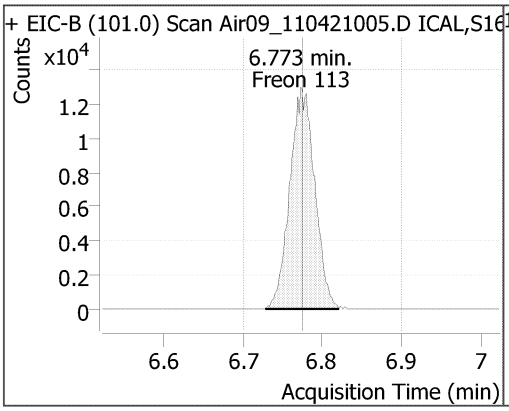
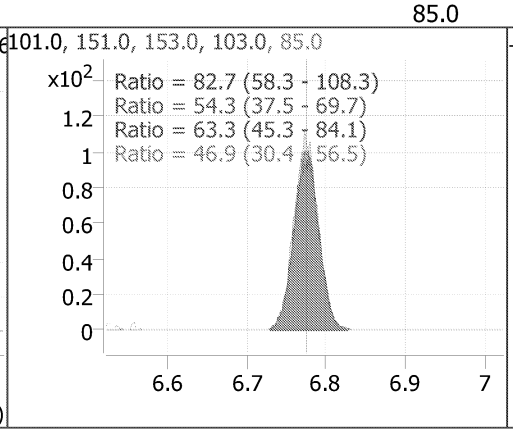
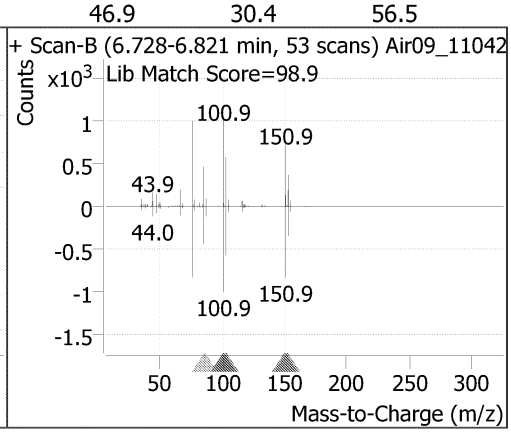
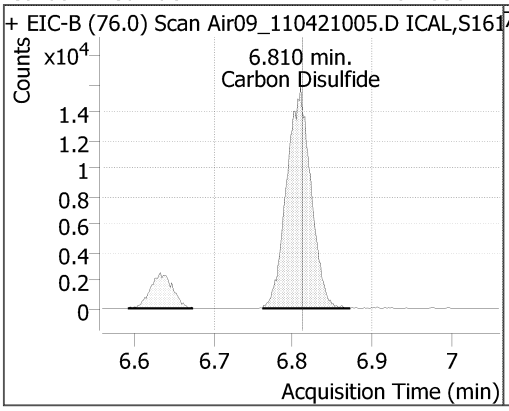
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	0.4799	6.77	0.00	28364	151.0	82.7	58.3	108.3
					103.0	63.3	45.3	84.1
					153.0	54.3	37.5	69.7
					85.0	46.9	30.4	56.5

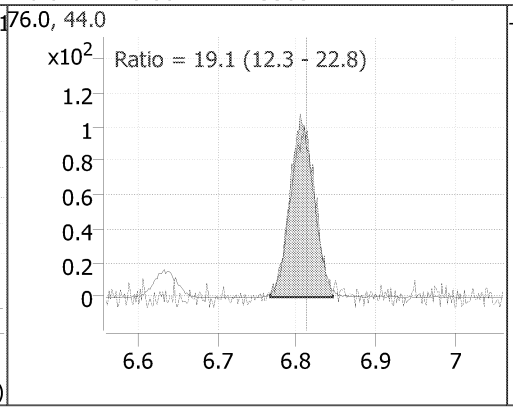


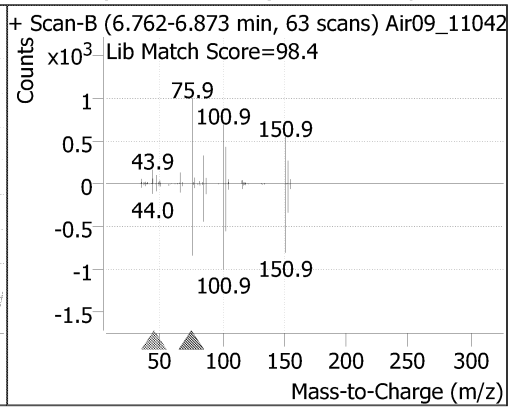




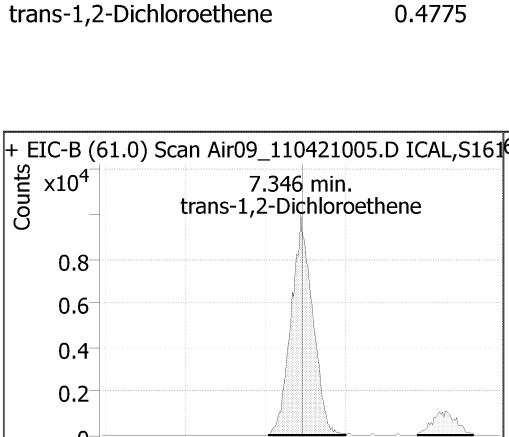
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.4850	6.81	0.00	33837	44.0	19.1	12.3	22.8

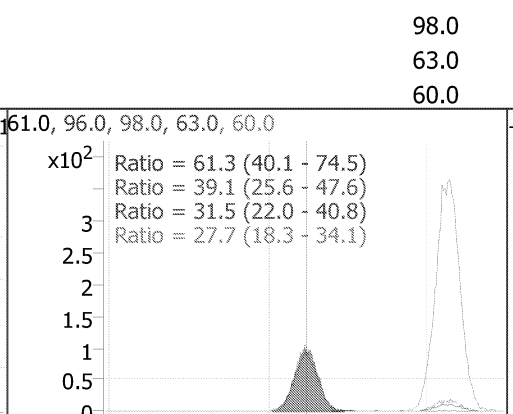


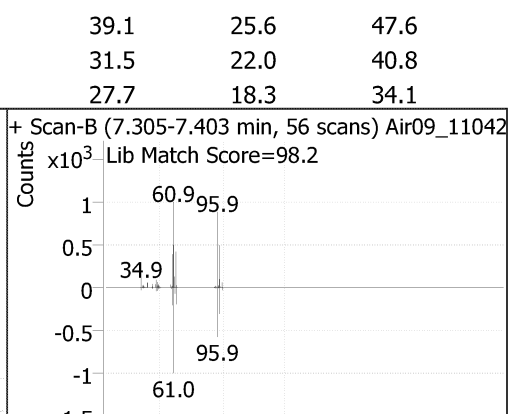




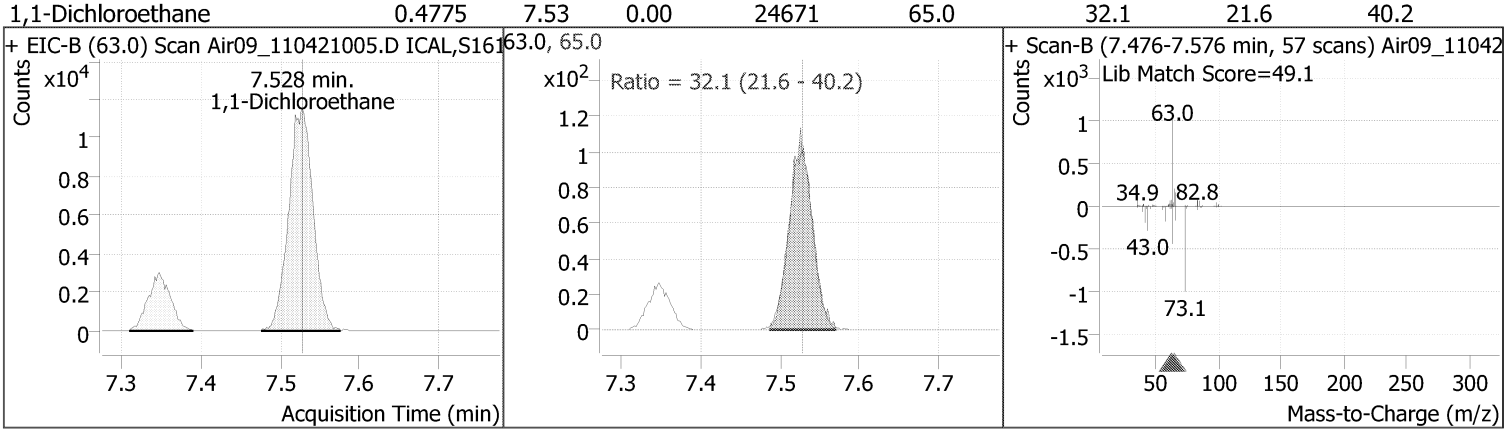
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.4775	7.35	0.00	18766	96.0	61.3	40.1	74.5
					98.0	39.1	25.6	47.6
					63.0	31.5	22.0	40.8
					60.0	27.7	18.3	34.1



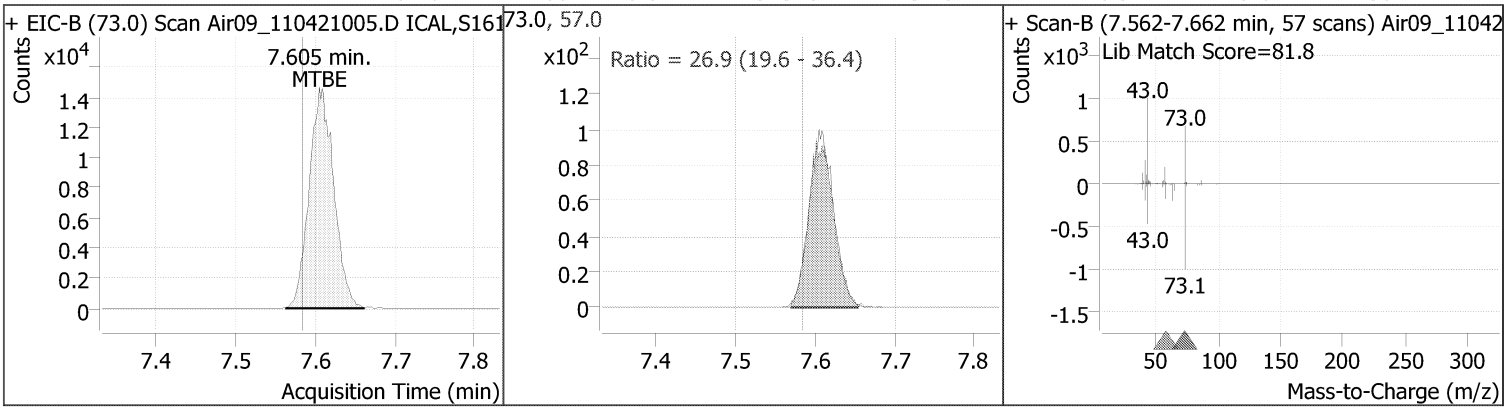




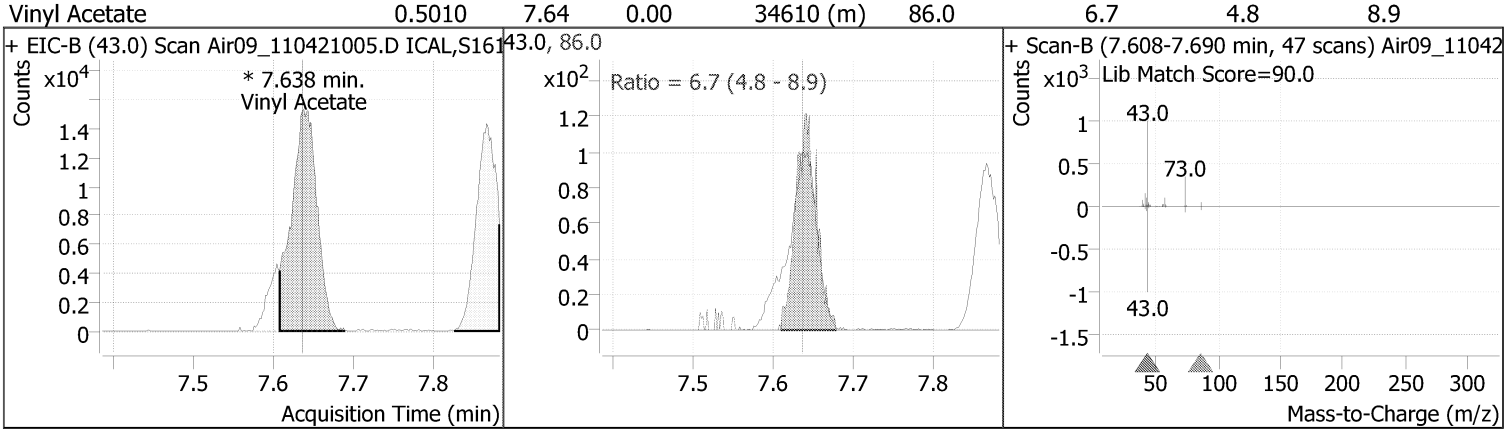
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	0.4775	7.53	0.00	24671	65.0	32.1	21.6	40.2



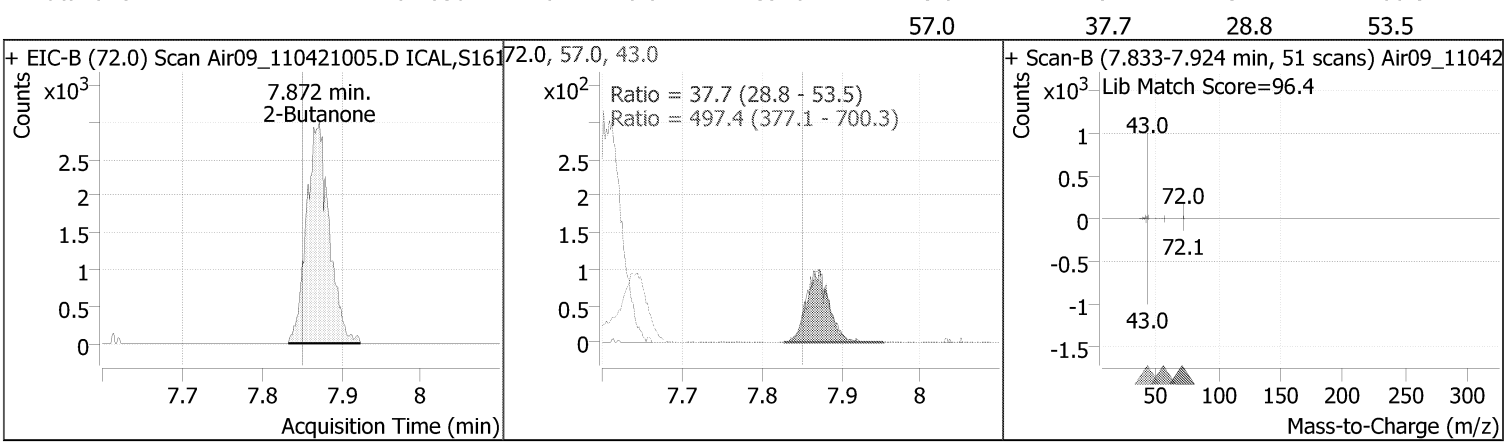
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	0.4611	7.60	0.02	31520	57.0	26.9	19.6	36.4



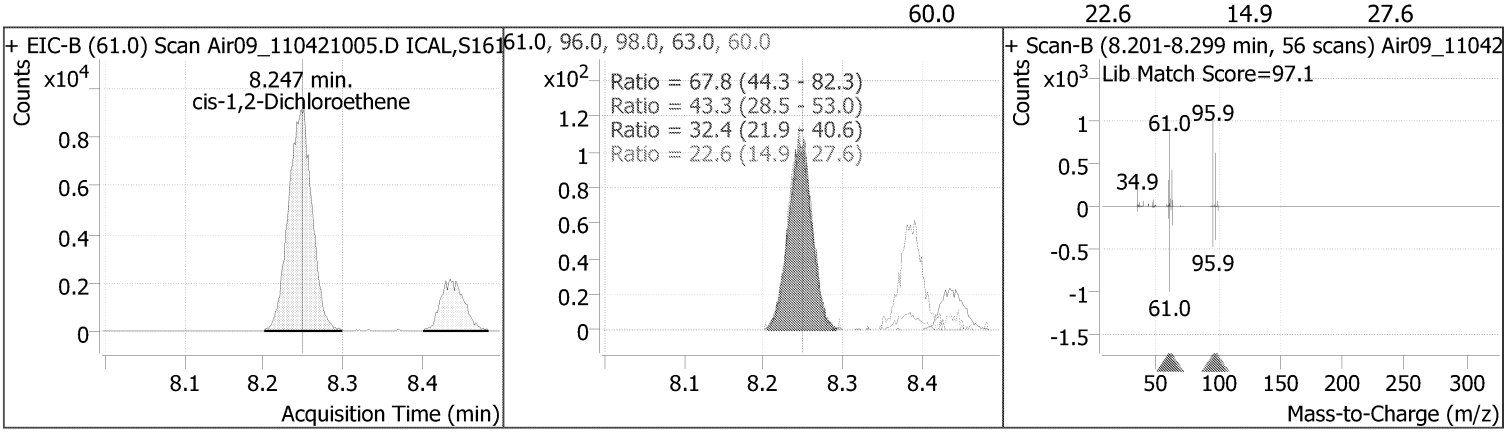
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.5010	7.64	0.00	34610 (m)	86.0	6.7	4.8	8.9



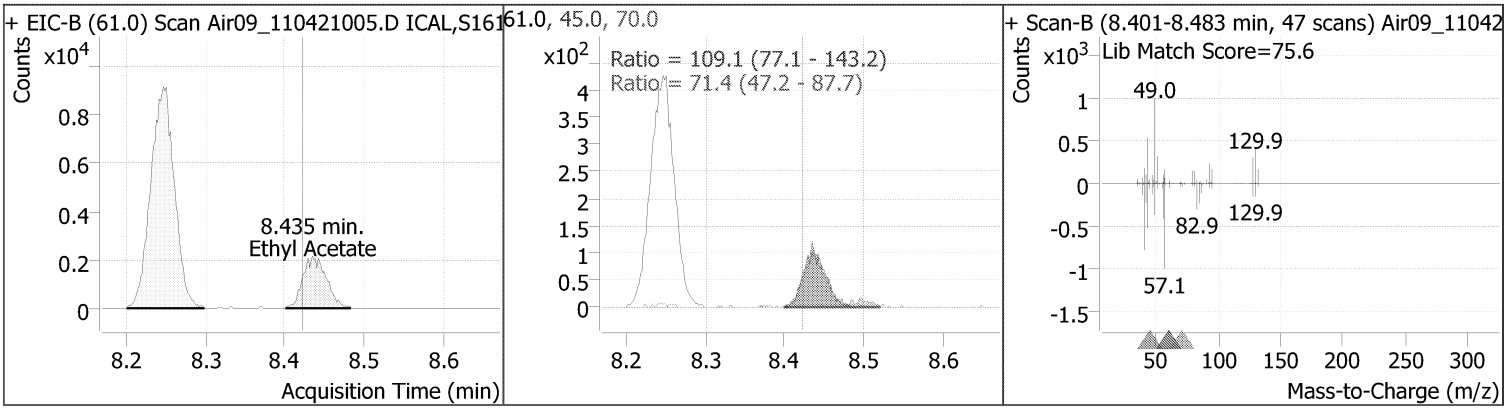
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.4836	7.87	0.02	5940	43.0	497.4	377.1	700.3
					57.0	37.7	28.8	53.5



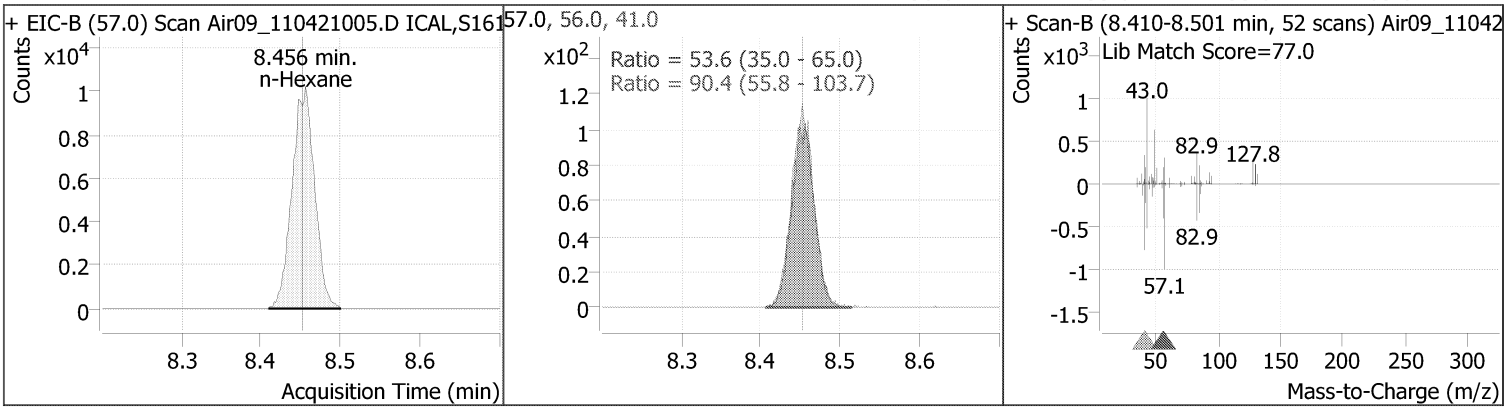
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.4727	8.25	0.00	19079	96.0	67.8	44.3	82.3
					98.0	43.3	28.5	53.0
					63.0	32.4	21.9	40.6
					60.0	22.6	14.9	27.6



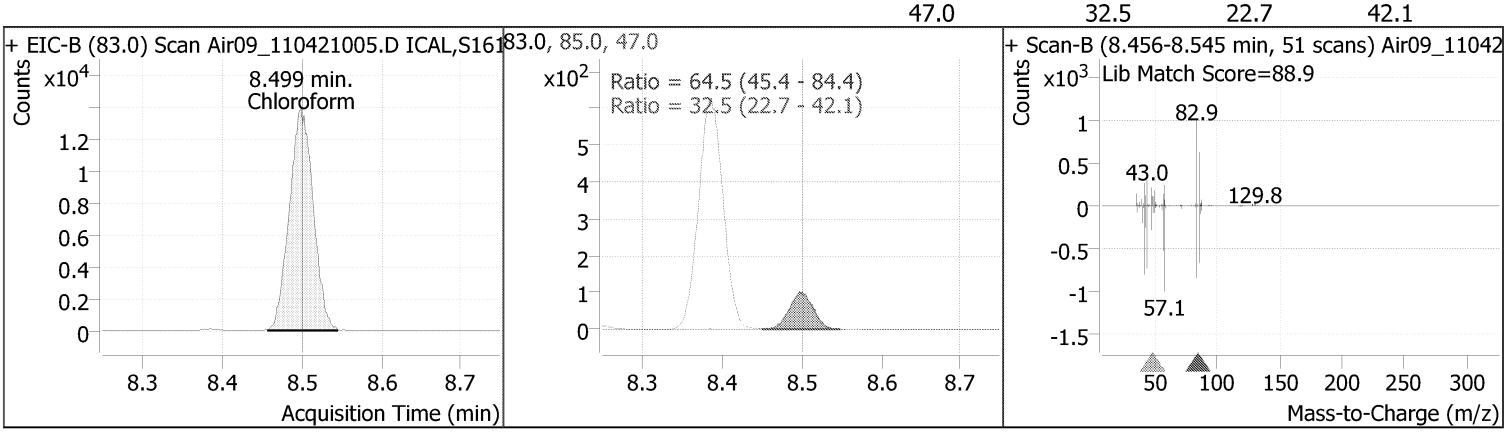
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	0.4732	8.43	0.01	4407	45.0	109.1	77.1	143.2
					70.0	71.4	47.2	87.7



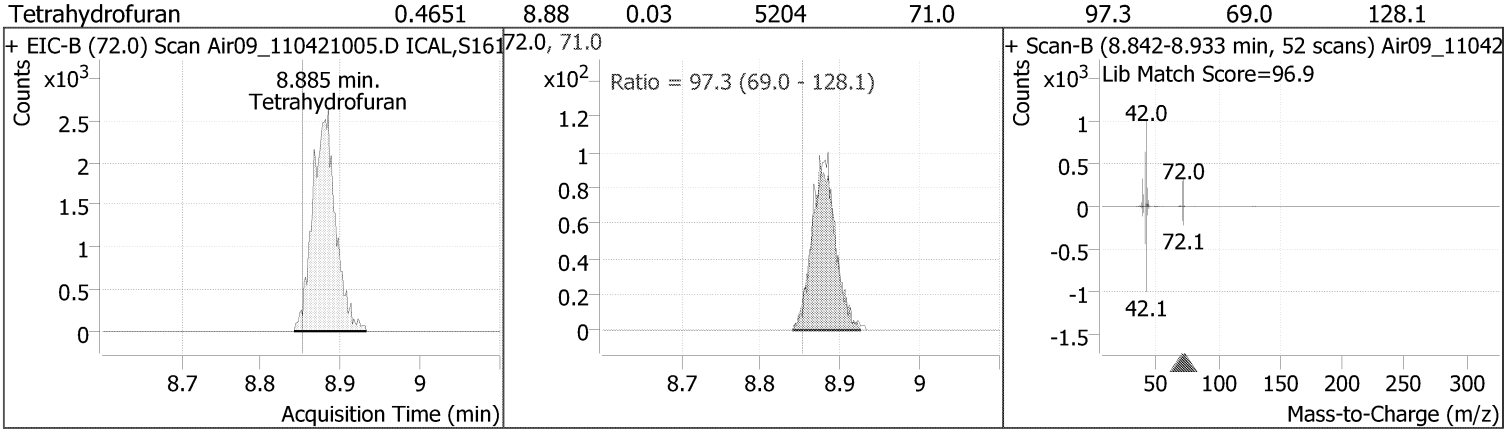
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.4622	8.46	0.00	20089	41.0	90.4	55.8	103.7
					56.0	53.6	35.0	65.0



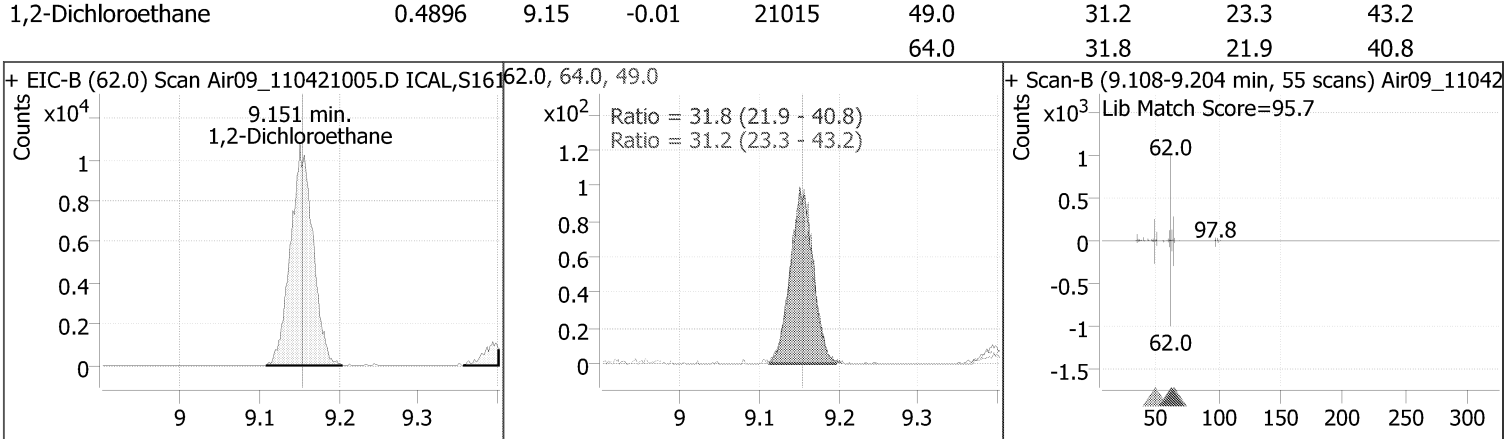
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.4896	8.50	0.00	29170	85.0	64.5	45.4	84.4
					47.0	32.5	22.7	42.1



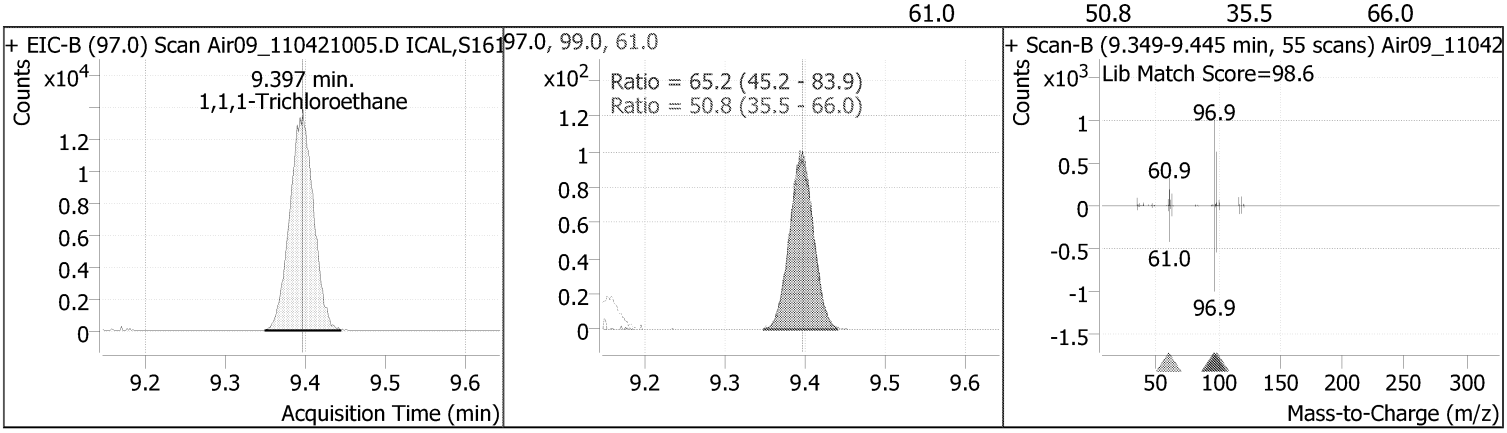
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	0.4651	8.88	0.03	5204	71.0	97.3	69.0	128.1



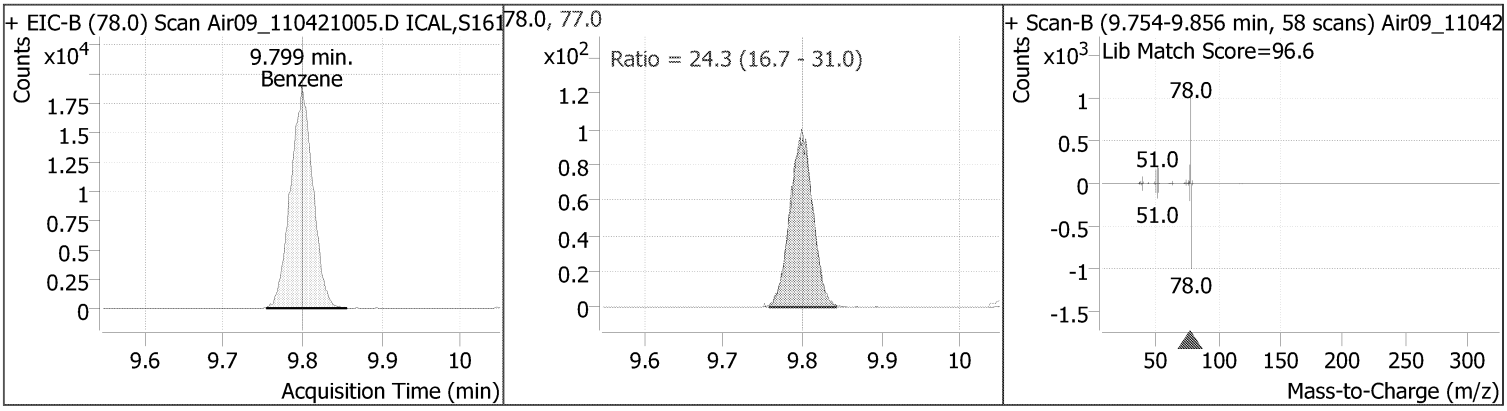
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	0.4896	9.15	-0.01	21015	49.0	31.2	23.3	43.2
					64.0	31.8	21.9	40.8



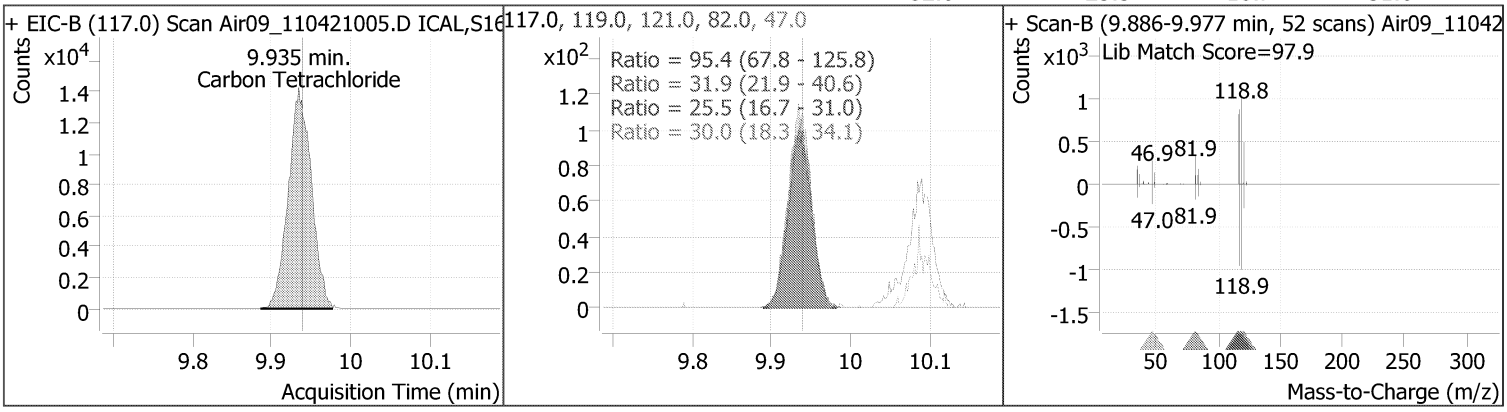
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	0.4882	9.40	0.00	28404	99.0	65.2	45.2	83.9
					61.0	50.8	35.5	66.0



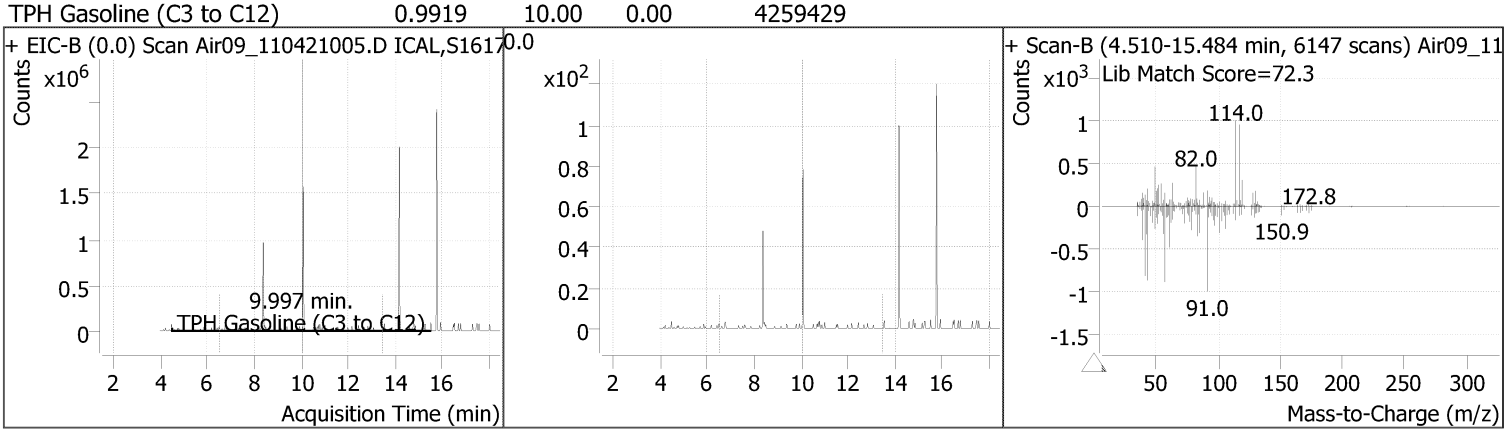
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.4734	9.80	0.00	36990	77.0	24.3	16.7	31.0



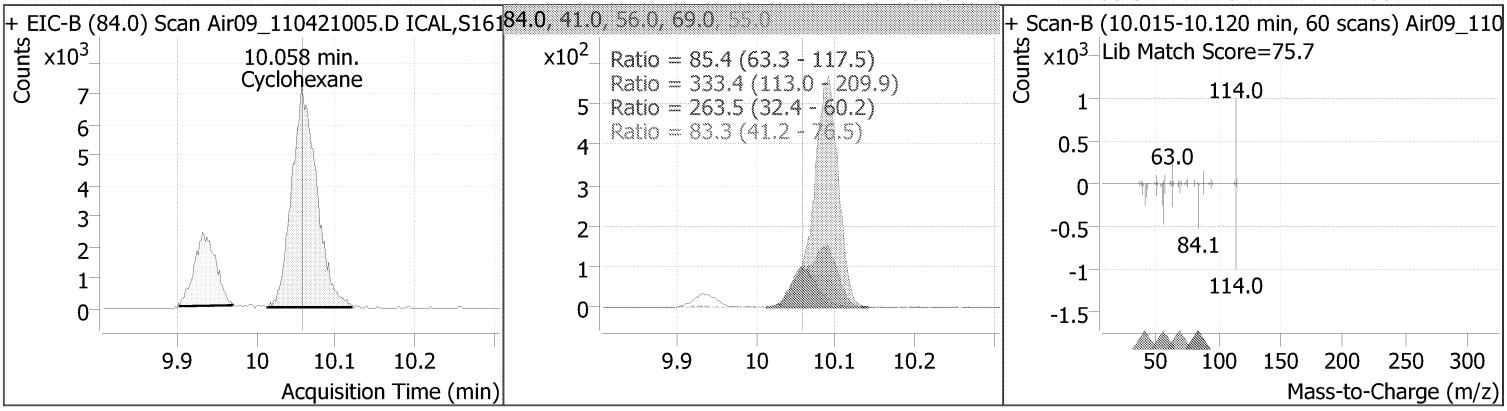
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	0.4727	9.93	-0.01	28813	119.0	95.4	67.8	125.8
					121.0	31.9	21.9	40.6
					47.0	30.0	18.3	34.1
					82.0	25.5	16.7	31.0



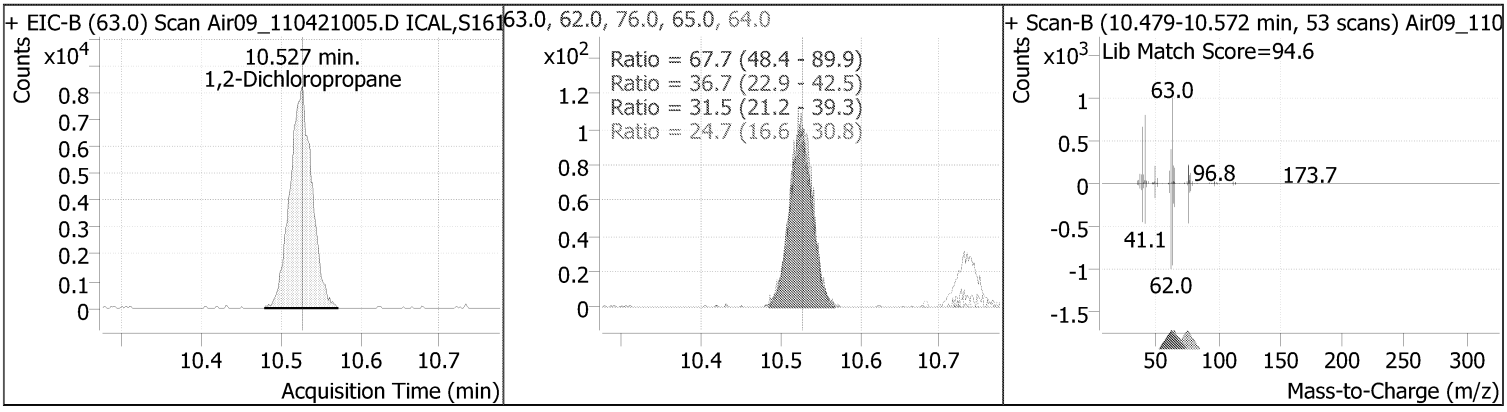
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	0.9919	10.00	0.00	4259429				



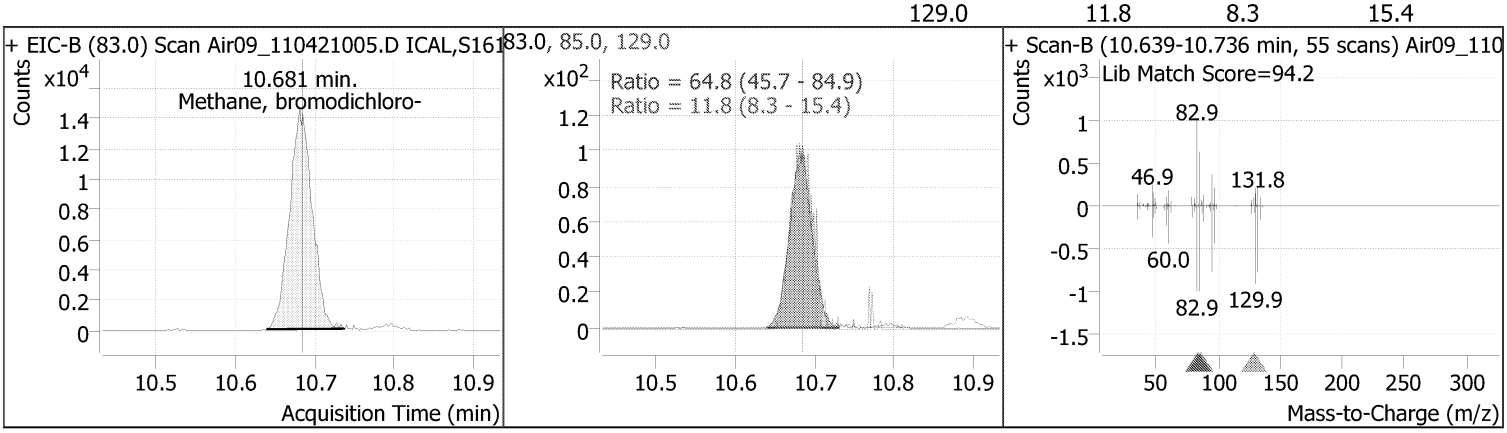
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.4588	10.06	0.00	15733	56.0	333.4	113.0	209.9
					41.0	85.4	63.3	117.5
					55.0	83.3	41.2	76.5
					69.0	263.5	32.4	60.2



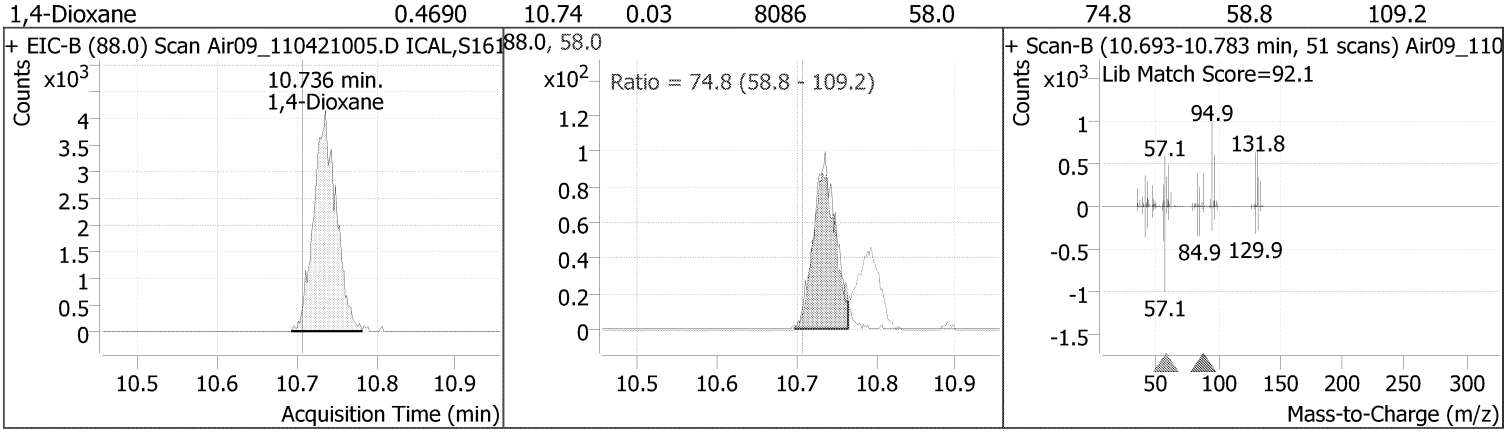
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.4746	10.53	0.00	15902	62.0	67.7	48.4	89.9
					76.0	36.7	22.9	42.5
					65.0	31.5	21.2	39.3
					64.0	24.7	16.6	30.8



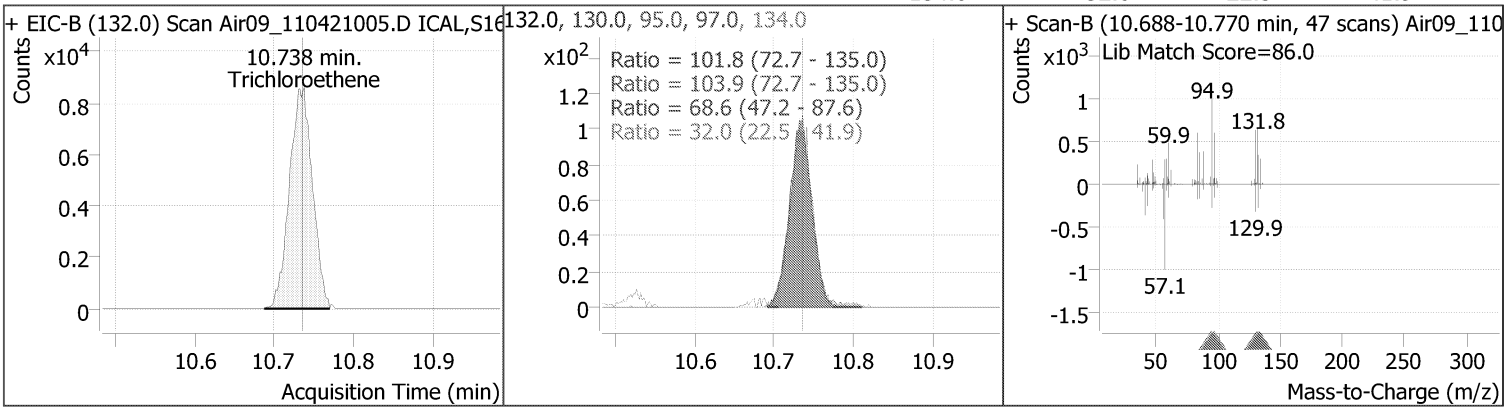
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	0.4698	10.68	-0.01	28750	85.0	64.8	45.7	84.9
					129.0	11.8	8.3	15.4



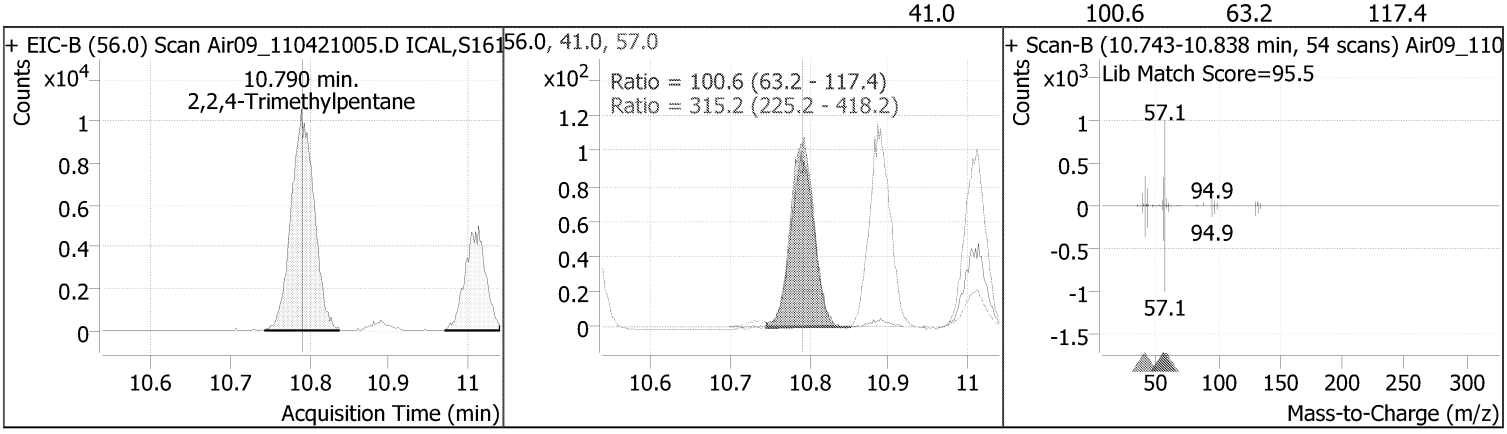
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.4690	10.74	0.03	8086	58.0	74.8	58.8	109.2



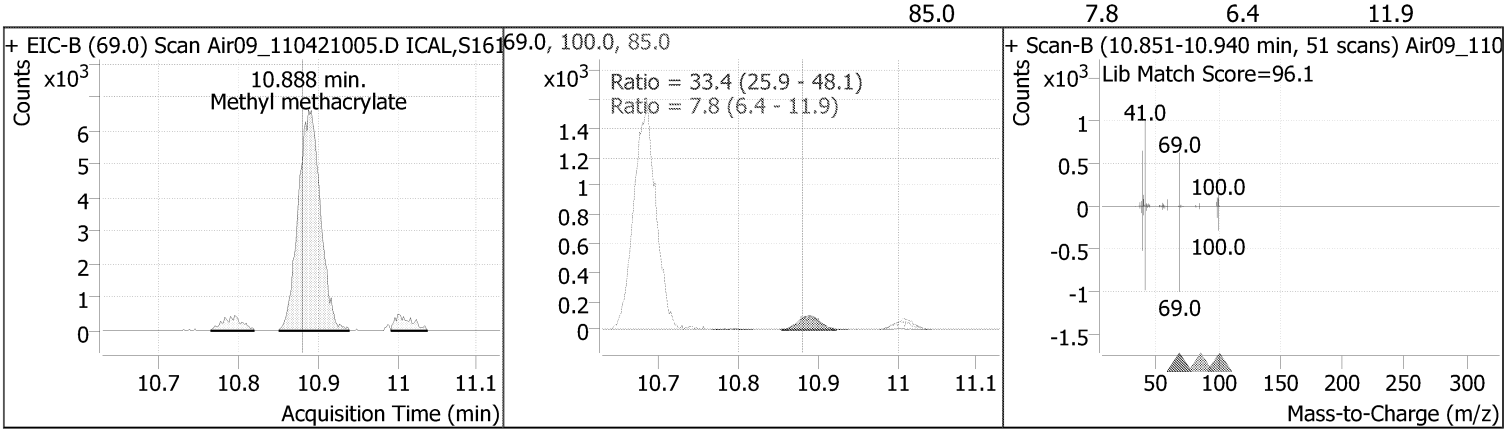
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.4787	10.74	0.00	17350	130.0	101.8	72.7	135.0
					95.0	103.9	72.7	135.0
					97.0	68.6	47.2	87.6
					134.0	32.0	22.5	41.9



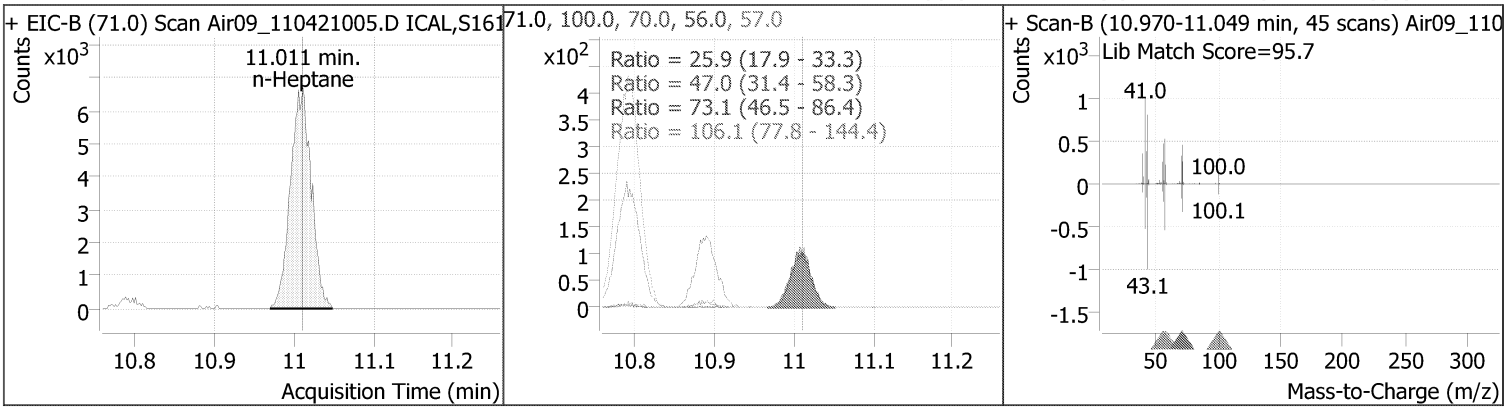
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.4793	10.79	0.00	21007	57.0	315.2	225.2	418.2
					41.0	100.6	63.2	117.4



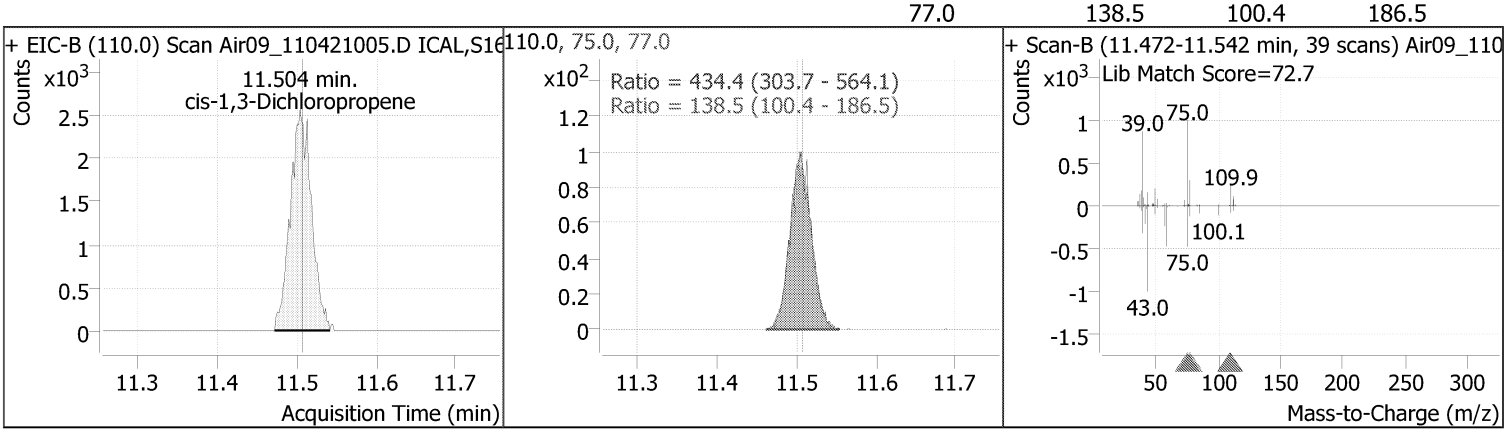
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	0.4619	10.89	0.01	12954	100.0	33.4	25.9	48.1
					85.0	7.8	6.4	11.9



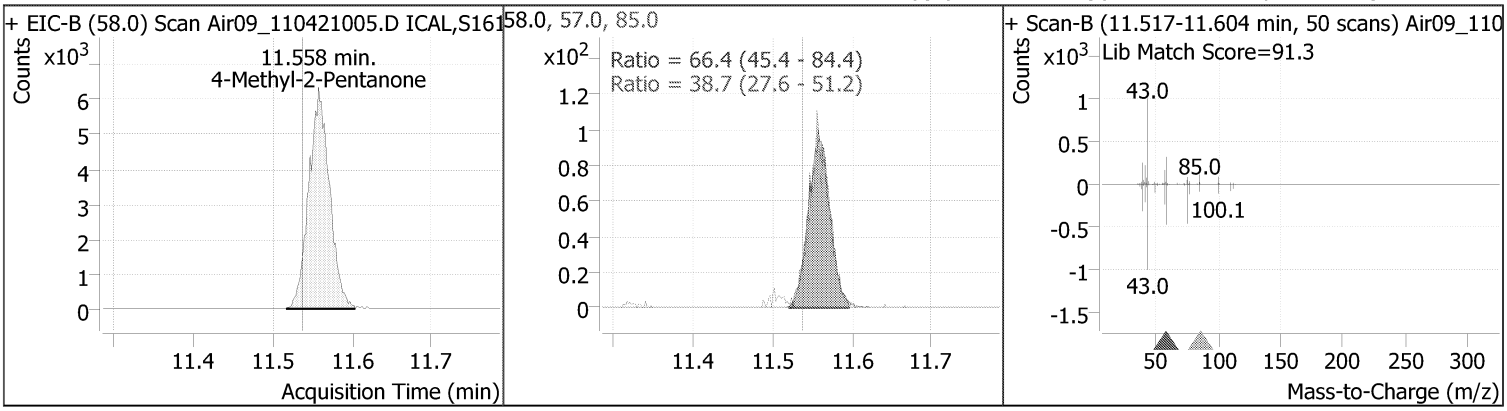
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	0.4627	11.01	0.00	12213	57.0	106.1	77.8	144.4
					56.0	73.1	46.5	86.4
					70.0	47.0	31.4	58.3
					100.0	25.9	17.9	33.3



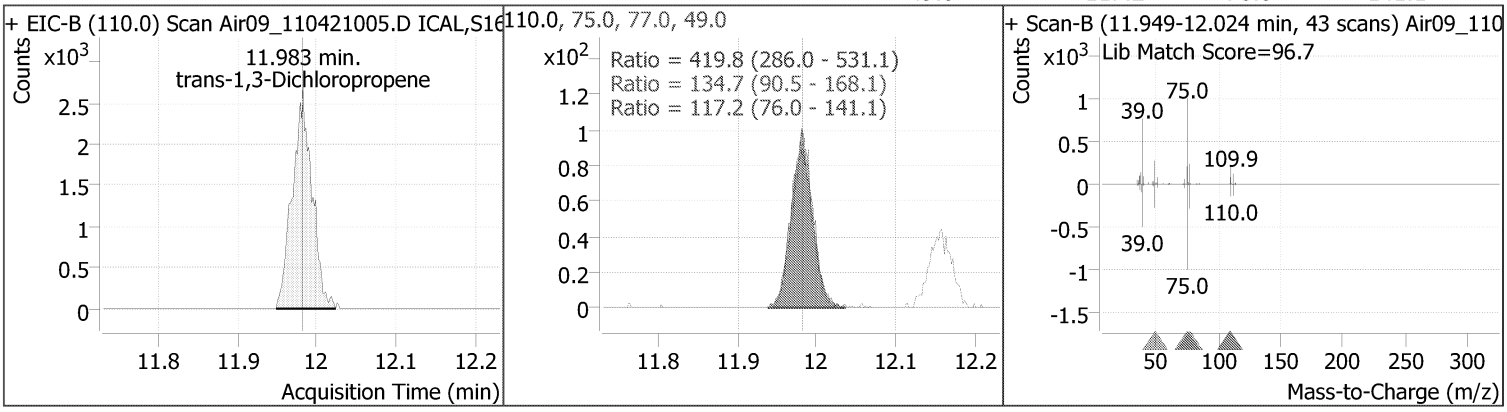
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	0.4652	11.50	-0.01	4753	75.0	434.4	303.7	564.1
					77.0	138.5	100.4	186.5



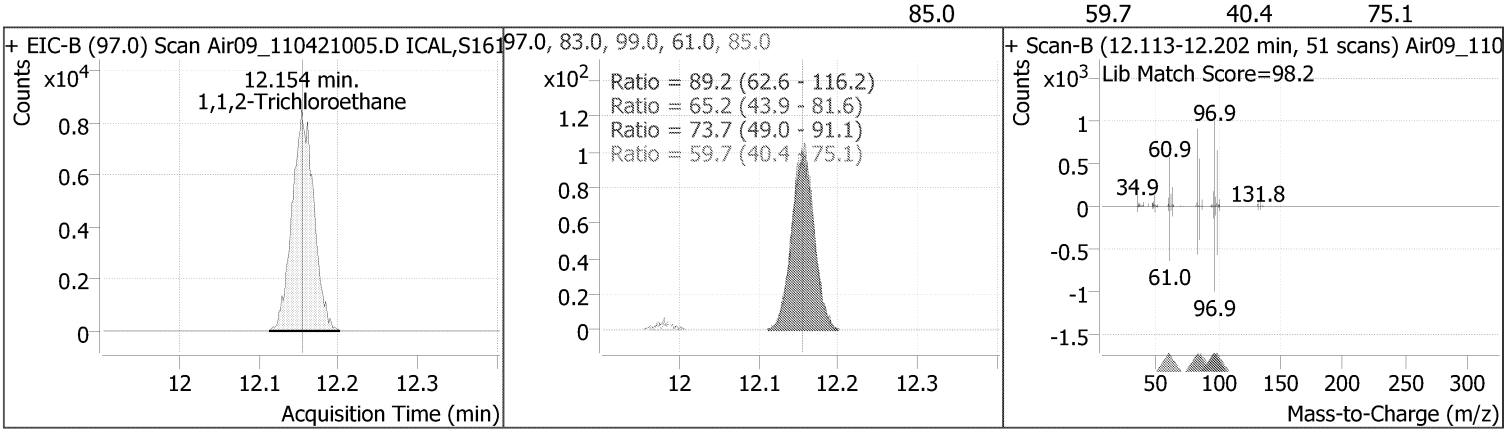
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.4675	11.56	0.02	11481	57.0	66.4	45.4	84.4
					85.0	38.7	27.6	51.2



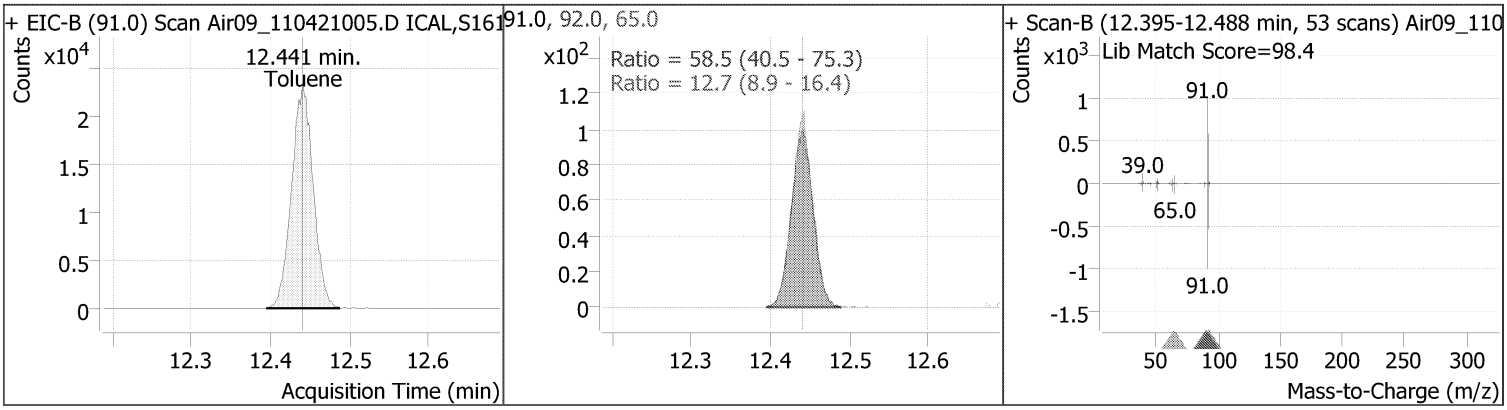
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	0.4457	11.98	0.00	4586	75.0	419.8	286.0	531.1
					77.0	134.7	90.5	168.1
					49.0	117.2	76.0	141.1



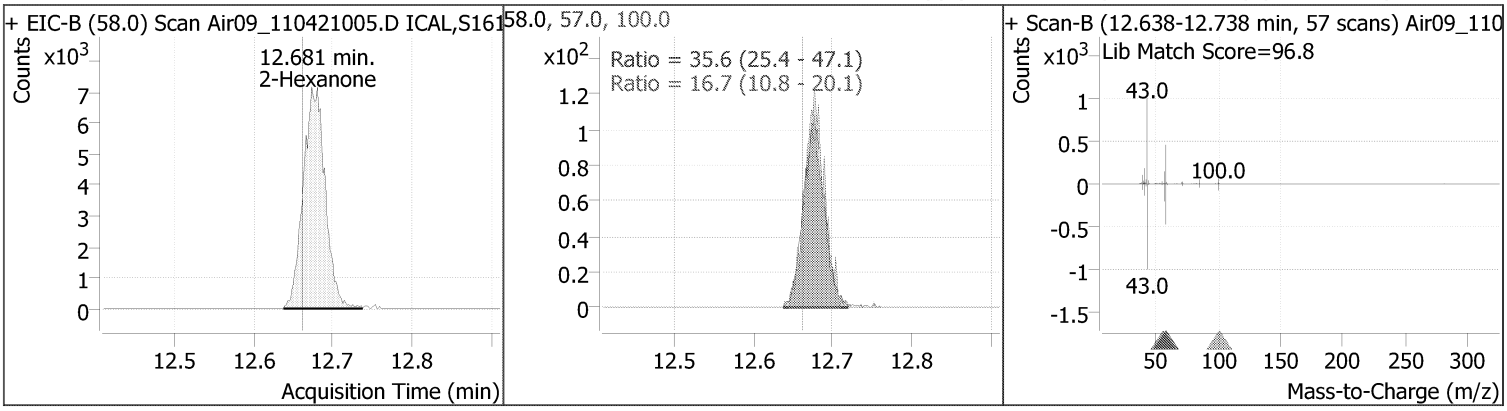
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	0.4726	12.15	0.00	16165	83.0	89.2	62.6	116.2
					61.0	73.7	49.0	91.1
					99.0	65.2	43.9	81.6
					85.0	59.7	40.4	75.1



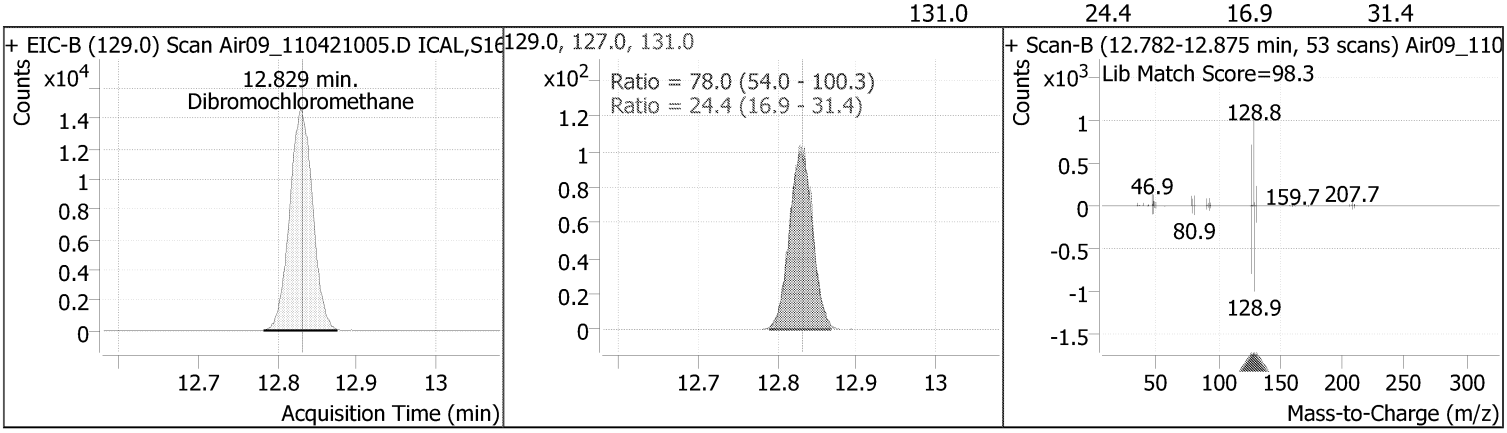
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.4574	12.44	0.00	44208	92.0	58.5	40.5	75.3
					65.0	12.7	8.9	16.4



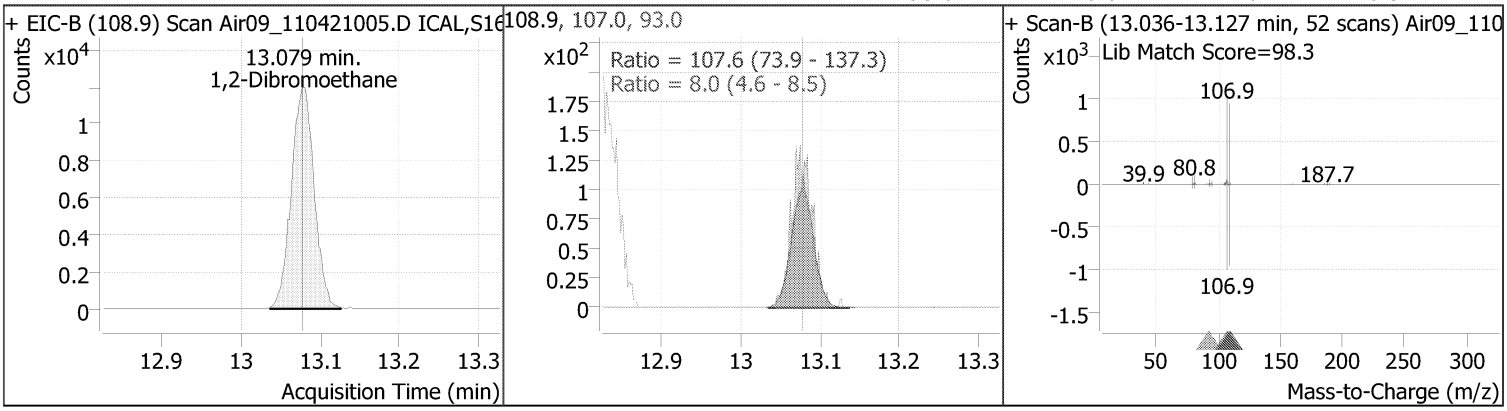
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.4345	12.68	0.02	13840	57.0	35.6	25.4	47.1
					100.0	16.7	10.8	20.1



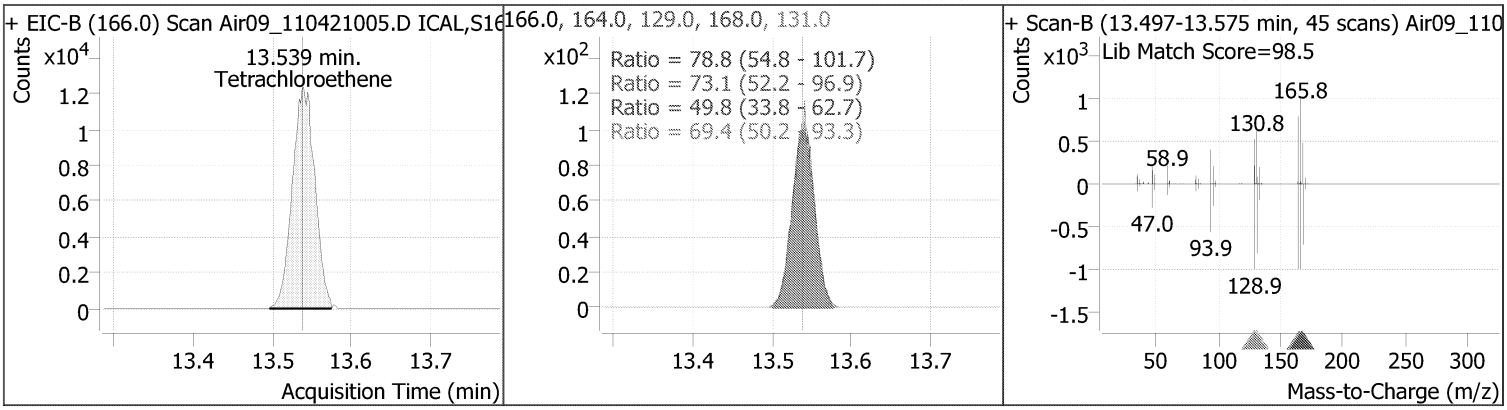
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.4645	12.83	-0.01	29694	127.0	78.0	54.0	100.3
					131.0	24.4	16.9	31.4



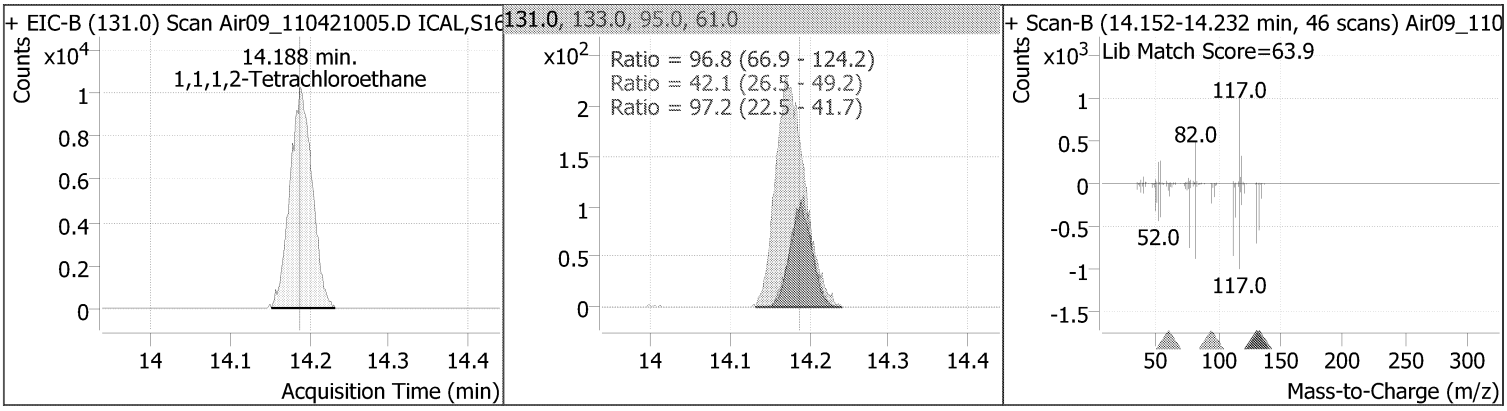
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.4606	13.08	0.00	24034	107.0	107.6	73.9	137.3
					93.0	8.0	4.6	8.5



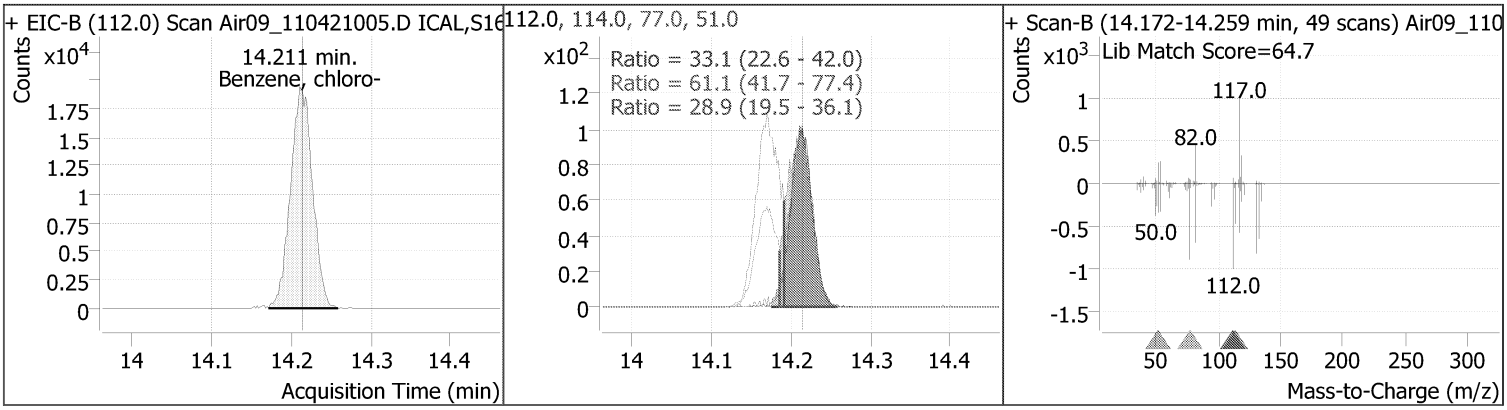
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.4701	13.54	0.00	24424	164.0	78.8	54.8	101.7
					129.0	73.1	52.2	96.9
					131.0	69.4	50.2	93.3
					168.0	49.8	33.8	62.7



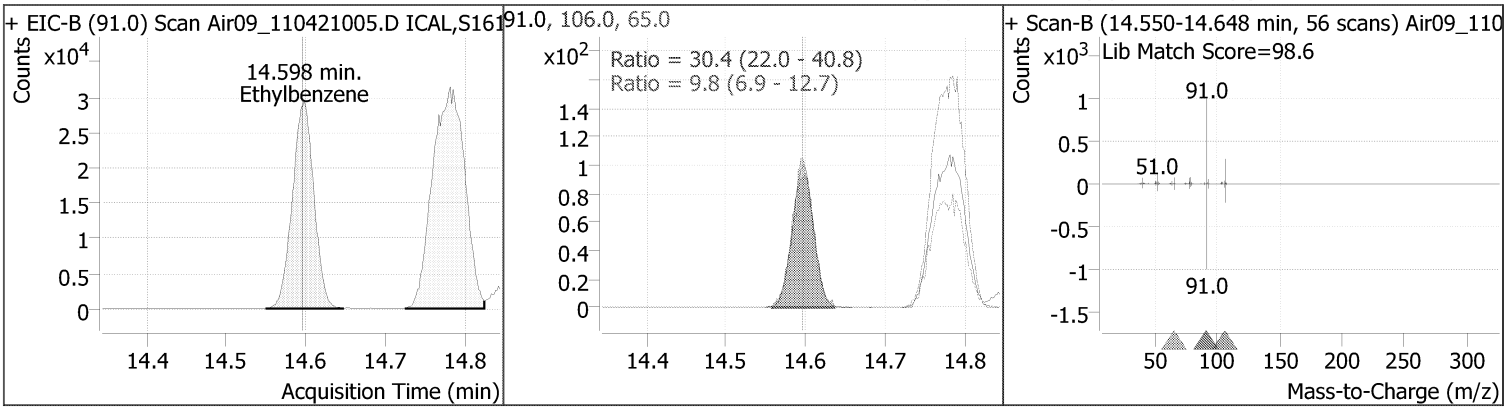
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	0.4802	14.19	-0.01	20119	133.0	96.8	66.9	124.2
					95.0	42.1	26.5	49.2
					61.0	97.2	22.5	41.7



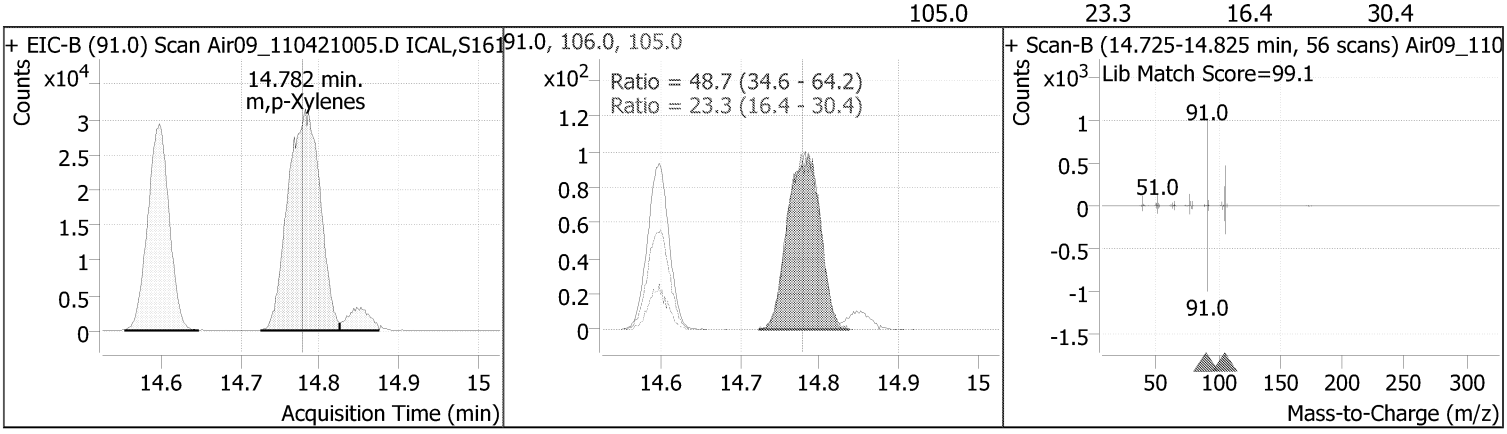
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.4900	14.21	-0.01	37433	77.0	61.1	41.7	77.4
					114.0	33.1	22.6	42.0
					51.0	28.9	19.5	36.1



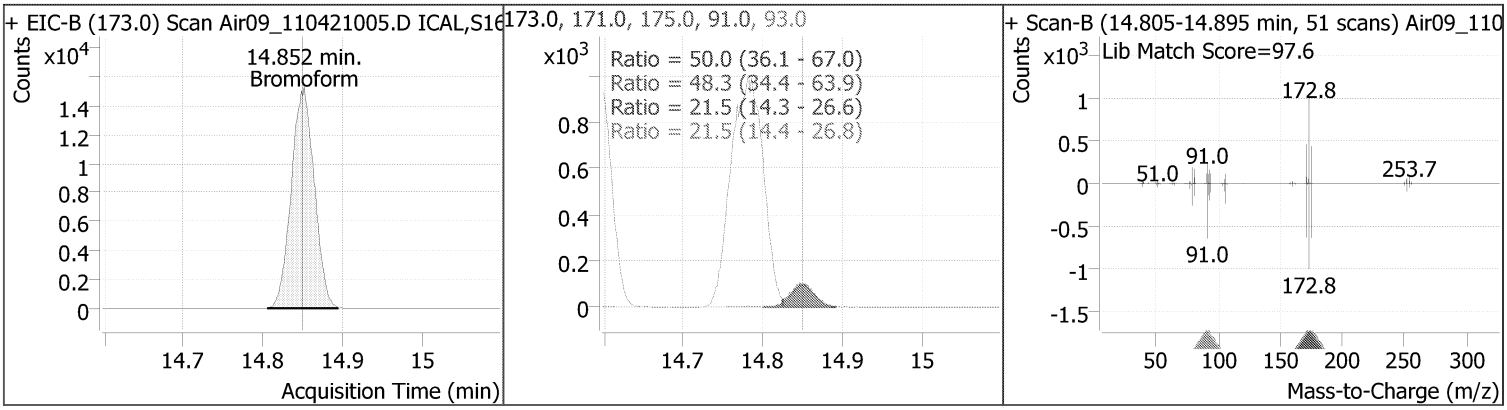
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.4787	14.60	0.00	55311	106.0	30.4	22.0	40.8
					65.0	9.8	6.9	12.7



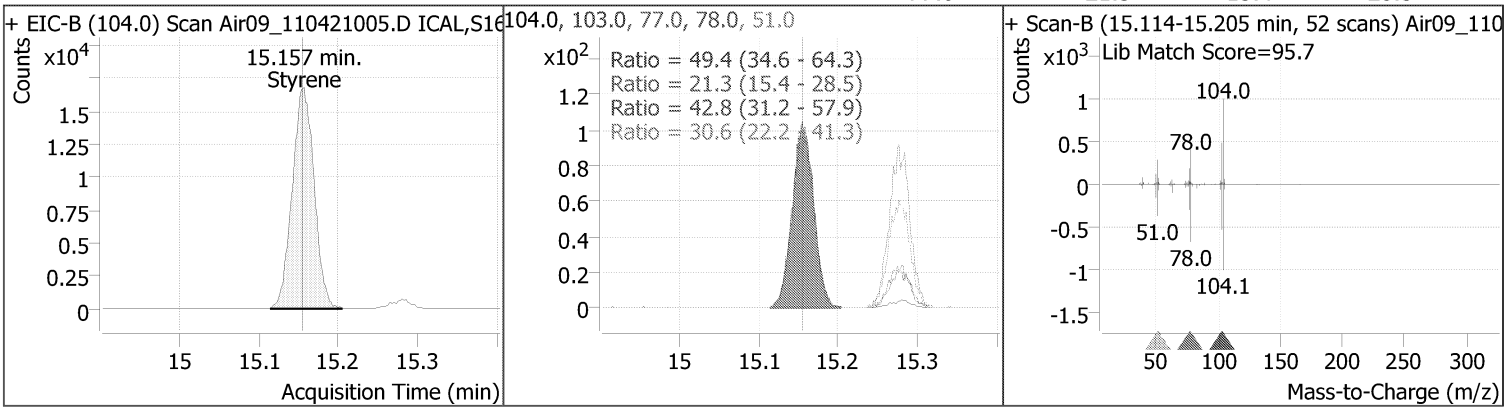
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	1.0611	14.78	0.00	88556	106.0	48.7	34.6	64.2
					105.0	23.3	16.4	30.4



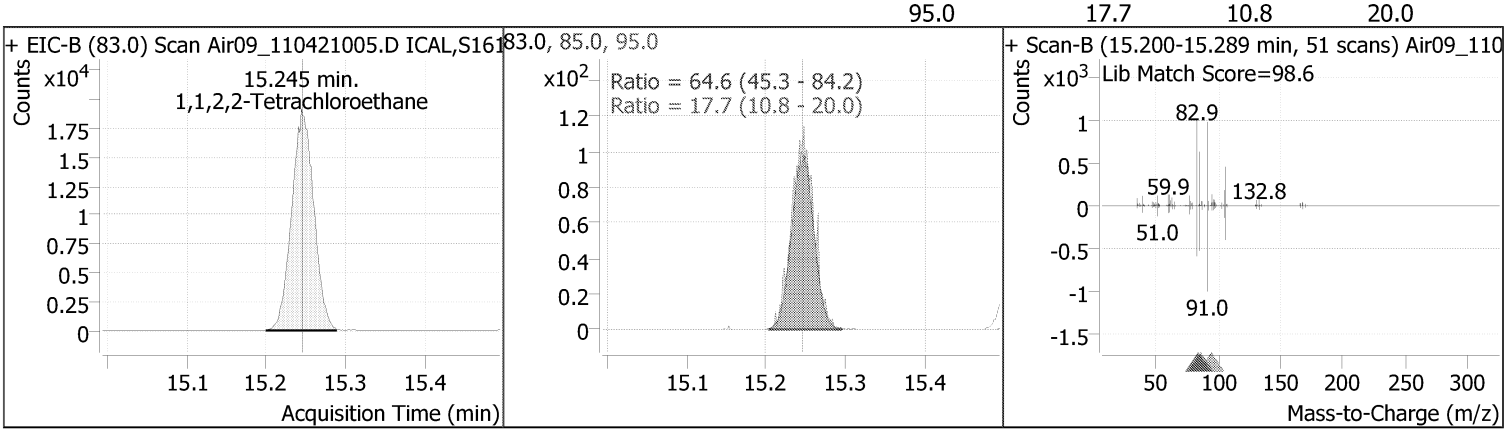
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.4671	14.85	0.00	30680	171.0	50.0	36.1	67.0
					175.0	48.3	34.4	63.9
					93.0	21.5	14.4	26.8
					91.0	21.5	14.3	26.6



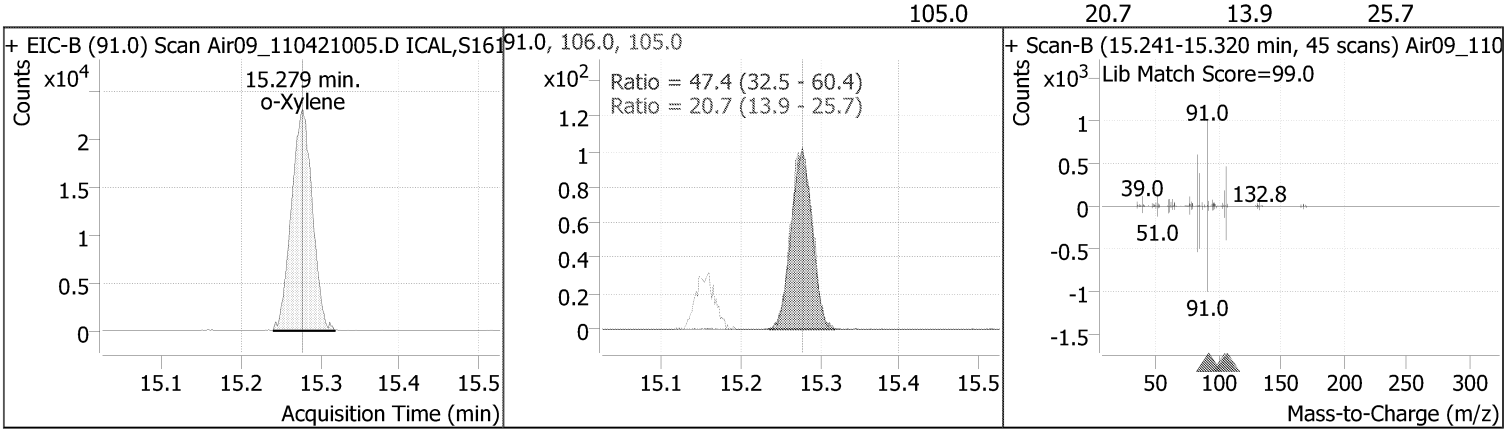
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	0.4642	15.16	0.00	32135	103.0	49.4	34.6	64.3
					78.0	42.8	31.2	57.9
					51.0	30.6	22.2	41.3
					77.0	21.3	15.4	28.5



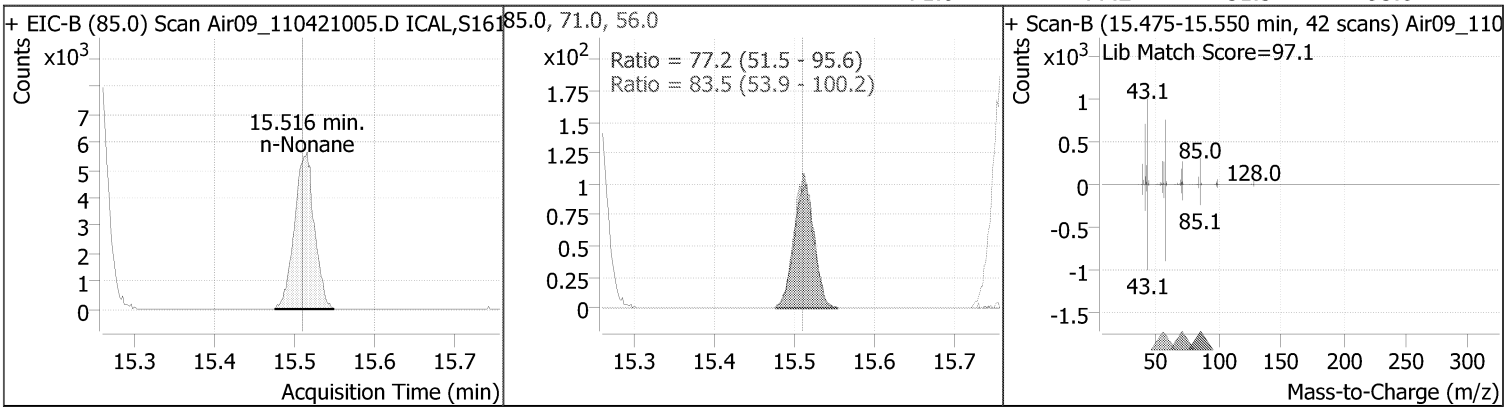
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.4842	15.24	0.00	36957	85.0	64.6	45.3	84.2
					95.0	17.7	10.8	20.0



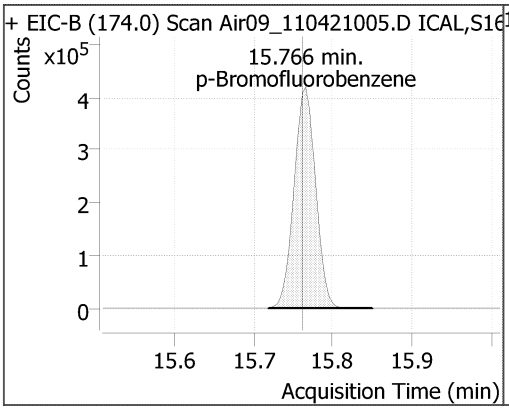
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.4591	15.28	0.00	42284	106.0	47.4	32.5	60.4
					105.0	20.7	13.9	25.7

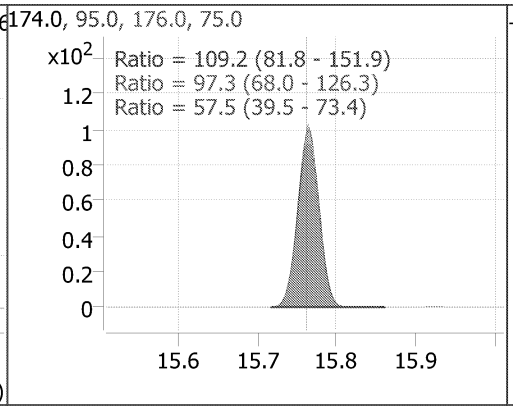


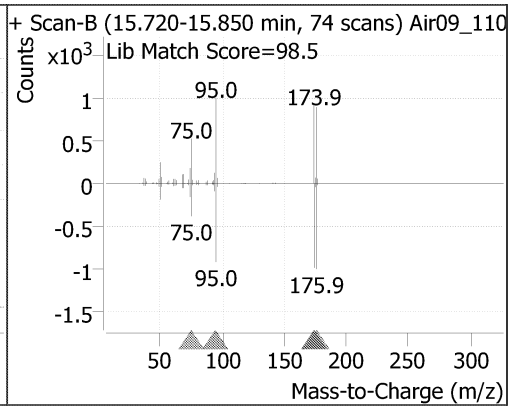
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	0.4693	15.52	0.00	9785	56.0	83.5	53.9	100.2
					71.0	77.2	51.5	95.6



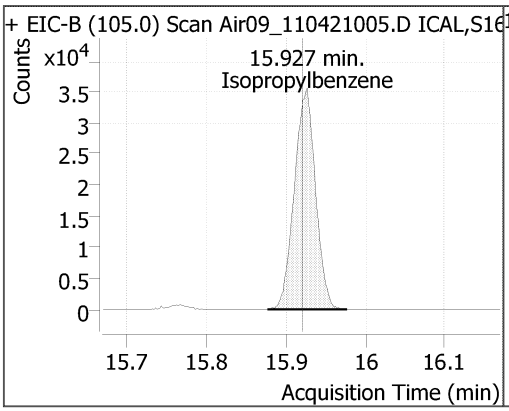
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.2267	15.77	0.00	793648	95.0	109.2	81.8	151.9
					176.0	97.3	68.0	126.3
					75.0	57.5	39.5	73.4

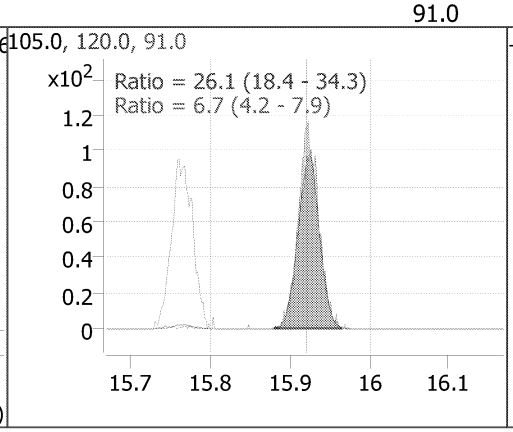


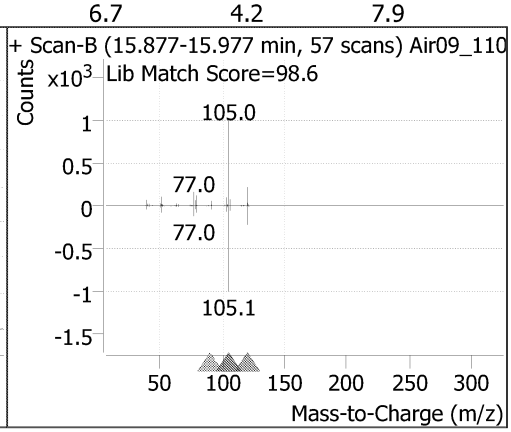




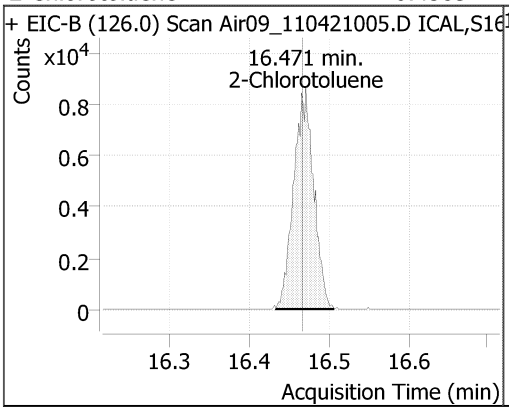
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.4850	15.93	0.00	66065	120.0	26.1	18.4	34.3
					91.0	6.7	4.2	7.9

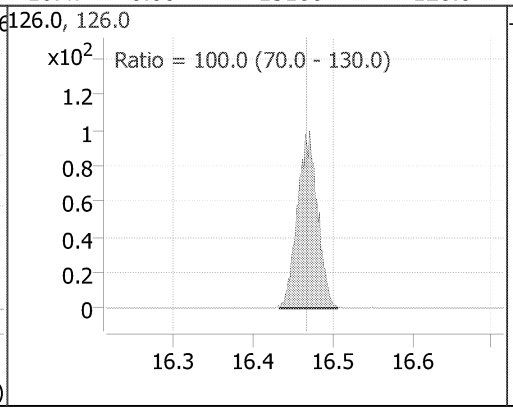


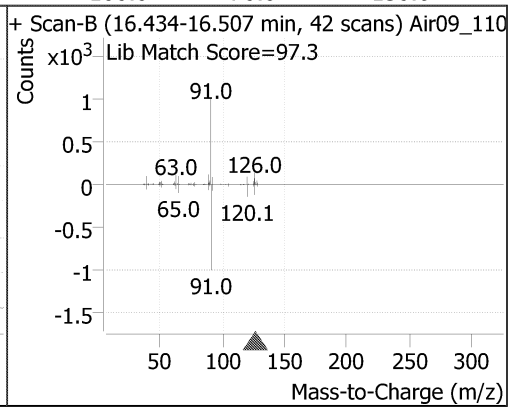




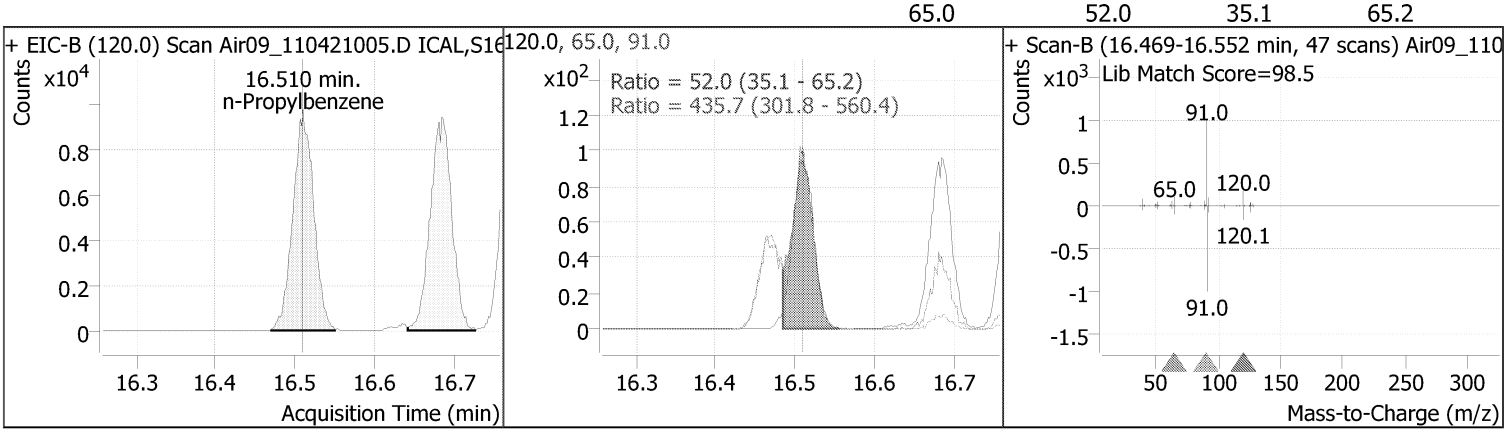
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	0.4583	16.47	0.00	15160	126.0	100.0	70.0	130.0



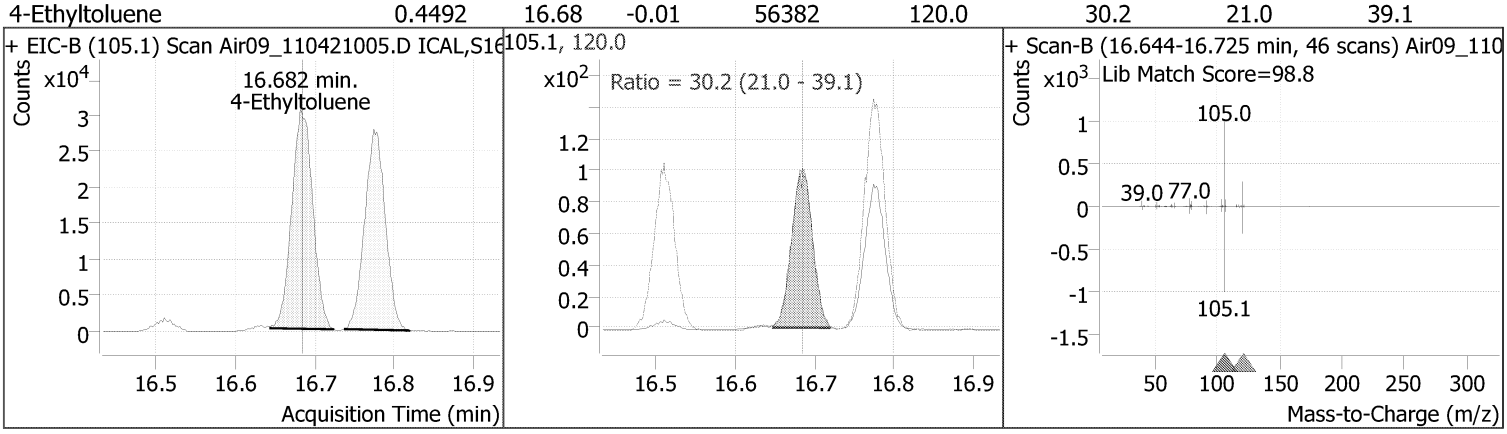




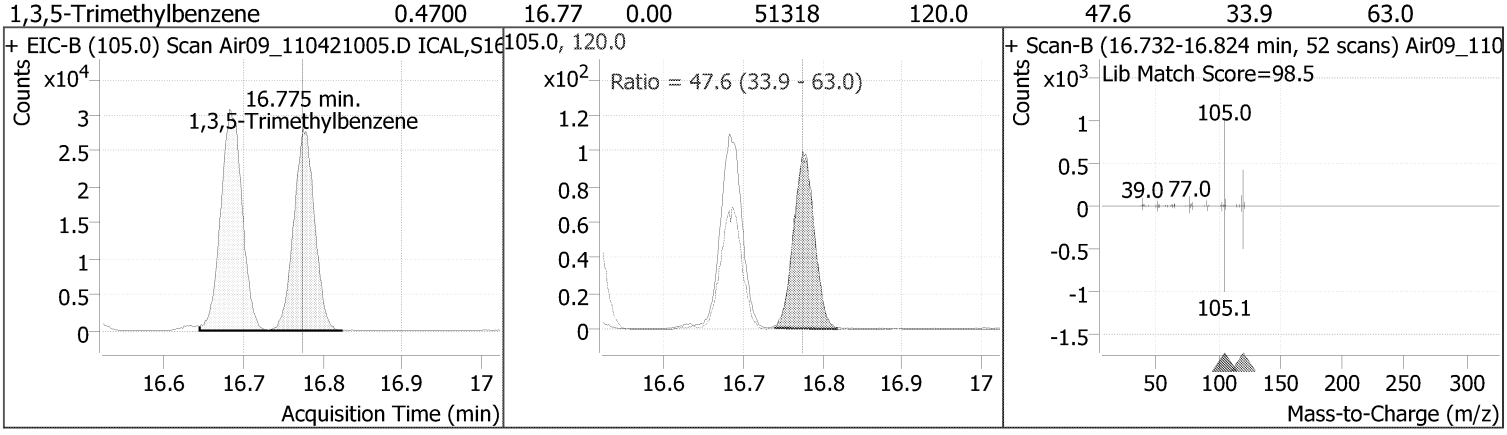
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.4832	16.51	0.00	17607	91.0	435.7	301.8	560.4
					65.0	52.0	35.1	65.2



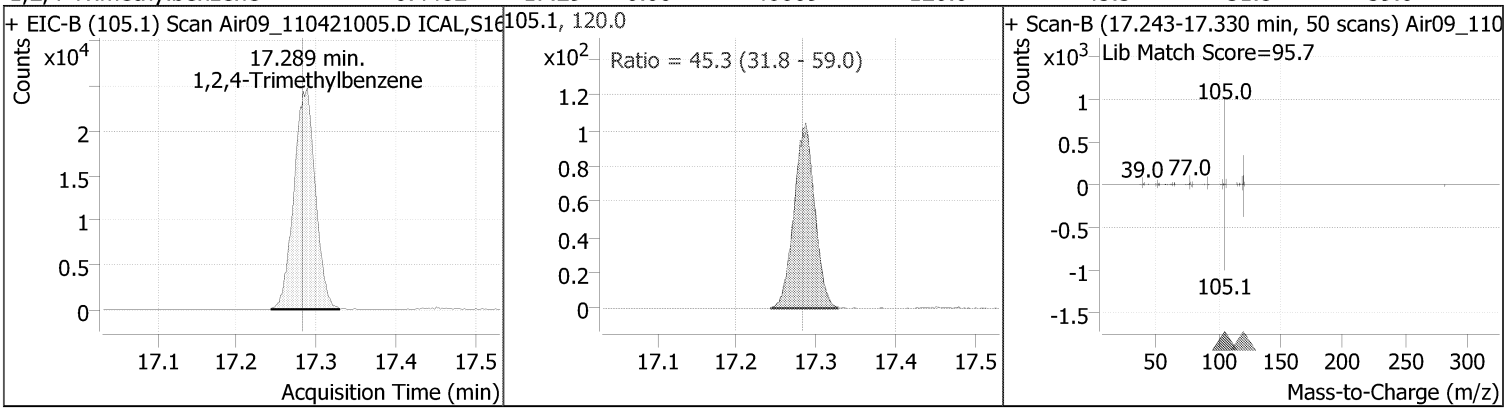
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.4492	16.68	-0.01	56382	120.0	30.2	21.0	39.1



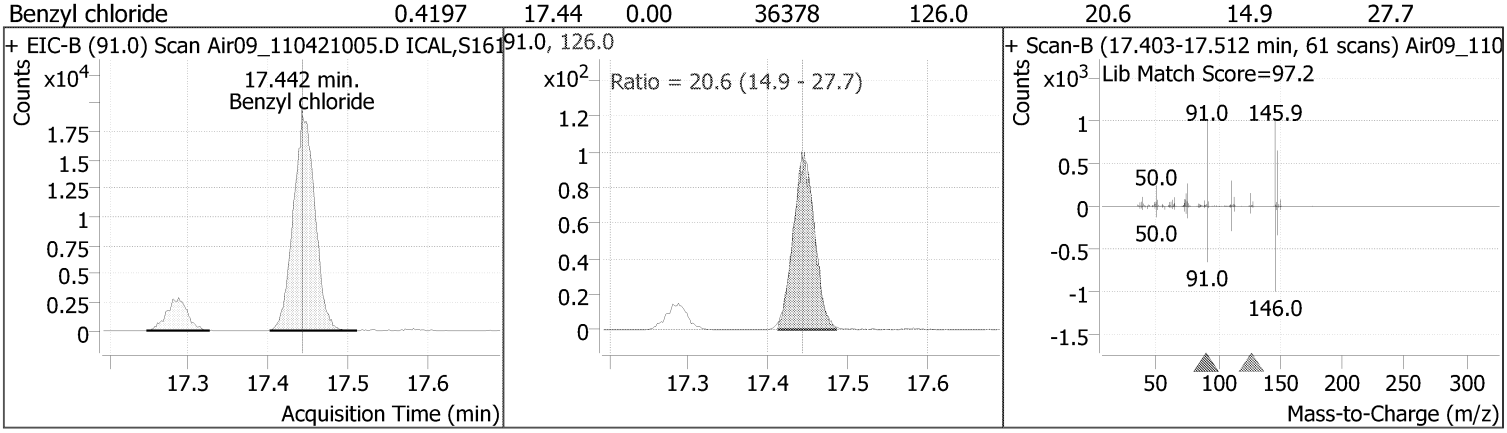
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.4700	16.77	0.00	51318	120.0	47.6	33.9	63.0



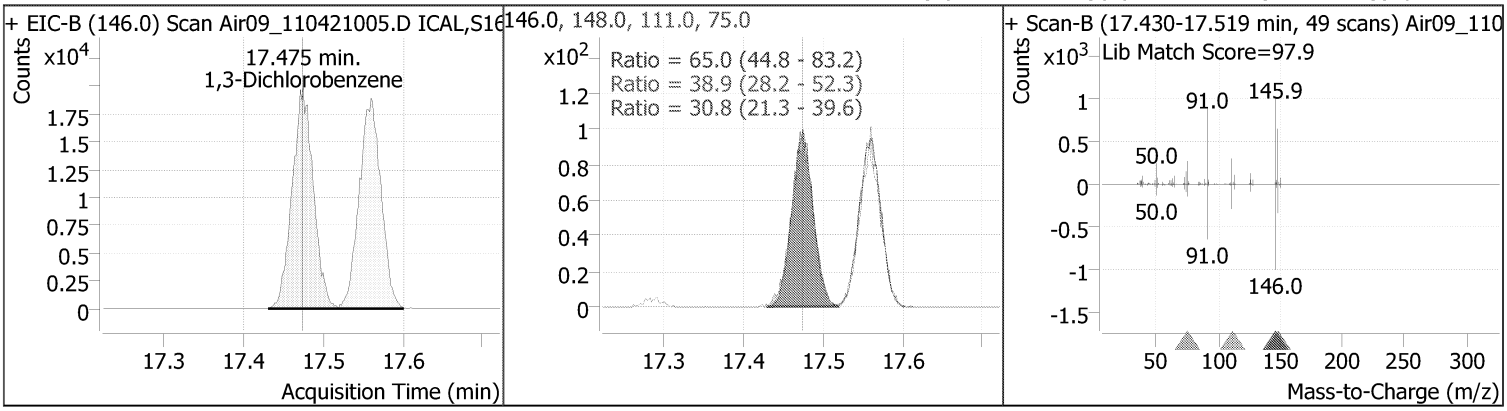
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	0.4482	17.29	0.00	46609	120.0	45.3	31.8	59.0



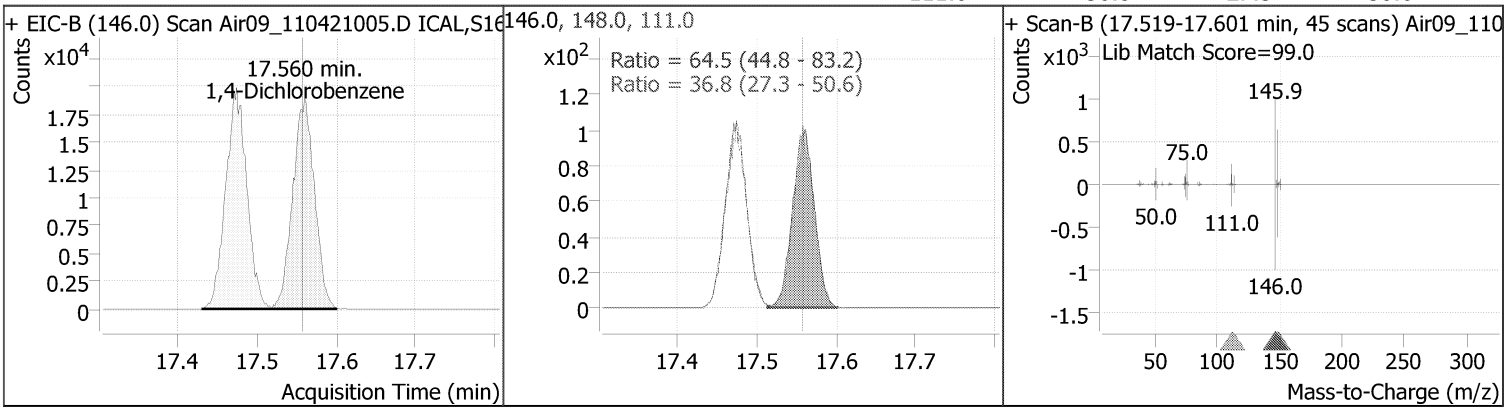
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.4197	17.44	0.00	36378	126.0	20.6	14.9	27.7



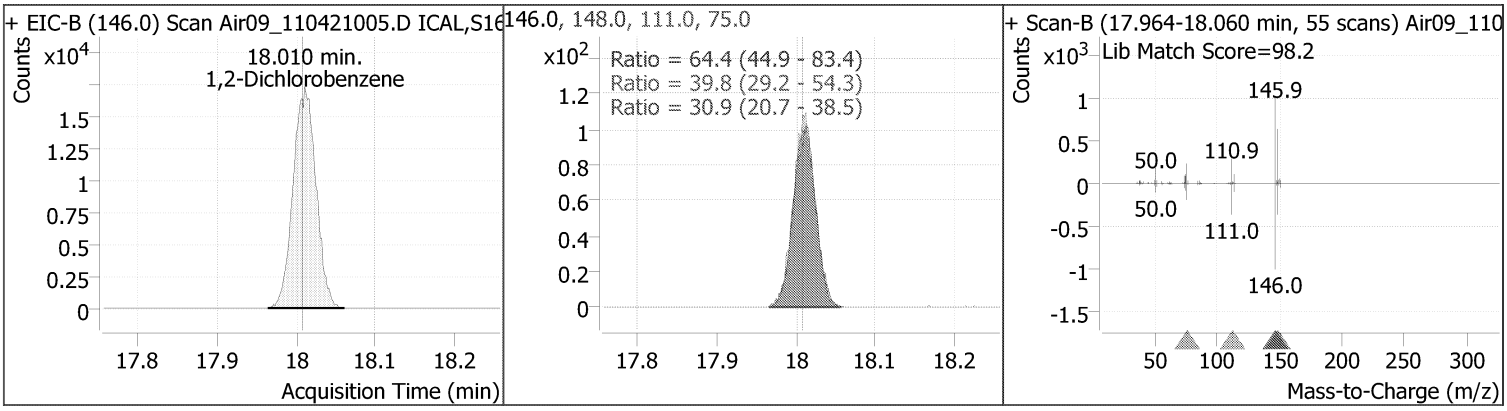
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.4652	17.47	0.00	36751	148.0	65.0	44.8	83.2
					111.0	38.9	28.2	52.3
					75.0	30.8	21.3	39.6



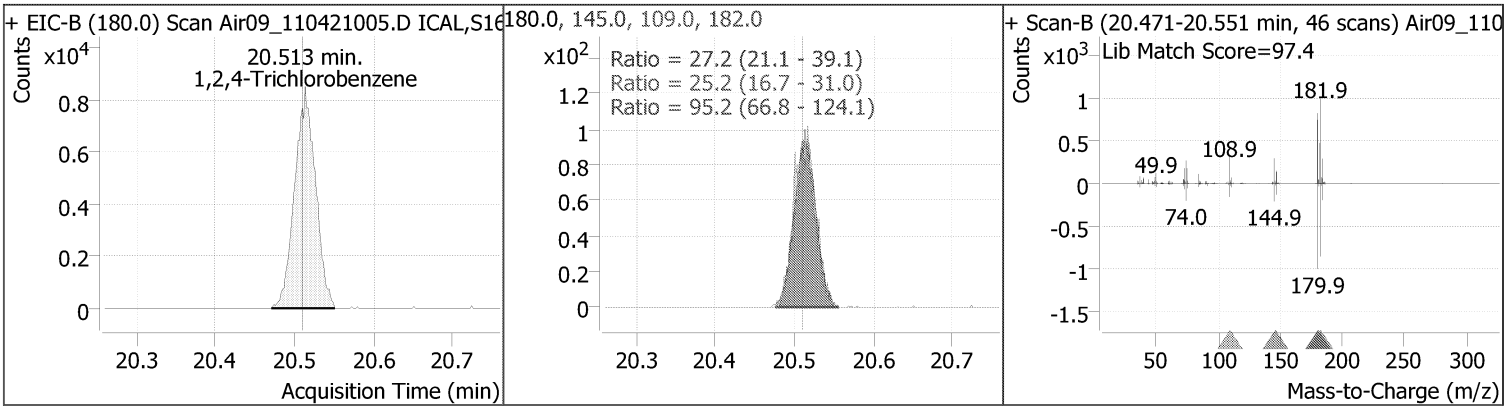
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.4634	17.56	0.00	36042	148.0	64.5	44.8	83.2
					111.0	36.8	27.3	50.6



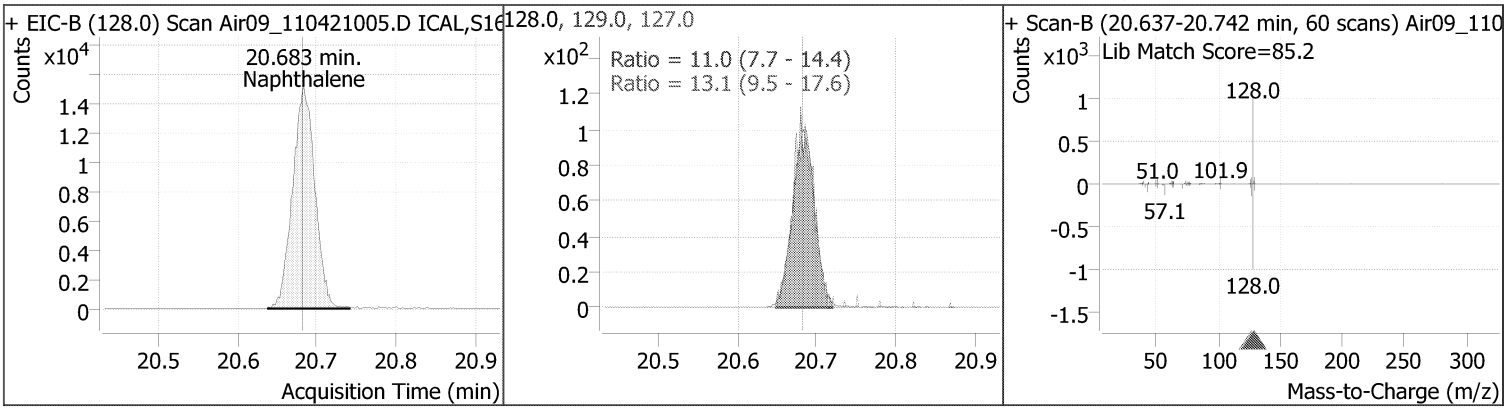
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.4641	18.01	0.00	34848	148.0	64.4	44.9	83.4
					111.0	39.8	29.2	54.3
					75.0	30.9	20.7	38.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.3547	20.51	0.00	15529	182.0	95.2	66.8	124.1
					145.0	27.2	21.1	39.1
					109.0	25.2	16.7	31.0

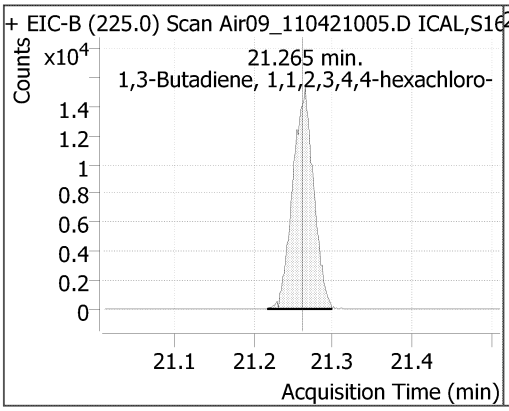


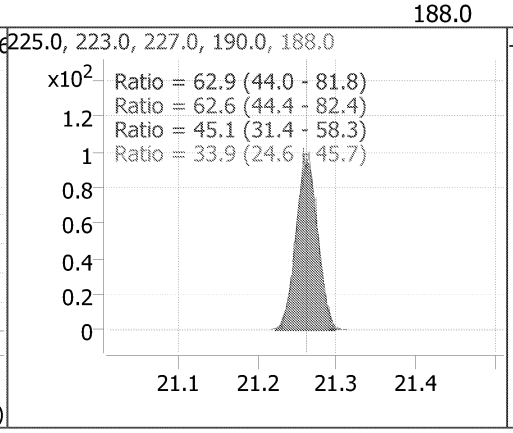
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	0.3250	20.68	0.00	29772	127.0	13.1	9.5	17.6
					129.0	11.0	7.7	14.4

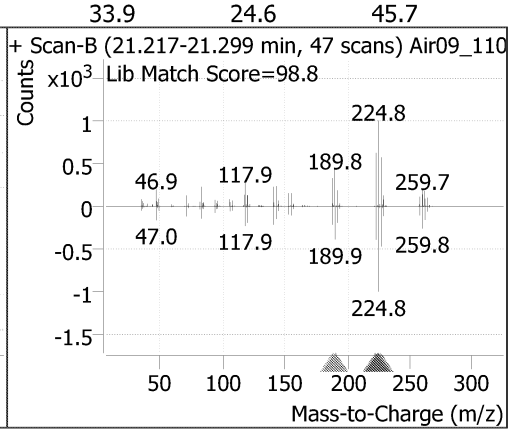


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.4628	21.27	0.00	28130	227.0	62.6	44.4	82.4
					223.0	62.9	44.0	81.8
					190.0	45.1	31.4	58.3
					188.0	33.9	24.6	45.7







Quantitation Results Report (Not Reviewed)

Data File	Air09_110421006.D	Operator	ZNZ
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Vial	1	Multiplier	1.00
DA Method File	TO15_SCAN_110421_1.m	Comment	1x200mL
Tune File	bfb.u	Tune Date	11/4/2021 10:42:36 AM
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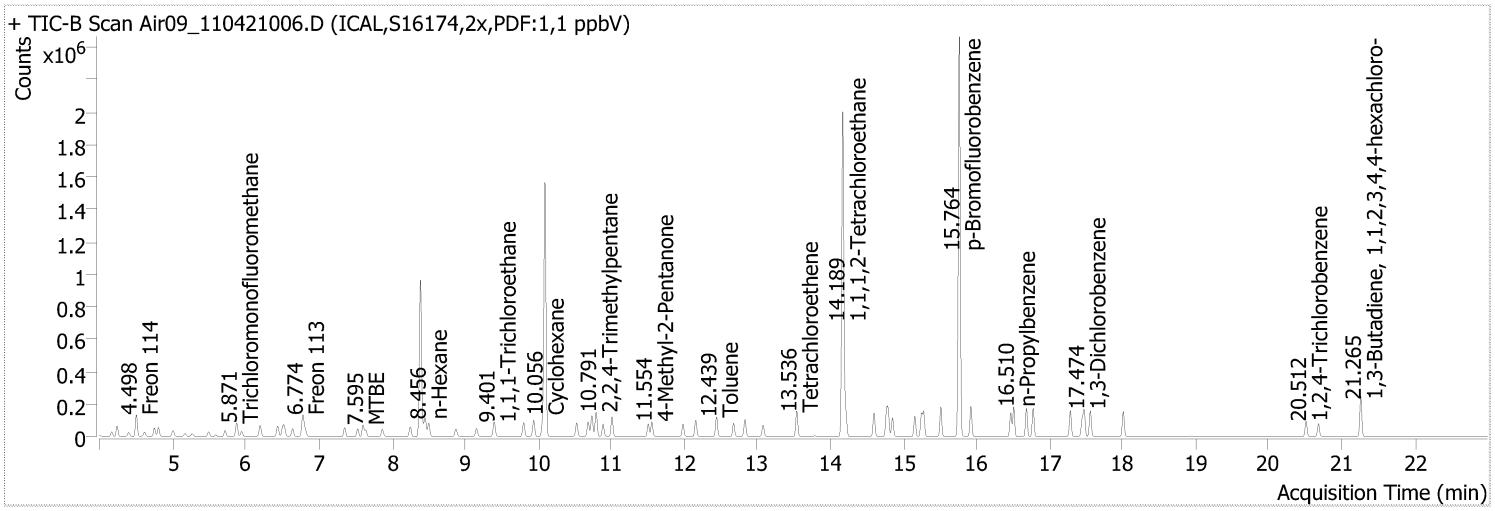


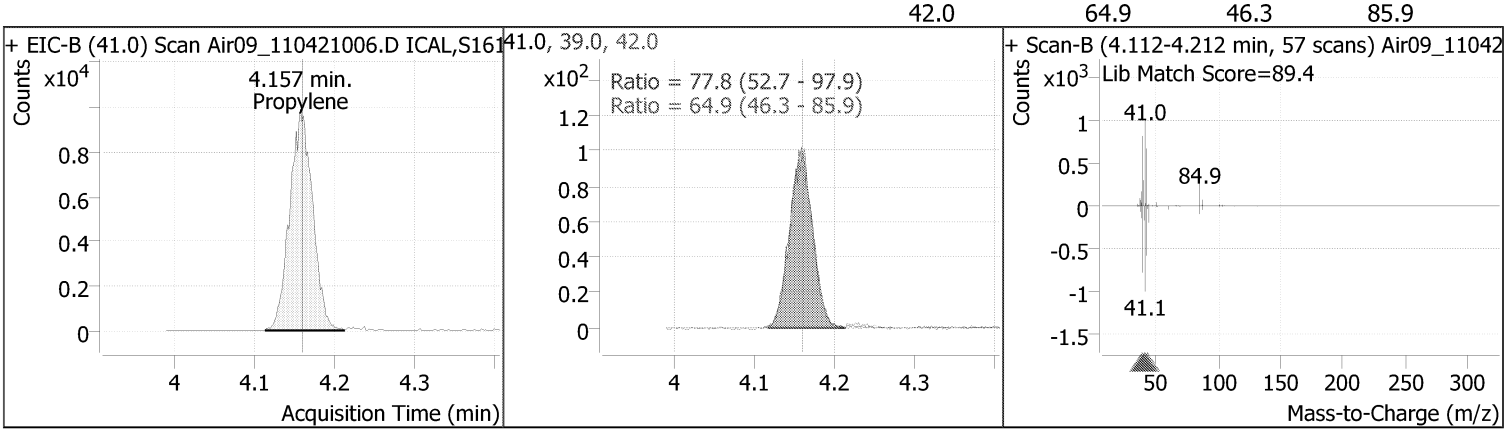
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.388	130.0	340224	10.0000	nL/L		-0.002
M 1,4-Difluorobenzene	10.092	114.0	1257555	10.0000	nL/L		-0.002
M Chlorobenzene-d5	14.168	82.0	654973	10.0000	nL/L	#	-0.004
System Monitoring Compounds							
S p-Bromofluorobenzene	15.764	174.0	793372	10.2743	nL/L		0.000
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 102.74%			
Target Compounds							QValue
T Propylene	4.157	41.0	19805	0.9811	nL/L		98
T Freon 12	4.233	85.0	65318	0.9667	nL/L		99
T Chloromethane	4.389	50.0	30975	0.9980	nL/L		98
T Freon 114	4.498	135.0	52968	0.9724	nL/L		99
T Vinyl Chloride	4.605	62.0	32728	0.9784	nL/L		99
T 1,3-Butadiene	4.741	54.0	26543	0.9949	nL/L		99
T Butane	4.798	43.0	54646	1.0050	nL/L		98
T Bromomethane	4.999	96.0	26819	0.9771	nL/L		99
T Chloroethane	5.164	64.0	17238	0.9778	nL/L		99
T Ethanol	5.258	45.0	19432	1.2761	nL/L		96
T Vinyl bromide	5.487	108.0	22638	0.9785	nL/L		99
T Acrolein	5.585	56.0	9582	0.9933	nL/L		98
T Acetone	5.710	58.0	13674	1.0701	nL/L		99
T Trichloromonofluoromethane	5.871	101.0	73815	0.9736	nL/L		100
T Isopropanol (IPA)	5.937	45.0	41589	0.9719	nL/L	#	87
T n-Pentane	6.192	43.0	46780	0.9473	nL/L		99
T 1,1-Dichloroethene	6.430	61.0	47435	0.9617	nL/L		97
T Tert-butyl alcohol (TBA)	6.496	59.0	45784	0.8814	nL/L	#	85
T Methylene Chloride	6.517	51.0	12364	0.9224	nL/L		93
T 3-Chloropropene	6.633	76.0	9922	0.9462	nL/L		99
T Freon 113	6.774	101.0	56936	0.9687	nL/L		99
T Carbon Disulfide	6.810	76.0	67045	0.9663	nL/L		97

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.351	61.0	37444	0.9581	nL/L		97
T 1,1-Dichloroethane	7.526	63.0	50864	0.9898	nL/L		99
T MTBE	7.595	73.0	64374	0.9468	nL/L		94
T Vinyl Acetate	7.638	43.0	57254	0.8334	nL/L	m	99
T 2-Butanone	7.863	72.0	11805	0.9663	nL/L		86
T cis-1,2-Dichloroethene	8.245	61.0	38447	0.9578	nL/L		96
T Ethyl Acetate	8.433	61.0	8950	0.9664	nL/L		97
T n-Hexane	8.456	57.0	40973	0.9480	nL/L		92
T Chloroform	8.501	83.0	57857	0.9764	nL/L		99
T Tetrahydrofuran	8.867	72.0	10656	0.9576	nL/L		99
T 1,2-Dichloroethane	9.152	62.0	41199	0.9651	nL/L		98
T 1,1,1-Trichloroethane	9.401	97.0	55901	0.9661	nL/L		99
T Benzene	9.802	78.0	74114	0.9537	nL/L		99
T Carbon Tetrachloride	9.934	117.0	58100	0.9584	nL/L		98
T TPH Gasoline (C3 to C12)	9.997	0.0	8489587	1.9869	nL/L		100
T Cyclohexane	10.056	84.0	30788	0.9029	nL/L	#	50
T 1,2-Dichloropropane	10.525	63.0	31817	0.9561	nL/L		98
T Methane, bromodichloro-	10.681	83.0	56578	0.9307	nL/L		98
T 1,4-Dioxane	10.725	88.0	15947	0.9311	nL/L		81
T Trichloroethene	10.736	132.0	34841	0.9678	nL/L		99
T 2,2,4-Trimethylpentane	10.791	56.0	42222	0.9698	nL/L		95
T Methyl methacrylate	10.888	69.0	26489	0.9508	nL/L		98
T n-Heptane	11.009	71.0	24932	0.9509	nL/L		95
T cis-1,3-Dichloropropene	11.507	110.0	9679	0.9538	nL/L		97
T 4-Methyl-2-Pentanone	11.554	58.0	23486	0.9627	nL/L		99
T trans-1,3-Dichloropropene	11.981	110.0	9636	0.9427	nL/L		99
T 1,1,2-Trichloroethane	12.156	97.0	32952	0.9699	nL/L		99
T Toluene	12.439	91.0	91008	0.9479	nL/L		99
T 2-Hexanone	12.673	58.0	29245	0.9243	nL/L		99
T Dibromochloromethane	12.832	129.0	59685	0.9398	nL/L		100
T 1,2-Dibromoethane	13.079	108.9	49584	0.9565	nL/L		100
T Tetrachloroethene	13.536	166.0	49069	0.9508	nL/L		98
T 1,1,1,2-Tetrachloroethane	14.189	131.0	40793	0.9785	nL/L	#	86
T Benzene, chloro-	14.214	112.0	74862	0.9849	nL/L		97
T Ethylbenzene	14.596	91.0	113475	0.9871	nL/L		100
T m,p-Xylenes	14.782	91.0	185742	2.2368	nL/L		99
T Bromoform	14.848	173.0	63008	0.9642	nL/L		99
T Styrene	15.155	104.0	66934	0.9717	nL/L		99
T 1,1,2,2-Tetrachloroethane	15.244	83.0	74956	0.9870	nL/L		99
T o-Xylene	15.277	91.0	92800	1.0126	nL/L		100
T n-Nonane	15.516	85.0	20375	0.9821	nL/L		95
T Isopropylbenzene	15.923	105.0	133804	0.9871	nL/L		99
T 2-Chlorotoluene	16.469	126.0	31357	0.9526	nL/L		100
T n-Propylbenzene	16.510	120.0	35740	0.9857	nL/L		90
T 4-Ethyltoluene	16.684	105.1	121953	0.9764	nL/L		100
T 1,3,5-Trimethylbenzene	16.776	105.0	107032	0.9852	nL/L		100
T 1,2,4-Trimethylbenzene	17.287	105.1	100072	0.9671	nL/L		100
T Benzyl chloride	17.446	91.0	78214	0.9069	nL/L		99
T 1,3-Dichlorobenzene	17.474	146.0	77929	0.9913	nL/L		99
T 1,4-Dichlorobenzene	17.560	146.0	76016	0.9823	nL/L		99
T 1,2-Dichlorobenzene	18.012	146.0	72670	0.9726	nL/L		98
T 1,2,4-Trichlorobenzene	20.512	180.0	35297	0.8102	nL/L		99
T Naphthalene	20.685	128.0	71202	0.7811	nL/L		99
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.265	225.0	56018	0.9262	nL/L		100

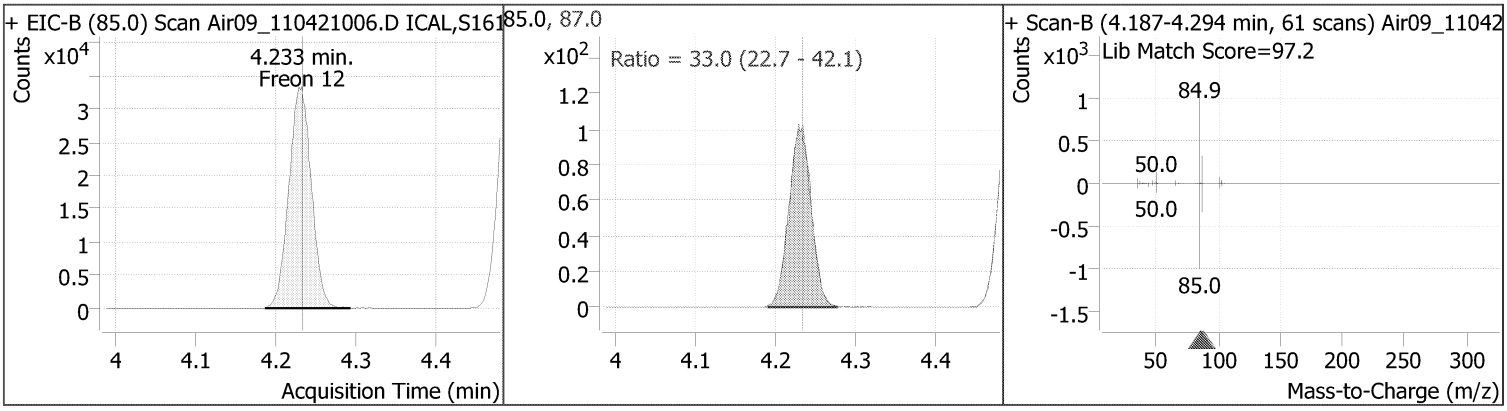
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

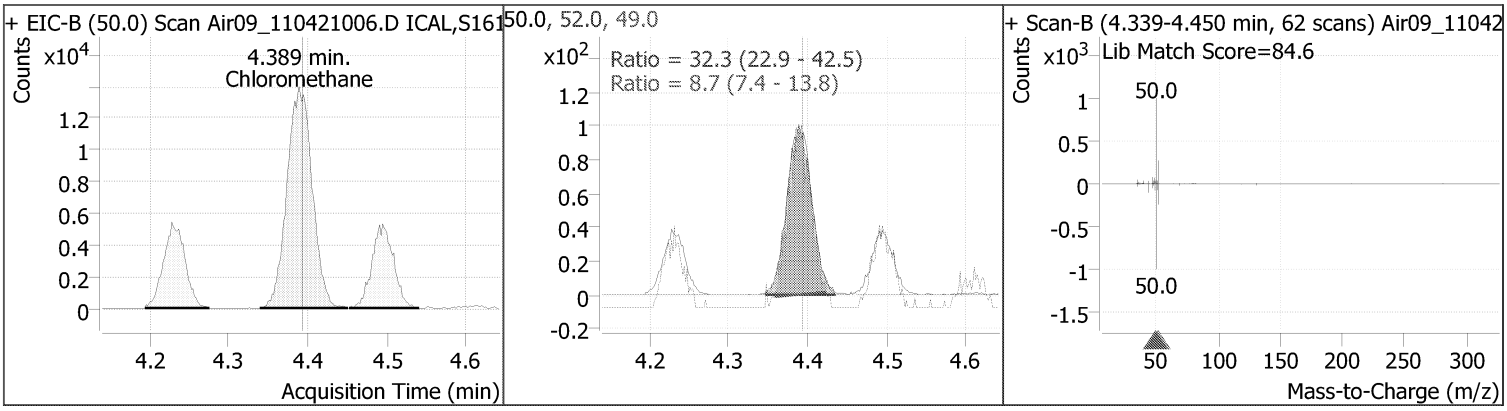
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.9811	4.16	0.00	19805	39.0	77.8	52.7	97.9
					42.0	64.9	46.3	85.9



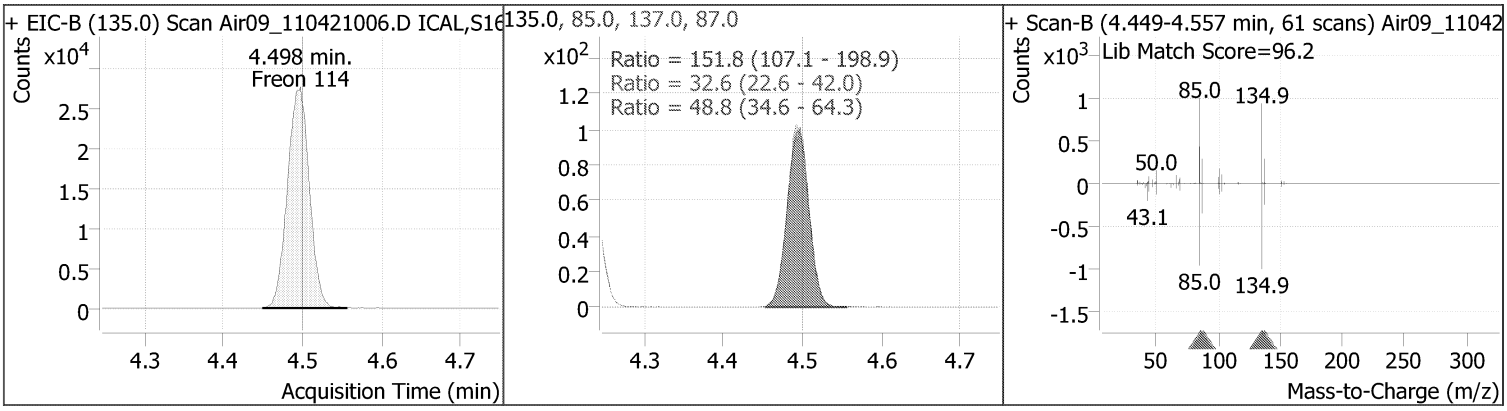
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	0.9667	4.23	0.00	65318	87.0	33.0	22.7	42.1



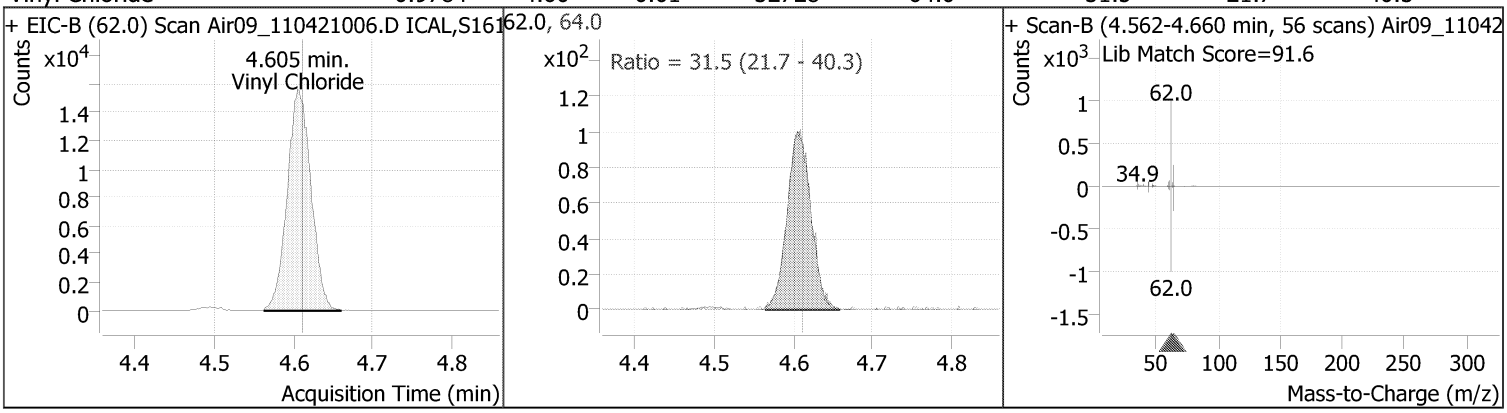
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	0.9980	4.39	0.00	30975	52.0	32.3	22.9	42.5
					49.0	8.7	7.4	13.8



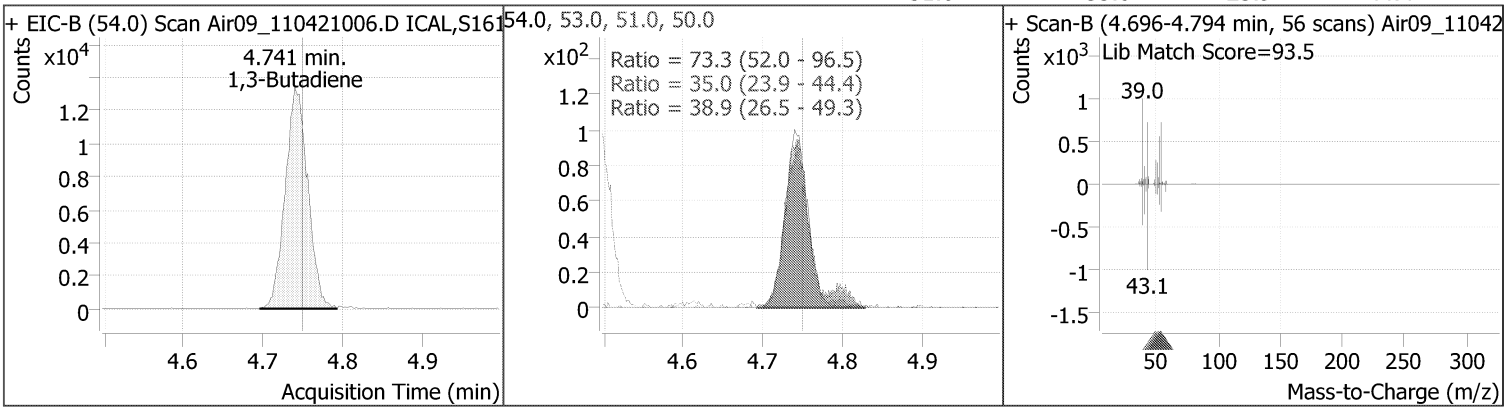
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	0.9724	4.50	0.00	52968	85.0	151.8	107.1	198.9
					87.0	48.8	34.6	64.3
					137.0	32.6	22.6	42.0



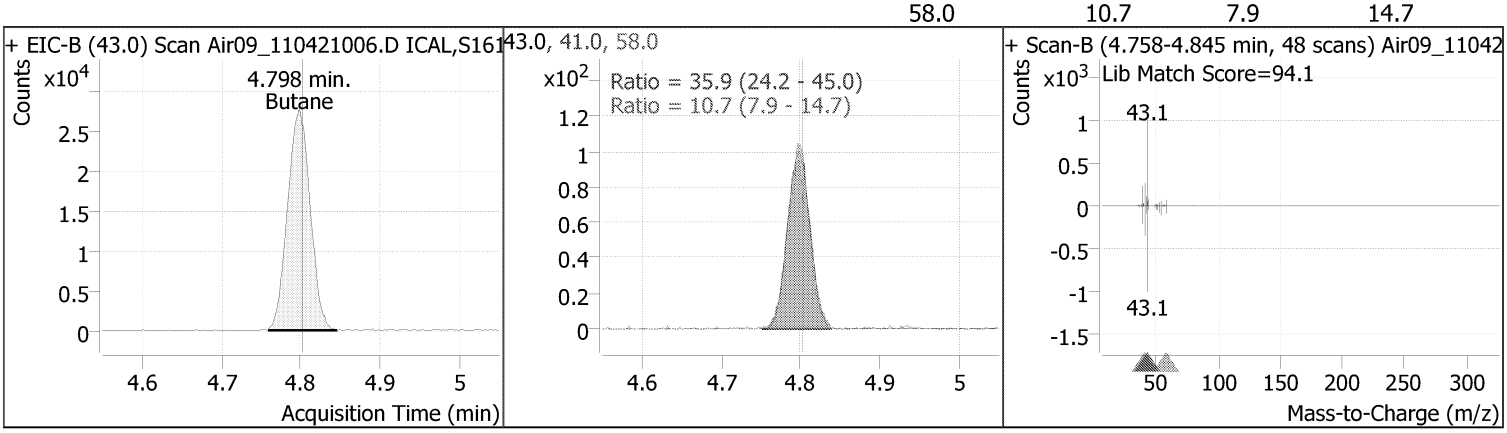
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	0.9784	4.60	-0.01	32728	64.0	31.5	21.7	40.3



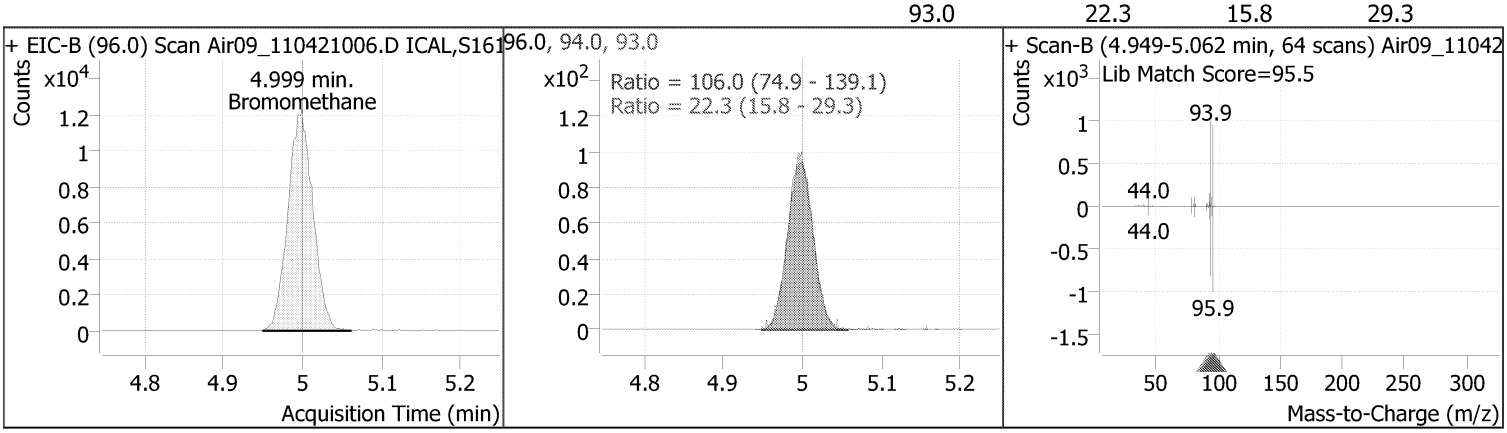
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	0.9949	4.74	-0.01	26543	53.0	73.3	52.0	96.5
					50.0	38.9	26.5	49.3
					51.0	35.0	23.9	44.4



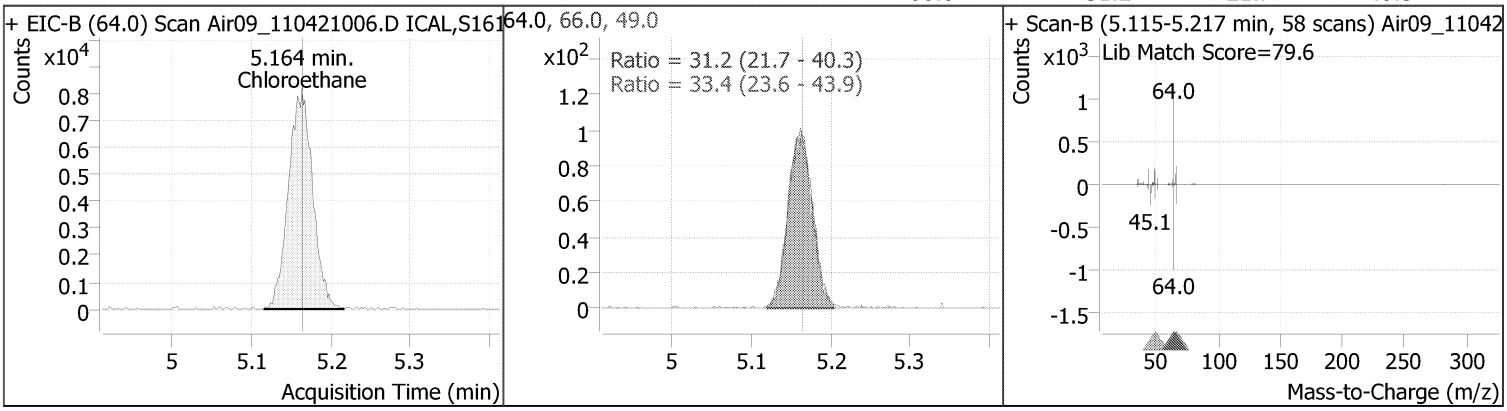
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	1.0050	4.80	0.00	54646	41.0	35.9	24.2	45.0
					58.0	10.7	7.9	14.7



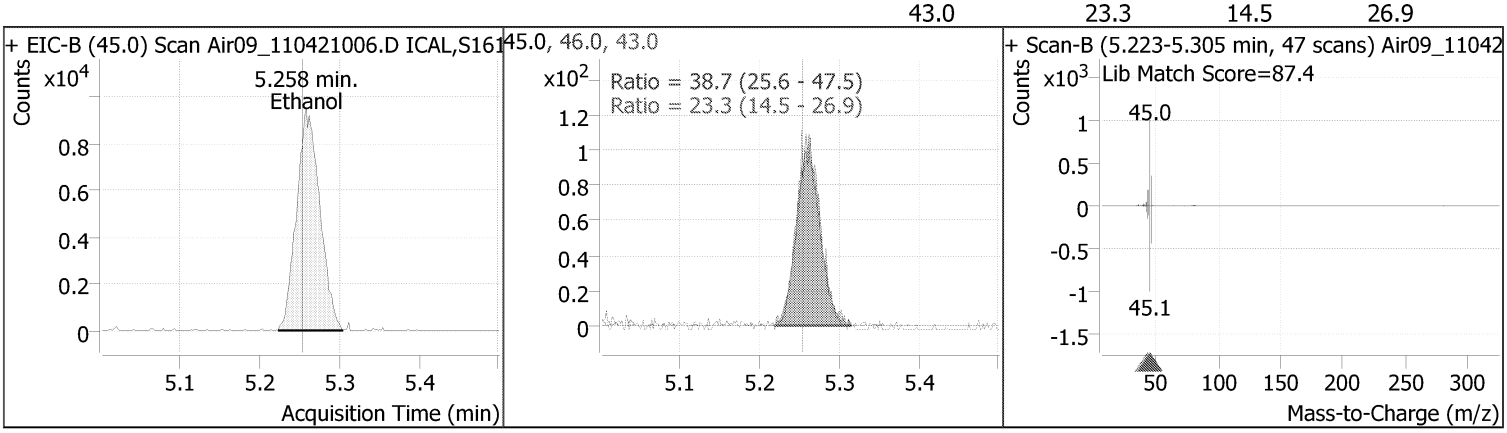
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromomethane	0.9771	5.00	0.00	26819	94.0	106.0	74.9	139.1
					93.0	22.3	15.8	29.3



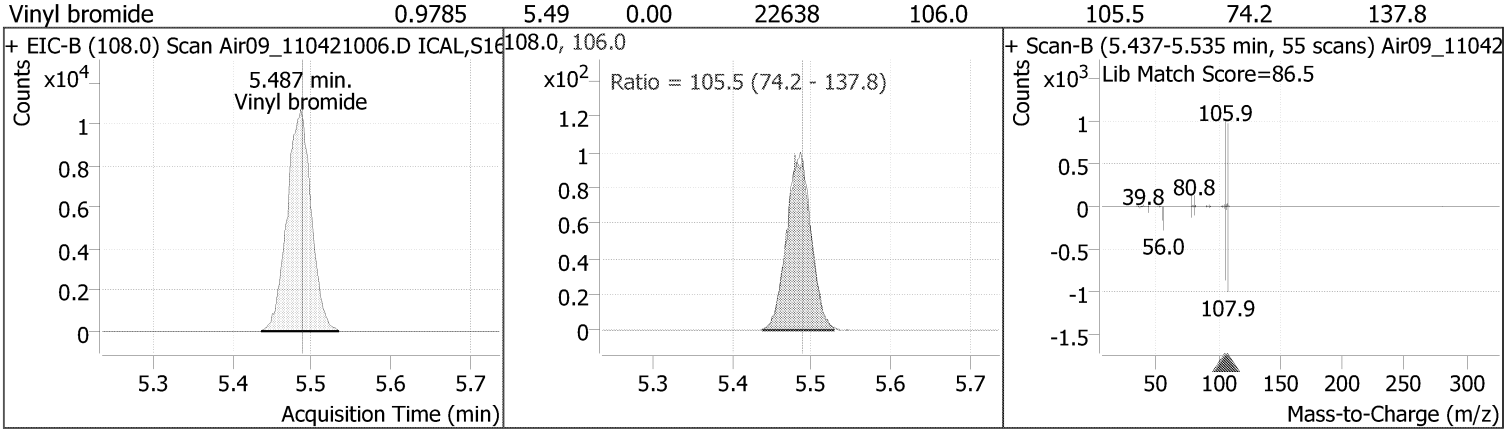
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	0.9778	5.16	0.00	17238	49.0	33.4	23.6	43.9
					66.0	31.2	21.7	40.3



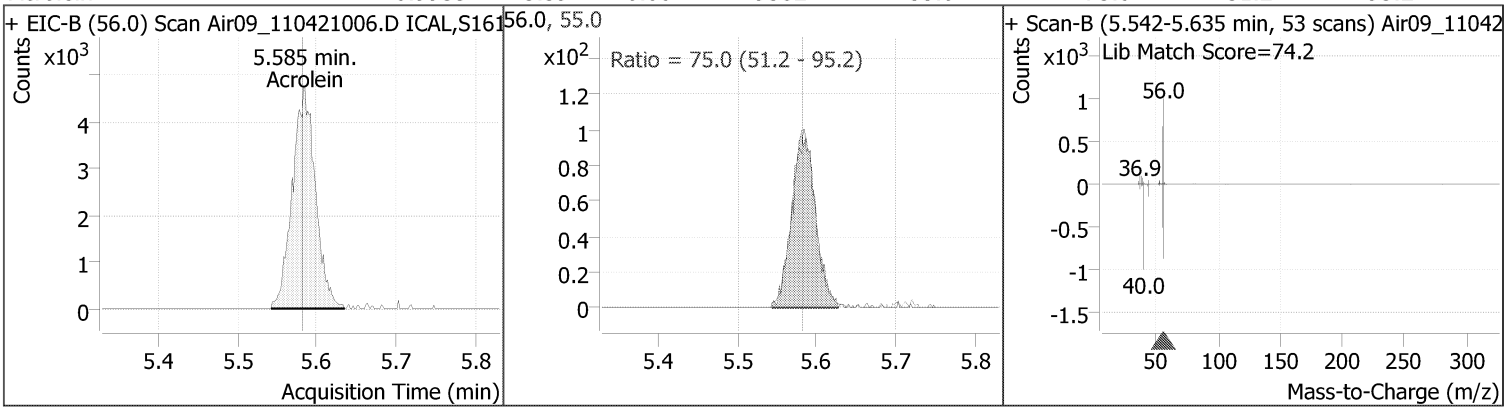
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	1.2761	5.26	0.01	19432	46.0	38.7	25.6	47.5
					43.0	23.3	14.5	26.9



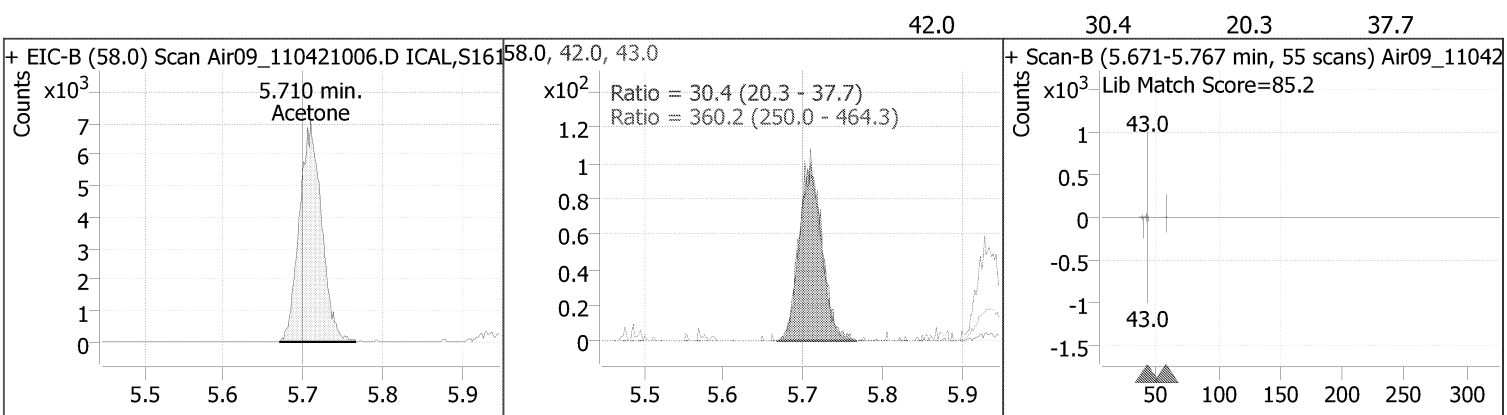
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl bromide	0.9785	5.49	0.00	22638	106.0	105.5	74.2	137.8



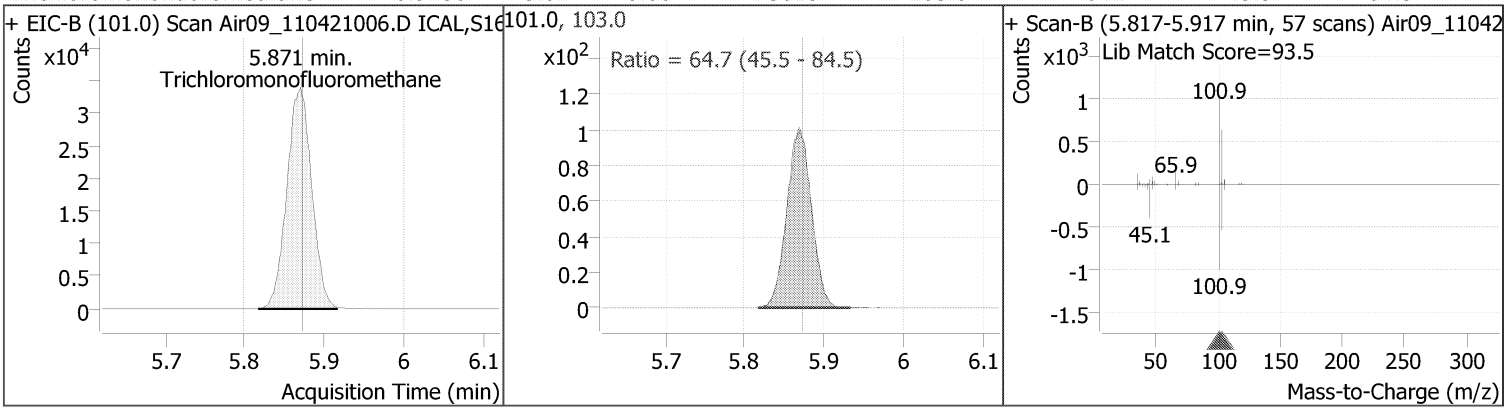
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	0.9933	5.59	0.00	9582	55.0	75.0	51.2	95.2



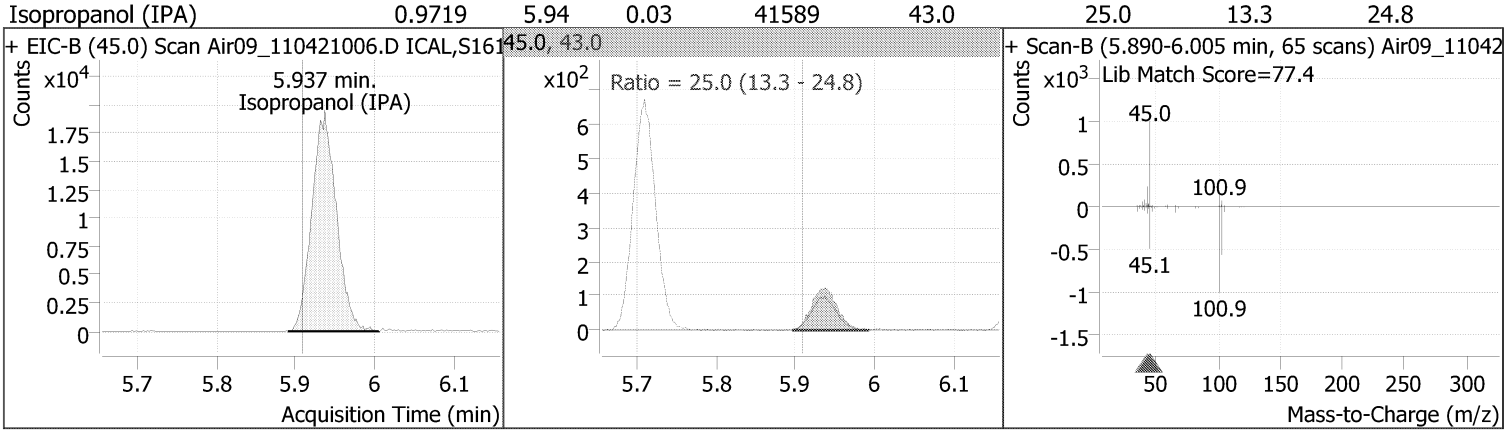
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	1.0701	5.71	0.01	13674	43.0	360.2	250.0	464.3
					42.0	30.4	20.3	37.7



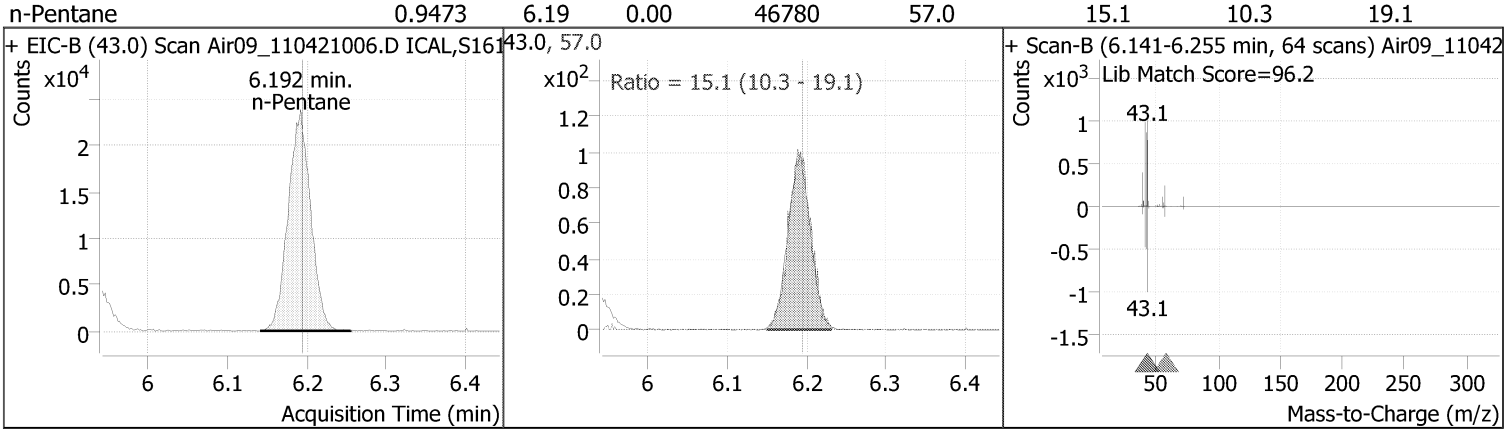
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	0.9736	5.87	0.00	73815	103.0	64.7	45.5	84.5



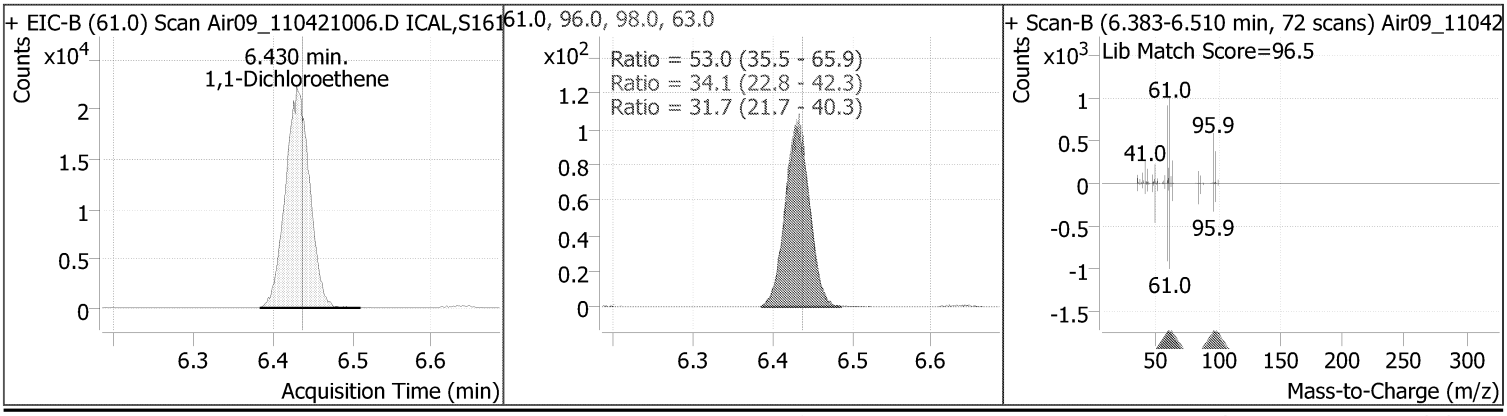
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.9719	5.94	0.03	41589	43.0	25.0	13.3	24.8



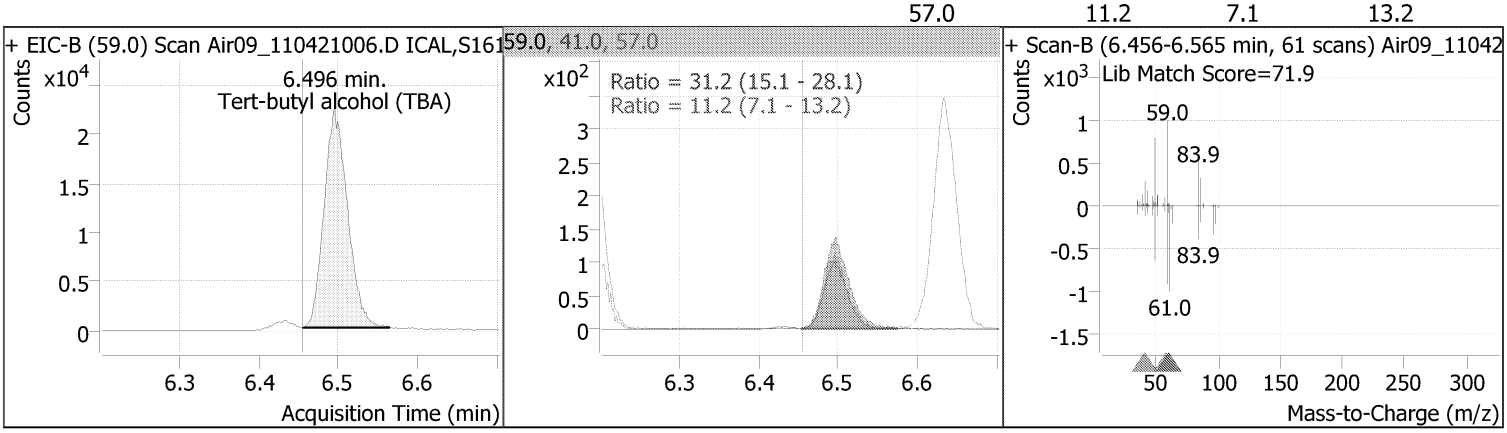
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.9473	6.19	0.00	46780	57.0	15.1	10.3	19.1



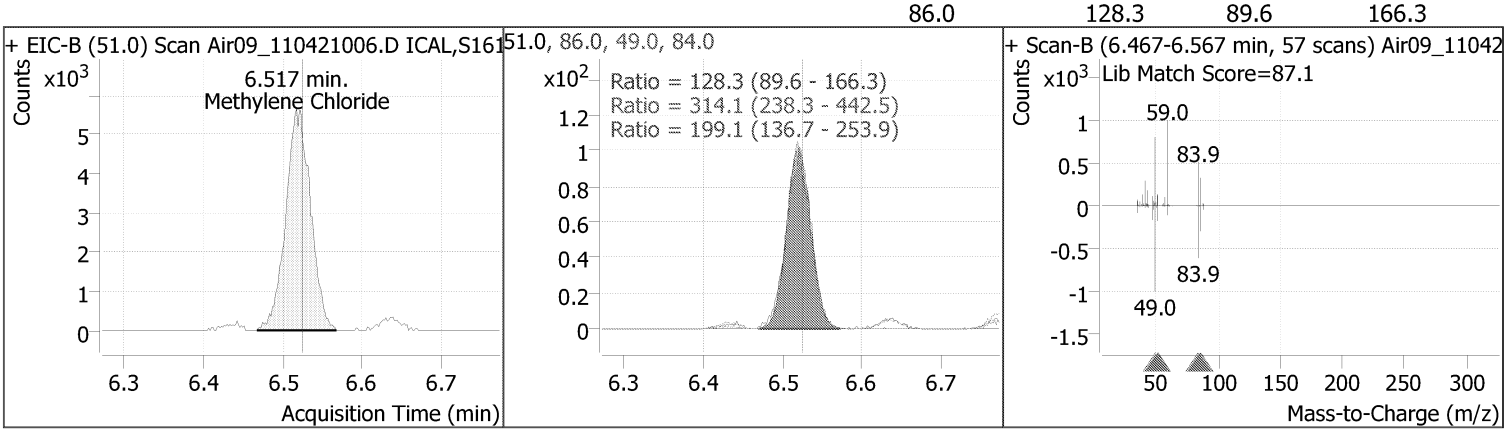
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	0.9617	6.43	-0.01	47435	96.0	53.0	35.5	65.9
					98.0	34.1	22.8	42.3
					63.0	31.7	21.7	40.3



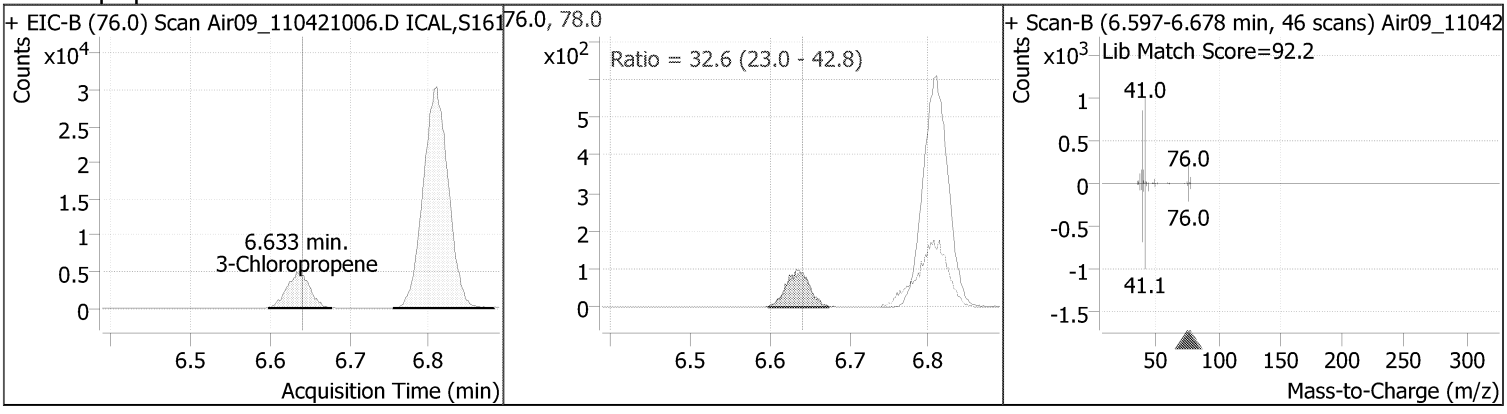
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.8814	6.50	0.04	45784	41.0	31.2	15.1	28.1
					57.0	11.2	7.1	13.2



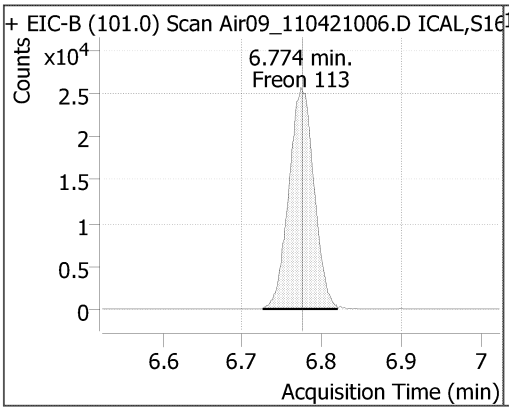
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.9224	6.52	-0.01	12364	49.0	314.1	238.3	442.5
					84.0	199.1	136.7	253.9
					86.0	128.3	89.6	166.3

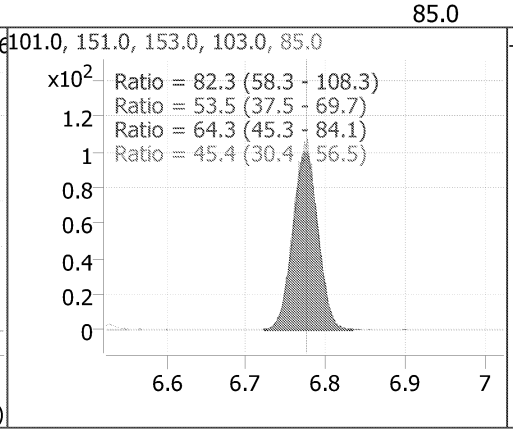


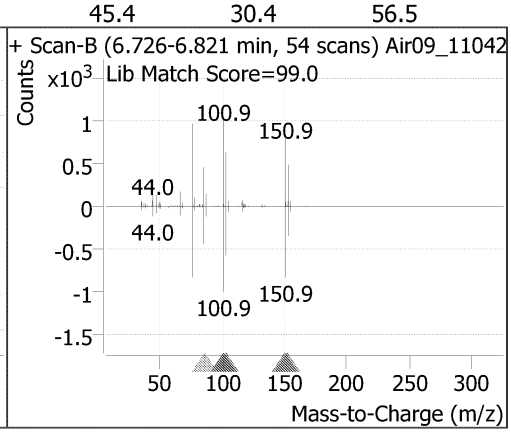
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	0.9462	6.63	-0.01	9922	78.0	32.6	23.0	42.8



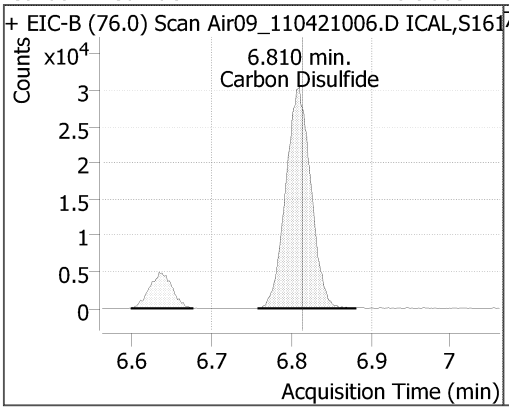
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	0.9687	6.77	0.00	56936	151.0	82.3	58.3	108.3
					103.0	64.3	45.3	84.1
					153.0	53.5	37.5	69.7
					85.0	45.4	30.4	56.5

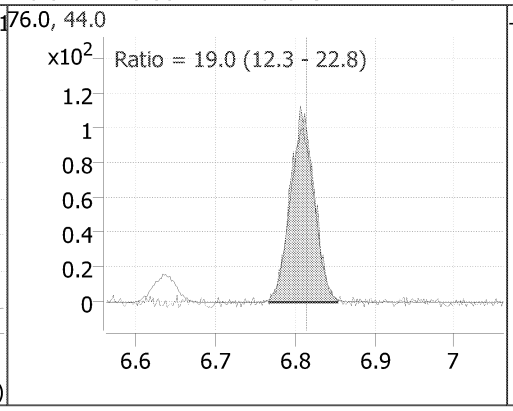


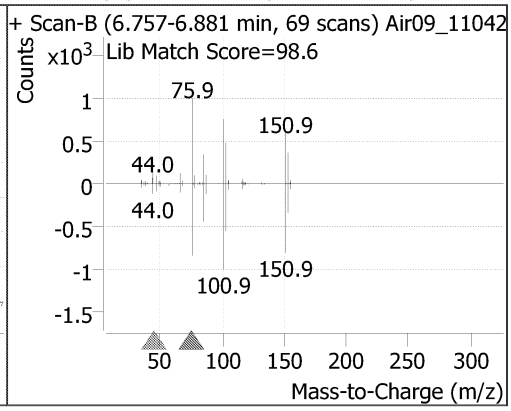




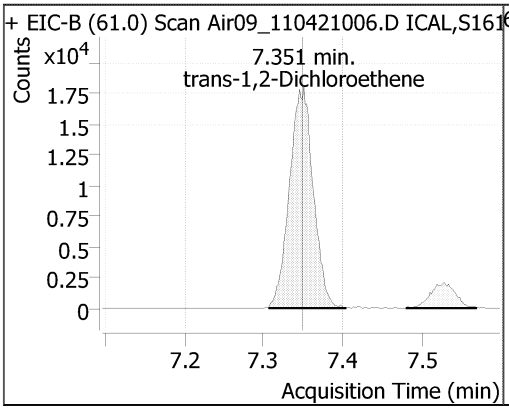
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.9663	6.81	0.00	67045	44.0	19.0	12.3	22.8

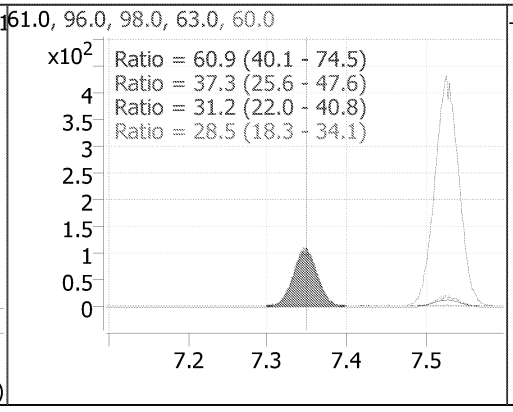


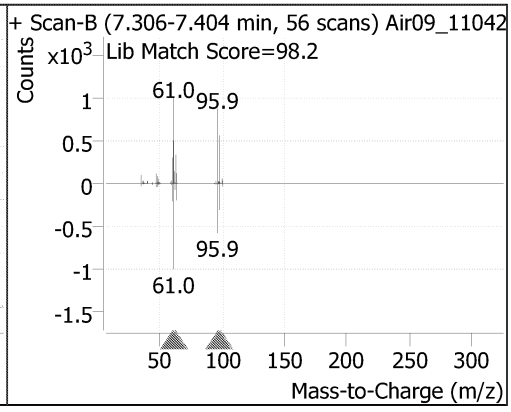




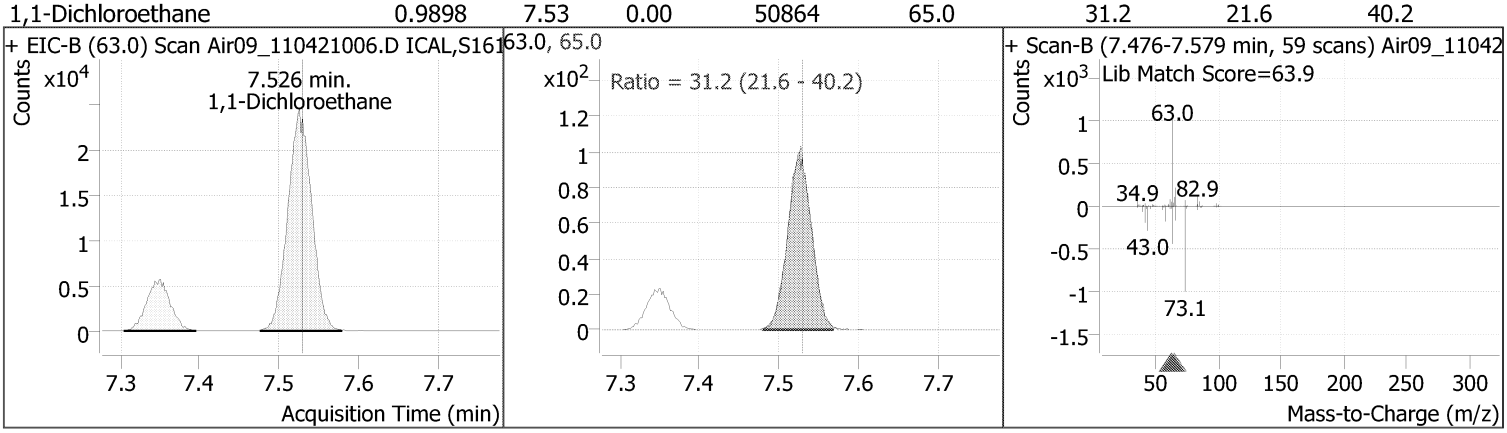
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.9581	7.35	0.00	37444	96.0	60.9	40.1	74.5
					98.0	37.3	25.6	47.6
					63.0	31.2	22.0	40.8
					60.0	28.5	18.3	34.1



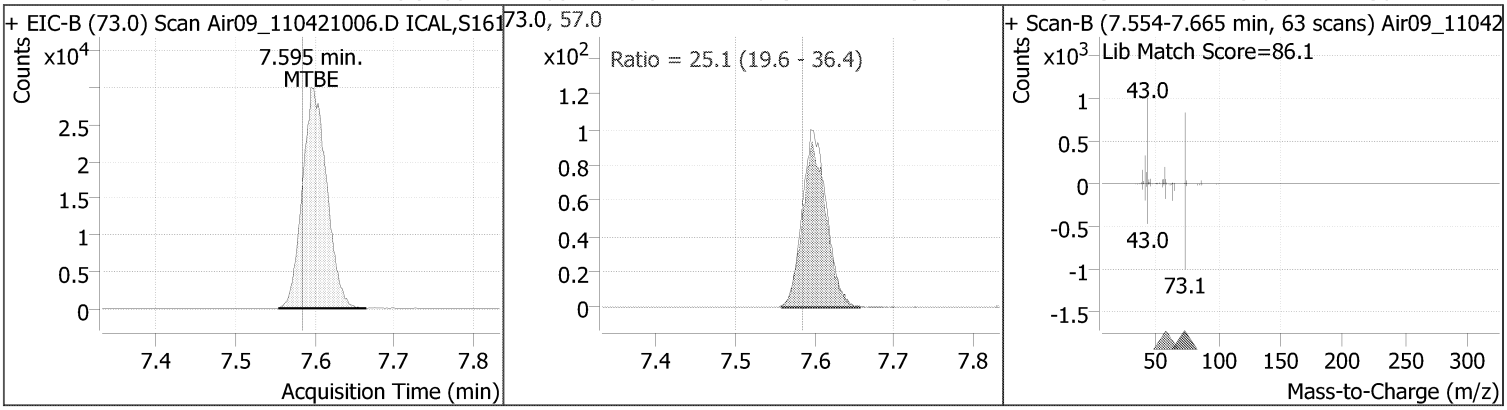




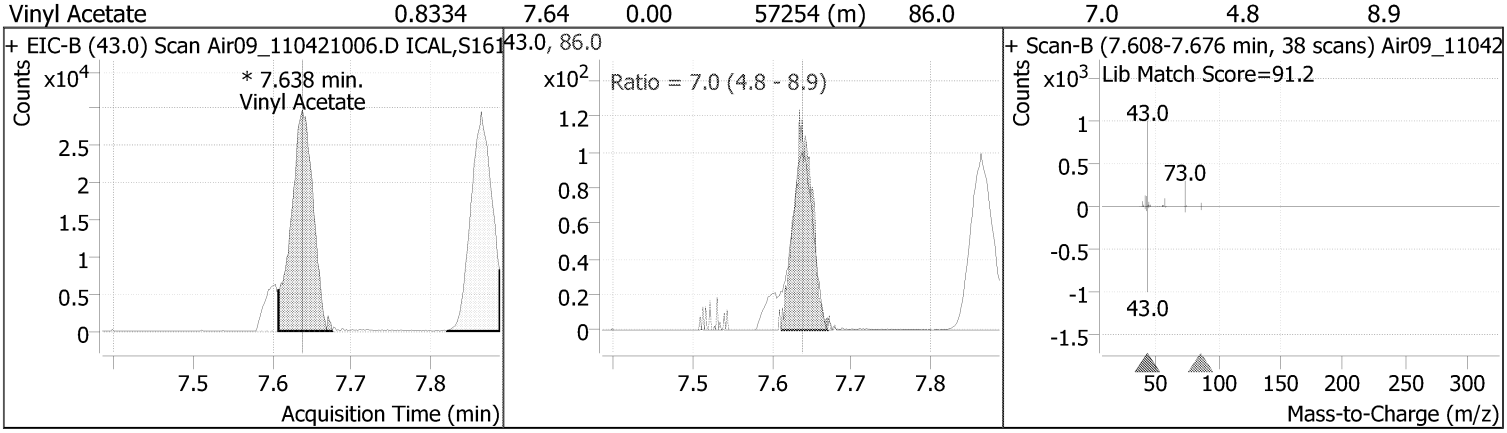
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	0.9898	7.53	0.00	50864	65.0	31.2	21.6	40.2



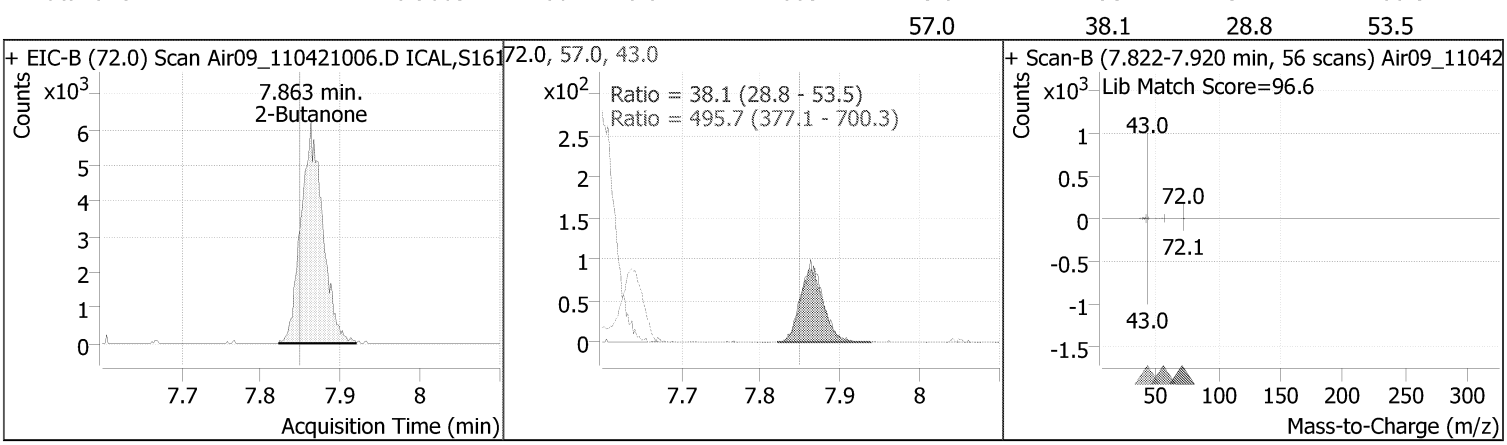
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	0.9468	7.60	0.01	64374	57.0	25.1	19.6	36.4



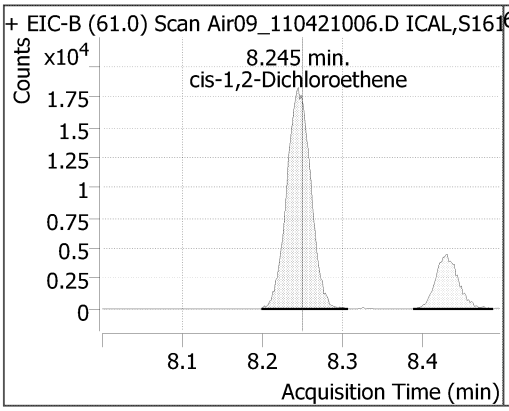
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.8334	7.64	0.00	57254 (m)	86.0	7.0	4.8	8.9

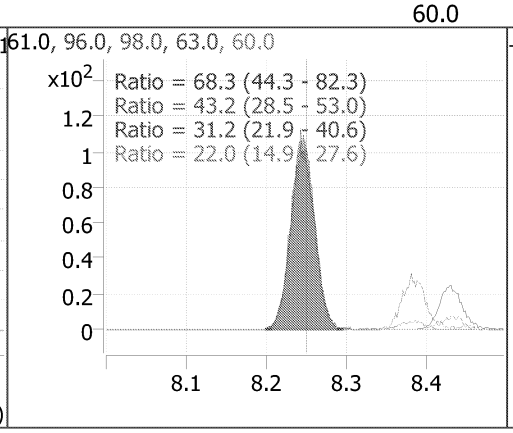


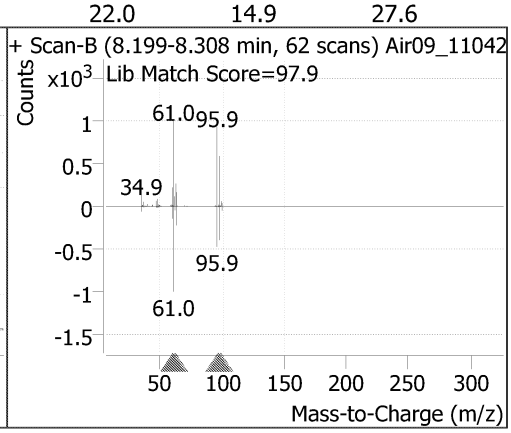
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.9663	7.86	0.01	11805	43.0	495.7	377.1	700.3
					57.0	38.1	28.8	53.5



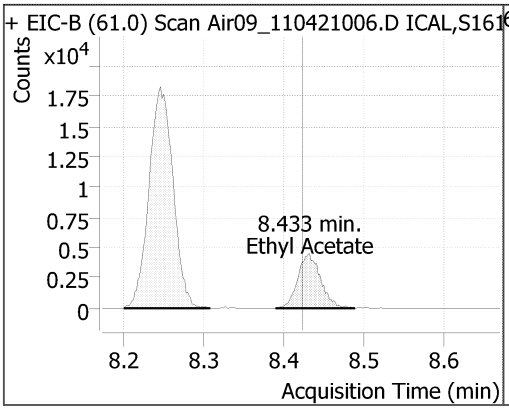
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.9578	8.25	-0.01	38447	96.0	68.3	44.3	82.3
					98.0	43.2	28.5	53.0
					63.0	31.2	21.9	40.6
					60.0	22.0	14.9	27.6

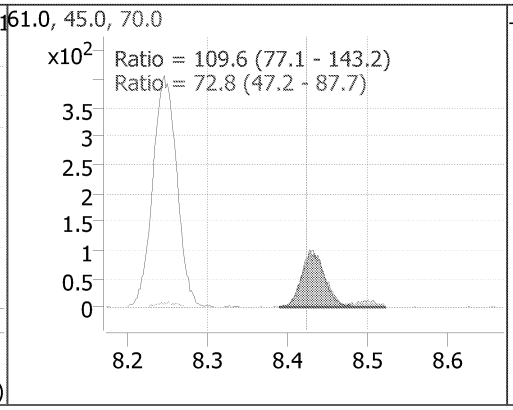


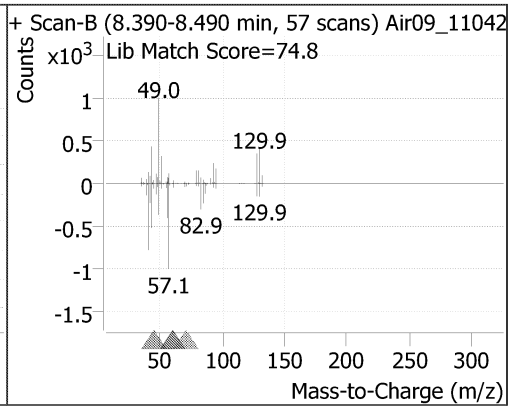




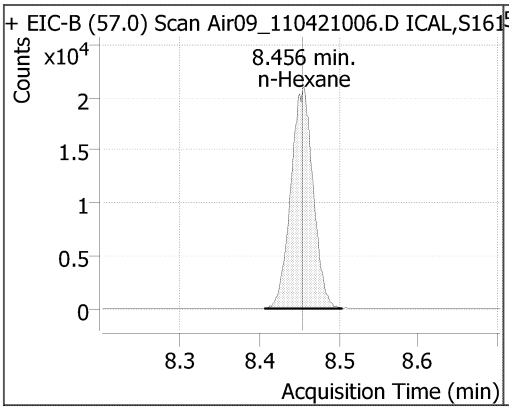
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	0.9664	8.43	0.01	8950	45.0	109.6	77.1	143.2
					70.0	72.8	47.2	87.7

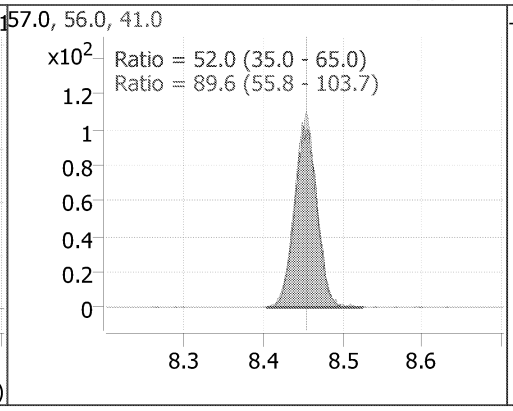


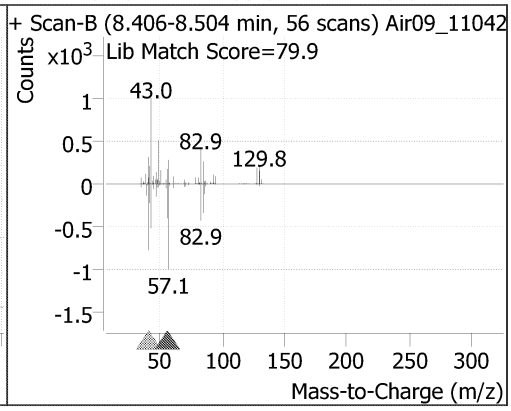




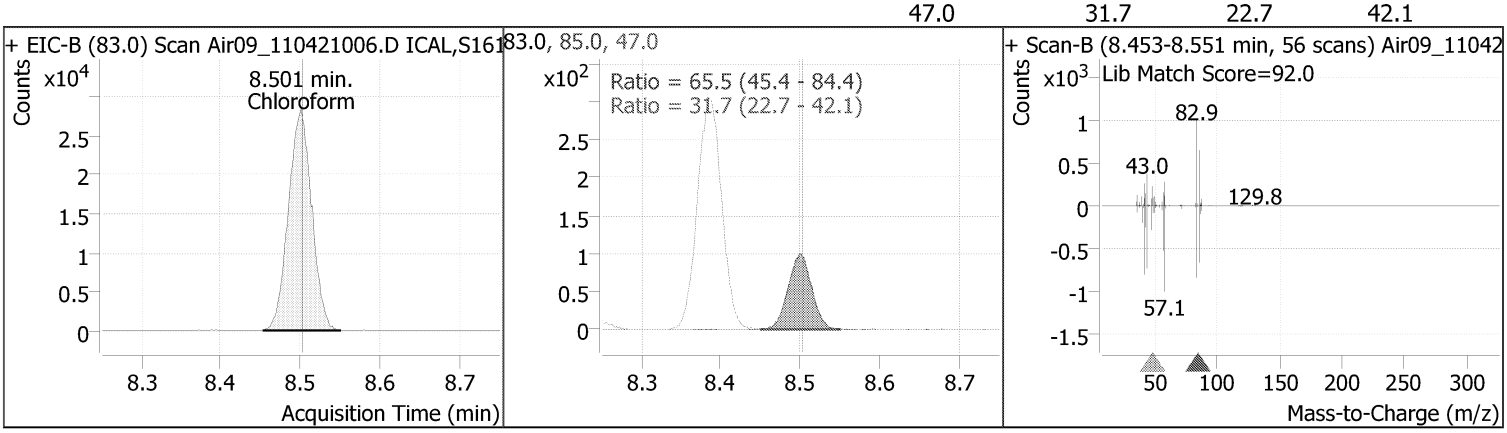
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.9480	8.46	0.00	40973	41.0	89.6	55.8	103.7
					56.0	52.0	35.0	65.0



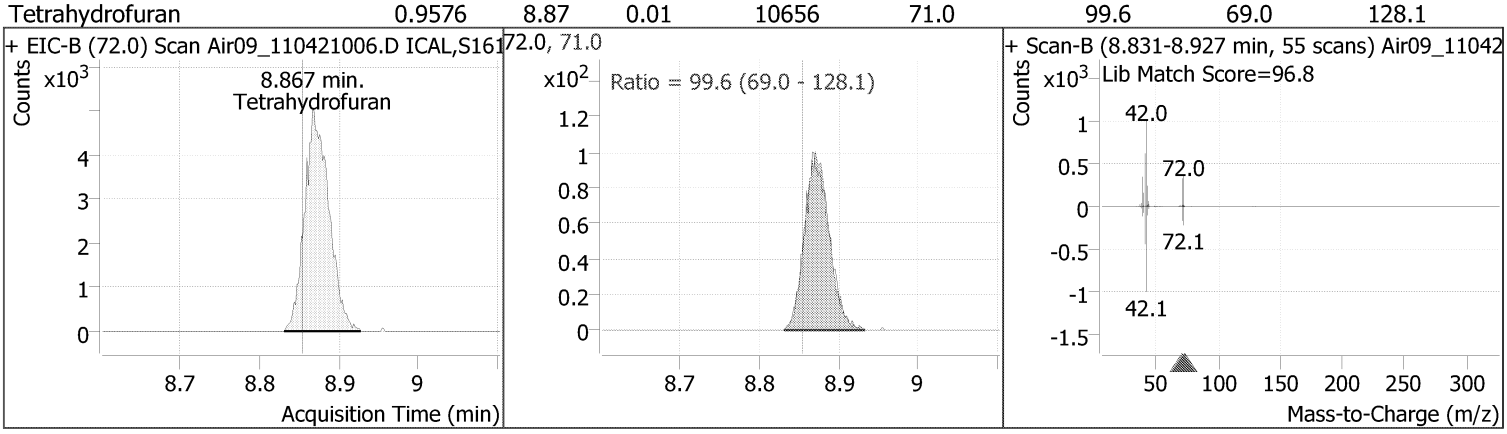




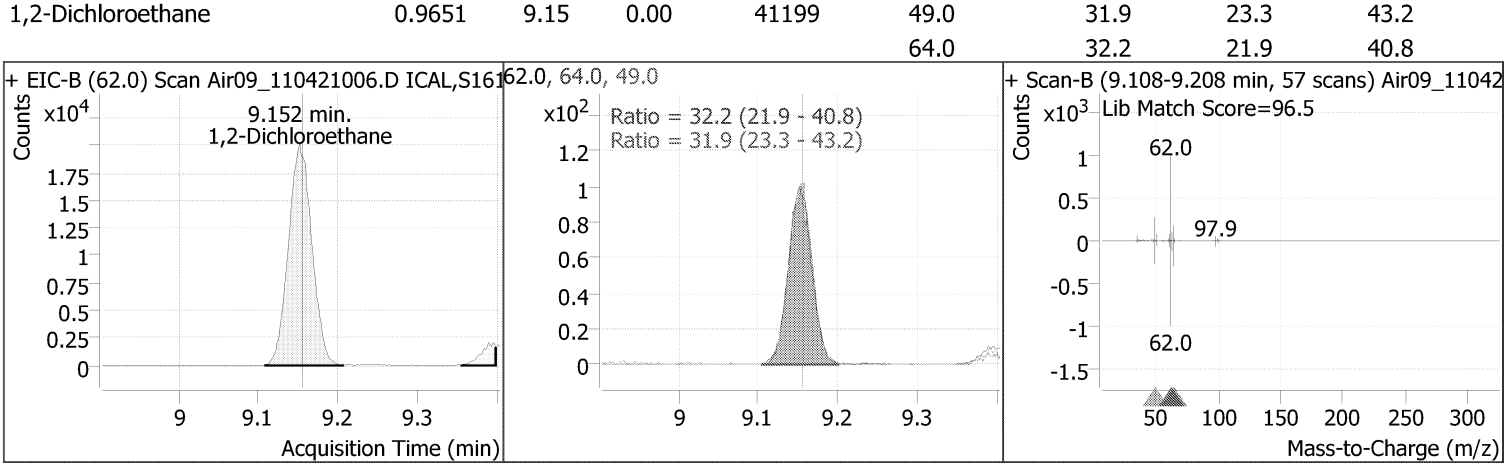
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.9764	8.50	0.00	57857	85.0	65.5	45.4	84.4
					47.0	31.7	22.7	42.1



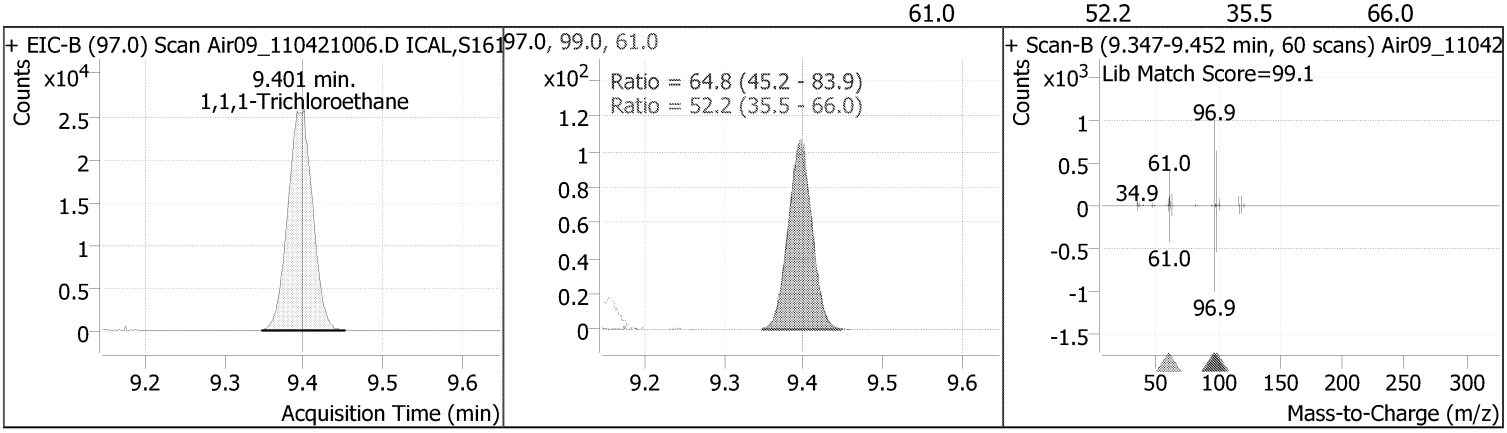
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	0.9576	8.87	0.01	10656	71.0	99.6	69.0	128.1



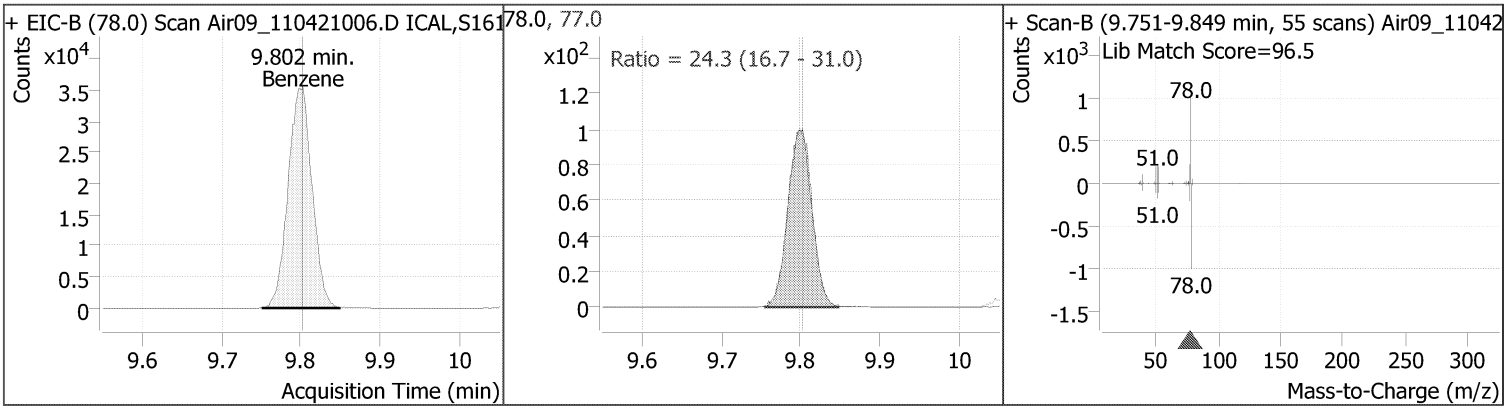
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	0.9651	9.15	0.00	41199	49.0	31.9	23.3	43.2
					64.0	32.2	21.9	40.8



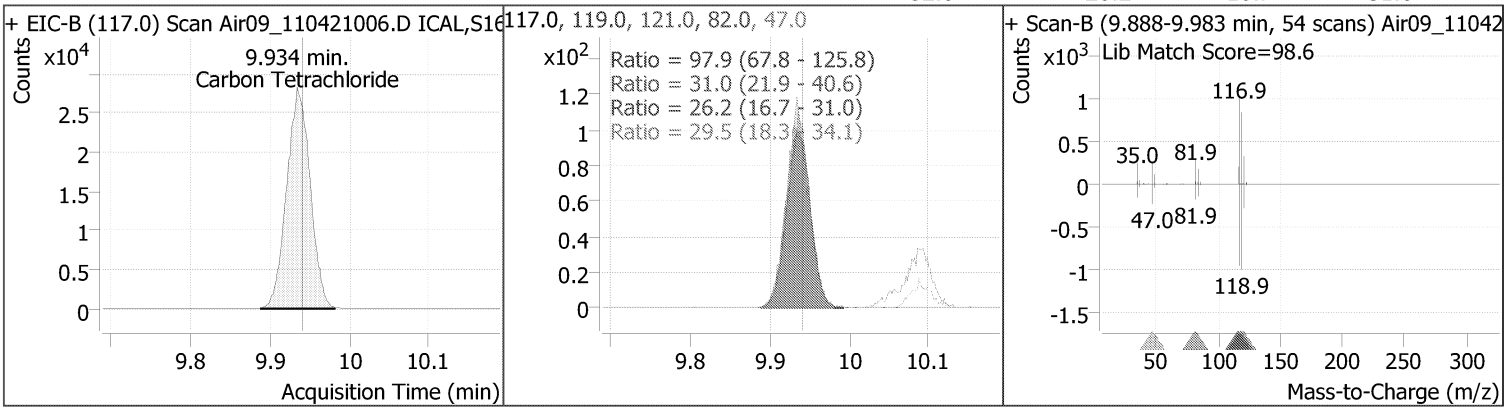
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	0.9661	9.40	0.00	55901	99.0	64.8	45.2	83.9
					61.0	52.2	35.5	66.0



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.9537	9.80	0.00	74114	77.0	24.3	16.7	31.0

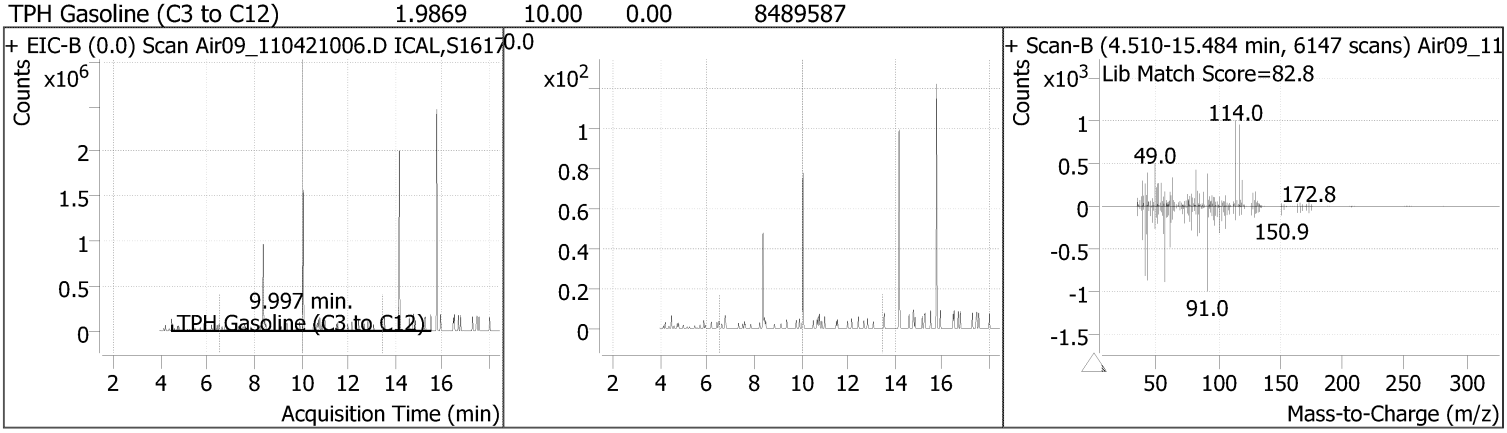


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	0.9584	9.93	-0.01	58100	119.0	97.9	67.8	125.8
					121.0	31.0	21.9	40.6
					47.0	29.5	18.3	34.1
					82.0	26.2	16.7	31.0

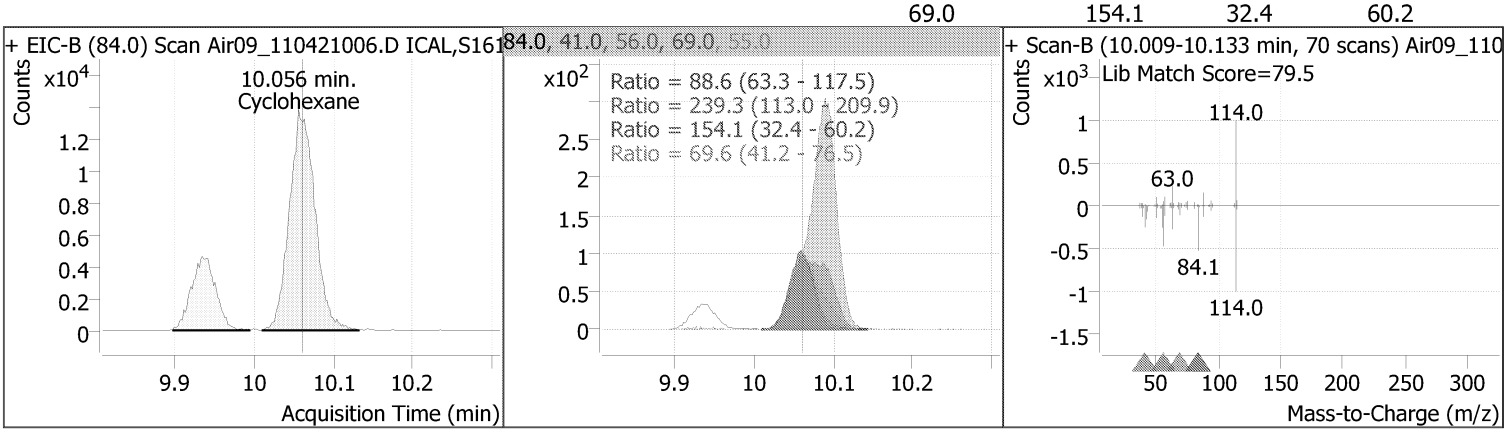


Quantitation Results Report (Not Reviewed)

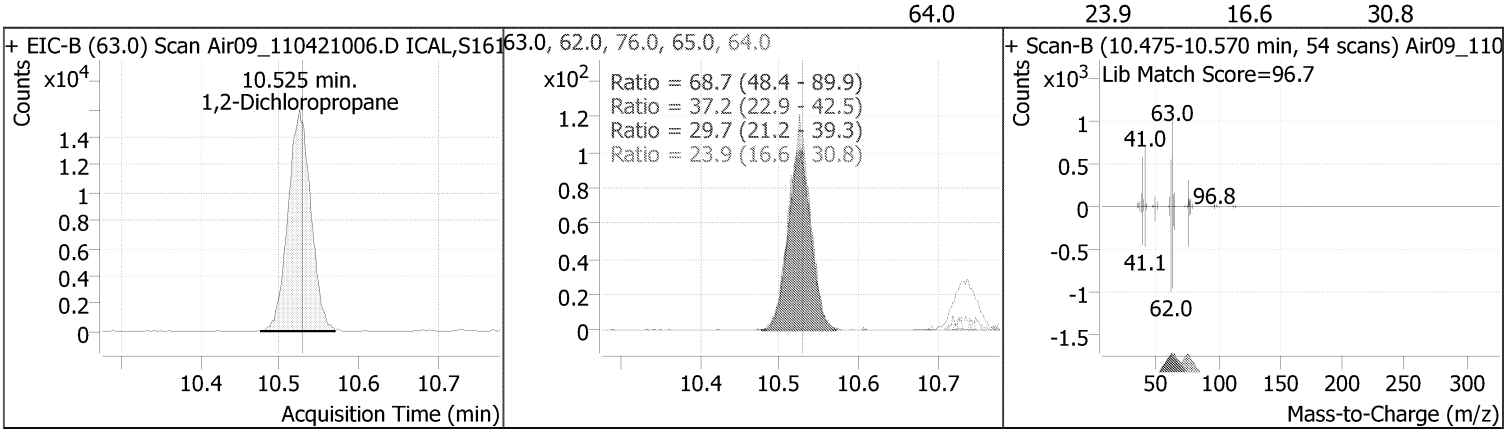
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	1.9869	10.00	0.00	8489587				



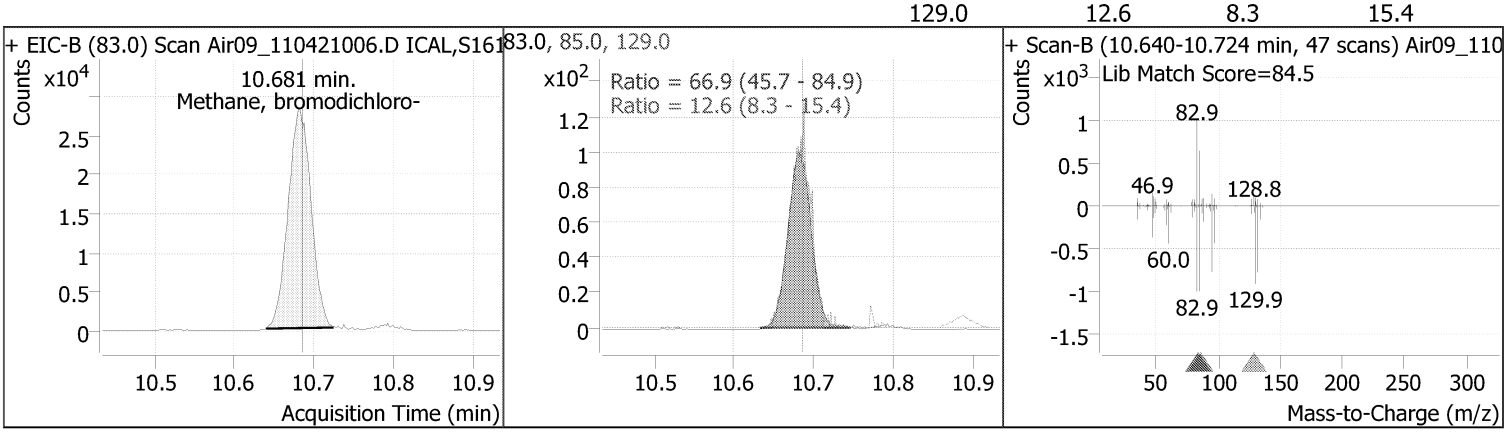
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.9029	10.06	-0.01	30788	56.0	239.3	113.0	209.9
					41.0	88.6	63.3	117.5
					55.0	69.6	41.2	76.5
					69.0	154.1	32.4	60.2



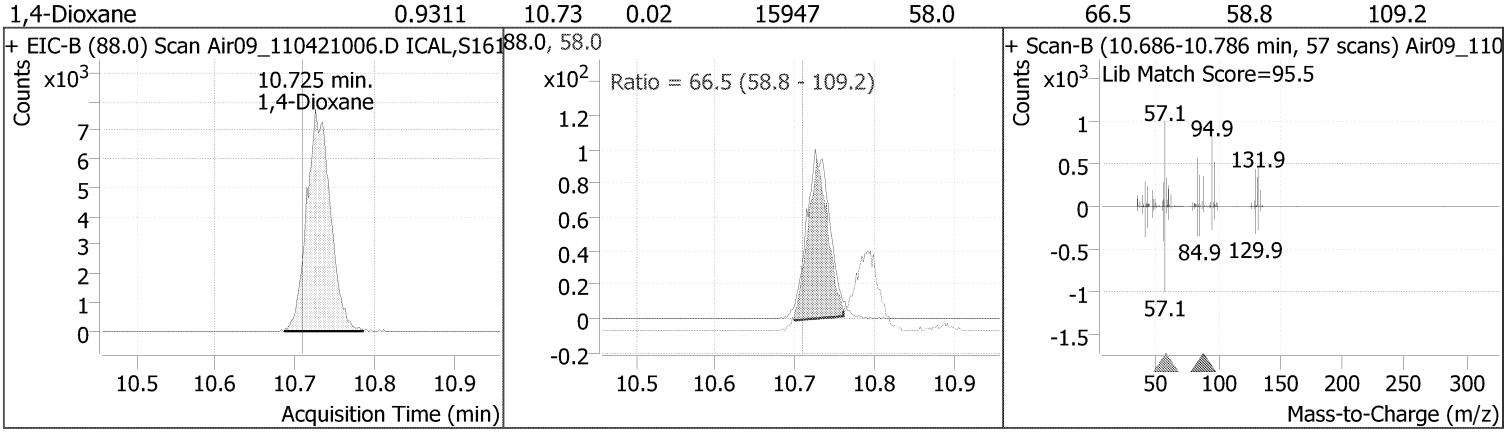
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.9561	10.53	0.00	31817	62.0	68.7	48.4	89.9
					76.0	37.2	22.9	42.5
					65.0	29.7	21.2	39.3
					64.0	23.9	16.6	30.8



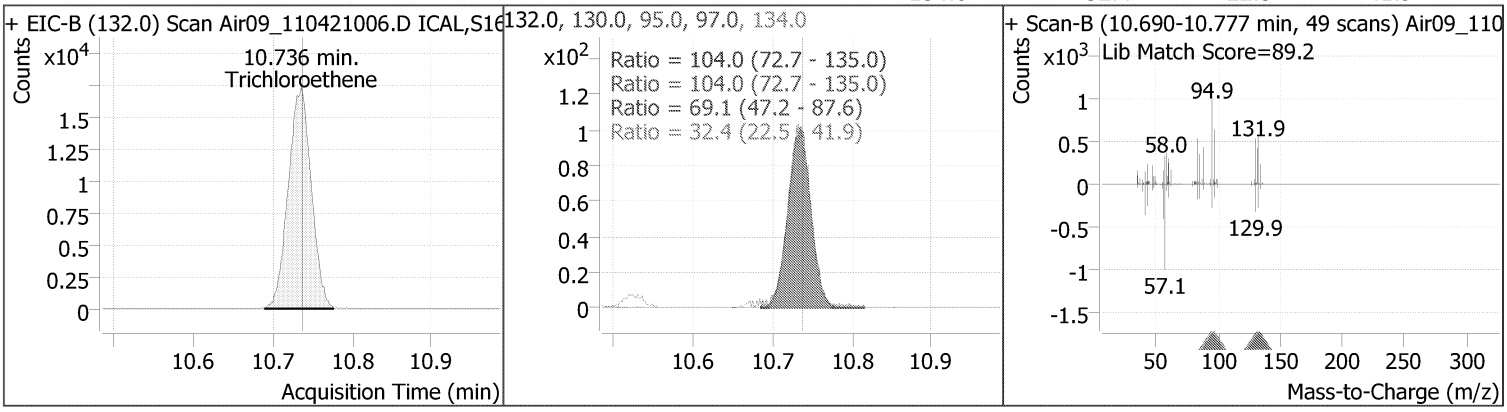
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	0.9307	10.68	-0.01	56578	85.0	66.9	45.7	84.9
					129.0	12.6	8.3	15.4



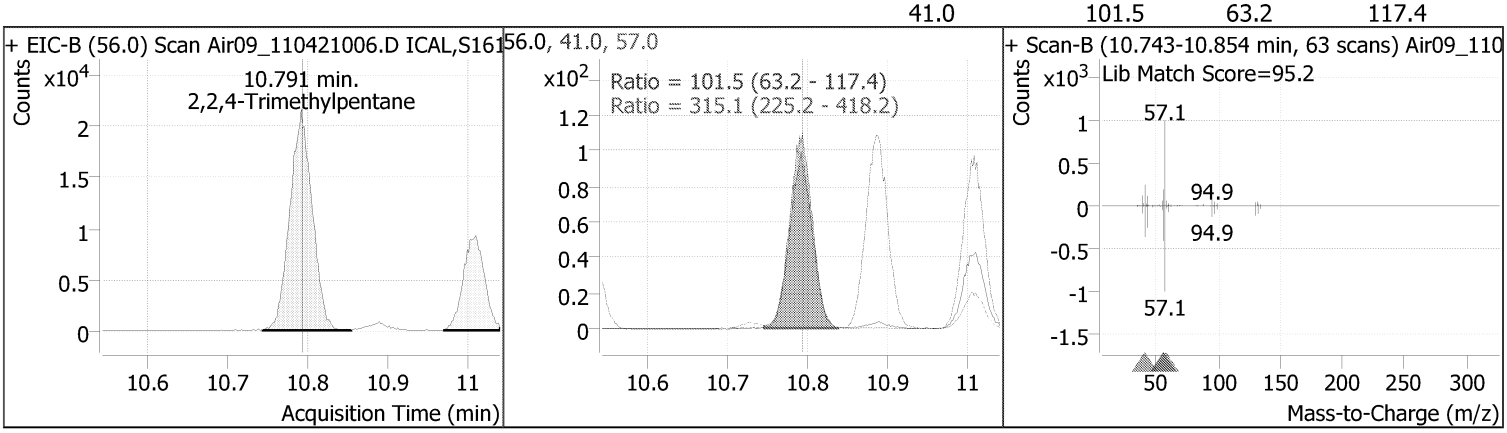
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.9311	10.73	0.02	15947	58.0	66.5	58.8	109.2



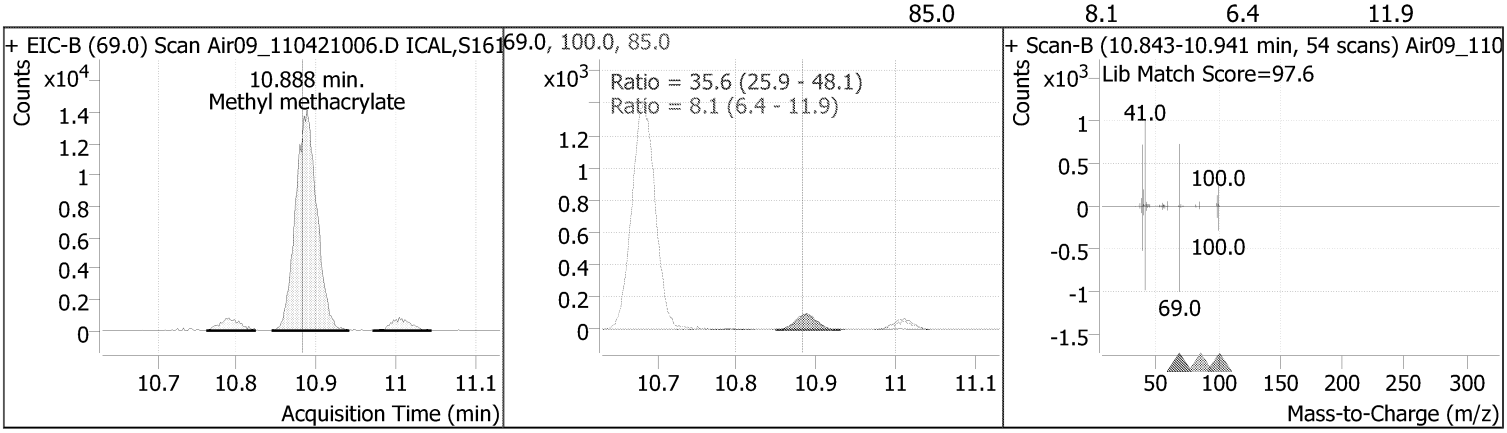
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.9678	10.74	0.00	34841	130.0	104.0	72.7	135.0
					95.0	104.0	72.7	135.0
					97.0	69.1	47.2	87.6
					134.0	32.4	22.5	41.9



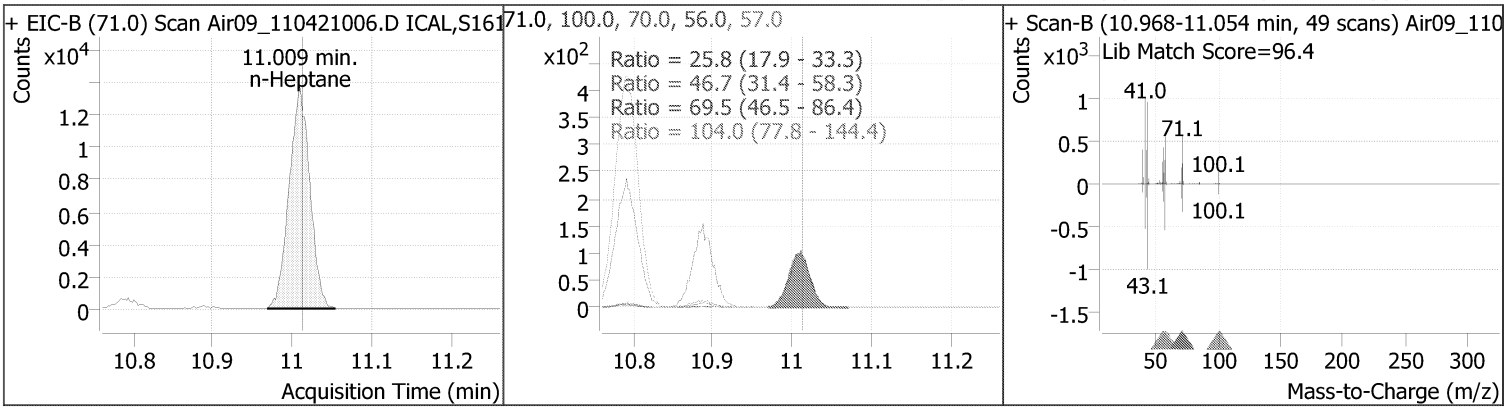
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.9698	10.79	0.00	42222	57.0	315.1	225.2	418.2
					41.0	101.5	63.2	117.4



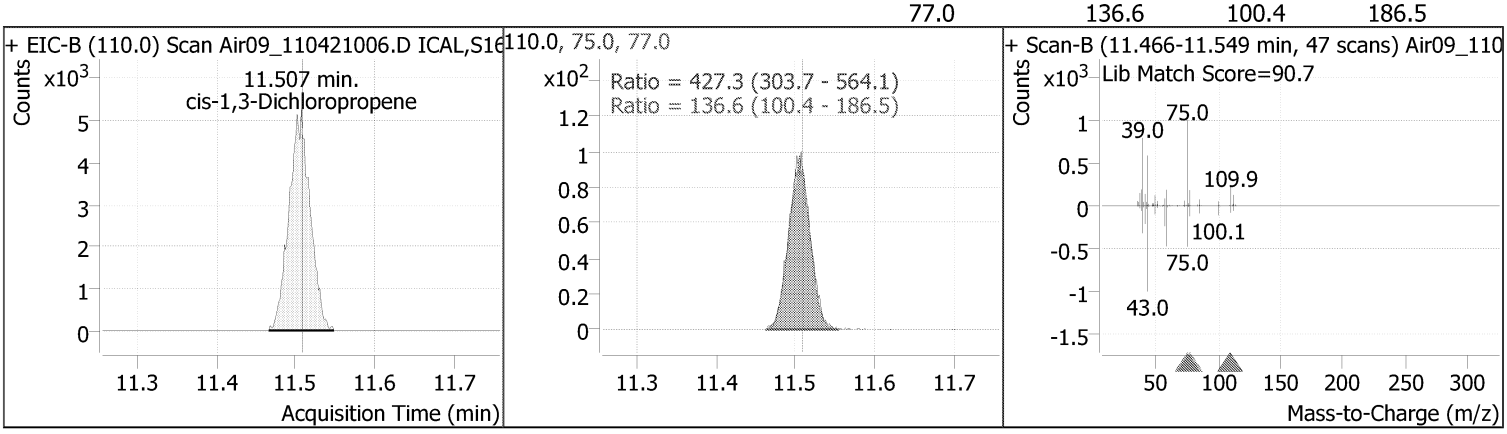
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	0.9508	10.89	0.01	26489	100.0	35.6	25.9	48.1
					85.0	8.1	6.4	11.9



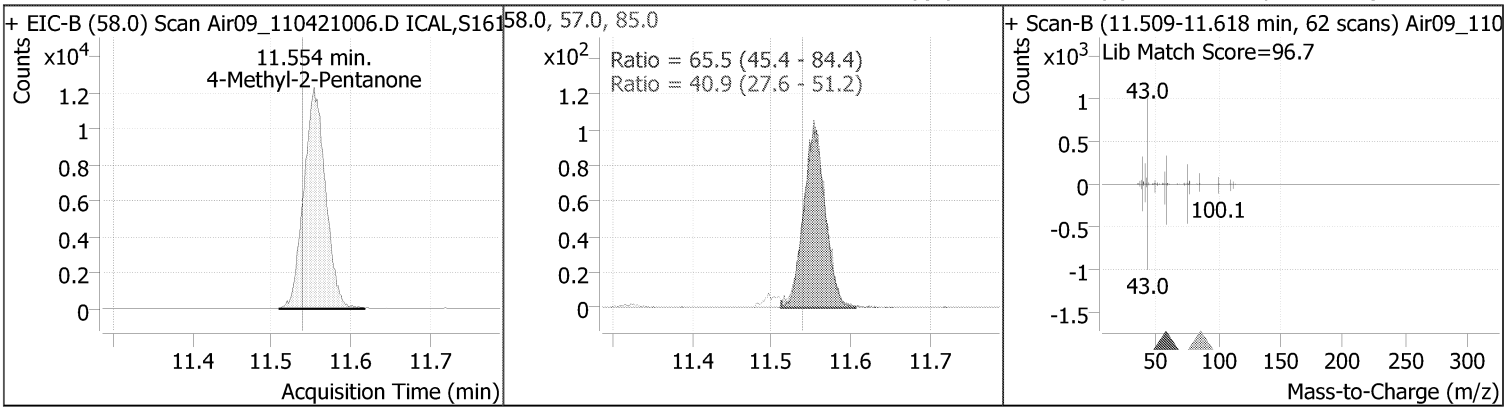
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	0.9509	11.01	0.00	24932	57.0	104.0	77.8	144.4
					56.0	69.5	46.5	86.4
					70.0	46.7	31.4	58.3
					100.0	25.8	17.9	33.3



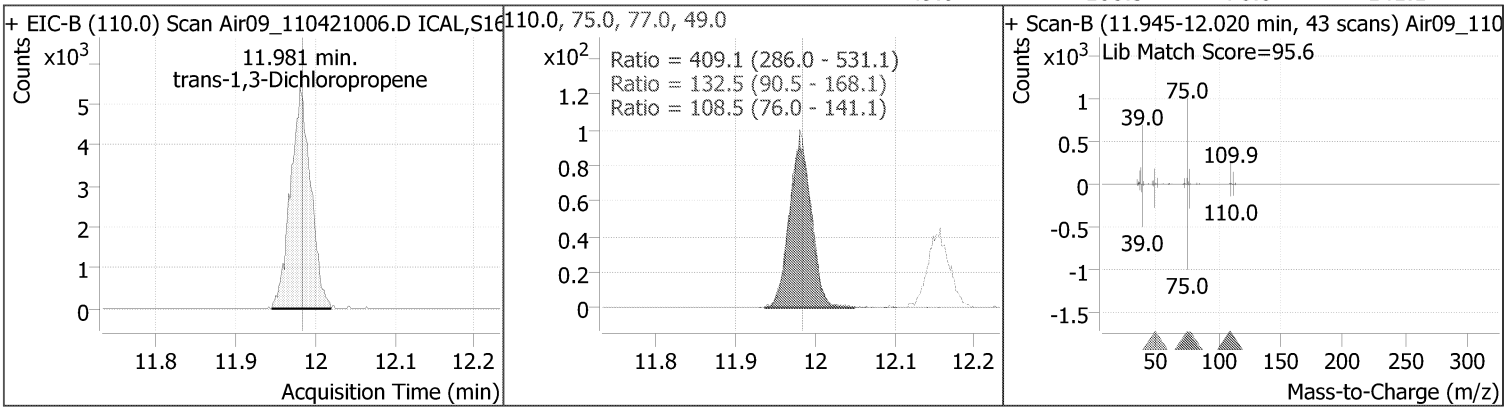
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	0.9538	11.51	0.00	9679	75.0	427.3	303.7	564.1
					77.0	136.6	100.4	186.5



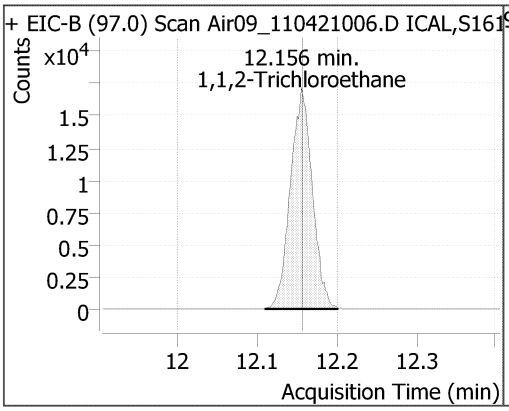
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.9627	11.55	0.01	23486	57.0	65.5	45.4	84.4
					85.0	40.9	27.6	51.2

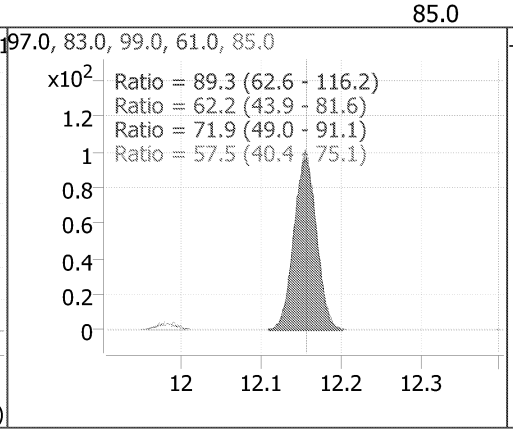


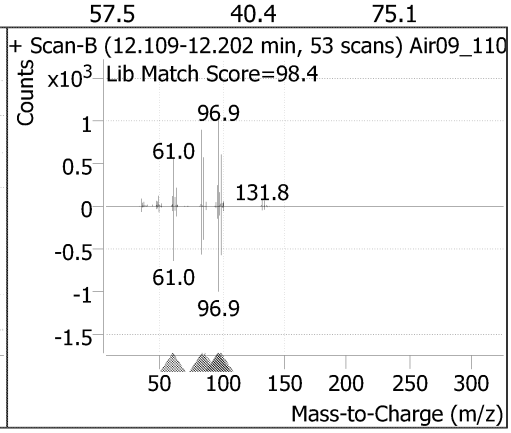
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	0.9427	11.98	0.00	9636	75.0	409.1	286.0	531.1
					77.0	132.5	90.5	168.1
					49.0	108.5	76.0	141.1



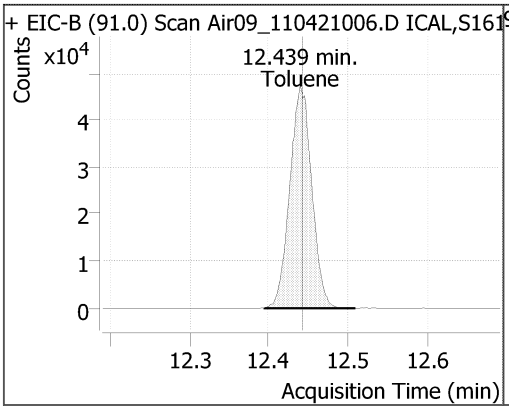
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	0.9699	12.16	0.00	32952	83.0	89.3	62.6	116.2
					61.0	71.9	49.0	91.1
					99.0	62.2	43.9	81.6
					85.0	57.5	40.4	75.1

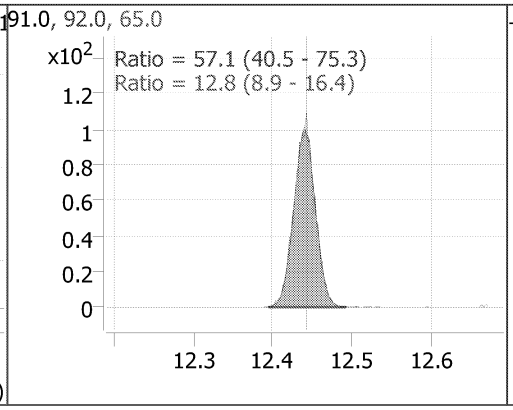


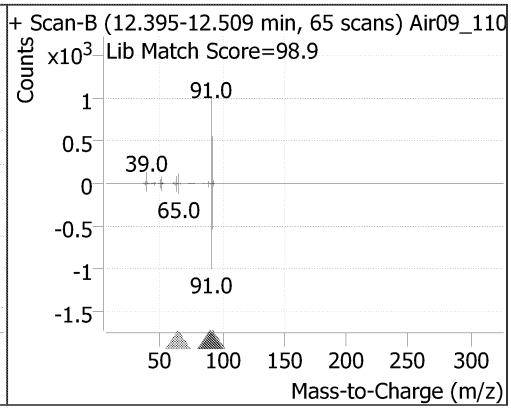




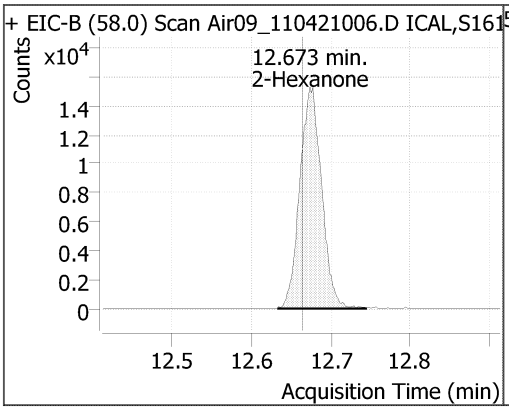
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.9479	12.44	0.00	91008	92.0	57.1	40.5	75.3
					65.0	12.8	8.9	16.4

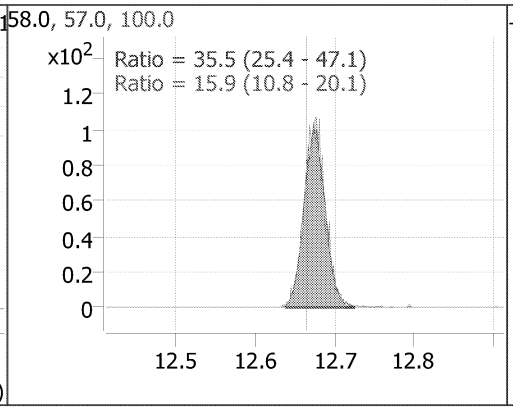


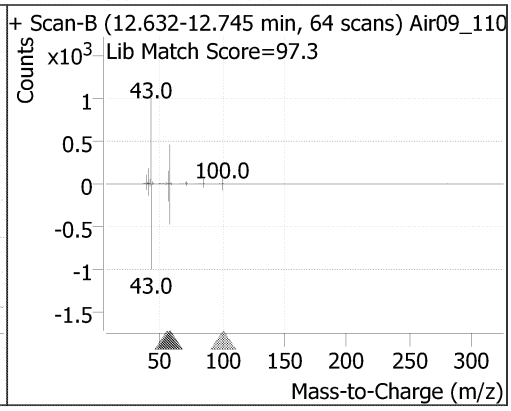




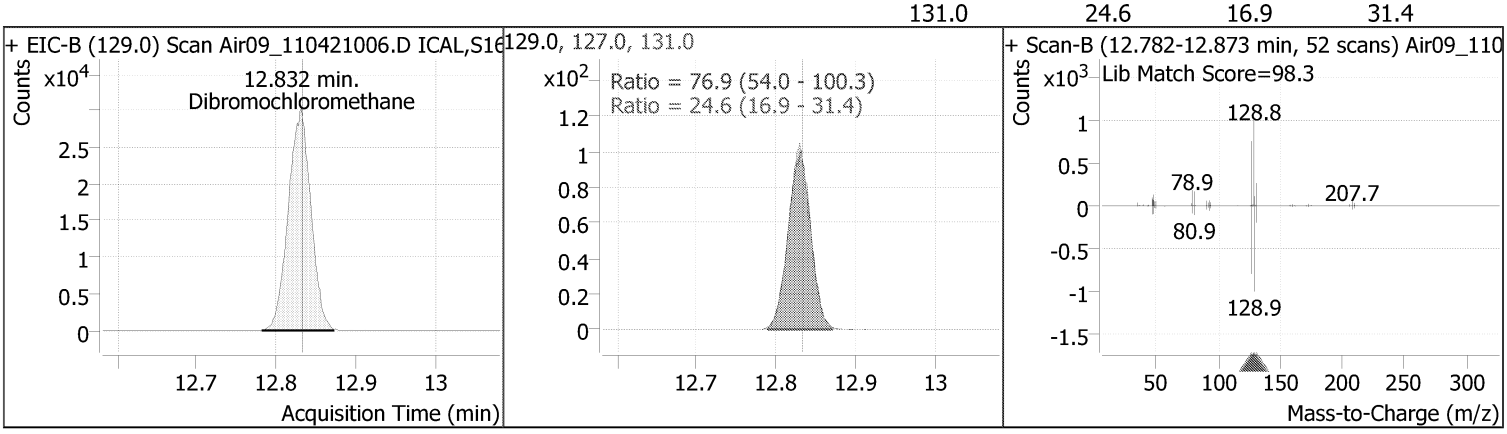
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.9243	12.67	0.01	29245	57.0	35.5	25.4	47.1
					100.0	15.9	10.8	20.1



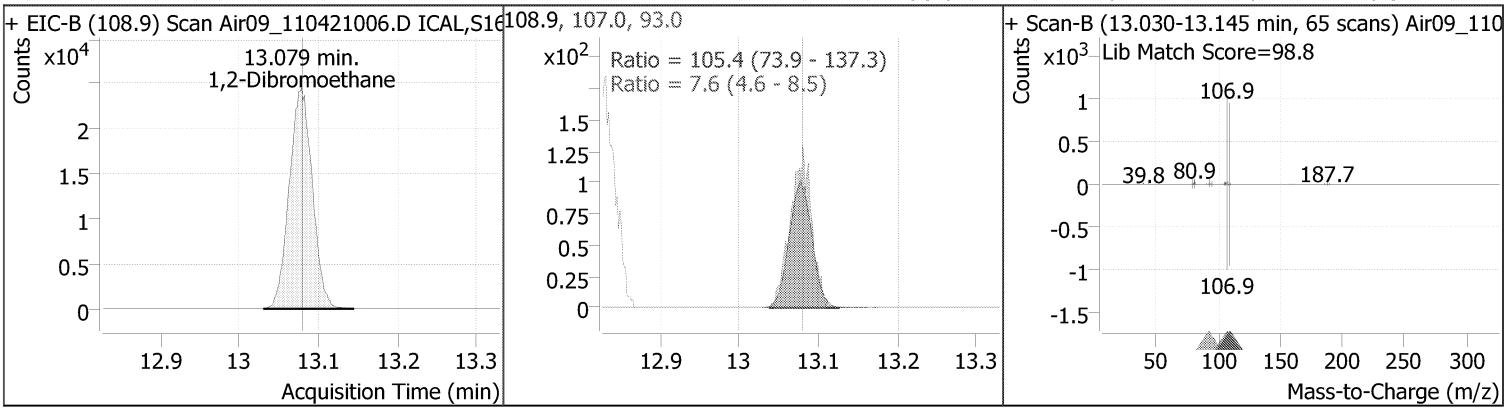




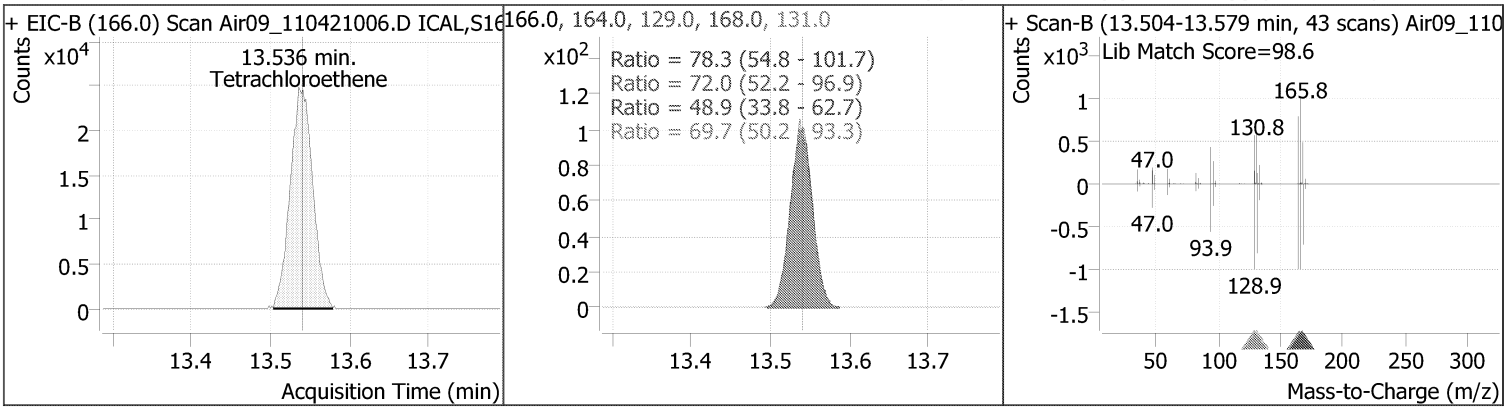
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.9398	12.83	0.00	59685	127.0	76.9	54.0	100.3
					131.0	24.6	16.9	31.4



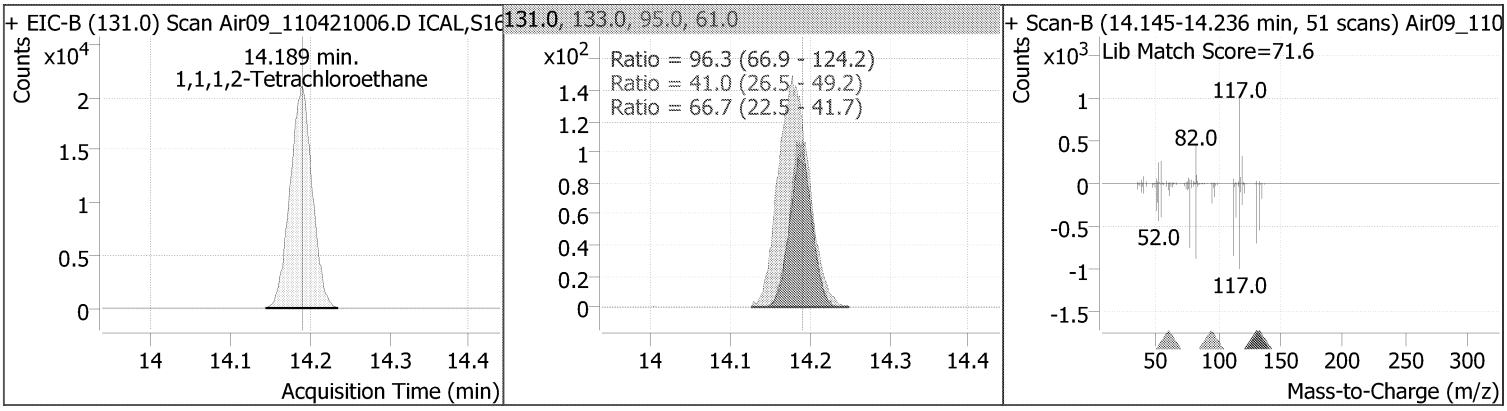
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.9565	13.08	0.00	49584	107.0	105.4	73.9	137.3
					93.0	7.6	4.6	8.5



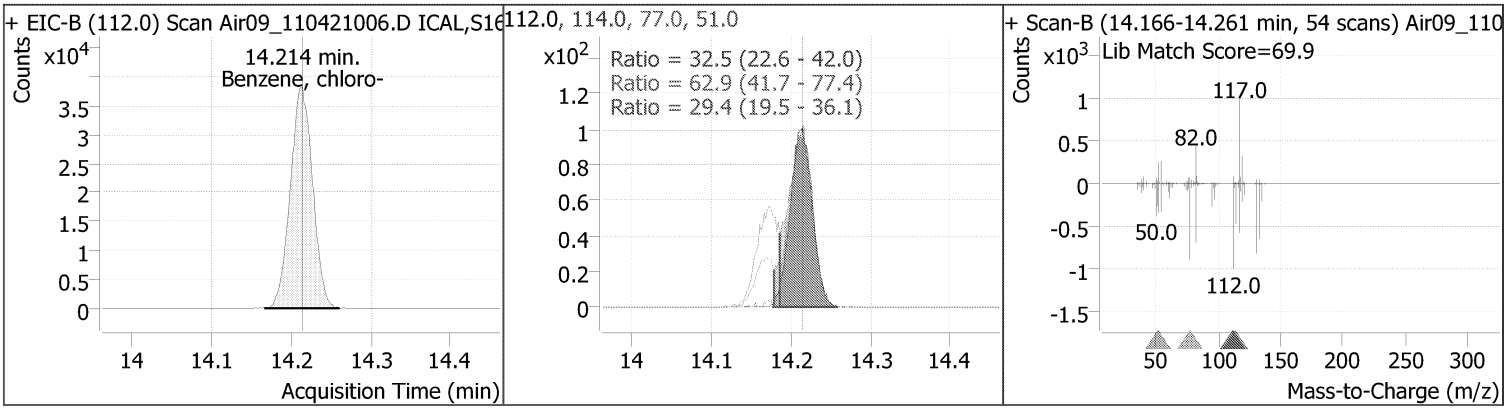
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.9508	13.54	-0.01	49069	164.0	78.3	54.8	101.7
					129.0	72.0	52.2	96.9
					131.0	69.7	50.2	93.3
					168.0	48.9	33.8	62.7



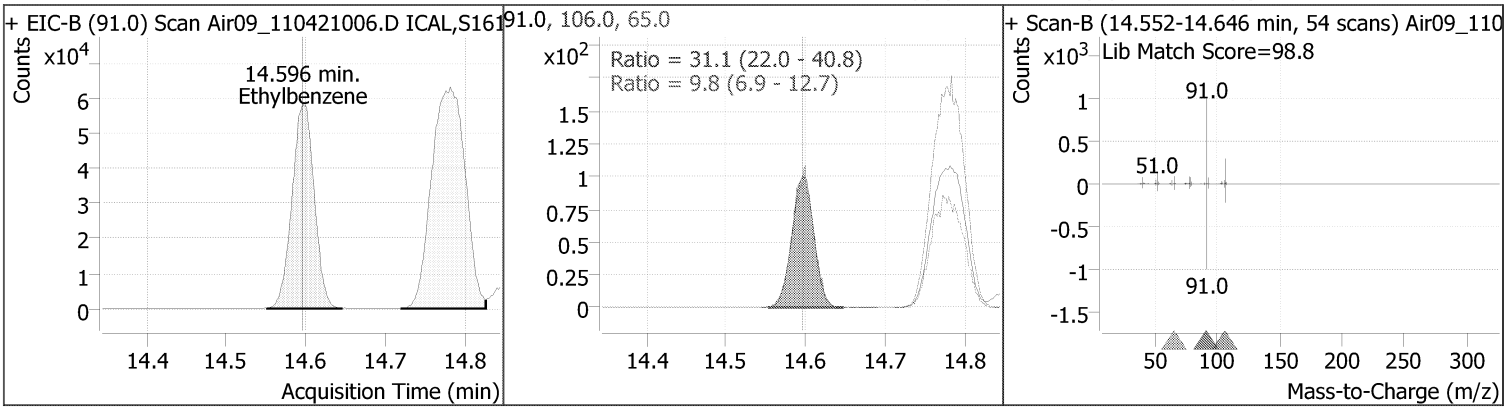
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	0.9785	14.19	0.00	40793	133.0	96.3	66.9	124.2
					95.0	41.0	26.5	49.2
					61.0	66.7	22.5	41.7



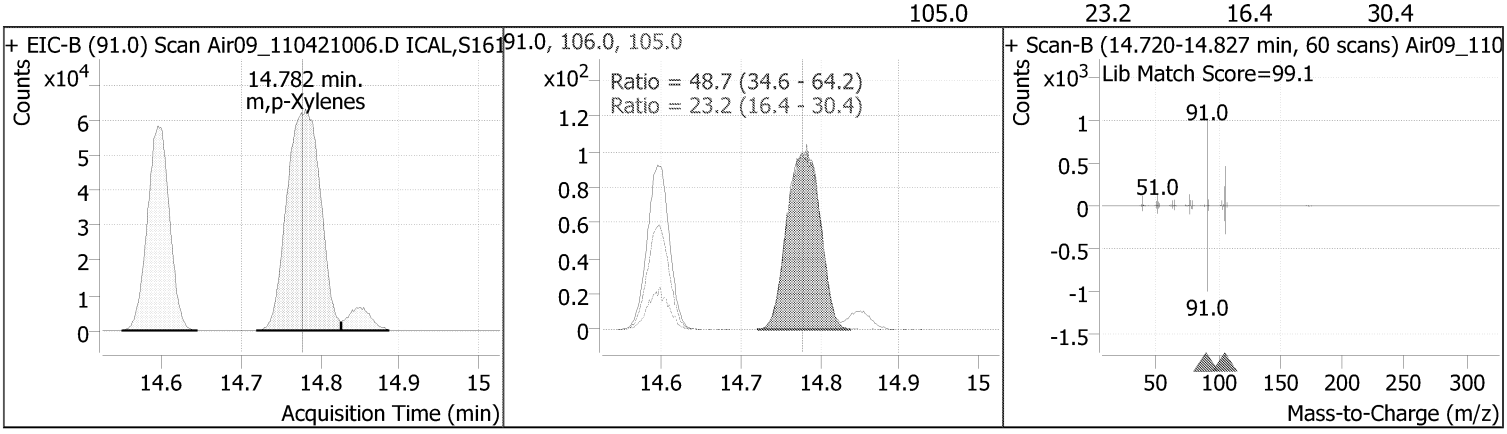
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.9849	14.21	0.00	74862	77.0	62.9	41.7	77.4
					114.0	32.5	22.6	42.0
					51.0	29.4	19.5	36.1



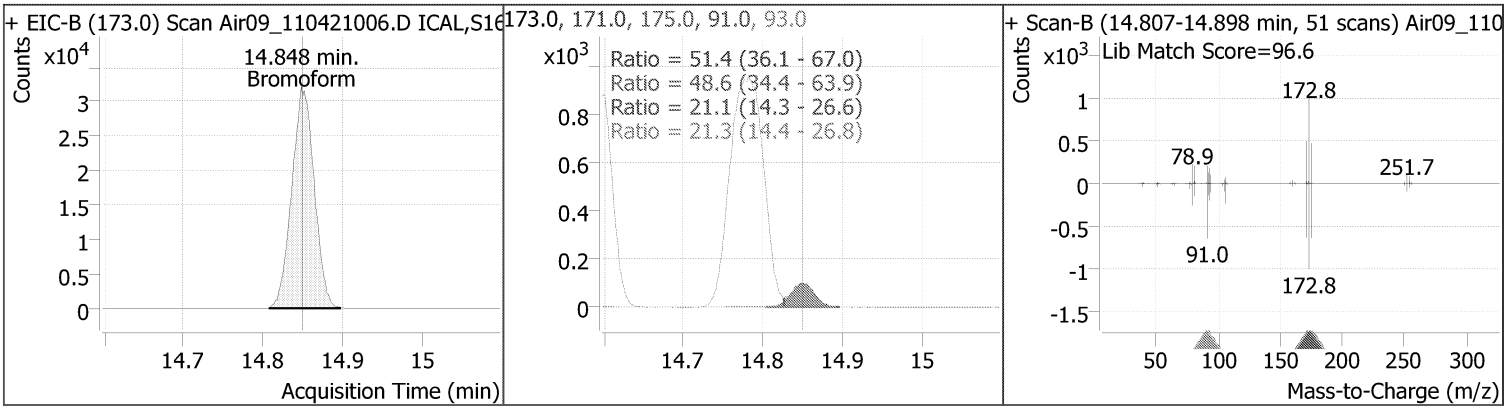
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.9871	14.60	0.00	113475	106.0	31.1	22.0	40.8
					65.0	9.8	6.9	12.7



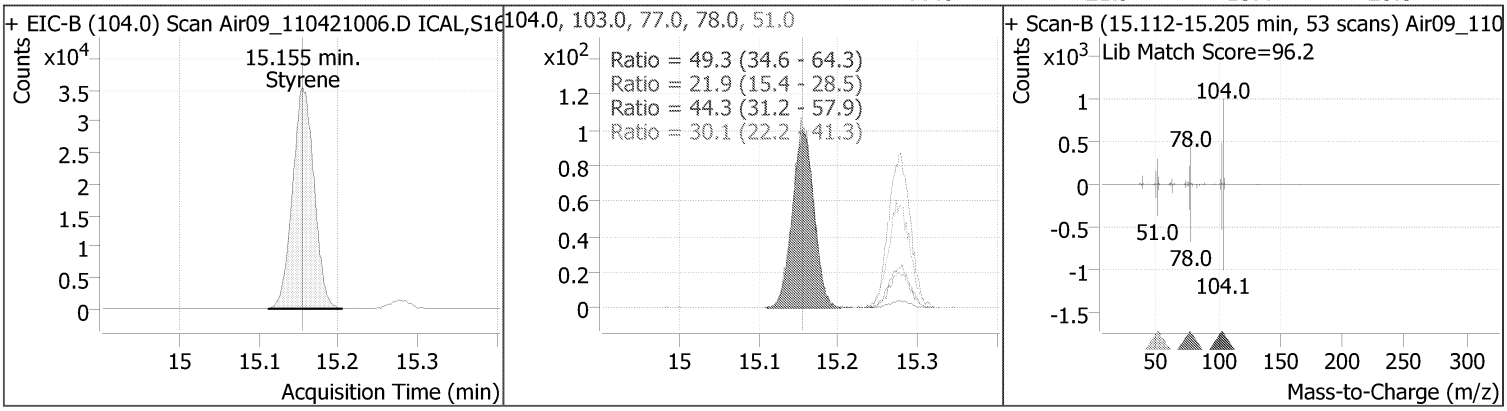
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	2.2368	14.78	0.00	185742	106.0	48.7	34.6	64.2
					105.0	23.2	16.4	30.4



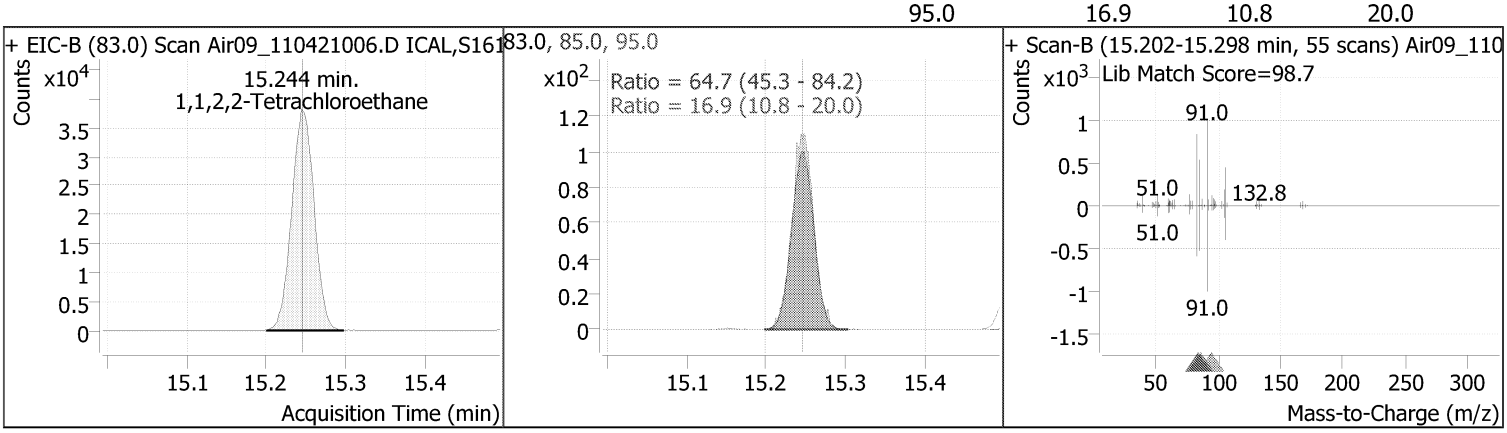
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.9642	14.85	0.00	63008	171.0	51.4	36.1	67.0
					175.0	48.6	34.4	63.9
					93.0	21.3	14.4	26.8
					91.0	21.1	14.3	26.6



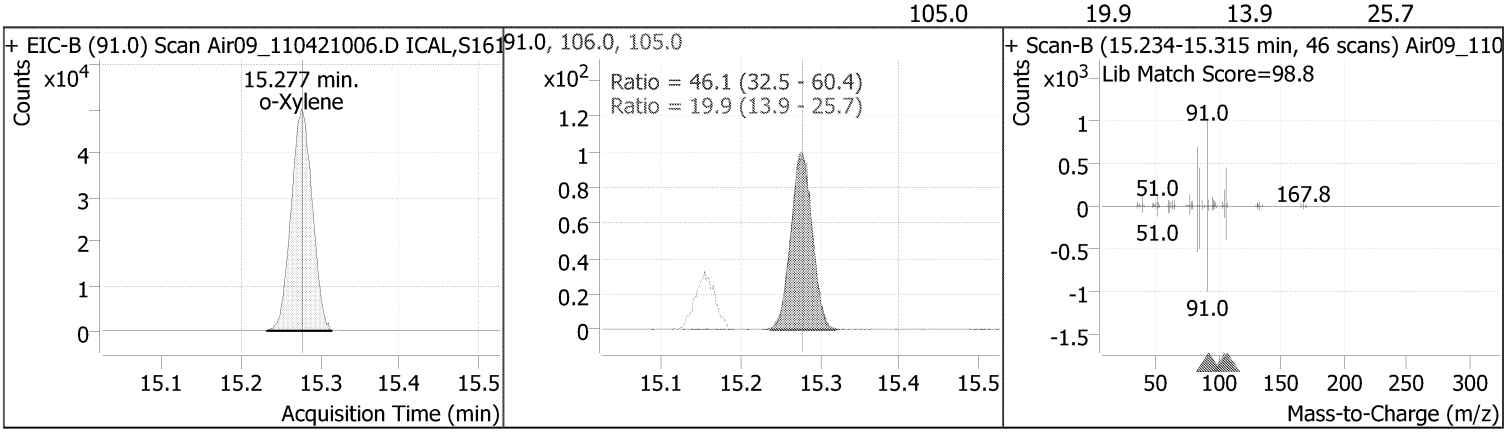
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	0.9717	15.16	0.00	66934	103.0	49.3	34.6	64.3
					78.0	44.3	31.2	57.9
					51.0	30.1	22.2	41.3
					77.0	21.9	15.4	28.5



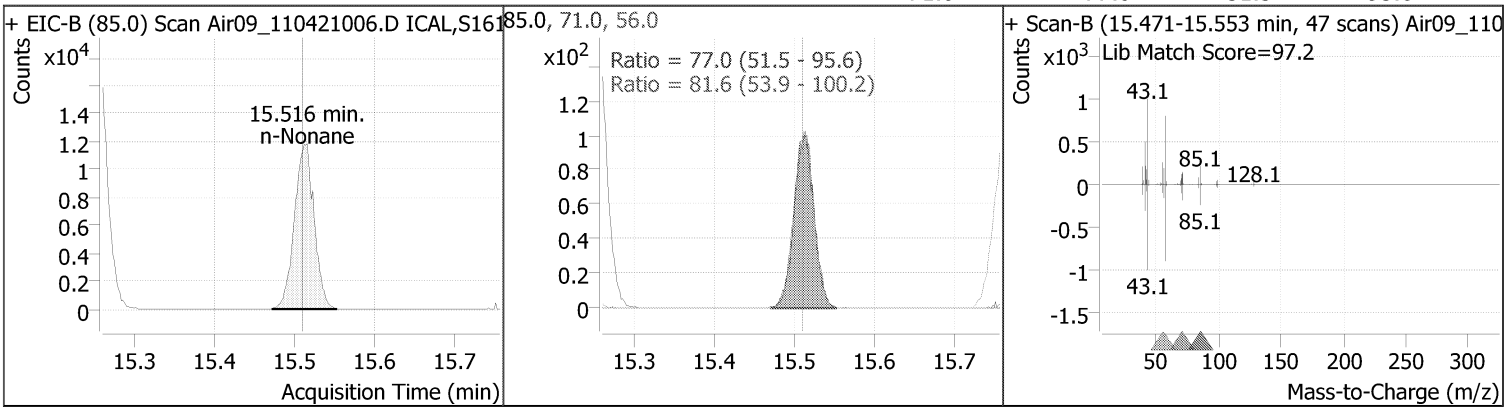
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.9870	15.24	0.00	74956	85.0	64.7	45.3	84.2
					95.0	16.9	10.8	20.0



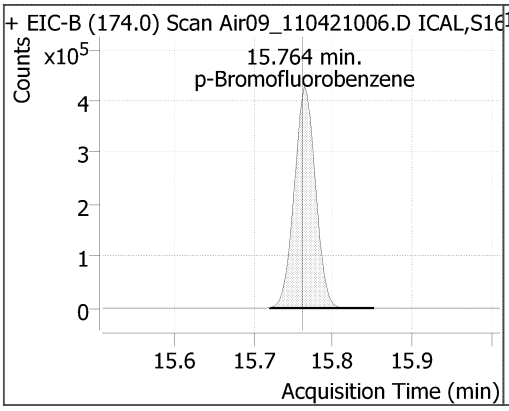
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	1.0126	15.28	0.00	92800	106.0	46.1	32.5	60.4
					105.0	19.9	13.9	25.7

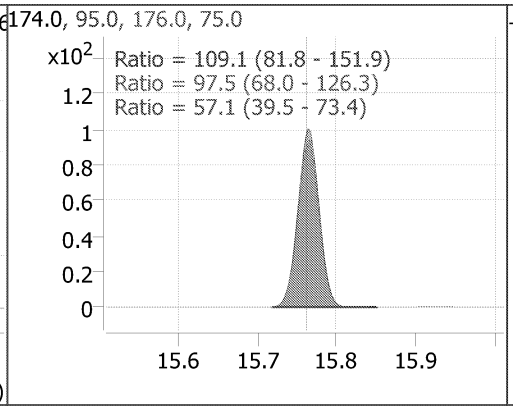


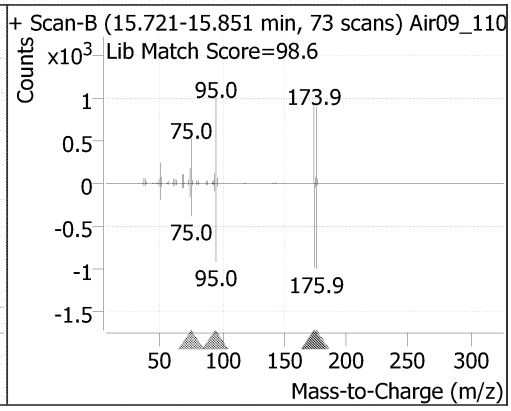
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	0.9821	15.52	0.00	20375	56.0	81.6	53.9	100.2
					71.0	77.0	51.5	95.6



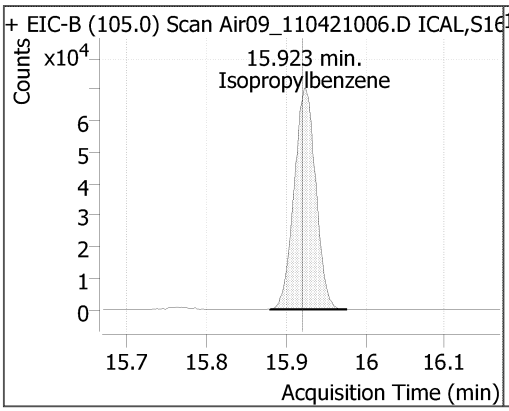
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.2743	15.76	0.00	793372	95.0	109.1	81.8	151.9
					176.0	97.5	68.0	126.3
					75.0	57.1	39.5	73.4

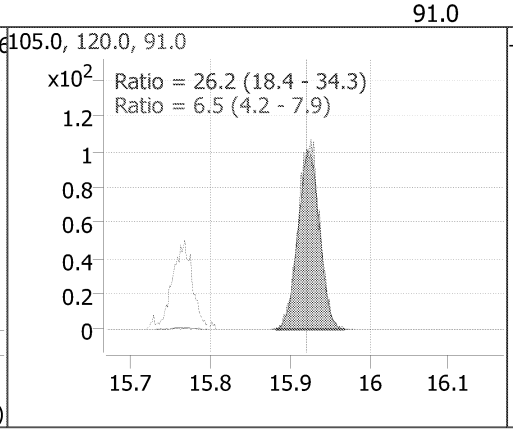


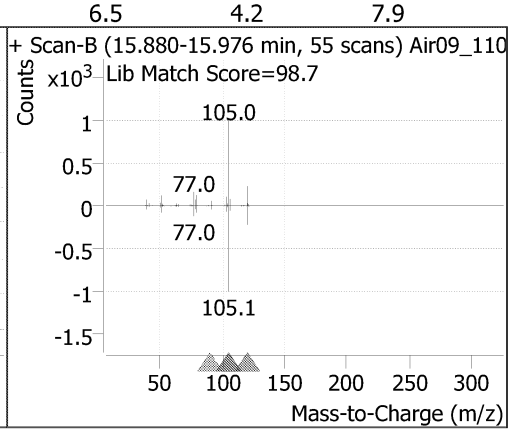




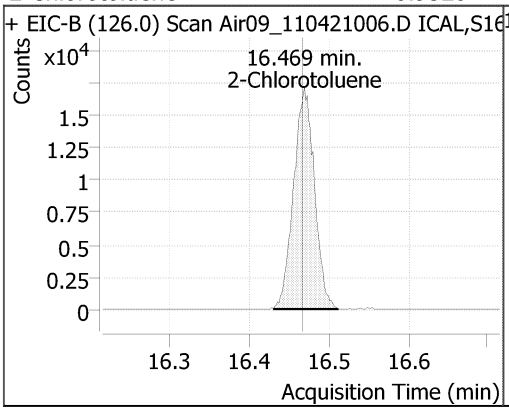
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.9871	15.92	0.00	133804	120.0	26.2	18.4	34.3
					91.0	6.5	4.2	7.9

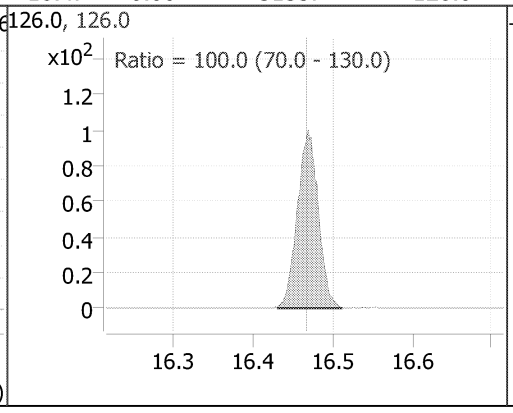


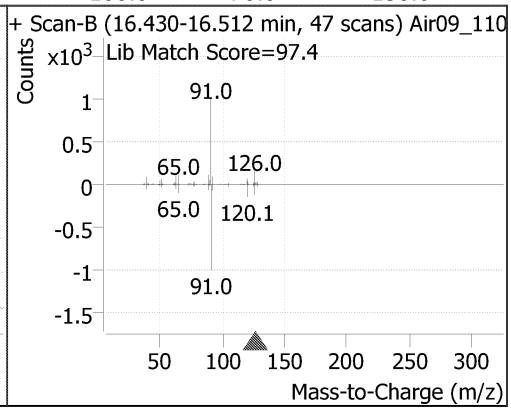




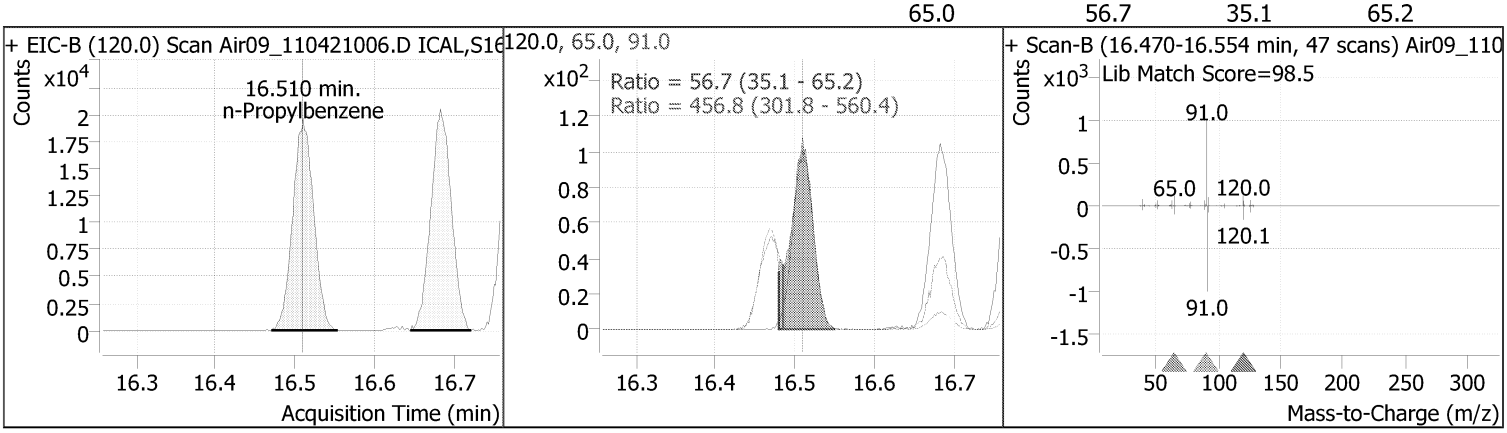
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	0.9526	16.47	0.00	31357	126.0	100.0	70.0	130.0



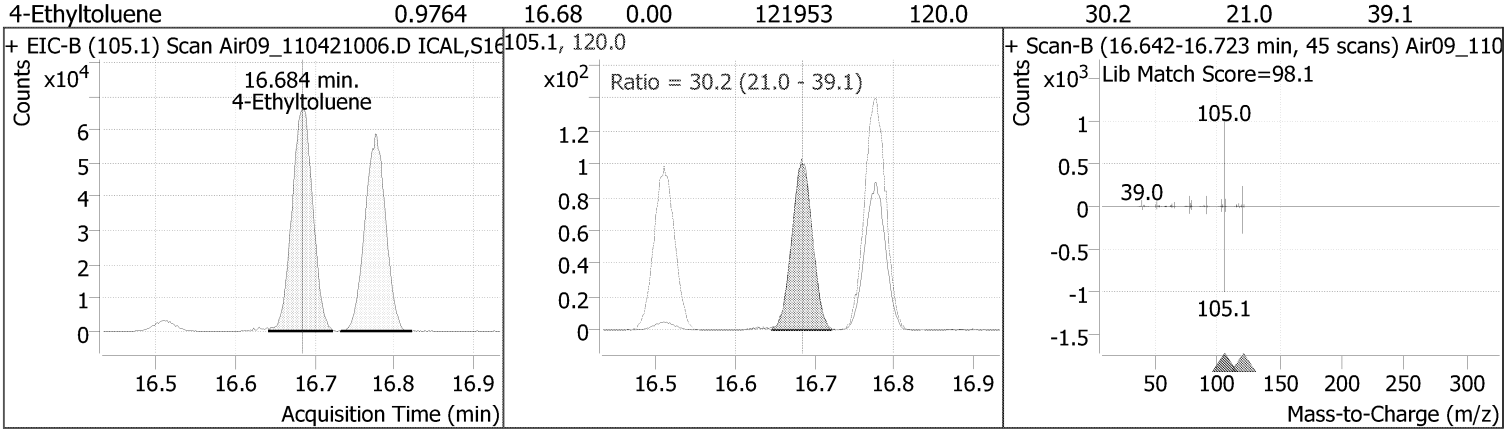




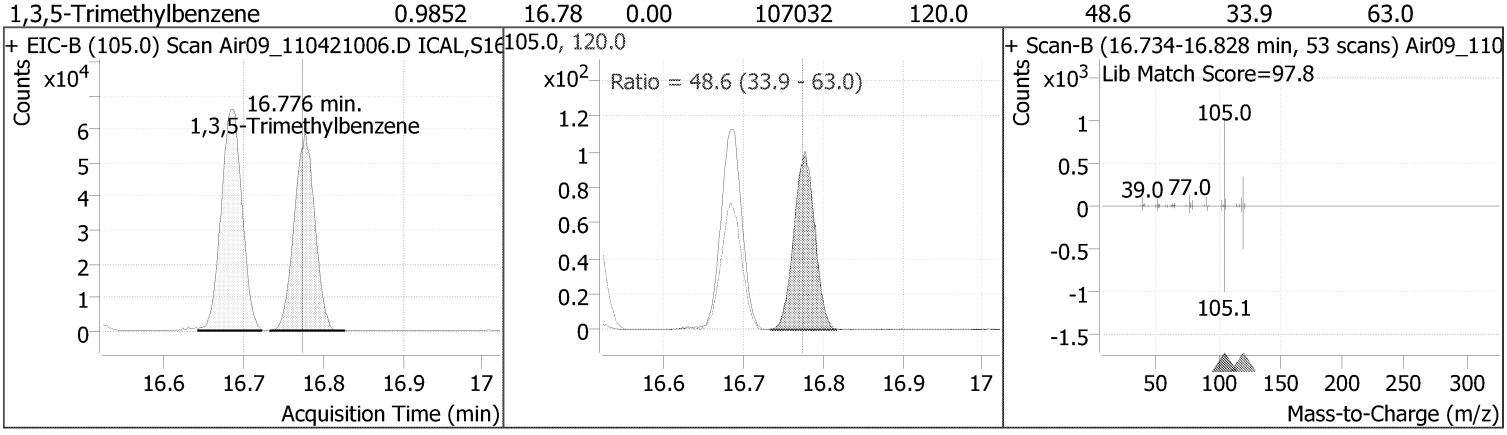
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.9857	16.51	0.00	35740	91.0	456.8	301.8	560.4
					65.0	56.7	35.1	65.2



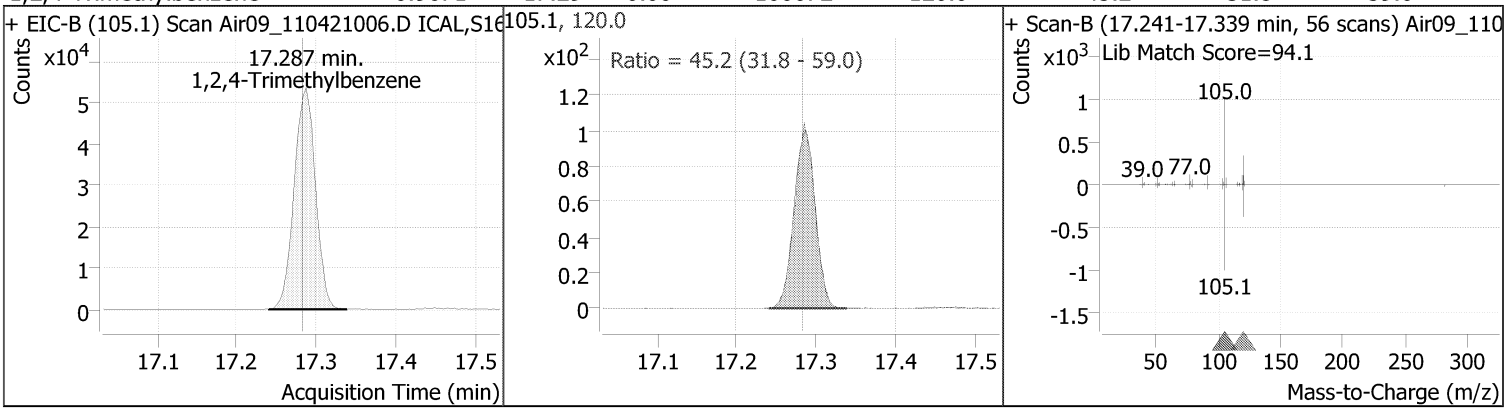
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.9764	16.68	0.00	121953	120.0	30.2	21.0	39.1



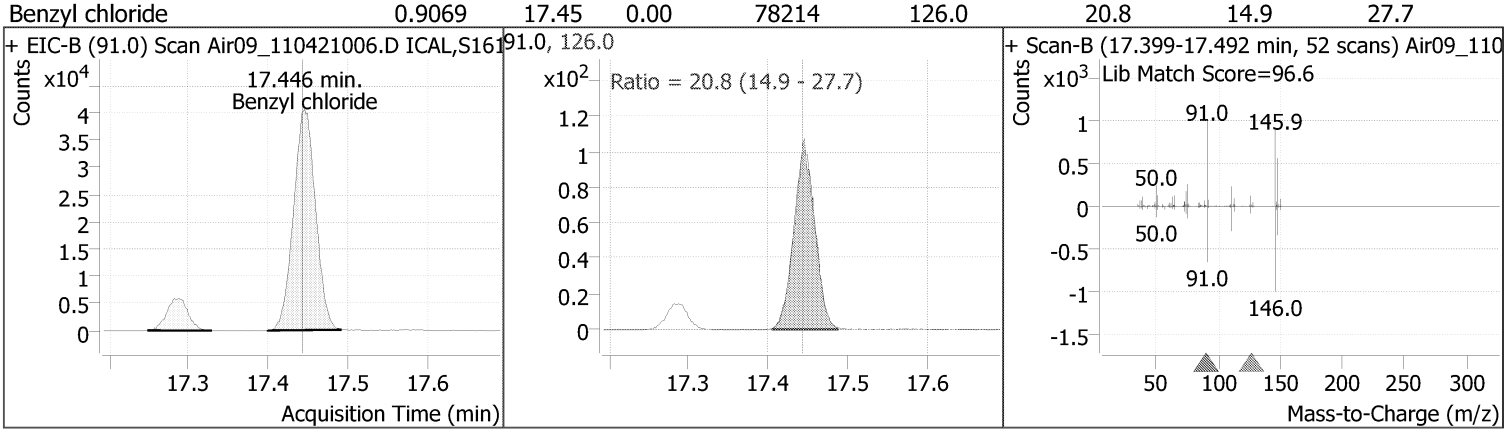
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.9852	16.78	0.00	107032	120.0	48.6	33.9	63.0



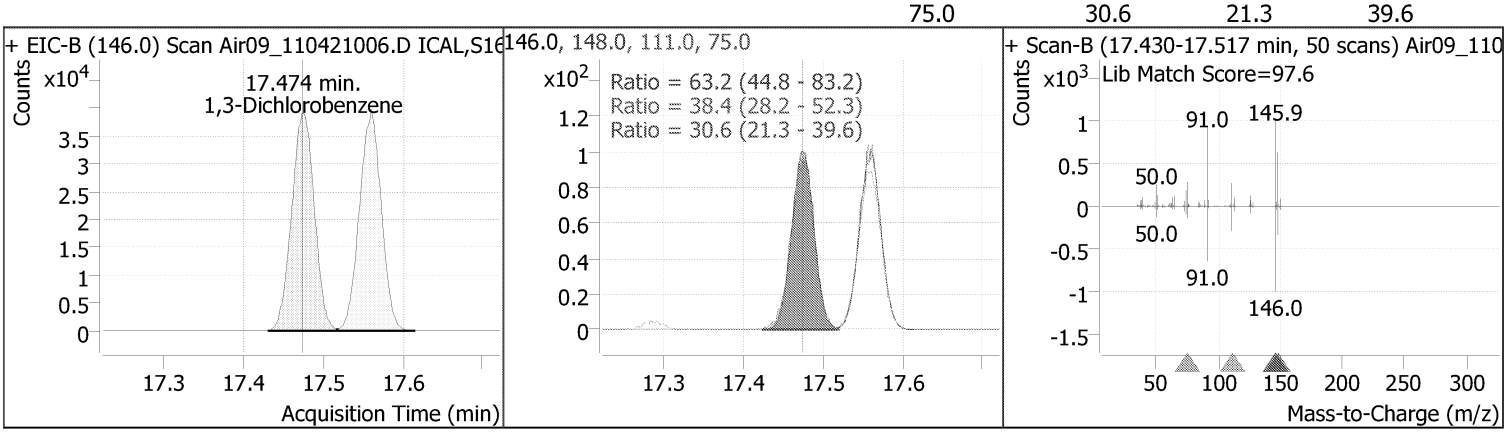
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	0.9671	17.29	0.00	100072	120.0	45.2	31.8	59.0



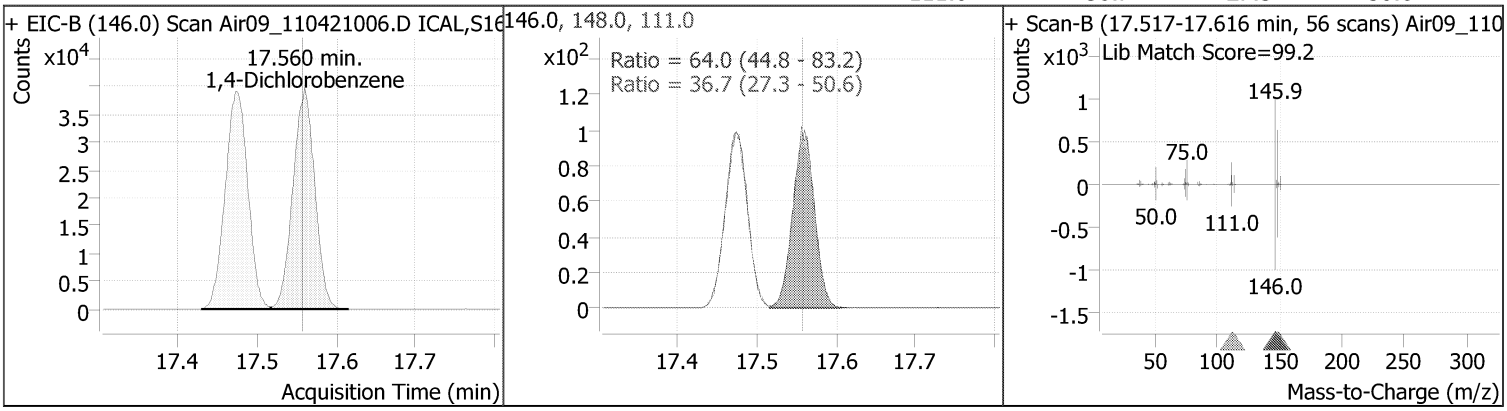
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.9069	17.45	0.00	78214	126.0	20.8	14.9	27.7



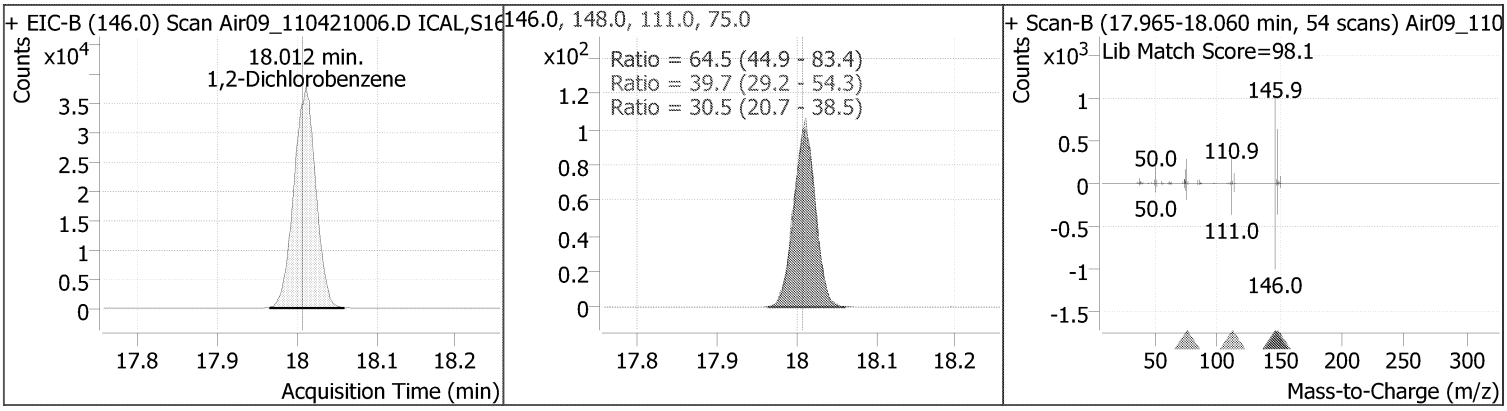
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.9913	17.47	0.00	77929	148.0	63.2	44.8	83.2
					111.0	38.4	28.2	52.3
					75.0	30.6	21.3	39.6



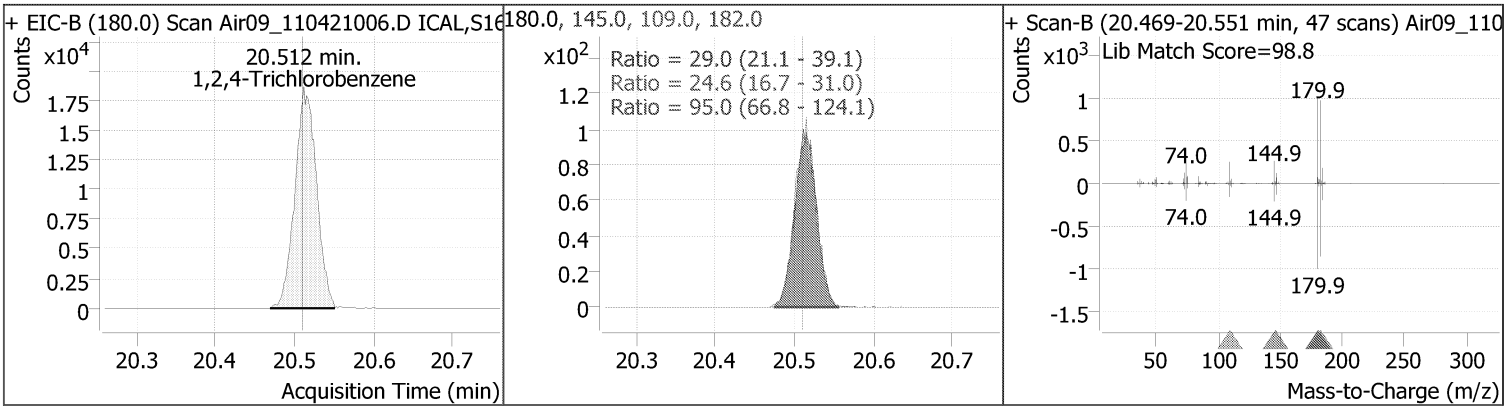
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.9823	17.56	0.00	76016	148.0	64.0	44.8	83.2
					111.0	36.7	27.3	50.6



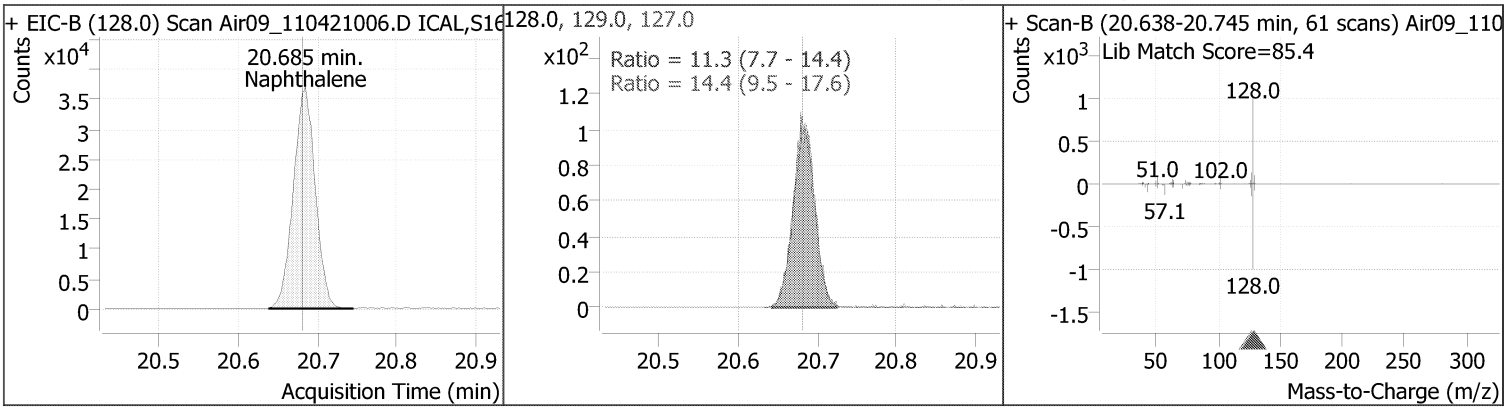
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.9726	18.01	0.00	72670	148.0	64.5	44.9	83.4
					111.0	39.7	29.2	54.3
					75.0	30.5	20.7	38.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.8102	20.51	0.00	35297	182.0	95.0	66.8	124.1
					145.0	29.0	21.1	39.1
					109.0	24.6	16.7	31.0

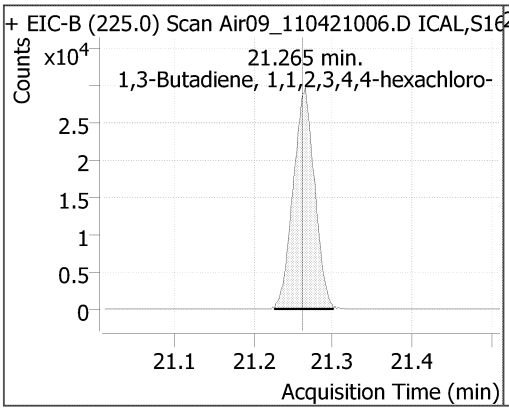


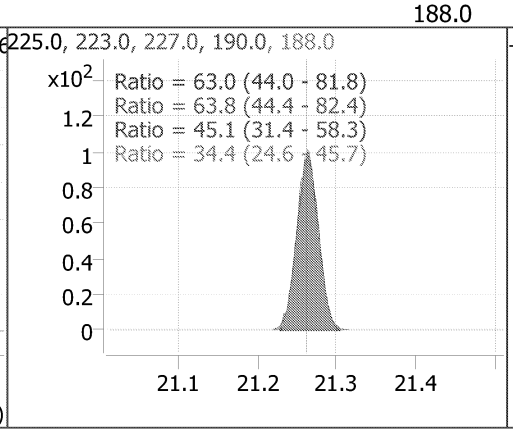
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	0.7811	20.68	0.00	71202	127.0	14.4	9.5	17.6
					129.0	11.3	7.7	14.4

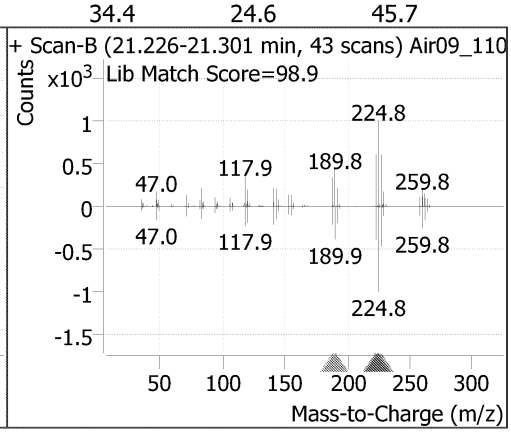


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.9262	21.27	0.00	56018	227.0	63.8	44.4	82.4
					223.0	63.0	44.0	81.8
					190.0	45.1	31.4	58.3
					188.0	34.4	24.6	45.7







Quantitation Results Report (Not Reviewed)

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Batch Name	2021 Nov 04 1517 TO15_SCAN_110421_1.m.batch.bin	Last Calib Update	11/4/2021 8:56:24 PM
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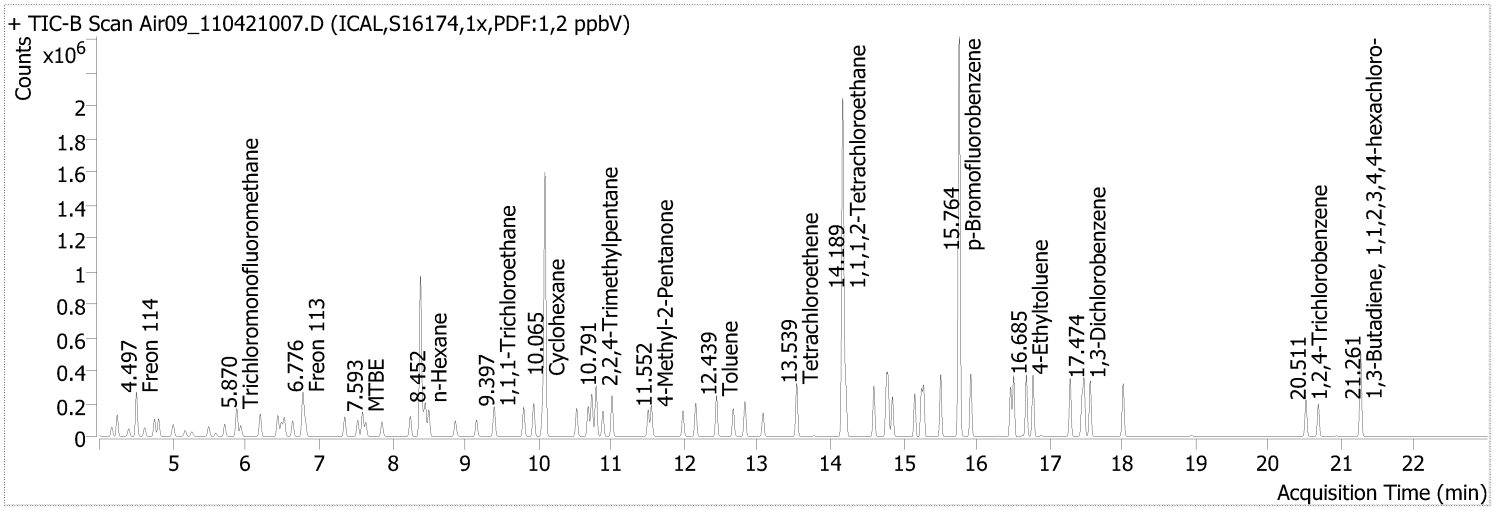


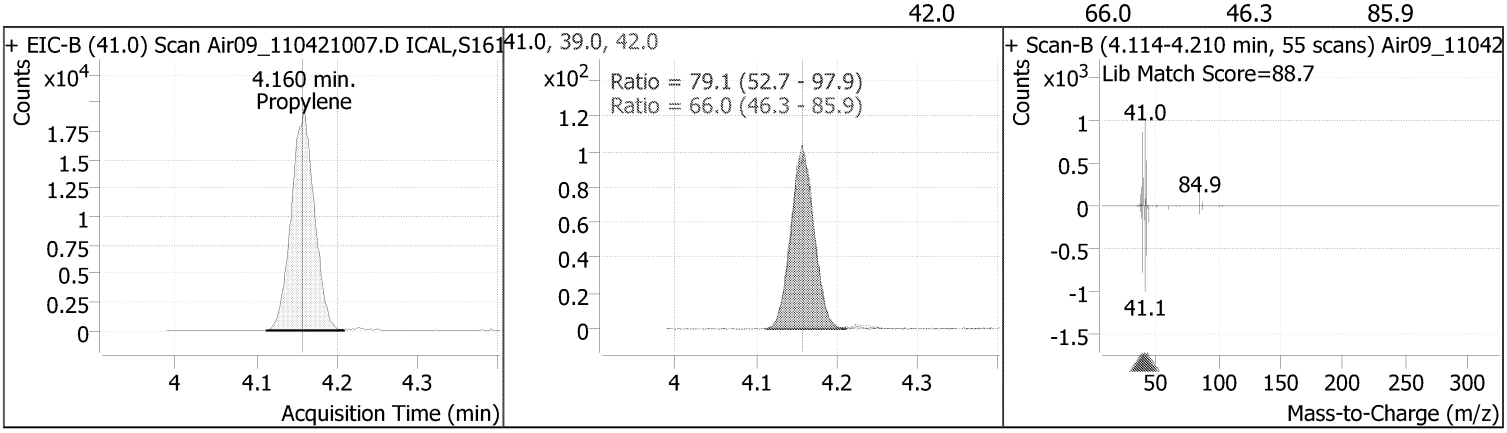
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.386	130.0	341637	10.0000	nL/L		-0.004
M 1,4-Difluorobenzene	10.091	114.0	1270314	10.0000	nL/L		-0.002
M Chlorobenzene-d5	14.168	82.0	664290	10.0000	nL/L	#	-0.004
System Monitoring Compounds							
S p-Bromofluorobenzene	15.764	174.0	805045	10.0407	nL/L		0.000
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 100.41%			
Target Compounds							QValue
T Propylene	4.160	41.0	38777	1.8414	nL/L		98
T Freon 12	4.233	85.0	131822	1.8894	nL/L		100
T Chloromethane	4.392	50.0	61684	2.0043	nL/L		98
T Freon 114	4.497	135.0	106704	1.8790	nL/L		99
T Vinyl Chloride	4.610	62.0	65413	1.8565	nL/L		100
T 1,3-Butadiene	4.746	54.0	53392	1.9123	nL/L		98
T Butane	4.799	43.0	108105	1.8519	nL/L		99
T Bromomethane	5.001	96.0	54173	1.9913	nL/L		99
T Chloroethane	5.162	64.0	34714	1.8406	nL/L		99
T Ethanol	5.254	45.0	35510	2.0000	nL/L		99
T Vinyl bromide	5.485	108.0	45762	1.9294	nL/L		99
T Acrolein	5.579	56.0	19655	2.0266	nL/L		100
T Acetone	5.704	58.0	26175	1.9205	nL/L		94
T Trichloromonofluoromethane	5.870	101.0	149411	1.8997	nL/L		99
T Isopropanol (IPA)	5.924	45.0	83259	1.9968	nL/L	#	87
T n-Pentane	6.192	43.0	95440	1.9084	nL/L		100
T 1,1-Dichloroethene	6.435	61.0	95134	1.8872	nL/L		98
T Tert-butyl alcohol (TBA)	6.478	59.0	98419	1.9580	nL/L		90
T Methylene Chloride	6.519	51.0	23930	1.7904	nL/L		93
T 3-Chloropropene	6.640	76.0	20088	1.9302	nL/L		98
T Freon 113	6.776	101.0	114365	1.8869	nL/L		99

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T Carbon Disulfide	6.810	76.0	133987	1.8853	nL/L		96
T trans-1,2-Dichloroethene	7.349	61.0	75308	1.8810	nL/L		96
T 1,1-Dichloroethane	7.526	63.0	100811	1.9106	nL/L		100
T MTBE	7.593	73.0	133060	1.9765	nL/L		95
T Vinyl Acetate	7.634	43.0	131651	1.8933	nL/L		99
T 2-Butanone	7.859	72.0	23882	1.9367	nL/L		88
T cis-1,2-Dichloroethene	8.249	61.0	78064	1.9192	nL/L		96
T Ethyl Acetate	8.429	61.0	18190	1.9760	nL/L		96
T n-Hexane	8.452	57.0	84558	1.9498	nL/L		95
T Chloroform	8.499	83.0	115575	1.8801	nL/L		100
T Tetrahydrofuran	8.861	72.0	22050	2.0070	nL/L		100
T 1,2-Dichloroethane	9.156	62.0	83703	1.8957	nL/L		97
T 1,1,1-Trichloroethane	9.397	97.0	113502	1.9185	nL/L		100
T Benzene	9.798	78.0	151991	1.9037	nL/L		100
T Carbon Tetrachloride	9.936	117.0	118876	1.9453	nL/L		98
T TPH Gasoline (C3 to C12)	9.997	0.0	17321964	3.8190	nL/L		100
T Cyclohexane	10.065	84.0	62031	1.6959	nL/L	#	80
T 1,2-Dichloropropane	10.527	63.0	64452	1.8829	nL/L		98
T Methane, bromodichloro-	10.684	83.0	118238	1.9152	nL/L		99
T 1,4-Dioxane	10.723	88.0	32856	1.9276	nL/L		96
T Trichloroethene	10.734	132.0	70354	1.9265	nL/L		99
T 2,2,4-Trimethylpentane	10.791	56.0	86283	1.9542	nL/L		96
T Methyl methacrylate	10.882	69.0	54225	1.9890	nL/L		99
T n-Heptane	11.009	71.0	51290	1.9773	nL/L		96
T cis-1,3-Dichloropropene	11.504	110.0	19735	1.9815	nL/L		95
T 4-Methyl-2-Pentanone	11.552	58.0	49293	2.0177	nL/L		99
T trans-1,3-Dichloropropene	11.979	110.0	19896	2.0206	nL/L		97
T 1,1,2-Trichloroethane	12.155	97.0	65773	1.8932	nL/L		99
T Toluene	12.439	91.0	190035	1.9787	nL/L		98
T 2-Hexanone	12.671	58.0	61736	2.0690	nL/L		99
T Dibromochloromethane	12.828	129.0	121531	1.9253	nL/L		100
T 1,2-Dibromoethane	13.078	108.9	100866	1.9501	nL/L		99
T Tetrachloroethene	13.539	166.0	99930	1.9278	nL/L		98
T 1,1,1,2-Tetrachloroethane	14.189	131.0	82743	1.8896	nL/L	#	92
T Benzene, chloro-	14.214	112.0	150287	1.8670	nL/L		92
T Ethylbenzene	14.594	91.0	236501	1.9948	nL/L		100
T m,p-Xylenes	14.780	91.0	386355	4.9390	nL/L		99
T Bromoform	14.851	173.0	130737	1.9940	nL/L		99
T Styrene	15.157	104.0	142847	2.0746	nL/L		98
T 1,1,2,2-Tetrachloroethane	15.246	83.0	154242	1.9332	nL/L		99
T o-Xylene	15.276	91.0	181766	1.9454	nL/L		99
T n-Nonane	15.512	85.0	43993	2.1453	nL/L		99
T Isopropylbenzene	15.924	105.0	277499	1.9585	nL/L		100
T 2-Chlorotoluene	16.471	126.0	66673	1.9788	nL/L		100
T n-Propylbenzene	16.508	120.0	72755	1.9651	nL/L		89
T 4-Ethyltoluene	16.685	105.1	268049	2.1593	nL/L		99
T 1,3,5-Trimethylbenzene	16.776	105.0	230161	2.1095	nL/L		100
T 1,2,4-Trimethylbenzene	17.283	105.1	219099	2.1707	nL/L		99
T Benzyl chloride	17.446	91.0	177286	2.2628	nL/L		98
T 1,3-Dichlorobenzene	17.474	146.0	161987	2.0255	nL/L		99
T 1,4-Dichlorobenzene	17.558	146.0	160171	2.0557	nL/L		99
T 1,2-Dichlorobenzene	18.008	146.0	154322	2.0418	nL/L		98
T 1,2,4-Trichlorobenzene	20.511	180.0	84948	2.4439	nL/L		99
T Naphthalene	20.681	128.0	180180	2.6483	nL/L		100
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.261	225.0	117816	1.9207	nL/L		99

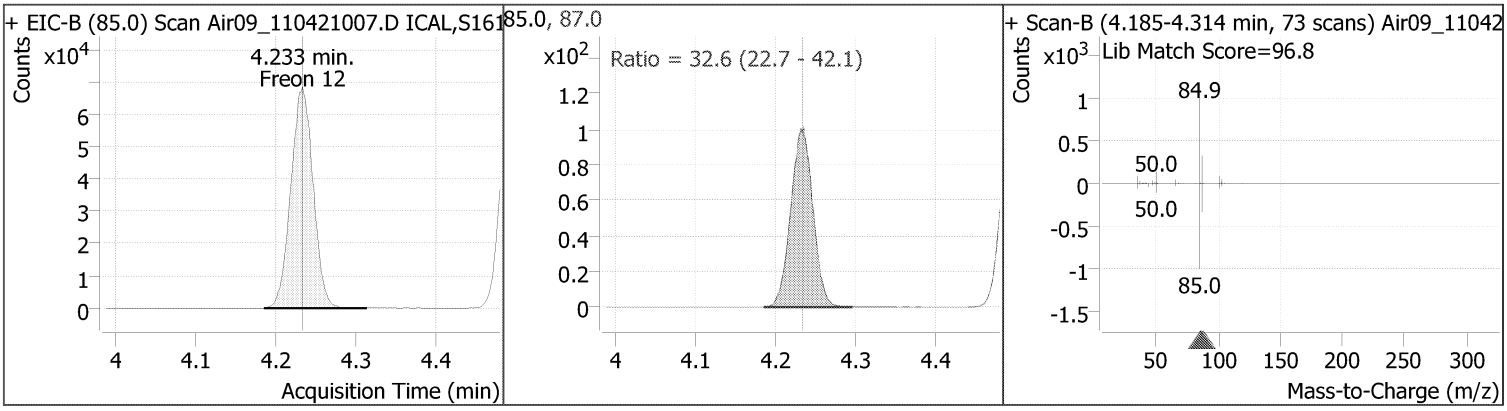
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

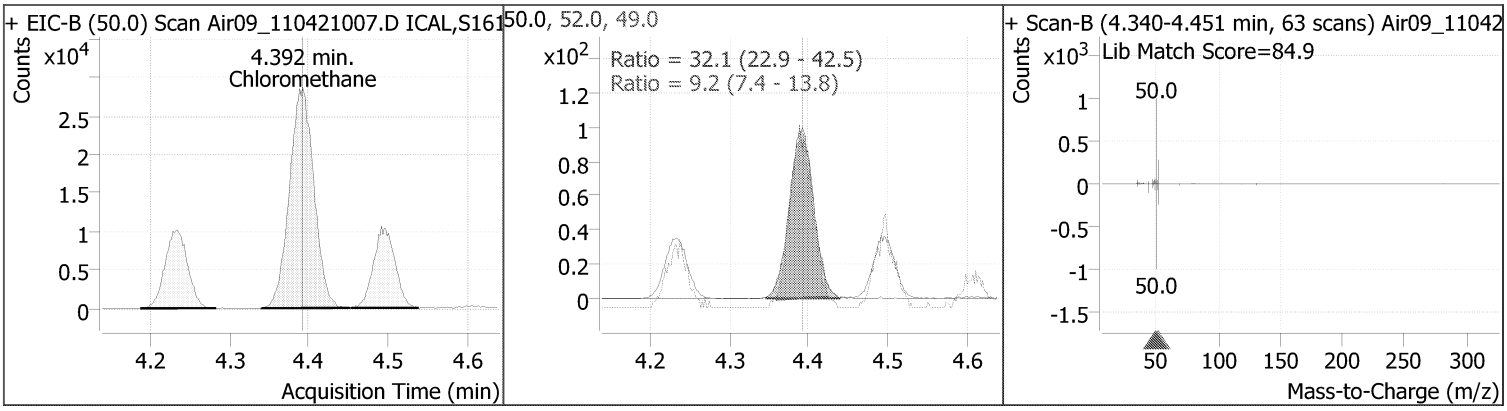
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	1.8414	4.16	0.00	38777	39.0	79.1	52.7	97.9
					42.0	66.0	46.3	85.9



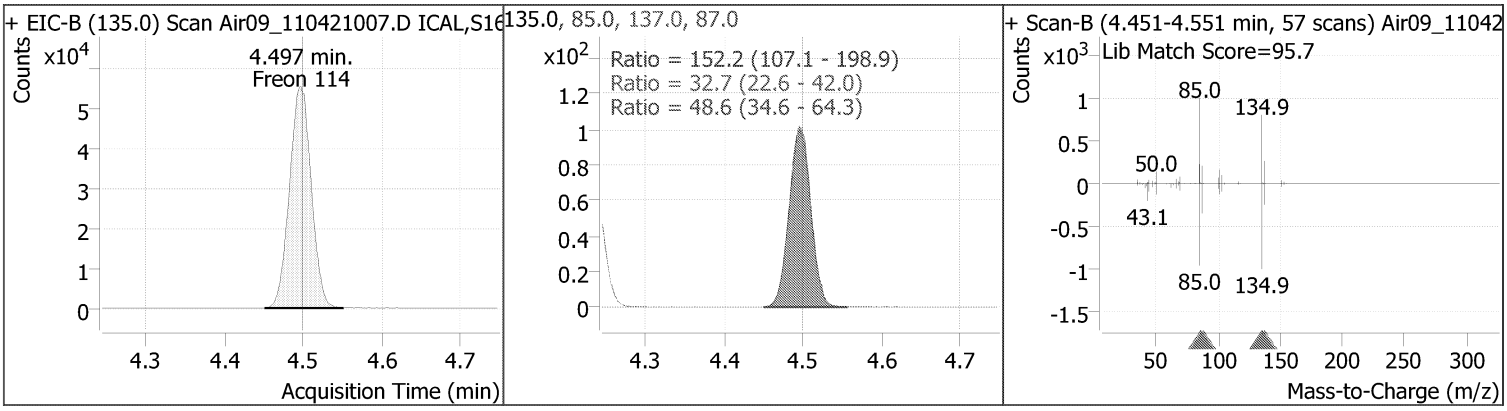
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	1.8894	4.23	0.00	131822	87.0	32.6	22.7	42.1



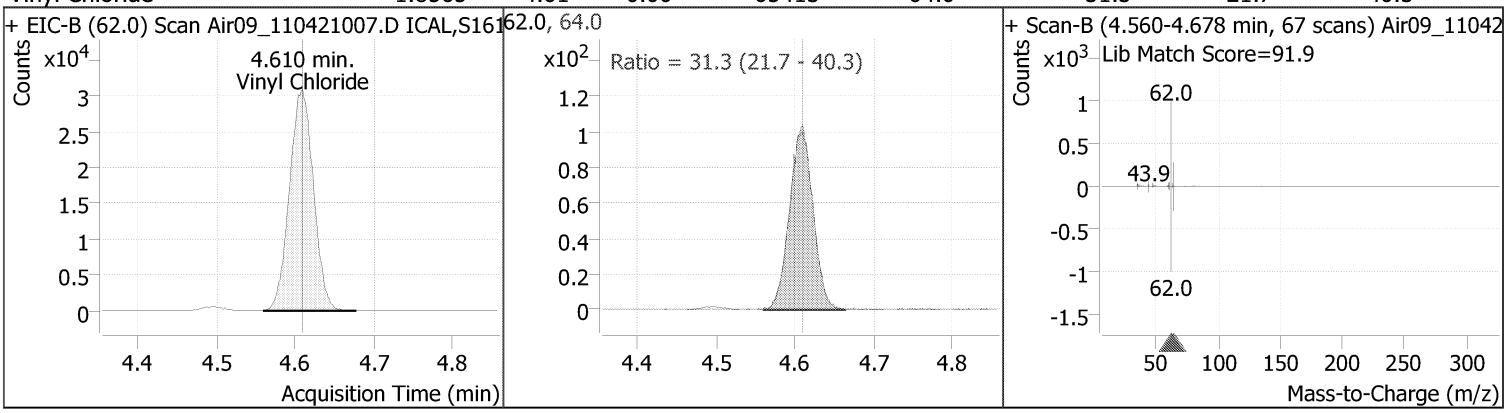
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	2.0043	4.39	0.00	61684	52.0	32.1	22.9	42.5
					49.0	9.2	7.4	13.8



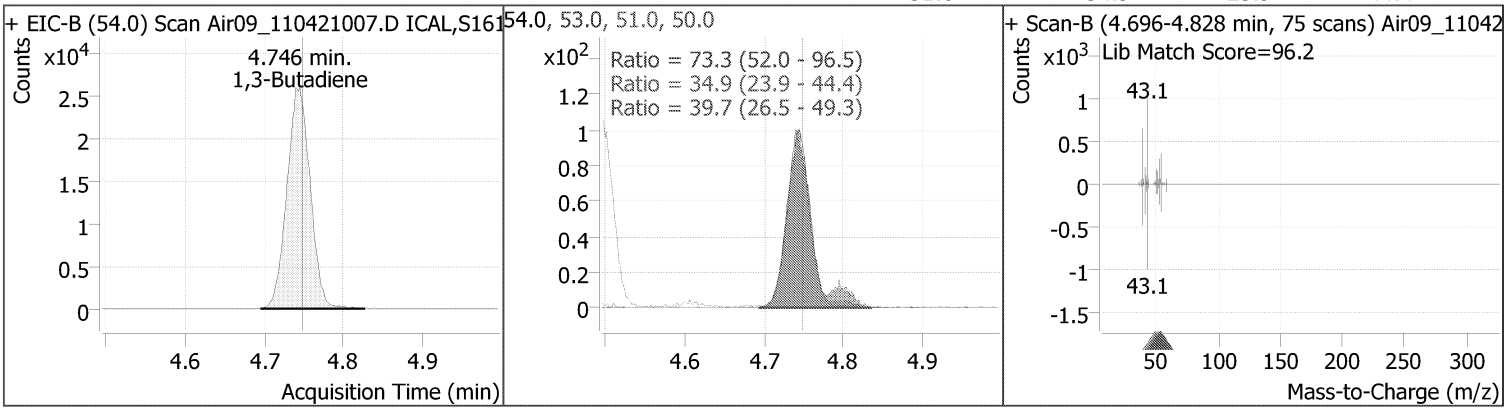
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	1.8790	4.50	0.00	106704	85.0	152.2	107.1	198.9
					87.0	48.6	34.6	64.3
					137.0	32.7	22.6	42.0



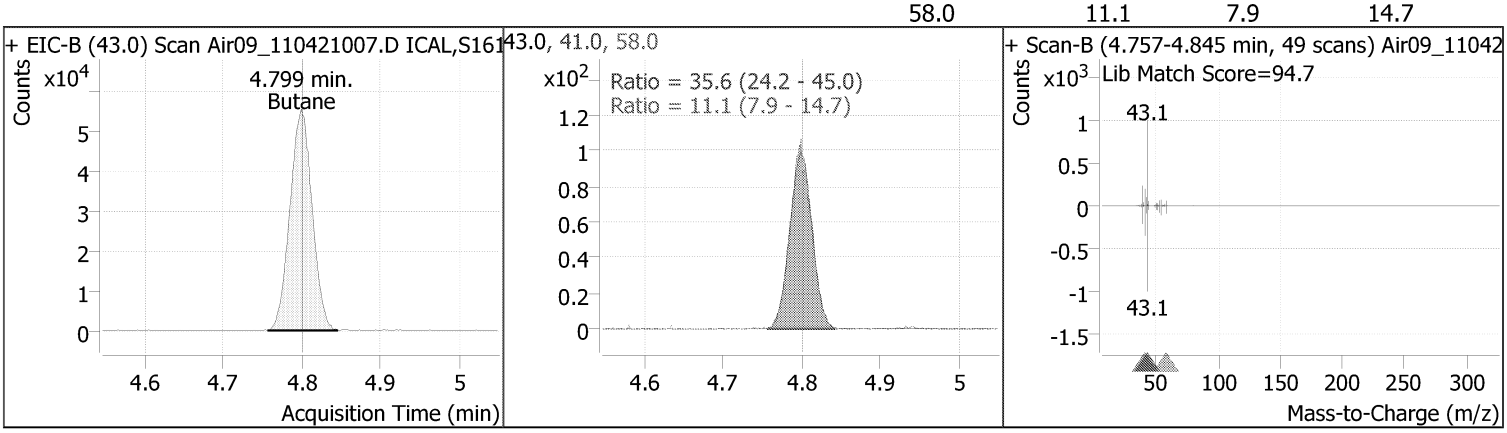
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	1.8565	4.61	0.00	65413	64.0	31.3	21.7	40.3



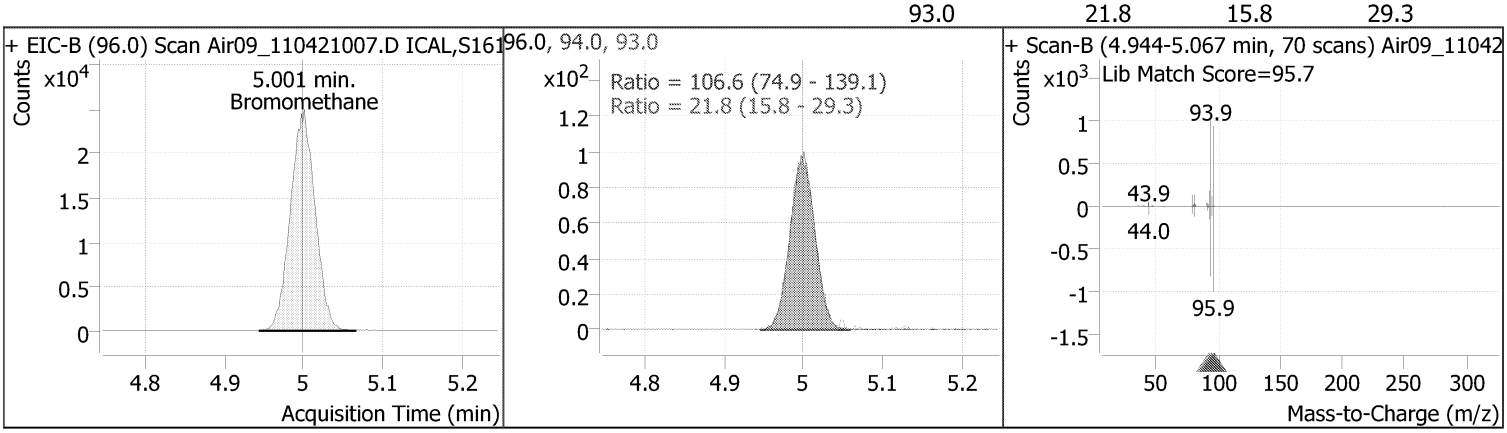
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	1.9123	4.75	0.00	53392	53.0	73.3	52.0	96.5
					50.0	39.7	26.5	49.3
					51.0	34.9	23.9	44.4



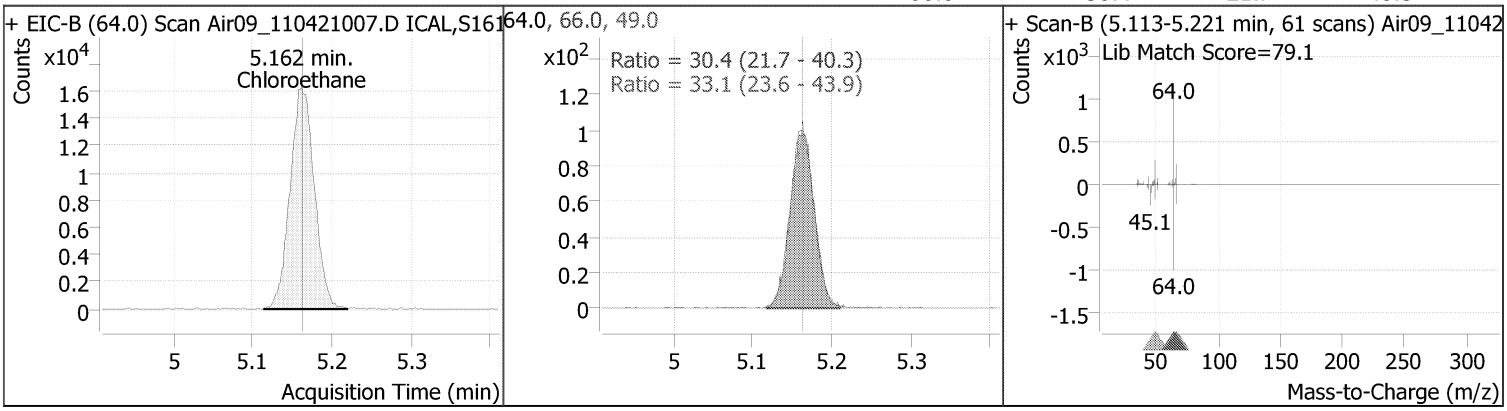
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	1.8519	4.80	0.00	108105	41.0	35.6	24.2	45.0
					58.0	11.1	7.9	14.7



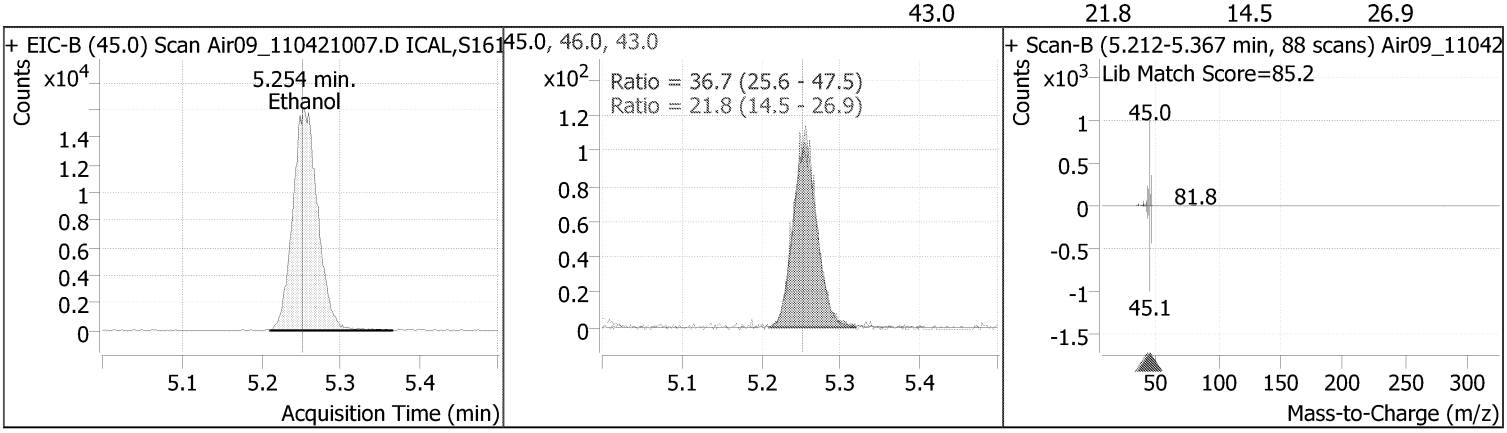
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromomethane	1.9913	5.00	0.00	54173	94.0	106.6	74.9	139.1
					93.0	21.8	15.8	29.3



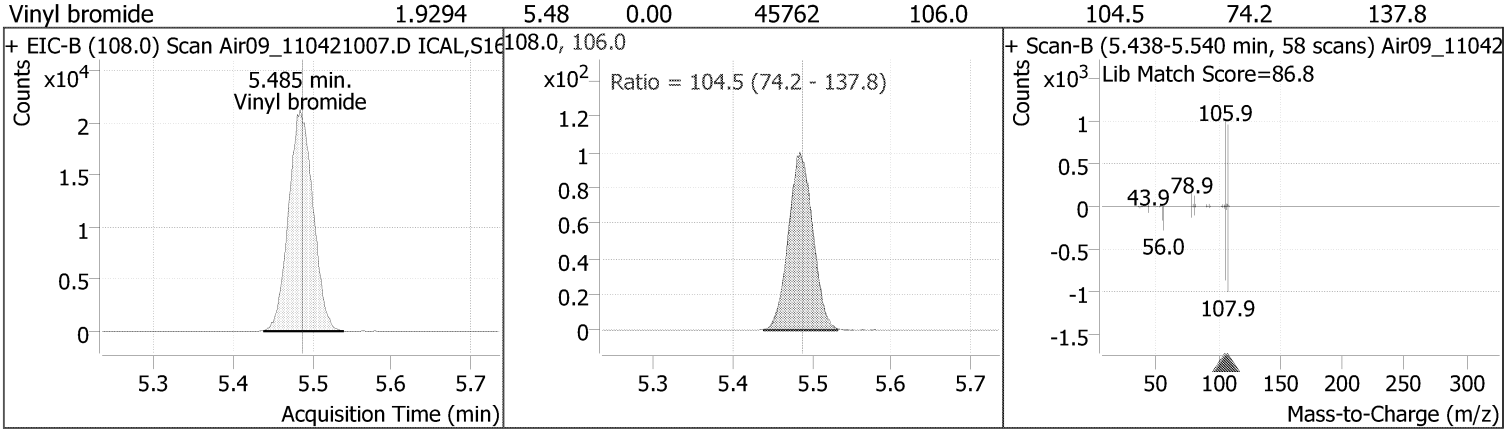
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	1.8406	5.16	0.00	34714	49.0	33.1	23.6	43.9
					66.0	30.4	21.7	40.3



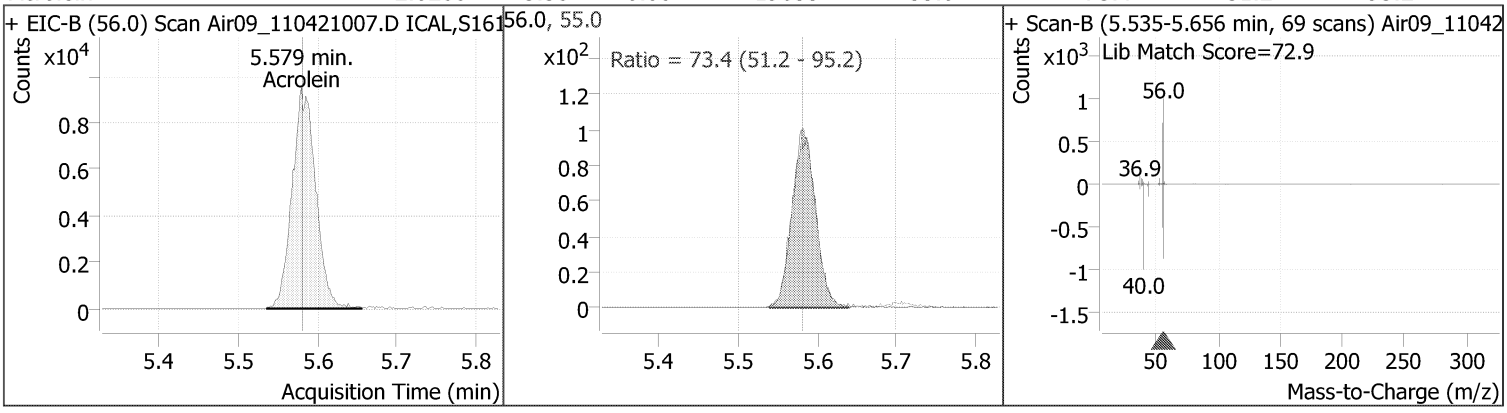
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	2.0000	5.25	0.00	35510	46.0	36.7	25.6	47.5
					43.0	21.8	14.5	26.9



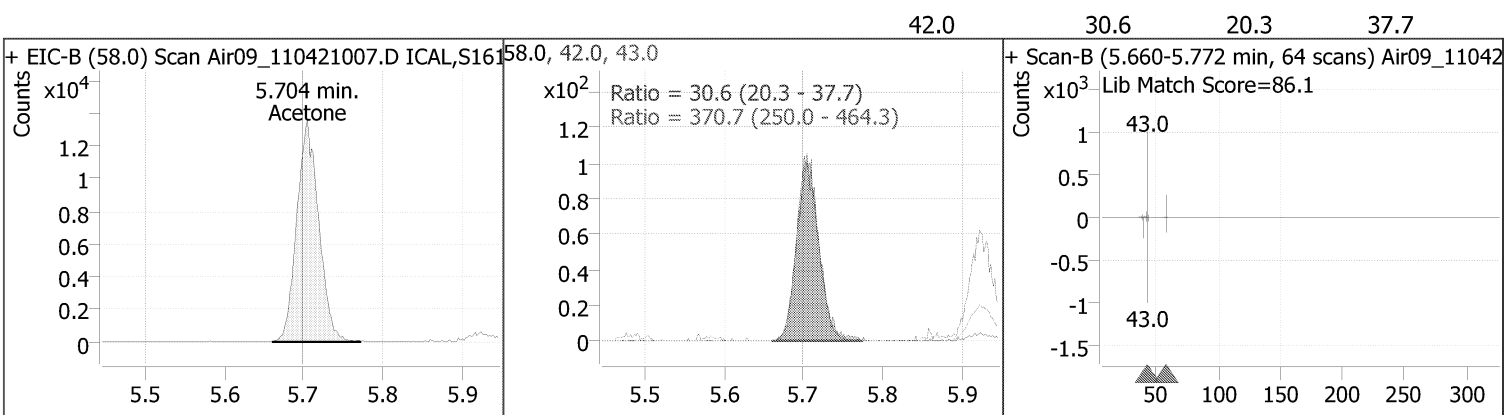
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl bromide	1.9294	5.48	0.00	45762	106.0	104.5	74.2	137.8



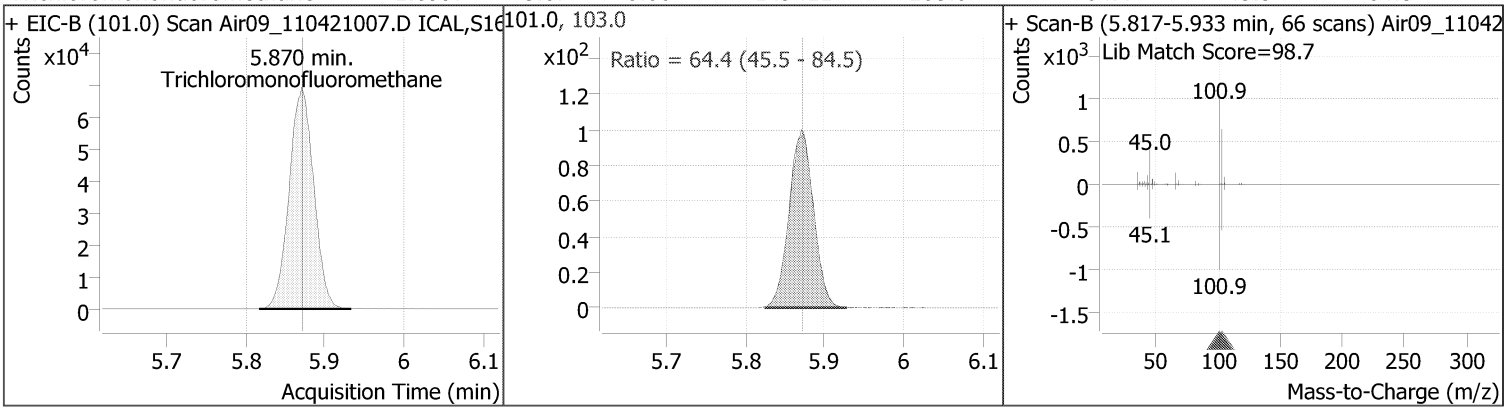
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	2.0266	5.58	0.00	19655	55.0	73.4	51.2	95.2



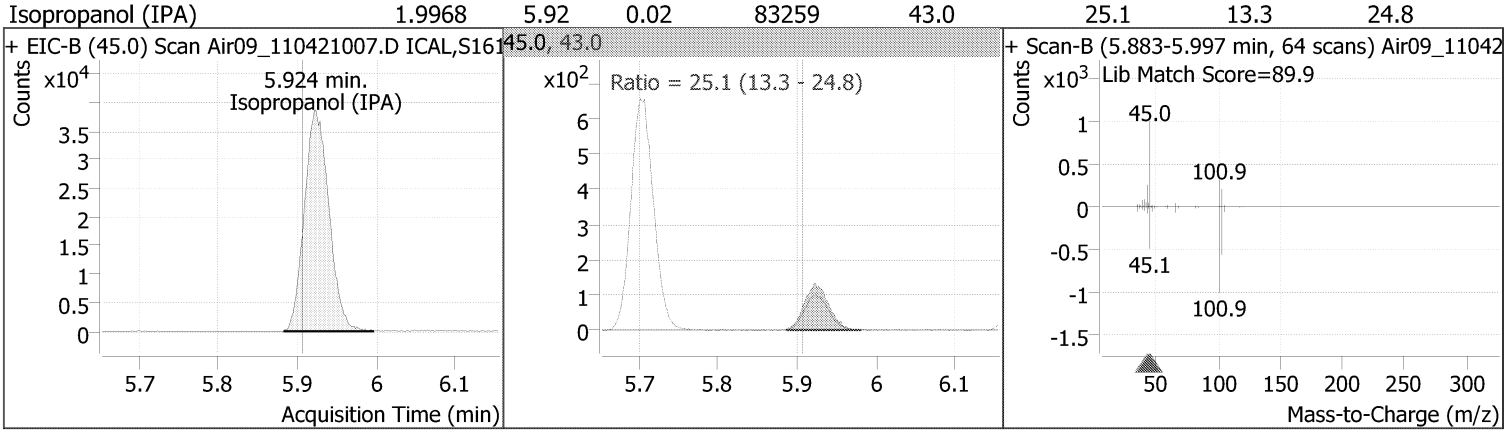
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	1.9205	5.70	0.01	26175	43.0	370.7	250.0	464.3
					42.0	30.6	20.3	37.7



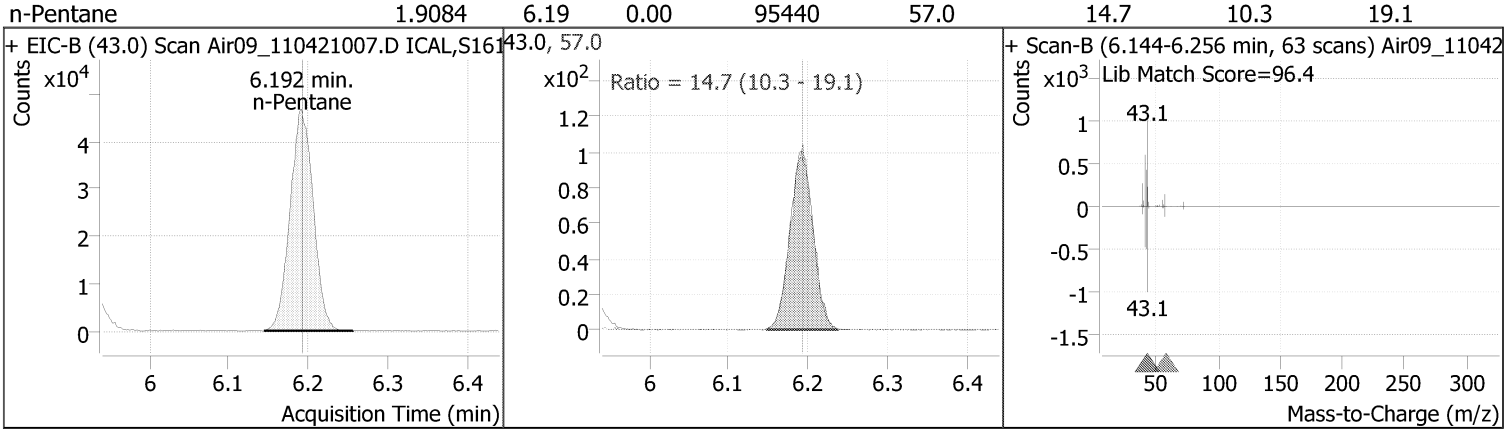
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	1.8997	5.87	0.00	149411	103.0	64.4	45.5	84.5



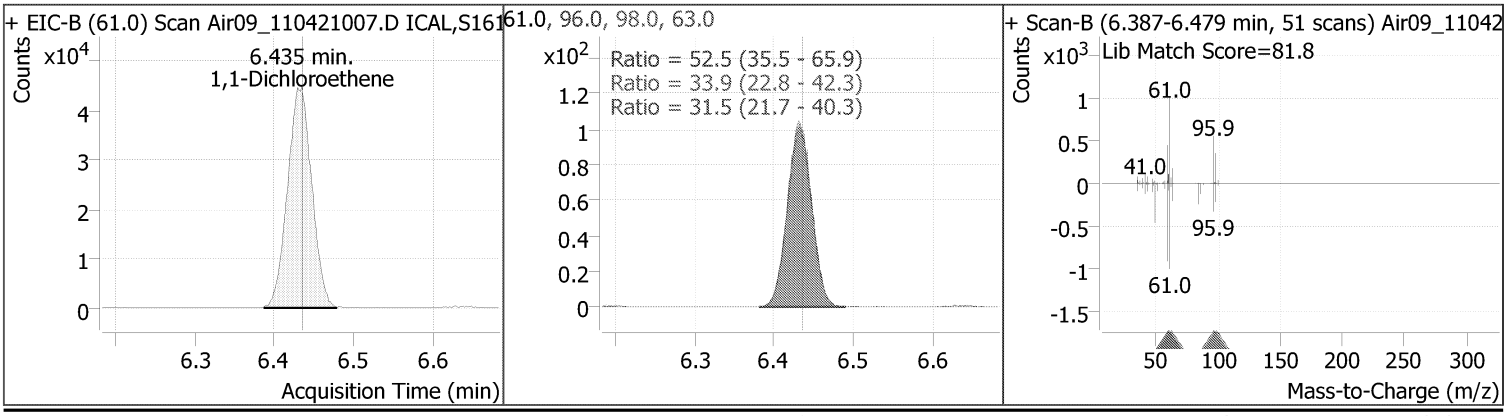
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	1.9968	5.92	0.02	83259	43.0	25.1	13.3	24.8



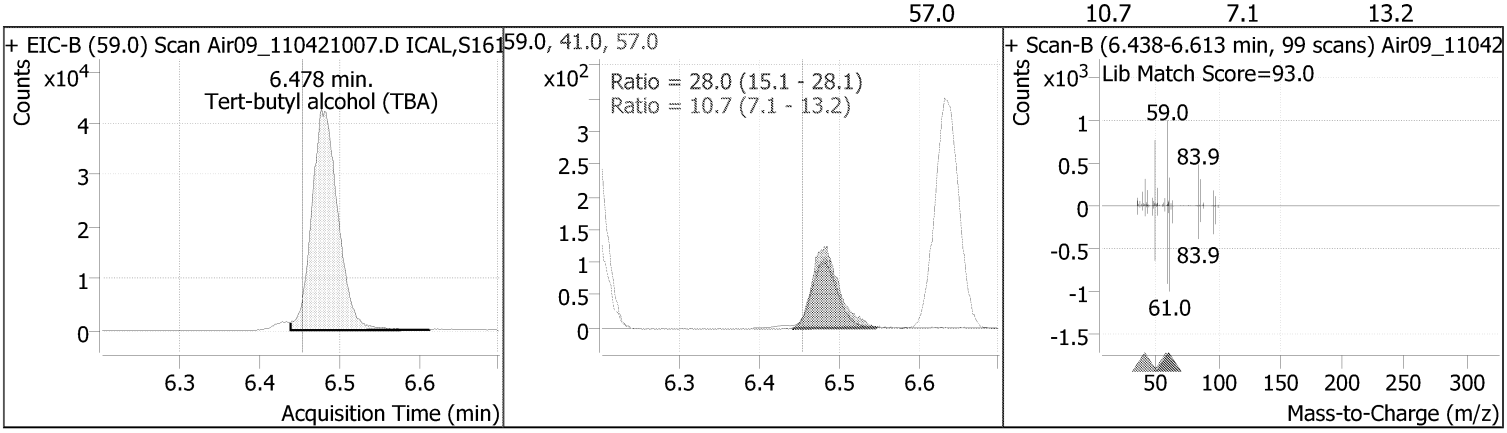
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	1.9084	6.19	0.00	95440	57.0	14.7	10.3	19.1



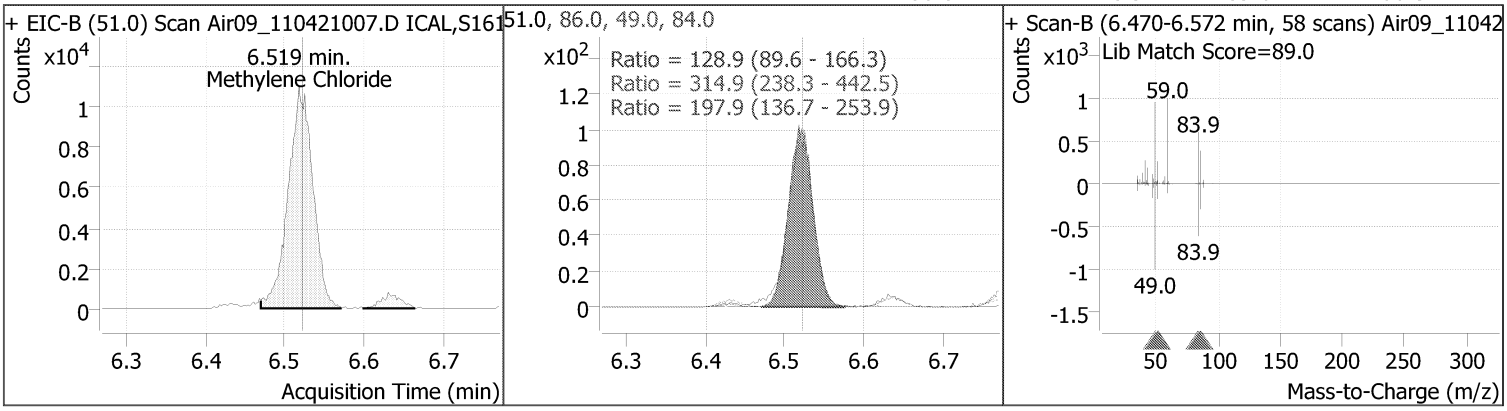
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	1.8872	6.43	0.00	95134	96.0	52.5	35.5	65.9
					98.0	33.9	22.8	42.3
					63.0	31.5	21.7	40.3



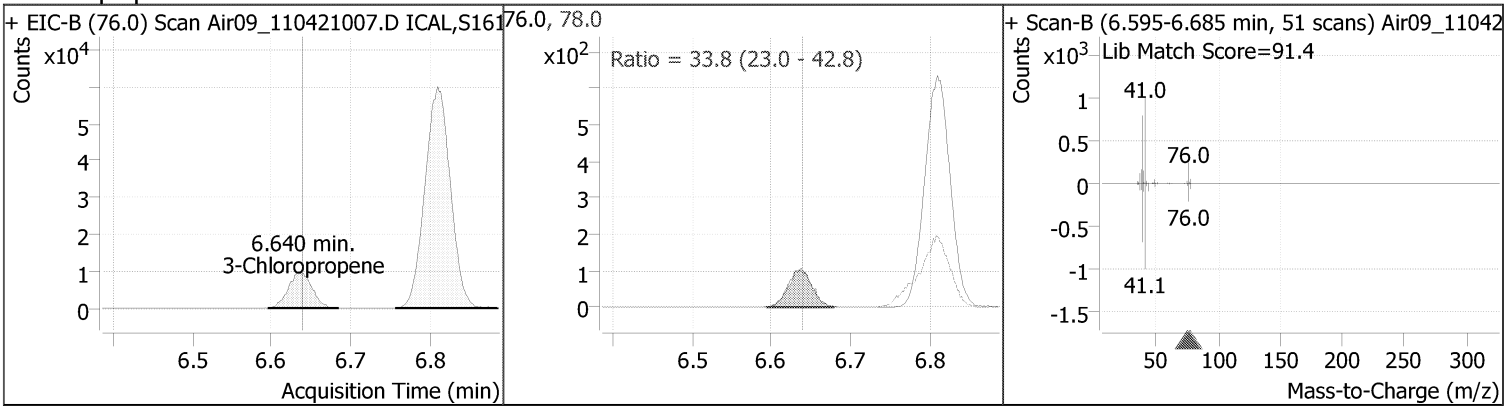
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	1.9580	6.48	0.02	98419	41.0	28.0	15.1	28.1
					57.0	10.7	7.1	13.2



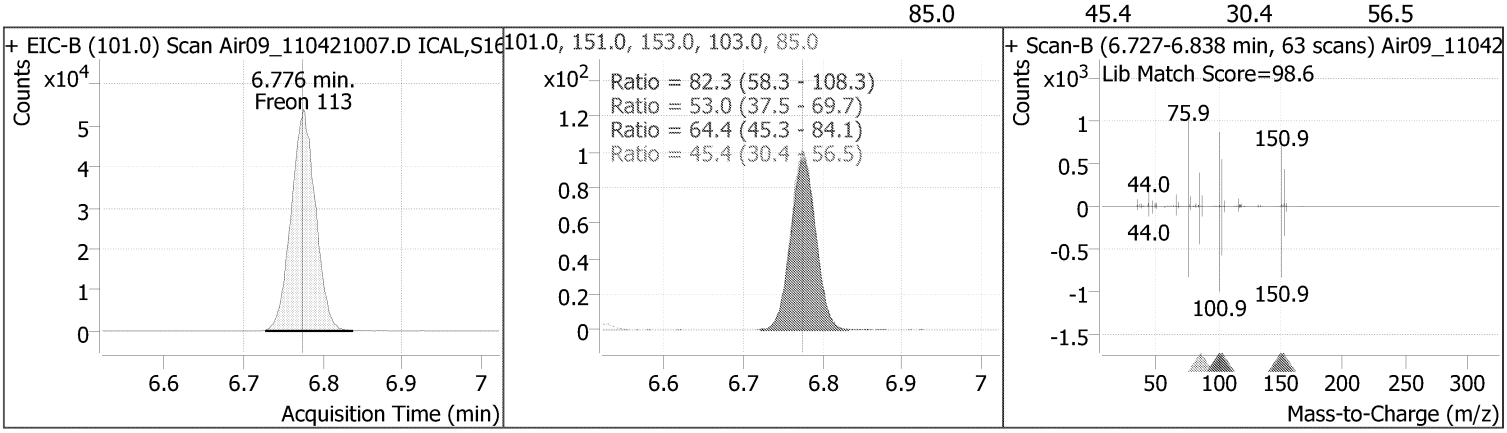
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	1.7904	6.52	-0.01	23930	49.0	314.9	238.3	442.5
					84.0	197.9	136.7	253.9
					86.0	128.9	89.6	166.3



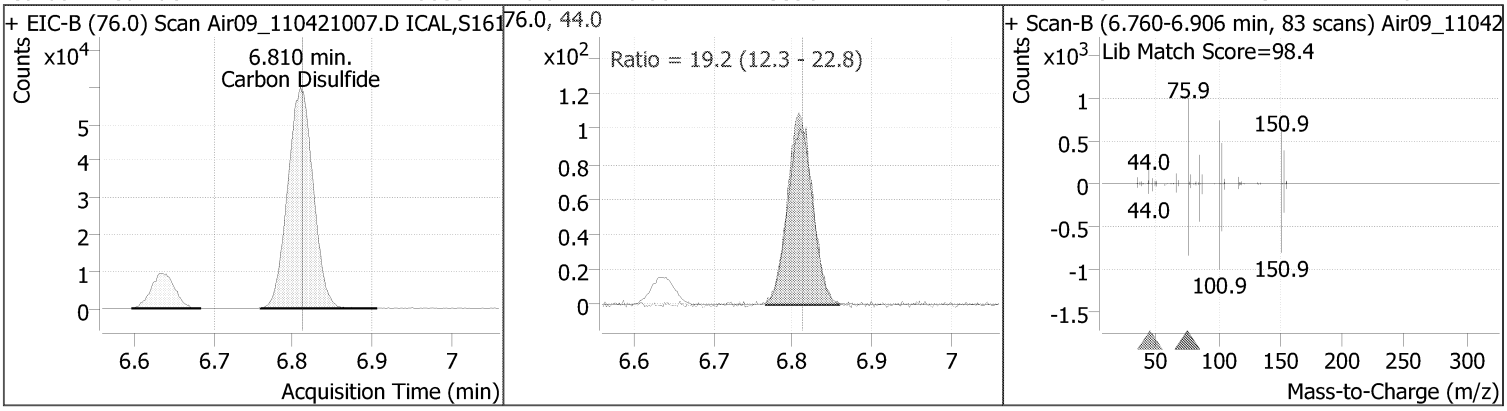
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	1.9302	6.64	0.00	20088	78.0	33.8	23.0	42.8



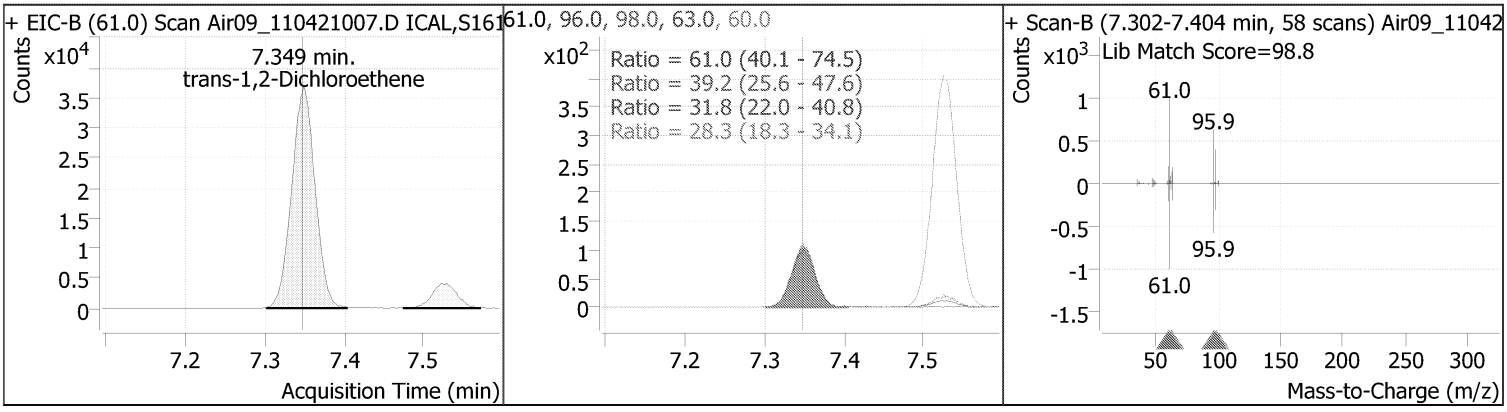
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	1.8869	6.78	0.00	114365	151.0	82.3	58.3	108.3
					103.0	64.4	45.3	84.1
					153.0	53.0	37.5	69.7
					85.0	45.4	30.4	56.5



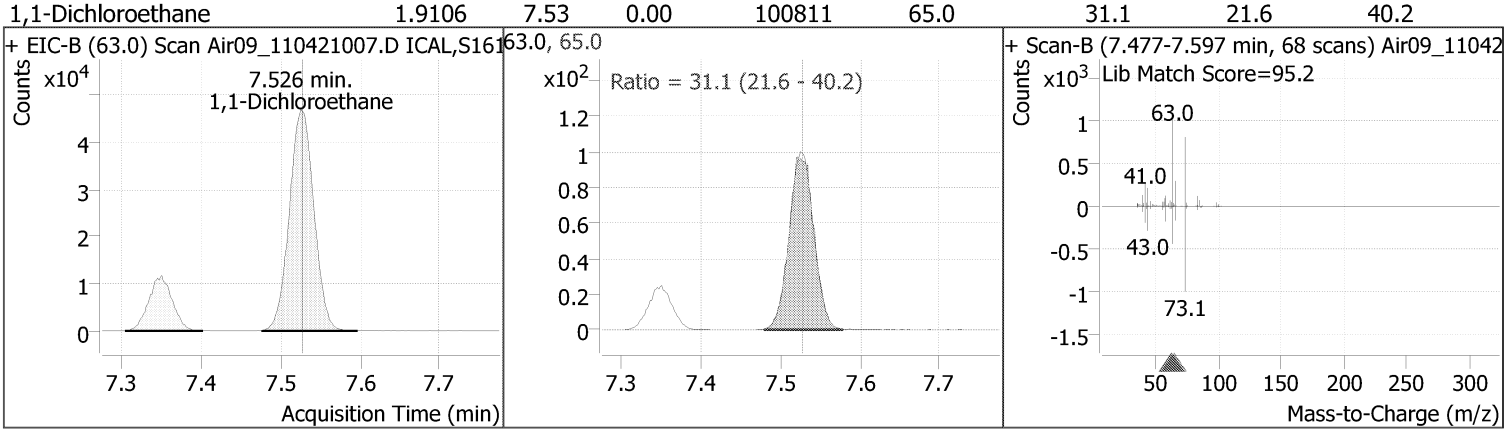
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	1.8853	6.81	0.00	133987	44.0	19.2	12.3	22.8



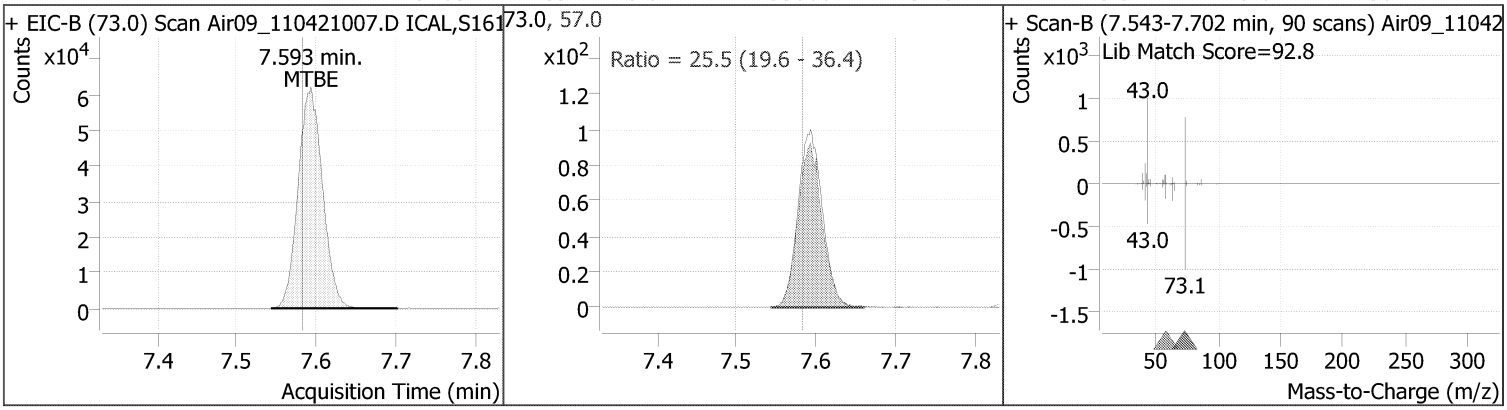
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	1.8810	7.35	0.00	75308	96.0	61.0	40.1	74.5
					98.0	39.2	25.6	47.6
					63.0	31.8	22.0	40.8
					60.0	28.3	18.3	34.1



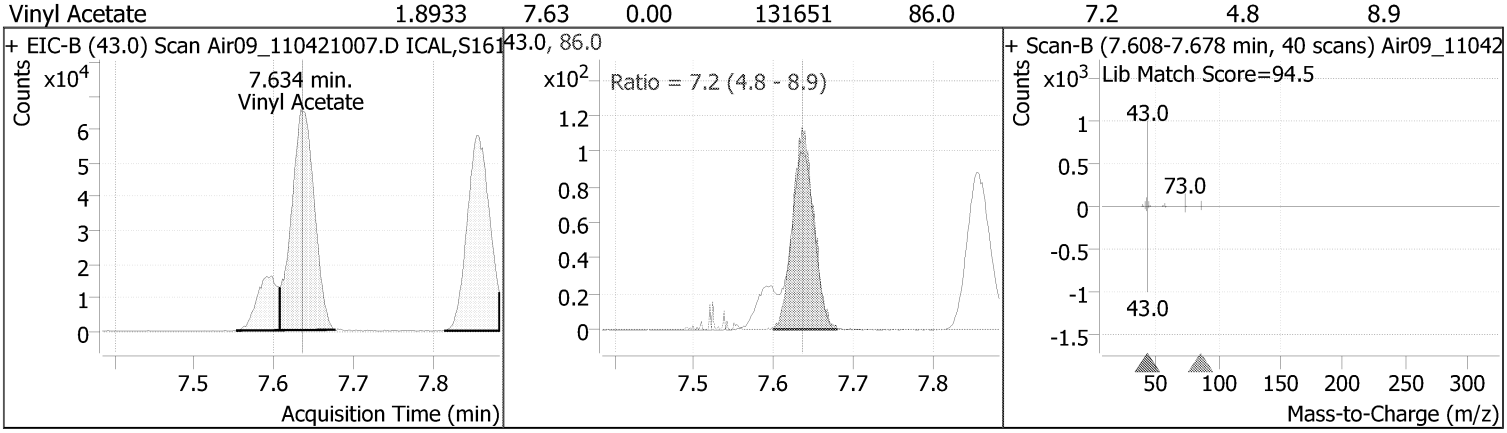
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	1.9106	7.53	0.00	100811	65.0	31.1	21.6	40.2



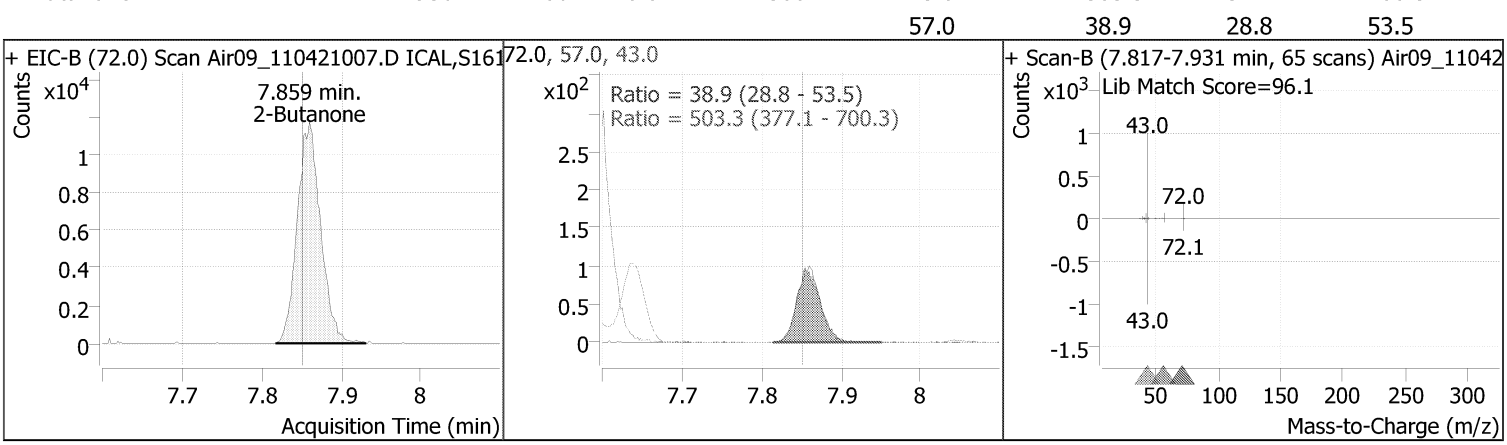
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	1.9765	7.59	0.01	133060	57.0	25.5	19.6	36.4



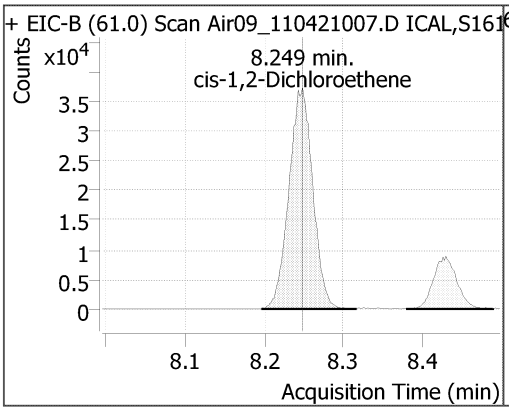
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	1.8933	7.63	0.00	131651	86.0	7.2	4.8	8.9

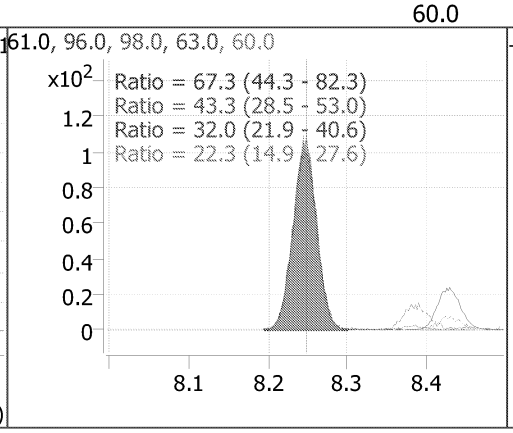


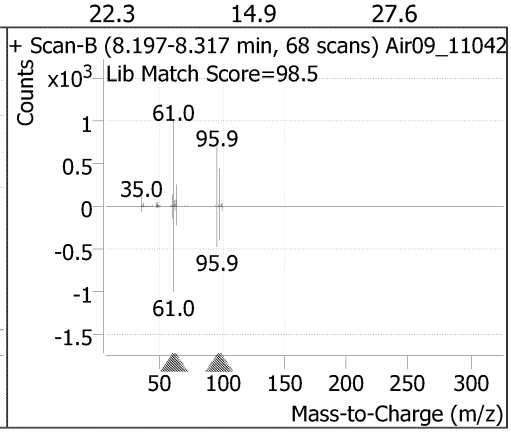
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	1.9367	7.86	0.01	23882	43.0	503.3	377.1	700.3
					57.0	38.9	28.8	53.5



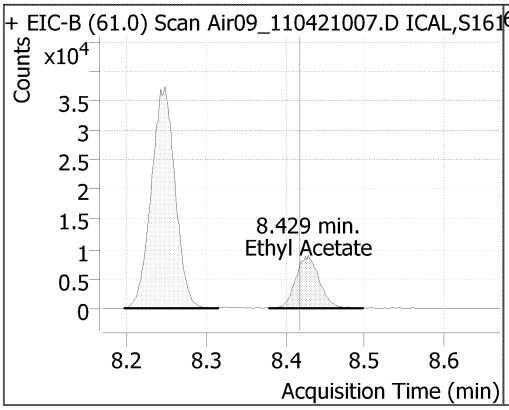
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	1.9192	8.25	0.00	78064	96.0	67.3	44.3	82.3
					98.0	43.3	28.5	53.0
					63.0	32.0	21.9	40.6
					60.0	22.3	14.9	27.6

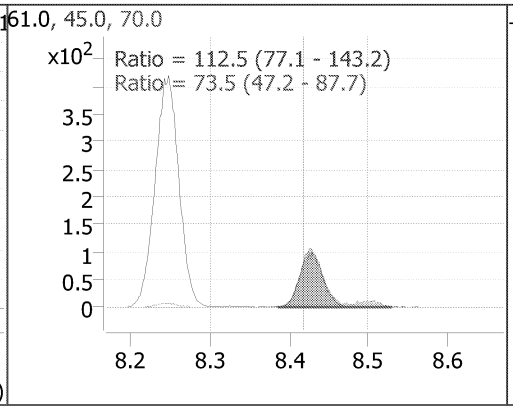


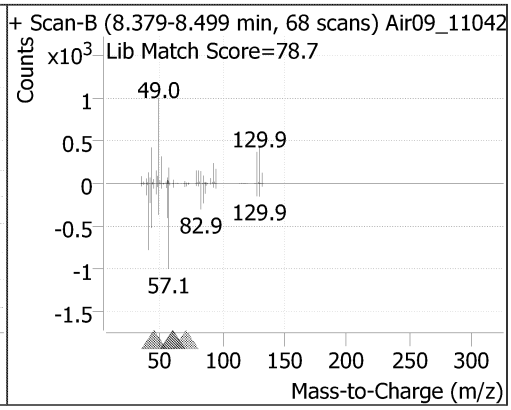




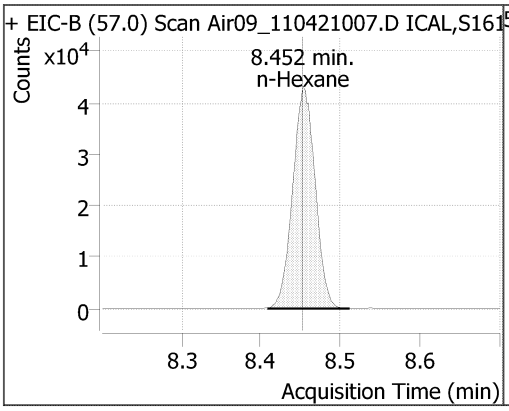
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	1.9760	8.43	0.01	18190	45.0	112.5	77.1	143.2
					70.0	73.5	47.2	87.7

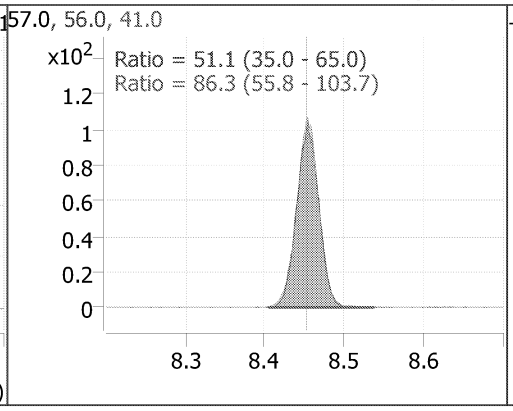


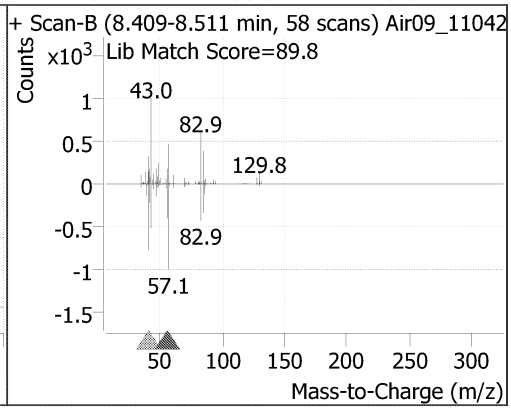




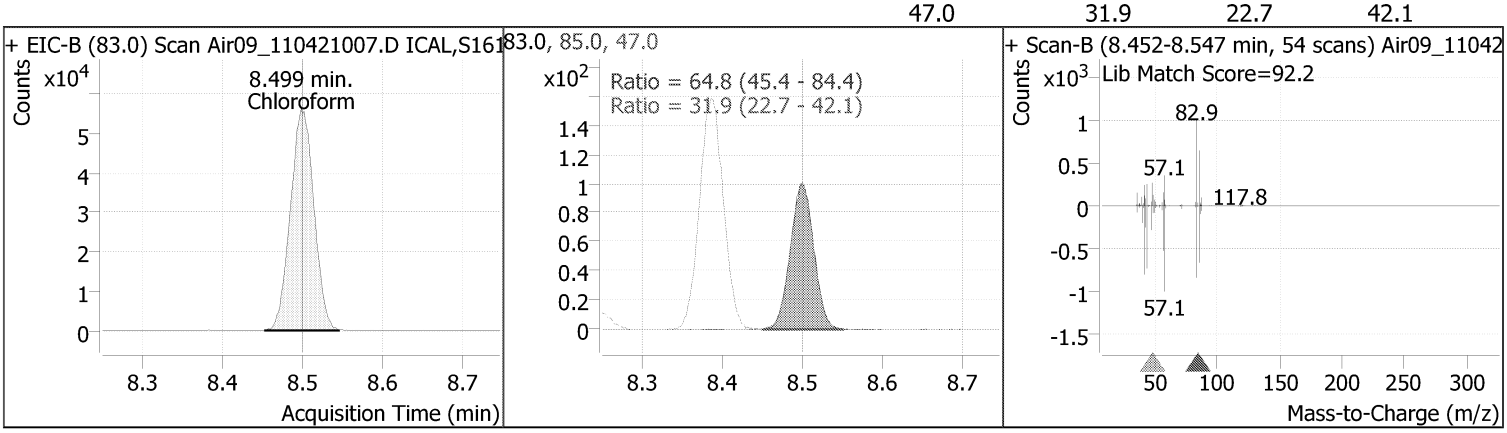
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	1.9498	8.45	0.00	84558	41.0	86.3	55.8	103.7
					56.0	51.1	35.0	65.0



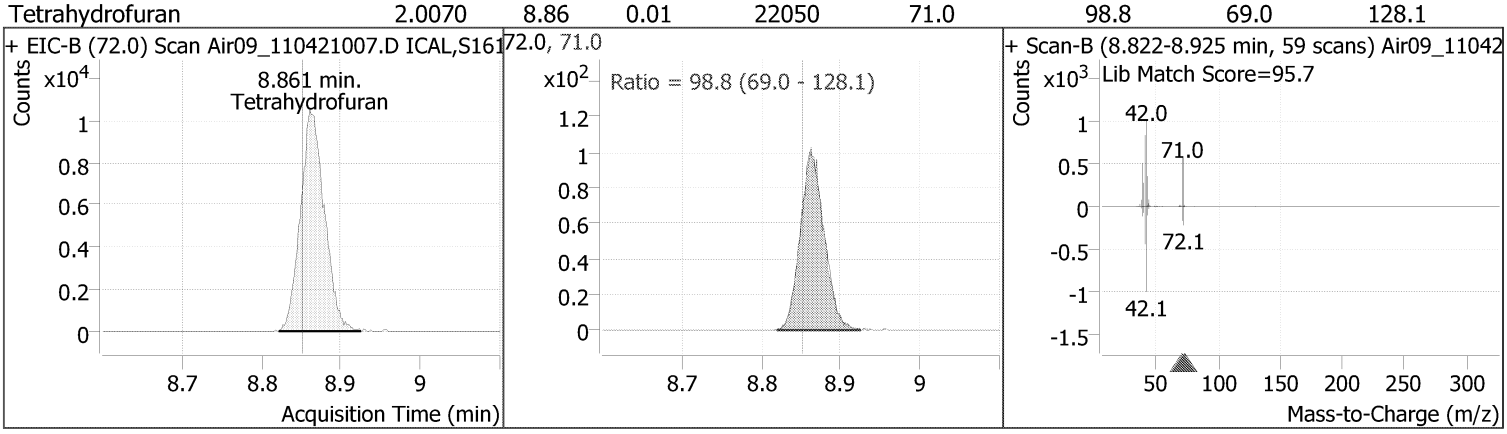




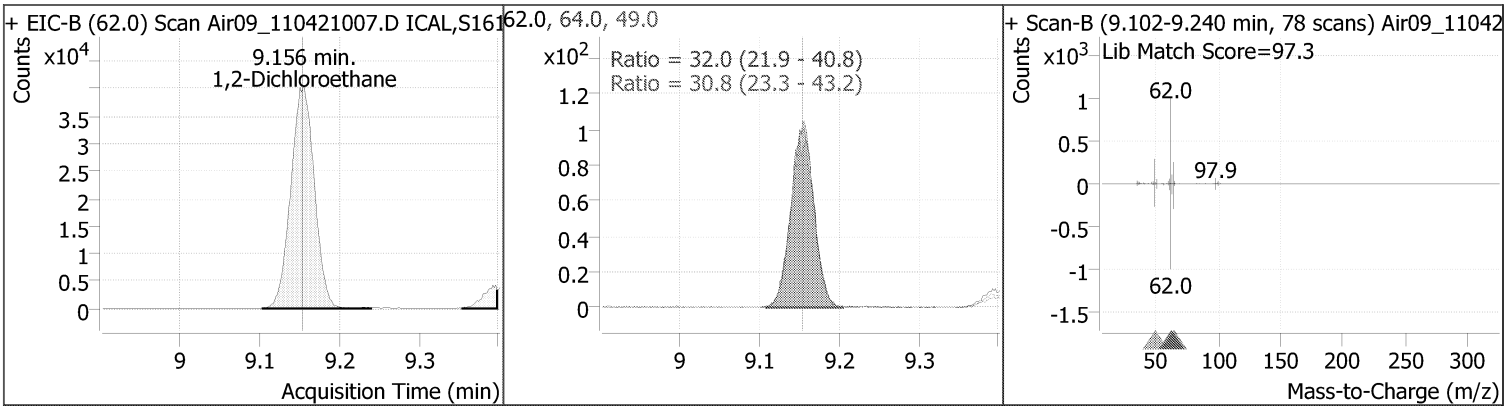
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	1.8801	8.50	0.00	115575	85.0	64.8	45.4	84.4
					47.0	31.9	22.7	42.1



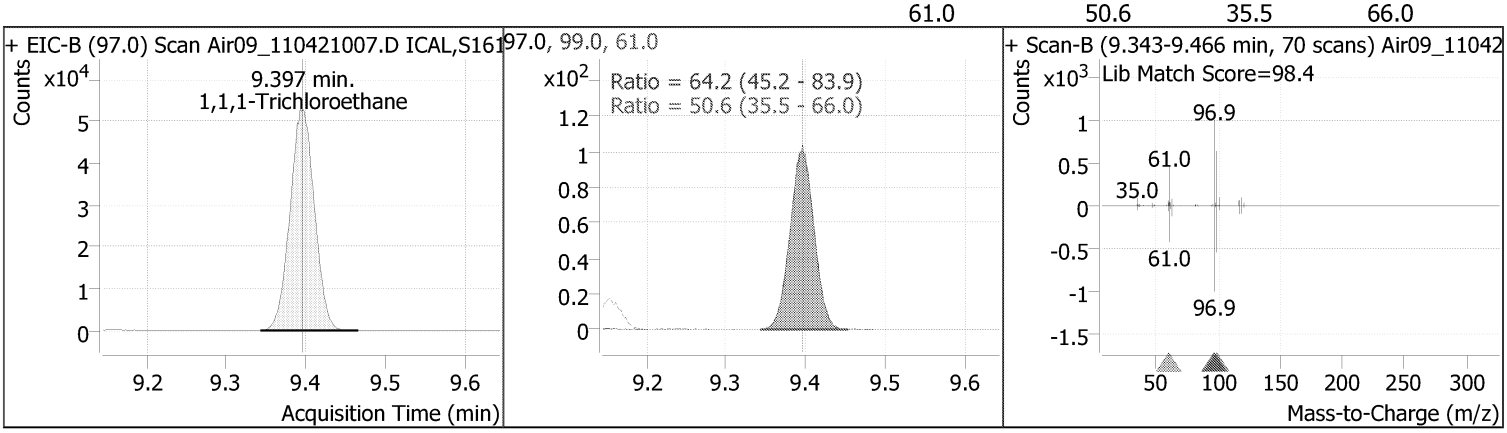
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	2.0070	8.86	0.01	22050	71.0	98.8	69.0	128.1



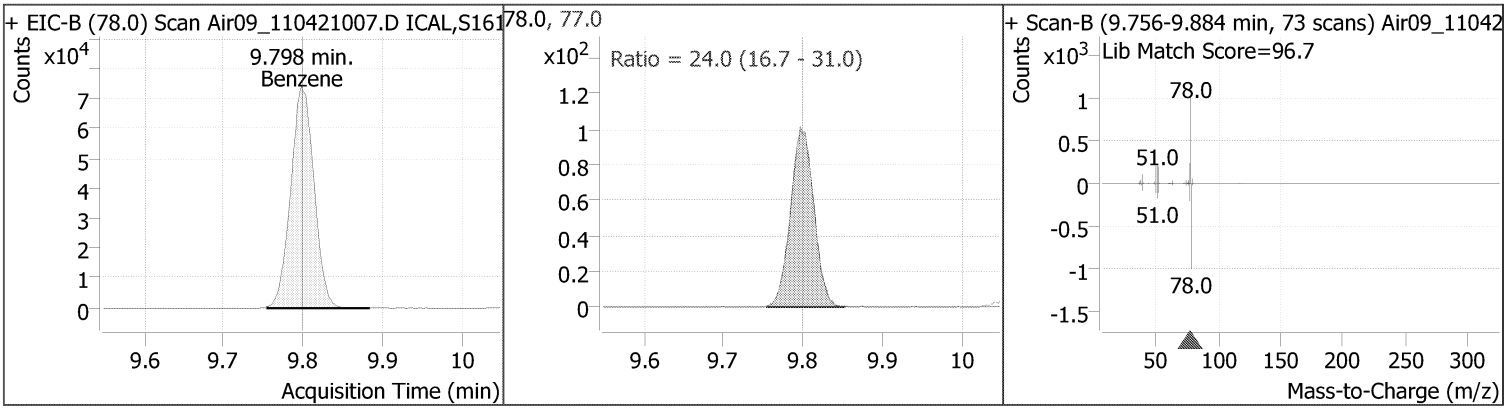
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	1.8957	9.16	0.00	83703	49.0	30.8	23.3	43.2
					64.0	32.0	21.9	40.8



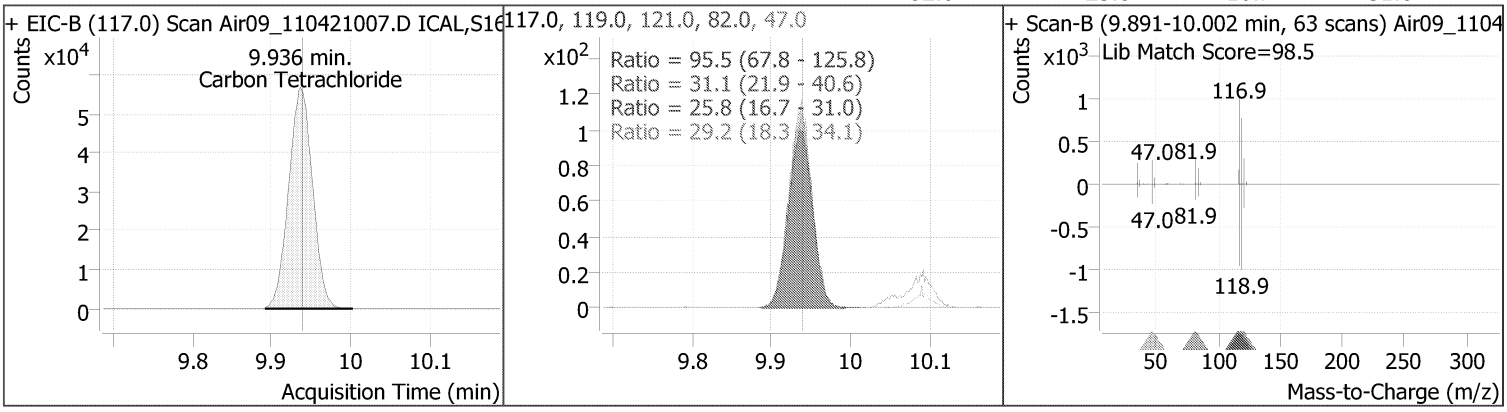
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	1.9185	9.40	0.00	113502	99.0	64.2	45.2	83.9
					61.0	50.6	35.5	66.0



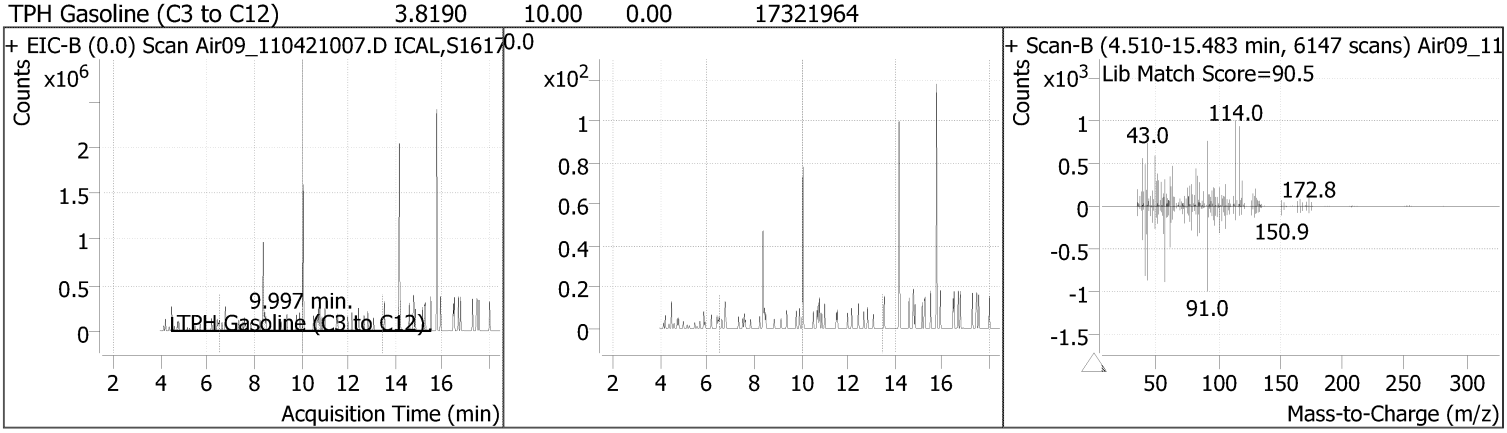
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	1.9037	9.80	0.00	151991	77.0	24.0	16.7	31.0



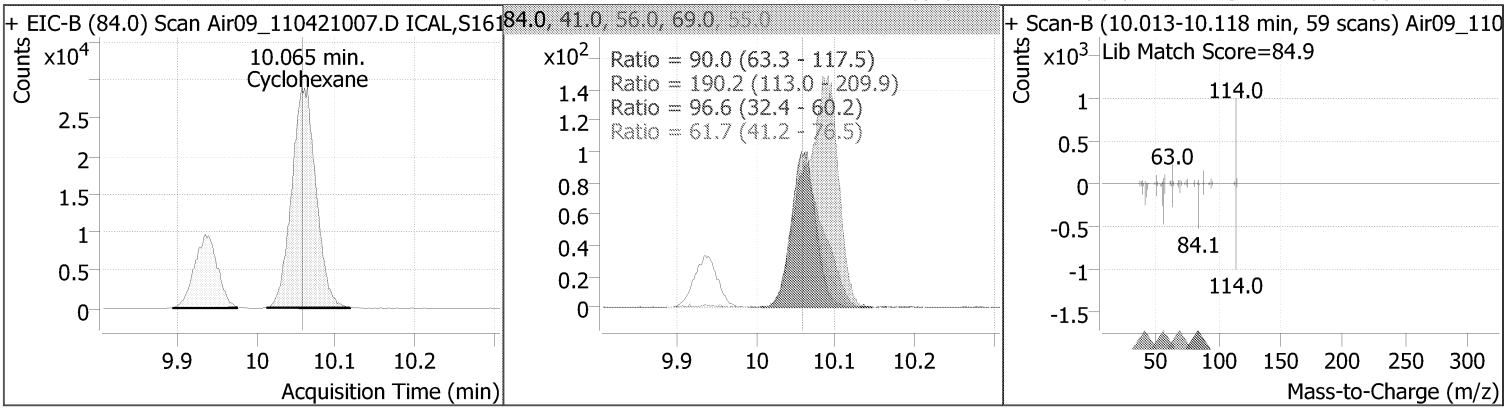
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	1.9453	9.94	-0.01	118876	119.0	95.5	67.8	125.8
					121.0	31.1	21.9	40.6
					47.0	29.2	18.3	34.1
					82.0	25.8	16.7	31.0



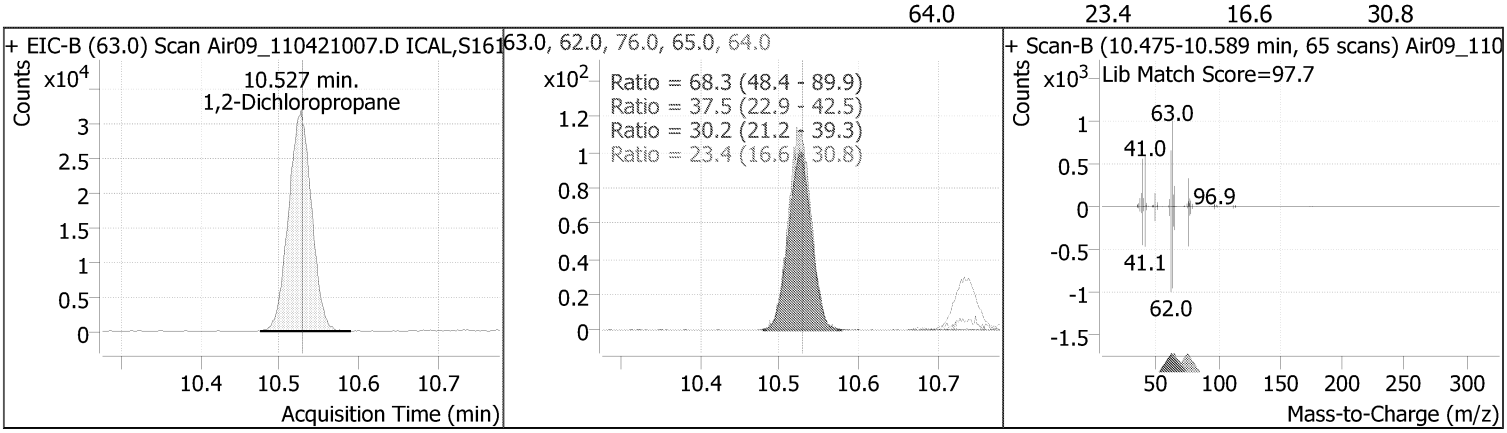
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	3.8190	10.00	0.00	17321964				



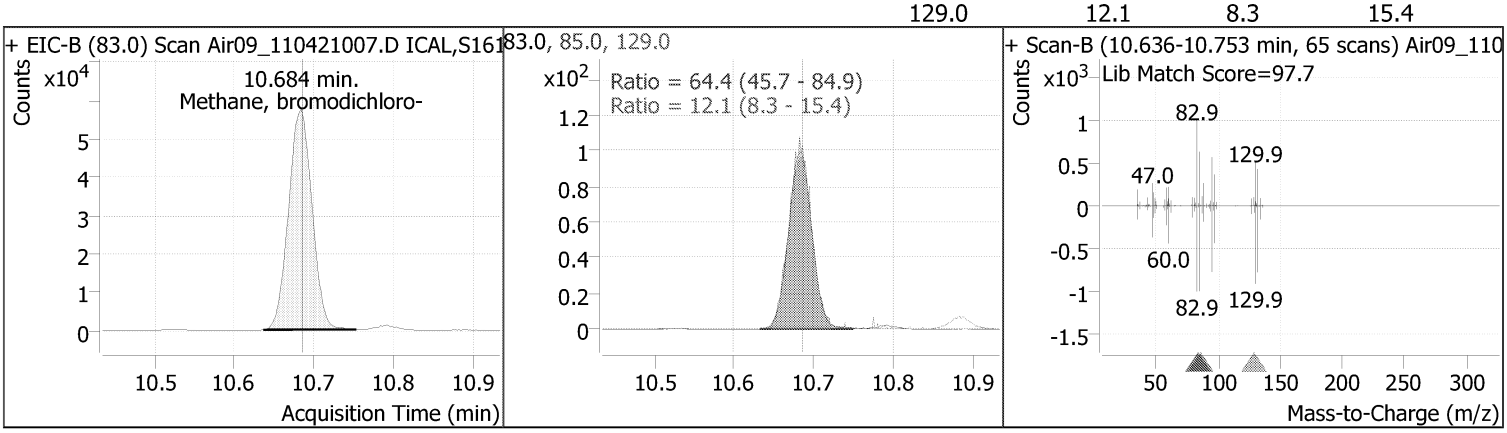
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	1.6959	10.06	0.00	62031	56.0	190.2	113.0	209.9
					41.0	90.0	63.3	117.5
					55.0	61.7	41.2	76.5
					69.0	96.6	32.4	60.2



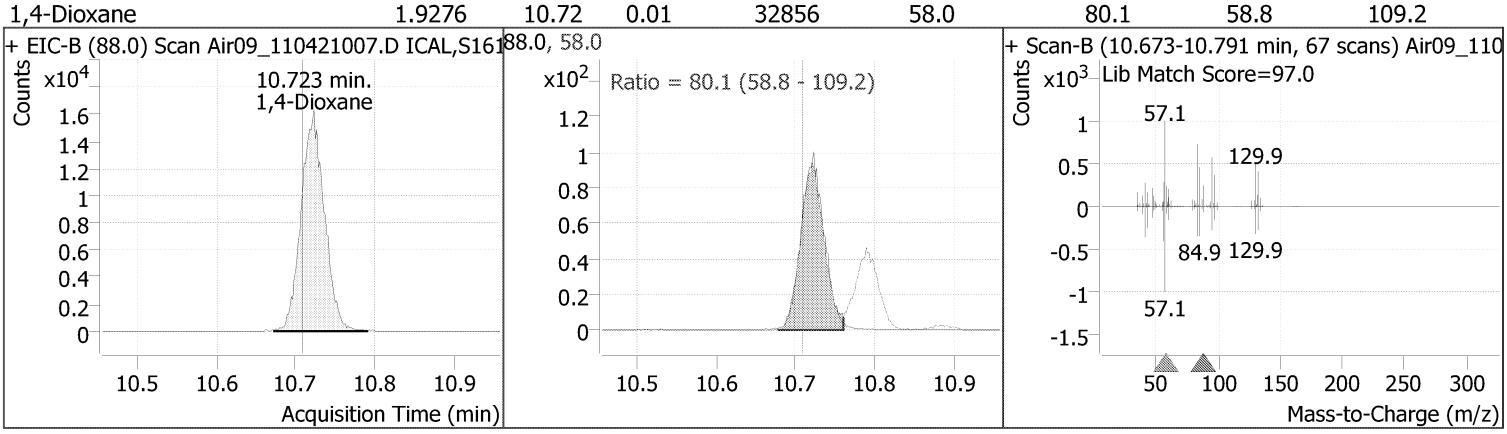
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	1.8829	10.53	0.00	64452	62.0	68.3	48.4	89.9
					76.0	37.5	22.9	42.5
					65.0	30.2	21.2	39.3
					64.0	23.4	16.6	30.8



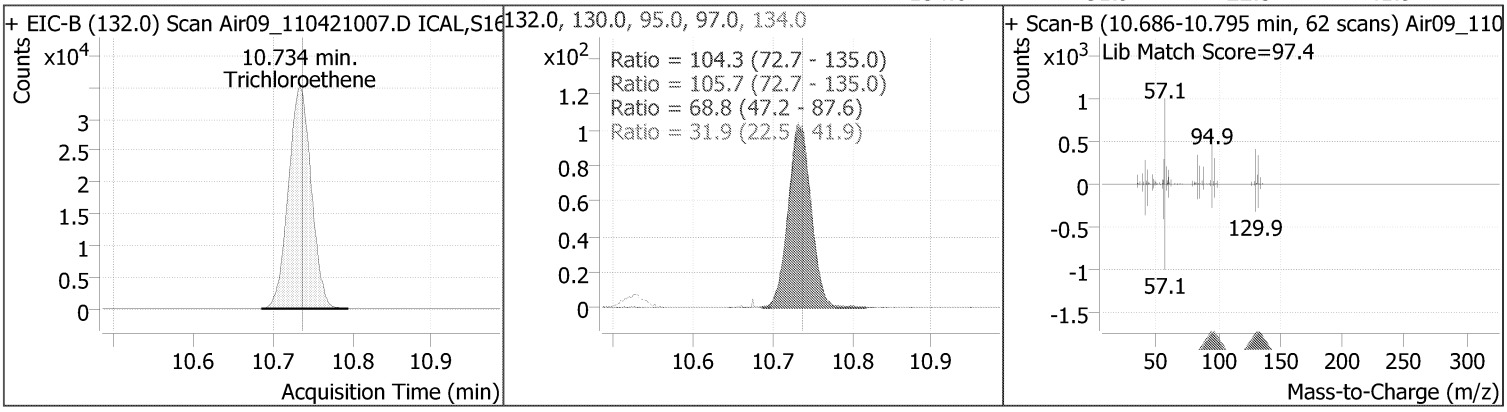
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	1.9152	10.68	0.00	118238	85.0	64.4	45.7	84.9
					129.0	12.1	8.3	15.4



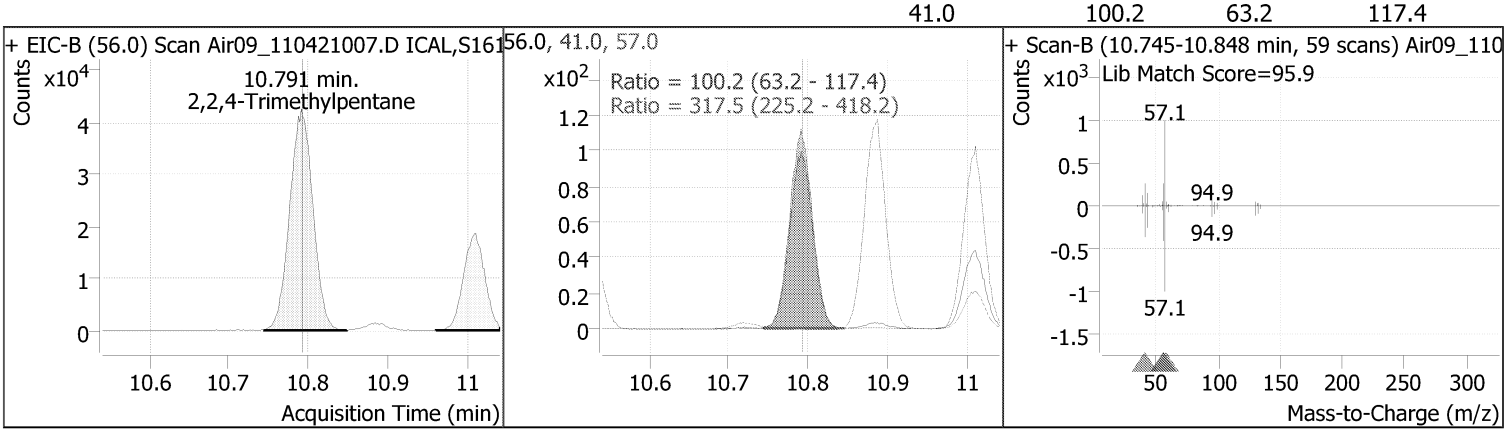
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	1.9276	10.72	0.01	32856	58.0	80.1	58.8	109.2



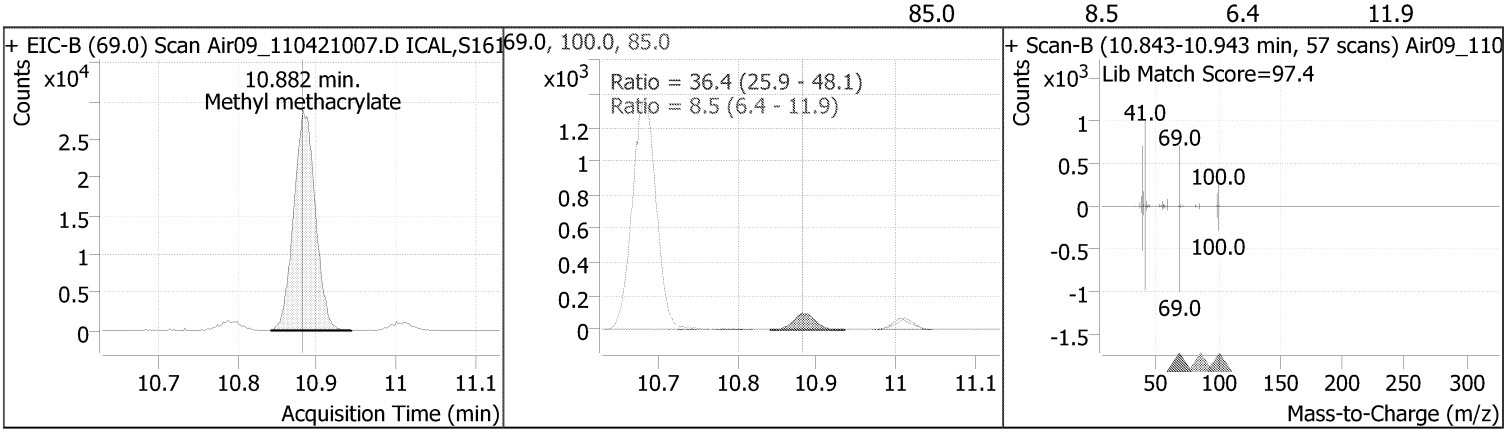
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	1.9265	10.73	0.00	70354	130.0	104.3	72.7	135.0
					95.0	105.7	72.7	135.0
					97.0	68.8	47.2	87.6
					134.0	31.9	22.5	41.9



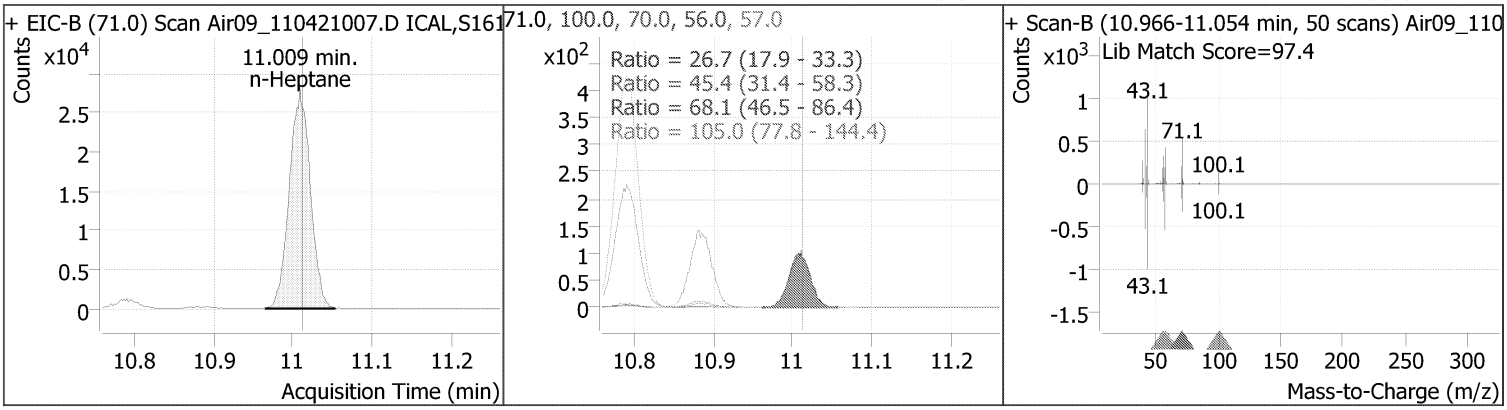
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	1.9542	10.79	0.00	86283	57.0	317.5	225.2	418.2
					41.0	100.2	63.2	117.4



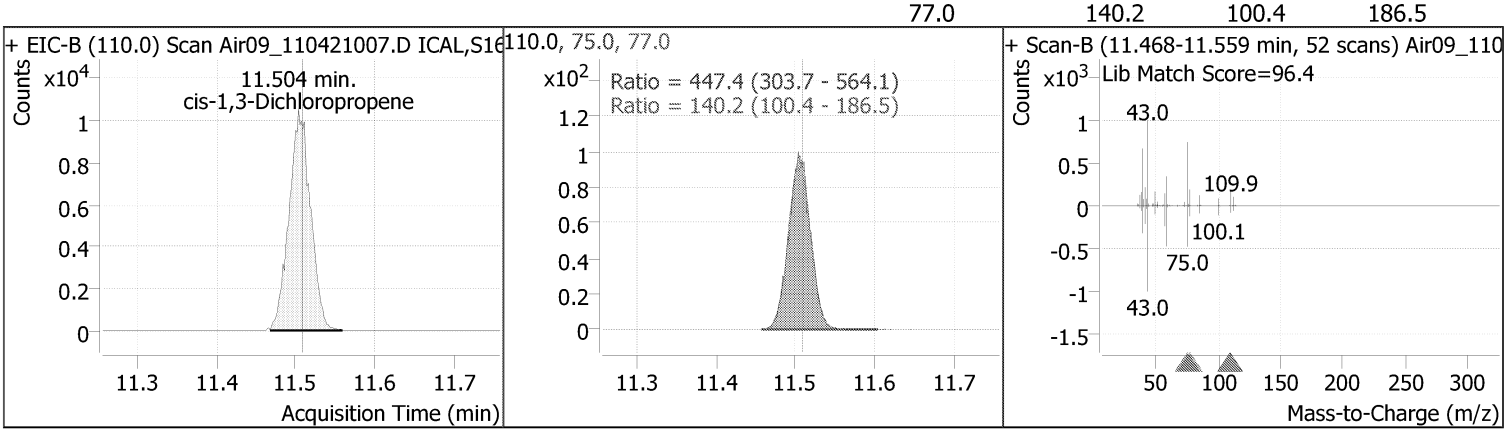
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	1.9890	10.88	0.00	54225	100.0	36.4	25.9	48.1
					85.0	8.5	6.4	11.9



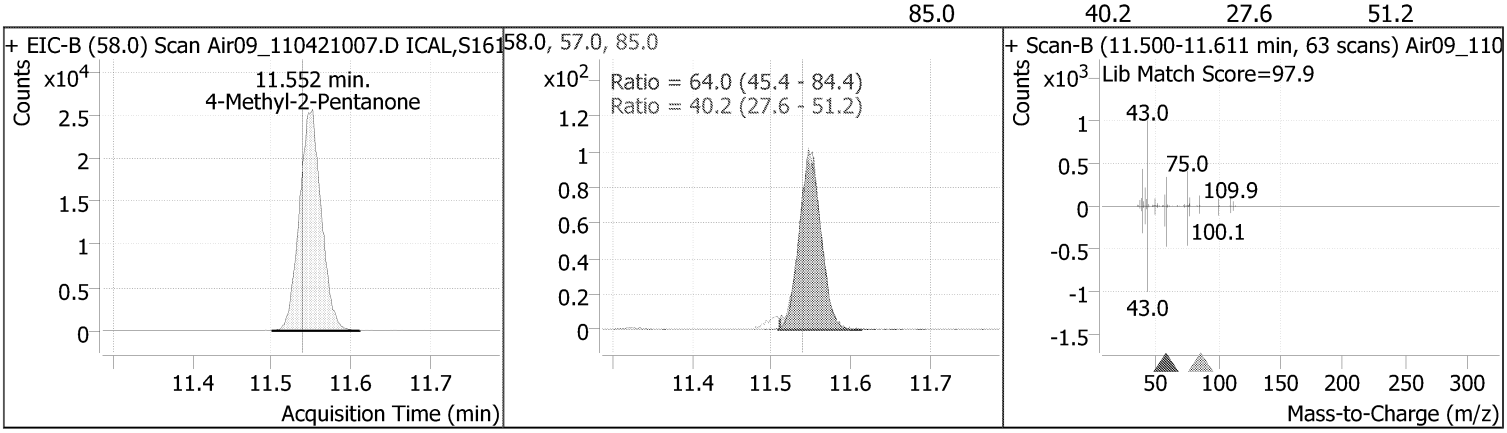
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	1.9773	11.01	0.00	51290	57.0	105.0	77.8	144.4
					56.0	68.1	46.5	86.4
					70.0	45.4	31.4	58.3
					100.0	26.7	17.9	33.3



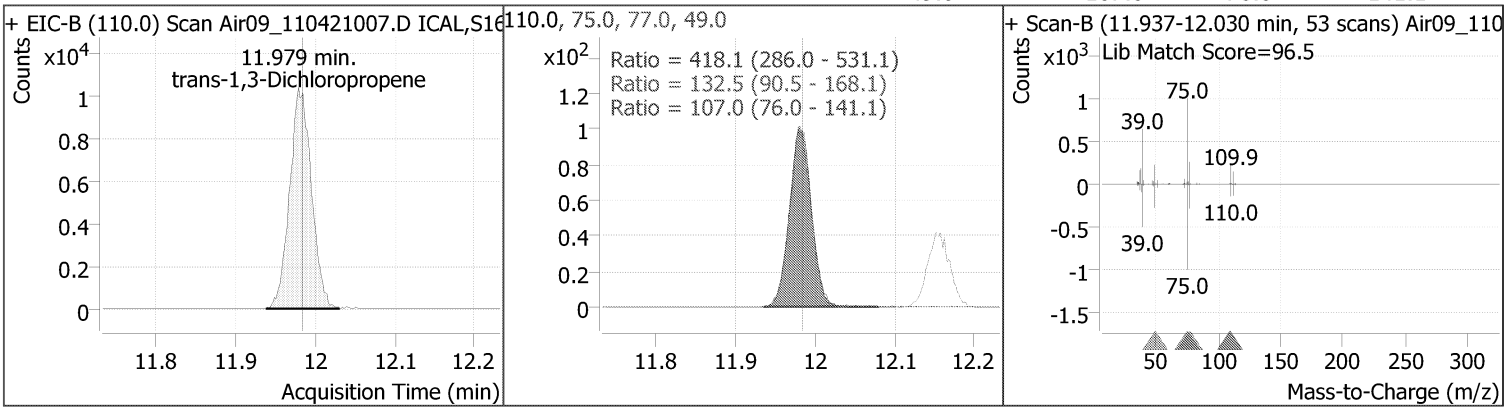
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	1.9815	11.50	-0.01	19735	75.0	447.4	303.7	564.1
					77.0	140.2	100.4	186.5



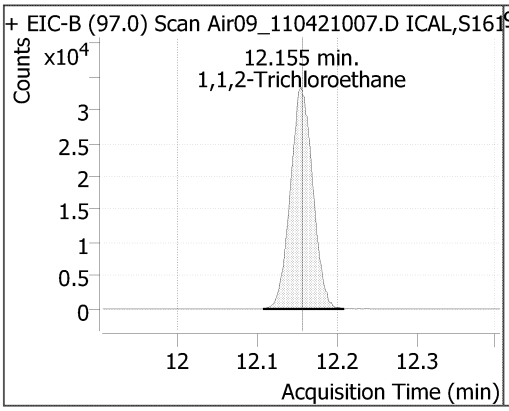
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	2.0177	11.55	0.01	49293	57.0	64.0	45.4	84.4
					85.0	40.2	27.6	51.2

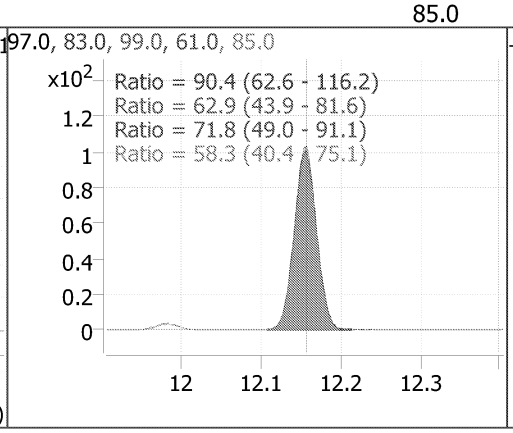


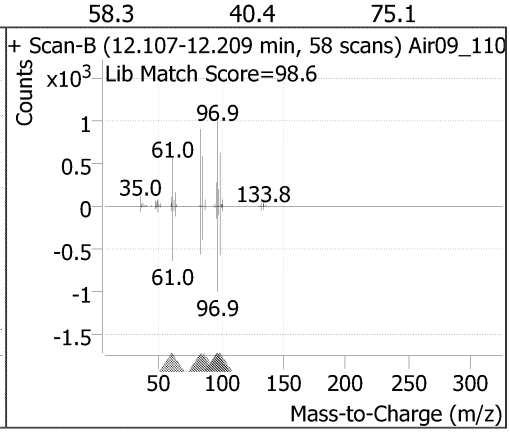
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	2.0206	11.98	-0.01	19896	75.0	418.1	286.0	531.1
					77.0	132.5	90.5	168.1
					49.0	107.0	76.0	141.1



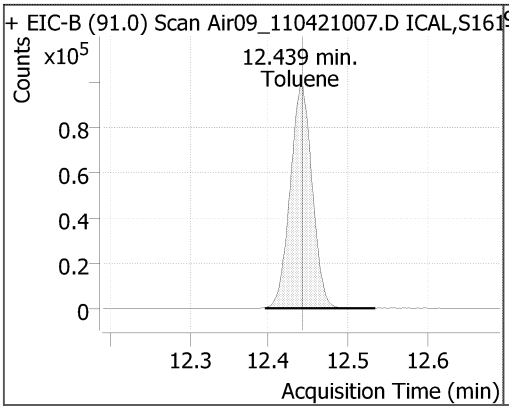
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	1.8932	12.16	0.00	65773	83.0	90.4	62.6	116.2
					61.0	71.8	49.0	91.1
					99.0	62.9	43.9	81.6
					85.0	58.3	40.4	75.1

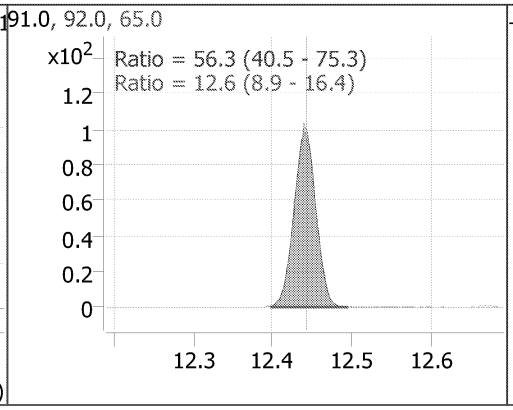


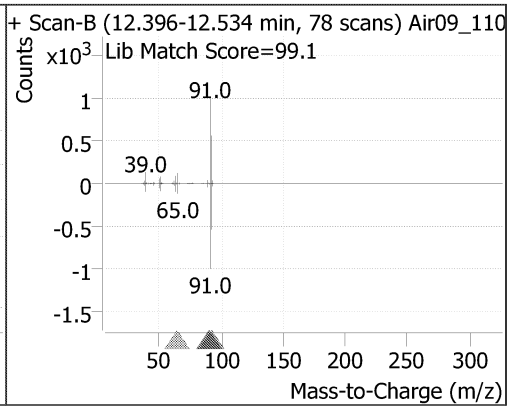




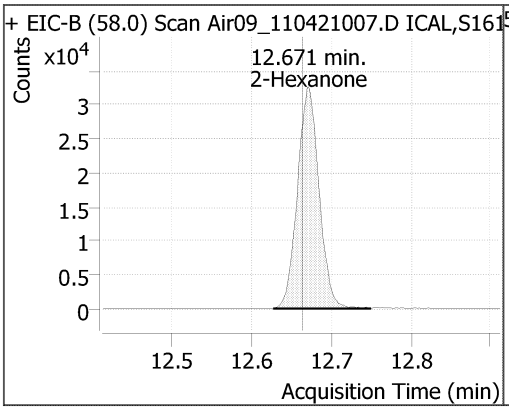
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	1.9787	12.44	0.00	190035	92.0	56.3	40.5	75.3
					65.0	12.6	8.9	16.4

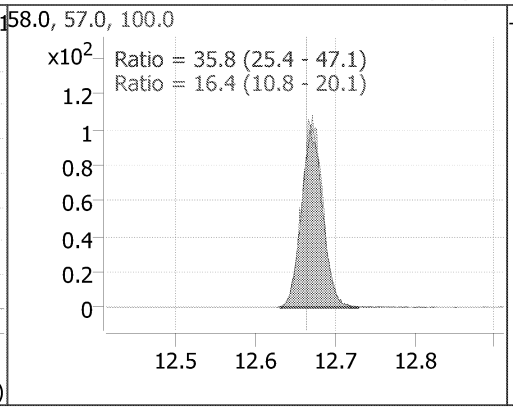


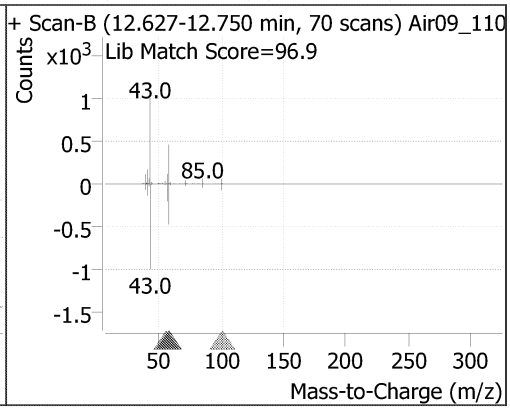




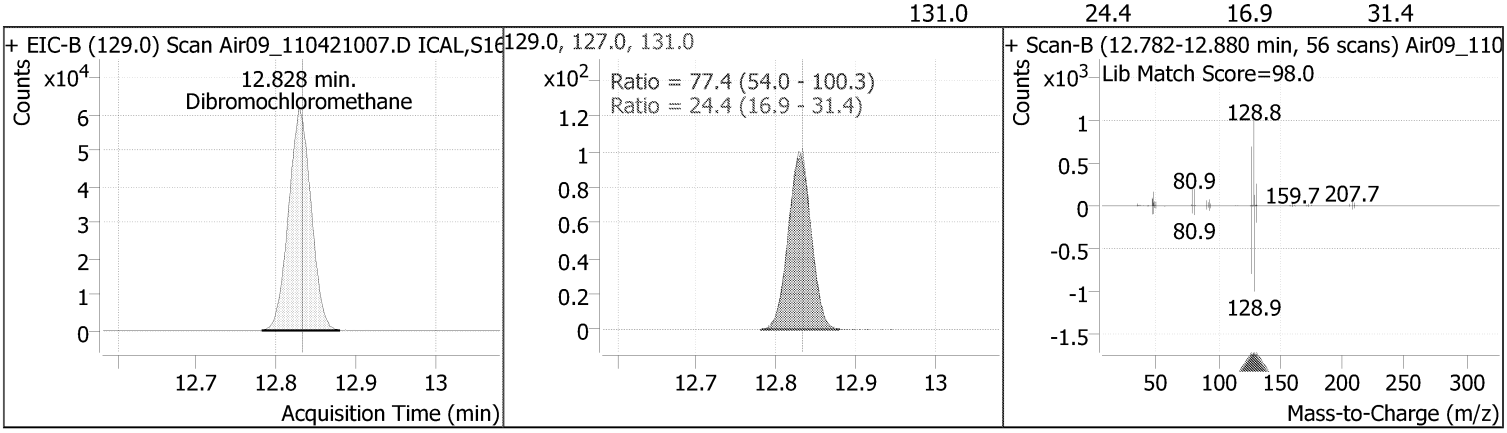
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	2.0690	12.67	0.01	61736	57.0	35.8	25.4	47.1
					100.0	16.4	10.8	20.1



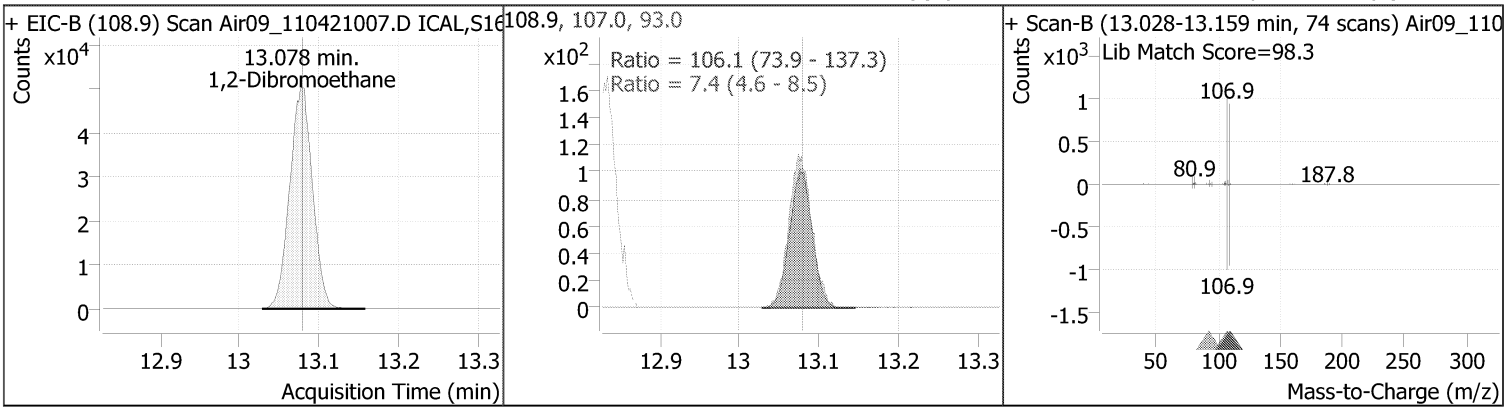




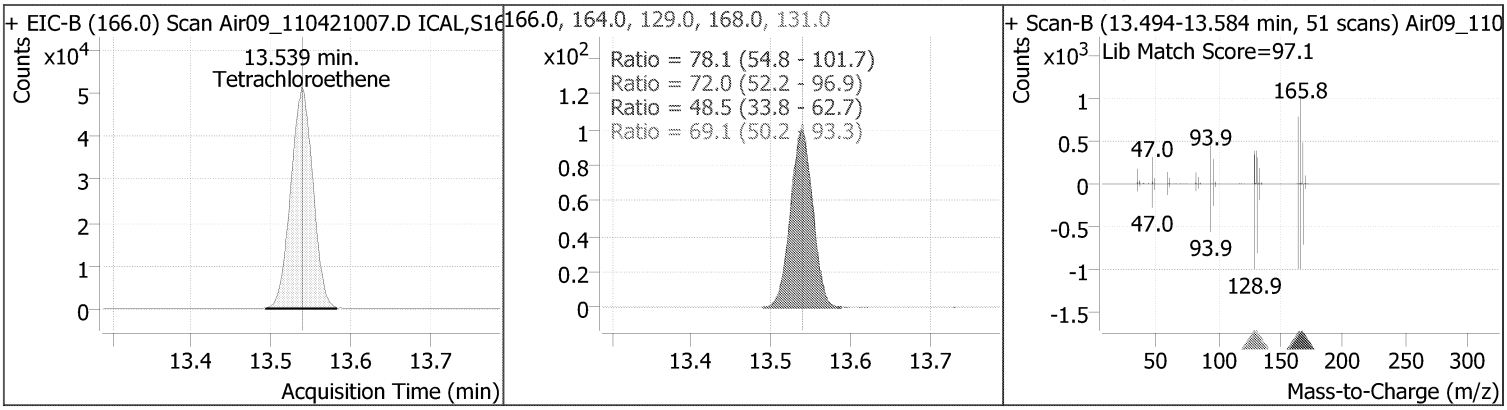
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	1.9253	12.83	-0.01	121531	127.0	77.4	54.0	100.3
					131.0	24.4	16.9	31.4



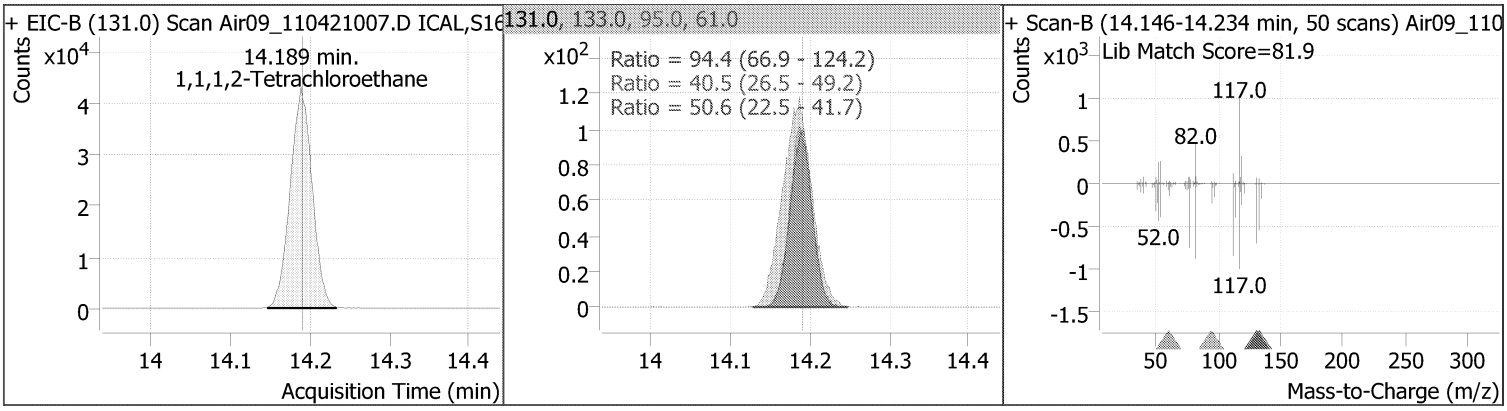
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	1.9501	13.08	0.00	100866	107.0	106.1	73.9	137.3
					93.0	7.4	4.6	8.5



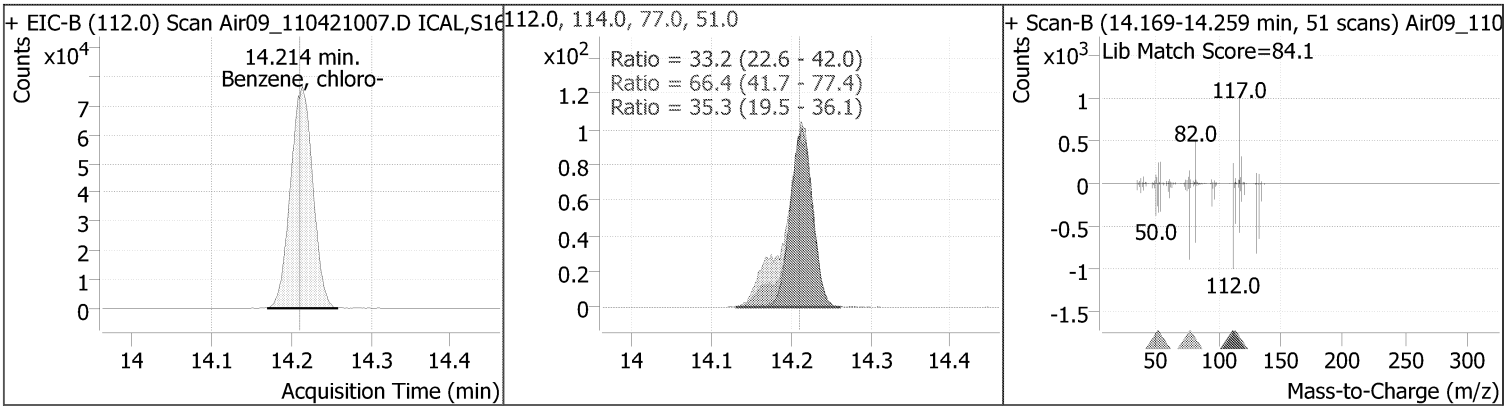
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	1.9278	13.54	0.00	99930	164.0	78.1	54.8	101.7
					129.0	72.0	52.2	96.9
					131.0	69.1	50.2	93.3
					168.0	48.5	33.8	62.7



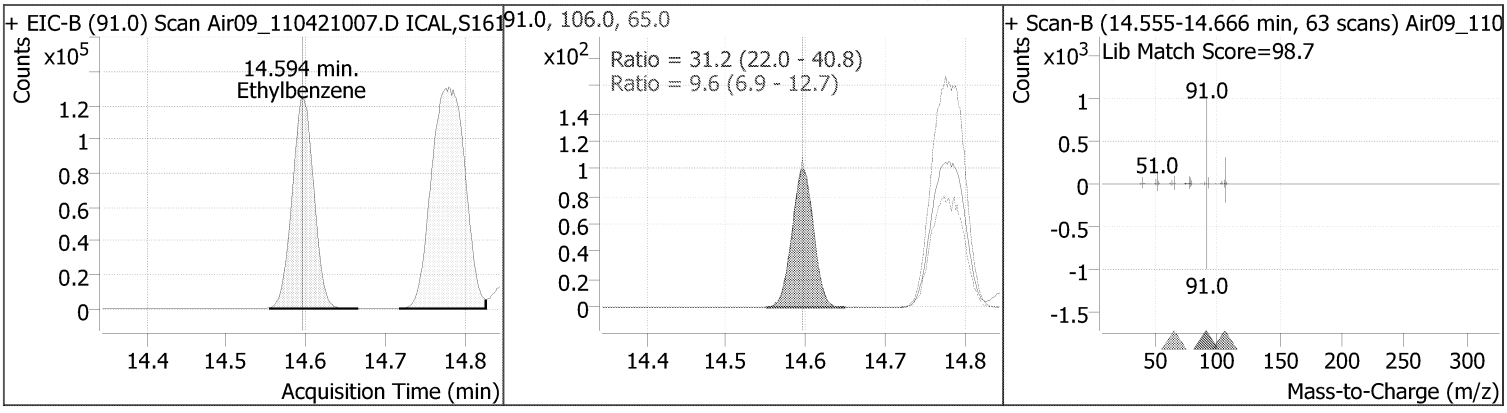
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	1.8896	14.19	0.00	82743	133.0	94.4	66.9	124.2
					95.0	40.5	26.5	49.2
					61.0	50.6	22.5	41.7



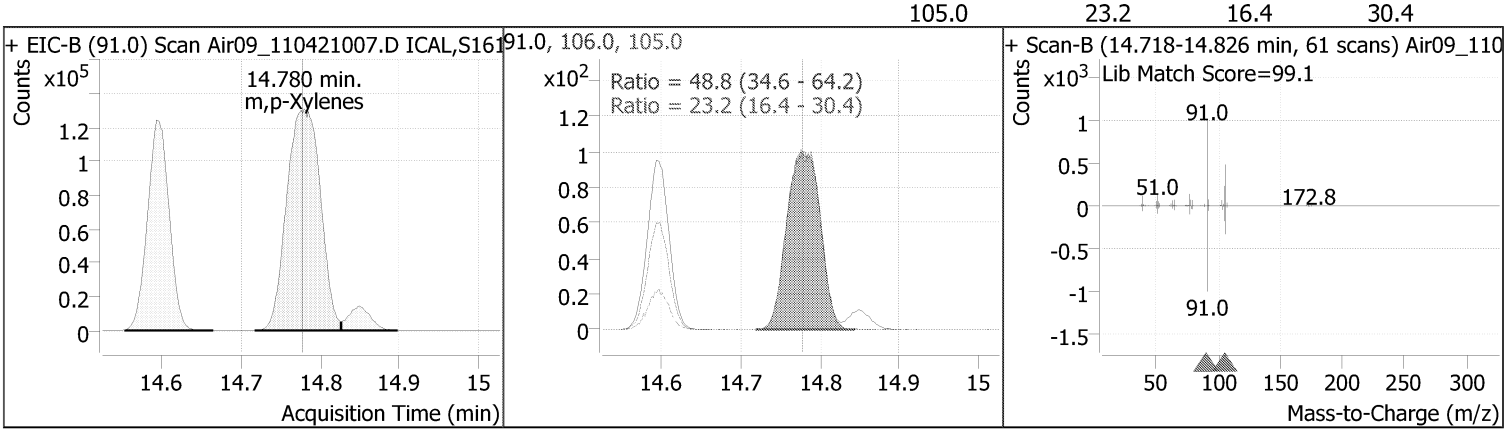
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	1.8670	14.21	0.00	150287	77.0	66.4	41.7	77.4
					114.0	33.2	22.6	42.0
					51.0	35.3	19.5	36.1



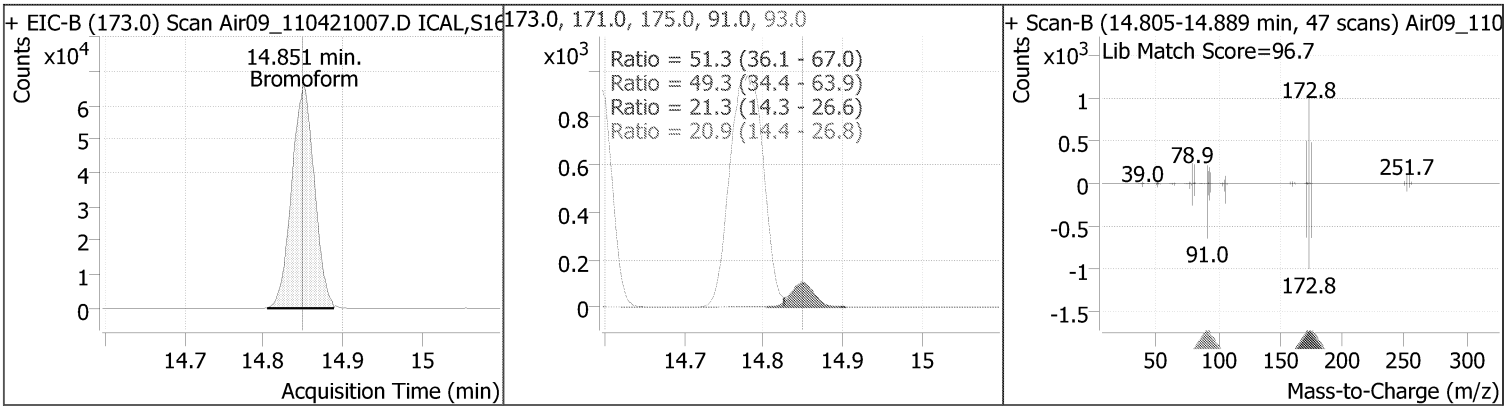
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	1.9948	14.59	0.00	236501	106.0	31.2	22.0	40.8
					65.0	9.6	6.9	12.7



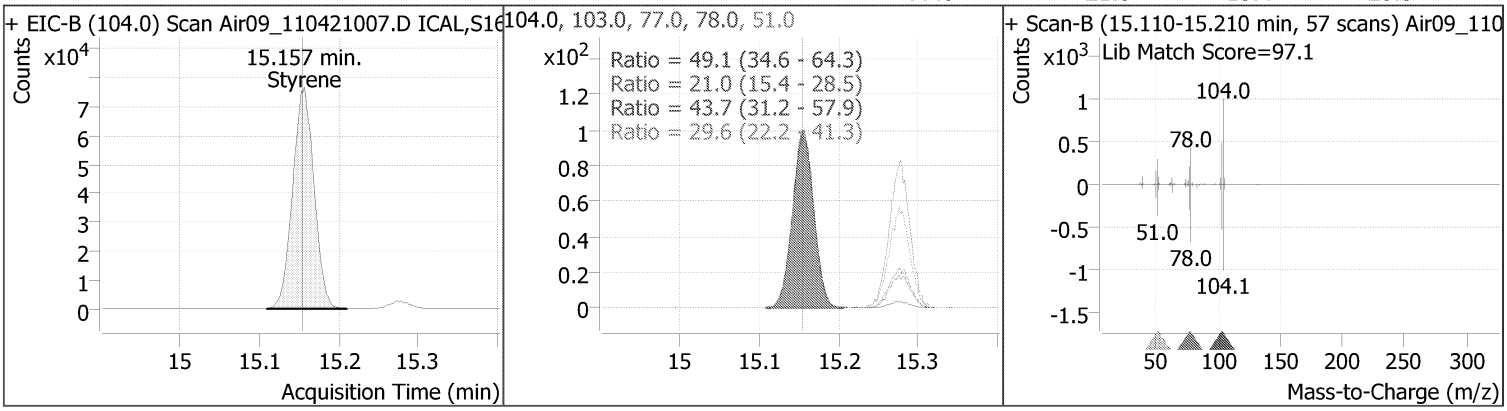
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	4.9390	14.78	0.00	386355	106.0	48.8	34.6	64.2
					105.0	23.2	16.4	30.4



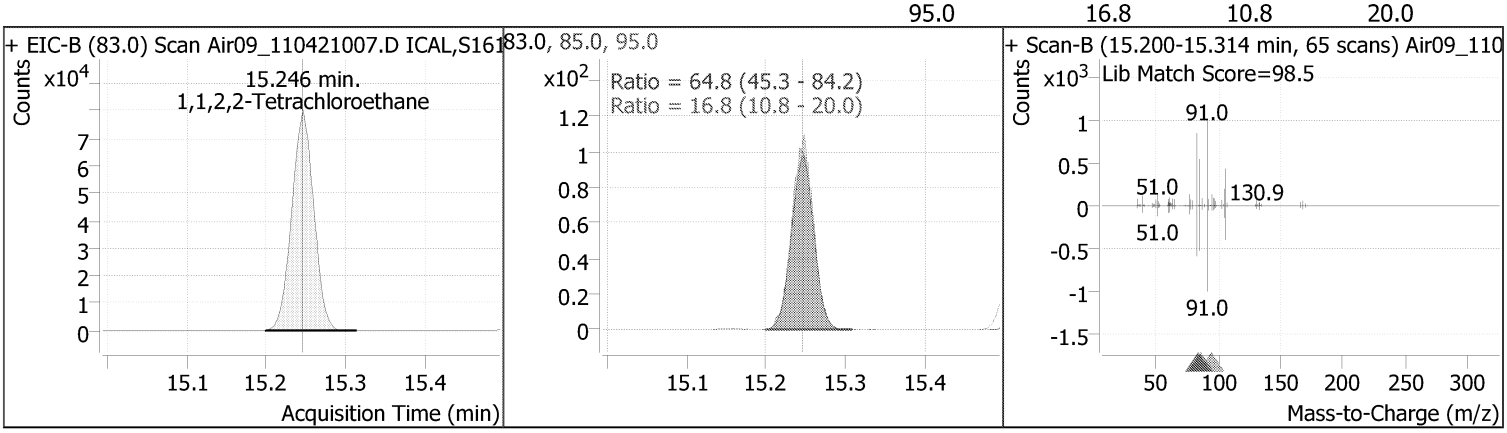
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	1.9940	14.85	0.00	130737	171.0	51.3	36.1	67.0
					175.0	49.3	34.4	63.9
					93.0	20.9	14.4	26.8
					91.0	21.3	14.3	26.6



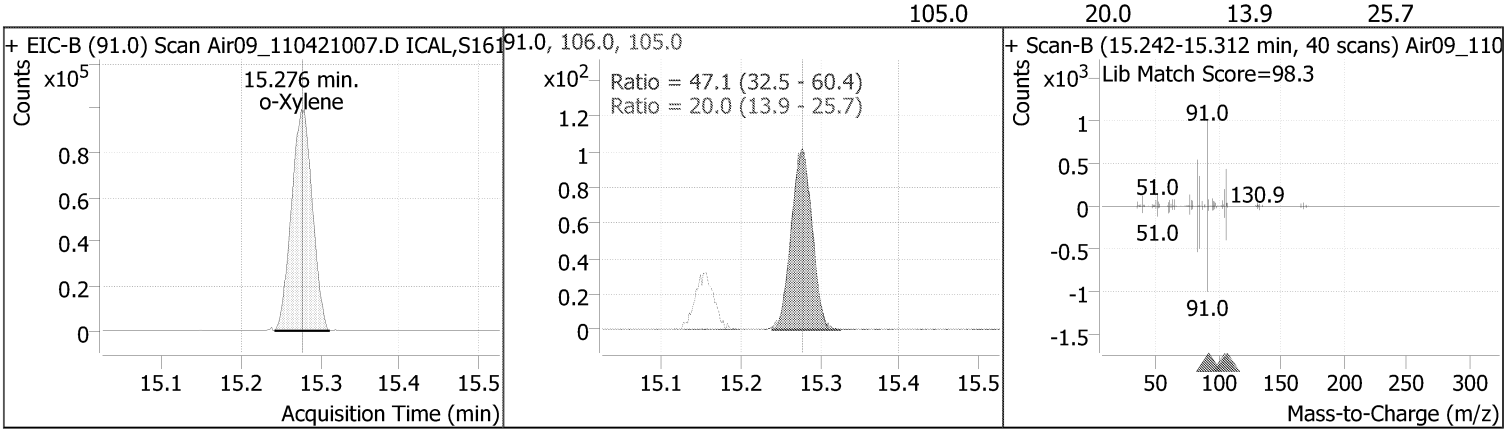
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	2.0746	15.16	0.00	142847	103.0	49.1	34.6	64.3
					78.0	43.7	31.2	57.9
					51.0	29.6	22.2	41.3
					77.0	21.0	15.4	28.5



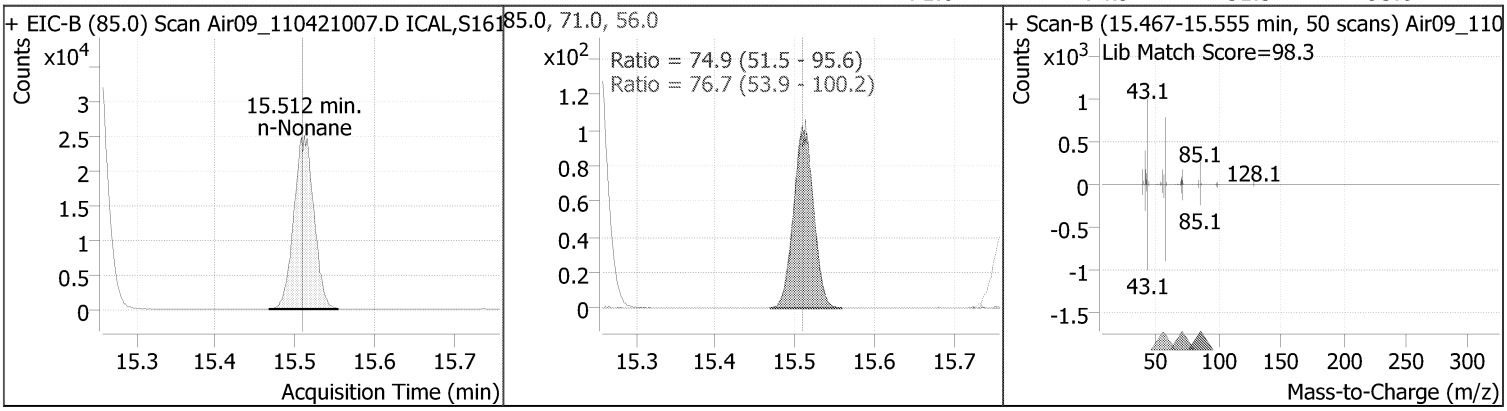
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	1.9332	15.25	0.00	154242	85.0	64.8	45.3	84.2
					95.0	16.8	10.8	20.0



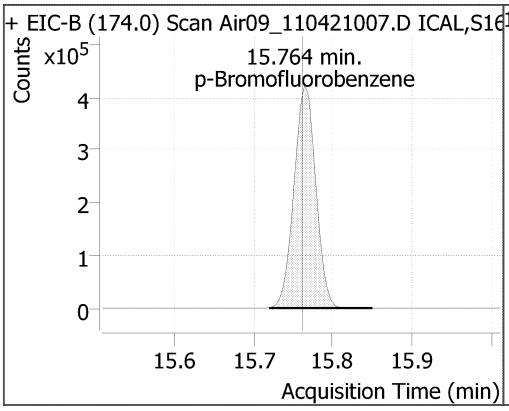
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	1.9454	15.28	0.00	181766	106.0	47.1	32.5	60.4
					105.0	20.0	13.9	25.7

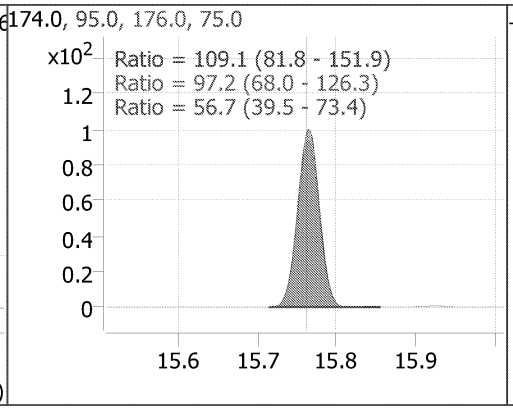


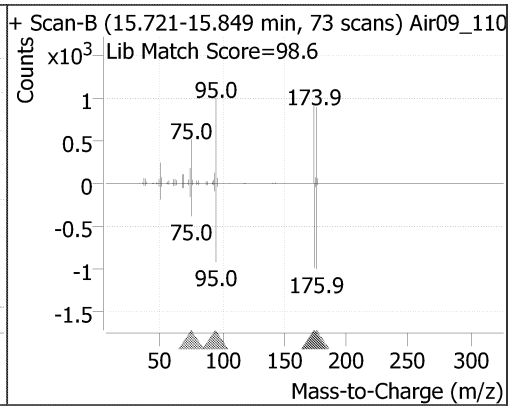
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	2.1453	15.51	0.00	43993	56.0	76.7	53.9	100.2
					71.0	74.9	51.5	95.6



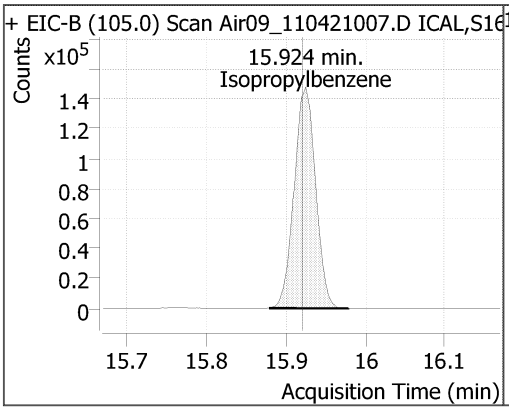
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.0407	15.76	0.00	805045	95.0	109.1	81.8	151.9
					176.0	97.2	68.0	126.3
					75.0	56.7	39.5	73.4

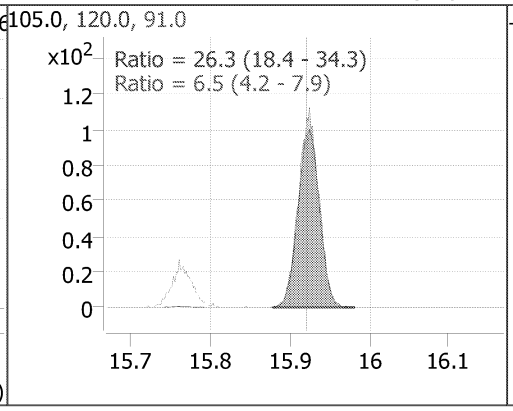


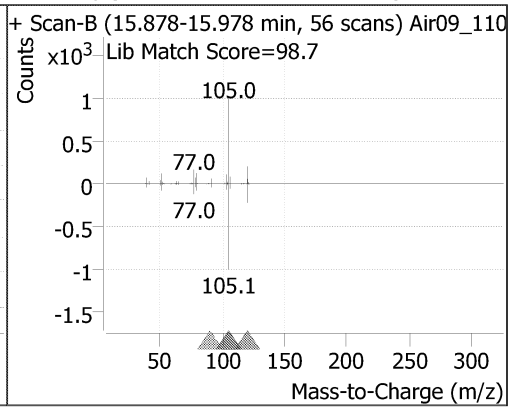




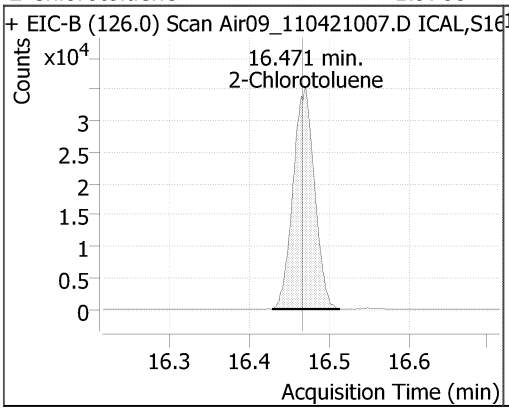
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	1.9585	15.92	0.00	277499	120.0	26.3	18.4	34.3
					91.0	6.5	4.2	7.9

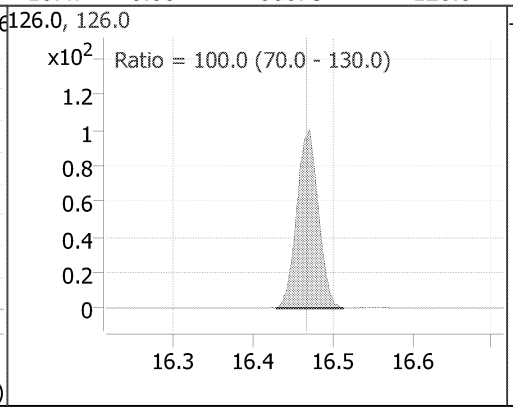


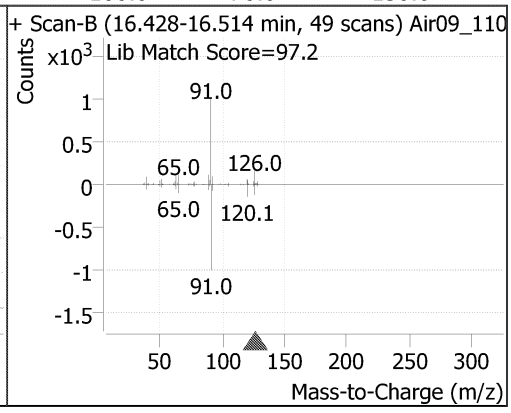




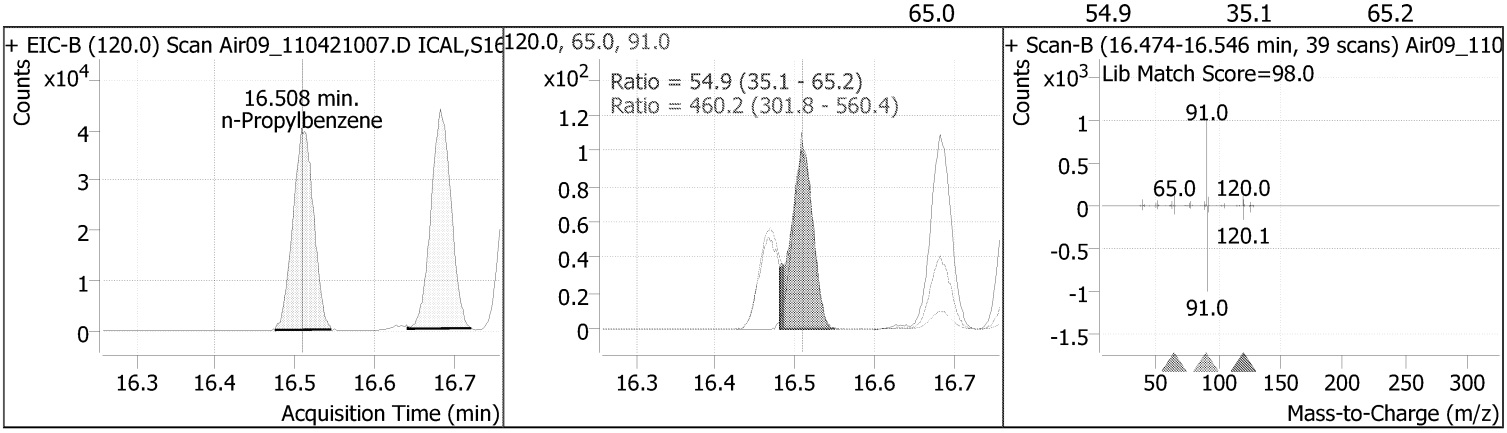
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	1.9788	16.47	0.00	66673	126.0	100.0	70.0	130.0



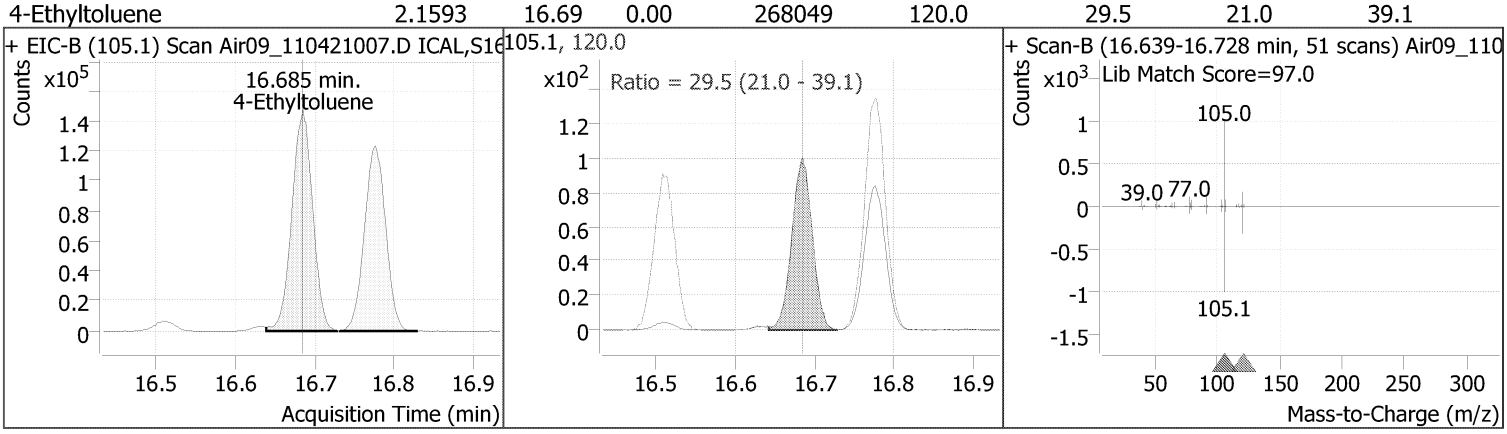




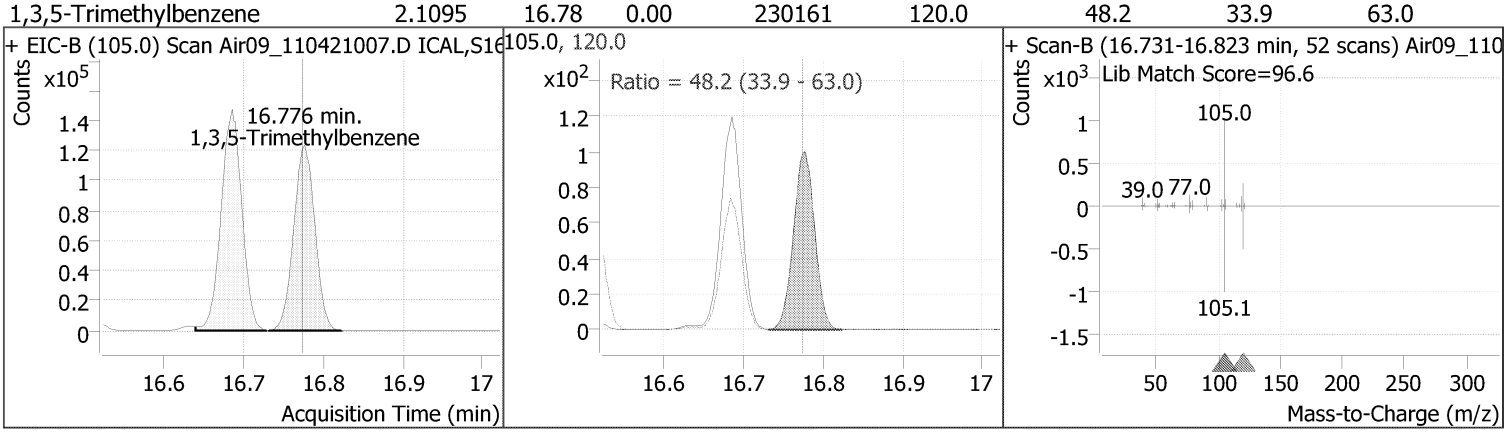
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	1.9651	16.51	0.00	72755	91.0	460.2	301.8	560.4
					65.0	54.9	35.1	65.2



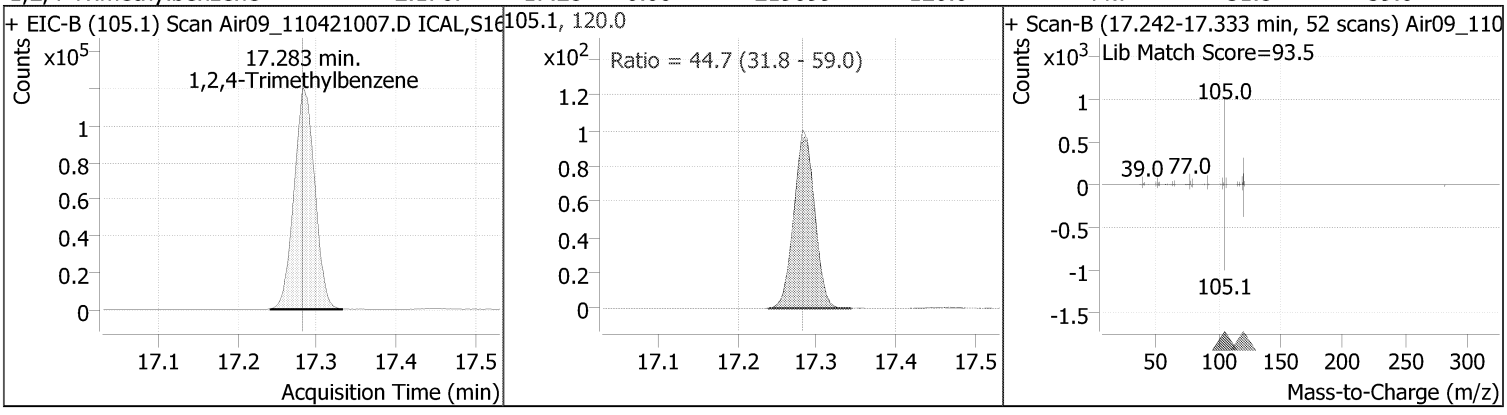
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	2.1593	16.69	0.00	268049	120.0	29.5	21.0	39.1



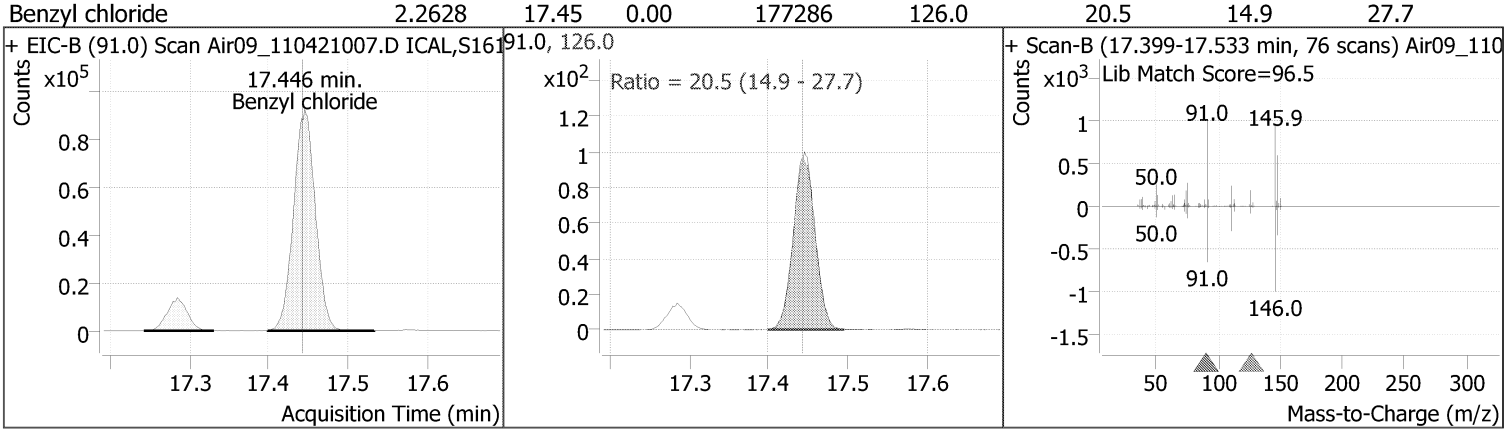
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	2.1095	16.78	0.00	230161	120.0	48.2	33.9	63.0



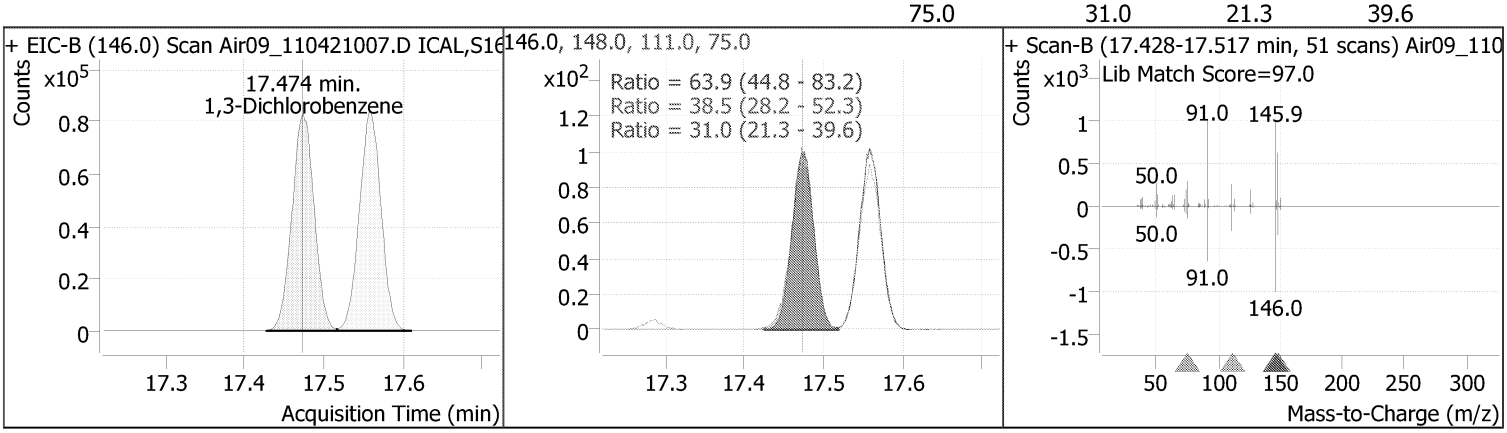
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	2.1707	17.28	0.00	219099	120.0	44.7	31.8	59.0



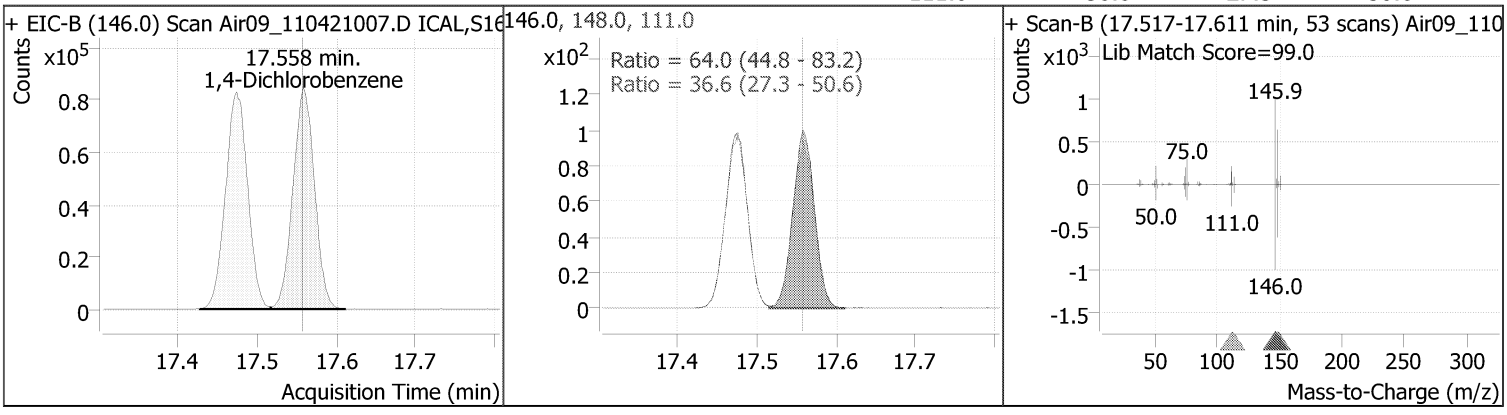
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	2.2628	17.45	0.00	177286	126.0	20.5	14.9	27.7



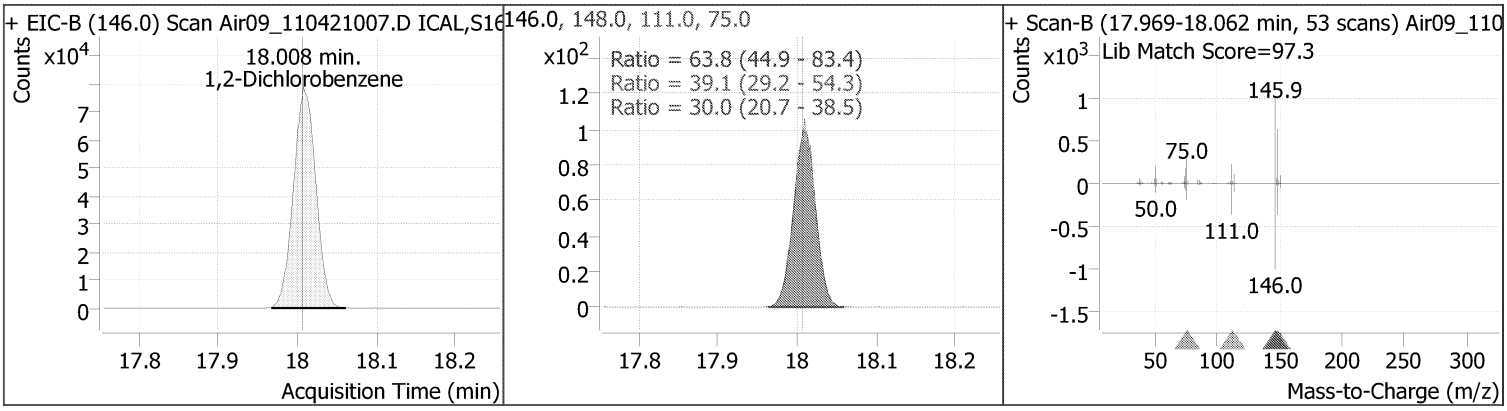
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	2.0255	17.47	0.00	161987	148.0	63.9	44.8	83.2
					111.0	38.5	28.2	52.3
					75.0	31.0	21.3	39.6



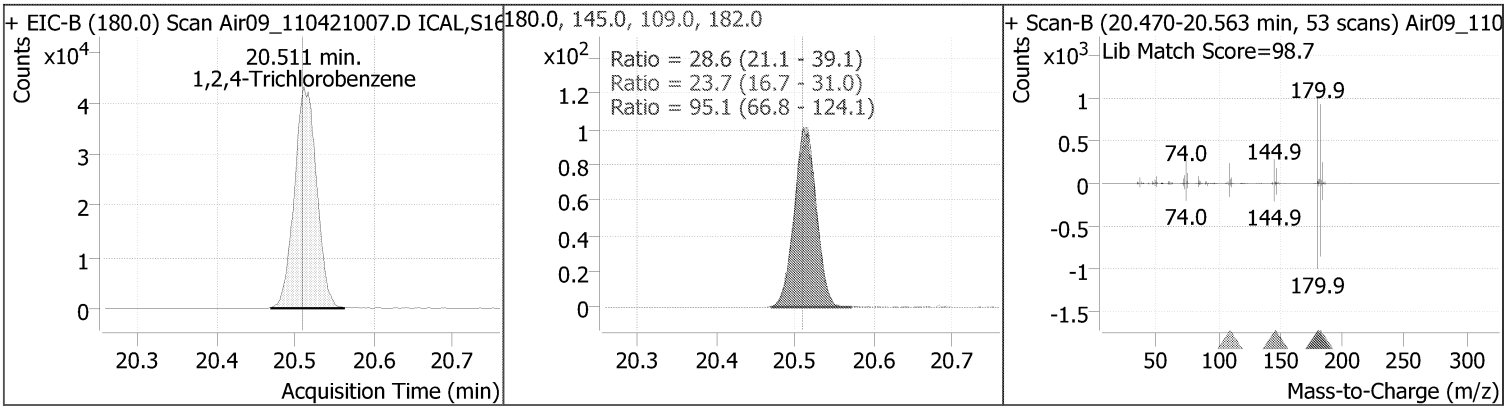
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	2.0557	17.56	0.00	160171	148.0	64.0	44.8	83.2
					111.0	36.6	27.3	50.6



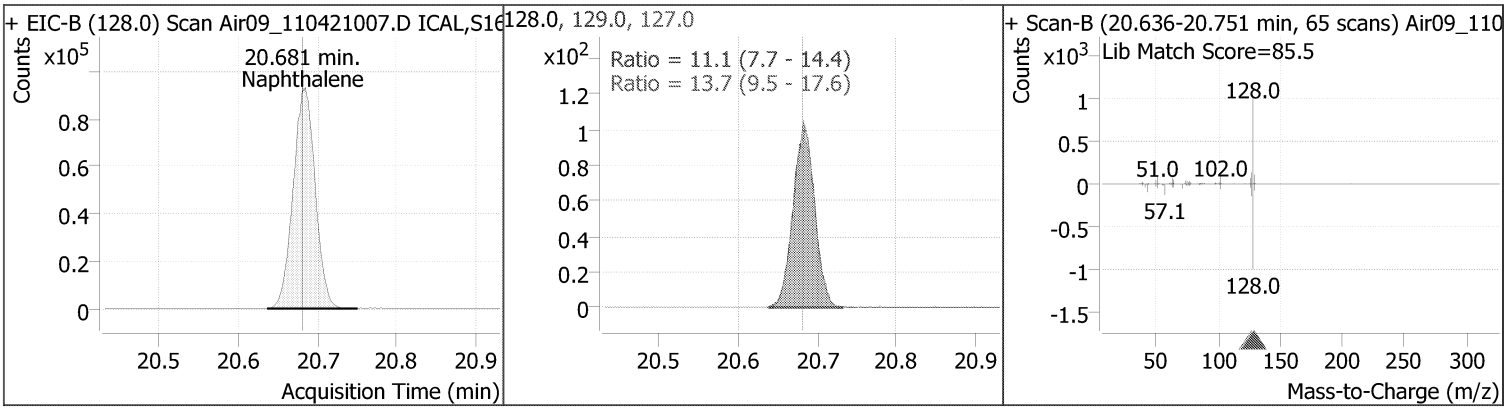
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	2.0418	18.01	0.00	154322	148.0	63.8	44.9	83.4
					111.0	39.1	29.2	54.3
					75.0	30.0	20.7	38.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	2.4439	20.51	0.00	84948	182.0	95.1	66.8	124.1
					145.0	28.6	21.1	39.1
					109.0	23.7	16.7	31.0

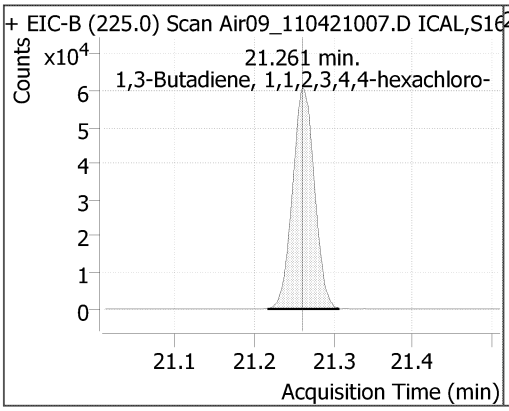


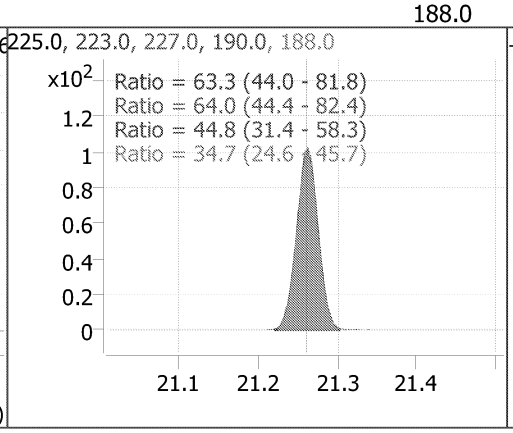
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	2.6483	20.68	0.00	180180	127.0	13.7	9.5	17.6
					129.0	11.1	7.7	14.4

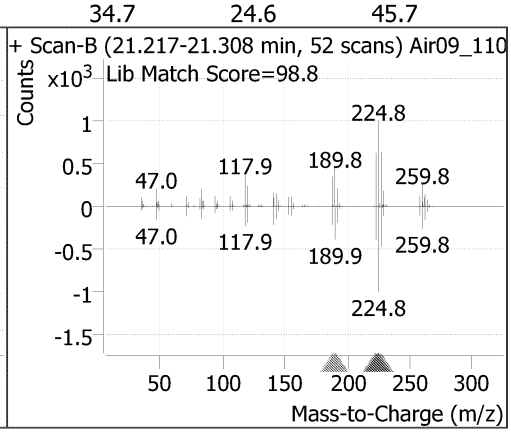


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	1.9207	21.26	0.00	117816	227.0	64.0	44.4	82.4
					223.0	63.3	44.0	81.8
					190.0	44.8	31.4	58.3
					188.0	34.7	24.6	45.7







Quantitation Results Report (Not Reviewed)

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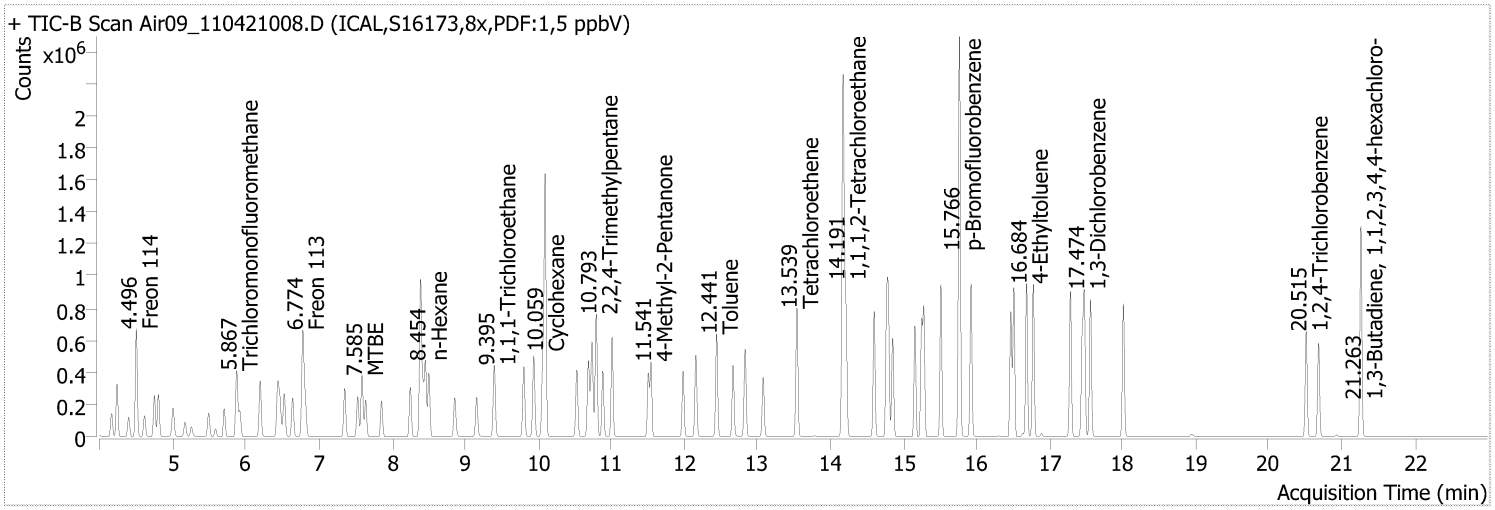


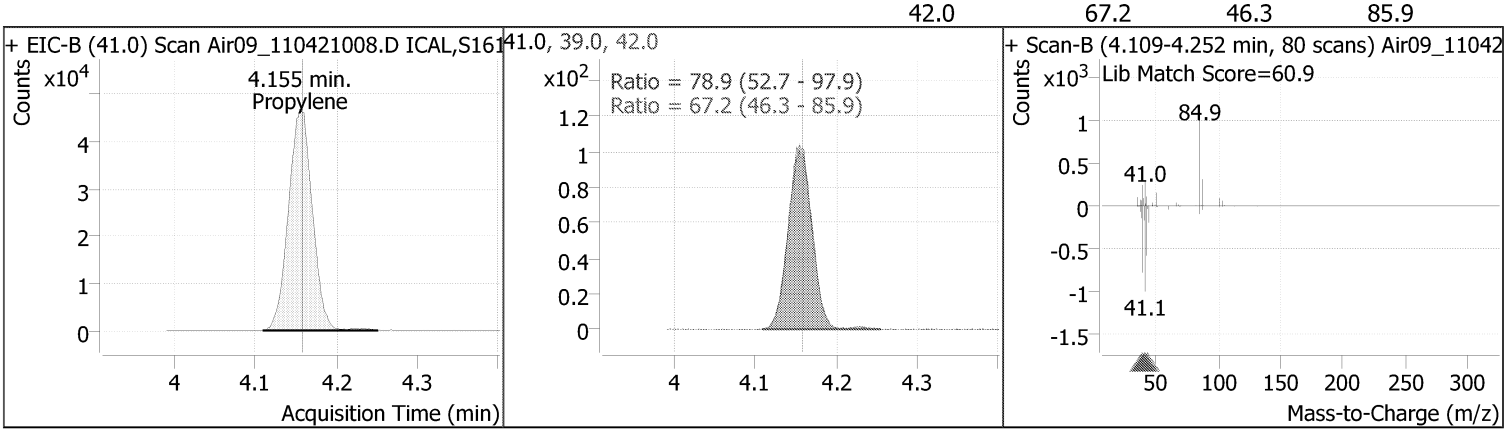
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M Bromochloromethane	8.386	130.0	347159	10.0000	nL/L	-0.004
M 1,4-Difluorobenzene	10.092	114.0	1285874	10.0000	nL/L	-0.002
M Chlorobenzene-d5	14.171	82.0	682370	10.0000	nL/L	0.000
System Monitoring Compounds						
S p-Bromofluorobenzene	15.766	174.0	822986	9.9938	nL/L	0.002
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 99.94%		
Target Compounds						QValue
T Propylene	4.155	41.0	97355	4.6188	nL/L	97
T Freon 12	4.230	85.0	332021	4.7332	nL/L	100
T Chloromethane	4.389	50.0	153228	4.9160	nL/L	99
T Freon 114	4.496	135.0	265629	4.6648	nL/L	99
T Vinyl Chloride	4.605	62.0	162910	4.6193	nL/L	100
T 1,3-Butadiene	4.744	54.0	130620	4.6655	nL/L	97
T Butane	4.798	43.0	264434	4.5399	nL/L	99
T Bromomethane	4.999	96.0	133234	4.8546	nL/L	99
T Chloroethane	5.160	64.0	84673	4.5055	nL/L	99
T Ethanol	5.246	45.0	75437	4.5541	nL/L	99
T Vinyl bromide	5.485	108.0	112644	4.7251	nL/L	100
T Acrolein	5.576	56.0	48016	4.8971	nL/L	99
T Acetone	5.701	58.0	62153	4.6057	nL/L	95
T Trichloromonofluoromethane	5.867	101.0	370395	4.6918	nL/L	100
T Isopropanol (IPA)	5.912	45.0	192255	4.6819	nL/L	89
T n-Pentane	6.194	43.0	245593	4.8598	nL/L	100
T 1,1-Dichloroethene	6.431	61.0	242011	4.7684	nL/L	98
T Tert-butyl alcohol (TBA)	6.460	59.0	264573	5.1489	nL/L	92
T Methylene Chloride	6.521	51.0	56911	4.3306	nL/L	93
T 3-Chloropropene	6.633	76.0	52448	4.9661	nL/L	99
T Freon 113	6.774	101.0	286597	4.7077	nL/L	99

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T Carbon Disulfide	6.806	76.0	342934	4.7888	nL/L		97
T trans-1,2-Dichloroethene	7.347	61.0	190469	4.7319	nL/L		96
T 1,1-Dichloroethane	7.526	63.0	252823	4.7606	nL/L		100
T MTBE	7.585	73.0	344336	5.0279	nL/L		96
T Vinyl Acetate	7.637	43.0	349780	4.9626	nL/L		99
T 2-Butanone	7.853	72.0	61035	4.8919	nL/L		89
T cis-1,2-Dichloroethene	8.247	61.0	199583	4.8565	nL/L		97
T Ethyl Acetate	8.422	61.0	46528	4.9783	nL/L		100
T n-Hexane	8.454	57.0	216770	4.9323	nL/L		97
T Chloroform	8.503	83.0	287014	4.6575	nL/L		99
T Tetrahydrofuran	8.858	72.0	56569	5.0559	nL/L		100
T 1,2-Dichloroethane	9.154	62.0	209712	4.7254	nL/L		98
T 1,1,1-Trichloroethane	9.395	97.0	285647	4.7911	nL/L		100
T Benzene	9.799	78.0	383854	4.7740	nL/L		100
T Carbon Tetrachloride	9.934	117.0	299343	4.8495	nL/L		99
T TPH Gasoline (C3 to C12)	9.998	0.0	43408935	9.4242	nL/L		100
T Cyclohexane	10.059	84.0	157039	4.3371	nL/L	#	96
T 1,2-Dichloropropane	10.527	63.0	162083	4.7285	nL/L		98
T Methane, bromodichloro-	10.684	83.0	299362	4.8241	nL/L		99
T 1,4-Dioxane	10.715	88.0	85696	4.9722	nL/L		93
T Trichloroethene	10.734	132.0	178277	4.8513	nL/L		99
T 2,2,4-Trimethylpentane	10.793	56.0	218293	4.9031	nL/L		97
T Methyl methacrylate	10.883	69.0	142797	5.1445	nL/L		98
T n-Heptane	11.008	71.0	132649	5.0433	nL/L		96
T cis-1,3-Dichloropropene	11.507	110.0	51160	5.0618	nL/L		97
T 4-Methyl-2-Pentanone	11.541	58.0	108432	4.4764	nL/L		95
T trans-1,3-Dichloropropene	11.984	110.0	52046	5.1832	nL/L		97
T 1,1,2-Trichloroethane	12.157	97.0	167029	4.7894	nL/L		99
T Toluene	12.441	91.0	486329	5.0022	nL/L		99
T 2-Hexanone	12.666	58.0	166542	5.4210	nL/L		99
T Dibromochloromethane	12.830	129.0	316183	4.9570	nL/L		100
T 1,2-Dibromoethane	13.077	108.9	259902	4.9700	nL/L		100
T Tetrachloroethene	13.539	166.0	255788	4.8953	nL/L		98
T 1,1,1,2-Tetrachloroethane	14.191	131.0	210860	4.7371	nL/L		96
T Benzene, chloro-	14.216	112.0	387935	4.7403	nL/L		98
T Ethylbenzene	14.598	91.0	613080	5.0285	nL/L		100
T m,p-Xylenes	14.782	91.0	983485	11.7990	nL/L		99
T Bromoform	14.852	173.0	341817	5.0626	nL/L		99
T Styrene	15.155	104.0	375757	5.2579	nL/L		98
T 1,1,2,2-Tetrachloroethane	15.248	83.0	393644	4.8347	nL/L		99
T o-Xylene	15.277	91.0	485820	5.0515	nL/L		99
T n-Nonane	15.510	85.0	113599	5.3231	nL/L		98
T Isopropylbenzene	15.925	105.0	711236	4.9052	nL/L		100
T 2-Chlorotoluene	16.469	126.0	174207	5.0277	nL/L		100
T n-Propylbenzene	16.510	120.0	189847	4.9932	nL/L		95
T 4-Ethyltoluene	16.684	105.1	695154	5.3706	nL/L		99
T 1,3,5-Trimethylbenzene	16.778	105.0	591733	5.2310	nL/L		100
T 1,2,4-Trimethylbenzene	17.285	105.1	580555	5.4897	nL/L		99
T Benzyl chloride	17.448	91.0	486664	5.8430	nL/L		99
T 1,3-Dichlorobenzene	17.474	146.0	416292	5.0560	nL/L		99
T 1,4-Dichlorobenzene	17.558	146.0	414675	5.1500	nL/L		98
T 1,2-Dichlorobenzene	18.012	146.0	397326	5.0977	nL/L		99
T 1,2,4-Trichlorobenzene	20.515	180.0	245224	6.4655	nL/L		99
T Naphthalene	20.685	128.0	542564	7.1085	nL/L		100
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.263	225.0	301789	4.8234	nL/L		100

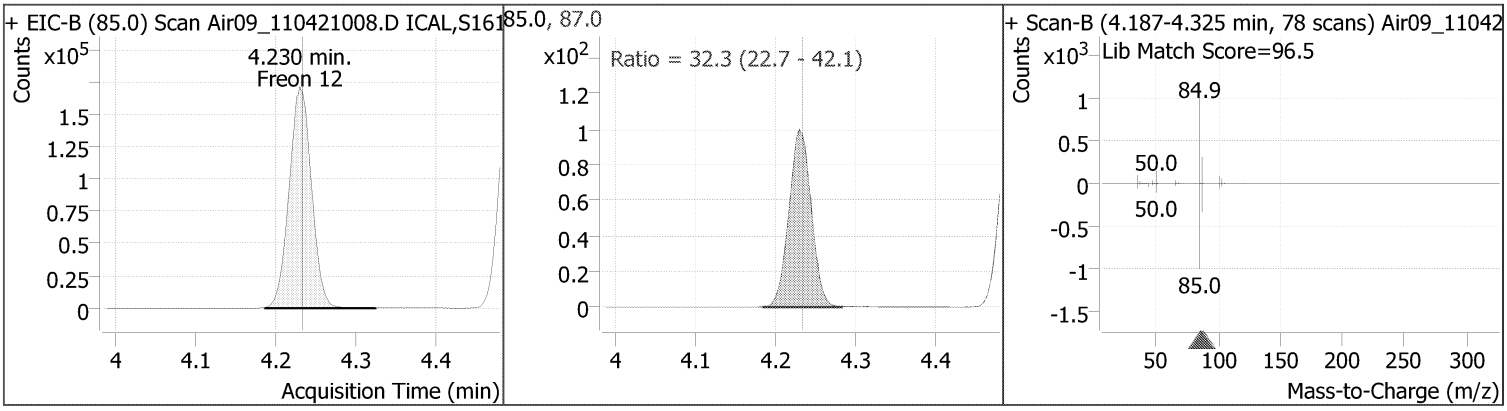
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

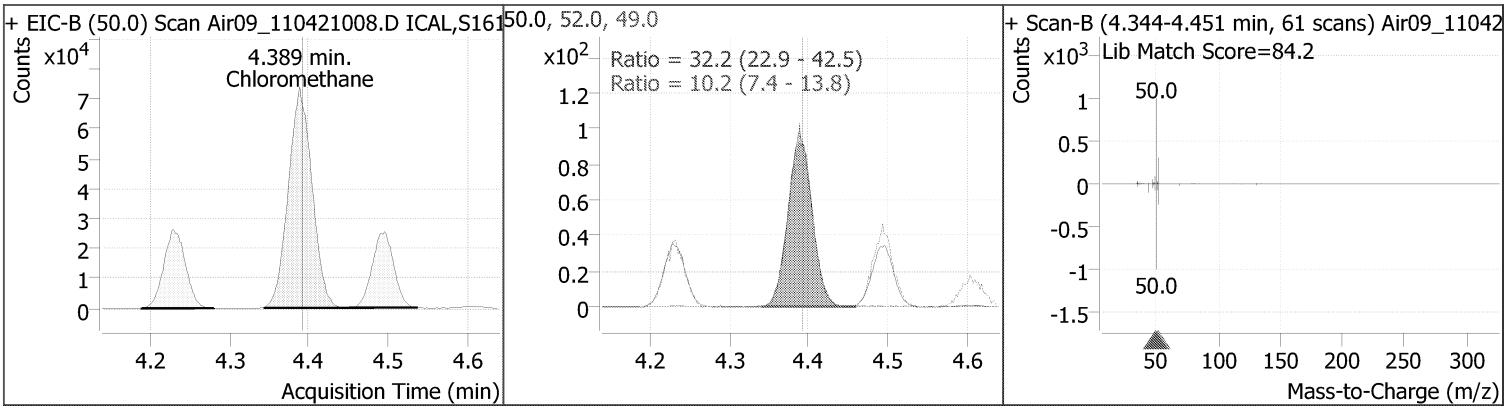
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	4.6188	4.15	0.00	97355	39.0	78.9	52.7	97.9
					42.0	67.2	46.3	85.9



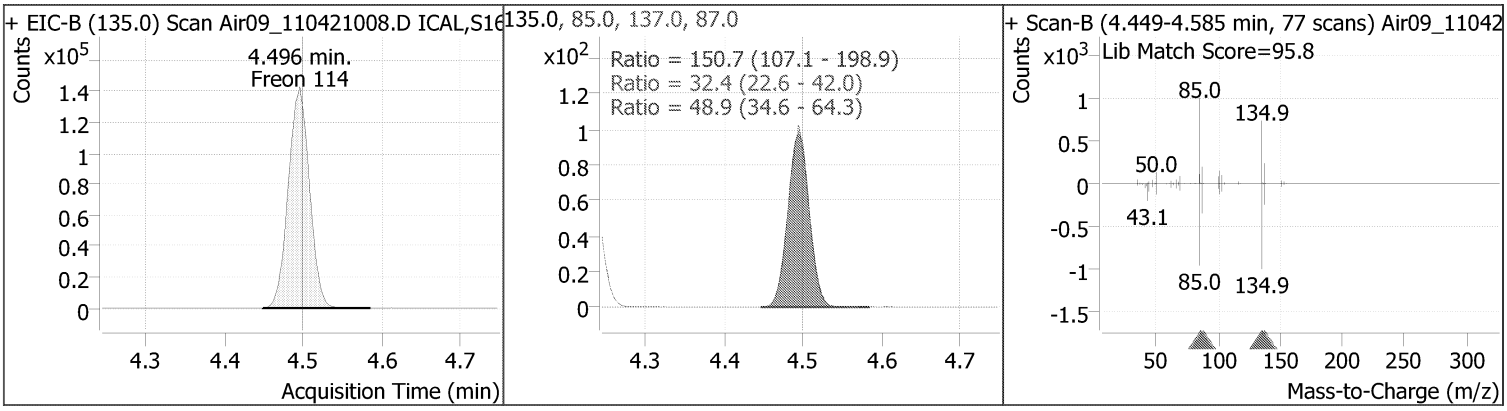
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	4.7332	4.23	0.00	332021	87.0	32.3	22.7	42.1



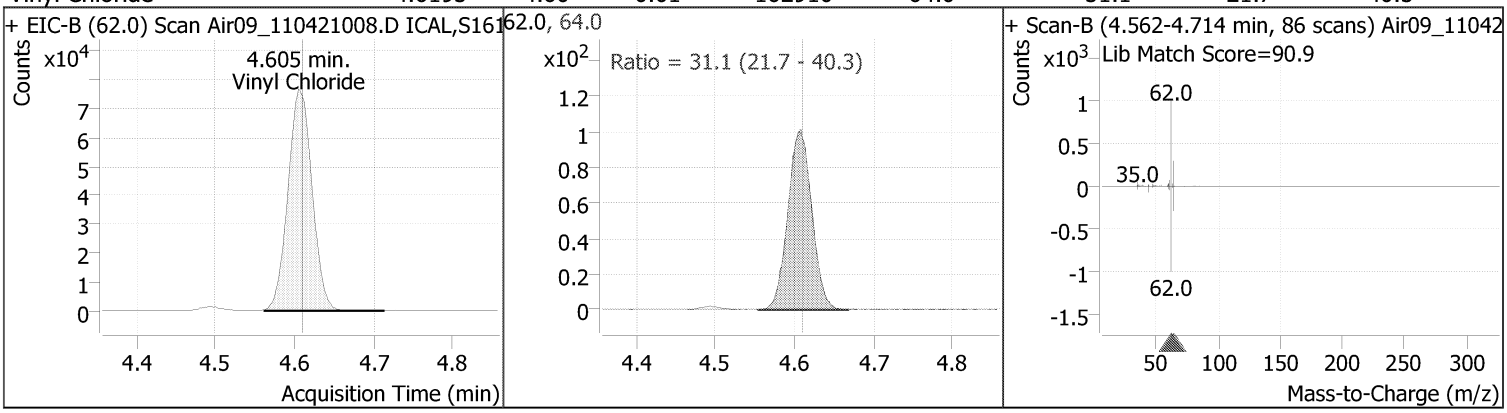
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	4.9160	4.39	0.00	153228	52.0	32.2	22.9	42.5
					49.0	10.2	7.4	13.8



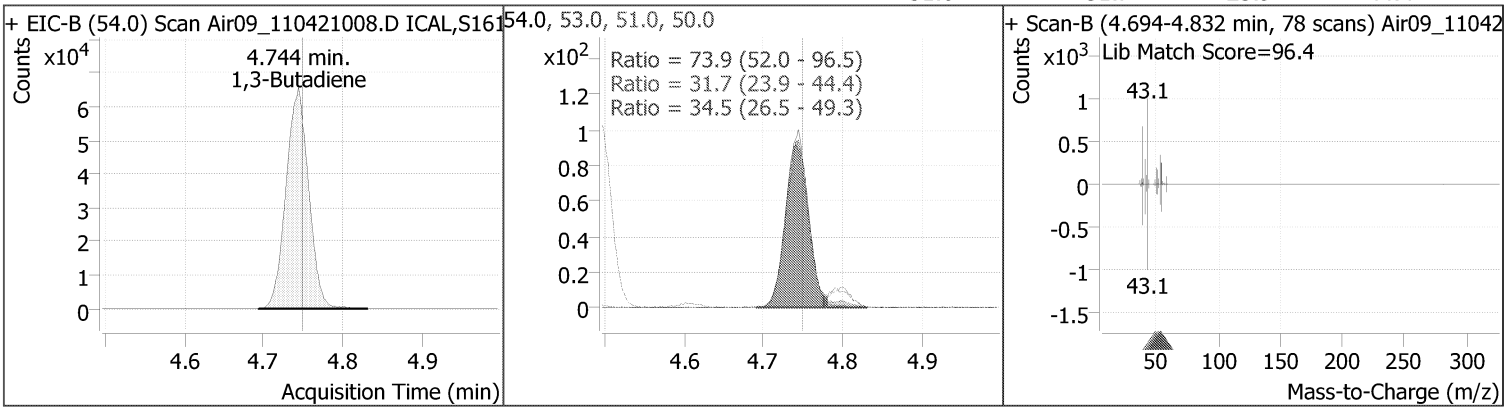
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	4.6648	4.50	0.00	265629	85.0	150.7	107.1	198.9
					87.0	48.9	34.6	64.3
					137.0	32.4	22.6	42.0



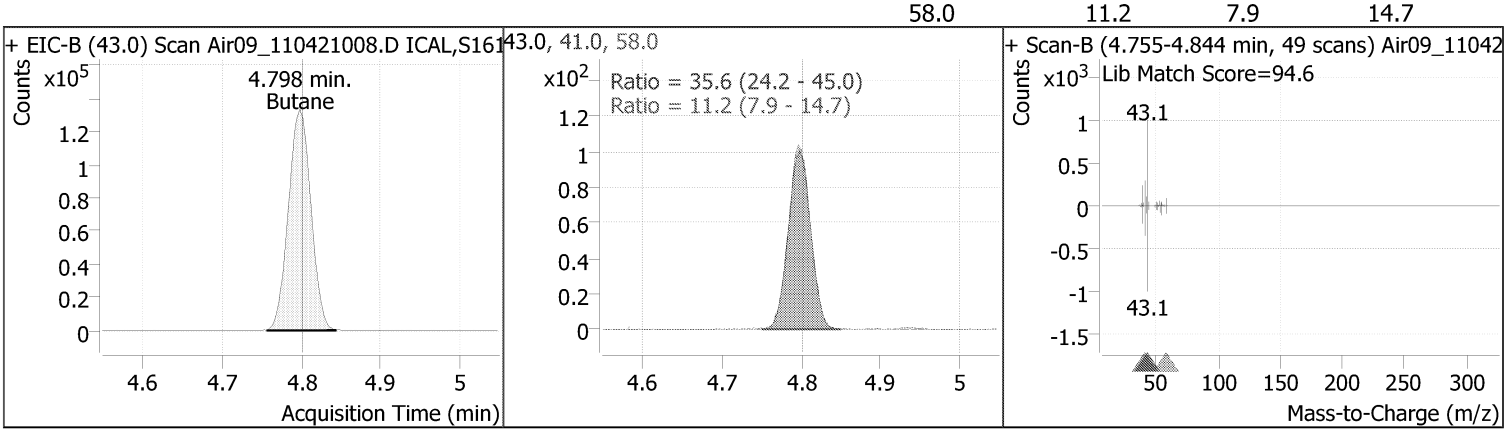
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	4.6193	4.60	-0.01	162910	64.0	31.1	21.7	40.3



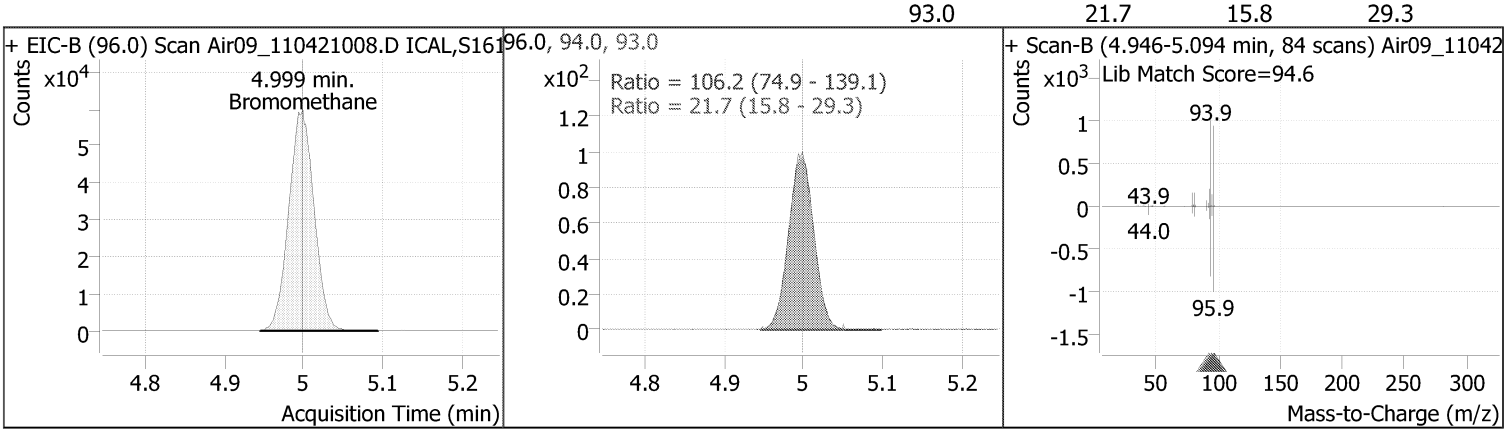
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	4.6655	4.74	-0.01	130620	53.0	73.9	52.0	96.5
					50.0	34.5	26.5	49.3
					51.0	31.7	23.9	44.4



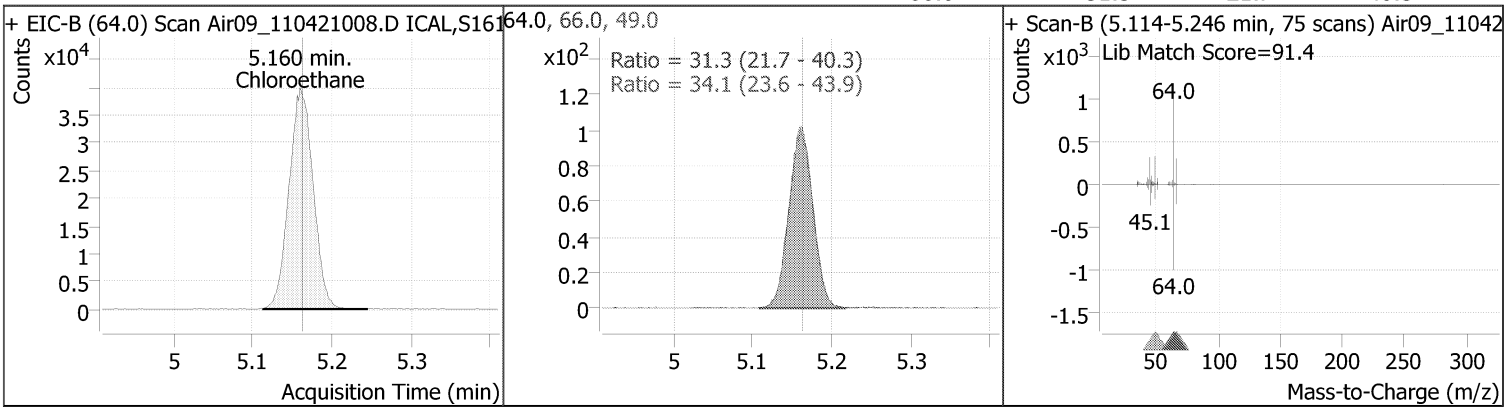
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	4.5399	4.80	0.00	264434	41.0	35.6	24.2	45.0
					58.0	11.2	7.9	14.7



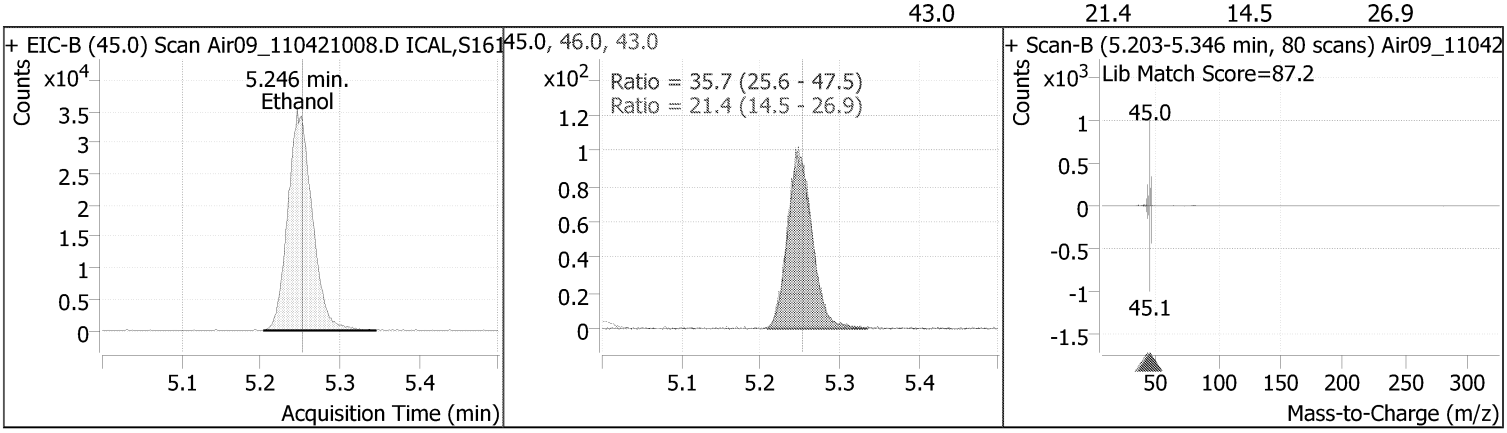
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromomethane	4.8546	5.00	0.00	133234	94.0	106.2	74.9	139.1
					93.0	21.7	15.8	29.3



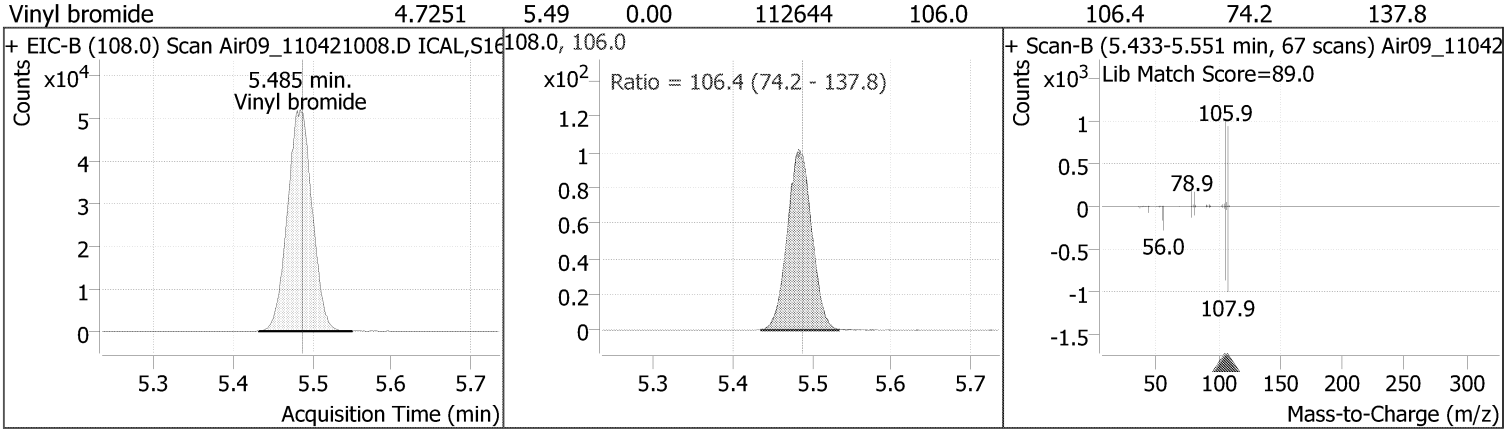
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	4.5055	5.16	0.00	84673	49.0	34.1	23.6	43.9
					66.0	31.3	21.7	40.3



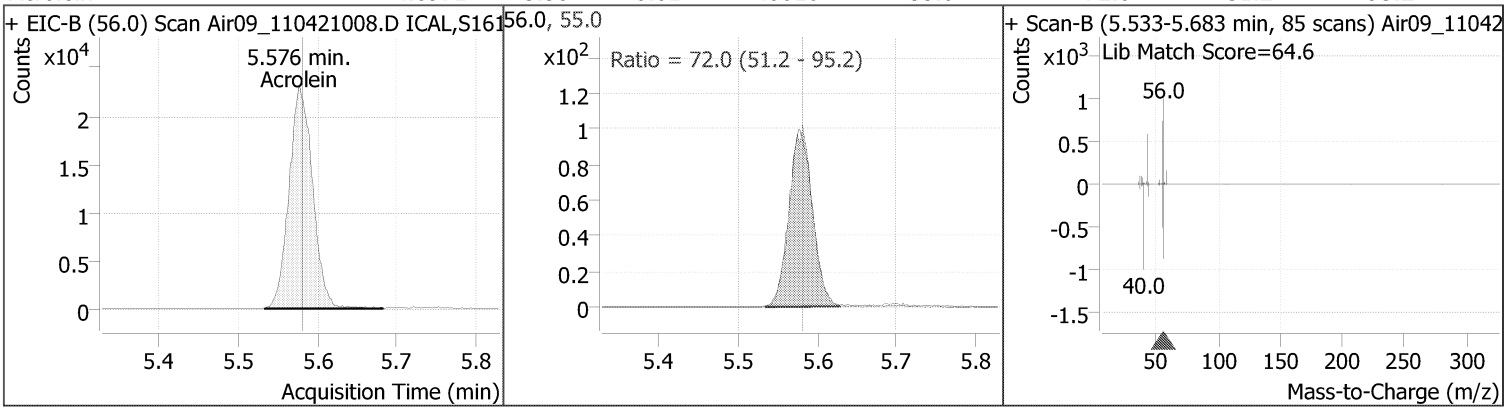
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	4.5541	5.25	-0.01	75437	46.0	35.7	25.6	47.5
					43.0	21.4	14.5	26.9



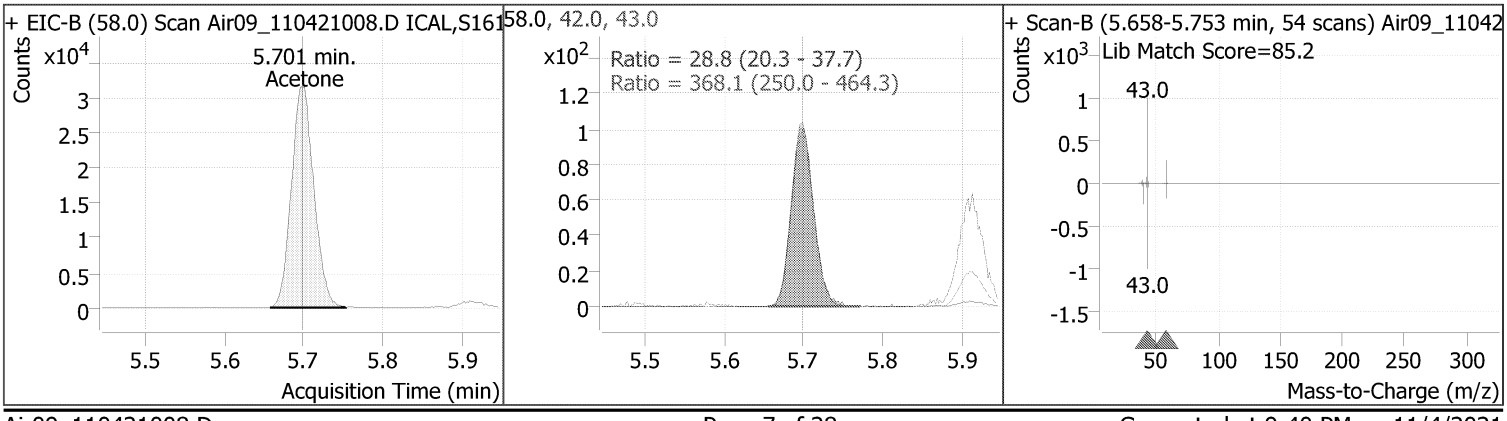
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl bromide	4.7251	5.49	0.00	112644	106.0	106.4	74.2	137.8



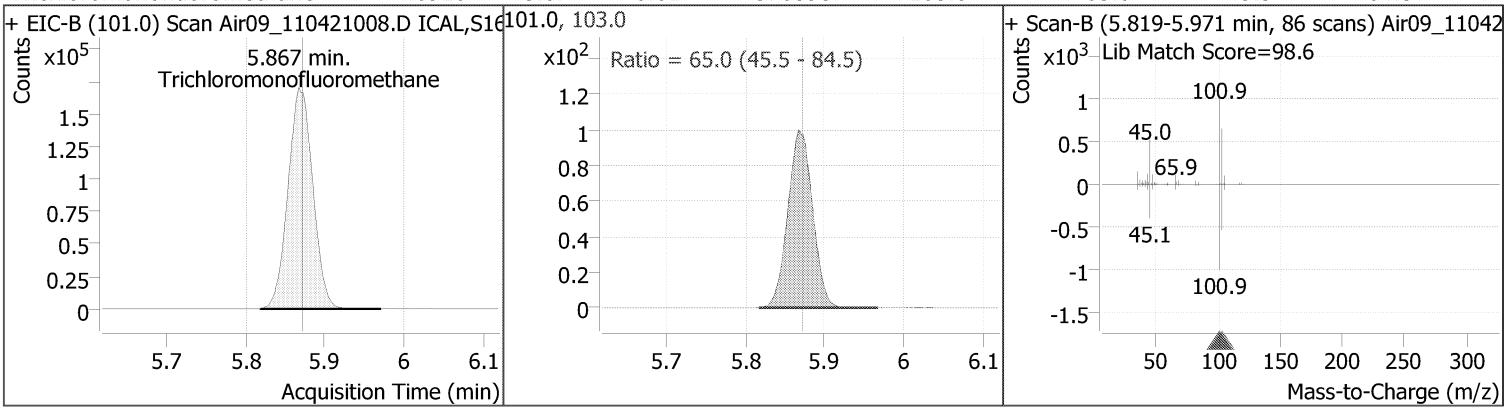
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	4.8971	5.58	-0.01	48016	55.0	72.0	51.2	95.2



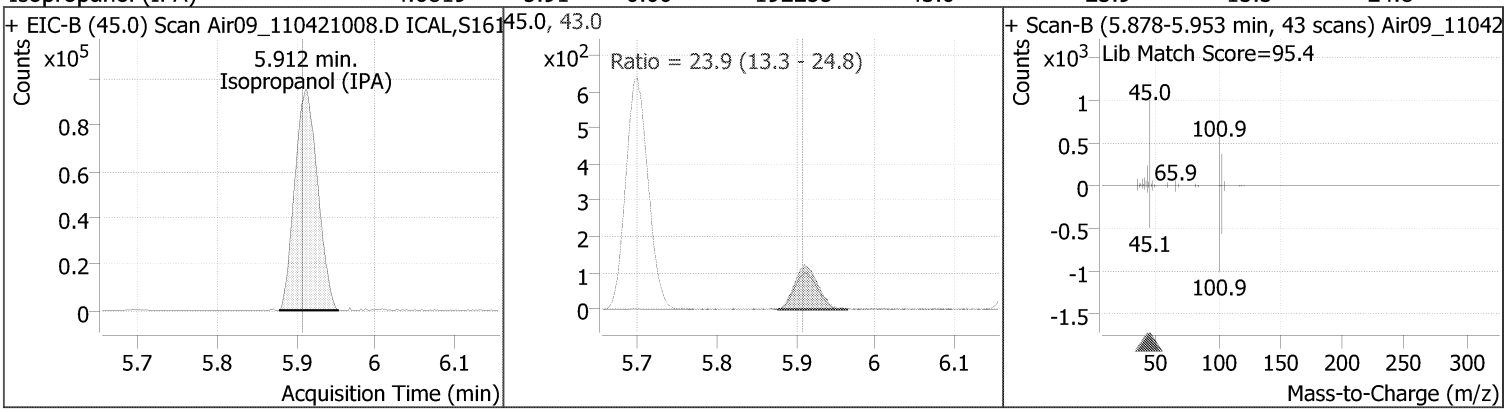
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	4.6057	5.70	0.00	62153	43.0	368.1	250.0	464.3
					42.0	28.8	20.3	37.7



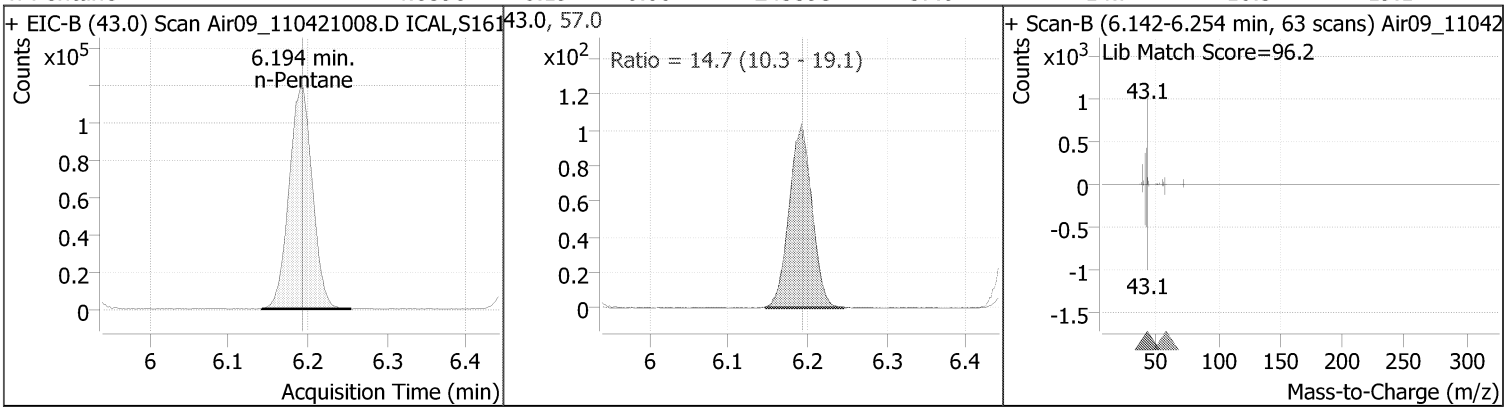
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	4.6918	5.87	-0.01	370395	103.0	65.0	45.5	84.5



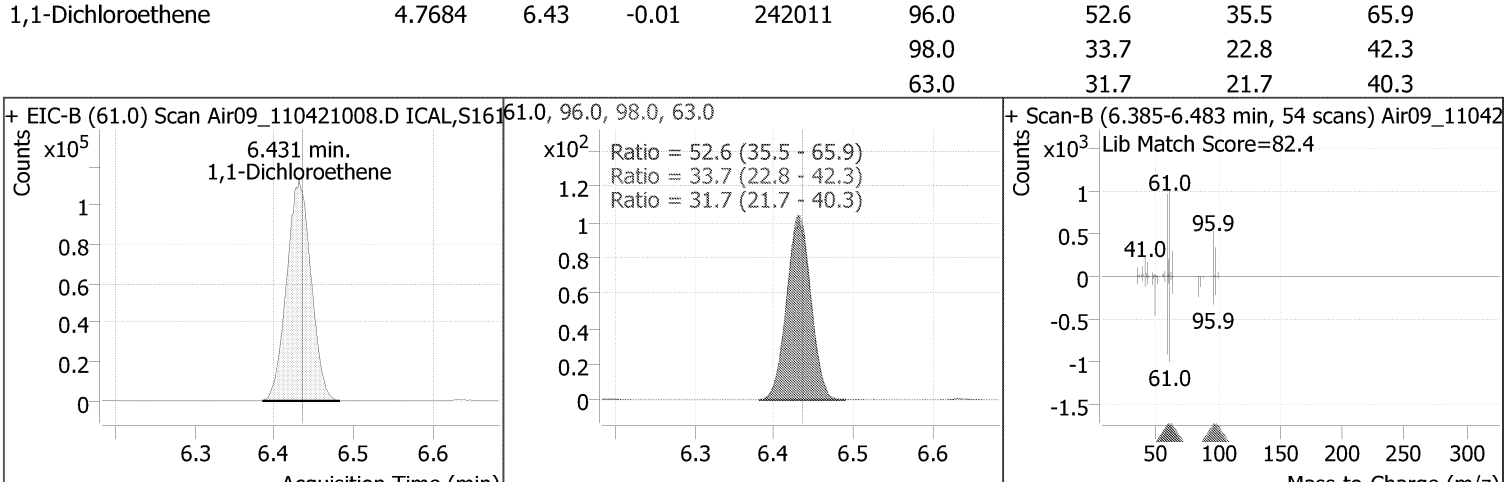
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	4.6819	5.91	0.00	192255	43.0	23.9	13.3	24.8



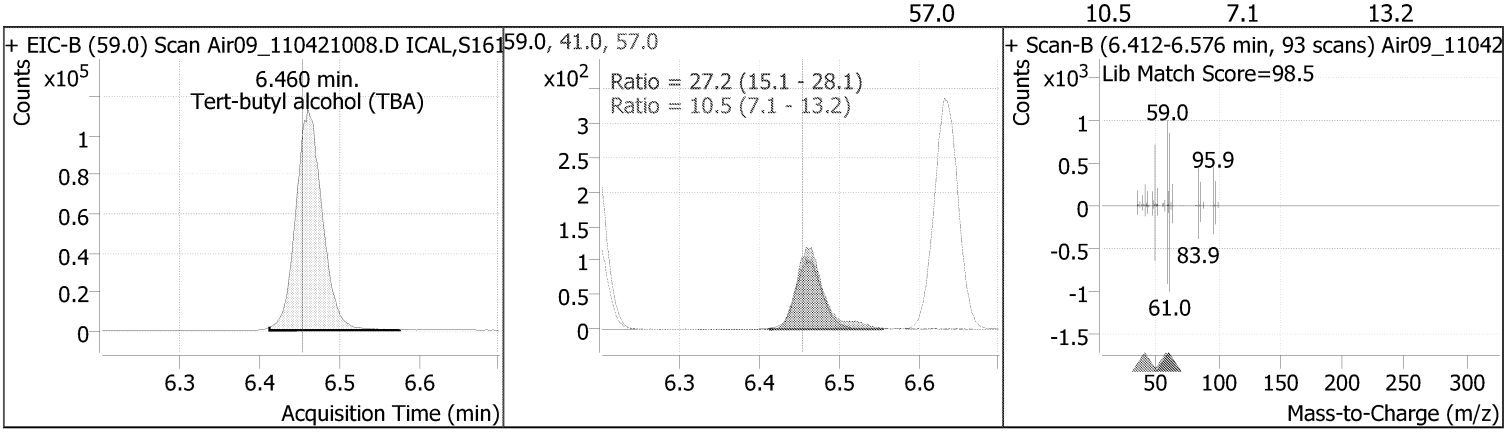
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	4.8598	6.19	0.00	245593	57.0	14.7	10.3	19.1



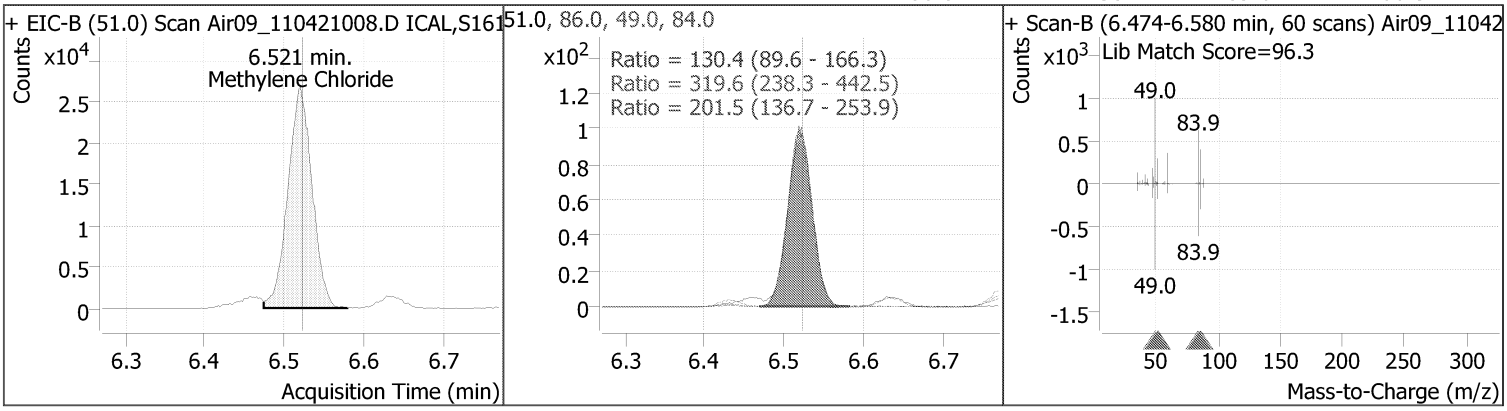
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	4.7684	6.43	-0.01	242011	96.0	52.6	35.5	65.9
					98.0	33.7	22.8	42.3
					63.0	31.7	21.7	40.3



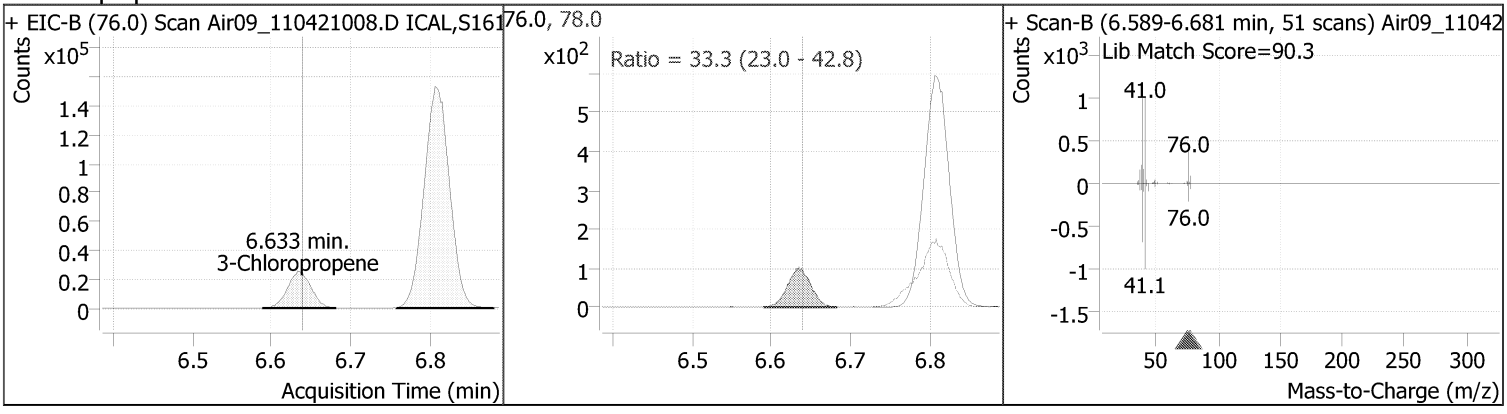
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	5.1489	6.46	0.01	264573	41.0	27.2	15.1	28.1
					57.0	10.5	7.1	13.2



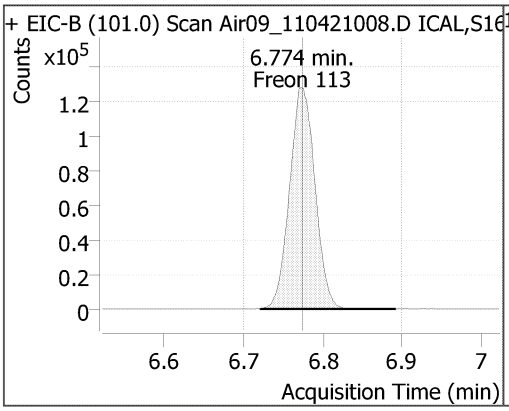
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	4.3306	6.52	0.00	56911	49.0	319.6	238.3	442.5
					84.0	201.5	136.7	253.9
					86.0	130.4	89.6	166.3

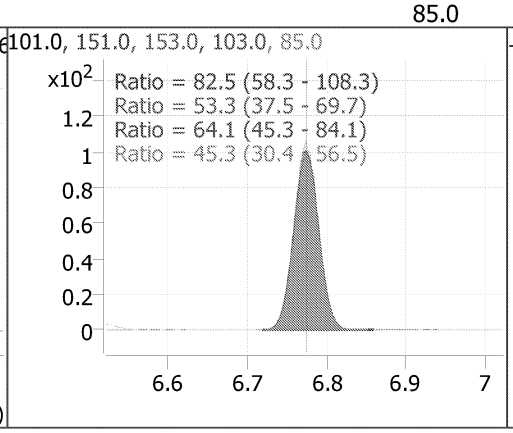


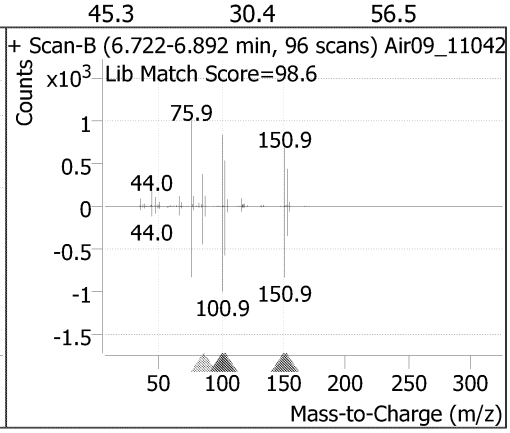
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	4.9661	6.63	-0.01	52448	78.0	33.3	23.0	42.8



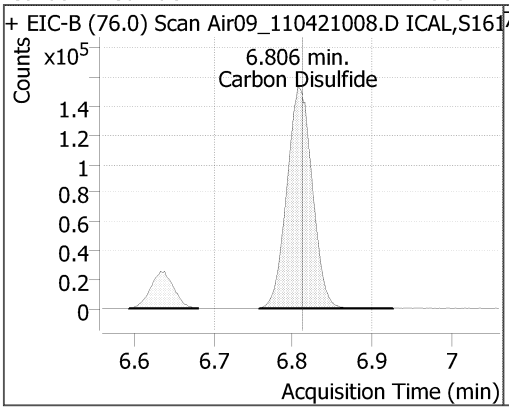
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	4.7077	6.77	0.00	286597	151.0	82.5	58.3	108.3
					103.0	64.1	45.3	84.1
					153.0	53.3	37.5	69.7
					85.0	45.3	30.4	56.5

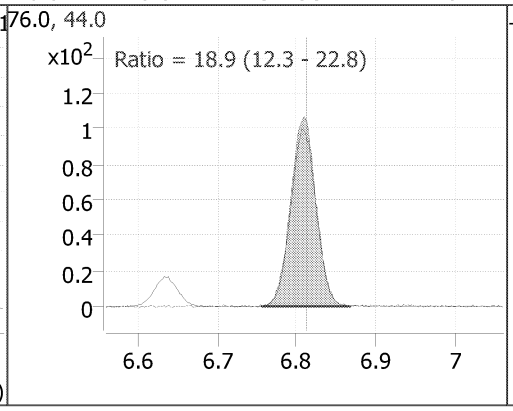


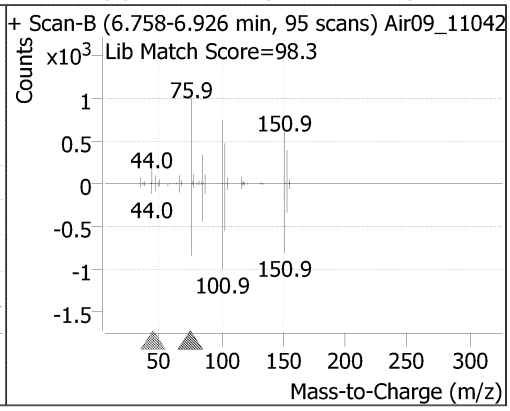




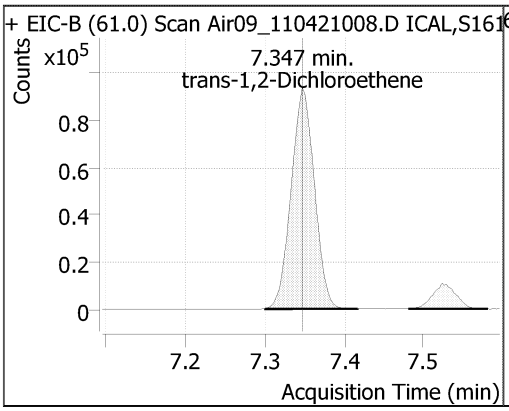
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	4.7888	6.81	-0.01	342934	44.0	18.9	12.3	22.8

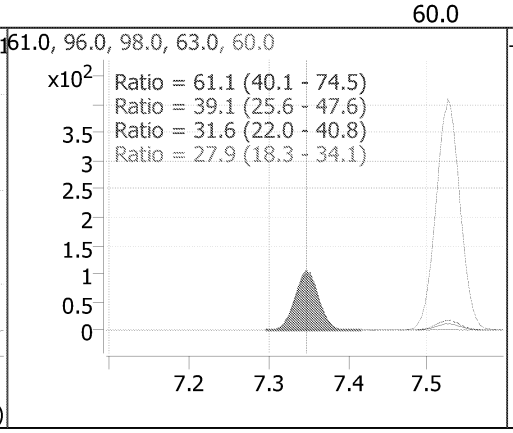


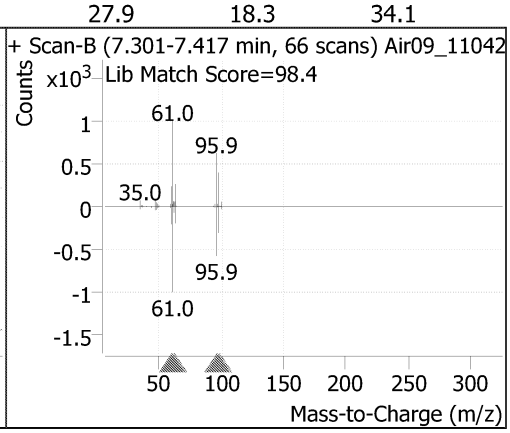




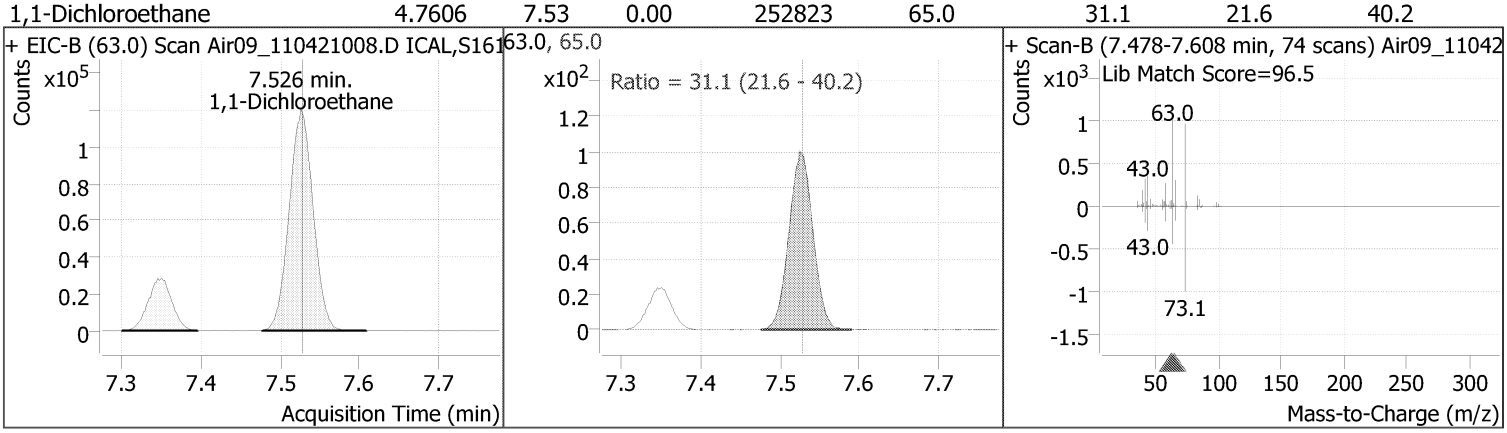
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	4.7319	7.35	0.00	190469	96.0	61.1	40.1	74.5
					98.0	39.1	25.6	47.6
					63.0	31.6	22.0	40.8
					60.0	27.9	18.3	34.1



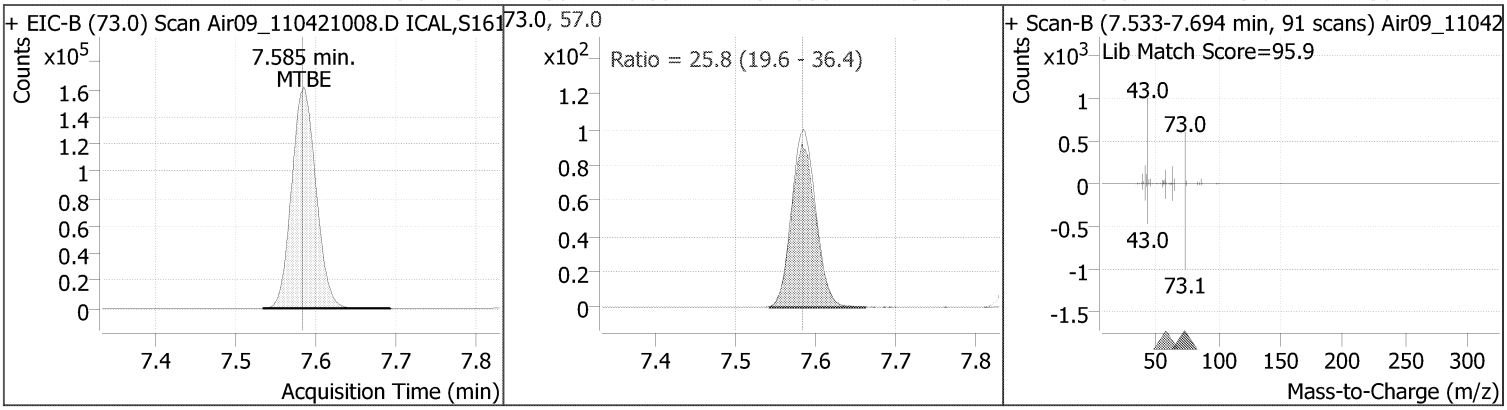




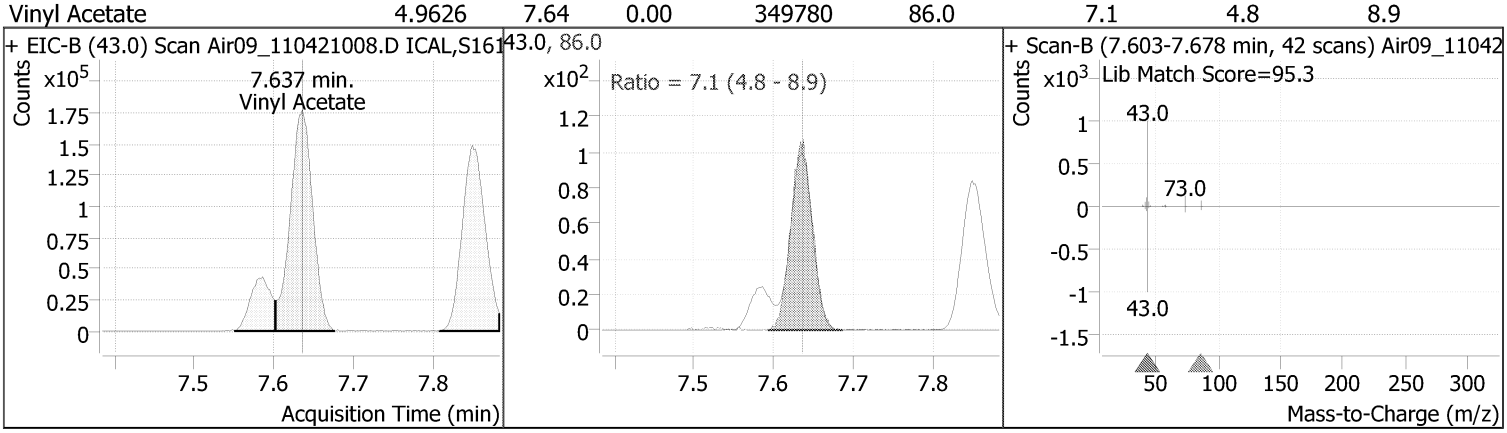
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	4.7606	7.53	0.00	252823	65.0	31.1	21.6	40.2



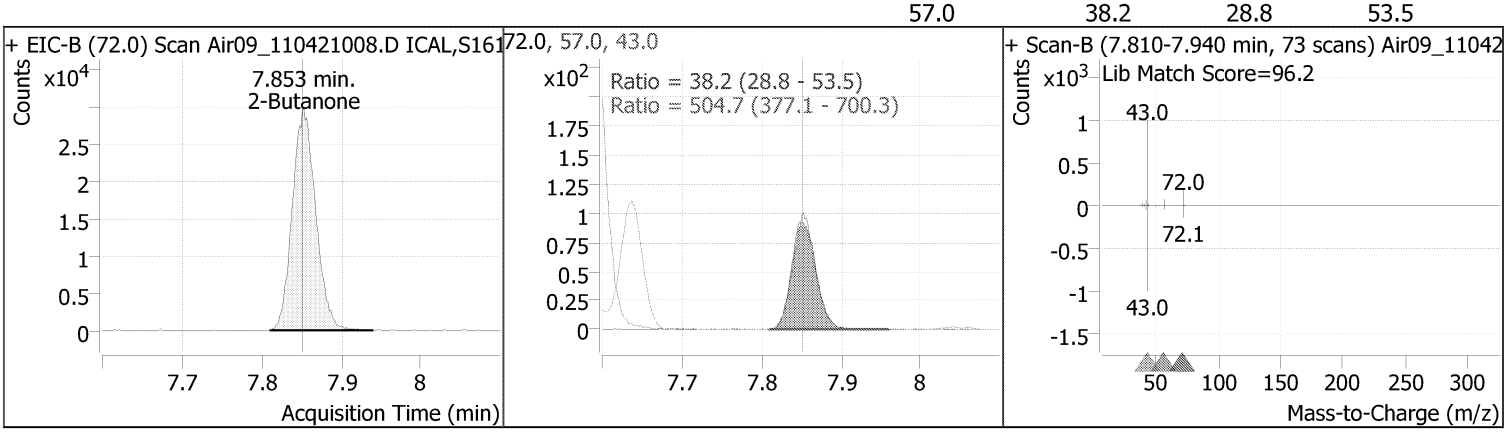
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	5.0279	7.58	0.00	344336	57.0	25.8	19.6	36.4



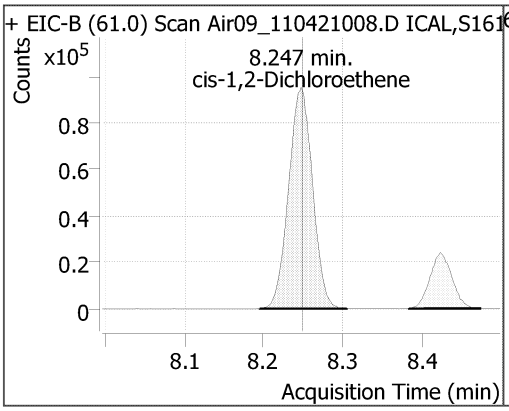
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	4.9626	7.64	0.00	349780	86.0	7.1	4.8	8.9

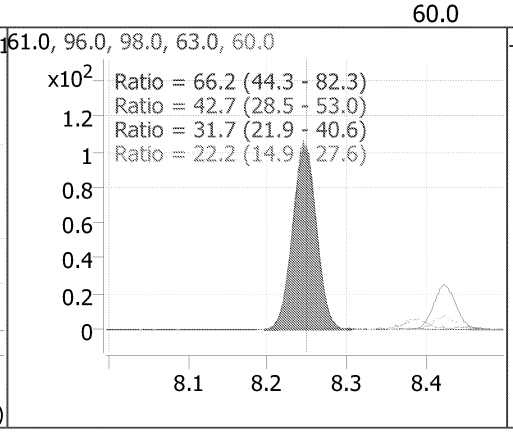


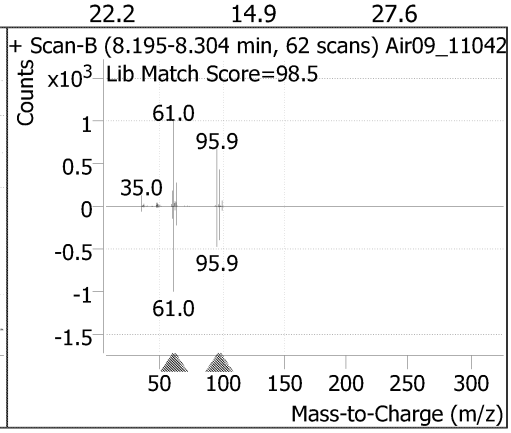
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	4.8919	7.85	0.00	61035	43.0	504.7	377.1	700.3
					57.0	38.2	28.8	53.5



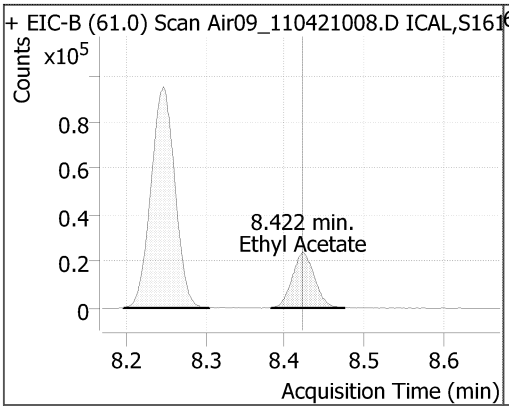
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	4.8565	8.25	0.00	199583	96.0	66.2	44.3	82.3
					98.0	42.7	28.5	53.0
					63.0	31.7	21.9	40.6
					60.0	22.2	14.9	27.6

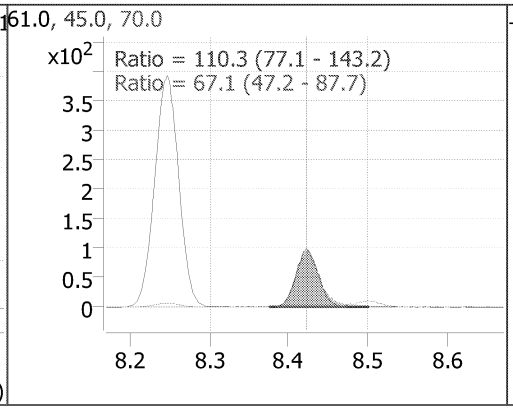


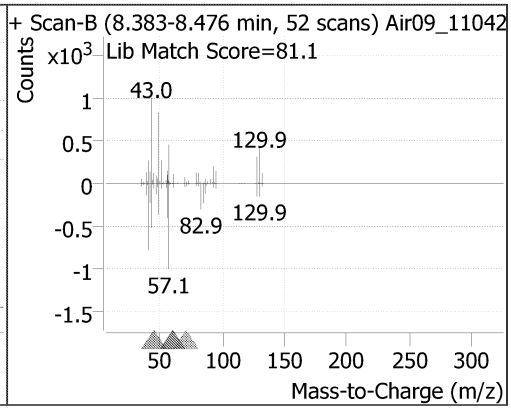




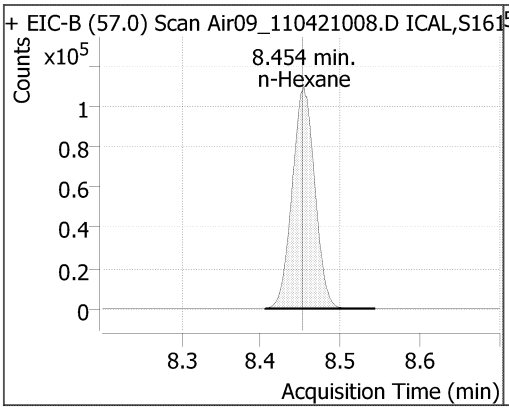
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	4.9783	8.42	0.00	46528	45.0	110.3	77.1	143.2
					70.0	67.1	47.2	87.7

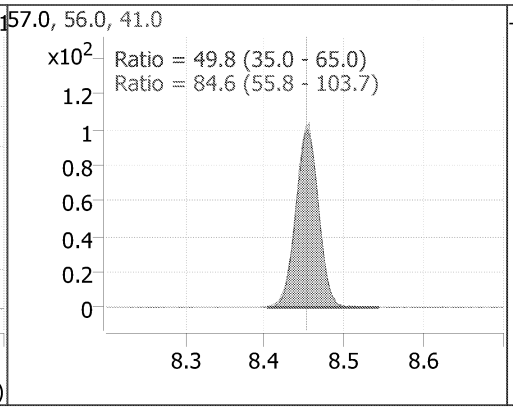


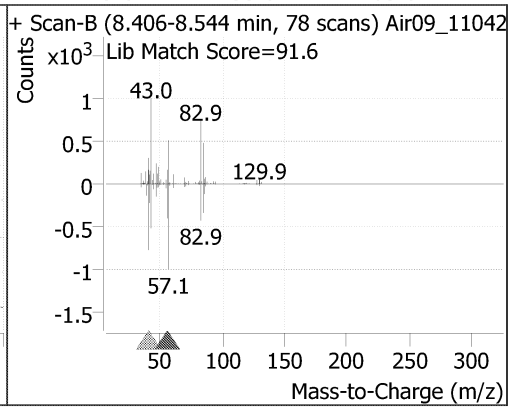




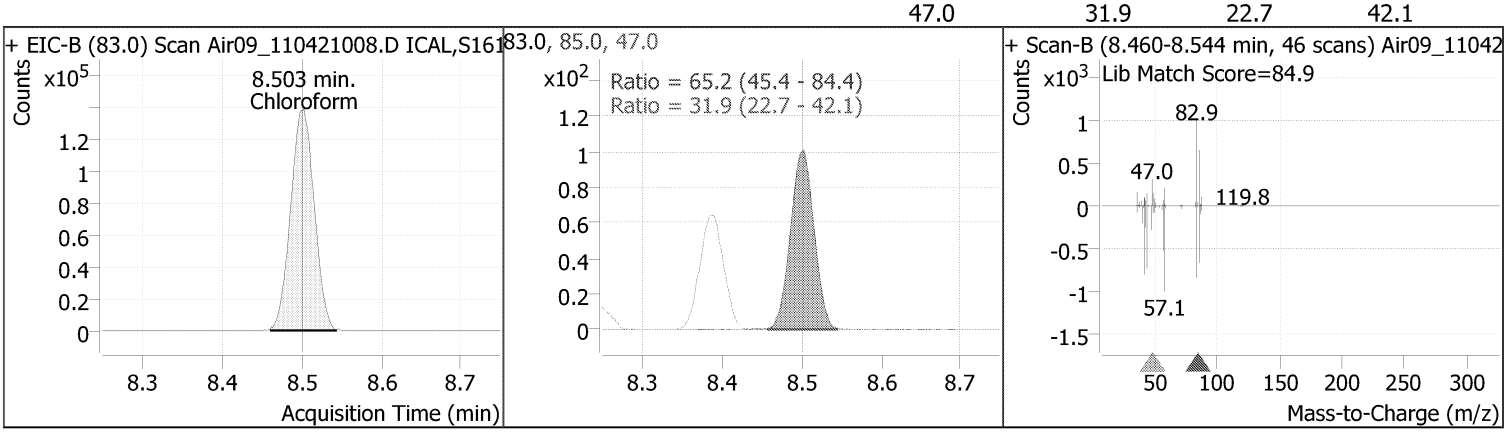
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	4.9323	8.45	0.00	216770	41.0	84.6	55.8	103.7
					56.0	49.8	35.0	65.0



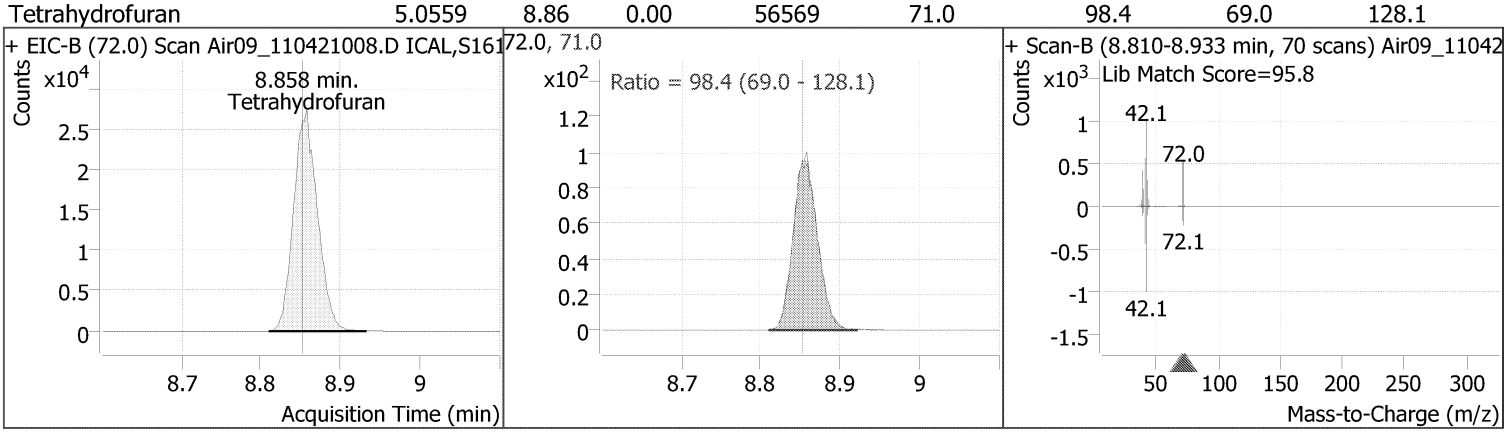




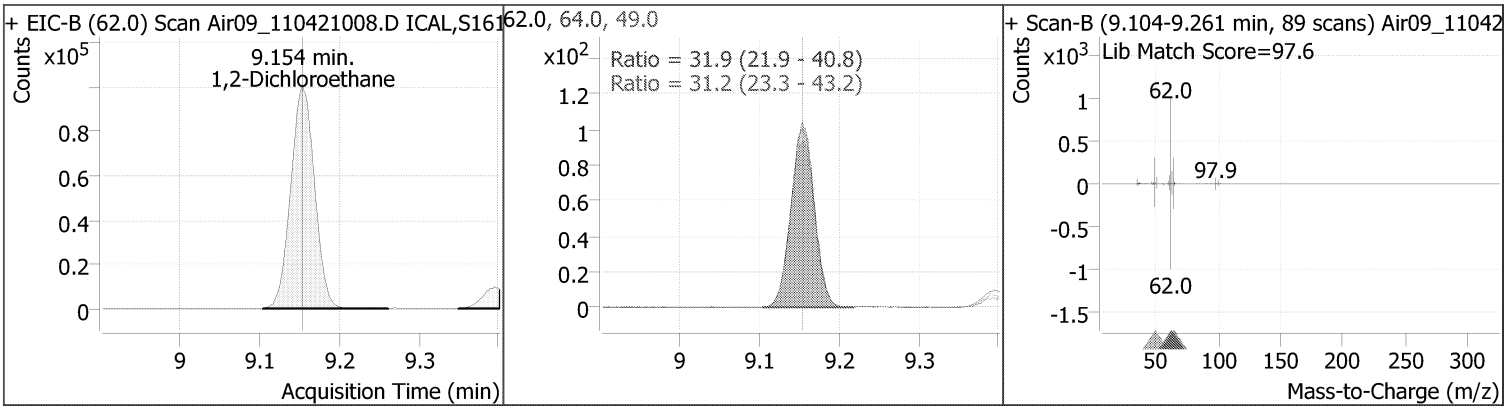
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	4.6575	8.50	0.00	287014	85.0	65.2	45.4	84.4
					47.0	31.9	22.7	42.1



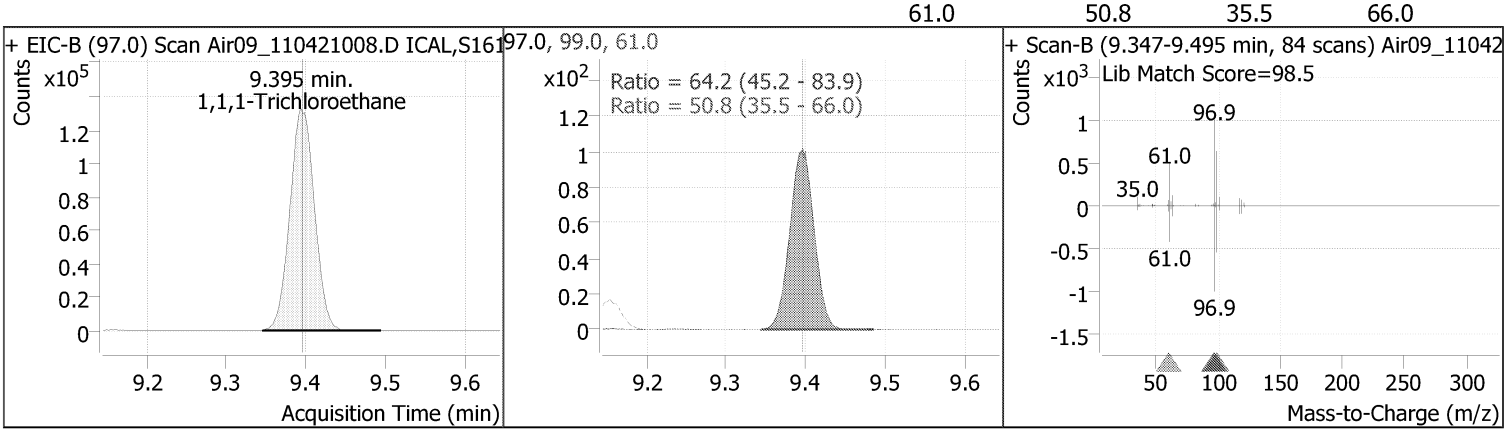
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	5.0559	8.86	0.00	56569	71.0	98.4	69.0	128.1



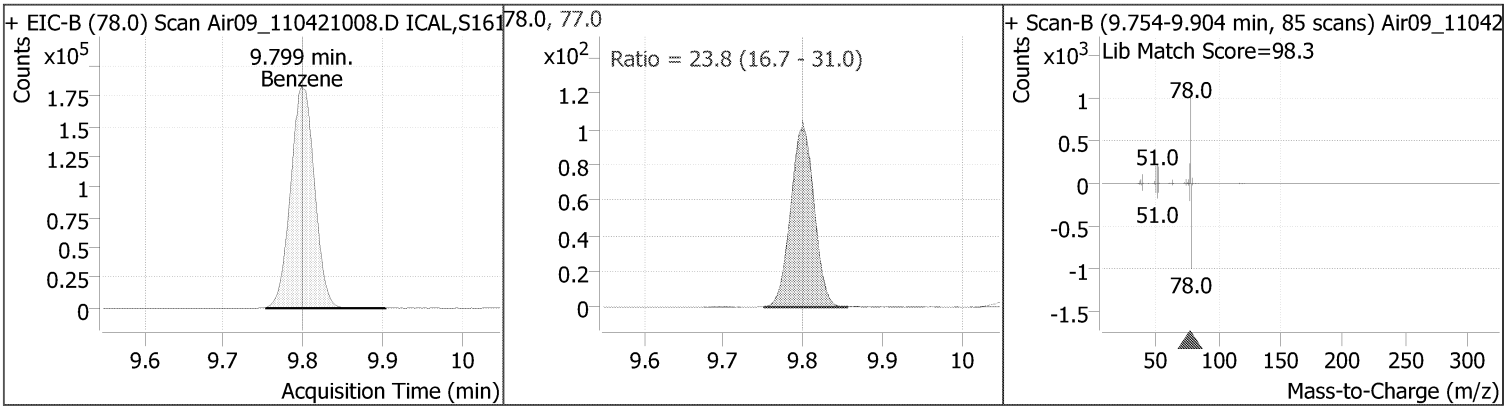
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	4.7254	9.15	0.00	209712	49.0	31.2	23.3	43.2
					64.0	31.9	21.9	40.8



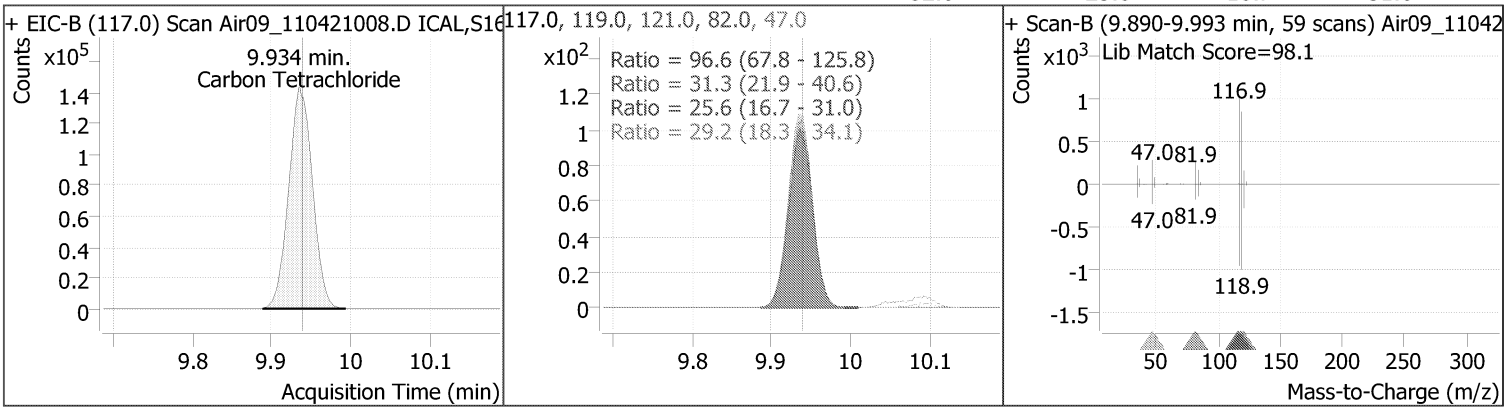
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	4.7911	9.40	0.00	285647	99.0	64.2	45.2	83.9
					61.0	50.8	35.5	66.0



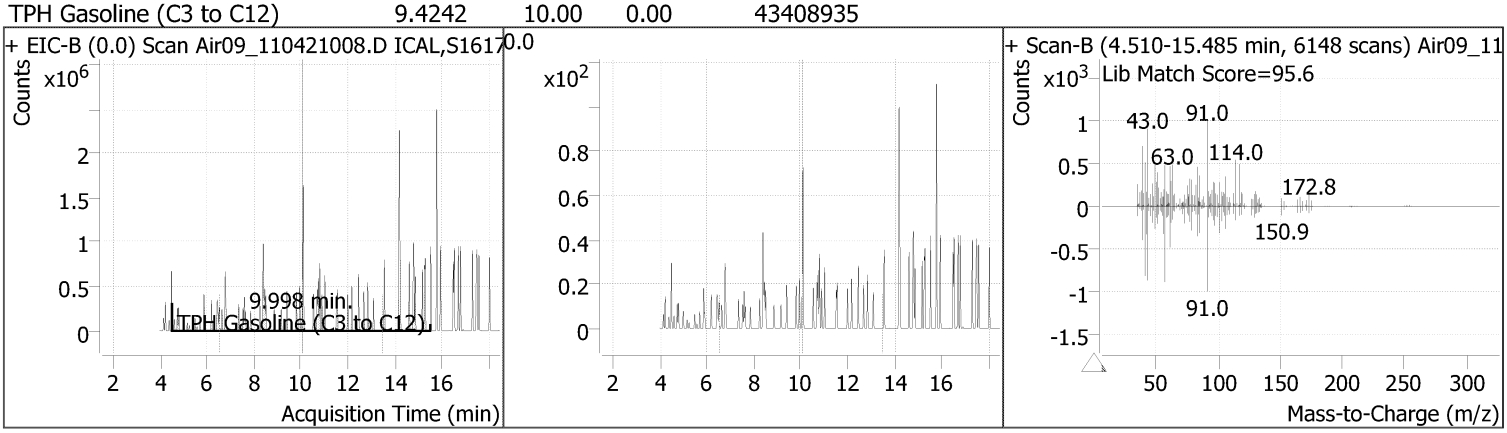
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	4.7740	9.80	0.00	383854	77.0	23.8	16.7	31.0



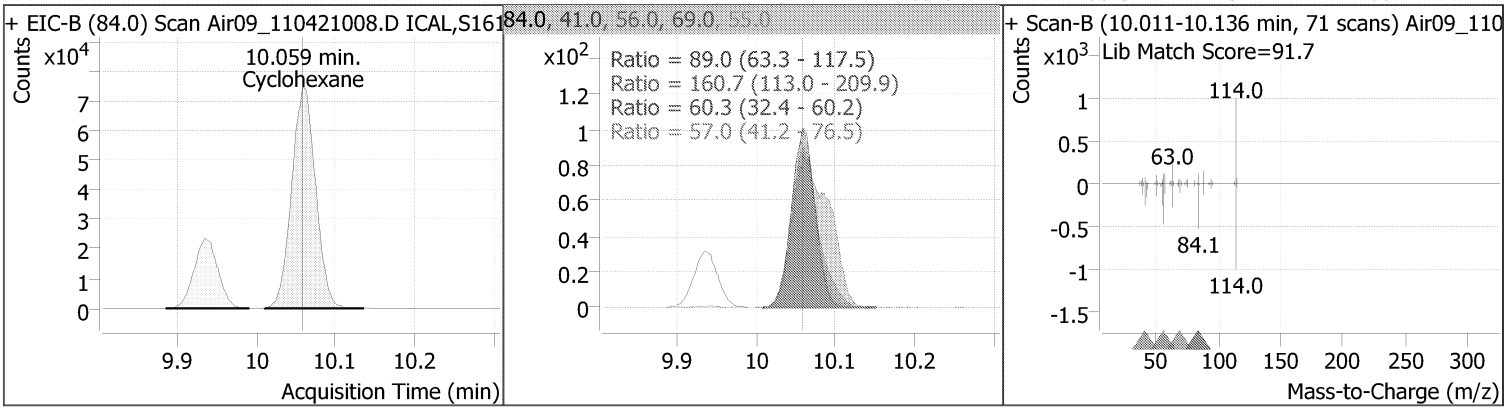
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	4.8495	9.93	-0.01	299343	119.0	96.6	67.8	125.8
					121.0	31.3	21.9	40.6
					47.0	29.2	18.3	34.1
					82.0	25.6	16.7	31.0



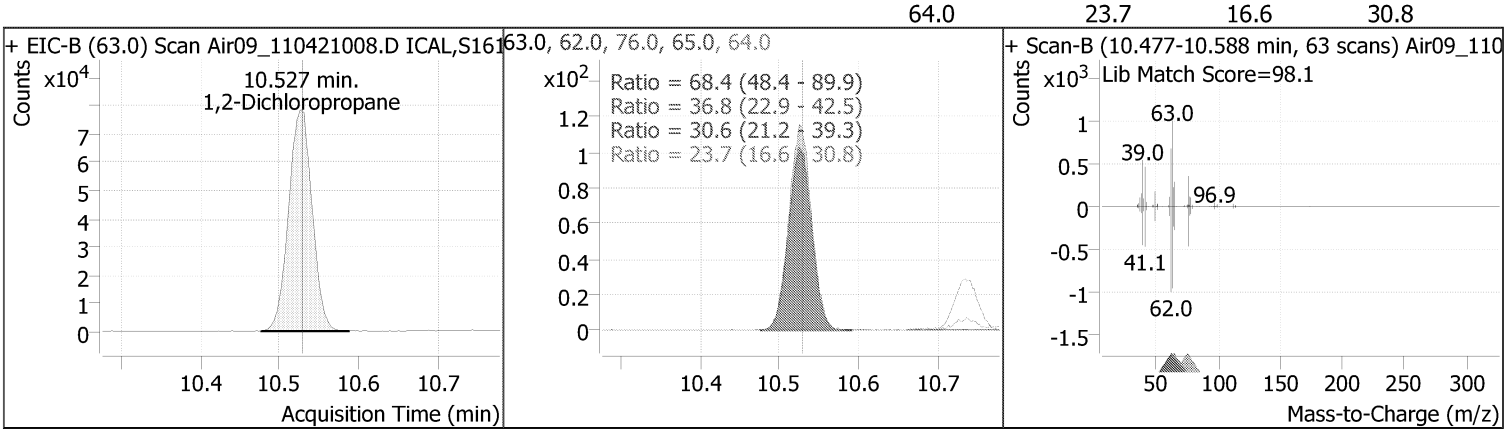
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	9.4242	10.00	0.00	43408935				



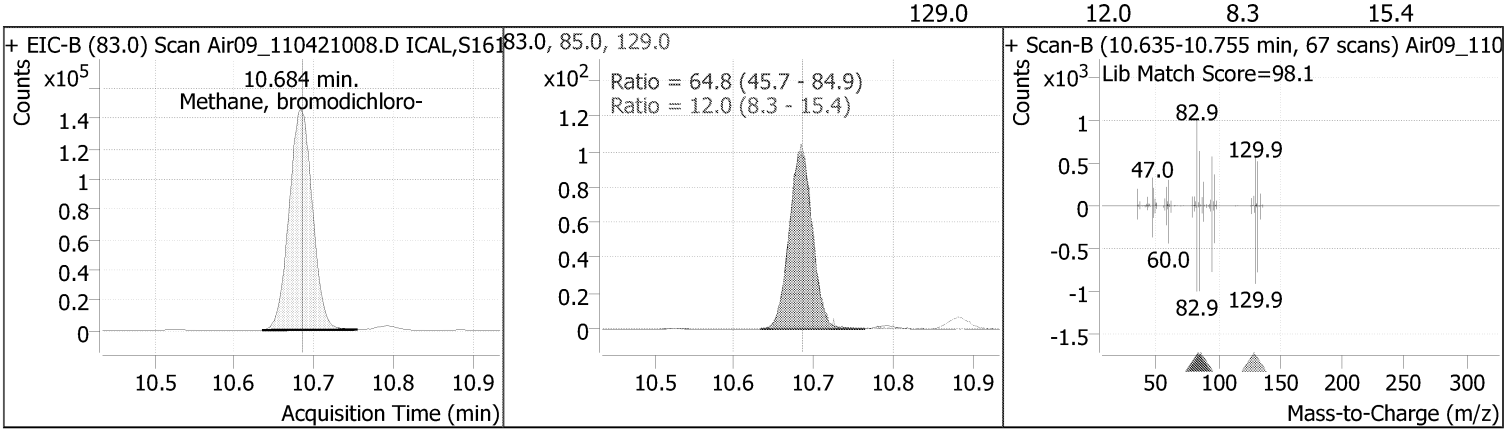
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	4.3371	10.06	0.00	157039	56.0	160.7	113.0	209.9
					41.0	89.0	63.3	117.5
					55.0	57.0	41.2	76.5
					69.0	60.3	32.4	60.2



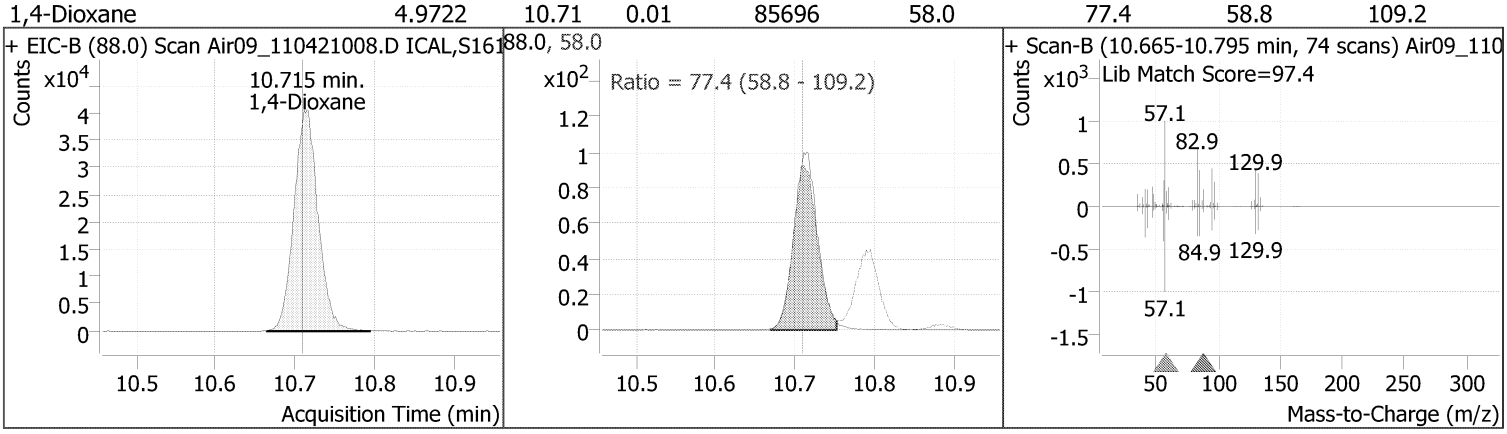
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	4.7285	10.53	0.00	162083	62.0	68.4	48.4	89.9
					76.0	36.8	22.9	42.5
					65.0	30.6	21.2	39.3
					64.0	23.7	16.6	30.8



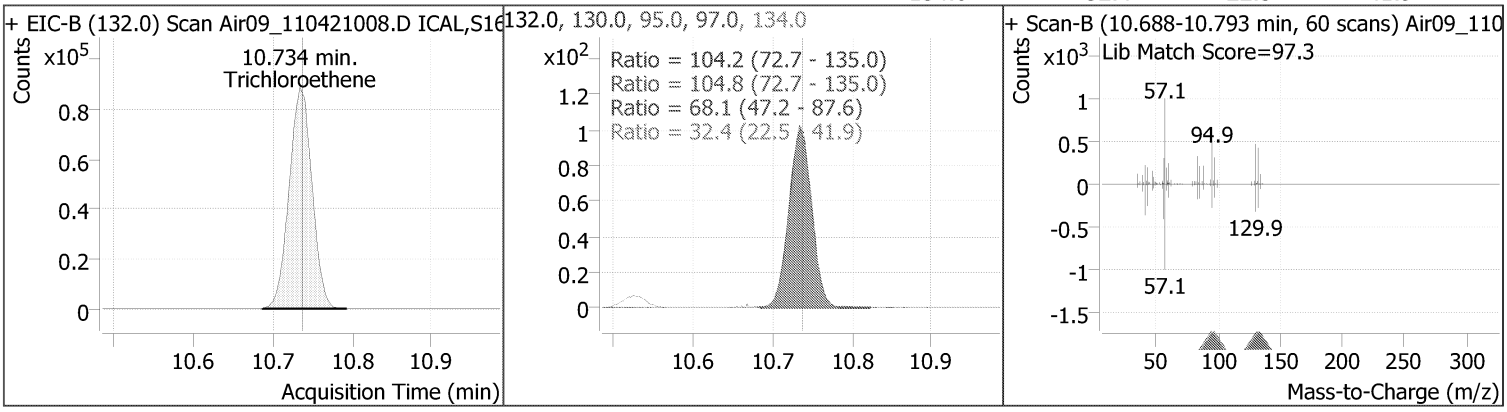
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	4.8241	10.68	0.00	299362	85.0	64.8	45.7	84.9
					129.0	12.0	8.3	15.4



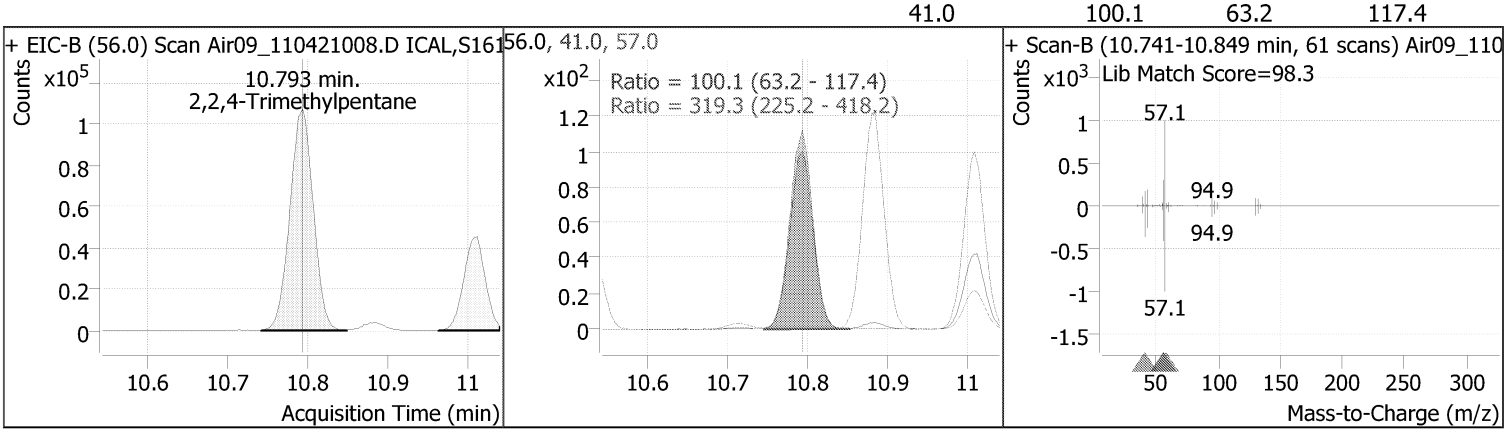
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	4.9722	10.71	0.01	85696	58.0	77.4	58.8	109.2



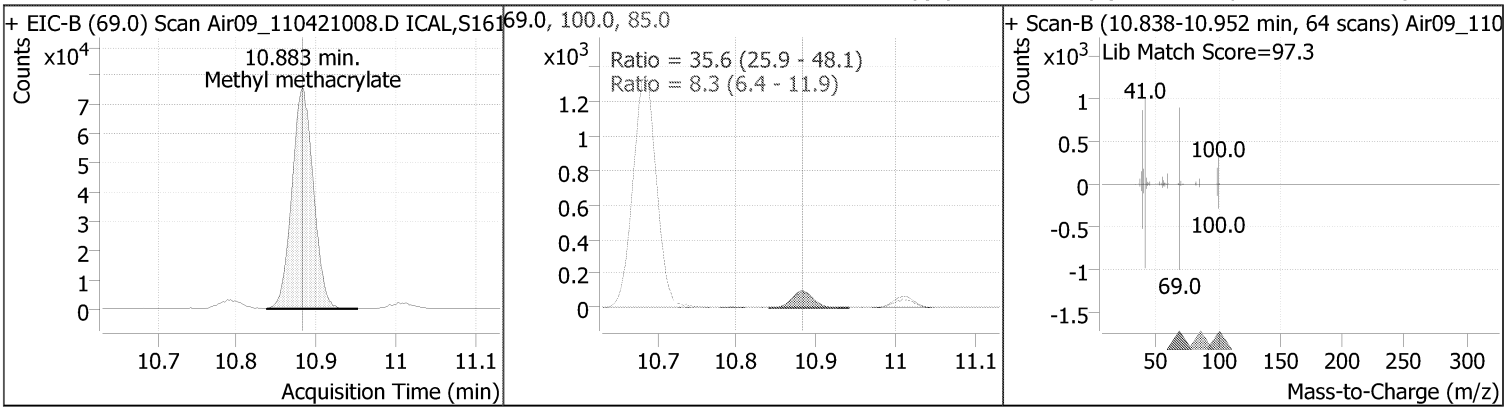
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	4.8513	10.73	0.00	178277	130.0	104.2	72.7	135.0
					95.0	104.8	72.7	135.0
					97.0	68.1	47.2	87.6
					134.0	32.4	22.5	41.9



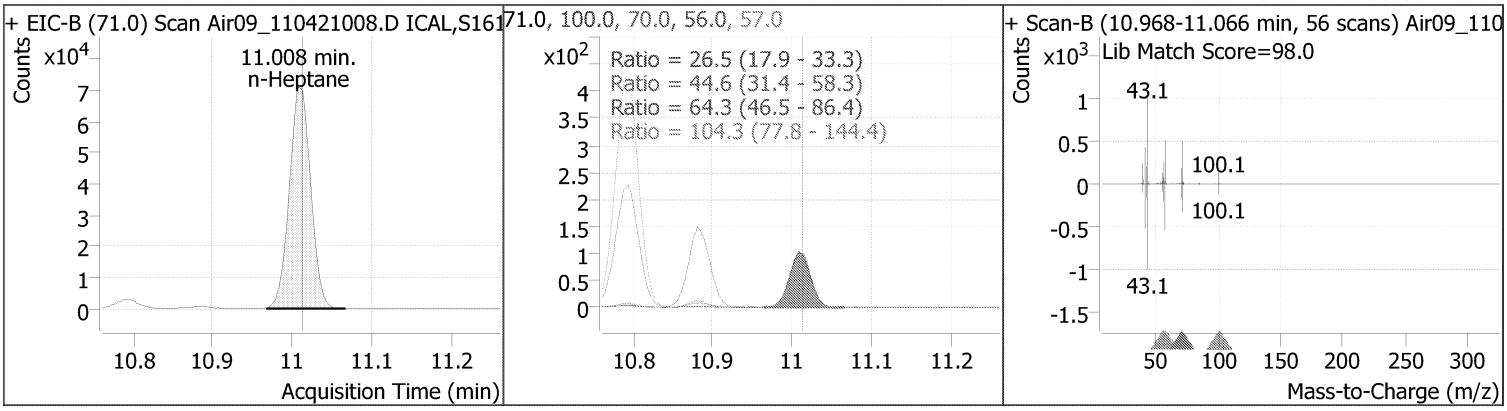
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	4.9031	10.79	0.00	218293	57.0	319.3	225.2	418.2
					41.0	100.1	63.2	117.4



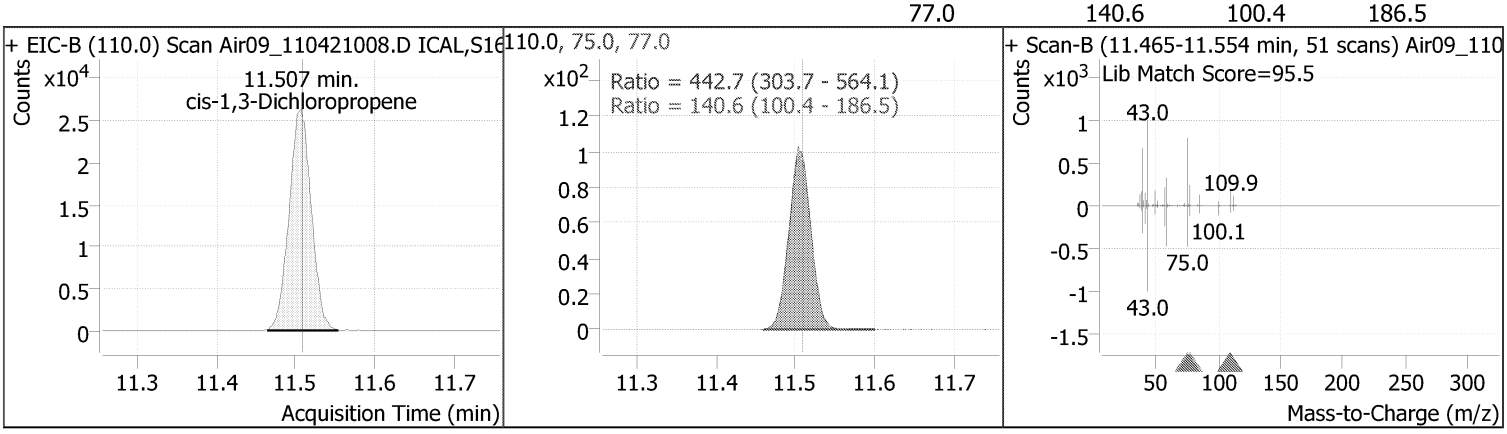
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	5.1445	10.88	0.00	142797	100.0	35.6	25.9	48.1
					85.0	8.3	6.4	11.9



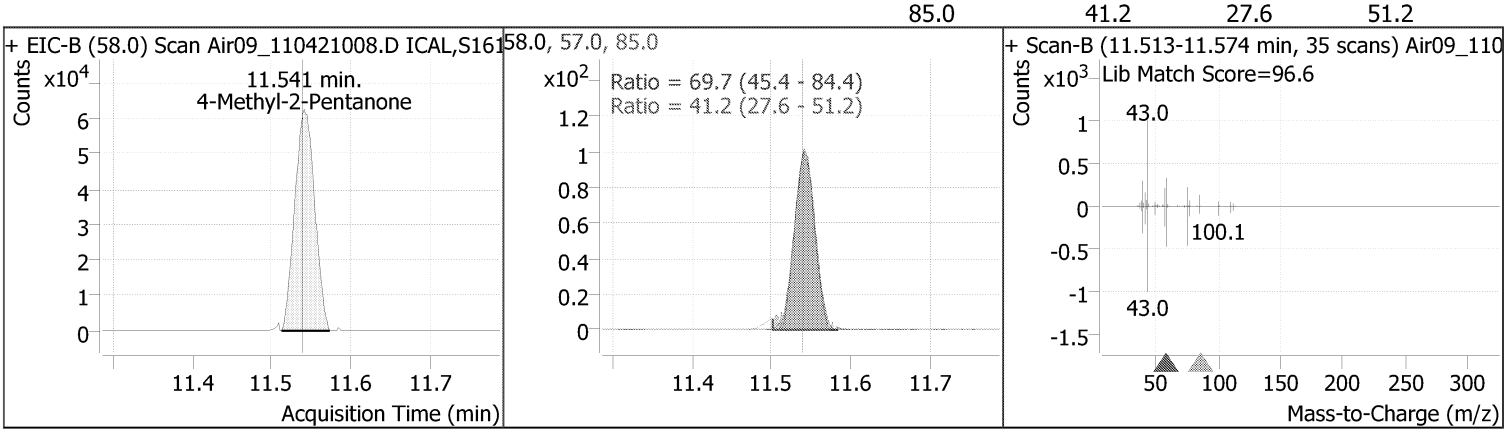
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	5.0433	11.01	-0.01	132649	57.0	104.3	77.8	144.4
					56.0	64.3	46.5	86.4
					70.0	44.6	31.4	58.3
					100.0	26.5	17.9	33.3



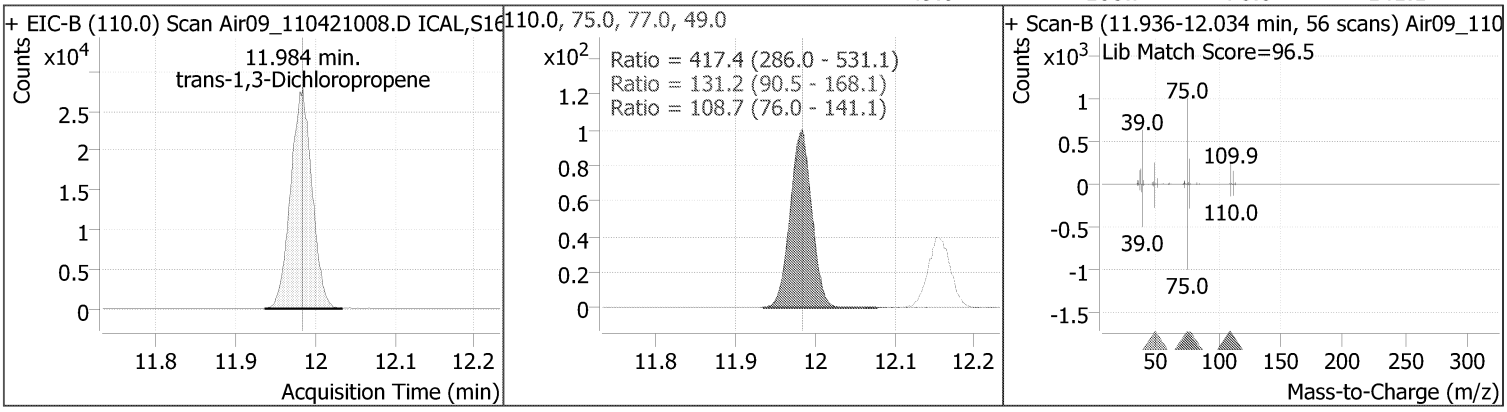
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	5.0618	11.51	0.00	51160	75.0	442.7	303.7	564.1
					77.0	140.6	100.4	186.5



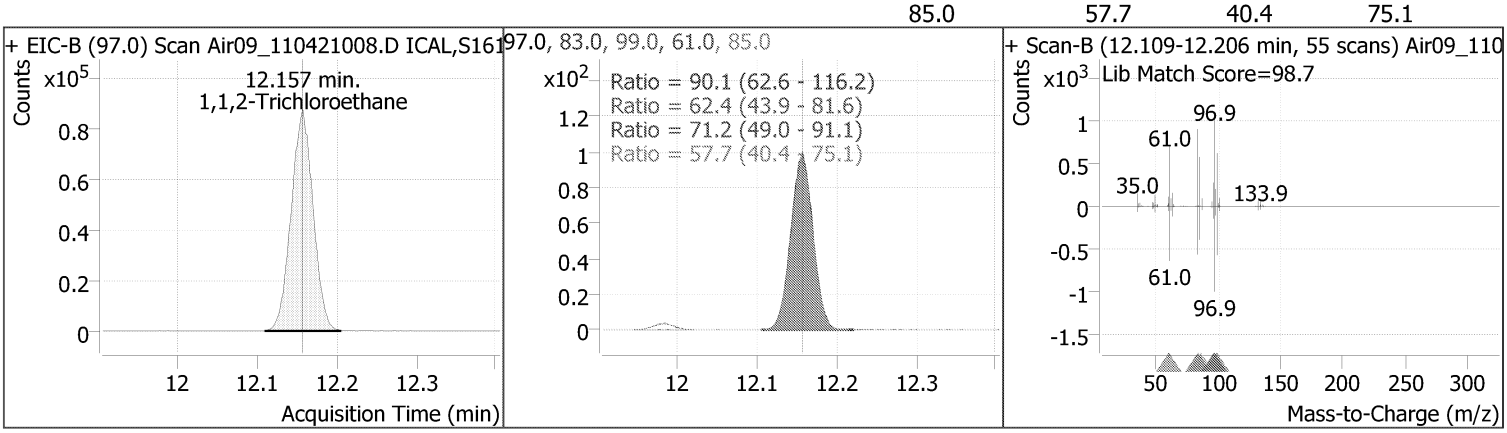
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	4.4764	11.54	0.00	108432	57.0	69.7	45.4	84.4
					85.0	41.2	27.6	51.2



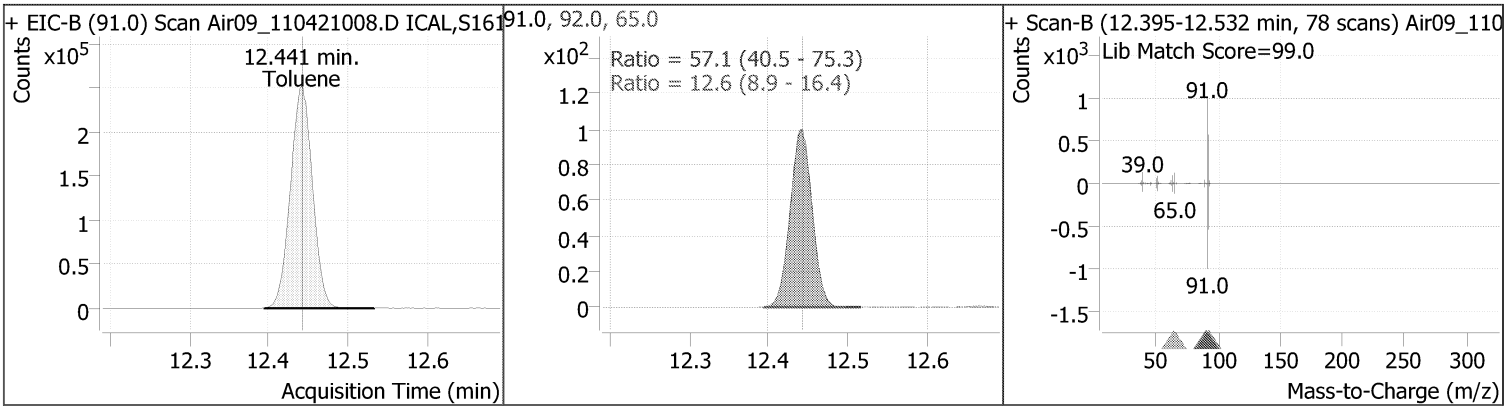
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	5.1832	11.98	0.00	52046	75.0	417.4	286.0	531.1
					77.0	131.2	90.5	168.1
					49.0	108.7	76.0	141.1



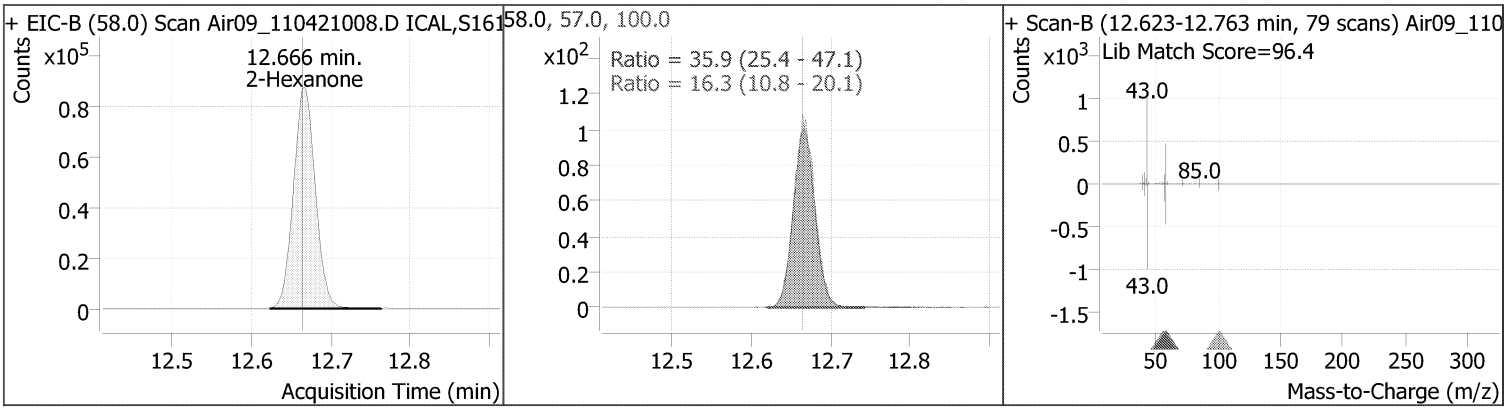
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	4.7894	12.16	0.00	167029	83.0	90.1	62.6	116.2
					61.0	71.2	49.0	91.1
					99.0	62.4	43.9	81.6
					85.0	57.7	40.4	75.1



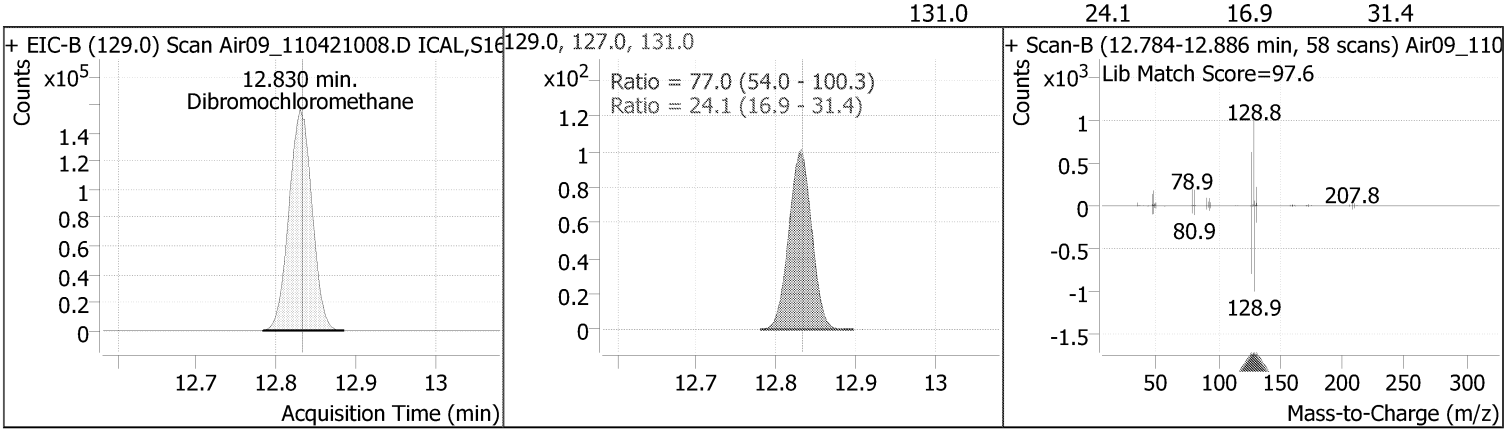
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	5.0022	12.44	0.00	486329	92.0	57.1	40.5	75.3
					65.0	12.6	8.9	16.4



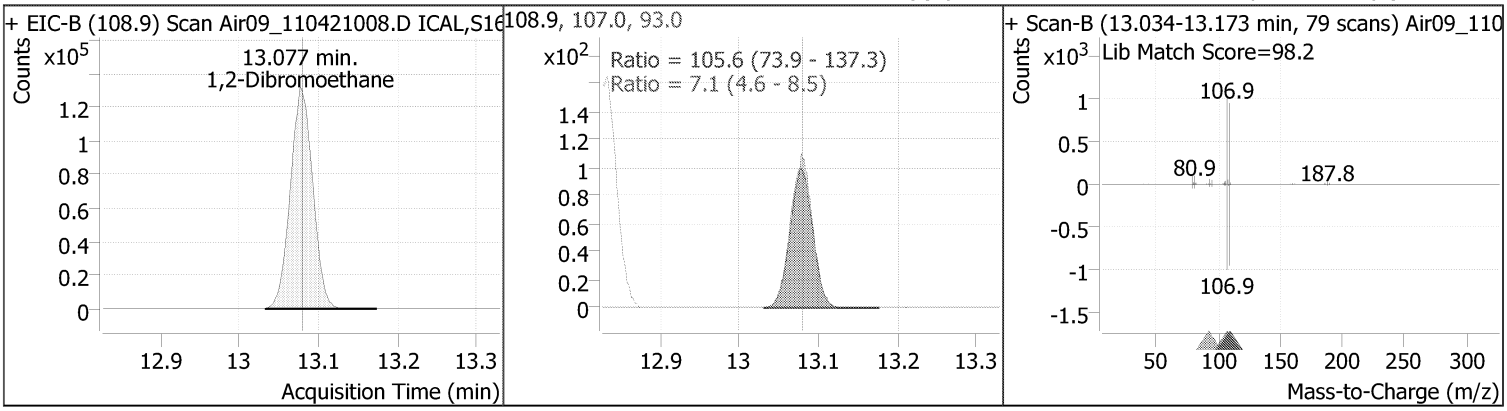
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	5.4210	12.67	0.00	166542	57.0	35.9	25.4	47.1
					100.0	16.3	10.8	20.1



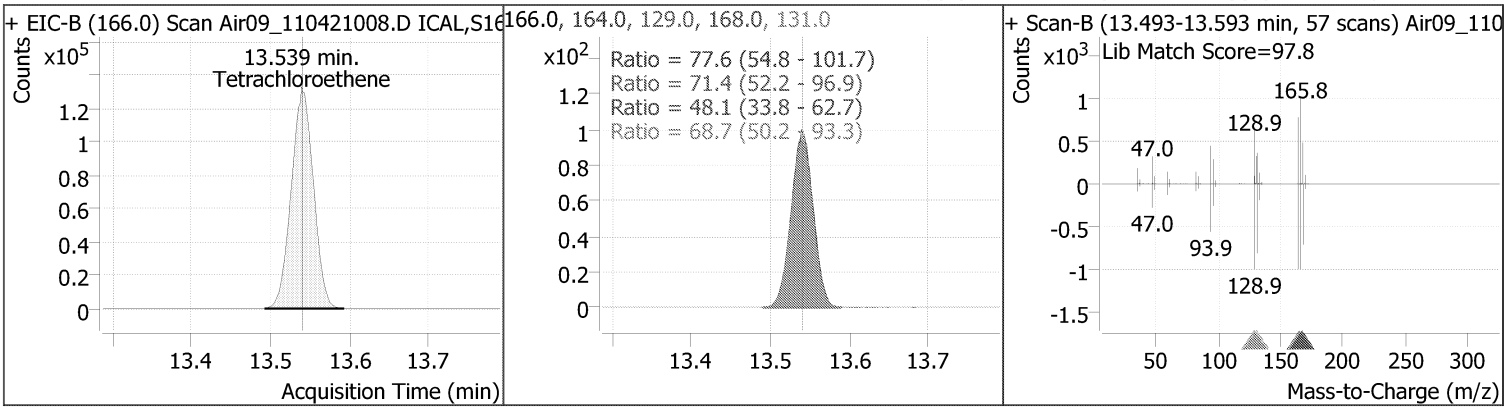
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	4.9570	12.83	0.00	316183	127.0	77.0	54.0	100.3
					131.0	24.1	16.9	31.4



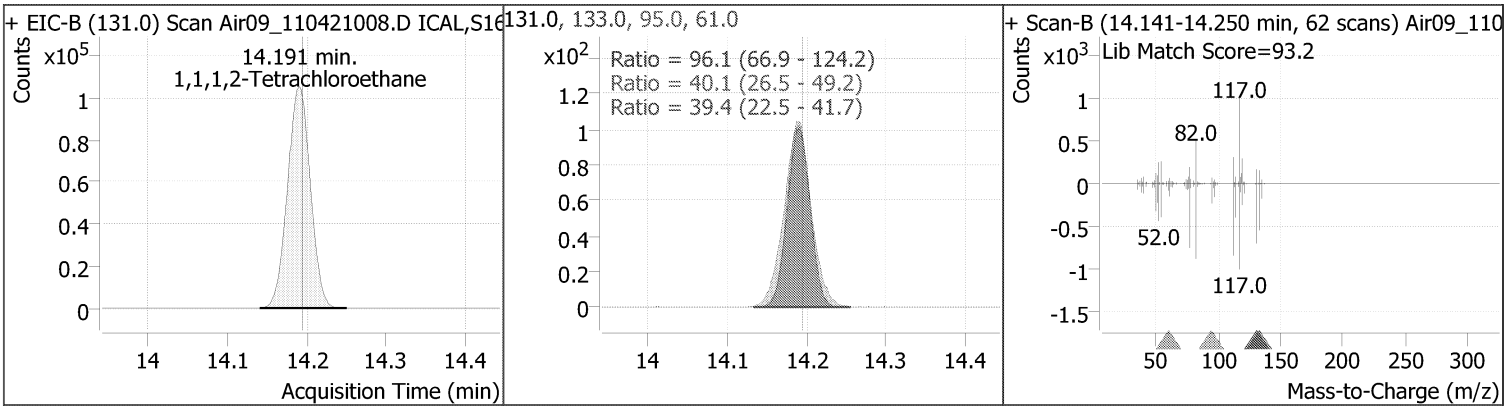
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	4.9700	13.08	0.00	259902	107.0	105.6	73.9	137.3
					93.0	7.1	4.6	8.5



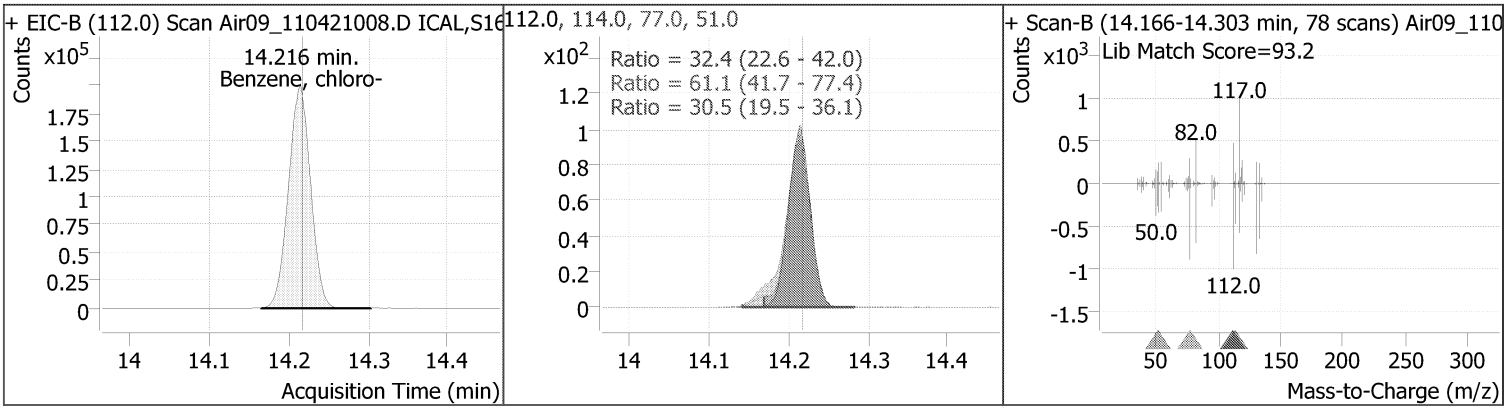
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	4.8953	13.54	0.00	255788	164.0	77.6	54.8	101.7
					129.0	71.4	52.2	96.9
					131.0	68.7	50.2	93.3
					168.0	48.1	33.8	62.7



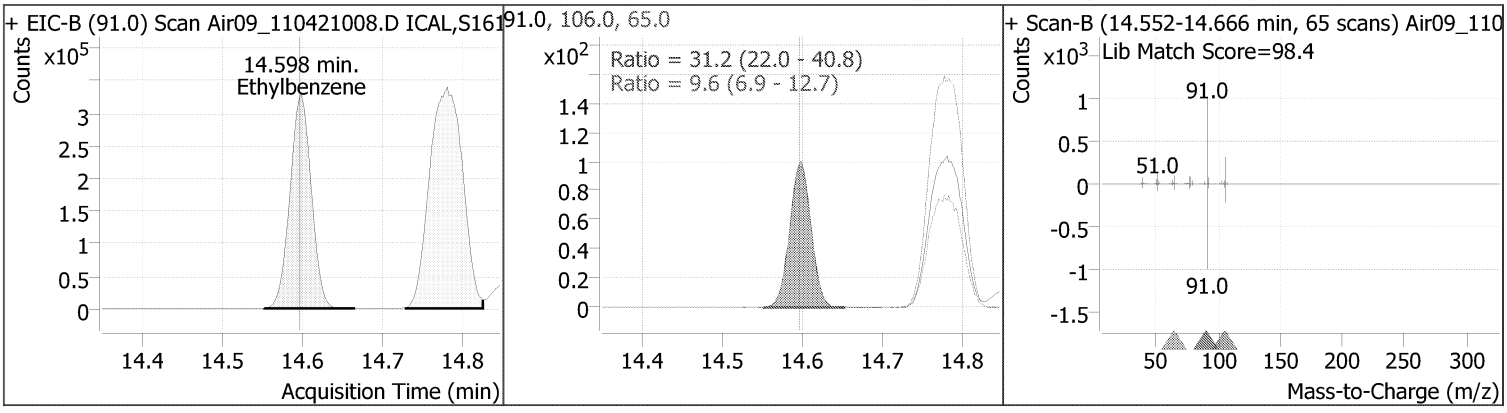
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	4.7371	14.19	0.00	210860	133.0	96.1	66.9	124.2
					95.0	40.1	26.5	49.2
					61.0	39.4	22.5	41.7



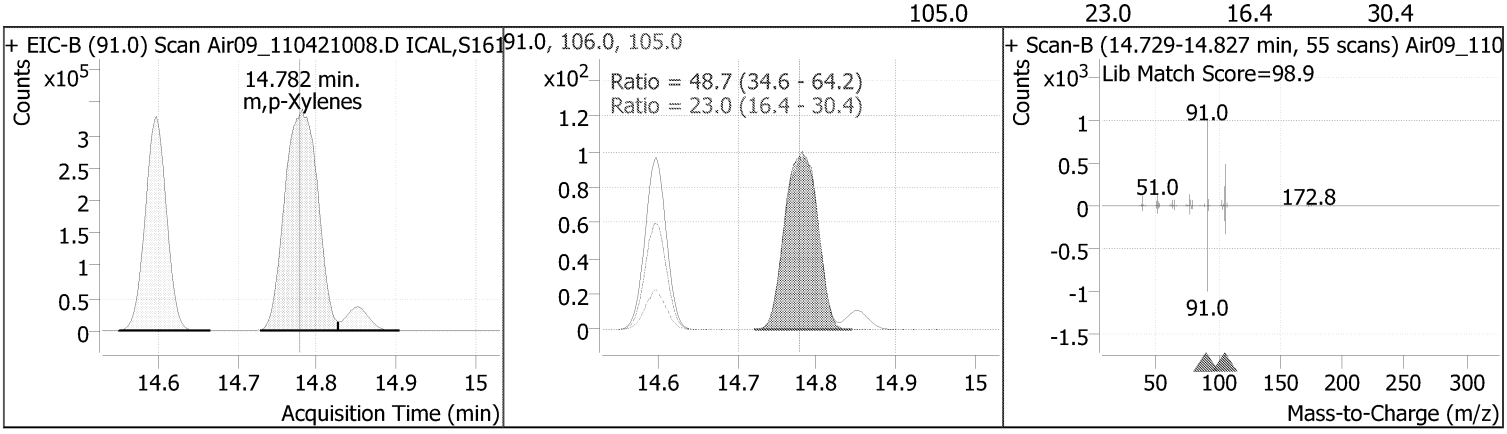
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	4.7403	14.22	0.00	387935	77.0	61.1	41.7	77.4
					114.0	32.4	22.6	42.0
					51.0	30.5	19.5	36.1



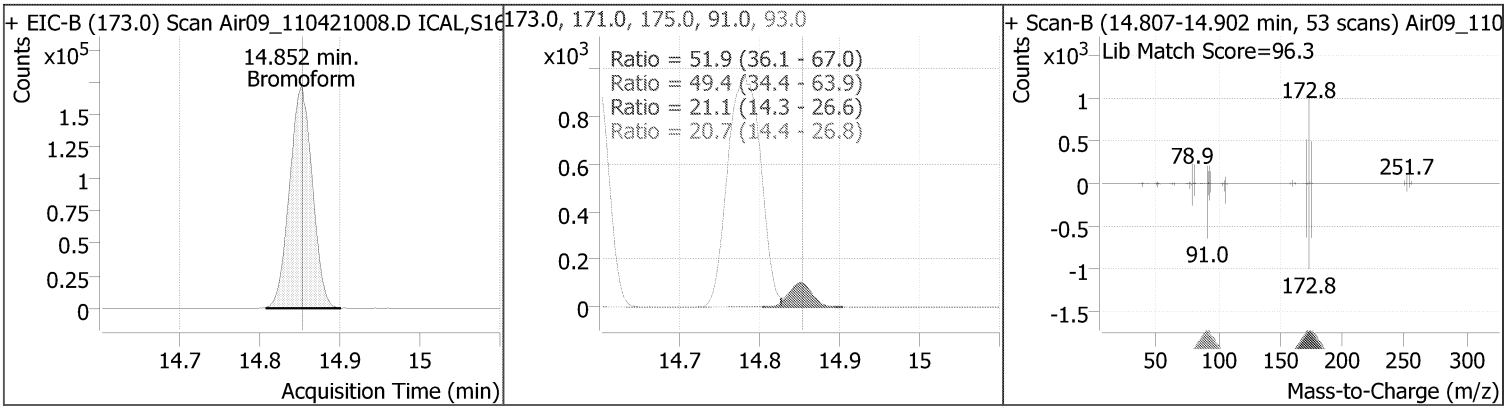
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	5.0285	14.60	0.00	613080	106.0	31.2	22.0	40.8
					65.0	9.6	6.9	12.7



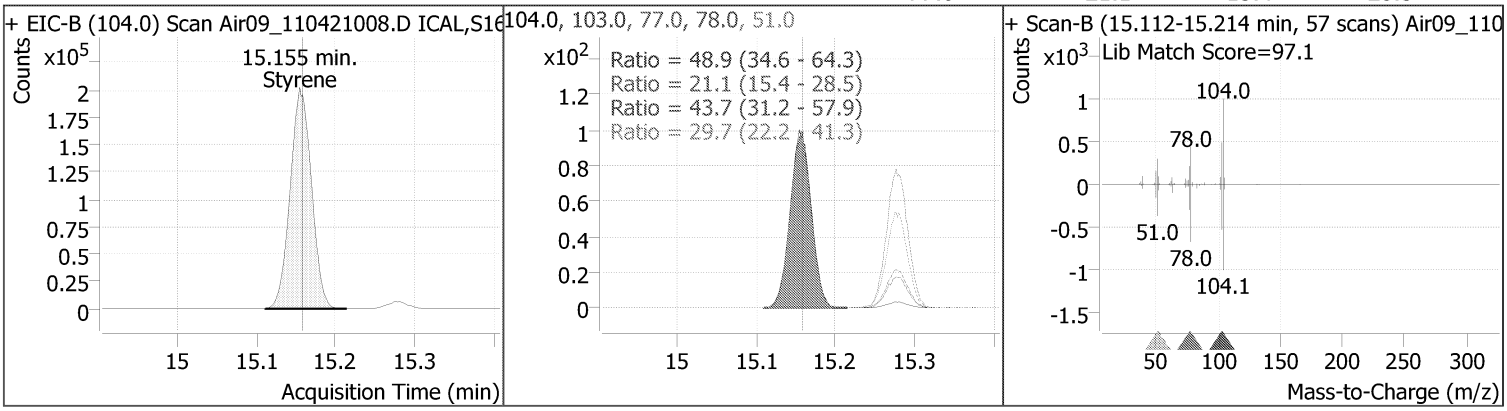
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	11.7990	14.78	0.00	983485	106.0	48.7	34.6	64.2
					105.0	23.0	16.4	30.4



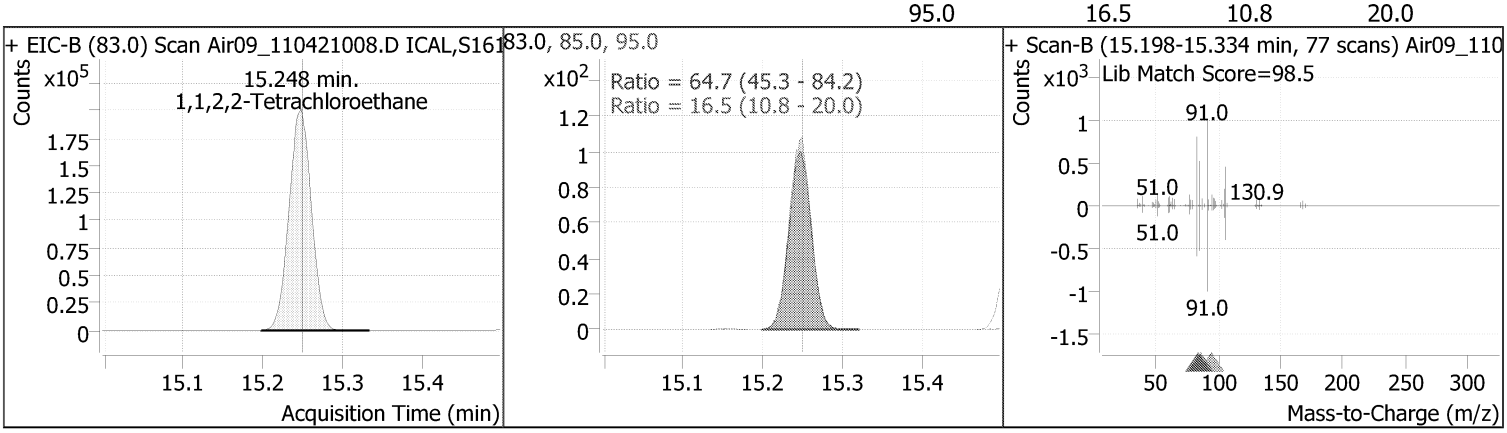
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	5.0626	14.85	0.00	341817	171.0	51.9	36.1	67.0
					175.0	49.4	34.4	63.9
					93.0	20.7	14.4	26.8
					91.0	21.1	14.3	26.6



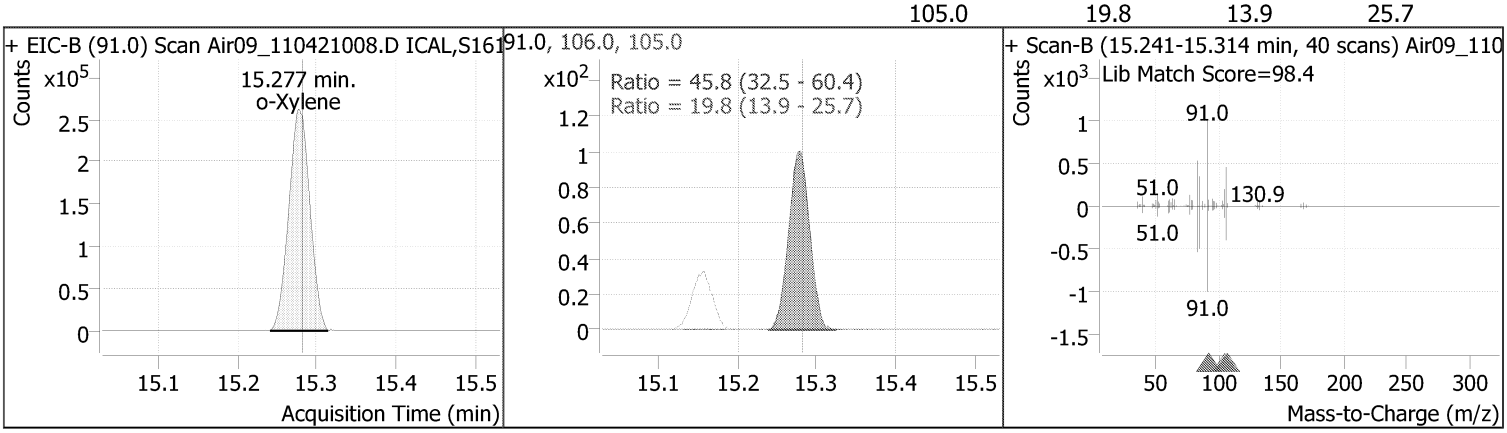
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	5.2579	15.16	0.00	375757	103.0	48.9	34.6	64.3
					78.0	43.7	31.2	57.9
					51.0	29.7	22.2	41.3
					77.0	21.1	15.4	28.5



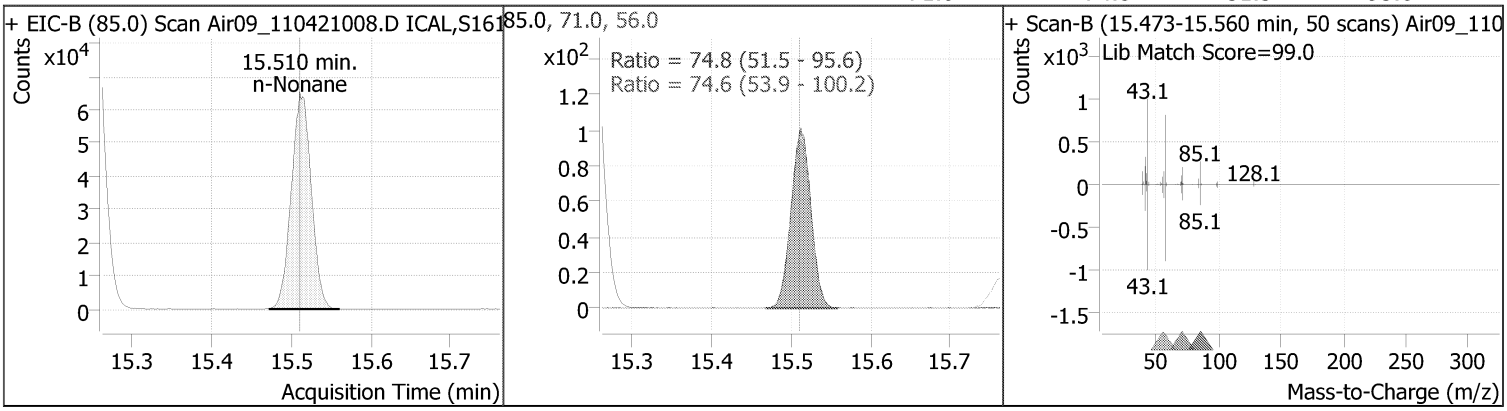
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	4.8347	15.25	0.00	393644	85.0	64.7	45.3	84.2
					95.0	16.5	10.8	20.0



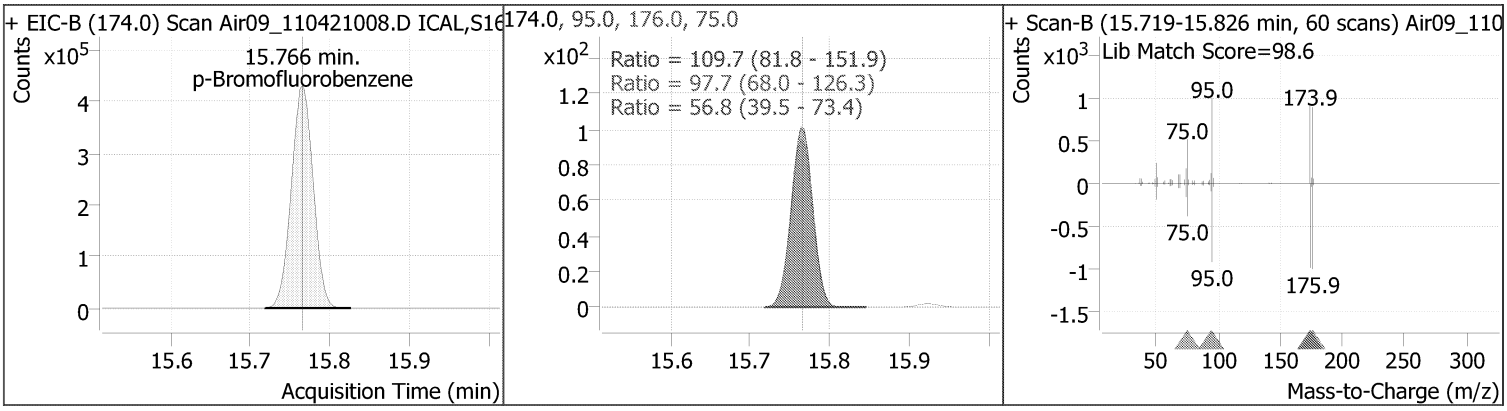
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	5.0515	15.28	0.00	485820	106.0	45.8	32.5	60.4
					105.0	19.8	13.9	25.7



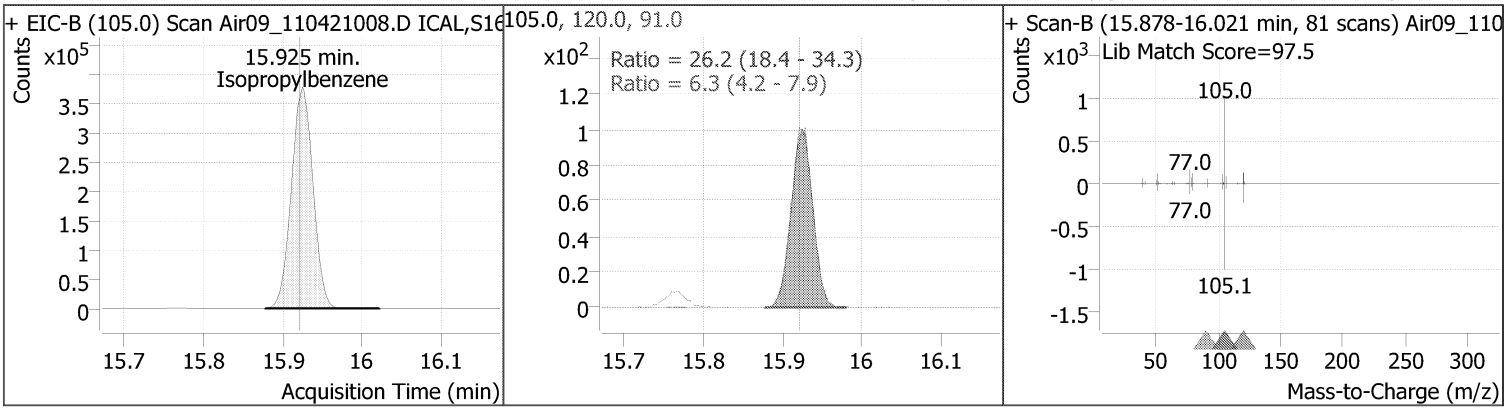
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	5.3231	15.51	0.00	113599	56.0	74.6	53.9	100.2
					71.0	74.8	51.5	95.6



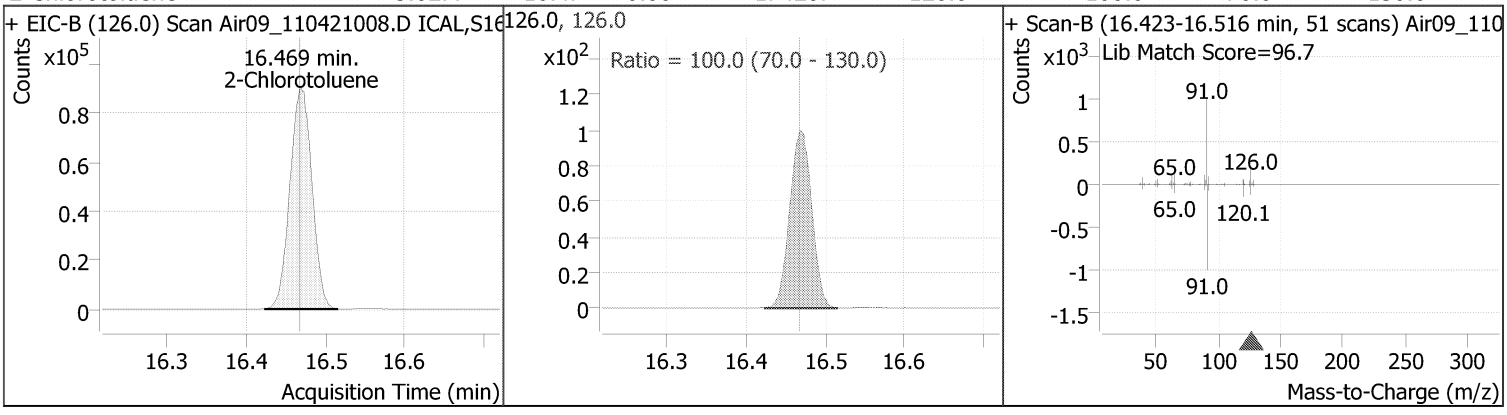
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	9.9938	15.77	0.00	822986	95.0	109.7	81.8	151.9
					176.0	97.7	68.0	126.3
					75.0	56.8	39.5	73.4



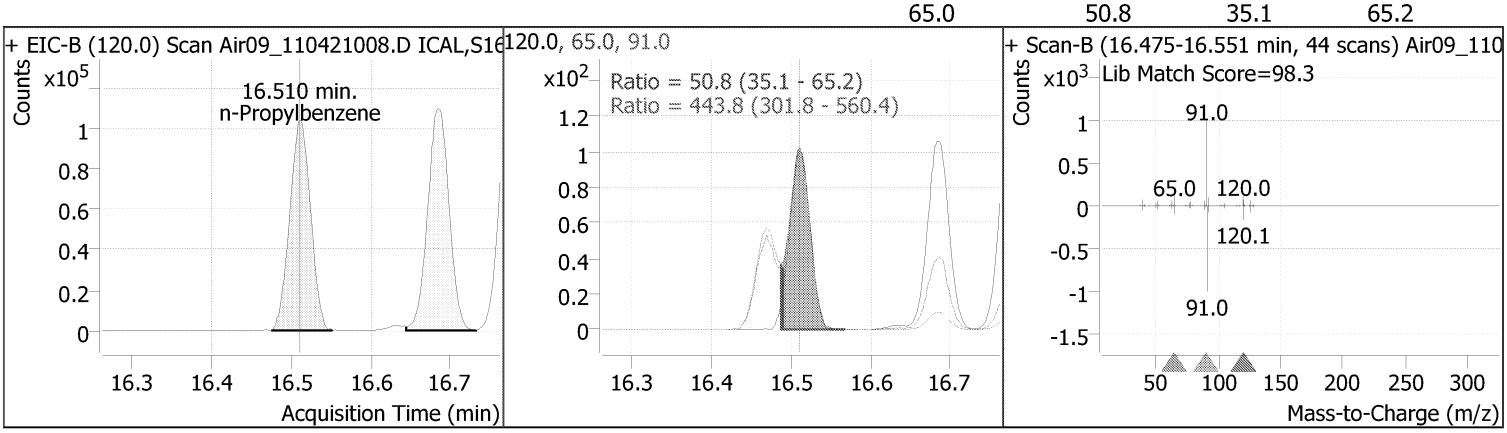
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	4.9052	15.92	0.00	711236	120.0	26.2	18.4	34.3
					91.0	6.3	4.2	7.9



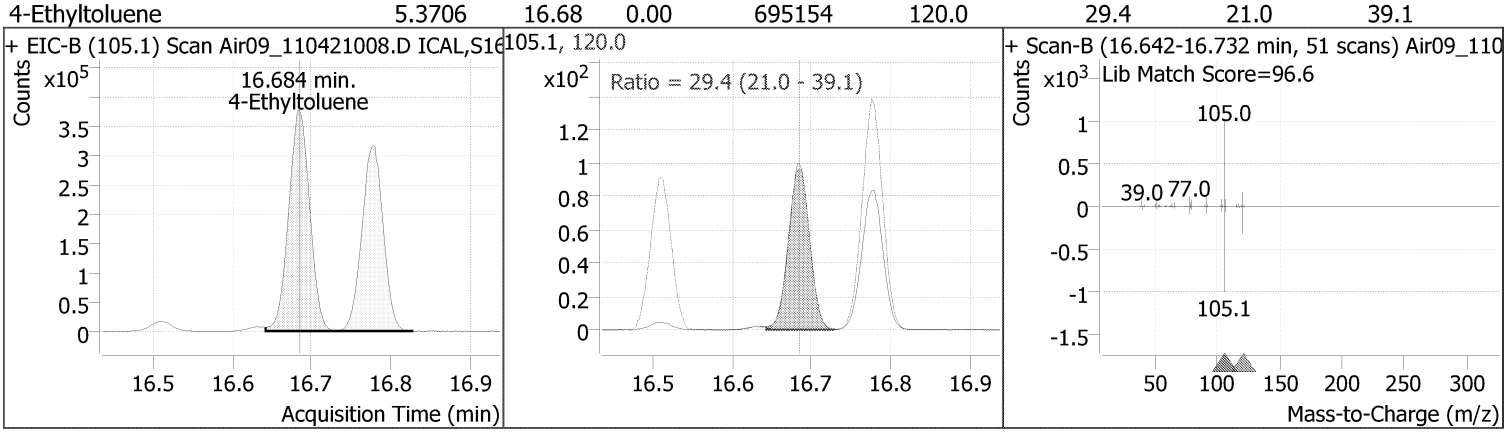
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	5.0277	16.47	0.00	174207	126.0	100.0	70.0	130.0



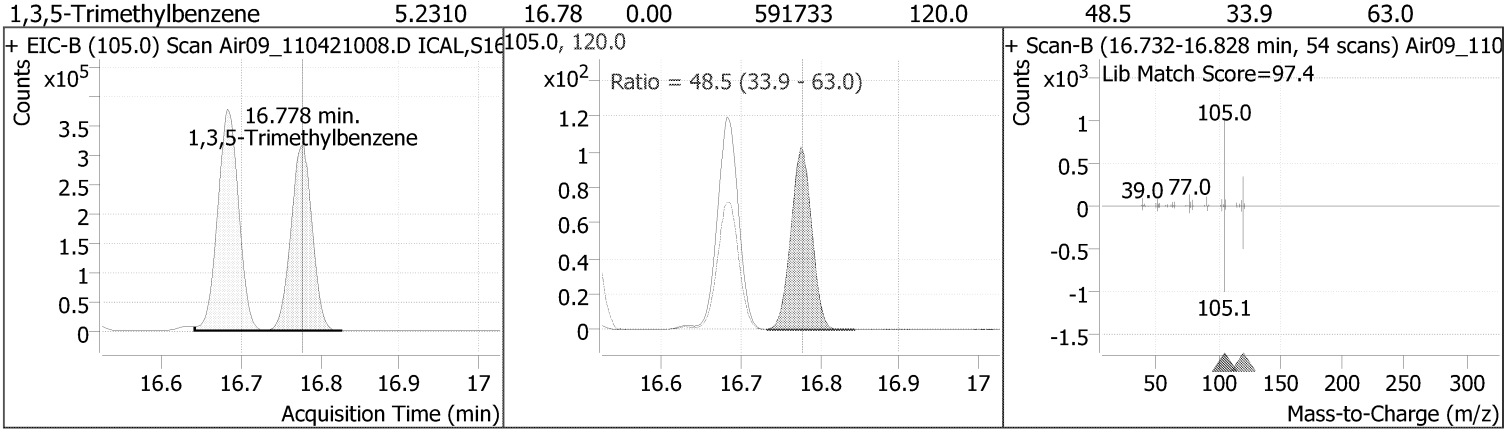
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	4.9932	16.51	0.00	189847	91.0	443.8	301.8	560.4
					65.0	50.8	35.1	65.2



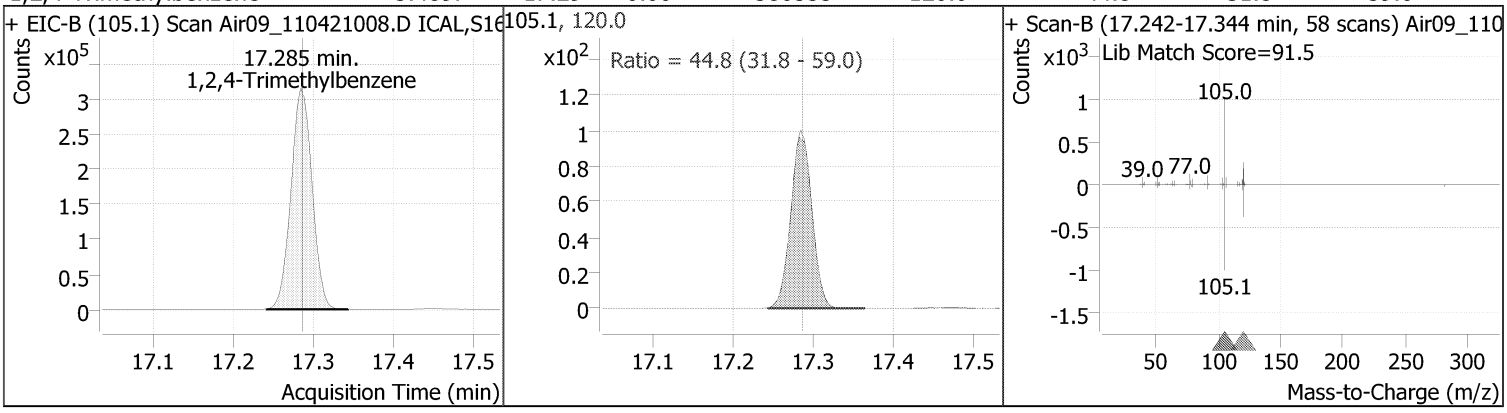
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	5.3706	16.68	0.00	695154	120.0	29.4	21.0	39.1



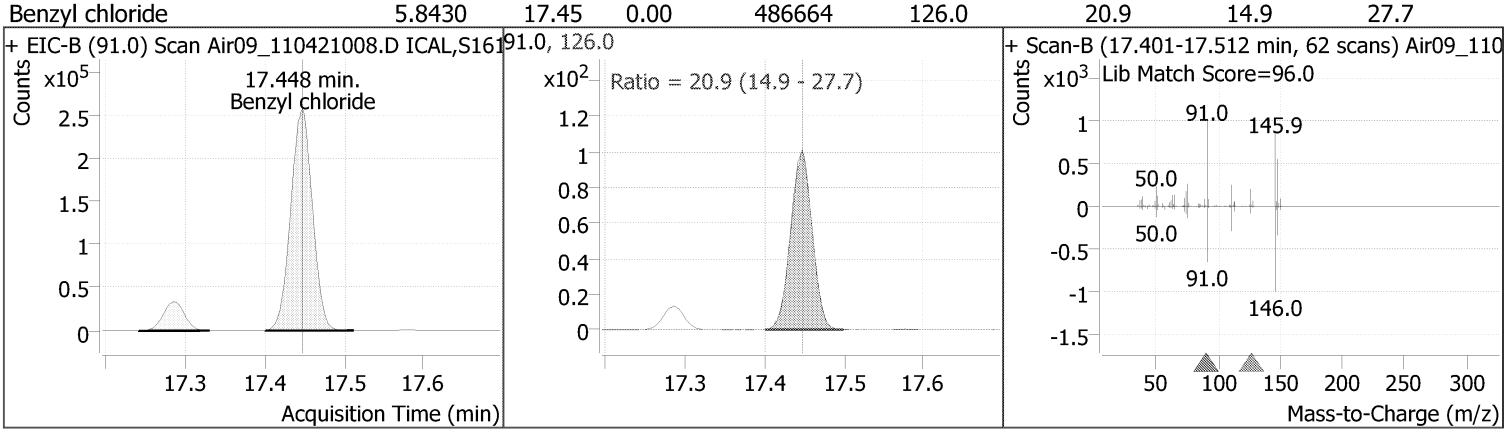
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	5.2310	16.78	0.00	591733	120.0	48.5	33.9	63.0



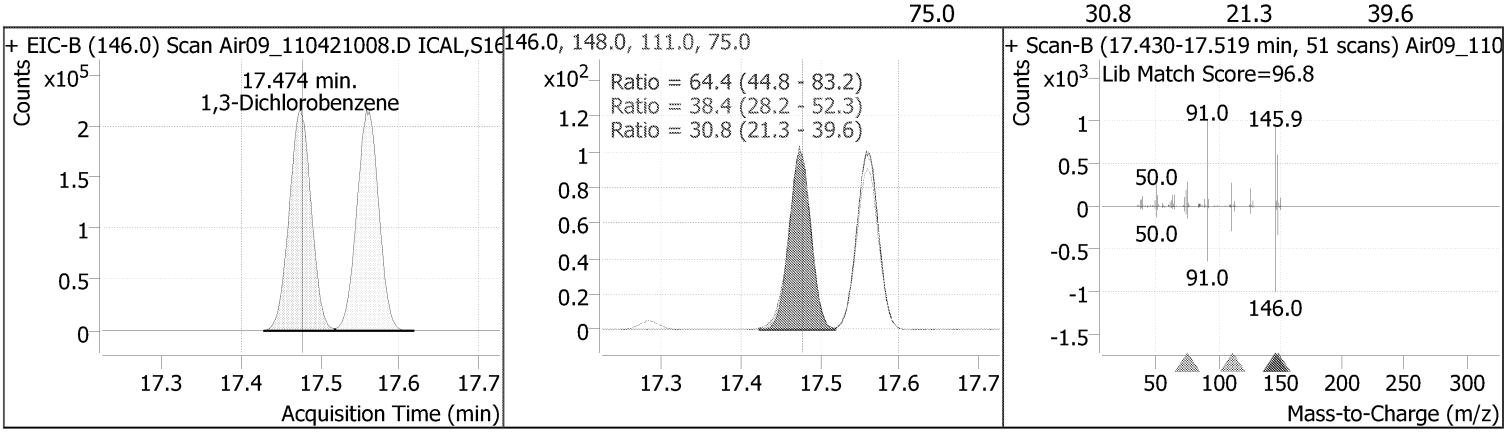
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	5.4897	17.29	0.00	580555	120.0	44.8	31.8	59.0



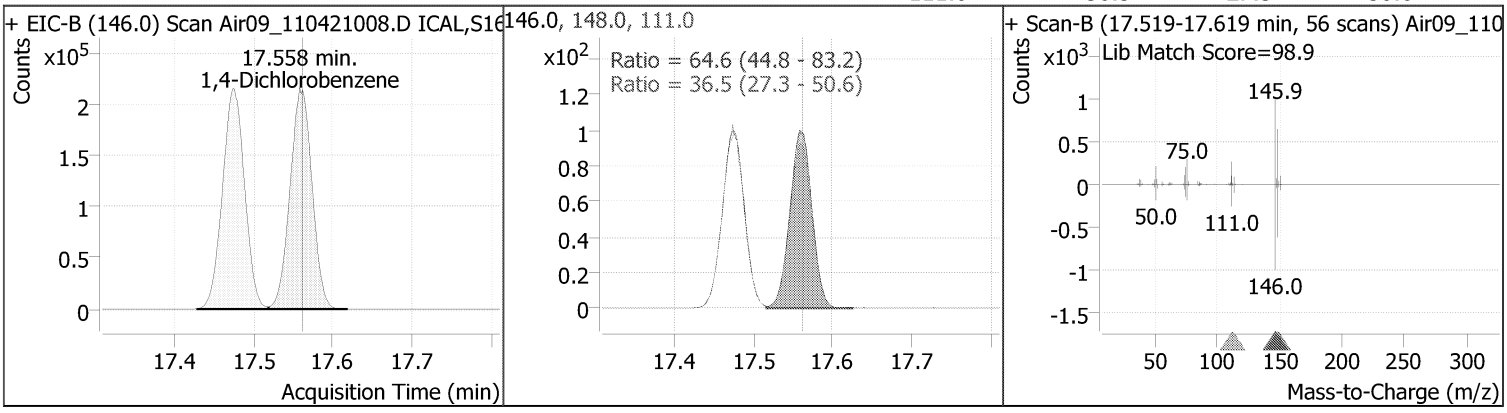
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	5.8430	17.45	0.00	486664	126.0	20.9	14.9	27.7



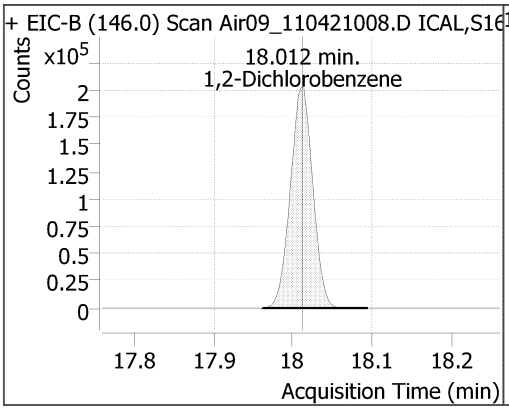
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	5.0560	17.47	0.00	416292	148.0	64.4	44.8	83.2
					111.0	38.4	28.2	52.3
					75.0	30.8	21.3	39.6

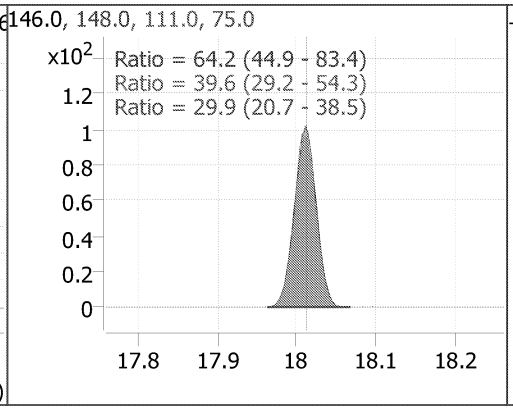


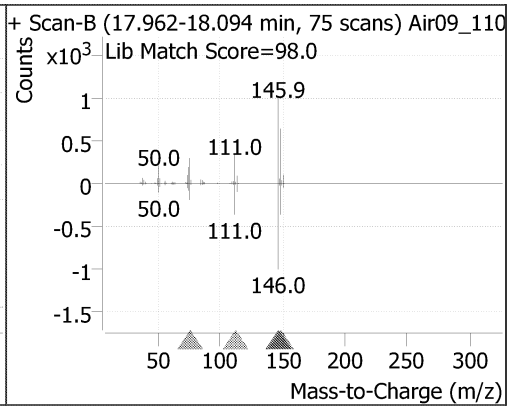
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	5.1500	17.56	0.00	414675	148.0	64.6	44.8	83.2
					111.0	36.5	27.3	50.6



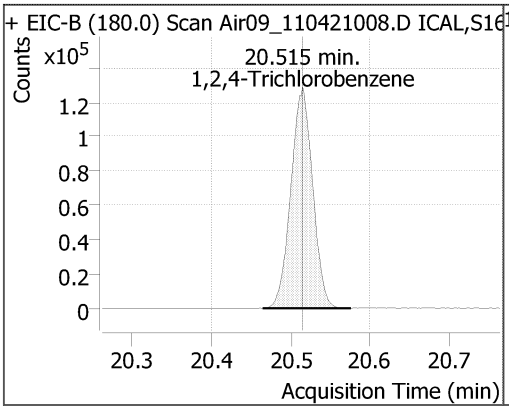
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	5.0977	18.01	0.00	397326	148.0	64.2	44.9	83.4
					111.0	39.6	29.2	54.3
					75.0	29.9	20.7	38.5

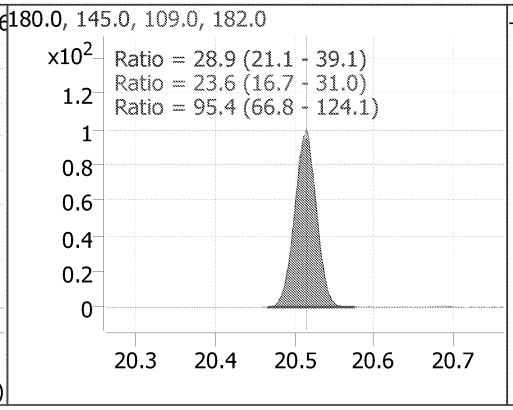


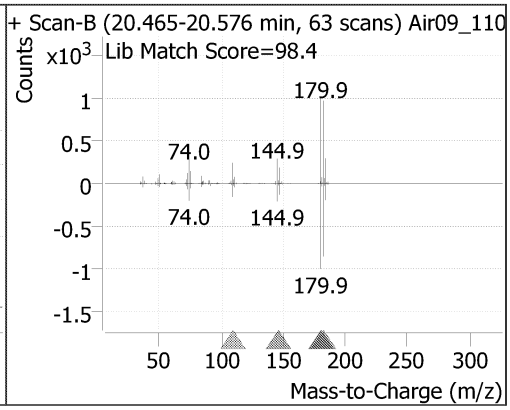




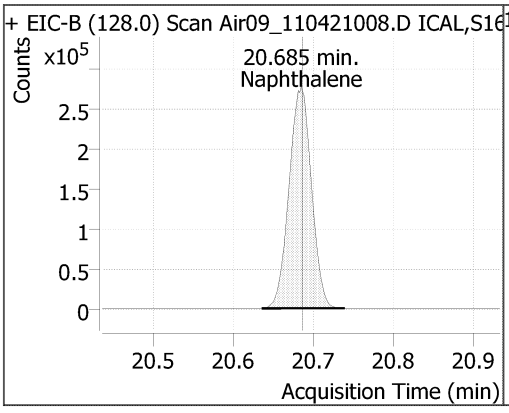
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	6.4655	20.52	0.00	245224	182.0	95.4	66.8	124.1
					145.0	28.9	21.1	39.1
					109.0	23.6	16.7	31.0

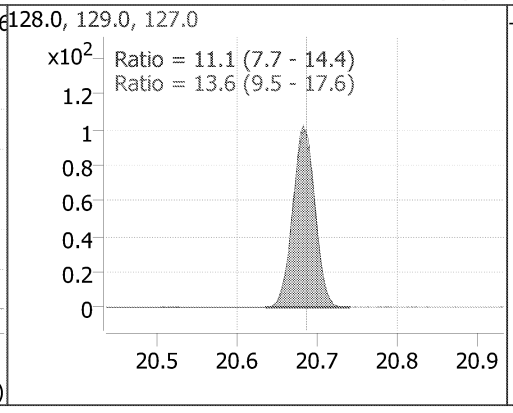


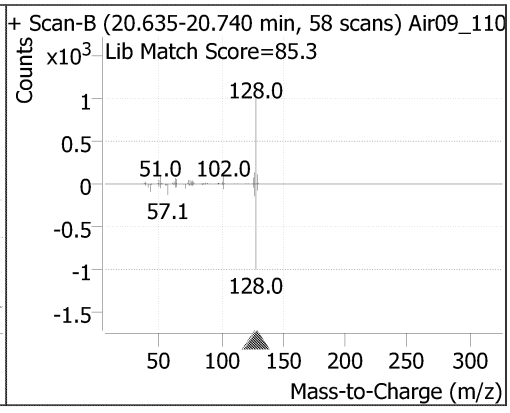




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	7.1085	20.68	0.00	542564	127.0	13.6	9.5	17.6
					129.0	11.1	7.7	14.4

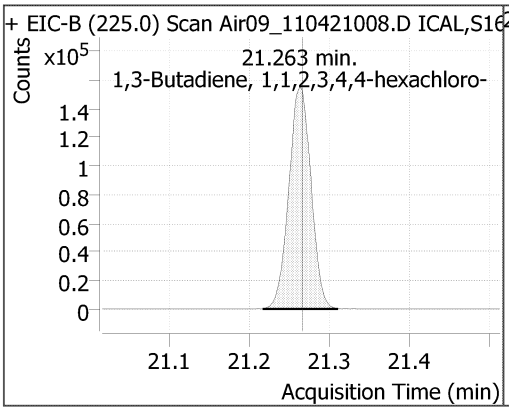


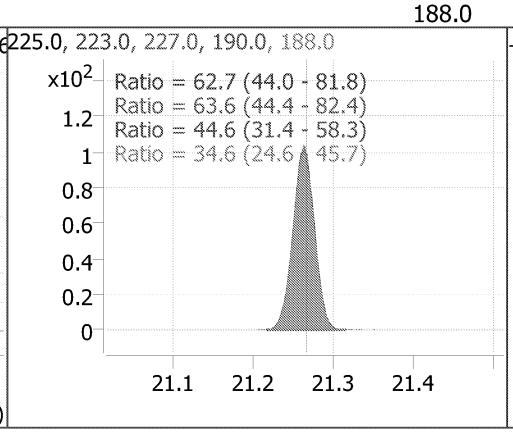


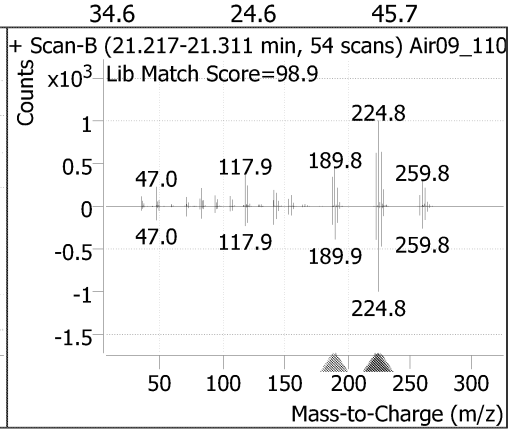


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	4.8234	21.26	0.00	301789	227.0	63.6	44.4	82.4
					223.0	62.7	44.0	81.8
					190.0	44.6	31.4	58.3
					188.0	34.6	24.6	45.7







Quantitation Results Report (Not Reviewed)

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Vial	2	Multiplier	1.00
DA Method File	TO15_SCAN_110421_1.m	Comment	1x100mL
Tune File	bfb.u	Tune Date	11/4/2021 10:42:36 AM
Batch Name	2021 Nov 04 1517 TO15_SCAN_110421_1.m.batch.bin	Last Calib Update	11/4/2021 10:25:58 PM
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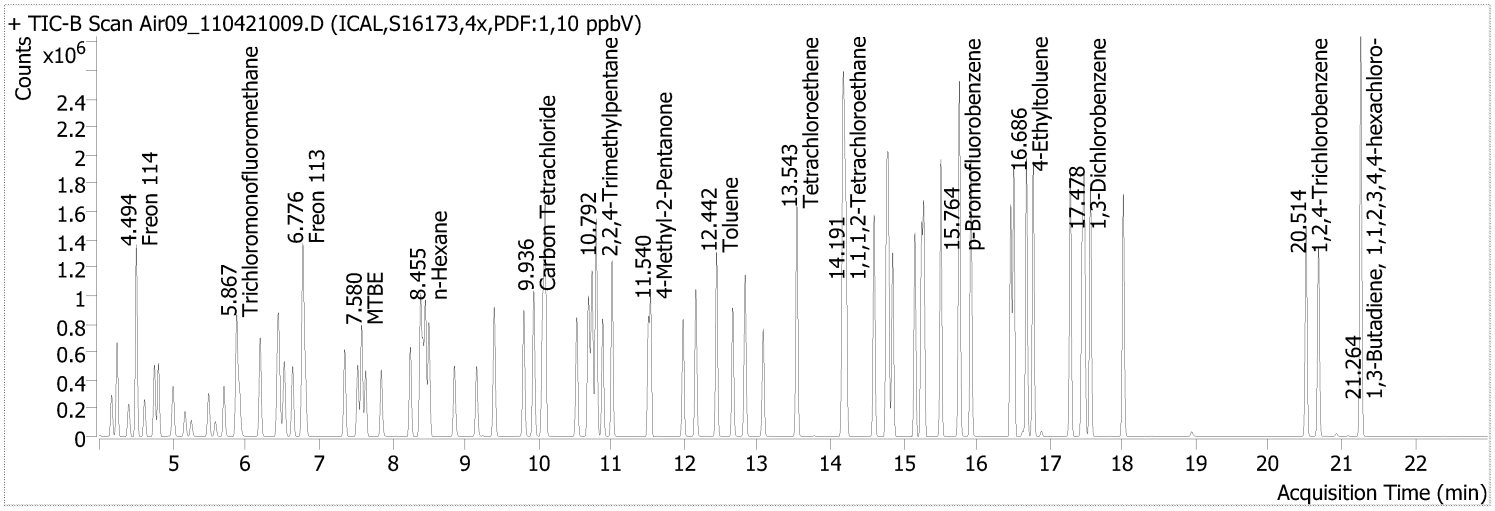


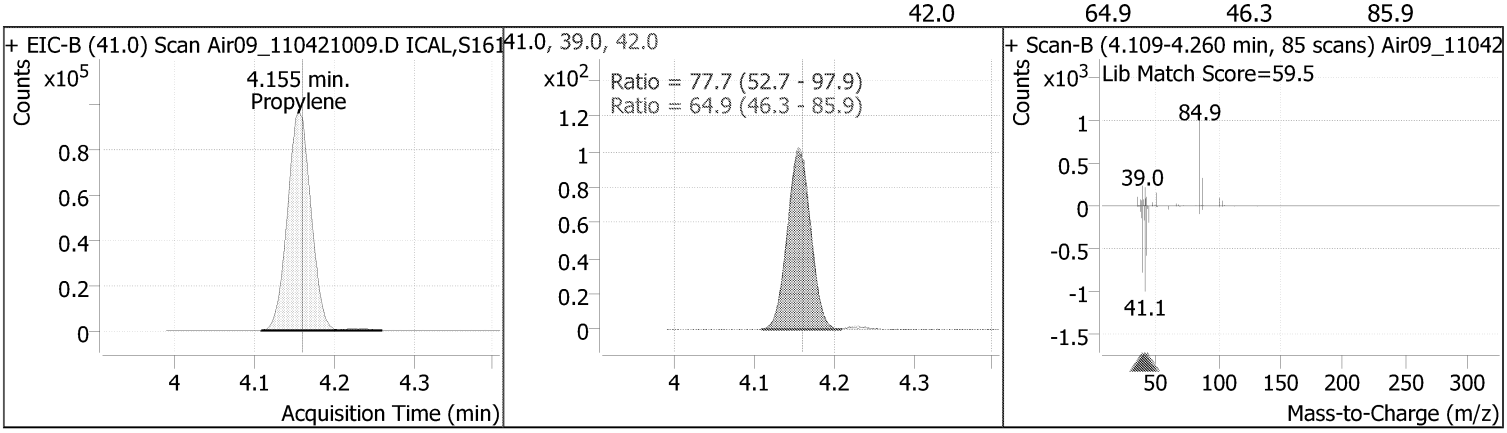
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M Bromochloromethane	8.390	130.0	352446	10.0000	nL/L	0.000
M 1,4-Difluorobenzene	10.094	114.0	1303208	10.0000	nL/L	0.000
M Chlorobenzene-d5	14.170	82.0	712397	10.0000	nL/L	-0.002
System Monitoring Compounds						
S p-Bromofluorobenzene	15.764	174.0	841640	9.8190	nL/L	0.000
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 98.19%		
Target Compounds						QValue
T Propylene	4.155	41.0	200301	9.4467	nL/L	98
T Freon 12	4.232	85.0	670240	9.4912	nL/L	99
T Chloromethane	4.389	50.0	306073	9.7179	nL/L	100
T Freon 114	4.494	135.0	538432	9.4061	nL/L	99
T Vinyl Chloride	4.607	62.0	328953	9.2954	nL/L	100
T 1,3-Butadiene	4.744	54.0	264433	9.3969	nL/L	96
T Butane	4.798	43.0	522478	8.9850	nL/L	99
T Bromomethane	5.001	96.0	266068	9.6215	nL/L	99
T Chloroethane	5.160	64.0	169502	9.0279	nL/L	100
T Ethanol	5.246	45.0	141761	8.8953	nL/L	99
T Vinyl bromide	5.484	108.0	232755	9.6699	nL/L	100
T Acrolein	5.576	56.0	99434	9.9910	nL/L	99
T Acetone	5.696	58.0	125306	9.3050	nL/L	92
T Trichloromonofluoromethane	5.867	101.0	753462	9.4820	nL/L	100
T Isopropanol (IPA)	5.908	45.0	457233	10.7087	nL/L	92
T n-Pentane	6.194	43.0	506886	9.8968	nL/L	100
T 1,1-Dichloroethene	6.430	61.0	497360	9.7007	nL/L	98
T Tert-butyl alcohol (TBA)	6.453	59.0	559658	10.6178	nL/L	96
T Methylene Chloride	6.523	51.0	114678	8.8015	nL/L	94
T 3-Chloropropene	6.637	76.0	109640	10.1928	nL/L	99
T Freon 113	6.776	101.0	584149	9.5261	nL/L	99

Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
T Carbon Disulfide	6.810	76.0	701863	9.7018	nL/L	97
T trans-1,2-Dichloroethene	7.349	61.0	392724	9.6641	nL/L	96
T 1,1-Dichloroethane	7.528	63.0	518757	9.6739	nL/L	100
T MTBE	7.580	73.0	713079	10.2186	nL/L	96
T Vinyl Acetate	7.635	43.0	722670	10.0793	nL/L	99
T 2-Butanone	7.849	72.0	125813	9.9420	nL/L	90
T cis-1,2-Dichloroethene	8.247	61.0	408530	9.8209	nL/L	96
T Ethyl Acetate	8.419	61.0	96800	10.1724	nL/L	99
T n-Hexane	8.455	57.0	449099	10.0559	nL/L	97
T Chloroform	8.501	83.0	598423	9.6250	nL/L	99
T Tetrahydrofuran	8.853	72.0	117947	10.3268	nL/L	99
T 1,2-Dichloroethane	9.156	62.0	425234	9.5145	nL/L	98
T 1,1,1-Trichloroethane	9.397	97.0	586613	9.7344	nL/L	99
T Benzene	9.801	78.0	784560	9.6649	nL/L	100
T Carbon Tetrachloride	9.936	117.0	622529	9.9434	nL/L	99
T TPH Gasoline (C3 to C12)	9.997	0.0	89690161	18.8328	nL/L	100
T Cyclohexane	10.061	84.0	324089	8.9681	nL/L	94
T 1,2-Dichloropropane	10.526	63.0	333258	9.6490	nL/L	98
T Methane, bromodichloro-	10.685	83.0	616231	9.8265	nL/L	100
T 1,4-Dioxane	10.708	88.0	176931	10.1106	nL/L	93
T Trichloroethene	10.738	132.0	366156	9.8552	nL/L	99
T 2,2,4-Trimethylpentane	10.792	56.0	444689	9.8757	nL/L	98
T Methyl methacrylate	10.881	69.0	296689	10.4648	nL/L	97
T n-Heptane	11.010	71.0	276112	10.3053	nL/L	96
T cis-1,3-Dichloropropene	11.506	110.0	101891	9.9547	nL/L	96
T 4-Methyl-2-Pentanone	11.540	58.0	238414	9.7518	nL/L	94
T trans-1,3-Dichloropropene	11.984	110.0	108945	10.5987	nL/L	96
T 1,1,2-Trichloroethane	12.158	97.0	342690	9.7380	nL/L	99
T Toluene	12.442	91.0	1003356	10.1563	nL/L	99
T 2-Hexanone	12.661	58.0	351204	11.0772	nL/L	99
T Dibromochloromethane	12.833	129.0	656823	10.1372	nL/L	100
T 1,2-Dibromoethane	13.081	108.9	536345	10.1026	nL/L	99
T Tetrachloroethene	13.543	166.0	527117	9.9605	nL/L	98
T 1,1,1,2-Tetrachloroethane	14.191	131.0	439802	9.5370	nL/L	98
T Benzene, chloro-	14.216	112.0	795326	9.4016	nL/L	100
T Ethylbenzene	14.598	91.0	1262790	9.9321	nL/L	100
T m,p-Xylenes	14.788	91.0	2035317	22.8361	nL/L	99
T Bromoform	14.854	173.0	727301	10.2713	nL/L	100
T Styrene	15.157	104.0	784001	10.4323	nL/L	98
T 1,1,2,2-Tetrachloroethane	15.248	83.0	811114	9.6049	nL/L	99
T o-Xylene	15.280	91.0	1021029	10.1446	nL/L	99
T n-Nonane	15.514	85.0	236990	10.5410	nL/L	97
T Isopropylbenzene	15.925	105.0	1458189	9.6836	nL/L	100
T 2-Chlorotoluene	16.470	126.0	368715	10.1648	nL/L	100
T n-Propylbenzene	16.512	120.0	396686	9.9944	nL/L	95
T 4-Ethyltoluene	16.686	105.1	1432727	10.5119	nL/L	100
T 1,3,5-Trimethylbenzene	16.780	105.0	1222236	10.2980	nL/L	100
T 1,2,4-Trimethylbenzene	17.289	105.1	1205063	10.7739	nL/L	100
T Benzyl chloride	17.450	91.0	1070791	11.9202	nL/L	99
T 1,3-Dichlorobenzene	17.478	146.0	867210	10.0759	nL/L	99
T 1,4-Dichlorobenzene	17.560	146.0	866389	10.2616	nL/L	98
T 1,2-Dichlorobenzene	18.010	146.0	833585	10.2085	nL/L	99
T 1,2,4-Trichlorobenzene	20.514	180.0	571519	13.5738	nL/L	99
T Naphthalene	20.683	128.0	1258700	14.5881	nL/L	100
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.264	225.0	654607	10.0184	nL/L	100

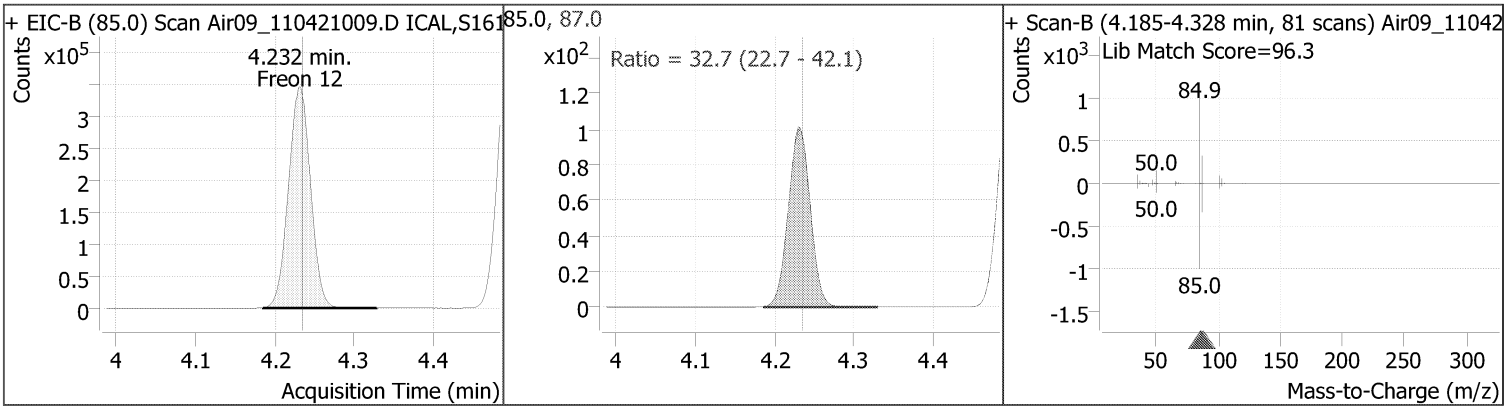
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

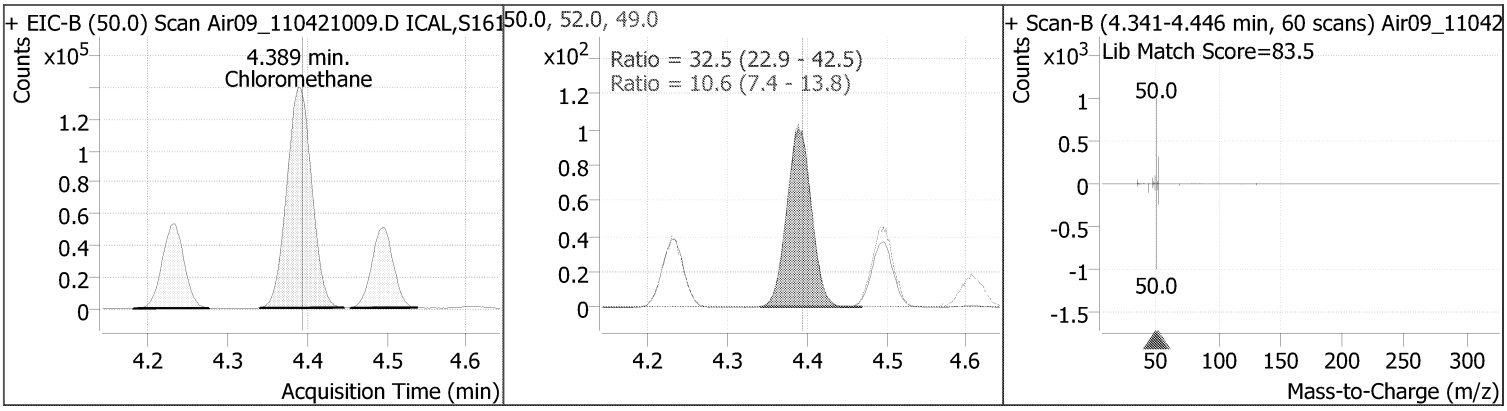
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	9.4467	4.16	0.00	200301	39.0	77.7	52.7	97.9
					42.0	64.9	46.3	85.9



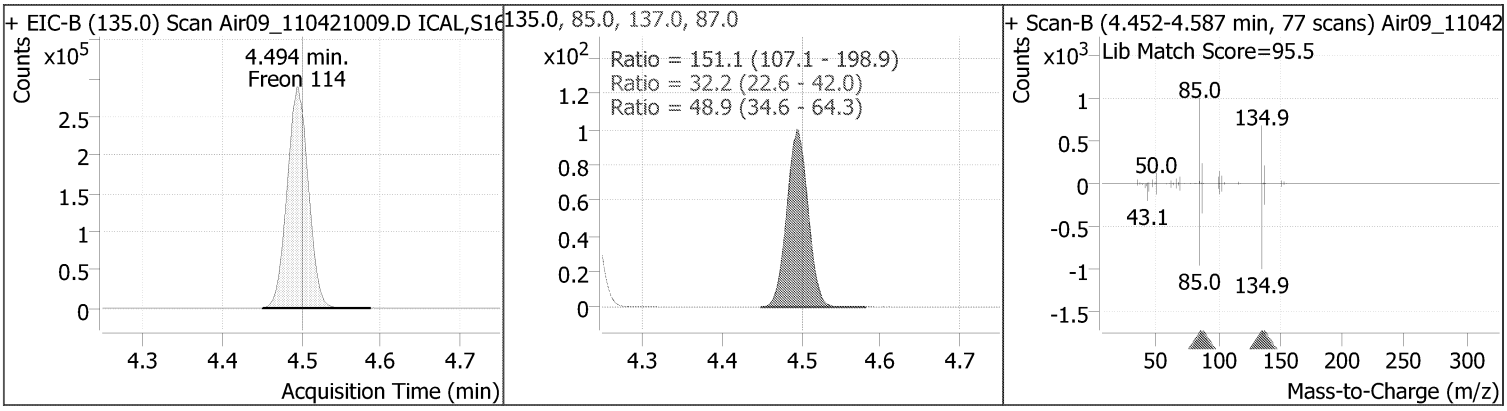
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	9.4912	4.23	0.00	670240	87.0	32.7	22.7	42.1



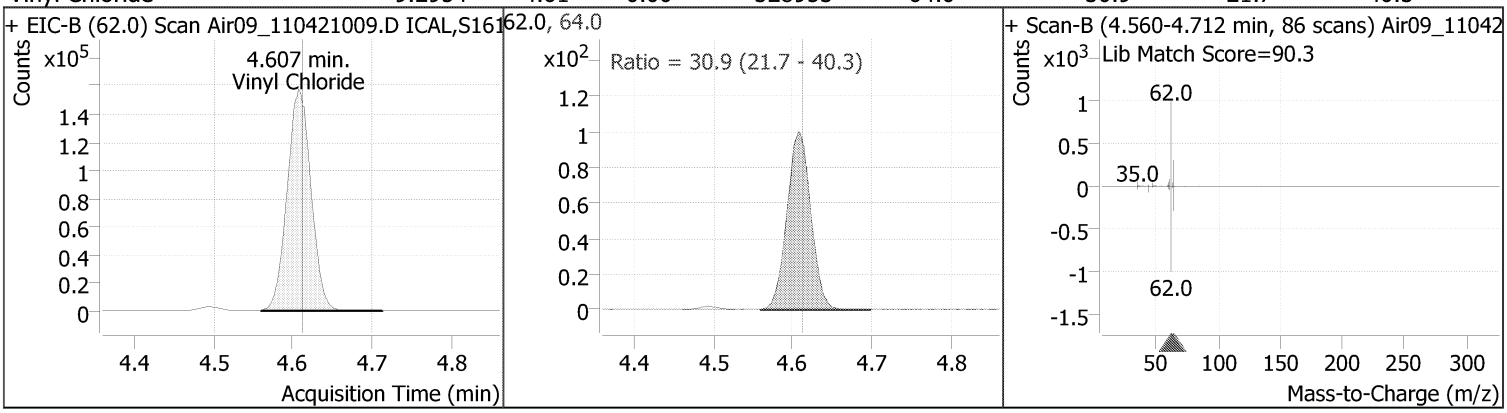
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	9.7179	4.39	0.00	306073	52.0	32.5	22.9	42.5
					49.0	10.6	7.4	13.8



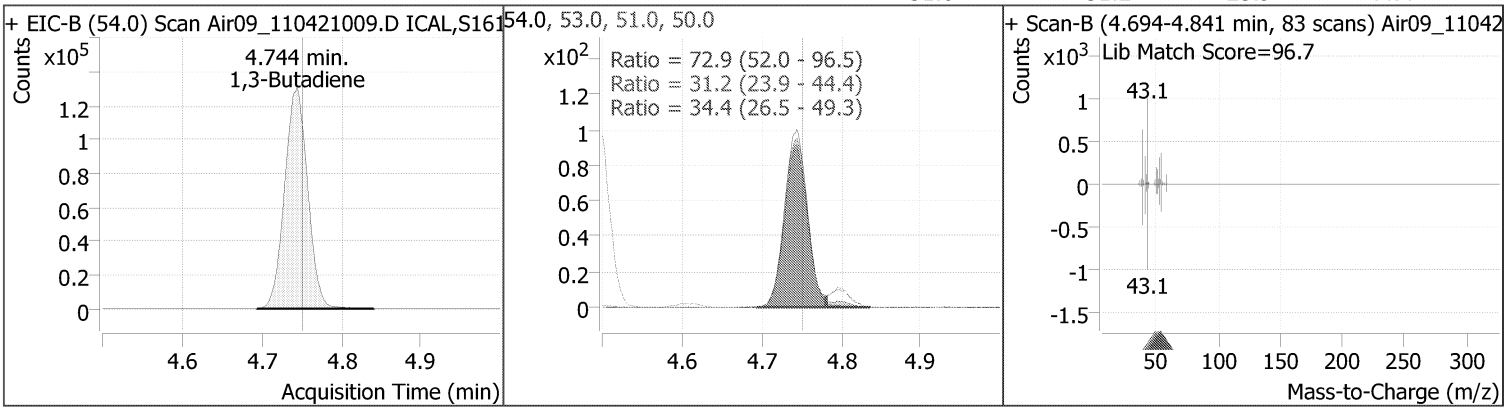
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	9.4061	4.49	-0.01	538432	85.0	151.1	107.1	198.9
					87.0	48.9	34.6	64.3
					137.0	32.2	22.6	42.0



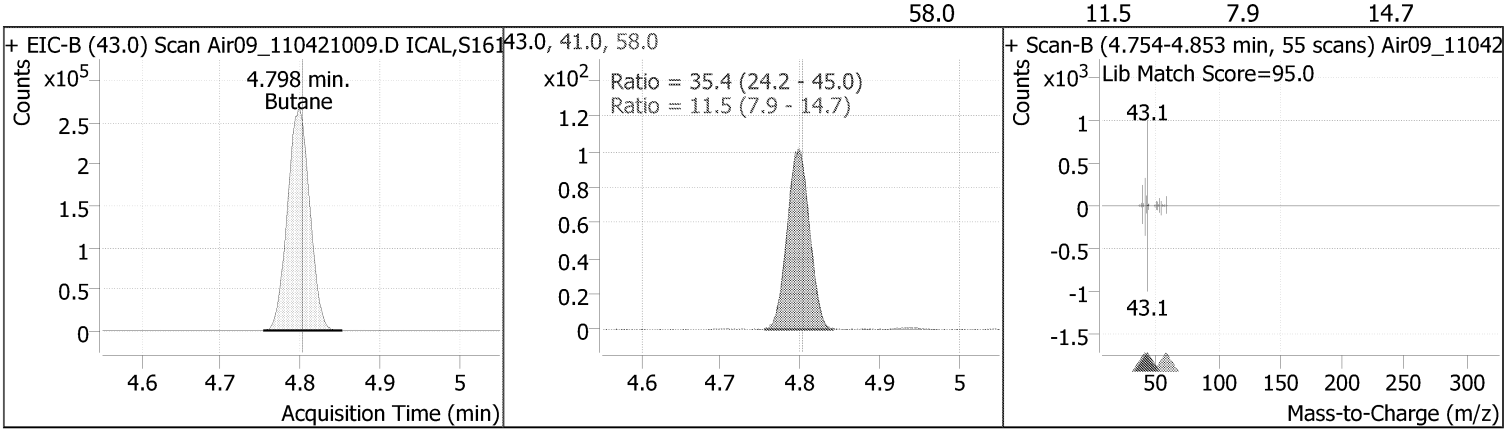
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	9.2954	4.61	0.00	328953	64.0	30.9	21.7	40.3



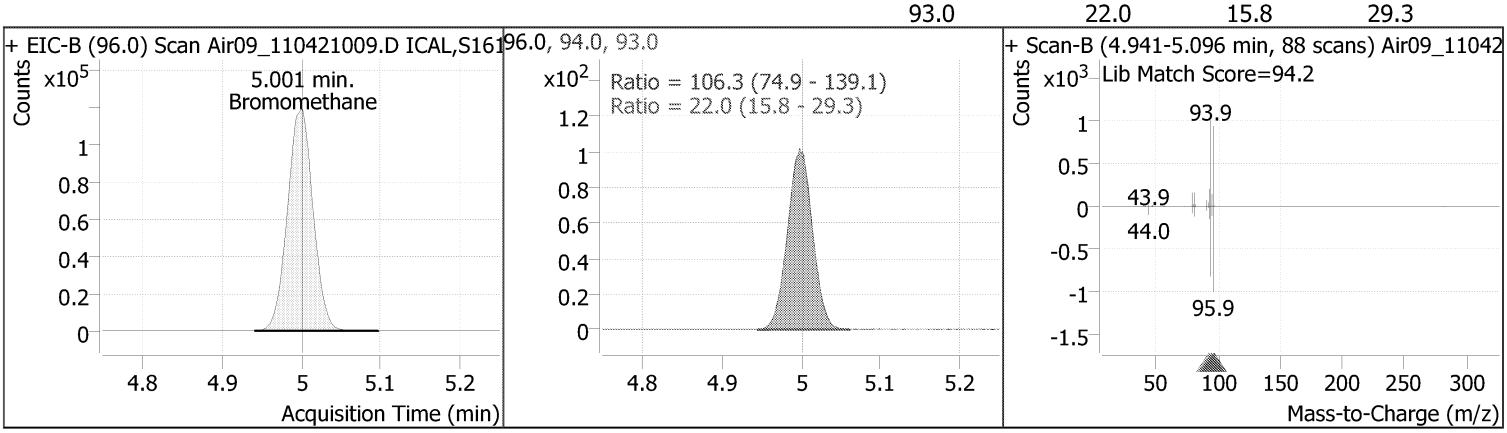
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	9.3969	4.74	-0.01	264433	53.0	72.9	52.0	96.5
					50.0	34.4	26.5	49.3
					51.0	31.2	23.9	44.4



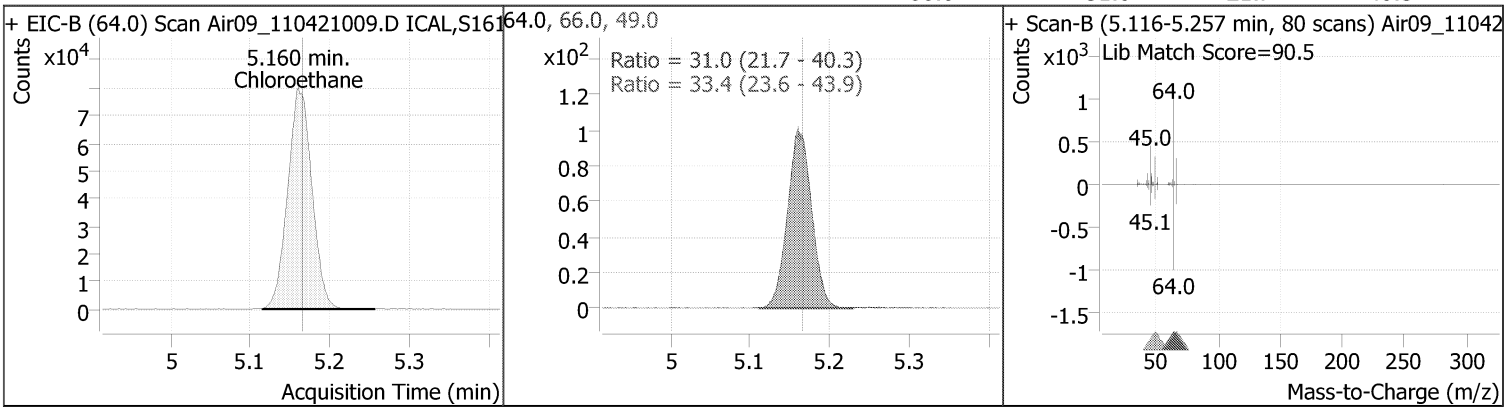
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	8.9850	4.80	0.00	522478	41.0	35.4	24.2	45.0
					58.0	11.5	7.9	14.7



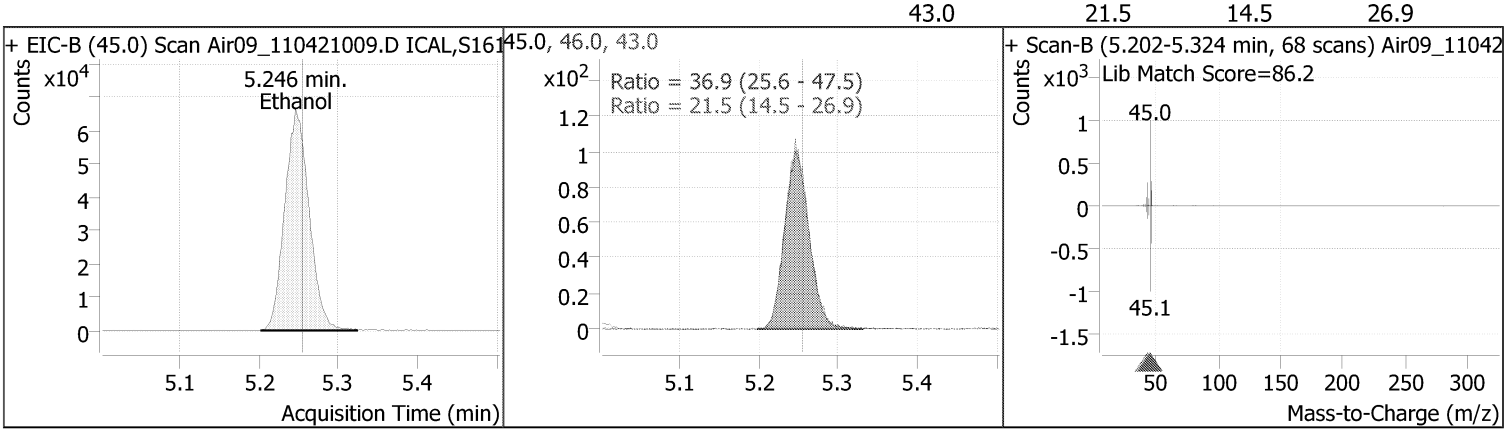
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromomethane	9.6215	5.00	0.00	266068	94.0	106.3	74.9	139.1
					93.0	22.0	15.8	29.3



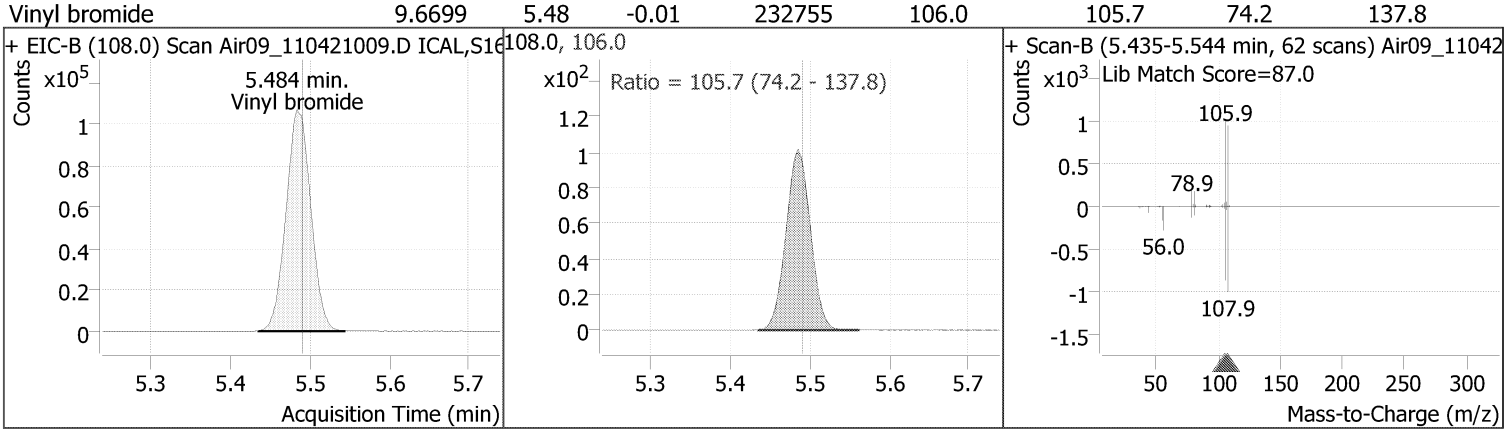
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	9.0279	5.16	0.00	169502	49.0	33.4	23.6	43.9
					66.0	31.0	21.7	40.3



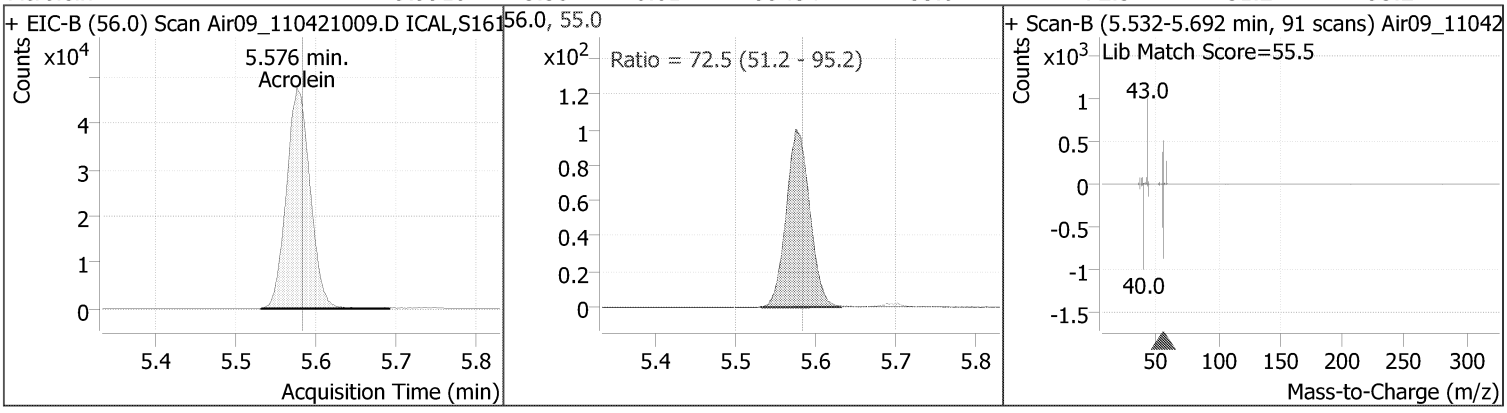
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	8.8953	5.25	-0.01	141761	46.0	36.9	25.6	47.5
					43.0	21.5	14.5	26.9



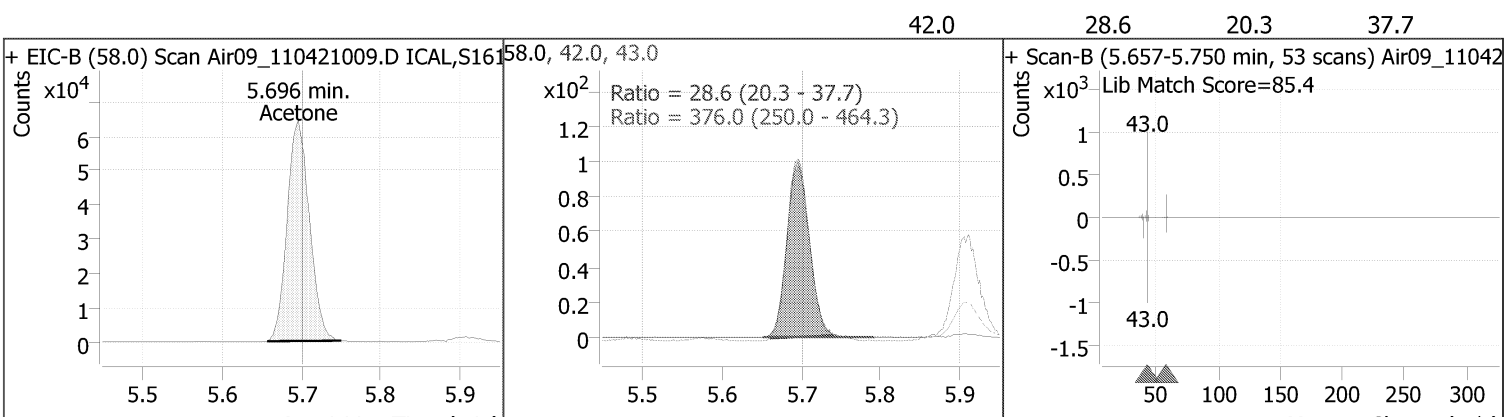
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl bromide	9.6699	5.48	-0.01	232755	106.0	105.7	74.2	137.8



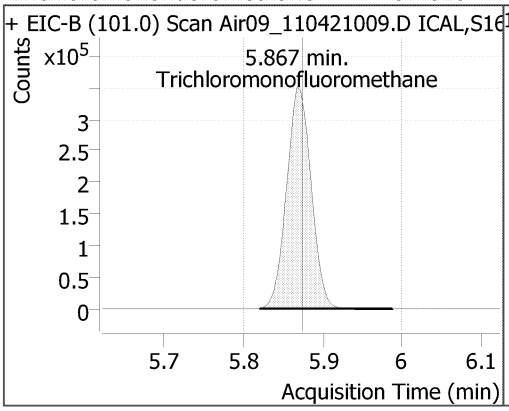
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	9.9910	5.58	-0.01	99434	55.0	72.5	51.2	95.2

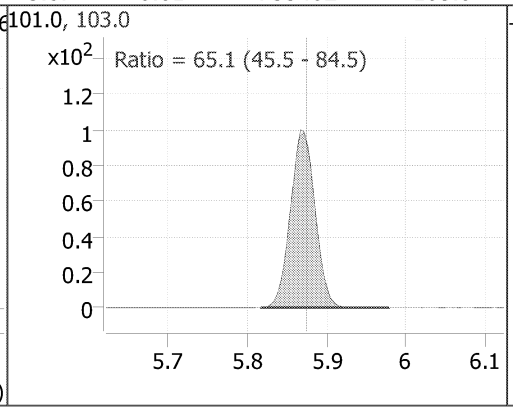


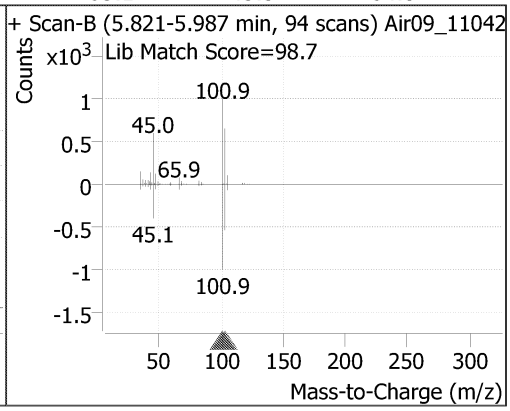
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	9.3050	5.70	0.00	125306	43.0	376.0	250.0	464.3
					42.0	28.6	20.3	37.7



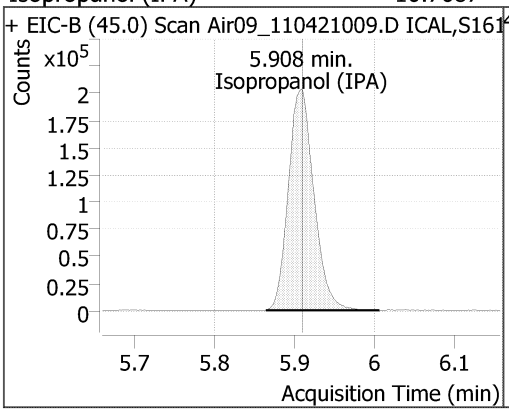
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	9.4820	5.87	-0.01	753462	103.0	65.1	45.5	84.5

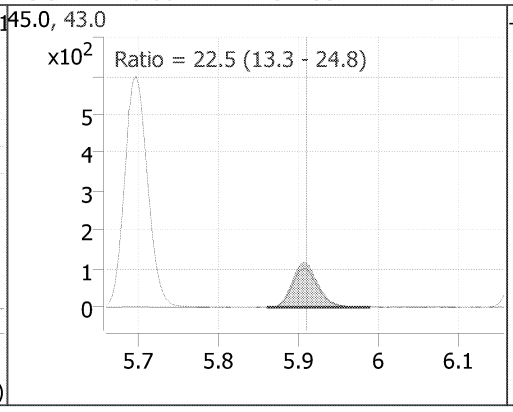


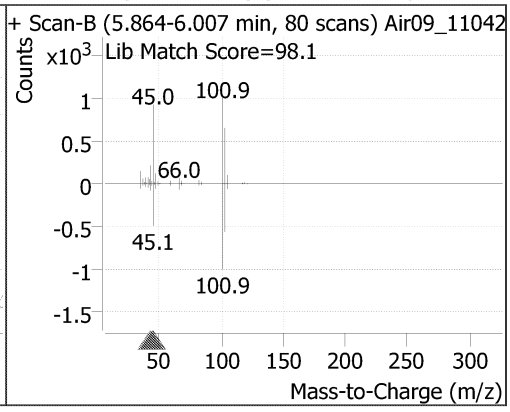




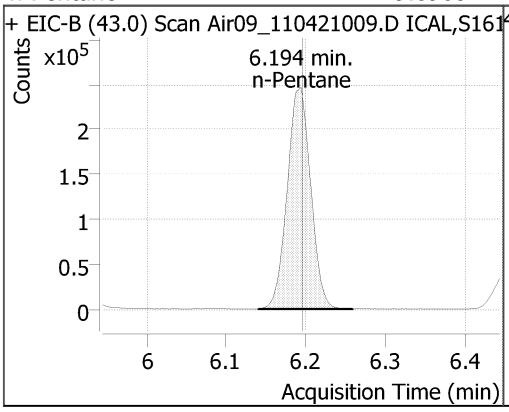
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	10.7087	5.91	0.00	457233	43.0	22.5	13.3	24.8

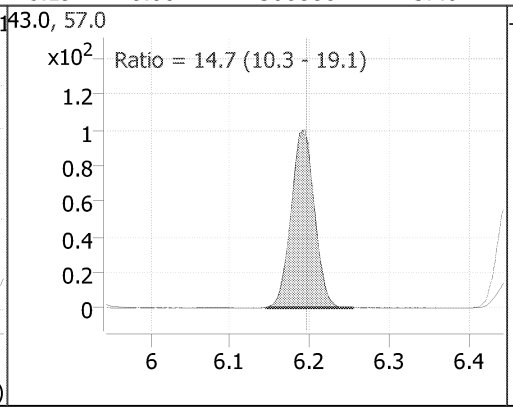


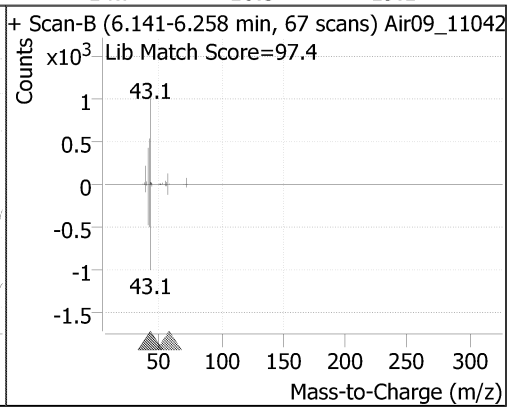




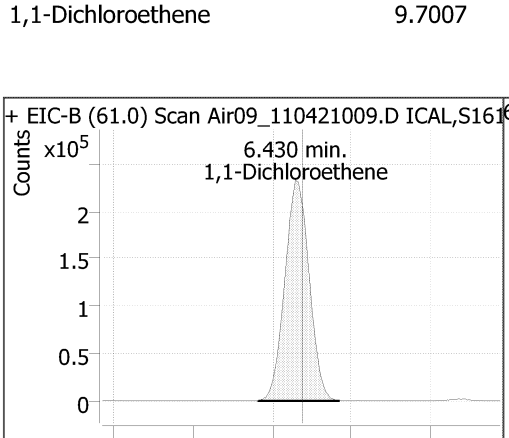
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	9.8968	6.19	0.00	506886	57.0	14.7	10.3	19.1

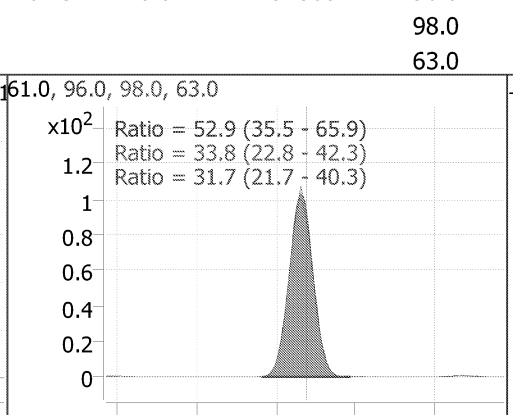


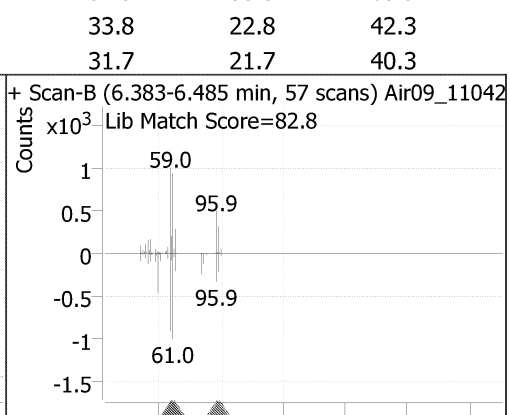




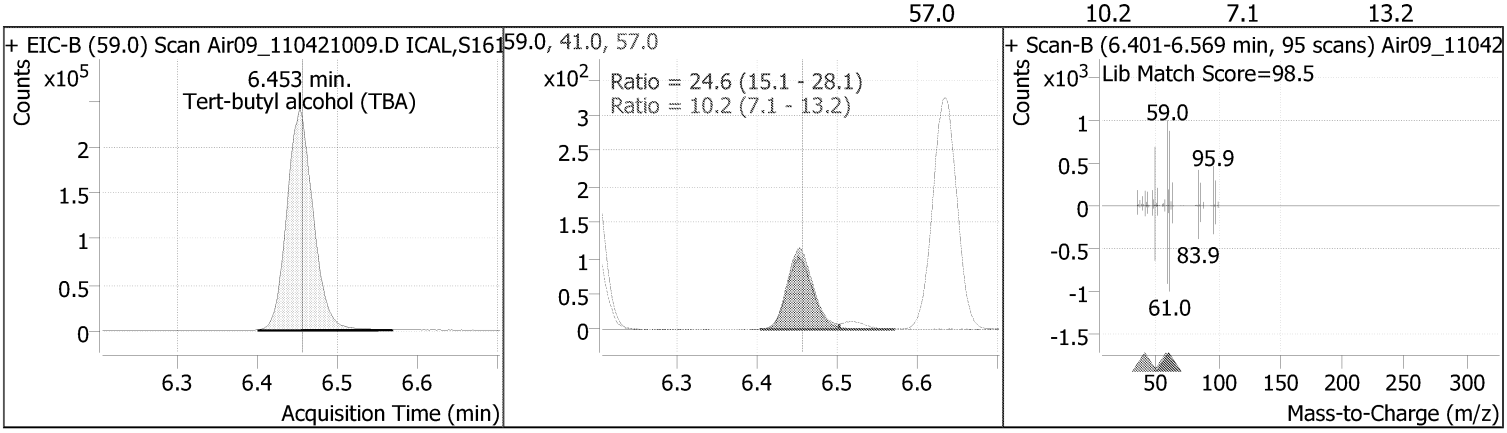
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	9.7007	6.43	-0.01	497360	96.0	52.9	35.5	65.9
					98.0	33.8	22.8	42.3
					63.0	31.7	21.7	40.3



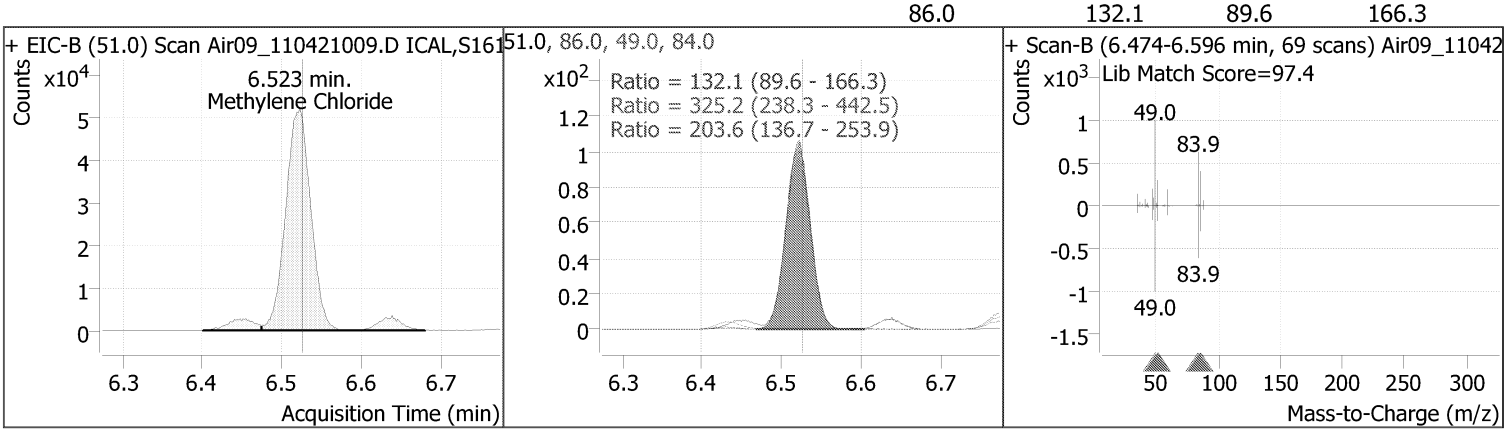




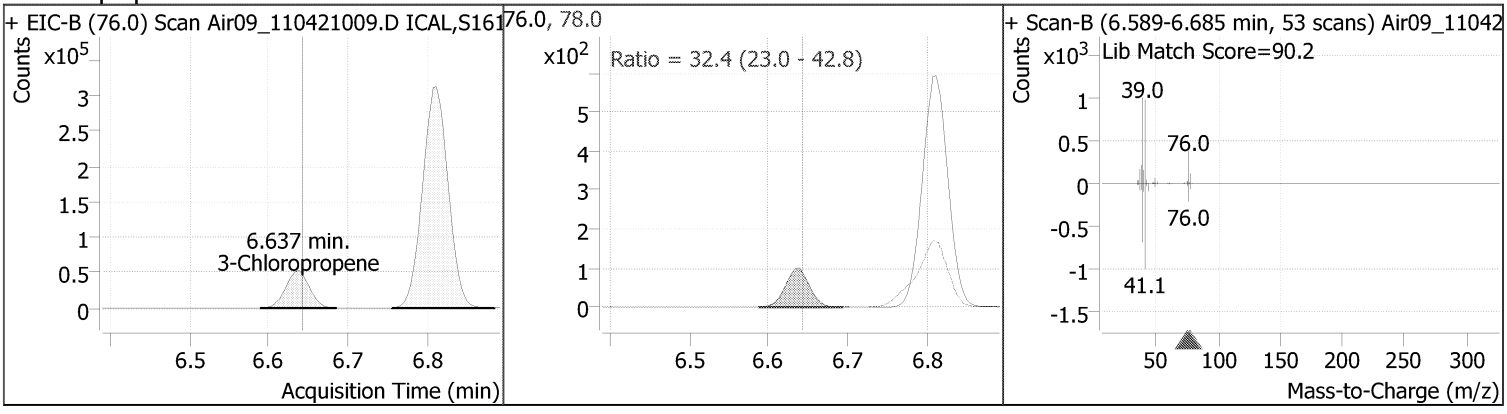
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	10.6178	6.45	0.00	559658	41.0	24.6	15.1	28.1
					57.0	10.2	7.1	13.2



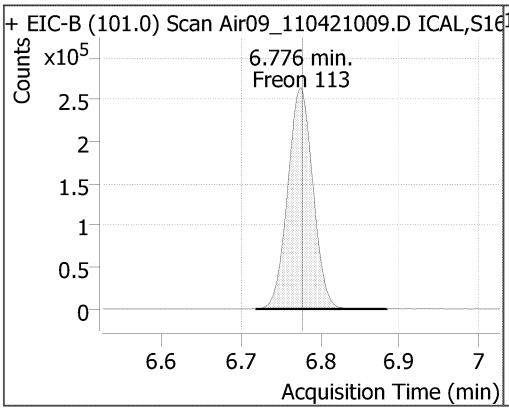
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	8.8015	6.52	0.00	114678	49.0	325.2	238.3	442.5
					84.0	203.6	136.7	253.9
					86.0	132.1	89.6	166.3

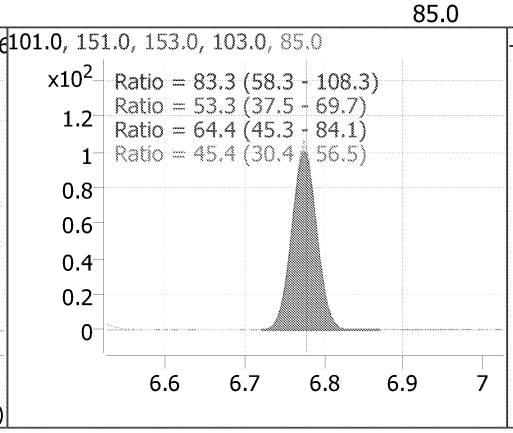


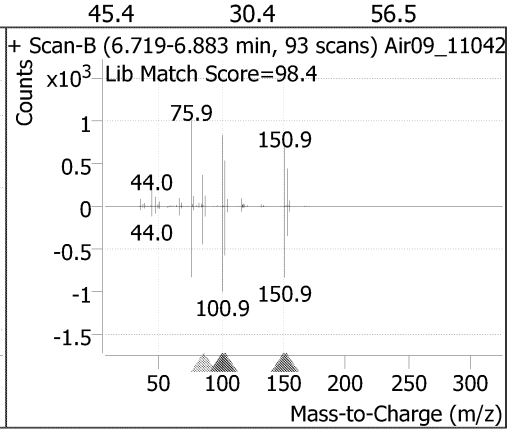
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	10.1928	6.64	0.00	109640	78.0	32.4	23.0	42.8



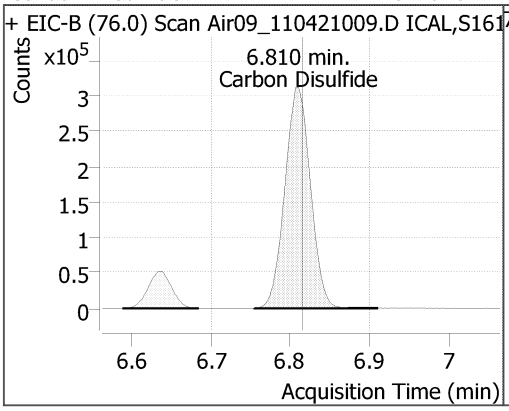
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	9.5261	6.78	0.00	584149	151.0	83.3	58.3	108.3
					103.0	64.4	45.3	84.1
					153.0	53.3	37.5	69.7
					85.0	45.4	30.4	56.5

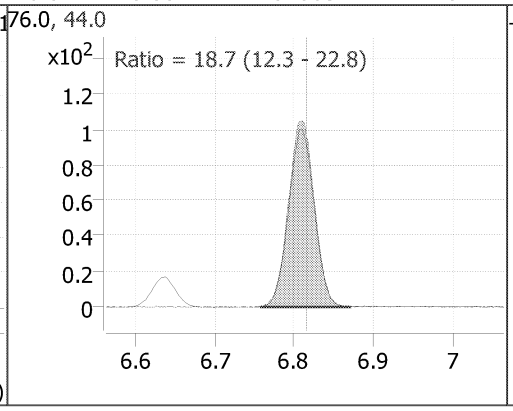


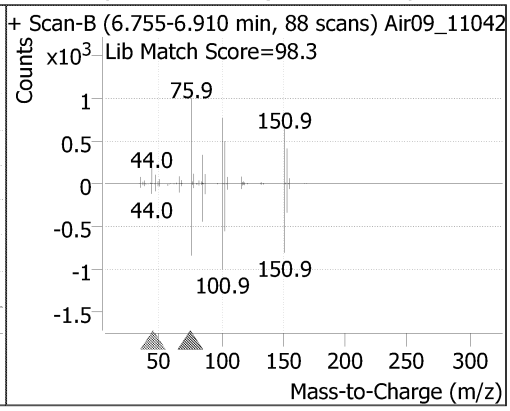




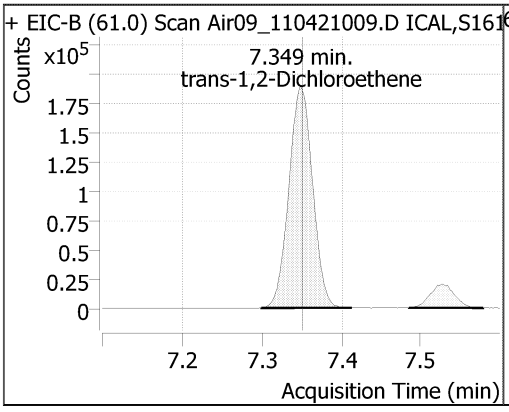
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	9.7018	6.81	0.00	701863	44.0	18.7	12.3	22.8

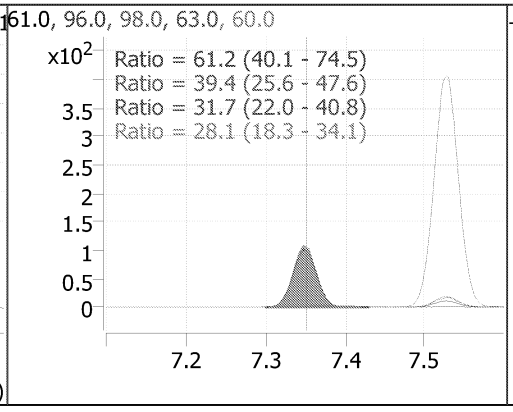


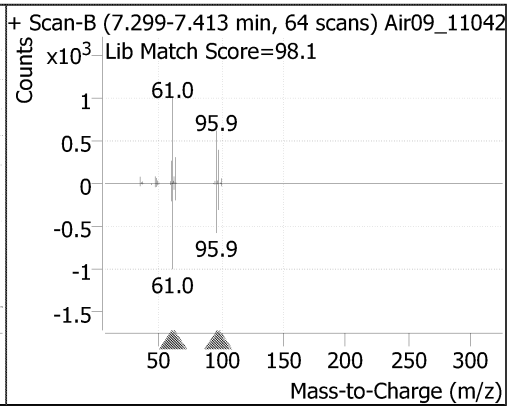




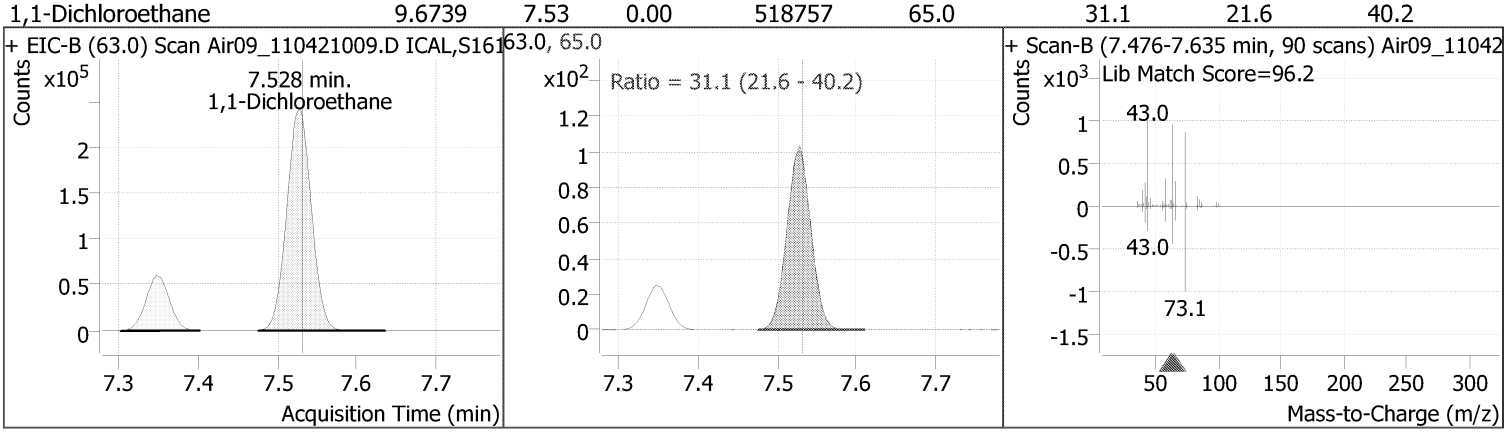
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	9.6641	7.35	0.00	392724	96.0	61.2	40.1	74.5
					98.0	39.4	25.6	47.6
					63.0	31.7	22.0	40.8
					60.0	28.1	18.3	34.1



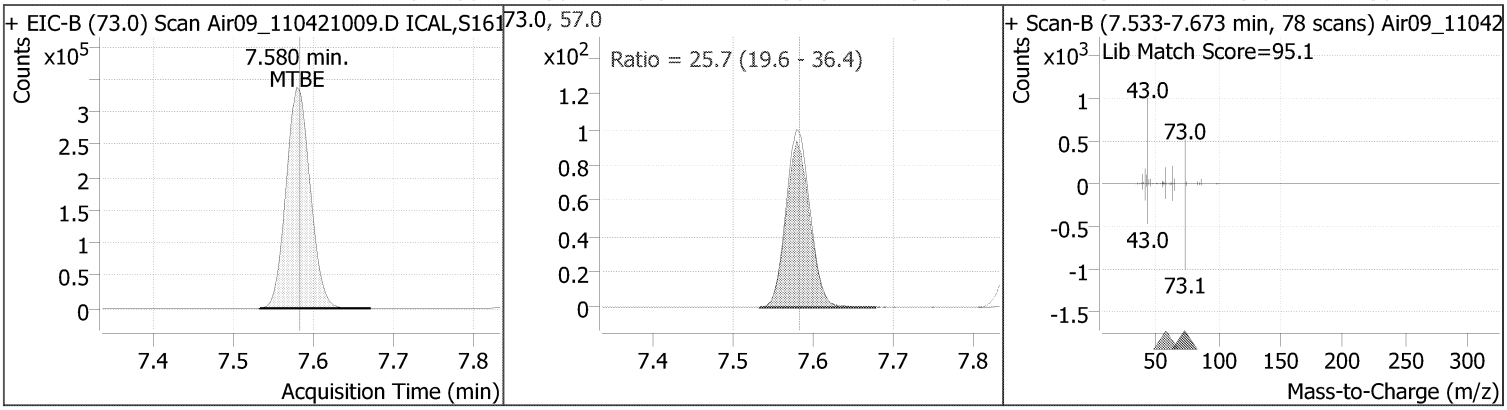




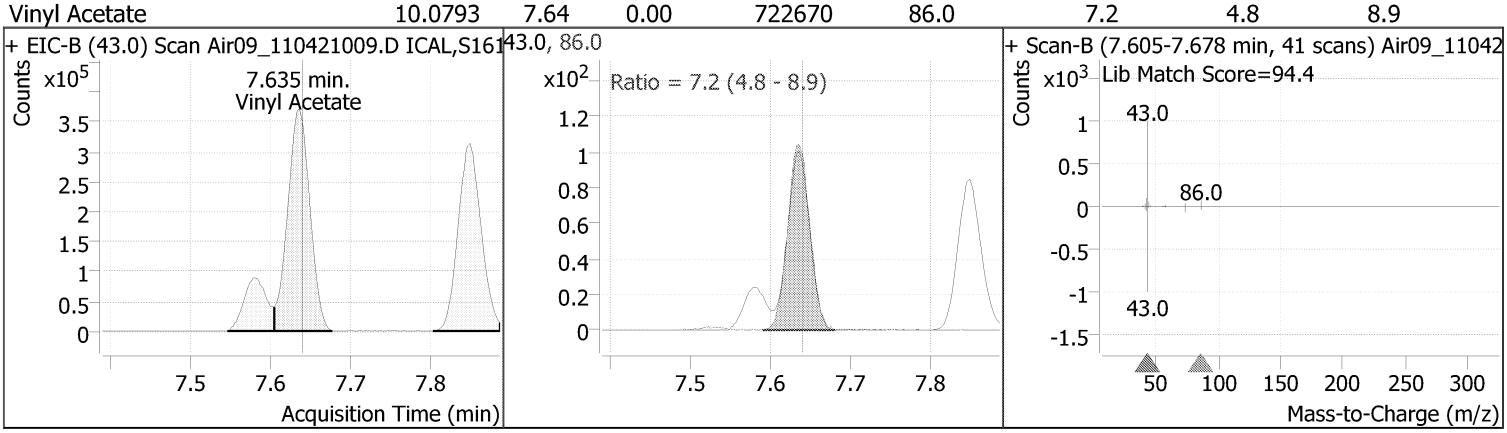
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	9.6739	7.53	0.00	518757	65.0	31.1	21.6	40.2



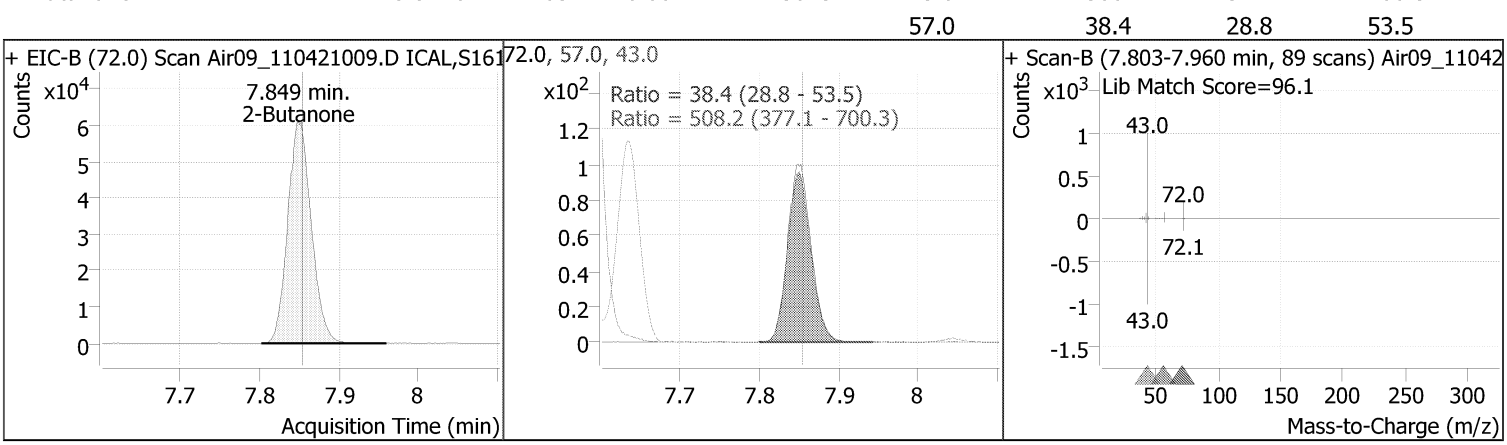
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	10.2186	7.58	-0.01	713079	57.0	25.7	19.6	36.4



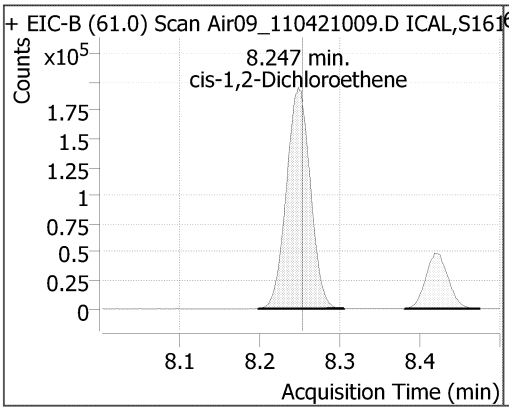
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	10.0793	7.64	0.00	722670	86.0	7.2	4.8	8.9

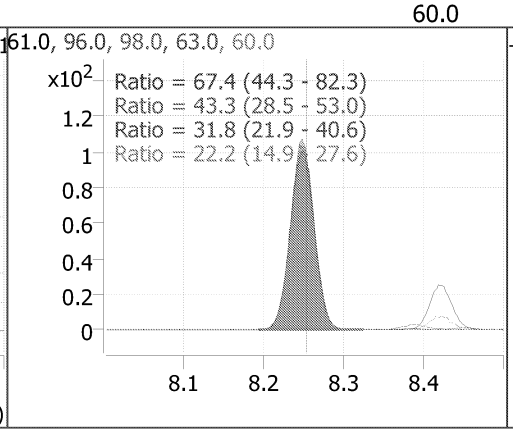


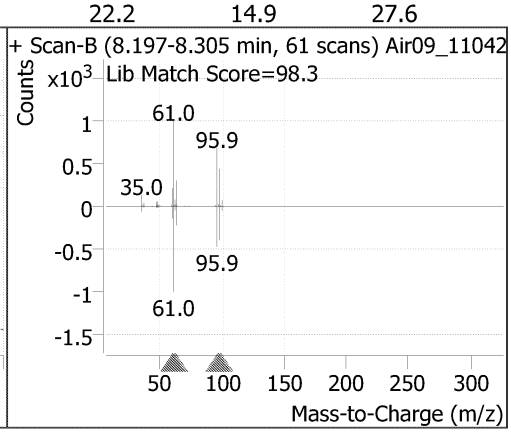
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	9.9420	7.85	0.00	125813	43.0	508.2	377.1	700.3
					57.0	38.4	28.8	53.5



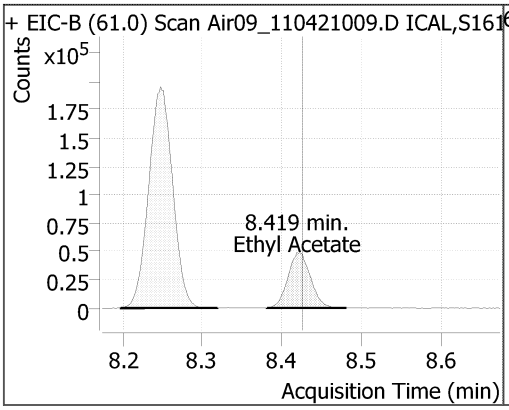
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	9.8209	8.25	0.00	408530	96.0	67.4	44.3	82.3
					98.0	43.3	28.5	53.0
					63.0	31.8	21.9	40.6
					60.0	22.2	14.9	27.6

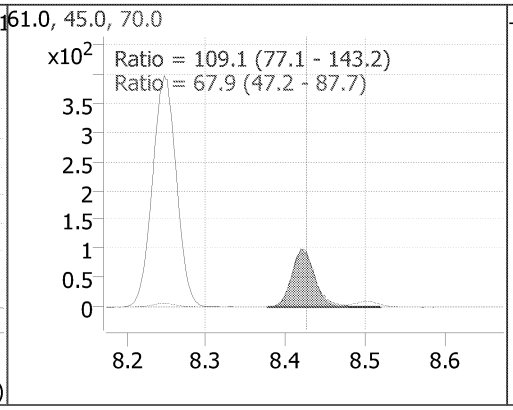


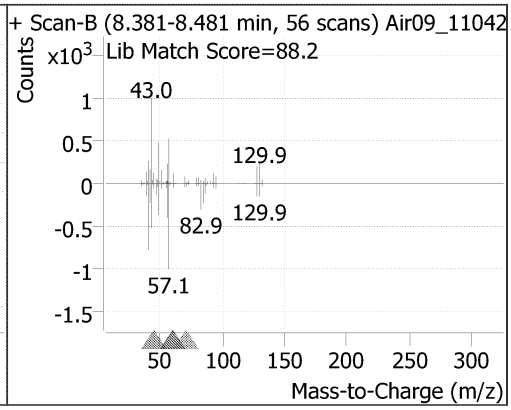




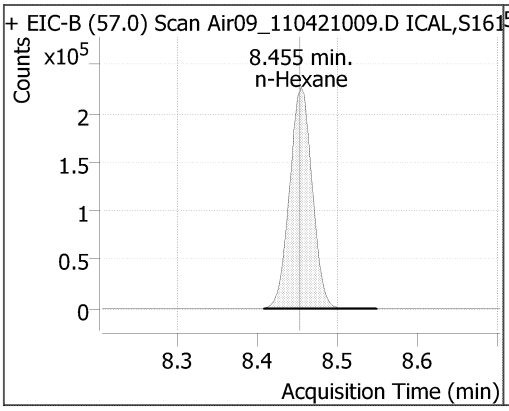
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	10.1724	8.42	-0.01	96800	45.0	109.1	77.1	143.2
					70.0	67.9	47.2	87.7

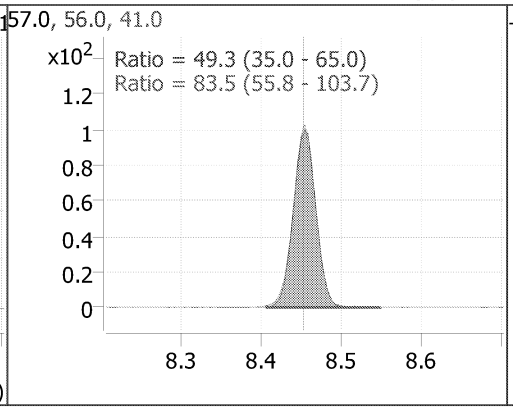


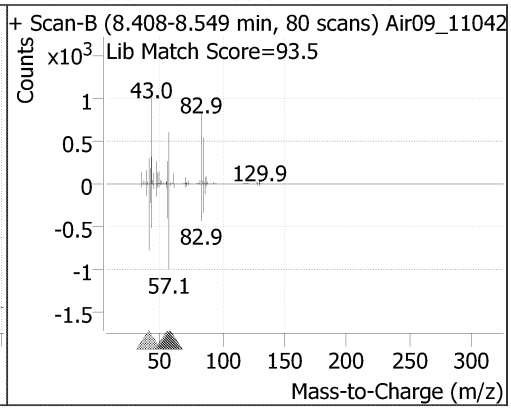




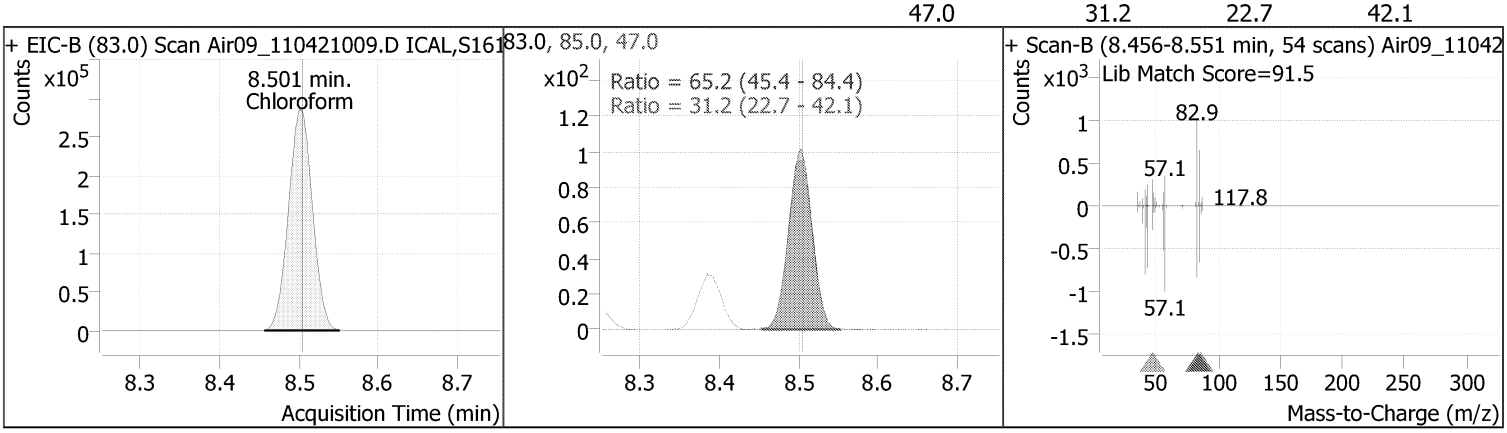
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	10.0559	8.45	0.00	449099	41.0	83.5	55.8	103.7
					56.0	49.3	35.0	65.0



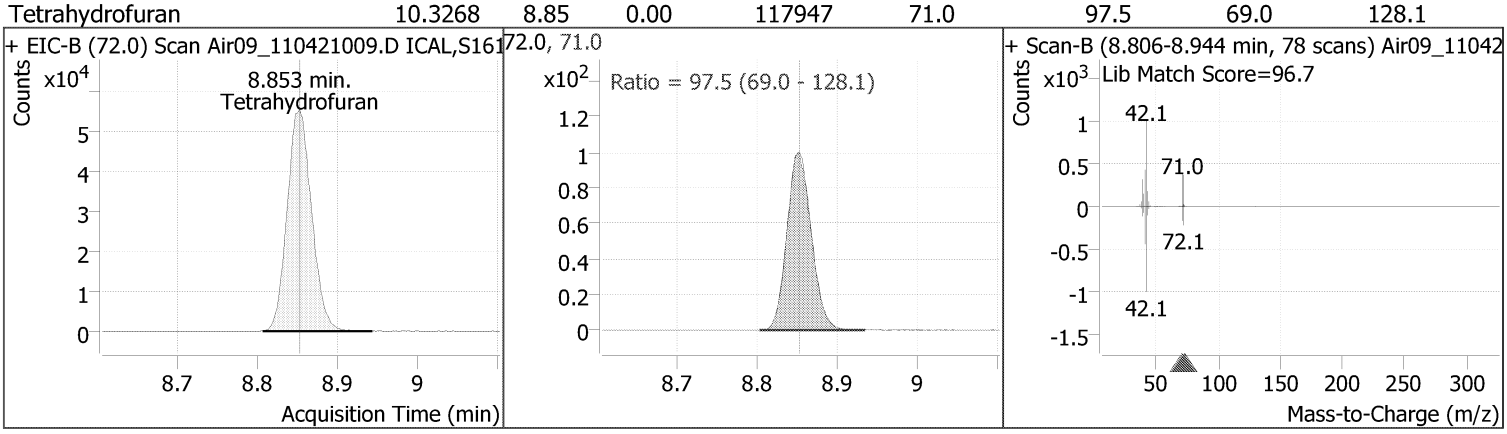




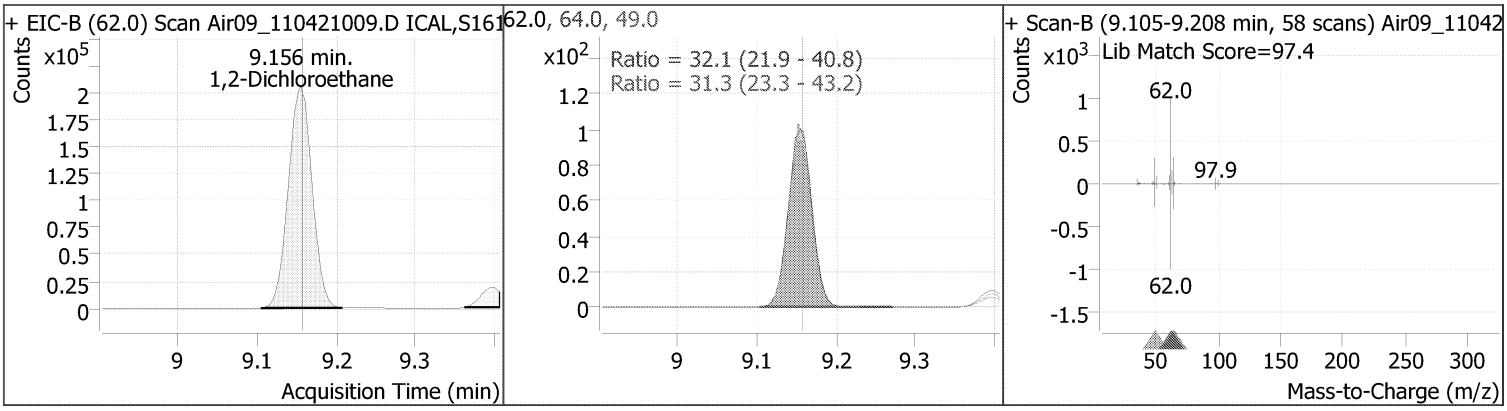
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	9.6250	8.50	0.00	598423	85.0	65.2	45.4	84.4
					47.0	31.2	22.7	42.1



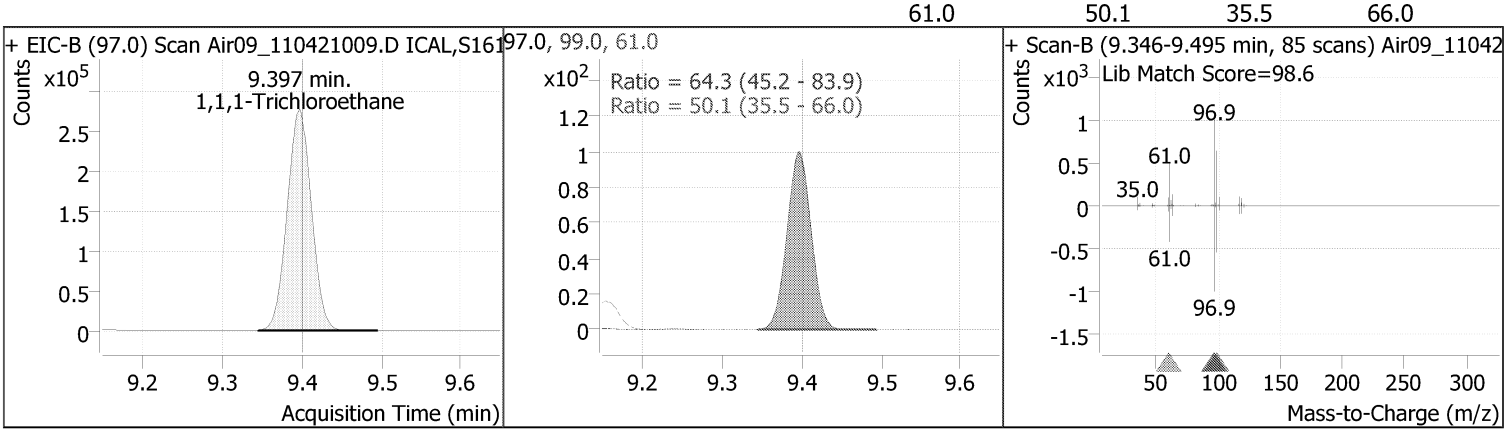
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	10.3268	8.85	0.00	117947	71.0	97.5	69.0	128.1



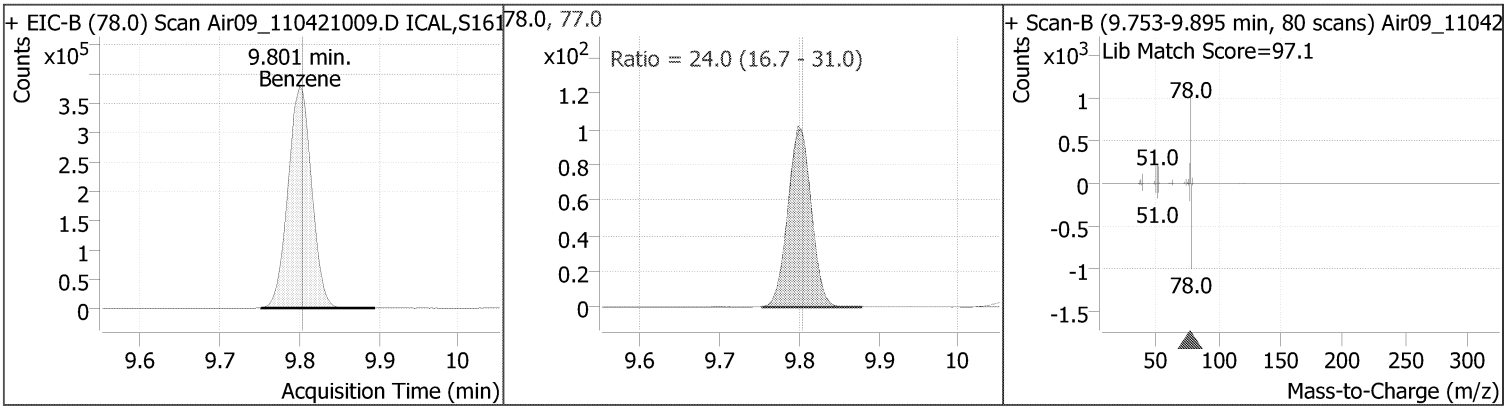
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	9.5145	9.16	0.00	425234	49.0	31.3	23.3	43.2
					64.0	32.1	21.9	40.8



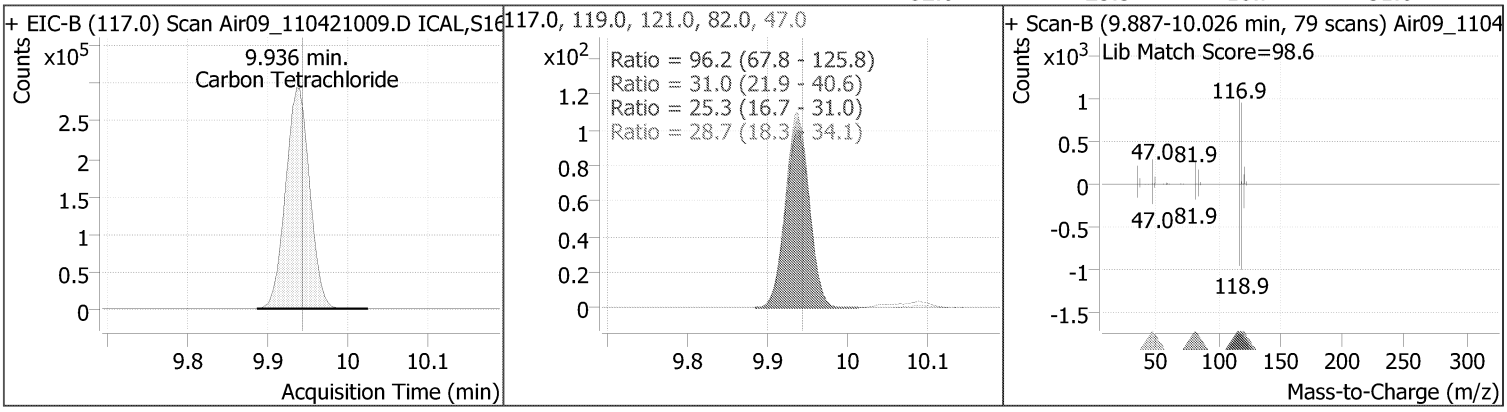
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	9.7344	9.40	0.00	586613	99.0	64.3	45.2	83.9
					61.0	50.1	35.5	66.0



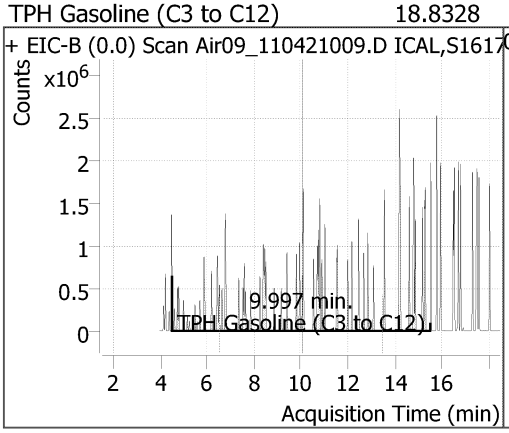
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	9.6649	9.80	0.00	784560	77.0	24.0	16.7	31.0

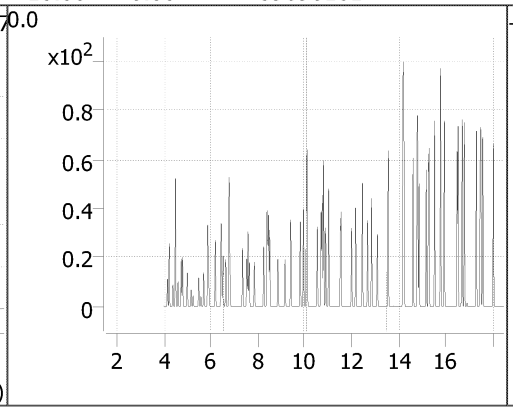


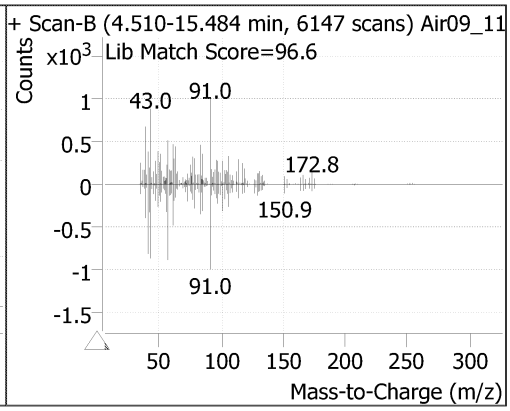
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	9.9434	9.94	-0.01	622529	119.0	96.2	67.8	125.8
					121.0	31.0	21.9	40.6
					47.0	28.7	18.3	34.1
					82.0	25.3	16.7	31.0



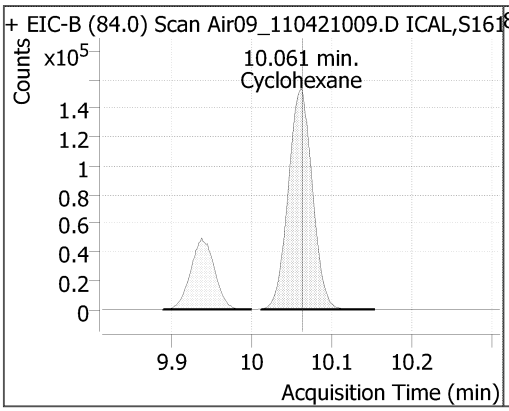
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	18.8328	10.00	0.00	89690161				

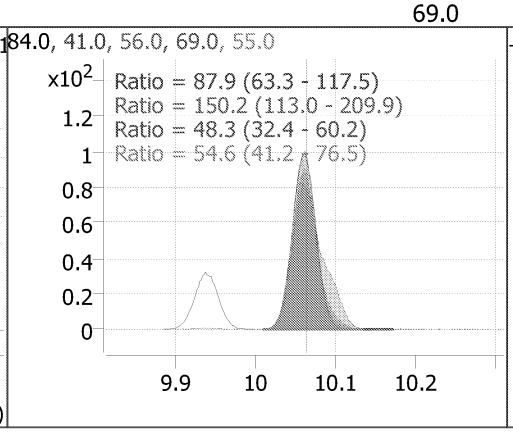


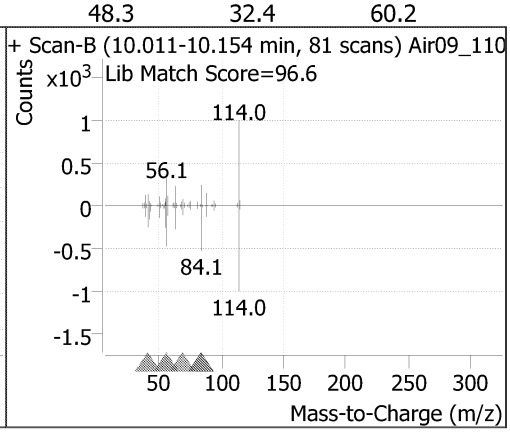




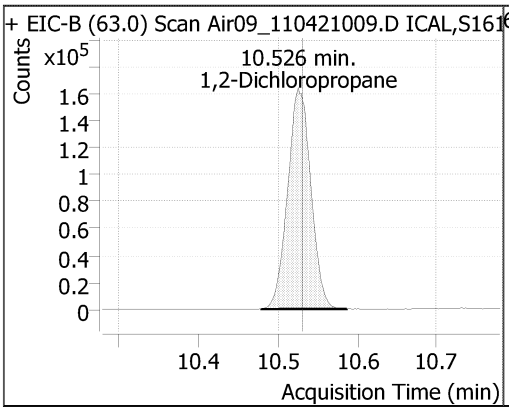
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	8.9681	10.06	0.00	324089	56.0	150.2	113.0	209.9
					41.0	87.9	63.3	117.5
					55.0	54.6	41.2	76.5
					69.0	48.3	32.4	60.2

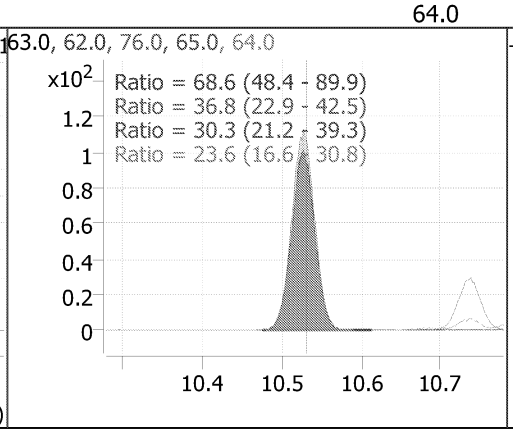


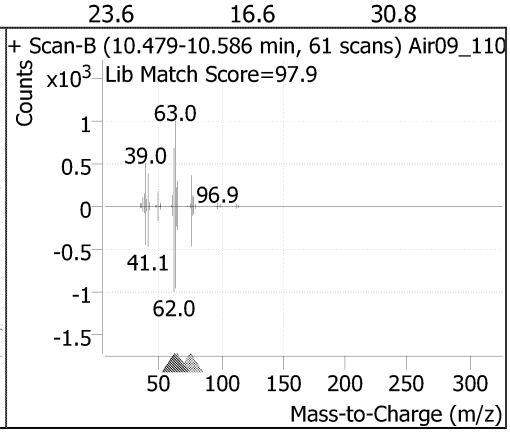




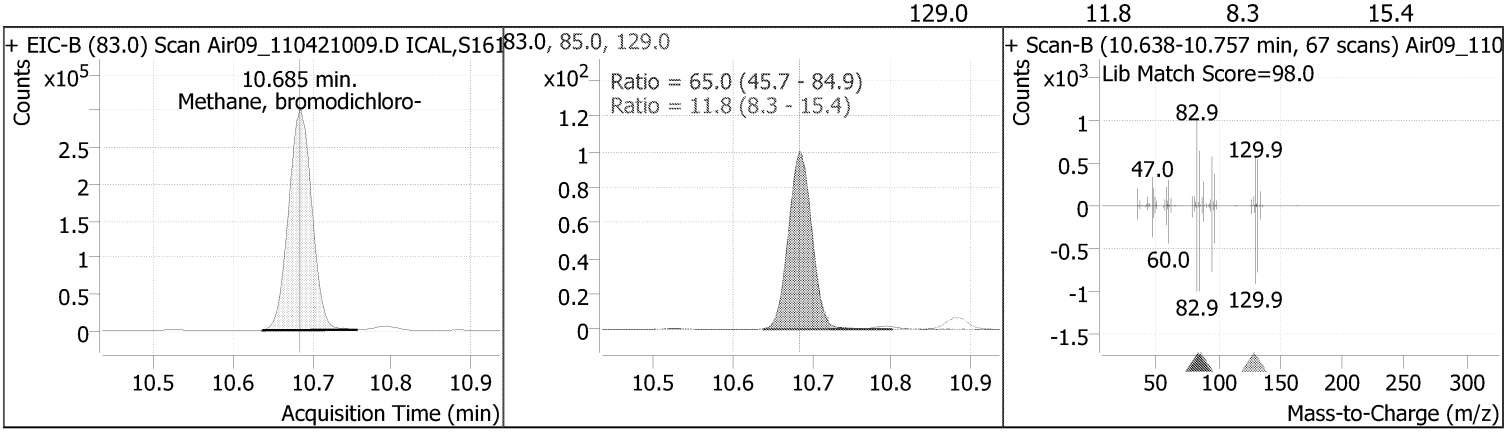
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	9.6490	10.53	0.00	333258	62.0	68.6	48.4	89.9
					76.0	36.8	22.9	42.5
					65.0	30.3	21.2	39.3
					64.0	23.6	16.6	30.8



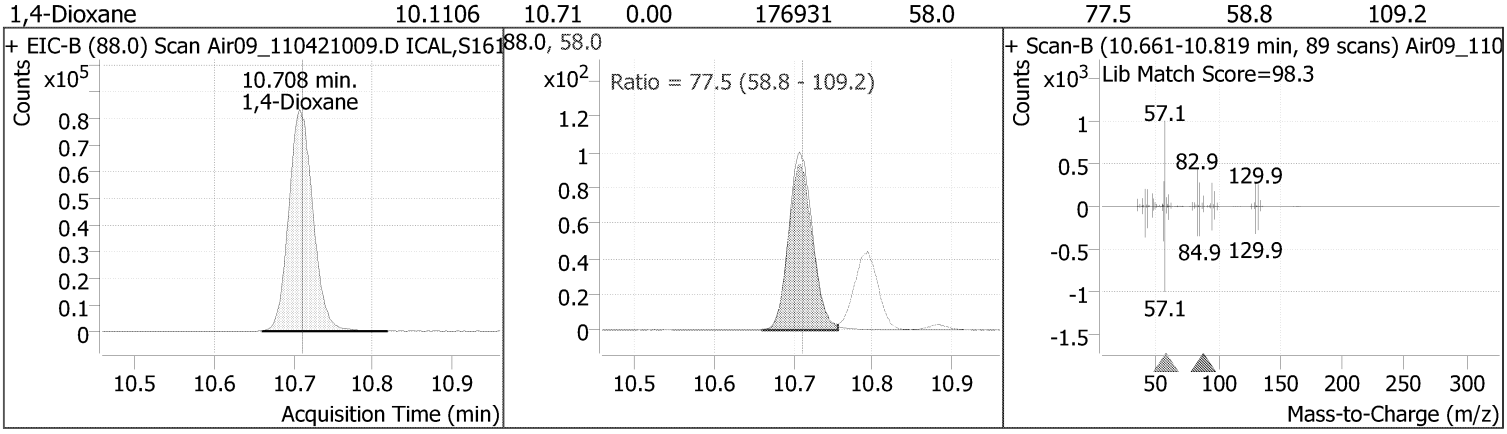




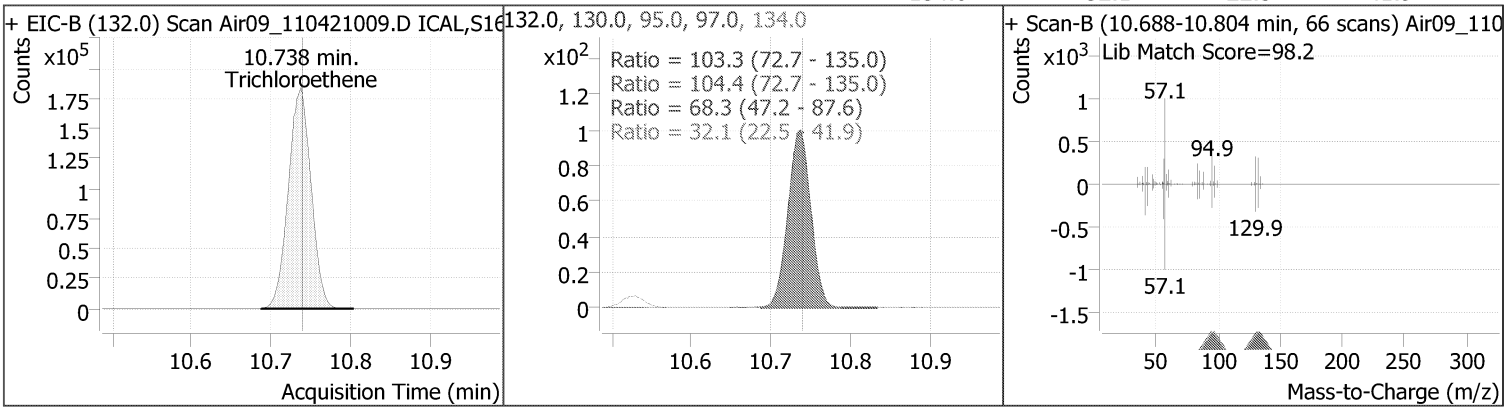
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	9.8265	10.68	0.00	616231	85.0	65.0	45.7	84.9
					129.0	11.8	8.3	15.4



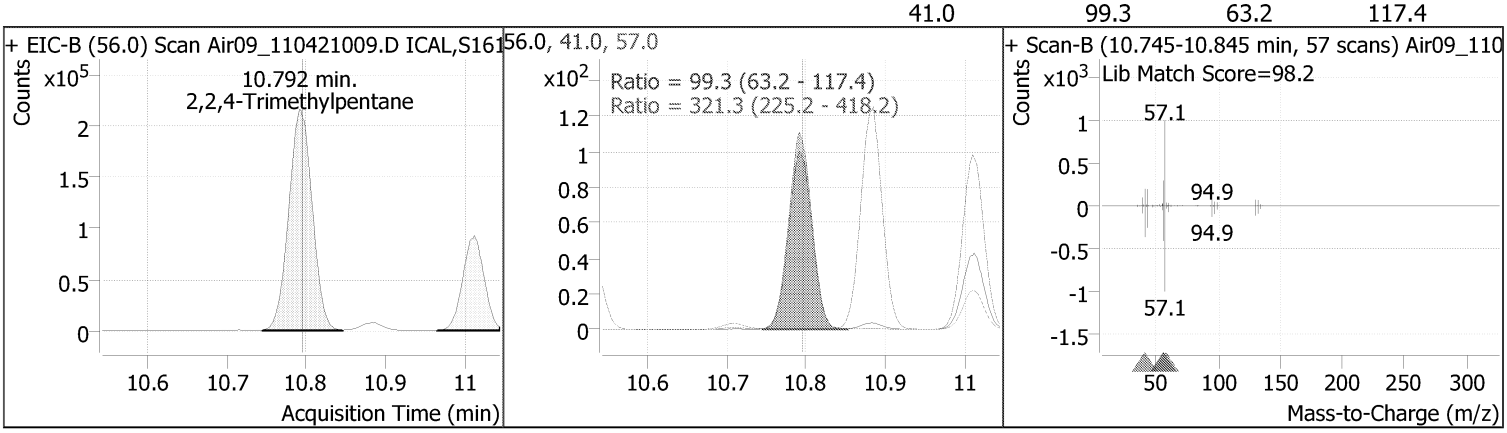
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	10.1106	10.71	0.00	176931	58.0	77.5	58.8	109.2



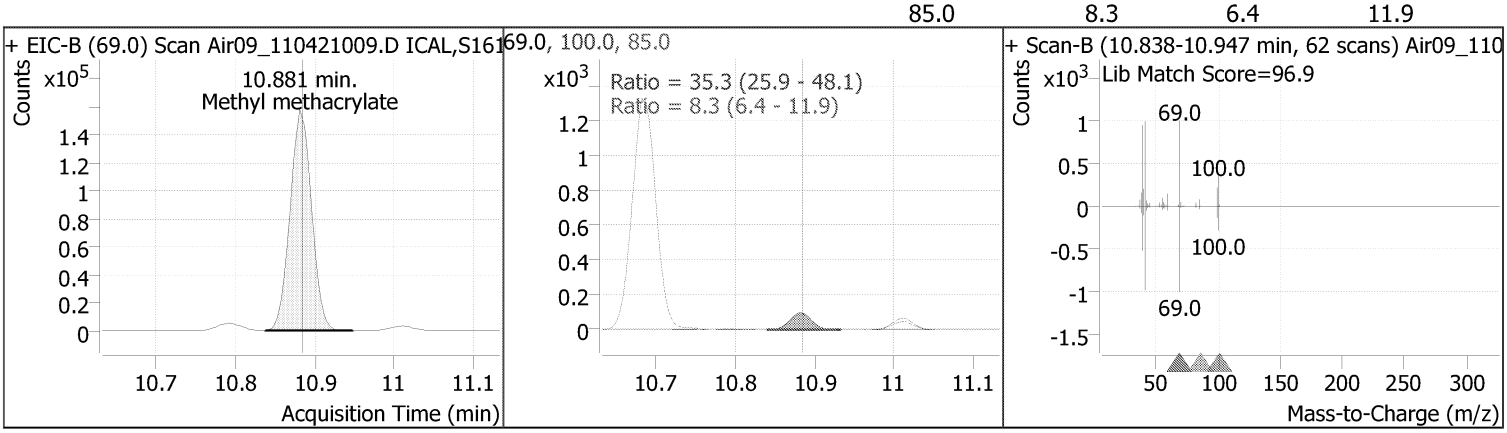
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	9.8552	10.74	0.00	366156	130.0	103.3	72.7	135.0
					95.0	104.4	72.7	135.0
					97.0	68.3	47.2	87.6
					134.0	32.1	22.5	41.9



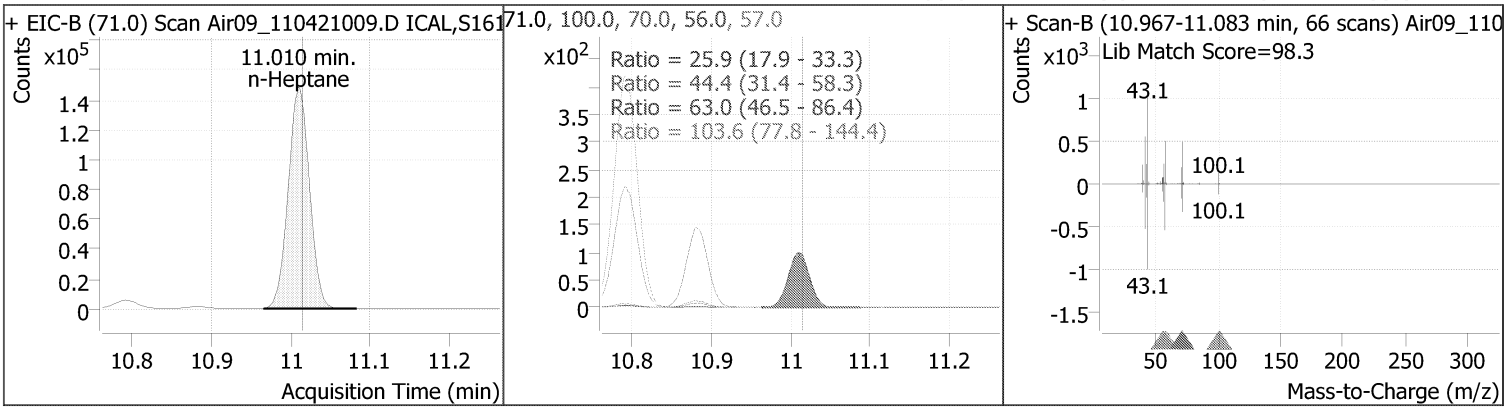
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	9.8757	10.79	0.00	444689	57.0	321.3	225.2	418.2
					41.0	99.3	63.2	117.4



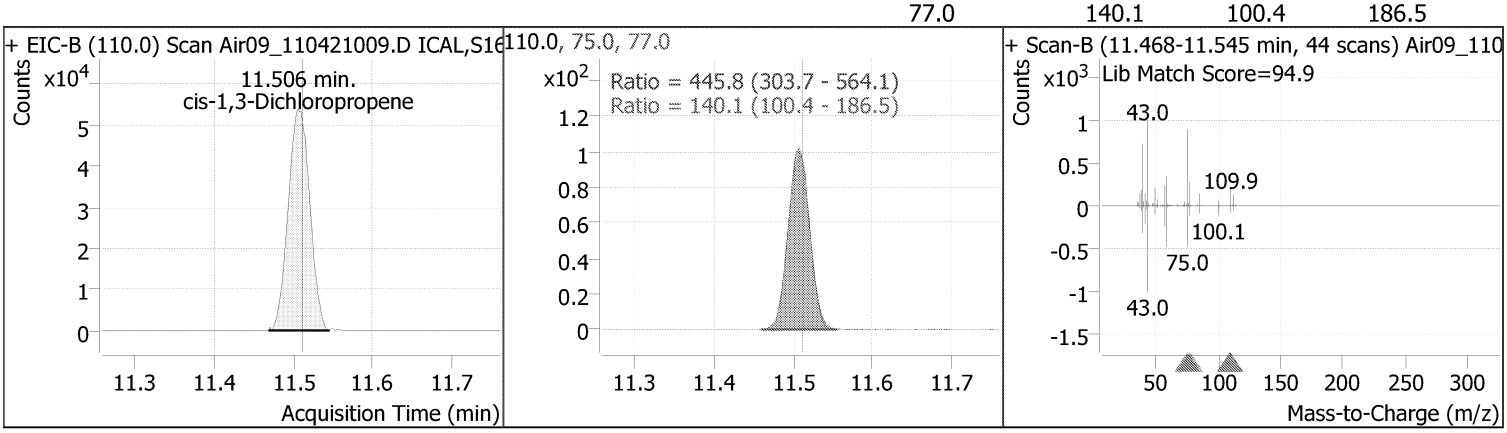
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	10.4648	10.88	0.00	296689	100.0	35.3	25.9	48.1
					85.0	8.3	6.4	11.9



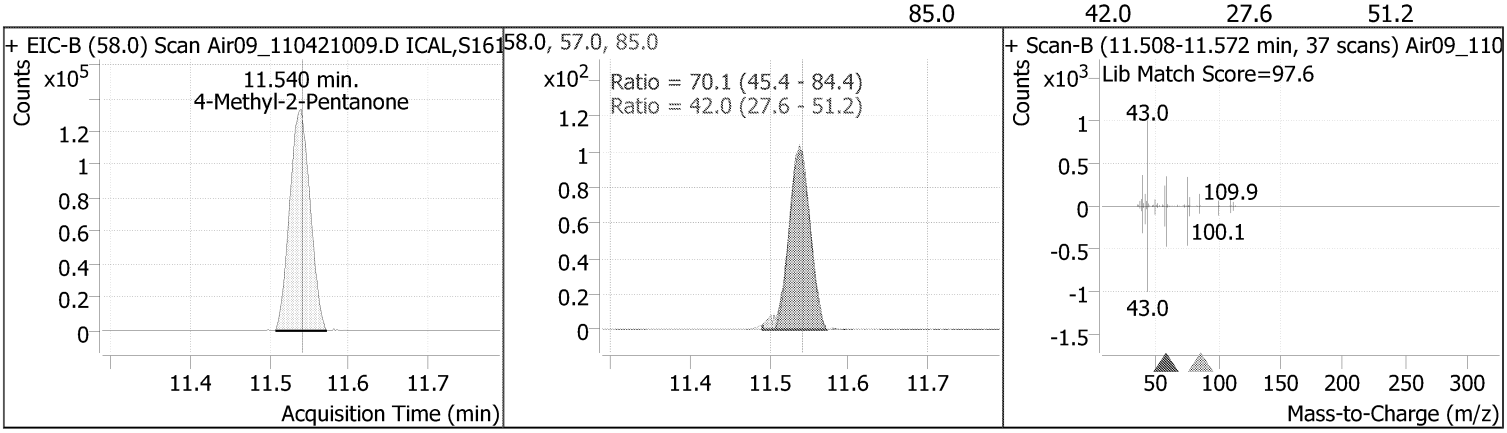
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	10.3053	11.01	0.00	276112	57.0	103.6	77.8	144.4
					56.0	63.0	46.5	86.4
					70.0	44.4	31.4	58.3
					100.0	25.9	17.9	33.3



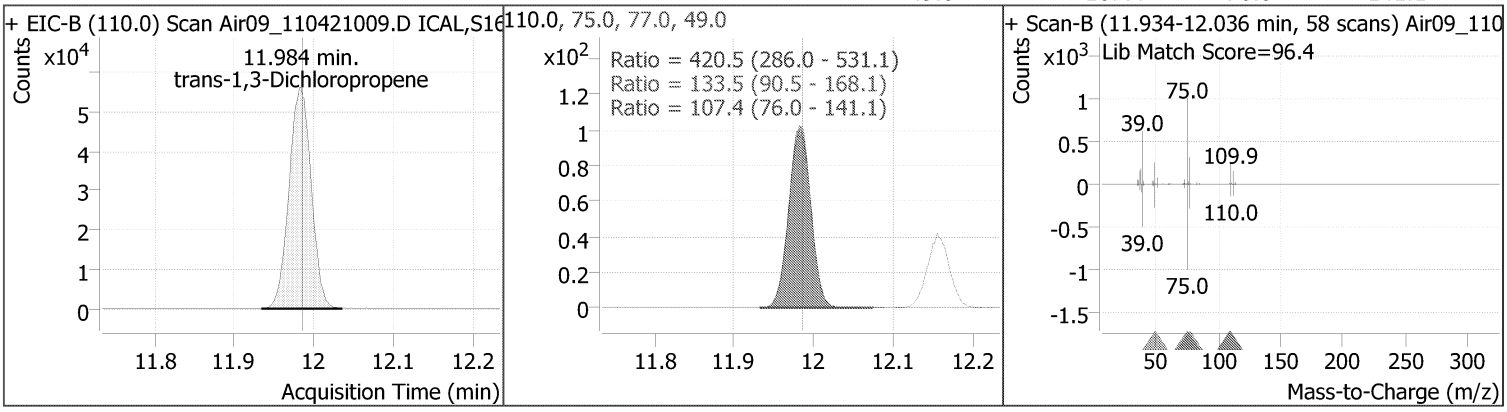
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	9.9547	11.51	0.00	101891	75.0	445.8	303.7	564.1
					77.0	140.1	100.4	186.5



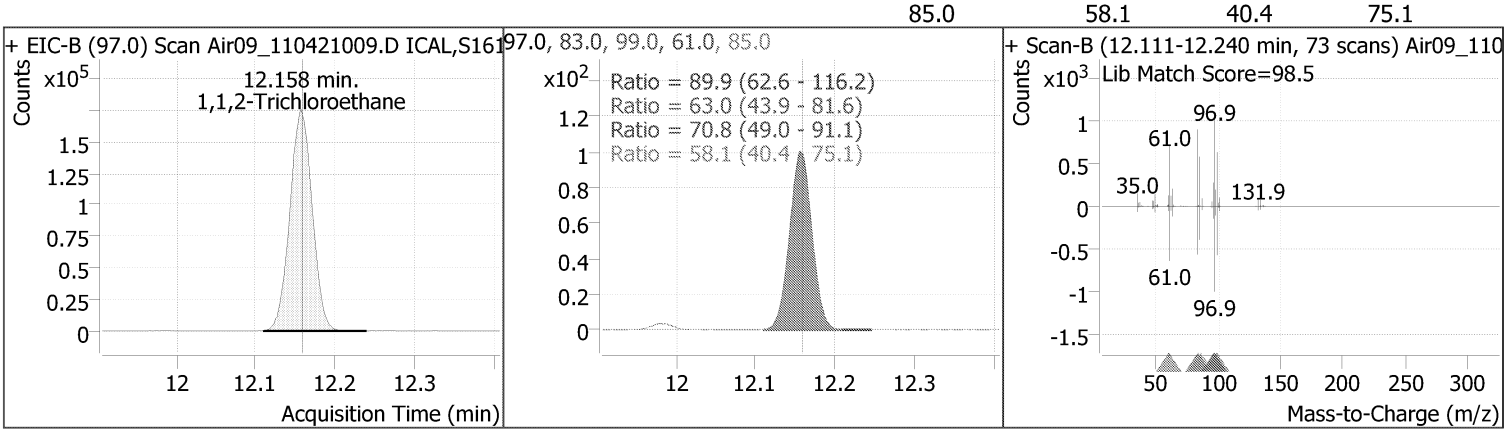
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	9.7518	11.54	0.00	238414	57.0	70.1	45.4	84.4
					85.0	42.0	27.6	51.2



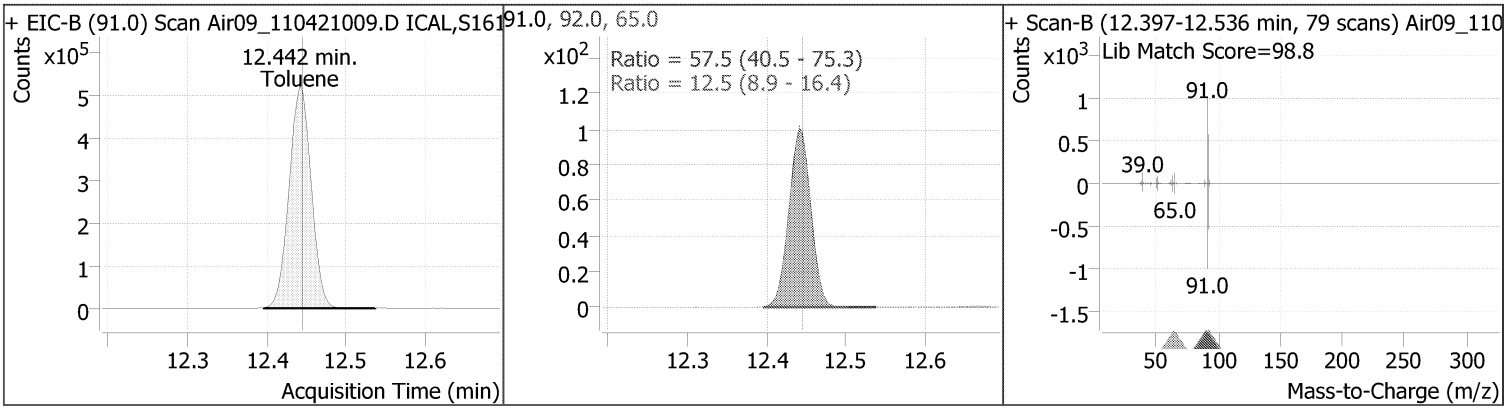
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	10.5987	11.98	0.00	108945	75.0	420.5	286.0	531.1
					77.0	133.5	90.5	168.1
					49.0	107.4	76.0	141.1



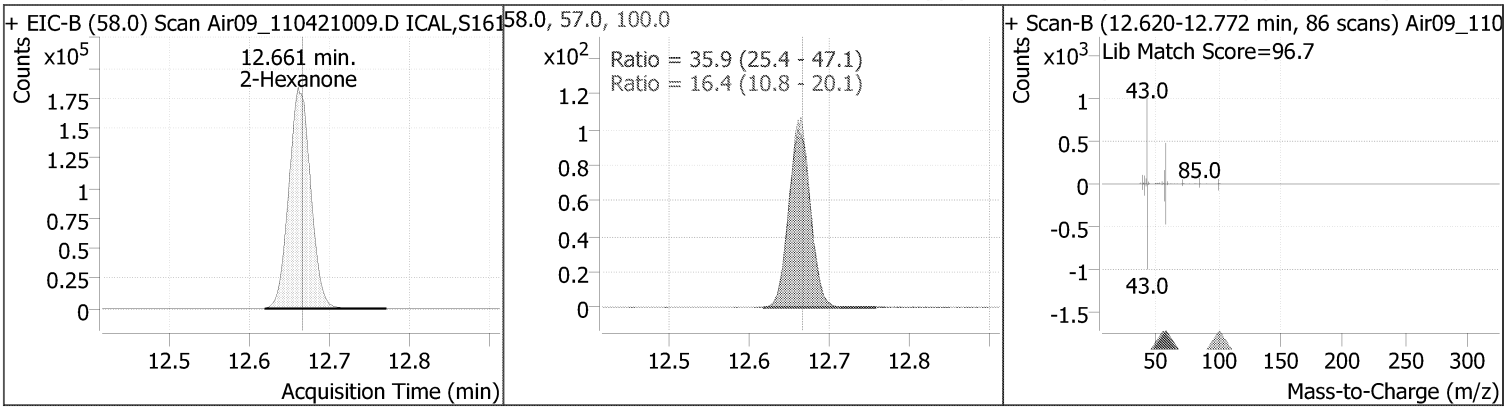
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	9.7380	12.16	0.00	342690	83.0	89.9	62.6	116.2
					61.0	70.8	49.0	91.1
					99.0	63.0	43.9	81.6
					85.0	58.1	40.4	75.1



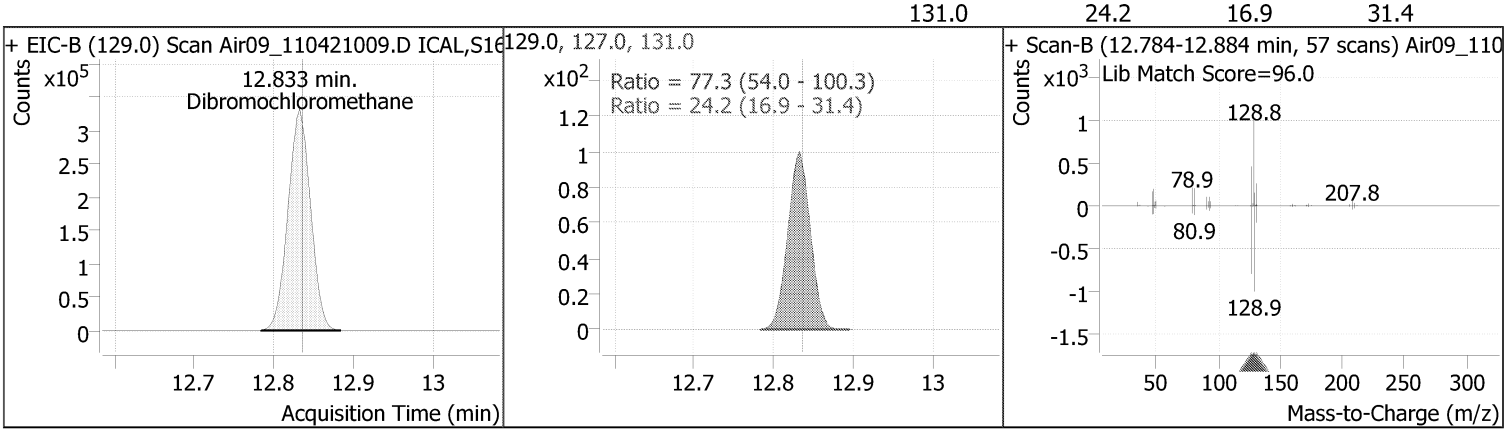
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	10.1563	12.44	0.00	1003356	92.0	57.5	40.5	75.3
					65.0	12.5	8.9	16.4



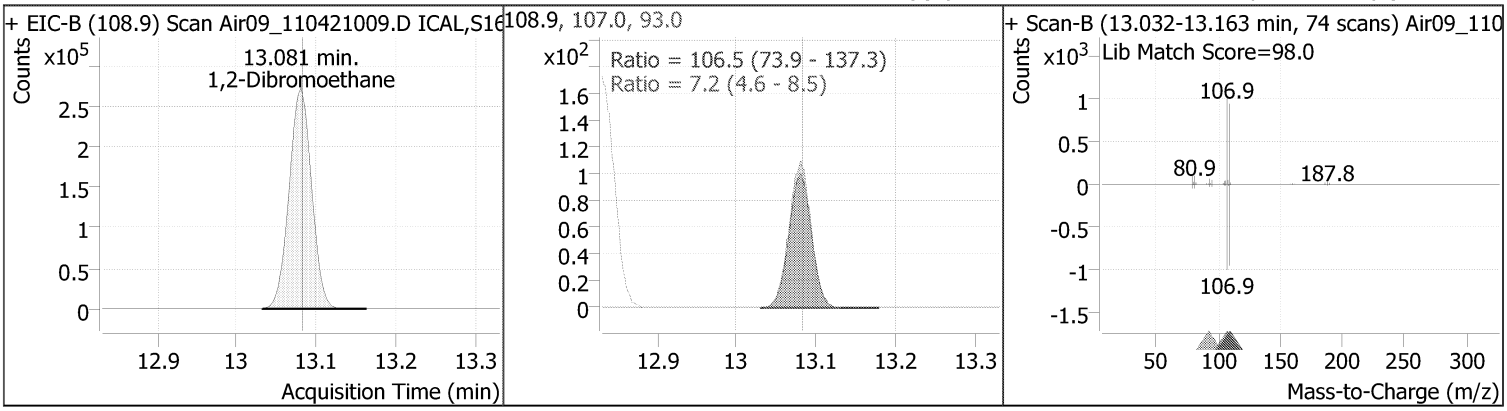
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	11.0772	12.66	0.00	351204	57.0	35.9	25.4	47.1
					100.0	16.4	10.8	20.1



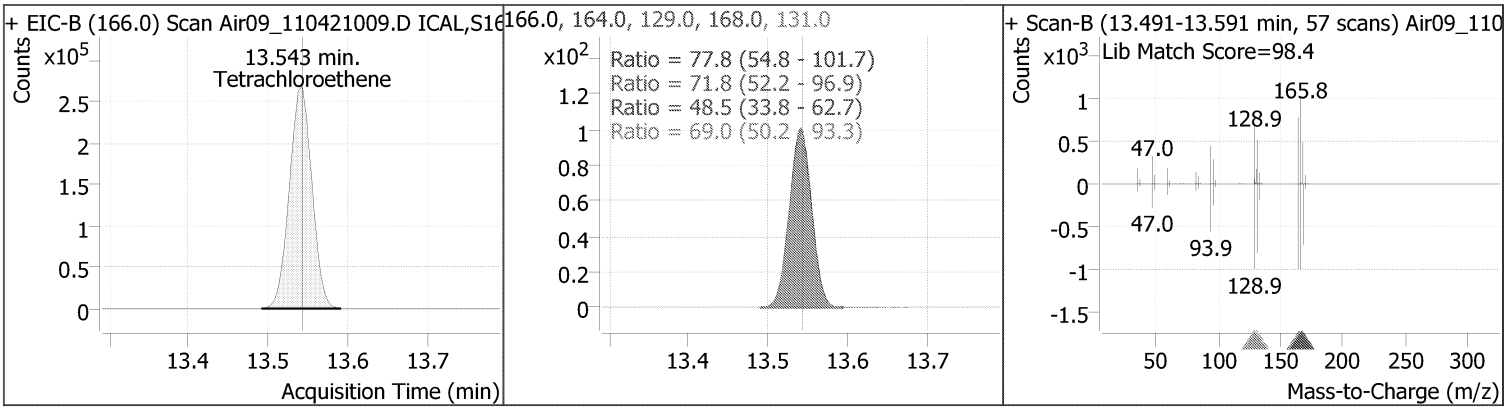
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	10.1372	12.83	0.00	656823	127.0	77.3	54.0	100.3
					131.0	24.2	16.9	31.4



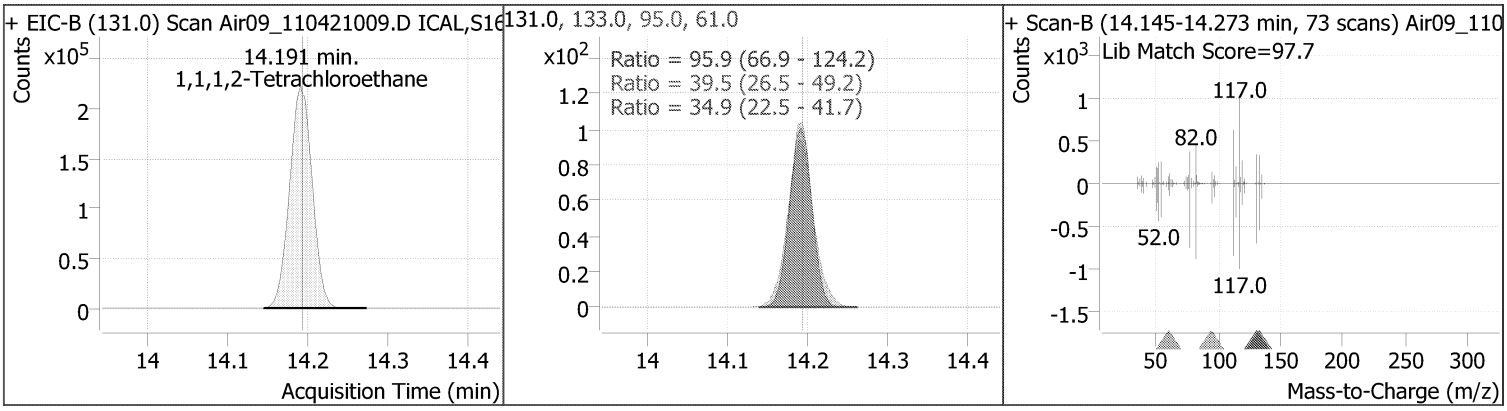
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	10.1026	13.08	0.00	536345	107.0	106.5	73.9	137.3
					93.0	7.2	4.6	8.5



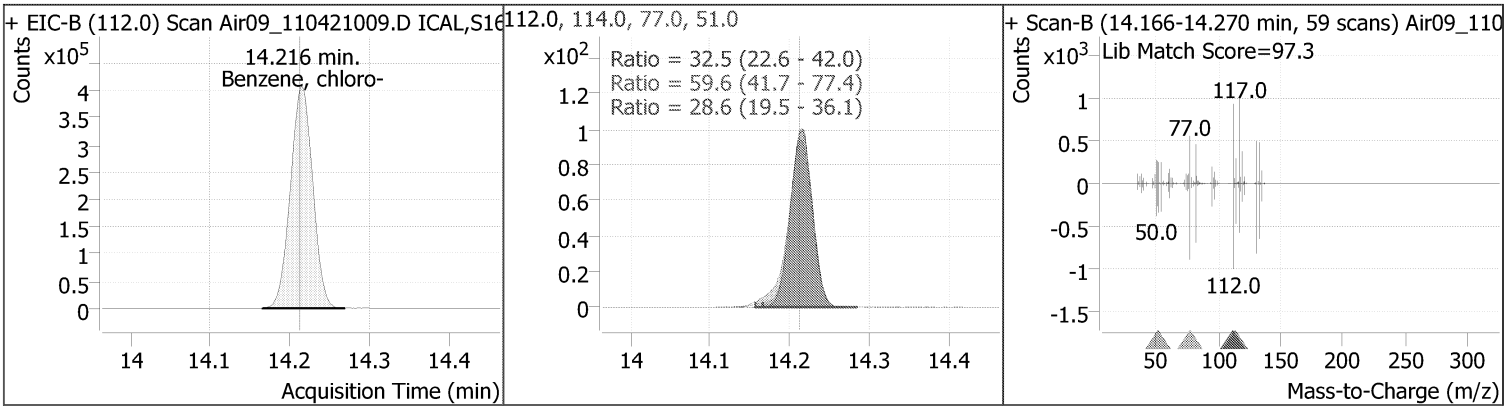
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	9.9605	13.54	0.00	527117	164.0	77.8	54.8	101.7
					129.0	71.8	52.2	96.9
					131.0	69.0	50.2	93.3
					168.0	48.5	33.8	62.7



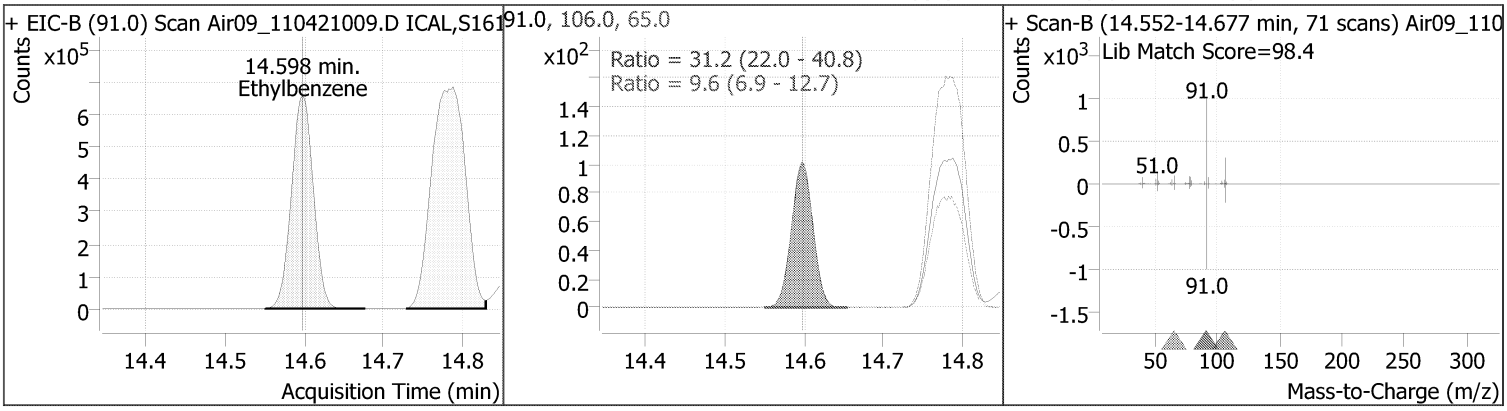
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	9.5370	14.19	0.00	439802	133.0	95.9	66.9	124.2
					95.0	39.5	26.5	49.2
					61.0	34.9	22.5	41.7



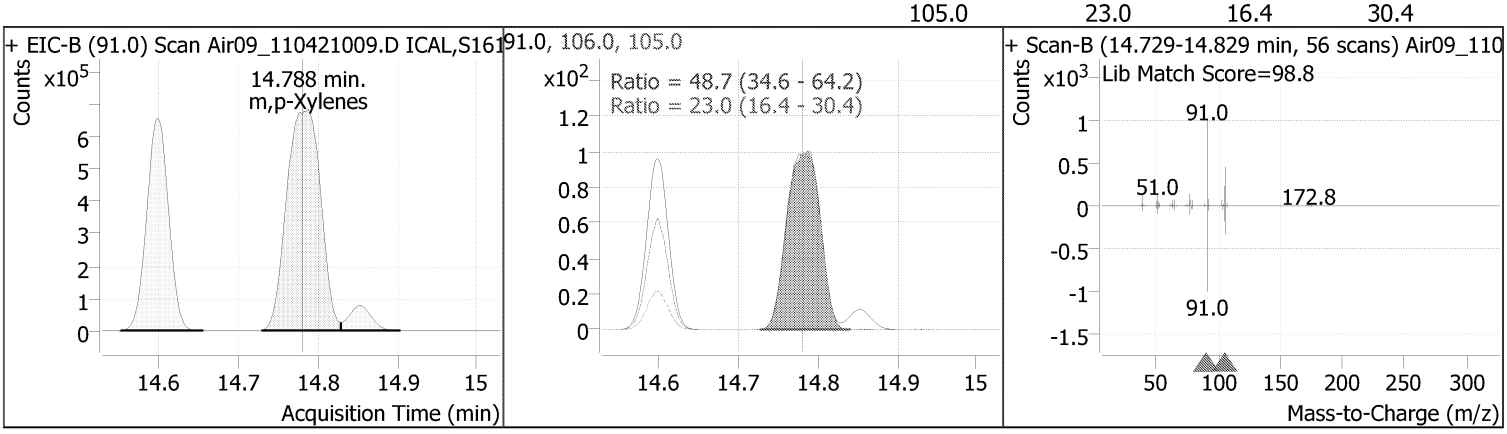
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	9.4016	14.22	0.00	795326	77.0	59.6	41.7	77.4
					114.0	32.5	22.6	42.0
					51.0	28.6	19.5	36.1



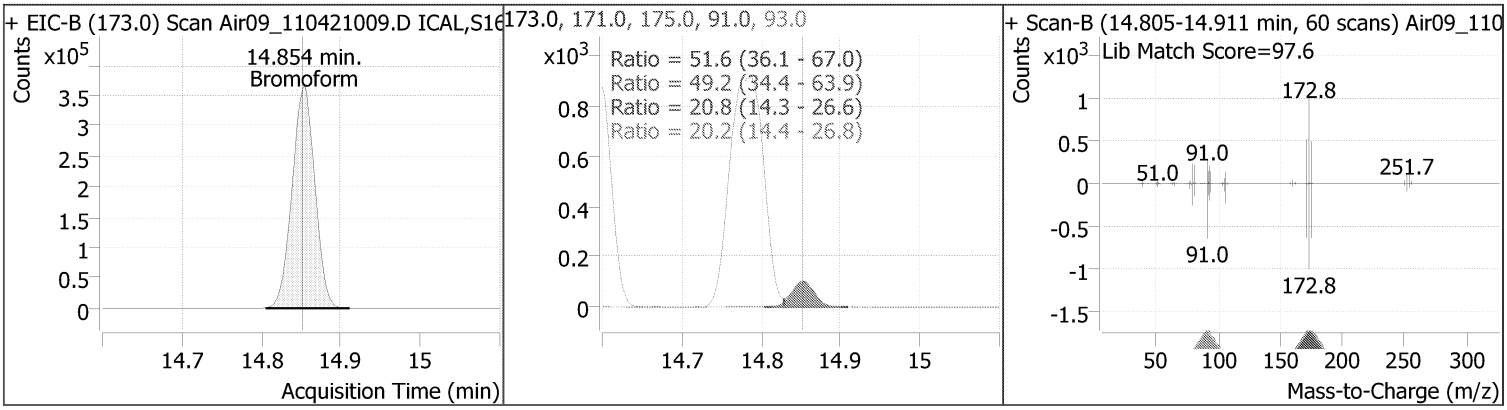
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	9.9321	14.60	0.00	1262790	106.0	31.2	22.0	40.8
					65.0	9.6	6.9	12.7



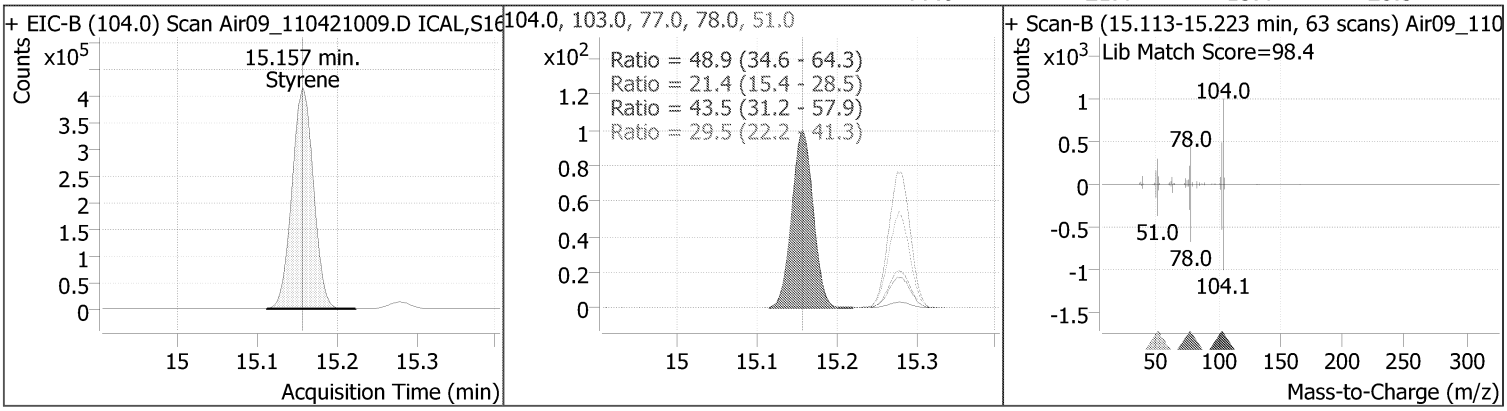
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	22.8361	14.79	0.01	2035317	106.0	48.7	34.6	64.2
					105.0	23.0	16.4	30.4



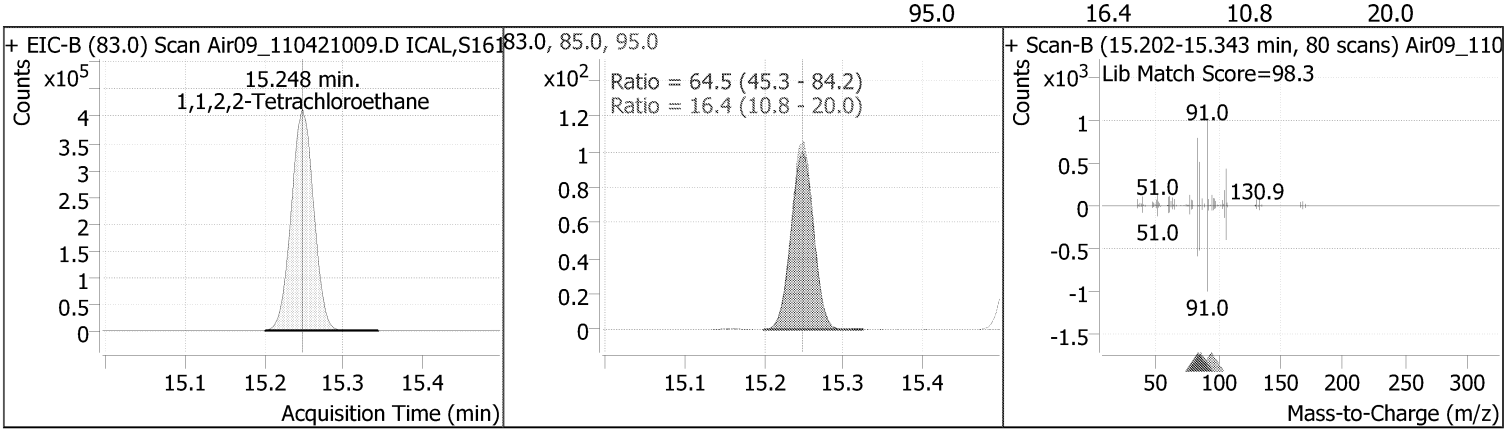
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	10.2713	14.85	0.00	727301	171.0	51.6	36.1	67.0
					175.0	49.2	34.4	63.9
					93.0	20.2	14.4	26.8
					91.0	20.8	14.3	26.6



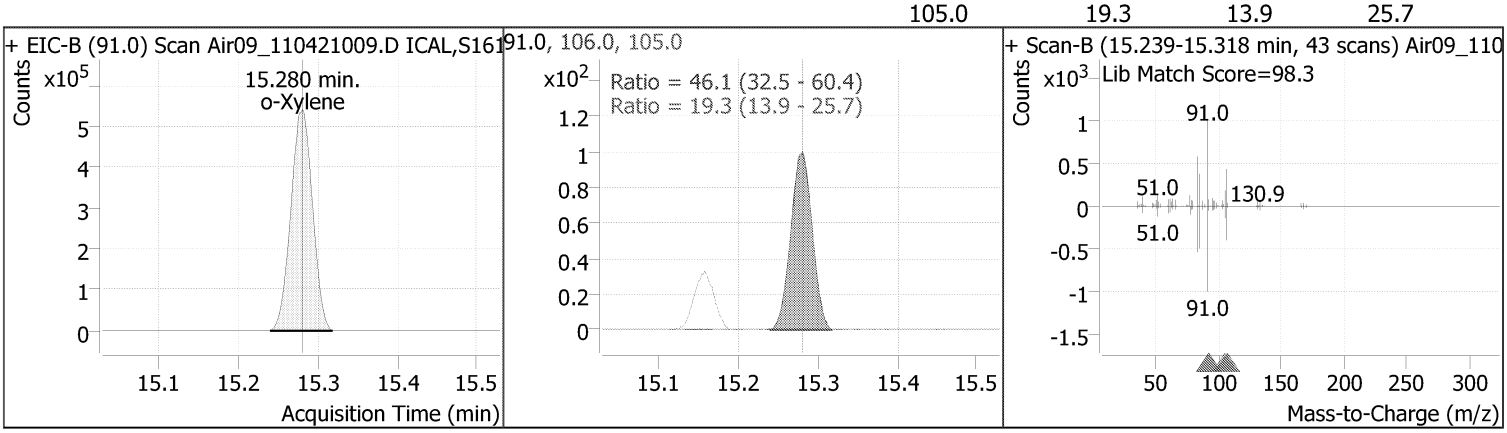
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	10.4323	15.16	0.00	784001	103.0	48.9	34.6	64.3
					78.0	43.5	31.2	57.9
					51.0	29.5	22.2	41.3
					77.0	21.4	15.4	28.5



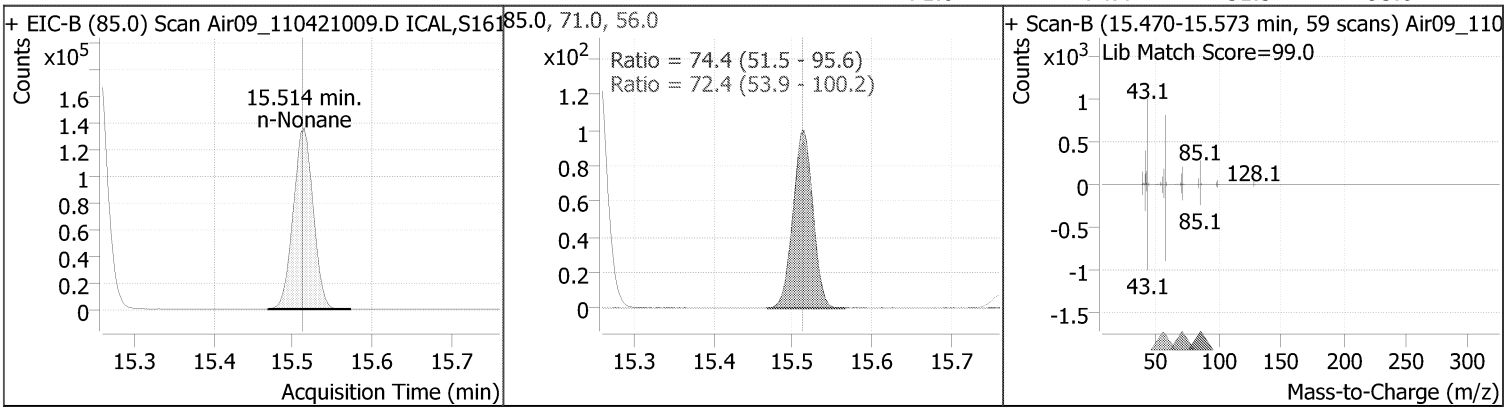
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	9.6049	15.25	0.00	811114	85.0	64.5	45.3	84.2
					95.0	16.4	10.8	20.0



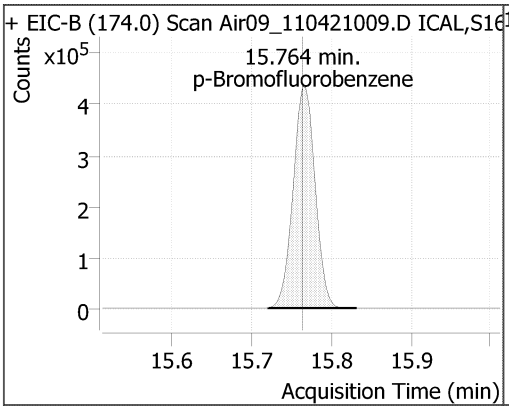
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	10.1446	15.28	0.00	1021029	106.0	46.1	32.5	60.4
					105.0	19.3	13.9	25.7

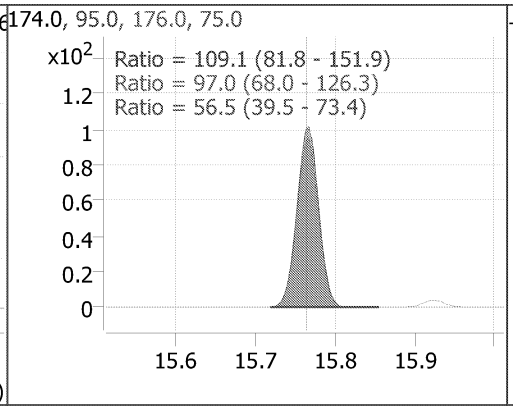


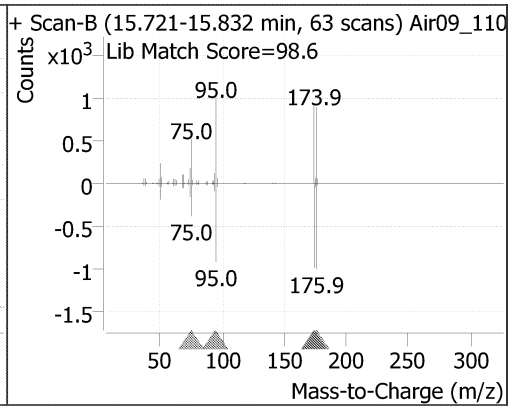
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	10.5410	15.51	0.00	236990	56.0	72.4	53.9	100.2
					71.0	74.4	51.5	95.6



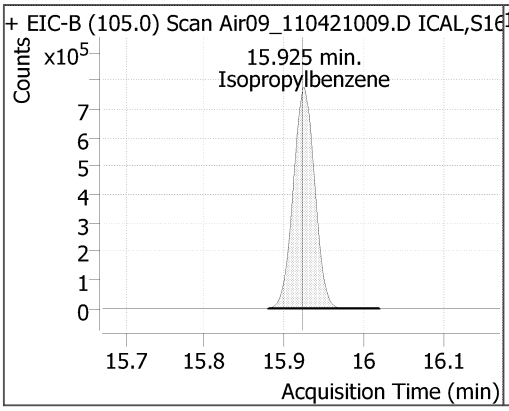
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	9.8190	15.76	0.00	841640	95.0	109.1	81.8	151.9
					176.0	97.0	68.0	126.3
					75.0	56.5	39.5	73.4

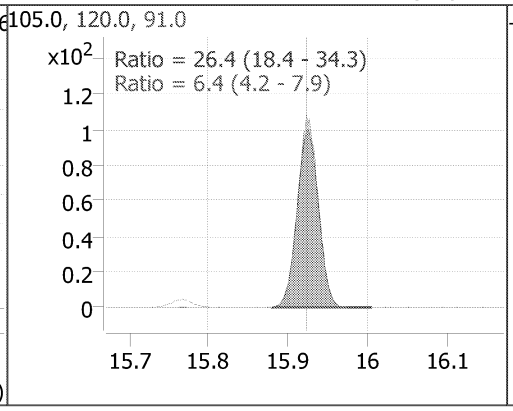


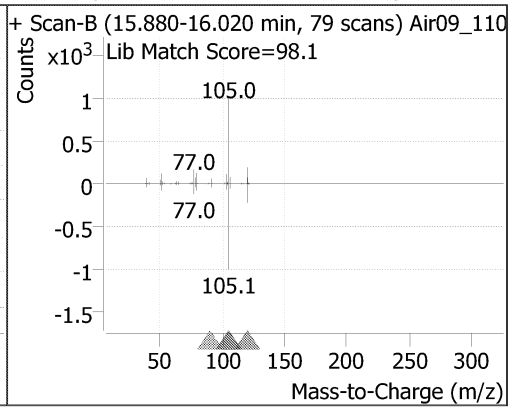




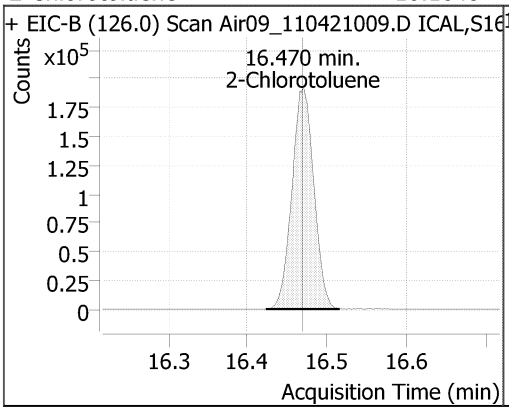
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	9.6836	15.92	0.00	1458189	120.0	26.4	18.4	34.3
					91.0	6.4	4.2	7.9

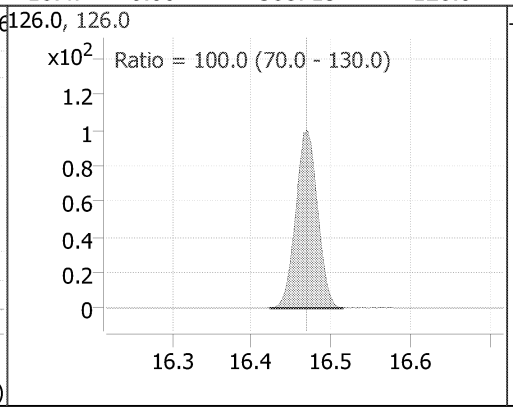


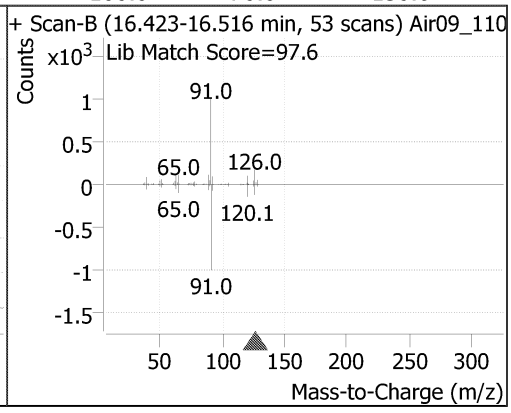




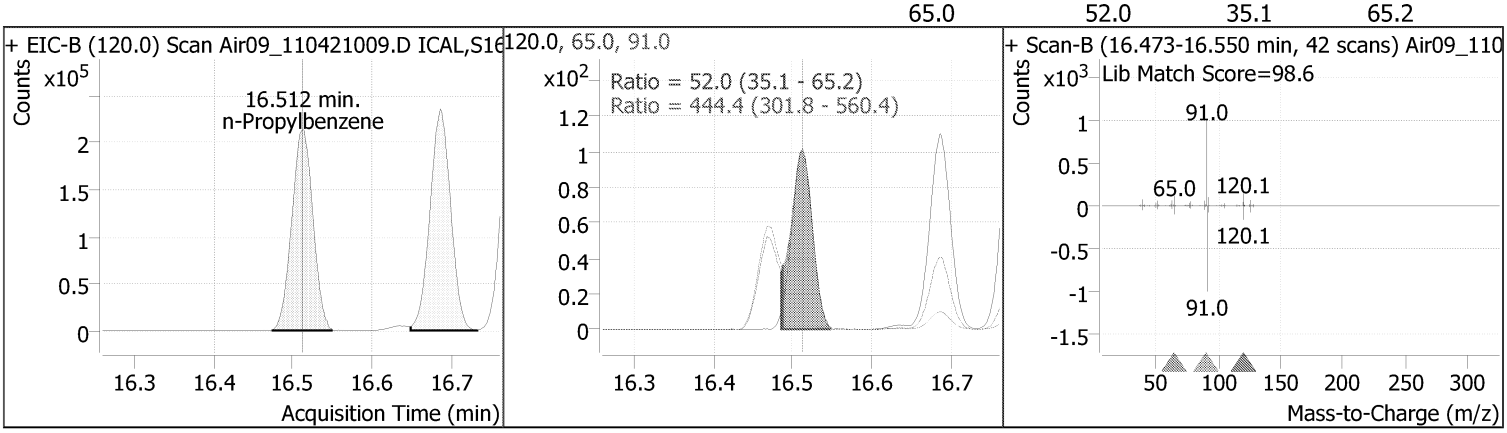
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	10.1648	16.47	0.00	368715	126.0	100.0	70.0	130.0



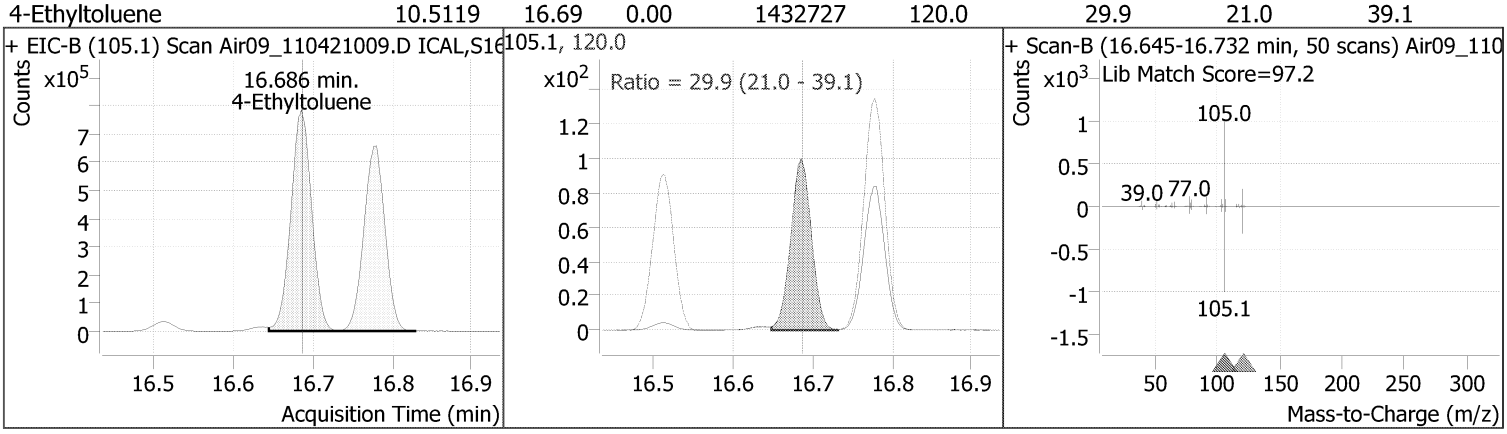




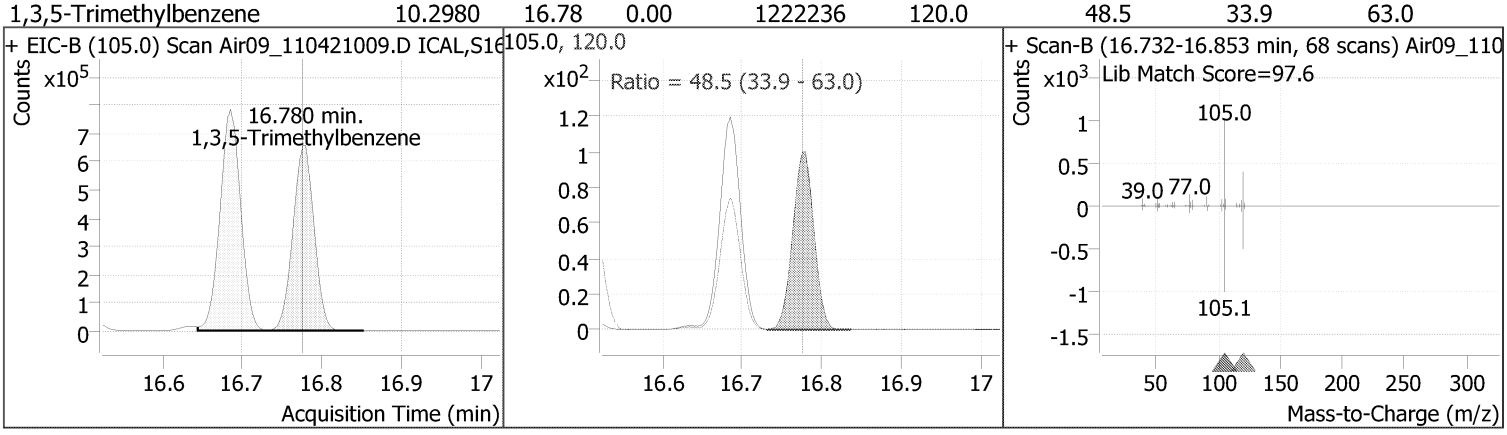
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	9.9944	16.51	0.00	396686	91.0	444.4	301.8	560.4
					65.0	52.0	35.1	65.2



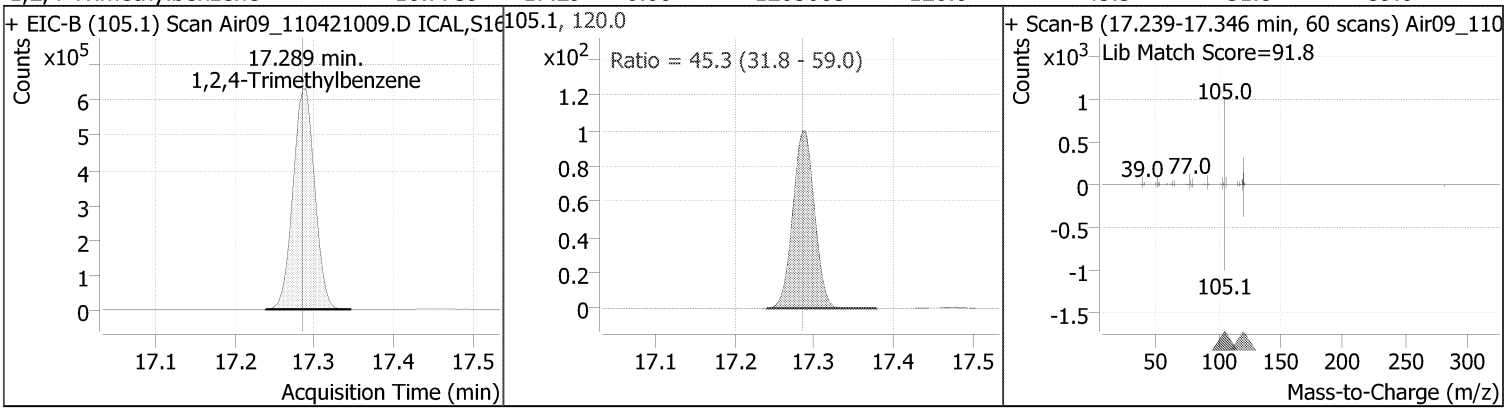
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	10.5119	16.69	0.00	1432727	120.0	29.9	21.0	39.1



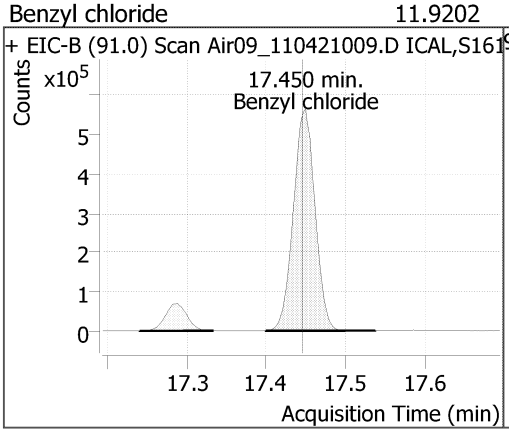
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	10.2980	16.78	0.00	1222236	120.0	48.5	33.9	63.0

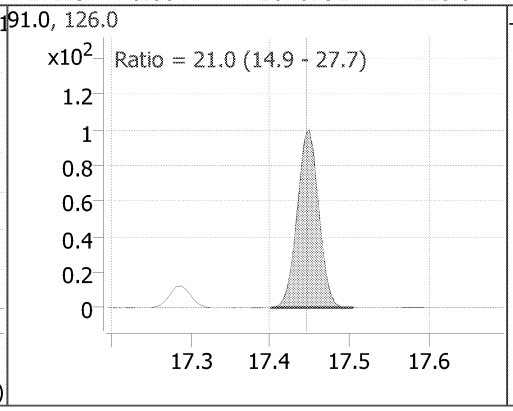


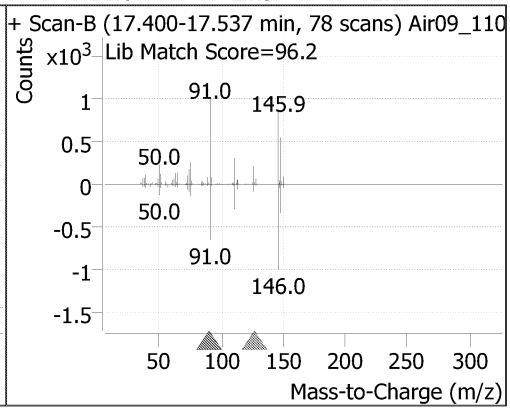
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	10.7739	17.29	0.00	1205063	120.0	45.3	31.8	59.0



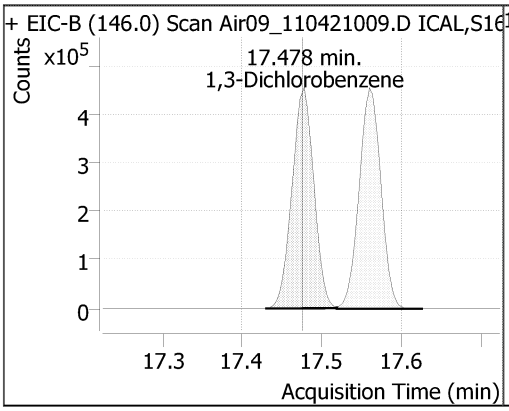
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	11.9202	17.45	0.00	1070791	126.0	21.0	14.9	27.7

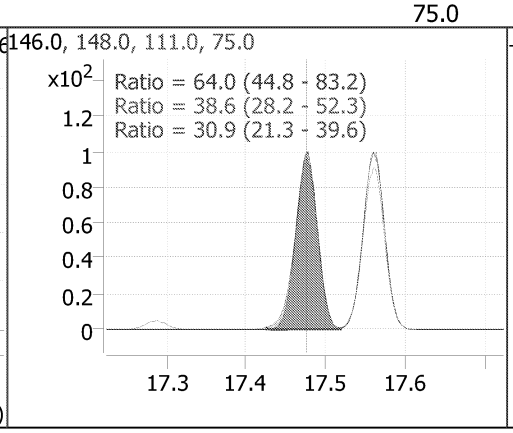


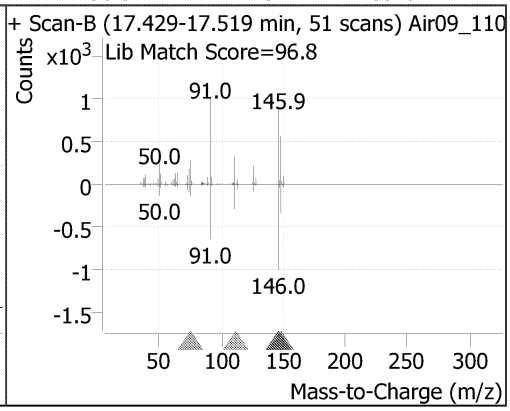




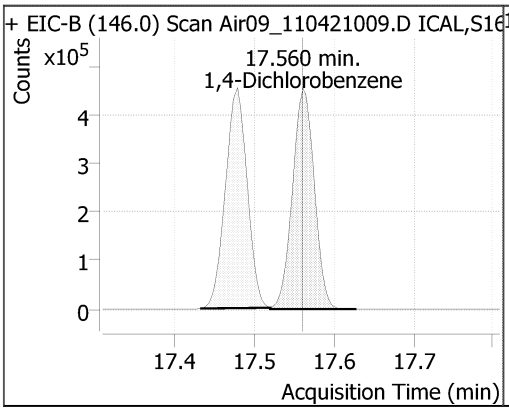
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	10.0759	17.48	0.00	867210	148.0	64.0	44.8	83.2
					111.0	38.6	28.2	52.3
					75.0	30.9	21.3	39.6

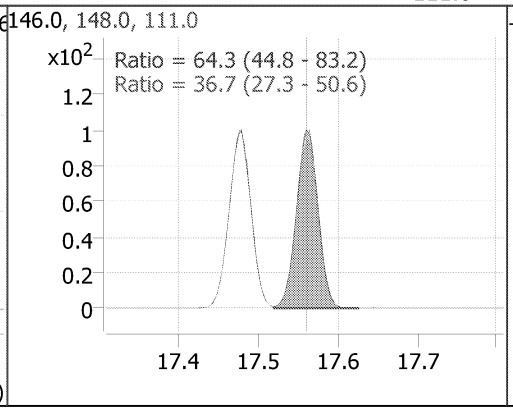


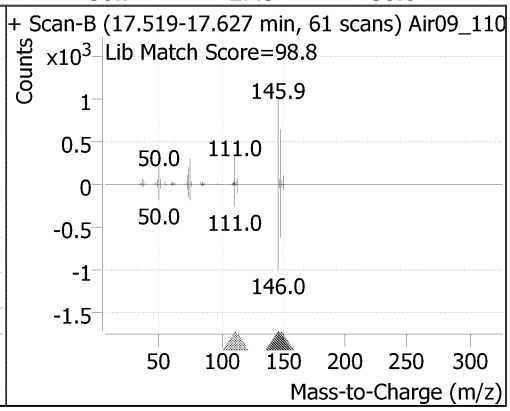




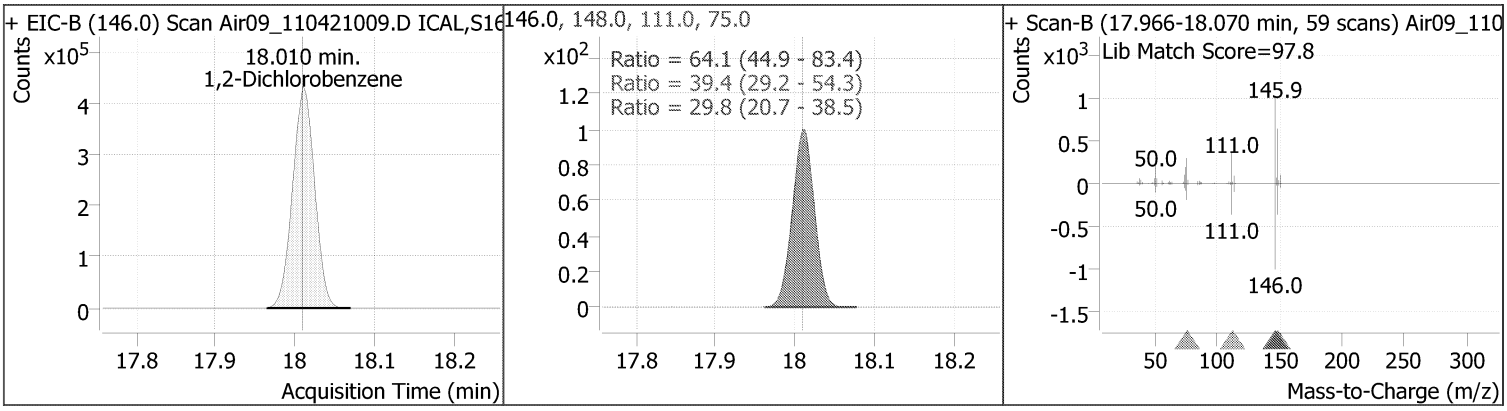
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	10.2616	17.56	0.00	866389	148.0	64.3	44.8	83.2
					111.0	36.7	27.3	50.6



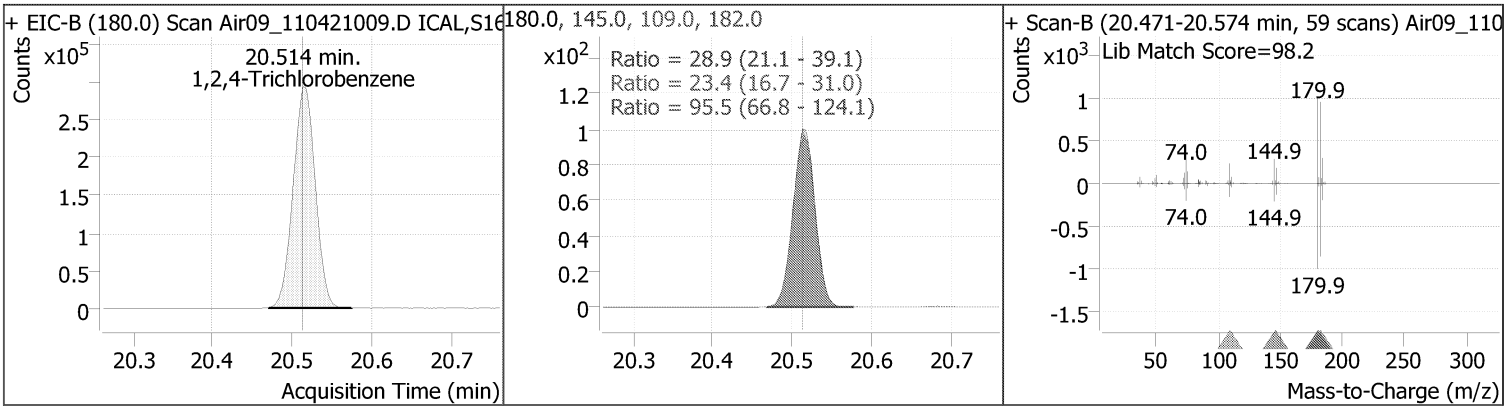




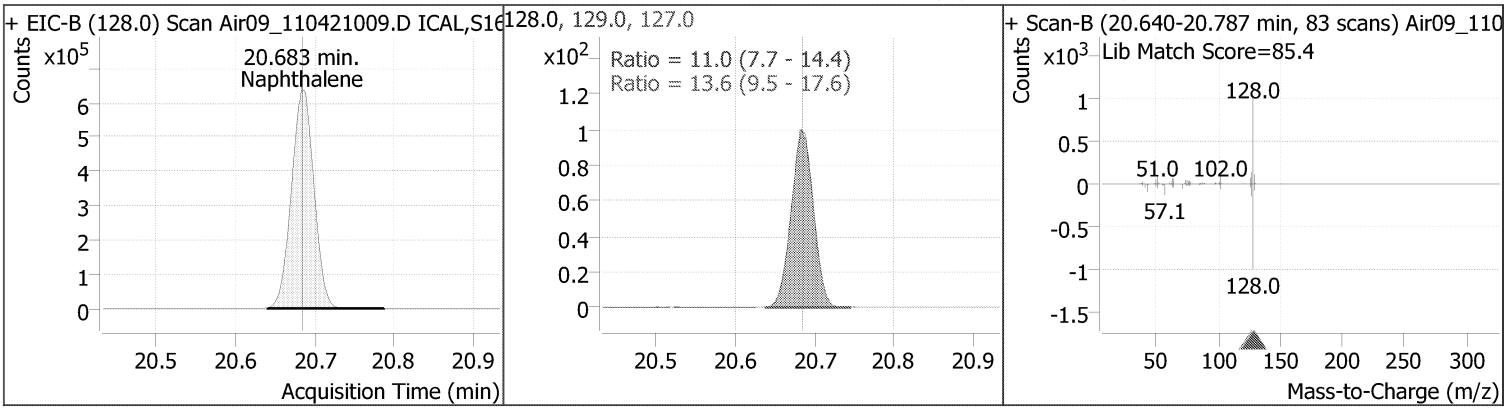
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	10.2085	18.01	0.00	833585	148.0	64.1	44.9	83.4
					111.0	39.4	29.2	54.3
					75.0	29.8	20.7	38.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	13.5738	20.51	0.00	571519	182.0	95.5	66.8	124.1
					145.0	28.9	21.1	39.1
					109.0	23.4	16.7	31.0

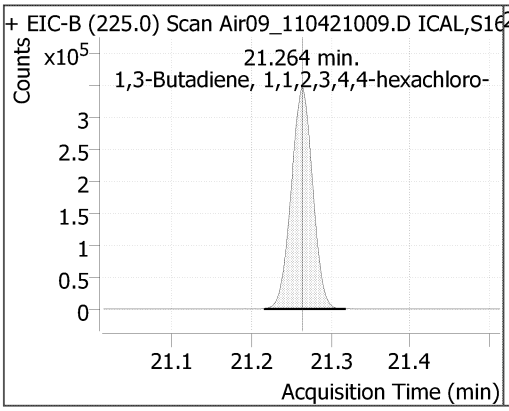


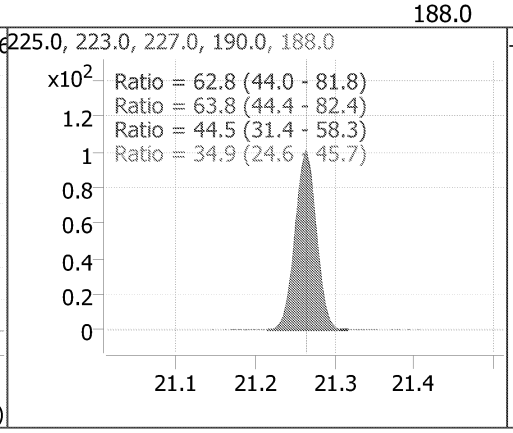
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	14.5881	20.68	0.00	1258700	127.0	13.6	9.5	17.6
					129.0	11.0	7.7	14.4

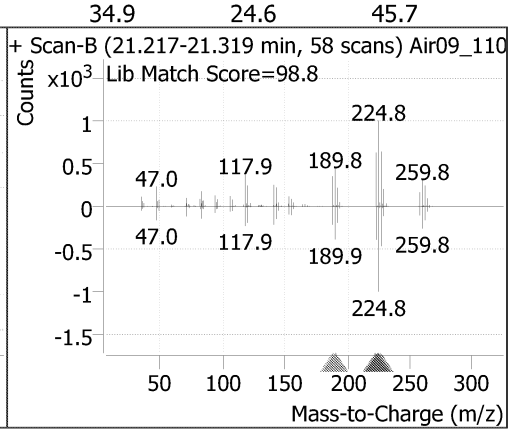


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	10.0184	21.26	0.00	654607	227.0	63.8	44.4	82.4
					223.0	62.8	44.0	81.8
					190.0	44.5	31.4	58.3
					188.0	34.9	24.6	45.7

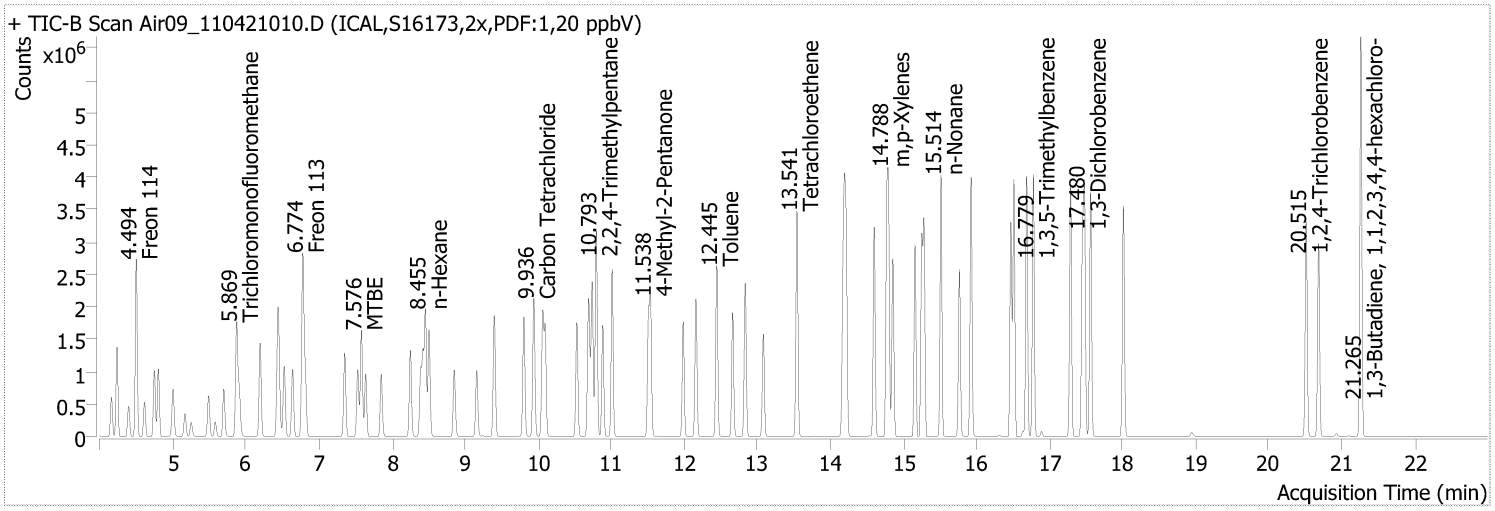






Quantitation Results Report (Not Reviewed)

Data File	Air09_110421010.D	Operator	ZNZ
Acq. Method	TO15_Acq_210707_2	Acq. Date-Time	11/4/2021 10:49:41 PM
Sample Name	ICAL,S16173,2x,PDF:1,20 ppbV	Instrument	AIR-MS-09
Vial	2	Multiplier	1.00
DA Method File	TO15_SCAN_110421_1.m	Comment	1x200mL
Tune File	bfb.u	Tune Date	11/4/2021 10:42:36 AM
Batch Name	2021 Nov 04 1517 TO15_SCAN_110421_1.m.batch.bin	Last Calib Update	11/4/2021 11:13:05 PM
Ref Library	D:\MassHunter\GCMS\1\data\2021\210621\MS09_062121_TO15_1.reflibrary.xml		



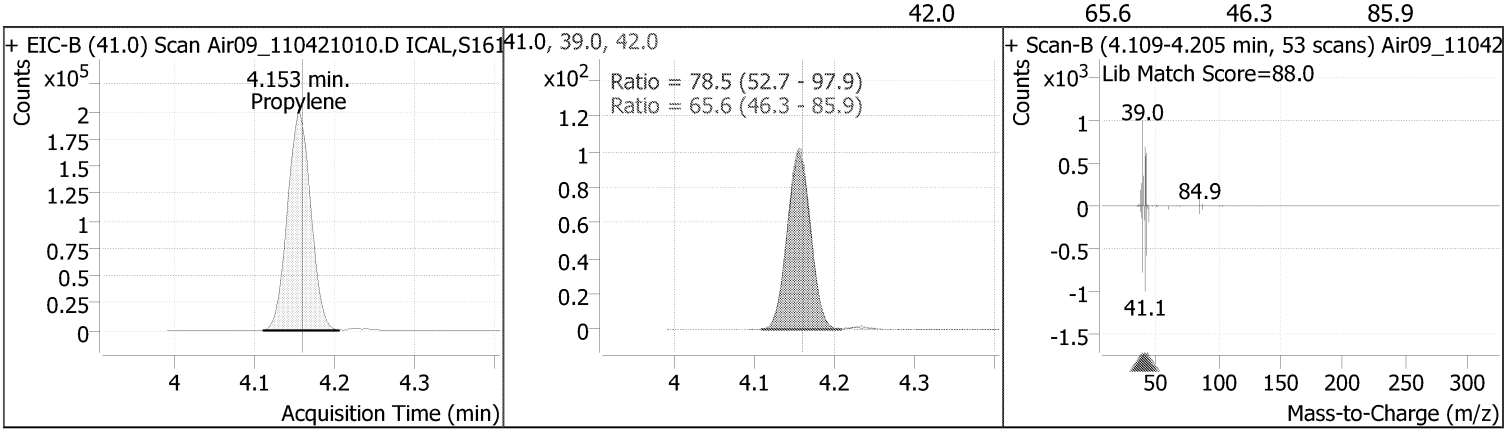
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M Bromochloromethane	8.387	130.0	361789	10.0000	nL/L	-0.003
M 1,4-Difluorobenzene	10.095	114.0	1316753	10.0000	nL/L	0.002
M Chlorobenzene-d5	14.173	82.0	751873	10.0000	nL/L	0.002
System Monitoring Compounds						
S p-Bromofluorobenzene	15.768	174.0	851310	9.4803	nL/L	0.004
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 94.80%		
Target Compounds						QValue
T Propylene	4.153	41.0	405313	18.7836	nL/L	98
T Freon 12	4.230	85.0	1371994	19.0548	nL/L	99
T Chloromethane	4.391	50.0	617842	19.2170	nL/L	99
T Freon 114	4.494	135.0	1095490	18.8027	nL/L	98
T Vinyl Chloride	4.609	62.0	661664	18.4197	nL/L	100
T 1,3-Butadiene	4.741	54.0	533951	18.6612	nL/L	95
T Butane	4.798	43.0	1035614	17.6417	nL/L	98
T Bromomethane	4.998	96.0	536828	19.0596	nL/L	99
T Chloroethane	5.160	64.0	339355	17.8750	nL/L	99
T Ethanol	5.248	45.0	280083	17.7601	nL/L	99
T Vinyl bromide	5.484	108.0	480071	19.4992	nL/L	100
T Acrolein	5.575	56.0	205917	20.1335	nL/L	99
T Acetone	5.694	58.0	259034	18.9376	nL/L	94
T Trichloromonofluoromethane	5.869	101.0	1540854	19.0222	nL/L	100
T Isopropanol (IPA)	5.903	45.0	960175	21.4972	nL/L	94
T n-Pentane	6.189	43.0	1043108	19.8603	nL/L	99
T 1,1-Dichloroethene	6.432	61.0	1028336	19.5954	nL/L	98
T Tert-butyl alcohol (TBA)	6.448	59.0	1173359	21.4599	nL/L	97
T Methylene Chloride	6.521	51.0	232088	17.6871	nL/L	94
T 3-Chloropropene	6.635	76.0	228763	20.6254	nL/L	100
T Freon 113	6.774	101.0	1209063	19.3034	nL/L	100

Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
T Carbon Disulfide	6.807	76.0	1446554	19.5428	nL/L	98
T trans-1,2-Dichloroethene	7.349	61.0	814828	19.5905	nL/L	96
T 1,1-Dichloroethane	7.526	63.0	1062963	19.3940	nL/L	100
T MTBE	7.576	73.0	1483782	20.6219	nL/L	96
T Vinyl Acetate	7.637	43.0	1541848	20.7849	nL/L	99
T 2-Butanone	7.849	72.0	259894	20.0062	nL/L	88
T cis-1,2-Dichloroethene	8.249	61.0	849907	19.9158	nL/L	97
T Ethyl Acetate	8.422	61.0	200591	20.4666	nL/L	99
T n-Hexane	8.455	57.0	925435	20.1630	nL/L	98
T Chloroform	8.503	83.0	1235031	19.4300	nL/L	99
T Tetrahydrofuran	8.851	72.0	244491	20.7429	nL/L	99
T 1,2-Dichloroethane	9.158	62.0	872916	19.1432	nL/L	98
T 1,1,1-Trichloroethane	9.395	97.0	1201182	19.4889	nL/L	100
T Benzene	9.803	78.0	1611887	19.4235	nL/L	100
T Carbon Tetrachloride	9.936	117.0	1287360	20.0274	nL/L	99
T TPH Gasoline (C3 to C12)	9.999	0.0	189023854	37.8899	nL/L	100
T Cyclohexane	10.061	84.0	664108	18.1402	nL/L	92
T 1,2-Dichloropropane	10.527	63.0	689050	19.7767	nL/L	98
T Methane, bromodichloro-	10.686	83.0	1275545	20.1144	nL/L	99
T 1,4-Dioxane	10.706	88.0	369432	20.7778	nL/L	93
T Trichloroethene	10.738	132.0	753917	20.0727	nL/L	100
T 2,2,4-Trimethylpentane	10.793	56.0	911403	20.0283	nL/L	97
T Methyl methacrylate	10.885	69.0	613731	21.2358	nL/L	98
T n-Heptane	11.011	71.0	569675	20.9069	nL/L	95
T cis-1,3-Dichloropropene	11.508	110.0	227936	21.7625	nL/L	97
T 4-Methyl-2-Pentanone	11.538	58.0	561792	22.3592	nL/L	98
T trans-1,3-Dichloropropene	11.986	110.0	231452	21.9713	nL/L	97
T 1,1,2-Trichloroethane	12.161	97.0	705130	19.8521	nL/L	100
T Toluene	12.445	91.0	2055623	20.5175	nL/L	100
T 2-Hexanone	12.661	58.0	728948	22.3699	nL/L	99
T Dibromochloromethane	12.833	129.0	1370896	20.8180	nL/L	99
T 1,2-Dibromoethane	13.082	108.9	1114185	20.6713	nL/L	99
T Tetrachloroethene	13.541	166.0	1097437	20.4570	nL/L	99
T 1,1,1,2-Tetrachloroethane	14.193	131.0	914474	18.9322	nL/L	99
T Benzene, chloro-	14.218	112.0	1640764	18.5654	nL/L	99
T Ethylbenzene	14.600	91.0	2582388	19.3358	nL/L	100
T m,p-Xylenes	14.788	91.0	4144322	43.5058	nL/L	100
T Bromoform	14.854	173.0	1538216	20.5082	nL/L	99
T Styrene	15.159	104.0	1609778	20.2583	nL/L	99
T 1,1,2,2-Tetrachloroethane	15.250	83.0	1656760	18.7541	nL/L	99
T o-Xylene	15.282	91.0	2048097	19.3678	nL/L	100
T n-Nonane	15.514	85.0	490882	20.5989	nL/L	97
T Isopropylbenzene	15.927	105.0	2985364	18.9283	nL/L	100
T 2-Chlorotoluene	16.471	126.0	723911	19.0388	nL/L	100
T n-Propylbenzene	16.514	120.0	829179	19.8196	nL/L	99
T 4-Ethyltoluene	16.687	105.1	2937946	20.3700	nL/L	100
T 1,3,5-Trimethylbenzene	16.779	105.0	2533409	20.1963	nL/L	100
T 1,2,4-Trimethylbenzene	17.287	105.1	2498092	21.0091	nL/L	100
T Benzyl chloride	17.452	91.0	2312827	23.7428	nL/L	100
T 1,3-Dichlorobenzene	17.480	146.0	1810992	19.9445	nL/L	99
T 1,4-Dichlorobenzene	17.564	146.0	1805330	20.2270	nL/L	99
T 1,2-Dichlorobenzene	18.012	146.0	1731262	20.0776	nL/L	99
T 1,2,4-Trichlorobenzene	20.515	180.0	1292004	27.5139	nL/L	99
T Naphthalene	20.685	128.0	2778760	28.6327	nL/L	100
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.265	225.0	1417623	20.4855	nL/L	100

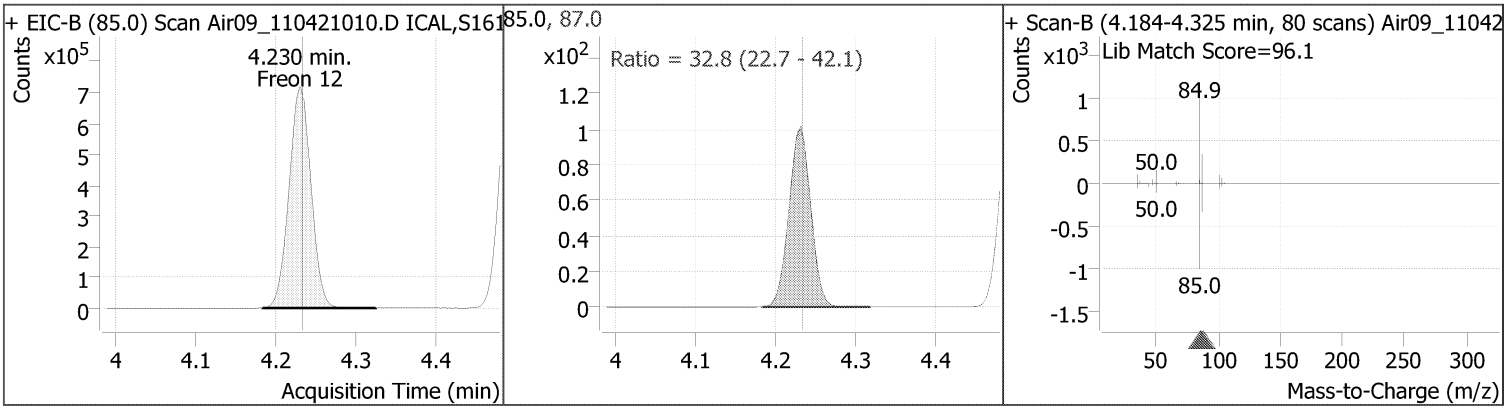
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

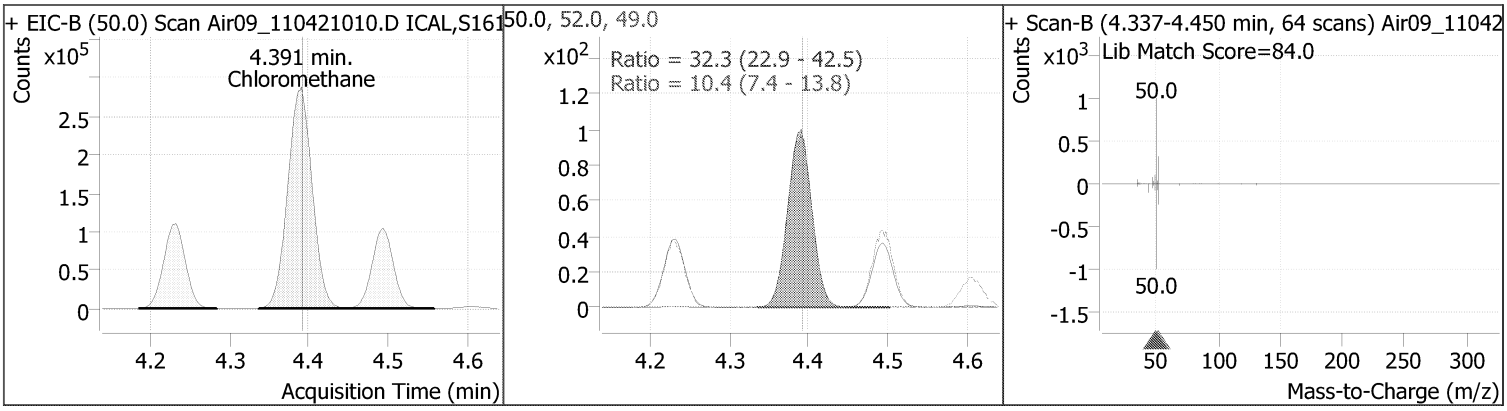
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	18.7836	4.15	-0.01	405313	39.0	78.5	52.7	97.9
					42.0	65.6	46.3	85.9



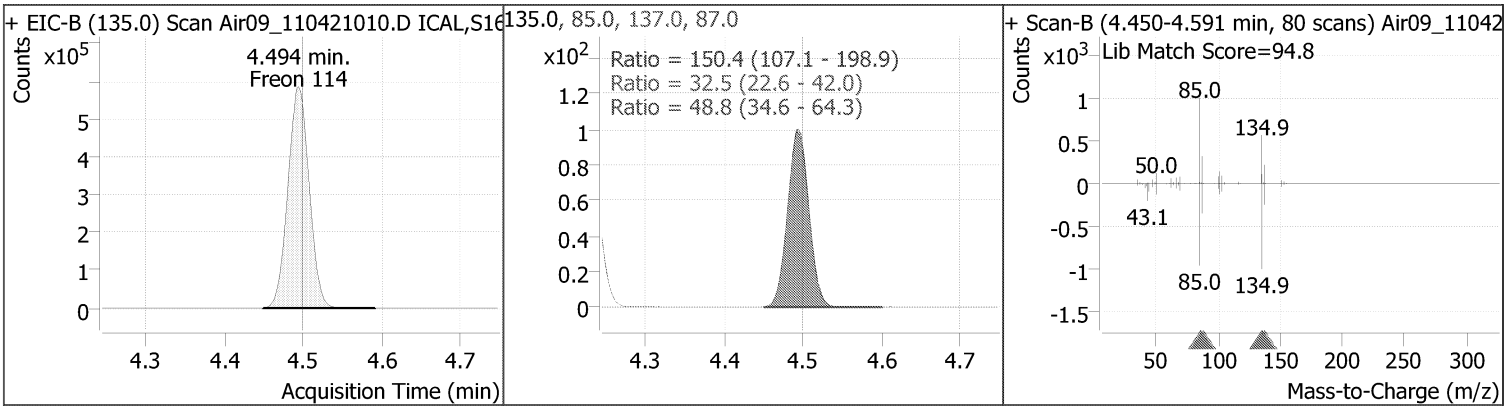
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	19.0548	4.23	0.00	1371994	87.0	32.8	22.7	42.1



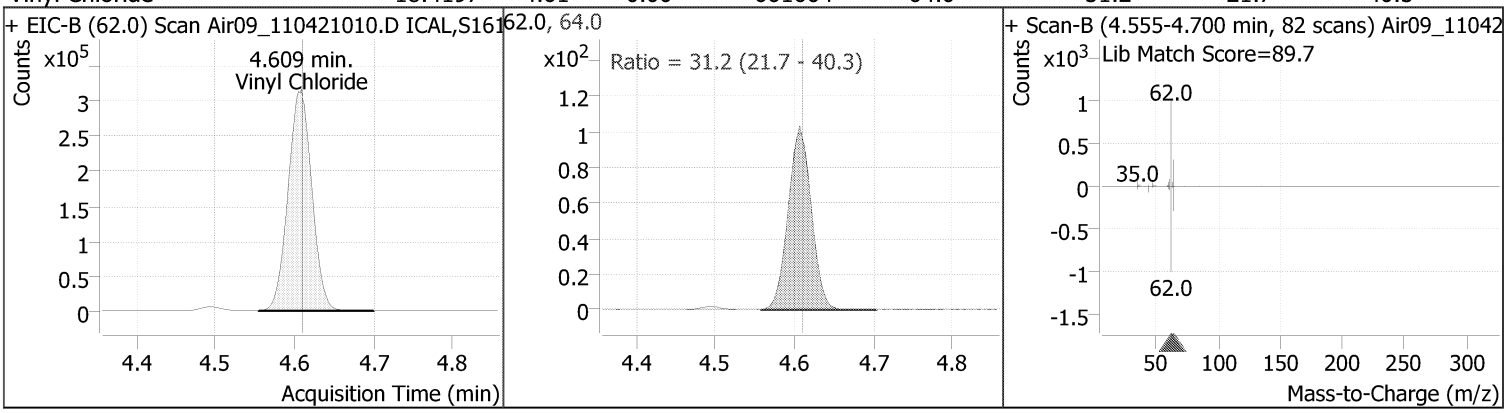
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	19.2170	4.39	0.00	617842	52.0	32.3	22.9	42.5
					49.0	10.4	7.4	13.8



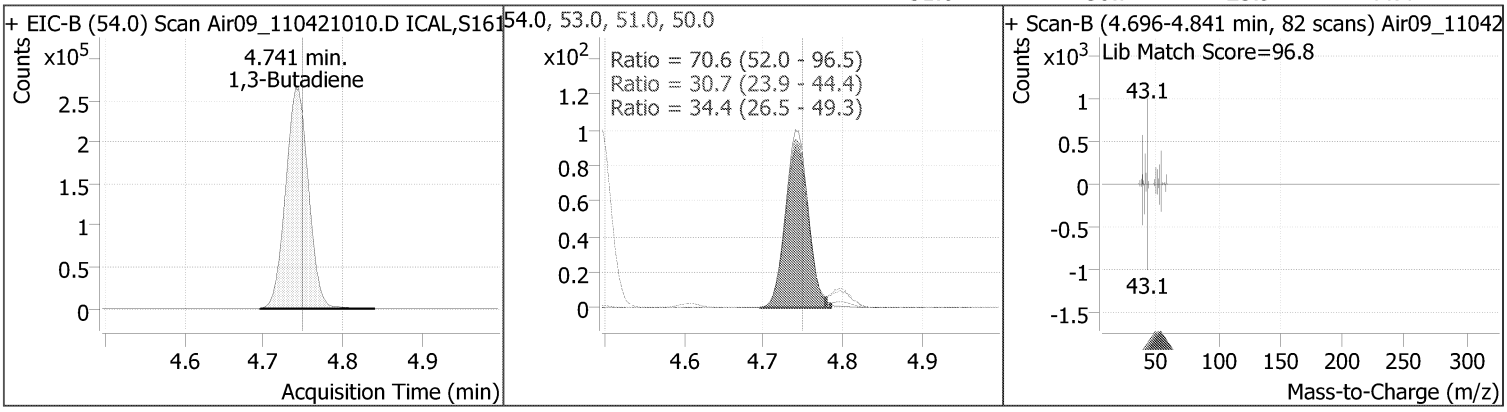
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	18.8027	4.49	-0.01	1095490	85.0	150.4	107.1	198.9
					87.0	48.8	34.6	64.3
					137.0	32.5	22.6	42.0



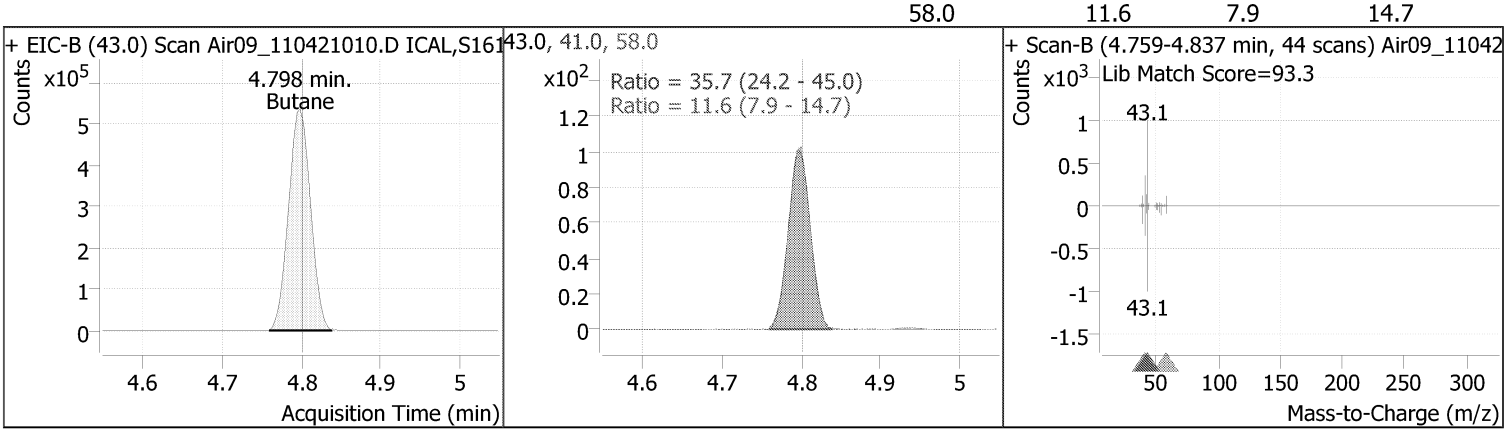
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	18.4197	4.61	0.00	661664	64.0	31.2	21.7	40.3



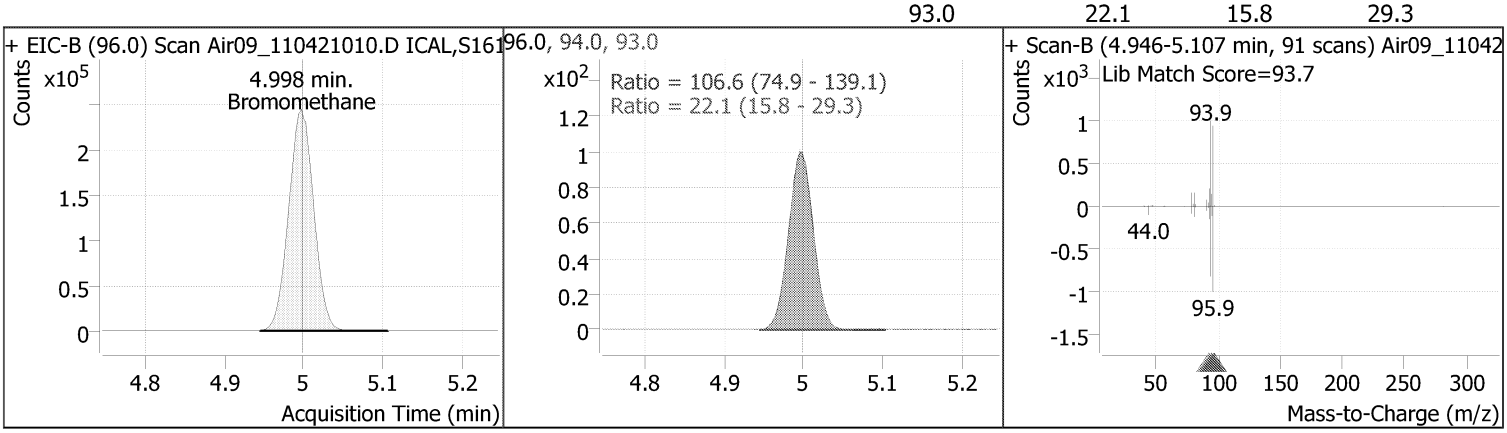
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	18.6612	4.74	-0.01	533951	53.0	70.6	52.0	96.5
					50.0	34.4	26.5	49.3
					51.0	30.7	23.9	44.4



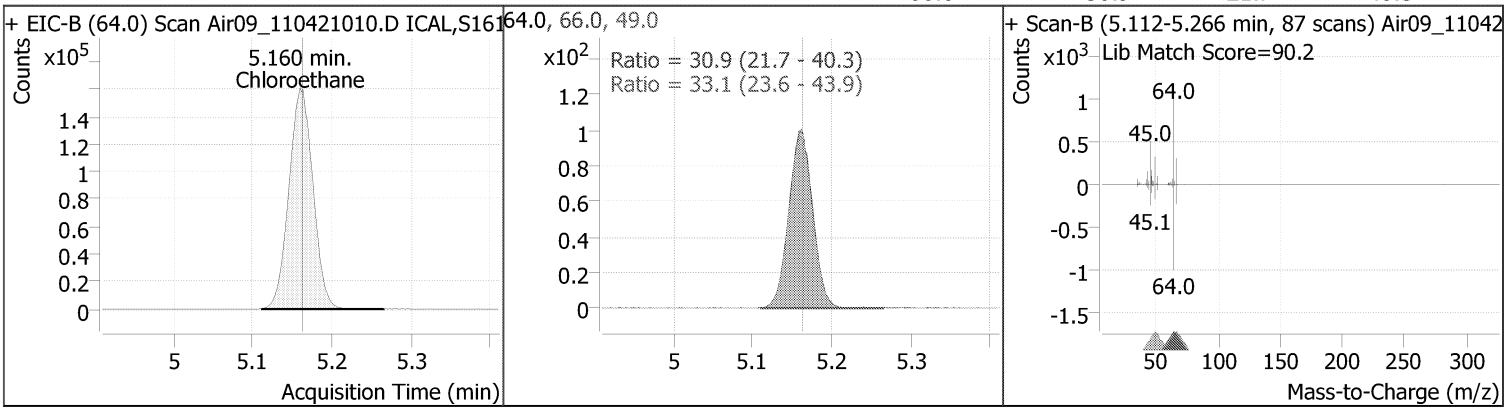
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	17.6417	4.80	0.00	1035614	41.0	35.7	24.2	45.0
					58.0	11.6	7.9	14.7



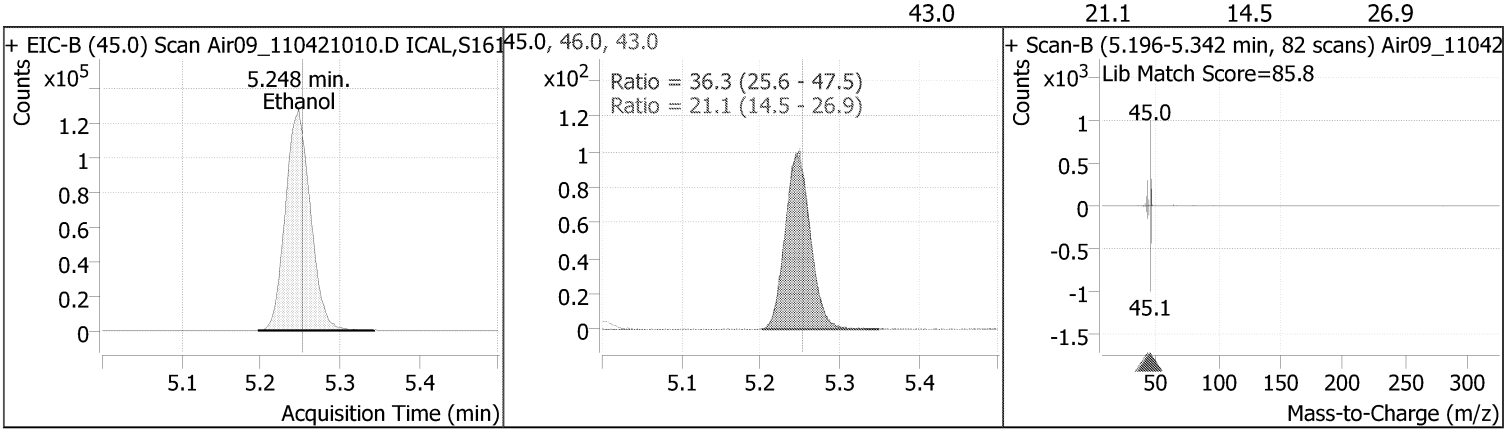
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromomethane	19.0596	5.00	0.00	536828	94.0	106.6	74.9	139.1
					93.0	22.1	15.8	29.3



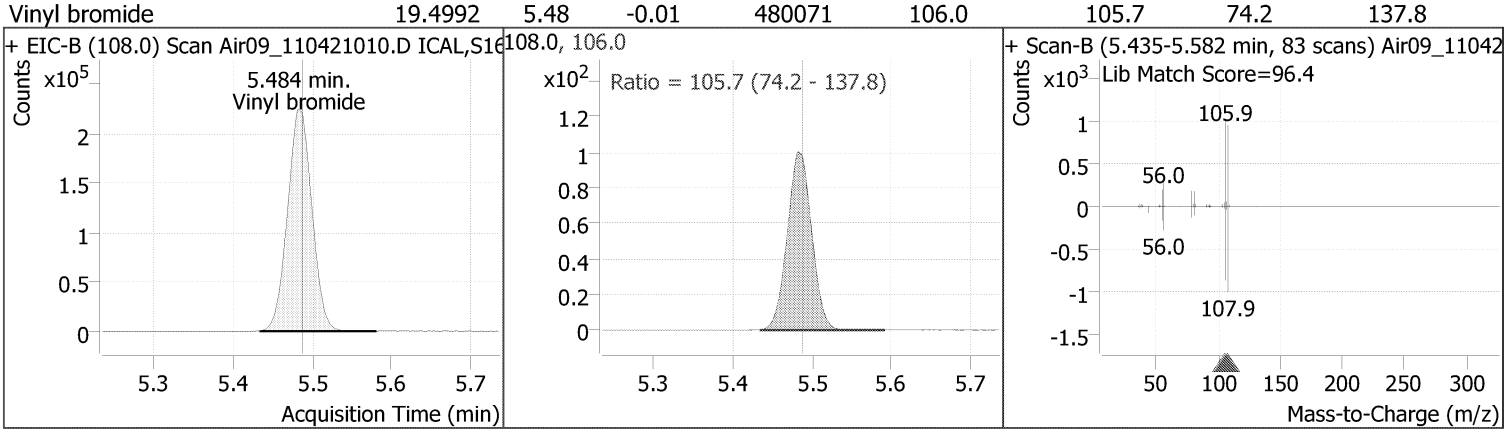
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	17.8750	5.16	0.00	339355	49.0	33.1	23.6	43.9
					66.0	30.9	21.7	40.3



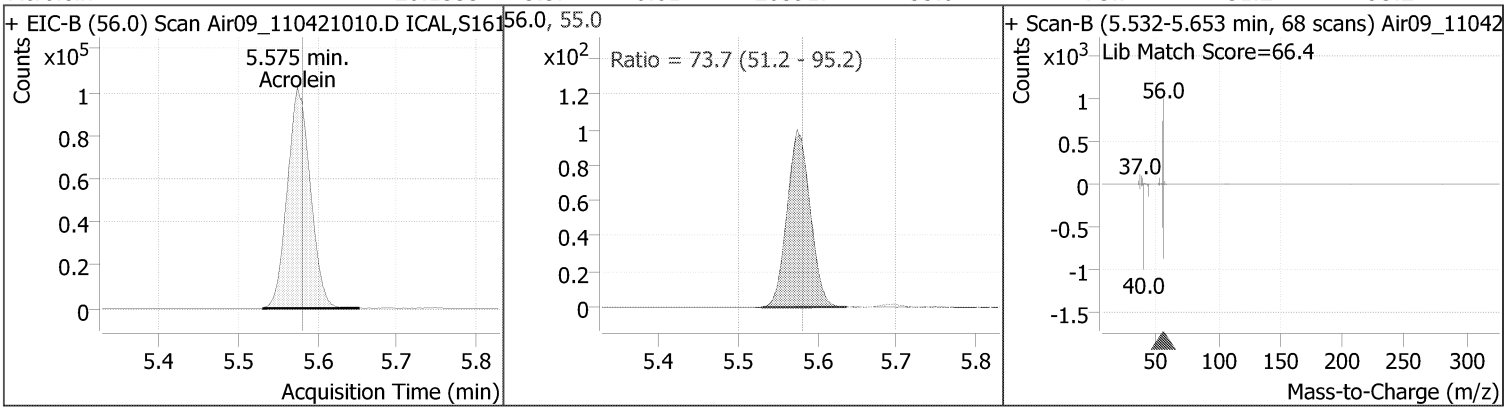
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	17.7601	5.25	-0.01	280083	46.0	36.3	25.6	47.5
					43.0	21.1	14.5	26.9



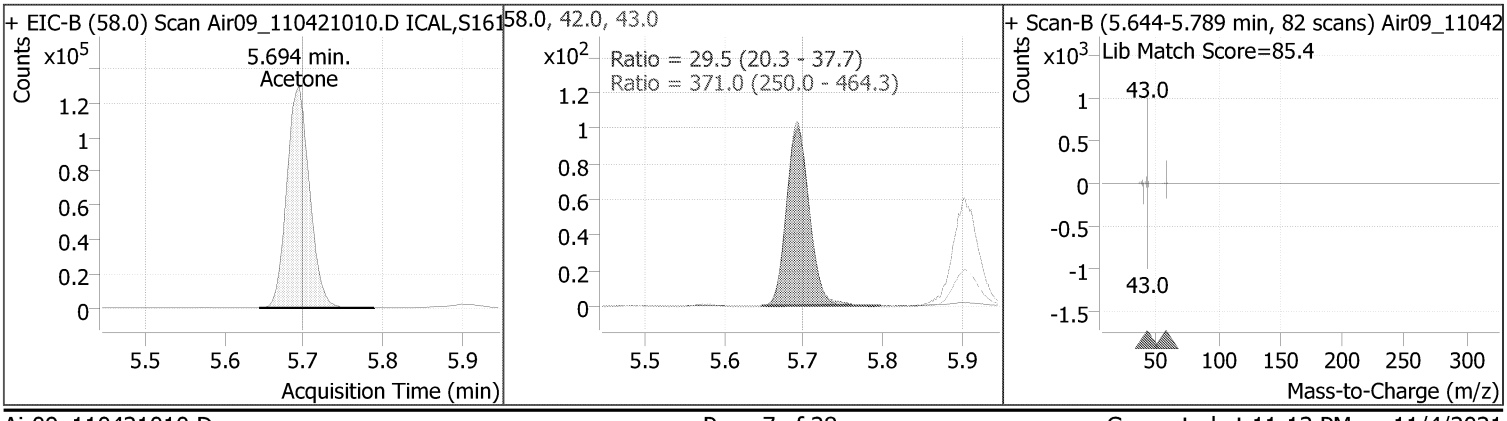
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl bromide	19.4992	5.48	-0.01	480071	106.0	105.7	74.2	137.8



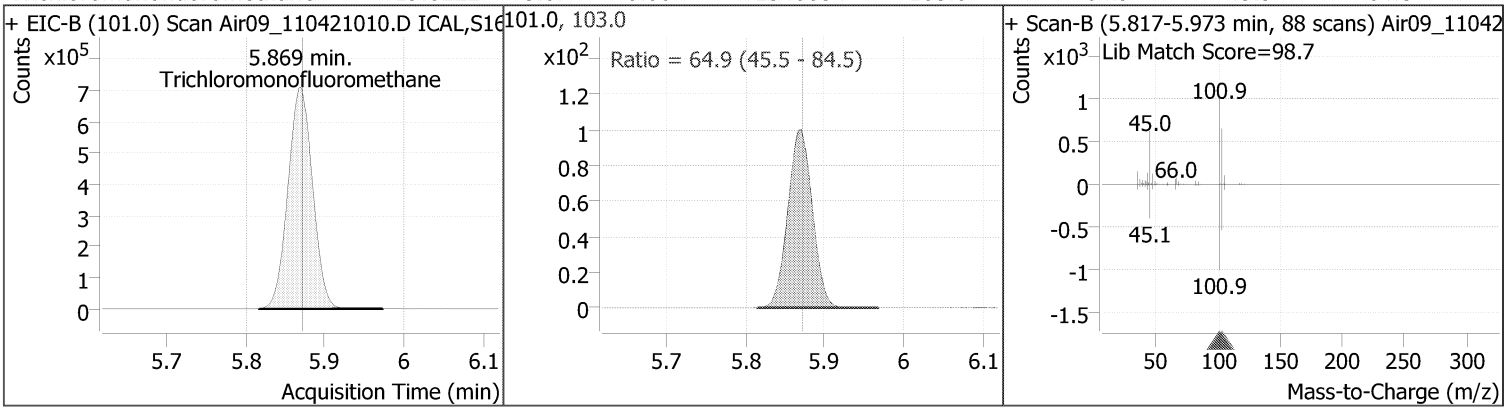
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	20.1335	5.57	-0.01	205917	55.0	73.7	51.2	95.2



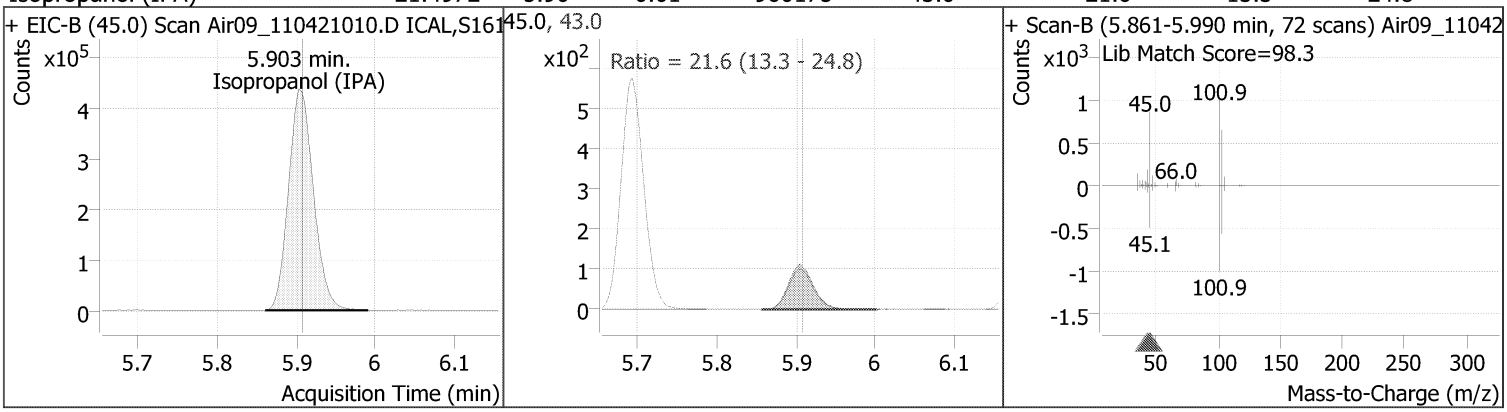
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	18.9376	5.69	-0.01	259034	43.0	371.0	250.0	464.3
					42.0	29.5	20.3	37.7



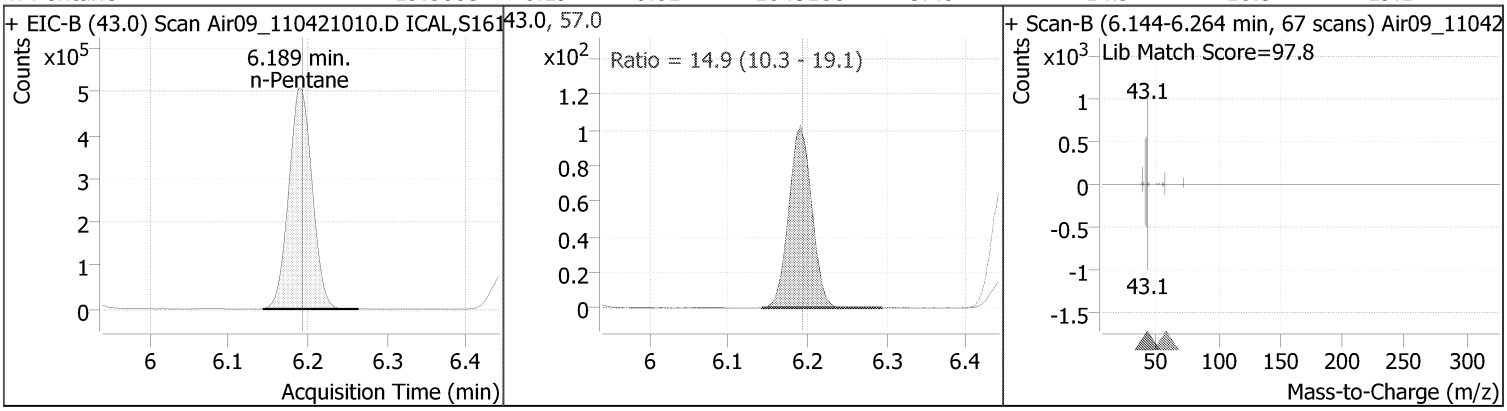
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	19.0222	5.87	0.00	1540854	103.0	64.9	45.5	84.5



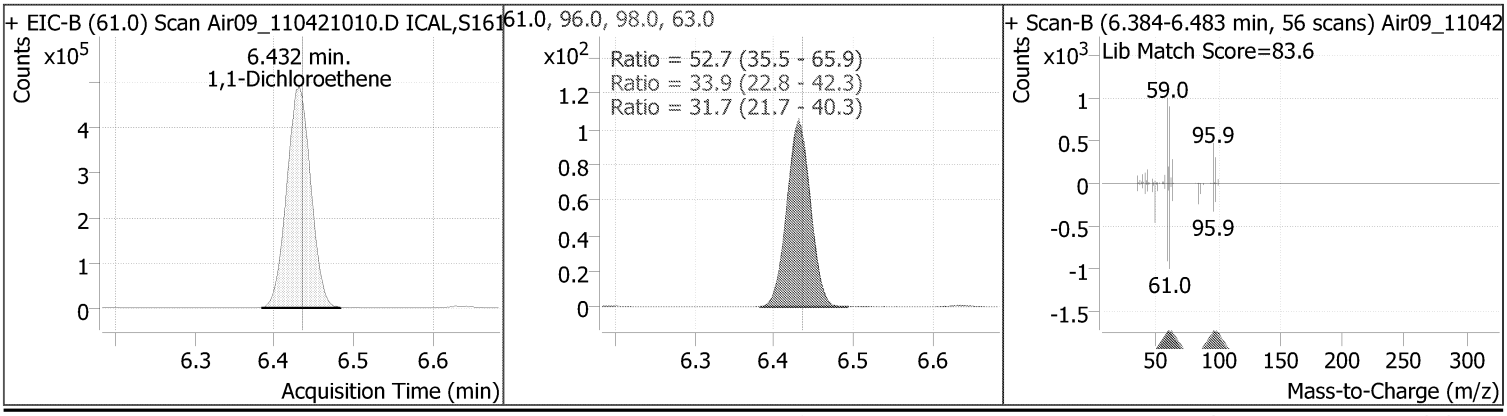
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	21.4972	5.90	-0.01	960175	43.0	21.6	13.3	24.8



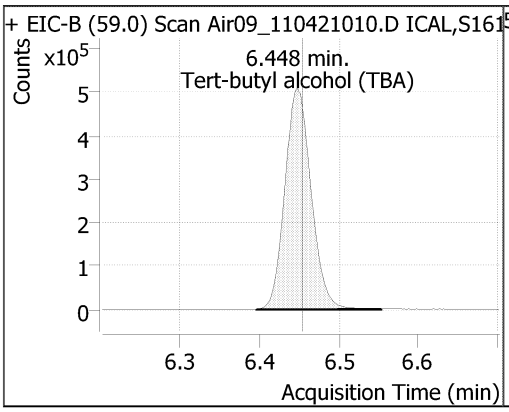
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	19.8603	6.19	-0.01	1043108	57.0	14.9	10.3	19.1

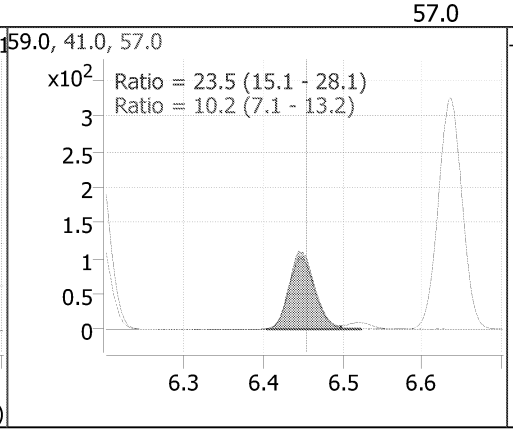


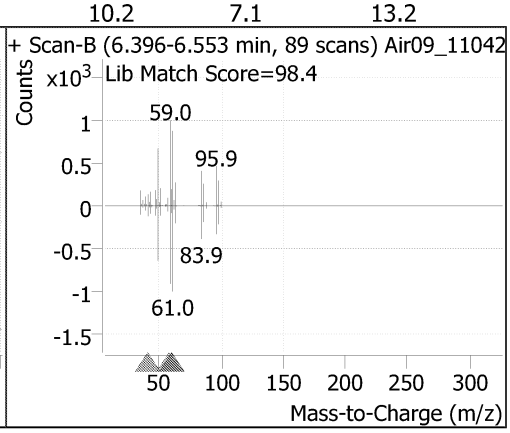
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	19.5954	6.43	-0.01	1028336	96.0	52.7	35.5	65.9
					98.0	33.9	22.8	42.3
					63.0	31.7	21.7	40.3



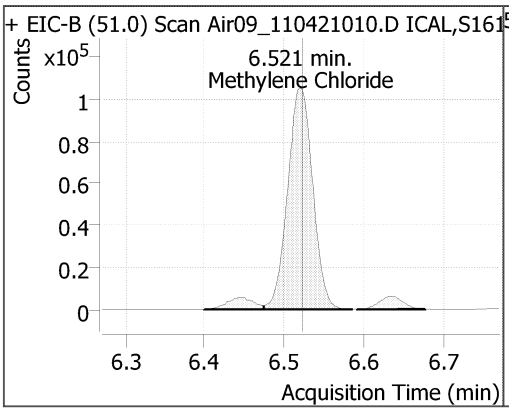
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	21.4599	6.45	-0.01	1173359	41.0	23.5	15.1	28.1
					57.0	10.2	7.1	13.2

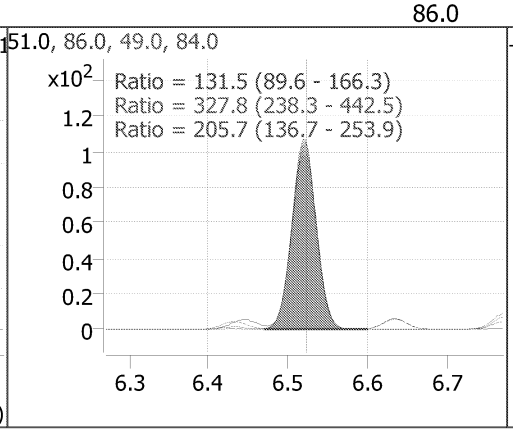


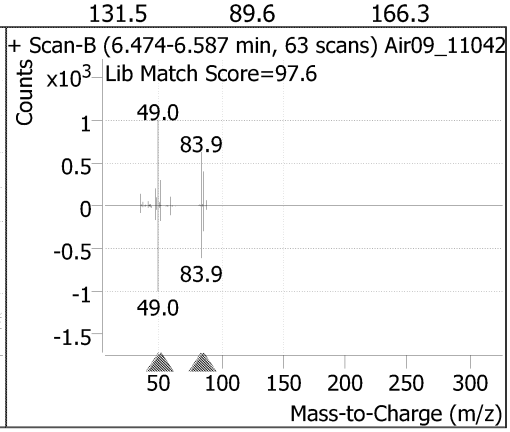




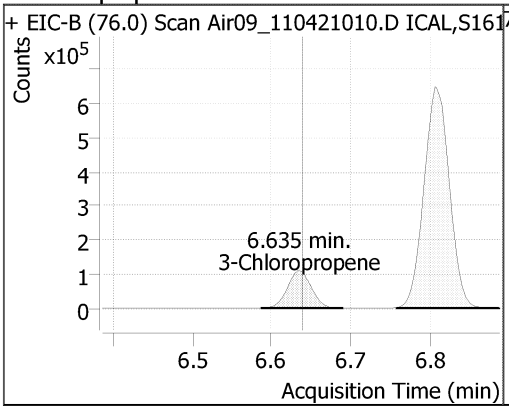
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	17.6871	6.52	0.00	232088	49.0	327.8	238.3	442.5
					84.0	205.7	136.7	253.9
					86.0	131.5	89.6	166.3

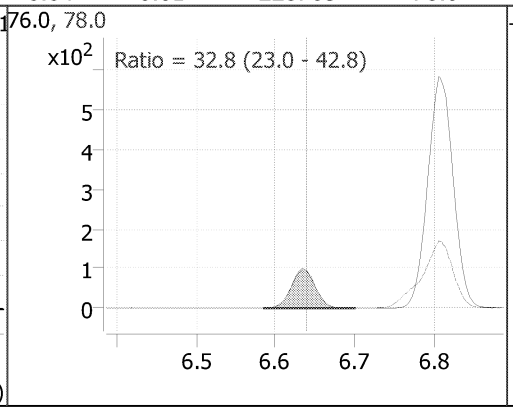


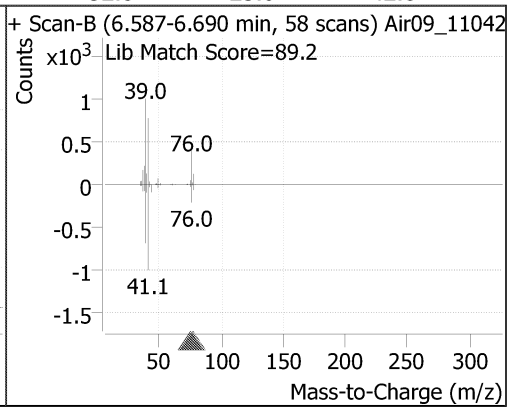




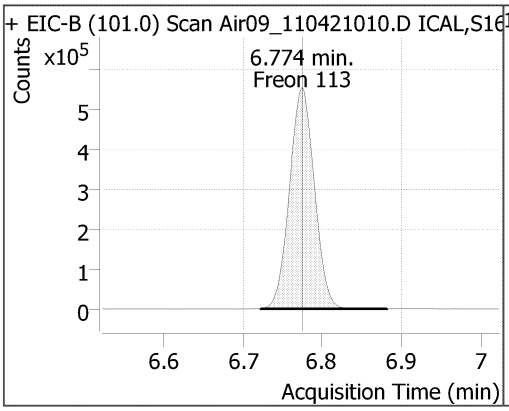
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	20.6254	6.64	-0.01	228763	78.0	32.8	23.0	42.8

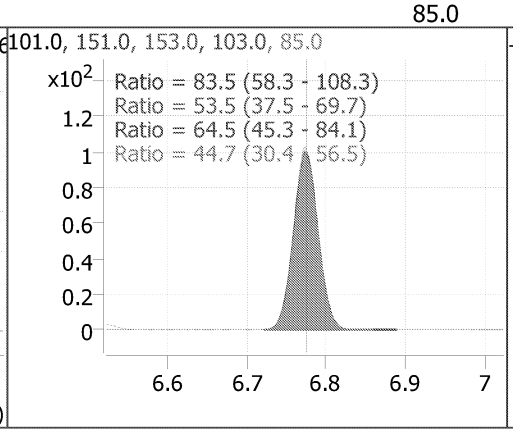


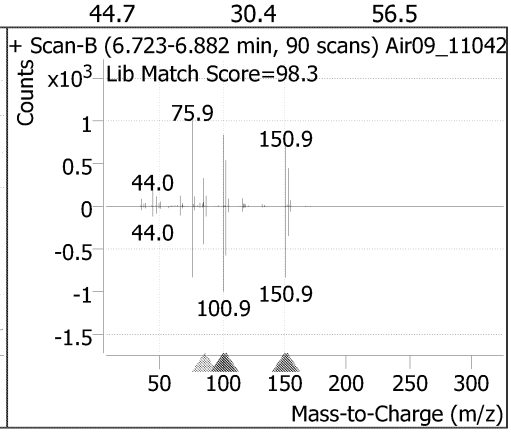




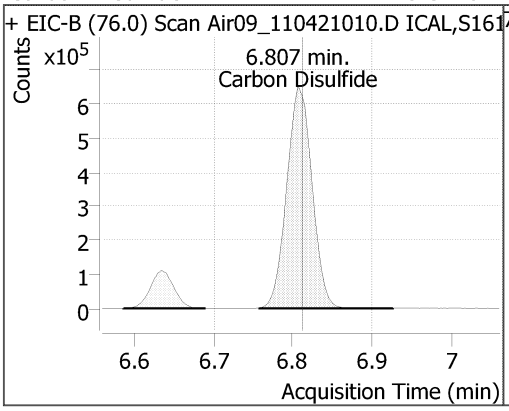
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	19.3034	6.77	0.00	1209063	151.0	83.5	58.3	108.3
					103.0	64.5	45.3	84.1
					153.0	53.5	37.5	69.7
					85.0	44.7	30.4	56.5

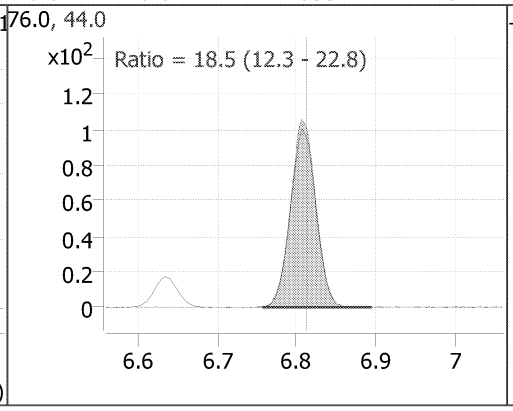


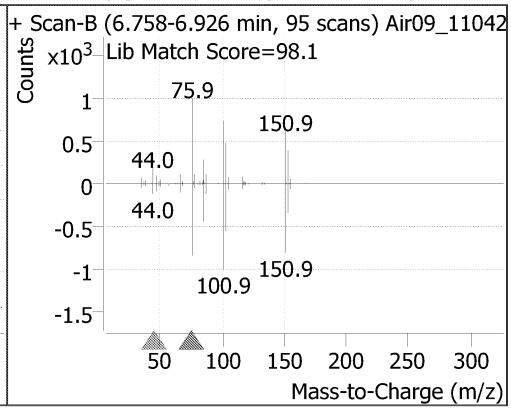




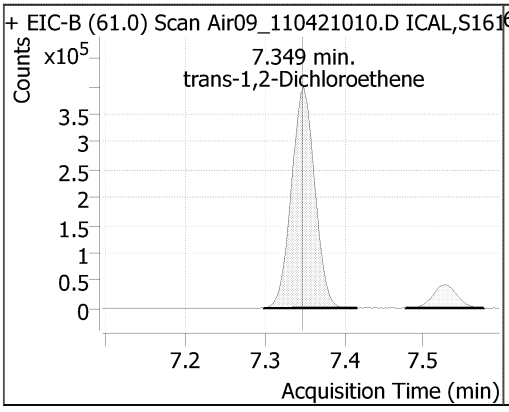
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	19.5428	6.81	-0.01	1446554	44.0	18.5	12.3	22.8

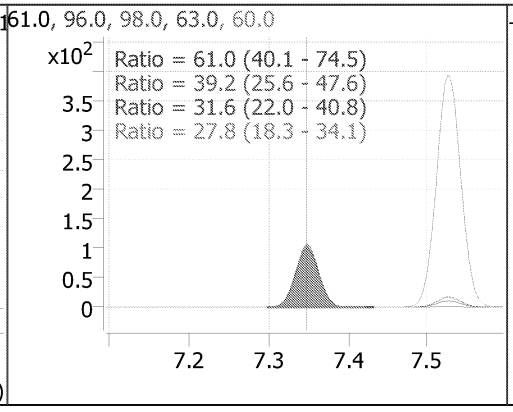


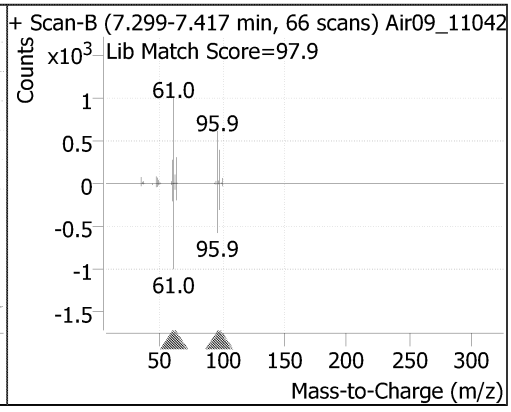




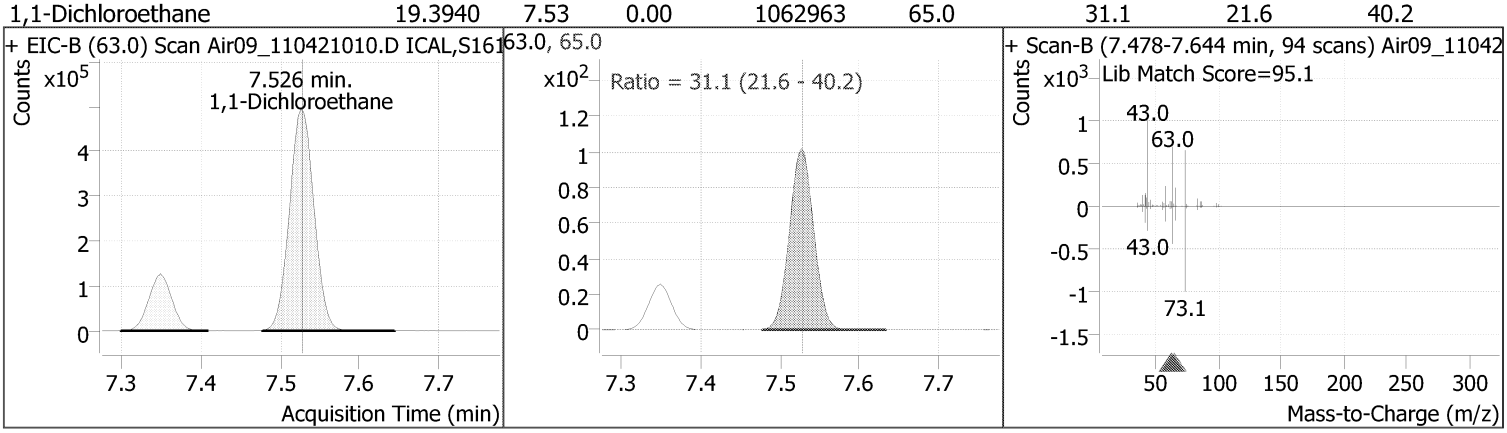
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	19.5905	7.35	0.00	814828	96.0	61.0	40.1	74.5
					98.0	39.2	25.6	47.6
					63.0	31.6	22.0	40.8
					60.0	27.8	18.3	34.1



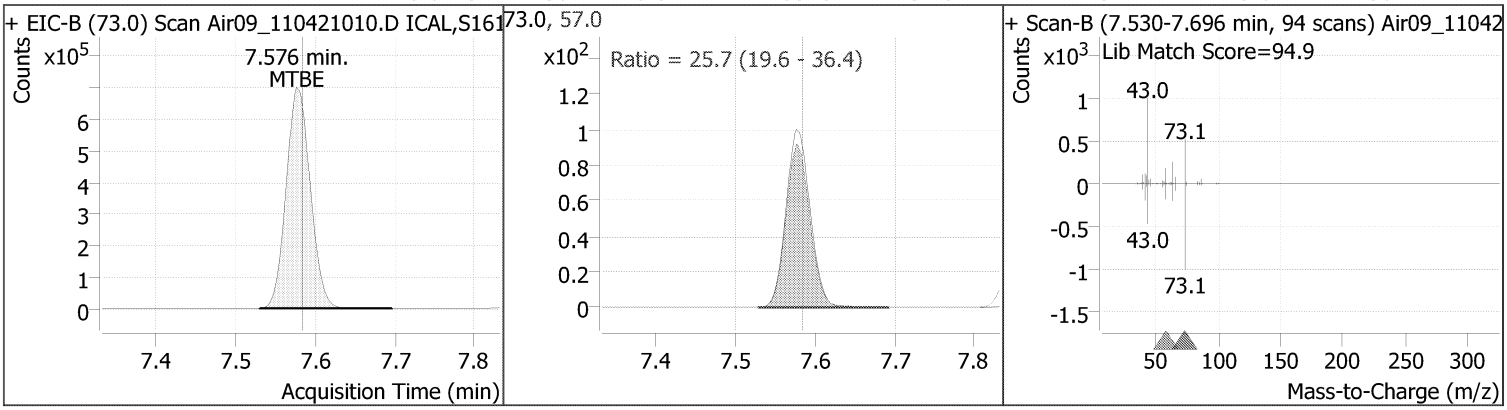




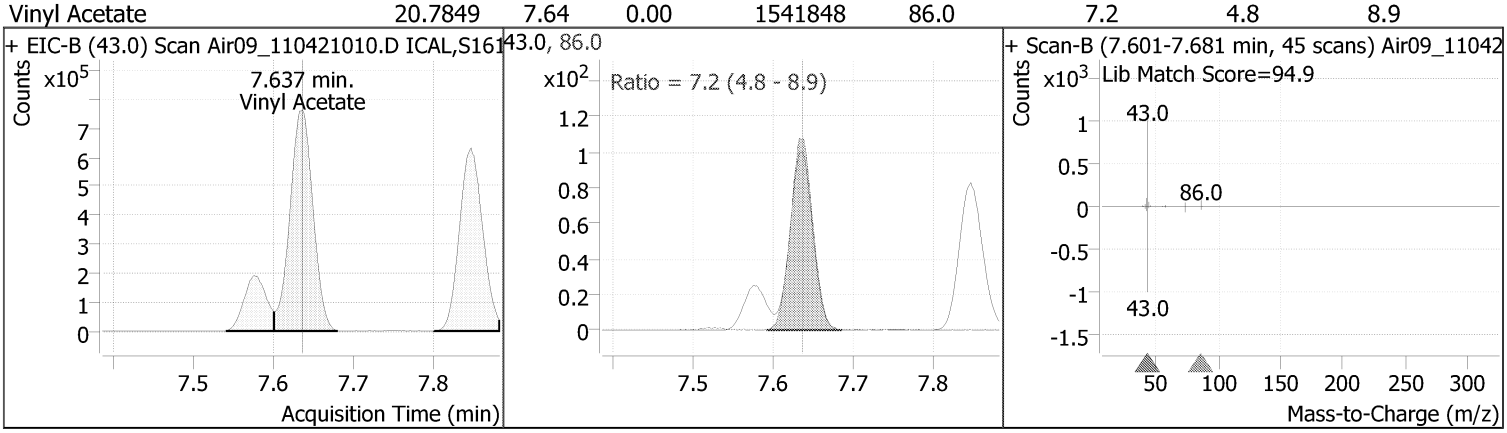
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	19.3940	7.53	0.00	1062963	65.0	31.1	21.6	40.2



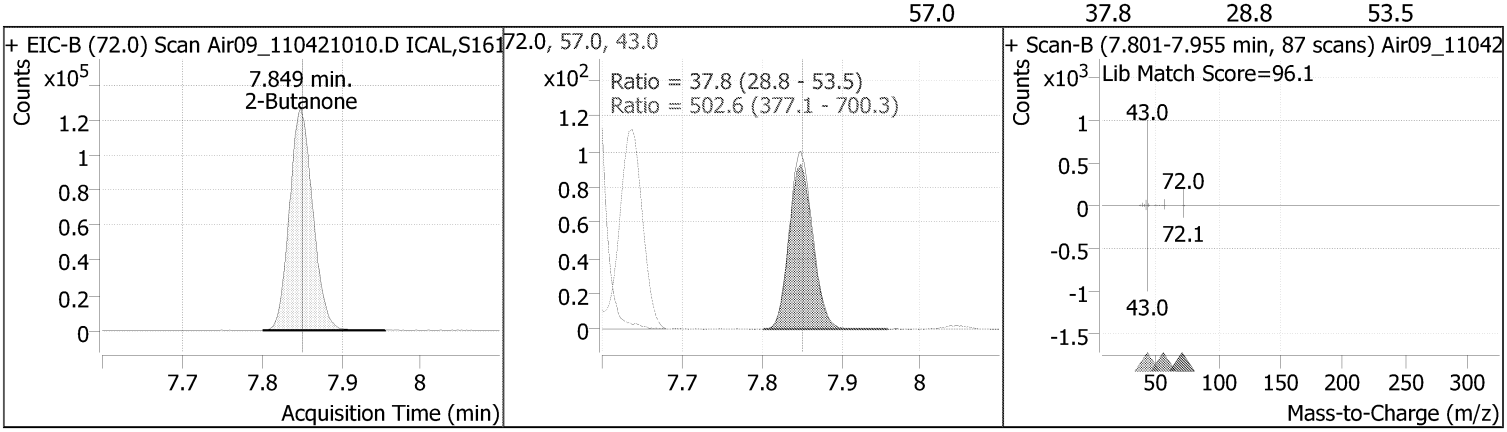
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	20.6219	7.58	-0.01	1483782	57.0	25.7	19.6	36.4



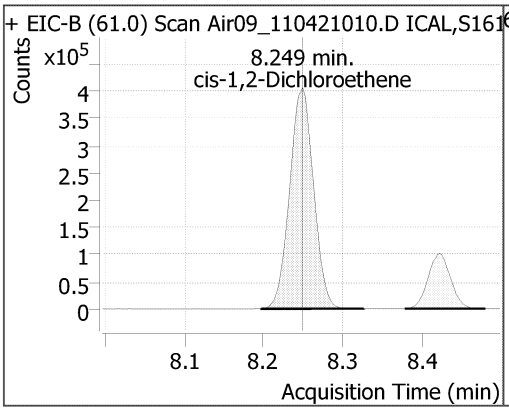
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	20.7849	7.64	0.00	1541848	86.0	7.2	4.8	8.9

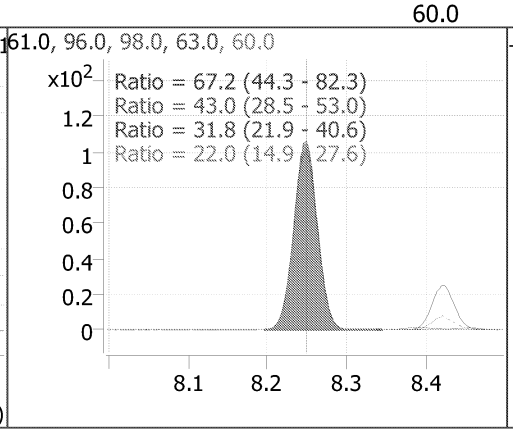


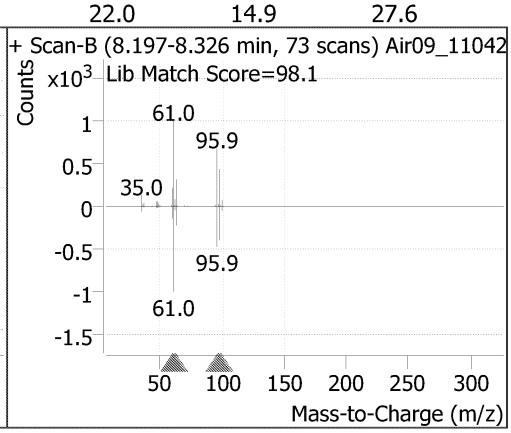
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	20.0062	7.85	0.00	259894	43.0	502.6	377.1	700.3
					57.0	37.8	28.8	53.5



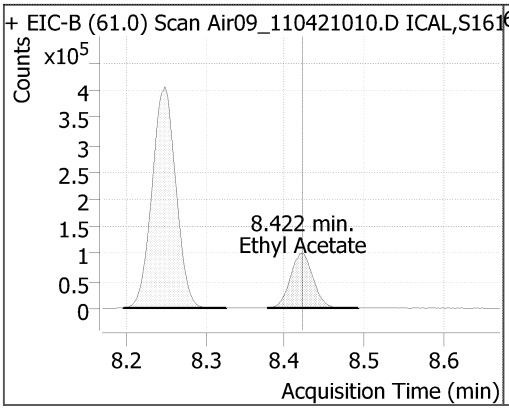
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	19.9158	8.25	0.00	849907	96.0	67.2	44.3	82.3
					98.0	43.0	28.5	53.0
					63.0	31.8	21.9	40.6
					60.0	22.0	14.9	27.6

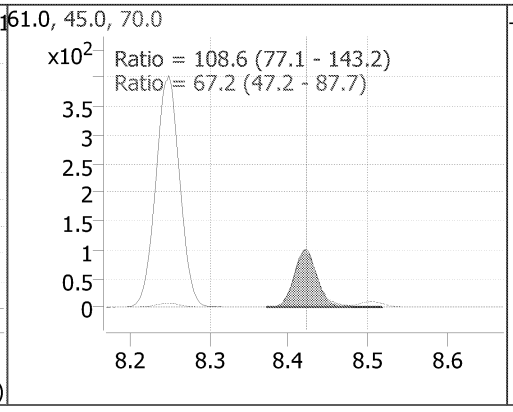


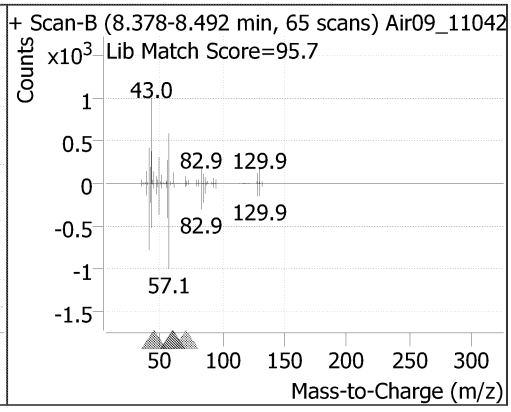




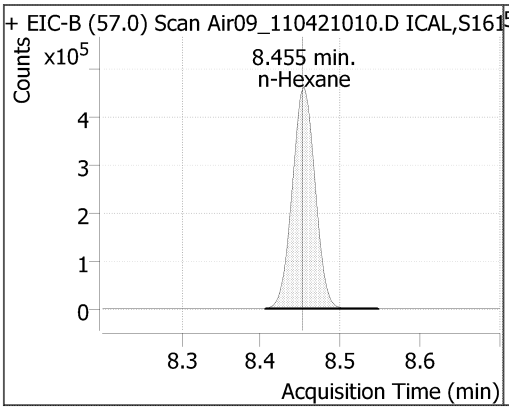
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	20.4666	8.42	0.00	200591	45.0	108.6	77.1	143.2
					70.0	67.2	47.2	87.7

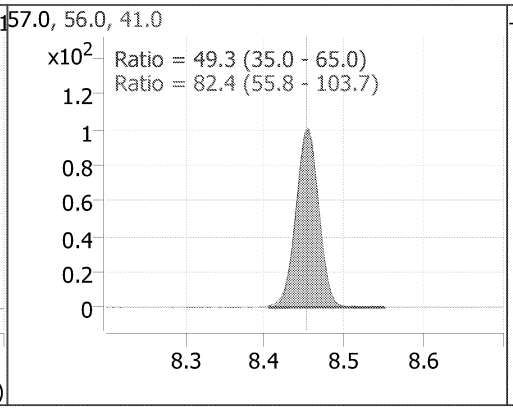


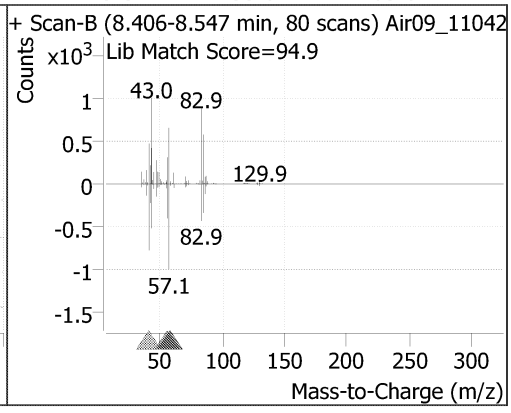




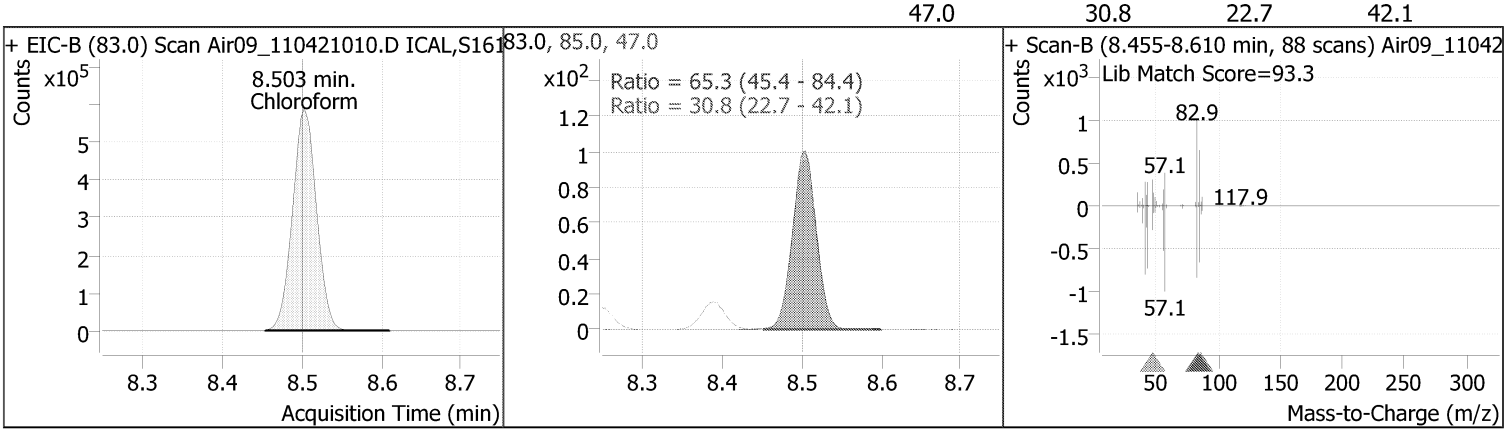
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	20.1630	8.45	0.00	925435	41.0	82.4	55.8	103.7
					56.0	49.3	35.0	65.0



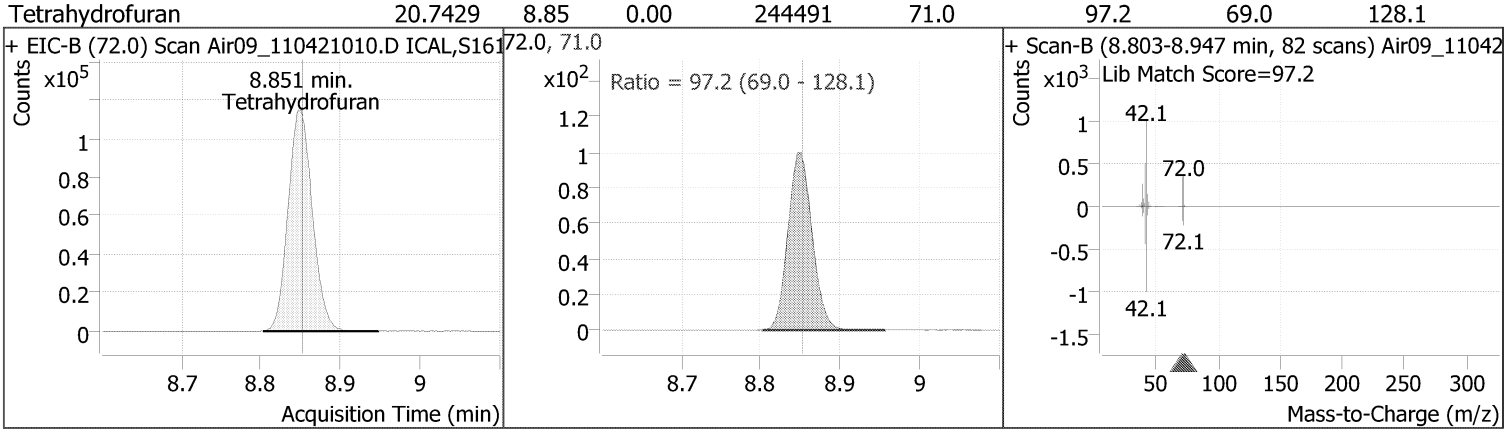




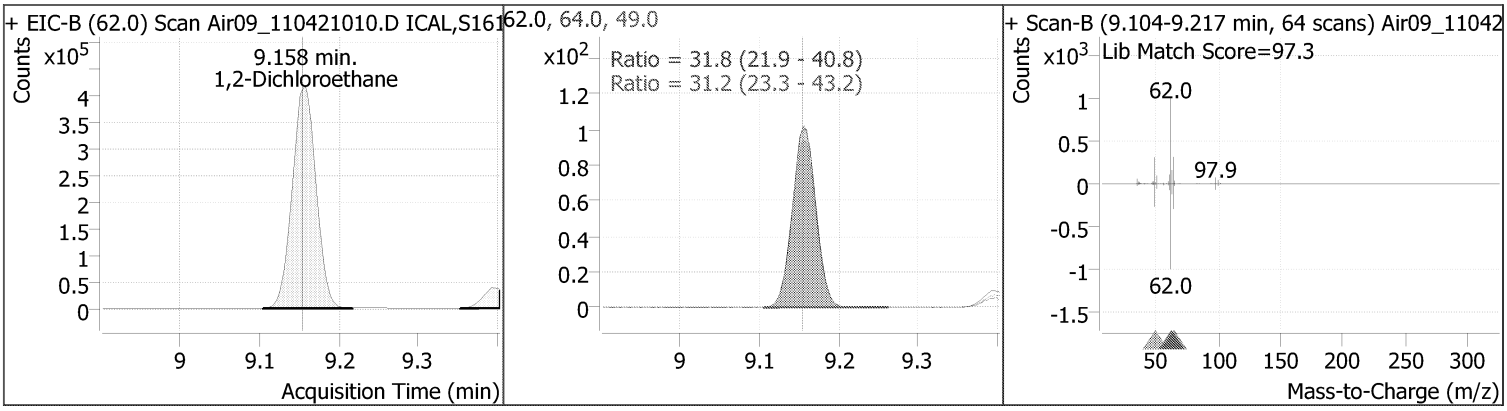
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	19.4300	8.50	0.00	1235031	85.0	65.3	45.4	84.4
					47.0	30.8	22.7	42.1



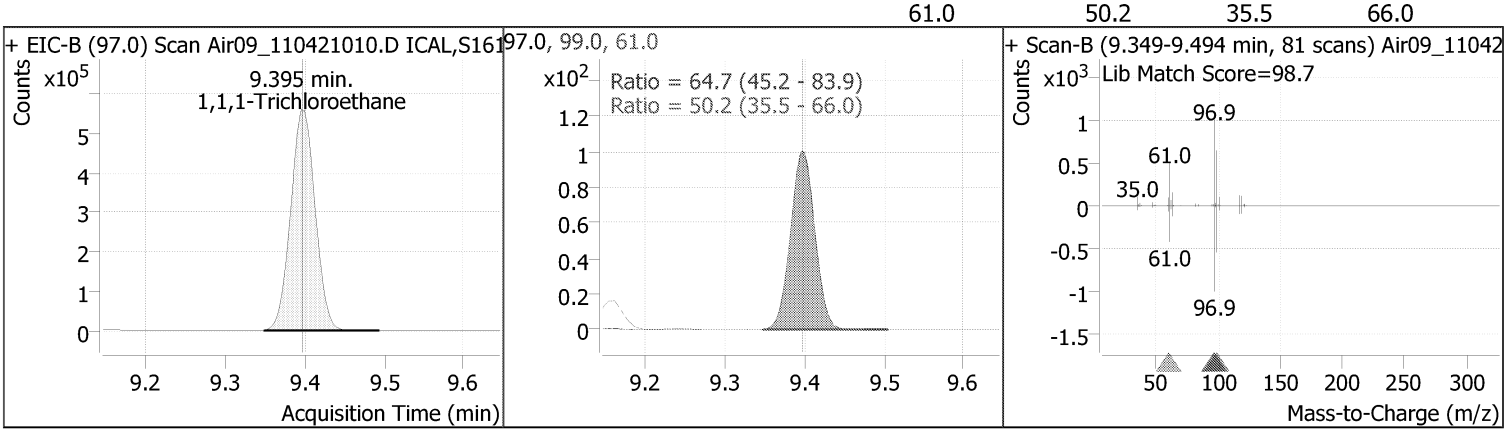
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	20.7429	8.85	0.00	244491	71.0	97.2	69.0	128.1



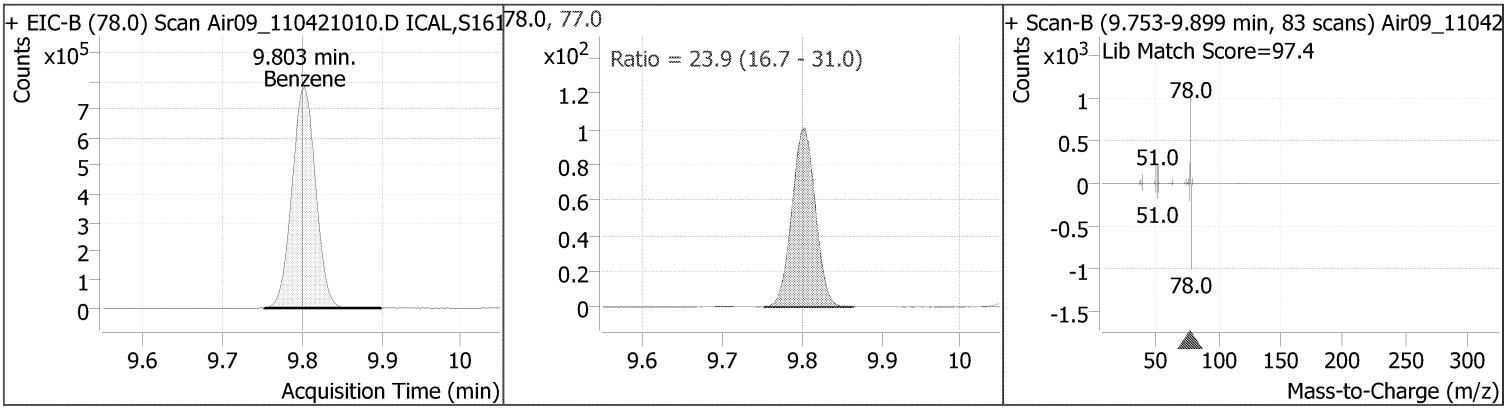
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	19.1432	9.16	0.00	872916	49.0	31.2	23.3	43.2
					64.0	31.8	21.9	40.8



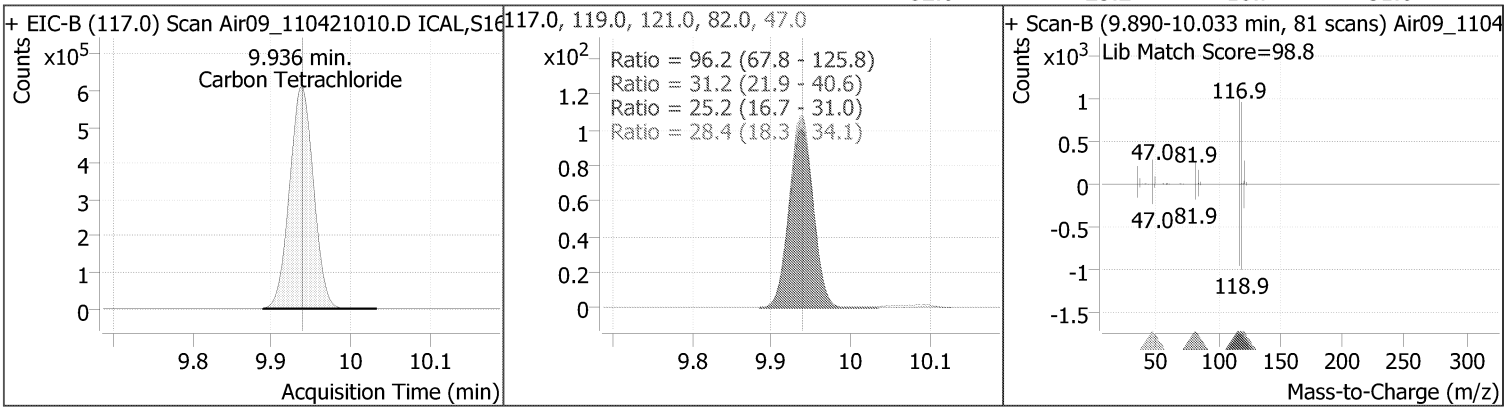
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	19.4889	9.40	0.00	1201182	99.0	64.7	45.2	83.9
					61.0	50.2	35.5	66.0



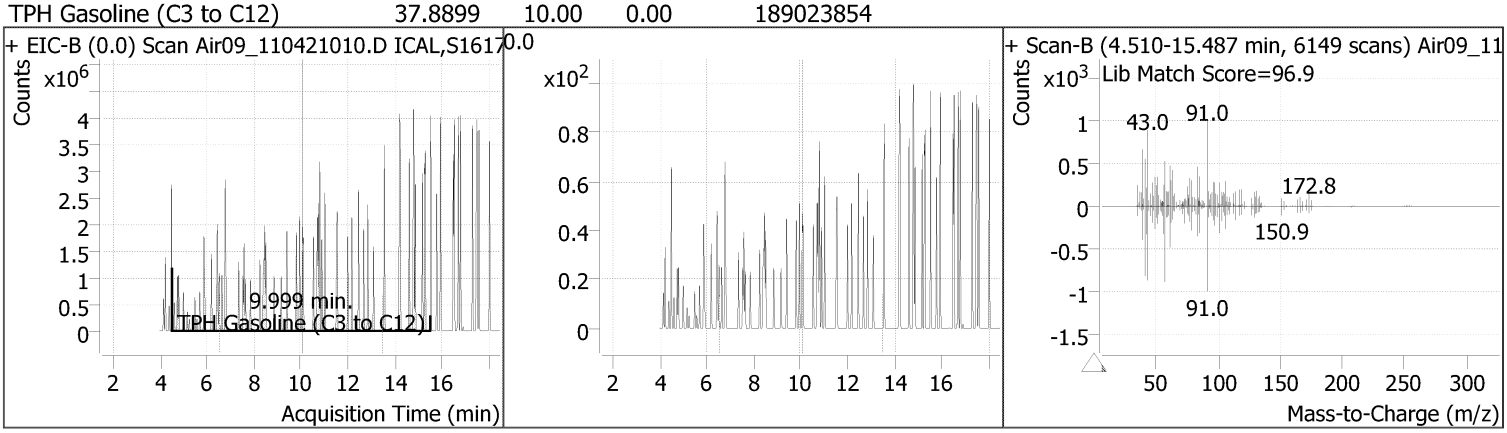
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	19.4235	9.80	0.00	1611887	77.0	23.9	16.7	31.0



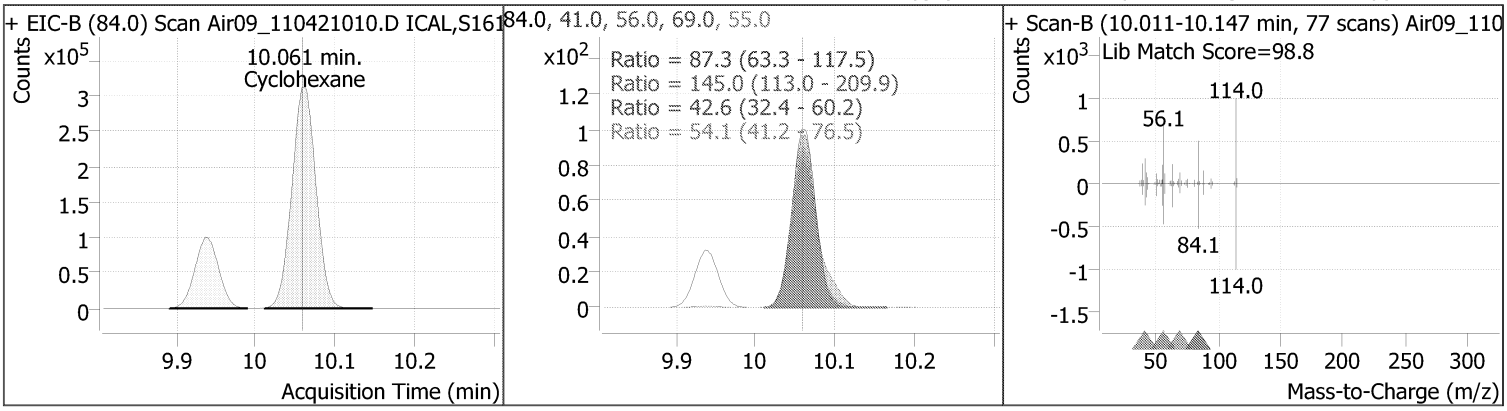
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	20.0274	9.94	-0.01	1287360	119.0	96.2	67.8	125.8
					121.0	31.2	21.9	40.6
					47.0	28.4	18.3	34.1
					82.0	25.2	16.7	31.0



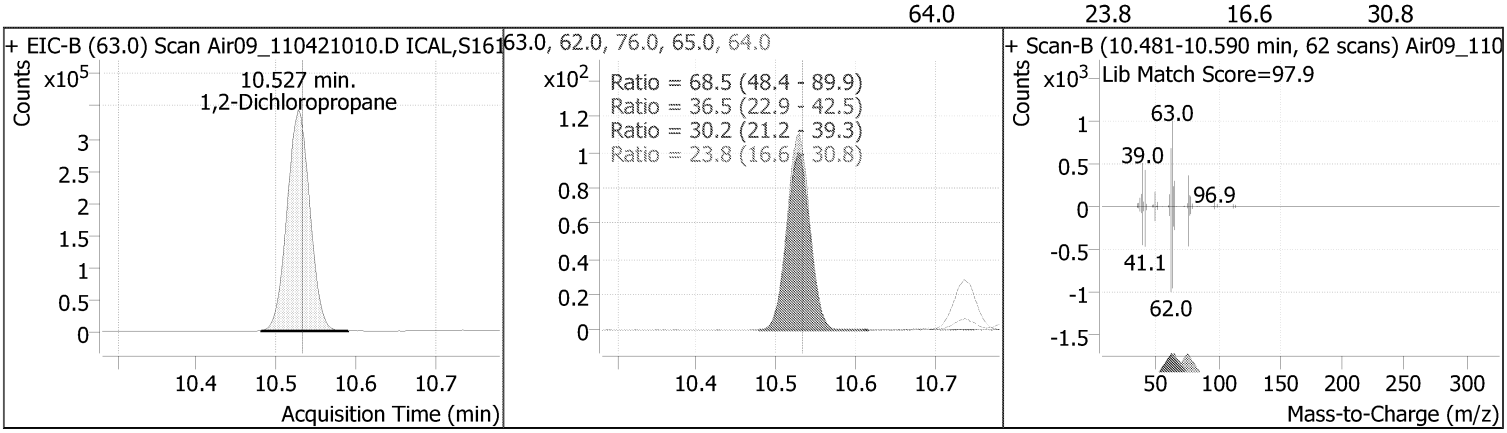
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	37.8899	10.00	0.00	189023854				



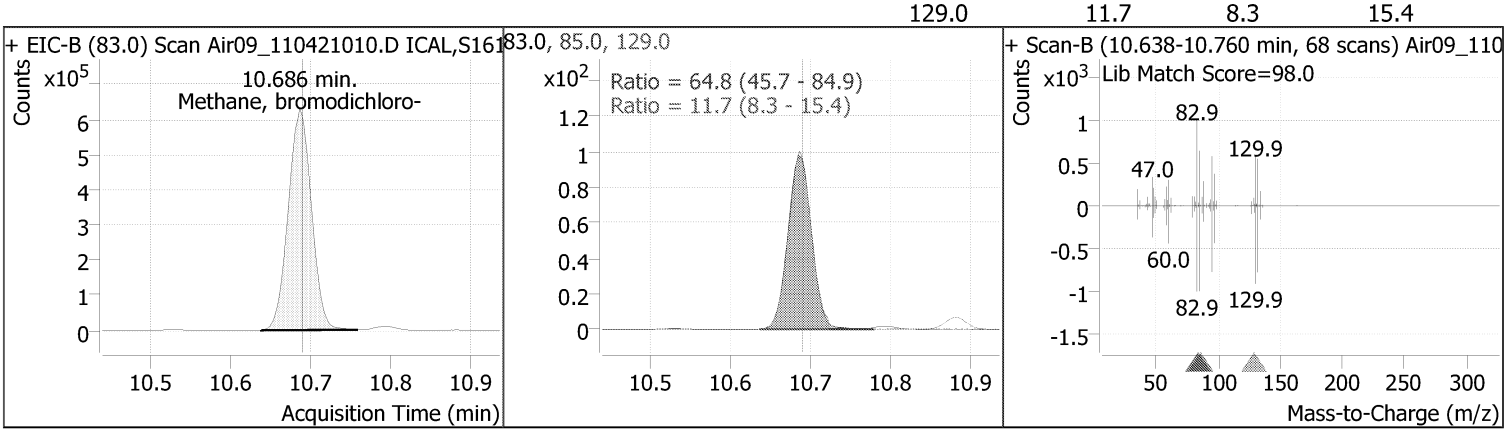
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	18.1402	10.06	0.00	664108	56.0	145.0	113.0	209.9
					41.0	87.3	63.3	117.5
					55.0	54.1	41.2	76.5
					69.0	42.6	32.4	60.2



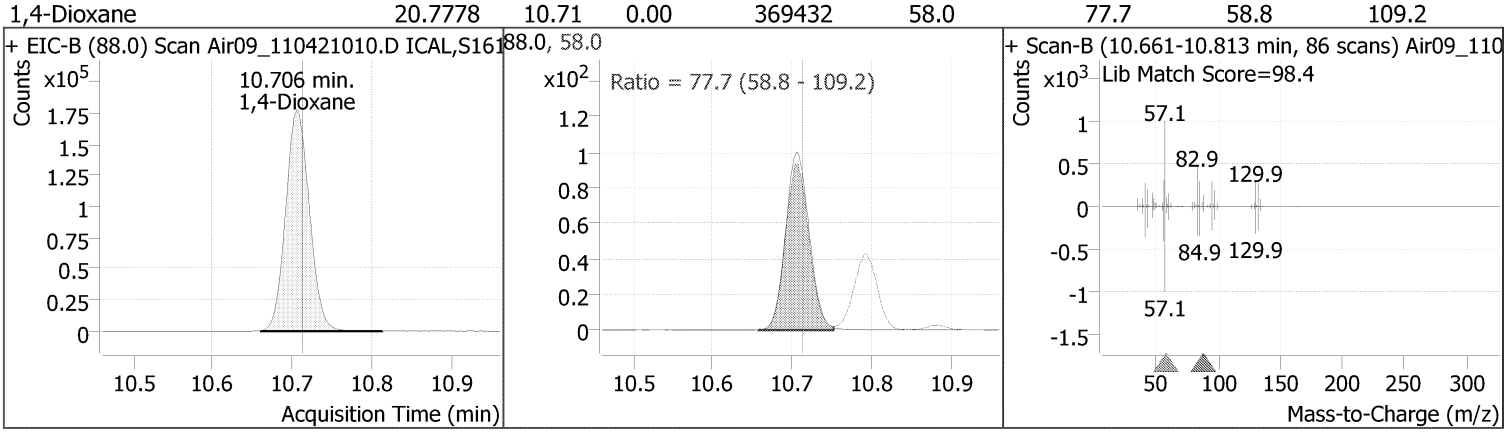
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	19.7767	10.53	0.00	689050	62.0	68.5	48.4	89.9
					76.0	36.5	22.9	42.5
					65.0	30.2	21.2	39.3
					64.0	23.8	16.6	30.8



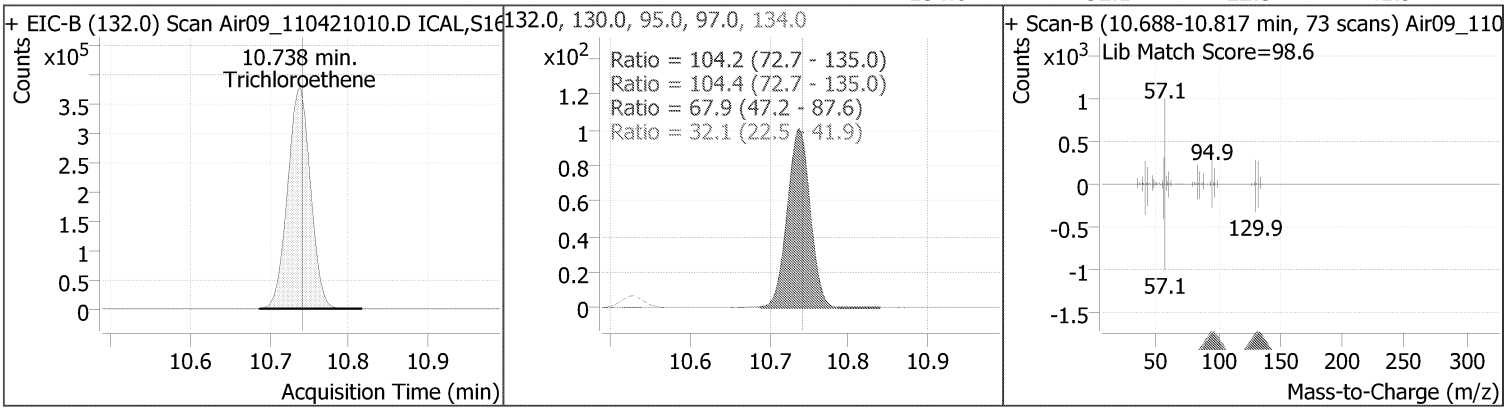
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	20.1144	10.69	0.00	1275545	85.0	64.8	45.7	84.9
					129.0	11.7	8.3	15.4



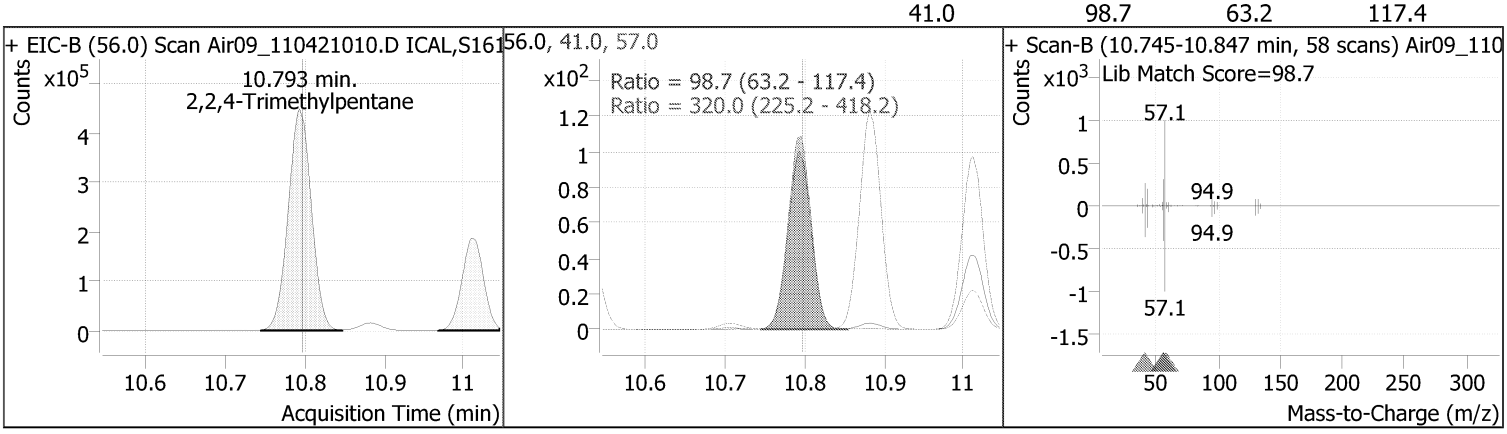
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	20.7778	10.71	0.00	369432	58.0	77.7	58.8	109.2



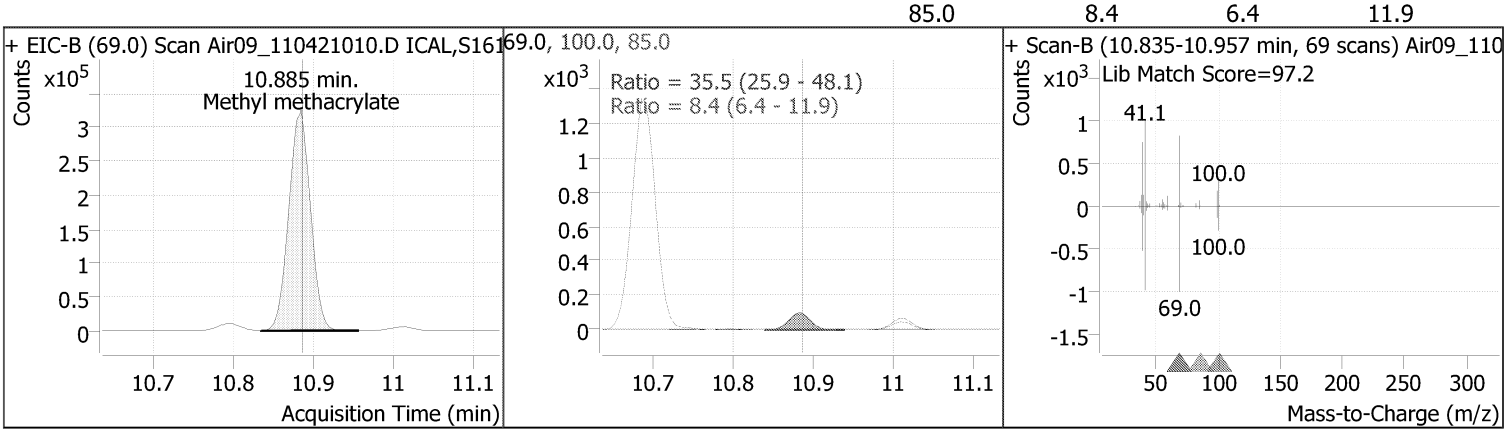
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	20.0727	10.74	0.00	753917	130.0	104.2	72.7	135.0
					95.0	104.4	72.7	135.0
					97.0	67.9	47.2	87.6
					134.0	32.1	22.5	41.9



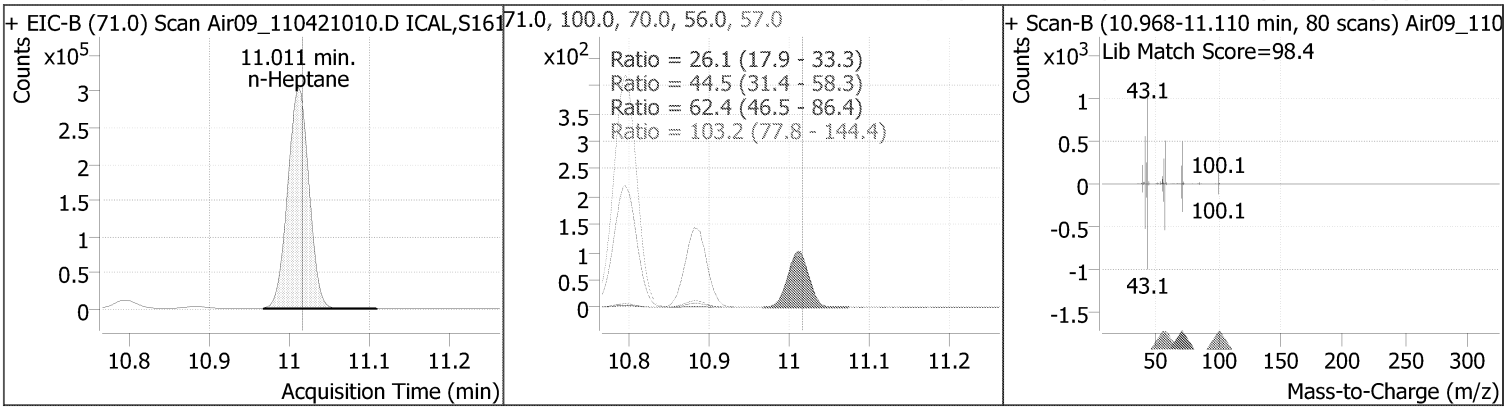
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	20.0283	10.79	0.00	911403	57.0	320.0	225.2	418.2
					41.0	98.7	63.2	117.4



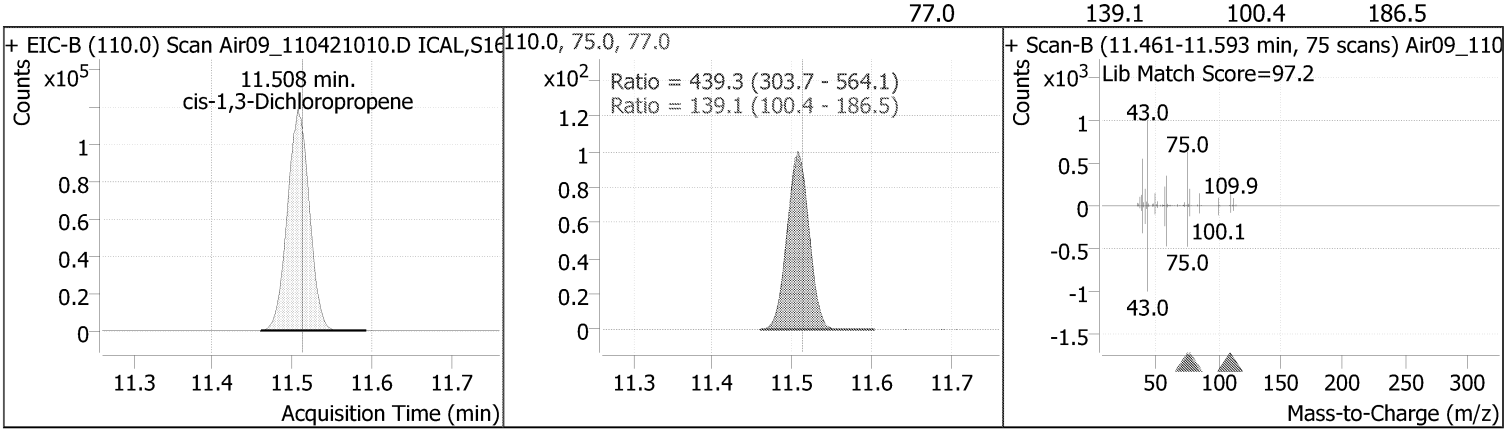
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	21.2358	10.88	0.00	613731	100.0	35.5	25.9	48.1
					85.0	8.4	6.4	11.9



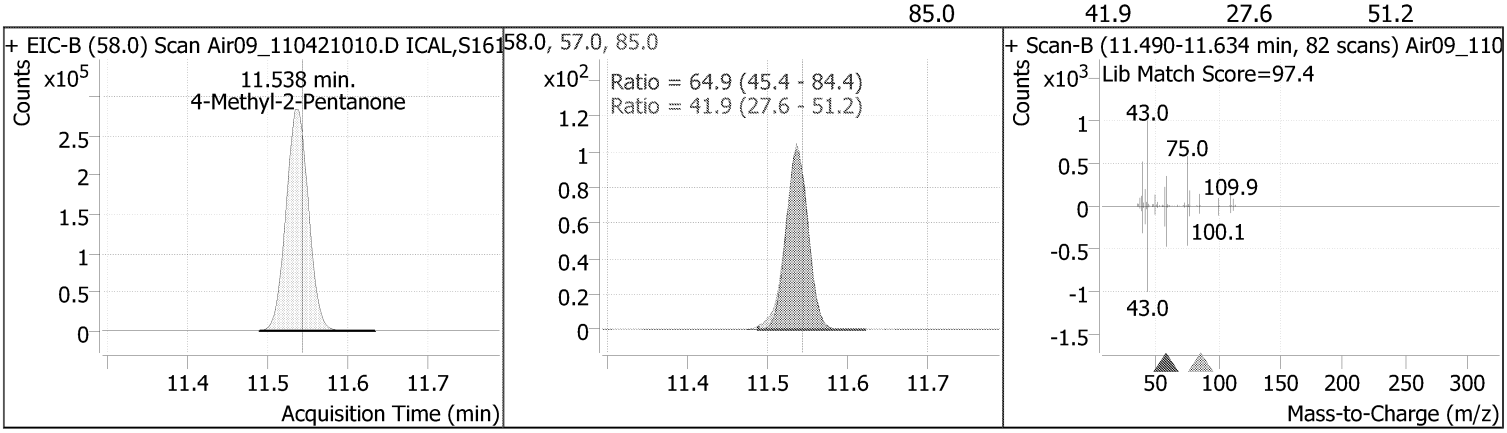
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	20.9069	11.01	0.00	569675	57.0	103.2	77.8	144.4
					56.0	62.4	46.5	86.4
					70.0	44.5	31.4	58.3
					100.0	26.1	17.9	33.3



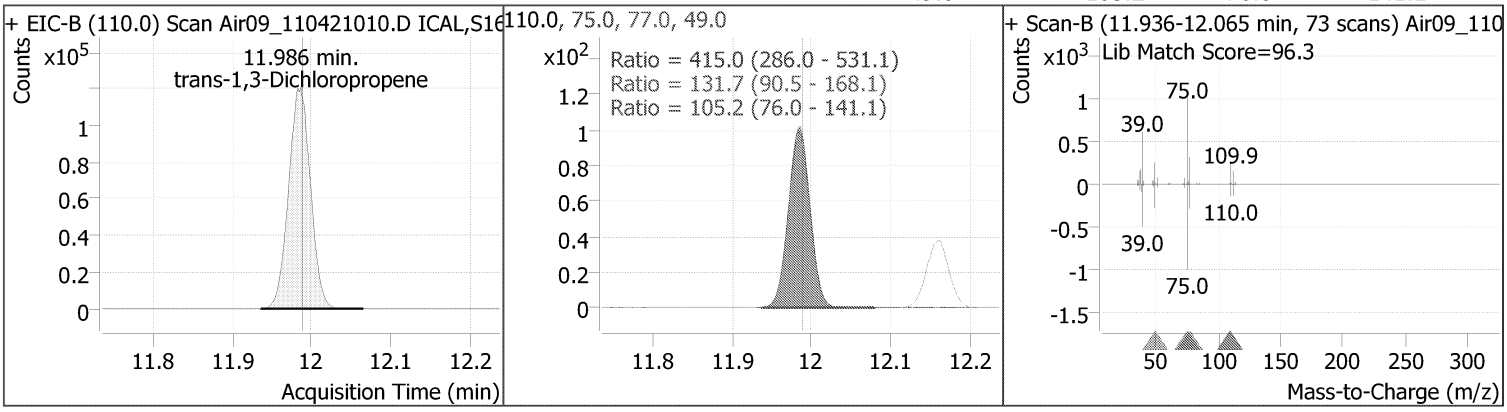
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	21.7625	11.51	0.00	227936	75.0	439.3	303.7	564.1
					77.0	139.1	100.4	186.5



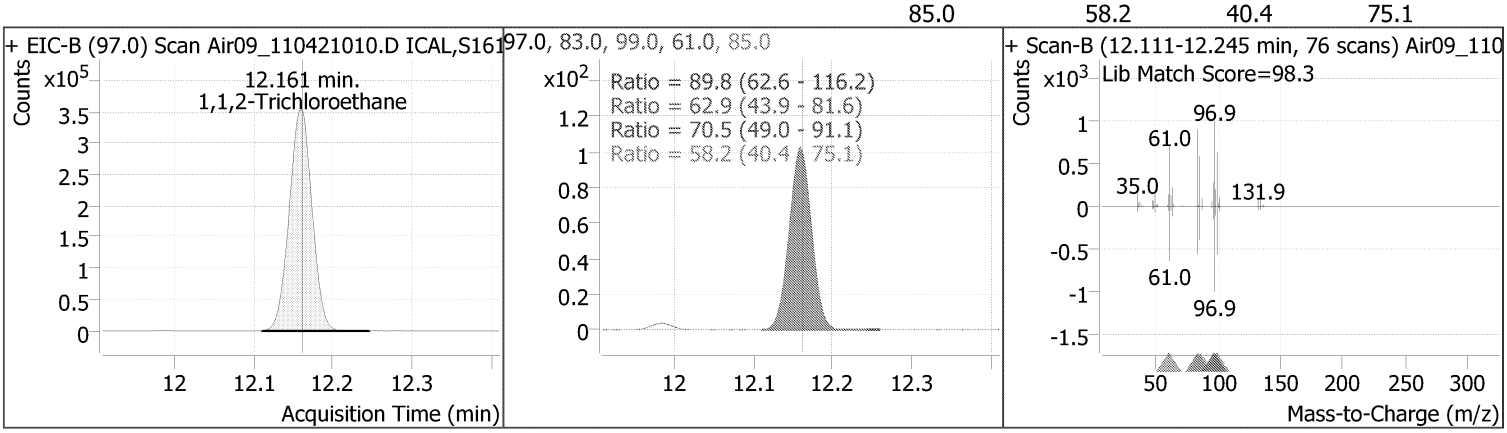
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	22.3592	11.54	0.00	561792	57.0	64.9	45.4	84.4
					85.0	41.9	27.6	51.2



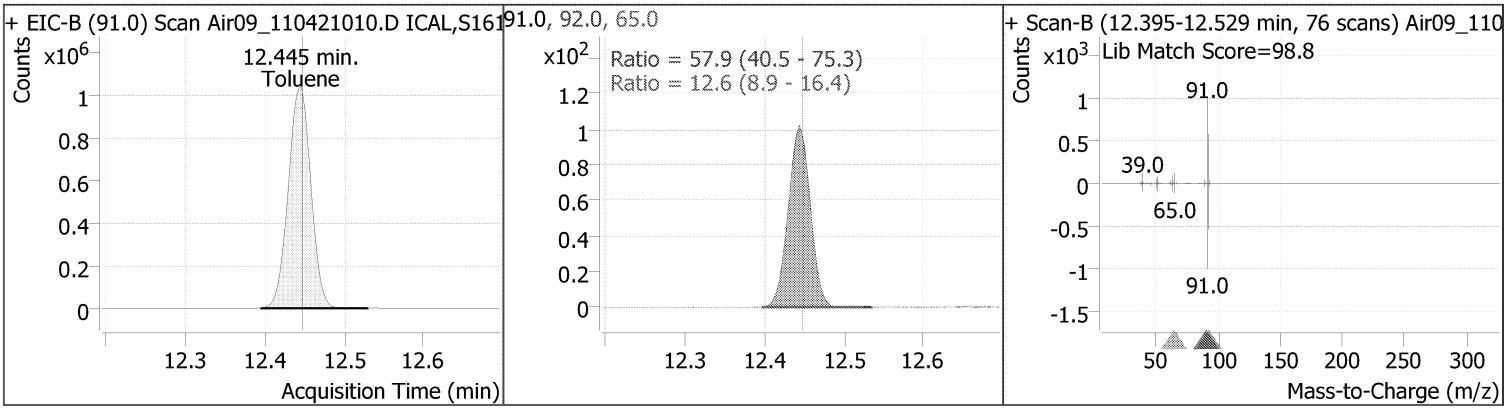
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	21.9713	11.99	0.00	231452	75.0	415.0	286.0	531.1
					77.0	131.7	90.5	168.1
					49.0	105.2	76.0	141.1



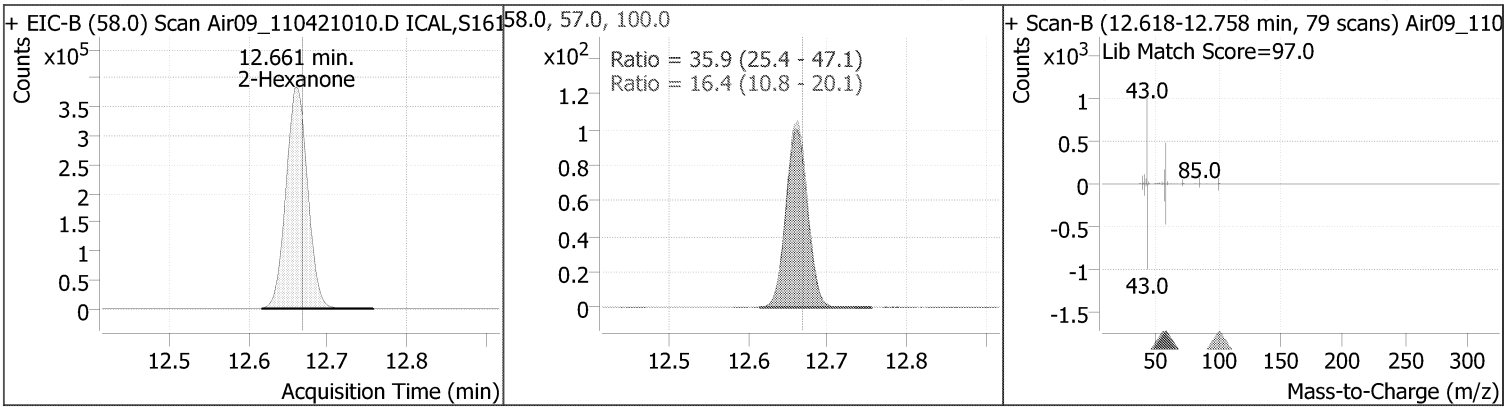
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	19.8521	12.16	0.00	705130	83.0	89.8	62.6	116.2
					61.0	70.5	49.0	91.1
					99.0	62.9	43.9	81.6
					85.0	58.2	40.4	75.1



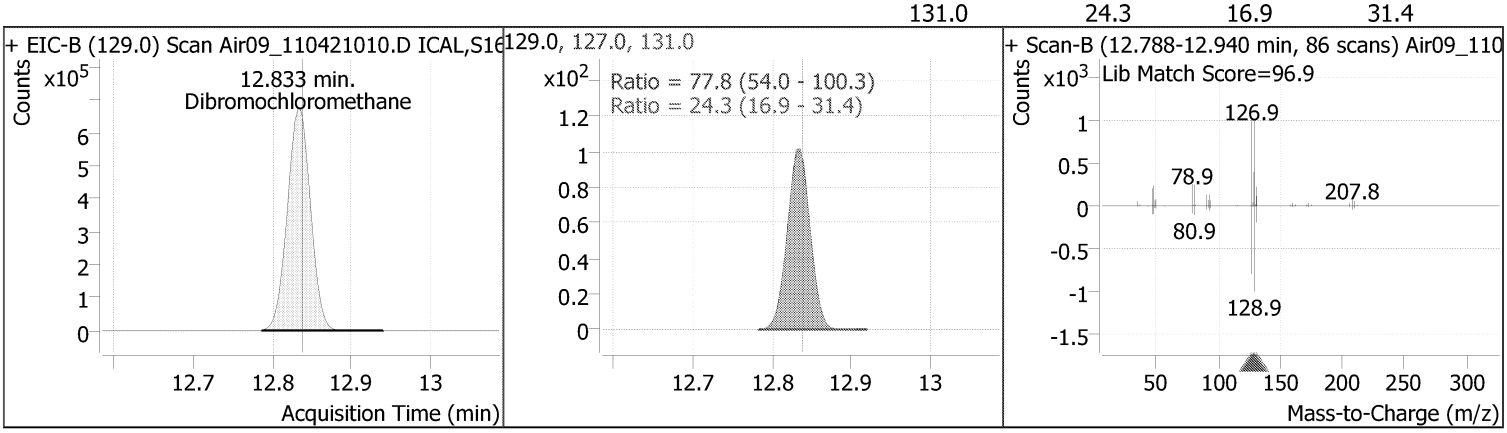
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	20.5175	12.45	0.00	2055623	92.0	57.9	40.5	75.3
					65.0	12.6	8.9	16.4



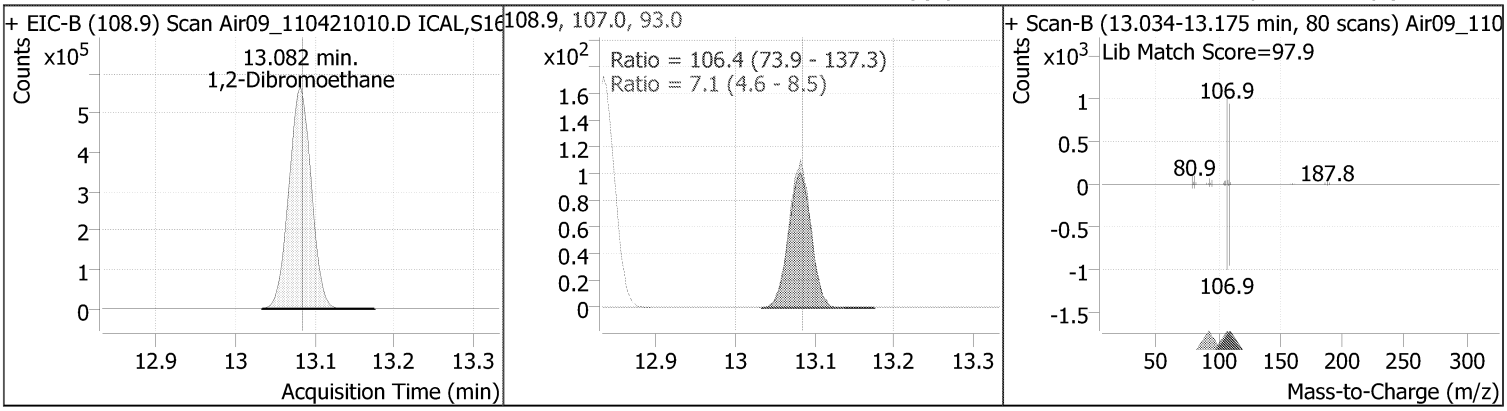
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	22.3699	12.66	0.00	728948	57.0	35.9	25.4	47.1
					100.0	16.4	10.8	20.1



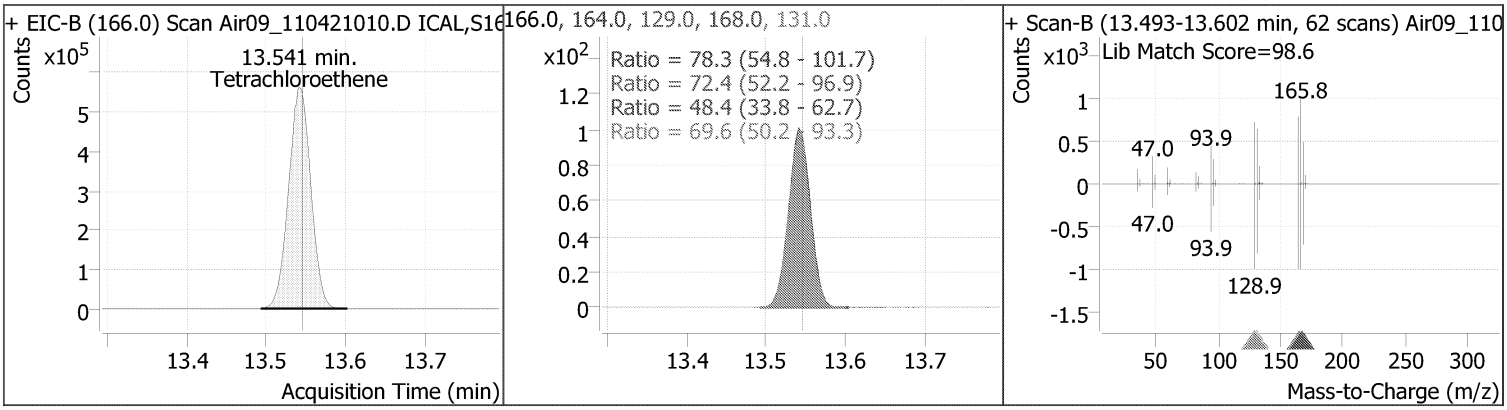
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	20.8180	12.83	0.00	1370896	127.0	77.8	54.0	100.3
					131.0	24.3	16.9	31.4



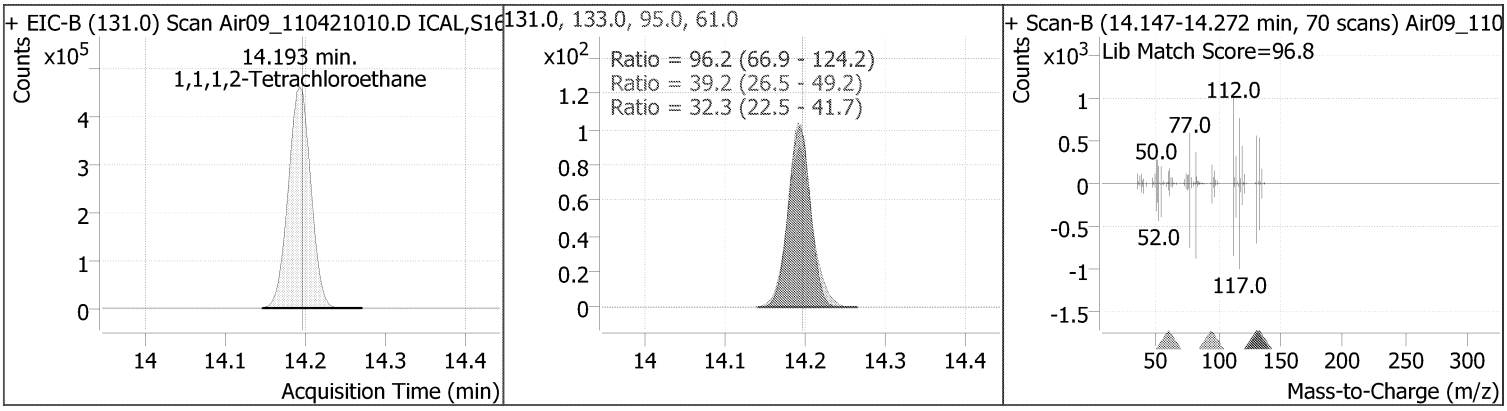
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	20.6713	13.08	0.00	1114185	107.0	106.4	73.9	137.3
					93.0	7.1	4.6	8.5



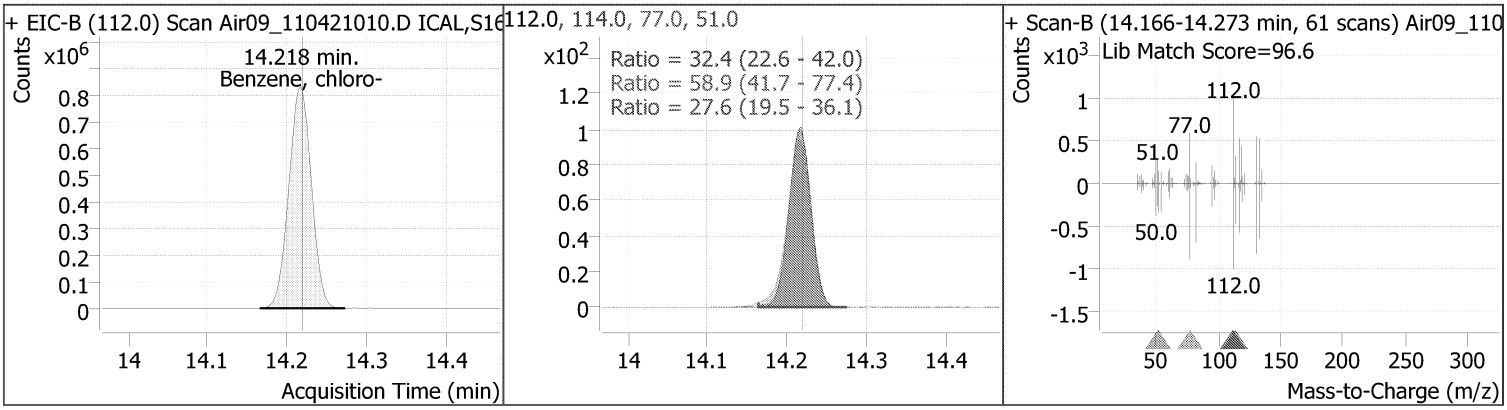
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	20.4570	13.54	0.00	1097437	164.0	78.3	54.8	101.7
					129.0	72.4	52.2	96.9
					131.0	69.6	50.2	93.3
					168.0	48.4	33.8	62.7



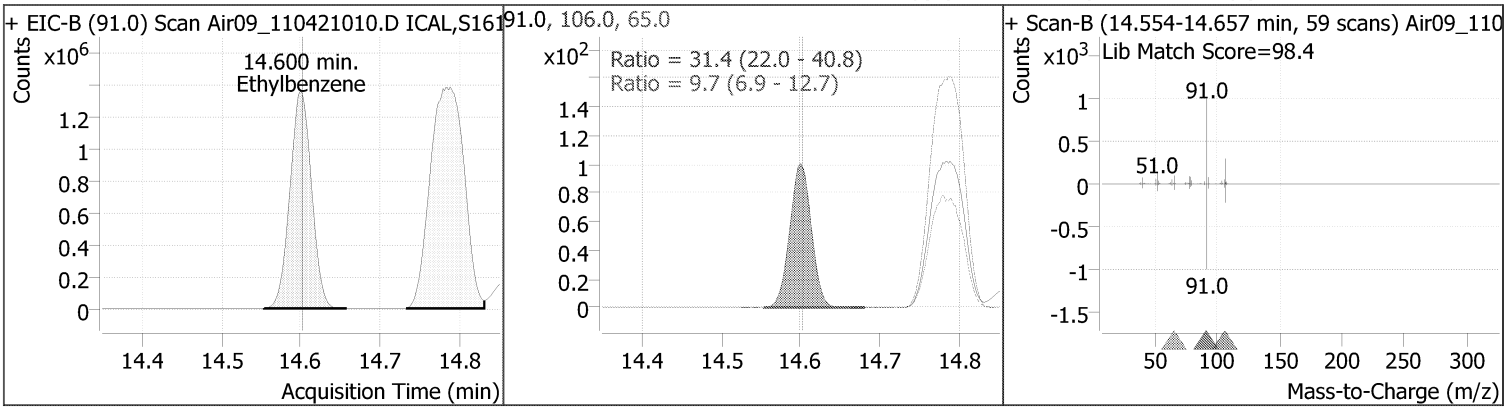
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	18.9322	14.19	0.00	914474	133.0	96.2	66.9	124.2
					95.0	39.2	26.5	49.2
					61.0	32.3	22.5	41.7



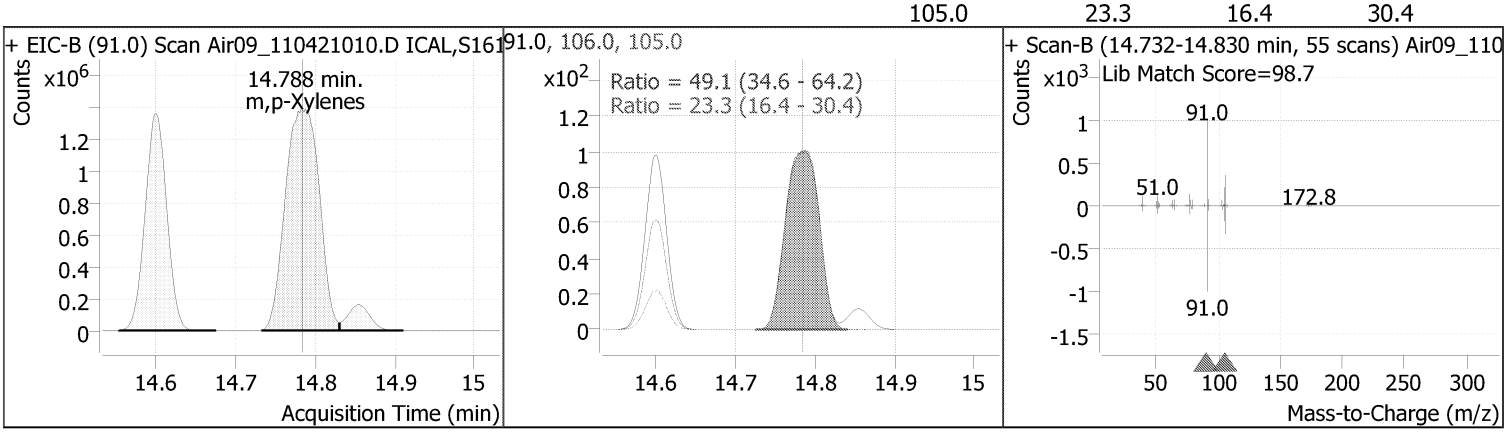
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	18.5654	14.22	0.00	1640764	77.0	58.9	41.7	77.4
					114.0	32.4	22.6	42.0
					51.0	27.6	19.5	36.1



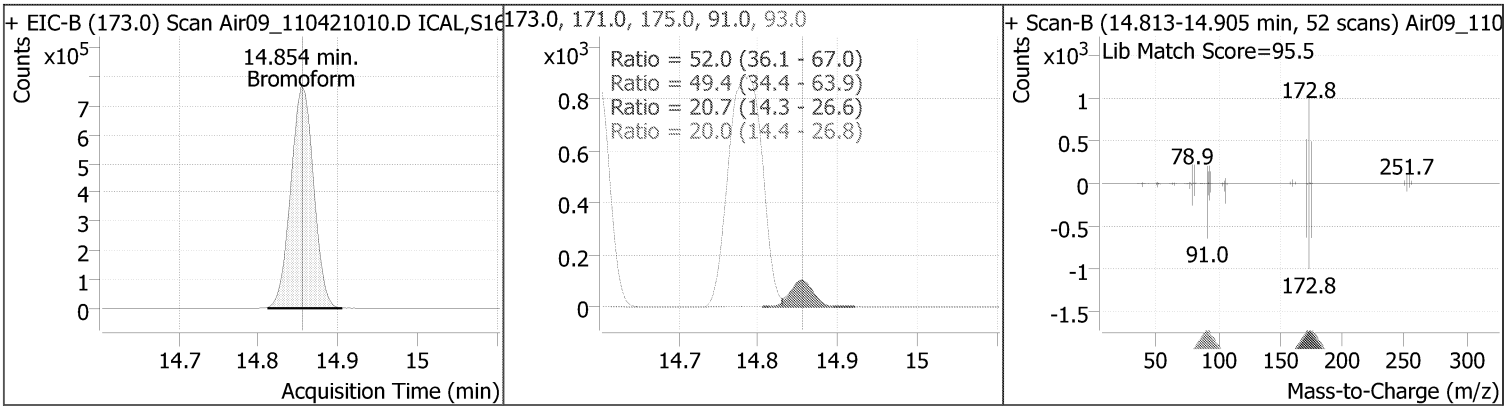
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	19.3358	14.60	0.00	2582388	106.0	31.4	22.0	40.8
					65.0	9.7	6.9	12.7



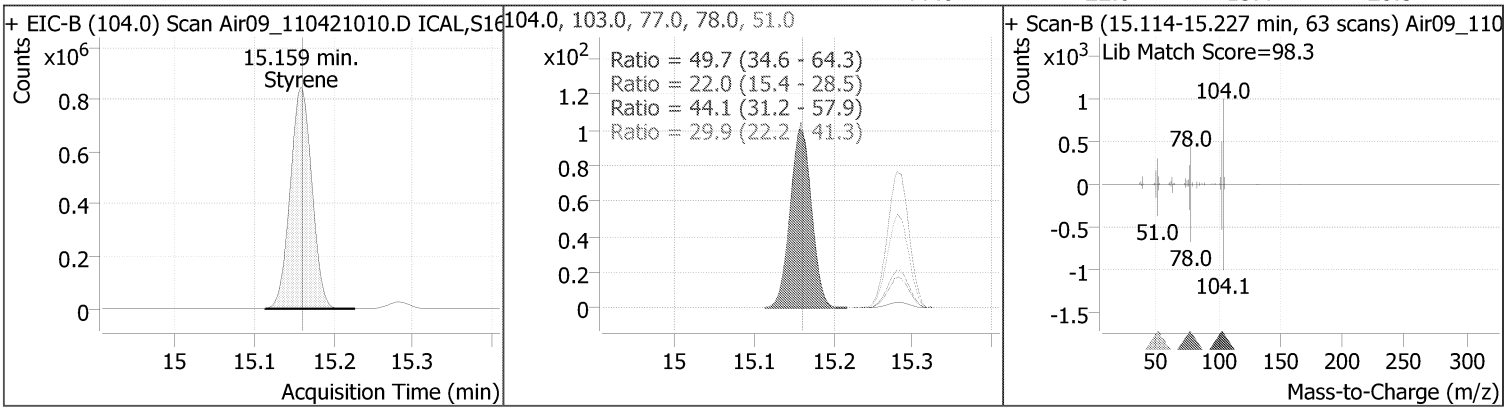
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	43.5058	14.79	0.01	4144322	106.0	49.1	34.6	64.2
					105.0	23.3	16.4	30.4



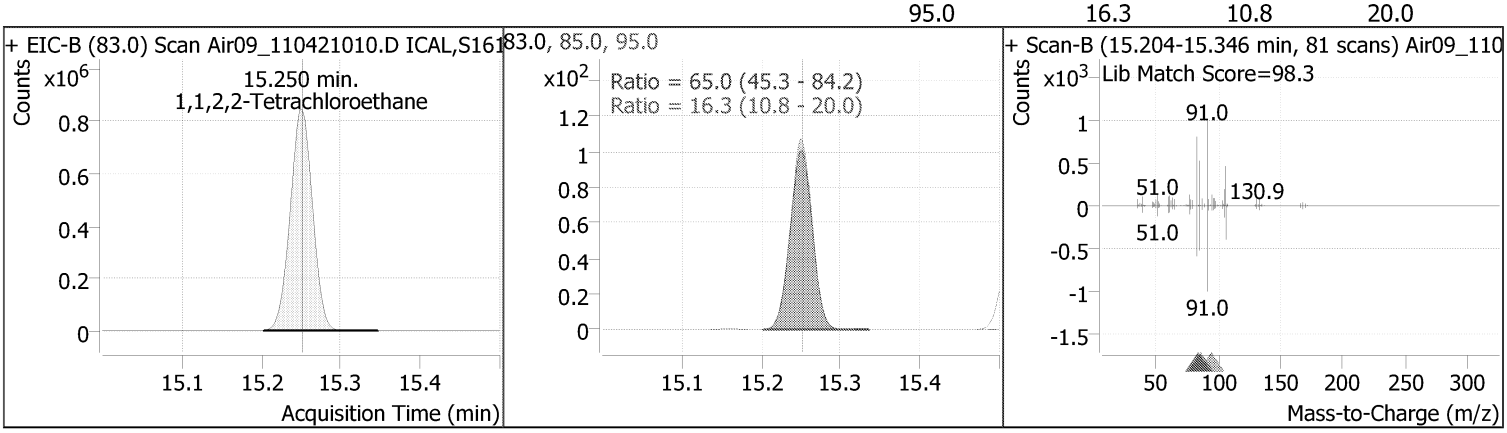
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	20.5082	14.85	0.00	1538216	171.0	52.0	36.1	67.0
					175.0	49.4	34.4	63.9
					93.0	20.0	14.4	26.8
					91.0	20.7	14.3	26.6



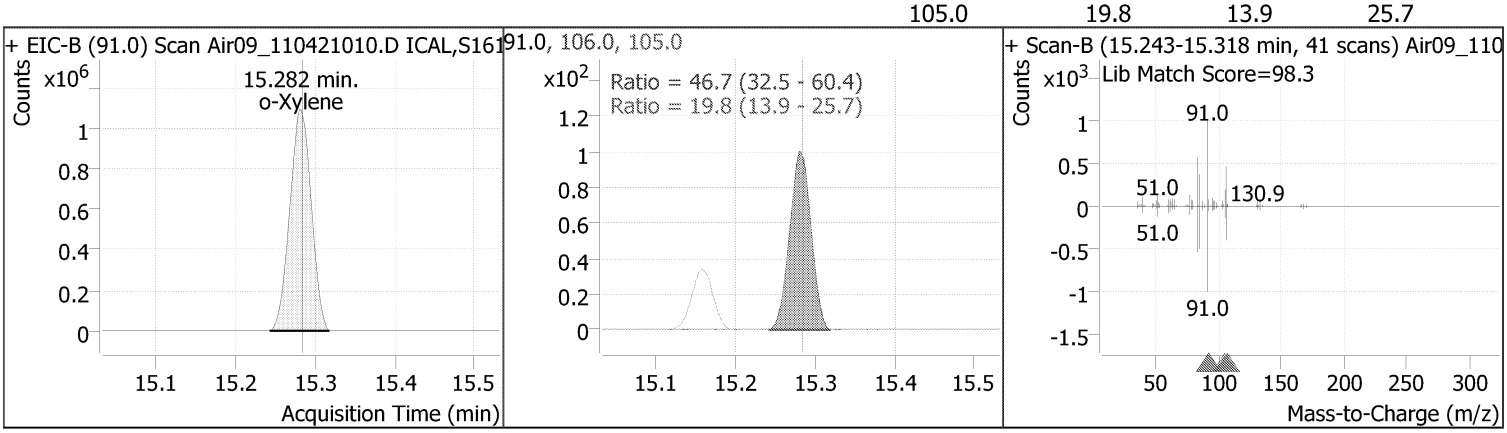
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	20.2583	15.16	0.00	1609778	103.0	49.7	34.6	64.3
					78.0	44.1	31.2	57.9
					51.0	29.9	22.2	41.3
					77.0	22.0	15.4	28.5



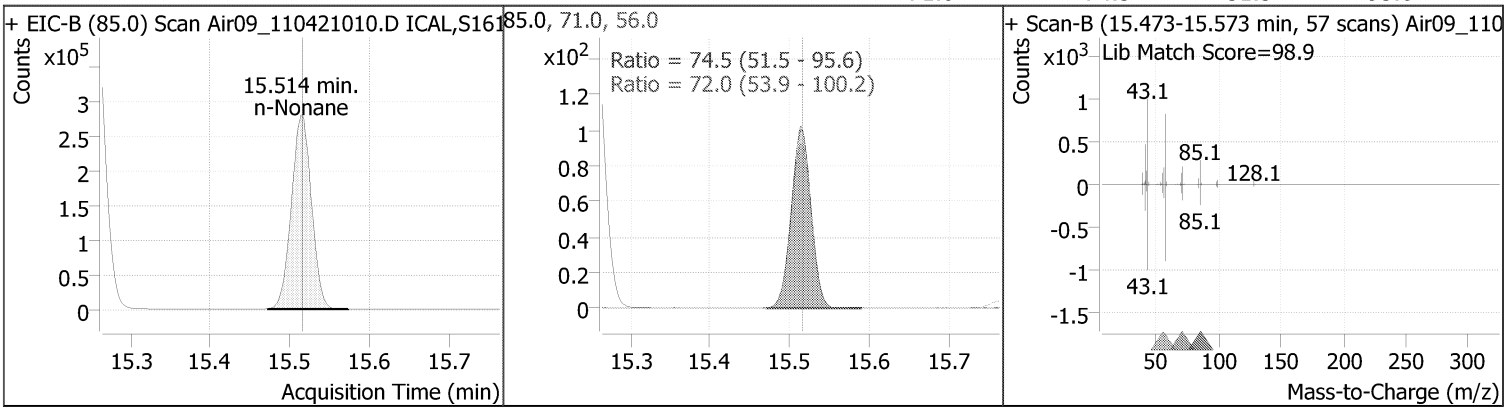
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	18.7541	15.25	0.00	1656760	85.0	65.0	45.3	84.2
					95.0	16.3	10.8	20.0



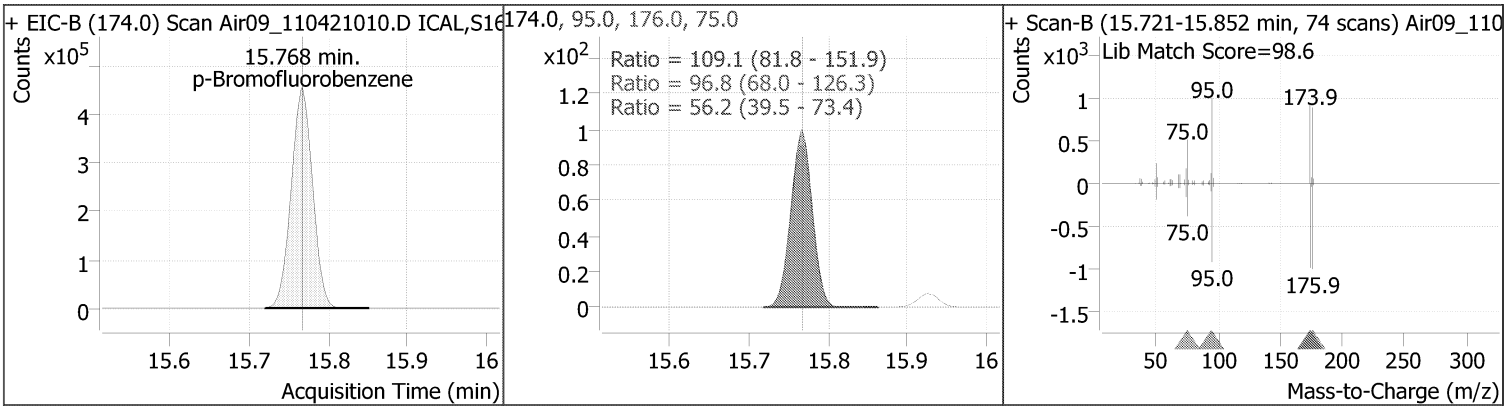
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	19.3678	15.28	0.00	2048097	106.0	46.7	32.5	60.4
					105.0	19.8	13.9	25.7



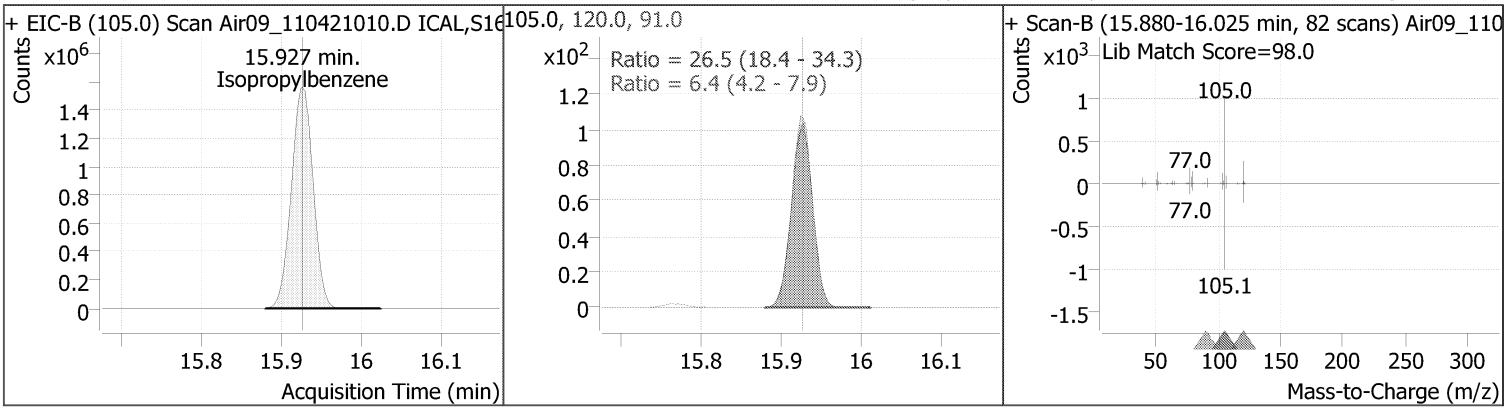
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	20.5989	15.51	0.00	490882	56.0	72.0	53.9	100.2
					71.0	74.5	51.5	95.6



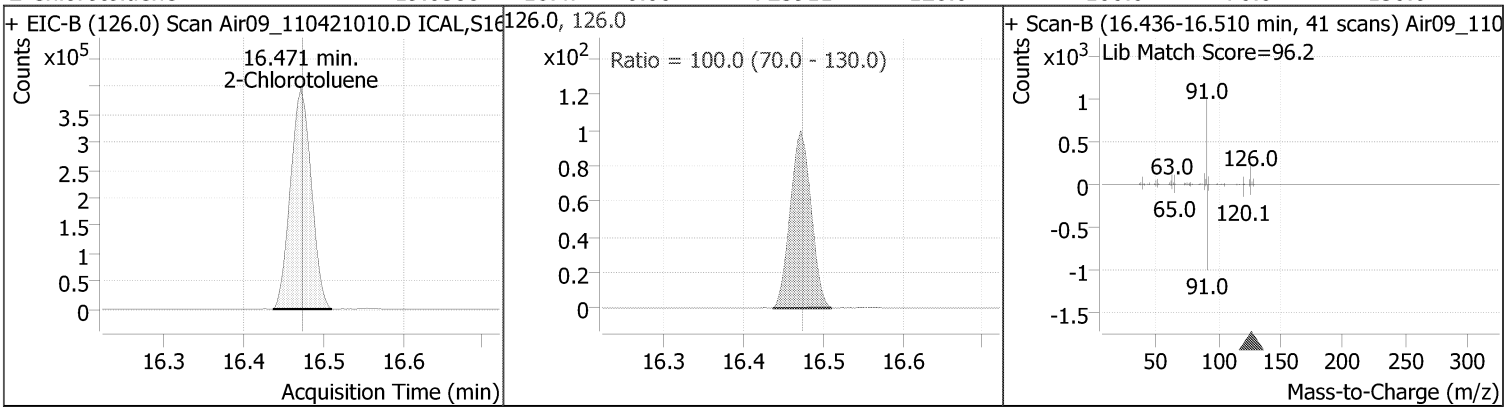
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	9.4803	15.77	0.00	851310	95.0	109.1	81.8	151.9
					176.0	96.8	68.0	126.3
					75.0	56.2	39.5	73.4



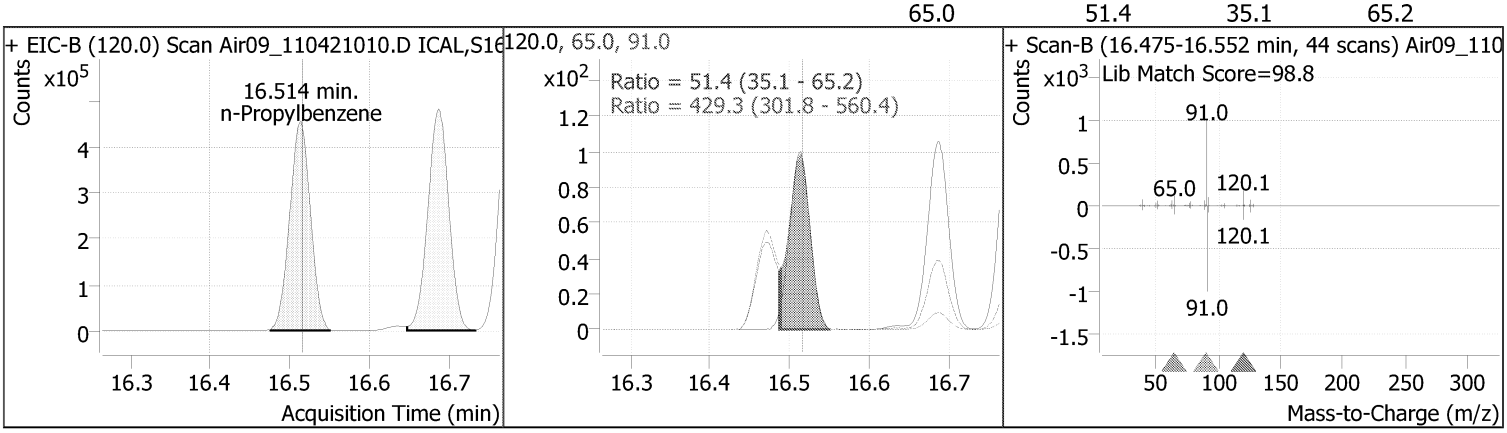
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	18.9283	15.93	0.00	2985364	120.0	26.5	18.4	34.3
					91.0	6.4	4.2	7.9



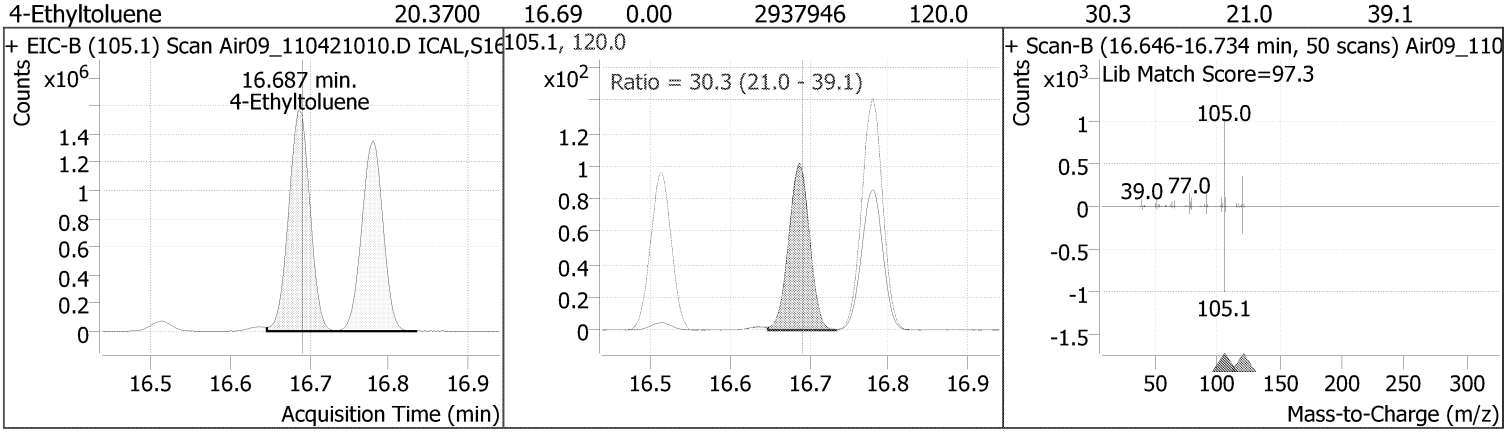
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	19.0388	16.47	0.00	723911	126.0	100.0	70.0	130.0



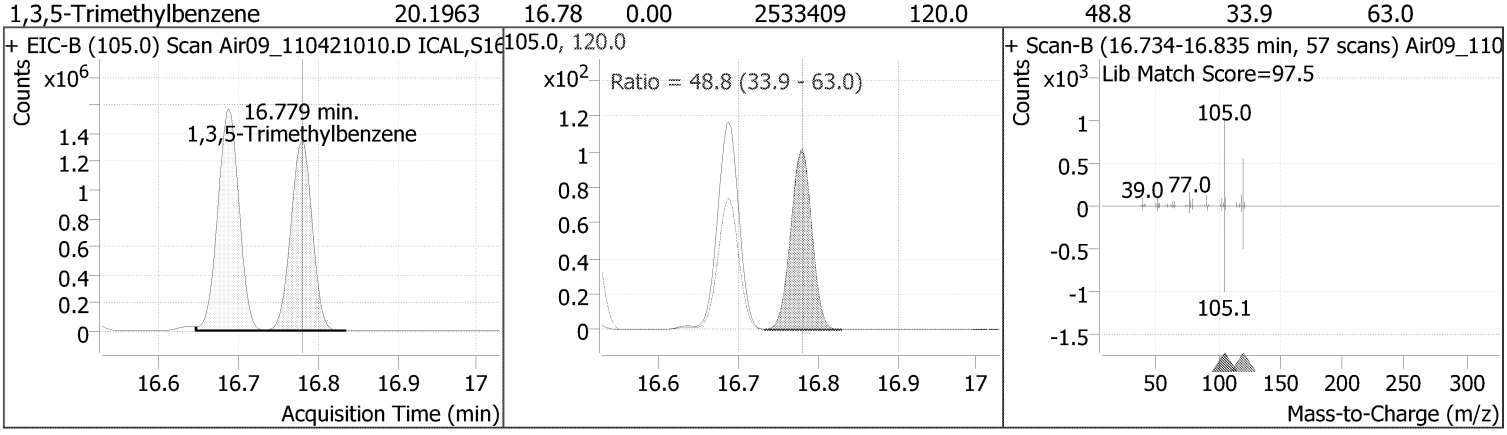
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	19.8196	16.51	0.00	829179	91.0	429.3	301.8	560.4
					65.0	51.4	35.1	65.2



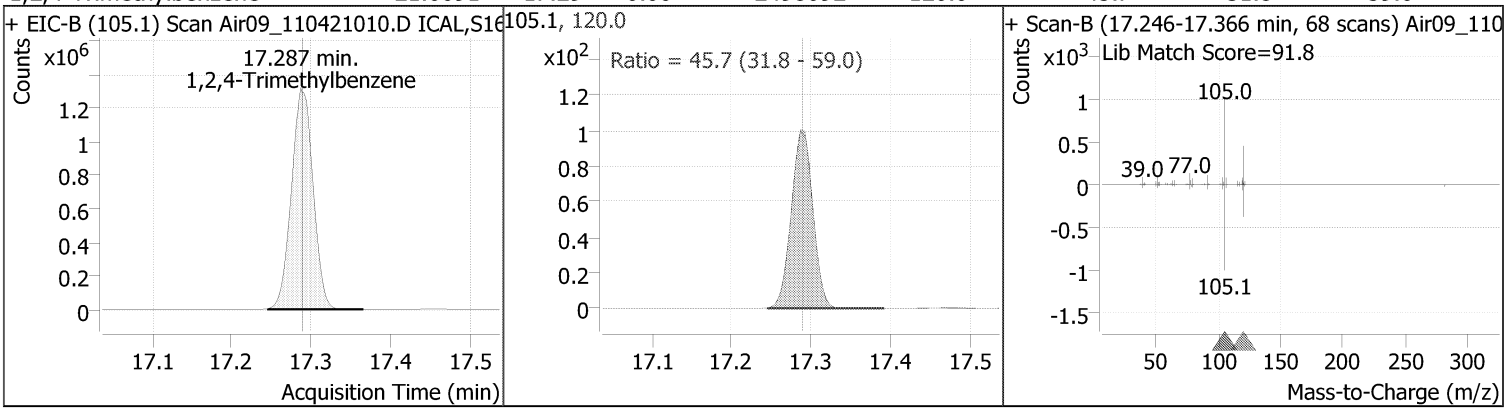
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	20.3700	16.69	0.00	2937946	120.0	30.3	21.0	39.1



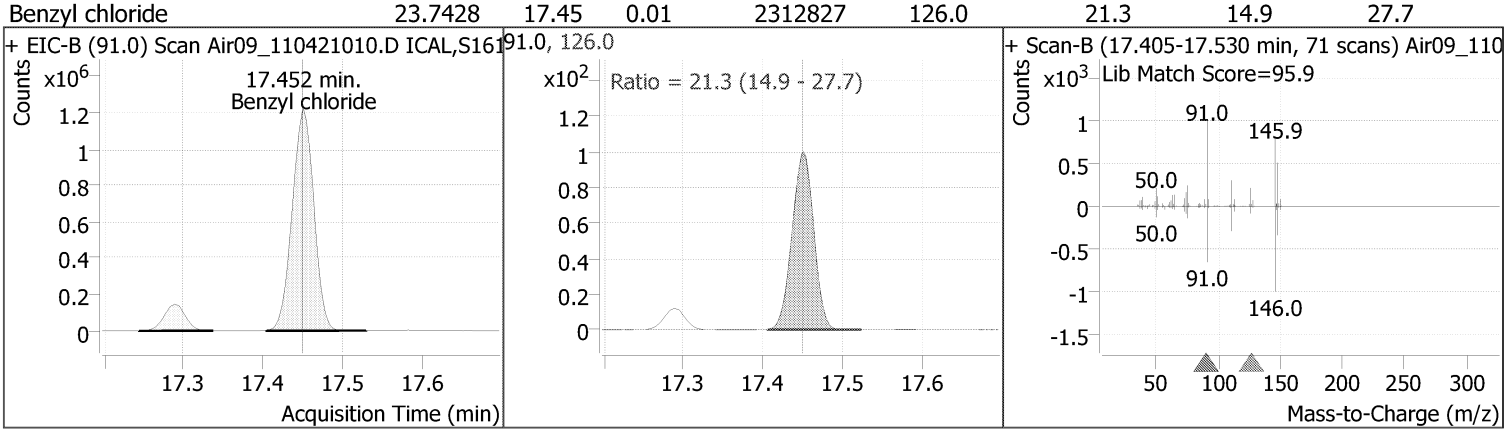
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	20.1963	16.78	0.00	2533409	120.0	48.8	33.9	63.0



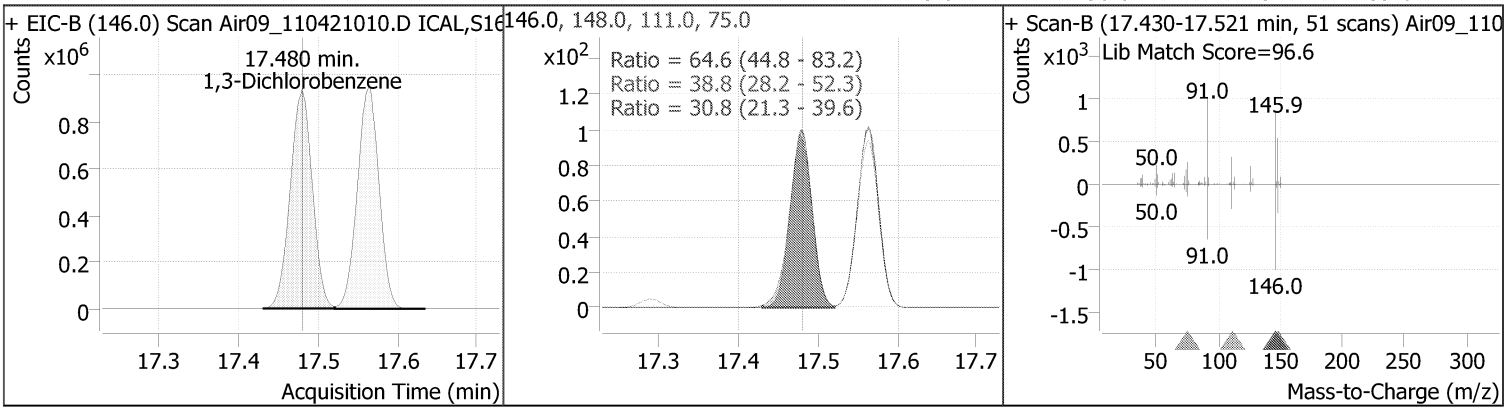
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	21.0091	17.29	0.00	2498092	120.0	45.7	31.8	59.0



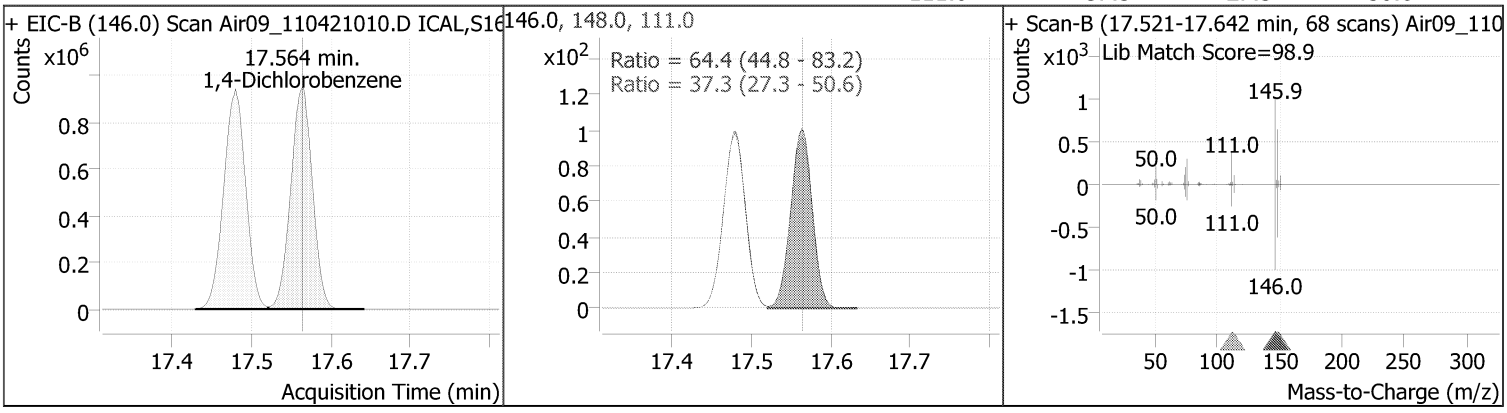
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	23.7428	17.45	0.01	2312827	126.0	21.3	14.9	27.7



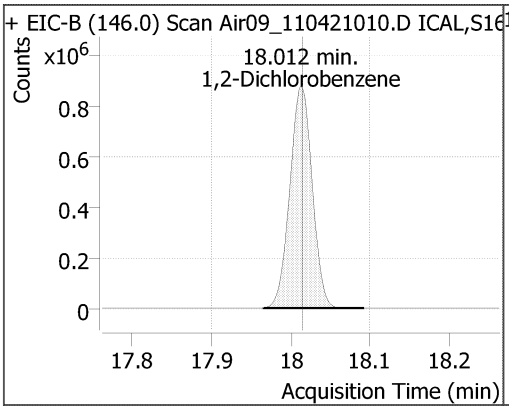
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	19.9445	17.48	0.00	1810992	148.0	64.6	44.8	83.2
					111.0	38.8	28.2	52.3
					75.0	30.8	21.3	39.6

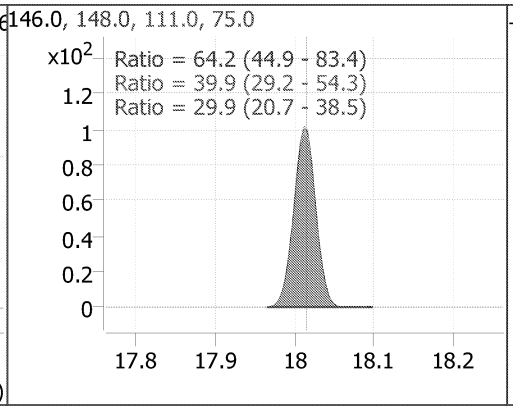


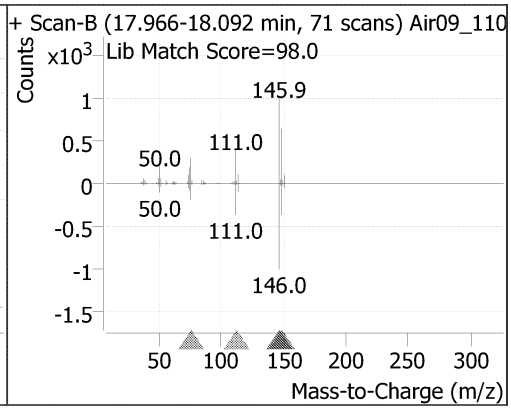
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	20.2270	17.56	0.00	1805330	148.0	64.4	44.8	83.2
					111.0	37.3	27.3	50.6



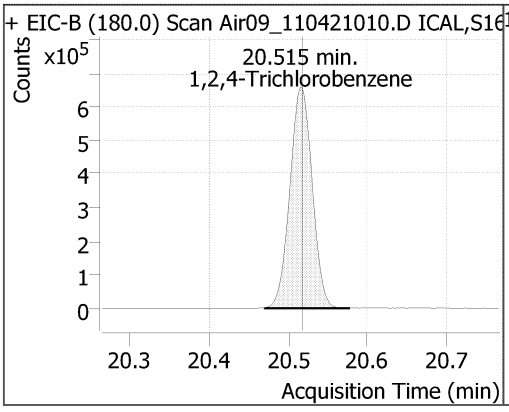
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	20.0776	18.01	0.00	1731262	148.0	64.2	44.9	83.4
					111.0	39.9	29.2	54.3
					75.0	29.9	20.7	38.5

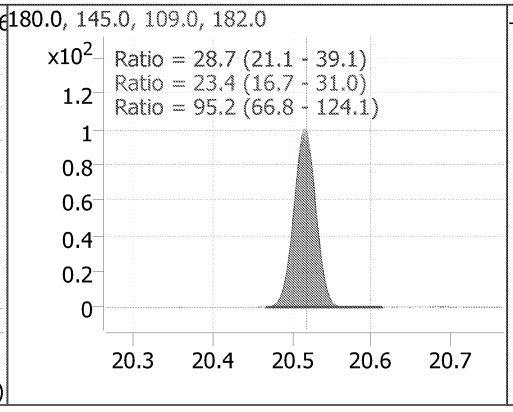


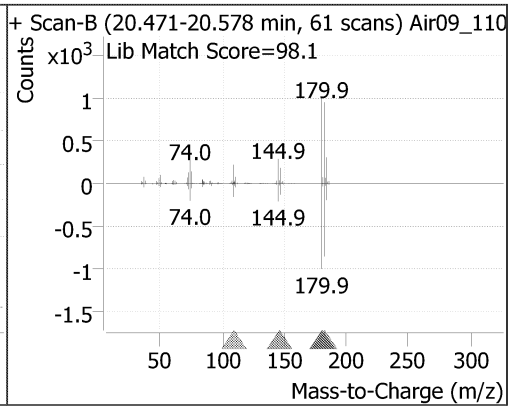




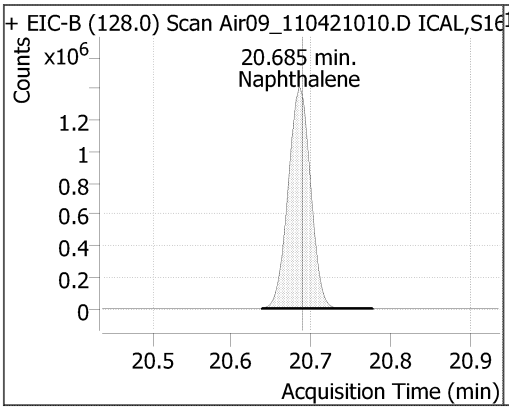
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	27.5139	20.52	0.00	1292004	182.0	95.2	66.8	124.1
					145.0	28.7	21.1	39.1
					109.0	23.4	16.7	31.0

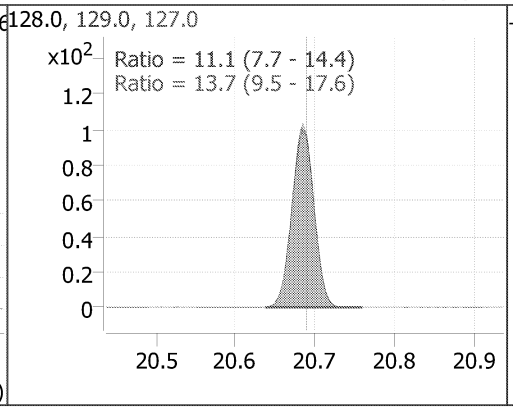


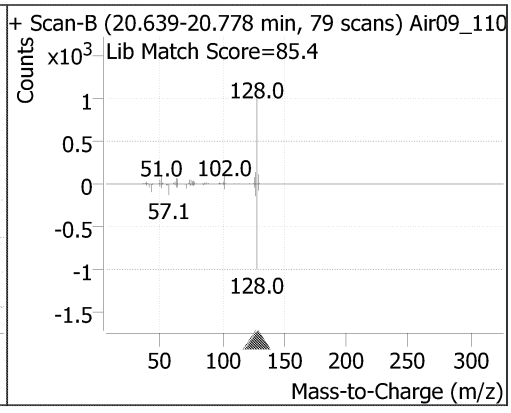




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	28.6327	20.69	0.00	2778760	127.0	13.7	9.5	17.6
					129.0	11.1	7.7	14.4

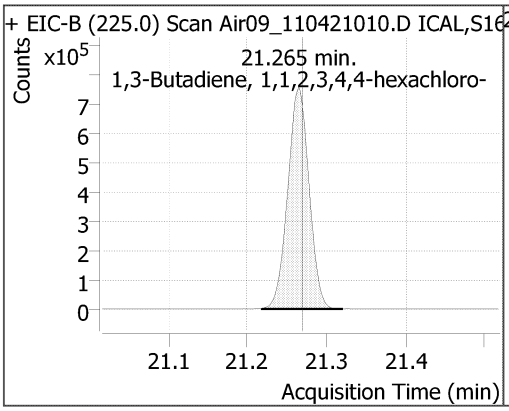


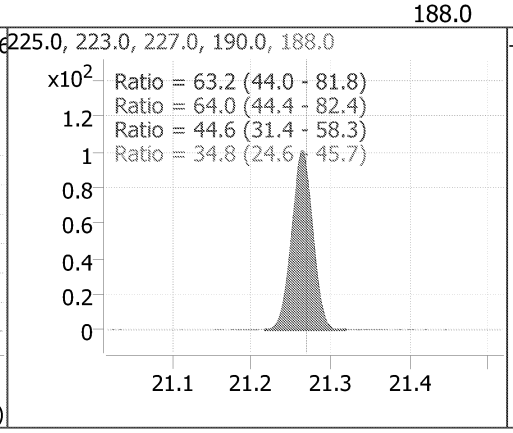


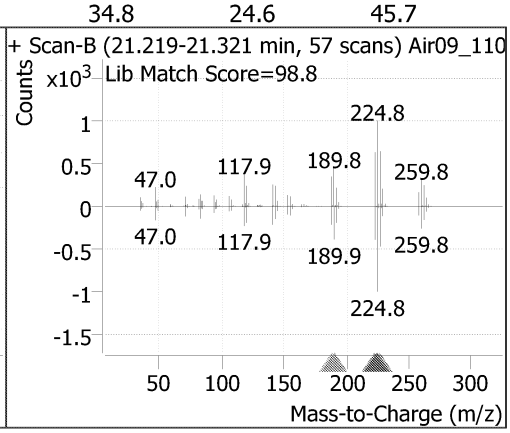


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	20.4855	21.27	0.00	1417623	227.0	64.0	44.4	82.4
					223.0	63.2	44.0	81.8
					190.0	44.6	31.4	58.3
					188.0	34.8	24.6	45.7

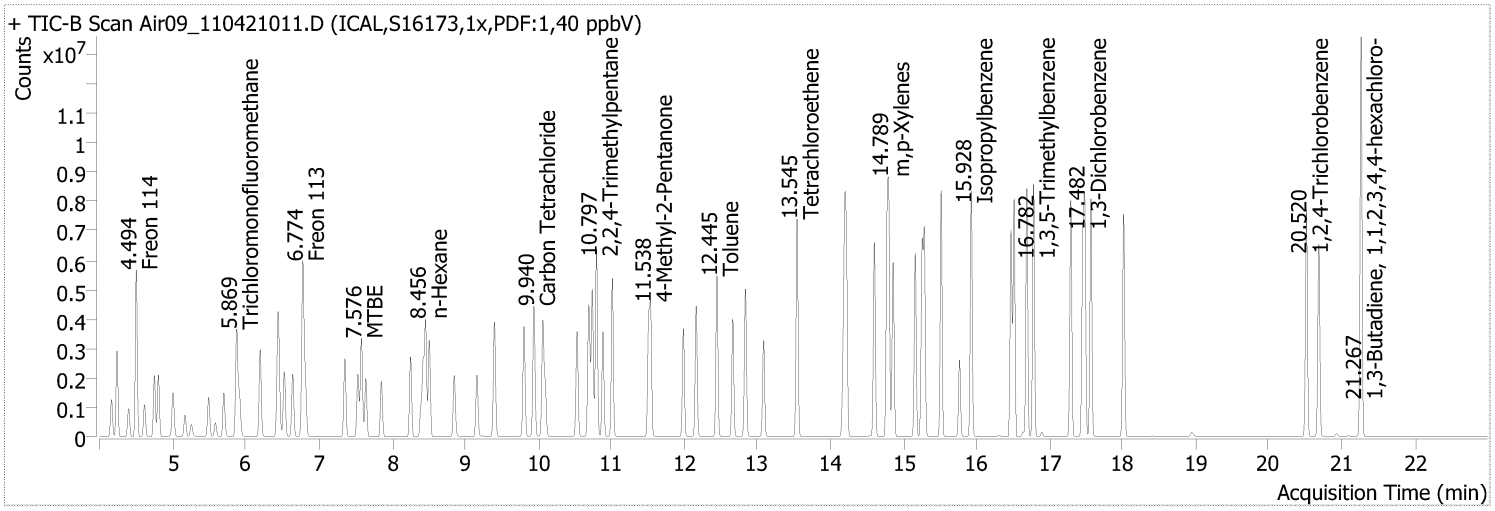






Quantitation Results Report (Not Reviewed)

Data File	Air09_110421011.D	Operator	ZNZ
Acq. Method	TO15_Acq_210707_2	Acq. Date-Time	11/4/2021 11:40:16 PM
Sample Name	ICAL,S16173,1x,PDF:1,40 ppbV	Instrument	AIR-MS-09
Vial	2	Multiplier	1.00
DA Method File	TO15_SCAN_110421_1.m	Comment	1x400mL
Tune File	bfb.u	Tune Date	11/4/2021 10:42:36 AM
Batch Name	2021 Nov 04 1517 TO15_SCAN_110421_1.m.batch.bin	Last Calib Update	11/5/2021 12:03:42 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\210621\MS09_062121_TO15_1.reflibrary.xml		



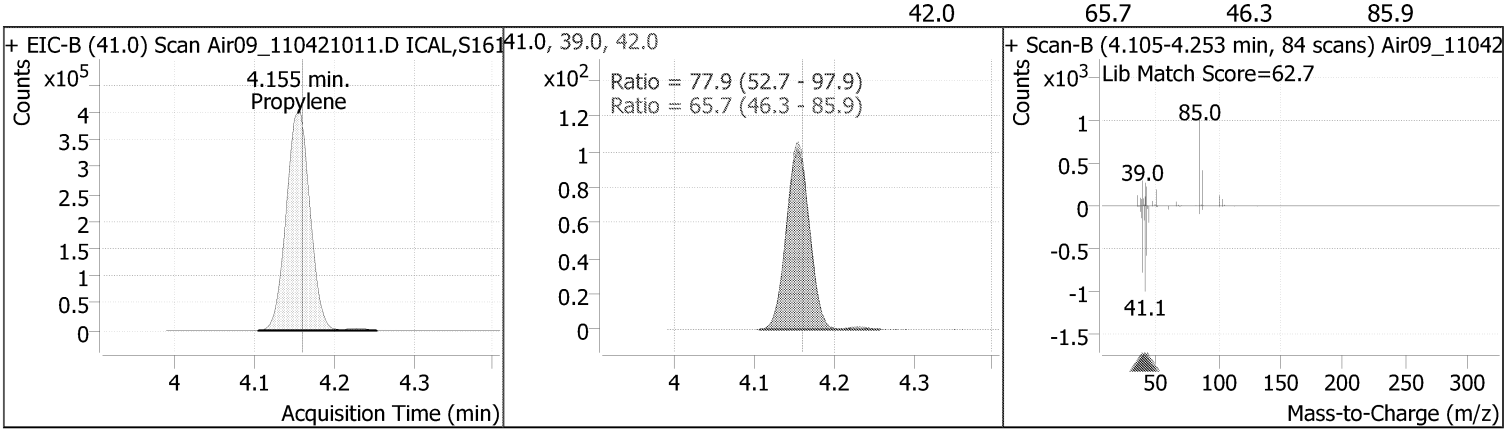
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.390	130.0	370342	10.0000	nL/L		0.000
M 1,4-Difluorobenzene	10.097	114.0	1336048	10.0000	nL/L		0.004
M Chlorobenzene-d5	14.175	82.0	831641	10.0000	nL/L	#	0.004
System Monitoring Compounds							
S p-Bromofluorobenzene	15.770	174.0	878290	8.9578	nL/L		0.006
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 89.58%			
Target Compounds							QValue
T Propylene	4.155	41.0	841818	38.3127	nL/L		98
T Freon 12	4.230	85.0	2891386	39.3134	nL/L		99
T Chloromethane	4.389	50.0	1237571	37.8556	nL/L		100
T Freon 114	4.494	135.0	2261009	38.1323	nL/L		98
T Vinyl Chloride	4.607	62.0	1342037	36.8559	nL/L		100
T 1,3-Butadiene	4.742	54.0	1082176	37.2638	nL/L		96
T Butane	4.797	43.0	2079278	35.1291	nL/L		99
T Bromomethane	4.996	96.0	1102347	38.4461	nL/L		99
T Chloroethane	5.160	64.0	689798	35.9448	nL/L		99
T Ethanol	5.250	45.0	549251	35.0717	nL/L		100
T Vinyl bromide	5.485	108.0	1001826	39.7792	nL/L		100
T Acrolein	5.578	56.0	429094	40.8598	nL/L		99
T Acetone	5.694	58.0	534253	38.4093	nL/L		96
T Trichloromonofluoromethane	5.869	101.0	3176285	38.4874	nL/L		100
T Isopropanol (IPA)	5.908	45.0	2005112	43.1620	nL/L		96
T n-Pentane	6.191	43.0	2146039	39.9253	nL/L		99
T 1,1-Dichloroethene	6.433	61.0	2138196	39.8251	nL/L		97
T Tert-butyl alcohol (TBA)	6.446	59.0	2444703	43.2374	nL/L		97
T Methylene Chloride	6.523	51.0	476885	36.0094	nL/L		93
T 3-Chloropropene	6.639	76.0	476013	41.7033	nL/L		99
T Freon 113	6.774	101.0	2515672	39.3199	nL/L		99

Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
T Carbon Disulfide	6.808	76.0	2942465	38.9605	nL/L	98
T trans-1,2-Dichloroethene	7.351	61.0	1690488	39.7374	nL/L	96
T 1,1-Dichloroethane	7.530	63.0	2183242	39.0315	nL/L	99
T MTBE	7.576	73.0	3073458	41.5295	nL/L	96
T Vinyl Acetate	7.638	43.0	3127027	41.0074	nL/L	98
T 2-Butanone	7.851	72.0	532108	40.0131	nL/L	86
T cis-1,2-Dichloroethene	8.251	61.0	1751695	40.0882	nL/L	96
T Ethyl Acetate	8.422	61.0	418801	41.5428	nL/L	97
T n-Hexane	8.456	57.0	1902794	40.4437	nL/L	98
T Chloroform	8.508	83.0	2398638	37.1887	nL/L	99
T Tetrahydrofuran	8.851	72.0	499344	41.2277	nL/L	100
T 1,2-Dichloroethane	9.160	62.0	1791981	38.5632	nL/L	98
T 1,1,1-Trichloroethane	9.399	97.0	2484779	39.4514	nL/L	99
T Benzene	9.802	78.0	3269151	38.6468	nL/L	100
T Carbon Tetrachloride	9.940	117.0	2700623	40.9246	nL/L	99
T TPH Gasoline (C3 to C12)	9.999	0.0	374612974	69.0504	nL/L	100
T Cyclohexane	10.063	84.0	1371139	36.9380	nL/L	90
T 1,2-Dichloropropane	10.529	63.0	1415652	40.0394	nL/L	98
T Methane, bromodichloro-	10.690	83.0	2661113	41.2024	nL/L	99
T 1,4-Dioxane	10.706	88.0	777458	42.7274	nL/L	92
T Trichloroethene	10.740	132.0	1574307	41.1602	nL/L	100
T 2,2,4-Trimethylpentane	10.797	56.0	1875586	40.5513	nL/L	95
T Methyl methacrylate	10.884	69.0	1271230	42.9509	nL/L	98
T n-Heptane	11.015	71.0	1180615	42.3843	nL/L	95
T cis-1,3-Dichloropropene	11.511	110.0	480392	44.5596	nL/L	99
T 4-Methyl-2-Pentanone	11.538	58.0	1172414	45.2356	nL/L	98
T trans-1,3-Dichloropropene	11.986	110.0	489337	45.0574	nL/L	98
T 1,1,2-Trichloroethane	12.161	97.0	1462100	40.5052	nL/L	100
T Toluene	12.445	91.0	4189805	41.0765	nL/L	99
T 2-Hexanone	12.663	58.0	1520395	45.2321	nL/L	99
T Dibromochloromethane	12.838	129.0	2908860	43.1118	nL/L	99
T 1,2-Dibromoethane	13.086	108.9	2325264	42.2220	nL/L	100
T Tetrachloroethene	13.545	166.0	2321173	42.3325	nL/L	99
T 1,1,1,2-Tetrachloroethane	14.197	131.0	1959610	37.0198	nL/L	99
T Benzene, chloro-	14.220	112.0	3462013	35.8726	nL/L	99
T Ethylbenzene	14.600	91.0	5277073	36.1521	nL/L	99
T m,p-Xylenes	14.789	91.0	8540619	80.9385	nL/L	98
T Bromoform	14.859	173.0	3323653	40.0552	nL/L	99
T Styrene	15.162	104.0	3361568	38.4334	nL/L	99
T 1,1,2,2-Tetrachloroethane	15.255	83.0	3445582	35.7324	nL/L	99
T o-Xylene	15.287	91.0	4463237	38.3545	nL/L	99
T n-Nonane	15.516	85.0	1048702	39.8094	nL/L	96
T Isopropylbenzene	15.928	105.0	6134082	35.6409	nL/L	98
T 2-Chlorotoluene	16.473	126.0	1588041	37.9959	nL/L	100
T n-Propylbenzene	16.518	120.0	1766567	38.3700	nL/L	93
T 4-Ethyltoluene	16.689	105.1	6043429	38.1067	nL/L	97
T 1,3,5-Trimethylbenzene	16.782	105.0	5261742	38.1432	nL/L	98
T 1,2,4-Trimethylbenzene	17.293	105.1	5212400	39.6725	nL/L	98
T Benzyl chloride	17.457	91.0	4944486	45.1513	nL/L	98
T 1,3-Dichlorobenzene	17.482	146.0	3793320	38.0046	nL/L	99
T 1,4-Dichlorobenzene	17.567	146.0	3782115	38.4913	nL/L	99
T 1,2-Dichlorobenzene	18.016	146.0	3634432	38.3077	nL/L	99
T 1,2,4-Trichlorobenzene	20.520	180.0	2919450	53.7865	nL/L	100
T Naphthalene	20.690	128.0	6018672	53.6731	nL/L	99
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.267	225.0	3151737	41.0419	nL/L	99

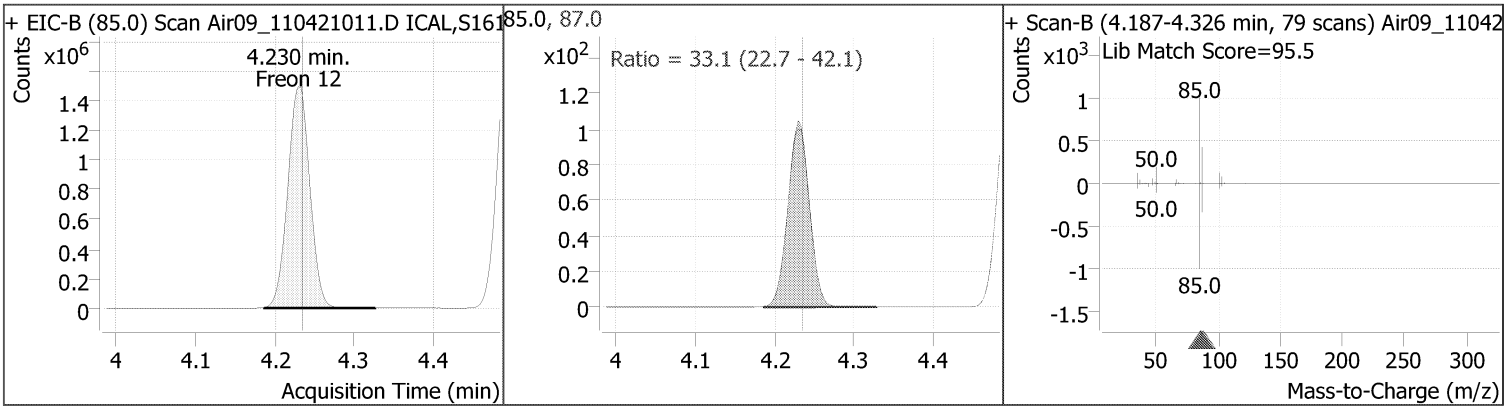
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

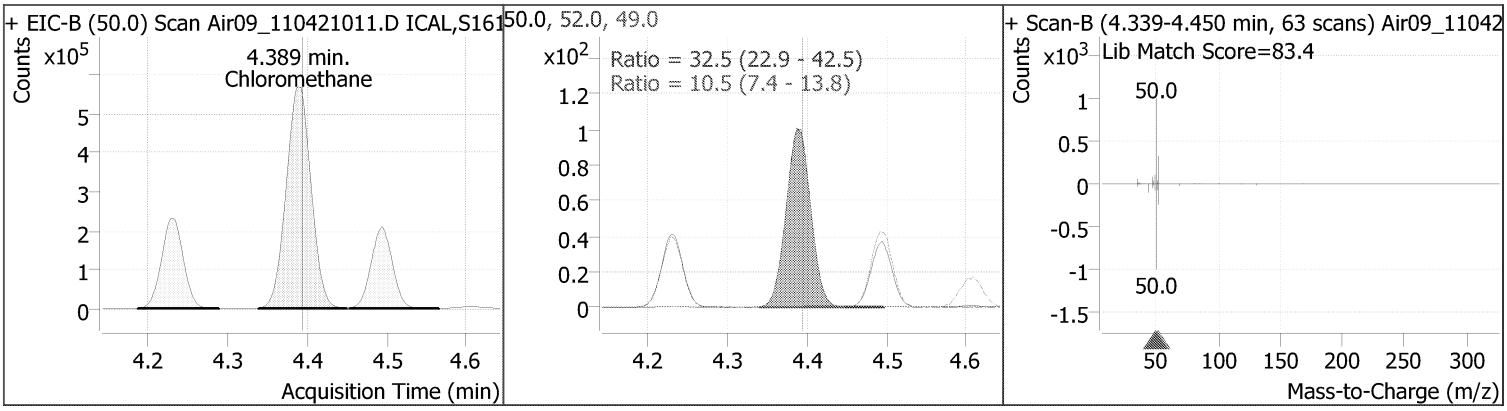
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	38.3127	4.16	0.00	841818	39.0	77.9	52.7	97.9
					42.0	65.7	46.3	85.9



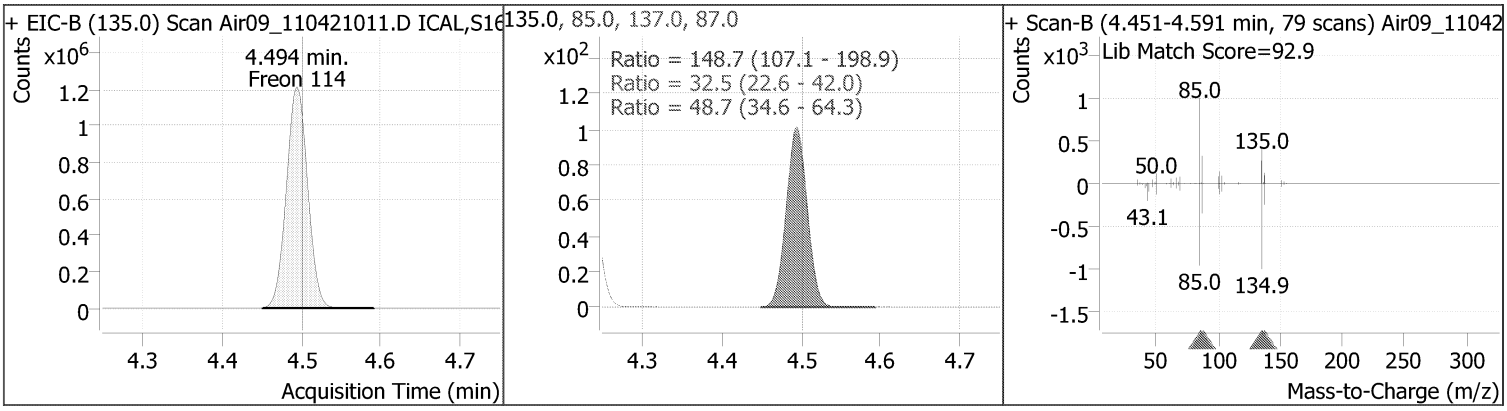
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	39.3134	4.23	0.00	2891386	87.0	33.1	22.7	42.1



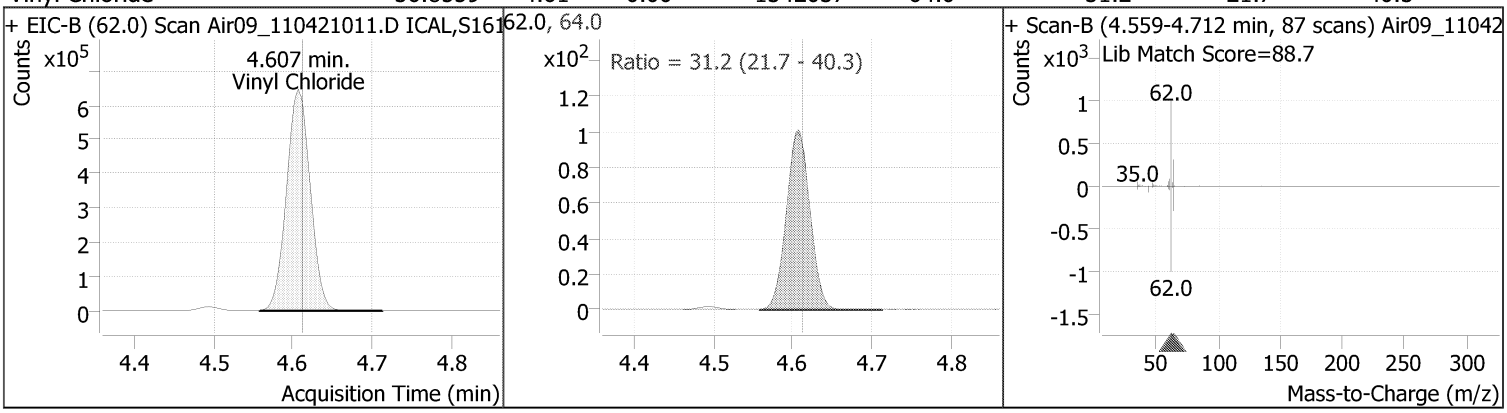
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	37.8556	4.39	0.00	1237571	52.0	32.5	22.9	42.5
					49.0	10.5	7.4	13.8



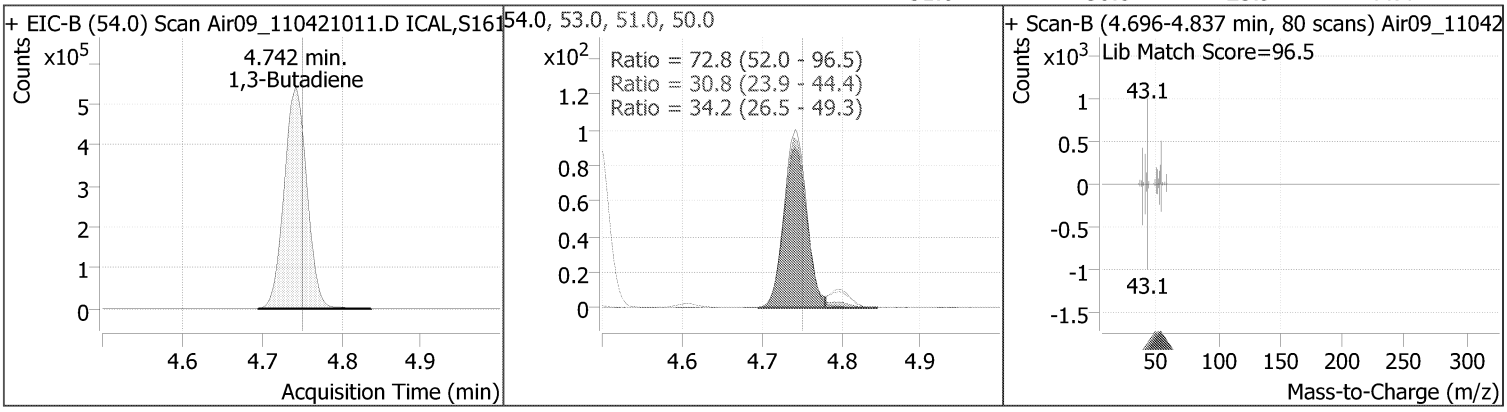
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	38.1323	4.49	-0.01	2261009	85.0	148.7	107.1	198.9
					87.0	48.7	34.6	64.3
					137.0	32.5	22.6	42.0



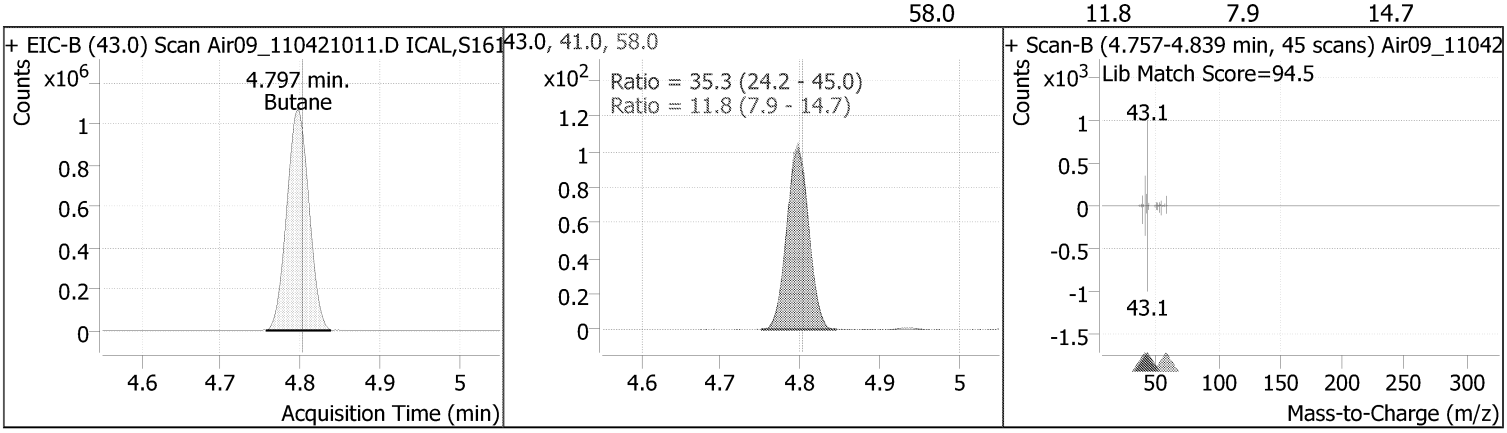
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	36.8559	4.61	0.00	1342037	64.0	31.2	21.7	40.3



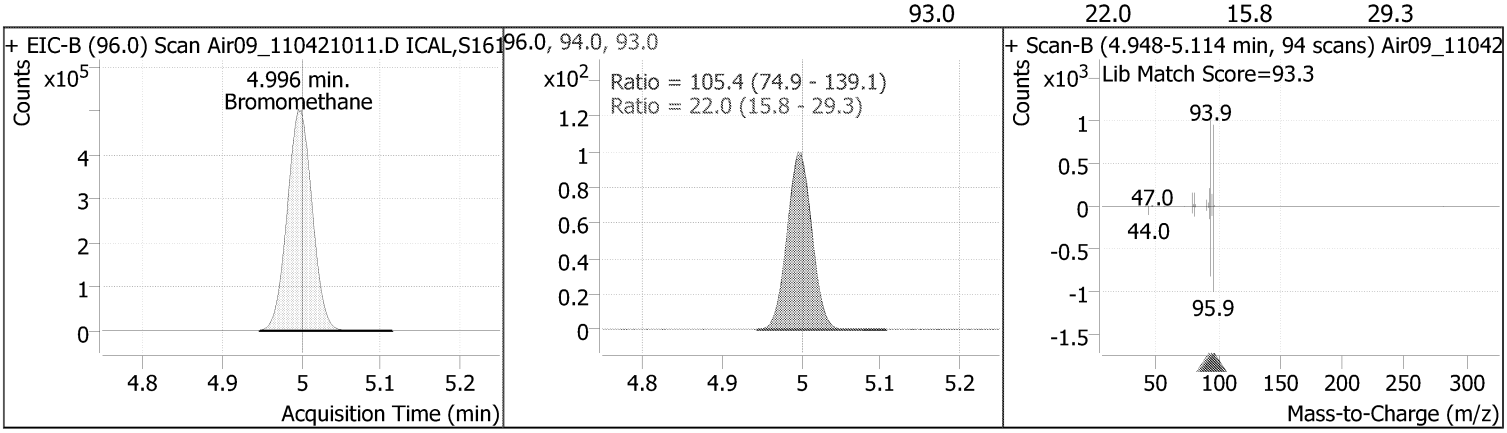
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	37.2638	4.74	-0.01	1082176	53.0	72.8	52.0	96.5
					50.0	34.2	26.5	49.3
					51.0	30.8	23.9	44.4



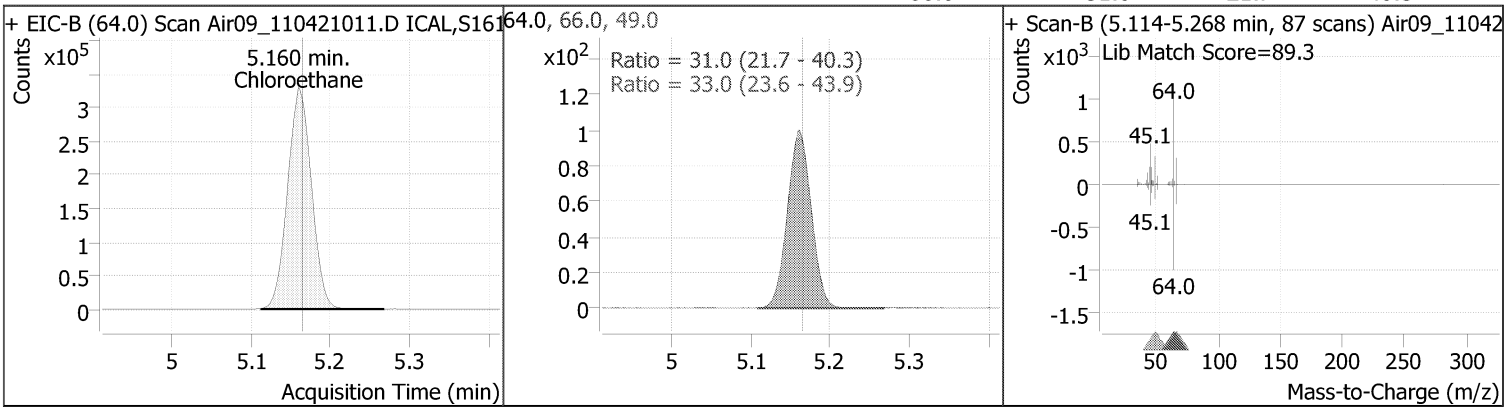
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	35.1291	4.80	0.00	2079278	41.0	35.3	24.2	45.0
					58.0	11.8	7.9	14.7



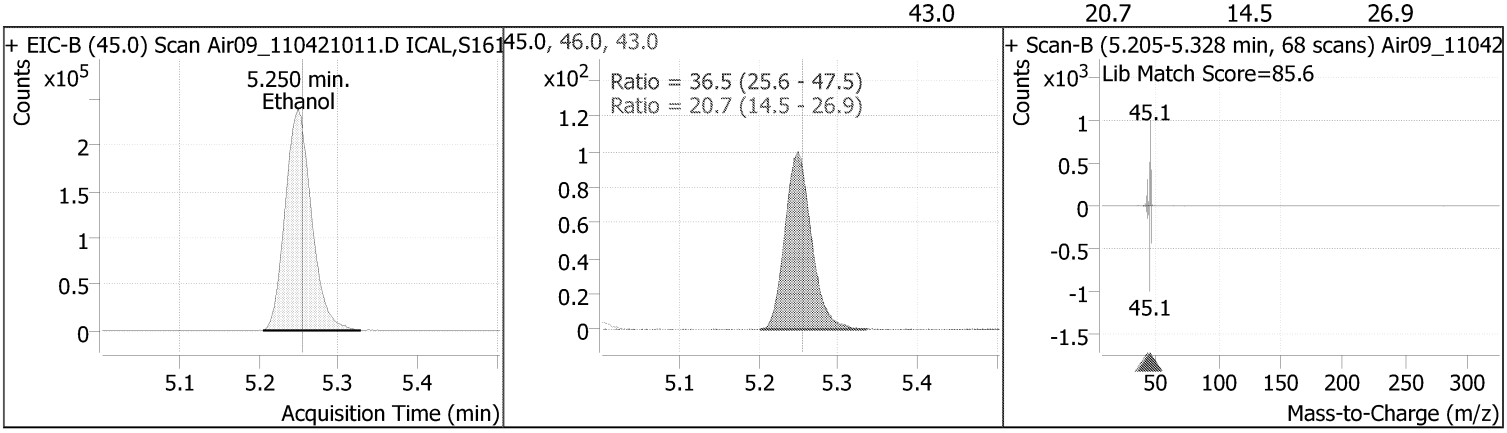
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromomethane	38.4461	5.00	0.00	1102347	94.0	105.4	74.9	139.1
					93.0	22.0	15.8	29.3



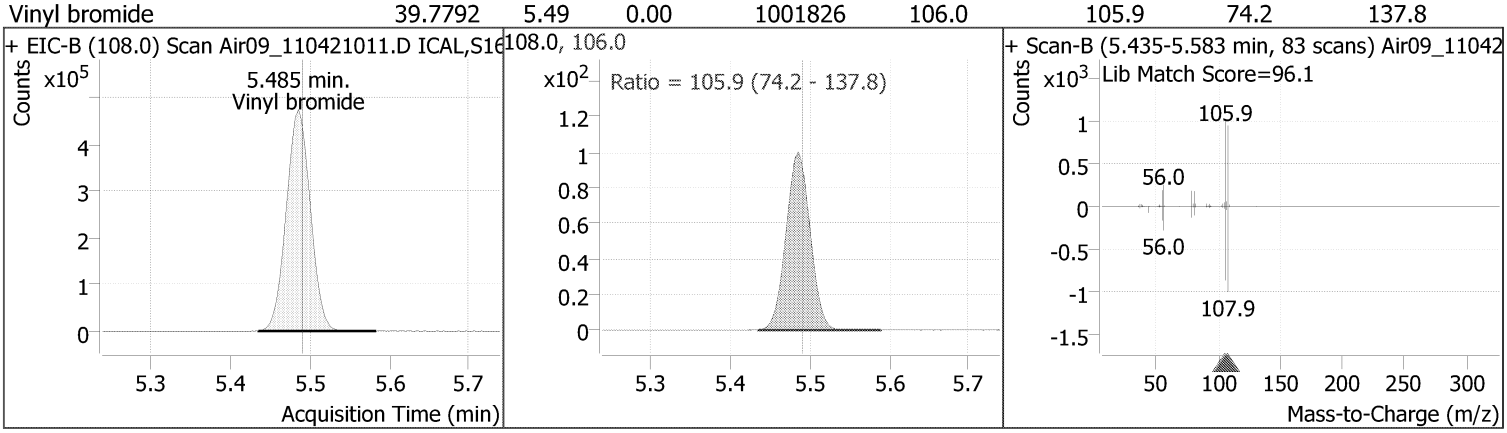
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	35.9448	5.16	0.00	689798	49.0	33.0	23.6	43.9
					66.0	31.0	21.7	40.3



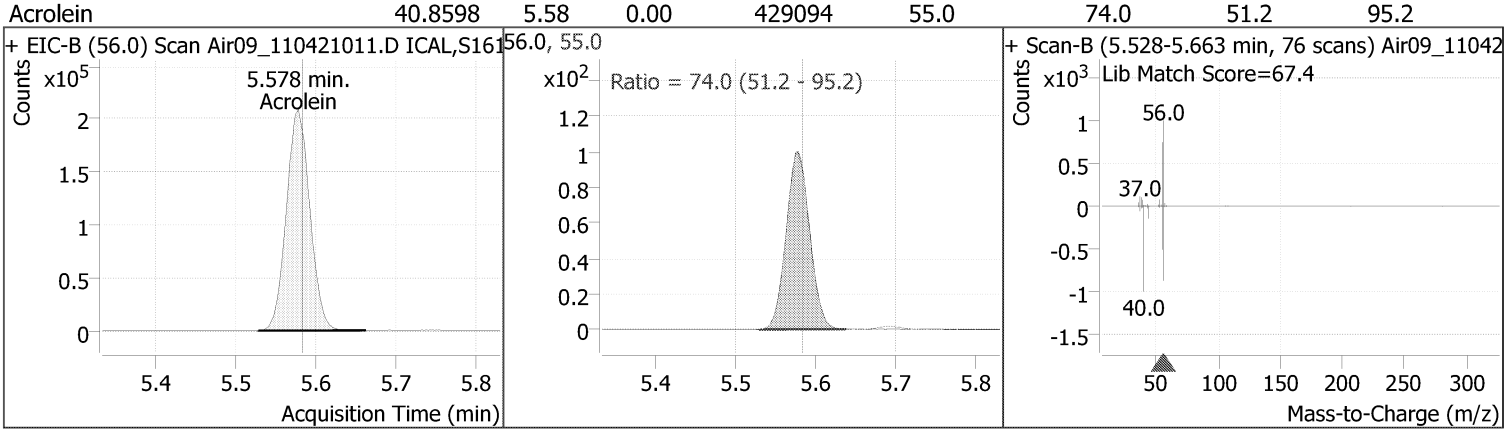
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	35.0717	5.25	0.00	549251	46.0	36.5	25.6	47.5
					43.0	20.7	14.5	26.9



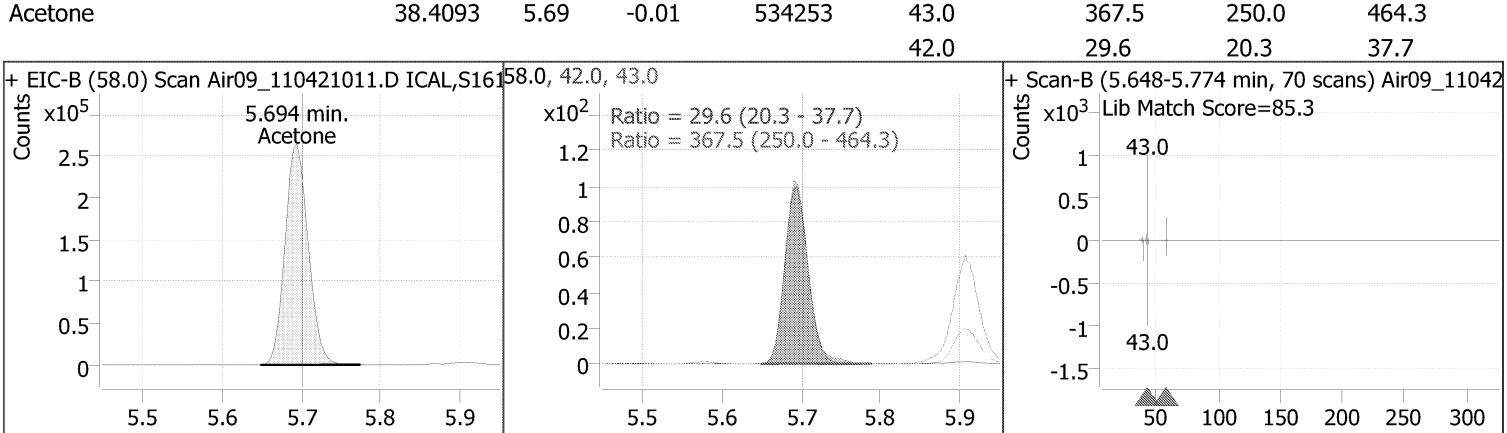
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl bromide	39.7792	5.49	0.00	1001826	106.0	105.9	74.2	137.8



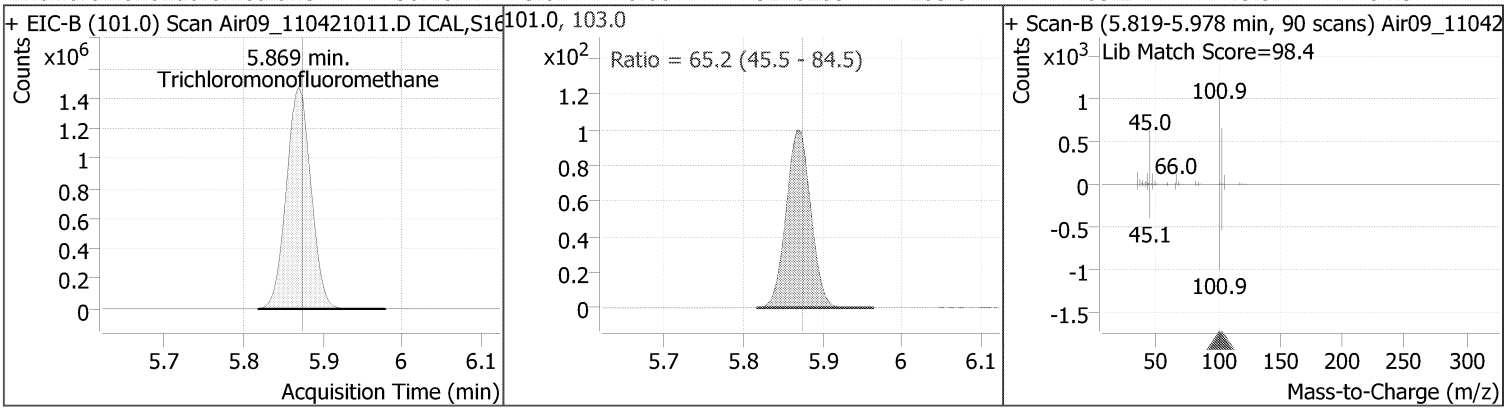
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	40.8598	5.58	0.00	429094	55.0	74.0	51.2	95.2



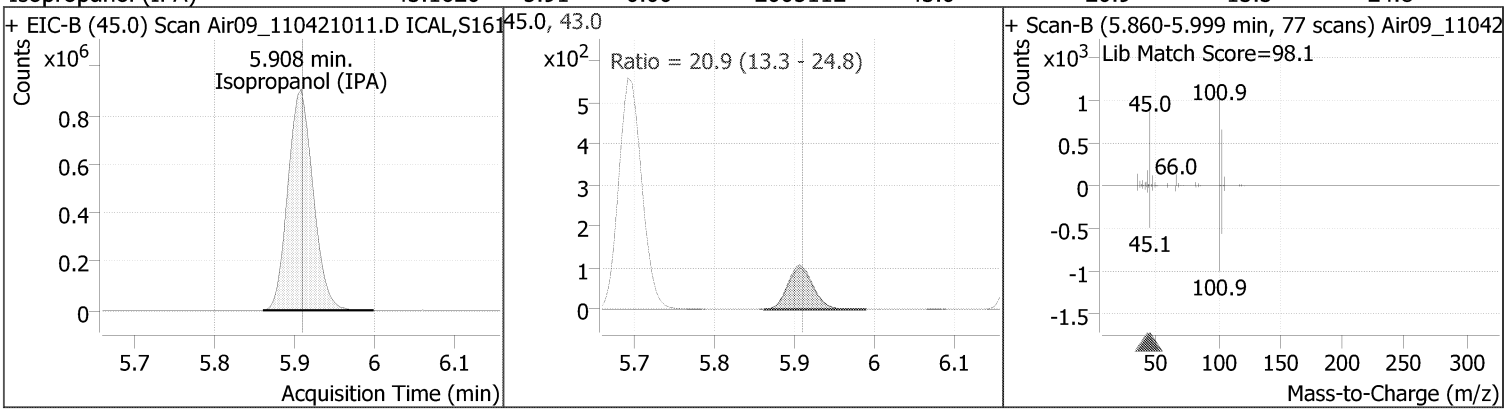
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	38.4093	5.69	-0.01	534253	43.0	367.5	250.0	464.3
					42.0	29.6	20.3	37.7



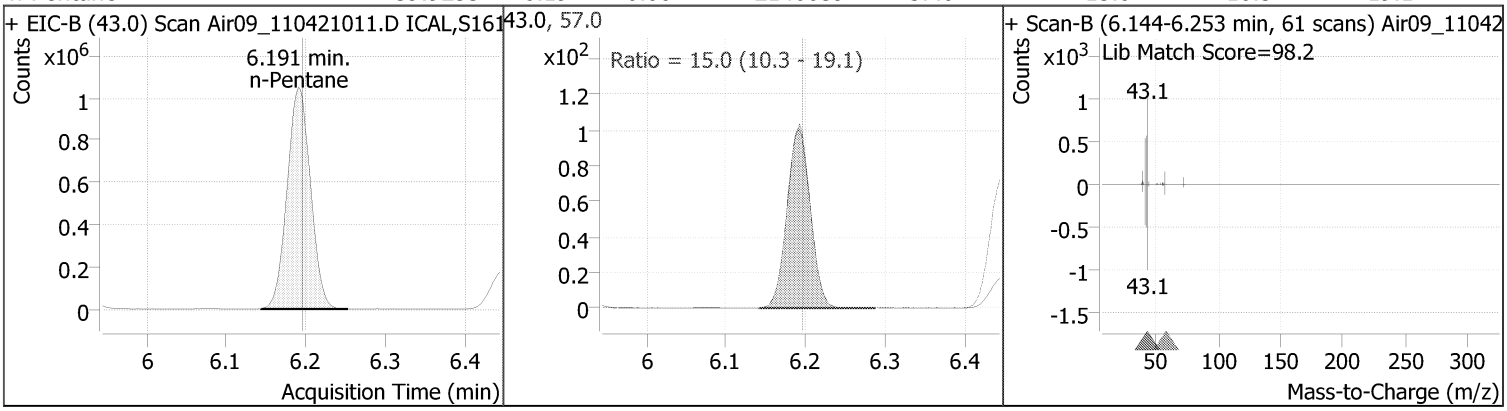
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	38.4874	5.87	0.00	3176285	103.0	65.2	45.5	84.5



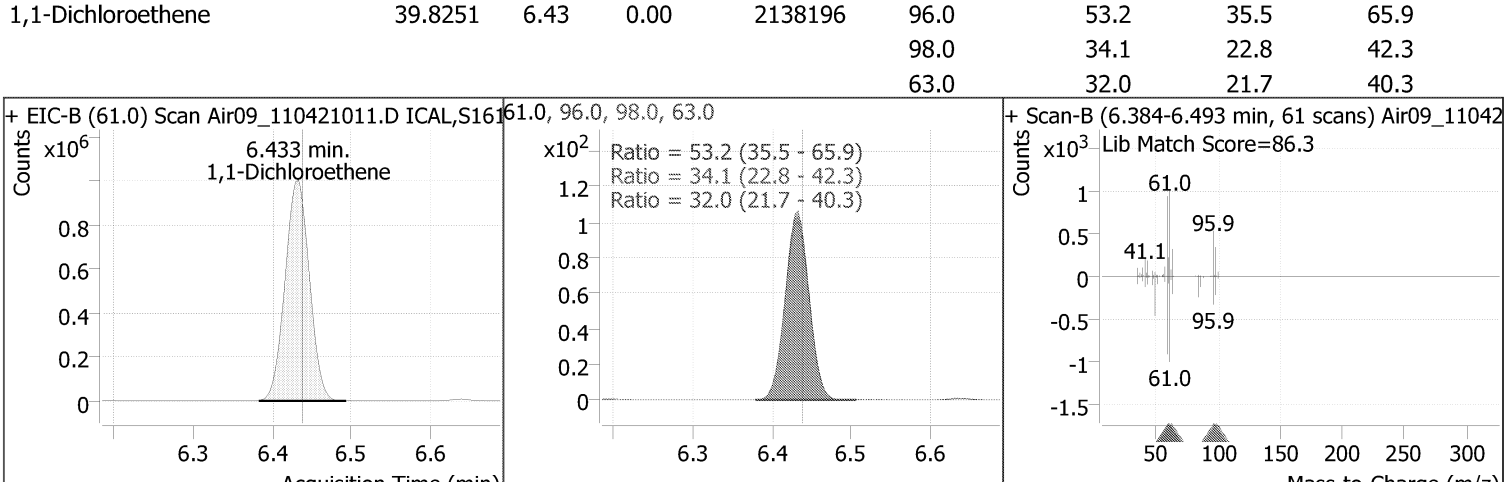
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	43.1620	5.91	0.00	2005112	43.0	20.9	13.3	24.8



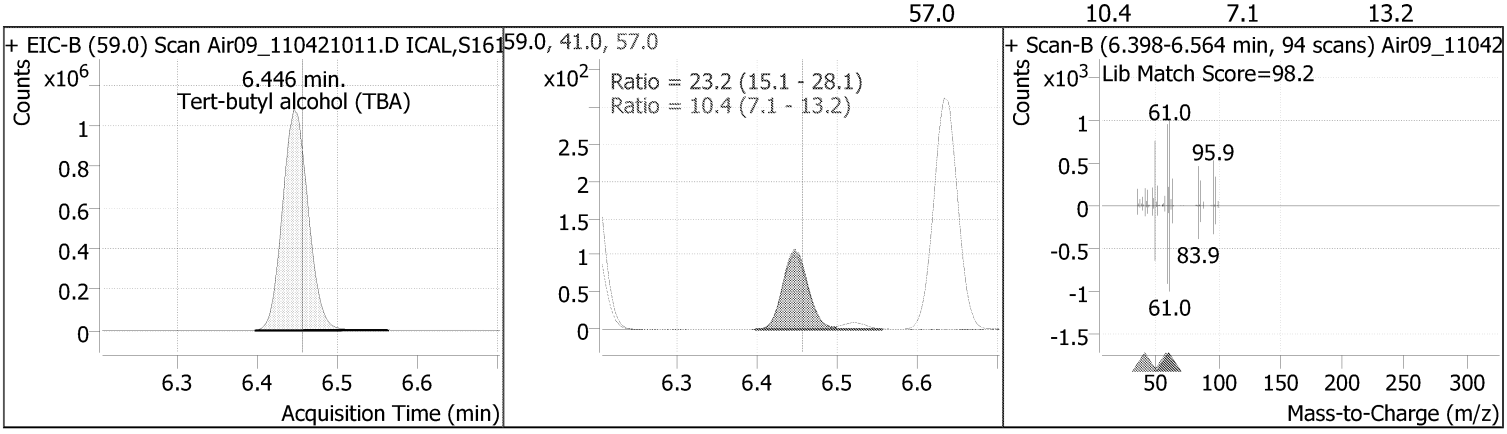
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	39.9253	6.19	0.00	2146039	57.0	15.0	10.3	19.1



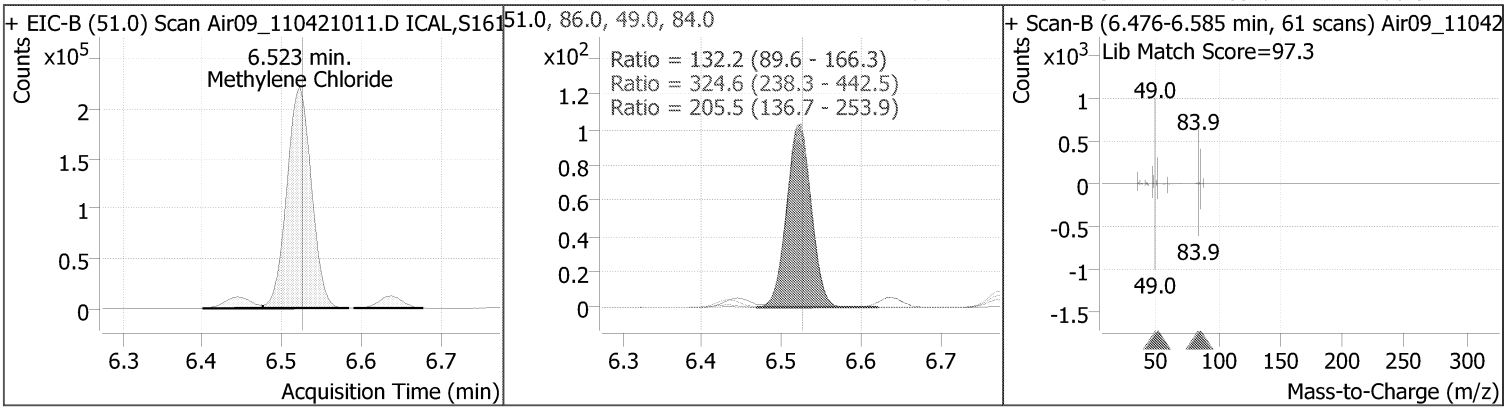
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	39.8251	6.43	0.00	2138196	96.0	53.2	35.5	65.9
					98.0	34.1	22.8	42.3
					63.0	32.0	21.7	40.3



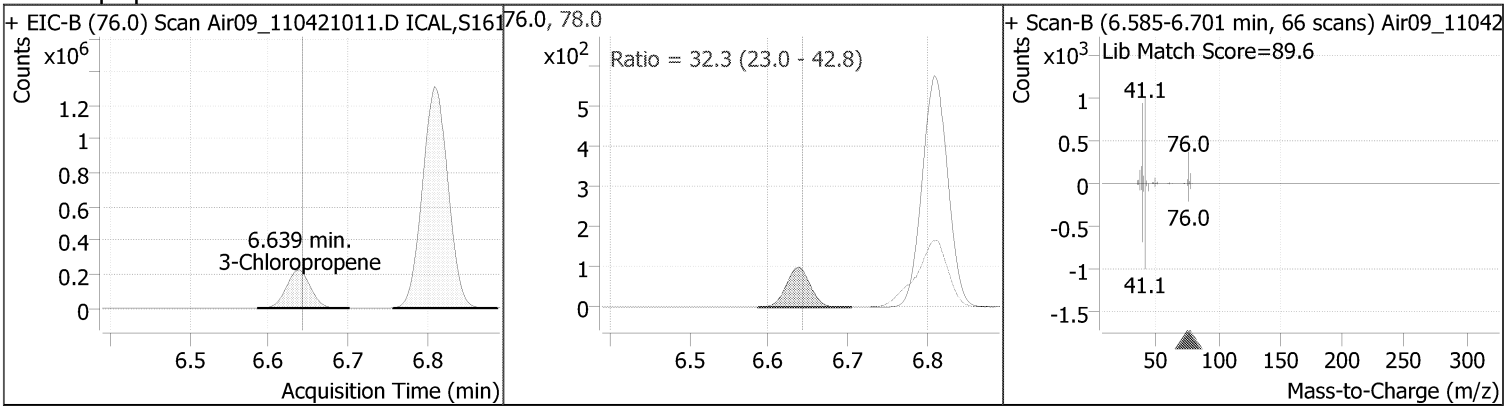
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	43.2374	6.45	-0.01	2444703	41.0	23.2	15.1	28.1
					57.0	10.4	7.1	13.2



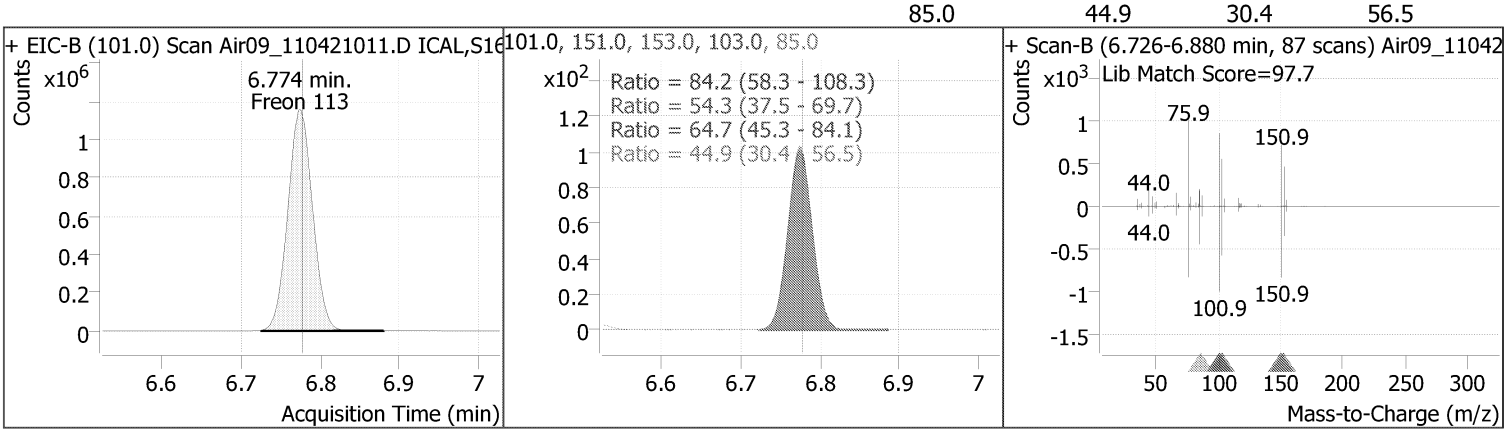
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	36.0094	6.52	0.00	476885	49.0	324.6	238.3	442.5
					84.0	205.5	136.7	253.9
					86.0	132.2	89.6	166.3



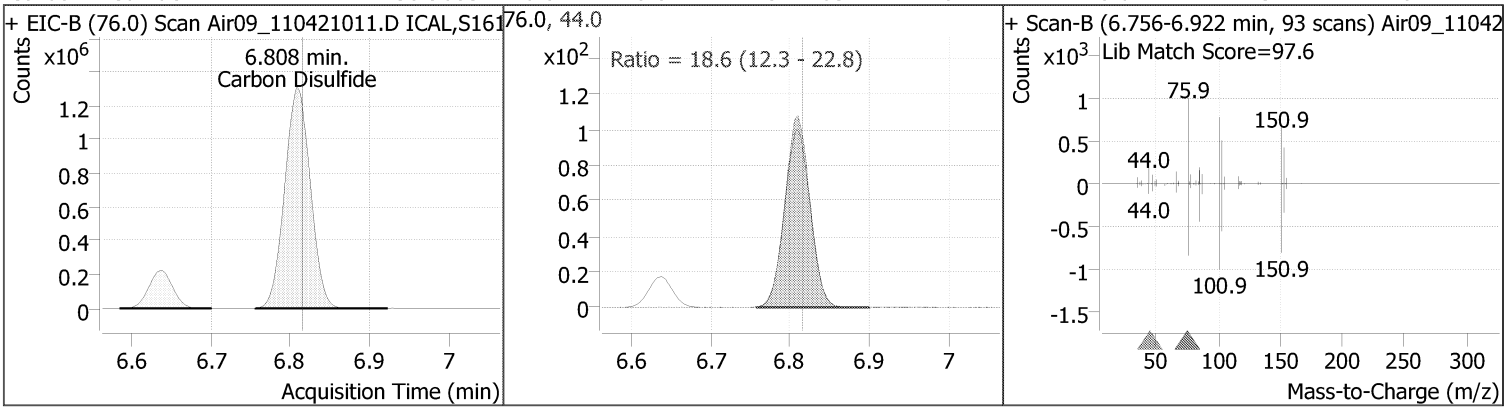
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	41.7033	6.64	0.00	476013	78.0	32.3	23.0	42.8



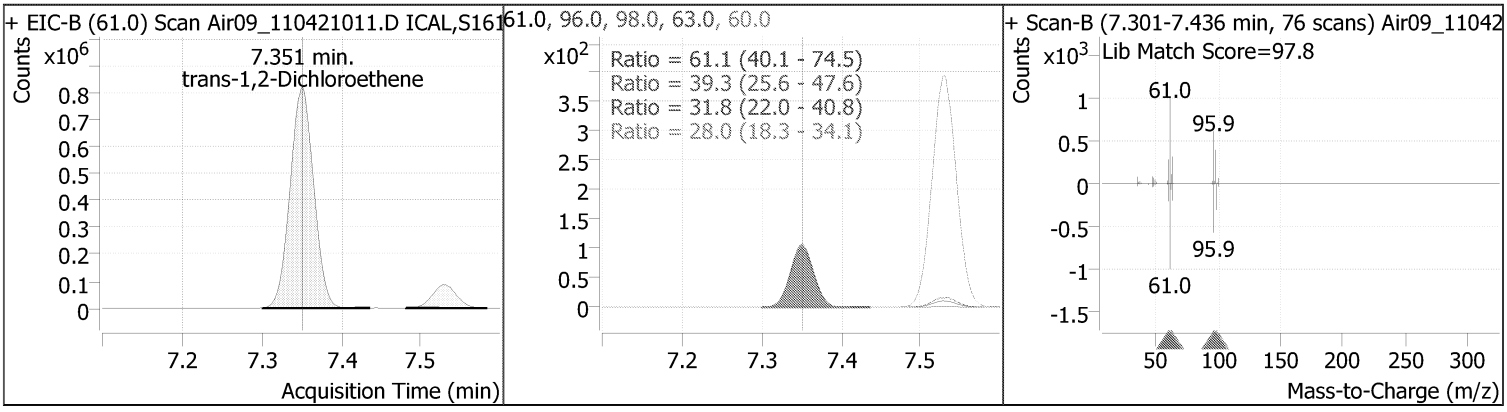
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	39.3199	6.77	0.00	2515672	151.0	84.2	58.3	108.3
					103.0	64.7	45.3	84.1
					153.0	54.3	37.5	69.7
					85.0	44.9	30.4	56.5



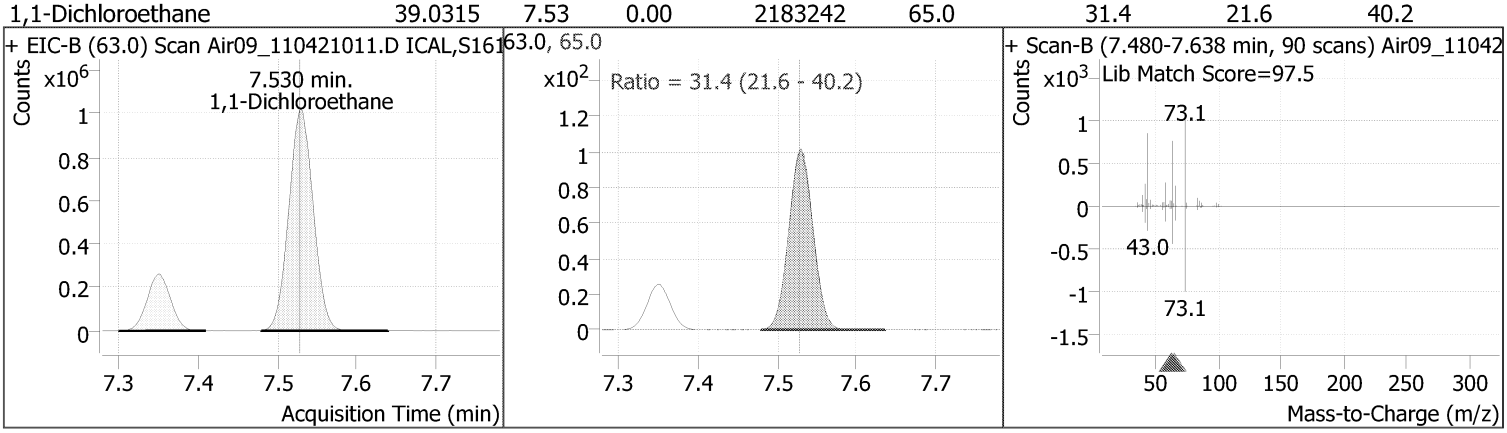
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	38.9605	6.81	-0.01	2942465	44.0	18.6	12.3	22.8



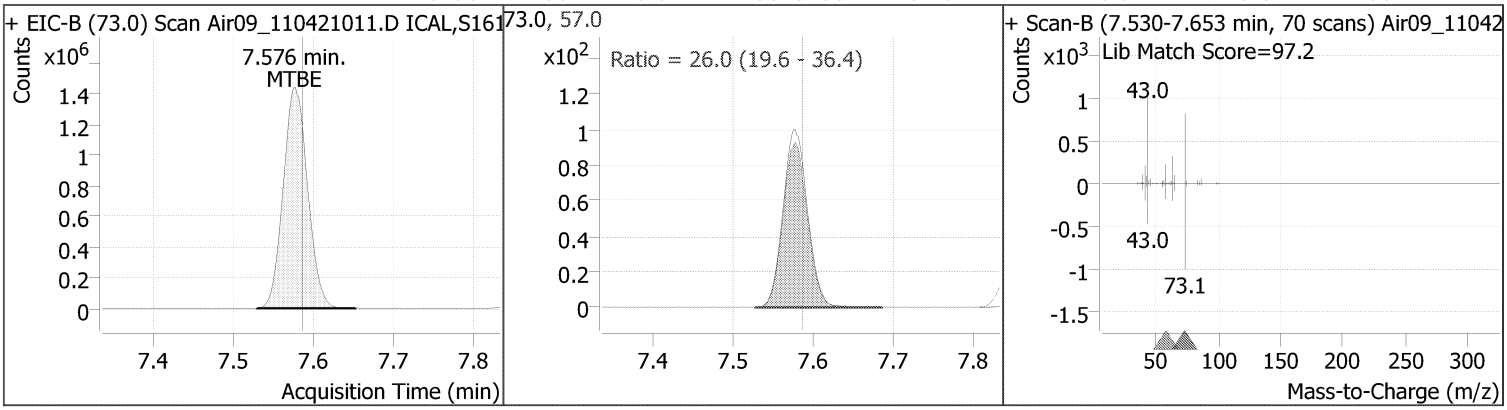
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	39.7374	7.35	0.00	1690488	96.0	61.1	40.1	74.5
					98.0	39.3	25.6	47.6
					63.0	31.8	22.0	40.8
					60.0	28.0	18.3	34.1



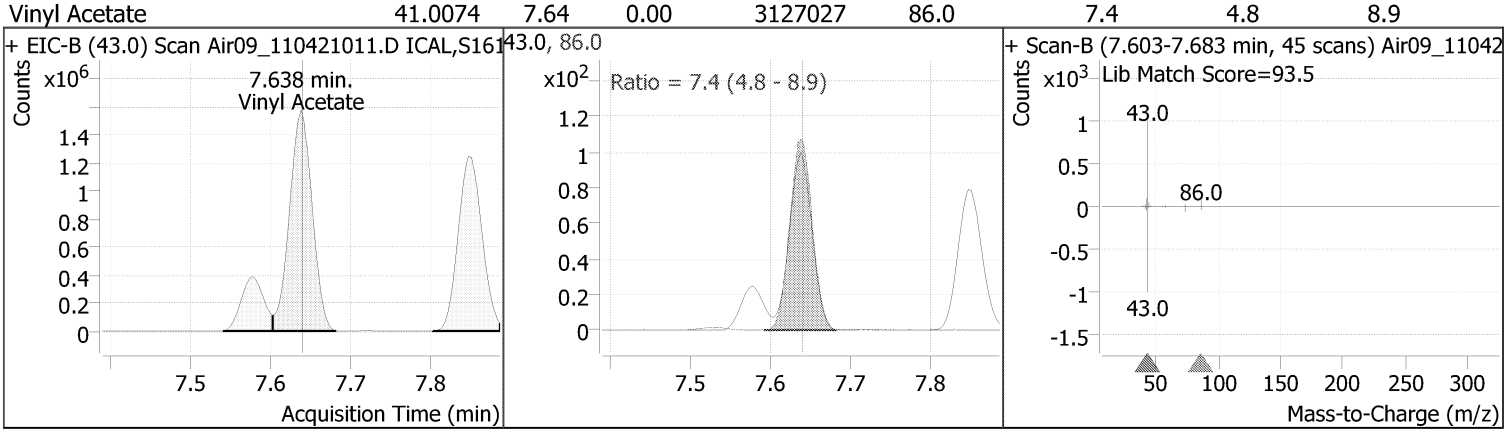
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	39.0315	7.53	0.00	2183242	65.0	31.4	21.6	40.2



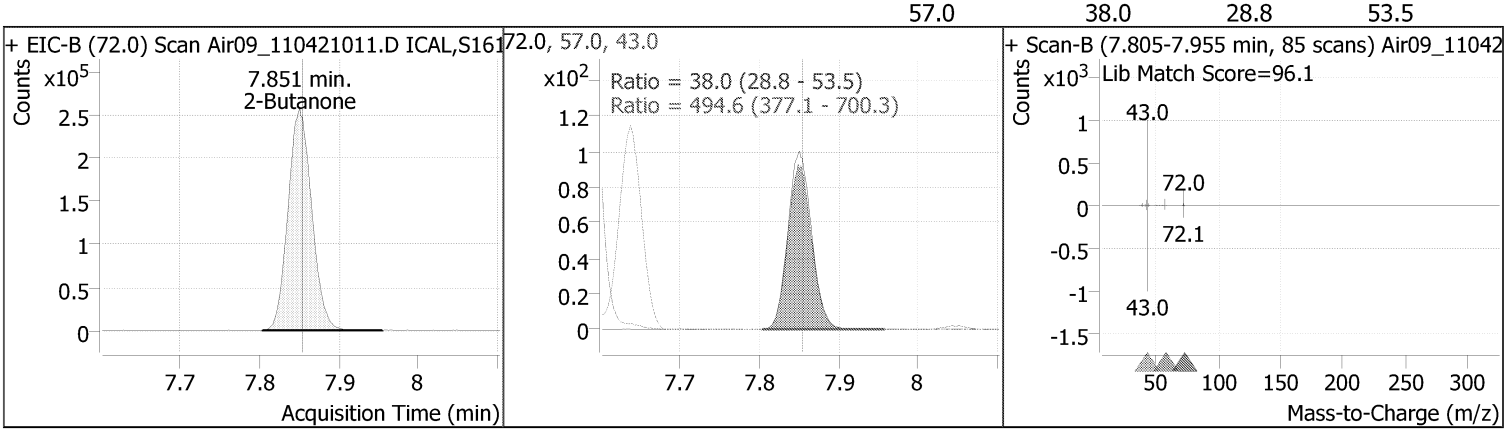
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	41.5295	7.58	-0.01	3073458	57.0	26.0	19.6	36.4



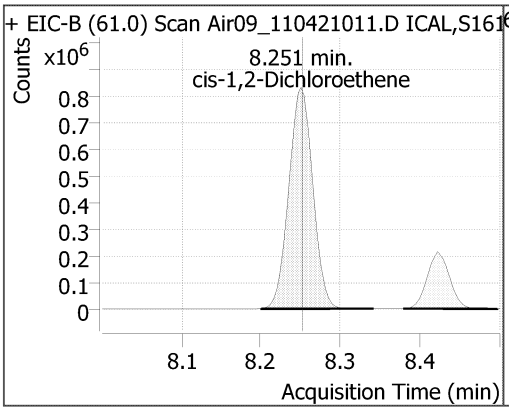
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	41.0074	7.64	0.00	3127027	86.0	7.4	4.8	8.9

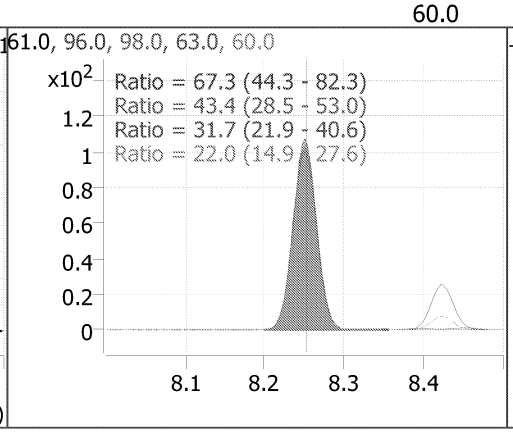


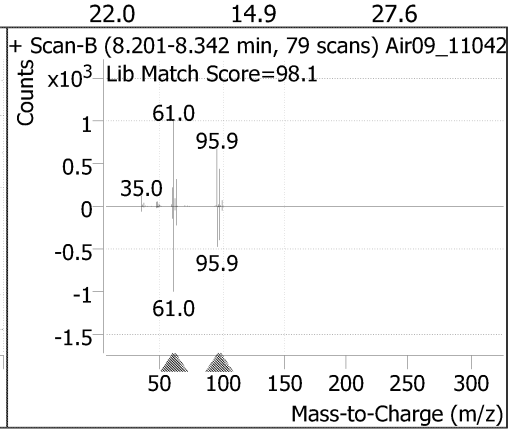
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	40.0131	7.85	0.00	532108	43.0	494.6	377.1	700.3
					57.0	38.0	28.8	53.5



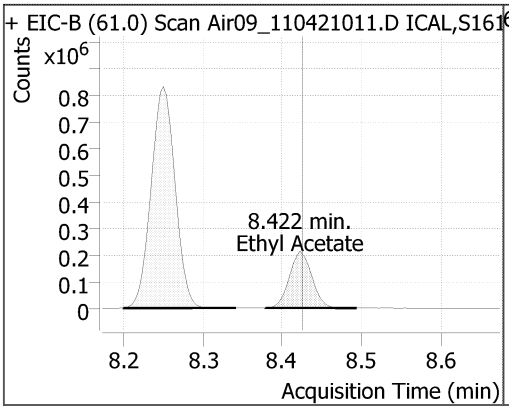
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	40.0882	8.25	0.00	1751695	96.0	67.3	44.3	82.3
					98.0	43.4	28.5	53.0
					63.0	31.7	21.9	40.6
					60.0	22.0	14.9	27.6

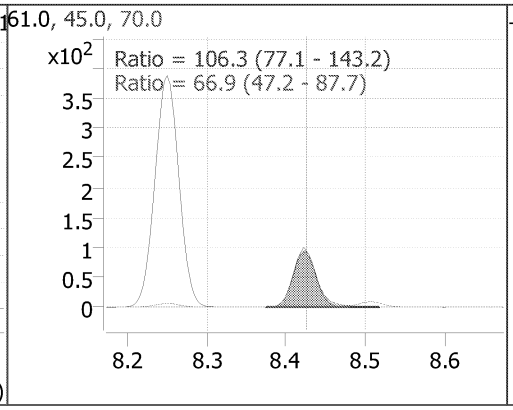


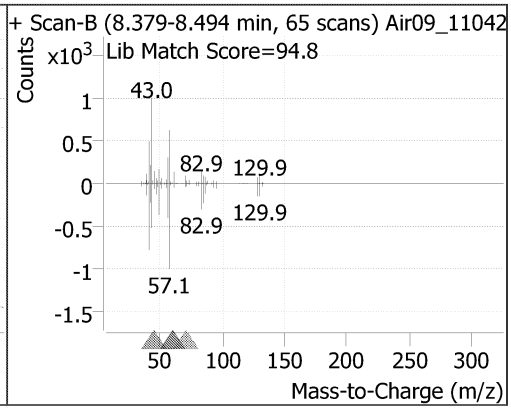




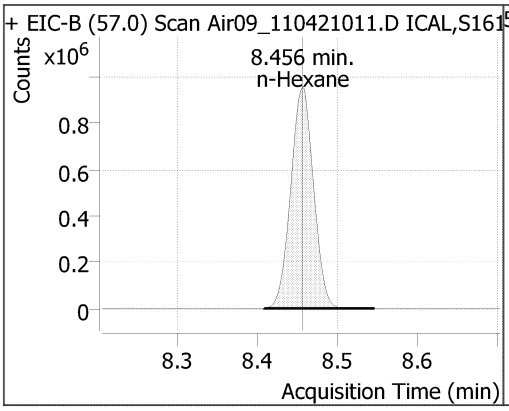
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	41.5428	8.42	0.00	418801	45.0	106.3	77.1	143.2
					70.0	66.9	47.2	87.7

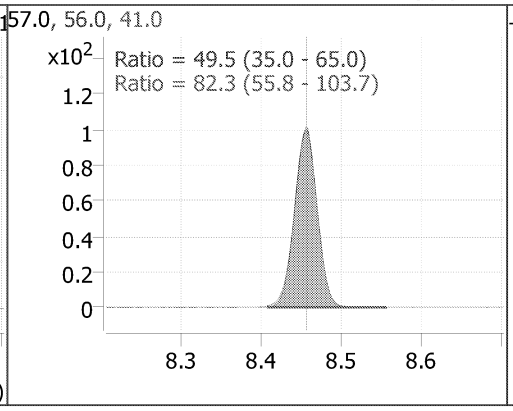


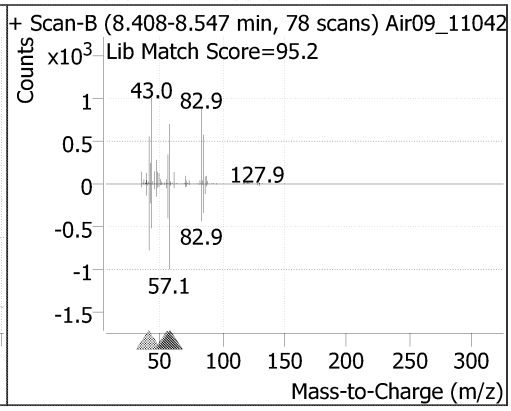




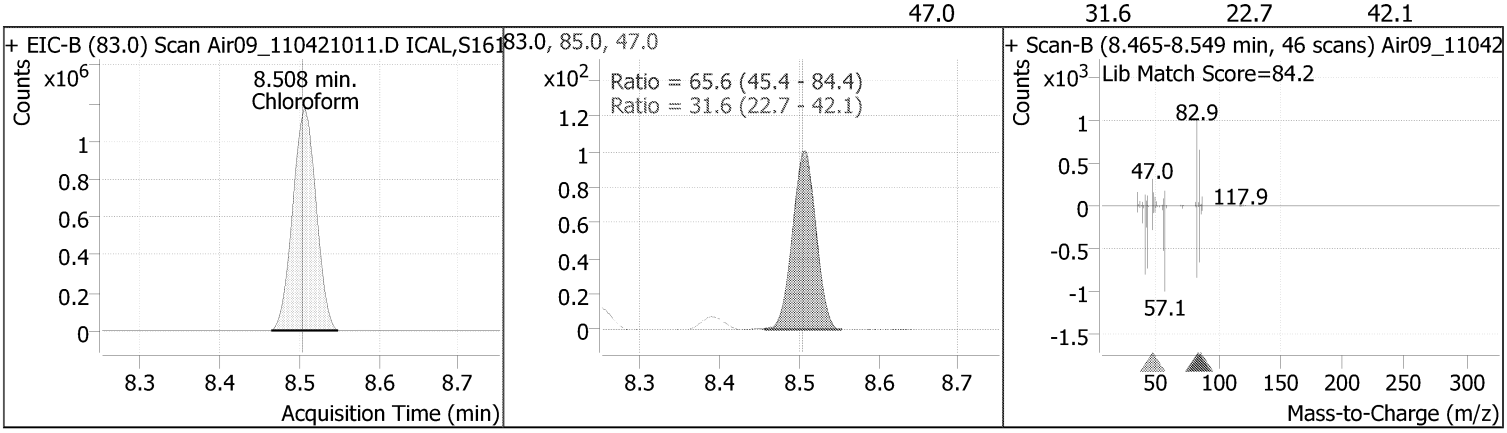
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	40.4437	8.46	0.00	1902794	41.0	82.3	55.8	103.7
					56.0	49.5	35.0	65.0



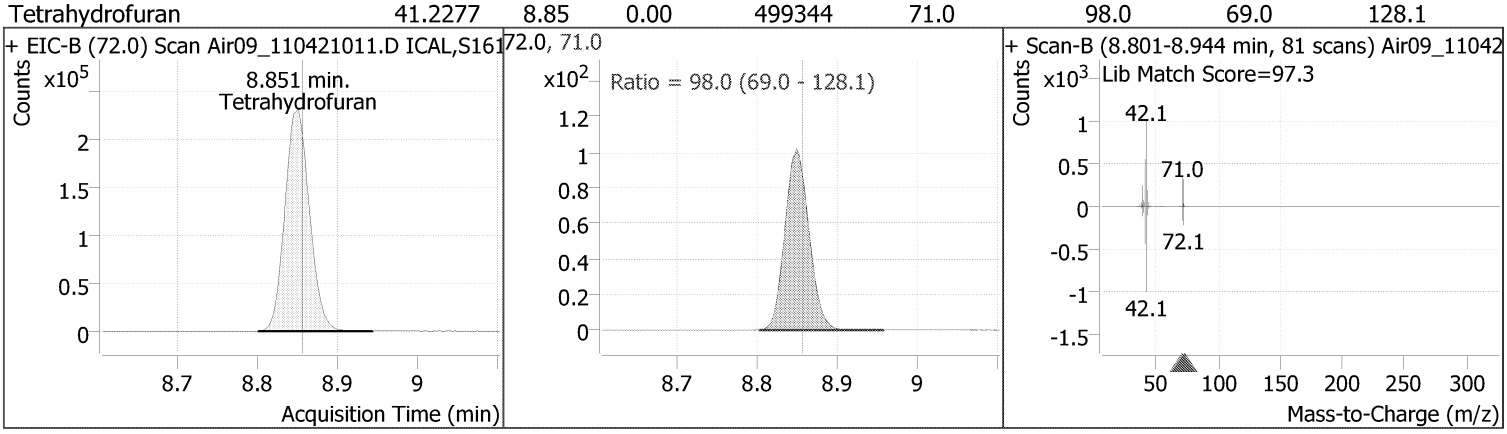




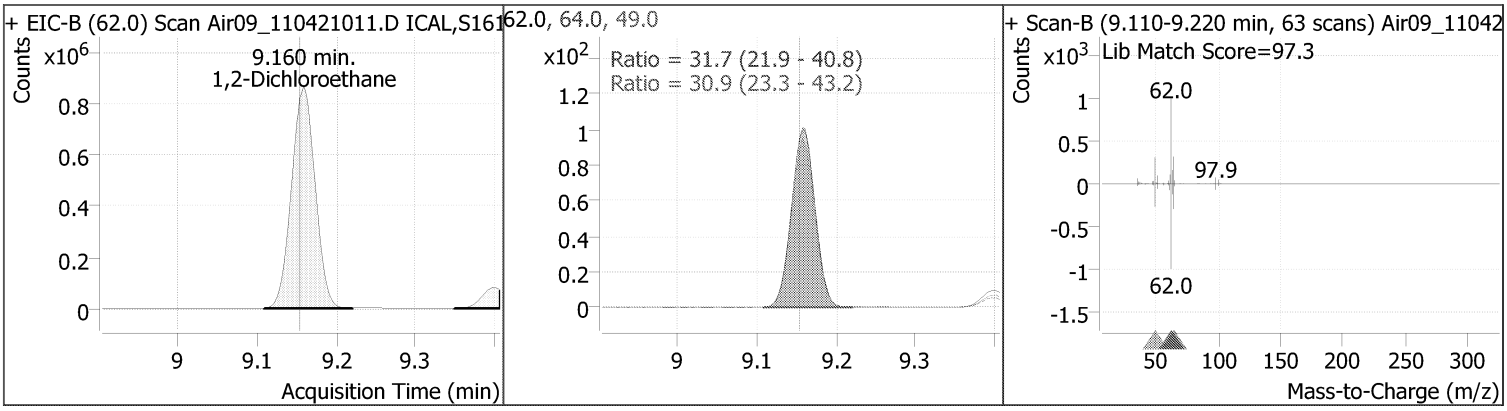
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	37.1887	8.51	0.01	2398638	85.0	65.6	45.4	84.4
					47.0	31.6	22.7	42.1



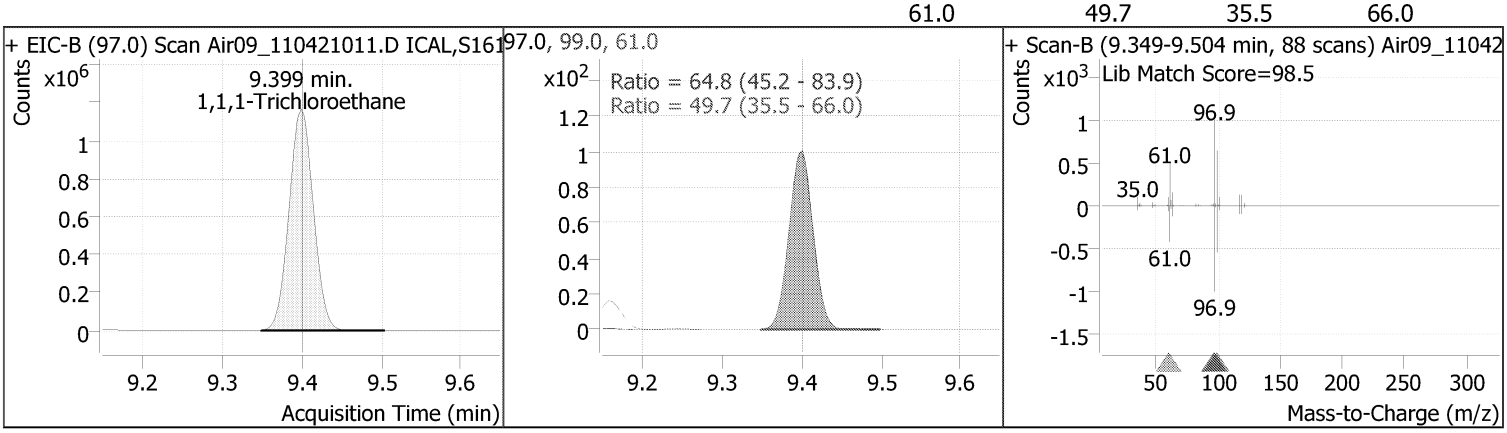
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	41.2277	8.85	0.00	499344	71.0	98.0	69.0	128.1



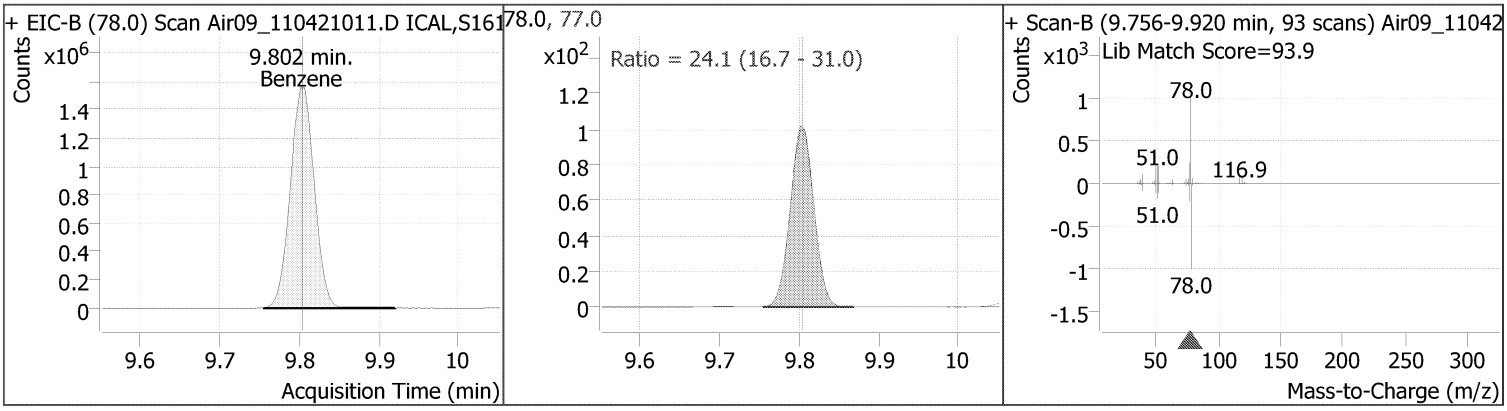
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	38.5632	9.16	0.00	1791981	49.0	30.9	23.3	43.2
					64.0	31.7	21.9	40.8



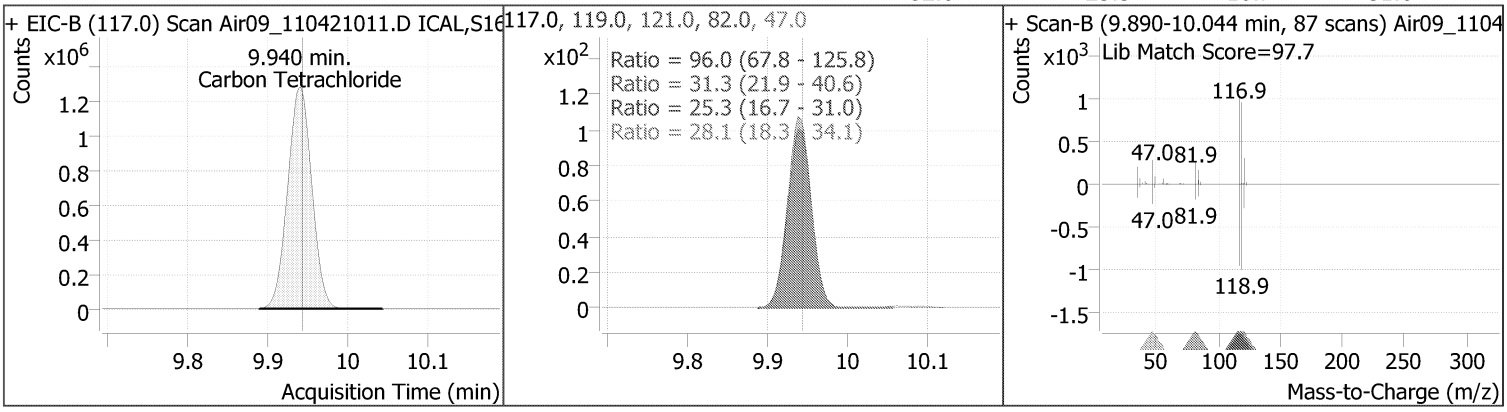
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	39.4514	9.40	0.00	2484779	99.0	64.8	45.2	83.9
					61.0	49.7	35.5	66.0



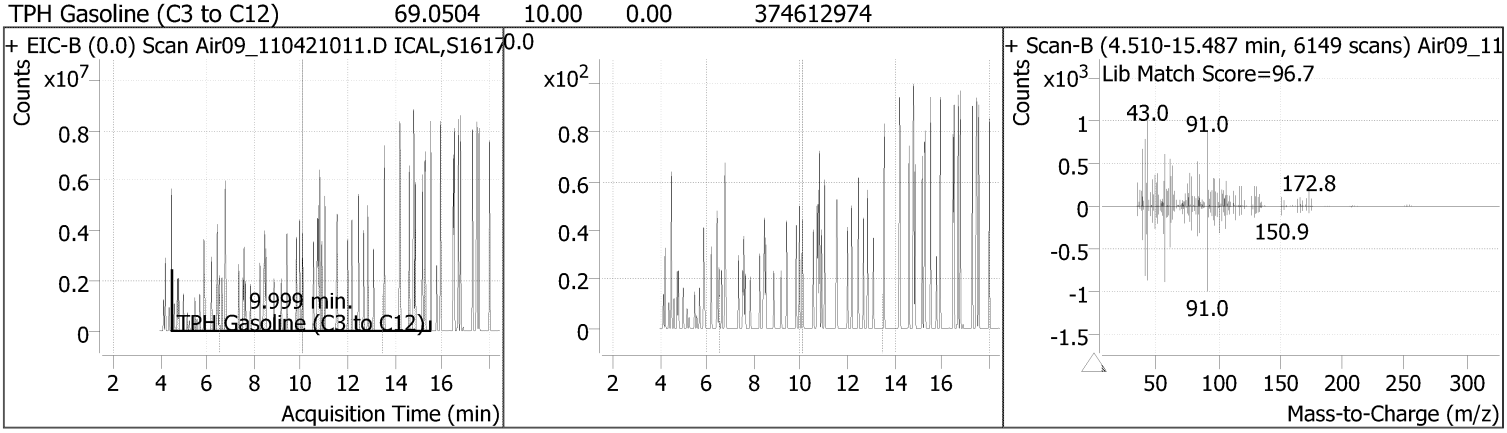
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	38.6468	9.80	0.00	3269151	77.0	24.1	16.7	31.0



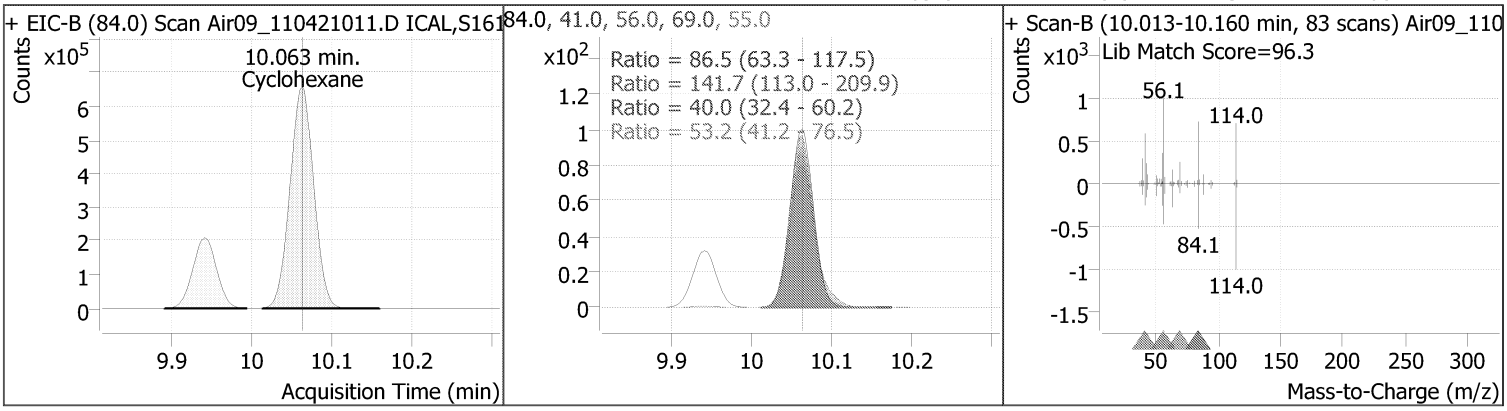
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	40.9246	9.94	0.00	2700623	119.0	96.0	67.8	125.8
					121.0	31.3	21.9	40.6
					47.0	28.1	18.3	34.1
					82.0	25.3	16.7	31.0



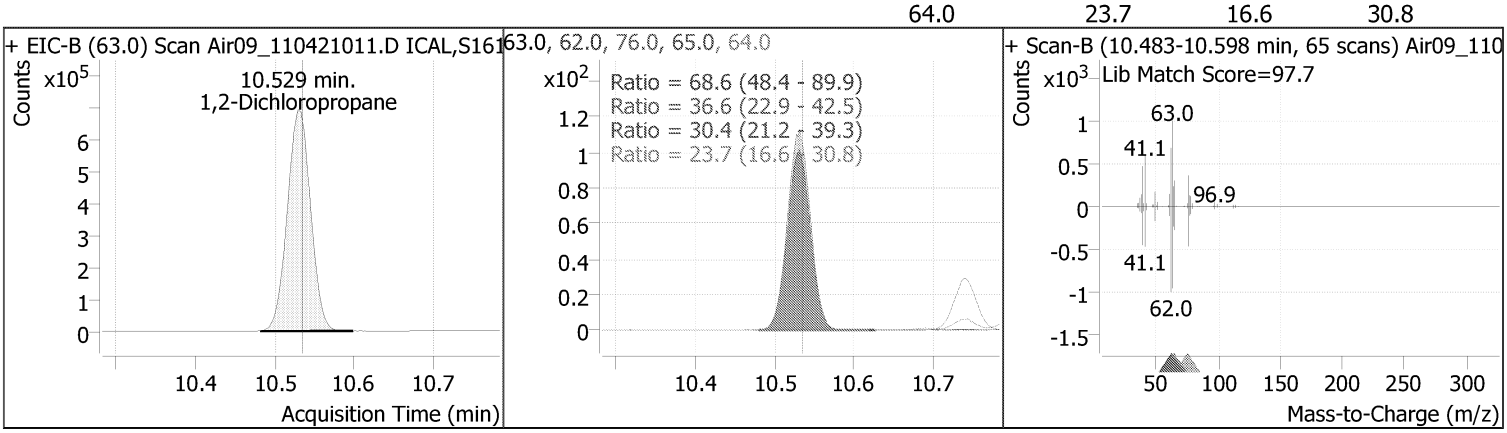
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	69.0504	10.00	0.00	374612974				



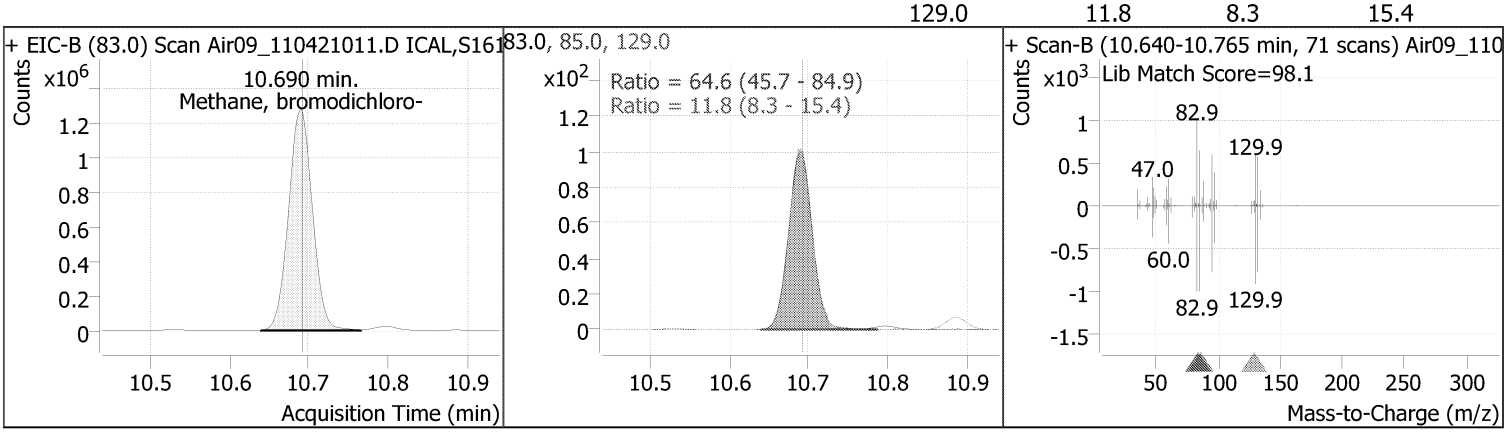
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	36.9380	10.06	0.00	1371139	56.0	141.7	113.0	209.9
					41.0	86.5	63.3	117.5
					55.0	53.2	41.2	76.5
					69.0	40.0	32.4	60.2



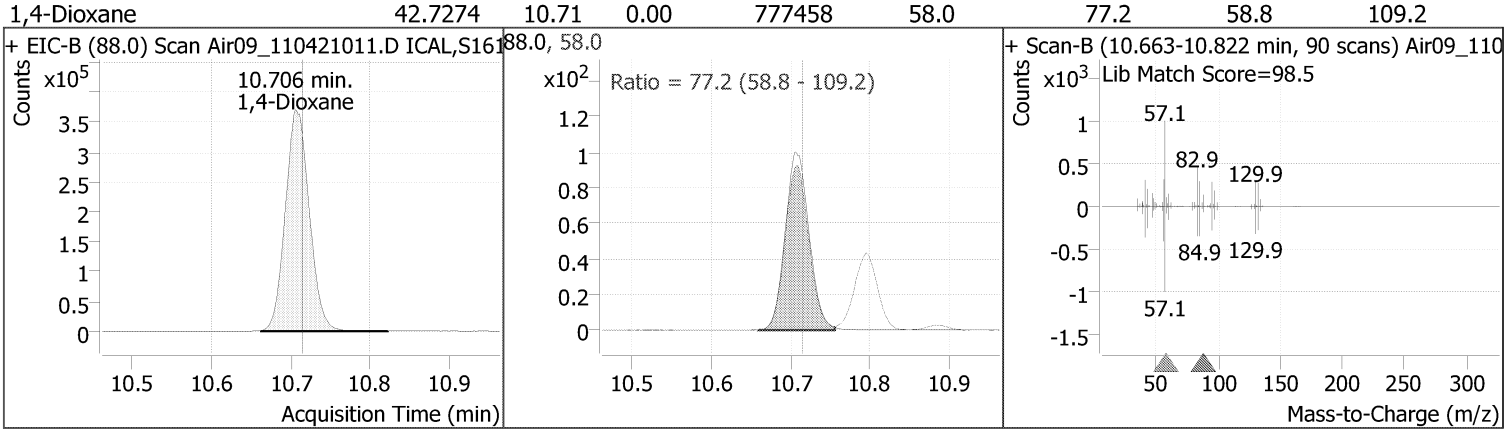
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	40.0394	10.53	0.00	1415652	62.0	68.6	48.4	89.9
					76.0	36.6	22.9	42.5
					65.0	30.4	21.2	39.3
					64.0	23.7	16.6	30.8



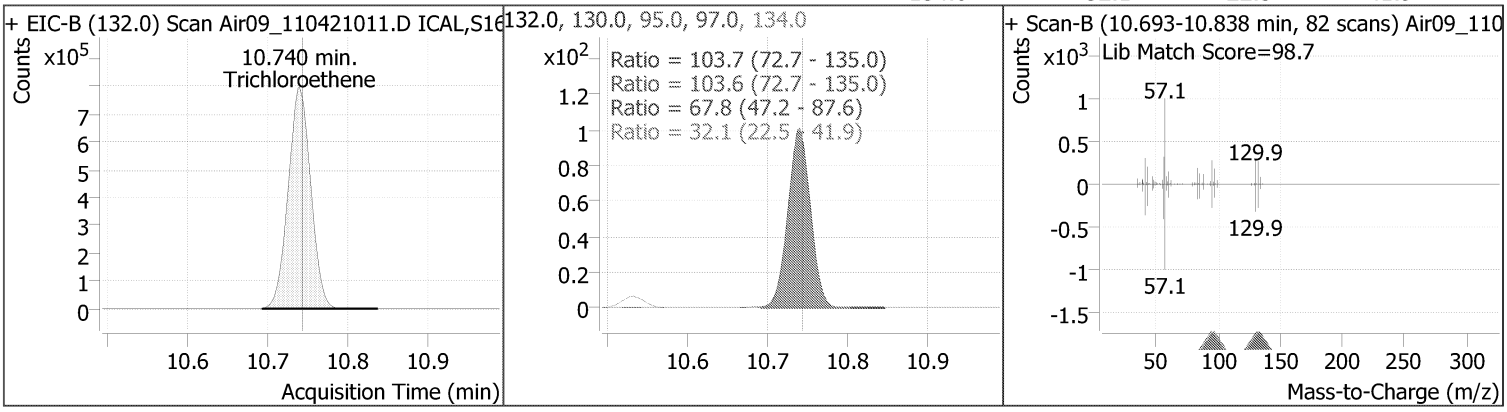
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	41.2024	10.69	0.00	2661113	85.0	64.6	45.7	84.9
					129.0	11.8	8.3	15.4



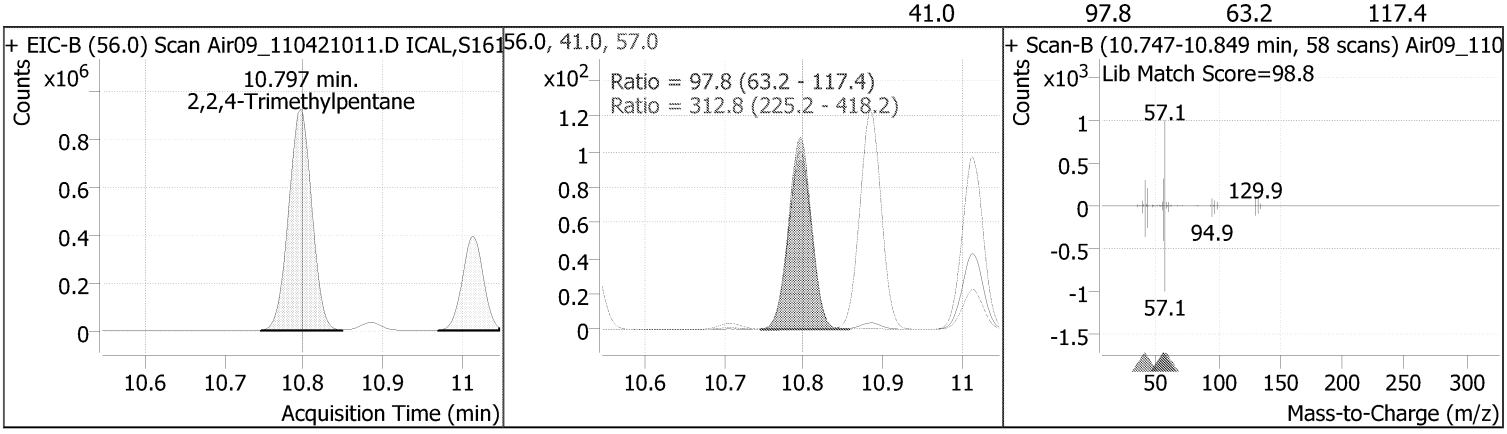
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	42.7274	10.71	0.00	777458	58.0	77.2	58.8	109.2



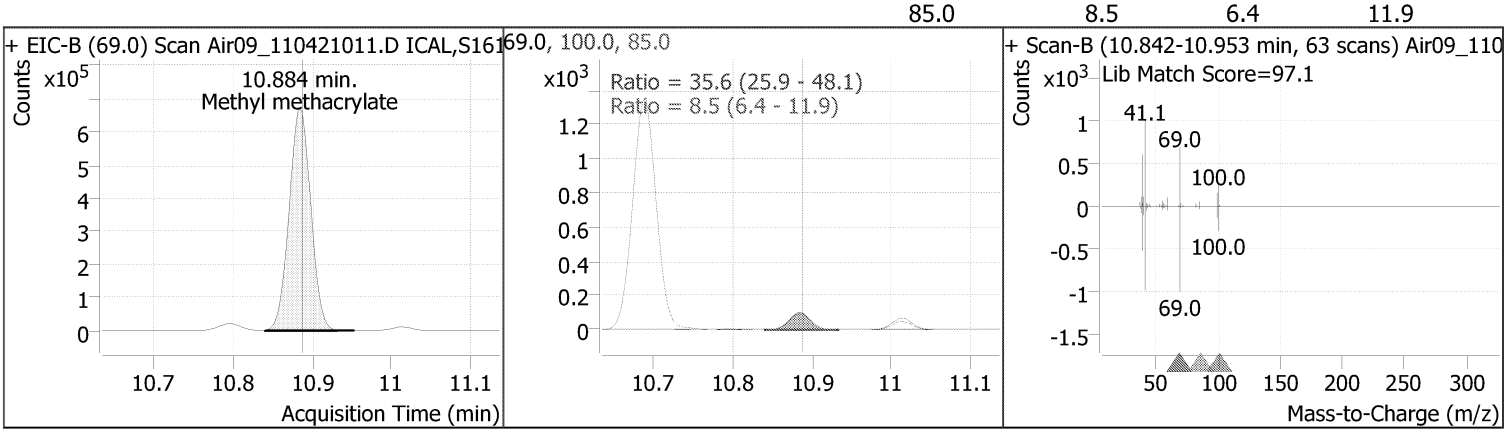
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	41.1602	10.74	0.00	1574307	130.0	103.7	72.7	135.0
					95.0	103.6	72.7	135.0
					97.0	67.8	47.2	87.6
					134.0	32.1	22.5	41.9



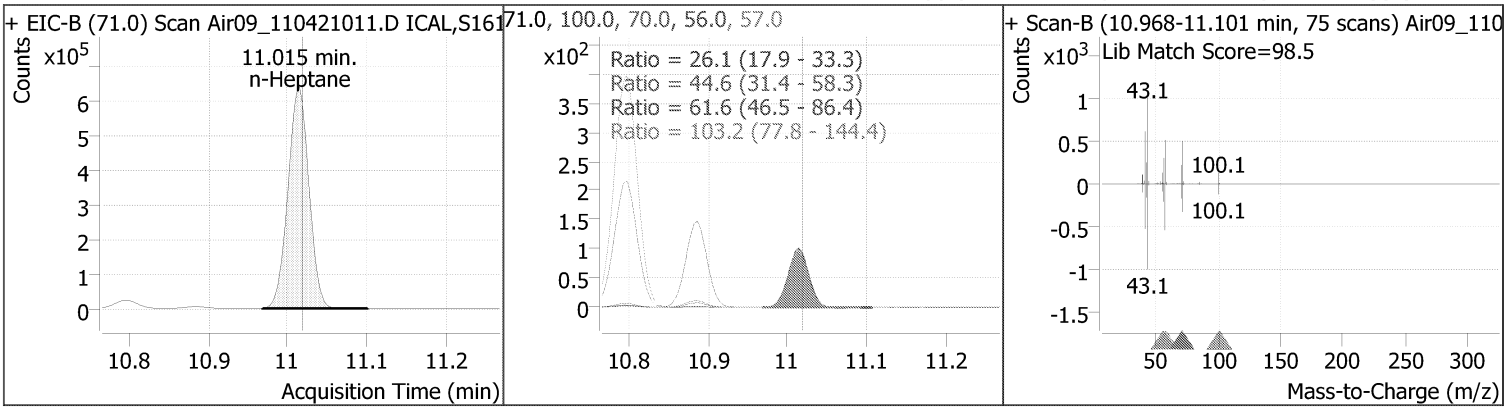
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	40.5513	10.80	0.00	1875586	57.0	312.8	225.2	418.2
					41.0	97.8	63.2	117.4



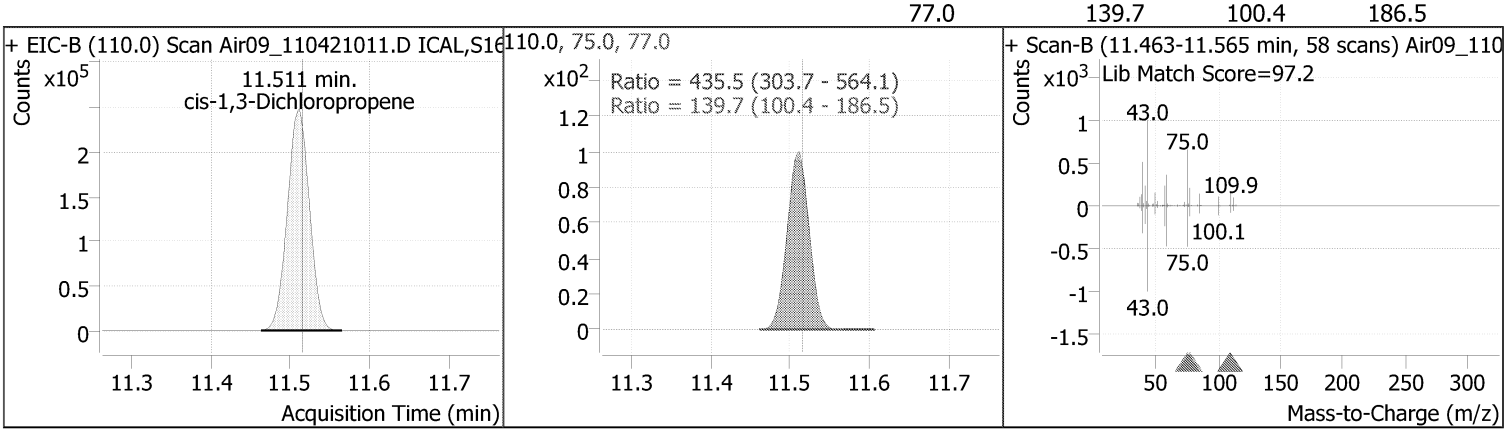
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	42.9509	10.88	0.00	1271230	100.0	35.6	25.9	48.1
					85.0	8.5	6.4	11.9



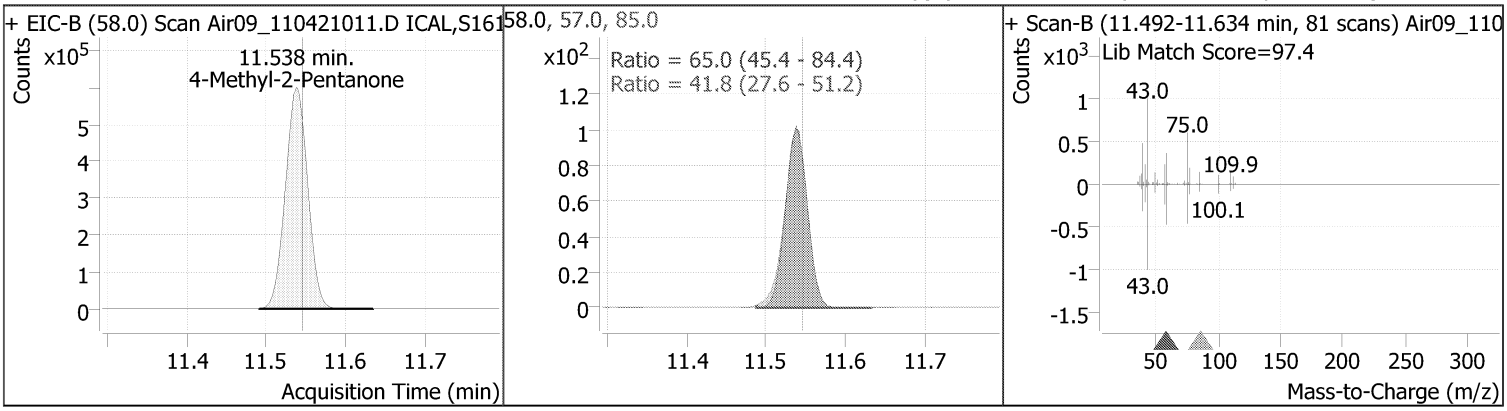
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	42.3843	11.01	0.00	1180615	57.0	103.2	77.8	144.4
					56.0	61.6	46.5	86.4
					70.0	44.6	31.4	58.3
					100.0	26.1	17.9	33.3



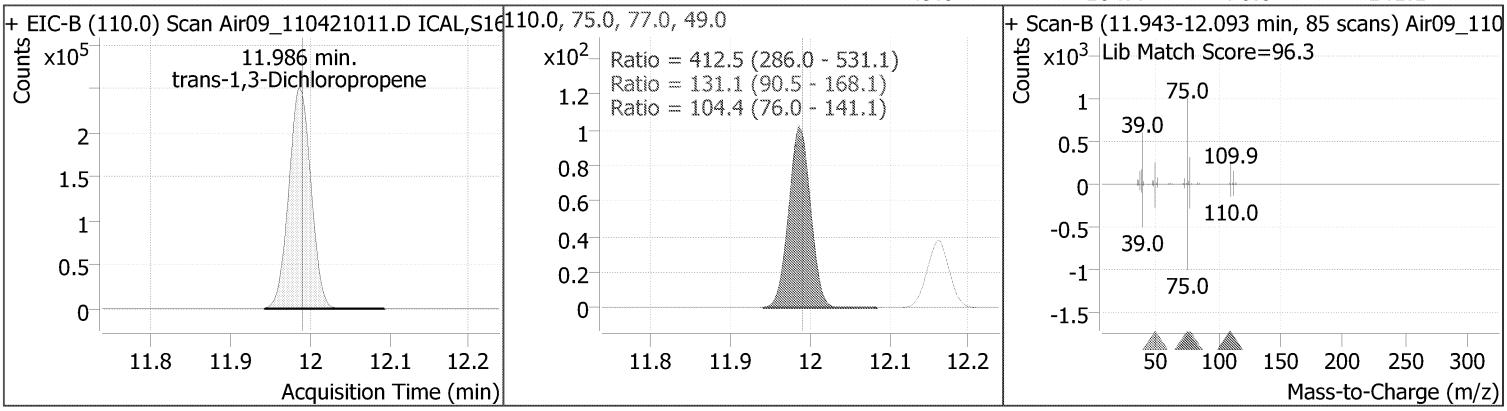
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	44.5596	11.51	0.00	480392	75.0	435.5	303.7	564.1
					77.0	139.7	100.4	186.5



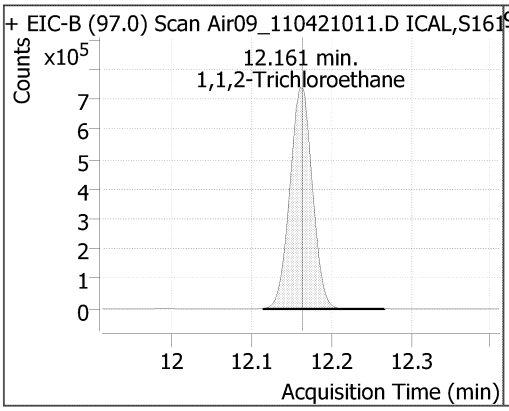
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	45.2356	11.54	0.00	1172414	57.0	65.0	45.4	84.4
					85.0	41.8	27.6	51.2

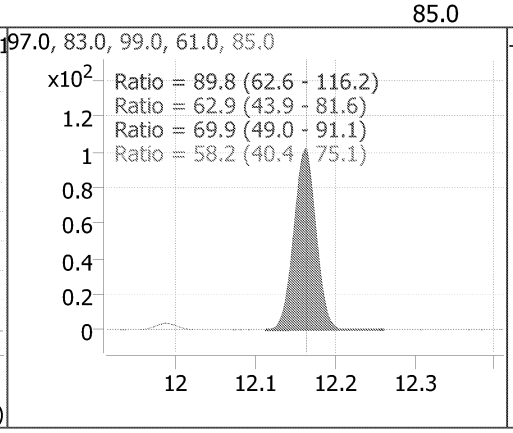


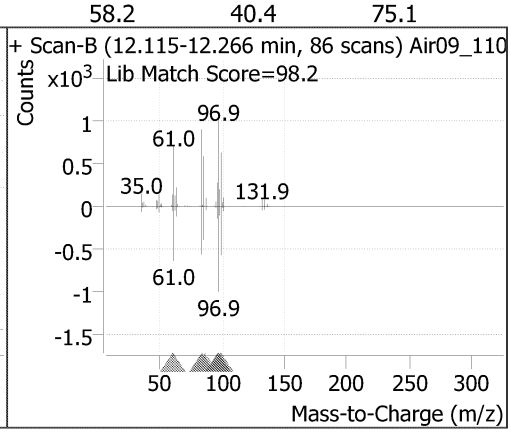
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	45.0574	11.99	0.00	489337	75.0	412.5	286.0	531.1
					77.0	131.1	90.5	168.1
					49.0	104.4	76.0	141.1



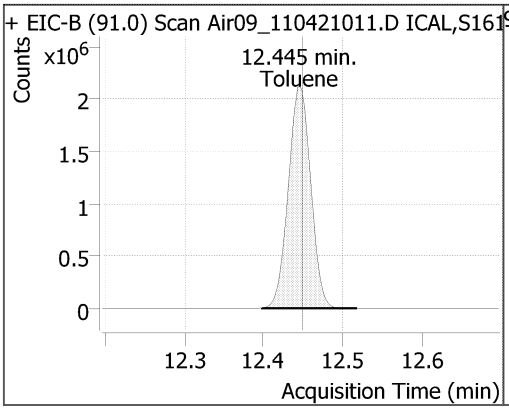
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	40.5052	12.16	0.00	1462100	83.0	89.8	62.6	116.2
					61.0	69.9	49.0	91.1
					99.0	62.9	43.9	81.6
					85.0	58.2	40.4	75.1

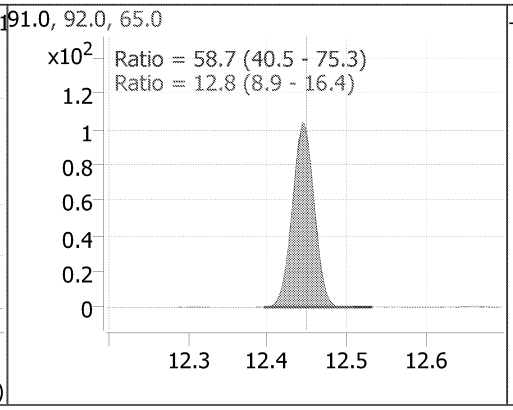


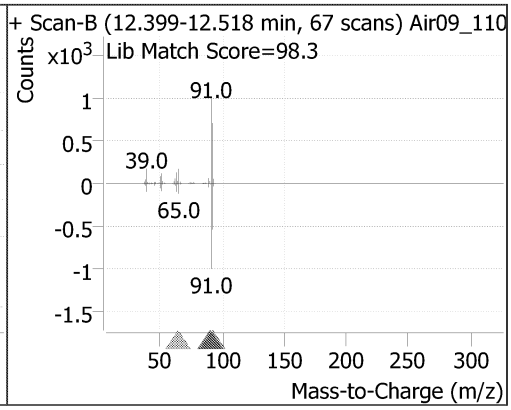




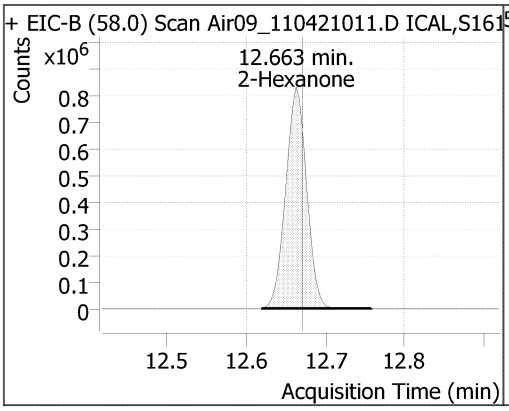
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	41.0765	12.44	0.00	4189805	92.0	58.7	40.5	75.3
					65.0	12.8	8.9	16.4

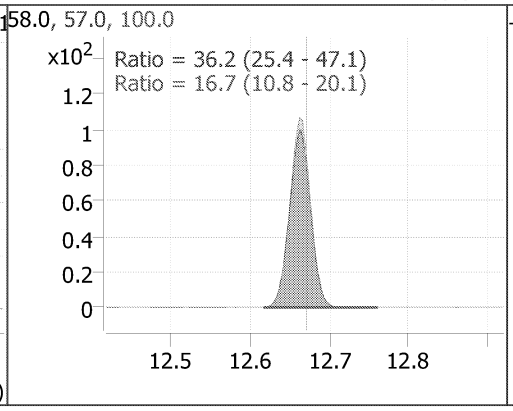


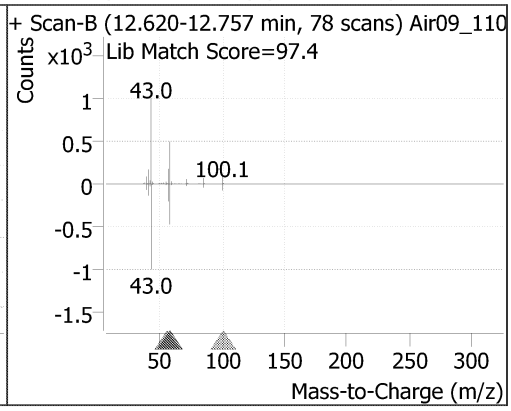




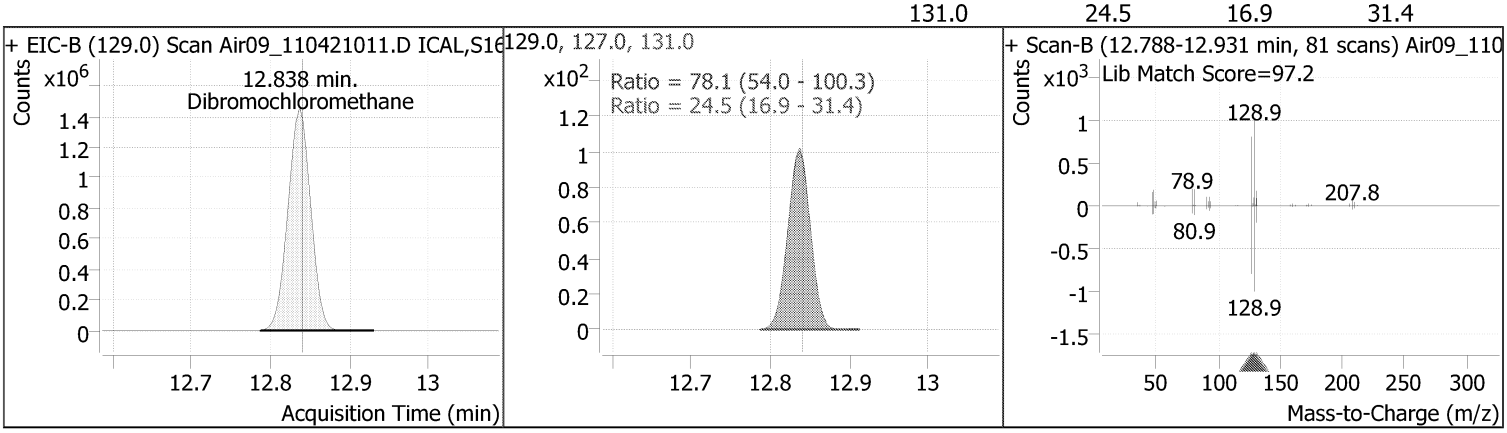
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	45.2321	12.66	0.00	1520395	57.0	36.2	25.4	47.1
					100.0	16.7	10.8	20.1



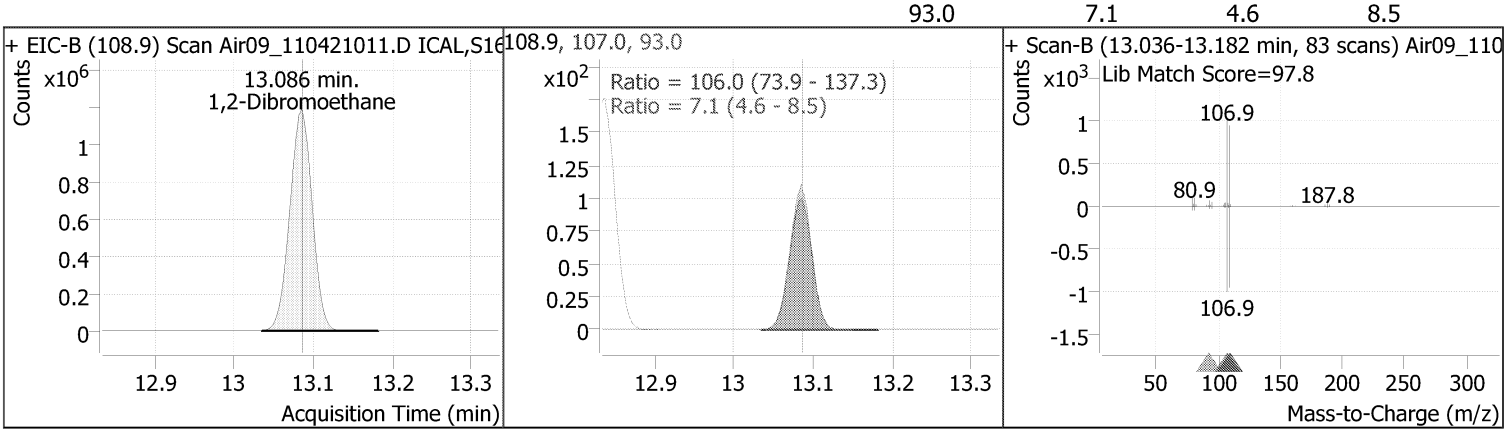




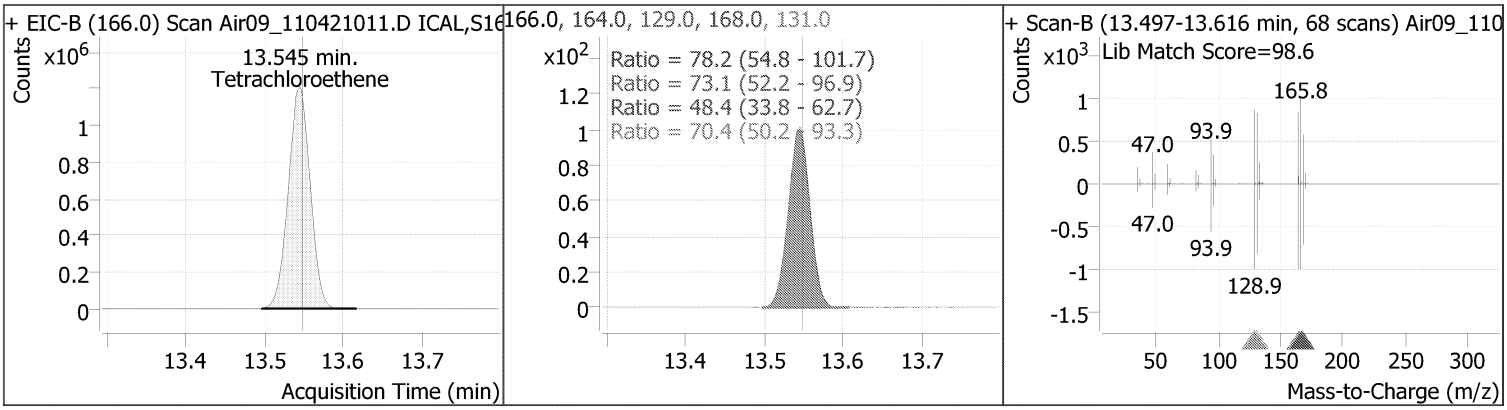
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	43.1118	12.84	0.00	2908860	127.0	78.1	54.0	100.3
					131.0	24.5	16.9	31.4



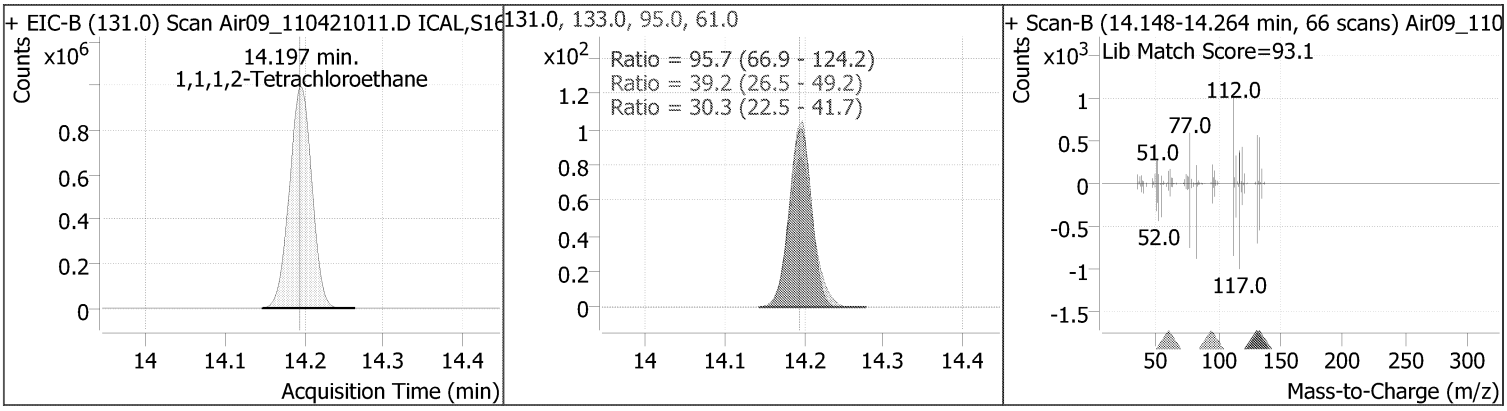
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	42.2220	13.09	0.01	2325264	107.0	106.0	73.9	137.3
					93.0	7.1	4.6	8.5



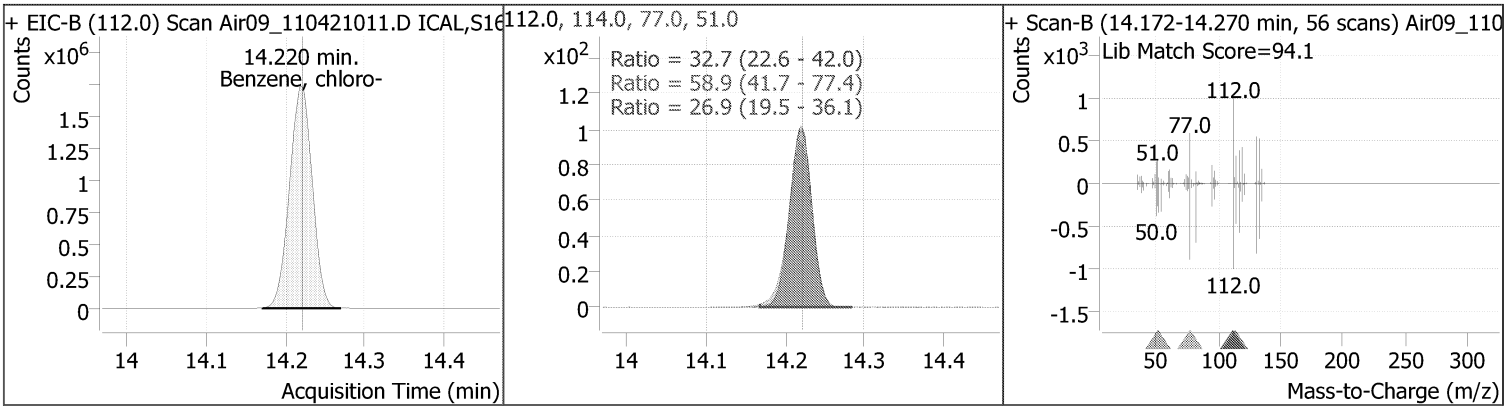
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	42.3325	13.54	0.00	2321173	164.0	78.2	54.8	101.7
					129.0	73.1	52.2	96.9
					131.0	70.4	50.2	93.3
					168.0	48.4	33.8	62.7



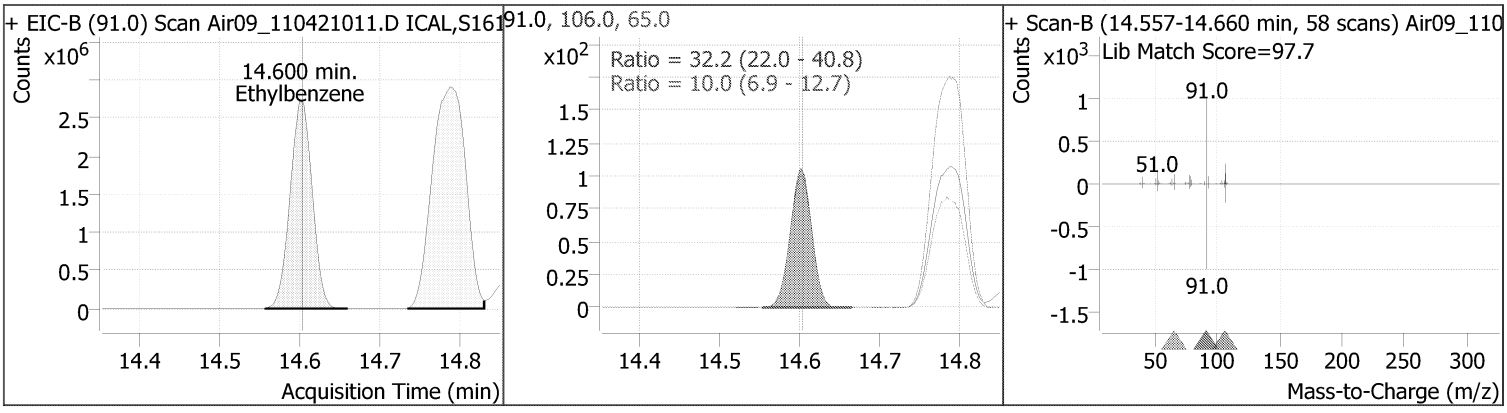
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	37.0198	14.20	0.00	1959610	133.0	95.7	66.9	124.2
					95.0	39.2	26.5	49.2
					61.0	30.3	22.5	41.7



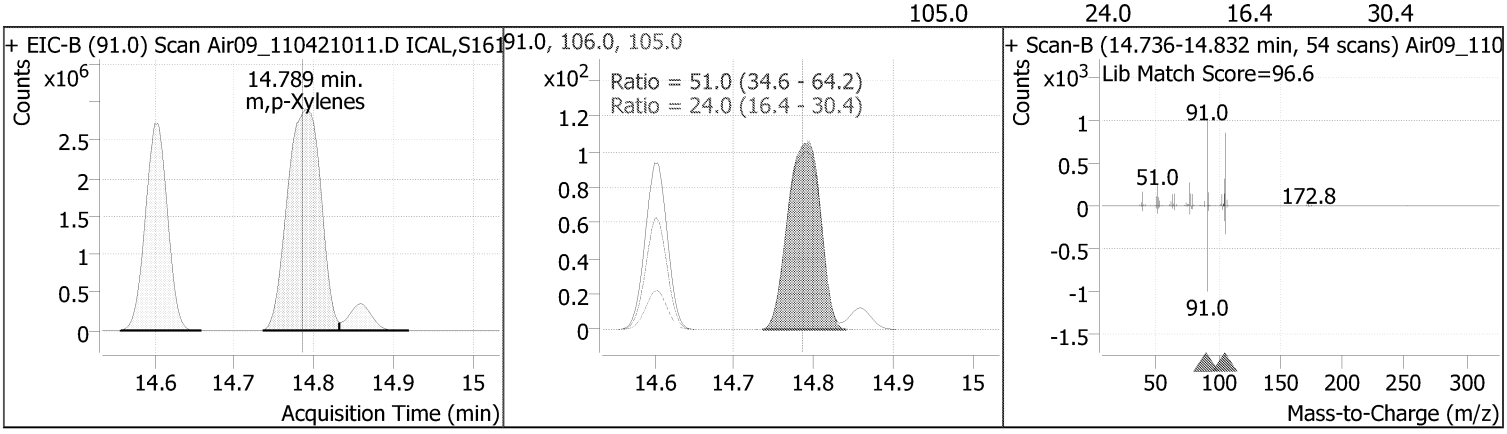
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	35.8726	14.22	0.00	3462013	77.0	58.9	41.7	77.4
					114.0	32.7	22.6	42.0
					51.0	26.9	19.5	36.1



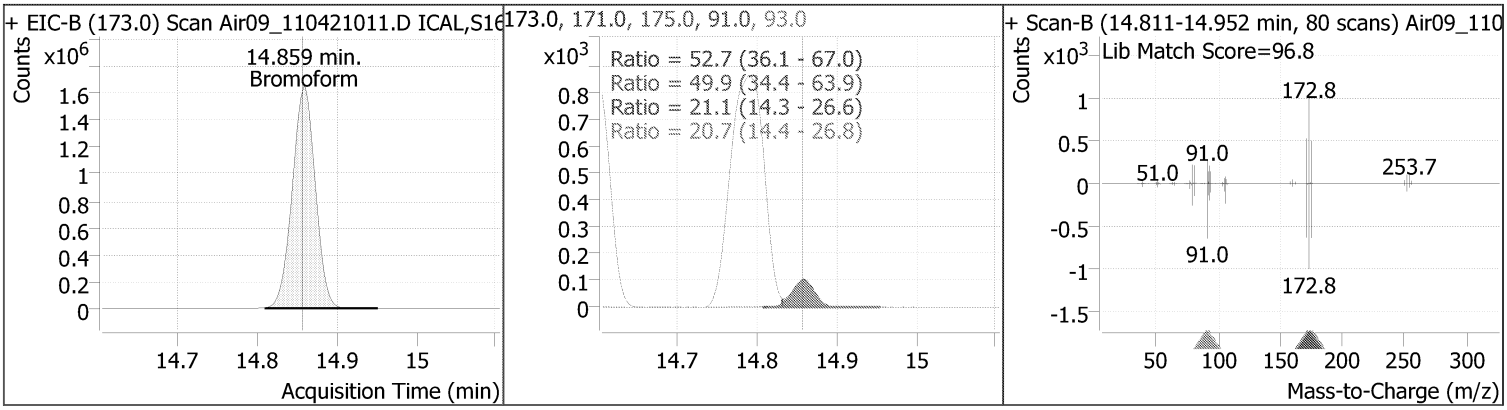
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	36.1521	14.60	0.00	5277073	106.0	32.2	22.0	40.8
					65.0	10.0	6.9	12.7



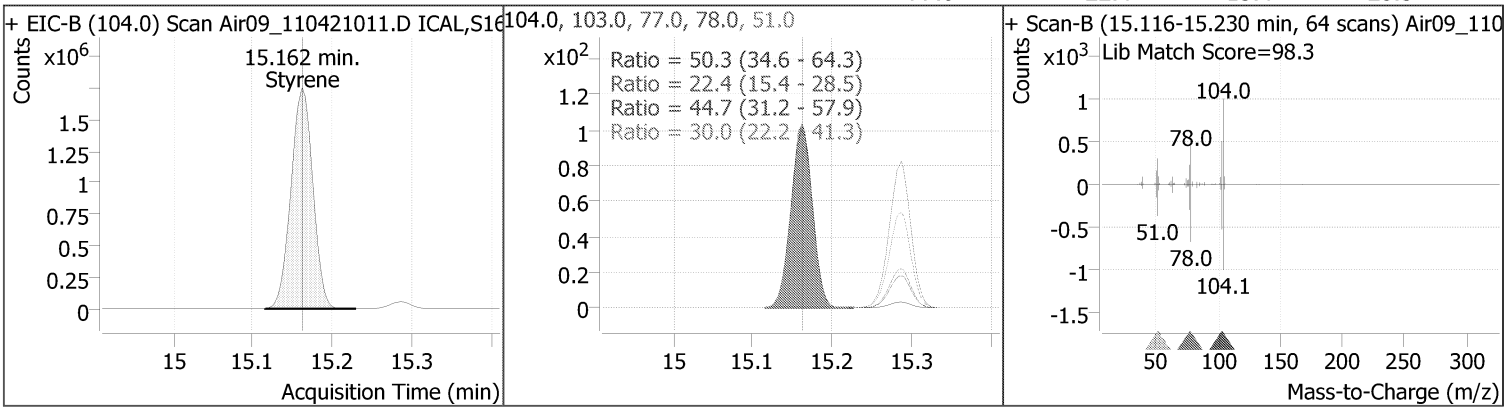
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	80.9385	14.79	0.01	8540619	106.0	51.0	34.6	64.2
					105.0	24.0	16.4	30.4



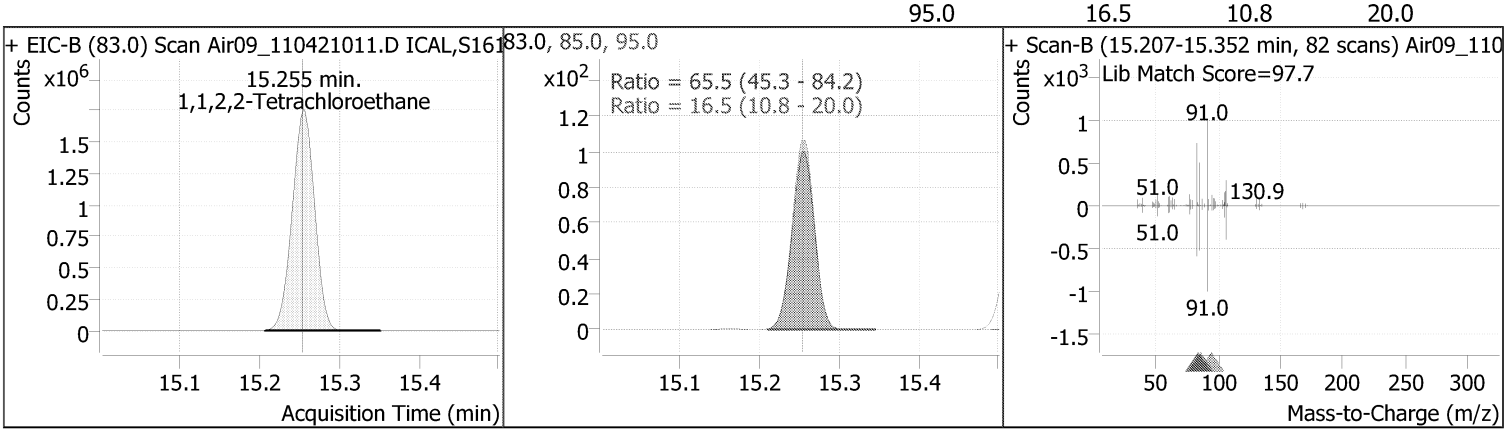
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	40.0552	14.86	0.01	3323653	171.0	52.7	36.1	67.0
					175.0	49.9	34.4	63.9
					93.0	20.7	14.4	26.8
					91.0	21.1	14.3	26.6



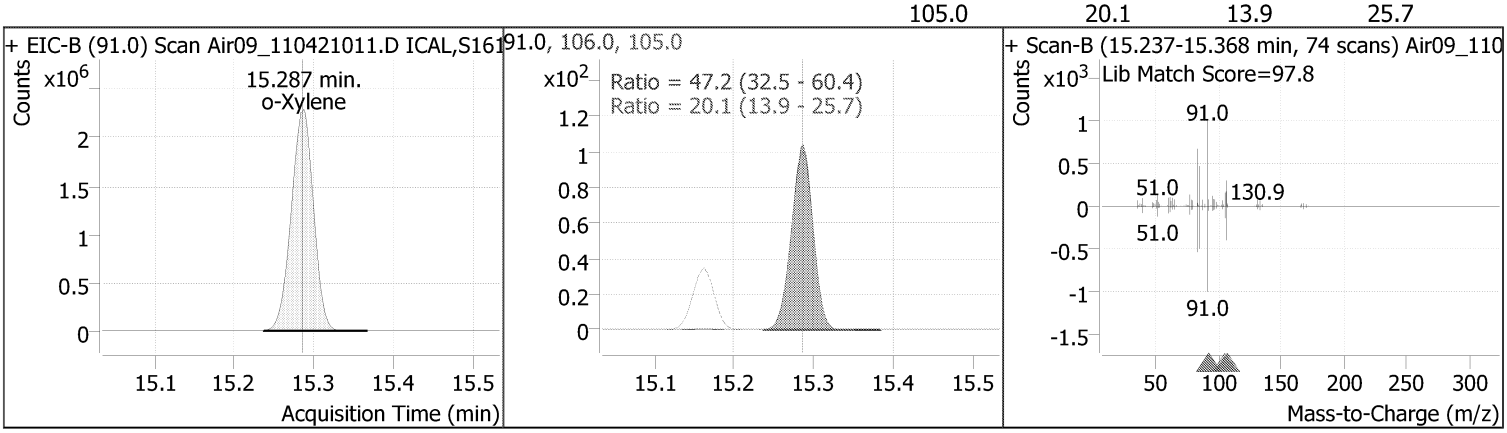
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	38.4334	15.16	0.01	3361568	103.0	50.3	34.6	64.3
					78.0	44.7	31.2	57.9
					51.0	30.0	22.2	41.3
					77.0	22.4	15.4	28.5



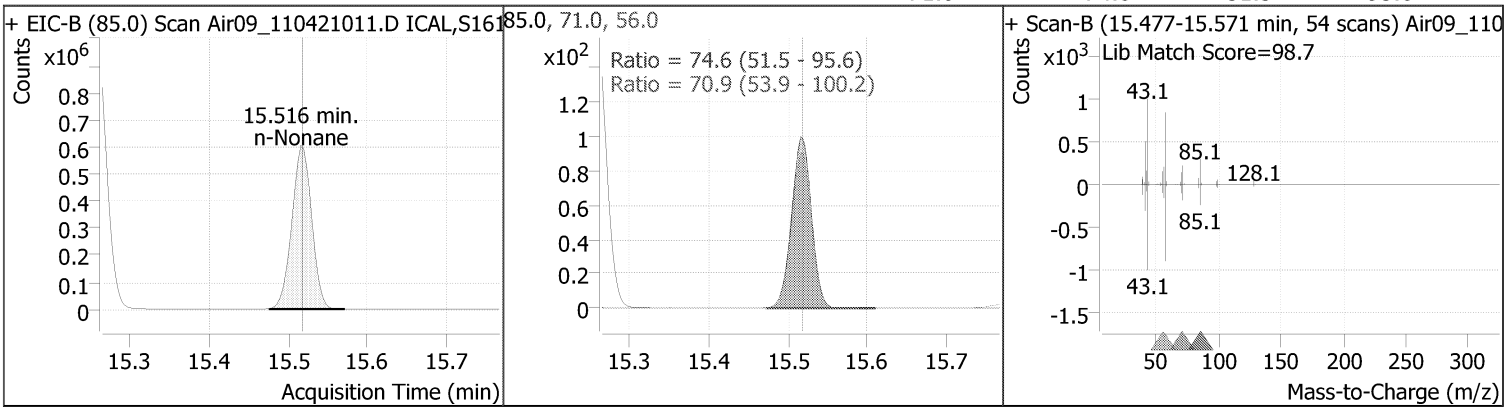
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	35.7324	15.26	0.01	3445582	85.0	65.5	45.3	84.2
					95.0	16.5	10.8	20.0



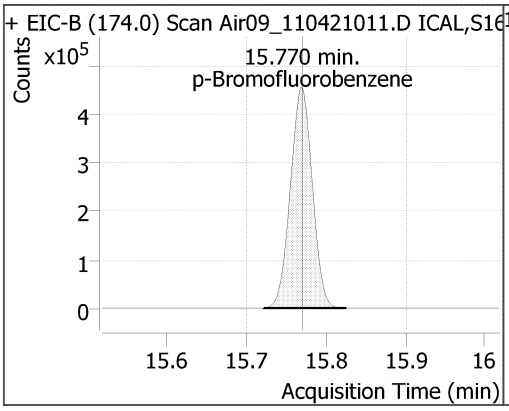
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	38.3545	15.29	0.01	4463237	106.0	47.2	32.5	60.4
					105.0	20.1	13.9	25.7

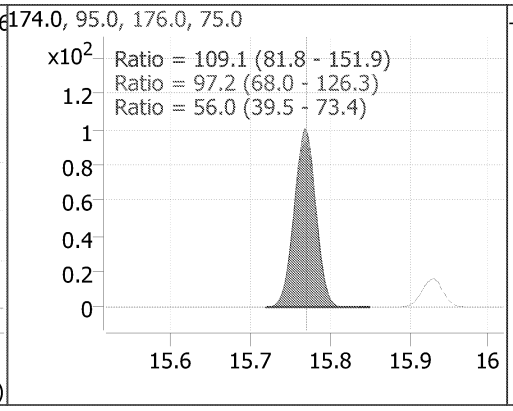


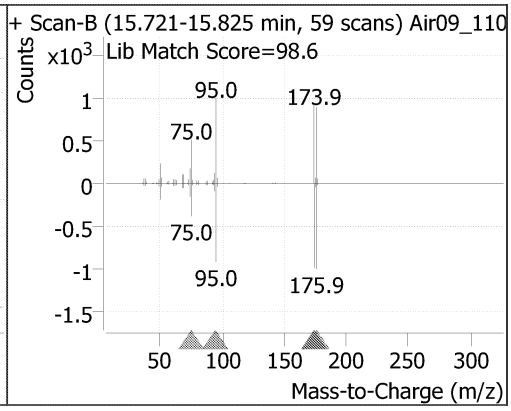
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	39.8094	15.52	0.00	1048702	56.0	70.9	53.9	100.2
					71.0	74.6	51.5	95.6



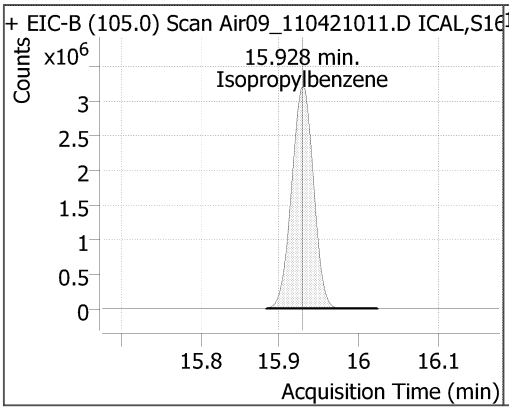
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	8.9578	15.77	0.01	878290	95.0	109.1	81.8	151.9
					176.0	97.2	68.0	126.3
					75.0	56.0	39.5	73.4

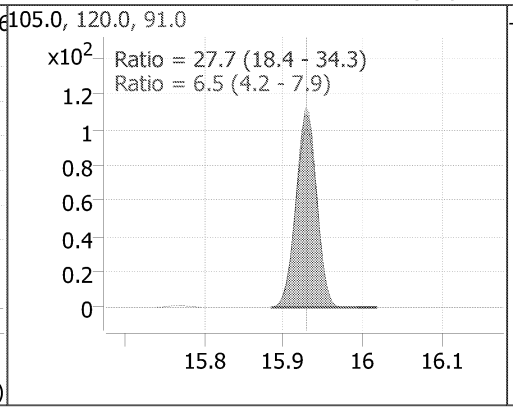


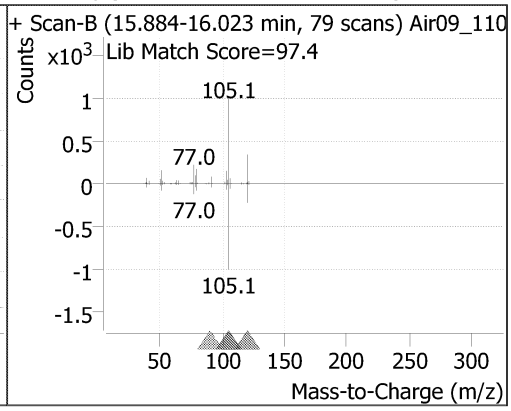




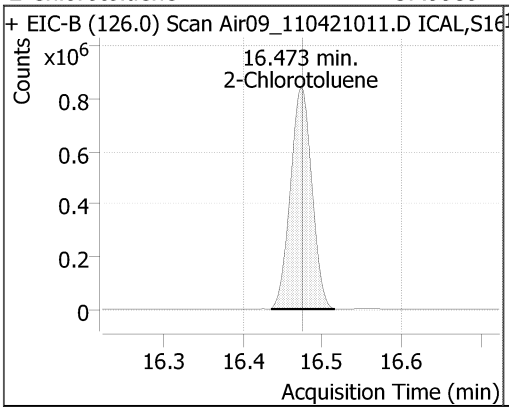
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	35.6409	15.93	0.01	6134082	120.0	27.7	18.4	34.3
					91.0	6.5	4.2	7.9

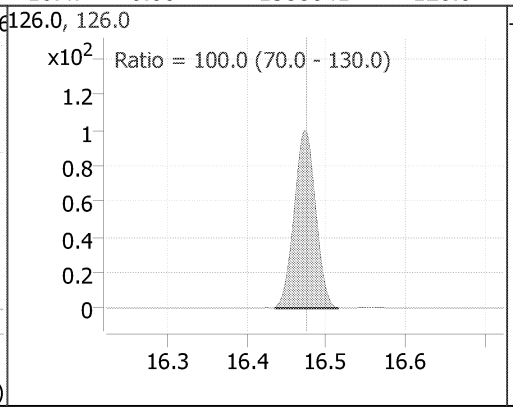


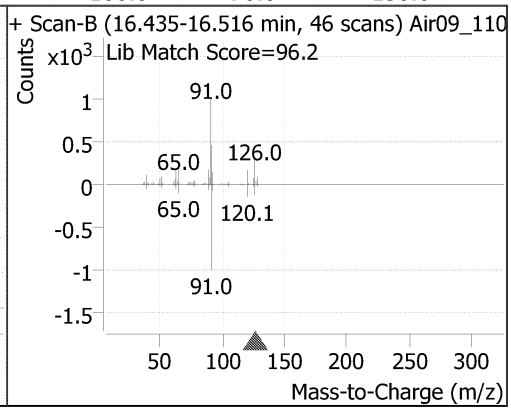




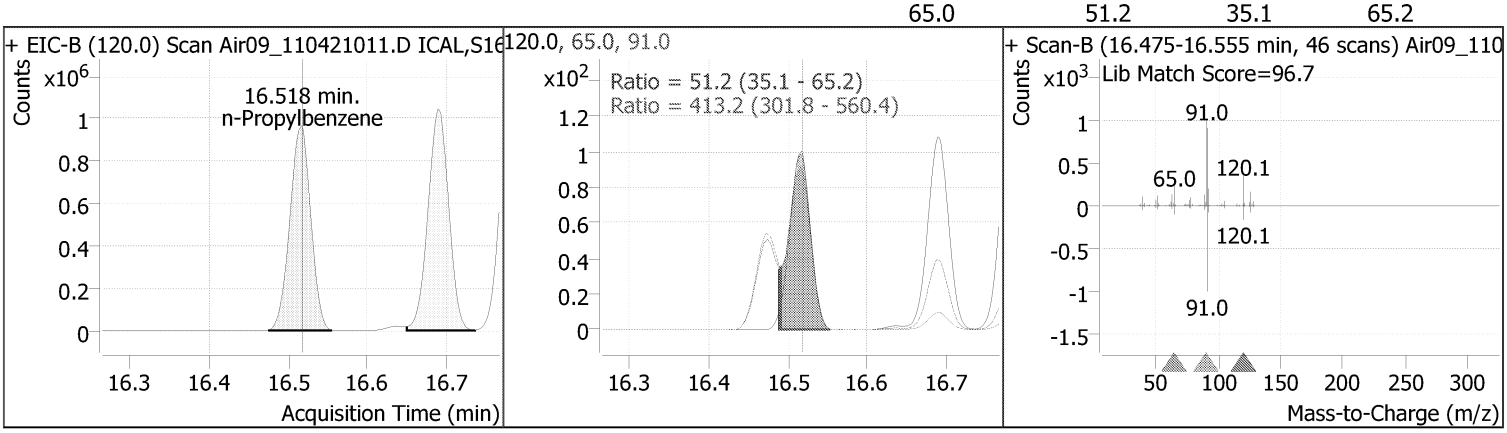
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	37.9959	16.47	0.00	1588041	126.0	100.0	70.0	130.0



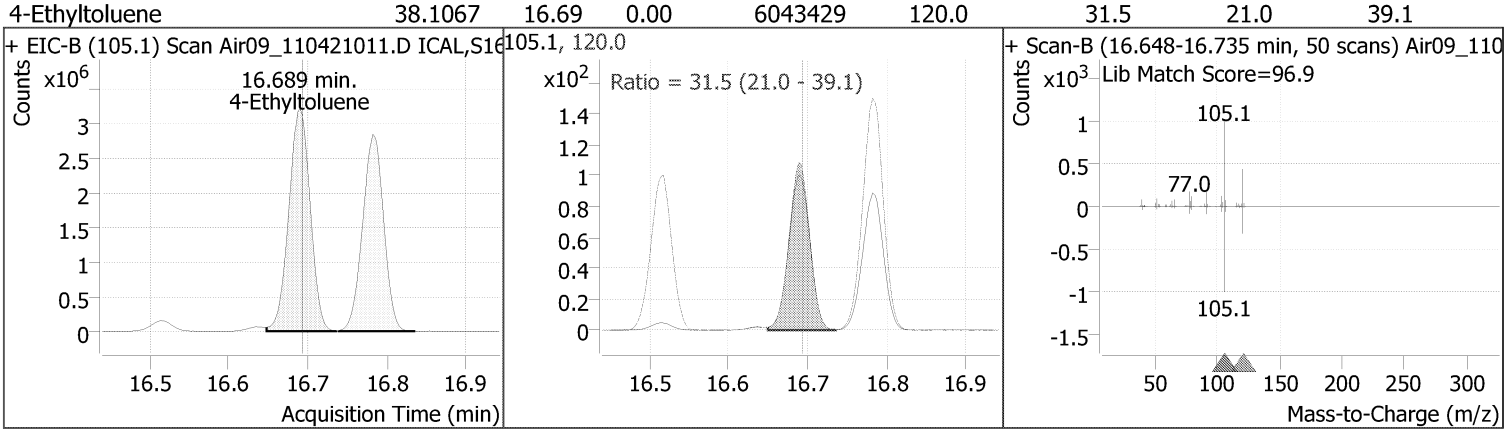




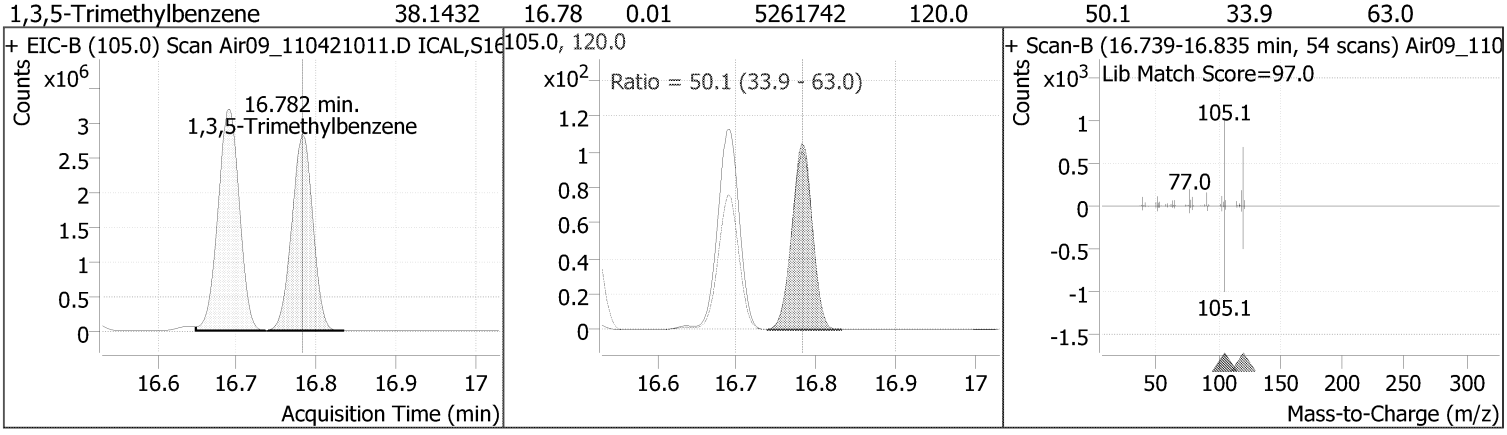
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	38.3700	16.52	0.01	1766567	91.0	413.2	301.8	560.4
					65.0	51.2	35.1	65.2



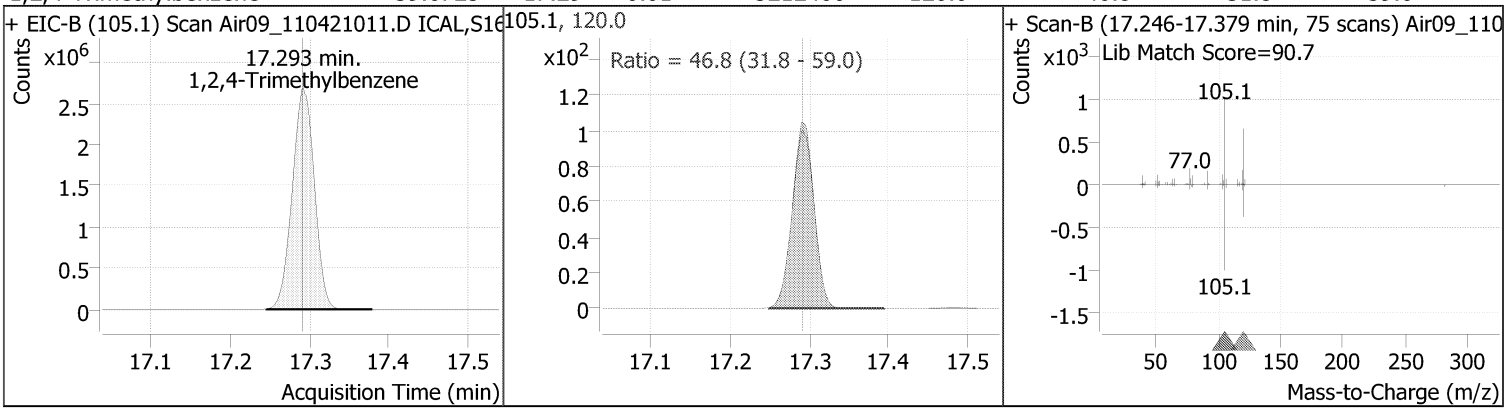
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	38.1067	16.69	0.00	6043429	120.0	31.5	21.0	39.1



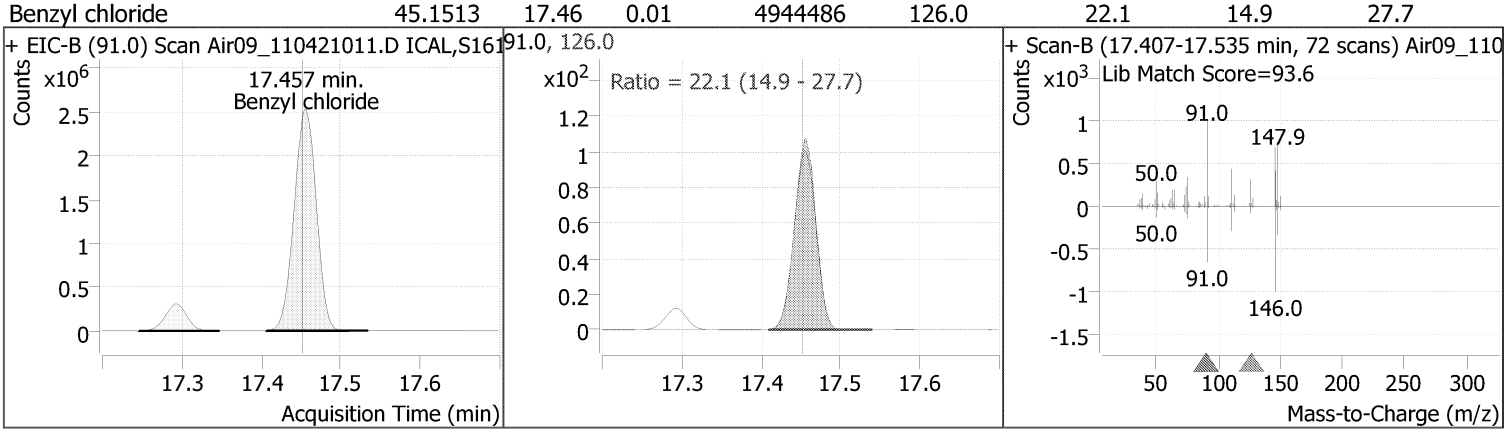
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	38.1432	16.78	0.01	5261742	120.0	50.1	33.9	63.0



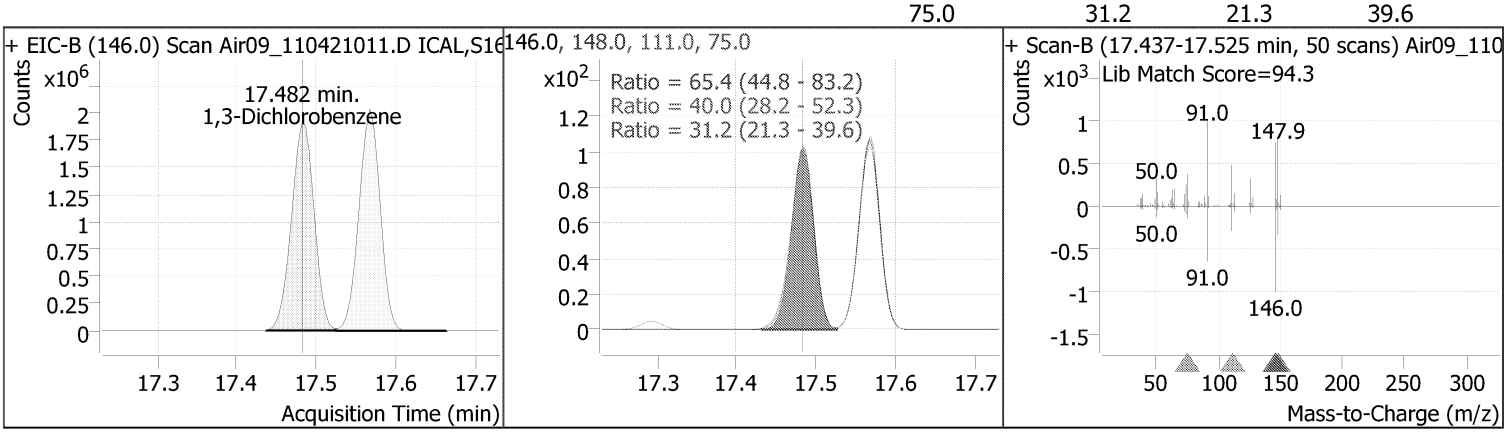
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	39.6725	17.29	0.01	5212400	120.0	46.8	31.8	59.0



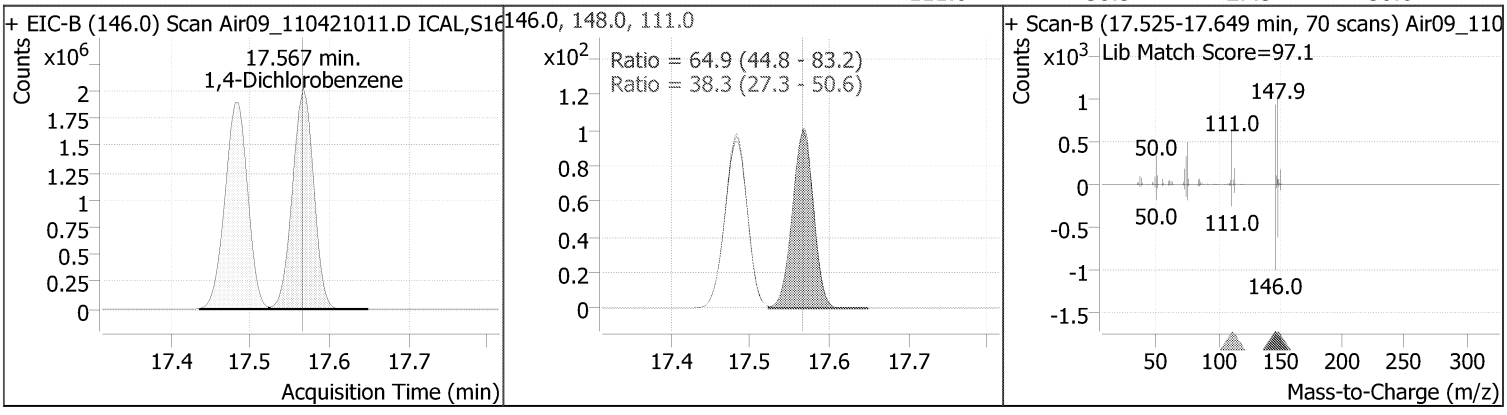
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	45.1513	17.46	0.01	4944486	126.0	22.1	14.9	27.7



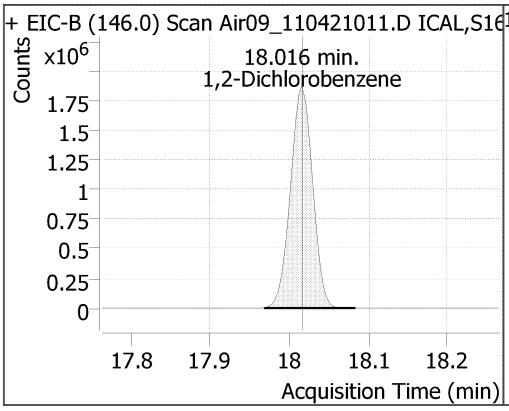
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	38.0046	17.48	0.01	3793320	148.0	65.4	44.8	83.2
					111.0	40.0	28.2	52.3
					75.0	31.2	21.3	39.6

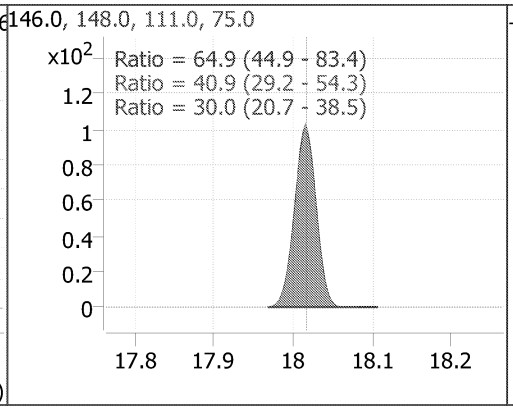


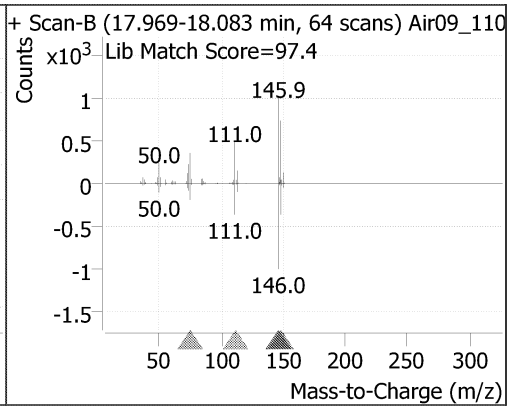
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	38.4913	17.57	0.01	3782115	148.0	64.9	44.8	83.2
					111.0	38.3	27.3	50.6



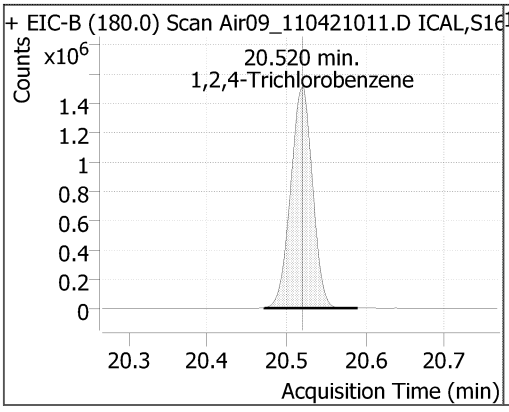
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	38.3077	18.02	0.01	3634432	148.0	64.9	44.9	83.4
					111.0	40.9	29.2	54.3
					75.0	30.0	20.7	38.5

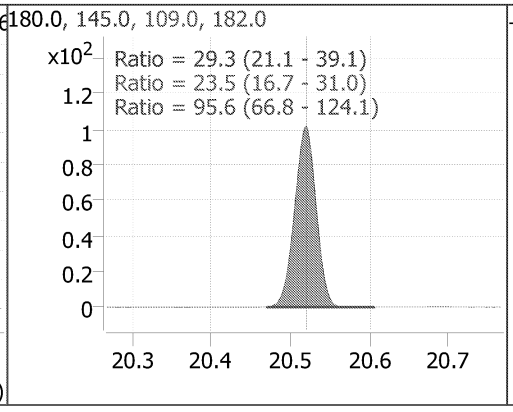


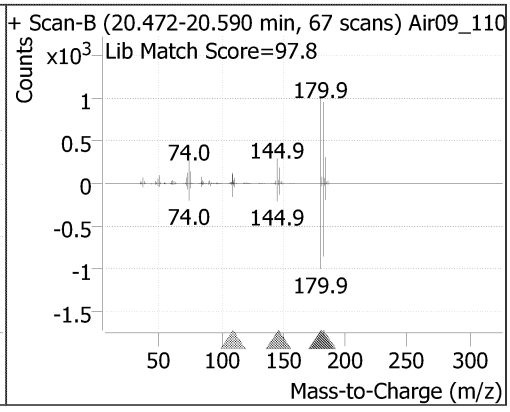




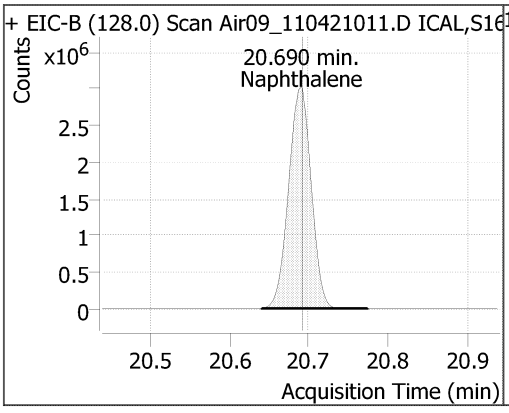
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	53.7865	20.52	0.01	2919450	182.0	95.6	66.8	124.1
					145.0	29.3	21.1	39.1
					109.0	23.5	16.7	31.0

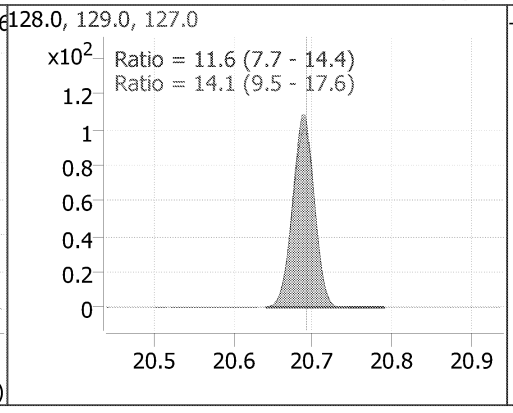


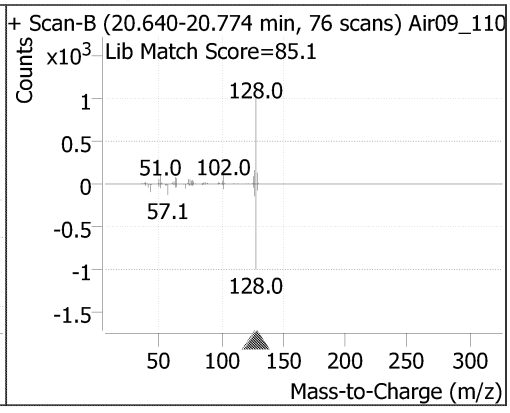




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	53.6731	20.69	0.01	6018672	127.0	14.1	9.5	17.6
					129.0	11.6	7.7	14.4

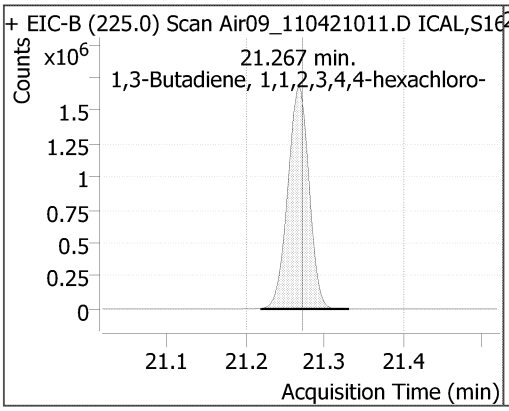


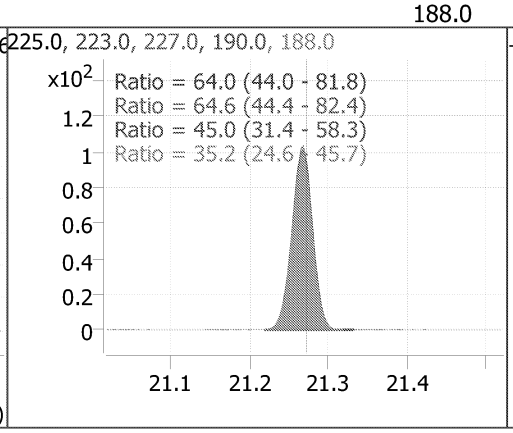


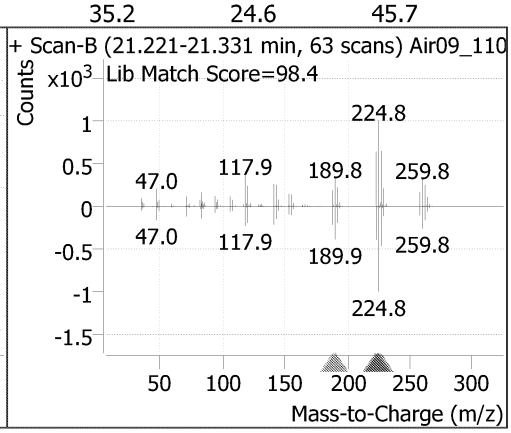


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	41.0419	21.27	0.00	3151737	227.0	64.6	44.4	82.4
					223.0	64.0	44.0	81.8
					190.0	45.0	31.4	58.3
					188.0	35.2	24.6	45.7

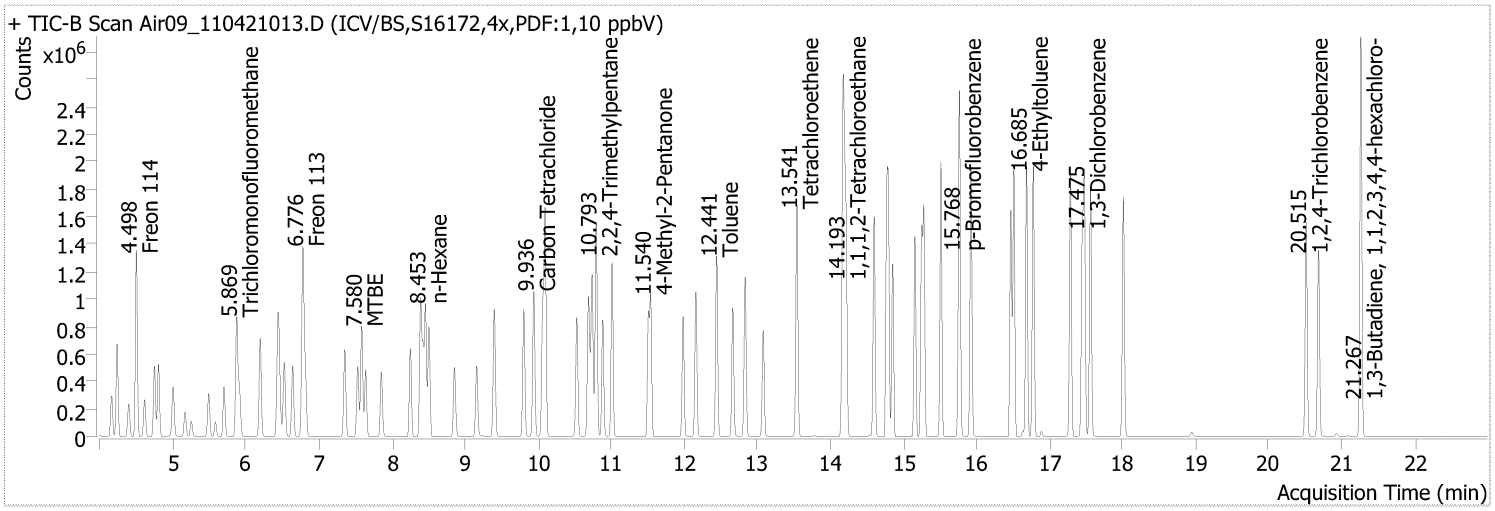






Quantitation Results Report (Not Reviewed)

Data File	Air09_110421013.D	Operator	ZNZ
Acq. Method	TO15_Acq_210707_2	Acq. Date-Time	11/5/2021 1:08:03 AM
Sample Name	ICV/BS,S16172,4x,PDF:1,10 ppbV	Instrument	AIR-MS-09
Vial	3	Multiplier	1.00
DA Method File	TO15_SCAN_110421_1.m	Comment	1x100mL
Tune File	bfb.u	Tune Date	11/4/2021 10:42:36 AM
Batch Name	110421_ICAL.batch.bin	Last Calib Update	11/5/2021 9:40:22 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\210621\MS09_062121_TO15_1.reflibrary.xml		



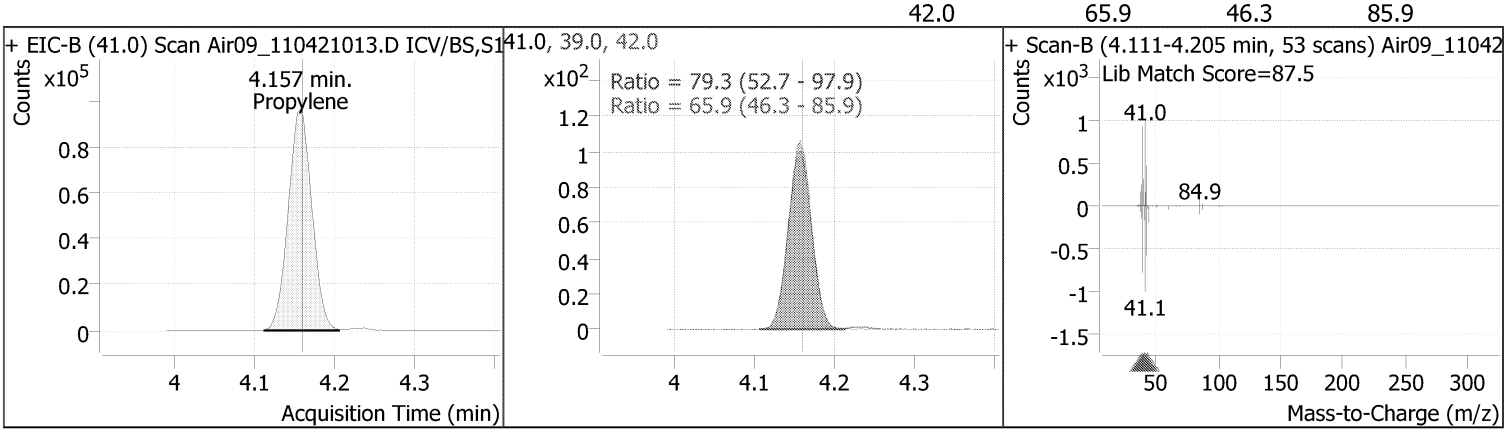
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M Bromochloromethane	8.388	130.0	356193	10.0000	nL/L	-0.002
M 1,4-Difluorobenzene	10.093	114.0	1309825	10.0000	nL/L	0.000
M Chlorobenzene-d5	14.171	82.0	717504	10.0000	nL/L	0.000
System Monitoring Compounds						
S p-Bromofluorobenzene	15.768	174.0	841583	9.9488	nL/L	0.004
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 99.49%		
Target Compounds						QValue
T Propylene	4.157	41.0	197968	9.3678	nL/L	97
T Freon 12	4.232	85.0	676156	9.5587	nL/L	100
T Chloromethane	4.391	50.0	308246	9.4864	nL/L	100
T Freon 114	4.498	135.0	541837	9.5012	nL/L	98
T Vinyl Chloride	4.609	62.0	329399	9.4055	nL/L	100
T 1,3-Butadiene	4.742	54.0	265894	9.5195	nL/L	97
T Butane	4.798	43.0	532621	9.3560	nL/L	99
T Bromomethane	5.000	96.0	266741	9.2826	nL/L	100
T Chloroethane	5.164	64.0	170831	9.2555	nL/L	99
T Ethanol	5.248	45.0	136664	8.5722	nL/L	99
T Vinyl bromide	5.485	108.0	236368	9.7582	nL/L	99
T Acrolein	5.578	56.0	100811	9.9810	nL/L	100
T Acetone	5.696	58.0	128191	9.5822	nL/L	94
T Trichloromonofluoromethane	5.869	101.0	762585	9.6074	nL/L	100
T Isopropanol (IPA)	5.908	45.0	448212	10.0048	nL/L	93
T n-Pentane	6.192	43.0	512251	9.9086	nL/L	100
T 1,1-Dichloroethene	6.433	61.0	508020	9.8380	nL/L	98
T Tert-butyl alcohol (TBA)	6.453	59.0	573859	10.5525	nL/L	96
T Methylene Chloride	6.523	51.0	114497	8.9890	nL/L	94
T 3-Chloropropene	6.633	76.0	112370	10.2357	nL/L	99
T Freon 113	6.776	101.0	591538	9.6130	nL/L	99
T Carbon Disulfide	6.812	76.0	707269	9.7368	nL/L	97

Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
T trans-1,2-Dichloroethene	7.349	61.0	401444	9.8114	nL/L	97
T 1,1-Dichloroethane	7.530	63.0	523320	9.7275	nL/L	100
T MTBE	7.580	73.0	733041	10.2985	nL/L	96
T Vinyl Acetate	7.635	43.0	757270	10.5288	nL/L	99
T 2-Butanone	7.849	72.0	127760	9.9888	nL/L	89
T cis-1,2-Dichloroethene	8.246	61.0	417853	9.9426	nL/L	97
T Ethyl Acetate	8.420	61.0	98057	10.1132	nL/L	99
T n-Hexane	8.453	57.0	453978	10.0326	nL/L	97
T Chloroform	8.501	83.0	582659	9.3925	nL/L	99
T Tetrahydrofuran	8.851	72.0	119939	10.2960	nL/L	100
T 1,2-Dichloroethane	9.154	62.0	431981	9.6655	nL/L	97
T 1,1,1-Trichloroethane	9.397	97.0	596597	9.8486	nL/L	99
T Benzene	9.801	78.0	800744	9.8422	nL/L	100
T Carbon Tetrachloride	9.936	117.0	636384	10.0267	nL/L	98
T TPH Gasoline (C3 to C12)	9.998	0.0	88283079	18.8613	nL/L	100
T Cyclohexane	10.063	84.0	328250	9.8956	nL/L	94
T 1,2-Dichloropropane	10.526	63.0	338318	9.7604	nL/L	98
T Methane, bromodichloro-	10.684	83.0	626253	9.8905	nL/L	99
T 1,4-Dioxane	10.709	88.0	180874	10.1395	nL/L	93
T Trichloroethene	10.740	132.0	371866	9.9171	nL/L	99
T 2,2,4-Trimethylpentane	10.793	56.0	450349	9.9317	nL/L	98
T Methyl methacrylate	10.883	69.0	300397	10.3527	nL/L	98
T n-Heptane	11.009	71.0	278978	10.2159	nL/L	95
T cis-1,3-Dichloropropene	11.506	110.0	105458	9.9777	nL/L	99
T 4-Methyl-2-Pentanone	11.540	58.0	276593	10.8855	nL/L	98
T trans-1,3-Dichloropropene	11.982	110.0	112803	10.5946	nL/L	96
T 1,1,2-Trichloroethane	12.159	97.0	347521	9.8203	nL/L	100
T Toluene	12.441	91.0	1019075	10.1909	nL/L	99
T 2-Hexanone	12.663	58.0	356707	10.8246	nL/L	99
T Dibromochloromethane	12.832	129.0	670079	10.1300	nL/L	100
T 1,2-Dibromoethane	13.081	108.9	549209	10.1722	nL/L	100
T Tetrachloroethene	13.541	166.0	535722	9.9659	nL/L	98
T 1,1,1,2-Tetrachloroethane	14.193	131.0	446230	9.7709	nL/L	98
T Benzene, chloro-	14.216	112.0	811460	9.7457	nL/L	99
T Ethylbenzene	14.598	91.0	1282660	10.1851	nL/L	100
T m,p-Xylenes	14.780	91.0	1925884	19.4578	nL/L	99
T Bromoform	14.854	173.0	742925	10.3777	nL/L	100
T Styrene	15.159	104.0	796209	10.5513	nL/L	98
T 1,1,2,2-Tetrachloroethane	15.250	83.0	814584	9.7915	nL/L	99
T o-Xylene	15.278	91.0	1028942	10.2487	nL/L	99
T n-Nonane	15.512	85.0	238508	10.4942	nL/L	97
T Isopropylbenzene	15.927	105.0	1475953	9.9399	nL/L	100
T 2-Chlorotoluene	16.471	126.0	373078	10.3463	nL/L	100
T n-Propylbenzene	16.512	120.0	400707	10.0879	nL/L	98
T 4-Ethyltoluene	16.685	105.1	1443613	10.5507	nL/L	100
T 1,3,5-Trimethylbenzene	16.778	105.0	1241730	10.4334	nL/L	100
T 1,2,4-Trimethylbenzene	17.289	105.1	1227443	10.8284	nL/L	100
T Benzyl chloride	17.450	91.0	1113731	11.7880	nL/L	99
T 1,3-Dichlorobenzene	17.475	146.0	877681	10.1921	nL/L	98
T 1,4-Dichlorobenzene	17.562	146.0	882364	10.4085	nL/L	99
T 1,2-Dichlorobenzene	18.012	146.0	846626	10.3431	nL/L	99
T 1,2,4-Trichlorobenzene	20.515	180.0	592440	12.4133	nL/L	99
T Naphthalene	20.685	128.0	1288896	12.9076	nL/L	100
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.267	225.0	677646	10.2280	nL/L	100

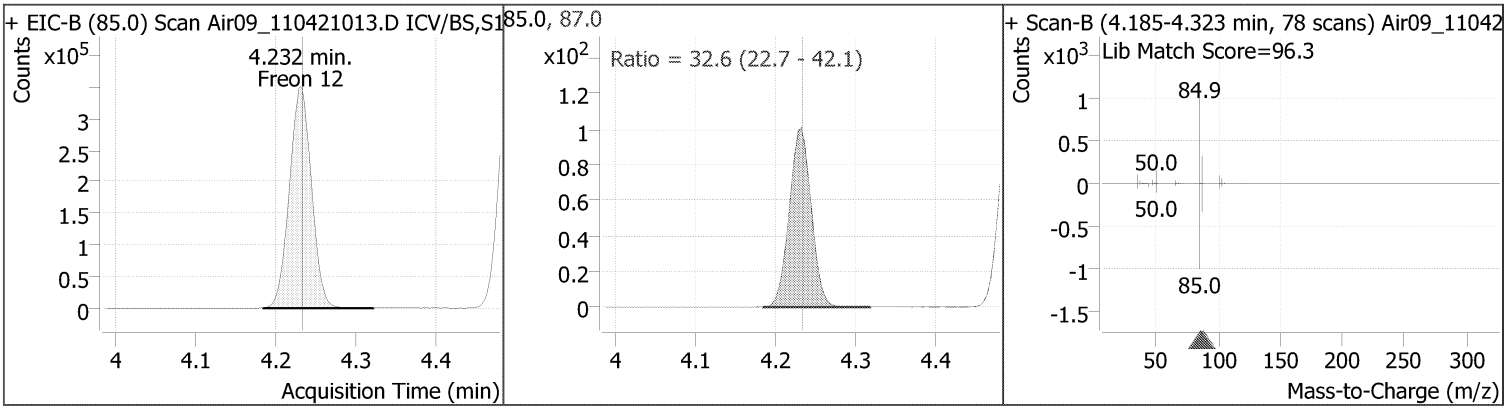
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

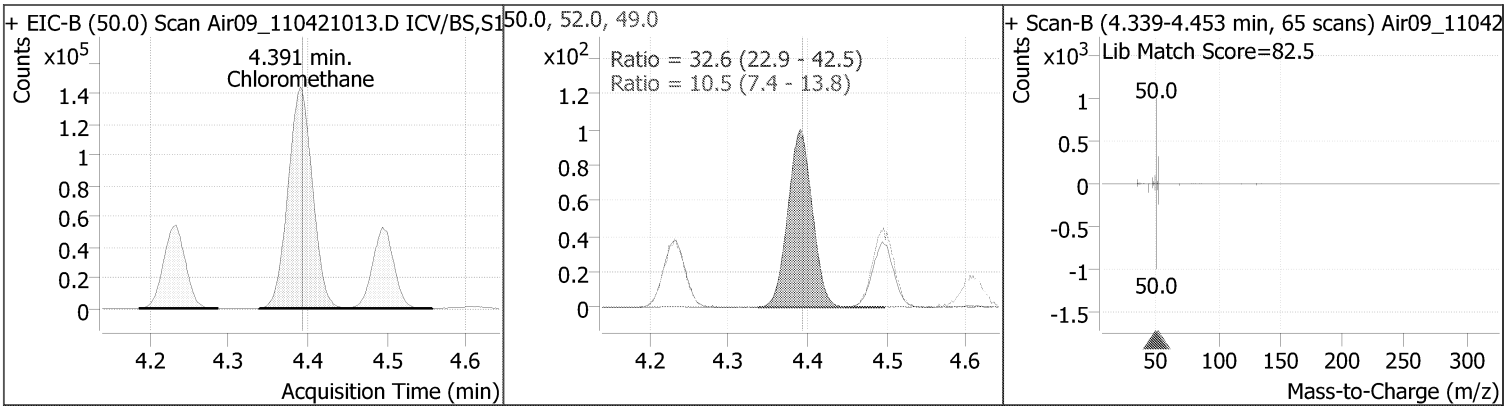
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	9.3678	4.16	0.00	197968	39.0	79.3	52.7	97.9
					42.0	65.9	46.3	85.9



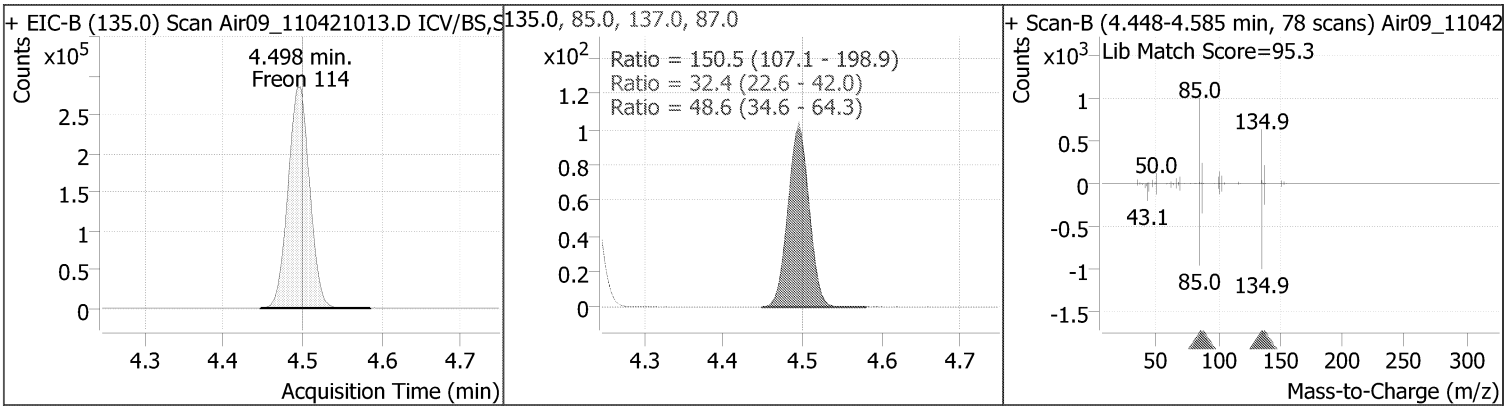
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	9.5587	4.23	0.00	676156	87.0	32.6	22.7	42.1



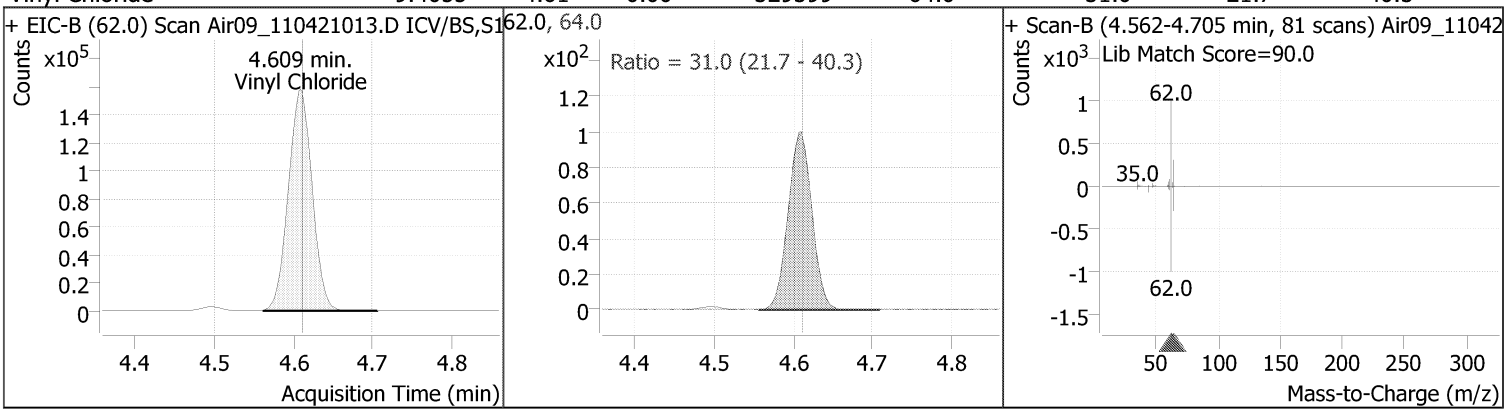
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	9.4864	4.39	0.00	308246	52.0	32.6	22.9	42.5
					49.0	10.5	7.4	13.8



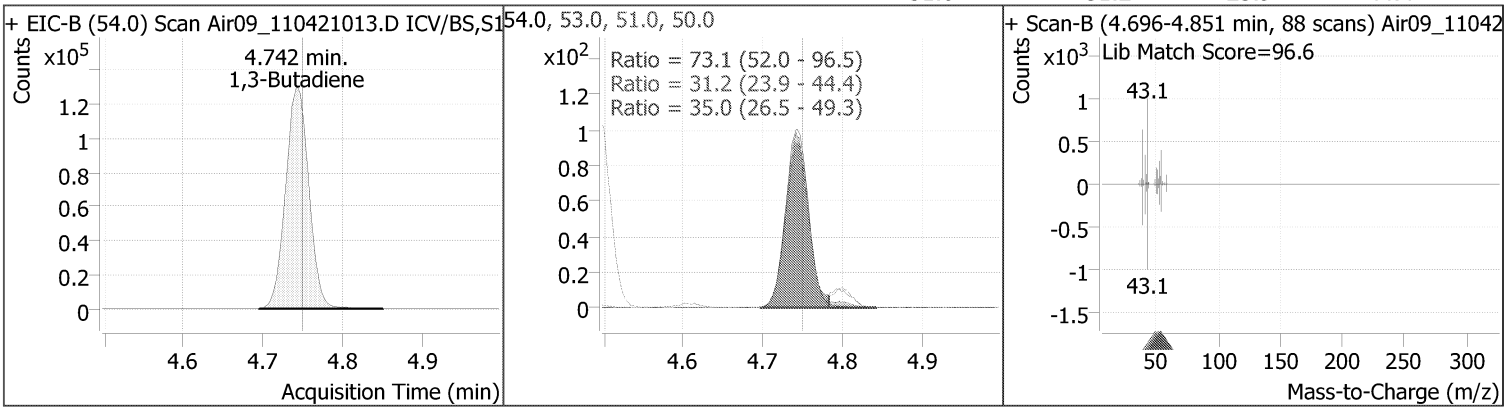
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	9.5012	4.50	0.00	541837	85.0	150.5	107.1	198.9
					87.0	48.6	34.6	64.3
					137.0	32.4	22.6	42.0



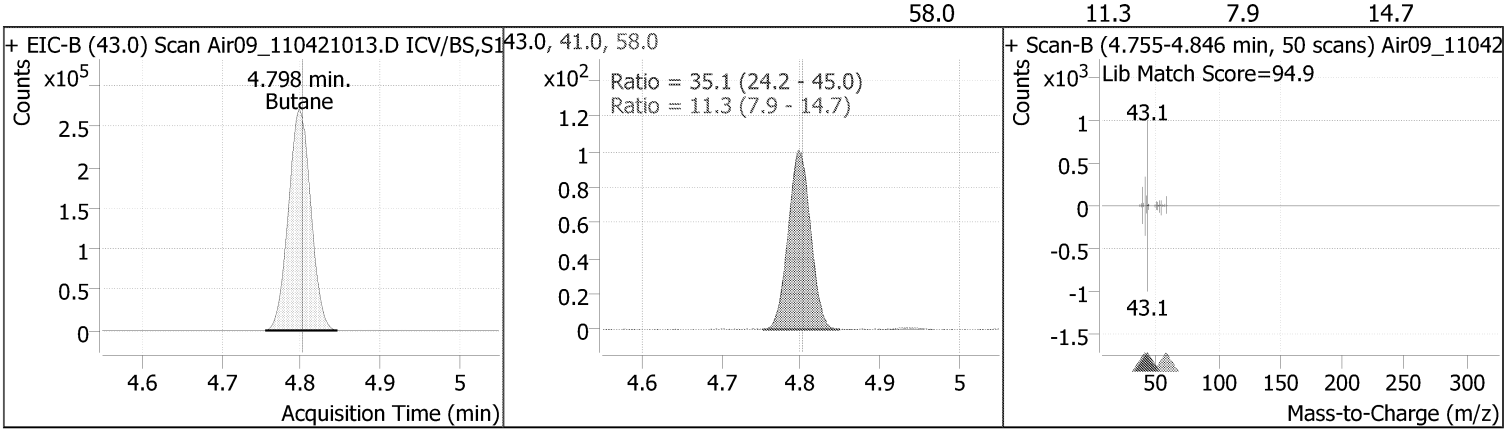
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	9.4055	4.61	0.00	329399	64.0	31.0	21.7	40.3



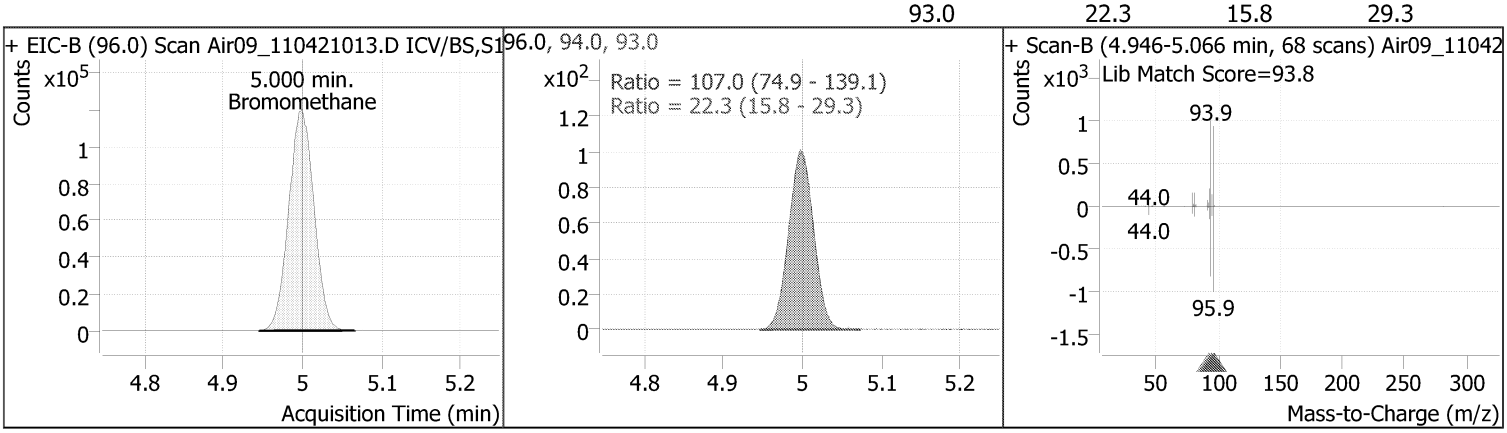
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	9.5195	4.74	-0.01	265894	53.0	73.1	52.0	96.5
					50.0	35.0	26.5	49.3
					51.0	31.2	23.9	44.4



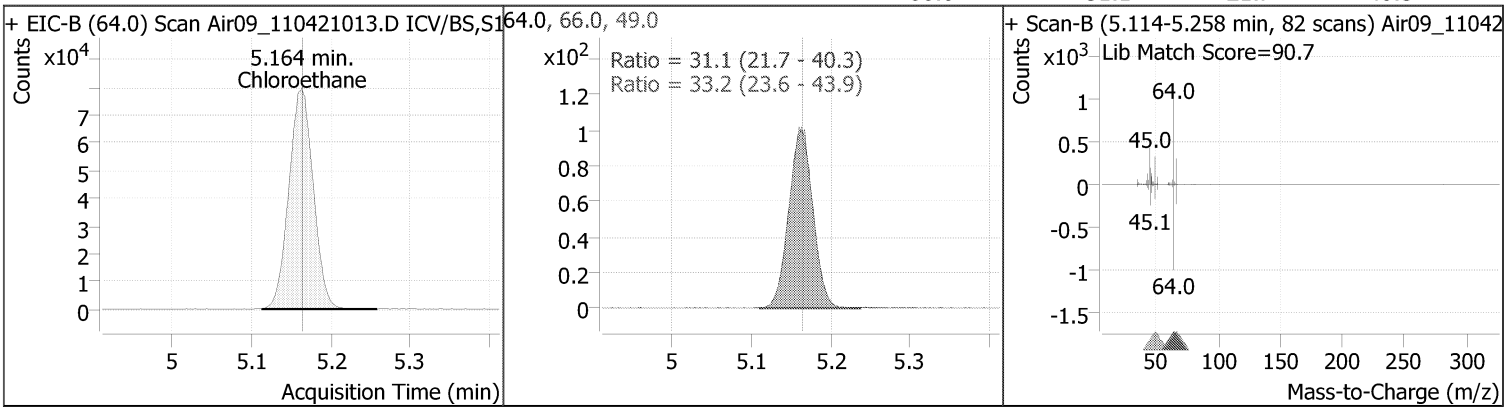
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	9.3560	4.80	0.00	532621	41.0	35.1	24.2	45.0
					58.0	11.3	7.9	14.7



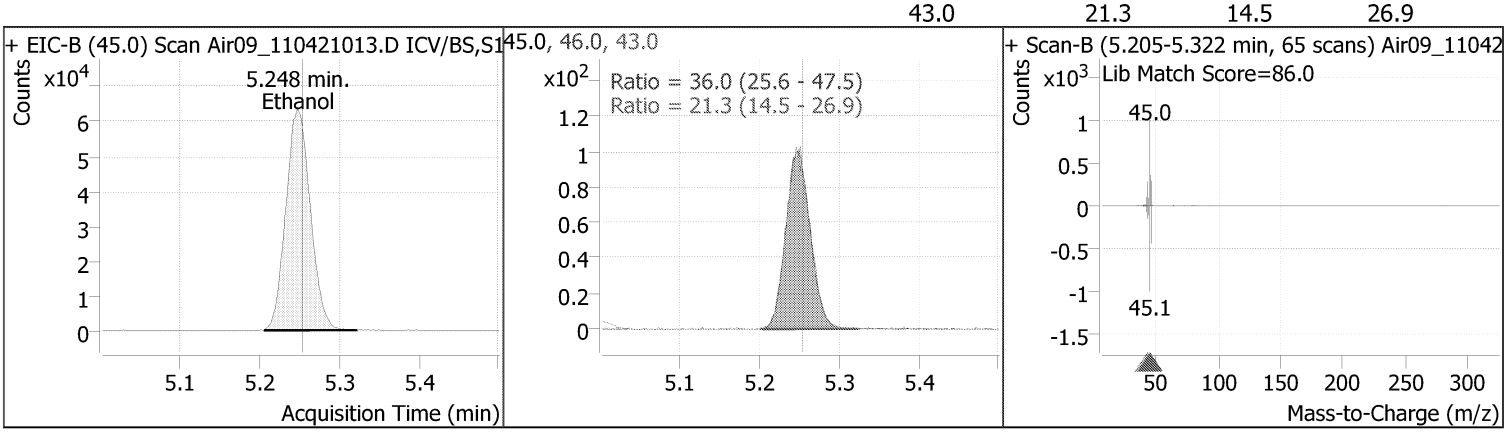
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromomethane	9.2826	5.00	0.00	266741	94.0	107.0	74.9	139.1
					93.0	22.3	15.8	29.3



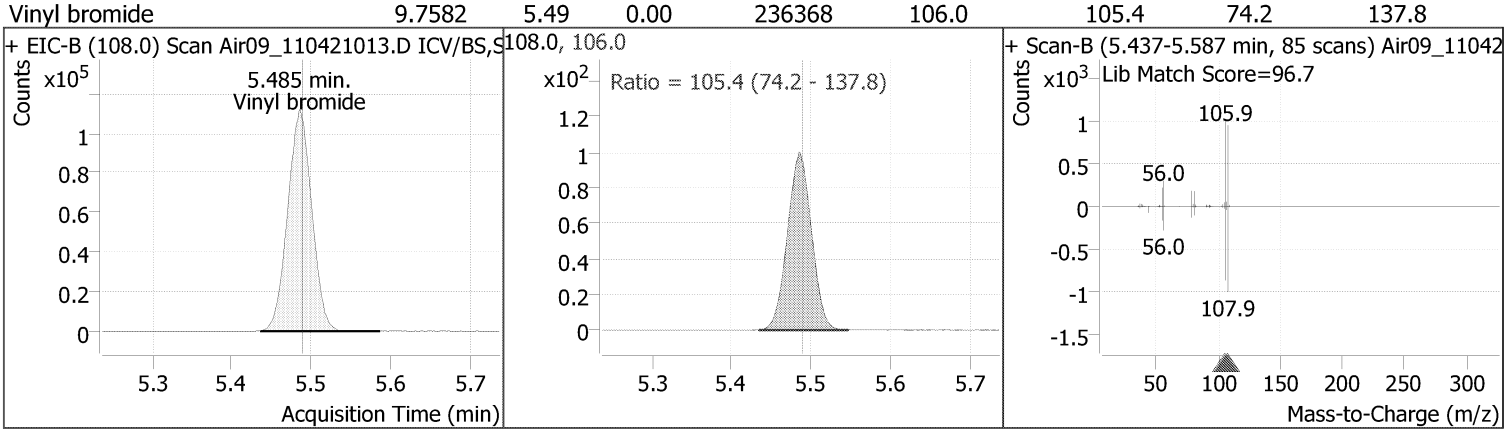
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	9.2555	5.16	0.00	170831	49.0	33.2	23.6	43.9
					66.0	31.1	21.7	40.3



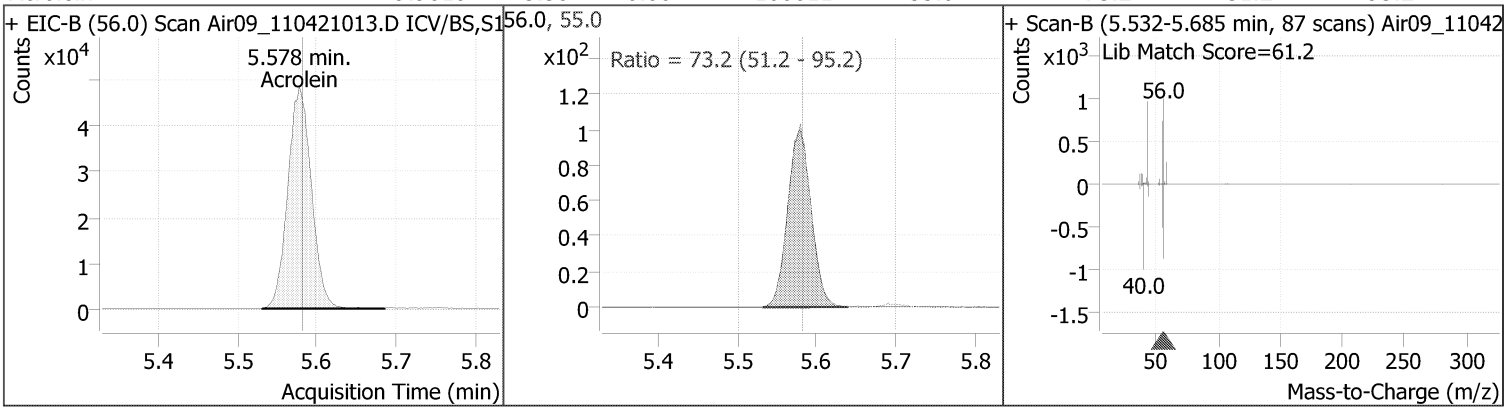
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	8.5722	5.25	-0.01	136664	46.0	36.0	25.6	47.5
					43.0	21.3	14.5	26.9



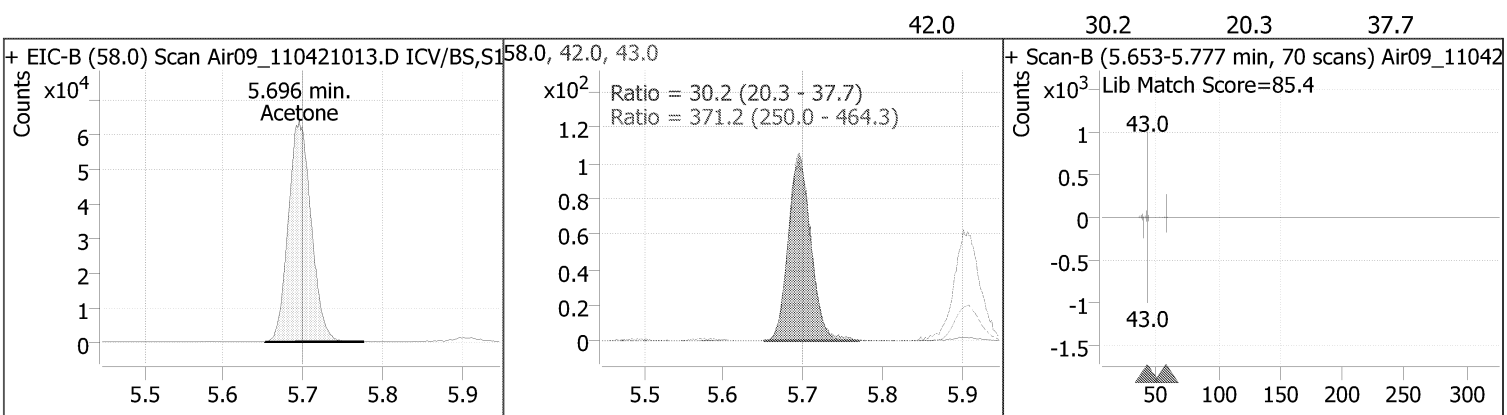
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl bromide	9.7582	5.49	0.00	236368	106.0	105.4	74.2	137.8



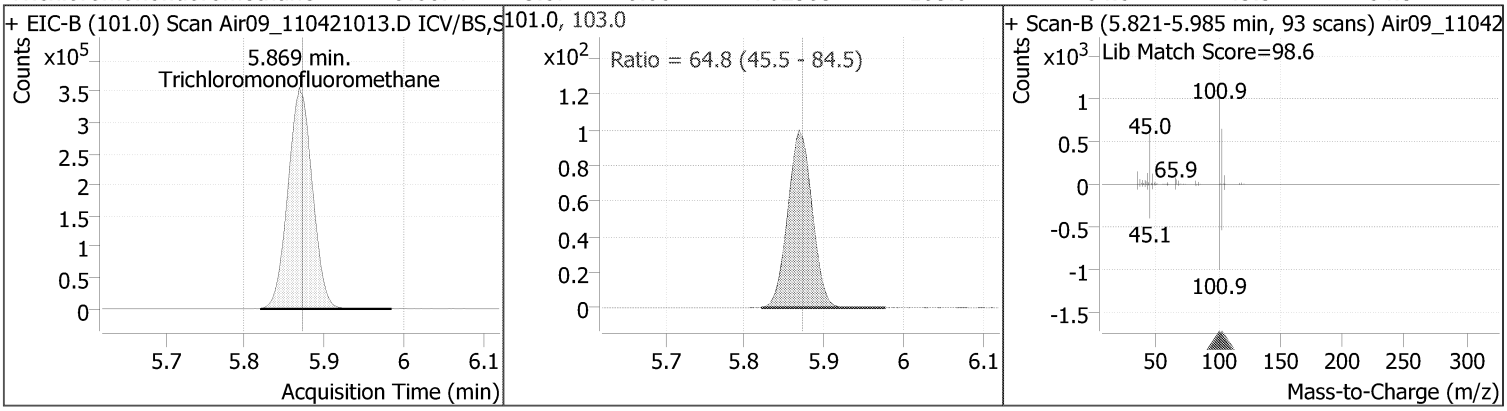
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	9.9810	5.58	0.00	100811	55.0	73.2	51.2	95.2



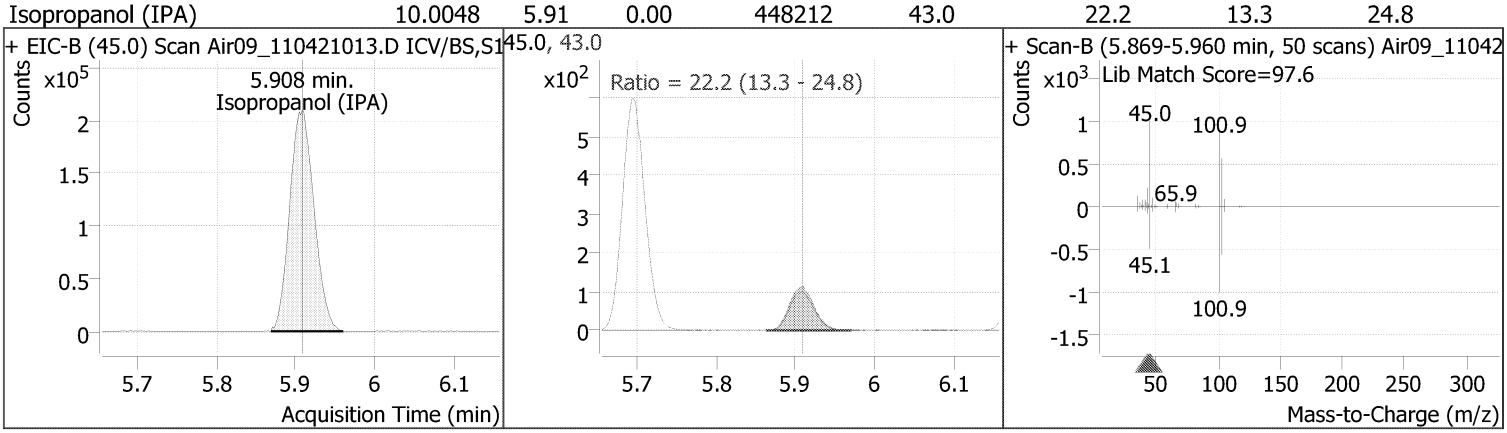
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	9.5822	5.70	0.00	128191	43.0	371.2	250.0	464.3
					42.0	30.2	20.3	37.7



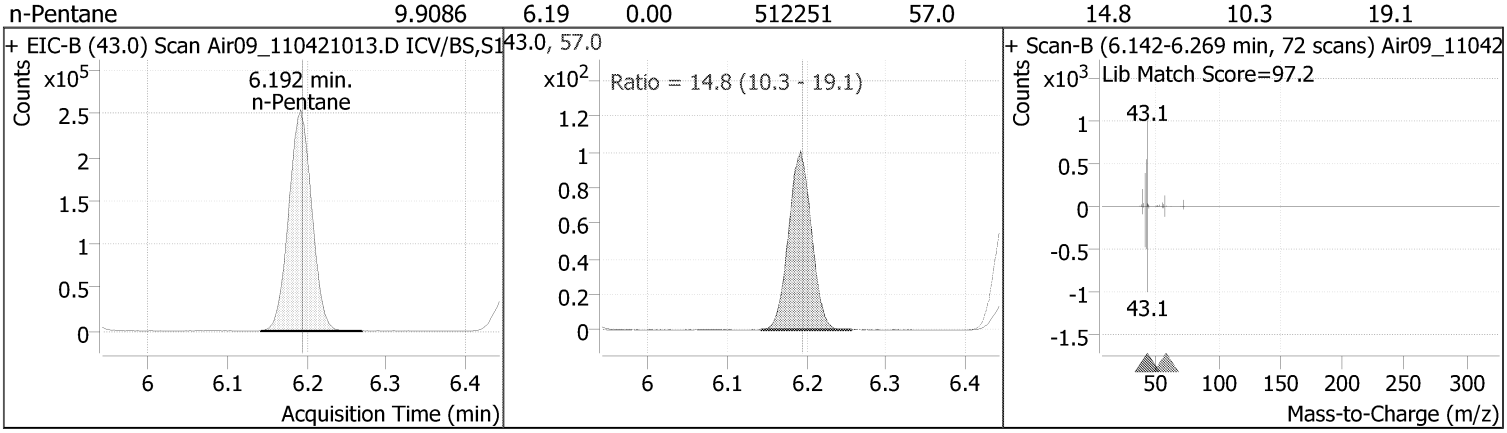
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	9.6074	5.87	0.00	762585	103.0	64.8	45.5	84.5



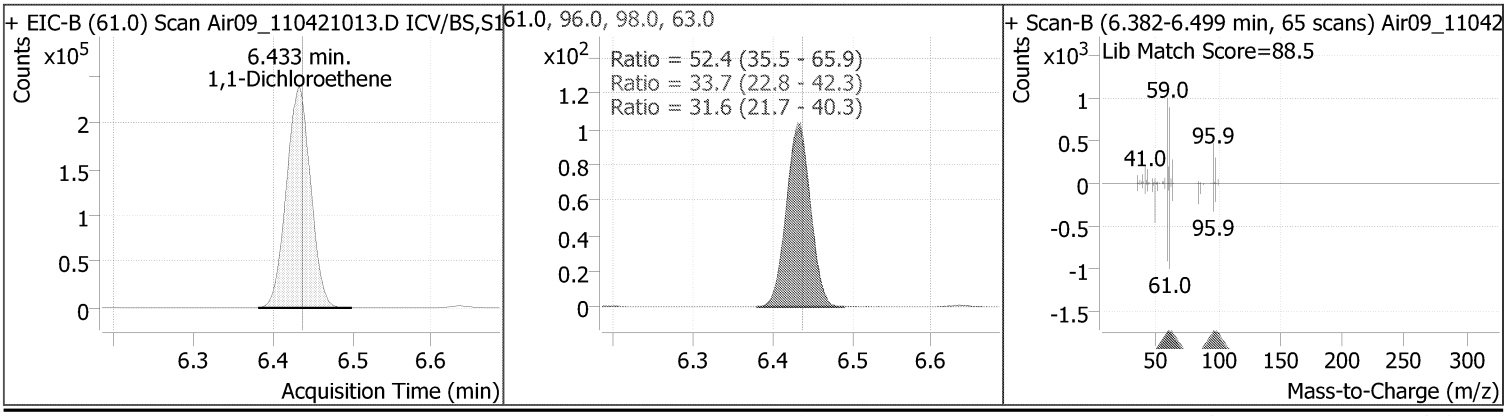
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	10.0048	5.91	0.00	448212	43.0	22.2	13.3	24.8



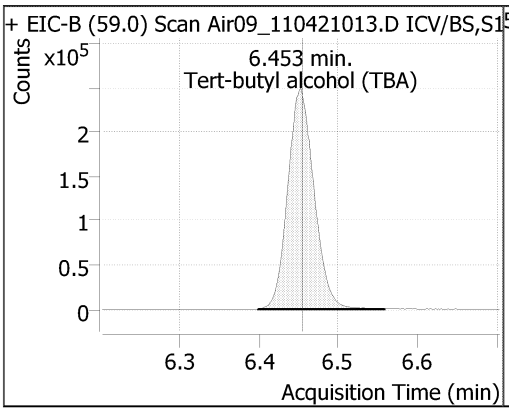
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	9.9086	6.19	0.00	512251	57.0	14.8	10.3	19.1

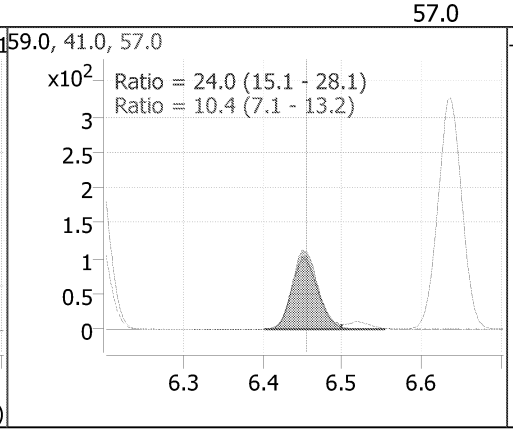


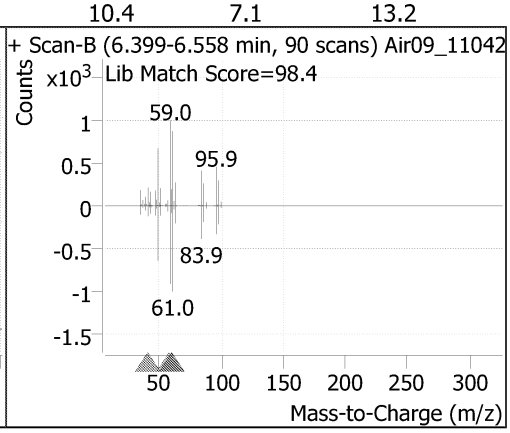
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	9.8380	6.43	0.00	508020	96.0	52.4	35.5	65.9
					98.0	33.7	22.8	42.3
					63.0	31.6	21.7	40.3



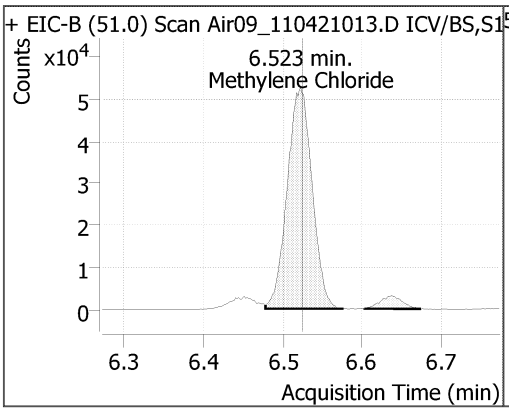
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	10.5525	6.45	0.00	573859	41.0	24.0	15.1	28.1
					57.0	10.4	7.1	13.2

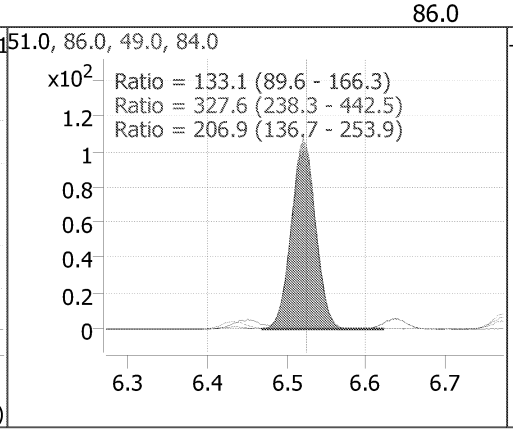


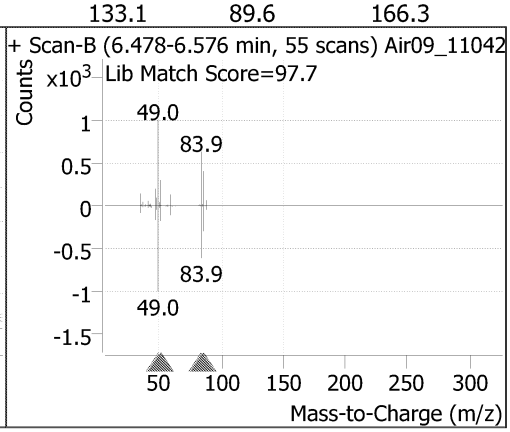




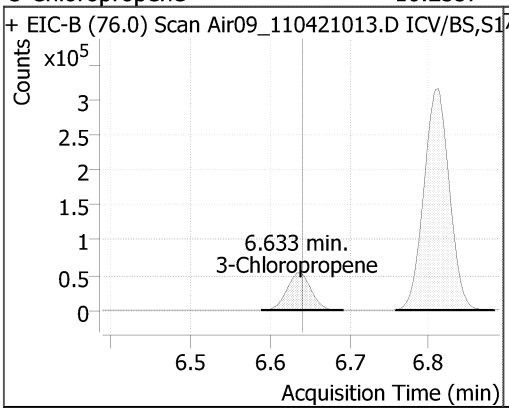
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	8.9890	6.52	0.00	114497	49.0	327.6	238.3	442.5
					84.0	206.9	136.7	253.9
					86.0	133.1	89.6	166.3

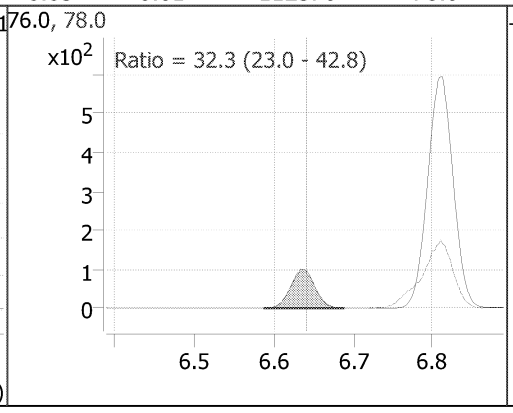


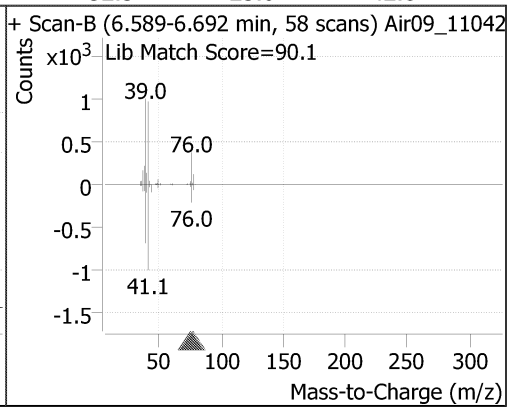




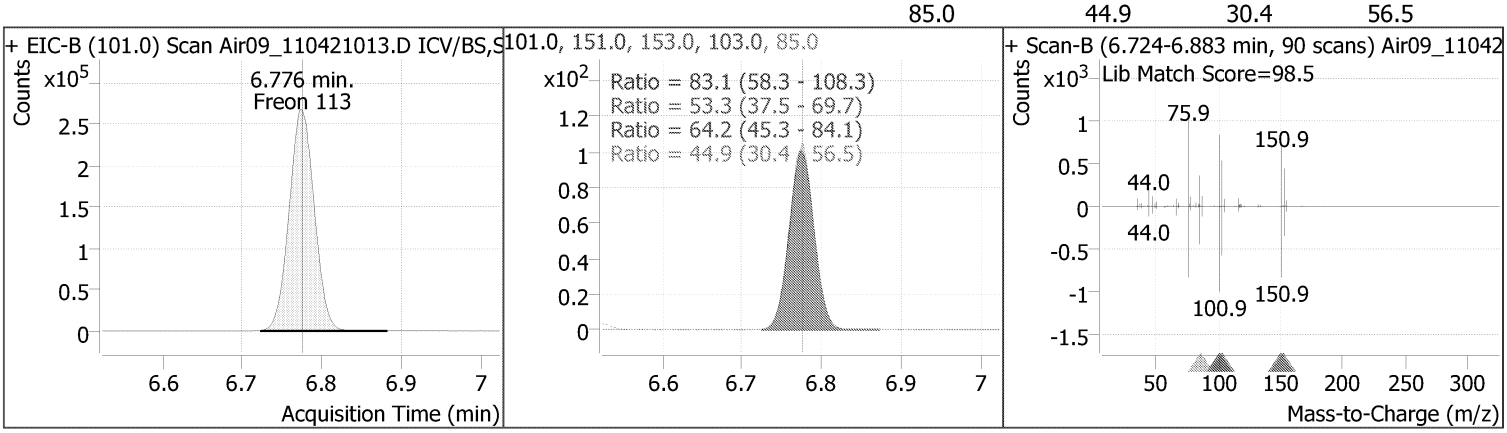
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	10.2357	6.63	-0.01	112370	78.0	32.3	23.0	42.8



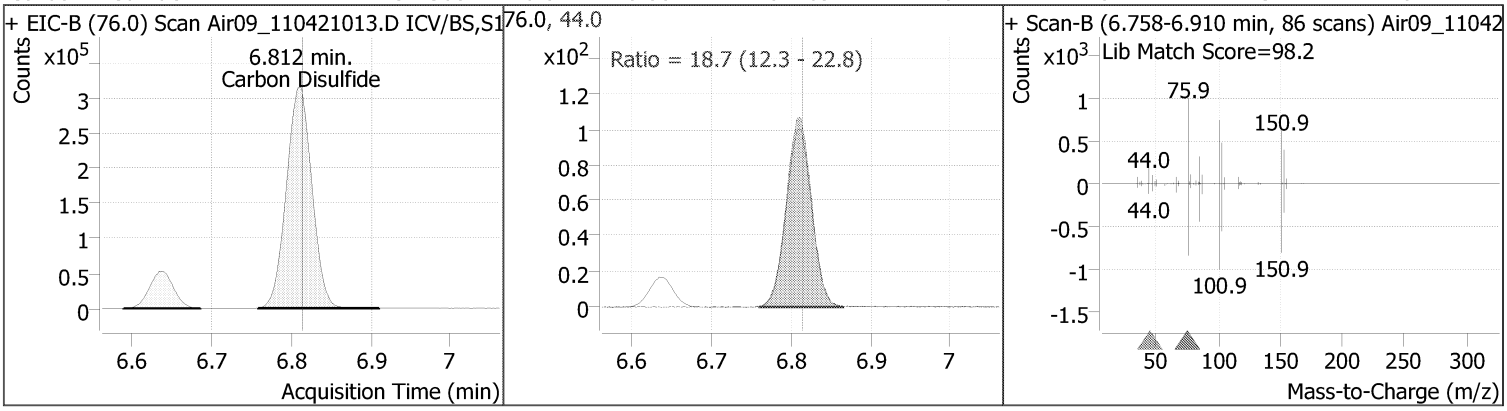




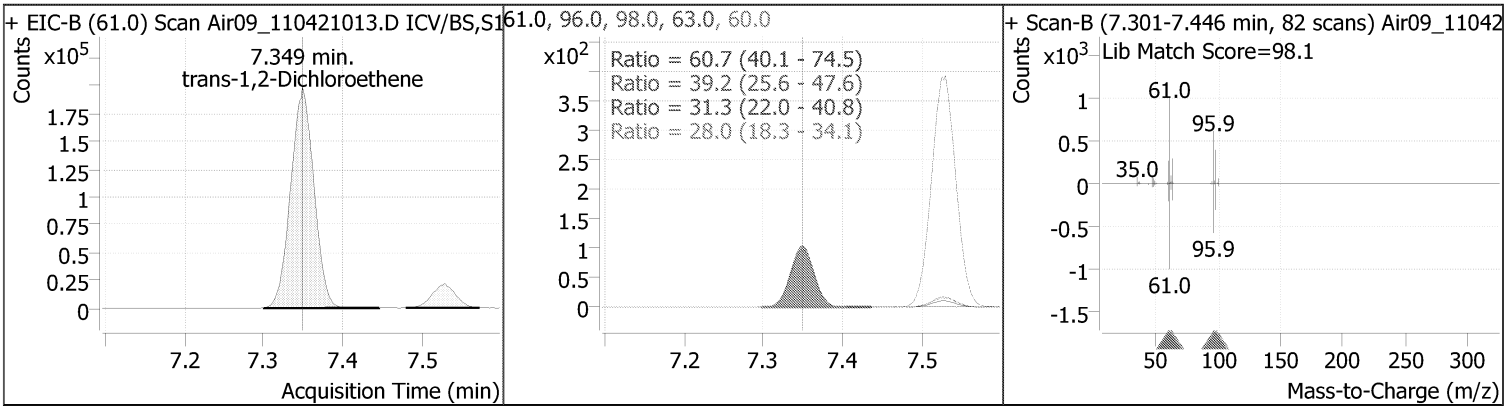
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	9.6130	6.78	0.00	591538	151.0	83.1	58.3	108.3
					103.0	64.2	45.3	84.1
					153.0	53.3	37.5	69.7
					85.0	44.9	30.4	56.5



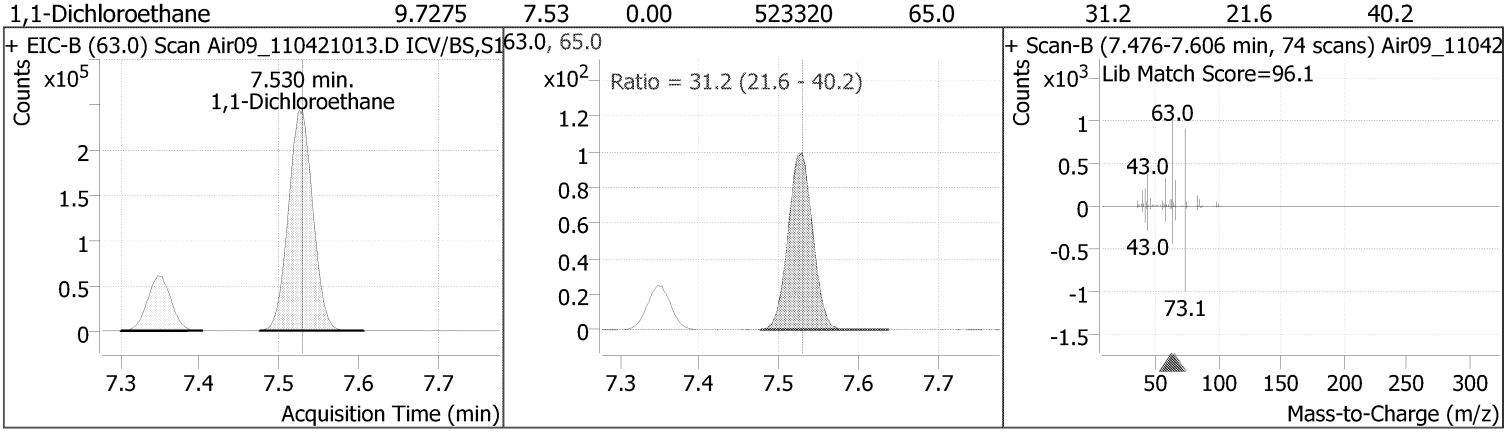
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	9.7368	6.81	0.00	707269	44.0	18.7	12.3	22.8



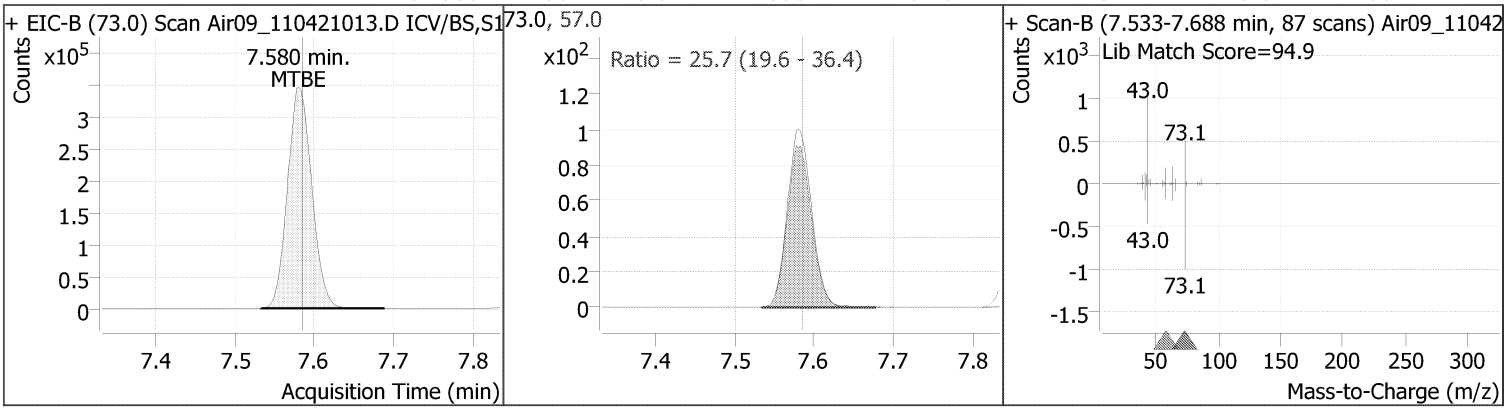
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	9.8114	7.35	0.00	401444	96.0	60.7	40.1	74.5
					98.0	39.2	25.6	47.6
					63.0	31.3	22.0	40.8
					60.0	28.0	18.3	34.1



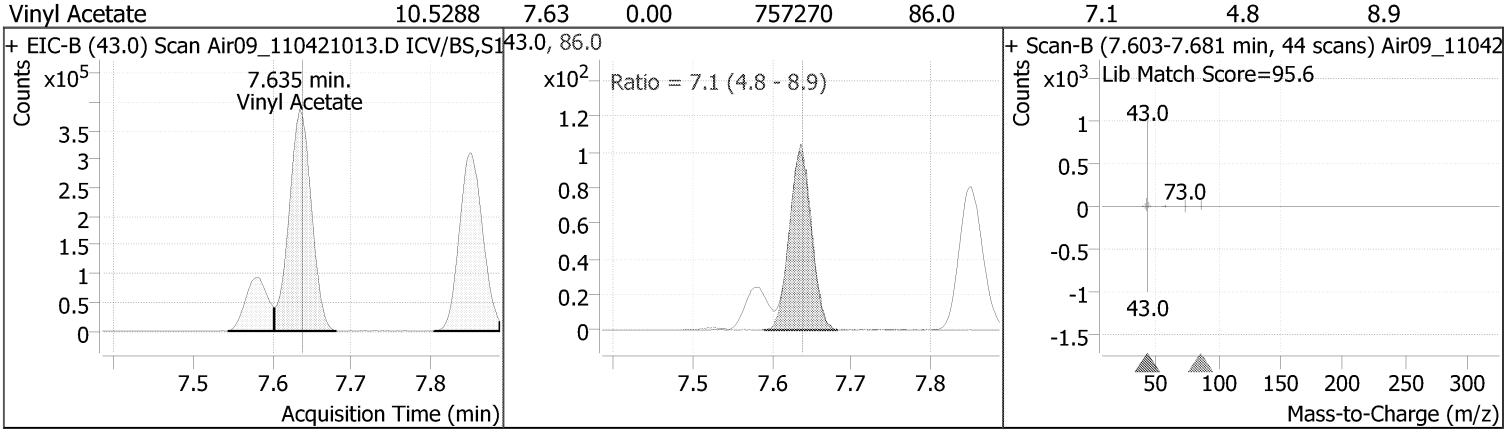
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	9.7275	7.53	0.00	523320	65.0	31.2	21.6	40.2



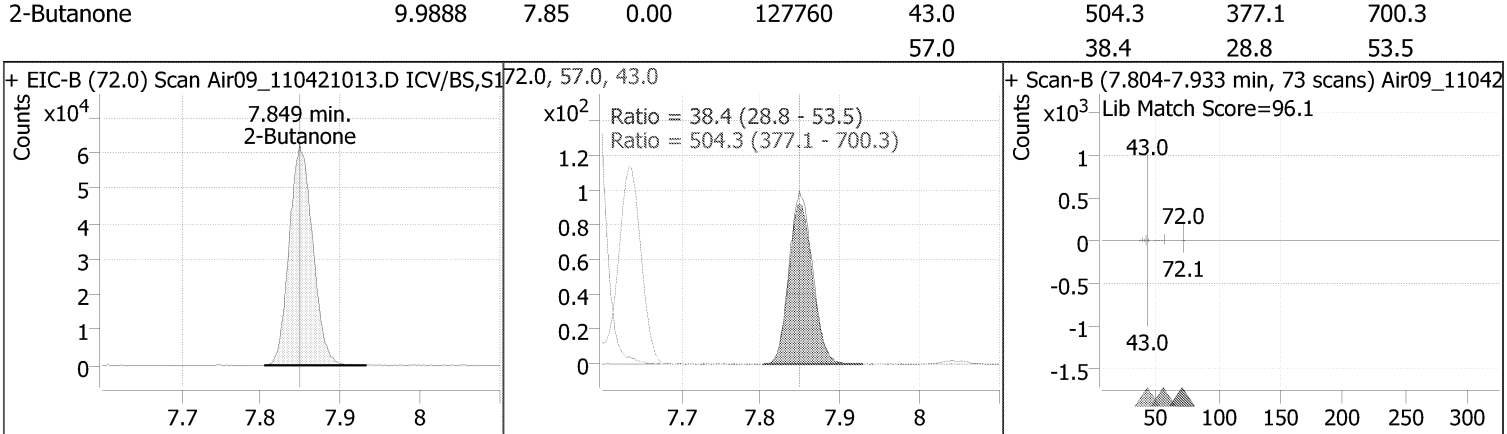
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	10.2985	7.58	-0.01	733041	57.0	25.7	19.6	36.4



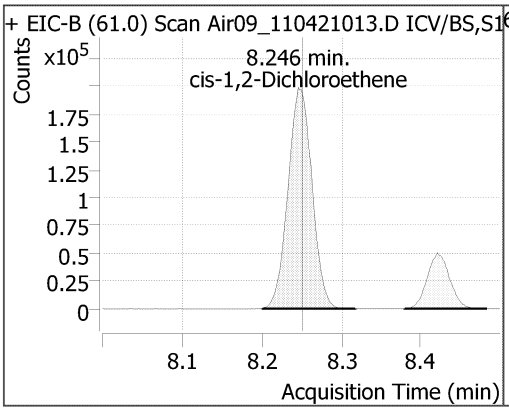
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	10.5288	7.63	0.00	757270	86.0	7.1	4.8	8.9

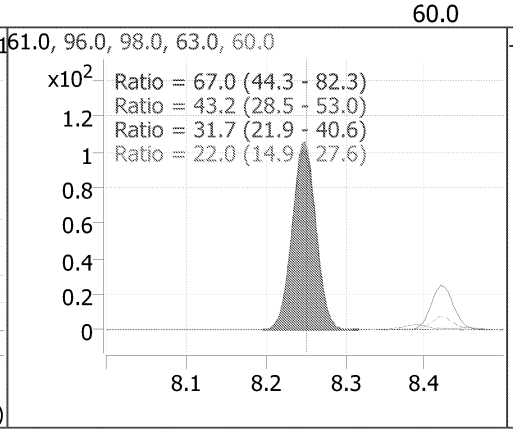


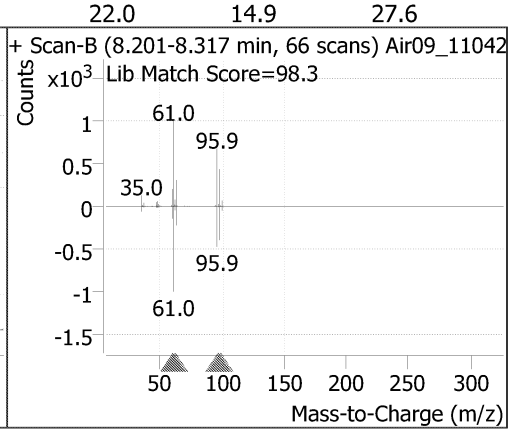
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	9.9888	7.85	0.00	127760	43.0	504.3	377.1	700.3
					57.0	38.4	28.8	53.5



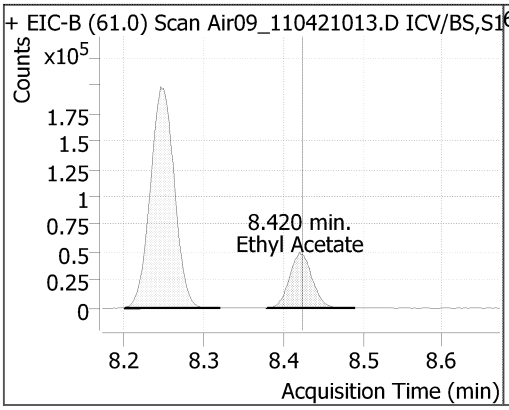
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	9.9426	8.25	-0.01	417853	96.0	67.0	44.3	82.3
					98.0	43.2	28.5	53.0
					63.0	31.7	21.9	40.6
					60.0	22.0	14.9	27.6

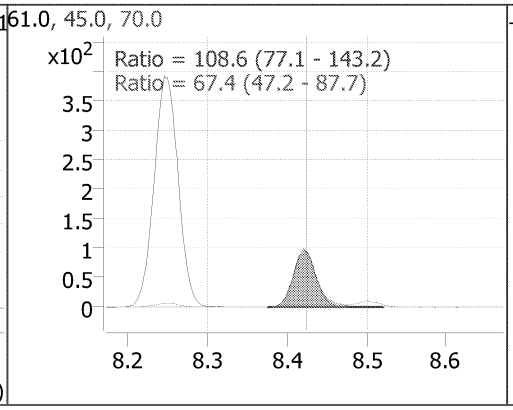


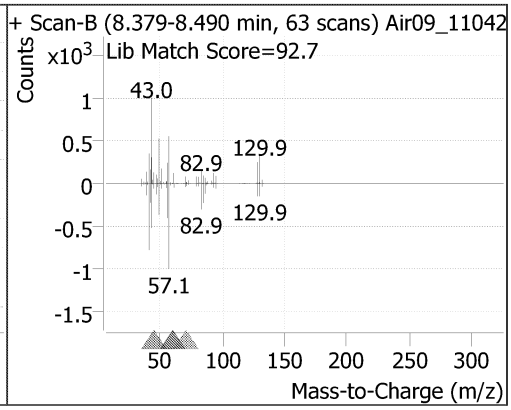




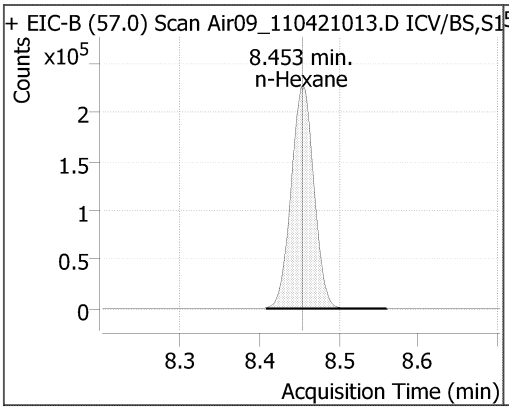
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	10.1132	8.42	0.00	98057	45.0	108.6	77.1	143.2
					70.0	67.4	47.2	87.7

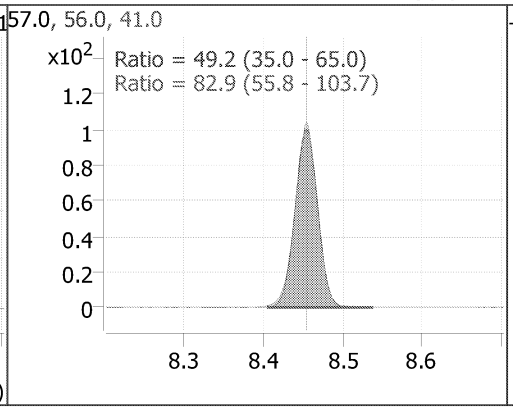


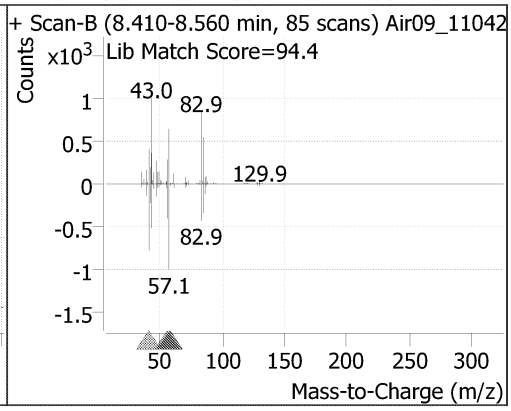




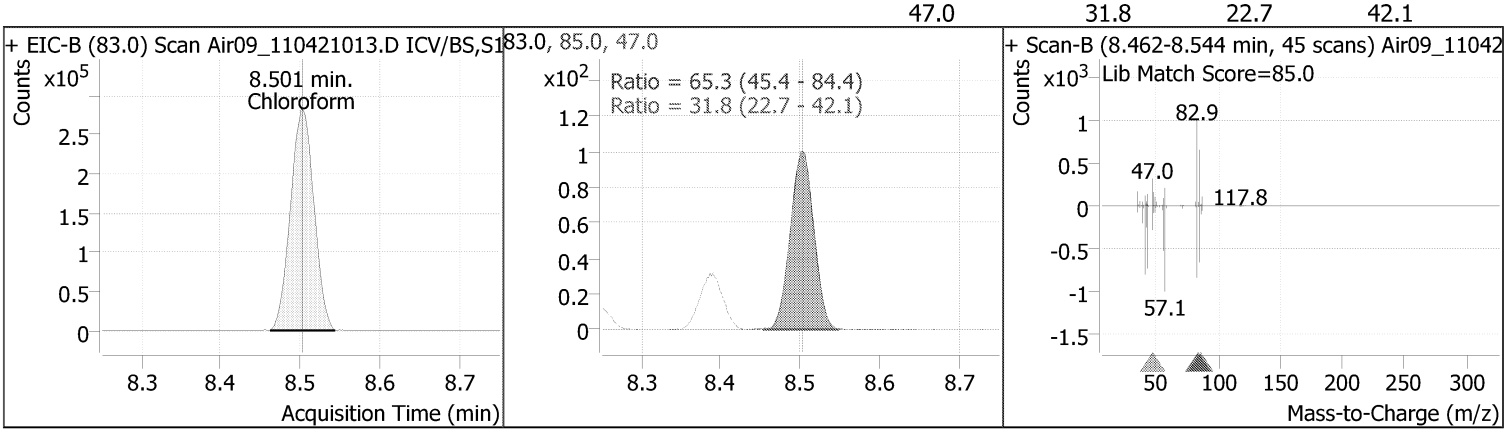
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	10.0326	8.45	0.00	453978	41.0	82.9	55.8	103.7
					56.0	49.2	35.0	65.0



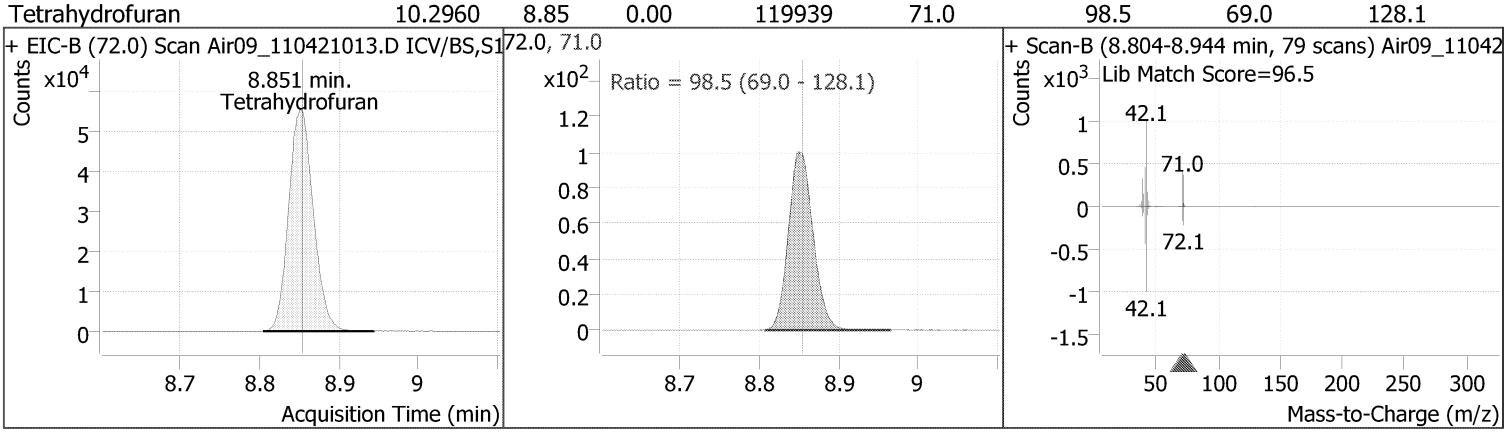




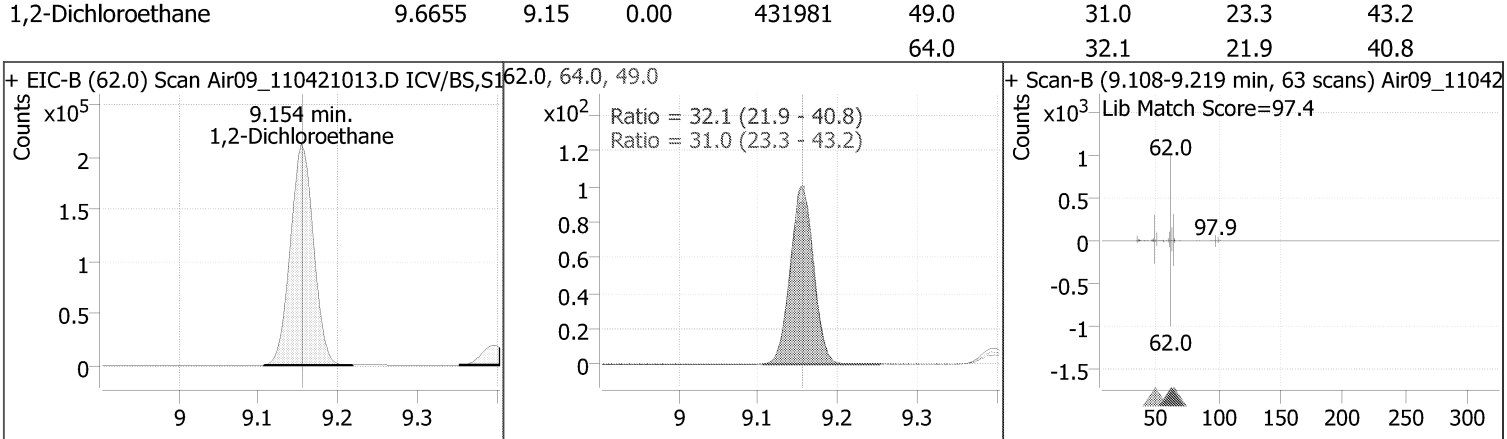
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	9.3925	8.50	0.00	582659	85.0	65.3	45.4	84.4
					47.0	31.8	22.7	42.1



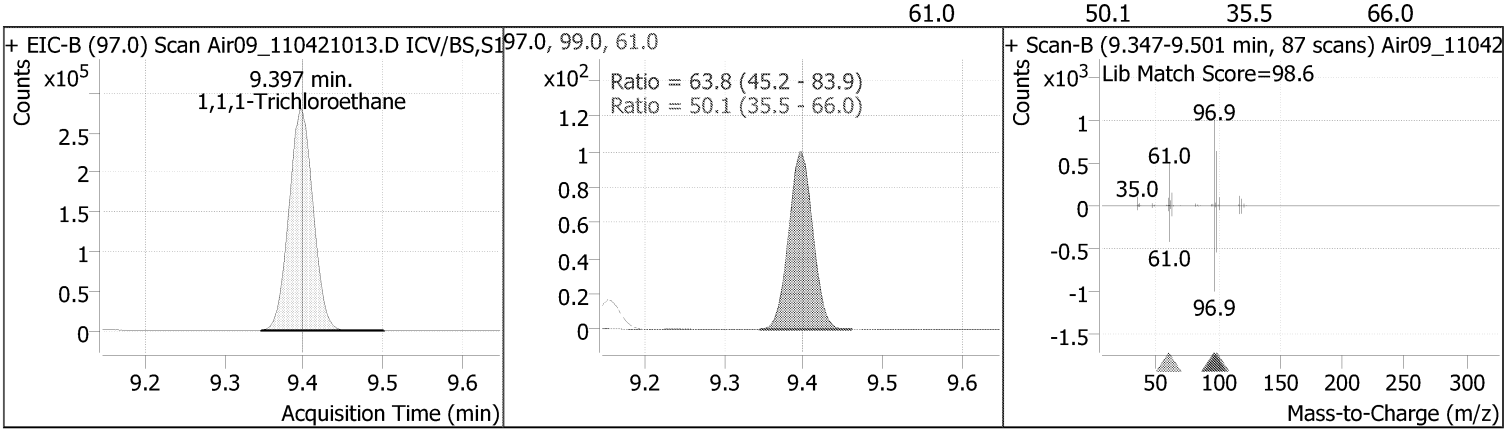
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	10.2960	8.85	0.00	119939	71.0	98.5	69.0	128.1



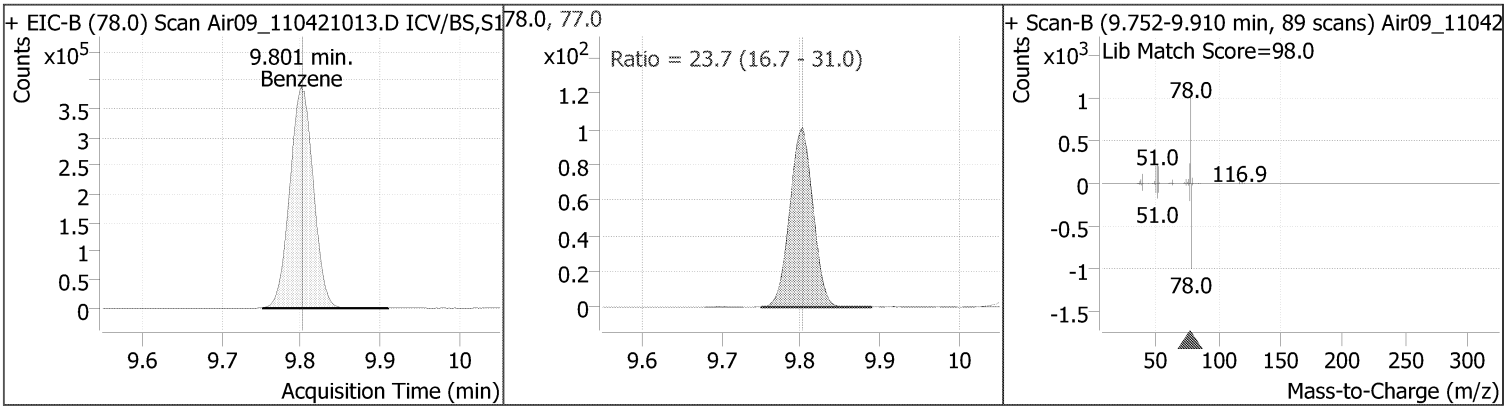
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	9.6655	9.15	0.00	431981	49.0	31.0	23.3	43.2
					64.0	32.1	21.9	40.8



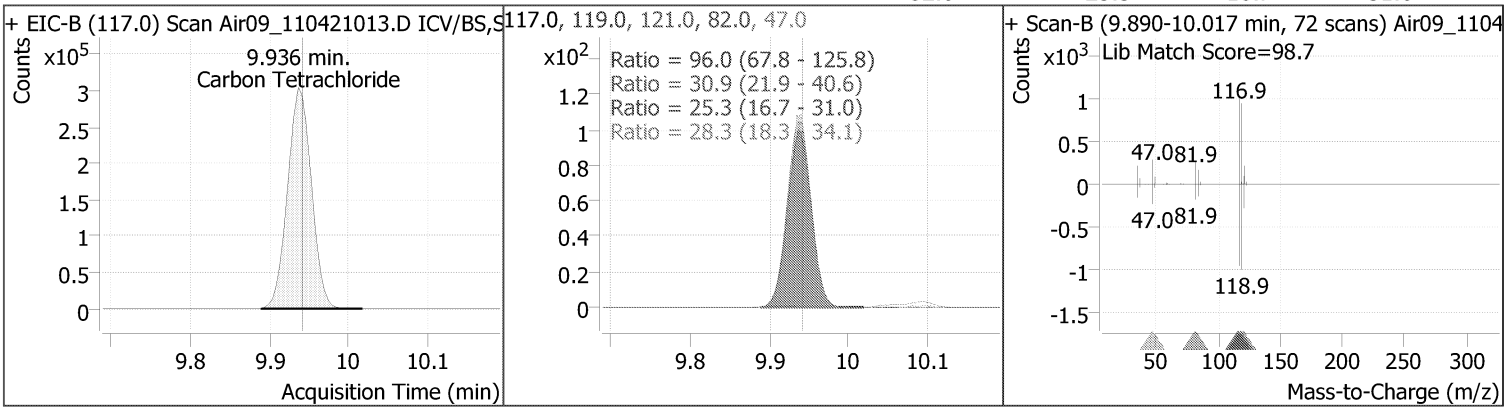
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	9.8486	9.40	0.00	596597	99.0	63.8	45.2	83.9
					61.0	50.1	35.5	66.0



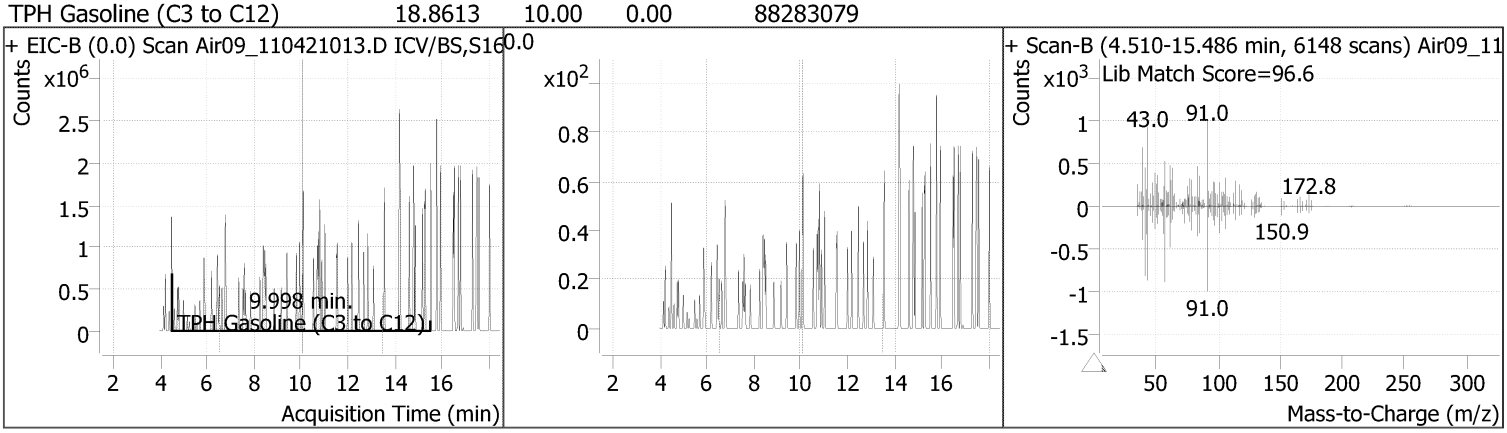
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	9.8422	9.80	0.00	800744	77.0	23.7	16.7	31.0



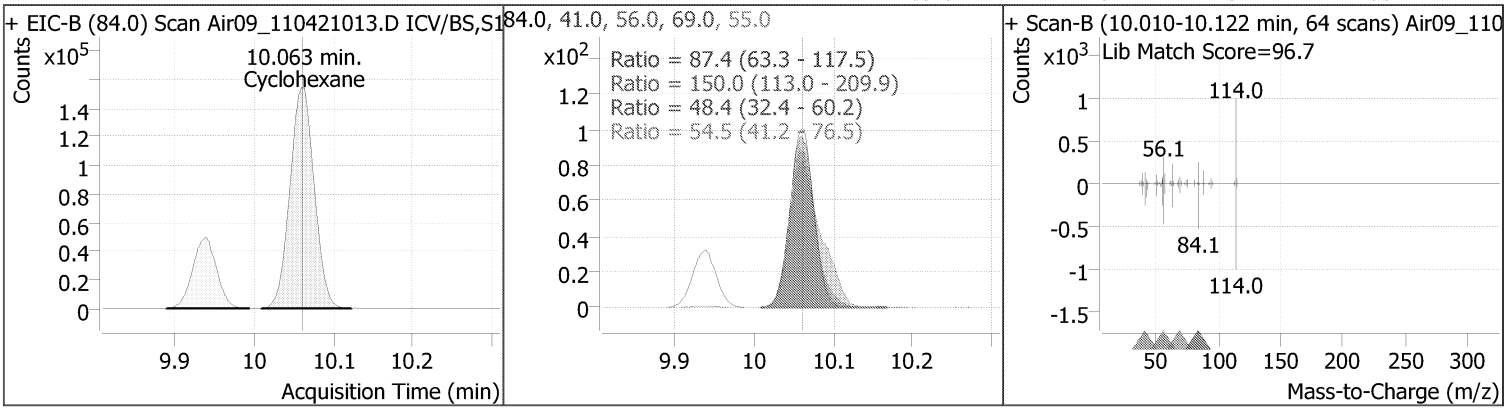
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	10.0267	9.94	-0.01	636384	119.0	96.0	67.8	125.8
					121.0	30.9	21.9	40.6
					47.0	28.3	18.3	34.1
					82.0	25.3	16.7	31.0



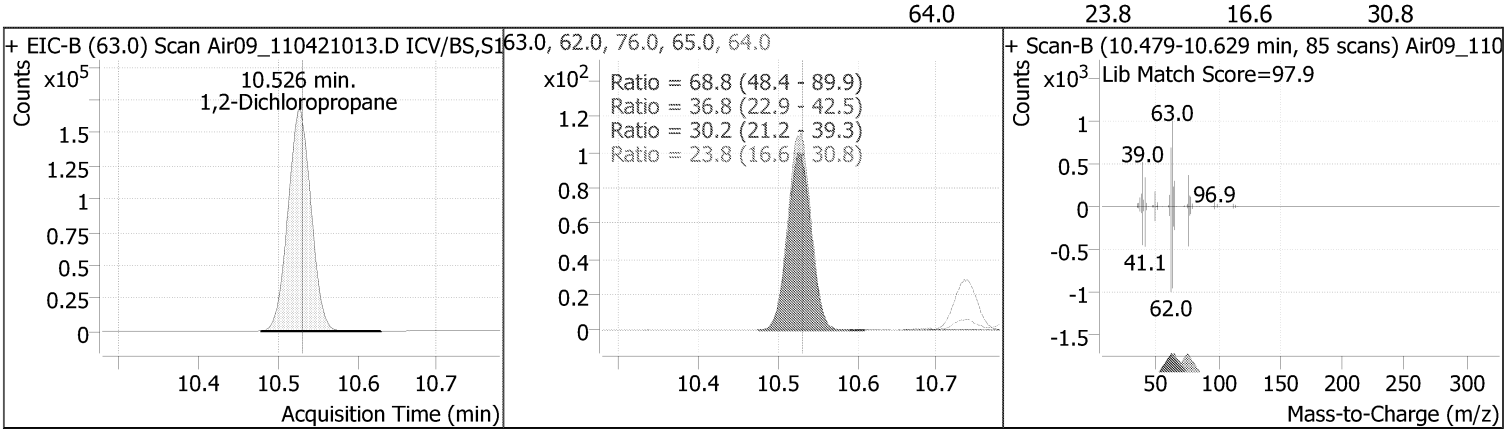
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	18.8613	10.00	0.00	88283079				



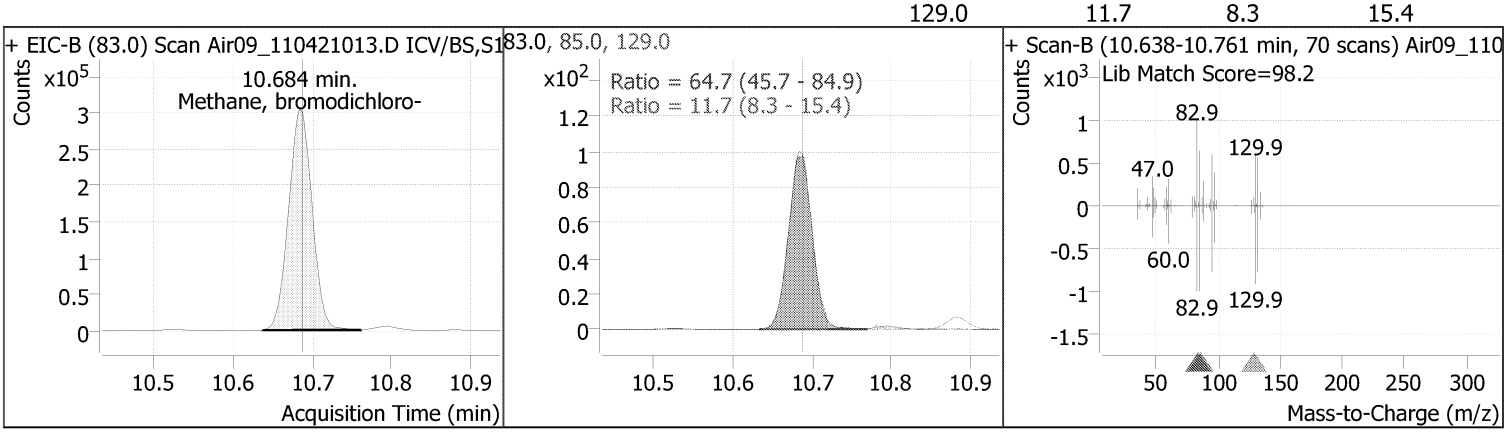
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	9.8956	10.06	0.00	328250	56.0	150.0	113.0	209.9
					41.0	87.4	63.3	117.5
					55.0	54.5	41.2	76.5
					69.0	48.4	32.4	60.2



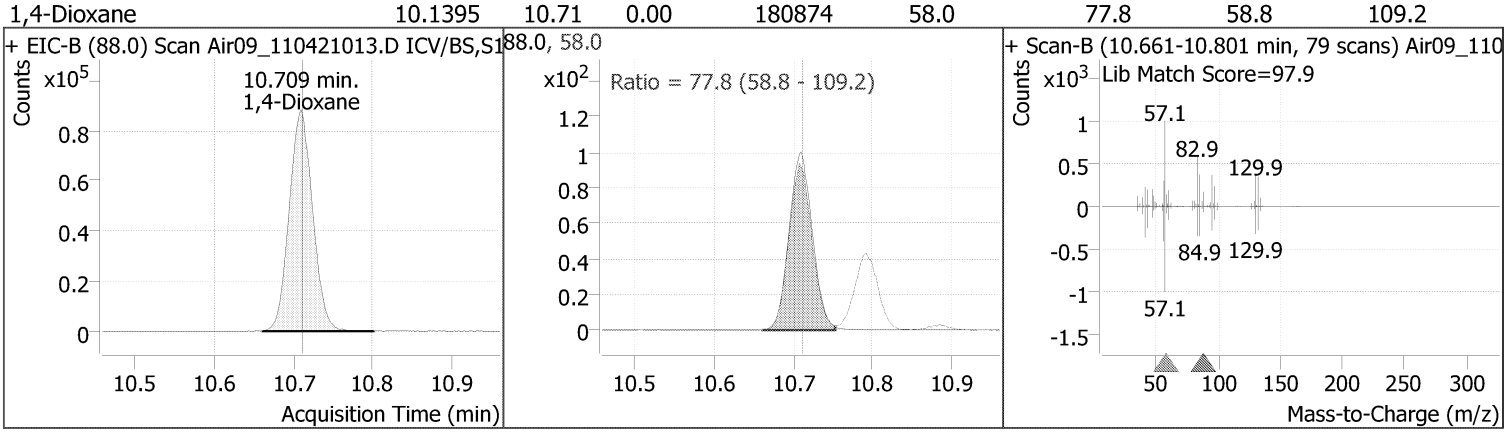
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	9.7604	10.53	0.00	338318	62.0	68.8	48.4	89.9
					76.0	36.8	22.9	42.5
					65.0	30.2	21.2	39.3
					64.0	23.8	16.6	30.8



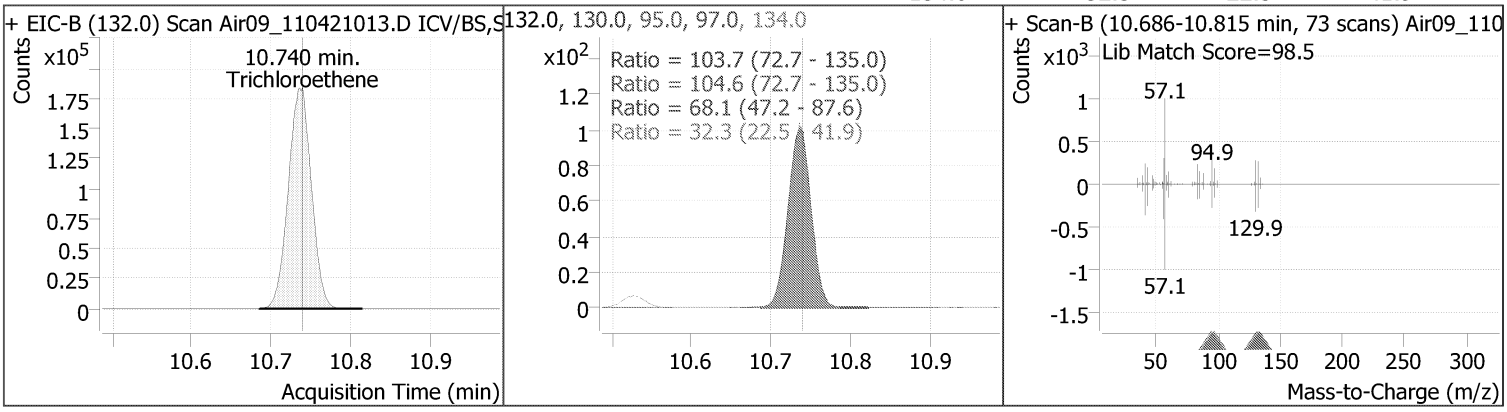
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	9.8905	10.68	0.00	626253	85.0	64.7	45.7	84.9
					129.0	11.7	8.3	15.4



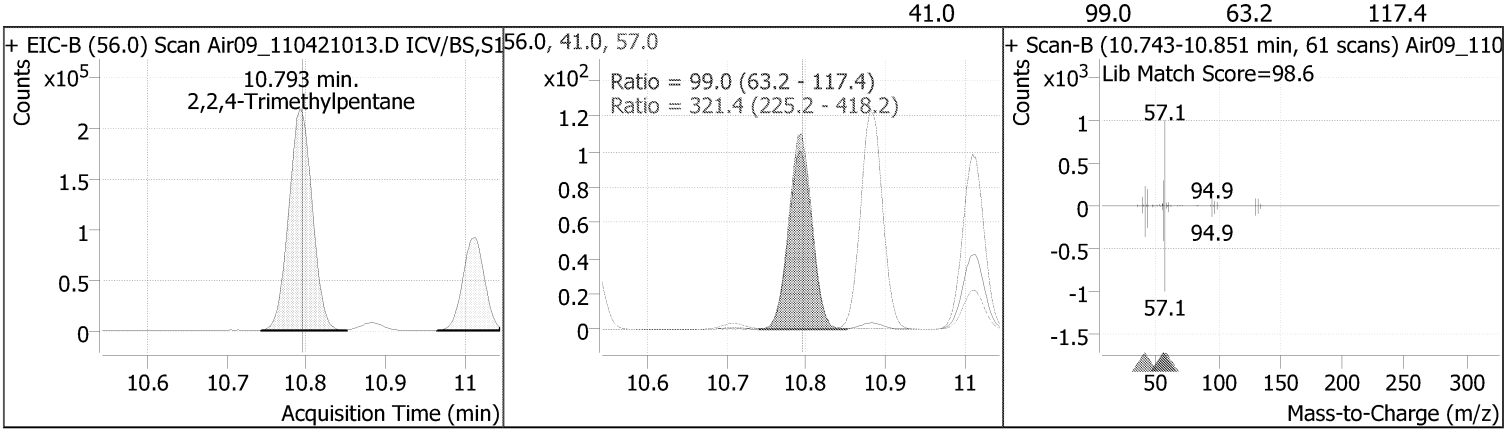
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	10.1395	10.71	0.00	180874	58.0	77.8	58.8	109.2



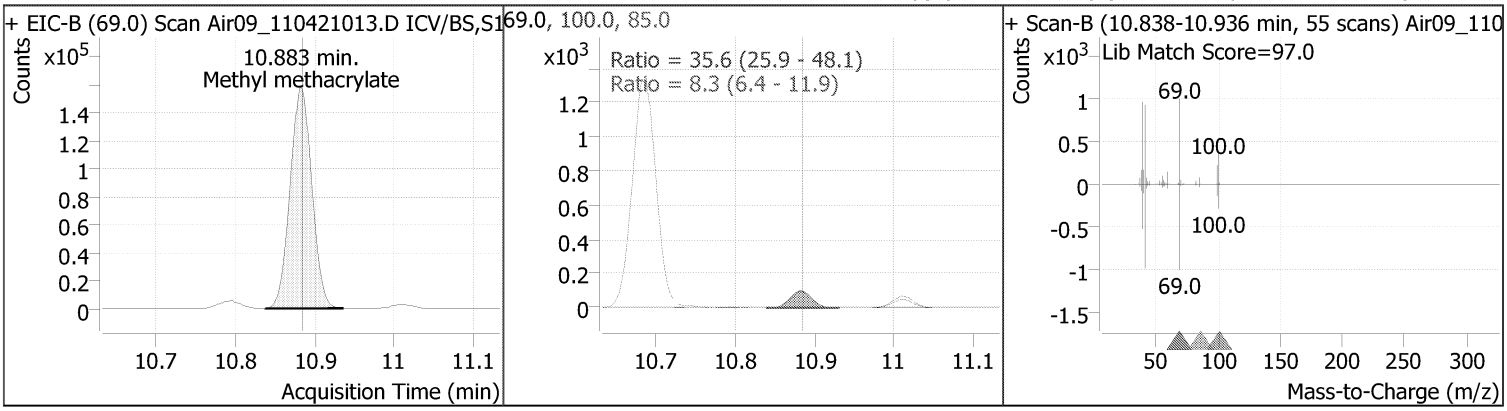
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	9.9171	10.74	0.00	371866	130.0	103.7	72.7	135.0
					95.0	104.6	72.7	135.0
					97.0	68.1	47.2	87.6
					134.0	32.3	22.5	41.9



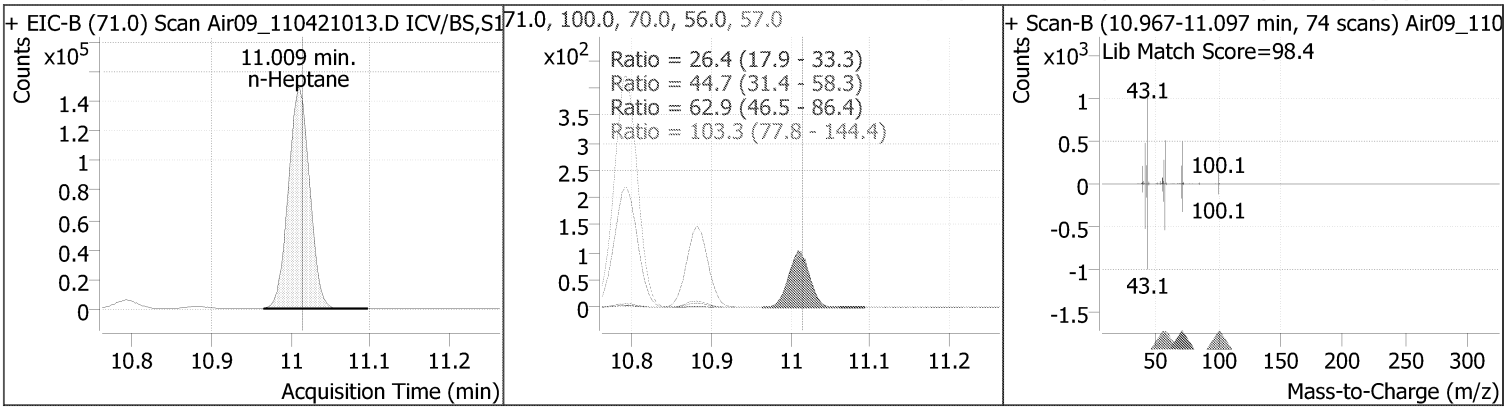
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	9.9317	10.79	0.00	450349	57.0	321.4	225.2	418.2
					41.0	99.0	63.2	117.4



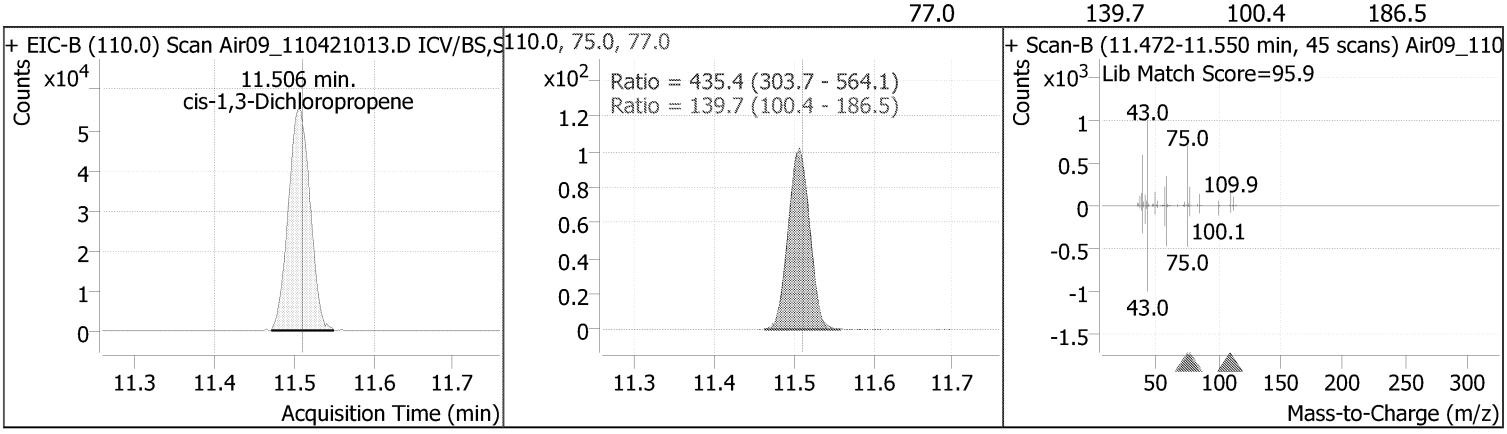
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	10.3527	10.88	0.00	300397	100.0	35.6	25.9	48.1
					85.0	8.3	6.4	11.9



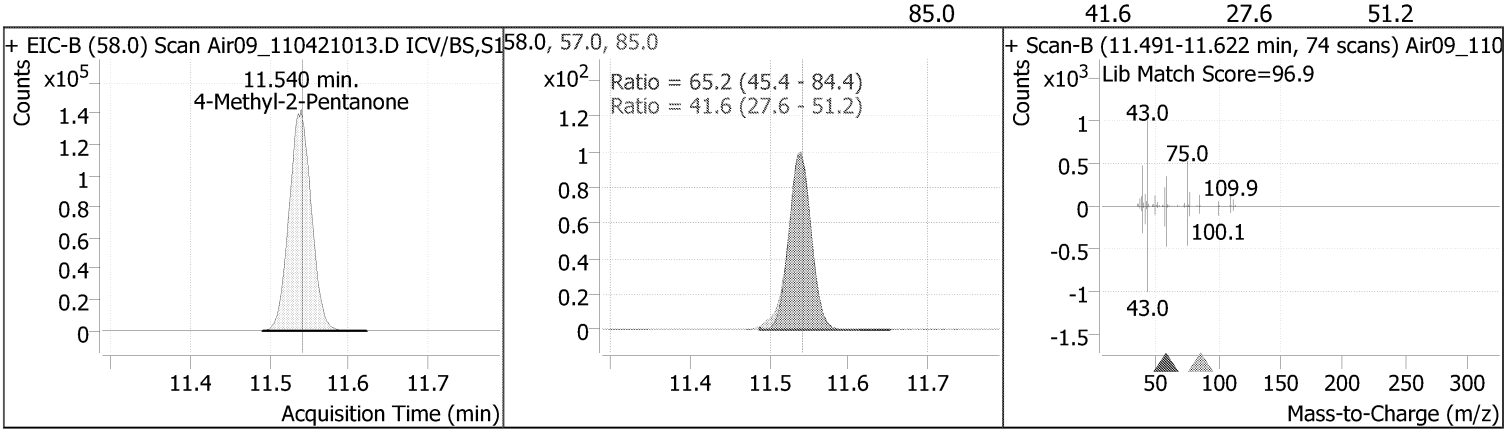
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	10.2159	11.01	0.00	278978	57.0	103.3	77.8	144.4
					56.0	62.9	46.5	86.4
					70.0	44.7	31.4	58.3
					100.0	26.4	17.9	33.3



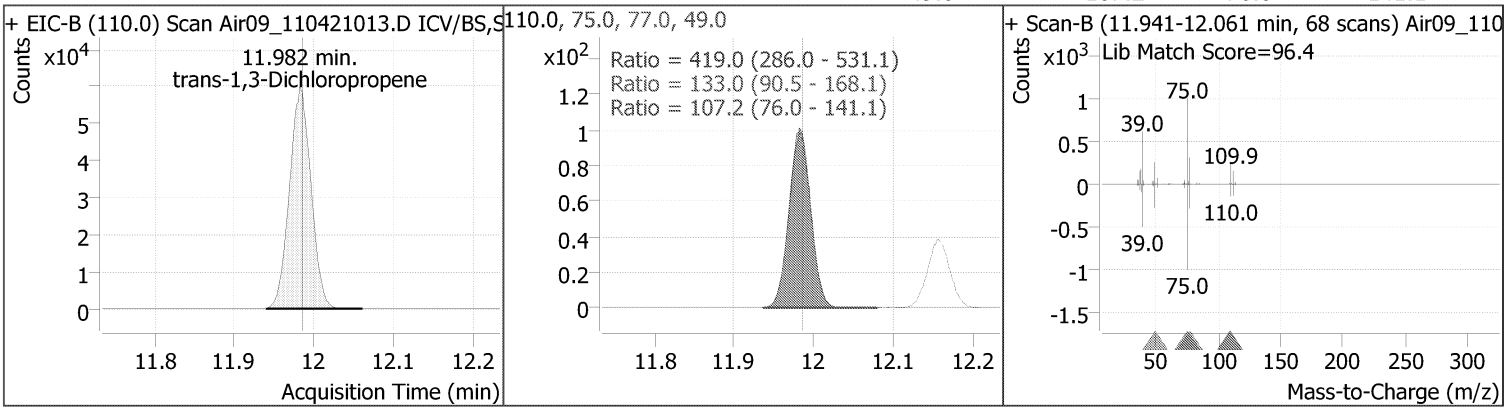
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	9.9777	11.51	0.00	105458	75.0	435.4	303.7	564.1
					77.0	139.7	100.4	186.5



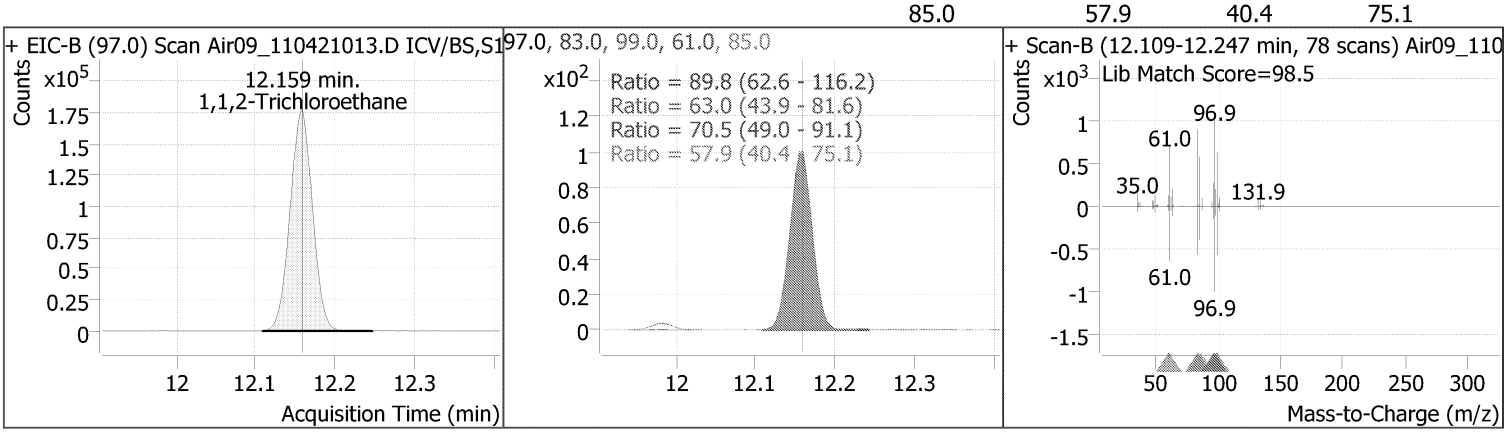
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	10.8855	11.54	0.00	276593	57.0	65.2	45.4	84.4
					85.0	41.6	27.6	51.2



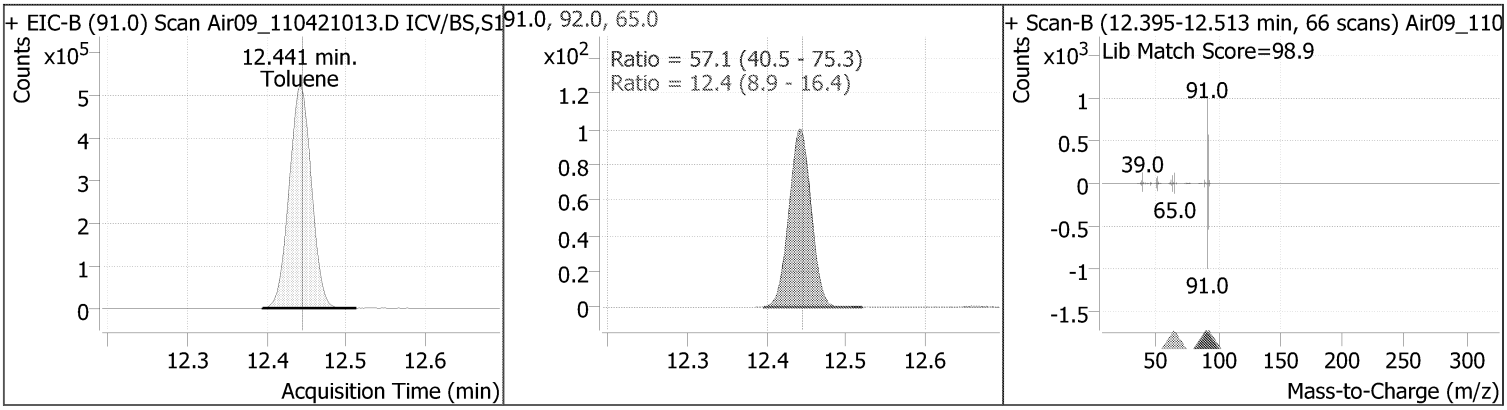
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	10.5946	11.98	0.00	112803	75.0	419.0	286.0	531.1
					77.0	133.0	90.5	168.1
					49.0	107.2	76.0	141.1



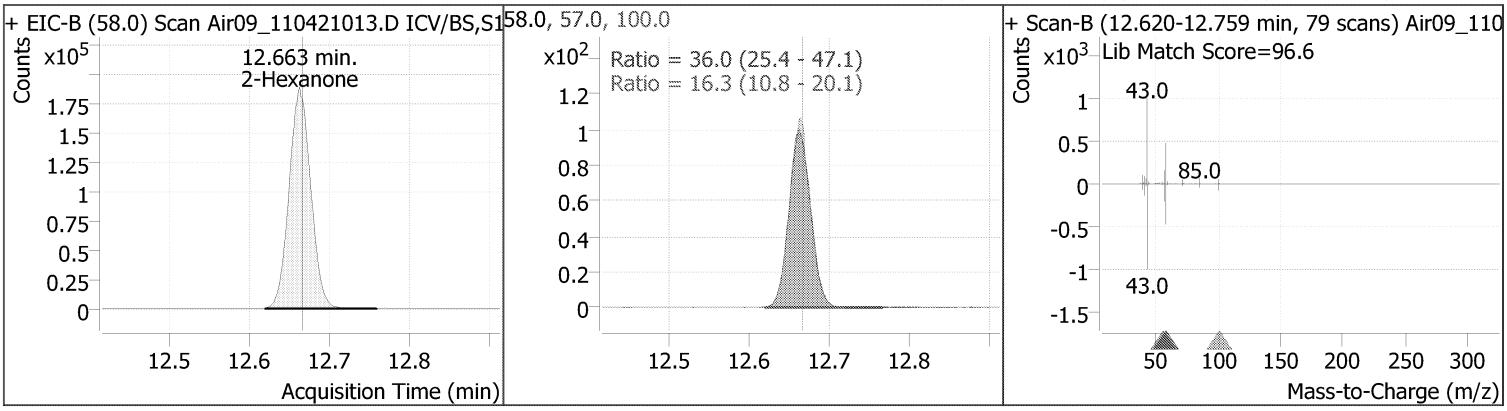
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	9.8203	12.16	0.00	347521	83.0	89.8	62.6	116.2
					61.0	70.5	49.0	91.1
					99.0	63.0	43.9	81.6
					85.0	57.9	40.4	75.1



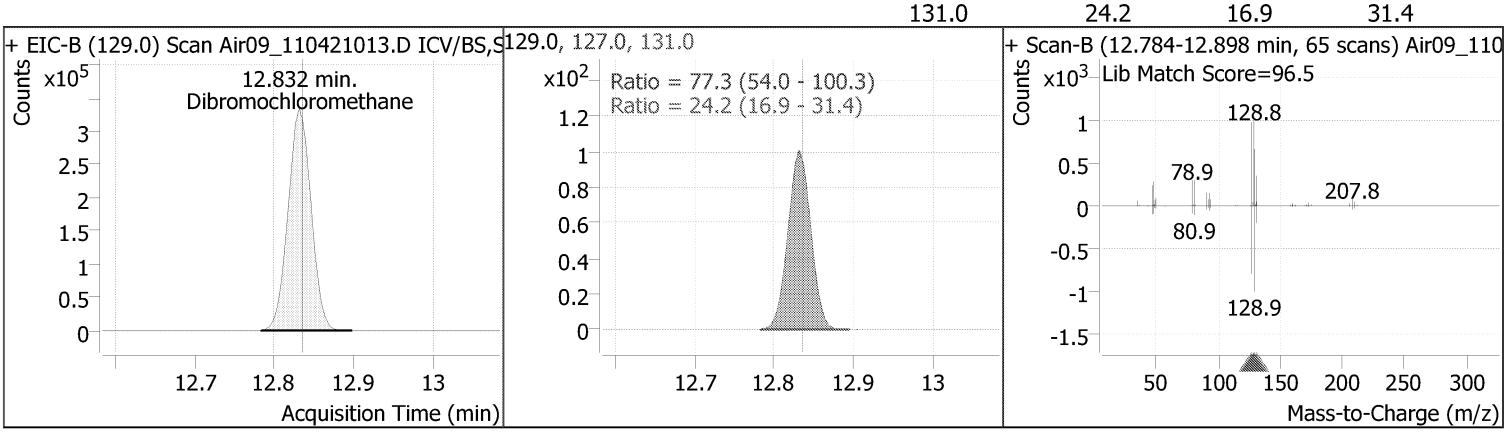
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	10.1909	12.44	0.00	1019075	92.0	57.1	40.5	75.3
					65.0	12.4	8.9	16.4



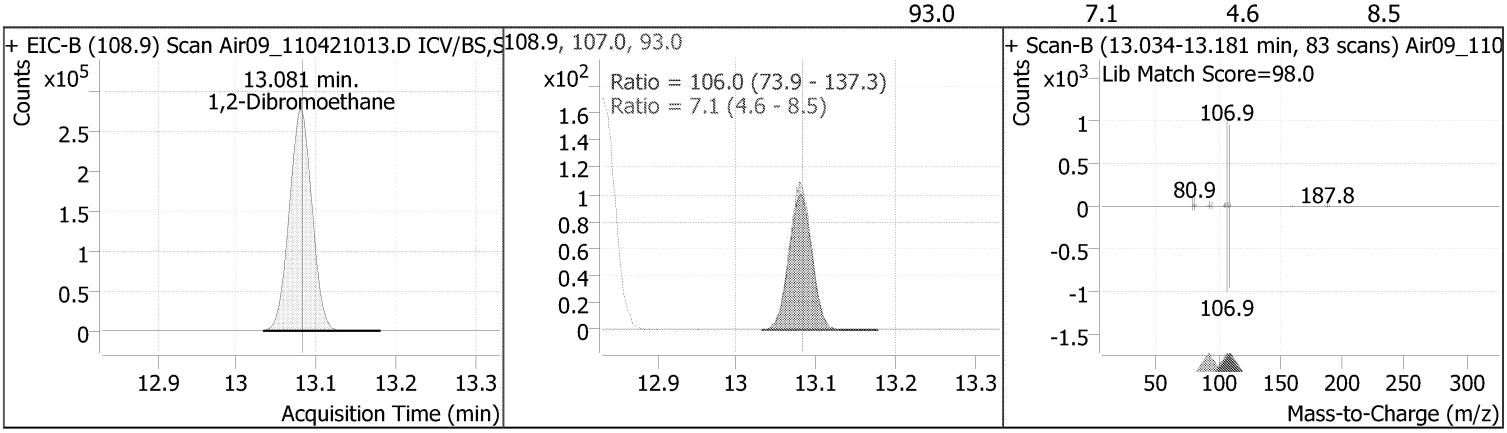
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	10.8246	12.66	0.00	356707	57.0	36.0	25.4	47.1
					100.0	16.3	10.8	20.1



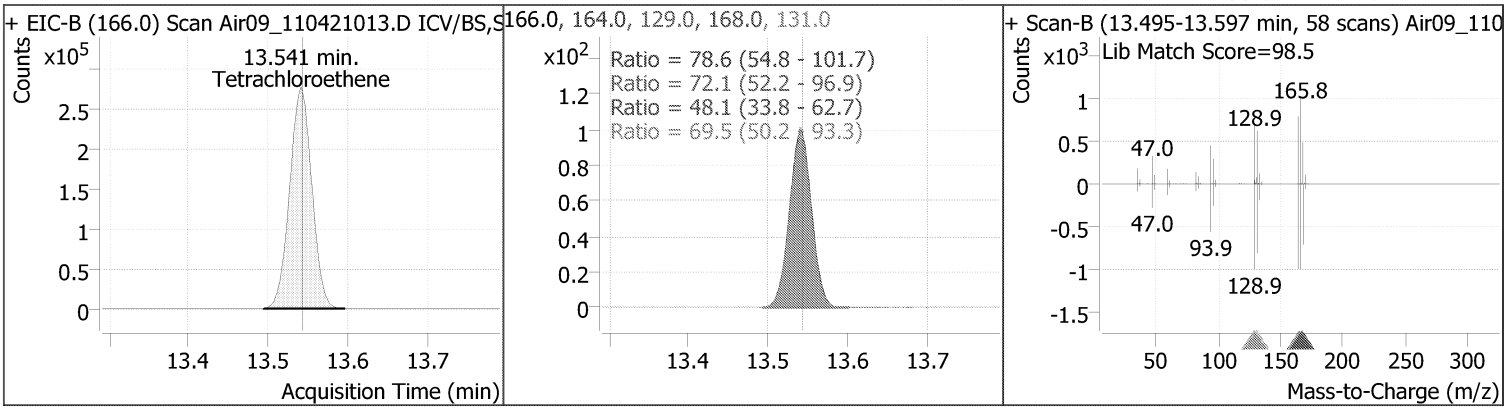
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	10.1300	12.83	0.00	670079	127.0	77.3	54.0	100.3
					131.0	24.2	16.9	31.4



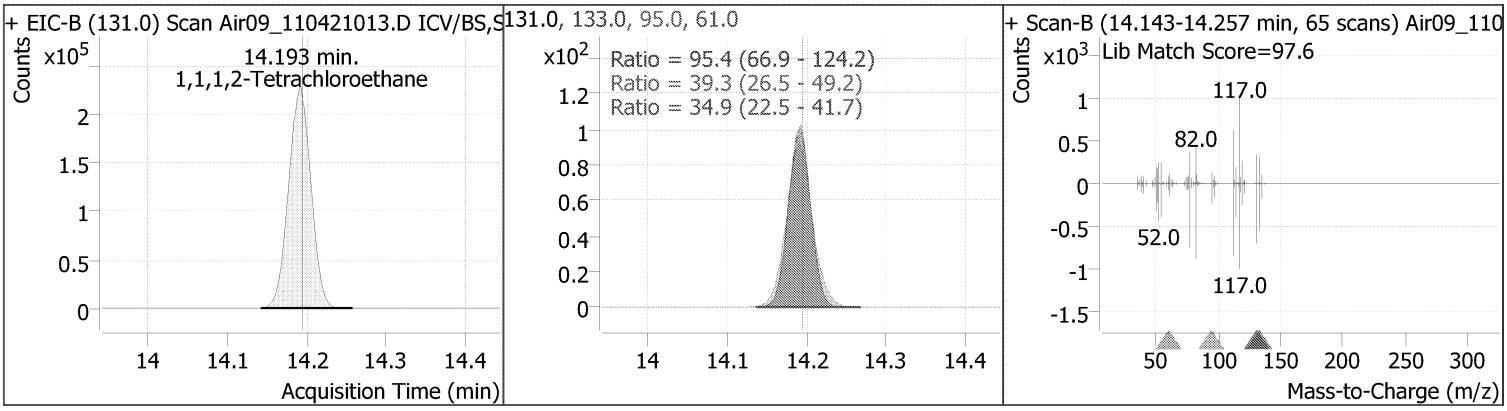
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	10.1722	13.08	0.00	549209	107.0	106.0	73.9	137.3
					93.0	7.1	4.6	8.5



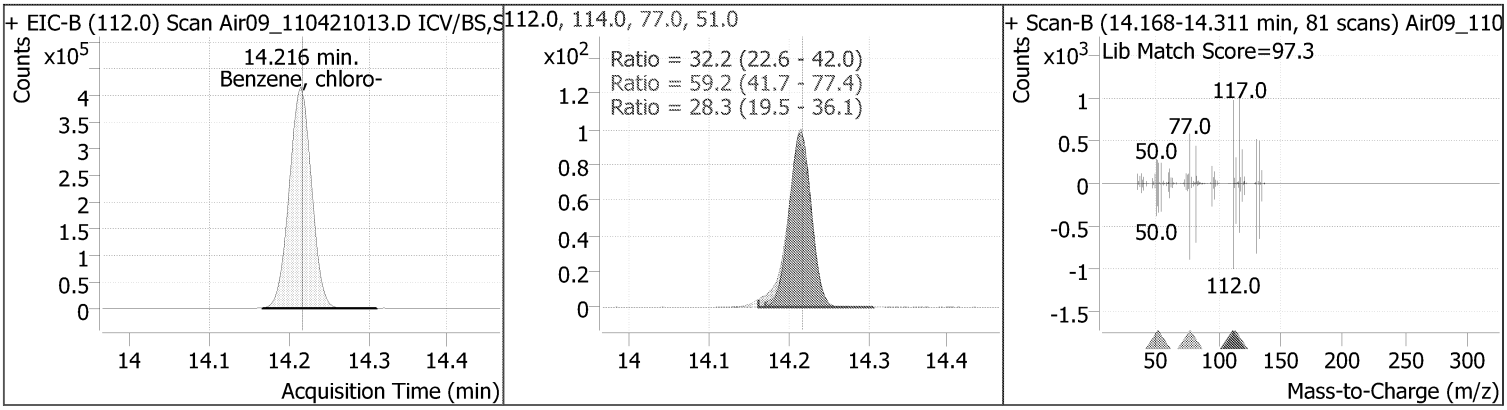
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	9.9659	13.54	0.00	535722	164.0	78.6	54.8	101.7
					129.0	72.1	52.2	96.9
					131.0	69.5	50.2	93.3
					168.0	48.1	33.8	62.7



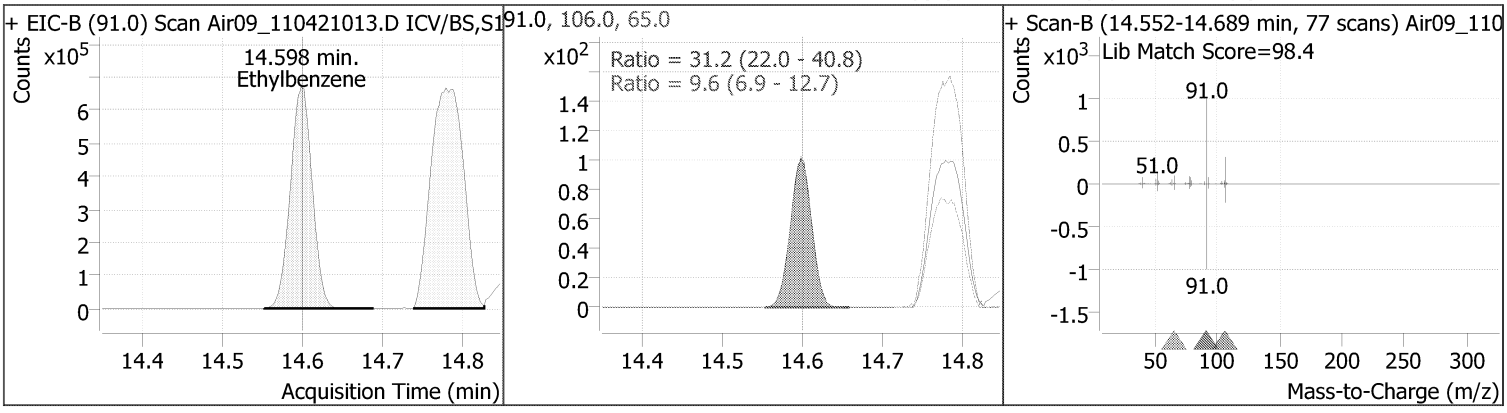
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	9.7709	14.19	0.00	446230	133.0	95.4	66.9	124.2
					95.0	39.3	26.5	49.2
					61.0	34.9	22.5	41.7



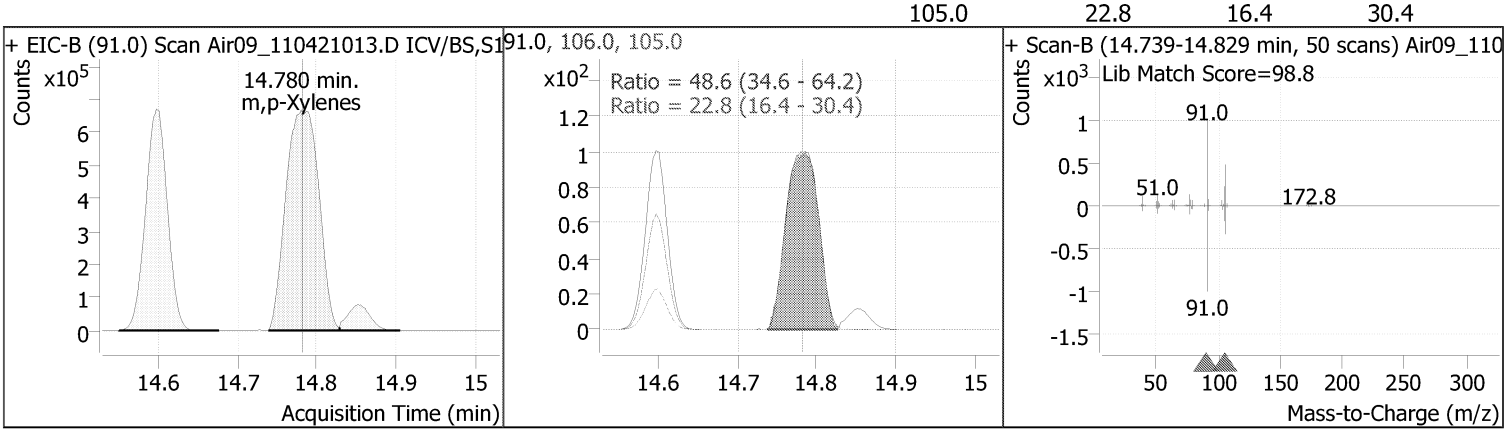
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	9.7457	14.22	0.00	811460	77.0	59.2	41.7	77.4
					114.0	32.2	22.6	42.0
					51.0	28.3	19.5	36.1



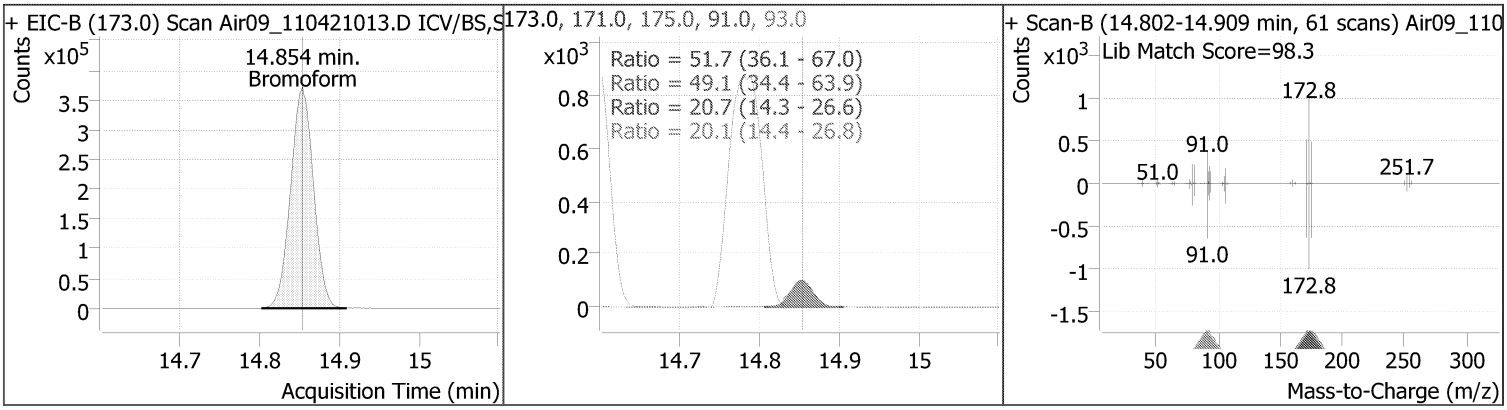
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	10.1851	14.60	0.00	1282660	106.0	31.2	22.0	40.8
					65.0	9.6	6.9	12.7



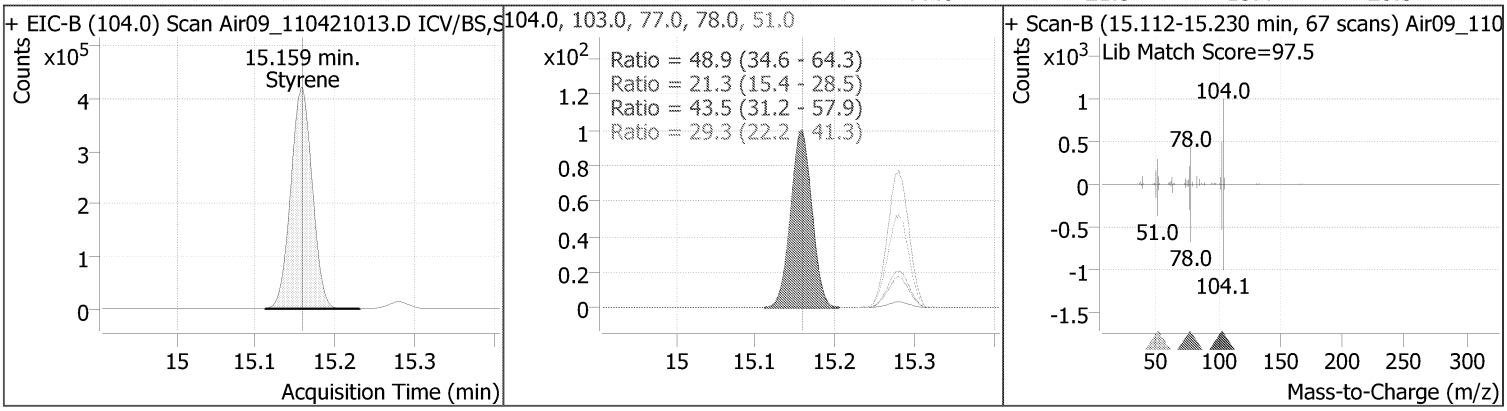
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	19.4578	14.78	0.00	1925884	106.0	48.6	34.6	64.2
					105.0	22.8	16.4	30.4



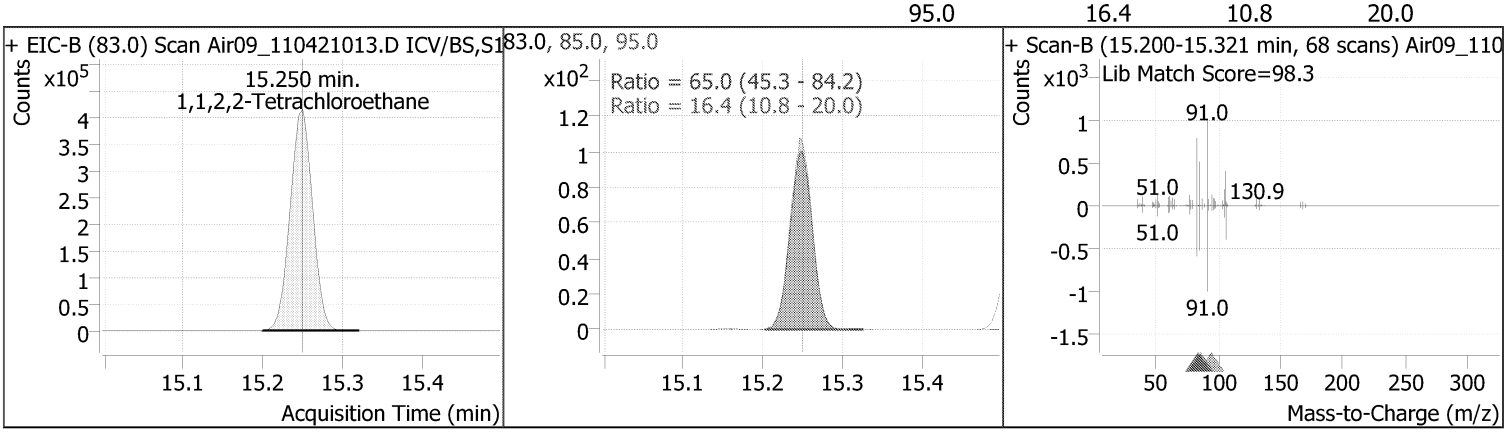
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	10.3777	14.85	0.00	742925	171.0	51.7	36.1	67.0
					175.0	49.1	34.4	63.9
					93.0	20.1	14.4	26.8
					91.0	20.7	14.3	26.6



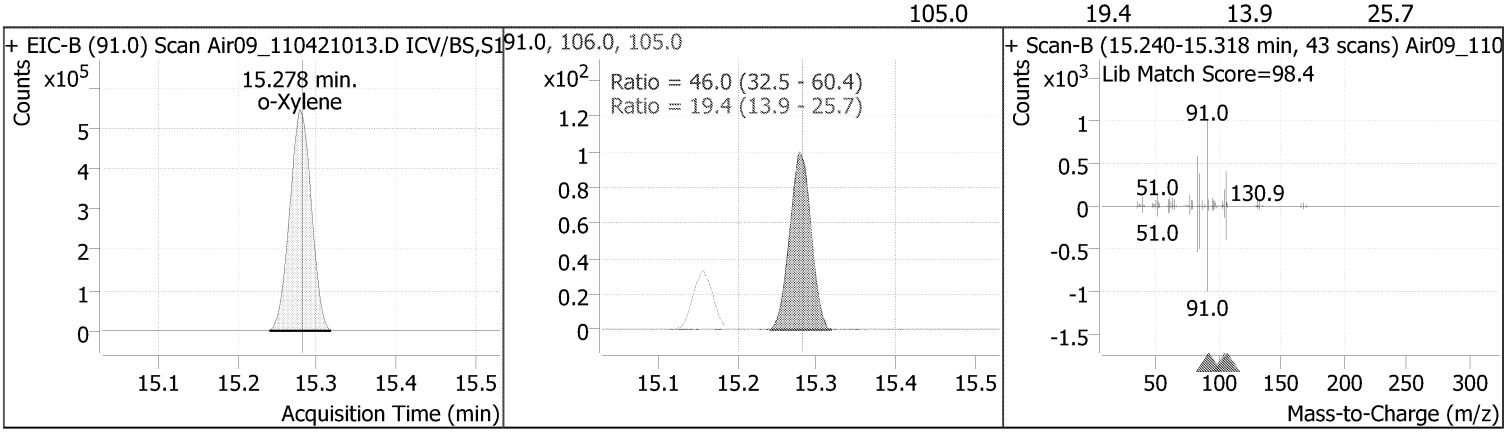
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	10.5513	15.16	0.00	796209	103.0	48.9	34.6	64.3
					78.0	43.5	31.2	57.9
					51.0	29.3	22.2	41.3
					77.0	21.3	15.4	28.5



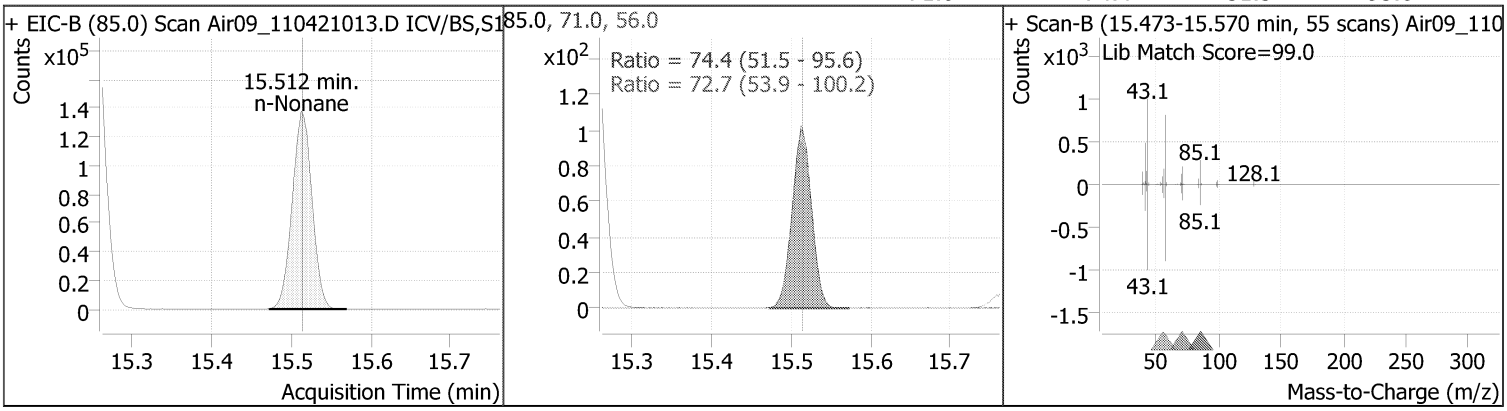
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	9.7915	15.25	0.00	814584	85.0	65.0	45.3	84.2
					95.0	16.4	10.8	20.0



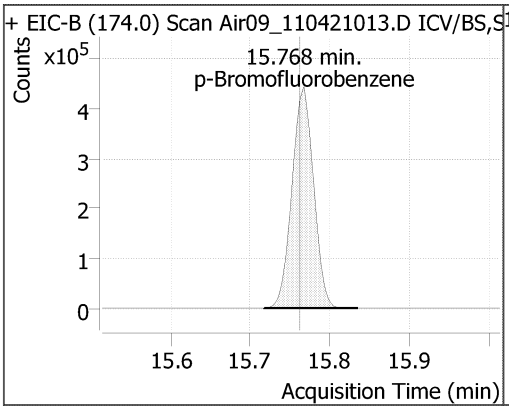
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	10.2487	15.28	0.00	1028942	106.0	46.0	32.5	60.4
					105.0	19.4	13.9	25.7

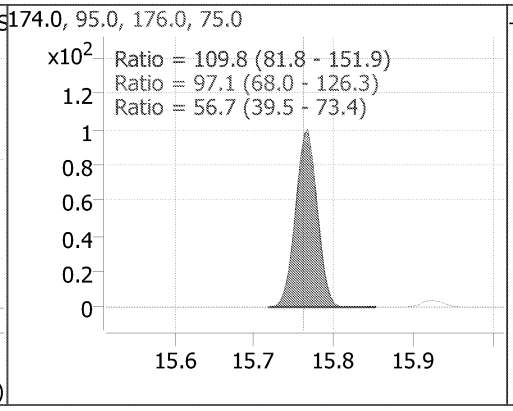


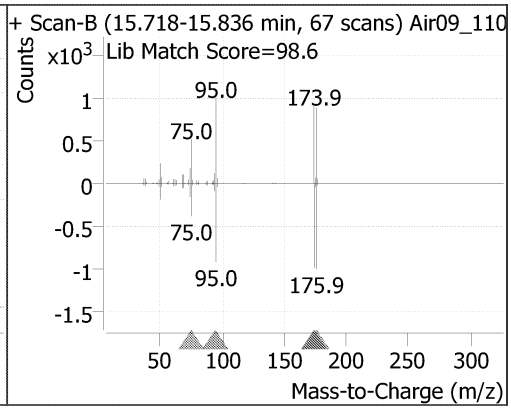
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	10.4942	15.51	0.00	238508	56.0	72.7	53.9	100.2
					71.0	74.4	51.5	95.6



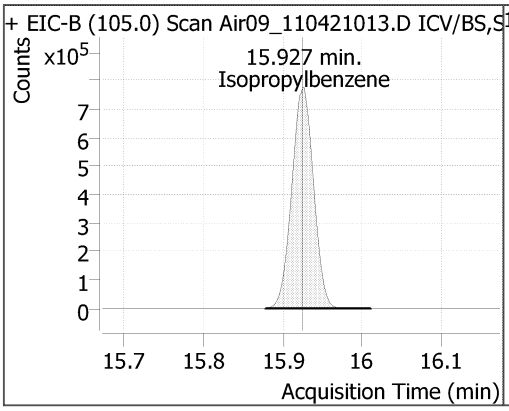
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	9.9488	15.77	0.00	841583	95.0	109.8	81.8	151.9
					176.0	97.1	68.0	126.3
					75.0	56.7	39.5	73.4

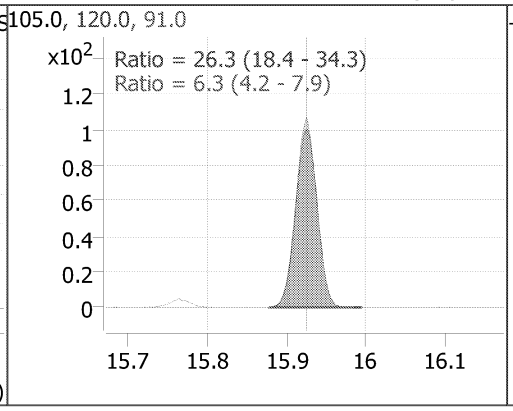


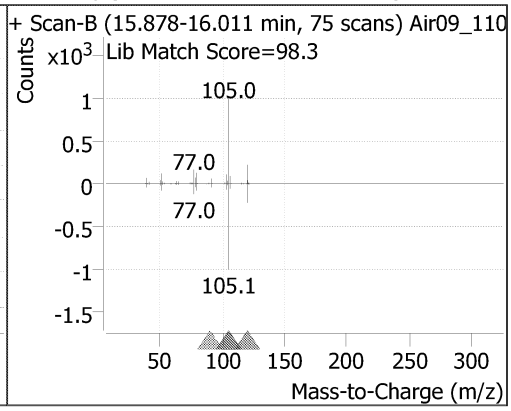




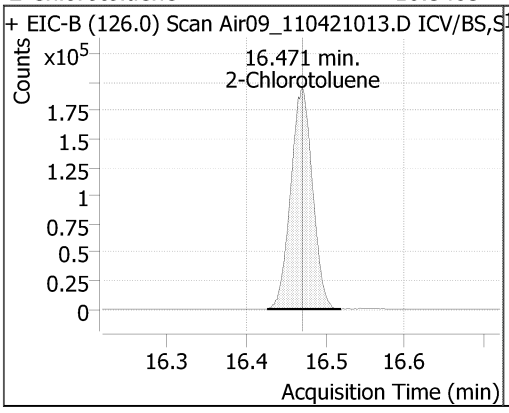
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	9.9399	15.93	0.00	1475953	120.0	26.3	18.4	34.3
					91.0	6.3	4.2	7.9

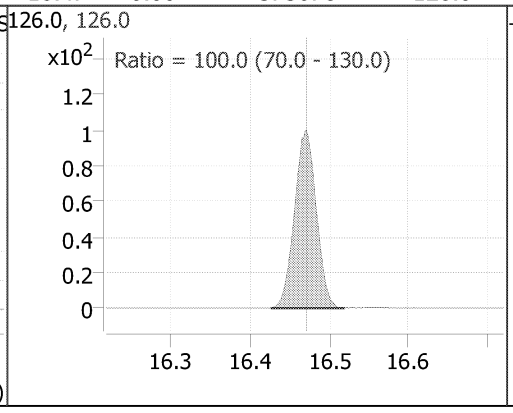


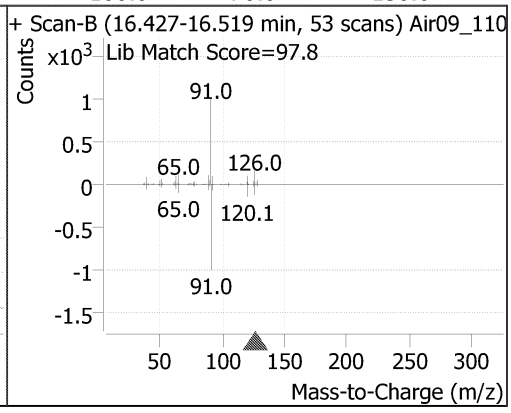




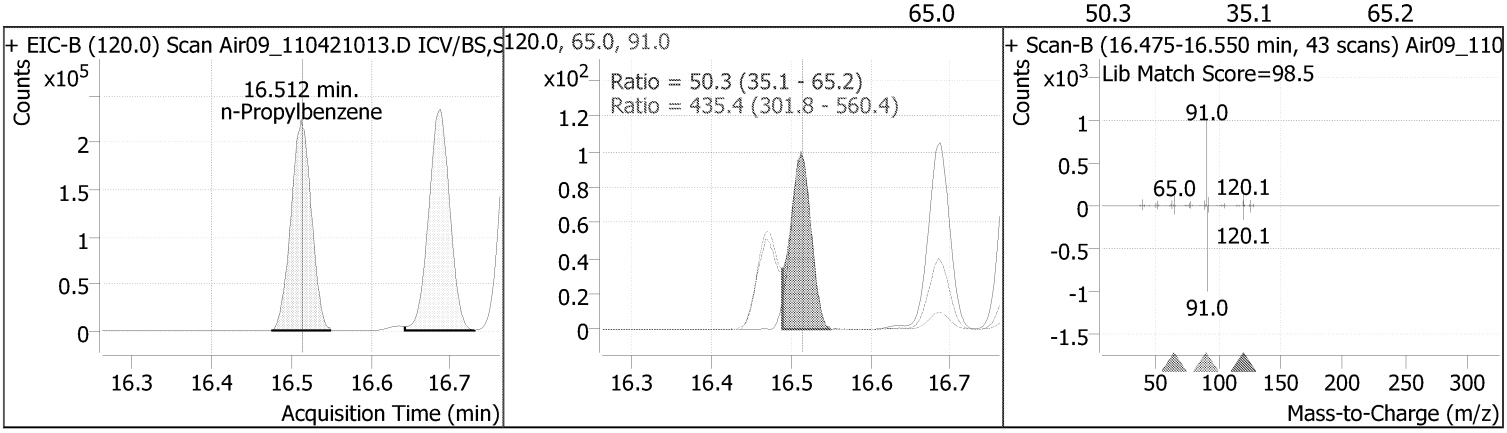
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	10.3463	16.47	0.00	373078	126.0	100.0	70.0	130.0



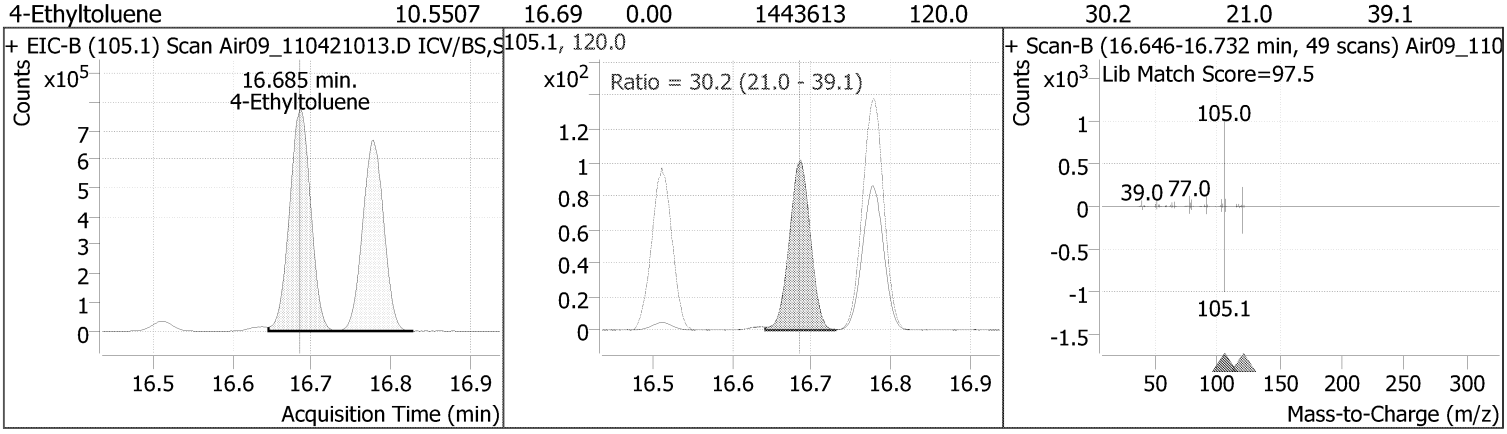




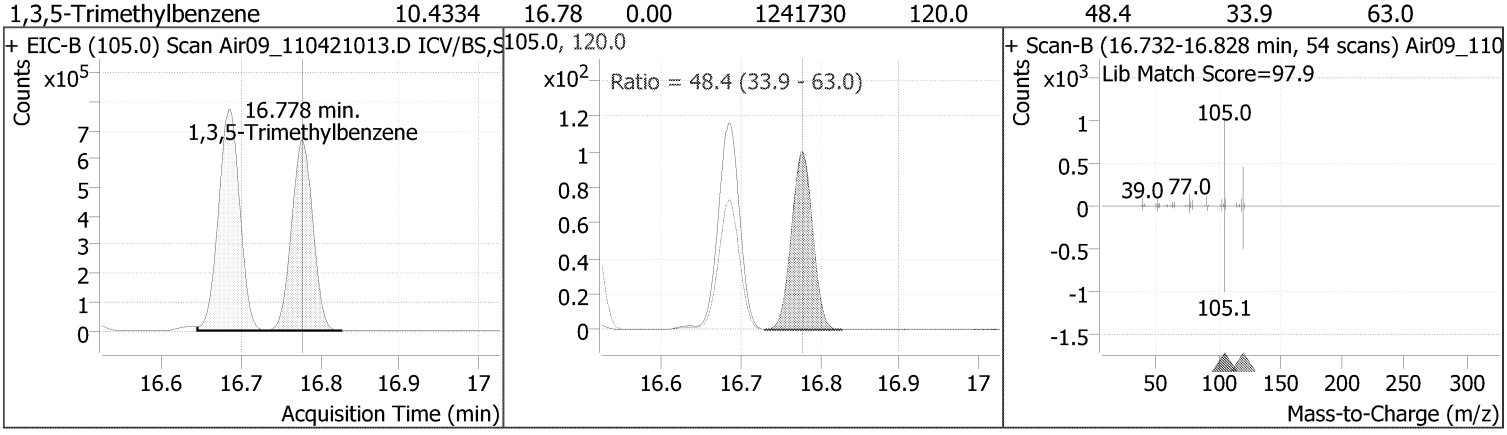
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	10.0879	16.51	0.00	400707	91.0	435.4	301.8	560.4
					65.0	50.3	35.1	65.2



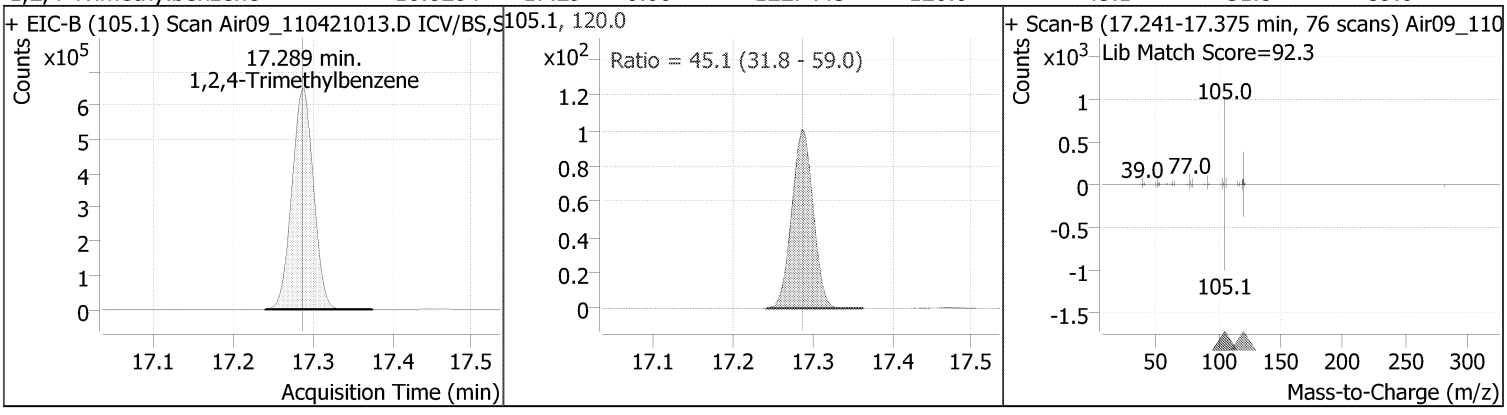
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	10.5507	16.69	0.00	1443613	120.0	30.2	21.0	39.1



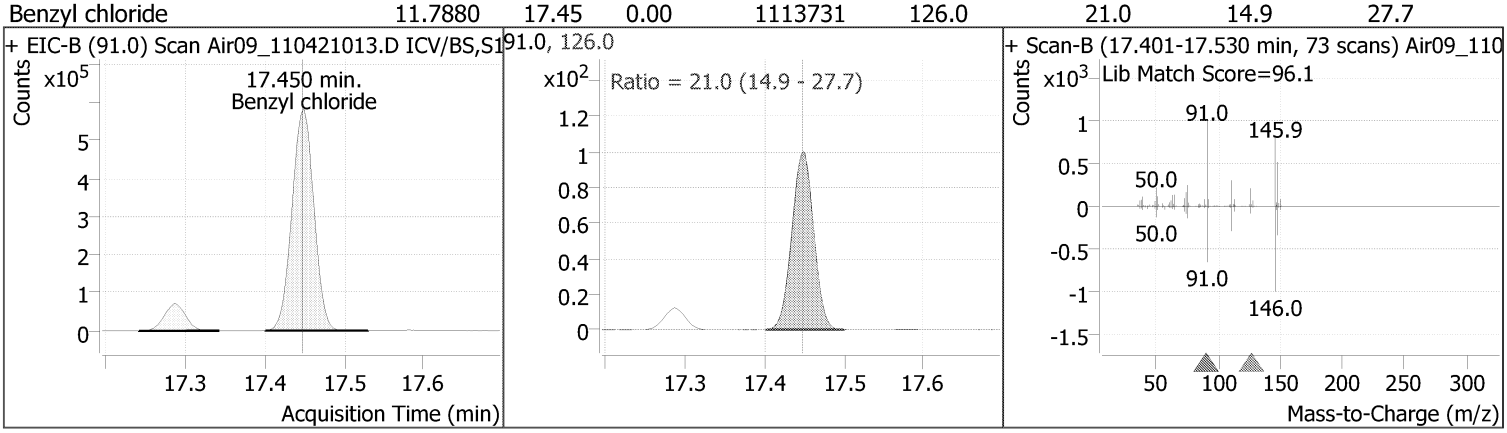
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	10.4334	16.78	0.00	1241730	120.0	48.4	33.9	63.0



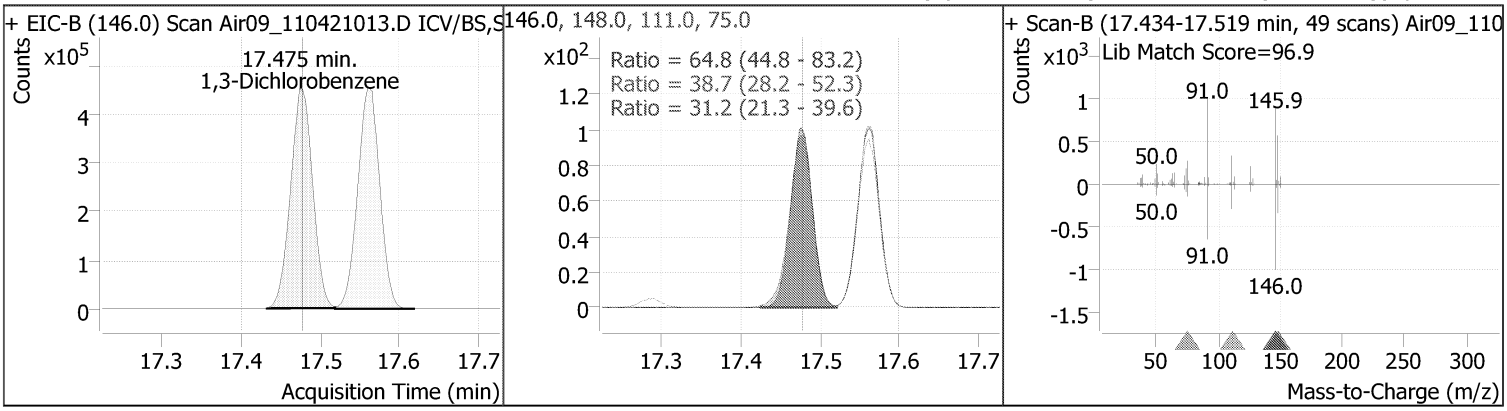
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	10.8284	17.29	0.00	1227443	120.0	45.1	31.8	59.0



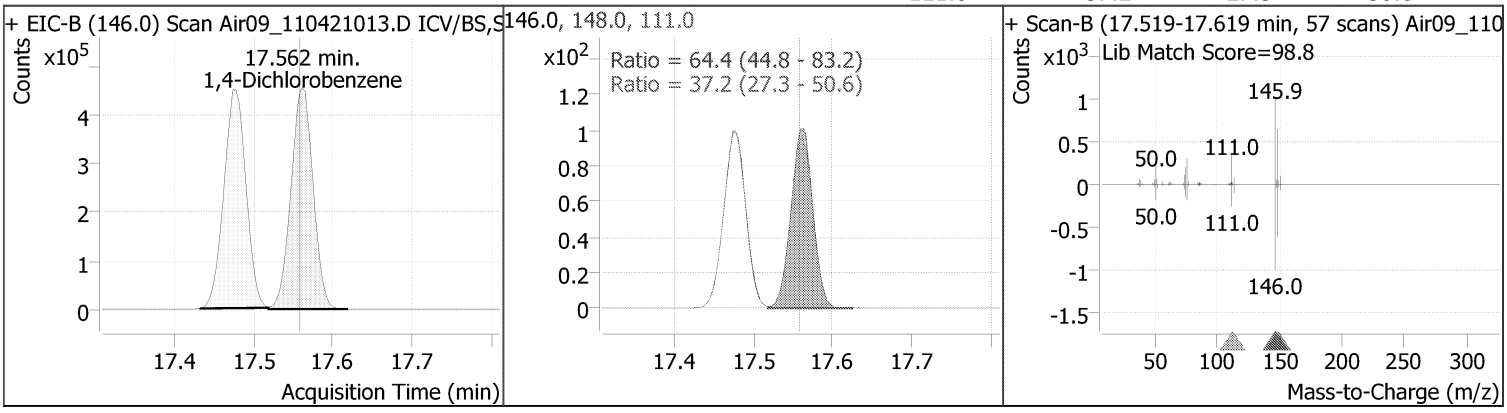
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	11.7880	17.45	0.00	1113731	126.0	21.0	14.9	27.7



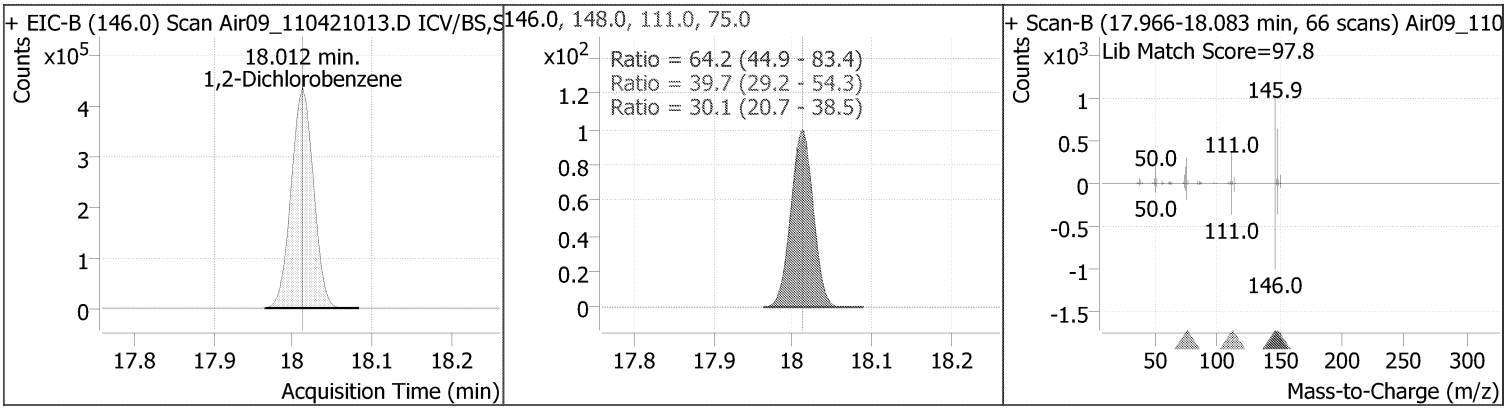
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	10.1921	17.47	0.00	877681	148.0	64.8	44.8	83.2
					111.0	38.7	28.2	52.3
					75.0	31.2	21.3	39.6



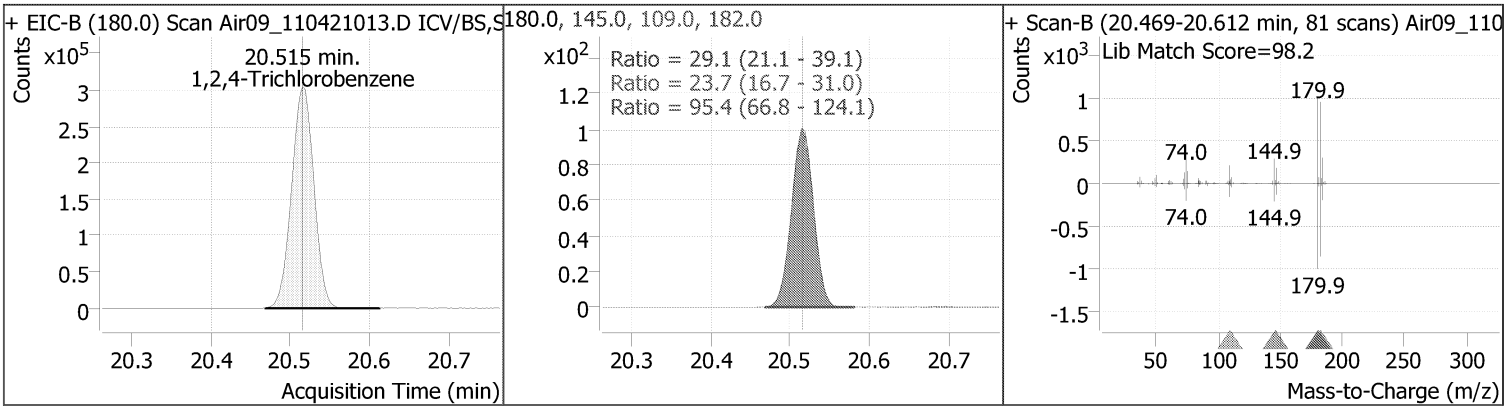
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	10.4085	17.56	0.00	882364	148.0	64.4	44.8	83.2
					111.0	37.2	27.3	50.6



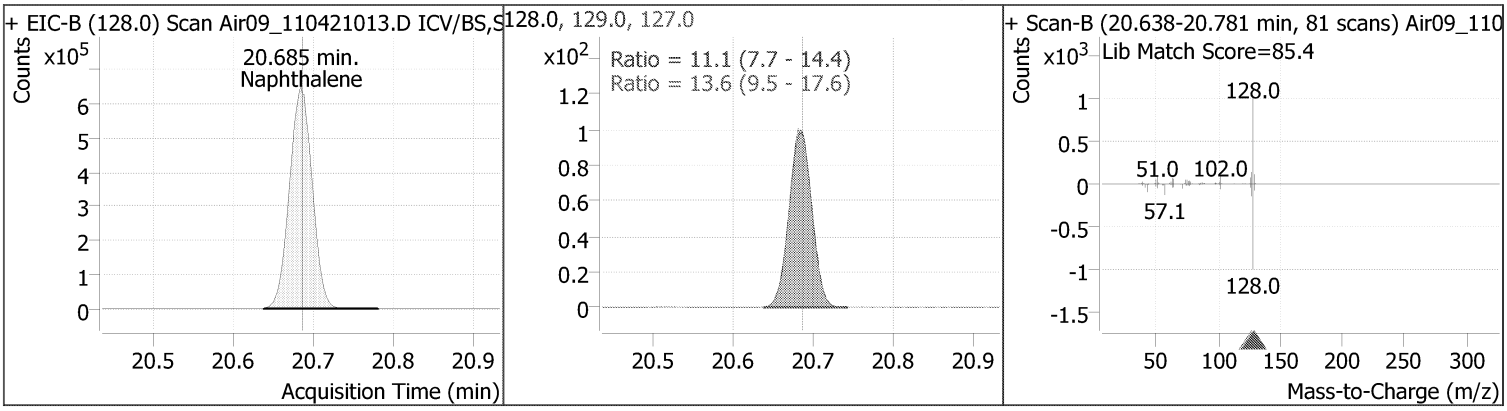
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	10.3431	18.01	0.00	846626	148.0	64.2	44.9	83.4
					111.0	39.7	29.2	54.3
					75.0	30.1	20.7	38.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	12.4133	20.52	0.00	592440	182.0	95.4	66.8	124.1
					145.0	29.1	21.1	39.1
					109.0	23.7	16.7	31.0

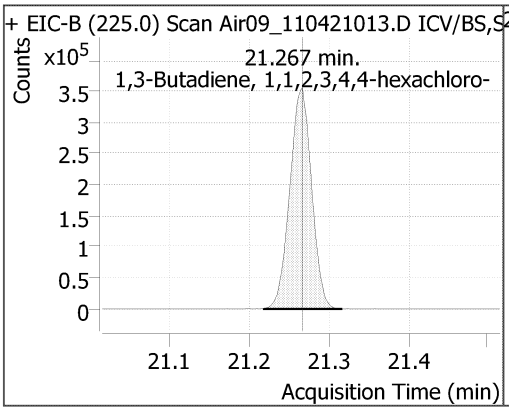


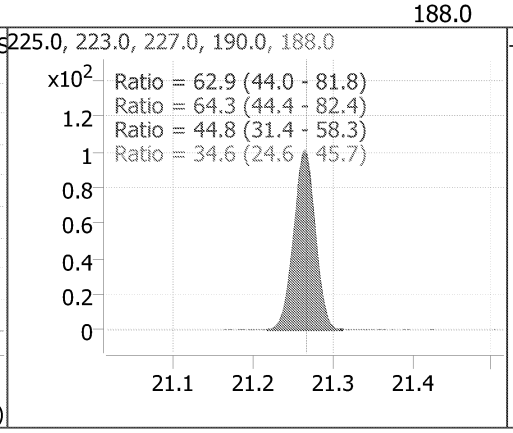
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	12.9076	20.68	0.00	1288896	127.0	13.6	9.5	17.6
					129.0	11.1	7.7	14.4

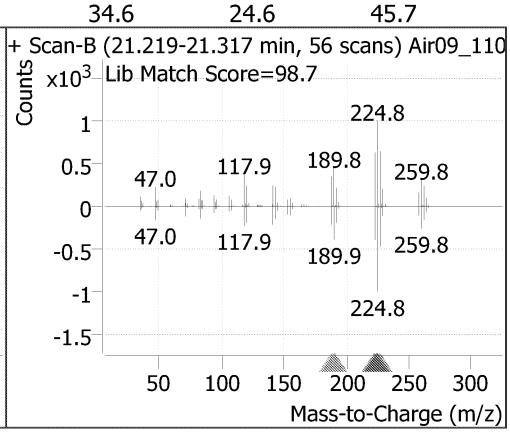


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	10.2280	21.27	0.00	677646	227.0	64.3	44.4	82.4
					223.0	62.9	44.0	81.8
					190.0	44.8	31.4	58.3
					188.0	34.6	24.6	45.7







Continuing Calibration Verification Raw Data

ENTHALPY SPIKE USER REPORT FOR 453958 MSAIR Air
EPA TO-15

Inst : AIR-MS-09 Run Name : QC958138 IDF : 1.0
Seqnum : 601481507003.2 File : air09_113021003 Time : 30-NOV-2021 11:02
Cal : 601444479001 Caldate : 04-NOV-2021
Standards: S16173 (4X), S16169 (5X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	1.9859	1.9263	10.00	9.700	nL/L	-3	30	u
Freon 114	1.6011	1.3611	10.00	8.501	nL/L	-15	30	u
Chloromethane	0.9122	0.9045	10.00	9.915	nL/L	-1	30	u
Vinyl Chloride	0.9832	0.9098	10.00	9.253	nL/L	-7	30	u
Bromomethane	0.8067	0.6722	10.00	8.333	nL/L	-17	30	u
Chloroethane	0.5182	0.4539	10.00	8.759	nL/L	-12	30	u
Trichlorofluoromethane	2.2284	2.1172	10.00	9.501	nL/L	-5	30	u
1,1-Dichloroethene	1.4497	1.4898	10.00	10.28	nL/L	3	30	u
Freon 113	1.7276	1.6527	10.00	9.566	nL/L	-4	30	u
Acetone	0.3756	0.4165	10.00	11.09	nL/L	11	30	u
Carbon Disulfide	2.0393	2.0635	10.00	10.12	nL/L	1	30	u
Isopropanol (IPA)	1.2577	1.4863	10.00	11.82	nL/L	18	30	u
Methylene Chloride	0.3576	0.3545	10.00	9.913	nL/L	-1	30	u
trans-1,2-Dichloroethene	1.1487	1.1932	10.00	10.39	nL/L	4	30	u
MTBE	1.9983	2.1649	10.00	10.83	nL/L	8	30	u
n-Hexane	1.2704	1.3799	10.00	10.86	nL/L	9	30	u
1,1-Dichloroethane	1.5104	1.5666	10.00	10.37	nL/L	4	30	u
Vinyl Acetate	2.0192	2.3599	10.00	11.69	nL/L	17	30	u
cis-1,2-Dichloroethene	1.1799	1.2371	10.00	10.48	nL/L	5	30	u
2-Butanone	0.3591	0.3773	10.00	10.51	nL/L	5	30	u
Chloroform	1.7416	1.6077	10.00	9.231	nL/L	-8	30	u
1,1,1-Trichloroethane	1.7007	1.6570	10.00	9.743	nL/L	-3	30	u
Carbon Tetrachloride	1.7819	1.7265	10.00	9.689	nL/L	-3	30	u
Benzene	2.2841	2.2795	10.00	9.980	nL/L	0	30	u
1,2-Dichloroethane	1.2547	1.2468	10.00	9.937	nL/L	-1	30	u
Trichloroethene	0.2863	0.2833	10.00	9.894	nL/L	-1	30	u
1,2-Dichloropropane	0.2646	0.2788	10.00	10.53	nL/L	5	30	u
Bromodichloromethane	0.4834	0.4792	10.00	9.913	nL/L	-1	30	u
cis-1,3-Dichloropropene	0.0807	0.0852	10.00	10.56	nL/L	6	30	u
4-Methyl-2-Pentanone	0.1940	0.2093	10.00	10.79	nL/L	8	30	u
Toluene	0.7634	0.7810	10.00	10.23	nL/L	2	30	u
trans-1,3-Dichloropropene	0.0813	0.0856	10.00	10.53	nL/L	5	30	u
1,1,2-Trichloroethane	0.2702	0.2659	10.00	9.843	nL/L	-2	30	u
Tetrachloroethene	0.4104	0.3933	10.00	9.583	nL/L	-4	30	u
2-Hexanone	0.2516	0.2882	10.00	11.45	nL/L	15	30	u
Dibromochloromethane	0.5050	0.5066	10.00	10.03	nL/L	0	30	u
1,2-Dibromoethane	0.4122	0.4152	10.00	10.07	nL/L	1	30	u
Chlorobenzene	1.1605	1.0958	10.00	9.443	nL/L	-6	30	u
Ethylbenzene	1.7552	1.7588	10.00	10.02	nL/L	0	30	u
m,p-Xylenes	1.3795	1.4159	20.00	20.53	nL/L	3	30	u
o-Xylene	1.3993	1.4056	10.00	10.05	nL/L	0	30	u
Styrene	1.0517	1.0647	10.00	10.12	nL/L	1	30	u
Bromoform	0.9977	0.9763	10.00	9.785	nL/L	-2	30	u
1,1,2,2-Tetrachloroethane	1.1595	1.1414	10.00	9.844	nL/L	-2	30	u
1,1,1,2-Tetrachloroethane	0.6365	0.6028	10.00	9.471	nL/L	-5	30	u
4-Ethyltoluene	1.9070	1.9722	10.00	10.34	nL/L	3	30	u
1,3,5-Trimethylbenzene	1.6587	1.6866	10.00	10.17	nL/L	2	30	u
1,2,4-Trimethylbenzene	1.5798	1.6507	10.00	10.45	nL/L	4	30	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
1,3-Dichlorobenzene	1.2002	1.1417	10.00	9.513	nL/L	-5	30	u
1,4-Dichlorobenzene	1.1815	1.1423	10.00	9.668	nL/L	-3	30	u
Benzyl chloride	1.3168	1.4795	10.00	11.24	nL/L	12	30	u
1,2-Dichlorobenzene	1.1408	1.1030	10.00	9.669	nL/L	-3	30	u
1,2,4-Trichlorobenzene	0.6652	0.7002	10.00	10.53	nL/L	5	30	!v+ u
Hexachlorobutadiene	0.9234	0.8163	10.00	8.840	nL/L	-12	30	u
Bromofluorobenzene	1.1790	1.1035	10.00	9.360	nL/L	-6	30	u

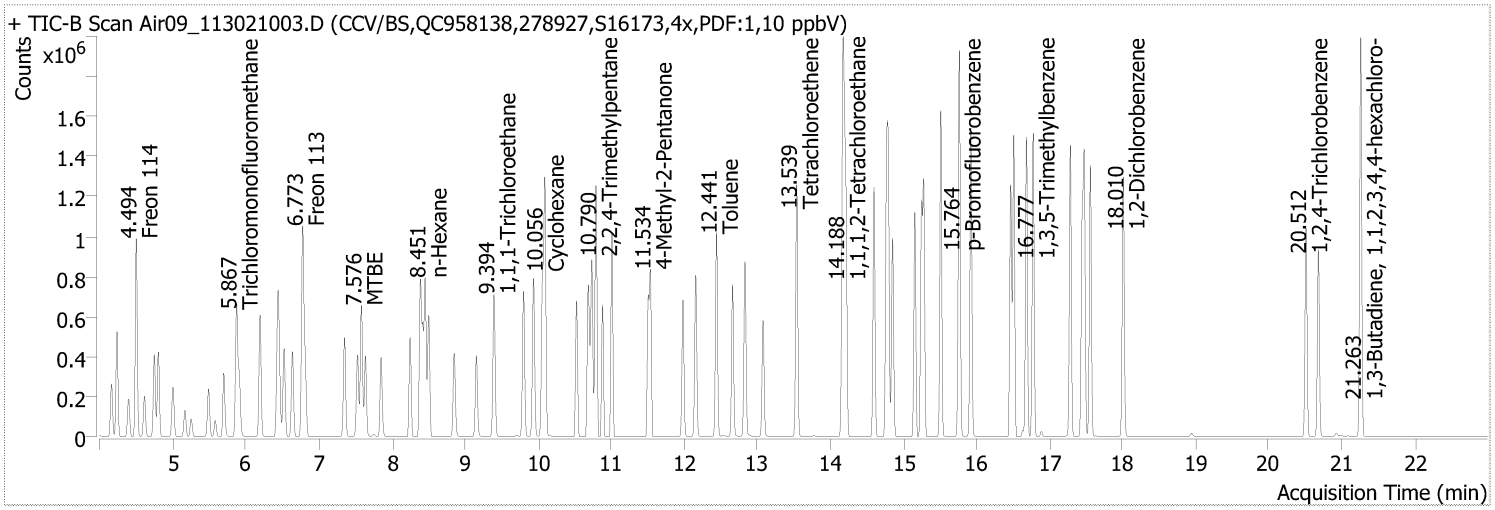
ISTD (ICAL air09_110421009)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	352446	273008	-22.54	8.39	8.38	-0.01
1,4-Difluorobenzene	1303208	997617	-23.45	10.09	10.09	0.00
Chlorobenzene-d5	712397	554740	-22.13	14.17	14.17	0.00

Analyst: ZNZ Date: 12/08/21 Reviewer: SLL Date: 12/08/21

!=warning +=high bias u=use v=ICV

Quantitation Results Report (Not Reviewed)

Data File	Air09_113021003.D	Operator	ZNZ
Acq. Method	TO15_Acq_210707_2	Acq. Date-Time	11/30/2021 11:02:29 AM
Sample Name	CCV/BS,QC958138,278927,S16173,4x,PDF:1,10 ppbV	Instrument	AIR-MS-09
Vial	5	Multiplier	1.00
DA Method File	TO15_SCAN_110421_1.m	Comment	1x100mL
Tune File	bfb.u	Tune Date	11/30/2021 10:19:00 AM
Batch Name	2021 Nov 30 0849 TO15_SCAN_110421_1.m.batch.bin	Last Calib Update	11/5/2021 9:40:22 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\210621\MS09_062121_TO15_1.reflibrary.xml		



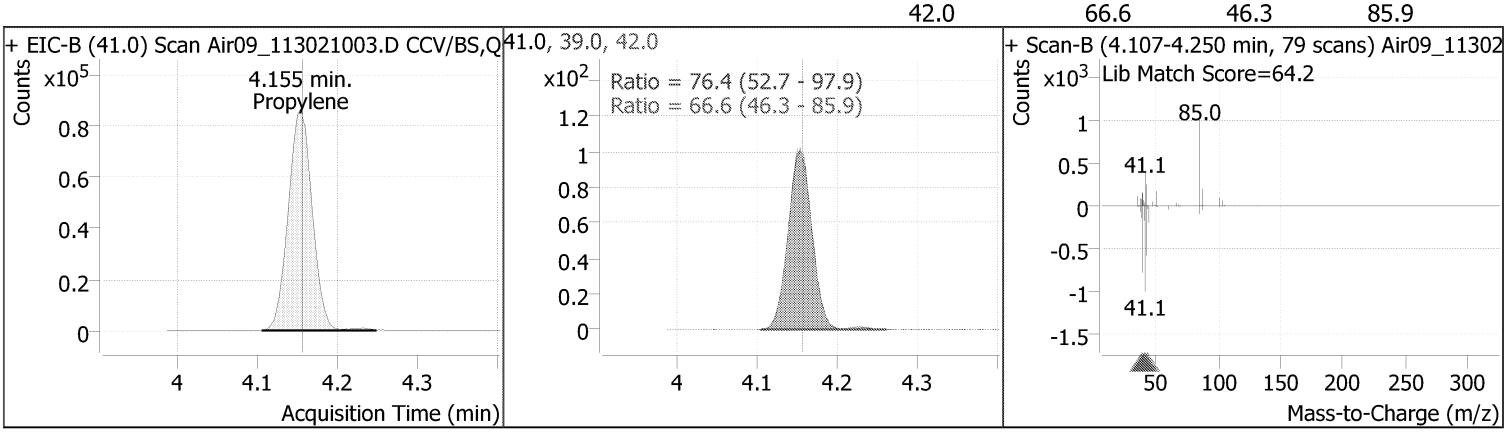
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
Internal Standards						
M Bromochloromethane	8.385	130.0	273008	10.0000	nL/L	-0.005
M 1,4-Difluorobenzene	10.090	114.0	997617	10.0000	nL/L	-0.003
M Chlorobenzene-d5	14.170	82.0	554740	10.0000	nL/L	-0.002
System Monitoring Compounds						
S p-Bromofluorobenzene	15.764	174.0	612144	9.3597	nL/L	0.000
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 93.60%		
Target Compounds						QValue
T Propylene	4.155	41.0	179830	11.1024	nL/L	99
T Freon 12	4.230	85.0	525905	9.7000	nL/L	100
T Chloromethane	4.385	50.0	246929	9.9149	nL/L	99
T Freon 114	4.494	135.0	371590	8.5013	nL/L	96
T Vinyl Chloride	4.605	62.0	248384	9.2533	nL/L	100
T 1,3-Butadiene	4.741	54.0	209956	9.8072	nL/L	97
T Butane	4.798	43.0	432910	9.9216	nL/L	99
T Bromomethane	4.996	96.0	183526	8.3327	nL/L	100
T Chloroethane	5.160	64.0	123909	8.7588	nL/L	98
T Ethanol	5.244	45.0	113424	9.2823	nL/L	99
T Vinyl bromide	5.483	108.0	182689	9.8402	nL/L	99
T Acrolein	5.575	56.0	74299	9.5974	nL/L	100
T Acetone	5.691	58.0	113714	11.0900	nL/L	97
T Trichloromonofluoromethane	5.867	101.0	578013	9.5009	nL/L	100
T Isopropanol (IPA)	5.903	45.0	405761	11.8169	nL/L	97
T n-Pentane	6.187	43.0	449652	11.3479	nL/L	99
T 1,1-Dichloroethene	6.428	61.0	406713	10.2761	nL/L	99
T Tert-butyl alcohol (TBA)	6.448	59.0	471829	11.3200	nL/L	97
T Methylene Chloride	6.519	51.0	96777	9.9129	nL/L	96
T 3-Chloropropene	6.632	76.0	90141	10.7128	nL/L	100
T Freon 113	6.773	101.0	451196	9.5665	nL/L	99

Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
T Carbon Disulfide	6.806	76.0	563362	10.1188	nL/L	96
T trans-1,2-Dichloroethene	7.346	61.0	325752	10.3873	nL/L	99
T 1,1-Dichloroethane	7.524	63.0	427687	10.3721	nL/L	100
T MTBE	7.576	73.0	591024	10.8334	nL/L	97
T Vinyl Acetate	7.631	43.0	644280	11.6872	nL/L	99
T 2-Butanone	7.846	72.0	102996	10.5064	nL/L	97
T cis-1,2-Dichloroethene	8.244	61.0	337728	10.4846	nL/L	100
T Ethyl Acetate	8.419	61.0	80003	10.7652	nL/L	98
T n-Hexane	8.451	57.0	376737	10.8624	nL/L	96
T Chloroform	8.499	83.0	438904	9.2309	nL/L	99
T Tetrahydrofuran	8.847	72.0	94917	10.6307	nL/L	98
T 1,2-Dichloroethane	9.151	62.0	340397	9.9370	nL/L	99
T 1,1,1-Trichloroethane	9.394	97.0	452378	9.7433	nL/L	99
T Benzene	9.797	78.0	622324	9.9798	nL/L	100
T Carbon Tetrachloride	9.935	117.0	471340	9.6891	nL/L	99
T TPH Gasoline (C3 to C12)	9.997	0.0	68936076	19.0492	nL/L	100
T Cyclohexane	10.056	84.0	259986	10.2258	nL/L	97
T 1,2-Dichloropropane	10.522	63.0	278116	10.5345	nL/L	99
T Methane, bromodichloro-	10.681	83.0	478051	9.9127	nL/L	99
T 1,4-Dioxane	10.704	88.0	141247	10.3960	nL/L	81
T Trichloroethene	10.731	132.0	282577	9.8942	nL/L	99
T 2,2,4-Trimethylpentane	10.790	56.0	377204	10.9220	nL/L	96
T Methyl methacrylate	10.879	69.0	236875	10.7183	nL/L	88
T n-Heptane	11.008	71.0	222917	10.7176	nL/L	95
T cis-1,3-Dichloropropene	11.506	110.0	85045	10.5646	nL/L	94
T 4-Methyl-2-Pentanone	11.534	58.0	208809	10.7896	nL/L	99
T trans-1,3-Dichloropropene	11.981	110.0	85368	10.5271	nL/L	92
T 1,1,2-Trichloroethane	12.154	97.0	265289	9.8426	nL/L	98
T Toluene	12.441	91.0	779127	10.2298	nL/L	100
T 2-Hexanone	12.659	58.0	287476	11.4538	nL/L	100
T Dibromochloromethane	12.829	129.0	505389	10.0313	nL/L	99
T 1,2-Dibromoethane	13.075	108.9	414163	10.0715	nL/L	100
T Tetrachloroethene	13.539	166.0	392352	9.5830	nL/L	100
T 1,1,1,2-Tetrachloroethane	14.188	131.0	334425	9.4713	nL/L	98
T Benzene, chloro-	14.214	112.0	607892	9.4429	nL/L	98
T Ethylbenzene	14.596	91.0	975659	10.0204	nL/L	100
T m,p-Xylenes	14.780	91.0	1570875	20.5277	nL/L	99
T Bromoform	14.850	173.0	541569	9.7846	nL/L	99
T Styrene	15.155	104.0	590650	10.1238	nL/L	99
T 1,1,2,2-Tetrachloroethane	15.246	83.0	633164	9.8438	nL/L	100
T o-Xylene	15.275	91.0	779732	10.0452	nL/L	99
T n-Nonane	15.511	85.0	186970	10.6403	nL/L	98
T Isopropylbenzene	15.923	105.0	1119764	9.7538	nL/L	100
T 2-Chlorotoluene	16.466	126.0	279691	10.0323	nL/L	100
T n-Propylbenzene	16.509	120.0	304535	9.9162	nL/L	93
T 4-Ethyltoluene	16.684	105.1	1094078	10.3422	nL/L	100
T 1,3,5-Trimethylbenzene	16.777	105.0	935627	10.1680	nL/L	100
T 1,2,4-Trimethylbenzene	17.285	105.1	915726	10.4487	nL/L	100
T Benzyl chloride	17.446	91.0	820739	11.2357	nL/L	99
T 1,3-Dichlorobenzene	17.475	146.0	633363	9.5130	nL/L	99
T 1,4-Dichlorobenzene	17.559	146.0	633662	9.6679	nL/L	99
T 1,2-Dichlorobenzene	18.010	146.0	611891	9.6687	nL/L	99
T 1,2,4-Trichlorobenzene	20.512	180.0	388434	10.5267	nL/L	100
T Naphthalene	20.681	128.0	847966	10.9836	nL/L	100
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.263	225.0	452841	8.8404	nL/L	100

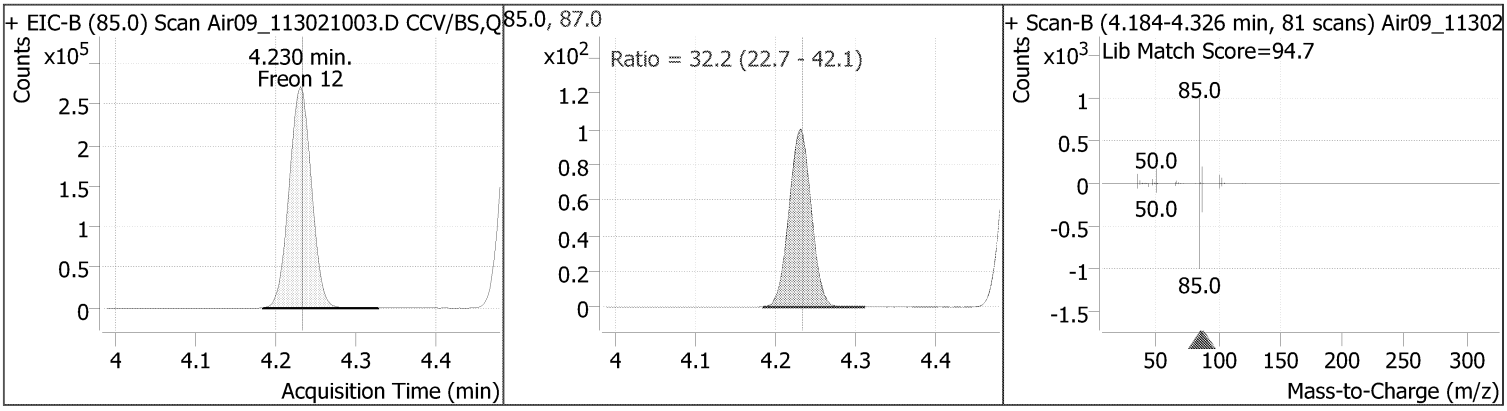
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

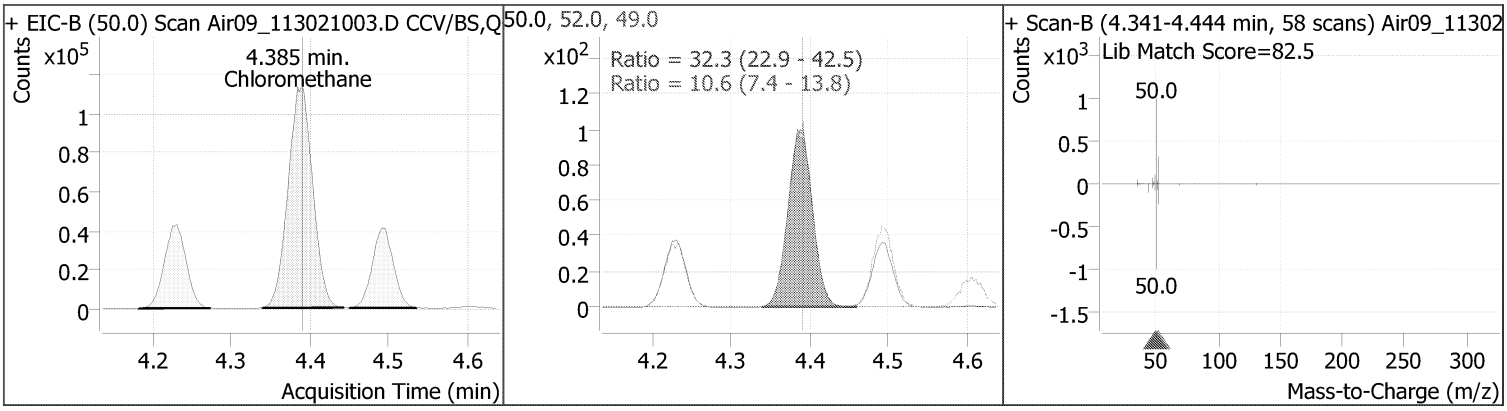
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	11.1024	4.16	0.00	179830	39.0	76.4	52.7	97.9
					42.0	66.6	46.3	85.9



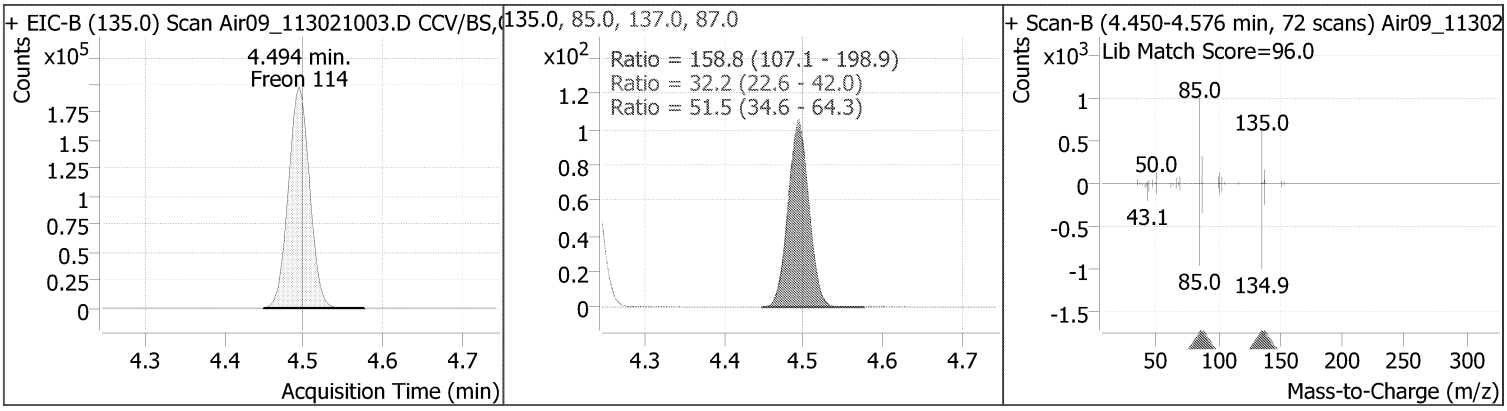
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	9.7000	4.23	0.00	525905	87.0	32.2	22.7	42.1



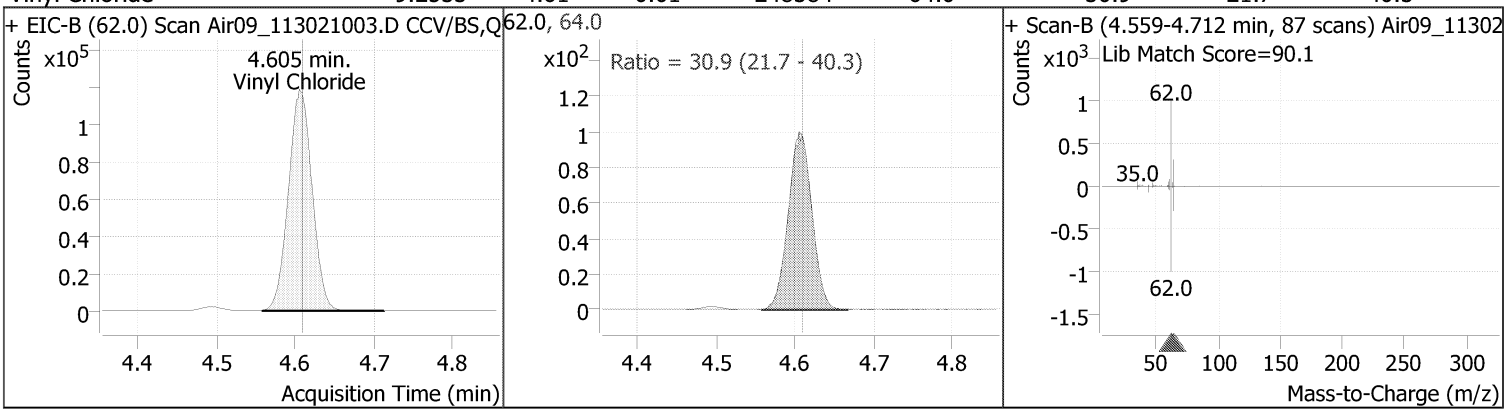
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	9.9149	4.39	-0.01	246929	52.0	32.3	22.9	42.5
					49.0	10.6	7.4	13.8



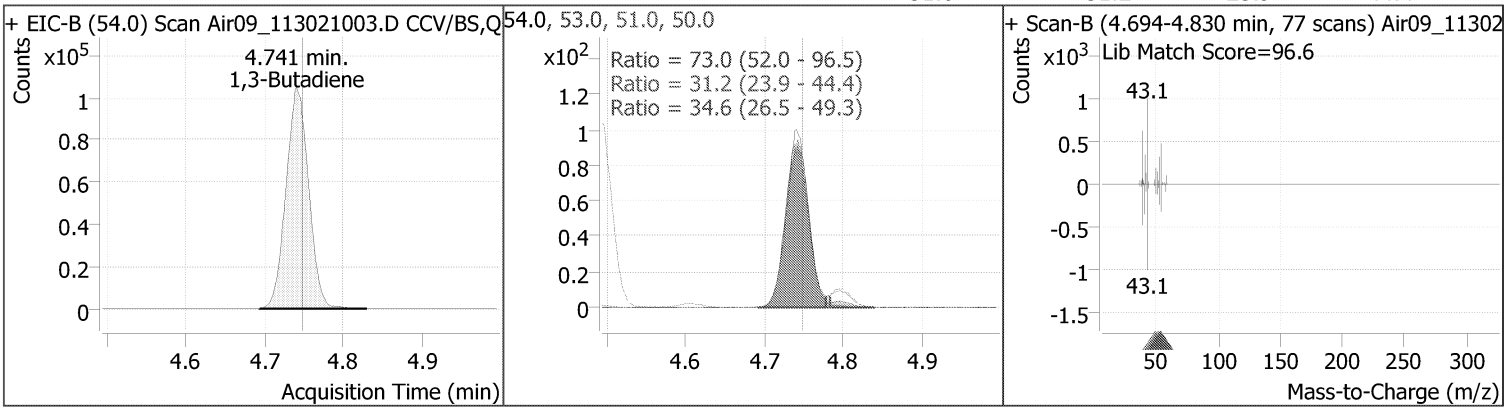
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	8.5013	4.49	-0.01	371590	85.0	158.8	107.1	198.9
					87.0	51.5	34.6	64.3
					137.0	32.2	22.6	42.0



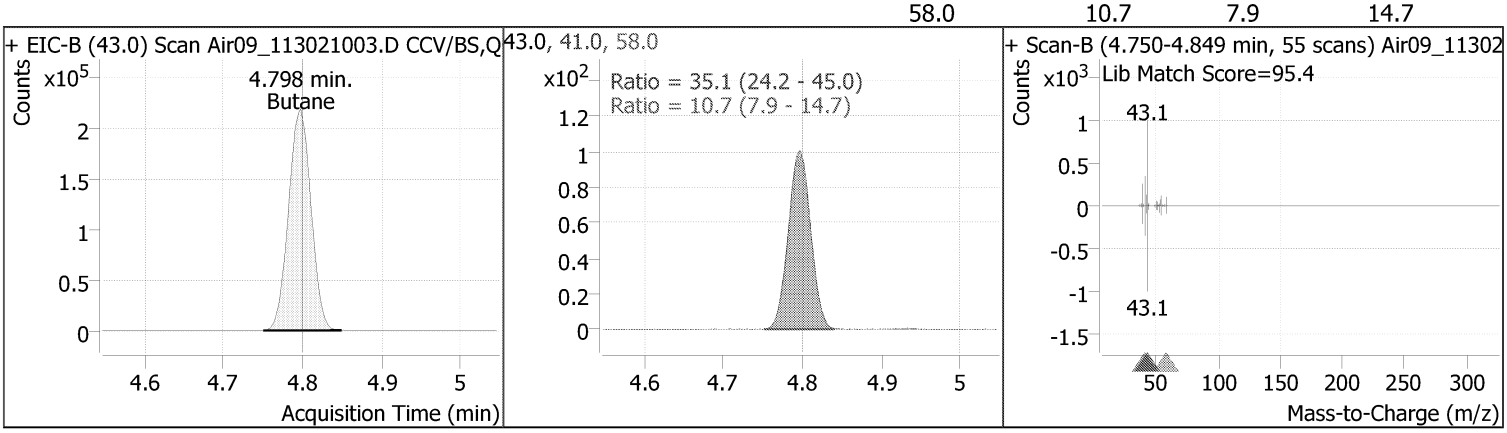
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	9.2533	4.61	-0.01	248384	64.0	30.9	21.7	40.3



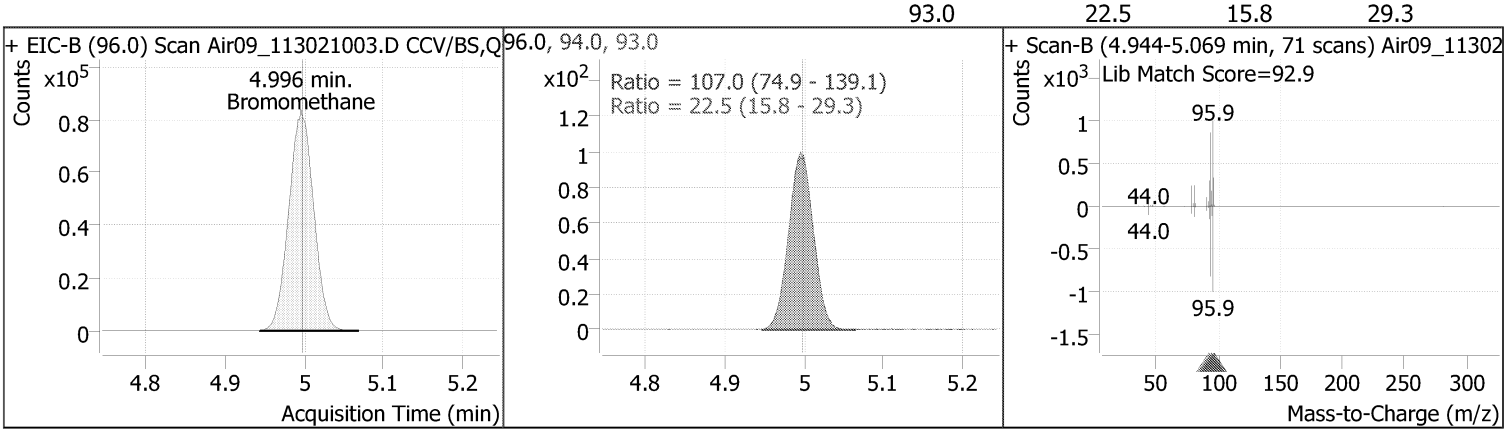
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	9.8072	4.74	-0.01	209956	53.0	73.0	52.0	96.5
					50.0	34.6	26.5	49.3
					51.0	31.2	23.9	44.4



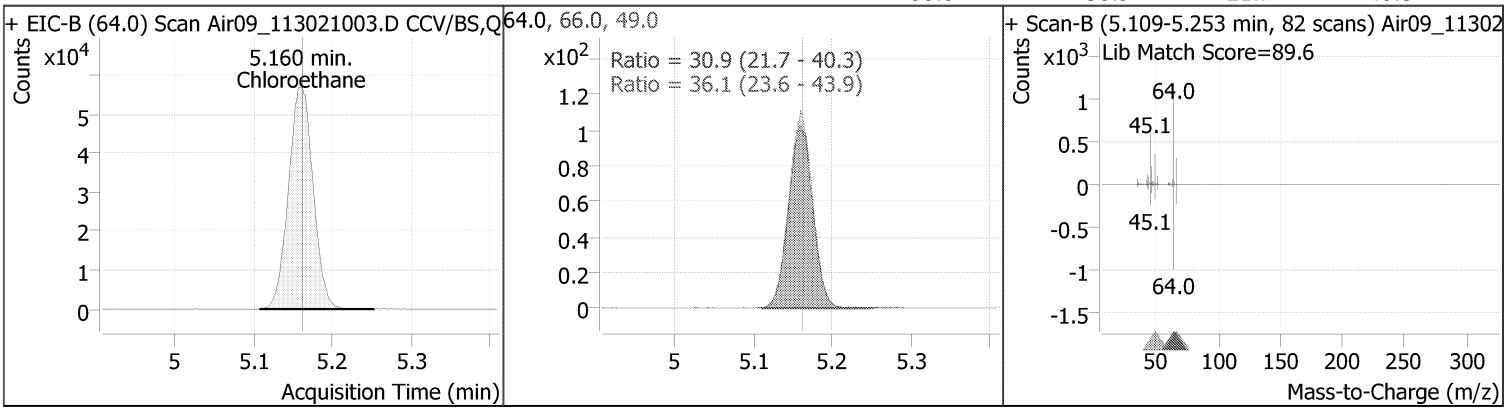
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	9.9216	4.80	0.00	432910	41.0	35.1	24.2	45.0
					58.0	10.7	7.9	14.7



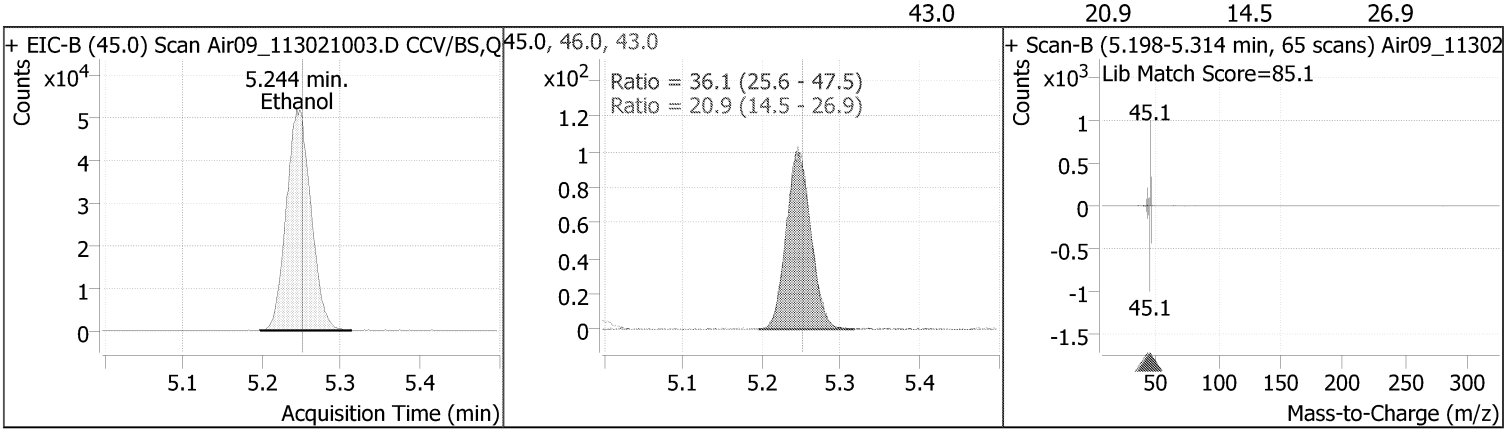
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromomethane	8.3327	5.00	0.00	183526	94.0	107.0	74.9	139.1
					93.0	22.5	15.8	29.3



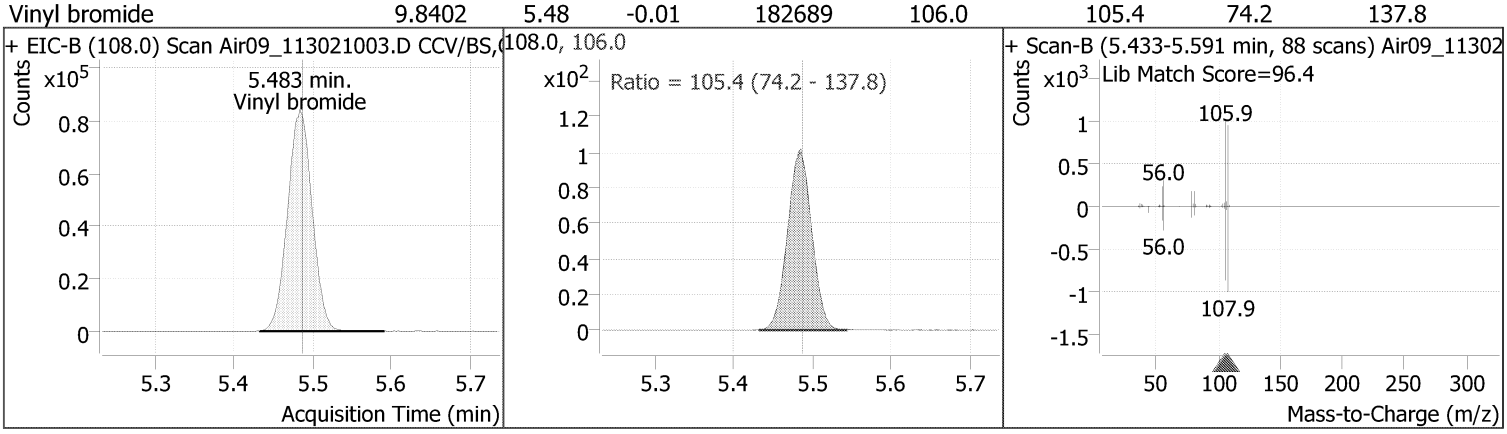
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	8.7588	5.16	0.00	123909	49.0	36.1	23.6	43.9
					66.0	30.9	21.7	40.3



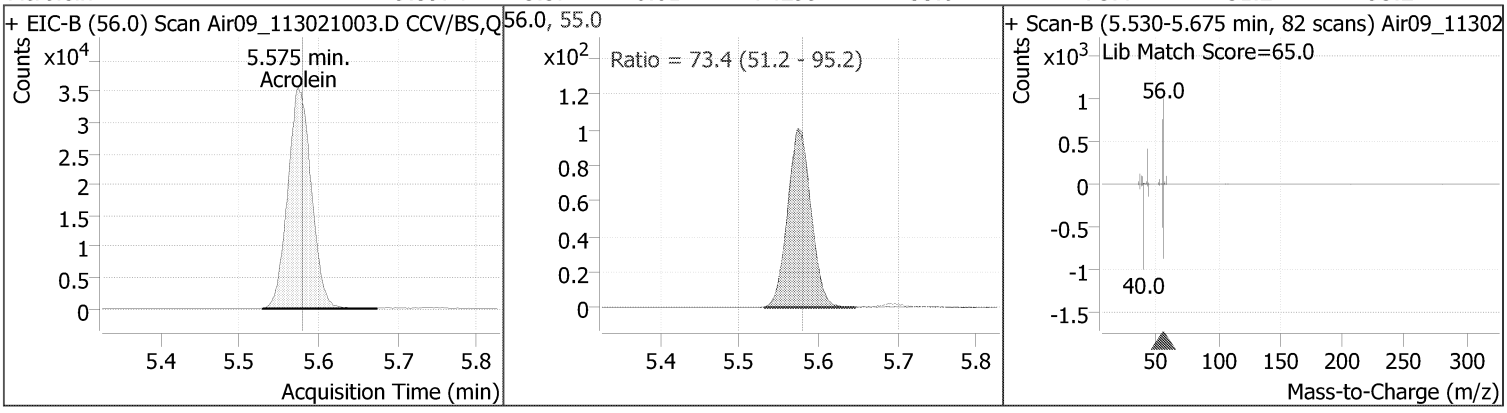
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	9.2823	5.24	-0.01	113424	46.0	36.1	25.6	47.5
					43.0	20.9	14.5	26.9



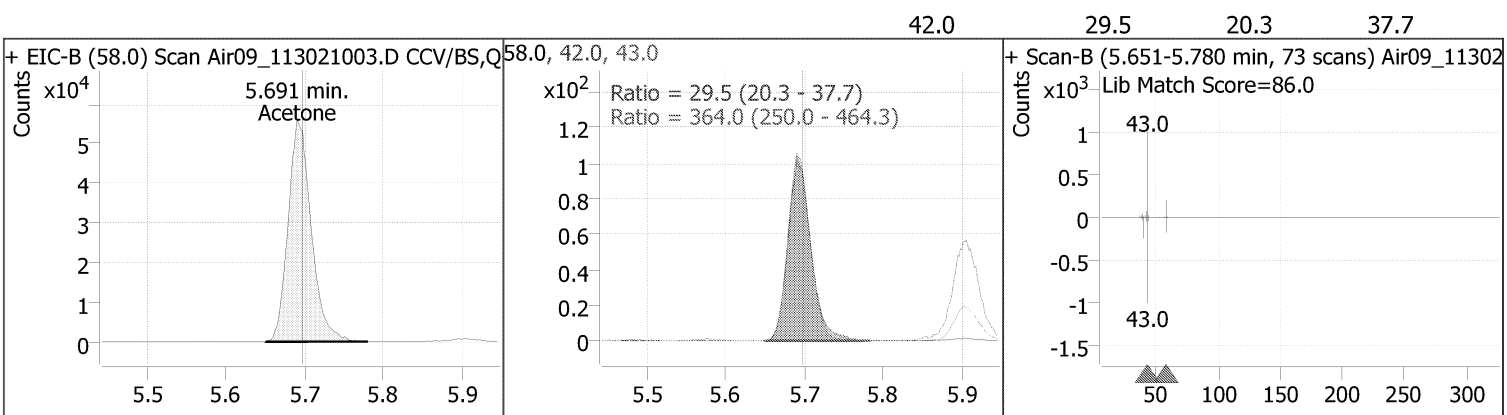
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl bromide	9.8402	5.48	-0.01	182689	106.0	105.4	74.2	137.8



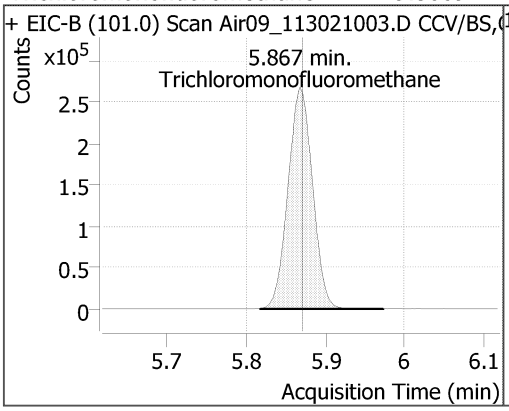
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	9.5974	5.57	-0.01	74299	55.0	73.4	51.2	95.2

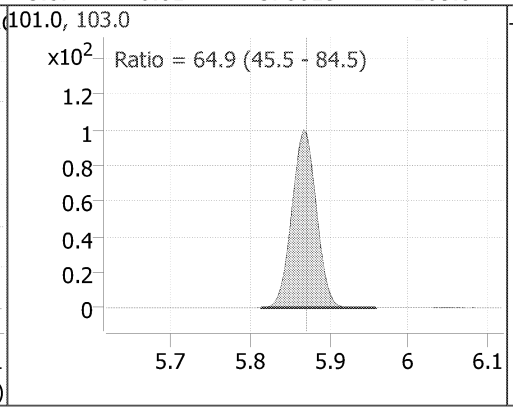


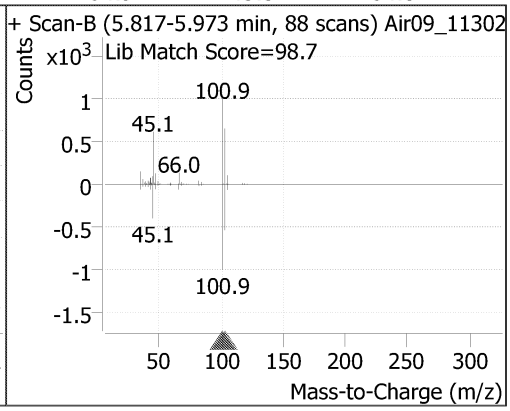
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	11.0900	5.69	-0.01	113714	43.0	364.0	250.0	464.3
					42.0	29.5	20.3	37.7



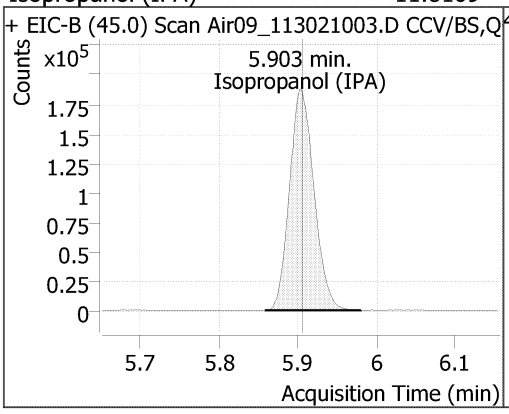
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	9.5009	5.87	-0.01	578013	103.0	64.9	45.5	84.5

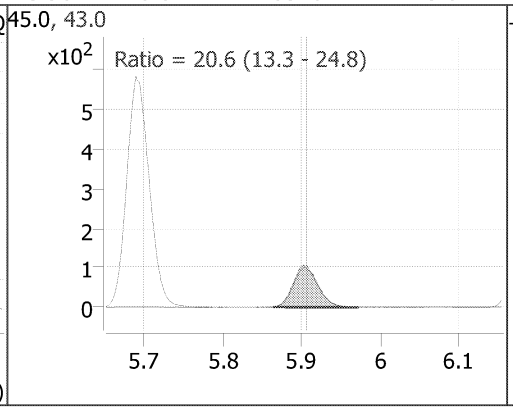


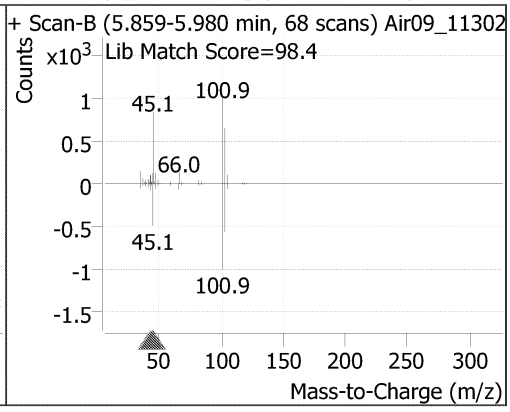




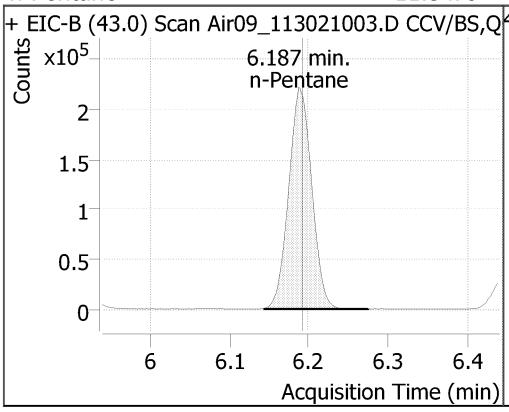
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	11.8169	5.90	-0.01	405761	43.0	20.6	13.3	24.8

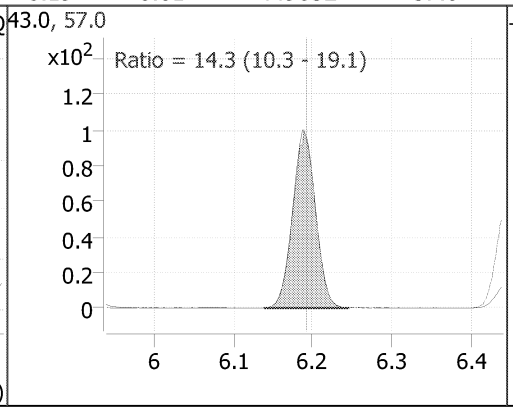


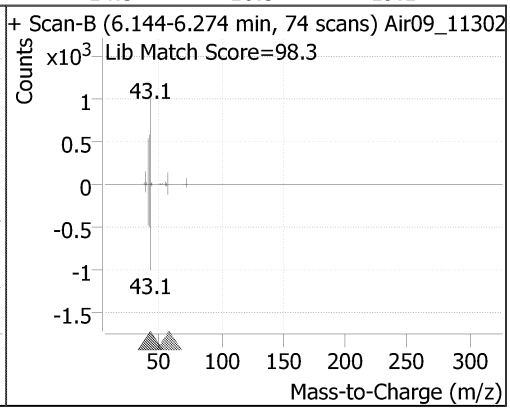




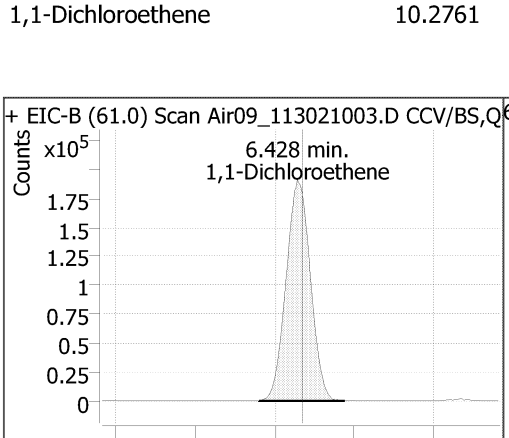
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	11.3479	6.19	-0.01	449652	57.0	14.3	10.3	19.1

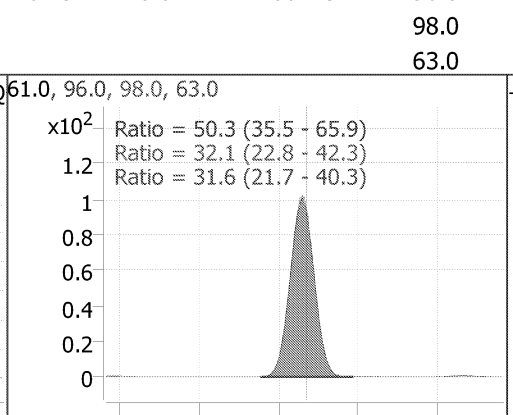


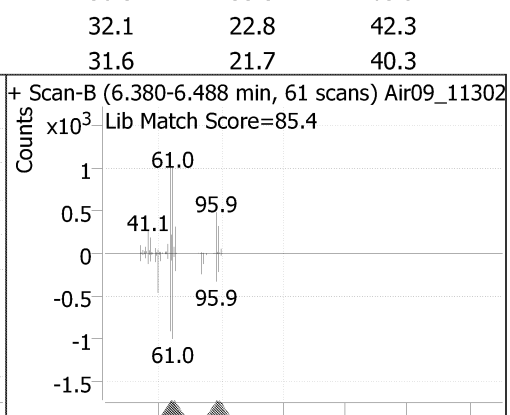




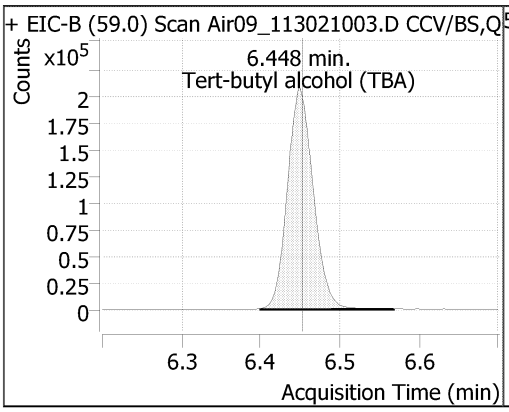
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	10.2761	6.43	-0.01	406713	96.0	50.3	35.5	65.9
					98.0	32.1	22.8	42.3
					63.0	31.6	21.7	40.3

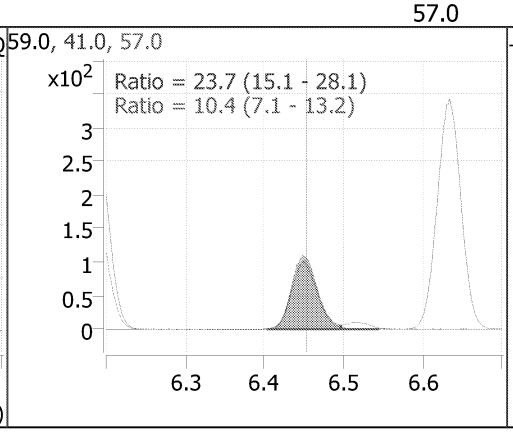


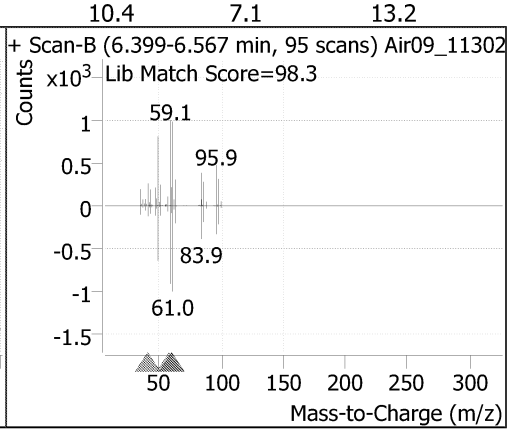




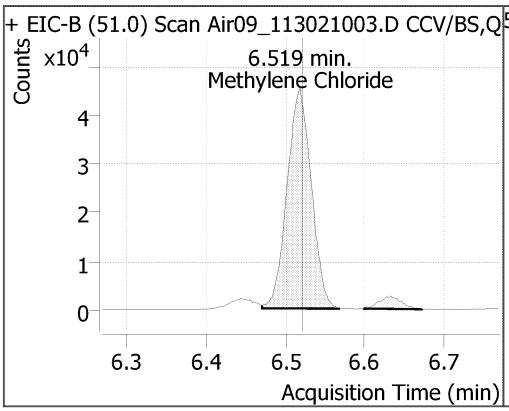
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	11.3200	6.45	-0.01	471829	41.0	23.7	15.1	28.1
					57.0	10.4	7.1	13.2

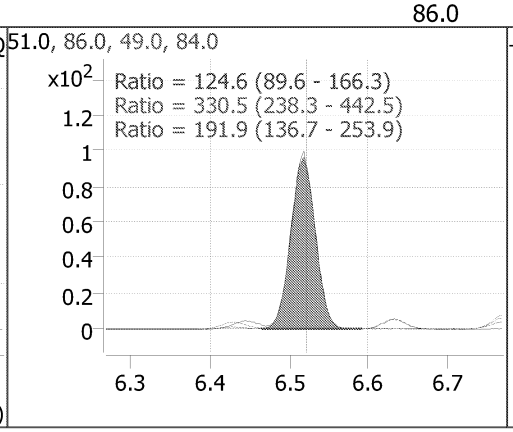


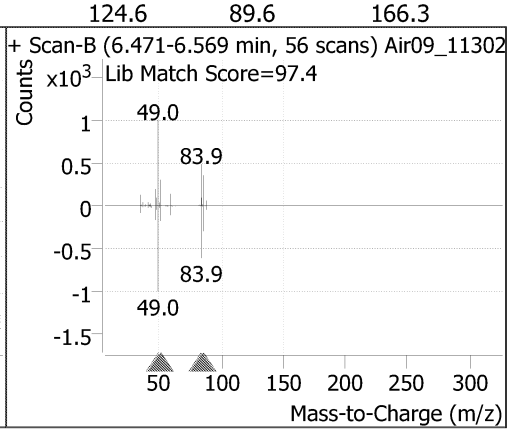




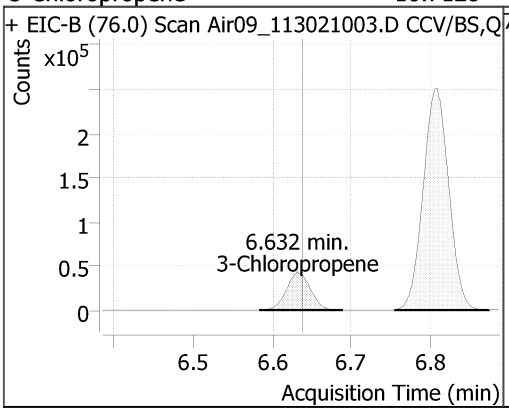
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	9.9129	6.52	-0.01	96777	49.0	330.5	238.3	442.5
					84.0	191.9	136.7	253.9
					86.0	124.6	89.6	166.3

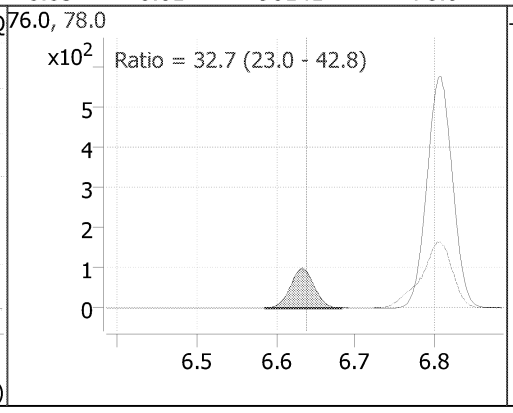


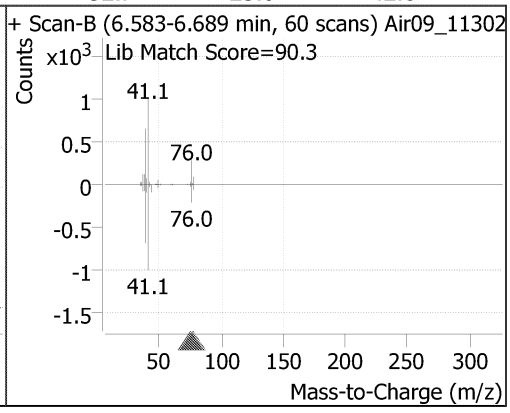




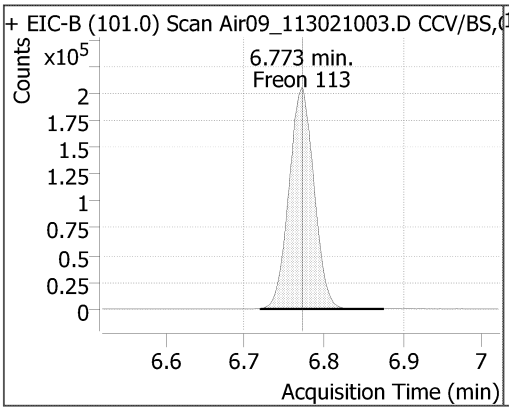
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	10.7128	6.63	-0.01	90141	78.0	32.7	23.0	42.8

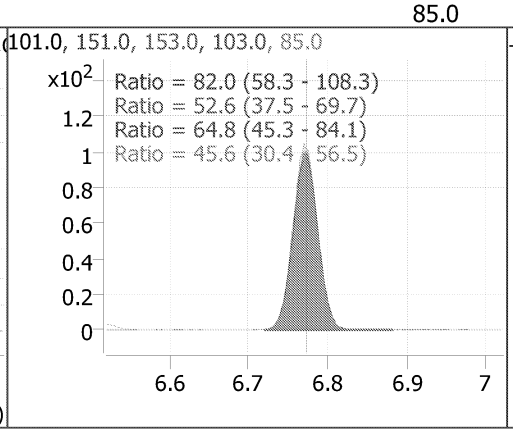


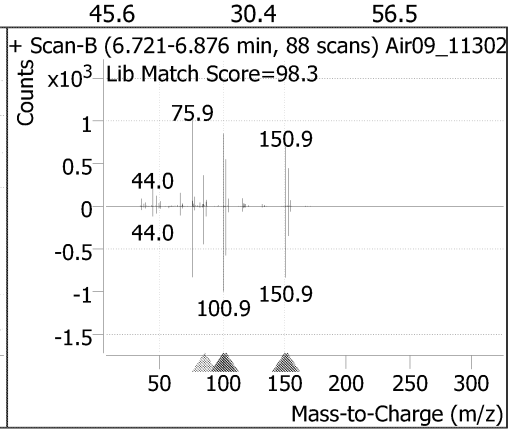




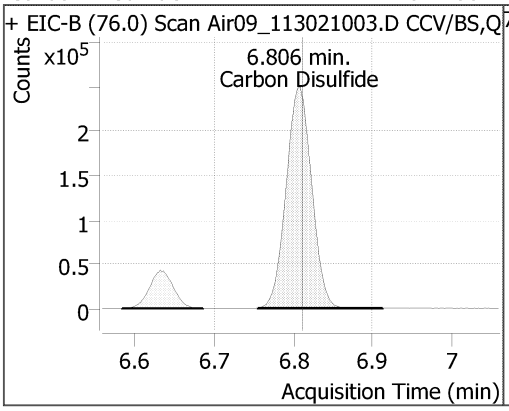
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	9.5665	6.77	0.00	451196	151.0	82.0	58.3	108.3
					103.0	64.8	45.3	84.1
					153.0	52.6	37.5	69.7
					85.0	45.6	30.4	56.5

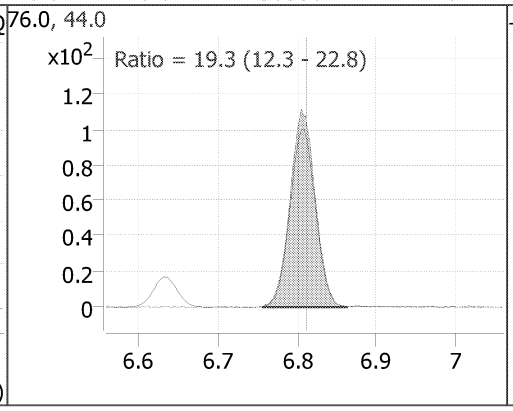


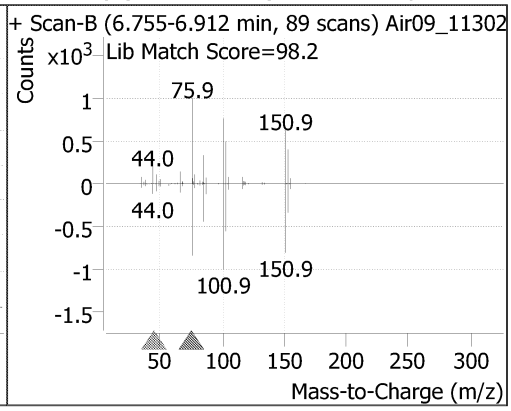




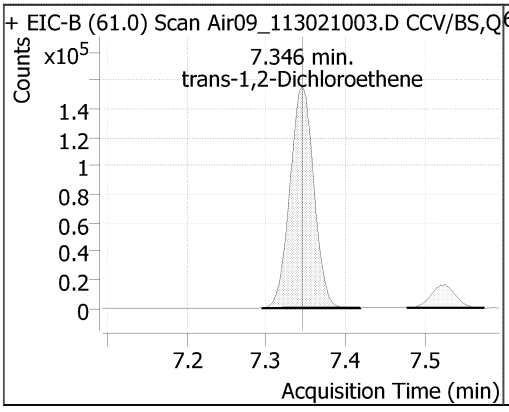
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	10.1188	6.81	-0.01	563362	44.0	19.3	12.3	22.8

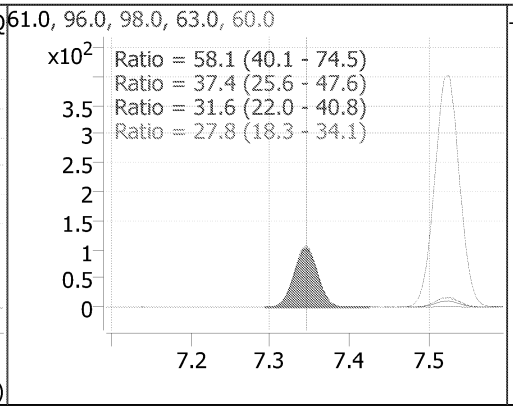


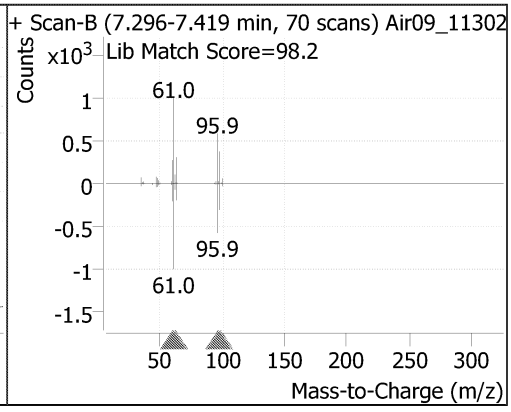




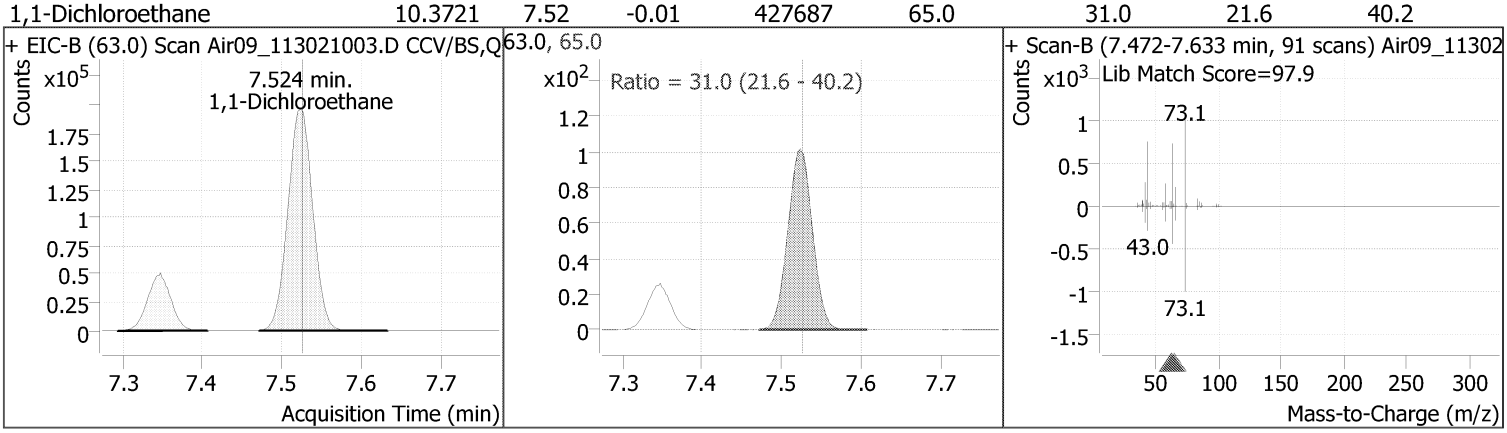
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	10.3873	7.35	0.00	325752	96.0	58.1	40.1	74.5
					98.0	37.4	25.6	47.6
					63.0	31.6	22.0	40.8
					60.0	27.8	18.3	34.1



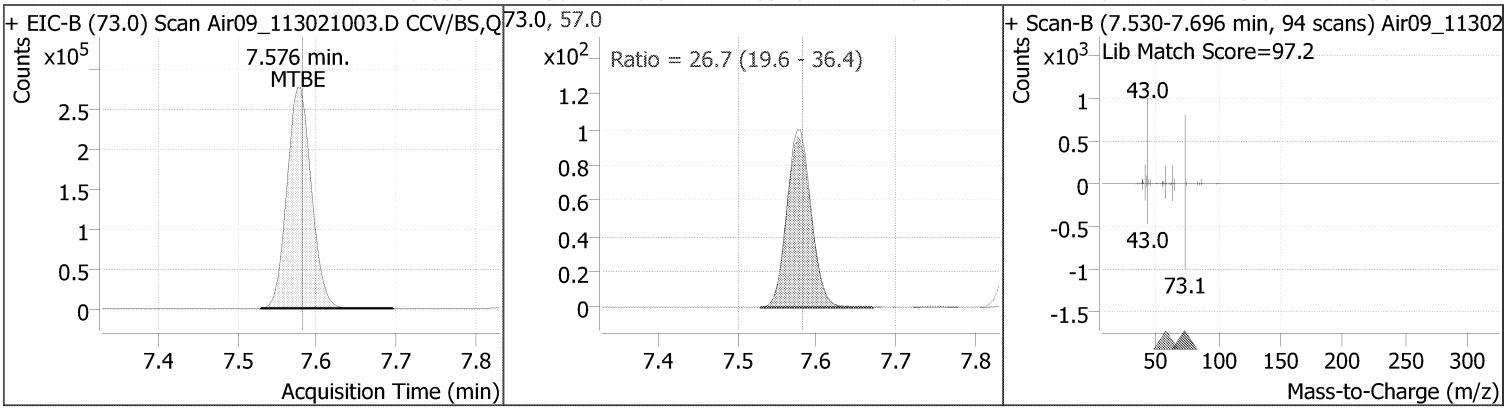




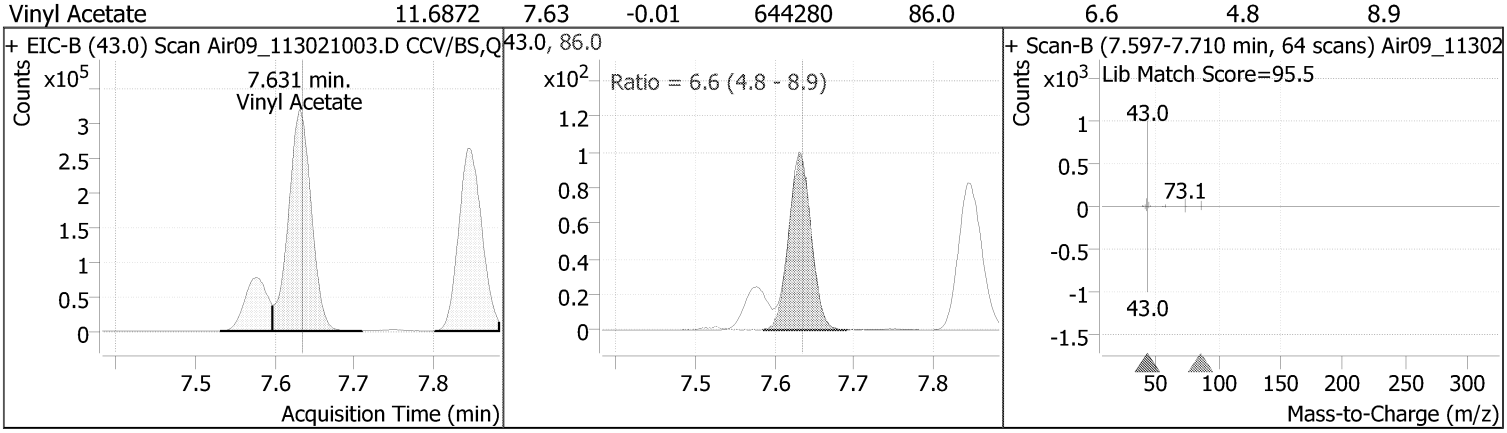
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	10.3721	7.52	-0.01	427687	65.0	31.0	21.6	40.2



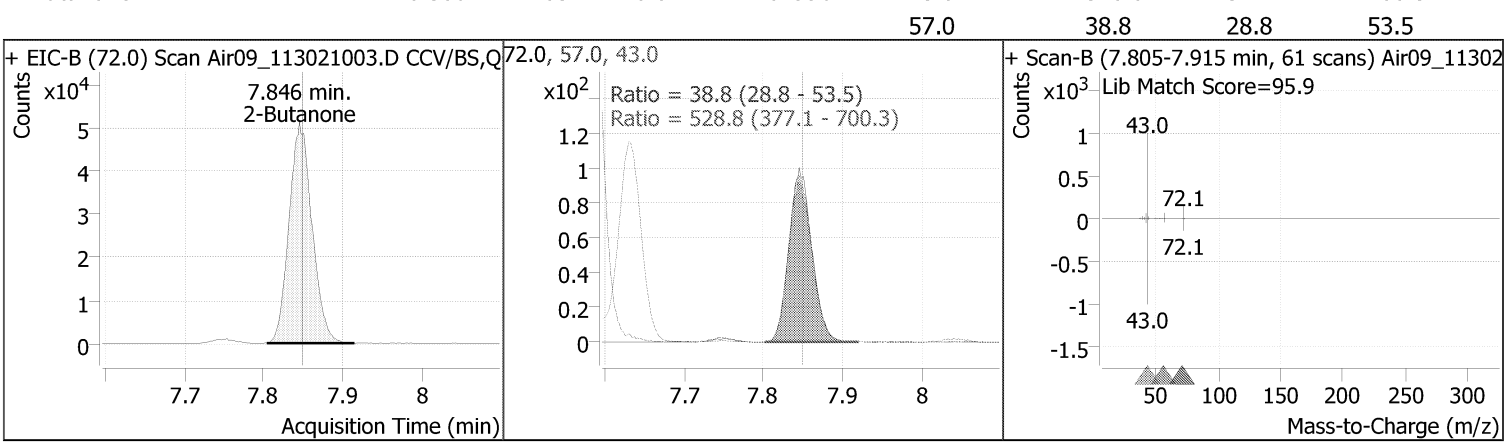
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	10.8334	7.58	-0.01	591024	57.0	26.7	19.6	36.4



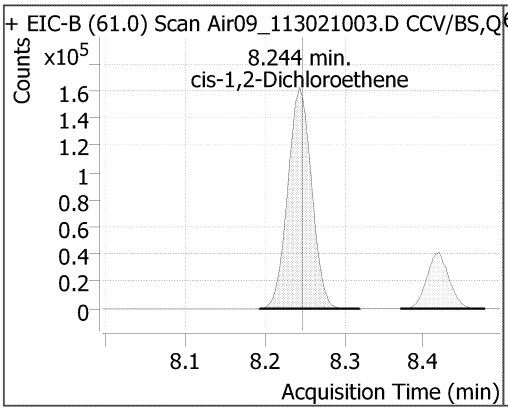
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	11.6872	7.63	-0.01	644280	86.0	6.6	4.8	8.9

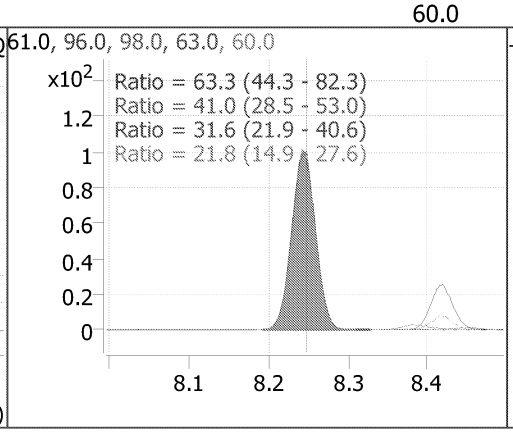


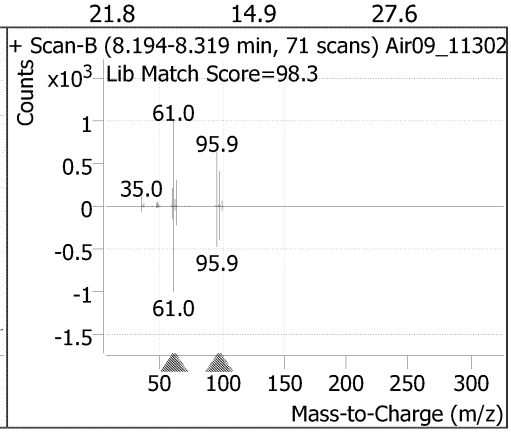
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	10.5064	7.85	-0.01	102996	43.0	528.8	377.1	700.3
					57.0	38.8	28.8	53.5



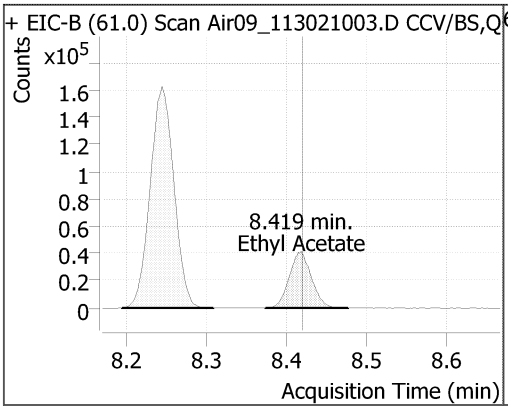
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	10.4846	8.24	-0.01	337728	96.0	63.3	44.3	82.3
					98.0	41.0	28.5	53.0
					63.0	31.6	21.9	40.6
					60.0	21.8	14.9	27.6

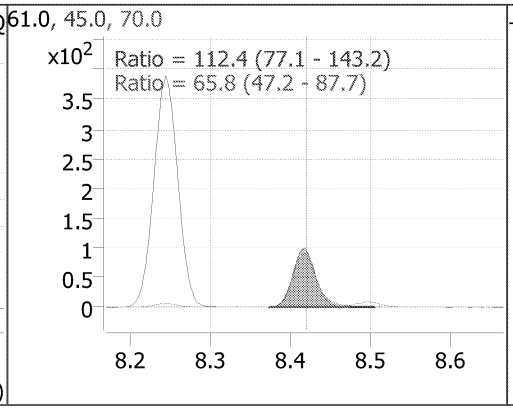


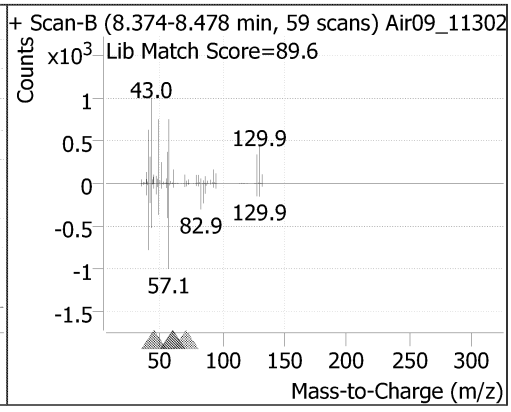




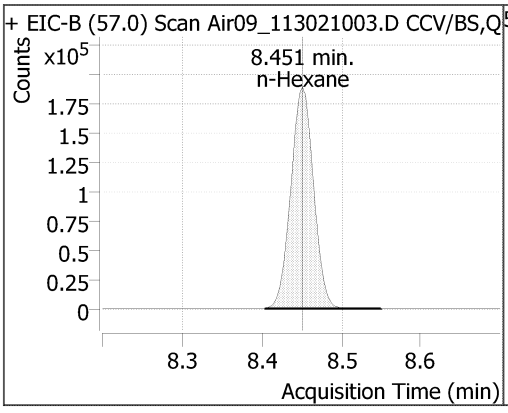
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	10.7652	8.42	-0.01	80003	45.0	112.4	77.1	143.2
					70.0	65.8	47.2	87.7

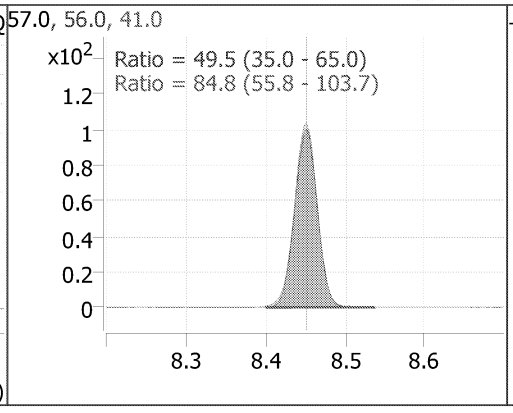


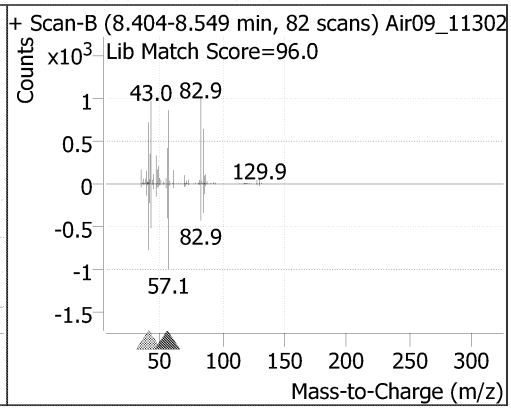




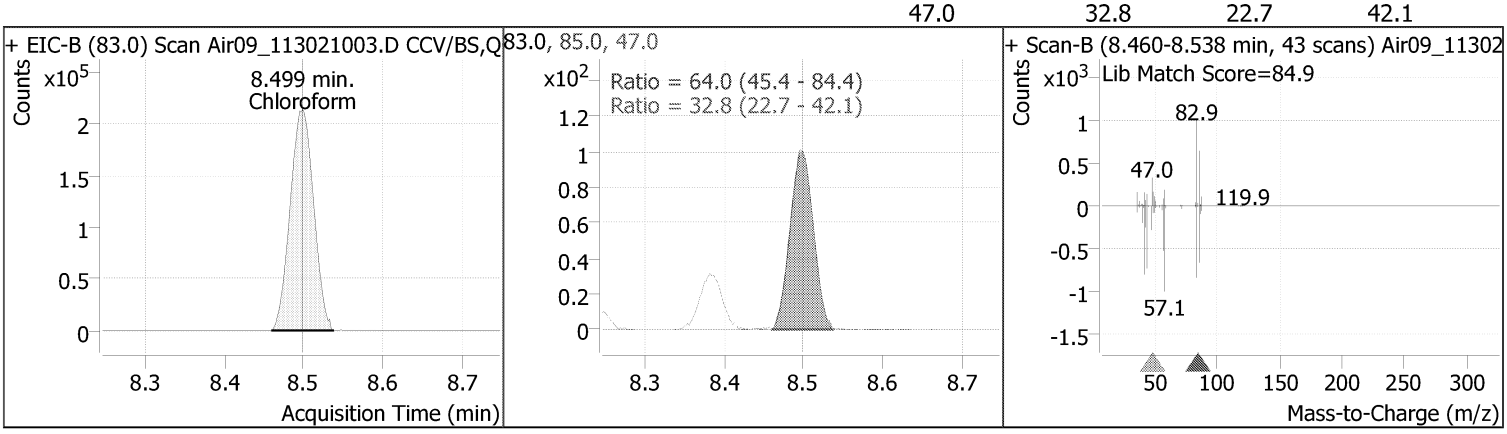
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	10.8624	8.45	0.00	376737	41.0	84.8	55.8	103.7
					56.0	49.5	35.0	65.0



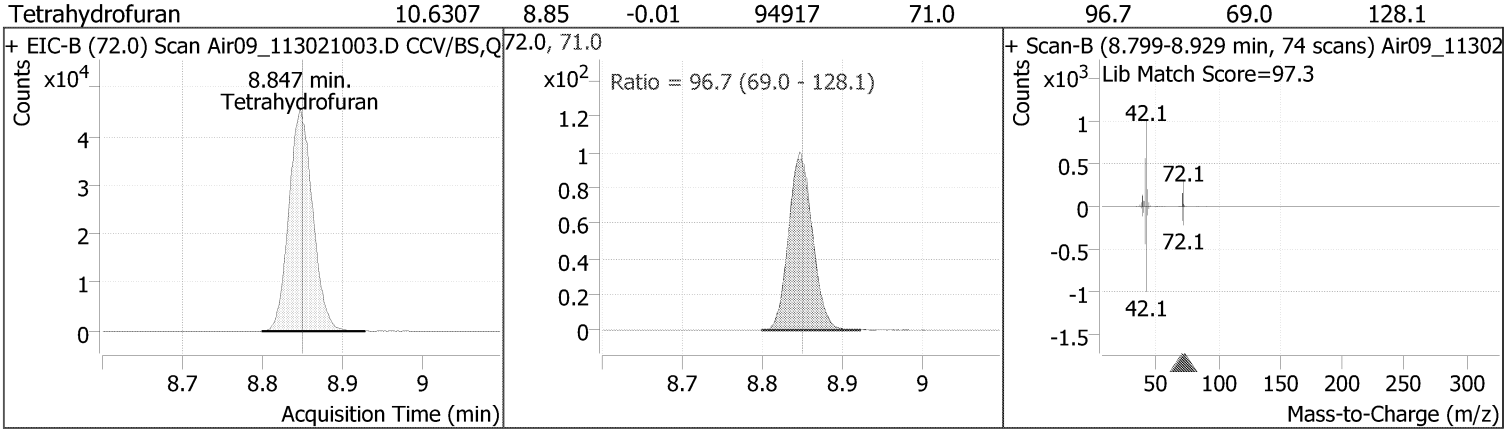




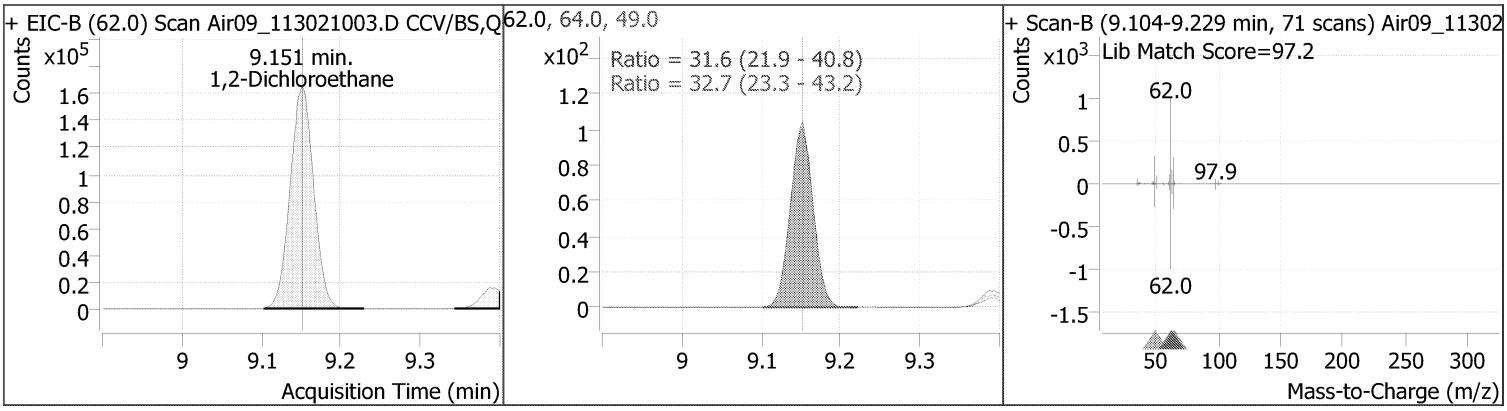
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	9.2309	8.50	0.00	438904	85.0	64.0	45.4	84.4
					47.0	32.8	22.7	42.1



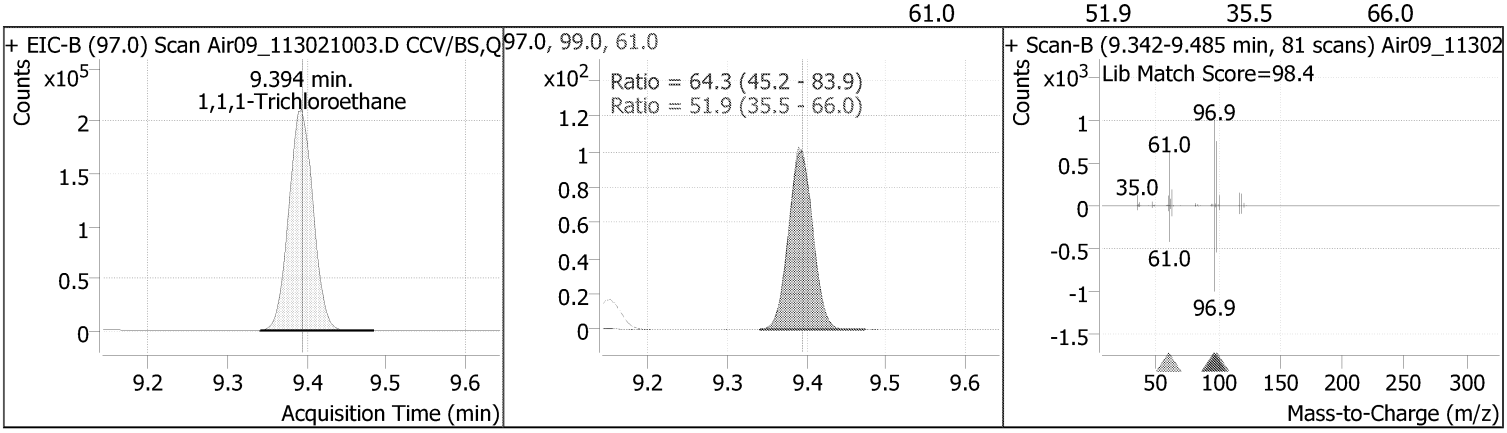
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	10.6307	8.85	-0.01	94917	71.0	96.7	69.0	128.1



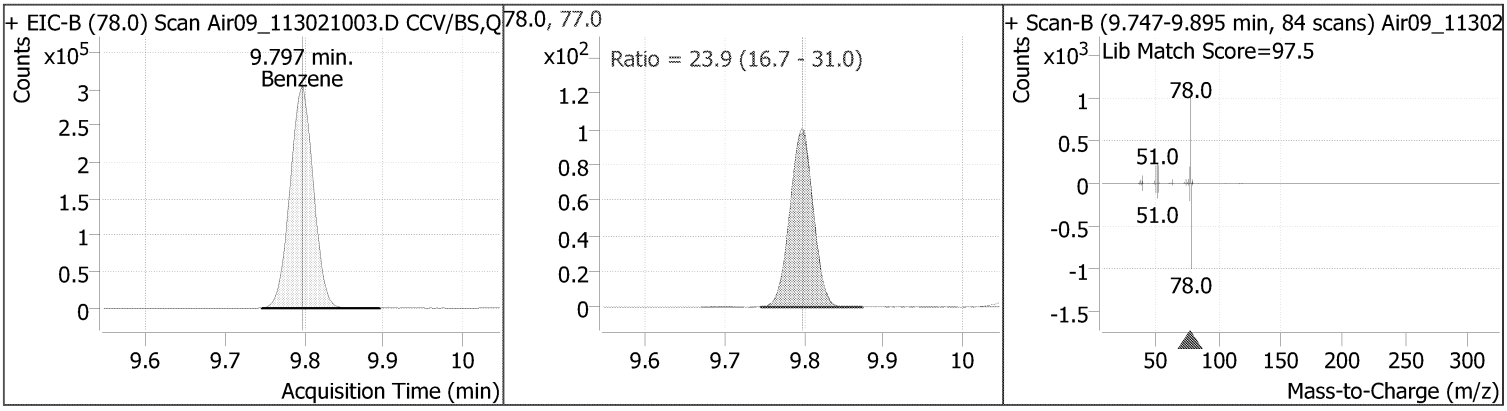
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	9.9370	9.15	-0.01	340397	49.0	32.7	23.3	43.2
					64.0	31.6	21.9	40.8



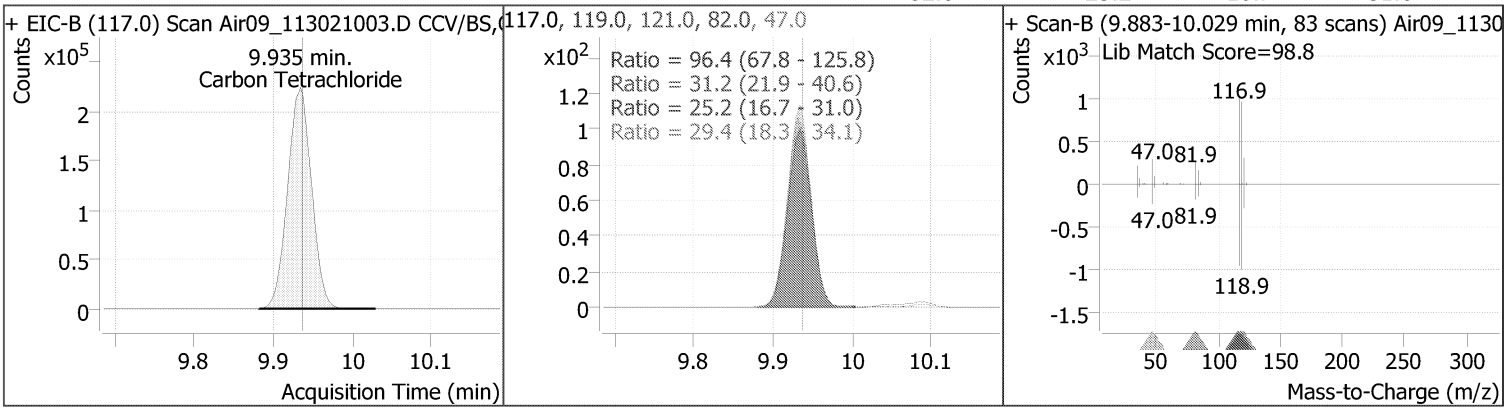
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	9.7433	9.39	-0.01	452378	99.0	64.3	45.2	83.9
					61.0	51.9	35.5	66.0



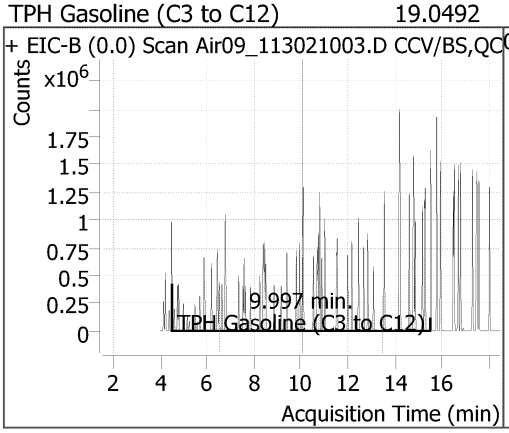
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	9.9798	9.80	-0.01	622324	77.0	23.9	16.7	31.0

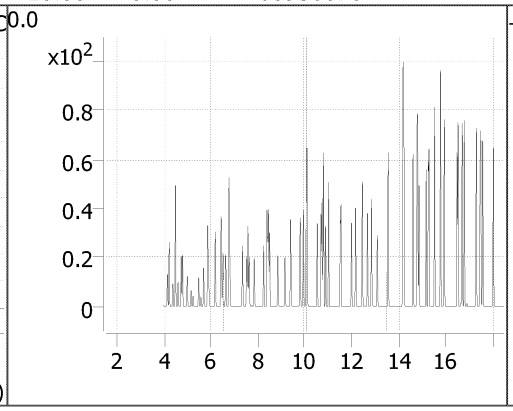


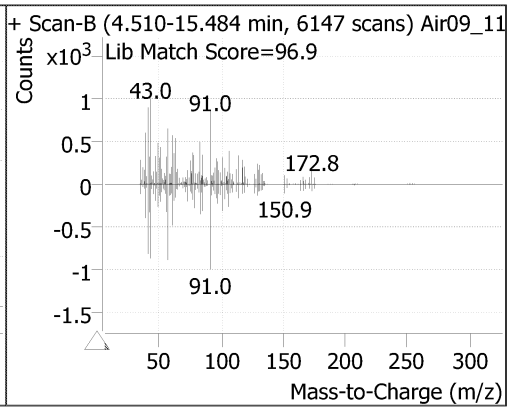
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	9.6891	9.93	-0.01	471340	119.0	96.4	67.8	125.8
					121.0	31.2	21.9	40.6
					47.0	29.4	18.3	34.1
					82.0	25.2	16.7	31.0



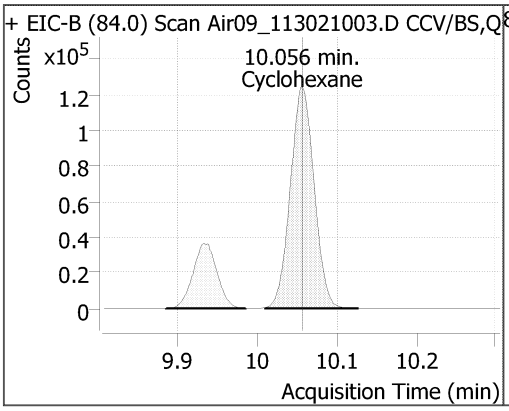
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	19.0492	10.00	0.00	68936076				

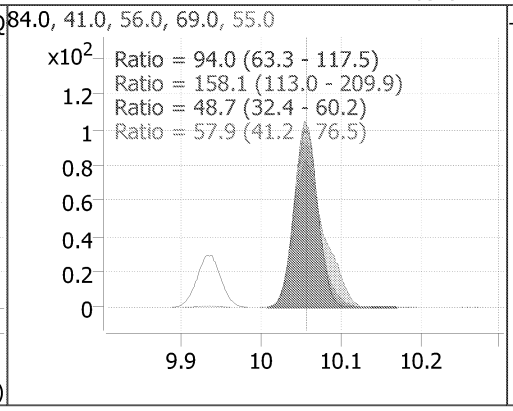


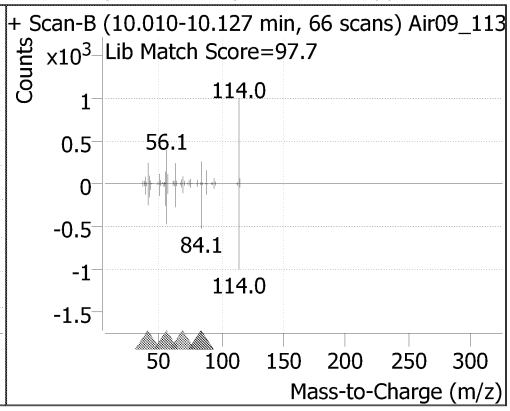




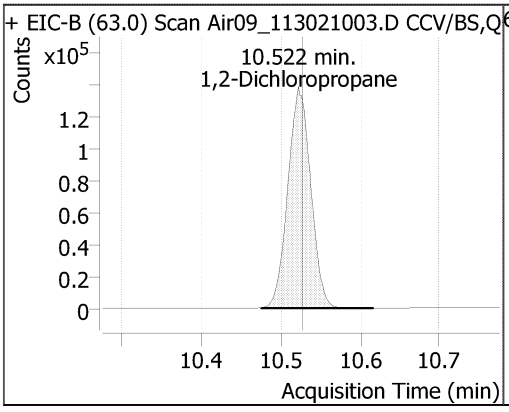
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	10.2258	10.06	-0.01	259986	56.0	158.1	113.0	209.9
					41.0	94.0	63.3	117.5
					55.0	57.9	41.2	76.5
					69.0	48.7	32.4	60.2

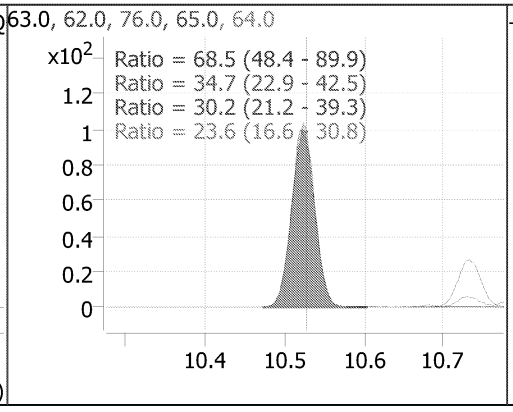


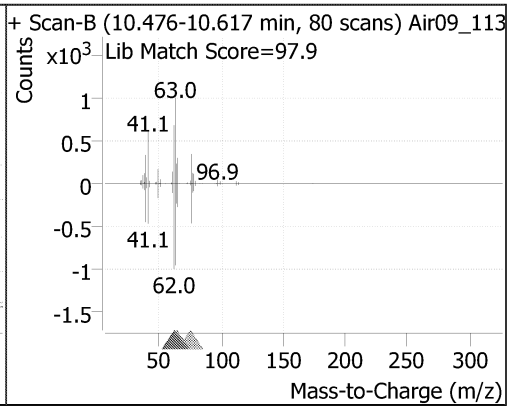




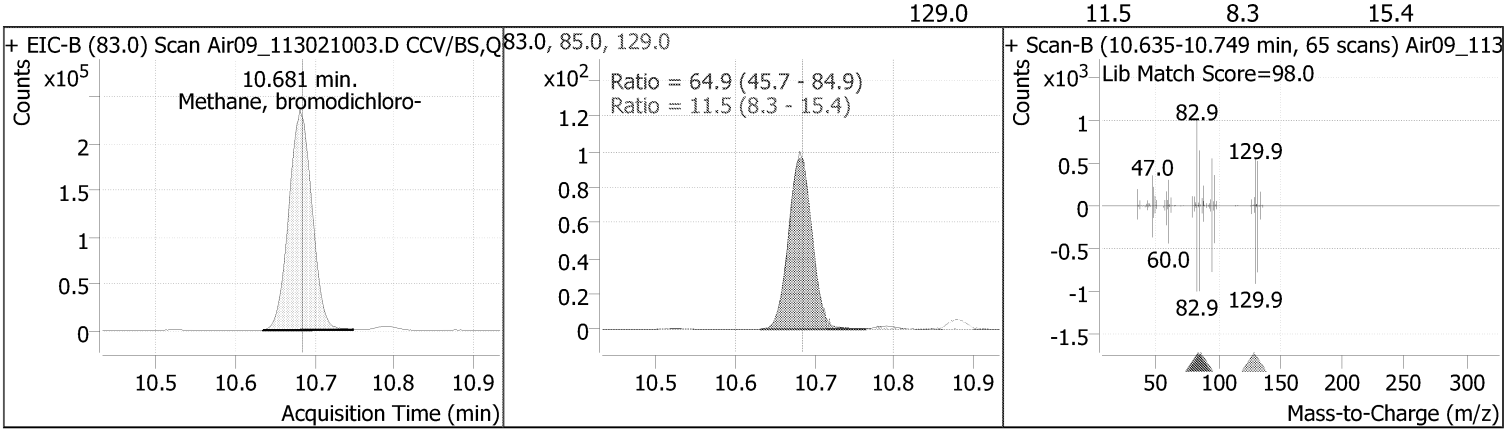
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	10.5345	10.52	-0.01	278116	62.0	68.5	48.4	89.9
					76.0	34.7	22.9	42.5
					65.0	30.2	21.2	39.3
					64.0	23.6	16.6	30.8



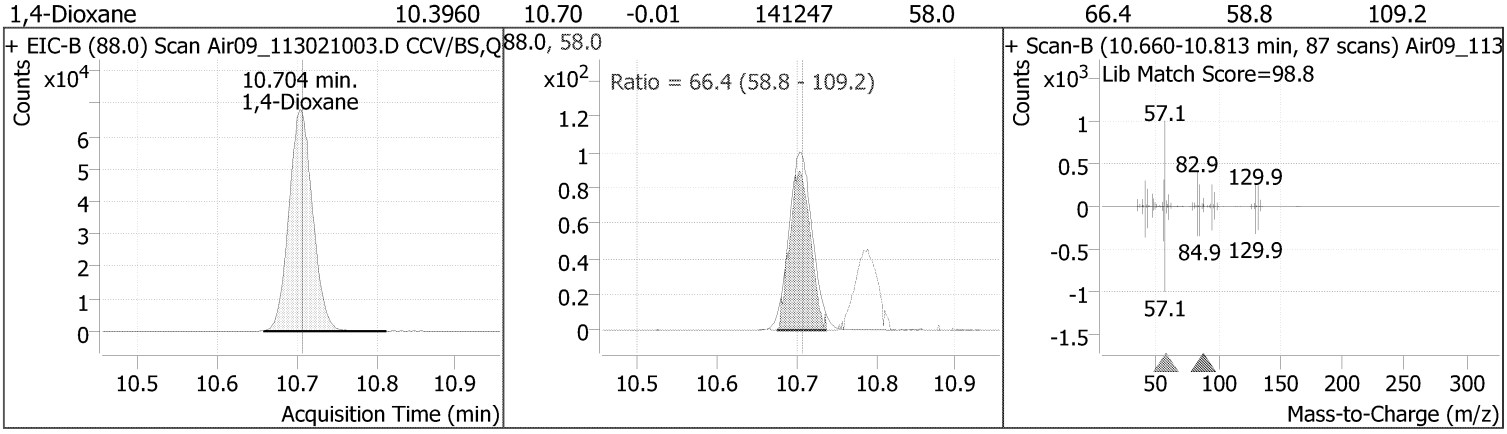




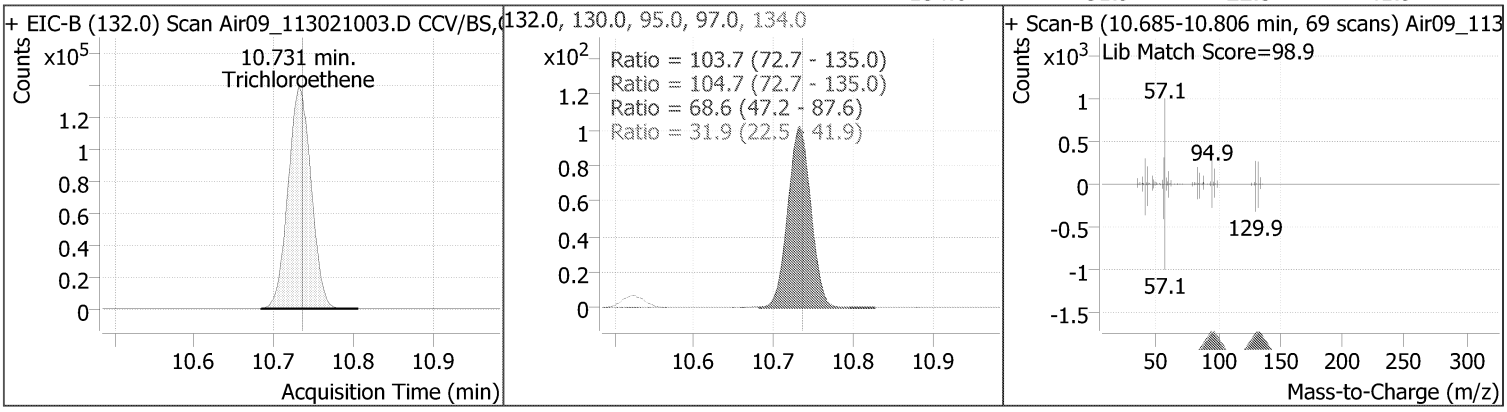
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	9.9127	10.68	-0.01	478051	85.0	64.9	45.7	84.9
					129.0	11.5	8.3	15.4



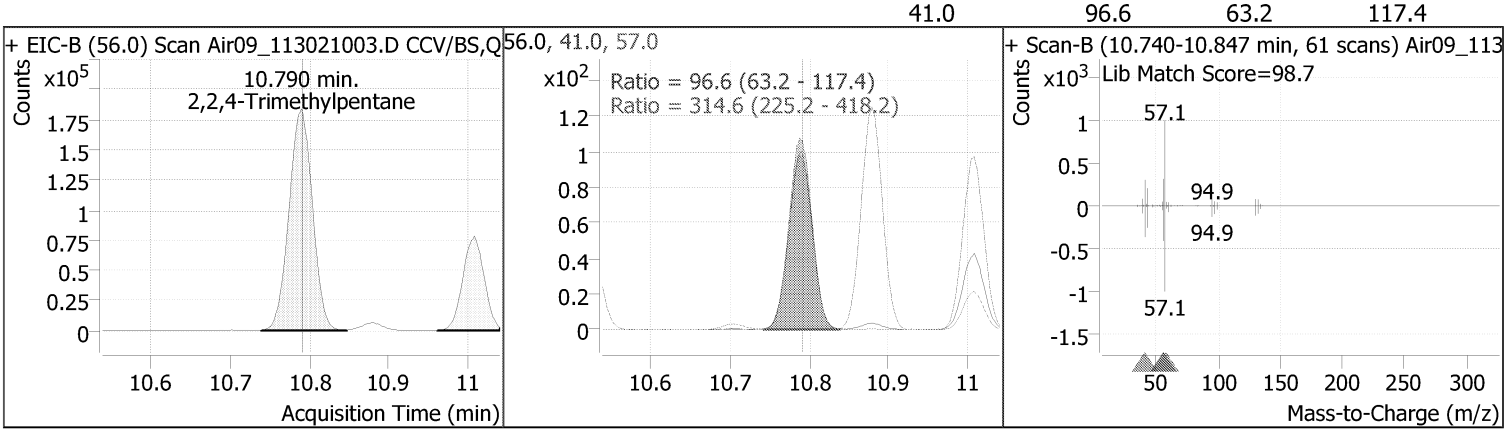
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	10.3960	10.70	-0.01	141247	58.0	66.4	58.8	109.2



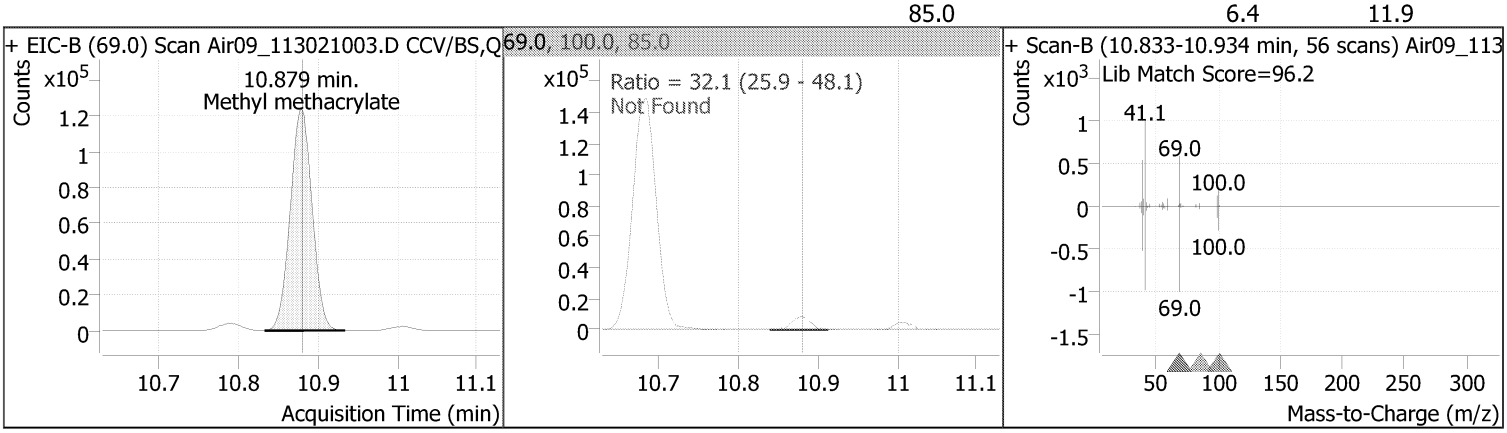
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	9.8942	10.73	-0.01	282577	130.0	103.7	72.7	135.0
					95.0	104.7	72.7	135.0
					97.0	68.6	47.2	87.6
					134.0	31.9	22.5	41.9



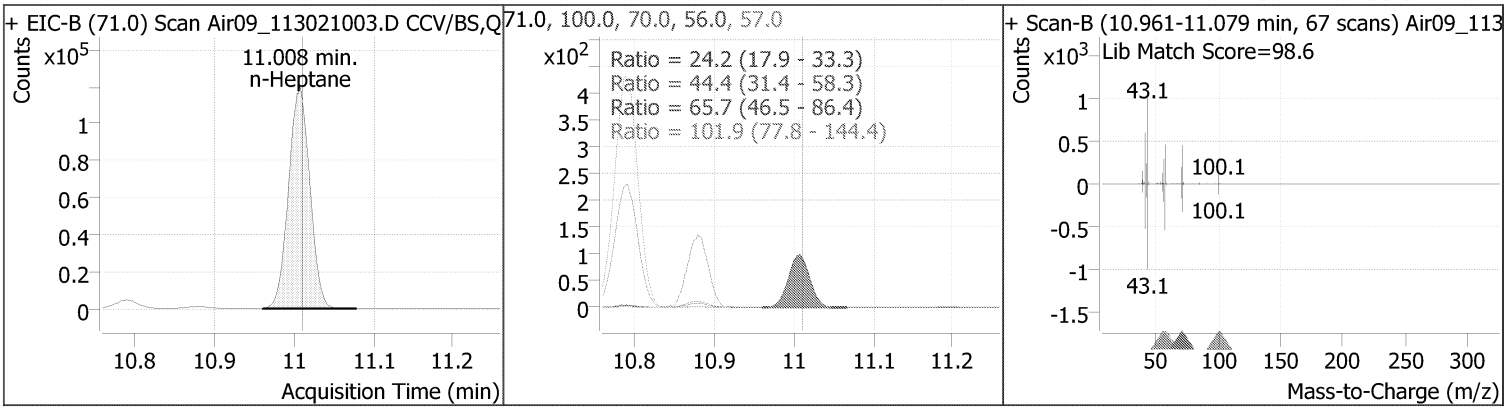
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	10.9220	10.79	0.00	377204	57.0	314.6	225.2	418.2
					41.0	96.6	63.2	117.4



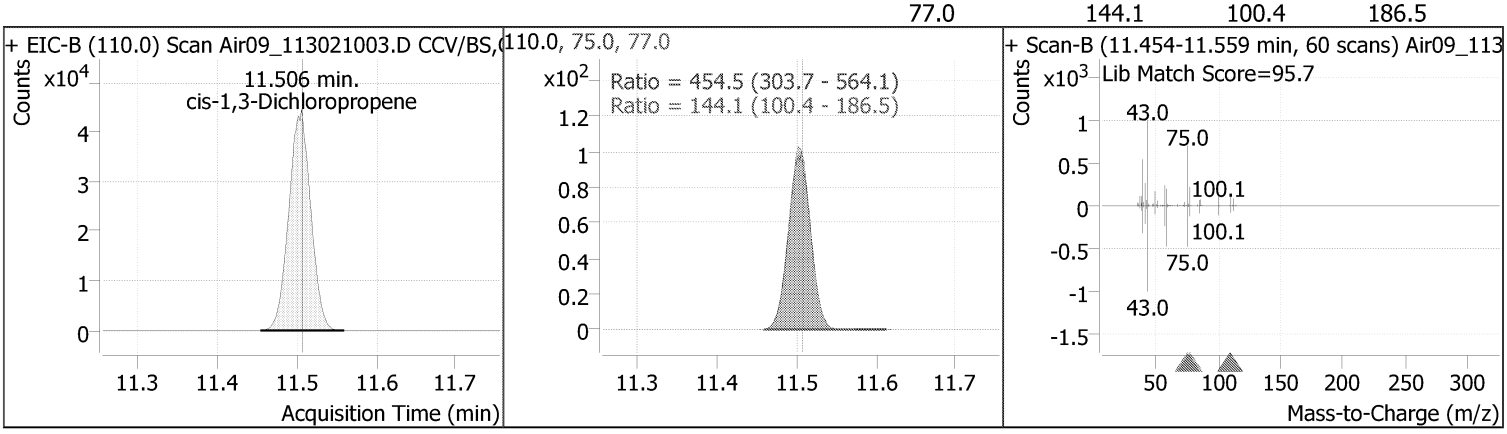
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	10.7183	10.88	0.00	236875	100.0	32.1	25.9	48.1
					85.0		6.4	11.9



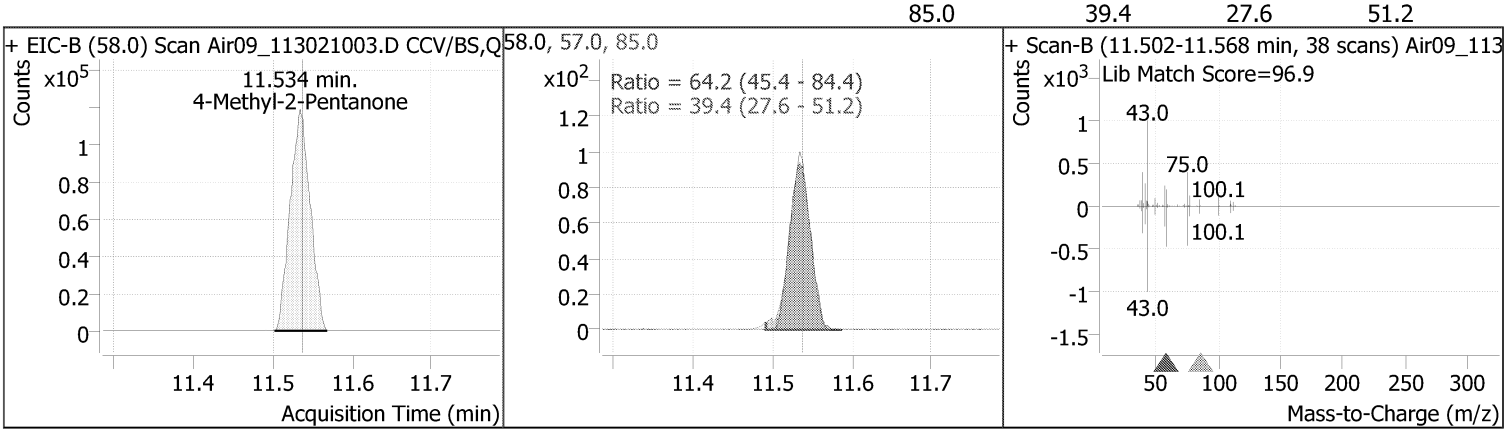
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	10.7176	11.01	-0.01	222917	57.0	101.9	77.8	144.4
					56.0	65.7	46.5	86.4
					70.0	44.4	31.4	58.3
					100.0	24.2	17.9	33.3



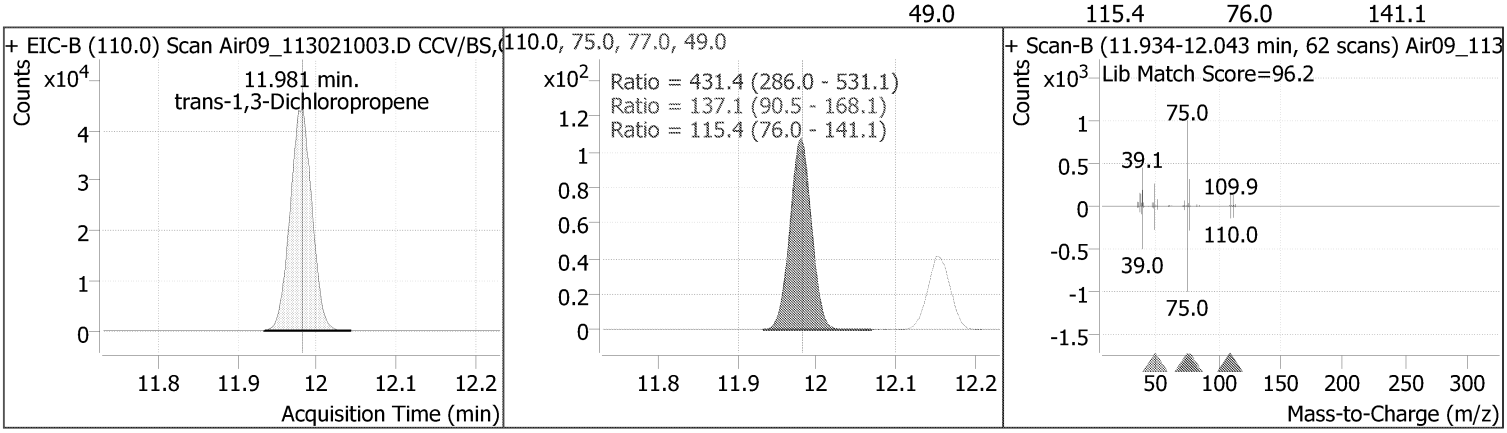
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	10.5646	11.51	0.00	85045	75.0	454.5	303.7	564.1
					77.0	144.1	100.4	186.5



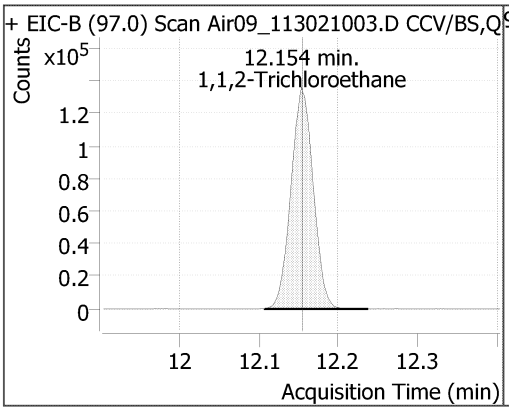
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	10.7896	11.53	-0.01	208809	57.0	64.2	45.4	84.4
					85.0	39.4	27.6	51.2

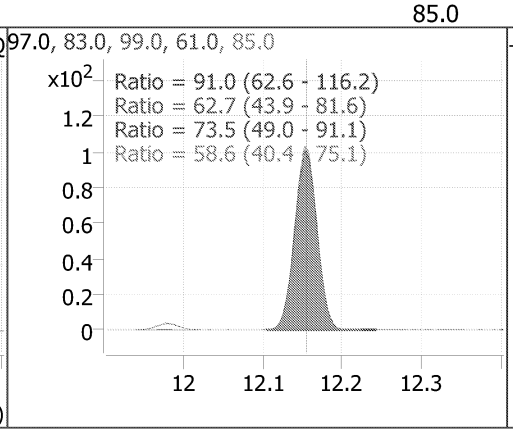


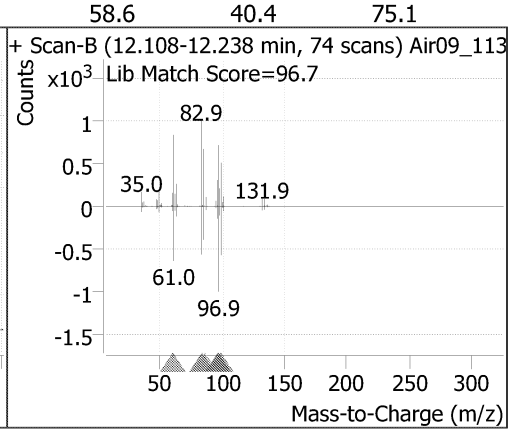
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	10.5271	11.98	0.00	85368	75.0	431.4	286.0	531.1
					77.0	137.1	90.5	168.1
					49.0	115.4	76.0	141.1



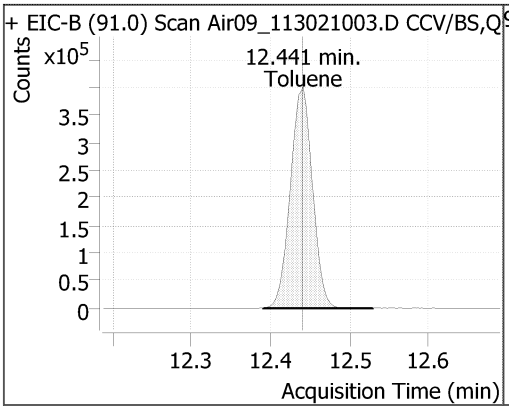
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	9.8426	12.15	0.00	265289	83.0	91.0	62.6	116.2
					61.0	73.5	49.0	91.1
					99.0	62.7	43.9	81.6
					85.0	58.6	40.4	75.1

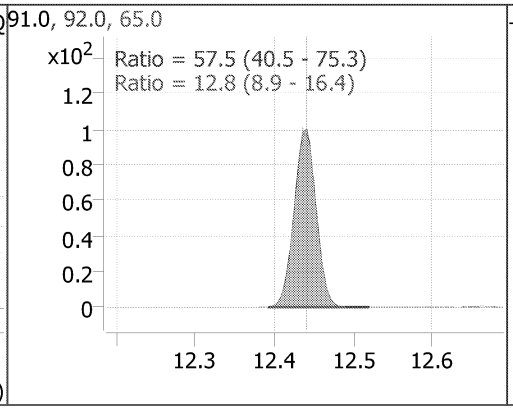


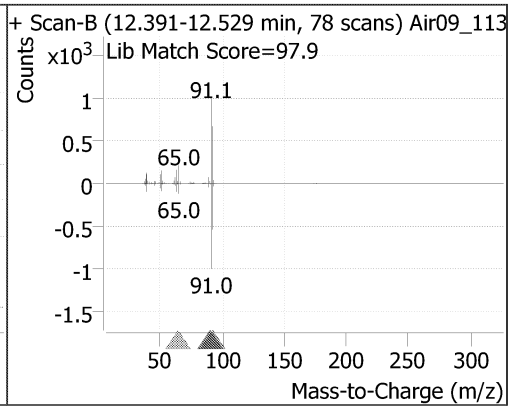




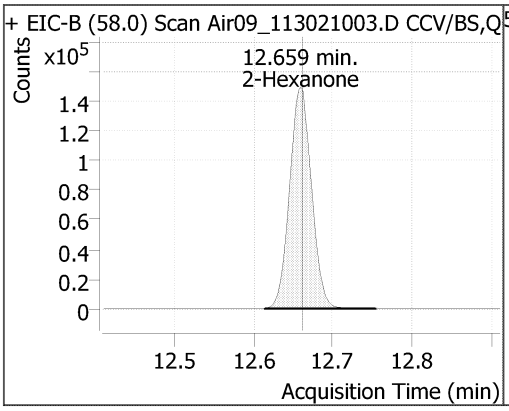
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	10.2298	12.44	0.00	779127	92.0	57.5	40.5	75.3
					65.0	12.8	8.9	16.4

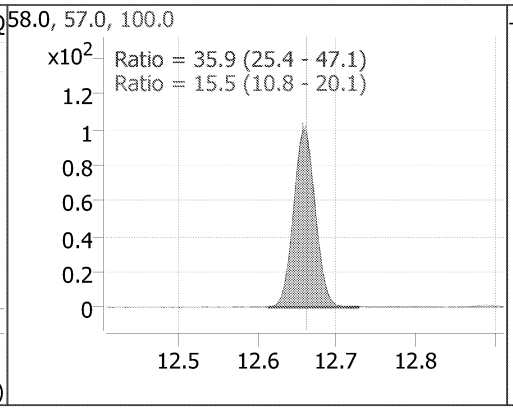


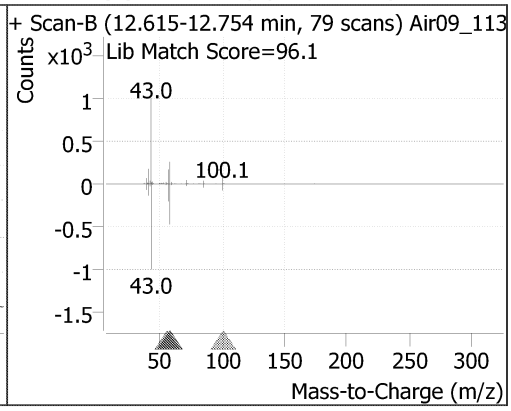




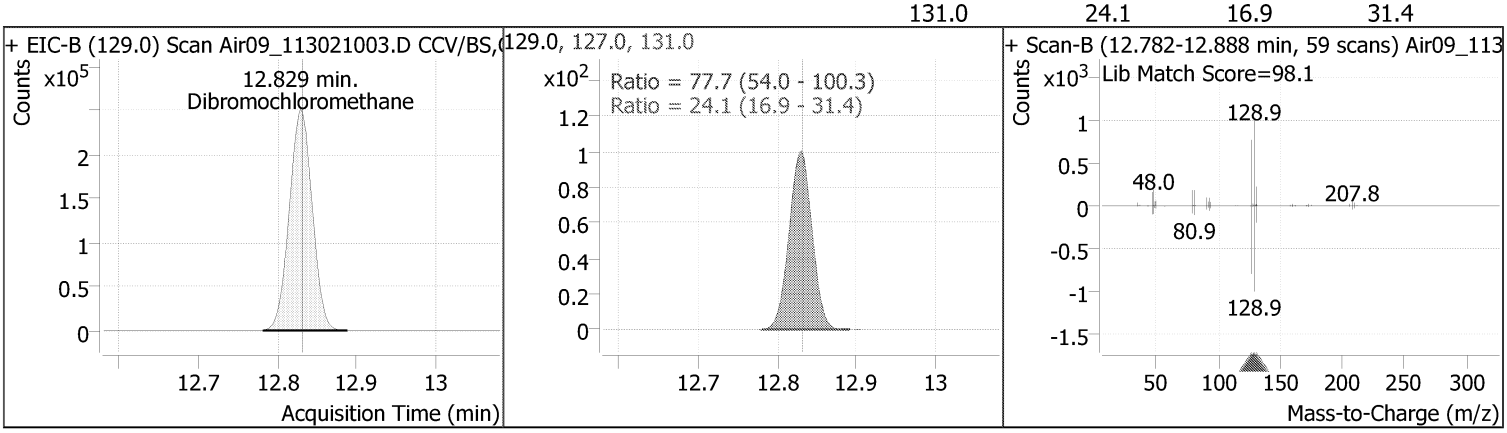
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	11.4538	12.66	-0.01	287476	57.0	35.9	25.4	47.1
					100.0	15.5	10.8	20.1



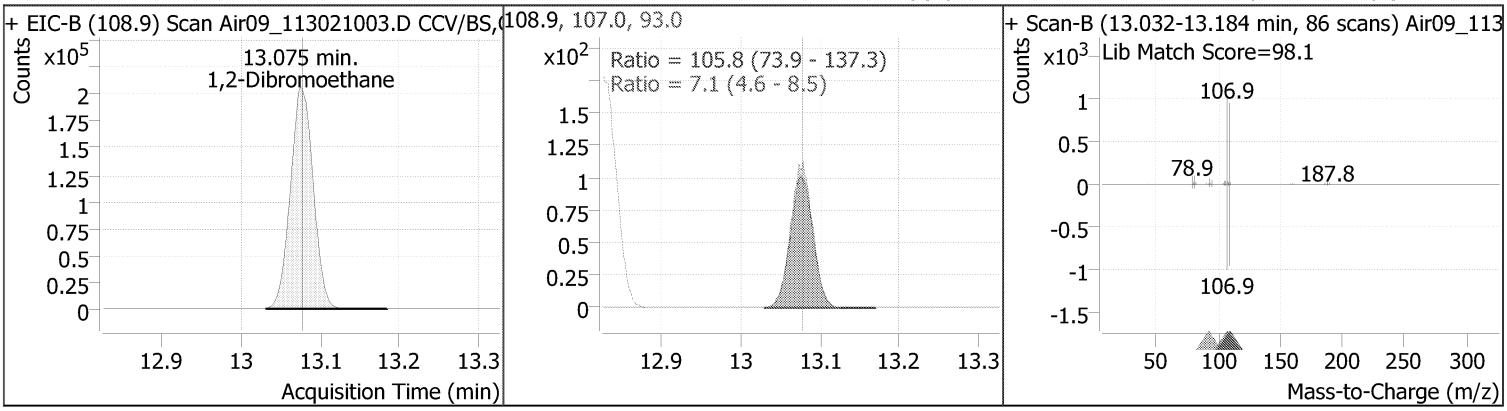




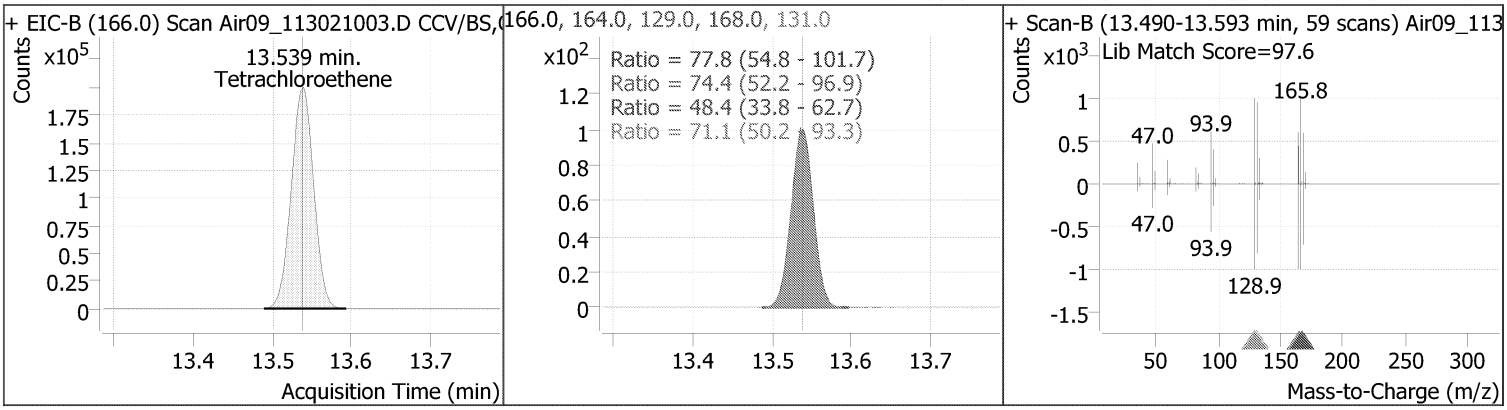
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	10.0313	12.83	-0.01	505389	127.0	77.7	54.0	100.3
					131.0	24.1	16.9	31.4



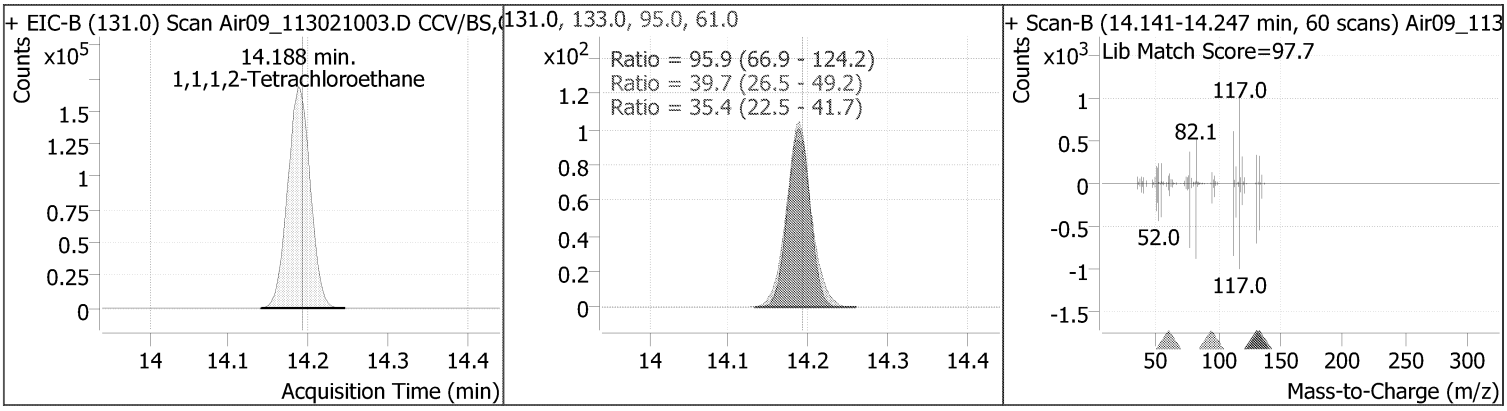
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	10.0715	13.08	-0.01	414163	107.0	105.8	73.9	137.3
					93.0	7.1	4.6	8.5



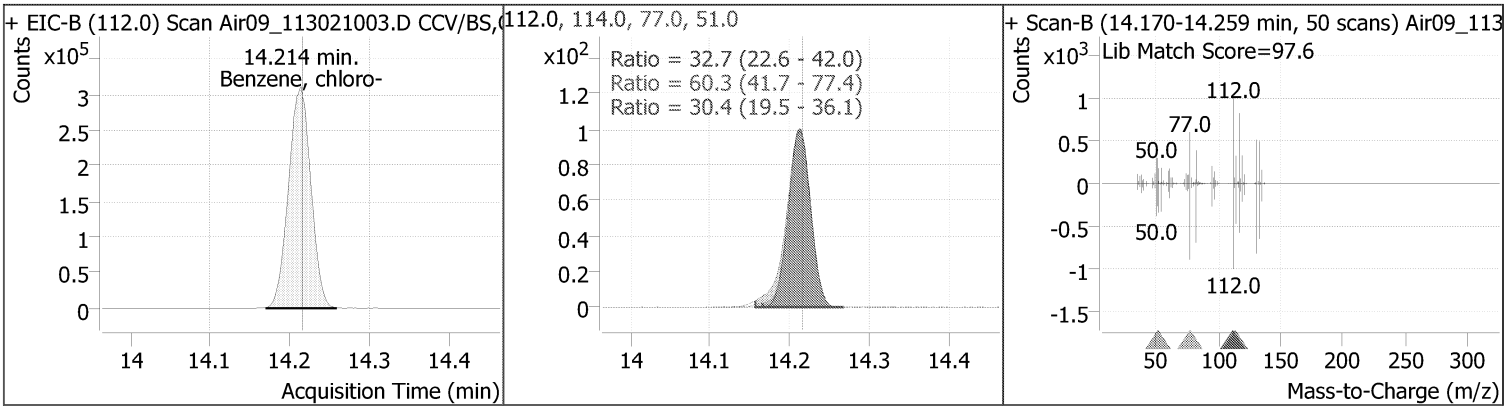
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	9.5830	13.54	0.00	392352	164.0	77.8	54.8	101.7
					129.0	74.4	52.2	96.9
					131.0	71.1	50.2	93.3
					168.0	48.4	33.8	62.7



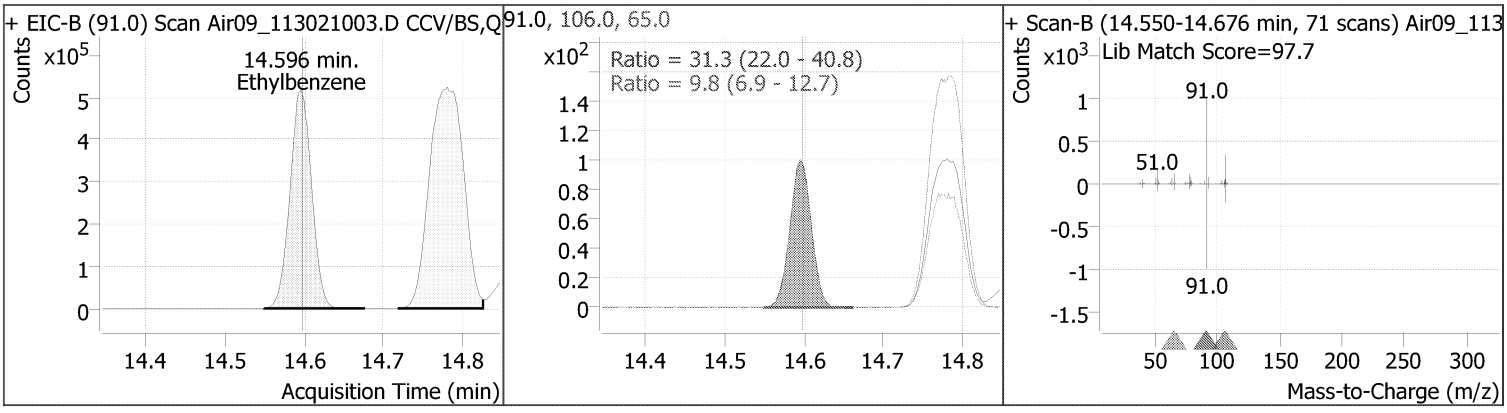
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	9.4713	14.19	-0.01	334425	133.0	95.9	66.9	124.2
					95.0	39.7	26.5	49.2
					61.0	35.4	22.5	41.7



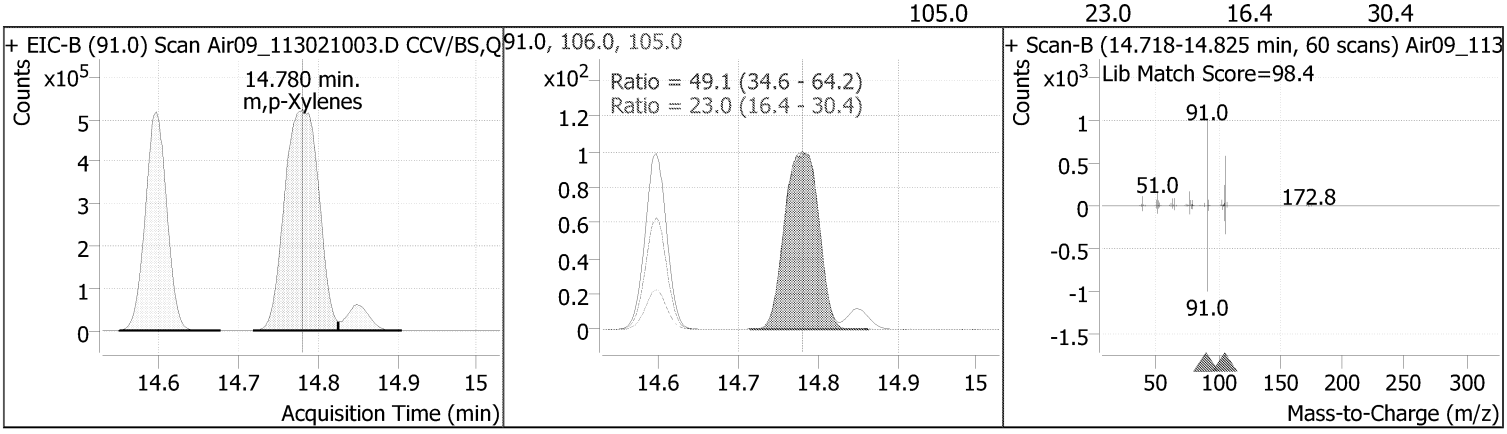
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	9.4429	14.21	0.00	607892	77.0	60.3	41.7	77.4
					114.0	32.7	22.6	42.0
					51.0	30.4	19.5	36.1



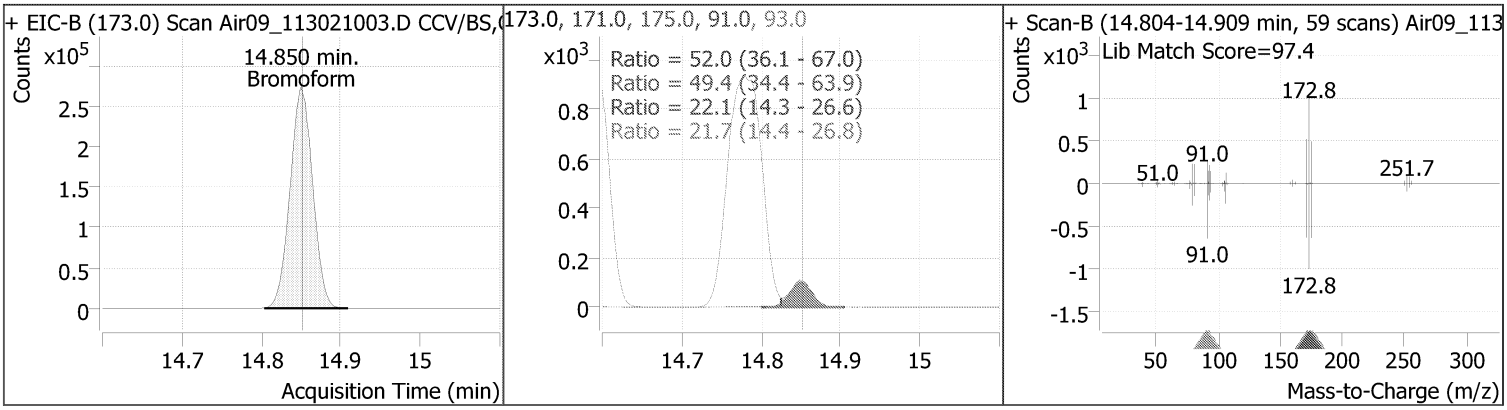
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	10.0204	14.60	0.00	975659	106.0	31.3	22.0	40.8
					65.0	9.8	6.9	12.7



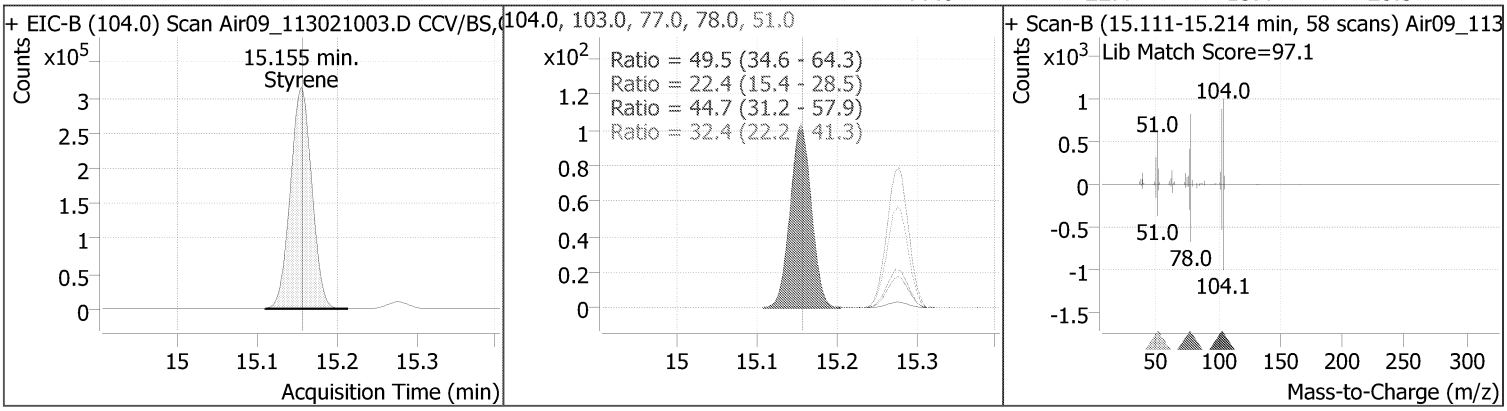
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	20.5277	14.78	0.00	1570875	106.0	49.1	34.6	64.2
					105.0	23.0	16.4	30.4



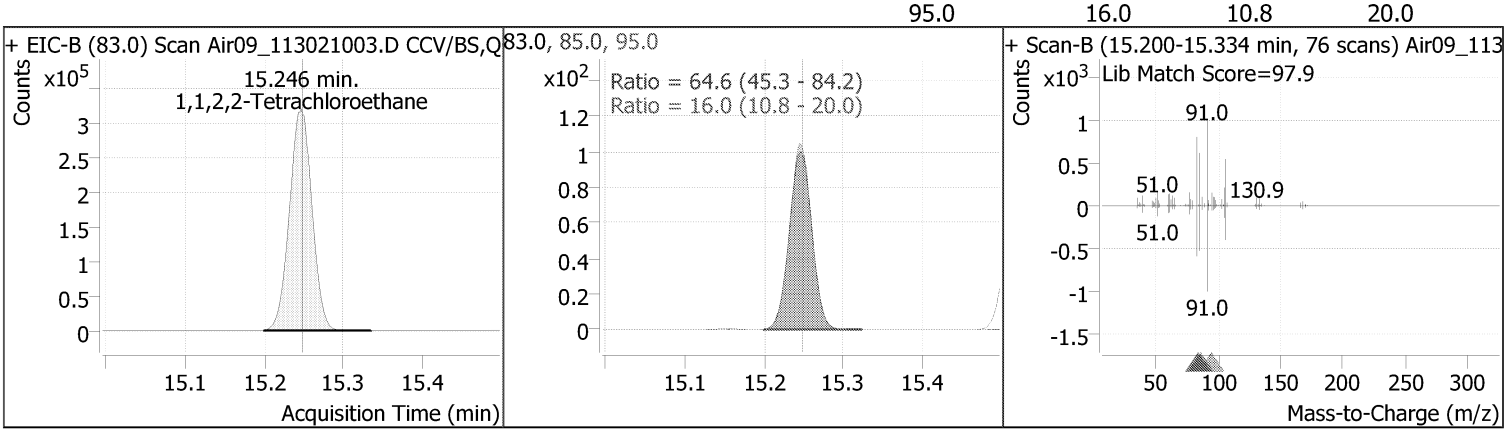
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	9.7846	14.85	0.00	541569	171.0	52.0	36.1	67.0
					175.0	49.4	34.4	63.9
					93.0	21.7	14.4	26.8
					91.0	22.1	14.3	26.6



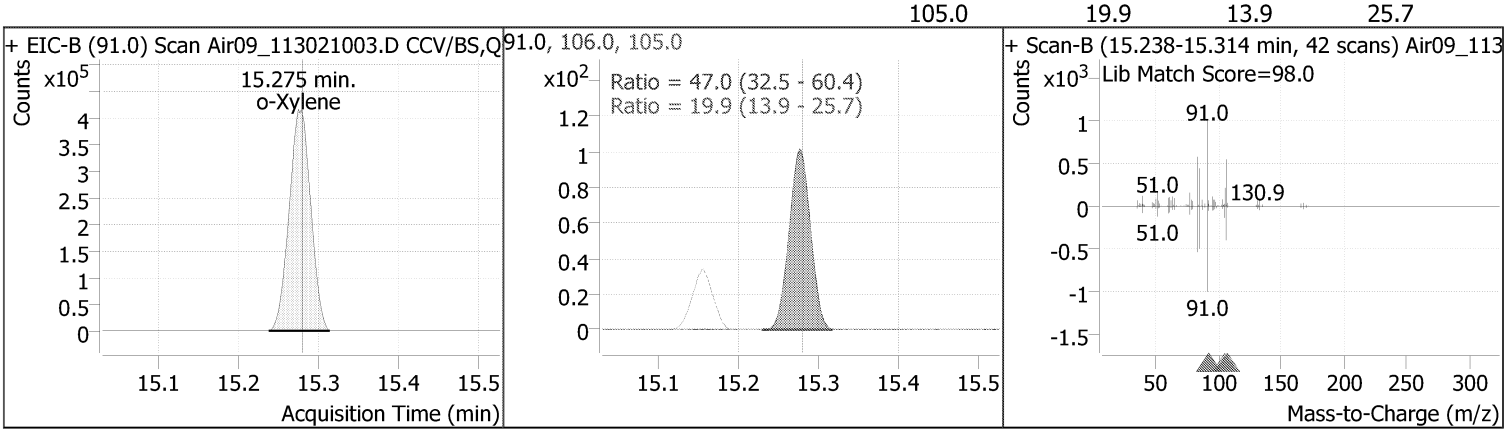
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	10.1238	15.16	0.00	590650	103.0	49.5	34.6	64.3
					78.0	44.7	31.2	57.9
					51.0	32.4	22.2	41.3
					77.0	22.4	15.4	28.5



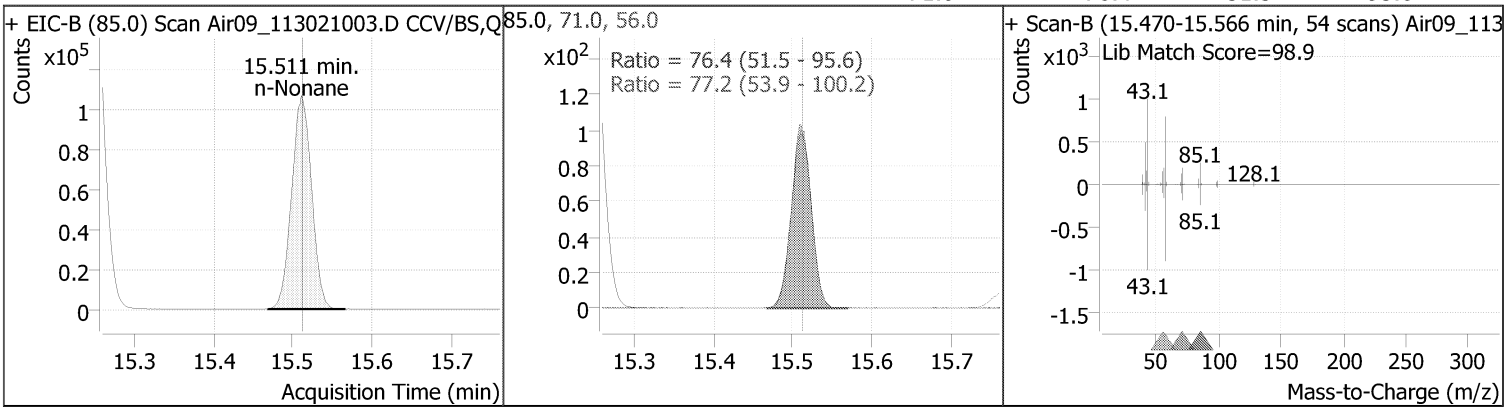
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	9.8438	15.25	0.00	633164	85.0	64.6	45.3	84.2
					95.0	16.0	10.8	20.0



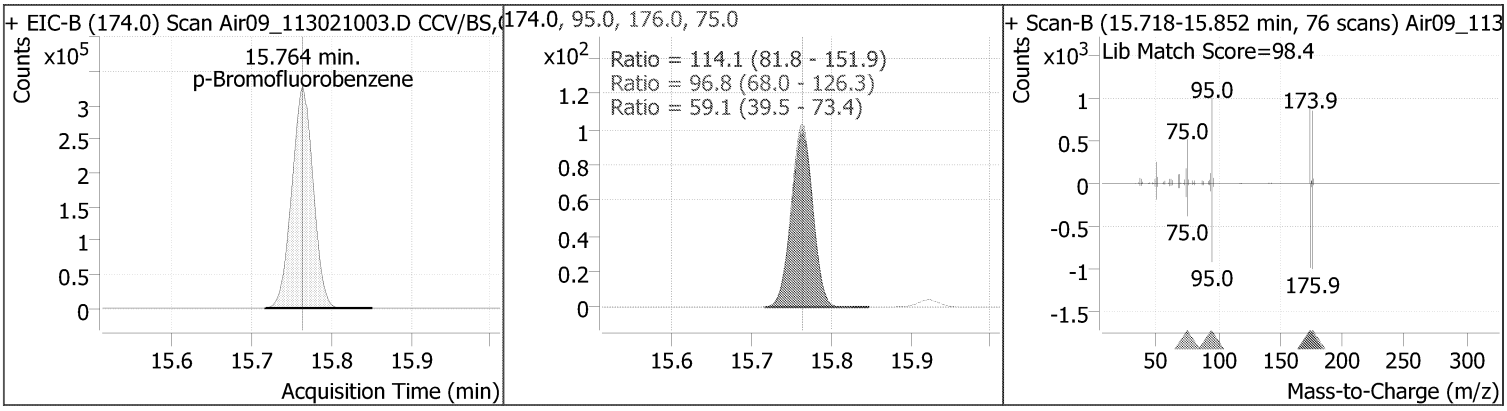
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	10.0452	15.27	-0.01	779732	106.0	47.0	32.5	60.4
					105.0	19.9	13.9	25.7



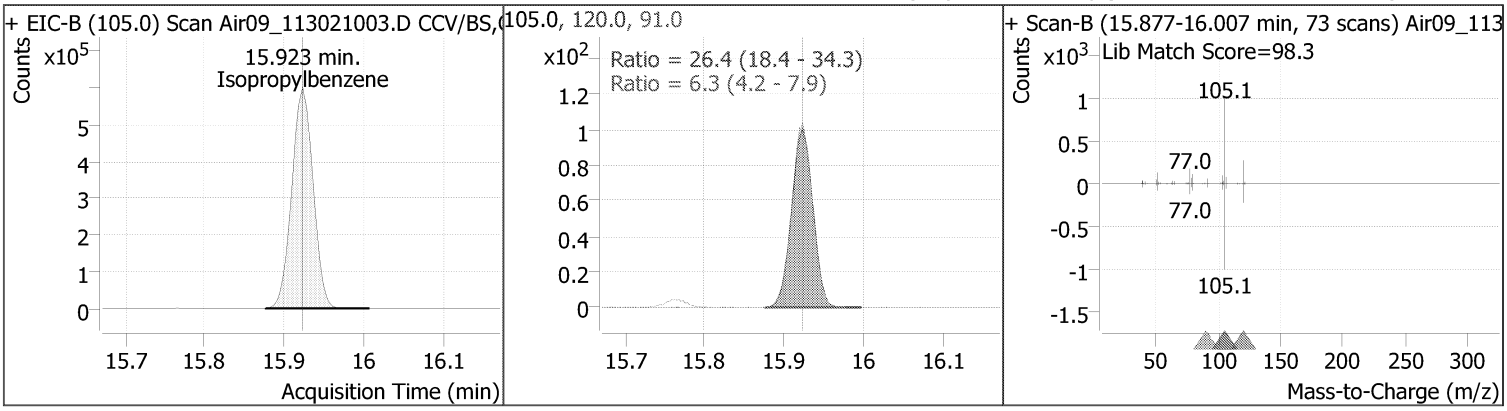
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	10.6403	15.51	0.00	186970	56.0	77.2	53.9	100.2
					71.0	76.4	51.5	95.6



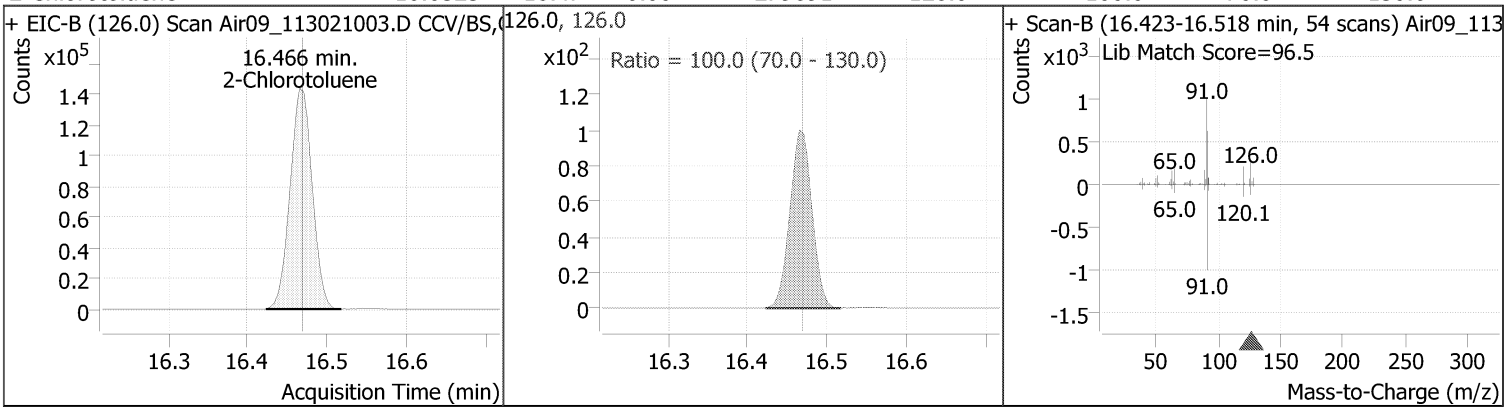
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	9.3597	15.76	0.00	612144	95.0	114.1	81.8	151.9
					176.0	96.8	68.0	126.3
					75.0	59.1	39.5	73.4



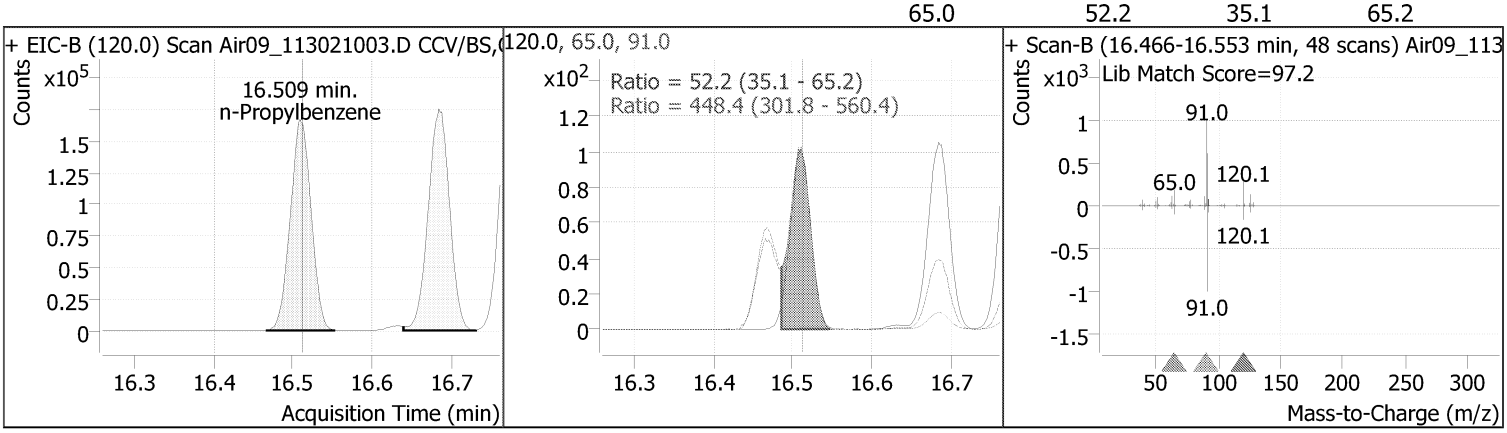
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	9.7538	15.92	0.00	1119764	120.0	26.4	18.4	34.3
					91.0	6.3	4.2	7.9



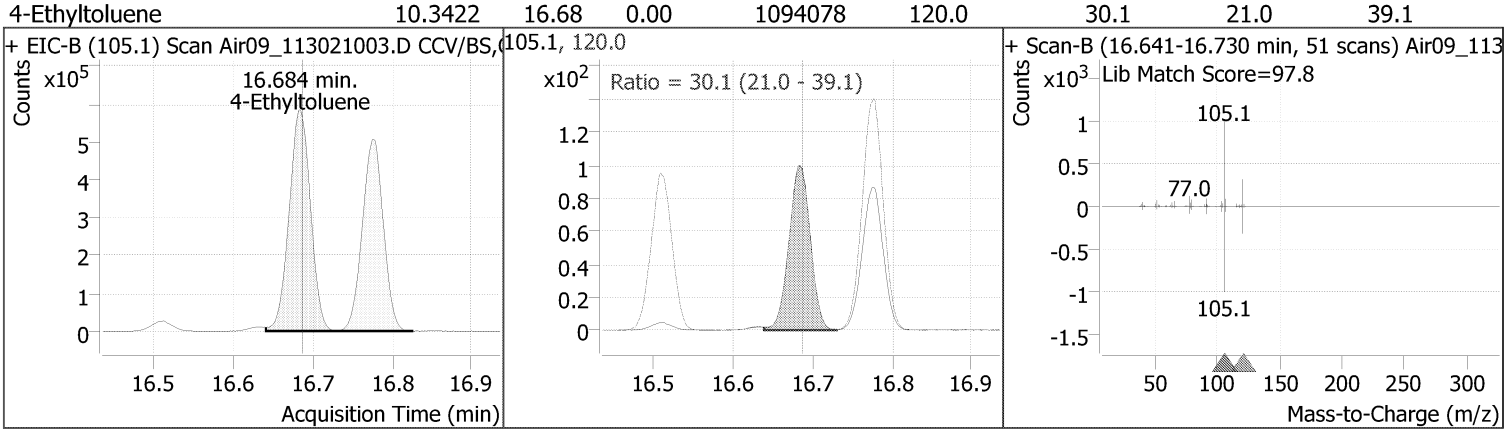
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	10.0323	16.47	0.00	279691	126.0	100.0	70.0	130.0



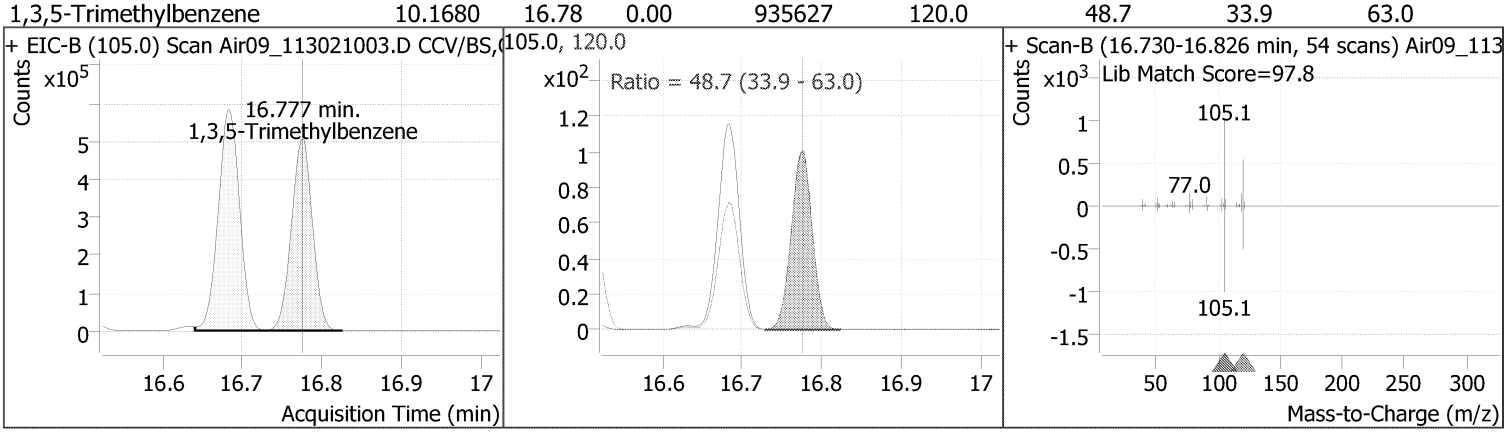
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	9.9162	16.51	0.00	304535	91.0	448.4	301.8	560.4
					65.0	52.2	35.1	65.2



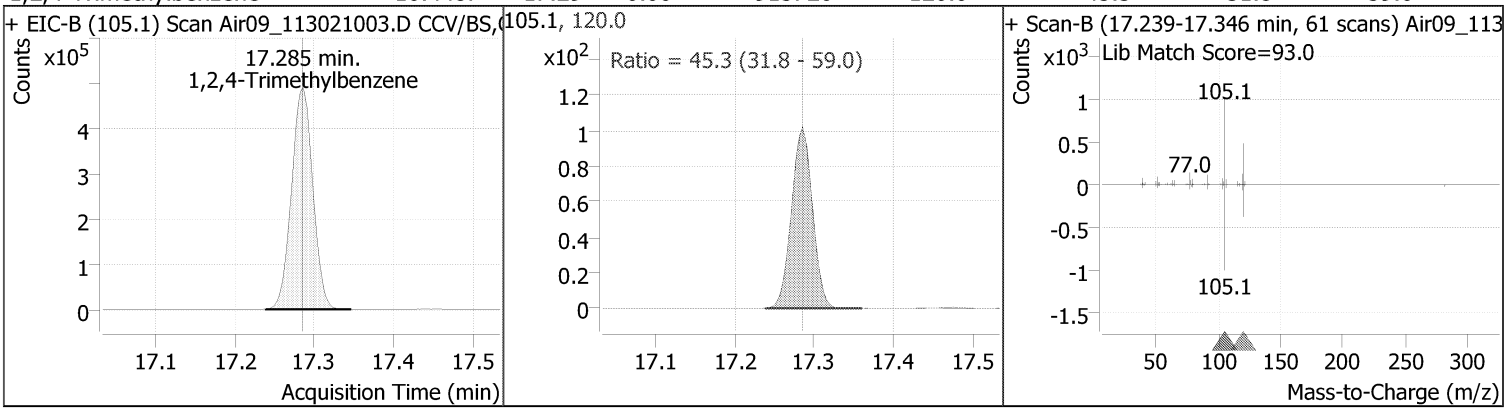
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	10.3422	16.68	0.00	1094078	120.0	30.1	21.0	39.1



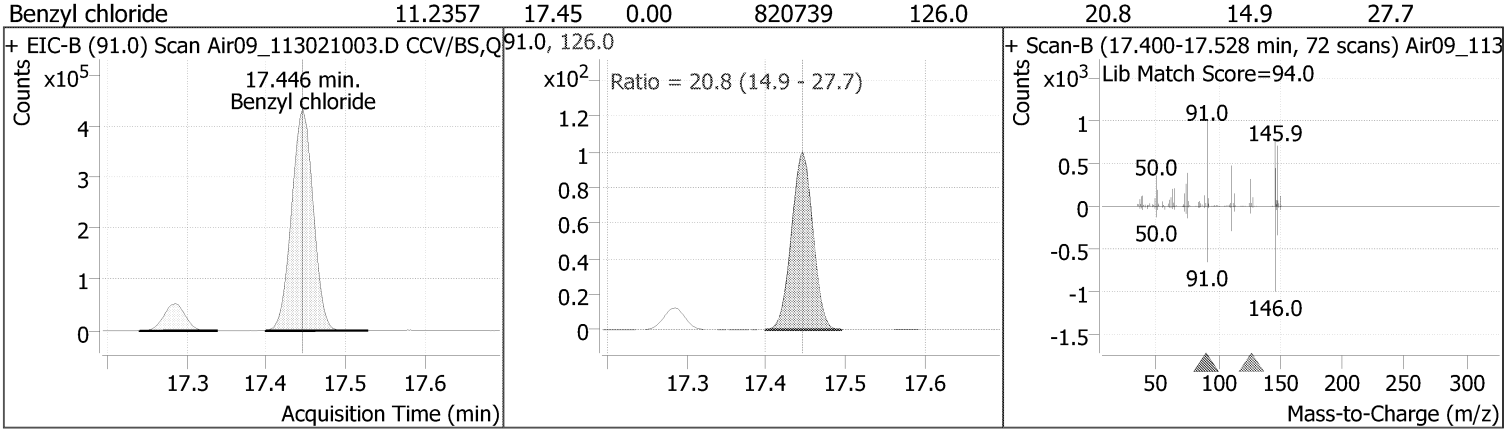
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	10.1680	16.78	0.00	935627	120.0	48.7	33.9	63.0



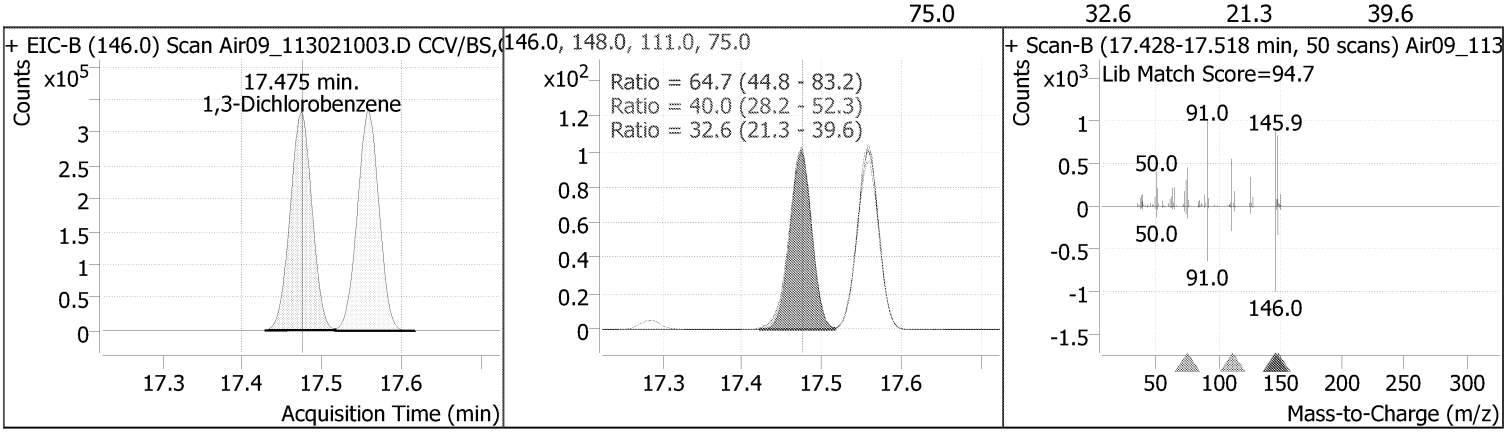
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	10.4487	17.29	0.00	915726	120.0	45.3	31.8	59.0



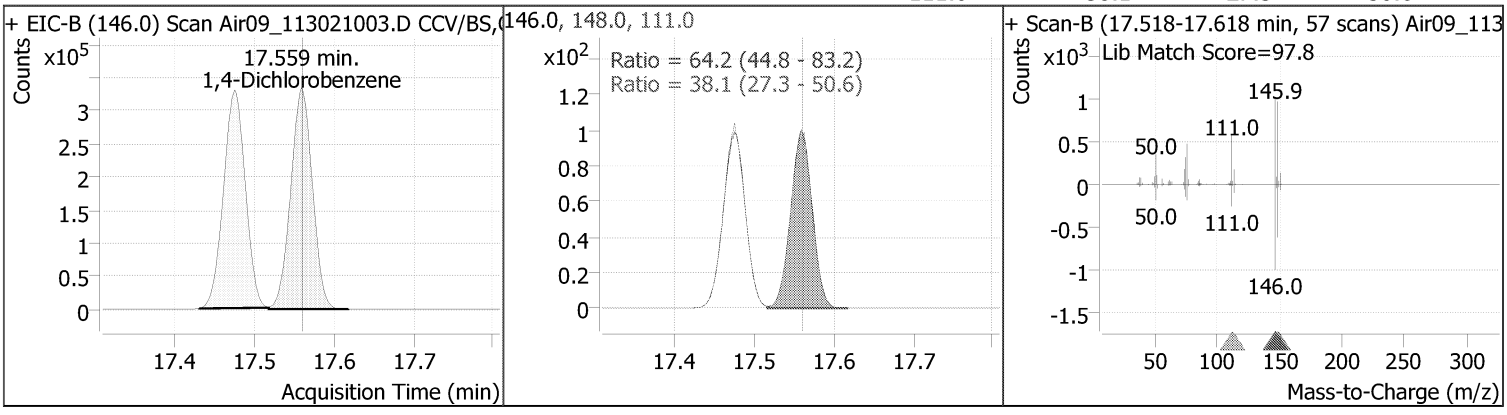
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	11.2357	17.45	0.00	820739	126.0	20.8	14.9	27.7



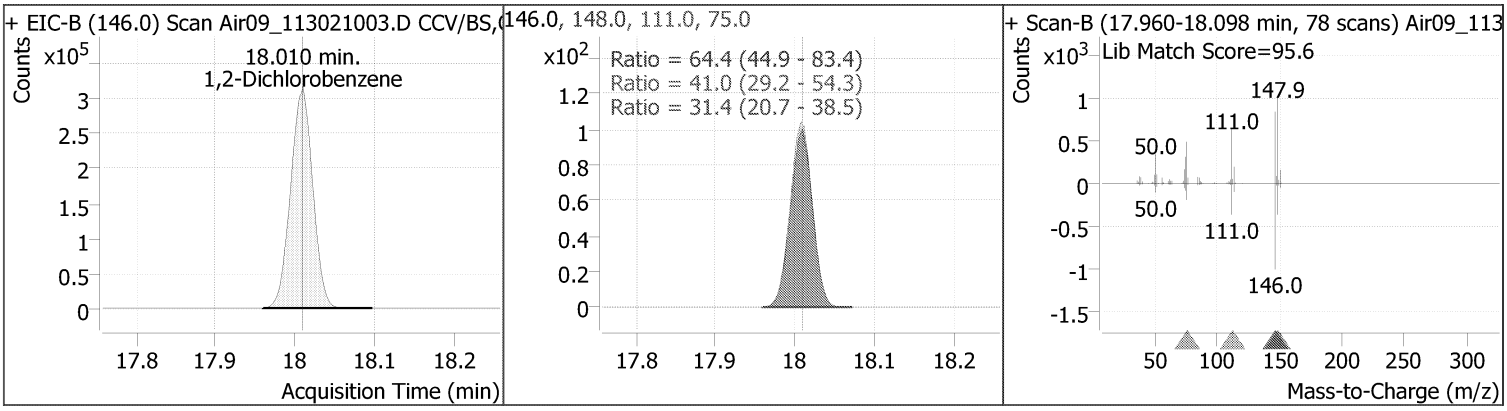
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	9.5130	17.47	0.00	633363	148.0	64.7	44.8	83.2
					111.0	40.0	28.2	52.3
					75.0	32.6	21.3	39.6



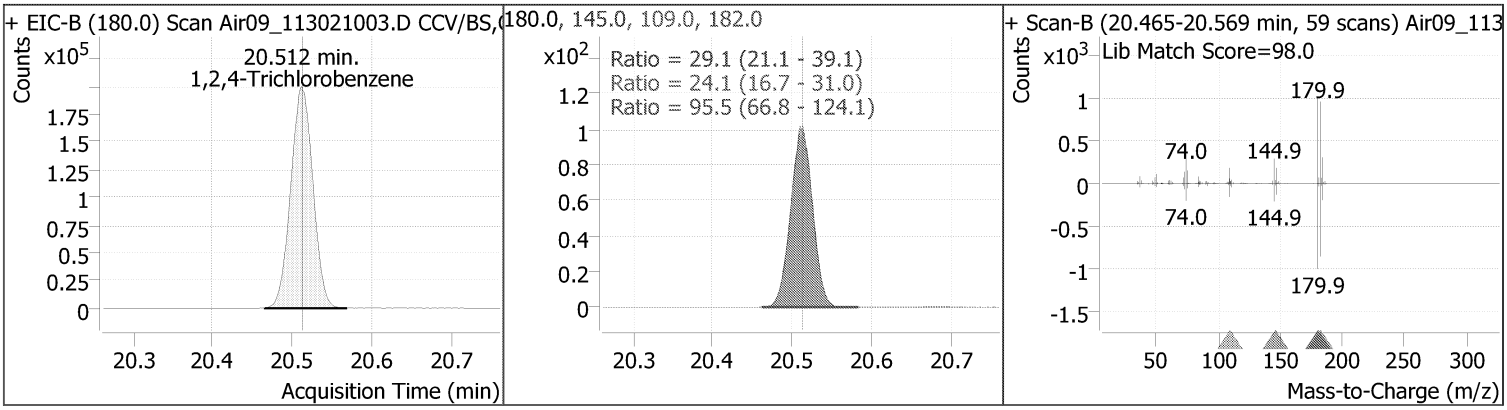
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	9.6679	17.56	0.00	633662	148.0	64.2	44.8	83.2
					111.0	38.1	27.3	50.6



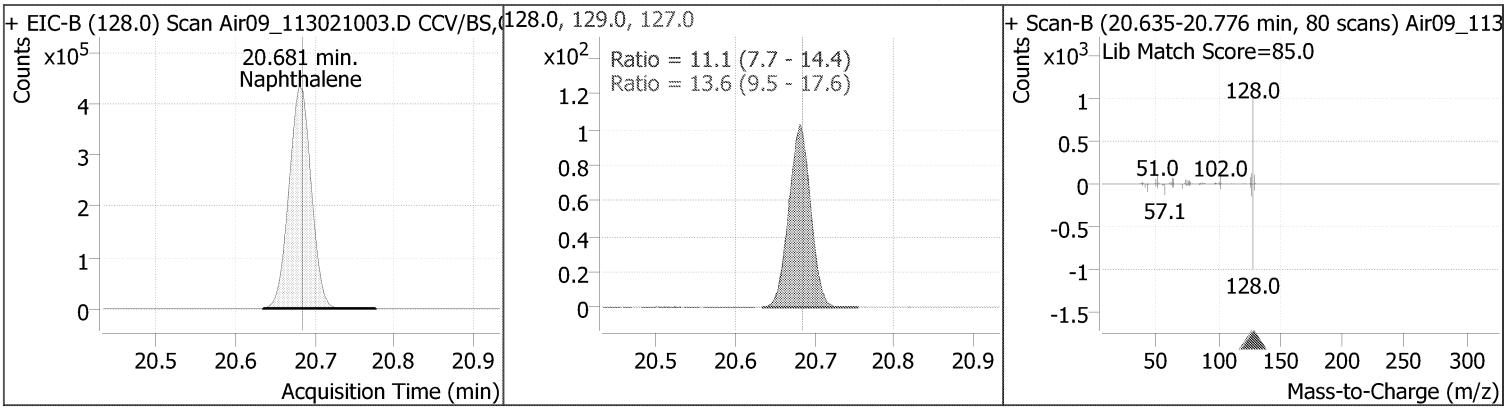
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	9.6687	18.01	0.00	611891	148.0	64.4	44.9	83.4
					111.0	41.0	29.2	54.3
					75.0	31.4	20.7	38.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	10.5267	20.51	0.00	388434	182.0	95.5	66.8	124.1
					145.0	29.1	21.1	39.1
					109.0	24.1	16.7	31.0

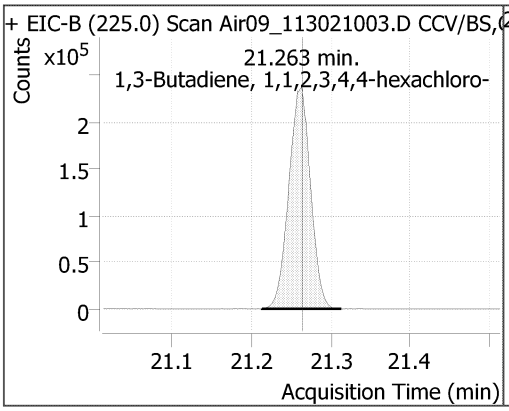


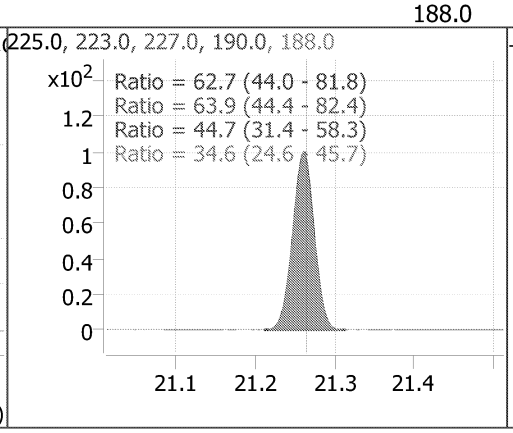
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	10.9836	20.68	0.00	847966	127.0	13.6	9.5	17.6
					129.0	11.1	7.7	14.4

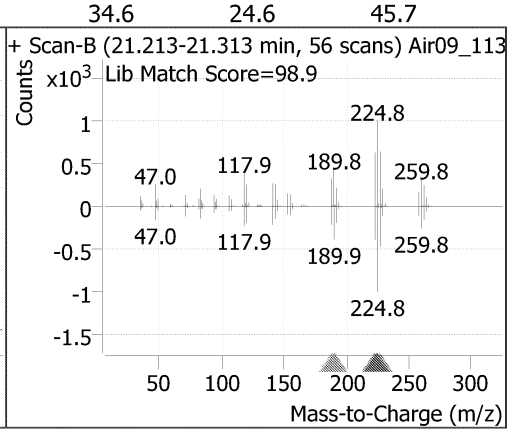


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	8.8404	21.26	0.00	452841	227.0	63.9	44.4	82.4
					223.0	62.7	44.0	81.8
					190.0	44.7	31.4	58.3
					188.0	34.6	24.6	45.7







ENTHALPY Canister Check FOR 453958 MSAIR Air
EPA TO-15

Inst : AIR-MS-06 Run Name : C10038 IDF : 1.0
Seqnum : 371435440006 File : air06_102921006 Time : 29-OCT-2021 14:12
Cal : 371424323001 Caldate : 21-OCT-2021

Analyte	Quant	RL	Units	Flags
1,1,1,2-Tetrachloroethane	ND	0.2000	nL/L	
Freon 12	ND	0.2000	nL/L	
Freon 114	ND	0.2000	nL/L	
Chloromethane	ND	0.2000	nL/L	
Vinyl Chloride	ND	0.2000	nL/L	
Bromomethane	ND	0.2000	nL/L	
Chloroethane	ND	0.2000	nL/L	
Trichlorofluoromethane	ND	0.2000	nL/L	
1,1-Dichloroethene	ND	0.2000	nL/L	
Freon 113	ND	0.2000	nL/L	
Acetone	ND	1.000	nL/L	
Carbon Disulfide	ND	0.2000	nL/L	
Isopropanol (IPA)	ND	1.000	nL/L	
Methylene Chloride	ND	0.2000	nL/L	
trans-1,2-Dichloroethene	ND	0.2000	nL/L	
MTBE	ND	0.2000	nL/L	
n-Hexane	ND	0.2000	nL/L	
1,1-Dichloroethane	ND	0.2000	nL/L	
Vinyl Acetate	ND	1.000	nL/L	
cis-1,2-Dichloroethene	ND	0.2000	nL/L	
2-Butanone	ND	1.000	nL/L	
Chloroform	ND	0.2000	nL/L	
1,1,1-Trichloroethane	ND	0.2000	nL/L	
Carbon Tetrachloride	ND	0.2000	nL/L	
Benzene	ND	0.2000	nL/L	
1,2-Dichloroethane	ND	0.2000	nL/L	
Trichloroethene	ND	0.2000	nL/L	
1,2-Dichloropropane	ND	0.2000	nL/L	
Bromodichloromethane	ND	0.2000	nL/L	
cis-1,3-Dichloropropene	ND	0.2000	nL/L	
4-Methyl-2-Pentanone	ND	0.2000	nL/L	
Toluene	ND	0.2000	nL/L	
trans-1,3-Dichloropropene	ND	0.2000	nL/L	
1,1,2-Trichloroethane	ND	0.2000	nL/L	
Tetrachloroethene	ND	0.2000	nL/L	
2-Hexanone	ND	0.5000	nL/L	
Dibromochloromethane	ND	0.2000	nL/L	
1,2-Dibromoethane	ND	0.2000	nL/L	
Chlorobenzene	ND	0.2000	nL/L	
Ethylbenzene	ND	0.2000	nL/L	
m,p-Xylenes	ND	0.4000	nL/L	
o-Xylene	ND	0.2000	nL/L	
Styrene	ND	0.2000	nL/L	
Bromoform	ND	0.2000	nL/L	
1,1,2,2-Tetrachloroethane	ND	0.2000	nL/L	
4-Ethyltoluene	ND	0.2000	nL/L	
1,3,5-Trimethylbenzene	ND	0.2000	nL/L	
1,2,4-Trimethylbenzene	ND	0.2000	nL/L	
1,3-Dichlorobenzene	ND	0.2000	nL/L	
1,4-Dichlorobenzene	ND	0.2000	nL/L	

Analyte	Quant	RL	Units	Flags
Benzyl chloride	ND	0.2000	nL/L	
1,2-Dichlorobenzene	ND	0.2000	nL/L	
1,2,4-Trichlorobenzene	ND	0.2000	nL/L	
Hexachlorobutadiene	ND	0.2000	nL/L	

ISTD (ICAL air06_102121011)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389038	387465	-0.40	8.19	8.19	0.00
1,4-Difluorobenzene	1458162	1460634	0.17	9.92	9.92	0.00
Chlorobenzene-d5	778633	755726	-2.94	14.02	14.02	0.00

TO15 SCAN Certified (Batch 2148)

Analyst: DJL Date: 11/18/21 Reviewer: LW Date: 11/29/21

Quantitation Results Report (Not Reviewed)

Data File	Air06_102921006.D	Operator	GSG
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Vial	10	Multiplier	1.00
DA Method File	TO15_102121.m	Comment	1x400mL
Tune File	bfb.u	Tune Date	10/28/2021 7:31:42 AM
Batch Name	2021 Oct 29 1141 TO15_102121.m.batch.bin	Last Calib Update	10/23/2021 7:11:09 AM
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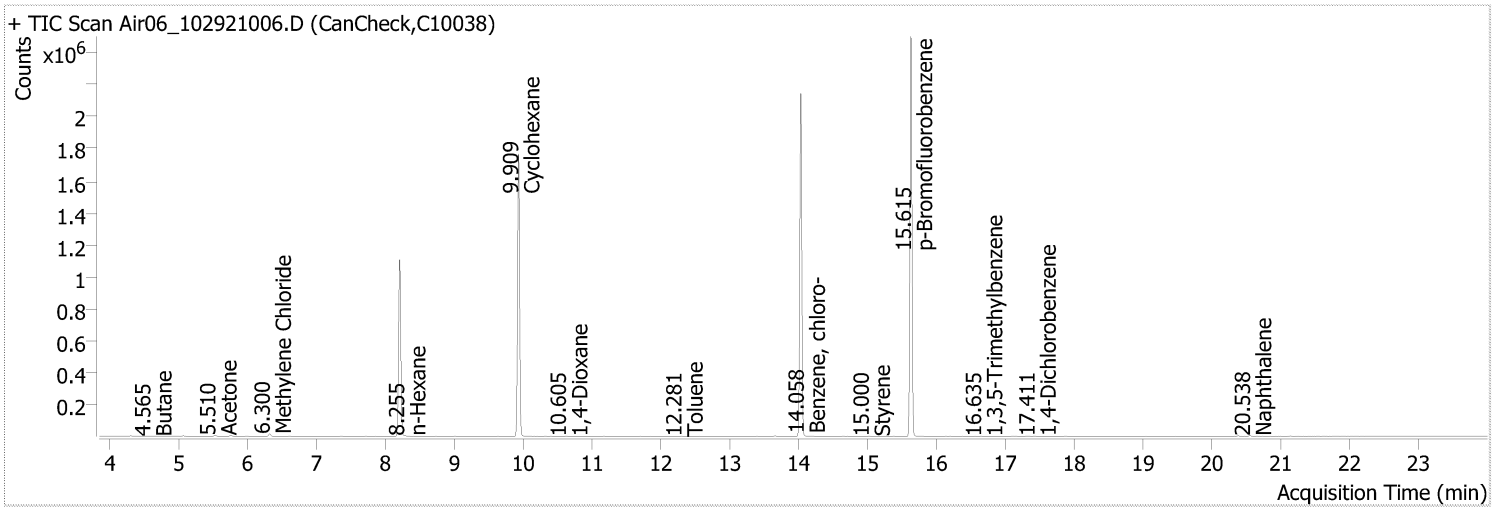


Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.190	130.0	387465	10.0000	nL/L		0.003
M 1,4-Difluorobenzene	9.915	114.0	1460634	10.0000	nL/L		0.000
M Chlorobenzene-d5	14.016	82.0	755726	10.0000	nL/L	#	0.000
System Monitoring Compounds							
S p-Bromofluorobenzene	15.615	95.0	999102	10.0404	nL/L		0.000
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 100.40%			
Target Compounds							QValue
T Propylene	3.940	41.0	495	0.0135	nL/L	#	60
T Freon 12	4.008	85.0	74	0.0009	nL/L	#	53
T Chloromethane	4.157	50.0	139	0.0033	nL/L		50
T Freon 114	0.000		0	N.D.			
T Vinyl Chloride	0.000		0	N.D.			
T 1,3-Butadiene	0.000		0	N.D.			
T Butane	4.565	43.0	436	0.0066	nL/L	#	56
T Bromomethane	0.000		0	N.D.			
T Chloroethane	4.769	64.0	23	0.0012	nL/L		39
T Ethanol	5.050	45.0	3425	0.1882	nL/L		98
T Vinyl bromide	0.000		0	N.D.			
T Acrolein	5.358	56.0	155	0.0084	nL/L	#	57
T Acetone	5.510	58.0	2812	0.1071	nL/L	#	77
T Trichloromonofluoromethane	0.000		0	N.D.			
T Isopropanol (IPA)	5.737	45.0	8479	0.0841	nL/L	#	91
T n-Pentane	5.963	43.0	1769	0.0203	nL/L		97
T 1,1-Dichloroethene	0.000		0	N.D.			
T Tert-butyl alcohol (TBA)	6.322	59.0	461	0.0057	nL/L	#	64
T Methylene Chloride	6.300	84.0	6764	0.1678	nL/L		87
T 3-Chloropropene	6.591	76.0	1415	0.0915	nL/L		42
T Freon 113	0.000		0	N.D.			
T Carbon Disulfide	6.591	76.0	1415	0.0141	nL/L		86

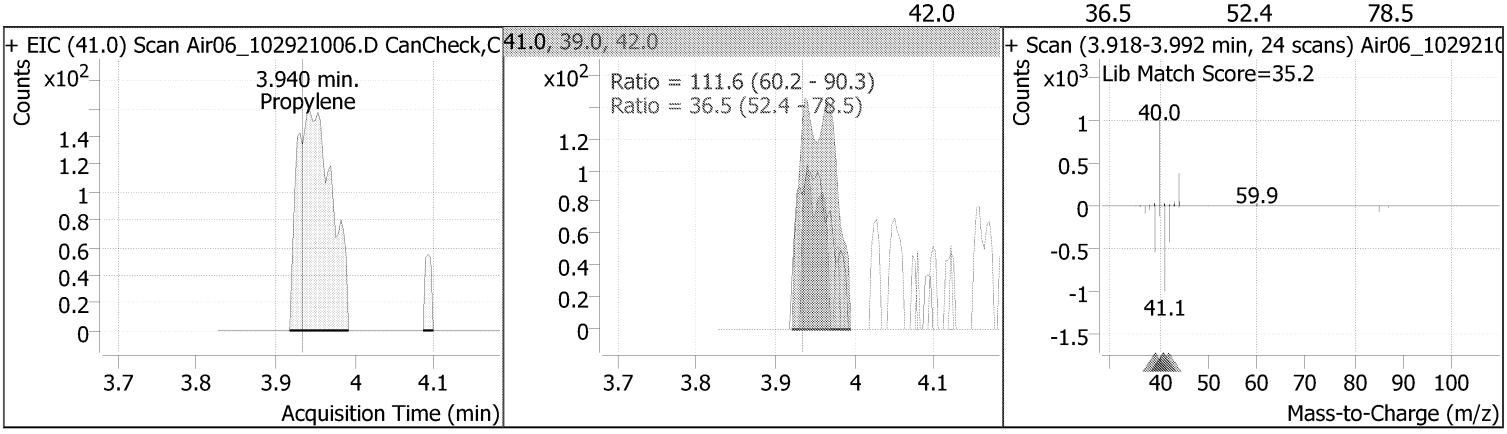
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.141	61.0	86	0.0014	nL/L		36
T 1,1-Dichloroethane	0.000		0	N.D.			
T MTBE	0.000		0	N.D.			
T Vinyl Acetate	7.436	43.0	666	0.0052	nL/L		84
T 2-Butanone	7.698	43.0	1417	0.0138	nL/L		90
T cis-1,2-Dichloroethene	8.041	61.0	36	0.0006	nL/L	#	22
T Ethyl Acetate	8.041	61.0	36	0.0023	nL/L		1
T n-Hexane	8.255	57.0	1241	0.0163	nL/L		94
T Chloroform	8.303	83.0	41	0.0005	nL/L		25
T Tetrahydrofuran	0.000		0	N.D.			
T 1,2-Dichloroethane	0.000		0	N.D.			
T 1,1,1-Trichloroethane	0.000		0	N.D.			
T Benzene	9.617	78.0	550	0.0050	nL/L	#	84
T Carbon Tetrachloride	0.000		0	N.D.			
T Cyclohexane	9.909	84.0	1390	0.0299	nL/L	#	1
T 1,2-Dichloropropane	10.190	63.0	22	0.0004	nL/L		27
T Methane, bromodichloro-	0.000		0	N.D.			
T 1,4-Dioxane	10.605	88.0	372	0.0152	nL/L		96
T Trichloroethene	10.559	132.0	94	0.0019	nL/L		7
T 2,2,4-Trimethylpentane	10.618	57.0	360	0.0015	nL/L	#	51
T Methyl methacrylate	0.000		0	N.D.			
T n-Heptane	0.000		0	N.D.			
T cis-1,3-Dichloropropene	0.000		0	N.D.			
T 4-Methyl-2-Pentanone	0.000		0	N.D.			
T trans-1,3-Dichloropropene	11.812	110.0	25	0.0016	nL/L	#	1
T 1,1,2-Trichloroethane	0.000		0	N.D.			
T Toluene	12.281	91.0	783	0.0057	nL/L	#	90
T TPH Gasoline (C3 to C12)	12.399	165.0	593040	0.0615	nL/L		100
T 2-Hexanone	12.550	58.0	139	0.0024	nL/L	#	7
T Dibromochloromethane	12.666	129.0	127	0.0015	nL/L		74
T 1,2-Dibromoethane	12.916	108.9	329	0.0046	nL/L		89
T Tetrachloroethene	13.388	166.0	202	0.0028	nL/L	#	77
T 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
T Benzene, chloro-	14.058	112.0	442	0.0041	nL/L	#	1
T Ethylbenzene	14.443	91.0	467	0.0028	nL/L	#	80
T TPH Gasoline (C6 to C12)	14.524	165.0	368260	0.0510	nL/L		100
T m,p-Xylenes	14.621	91.0	946	0.0070	nL/L	#	80
T Bromoform	14.702	173.0	170	0.0019	nL/L	#	1
T Styrene	15.000	104.0	538	0.0052	nL/L	#	70
T 1,1,2,2-Tetrachloroethane	15.091	83.0	260	0.0025	nL/L	#	49
T o-Xylene	15.129	91.0	419	0.0030	nL/L	#	67
T n-Nonane	0.000		0	N.D.			
T Isopropylbenzene	15.774	105.0	405	0.0021	nL/L		57
T 2-Chlorotoluene	16.317	126.0	24	0.0005	nL/L	#	1
T n-Propylbenzene	16.356	120.0	65	0.0012	nL/L	#	1
T 4-Ethyltoluene	16.541	105.1	474	0.0025	nL/L	#	79
T 1,3,5-Trimethylbenzene	16.635	105.0	655	0.0040	nL/L	#	74
T 1,2,4-Trimethylbenzene	17.139	105.0	650	0.0041	nL/L		86
T Benzyl chloride	17.295	91.0	793	0.0061	nL/L	#	63
T 1,3-Dichlorobenzene	17.324	146.0	1054	0.0093	nL/L	#	93
T 1,4-Dichlorobenzene	17.411	146.0	1441	0.0127	nL/L	#	89
T 1,2-Dichlorobenzene	17.861	146.0	1100	0.0100	nL/L	#	95
T 1,2,4-Trichlorobenzene	20.370	179.9	1588	0.0191	nL/L	#	96
T Naphthalene	20.538	128.0	4696	0.0268	nL/L		99
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.127	225.0	460	0.0051	nL/L	#	69

Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

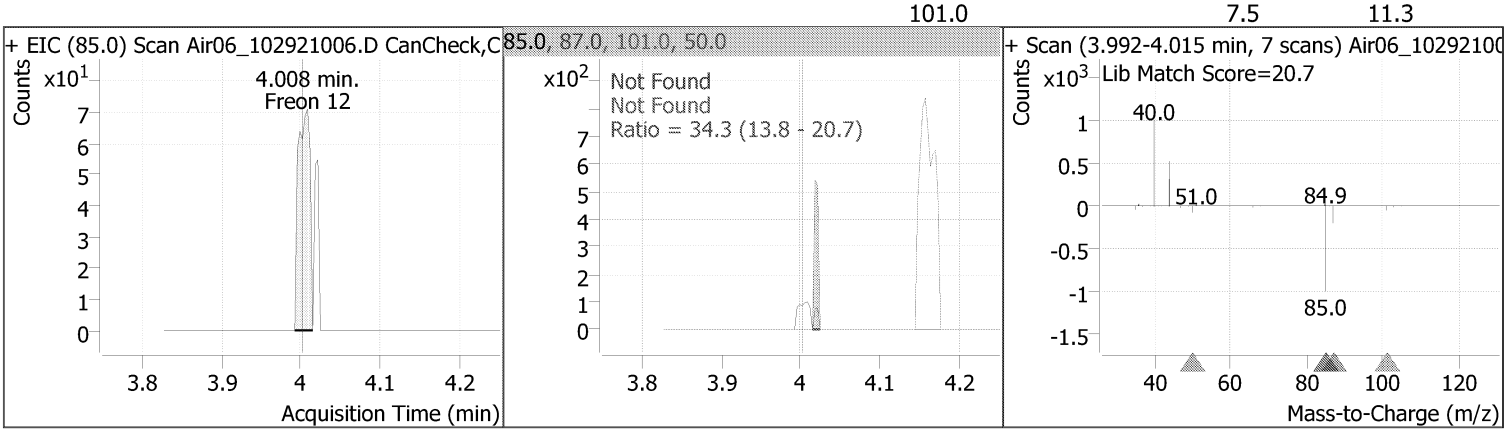
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitation Results Report (Not Reviewed)

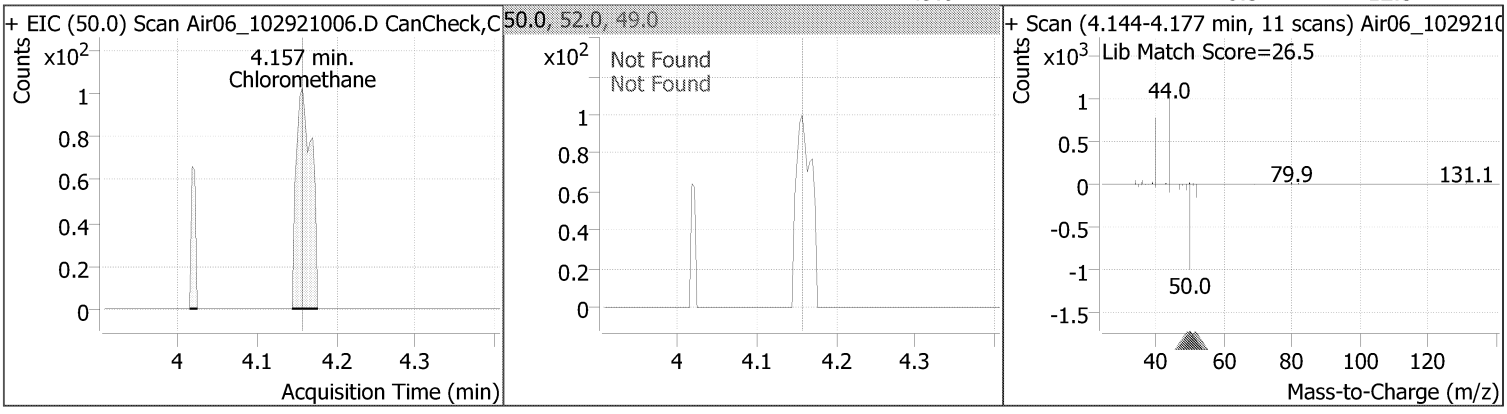
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.0135	3.94	0.01	495	39.0	111.6	60.2	90.3
					42.0	36.5	52.4	78.5



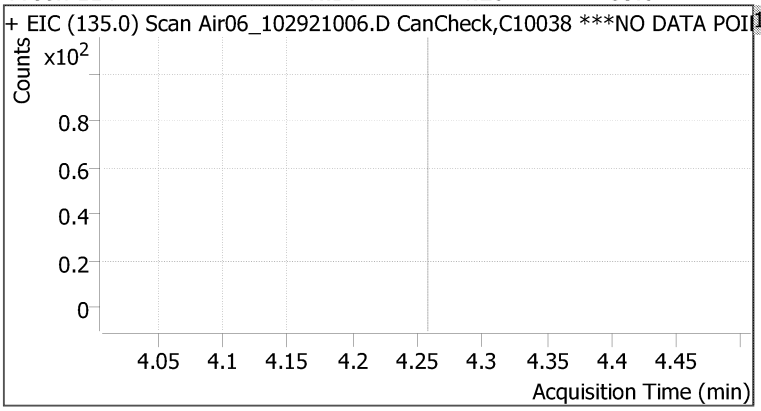
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	0.0009	4.01	0.01	74	87.0		25.9	38.8
					50.0	34.3	13.8	20.7
					101.0		7.5	11.3

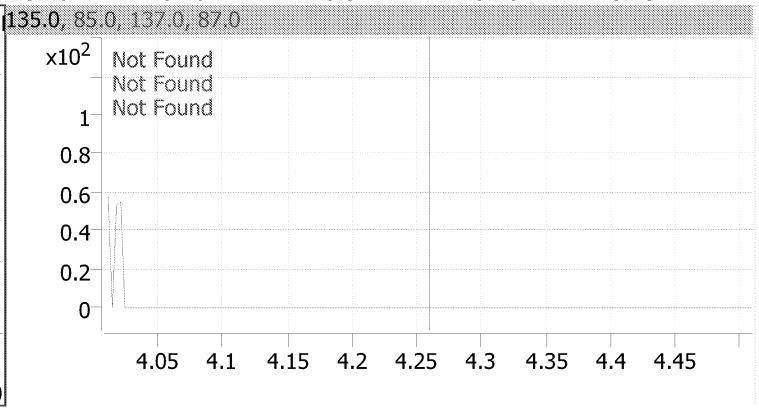


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	0.0033	4.16	0.00	139	52.0		25.5	38.3
					49.0		8.3	12.5

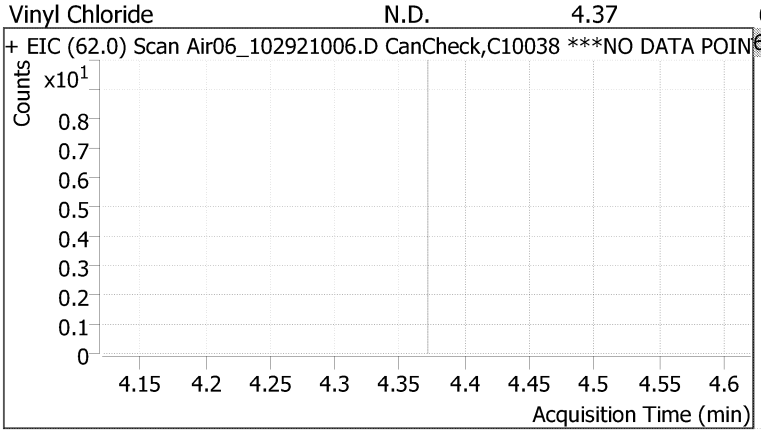


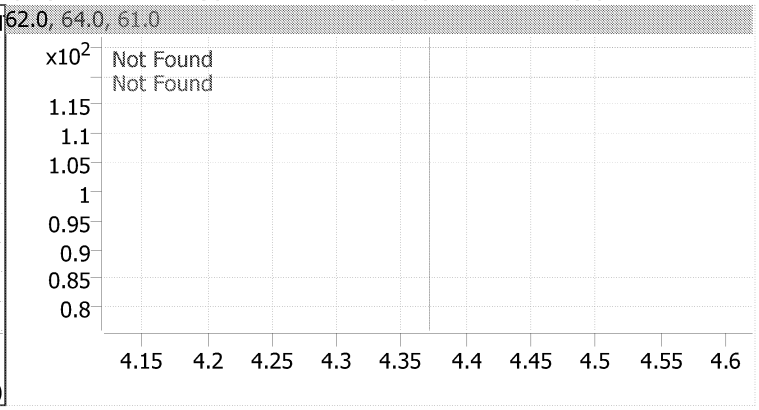
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 114	N.D.	4.26	85.0	151.0	87.0	48.3	137.0	32.5



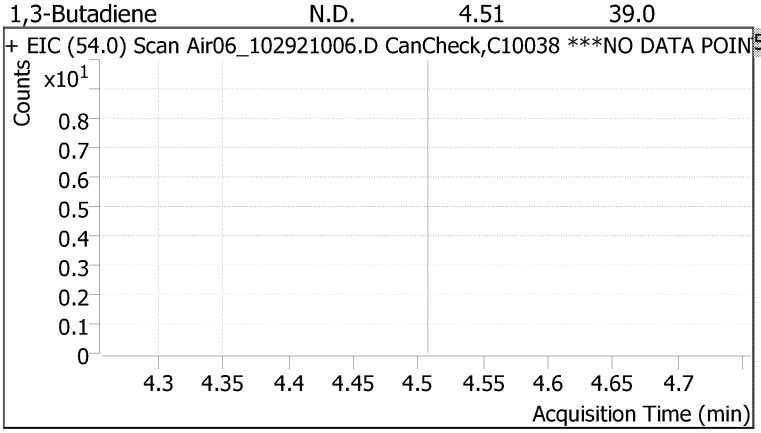


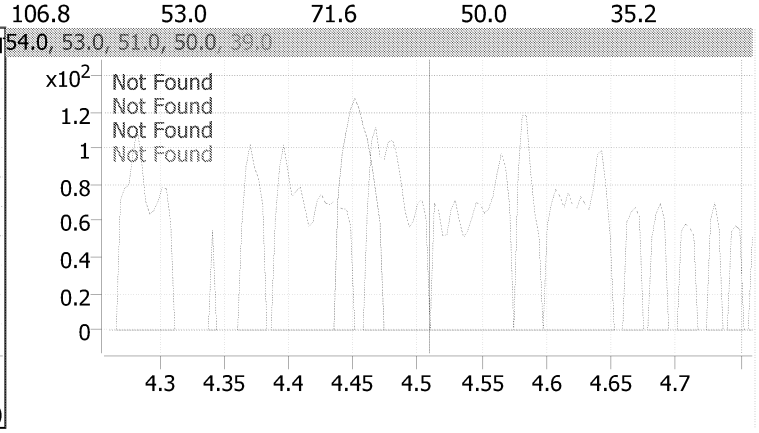
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl Chloride	N.D.	4.37	64.0	30.2	61.0	9.0



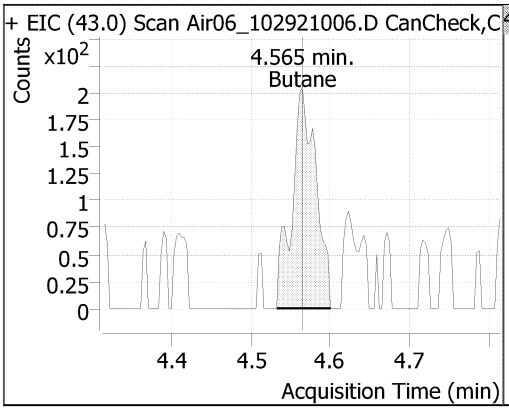


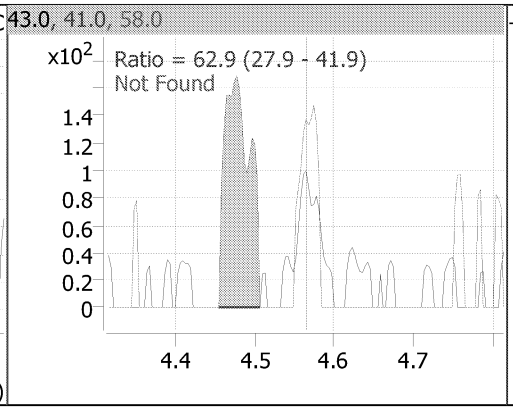
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,3-Butadiene	N.D.	4.51	39.0	106.8	53.0	71.6	50.0	35.2

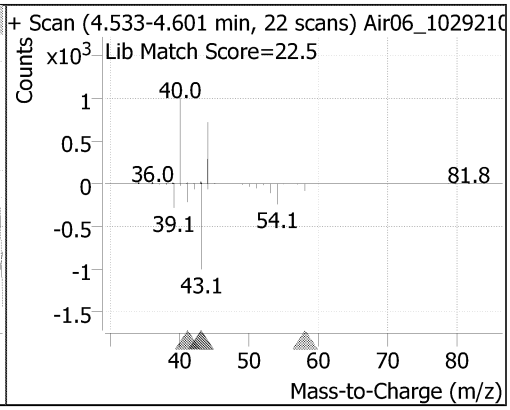




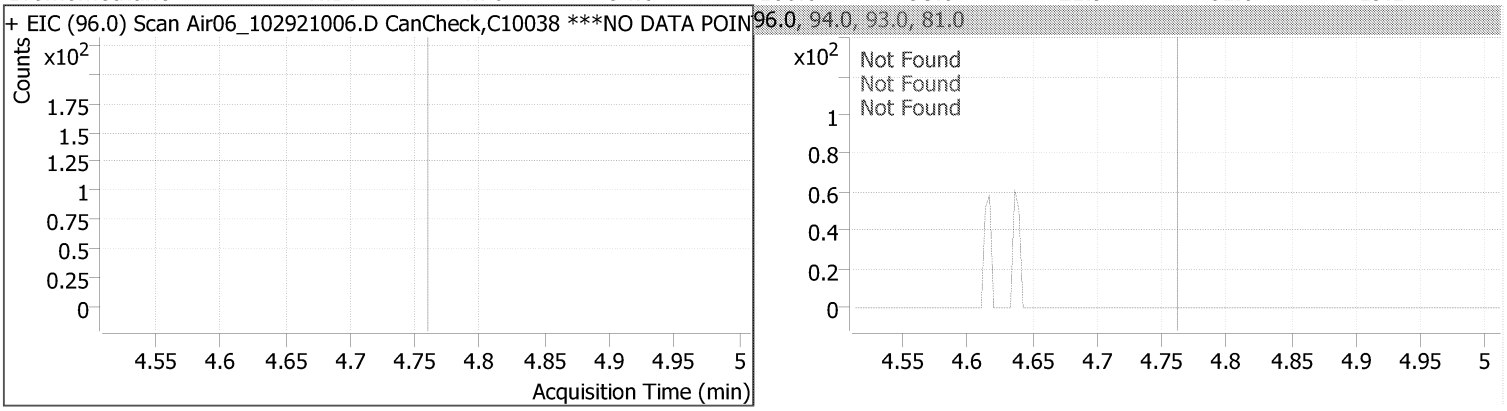
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	0.0066	4.56	0.00	436	41.0	62.9	27.9	41.9
					58.0		8.2	12.4



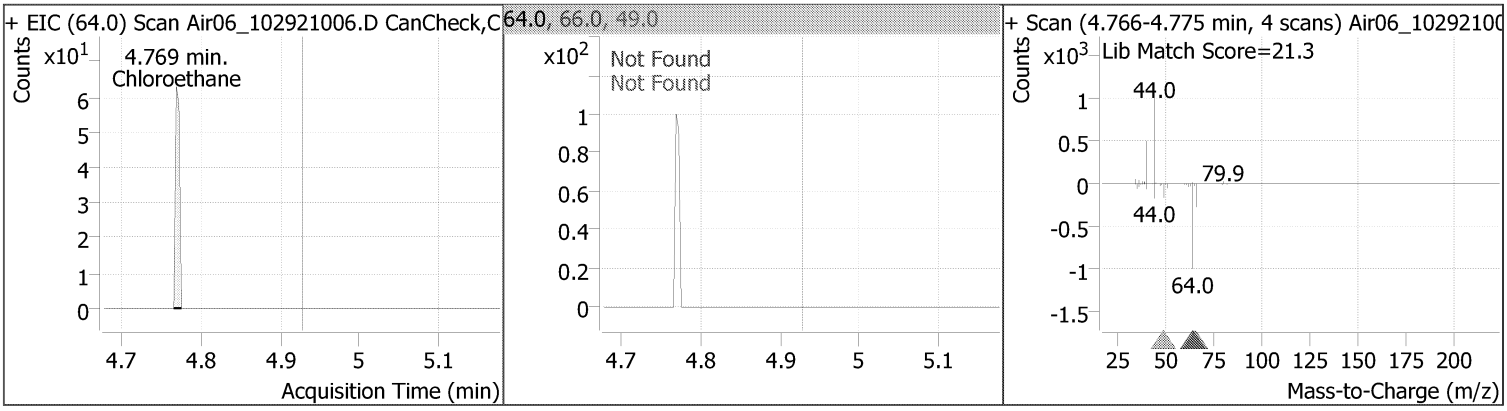




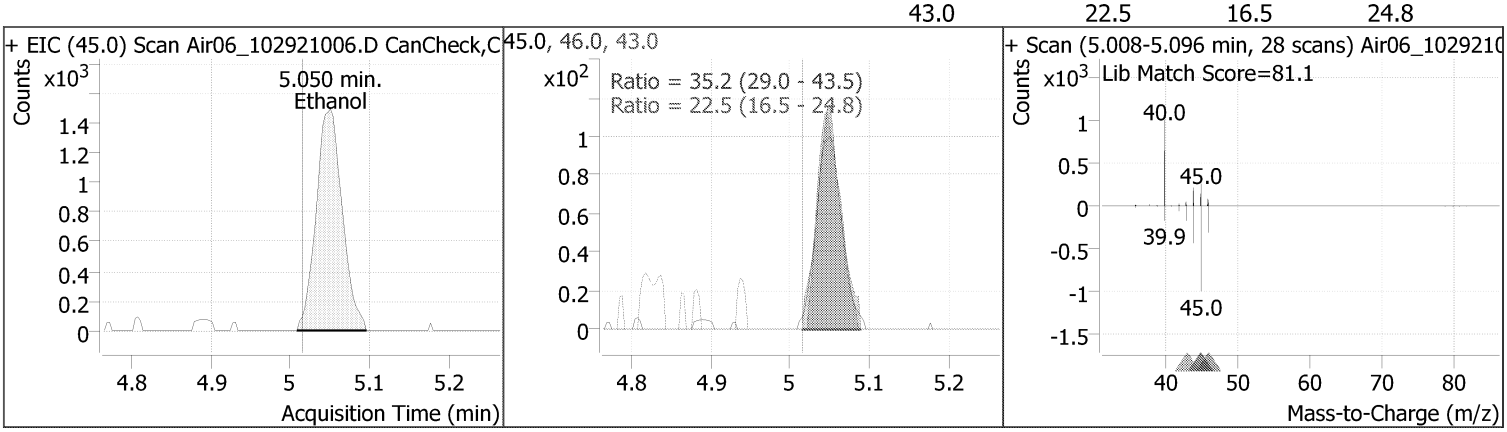
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Bromomethane	N.D.	4.76	94.0	106.0	93.0	21.9	81.0	19.1



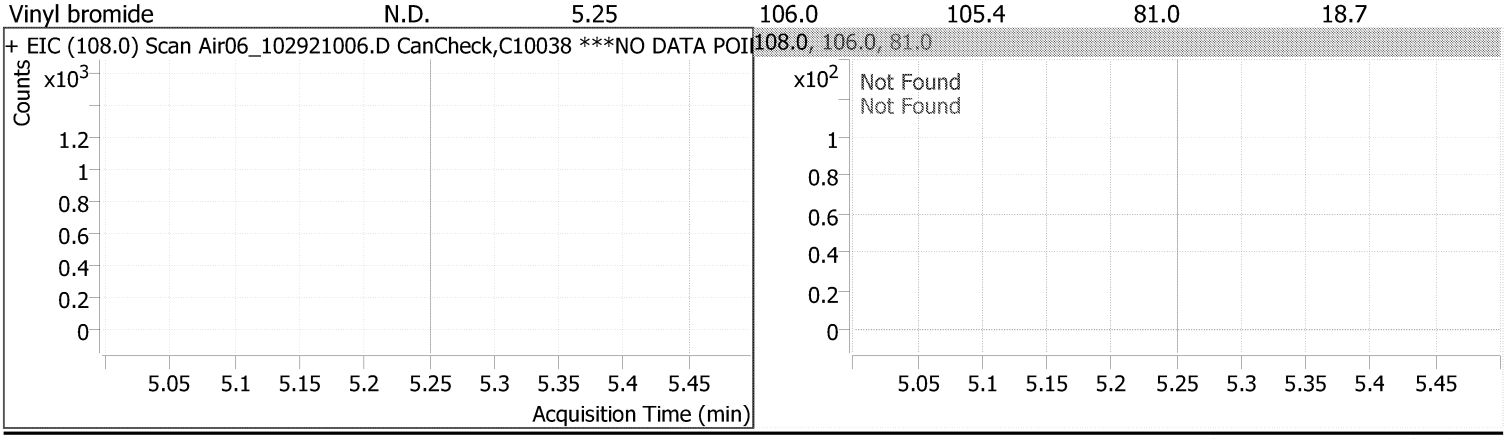
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	0.0012	4.77	-0.16	23	49.0		31.7	47.6
					66.0		24.3	36.5



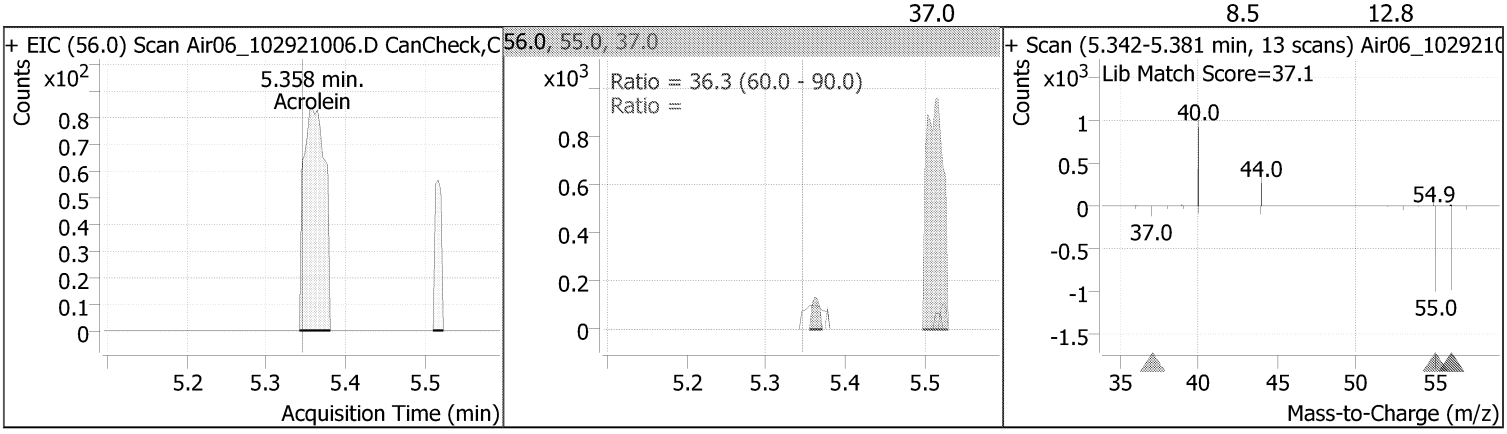
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	0.1882	5.05	0.04	3425	46.0	35.2	29.0	43.5
					43.0	22.5	16.5	24.8



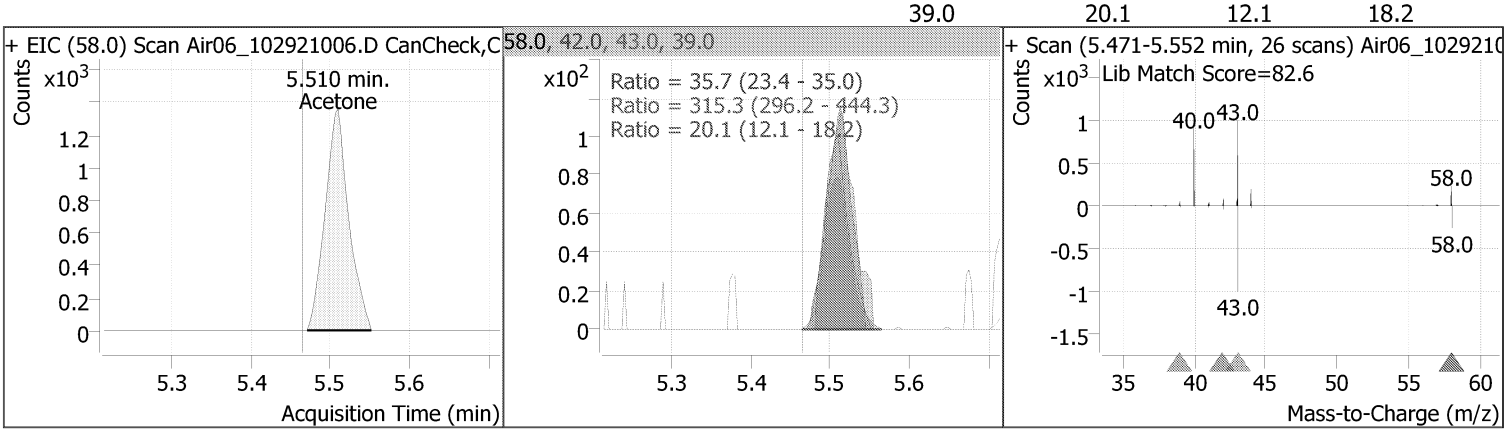
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl bromide	N.D.	5.25	106.0	105.4	81.0	18.7



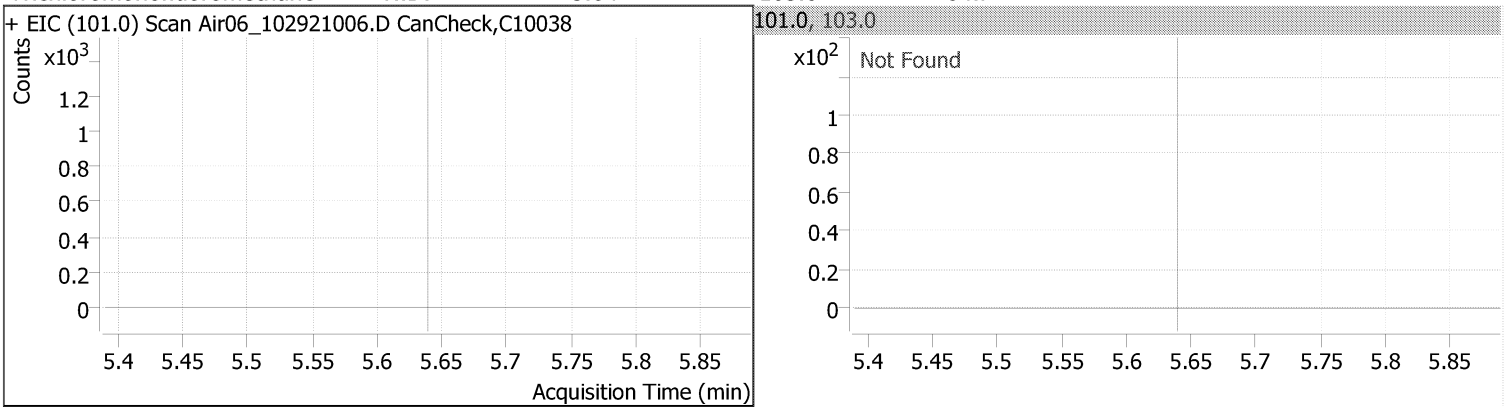
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	0.0084	5.36	0.02	155	55.0	36.3	60.0	90.0
					37.0		8.5	12.8



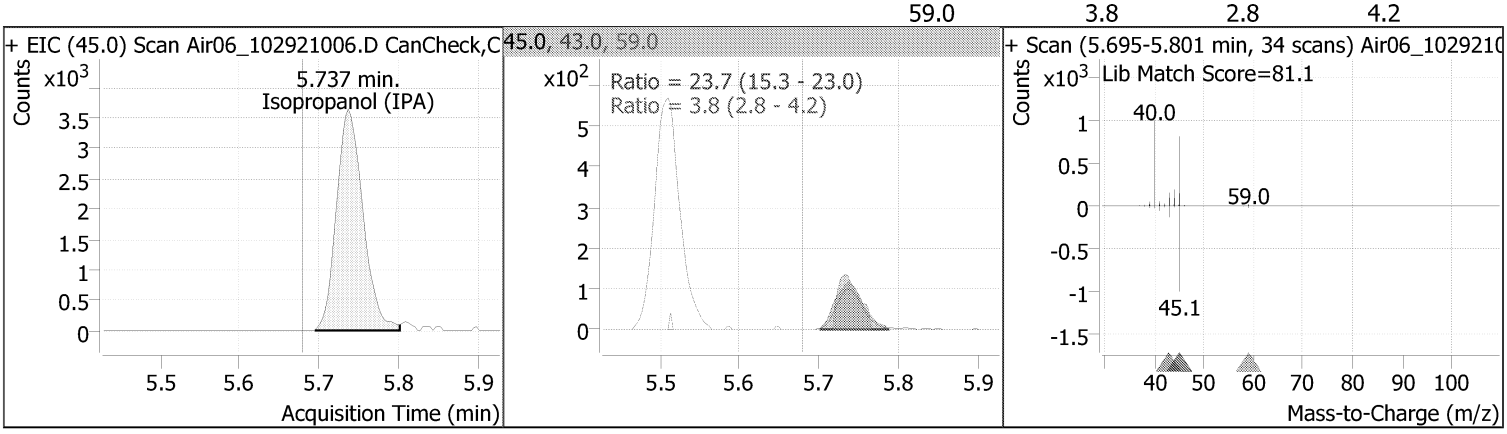
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	0.1071	5.51	0.05	2812	43.0	315.3	296.2	444.3
					42.0	35.7	23.4	35.0
					39.0	20.1	12.1	18.2



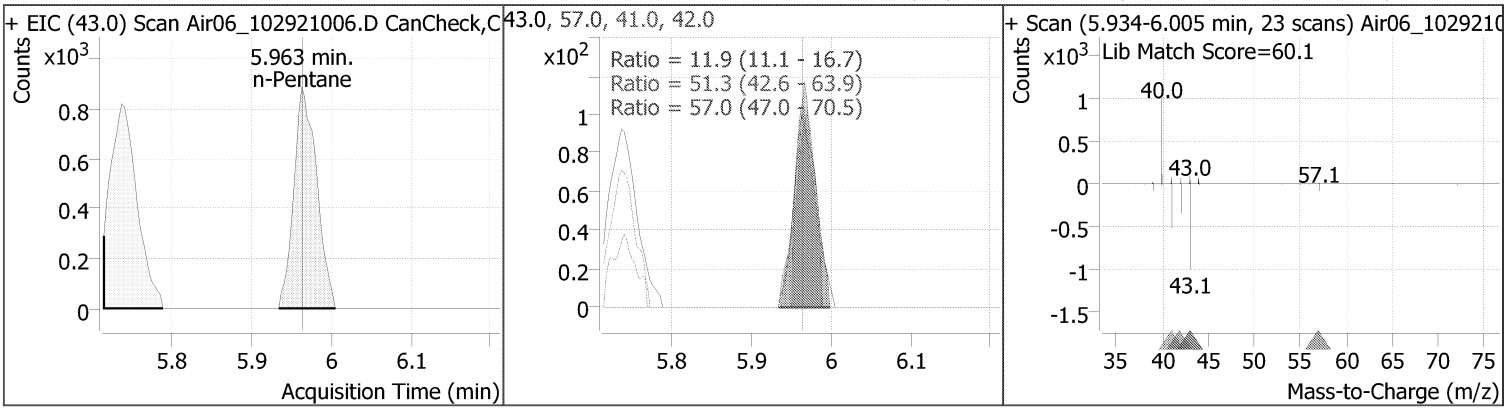
Compound	Conc.	Exp RT	QIon	Exp Ratio
Trichloromonofluoromethane	N.D.	5.64	103.0	64.7



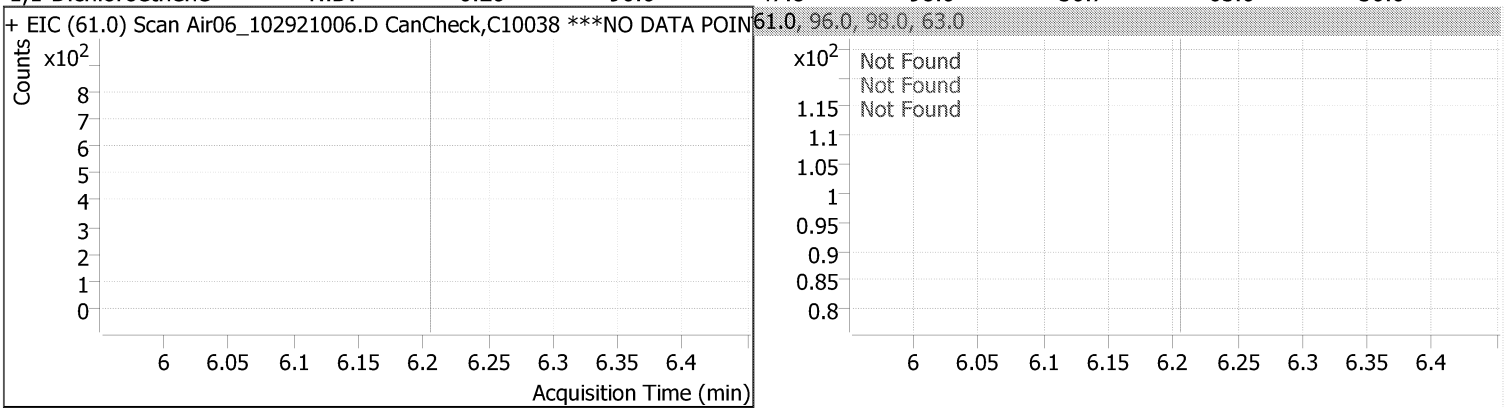
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.0841	5.74	0.06	8479	43.0	23.7	15.3	23.0
					59.0	3.8	2.8	4.2



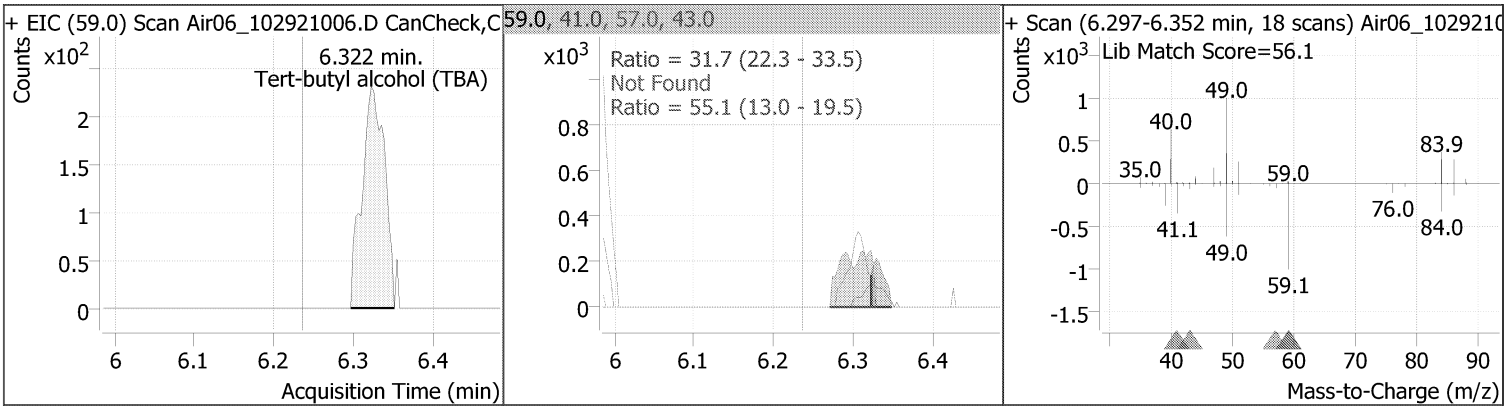
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.0203	5.96	0.00	1769	42.0	57.0	47.0	70.5
					41.0	51.3	42.6	63.9
					57.0	11.9	11.1	16.7



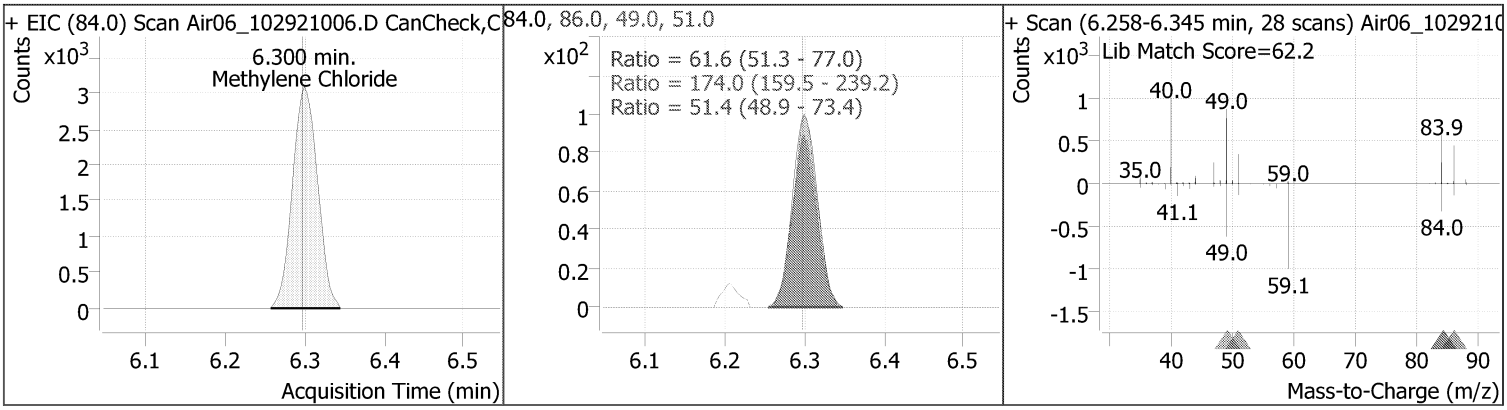
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethene	N.D.	6.20	96.0	47.8	98.0	30.7	63.0	30.6



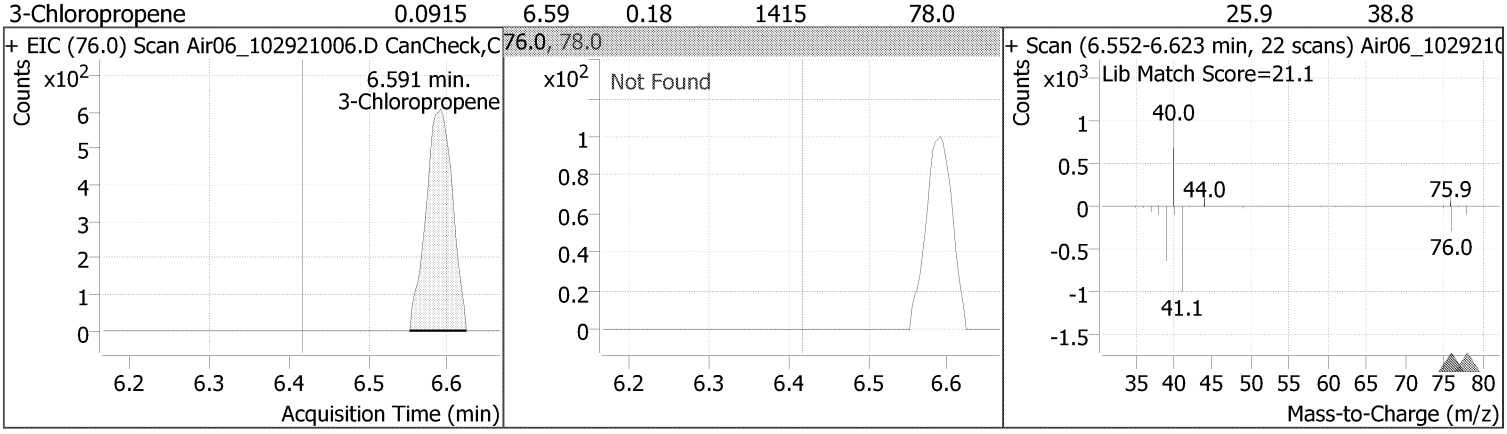
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.0057	6.32	0.09	461	41.0	31.7	22.3	33.5
					43.0	55.1	13.0	19.5
					57.0		8.3	12.4



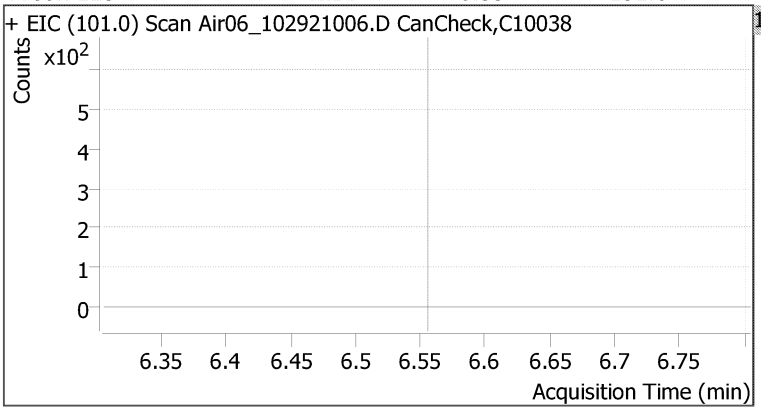
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.1678	6.30	0.01	6764	49.0	174.0	159.5	239.2
					86.0	61.6	51.3	77.0
					51.0	51.4	48.9	73.4

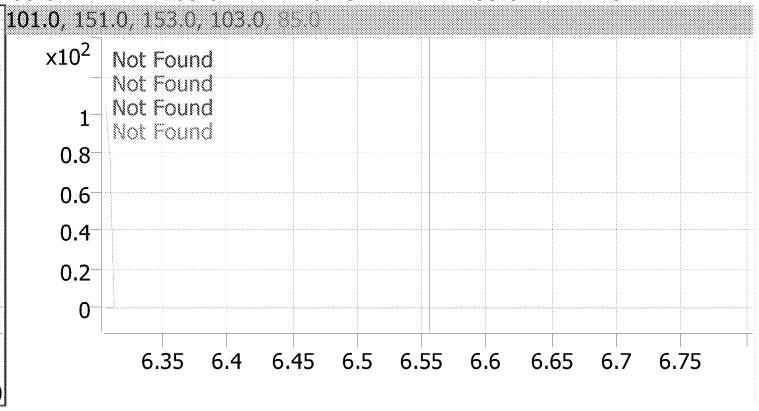


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	0.0915	6.59	0.18	1415	78.0		25.9	38.8

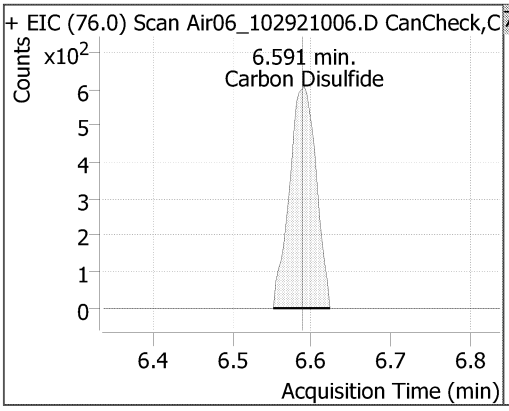


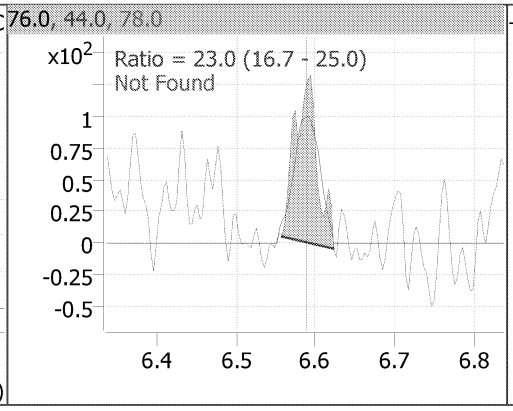
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 113	N.D.	6.55	151.0	83.8	103.0	64.0	153.0	54.1

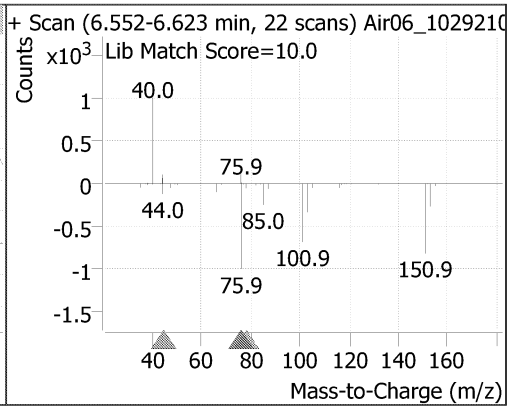




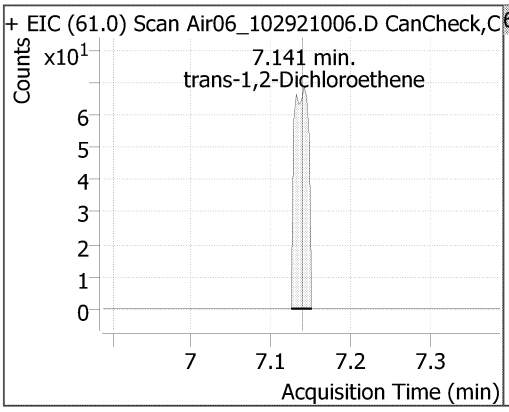
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.0141	6.59	0.01	1415	44.0	23.0	16.7	25.0
					78.0		9.2	13.8

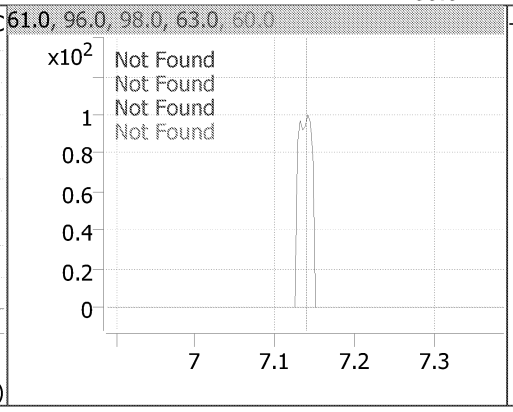


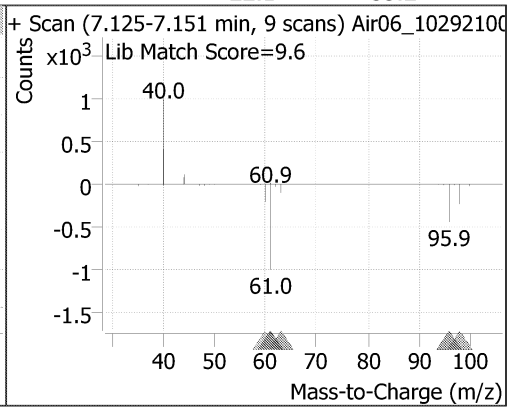




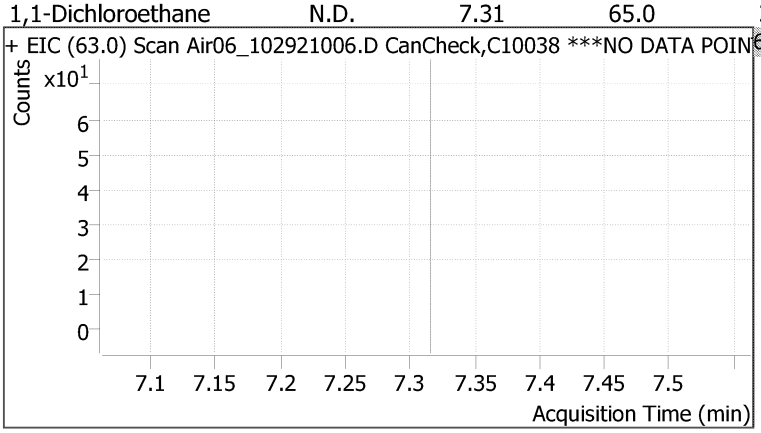
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.0014	7.14	0.01	86	96.0		44.1	66.2
					98.0		27.9	41.9
					63.0		24.4	36.6
					60.0		22.1	33.2

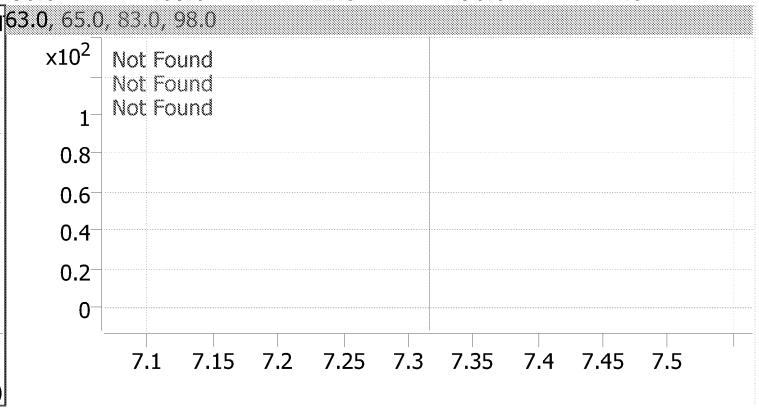




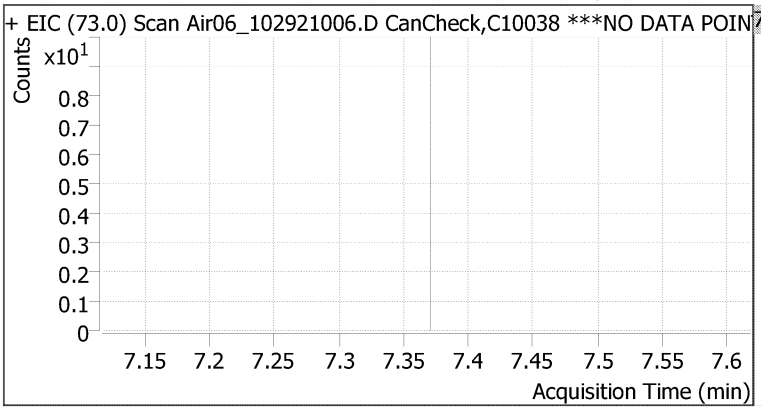


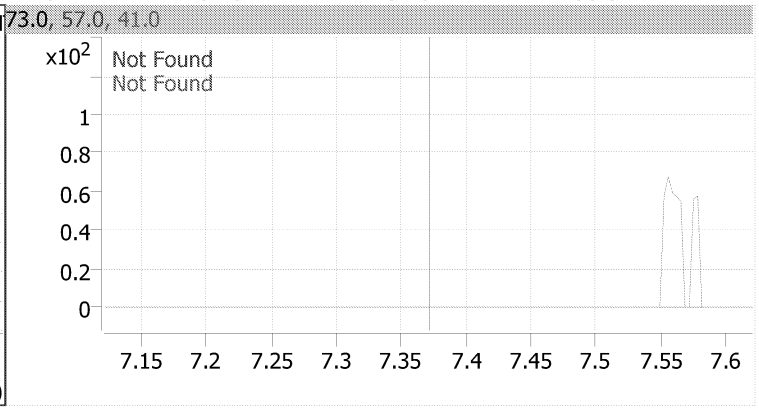
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethane	N.D.	7.31	65.0	30.0	83.0	11.8	98.0	4.8



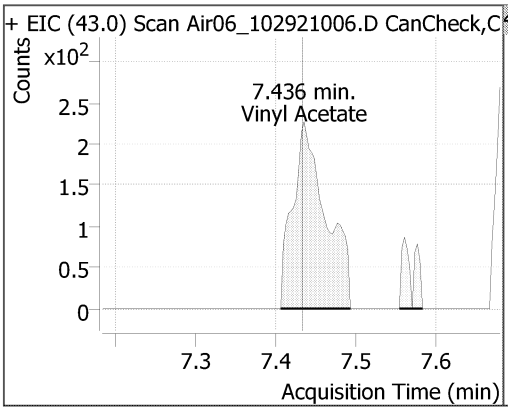


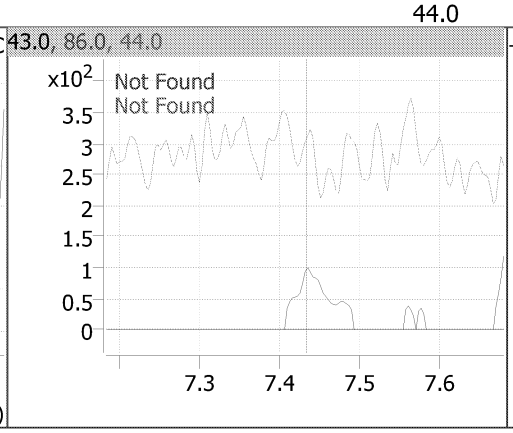
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
MTBE	N.D.	7.37	41.0	34.5	57.0	30.3

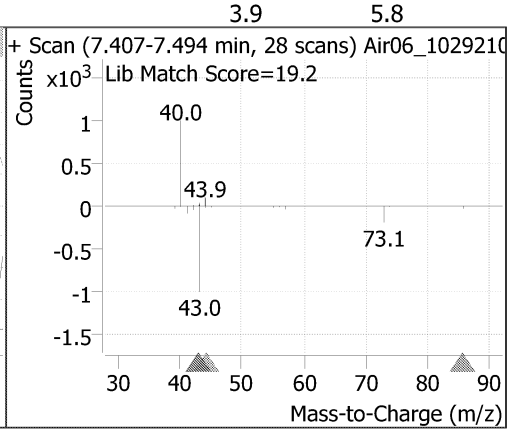




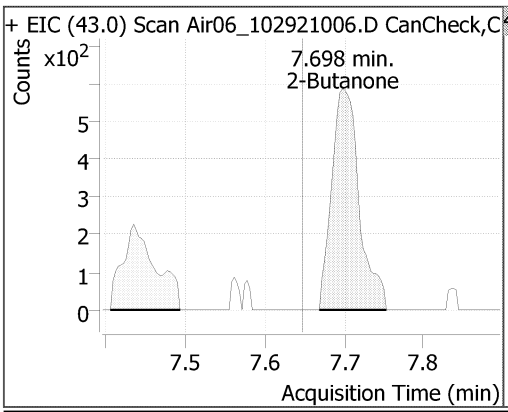
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.0052	7.44	0.01	666	86.0		4.6	6.9
					44.0		3.9	5.8

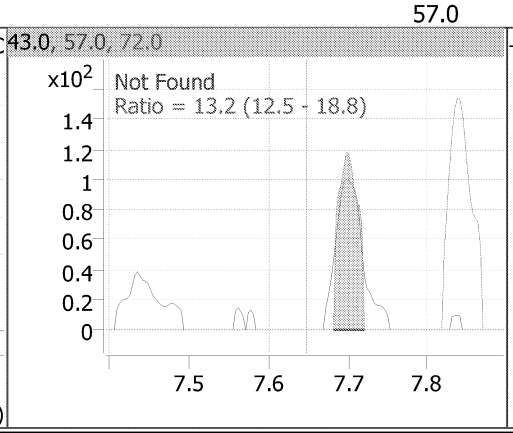


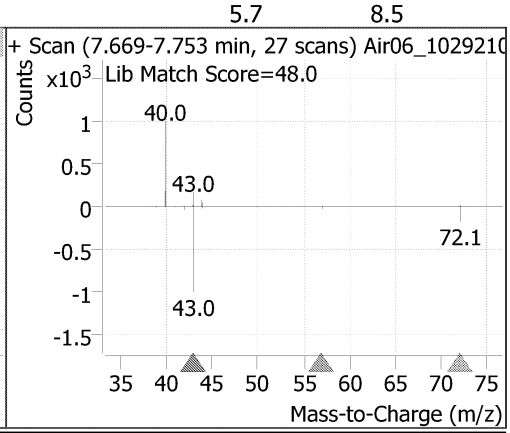




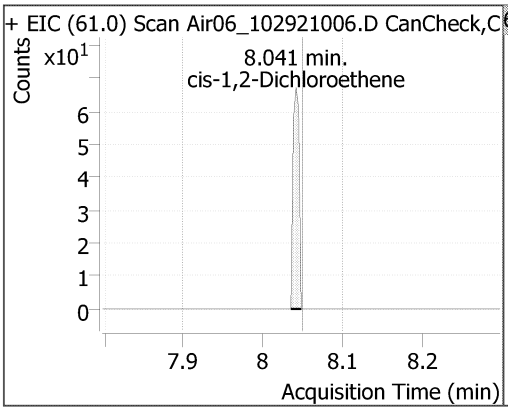
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.0138	7.70	0.06	1417	72.0	13.2	12.5	18.8
					57.0		5.7	8.5

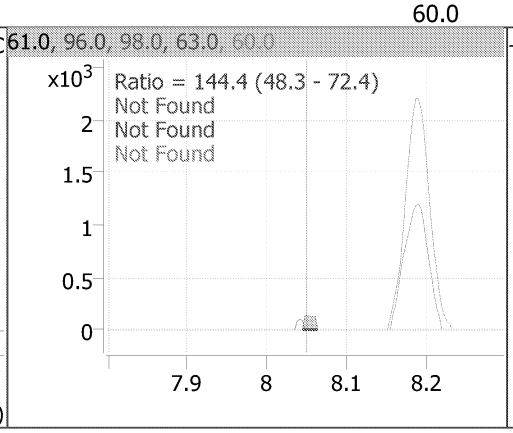


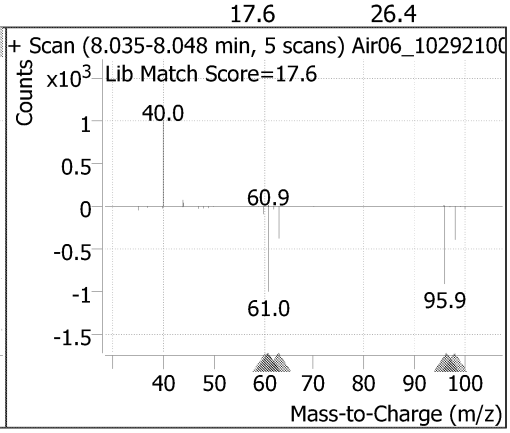




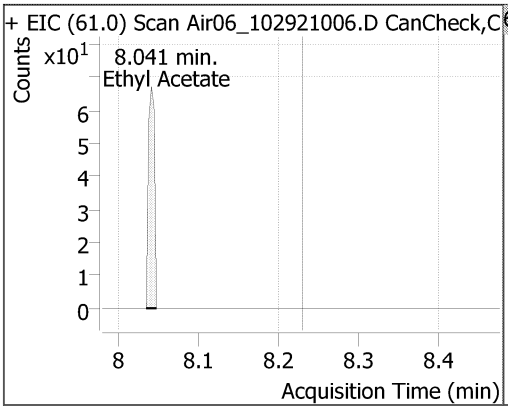
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.0006	8.04	0.00	36	96.0	144.4	48.3	72.4
					98.0		31.2	46.8
					63.0		24.5	36.7
					60.0		17.6	26.4

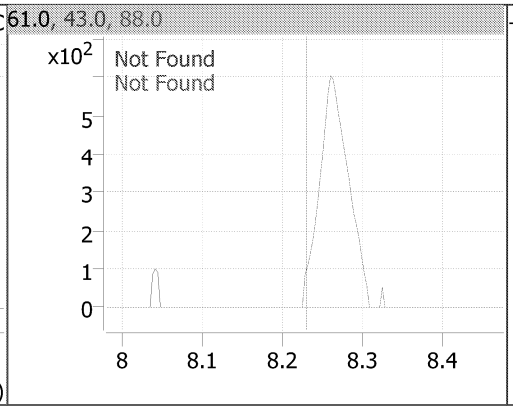


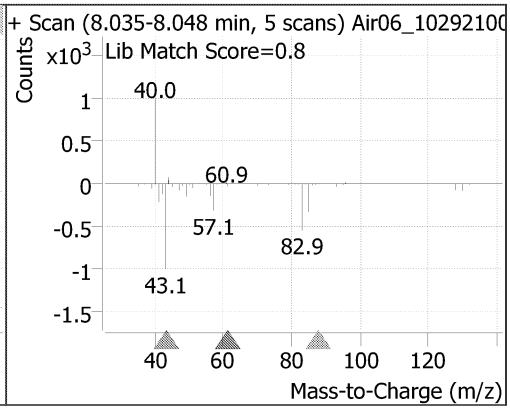




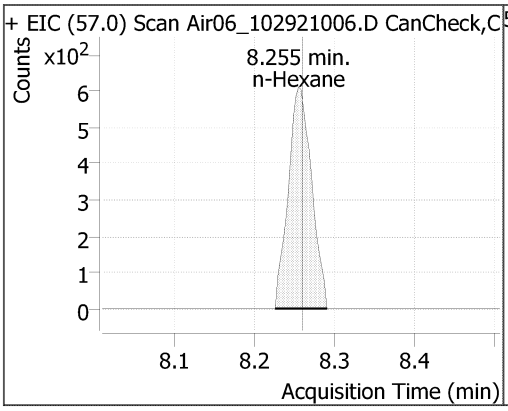
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	0.0023	8.04	-0.18	36	43.0		963.0	1444.5
					88.0		16.2	24.3

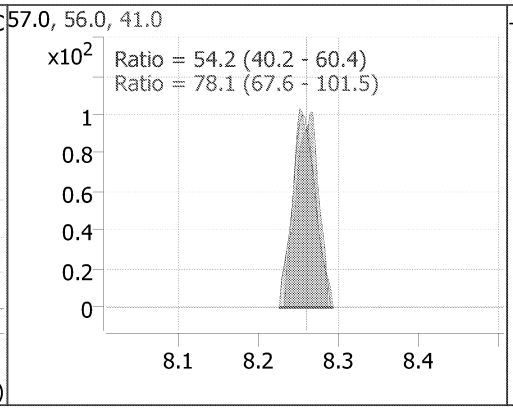


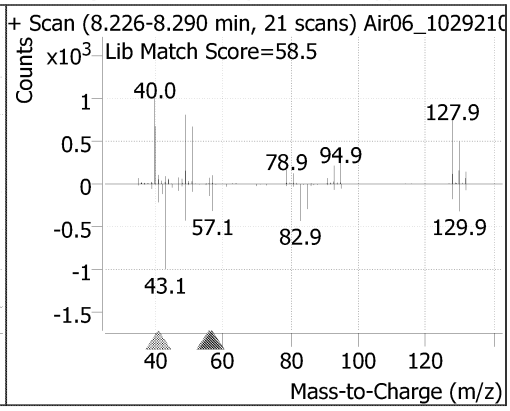




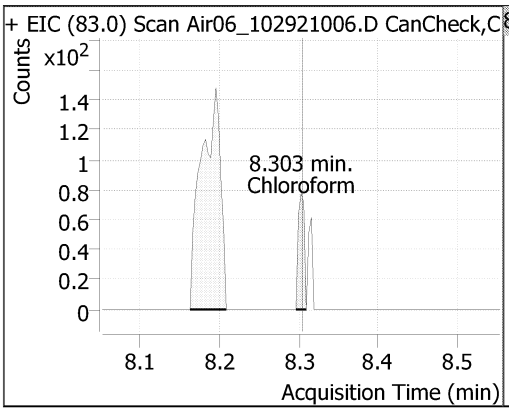
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.0163	8.25	0.00	1241	41.0	78.1	67.6	101.5
					56.0	54.2	40.2	60.4

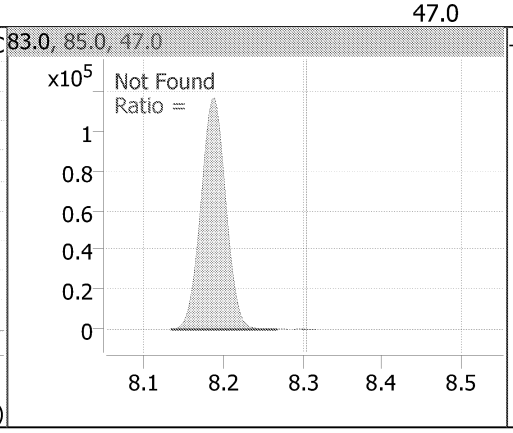


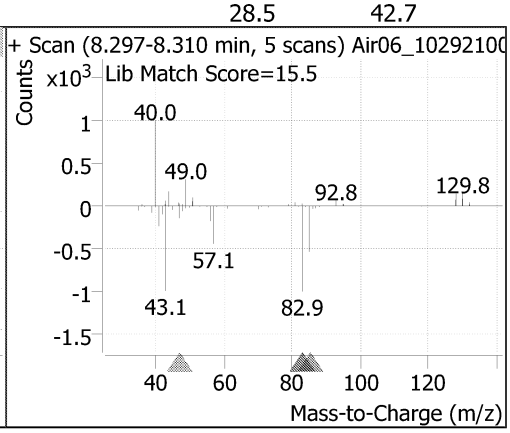




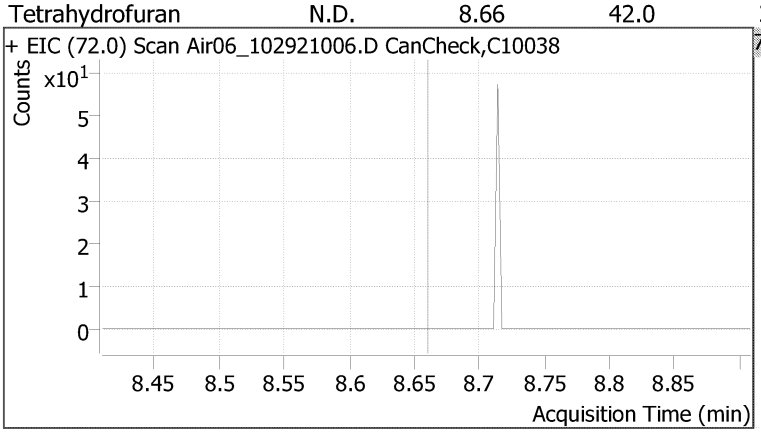
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.0005	8.30	0.00	41	85.0		52.2	78.4
					47.0		28.5	42.7

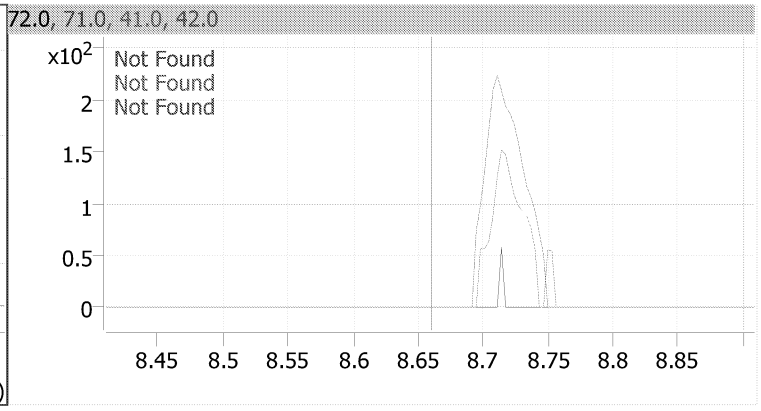




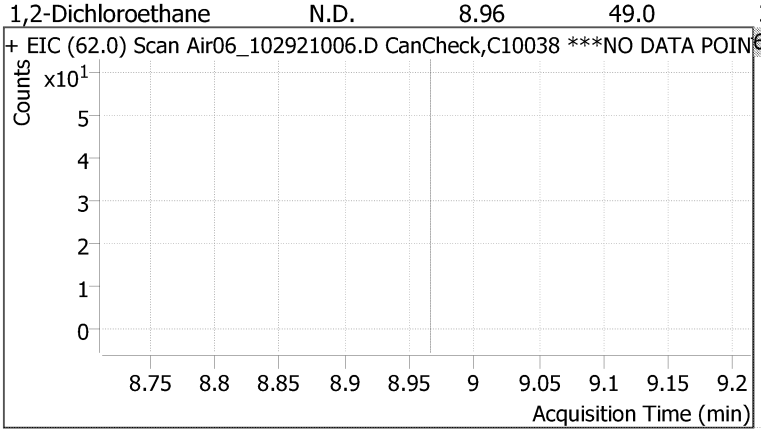


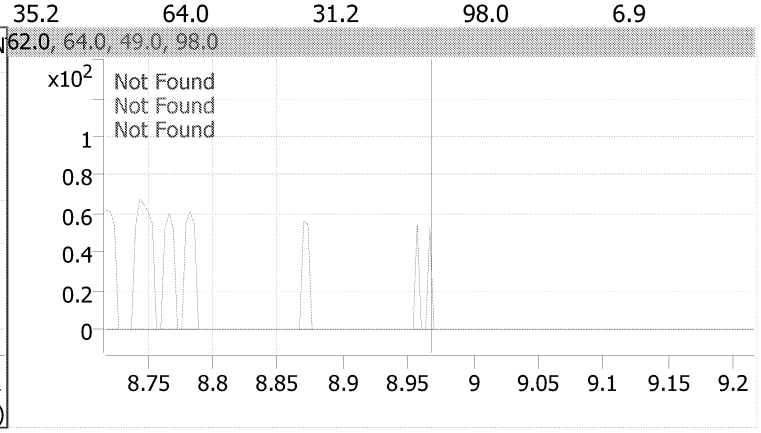
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Tetrahydrofuran	N.D.	8.66	42.0	369.9	41.0	207.9	71.0	98.2



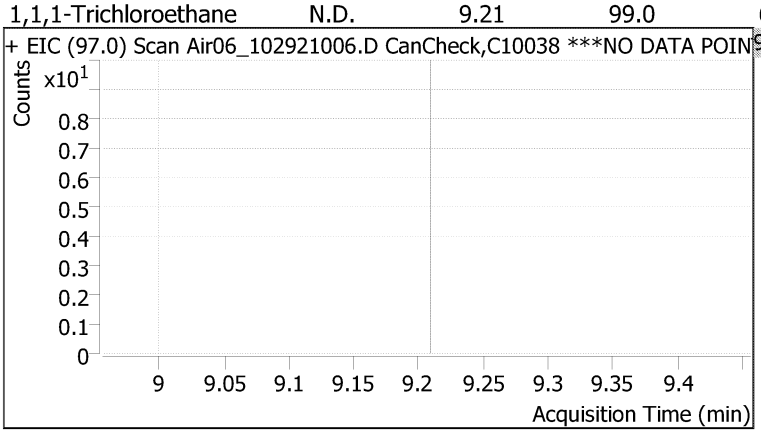


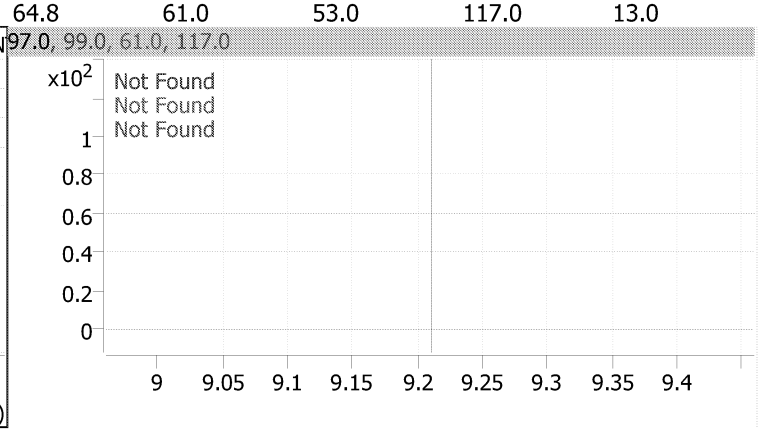
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,2-Dichloroethane	N.D.	8.96	49.0	35.2	64.0	31.2	98.0	6.9



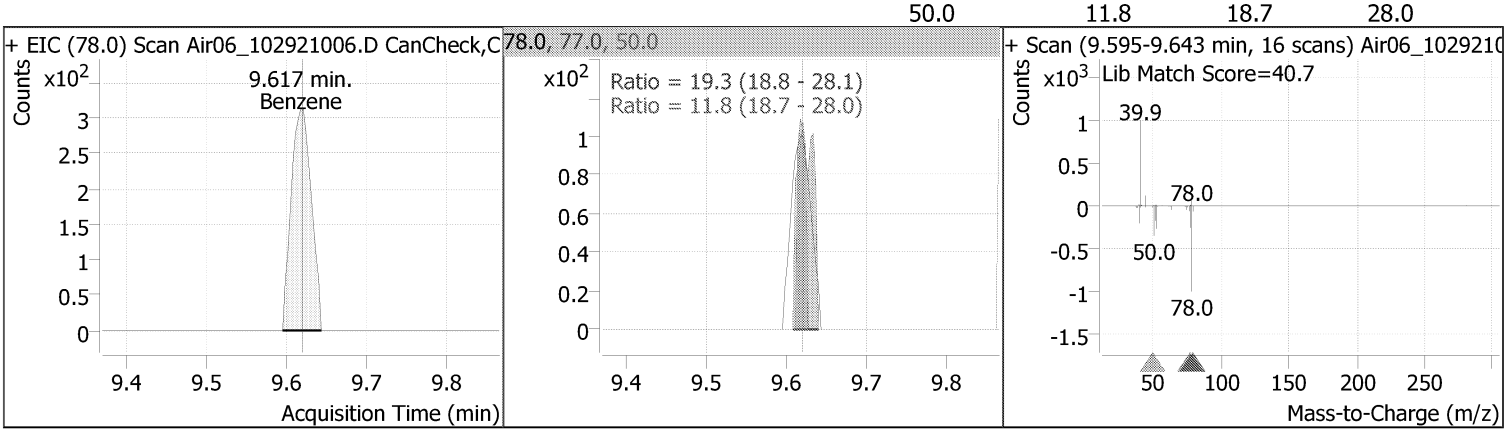


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1-Trichloroethane	N.D.	9.21	99.0	64.8	61.0	53.0	117.0	13.0

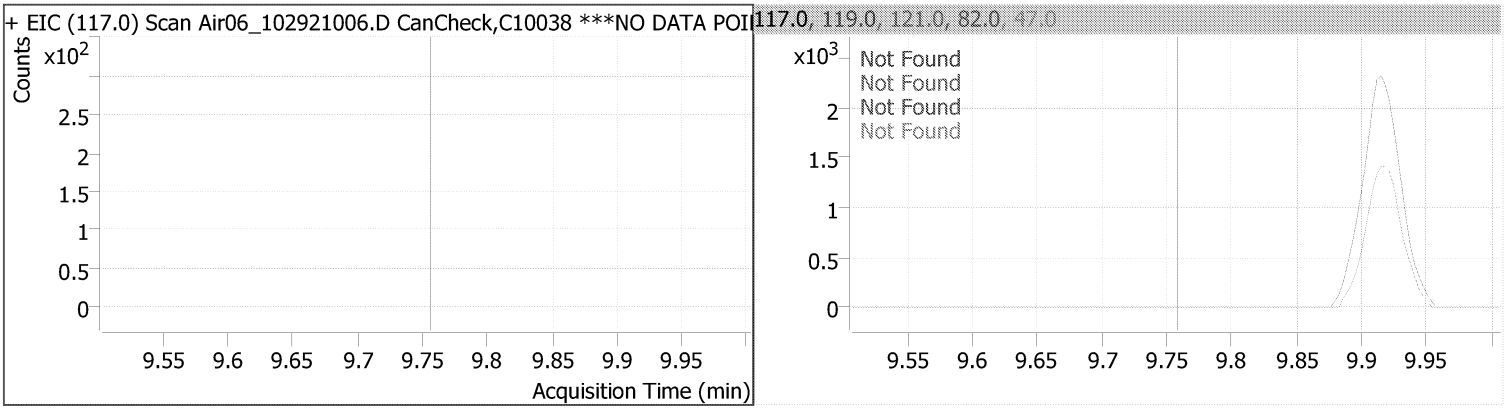




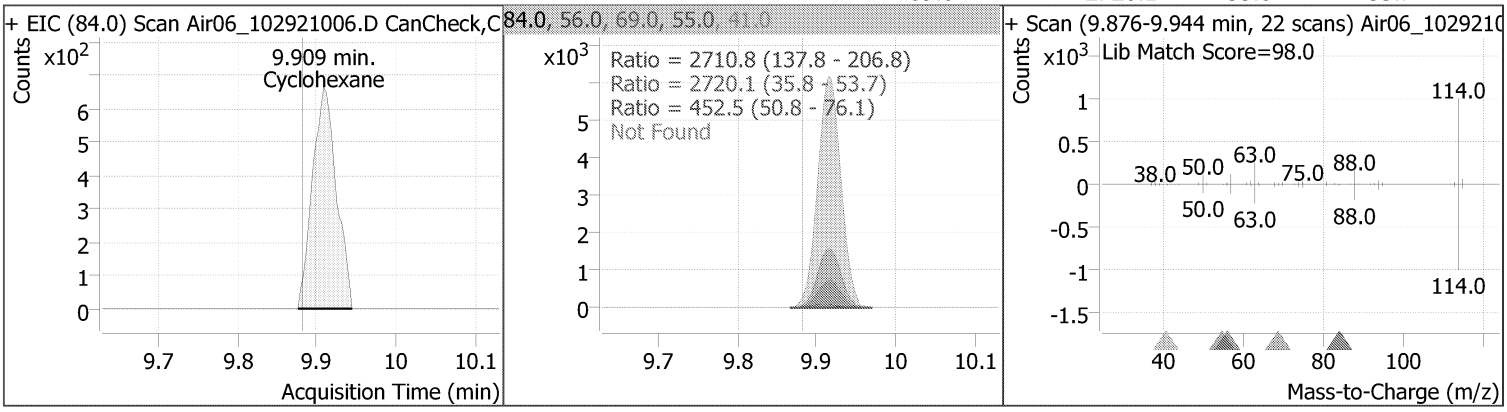
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.0050	9.62	0.00	550	77.0	19.3	18.8	28.1
					50.0	11.8	18.7	28.0



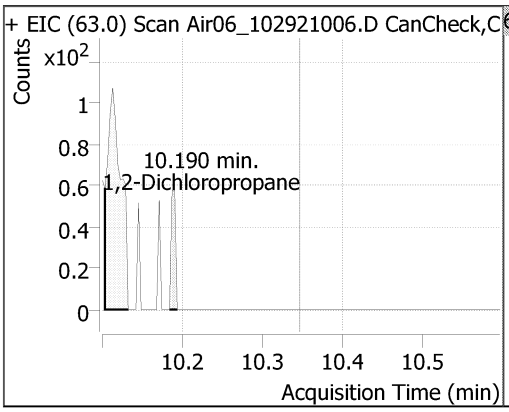
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Carbon Tetrachloride	N.D.	9.75	119.0	96.4	121.0	31.2	47.0	30.4

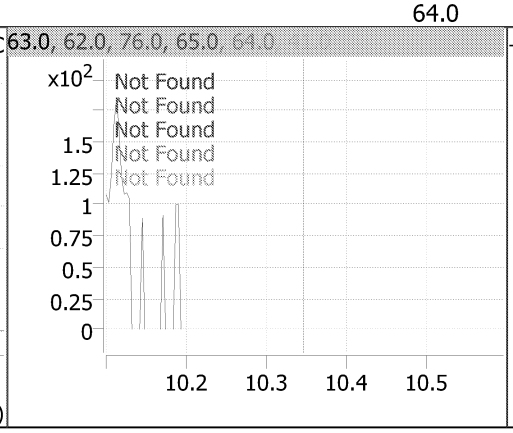


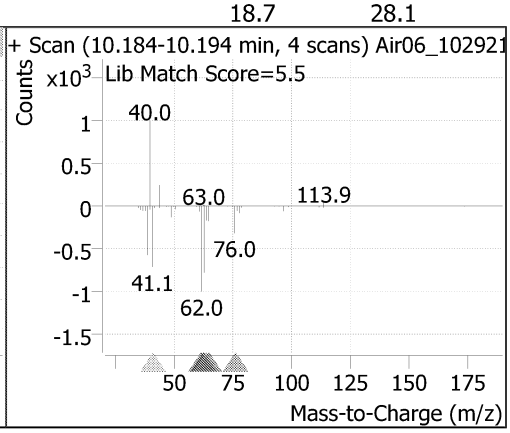
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.0299	9.91	0.03	1390	56.0	2710.8	137.8	206.8
					41.0		81.5	122.2
					55.0	452.5	50.8	76.1
					69.0	2720.1	35.8	53.7



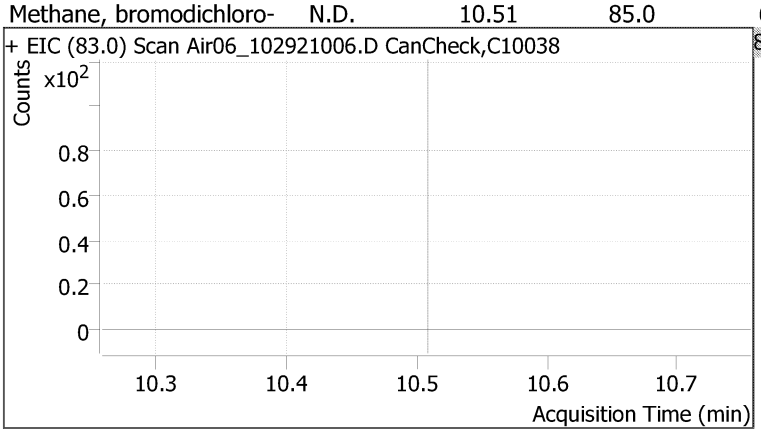
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.0004	10.19	-0.16	22	41.0		55.7	83.5
					62.0		55.5	83.2
					76.0		28.3	42.5
					65.0		23.4	35.1
					64.0		18.7	28.1

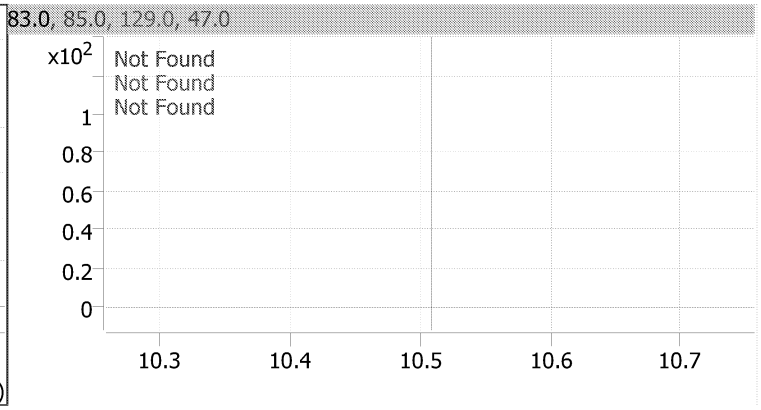




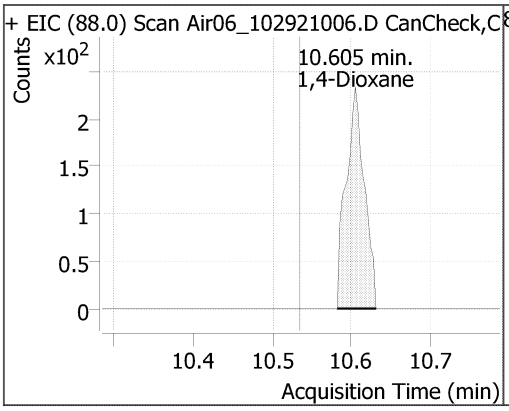


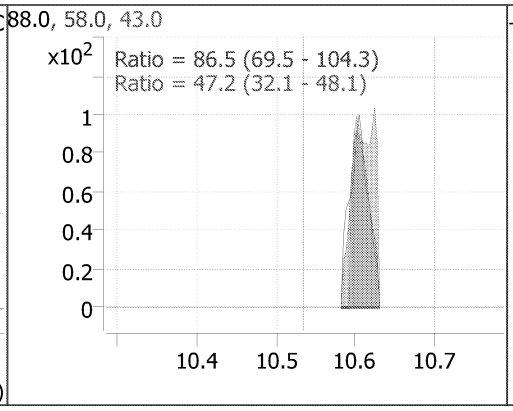
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Methane, bromodichloro-	N.D.	10.51	85.0	64.4	47.0	26.9	129.0	12.1

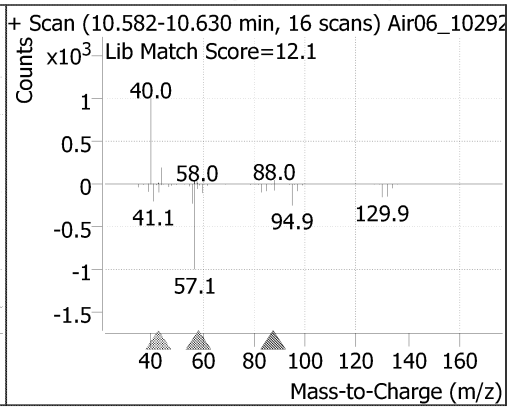




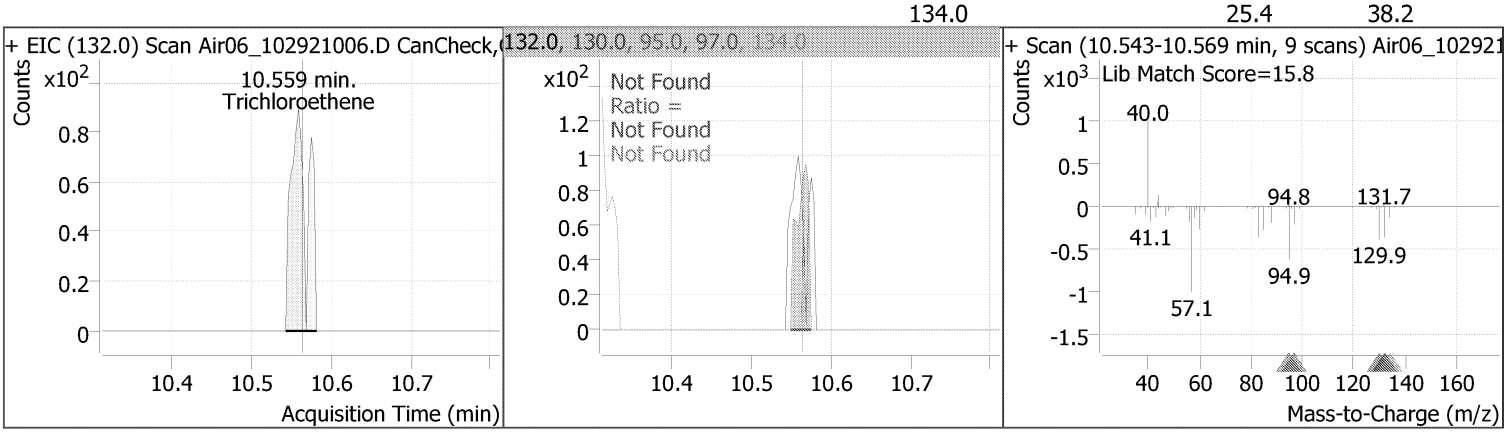
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.0152	10.60	0.07	372	58.0	86.5	69.5	104.3
					43.0	47.2	32.1	48.1



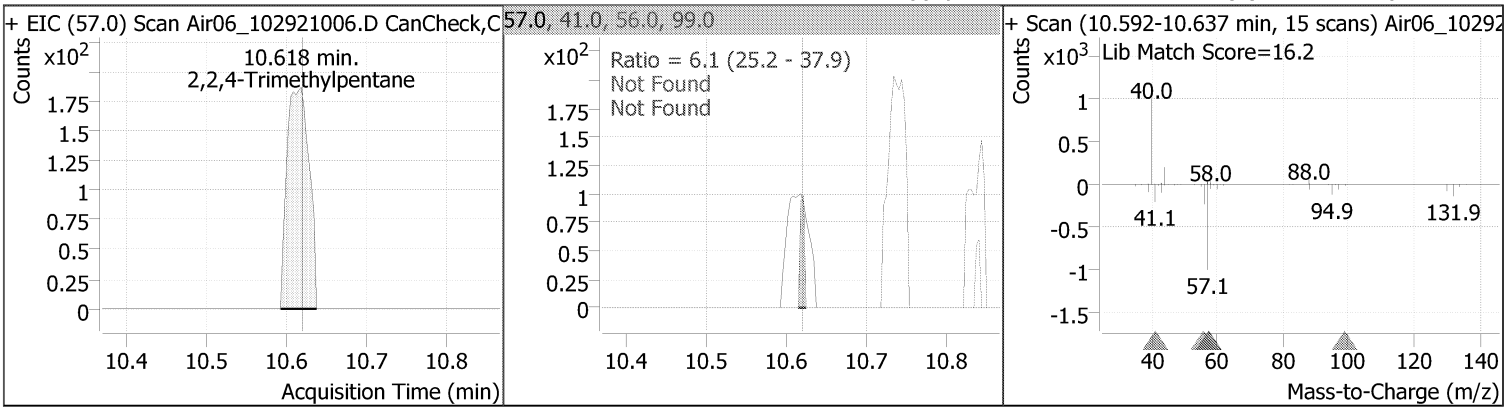




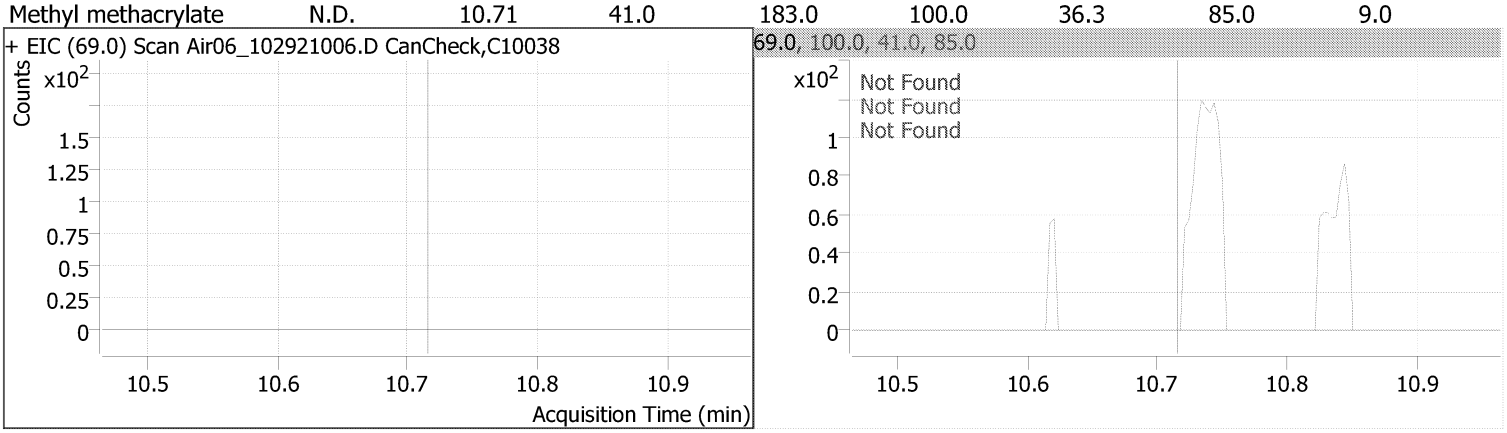
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.0019	10.56	0.00	94	95.0		83.9	125.8
					130.0		83.3	124.9
					97.0		54.4	81.7
					134.0		25.4	38.2



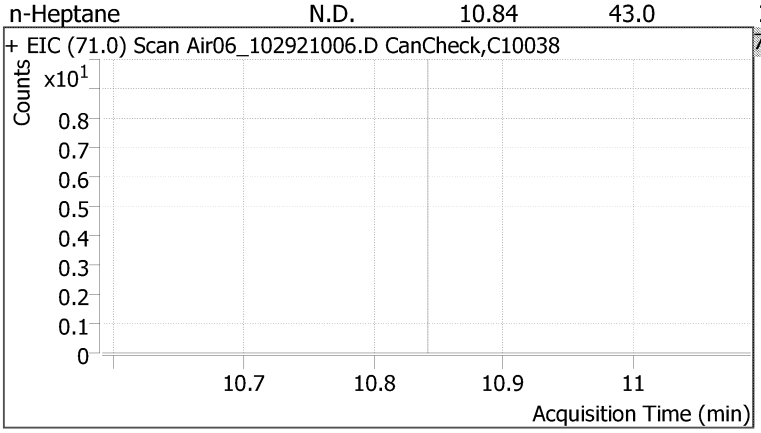
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.0015	10.62	0.00	360	41.0	6.1	25.2	37.9
					56.0		25.2	37.9
					99.0		3.3	4.9

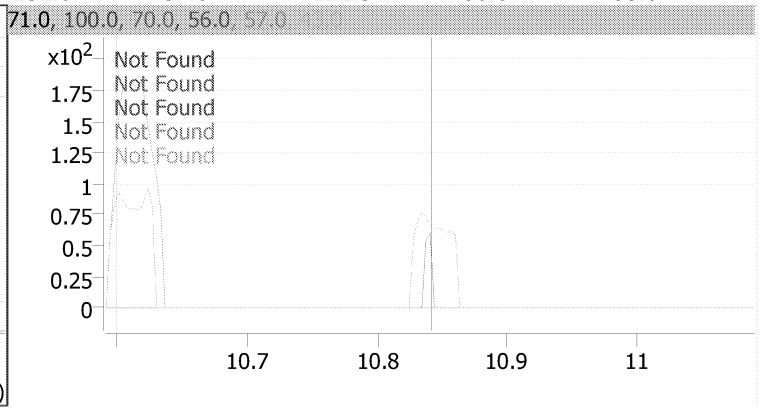


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Methyl methacrylate	N.D.	10.71	41.0	183.0	100.0	36.3	85.0	9.0

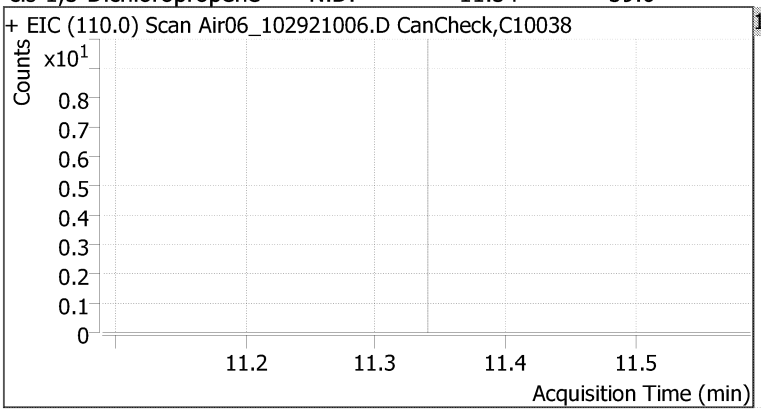


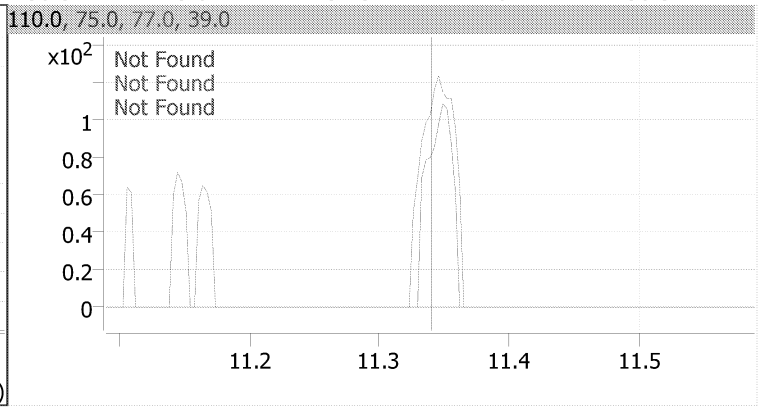
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
n-Heptane	N.D.	10.84	43.0	252.8	57.0	121.3	56.0	53.0



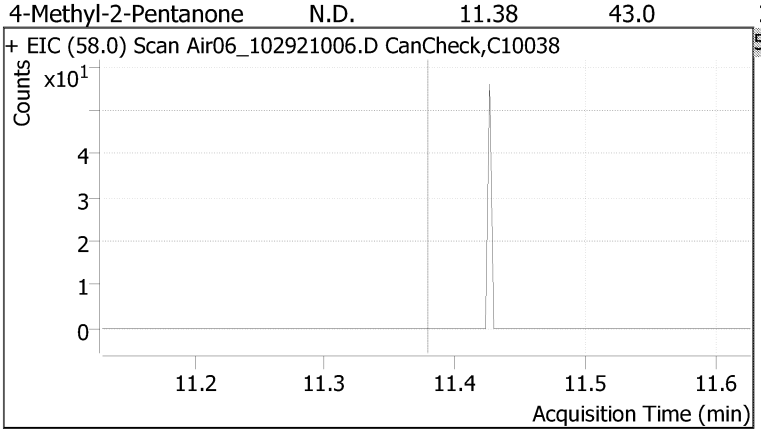


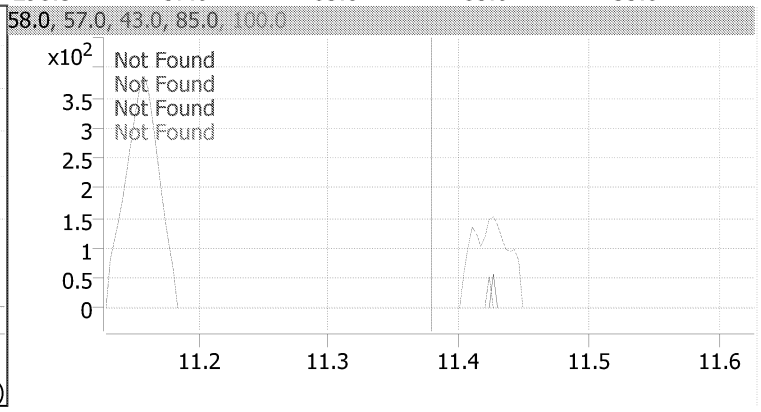
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
cis-1,3-Dichloropropene	N.D.	11.34	39.0	438.3	75.0	432.5	77.0	138.5



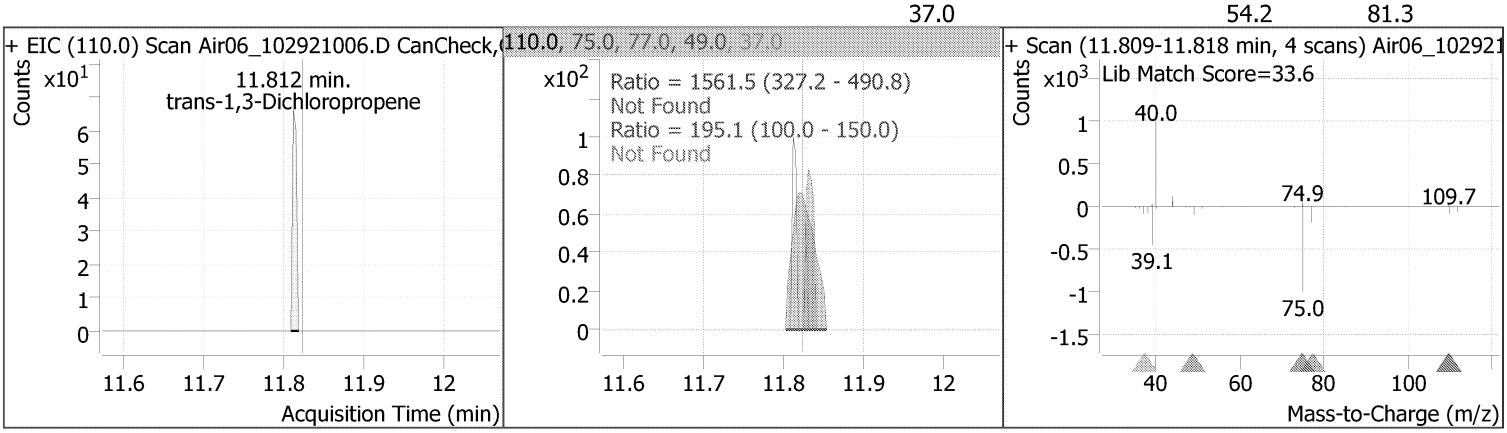


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
4-Methyl-2-Pentanone	N.D.	11.38	43.0	298.3	57.0	63.8	85.0	35.6

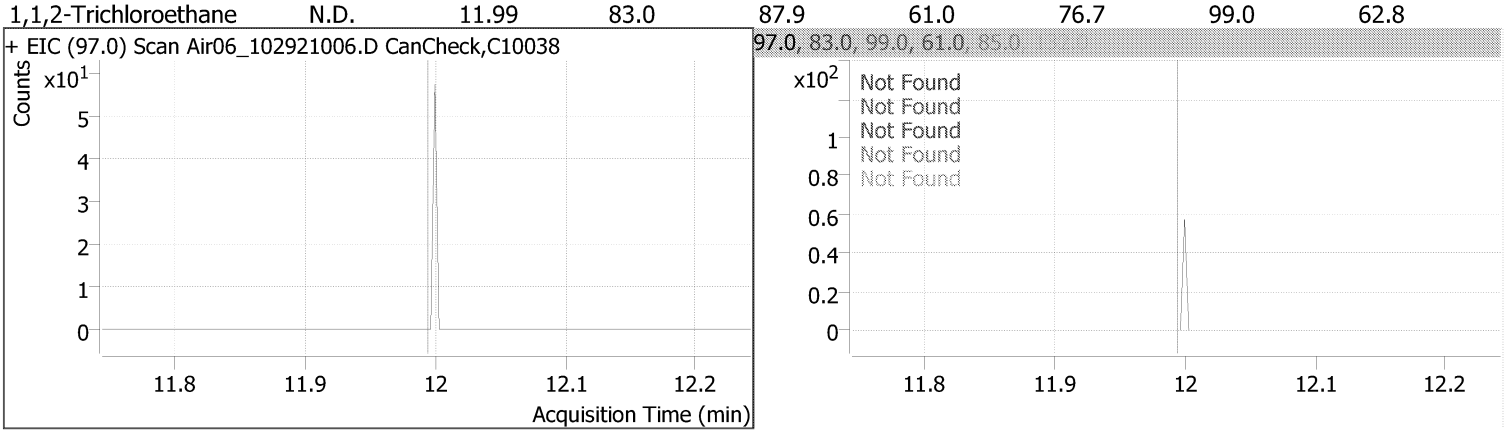




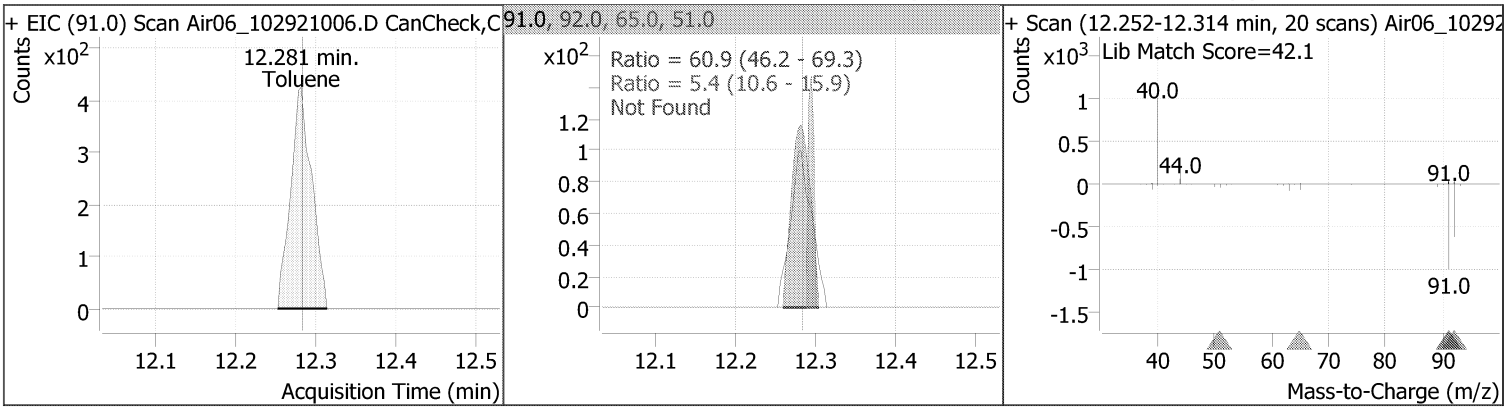
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	0.0016	11.81	-0.01	25	75.0	1561.5	327.2	490.8
					77.0		103.8	155.6
					49.0	195.1	100.0	150.0
					37.0		54.2	81.3



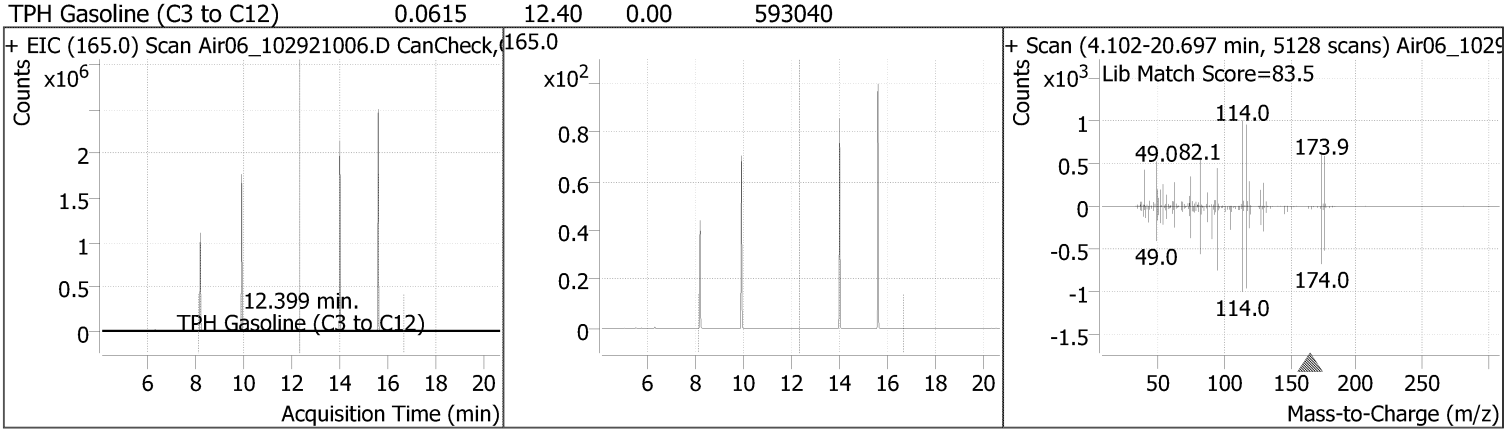
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,2-Trichloroethane	N.D.	11.99	83.0	87.9	61.0	76.7	99.0	62.8



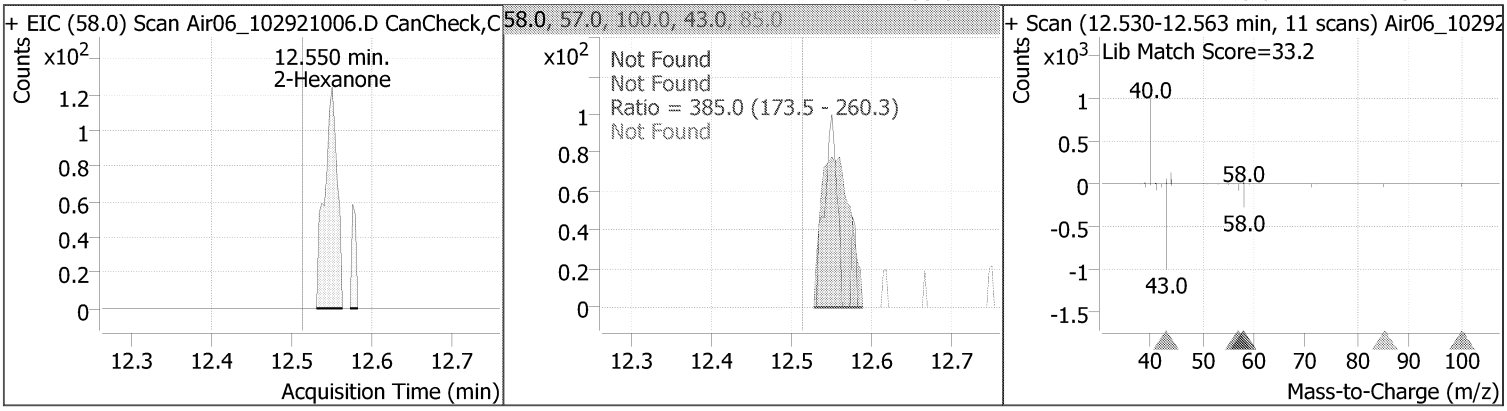
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.0057	12.28	0.00	783	92.0	60.9	46.2	69.3
					65.0	5.4	10.6	15.9
					51.0		8.3	12.4



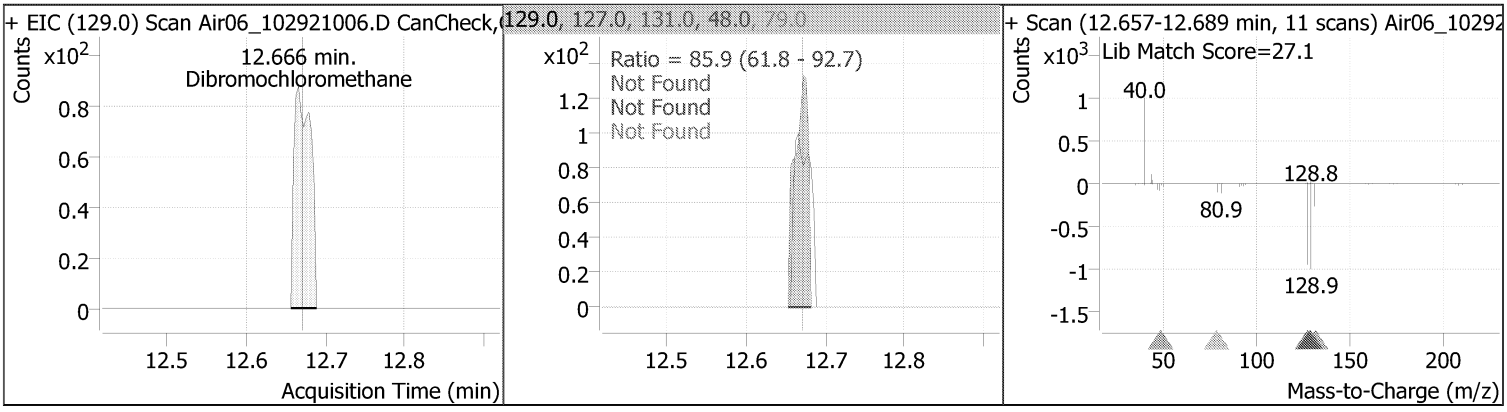
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	0.0615	12.40	0.00	593040				



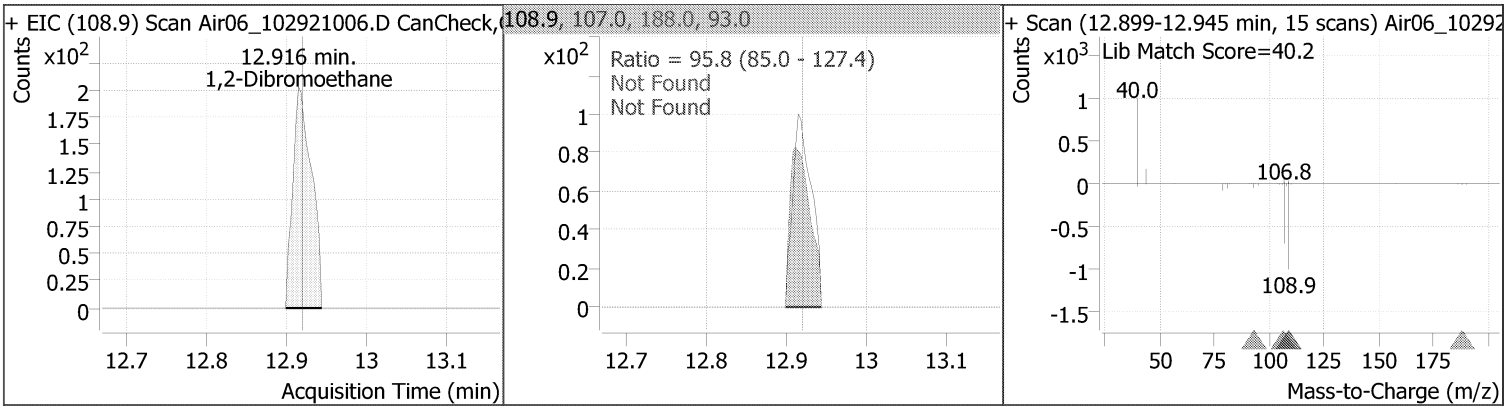
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.0024	12.55	0.04	139	43.0	385.0	173.5	260.3
					57.0		28.5	42.8
					100.0		11.2	16.8
					85.0		10.0	14.9



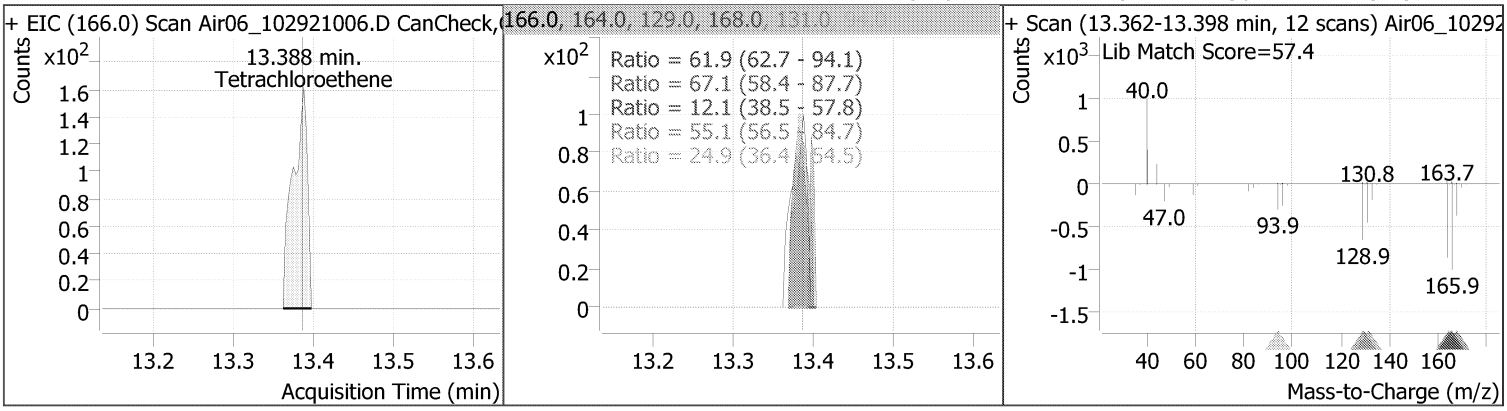
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.0015	12.67	0.00	127	127.0	85.9	61.8	92.7
					131.0		19.3	29.0
					48.0		16.2	24.2
					79.0		14.5	21.7



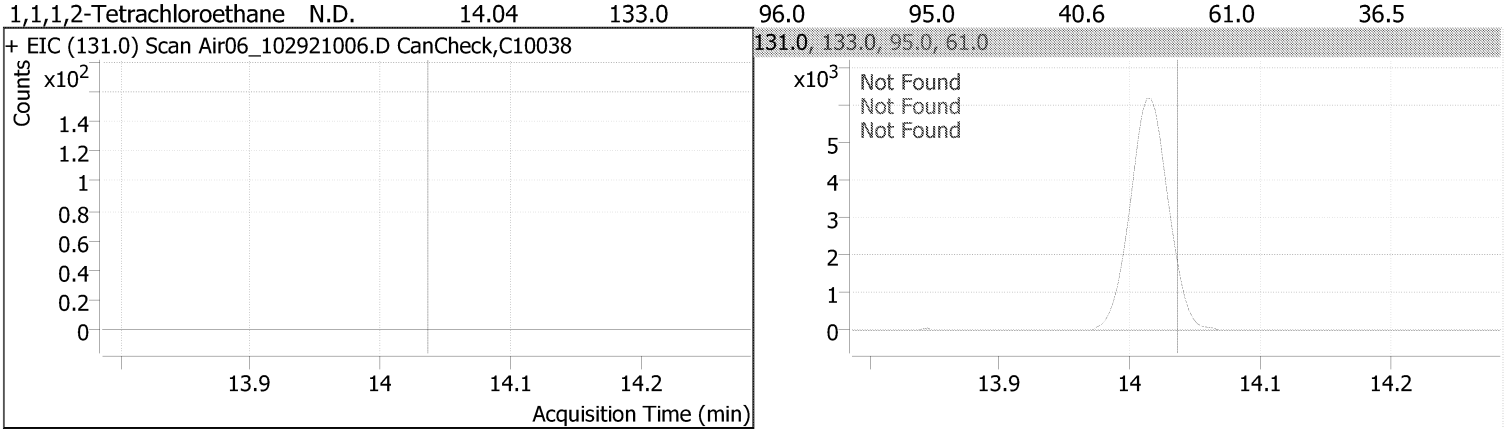
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.0046	12.92	0.00	329	107.0	95.8	85.0	127.4
					93.0		5.7	8.6
					188.0		3.1	4.6



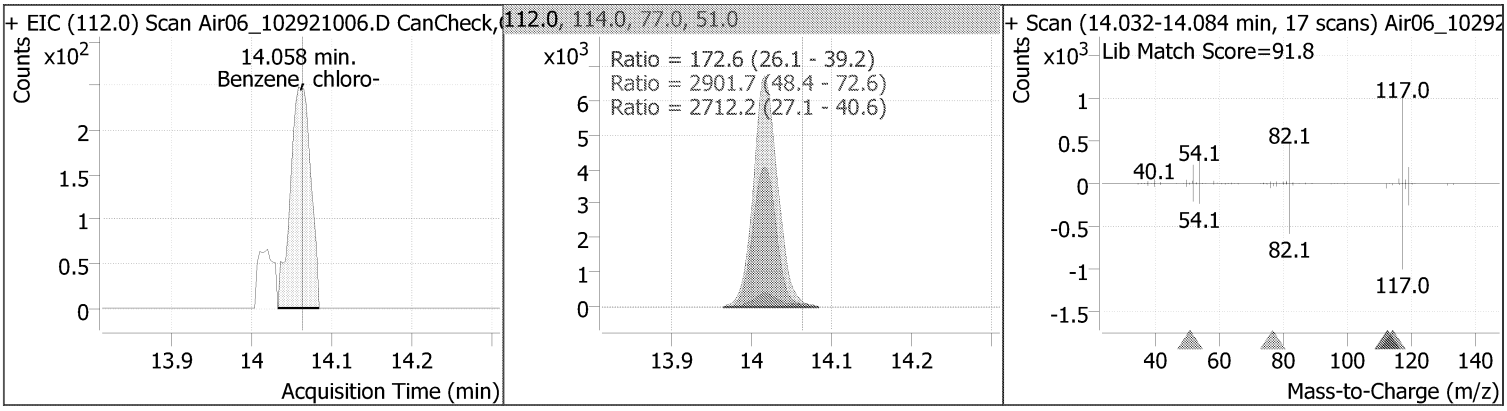
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.0028	13.39	0.00	202	164.0	61.9	62.7	94.1
					129.0	67.1	58.4	87.7
					131.0	55.1	56.5	84.7
					168.0	12.1	38.5	57.8
					94.0	24.9	36.4	54.5



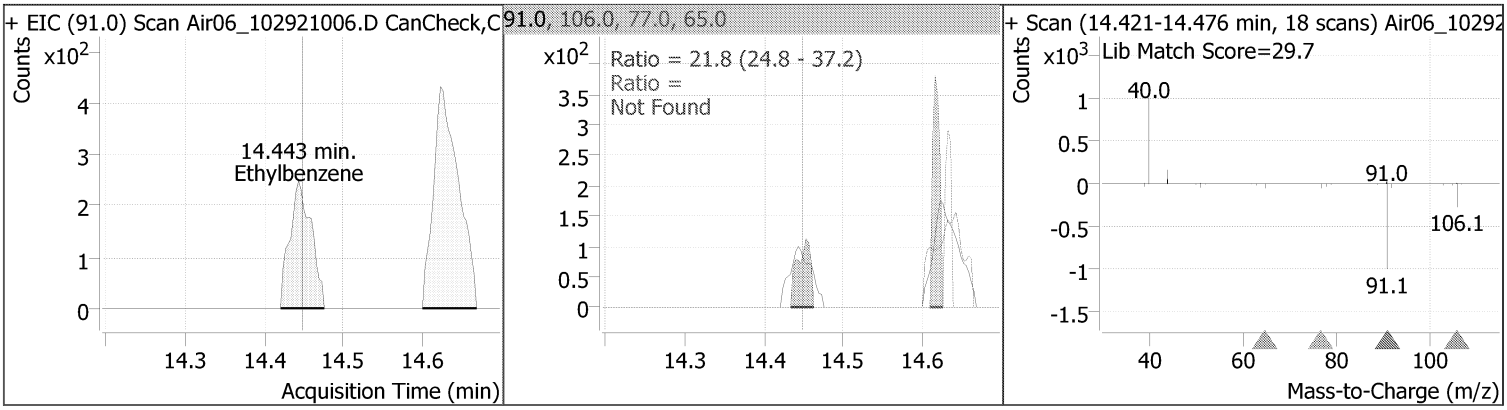
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1,2-Tetrachloroethane	N.D.	14.04	133.0	96.0	95.0	40.6	61.0	36.5



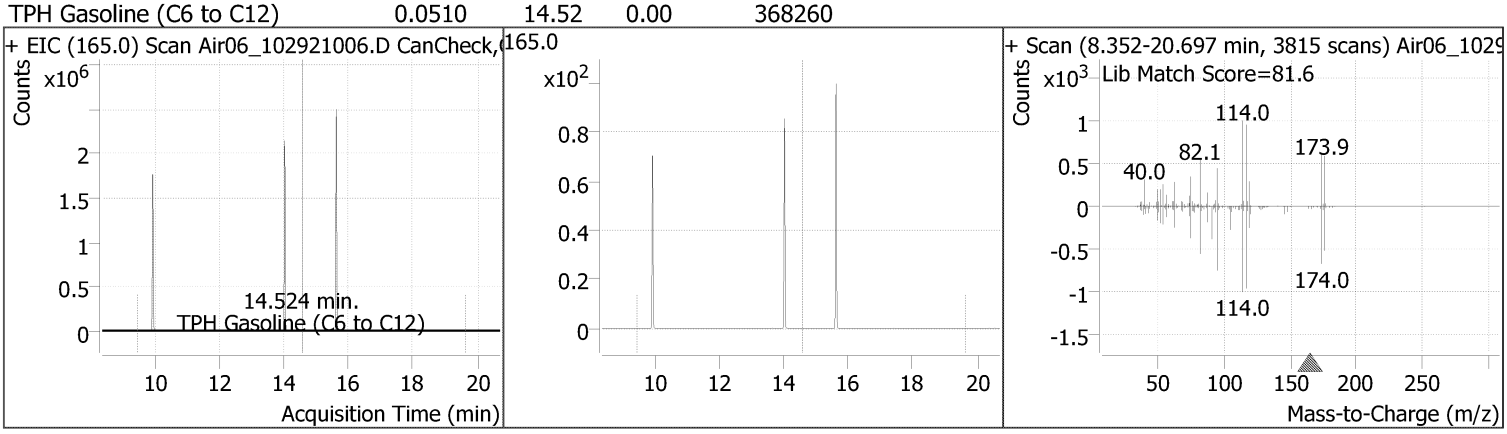
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0041	14.06	0.00	442	77.0	2901.7	48.4	72.6
					51.0	2712.2	27.1	40.6
					114.0	172.6	26.1	39.2



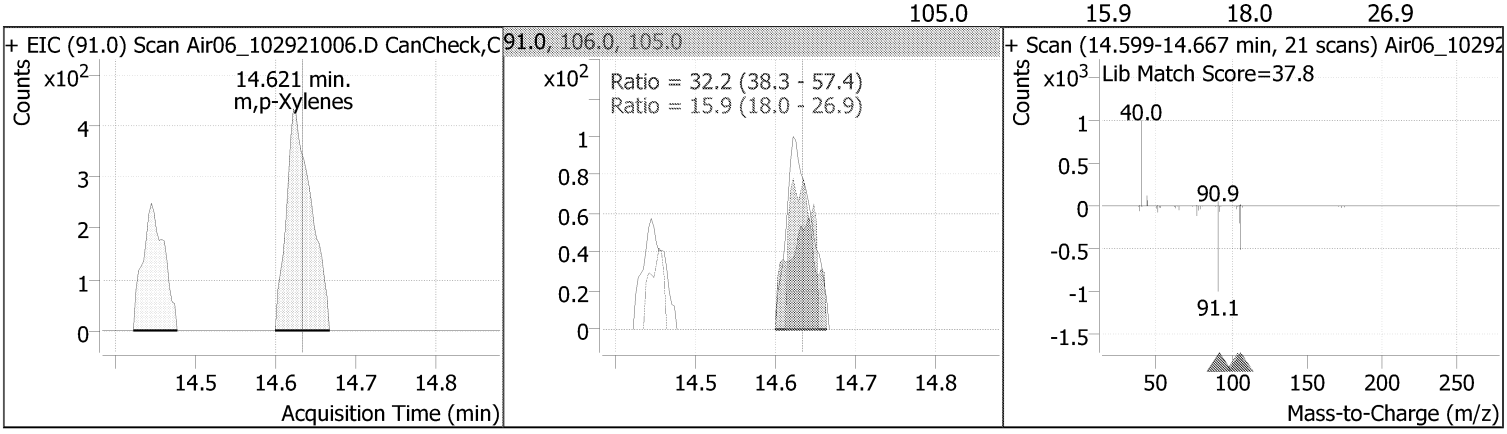
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.0028	14.44	0.00	467	106.0	21.8	24.8	37.2
					65.0		8.1	12.2
					77.0		7.2	10.8



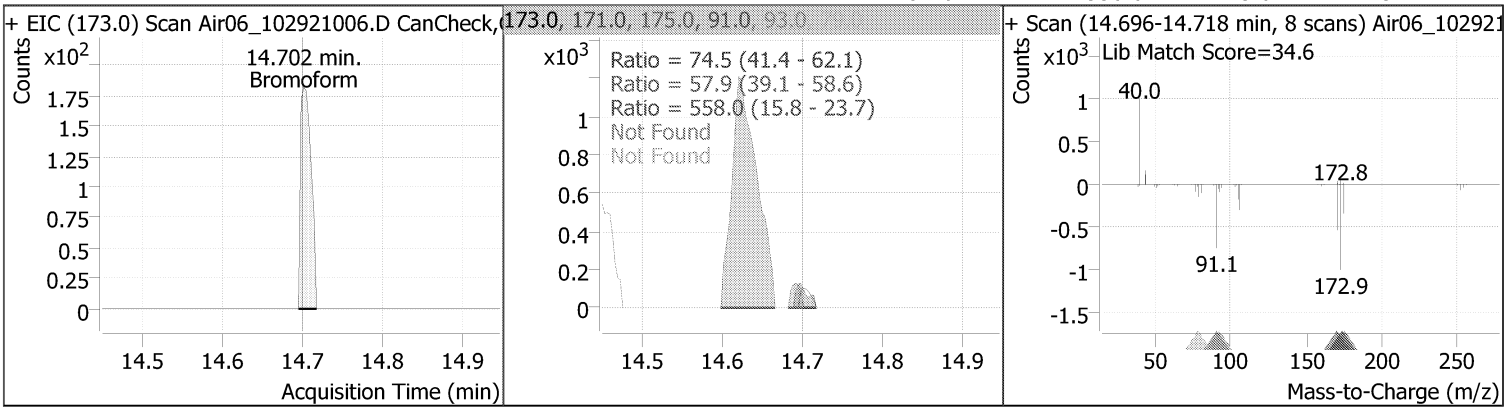
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	0.0510	14.52	0.00	368260				



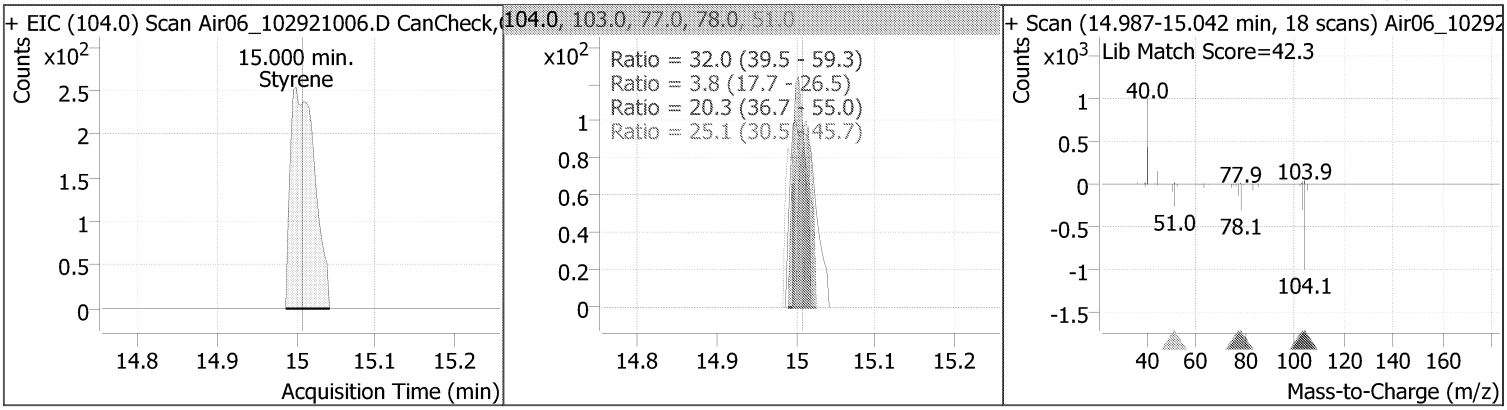
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	0.0070	14.62	-0.01	946	106.0	32.2	38.3	57.4
					105.0	15.9	18.0	26.9



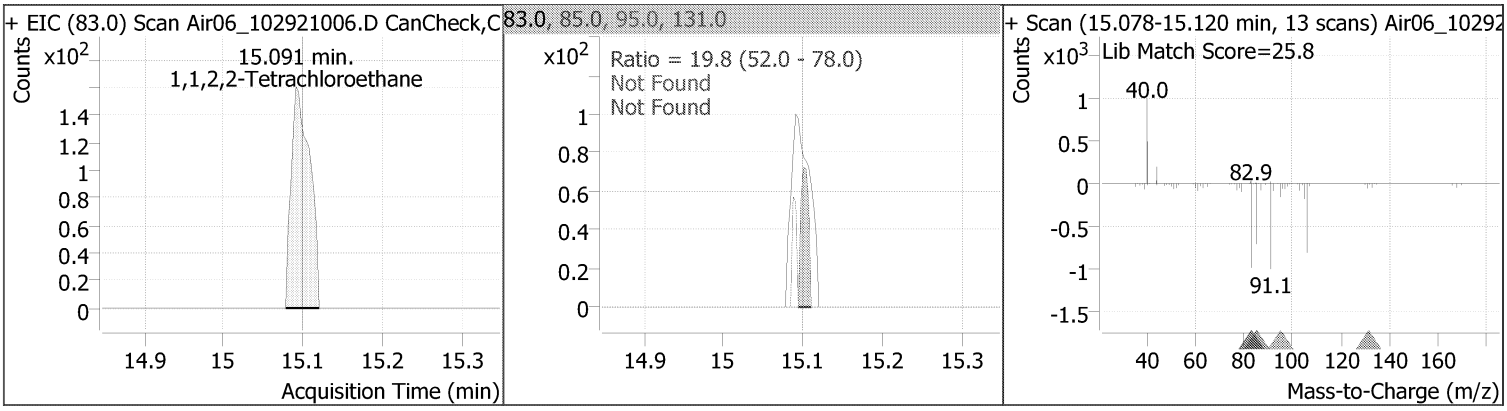
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.0019	14.70	0.00	170	171.0	74.5	41.4	62.1
					175.0	57.9	39.1	58.6
					79.0		17.9	26.8
					93.0		16.8	25.2
					91.0	558.0	15.8	23.7



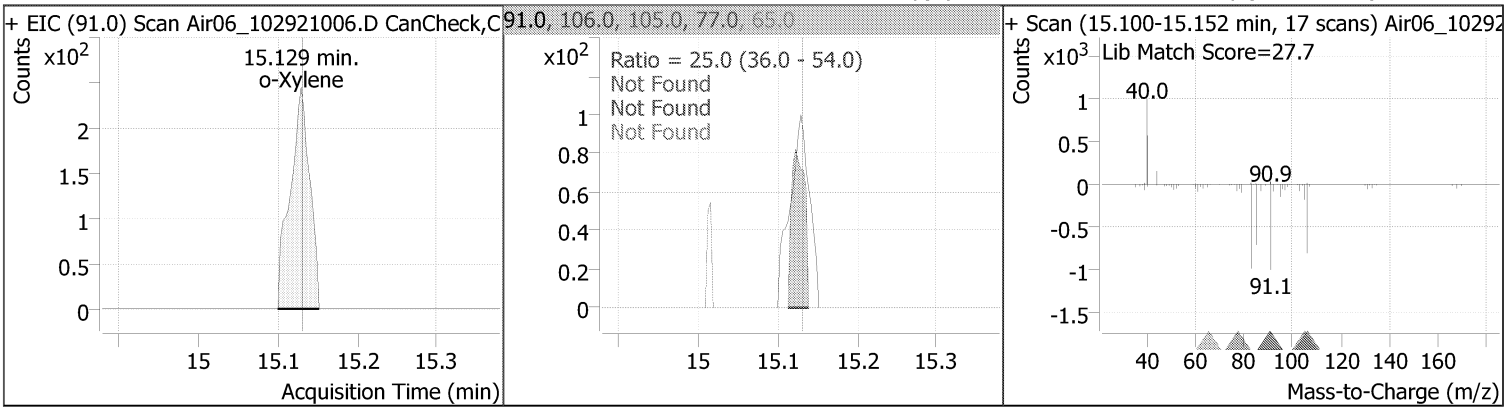
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	0.0052	15.00	-0.01	538	103.0	32.0	39.5	59.3
					78.0	20.3	36.7	55.0
					51.0	25.1	30.5	45.7
					77.0	3.8	17.7	26.5



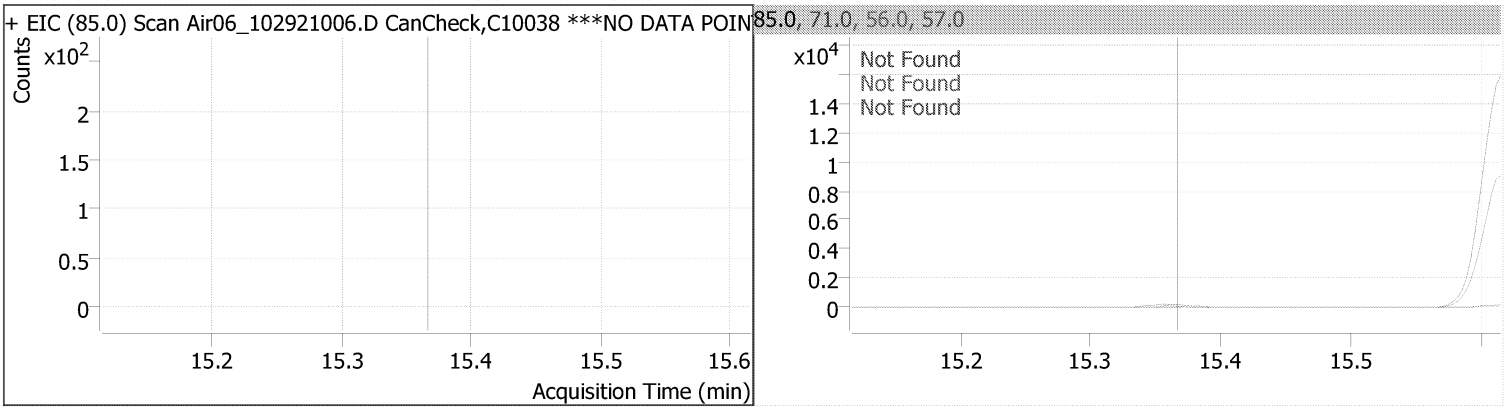
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.0025	15.09	-0.01	260	85.0	19.8	52.0	78.0
					95.0		13.3	20.0
					131.0		8.2	12.3



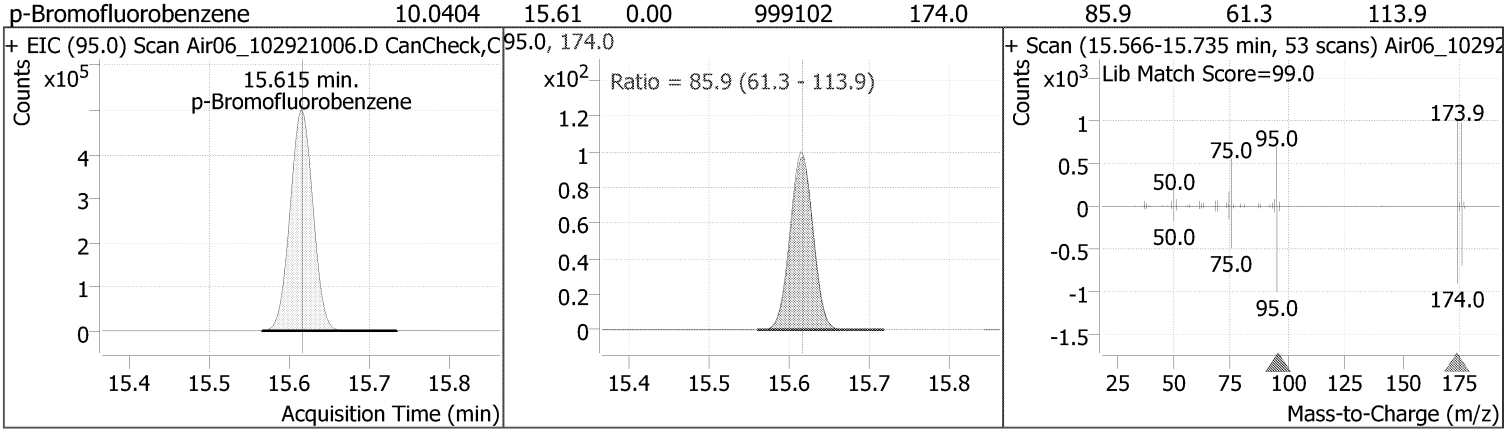
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.0030	15.13	0.00	419	106.0	25.0	36.0	54.0
					105.0		15.4	23.0
					77.0		10.2	15.4
					65.0		6.5	9.7



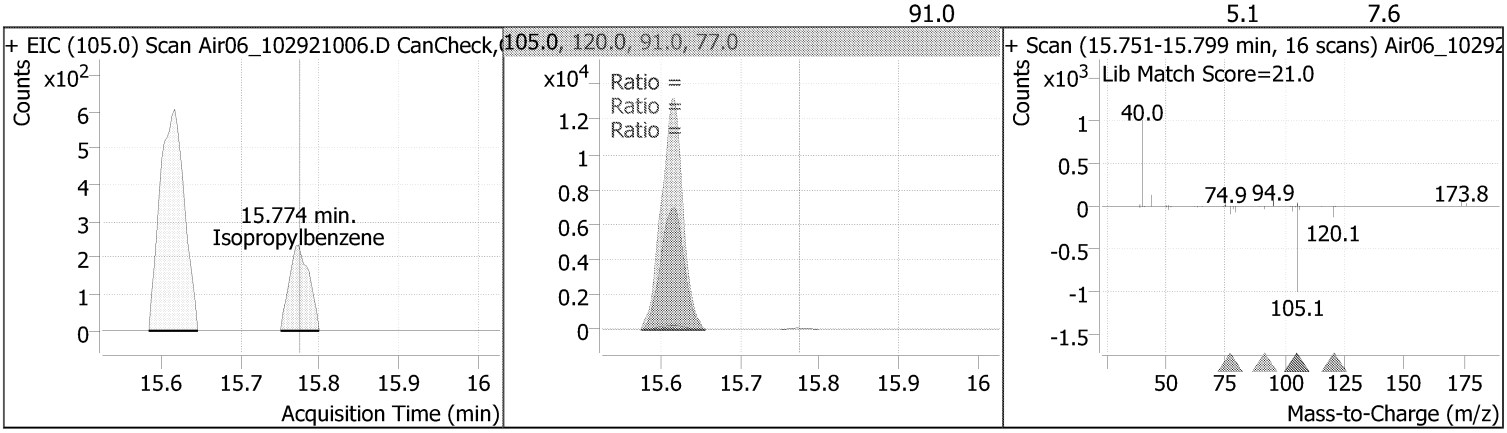
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
n-Nonane	N.D.	15.37	57.0	353.3	56.0	88.5	71.0	73.7



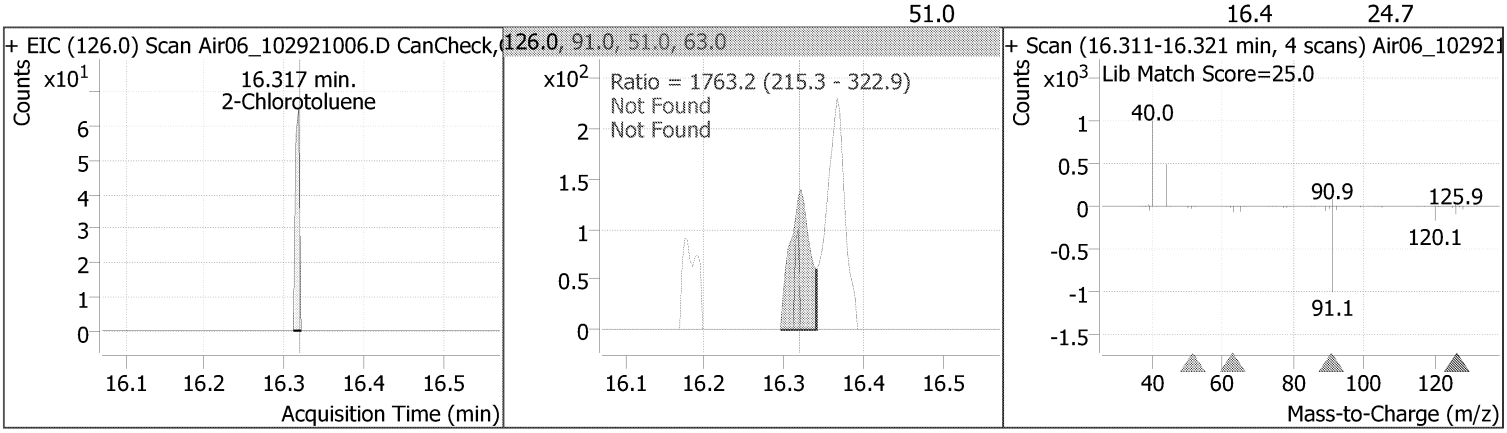
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.0404	15.61	0.00	999102	174.0	85.9	61.3	113.9



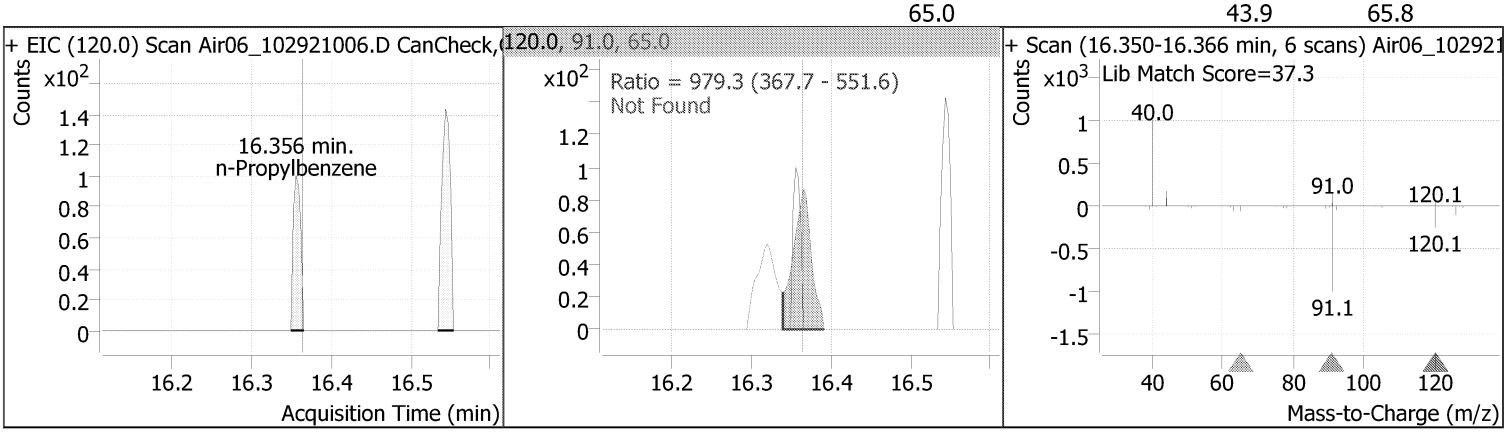
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.0021	15.77	0.00	405	120.0		20.8	31.2
					77.0		13.1	19.7
					91.0		5.1	7.6



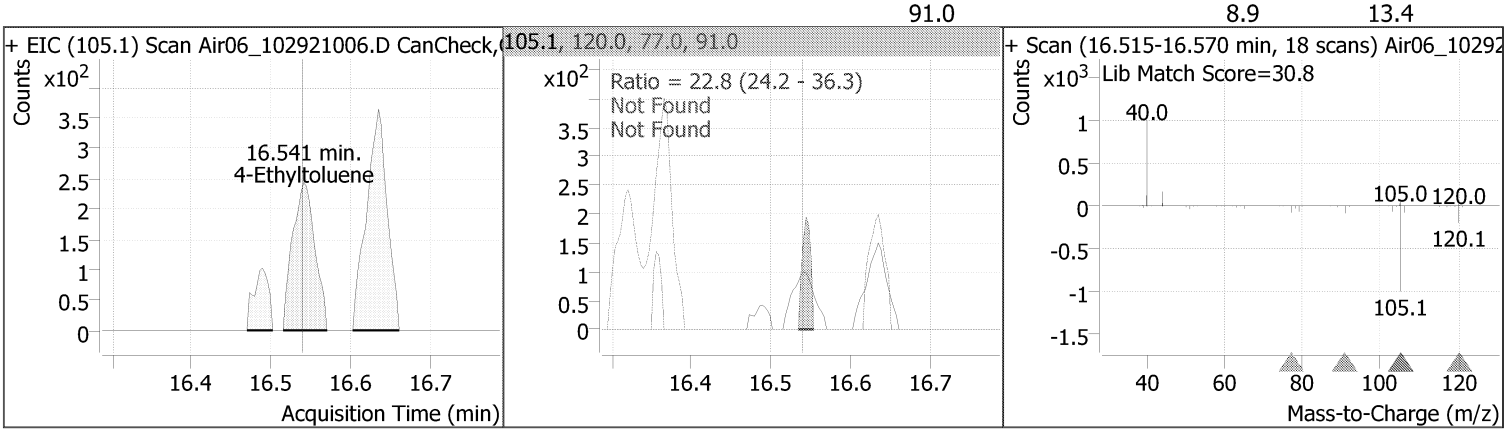
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	0.0005	16.32	0.00	24	91.0	1763.2	215.3	322.9
					63.0		41.2	61.8
					51.0		16.4	24.7



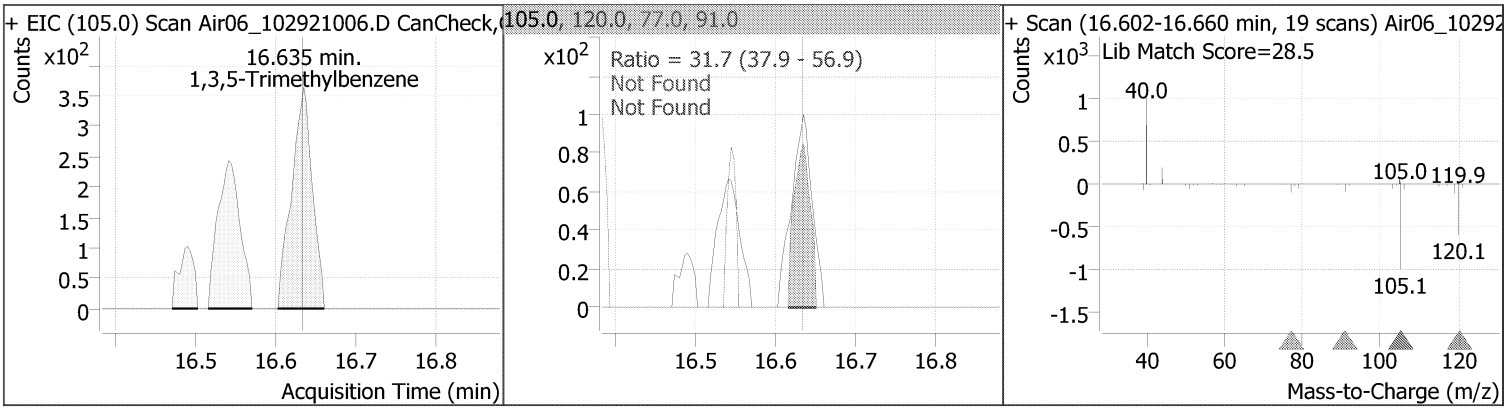
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.0012	16.36	-0.01	65	91.0	979.3	367.7	551.6
					65.0		43.9	65.8



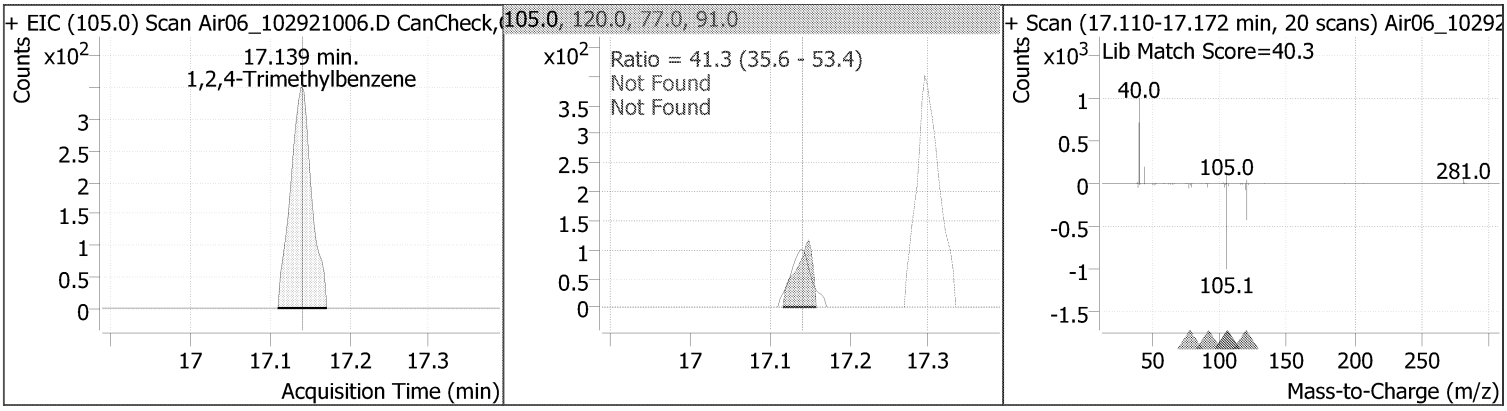
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.0025	16.54	0.00	474	120.0	22.8	24.2	36.3
					77.0		9.5	14.3
					91.0		8.9	13.4



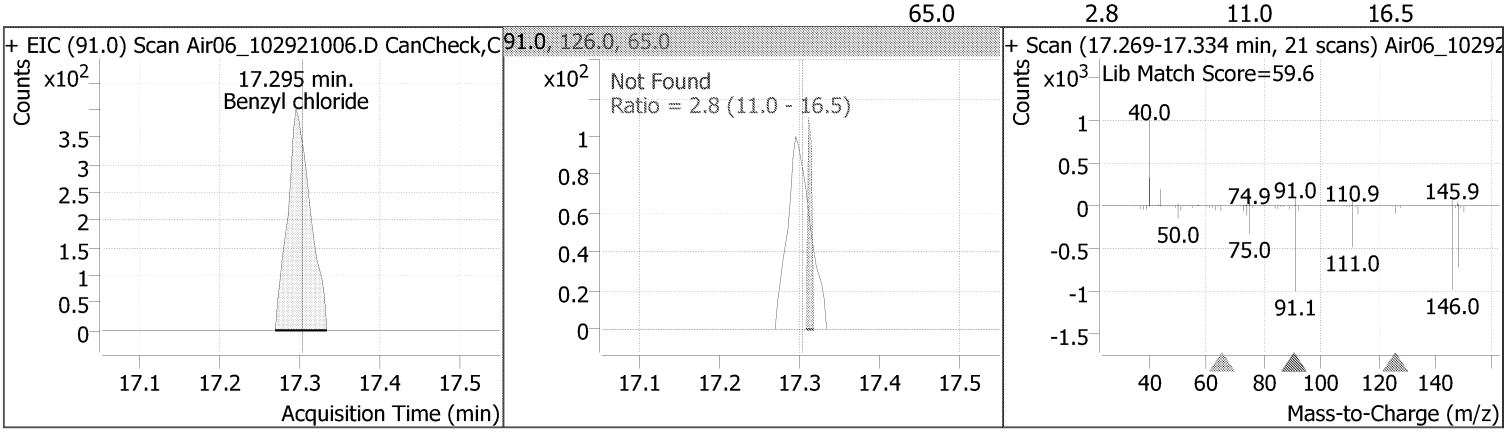
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.0040	16.63	0.00	655	120.0	31.7	37.9	56.9
					77.0		10.7	16.0
					91.0		8.8	13.2



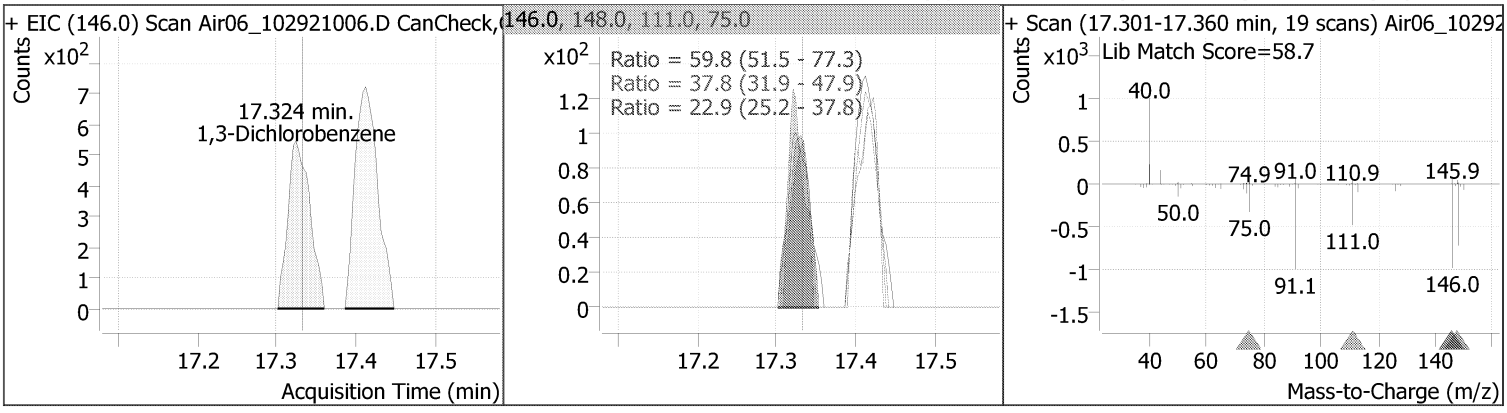
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	0.0041	17.14	0.00	650	120.0	41.3	35.6	53.4
					77.0		10.4	15.6
					91.0		8.8	13.3



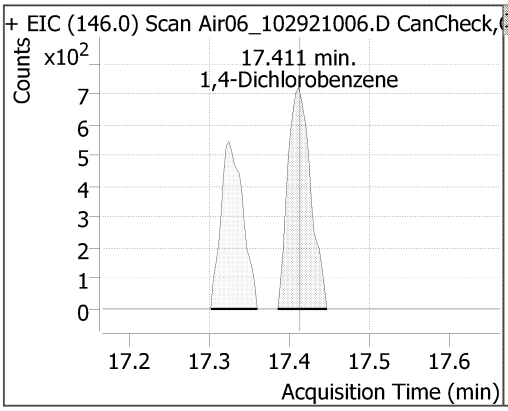
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.0061	17.29	-0.01	793	126.0		16.4	24.6
					65.0	2.8	11.0	16.5

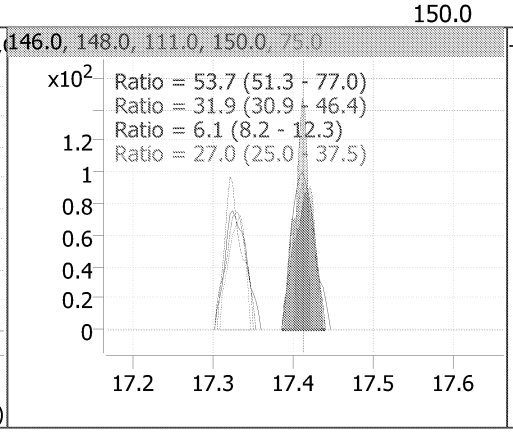


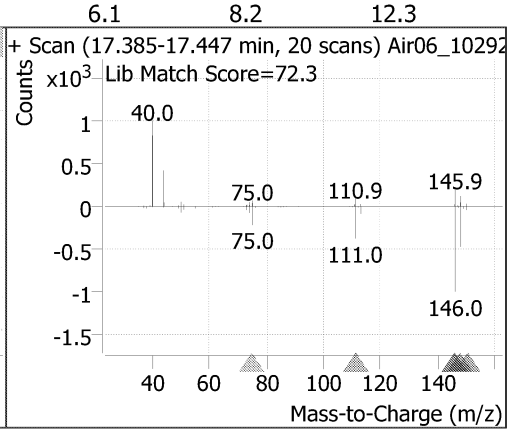
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.0093	17.32	-0.01	1054	148.0	59.8	51.5	77.3
					111.0	37.8	31.9	47.9
					75.0	22.9	25.2	37.8



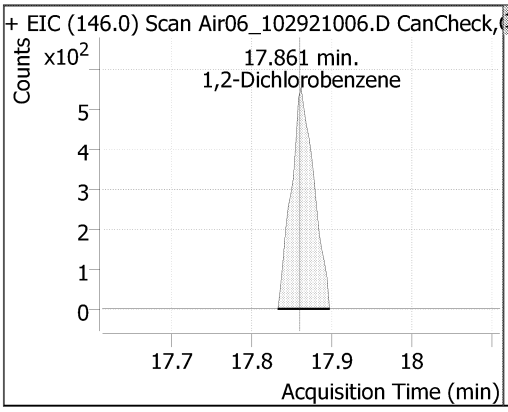
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.0127	17.41	0.00	1441	148.0	53.7	51.3	77.0
					111.0	31.9	30.9	46.4
					75.0	27.0	25.0	37.5
					150.0	6.1	8.2	12.3

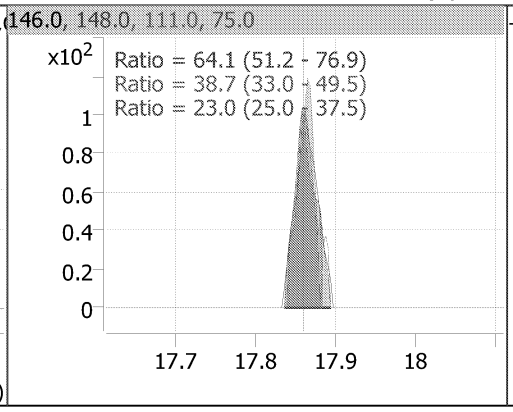


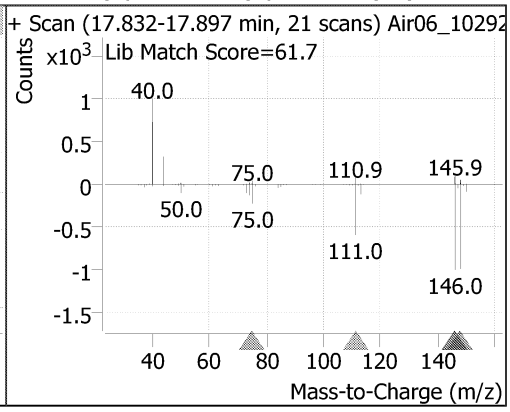




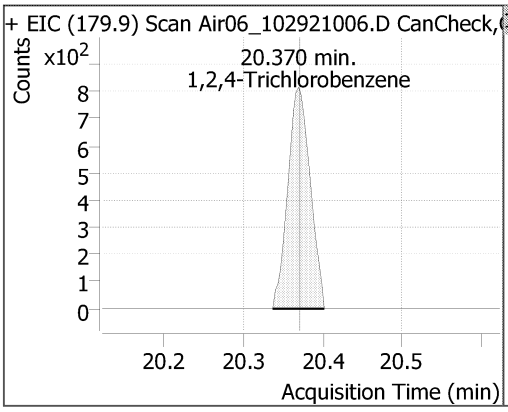
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.0100	17.86	0.00	1100	148.0	64.1	51.2	76.9
					111.0	38.7	33.0	49.5
					75.0	23.0	25.0	37.5

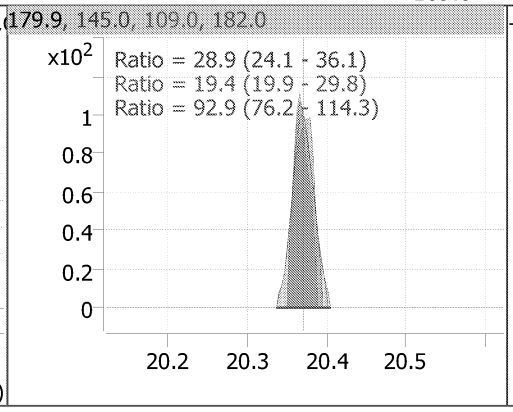


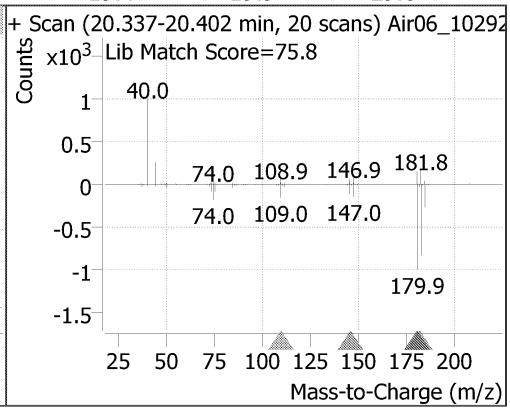




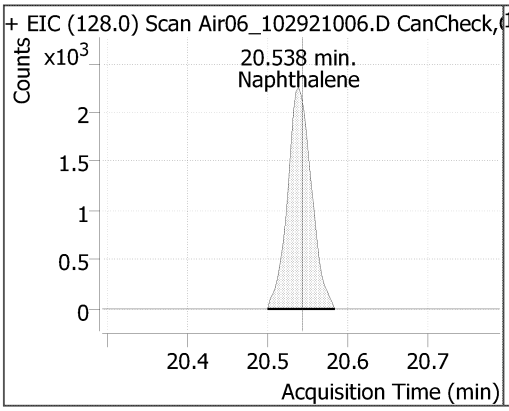
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.0191	20.37	0.00	1588	182.0	92.9	76.2	114.3
					145.0	28.9	24.1	36.1
					109.0	19.4	19.9	29.8

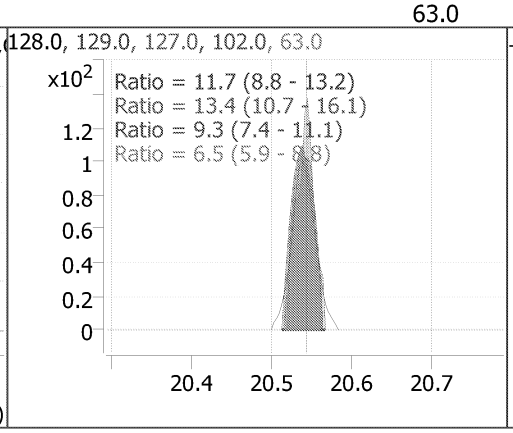


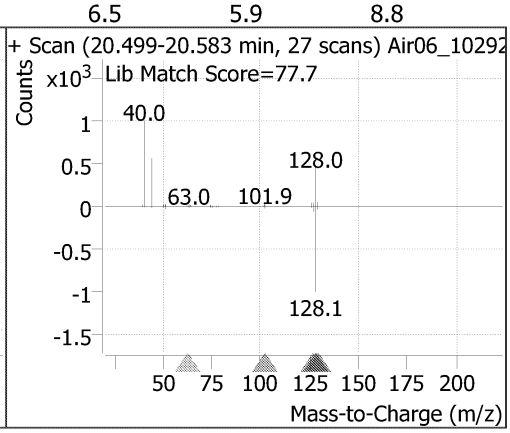




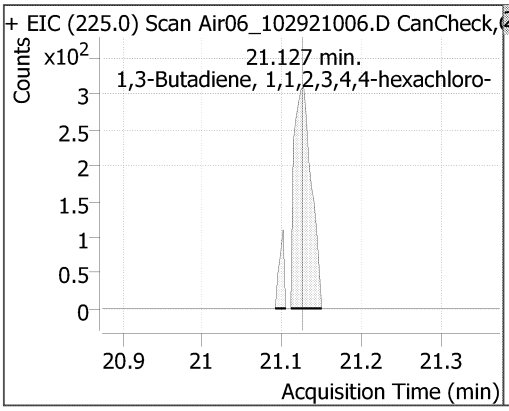
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	0.0268	20.54	0.00	4696	127.0	13.4	10.7	16.1
					129.0	11.7	8.8	13.2
					102.0	9.3	7.4	11.1
					63.0	6.5	5.9	8.8

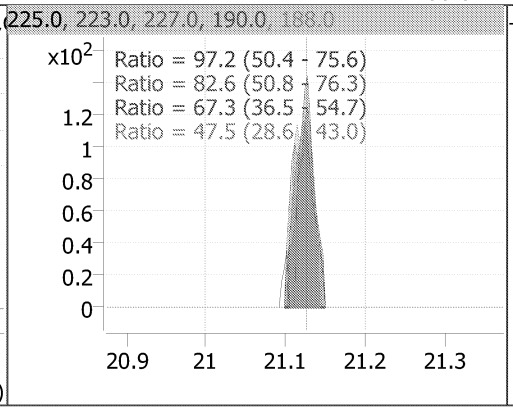


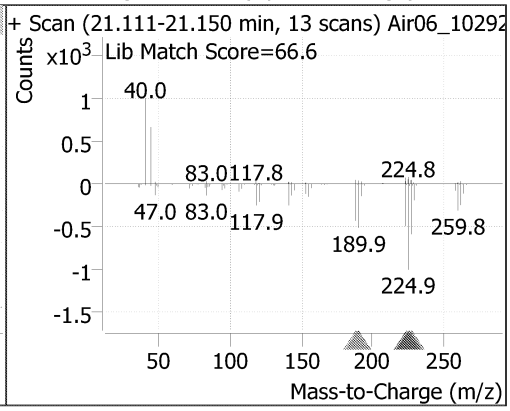




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.0051	21.13	0.00	460	227.0	82.6	50.8	76.3
					223.0	97.2	50.4	75.6
					190.0	67.3	36.5	54.7
					188.0	47.5	28.6	43.0







ENTHALPY Canister Check FOR 453958 MSAIR Air
EPA TO-15

Inst : AIR-MS-06 Run Name : C10705 IDF : 1.0
Seqnum : 371442695006 File : air06_110321006 Time : 03-NOV-2021 14:54
Cal : 371424323001 Caldate : 21-OCT-2021

Analyte	Quant	RL	Units	Flags
1,1,1,2-Tetrachloroethane	ND	0.2000	nL/L	
Freon 12	ND	0.2000	nL/L	
Freon 114	ND	0.2000	nL/L	
Chloromethane	ND	0.2000	nL/L	
Vinyl Chloride	ND	0.2000	nL/L	
Bromomethane	ND	0.2000	nL/L	
Chloroethane	ND	0.2000	nL/L	
Trichlorofluoromethane	ND	0.2000	nL/L	
1,1-Dichloroethene	ND	0.2000	nL/L	
Freon 113	ND	0.2000	nL/L	
Acetone	ND	1.000	nL/L	
Carbon Disulfide	ND	0.2000	nL/L	
Isopropanol (IPA)	ND	1.000	nL/L	
Methylene Chloride	ND	0.2000	nL/L	
trans-1,2-Dichloroethene	ND	0.2000	nL/L	
MTBE	ND	0.2000	nL/L	
n-Hexane	ND	0.2000	nL/L	
1,1-Dichloroethane	ND	0.2000	nL/L	
Vinyl Acetate	ND	1.000	nL/L	
cis-1,2-Dichloroethene	ND	0.2000	nL/L	
2-Butanone	ND	1.000	nL/L	
Chloroform	ND	0.2000	nL/L	
1,1,1-Trichloroethane	ND	0.2000	nL/L	
Carbon Tetrachloride	ND	0.2000	nL/L	
Benzene	ND	0.2000	nL/L	
1,2-Dichloroethane	ND	0.2000	nL/L	
Trichloroethene	ND	0.2000	nL/L	
1,2-Dichloropropane	ND	0.2000	nL/L	
Bromodichloromethane	ND	0.2000	nL/L	
cis-1,3-Dichloropropene	ND	0.2000	nL/L	
4-Methyl-2-Pentanone	ND	0.2000	nL/L	
Toluene	ND	0.2000	nL/L	
trans-1,3-Dichloropropene	ND	0.2000	nL/L	
1,1,2-Trichloroethane	ND	0.2000	nL/L	
Tetrachloroethene	ND	0.2000	nL/L	
2-Hexanone	ND	0.5000	nL/L	
Dibromochloromethane	ND	0.2000	nL/L	
1,2-Dibromoethane	ND	0.2000	nL/L	
Chlorobenzene	ND	0.2000	nL/L	
Ethylbenzene	ND	0.2000	nL/L	
m,p-Xylenes	ND	0.4000	nL/L	
o-Xylene	ND	0.2000	nL/L	
Styrene	ND	0.2000	nL/L	
Bromoform	ND	0.2000	nL/L	
1,1,2,2-Tetrachloroethane	ND	0.2000	nL/L	
4-Ethyltoluene	ND	0.2000	nL/L	
1,3,5-Trimethylbenzene	ND	0.2000	nL/L	
1,2,4-Trimethylbenzene	ND	0.2000	nL/L	
1,3-Dichlorobenzene	ND	0.2000	nL/L	
1,4-Dichlorobenzene	ND	0.2000	nL/L	

Analyte	Quant	RL	Units	Flags
Benzyl chloride	ND	0.2000	nL/L	
1,2-Dichlorobenzene	ND	0.2000	nL/L	
1,2,4-Trichlorobenzene	ND	0.2000	nL/L	
Hexachlorobutadiene	ND	0.2000	nL/L	

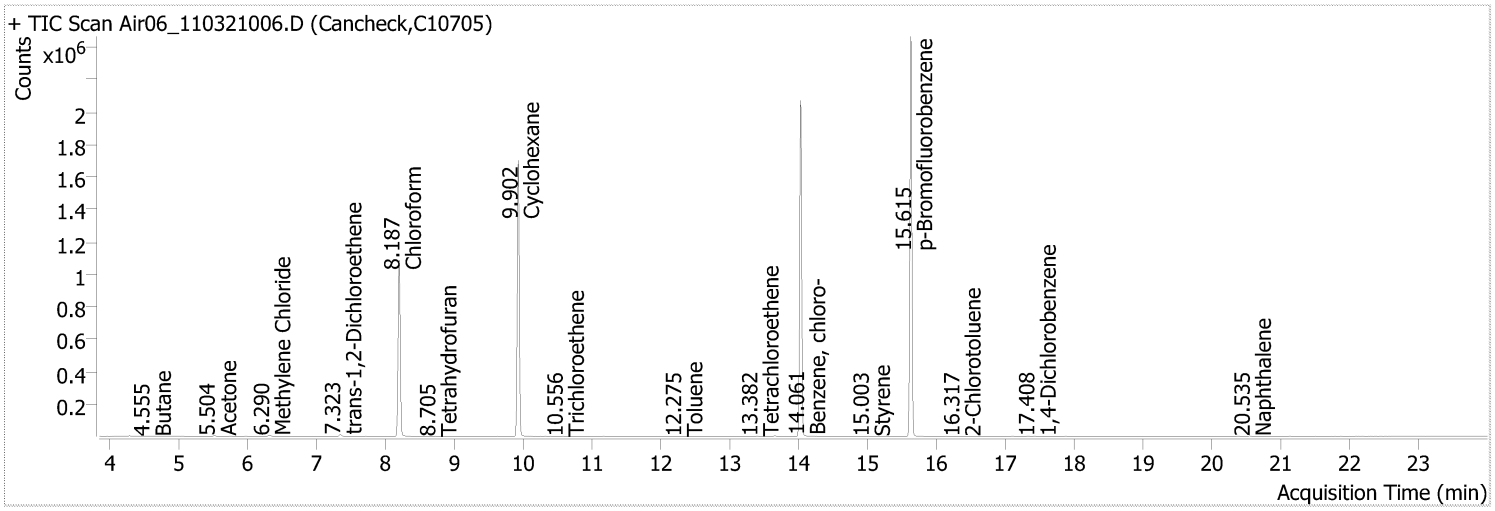
ISTD (ICAL air06_102121011)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389038	376371	-3.26	8.19	8.18	-0.01
1,4-Difluorobenzene	1458162	1399442	-4.03	9.92	9.91	-0.01
Chlorobenzene-d5	778633	722718	-7.18	14.02	14.01	-0.01

TO15 SCAN Certified (Batch 2153)

Analyst: DJL Date: 11/18/21 Reviewer: SLL Date: 11/23/21

Quantitation Results Report (Not Reviewed)

Data File	Air06_110321006.D	Operator	ZNZ
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	11/3/2021 2:54:39 PM
Sample Name	Cancheck,C10705	Instrument	Air-MS-06
Vial	2	Multiplier	1.00
DA Method File	TO15_102121.m	Comment	1x400mL
Tune File	bfb.u	Tune Date	11/1/2021 11:46:40 AM
Batch Name	2021 Nov 03 1428 TO15_102121.m.batch.bin	Last Calib Update	10/23/2021 7:11:09 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.184	130.0	376371	10.0000	nL/L		-0.003
M 1,4-Difluorobenzene	9.912	114.0	1399442	10.0000	nL/L		-0.003
M Chlorobenzene-d5	14.013	82.0	722718	10.0000	nL/L	#	-0.003
System Monitoring Compounds							
S p-Bromofluorobenzene	15.615	95.0	967879	10.1709	nL/L		0.000
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 101.71%			
Target Compounds							QValue
T Propylene	3.927	41.0	261	0.0073	nL/L	#	45
T Freon 12	0.000		0	N.D.			
T Chloromethane	4.141	50.0	137	0.0033	nL/L		50
T Freon 114	0.000		0	N.D.			
T Vinyl Chloride	0.000		0	N.D.			
T 1,3-Butadiene	0.000		0	N.D.			
T Butane	4.555	43.0	427	0.0067	nL/L	#	6
T Bromomethane	0.000		0	N.D.			
T Chloroethane	0.000		0	N.D.			
T Ethanol	5.041	45.0	1954	0.1106	nL/L		96
T Vinyl bromide	0.000		0	N.D.			
T Acrolein	5.351	56.0	109	0.0061	nL/L	#	41
T Acetone	5.504	58.0	2051	0.0804	nL/L	#	69
T Trichloromonofluoromethane	0.000		0	N.D.			
T Isopropanol (IPA)	5.727	45.0	3485	0.0356	nL/L	#	88
T n-Pentane	5.963	43.0	1046	0.0123	nL/L		92
T 1,1-Dichloroethene	0.000		0	N.D.			
T Tert-butyl alcohol (TBA)	6.310	59.0	4918	0.0624	nL/L		93
T Methylene Chloride	6.290	84.0	2113	0.0540	nL/L		89
T 3-Chloropropene	6.578	76.0	718	0.0478	nL/L		42
T Freon 113	0.000		0	N.D.			
T Carbon Disulfide	6.578	76.0	718	0.0074	nL/L	#	48

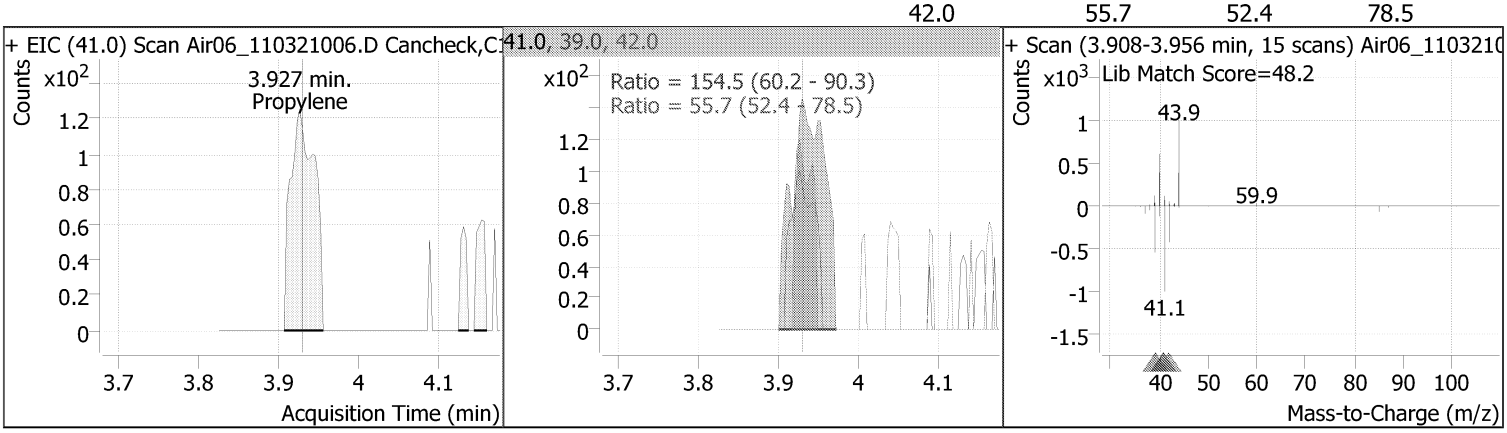
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.323	61.0	456	0.0074	nL/L	#	33
T 1,1-Dichloroethane	0.000		0	N.D.			
T MTBE	7.319	73.0	24	0.0003	nL/L		42
T Vinyl Acetate	7.429	43.0	651	0.0052	nL/L	#	80
T 2-Butanone	7.695	43.0	1425	0.0143	nL/L	#	83
T cis-1,2-Dichloroethene	8.038	61.0	141	0.0023	nL/L		34
T Ethyl Acetate	8.038	61.0	141	0.0092	nL/L		1
T n-Hexane	8.261	57.0	333	0.0045	nL/L	#	20
T Chloroform	8.187	83.0	80	0.0010	nL/L	#	1
T Tetrahydrofuran	8.705	72.0	48	0.0030	nL/L	#	1
T 1,2-Dichloroethane	0.000		0	N.D.			
T 1,1,1-Trichloroethane	0.000		0	N.D.			
T Benzene	9.611	78.0	520	0.0048	nL/L	#	81
T Carbon Tetrachloride	0.000		0	N.D.			
T Cyclohexane	9.902	84.0	1759	0.0389	nL/L	#	1
T 1,2-Dichloropropane	10.346	63.0	22	0.0004	nL/L		27
T Methane, bromodichloro-	10.511	83.0	41	0.0005	nL/L		76
T 1,4-Dioxane	10.611	88.0	60	0.0026	nL/L	#	85
T Trichloroethene	10.556	132.0	240	0.0050	nL/L	#	77
T 2,2,4-Trimethylpentane	10.618	57.0	102	0.0004	nL/L	#	66
T Methyl methacrylate	0.000		0	N.D.			
T n-Heptane	0.000		0	N.D.			
T cis-1,3-Dichloropropene	0.000		0	N.D.			
T 4-Methyl-2-Pentanone	0.000		0	N.D.			
T trans-1,3-Dichloropropene	0.000		0	N.D.			
T 1,1,2-Trichloroethane	0.000		0	N.D.			
T Toluene	12.275	91.0	407	0.0031	nL/L	#	77
T TPH Gasoline (C3 to C12)	12.396	165.0	461551	0.0500	nL/L		100
T 2-Hexanone	12.547	58.0	55	0.0010	nL/L	#	1
T Dibromochloromethane	12.666	129.0	105	0.0013	nL/L	#	59
T 1,2-Dibromoethane	12.919	108.9	263	0.0038	nL/L		91
T Tetrachloroethene	13.382	166.0	701	0.0103	nL/L		96
T 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
T Benzene, chloro-	14.061	112.0	361	0.0035	nL/L	#	37
T Ethylbenzene	14.443	91.0	276	0.0017	nL/L		55
T TPH Gasoline (C6 to C12)	14.521	165.0	265863	0.0385	nL/L		100
T m,p-Xylenes	14.641	91.0	268	0.0021	nL/L	#	73
T Bromoform	14.699	173.0	92	0.0011	nL/L		57
T Styrene	15.003	104.0	267	0.0027	nL/L	#	76
T 1,1,2,2-Tetrachloroethane	15.091	83.0	128	0.0013	nL/L	#	56
T o-Xylene	15.120	91.0	109	0.0008	nL/L		47
T n-Nonane	0.000		0	N.D.			
T Isopropylbenzene	15.777	105.0	136	0.0007	nL/L		57
T 2-Chlorotoluene	16.317	126.0	40	0.0009	nL/L	#	1
T n-Propylbenzene	16.369	120.0	39	0.0007	nL/L	#	1
T 4-Ethyltoluene	16.534	105.1	343	0.0019	nL/L		84
T 1,3,5-Trimethylbenzene	16.638	105.0	353	0.0022	nL/L	#	74
T 1,2,4-Trimethylbenzene	17.143	105.0	399	0.0026	nL/L		88
T Benzyl chloride	17.301	91.0	679	0.0055	nL/L	#	72
T 1,3-Dichlorobenzene	17.327	146.0	782	0.0072	nL/L		94
T 1,4-Dichlorobenzene	17.408	146.0	980	0.0090	nL/L	#	95
T 1,2-Dichlorobenzene	17.858	146.0	824	0.0078	nL/L		93
T 1,2,4-Trichlorobenzene	20.370	179.9	1173	0.0147	nL/L	#	91
T Naphthalene	20.535	128.0	2571	0.0154	nL/L	#	96
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.124	225.0	356	0.0041	nL/L	#	74

Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

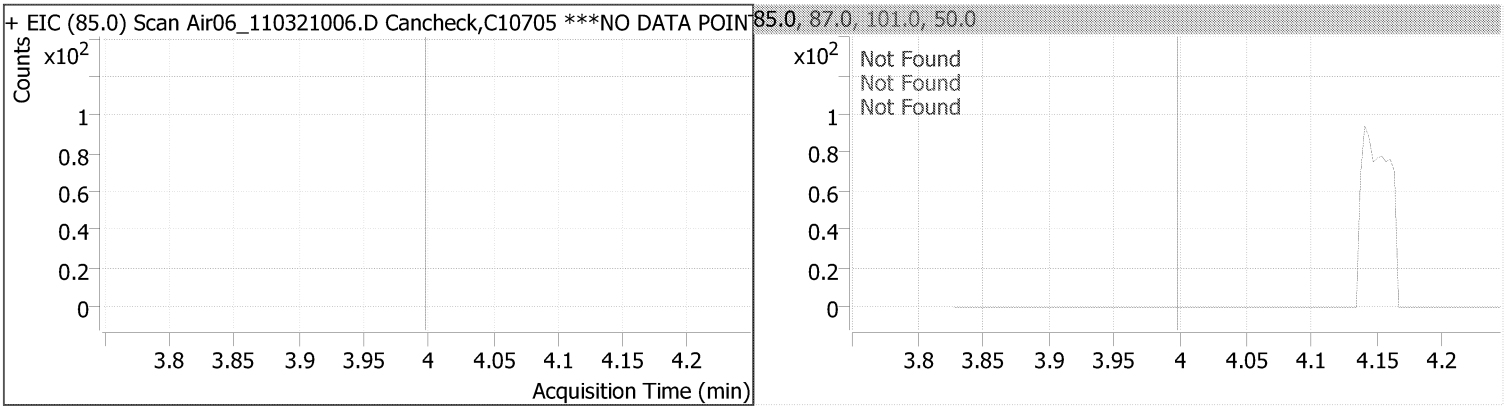
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitation Results Report (Not Reviewed)

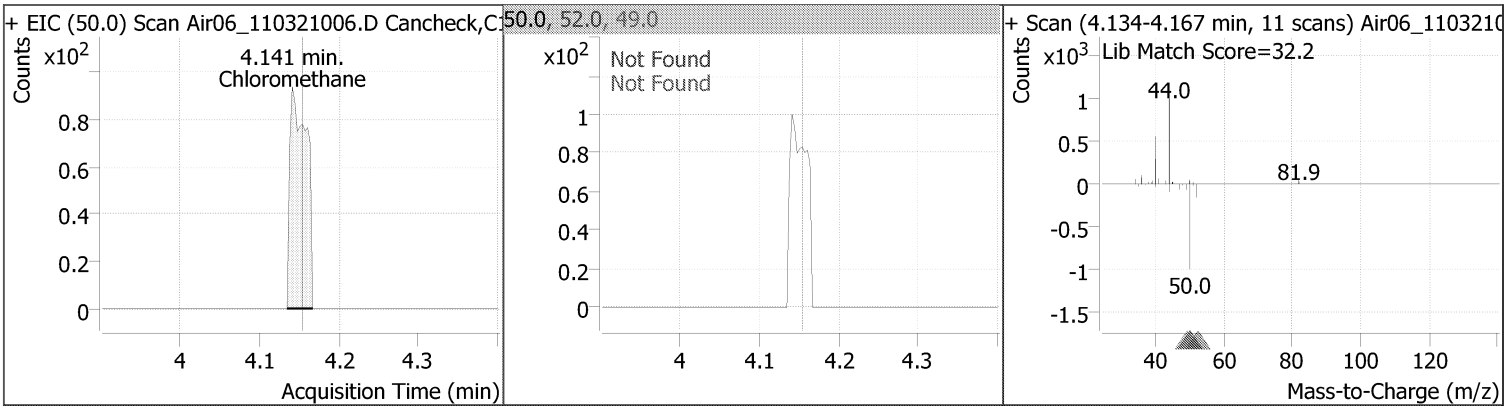
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.0073	3.93	0.00	261	39.0	154.5	60.2	90.3
					42.0	55.7	52.4	78.5



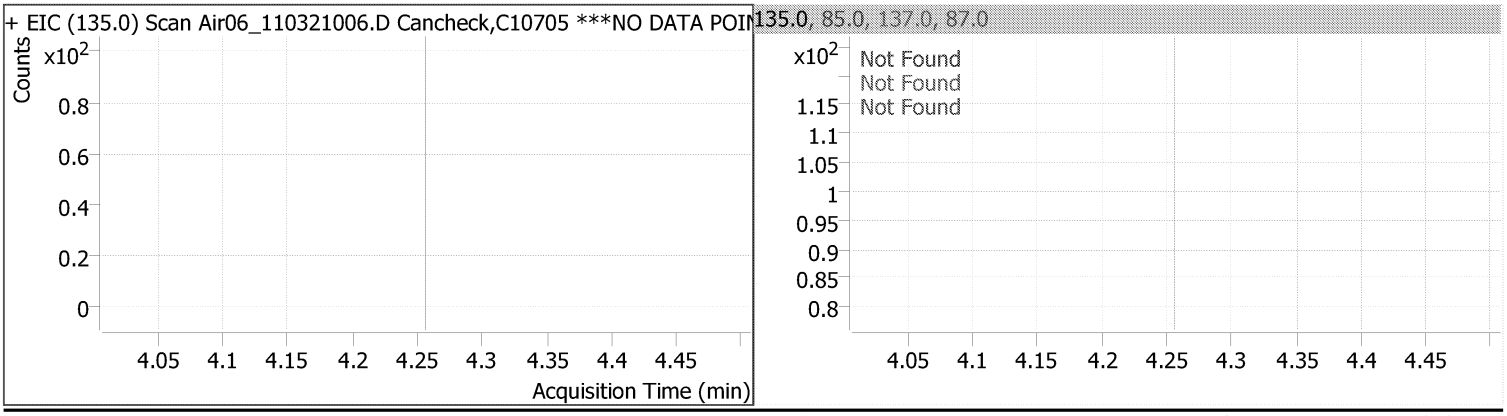
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 12	N.D.	4.00	87.0	32.4	50.0	17.3	101.0	9.4



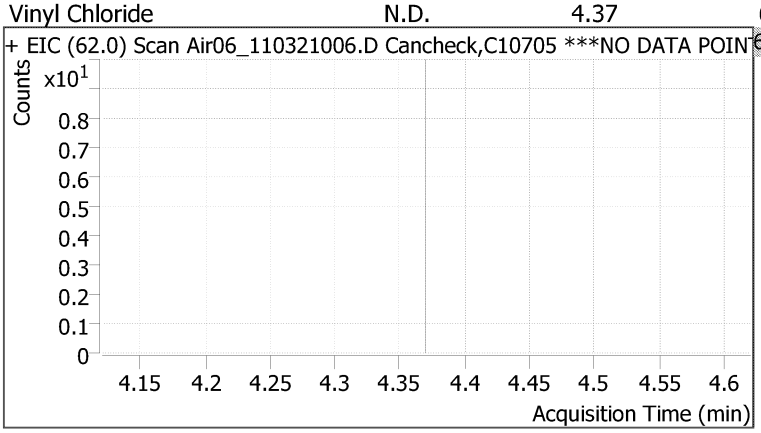
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	0.0033	4.14	-0.01	137	52.0		25.5	38.3
					49.0		8.3	12.5

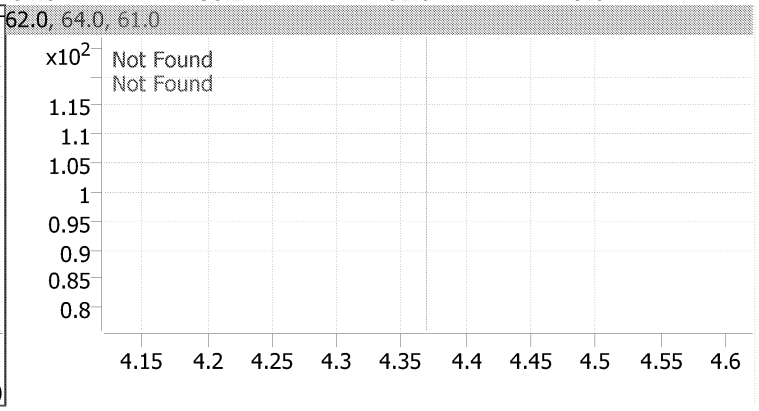


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 114	N.D.	4.26	85.0	151.0	87.0	48.3	137.0	32.5

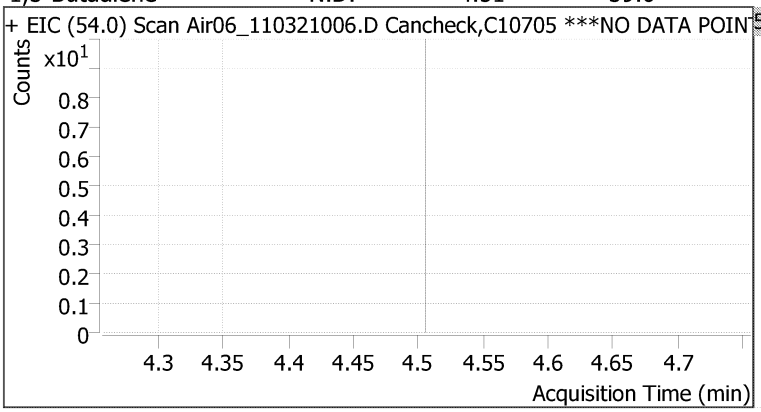


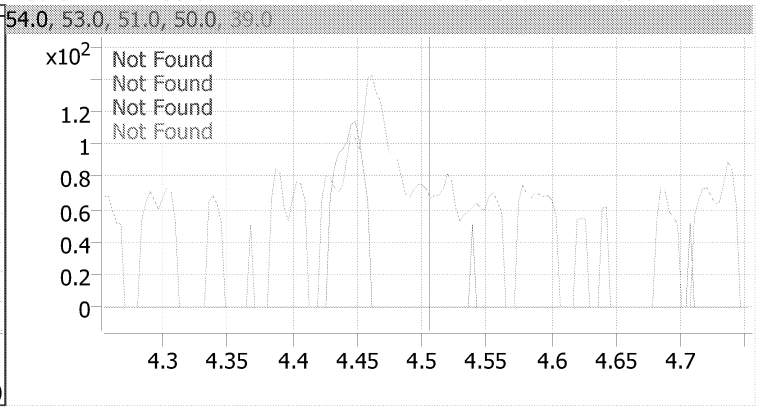
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl Chloride	N.D.	4.37	64.0	30.2	61.0	9.0



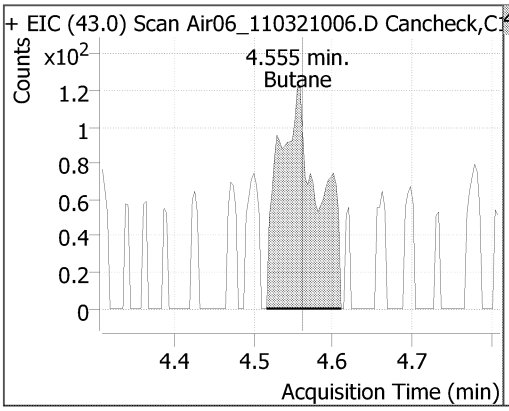


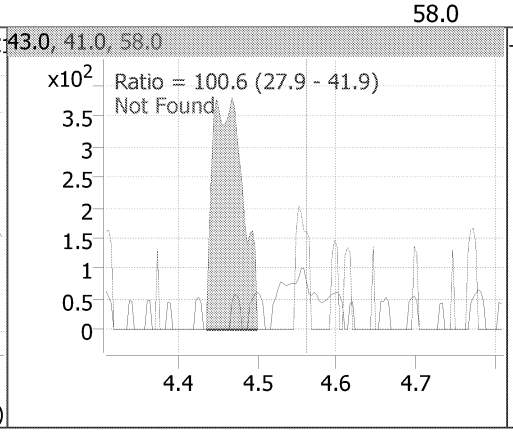
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,3-Butadiene	N.D.	4.51	39.0	106.8	53.0	71.6	50.0	35.2

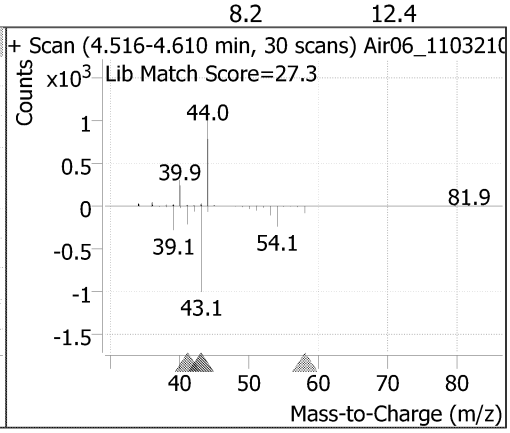




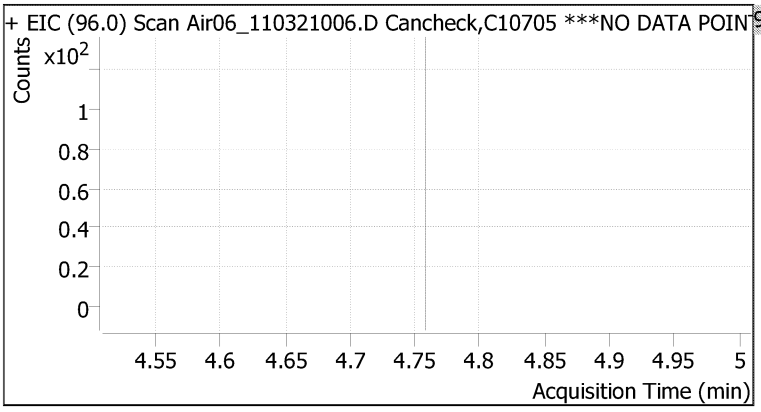
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	0.0067	4.56	-0.01	427	41.0	100.6	27.9	41.9
					58.0		8.2	12.4

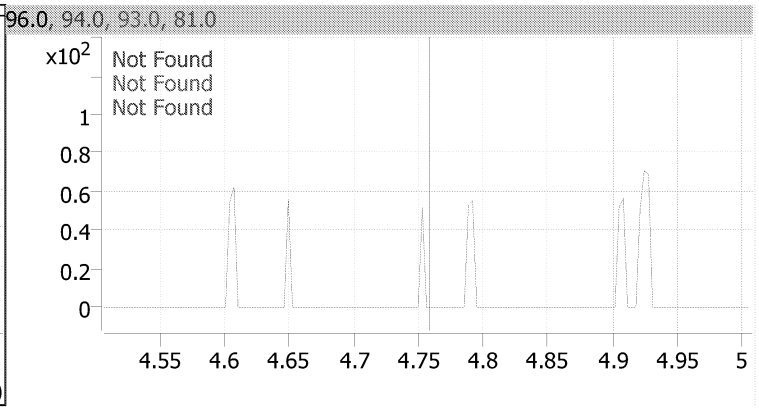




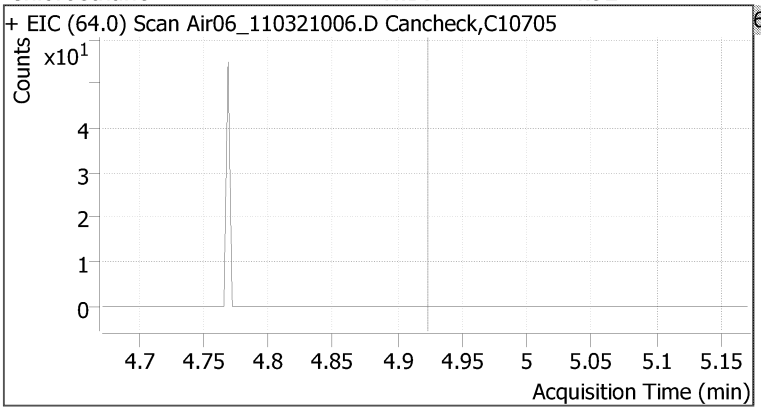


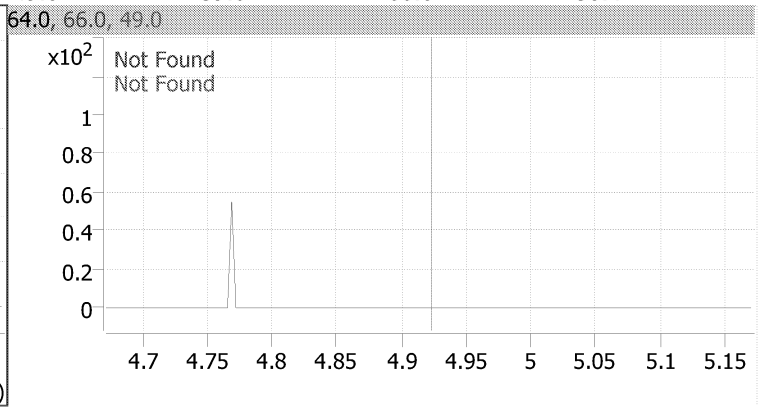
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Bromomethane	N.D.	4.76	94.0	106.0	93.0	21.9	81.0	19.1



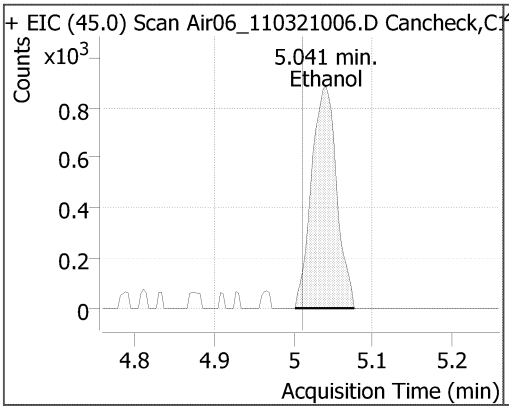


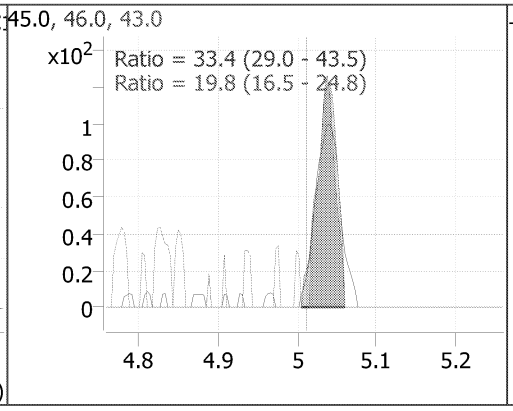
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Chloroethane	N.D.	4.92	49.0	39.6	66.0	30.4

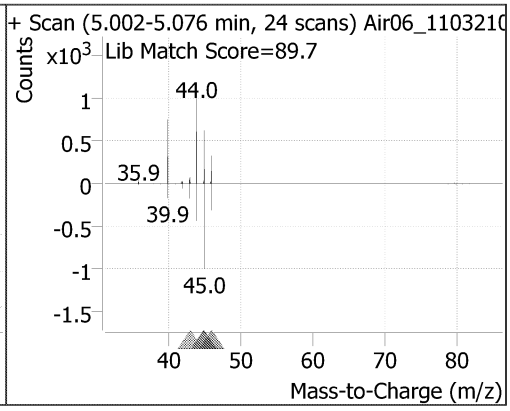




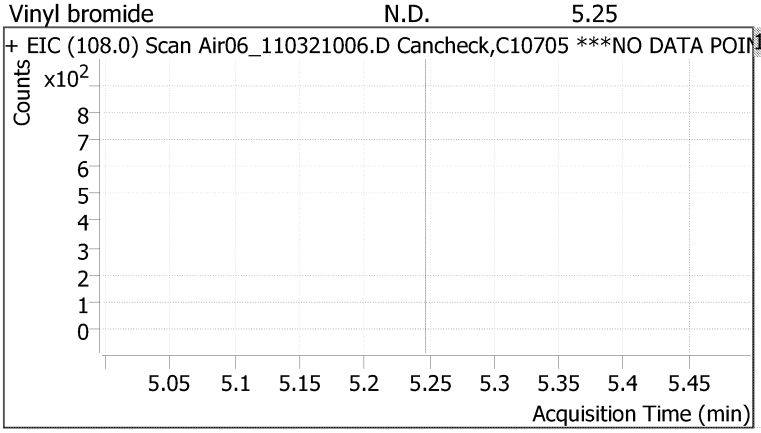
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	0.1106	5.04	0.03	1954	46.0	33.4	29.0	43.5
					43.0	19.8	16.5	24.8

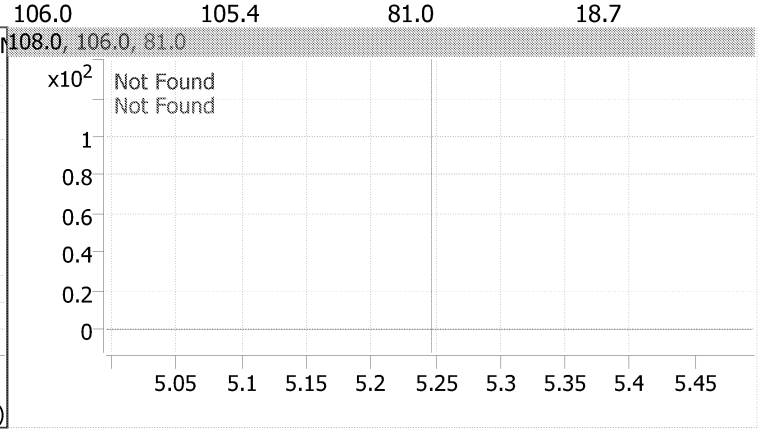




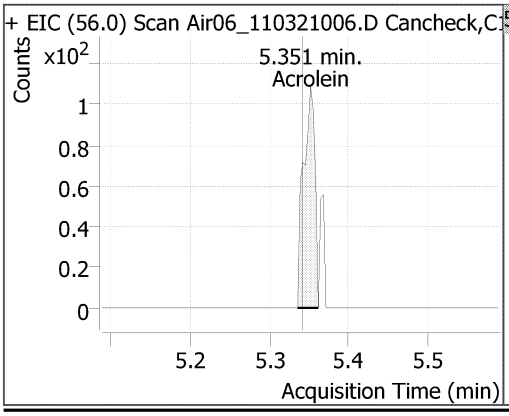


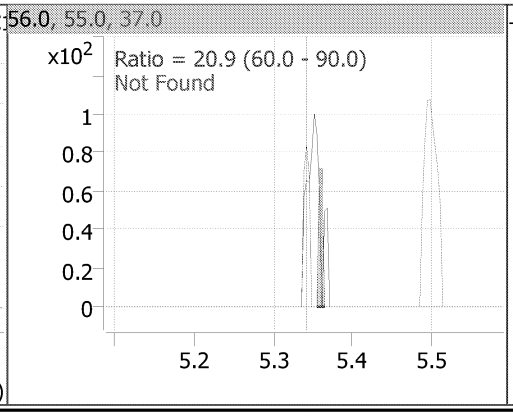
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl bromide	N.D.	5.25	106.0	105.4	81.0	18.7

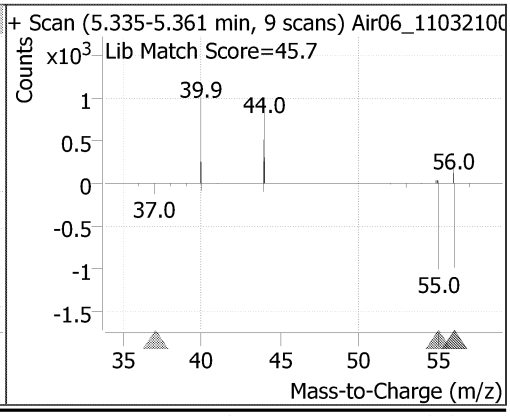




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	0.0061	5.35	0.01	109	55.0	20.9	60.0	90.0
					37.0		8.5	12.8

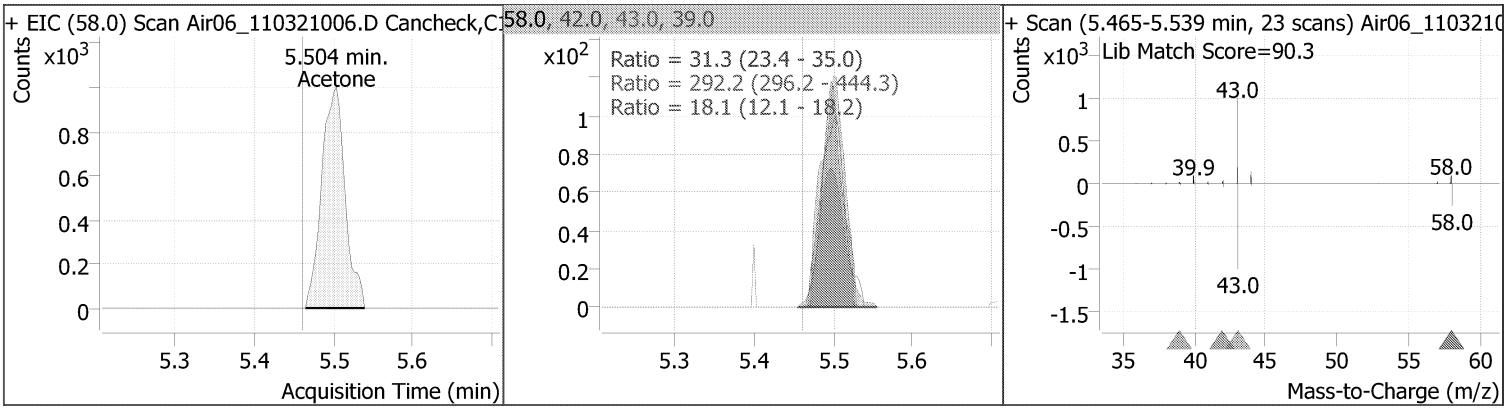




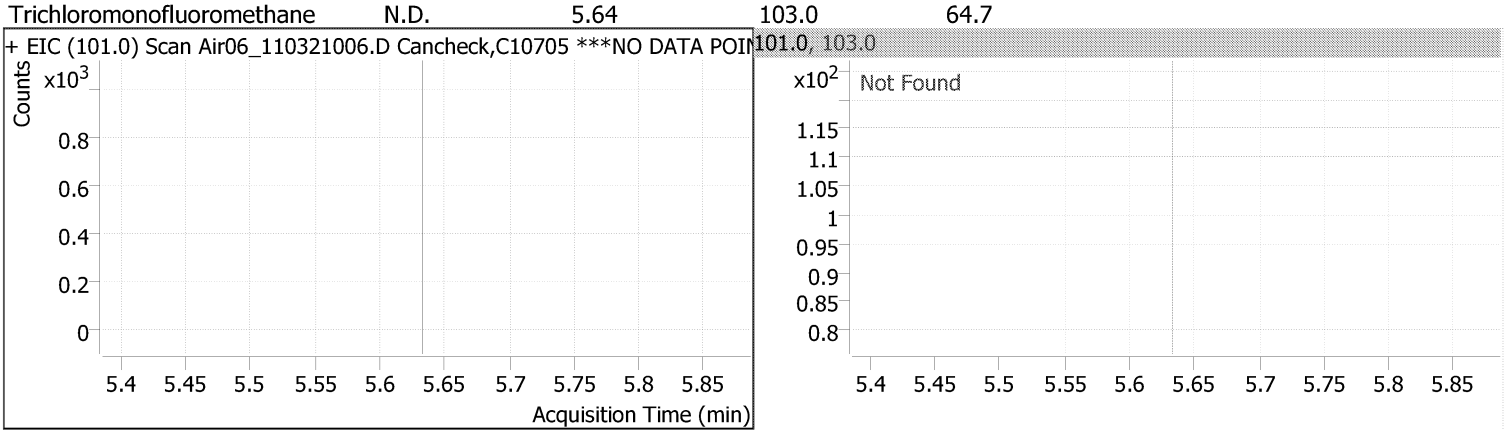


Quantitation Results Report (Not Reviewed)

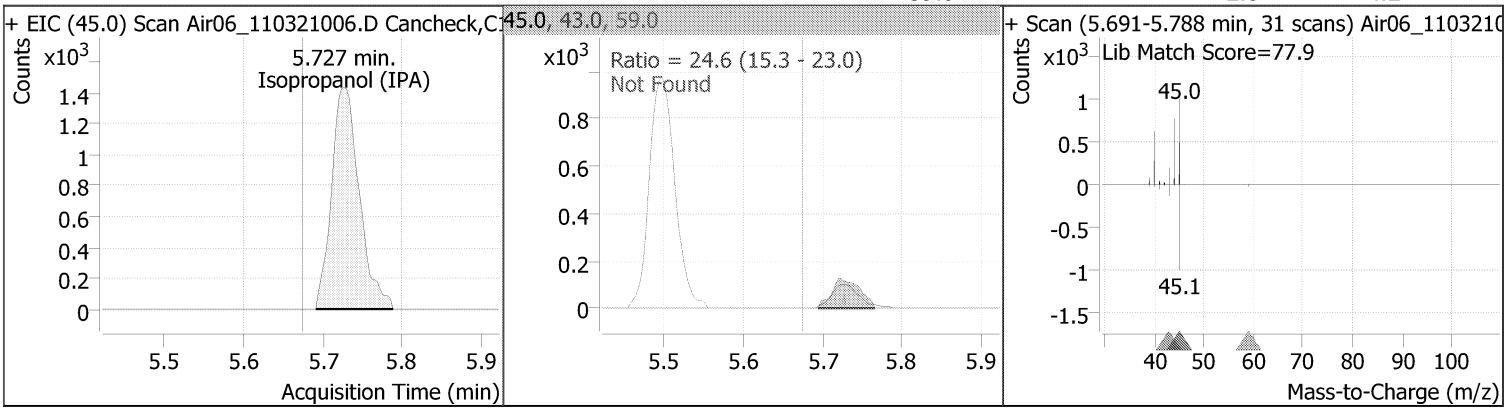
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	0.0804	5.50	0.04	2051	43.0	292.2	296.2	444.3
					42.0	31.3	23.4	35.0
					39.0	18.1	12.1	18.2



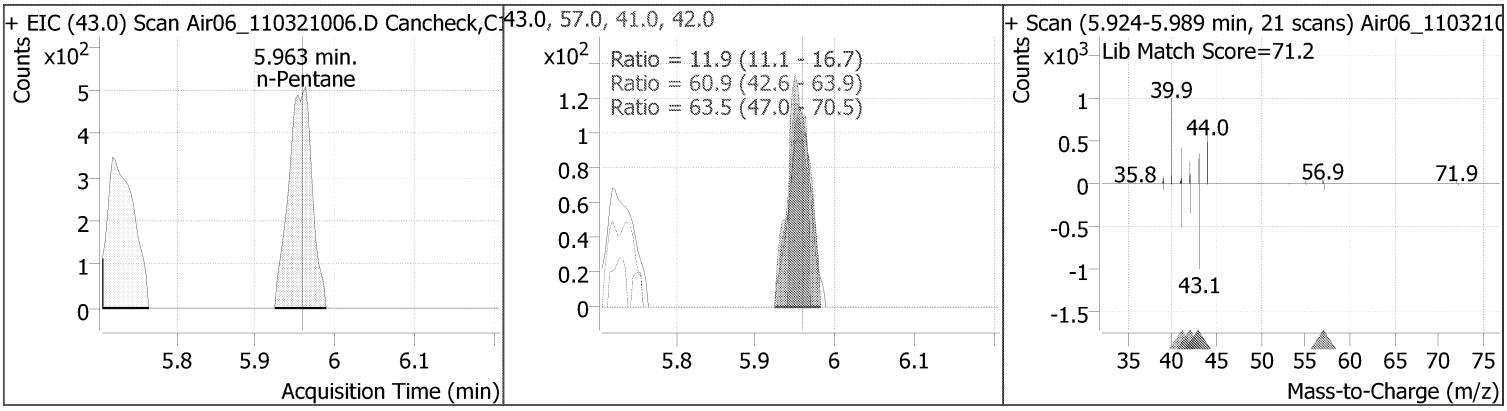
Compound	Conc.	Exp RT	QIon	Exp Ratio
Trichloromonofluoromethane	N.D.	5.64	103.0	64.7



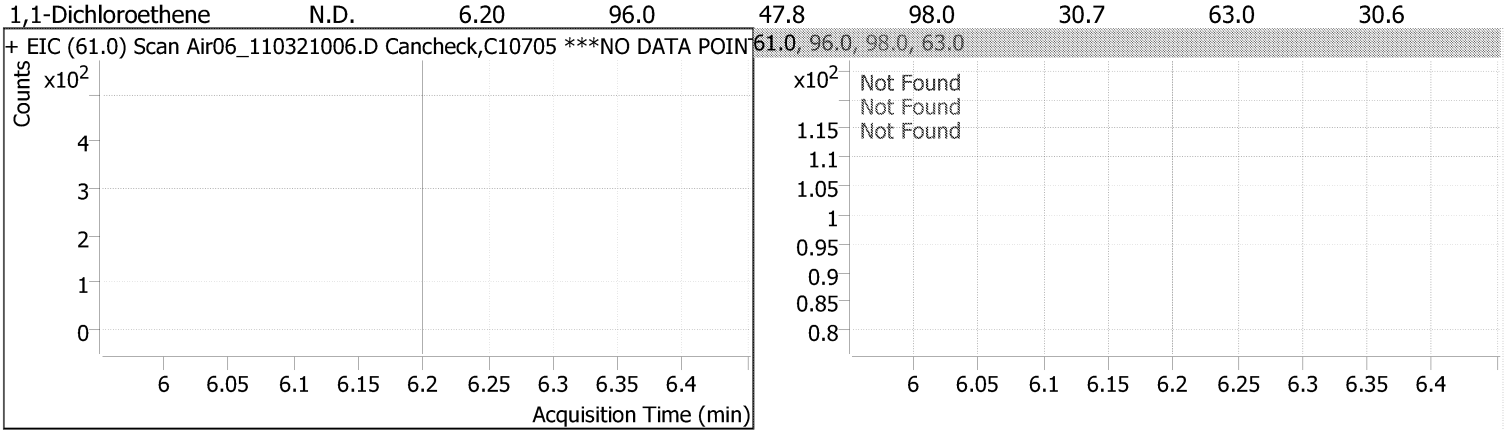
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.0356	5.73	0.05	3485	43.0	24.6	15.3	23.0
					59.0		2.8	4.2



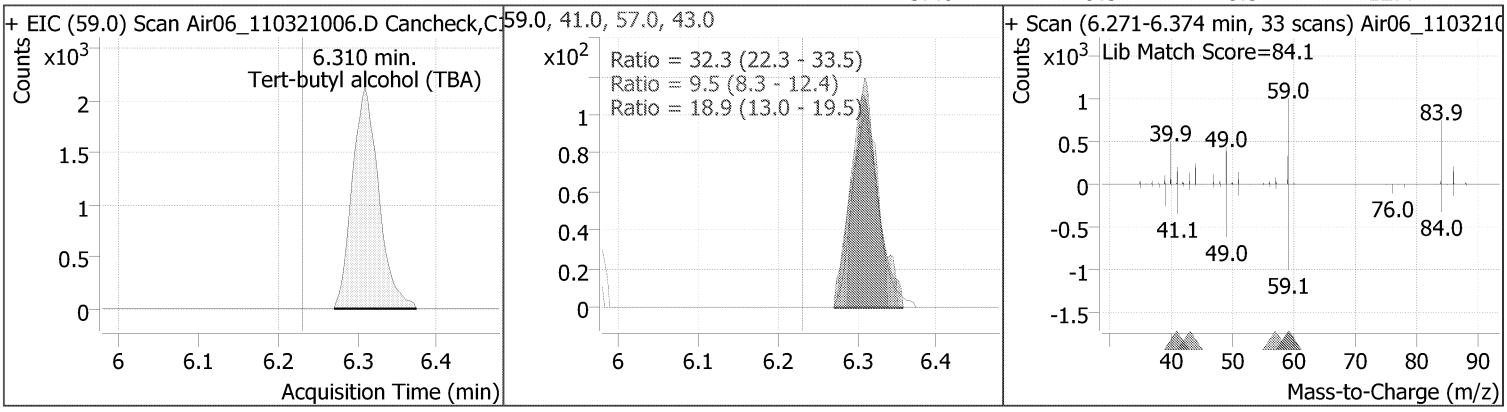
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.0123	5.96	0.00	1046	42.0	63.5	47.0	70.5
					41.0	60.9	42.6	63.9
					57.0	11.9	11.1	16.7



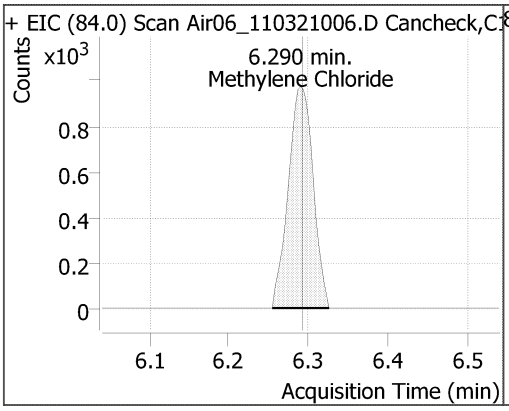
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethene	N.D.	6.20	96.0	47.8	98.0	30.7	63.0	30.6

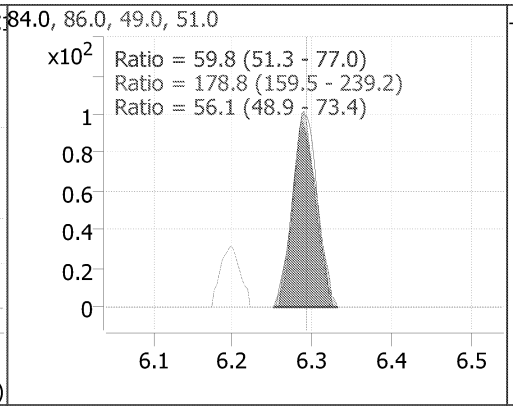


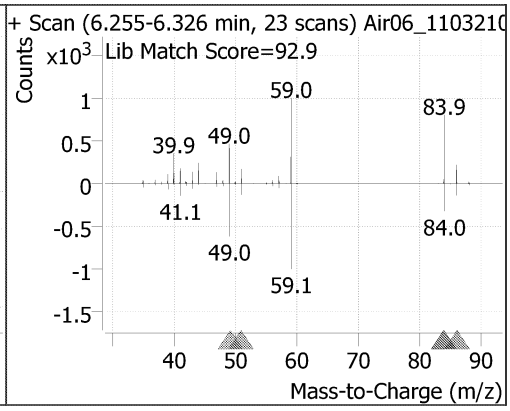
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.0624	6.31	0.08	4918	41.0	32.3	22.3	33.5
					43.0	18.9	13.0	19.5
					57.0	9.5	8.3	12.4



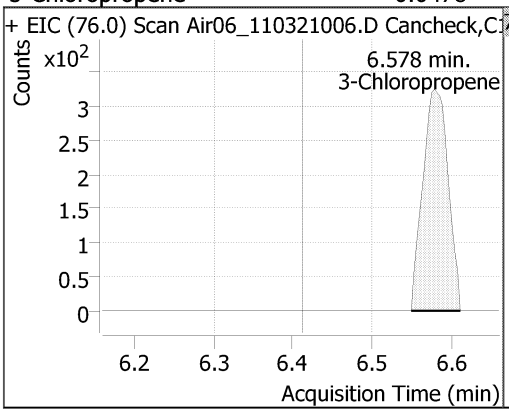
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.0540	6.29	0.00	2113	49.0	178.8	159.5	239.2
					86.0	59.8	51.3	77.0
					51.0	56.1	48.9	73.4

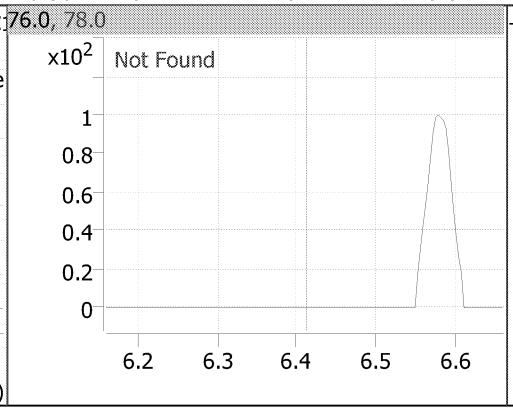


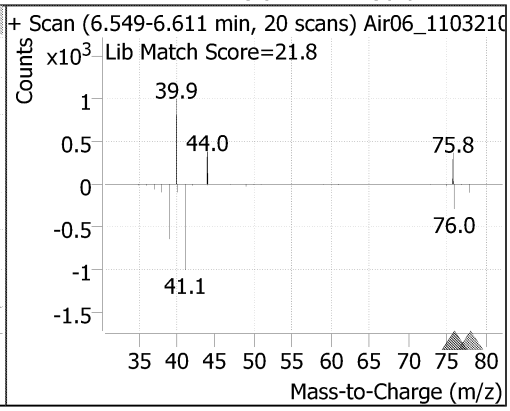




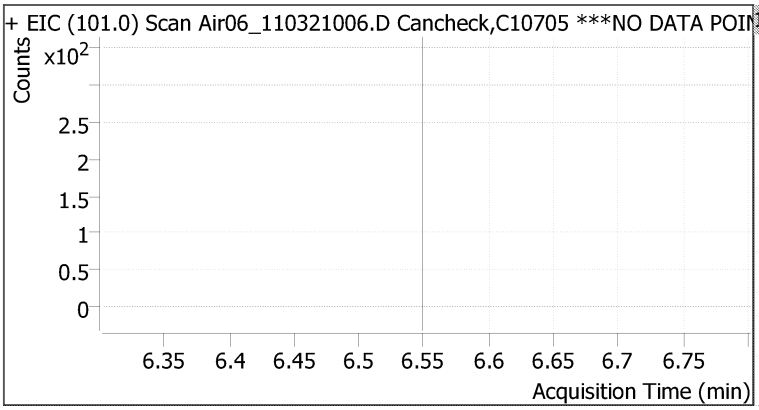
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	0.0478	6.58	0.17	718	78.0		25.9	38.8

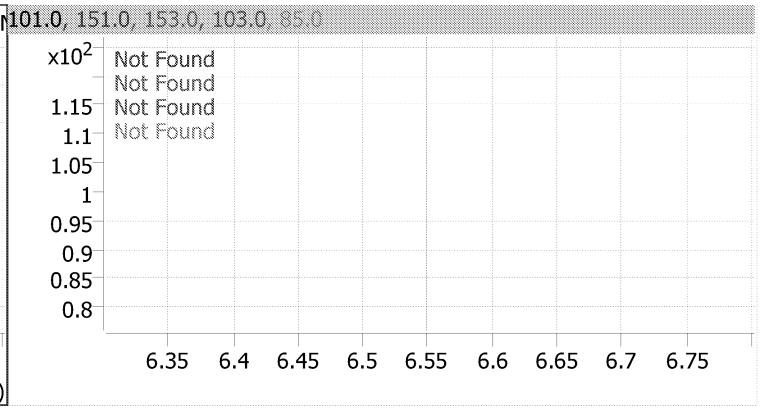




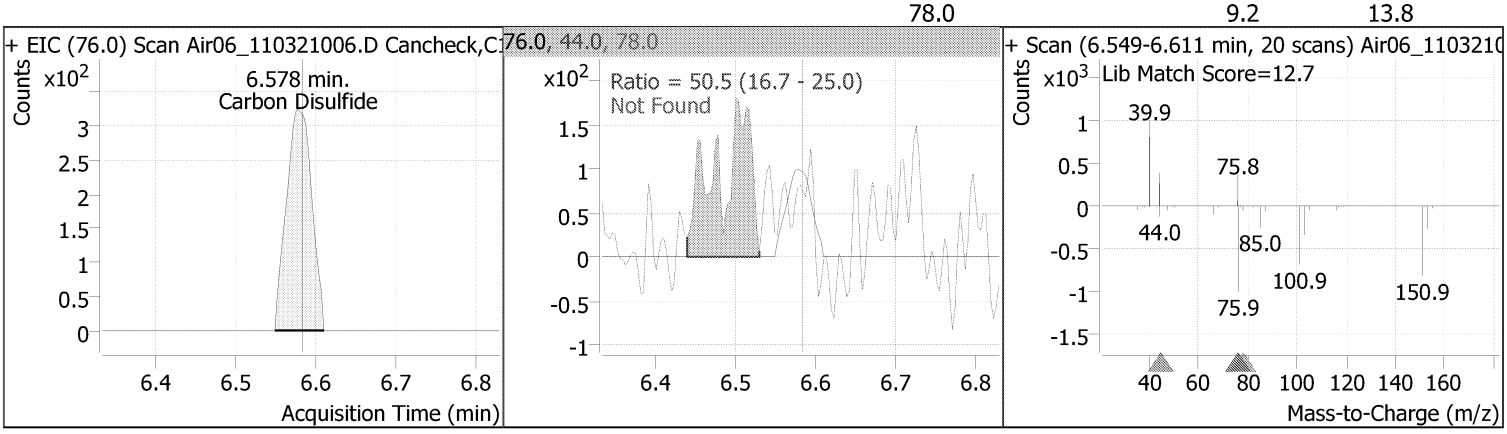


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 113	N.D.	6.55	151.0	83.8	103.0	64.0	153.0	54.1

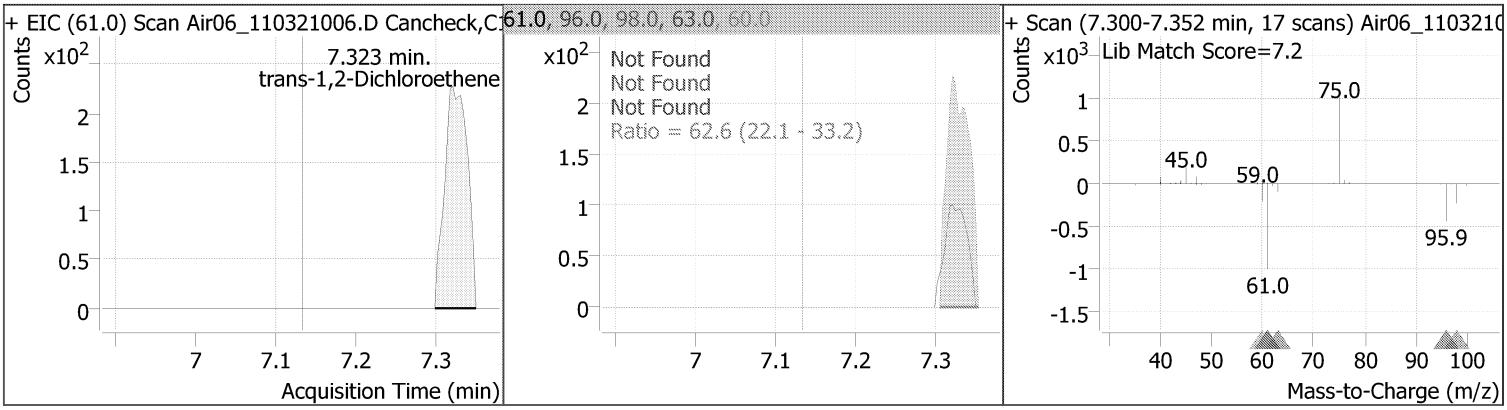




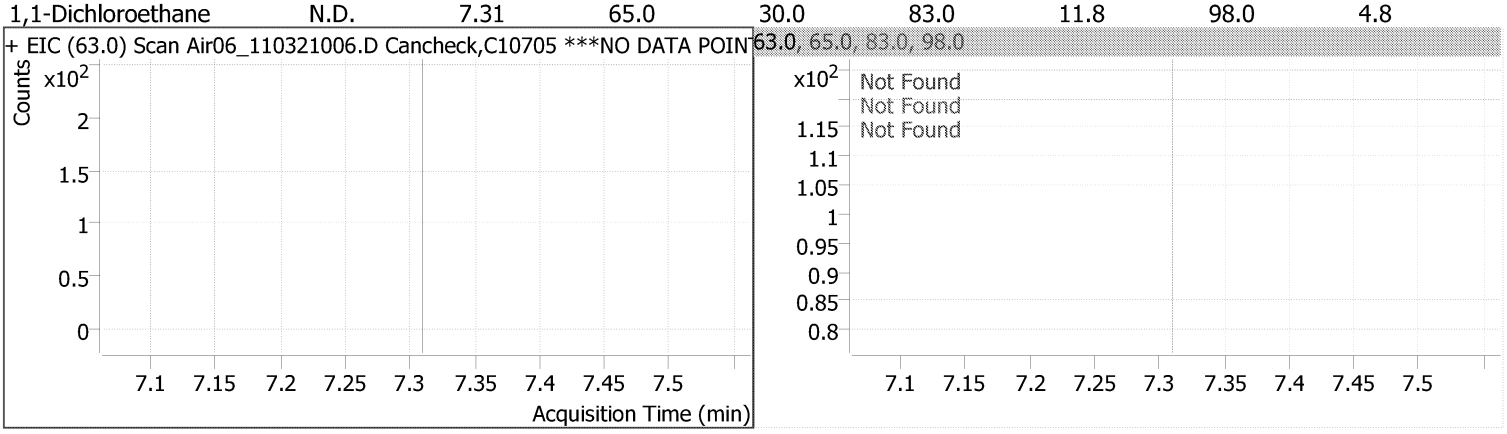
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.0074	6.58	-0.01	718	44.0	50.5	16.7	25.0
					78.0		9.2	13.8



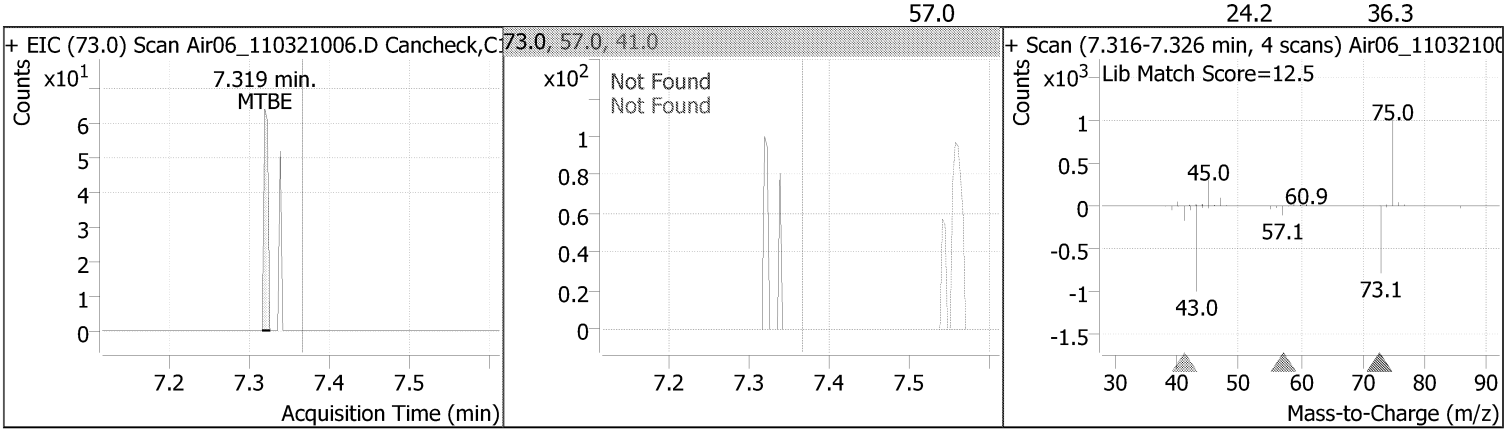
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.0074	7.32	0.19	456	96.0		44.1	66.2
					98.0		27.9	41.9
					63.0		24.4	36.6
					60.0	62.6	22.1	33.2



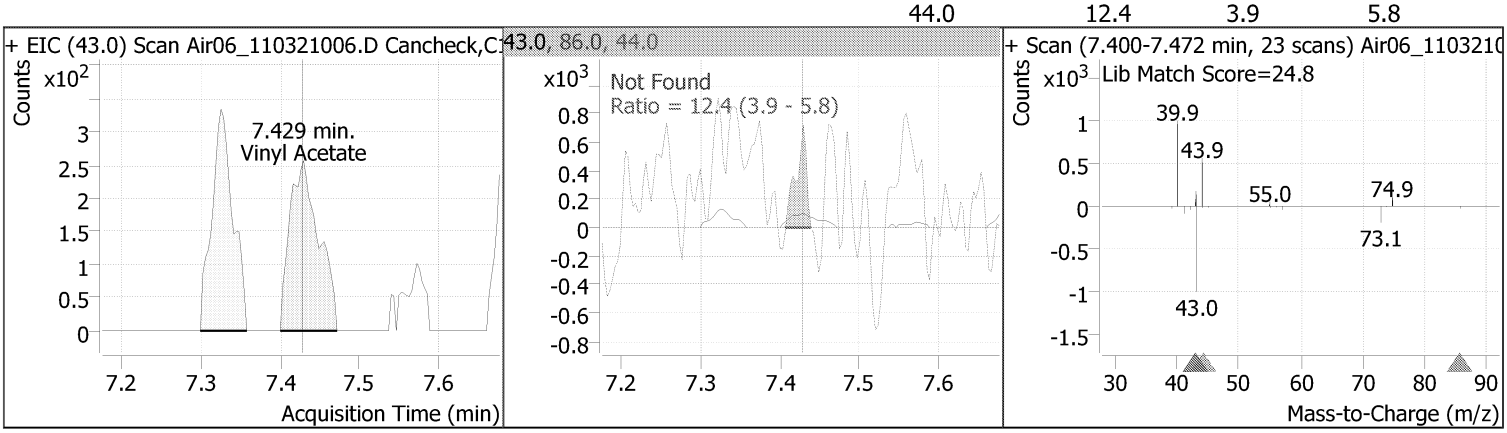
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethane	N.D.	7.31	65.0	30.0	83.0	11.8	98.0	4.8



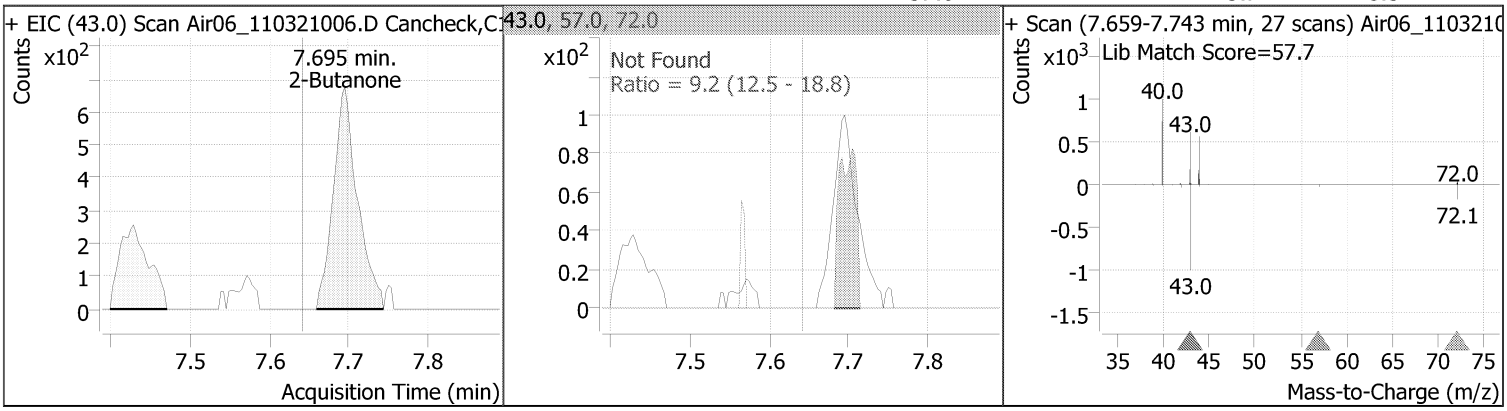
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	0.0003	7.32	-0.05	24	41.0		27.6	41.3
					57.0		24.2	36.3



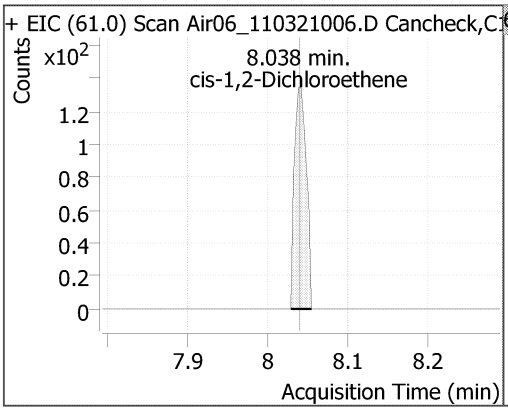
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.0052	7.43	0.00	651	86.0		4.6	6.9
					44.0	12.4	3.9	5.8

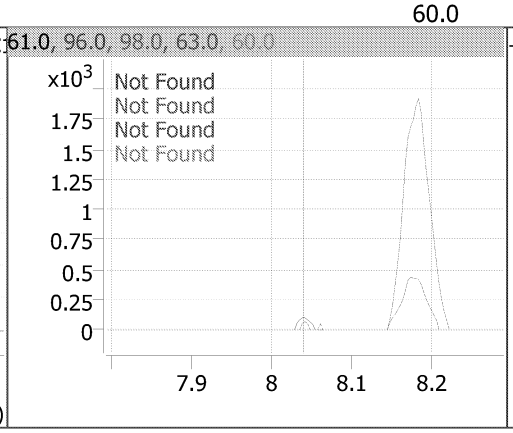


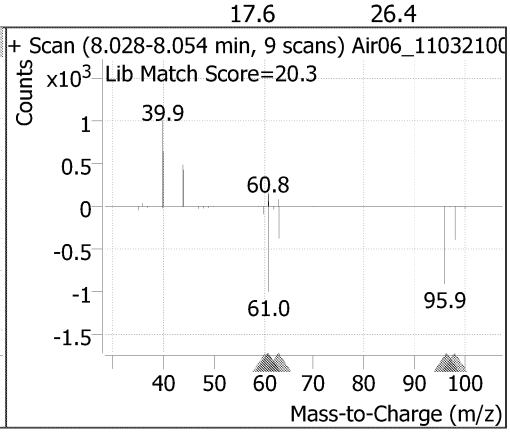
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.0143	7.69	0.05	1425	72.0	9.2	12.5	18.8
					57.0		5.7	8.5



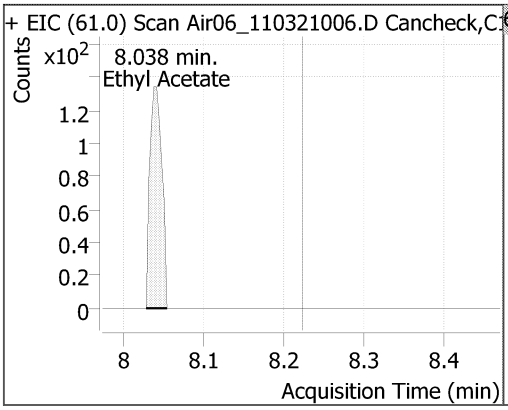
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.0023	8.04	-0.01	141	96.0		48.3	72.4
					98.0		31.2	46.8
					63.0		24.5	36.7
					60.0		17.6	26.4

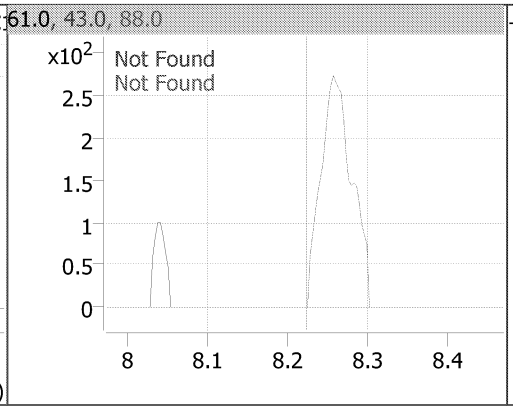


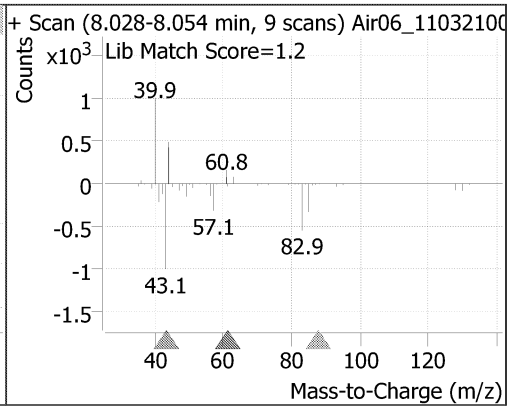




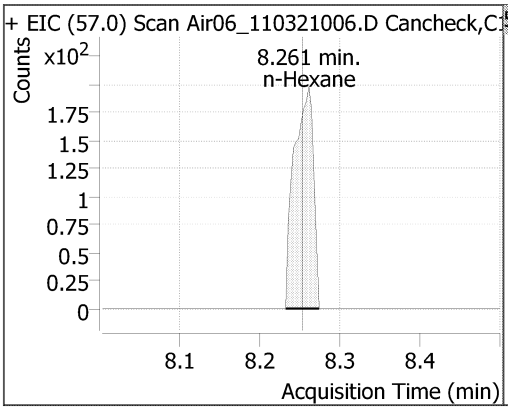
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	0.0092	8.04	-0.19	141	43.0		963.0	1444.5
					88.0		16.2	24.3

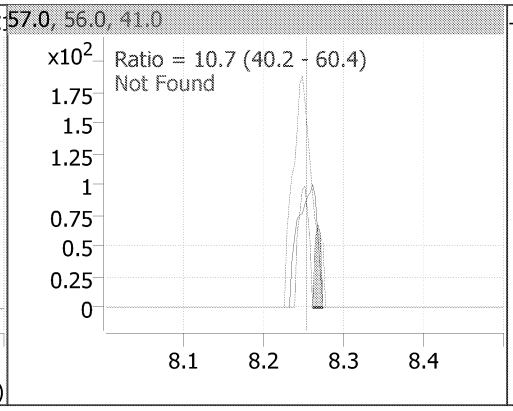


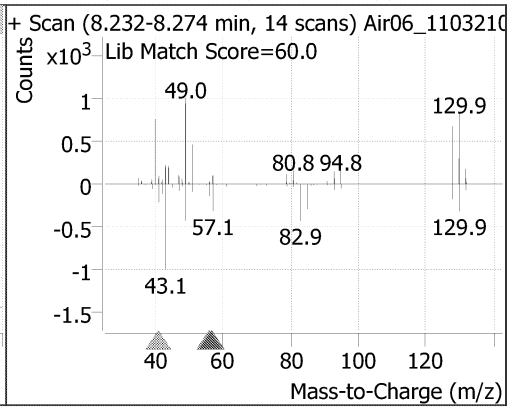




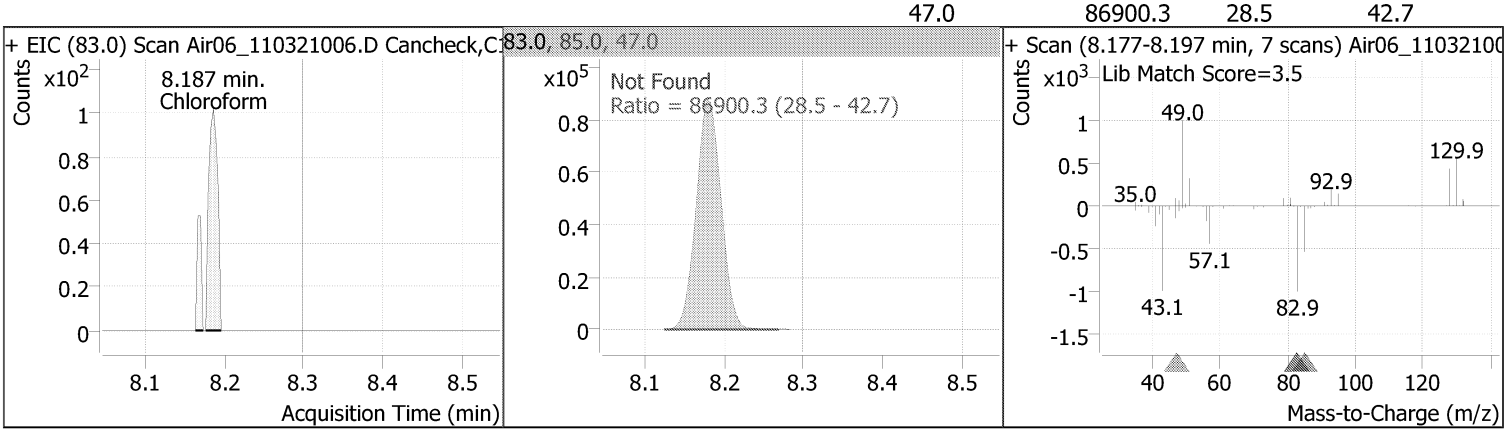
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.0045	8.26	0.01	333	41.0		67.6	101.5
					56.0	10.7	40.2	60.4



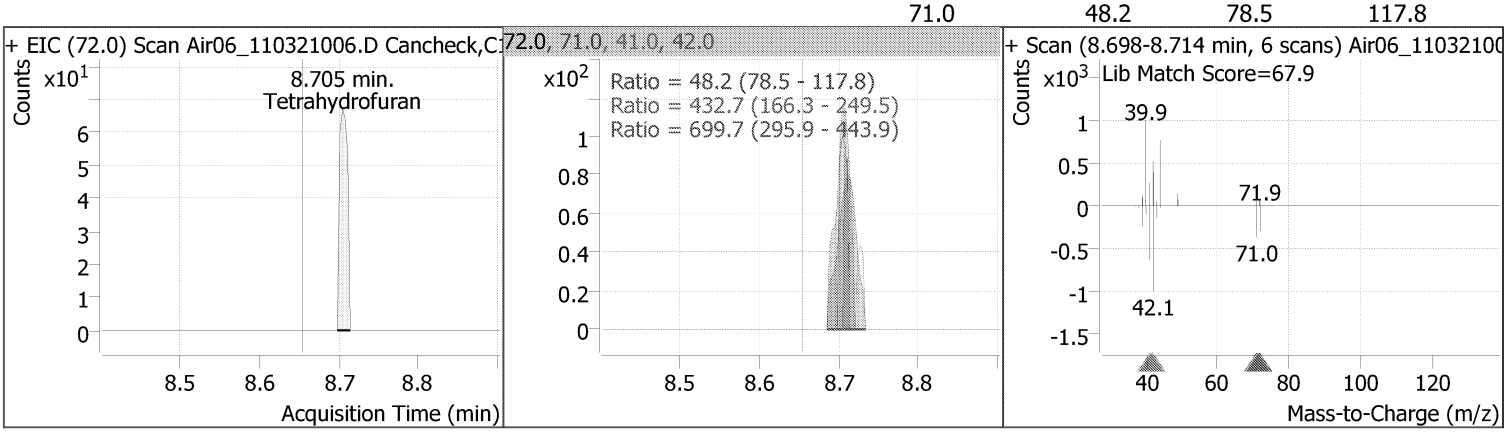




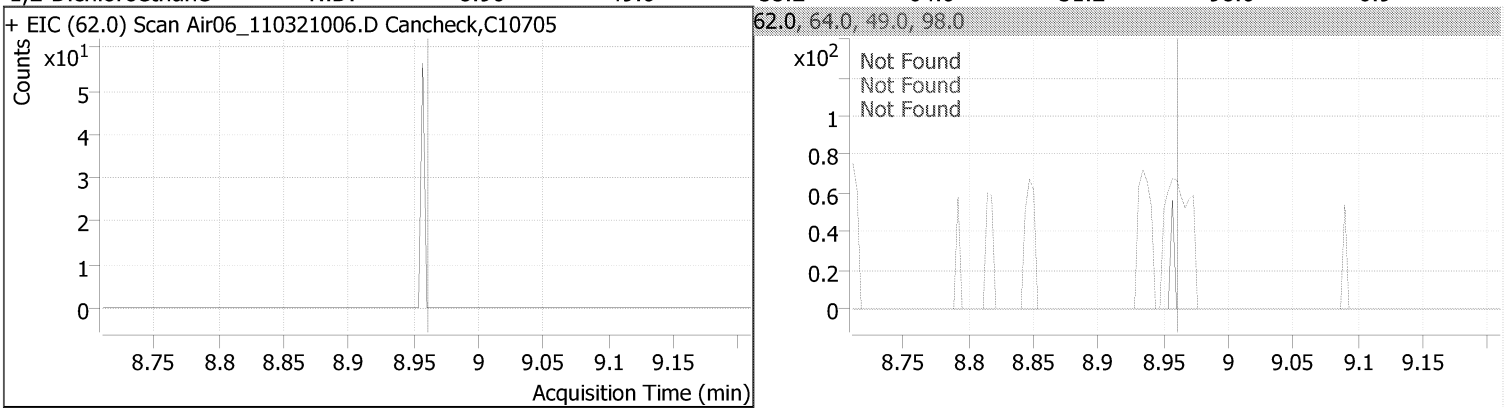
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.0010	8.19	-0.11	80	85.0		52.2	78.4
					47.0	86900.3	28.5	42.7



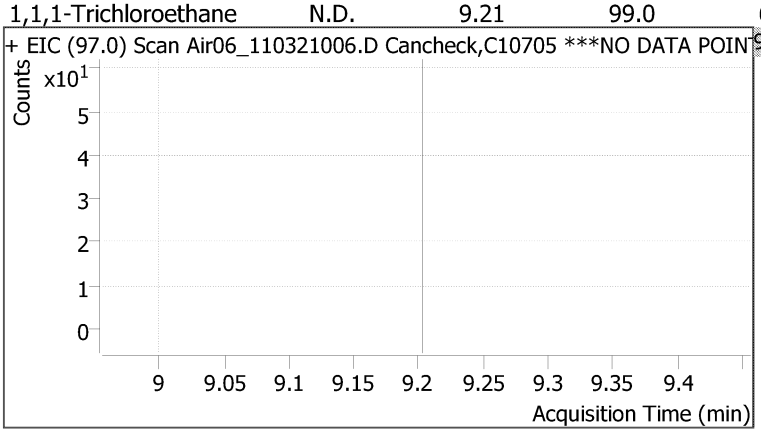
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	0.0030	8.70	0.05	48	42.0	699.7	295.9	443.9
					41.0	432.7	166.3	249.5
					71.0	48.2	78.5	117.8

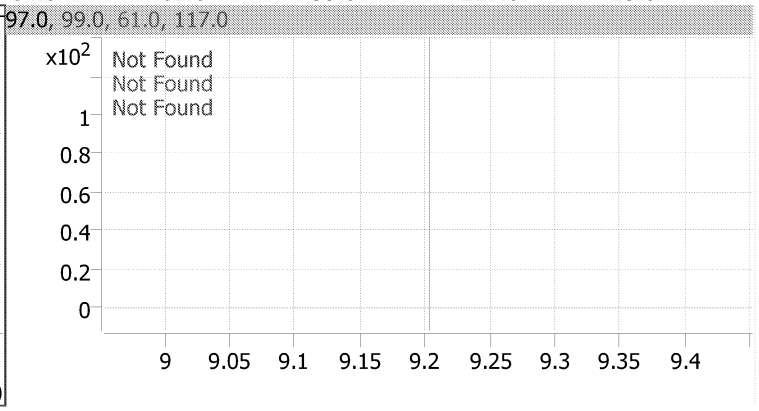


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,2-Dichloroethane	N.D.	8.96	49.0	35.2	64.0	31.2	98.0	6.9

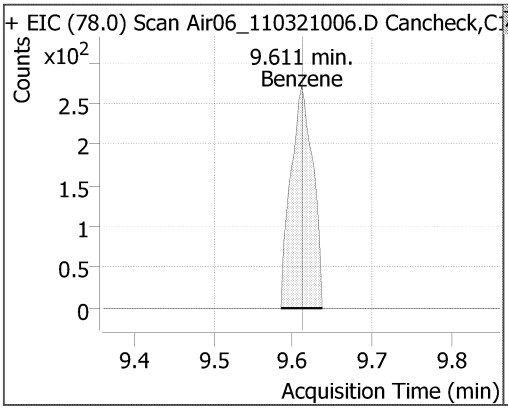


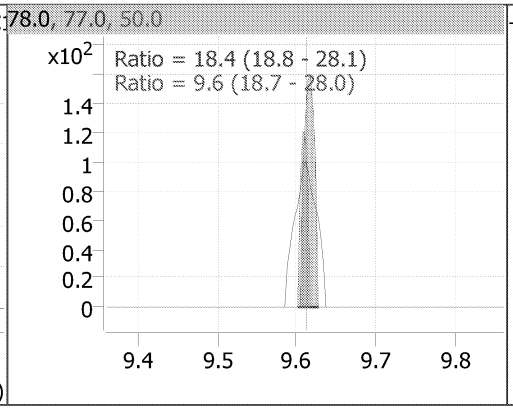
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1-Trichloroethane	N.D.	9.21	99.0	64.8	61.0	53.0	117.0	13.0

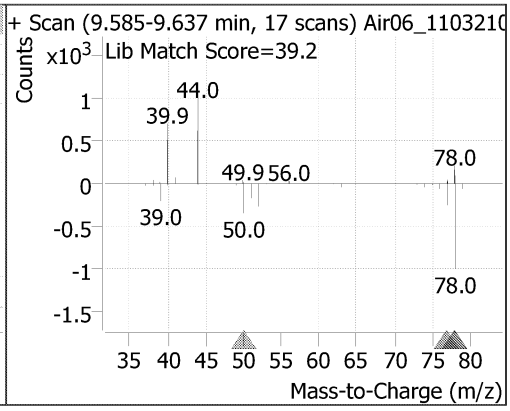




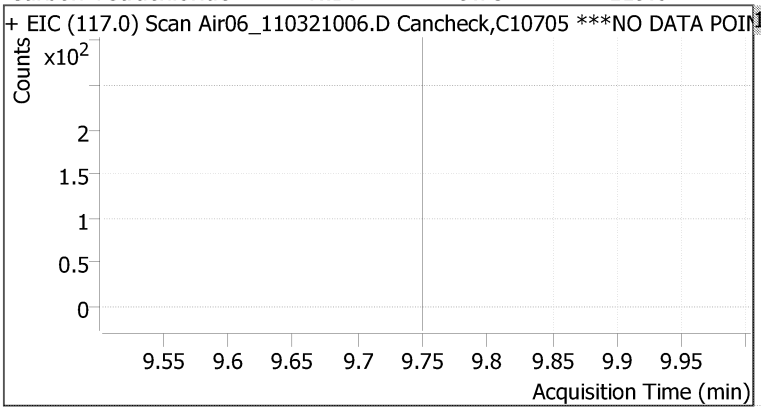
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.0048	9.61	0.00	520	77.0	18.4	18.8	28.1
					50.0	9.6	18.7	28.0

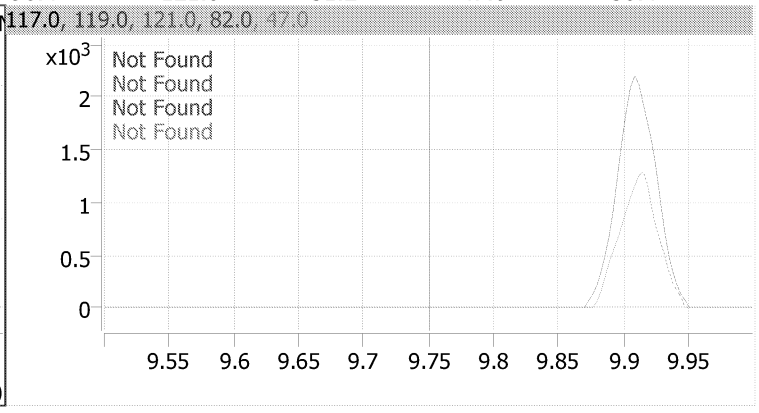




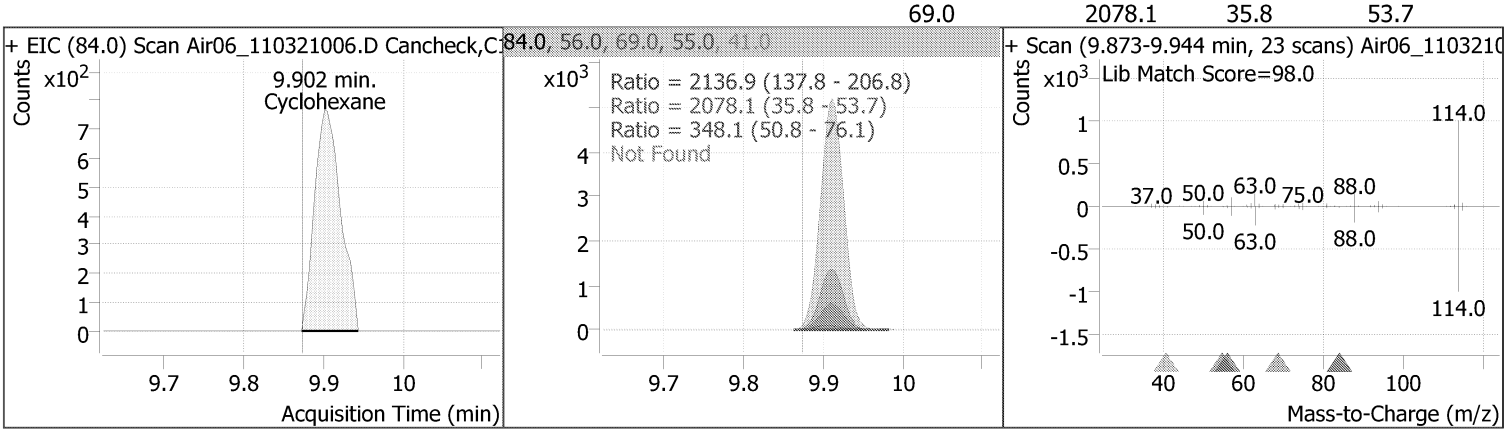


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Carbon Tetrachloride	N.D.	9.75	119.0	96.4	121.0	31.2	47.0	30.4

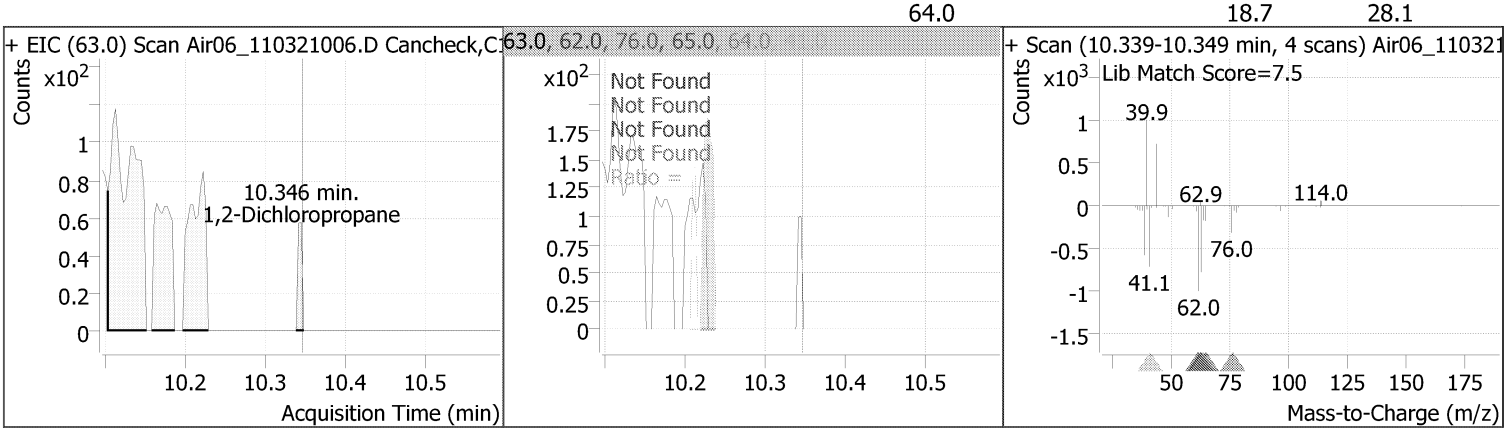




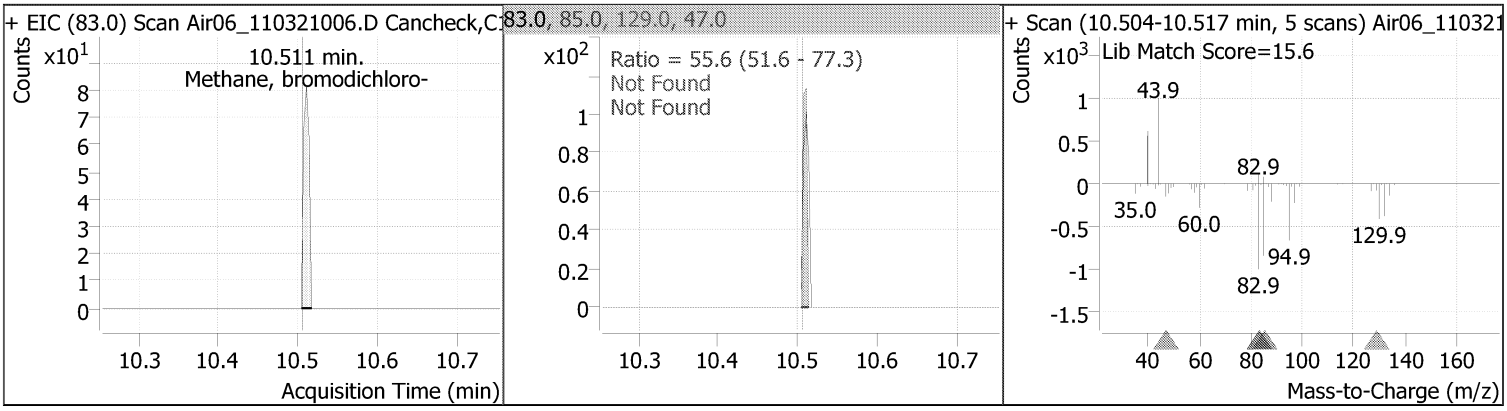
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.0389	9.90	0.03	1759	56.0	2136.9	137.8	206.8
					41.0		81.5	122.2
					55.0	348.1	50.8	76.1
					69.0	2078.1	35.8	53.7



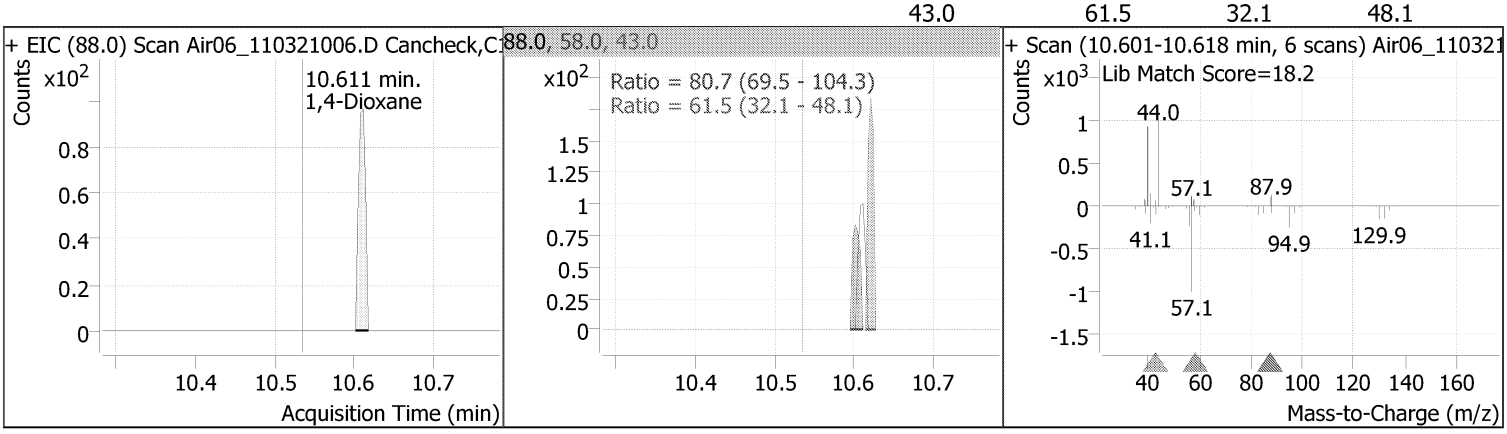
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.0004	10.35	0.00	22	41.0		55.7	83.5
					62.0		55.5	83.2
					76.0		28.3	42.5
					65.0		23.4	35.1
					64.0		18.7	28.1



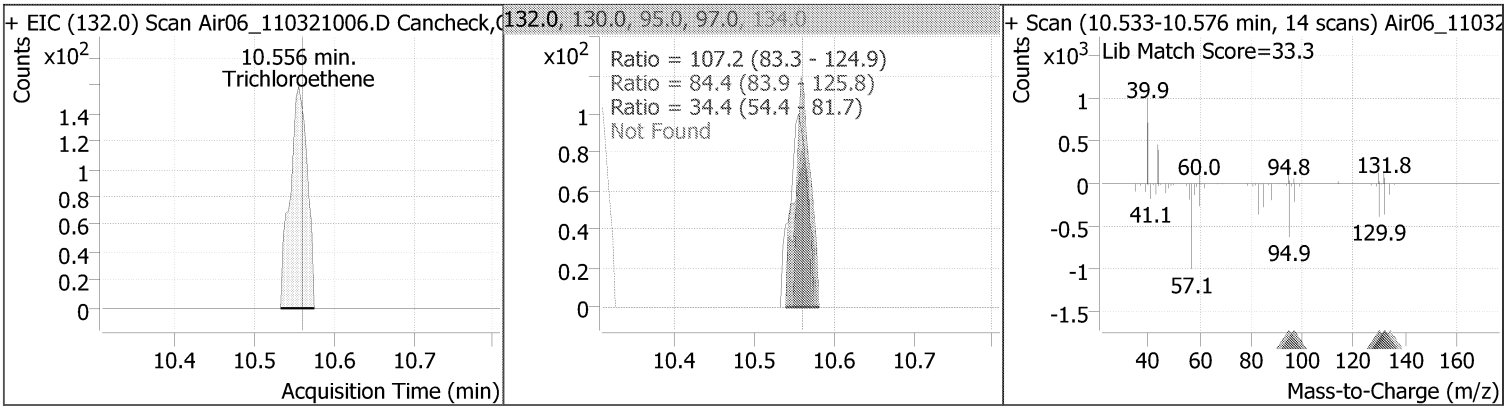
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	0.0005	10.51	0.00	41	85.0	55.6	51.6	77.3
					47.0		21.6	32.3
					129.0		9.7	14.5



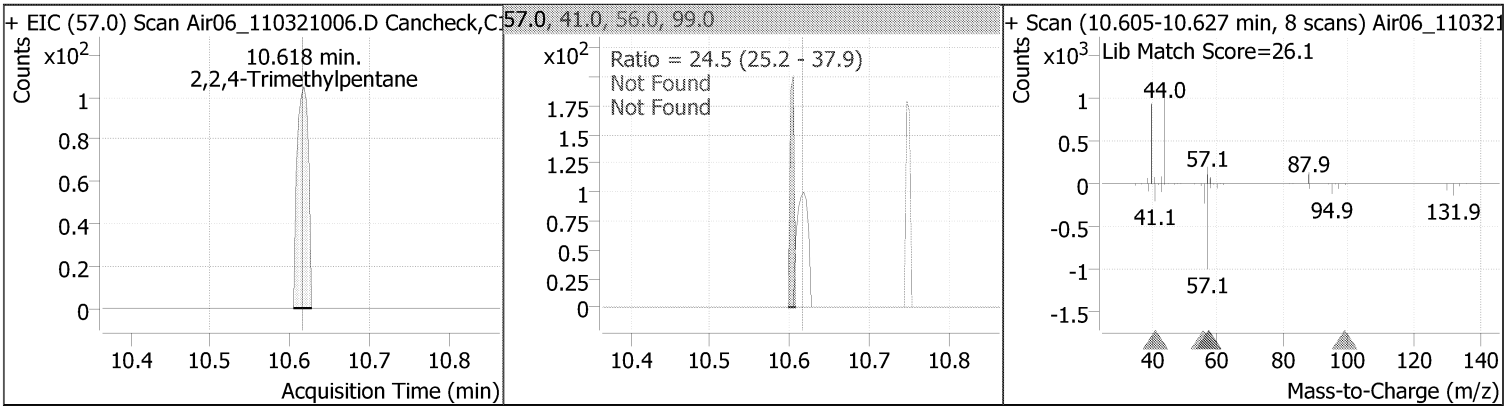
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.0026	10.61	0.07	60	58.0	80.7	69.5	104.3
					43.0	61.5	32.1	48.1



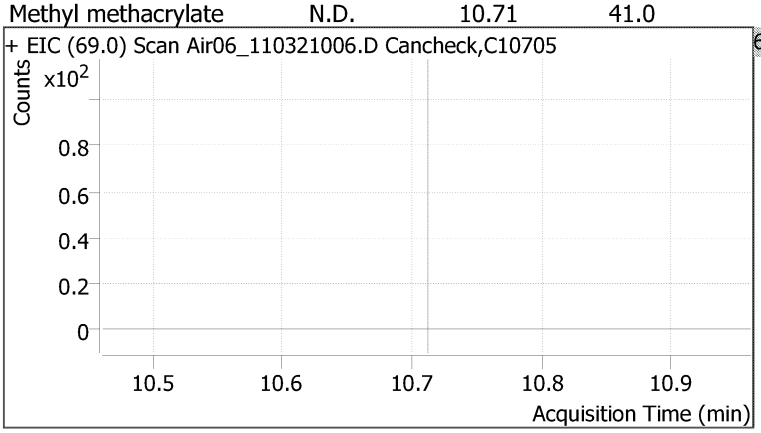
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.0050	10.56	-0.01	240	95.0	84.4	83.9	125.8
					130.0	107.2	83.3	124.9
					97.0	34.4	54.4	81.7
					134.0		25.4	38.2

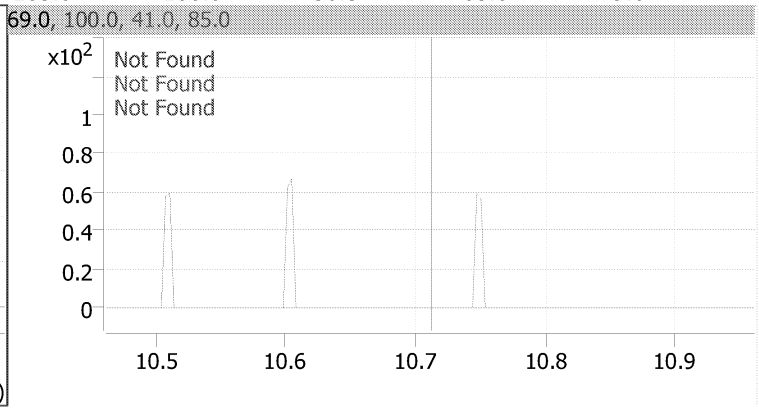


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.0004	10.62	0.00	102	41.0	24.5	25.2	37.9
					56.0		25.2	37.9
					99.0		3.3	4.9

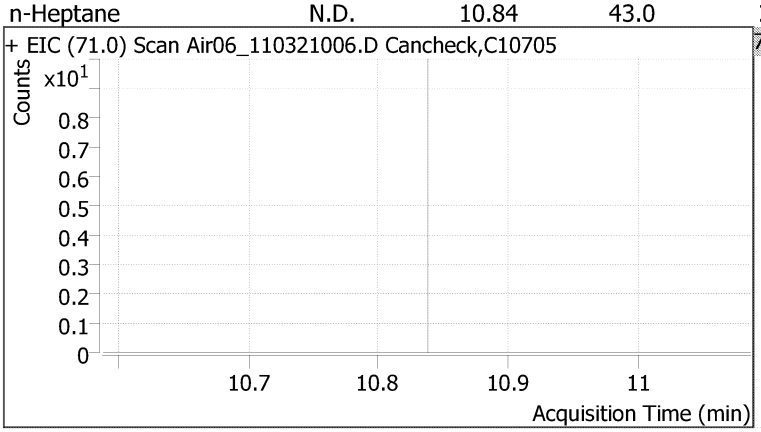


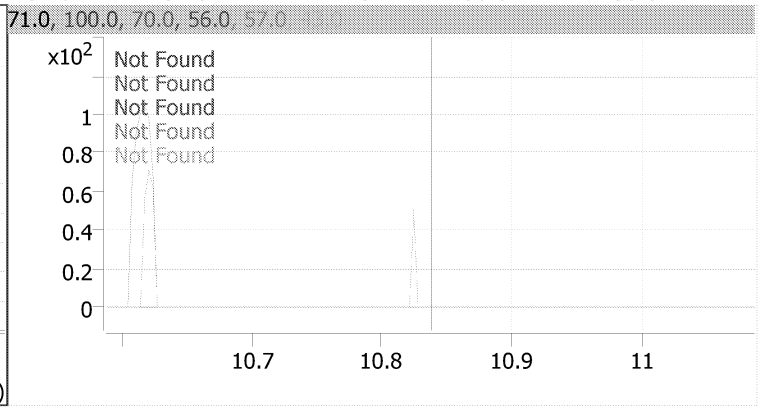
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Methyl methacrylate	N.D.	10.71	41.0	183.0	100.0	36.3	85.0	9.0



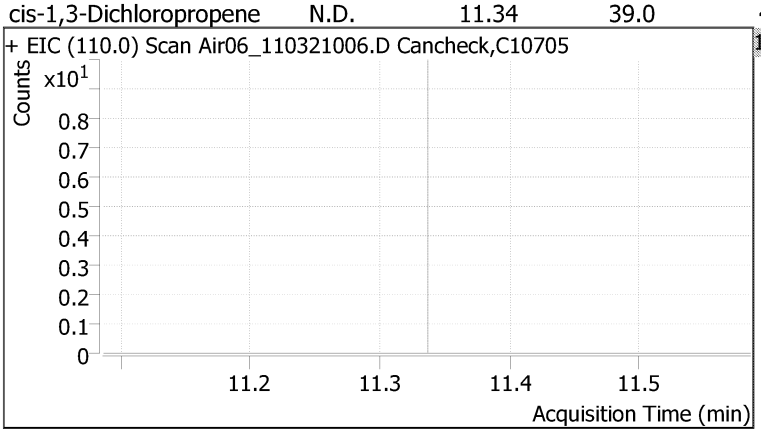


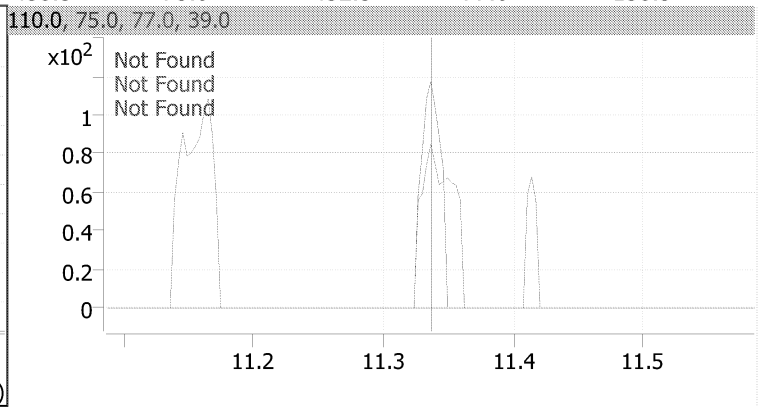
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
n-Heptane	N.D.	10.84	43.0	252.8	57.0	121.3	56.0	53.0



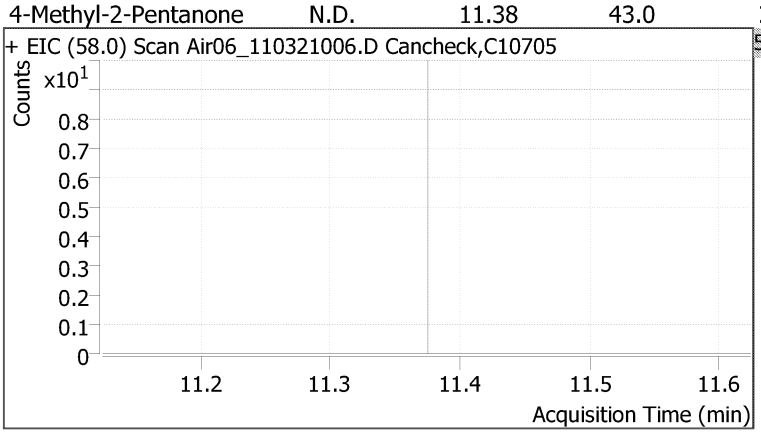


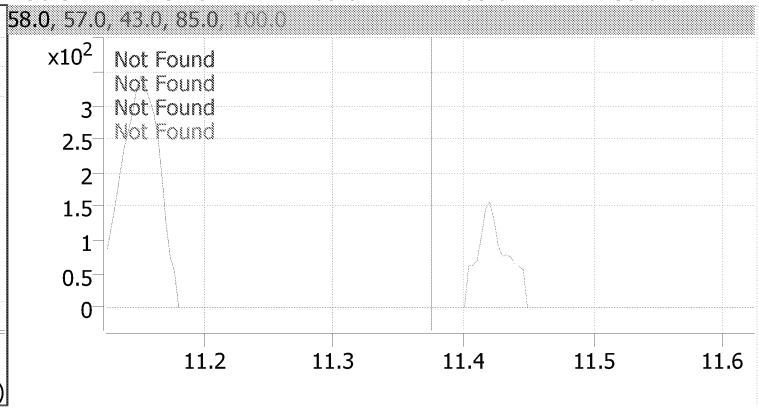
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
cis-1,3-Dichloropropene	N.D.	11.34	39.0	438.3	75.0	432.5	77.0	138.5



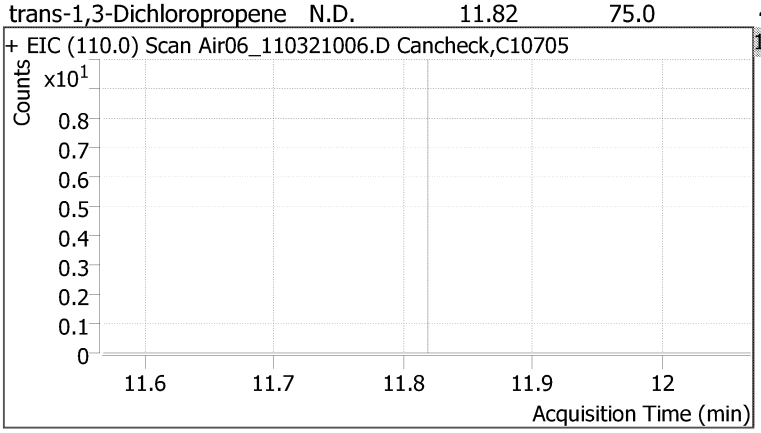


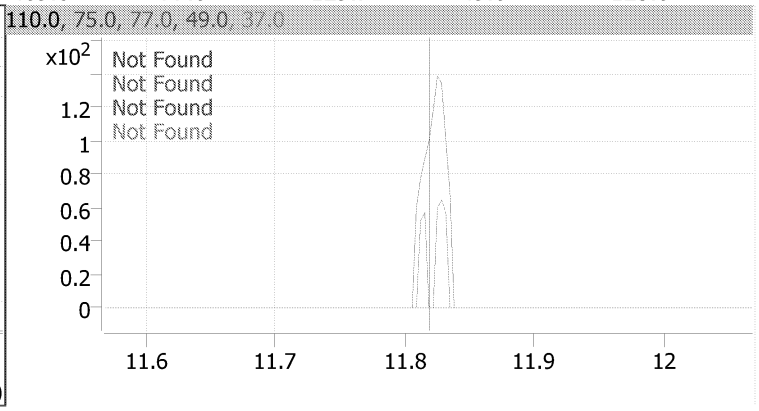
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
4-Methyl-2-Pentanone	N.D.	11.38	43.0	298.3	57.0	63.8	85.0	35.6



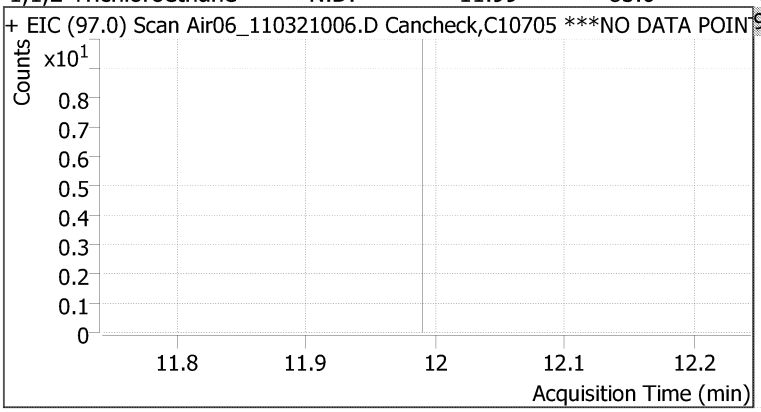


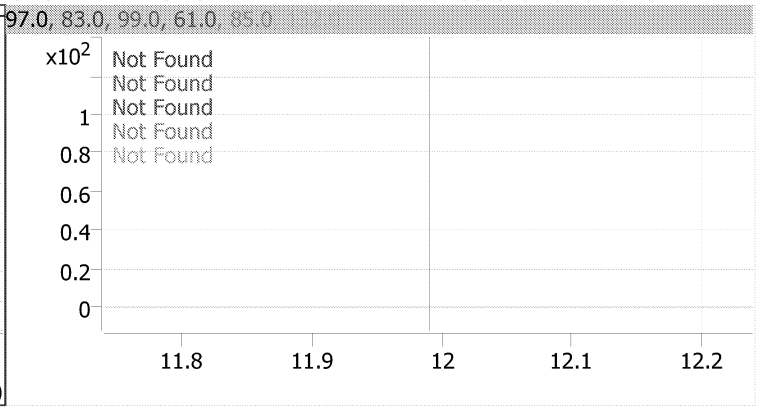
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
trans-1,3-Dichloropropene	N.D.	11.82	75.0	409.0	77.0	129.7	49.0	125.0



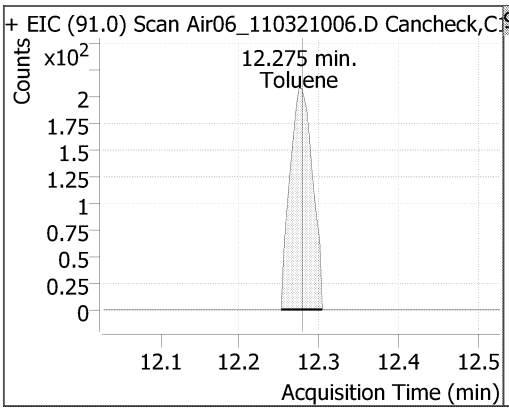


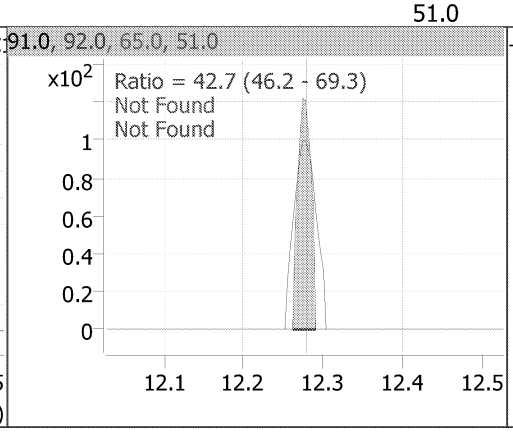
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,2-Trichloroethane	N.D.	11.99	83.0	87.9	61.0	76.7	99.0	62.8

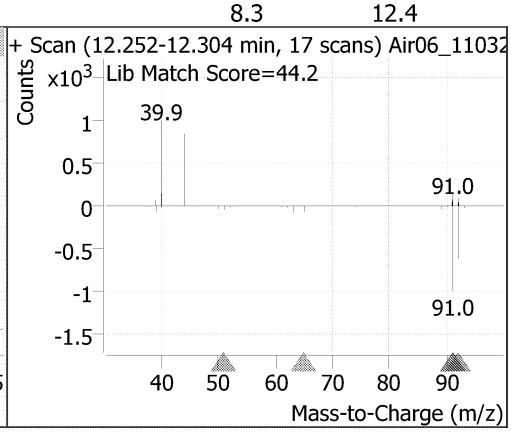




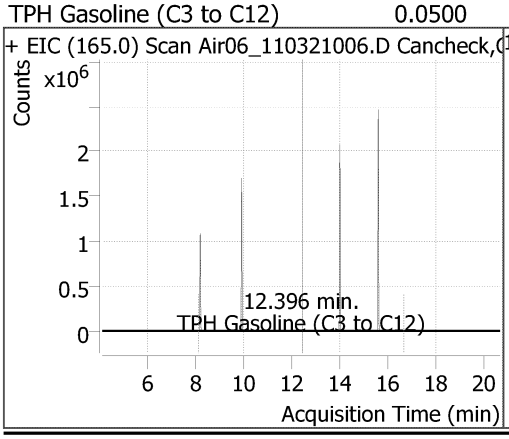
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.0031	12.27	-0.01	407	92.0	42.7	46.2	69.3
					65.0		10.6	15.9
					51.0		8.3	12.4

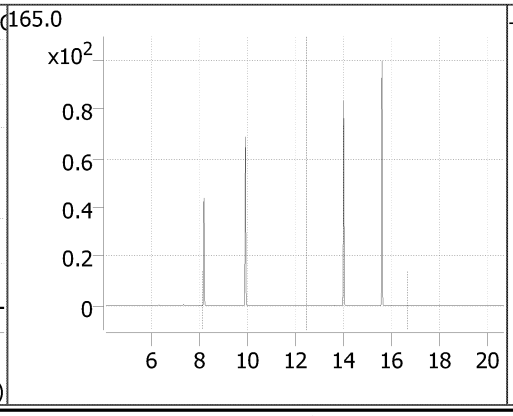


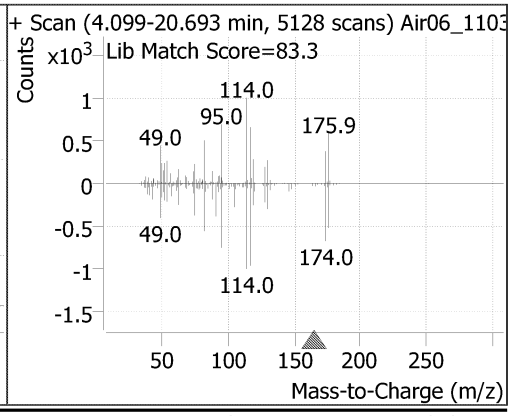




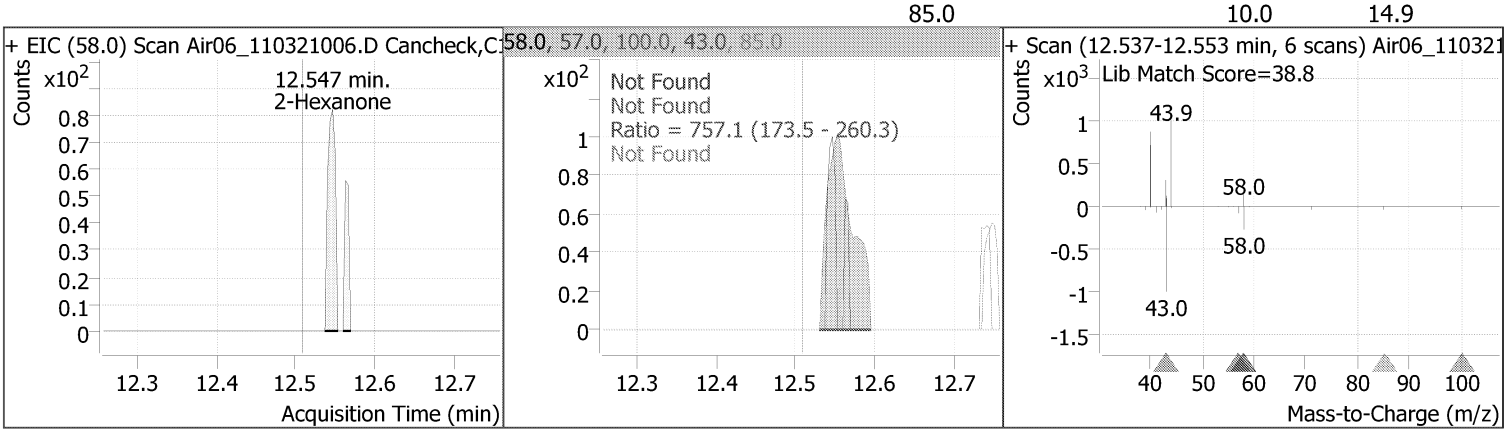
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	0.0500	12.40	0.00	461551				



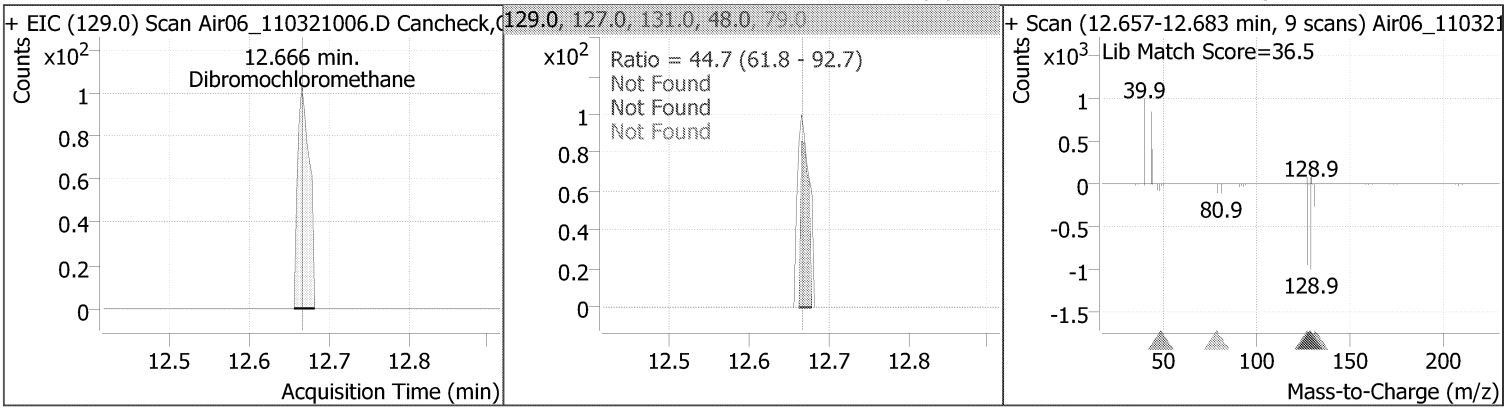




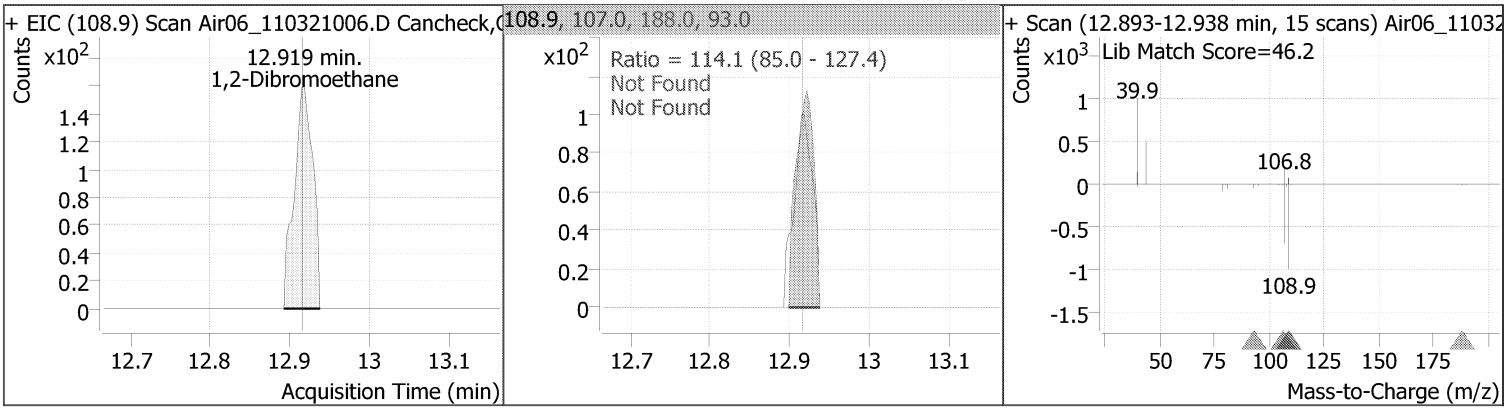
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.0010	12.55	0.04	55	43.0	757.1	173.5	260.3
					57.0		28.5	42.8
					100.0		11.2	16.8
					85.0		10.0	14.9



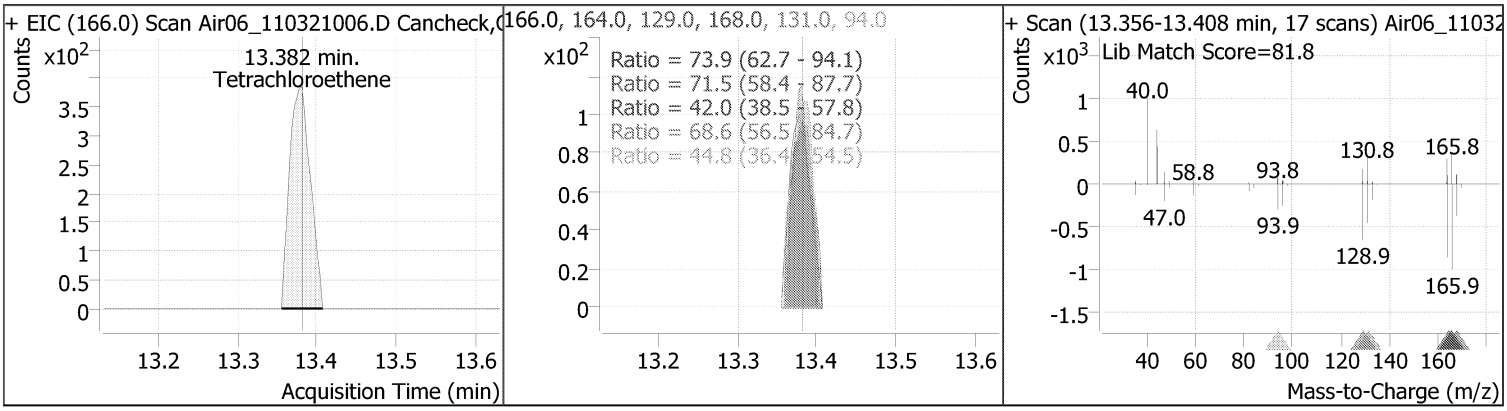
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.0013	12.67	0.00	105	127.0	44.7	61.8	92.7
					131.0		19.3	29.0
					48.0		16.2	24.2
					79.0		14.5	21.7



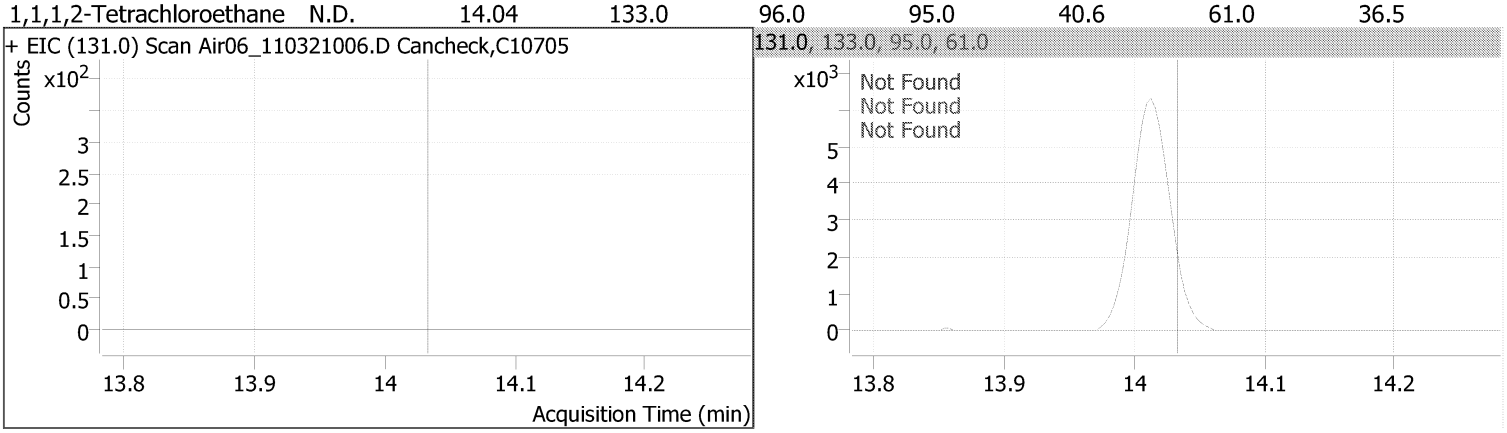
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.0038	12.92	0.00	263	107.0	114.1	85.0	127.4
					93.0		5.7	8.6
					188.0		3.1	4.6



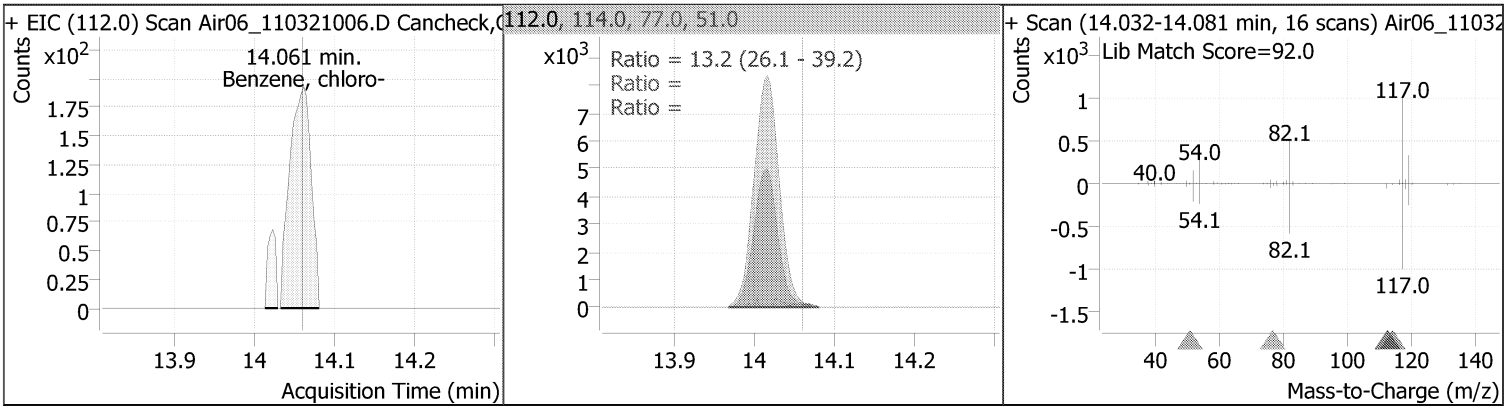
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.0103	13.38	0.00	701	164.0	73.9	62.7	94.1
					129.0	71.5	58.4	87.7
					131.0	68.6	56.5	84.7
					168.0	42.0	38.5	57.8
					94.0	44.8	36.4	54.5



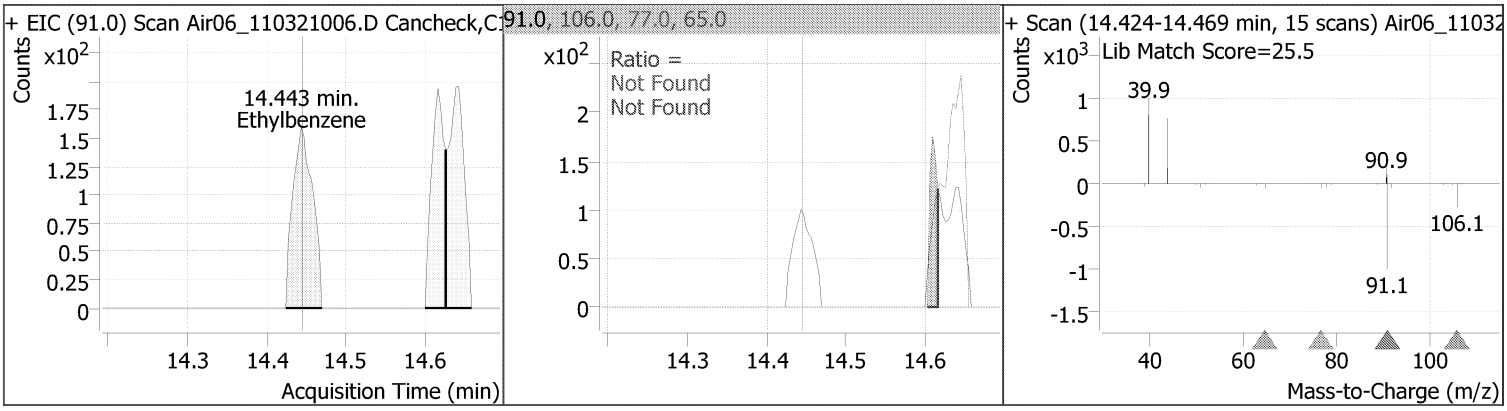
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1,2-Tetrachloroethane	N.D.	14.04	133.0	96.0	95.0	40.6	61.0	36.5



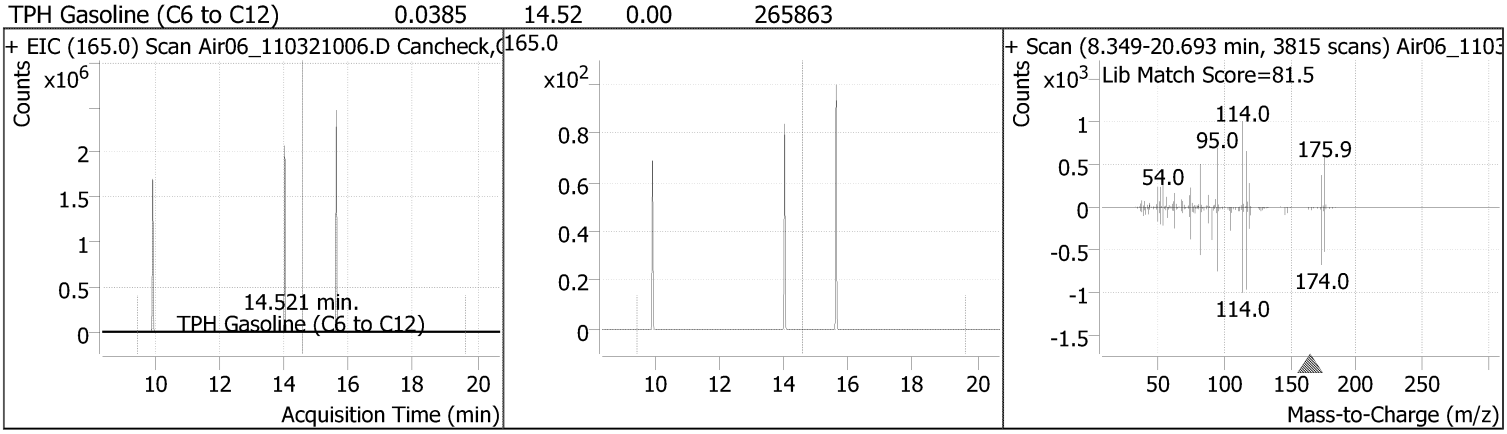
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0035	14.06	0.00	361	77.0		48.4	72.6
					51.0		27.1	40.6
					114.0	13.2	26.1	39.2



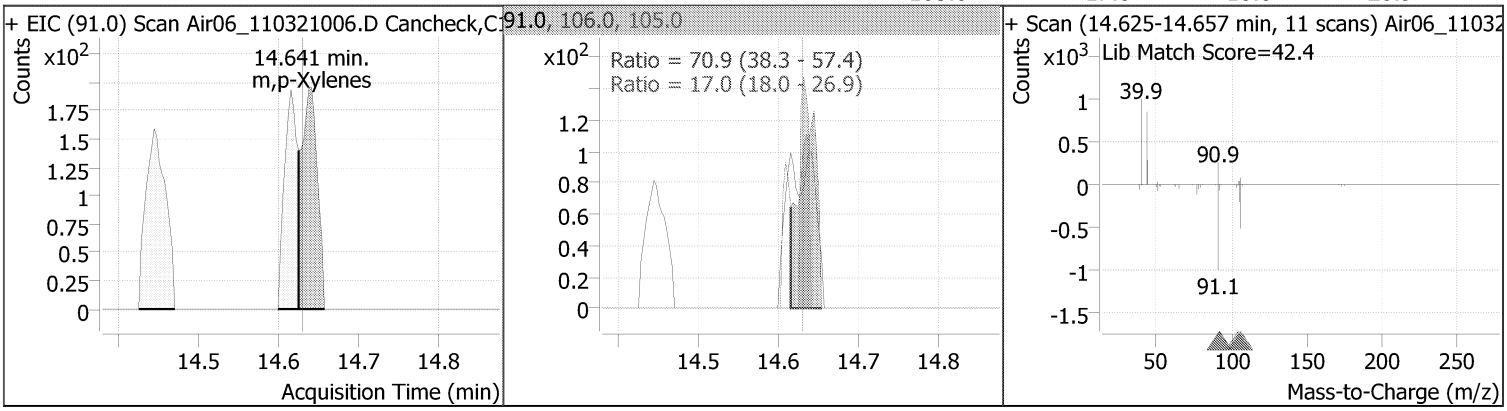
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.0017	14.44	0.00	276	106.0		24.8	37.2
					65.0		8.1	12.2
					77.0		7.2	10.8



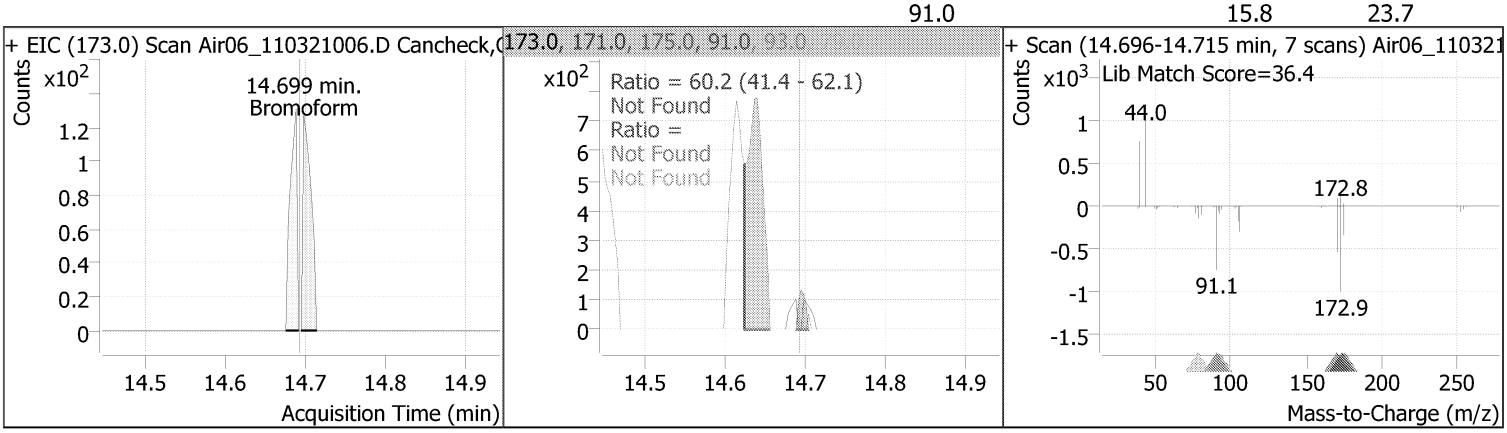
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	0.0385	14.52	0.00	265863				



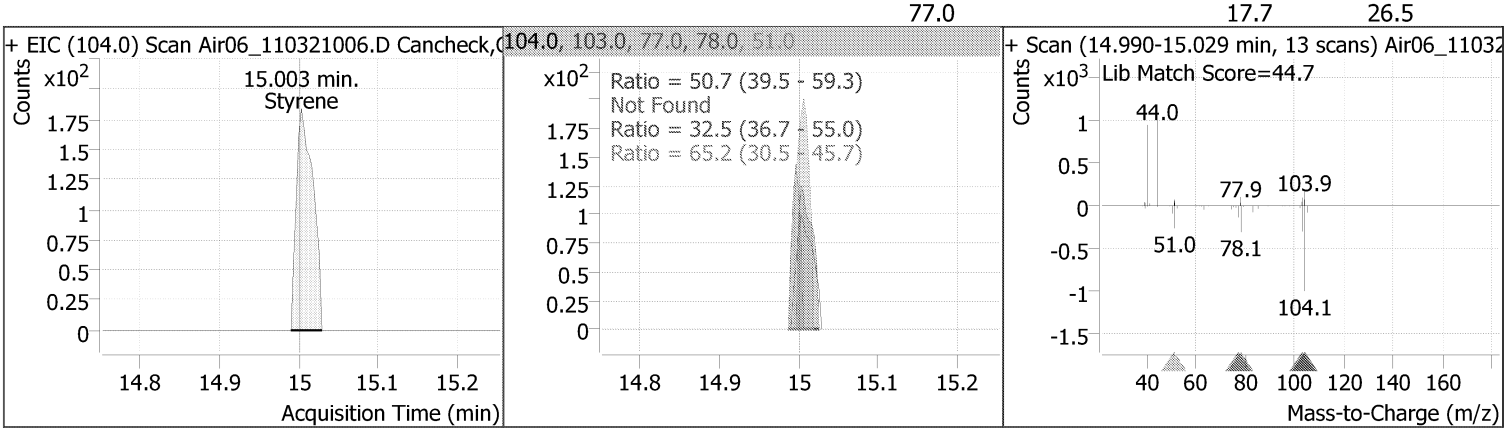
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	0.0021	14.64	0.01	268	106.0	70.9	38.3	57.4
					105.0	17.0	18.0	26.9



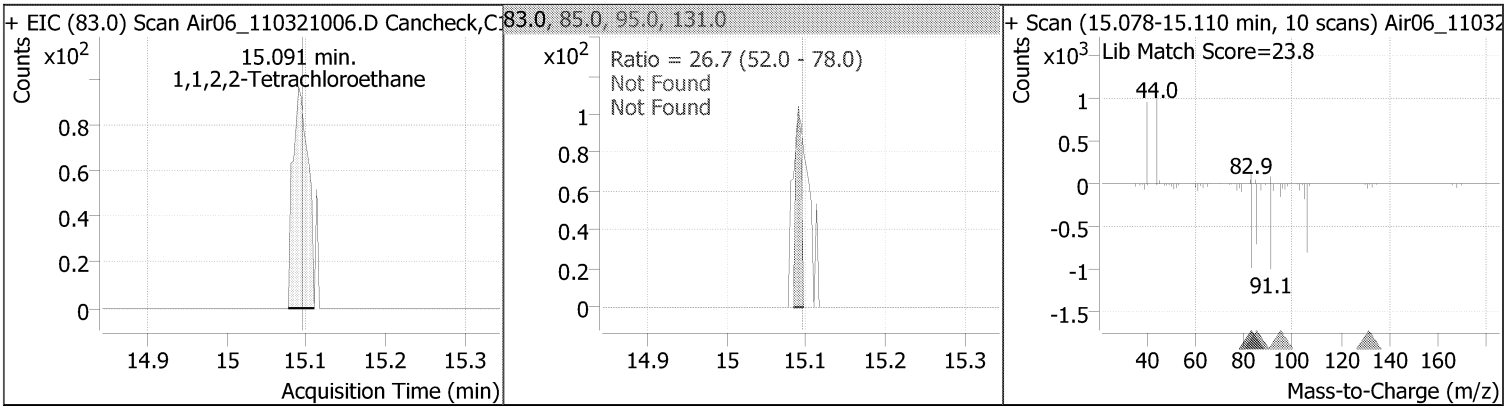
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.0011	14.70	0.00	92	171.0	60.2	41.4	62.1
					175.0		39.1	58.6
					79.0		17.9	26.8
					93.0		16.8	25.2
					91.0		15.8	23.7



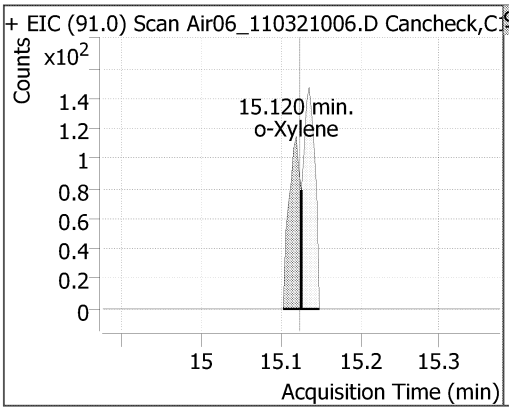
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	0.0027	15.00	0.00	267	103.0	50.7	39.5	59.3
					78.0	32.5	36.7	55.0
					51.0	65.2	30.5	45.7
					77.0		17.7	26.5

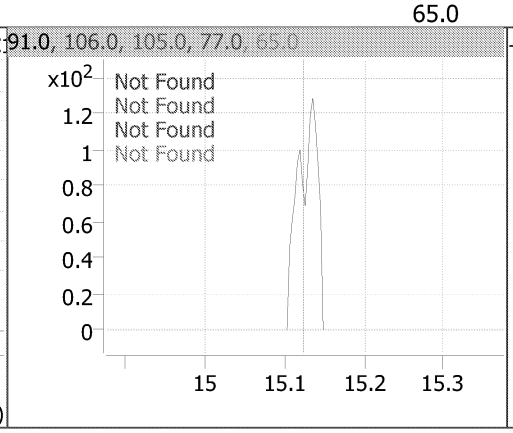


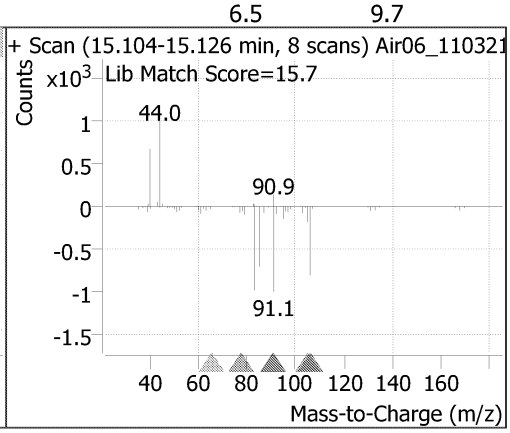
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.0013	15.09	-0.01	128	85.0	26.7	52.0	78.0
					95.0		13.3	20.0
					131.0		8.2	12.3



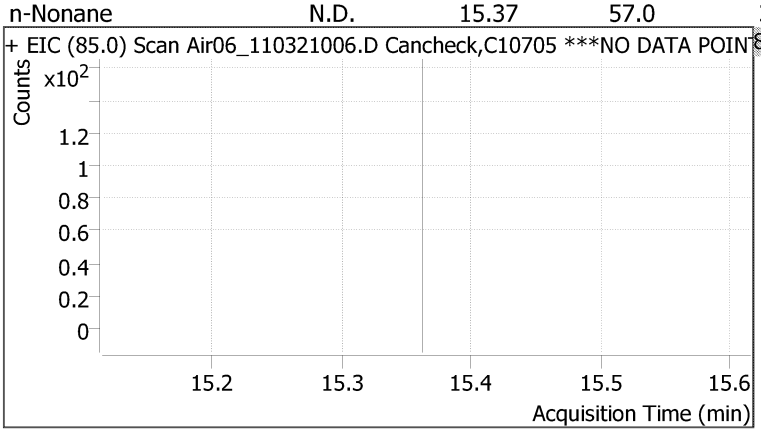
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.0008	15.12	-0.01	109	106.0		36.0	54.0
					105.0		15.4	23.0
					77.0		10.2	15.4
					65.0		6.5	9.7

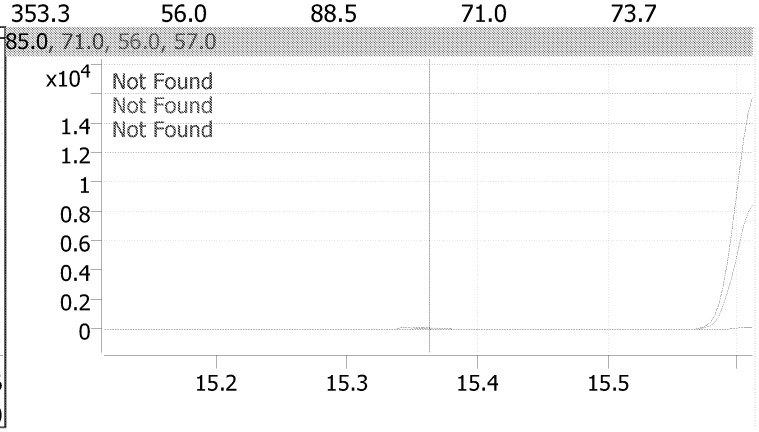




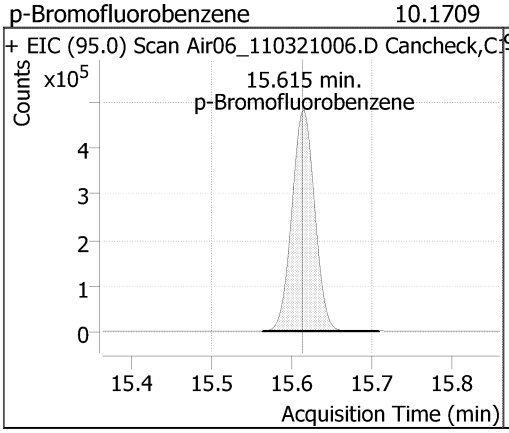


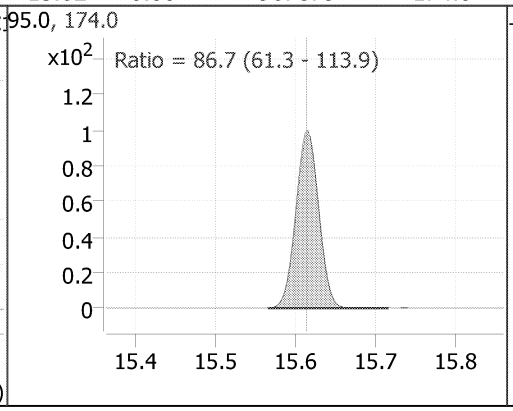
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
n-Nonane	N.D.	15.37	57.0	353.3	56.0	88.5	71.0	73.7

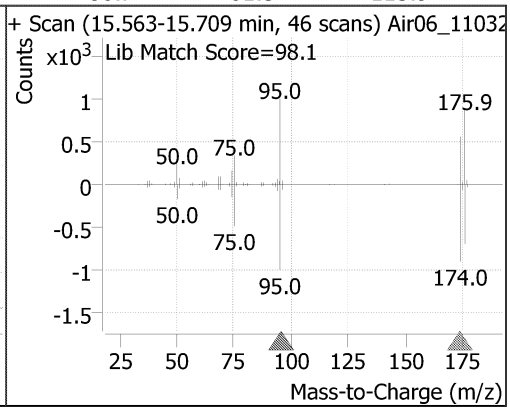




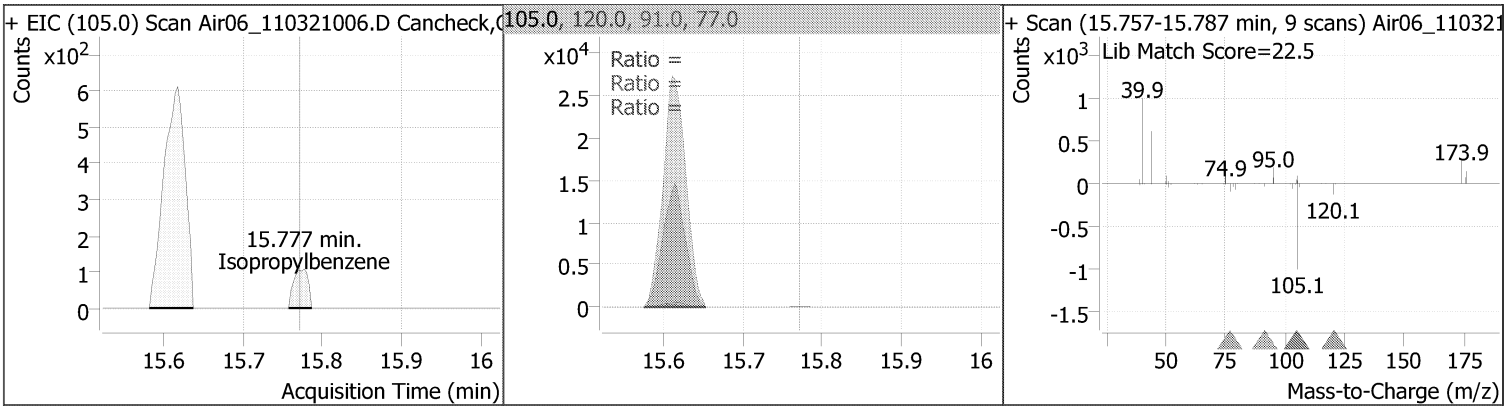
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.1709	15.62	0.00	967879	174.0	86.7	61.3	113.9



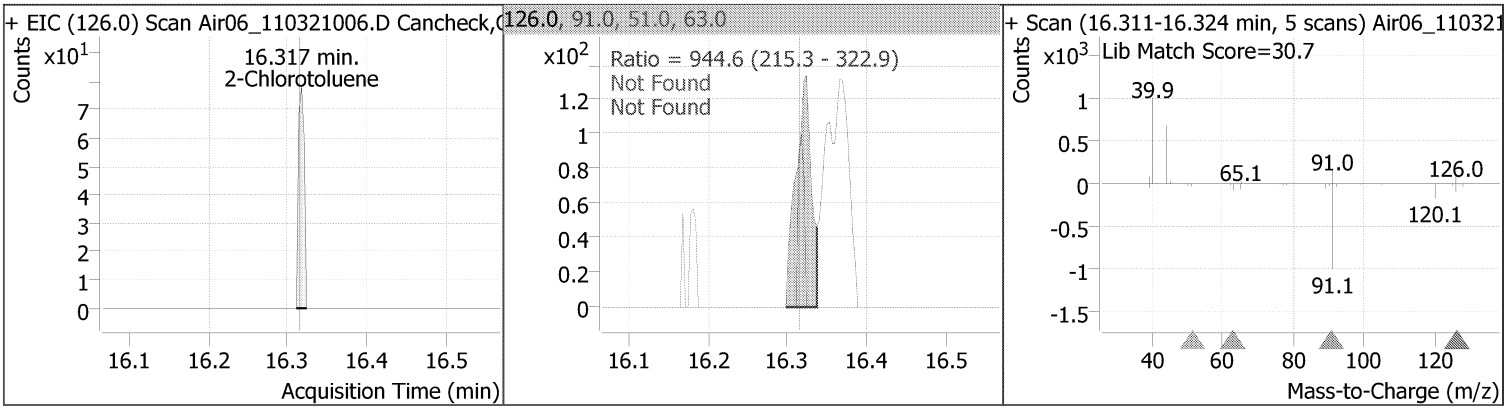




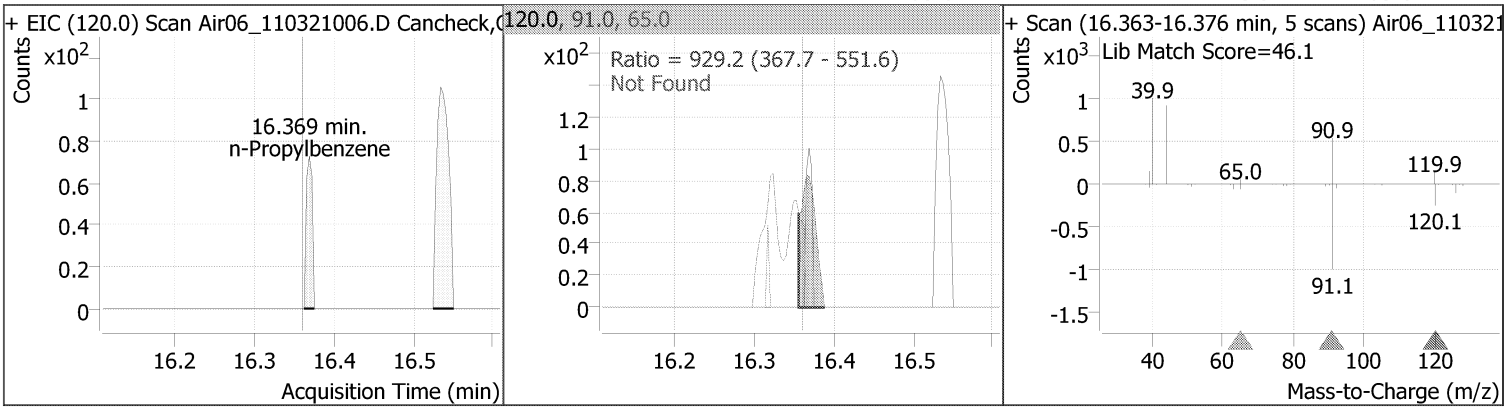
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.0007	15.78	0.00	136	120.0		20.8	31.2
					77.0		13.1	19.7
					91.0		5.1	7.6



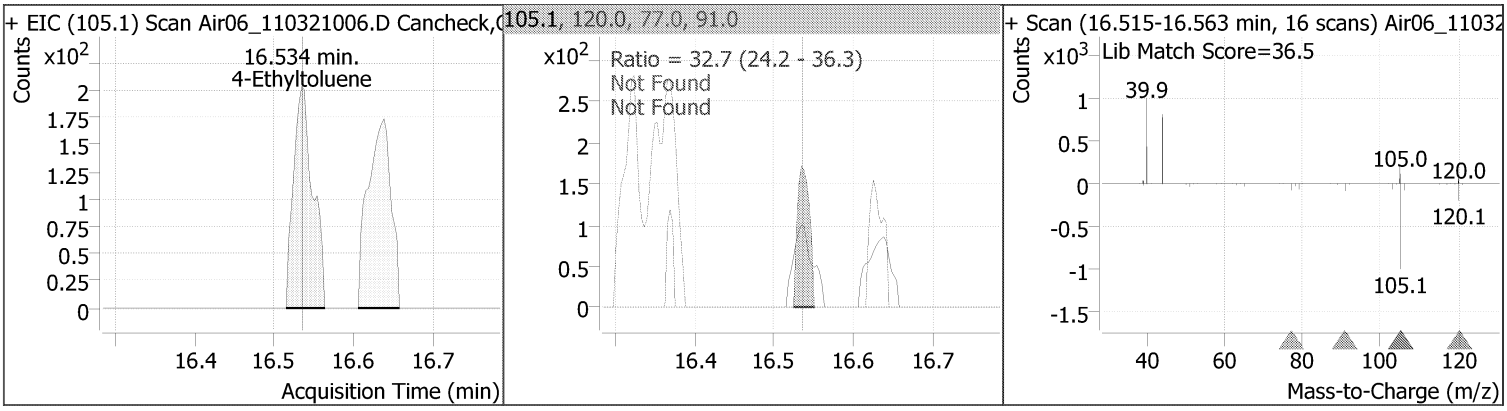
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	0.0009	16.32	0.00	40	91.0	944.6	215.3	322.9
					63.0		41.2	61.8
					51.0		16.4	24.7



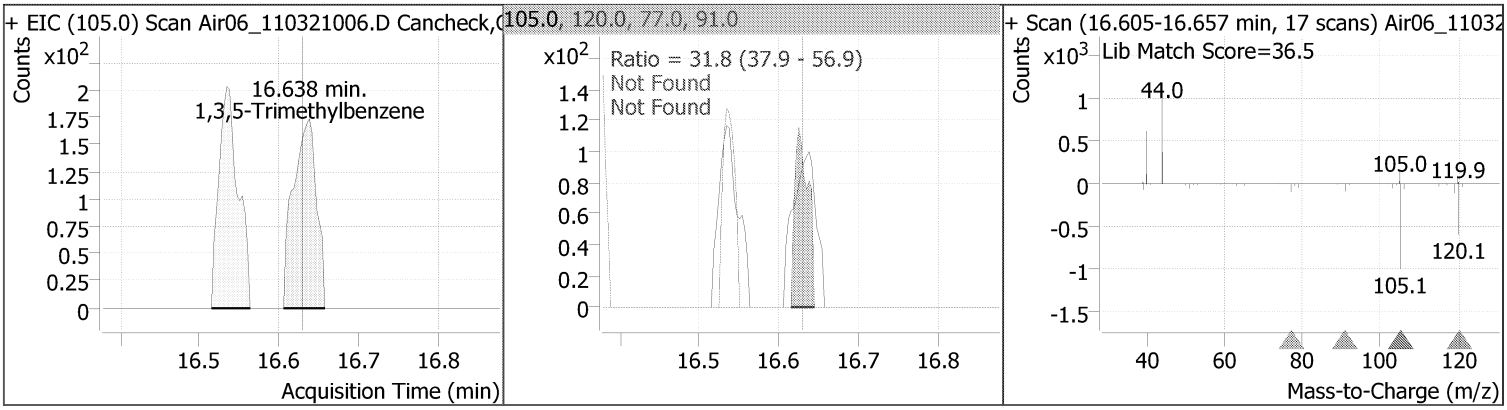
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.0007	16.37	0.01	39	91.0	929.2	367.7	551.6
					65.0		43.9	65.8



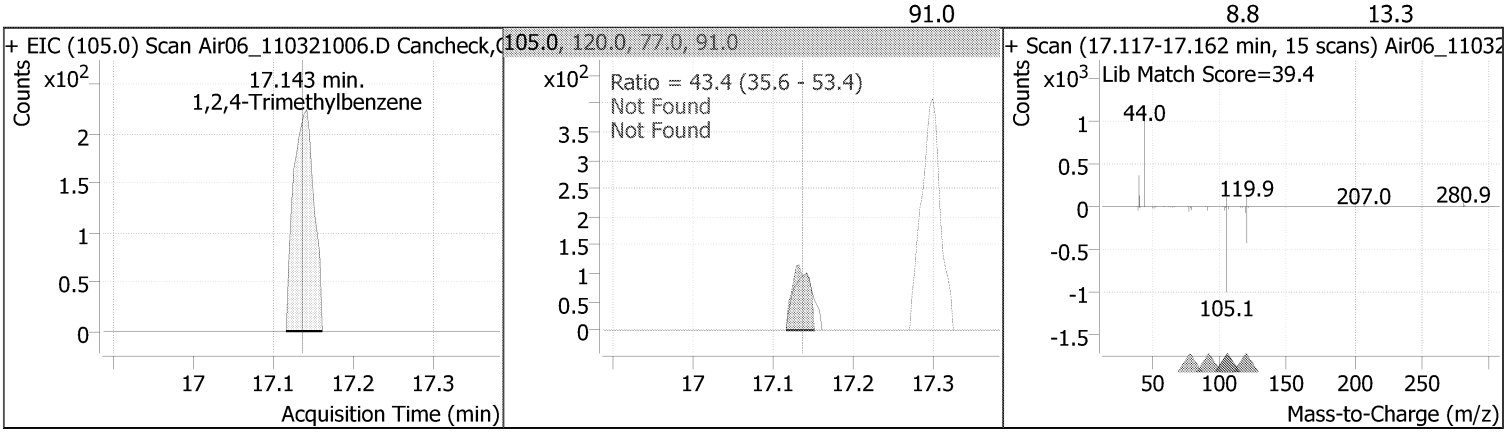
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.0019	16.53	0.00	343	120.0	32.7	24.2	36.3
					77.0		9.5	14.3
					91.0		8.9	13.4



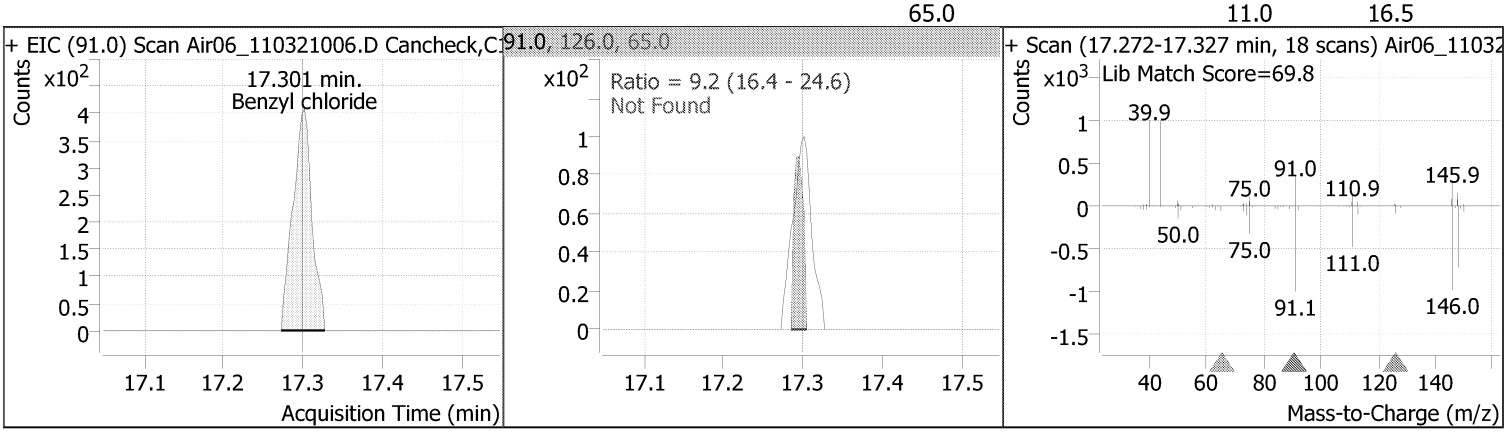
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.0022	16.64	0.01	353	120.0	31.8	37.9	56.9
					77.0		10.7	16.0
					91.0		8.8	13.2



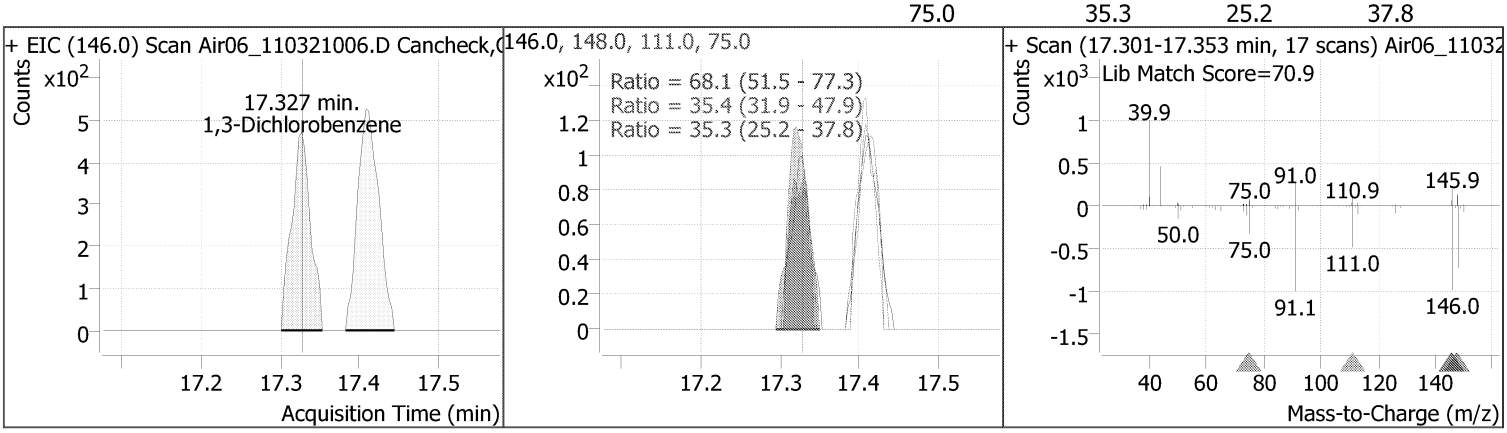
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	0.0026	17.14	0.00	399	120.0	43.4	35.6	53.4
					77.0		10.4	15.6
					91.0		8.8	13.3



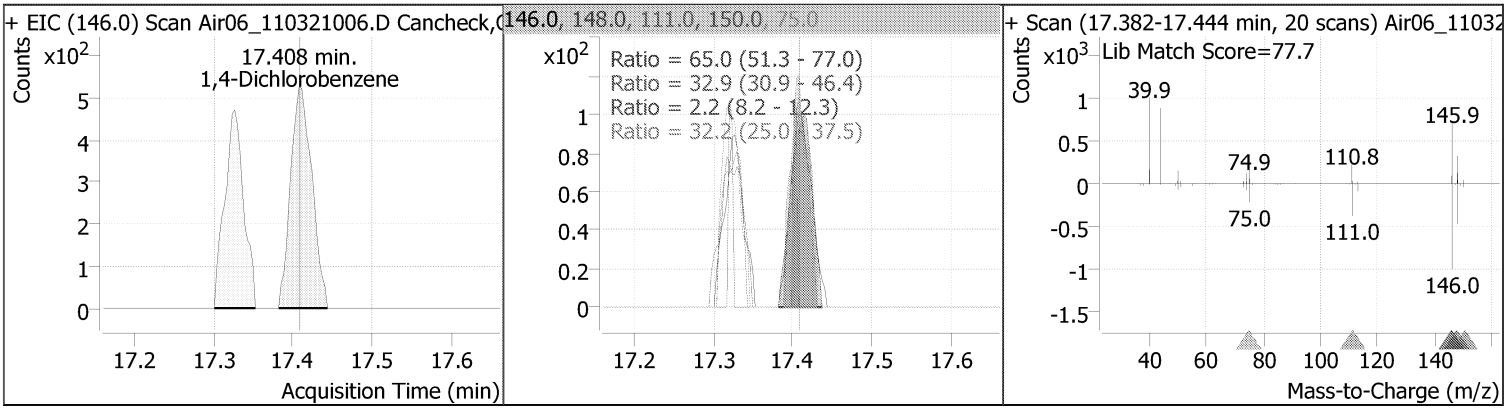
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.0055	17.30	0.00	679	126.0	9.2	16.4	24.6
					65.0		11.0	16.5



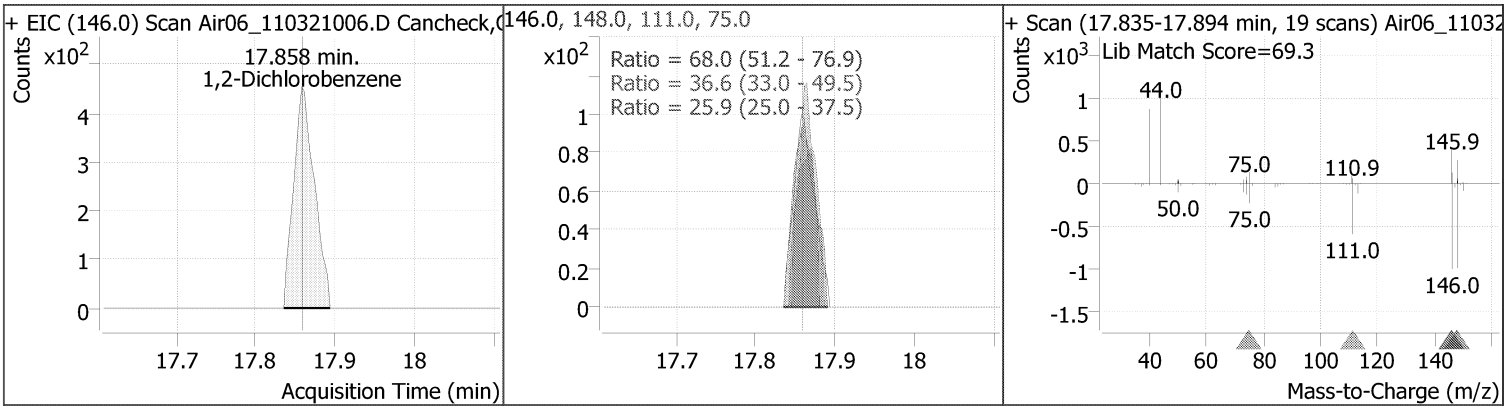
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.0072	17.33	0.00	782	148.0	68.1	51.5	77.3
					111.0	35.4	31.9	47.9
					75.0	35.3	25.2	37.8



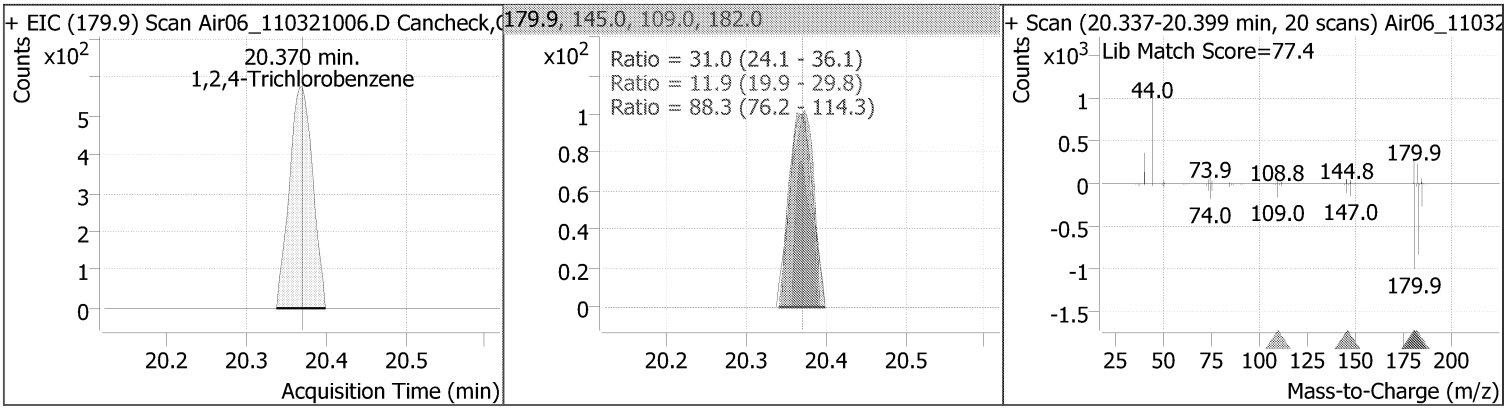
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.0090	17.41	-0.01	980	148.0	65.0	51.3	77.0
					111.0	32.9	30.9	46.4
					75.0	32.2	25.0	37.5
					150.0	2.2	8.2	12.3



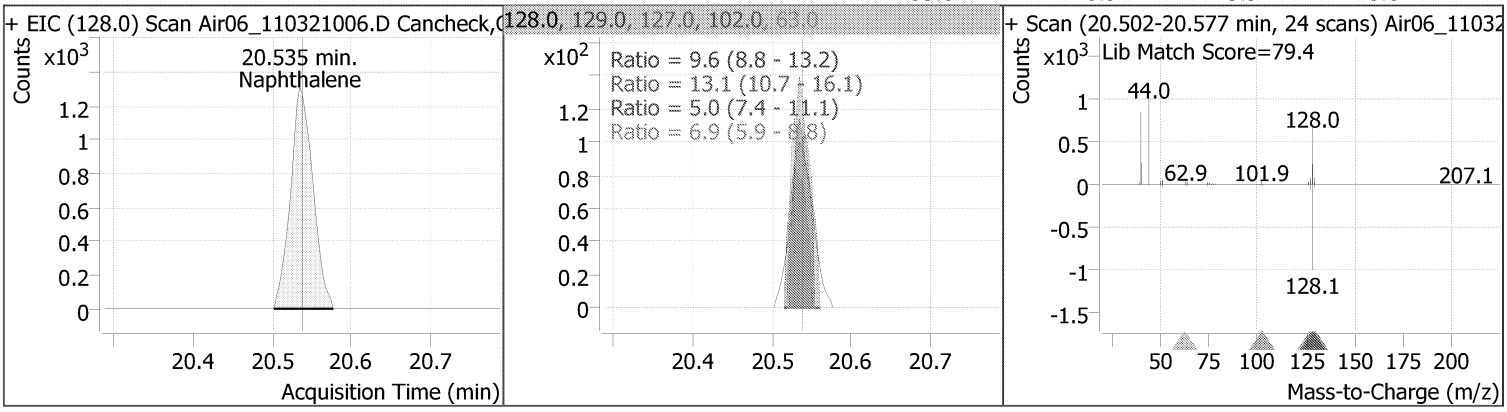
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.0078	17.86	0.00	824	148.0	68.0	51.2	76.9
					111.0	36.6	33.0	49.5
					75.0	25.9	25.0	37.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.0147	20.37	0.00	1173	182.0	88.3	76.2	114.3
					145.0	31.0	24.1	36.1
					109.0	11.9	19.9	29.8

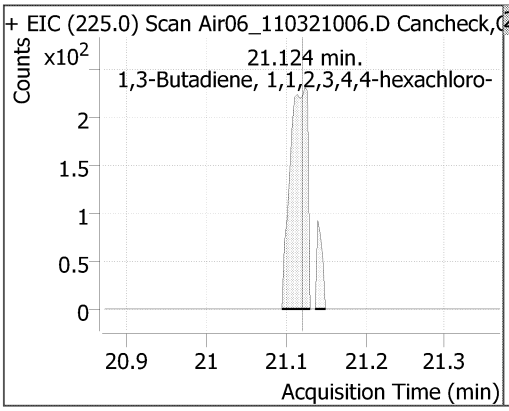


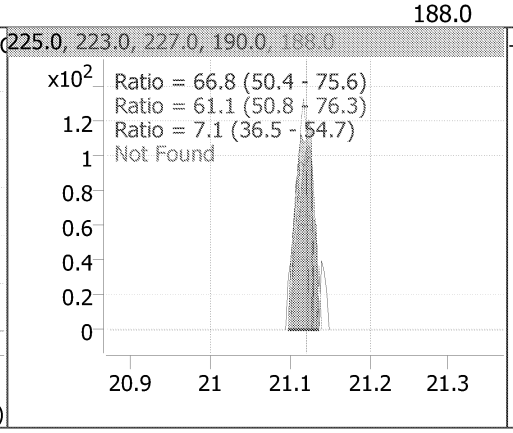
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	0.0154	20.53	-0.01	2571	127.0	13.1	10.7	16.1
					129.0	9.6	8.8	13.2
					102.0	5.0	7.4	11.1
					63.0	6.9	5.9	8.8

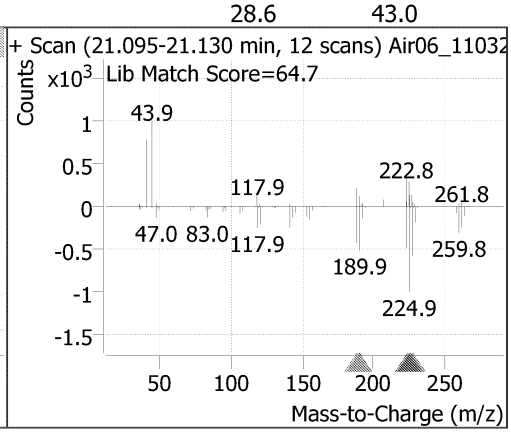


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.0041	21.12	0.00	356	227.0	61.1	50.8	76.3
					223.0	66.8	50.4	75.6
					190.0	7.1	36.5	54.7
					188.0		28.6	43.0







Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 453958
Report Level: IV
Report Date: 12/08/2021

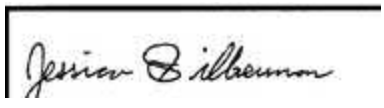
Volatile Organics in Air GC

Analytical Report *prepared for:*

Marvin Heskett
Element Environmental, LLC
98-030 Hekaha Street
Unit 9
Aiea, HI 96701

Project: 180025 - Red Hill Soil Vapor Monitoring

Authorized for release by:



Jess Silberman, Project Manager
510-204-2236
jessica.silberman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE Member

ENTHALPY ANALYTICAL

Sample Summary

Marvin Heskett
Element Environmental, LLC
98-030 Hekaha Street
Unit 9
Aiea, HI 96701

Lab Job #: 453958
Project No: 180025
Location: Red Hill Soil Vapor Monitoring
Date Received: 11/22/21

Sample ID	Lab ID	Collected	Matrix
SVMP-15S	453958-001	11/18/21 12:18	Air
SVMP-15D	453958-002	11/18/21 12:23	Air
SVMP-17S	453958-003	11/18/21 12:40	Air
SVMP-17D	453958-004	11/18/21 12:43	Air
SVMP-18S	453958-005	11/18/21 13:00	Air
SVMP-18D	453958-006	11/18/21 13:01	Air
SVMP-20M	453958-007	11/18/21 13:17	Air
SVMP-20D	453958-008	11/18/21 13:20	Air

Case Narrative

VOLATILE ORGANICS IN AIR GC (ASTM D1946)

Element Environmental, LLC 98-030 Hekaha Street Unit 9 Aiea, HI 96701 Marvin Heskett	Lab Job Number: 453958 Project No: 180025 Location: Red Hill Soil Vapor Monitoring Date Received: 11/22/21

This data package contains sample and QC results for eight air samples, requested for the above referenced project on 11/22/21. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics in Air GC (ASTM D1946):

High recoveries were observed for methane in the BS/BSD for batch 279032; this analyte was not detected at or above the RL in the associated samples.

No other analytical problems were encountered.

Chain of Custody

ENTHALPY ANALYTICAL

Enthalpy Analytical - Orange
931 W. Barkley Avenue, Orange, CA 92868
Phone 714-771-6900

Air Chain of Custody Record

Lab No: 453958
Page: 1 of 1

Turn Around Time (rush by advanced notice only)

Standard:		5 Day:	X	3 Day:	
2 Day:		1 Day:		Custom TAT:	

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Element Environmental LLC	Name:	Red Hill Soil Vapor Monitoring
Report To:	Marvin Heskett	Number:	180025
Email:	mheskett@e2hi.com	P.O. #:	
Address:	98-030 Hekaha St., Unit 9, Aiea, Hawaii 96701	Address:	
Phone:	808-728-4617	Global ID:	
Fax:		Sampled By:	AL/DA

Special Instructions:
1. LEVEL IV Data Reporting, with additional anaylsis and text files data per discussion 9/14/21
2. A10080 Flow Controller Returned (Broken)

Note:

	Sample ID	Type	Equipment Information			Sampling Information						Analysis Requested	
		(I) Indoor (A) Ambient (SV) Soil Vapor (S) Source	Canister ID	Size (1L, 3L, 6L, 15L)	Flow Controller ID	Sample Start Date	Sample Start Time	Vacuum Start ("Hg)	Sample End Date	Sample End Time	Vacuum End ("Hg)	VOCs & TICs (TO-15) *C5-C12 (T-03)	Fixed Gases (ASTM D-1946)
1	SVMP-15S	SV	C10293	1.4L	A10123	11/18/2021	12:09	30	11/18/2021	12:18	5	X	X
2	SVMP-15D	SV	C10092	1.4L	A10126	11/18/2021	12:17	29	11/18/2021	12:23	4	X	X
3	SVMP-17S	SV	C10150	1.4L	A10127	11/18/2021	12:33	28	11/18/2021	12:40	4	X	X
4	SVMP-17D	SV	C10654	1.4L	A10052	11/18/2021	12:34	30	11/18/2021	12:43	4	X	X
5	SVMP-18S	SV	C10173	1.4L	A10038	11/18/2021	12:52	30	11/18/2021	13:00	4	X	X
6	SVMP-18D	SV	C10672	1.4L	A10095	11/18/2021	12:54	29	11/18/2021	13:01	4	X	X
7	SVMP-20M	SV	C10318	1.4L	A10230	11/18/2021	13:10	27	11/18/2021	13:17	4	X	X
8	SVMP-20D	SV	C10146	1.4L	A10066	11/18/2021	13:11	28	11/18/2021	13:20	4	X	X
9													
10													

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Theodore Uekawa	Element Environmental LLC	11/19/2021 (11:30)
[1] Received By:			EA	11/19/21 09:00
[2] Relinquished By:				
[2] Received By:				
[3] Relinquished By:				
[3] Received By:				

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Element Environmental LLC

Project: Red Hill Soil Vapor Monitoring

Date Received: 11/22/21

Sampler's Name Present: ☑ Yes ☐ No

Section 2

Sample(s) received in a cooler? ☐ Yes, How many? _____ ☑ No (skip section 2)

Sample Temp (°C) (No Cooler): AMB

Sample Temp (°C), One from each cooler: #1: _____ #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: ☐ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✔		
Are sample IDs present?	✔		
Are sampling dates & times present?	✔		
Is a relinquished signature present?	✔		
Are the tests required clearly indicated on the COC?	✔		
Are custody seals present?		✔	
If custody seals are present, were they intact?			✔
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✔
Did all samples arrive intact? If no, indicate in Section 4 below.	✔		
Did all bottle labels agree with COC? (ID, dates and times)	✔		
Were the samples collected in the correct containers for the required tests?	✔		
Are the containers labeled with the correct preservatives?			
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✔
Was a sufficient amount of sample submitted for the requested tests?	✔		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☐ Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 11/22/21

ORIGIN ID:CCRA (925) 680-4300
MAQS
MONTROSE AIR QUALITY SERVICES
2825 VERNE ROBERTS CIRCLE

ANTIOCH, CA 94509
UNITED STATES US

SHIP DATE: 19NOV21
ACTWGT: 35.00 LB
CAD: 4603247/INET4400

BILL SENDER

TO **SAMPLE RECEIVING**
ENTHALPY ANALYTICAL-SAMPLE RECEIVE
931 W BARKLEY AVE

ORANGE CA 92868
(741) 771-6900 REF: MARSH LANDING PROJ-011745
INV:
PO: DEPT:

56DJ29A7EFE4A

FedEx Express

E

J212211018801uv

WED - 24 NOV 4:30P
EXPRESS SAVER

1 of 4
TRK# 0201 **7752 6267 4216**
MASTER

CZ APVA

92868
CA-US **SNA**

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Results & QC Summary

ENTHALPY ANALYTICAL

Reformed Gases by GC

Lab #: 453958 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Field ID: SVMP-15S **Diln Fac:** 2.000 **Analyzed:** 12/01/21
Type: SAMPLE **Batch#:** 279032 **Prep:** METHOD
Lab ID: 453958-001 **Sampled:** 11/18/21 **Analysis:** ASTM D1946
Matrix: Air **Received:** 11/22/21 **Analyst:** MPD

Analyte	Result	RL	Units
Carbon Monoxide	ND	0.20	mol %
Carbon Dioxide	**0.54**	0.20	mol %
Oxygen/Argon	**22**	0.20	mol %
Methane	ND	0.20	mol %
Nitrogen	**78**	0.20	mol %

Field ID: SVMP-15D **Diln Fac:** 3.000 **Analyzed:** 12/01/21
Type: SAMPLE **Batch#:** 279032 **Prep:** METHOD
Lab ID: 453958-002 **Sampled:** 11/18/21 **Analysis:** ASTM D1946
Matrix: Air **Received:** 11/22/21 **Analyst:** MPD

Analyte	Result	RL	Units
Carbon Monoxide	ND	0.30	mol %
Carbon Dioxide	**0.83**	0.30	mol %
Oxygen/Argon	**21**	0.30	mol %
Methane	ND	0.30	mol %
Nitrogen	**78**	0.30	mol %

Field ID: SVMP-17S **Diln Fac:** 2.000 **Analyzed:** 12/01/21
Type: SAMPLE **Batch#:** 279032 **Prep:** METHOD
Lab ID: 453958-003 **Sampled:** 11/18/21 **Analysis:** ASTM D1946
Matrix: Air **Received:** 11/22/21 **Analyst:** MPD

Analyte	Result	RL	Units
Carbon Monoxide	ND	0.20	mol %
Carbon Dioxide	**0.67**	0.20	mol %
Oxygen/Argon	**22**	0.20	mol %
Methane	ND	0.20	mol %
Nitrogen	**78**	0.20	mol %

Field ID: SVMP-17D **Diln Fac:** 2.000 **Analyzed:** 12/01/21
Type: SAMPLE **Batch#:** 279032 **Prep:** METHOD
Lab ID: 453958-004 **Sampled:** 11/18/21 **Analysis:** ASTM D1946
Matrix: Air **Received:** 11/22/21 **Analyst:** MPD

Analyte	Result	RL	Units
Carbon Monoxide	ND	0.20	mol %
Carbon Dioxide	**0.29**	0.20	mol %
Oxygen/Argon	**22**	0.20	mol %
Methane	ND	0.20	mol %
Nitrogen	**78**	0.20	mol %

ENTHALPY ANALYTICAL

Reformed Gases by GC

Lab #: 453958 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Field ID: SVMP-18S **Diln Fac:** 2.000 **Analyzed:** 12/01/21
Type: SAMPLE **Batch#:** 279032 **Prep:** METHOD
Lab ID: 453958-005 **Sampled:** 11/18/21 **Analysis:** ASTM D1946
Matrix: Air **Received:** 11/22/21 **Analyst:** MPD

Analyte	Result	RL	Units
Carbon Monoxide	ND	0.20	mol %
Carbon Dioxide	**0.32**	0.20	mol %
Oxygen/Argon	**22**	0.20	mol %
Methane	ND	0.20	mol %
Nitrogen	**78**	0.20	mol %

Field ID: SVMP-18D **Diln Fac:** 2.000 **Analyzed:** 12/01/21
Type: SAMPLE **Batch#:** 279032 **Prep:** METHOD
Lab ID: 453958-006 **Sampled:** 11/18/21 **Analysis:** ASTM D1946
Matrix: Air **Received:** 11/22/21 **Analyst:** MPD

Analyte	Result	RL	Units
Carbon Monoxide	ND	0.20	mol %
Carbon Dioxide	**0.31**	0.20	mol %
Oxygen/Argon	**23**	0.20	mol %
Methane	ND	0.20	mol %
Nitrogen	**77**	0.20	mol %

Field ID: SVMP-20M **Diln Fac:** 3.000 **Analyzed:** 12/01/21
Type: SAMPLE **Batch#:** 279032 **Prep:** METHOD
Lab ID: 453958-007 **Sampled:** 11/18/21 **Analysis:** ASTM D1946
Matrix: Air **Received:** 11/22/21 **Analyst:** MPD

Analyte	Result	RL	Units
Carbon Monoxide	ND	0.30	mol %
Carbon Dioxide	ND	0.30	mol %
Oxygen/Argon	**23**	0.30	mol %
Methane	ND	0.30	mol %
Nitrogen	**77**	0.30	mol %

Field ID: SVMP-20D **Diln Fac:** 2.000 **Analyzed:** 12/01/21
Type: SAMPLE **Batch#:** 279032 **Prep:** METHOD
Lab ID: 453958-008 **Sampled:** 11/18/21 **Analysis:** ASTM D1946
Matrix: Air **Received:** 11/22/21 **Analyst:** MPD

Analyte	Result	RL	Units
Carbon Monoxide	ND	0.20	mol %
Carbon Dioxide	ND	0.20	mol %
Oxygen/Argon	**22**	0.20	mol %
Methane	ND	0.20	mol %
Nitrogen	**77**	0.20	mol %

ENTHALPY ANALYTICAL

Reformed Gases by GC

Lab #: 453958 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Type:	BLANK	**DilN Fac:**	1.000	**Prep:**	METHOD
Lab ID:	QC958442	**Batch#:**	279032	**Analysis:**	ASTM D1946
Matrix:	Air	**Analyzed:**	12/01/21	**Analyst:**	MPD

Analyte	Result	RL	Units
Carbon Monoxide	ND	0.10	mol %
Carbon Dioxide	ND	0.10	mol %
Oxygen/Argon	ND	0.10	mol %
Methane	ND	0.10	mol %
Nitrogen	ND	0.10	mol %

Legend

ND: Not Detected

RL: Reporting Limit

ENTHALPY ANALYTICAL

Reformed Gases by GC: Batch QC

Lab #: 453958 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Type: BS **Dil'n Fac:** 1.000 **Prep:** METHOD

Lab ID: QC958440 **Batch#:** 279032 **Analysis:** ASTM D1946

Matrix: Air **Analyzed:** 12/01/21 **Analyst:** MPD

Analyte	Spiked	Result	%REC	Limits	Units
Carbon Monoxide	7.000	7.539	108	85-115	mol %
Carbon Dioxide	15.00	13.92	93	85-115	mol %
Oxygen/Argon	4.000	4.266	107	85-115	mol %
Methane	4.000	4.659	116 *	85-115	mol %

Type: BSD **Dil'n Fac:** 1.000 **Prep:** METHOD

Lab ID: QC958441 **Batch#:** 279032 **Analysis:** ASTM D1946

Matrix: Air **Analyzed:** 12/01/21 **Analyst:** MPD

Analyte	Spiked	Result	%REC	Limits	Units	RPD	Lim
Carbon Monoxide	7.000	7.534	108	85-115	mol %	0	10
Carbon Dioxide	15.00	13.92	93	85-115	mol %	0	10
Oxygen/Argon	4.000	4.264	107	85-115	mol %	0	10
Methane	4.000	4.655	116 *	85-115	mol %	0	10

Legend

*: Value is outside QC limits

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Reformed Gases by GC: Batch QC

Lab #: 453958 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Field ID:	ZZZZZZZZZZ	**DilnFac:**	2.250	**Prep:**	METHOD
Type:	SDUP	**Batch#:**	279032	**Analysis:**	ASTM D1946
MSS Lab ID:	454140-001	**Sampled:**	11/24/21	**Analyst:**	MPD
Lab ID:	QC958443	**Received:**	11/24/21		
Matrix:	Air	**Analyzed:**	12/01/21		

Analyte	MSS Result	Result	RL	Units	RPD	Lim
Carbon Monoxide	<0.2250	<0.2250	0.2250	mol %	NC	20
Carbon Dioxide	<0.2250	<0.2250	0.2250	mol %	NC	20
Oxygen/Argon	18.89	**18.87**	0.2250	mol %	0	20
Methane	<0.2250	<0.2250	0.2250	mol %	0	20
Nitrogen	81.09	**81.89**	0.2250	mol %	1	20

Legend

NC: Not Calculated

RL: Reporting Limit

RPD: Relative Percent Difference

ENTHALPY ANALYTICAL

Reformed Gases by GC: Batch QC

Lab #: 453958 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Field ID:	SVMP-15S	**Dil'n Fac:**	2.000	**Prep:**	METHOD
Type:	SDUP	**Batch#:**	279032	**Analysis:**	ASTM D1946
MSS Lab ID:	453958-001	**Sampled:**	11/18/21	**Analyst:**	MPD
Lab ID:	QC958444	**Received:**	11/22/21		
Matrix:	Air	**Analyzed:**	12/01/21		

Analyte	MSS Result	Result	RL	Units	RPD	Lim
Carbon Monoxide	<0.2000	<0.2000	0.2000	mol %	NC	20
Carbon Dioxide	0.5410	**0.5400**	0.2000	mol %	0	20
Oxygen/Argon	21.60	**21.58**	0.2000	mol %	0	20
Methane	<0.2000	<0.2000	0.2000	mol %	5	20
Nitrogen	77.84	**77.86**	0.2000	mol %	0	20

Legend

NC: Not Calculated

RL: Reporting Limit

RPD: Relative Percent Difference

LEVEL IV DATA

PACKAGE 453958

Enthalpy Analytical, an affiliate of Montrose Environmental Company
931 W. Barkley Ave., Orange, CA 92868 • T: (714) 771-6900 • F: (714) 531-1209
www.enthalpy.com/socal

METHOD

D1946 (FGs)

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INSTRUMENT RUN LOGS

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Instr AIR-GC02
Date: 12/1/2021
Seq #: **120121_FG**

#	Sample ID	Data File	Injection Time	Comments
1	N2 BLK	AIR02_211201001	12/1/2021 9:15	
2	FG CCV/BS,QC958440,279032,S14249	AIR02_211201002	12/1/2021 9:31	
3	FG CCV/BSD,QC958441,279032,S14249	AIR02_211201003	12/1/2021 9:47	
4	Lab Air	AIR02_211201004	12/1/2021 10:03	
5	Lab Air Dup	AIR02_211201005	12/1/2021 10:19	
6	BLANK,QC958442,279032,1x	AIR02_211201006	12/1/2021 10:34	
7	454140-001,279032,2.25x	AIR02_211201007	12/1/2021 11:23	
8	454140-001D,QC958443,279032,2.25x	AIR02_211201008	12/1/2021 11:39	
9	454140-002,279032,1.5x	AIR02_211201009	12/1/2021 11:55	
10	454140-003,279032,2.3x	AIR02_211201010	12/1/2021 12:11	
11	454140-004,279032,1.7x	AIR02_211201011	12/1/2021 12:27	
12	453958-001,279032,2x	AIR02_211201012	12/1/2021 12:43	
13	453958-001D,QC958444,279032,2x	AIR02_211201013	12/1/2021 12:59	
14	453958-002,279032,2x	AIR02_211201014	12/1/2021 13:15	Not reported
15	453958-003,279032,2x	AIR02_211201015	12/1/2021 13:32	
16	453958-004,279032,2x	AIR02_211201016	12/1/2021 13:50	
17	453958-005,279032,2x	AIR02_211201017	12/1/2021 14:06	
18	453958-006,279032,2x	AIR02_211201018	12/1/2021 14:23	
19	453958-007,279032,3x	AIR02_211201019	12/1/2021 15:01	
20	453958-008,279032,2x	AIR02_211201020	12/1/2021 15:17	
21	453958-002,279032,3x	AIR02_211201021	12/1/2021 15:33	
22	454140-004D,279032,1.7x	AIR02_211201022	12/1/2021 15:49	Not reported
23	Closing BLK	AIR02_211201023	12/1/2021 16:05	
24	Closing Lab Air	AIR02_211201024	12/1/2021 16:21	
25	Closing CCV, s14249	AIR02_211201025	12/1/2021 16:37	

Instr AIR-GC02
Date: 2/12/2021
Seq #: **021221_FG ICAL**

#	Sample ID	Data File	Injection Time	Comments
1	N2 blank	AIR02_210212001	2/12/2021 15:05	
2	FG IC1,S14256,0.1% no Ar	AIR02_210212002	2/12/2021 15:21	
3	FG IC1,S14256,0.1% no Ar	AIR02_210212003	2/12/2021 15:37	
4	FG IC2,S14081,0.1%	AIR02_210212004	2/12/2021 15:53	
5	FG IC2,S14081,0.1%	AIR02_210212005	2/12/2021 16:09	
6	FG IC3,~~S14081~~,1% no Ar	AIR02_210212006	2/12/2021 16:25	S14799; GSG 6/25/21
7	FG IC3,~~S14081~~,1% no Ar	AIR02_210212007	2/12/2021 16:41	S14799; GSG 6/25/21
8	FG IC4,S12400,1%	AIR02_210212008	2/12/2021 16:57	
9	FG IC4,S12400,1%	AIR02_210212009	2/12/2021 17:13	
10	FG IC5,S14249,4%	AIR02_210212010	2/12/2021 17:29	
11	FG IC5,S14249,4%	AIR02_210212011	2/12/2021 17:44	
12	FG IC6,S14181,5%	AIR02_210212012	2/12/2021 18:00	
13	FG IC6,S14181,5%	AIR02_210212013	2/12/2021 18:16	
14	FG IC7,S12402,20%	AIR02_210212014	2/12/2021 18:32	
15	FG IC7,S12402,20%	AIR02_210212015	2/12/2021 18:48	
16	FG IC8,S14258,ZeroAir	AIR02_210212016	2/12/2021 19:04	
17	FG IC8,S14258,ZeroAir	AIR02_210212017	2/12/2021 19:20	
18	FG IC9,S14255,UHP 100% N2	AIR02_210212018	2/12/2021 19:36	
19	FG IC9,S14255,UHP 100% N2	AIR02_210212019	2/12/2021 19:51	
20	FG IC10,S14080,25% O2	AIR02_210212020	2/12/2021 20:07	
21	FG IC10,S14080,25% O2	AIR02_210212021	2/12/2021 20:23	
22	FG IC11,~~S14080~~,50% CH4	AIR02_210212022	2/12/2021 20:39	S13964; GSG 6/25/21
23	FG IC11,~~S14080~~,50% CH4	AIR02_210212023	2/12/2021 20:55	S13964; GSG 6/25/21
24	N2 blank	AIR02_210212024	2/12/2021 21:11	
25	FG ICV1,S14249,4%	AIR02_210212025	2/12/2021 21:27	
26	FG ICV1,S14249,4%	AIR02_210212026	2/12/2021 21:42	
27	FG ICV2,S14181,5%	AIR02_210212027	2/12/2021 21:58	H2 ONLY
28	FG ICV2,S14181,5%	AIR02_210212028	2/12/2021 22:14	H2 ONLY

INITIAL CALIBRATION SUMMARY

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www.enthalpy.com/socal

method: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M
Modified on: 6/30/2021 at 1:57:46 PM

The Data Analysis Parameters of the used Method are :

==========

Calibration Table

==========

AIR-GC02 Fixed Gases and C1-C6+ Hydrocarbons

Calib. Data Modified : 6/30/2021 1:57:32 PM

Rel. Reference Window : 3.500 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 3.500 %
Abs. Non-ref. Window : 0.000 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear (some peaks differ, see below)
Origin : Ignored (some peaks differ, see below)
Weight : Equal (some peaks differ, see below)

Recalibration Settings:
Average Response : No Update
Average Retention Time: No Update

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: FID1 A, Front Signal
Signal 2: TCD2 B, Back Signal
Signal 3: TCD3 C, Aux Signal

RetTime [min]	Lvl Sig		Amount [%v/v]	Area	Amt/Area	Ref	Grp	Name
1.674	3	23	1.00000e-1	12.98400	7.70179e-3			Helium
		24	1.00000e-1	13.01300	7.68462e-3			
		25	1.00000	111.61600	8.95929e-3			
		26	1.00000	111.94700	8.93280e-3			
		27	10.00000	1103.93000	9.05855e-3			
		28	10.00000	1105.29600	9.04735e-3			
		29	20.00000	2172.83800	9.20455e-3			
		30	20.00000	2173.09700	9.20345e-3			
		31	50.00000	5491.37300	9.10519e-3			
		32	50.00000	5492.00100	9.10415e-3			
1.880	3	3	1.00000e-1	14.73083	6.78848e-3			Hydrogen
		4	1.00000e-1	14.94727	6.69019e-3			
		7	1.00000	160.45828	6.23215e-3			
		8	1.00000	159.22105	6.28058e-3			
		11	5.00000	779.74597	6.41234e-3			
		12	5.00000	781.24933	6.40001e-3			
		13	20.00000	2699.67993	7.40829e-3			
		14	20.00000	3045.77197	6.56648e-3			
2.400	2	1	1.00000e-1	252.87965	3.95445e-4			Oxygen+Argon

method: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M
Modified on: 6/30/2021 at 1:57:46 PM

RetTime [min]	Sig	Lvl	Amount [%v/v]	Area	Amt/Area	Ref Grp	Name
	2	2	1.00000e-1	254.03249	3.93650e-4		
	5		1.00000	2495.72852	4.00685e-4		
	6		1.00000	2494.72192	4.00846e-4		
	9		4.00000	8956.55371	4.46600e-4		
	10		4.00000	8957.77832	4.46539e-4		
	15		21.00000	4.33958e4	4.83917e-4		
	16		21.00000	4.33906e4	4.83976e-4		
	19		24.95000	5.38680e4	4.63169e-4		
	20		24.95000	5.38930e4	4.62955e-4		
2.800	2	3	1.00000e-1	266.40210	3.75372e-4		Carbon Dioxide
	4		1.00000e-1	265.99722	3.75944e-4		
	1		3.75000e-1	1078.39771	3.47738e-4		
	2		3.75000e-1	1077.46301	3.48040e-4		
	7		1.00000	2789.24316	3.58520e-4		
	8		1.00000	2781.42896	3.59527e-4		
	5		3.75000	1.05985e4	3.53825e-4		
	6		3.75000	1.06029e4	3.53677e-4		
	11		5.00000	1.35344e4	3.69429e-4		
	12		5.00000	1.35885e4	3.67957e-4		
	9		15.00000	4.14712e4	3.61696e-4		
	10		15.00000	4.14624e4	3.61774e-4		
	13		20.00000	4.79398e4	4.17190e-4		
	14		20.00000	5.34221e4	3.74377e-4		
3.700	2	11	5.00000	463.98218	1.07763e-2		Nitrogen
	12		5.00000	531.85602	9.40104e-3		
	13		20.00000	7.66521e4	2.60919e-4		
	14		20.00000	5.75265e4	3.47666e-4		
	15		79.00000	1.87708e5	4.20867e-4		
	16		79.00000	1.87761e5	4.20748e-4		
	17		100.00000	2.28668e5	4.37316e-4		
	18		100.00000	2.28814e5	4.37037e-4		
4.600	2	1	1.00000e-1	229.28514	4.36138e-4		Methane
	2		1.00000e-1	228.70892	4.37237e-4		
	3		1.00000e-1	223.73921	4.46949e-4		
	4		1.00000e-1	223.95868	4.46511e-4		
	5		1.00000	2155.06421	4.64023e-4		
	6		1.00000	2156.22168	4.63774e-4		
	7		1.00000	2060.31323	4.85363e-4		
	8		1.00000	2060.54199	4.85309e-4		
	9		4.00000	8479.04785	4.71751e-4		
	10		4.00000	8474.87109	4.71984e-4		
	11		5.00000	9964.09766	5.01802e-4		
	12		5.00000	1.00013e4	4.99934e-4		
	13		20.00000	3.43018e4	5.83060e-4		
	14		20.00000	3.80525e4	5.25589e-4		
	21		49.75000	9.20204e4	5.40641e-4		
	22		49.75000	9.20586e4	5.40417e-4		
4.900	2	3	1.00000e-1	283.27145	3.53018e-4		Carbon Monoxide
	4		1.00000e-1	283.63388	3.52567e-4		
	1		1.75000e-1	501.21292	3.49153e-4		
	2		1.75000e-1	500.87183	3.49391e-4		
	7		1.00000	2834.93628	3.52742e-4		
	8		1.00000	2837.39893	3.52435e-4		
	5		1.75000	4974.48926	3.51795e-4		
	6		1.75000	4975.59082	3.51717e-4		
	11		5.00000	1.37667e4	3.63195e-4		
	12		5.00000	1.38230e4	3.61716e-4		
	9		7.00000	1.96302e4	3.56594e-4		
	10		7.00000	1.96307e4	3.56585e-4		

method: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M
Modified on: 6/30/2021 at 1:57:46 PM

RetTime [min]	Sig	Lvl	Amount [%v/v]	Area	Amt/Area	Ref Grp	Name
		13	20.00000	4.87288e4	4.10435e-4		
		14	20.00000	5.41698e4	3.69209e-4		

More compound-specific settings:

Compound: Helium
- Amount Control Limits : Low 8.50000 High 11.50000
- Time Window : From 1.574 min To 1.749 min
- Curve Type : Linear
- Origin : Forced
- Calibration Level Weights:/
  - Level 23 : 1
  - Level 24 : 1
  - Level 25 : 1
  - Level 26 : 1
  - Level 27 : 1
  - Level 28 : 1
  - Level 29 : 1
  - Level 30 : 1
  - Level 31 : 1
  - Level 32 : 1

Compound: Hydrogen
- Amount Control Limits : Low 4.50000 High 5.50000
- Time Window : From 1.850 min To 1.930 min
- Curve Type : Linear
- Origin : Forced
- Calibration Level Weights:/
  - Level 3 : 1
  - Level 4 : 1
  - Level 7 : 0.1
  - Level 8 : 0.1
  - Level 11 : 0.02
  - Level 12 : 0.02
  - Level 13 : 0.005
  - Level 14 : 0.005

Compound: Oxygen+Argon
- Amount Control Limits : Low 3.60000 High 4.40000
- Time Window : From 2.300 min To 2.650 min
- Curve Type : Linear
- Origin : Forced
- Calibration Level Weights:/
  - Level 1 : 1
  - Level 2 : 1
  - Level 5 : 0.1
  - Level 6 : 0.1
  - Level 9 : 0.025
  - Level 10 : 0.025
  - Level 15 : 0.004762
  - Level 16 : 0.004762
  - Level 19 : 0.004008
  - Level 20 : 0.004008

Compound: Carbon Dioxide
- Amount Control Limits : Low 13.50000 High 16.50000
- Time Window : From 2.650 min To 3.100 min
- Curve Type : Linear
- Origin : Forced

```
 method: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M
Modified on: 6/30/2021 at 1:57:46 PM
      Calibration Level Weights:/
        Level 3                : 1
        Level 4                : 1
        Level 1                : 0.266667
        Level 2                : 0.266667
        Level 7                : 0.1
        Level 8                : 0.1
        Level 5                : 0.026667
        Level 6                : 0.026667
        Level 11               : 0.02
        Level 12               : 0.02
        Level 9                : 0.006667
        Level 10               : 0.006667
        Level 13               : 0.005
        Level 14               : 0.005

    Compound: Nitrogen
      Amount Control Limits    : Low   70.65000  High   86.35000
      Time Window              : From 3.450 min To 4.100 min
      Curve Type               : Linear
      Origin                   : Forced
      Calibration Level Weights:/
        Level 11               : 1
        Level 12               : 1
        Level 13               : 1
        Level 14               : 1
        Level 15               : 1
        Level 16               : 1
        Level 17               : 1
        Level 18               : 1

    Compound: Methane
      Time Window              : From 4.400 min To 4.800 min
      Curve Type               : Linear
      Origin                   : Forced
      Calibration Level Weights:/
        Level 1                : 1
        Level 2                : 1
        Level 3                : 1
        Level 4                : 1
        Level 5                : 0.1
        Level 6                : 0.1
        Level 7                : 0.1
        Level 8                : 0.1
        Level 9                : 0.025
        Level 10               : 0.025
        Level 11               : 0.02
        Level 12               : 0.02
        Level 13               : 0.005
        Level 14               : 0.005
        Level 21               : 0.00201
        Level 22               : 0.00201

    Compound: Carbon Monoxide
      Amount Control Limits    : Low    6.30000  High    7.70000
      Time Window              : From 4.800 min To 5.100 min
      Curve Type               : Linear
      Origin                   : Forced
      Calibration Level Weights:/
        Level 3                : 1
        Level 4                : 1
        Level 1                : 0.571429
```

method: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M
Modified on: 6/30/2021 at 1:57:46 PM

Level 2	: 0.571429
Level 7	: 0.1
Level 8	: 0.1
Level 5	: 0.057143
Level 6	: 0.057143
Level 11	: 0.02
Level 12	: 0.02
Level 9	: 0.014286
Level 10	: 0.014286
Level 13	: 0.005
Level 14	: 0.005

Peak Sum Table

No Entries in table

Data File C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212025.D
Sample Name: FG ICV1,S14249,4%

Signal 1: TCD2 B, Back Signal

RetTime [min]	Type	Area [25 µV*s]	Amt/Area	Amount [%v/v]	Grp	Name
2.410	BB	8958.45996	4.68436e-4	4.19647		Oxygen
2.797	BB S	4.15705e4	3.75500e-4	15.60972		Carbon Dioxide
3.738	BB S	1.65743e5	4.26793e-4	70.73783		Nitrogen
4.641	BV	8486.37891	5.34870e-4	4.53911		Methane
4.894	VB	1.96585e4	3.74718e-4	7.36640		Carbon Monoxide

Totals : 102.44952

Signal 2: TCD3 C, Aux Signal not found

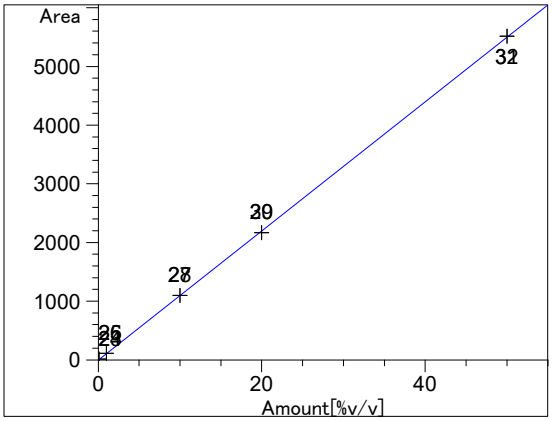
RetTime [min]	Type	Area	Amt/Area	Amount [%v/v]	Grp	Name
1.775		-	-	-		Helium
1.880		-	-	-		Hydrogen

Totals : 0.00000

1 Warnings or Errors :

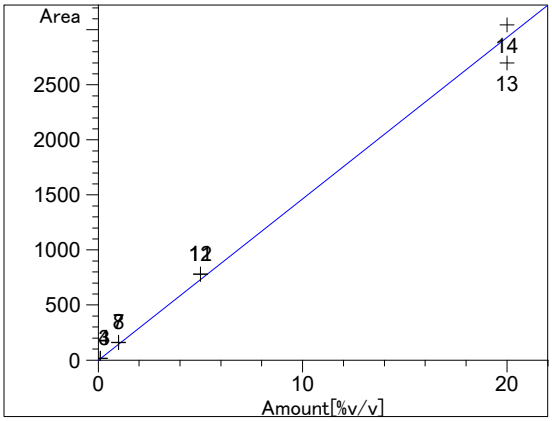
Warning : Calibrated compound(s) not found

==========
==========
Calibration Curves
==========

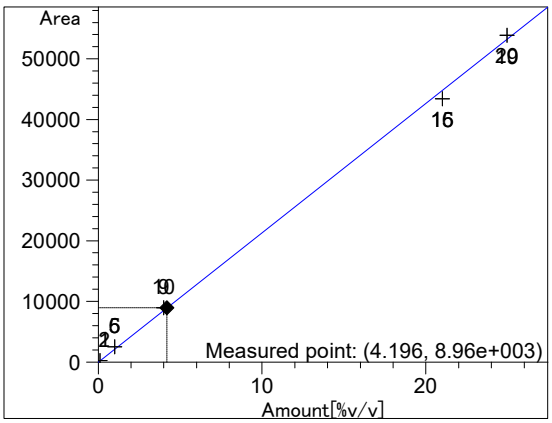


Helium at exp. RT: 1.775
TCD3 C, Aux Signal
Correlation: 0.99998
Residual Std. Dev.: 16.32302
Formula: y = mx
m: 110.04465
x: Amount
y: Area
Calibration Level Weights:
Level 23 : 1
Level 24 : 1
Level 25 : 1
Level 26 : 1
Level 27 : 1
Level 28 : 1
Level 29 : 1
Level 30 : 1
Level 31 : 1
Level 32 : 1

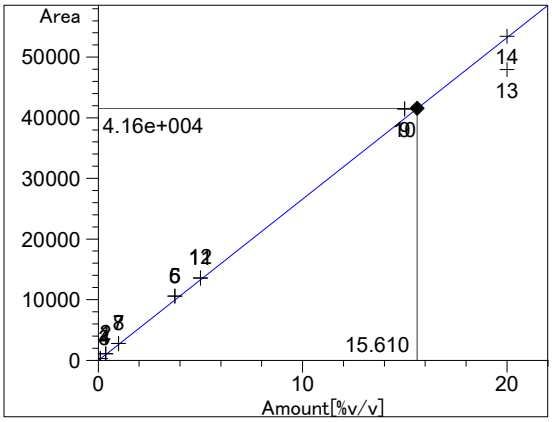
Data File C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212025.D
Sample Name: FG ICV1,S14249,4%



Hydrogen at exp. RT: 1.880
TCD3 C, Aux Signal
Correlation: 0.99796
Residual Std. Dev.: 101.43255
Formula: y = mx
m: 146.66292
x: Amount
y: Area
Calibration Level Weights:
Level 3 : 1
Level 4 : 1
Level 7 : 0.1
Level 8 : 0.1
Level 11 : 0.02
Level 12 : 0.02
Level 13 : 0.005
Level 14 : 0.005



Oxygen at exp. RT: 2.400
TCD2 B, Back Signal
Correlation: 0.99935
Residual Std. Dev.: 782.15583
Formula: y = mx
m: 2134.76141
x: Amount
y: Area
Calibration Level Weights:
Level 1 : 1
Level 2 : 1
Level 5 : 0.1
Level 6 : 0.1
Level 9 : 0.025
Level 10 : 0.025
Level 15 : 0.004762
Level 16 : 0.004762
Level 19 : 0.004008
Level 20 : 0.004008

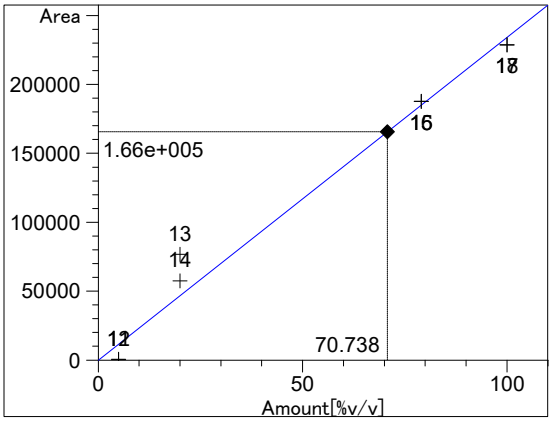


Carbon Dioxide at exp. RT: 2.800
TCD2 B, Back Signal
Correlation: 0.99843
Residual Std. Dev.: 1614.70844
Formula: y = mx
m: 2663.11564
x: Amount
y: Area
Calibration Level Weights:
Level 3 : 1
Level 4 : 1
Level 1 : 0.266667
Level 2 : 0.266667
Level 7 : 0.1
Level 8 : 0.1
Level 5 : 0.026667
Level 6 : 0.026667
Level 11 : 0.02
Level 12 : 0.02
Level 9 : 0.006667
Level 10 : 0.006667

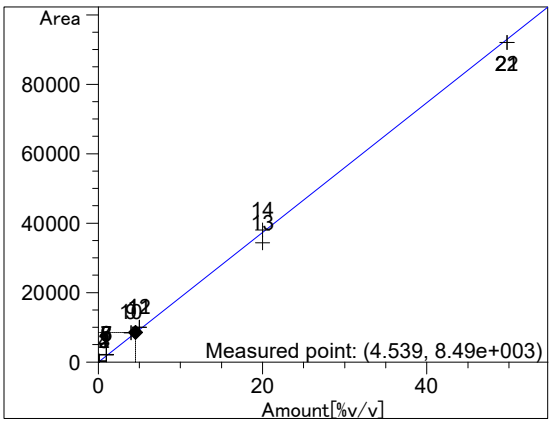
Data File C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212025.D
Sample Name: FG ICV1,S14249,4%

Level 13 : 0.005
Level 14 : 0.005

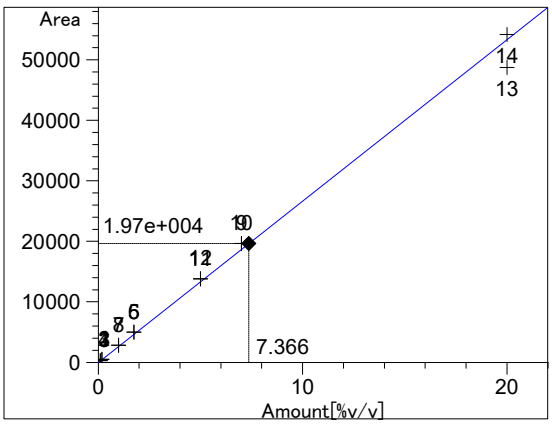
Data File C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212025.D
Sample Name: FG ICV1,S14249,4%



Nitrogen at exp. RT: 3.700
TCD2 B, Back Signal
Correlation: 0.99639
Residual Std. Dev.: 13777.45237
Formula: y = mx
m: 2343.05516
x: Amount
y: Area
Calibration Level Weights:
Level 11 : 1
Level 12 : 1
Level 13 : 1
Level 14 : 1
Level 15 : 1
Level 16 : 1
Level 17 : 1
Level 18 : 1



Methane at exp. RT: 4.600
TCD2 B, Back Signal
Correlation: 0.99868
Residual Std. Dev.: 997.57282
Formula: y = mx
m: 1869.61367
x: Amount
y: Area
Calibration Level Weights:
Level 1 : 1
Level 2 : 1
Level 3 : 1
Level 4 : 1
Level 5 : 0.1
Level 6 : 0.1
Level 7 : 0.1
Level 8 : 0.1
Level 9 : 0.025
Level 10 : 0.025
Level 11 : 0.02
Level 12 : 0.02
Level 13 : 0.005
Level 14 : 0.005
Level 21 : 0.00201
Level 22 : 0.00201



Carbon Monoxide at exp. RT: 4.900
TCD2 B, Back Signal
Correlation: 0.99837
Residual Std. Dev.: 1377.43867
Formula: y = mx
m: 2668.67291
x: Amount
y: Area
Calibration Level Weights:
Level 3 : 1
Level 4 : 1
Level 1 : 0.571429
Level 2 : 0.571429
Level 7 : 0.1
Level 8 : 0.1

Data File C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212025.D
Sample Name: FG ICV1,S14249,4%

Level 5 : 0.057143
Level 6 : 0.057143
Level 11 : 0.02
Level 12 : 0.02
Level 9 : 0.014286
Level 10 : 0.014286
Level 13 : 0.005
Level 14 : 0.005

INITIAL AND CONTINUING CALIBRATION VERIFICATION SUMMARY

Enthalpy Analytical, an affiliate of Montrose Environmental Company
931 W. Barkley Ave., Orange, CA 92868 • T: (714) 771-6900 • F: (714) 531-1209
www.enthalpy.com/socal

INITIAL AND CONTINUING CALIBRATION VERIFICATION SUMMARY

Method: D1946
Instrument ID: AIR-GC02
Analyst: MPD
ICAL Run File: 2/12/2020
Sample Run File: 12/1/2021
Units: mol %

Parameter: 120121_FG

Sample ID	Analysis Date	Compound Name	Area	Concentration	Recovered	%Recovery Limit 85-115%
ICV (S14249)	2/12/2021 21:27	Oxygen+Argon	8958	4	4.196	105
		Carbon Dioxide	41570	15	15.610	104
		Nitrogen	165743	70	70.738	101
		Methane	8486	4	4.539	113
		Carbon Monoxide	19659	7	7.366	105
ICV DUP (S14249)	2/12/2021 21:42	Oxygen+Argon	8964	4	4.199	105
		Carbon Dioxide	41582	15	15.614	104
		Nitrogen	165771	70	70.750	101
		Methane	8488	4	4.540	114
		Carbon Monoxide	19664	7	7.369	105
FG CCV/BS (S14249)	12/1/2021 9:31	Oxygen+Argon	9107	4	4.266	107
		Carbon Dioxide	37067	15	13.918	93
		Nitrogen	168943	70	72.104	103
		Methane	8711	4	4.659	116
		Carbon Monoxide	20120	7	7.539	108
FG CCV/BSD (S14249)	12/1/2021 9:47	Oxygen+Argon	9103	4	4.264	107
		Carbon Dioxide	37062	15	13.917	93
		Nitrogen	168851	70	72.064	103
		Methane	8704	4	4.655	116
		Carbon Monoxide	20106	7	7.534	108
Closing FG CCV (s14249)	12/1/2021 16:37	Oxygen+Argon	9072	4	4.250	106
		Carbon Dioxide	36970	15	13.882	93
		Nitrogen	168396	70	71.870	103
		Methane	8669	4	4.637	116
		Carbon Monoxide	20030	7	7.506	107

RAW DATA SAMPLES

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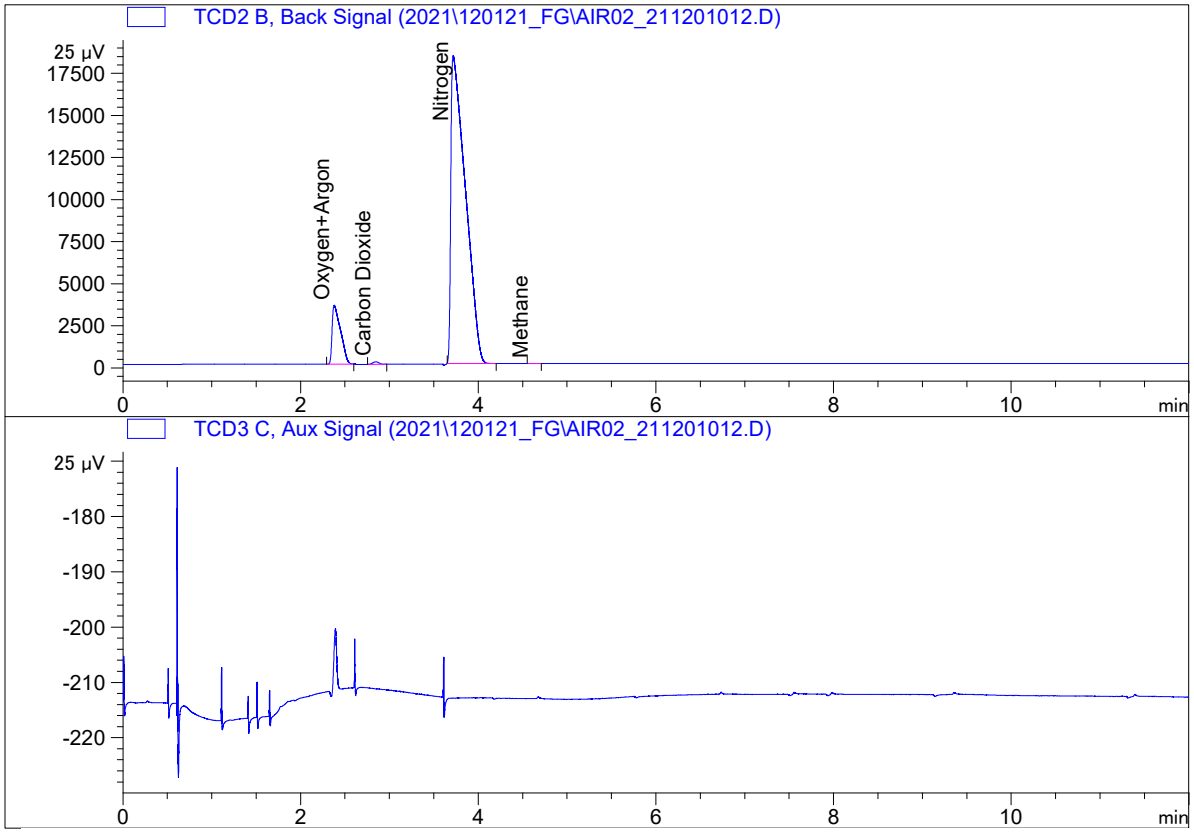
Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201012.D
Sample Name: 453958-001,279032,2x,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 12
Acq Operator	: GSG	Location	: Vial 9
Injection Date	: 12/1/2021 12:43:43 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M		
Last Changed	: 8/30/2021 11:34:43 AM		



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 2.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.378	BBA	23055.160	4.684e-4	21.600	Oxygen+Argon
2.845	BB	720.754	3.755e-4	0.541	Carbon Dioxide
3.718	BB S	207773.828	4.268e-4	177.353	Nitrogen
4.614	BB	19.800	5.349e-4	0.021	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

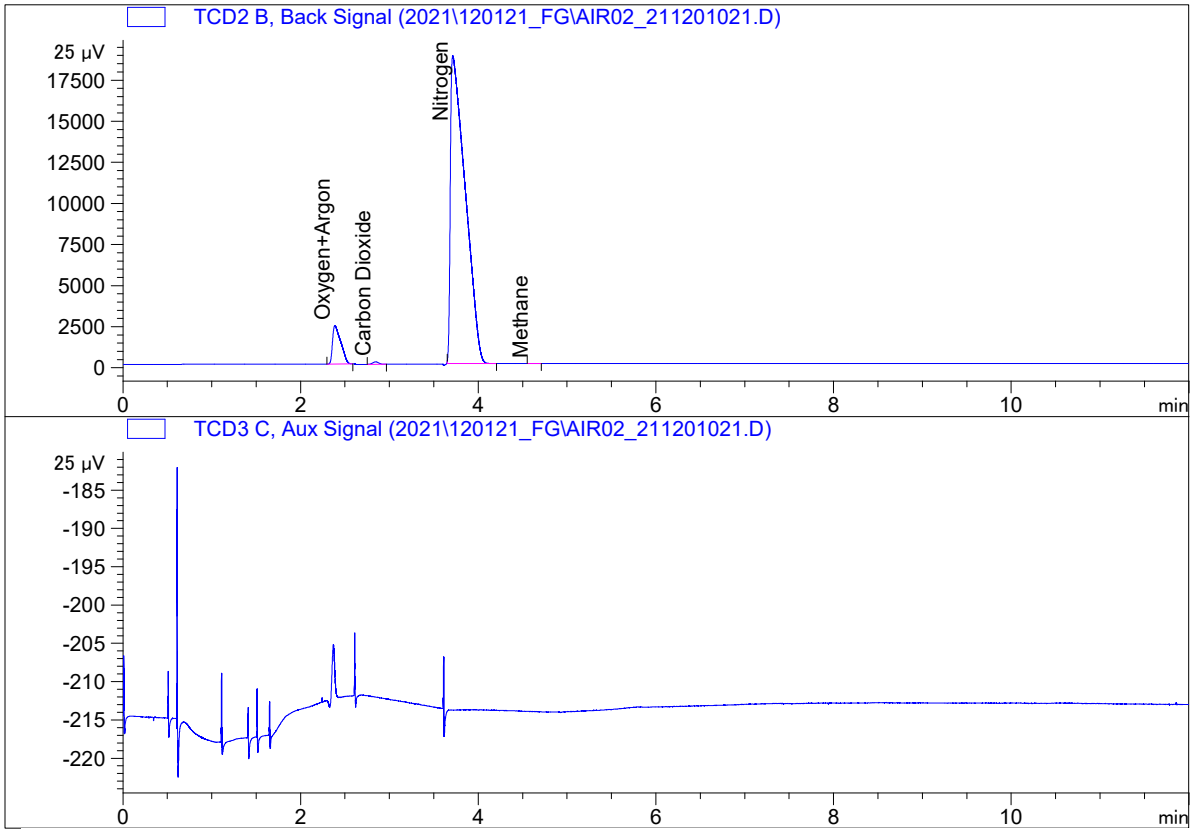
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201021.D
Sample Name: 453958-002,279032,3x,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 21
Acq Operator	: GSG	Location	: Vial 6
Injection Date	: 12/1/2021 3:33:14 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M		
Last Changed	: 8/30/2021 11:34:43 AM		



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 3.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.385	BB	15069.083	4.684e-4	21.177	Oxygen+Argon
2.844	BB	734.457	3.755e-4	0.827	Carbon Dioxide
3.712	BB S	216462.219	4.268e-4	277.154	Nitrogen
4.614	BB	20.003	5.349e-4	0.032	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

Signal : TCD3 C, Aux Signal

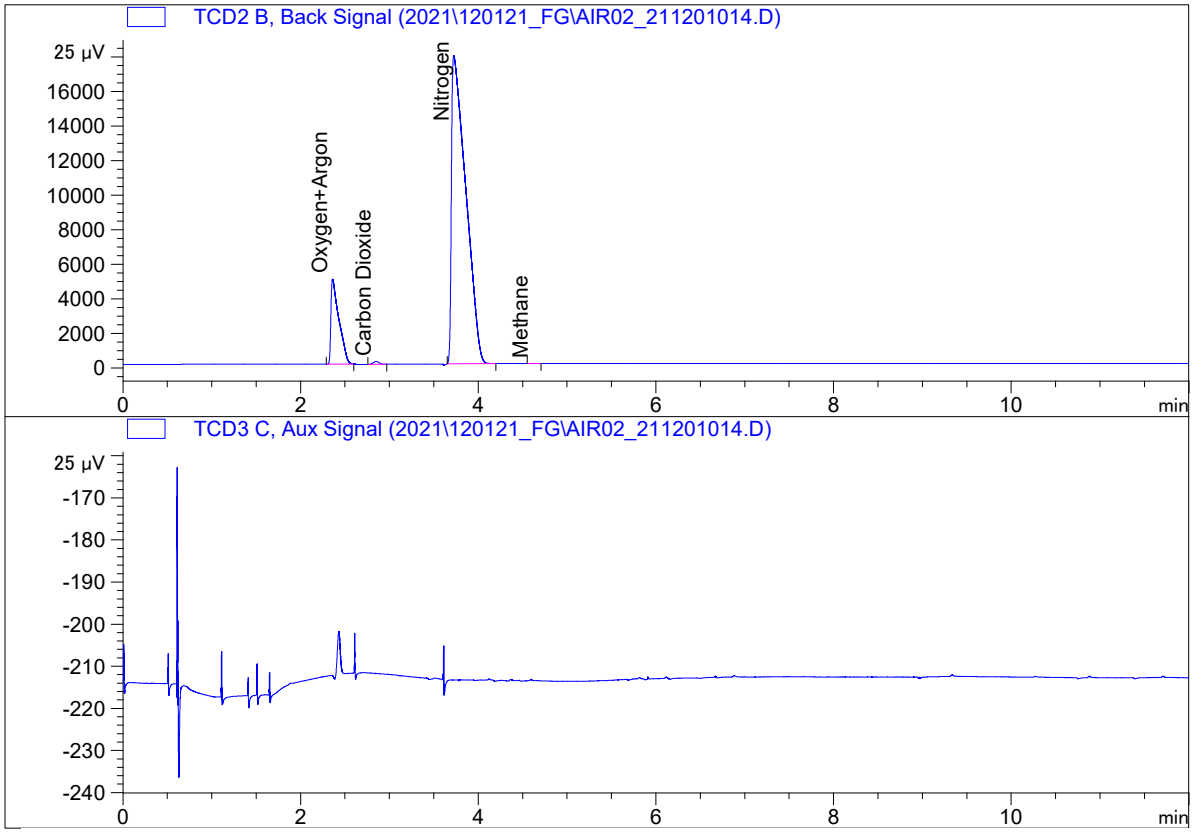
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201014.D
Sample Name: 453958-002,279032,2x,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 14
Acq Operator	: GSG	Location	: Vial 10
Injection Date	: 12/1/2021 1:15:56 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M		
Last Changed	: 8/30/2021 11:34:43 AM		

12/02/21 MPD: Not reported, reference run, can low pressure.



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 2.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.358	BBAS	30769.854	4.684e-4	28.827	Oxygen+Argon
2.848	BB	770.997	3.755e-4	0.579	Carbon Dioxide
3.724	BB S	198908.422	4.268e-4	169.786	Nitrogen
4.612	BB	20.718	5.349e-4	0.022	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

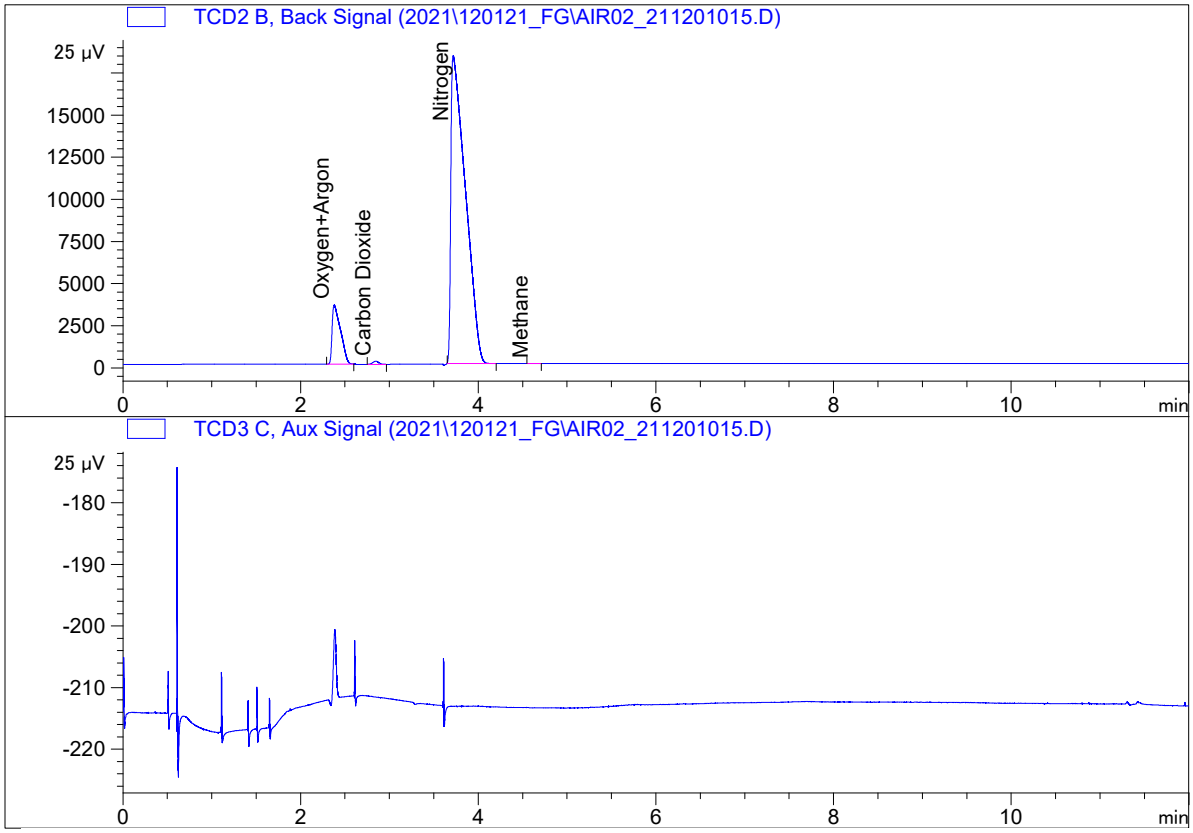
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201015.D
Sample Name: 453958-003,279032,2x,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 15
Acq Operator	: GSG	Location	: Vial 11
Injection Date	: 12/1/2021 1:32:06 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M		
Last Changed	: 8/30/2021 11:34:43 AM		



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 2.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.378	BBA	23124.580	4.684e-4	21.665	Oxygen+Argon
2.844	BB	889.097	3.755e-4	0.668	Carbon Dioxide
3.717	BB S	207136.266	4.268e-4	176.809	Nitrogen
4.613	BB	20.697	5.349e-4	0.022	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

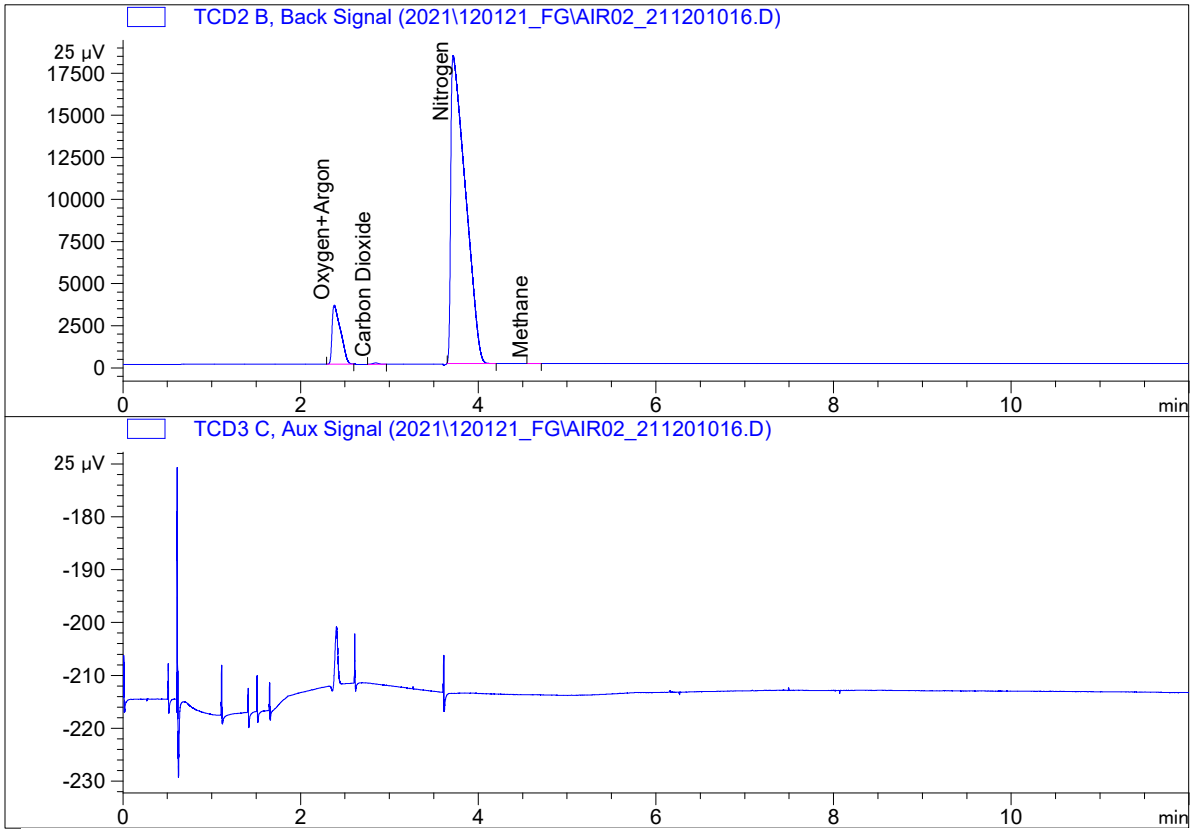
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201016.D
Sample Name: 453958-004,279032,2x,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 16
Acq Operator	: GSG	Location	: Vial 12
Injection Date	: 12/1/2021 1:50:40 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M		
Last Changed	: 8/30/2021 11:34:43 AM		



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 2.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.378	BBA	23097.229	4.684e-4	21.639	Oxygen+Argon
2.844	BB	380.038	3.755e-4	0.285	Carbon Dioxide
3.715	BB S	207935.969	4.268e-4	177.491	Nitrogen
4.614	BB	20.127	5.349e-4	0.022	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

Signal : TCD3 C, Aux Signal

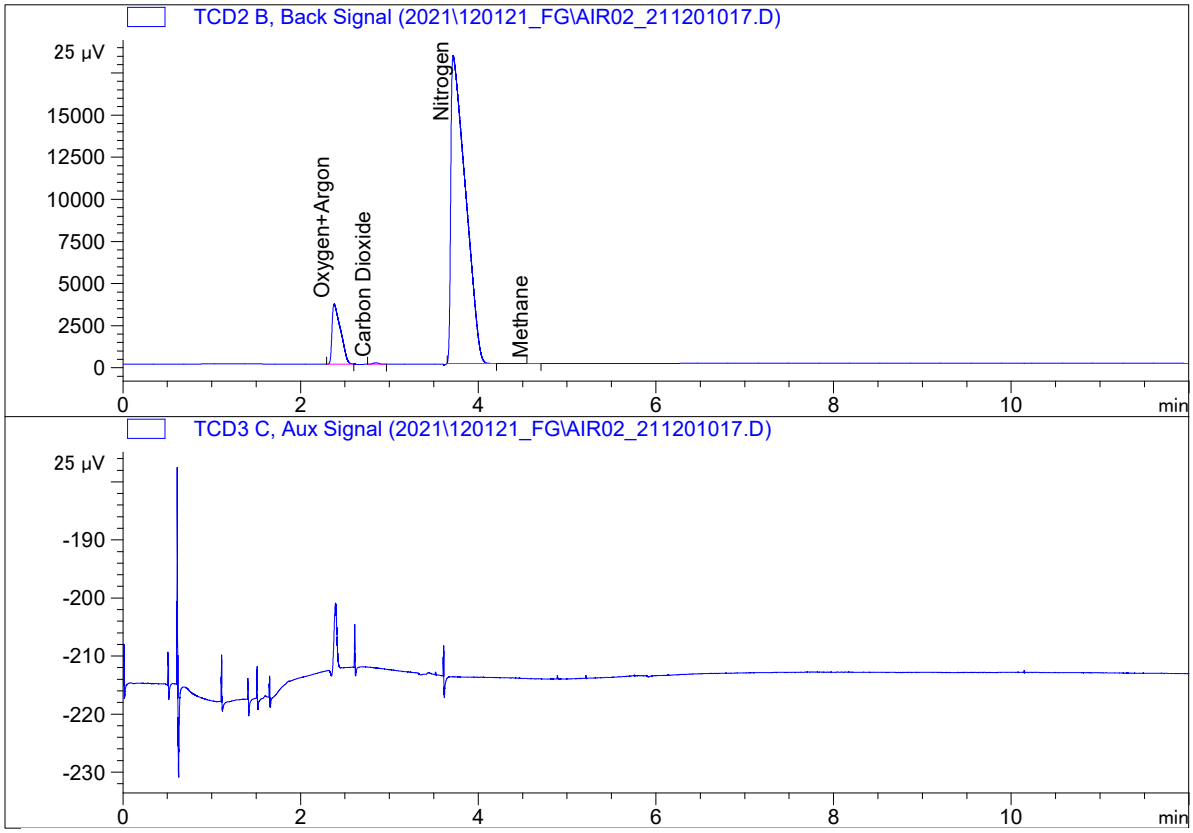
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201017.D
Sample Name: 453958-005,279032,2x,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 17
Acq Operator	: GSG	Location	: Vial 14
Injection Date	: 12/1/2021 2:06:55 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M
Last Changed : 8/30/2021 11:34:43 AM



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 2.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.378	BBA	23581.787	4.684e-4	22.093	Oxygen+Argon
2.845	BB	429.443	3.755e-4	0.323	Carbon Dioxide
3.718	BB S	207631.359	4.268e-4	177.231	Nitrogen
4.613	BB	20.267	5.349e-4	0.022	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

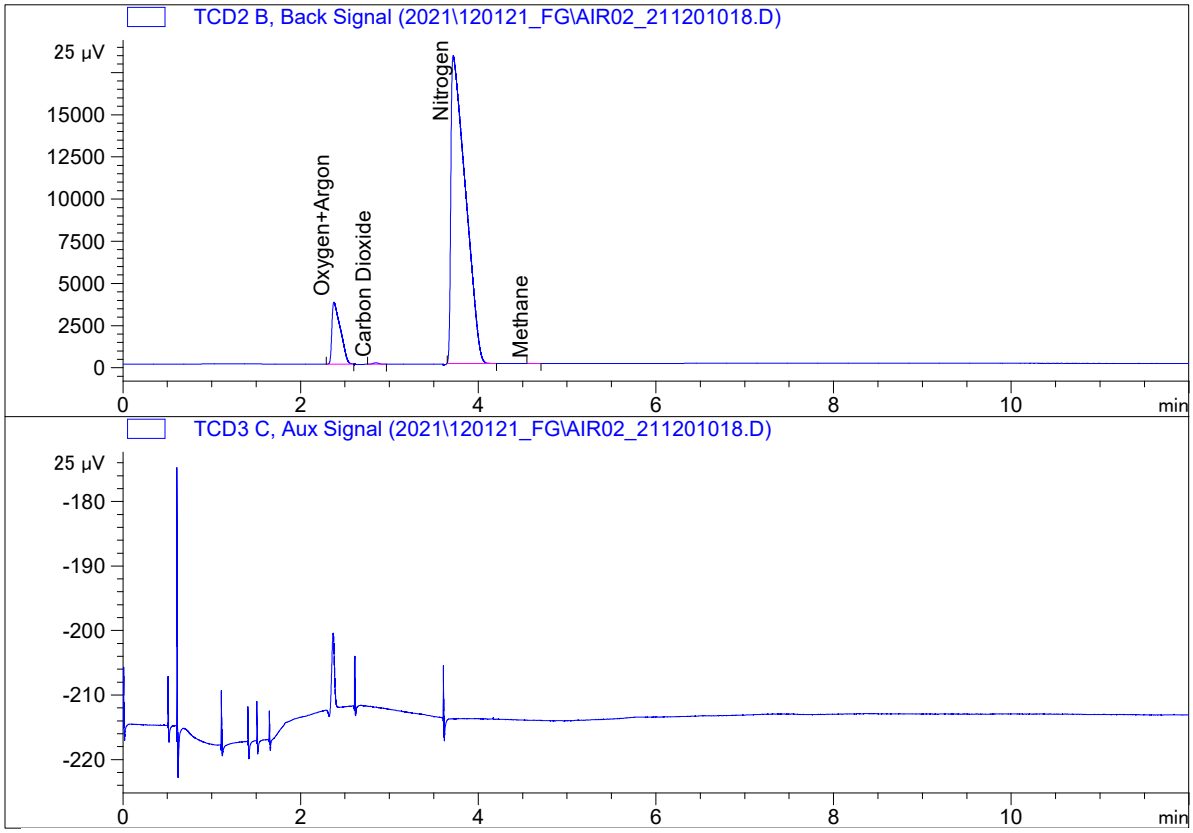
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201018.D
Sample Name: 453958-006,279032,2x,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 18
Acq Operator	: GSG	Location	: Vial 15
Injection Date	: 12/1/2021 2:23:11 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M		
Last Changed	: 8/30/2021 11:34:43 AM		



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 2.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.376	BBA	24230.453	4.684e-4	22.701	Oxygen+Argon
2.846	BB	409.916	3.755e-4	0.308	Carbon Dioxide
3.717	BB S	206667.250	4.268e-4	176.408	Nitrogen
4.612	BB	20.249	5.349e-4	0.022	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

Signal : TCD3 C, Aux Signal

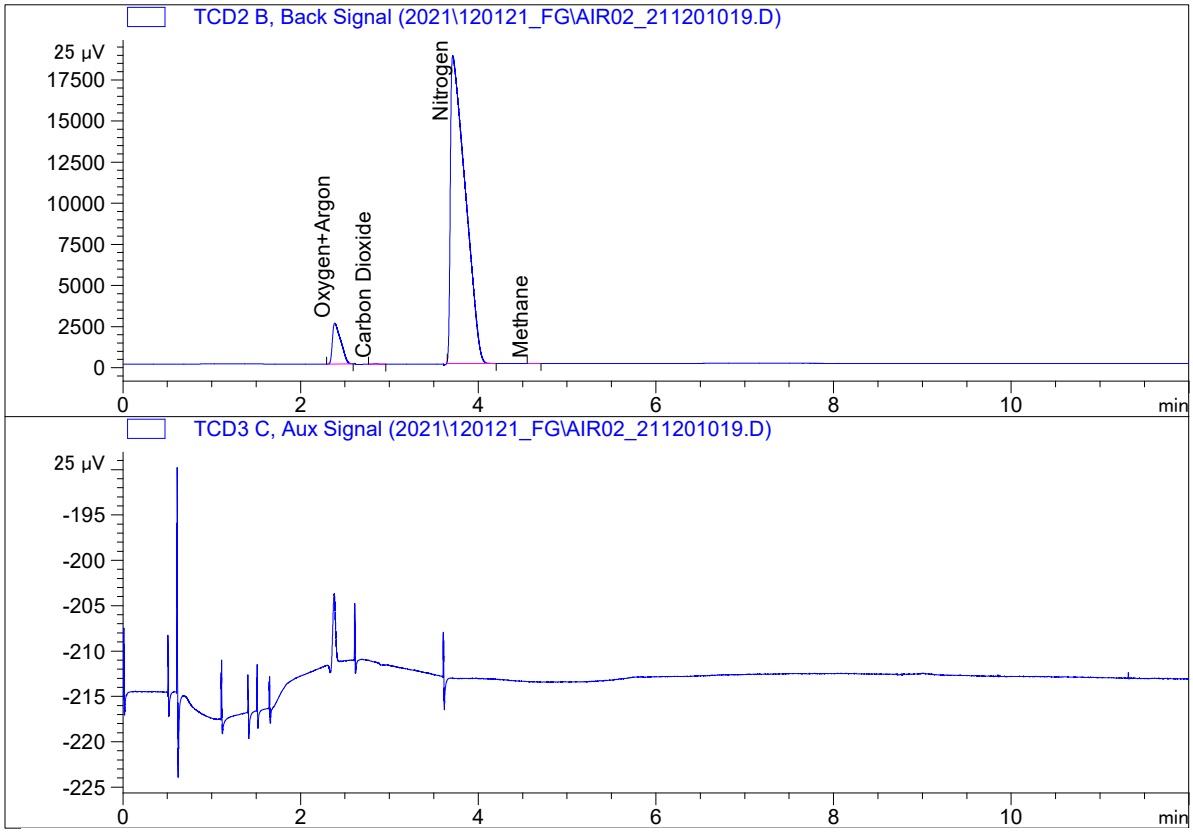
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201019.D
Sample Name: 453958-007,279032,3x,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 19
Acq Operator	: GSG	Location	: Vial 16
Injection Date	: 12/1/2021 3:01:20 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M
Last Changed : 8/30/2021 11:34:43 AM



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 3.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.383	BB	16068.800	4.684e-4	22.582	Oxygen+Argon
2.842	BB	130.219	3.755e-4	0.147	Carbon Dioxide
3.713	BB S	216303.844	4.268e-4	276.951	Nitrogen
4.612	BB	20.209	5.349e-4	0.032	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

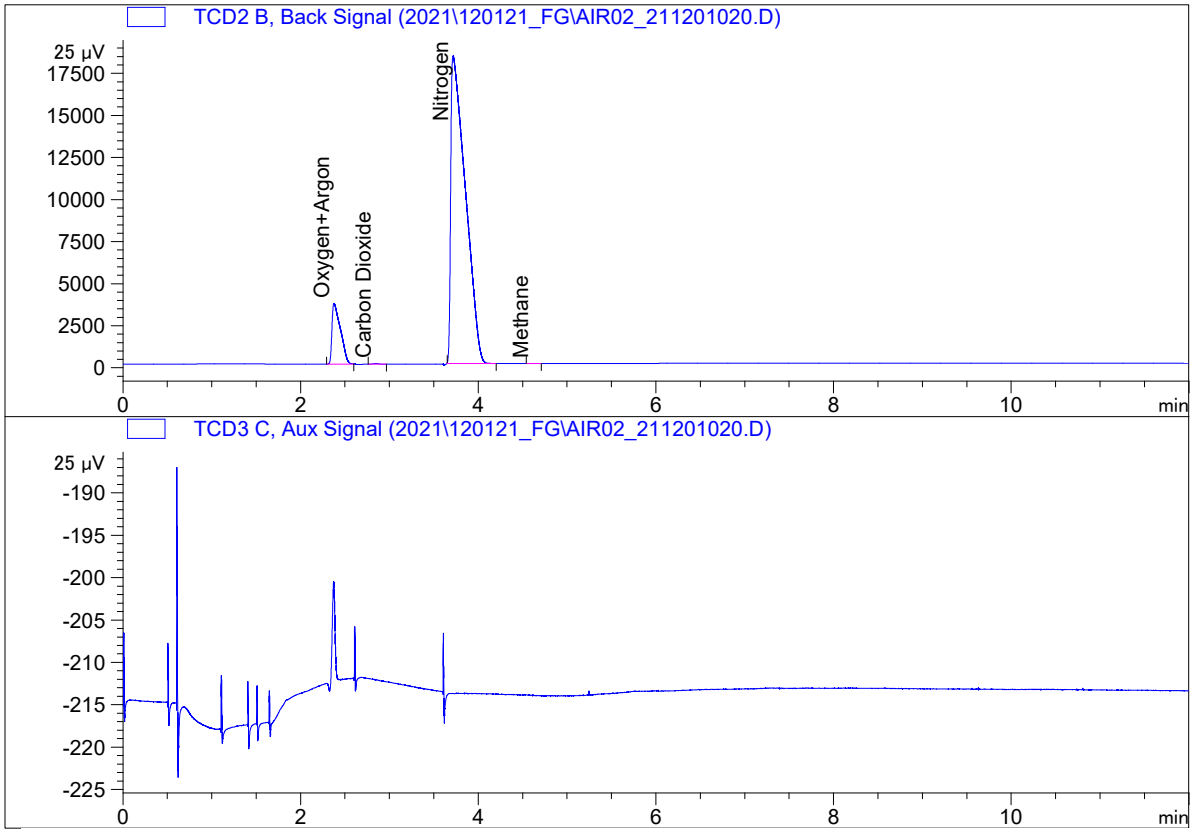
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201020.D
Sample Name: 453958-008,279032,2x,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 20
Acq Operator	: GSG	Location	: Vial 5
Injection Date	: 12/1/2021 3:17:14 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M		
Last Changed	: 8/30/2021 11:34:43 AM		



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 2.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.376	BBA	23856.504	4.684e-4	22.351	Oxygen+Argon
2.846	BB	184.928	3.755e-4	0.139	Carbon Dioxide
3.716	BB S	207956.172	4.268e-4	177.509	Nitrogen
4.612	BB	20.515	5.349e-4	0.022	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

RAW DATA

BATCH QUALITY CONTROL

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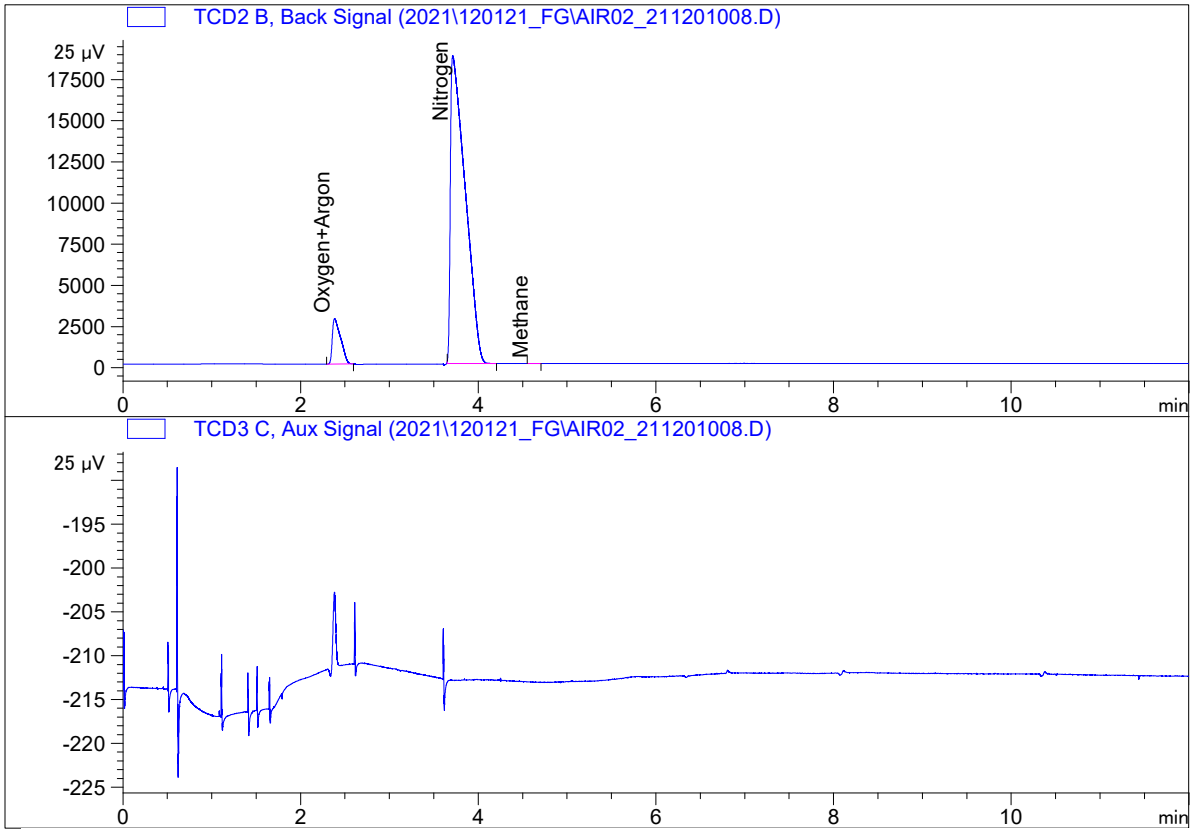
Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201008.D
Sample Name: 454140-001D,QC958443,279032,2.25x,PDF:1 1

Acq. Instrument : AIR-GC02 Seq Line : 8
Acq Operator : GSG Location : Vial 5
Injection Date : 12/1/2021 11:39:33 AM Inj. No. : 1
Inj. Vol. : 3100 µl
Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M
Last Changed : 8/30/2021 11:34:43 AM



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 2.250000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.382	BB	17906.363	4.684e-4	18.873	Oxygen+Argon
0.000		0.000	0.000	0.000	Carbon Dioxide
3.712	BB S	215769.266	4.268e-4	207.200	Nitrogen
4.612	BB	20.030	5.349e-4	0.024	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

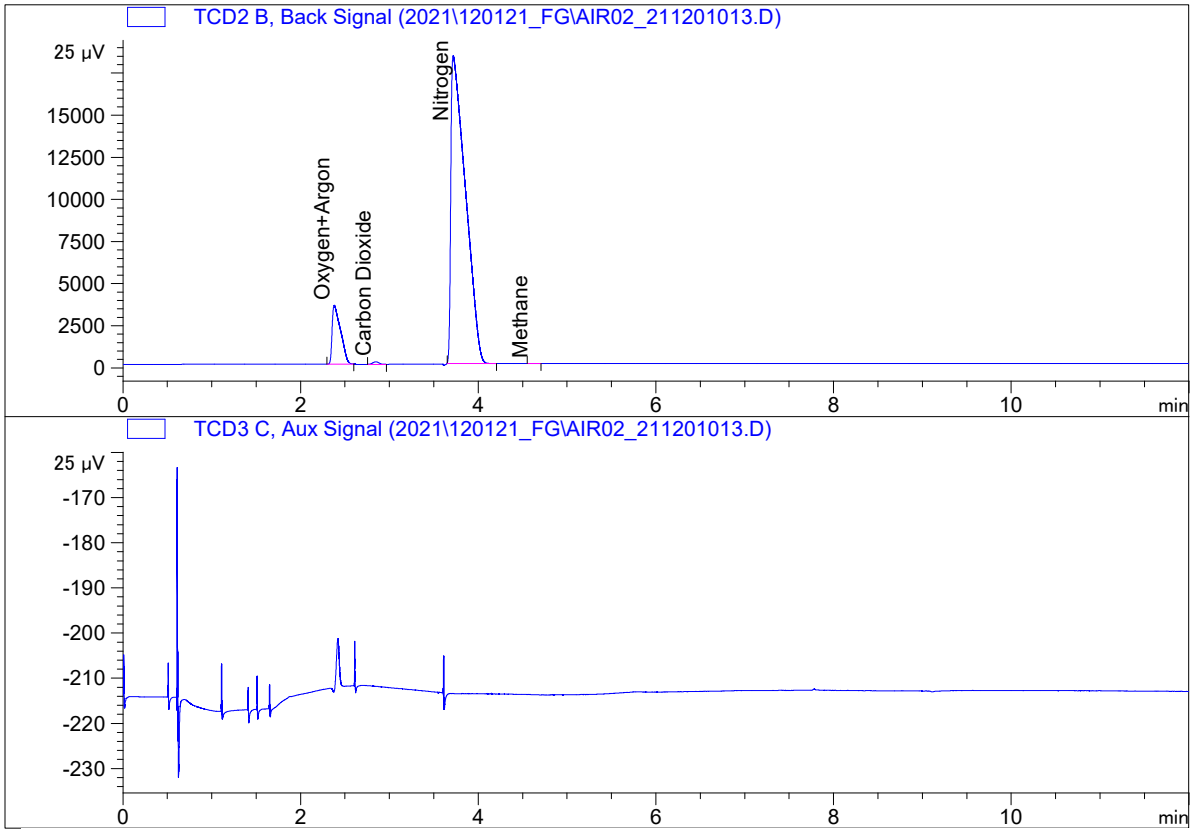
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201013.D
Sample Name: 453958-001D,QC958444,279032,2x,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 13
Acq Operator	: GSG	Location	: Vial 9
Injection Date	: 12/1/2021 12:59:47 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M		
Last Changed	: 8/30/2021 11:34:43 AM		



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 2.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.378	BBA	23029.047	4.684e-4	21.575	Oxygen+Argon
2.845	BB	719.295	3.755e-4	0.540	Carbon Dioxide
3.718	BB S	207589.641	4.268e-4	177.196	Nitrogen
4.611	BB	20.148	5.349e-4	0.022	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

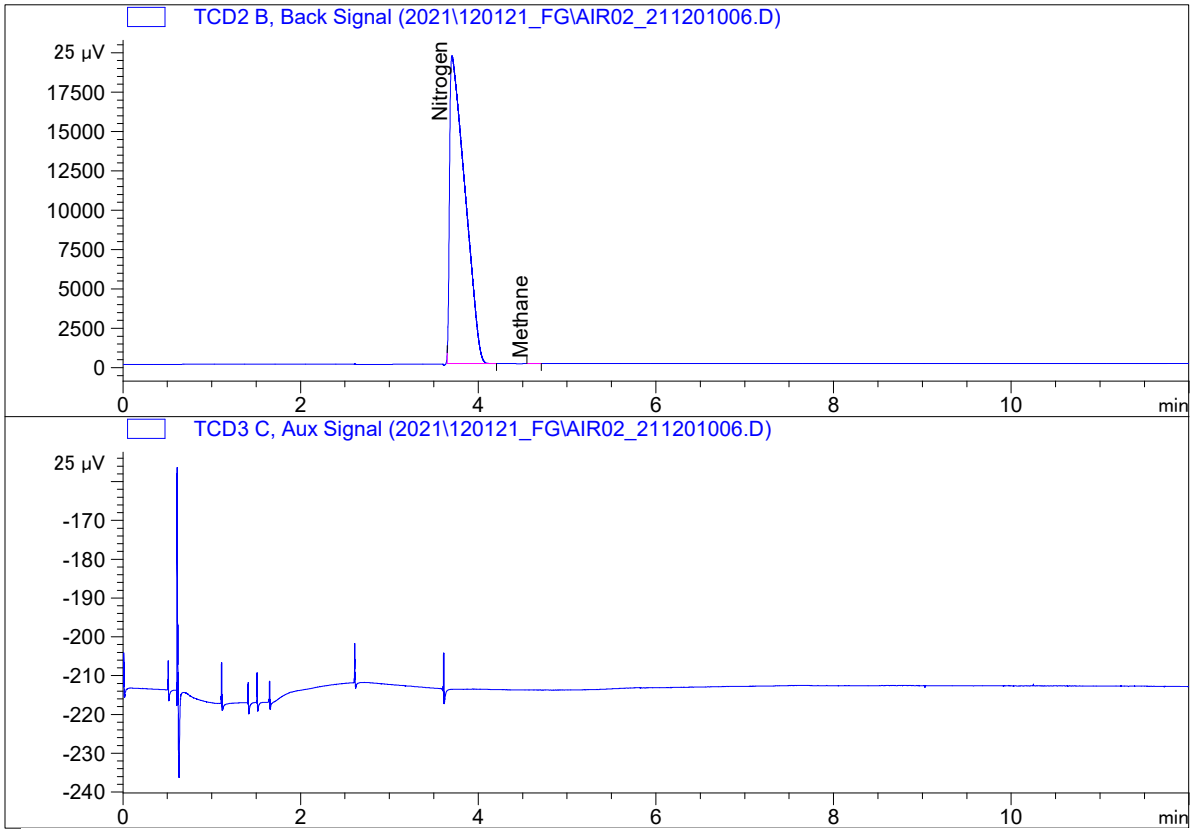
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201006.D
Sample Name: BLANK,QC958442,279032,1x,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 6
Acq Operator	: GSG	Location	: Vial 1
Injection Date	: 12/1/2021 10:34:49 AM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M		
Last Changed	: 8/30/2021 11:34:43 AM		



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Oxygen+Argon
0.000		0.000	0.000	0.000	Carbon Dioxide
3.704	BB S	232891.234	4.268e-4	99.396	Nitrogen
4.613	BB	20.535	5.349e-4	0.011	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

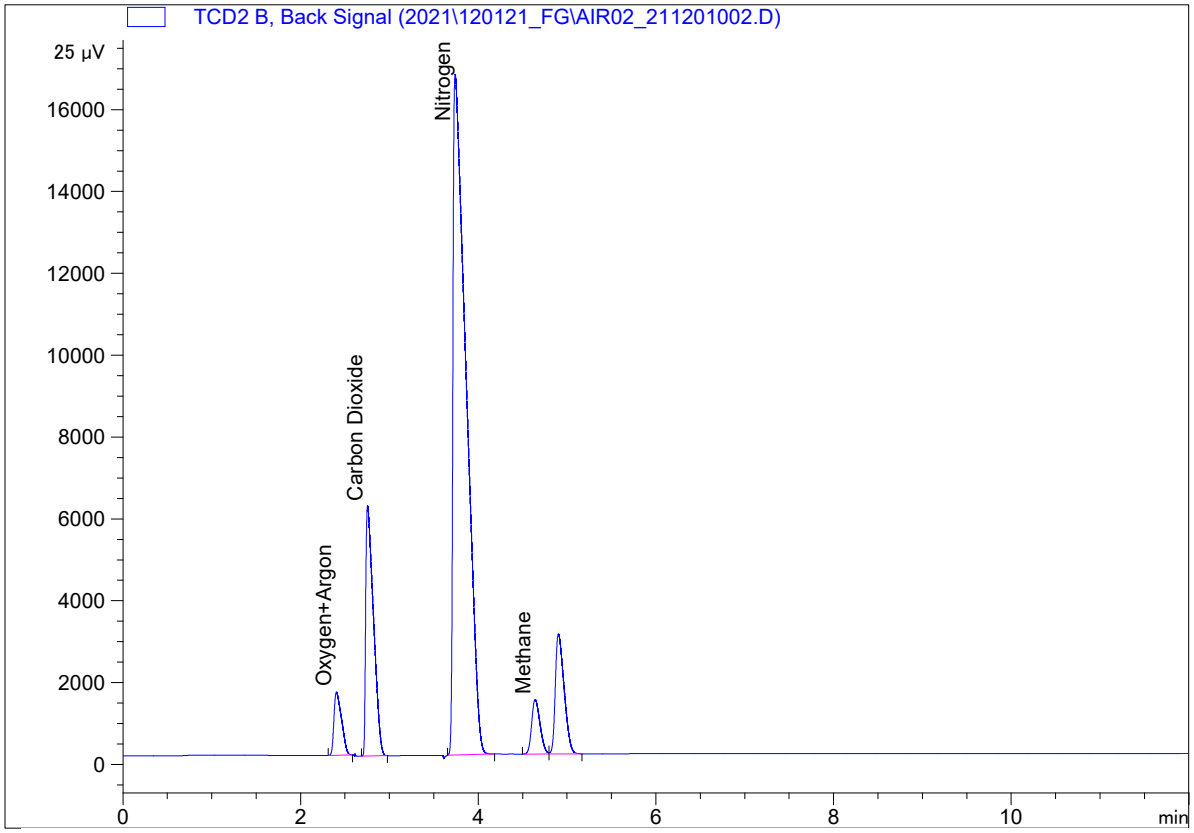
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201002.D
Sample Name: FG CCV/BS,QC958440,279032,S14249,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 2
Acq Operator	: GSG	Location	: Vial 3
Injection Date	: 12/1/2021 9:31:16 AM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M		
Last Changed	: 8/30/2021 11:34:43 AM		



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.402	BB	9107.052	4.684e-4	4.266	Oxygen+Argon
2.754	BB S	37066.508	3.755e-4	13.918	Carbon Dioxide
3.739	BB S	168943.156	4.268e-4	72.104	Nitrogen
4.641	BV	8710.607	5.349e-4	4.659	Methane
4.902	VB	20119.854	3.747e-4	7.539	Carbon Monoxide

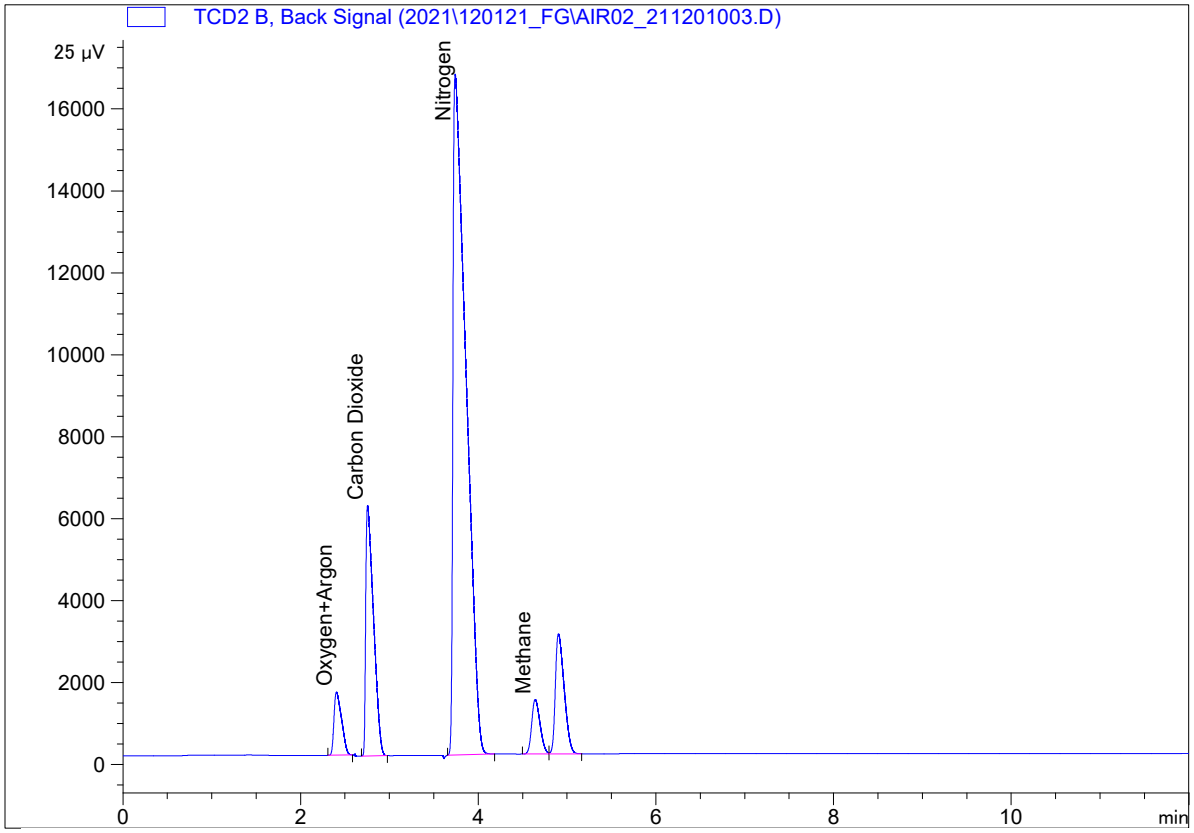
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201003.D
Sample Name: FG CCV/BSD,QC958441,279032,14249,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 3
Acq Operator	: GSG	Location	: Vial 3
Injection Date	: 12/1/2021 9:47:05 AM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M		
Last Changed	: 8/30/2021 11:34:43 AM		



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.404	BB	9102.665	4.684e-4	4.264	Oxygen+Argon
2.754	BB S	37062.285	3.755e-4	13.917	Carbon Dioxide
3.741	BB S	168850.828	4.268e-4	72.064	Nitrogen
4.641	BV	8703.895	5.349e-4	4.655	Methane
4.902	VB	20105.512	3.747e-4	7.534	Carbon Monoxide

Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

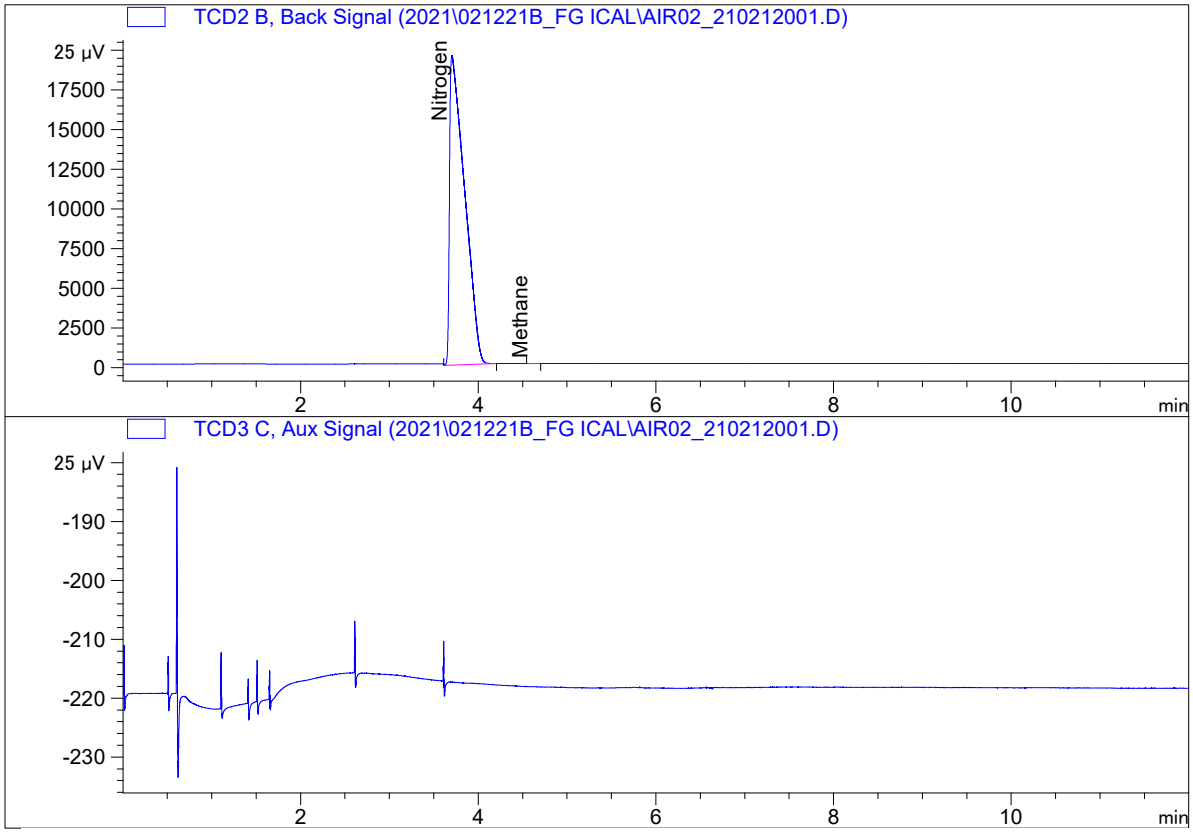
*** End of Report ***

RAW DATA

INTIAL CALIBRATION

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212001.D
Sample Name: N2 blank 1

Acq. Instrument	: GC02	Seq Line	: 1
Acq Operator	: GSG	Location	: Vial 1
Injection Date	: 2/12/2021 3:05:46 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M		
Last Changed	: 2/18/2021 4:42:20 PM		



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Oxygen
0.000		0	0.000	0.000	Carbon Dioxide
3.702	BB S	228596	0.000	97.563	Nitrogen
4.610	BB	20	0.001	0.011	Methane
0.000		0	0.000	0.000	Carbon Monoxide

Signal : TCD3 C, Aux Signal

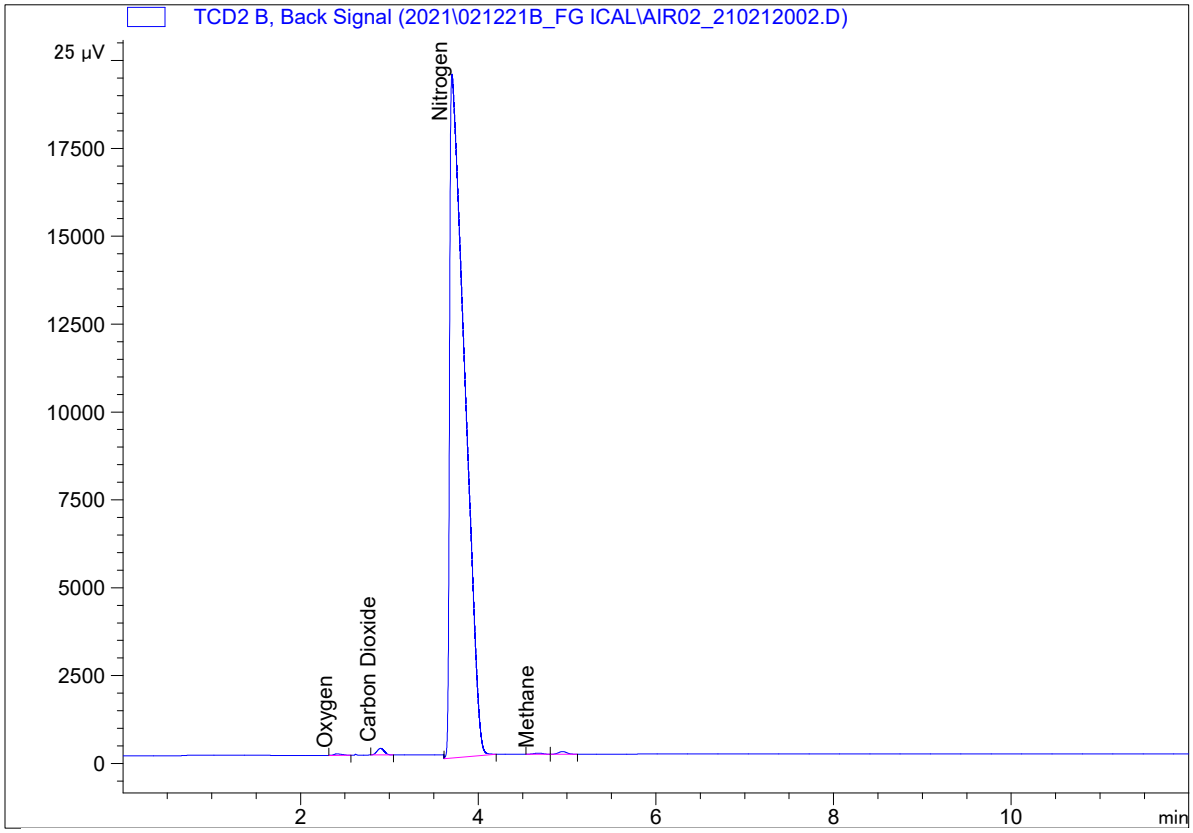
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212002.D
Sample Name: FG IC1,S14256,0.1% no Ar 1

Acq. Instrument	: GC02	Seq Line	: 2
Acq Operator	: GSG	Location	: Vial 5
Injection Date	: 2/12/2021 3:21:40 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.408	BB	253	0.000	0.118	Oxygen
2.899	BB	1078	0.000	0.405	Carbon Dioxide
3.703	BB S	227057	0.000	96.906	Nitrogen
4.679	BV	229	0.001	0.123	Methane
4.946	VB	501	0.000	0.188	Carbon Monoxide

Signal : TCD3 C, Aux Signal

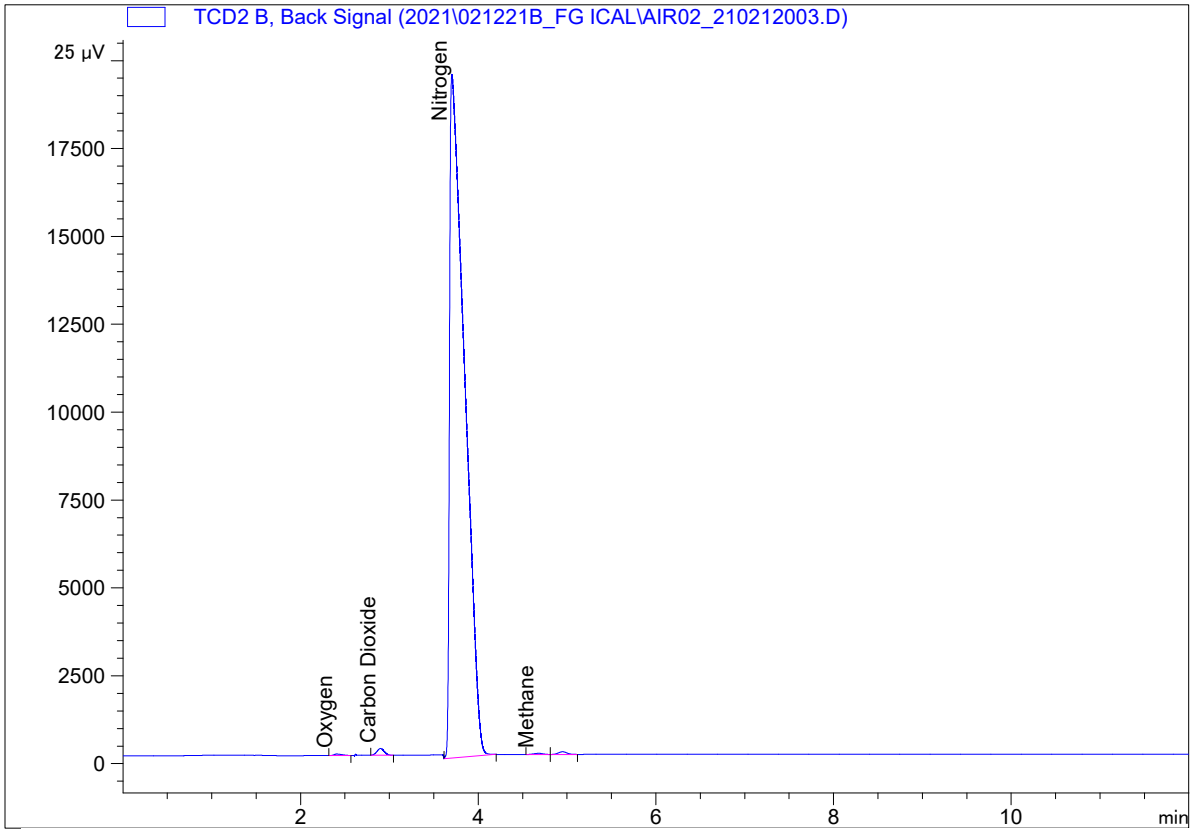
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212003.D
Sample Name: FG IC1,S14256,0.1% no Ar 1

Acq. Instrument	: GC02	Seq Line	: 3
Acq Operator	: GSG	Location	: Vial 5
Injection Date	: 2/12/2021 3:37:34 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.407	BB	254	0.000	0.119	Oxygen
2.898	BB	1077	0.000	0.405	Carbon Dioxide
3.702	BB S	226911	0.000	96.844	Nitrogen
4.678	BV	229	0.001	0.122	Methane
4.945	VB	501	0.000	0.188	Carbon Monoxide

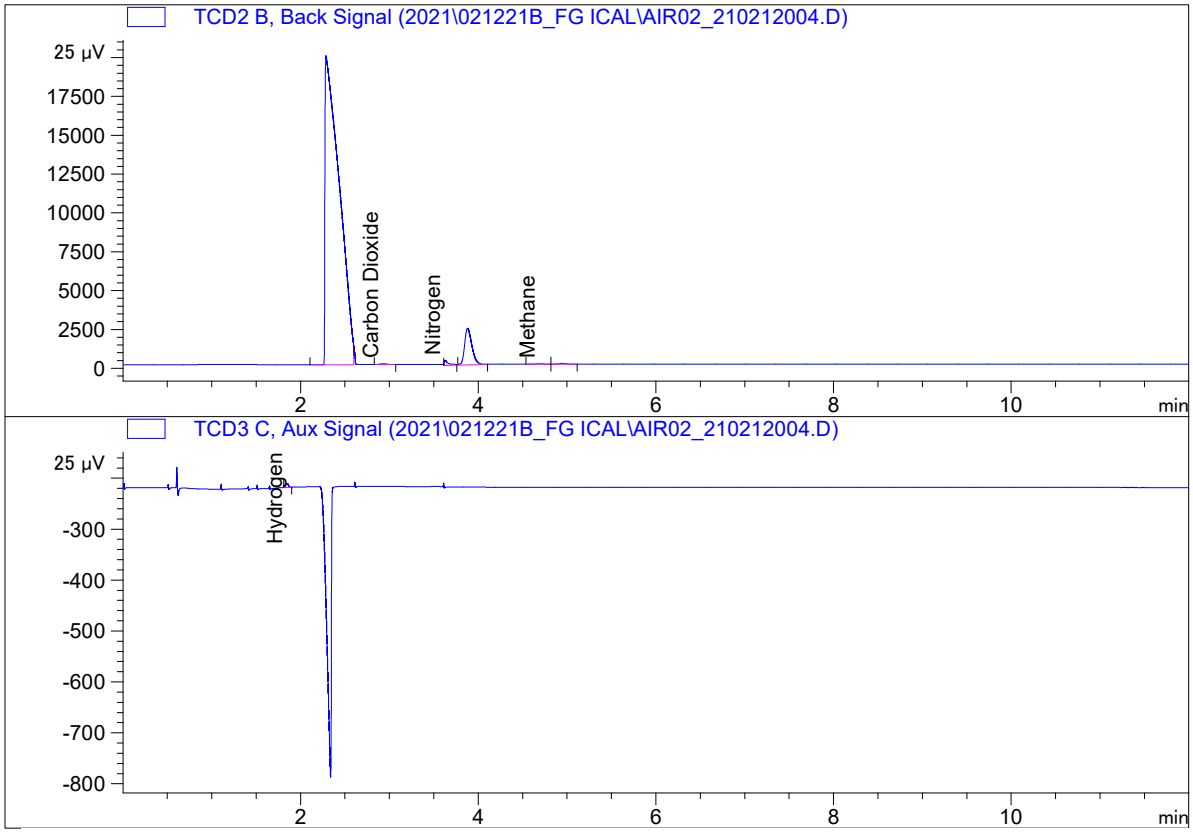
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212004.D
Sample Name: FG IC2,S14081,0.1% 1

Acq. Instrument : GC02 Seq Line : 4
Acq Operator : GSG Location : Vial 6
Injection Date : 2/12/2021 3:53:30 PM Inj. No. : 1
Inj. Vol. : 3100 µl
Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Oxygen
2.928	BB	266	0.000	0.100	Carbon Dioxide
3.625	BB	1100	0.000	0.470	Nitrogen
4.692	BV	224	0.001	0.120	Methane
4.939	VB	283	0.000	0.106	Carbon Monoxide

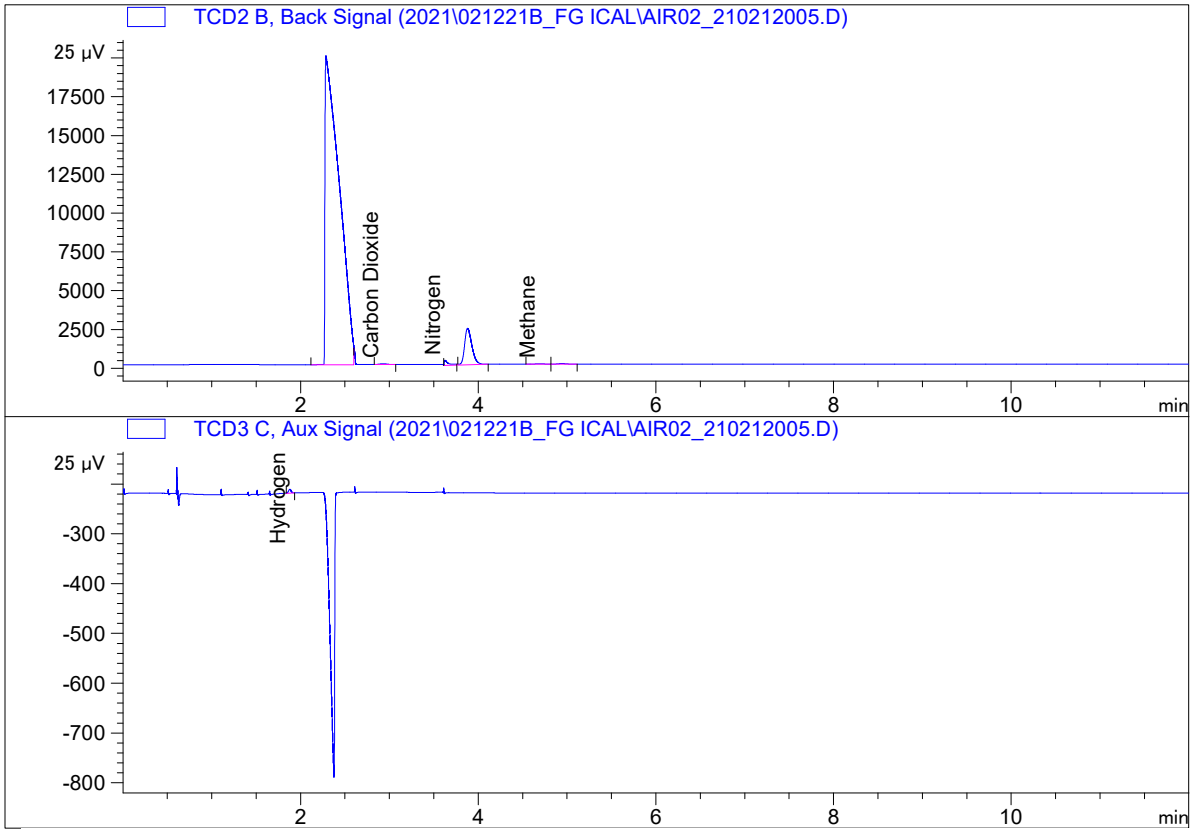
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
1.847	BB	17	0.007	0.113	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212005.D
Sample Name: FG IC2,S14081,0.1% 1

Acq. Instrument : GC02 Seq Line : 5
Acq Operator : GSG Location : Vial 6
Injection Date : 2/12/2021 4:09:23 PM Inj. No. : 1
Inj. Vol. : 3100 µl
Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Oxygen
2.928	BB	266	0.000	0.100	Carbon Dioxide
3.625	BB	1117	0.000	0.477	Nitrogen
4.692	BV	224	0.001	0.120	Methane
4.941	VB	284	0.000	0.106	Carbon Monoxide

Signal : TCD3 C, Aux Signal

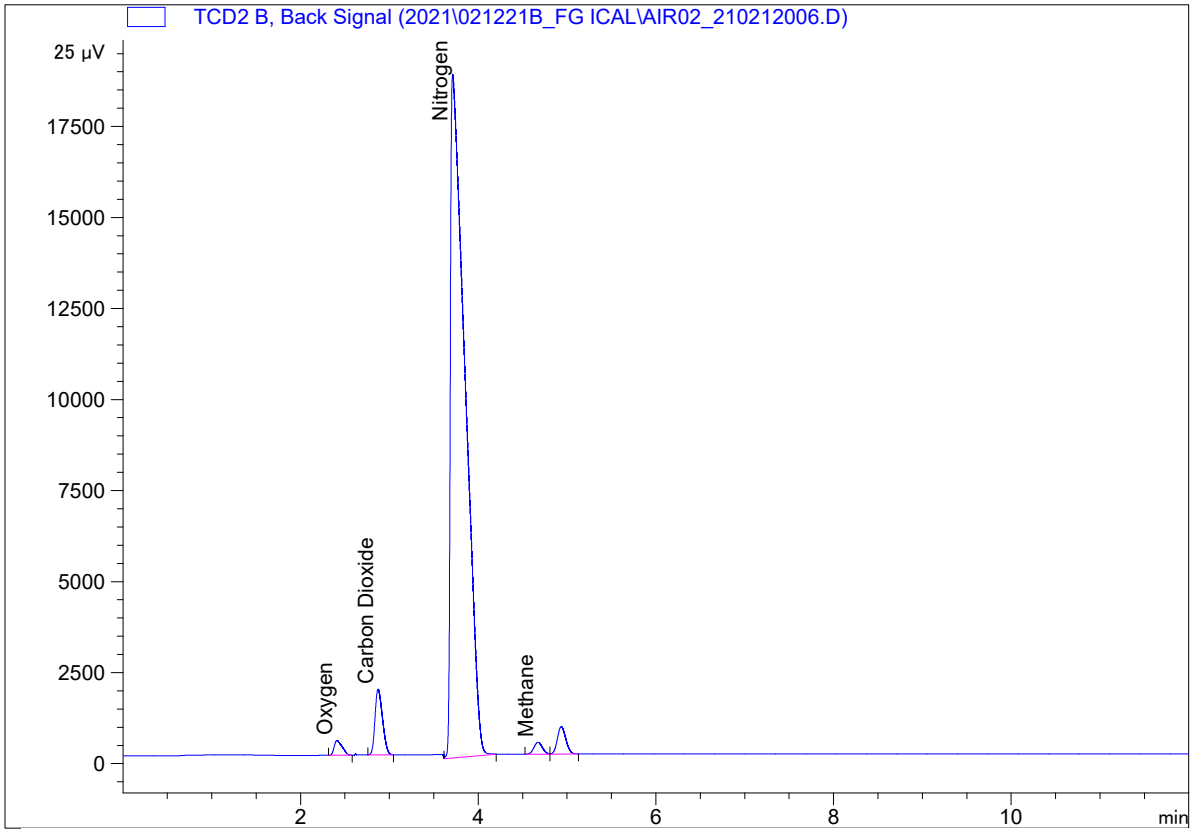
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
1.878	BB	17	0.007	0.114	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212006.D
Sample Name: FG IC3,~~S14081~~,1% no Ar S14799 GSG 2/18/21 1

Acq. Instrument	: GC02	Seq Line	: 6
Acq Operator	: GSG	Location	: Vial 7
Injection Date	: 2/12/2021 4:25:20 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.409	BB	2496	0.000	1.169	Oxygen
2.872	BB	10598	0.000	3.980	Carbon Dioxide
3.710	BB S	212154	0.000	90.546	Nitrogen
4.672	BV	2155	0.001	1.153	Methane
4.933	VB	4974	0.000	1.864	Carbon Monoxide

Signal : TCD3 C, Aux Signal

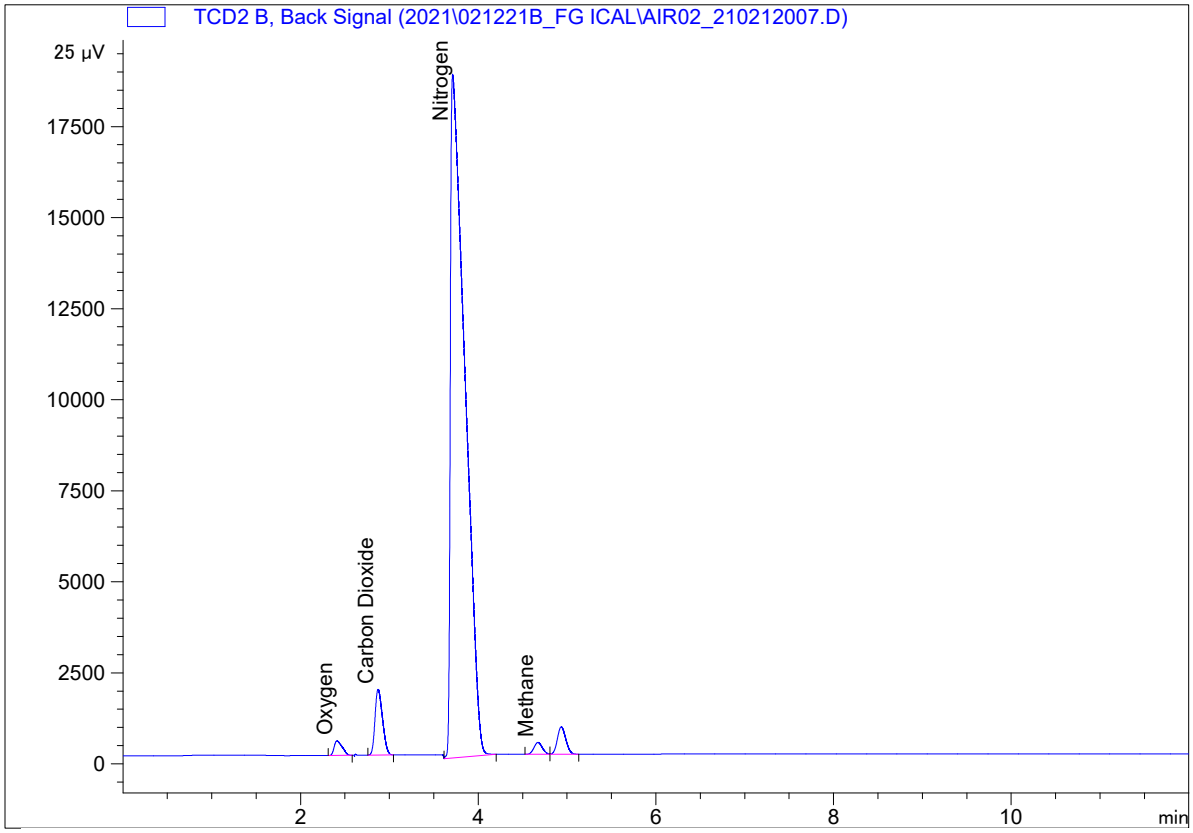
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212007.D
Sample Name: FG IC3,~~S14081~~,1% no Ar S14799 GSG 2/18/21 1

Acq. Instrument	: GC02	Seq Line	: 7
Acq Operator	: GSG	Location	: Vial 7
Injection Date	: 2/12/2021 4:41:19 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.408	BB	2495	0.000	1.169	Oxygen
2.871	BB	10603	0.000	3.981	Carbon Dioxide
3.711	BB S	212026	0.000	90.491	Nitrogen
4.671	BV	2156	0.001	1.153	Methane
4.932	VB	4976	0.000	1.864	Carbon Monoxide

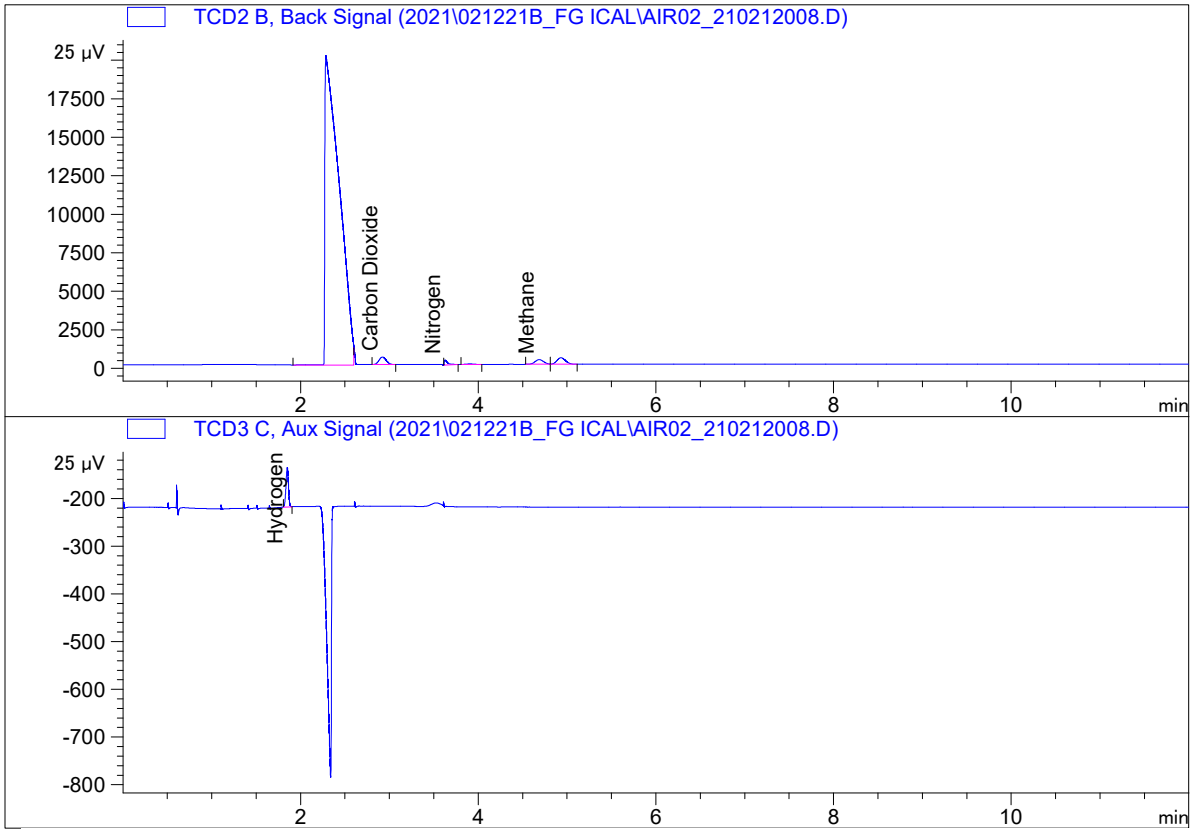
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212008.D
Sample Name: FG IC4,S12400,1% 1

Acq. Instrument : GC02 Seq Line : 8
Acq Operator : GSG Location : Vial 8
Injection Date : 2/12/2021 4:57:18 PM Inj. No. : 1
Inj. Vol. : 3100 µl
Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Oxygen
2.920	BB	2789	0.000	1.047	Carbon Dioxide
3.626	BB	836	0.000	0.357	Nitrogen
4.683	BV	2060	0.001	1.102	Methane
4.929	VB	2835	0.000	1.062	Carbon Monoxide

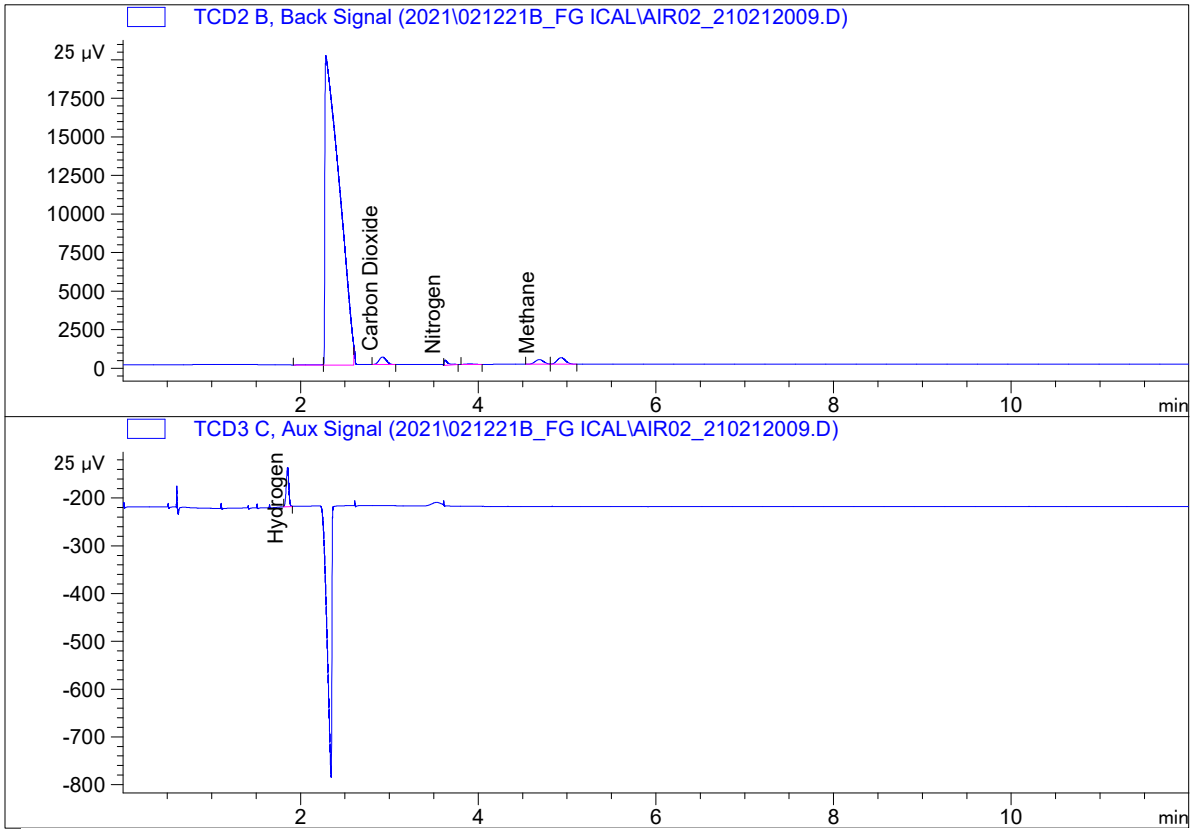
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
1.849	BB	163	0.007	1.108	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212009.D
Sample Name: FG IC4,S12400,1% 1

Acq. Instrument : GC02 Seq Line : 9
Acq Operator : GSG Location : Vial 8
Injection Date : 2/12/2021 5:13:17 PM Inj. No. : 1
Inj. Vol. : 3100 µl
Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Oxygen
2.921	BB	2781	0.000	1.044	Carbon Dioxide
3.625	BB	974	0.000	0.416	Nitrogen
4.684	BV	2061	0.001	1.102	Methane
4.931	VB	2837	0.000	1.063	Carbon Monoxide

Signal : TCD3 C, Aux Signal

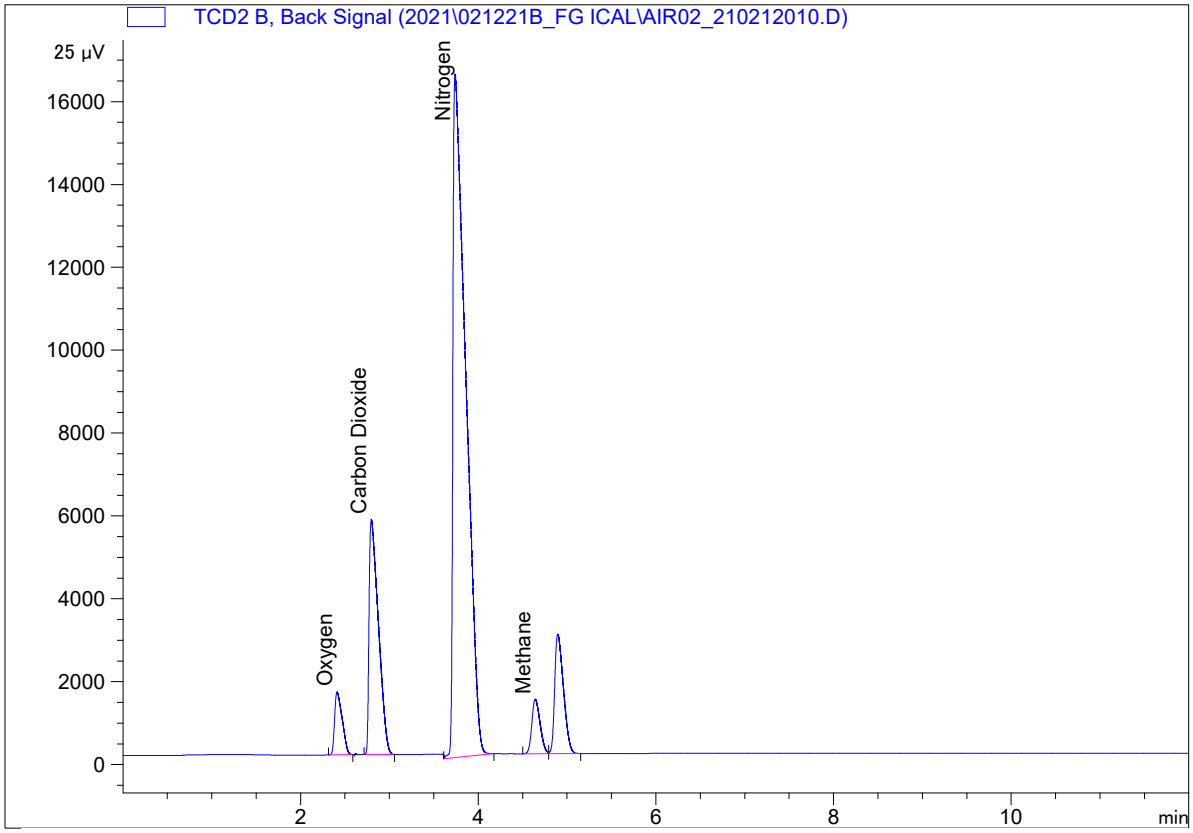
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
1.852	BB	161	0.007	1.101	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212010.D
Sample Name: FG IC5,S14249,4% 1

Acq. Instrument	: GC02	Seq Line	: 10
Acq Operator	: GSG	Location	: Vial 3
Injection Date	: 2/12/2021 5:29:07 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.409	BB	8957	0.000	4.196	Oxygen
2.795	BB S	41471	0.000	15.572	Carbon Dioxide
3.738	BB S	165568	0.000	70.663	Nitrogen
4.641	BV	8479	0.001	4.535	Methane
4.895	VB	19630	0.000	7.356	Carbon Monoxide

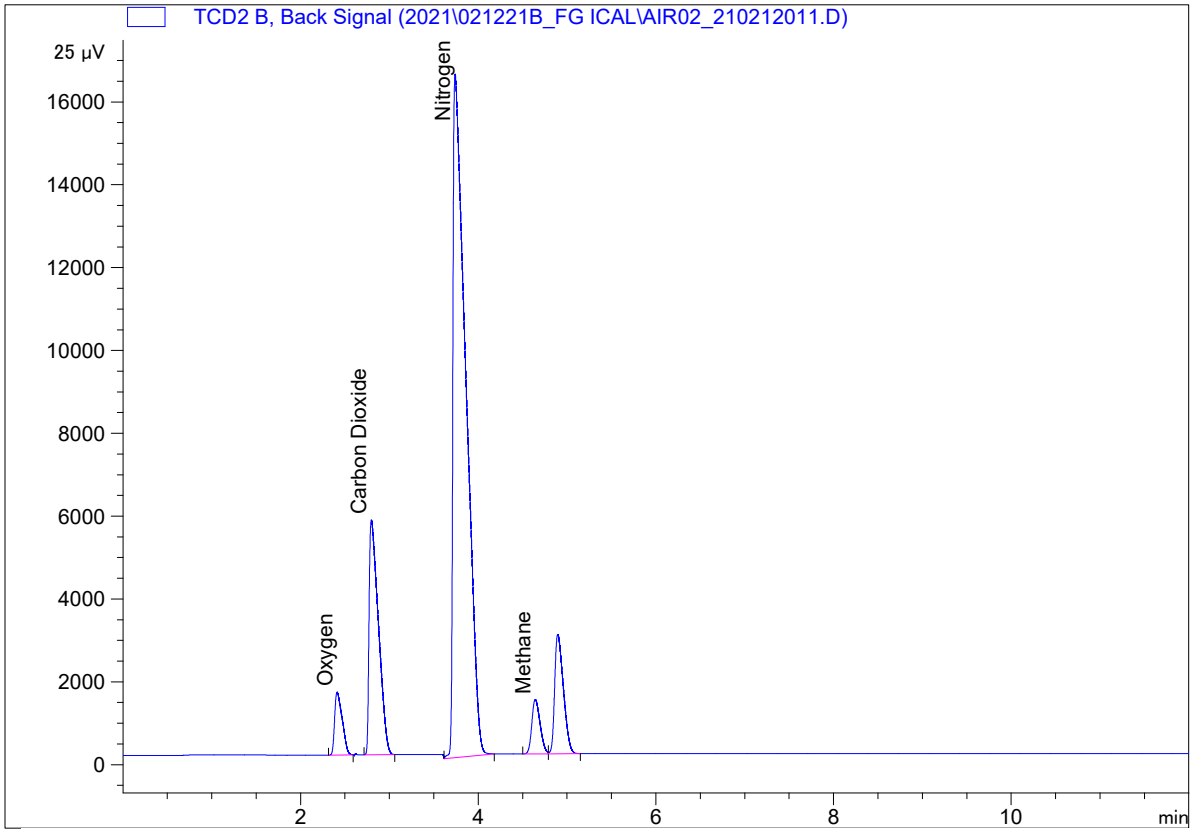
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212011.D
Sample Name: FG IC5,S14249,4% 1

Acq. Instrument	: GC02	Seq Line	: 11
Acq Operator	: GSG	Location	: Vial 3
Injection Date	: 2/12/2021 5:44:54 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M		
Last Changed	: 2/18/2021 4:42:20 PM		



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.411	BB	8958	0.000	4.196	Oxygen
2.795	BB S	41462	0.000	15.569	Carbon Dioxide
3.738	BB S	165571	0.000	70.664	Nitrogen
4.641	BV	8475	0.001	4.533	Methane
4.894	VB	19631	0.000	7.356	Carbon Monoxide

Signal : TCD3 C, Aux Signal

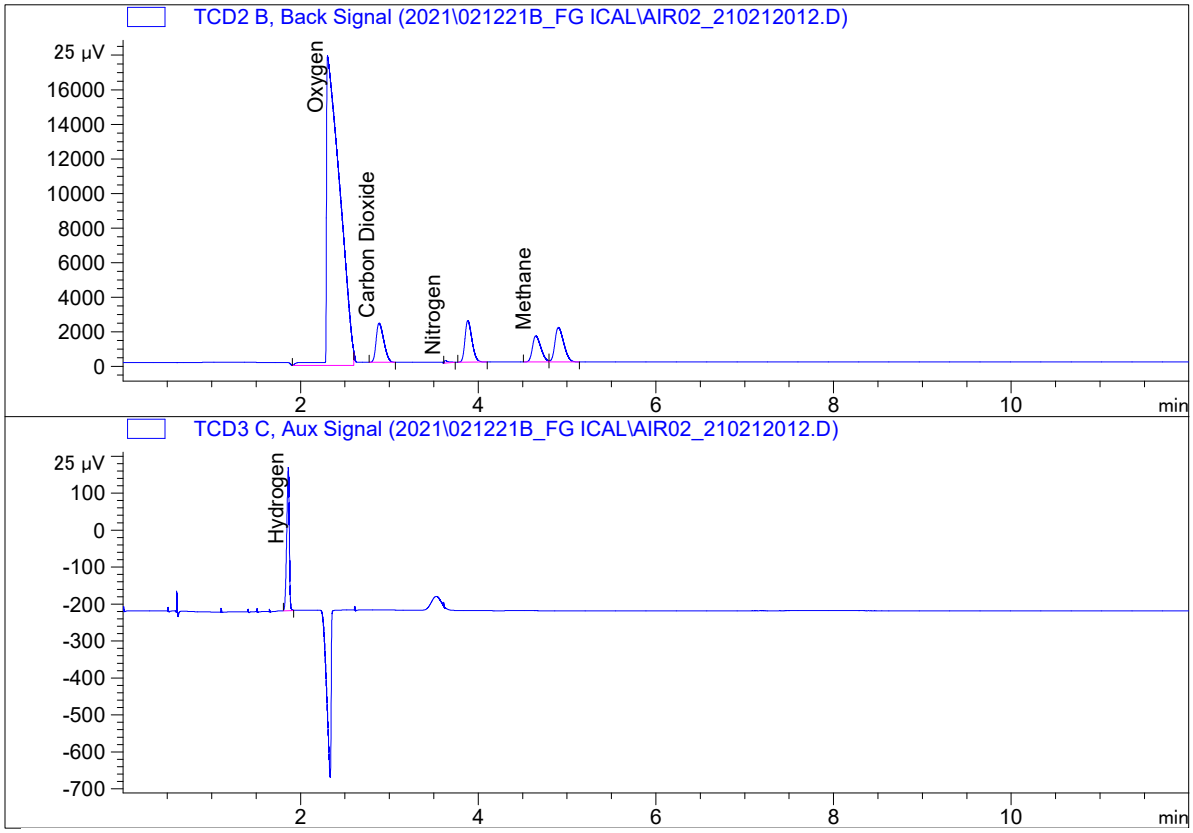
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212012.D
Sample Name: FG IC6,S14181,5% 1

Acq. Instrument	: GC02	Seq Line	: 12
Acq Operator	: GSG	Location	: Vial 4
Injection Date	: 2/12/2021 6:00:45 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.304	BBAS	185748	0.000	87.011	Oxygen
2.883	BB	13534	0.000	5.082	Carbon Dioxide
3.627	BB	464	0.000	0.198	Nitrogen
4.647	BV	9964	0.001	5.329	Methane
4.900	VB	13767	0.000	5.159	Carbon Monoxide

Signal : TCD3 C, Aux Signal

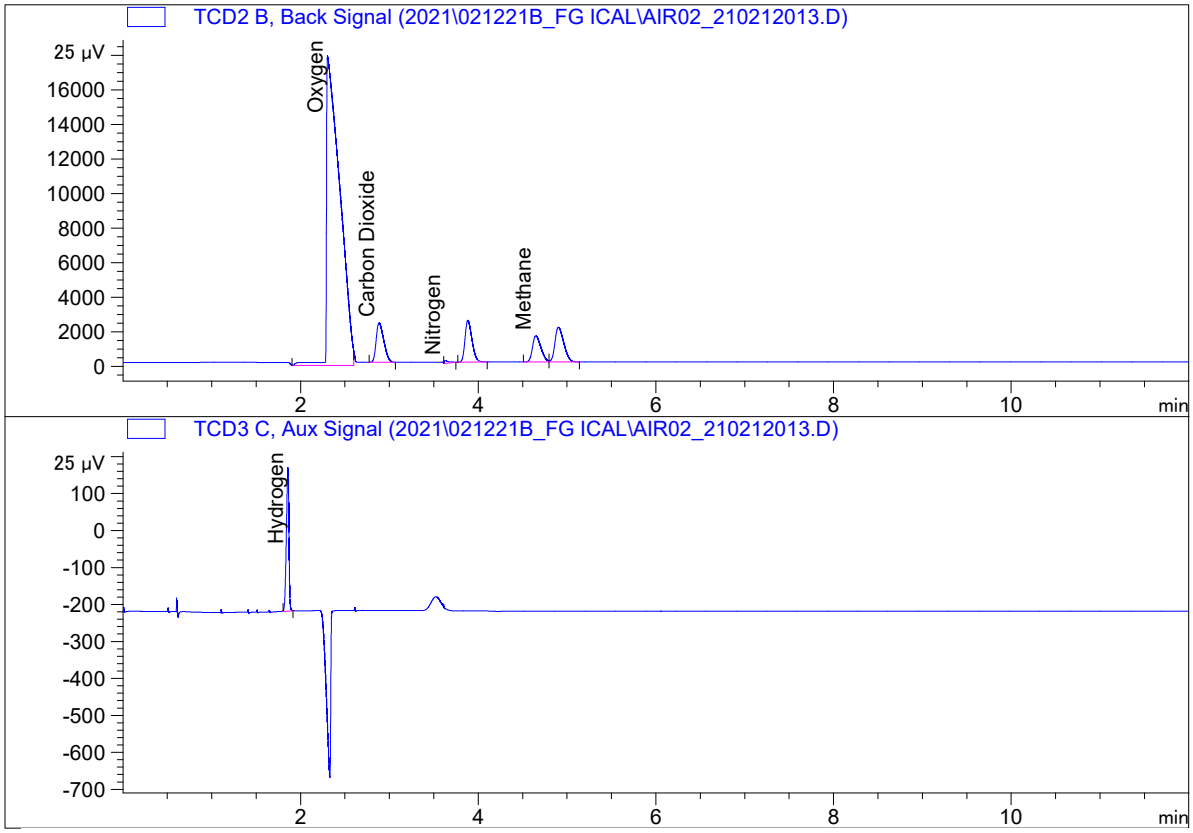
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
1.860	BB	783	0.007	5.342	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212013.D
Sample Name: FG IC6,S14181,5% 1

Acq. Instrument	: GC02	Seq Line	: 13
Acq Operator	: GSG	Location	: Vial 4
Injection Date	: 2/12/2021 6:16:38 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.303	BBAS	185618	0.000	86.950	Oxygen
2.883	BB	13589	0.000	5.102	Carbon Dioxide
3.627	BB	532	0.000	0.227	Nitrogen
4.647	BV	10001	0.001	5.349	Methane
4.902	VB	13823	0.000	5.180	Carbon Monoxide

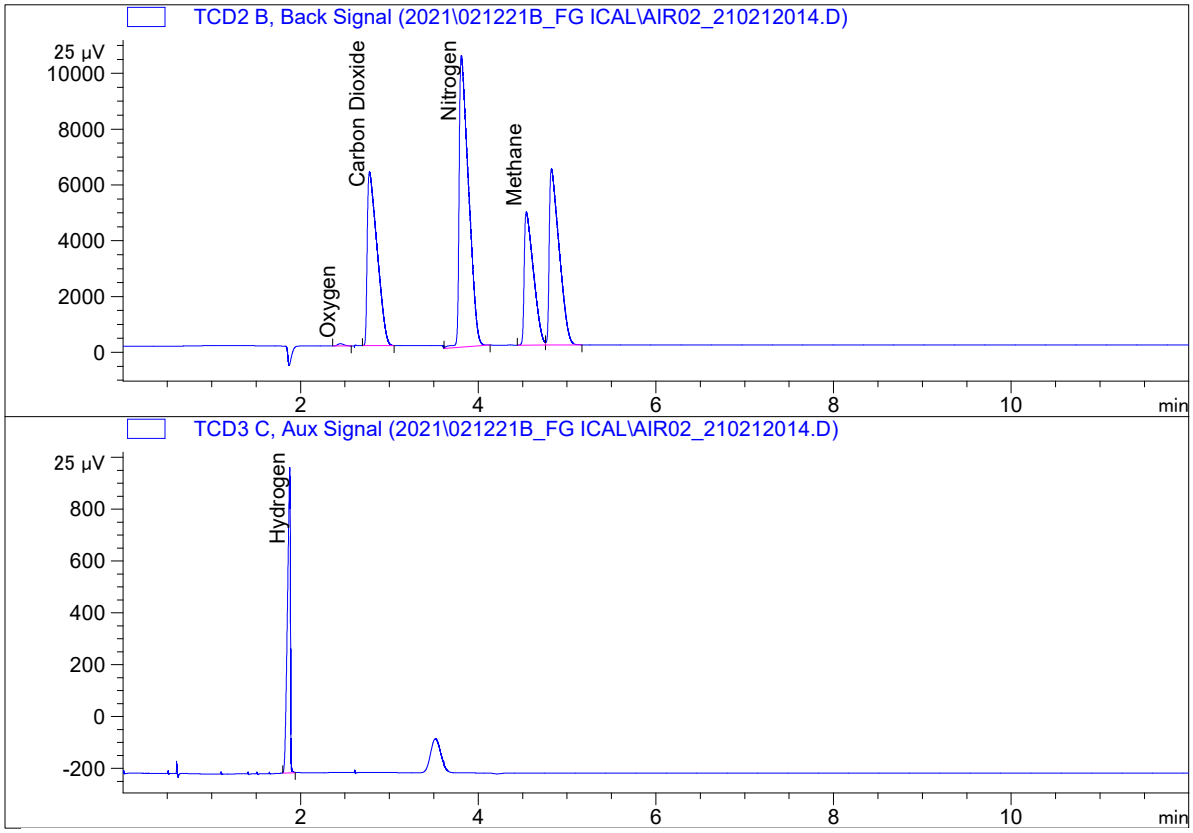
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
1.856	BB	785	0.007	5.351	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212014.D
Sample Name: FG IC7,S12402,20% 1

Acq. Instrument : GC02 Seq Line : 14
Acq Operator : GSG Location : Vial 9
Injection Date : 2/12/2021 6:32:41 PM Inj. No. : 1
Inj. Vol. : 3100 µl
Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.446	BB	376	0.000	0.176	Oxygen
2.774	BB S	47940	0.000	18.001	Carbon Dioxide
3.807	BB S	76652	0.000	32.715	Nitrogen
4.540	BV S	34302	0.001	18.347	Methane
4.823	VB S	48729	0.000	18.260	Carbon Monoxide

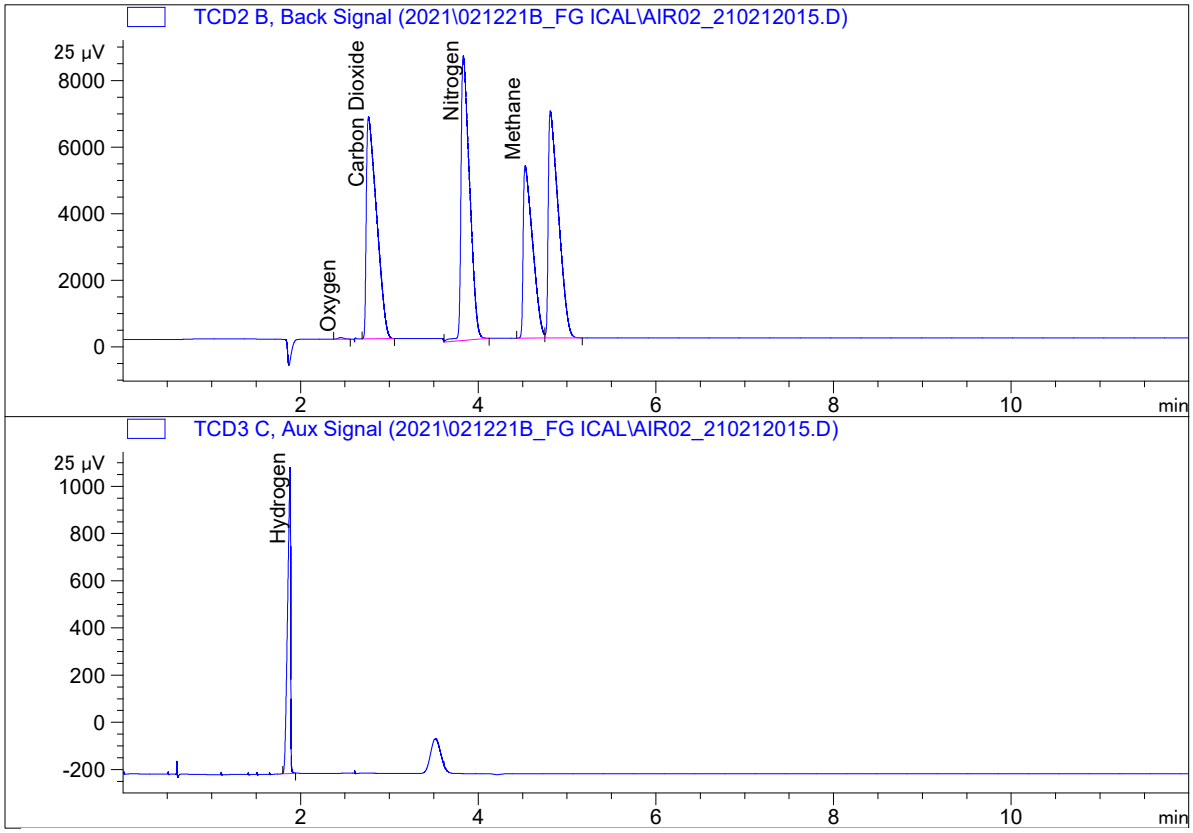
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
1.876	BB	2722	0.007	18.556	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212015.D
Sample Name: FG IC7,S12402,20% 1

Acq. Instrument : GC02 Seq Line : 15
Acq Operator : GSG Location : Vial 9
Injection Date : 2/12/2021 6:48:43 PM Inj. No. : 1
Inj. Vol. : 3100 µl
Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.448	BB	211	0.000	0.099	Oxygen
2.764	BB S	53422	0.000	20.060	Carbon Dioxide
3.830	BB S	57527	0.000	24.552	Nitrogen
4.527	BV S	38053	0.001	20.353	Methane
4.810	VB S	54170	0.000	20.298	Carbon Monoxide

Signal : TCD3 C, Aux Signal

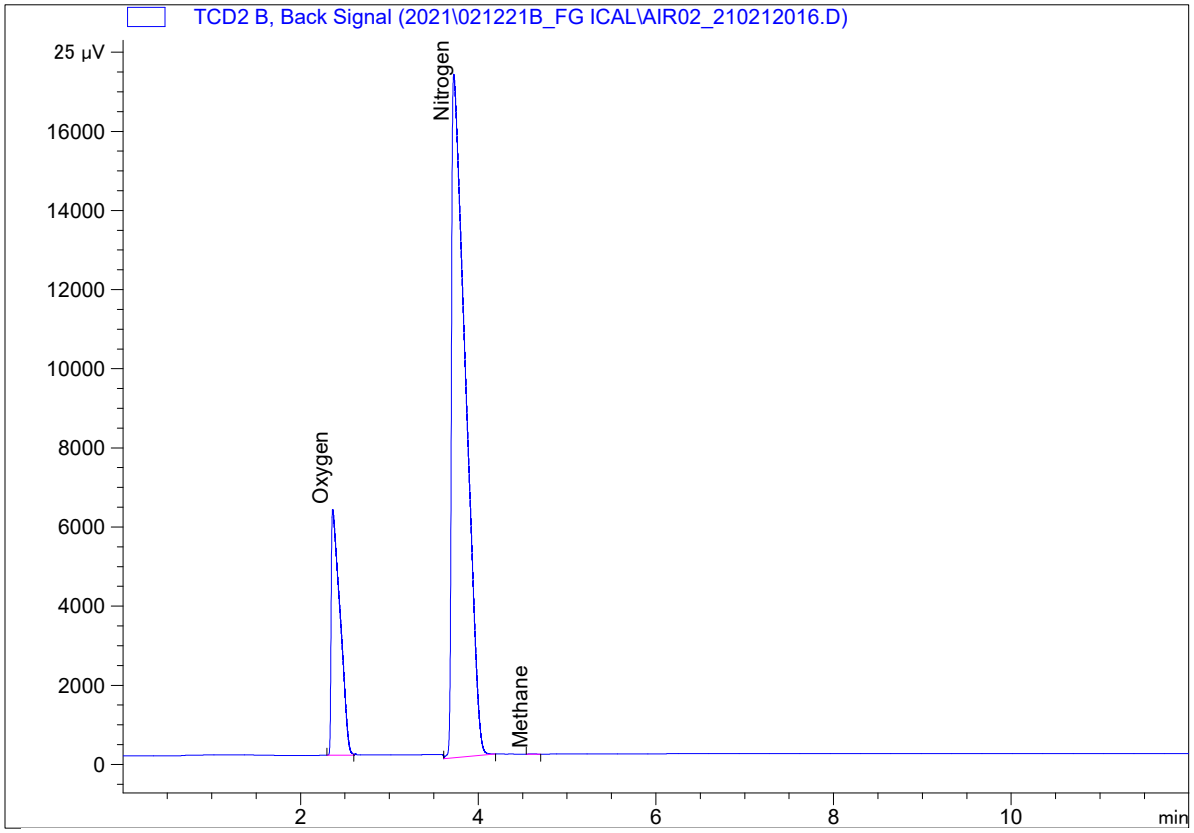
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
1.879	BB	3074	0.007	20.962	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212016.D
Sample Name: FG IC8,S14258,ZeroAir 1

Acq. Instrument	: GC02	Seq Line	: 16
Acq Operator	: GSG	Location	: Vial 10
Injection Date	: 2/12/2021 7:04:46 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.361	BBAS	43396	0.000	20.328	Oxygen
0.000		0	0.000	0.000	Carbon Dioxide
3.722	BB S	187708	0.000	80.112	Nitrogen
4.608	BB	20	0.001	0.011	Methane
0.000		0	0.000	0.000	Carbon Monoxide

Signal : TCD3 C, Aux Signal

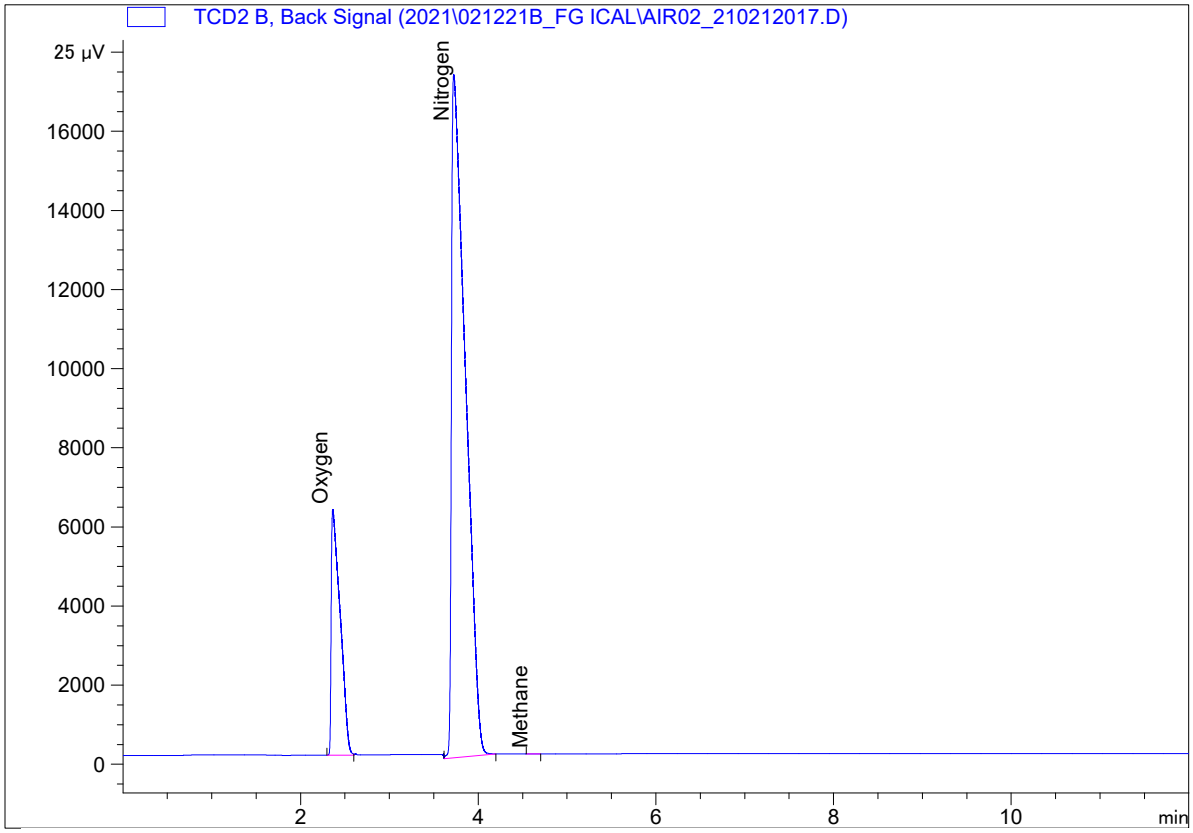
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212017.D
Sample Name: FG IC8,S14258,ZeroAir 1

Acq. Instrument	: GC02	Seq Line	: 17
Acq Operator	: GSG	Location	: Vial 10
Injection Date	: 2/12/2021 7:20:51 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.360	BBAS	43391	0.000	20.326	Oxygen
0.000		0	0.000	0.000	Carbon Dioxide
3.723	BB S	187761	0.000	80.135	Nitrogen
4.609	BB	20	0.001	0.011	Methane
0.000		0	0.000	0.000	Carbon Monoxide

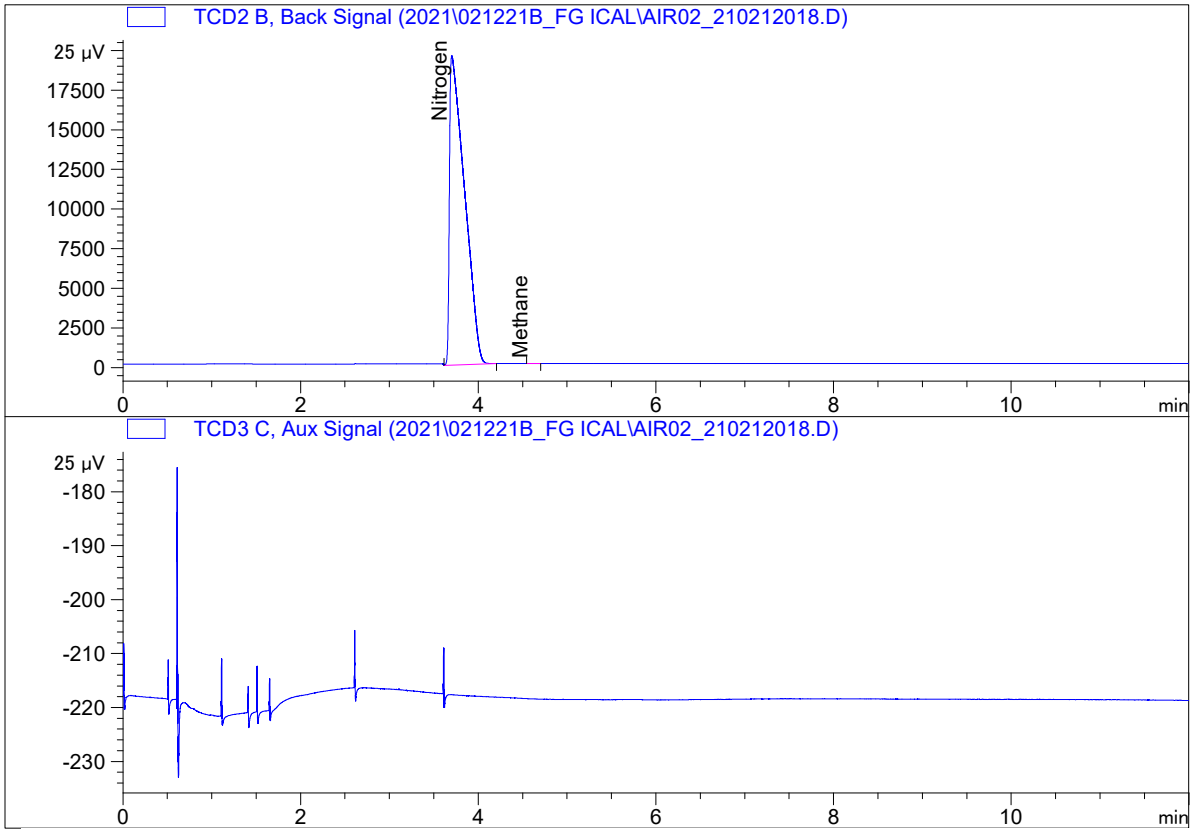
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212018.D
Sample Name: FG IC9,S14255,UHP 100% N2 1

Acq. Instrument : GC02 Seq Line : 18
Acq Operator : GSG Location : Vial 1
Injection Date : 2/12/2021 7:36:08 PM Inj. No. : 1
Inj. Vol. : 3100 µl
Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\OLD QUANT METHODS\D1946_C1C6->
Last Changed : 3/25/2021 8:45:36 AM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Oxygen
0.000		0.000	0.000	0.000	Carbon Dioxide
3.701	BB S	228667.656	4.268e-4	97.594	Nitrogen
4.609	BB	19.805	5.349e-4	0.011	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

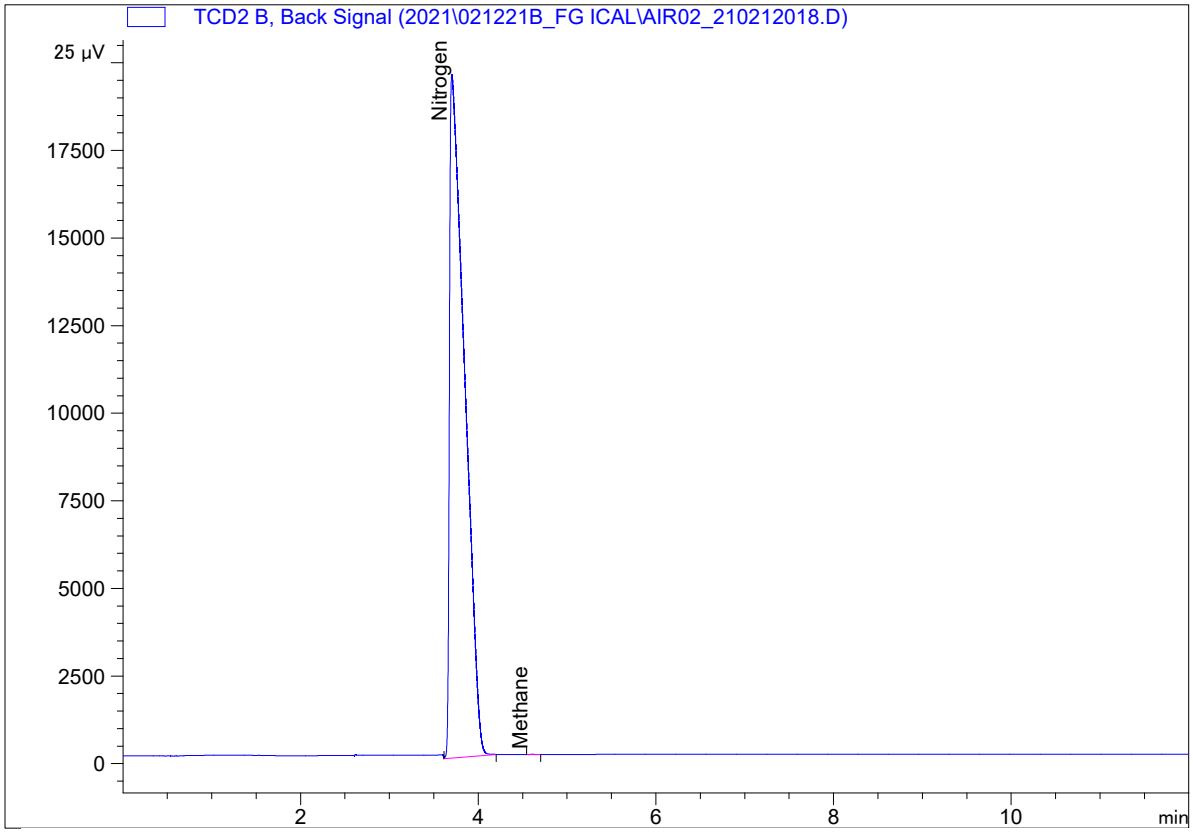
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212018.D
Sample Name: FG IC9,S14255,UHP 100% N2 1

Acq. Instrument	: GC02	Seq Line	: 18
Acq Operator	: GSG	Location	: Vial 1
Injection Date	: 2/12/2021 7:36:08 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M		
Last Changed	: 2/18/2021 4:42:20 PM		



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Oxygen
0.000		0	0.000	0.000	Carbon Dioxide
3.701	BB S	228668	0.000	97.594	Nitrogen
4.609	BB	20	0.001	0.011	Methane
0.000		0	0.000	0.000	Carbon Monoxide

Signal : TCD3 C, Aux Signal

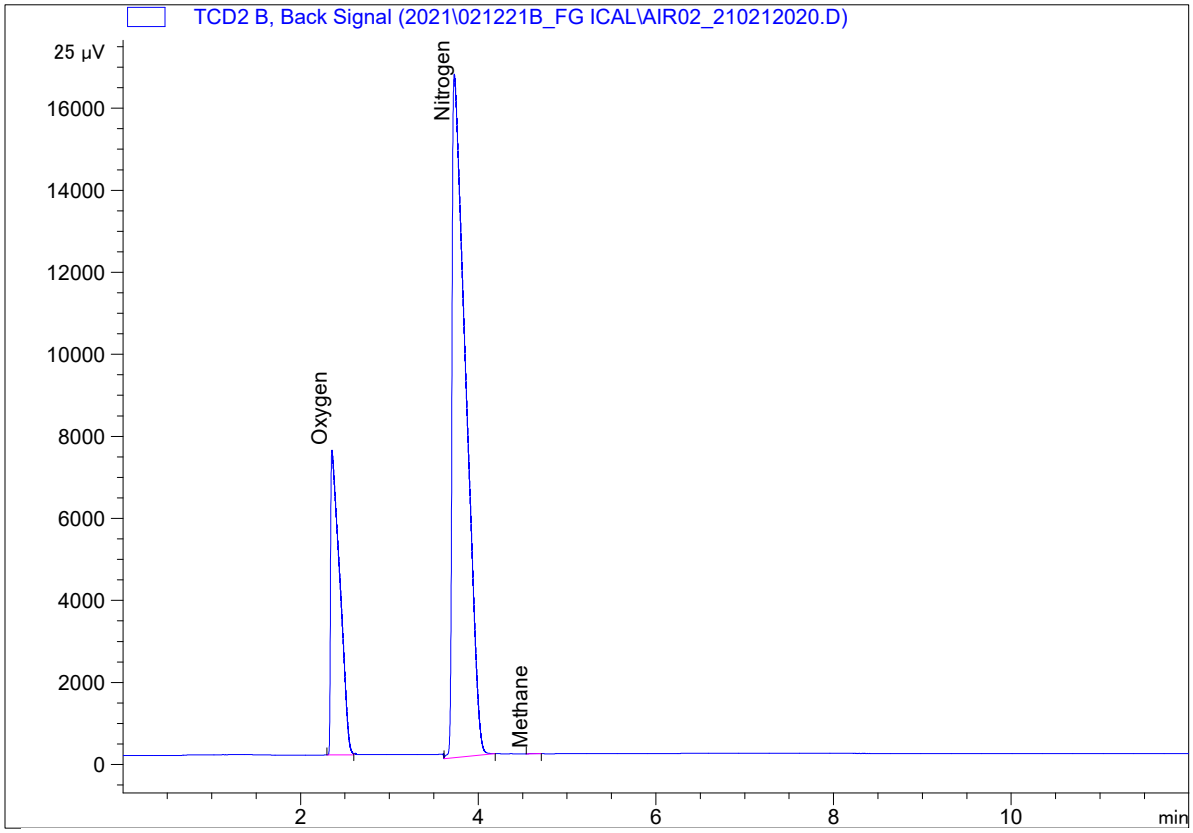
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212020.D
Sample Name: FG IC10,S14080,25% O2 1

Acq. Instrument	: GC02	Seq Line	: 20
Acq Operator	: GSG	Location	: Vial 11
Injection Date	: 2/12/2021 8:07:31 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.352	BBAS	53868	0.000	25.234	Oxygen
0.000		0	0.000	0.000	Carbon Dioxide
3.729	BB S	177051	0.000	75.564	Nitrogen
4.609	BB	22	0.001	0.012	Methane
0.000		0	0.000	0.000	Carbon Monoxide

Signal : TCD3 C, Aux Signal

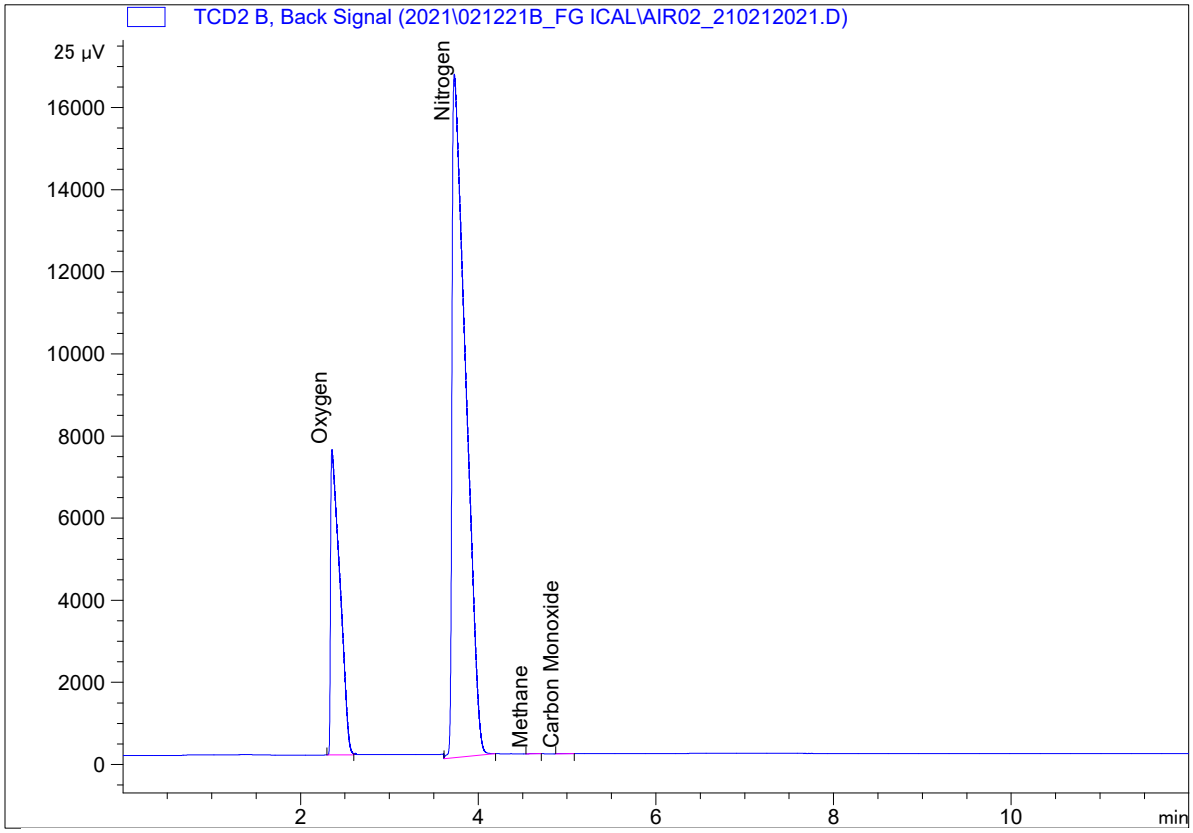
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212021.D
Sample Name: FG IC10,S14080,25% O2 1

Acq. Instrument	: GC02	Seq Line	: 21
Acq Operator	: GSG	Location	: Vial 11
Injection Date	: 2/12/2021 8:23:37 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.352	BBAS	53893	0.000	25.245	Oxygen
0.000		0	0.000	0.000	Carbon Dioxide
3.729	BB S	177146	0.000	75.605	Nitrogen
4.609	BB	22	0.001	0.012	Methane
4.958	BB	24	0.000	0.009	Carbon Monoxide

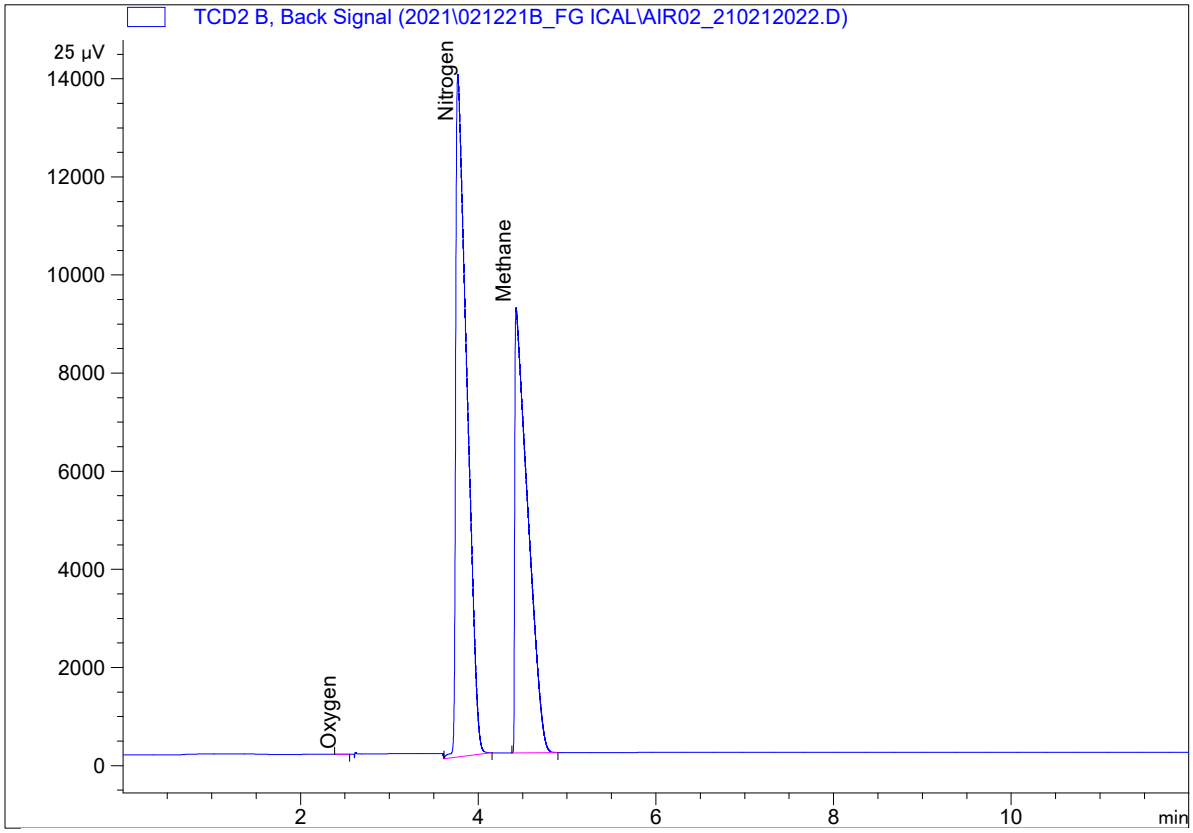
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212022.D
Sample Name: FG IC11,~~S14080~~,50% CH4 S13964, GSG 2/18/21 1

Acq. Instrument	: GC02	Seq Line	: 22
Acq Operator	: GSG	Location	: Vial 13
Injection Date	: 2/12/2021 8:39:48 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M		
Last Changed	: 2/18/2021 4:42:20 PM		



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.451	BB	14	0.000	0.007	Oxygen
0.000		0	0.000	0.000	Carbon Dioxide
3.770	BB S	121148	0.000	51.705	Nitrogen
4.424	BB S	92020	0.001	49.219	Methane
0.000		0	0.000	0.000	Carbon Monoxide

Signal : TCD3 C, Aux Signal

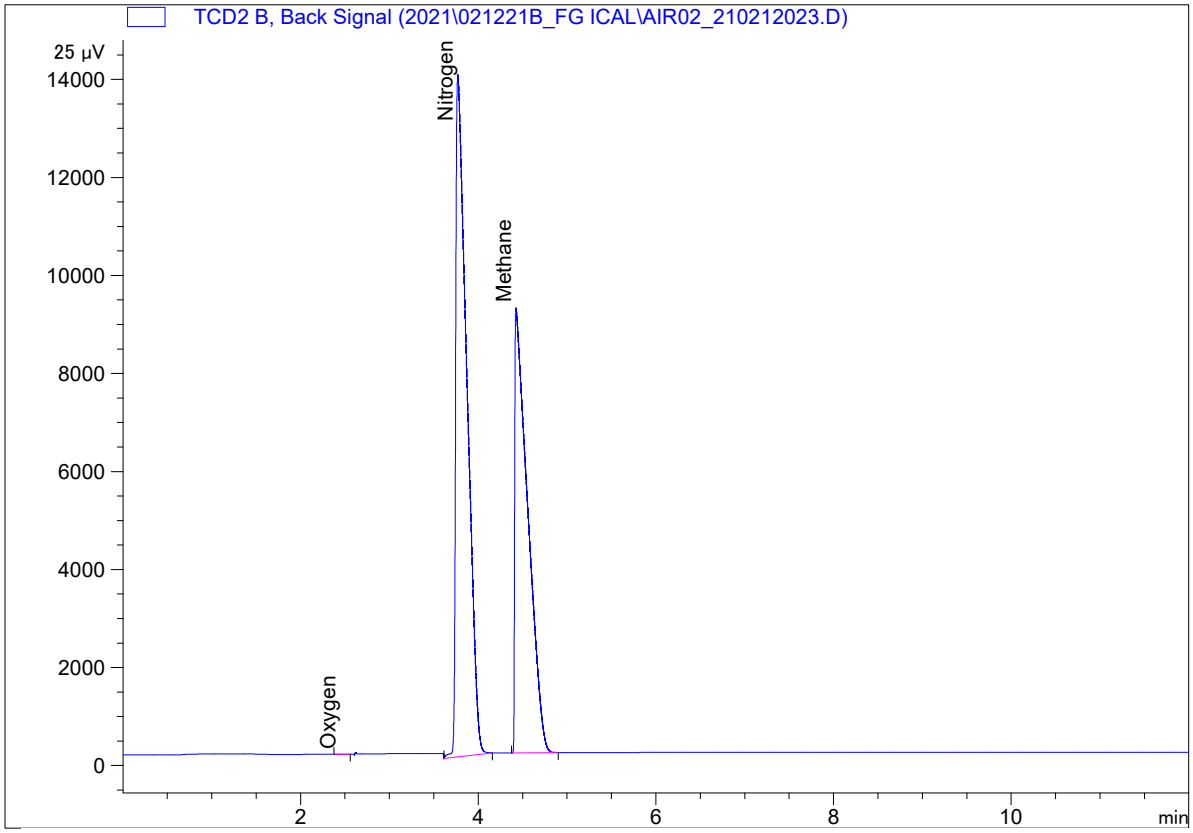
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212023.D
Sample Name: FG IC11,~~S14080~~,50% CH4 S13964, GSG 2/18/21 1

Acq. Instrument	: GC02	Seq Line	: 23
Acq Operator	: GSG	Location	: Vial 13
Injection Date	: 2/12/2021 8:55:55 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M
Last Changed : 2/18/2021 4:42:20 PM



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.448	BB	15	0.000	0.007	Oxygen
0.000		0	0.000	0.000	Carbon Dioxide
3.769	BB S	121182	0.000	51.720	Nitrogen
4.425	BB S	92059	0.001	49.239	Methane
0.000		0	0.000	0.000	Carbon Monoxide

Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

RAW DATA

SEQUENCE QUALITY CONTROL

Initial and Continuing Calibration Verifications and Blanks

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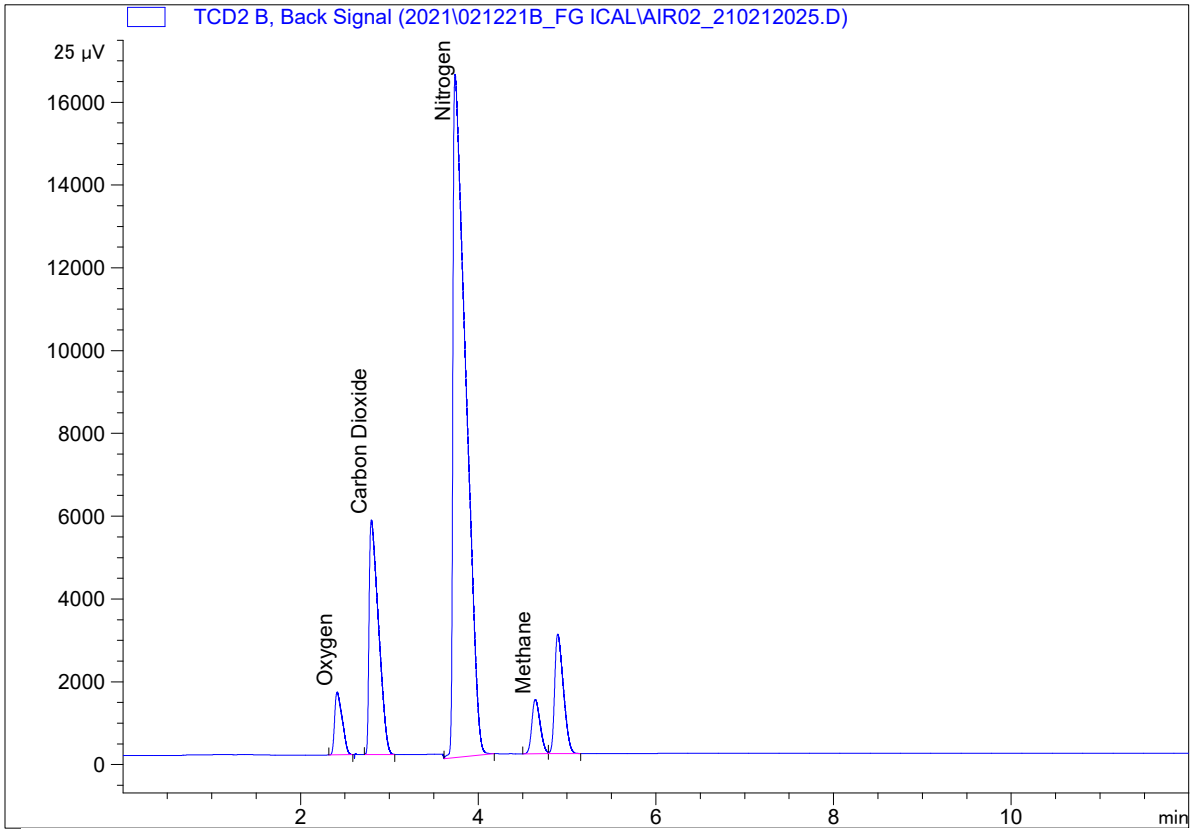
www.enthalpy.com/socal

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212025.D
Sample Name: FG ICV1,S14249,4% 1

Acq. Instrument	: GC02	Seq Line	: 25
Acq Operator	: GSG	Location	: Vial 3
Injection Date	: 2/12/2021 9:27:02 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M		
Last Changed	: 2/18/2021 4:42:20 PM		



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.410	BB	8958	0.000	4.196	Oxygen
2.797	BB S	41570	0.000	15.610	Carbon Dioxide
3.738	BB S	165743	0.000	70.738	Nitrogen
4.641	BV	8486	0.001	4.539	Methane
4.894	VB	19659	0.000	7.366	Carbon Monoxide

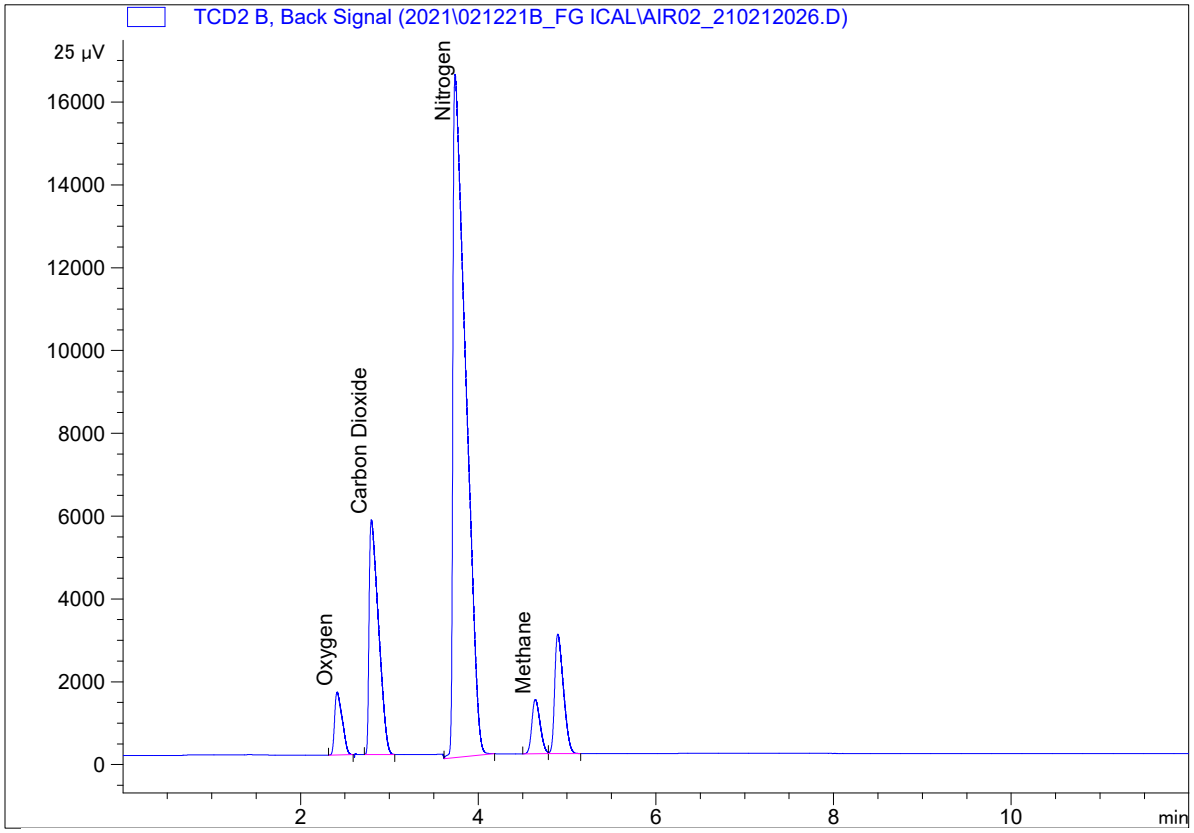
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\021221B_FG ICAL\AIR02_210212026.D
Sample Name: FG ICV1,S14249,4% 1

Acq. Instrument	: GC02	Seq Line	: 26
Acq Operator	: GSG	Location	: Vial 3
Injection Date	: 2/12/2021 9:42:50 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121.M		
Last Changed	: 2/18/2021 4:42:20 PM		



External Standard Report

Calib. Data Modified : 2/17/2021 01:01:08 pm
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.410	BB	8964	0.000	4.199	Oxygen
2.797	BB S	41582	0.000	15.614	Carbon Dioxide
3.738	BB S	165771	0.000	70.750	Nitrogen
4.641	BV	8488	0.001	4.540	Methane
4.894	VB	19664	0.000	7.369	Carbon Monoxide

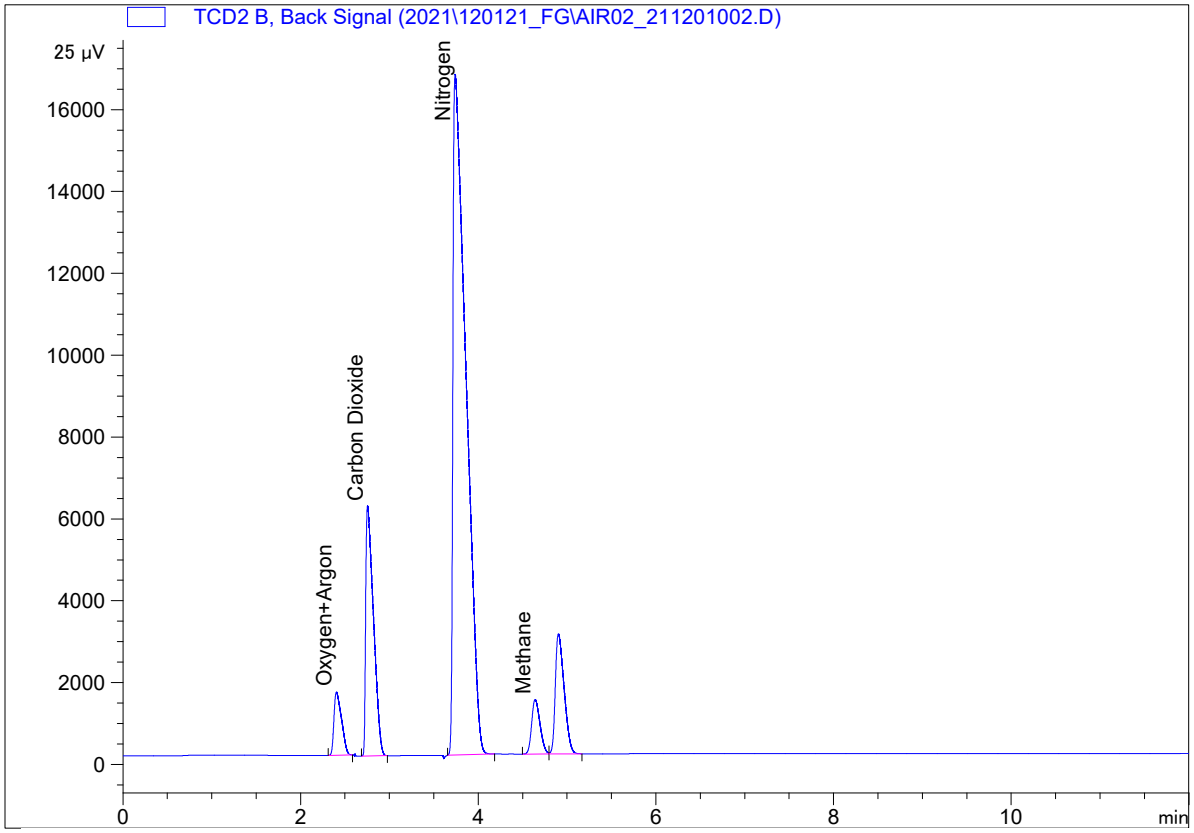
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0	0.000	0.000	Helium
0.000		0	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201002.D
Sample Name: FG CCV/BS,QC958440,279032,S14249,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 2
Acq Operator	: GSG	Location	: Vial 3
Injection Date	: 12/1/2021 9:31:16 AM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M		
Last Changed	: 8/30/2021 11:34:43 AM		



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.402	BB	9107.052	4.684e-4	4.266	Oxygen+Argon
2.754	BB S	37066.508	3.755e-4	13.918	Carbon Dioxide
3.739	BB S	168943.156	4.268e-4	72.104	Nitrogen
4.641	BV	8710.607	5.349e-4	4.659	Methane
4.902	VB	20119.854	3.747e-4	7.539	Carbon Monoxide

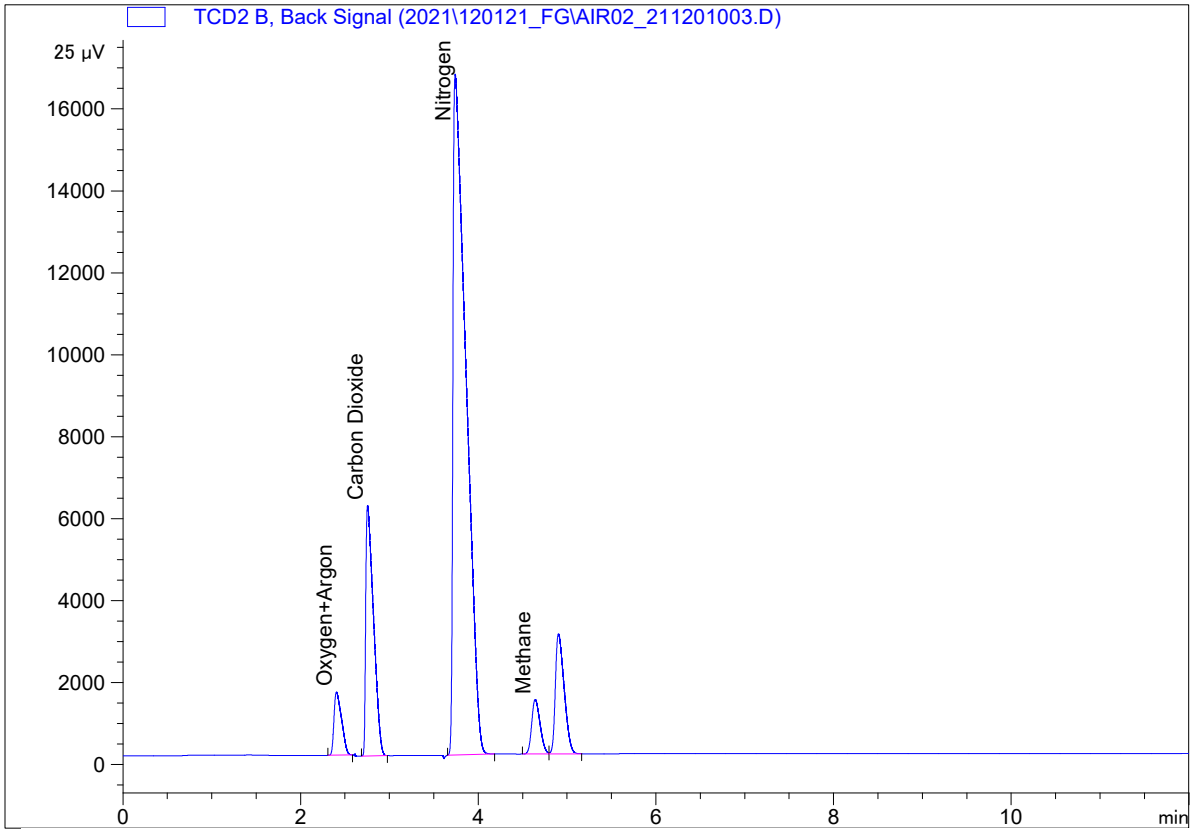
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201003.D
Sample Name: FG CCV/BSD,QC958441,279032,14249,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 3
Acq Operator	: GSG	Location	: Vial 3
Injection Date	: 12/1/2021 9:47:05 AM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M		
Last Changed	: 8/30/2021 11:34:43 AM		



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.404	BB	9102.665	4.684e-4	4.264	Oxygen+Argon
2.754	BB S	37062.285	3.755e-4	13.917	Carbon Dioxide
3.741	BB S	168850.828	4.268e-4	72.064	Nitrogen
4.641	BV	8703.895	5.349e-4	4.655	Methane
4.902	VB	20105.512	3.747e-4	7.534	Carbon Monoxide

Signal : TCD3 C, Aux Signal

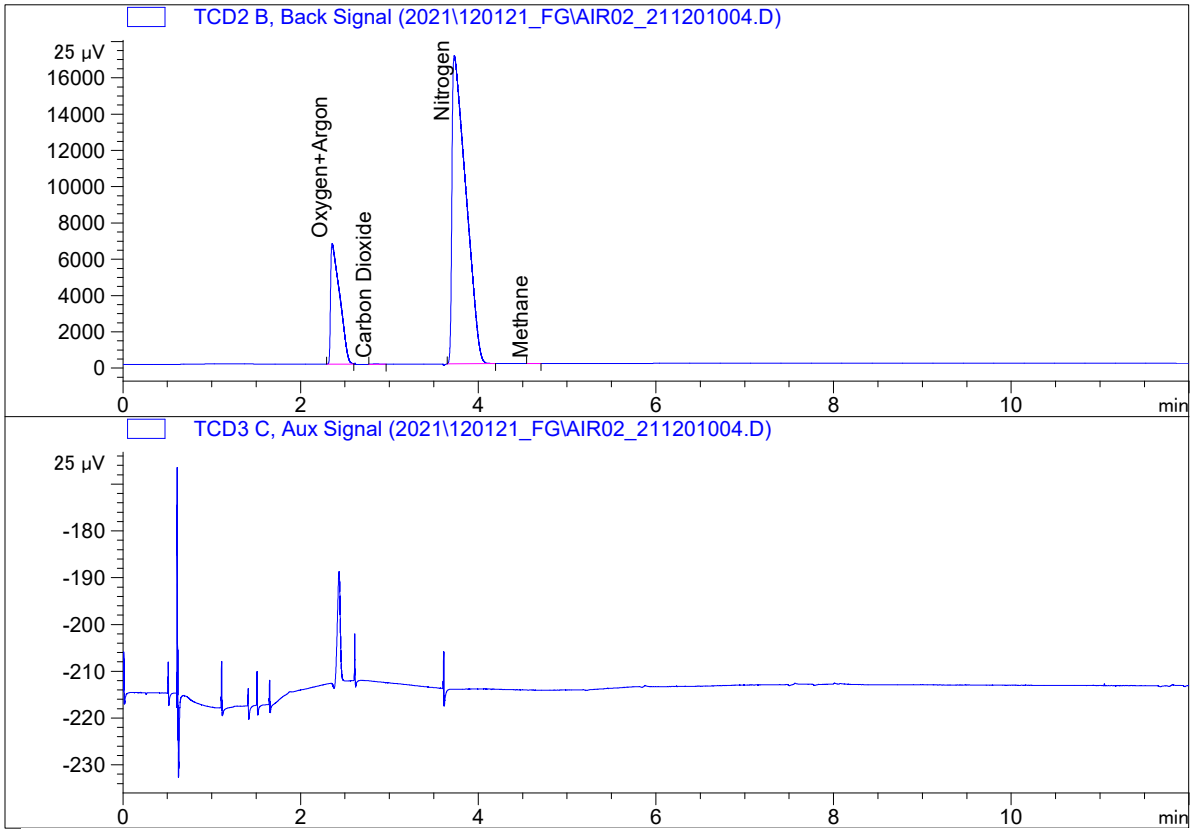
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201004.D
Sample Name: Lab Air 1

Acq. Instrument	: AIR-GC02	Seq Line	: 4
Acq Operator	: GSG	Location	: Vial 13
Injection Date	: 12/1/2021 10:03:19 AM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M
Last Changed : 8/30/2021 11:34:43 AM



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.355	BBAS	47044.598	4.684e-4	22.037	Oxygen+Argon
2.847	BB	136.753	3.755e-4	0.051	Carbon Dioxide
3.729	BB S	183570.500	4.268e-4	78.347	Nitrogen
4.612	BB	20.715	5.349e-4	0.011	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

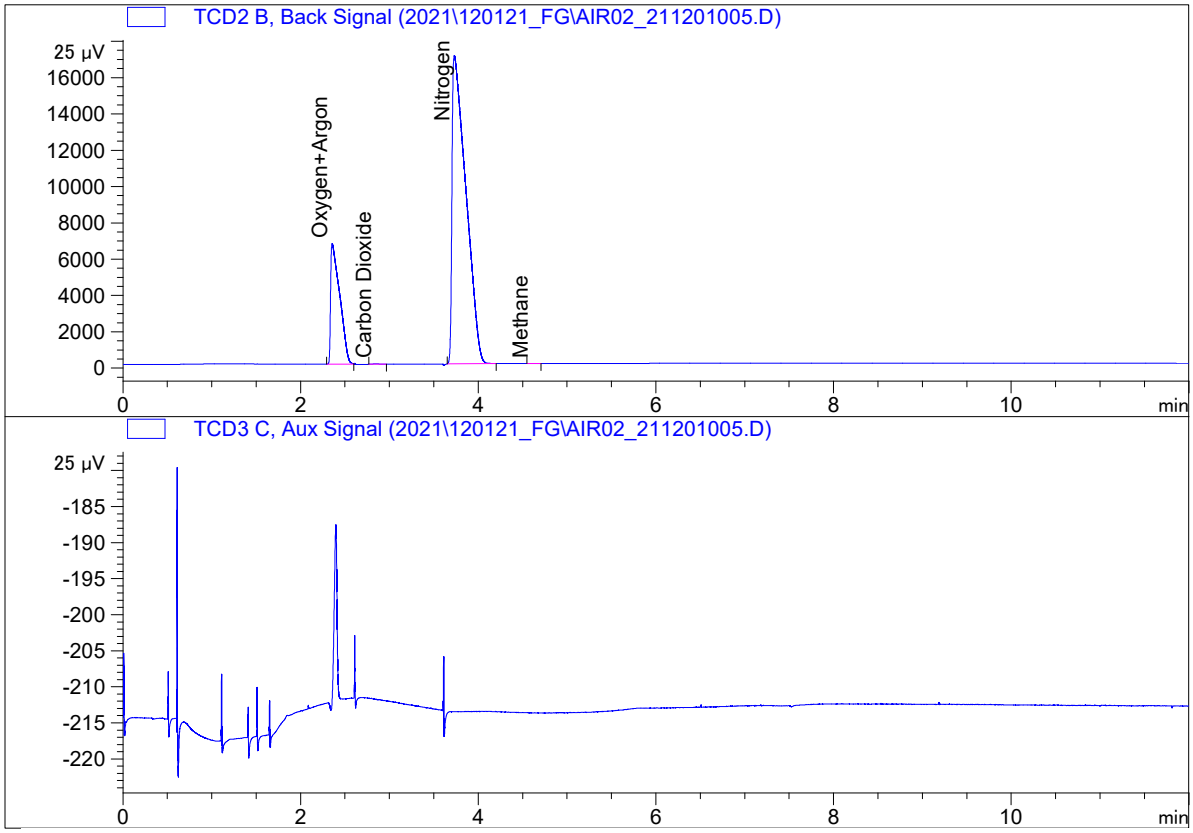
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201005.D
Sample Name: Lab Air Dup 1

Acq. Instrument : AIR-GC02 Seq Line : 5
Acq Operator : GSG Location : Vial 13
Injection Date : 12/1/2021 10:19:29 AM Inj. No. : 1
Inj. Vol. : 3100 µl
Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M
Last Changed : 8/30/2021 11:34:43 AM



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.355	BBAS	47012.141	4.684e-4	22.022	Oxygen+Argon
2.848	BB	132.409	3.755e-4	0.050	Carbon Dioxide
3.729	BB S	183493.875	4.268e-4	78.314	Nitrogen
4.611	BB	20.313	5.349e-4	0.011	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

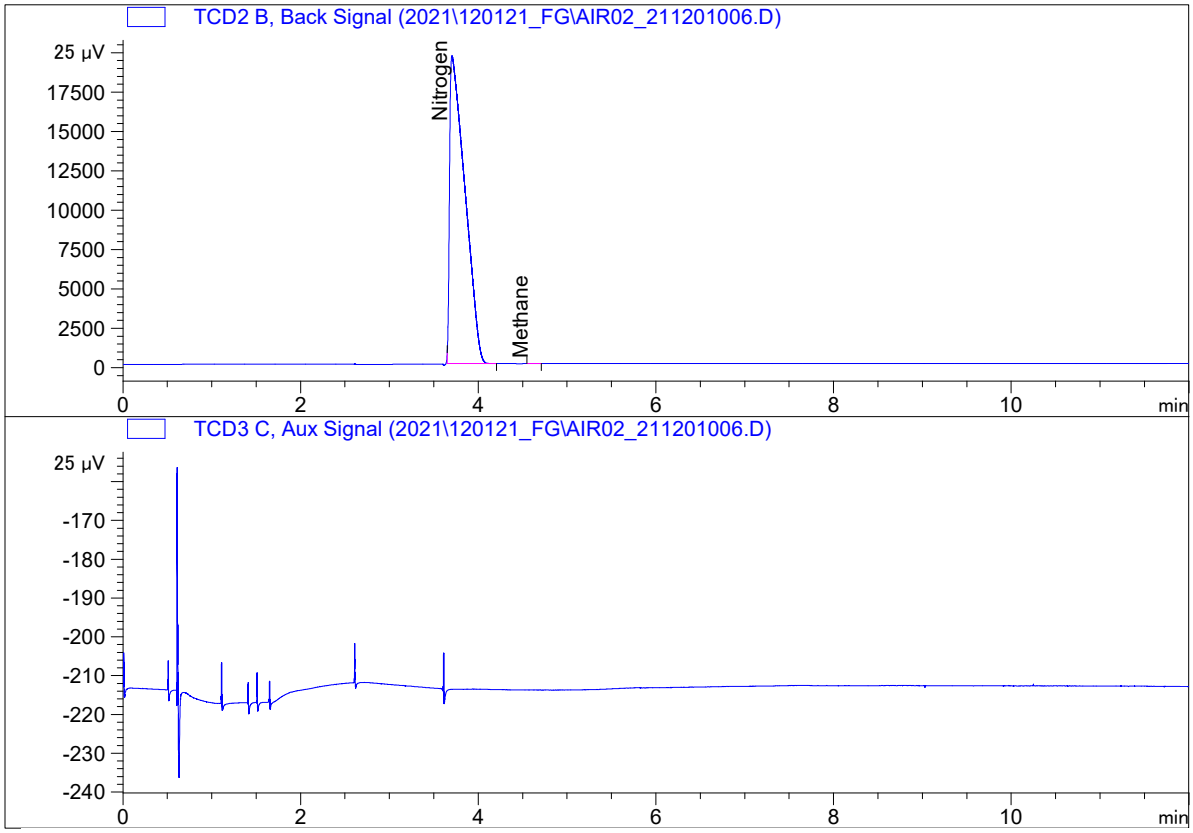
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201006.D
Sample Name: BLANK,QC958442,279032,1x,PDF:1 1

Acq. Instrument : AIR-GC02 Seq Line : 6
Acq Operator : GSG Location : Vial 1
Injection Date : 12/1/2021 10:34:49 AM Inj. No. : 1
Inj. Vol. : 3100 µl
Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M
Last Changed : 8/30/2021 11:34:43 AM



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Oxygen+Argon
0.000		0.000	0.000	0.000	Carbon Dioxide
3.704	BB S	232891.234	4.268e-4	99.396	Nitrogen
4.613	BB	20.535	5.349e-4	0.011	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

Signal : TCD3 C, Aux Signal

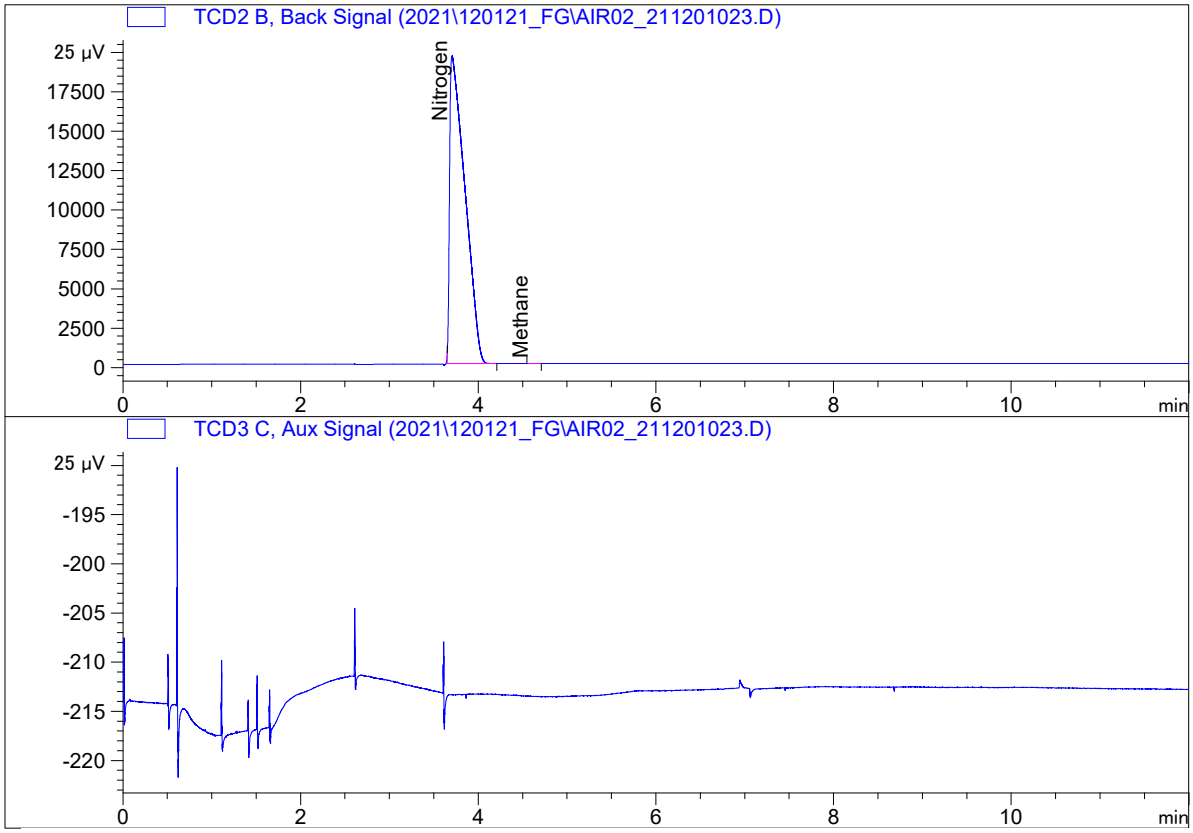
Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201023.D
Sample Name: Closing BLK 1

Acq. Instrument	: AIR-GC02	Seq Line	: 23
Acq Operator	: GSG	Location	: Vial 1
Injection Date	: 12/1/2021 4:05:01 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl

Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M
Last Changed : 12/1/2021 4:07:32 PM



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Oxygen+Argon
0.000		0.000	0.000	0.000	Carbon Dioxide
3.705	BB S	232645.547	4.268e-4	99.292	Nitrogen
4.612	BB	20.129	5.349e-4	0.011	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

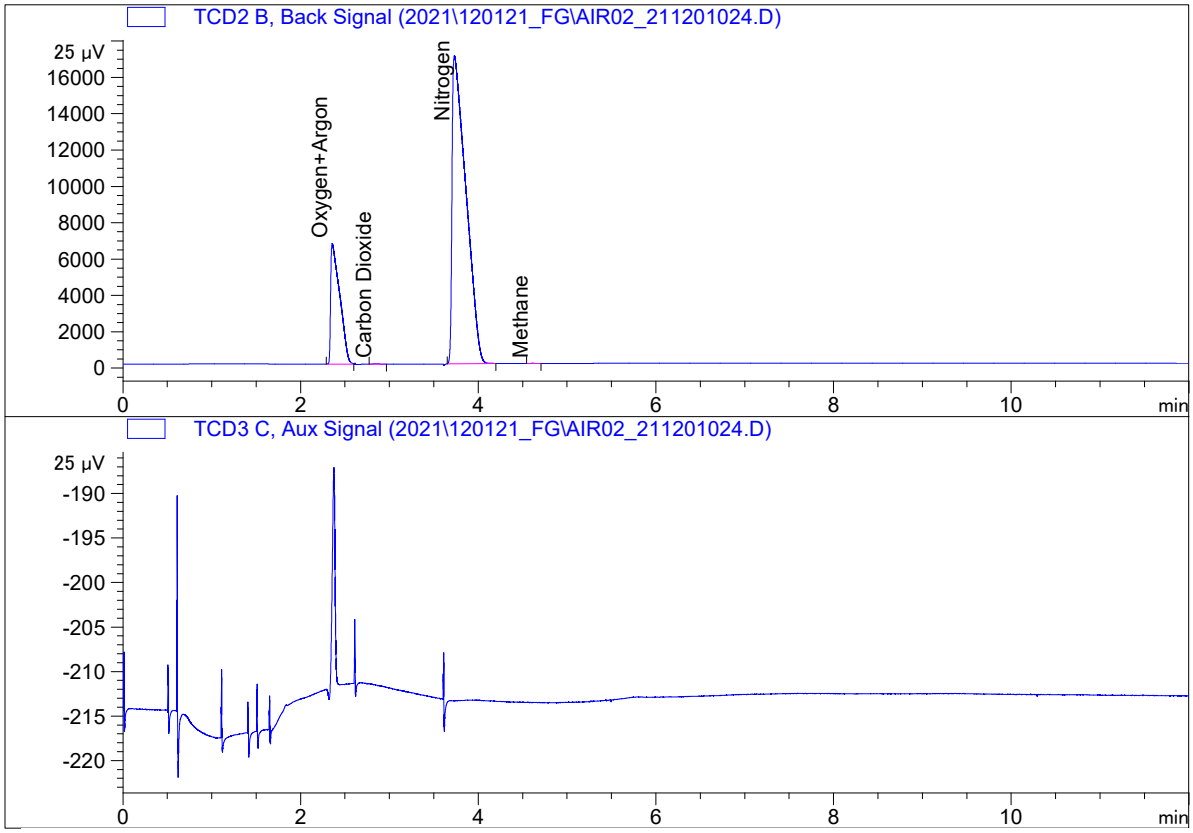
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201024.D
Sample Name: Closing Lab Air 1

Acq. Instrument : AIR-GC02 Seq Line : 24
Acq Operator : GSG Location : Vial 13
Injection Date : 12/1/2021 4:21:12 PM Inj. No. : 1
Inj. Vol. : 3100 µl
Acq. Method : C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M
Analysis Method : C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M
Last Changed : 12/1/2021 4:07:32 PM



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.355	BBAS	46943.523	4.684e-4	21.990	Oxygen+Argon
2.848	BB	131.254	3.755e-4	0.049	Carbon Dioxide
3.729	BB S	183204.328	4.268e-4	78.190	Nitrogen
4.612	BB	20.377	5.349e-4	0.011	Methane
0.000		0.000	0.000	0.000	Carbon Monoxide

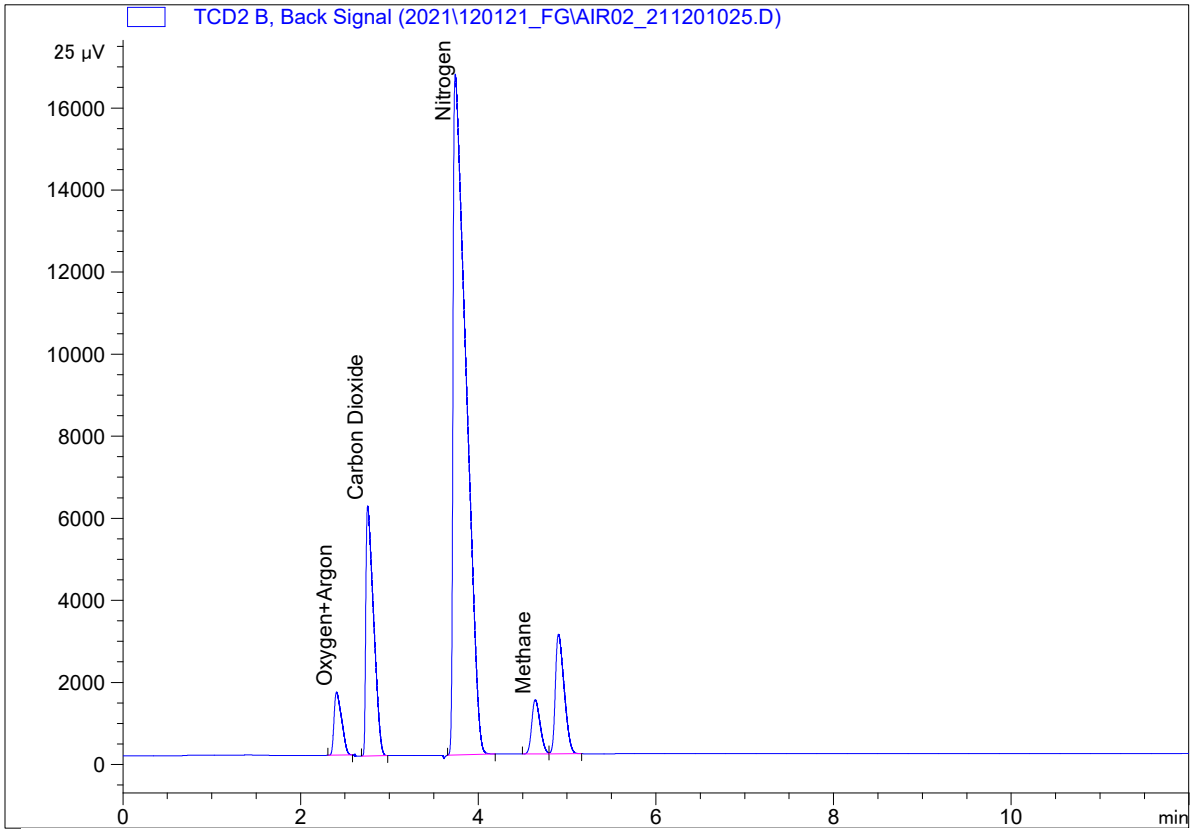
Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Data file : C:\CHEM32\1\DATA\2021\120121_FG\AIR02_211201025.D
Sample Name: Closing FG CCV,S14249,PDF:1 1

Acq. Instrument	: AIR-GC02	Seq Line	: 25
Acq Operator	: GSG	Location	: Vial 3
Injection Date	: 12/1/2021 4:37:06 PM	Inj. No.	: 1
		Inj. Vol.	: 3100 µl
Acq. Method	: C:\CHEM32\1\METHODS\D1946_C1C6+HC_ACQ_210211_2.M		
Analysis Method	: C:\CHEM32\1\QUANT METHODS\D1946_C1C6+HC_021121_2.M		
Last Changed	: 12/1/2021 4:07:32 PM		



External Standard Report

Calib. Data Modified : 8/30/2021 11:33:48 am
Multiplier : 1.000000
Dilution : 1.000000
Signal : TCD2 B, Back Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
2.404	BB	9072.271	4.684e-4	4.250	Oxygen+Argon
2.754	BB S	36970.035	3.755e-4	13.882	Carbon Dioxide
3.741	BB S	168396.359	4.268e-4	71.870	Nitrogen
4.641	BV	8669.273	5.349e-4	4.637	Methane
4.904	VB	20030.498	3.747e-4	7.506	Carbon Monoxide

Signal : TCD3 C, Aux Signal

Ret. Time [min]	Type	Area Response	RF	Amount [%v/v]	Compound Name
0.000		0.000	0.000	0.000	Helium
0.000		0.000	0.000	0.000	Hydrogen

*** End of Report ***

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number: 453958
Report Level: IV
Report Date: 12/08/2021

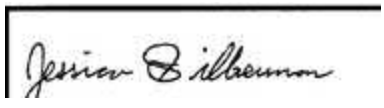
Volatile Organics in Air GC - TO3

Analytical Report *prepared for:*

Marvin Heskett
Element Environmental, LLC
98-030 Hekaha Street
Unit 9
Aiea, HI 96701

Project: 180025 - Red Hill Soil Vapor Monitoring

Authorized for release by:



Jess Silberman, Project Manager
510-204-2236
jessica.silberman@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE Member

ENTHALPY ANALYTICAL

Sample Summary

Marvin Heskett
Element Environmental, LLC
98-030 Hekaha Street
Unit 9
Aiea, HI 96701

Lab Job #: 453958
Project No: 180025
Location: Red Hill Soil Vapor Monitoring
Date Received: 11/22/21

Sample ID	Lab ID	Collected	Matrix
SVMP-15S	453958-001	11/18/21 12:18	Air
SVMP-15D	453958-002	11/18/21 12:23	Air
SVMP-17S	453958-003	11/18/21 12:40	Air
SVMP-17D	453958-004	11/18/21 12:43	Air
SVMP-18S	453958-005	11/18/21 13:00	Air
SVMP-18D	453958-006	11/18/21 13:01	Air
SVMP-20M	453958-007	11/18/21 13:17	Air
SVMP-20D	453958-008	11/18/21 13:20	Air

Case Narrative

VOLATILE ORGANICS IN AIR GC - TO3 (EPA TO-3M)

Element Environmental, LLC	Lab Job Number: 453958
98-030 Hekaha Street	Project No: 180025
Unit 9	Location: Red Hill Soil Vapor Monitoring
Aiea, HI 96701	Date Received: 11/22/21
Marvin Heskett	

This data package contains sample and QC results for eight air samples, requested for the above referenced project on 11/22/21. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics in Air GC - TO3 (EPA TO-3M):

No analytical problems were encountered.

Chain of Custody

ENTHALPY ANALYTICAL

Enthalpy Analytical - Orange
931 W. Barkley Avenue, Orange, CA 92868
Phone 714-771-6900

Air Chain of Custody Record

Lab No: 453958
Page: 1 of 1

Turn Around Time (rush by advanced notice only)

Standard:		5 Day:	X	3 Day:	
2 Day:		1 Day:		Custom TAT:	

Special Instructions:
1. LEVEL IV Data Reporting, with additional anaylsis and text files data per discussion 9/14/21
2. A10080 Flow Controller Returned (Broken)

Note:

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Element Environmental LLC	Name:	Red Hill Soil Vapor Monitoring
Report To:	Marvin Heskett	Number:	180025
Email:	mheskett@e2hi.com	P.O. #:	
Address:	98-030 Hekaha St., Unit 9, Aiea, Hawaii 96701	Address:	
Phone:	808-728-4617	Global ID:	
Fax:		Sampled By:	AL/DA

	Sample ID	Type	Equipment Information			Sampling Information						Analysis Requested	
		(I) Indoor (A) Ambient (SV) Soil Vapor (S) Source	Canister ID	Size (1L, 3L, 6L, 15L)	Flow Controller ID	Sample Start Date	Sample Start Time	Vacuum Start ("Hg)	Sample End Date	Sample End Time	Vacuum End ("Hg)	VOCs & TICs (TO-15) *C5-C12 (T-03)	Fixed Gases (ASTM D-1946)
1	SVMP-15S	SV	C10293	1.4L	A10123	11/18/2021	12:09	30	11/18/2021	12:18	5	X	X
2	SVMP-15D	SV	C10092	1.4L	A10126	11/18/2021	12:17	29	11/18/2021	12:23	4	X	X
3	SVMP-17S	SV	C10150	1.4L	A10127	11/18/2021	12:33	28	11/18/2021	12:40	4	X	X
4	SVMP-17D	SV	C10654	1.4L	A10052	11/18/2021	12:34	30	11/18/2021	12:43	4	X	X
5	SVMP-18S	SV	C10173	1.4L	A10038	11/18/2021	12:52	30	11/18/2021	13:00	4	X	X
6	SVMP-18D	SV	C10672	1.4L	A10095	11/18/2021	12:54	29	11/18/2021	13:01	4	X	X
7	SVMP-20M	SV	C10318	1.4L	A10230	11/18/2021	13:10	27	11/18/2021	13:17	4	X	X
8	SVMP-20D	SV	C10146	1.4L	A10066	11/18/2021	13:11	28	11/18/2021	13:20	4	X	X
9													
10													

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Theodore Uekawa	Element Environmental LLC	11/19/2021 (11:30)
[1] Received By:				
[2] Relinquished By:				
[2] Received By:				
[3] Relinquished By:				
[3] Received By:				

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Element Environmental LLC

Project: Red Hill Soil Vapor Monitoring

Date Received: 11/22/21

Sampler's Name Present: ☑ Yes ☐ No

Section 2

Sample(s) received in a cooler? ☐ Yes, How many? _____ ☑ No (skip section 2)

Sample Temp (°C) (No Cooler): AMB

Sample Temp (°C), One from each cooler: #1: _____ #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: ☐ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✔		
Are sample IDs present?	✔		
Are sampling dates & times present?	✔		
Is a relinquished signature present?	✔		
Are the tests required clearly indicated on the COC?	✔		
Are custody seals present?		✔	
If custody seals are present, were they intact?			✔
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✔
Did all samples arrive intact? If no, indicate in Section 4 below.	✔		
Did all bottle labels agree with COC? (ID, dates and times)	✔		
Were the samples collected in the correct containers for the required tests?	✔		
Are the containers labeled with the correct preservatives?			
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✔
Was a sufficient amount of sample submitted for the requested tests?	✔		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☐ Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 11/22/21

ORIGIN ID:CCRA (925) 680-4300
MAQS
MONTROSE AIR QUALITY SERVICES
2825 VERNE ROBERTS CIRCLE

ANTIOCH, CA 94509
UNITED STATES US

SHIP DATE: 19NOV21
ACTWGT: 35.00 LB
CAD: 4603247/INET4400

BILL SENDER

TO **SAMPLE RECEIVING**
ENTHALPY ANALYTICAL-SAMPLE RECEIVE
931 W BARKLEY AVE

ORANGE CA 92868
(741) 771-6900 REF: MARSH LANDING PROJ-011745
INV:
PO: DEPT:

56DJ29A7EFE4A

FedEx Express

E

J212221101801uv

1 of 4

TRK# 0201 **7752 6267 4216**

MASTER

CZ APVA

WED - 24 NOV 4:30P
EXPRESS SAVER

92868
CA-US **SNA**

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Results & QC Summary

ENTHALPY ANALYTICAL

Gas range organics by EPA TO-3M

Lab #: 453958 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Field ID: SVMP-15S **Diln Fac:** 2.000 **Analyzed:** 11/29/21 22:42
Type: SAMPLE **Batch#:** 278885 **Prep:**
Lab ID: 453958-001 **Sampled:** 11/18/21 12:18 **Analysis:** EPA TO-3M
Matrix: Air **Received:** 11/22/21 **Analyst:** LJB

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
TPH (C5-C12)	ND	0.050	ppmv	ND	0.20	mg/m3

Field ID: SVMP-15D **Diln Fac:** 2.000 **Analyzed:** 11/29/21 23:10
Type: SAMPLE **Batch#:** 278885 **Prep:**
Lab ID: 453958-002 **Sampled:** 11/18/21 12:23 **Analysis:** EPA TO-3M
Matrix: Air **Received:** 11/22/21 **Analyst:** LJB

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
TPH (C5-C12)	**0.090**	0.050	ppmv	**0.37**	0.20	mg/m3

Field ID: SVMP-17S **Diln Fac:** 2.000 **Analyzed:** 11/29/21 23:38
Type: SAMPLE **Batch#:** 278885 **Prep:**
Lab ID: 453958-003 **Sampled:** 11/18/21 12:40 **Analysis:** EPA TO-3M
Matrix: Air **Received:** 11/22/21 **Analyst:** LJB

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
TPH (C5-C12)	**0.57**	0.050	ppmv	**2.3**	0.20	mg/m3

Field ID: SVMP-17D **Diln Fac:** 2.000 **Analyzed:** 11/30/21 00:06
Type: SAMPLE **Batch#:** 278885 **Prep:**
Lab ID: 453958-004 **Sampled:** 11/18/21 12:43 **Analysis:** EPA TO-3M
Matrix: Air **Received:** 11/22/21 **Analyst:** LJB

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
TPH (C5-C12)	**0.37**	0.050	ppmv	**1.5**	0.20	mg/m3

Field ID: SVMP-18S **Diln Fac:** 2.000 **Analyzed:** 11/30/21 00:34
Type: SAMPLE **Batch#:** 278885 **Prep:**
Lab ID: 453958-005 **Sampled:** 11/18/21 13:00 **Analysis:** EPA TO-3M
Matrix: Air **Received:** 11/22/21 **Analyst:** LJB

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
TPH (C5-C12)	**0.22**	0.050	ppmv	**0.89**	0.20	mg/m3

Field ID: SVMP-18D **Diln Fac:** 2.000 **Analyzed:** 11/30/21 01:01
Type: SAMPLE **Batch#:** 278885 **Prep:**
Lab ID: 453958-006 **Sampled:** 11/18/21 13:01 **Analysis:** EPA TO-3M
Matrix: Air **Received:** 11/22/21 **Analyst:** LJB

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
TPH (C5-C12)	**0.16**	0.050	ppmv	**0.66**	0.20	mg/m3

ENTHALPY ANALYTICAL

Gas range organics by EPA TO-3M

Lab #: 453958 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Field ID: SVMP-20M **Diln Fac:** 2.000 **Analyzed:** 11/30/21 01:29
Type: SAMPLE **Batch#:** 278885 **Prep:**
Lab ID: 453958-007 **Sampled:** 11/18/21 13:17 **Analysis:** EPA TO-3M
Matrix: Air **Received:** 11/22/21 **Analyst:** LJB

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
TPH (C5-C12)	**0.070**	0.050	ppmv	**0.29**	0.20	mg/m3

Field ID: SVMP-20D **Diln Fac:** 2.000 **Analyzed:** 11/30/21 01:57
Type: SAMPLE **Batch#:** 278885 **Prep:**
Lab ID: 453958-008 **Sampled:** 11/18/21 13:20 **Analysis:** EPA TO-3M
Matrix: Air **Received:** 11/22/21 **Analyst:** LJB

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
TPH (C5-C12)	**0.087**	0.050	ppmv	**0.36**	0.20	mg/m3

Type: BLANK **Diln Fac:** 1.000 **Prep:**
Lab ID: QC957998 **Batch#:** 278885 **Analysis:** EPA TO-3M
Matrix: Air **Analyzed:** 11/29/21 19:52 **Analyst:** LJB

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
TPH (C5-C12)	ND	0.025	ppmv	ND	0.10	mg/m3

Legend

ND: Not Detected
RL (V): Reporting Limit
Result (M): Result in mass units
Result (V): Result in volume units

ENTHALPY ANALYTICAL

Gas range organics by EPA TO-3M: Batch QC

Lab #: 453958 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Type: BS **Dil'n Fac:** 1.000 **Prep:**

Lab ID: QC957996 **Batch#:** 278885 **Analysis:** EPA TO-3M

Matrix: Air **Analyzed:** 11/29/21 18:26 **Analyst:** LJB

Analyte	Spiked	Result (V)	Units (V)	%REC	Limits
TPH Gasoline	2.500	2.219	ppmv	89	70-130

Type: BSD **Dil'n Fac:** 1.000 **Prep:**

Lab ID: QC957997 **Batch#:** 278885 **Analysis:** EPA TO-3M

Matrix: Air **Analyzed:** 11/29/21 18:55 **Analyst:** LJB

Analyte	Spiked	Result (V)	Units (V)	%REC	Limits	RPD	Lim
TPH Gasoline	2.500	2.288	ppmv	92	70-130	3	25

Legend

RPD: Relative Percent Difference

Result (V): Result in volume units

Level IV Data Package

453958

Enthalpy Analytical, an affiliate of Montrose Environmental Company
931 W. Barkley Ave., Orange, CA 92868 • T: (714) 771-6900 • F: (714) 531-1209
www.enthalpy.com/socal

Initial Calibration Summary

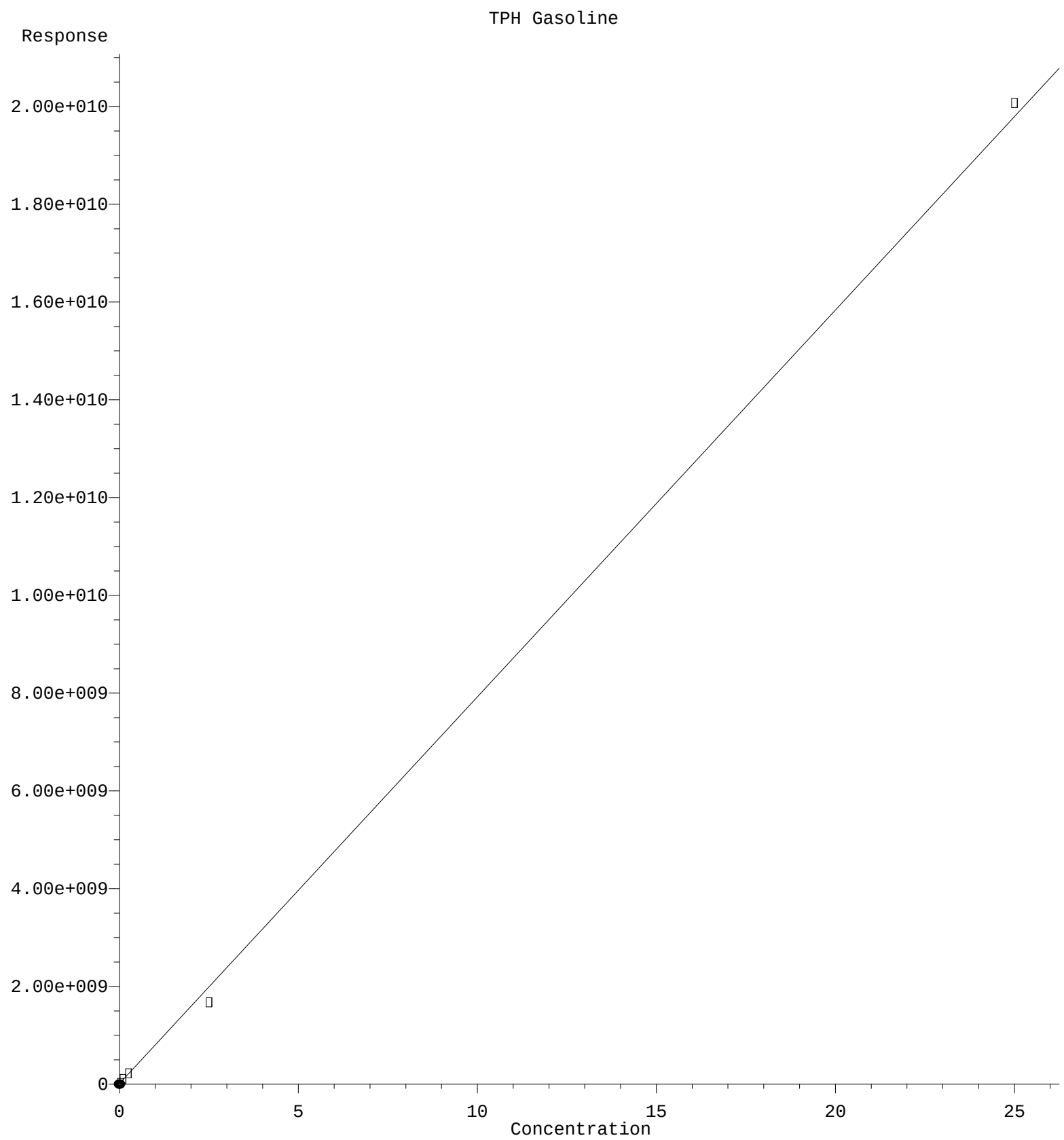
Response Factor Report AIR-MS-03

Method Path : C:\MSDChem\1\METHODS\Quant Methods\
Method File : TO3M_211020_1.m
Title : AIR-MS-03 Gas
Last Update : Thu Oct 21 12:41:38 2021
Response Via : Initial Calibration

Calibration Files
1 =Air03_102021003.D 2 =Air03_102021004.D 3 =Air03_102021005.D
4 =Air03_102021006.D 5 =Air03_102021007.D 6 =Air03_102021008.D

	Compound	1	2	3	4	5	6	Avg	%RSD
1) H	TPH Gasoline	1.059	1.058	0.896	0.670	0.803		0.897 E9	18.70
2) H	TPH Gasoline ...	1.059	1.058	0.896	0.670	0.803		0.897 E9	18.70
3) H	TVOC as Hexane		7.713	6.694	6.526	6.325	6.272	6.706 E8	8.76
4) T	n-Hexane		7.713	6.694	6.526	6.325	6.272	6.706 E8	8.76

(#) = Out of Range



Response = 7.911e+008 * Amt + 9.729e+006
Coef of Det (r^2) = 0.997 Curve Fit: wlr(1/a)
Method Name: C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Calibration Table Last Updated: Thu Oct 21 12:41:38 2021

Initial and Continuing Calibration Verification Summary

Enthalpy Analytical, an affiliate of Montrose Environmental Company
931 W. Barkley Ave., Orange, CA 92868 • T: (714) 771-6900 • F: (714) 531-1209
www.enthalpy.com/socal

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021011.D
Acq On : 20 Oct 2021 6:33 pm
Operator : LJB
Sample : ICV,276233,S15999,1X,PDF:1
Misc : I3; BS,QC950404
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 21 13:33:09 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 H	TPH Gasoline	2.500	2.182	12.7	104	0.00
2 H	TPH Gasoline (C5-C12)	2.500	2.020	19.2	96	0.00
3 H	TVOC as Hexane	0.100	2.764	-2664.0#	2660	0.00
4 T	n-Hexane	0.100	0.103	-3.0	100	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921018.D
Acq On : 29 Nov 2021 6:26 pm
Operator : LJB
Sample : CCV/BS,S15999,QC957996,278885,1x,PDF:1
Misc : I1 1x200mL 2.5ppmv
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 29 19:14:43 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 H	TPH Gasoline	2.500	2.219	11.2	105	0.00
2 H	TPH Gasoline (C5-C12)	2.500	2.054	17.8	98	0.00
3 H	TVOC as Hexane	0.100	2.811	-2711.0#	2704	0.00
4 T	n-Hexane	0.100	0.103	-3.0	100	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921035.D
Acq On : 30 Nov 2021 2:25 am
Operator : LJB
Sample : CCV,S15999,278885,1x,PDF:1
Misc : I1 1x200mL 2.5ppmv
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 30 13:43:46 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 H	TPH Gasoline	2.500	2.193	12.3	104	0.00
2 H	TPH Gasoline (C5-C12)	2.500	2.034	18.6	97	0.00
3 H	TVOC as Hexane	0.100	2.779	-2679.0#	2674	0.00
4 T	n-Hexane	0.100	0.103	-3.0	100	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Instrument Run Logs

Instr AIR-MS03
Date: 7/21/2021
Seq #: **210721_TO3**

#	Sample ID	Data File	Injection Time	Comments
1	IB	Air03_10202101	10/20/2021 12:57	
2	IB	Air03_10202102	10/20/2021 13:26	
3	ICAL,S16078,10X,0.025ppmv	Air03_10202103	10/20/2021 13:55	
4	ICAL,S16078,2.5X,0.100ppmv	Air03_10202104	10/20/2021 14:23	
5	ICAL,S16078,1X,0.250ppmv	Air03_10202105	10/20/2021 14:52	
6	ICAL,S16077,1X,2.500ppmv	Air03_10202106	10/20/2021 15:21	
7	ICAL,S16076,1X,25ppmv	Air03_10202107	10/20/2021 16:10	
8	ICAL,S16078,1X,10ppmv	Air03_10202108	10/20/2021 17:07	n-Hexane ONLY
9	IB	Air03_10202109	10/20/2021 17:36	
10	IB	Air03_10202110	10/20/2021 18:04	
11	ICV/BS,QC950404,276233,S15999,1X,PDF:1	Air03_10202111	10/20/2021 18:33	
12	BSD,QC950405,276233,S15999,1X,PDF:1	Air03_10202112	10/20/2021 19:02	
13	IB	Air03_10202113	10/20/2021 19:30	
14	BLANK,QC950406,276233,1X,PDF:1	Air03_10202114	10/20/2021 19:59	
15	452101-001,276233,1000X,PDF:1	Air03_10202115	10/20/2021 20:29	
16	CCV,S16077,1X,2.500ppmv	Air03_10202116	10/20/2021 20:57	

Instr AIR-MS03
Date: 11/29/2021
Seq #: **211129_TO3**

#	Sample ID	Data File	Injection Time	Comments
1	IB	Air03_112921001	11/29/2021 10:10	IB
2	454058-001,15x	Air03_112921002	11/29/2021 10:39	NR, Screen
3	454058-002,15x	Air03_112921003	11/29/2021 11:08	NR, Screen
4	454058-003,15x	Air03_112921004	11/29/2021 11:37	NR, Screen
5	454058-004,15x	Air03_112921005	11/29/2021 12:06	NR, Screen
6	454058-005,15x	Air03_112921006	11/29/2021 12:35	NR, Screen
7	454114-001,15x	Air03_112921007	11/29/2021 13:04	NR, Screen
8	454114-002,15x	Air03_112921008	11/29/2021 13:33	NR, Screen
9	454114-003,15x	Air03_112921009	11/29/2021 14:02	NR, Screen
10	454114-004,15x	Air03_112921010	11/29/2021 14:31	NR, Screen
11	454114-005,15x	Air03_112921011	11/29/2021 15:00	NR, Screen
12	454114-006,15x	Air03_112921012	11/29/2021 15:29	NR, Screen
13	454114-007,15x	Air03_112921013	11/29/2021 15:58	NR, Screen
14	454114-008,15x	Air03_112921014	11/29/2021 16:32	NR, Screen
15	454114-009,15x	Air03_112921015	11/29/2021 17:00	NR, Screen
16	454114-010,15x	Air03_112921016	11/29/2021 17:29	NR, Screen
17	454114-011,15x	Air03_112921017	11/29/2021 17:57	NR, Screen
18	CCV/BS,S15999,QC957996,278885,1x,PDF:1	Air03_112921018	11/29/2021 18:26	
19	BSD,S15999,QC957976,278885,1x,PDF:1	Air03_112921019	11/29/2021 18:55	
20	IB	Air03_112921020	11/29/2021 19:23	
21	BLANK,QC957977,278885,1X,PDF:1	Air03_112921021	11/29/2021 19:52	
22	453996-022,278885,2X,PDF:1	Air03_112921022	11/29/2021 20:20	
23	453996-023,278885,2X,PDF:1	Air03_112921023	11/29/2021 20:49	
24	453996-024,278885,2X,PDF:1	Air03_112921024	11/29/2021 21:17	
25	453996-025,278885,2X,PDF:1	Air03_112921025	11/29/2021 21:45	
26	453996-026,278885,2X,PDF:1	Air03_112921026	11/29/2021 22:14	
27	453958-001,278885,2X,PDF:1	Air03_112921027	11/29/2021 22:42	
28	453958-002,278885,2X,PDF:1	Air03_112921028	11/29/2021 23:10	
29	453958-003,278885,2X,PDF:1	Air03_112921029	11/29/2021 23:38	
30	453958-004,278885,2X,PDF:1	Air03_112921030	11/30/2021 0:06	
31	453958-005,278885,2X,PDF:1	Air03_112921031	11/30/2021 0:34	
32	453958-006,278885,2X,PDF:1	Air03_112921032	11/30/2021 1:01	
33	453958-007,278885,2X,PDF:1	Air03_112921033	11/30/2021 1:29	
34	453958-008,278885,2X,PDF:1	Air03_112921034	11/30/2021 1:57	
35	CCV,S15999,27885,1X,PDF:1	Air03_112921035	11/30/2021 2:23	

Sample Prep Logs

Pressurization Logbook

Sample ID	Initial Pressure (mm Hg)	Final Pressure (mm Hg)	Canister Volume (L)	Dilution Factor	Analyst Initials	Date	Comments
453955-001	536.6	1073.2	1.4L	2X	CD	11/22/21	C80050
-002	423.3	1058.3	"	2.5X	"	"	97
-003	378.3	1134.9	"	3X	"	"	41
453909-001	593.0	652.3	6L	1.1X	BL	11/22/21	C70295
453996-001	596.4	1192.8	1.4L	2X	LB	11/23/21	C10770
-002	563.1	1126.2	"	"	"	"	C10768
-003	587.9	1175.8	"	"	"	"	C10853
-004	603.6	1207.2	"	"	"	"	C10607
453915-007	674.2	903.4	"	1.34	ND	"	C10678 (1.5X, 1.34X → 2X)
453996-005	592.5	1185.0	"	2X	LB	"	C10767
-006	639.9	1279.8	"	"	"	"	C10834
-007	595.4	1190.8	"	"	"	"	C10855
-008	665.2	1330.4	"	"	"	"	C10764
454109-001	633.5	950.3	"	1.5X	LB	"	C10263
2	615.0	922.5	"	"	"	"	C10264
3	648.1	972.2	"	"	"	"	C10712
4	747.4	1121.1	"	"	"	"	C10066
454004-001	589.6	1179.2	1.4L	2X	CD	11/24/21	C10454
-002	688.7	1239.7	"	1.8X	"	"	300
-003	620.7	1241.4	"	2X	"	"	437
454082-001	583.3	1166.6	1.4L	2X	CD	11/24/21	C10279
-002	639.2	1278.4	"	2X	"	"	338
-003	548.7	1097.4	"	2X	"	"	087
-004	651.1	1302.2	"	2X	"	"	144
-005	604.5	1209.0	"	2X	"	"	306
-006	603.3	1206.6	"	2X	"	"	200
453996-009	563.8	1127.6	"	"	LB	"	C10602
-010	591.4	1182.8	"	"	"	"	C10826
-011	581.1	1162.2	"	"	"	"	C10811
-012	582.1	1164.2	"	"	"	"	C10612
-013	599.5	1199.0	"	"	"	"	C10563
-014	634.5	1269.0	"	"	"	"	C10809
-015	600.2	1200.4	"	"	"	"	C10050
-016	614.2	1228.4	"	"	"	"	C10771
-017	604.9	1209.8	"	2X	"	"	C10554
-018	581.8	1163.6	"	"	"	"	C10827
-019	581.9	1163.8	"	"	"	"	C10608
-020	666.6	1333.2	"	"	"	"	C10766
-021	616.7	1233.4	"	"	"	"	C10048
-022	623.8	1247.6	"	"	"	"	C10015
-023	648.6	1297.2	"	"	"	"	C10524
-024	590.2	1180.4	"	"	"	"	C10769

Pressurization Logbook

Sample ID	Initial Pressure (mm Hg)	Final Pressure (mm Hg)	Canister Volume (L)	Dilution Factor	Analyst Initials	Date	Comments
453996-025	657.8	1315.6	1.4L	2x	LB	11/24/21	C10806
-026	654.4	1308.8	↓	↓	↓	↓	C10787
454130-001	652.6	NA	6L	NA	↓	↓	C70050
-002	663.4	↓	↓	↓	↓	↓	C70296
-003	650.9	↓	↓	↓	↓	↓	C70085
-004	642.8	707.1	↓	1.1x	↓	↓	C70008
-005	650.5	NA	↓	NA	↓	↓	C70081
-006	609.7	670.7	↓	1.1x	↓	↓	C70007
-007	614.3	675.7	↓	↓	↓	↓	C70193
-008	656.7	NA	↓	NA	↓	↓	C70024
454175-001	710.8	1066.2	1.4L	1.5x	↓	↓	C10686
2	719.1	1078.7	↓	↓	↓	↓	C10231
3	689.7	1034.6	↓	↓	↓	↓	C10083
4	727.0	1090.5	↓	↓	↓	↓	C10315
453945-001	514.9	926.8	1.4L	1.8X	NZ	11/27/21	C10596
2	483.2	869.8	↓	↓	↓	↓	813
3	574.7	1034.5	↓	↓	↓	↓	529
4	565.8	1018.4	↓	↓	↓	↓	577
5	515.8	928.4	↓	↓	↓	↓	537
6	502.1	903.8	↓	↓	↓	↓	619
7	473.1	851.6	↓	↓	↓	↓	598
454058-001	671.5	1007.3	↓	1.5X	↓	11/29/21	633
2	671.2	1006.8	↓	↓	↓	↓	434
3	675.2	1012.8	↓	↓	↓	↓	333
4	635.0	952.5	↓	↓	↓	↓	659
5	652.0	978.0	↓	↓	↓	↓	414
454114-001	665.4	998.1	↓	1.5x	LB	↓	C10691
-002	718.8	1078.2	↓	↓	↓	↓	C10433
-003	692.9	1039.4	↓	↓	↓	↓	C10292
-004	676.2	1014.3	↓	↓	↓	↓	C10195
-005	645.4	968.1	↓	↓	↓	↓	C10406
-006	644.7	967.1	↓	↓	↓	↓	C10680
-007	676.8	1015.2	↓	↓	↓	↓	C10372
-008	710.5	1065.8	↓	↓	↓	↓	C10260
-009	609.3	914.0	↓	↓	↓	↓	C10309
-010	639.2	958.8	↓	↓	↓	↓	C10651
-011	672.2	1008.3	↓	↓	↓	↓	C10398
454140-001	613.2	919.8	↓	↓	↓	↓	C10446
-002	748.1	1122.2	↓	↓	↓	↓	C10483
-003	420.5	967.2	↓	2.3x	↓	↓	C10640
-004	567.8	965.3	↓	1.7x	↓	↓	C10642
454113-001	665.4	998.1	↓	1.5x	↓	↓	C10101

Pressurization Logbook

Sample ID	Initial Pressure (mm Hg)	Final Pressure (mm Hg)	Canister Volume (L)	Dilution Factor	Analyst Initials	Date	Comments
454113-002	695.4	1043.1	1.4L	1.5x	LB	11/29/21	C10121
-003	715.0	1072.5					C10244
-004	691.1	1036.7					C10137
-005	653.2	979.8					C10229
-006	690.2	1035.3					C10298
-007	716.3	1074.5					C10291
-008	636.3	954.5					C10228
453958-001	677.9	1355.8		2x			C10293
-002	586.2	1172.4					C10092
-003	634.9	1269.8					C10150
-004	686.7	1373.4					C10664
-005	657.6	1315.2					C10173
-006	625.3	1250.6					C10672
-007	615.0	1230.0					C10318
-008	664.0	1328.0					C10146
454231-001	594.0	1188.0				11/30/21	C10606
-002	726.3	1452.6					C10623
-003	706.8	1413.6					C10104
454137-001	614.8	676.3	6L	1.1X	DL	11/30/21	C70209
-002	630.6	693.7					C70221
-003	637.5	701.3					C70133
-004	625.0	687.5					C70167
-005	601.0	661.1					C70216
-006	630.1	693.1					C70185
454249-001	646.7	1293.4	1.4L	2x	LB		C10412
-002	653.2	1306.4					C10090
-003	659.0	1318					C10326
-004	712.7	1425.4					C10084
-005	641.3	1282.6					C10400
-006	652.8	1305.6					C10448
-007	699.8	1399.6					C10330
-008	727.9	1455.8					C10455
-009	636.2	1272.4					C10641
-010	370.8	1112.4		3x			C10227
-011	641.0	1282.0		2x			C10410
-012	596.0	1192.0					C10148

Air Sample Dilution Logbook

Sample ID	Dilution 1			Dilution 2			Dilution 3			Total DF	Date	Analyst Initials	Comments
	Initial Vol.	Final Vol.	DF1	Initial Vol.	Final Vol.	DF2	Initial Vol.	Final Vol.	DF3				
453817-004	20mL	1L	50X							50X	11/18/21	LB	Bag to bag
-005	↓	↓	↓							↓	↓	↓	↓
-007	↓	↓	↓							↓	↓	↓	↓
-009	↓	↓	↓							↓	↓	↓	↓
-010	↓	↓	↓							↓	↓	↓	↓
-011	↓	↓	↓							↓	↓	BR	↓
-012	↓	↓	↓							↓	↓	LB	↓
-013	↓	↓	↓							↓	↓	DL	↓
-014	↓	↓	↓							↓	↓	LB	↓
453580-001				20mL	1L	50X				↓	↓	DL	↓
453974-001	10mL	1L	100X	10mL	1L	100X				37500X	11/19/21	NZ	PF=1.5 500X
-002	↓	↓	↓	↓	↓	↓				10000X	11/22/21	DL	Serial DL/Bag to bag
-003	↓	↓	↓							↓	↓	↓	↓
453796-002	20mL	1L	50X							75X	↓	↓	PF=1.5X
453964-001	10mL	↓	100X							100X	11/23/21	LB	Bag to bag
453915-003	20mL	↓	50X							75X	↓	NZ	PF=1.5X
006	↓	↓	↓							↓	↓	↓	↓
453974-001	50mL		20X							20X		LB	Bag to bag
-002	↓	↓	↓							↓	↓	↓	↓
-003	↓	↓	↓							↓	↓	↓	↓
454075-001	10mL	↓	100X							100X	↓	LB	↓
454134-001	↓	↓	↓							↓	11/24/21	LB	↓
454058-005	↓	↓	↓							150X	11/30/21	NZ	PF=1.5
454195-001	10mL	1L	100X	100mL	1L	10X				1000X	↓	LB	Bag to bag

Raw Data

Samples

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921027.D
Acq On : 29 Nov 2021 10:42 pm
Operator : LJB
Sample : 453958-001,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 7 Sample Multiplier: 2

Quant Time: Nov 30 13:39:29 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

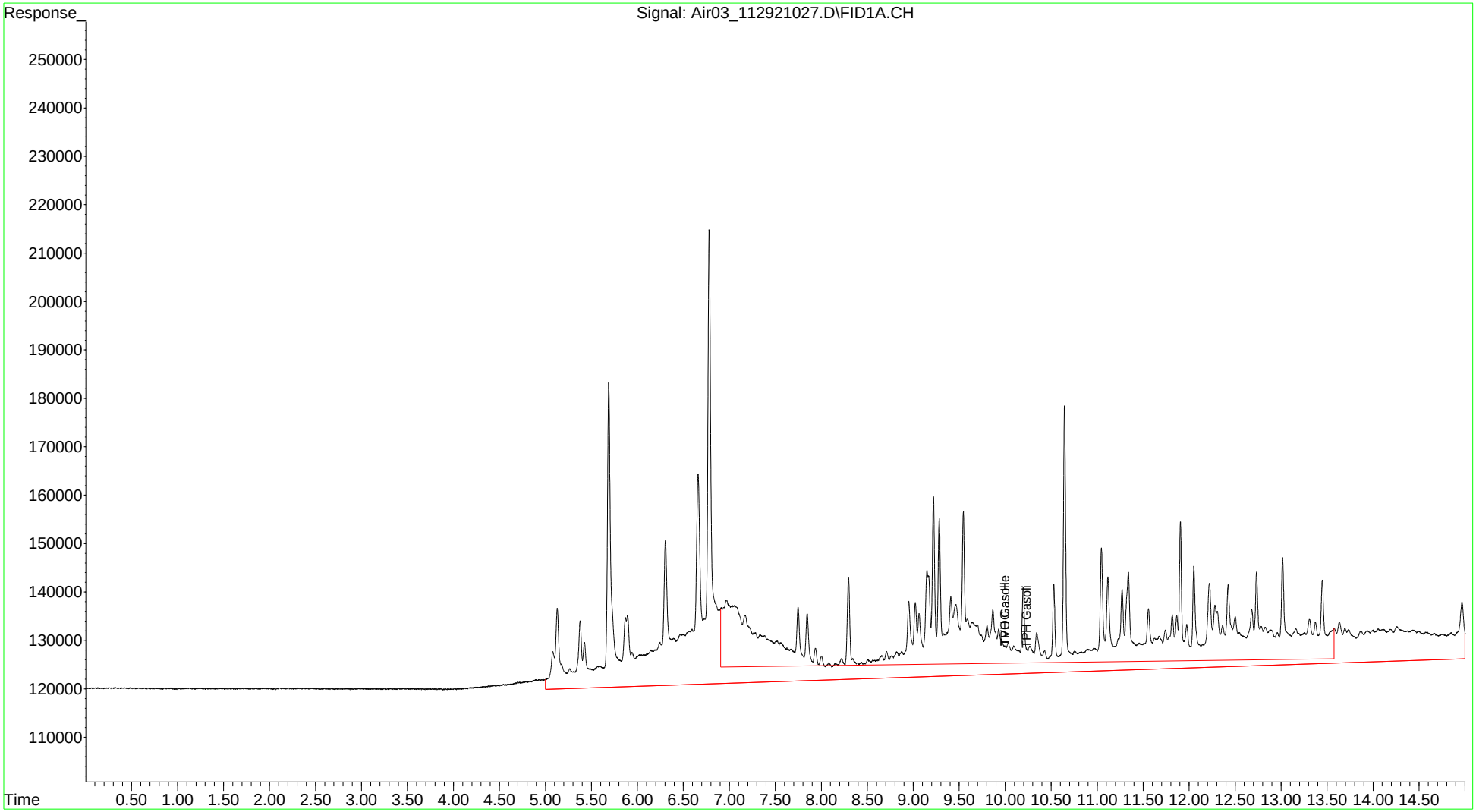
	Compound	R.T.	Response	Conc	Units
Target Compounds					
1) H	TPH Gasoline	10.000	32818187	0.058	uL/L
2) H	TPH Gasoline (C5-C12)	10.240	21095509	0.029	uL/L
3) H	TVOC as Hexane	10.000	32818187	0.103	uL/L
4) T	n-Hexane	8.296	405276	N.D.	uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921027.D
Acq On : 29 Nov 2021 10:42 pm
Operator : LJB
Sample : 453958-001,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 7 Sample Multiplier: 2

Quant Time: Nov 30 13:39:29 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921028.D
Acq On : 29 Nov 2021 11:10 pm
Operator : LJB
Sample : 453958-002,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 8 Sample Multiplier: 2

Quant Time: Nov 30 13:39:56 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

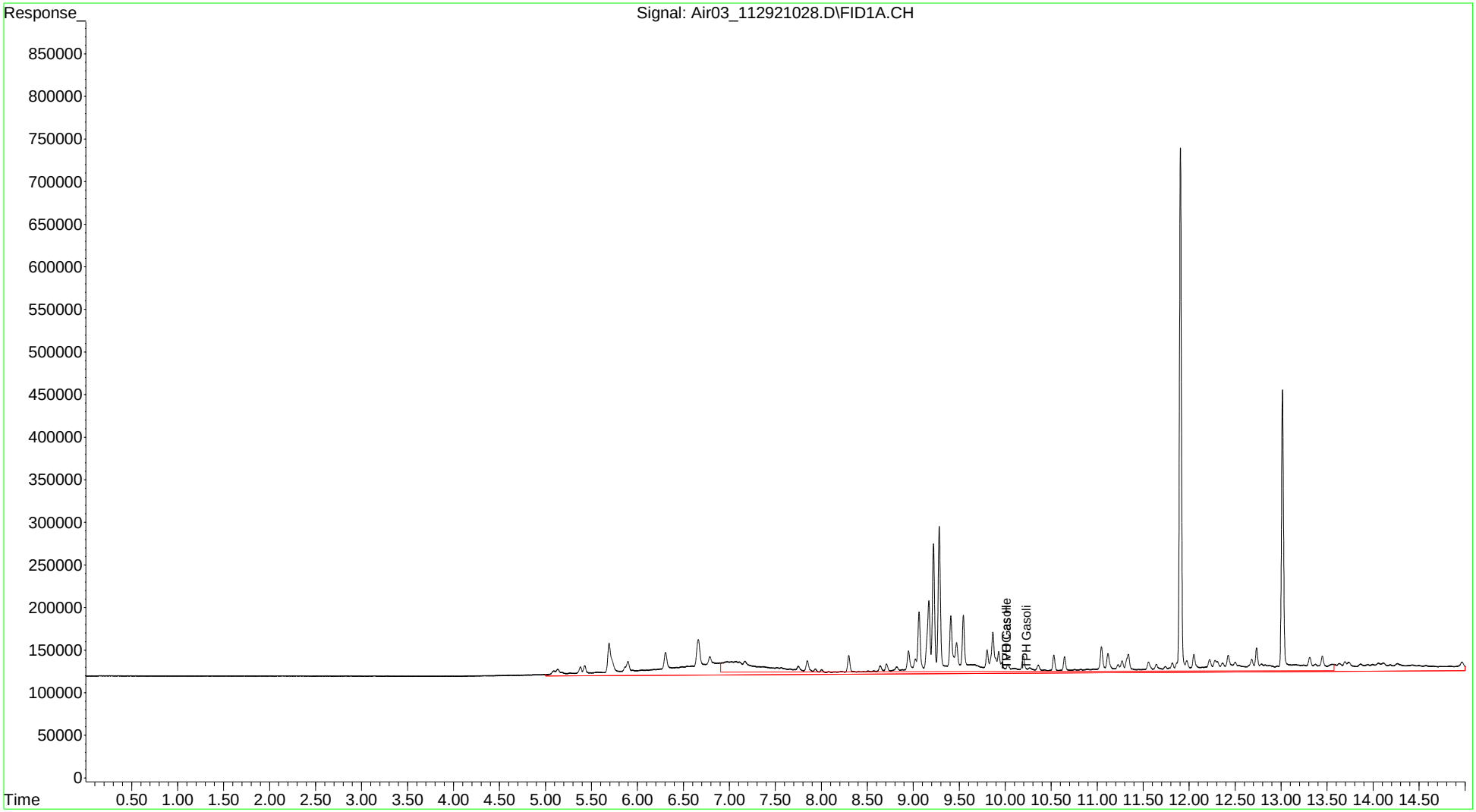
	Compound	R.T.	Response	Conc	Units
Target Compounds					
1) H	TPH Gasoline	10.000	55188874	0.115	uL/L
2) H	TPH Gasoline (C5-C12)	10.240	45336295	0.090	uL/L
3) H	TVOC as Hexane	10.000	55188874	0.174	uL/L
4) T	n-Hexane	8.299	366194	N.D.	uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921028.D
Acq On : 29 Nov 2021 11:10 pm
Operator : LJB
Sample : 453958-002,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 8 Sample Multiplier: 2

Quant Time: Nov 30 13:39:56 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921029.D
Acq On : 29 Nov 2021 11:38 pm
Operator : LJB
Sample : 453958-003,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 9 Sample Multiplier: 2

Quant Time: Nov 30 13:40:15 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

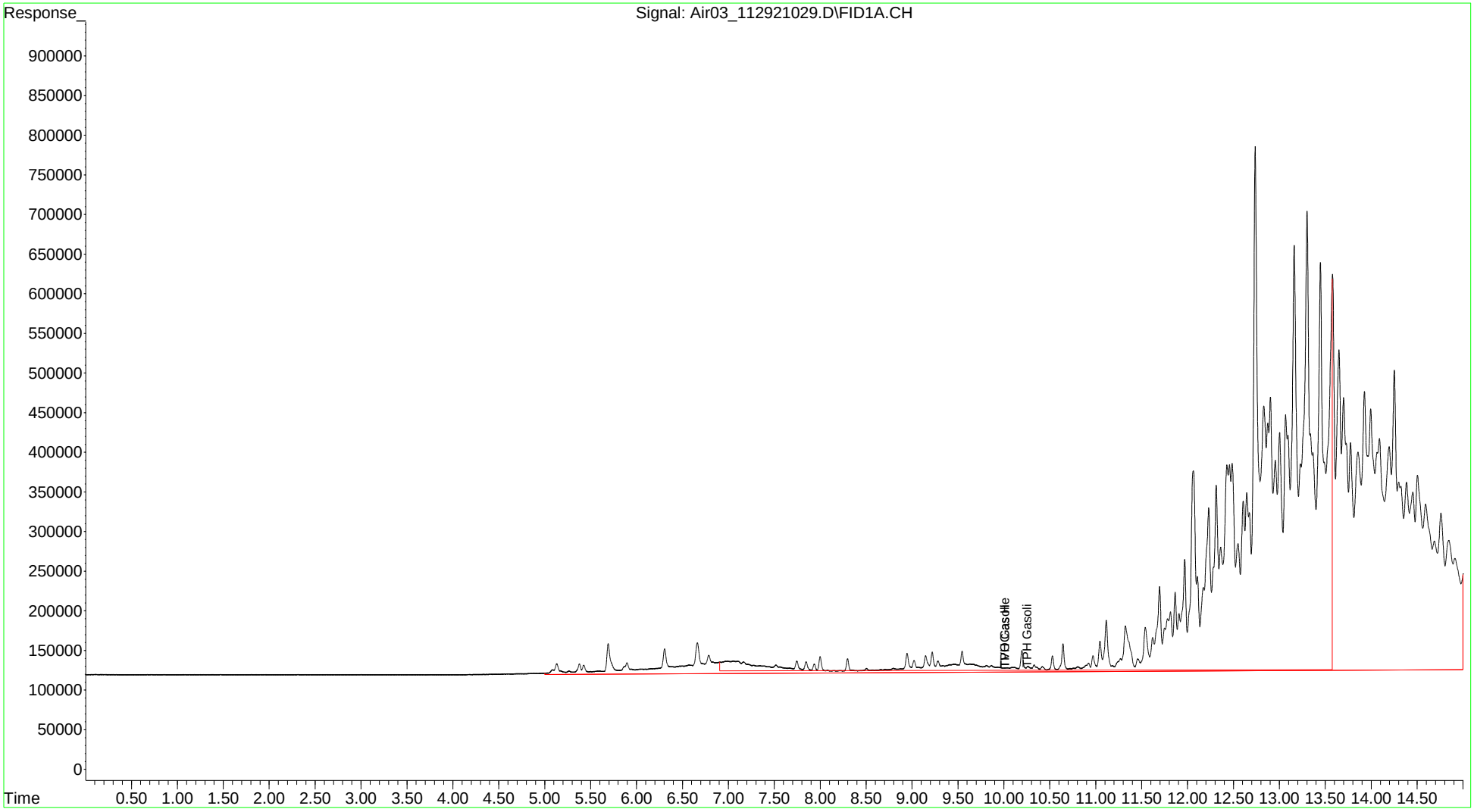
	Compound	R.T.	Response	Conc	Units
Target Compounds					
1) H	TPH Gasoline	10.000	417489567	1.031	uL/L
2) H	TPH Gasoline (C5-C12)	10.240	233199905	0.565	uL/L
3) H	TVOC as Hexane	10.000	417489567	1.328	uL/L
4) T	n-Hexane	8.298	322224	N.D.	uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921029.D
Acq On : 29 Nov 2021 11:38 pm
Operator : LJB
Sample : 453958-003,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 9 Sample Multiplier: 2

Quant Time: Nov 30 13:40:15 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921030.D
Acq On : 30 Nov 2021 0:06 am
Operator : LJB
Sample : 453958-004,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 10 Sample Multiplier: 2

Quant Time: Nov 30 13:40:39 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

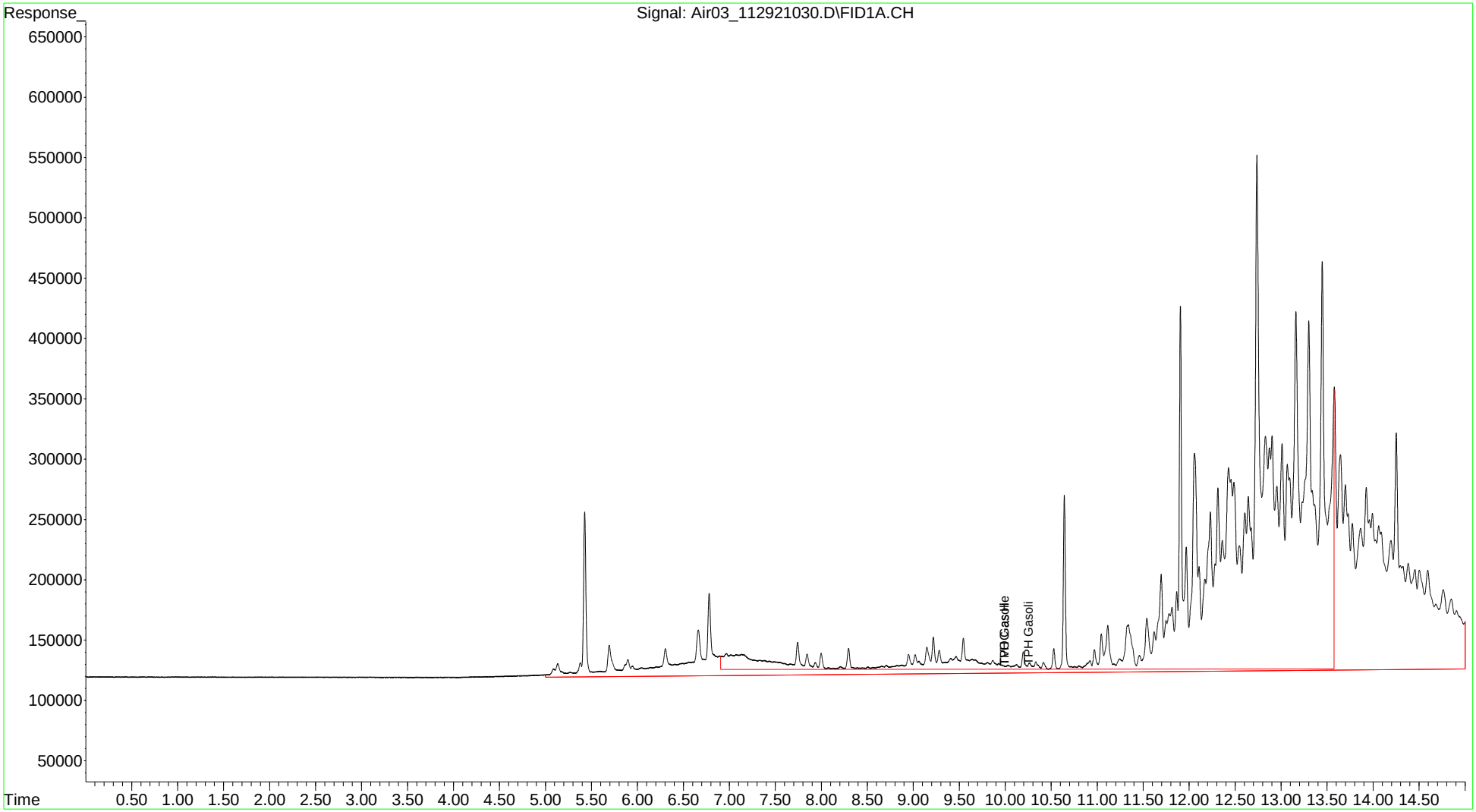
	Compound	R.T.	Response	Conc	Units
Target Compounds					
1) H	TPH Gasoline	10.000	237974889	0.577	uL/L
2) H	TPH Gasoline (C5-C12)	10.240	156229492	0.370	uL/L
3) H	TVOC as Hexane	10.000	237974889	0.756	uL/L
4) T	n-Hexane	8.296	499054	N.D.	uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921030.D
Acq On : 30 Nov 2021 0:06 am
Operator : LJB
Sample : 453958-004,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 10 Sample Multiplier: 2

Quant Time: Nov 30 13:40:39 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921031.D
Acq On : 30 Nov 2021 0:34 am
Operator : LJB
Sample : 453958-005,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 11 Sample Multiplier: 2

Quant Time: Nov 30 13:41:26 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

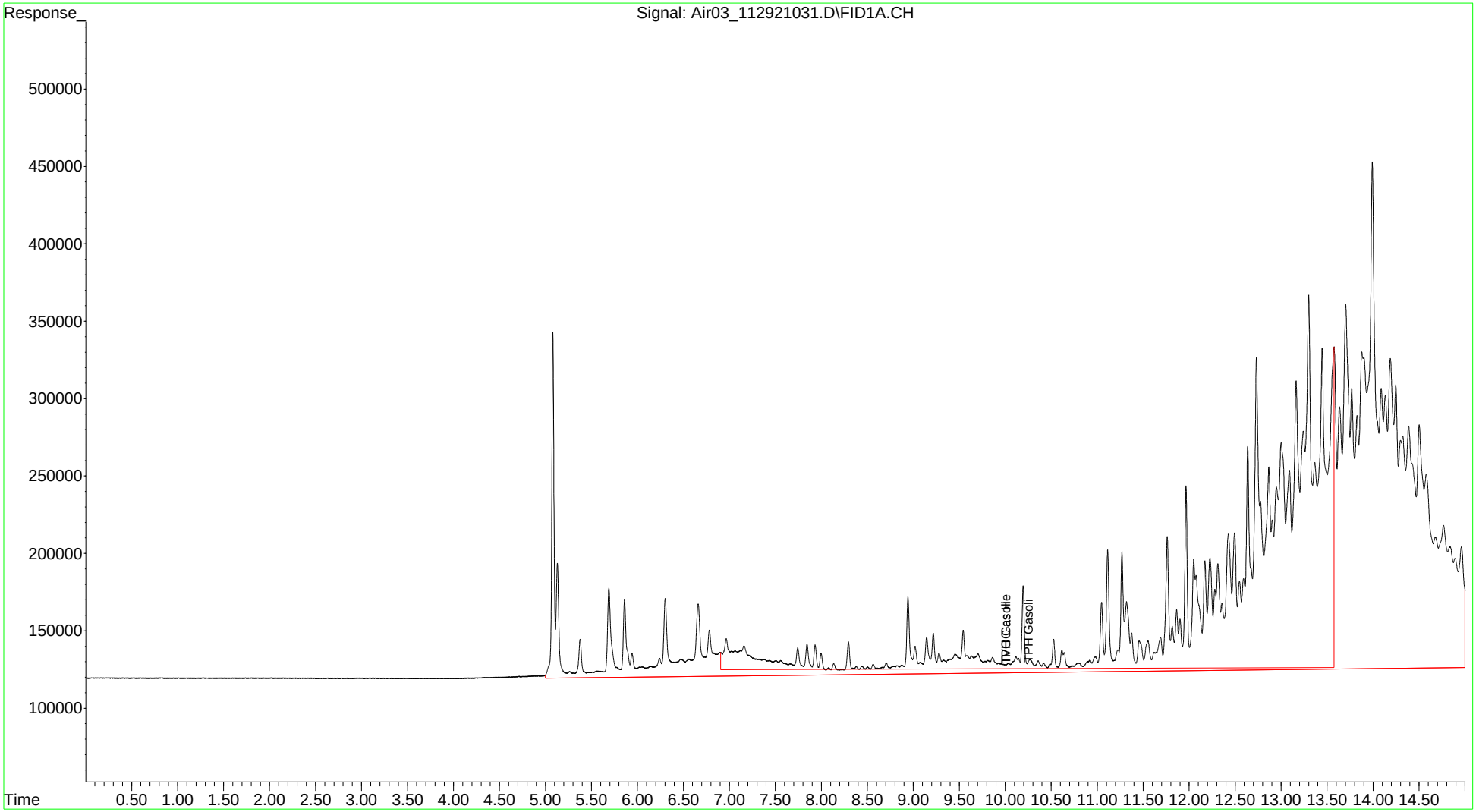
	Compound	R.T.	Response	Conc	Units
Target Compounds					
1) H	TPH Gasoline	10.000	184560584	0.442	uL/L
2) H	TPH Gasoline (C5-C12)	10.240	96060584	0.218	uL/L
3) H	TVOC as Hexane	10.000	184560584	0.586	uL/L
4) T	n-Hexane	8.295	386006	N.D.	uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921031.D
Acq On : 30 Nov 2021 0:34 am
Operator : LJB
Sample : 453958-005,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 11 Sample Multiplier: 2

Quant Time: Nov 30 13:41:26 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921032.D
Acq On : 30 Nov 2021 1:01 am
Operator : LJB
Sample : 453958-006,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 12 Sample Multiplier: 2

Quant Time: Nov 30 13:41:51 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

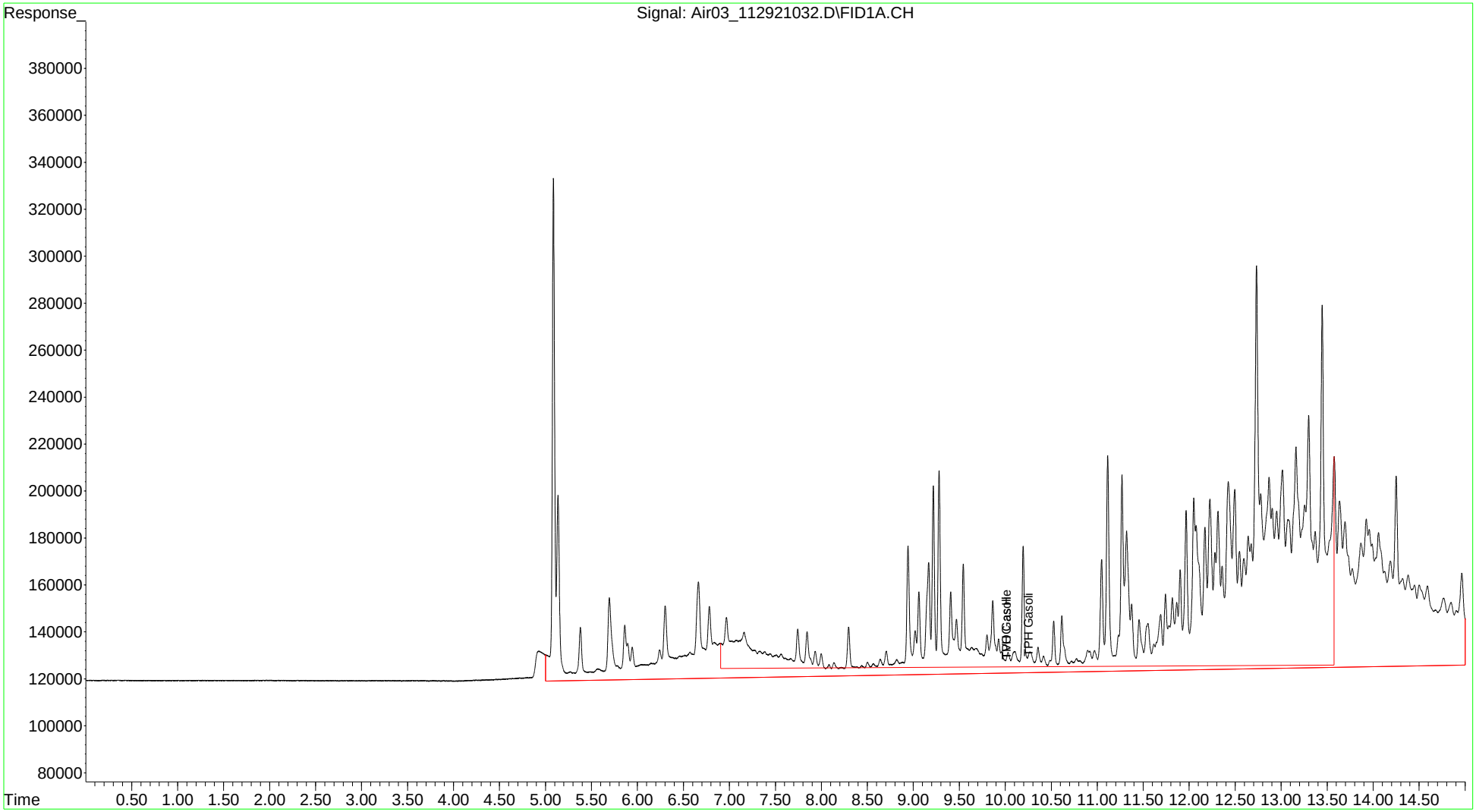
	Compound	R.T.	Response	Conc	Units
Target Compounds					
1) H	TPH Gasoline	10.000	105511886	0.242	uL/L
2) H	TPH Gasoline (C5-C12)	10.240	73836935	0.162	uL/L
3) H	TVOC as Hexane	10.000	105511886	0.334	uL/L
4) T	n-Hexane	8.297	340069	N.D.	uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921032.D
Acq On : 30 Nov 2021 1:01 am
Operator : LJB
Sample : 453958-006,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 12 Sample Multiplier: 2

Quant Time: Nov 30 13:41:51 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921033.D
Acq On : 30 Nov 2021 1:29 am
Operator : LJB
Sample : 453958-007,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 13 Sample Multiplier: 2

Quant Time: Nov 30 13:42:16 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

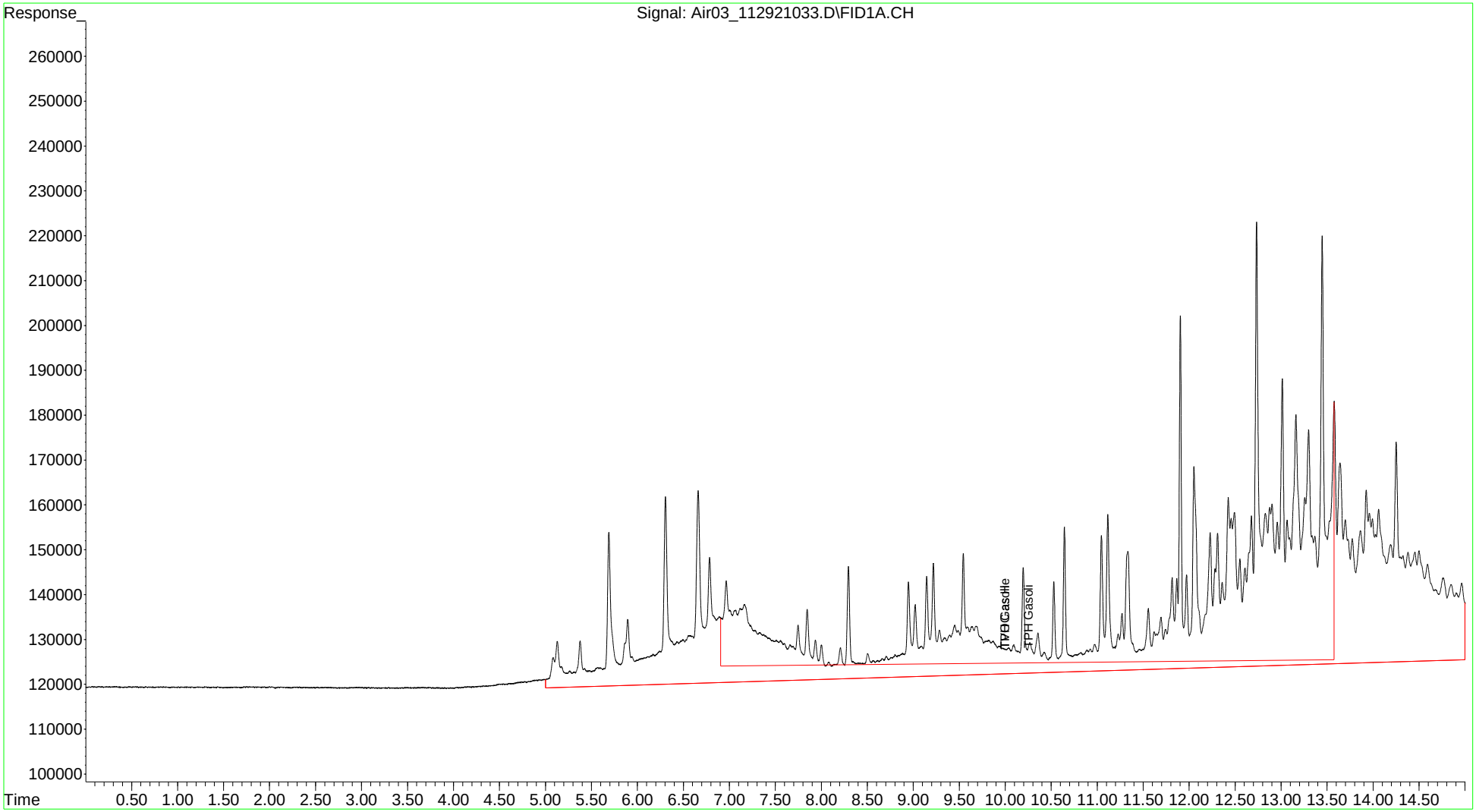
	Compound	R.T.	Response	Conc	Units
Target Compounds					
1) H	TPH Gasoline	10.000	57420177	0.121	uL/L
2) H	TPH Gasoline (C5-C12)	10.240	37603439	0.070	uL/L
3) H	TVOC as Hexane	10.000	57420177	0.181	uL/L
4) T	n-Hexane	8.295	461170	N.D.	uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921033.D
Acq On : 30 Nov 2021 1:29 am
Operator : LJB
Sample : 453958-007,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 13 Sample Multiplier: 2

Quant Time: Nov 30 13:42:16 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921034.D
Acq On : 30 Nov 2021 1:57 am
Operator : LJB
Sample : 453958-008,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 14 Sample Multiplier: 2

Quant Time: Nov 30 13:43:16 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

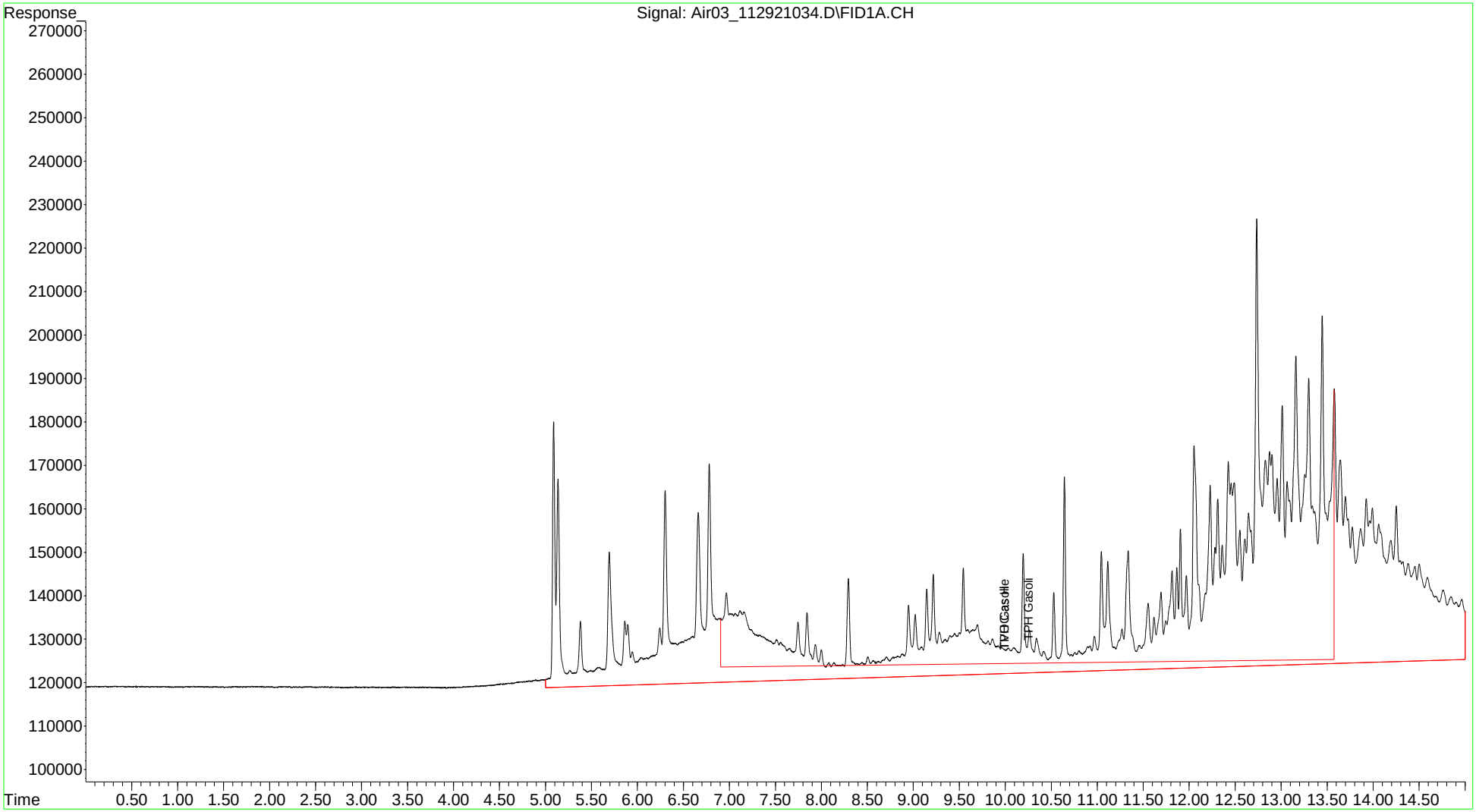
	Compound	R.T.	Response	Conc	Units
Target Compounds					
1) H	TPH Gasoline	10.000	67343739	0.146	uL/L
2) H	TPH Gasoline (C5-C12)	10.240	44262496	0.087	uL/L
3) H	TVOC as Hexane	10.000	67343739	0.213	uL/L
4) T	n-Hexane	8.294	450581	N.D.	uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921034.D
Acq On : 30 Nov 2021 1:57 am
Operator : LJB
Sample : 453958-008,278885,2X,PDF:1
Misc : I1 2x200mL
ALS Vial : 14 Sample Multiplier: 2

Quant Time: Nov 30 13:43:16 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Raw Data

Batch Quality Control

Enthalpy Analytical, an affiliate of Montrose Environmental Company
931 W. Barkley Ave., Orange, CA 92868 • T: (714) 771-6900 • F: (714) 531-1209
www.enthalpy.com/socal

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921021.D
Acq On : 29 Nov 2021 7:52 pm
Operator : LJB
Sample : BLANK,QC957977,278885,1x,PDF:1
Misc : I1 1x200mL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 30 13:32:22 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

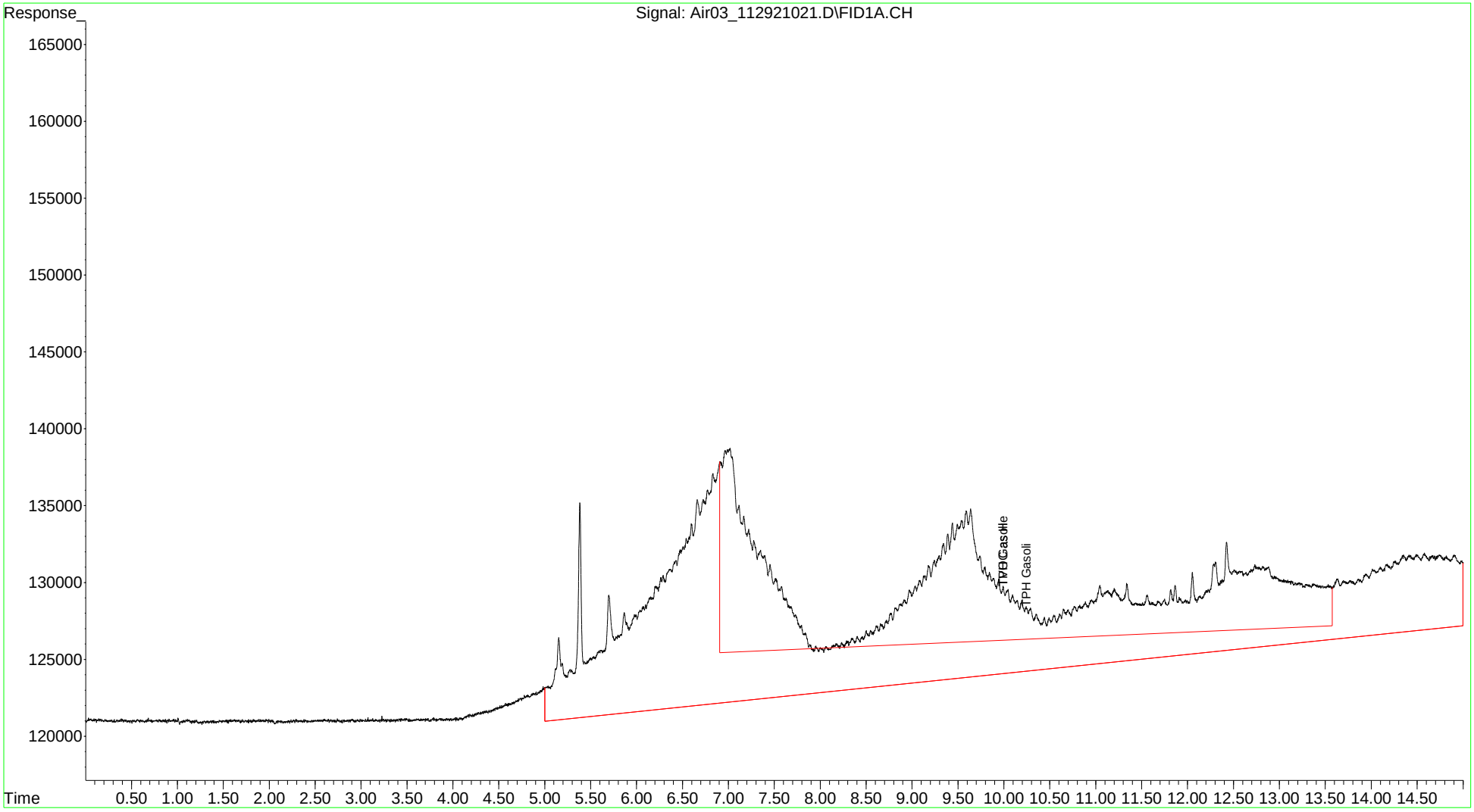
	Compound	R.T.	Response	Conc	Units
Target Compounds					
1) H	TPH Gasoline	10.000	16325471	0.008	uL/L
2) H	TPH Gasoline (C5-C12)	10.240	10214169	0.001	uL/L
3) H	TVOC as Hexane	10.000	16325471	0.025	uL/L
4) T	n-Hexane	8.349	46407	N.D.	uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921021.D
Acq On : 29 Nov 2021 7:52 pm
Operator : LJB
Sample : BLANK,QC957977,278885,1x,PDF:1
Misc : I1 1x200mL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 30 13:32:22 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921018.D
Acq On : 29 Nov 2021 6:26 pm
Operator : LJB
Sample : CCV/BS,S15999,QC957996,278885,1x,PDF:1
Misc : I1 1x200mL 2.5ppmv
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 29 19:14:43 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

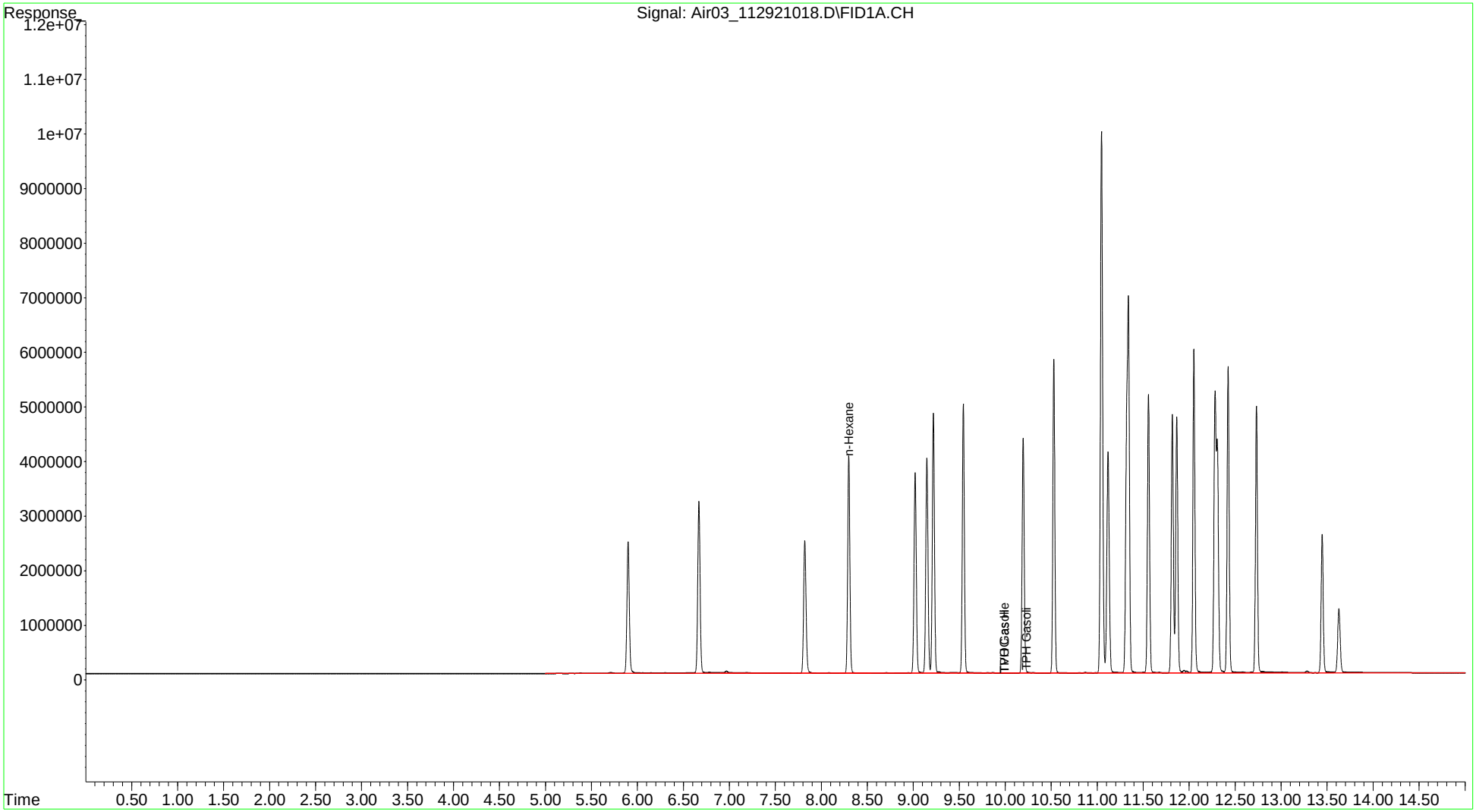
	Compound	R.T.	Response	Conc Units
Target Compounds				
1) H	TPH Gasoline	10.000	1765023060	2.219 uL/L
2) H	TPH Gasoline (C5-C12)	10.240	1634342472	2.054 uL/L
3) H	TVOC as Hexane	10.000	1765023060	2.811 uL/L
4) T	n-Hexane	8.299	65340369	0.103 uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921018.D
Acq On : 29 Nov 2021 6:26 pm
Operator : LJB
Sample : CCV/BS,S15999,QC957996,278885,1x,PDF:1
Misc : I1 1x200mL 2.5ppmv
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 29 19:14:43 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921019.D
Acq On : 29 Nov 2021 6:55 pm
Operator : LJB
Sample : BSD,S15999,QC957976,278885,1x,PDF:1
Misc : I1 1x200mL 2.5ppmv
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 29 19:15:00 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

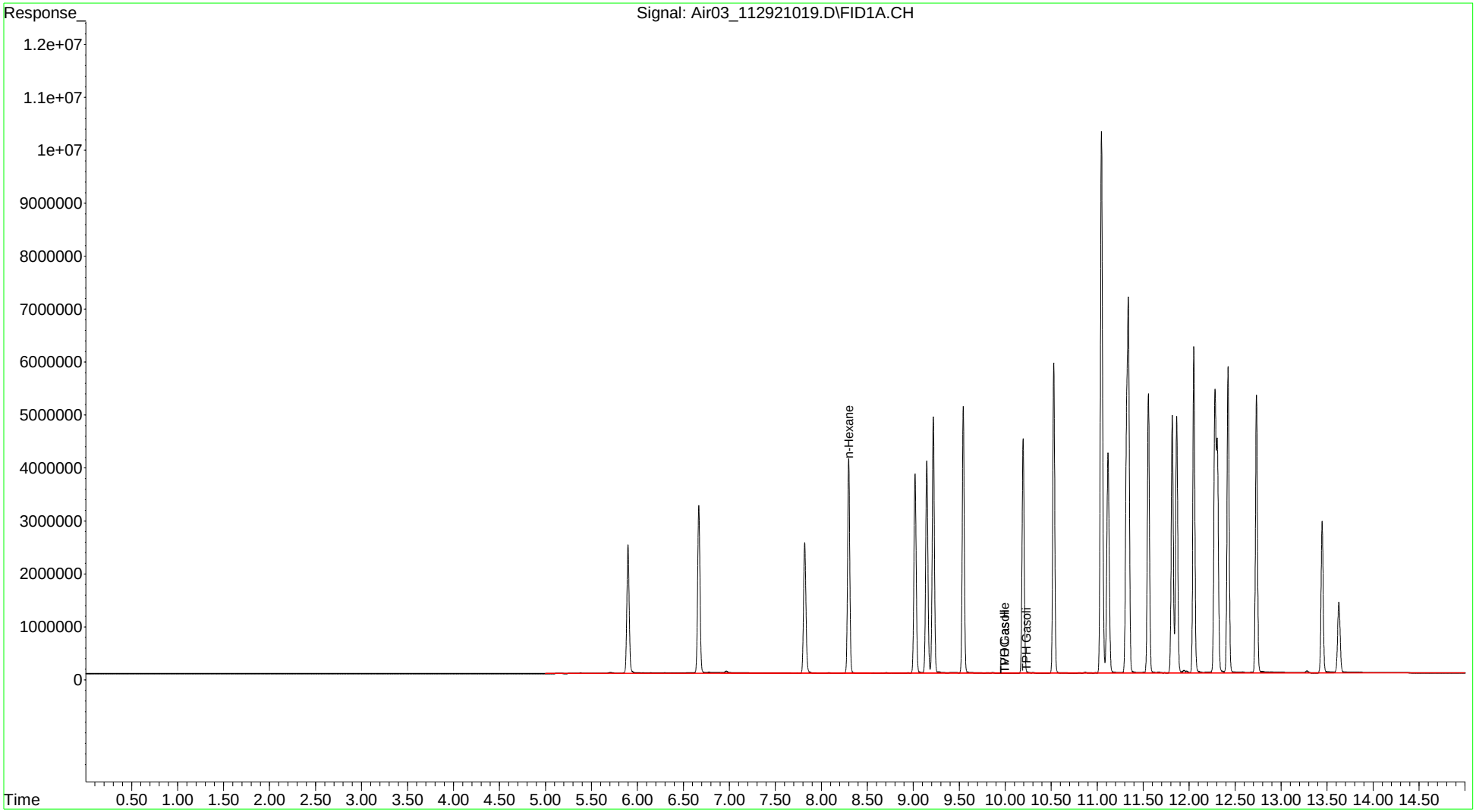
	Compound	R.T.	Response	Conc Units
Target Compounds				
1) H	TPH Gasoline	10.000	1820101207	2.288 uL/L
2) H	TPH Gasoline (C5-C12)	10.240	1686182920	2.119 uL/L
3) H	TVOC as Hexane	10.000	1820101207	2.899 uL/L
4) T	n-Hexane	8.298	66199921	0.105 uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921019.D
Acq On : 29 Nov 2021 6:55 pm
Operator : LJB
Sample : BSD,S15999,QC957976,278885,1x,PDF:1
Misc : I1 1x200mL 2.5ppmv
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 29 19:15:00 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Raw Data

Initial Calibration

	RT	RT Window
GRO		
TPH Gas (C4-C12)	9.727	3.850
TPH Gas (C6-C12)	10.903	2.673
TPH Gas (C4-C10)	9.017	3.140
TPH Gas (C6-C10)	10.193	1.963
TPH Gas (C5-C12)	10.240	3.336

	RT Start	RT End
C3	5.324	5.524
C4	5.877	6.097
C5	6.904	7.124
C6	8.23	8.456
C7	9.496	9.676
C8	10.463	10.683
C9	11.25	11.47
C10	12.009	12.156
C11	12.636	12.883
C12	13.396	13.576
2-Methylpentane		
124-TMB		

Signal: Air03_102021006.D\FID1A.CH
ICAL,S16077,1X,2.500ppmv

Peak #	Ret Time	Type	Width	Area	Start Time	End Time	
4	8.301	BB	0.053	64962897	8.23	8.456	C6
8	9.547	BB	0.045	74671063	9.496	9.676	C7
10	10.531	BB	0.043	82620166	10.463	10.683	C8
13	11.341	VB	0.066	1.54E+08	11.25	11.47	C9
17	12.056	PB	0.039	81254118	12.009	12.156	C10
20	12.737	BB	0.039	62670632	12.636	12.883	C11
21	13.452	BV	0.026	32798644	13.396	13.576	C12

Signal: Air03_102021008.D\FID1A.CH
ICAL,S14835,10X,10ppmv

Peak #	Ret Time	Type	Width	Area	Start Time	End Time	
2	5.372	BB	0.029	3.11E+09	5.324	5.524	C3
3	5.93	BB	0.064	4.18E+09	5.877	6.097	C4
4	6.965	BB	0.029	4.96E+09	6.904	7.124	C5

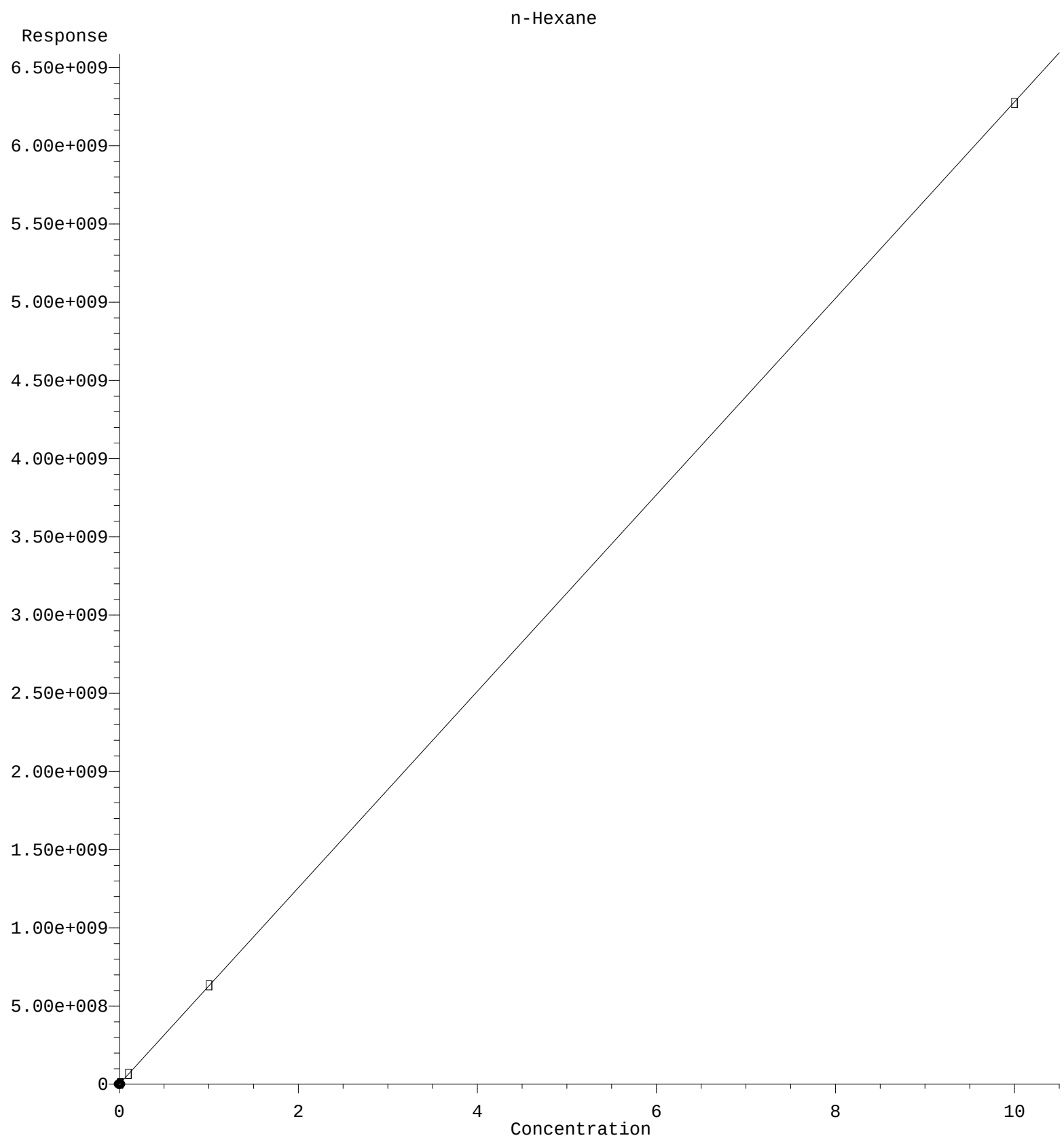
Response Factor Report AIR-MS-03

Method Path : C:\MSDChem\1\METHODS\Quant Methods\
Method File : TO3M_211020_1.m
Title : AIR-MS-03 Gas
Last Update : Thu Oct 21 12:41:38 2021
Response Via : Initial Calibration

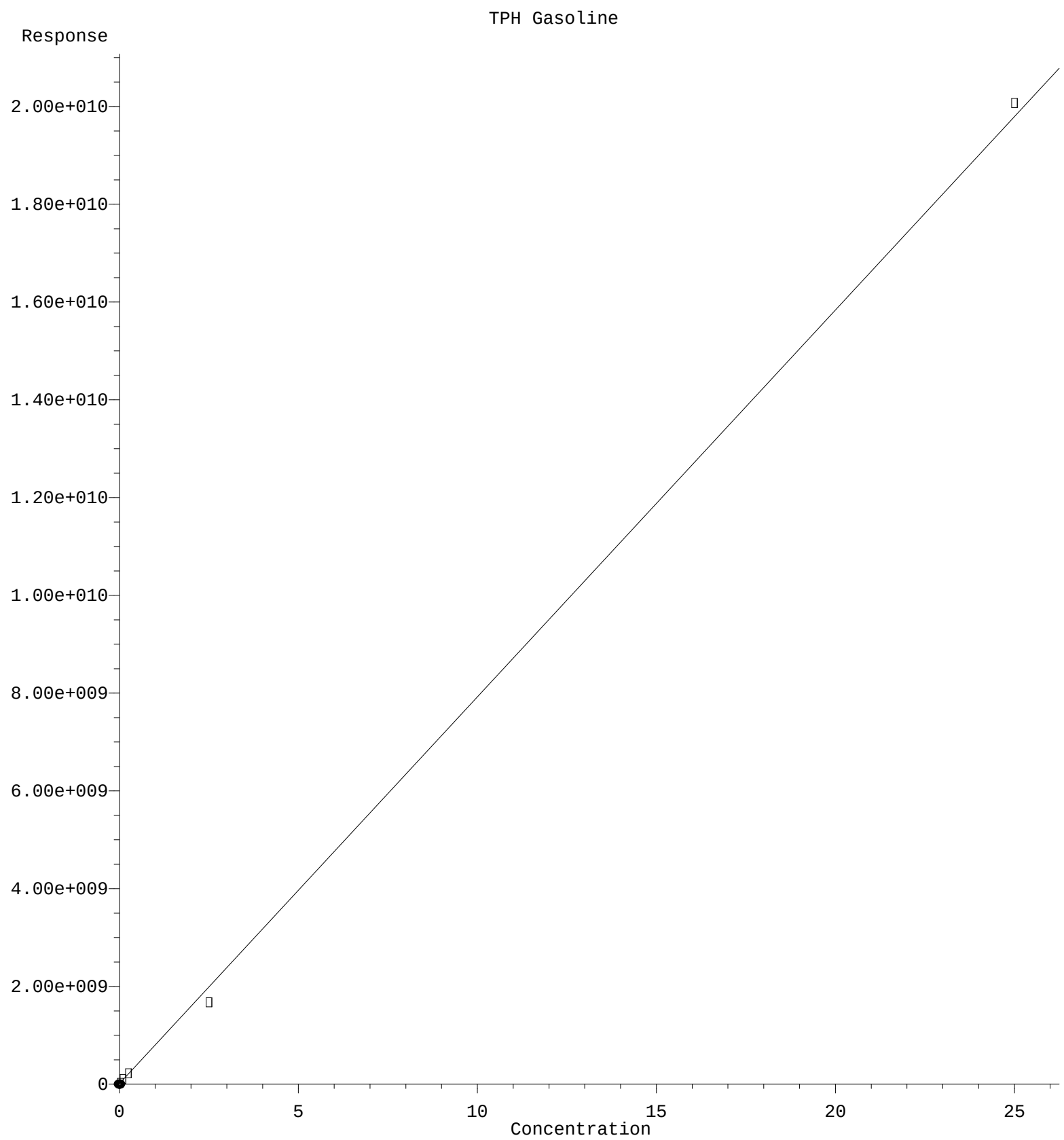
Calibration Files
1 =Air03_102021003.D 2 =Air03_102021004.D 3 =Air03_102021005.D
4 =Air03_102021006.D 5 =Air03_102021007.D 6 =Air03_102021008.D

	Compound	1	2	3	4	5	6	Avg	%RSD
1) H	TPH Gasoline	1.059	1.058	0.896	0.670	0.803		0.897 E9	18.70
2) H	TPH Gasoline ...	1.059	1.058	0.896	0.670	0.803		0.897 E9	18.70
3) H	TVOC as Hexane		7.713	6.694	6.526	6.325	6.272	6.706 E8	8.76
4) T	n-Hexane		7.713	6.694	6.526	6.325	6.272	6.706 E8	8.76

(#) = Out of Range



Response = 6.277e+008 * Amt + 5.937e+005
Coef of Det (r^2) = 1.000 Curve Fit: wlr(1/a)
Method Name: C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Calibration Table Last Updated: Thu Oct 21 12:41:38 2021



Response = 7.911e+008 * Amt + 9.729e+006
Coef of Det (r^2) = 0.997 Curve Fit: wlr(1/a)
Method Name: C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Calibration Table Last Updated: Thu Oct 21 12:41:38 2021

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021011.D
Acq On : 20 Oct 2021 6:33 pm
Operator : LJB
Sample : ICV,276233,S15999,1X,PDF:1
Misc : I3; BS,QC950404
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 21 13:33:09 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 H	TPH Gasoline	2.500	2.182	12.7	104	0.00
2 H	TPH Gasoline (C5-C12)	2.500	2.020	19.2	96	0.00
3 H	TVOC as Hexane	0.100	2.764	-2664.0#	2660	0.00
4 T	n-Hexane	0.100	0.103	-3.0	100	0.00

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

	RT	RT Window
GRO		
TPH Gas (C4-C12)	9.727	3.850
TPH Gas (C6-C12)	10.903	2.673
TPH Gas (C4-C10)	9.017	3.140
TPH Gas (C6-C10)	10.193	1.963
TPH Gas (C5-C12)	10.240	3.336

	RT Start	RT End
C3	5.324	5.524
C4	5.877	6.097
C5	6.904	7.124
C6	8.23	8.456
C7	9.496	9.676
C8	10.463	10.683
C9	11.25	11.47
C10	12.009	12.156
C11	12.636	12.883
C12	13.396	13.576
2-Methylpentane		
124-TMB		

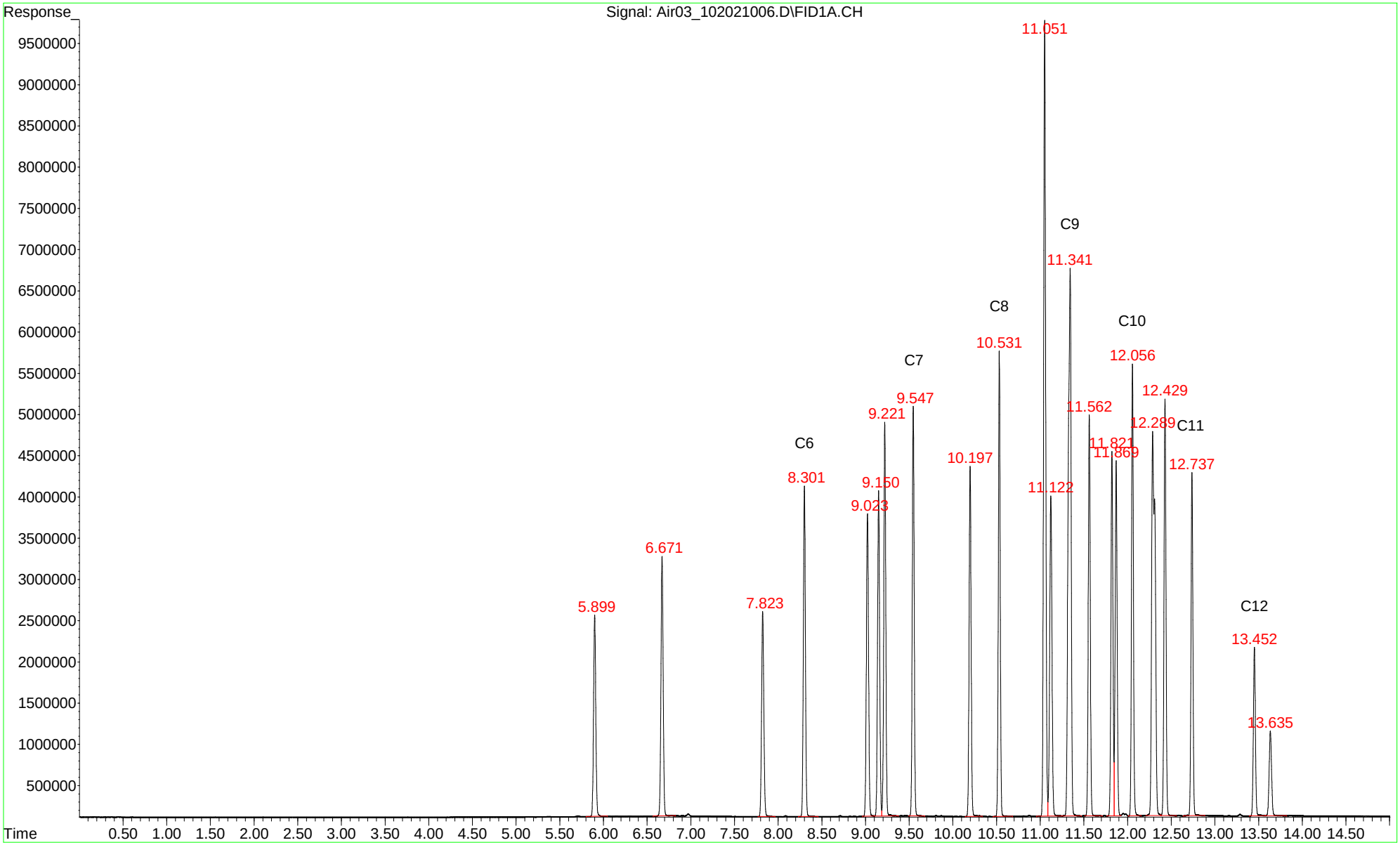
Signal: Air03_102021006.D\FID1A.CH
ICAL,S16077,1X,2.500ppmv

Peak #	Ret Time	Type	Width	Area	Start Time	End Time	
4	8.301	BB	0.053	64962897	8.23	8.456	C6
8	9.547	BB	0.045	74671063	9.496	9.676	C7
10	10.531	BB	0.043	82620166	10.463	10.683	C8
13	11.341	VB	0.066	1.54E+08	11.25	11.47	C9
17	12.056	PB	0.039	81254118	12.009	12.156	C10
20	12.737	BB	0.039	62670632	12.636	12.883	C11
21	13.452	BV	0.026	32798644	13.396	13.576	C12

Signal: Air03_102021008.D\FID1A.CH
ICAL,S14835,10X,10ppmv

Peak #	Ret Time	Type	Width	Area	Start Time	End Time	
2	5.372	BB	0.029	3.11E+09	5.324	5.524	C3
3	5.93	BB	0.064	4.18E+09	5.877	6.097	C4
4	6.965	BB	0.029	4.96E+09	6.904	7.124	C5

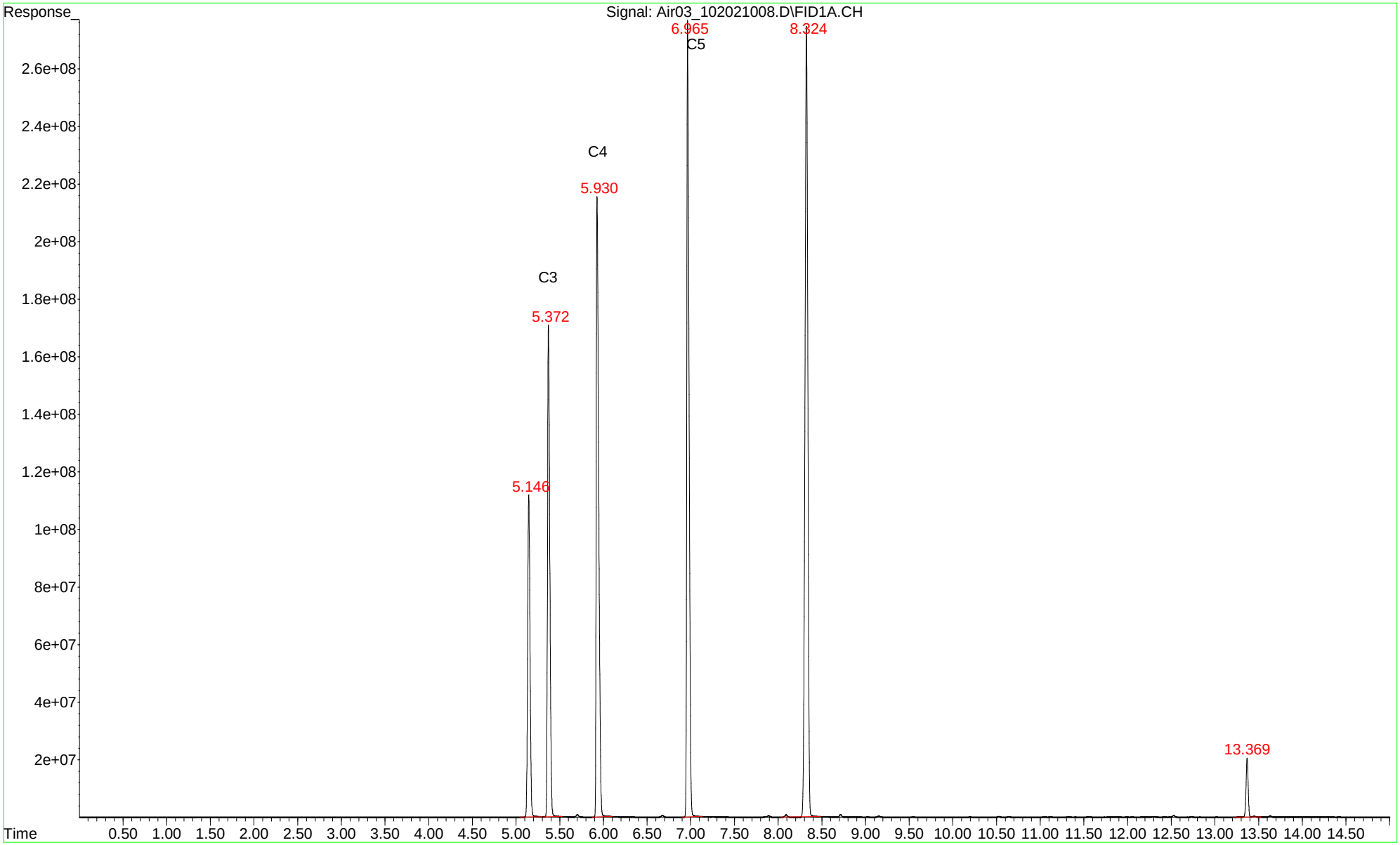
File :C:\MSDChem\1\DATA\211020_TO3 ICAL\Air03_102021006.D
Operator : LJB
Acquired : 20 Oct 2021 3:21 pm using AcqMethod TO3M.M
Instrument : AIR-MS-03
Sample Name: ICAL,S16077,1X,2.500ppmv
Misc Info : I2
Vial Number: 1



Signal: Air03_102021006.D\FID1A.CH
ICAL,S16077,1X,2.500ppmv

Peak #	Ret Time	Type	Width	Area	Start Time	End Time
1	5.899	BB	0.029	42849920	5.803	6.043
2	6.671	BB	0.028	55003904	6.570	6.823
3	7.823	BB	0.043	44208770	7.770	7.963
4	8.301	BB	0.053	64962897	8.230	8.456
5	9.023	BV	0.029	62747356	8.963	9.103
6	9.150	VV	0.028	65741147	9.103	9.186
7	9.221	VB	0.039	76447882	9.186	9.376
8	9.547	BB	0.045	74671063	9.496	9.676
9	10.197	BB	0.042	67714011	10.143	10.336
10	10.531	BB	0.043	82620166	10.463	10.683
11	11.051	BV	0.027	161481837	10.956	11.088
12	11.122	VV	0.054	70872947	11.088	11.250
13	11.341	VB	0.066	154214225	11.250	11.470
14	11.562	BB	0.042	76472704	11.510	11.710
15	11.821	BV	0.026	69409636	11.763	11.845
16	11.869	VV	0.027	68552555	11.845	11.923
17	12.056	PB	0.039	81254118	12.009	12.156
18	12.289	BV	0.049	129732201	12.210	12.381
19	12.429	VV	0.042	78968316	12.381	12.556
20	12.737	BB	0.039	62670632	12.636	12.883
21	13.452	BV	0.026	32798644	13.396	13.576
22	13.635	VB	0.066	19856743	13.576	13.816

File :C:\MSDChem\1\DATA\211020_TO3 ICAL\Air03_102021008.D
Operator : LJB
Acquired : 20 Oct 2021 5:07 pm using AcqMethod TO3M.M
Instrument : AIR-MS-03
Sample Name: ICAL,S14835,1X,10ppmv
Misc Info :
Vial Number: 16



Signal: Air03_102021008.D\FID1A.CH
ICAL,S14835,1X,10ppmv

Peak #	Ret Time	Type	Width	Area	Start Time	End Time
1	5.146	BB	0.030	2070316741	5.050	5.297
2	5.372	BB	0.029	3107234125	5.324	5.524
3	5.930	BB	0.064	4180630851	5.877	6.097
4	6.965	BB	0.029	4961192525	6.904	7.124
5	8.324	BB	0.037	6254096018	8.037	8.484
6	13.369	BB	0.044	344485520	13.217	13.524

Instr AIR-MS03
Date: 7/21/2021
Seq #: **210721_TO3**

#	Sample ID	Data File	Injection Time	Comments
1	IB	Air03_10202101	10/20/2021 12:57	
2	IB	Air03_10202102	10/20/2021 13:26	
3	ICAL,S16078,10X,0.025ppmv	Air03_10202103	10/20/2021 13:55	
4	ICAL,S16078,2.5X,0.100ppmv	Air03_10202104	10/20/2021 14:23	
5	ICAL,S16078,1X,0.250ppmv	Air03_10202105	10/20/2021 14:52	
6	ICAL,S16077,1X,2.500ppmv	Air03_10202106	10/20/2021 15:21	
7	ICAL,S16076,1X,25ppmv	Air03_10202107	10/20/2021 16:10	
8	ICAL,S16078,1X,10ppmv	Air03_10202108	10/20/2021 17:07	n-Hexane ONLY
9	IB	Air03_10202109	10/20/2021 17:36	
10	IB	Air03_10202110	10/20/2021 18:04	
11	ICV/BS,QC950404,276233,S15999,1X,PDF:1	Air03_10202111	10/20/2021 18:33	
12	BSD,QC950405,276233,S15999,1X,PDF:1	Air03_10202112	10/20/2021 19:02	
13	IB	Air03_10202113	10/20/2021 19:30	
14	BLANK,QC950406,276233,1X,PDF:1	Air03_10202114	10/20/2021 19:59	
15	452101-001,276233,1000X,PDF:1	Air03_10202115	10/20/2021 20:29	
16	CCV,S16077,1X,2.500ppmv	Air03_10202116	10/20/2021 20:57	

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021003.D
Acq On : 20 Oct 2021 1:55 pm
Operator : LJB
Sample : ICAL,S16078,10X,0.025ppmv
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 21 13:32:57 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

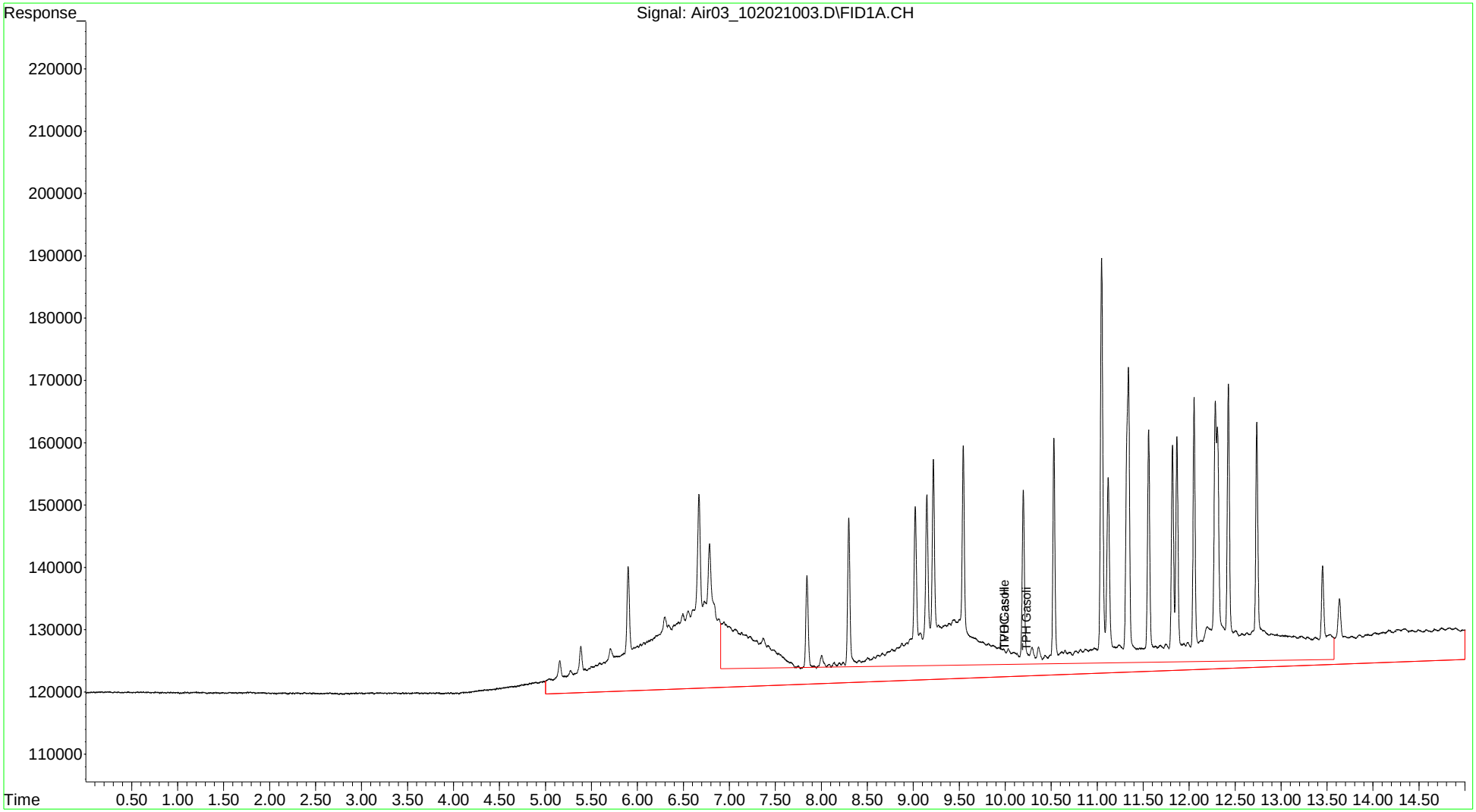
	Compound	R.T.	Response	Conc Units
Target Compounds				
1) H	TPH Gasoline	10.000	26467271	0.021 uL/L
2) H	TPH Gasoline (C5-C12)	10.240	18981049	0.012 uL/L
3) H	TVOC as Hexane	10.000	26467271	0.041 uL/L
4) T	n-Hexane	8.299	462087	N.D. uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021003.D
Acq On : 20 Oct 2021 1:55 pm
Operator : LJB
Sample : ICAL,S16078,10X,0.025ppmv
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 21 13:32:57 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021004.D
Acq On : 20 Oct 2021 2:23 pm
Operator : LJB
Sample : ICAL,S16078,2.5X,0.100ppmv
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 21 13:32:59 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

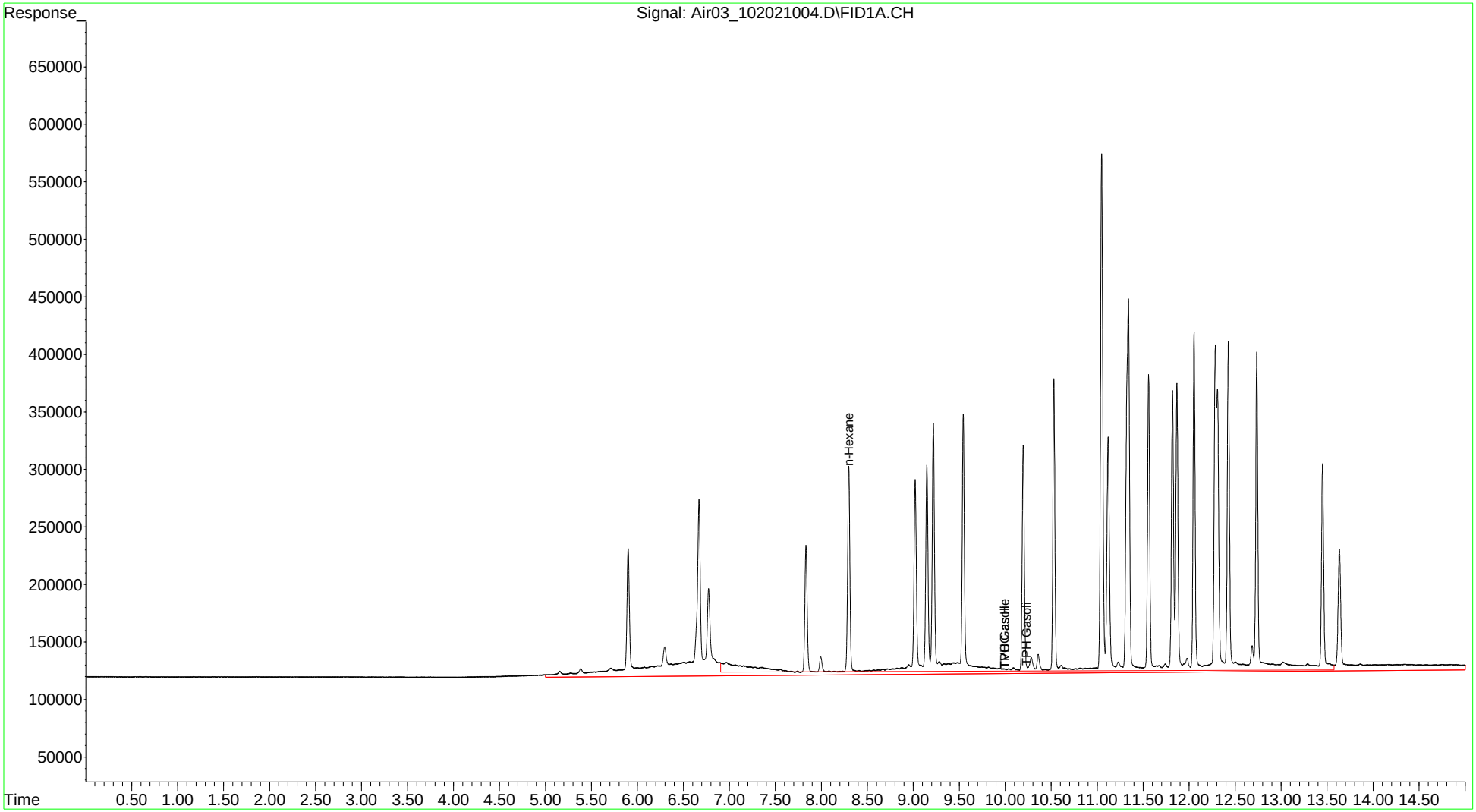
	Compound	R.T.	Response	Conc Units
Target Compounds				
1) H	TPH Gasoline	10.000	105807474	0.121 uL/L
2) H	TPH Gasoline (C5-C12)	10.240	90045452	0.102 uL/L
3) H	TVOC as Hexane	10.000	105807474	0.168 uL/L
4) T	n-Hexane	8.299	3085099	0.004 uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021004.D
Acq On : 20 Oct 2021 2:23 pm
Operator : LJB
Sample : ICAL,S16078,2.5X,0.100ppmv
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 21 13:32:59 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021005.D
Acq On : 20 Oct 2021 2:52 pm
Operator : LJB
Sample : ICAL,S16078,1X,0.250ppmv
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 21 13:33:01 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

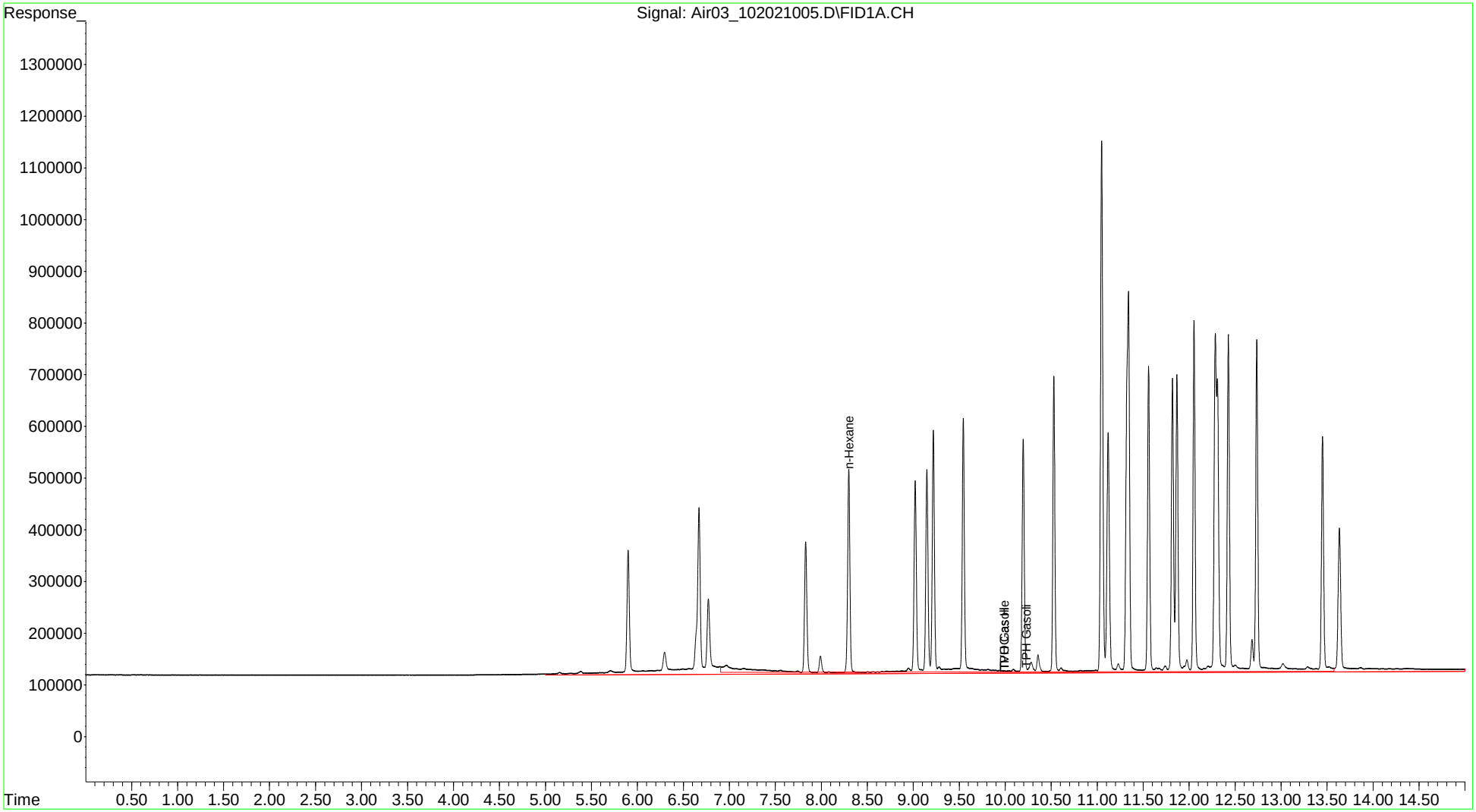
	Compound	R.T.	Response	Conc Units
Target Compounds				
1) H	TPH Gasoline	10.000	223953522	0.271 uL/L
2) H	TPH Gasoline (C5-C12)	10.240	197444461	0.237 uL/L
3) H	TVOC as Hexane	10.000	223953522	0.356 uL/L
4) T	n-Hexane	8.299	6694333	0.010 uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021005.D
Acq On : 20 Oct 2021 2:52 pm
Operator : LJB
Sample : ICAL,S16078,1X,0.250ppmv
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 21 13:33:01 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021006.D
Acq On : 20 Oct 2021 3:21 pm
Operator : LJB
Sample : ICAL,S16077,1X,2.500ppmv
Misc : I2
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 21 13:33:03 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

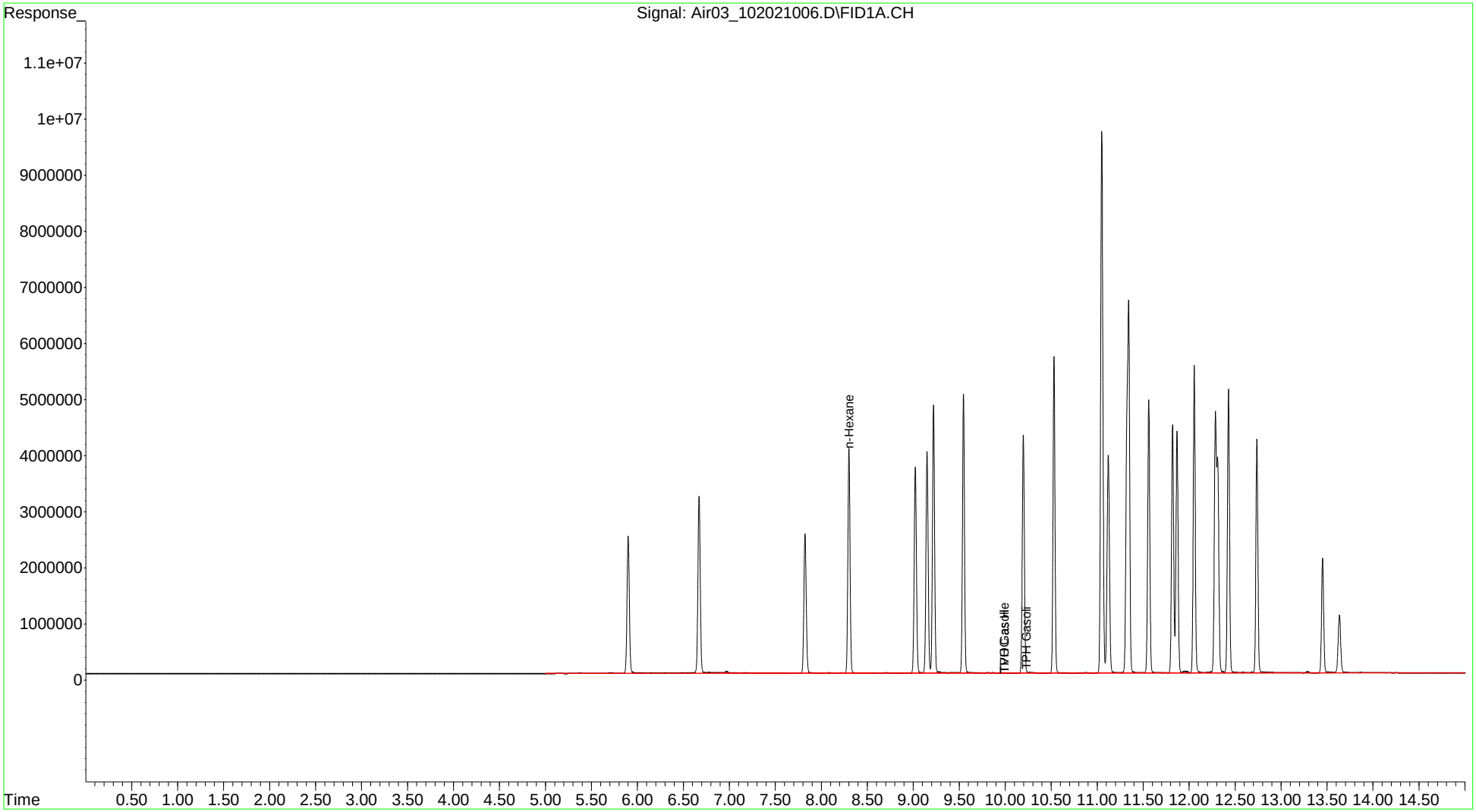
	Compound	R.T.	Response	Conc Units
Target Compounds				
1) H	TPH Gasoline	10.000	1674517277	2.104 uL/L
2) H	TPH Gasoline (C5-C12)	10.240	1547163886	1.943 uL/L
3) H	TVOC as Hexane	10.000	1674517277	2.667 uL/L
4) T	n-Hexane	8.301	65264702	0.103 uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021006.D
Acq On : 20 Oct 2021 3:21 pm
Operator : LJB
Sample : ICAL,S16077,1X,2.500ppmv
Misc : I2
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 21 13:33:03 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021007.D
Acq On : 20 Oct 2021 4:10 pm
Operator : LJB
Sample : ICAL,S16076,1X,25ppmv
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 21 13:33:05 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

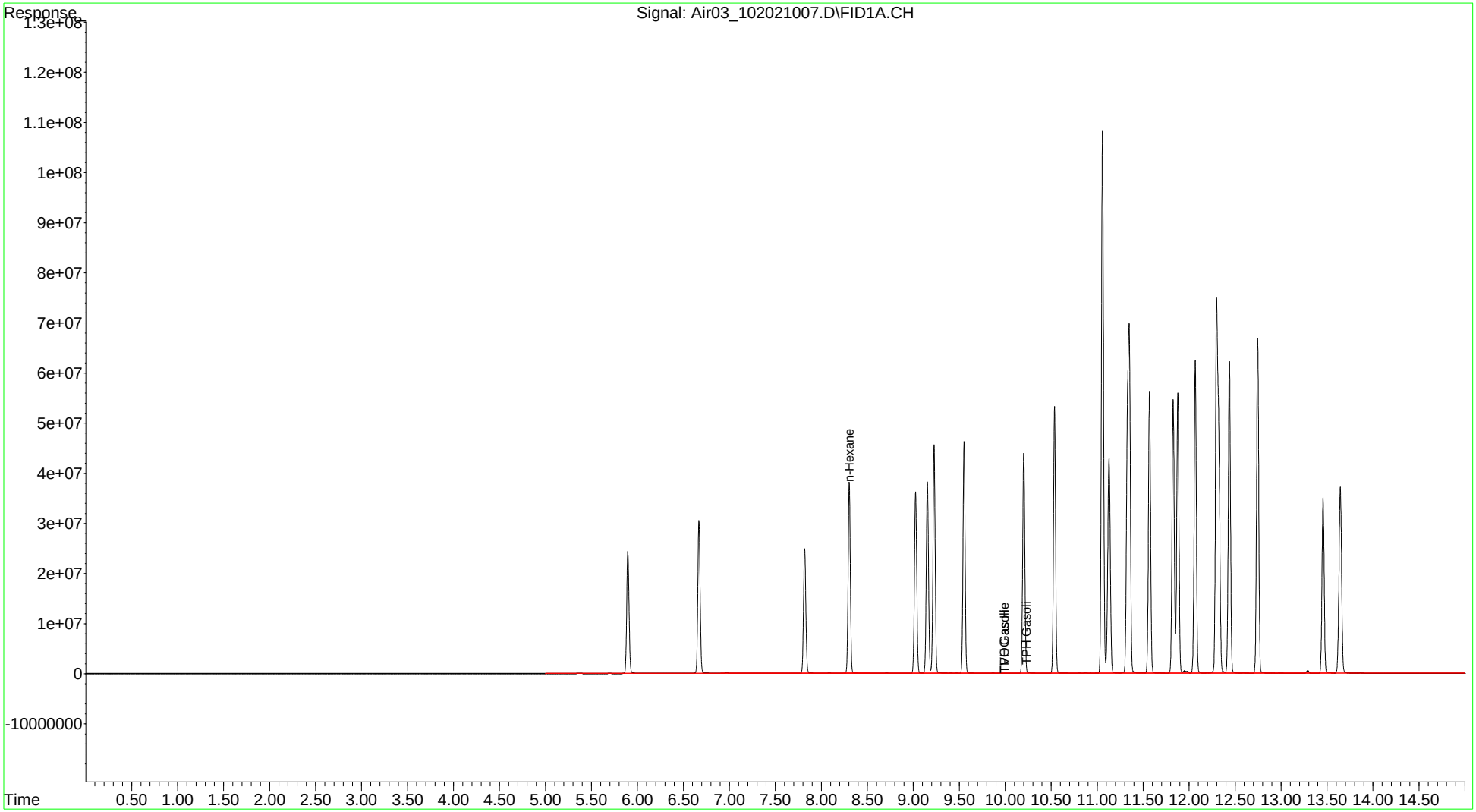
	Compound	R.T.	Response	Conc Units
Target Compounds				
1) H	TPH Gasoline	10.000	20070068991	25.357 uL/L
2) H	TPH Gasoline (C5-C12)	10.240	18337713295	23.167 uL/L
3) H	TVOC as Hexane	10.000	20070068991	31.971 uL/L
4) T	n-Hexane	8.304	632478150	1.007 uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021007.D
Acq On : 20 Oct 2021 4:10 pm
Operator : LJB
Sample : ICAL,S16076,1X,25ppmv
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 21 13:33:05 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021008.D
Acq On : 20 Oct 2021 5:07 pm
Operator : LJB
Sample : ICAL,S14835,1X,10ppmv
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 21 13:33:07 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

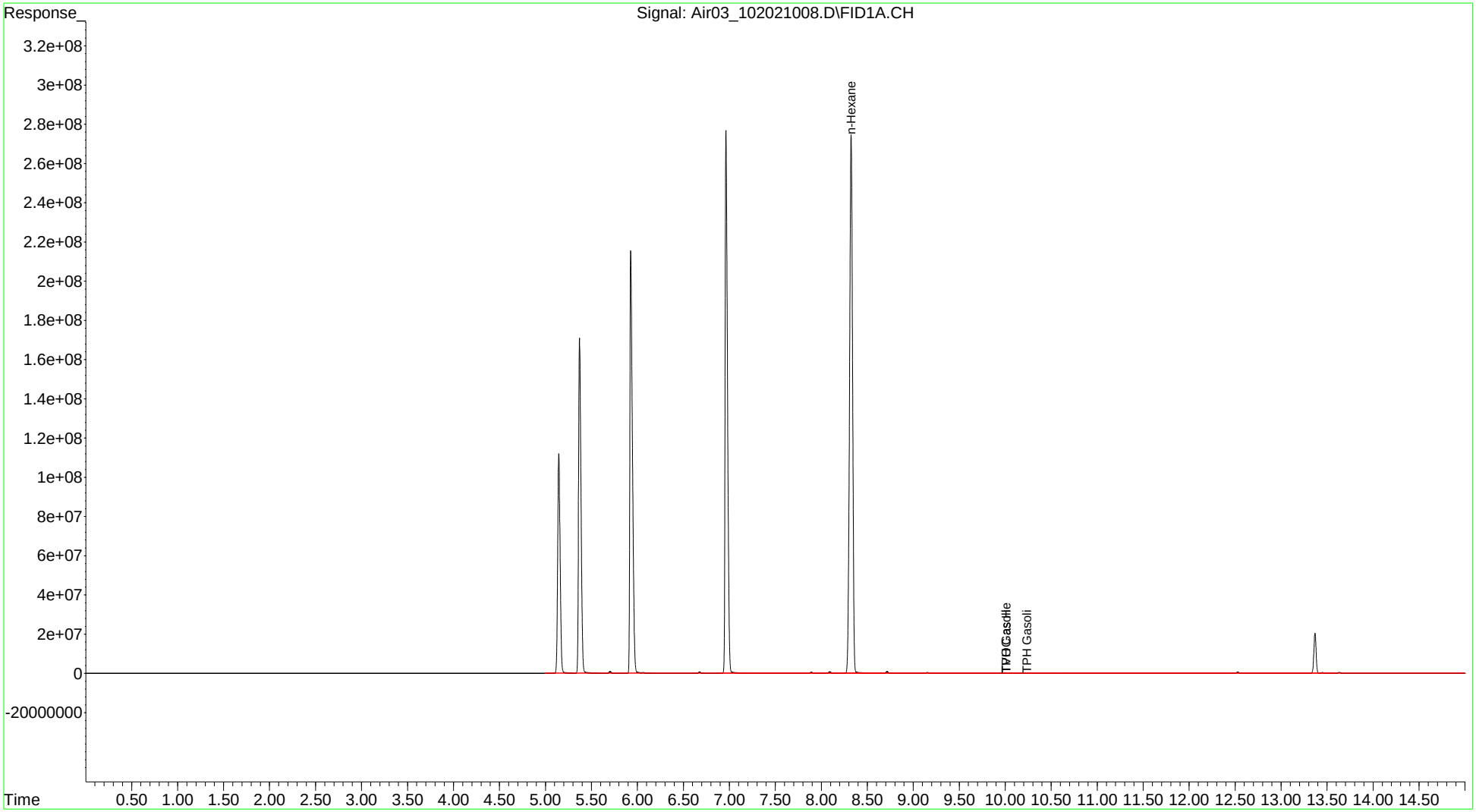
	Compound	R.T.	Response	Conc Units
Target Compounds				
1) H	TPH Gasoline	10.000	21157113372	26.731 uL/L
2) H	TPH Gasoline (C5-C12)	10.240	11699611331	14.777 uL/L
3) H	TVOC as Hexane	10.000	21157113372	33.703 uL/L
4) T	n-Hexane	8.324	6272094026	9.991 uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021008.D
Acq On : 20 Oct 2021 5:07 pm
Operator : LJB
Sample : ICAL,S14835,1X,10ppmv
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 21 13:33:07 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021011.D
Acq On : 20 Oct 2021 6:33 pm
Operator : LJB
Sample : ICV,276233,S15999,1X,PDF:1
Misc : I3; BS,QC950404
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 21 13:33:09 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

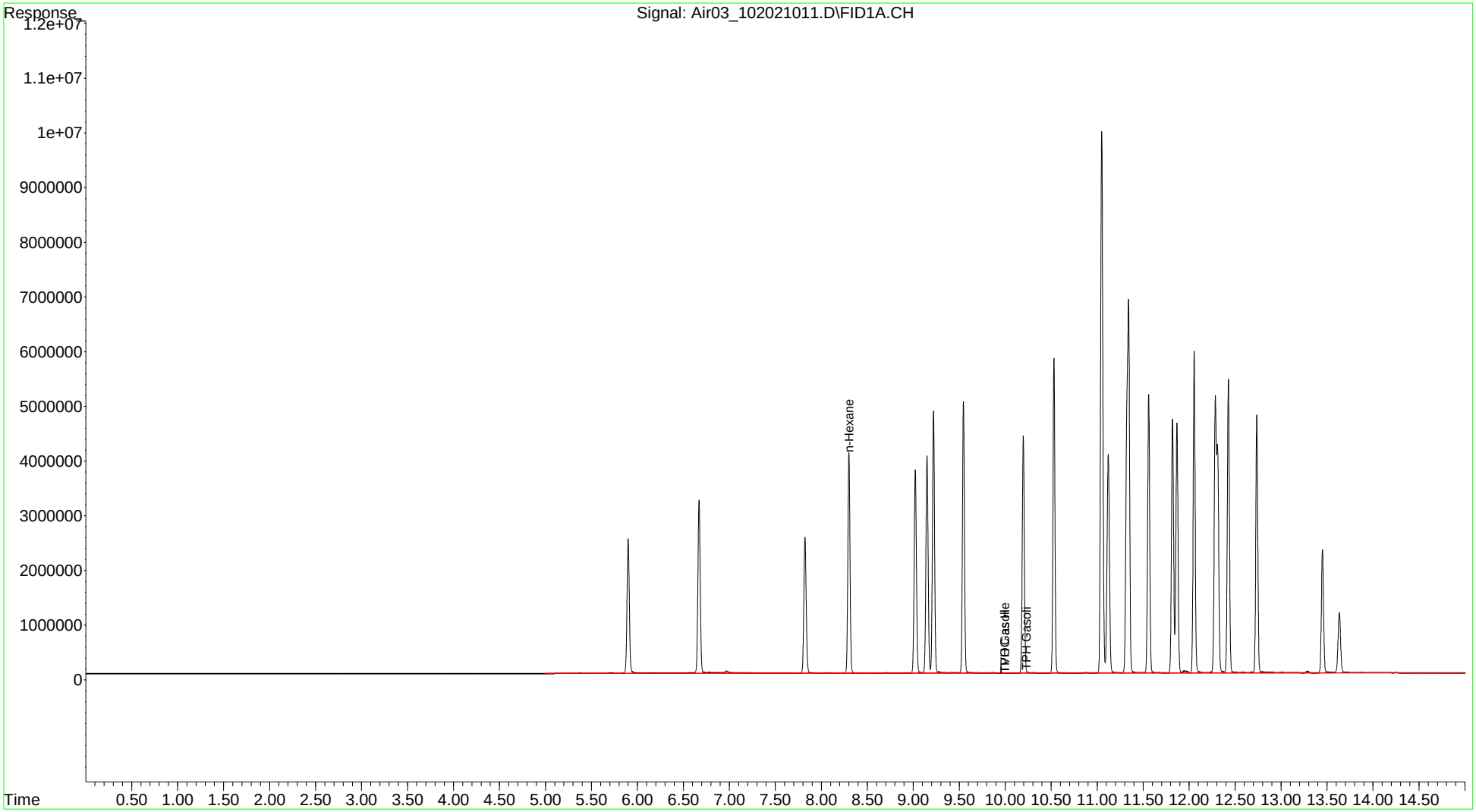
	Compound	R.T.	Response	Conc Units
Target Compounds				
1) H	TPH Gasoline	10.000	1735843924	2.182 uL/L
2) H	TPH Gasoline (C5-C12)	10.240	1607535684	2.020 uL/L
3) H	TVOC as Hexane	10.000	1735843924	2.764 uL/L
4) T	n-Hexane	8.301	65336204	0.103 uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

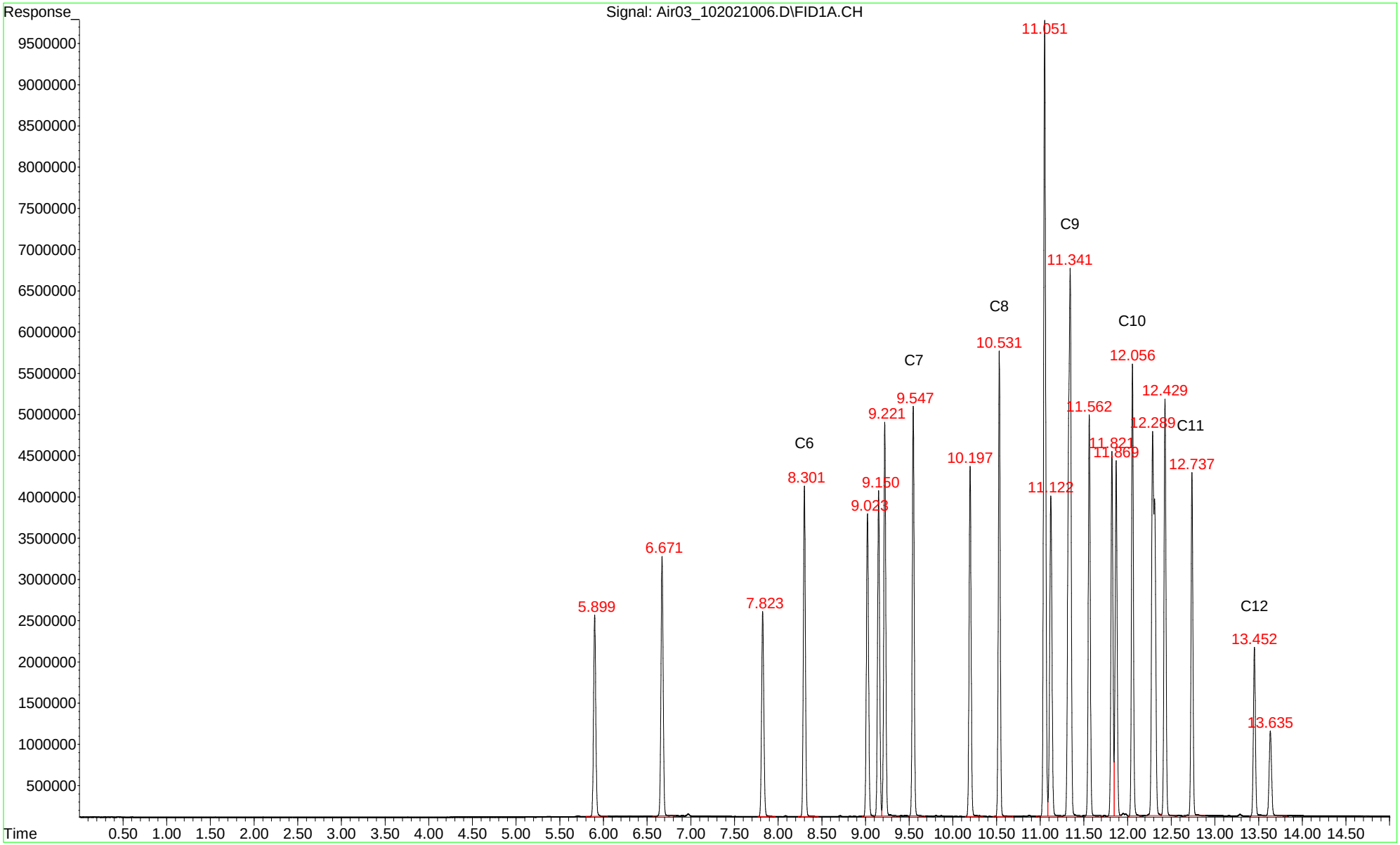
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021011.D
Acq On : 20 Oct 2021 6:33 pm
Operator : LJB
Sample : ICV,276233,S15999,1X,PDF:1
Misc : I3; BS,QC950404
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 21 13:33:09 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



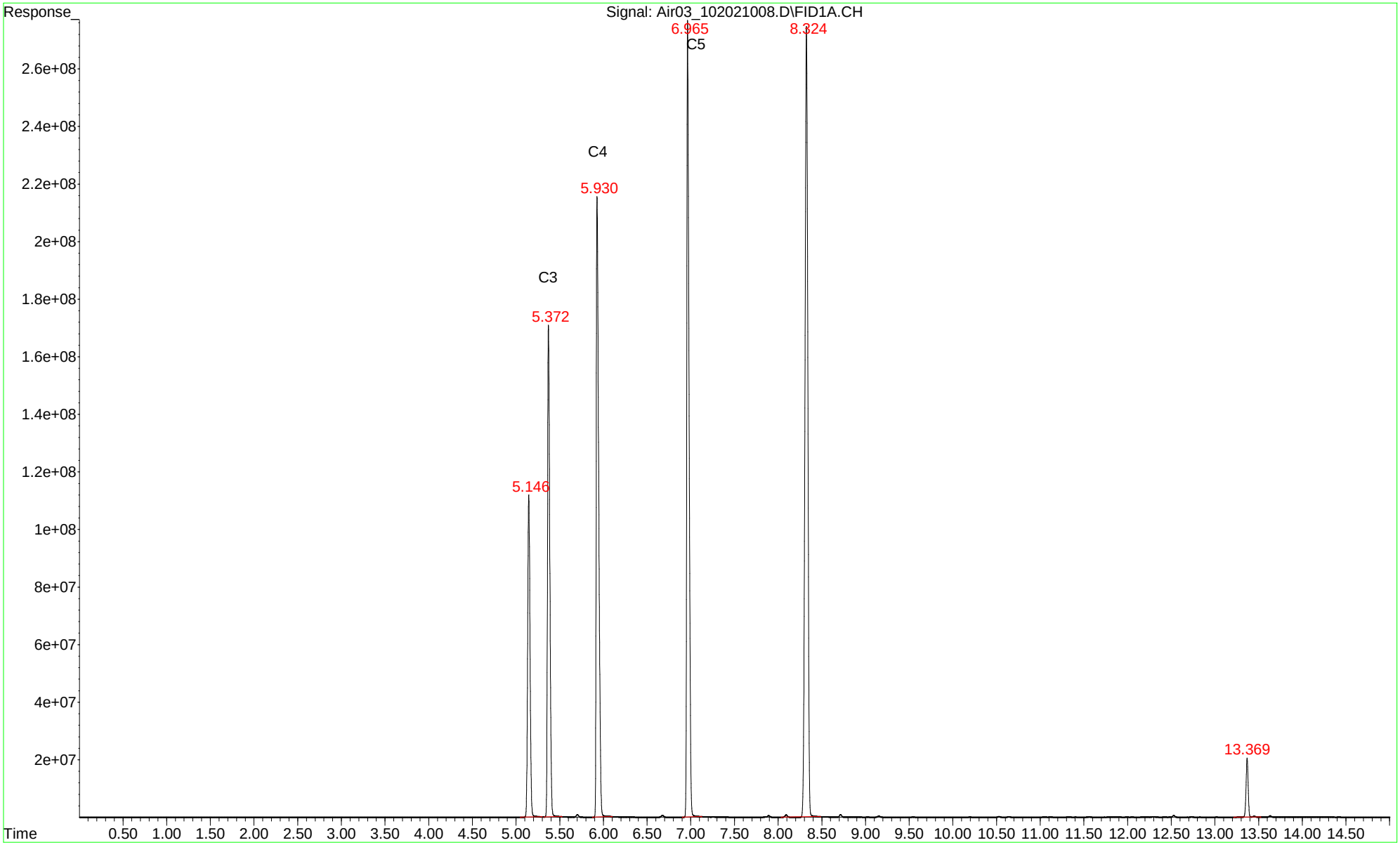
File :C:\MSDChem\1\DATA\211020_TO3 ICAL\Air03_102021006.D
Operator : LJB
Acquired : 20 Oct 2021 3:21 pm using AcqMethod TO3M.M
Instrument : AIR-MS-03
Sample Name: ICAL,S16077,1X,2.500ppmv
Misc Info : I2
Vial Number: 1



Signal: Air03_102021006.D\FID1A.CH
ICAL,S16077,1X,2.500ppmv

Peak #	Ret Time	Type	Width	Area	Start Time	End Time
1	5.899	BB	0.029	42849920	5.803	6.043
2	6.671	BB	0.028	55003904	6.570	6.823
3	7.823	BB	0.043	44208770	7.770	7.963
4	8.301	BB	0.053	64962897	8.230	8.456
5	9.023	BV	0.029	62747356	8.963	9.103
6	9.150	VV	0.028	65741147	9.103	9.186
7	9.221	VB	0.039	76447882	9.186	9.376
8	9.547	BB	0.045	74671063	9.496	9.676
9	10.197	BB	0.042	67714011	10.143	10.336
10	10.531	BB	0.043	82620166	10.463	10.683
11	11.051	BV	0.027	161481837	10.956	11.088
12	11.122	VV	0.054	70872947	11.088	11.250
13	11.341	VB	0.066	154214225	11.250	11.470
14	11.562	BB	0.042	76472704	11.510	11.710
15	11.821	BV	0.026	69409636	11.763	11.845
16	11.869	VV	0.027	68552555	11.845	11.923
17	12.056	PB	0.039	81254118	12.009	12.156
18	12.289	BV	0.049	129732201	12.210	12.381
19	12.429	VV	0.042	78968316	12.381	12.556
20	12.737	BB	0.039	62670632	12.636	12.883
21	13.452	BV	0.026	32798644	13.396	13.576
22	13.635	VB	0.066	19856743	13.576	13.816

File :C:\MSDChem\1\DATA\211020_TO3 ICAL\Air03_102021008.D
Operator : LJB
Acquired : 20 Oct 2021 5:07 pm using AcqMethod TO3M.M
Instrument : AIR-MS-03
Sample Name: ICAL,S14835,1X,10ppmv
Misc Info :
Vial Number: 16



Signal: Air03_102021008.D\FID1A.CH
ICAL,S14835,1X,10ppmv

Peak #	Ret Time	Type	Width	Area	Start Time	End Time
1	5.146	BB	0.030	2070316741	5.050	5.297
2	5.372	BB	0.029	3107234125	5.324	5.524
3	5.930	BB	0.064	4180630851	5.877	6.097
4	6.965	BB	0.029	4961192525	6.904	7.124
5	8.324	BB	0.037	6254096018	8.037	8.484
6	13.369	BB	0.044	344485520	13.217	13.524

Raw Data

Sequence Quality Control

Initial and Continuing Calibration Verifications

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www.enthalpy.com/socal

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021011.D
Acq On : 20 Oct 2021 6:33 pm
Operator : LJB
Sample : ICV,276233,S15999,1X,PDF:1
Misc : I3; BS,QC950404
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 21 13:33:09 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

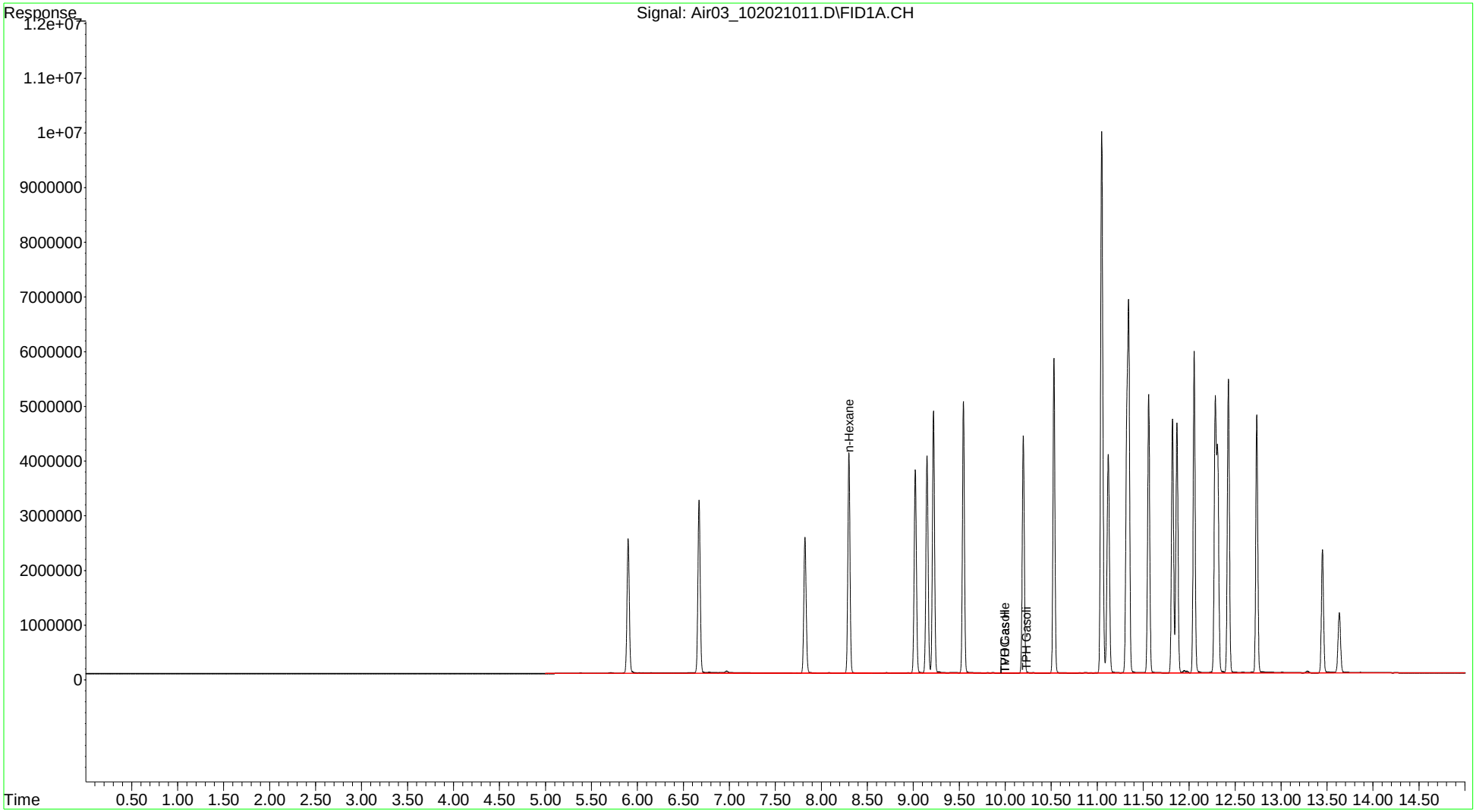
	Compound	R.T.	Response	Conc Units
Target Compounds				
1) H	TPH Gasoline	10.000	1735843924	2.182 uL/L
2) H	TPH Gasoline (C5-C12)	10.240	1607535684	2.020 uL/L
3) H	TVOC as Hexane	10.000	1735843924	2.764 uL/L
4) T	n-Hexane	8.301	65336204	0.103 uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\211020_TO3 ICAL\
Data File : Air03_102021011.D
Acq On : 20 Oct 2021 6:33 pm
Operator : LJB
Sample : ICV,276233,S15999,1X,PDF:1
Misc : I3; BS,QC950404
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 21 13:33:09 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921018.D
Acq On : 29 Nov 2021 6:26 pm
Operator : LJB
Sample : CCV/BS,S15999,QC957996,278885,1x,PDF:1
Misc : I1 1x200mL 2.5ppmv
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 29 19:14:43 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

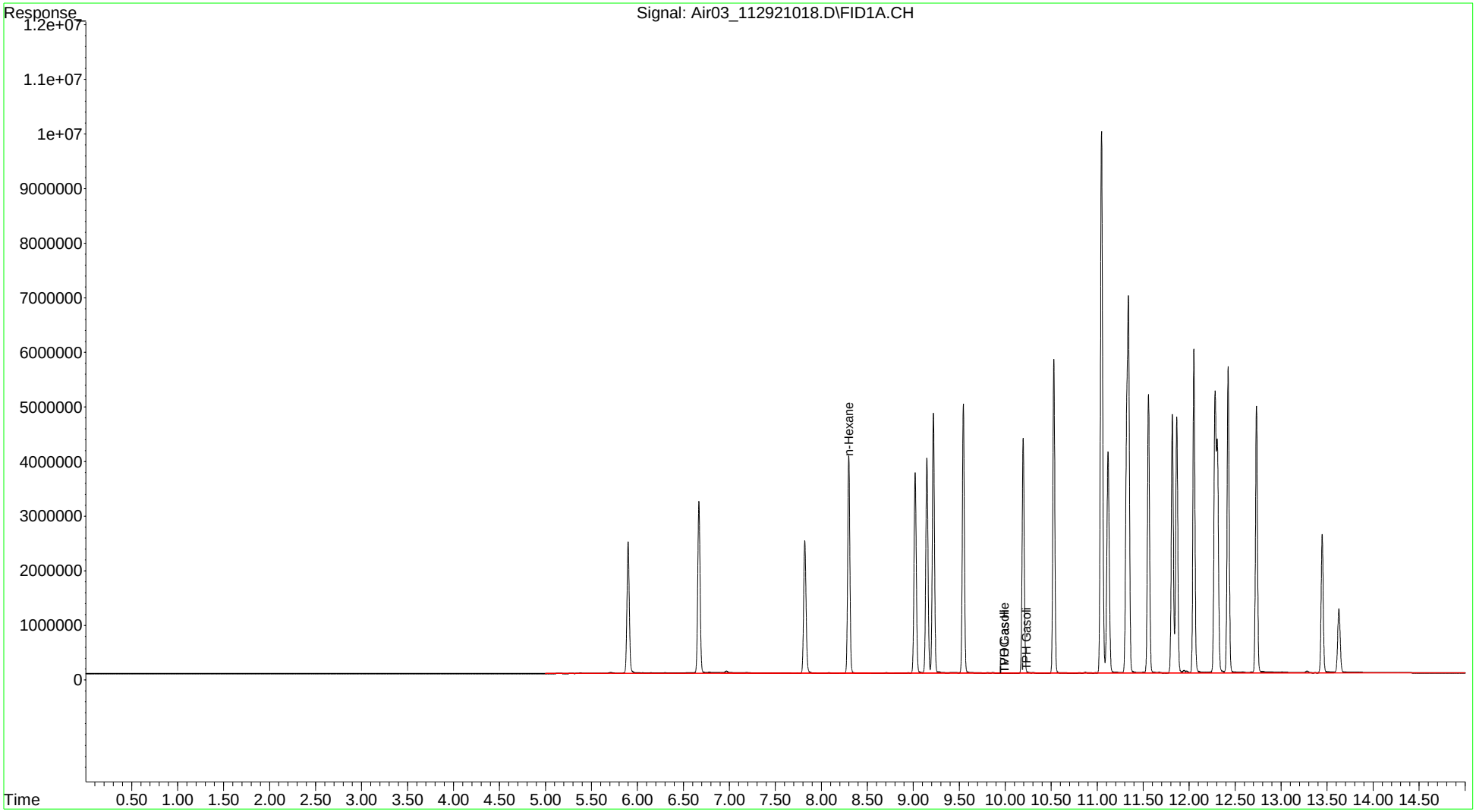
	Compound	R.T.	Response	Conc Units
Target Compounds				
1) H	TPH Gasoline	10.000	1765023060	2.219 uL/L
2) H	TPH Gasoline (C5-C12)	10.240	1634342472	2.054 uL/L
3) H	TVOC as Hexane	10.000	1765023060	2.811 uL/L
4) T	n-Hexane	8.299	65340369	0.103 uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921018.D
Acq On : 29 Nov 2021 6:26 pm
Operator : LJB
Sample : CCV/BS,S15999,QC957996,278885,1x,PDF:1
Misc : I1 1x200mL 2.5ppmv
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Nov 29 19:14:43 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921048.D
Acq On : 30 Nov 2021 1:40 pm
Operator : LJB
Sample : CCV,S15999,278885,1x,PDF:1
Misc : I1 1x200mL 2.5ppmv
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 30 16:46:38 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH

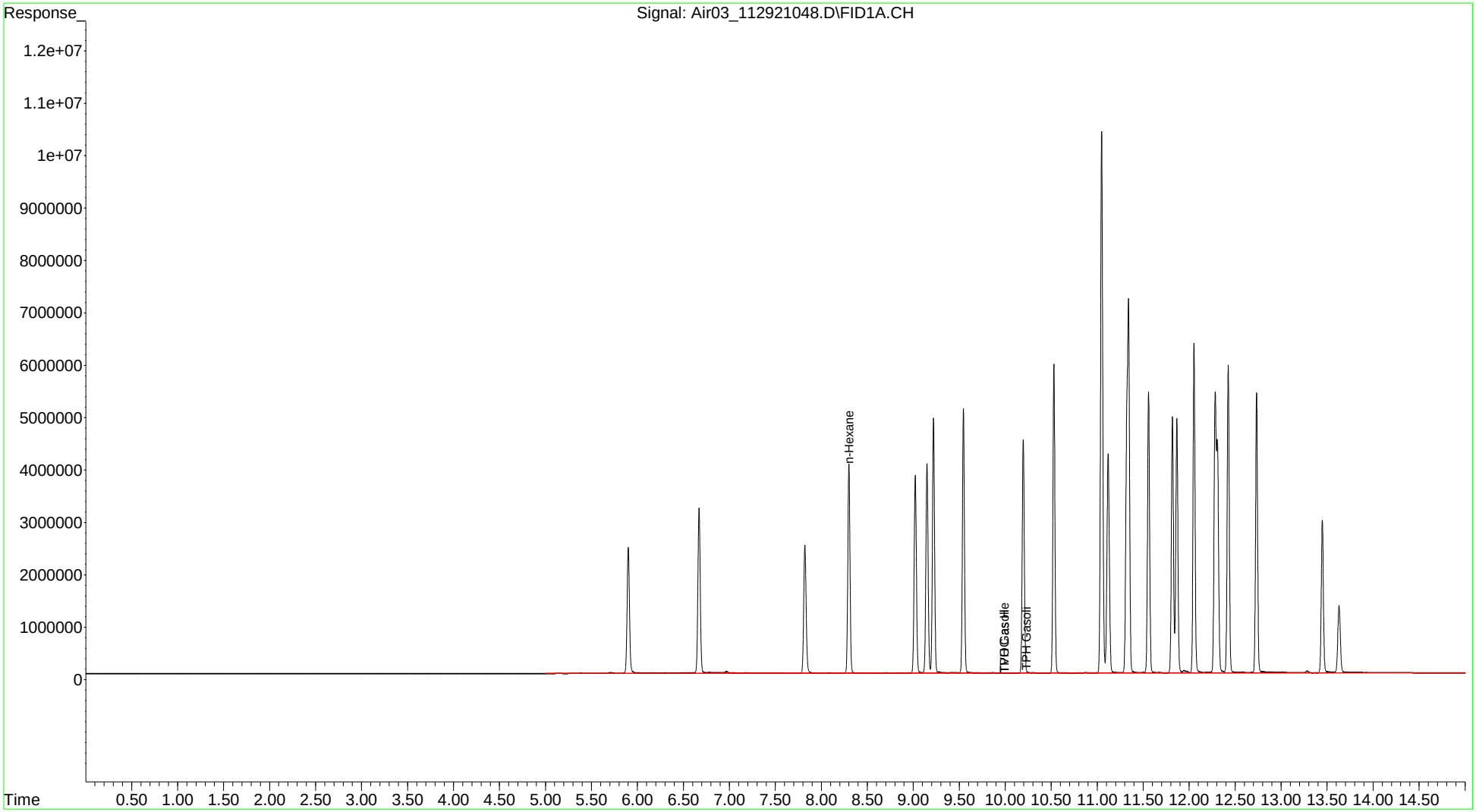
	Compound	R.T.	Response	Conc Units
Target Compounds				
1) H	TPH Gasoline	10.000	1830429202	2.301 uL/L
2) H	TPH Gasoline (C5-C12)	10.240	1696552789	2.132 uL/L
3) H	TVOC as Hexane	10.000	1830429202	2.915 uL/L
4) T	n-Hexane	8.300	65970220	0.104 uL/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\2021\211129_TO3\
Data File : Air03_112921048.D
Acq On : 30 Nov 2021 1:40 pm
Operator : LJB
Sample : CCV,S15999,278885,1x,PDF:1
Misc : I1 1x200mL 2.5ppmv
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 30 16:46:38 2021
Quant Method : C:\MSDChem\1\METHODS\Quant Methods\TO3M_211020_1.m
Quant Title : AIR-MS-03 Gas
QLast Update : Thu Oct 21 12:41:38 2021
Response via : Initial Calibration
Signal(s) : FID1A.CH



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Lab Job Number: 455620
Report Level: IV
Report Date: 01/06/2022

Volatile Organics in Air by MS

Analytical Report *prepared for:*

Marvin Heskett
Element Environmental, LLC
98-030 Hekaha Street
Unit 9
Aiea, HI 96701

Project: 180025 - Red Hill Soil Vapor Monitoring

Authorized for release by:



John Goyette, Service Center Manager
(510) 204-2233 Ext 13112
john.goyette@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105

ENTHALPY ANALYTICAL

Sample Summary

Marvin Heskett
Element Environmental, LLC
98-030 Hekaha Street
Unit 9
Aiea, HI 96701

Lab Job #:	455620
Project No:	180025
Location:	Red Hill Soil Vapor Monitoring
Date Received:	12/18/21

Sample ID	Lab ID	Collected	Matrix
SVMP-15S	455620-001	12/16/21 13:59	Air
SVMP-15D	455620-002	12/16/21 14:18	Air
SVMP-17S	455620-003	12/16/21 14:55	Air
SVMP-18S	455620-005	12/16/21 15:14	Air
SVMP-18D	455620-006	12/16/21 15:18	Air
SVMP-20M	455620-007	12/16/21 15:41	Air
SVMP-20D	455620-008	12/16/21 15:45	Air

ENTHALPY ANALYTICAL

Case Narrative

VOLATILE ORGANICS IN AIR BY MS (EPA TO-15)

Element Environmental, LLC	Lab Job Number: 455620
98-030 Hekaha Street	Project No: 180025
Unit 9	Location: Red Hill Soil Vapor Monitoring
Aiea, HI 96701	Date Received: 12/18/21
Marvin Heskett	

This data package contains sample and QC results for seven air samples, requested for the above referenced project on 12/18/21. See attached cooler receipt form for any sample receipt problems or discrepancies.

Volatile Organics in Air by MS (EPA TO-15):

High response was observed for 1,2,4-trichlorobenzene in the ICV analyzed 12/12/21 02:13; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

No other analytical problems were encountered.

Chain of Custody

ENTHALPY ANALYTICAL

Air Chain of Custody Record

Lab No: 455620

Page: 1 of 1

Turn Around Time (rush by advanced notice only)

Standard:		5 Day:	X	3 Day:	
2 Day:		1 Day:		Custom TAT:	

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

Special Instructions:
1. LEVEL IV Data Reporting, with additional anaylsis and text files data per discussion 9/14/21
2. High VOCs (>10 ppm) on SVMP-17S

Note:

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Element Environmental LLC	Name:	Red Hill Soil Vapor Monitoring
Report To:	Marvin Heskett	Number:	180025
Email:	mheskett@e2hi.com	P.O. #:	
Address:	98-030 Hekaha St., Unit 9, Aiea, Hawaii 96701	Address:	
Phone:	808-728-4617	Global ID:	
Fax:		Sampled By:	~~AL/DA~~ MH/KO

	Sample ID	Type	Equipment Information			Sampling Information						Analysis Requested								
		(I) Indoor (A) Ambient (SV) Soil Vapor (S) Source	Canister ID	Size (1L, 3L, 6L, 15L)	Flow Controller ID	Sample Start Date	Sample Start Time	Vacuum Start ("Hg)	Sample End Date	Sample End Time	Vacuum End ("Hg)	VOCs & TICs (TO-15) *C5-C12 (T-03)	Fixed Gases (ASTM D-1946							
1	SVMP-15S	SV	C10008	1.4L	A10089	12/16/2021	13:53	27	12/16/2021	13:59	5	X	X							
2	SVMP-15D	SV	C10031	1.4L	A10283	12/16/2021	14:03	30	12/16/2021	14:18	6	X	X							
3	SVMP-17S	SV	C10076	1.4L	A10004	12/16/2021	14:46	28	12/16/2021	14:55	5	X	X							
4	SVMP-17D	SV	C10005	1.4L	A10042	12/16/2021	14:50	27	12/16/2021	14:58	5	X	X							
5	SVMP-18S	SV	C10057	1.4L	A10165	12/16/2021	15:04	30	12/16/2021	15:14	5	X	X							
6	SVMP-18D	SV	C10024	1.4L	A10309	12/16/2021	15:09	27	12/16/2021	15:18	3	X	X							
7	SVMP-20M	SV	C10177	1.4L	A10074	12/16/2021	15:33	29	12/16/2021	15:41	5	X	X							
8	SVMP-20D	SV	C10001	1.4L	A10091	12/16/2021	15:38	28	12/16/2021	15:45	5	X	X							
9																				
10																				

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Jodie Tsubone	Element Environmental LLC	12/17/2021 (11:30)
[1] Received By:		Elizabeth Ramin	EA	12/18/21 11:39
[2] Relinquished By:				
[2] Received By:				
[3] Relinquished By:				
[3] Received By:				

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Element Environmental

Project: Red Hill Soil Vapor Monitoring

Date Received: 12/18/21

Sampler's Name Present: ☑ Yes ☐ No

Section 2

Sample(s) received in a cooler? ☐ Yes, How many? _____ ☑ No (skip section 2)

Sample Temp (°C) (No Cooler): Ambient

Sample Temp (°C), One from each cooler: #1: _____ #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: ☐ Ice ☐ Ice Packs ☐ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✔		
Are sample IDs present?	✔		
Are sampling dates & times present?	✔		
Is a relinquished signature present?	✔		
Are the tests required clearly indicated on the COC?	✔		
Are custody seals present?		✔	
If custody seals are present, were they intact?			✔
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✔
Did all samples arrive intact? If no, indicate in Section 4 below.	✔		
Did all bottle labels agree with COC? (ID, dates and times)	✔		
Were the samples collected in the correct containers for the required tests?	✔		
Are the containers labeled with the correct preservatives?			✔
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✔
Was a sufficient amount of sample submitted for the requested tests?	✔		

Section 5 Explanations/Comments

Section 6

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☐ Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 12/18/21

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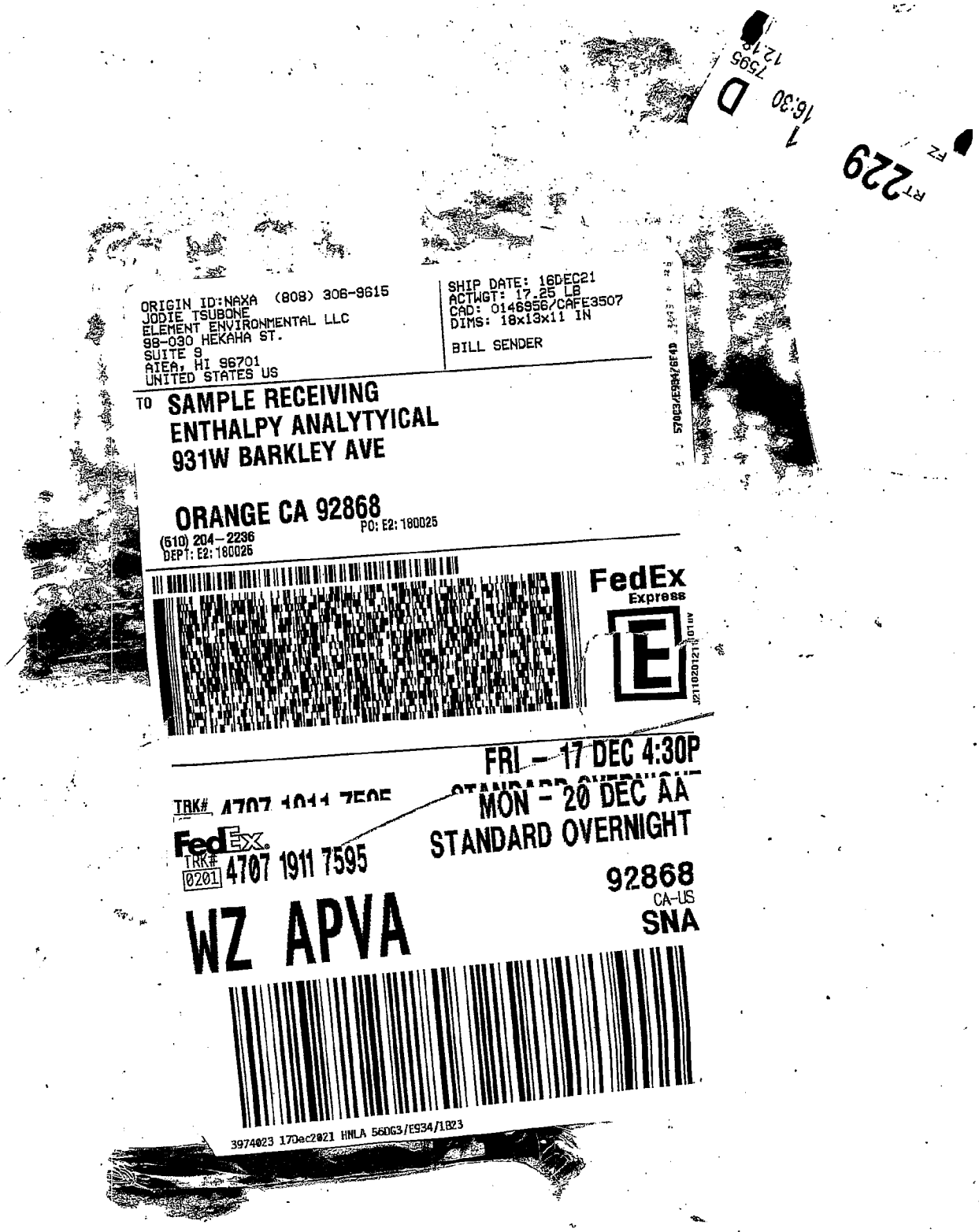

ORIGIN ID:NAXA (808) 306-9615
JODIE TSUBONE
ELEMENT ENVIRONMENTAL LLC
98-030 HEKAHA ST.
SUITE 9
AIEA, HI 96701
UNITED STATES US

SHIP DATE: 16DEC21
ACTWGT: 17.25 LB
CAD: 0146956/CAFE3507
DIMS: 18x13x11 IN

BILL SENDER

TO SAMPLE RECEIVING
ENTHALPY ANALYTYICAL
931W BARKLEY AVE

ORANGE CA 92868
(610) 204-2236
DEPT: E2: 180025
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3974023 17Dec2021 HNLA 56DG3/E934/1823

Results & QC Summary

ENTHALPY ANALYTICAL

Volatile Organics in Air

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Field ID:	SVMP-15S	**Batch#:**	280281	**Prep:**	METHOD
Lab ID:	455620-001	**Sampled:**	12/16/21 13:59	**Analysis:**	EPA TO-15
Matrix:	Air	**Received:**	12/18/21	**Analyst:**	GSG
DilN Fac:	2.000	**Analyzed:**	12/20/21 14:59		

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Freon 12	**4.6**	0.40	ppbv	**23**	2.0	ug/m3
Freon 114	ND	0.40	ppbv	ND	2.8	ug/m3
Chloromethane	ND	0.40	ppbv	ND	0.83	ug/m3
Vinyl Chloride	ND	0.40	ppbv	ND	1.0	ug/m3
Bromomethane	ND	0.40	ppbv	ND	1.6	ug/m3
Chloroethane	ND	0.40	ppbv	ND	1.1	ug/m3
Trichlorofluoromethane	ND	0.40	ppbv	ND	2.2	ug/m3
1,1-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
Freon 113	ND	0.40	ppbv	ND	3.1	ug/m3
Acetone	ND	2.0	ppbv	ND	4.8	ug/m3
Carbon Disulfide	ND	0.40	ppbv	ND	1.2	ug/m3
Isopropanol (IPA)	ND	2.0	ppbv	ND	4.9	ug/m3
Methylene Chloride	ND	0.40	ppbv	ND	1.4	ug/m3
trans-1,2-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
MTBE	ND	0.40	ppbv	ND	1.4	ug/m3
n-Hexane	ND	0.40	ppbv	ND	1.4	ug/m3
1,1-Dichloroethane	ND	0.40	ppbv	ND	1.6	ug/m3
Vinyl Acetate	ND	2.0	ppbv	ND	7.0	ug/m3
cis-1,2-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
2-Butanone	ND	2.0	ppbv	ND	5.9	ug/m3
Chloroform	ND	0.40	ppbv	ND	2.0	ug/m3
1,1,1-Trichloroethane	ND	0.40	ppbv	ND	2.2	ug/m3
Carbon Tetrachloride	ND	0.40	ppbv	ND	2.5	ug/m3
Benzene	ND	0.40	ppbv	ND	1.3	ug/m3
1,2-Dichloroethane	ND	0.40	ppbv	ND	1.6	ug/m3
Trichloroethene	ND	0.40	ppbv	ND	2.1	ug/m3
1,2-Dichloropropane	ND	0.40	ppbv	ND	1.8	ug/m3
Bromodichloromethane	ND	0.40	ppbv	ND	2.7	ug/m3
cis-1,3-Dichloropropene	ND	0.40	ppbv	ND	1.8	ug/m3
4-Methyl-2-Pentanone	ND	0.40	ppbv	ND	1.6	ug/m3
Toluene	ND	0.40	ppbv	ND	1.5	ug/m3
trans-1,3-Dichloropropene	ND	0.40	ppbv	ND	1.8	ug/m3
1,1,2-Trichloroethane	ND	0.40	ppbv	ND	2.2	ug/m3
Tetrachloroethene	ND	0.40	ppbv	ND	2.7	ug/m3
2-Hexanone	ND	1.0	ppbv	ND	4.1	ug/m3
Dibromochloromethane	ND	0.40	ppbv	ND	3.4	ug/m3
1,2-Dibromoethane	ND	0.40	ppbv	ND	3.1	ug/m3
Chlorobenzene	ND	0.40	ppbv	ND	1.8	ug/m3
Ethylbenzene	ND	0.40	ppbv	ND	1.7	ug/m3
m,p-Xylenes	ND	0.80	ppbv	ND	3.5	ug/m3
o-Xylene	ND	0.40	ppbv	ND	1.7	ug/m3

ENTHALPY ANALYTICAL

Volatile Organics in Air

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Styrene	ND	0.40	ppbv	ND	1.7	ug/m3
Bromoform	ND	0.40	ppbv	ND	4.1	ug/m3
1,1,2,2-Tetrachloroethane	ND	0.40	ppbv	ND	2.7	ug/m3
1,1,1,2-Tetrachloroethane	ND	0.40	ppbv	ND	2.7	ug/m3
4-Ethyltoluene	ND	0.40	ppbv	ND	2.0	ug/m3
1,3,5-Trimethylbenzene	ND	0.40	ppbv	ND	2.0	ug/m3
1,2,4-Trimethylbenzene	ND	0.40	ppbv	ND	2.0	ug/m3
1,3-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
1,4-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
Benzyl chloride	ND	0.40	ppbv	ND	2.1	ug/m3
1,2-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
1,2,4-Trichlorobenzene	ND	0.40	ppbv	ND	3.0	ug/m3
Hexachlorobutadiene	ND	0.40	ppbv	ND	4.3	ug/m3
Xylene (total)	ND	0.40	ppbv	ND	1.7	ug/m3

Tentatively Identified Compounds	Result (M)	Units (M)
No TICs found.		

Surrogate	%REC	Limits	Units (M)
Bromofluorobenzene	103	60-140	ug/m3

Legend

ND: Not Detected

RL (V): Reporting Limit

Result (M): Result in mass units

Result (V): Result in volume units

ENTHALPY ANALYTICAL

Volatile Organics in Air

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Field ID:	SVMP-15D	**Batch#:**	280281	**Prep:**	METHOD
Lab ID:	455620-002	**Sampled:**	12/16/21 14:18	**Analysis:**	EPA TO-15
Matrix:	Air	**Received:**	12/18/21	**Analyst:**	GSG
DilN Fac:	2.000	**Analyzed:**	12/20/21 15:50		

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Freon 12	**8.0**	0.40	ppbv	**40**	2.0	ug/m3
Freon 114	ND	0.40	ppbv	ND	2.8	ug/m3
Chloromethane	ND	0.40	ppbv	ND	0.83	ug/m3
Vinyl Chloride	ND	0.40	ppbv	ND	1.0	ug/m3
Bromomethane	ND	0.40	ppbv	ND	1.6	ug/m3
Chloroethane	ND	0.40	ppbv	ND	1.1	ug/m3
Trichlorofluoromethane	ND	0.40	ppbv	ND	2.2	ug/m3
1,1-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
Freon 113	ND	0.40	ppbv	ND	3.1	ug/m3
Acetone	**2.6**	2.0	ppbv	**6.1**	4.8	ug/m3
Carbon Disulfide	ND	0.40	ppbv	ND	1.2	ug/m3
Isopropanol (IPA)	ND	2.0	ppbv	ND	4.9	ug/m3
Methylene Chloride	ND	0.40	ppbv	ND	1.4	ug/m3
trans-1,2-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
MTBE	ND	0.40	ppbv	ND	1.4	ug/m3
n-Hexane	ND	0.40	ppbv	ND	1.4	ug/m3
1,1-Dichloroethane	ND	0.40	ppbv	ND	1.6	ug/m3
Vinyl Acetate	ND	2.0	ppbv	ND	7.0	ug/m3
cis-1,2-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
2-Butanone	ND	2.0	ppbv	ND	5.9	ug/m3
Chloroform	ND	0.40	ppbv	ND	2.0	ug/m3
1,1,1-Trichloroethane	ND	0.40	ppbv	ND	2.2	ug/m3
Carbon Tetrachloride	**0.93**	0.40	ppbv	**5.9**	2.5	ug/m3
Benzene	ND	0.40	ppbv	ND	1.3	ug/m3
1,2-Dichloroethane	ND	0.40	ppbv	ND	1.6	ug/m3
Trichloroethene	ND	0.40	ppbv	ND	2.1	ug/m3
1,2-Dichloropropane	ND	0.40	ppbv	ND	1.8	ug/m3
Bromodichloromethane	ND	0.40	ppbv	ND	2.7	ug/m3
cis-1,3-Dichloropropene	ND	0.40	ppbv	ND	1.8	ug/m3
4-Methyl-2-Pentanone	ND	0.40	ppbv	ND	1.6	ug/m3
Toluene	ND	0.40	ppbv	ND	1.5	ug/m3
trans-1,3-Dichloropropene	ND	0.40	ppbv	ND	1.8	ug/m3
1,1,2-Trichloroethane	ND	0.40	ppbv	ND	2.2	ug/m3
Tetrachloroethene	ND	0.40	ppbv	ND	2.7	ug/m3
2-Hexanone	ND	1.0	ppbv	ND	4.1	ug/m3
Dibromochloromethane	ND	0.40	ppbv	ND	3.4	ug/m3
1,2-Dibromoethane	ND	0.40	ppbv	ND	3.1	ug/m3
Chlorobenzene	ND	0.40	ppbv	ND	1.8	ug/m3
Ethylbenzene	ND	0.40	ppbv	ND	1.7	ug/m3
m,p-Xylenes	ND	0.80	ppbv	ND	3.5	ug/m3
o-Xylene	ND	0.40	ppbv	ND	1.7	ug/m3

ENTHALPY ANALYTICAL

Volatile Organics in Air

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Styrene	ND	0.40	ppbv	ND	1.7	ug/m3
Bromoform	ND	0.40	ppbv	ND	4.1	ug/m3
1,1,2,2-Tetrachloroethane	ND	0.40	ppbv	ND	2.7	ug/m3
1,1,1,2-Tetrachloroethane	ND	0.40	ppbv	ND	2.7	ug/m3
4-Ethyltoluene	ND	0.40	ppbv	ND	2.0	ug/m3
1,3,5-Trimethylbenzene	ND	0.40	ppbv	ND	2.0	ug/m3
1,2,4-Trimethylbenzene	ND	0.40	ppbv	ND	2.0	ug/m3
1,3-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
1,4-Dichlorobenzene	**0.47**	0.40	ppbv	**2.8**	2.4	ug/m3
Benzyl chloride	ND	0.40	ppbv	ND	2.1	ug/m3
1,2-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
1,2,4-Trichlorobenzene	ND	0.40	ppbv	ND	3.0	ug/m3
Hexachlorobutadiene	ND	0.40	ppbv	ND	4.3	ug/m3
Xylene (total)	ND	0.40	ppbv	ND	1.7	ug/m3

Tentatively Identified Compounds	Result (M)	Units (M)
No TICs found.		

Surrogate	%REC	Limits	Units (M)
Bromofluorobenzene	103	60-140	ug/m3

Legend

ND: Not Detected

RL (V): Reporting Limit

Result (M): Result in mass units

Result (V): Result in volume units

ENTHALPY ANALYTICAL

Volatile Organics in Air

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Field ID:	SVMP-17S	**Batch#:**	280281	**Prep:**	METHOD
Lab ID:	455620-003	**Sampled:**	12/16/21 14:55	**Analysis:**	EPA TO-15
Matrix:	Air	**Received:**	12/18/21	**Analyst:**	GSG
DilN Fac:	2.000	**Analyzed:**	12/20/21 20:53		

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Freon 12	**10**	0.40	ppbv	**52**	2.0	ug/m3
Freon 114	ND	0.40	ppbv	ND	2.8	ug/m3
Chloromethane	ND	0.40	ppbv	ND	0.83	ug/m3
Vinyl Chloride	ND	0.40	ppbv	ND	1.0	ug/m3
Bromomethane	ND	0.40	ppbv	ND	1.6	ug/m3
Chloroethane	ND	0.40	ppbv	ND	1.1	ug/m3
Trichlorofluoromethane	ND	0.40	ppbv	ND	2.2	ug/m3
1,1-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
Freon 113	ND	0.40	ppbv	ND	3.1	ug/m3
Acetone	**3.5**	2.0	ppbv	**8.4**	4.8	ug/m3
Carbon Disulfide	ND	0.40	ppbv	ND	1.2	ug/m3
Isopropanol (IPA)	ND	2.0	ppbv	ND	4.9	ug/m3
Methylene Chloride	**2.4**	0.40	ppbv	**8.5**	1.4	ug/m3
trans-1,2-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
MTBE	ND	0.40	ppbv	ND	1.4	ug/m3
n-Hexane	ND	0.40	ppbv	ND	1.4	ug/m3
1,1-Dichloroethane	ND	0.40	ppbv	ND	1.6	ug/m3
Vinyl Acetate	ND	2.0	ppbv	ND	7.0	ug/m3
cis-1,2-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
2-Butanone	ND	2.0	ppbv	ND	5.9	ug/m3
Chloroform	ND	0.40	ppbv	ND	2.0	ug/m3
1,1,1-Trichloroethane	ND	0.40	ppbv	ND	2.2	ug/m3
Carbon Tetrachloride	ND	0.40	ppbv	ND	2.5	ug/m3
Benzene	ND	0.40	ppbv	ND	1.3	ug/m3
1,2-Dichloroethane	ND	0.40	ppbv	ND	1.6	ug/m3
Trichloroethene	ND	0.40	ppbv	ND	2.1	ug/m3
1,2-Dichloropropane	ND	0.40	ppbv	ND	1.8	ug/m3
Bromodichloromethane	ND	0.40	ppbv	ND	2.7	ug/m3
cis-1,3-Dichloropropene	ND	0.40	ppbv	ND	1.8	ug/m3
4-Methyl-2-Pentanone	ND	0.40	ppbv	ND	1.6	ug/m3
Toluene	**0.44**	0.40	ppbv	**1.7**	1.5	ug/m3
trans-1,3-Dichloropropene	ND	0.40	ppbv	ND	1.8	ug/m3
1,1,2-Trichloroethane	ND	0.40	ppbv	ND	2.2	ug/m3
Tetrachloroethene	ND	0.40	ppbv	ND	2.7	ug/m3
2-Hexanone	ND	1.0	ppbv	ND	4.1	ug/m3
Dibromochloromethane	ND	0.40	ppbv	ND	3.4	ug/m3
1,2-Dibromoethane	ND	0.40	ppbv	ND	3.1	ug/m3
Chlorobenzene	ND	0.40	ppbv	ND	1.8	ug/m3
Ethylbenzene	ND	0.40	ppbv	ND	1.7	ug/m3
m,p-Xylenes	**2.1**	0.80	ppbv	**9.0**	3.5	ug/m3
o-Xylene	**1.2**	0.40	ppbv	**5.2**	1.7	ug/m3

ENTHALPY ANALYTICAL

Volatile Organics in Air

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Styrene	ND	0.40	ppbv	ND	1.7	ug/m3
Bromoform	ND	0.40	ppbv	ND	4.1	ug/m3
1,1,2,2-Tetrachloroethane	ND	0.40	ppbv	ND	2.7	ug/m3
1,1,1,2-Tetrachloroethane	ND	0.40	ppbv	ND	2.7	ug/m3
4-Ethyltoluene	ND	0.40	ppbv	ND	2.0	ug/m3
1,3,5-Trimethylbenzene	**1.9**	0.40	ppbv	**9.1**	2.0	ug/m3
1,2,4-Trimethylbenzene	**3.0**	0.40	ppbv	**15**	2.0	ug/m3
1,3-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
1,4-Dichlorobenzene	**0.46**	0.40	ppbv	**2.7**	2.4	ug/m3
Benzyl chloride	ND	0.40	ppbv	ND	2.1	ug/m3
1,2-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
1,2,4-Trichlorobenzene	ND	0.40	ppbv	ND	3.0	ug/m3
Hexachlorobutadiene	ND	0.40	ppbv	ND	4.3	ug/m3
Xylene (total)	**3.3**	0.40	ppbv	**14**	1.7	ug/m3

Tentatively Identified Compounds	Result (V)	Units (V)	Result (M)	Units (M)
Benzene, 1-methyl-3-(1-methylethyl)-	**24 J**	ppbv	**130 J**	ug/m3
Benzene, 4-ethyl-1,2-dimethyl-	**19 J**	ppbv	**100 J**	ug/m3
Dodecane	**21 J**	ppbv	**150 J**	ug/m3
Naphthalene, decahydro-1,5-dimethyl-	**23 J**	ppbv	**160 J**	ug/m3
Naphthalene, decahydro-1,6-dimethyl-	**27 J**	ppbv	**190 J**	ug/m3
Naphthalene, decahydro-2-methyl	**28 J**	ppbv	**180 J**	ug/m3
Naphthalene,decahydro-,trans-	**29 J**	ppbv	**160 J**	ug/m3
Tridecane	**21 J**	ppbv	**160 J**	ug/m3
Undecane	**43 J**	ppbv	**280 J**	ug/m3

Surrogate	%REC	Limits	Units (M)
Bromofluorobenzene	103	60-140	ug/m3

Legend

J: Estimated value

ND: Not Detected

RL (V): Reporting Limit

Result (M): Result in mass units

Result (V): Result in volume units

ENTHALPY ANALYTICAL

Volatile Organics in Air

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Field ID:	SVMP-18S	**Batch#:**	280281	**Prep:**	METHOD
Lab ID:	455620-005	**Sampled:**	12/16/21 15:14	**Analysis:**	EPA TO-15
Matrix:	Air	**Received:**	12/18/21	**Analyst:**	GSG
DilN Fac:	2.000	**Analyzed:**	12/20/21 23:45		

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Freon 12	ND	0.40	ppbv	ND	2.0	ug/m3
Freon 114	ND	0.40	ppbv	ND	2.8	ug/m3
Chloromethane	ND	0.40	ppbv	ND	0.83	ug/m3
Vinyl Chloride	ND	0.40	ppbv	ND	1.0	ug/m3
Bromomethane	ND	0.40	ppbv	ND	1.6	ug/m3
Chloroethane	**0.81**	0.40	ppbv	**2.1**	1.1	ug/m3
Trichlorofluoromethane	ND	0.40	ppbv	ND	2.2	ug/m3
1,1-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
Freon 113	ND	0.40	ppbv	ND	3.1	ug/m3
Acetone	**2.3**	2.0	ppbv	**5.5**	4.8	ug/m3
Carbon Disulfide	**0.56**	0.40	ppbv	**1.8**	1.2	ug/m3
Isopropanol (IPA)	ND	2.0	ppbv	ND	4.9	ug/m3
Methylene Chloride	ND	0.40	ppbv	ND	1.4	ug/m3
trans-1,2-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
MTBE	ND	0.40	ppbv	ND	1.4	ug/m3
n-Hexane	ND	0.40	ppbv	ND	1.4	ug/m3
1,1-Dichloroethane	ND	0.40	ppbv	ND	1.6	ug/m3
Vinyl Acetate	ND	2.0	ppbv	ND	7.0	ug/m3
cis-1,2-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
2-Butanone	ND	2.0	ppbv	ND	5.9	ug/m3
Chloroform	ND	0.40	ppbv	ND	2.0	ug/m3
1,1,1-Trichloroethane	ND	0.40	ppbv	ND	2.2	ug/m3
Carbon Tetrachloride	ND	0.40	ppbv	ND	2.5	ug/m3
Benzene	ND	0.40	ppbv	ND	1.3	ug/m3
1,2-Dichloroethane	ND	0.40	ppbv	ND	1.6	ug/m3
Trichloroethene	ND	0.40	ppbv	ND	2.1	ug/m3
1,2-Dichloropropane	ND	0.40	ppbv	ND	1.8	ug/m3
Bromodichloromethane	ND	0.40	ppbv	ND	2.7	ug/m3
cis-1,3-Dichloropropene	ND	0.40	ppbv	ND	1.8	ug/m3
4-Methyl-2-Pentanone	ND	0.40	ppbv	ND	1.6	ug/m3
Toluene	**1.2**	0.40	ppbv	**4.5**	1.5	ug/m3
trans-1,3-Dichloropropene	ND	0.40	ppbv	ND	1.8	ug/m3
1,1,2-Trichloroethane	ND	0.40	ppbv	ND	2.2	ug/m3
Tetrachloroethene	ND	0.40	ppbv	ND	2.7	ug/m3
2-Hexanone	ND	1.0	ppbv	ND	4.1	ug/m3
Dibromochloromethane	ND	0.40	ppbv	ND	3.4	ug/m3
1,2-Dibromoethane	ND	0.40	ppbv	ND	3.1	ug/m3
Chlorobenzene	ND	0.40	ppbv	ND	1.8	ug/m3
Ethylbenzene	**0.61**	0.40	ppbv	**2.7**	1.7	ug/m3
m,p-Xylenes	**2.4**	0.80	ppbv	**11**	3.5	ug/m3
o-Xylene	**1.2**	0.40	ppbv	**5.0**	1.7	ug/m3

ENTHALPY ANALYTICAL

Volatile Organics in Air

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Styrene	**2.3**	0.40	ppbv	**9.9**	1.7	ug/m3
Bromoform	ND	0.40	ppbv	ND	4.1	ug/m3
1,1,2,2-Tetrachloroethane	ND	0.40	ppbv	ND	2.7	ug/m3
1,1,1,2-Tetrachloroethane	ND	0.40	ppbv	ND	2.7	ug/m3
4-Ethyltoluene	ND	0.40	ppbv	ND	2.0	ug/m3
1,3,5-Trimethylbenzene	**1.9**	0.40	ppbv	**9.6**	2.0	ug/m3
1,2,4-Trimethylbenzene	**4.0**	0.40	ppbv	**20**	2.0	ug/m3
1,3-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
1,4-Dichlorobenzene	**1.8**	0.40	ppbv	**11**	2.4	ug/m3
Benzyl chloride	ND	0.40	ppbv	ND	2.1	ug/m3
1,2-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
1,2,4-Trichlorobenzene	ND	0.40	ppbv	ND	3.0	ug/m3
Hexachlorobutadiene	ND	0.40	ppbv	ND	4.3	ug/m3
Xylene (total)	**3.6**	0.40	ppbv	**16**	1.7	ug/m3

Tentatively Identified Compounds	Result (V)	Units (V)	Result (M)	Units (M)
Benzene, 1-ethyl-3,5-dimethyl-	**20 J**	ppbv	**110 J**	ug/m3
Benzene, 1-methyl-3-(1-methylethyl)-	**12 J**	ppbv	**68 J**	ug/m3
Cyclohexane, 2-butyl-1,1,3-trimethyl-	**16 J**	ppbv	**120 J**	ug/m3
Dodecane	**41 J**	ppbv	**280 J**	ug/m3
Naphthalene, 2-methyl-	**24 J**	ppbv	**140 J**	ug/m3
Naphthalene, decahydro-1,5-dimethyl-	**19 J**	ppbv	**130 J**	ug/m3
Naphthalene, decahydro-2-methyl	**17 J**	ppbv	**100 J**	ug/m3
Tridecane	**18 J**	ppbv	**140 J**	ug/m3
Undecane	**33 J**	ppbv	**210 J**	ug/m3
Undecane, 2,6-dimethyl-	**17 J**	ppbv	**120 J**	ug/m3

Surrogate	%REC	Limits	Units (M)
Bromofluorobenzene	103	60-140	ug/m3

Legend

J: Estimated value

ND: Not Detected

RL (V): Reporting Limit

Result (M): Result in mass units

Result (V): Result in volume units

ENTHALPY ANALYTICAL

Volatile Organics in Air

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Field ID:	SVMP-18D	**Batch#:**	280281	**Prep:**	METHOD
Lab ID:	455620-006	**Sampled:**	12/16/21 15:18	**Analysis:**	EPA TO-15
Matrix:	Air	**Received:**	12/18/21	**Analyst:**	GSG
DilN Fac:	2.000	**Analyzed:**	12/21/21 00:36		

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Freon 12	ND	0.40	ppbv	ND	2.0	ug/m3
Freon 114	ND	0.40	ppbv	ND	2.8	ug/m3
Chloromethane	ND	0.40	ppbv	ND	0.83	ug/m3
Vinyl Chloride	ND	0.40	ppbv	ND	1.0	ug/m3
Bromomethane	ND	0.40	ppbv	ND	1.6	ug/m3
Chloroethane	**0.75**	0.40	ppbv	**2.0**	1.1	ug/m3
Trichlorofluoromethane	ND	0.40	ppbv	ND	2.2	ug/m3
1,1-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
Freon 113	ND	0.40	ppbv	ND	3.1	ug/m3
Acetone	**3.1**	2.0	ppbv	**7.3**	4.8	ug/m3
Carbon Disulfide	**1.7**	0.40	ppbv	**5.3**	1.2	ug/m3
Isopropanol (IPA)	ND	2.0	ppbv	ND	4.9	ug/m3
Methylene Chloride	ND	0.40	ppbv	ND	1.4	ug/m3
trans-1,2-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
MTBE	ND	0.40	ppbv	ND	1.4	ug/m3
n-Hexane	**0.44**	0.40	ppbv	**1.5**	1.4	ug/m3
1,1-Dichloroethane	ND	0.40	ppbv	ND	1.6	ug/m3
Vinyl Acetate	ND	2.0	ppbv	ND	7.0	ug/m3
cis-1,2-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
2-Butanone	ND	2.0	ppbv	ND	5.9	ug/m3
Chloroform	ND	0.40	ppbv	ND	2.0	ug/m3
1,1,1-Trichloroethane	ND	0.40	ppbv	ND	2.2	ug/m3
Carbon Tetrachloride	ND	0.40	ppbv	ND	2.5	ug/m3
Benzene	ND	0.40	ppbv	ND	1.3	ug/m3
1,2-Dichloroethane	ND	0.40	ppbv	ND	1.6	ug/m3
Trichloroethene	ND	0.40	ppbv	ND	2.1	ug/m3
1,2-Dichloropropane	ND	0.40	ppbv	ND	1.8	ug/m3
Bromodichloromethane	ND	0.40	ppbv	ND	2.7	ug/m3
cis-1,3-Dichloropropene	ND	0.40	ppbv	ND	1.8	ug/m3
4-Methyl-2-Pentanone	ND	0.40	ppbv	ND	1.6	ug/m3
Toluene	**1.1**	0.40	ppbv	**4.2**	1.5	ug/m3
trans-1,3-Dichloropropene	ND	0.40	ppbv	ND	1.8	ug/m3
1,1,2-Trichloroethane	ND	0.40	ppbv	ND	2.2	ug/m3
Tetrachloroethene	ND	0.40	ppbv	ND	2.7	ug/m3
2-Hexanone	ND	1.0	ppbv	ND	4.1	ug/m3
Dibromochloromethane	ND	0.40	ppbv	ND	3.4	ug/m3
1,2-Dibromoethane	ND	0.40	ppbv	ND	3.1	ug/m3
Chlorobenzene	ND	0.40	ppbv	ND	1.8	ug/m3
Ethylbenzene	**0.59**	0.40	ppbv	**2.6**	1.7	ug/m3
m,p-Xylenes	**2.5**	0.80	ppbv	**11**	3.5	ug/m3
o-Xylene	**1.3**	0.40	ppbv	**5.8**	1.7	ug/m3

ENTHALPY ANALYTICAL

Volatile Organics in Air

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Styrene	**2.2**	0.40	ppbv	**9.4**	1.7	ug/m3
Bromoform	ND	0.40	ppbv	ND	4.1	ug/m3
1,1,2,2-Tetrachloroethane	ND	0.40	ppbv	ND	2.7	ug/m3
1,1,1,2-Tetrachloroethane	ND	0.40	ppbv	ND	2.7	ug/m3
4-Ethyltoluene	ND	0.40	ppbv	ND	2.0	ug/m3
1,3,5-Trimethylbenzene	**1.8**	0.40	ppbv	**8.7**	2.0	ug/m3
1,2,4-Trimethylbenzene	**3.8**	0.40	ppbv	**19**	2.0	ug/m3
1,3-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
1,4-Dichlorobenzene	**1.7**	0.40	ppbv	**10**	2.4	ug/m3
Benzyl chloride	ND	0.40	ppbv	ND	2.1	ug/m3
1,2-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
1,2,4-Trichlorobenzene	ND	0.40	ppbv	ND	3.0	ug/m3
Hexachlorobutadiene	ND	0.40	ppbv	ND	4.3	ug/m3
Xylene (total)	**3.9**	0.40	ppbv	**17**	1.7	ug/m3

Tentatively Identified Compounds	Result (V)	Units (V)	Result (M)	Units (M)
Azulene	**8.4 J**	ppbv	**44 J**	ug/m3
Benzene, (1,2-dimethylpropyl)-	**9.7 J**	ppbv	**59 J**	ug/m3
Benzene, 2-ethyl-1,4-dimethyl	**17 J**	ppbv	**94 J**	ug/m3
Cyclotetrasiloxane, octamethyl-	**11 J**	ppbv	**140 J**	ug/m3
Decane	**9.3 J**	ppbv	**54 J**	ug/m3
Dodecane	**33 J**	ppbv	**230 J**	ug/m3
Naphthalene, 2-methyl-	**10 J**	ppbv	**60 J**	ug/m3
Naphthalene, decahydro-2-methyl	**12 J**	ppbv	**72 J**	ug/m3
Tridecane	**13 J**	ppbv	**96 J**	ug/m3
Undecane	**32 J**	ppbv	**200 J**	ug/m3

Surrogate	%REC	Limits	Units (M)
Bromofluorobenzene	104	60-140	ug/m3

Legend

J: Estimated value

ND: Not Detected

RL (V): Reporting Limit

Result (M): Result in mass units

Result (V): Result in volume units

ENTHALPY ANALYTICAL

Volatile Organics in Air

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Field ID:	SVMP-20M	**Batch#:**	280281	**Prep:**	METHOD
Lab ID:	455620-007	**Sampled:**	12/16/21 15:41	**Analysis:**	EPA TO-15
Matrix:	Air	**Received:**	12/18/21	**Analyst:**	GSG
DilN Fac:	2.000	**Analyzed:**	12/21/21 01:27		

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Freon 12	ND	0.40	ppbv	ND	2.0	ug/m3
Freon 114	ND	0.40	ppbv	ND	2.8	ug/m3
Chloromethane	ND	0.40	ppbv	ND	0.83	ug/m3
Vinyl Chloride	ND	0.40	ppbv	ND	1.0	ug/m3
Bromomethane	ND	0.40	ppbv	ND	1.6	ug/m3
Chloroethane	ND	0.40	ppbv	ND	1.1	ug/m3
Trichlorofluoromethane	ND	0.40	ppbv	ND	2.2	ug/m3
1,1-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
Freon 113	ND	0.40	ppbv	ND	3.1	ug/m3
Acetone	ND	2.0	ppbv	ND	4.8	ug/m3
Carbon Disulfide	ND	0.40	ppbv	ND	1.2	ug/m3
Isopropanol (IPA)	ND	2.0	ppbv	ND	4.9	ug/m3
Methylene Chloride	**1.0**	0.40	ppbv	**3.5**	1.4	ug/m3
trans-1,2-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
MTBE	ND	0.40	ppbv	ND	1.4	ug/m3
n-Hexane	ND	0.40	ppbv	ND	1.4	ug/m3
1,1-Dichloroethane	ND	0.40	ppbv	ND	1.6	ug/m3
Vinyl Acetate	ND	2.0	ppbv	ND	7.0	ug/m3
cis-1,2-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
2-Butanone	ND	2.0	ppbv	ND	5.9	ug/m3
Chloroform	ND	0.40	ppbv	ND	2.0	ug/m3
1,1,1-Trichloroethane	ND	0.40	ppbv	ND	2.2	ug/m3
Carbon Tetrachloride	ND	0.40	ppbv	ND	2.5	ug/m3
Benzene	ND	0.40	ppbv	ND	1.3	ug/m3
1,2-Dichloroethane	ND	0.40	ppbv	ND	1.6	ug/m3
Trichloroethene	ND	0.40	ppbv	ND	2.1	ug/m3
1,2-Dichloropropane	ND	0.40	ppbv	ND	1.8	ug/m3
Bromodichloromethane	ND	0.40	ppbv	ND	2.7	ug/m3
cis-1,3-Dichloropropene	ND	0.40	ppbv	ND	1.8	ug/m3
4-Methyl-2-Pentanone	ND	0.40	ppbv	ND	1.6	ug/m3
Toluene	ND	0.40	ppbv	ND	1.5	ug/m3
trans-1,3-Dichloropropene	ND	0.40	ppbv	ND	1.8	ug/m3
1,1,2-Trichloroethane	ND	0.40	ppbv	ND	2.2	ug/m3
Tetrachloroethene	ND	0.40	ppbv	ND	2.7	ug/m3
2-Hexanone	ND	1.0	ppbv	ND	4.1	ug/m3
Dibromochloromethane	ND	0.40	ppbv	ND	3.4	ug/m3
1,2-Dibromoethane	ND	0.40	ppbv	ND	3.1	ug/m3
Chlorobenzene	ND	0.40	ppbv	ND	1.8	ug/m3
Ethylbenzene	ND	0.40	ppbv	ND	1.7	ug/m3
m,p-Xylenes	ND	0.80	ppbv	ND	3.5	ug/m3
o-Xylene	ND	0.40	ppbv	ND	1.7	ug/m3

ENTHALPY ANALYTICAL

Volatile Organics in Air

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Styrene	ND	0.40	ppbv	ND	1.7	ug/m3
Bromoform	ND	0.40	ppbv	ND	4.1	ug/m3
1,1,2,2-Tetrachloroethane	ND	0.40	ppbv	ND	2.7	ug/m3
1,1,1,2-Tetrachloroethane	ND	0.40	ppbv	ND	2.7	ug/m3
4-Ethyltoluene	ND	0.40	ppbv	ND	2.0	ug/m3
1,3,5-Trimethylbenzene	ND	0.40	ppbv	ND	2.0	ug/m3
1,2,4-Trimethylbenzene	**0.95**	0.40	ppbv	**4.7**	2.0	ug/m3
1,3-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
1,4-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
Benzyl chloride	ND	0.40	ppbv	ND	2.1	ug/m3
1,2-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
1,2,4-Trichlorobenzene	ND	0.40	ppbv	ND	3.0	ug/m3
Hexachlorobutadiene	ND	0.40	ppbv	ND	4.3	ug/m3
Xylene (total)	ND	0.40	ppbv	ND	1.7	ug/m3

Tentatively Identified Compounds	Result (V)	Units (V)	Result (M)	Units (M)
Butane, 2-methyl-	**2.8 J**	ppbv	**8.4 J**	ug/m3
Cyclotetrasiloxane, octamethyl-	**4.3 J**	ppbv	**52 J**	ug/m3
Dodecane	**4.2 J**	ppbv	**29 J**	ug/m3
Naphthalene, 2-methyl-	**2.2 J**	ppbv	**13 J**	ug/m3
Tridecane	**4.3 J**	ppbv	**32 J**	ug/m3
Undecane	**2.0 J**	ppbv	**13 J**	ug/m3
n-Nonadecanol-1	**2.2 J**	ppbv	**25 J**	ug/m3

Surrogate	%REC	Limits	Units (M)
Bromofluorobenzene	102	60-140	ug/m3

Legend

J: Estimated value

ND: Not Detected

RL (V): Reporting Limit

Result (M): Result in mass units

Result (V): Result in volume units

ENTHALPY ANALYTICAL

Volatile Organics in Air

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Field ID:	SVMP-20D	**Batch#:**	280281	**Prep:**	METHOD
Lab ID:	455620-008	**Sampled:**	12/16/21 15:45	**Analysis:**	EPA TO-15
Matrix:	Air	**Received:**	12/18/21	**Analyst:**	GSG
DilN Fac:	2.000	**Analyzed:**	12/21/21 02:18		

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Freon 12	**0.43**	0.40	ppbv	**2.1**	2.0	ug/m3
Freon 114	ND	0.40	ppbv	ND	2.8	ug/m3
Chloromethane	ND	0.40	ppbv	ND	0.83	ug/m3
Vinyl Chloride	ND	0.40	ppbv	ND	1.0	ug/m3
Bromomethane	ND	0.40	ppbv	ND	1.6	ug/m3
Chloroethane	**0.76**	0.40	ppbv	**2.0**	1.1	ug/m3
Trichlorofluoromethane	ND	0.40	ppbv	ND	2.2	ug/m3
1,1-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
Freon 113	ND	0.40	ppbv	ND	3.1	ug/m3
Acetone	ND	2.0	ppbv	ND	4.8	ug/m3
Carbon Disulfide	**0.46**	0.40	ppbv	**1.4**	1.2	ug/m3
Isopropanol (IPA)	ND	2.0	ppbv	ND	4.9	ug/m3
Methylene Chloride	**0.66**	0.40	ppbv	**2.3**	1.4	ug/m3
trans-1,2-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
MTBE	ND	0.40	ppbv	ND	1.4	ug/m3
n-Hexane	ND	0.40	ppbv	ND	1.4	ug/m3
1,1-Dichloroethane	ND	0.40	ppbv	ND	1.6	ug/m3
Vinyl Acetate	ND	2.0	ppbv	ND	7.0	ug/m3
cis-1,2-Dichloroethene	ND	0.40	ppbv	ND	1.6	ug/m3
2-Butanone	ND	2.0	ppbv	ND	5.9	ug/m3
Chloroform	ND	0.40	ppbv	ND	2.0	ug/m3
1,1,1-Trichloroethane	ND	0.40	ppbv	ND	2.2	ug/m3
Carbon Tetrachloride	ND	0.40	ppbv	ND	2.5	ug/m3
Benzene	ND	0.40	ppbv	ND	1.3	ug/m3
1,2-Dichloroethane	ND	0.40	ppbv	ND	1.6	ug/m3
Trichloroethene	ND	0.40	ppbv	ND	2.1	ug/m3
1,2-Dichloropropane	ND	0.40	ppbv	ND	1.8	ug/m3
Bromodichloromethane	ND	0.40	ppbv	ND	2.7	ug/m3
cis-1,3-Dichloropropene	ND	0.40	ppbv	ND	1.8	ug/m3
4-Methyl-2-Pentanone	ND	0.40	ppbv	ND	1.6	ug/m3
Toluene	ND	0.40	ppbv	ND	1.5	ug/m3
trans-1,3-Dichloropropene	ND	0.40	ppbv	ND	1.8	ug/m3
1,1,2-Trichloroethane	ND	0.40	ppbv	ND	2.2	ug/m3
Tetrachloroethene	ND	0.40	ppbv	ND	2.7	ug/m3
2-Hexanone	ND	1.0	ppbv	ND	4.1	ug/m3
Dibromochloromethane	ND	0.40	ppbv	ND	3.4	ug/m3
1,2-Dibromoethane	ND	0.40	ppbv	ND	3.1	ug/m3
Chlorobenzene	ND	0.40	ppbv	ND	1.8	ug/m3
Ethylbenzene	ND	0.40	ppbv	ND	1.7	ug/m3
m,p-Xylenes	ND	0.80	ppbv	ND	3.5	ug/m3
o-Xylene	ND	0.40	ppbv	ND	1.7	ug/m3

ENTHALPY ANALYTICAL

Volatile Organics in Air

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Styrene	ND	0.40	ppbv	ND	1.7	ug/m3
Bromoform	ND	0.40	ppbv	ND	4.1	ug/m3
1,1,2,2-Tetrachloroethane	ND	0.40	ppbv	ND	2.7	ug/m3
1,1,1,2-Tetrachloroethane	ND	0.40	ppbv	ND	2.7	ug/m3
4-Ethyltoluene	ND	0.40	ppbv	ND	2.0	ug/m3
1,3,5-Trimethylbenzene	ND	0.40	ppbv	ND	2.0	ug/m3
1,2,4-Trimethylbenzene	**0.92**	0.40	ppbv	**4.5**	2.0	ug/m3
1,3-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
1,4-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
Benzyl chloride	ND	0.40	ppbv	ND	2.1	ug/m3
1,2-Dichlorobenzene	ND	0.40	ppbv	ND	2.4	ug/m3
1,2,4-Trichlorobenzene	ND	0.40	ppbv	ND	3.0	ug/m3
Hexachlorobutadiene	ND	0.40	ppbv	ND	4.3	ug/m3
Xylene (total)	ND	0.40	ppbv	ND	1.7	ug/m3

Tentatively Identified Compounds	Result (V)	Units (V)	Result (M)	Units (M)
Azulene	**3.5 J**	ppbv	**18 J**	ug/m3
Benzene, 4-ethyl-1,2-dimethyl-	**3.8 J**	ppbv	**21 J**	ug/m3
Dodecane	**6.5 J**	ppbv	**46 J**	ug/m3
Hexanol-1, 6-cyclohexyl-	**4.0 J**	ppbv	**30 J**	ug/m3
Naphthalene, 1-methyl-	**3.3 J**	ppbv	**19 J**	ug/m3
Naphthalene, decahydro-2-methyl	**3.6 J**	ppbv	**22 J**	ug/m3
Tridecane	**4.5 J**	ppbv	**34 J**	ug/m3
Tridecane, 7-methyl-	**4.1 J**	ppbv	**33 J**	ug/m3
Undecane	**5.5 J**	ppbv	**35 J**	ug/m3
Undecane, 2,6-dimethyl-	**3.7 J**	ppbv	**28 J**	ug/m3

Surrogate	%REC	Limits	Units (M)
Bromofluorobenzene	103	60-140	ug/m3

Legend

J: Estimated value

ND: Not Detected

RL (V): Reporting Limit

Result (M): Result in mass units

Result (V): Result in volume units

ENTHALPY ANALYTICAL

Volatile Organics in Air: Batch QC

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Type: BS **Dil'n Fac:** 1.000 **Prep:** METHOD

Lab ID: QC962005 **Batch#:** 280281 **Analysis:** EPA TO-15

Matrix: Air **Analyzed:** 12/20/21 10:06 **Analyst:** ZNZ

Analyte	Spiked	Result (V)	Units (V)	%REC	Limits	Qual
Freon 12	10.00	8.457	ppbv	85	70-130	
Freon 114	10.00	9.108	ppbv	91	70-130	
Chloromethane	10.00	8.874	ppbv	89	70-130	
Vinyl Chloride	10.00	9.489	ppbv	95	70-130	
Bromomethane	10.00	9.489	ppbv	95	70-130	
Chloroethane	10.00	9.598	ppbv	96	70-130	
Trichlorofluoromethane	10.00	8.067	ppbv	81	70-130	
1,1-Dichloroethene	10.00	8.893	ppbv	89	70-130	
Freon 113	10.00	9.299	ppbv	93	70-130	
Acetone	10.00	9.224	ppbv	92	70-130	
Carbon Disulfide	10.00	10.02	ppbv	100	70-130	
Isopropanol (IPA)	10.00	8.978	ppbv	90	70-130	
Methylene Chloride	10.00	9.188	ppbv	92	70-130	
trans-1,2-Dichloroethene	10.00	9.193	ppbv	92	70-130	
MTBE	10.00	9.030	ppbv	90	70-130	
n-Hexane	10.00	9.742	ppbv	97	70-130	
1,1-Dichloroethane	10.00	9.138	ppbv	91	70-130	
Vinyl Acetate	10.00	8.438	ppbv	84	70-130	
cis-1,2-Dichloroethene	10.00	9.068	ppbv	91	70-130	
2-Butanone	10.00	8.848	ppbv	88	70-130	
Chloroform	10.00	8.749	ppbv	87	70-130	
1,1,1-Trichloroethane	10.00	8.345	ppbv	83	70-130	
Carbon Tetrachloride	10.00	8.239	ppbv	82	70-130	
Benzene	10.00	10.22	ppbv	102	70-130	
1,2-Dichloroethane	10.00	7.745	ppbv	77	70-130	
Trichloroethene	10.00	9.725	ppbv	97	70-130	
1,2-Dichloropropane	10.00	9.832	ppbv	98	70-130	
Bromodichloromethane	10.00	8.826	ppbv	88	70-130	
cis-1,3-Dichloropropene	10.00	10.26	ppbv	103	70-130	
4-Methyl-2-Pentanone	10.00	9.721	ppbv	97	70-130	
Toluene	10.00	10.47	ppbv	105	70-130	
trans-1,3-Dichloropropene	10.00	10.16	ppbv	102	70-130	
1,1,2-Trichloroethane	10.00	9.804	ppbv	98	70-130	
Tetrachloroethene	10.00	9.500	ppbv	95	70-130	
2-Hexanone	10.00	10.02	ppbv	100	70-130	
Dibromochloromethane	10.00	9.289	ppbv	93	70-130	
1,2-Dibromoethane	10.00	9.640	ppbv	96	70-130	
Chlorobenzene	10.00	10.04	ppbv	100	70-130	
Ethylbenzene	10.00	10.67	ppbv	107	70-130	
m,p-Xylenes	20.00	21.08	ppbv	105	70-130	
o-Xylene	10.00	10.45	ppbv	104	70-130	
Styrene	10.00	10.79	ppbv	108	70-130	

ENTHALPY ANALYTICAL

Volatile Organics in Air: Batch QC

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Analyte	Spiked	Result (V)	Units (V)	%REC	Limits	Qual
Bromoform	10.00	9.581	ppbv	96	70-130	
1,1,2,2-Tetrachloroethane	10.00	10.27	ppbv	103	70-130	
1,1,1,2-Tetrachloroethane	10.00	9.611	ppbv	96	70-130	
4-Ethyltoluene	10.00	10.46	ppbv	105	70-130	
1,3,5-Trimethylbenzene	10.00	10.27	ppbv	103	70-130	
1,2,4-Trimethylbenzene	10.00	10.76	ppbv	108	70-130	
1,3-Dichlorobenzene	10.00	9.644	ppbv	96	70-130	
1,4-Dichlorobenzene	10.00	9.584	ppbv	96	70-130	
Benzyl chloride	10.00	9.772	ppbv	98	70-130	
1,2-Dichlorobenzene	10.00	9.967	ppbv	100	70-130	
1,2,4-Trichlorobenzene	10.00	10.27	ppbv	103	70-130	b
Hexachlorobutadiene	10.00	8.959	ppbv	90	70-130	

Surrogate	%REC	Limits
Bromofluorobenzene	100	60-140

Type: BSD **DiIn Fac:** 1.000 **Prep:** METHOD

Lab ID: QC962006 **Batch#:** 280281 **Analysis:** EPA TO-15

Matrix: Air **Analyzed:** 12/20/21 10:56 **Analyst:** ZNZ

Analyte	Spiked	Result (V)	Units (V)	%REC	Limits	RPD	Lim	Qual
Freon 12	10.00	7.954	ppbv	80	70-130	6	30	
Freon 114	10.00	8.812	ppbv	88	70-130	3	30	
Chloromethane	10.00	8.453	ppbv	85	70-130	5	30	
Vinyl Chloride	10.00	9.103	ppbv	91	70-130	4	30	
Bromomethane	10.00	9.216	ppbv	92	70-130	3	30	
Chloroethane	10.00	9.143	ppbv	91	70-130	5	30	
Trichlorofluoromethane	10.00	7.725	ppbv	77	70-130	4	30	
1,1-Dichloroethene	10.00	8.430	ppbv	84	70-130	5	30	
Freon 113	10.00	8.927	ppbv	89	70-130	4	30	
Acetone	10.00	8.571	ppbv	86	70-130	7	30	
Carbon Disulfide	10.00	9.661	ppbv	97	70-130	4	30	
Isopropanol (IPA)	10.00	8.093	ppbv	81	70-130	10	30	
Methylene Chloride	10.00	8.843	ppbv	88	70-130	4	30	
trans-1,2-Dichloroethene	10.00	8.756	ppbv	88	70-130	5	30	
MTBE	10.00	8.691	ppbv	87	70-130	4	30	
n-Hexane	10.00	9.194	ppbv	92	70-130	6	30	
1,1-Dichloroethane	10.00	8.791	ppbv	88	70-130	4	30	
Vinyl Acetate	10.00	7.821	ppbv	78	70-130	8	30	
cis-1,2-Dichloroethene	10.00	8.735	ppbv	87	70-130	4	30	
2-Butanone	10.00	8.530	ppbv	85	70-130	4	30	
Chloroform	10.00	8.433	ppbv	84	70-130	4	30	
1,1,1-Trichloroethane	10.00	8.026	ppbv	80	70-130	4	30	
Carbon Tetrachloride	10.00	7.935	ppbv	79	70-130	4	30	
Benzene	10.00	9.799	ppbv	98	70-130	4	30	
1,2-Dichloroethane	10.00	7.450	ppbv	75	70-130	4	30	
Trichloroethene	10.00	9.549	ppbv	95	70-130	2	30	

ENTHALPY ANALYTICAL

Volatile Organics in Air: Batch QC

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Analyte	Spiked	Result (V)	Units (V)	%REC	Limits	RPD	Lim	Qual
1,2-Dichloropropane	10.00	9.514	ppbv	95	70-130	3	30	
Bromodichloromethane	10.00	8.476	ppbv	85	70-130	4	30	
cis-1,3-Dichloropropene	10.00	10.14	ppbv	101	70-130	1	30	
4-Methyl-2-Pentanone	10.00	9.506	ppbv	95	70-130	2	30	
Toluene	10.00	9.862	ppbv	99	70-130	6	30	
trans-1,3-Dichloropropene	10.00	9.904	ppbv	99	70-130	3	30	
1,1,2-Trichloroethane	10.00	9.553	ppbv	96	70-130	3	30	
Tetrachloroethene	10.00	9.193	ppbv	92	70-130	3	30	
2-Hexanone	10.00	9.758	ppbv	98	70-130	3	30	
Dibromochloromethane	10.00	9.045	ppbv	90	70-130	3	30	
1,2-Dibromoethane	10.00	9.429	ppbv	94	70-130	2	30	
Chlorobenzene	10.00	9.752	ppbv	98	70-130	3	30	
Ethylbenzene	10.00	10.19	ppbv	102	70-130	5	30	
m,p-Xylenes	20.00	19.54	ppbv	98	70-130	8	30	
o-Xylene	10.00	9.692	ppbv	97	70-130	7	30	
Styrene	10.00	10.47	ppbv	105	70-130	3	30	
Bromoform	10.00	9.368	ppbv	94	70-130	2	30	
1,1,2,2-Tetrachloroethane	10.00	10.06	ppbv	101	70-130	2	30	
1,1,1,2-Tetrachloroethane	10.00	9.350	ppbv	94	70-130	3	30	
4-Ethyltoluene	10.00	10.06	ppbv	101	70-130	4	30	
1,3,5-Trimethylbenzene	10.00	9.683	ppbv	97	70-130	6	30	
1,2,4-Trimethylbenzene	10.00	10.14	ppbv	101	70-130	6	30	
1,3-Dichlorobenzene	10.00	9.390	ppbv	94	70-130	3	30	
1,4-Dichlorobenzene	10.00	9.359	ppbv	94	70-130	2	30	
Benzyl chloride	10.00	9.542	ppbv	95	70-130	2	30	
1,2-Dichlorobenzene	10.00	9.745	ppbv	97	70-130	2	30	
1,2,4-Trichlorobenzene	10.00	9.905	ppbv	99	70-130	4	30	b
Hexachlorobutadiene	10.00	8.784	ppbv	88	70-130	2	30	

Surrogate	%REC	Limits
Bromofluorobenzene	100	60-140

Legend

RPD: Relative Percent Difference

Result (V): Result in volume units

b: See narrative

ENTHALPY ANALYTICAL

Volatile Organics in Air: Batch QC

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Type: BLANK **Dil'n Fac:** 1.000 **Prep:** METHOD

Lab ID: QC962007 **Batch#:** 280281 **Analysis:** EPA TO-15

Matrix: Air **Analyzed:** 12/20/21 13:39 **Analyst:** ZNZ

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Freon 12	ND	0.20	ppbv	ND	0.99	ug/m3
Freon 114	ND	0.20	ppbv	ND	1.4	ug/m3
Chloromethane	ND	0.20	ppbv	ND	0.41	ug/m3
Vinyl Chloride	ND	0.20	ppbv	ND	0.51	ug/m3
Bromomethane	ND	0.20	ppbv	ND	0.78	ug/m3
Chloroethane	ND	0.20	ppbv	ND	0.53	ug/m3
Trichlorofluoromethane	ND	0.20	ppbv	ND	1.1	ug/m3
1,1-Dichloroethene	ND	0.20	ppbv	ND	0.79	ug/m3
Freon 113	ND	0.20	ppbv	ND	1.5	ug/m3
Acetone	ND	1.0	ppbv	ND	2.4	ug/m3
Carbon Disulfide	ND	0.20	ppbv	ND	0.62	ug/m3
Isopropanol (IPA)	ND	1.0	ppbv	ND	2.5	ug/m3
Methylene Chloride	ND	0.20	ppbv	ND	0.69	ug/m3
trans-1,2-Dichloroethene	ND	0.20	ppbv	ND	0.79	ug/m3
MTBE	ND	0.20	ppbv	ND	0.72	ug/m3
n-Hexane	ND	0.20	ppbv	ND	0.70	ug/m3
1,1-Dichloroethane	ND	0.20	ppbv	ND	0.81	ug/m3
Vinyl Acetate	ND	1.0	ppbv	ND	3.5	ug/m3
cis-1,2-Dichloroethene	ND	0.20	ppbv	ND	0.79	ug/m3
2-Butanone	ND	1.0	ppbv	ND	2.9	ug/m3
Chloroform	ND	0.20	ppbv	ND	0.98	ug/m3
1,1,1-Trichloroethane	ND	0.20	ppbv	ND	1.1	ug/m3
Carbon Tetrachloride	ND	0.20	ppbv	ND	1.3	ug/m3
Benzene	ND	0.20	ppbv	ND	0.64	ug/m3
1,2-Dichloroethane	ND	0.20	ppbv	ND	0.81	ug/m3
Trichloroethene	ND	0.20	ppbv	ND	1.1	ug/m3
1,2-Dichloropropane	ND	0.20	ppbv	ND	0.92	ug/m3
Bromodichloromethane	ND	0.20	ppbv	ND	1.3	ug/m3
cis-1,3-Dichloropropene	ND	0.20	ppbv	ND	0.91	ug/m3
4-Methyl-2-Pentanone	ND	0.20	ppbv	ND	0.82	ug/m3
Toluene	ND	0.20	ppbv	ND	0.75	ug/m3
trans-1,3-Dichloropropene	ND	0.20	ppbv	ND	0.91	ug/m3
1,1,2-Trichloroethane	ND	0.20	ppbv	ND	1.1	ug/m3
Tetrachloroethene	ND	0.20	ppbv	ND	1.4	ug/m3
2-Hexanone	ND	0.50	ppbv	ND	2.0	ug/m3
Dibromochloromethane	ND	0.20	ppbv	ND	1.7	ug/m3
1,2-Dibromoethane	ND	0.20	ppbv	ND	1.5	ug/m3
Chlorobenzene	ND	0.20	ppbv	ND	0.92	ug/m3
Ethylbenzene	ND	0.20	ppbv	ND	0.87	ug/m3
m,p-Xylenes	ND	0.40	ppbv	ND	1.7	ug/m3
o-Xylene	ND	0.20	ppbv	ND	0.87	ug/m3
Styrene	ND	0.20	ppbv	ND	0.85	ug/m3

ENTHALPY ANALYTICAL

Volatile Organics in Air: Batch QC

Lab #: 455620 **Project#:** 180025

Client: Element Environmental, LLC **Location:** Red Hill Soil Vapor Monitoring

Analyte	Result (V)	RL (V)	Units (V)	Result (M)	RL (M)	Units (M)
Bromoform	ND	0.20	ppbv	ND	2.1	ug/m3
1,1,2,2-Tetrachloroethane	ND	0.20	ppbv	ND	1.4	ug/m3
1,1,1,2-Tetrachloroethane	ND	0.20	ppbv	ND	1.4	ug/m3
4-Ethyltoluene	ND	0.20	ppbv	ND	0.98	ug/m3
1,3,5-Trimethylbenzene	ND	0.20	ppbv	ND	0.98	ug/m3
1,2,4-Trimethylbenzene	ND	0.20	ppbv	ND	0.98	ug/m3
1,3-Dichlorobenzene	ND	0.20	ppbv	ND	1.2	ug/m3
1,4-Dichlorobenzene	ND	0.20	ppbv	ND	1.2	ug/m3
Benzyl chloride	ND	0.20	ppbv	ND	1.0	ug/m3
1,2-Dichlorobenzene	ND	0.20	ppbv	ND	1.2	ug/m3
1,2,4-Trichlorobenzene	ND	0.20	ppbv	ND	1.5	ug/m3
Hexachlorobutadiene	ND	0.20	ppbv	ND	2.1	ug/m3
Xylene (total)	ND	0.20	ppbv	ND	0.87	ug/m3

Tentatively Identified Compounds	Result (M)	Units (M)
No TICs found.		

Surrogate	%REC	Limits	Units (M)
Bromofluorobenzene	104	60-140	ug/m3

Legend

ND: Not Detected

RL (V): Reporting Limit

Result (M): Result in mass units

Result (V): Result in volume units

ENTHALPY BFB TUNE FOR 455620 MSAIR Air
EPA TO-15

Inst : AIR-MS-06 Run Name : TUNE IDF : 1.0
Seqnum : 371497775002 File : air06_121121002 Time : 11-DEC-2021 17:49

Standards: S16071 (5X)

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	121194	27.50	
75	30% - 66% of mass 95	254835	57.83	
95		440677	100.00	
96	5% - 9% of mass 95	29330	6.66	
173	< 2% of mass 174	0	0.00	
174	50% - 120% of mass 95	407669	92.51	
175	4% - 9% of mass 174	32229	7.91	
176	93% - 101% of mass 174	396607	97.29	
177	5% - 9% of mass 176	25799	6.50	

Analyst: ZNZ Date: 12/13/21 Reviewer: SLL Date: 12/13/21

ENTHALPY BFB TUNE FOR 455620 MSAIR Air
EPA TO-15

Inst : AIR-MS-06 Run Name : TUNE IDF : 1.0
Seqnum : 371497775012 File : air06_121121012 Time : 12-DEC-2021 01:29

Standards: S16071 (5X)

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	142777	26.89	
75	30% - 66% of mass 95	300648	56.61	
95		531062	100.00	
96	5% - 9% of mass 95	35069	6.60	
173	< 2% of mass 174	0	0.00	
174	50% - 120% of mass 95	489118	92.10	
175	4% - 9% of mass 174	38385	7.85	
176	93% - 101% of mass 174	471978	96.50	
177	5% - 9% of mass 176	31544	6.68	

Analyst: ZNZ Date: 12/13/21 Reviewer: SLL Date: 12/13/21

ENTHALPY BFB TUNE FOR 455620 MSAIR Air
EPA TO-15

Inst : AIR-MS-06 Run Name : TUNE IDF : 1.0
Seqnum : 371510273002 File : air06_122021002 Time : 20-DEC-2021 09:15

Standards: S16071 (5X)

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	107791	22.88	
75	30% - 66% of mass 95	243481	51.67	
95		471204	100.00	
96	5% - 9% of mass 95	30843	6.55	
173	< 2% of mass 174	0	0.00	
174	50% - 120% of mass 95	438421	93.04	
175	4% - 9% of mass 174	34035	7.76	
176	93% - 101% of mass 174	424929	96.92	
177	5% - 9% of mass 176	28312	6.66	

Analyst: ZNZ Date: 12/20/21 Reviewer: LW Date: 12/22/21

ENTHALPY INITIAL CALIBRATION FOR 455620 MSAIR Air: EPA TO-15

Inst : AIR-MS-06
Calnum : 371497775001
Units : nL/L

Name : TO15_121121
Date : 11-DEC-2021 18:32
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	air06_121121004	371497775004	0.2PPBV	11-DEC-2021 19:16	S16297 (10X), S16298 (5X)
L2	air06_121121005	371497775005	0.5PPBV	11-DEC-2021 20:01	S16297 (4X), S16298 (5X)
L3	air06_121121006	371497775006	1PPBV	11-DEC-2021 20:48	S16297 (2X), S16298 (5X)
L4	air06_121121007	371497775007	2PPBV	11-DEC-2021 21:39	S16297, S16298 (5X)
L5	air06_121121008	371497775008	5PPBV	11-DEC-2021 22:23	S16295 (8X), S16298 (5X)
L6	air06_121121009	371497775009	10PPBV	11-DEC-2021 23:08	S16295 (4X), S16298 (5X)
L7	air06_121121010	371497775010	20PPBV	11-DEC-2021 23:55	S16295 (2X), S16298 (5X)
L8	air06_121121011	371497775011	40PPBV	12-DEC-2021 00:46	S16295, S16298 (5X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
1,1,1,2-Tetrachloroethane	0.8674	1.0040	0.8819	0.7917	0.8272	0.7853	0.7732	0.6550	AVRG		1.21477		0.8232	12	1	30	
Freon 12	3.6340	4.2243	3.8106	3.3749	3.5344	3.4448	3.4557	3.1329	AVRG		0.27961		3.5765	9	1	30	
Freon 114	2.1432	2.4551	2.2202	1.9475	2.0282	2.0148	2.0576	1.8553	AVRG		0.47842		2.0902	9	1	30	
Chloromethane	1.3190	1.5003	1.2936	1.1761	1.2199	1.1894	1.2198	1.0914	AVRG		0.79925		1.2512	10	1	30	
Vinyl Chloride	1.2266	1.3501	1.2113	1.1023	1.1484	1.1270	1.1629	1.0605	AVRG		0.85205		1.1736	8	1	30	
Bromomethane	0.9916	1.1109	0.9847	0.8917	0.9303	0.9046	0.9286	0.8544	AVRG		1.05307		0.9496	8	1	30	
Chloroethane	0.6262	0.6821	0.6180	0.5486	0.5700	0.5526	0.5653	0.5243	AVRG		1.70680		0.5859	9	1	30	
Trichlorofluoromethane	4.1577	4.8781	4.2580	3.8440	3.9721	3.8689	3.8944	3.5102	AVRG		0.24704		4.0479	10	1	30	
1,1-Dichloroethene	2.3799	2.8538	2.6530	2.3641	2.4889	2.4196	2.4850	2.2552	AVRG		0.40202		2.4874	8	1	30	
Freon 113	2.6424	3.0486	2.7231	2.4596	2.5225	2.4137	2.4519	2.2283	AVRG		0.39043		2.5613	10	1	30	
Acetone		0.8706	0.7793	0.6631	0.6258	0.6052	0.6222	0.5741	AVRG		1.47673		0.6772	16	1	30	
Carbon Disulfide	3.0611	3.4849	3.1608	2.8065	2.9327	2.8517	2.9198	2.6844	AVRG		0.33470		2.9877	8	1	30	
Isopropanol (IPA)		3.2160	2.8242	2.5305	2.5380	2.4829	2.5796	2.3592	AVRG		0.37776		2.6472	11	1	30	
Methylene Chloride	1.3954	1.3142	1.1313	0.9757	0.9817	0.9460	0.9585	0.8862	AVRG		0.93141		1.0736	18	1	30	
trans-1,2-Dichloroethene	1.8048	2.2769	2.0493	1.8425	1.9149	1.8756	1.9474	1.8034	AVRG		0.51564		1.9393	8	1	30	
MTBE	3.0347	3.6504	3.3797	3.0432	3.3096	3.2664	3.3919	3.1324	AVRG		0.30525		3.2760	6	1	30	
n-Hexane	2.0263	2.3845	2.1943	2.0072	2.1041	2.0384	2.0850	1.9128	AVRG		0.47754		2.0941	7	1	30	
1,1-Dichloroethane	2.4473	2.8170	2.6126	2.3098	2.3700	2.3167	2.3711	2.1897	AVRG		0.41165		2.4293	8	1	30	
Vinyl Acetate	4.1032	4.7714	4.4137	3.8377	3.9852	3.9216	4.0394	3.6928	AVRG		0.24416		4.0956	8	1	30	
cis-1,2-Dichloroethene	1.9459	2.2552	2.0902	1.8740	1.9525	1.9257	2.0127	1.8606	AVRG		0.50262		1.9896	7	1	30	
2-Butanone	3.0876	3.7617	3.3970	3.0704	3.1859	3.1846	3.1864	2.9970	AVRG		0.30923		3.2339	8	1	30	
Chloroform	2.9515	3.3990	2.9891	2.6736	2.7827	2.7078	2.7755	2.5521	AVRG		0.35040		2.8539	9	1	30	
1,1,1-Trichloroethane	3.0039	3.4970	3.1276	2.7930	2.9548	2.8705	2.9844	2.7464	AVRG		0.33365		2.9972	8	1	30	
Carbon Tetrachloride	3.1866	3.7108	3.3810	3.0312	3.2105	3.1297	3.2269	2.9669	AVRG		0.30955		3.2304	7	1	30	
Benzene	3.1498	3.6333	3.3145	2.9665	3.1413	3.0695	3.1682	2.9486	AVRG		0.31507		3.1739	7	1	30	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
1,2-Dichloroethane	2.2856	2.7002	2.4282	2.1565	2.2483	2.1894	2.2616	2.0795	AVRG		0.43598		2.2937	8	1	30	
Trichloroethene	0.3769	0.4547	0.4110	0.3622	0.3869	0.3735	0.3821	0.3459	AVRG		2.58622		0.3867	9	1	30	
1,2-Dichloropropane	0.4019	0.4568	0.3991	0.3545	0.3743	0.3637	0.3830	0.3550	AVRG		2.59034		0.3860	9	1	30	
Bromodichloromethane	0.7848	0.9235	0.8072	0.7282	0.7770	0.7604	0.7908	0.7288	AVRG		1.26970		0.7876	8	1	30	
cis-1,3-Dichloropropene	0.0972	0.1273	0.1121	0.1058	0.1166	0.1140	0.1210	0.1131	AVRG		8.81975		0.1134	8	1	30	
4-Methyl-2-Pentanone	0.2924	0.3631	0.3477	0.3186	0.3463	0.3391	0.3512	0.3218	AVRG		2.98500		0.3350	7	1	30	
Toluene	1.0267	1.2171	1.1130	0.9980	1.0910	1.0662	1.1170	1.0267	AVRG		0.92425		1.0820	6	1	30	
trans-1,3-Dichloropropene	0.1025	0.1269	0.1158	0.1084	0.1185	0.1170	0.1263	0.1169	AVRG		8.58161		0.1165	7	1	30	
1,1,2-Trichloroethane	0.3786	0.4393	0.3902	0.3508	0.3701	0.3594	0.3767	0.3481	AVRG		2.65498		0.3767	8	1	30	
Tetrachloroethene	0.6043	0.7542	0.6614	0.5968	0.6313	0.6132	0.6379	0.5821	AVRG		1.57439		0.6352	9	1	30	
2-Hexanone	0.3439	0.4421	0.4168	0.3913	0.4362	0.4376	0.4588	0.4238	AVRG		2.38772		0.4188	9	1	30	
Dibromochloromethane	0.6977	0.8537	0.7923	0.7132	0.7637	0.7543	0.7925	0.7279	AVRG		1.31251		0.7619	7	1	30	
1,2-Dibromoethane	0.5613	0.6547	0.5995	0.5344	0.5701	0.5646	0.5923	0.5481	AVRG		1.72971		0.5781	6	1	30	
Chlorobenzene	1.5387	1.7548	1.5730	1.3828	1.4154	1.3436	1.2949	1.0968	AVRG		0.70175		1.4250	14	1	30	
Ethylbenzene	2.1834	2.6580	2.4419	2.2357	2.4095	2.3073	2.2527	1.9083	AVRG		0.43486		2.2996	9	1	30	
m,p-Xylenes	1.8265	2.2981	2.1133	1.9270	2.0185	1.9188	1.8617	1.5552	AVRG		0.51549		1.9399	11	1	30	
o-Xylene	1.8891	2.3809	2.1984	2.0066	2.0947	1.9840	1.9343	1.6204	AVRG		0.49664		2.0135	11	1	30	
Styrene	1.1347	1.4508	1.3632	1.2670	1.4043	1.3398	1.3143	1.1221	AVRG		0.76952		1.2995	9	1	30	
Bromoform	1.5225	1.7833	1.6139	1.4925	1.5798	1.5086	1.4861	1.2571	AVRG		0.65340		1.5305	10	1	30	
1,1,2,2-Tetrachloroethane	1.4452	1.6736	1.5163	1.3608	1.4139	1.3368	1.2982	1.0929	AVRG		0.71828		1.3922	12	1	30	
4-Ethyltoluene	2.2855	2.9566	2.7865	2.5506	2.7908	2.6683	2.5665	2.1593	AVRG		0.38528		2.5955	10	1	30	
1,3,5-Trimethylbenzene	2.1392	2.7693	2.5455	2.3358	2.5056	2.3684	2.3070	1.9318	AVRG		0.42322		2.3628	11	1	30	
1,2,4-Trimethylbenzene	1.8103	2.3954	2.3001	2.1585	2.4308	2.3421	2.2988	1.9442	AVRG		0.45249		2.2100	10	1	30	
1,3-Dichlorobenzene	1.4441	1.8202	1.6379	1.4813	1.6060	1.5245	1.4790	1.2361	AVRG		0.65418		1.5286	11	1	30	
1,4-Dichlorobenzene	1.3969	1.7824	1.5991	1.4247	1.6031	1.5327	1.4876	1.2439	AVRG		0.66278		1.5088	11	1	30	
Benzyl chloride	1.4885	1.9091	1.8241	1.7279	2.1124	2.1338	2.1746	1.8699	AVRG		0.52492		1.9050	12	1	30	
1,2-Dichlorobenzene	1.3883	1.6982	1.5245	1.3951	1.5585	1.4933	1.4754	1.2476	AVRG		0.67907		1.4726	9	1	30	
1,2,4-Trichlorobenzene	0.7694	0.9501	0.8882	0.8386	1.2165	1.2621	1.3061	1.1477	AVRG		0.95480		1.0473	20	1	30	
Hexachlorobutadiene	1.7988	2.0228	1.8266	1.6074	1.7326	1.6787	1.6599	1.4218	AVRG		0.58187		1.7186	10	1	30	
Bromofluorobenzene	1.3177	1.3256	1.3380	1.3350	1.3141	1.2880	1.2241	1.1253	AVRG		0.77914		1.2835	6	1	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
1,1,1,2-Tetrachloroethane	0.2000	5	0.5000	**22**	1.0000	7	2.0000	-4	5.0000	0	10.000	-5	20.000	-6	40.000	-20
Freon 12	0.2000	2	0.5000	18	1.0000	7	2.0000	-6	5.0000	-1	10.000	-4	20.000	-3	40.000	-12
Freon 114	0.2000	3	0.5000	17	1.0000	6	2.0000	-7	5.0000	-3	10.000	-4	20.000	-2	40.000	-11
Chloromethane	0.2000	5	0.5000	20	1.0000	3	2.0000	-6	5.0000	-2	10.000	-5	20.000	-3	40.000	-13
Vinyl Chloride	0.2000	5	0.5000	15	1.0000	3	2.0000	-6	5.0000	-2	10.000	-4	20.000	-1	40.000	-10
Bromomethane	0.2000	4	0.5000	17	1.0000	4	2.0000	-6	5.0000	-2	10.000	-5	20.000	-2	40.000	-10
Chloroethane	0.2000	7	0.5000	16	1.0000	5	2.0000	-6	5.0000	-3	10.000	-6	20.000	-4	40.000	-11
Trichlorofluoromethane	0.2000	3	0.5000	**21**	1.0000	5	2.0000	-5	5.0000	-2	10.000	-4	20.000	-4	40.000	-13
1,1-Dichloroethene	0.2000	-4	0.5000	15	1.0000	7	2.0000	-5	5.0000	0	10.000	-3	20.000	0	40.000	-9
Freon 113	0.2000	3	0.5000	19	1.0000	6	2.0000	-4	5.0000	-2	10.000	-6	20.000	-4	40.000	-13
Acetone			0.5000	**29**	1.0000	15	2.0000	-2	5.0000	-8	10.000	-11	20.000	-8	40.000	-15
Carbon Disulfide	0.2000	2	0.5000	17	1.0000	6	2.0000	-6	5.0000	-2	10.000	-5	20.000	-2	40.000	-10
Isopropanol (IPA)			0.5000	**21**	1.0000	7	2.0000	-4	5.0000	-4	10.000	-6	20.000	-3	40.000	-11
Methylene Chloride	0.2000	**30**	0.5000	**22**	1.0000	5	2.0000	-9	5.0000	-9	10.000	-12	20.000	-11	40.000	-17
trans-1,2-Dichloroethene	0.2000	-7	0.5000	17	1.0000	6	2.0000	-5	5.0000	-1	10.000	-3	20.000	0	40.000	-7
MTBE	0.2000	-7	0.5000	11	1.0000	3	2.0000	-7	5.0000	1	10.000	0	20.000	4	40.000	-4
n-Hexane	0.2000	-3	0.5000	14	1.0000	5	2.0000	-4	5.0000	0	10.000	-3	20.000	0	40.000	-9
1,1-Dichloroethane	0.2000	1	0.5000	16	1.0000	8	2.0000	-5	5.0000	-2	10.000	-5	20.000	-2	40.000	-10
Vinyl Acetate	0.2000	0	0.5000	17	1.0000	8	2.0000	-6	5.0000	-3	10.000	-4	20.000	-1	40.000	-10
cis-1,2-Dichloroethene	0.2000	-2	0.5000	13	1.0000	5	2.0000	-6	5.0000	-2	10.000	-3	20.000	1	40.000	-6
2-Butanone	0.2000	-5	0.5000	16	1.0000	5	2.0000	-5	5.0000	-1	10.000	-2	20.000	-1	40.000	-7
Chloroform	0.2000	3	0.5000	19	1.0000	5	2.0000	-6	5.0000	-2	10.000	-5	20.000	-3	40.000	-11
1,1,1-Trichloroethane	0.2000	0	0.5000	17	1.0000	4	2.0000	-7	5.0000	-1	10.000	-4	20.000	0	40.000	-8
Carbon Tetrachloride	0.2000	-1	0.5000	15	1.0000	5	2.0000	-6	5.0000	-1	10.000	-3	20.000	0	40.000	-8
Benzene	0.2000	-1	0.5000	14	1.0000	4	2.0000	-7	5.0000	-1	10.000	-3	20.000	0	40.000	-7
1,2-Dichloroethane	0.2000	0	0.5000	18	1.0000	6	2.0000	-6	5.0000	-2	10.000	-5	20.000	-1	40.000	-9
Trichloroethene	0.2000	-3	0.5000	18	1.0000	6	2.0000	-6	5.0000	0	10.000	-3	20.000	-1	40.000	-11
1,2-Dichloropropane	0.2000	4	0.5000	18	1.0000	3	2.0000	-8	5.0000	-3	10.000	-6	20.000	-1	40.000	-8
Bromodichloromethane	0.2000	0	0.5000	17	1.0000	2	2.0000	-8	5.0000	-1	10.000	-3	20.000	0	40.000	-7
cis-1,3-Dichloropropene	0.2000	-14	0.5000	12	1.0000	-1	2.0000	-7	5.0000	3	10.000	1	20.000	7	40.000	0
4-Methyl-2-Pentanone	0.2000	-13	0.5000	8	1.0000	4	2.0000	-5	5.0000	3	10.000	1	20.000	5	40.000	-4
Toluene	0.2000	-5	0.5000	12	1.0000	3	2.0000	-8	5.0000	1	10.000	-1	20.000	3	40.000	-5
trans-1,3-Dichloropropene	0.2000	-12	0.5000	9	1.0000	-1	2.0000	-7	5.0000	2	10.000	0	20.000	8	40.000	0
1,1,2-Trichloroethane	0.2000	1	0.5000	17	1.0000	4	2.0000	-7	5.0000	-2	10.000	-5	20.000	0	40.000	-8
Tetrachloroethene	0.2000	-5	0.5000	19	1.0000	4	2.0000	-6	5.0000	-1	10.000	-3	20.000	0	40.000	-8
2-Hexanone	0.2000	-18	0.5000	6	1.0000	0	2.0000	-7	5.0000	4	10.000	4	20.000	10	40.000	1
Dibromochloromethane	0.2000	-8	0.5000	12	1.0000	4	2.0000	-6	5.0000	0	10.000	-1	20.000	4	40.000	-4
1,2-Dibromoethane	0.2000	-3	0.5000	13	1.0000	4	2.0000	-8	5.0000	-1	10.000	-2	20.000	2	40.000	-5
Chlorobenzene	0.2000	8	0.5000	**23**	1.0000	10	2.0000	-3	5.0000	-1	10.000	-6	20.000	-9	40.000	**-23**
Ethylbenzene	0.2000	-5	0.5000	16	1.0000	6	2.0000	-3	5.0000	5	10.000	0	20.000	-2	40.000	-17
m,p-Xylenes	0.4000	-6	1.0000	18	2.0000	9	4.0000	-1	10.000	4	20.000	-1	40.000	-4	80.000	-20
o-Xylene	0.2000	-6	0.5000	18	1.0000	9	2.0000	0	5.0000	4	10.000	-1	20.000	-4	40.000	-20

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
Styrene	0.2000	-13	0.5000	12	1.0000	5	2.0000	-3	5.0000	8	10.000	3	20.000	1	40.000	-14
Bromoform	0.2000	-1	0.5000	17	1.0000	5	2.0000	-2	5.0000	3	10.000	-1	20.000	-3	40.000	-18
1,1,2,2-Tetrachloroethane	0.2000	4	0.5000	20	1.0000	9	2.0000	-2	5.0000	2	10.000	-4	20.000	-7	40.000	**-21**
4-Ethyltoluene	0.2000	-12	0.5000	14	1.0000	7	2.0000	-2	5.0000	8	10.000	3	20.000	-1	40.000	-17
1,3,5-Trimethylbenzene	0.2000	-9	0.5000	17	1.0000	8	2.0000	-1	5.0000	6	10.000	0	20.000	-2	40.000	-18
1,2,4-Trimethylbenzene	0.2000	-18	0.5000	8	1.0000	4	2.0000	-2	5.0000	10	10.000	6	20.000	4	40.000	-12
1,3-Dichlorobenzene	0.2000	-6	0.5000	19	1.0000	7	2.0000	-3	5.0000	5	10.000	0	20.000	-3	40.000	-19
1,4-Dichlorobenzene	0.2000	-7	0.5000	18	1.0000	6	2.0000	-6	5.0000	6	10.000	2	20.000	-1	40.000	-18
Benzyl chloride	0.2000	**-22**	0.5000	0	1.0000	-4	2.0000	-9	5.0000	11	10.000	12	20.000	14	40.000	-2
1,2-Dichlorobenzene	0.2000	-6	0.5000	15	1.0000	4	2.0000	-5	5.0000	6	10.000	1	20.000	0	40.000	-15
1,2,4-Trichlorobenzene	0.2000	**-27**	0.5000	-9	1.0000	-15	2.0000	-20	5.0000	16	10.000	**21**	20.000	**25**	40.000	10
Hexachlorobutadiene	0.2000	5	0.5000	18	1.0000	6	2.0000	-6	5.0000	1	10.000	-2	20.000	-3	40.000	-17
Bromofluorobenzene	10.000	3	10.000	3	10.000	4	10.000	4	10.000	2	10.000	0	10.000	-5	10.000	-12

ZNZ 12/13/21 [1,2,4-Trichlorobenzene]: The ICV failed high for 1,2,4-Trichlorobenzene. Samples with detectable hits will be re-analyzed on an instrument with a passing ICAL.

ZNZ 12/13/21 [Naphthalene]: The ICV failed high for Naphthalene. Samples with detectable hits will be re-analyzed on an instrument with a passing ICAL.

ZNZ 12/13/21 [Vinyl Acetate]: Separated from coeluting peak in 0.2PPBV (air06_121121004).

ZNZ 12/13/21 [Vinyl Acetate]: Separated from coeluting peak in 0.5PPBV (air06_121121005).

ZNZ 12/13/21 [Vinyl Acetate]: Separated from coeluting peak in 1PPBV (air06_121121006).

ZNZ 12/13/21 [Vinyl Acetate]: Separated from coeluting peak in 2PPBV (air06_121121007).

ZNZ 12/13/21 [2-Butanone]: Corrected automatically drawn baseline in 20PPBV (air06_121121010).

Analyst: ZNZ Date: 12/13/21 Reviewer: SLL Date: 12/13/21

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

ENTHALPY 2ND SOURCE CALIBRATION SUMMARY FOR 455620 MSAIR Air
EPA TO-15

Inst : AIR-MS-06 Name : TO15_121121
Calnum : 371497775001 Cal Date : 11-DEC-2021

ICV 371497775013 (air06_121121013 12-DEC-2021) stds: S16294 (4X), S16298 (5X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,1,1,2-Tetrachloroethane	10.00	9.445	nL/L	-6	30	
Freon 12	10.00	9.368	nL/L	-6	30	
Freon 114	10.00	9.490	nL/L	-5	30	
Chloromethane	10.00	9.437	nL/L	-6	30	
Vinyl Chloride	10.00	9.587	nL/L	-4	30	
Bromomethane	10.00	9.413	nL/L	-6	30	
Chloroethane	10.00	9.451	nL/L	-5	30	
Trichlorofluoromethane	10.00	9.144	nL/L	-9	30	
1,1-Dichloroethene	10.00	9.585	nL/L	-4	30	
Freon 113	10.00	9.279	nL/L	-7	30	
Acetone	10.00	9.026	nL/L	-10	30	
Carbon Disulfide	10.00	9.473	nL/L	-5	30	
Isopropanol (IPA)	10.00	9.595	nL/L	-4	30	
Methylene Chloride	10.00	8.864	nL/L	-11	30	
trans-1,2-Dichloroethene	10.00	9.625	nL/L	-4	30	
MTBE	10.00	9.958	nL/L	0	30	
n-Hexane	10.00	9.680	nL/L	-3	30	
1,1-Dichloroethane	10.00	9.412	nL/L	-6	30	
Vinyl Acetate	10.00	9.441	nL/L	-6	30	
cis-1,2-Dichloroethene	10.00	9.624	nL/L	-4	30	
2-Butanone	10.00	9.669	nL/L	-3	30	
Chloroform	10.00	9.309	nL/L	-7	30	
1,1,1-Trichloroethane	10.00	9.338	nL/L	-7	30	
Carbon Tetrachloride	10.00	9.343	nL/L	-7	30	
Benzene	10.00	9.693	nL/L	-3	30	
1,2-Dichloroethane	10.00	9.218	nL/L	-8	30	
Trichloroethene	10.00	9.457	nL/L	-5	30	
1,2-Dichloropropane	10.00	9.485	nL/L	-5	30	
Bromodichloromethane	10.00	9.446	nL/L	-6	30	
cis-1,3-Dichloropropene	10.00	10.18	nL/L	2	30	
4-Methyl-2-Pentanone	10.00	10.09	nL/L	1	30	
Toluene	10.00	9.841	nL/L	-2	30	
trans-1,3-Dichloropropene	10.00	10.17	nL/L	2	30	
1,1,2-Trichloroethane	10.00	9.571	nL/L	-4	30	
Tetrachloroethene	10.00	9.475	nL/L	-5	30	
2-Hexanone	10.00	10.63	nL/L	6	30	
Dibromochloromethane	10.00	9.698	nL/L	-3	30	
1,2-Dibromoethane	10.00	9.773	nL/L	-2	30	
Chlorobenzene	10.00	9.460	nL/L	-5	30	
Ethylbenzene	10.00	10.04	nL/L	0	30	
m,p-Xylenes	20.00	19.68	nL/L	-2	30	
o-Xylene	10.00	9.811	nL/L	-2	30	
Styrene	10.00	10.50	nL/L	5	30	
Bromoform	10.00	9.762	nL/L	-2	30	
1,1,2,2-Tetrachloroethane	10.00	9.679	nL/L	-3	30	
4-Ethyltoluene	10.00	10.21	nL/L	2	30	
1,3,5-Trimethylbenzene	10.00	10.04	nL/L	0	30	
1,2,4-Trimethylbenzene	10.00	10.71	nL/L	7	30	
1,3-Dichlorobenzene	10.00	10.26	nL/L	3	30	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,4-Dichlorobenzene	10.00	10.48	nL/L	5	30	
Benzyl chloride	10.00	11.92	nL/L	19	30	
1,2-Dichlorobenzene	10.00	10.41	nL/L	4	30	
1,2,4-Trichlorobenzene	10.00	13.96	nL/L	**40**	30	v+
Hexachlorobutadiene	10.00	9.961	nL/L	0	30	

Analyst: ZNZ Date: 12/13/21 Reviewer: SLL Date: 12/13/21

+=high bias v=ICV

ENTHALPY SPIKE USER REPORT FOR 455620 MSAIR Air
EPA TO-15

Inst : AIR-MS-06 Run Name : QC962005 IDF : 1.0
Seqnum : 371510273003.5 File : air06_122021003 Time : 20-DEC-2021 10:06
Cal : 371497775001 Caldate : 11-DEC-2021
Standards: S16295 (4X), S16298 (5X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Freon 12	3.5765	3.0248	10.00	8.457	nL/L	-15	30	u
Freon 114	2.0902	1.9037	10.00	9.108	nL/L	-9	30	u
Chloromethane	1.2512	1.1103	10.00	8.874	nL/L	-11	30	u
Vinyl Chloride	1.1736	1.1136	10.00	9.489	nL/L	-5	30	u
Bromomethane	0.9496	0.9011	10.00	9.489	nL/L	-5	30	u
Chloroethane	0.5859	0.5623	10.00	9.598	nL/L	-4	30	u
Trichlorofluoromethane	4.0479	3.2656	10.00	8.067	nL/L	-19	30	u
1,1-Dichloroethene	2.4874	2.2120	10.00	8.893	nL/L	-11	30	u
Freon 113	2.5613	2.3817	10.00	9.299	nL/L	-7	30	u
Acetone	0.6772	0.6246	10.00	9.224	nL/L	-8	30	u
Carbon Disulfide	2.9877	2.9930	10.00	10.02	nL/L	0	30	u
Isopropanol (IPA)	2.6472	2.3766	10.00	8.978	nL/L	-10	30	u
Methylene Chloride	1.0736	0.9865	10.00	9.188	nL/L	-8	30	u
trans-1,2-Dichloroethene	1.9393	1.7829	10.00	9.193	nL/L	-8	30	u
MTBE	3.2760	2.9584	10.00	9.030	nL/L	-10	30	u
n-Hexane	2.0941	2.0400	10.00	9.742	nL/L	-3	30	u
1,1-Dichloroethane	2.4293	2.2198	10.00	9.138	nL/L	-9	30	u
Vinyl Acetate	4.0956	3.4559	10.00	8.438	nL/L	-16	30	u
cis-1,2-Dichloroethene	1.9896	1.8041	10.00	9.068	nL/L	-9	30	u
2-Butanone	3.2339	2.8614	10.00	8.848	nL/L	-12	30	u
Chloroform	2.8539	2.4968	10.00	8.749	nL/L	-13	30	u
1,1,1-Trichloroethane	2.9972	2.5012	10.00	8.345	nL/L	-17	30	u
Carbon Tetrachloride	3.2304	2.6614	10.00	8.239	nL/L	-18	30	u
Benzene	3.1739	3.2430	10.00	10.22	nL/L	2	30	u
1,2-Dichloroethane	2.2937	1.7764	10.00	7.745	nL/L	-23	30	u
Trichloroethene	0.3867	0.3760	10.00	9.725	nL/L	-3	30	u
1,2-Dichloropropane	0.3860	0.3796	10.00	9.832	nL/L	-2	30	u
Bromodichloromethane	0.7876	0.6951	10.00	8.826	nL/L	-12	30	u
cis-1,3-Dichloropropene	0.1134	0.1164	10.00	10.26	nL/L	3	30	u
4-Methyl-2-Pentanone	0.3350	0.3257	10.00	9.721	nL/L	-3	30	u
Toluene	1.0820	1.1327	10.00	10.47	nL/L	5	30	u
trans-1,3-Dichloropropene	0.1165	0.1184	10.00	10.16	nL/L	2	30	u
1,1,2-Trichloroethane	0.3767	0.3693	10.00	9.804	nL/L	-2	30	u
Tetrachloroethene	0.6352	0.6034	10.00	9.500	nL/L	-5	30	u
2-Hexanone	0.4188	0.4195	10.00	10.02	nL/L	0	30	u
Dibromochloromethane	0.7619	0.7078	10.00	9.289	nL/L	-7	30	u
1,2-Dibromoethane	0.5781	0.5573	10.00	9.640	nL/L	-4	30	u
Chlorobenzene	1.4250	1.4300	10.00	10.04	nL/L	0	30	u
Ethylbenzene	2.2996	2.4547	10.00	10.67	nL/L	7	30	u
m,p-Xylenes	1.9399	2.0442	20.00	21.08	nL/L	5	30	u
o-Xylene	2.0135	2.1034	10.00	10.45	nL/L	4	30	u
Styrene	1.2995	1.4028	10.00	10.79	nL/L	8	30	u
Bromoform	1.5305	1.4663	10.00	9.581	nL/L	-4	30	u
1,1,2,2-Tetrachloroethane	1.3922	1.4299	10.00	10.27	nL/L	3	30	u
1,1,1,2-Tetrachloroethane	0.8232	0.7912	10.00	9.611	nL/L	-4	30	u
4-Ethyltoluene	2.5955	2.7159	10.00	10.46	nL/L	5	30	u
1,3,5-Trimethylbenzene	2.3628	2.4266	10.00	10.27	nL/L	3	30	u
1,2,4-Trimethylbenzene	2.2100	2.3782	10.00	10.76	nL/L	8	30	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
1,3-Dichlorobenzene	1.5286	1.4741	10.00	9.644	nL/L	-4	30	u
1,4-Dichlorobenzene	1.5088	1.4460	10.00	9.584	nL/L	-4	30	u
Benzyl chloride	1.9050	1.8616	10.00	9.772	nL/L	-2	30	u
1,2-Dichlorobenzene	1.4726	1.4678	10.00	9.967	nL/L	0	30	u
1,2,4-Trichlorobenzene	1.0473	1.0754	10.00	10.27	nL/L	3	30	u v+ ***
Hexachlorobutadiene	1.7186	1.5398	10.00	8.959	nL/L	-10	30	u
Bromofluorobenzene	1.2835	1.2816	10.00	9.985	nL/L	0	30	u

ISTD (ICAL air06_121121009)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	329831	348979	5.81	8.18	8.18	0.00
1,4-Difluorobenzene	1230119	1305225	6.11	9.91	9.91	0.00
Chlorobenzene-d5	754830	756651	0.24	14.02	14.02	0.00

ZNZ 12/20/21 [1,2,4-Trichlorobenzene]: The ICV failed high for 1,2,4-Trichlorobenzene. Samples with detectable hits will be re-analyzed on an instrument with a passing ICAL. [general version]

ZNZ 12/20/21 [Naphthalene]: The ICV failed high for Naphthalene. Samples with detectable hits will be re-analyzed on an instrument with a passing ICAL. [general version]

GSG 01/04/22 [1,2,4-Trichlorobenzene]: The ICV failed high for 1,2,4-Trichlorobenzene. Samples with detectable hits will be re-analyzed on an instrument with a passing ICAL.

Analyst: GSG Date: 01/04/22 Reviewer: SLL Date: 01/04/22

+=high bias u=use v=ICV

ENTHALPY Canister Check FOR 455620 MSAIR Air
EPA TO-15

Inst : AIR-MS-06 Run Name : C10714 IDF : 1.0
Seqnum : 371483523019 File : air06_122101019 Time : 02-DEC-2021 09:57
Cal : 371483523003 Caldate : 01-DEC-2021

Analyte	Quant	RL	Units	Flags
1,1,1,2-Tetrachloroethane	ND	0.2000	nL/L	
Freon 12	ND	0.2000	nL/L	
Freon 114	ND	0.2000	nL/L	
Chloromethane	ND	0.2000	nL/L	
Vinyl Chloride	ND	0.2000	nL/L	
Bromomethane	ND	0.2000	nL/L	
Chloroethane	ND	0.2000	nL/L	
Trichlorofluoromethane	ND	0.2000	nL/L	
1,1-Dichloroethene	ND	0.2000	nL/L	
Freon 113	ND	0.2000	nL/L	
Acetone	ND	1.000	nL/L	
Carbon Disulfide	ND	0.2000	nL/L	
Isopropanol (IPA)	ND	1.000	nL/L	
Methylene Chloride	ND	0.2000	nL/L	
trans-1,2-Dichloroethene	ND	0.2000	nL/L	
MTBE	ND	0.2000	nL/L	
n-Hexane	ND	0.2000	nL/L	
1,1-Dichloroethane	ND	0.2000	nL/L	
Vinyl Acetate	ND	1.000	nL/L	
cis-1,2-Dichloroethene	ND	0.2000	nL/L	
2-Butanone	ND	1.000	nL/L	calc
Chloroform	ND	0.2000	nL/L	
1,1,1-Trichloroethane	ND	0.2000	nL/L	
Carbon Tetrachloride	ND	0.2000	nL/L	
Benzene	ND	0.2000	nL/L	
1,2-Dichloroethane	ND	0.2000	nL/L	
Trichloroethene	ND	0.2000	nL/L	
1,2-Dichloropropane	ND	0.2000	nL/L	
Bromodichloromethane	ND	0.2000	nL/L	
cis-1,3-Dichloropropene	ND	0.2000	nL/L	
4-Methyl-2-Pentanone	ND	0.2000	nL/L	
Toluene	ND	0.2000	nL/L	
trans-1,3-Dichloropropene	ND	0.2000	nL/L	
1,1,2-Trichloroethane	ND	0.2000	nL/L	
Tetrachloroethene	ND	0.2000	nL/L	
2-Hexanone	ND	0.5000	nL/L	
Dibromochloromethane	ND	0.2000	nL/L	
1,2-Dibromoethane	ND	0.2000	nL/L	
Chlorobenzene	ND	0.2000	nL/L	
Ethylbenzene	ND	0.2000	nL/L	
m,p-Xylenes	ND	0.4000	nL/L	
o-Xylene	ND	0.2000	nL/L	
Styrene	ND	0.2000	nL/L	
Bromoform	ND	0.2000	nL/L	
1,1,2,2-Tetrachloroethane	ND	0.2000	nL/L	
4-Ethyltoluene	ND	0.2000	nL/L	
1,3,5-Trimethylbenzene	ND	0.2000	nL/L	
1,2,4-Trimethylbenzene	ND	0.2000	nL/L	
1,3-Dichlorobenzene	ND	0.2000	nL/L	calc
1,4-Dichlorobenzene	ND	0.2000	nL/L	

Analyte	Quant	RL	Units	Flags
Benzyl chloride	ND	0.2000	nL/L	calc
1,2-Dichlorobenzene	ND	0.2000	nL/L	
1,2,4-Trichlorobenzene	ND	0.2000	nL/L	
Hexachlorobutadiene	ND	0.2000	nL/L	calc

ISTD (ICAL air06_122101011)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	338465	352158	4.05	8.18	8.18	0.00
1,4-Difluorobenzene	1262378	1289092	2.12	9.92	9.91	-0.01
Chlorobenzene-d5	728462	699697	-3.95	14.02	14.01	-0.01

TO15 SCAN Certified (Batch 2229)

Analyst: GSG Date: 12/03/21 Reviewer: LW Date: 12/09/21

calc=check quantitation

ENTHALPY Canister Check FOR 455620 MSAIR Air
EPA TO-15

Inst : AIR-MS-09 Run Name : C10626 IDF : 1.0
Seqnum : 601482985006 File : air09_120121006 Time : 01-DEC-2021 14:19
Cal : 601444479001 Caldate : 04-NOV-2021

Analyte	Quant	RL	Units	Flags
1,1,1,2-Tetrachloroethane	ND	0.2000	nL/L	
Freon 12	ND	0.2000	nL/L	
Freon 114	ND	0.2000	nL/L	
Chloromethane	ND	0.2000	nL/L	
Vinyl Chloride	ND	0.2000	nL/L	
Bromomethane	ND	0.2000	nL/L	
Chloroethane	ND	0.2000	nL/L	
Trichlorofluoromethane	ND	0.2000	nL/L	
1,1-Dichloroethene	ND	0.2000	nL/L	
Freon 113	ND	0.2000	nL/L	
Acetone	ND	1.000	nL/L	
Carbon Disulfide	ND	0.2000	nL/L	calc
Isopropanol (IPA)	ND	1.000	nL/L	
Methylene Chloride	ND	0.2000	nL/L	
trans-1,2-Dichloroethene	ND	0.2000	nL/L	
MTBE	ND	0.2000	nL/L	
n-Hexane	ND	0.2000	nL/L	
1,1-Dichloroethane	ND	0.2000	nL/L	
Vinyl Acetate	ND	1.000	nL/L	
cis-1,2-Dichloroethene	ND	0.2000	nL/L	
2-Butanone	ND	1.000	nL/L	
Chloroform	ND	0.2000	nL/L	
1,1,1-Trichloroethane	ND	0.2000	nL/L	
Carbon Tetrachloride	ND	0.2000	nL/L	
Benzene	ND	0.2000	nL/L	
1,2-Dichloroethane	ND	0.2000	nL/L	
Trichloroethene	ND	0.2000	nL/L	
1,2-Dichloropropane	ND	0.2000	nL/L	
Bromodichloromethane	ND	0.2000	nL/L	
cis-1,3-Dichloropropene	ND	0.2000	nL/L	
4-Methyl-2-Pentanone	ND	0.2000	nL/L	
Toluene	ND	0.2000	nL/L	
trans-1,3-Dichloropropene	ND	0.2000	nL/L	
1,1,2-Trichloroethane	ND	0.2000	nL/L	
Tetrachloroethene	ND	0.2000	nL/L	
2-Hexanone	ND	0.5000	nL/L	
Dibromochloromethane	ND	0.2000	nL/L	
1,2-Dibromoethane	ND	0.2000	nL/L	
Chlorobenzene	ND	0.2000	nL/L	
Ethylbenzene	ND	0.2000	nL/L	
m,p-Xylenes	ND	0.4000	nL/L	
o-Xylene	ND	0.2000	nL/L	
Styrene	ND	0.2000	nL/L	
Bromoform	ND	0.2000	nL/L	
1,1,2,2-Tetrachloroethane	ND	0.2000	nL/L	
4-Ethyltoluene	ND	0.2000	nL/L	
1,3,5-Trimethylbenzene	ND	0.2000	nL/L	
1,2,4-Trimethylbenzene	ND	0.2000	nL/L	
1,3-Dichlorobenzene	ND	0.2000	nL/L	
1,4-Dichlorobenzene	ND	0.2000	nL/L	

Analyte	Quant	RL	Units	Flags
Benzyl chloride	ND	0.2000	nL/L	
1,2-Dichlorobenzene	ND	0.2000	nL/L	
1,2,4-Trichlorobenzene	ND	0.2000	nL/L	
Hexachlorobutadiene	ND	0.2000	nL/L	

ISTD (ICAL air09_110421009)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	352446	259242	-26.44	8.39	8.38	-0.01
1,4-Difluorobenzene	1303208	955140	-26.71	10.09	10.09	0.00
Chlorobenzene-d5	712397	499829	-29.84	14.17	14.17	0.00

TO15 SCAN Certified (Batch 2226)

Analyst: DJL Date: 12/13/21 Reviewer: SLL Date: 12/13/21

calc=check quantitation

Enthalpy Internal Standard Summary for Sequence 371471408

Date : 11/23/21 Reference : air06_102121011
Sequence : AIR-MS-06 air06_112321 Analyzed : 10/21/21 22:52

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389038	8.19	1458162	9.92	778633	14.02
		LOWER LIMIT	233423	7.86	874897	9.59	467180	13.69
		UPPER LIMIT	544653	8.52	2041427	10.25	1090087	14.35
002	CCV/BS	QC957222	348393	8.18	1304954	9.91	724823	14.02
003	BSD	QC957223	343372	8.18	1291523	9.91	711544	14.01
004	IB		349398	8.18	1302904	9.91	689358	14.01
005	BLANK	QC957224	342740	8.18	1279087	9.91	676491	14.01
006	CANCHECK		337183	8.18	1254634	9.91	662383	14.01
007	MDL	432558-004	335052	8.18	1249836	9.91	659484	14.01
008	MDL	432558-005	327416	8.18	1226525	9.91	650467	14.01
009	SAMPLE	453796-004	328168	8.18	1234954	9.91	649095	14.01
010	SAMPLE	453796-006	340786	8.19	1283350	9.91	671273	14.01
011	SAMPLE	453796-008	333899	8.19	1258689	9.91	661391	14.01
012	SAMPLE	453819-002	336242	8.19	1261369	9.92	673806	14.01
013	SAMPLE	453934-008	332426	8.19	1248320	9.92	659443	14.01
014	SAMPLE	453934-009	341858	8.20	1289410	9.92	687112	14.02
015	SAMPLE	453934-010	342071	8.19	1288284	9.92	676494	14.01
016	SAMPLE	453934-011	342587	8.20	1281732	9.92	675197	14.01
017	SAMPLE	453934-012	339963	8.19	1285785	9.92	674724	14.01
018	SAMPLE	453934-013	335063	8.20	1260678	9.92	664219	14.01
019	SAMPLE	453934-014	329248	8.19	1233603	9.92	660403	14.01
020	SAMPLE	453934-015	332722	8.20	1240765	9.92	659420	14.02
021	SAMPLE	453934-016	329749	8.20	1236732	9.92	650289	14.02
022	SAMPLE	453840-001	323054	8.18	1200571	9.91	635882	14.01
023	SAMPLE	453840-003	321142	8.18	1201602	9.91	640677	14.01

Enthalpy Internal Standard Summary for Sequence 371481516

Date : 11/30/21 Reference : air06_102121011
Sequence : AIR-MS-06 air06_113021 Analyzed : 10/21/21 22:52

#	Type	Sample ID	BRCLME		RT	14DFB		RT	CLBZD5		RT
		ICAL STD	389038		8.19	1458162		9.92	778633		14.02
		LOWER LIMIT	233423		7.86	874897		9.59	467180		13.69
		UPPER LIMIT	544653		8.52	2041427		10.25	1090087		14.35
005	CCV/BS	QC958135	265843		8.18	988106		9.91	567079		14.01
006	BSD	QC958136	273638		8.18	1013139		9.91	579451		14.01
007	IB		273979		8.18	1015986		9.91	549152		14.01
008	BLANK	QC958137	262921		8.18	967157		9.91	527901		14.01
010	SAMPLE	454231-001	280543		8.18	1029754		9.91	558925		14.01
011	SAMPLE	454231-002	270303		8.18	1001566		9.91	548431		14.01
012	SAMPLE	454231-003	267076		8.18	991295		9.91	550200		14.01
019	SAMPLE	454249-001	238683		8.19	882102		9.92	487460		14.02
020	SAMPLE	454249-002	237694		8.19	885723		9.91	488991		14.02
021	SAMPLE	454249-003	243754		8.19	896643		9.92	494990		14.01
022	SAMPLE	454231-001	240507		8.19	882112		9.92	489242		14.02
026	SAMPLE	454249-001	226626	*	8.18	835311	*	9.91	463192	*	14.01
027	SAMPLE	454249-003	222183	*	8.18	820596	*	9.91	454586	*	14.01
028	SAMPLE	454249-004	238797		8.18	880630		9.91	491892		14.01

Enthalpy Internal Standard Summary for Sequence 371483523

Date : 12/01/21 Reference : air06_122101011
Sequence : AIR-MS-06 air06_122101 Analyzed : 12/02/21 02:08

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	338465	8.18	1262378	9.92	728462	14.02
		LOWER LIMIT	203079	7.85	757427	9.59	437077	13.69
		UPPER LIMIT	473851	8.51	1767329	10.25	1019846	14.35
015	ICV/BS	QC958655	377017	8.18	1398150	9.91	795650	14.02
016	BSD	QC958656	380945	8.18	1421116	9.91	813182	14.02
017	IB		394721	8.18	1452265	9.91	776514	14.01
018	BLANK	QC958657	370544	8.18	1361098	9.91	733495	14.01
019	CANCHECK		352158	8.18	1289092	9.91	699697	14.01
020	SAMPLE	454323-006	342864	8.18	1260722	9.91	710903	14.01
021	SAMPLE	454323-007	357295	8.19	1322306	9.92	748972	14.01
022	SAMPLE	454223-001	358963	8.18	1337153	9.91	737498	14.01
023	SAMPLE	454223-002	396995	8.19	1479943	9.92	795068	14.01
024	SAMPLE	454223-003	401881	8.19	1481706	9.92	801965	14.01
025	SAMPLE	454223-004	423318	8.19	1582923	9.92	847704	14.01
026	SAMPLE	454223-005	447001	8.19	1662911	9.91	895132	14.01
027	SAMPLE	454223-006	458814	8.19	1706966	9.92	909115	14.01
028	SAMPLE	454223-007	457053	8.19	1696054	9.91	907705	14.01
029	SAMPLE	454223-008	460032	8.19	1702324	9.92	903899	14.01
030	SAMPLE	454223-009	450669	8.19	1675087	9.92	890739	14.01
031	SAMPLE	454223-010	443705	8.19	1657963	9.92	879276	14.01
032	SAMPLE	454230-012	443138	8.18	1637509	9.91	860368	14.01
033	SAMPLE	454230-013	435696	8.18	1599629	9.91	837591	14.01
034	SAMPLE	454230-014	421805	8.18	1548616	9.91	809310	14.01
035	SAMPLE	454230-015	409131	8.18	1497089	9.91	796564	14.01
036	SAMPLE	454230-016	401490	8.18	1470722	9.91	790178	14.01
037	SAMPLE	454230-017	384305	8.18	1413657	9.91	761282	14.01
038	SAMPLE	454230-018	381530	8.18	1402527	9.91	752620	14.01
039	SAMPLE	454230-019	370056	8.18	1372994	9.91	739617	14.01
040	CCV	QC958XXX	349407	8.18	1283583	9.91	735073	14.01

Enthalpy Internal Standard Summary for Sequence 371510273

Date : 12/20/21 Reference : air06_121121009
Sequence : AIR-MS-06 air06_122021 Analyzed : 12/11/21 23:08

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	329831	8.18	1230119	9.91	754830	14.02
		LOWER LIMIT	197899	7.85	738071	9.58	452898	13.69
		UPPER LIMIT	461763	8.51	1722166	10.24	1056761	14.35
001	IB		372950	8.18	1377527	9.91	750772	14.02
003	CCV/BS	QC962005	348979	8.18	1305225	9.91	756651	14.02
004	BSD	QC962006	346906	8.18	1290615	9.91	745359	14.02
005	IB		355764	8.18	1323755	9.91	726848	14.01
006	BLANK	QC962007	348828	8.18	1292248	9.91	705840	14.01
007	SAMPLE	455620-001	345639	8.18	1286623	9.91	708057	14.01
008	SAMPLE	455620-002	338879	8.18	1270464	9.91	703583	14.01
009	SAMPLE	455508-001	341999	8.18	1279030	9.91	703612	14.01
010	SAMPLE	455508-002	355910	8.18	1331028	9.91	733366	14.01
011	SAMPLE	455508-003	359603	8.18	1339137	9.91	737326	14.01
012	SAMPLE	455508-004	347316	8.19	1300532	9.91	720132	14.01
013	SAMPLE	455508-005	354806	8.18	1317362	9.91	727942	14.01
014	SAMPLE	455620-003	344148	8.18	1282136	9.91	709898	14.01
016	SAMPLE	455620-005	359448	8.18	1361073	9.91	753432	14.01
017	SAMPLE	455620-006	362831	8.18	1372042	9.91	757501	14.01
018	SAMPLE	455620-007	364194	8.18	1368680	9.91	760165	14.01
019	SAMPLE	455620-008	371428	8.18	1384332	9.91	764307	14.01
020	SAMPLE	455637-001	367463	8.18	1365139	9.91	763227	14.01
021	SAMPLE	455637-002	364237	8.18	1366612	9.91	747225	14.02
022	SAMPLE	455637-003	355927	8.18	1343059	9.91	741185	14.02
023	SAMPLE	455563-001	355793	8.18	1349612	9.91	740071	14.02
026	SAMPLE	455508-005	348896	8.18	1309122	9.91	725015	14.01

Enthalpy Internal Standard Summary for Sequence 601482985

Date : 12/01/21 Reference : air09_110421009
Sequence : AIR-MS-09 air09_120121 Analyzed : 11/04/21 22:02

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	352446	8.39	1303208	10.09	712397	14.17
		LOWER LIMIT	211468	8.06	781925	9.76	427438	13.84
		UPPER LIMIT	493424	8.72	1824491	10.42	997355	14.50
002	CCV/BS	QC958455	274735	8.38	1011520	10.09	557632	14.17
003	BSD	QC958456	276921	8.38	1013461	10.09	560349	14.17
004	IB		267614	8.38	983614	10.09	511087	14.16
005	BLANK	QC958457	260799	8.38	958949	10.09	501357	14.17
006	CANCHECK		259242	8.38	955140	10.09	499829	14.17
007	SAMPLE	454113-003	260171	8.38	954426	10.09	503213	14.16
008	SAMPLE	454113-005	257382	8.38	944484	10.09	498741	14.17
009	SAMPLE	454113-006	264344	8.38	979610	10.08	596932	14.17
010	SAMPLE	454113-007	272627	8.38	1009226	10.09	540342	14.16
011	SAMPLE	454113-008	273085	8.38	1009345	10.09	554772	14.17
012	SAMPLE	454249-001	262369	8.38	968865	10.09	505295	14.16
013	SAMPLE	454249-003	261513	8.38	958553	10.09	506635	14.16
014	SAMPLE	454249-005	255376	8.38	945886	10.09	499147	14.17
015	SAMPLE	454249-006	254888	8.39	937389	10.09	495201	14.16
016	SAMPLE	454249-007	252632	8.39	934129	10.09	495301	14.17
017	SAMPLE	454249-008	251565	8.39	924926	10.09	486791	14.17
018	SAMPLE	454249-009	247923	8.38	910032	10.09	478727	14.17
019	SAMPLE	454249-010	245308	8.38	903715	10.09	479584	14.17
020	SAMPLE	454249-011	245437	8.38	902651	10.09	485929	14.17
021	SAMPLE	454249-012	245050	8.38	906541	10.09	483144	14.17
022	SAMPLE	454323-001	249485	8.39	910318	10.09	499685	14.17
023	SAMPLE	454323-002	255137	8.38	938192	10.09	502627	14.16
024	SAMPLE	454323-003	253578	8.38	930348	10.09	504358	14.16
025	SAMPLE	454323-004	249673	8.39	924872	10.09	499713	14.17
026	SAMPLE	454323-005	250219	8.39	919675	10.09	495712	14.17
027	SAMPLE	454249-008	243113	8.38	890776	10.09	472978	14.17

Enthalpy Sequence Summary for Sequence 371471408

Instrument : AIR-MS-06 Begun : 11/23/21 08:48
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	air06_112321001	TUN	TUNE			11/23/21 08:48	1.0	1	
002	air06_112321002	CCV/BS	QC957222	Air	278593	11/23/21 09:34	1.0	2 1	
003	air06_112321003	BSD	QC957223	Air	278593	11/23/21 10:26	1.0	2 1	
004	air06_112321004	IB				11/23/21 11:43	1.0	1	
005	air06_112321005	BLANK	QC957224	Air	278593	11/23/21 12:34	1.0	1	
006	air06_112321006	CANCHECK				11/23/21 13:26	1.0	1	Certifies
007	air06_112321007	MDL	432558-004	Air	278593	11/23/21 14:11	1.0	3 1	
008	air06_112321008	MDL	432558-005	Air	278593	11/23/21 15:04	1.0	3 1	
009	air06_112321009	SAMPLE	453796-004	Air	278593	11/23/21 15:53	3.0	1	
010	air06_112321010	SAMPLE	453796-006	Air	278593	11/23/21 16:41	3.0	1	
011	air06_112321011	SAMPLE	453796-008	Air	278593	11/23/21 17:27	6.0	1	
012	air06_112321012	SAMPLE	453819-002	Air	278593	11/23/21 18:12	37.50	1	
013	air06_112321013	SAMPLE	453934-008	Air	278593	11/23/21 19:04	2.0	1	1:ETHANOL=48
014	air06_112321014	SAMPLE	453934-009	Air	278593	11/23/21 19:55	2.0	1	
015	air06_112321015	SAMPLE	453934-010	Air	278593	11/23/21 20:46	2.0	1	
016	air06_112321016	SAMPLE	453934-011	Air	278593	11/23/21 21:38	2.0	1	
017	air06_112321017	SAMPLE	453934-012	Air	278593	11/23/21 22:29	2.0	1	
018	air06_112321018	SAMPLE	453934-013	Air	278593	11/23/21 23:20	2.0	1	
019	air06_112321019	SAMPLE	453934-014	Air	278593	11/24/21 00:12	2.0	1	
020	air06_112321020	SAMPLE	453934-015	Air	278593	11/24/21 01:03	2.0	1	
021	air06_112321021	SAMPLE	453934-016	Air	278593	11/24/21 01:55	2.0	1	
022	air06_112321022	SAMPLE	453840-001	Air	278593	11/24/21 07:35	2.0	1	2:ETHANOL=240
023	air06_112321023	SAMPLE	453840-003	Air	278593	11/24/21 08:20	50.0	1	high HC, 1:ETHANOL=58

ZNZ 11/24/21 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 23.

GSG 01/04/22 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 23.

Analyst: ZNZ Date: 11/24/21 Reviewer: GSG Date: 01/04/22

Standards used: 1=S16071 2=S16074 3=S16184

Flags used: Certifies=TO15 SCAN Certified (Batch 2212)

Pressurization Logbook

Sample ID	Initial Pressure (mm Hg)	Final Pressure (mm Hg)	Canister Volume (L)	Dilution Factor	Analyst Initials	Date	Comments
453789-004	608.4	1216.8	1.4L	2x	LB	11/18/21	C10340
453808-001	675.5	1351.0					C10786
-002	629.3	1258.6					C10812
-003	645.1	1290.2					C10808
-004	646.2	1292.4					C10801
-005	611.7	1223.4					C10861
-006	566.2	1132.4					C10816
-007	634.3	1268.6					C10785
-008	567.9	1135.8					C10700
-009	588.0	1176.0					C10788
-010	604.3	1208.6					C10617
-011	614.5	1229.0					C10810
-012	635.8	1271.6					C10782
-013	597.8	1195.6					C10783
-014	632.4	1264.8					C10805
-015	635.9	1271.8					C10727
-016	554.2	1108.4					C10758
-017	692.0	1384.0					C10532
-018	606.8	1213.6					C10054
453796-001	600.7	901.1		1.5x			C10179
-002	633.8	950.7					C10154
-003	688.8	1033.2					C10383
-004	584.6	876.9					C10668
-005	591.8	887.7					C10151
-006	677.8	1016.7					C10220
-007	637.8	956.7					C10689
-008	608.7	913.1					C10303
453844-008	584.6	935.4		1.6x			C10029
453840-001	533.6	1067.2	1.4L	2x	LB	11/19/21	C10439
-002	609.7	1219.4					C10367
-003	563.5	1127.0					C10270
-004	603.9	1207.8					C10051
-005	605.7	1211.4					C10207
-006	606.9	1213.8					C10419
-007	601.0	1202.0					C10346
-008	507.6	1015.2					C10248
453819-001	760.8	1141.2		1.5x			C10364
-002	703.5	1055.3					C10441
-003	732.3	1098.5					C10394
-004	725.1	1087.7					C10444
-005	729.3	1094.0					C10153
453785-001	648.3	972.5					C10720

Pressurization Logbook

Sample ID	Initial Pressure (mm Hg)	Final Pressure (mm Hg)	Canister Volume (L)	Dilution Factor	Analyst Initials	Date	Comments
453785-002	698.4	1047.6	1.4L	1.5x	LB	11/19/21	C10141
453839-001	663.8	995.7	↓	↓	↓	↓	C10447
-002	500.5	900.9	↓	1.8x	↓	↓	C10497
453874-001	685.9	1028.9	↓	1.5x	↓	↓	C10382
453915-001	679.0	1018.5	↓	↓	↓	↓	C10354
-002	654.3	981.5	↓	↓	↓	↓	C10221
-003	637.8	956.7	↓	↓	↓	↓	C10277
-004	664.5	996.8	↓	↓	↓	↓	C10361
-005	647.9	971.9	↓	↓	↓	↓	C10522
-006	668.4	1002.6	↓	↓	↓	↓	C10665
-007	628.3	942.5	↓	↓	↓	↓	C10678
453934-001	616.8	1233.6	↓	2x	↓	↓	C10610
-002	648.1	1296.2	↓	↓	↓	↓	C10552
-003	660.3	1320.6	↓	↓	↓	↓	C10797
-004	640.4	1280.8	↓	↓	↓	↓	C10800
-005	635.8	1271.6	↓	↓	↓	↓	C10817
-006	619.9	1239.8	↓	↓	↓	↓	C10862
-007	615.8	1231.6	↓	↓	↓	↓	C10799
-008	640.7	1281.4	↓	↓	↓	↓	C10585
-009	697.1	1394.2	↓	↓	↓	↓	C10790
-010	597.7	1195.4	↓	↓	↓	↓	C10791
-011	629.0	1258.0	↓	↓	↓	↓	C10627
-012	665.1	1330.2	↓	↓	↓	↓	C10591
-013	648.6	1297.2	↓	↓	↓	↓	C10820
-014	588.1	1176.2	↓	↓	↓	↓	C10614
-015	674.4	1348.8	↓	↓	↓	↓	C10854
-016	628.2	1256.4	↓	↓	↓	↓	C10773
-017	633.8	1267.6	↓	↓	↓	↓	C10784
-018	647.3	1294.6	↓	↓	↓	↓	C10804
-019	699.8	1399.6	↓	↓	↓	↓	C10618
-020	648.2	1296.4	↓	↓	↓	↓	C10592
-021	617.1	1234.2	↓	↓	↓	↓	C10655
-022	591.1	1182.2	↓	↓	↓	↓	C10044
453813-001	619.9	1115.8	6L	1.8x	CD	11/22/21	C80157
-002	619.7	1115.5	↓	1.8x	↓	↓	C80149
-003	624.7	1124.5	↓	1.8x	↓	↓	093
-004	723.3	1084.9	↓	1.5x	↓	↓	099
-005	618.5	1037.6	↓	1.6x	↓	↓	133
-006	629.5	1133.1	↓	1.8x	↓	↓	095
-007	352.6	1057.8	↓	3x	↓	↓	104
-008	231.7	1158.5	↓	5x	↓	↓	C70141
-009	168.4	1010.4	↓	6x	↓	↓	C80139

Enthalpy Sequence Summary for Sequence 371481516

Instrument : AIR-MS-06 Begun : 11/30/21 09:16
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	air06_113021001	XTUN	TUNE			11/30/21 09:16	1.0	1	
002	air06_113021002	XCCV/BS	QC958135	Air	278926	11/30/21 10:04	1.0	2 1	spk
003	air06_113021003	XCCV/BS	QC958135	Air	278926	11/30/21 11:02	1.0	2 1	
004	air06_113021004	TUN	TUNE			11/30/21 11:49	1.0	1	
005	air06_113021005	CCV/BS	QC958135	Air	278926	11/30/21 12:36	1.0	2 1	
006	air06_113021006	BSD	QC958136	Air	278926	11/30/21 14:09	1.0	2 1	
007	air06_113021007	IB				11/30/21 15:20	1.0	1	
008	air06_113021008	BLANK	QC958137	Air	278926	11/30/21 16:11	1.0	1	
009	air06_113021009	SAMPLE	454114-009	Air	278926	11/30/21 17:45	1.500	1	
010	air06_113021010	SAMPLE	454231-001	Air	278926	11/30/21 18:30	6.0	1	1:PCE=42
011	air06_113021011	SAMPLE	454231-002	Air	278926	11/30/21 19:22	1.500	1	
012	air06_113021012	SAMPLE	454231-003	Air	278926	11/30/21 20:13	1.500	1	
013	air06_113021013	SAMPLE	454114-001	Air	278926	11/30/21 20:59	6.0	1	1:ETACET=92
014	air06_113021014	SAMPLE	454114-002	Air	278926	11/30/21 21:45	7.500	1	2:ETACET=110
015	air06_113021015	SAMPLE	454114-003	Air	278926	11/30/21 22:31	7.500	1	1:ETACET=130
016	air06_113021016	SAMPLE	454114-004	Air	278926	11/30/21 23:17	6.0	1	1:ETACET=84
017	air06_113021017	SAMPLE	454114-005	Air	278926	12/01/21 00:02	15.0	1	2:ETACET=190
018	air06_113021018	SAMPLE	454114-008	Air	278926	12/01/21 00:52	15.0	1	
019	air06_113021019	SAMPLE	454249-001	Air	278926	12/01/21 01:44	2.0	1	1:PCE=41
020	air06_113021020	SAMPLE	454249-002	Air	278926	12/01/21 02:35	2.0	1	
021	air06_113021021	SAMPLE	454249-003	Air	278926	12/01/21 03:27	2.0	1	1:PCE=59
022	air06_113021022	SAMPLE	454231-001	Air	278926	12/01/21 04:12	12.0	1	
023	air06_113021023	SAMPLE	454114-008	Air	278926	12/01/21 07:24	15.0	1	1:ETACET=130
024	air06_113021024	SAMPLE	454114-002	Air	278926	12/01/21 08:09	15.0	1	1:ETACET=55
025	air06_113021025	SAMPLE	454114-005	Air	278926	12/01/21 08:55	30.0	1	1:ETACET=97
026	air06_113021026	SAMPLE	454249-001	Air	278926	12/01/21 09:43	4.0	1	
027	air06_113021027	SAMPLE	454249-003	Air	278926	12/01/21 10:29	5.0	1	
028	air06_113021028	SAMPLE	454249-004	Air	278926	12/01/21 11:16	5.0	1	
029	air06_113021029	UNKNOWN	XCCV			12/01/21 12:30	1.0	2 1	
030	air06_113021030	UNKNOWN	XCCV			12/01/21 13:32	1.0	2 1	
031	air06_113021031	UNKNOWN	XCCV			12/01/21 14:23	1.0	2 1	
032	air06_113021032	UNKNOWN	XCCV			12/01/21 15:53	1.0	2 1	

ZNZ 12/01/21 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 28.

GSG 01/04/22 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 28.

Analyst: ZNZ Date: 12/01/21 Reviewer: GSG Date: 01/04/22

Standards used: 1=S16071 2=S16074

Flags used: spk=5,n% spike rule

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Pressurization Logbook

Sample ID	Initial Pressure (mm Hg)	Final Pressure (mm Hg)	Canister Volume (L)	Dilution Factor	Analyst Initials	Date	Comments
453996-025	657.8	1315.6	1.4L	2x	LB	11/24/21	C10806
-026	654.4	1308.8	↓	↓	↓	↓	C10787
454130-001	652.6	NA	6L	NA	↓	↓	C70050
-002	663.4	↓	↓	↓	↓	↓	C70296
-003	650.9	↓	↓	↓	↓	↓	C70085
-004	642.8	707.1	↓	1.1x	↓	↓	C70008
-005	650.5	NA	↓	NA	↓	↓	C70081
-006	609.7	670.7	↓	1.1x	↓	↓	C70007
-007	614.3	675.7	↓	↓	↓	↓	C70193
-008	656.7	NA	↓	NA	↓	↓	C70024
454175-001	710.8	1066.2	1.4L	1.5x	↓	↓	C10686
2	719.1	1078.7	↓	↓	↓	↓	C10231
3	689.7	1034.6	↓	↓	↓	↓	C10083
4	727.0	1090.5	↓	↓	↓	↓	C10315
453945-001	514.9	926.8	1.4L	1.8X	NZ	11/27/21	C10596
2	483.2	869.8	↓	↓	↓	↓	813
3	574.7	1034.5	↓	↓	↓	↓	529
4	565.8	1018.4	↓	↓	↓	↓	577
5	515.8	928.4	↓	↓	↓	↓	537
6	502.1	903.8	↓	↓	↓	↓	619
7	473.1	851.6	↓	↓	↓	↓	598
454058-001	671.5	1007.3	↓	1.5X	↓	11/29/21	633
2	671.2	1006.8	↓	↓	↓	↓	434
3	675.2	1012.8	↓	↓	↓	↓	333
4	635.0	952.5	↓	↓	↓	↓	659
5	652.0	978.0	↓	↓	↓	↓	414
454114-001	665.4	998.1	↓	1.5x	LB	↓	C10691
-002	718.8	1078.2	↓	↓	↓	↓	C10433
-003	692.9	1039.4	↓	↓	↓	↓	C10292
-004	676.2	1014.3	↓	↓	↓	↓	C10195
-005	645.4	968.1	↓	↓	↓	↓	C10406
-006	644.7	967.1	↓	↓	↓	↓	C10680
-007	676.8	1015.2	↓	↓	↓	↓	C10372
-008	710.5	1065.8	↓	↓	↓	↓	C10260
-009	609.3	914.0	↓	↓	↓	↓	C10309
-010	639.2	958.8	↓	↓	↓	↓	C10651
-011	672.2	1008.3	↓	↓	↓	↓	C10398
454140-001	613.2	919.8	↓	↓	↓	↓	C10446
-002	748.1	1122.2	↓	↓	↓	↓	C10483
-003	420.5	967.2	↓	2.3x	↓	↓	C10640
-004	567.8	965.3	↓	1.7x	↓	↓	C10642
454113-001	665.4	998.1	↓	1.5x	↓	↓	C10101

Pressurization Logbook

Sample ID	Initial Pressure (mm Hg)	Final Pressure (mm Hg)	Canister Volume (L)	Dilution Factor	Analyst Initials	Date	Comments
454113-002	695.4	1043.1	1.4L	1.5x	LB	11/29/21	C10121
-003	715.0	1072.5					C10244
-004	691.1	1036.7					C10137
-005	653.2	979.8					C10229
-006	690.2	1035.3					C10298
-007	716.3	1074.5					C10291
-008	636.3	954.5					C10228
453958-001	677.9	1355.8		2x			C10293
-002	586.2	1172.4					C10092
-003	634.9	1269.8					C10150
-004	686.7	1373.4					C10664
-005	657.6	1315.2					C10173
-006	625.3	1250.6					C10672
-007	615.0	1230.0					C10318
-008	664.0	1328.0					C10146
454231-001	594.0	1188.0				11/30/21	C10606
-002	726.3	1452.6					C10623
-003	706.8	1413.6					C10104
454137-001	614.8	676.3	6L	1.1x	DL	11/30/21	C70209
-002	630.6	693.7					C70221
-003	637.5	701.3					C70133
-004	625.0	687.5					C70167
-005	601.0	661.1					C70216
-006	630.1	693.1					C70185
454249-001	646.7	1293.4	1.4L	2x	LB		C10412
-002	653.2	1306.4					C10090
-003	659.0	1318					C10326
-004	712.7	1425.4					C10084
-005	641.3	1282.6					C10400
-006	652.8	1305.6					C10448
-007	699.8	1399.6					C10330
-008	727.9	1455.8					C10455
-009	636.2	1272.4					C10641
-010	370.8	1112.4		3x			C10227
-011	641.0	1282.0		2x			C10410
-012	596.0	1192.0					C10148
454223-001	619.3	928.9		1.5x			C10457
-002	716.6	1074.9					C10313
-003	624.9	937.4					C10692
-004	637.0	955.5					C10234
-005	636.0	954.0					C10324
-006	581.2	871.8					C10286

Enthalpy Sequence Summary for Sequence 371483523

Instrument : AIR-MS-06 Begun : 12/01/21 18:43
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	air06_122101001	IB				12/01/21 18:43	1.0	1	?t
002	air06_122101002	TUN	TUNE			12/01/21 19:25	1.0	2	
003	air06_122101003	IB				12/01/21 20:07	1.0	1	t
004	air06_122101004	IB				12/01/21 20:49	1.0	1	t
005	air06_122101005	ICAL	0.1PPBV			12/01/21 21:33	1.0	3 1	
006	air06_122101006	ICAL	0.2PPBV			12/01/21 22:17	1.0	3 1	
007	air06_122101007	ICAL	0.5PPBV			12/01/21 23:02	1.0	3 1	
008	air06_122101008	ICAL	1PPBV			12/01/21 23:48	1.0	3 1	
009	air06_122101009	ICAL	2PPBV			12/02/21 00:39	1.0	3 1	
010	air06_122101010	ICAL	5PPBV			12/02/21 01:23	1.0	4 1	
011	air06_122101011	ICAL	10PPBV			12/02/21 02:08	1.0	4 1	
012	air06_122101012	ICAL	20PPBV			12/02/21 02:55	1.0	4 1	
013	air06_122101013	ICAL	40PPBV			12/02/21 03:46	1.0	4 1	
014	air06_122101014	TUN	TUNE			12/02/21 04:28	1.0	1	
015	air06_122101015	ICV/BS	QC958655	Air	279097	12/02/21 05:13	1.0	5 1	
016	air06_122101016	BSD	QC958656	Air	279097	12/02/21 05:58	1.0	5 1	
017	air06_122101017	IB				12/02/21 08:16	1.0	1	
018	air06_122101018	BLANK	QC958657	Air	279097	12/02/21 09:06	1.0	1	Certifies
019	air06_122101019	CANCHECK				12/02/21 09:57	1.0	1	Certifies
020	air06_122101020	SAMPLE	454323-006	Air	279097	12/02/21 11:13	2.0	1	
021	air06_122101021	SAMPLE	454323-007	Air	279097	12/02/21 12:04	2.0	1	
022	air06_122101022	SAMPLE	454223-001	Air	279097	12/02/21 12:55	1.500	1	
023	air06_122101023	SAMPLE	454223-002	Air	279097	12/02/21 13:46	1.500	1	
024	air06_122101024	SAMPLE	454223-003	Air	279097	12/02/21 14:37	1.500	1	
025	air06_122101025	SAMPLE	454223-004	Air	279097	12/02/21 15:28	1.500	1	
026	air06_122101026	SAMPLE	454223-005	Air	279097	12/02/21 16:19	1.500	1	
027	air06_122101027	SAMPLE	454223-006	Air	279097	12/02/21 17:11	1.500	1	
028	air06_122101028	SAMPLE	454223-007	Air	279097	12/02/21 18:02	1.500	1	
029	air06_122101029	SAMPLE	454223-008	Air	279097	12/02/21 18:53	1.500	1	
030	air06_122101030	SAMPLE	454223-009	Air	279097	12/02/21 19:44	1.500	1	
031	air06_122101031	SAMPLE	454223-010	Air	279097	12/02/21 20:35	1.500	1	
032	air06_122101032	SAMPLE	454230-012	Air	279097	12/02/21 21:27	2.400	1	
033	air06_122101033	SAMPLE	454230-013	Air	279097	12/02/21 22:18	1.500	1	1:PCE=48
034	air06_122101034	SAMPLE	454230-014	Air	279097	12/02/21 23:09	1.500	1	1:PCE=120
035	air06_122101035	SAMPLE	454230-015	Air	279097	12/03/21 00:01	1.500	1	
036	air06_122101036	SAMPLE	454230-016	Air	279097	12/03/21 00:52	1.500	1	
037	air06_122101037	SAMPLE	454230-017	Air	279097	12/03/21 01:44	1.500	1	
038	air06_122101038	SAMPLE	454230-018	Air	279097	12/03/21 02:36	1.500	1	
039	air06_122101039	SAMPLE	454230-019	Air	279097	12/03/21 03:27	1.500	1	
040	air06_122101040	CCV	QC958XXX			12/03/21 07:24	1.0	5 1	

ZNZ 12/02/21 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 19.

ZNZ 12/03/21 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 20 through 39.

GSG 01/04/22 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Enthalpy Sequence Summary for Sequence 371483523

Instrument : AIR-MS-06 Begun : 12/01/21 18:43
Method : EPA TO-15

ZNZ: 12/02/21 SLL: 12/07/21 GSG: 01/04/22

Standards used: 1=S16071 2=S16170 3=S16259 4=S16257 5=S16258

Flags used: ?t=missing tune Certifies=TO15 SCAN Certified (Batch 2229) t=tune failure

Pressurization Logbook

Sample ID	Initial Pressure (mm Hg)	Final Pressure (mm Hg)	Canister Volume (L)	Dilution Factor	Analyst Initials	Date	Comments
454113-002	695.4	1043.1	1.4L	1.5x	LB	11/29/21	C10121
-003	715.0	1072.5					C10244
-004	691.1	1036.7					C10137
-005	653.2	979.8					C10229
-006	690.2	1035.3					C10298
-007	716.3	1074.5					C10291
-008	636.3	954.5					C10228
453958-001	677.9	1355.8		2x			C10293
-002	586.2	1172.4					C10092
-003	634.9	1269.8					C10150
-004	686.7	1373.4					C10664
-005	657.6	1315.2					C10173
-006	625.3	1250.6					C10672
-007	615.0	1230.0					C10318
-008	664.0	1328.0					C10146
454231-001	594.0	1188.0				11/30/21	C10606
-002	726.3	1452.6					C10623
-003	706.8	1413.6					C10104
454137-001	614.8	676.3	6L	1.1x	DL	11/30/21	C70209
-002	630.6	693.7					C70221
-003	637.5	701.3					C70133
-004	625.0	687.5					C70167
-005	601.0	661.1					C70210
-006	630.1	693.1					C70185
454249-001	646.7	1293.4	1.4L	2x	LB		C10412
-002	653.2	1306.4					C10090
-003	659.0	1318					C10326
-004	712.7	1425.4					C10084
-005	641.3	1282.6					C10400
-006	652.8	1305.6					C10448
-007	699.8	1399.6					C10330
-008	727.9	1455.8					C10455
-009	636.2	1272.4					C10641
-010	370.8	1112.4		3x			C10227
-011	641.0	1282.0		2x			C10410
-012	596.0	1192.0					C10148
454223-001	619.3	928.9		1.5x			C10457
-002	716.6	1074.9					C10313
-003	624.9	937.4					C10692
-004	637.0	955.5					C10234
-005	636.0	954.0					C10324
-006	581.2	871.8					C10286

Pressurization Logbook

Sample ID	Initial Pressure (mm Hg)	Final Pressure (mm Hg)	Canister Volume (L)	Dilution Factor	Analyst Initials	Date	Comments
454223-007	631.1	946.7	1.4L	1.5x	LB	11/30/21	C10440
-008	713.2	1069.8					C10401
-009	676.8	1015.2					C10405
-010	634.2	951.3					C10273
454140-001	732.1	1098.2	1.4L	1.5x	CD	12/1/21	(1.5)(1.5x) = 2.25x total
454230-001	528.2	897.9		1.7x	LB	12/1/21	C10574
-002	594.3	891.5		1.5x			C10561
-003	618.2	927.3					C10699
-004	591.3	887.0					C10605
-005	575.7	863.6					C10575
-006	599.6	899.4					C10548
-007	587.8	881.7					C10595
-008	564.1	846.2					C10535
-009	592.2	888.3					C10709
-010	589.8	884.7					C10702
-011	594.6	891.9					C10569
-012	379.2	910.1		2.4x			C10280
-013	580.2	870.3		1.5x			C10710
-014	589.8	884.7					C10549
-015	590.8	886.2					C10628
-016	561.2	841.8					C10582
453958-002	765.6	1148.4	1.4L	1.5x	CD	12/1/21	(2x)(1.5x) = 3x total
454230-017	572.6	858.9			LB		C10551
-018	610.7	916.1					C10643
-019	584.8	877.2					C10189
-020	564.8	847.2					C10580
454323-001	632.1	1264.2		2x			C10259
-002	641.8	1283.6					C10508
-003	687.5	1375.0					C10719
-004	739.2	1330.6		1.8x			C10099
-005	724.9	1304.8					C10162
-006	630.1	1260.2		2x			C10243
-007	616.0	1232.0					C10519
453958-007	791.5	1187.3	1.4L	1.5x	CD	12/1/21	(2)(1.5) = 3x total
454230-021	612.9	919.4			LB		C10558
-022	577.8	866.7					C10630
-023	594.8	892.2					C10557
-024	605.8	908.7					C10631
454315-001	569.6	1139.2	1.4L	2x	CD	12/2/21	C10252
-002	646.1	1292.2					428
-003	623.4	1246.8					421
-004	602.7	1205.4					429

Enthalpy Sequence Summary for Sequence 371497775

Instrument : AIR-MS-06 Begun : 12/11/21 16:15
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	air06_121121001	TUN	TUNE			12/11/21 16:15	1.0	1	t
002	air06_121121002	TUN	TUNE			12/11/21 17:49	1.0	1	
003	air06_121121003	ICAL	0.1PPBV			12/11/21 18:32	1.0	2 3	
004	air06_121121004	ICAL	0.2PPBV			12/11/21 19:16	1.0	2 3	
005	air06_121121005	ICAL	0.5PPBV			12/11/21 20:01	1.0	2 3	
006	air06_121121006	ICAL	1PPBV			12/11/21 20:48	1.0	2 3	
007	air06_121121007	ICAL	2PPBV			12/11/21 21:39	1.0	2 3	
008	air06_121121008	ICAL	5PPBV			12/11/21 22:23	1.0	4 3	
009	air06_121121009	ICAL	10PPBV			12/11/21 23:08	1.0	4 3	
010	air06_121121010	ICAL	20PPBV			12/11/21 23:55	1.0	4 3	
011	air06_121121011	ICAL	40PPBV			12/12/21 00:46	1.0	4 3	
012	air06_121121012	TUN	TUNE			12/12/21 01:29	1.0	1	
013	air06_121121013	ICV	10PPBV			12/12/21 02:13	1.0	5 3	
014	air06_121121014	UNKNOWN	10PPBV			12/12/21 02:59	1.0	5 3	
015	air06_121121015	IB				12/12/21 03:41	1.0	3	
016	air06_121121016	CANCHECK				12/12/21 04:32	1.0	3	Certifies
017	air06_121121017	CANCHECK				12/12/21 05:23	1.0	3	Certifies

ZNZ 12/13/21 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

Analyst: ZNZ Date: 12/13/21 Reviewer: SLL Date: 12/13/21

Standards used: 1=S16071 2=S16297 3=S16298 4=S16295 5=S16294

Flags used: Certifies=TO15 SCAN Certified (Batch 2258) t=tune failure

Enthalpy Sequence Summary for Sequence 371510273

Instrument : AIR-MS-06 Begun : 12/20/21 08:33
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	air06_122021001	IB				12/20/21 08:33	1.0	1	?t
002	air06_122021002	TUN	TUNE			12/20/21 09:15	1.0	2	
003	air06_122021003	CCV/BS	QC962005	Air	280281	12/20/21 10:06	1.0	3 1	
004	air06_122021004	BSD	QC962006	Air	280281	12/20/21 10:56	1.0	3 1	
005	air06_122021005	IB				12/20/21 12:48	1.0	1	
006	air06_122021006	BLANK	QC962007	Air	280281	12/20/21 13:39	1.0	1	
007	air06_122021007	SAMPLE	455620-001	Air	280281	12/20/21 14:59	2.0	1	
008	air06_122021008	SAMPLE	455620-002	Air	280281	12/20/21 15:50	2.0	1	
009	air06_122021009	SAMPLE	455508-001	Air	280281	12/20/21 16:41	1.800	1	
010	air06_122021010	SAMPLE	455508-002	Air	280281	12/20/21 17:32	1.800	1	
011	air06_122021011	SAMPLE	455508-003	Air	280281	12/20/21 18:17	7.200	1	
012	air06_122021012	SAMPLE	455508-004	Air	280281	12/20/21 19:08	1.800	1	
013	air06_122021013	SAMPLE	455508-005	Air	280281	12/20/21 19:52	16.0	1	
014	air06_122021014	SAMPLE	455620-003	Air	280281	12/20/21 20:53	2.0	1	
015	air06_122021015	SAMPLE	455620-004	Air	280281	12/20/21 22:54	2.41	1	
016	air06_122021016	SAMPLE	455620-005	Air	280281	12/20/21 23:45	2.0	1	
017	air06_122021017	SAMPLE	455620-006	Air	280281	12/21/21 00:36	2.0	1	
018	air06_122021018	SAMPLE	455620-007	Air	280281	12/21/21 01:27	2.0	1	
019	air06_122021019	SAMPLE	455620-008	Air	280281	12/21/21 02:18	2.0	1	
020	air06_122021020	SAMPLE	455637-001	Air	280281	12/21/21 03:09	1.500	1	
021	air06_122021021	SAMPLE	455637-002	Air	280281	12/21/21 04:01	1.500	1	
022	air06_122021022	SAMPLE	455637-003	Air	280281	12/21/21 04:52	1.500	1	1:ETHANOL=68
023	air06_122021023	SAMPLE	455563-001	Air	280281	12/21/21 05:38	6.0	1	2:PROPENE=110
024	air06_122021024	SAMPLE	455583-002	Air	280281	12/21/21 06:29	1.500	1	2:TCE=220
025	air06_122021025	SAMPLE	455583-002	Air	280281	12/21/21 07:14	15.0	1	
026	air06_122021026	SAMPLE	455508-005	Air	280281	12/21/21 08:02	4.0	1	
027	air06_122021027	SAMPLE	455583-004	Air	280281	12/21/21 08:50	136.0	1	

ZNZ 12/21/21 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 27.

Analyst: ZNZ Date: 12/21/21 Reviewer: SLL Date: 12/23/21

Standards used: 1=S16298 2=S16071 3=S16295

Flags used: ?t=missing tune

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Pressurization Logbook

Sample ID	Initial Pressure (mm Hg)	Final Pressure (mm Hg)	Canister Volume (L)	Dilution Factor	Analyst Initials	Date	Comments
454635-013	725.0	1087.5	1.4 L	1.5x	LB	12/14/21	C10740
455129-001	626.4	939.6					C10604
-002	602.4	903.6					C10845
-003	578.2	867.3					C10776
454448-001	425.6	893.8	6L	2.1x		12/15/21	C80111
455092-001	726.8	1162.9	1.4L	1.6x	CD		C10570
-002	620.6	1117.1		1.8x			626
454770-001	589.3	1178.6	1.4L	2x	CD	12/15/21	(1.8)(2) = 3.6x (tot
455109-001	691.9	1037.9		1.5x	LB		C10380
-002	638.8	958.2					C10149
-003	620.4	930.6					C10671
-004	638.3	957.5					C10669
454746-001	541.3	920.21		1.7x			C10109
-002	208.6	938.7		4.5x			C10061
-003	454.9	909.8		2x			C10506
-004	224.7	966.2		4.3x			C10644
-005	498.4	897.1		1.8x			C10491
-006	424.4	891.2		2.1x			C10122
-007	600.6	900.9		1.5x			C10124
455091-001	658.2	987.3				12/16/21	C10819
-002	605.0	907.5					C10734
-003	682.6	1023.9					C10744
-004	622.0	933.0					C10774
455519-001	759.5	1139.3	1.4L	1.5x	LB	12/17/21	C10886
-002	718.4	1077.6					C10796
-003	708.8	1063.2					C10544
-004	604.0	906.0					C10593
-005	569.6	854.4					C10586
-006	669.0	1003.5					C10589
455520-001	695.4	1043.1					C10611
-002	689.9	1034.9					C10070
-003	732.8	1099.2					C10071
-004	671.8	1007.7					C10624
-005	680.0	1020.0					C10629
455521-001	696.4	1044.6					C10802
-002	714.7	1072.1					C10792
-003	629.5	944.3					C10763
-004	613.6	920.4					C10572
455508-001	698.2	1256.8		1.8x			C10239
-002	659.8	1187.6					C10242
-003	661.0	1189.8					C10163
-004	718.8	1293.8					C10157

Pressurization Logbook

Sample ID	Initial Pressure (mm Hg)	Final Pressure (mm Hg)	Canister Volume (L)	Dilution Factor	Analyst Initials	Date	Comments
455508-005	622.4	1244.8	1.4L	2x	LB	12/17/21	C10140
455428-001	1232.6	NA	1L	2.022x			R1370
-002	1120.5						R4333
455432-001	1044.6			2.351x			N6556
-002	1043.3						N6570
-003	982.7			2.298x			N6533
-004	1044.6						N6547
455427-001	1158.2		6L	1.944x			5472
-002	1239.4			1.872x			N4805
-003	1118.8		1L	1.944x			N6534
-004	922.5			1.944x			N6554
455004-001	688.5	NA	6L	NA	DL		C70161
-002	680.8						186
-003	706.7						184
-004	680.3						128
-005	718.0						204
-006	697.5						206
-007	628.1						181
~~455399~~							[illegible] 12/18/21
455393-001	690.9	1036.4	1.4L	1.5X	NZ	12/18/21	C10503
455620-001	573.0	1146.0		2x	LB	12/20/21	C10008
-002	634.1	1268.2					C10031
-003	624.6	1249.2					C10076
-004	569.7	1139.4					C10005
-005	656.9	1313.8					C10057
-006	653.9	1307.8					C10024
-007	603.7	1207.4					C10177
-008	568.8	1137.6					C10001
455563-001	700.8	1051.2		1.5x			C10080
455552-001	676.1	1014.2					C10444
-002	599.4	899.1					C10670
-003	651.4	977.1					C10664
-004	655.0	982.5					C10361
-005	692.4	1038.6					C10406
-006	721.7	1082.6					C10450
455637-001	646.3	969.5					C10800
-002	630.2	945.3					C10767
-003	651.9	977.9					C10817
455665-001	1204.6	NA	6L	2.66x			ATL 1215
-002	1222.8			2.808x			ATL 1285
455583-001	530.4	901.7	1.4L	1.7x			C10504
~~-002~~	~~633.5~~	~~950.3~~		~~1.5x~~			~~C10265~~ 12/20/21 LB

Pressurization Logbook

Sample ID	Initial Pressure (mm Hg)	Final Pressure (mm Hg)	Canister Volume (L)	Dilution Factor	Analyst Initials	Date	Comments
455583-002	672.2	1008.3	1.4L	1.5x	LB	12/20/21	C10265
-003	553.7	941.3	↓	1.7x	↓	↓	C10251
-004	560.2	952.3	↓	↓	↓	↓	C10103
455443-001	709.3	NA	6L	NA	DL		C70144
-002	685.0	↓	↓	↓	↓		036
-003	684.9	↓	↓	↓	↓		053
-004	670.1	↓	↓	↓	↓		233
-005	699.4	↓	↓	↓	↓		256
-006	699.1	↓	↓	↓	↓		285
-007	666.3	↓	↓	↓	↓		189
-008	729.9	↓	↓	↓	↓		281
-009	717.4	↓	↓	↓	↓	↓	245
455630-001	799.8	↓	↓	↓	↓	↓	067
-002	803.0	NA	↓	NA	↓	↓	100
-003	819.2	↓	↓	↓	↓	↓	089
-004	~~761.5~~ 788.3 12/21/21	↓	↓	↓	↓	↓	152
-005	745.7	↓	↓	↓	↓	↓	151
454889-001	679.0	NA	↓	NA	↓	↓	015
-002	693.1	↓	↓	↓	↓	↓	250
455620-001	753.4	1130.1	1.4L	1.5x	CD	12/21/21	(2)(1.5) = 3x (total)
-004	332.6	1130.8	↓	3.4x	↓	↓	(2)(3.4) = 6.8x ↓

Air Sample Dilution Logbook

Sample ID	Dilution 1			Dilution 2			Dilution 3			Total DF	Date	Analyst Initials	Comments
	Initial Vol.	Final Vol.	DF1	Initial Vol.	Final Vol.	DF2	Initial Vol.	Final Vol.	DF3				
455432-003	20ml	1L	50X							114.9X	12/18/21	NZ	PF=2.298
↓ 4	10ml	↓	100X							229.8X	↓	↓	↓
455442-001	20ml	↓	50X							60X	↓	↓	PF=1.6
455665-001	0.3psia	30.0psia	100X							266X	12/20/21	LB	PF=2.66X
↓ .002	0.4psia	40.0psia	↓							280.8X	↓	↓	PF=2.808X
455583-001	20ml	1L	50X							85X	12/21/21	NZ	PF=1.7
↓ 3	↓	↓	↓							↓	↓	↓	↓
↓ 4	↓	↓	↓							↓	↓	↓	↓

Enthalpy Sequence Summary for Sequence 601482985

Instrument : AIR-MS-09 Begun : 12/01/21 09:45
Method : EPA TO-15

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	air09_120121001	TUN	TUNE			12/01/21 09:45	1.0	1	
002	air09_120121002	CCV/BS	QC958455	Air	279035	12/01/21 10:30	1.0	2 1	
003	air09_120121003	BSD	QC958456	Air	279035	12/01/21 11:21	1.0	2 1	
004	air09_120121004	IB				12/01/21 12:39	1.0	1	
005	air09_120121005	BLANK	QC958457	Air	279035	12/01/21 13:29	1.0	1	Certifies
006	air09_120121006	CANCHECK				12/01/21 14:19	1.0	1	Certifies
007	air09_120121007	SAMPLE	454113-003	Air	279035	12/01/21 15:24	300.0	1	
008	air09_120121008	SAMPLE	454113-005	Air	279035	12/01/21 16:09	37.50	1	
009	air09_120121009	SAMPLE	454113-006	Air	279035	12/01/21 16:59	1.500	1	1:ETHANOL=57
010	air09_120121010	SAMPLE	454113-007	Air	279035	12/01/21 17:44	7.500	1	
011	air09_120121011	SAMPLE	454113-008	Air	279035	12/01/21 18:28	12.0	1	
012	air09_120121012	SAMPLE	454249-001	Air	279035	12/01/21 19:15	4.0	1	
013	air09_120121013	SAMPLE	454249-003	Air	279035	12/01/21 20:02	5.0	1	
014	air09_120121014	SAMPLE	454249-005	Air	279035	12/01/21 20:49	4.0	1	
015	air09_120121015	SAMPLE	454249-006	Air	279035	12/01/21 21:35	5.0	1	
016	air09_120121016	SAMPLE	454249-007	Air	279035	12/01/21 22:25	2.0	1	
017	air09_120121017	SAMPLE	454249-008	Air	279035	12/01/21 23:12	4.0	1	1:PCE=46
018	air09_120121018	SAMPLE	454249-009	Air	279035	12/01/21 23:56	20.0	1	
019	air09_120121019	SAMPLE	454249-010	Air	279035	12/02/21 00:47	2.0	1	
020	air09_120121020	SAMPLE	454249-011	Air	279035	12/02/21 01:37	2.0	1	
021	air09_120121021	SAMPLE	454249-012	Air	279035	12/02/21 02:28	2.0	1	
022	air09_120121022	SAMPLE	454323-001	Air	279035	12/02/21 03:18	2.0	1	
023	air09_120121023	SAMPLE	454323-002	Air	279035	12/02/21 04:09	2.0	1	
024	air09_120121024	SAMPLE	454323-003	Air	279035	12/02/21 04:59	2.0	1	
025	air09_120121025	SAMPLE	454323-004	Air	279035	12/02/21 05:50	1.800	1	
026	air09_120121026	SAMPLE	454323-005	Air	279035	12/02/21 06:40	1.800	1	1:ETHANOL=48
027	air09_120121027	SAMPLE	454249-008	Air	279035	12/02/21 07:26	8.0	1	

ZNZ 12/02/21 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 27.

GSG 01/04/22 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 27.

ZNZ: 12/02/21 SLL: 12/02/21 GSG: 01/04/22

Standards used: 1=S16169 2=S16173

Flags used: Certifies=TO15 SCAN Certified (Batch 2226)

Pressurization Logbook

Sample ID	Initial Pressure (mm Hg)	Final Pressure (mm Hg)	Canister Volume (L)	Dilution Factor	Analyst Initials	Date	Comments
454113-002	695.4	1043.1	1.4L	1.5x	LB	11/29/21	C10121
-003	715.0	1072.5					C10244
-004	691.1	1036.7					C10137
-005	653.2	979.8					C10229
-006	690.2	1035.3					C10298
-007	716.3	1074.5					C10291
-008	636.3	954.5					C10228
453958-001	677.9	1355.8		2x			C10293
-002	586.2	1172.4					C10092
-003	634.9	1269.8					C10150
-004	686.7	1373.4					C10664
-005	657.6	1315.2					C10173
-006	625.3	1250.6					C10672
-007	615.0	1230.0					C10318
-008	664.0	1328.0					C10146
454231-001	594.0	1188.0				11/30/21	C10606
-002	726.3	1452.6					C10623
-003	706.8	1413.6					C10104
454137-001	614.8	676.3	6L	1.1x	DL	11/30/21	C70209
-002	630.6	693.7					C70221
-003	637.5	701.3					C70133
-004	625.0	687.5					C70167
-005	601.0	661.1					C70216
-006	630.1	693.1					C70185
454249-001	646.7	1293.4	1.4L	2x	LB		C10412
-002	653.2	1306.4					C10090
-003	659.0	1318					C10326
-004	712.7	1425.4					C10084
-005	691.3	1282.6					C10400
-006	652.8	1305.6					C10448
-007	699.8	1399.6					C10330
-008	727.9	1455.8					C10455
-009	636.2	1272.4		3x			C10641
-010	370.8	1112.4		2x			C10227
-011	641.0	1282.0					C10410
-012	596.0	1192.0					C10148
454223-001	619.3	928.9		1.5x			C10457
-002	716.6	1074.9					C10313
-003	624.9	937.4					C10692
-004	637.0	955.5					C10234
-005	636.0	954.0					C10324
-006	581.2	871.8					C10286

Pressurization Logbook

Sample ID	Initial Pressure (mm Hg)	Final Pressure (mm Hg)	Canister Volume (L)	Dilution Factor	Analyst Initials	Date	Comments
454223-007	631.1	946.7	1.4L	1.5x	LB	11/30/21	C10440
-008	713.2	1069.8					C10401
-009	676.8	1015.2					C10405
-010	634.2	951.3					C10273
454140-001	732.1	1098.2	1.4L	1.5x	CD	12/1/21	(1.5)(1.5x) = 2.25x total
454230-001	528.2	897.9		1.7x	LB	12/1/21	C10574
-002	594.3	891.5		1.5x			C10561
-003	618.2	927.3					C10699
-004	591.3	887.0					C10605
-005	575.7	863.6					C10575
-006	599.6	899.4					C10548
-007	587.8	881.7					C10595
-008	564.1	846.2					C10535
-009	592.2	888.3					C10709
-010	589.8	884.7					C10702
-011	594.6	891.9					C10569
-012	379.2	910.1		2.4x			C10280
-013	580.2	870.3		1.5x			C10710
-014	589.8	884.7					C10549
-015	590.8	886.2					C10628
-016	561.2	841.8					C10582
453958-002	765.6	1148.4	1.4L	1.5x	CD	12/1/21	(2x)(1.5x) = 3x total
454230-017	572.6	858.9			LB		C10551
-018	610.7	916.1					C10643
-019	584.8	877.2					C10189
-020	564.8	847.2					C10580
454323-001	632.1	1264.2		2x			C10259
-002	641.8	1283.6					C10508
-003	687.5	1375.0					C10719
-004	739.2	1330.6		1.8x			C10099
-005	724.9	1304.8					C10162
-006	630.1	1260.2		2x			C10243
-007	616.0	1232.0					C10519
453958-007	791.5	1187.3	1.4L	1.5x	CD	12/1/21	(2)(1.5) = 3x total
454230-021	612.9	919.4			LB		C10558
-022	577.8	866.7					C10630
-023	594.8	892.2					C10557
-024	605.8	908.7					C10631
454315-001	569.6	1139.2	1.4L	2x	CD	12/2/21	C10252
-002	646.1	1292.2					428
-003	623.4	1246.8					421
-004	602.7	1205.4					429

Air Sample Dilution Logbook

Sample ID	Dilution 1			Dilution 2			Dilution 3			Total DF	Date	Analyst Initials	Comments
	Initial Vol.	Final Vol.	DF1	Initial Vol.	Final Vol.	DF2	Initial Vol.	Final Vol.	DF3				
453817-004	20mL	1L	50x							50x	11/18/21	LB	Bag to bag
-005	↓	↓	↓							↓	↓	↓	↓
-007	↓	↓	↓							↓	↓	↓	↓
-009	↓	↓	↓							↓	↓	↓	↓
-010	↓	↓	↓							↓	↓	BL	↓
-011	↓	↓	↓							↓	↓	LB	↓
-012	↓	↓	↓							↓	↓	DL	↓
-013	↓	↓	↓							↓	↓	LB	↓
-014	↓	↓	↓							↓	↓	DL	↓
453580-001				20ml	1L	50X				37500X	11/19/21	NZ	PF=1.5 500X
453974-001	10mL	1L	100X	10mL	1L	100x				10000X	11/22/21	DL	Serial DL/Bag to bag
-002	↓	↓	↓	↓	↓	↓				↓	↓	↓	↓
-003	↓	↓	↓	↓	↓	↓				↓	↓	↓	↓
453796-002	20mL	1L	50X							75X	↓	↓	PF=1.5X
453964-001	10mL	↓	100x							100x	11/23/21	LB	Bag to bag
453915-003	20ml	↓	50X							75X	↓	NZ	PF=1.5X
006	↓	↓	↓							↓	↓	↓	↓
453974-001	50mL		20X							20X		LB	Bag to bag
-002	↓	↓	↓							↓	↓	↓	↓
-003	↓	↓	↓							↓	↓	↓	↓
454075-001	10mL	↓	100x							100x	↓	↓	↓
454134-001	↓	↓	↓							↓	11/24/21	LB	↓
454058-005	↓	↓	↓							150X	11/30/21	NZ	PF=1.5
454195-001	10mL	1L	100x	100mL	1L	10x				1000x	↓	LB	Bag to bag
454113-003	20ml	↓	50X							75X	12/1/21	NZ	PF=1.5
454327-001	10mL	1L	100x							100x	↓	LB	Bag to bag
454351-002	↓	↓	↓							↓	↓	↓	↓

Sample Raw Data

ENTHALPY SAMPLE USER REPORT FOR EPA TO-15

Inst	: AIR-MS-06	Lab ID	: 455620-001 C10008	Client ID	: SVMP-15S
Seqnum	: 371510273007	Matrix	: Air	Acct	: ELEMENT (JG)
File	: air06_122021007	Batch	: 280281	Time	: 20-DEC-2021 14:59
Cal	: 371497775001	Caldate	: 11-DEC-2021		
IDF	: 2.0	Raw Units	: nL/L	Units	: nL/L
PDF	: 1.0				

Analyte	Raw	Result	RTS	RL	Blank	Flags
Freon 12	2.289	4.6		0.40		u
Freon 114	0.006789	ND		0.40		u
Chloromethane	0.8851	1.8	-0.140	0.40		u x
Vinyl Chloride	0	ND		0.40		u
Bromomethane	0	ND		0.40		u
Chloroethane	0.05935	ND		0.40		u
Trichlorofluoromethane	0.07346	ND		0.40		u
1,1-Dichloroethene	0	ND		0.40		u
Freon 113	0.02917	ND		0.40		u
Acetone	0.6607	ND		2.0	0.13	u
Carbon Disulfide	0.06973	ND		0.40		u
Isopropanol (IPA)	0.6750	ND		2.0	0.067	u
Methylene Chloride	0.1841	ND		0.40	0.34	u
trans-1,2-Dichloroethene	0.007331	ND		0.40		u
MTBE	0.001020	ND		0.40		u
n-Hexane	0.02568	ND		0.40		calc u
1,1-Dichloroethane	0.0002680	ND		0.40		u
Vinyl Acetate	0.02333	ND		2.0		calc u
cis-1,2-Dichloroethene	0.05592	ND		0.40		u
2-Butanone	0.06243	ND		2.0		u
Chloroform	0.03064	ND		0.40		calc u
1,1,1-Trichloroethane	0	ND		0.40		u
Carbon Tetrachloride	0.1438	ND		0.40		u
Benzene	0.03750	ND		0.40		calc u
1,2-Dichloroethane	0.003812	ND		0.40		u
Trichloroethene	0.006529	ND		0.40		u
1,2-Dichloropropane	0.0006463	ND		0.40		u
Bromodichloromethane	0.001992	ND		0.40		u
cis-1,3-Dichloropropene	0	ND		0.40		u
4-Methyl-2-Pentanone	0.01313	ND		0.40		u
Toluene	0.09067	ND		0.40		u
trans-1,3-Dichloropropene	0	ND		0.40		u
1,1,2-Trichloroethane	0	ND		0.40		u
Tetrachloroethene	0.03203	ND		0.40		u
2-Hexanone	0.01582	ND		1.0		u
Dibromochloromethane	0.001704	ND		0.40		u
1,2-Dibromoethane	0.002589	ND		0.40		u
Chlorobenzene	0.005951	ND		0.40		u
Ethylbenzene	0.03629	ND		0.40		u
m,p-Xylenes	0.1139	ND		0.80		u
o-Xylene	0.04410	ND		0.40		u
Styrene	0.1341	ND		0.40		u
Bromoform	0.003901	ND		0.40		u
1,1,2,2-Tetrachloroethane	0.003150	ND		0.40		u
1,1,1,2-Tetrachloroethane	0	ND		0.40		u
4-Ethyltoluene	0.008723	ND		0.40		u
1,3,5-Trimethylbenzene	0.008798	ND		0.40		u
1,2,4-Trimethylbenzene	0.02749	ND		0.40		calc u

Analyte	Raw	Result	RTS	RL	Blank	Flags
1,3-Dichlorobenzene	0.01118	ND		0.40		u
1,4-Dichlorobenzene	0.1693	ND		0.40	0.027	u
Benzyl chloride	0.01089	ND		0.40	0.020	u
1,2-Dichlorobenzene	0.02776	ND		0.40	0.034	calc u
1,2,4-Trichlorobenzene	0.03522	ND		0.40	0.069	u v+
Hexachlorobutadiene	0.008472	ND		0.40		u

No TICs found.

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Bromofluorobenzene	10.29	20.00	20.57	103	60-140	u

ISTD (ICAL air06_121121009)	ICAL Area	SAMPLE Area	%Drift	ICAL RT	SAMPLE RT	Drift
Bromochloromethane	329831	345639	4.79	8.18	8.18	0.00
1,4-Difluorobenzene	1230119	1286623	4.59	9.91	9.91	0.00
Chlorobenzene-d5	754830	708057	-6.20	14.02	14.01	-0.01

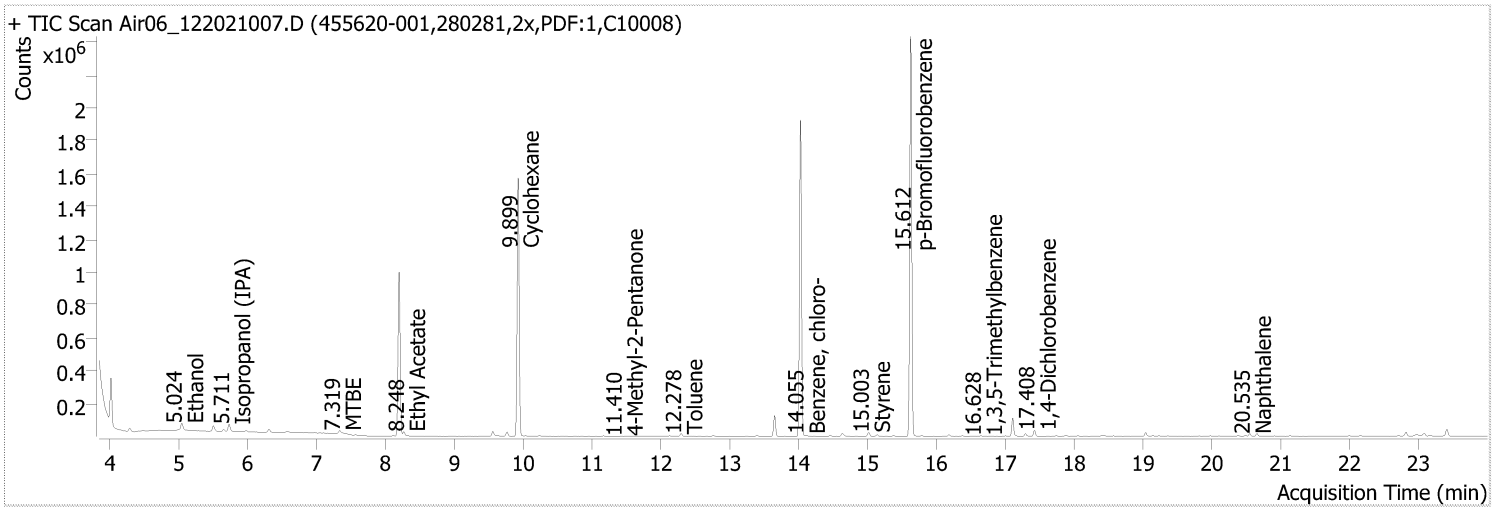
(not in upper half)

Analyst: GSG Date: 01/04/22 Reviewer: SLL Date: 01/04/22

+=high bias calc=check quantitation u=use v=ICV x=false positive

Quantitation Results Report (Not Reviewed)

Data File	Air06_122021007.D	Operator	ZNZ/DJL/LJB
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	12/20/2021 2:59:21 PM
Sample Name	455620-001,280281,2x,PDF:1,C10008	Instrument	Air-MS-06
Vial	5	Multiplier	1.00
DA Method File	TO15_121121.m	Comment	2x400mL
Tune File	bfb.u	Tune Date	12/14/2021 7:38:43 AM
Batch Name	2021 Dec 20 1433 TO15_121121.m.batch.bin	Last Calib Update	12/13/2021 9:29:07 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



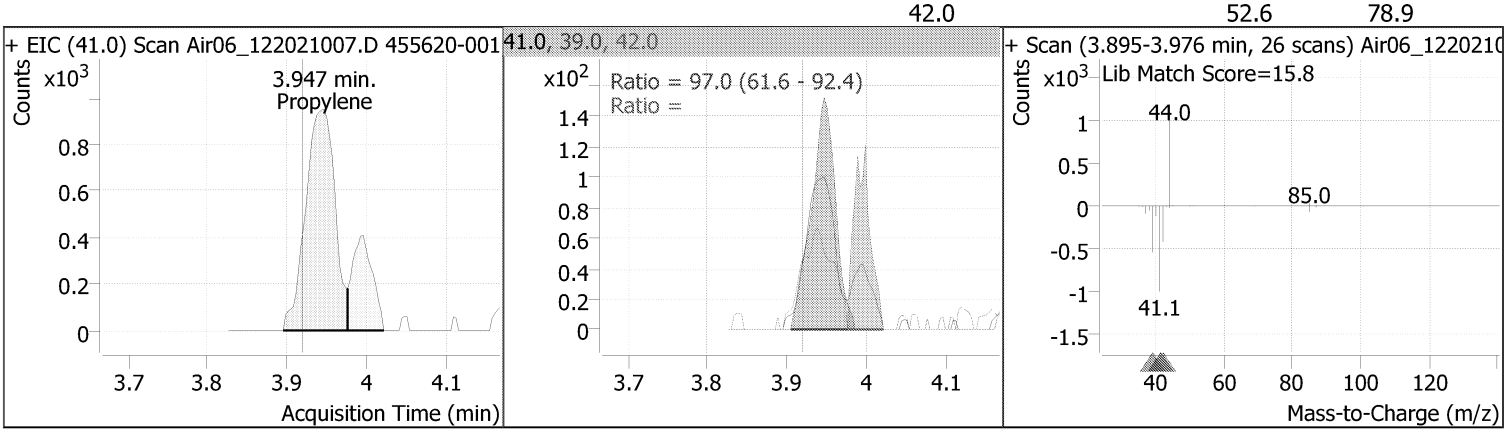
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.180	130.0	345639	10.0000	nL/L		0.000
M 1,4-Difluorobenzene	9.909	114.0	1286623	10.0000	nL/L		-0.003
M Chlorobenzene-d5	14.010	82.0	708057	10.0000	nL/L	#	-0.006
System Monitoring Compounds							
S p-Bromofluorobenzene	15.612	95.0	934852	10.2870	nL/L		-0.006
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 102.87%			
Target Compounds							QValue
T Propylene	3.947	41.0	2443	0.0644	nL/L	#	49
T Freon 12	3.995	85.0	282917	2.2888	nL/L		99
T Chloromethane	3.995	50.0	38278	0.8852	nL/L	#	56
T Freon 114	4.261	135.0	490	0.0068	nL/L		87
T Vinyl Chloride	0.000		0	N.D.			
T 1,3-Butadiene	4.465	54.0	47	0.0014	nL/L	#	1
T Butane	4.562	43.0	2708	0.0389	nL/L	#	88
T Bromomethane	0.000		0	N.D.			
T Chloroethane	4.918	64.0	1202	0.0594	nL/L	#	82
T Ethanol	5.024	45.0	50936	1.8783	nL/L		98
T Vinyl bromide	0.000		0	N.D.			
T Acrolein	5.348	56.0	573	0.0327	nL/L	#	78
T Acetone	5.484	58.0	15465	0.6608	nL/L	#	58
T Trichloromonofluoromethane	5.630	101.0	10278	0.0735	nL/L		98
T Isopropanol (IPA)	5.711	45.0	61765	0.6751	nL/L		98
T n-Pentane	5.960	43.0	5553	0.0619	nL/L		88
T 1,1-Dichloroethene	0.000		0	N.D.			
T Tert-butyl alcohol (TBA)	6.296	59.0	4617	0.0478	nL/L	#	84
T Methylene Chloride	6.293	84.0	6832	0.1841	nL/L		86
T 3-Chloropropene	6.578	76.0	7201	0.4611	nL/L	#	56
T Freon 113	6.549	101.0	2582	0.0292	nL/L		94
T Carbon Disulfide	6.578	76.0	7201	0.0697	nL/L	#	67

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.316	61.0	491	0.0073	nL/L	#	32
T 1,1-Dichloroethane	7.300	63.0	23	0.0003	nL/L		55
T MTBE	7.319	73.0	116	0.0010	nL/L		45
T Vinyl Acetate	7.410	43.0	3303	0.0233	nL/L	#	1
T 2-Butanone	7.679	43.0	6978	0.0624	nL/L		95
T cis-1,2-Dichloroethene	8.248	61.0	3845	0.0559	nL/L	#	37
T Ethyl Acetate	8.248	61.0	3845	0.2474	nL/L	#	20
T n-Hexane	8.245	57.0	1858	0.0257	nL/L	#	85
T Chloroform	8.294	83.0	3022	0.0306	nL/L		79
T Tetrahydrofuran	8.698	72.0	144	0.0089	nL/L	#	1
T 1,2-Dichloroethane	8.967	62.0	302	0.0038	nL/L		69
T 1,1,1-Trichloroethane	0.000		0	N.D.			
T Benzene	9.611	78.0	4114	0.0375	nL/L		95
T Carbon Tetrachloride	9.750	117.0	16061	0.1439	nL/L		97
T Cyclohexane	9.899	84.0	1899	0.0418	nL/L	#	1
T 1,2-Dichloropropane	10.239	63.0	32	0.0006	nL/L	#	1
T Methane, bromodichloro-	10.504	83.0	202	0.0020	nL/L	#	42
T 1,4-Dioxane	10.601	88.0	261	0.0109	nL/L	#	43
T Trichloroethene	10.556	132.0	325	0.0065	nL/L	#	86
T 2,2,4-Trimethylpentane	10.611	57.0	799	0.0034	nL/L	#	84
T Methyl methacrylate	10.734	69.0	87	0.0022	nL/L	#	1
T n-Heptane	10.831	71.0	270	0.0074	nL/L	#	17
T cis-1,3-Dichloropropene	0.000		0	N.D.			
T 4-Methyl-2-Pentanone	11.410	58.0	566	0.0131	nL/L	#	79
T trans-1,3-Dichloropropene	0.000		0	N.D.			
T 1,1,2-Trichloroethane	0.000		0	N.D.			
T Toluene	12.278	91.0	12622	0.0907	nL/L		98
T TPH Gasoline (C3 to C12)	12.393	165.0	8242871	0.8202	nL/L		100
T 2-Hexanone	12.540	58.0	852	0.0158	nL/L	#	72
T Dibromochloromethane	12.653	129.0	167	0.0017	nL/L	#	44
T 1,2-Dibromoethane	12.928	108.9	193	0.0026	nL/L	#	67
T Tetrachloroethene	13.378	166.0	2618	0.0320	nL/L		94
T 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
T Benzene, chloro-	14.055	112.0	600	0.0060	nL/L	#	35
T Ethylbenzene	14.443	91.0	5910	0.0363	nL/L	#	95
T TPH Gasoline (C6 to C12)	14.518	165.0	1804741	0.2413	nL/L		100
T m,p-Xylenes	14.621	91.0	15640	0.1139	nL/L		97
T Bromoform	14.696	173.0	423	0.0039	nL/L	#	1
T Styrene	15.003	104.0	12337	0.1341	nL/L		93
T 1,1,2,2-Tetrachloroethane	15.110	83.0	310	0.0031	nL/L		81
T o-Xylene	15.123	91.0	6287	0.0441	nL/L		98
T n-Nonane	15.359	85.0	429	0.0148	nL/L	#	67
T Isopropylbenzene	15.774	105.0	3697	0.0191	nL/L	#	97
T 2-Chlorotoluene	16.321	126.0	179	0.0041	nL/L	#	1
T n-Propylbenzene	16.363	120.0	866	0.0178	nL/L		97
T 4-Ethyltoluene	16.534	105.1	1603	0.0087	nL/L	#	90
T 1,3,5-Trimethylbenzene	16.628	105.0	1472	0.0088	nL/L	#	81
T 1,2,4-Trimethylbenzene	17.136	105.0	4301	0.0275	nL/L		97
T Benzyl chloride	17.298	91.0	1469	0.0109	nL/L	#	95
T 1,3-Dichlorobenzene	17.324	146.0	1210	0.0112	nL/L		92
T 1,4-Dichlorobenzene	17.408	146.0	18092	0.1694	nL/L		98
T 1,2-Dichlorobenzene	17.861	146.0	2894	0.0278	nL/L	#	88
T 1,2,4-Trichlorobenzene	20.366	179.9	2612	0.0352	nL/L		98
T Naphthalene	20.535	128.0	14102	0.1224	nL/L		98
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.117	225.0	1031	0.0085	nL/L		94

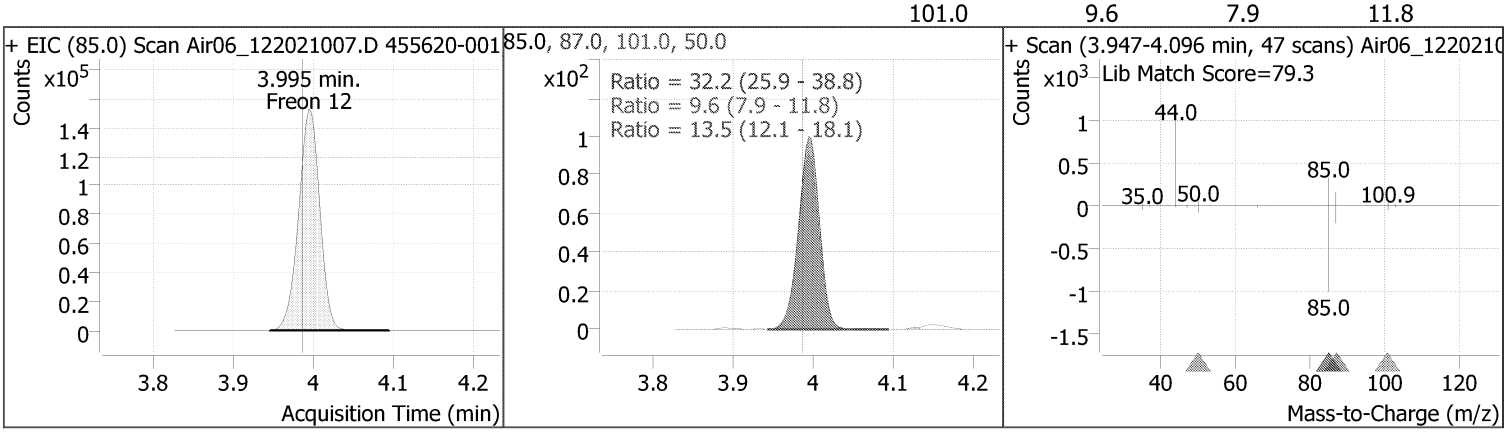
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

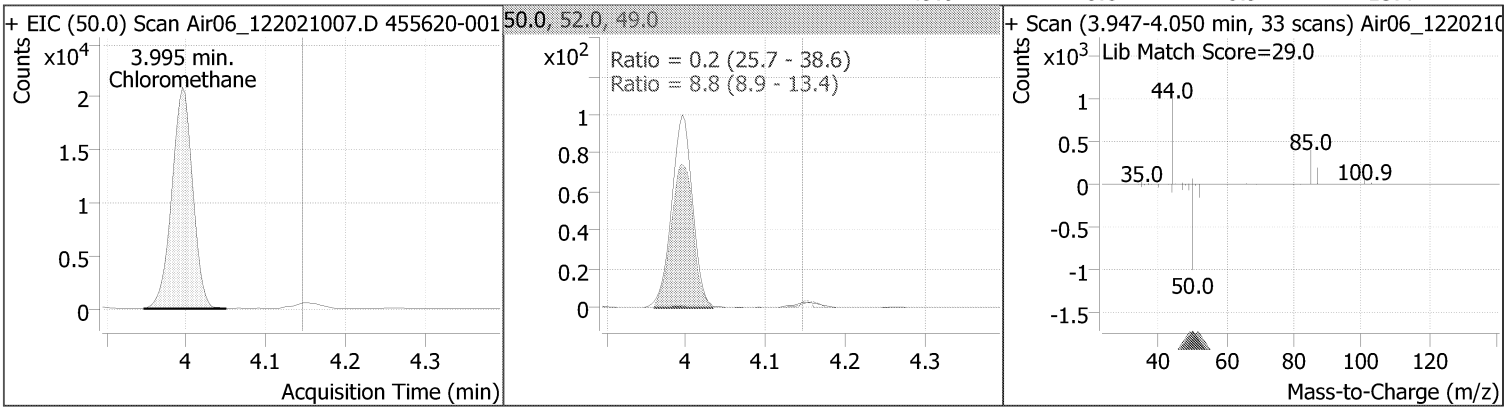
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.0644	3.95	0.03	2443	39.0	97.0	61.6	92.4
					42.0		52.6	78.9



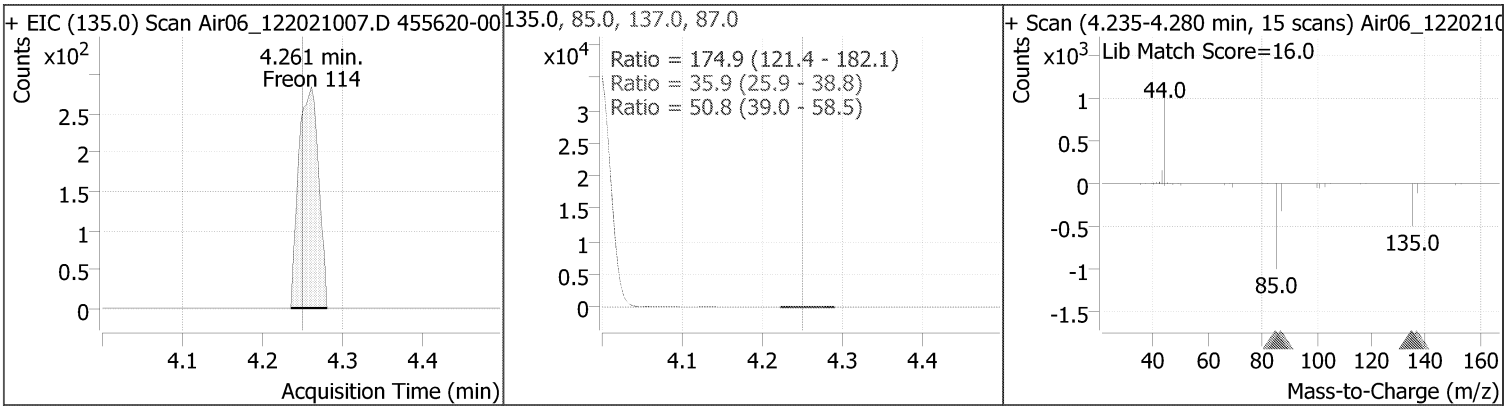
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	2.2888	4.00	0.01	282917	87.0	32.2	25.9	38.8
					50.0	13.5	12.1	18.1
					101.0	9.6	7.9	11.8



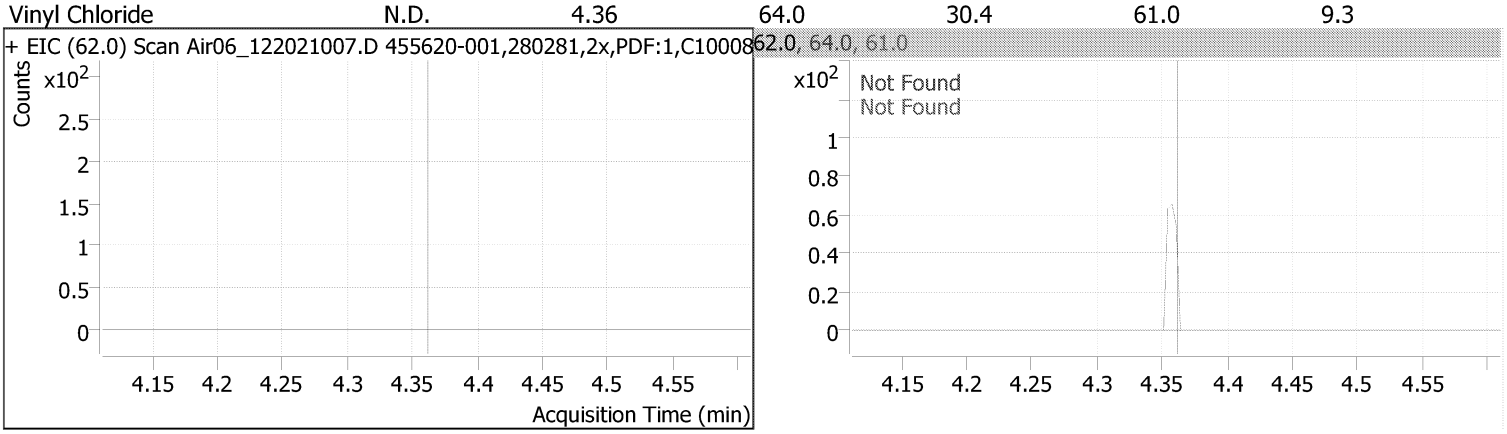
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	0.8852	4.00	-0.15	38278	52.0	0.2	25.7	38.6
					49.0	8.8	8.9	13.4



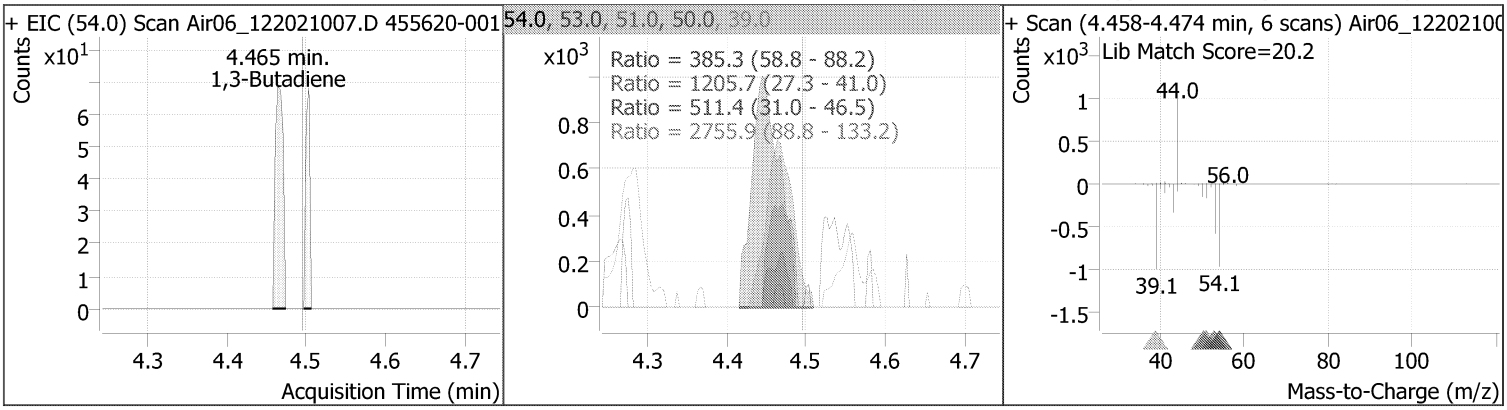
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	0.0068	4.26	0.01	490	85.0	174.9	121.4	182.1
					87.0	50.8	39.0	58.5
					137.0	35.9	25.9	38.8



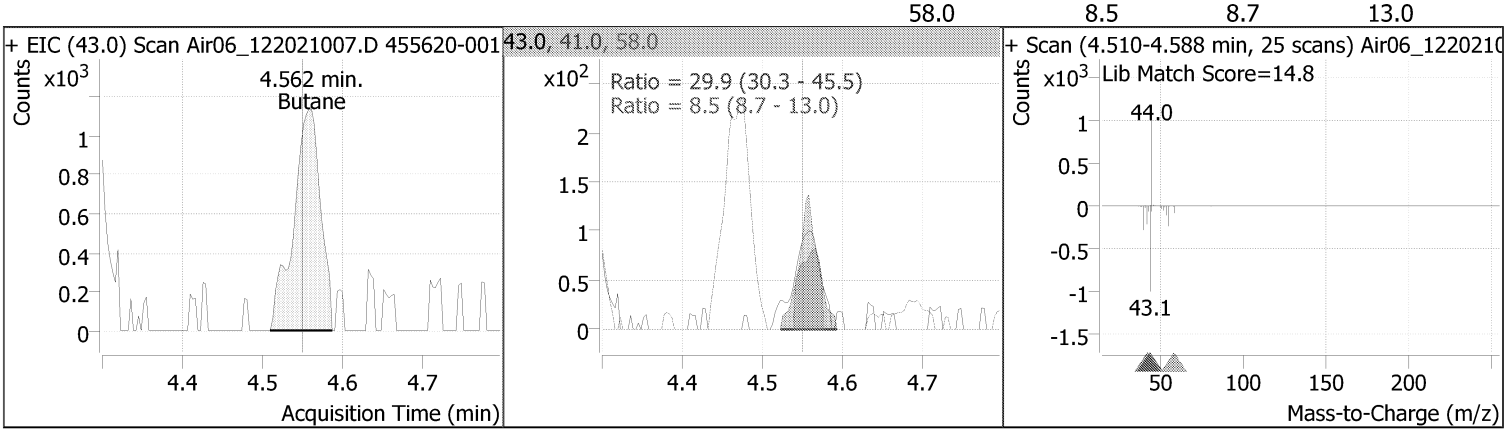
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl Chloride	N.D.	4.36	64.0	30.4	61.0	9.3



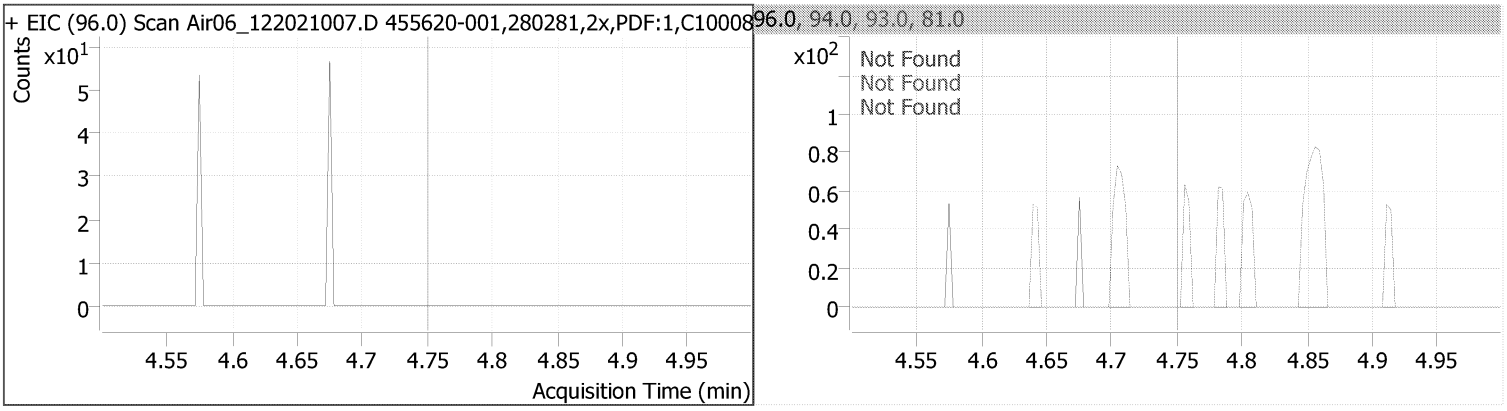
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	0.0014	4.46	-0.03	47	39.0	2755.9	88.8	133.2
					53.0	385.3	58.8	88.2
					50.0	511.4	31.0	46.5
					51.0	1205.7	27.3	41.0



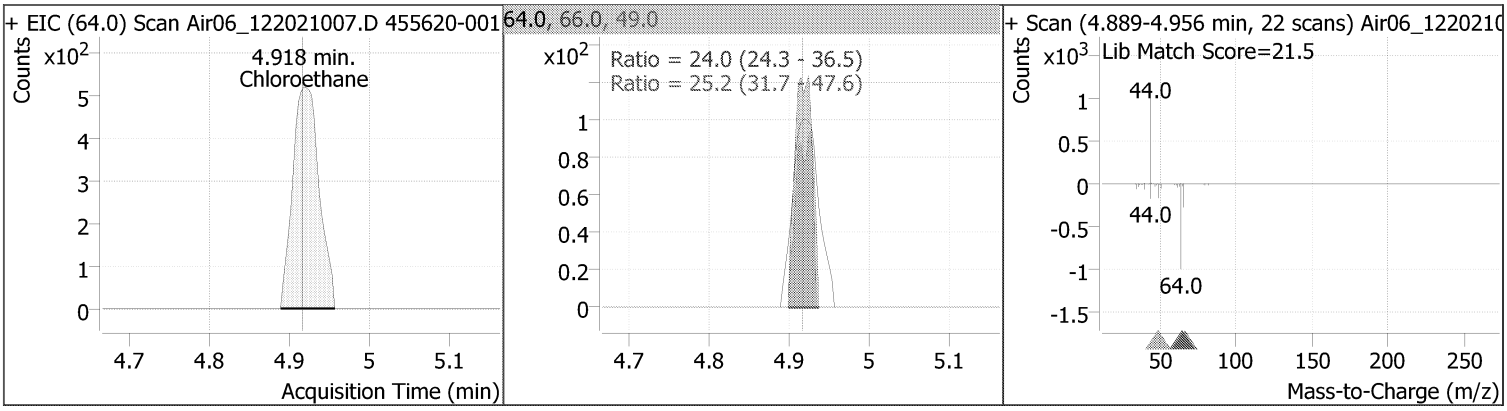
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	0.0389	4.56	0.01	2708	41.0	29.9	30.3	45.5
					58.0	8.5	8.7	13.0



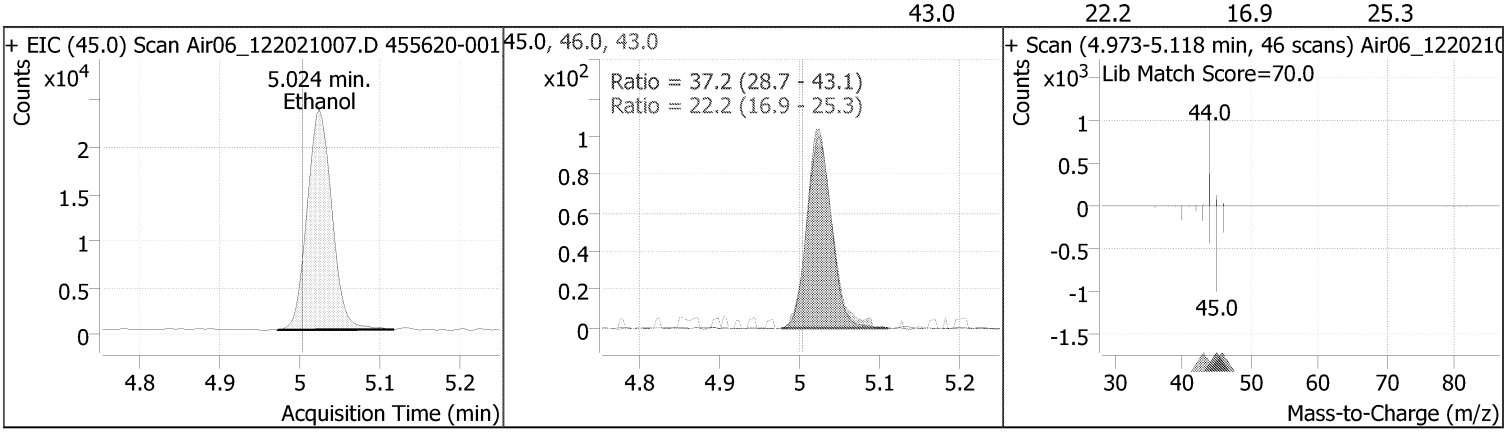
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Bromomethane	N.D.	4.75	94.0	107.8	93.0	23.9	81.0	23.8



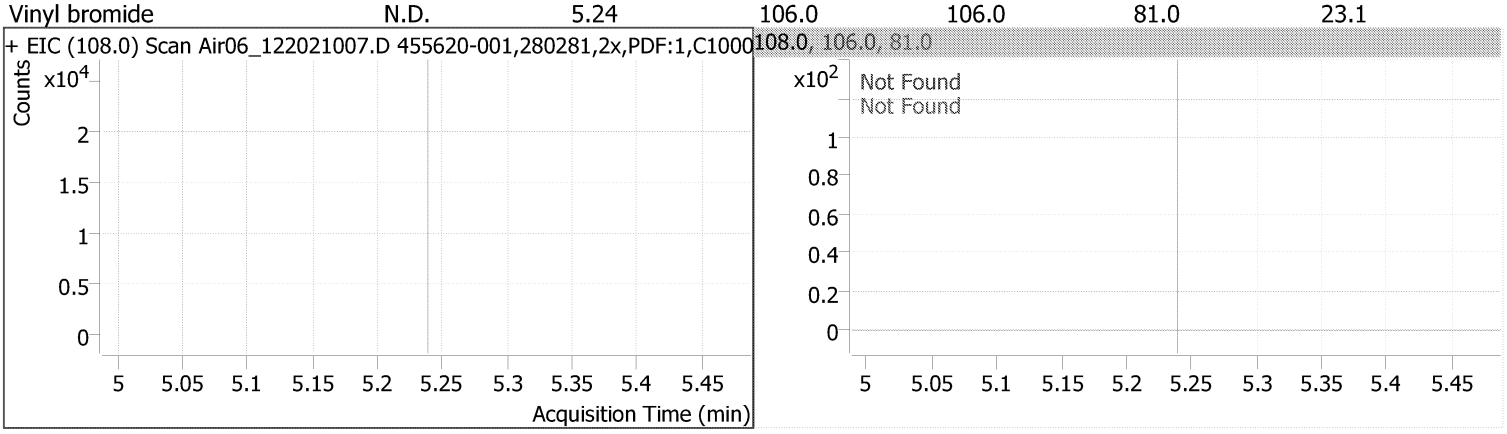
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	0.0594	4.92	0.00	1202	49.0	25.2	31.7	47.6
					66.0	24.0	24.3	36.5



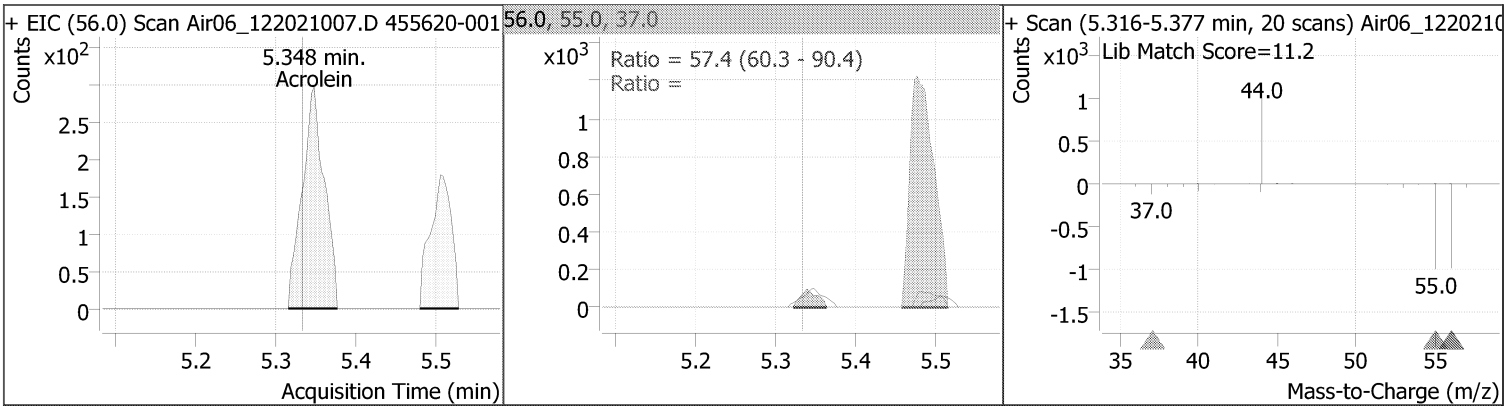
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	1.8783	5.02	0.02	50936	46.0	37.2	28.7	43.1
					43.0	22.2	16.9	25.3



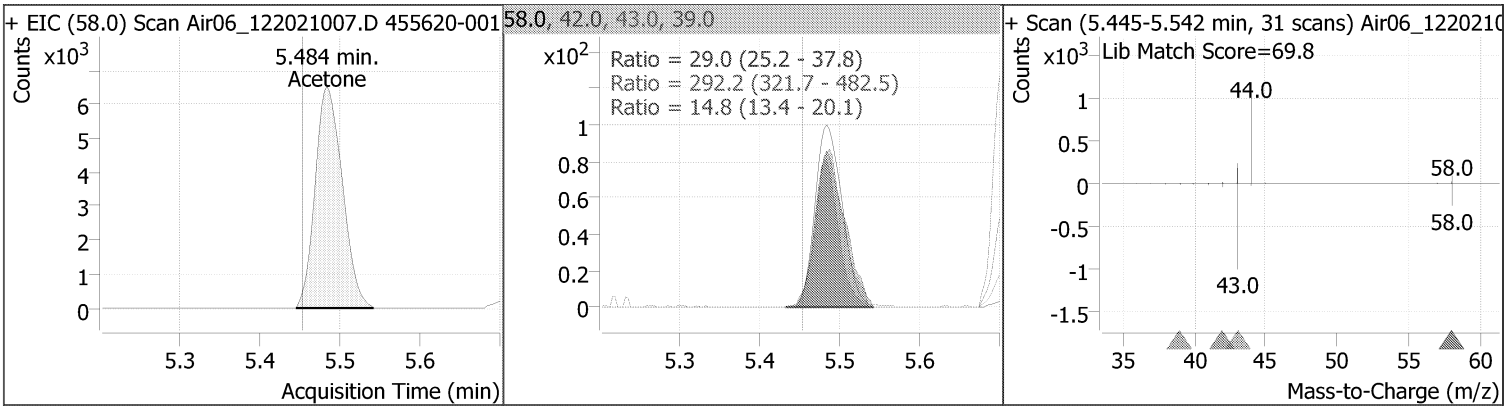
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl bromide	N.D.	5.24	106.0	106.0	81.0	23.1



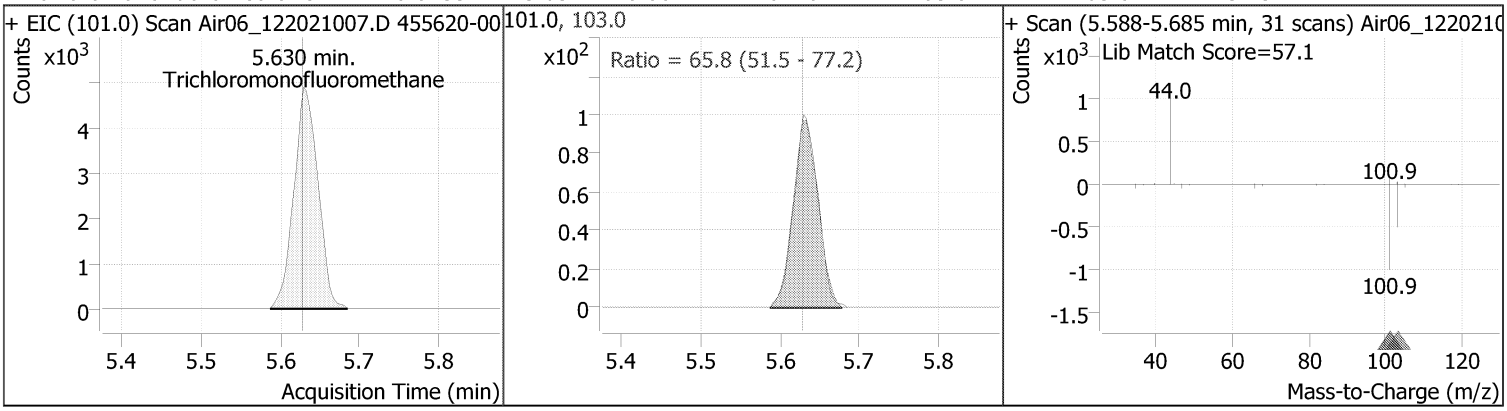
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	0.0327	5.35	0.02	573	55.0	57.4	60.3	90.4
					37.0		9.1	13.7



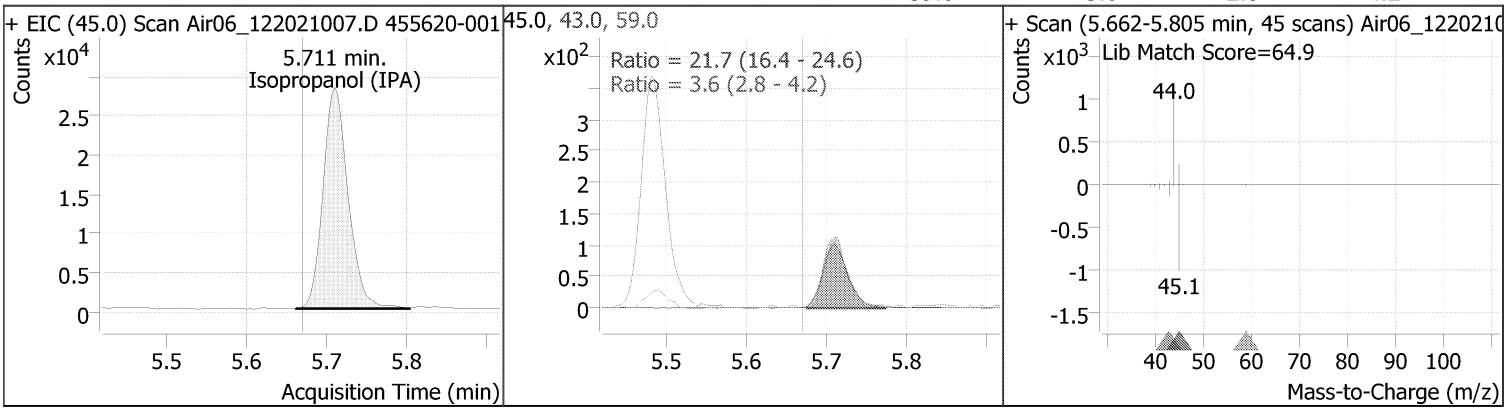
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	0.6608	5.48	0.03	15465	43.0	292.2	321.7	482.5
					42.0	29.0	25.2	37.8
					39.0	14.8	13.4	20.1



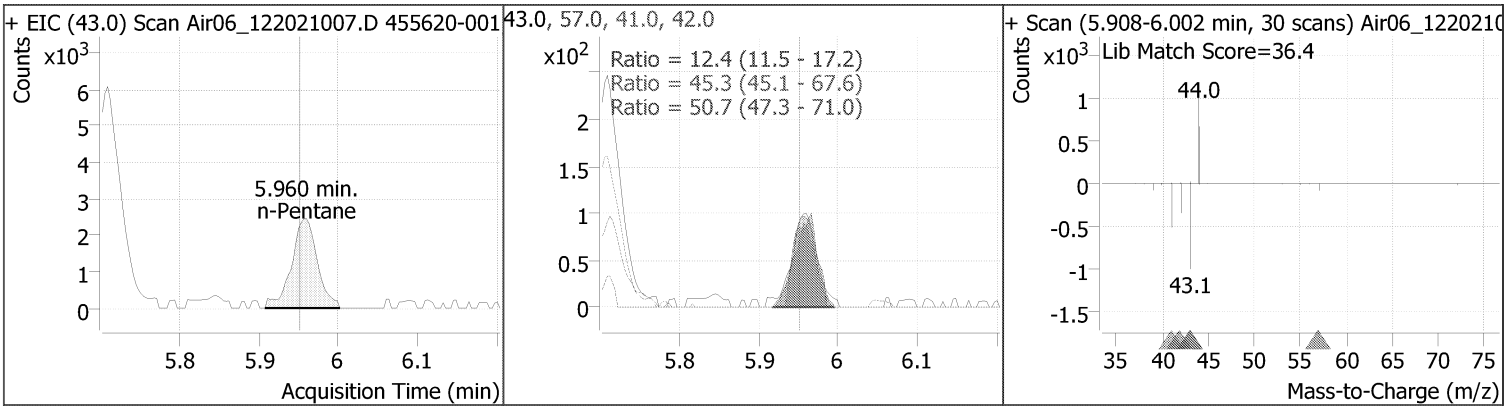
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	0.0735	5.63	0.00	10278	103.0	65.8	51.5	77.2



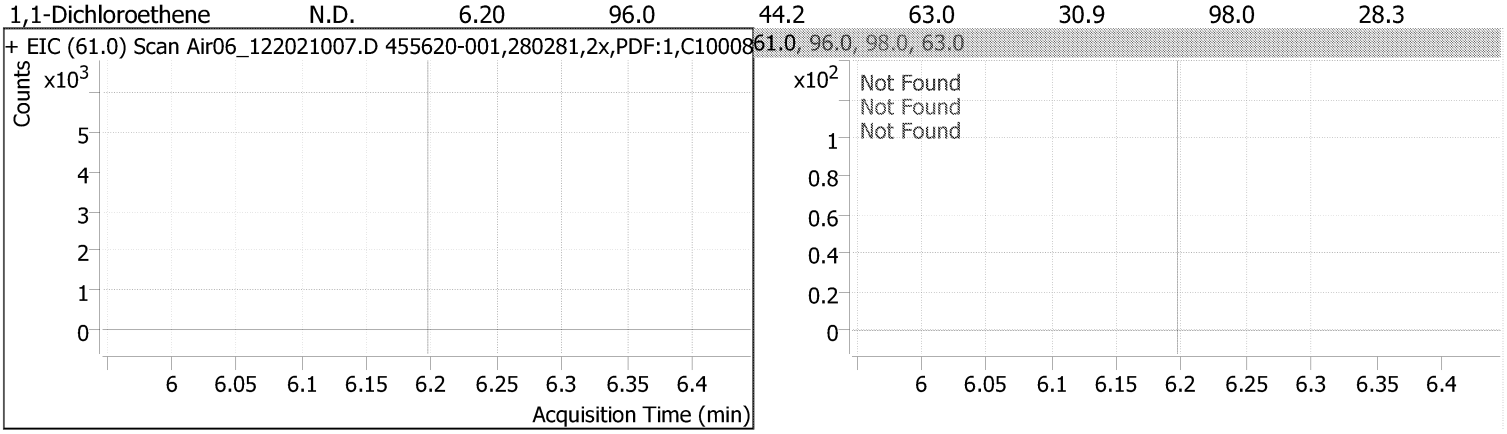
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.6751	5.71	0.04	61765	43.0	21.7	16.4	24.6
					59.0	3.6	2.8	4.2



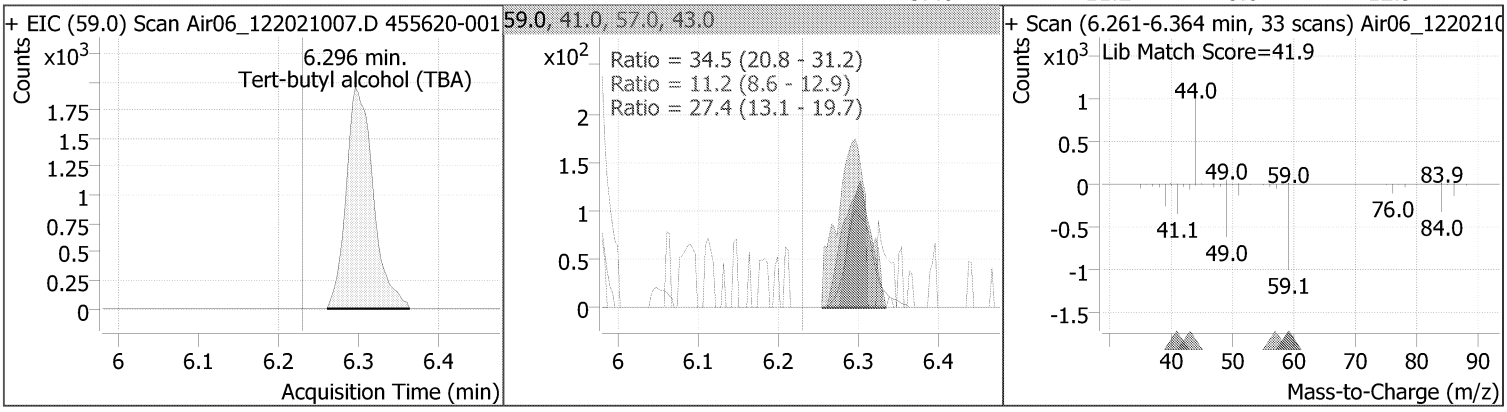
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.0619	5.96	0.01	5553	42.0	50.7	47.3	71.0
					41.0	45.3	45.1	67.6
					57.0	12.4	11.5	17.2



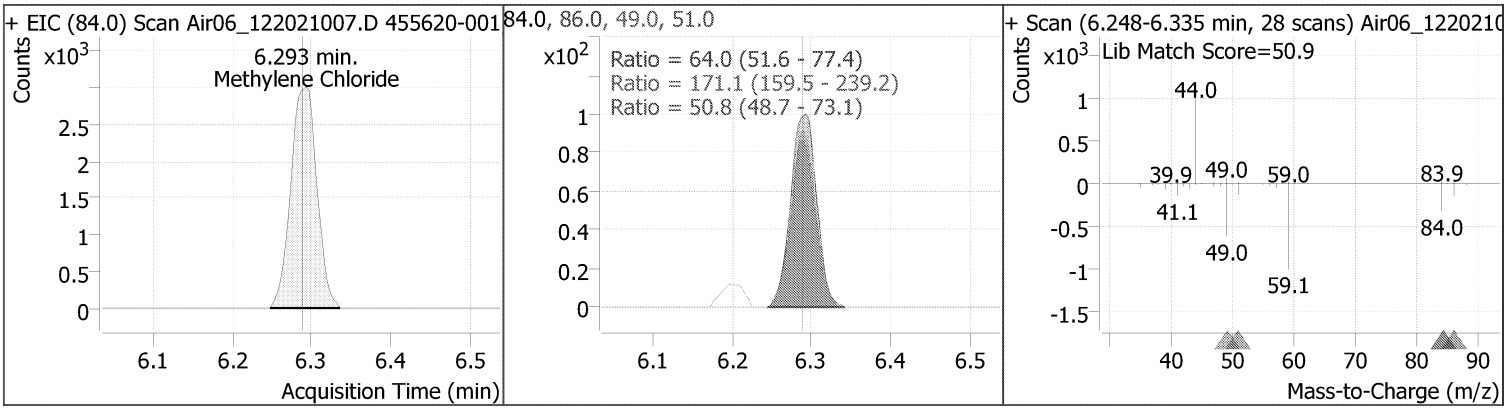
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethene	N.D.	6.20	96.0	44.2	63.0	30.9	98.0	28.3



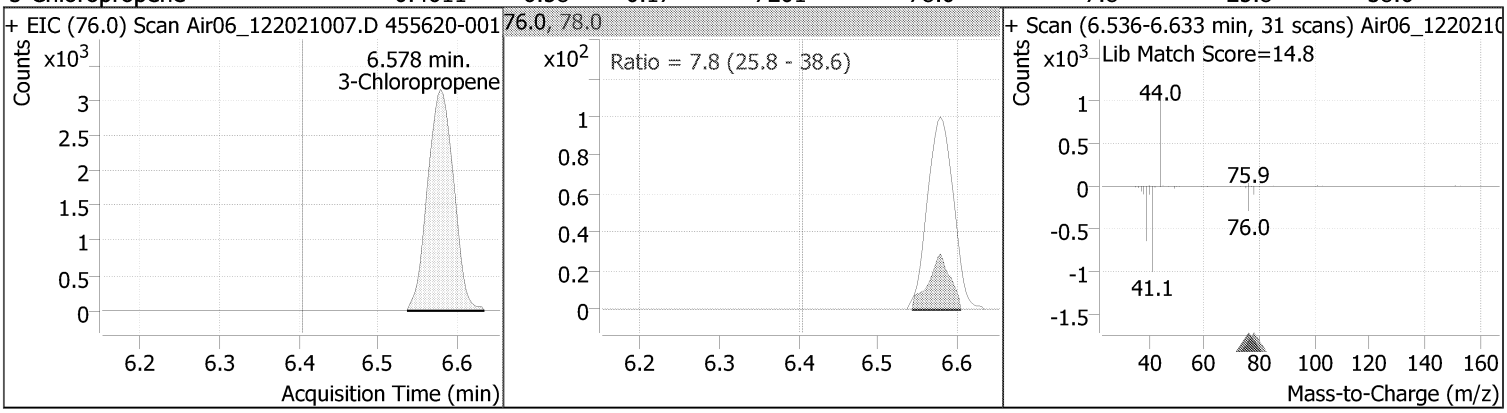
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.0478	6.30	0.07	4617	41.0	34.5	20.8	31.2
					43.0	27.4	13.1	19.7
					57.0	11.2	8.6	12.9



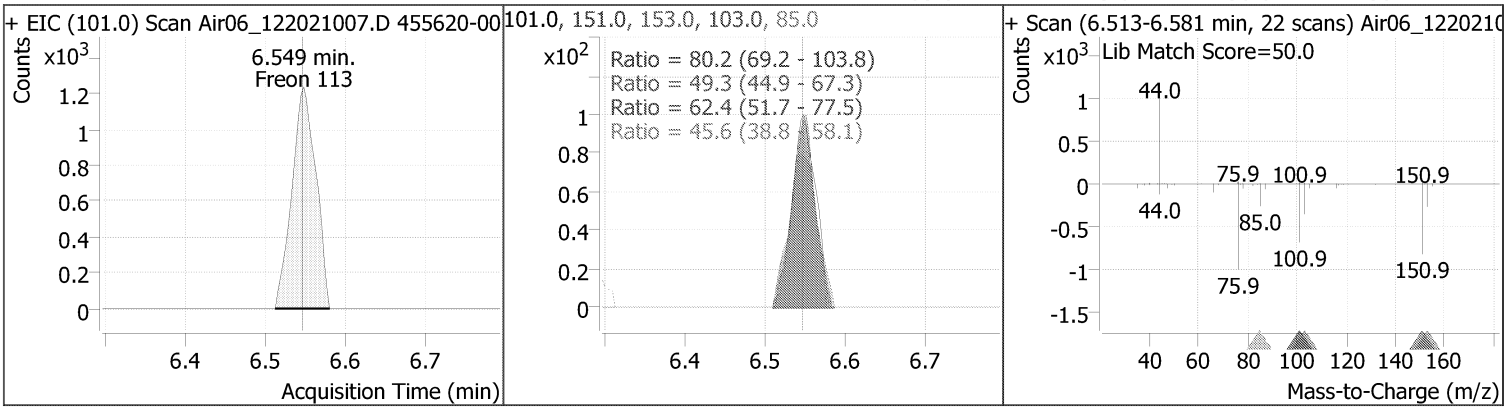
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.1841	6.29	0.01	6832	49.0	171.1	159.5	239.2
					86.0	64.0	51.6	77.4
					51.0	50.8	48.7	73.1



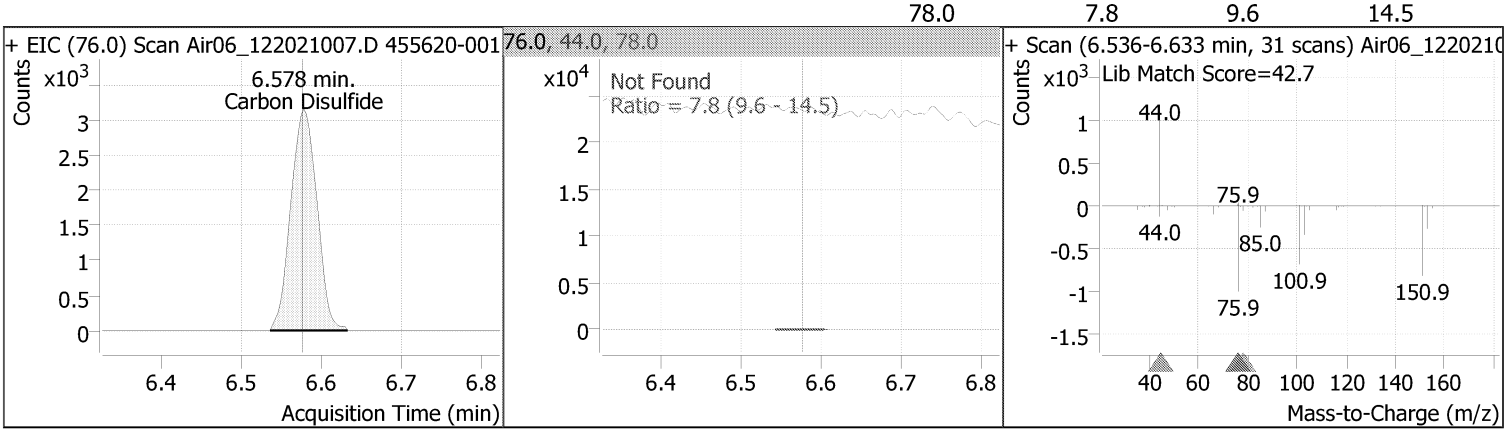
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	0.4611	6.58	0.17	7201	78.0	7.8	25.8	38.6



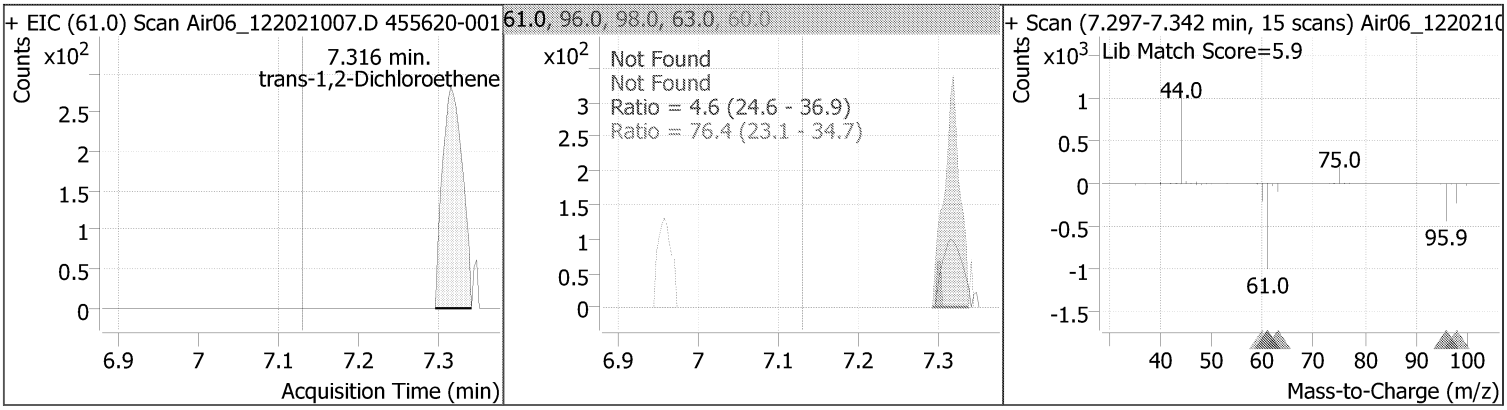
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	0.0292	6.55	0.00	2582	151.0	80.2	69.2	103.8
					103.0	62.4	51.7	77.5
					153.0	49.3	44.9	67.3
					85.0	45.6	38.8	58.1



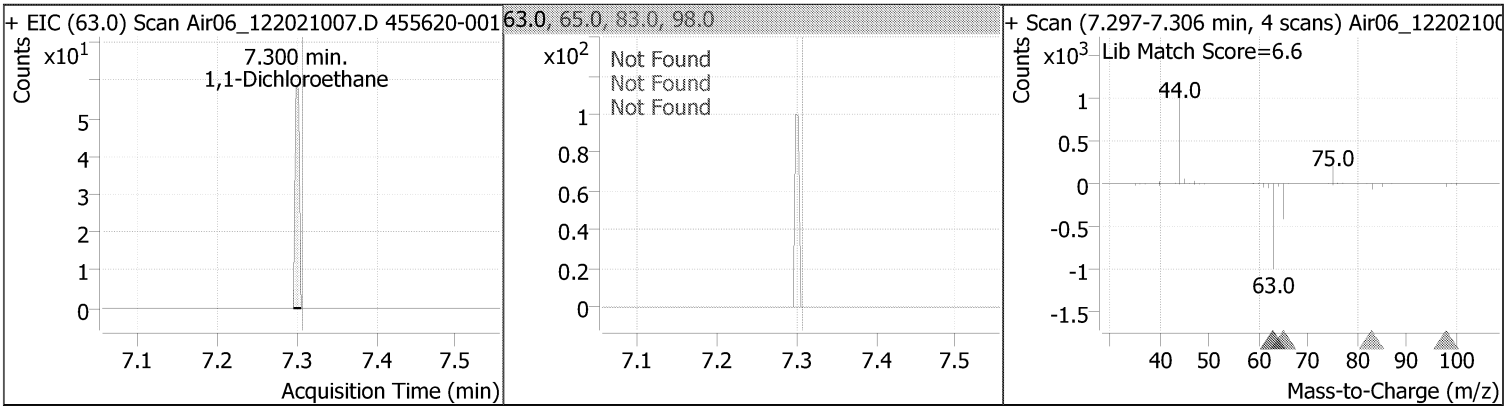
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.0697	6.58	0.00	7201	44.0		17.2	25.7
					78.0	7.8	9.6	14.5



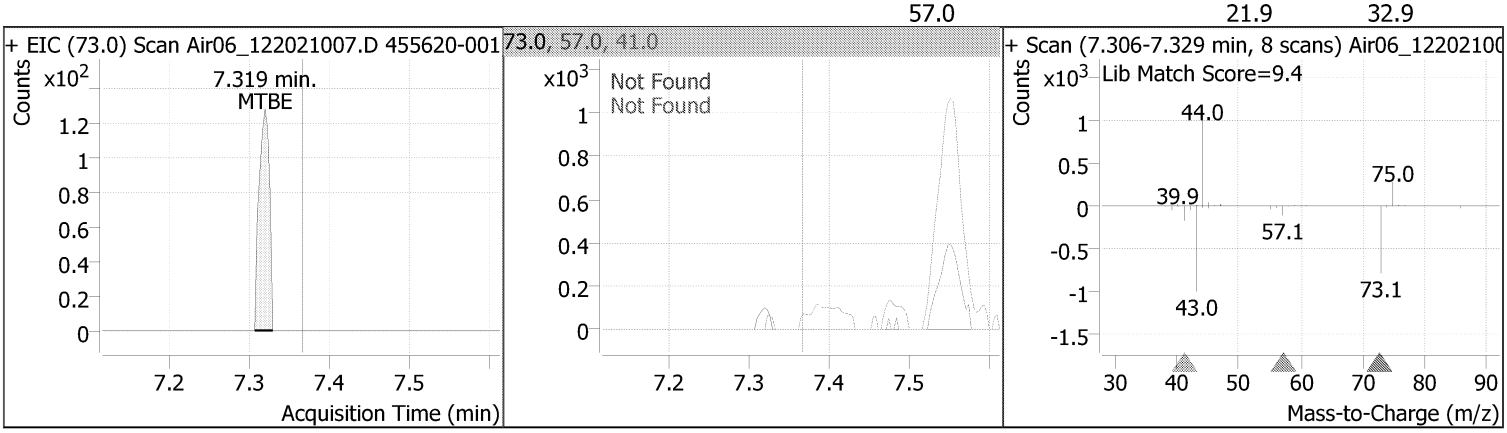
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.0073	7.32	0.19	491	96.0		41.3	61.9
					98.0		26.5	39.8
					63.0	4.6	24.6	36.9
					60.0	76.4	23.1	34.7



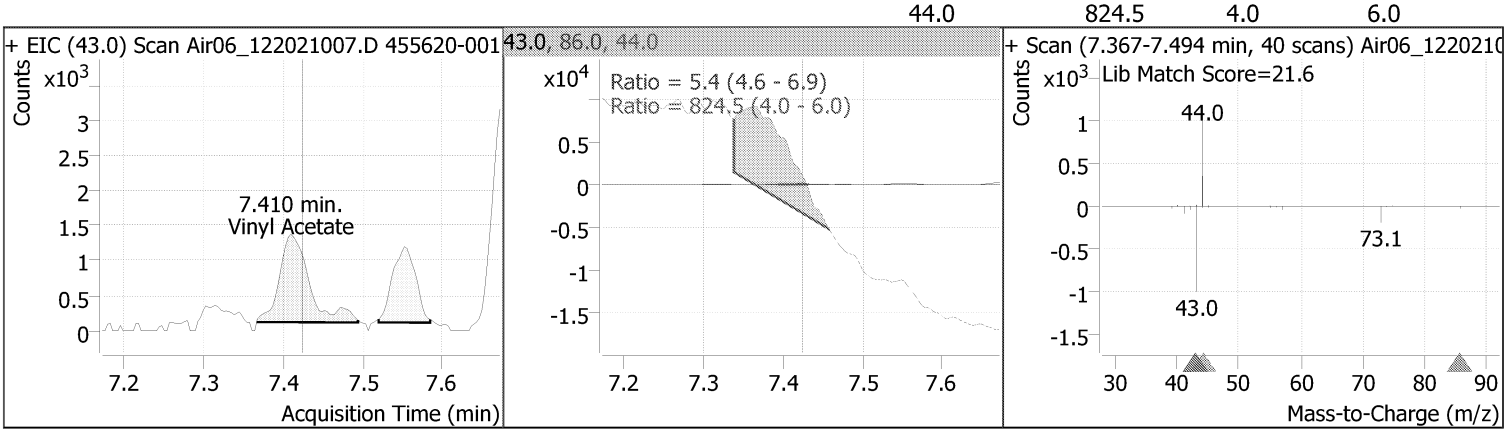
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	0.0003	7.30	-0.01	23	65.0		24.1	36.1
					83.0		9.9	14.8
					98.0		3.6	5.5



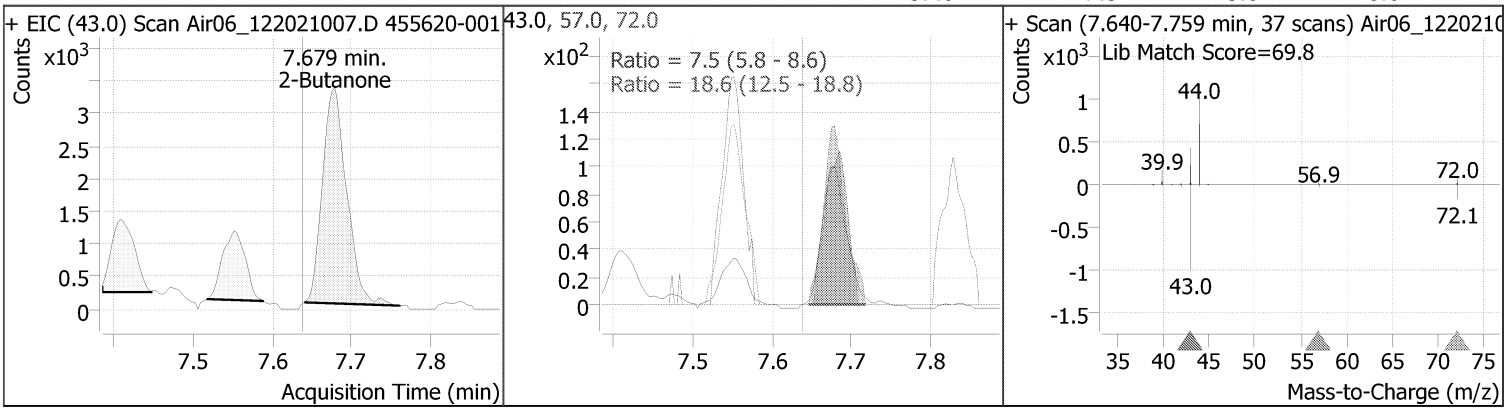
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	0.0010	7.32	-0.05	116	41.0		25.7	38.5
					57.0		21.9	32.9



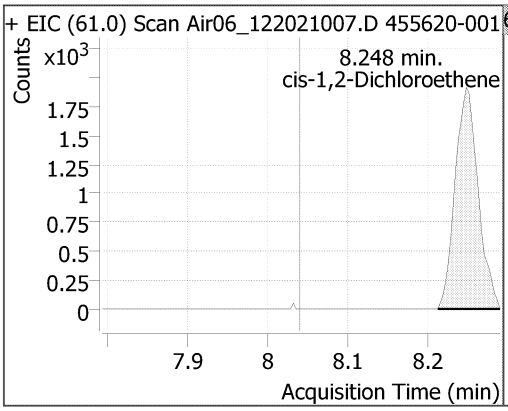
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.0233	7.41	-0.01	3303	86.0	5.4	4.6	6.9
					44.0	824.5	4.0	6.0

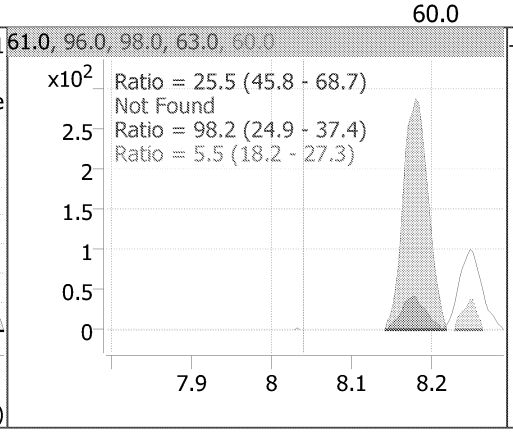


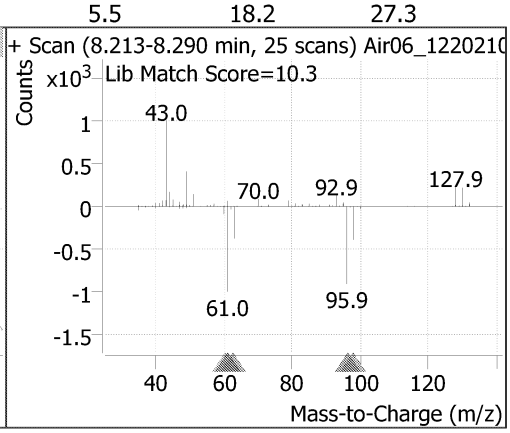
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.0624	7.68	0.04	6978	72.0	18.6	12.5	18.8
					57.0	7.5	5.8	8.6



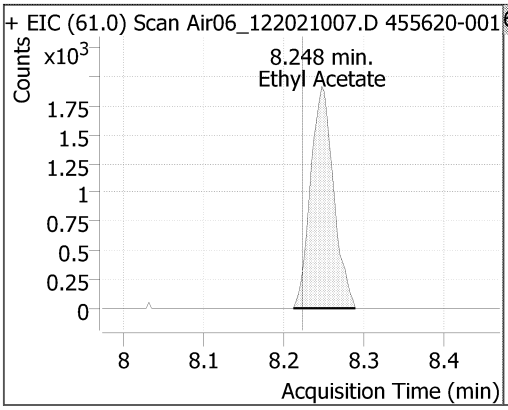
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.0559	8.25	0.21	3845	96.0	25.5	45.8	68.7
					98.0		29.3	43.9
					63.0	98.2	24.9	37.4
					60.0	5.5	18.2	27.3

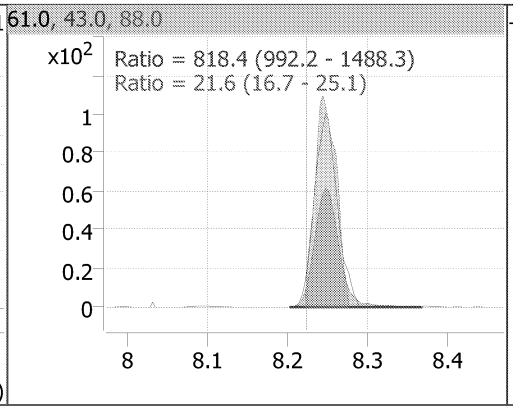


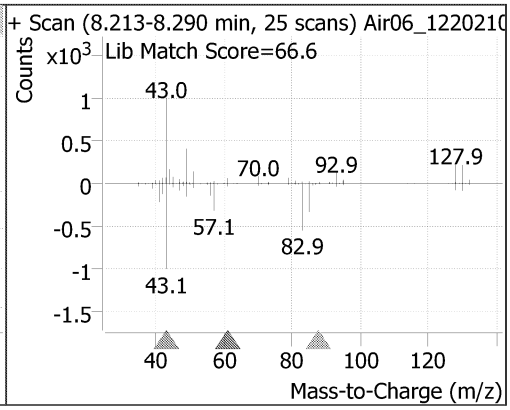




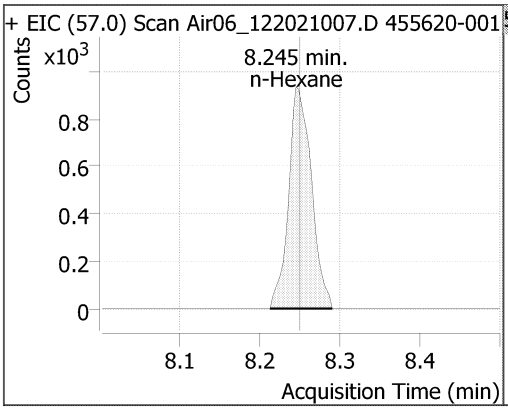
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	0.2474	8.25	0.03	3845	43.0	818.4	992.2	1488.3
					88.0	21.6	16.7	25.1

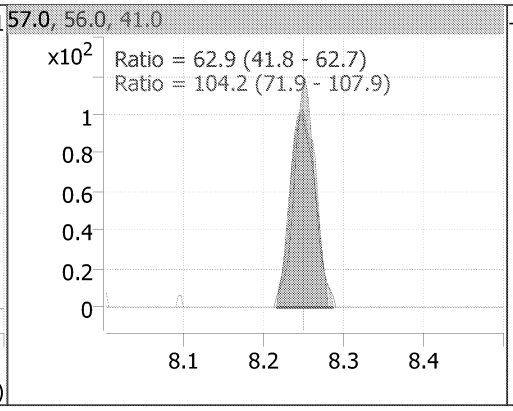


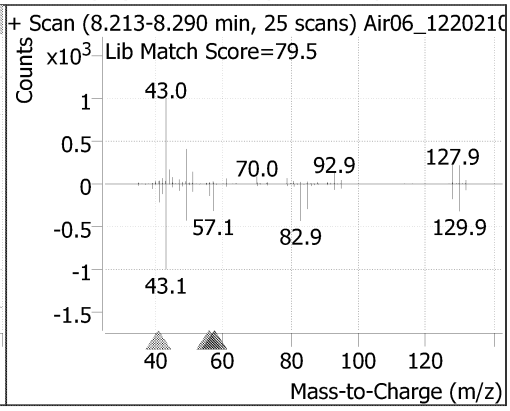




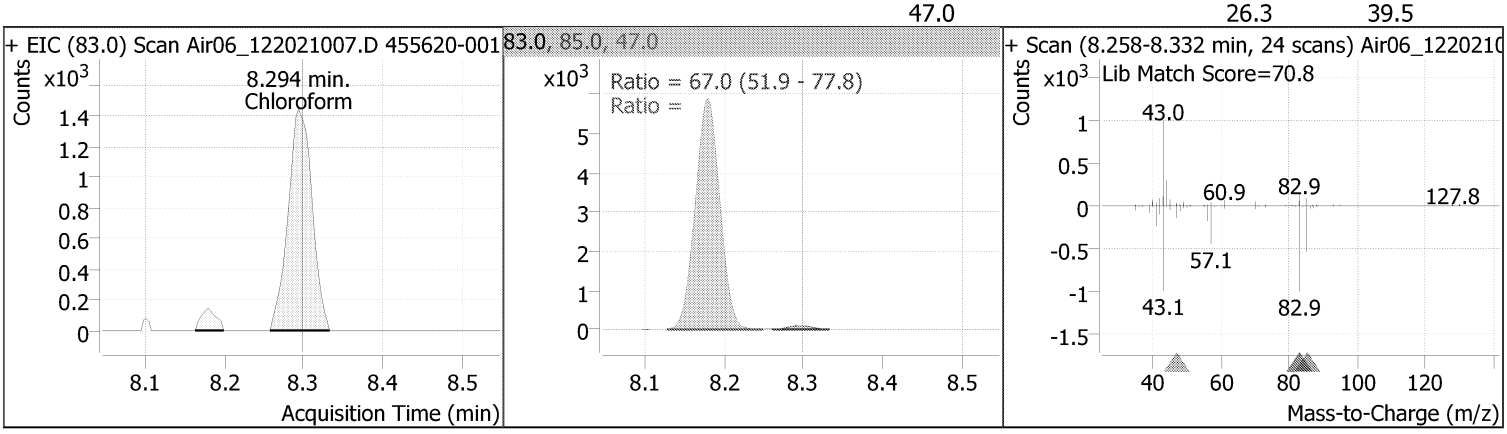
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.0257	8.24	-0.01	1858	41.0	104.2	71.9	107.9
					56.0	62.9	41.8	62.7



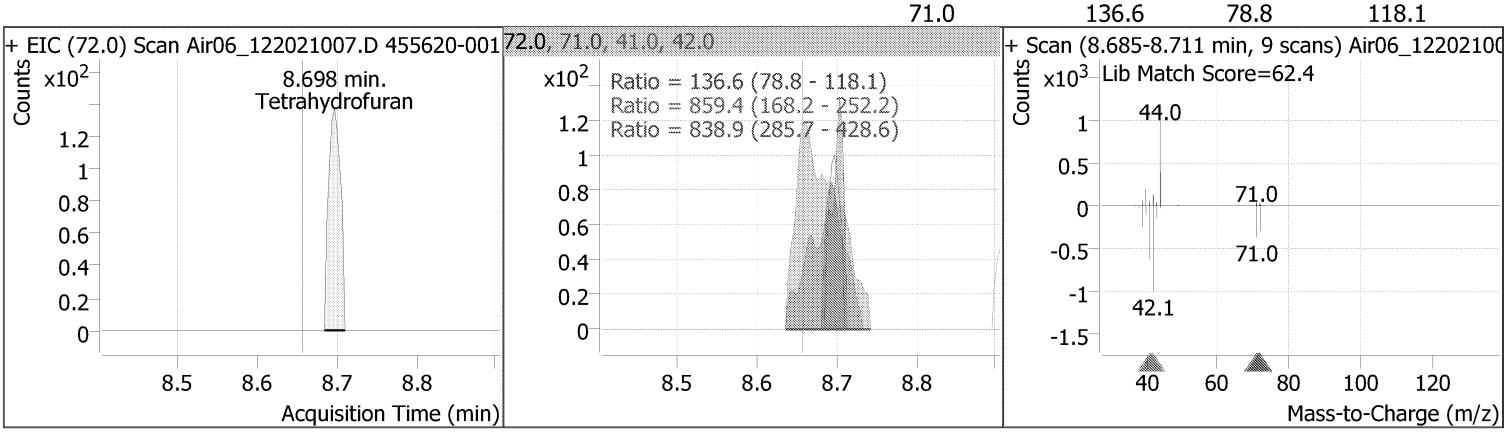




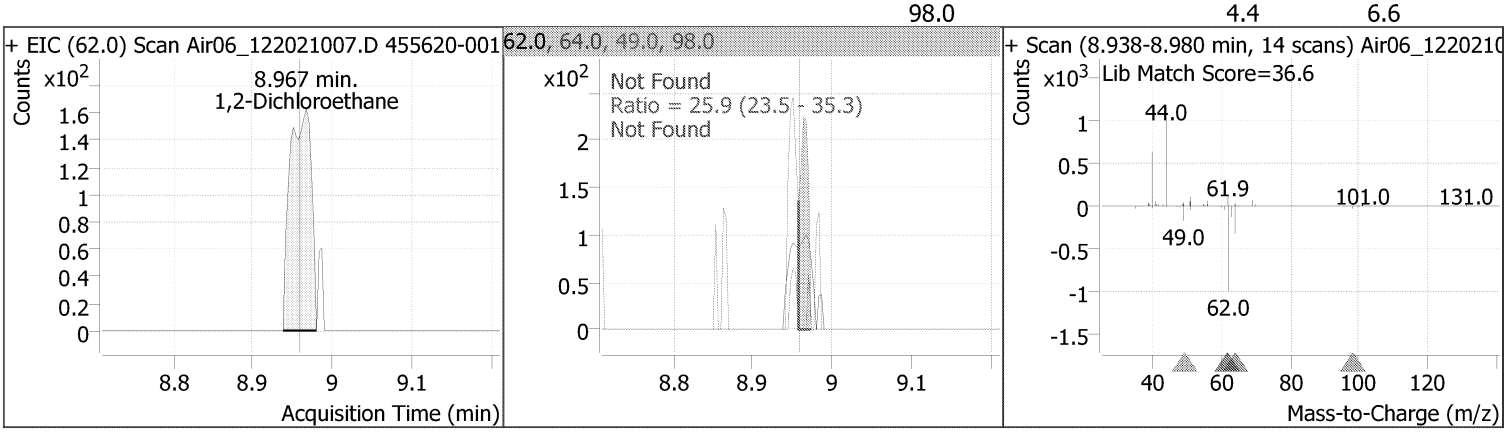
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.0306	8.29	0.00	3022	85.0	67.0	51.9	77.8
					47.0		26.3	39.5



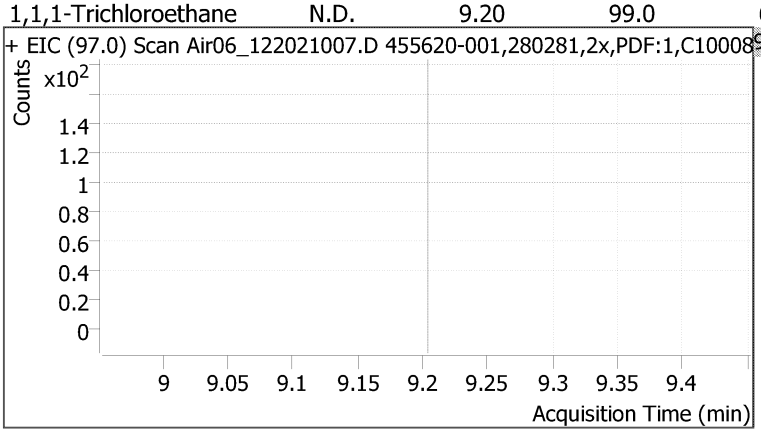
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	0.0089	8.70	0.04	144	42.0	838.9	285.7	428.6
					41.0	859.4	168.2	252.2
					71.0	136.6	78.8	118.1

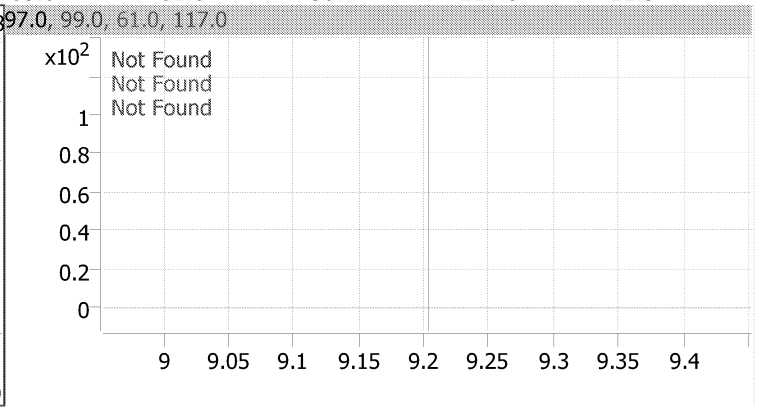


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	0.0038	8.97	0.01	302	64.0		24.8	37.2
					49.0	25.9	23.5	35.3
					98.0		4.4	6.6

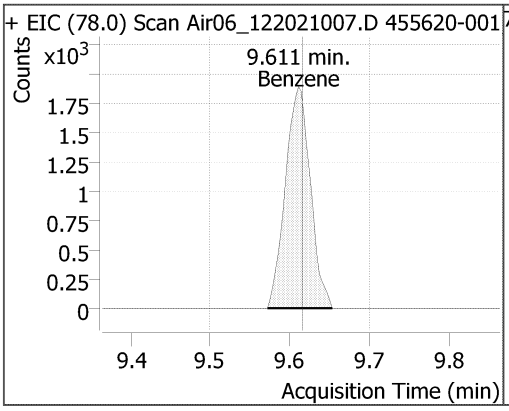


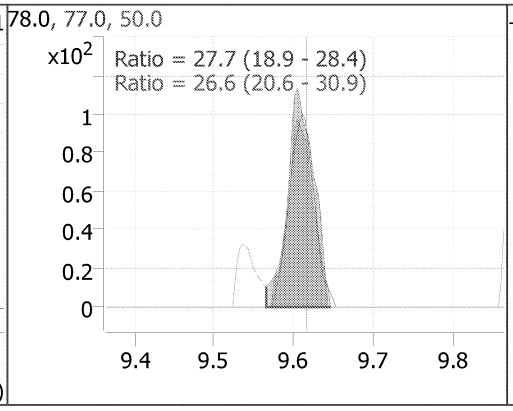
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1-Trichloroethane	N.D.	9.20	99.0	65.0	61.0	50.4	117.0	11.3

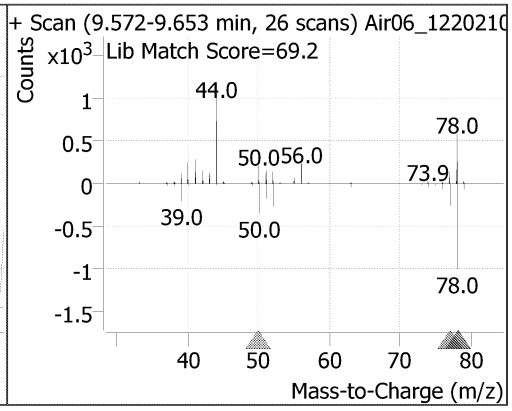




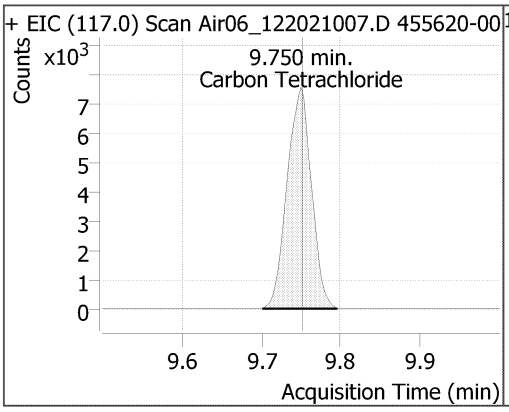
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.0375	9.61	0.00	4114	50.0	26.6	20.6	30.9
					77.0	27.7	18.9	28.4

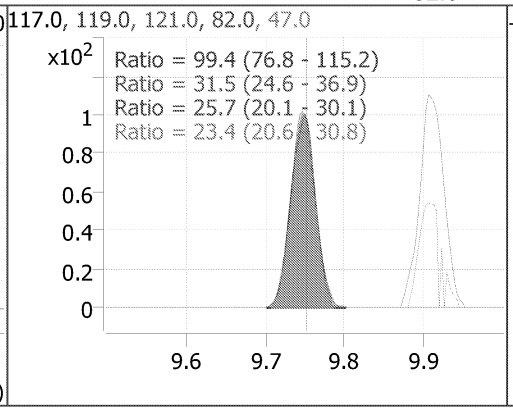


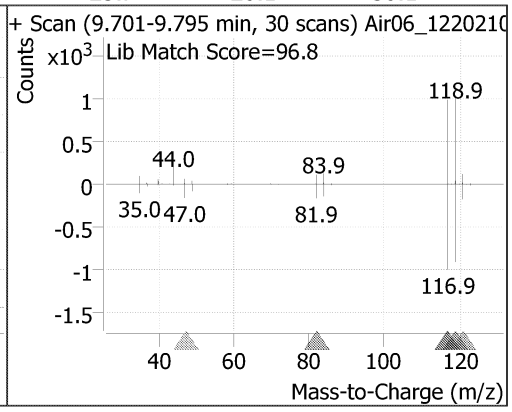




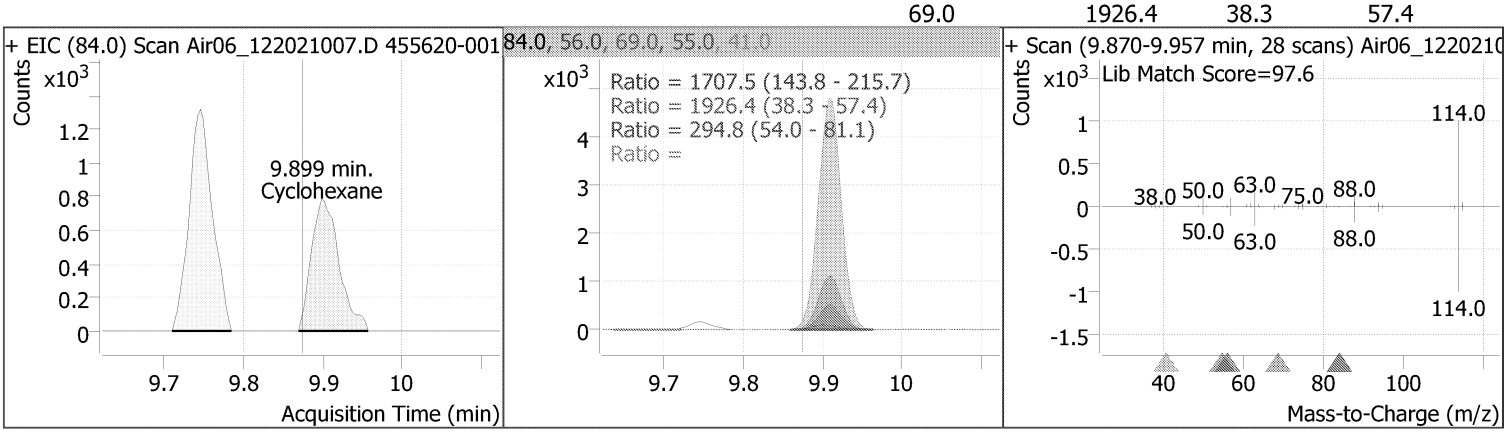
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	0.1439	9.75	0.00	16061	119.0	99.4	76.8	115.2
					121.0	31.5	24.6	36.9
					47.0	23.4	20.6	30.8
					82.0	25.7	20.1	30.1



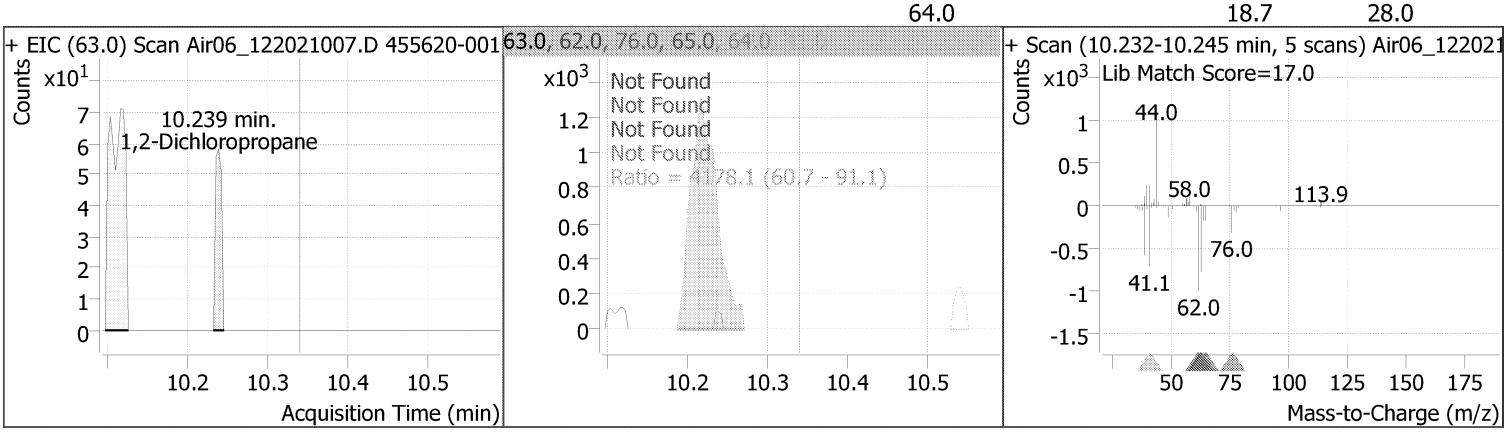




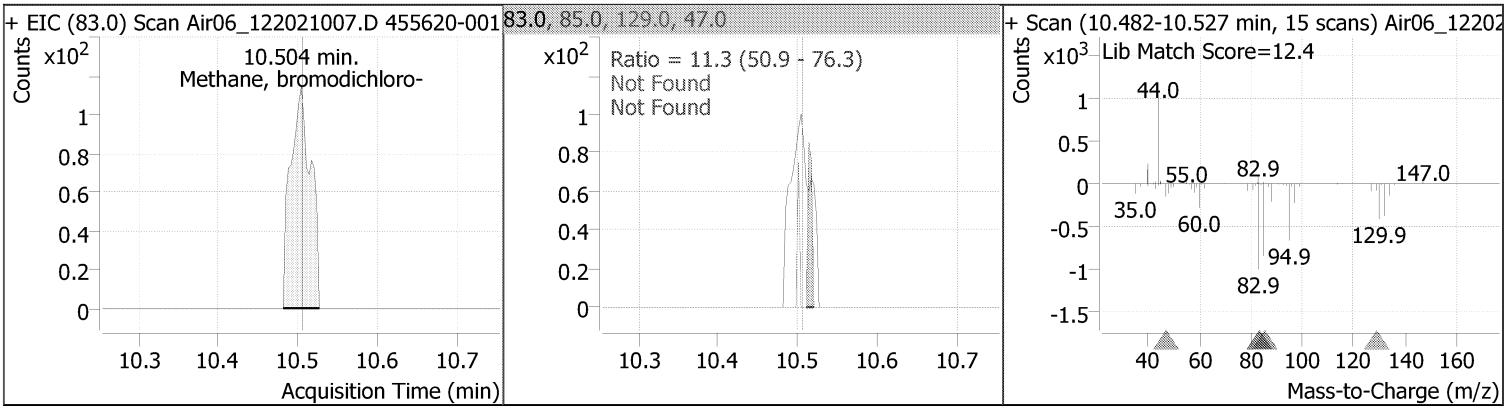
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.0418	9.90	0.03	1899	56.0	1707.5	143.8	215.7
					41.0		86.9	130.3
					55.0	294.8	54.0	81.1
					69.0	1926.4	38.3	57.4



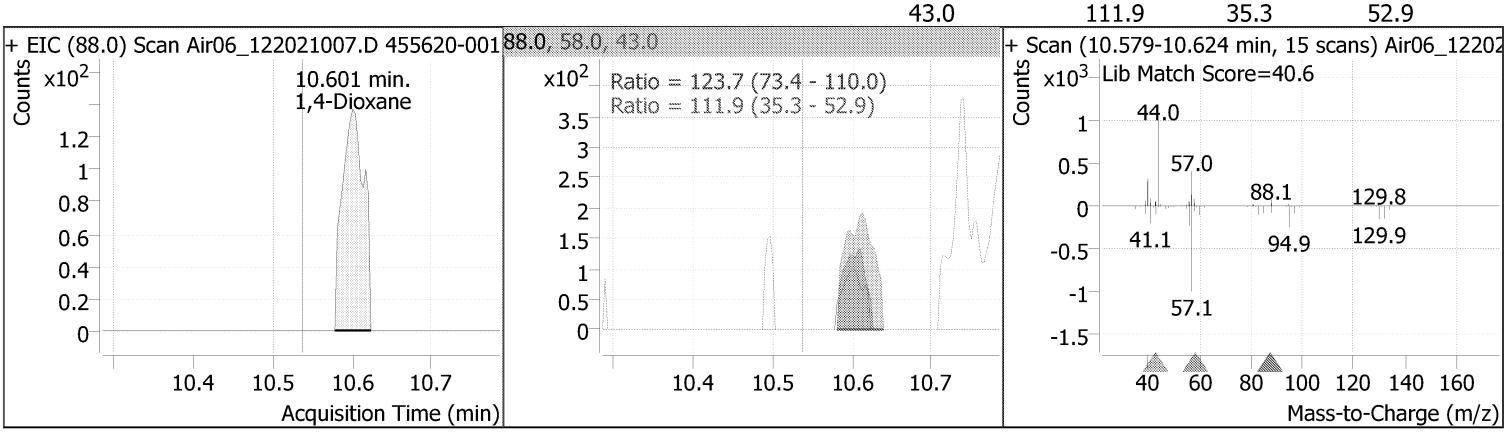
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.0006	10.24	-0.11	32	41.0	4178.1	60.7	91.1
					62.0		55.7	83.6
					76.0		35.7	53.6
					65.0		23.3	35.0
					64.0		18.7	28.0



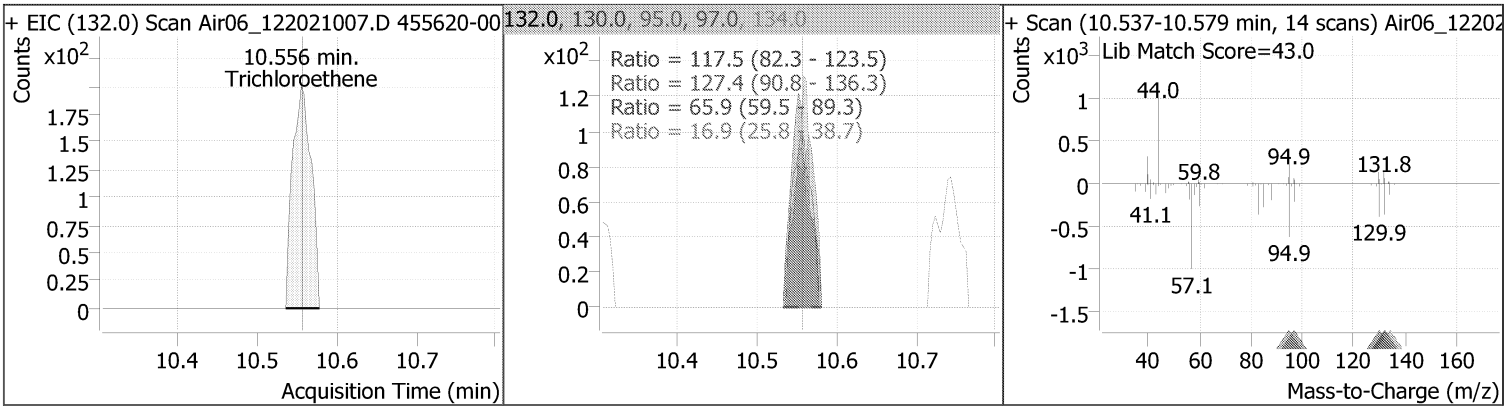
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	0.0020	10.50	0.00	202	85.0	11.3	50.9	76.3
					47.0		19.9	29.9
					129.0		9.1	13.7



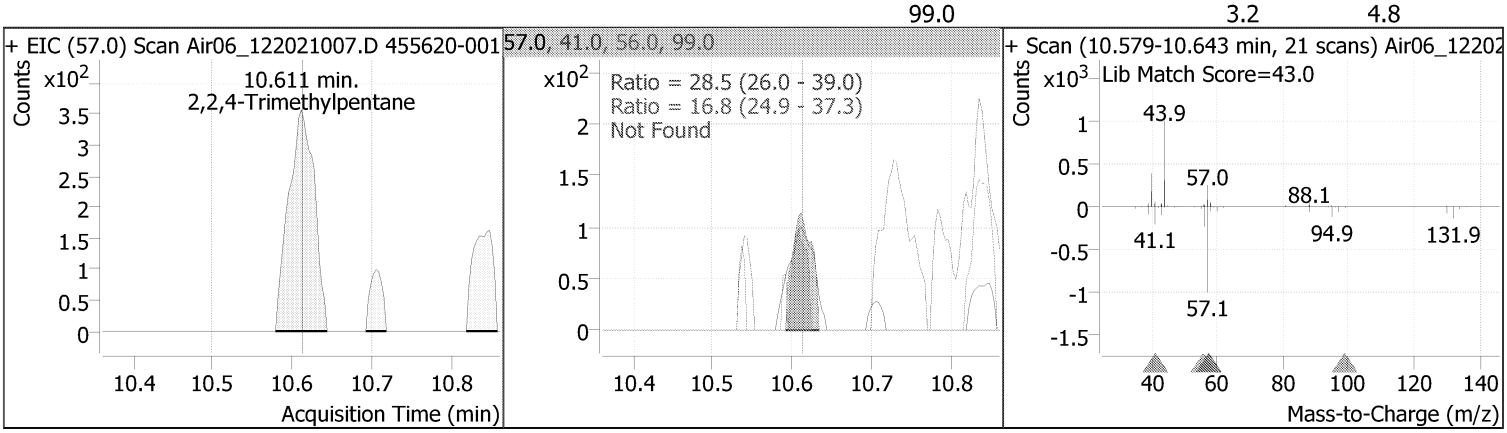
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.0109	10.60	0.06	261	58.0	123.7	73.4	110.0
					43.0	111.9	35.3	52.9



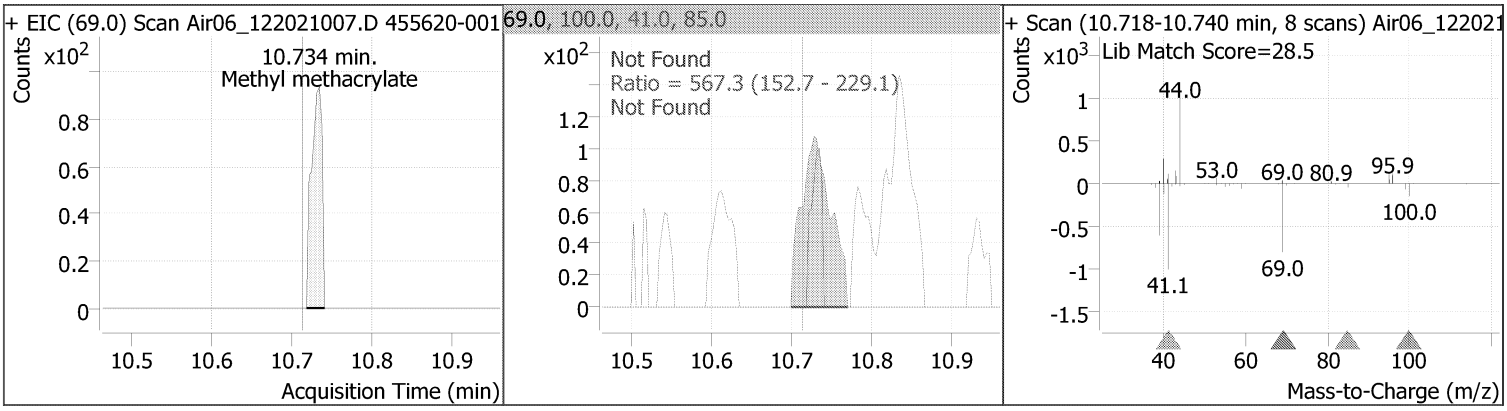
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.0065	10.56	0.00	325	95.0	127.4	90.8	136.3
					130.0	117.5	82.3	123.5
					97.0	65.9	59.5	89.3
					134.0	16.9	25.8	38.7



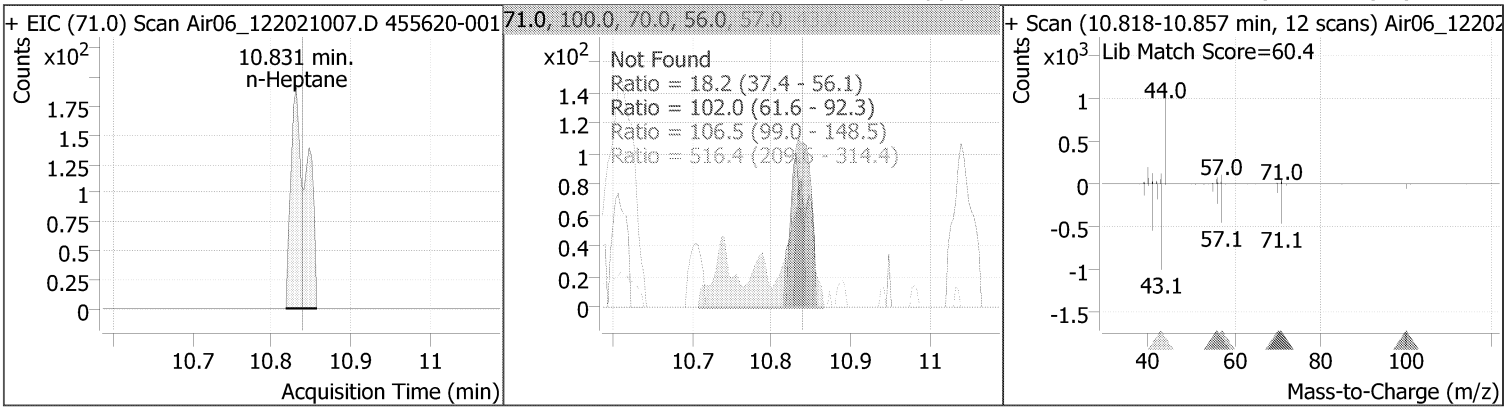
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.0034	10.61	0.00	799	41.0	28.5	26.0	39.0
					56.0	16.8	24.9	37.3
					99.0		3.2	4.8



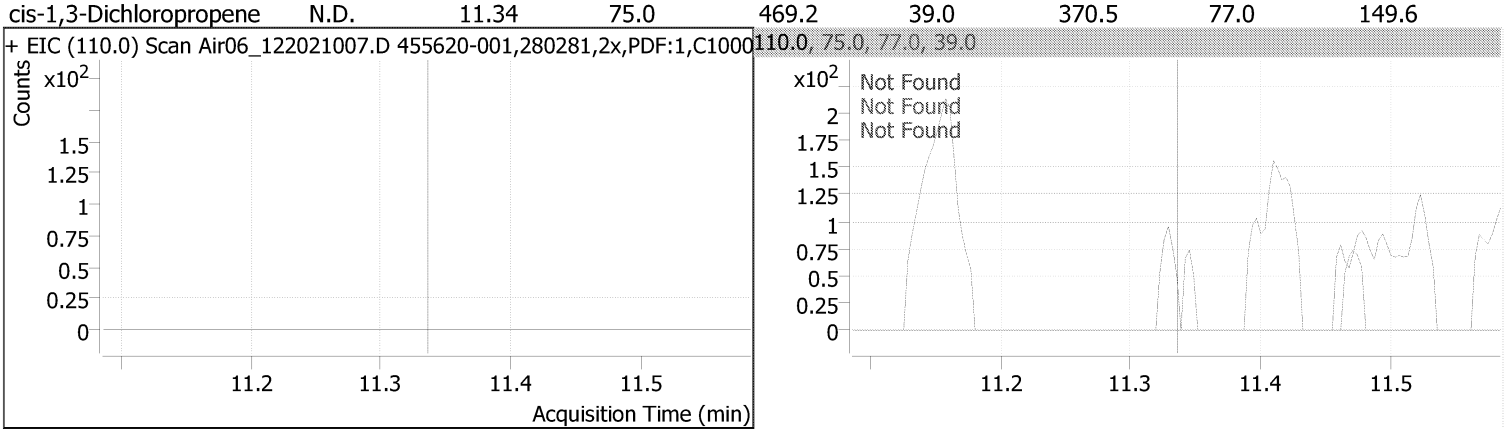
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	0.0022	10.73	0.02	87	41.0	567.3	152.7	229.1
					100.0		29.1	43.6
					85.0		7.9	11.8



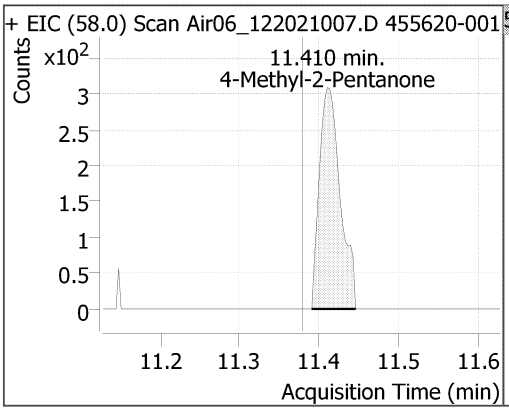
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	0.0074	10.83	-0.01	270	43.0	516.4	209.6	314.4
					57.0	106.5	99.0	148.5
					56.0	102.0	61.6	92.3
					70.0	18.2	37.4	56.1
					100.0		21.5	32.3

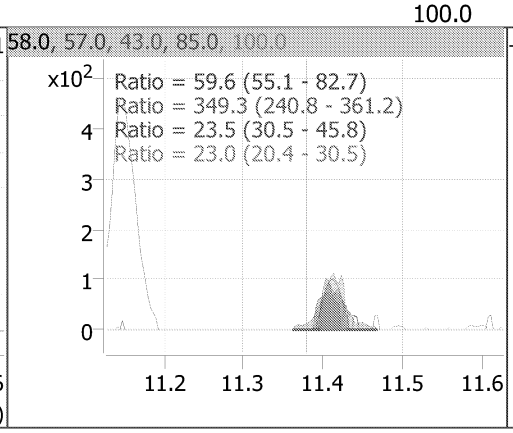


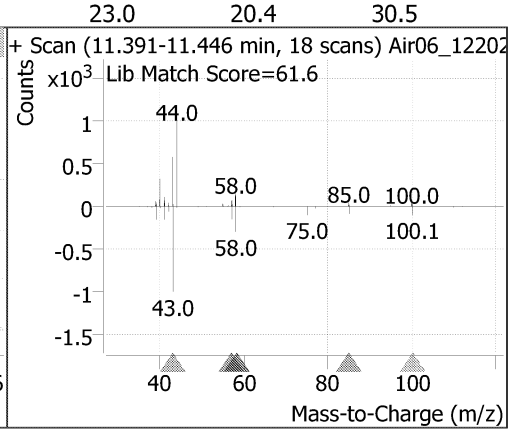
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
cis-1,3-Dichloropropene	N.D.	11.34	75.0	469.2	39.0	370.5	77.0	149.6



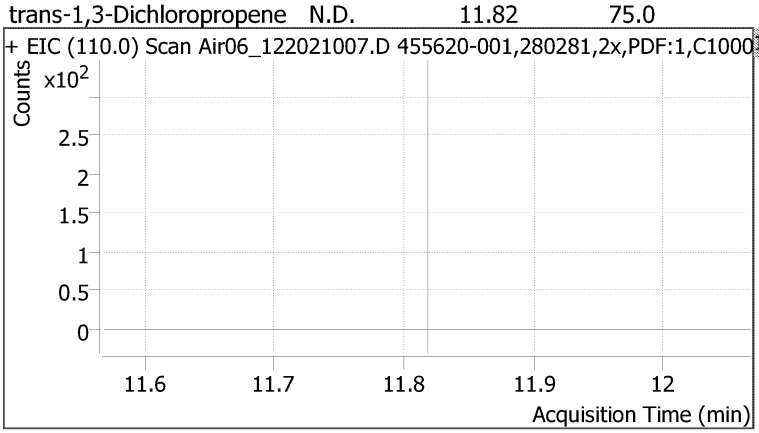
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.0131	11.41	0.03	566	43.0	349.3	240.8	361.2
					57.0	59.6	55.1	82.7
					85.0	23.5	30.5	45.8
					100.0	23.0	20.4	30.5

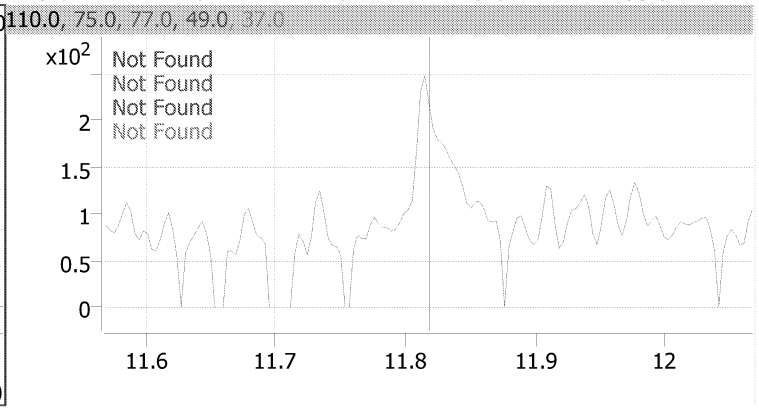




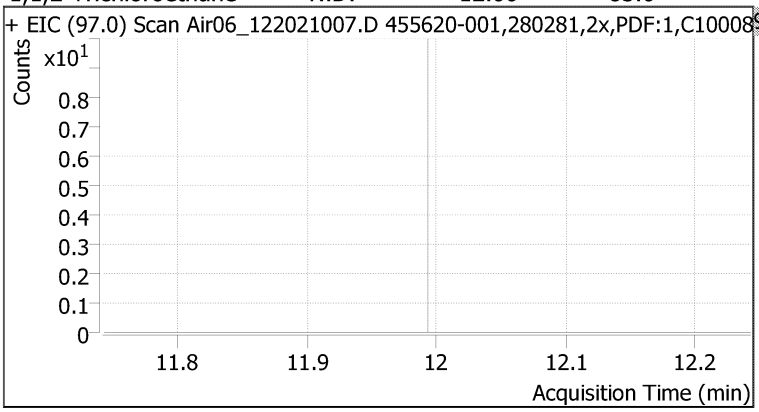


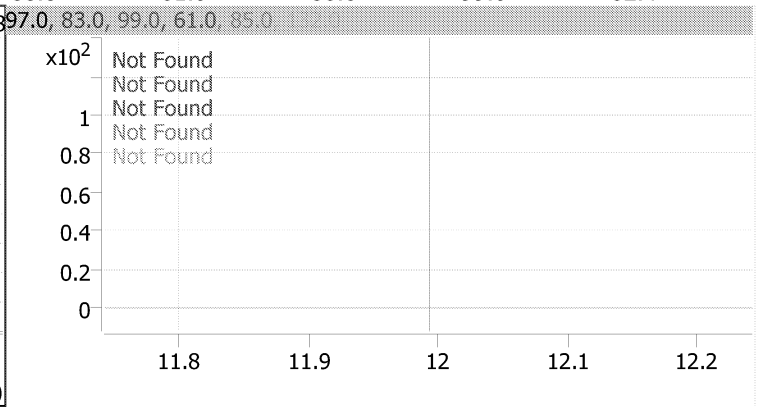
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
trans-1,3-Dichloropropene	N.D.	11.82	75.0	473.6	77.0	148.2	49.0	133.5



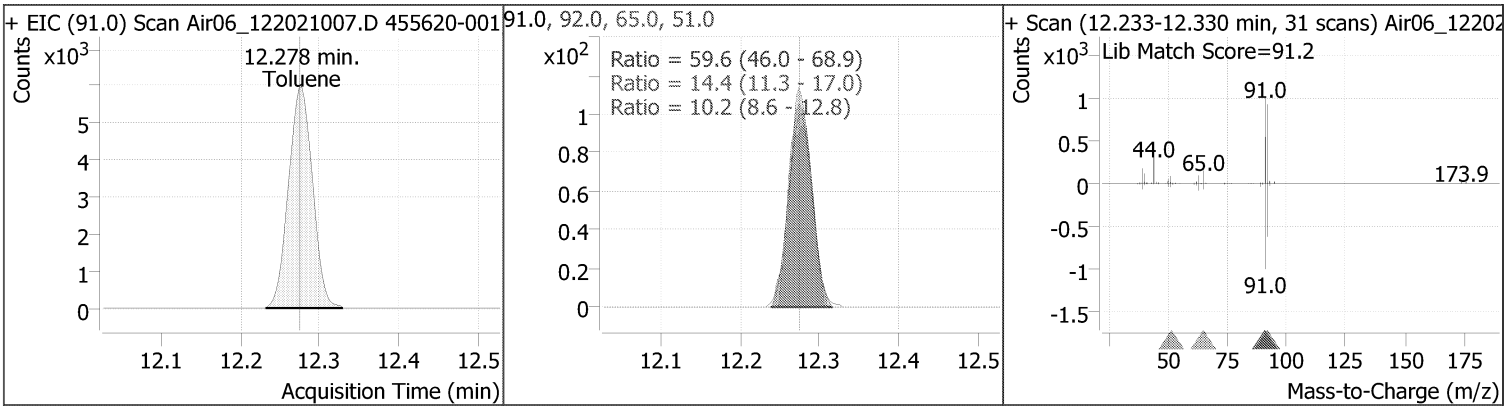


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,2-Trichloroethane	N.D.	12.00	83.0	88.8	61.0	86.6	99.0	62.4

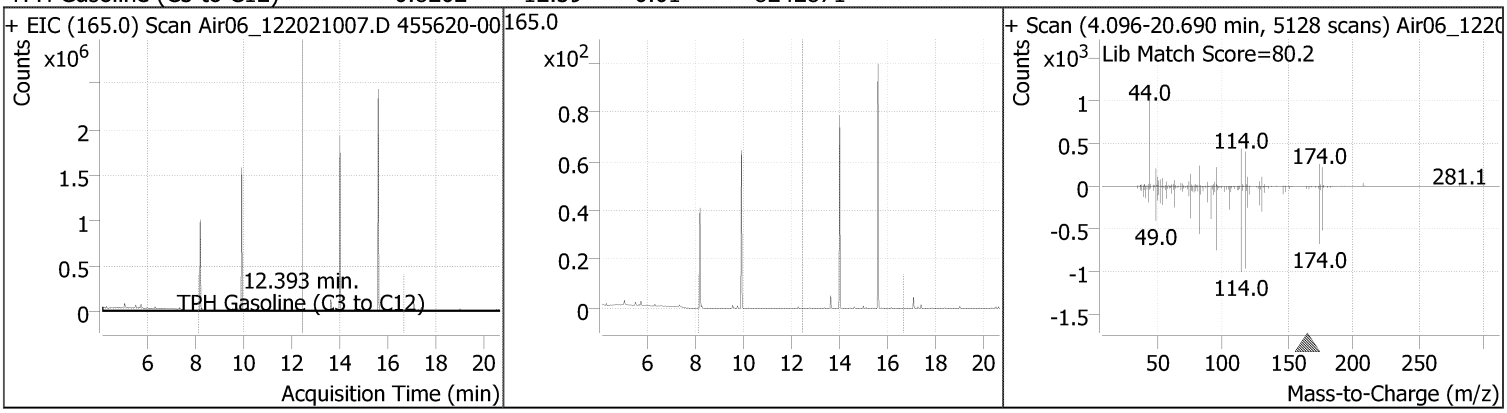




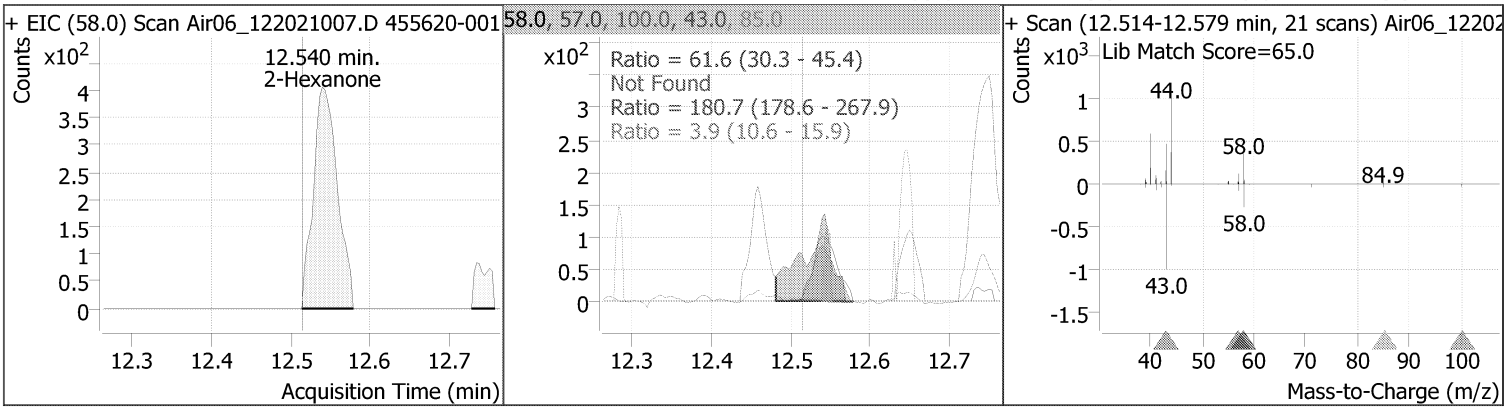
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.0907	12.28	0.00	12622	92.0	59.6	46.0	68.9
					65.0	14.4	11.3	17.0
					51.0	10.2	8.6	12.8



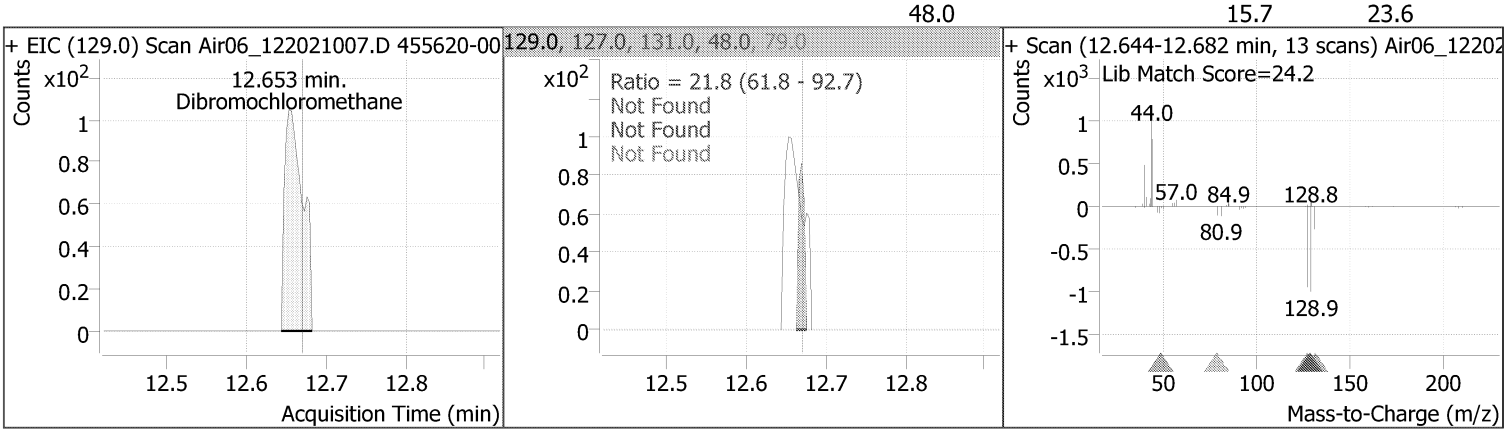
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	0.8202	12.39	-0.01	8242871				



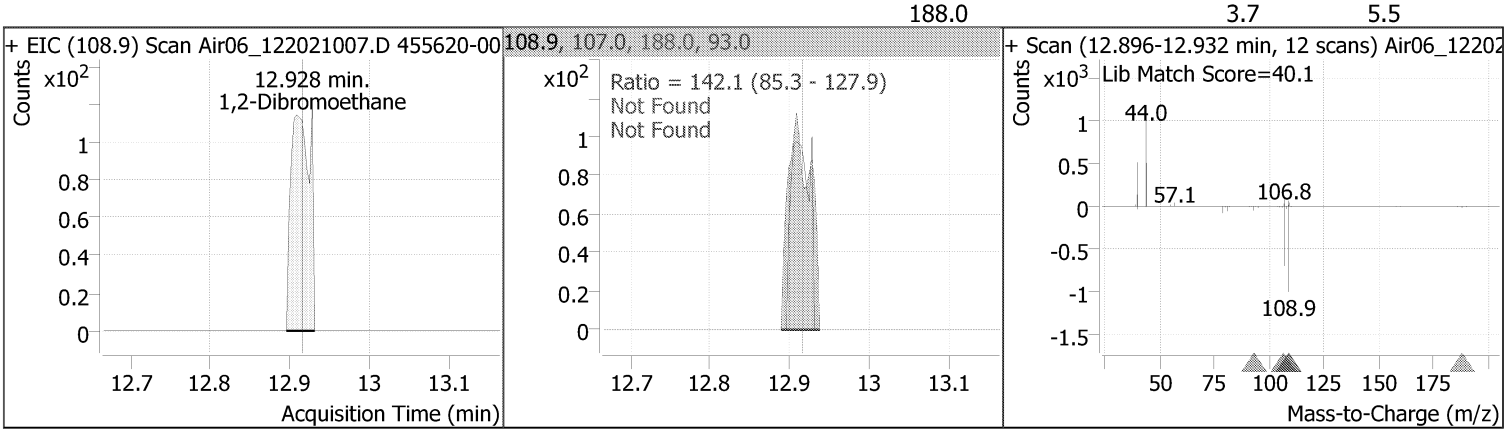
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.0158	12.54	0.02	852	43.0	180.7	178.6	267.9
					57.0	61.6	30.3	45.4
					100.0		11.5	17.3
					85.0	3.9	10.6	15.9



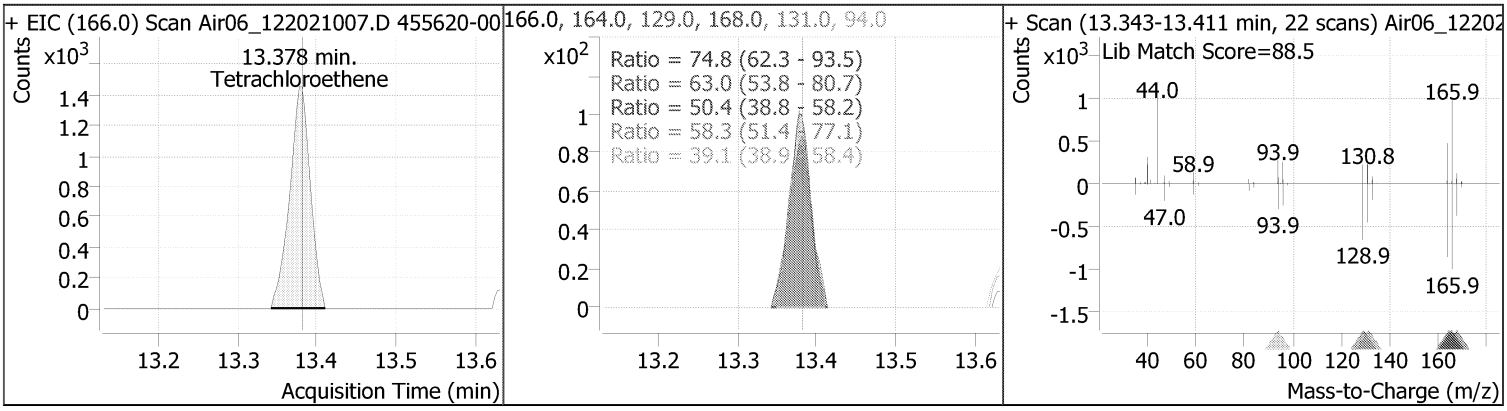
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.0017	12.65	-0.02	167	127.0	21.8	61.8	92.7
					131.0		19.2	28.8
					79.0		16.0	24.0
					48.0		15.7	23.6



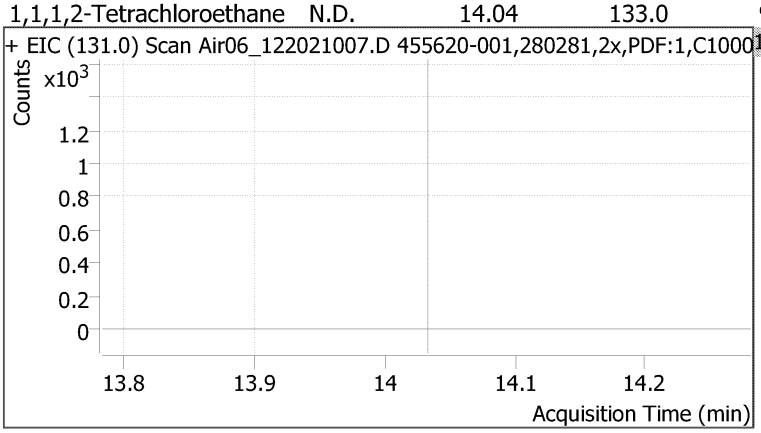
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.0026	12.93	0.01	193	107.0	142.1	85.3	127.9
					93.0		6.2	9.3
					188.0		3.7	5.5

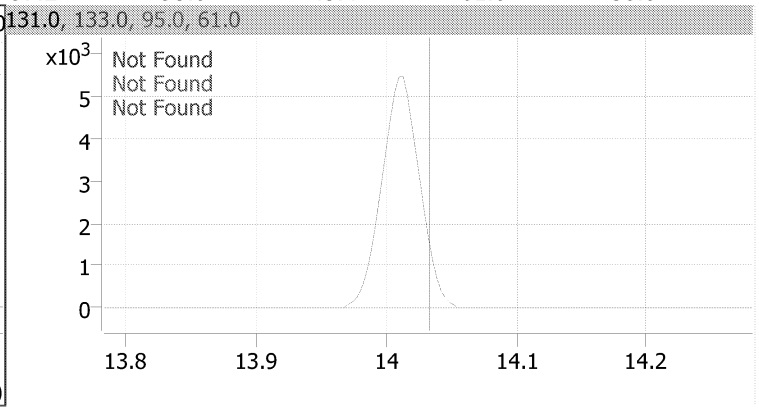


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.0320	13.38	-0.01	2618	164.0	74.8	62.3	93.5
					129.0	63.0	53.8	80.7
					131.0	58.3	51.4	77.1
					94.0	39.1	38.9	58.4
					168.0	50.4	38.8	58.2

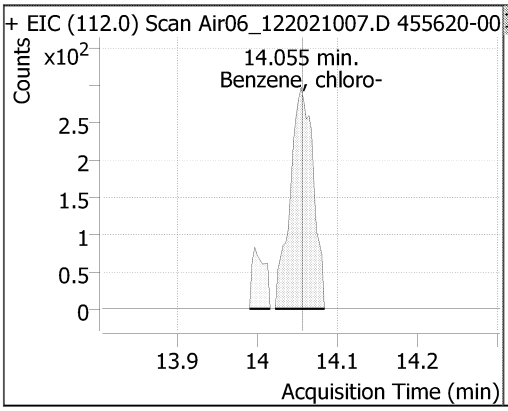


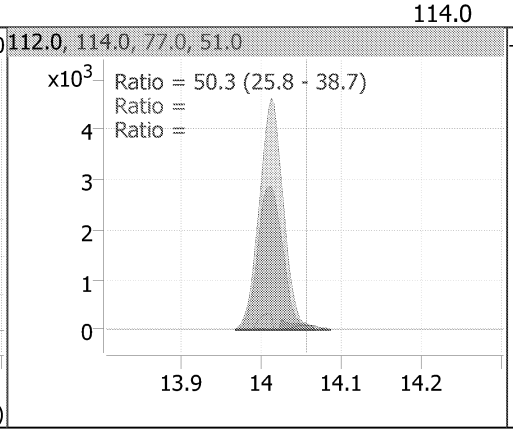
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1,2-Tetrachloroethane	N.D.	14.04	133.0	97.2	95.0	45.4	61.0	38.0

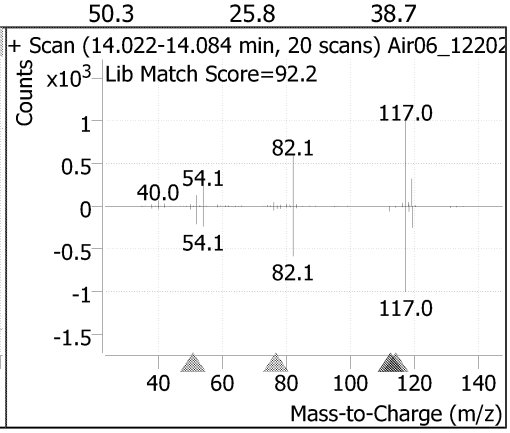




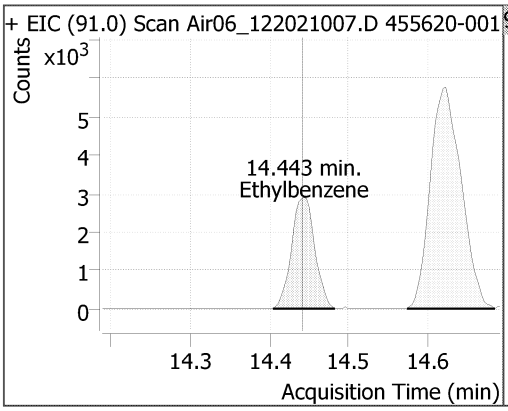
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0060	14.05	-0.01	600	77.0		53.0	79.5
					51.0		28.8	43.2
					114.0	50.3	25.8	38.7

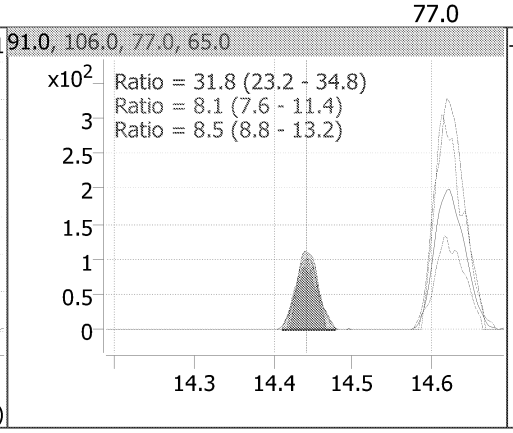


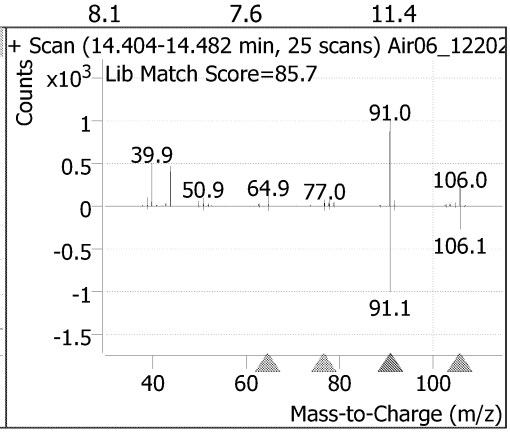




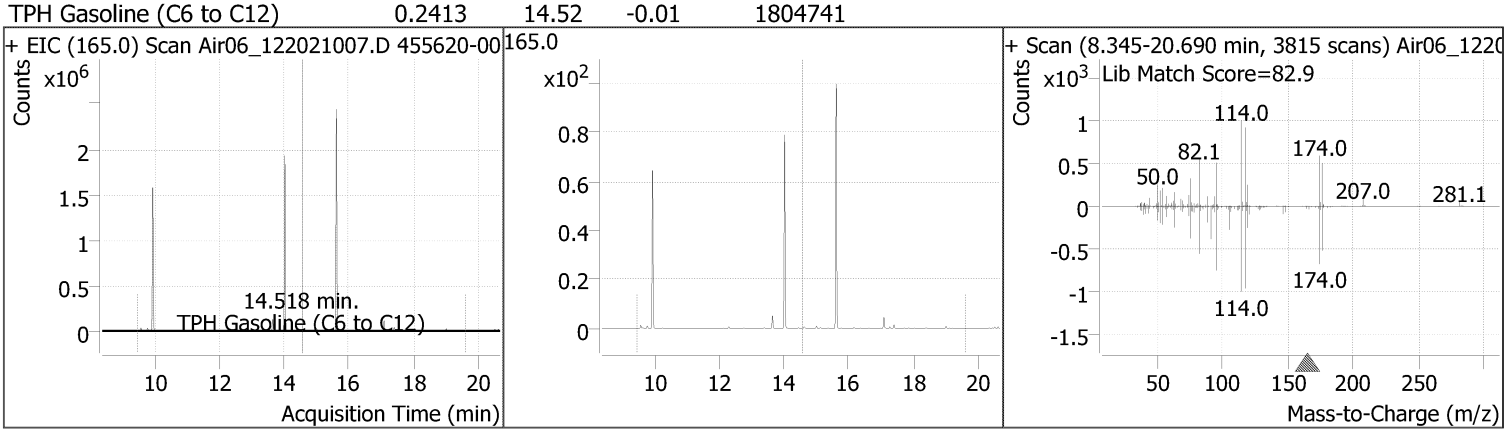
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.0363	14.44	0.00	5910	106.0	31.8	23.2	34.8
					65.0	8.5	8.8	13.2
					77.0	8.1	7.6	11.4



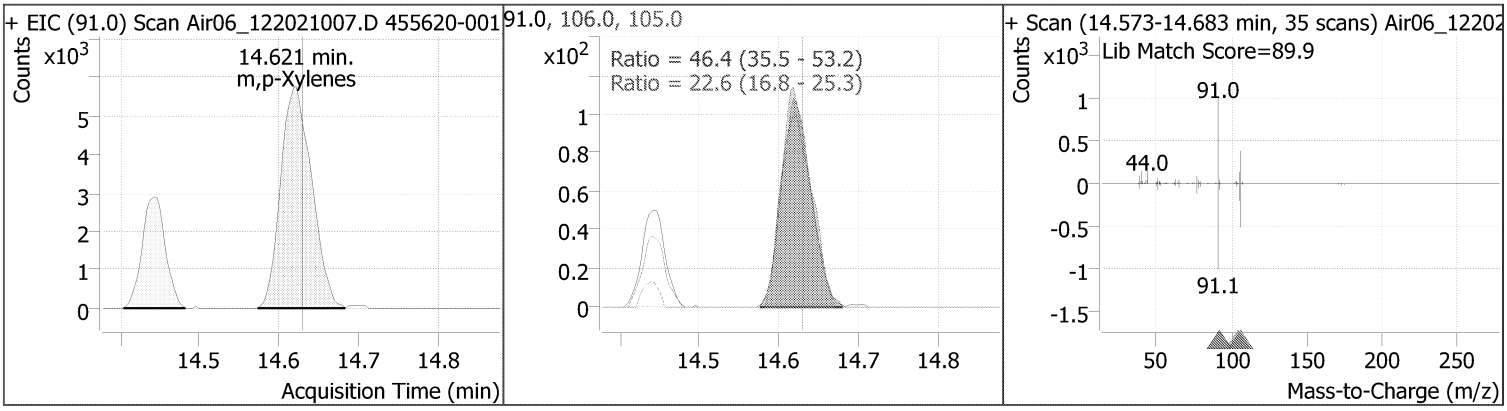




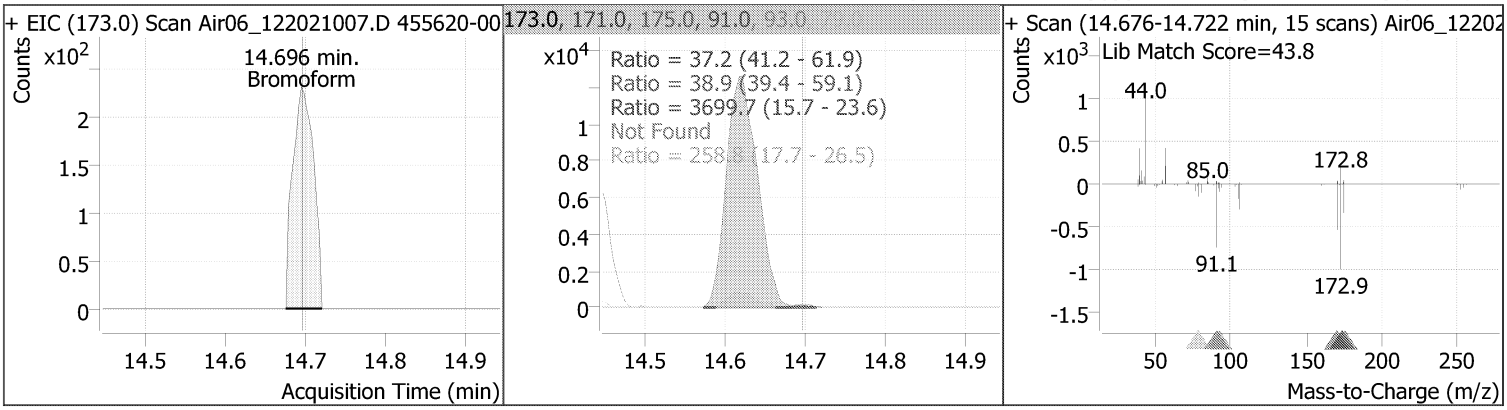
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	0.2413	14.52	-0.01	1804741				



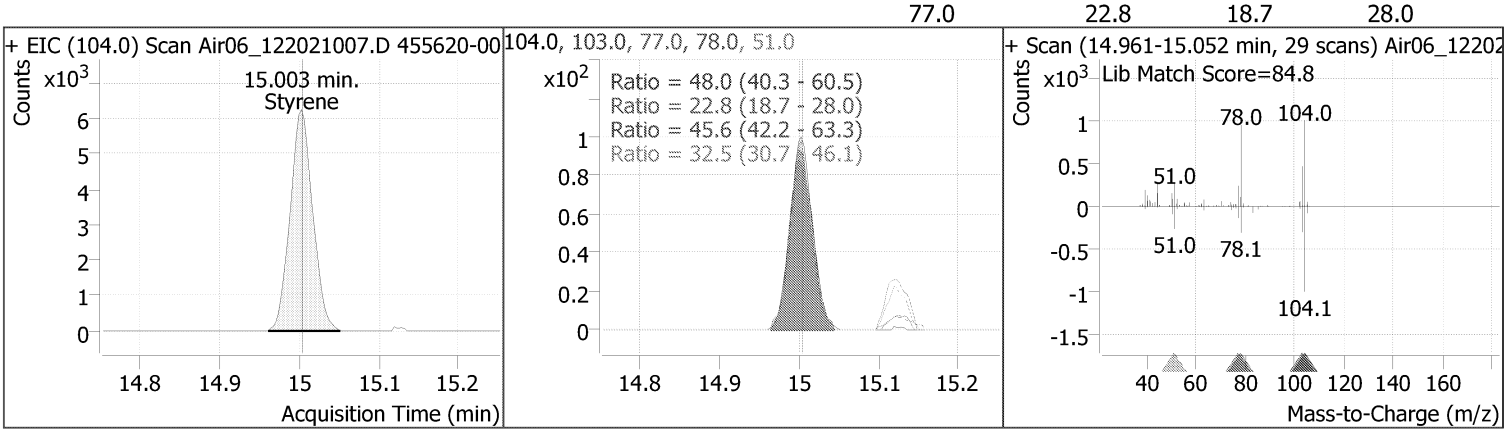
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	0.1139	14.62	-0.01	15640	106.0	46.4	35.5	53.2
					105.0	22.6	16.8	25.3



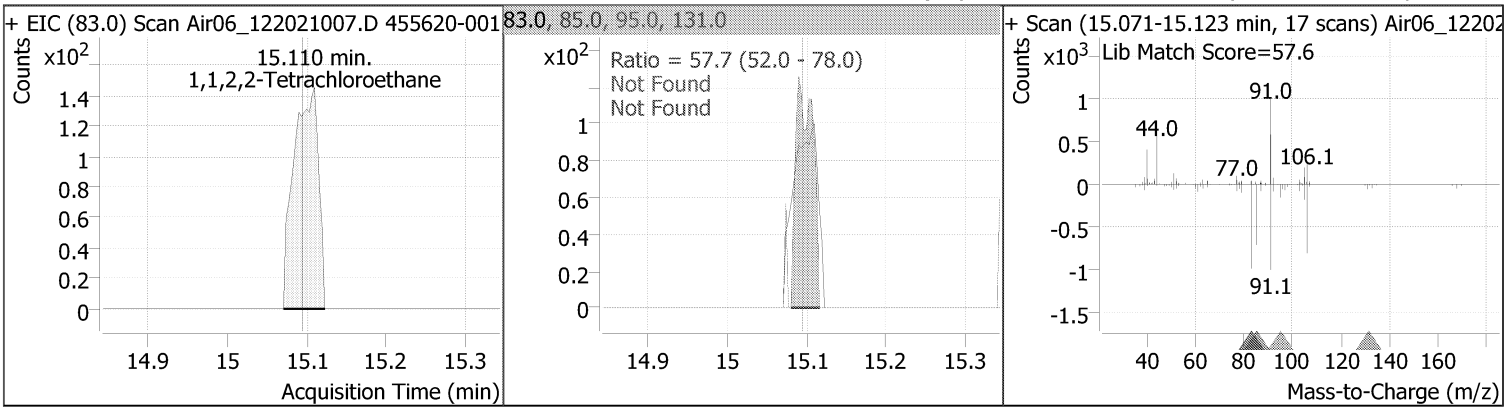
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.0039	14.70	-0.01	423	171.0	37.2	41.2	61.9
					175.0	38.9	39.4	59.1
					79.0	258.8	17.7	26.5
					93.0		16.1	24.1
					91.0	3699.7	15.7	23.6



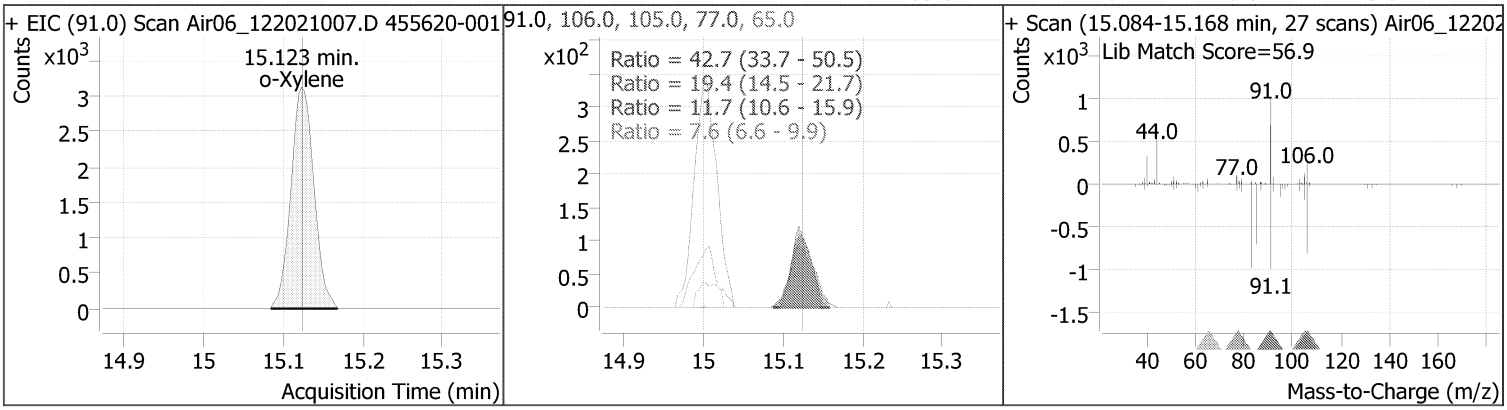
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	0.1341	15.00	-0.01	12337	78.0	45.6	42.2	63.3
					103.0	48.0	40.3	60.5
					51.0	32.5	30.7	46.1
					77.0	22.8	18.7	28.0



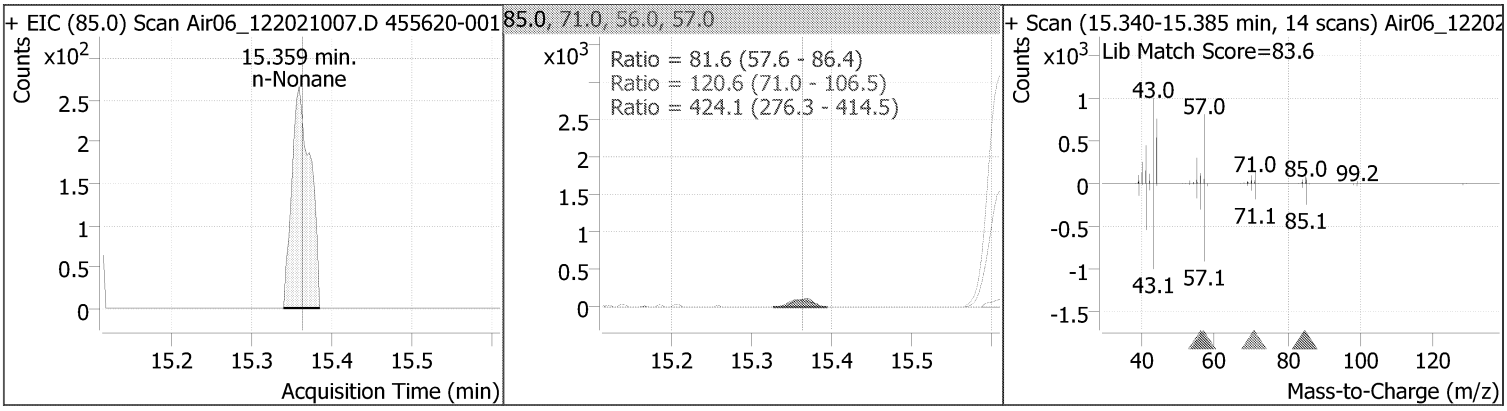
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.0031	15.11	0.01	310	85.0	57.7	52.0	78.0
					95.0		16.0	24.0
					131.0		8.4	12.6



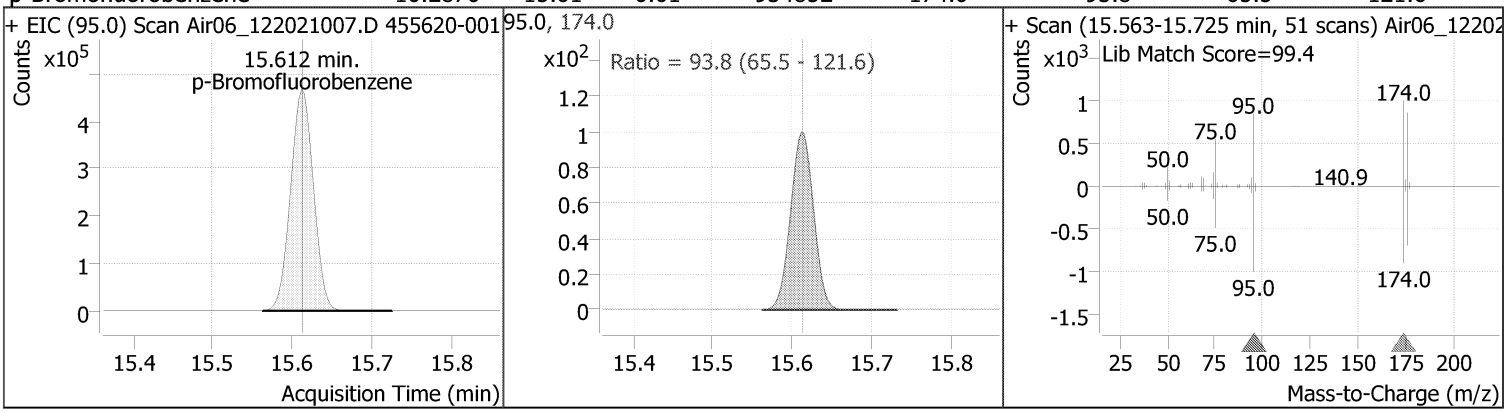
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.0441	15.12	-0.01	6287	106.0	42.7	33.7	50.5
					105.0	19.4	14.5	21.7
					77.0	11.7	10.6	15.9
					65.0	7.6	6.6	9.9



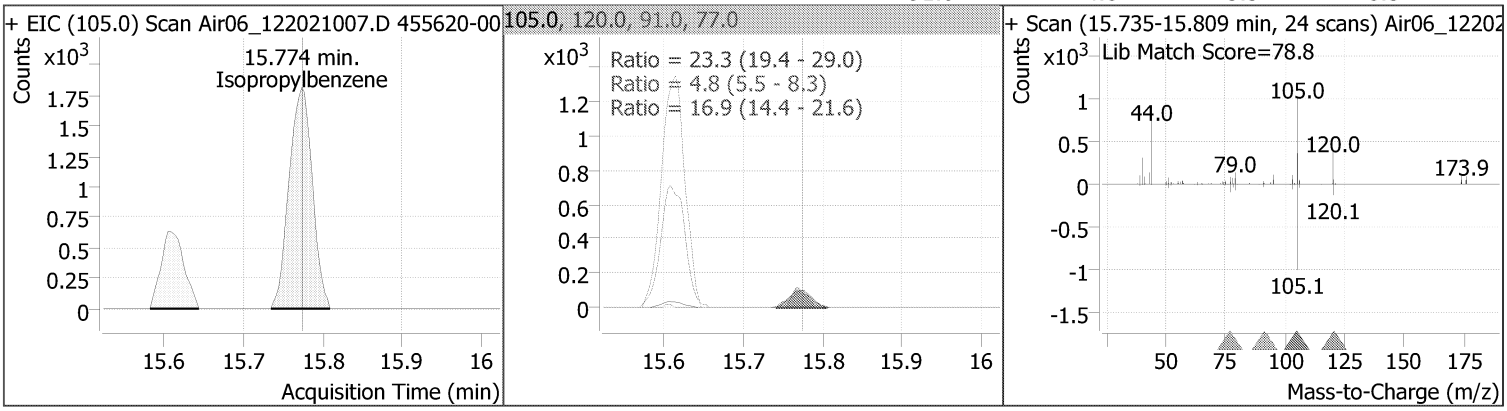
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	0.0148	15.36	-0.01	429	57.0	424.1	276.3	414.5
					56.0	120.6	71.0	106.5
					71.0	81.6	57.6	86.4



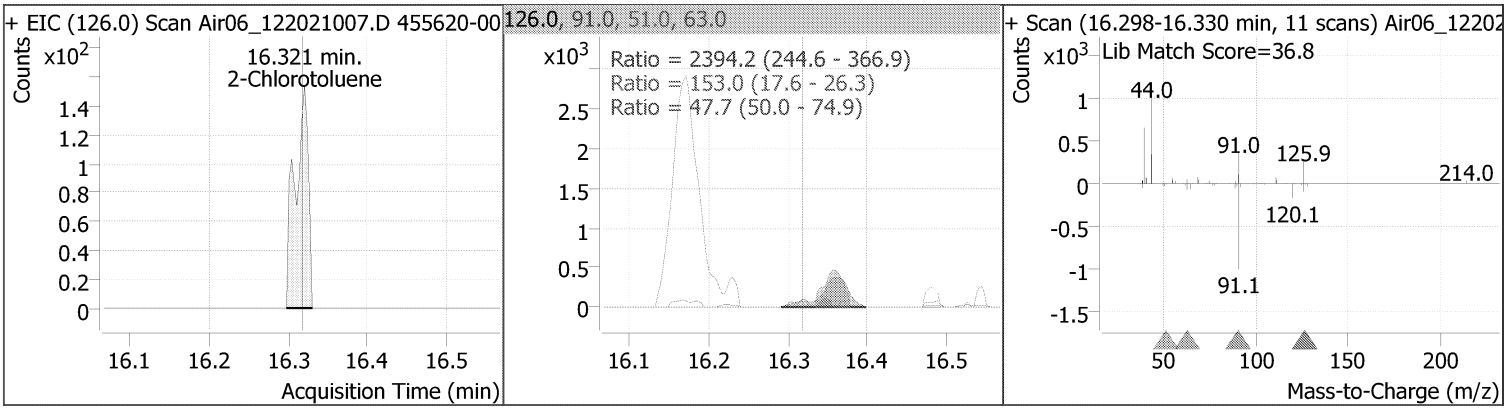
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.2870	15.61	-0.01	934852	174.0	93.8	65.5	121.6



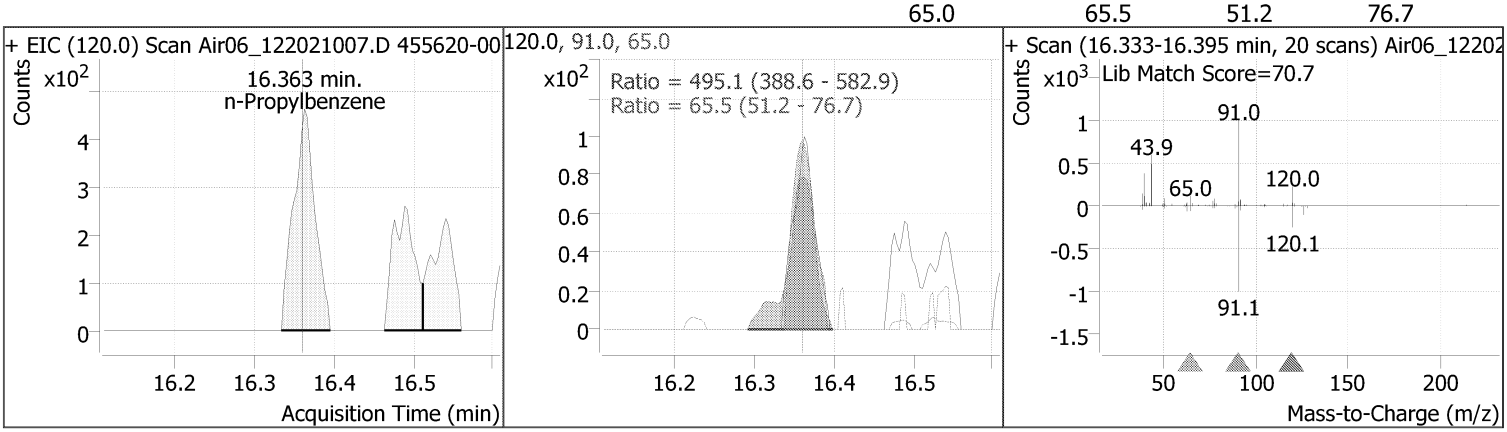
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.0191	15.77	-0.01	3697	120.0	23.3	19.4	29.0
					77.0	16.9	14.4	21.6
					91.0	4.8	5.5	8.3



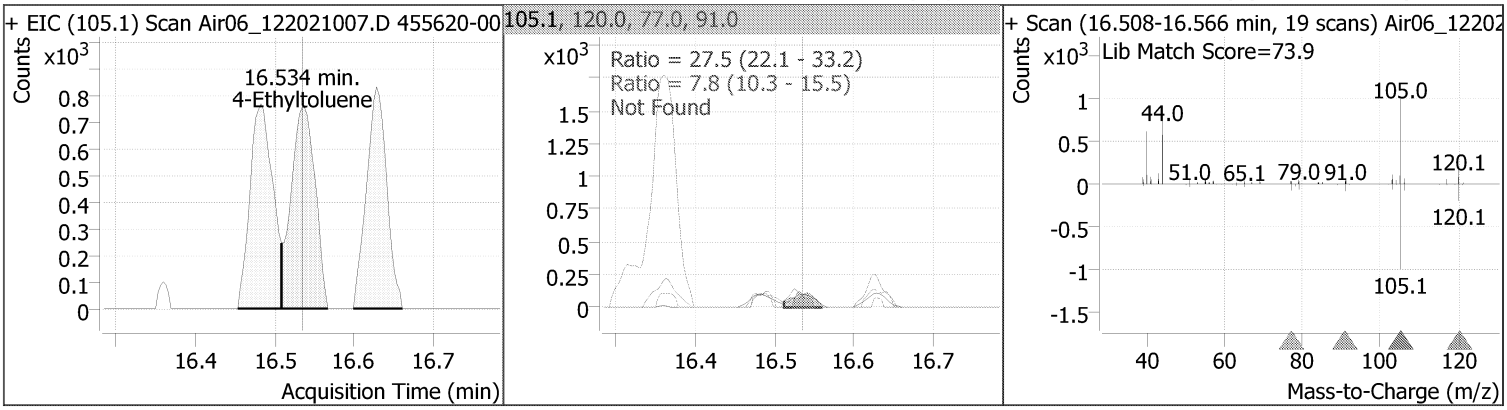
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	0.0041	16.32	0.00	179	91.0	2394.2	244.6	366.9
					63.0	47.7	50.0	74.9
					51.0	153.0	17.6	26.3



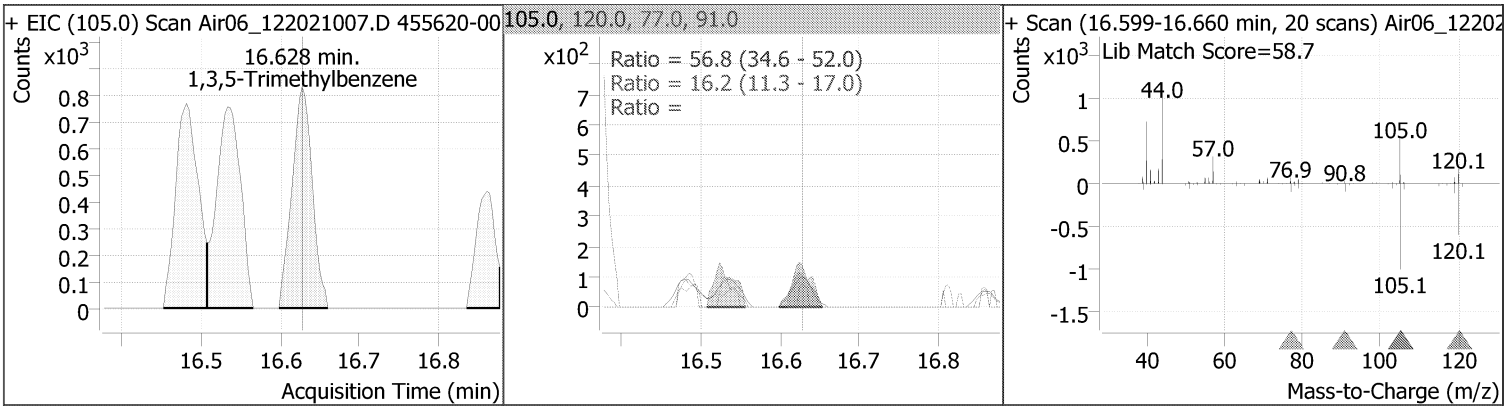
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.0178	16.36	0.00	866	91.0	495.1	388.6	582.9
					65.0	65.5	51.2	76.7



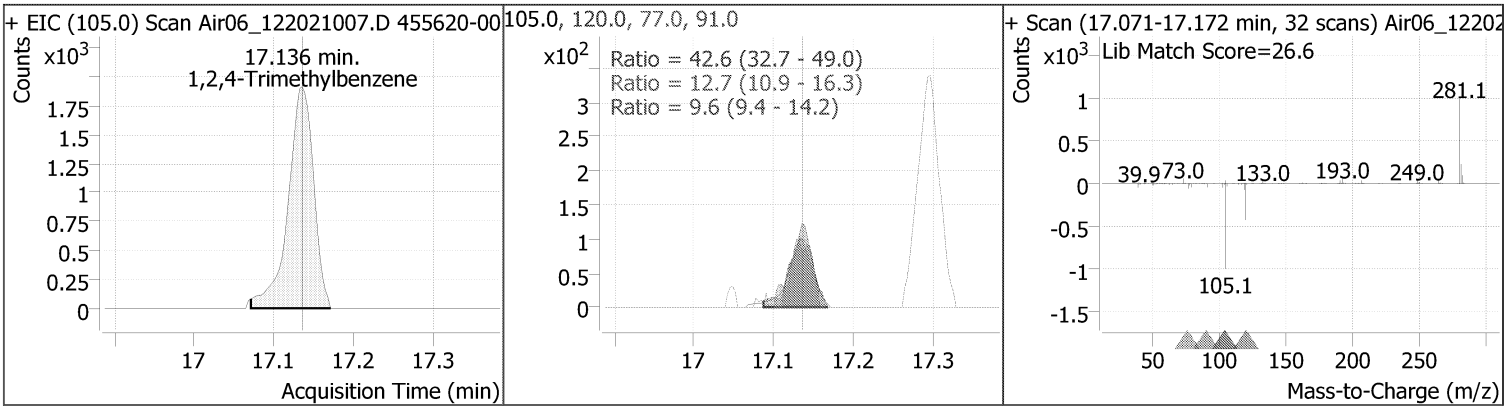
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.0087	16.53	-0.01	1603	120.0	27.5	22.1	33.2
					77.0	7.8	10.3	15.5
					91.0		9.5	14.3



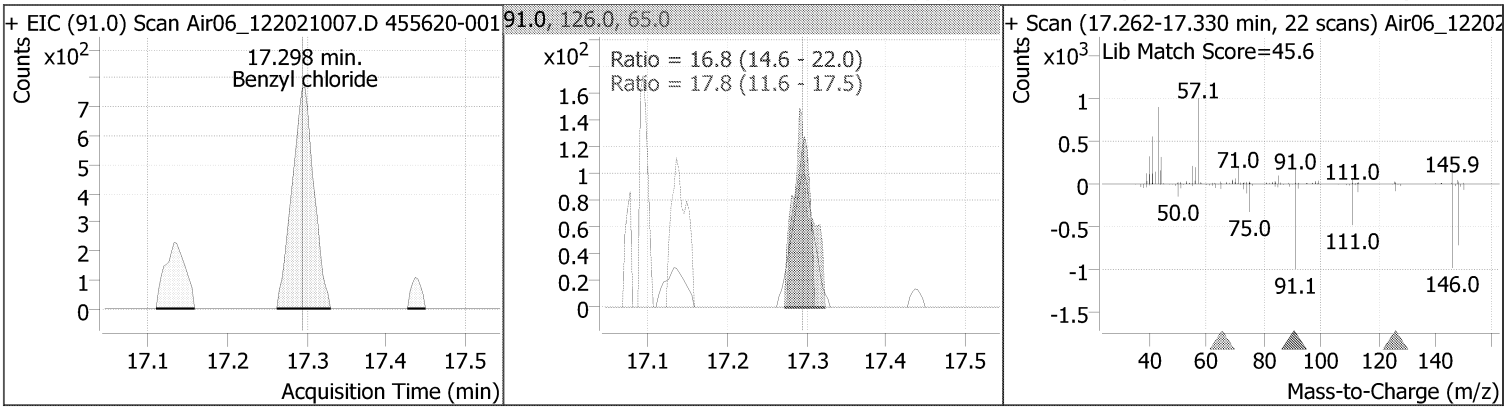
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.0088	16.63	-0.01	1472	120.0	56.8	34.6	52.0
					77.0	16.2	11.3	17.0
					91.0		9.5	14.3



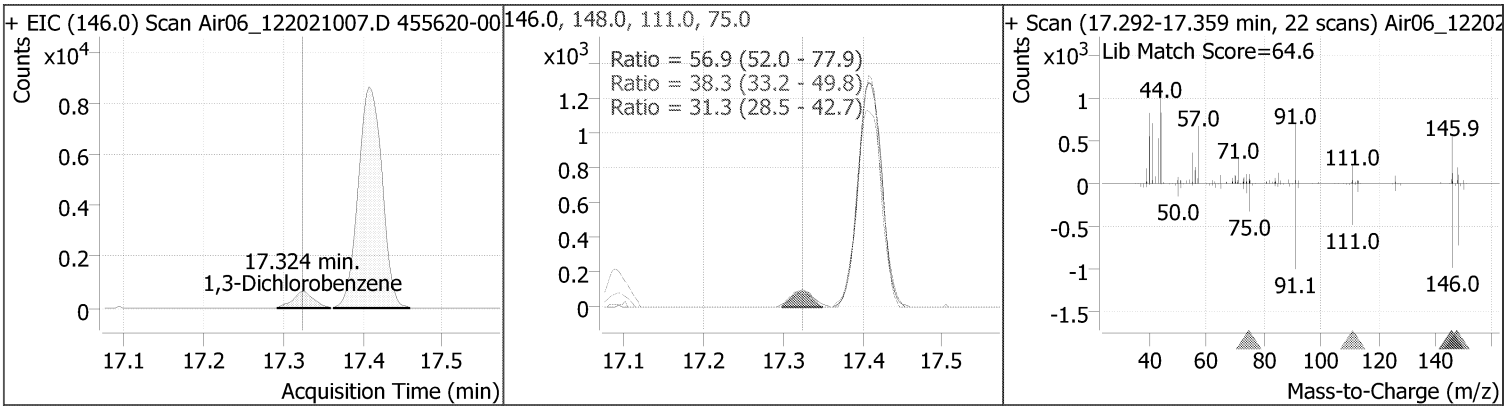
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	0.0275	17.14	-0.01	4301	120.0	42.6	32.7	49.0
					77.0	12.7	10.9	16.3
					91.0	9.6	9.4	14.2



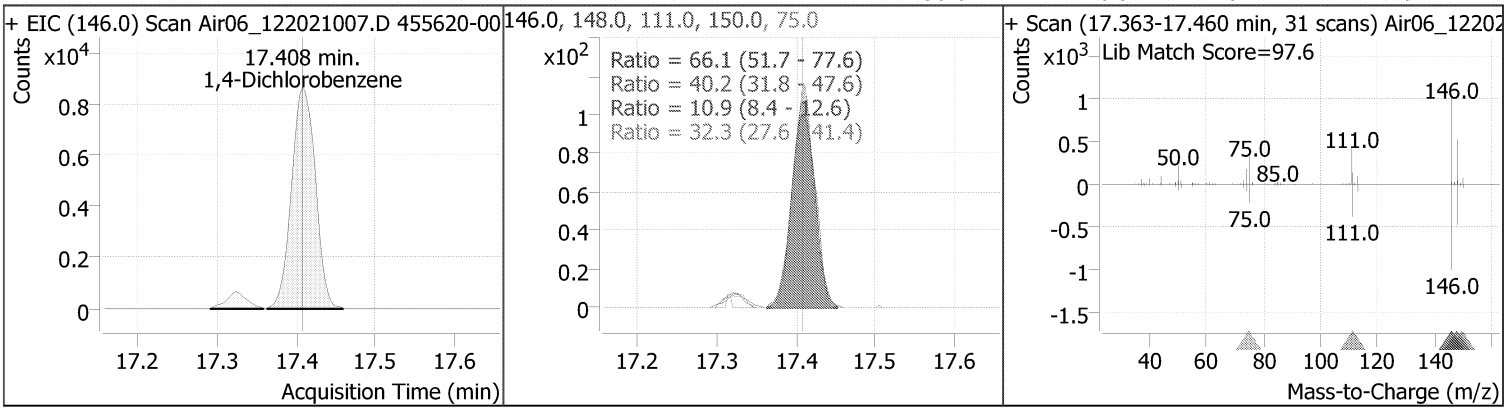
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.0109	17.30	0.00	1469	126.0	16.8	14.6	22.0
					65.0	17.8	11.6	17.5



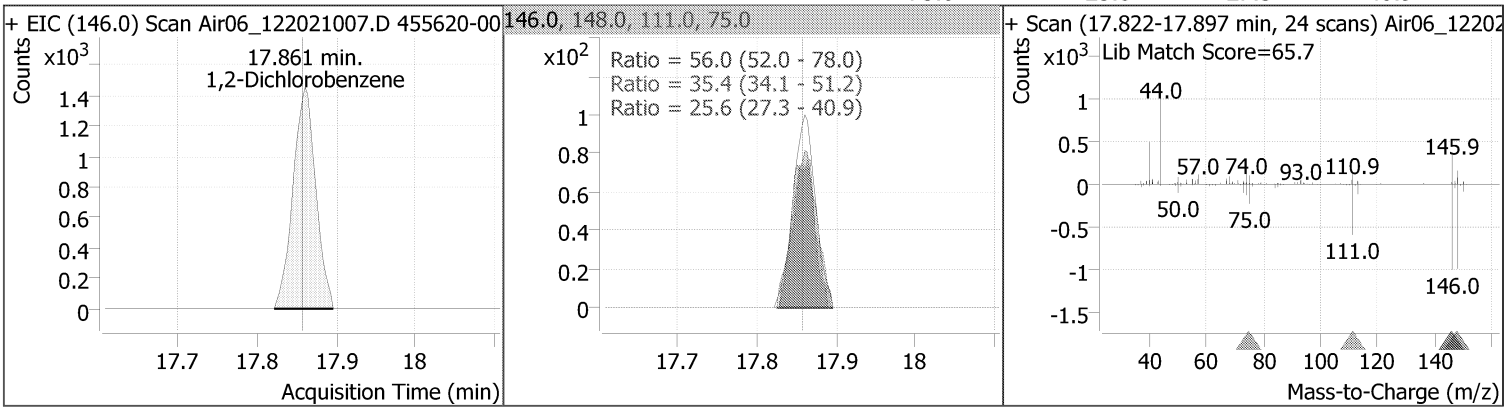
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.0112	17.32	-0.01	1210	148.0	56.9	52.0	77.9
					111.0	38.3	33.2	49.8
					75.0	31.3	28.5	42.7



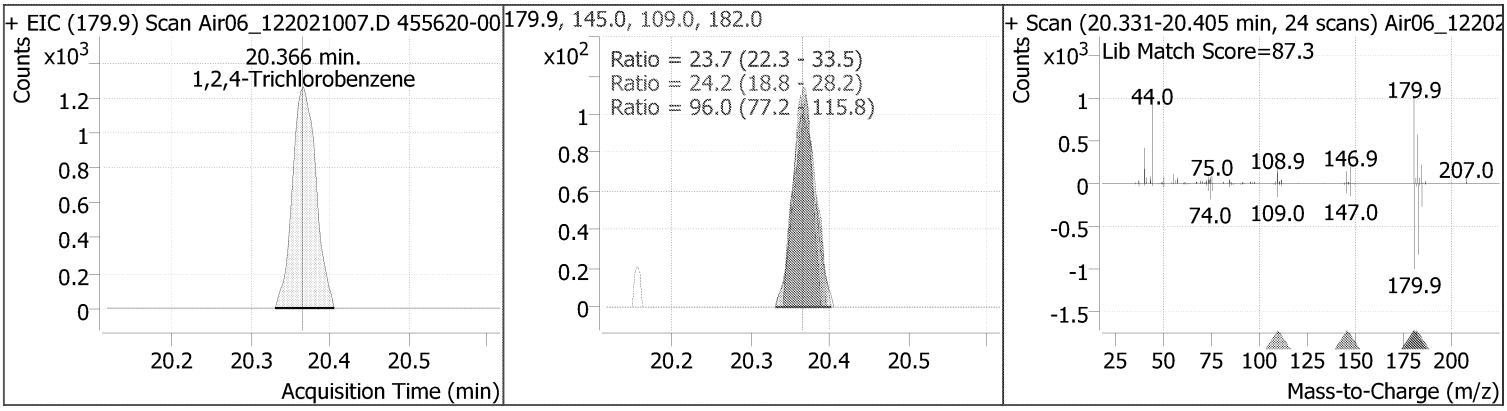
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.1694	17.41	-0.01	18092	148.0	66.1	51.7	77.6
					111.0	40.2	31.8	47.6
					75.0	32.3	27.6	41.4
					150.0	10.9	8.4	12.6



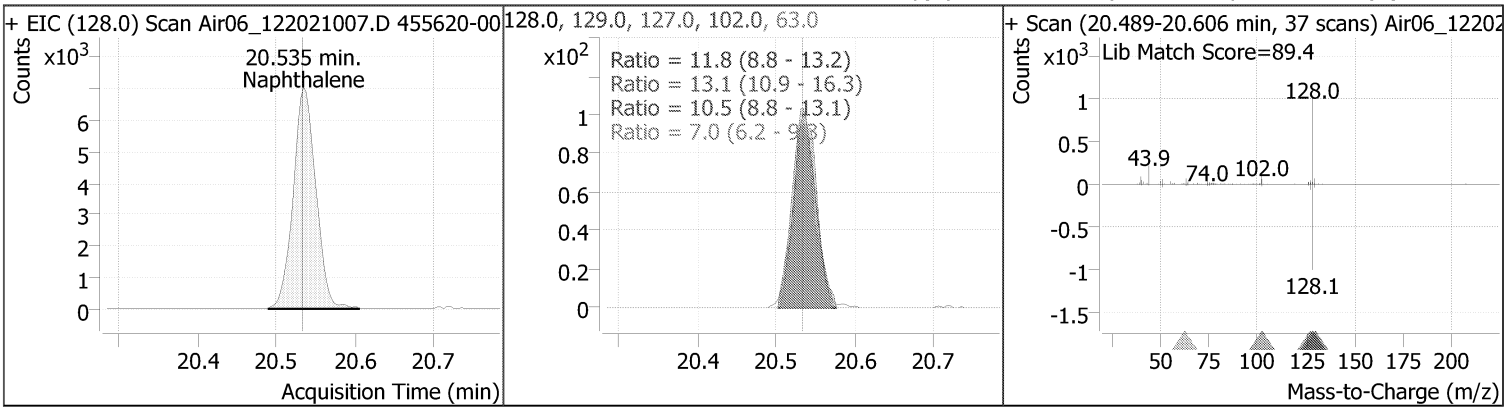
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.0278	17.86	0.00	2894	148.0	56.0	52.0	78.0
					111.0	35.4	34.1	51.2
					75.0	25.6	27.3	40.9



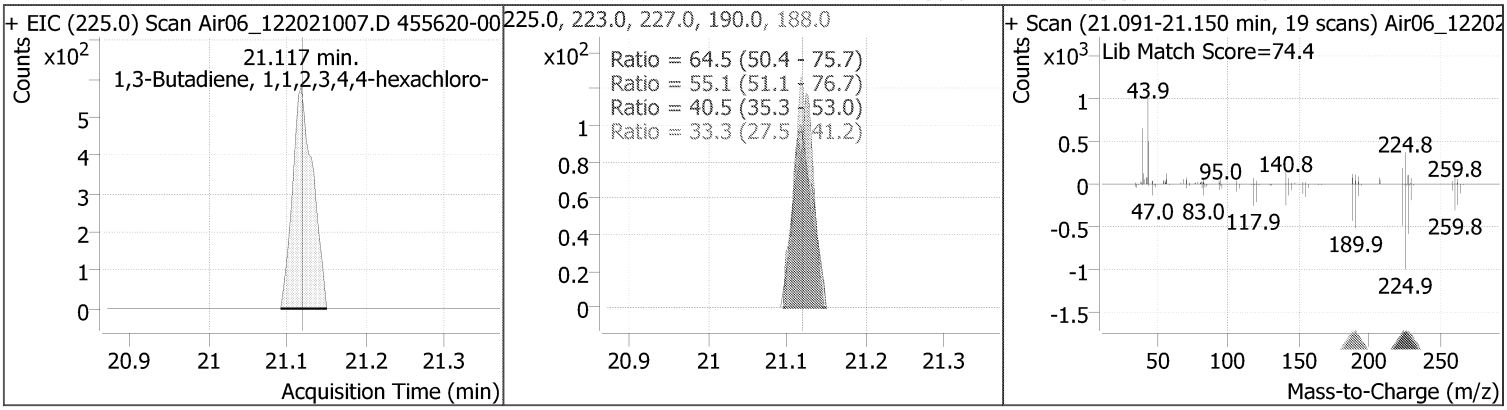
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.0352	20.37	-0.01	2612	182.0	96.0	77.2	115.8
					145.0	23.7	22.3	33.5
					109.0	24.2	18.8	28.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	0.1224	20.53	-0.01	14102	127.0	13.1	10.9	16.3
					129.0	11.8	8.8	13.2
					102.0	10.5	8.8	13.1
					63.0	7.0	6.2	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.0085	21.12	-0.01	1031	227.0	55.1	51.1	76.7
					223.0	64.5	50.4	75.7
					190.0	40.5	35.3	53.0
					188.0	33.3	27.5	41.2



Library Search Results - NonTarget Hits with Details

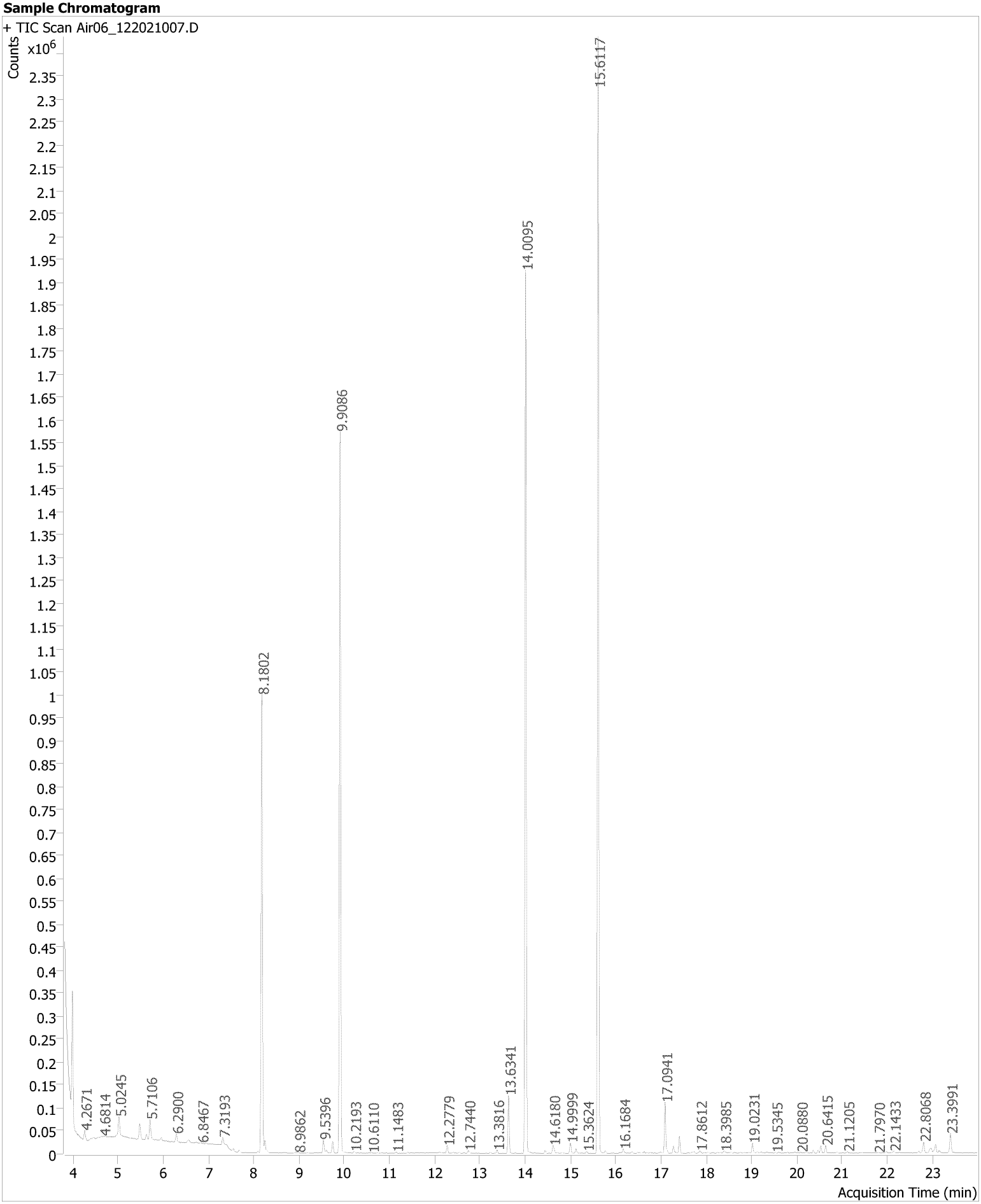
Agilent Technologies

Batch Path	D:\MassHunter\GCMS\1\data\2021\122021		
Analysis File Name	122021_1.uaf		
Analyst Name	003AIRMS06	**Analysis Time**	1/4/2022 11:18:48 AM
File Name	Air06_122021007.D	**Path Name**	D:\MassHunter\GCMS\1\data\2021\122021
Sample Name	455620-001,280281,2x,PDF:1,C10008	**Type**	Sample
Acq. Method File	TO15_Acq_013120_1	**Acq. Method Path**	D:\MassHunter\GCMS\1\methods\
Acq. Date-Time	12/20/2021 2:59:21 PM	**Acq. Operator**	ZNZ/DJL/LJB
Instrument Name	Air-MS-06	**Dil.**	1

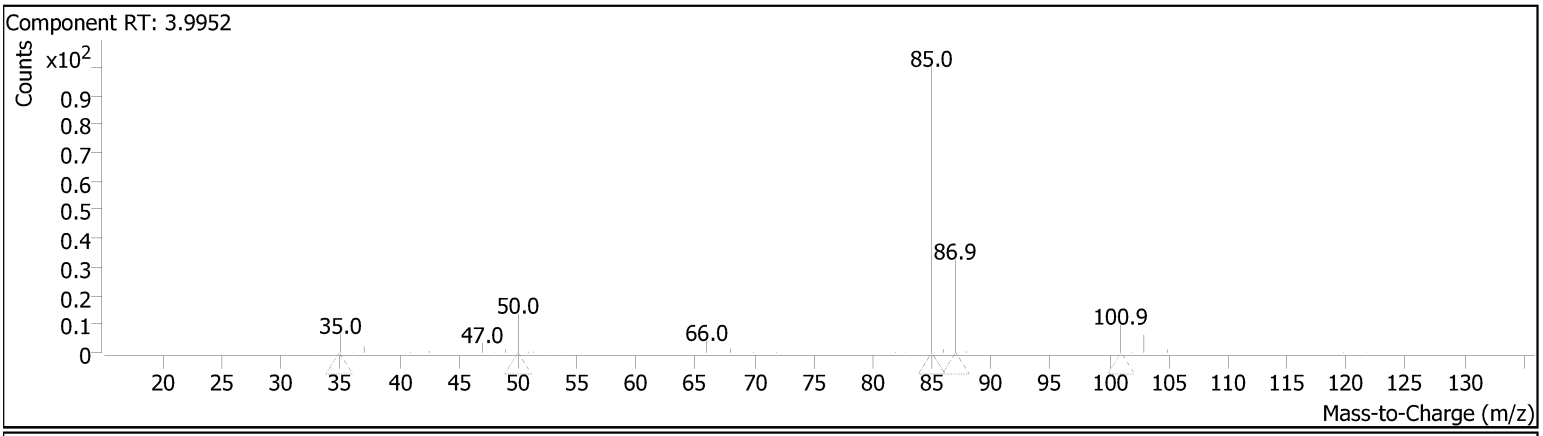
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
3.9952	Dichlorodifluoromethane	75-71-8	CCl2F2	655064.4	99.1	3.049
4.2671	Glycidol	556-52-5	C3H6O2	38243.1	80.3	0.178
4.4160	(2-Aziridinylethyl)amine	4025-37-0	C4H10N2	6268.2	71.5	0.02918
4.4807	Cyclopropyl carbinol	2516-33-8	C4H8O	8314.3	77.7	0.0387
4.6814	(2-Aziridinylethyl)amine	4025-37-0	C4H10N2	17777.7	71.8	0.08275
5.0245	Dimethyl ether	115-10-6	C2H6O	112195.0	87.8	0.5222
5.2672	(2-Aziridinylethyl)amine	4025-37-0	C4H10N2	1416.4	73.5	0.006593
5.4841	Acetone	67-64-1	C3H6O	71682.3	96.3	0.3337
5.6330	Trichloromonofluoromethane	75-69-4	CCl3F	21176.1	94.4	0.09857
5.7106	Isopropyl Alcohol	67-63-0	C3H8O	95591.8	97.2	0.445
5.9566	Pentane	109-66-0	C5H12	13560.6	93.3	0.06312
6.2900	Methylene chloride	75-09-2	CH2Cl2	40850.1	89.5	0.1901
6.5554	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	76-13-1	C2Cl3F3	19863.4	82.1	0.09246
6.8467	Acetic acid, 2-(methylaminoethyl) ester	26921-43-7	C5H11NO2	2567.6	73.1	0.01195
6.9535	Acetamide	60-35-5	C2H5NO	2136.3	86.2	0.009944
7.3193	Silanol, trimethyl-	1066-40-6	C3H10OSi	34418.1	93.8	0.1602
7.5491	Isobutylene epoxide	558-30-5	C4H8O	8935.6	88.3	0.04159
7.6785	2-Butanone	78-93-3	C4H8O	9317.2	91.7	0.04337
8.0961	Furan, 2-methyl-	534-22-5	C5H6O	7530.0	89.3	0.03505
8.1802	Methane, bromochloro-	74-97-5	CH2BrCl	2148320.4	98.9	10
8.2482	Ethyl Acetate	141-78-6	C4H8O2	67392.4	88.1	0.3137
8.9862	Cyclopropane, propyl-	2415-72-7	C6H12	4184.9	77.6	0.01948
9.1868	Pentanal	110-62-3	C5H10O	1790.1	84.7	0.005574
9.5396	1-Butanol	71-36-3	C4H10O	63731.9	97.8	0.1984
9.6011	Benzene	71-43-2	C6H6	14018.0	92.1	0.04364
9.7500	Carbon Tetrachloride	56-23-5	CCl4	53448.1	98.7	0.1664
9.9086	Benzene, 1,4-difluoro-	540-36-3	C6H4F2	3211830.9	99.5	10
10.0187	Acetic acid ethenyl ester	108-05-4	C4H6O2	6589.2	73.3	0.02052
10.2193	Pentanal	110-62-3	C5H10O	7238.1	92.1	0.02254
10.6110	Formic acid, 2-propenyl ester	1838-59-1	C4H6O2	1588.3	78.9	0.004945
10.7372	Furan, 2,5-dimethyl-	625-86-5	C6H8O	1774.7	79.5	0.005526
10.8343	Pentane, 2-methyl-	107-83-5	C6H14	2162.1	86.0	0.006732
11.1483	1-Pentene, 2,4,4-trimethyl-	107-39-1	C8H16	5377.6	94.3	0.01674
11.4104	Methyl Isobutyl Ketone	108-10-1	C6H12O	3110.3	87.6	0.009684
12.1063	1-Pentanol	71-41-0	C5H12O	6336.1	91.5	0.01607
12.2779	Cyclobutene, 2-propenylidene-	52097-85-5	C7H8	32088.6	96.9	0.08137
12.4138	Cyclopentanone	120-92-3	C5H8O	3615.6	91.9	0.009169
12.5433	Pentanal, 2,3-dimethyl-	32749-94-3	C7H14O	2996.9	82.4	0.0076
12.7440	Hexanal	66-25-1	C6H12O	10912.5	93.8	0.02767
13.2327	Octane	111-65-9	C8H18	3724.1	89.1	0.009444
13.3816	Tetrachloroethylene	127-18-4	C2Cl4	13584.1	97.1	0.03445
13.6341	Cyclotrisiloxane, hexamethyl-	541-05-9	C6H18O3Si3	255045.4	98.7	0.6468
14.0095	Chlorobenzene-d5	3114-55-4	C6D5Cl	3943313.9	96.3	10
14.4432	Ethylbenzene	100-41-4	C8H10	12882.2	94.4	0.03267
14.6180	p-Xylene	106-42-3	C8H10	46733.0	97.9	0.1185
14.7119	2-Butanone, 3,3-dimethyl-1-thiocyanato-	57518-71-5	C7H11NOS	3881.3	74.5	0.009843
14.8187	Propane, 2-methyl-1-nitro-	625-74-1	C4H9NO2	3185.7	89.1	0.008079
14.9999	1,3,5,7-Cyclooctatetraene	629-20-9	C8H8	50309.5	94.6	0.1276
15.1229	o-Xylene	95-47-6	C8H10	21635.8	96.4	0.05487
15.3624	Hexane, 2,4-dimethyl-	589-43-5	C8H18	9166.7	91.6	0.02325
15.6117	Benzene, 1-bromo-3-fluoro-	1073-06-9	C6H4BrF	4866528.0	98.6	12.34
15.7703	Benzene, (1-methylethyl)-	98-82-8	C9H12	8882.3	91.5	0.02253
16.1684	Benzaldehyde	100-52-7	C7H6O	13975.0	94.5	0.03544
16.3561	Benzene, propyl-	103-65-1	C9H12	6598.1	92.2	0.01673
16.4856	Benzene, 1-ethyl-4-methyl-	622-96-8	C9H12	3595.9	75.0	0.009119
16.5309	Benzene, 1-ethyl-4-methyl-	622-96-8	C9H12	3877.2	76.8	0.009832
16.5989	1-Hexene, 3,5,5-trimethyl-	4316-65-8	C9H18	2407.5	85.0	0.006105
16.6927	Pentane, 2,2,3,4-tetramethyl-	1186-53-4	C9H20	3532.8	93.3	0.008959
16.7704	Butane, 2,2-dimethyl-	75-83-2	C6H14	4073.2	80.0	0.01033

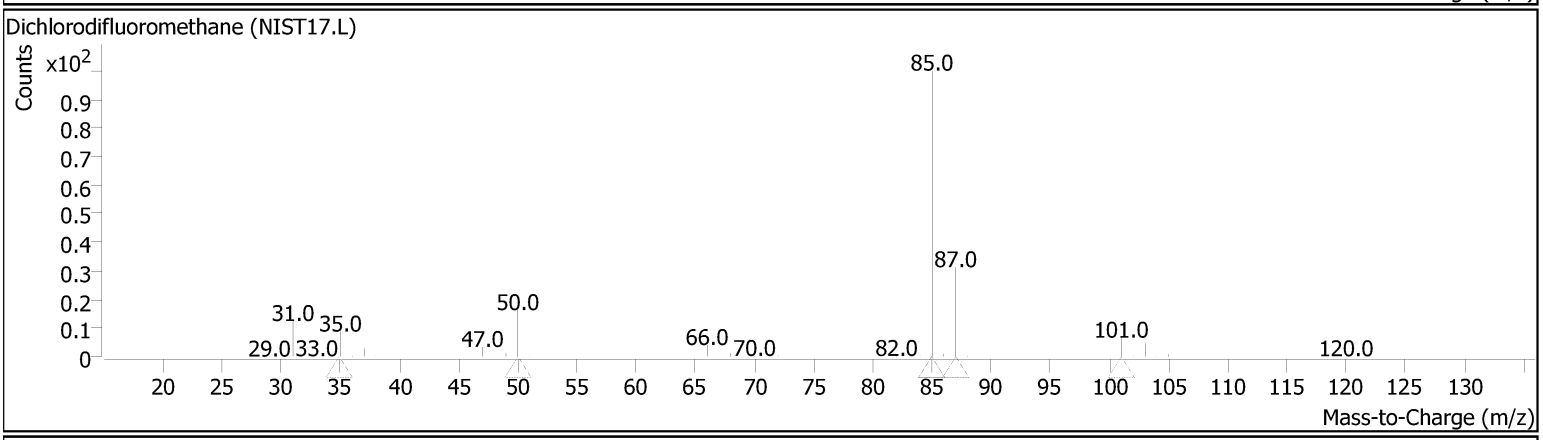
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
16.9905	Hydroperoxide, hexyl	4312-76-9	C6H14O2	7623.8	83.1	0.01933
17.0941	Cyclotetrasiloxane, octamethyl-	556-67-2	C8H24O4Si4	230391.9	96.7	0.5843
17.2786	Decane	124-18-5	C10H22	37731.6	90.1	0.09568
17.4080	Benzene, 1,4-dichloro-	106-46-7	C6H4Cl2	75029.9	98.5	0.1903
17.7317	2,4,6-Trimethyl-1-nonene	55771-40-9	C12H24	12499.3	88.5	0.0317
17.8612	Benzene, 1,2-dichloro-	95-50-1	C6H4Cl2	14838.8	89.1	0.03763
17.9486	Propanoic acid, 2-methyl-, 3-phenylpropyl ester	103-58-2	C13H18O2	2808.9	70.5	0.007123
18.0392	1,8-Octanediol	629-41-4	C8H18O2	6591.4	81.8	0.01672
18.2496	Myrtenyl 2-methyl butyrate	138530-44-6	C15H24O2	3614.6	71.0	0.009166
18.3208	Hexane, 3-ethyl-2-methyl-	16789-46-1	C9H20	3084.3	85.6	0.007822
18.3985	Hexane, 3,3-dimethyl-	563-16-6	C8H18	12695.8	88.8	0.0322
18.5538	Oxalic acid, cyclobutyl nonyl ester	1000309-70-0	C15H26O4	3536.1	71.7	0.008967
18.7674	Benzene, tert-butyl-	98-06-6	C10H14	2127.7	71.7	0.005396
18.8354	1,4-Heptadiene, 3,3,6-trimethyl-	74498-89-8	C10H18	2044.4	73.2	0.005185
18.9455	Cyclopentane, 1-hydroxymethyl-1,3-dimethyl-	1000156-73-8	C8H16O	2756.7	80.1	0.006991
19.0231	Undecane	1120-21-4	C11H24	43770.3	93.4	0.111
19.1299	Hexane, 2,3,4-trimethyl-	921-47-1	C9H20	6828.2	91.1	0.01732
19.2238	Oxalic acid, cyclobutyl octyl ester	1000309-69-9	C14H24O4	7065.2	70.6	0.01792
19.5345	Oxalic acid, allyl nonyl ester	1000309-23-7	C14H24O4	2265.6	75.7	0.005745
19.7999	Cyclopentane, 1-methyl-2-(2-propenyl)-, trans-	50746-53-7	C9H16	2936.9	74.7	0.007448
20.0880	Oxalic acid, allyl nonyl ester	1000309-23-7	C14H24O4	2755.4	81.9	0.006987
20.2078	Pentane, 2,2,3,4-tetramethyl-	1186-53-4	C9H20	2671.4	79.0	0.006774
20.3664	Benzene, 1,3,5-trichloro-	108-70-3	C6H3Cl3	9876.7	91.0	0.02505
20.4732	Cyclododecane	294-62-2	C12H24	10339.3	88.0	0.02622
20.5347	Naphthalene	91-20-3	C10H8	31033.8	94.4	0.0787
20.6415	Dodecane	112-40-3	C12H26	33318.1	90.1	0.08449
20.8907	Heptane, 3-ethyl-2-methyl-	14676-29-0	C10H22	3568.0	82.3	0.009048
21.1205	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87-68-3	C4Cl6	6105.8	80.9	0.01548
21.4442	Cyclopentane, 1-methyl-2-(2-propenyl)-, trans-	50746-53-7	C9H16	2545.3	72.4	0.006455
21.7970	1-Hexene, 3,5,5-trimethyl-	4316-65-8	C9H18	1960.3	76.0	0.004971
21.9847	Octane, 3,4,5,6-tetramethyl-	62185-21-1	C12H26	5839.7	84.5	0.01481
22.1433	Octane, 4-ethyl-	15869-86-0	C10H22	8727.6	79.9	0.02213
22.7000	Naphthalene, 2-ethyl-1,2,3,4-tetrahydro-	32367-54-7	C12H16	7485.5	75.5	0.01898
22.8068	Cyclododecene	1501-82-2	C12H22	56459.4	90.0	0.1432
22.9654	1,3-Cyclododecadiene, (E,Z)-	1129-92-6	C12H20	38682.3	88.9	0.0981
23.0690	Benzene, (3-methylcyclopentyl)-	5078-75-1	C12H16	52353.4	71.2	0.1328
23.3991	1,3-Cyclododecadiene, (E,Z)-	1129-92-6	C12H20	103247.6	93.9	0.2618

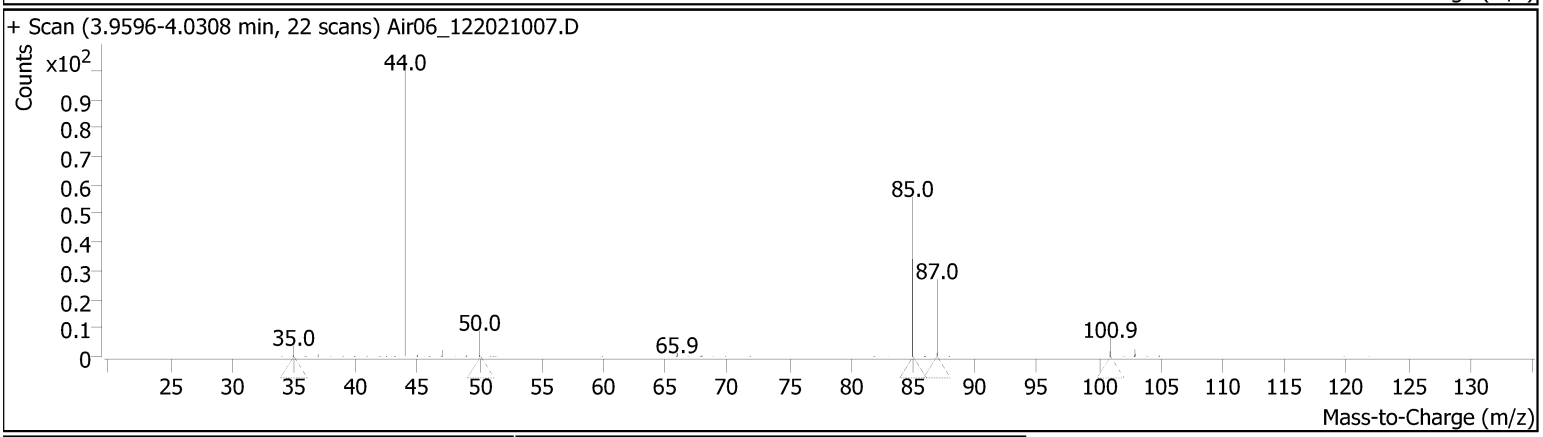
Sample Chromatogram

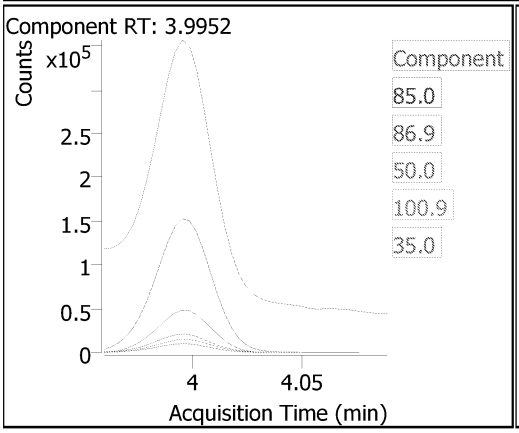


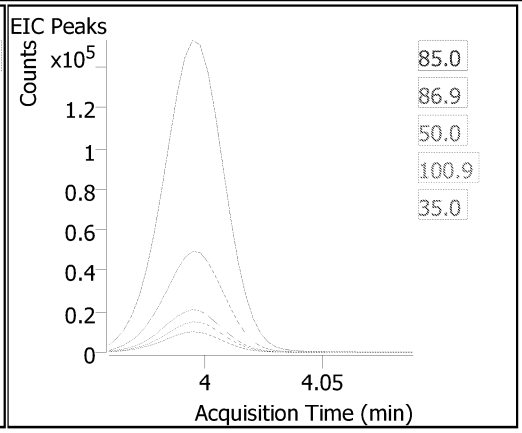
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
3.9952	Dichlorodifluoromethane	655064.4	99.1	75-71-8	CCl2F2	3.049

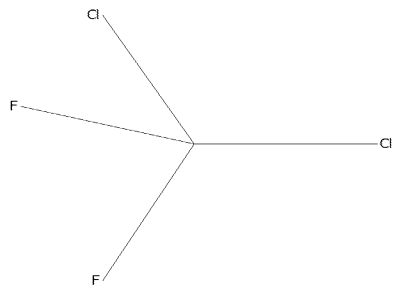




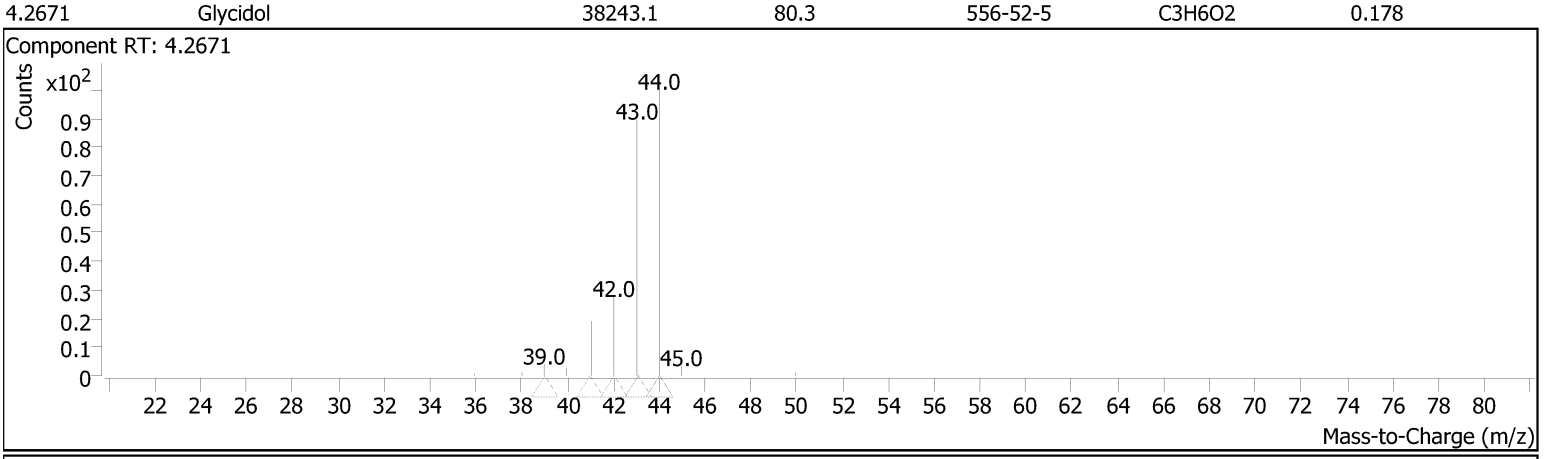


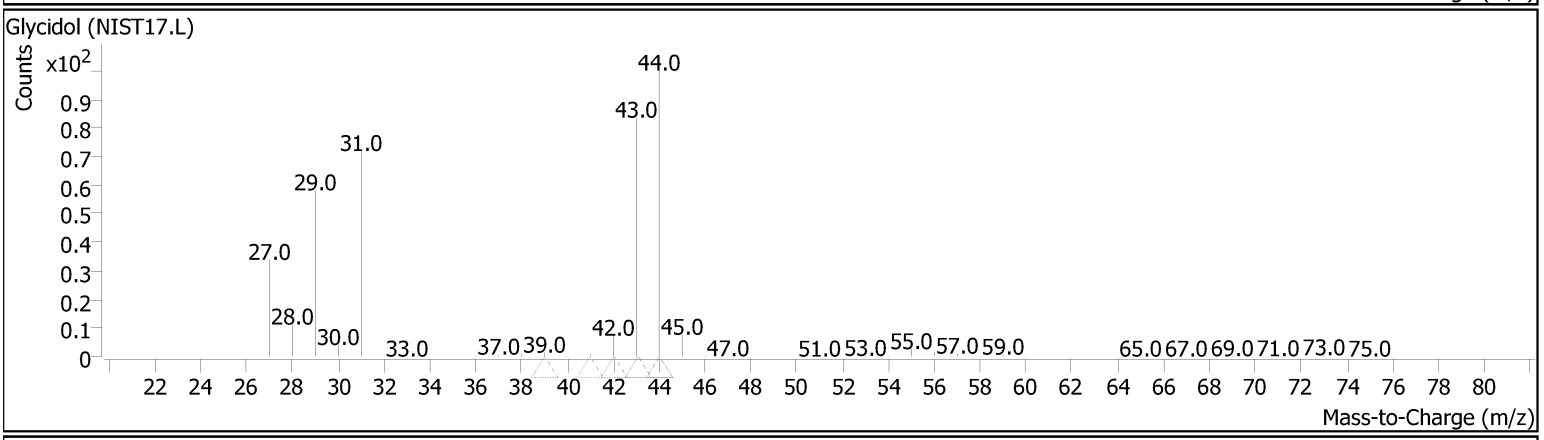


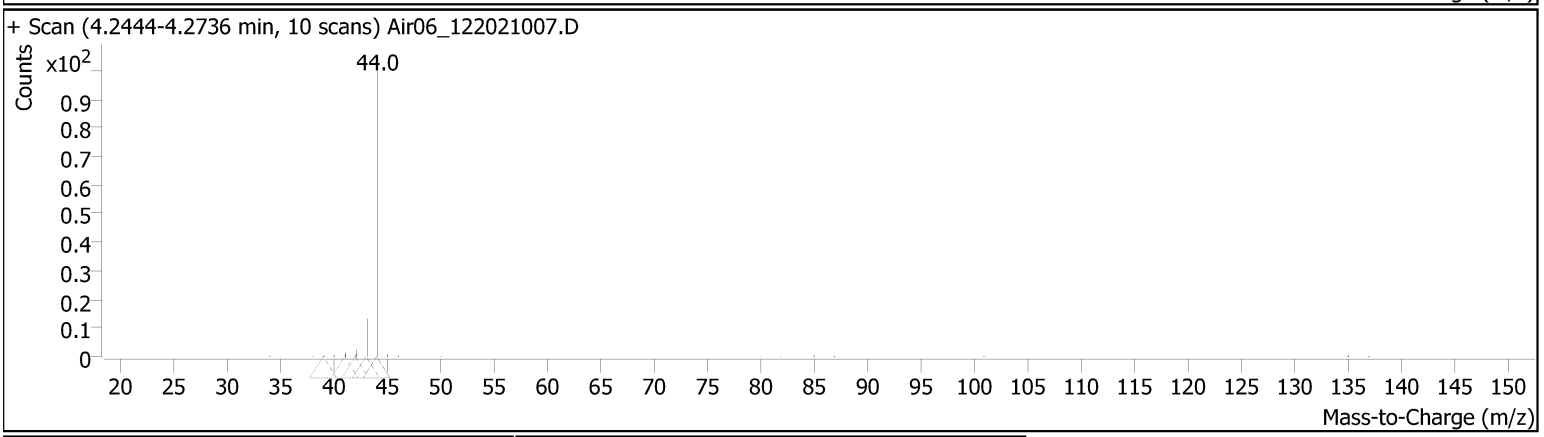


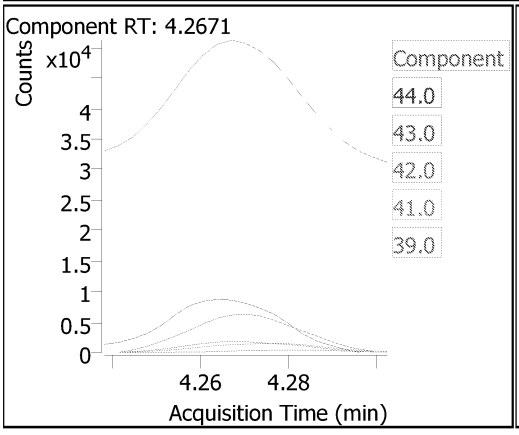


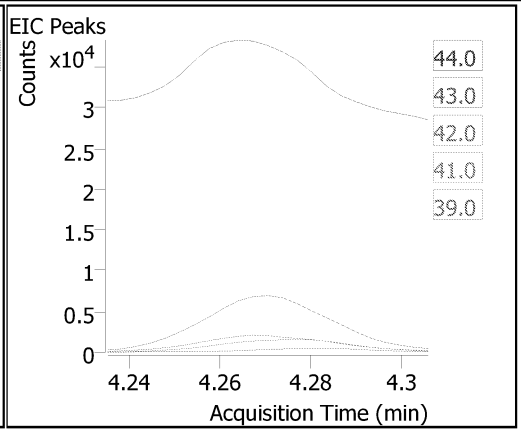
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.2671	Glycidol	38243.1	80.3	556-52-5	C3H6O2	0.178

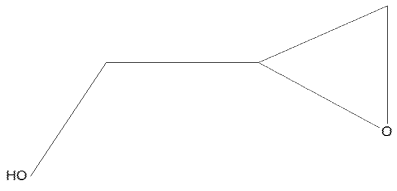




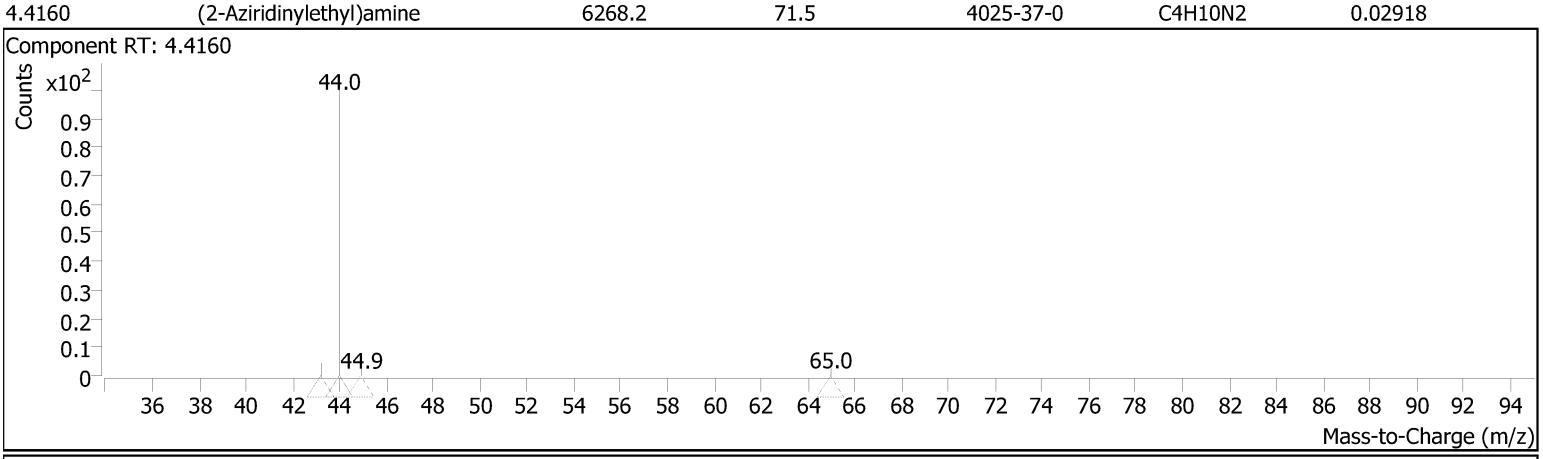


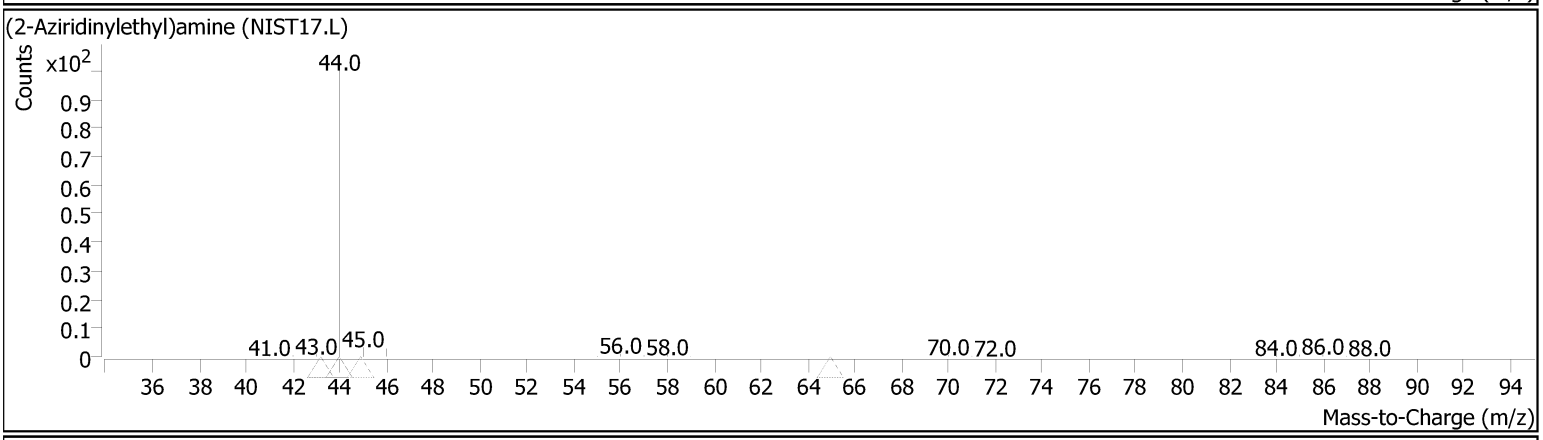


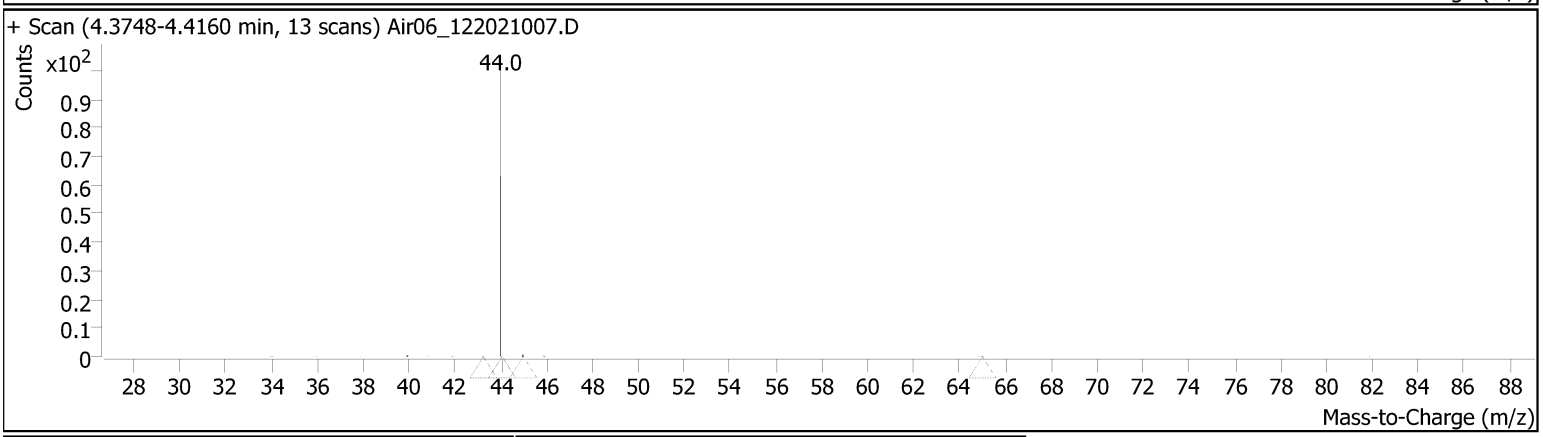


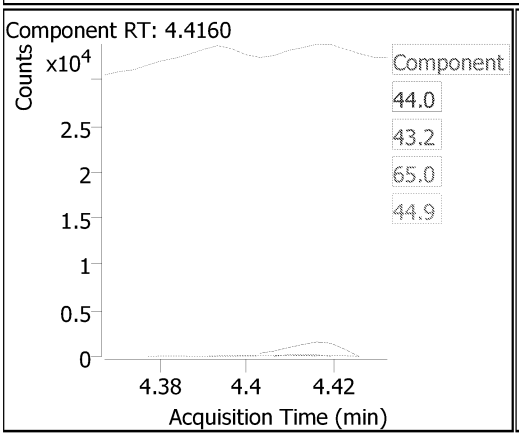


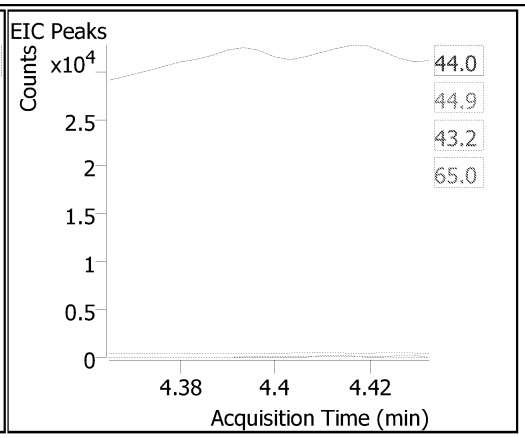
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.4160	(2-Aziridinylethyl)amine	6268.2	71.5	4025-37-0	C4H10N2	0.02918

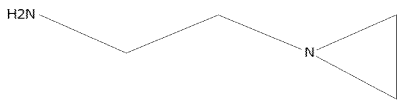




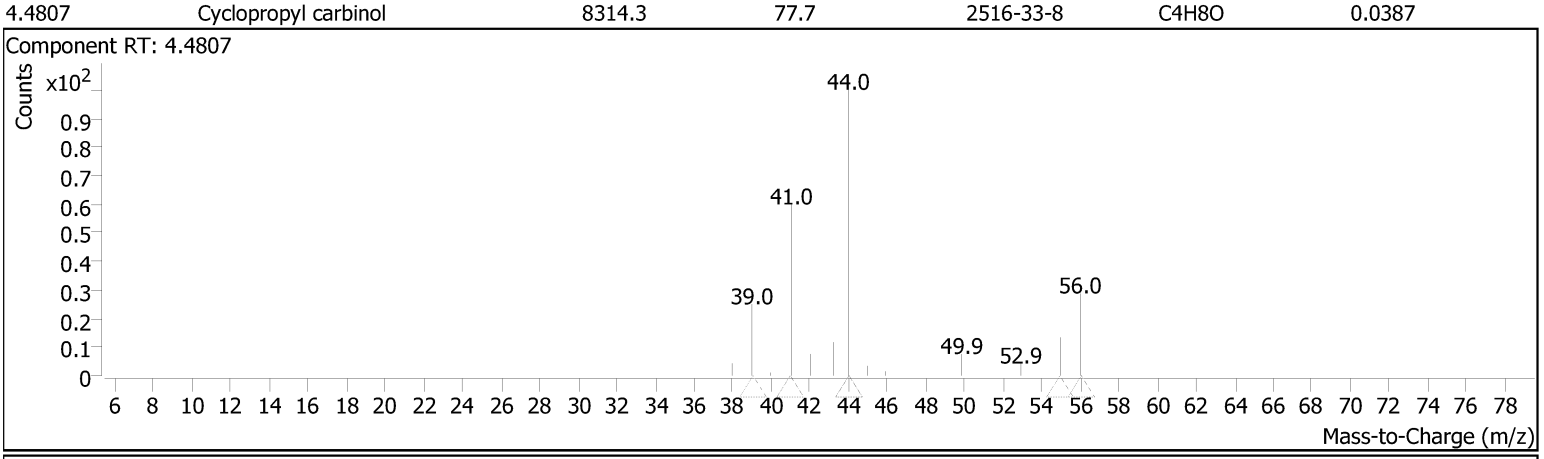


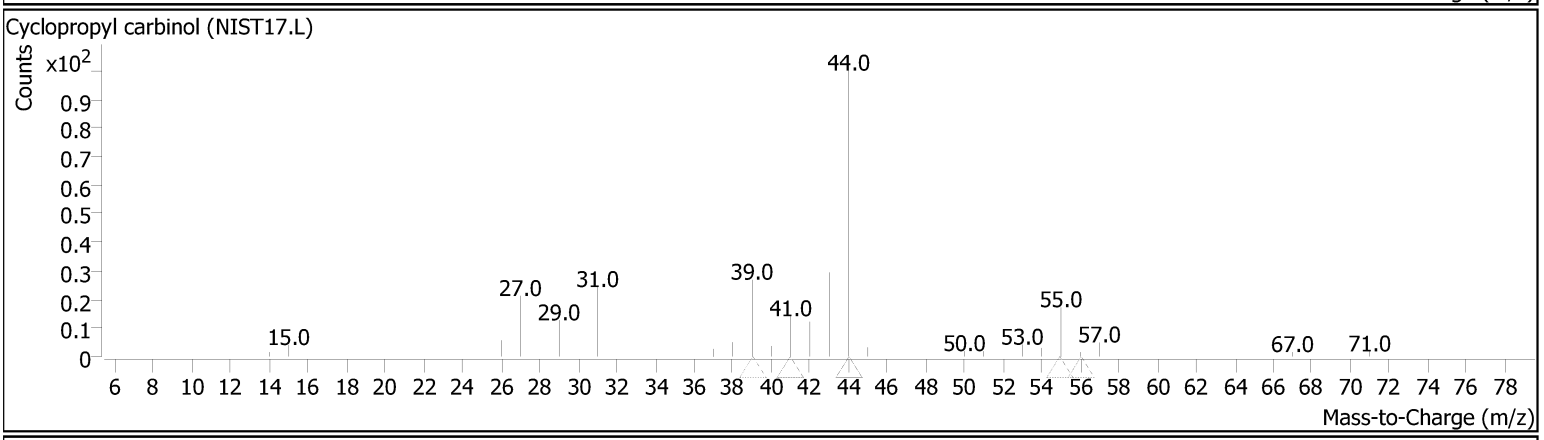


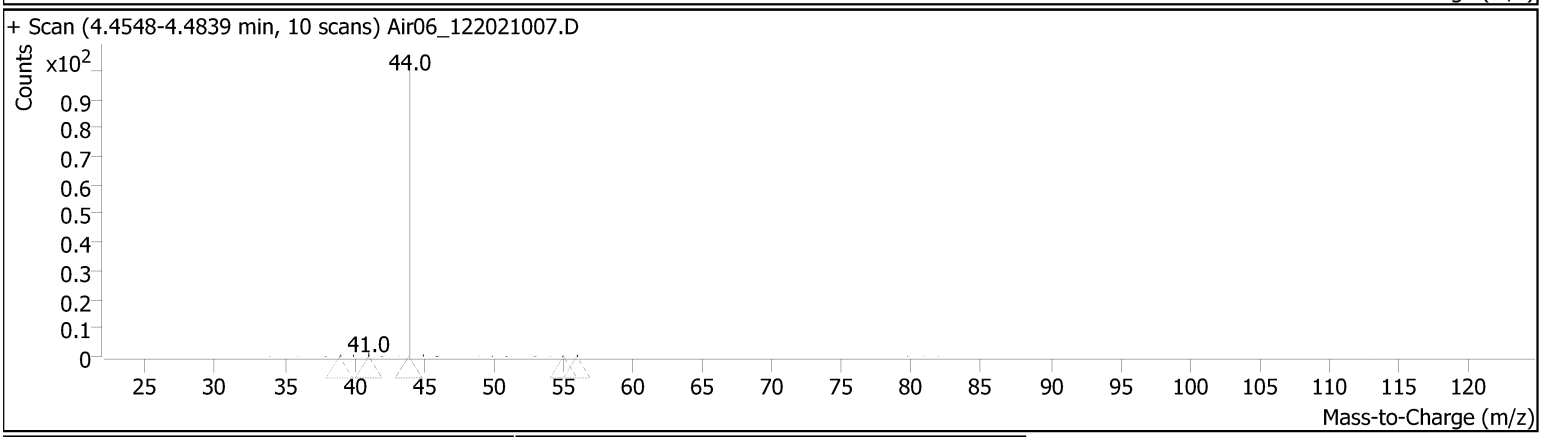


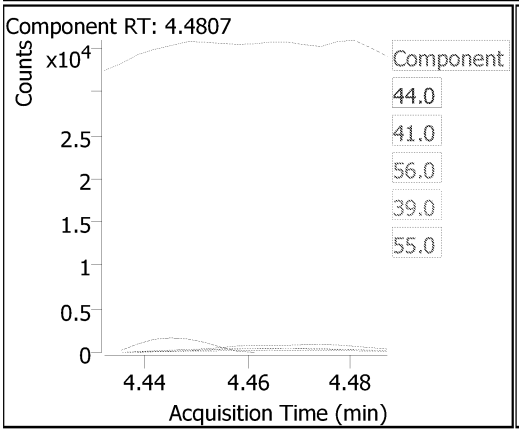


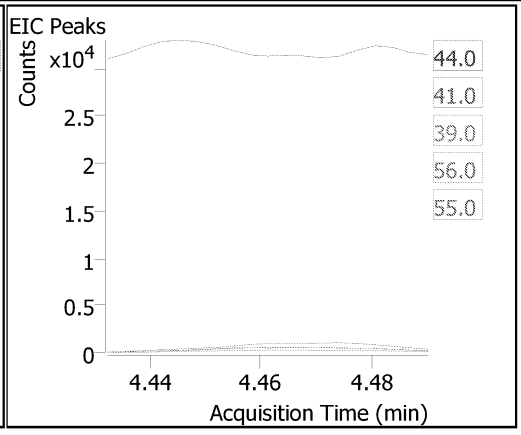
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.4807	Cyclopropyl carbinol	8314.3	77.7	2516-33-8	C4H8O	0.0387

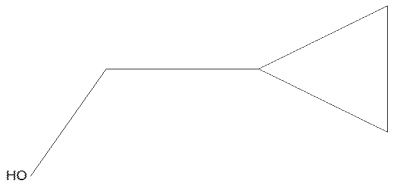




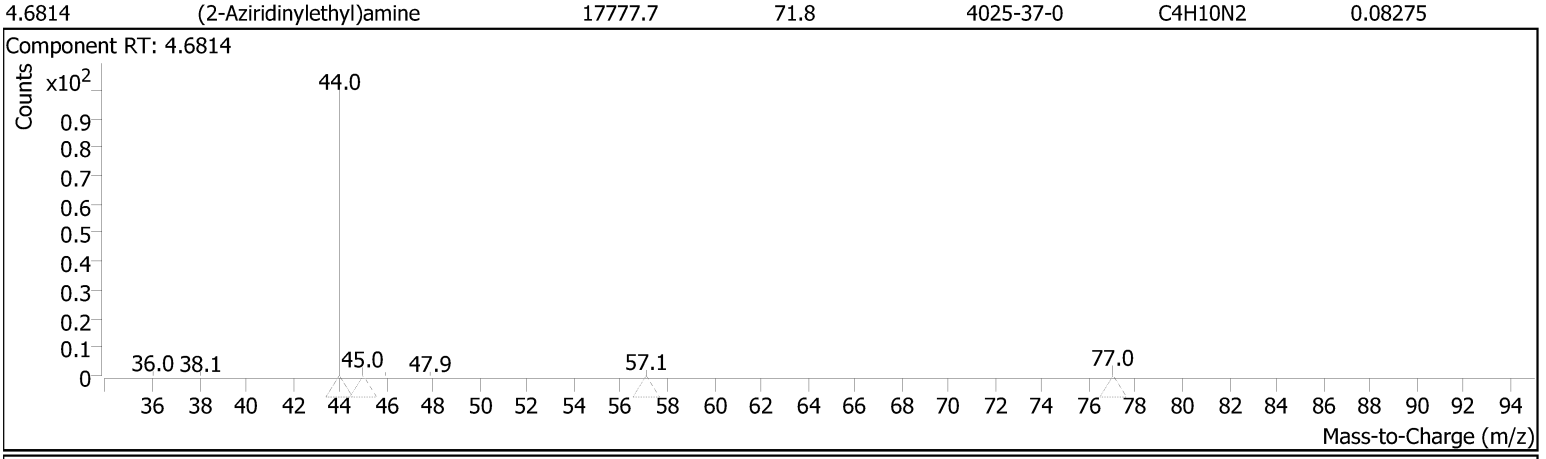


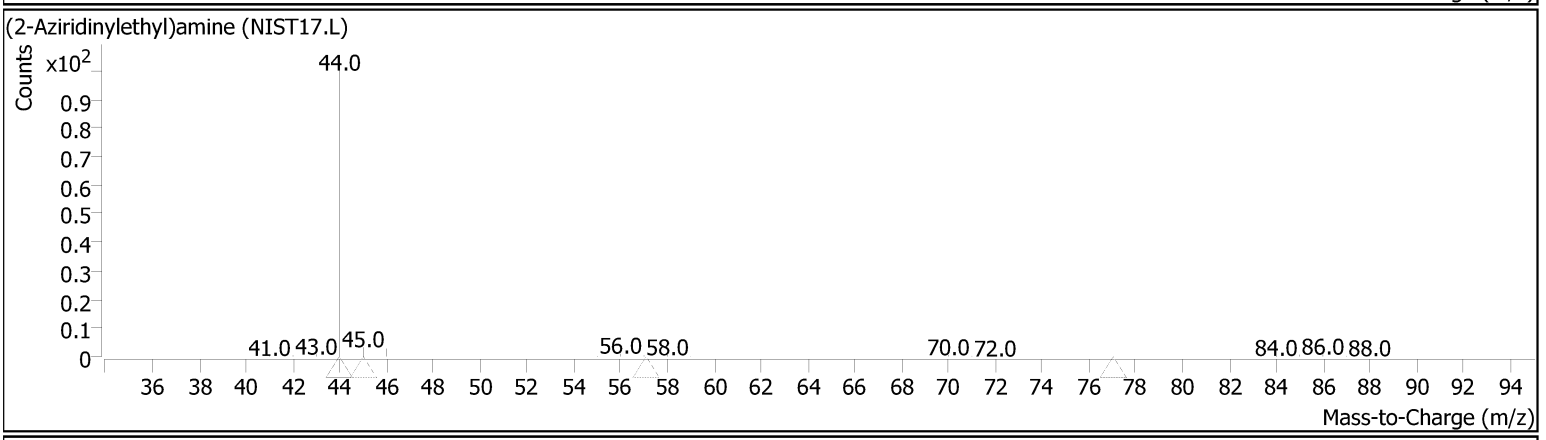


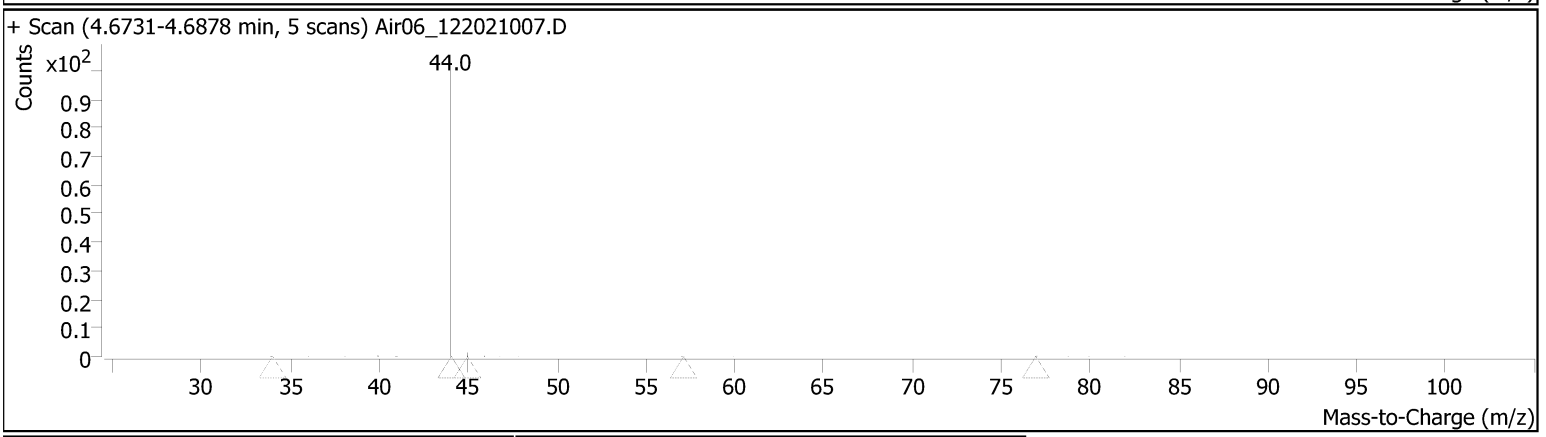


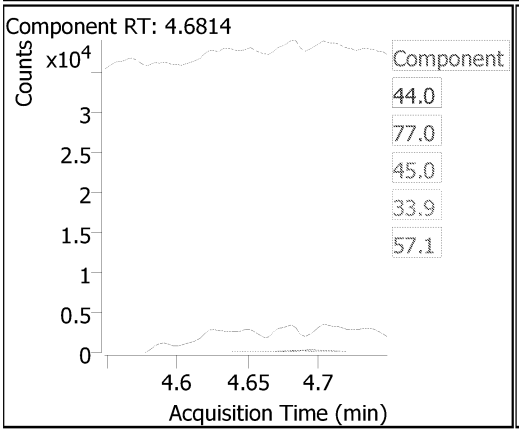


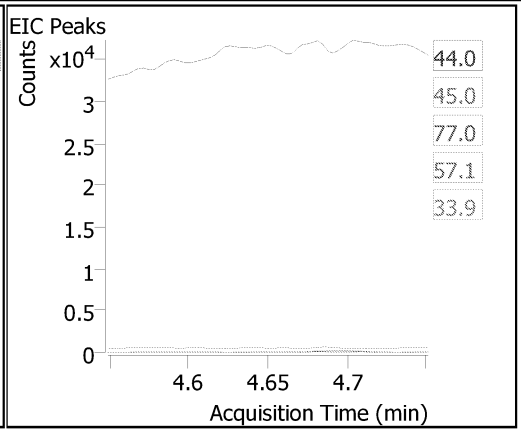
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.6814	(2-Aziridinylethyl)amine	17777.7	71.8	4025-37-0	C4H10N2	0.08275

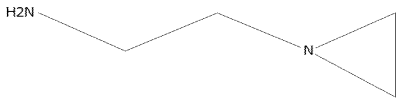




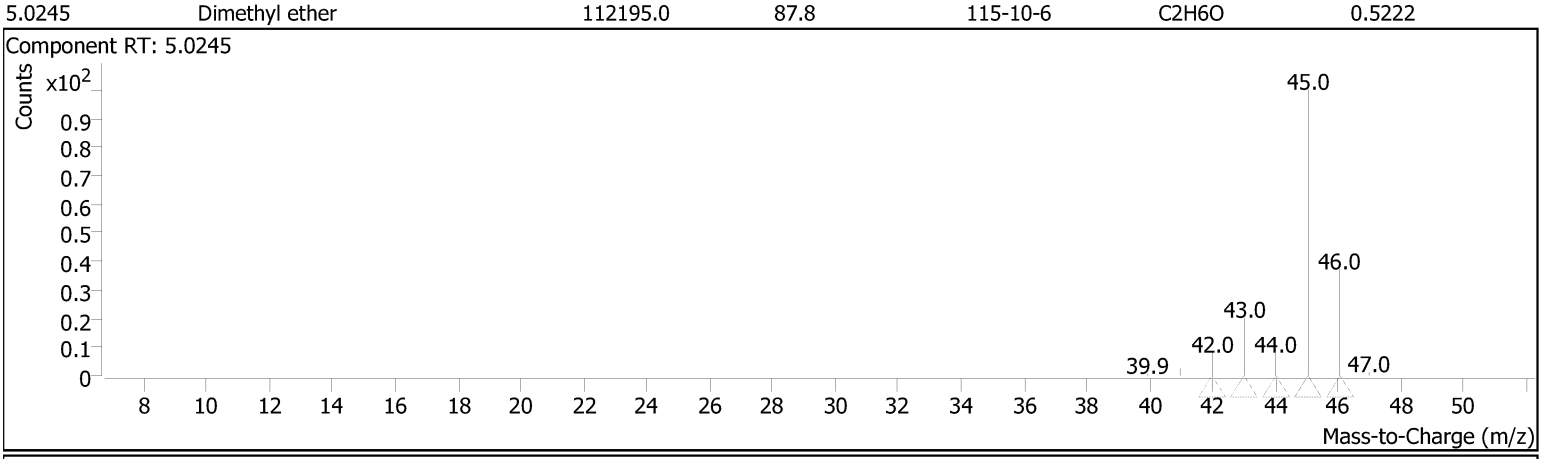


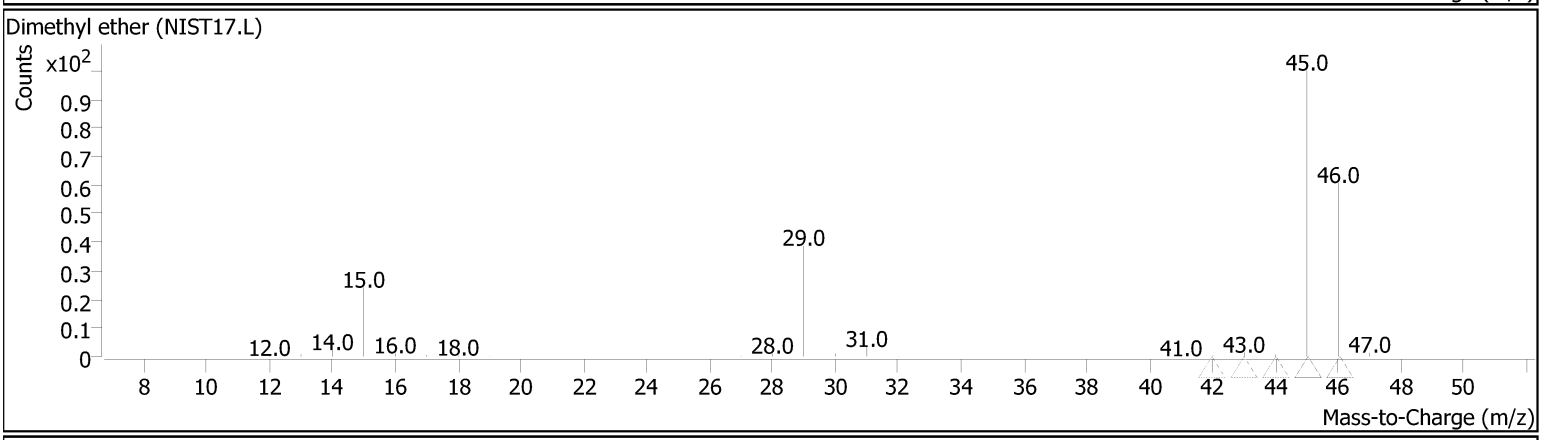


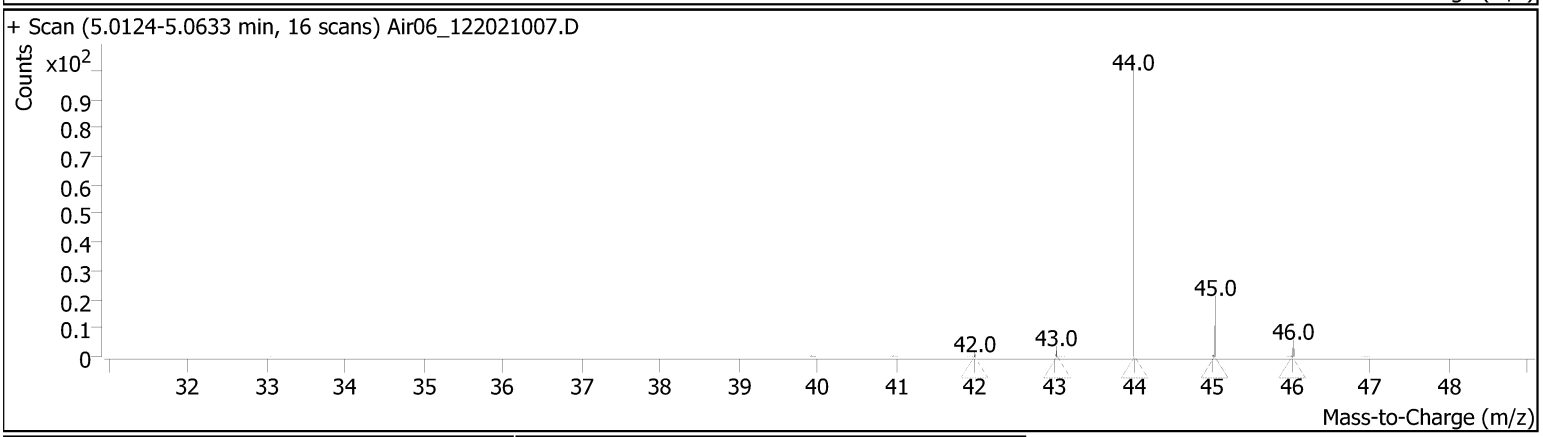


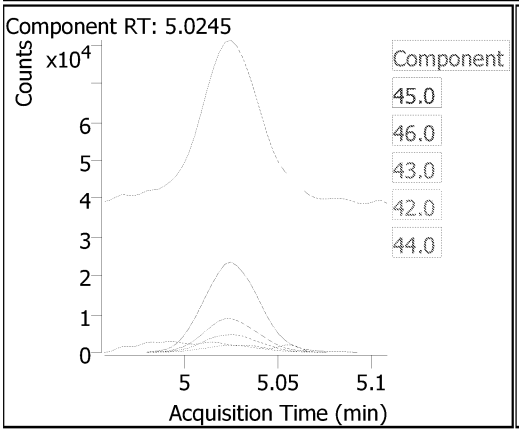


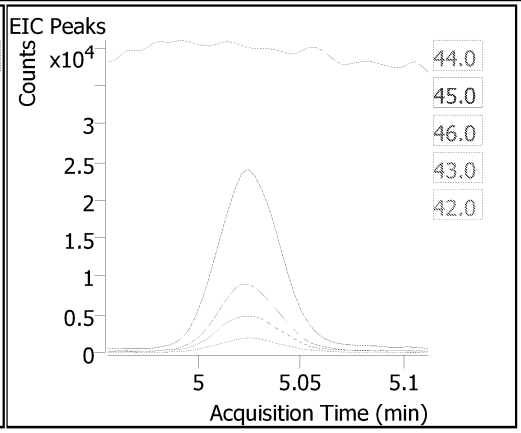
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.0245	Dimethyl ether	112195.0	87.8	115-10-6	C2H6O	0.5222

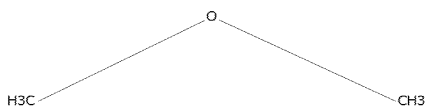




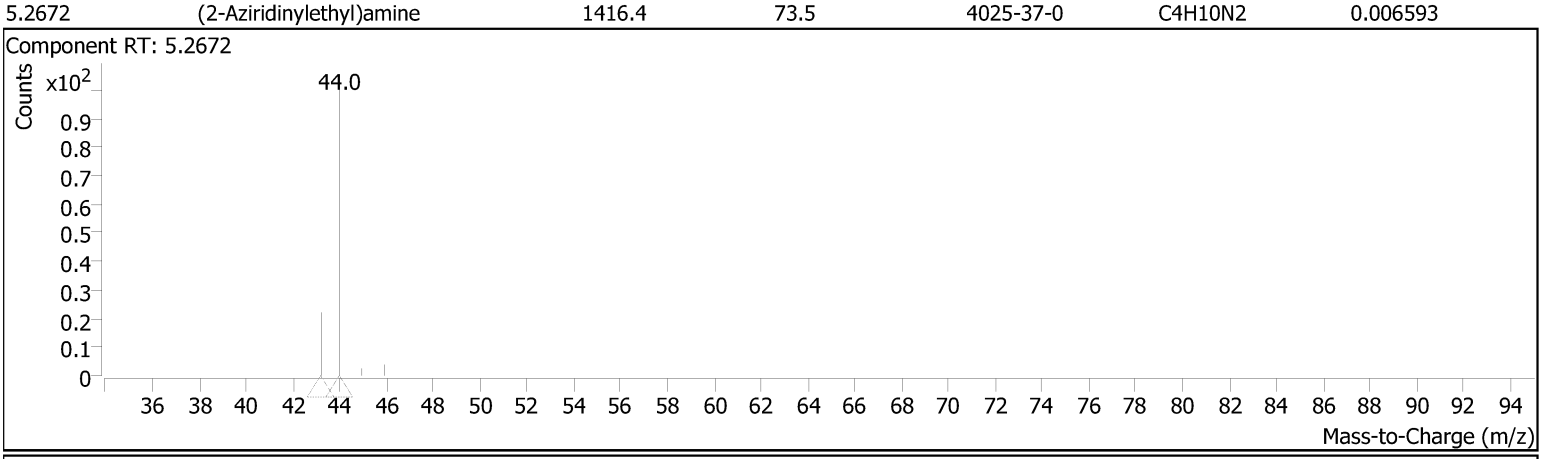


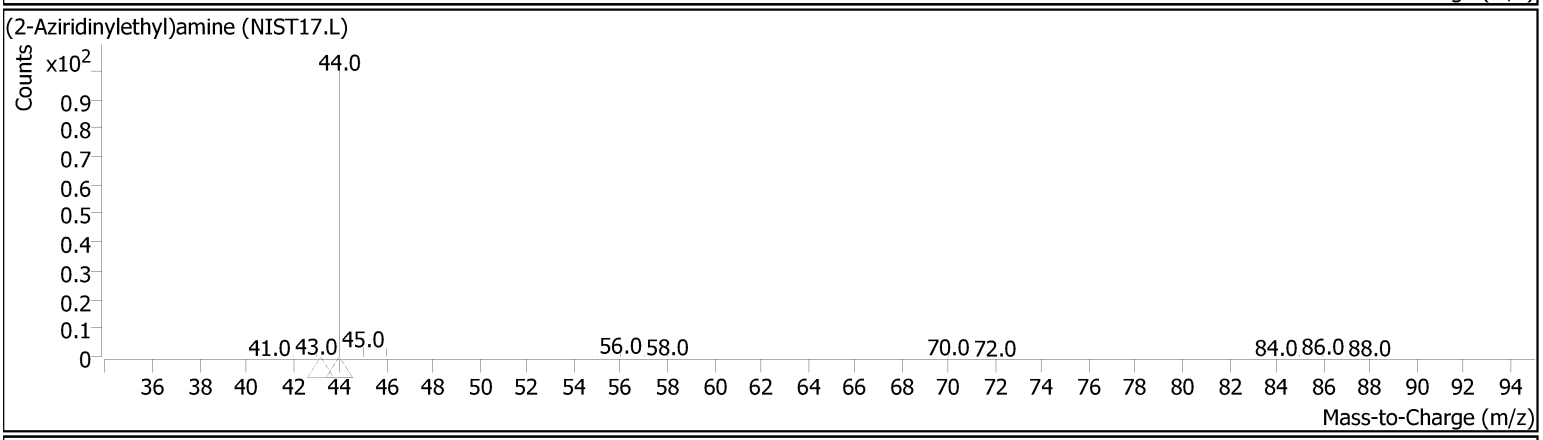


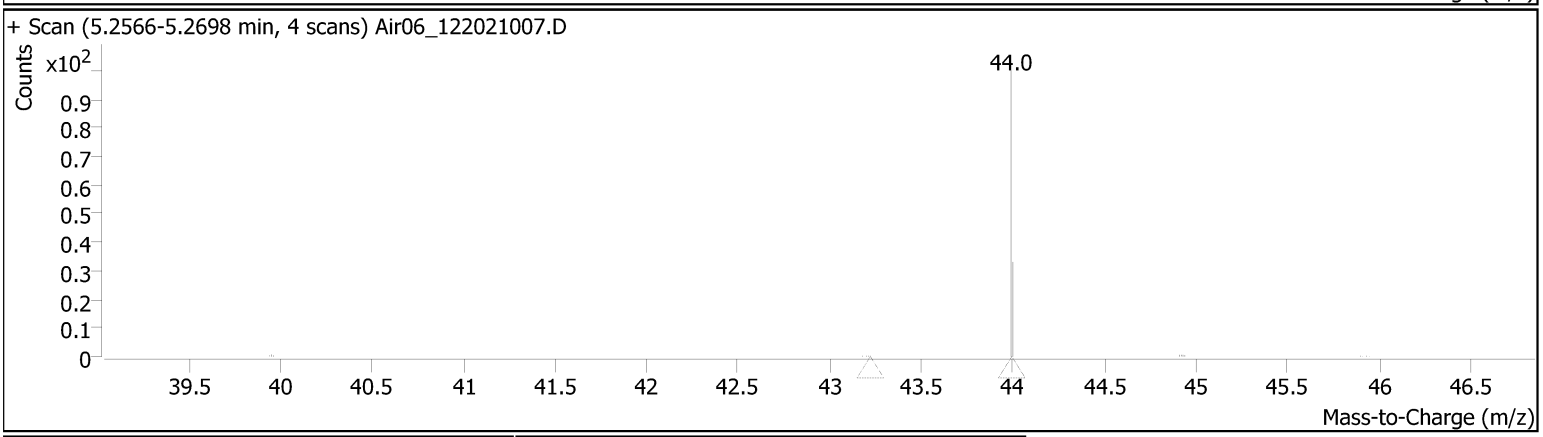


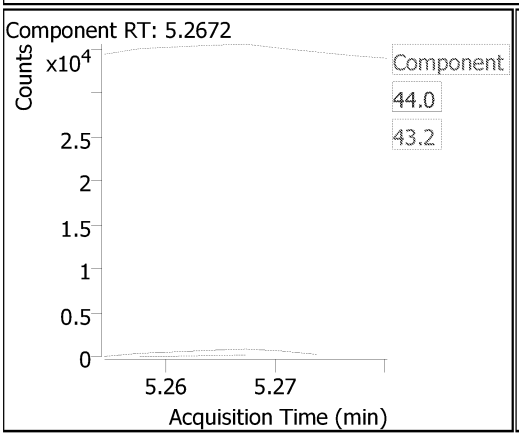


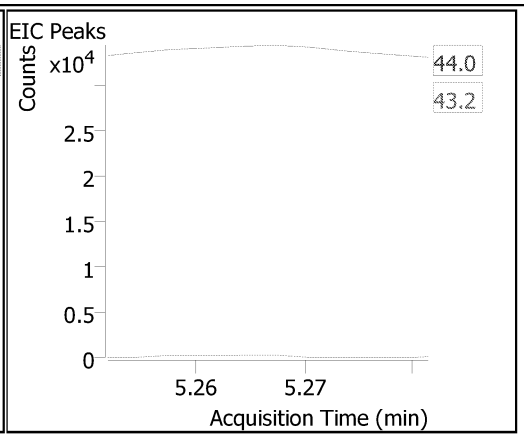
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.2672	(2-Aziridinylethyl)amine	1416.4	73.5	4025-37-0	C4H10N2	0.006593

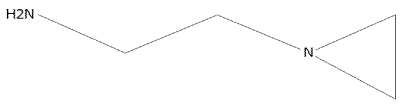




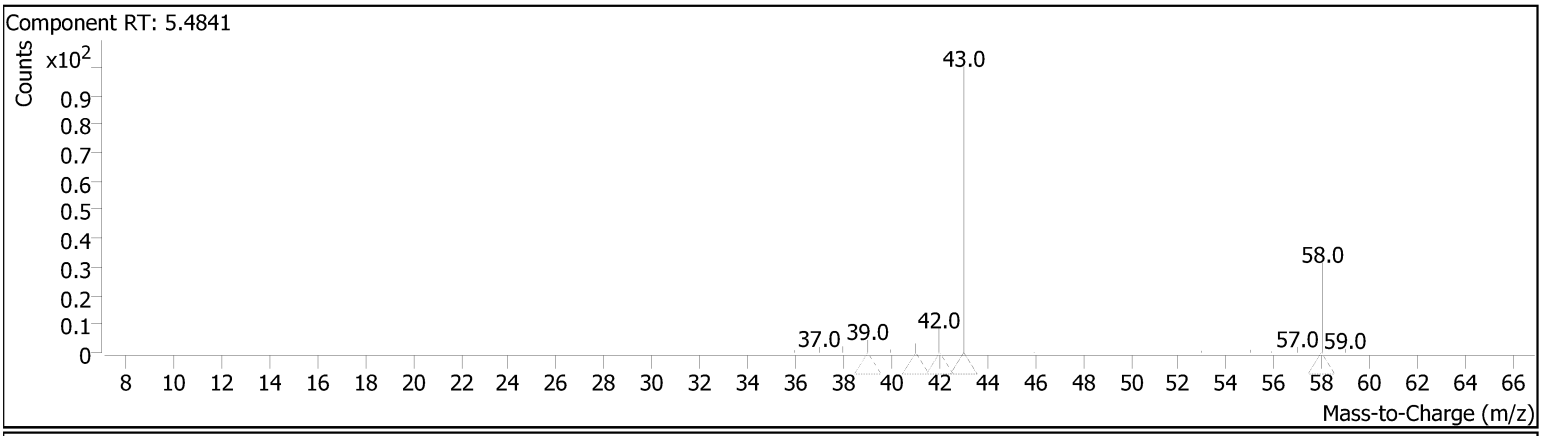


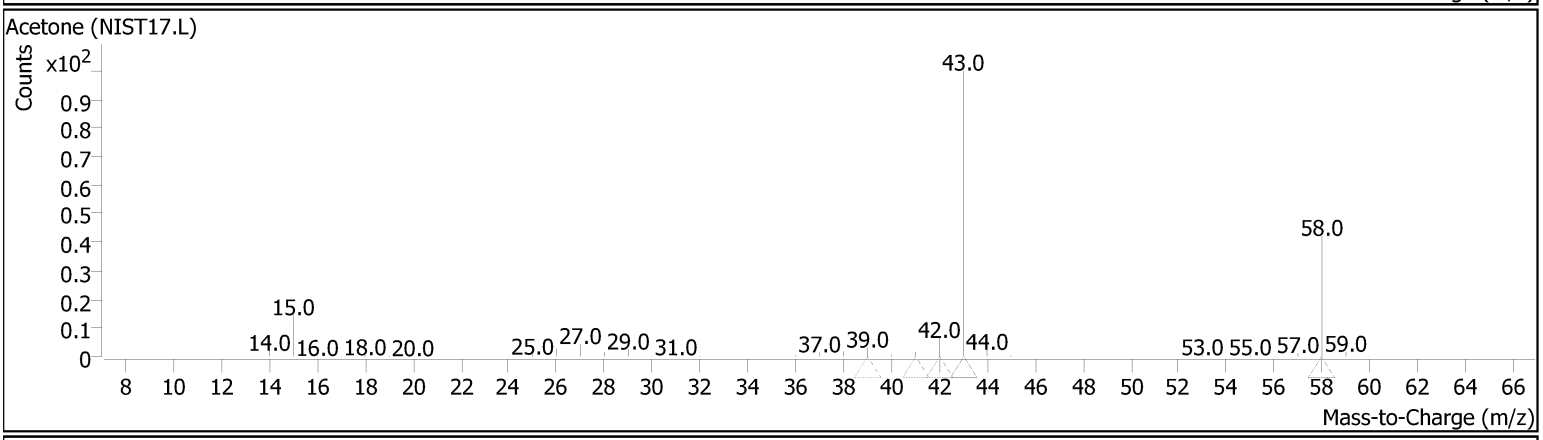


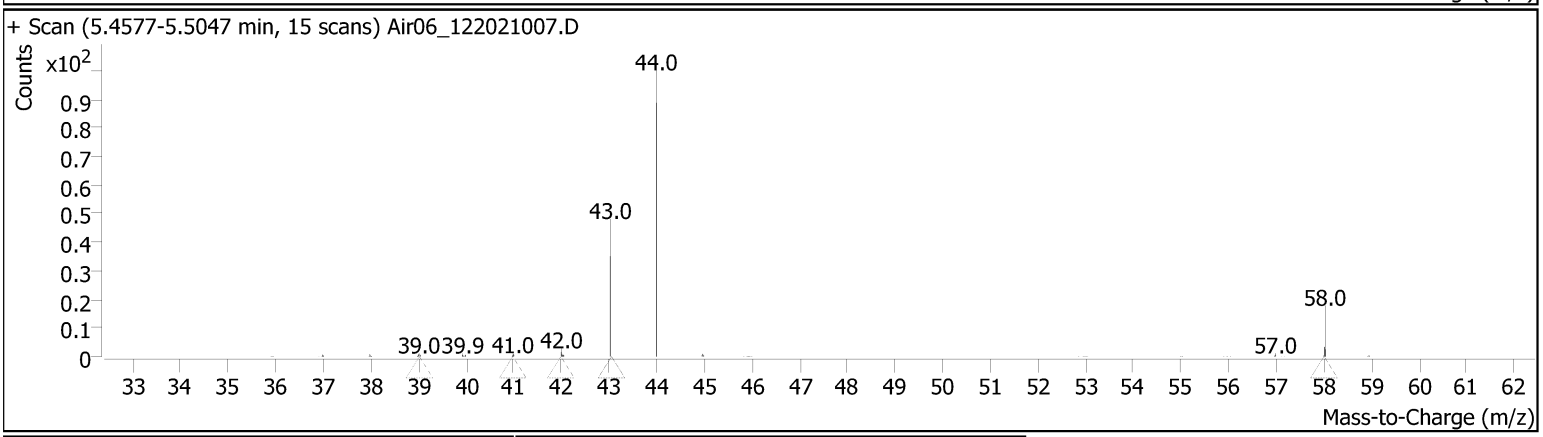


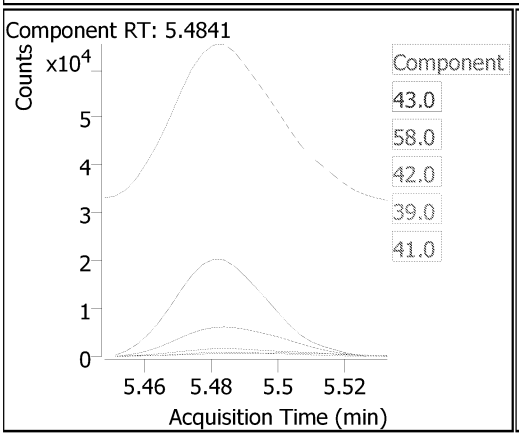


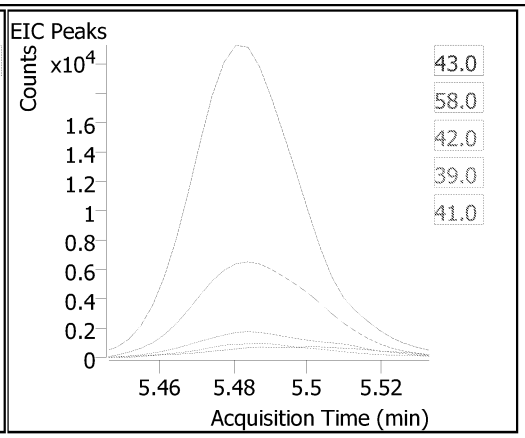
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.4841	Acetone	71682.3	96.3	67-64-1	C3H6O	0.3337

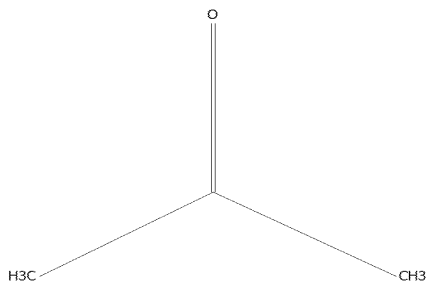




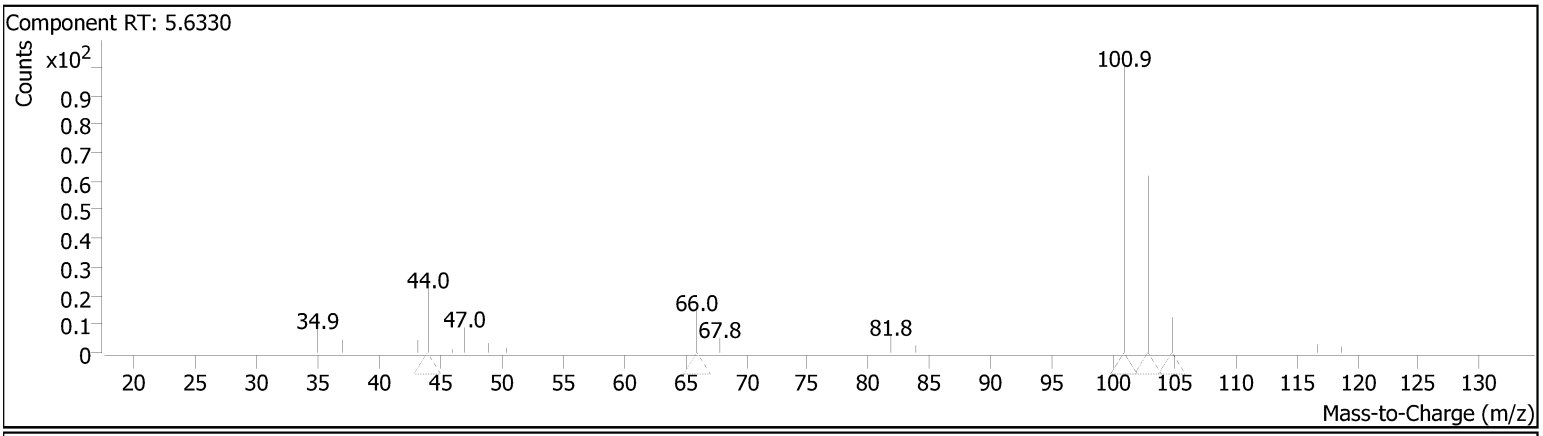


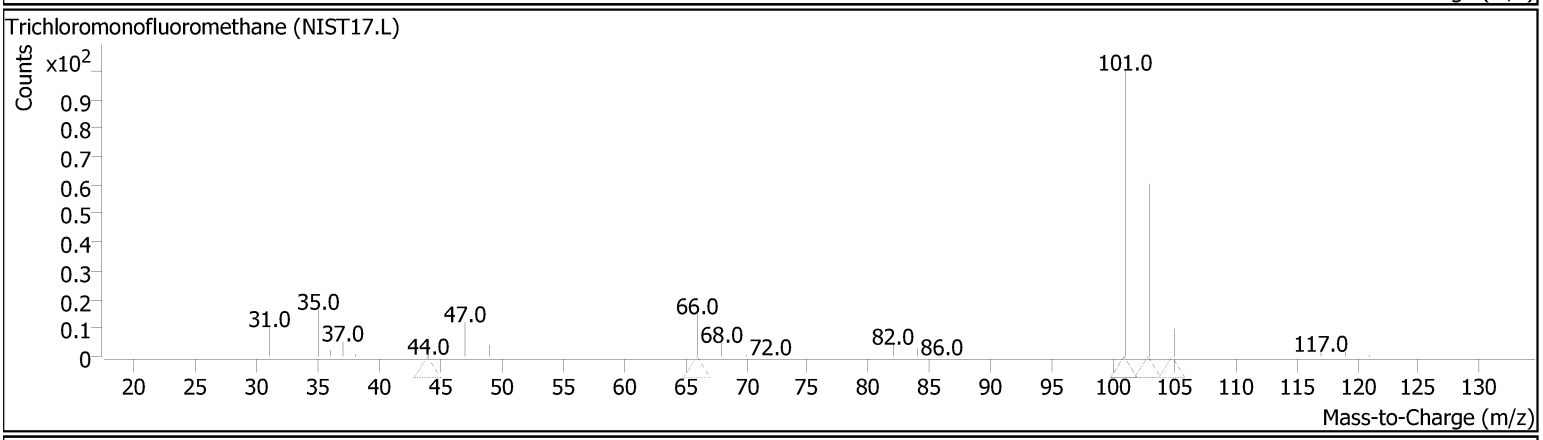


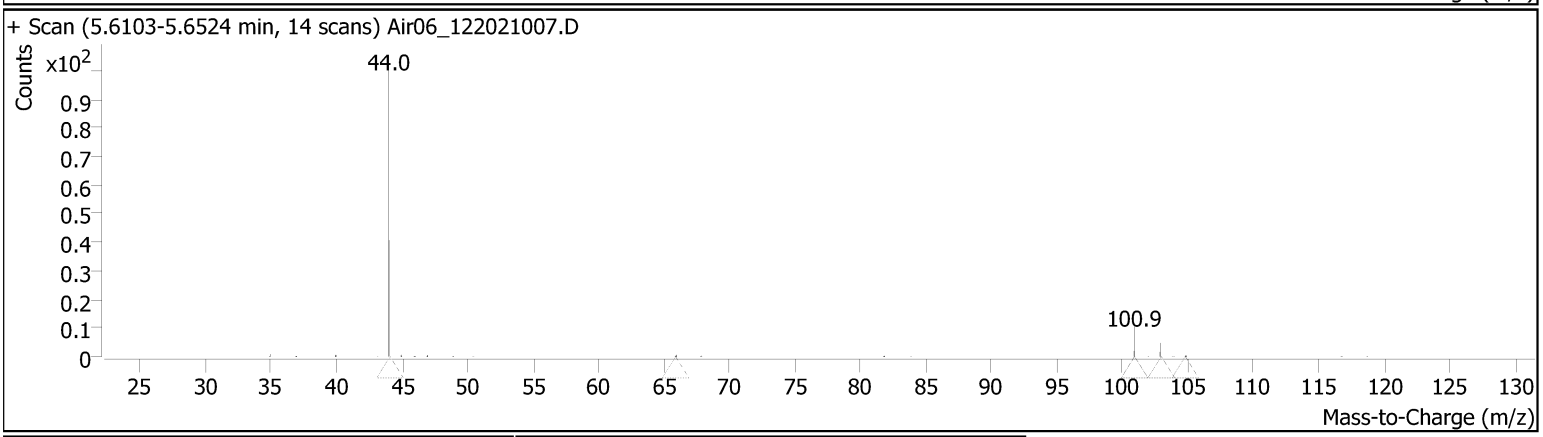


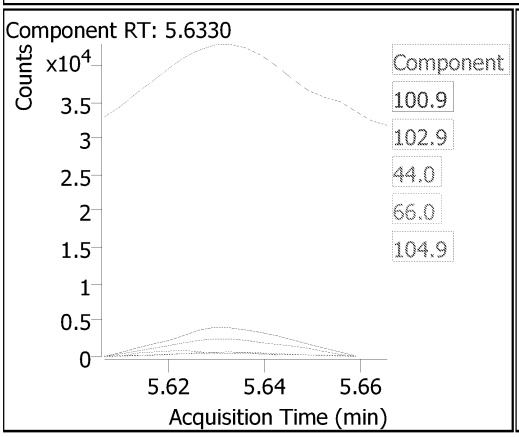


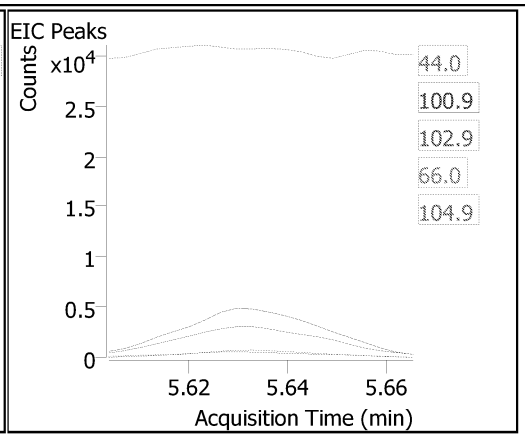
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.6330	Trichloromonofluoromethane	21176.1	94.4	75-69-4	CCl3F	0.09857

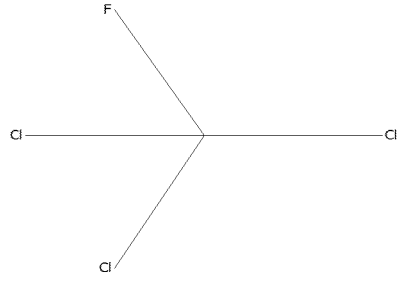




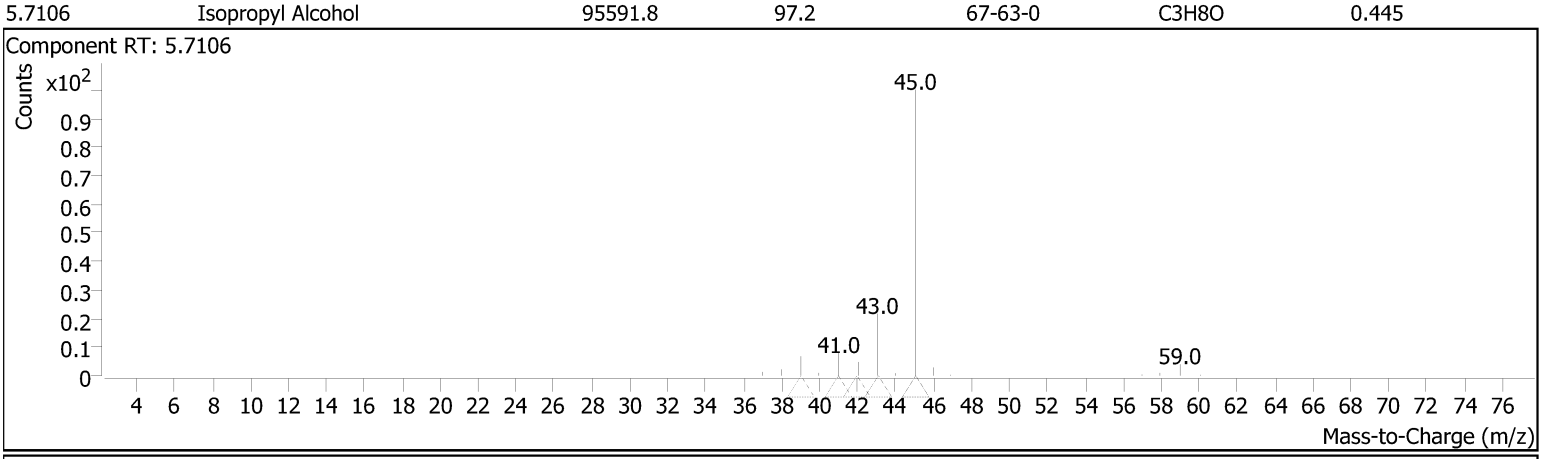


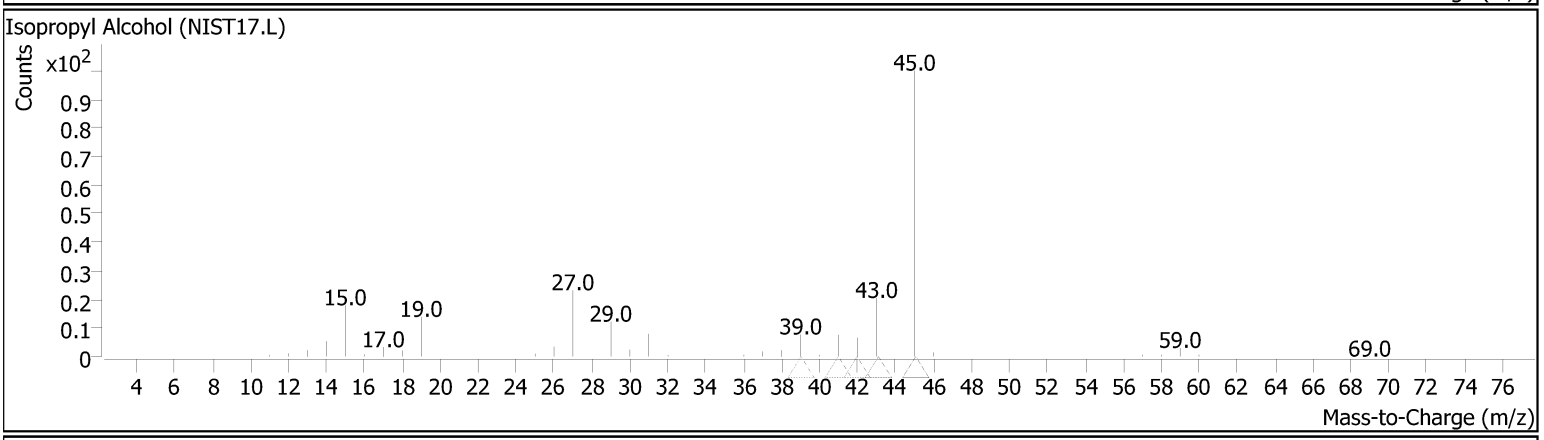


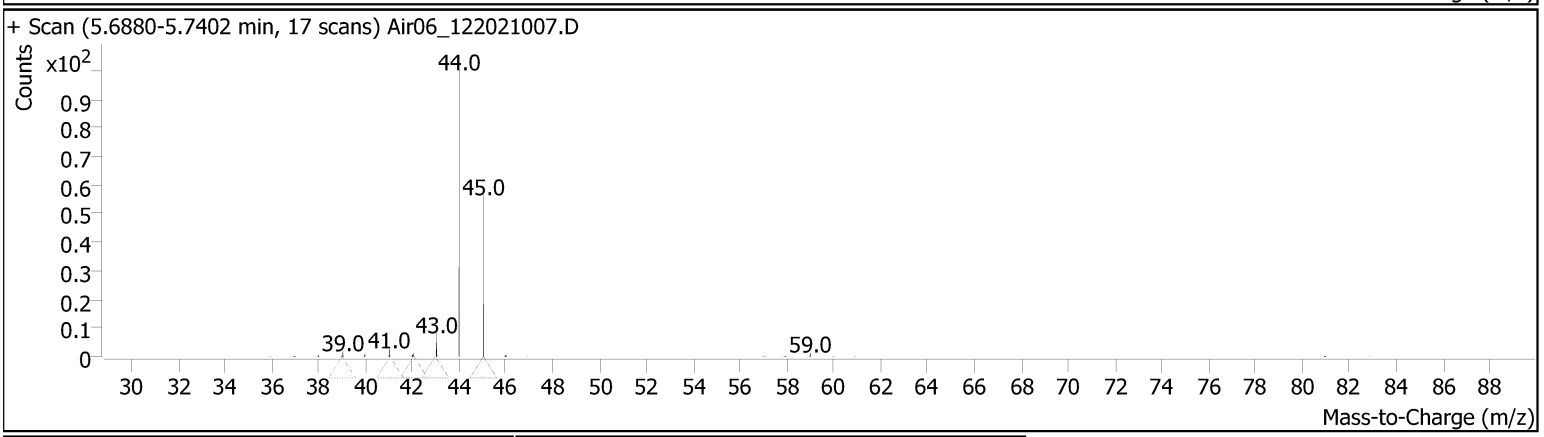


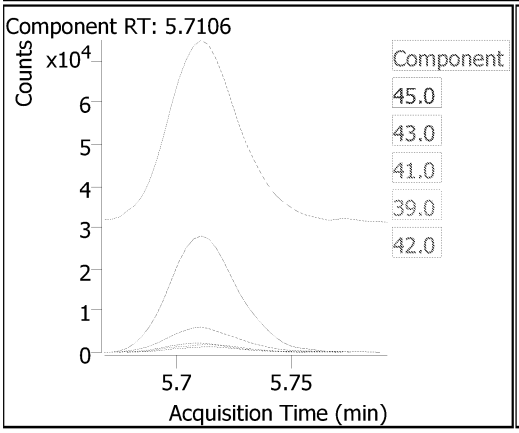


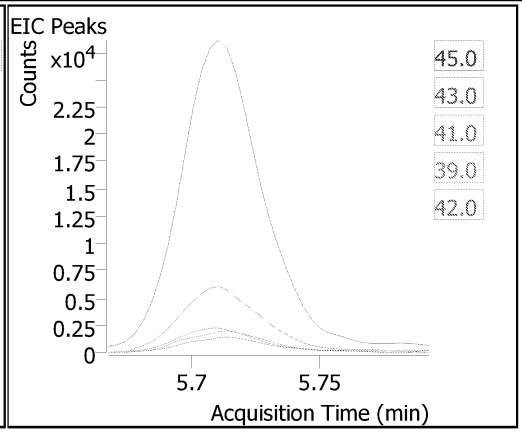
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.7106	Isopropyl Alcohol	95591.8	97.2	67-63-0	C3H8O	0.445

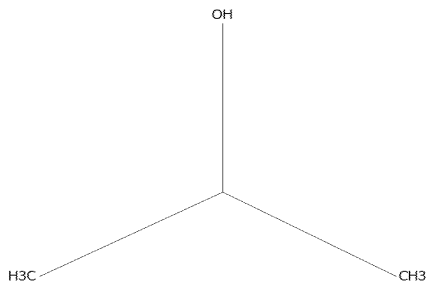




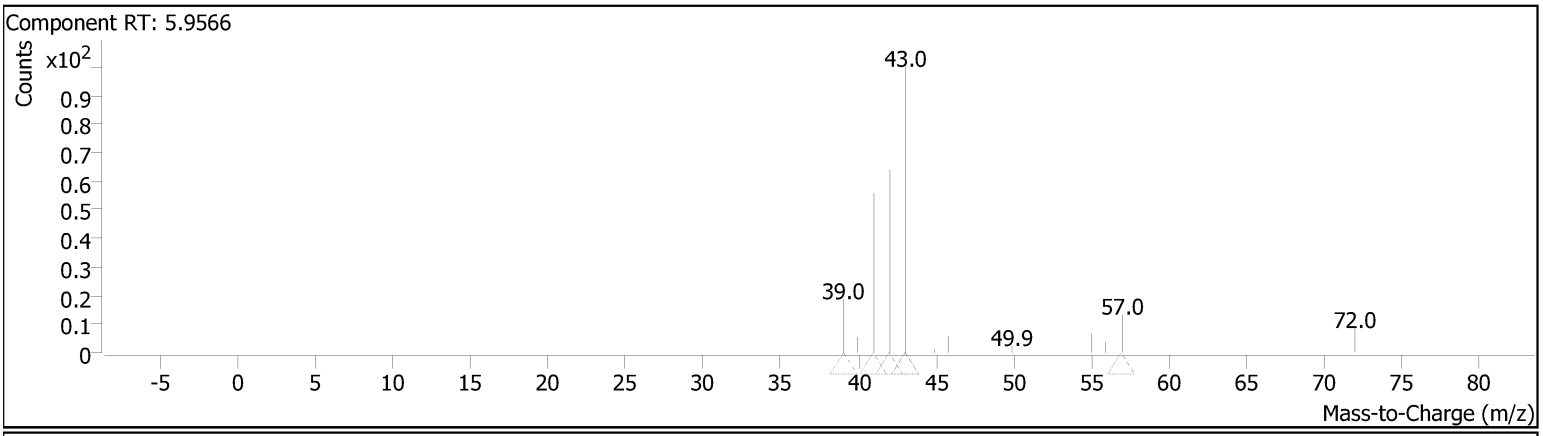


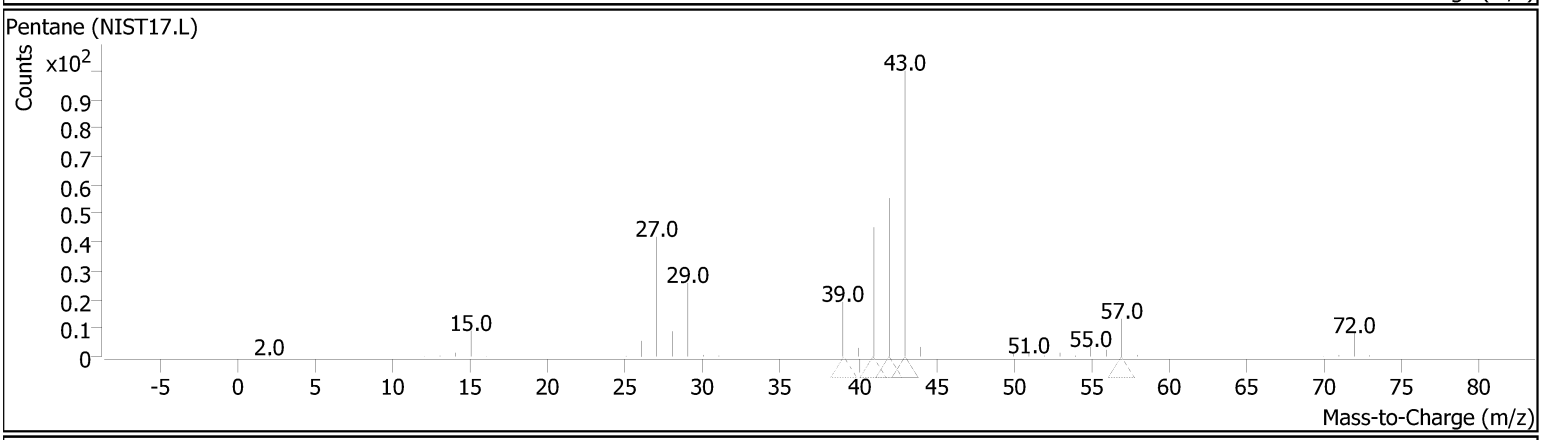


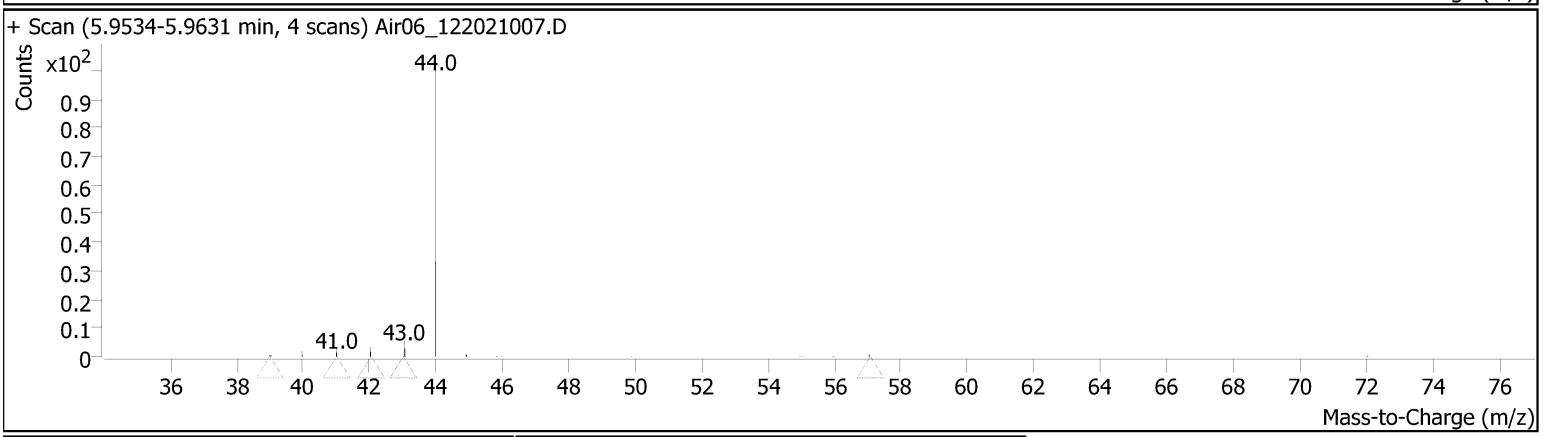


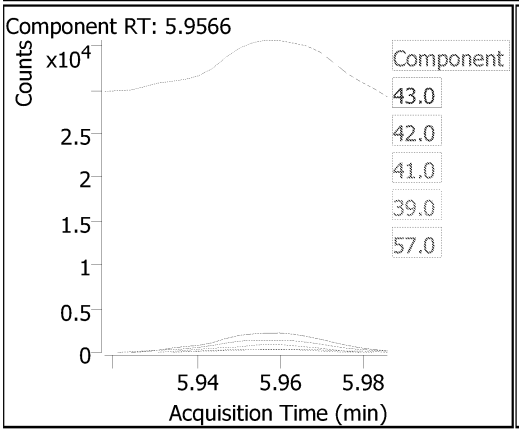


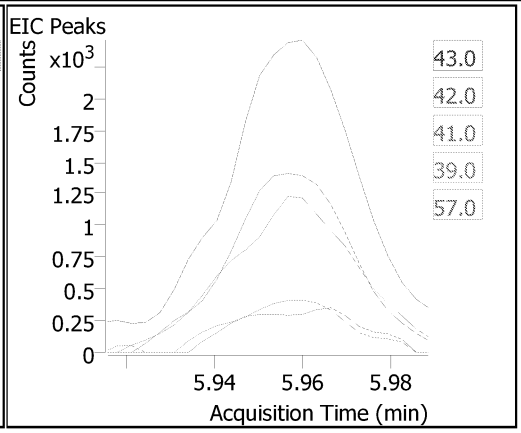
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.9566	Pentane	13560.6	93.3	109-66-0	C5H12	0.06312

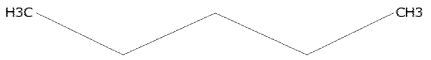




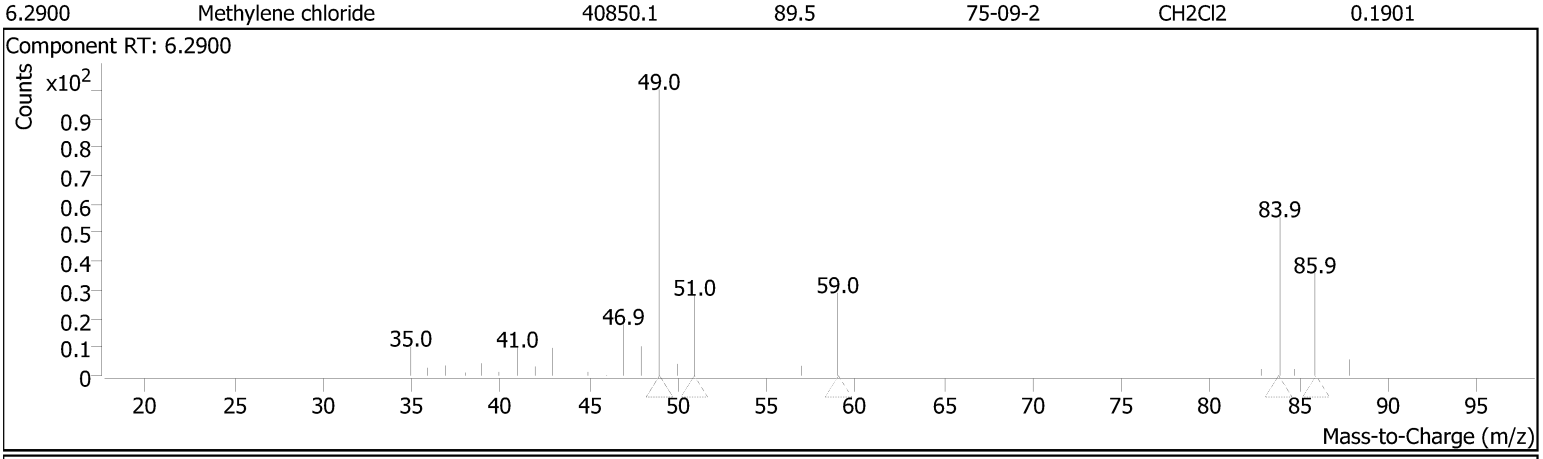


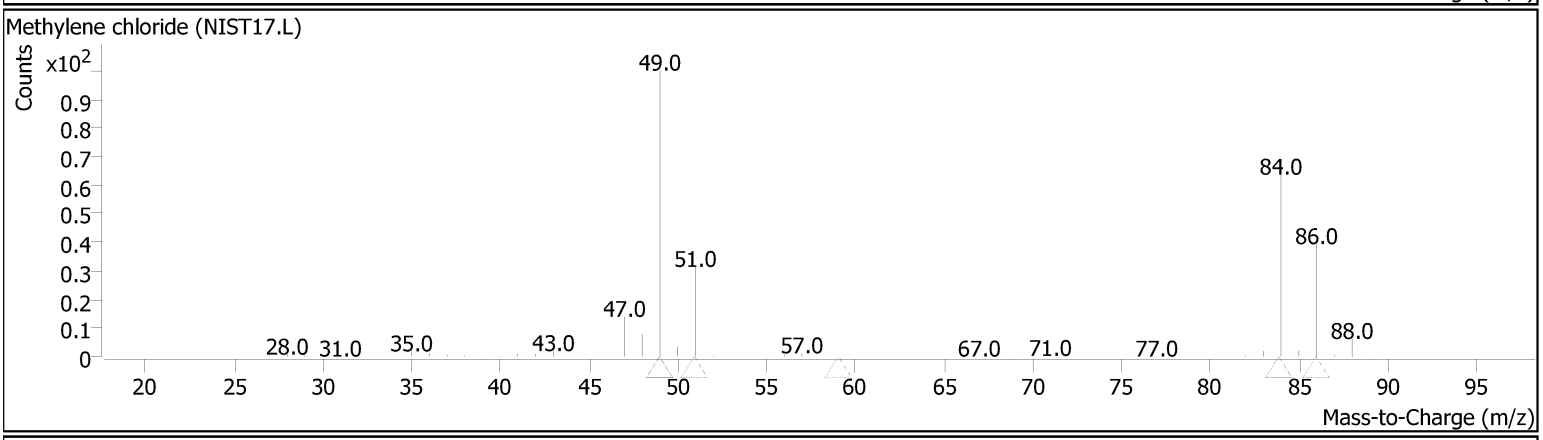


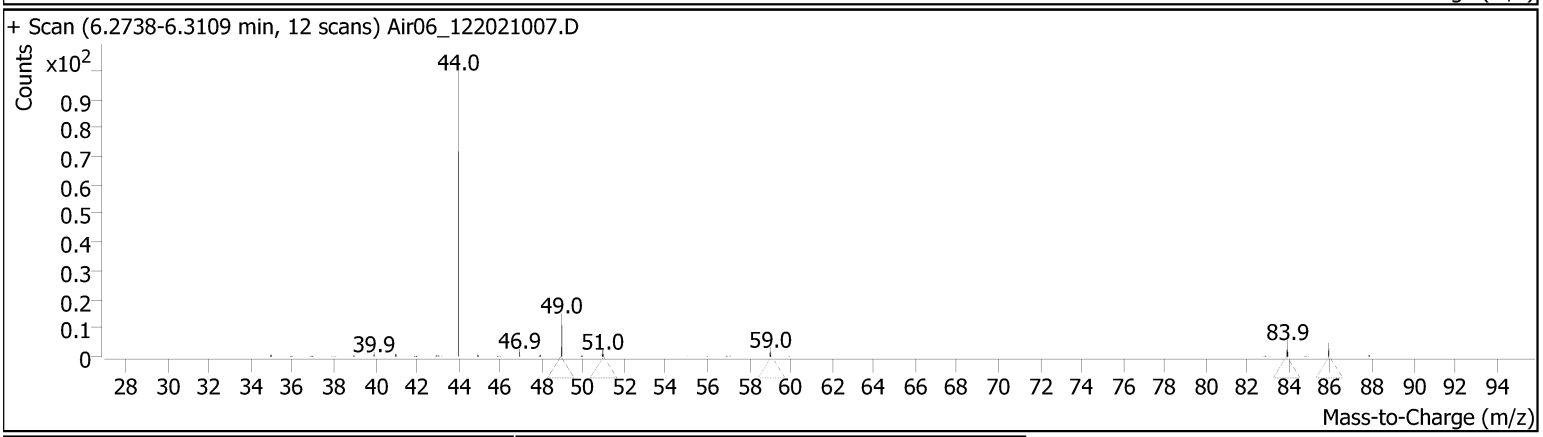


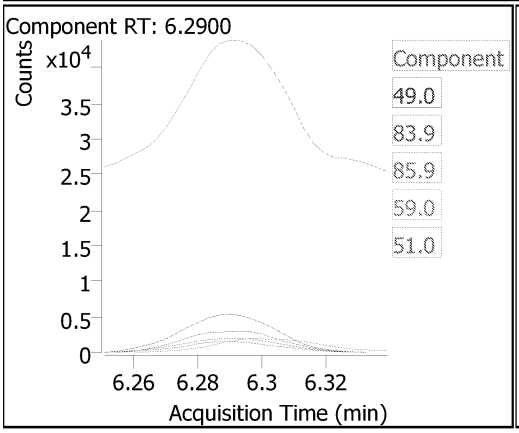


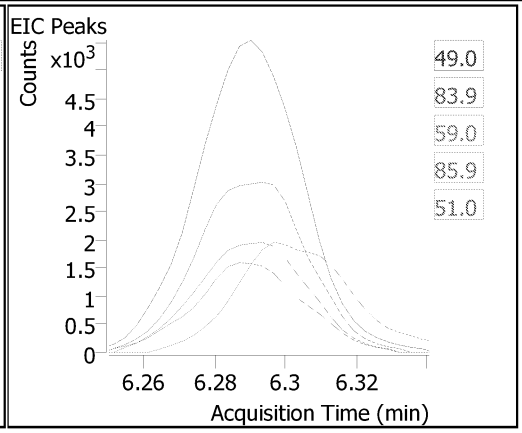
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.2900	Methylene chloride	40850.1	89.5	75-09-2	CH2Cl2	0.1901

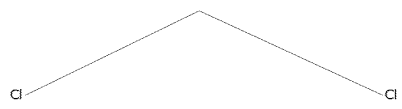




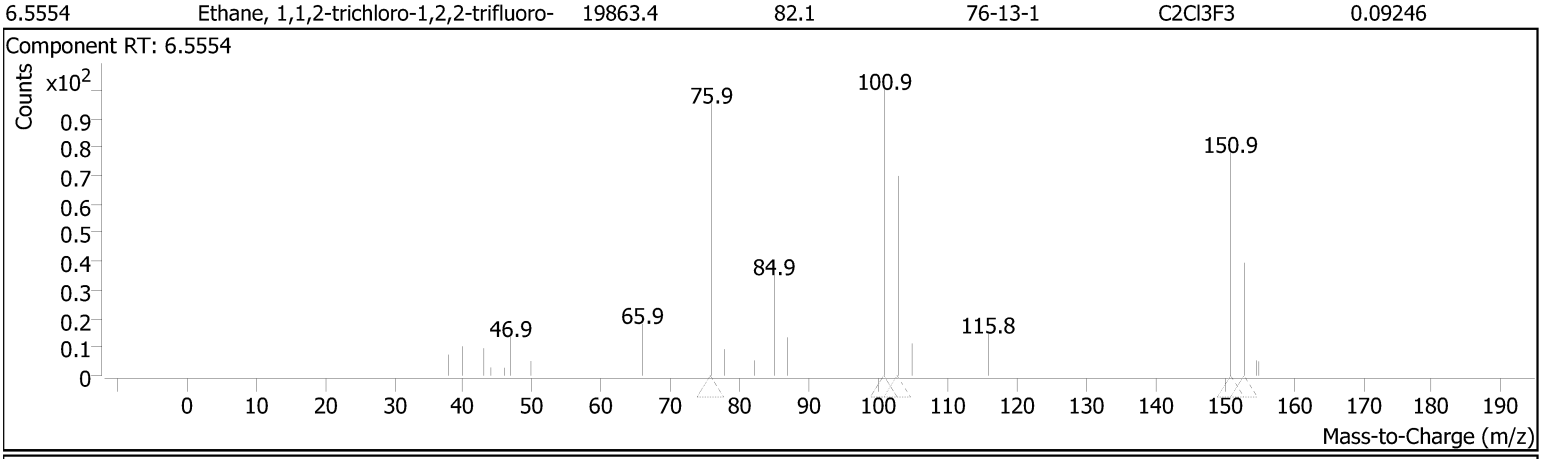


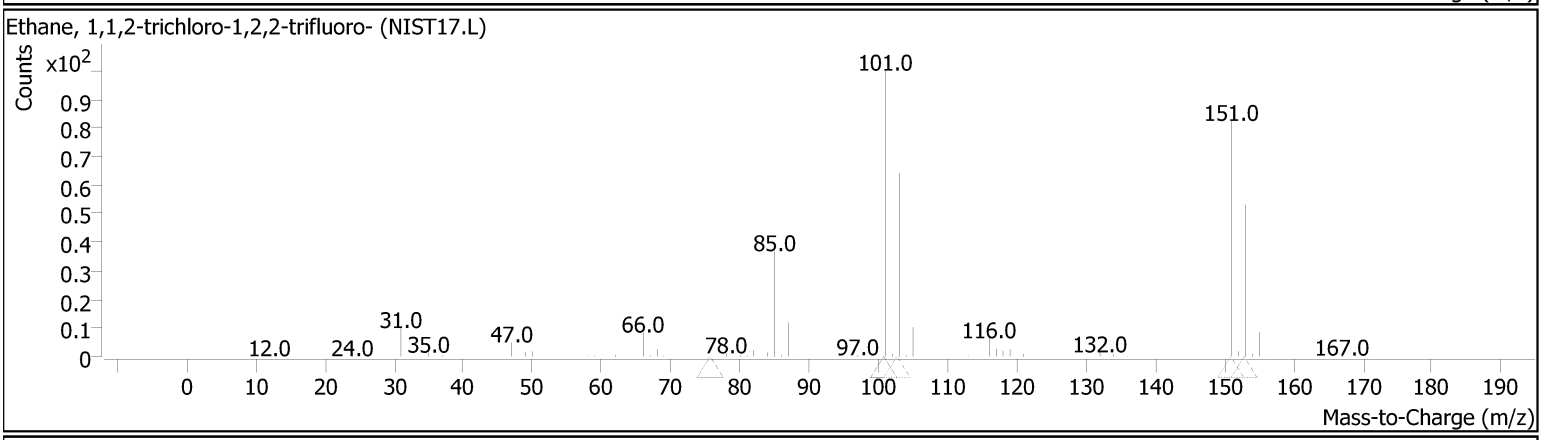


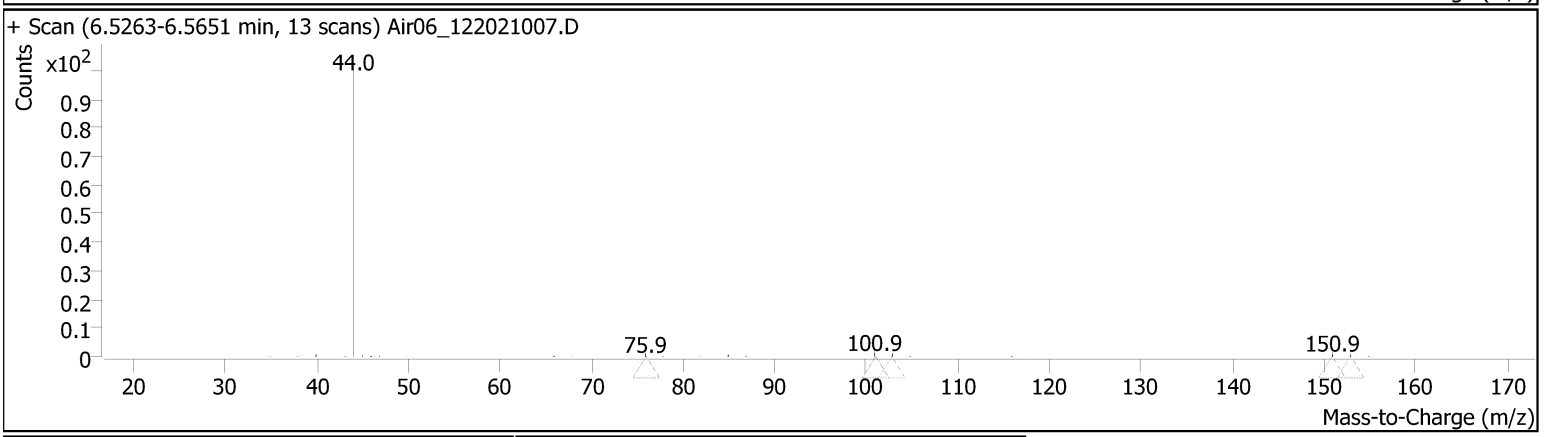


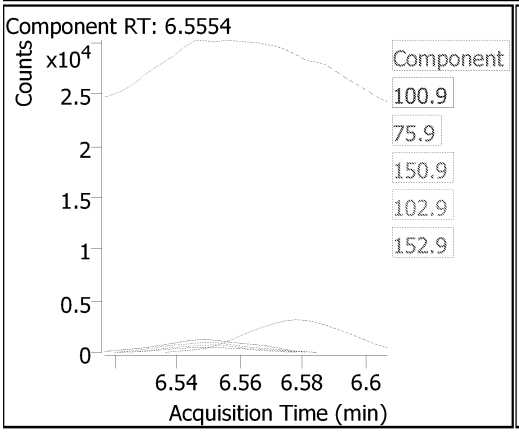


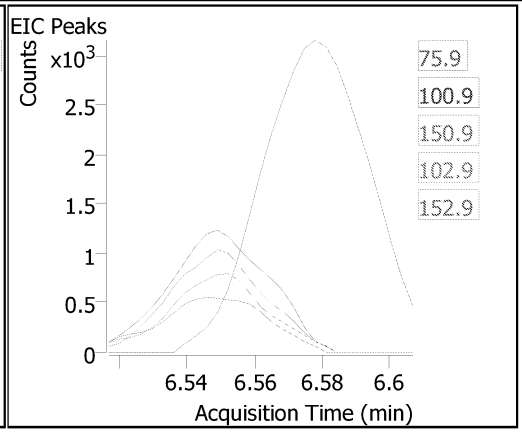
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.5554	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	19863.4	82.1	76-13-1	C2Cl3F3	0.09246

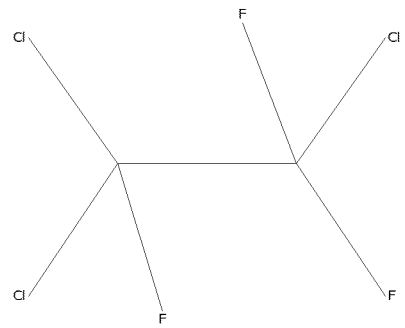




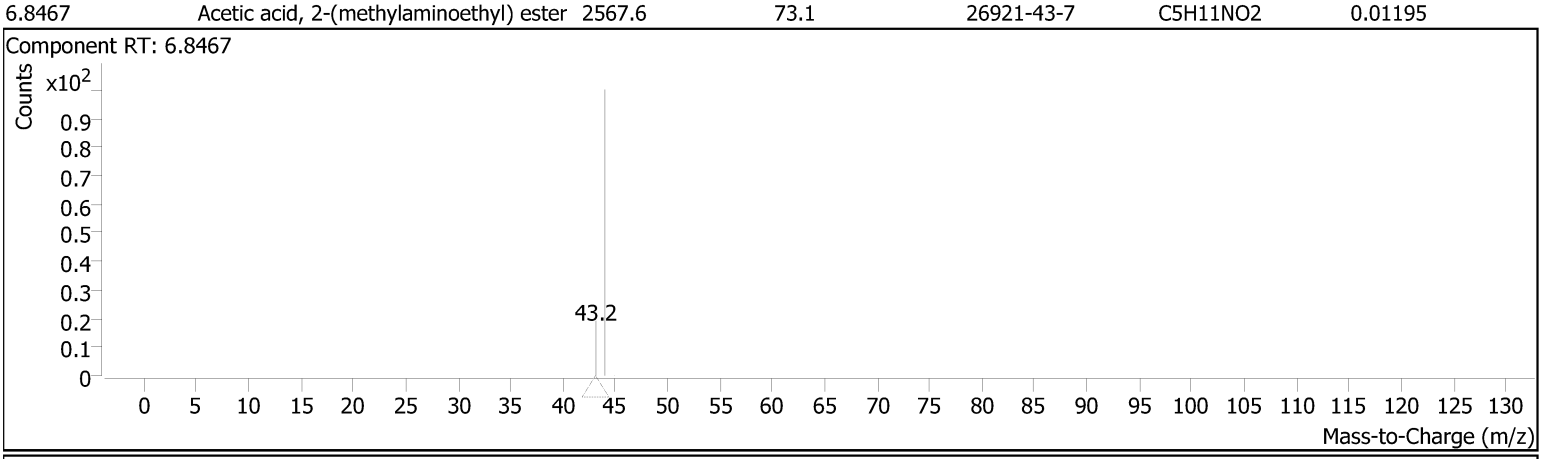


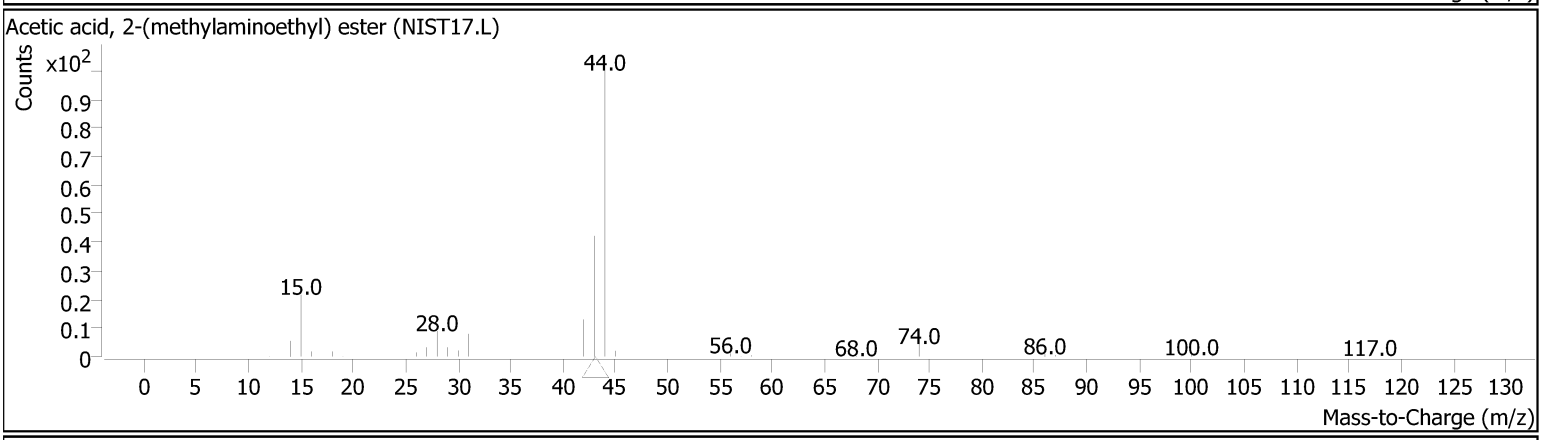


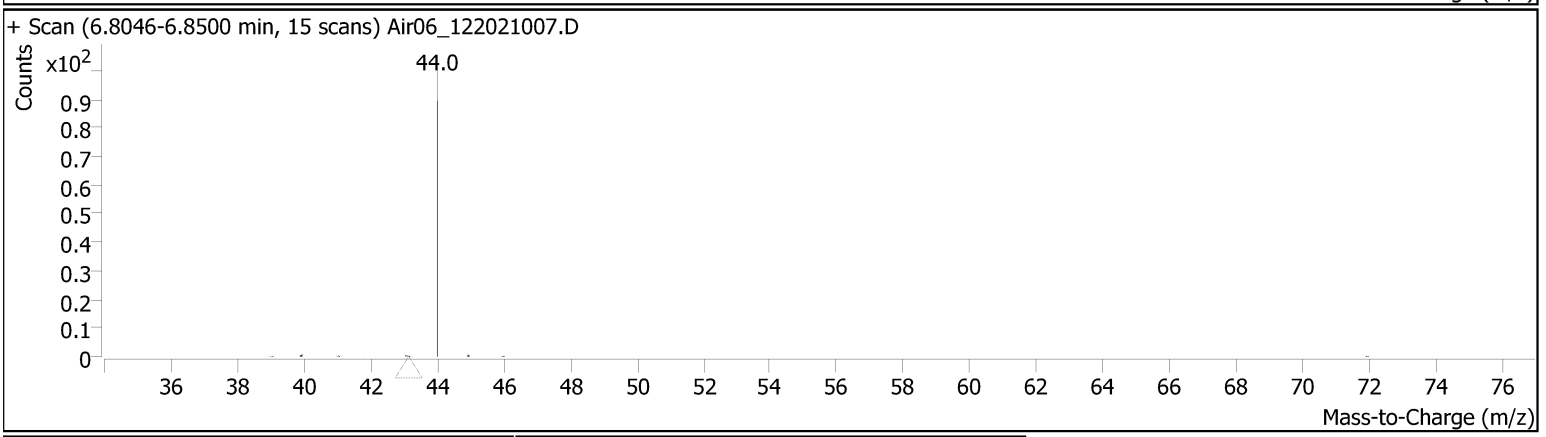


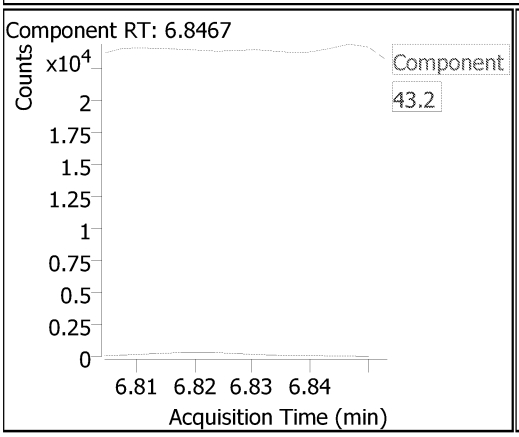


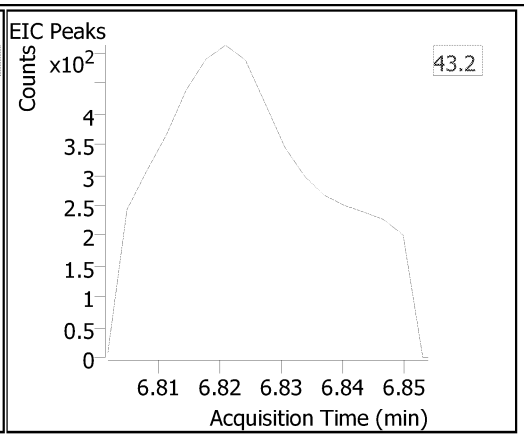
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.8467	Acetic acid, 2-(methylaminoethyl) ester	2567.6	73.1	26921-43-7	C5H11NO2	0.01195

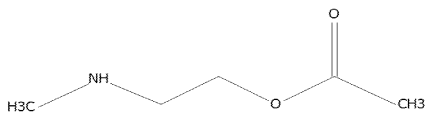




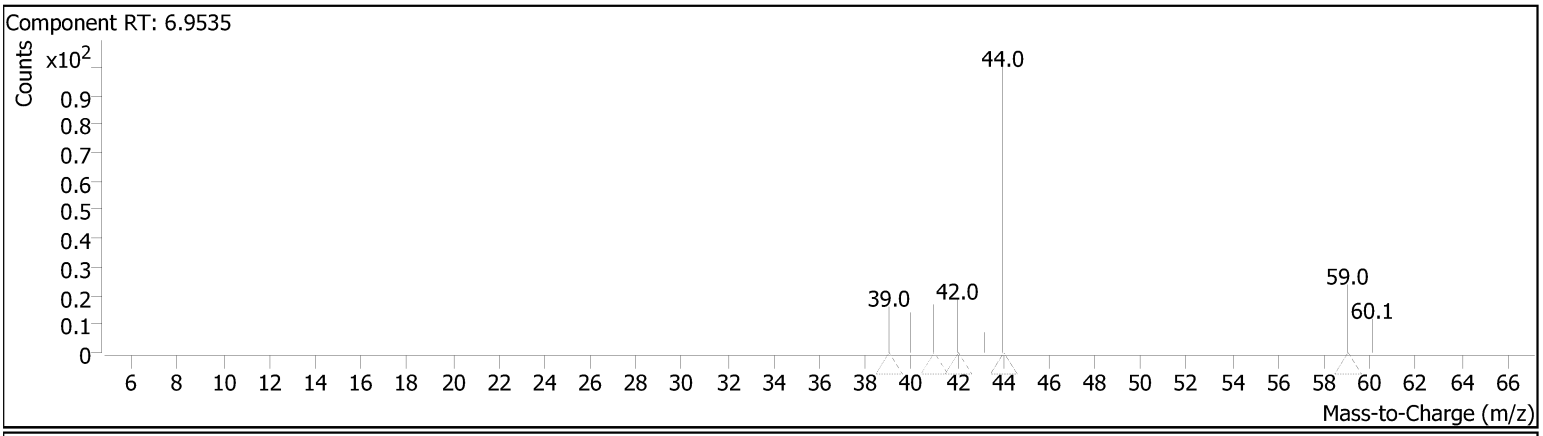


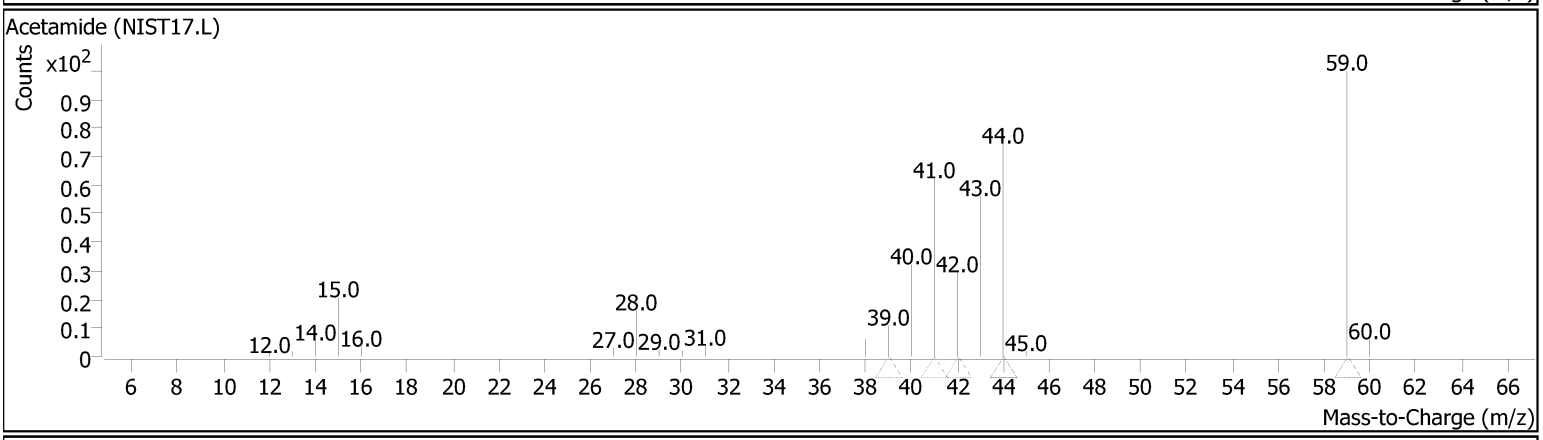


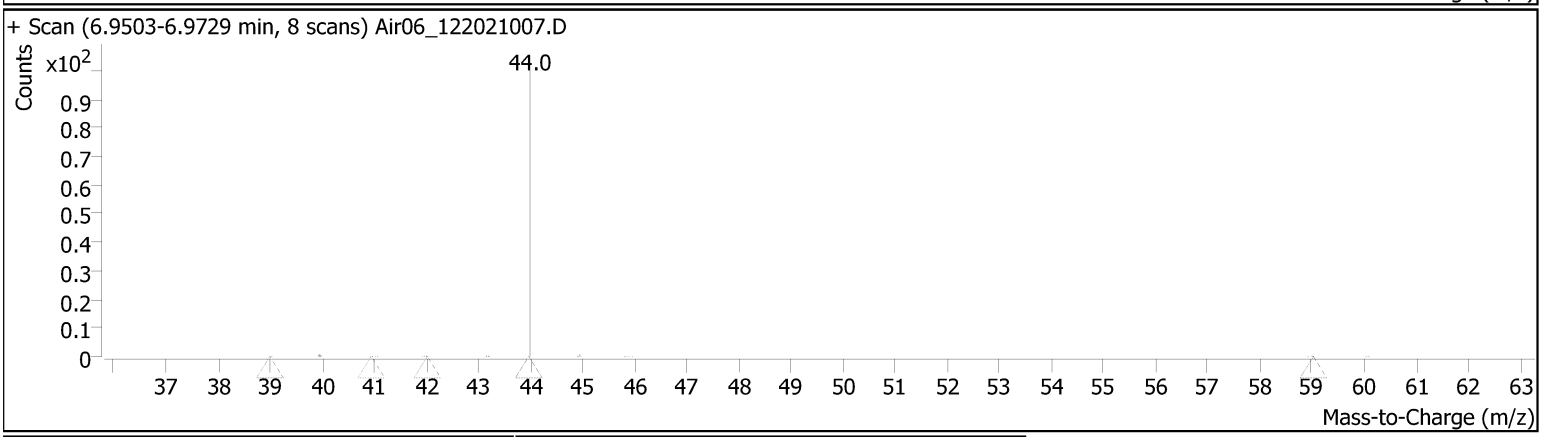


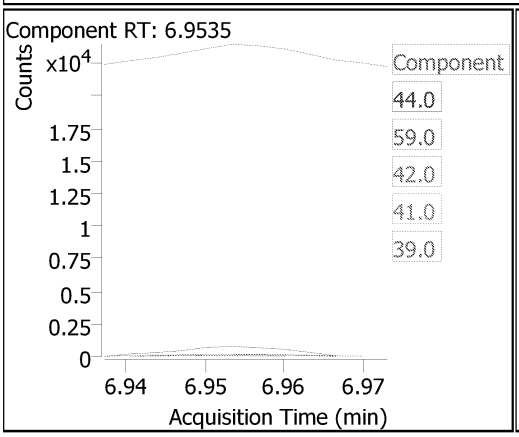


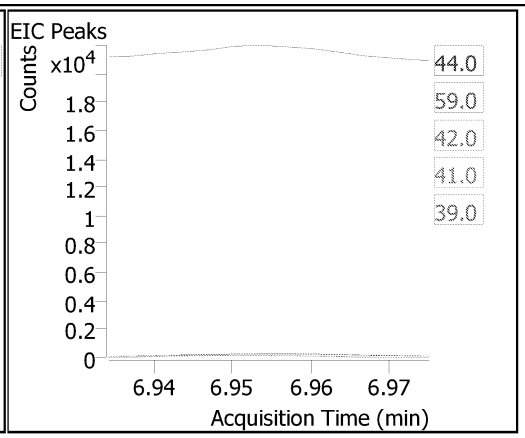
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.9535	Acetamide	2136.3	86.2	60-35-5	C2H5NO	0.009944

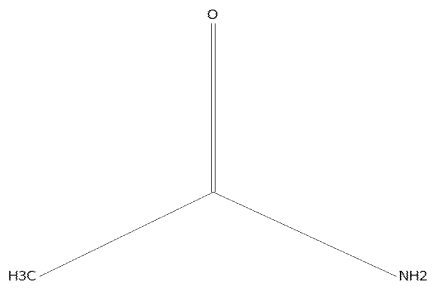




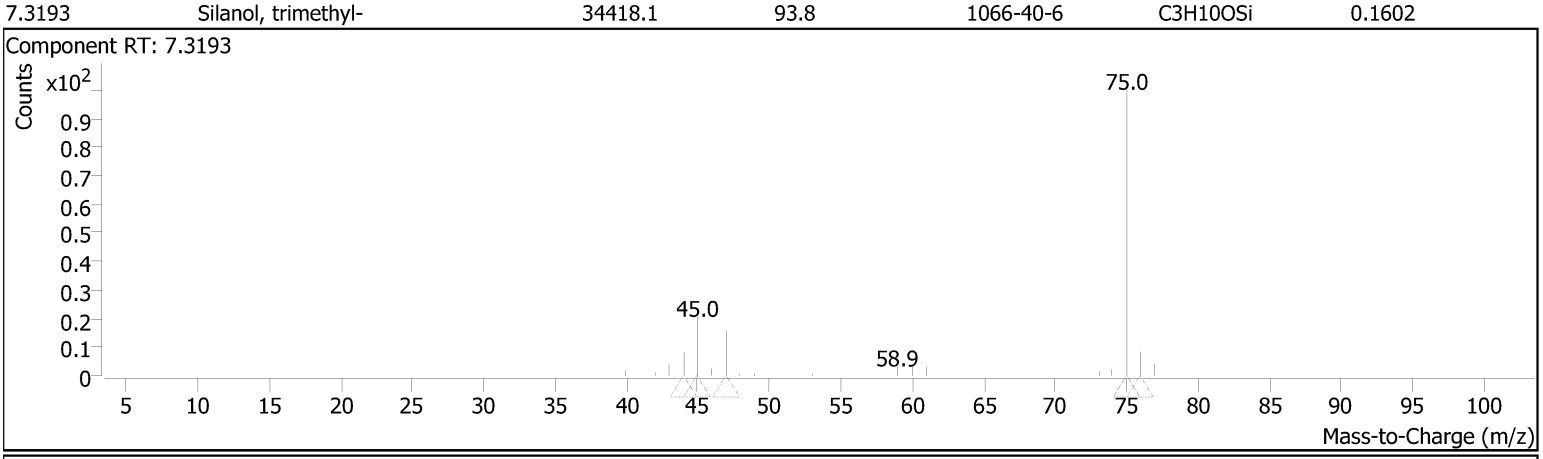


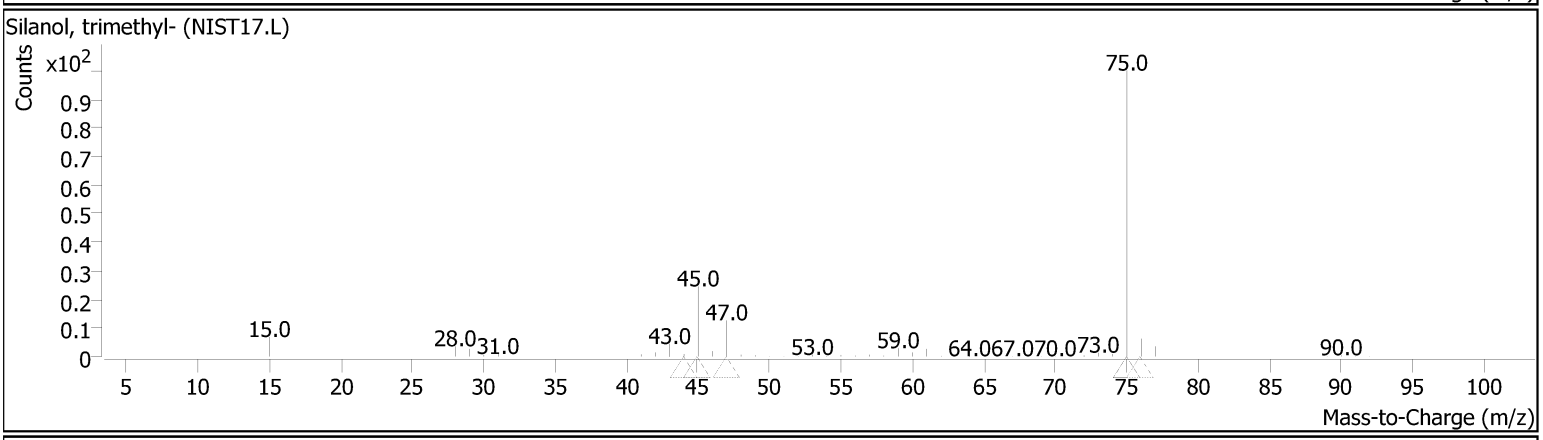


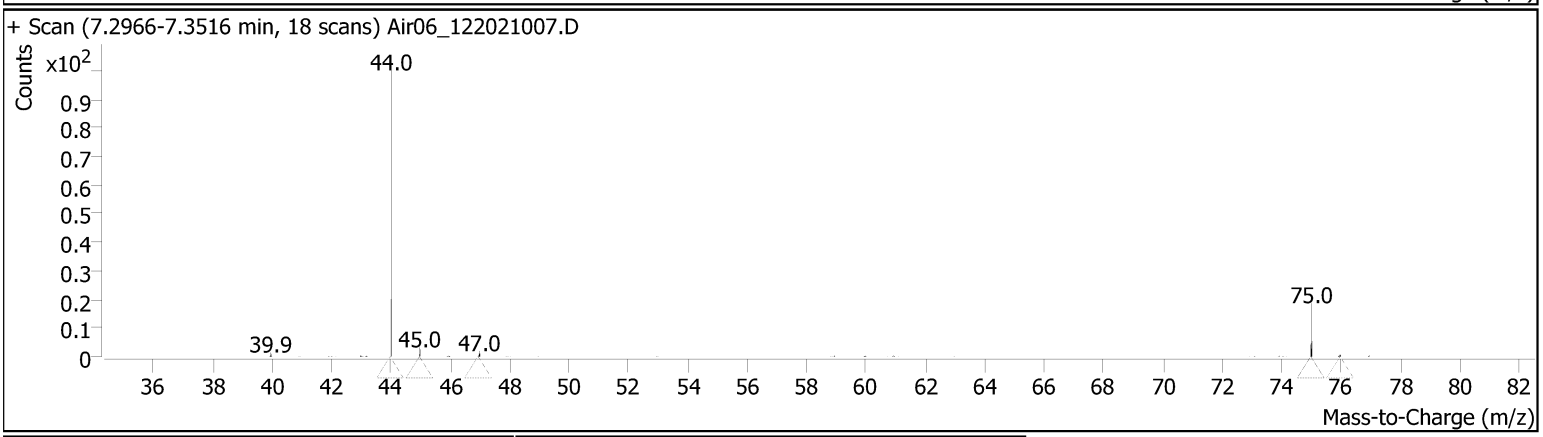


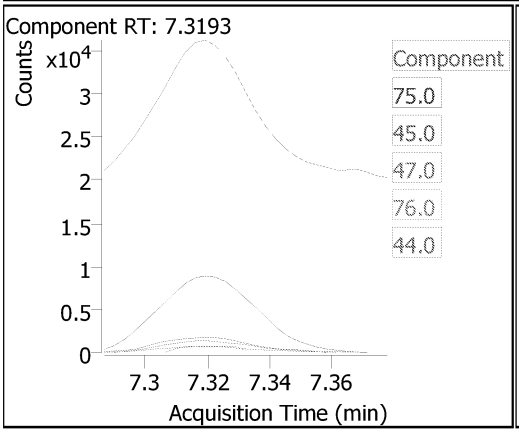


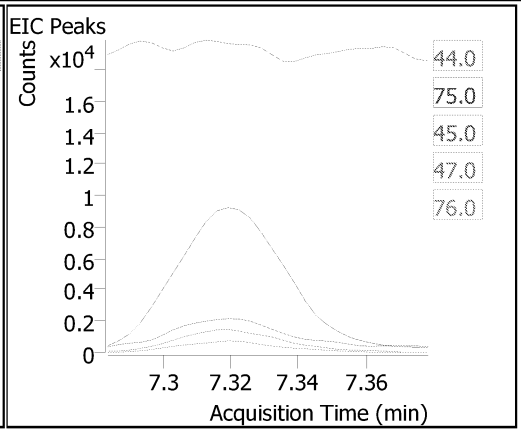
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.3193	Silanol, trimethyl-	34418.1	93.8	1066-40-6	C3H10OSi	0.1602

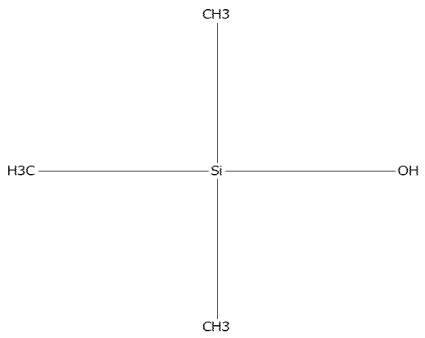




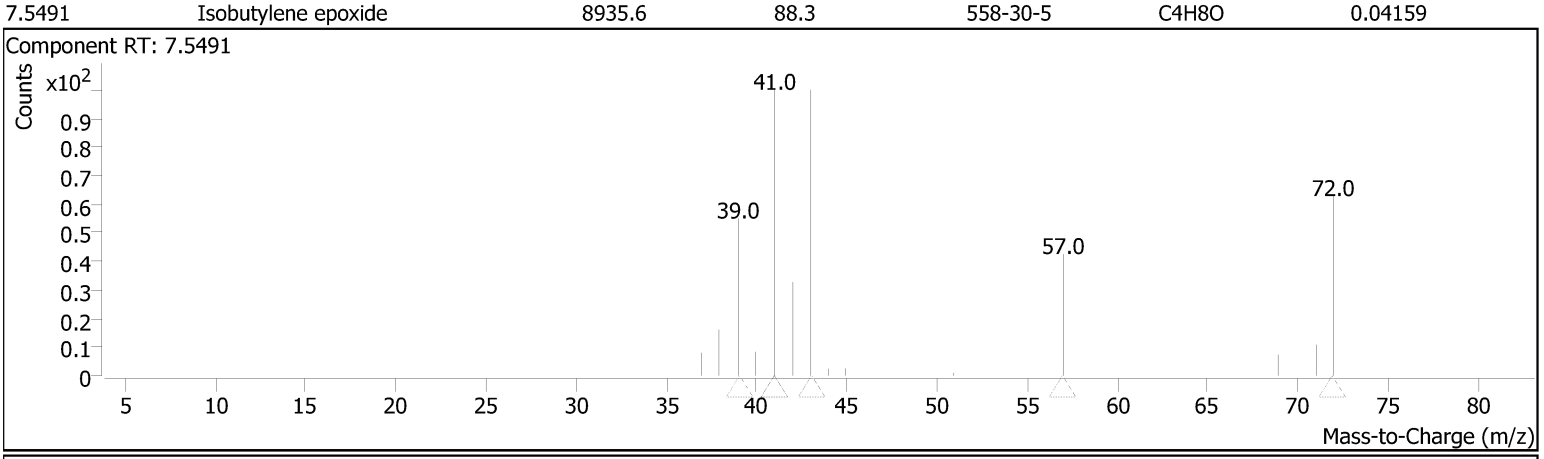


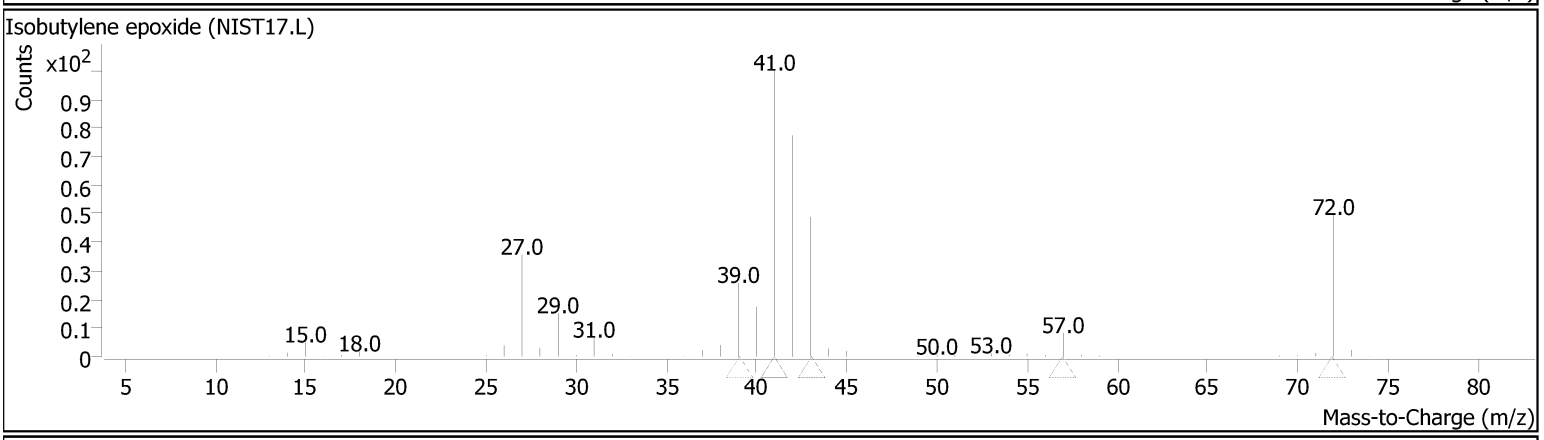


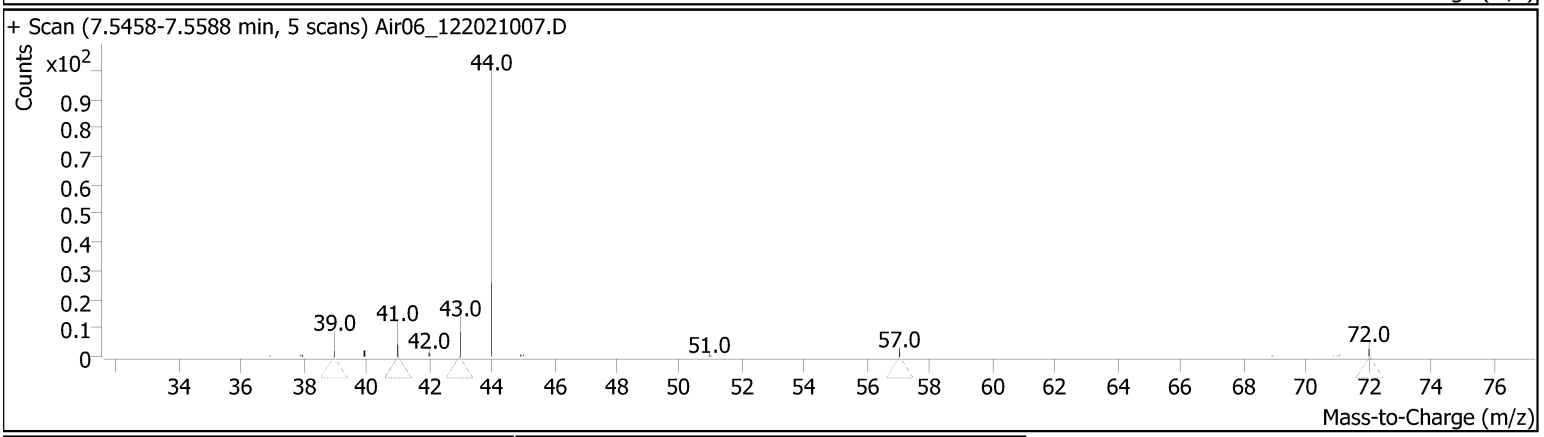


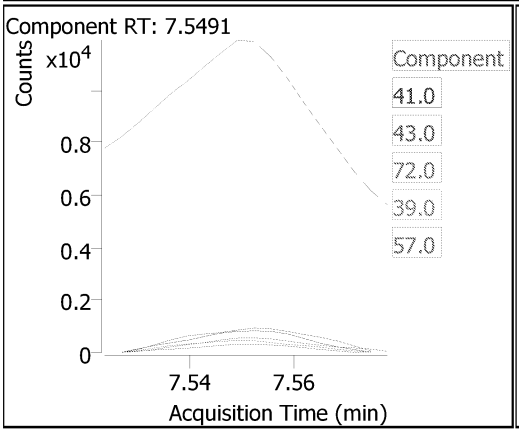


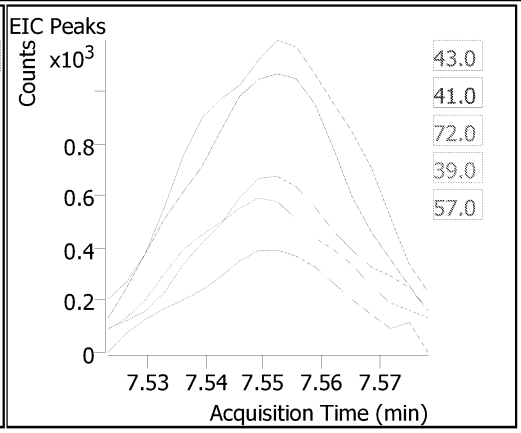
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.5491	Isobutylene epoxide	8935.6	88.3	558-30-5	C4H8O	0.04159

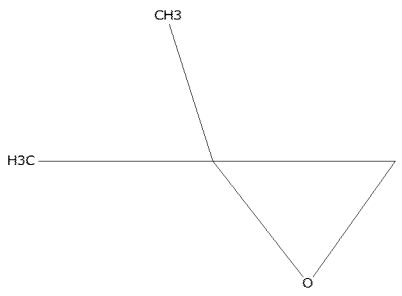




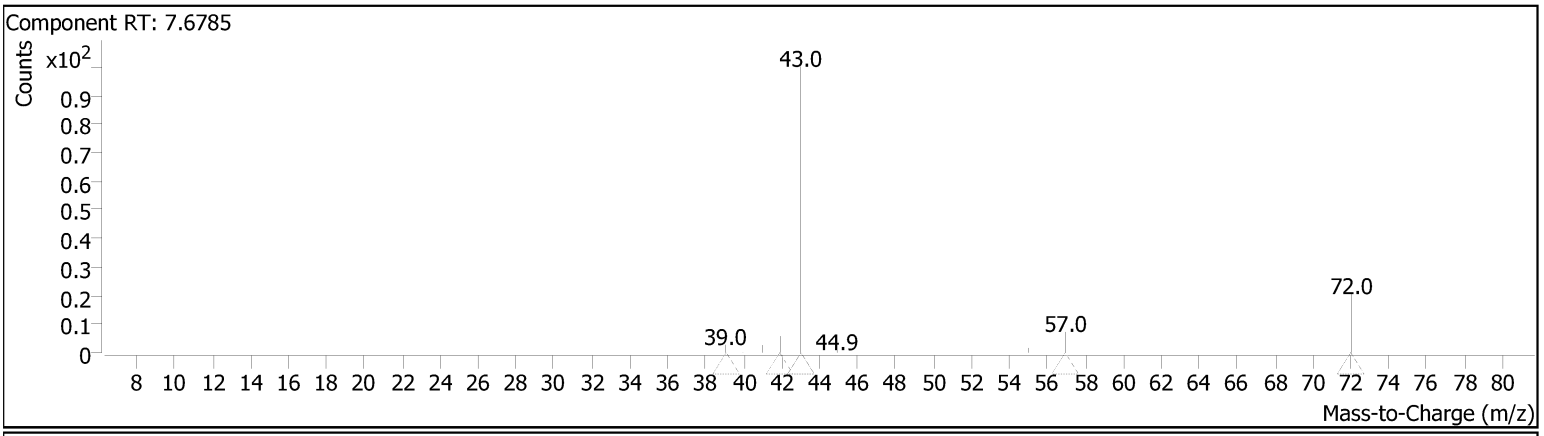


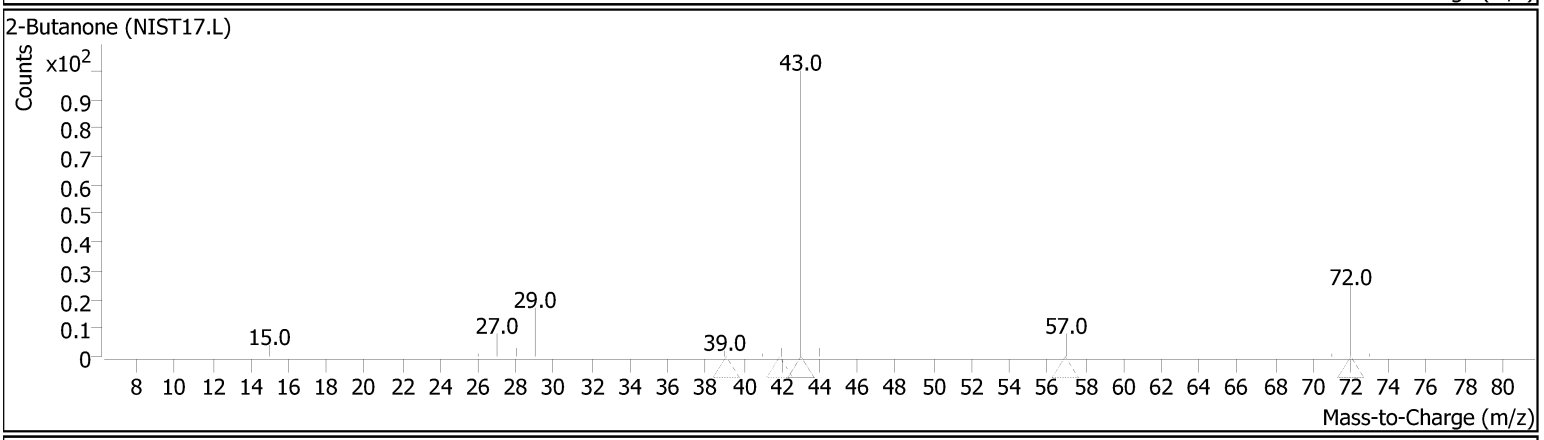


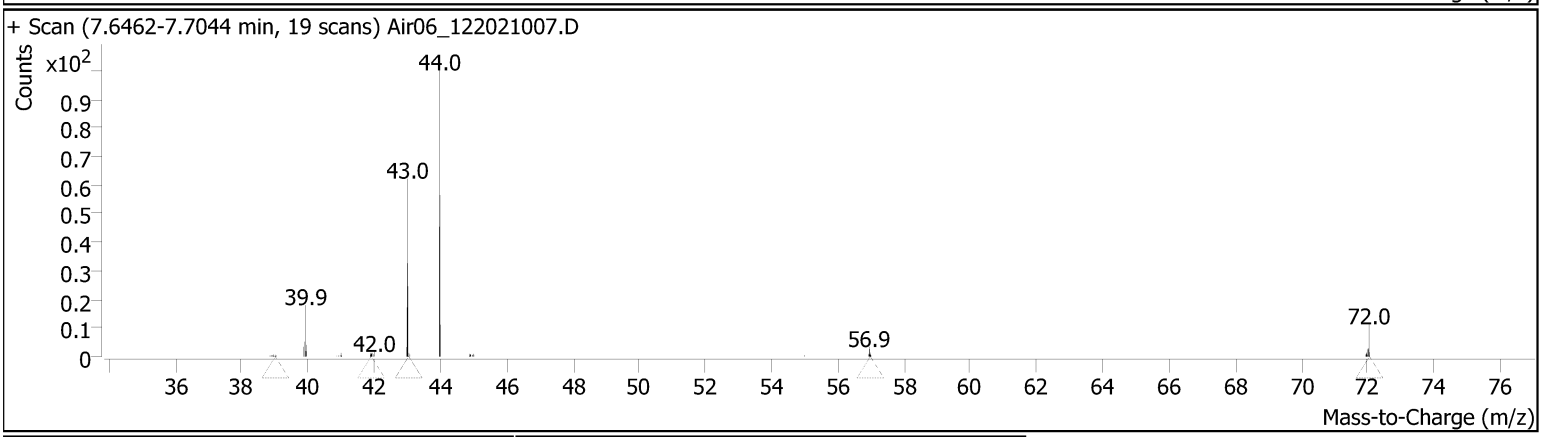


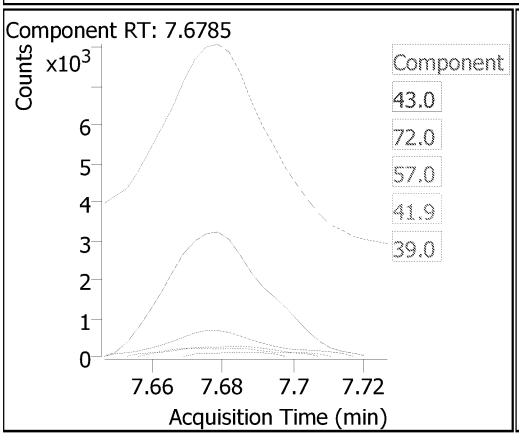


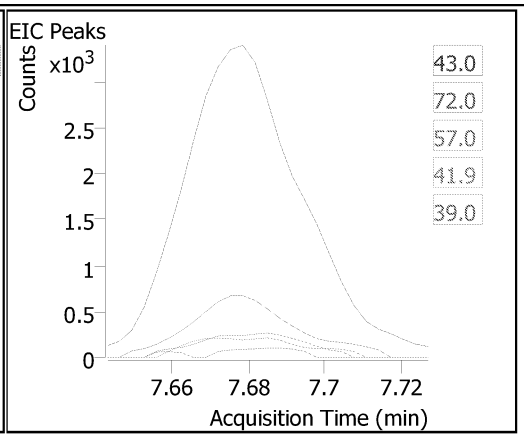
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.6785	2-Butanone	9317.2	91.7	78-93-3	C4H8O	0.04337

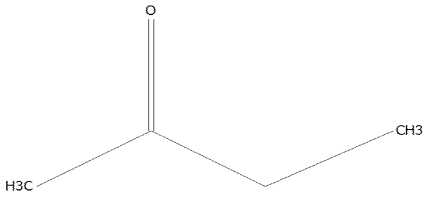












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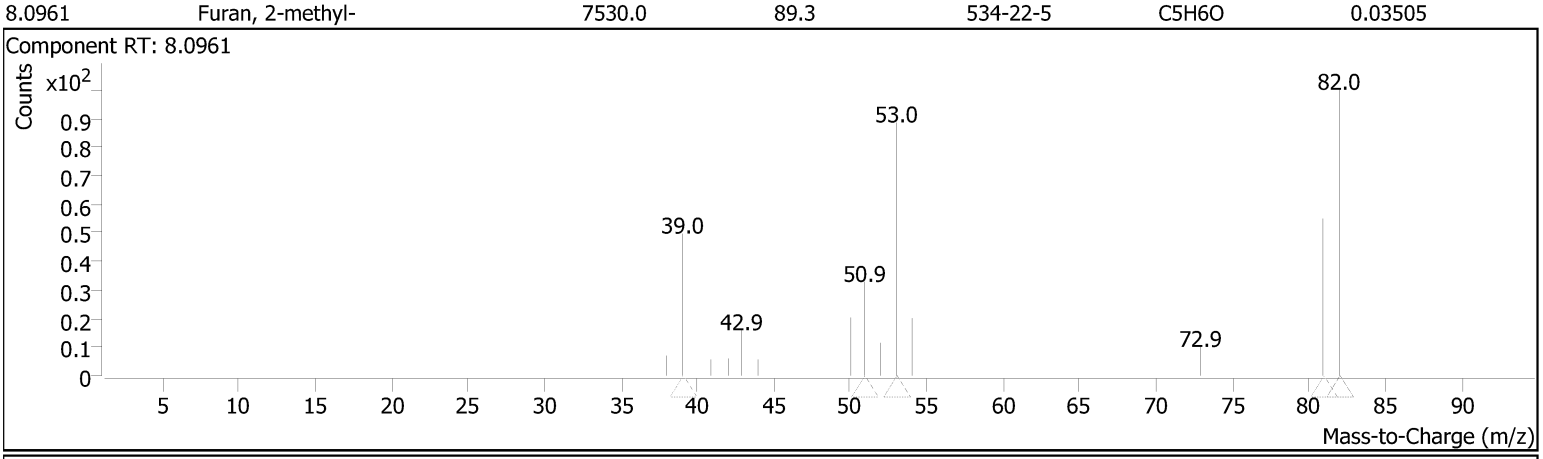
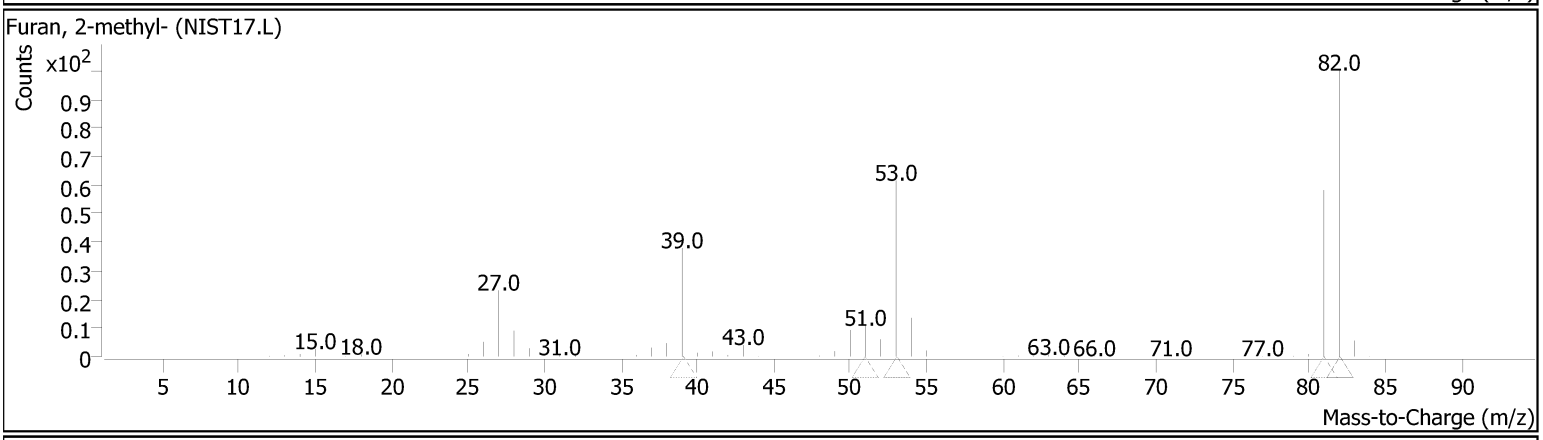
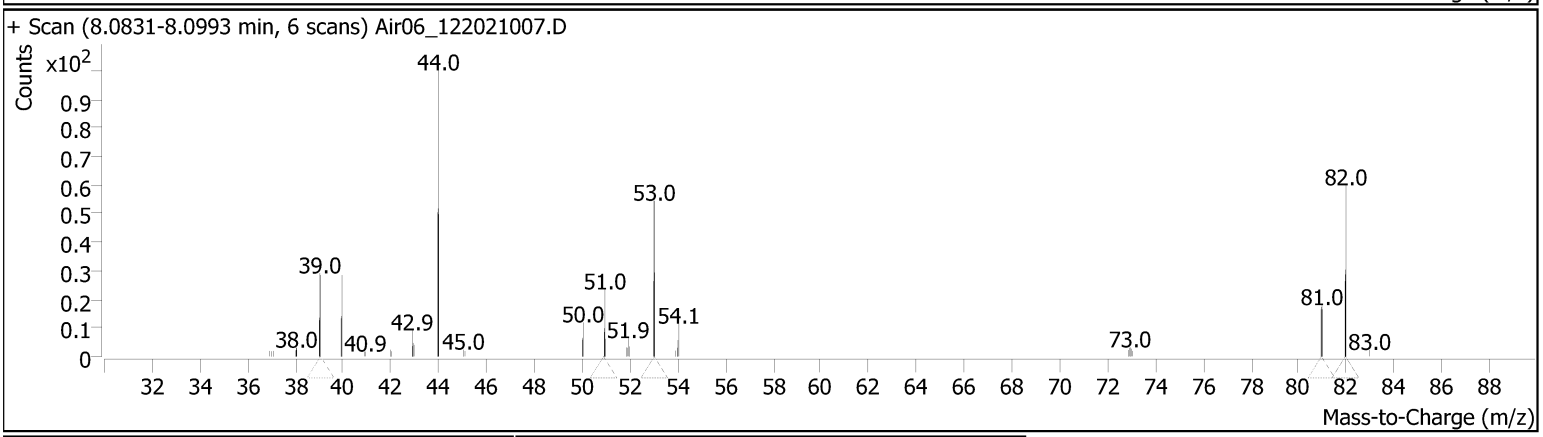
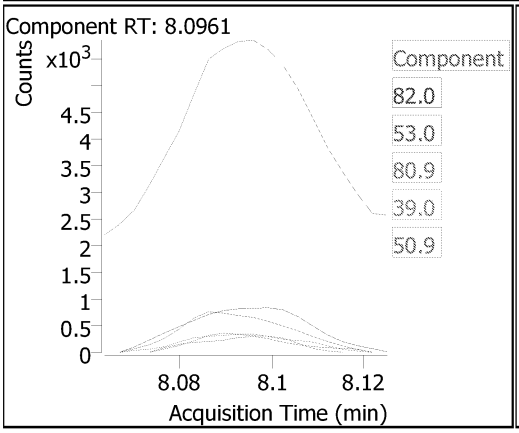
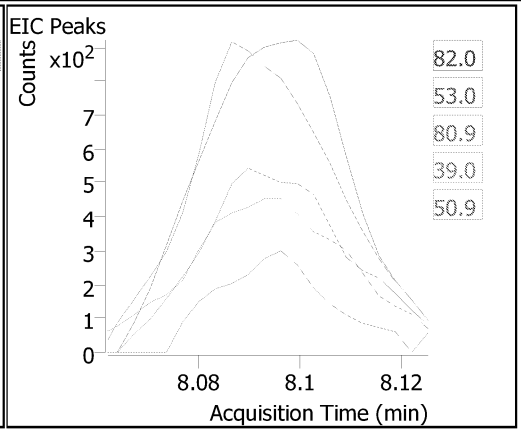
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.0961	Furan, 2-methyl-	7530.0	89.3	534-22-5	C5H6O	0.03505

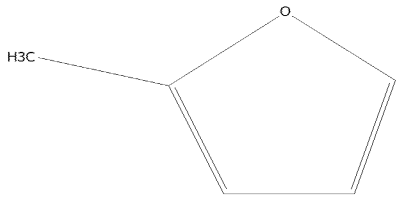




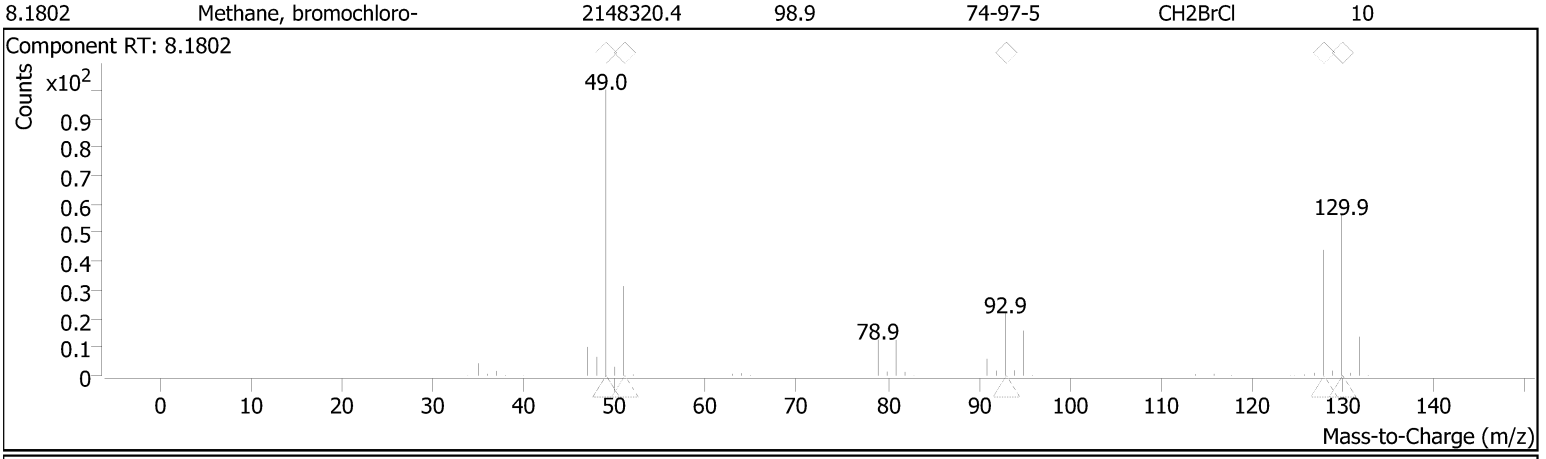


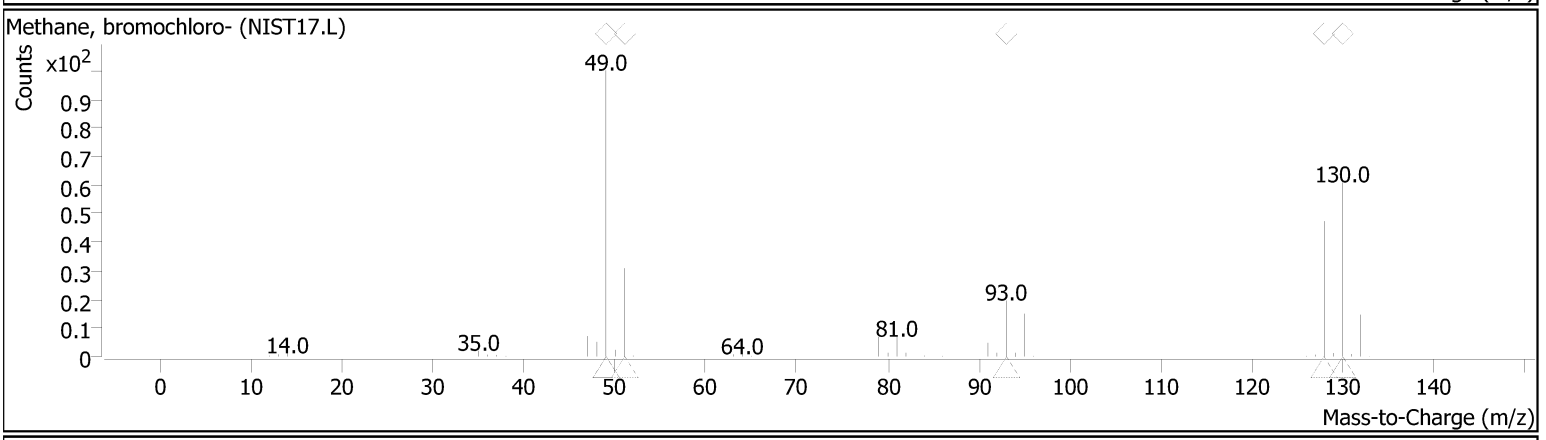


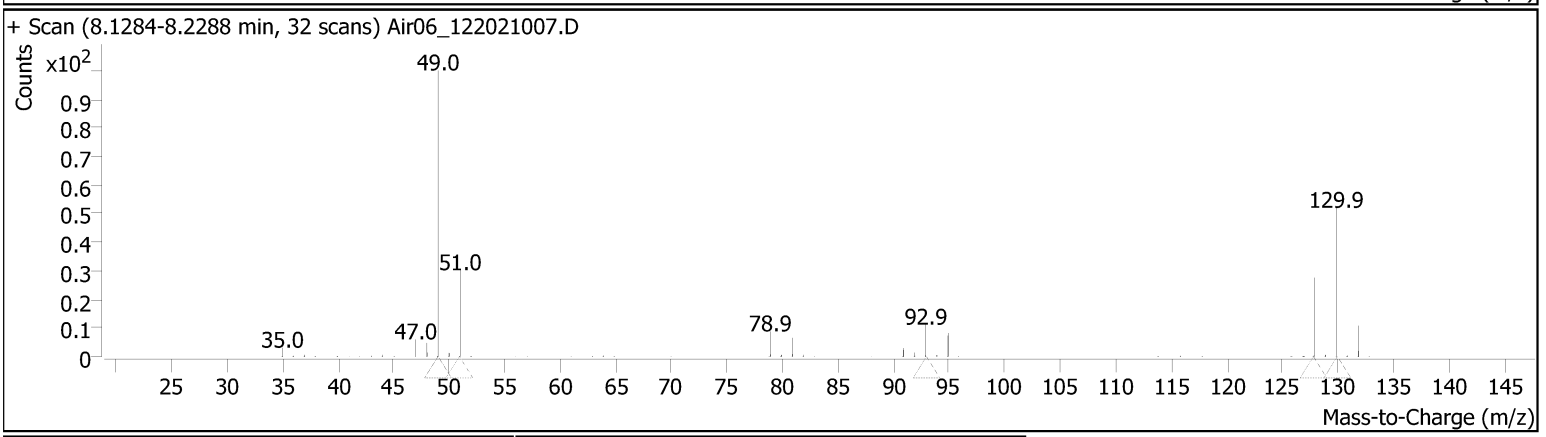


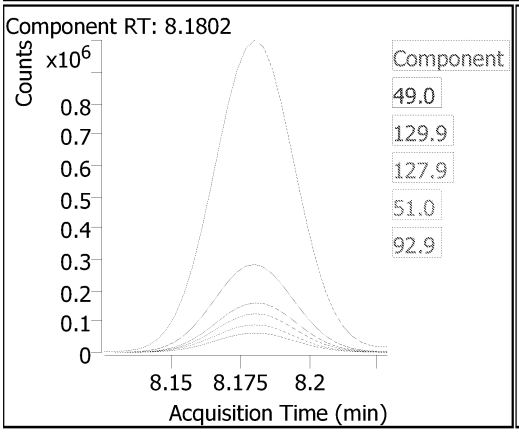


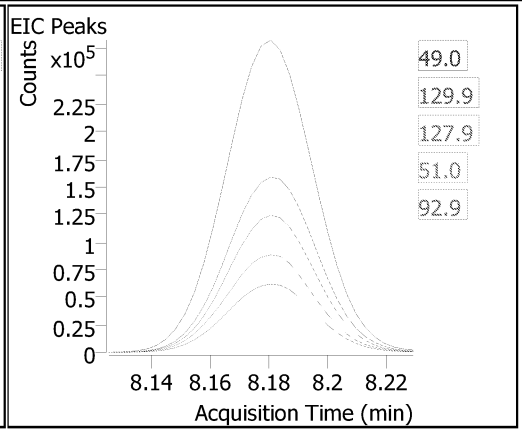
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.1802	Methane, bromochloro-	2148320.4	98.9	74-97-5	CH2BrCl	10

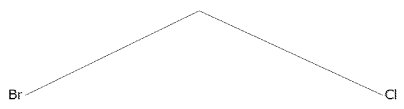




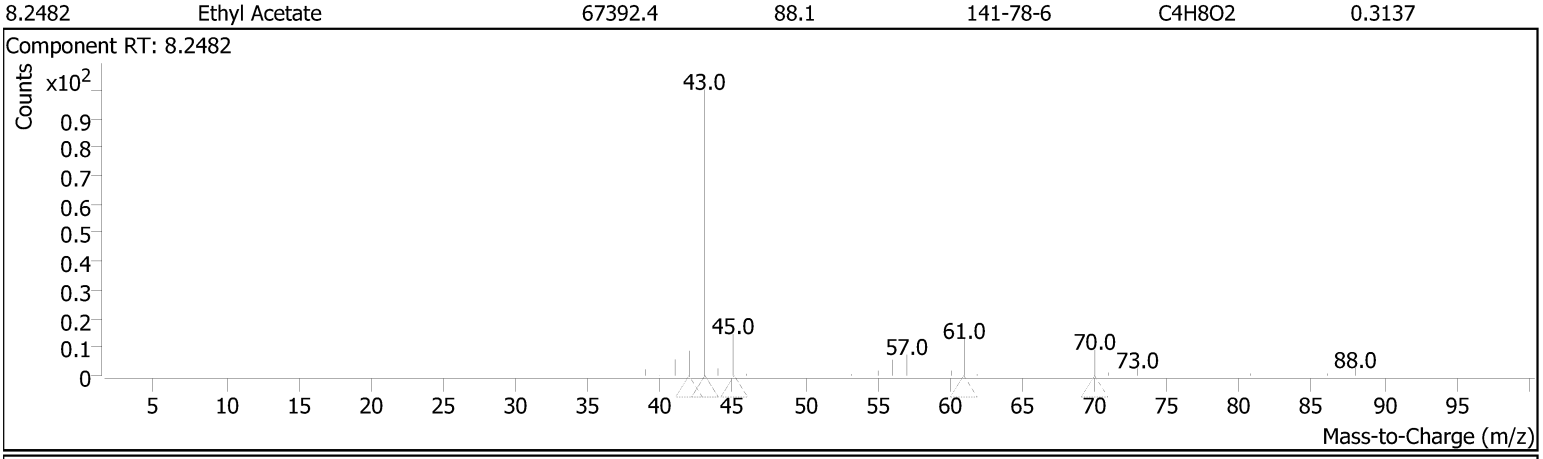


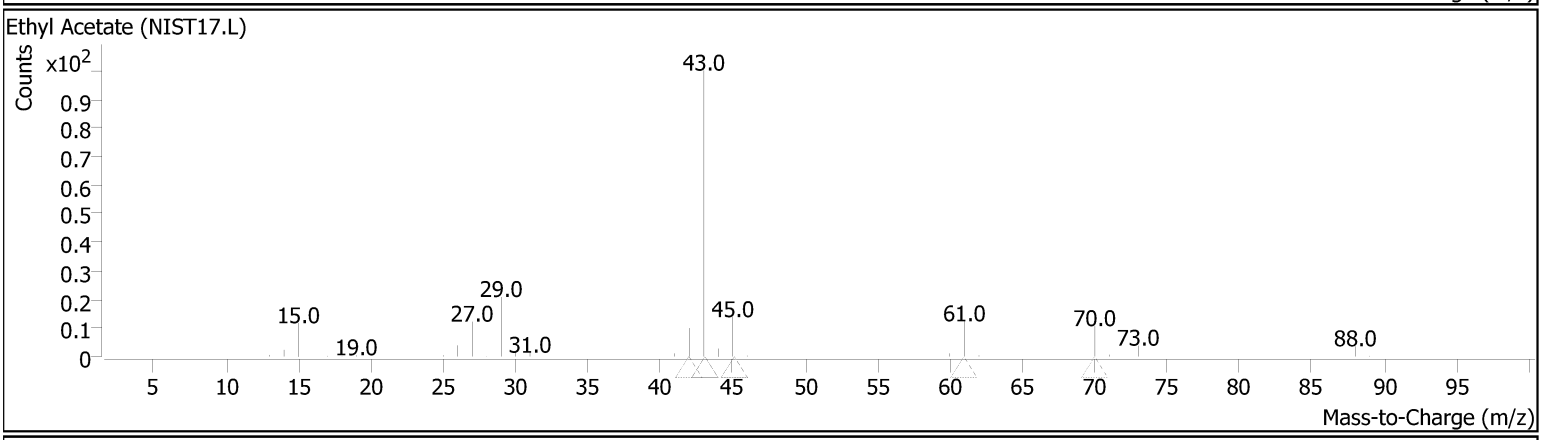


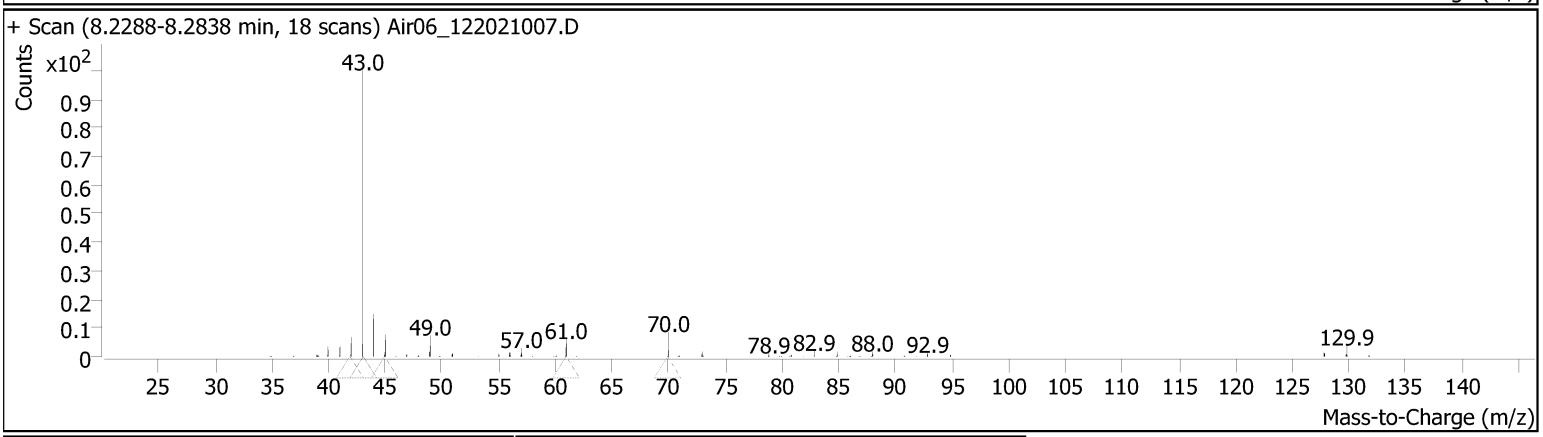


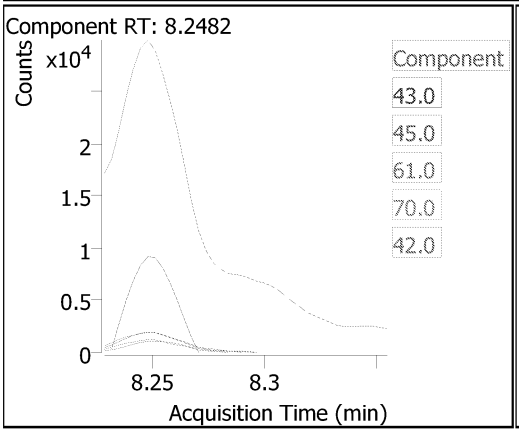


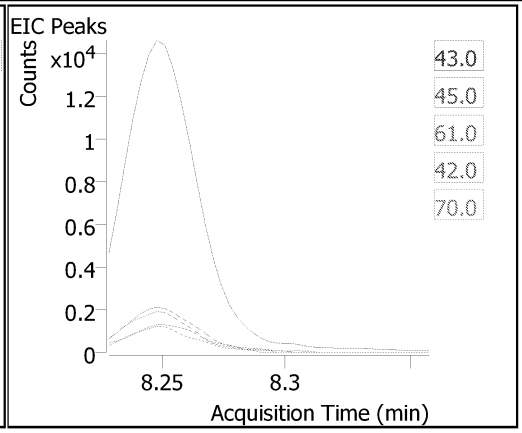
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.2482	Ethyl Acetate	67392.4	88.1	141-78-6	C4H8O2	0.3137

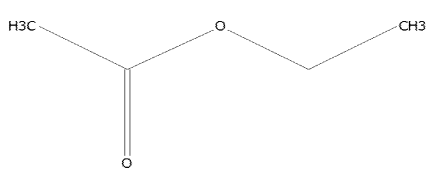




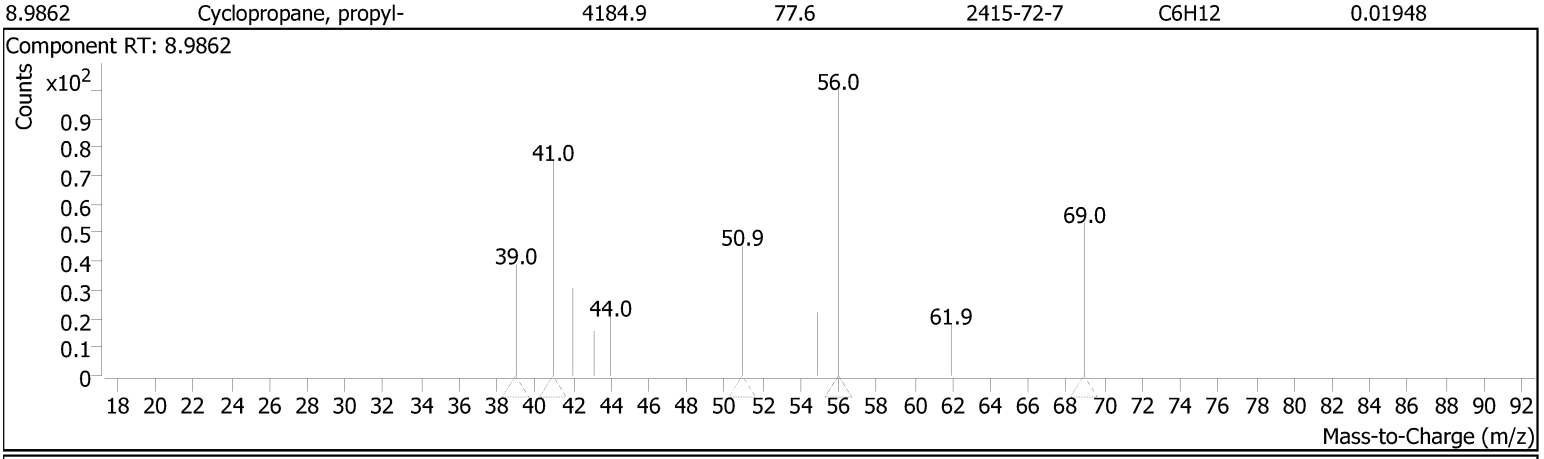


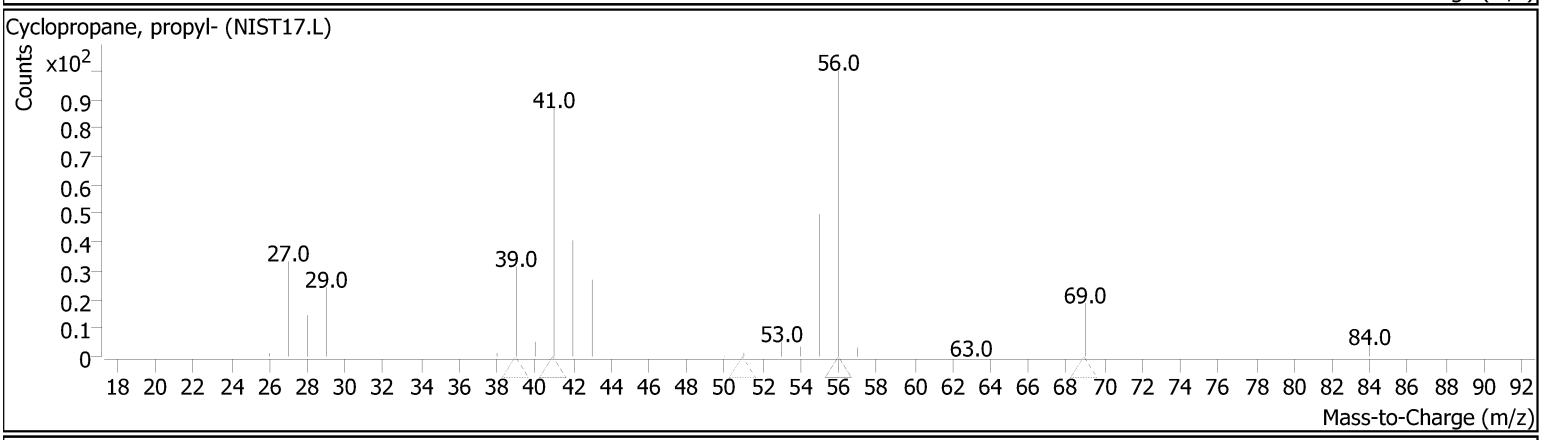


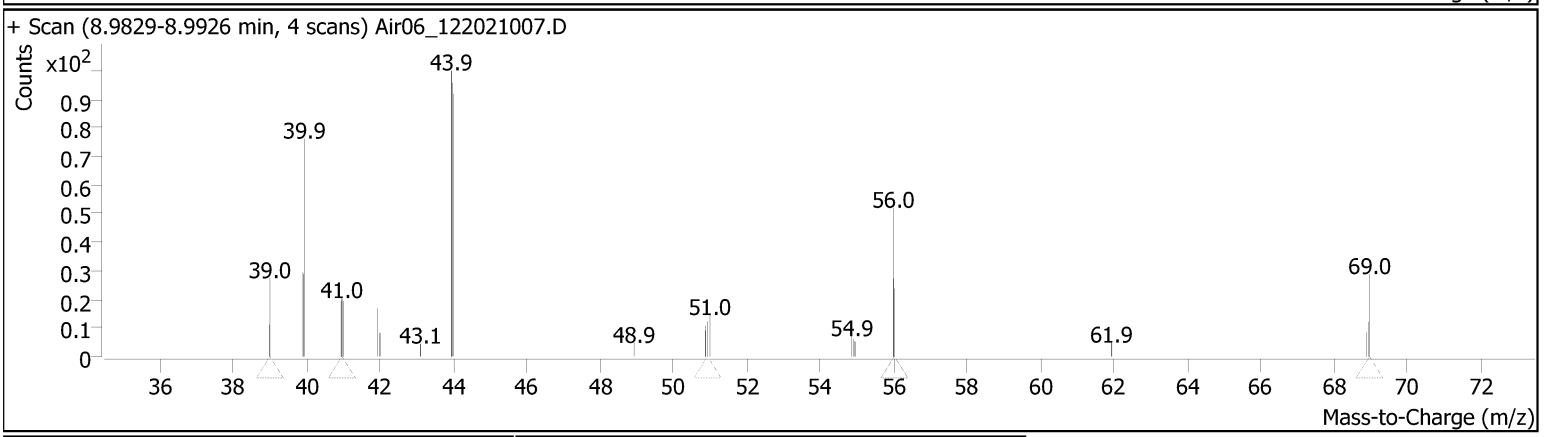


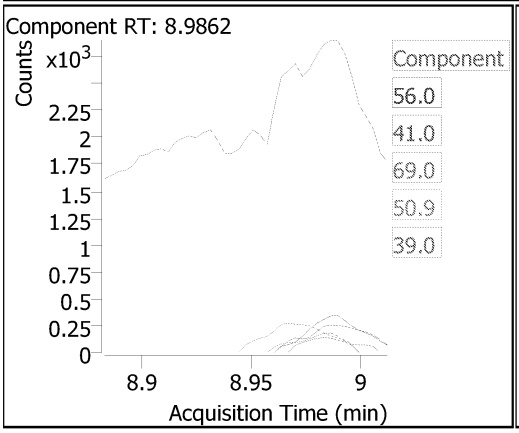


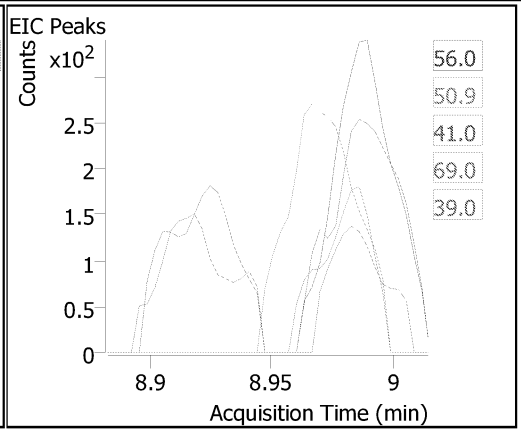
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.9862	Cyclopropane, propyl-	4184.9	77.6	2415-72-7	C6H12	0.01948

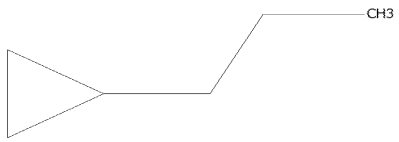




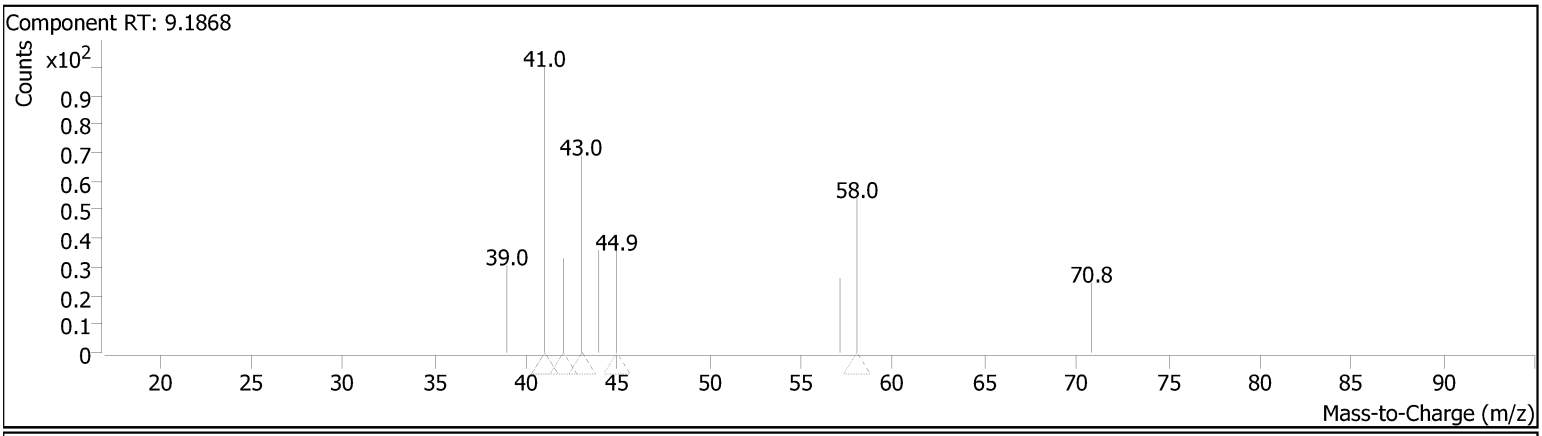


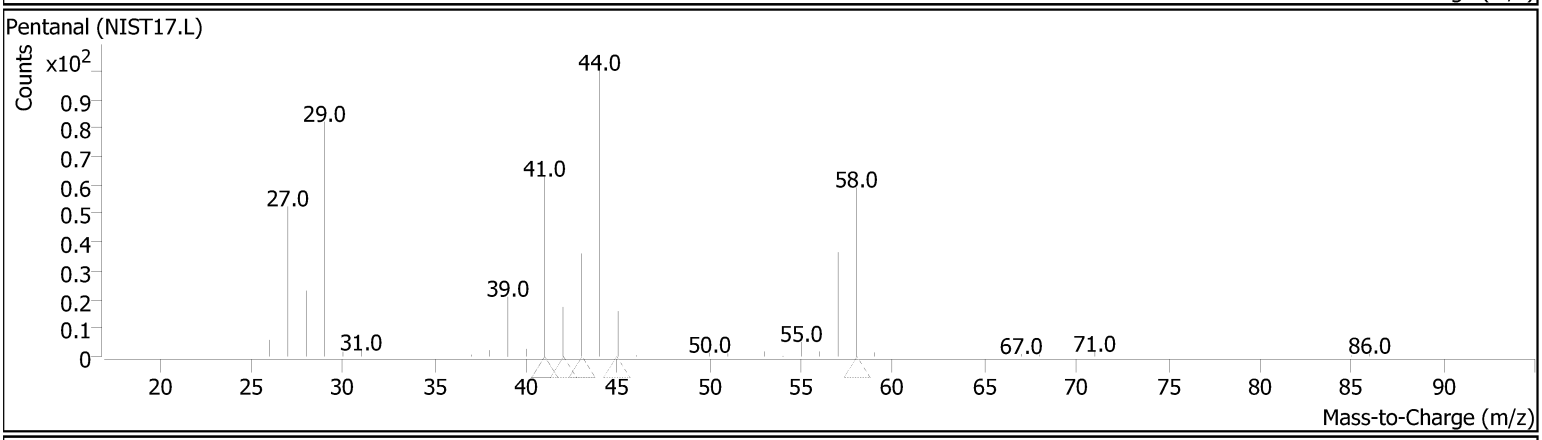


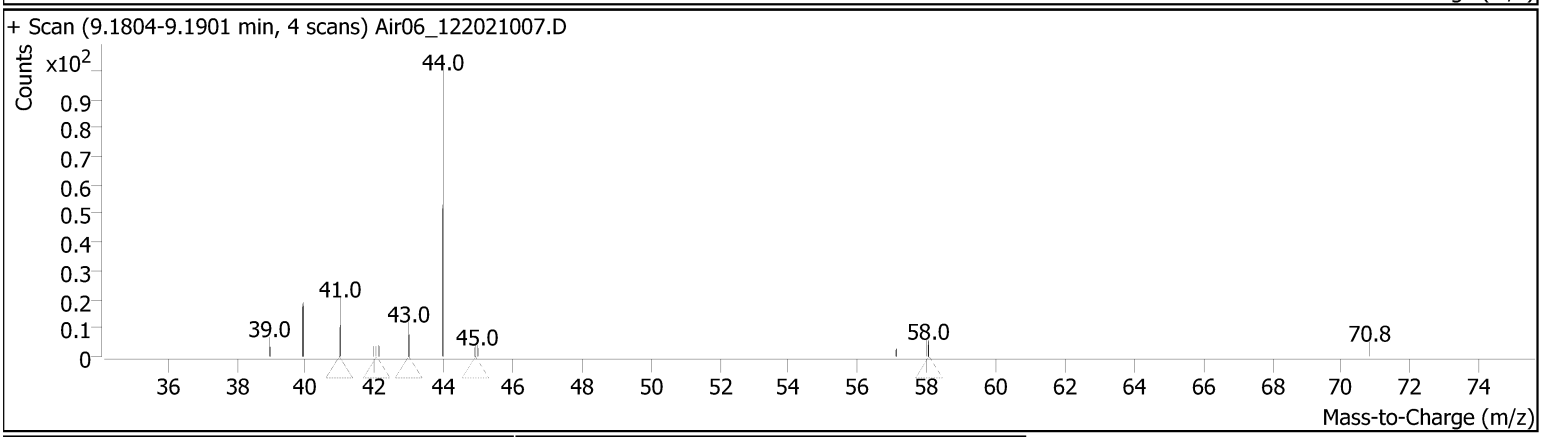


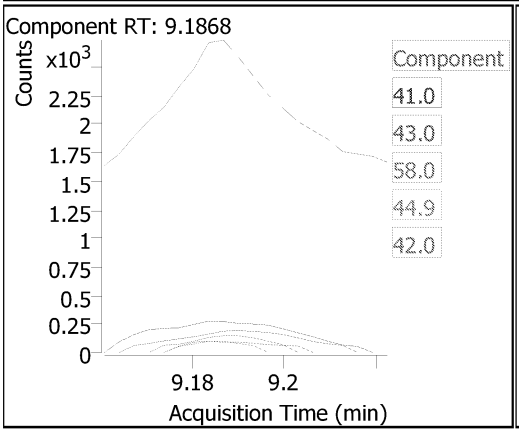


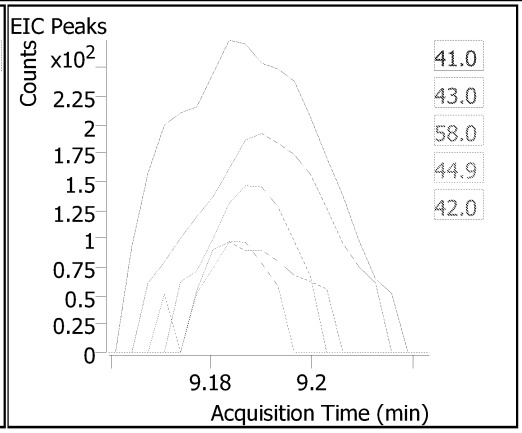
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.1868	Pentanal	1790.1	84.7	110-62-3	C5H10O	0.005574





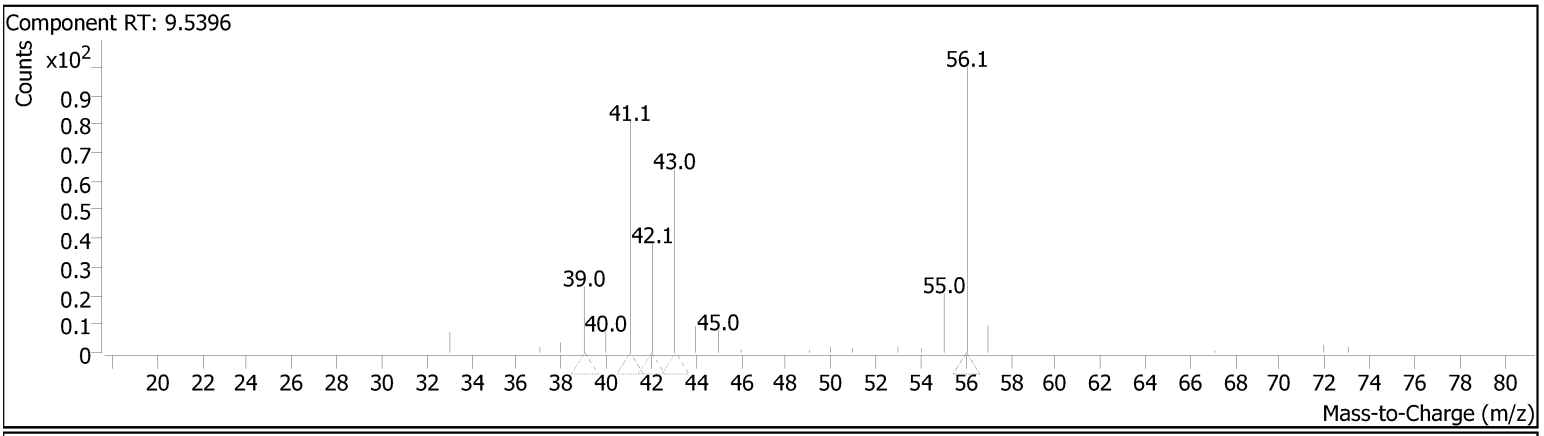


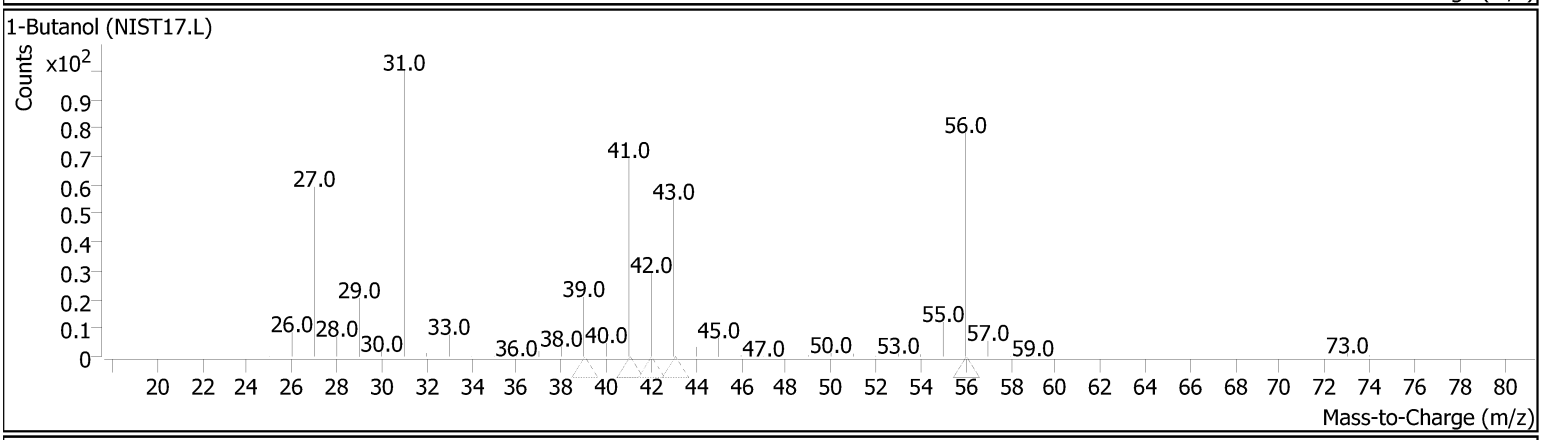


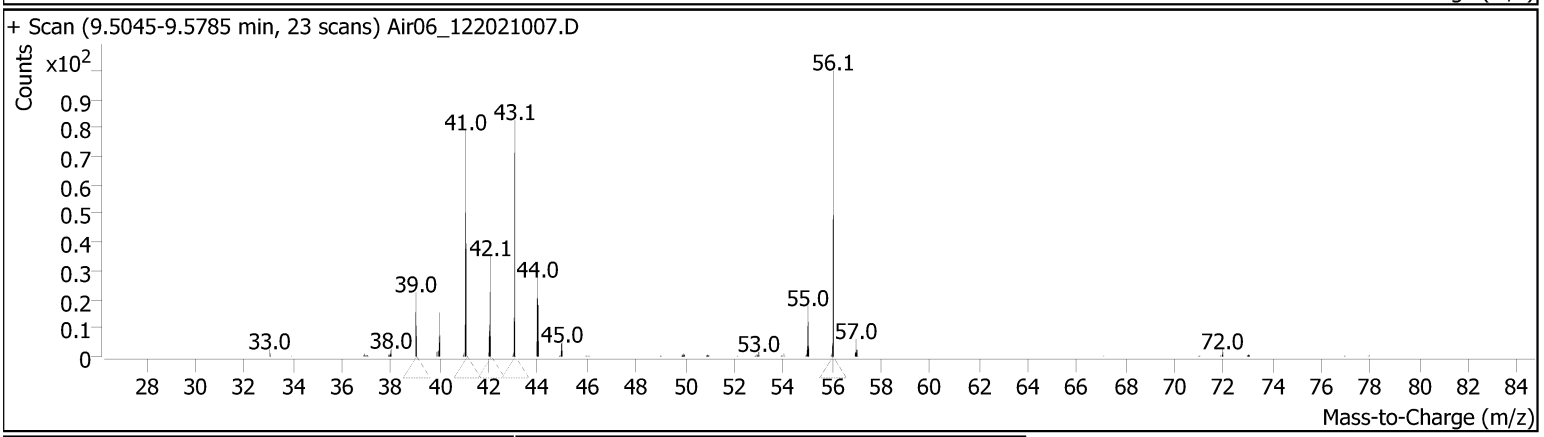


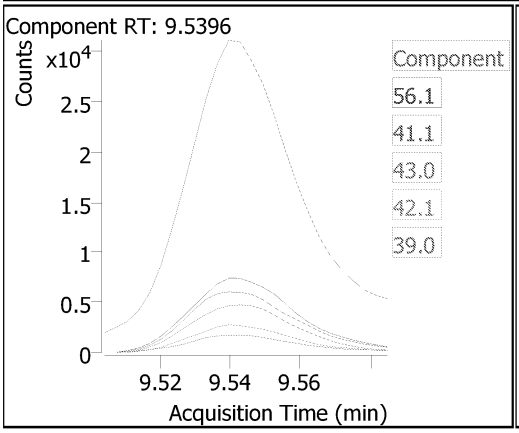


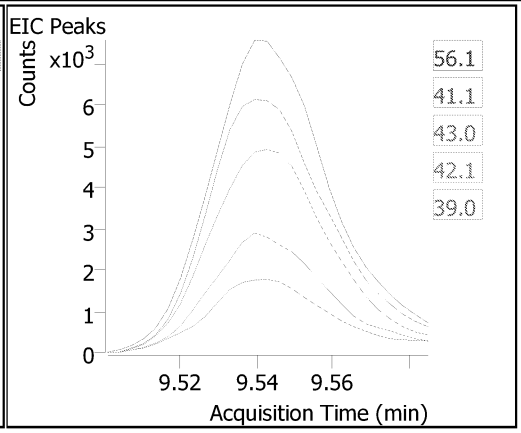
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.5396	1-Butanol	63731.9	97.8	71-36-3	C4H10O	0.1984

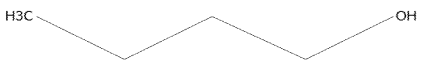




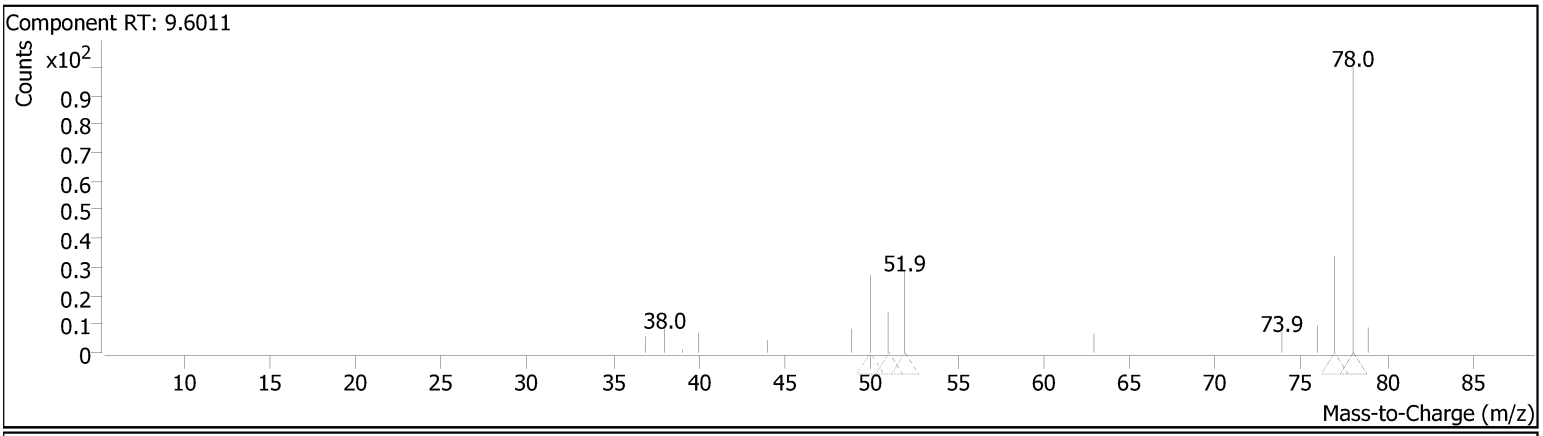


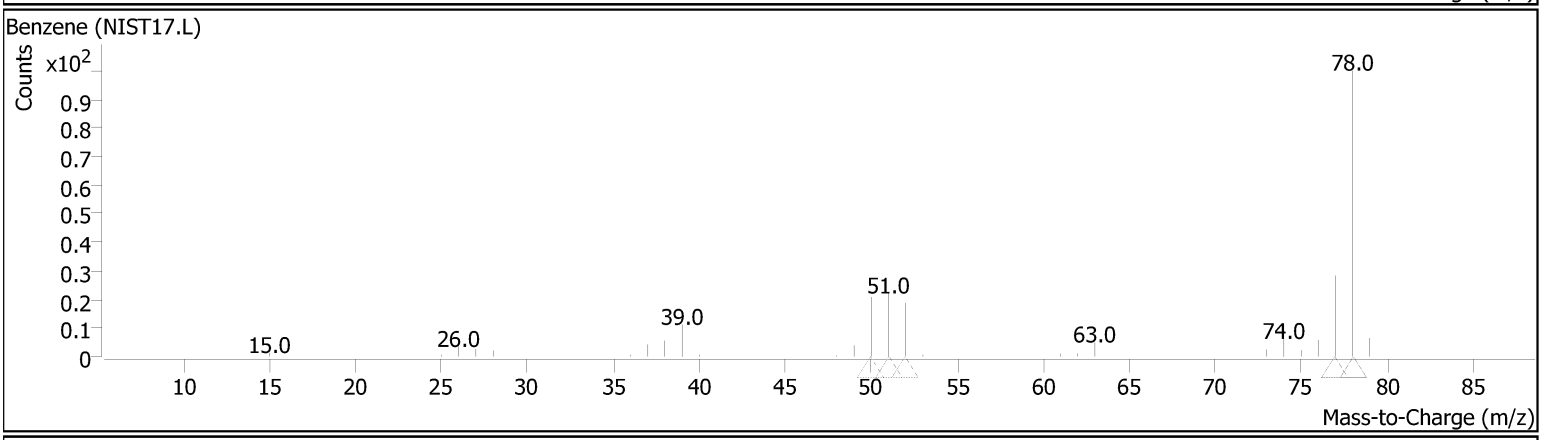


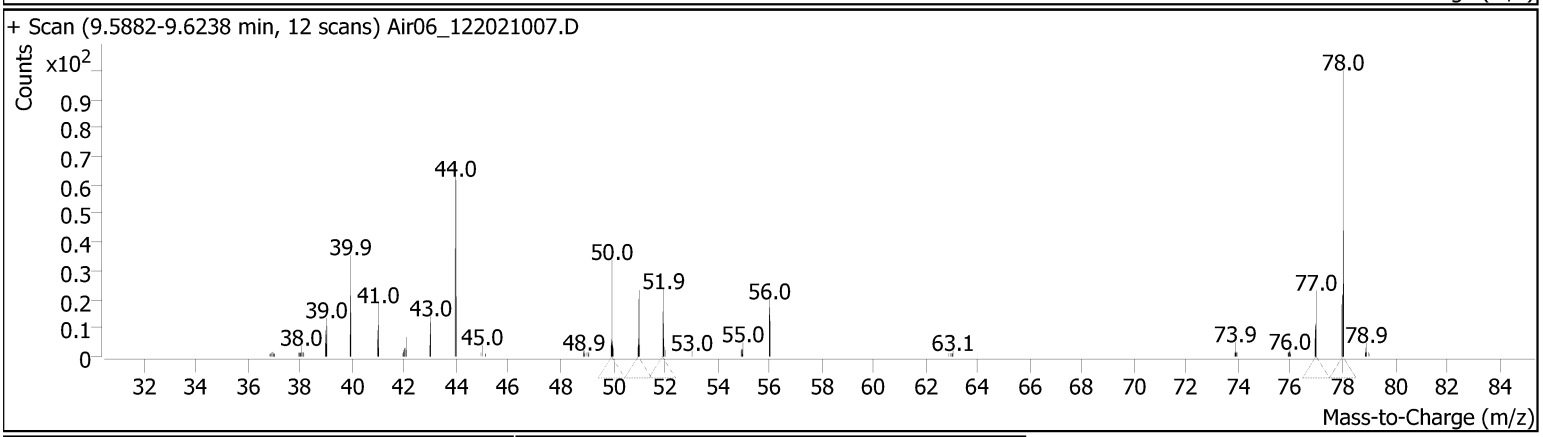


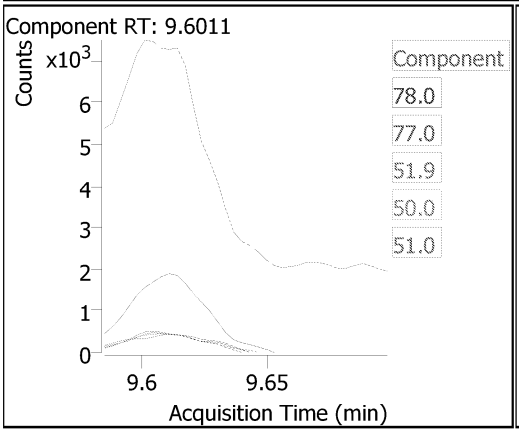


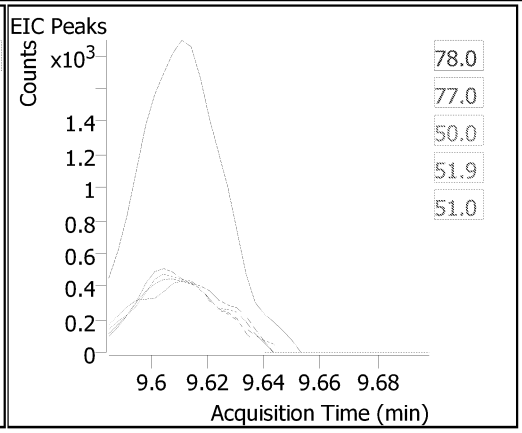
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.6011	Benzene	14018.0	92.1	71-43-2	C6H6	0.04364

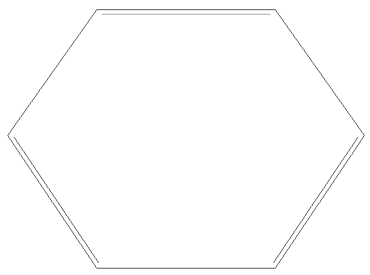




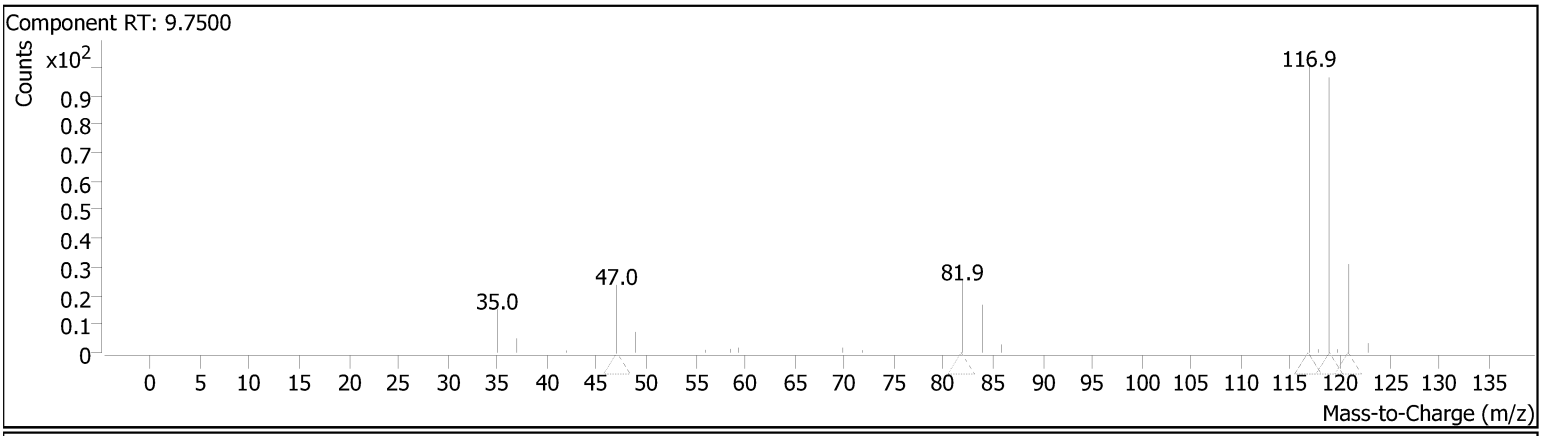


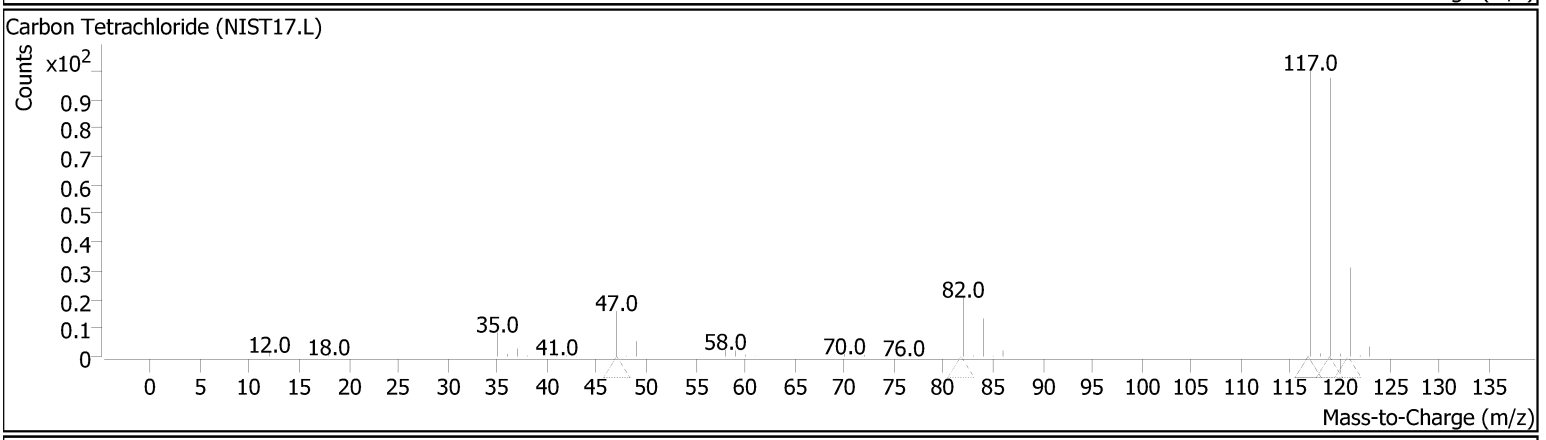


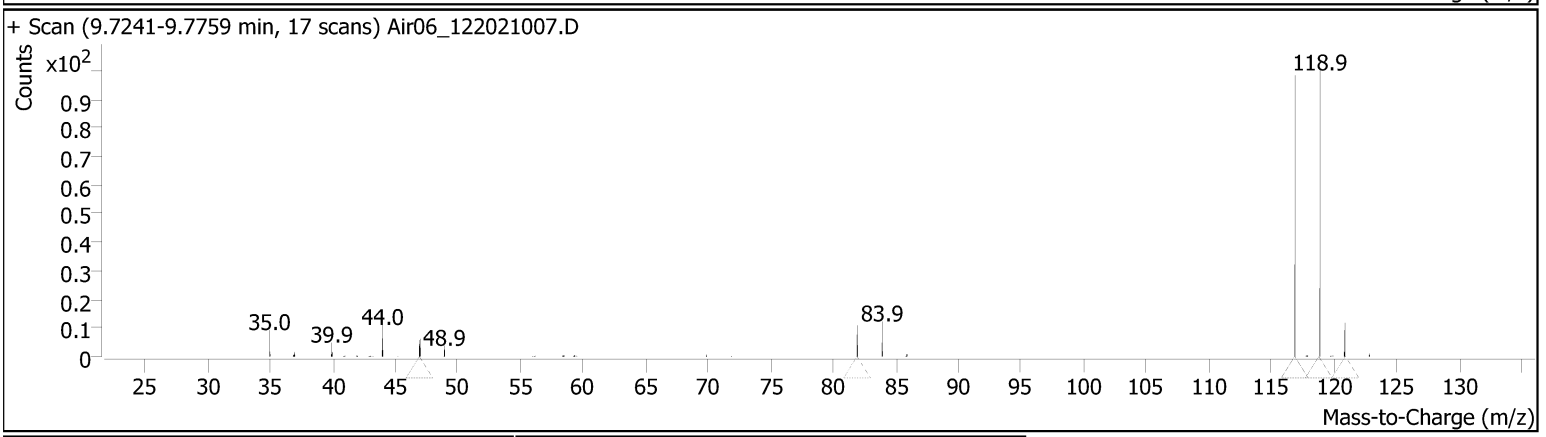


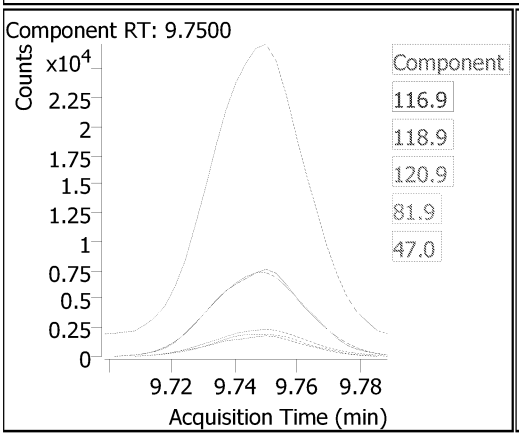


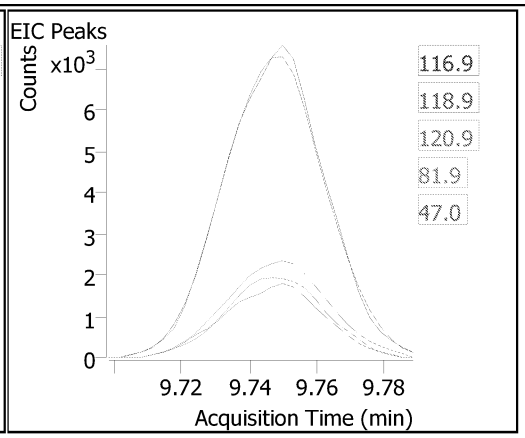
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.7500	Carbon Tetrachloride	53448.1	98.7	56-23-5	CCl4	0.1664

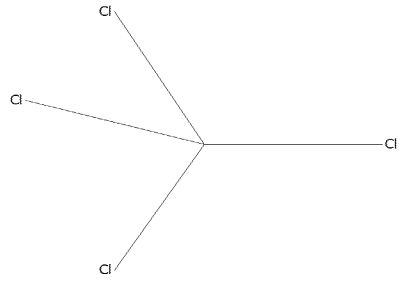




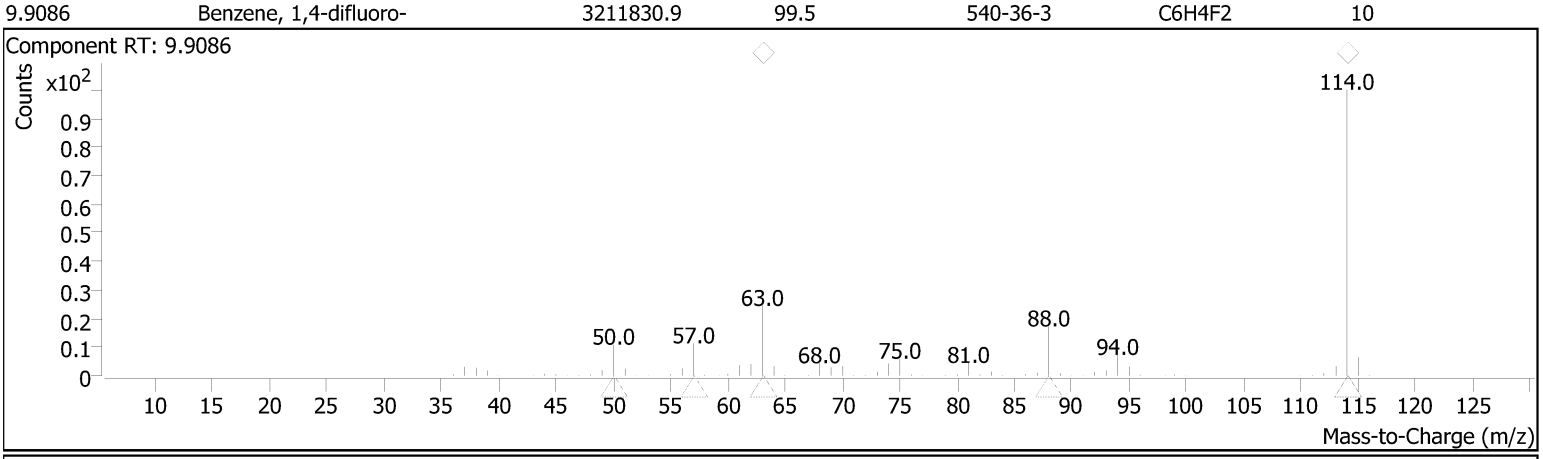


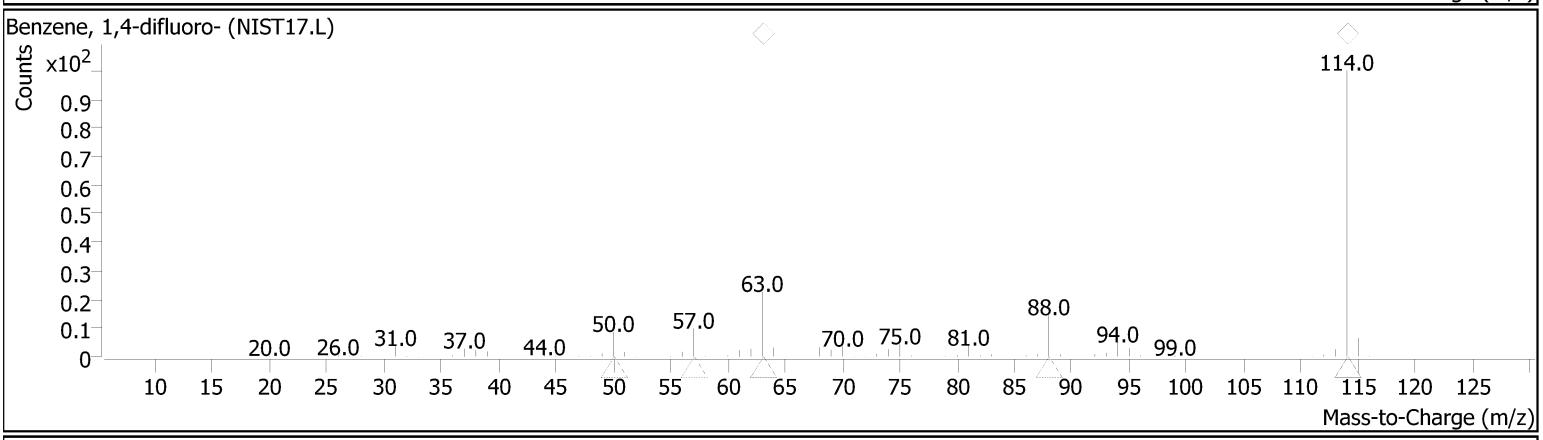


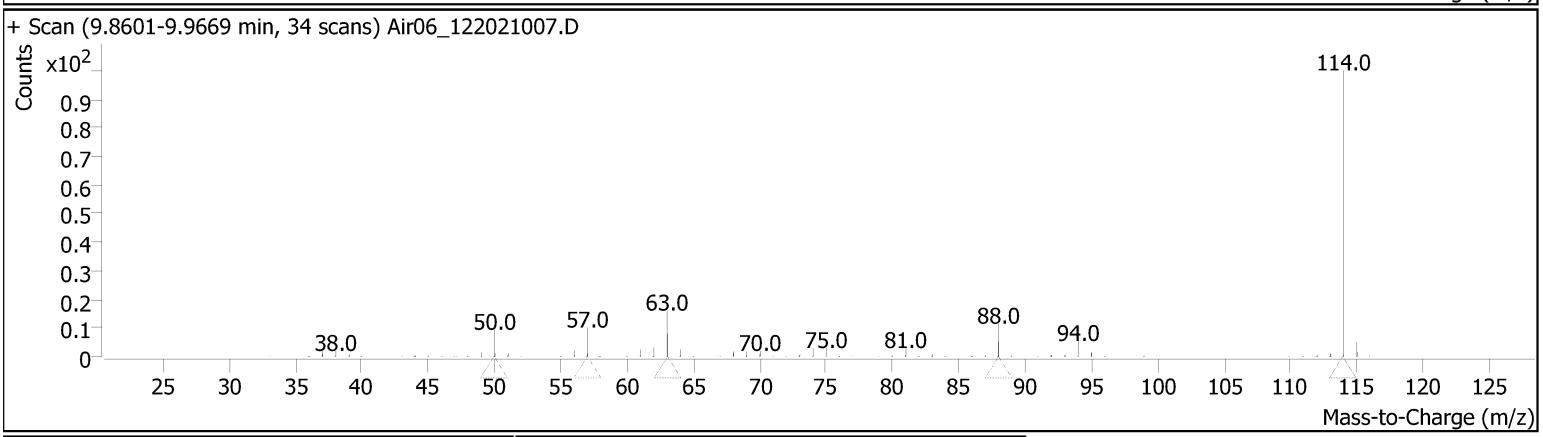


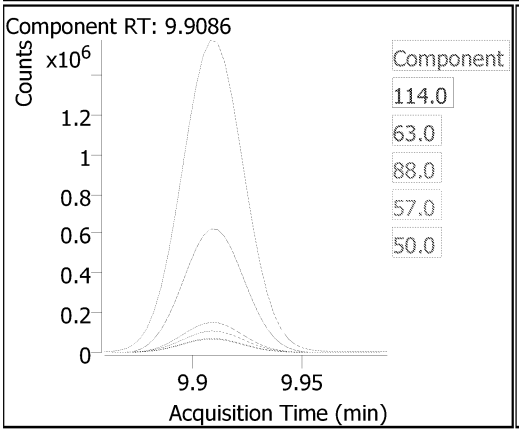


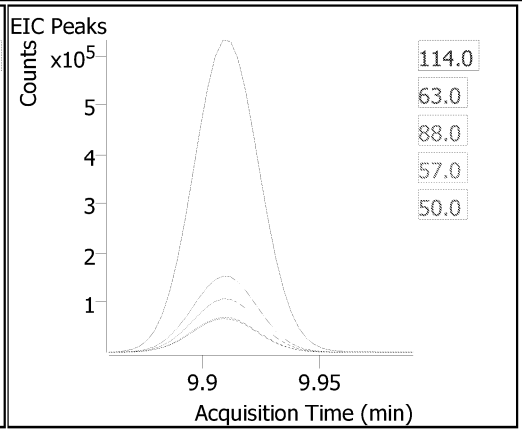
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.9086	Benzene, 1,4-difluoro-	3211830.9	99.5	540-36-3	C6H4F2	10





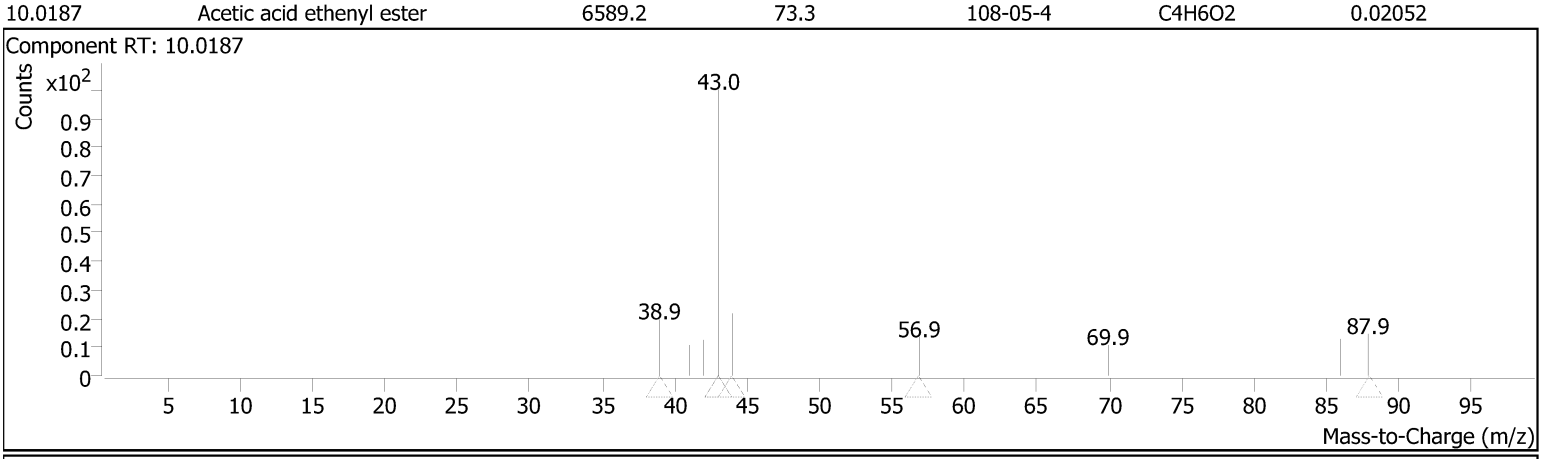


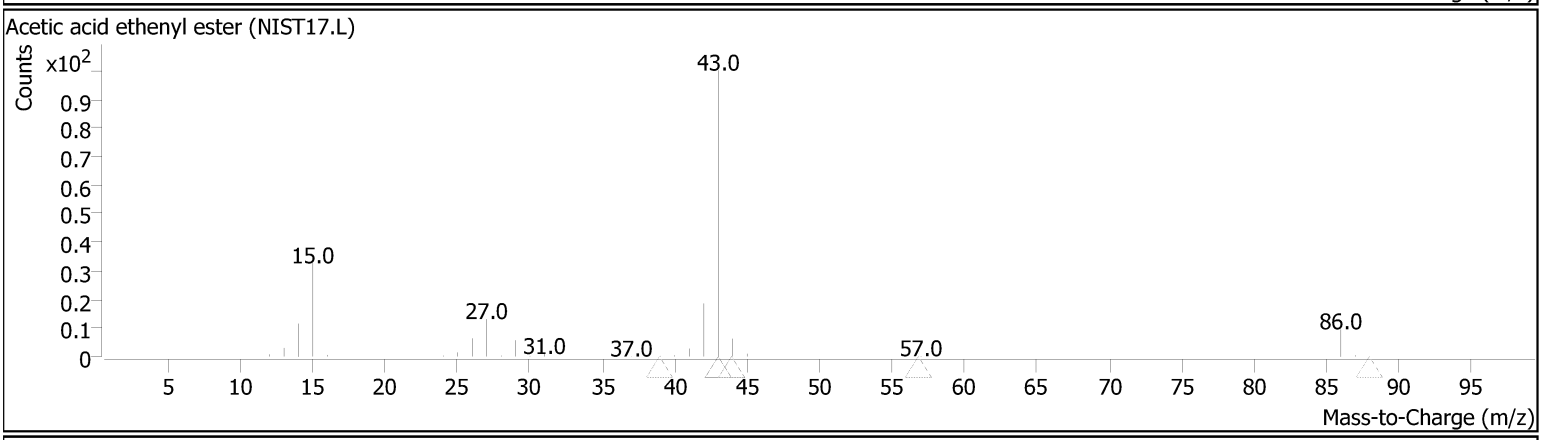


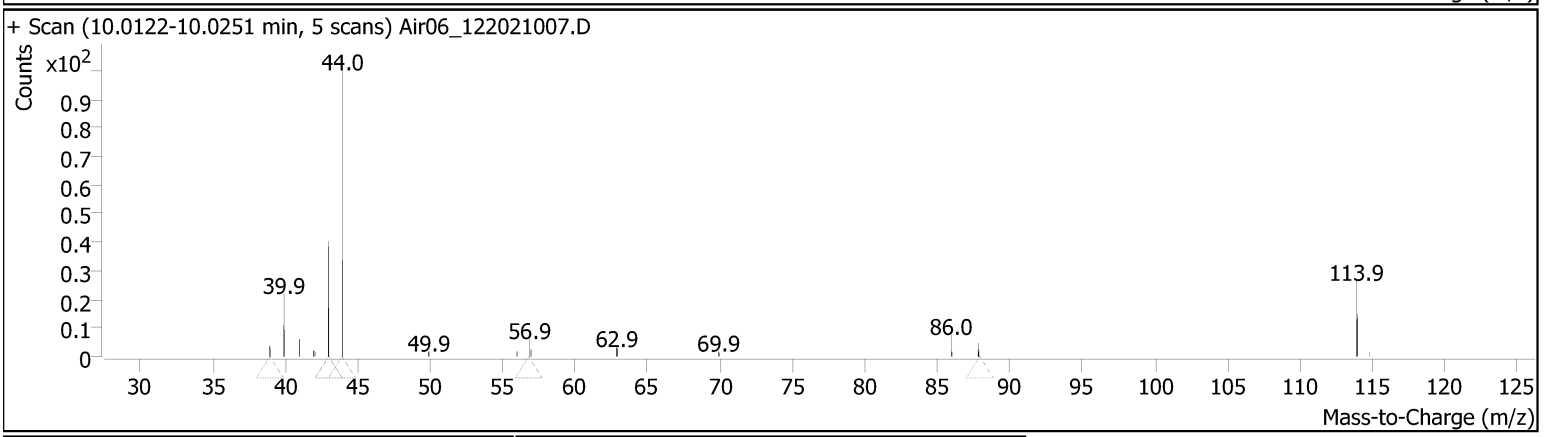


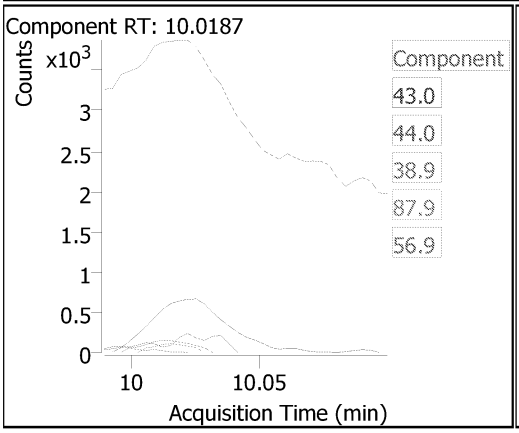


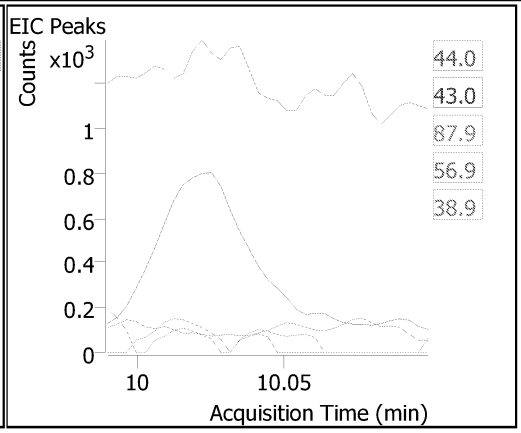
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.0187	Acetic acid ethenyl ester	6589.2	73.3	108-05-4	C4H6O2	0.02052

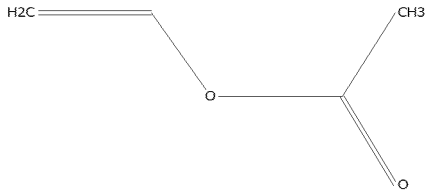




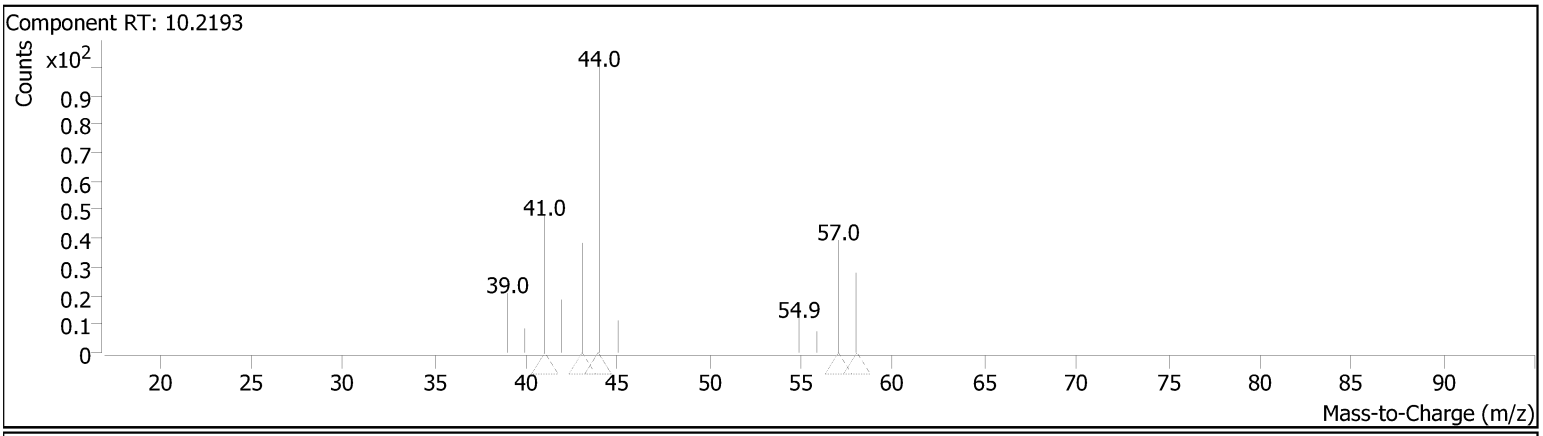


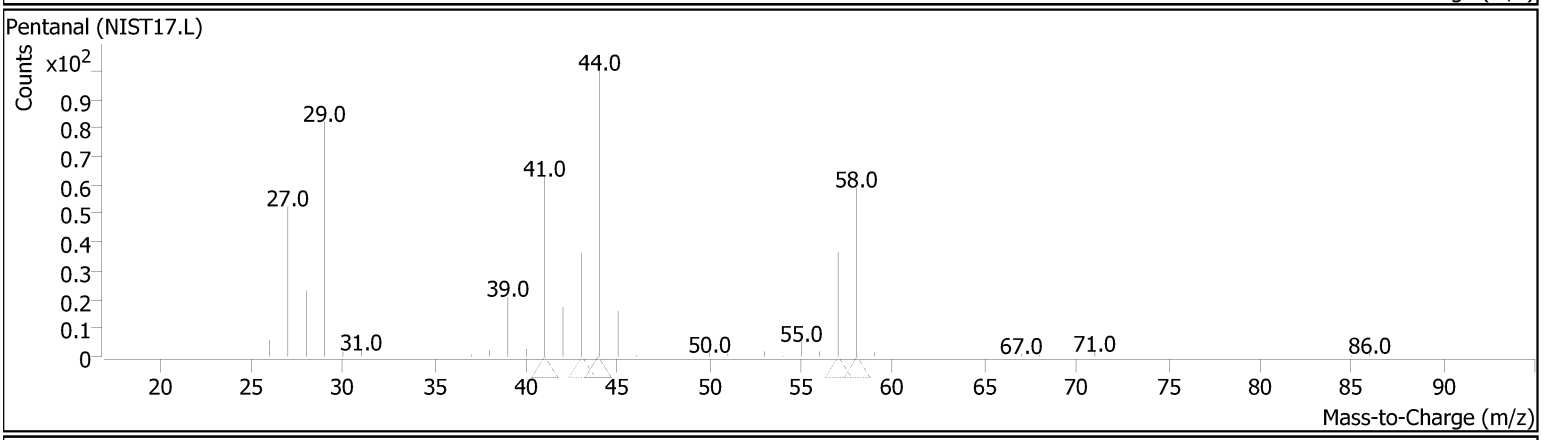


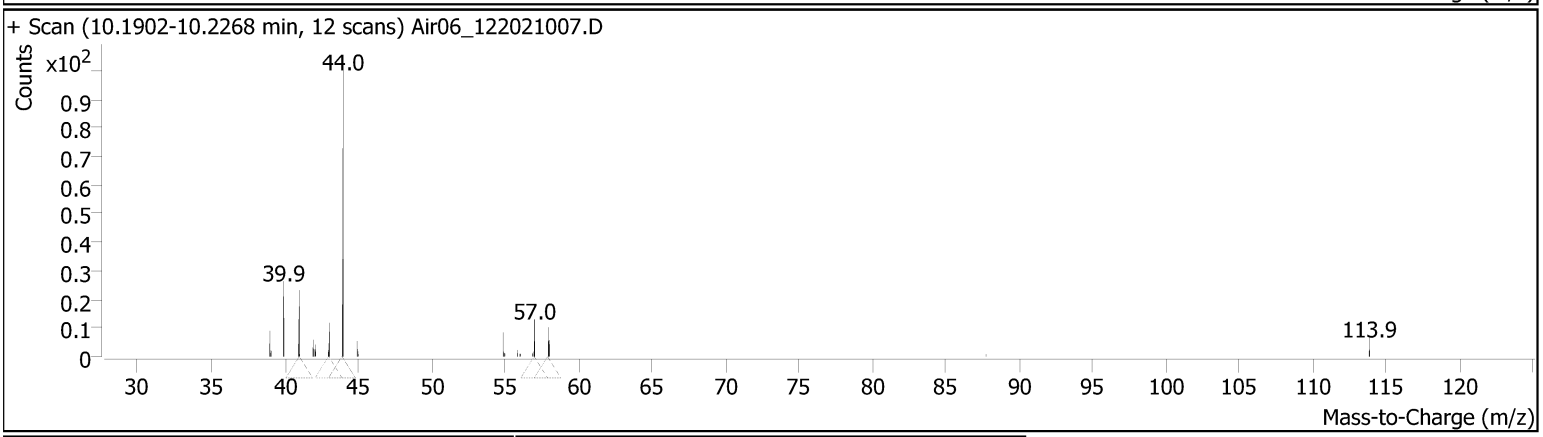


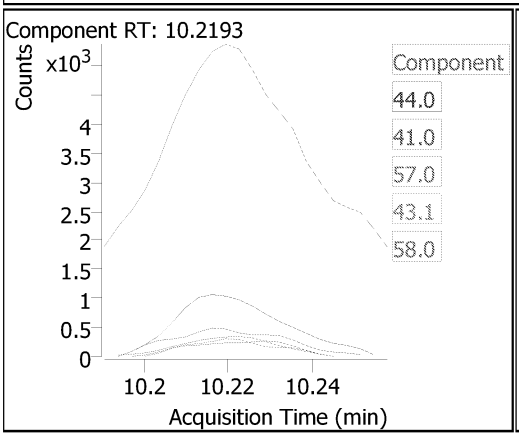


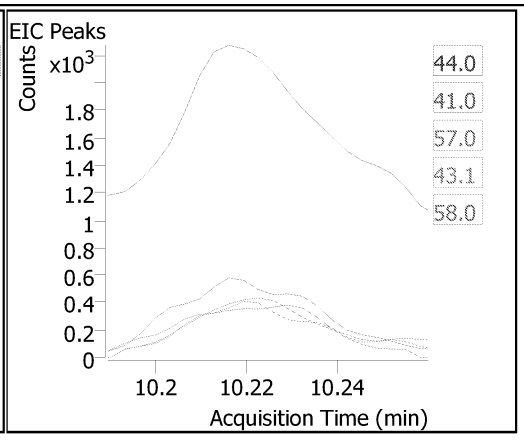
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.2193	Pentanal	7238.1	92.1	110-62-3	C5H10O	0.02254





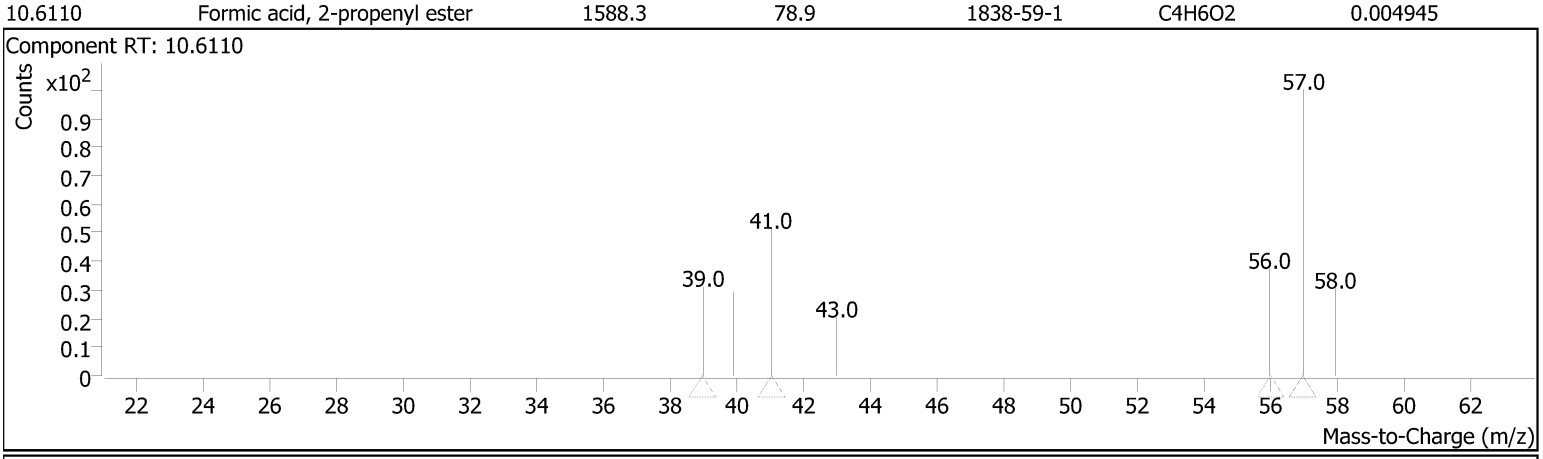


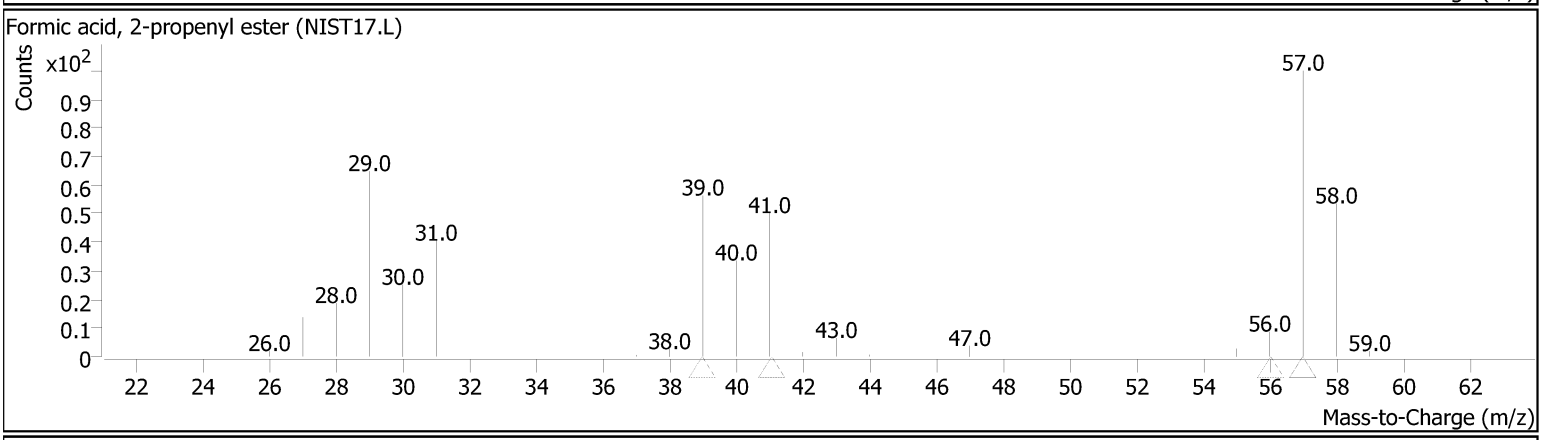


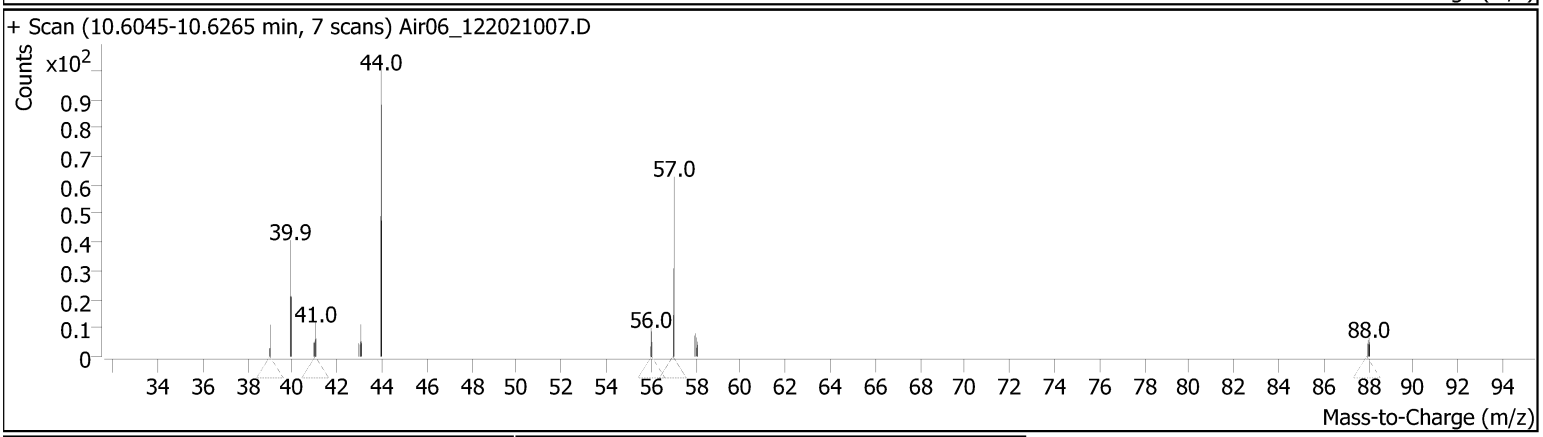


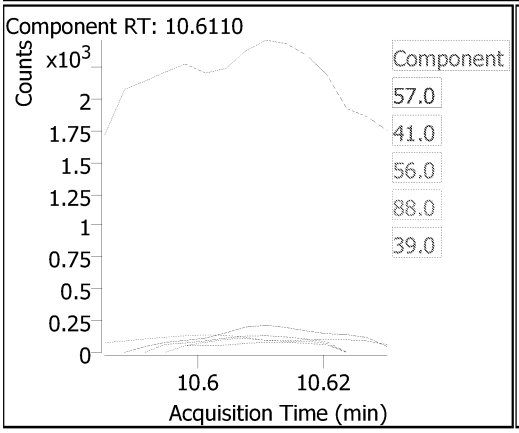


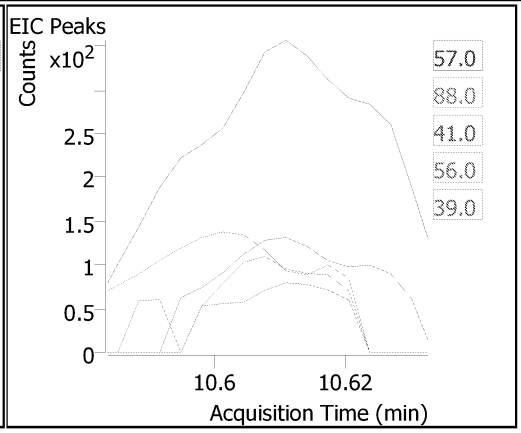
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.6110	Formic acid, 2-propenyl ester	1588.3	78.9	1838-59-1	C4H6O2	0.004945





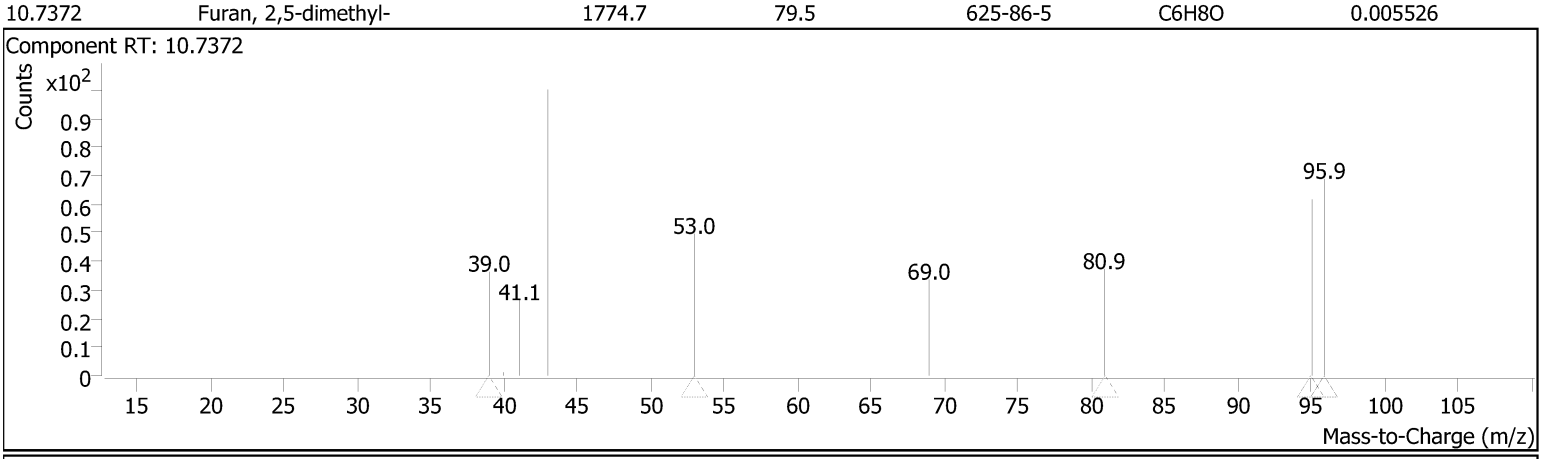


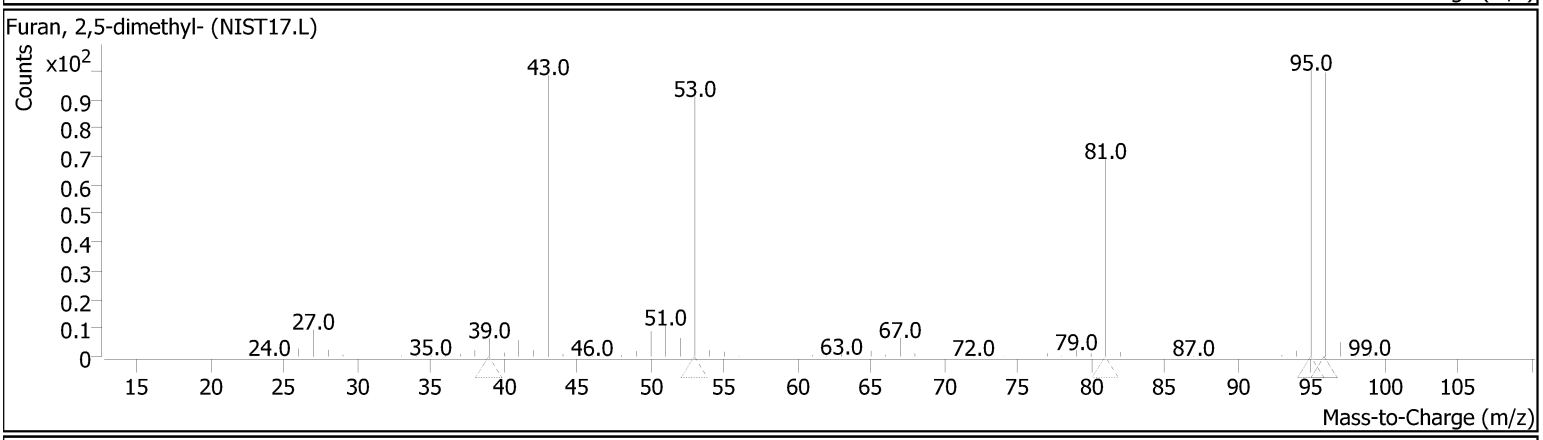


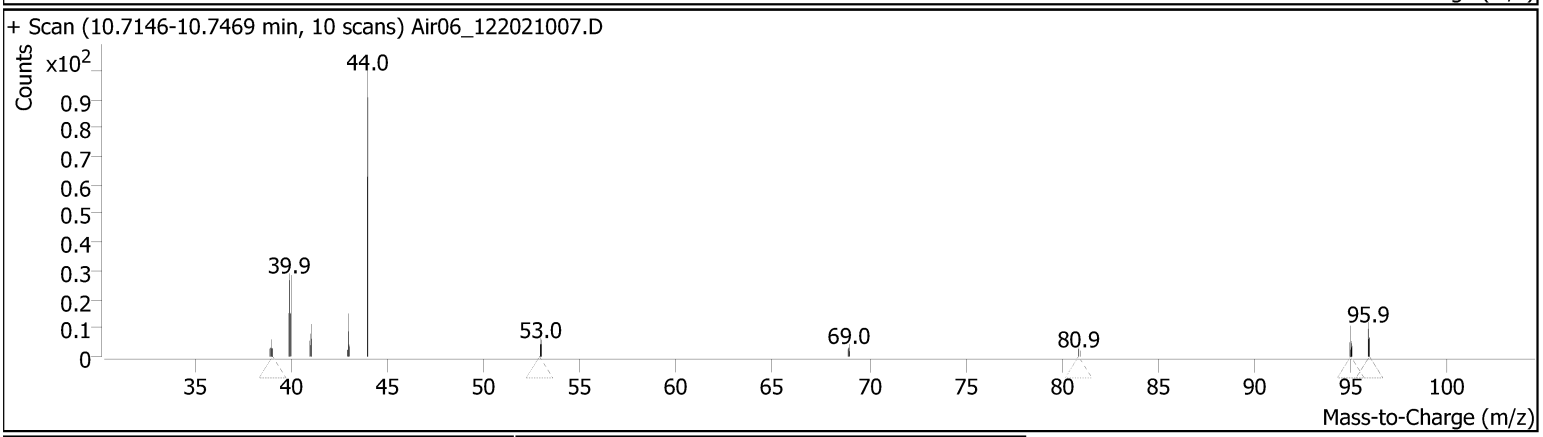


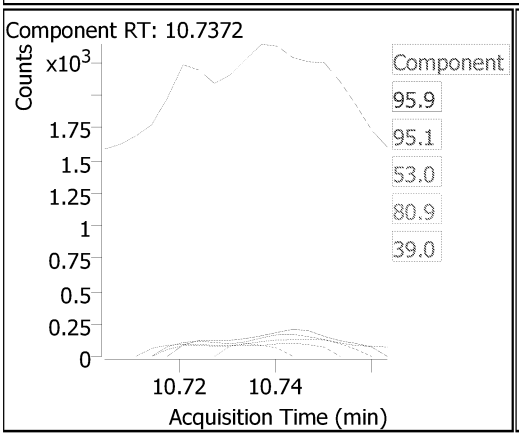


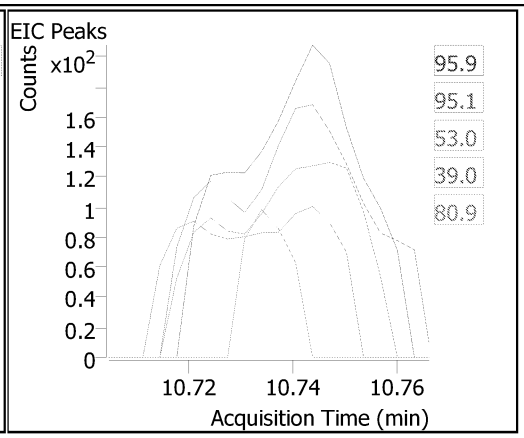
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.7372	Furan, 2,5-dimethyl-	1774.7	79.5	625-86-5	C6H8O	0.005526

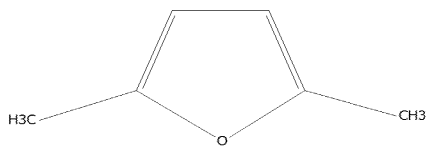




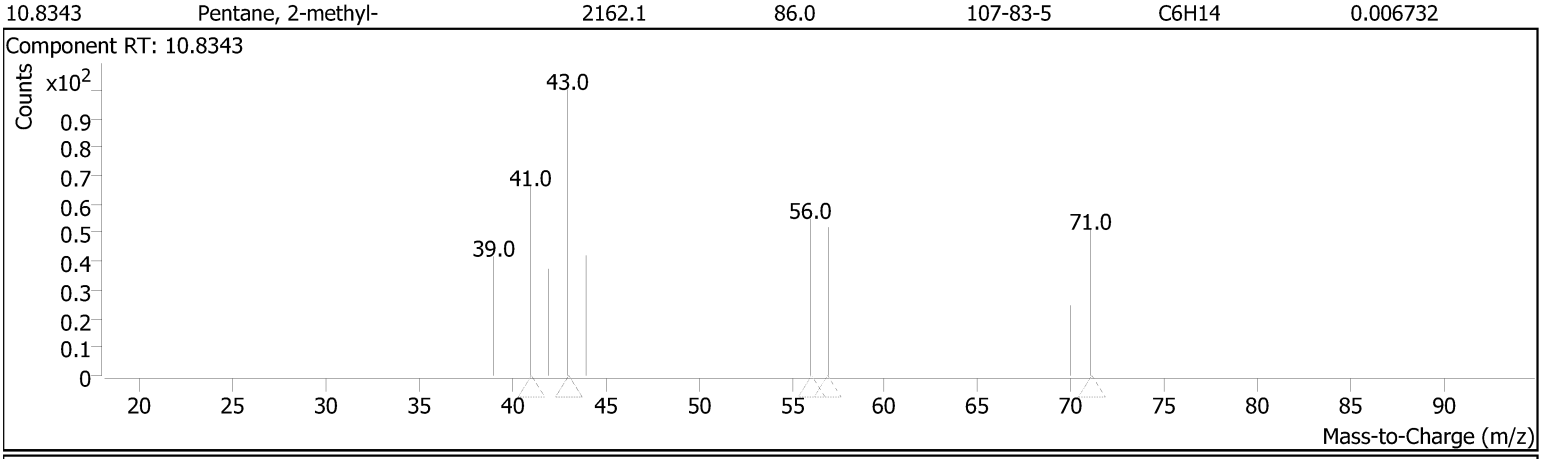


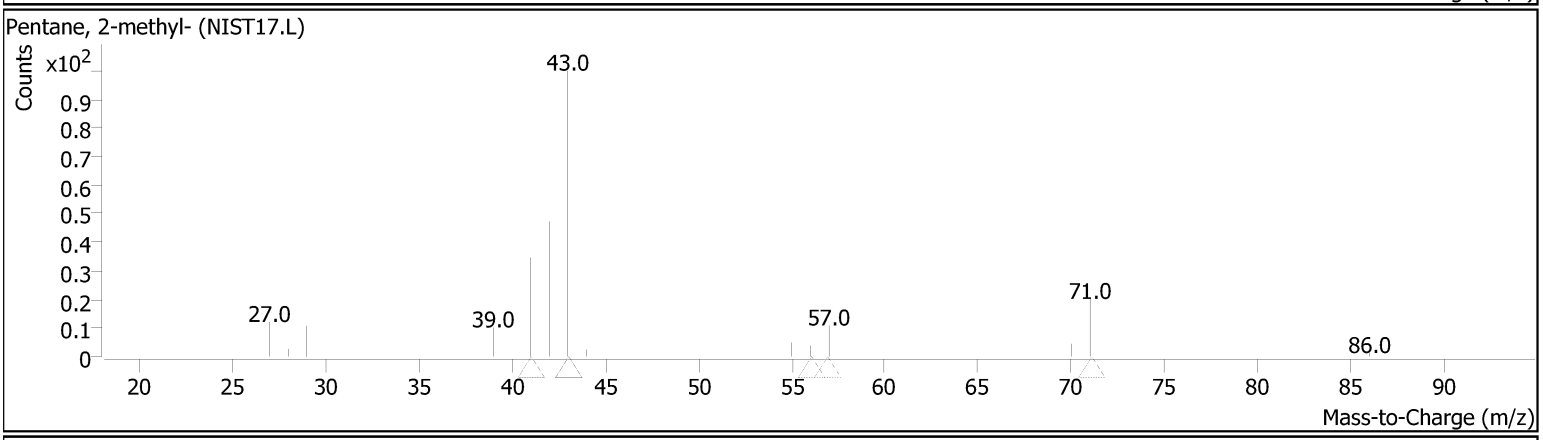


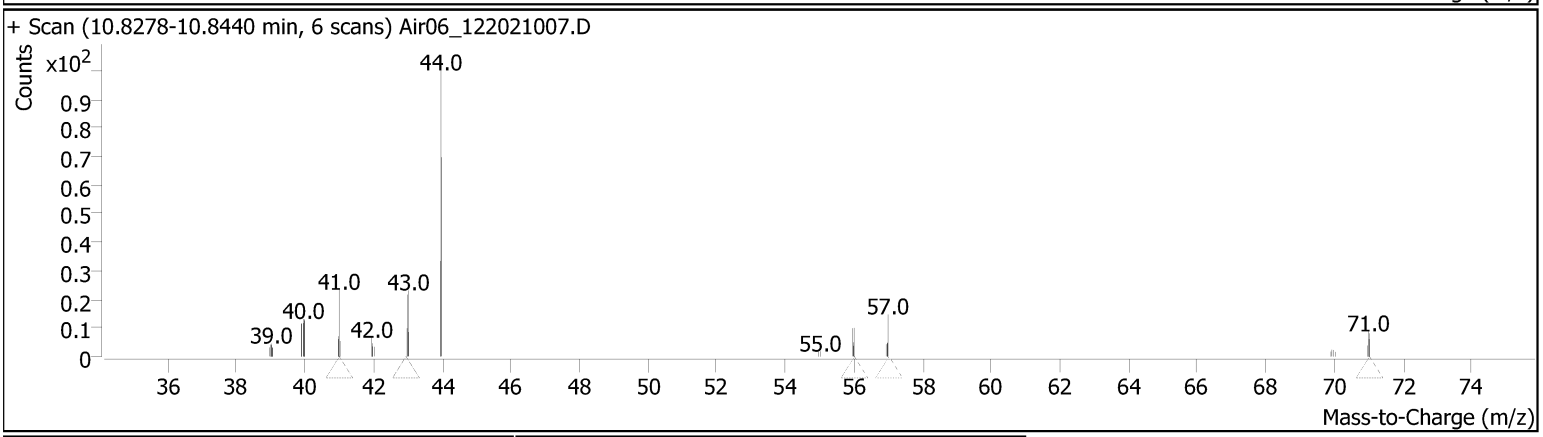


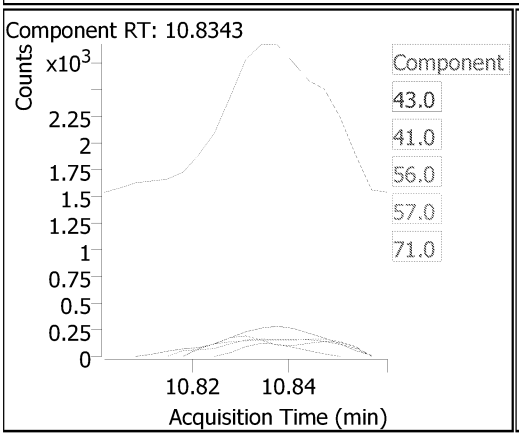


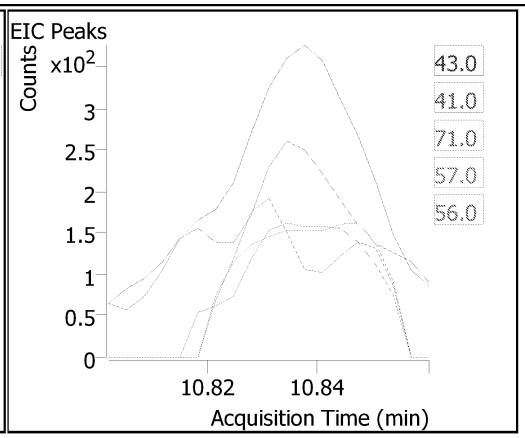
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.8343	Pentane, 2-methyl-	2162.1	86.0	107-83-5	C6H14	0.006732

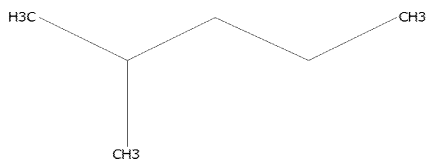




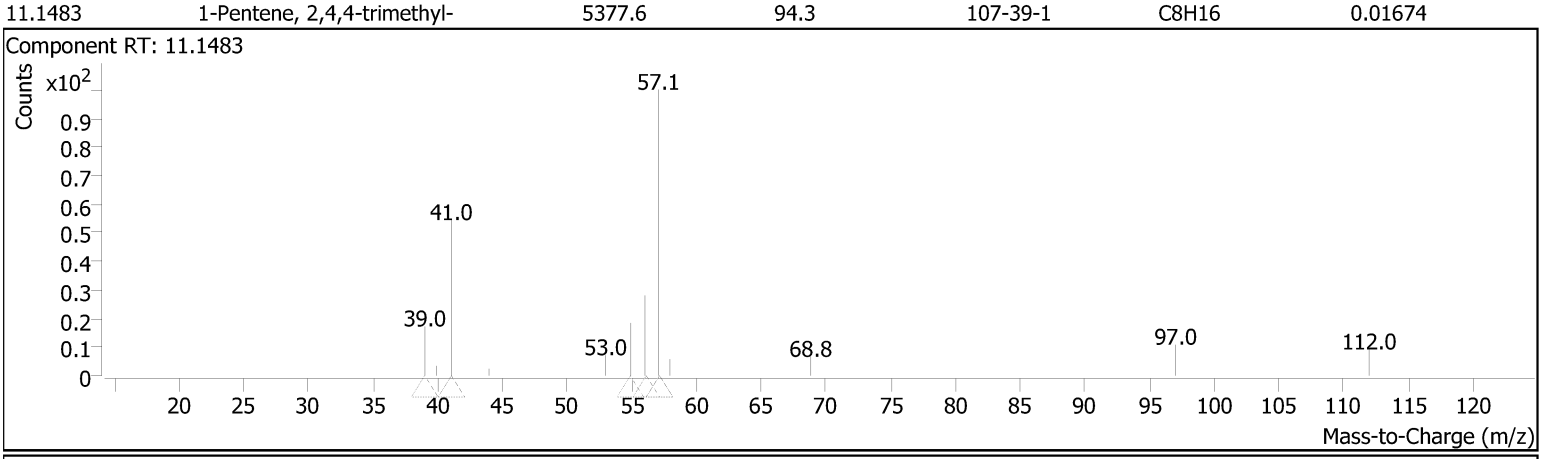


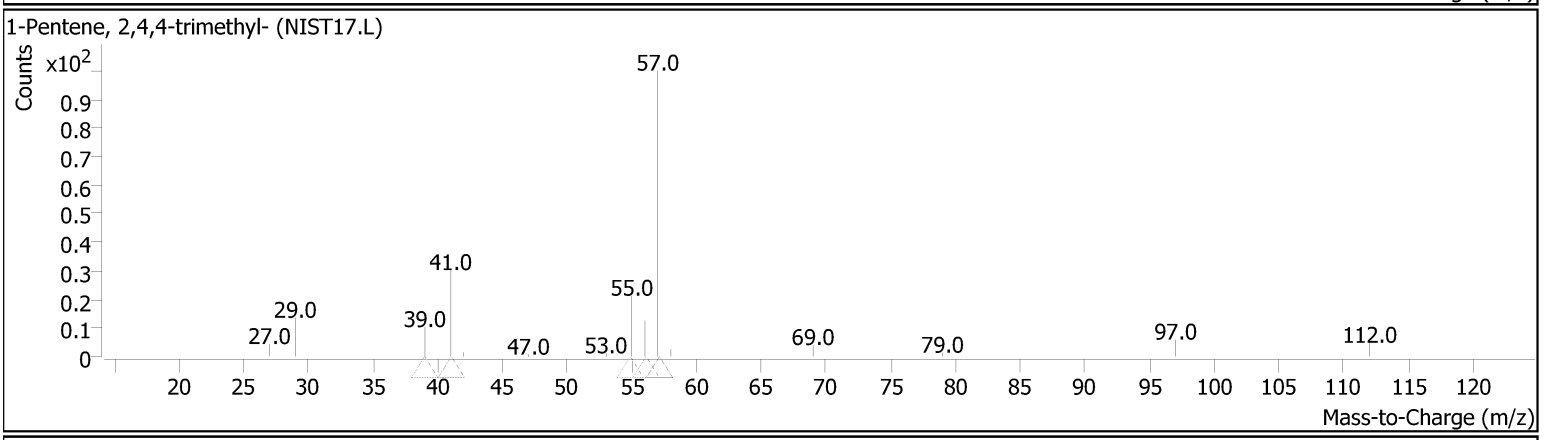


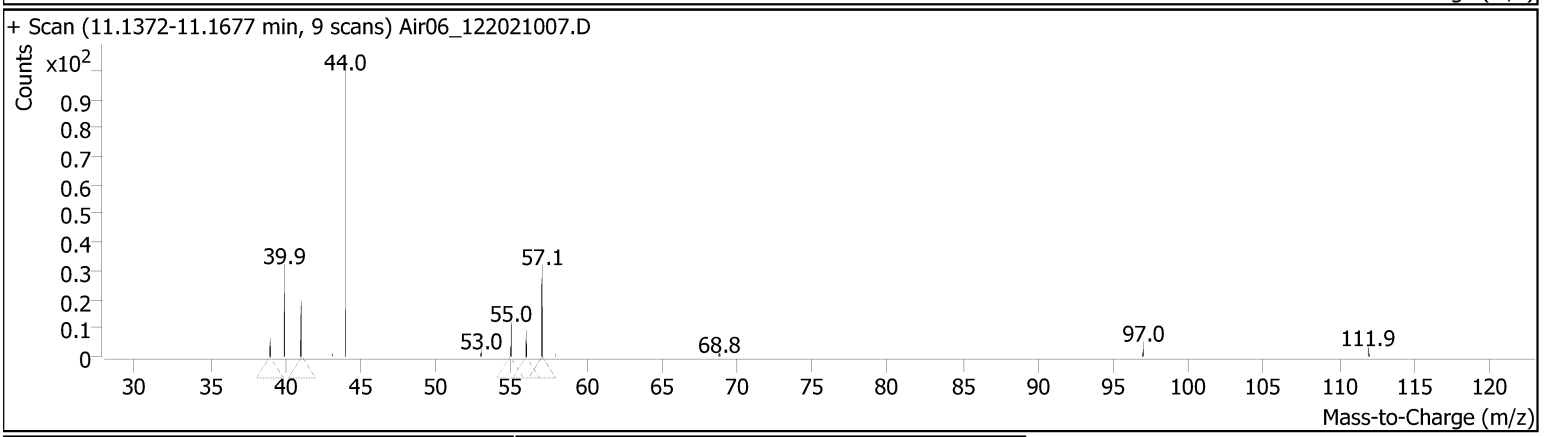


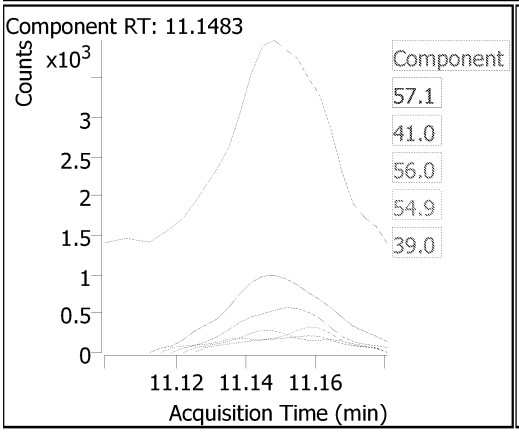


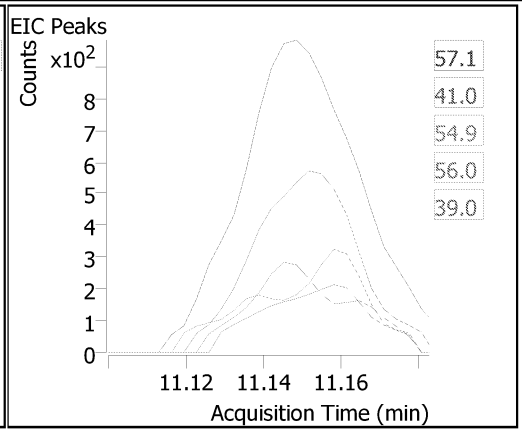
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.1483	1-Pentene, 2,4,4-trimethyl-	5377.6	94.3	107-39-1	C8H16	0.01674

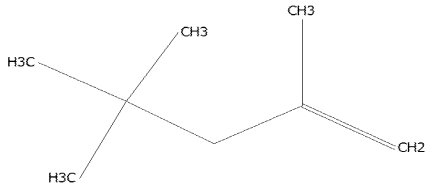




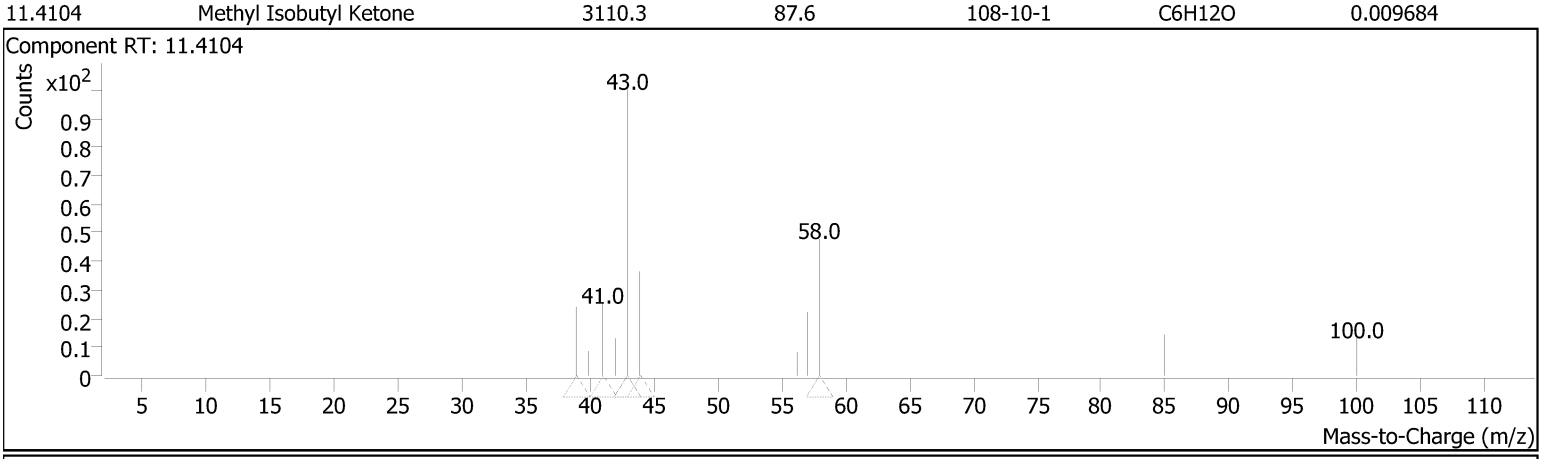


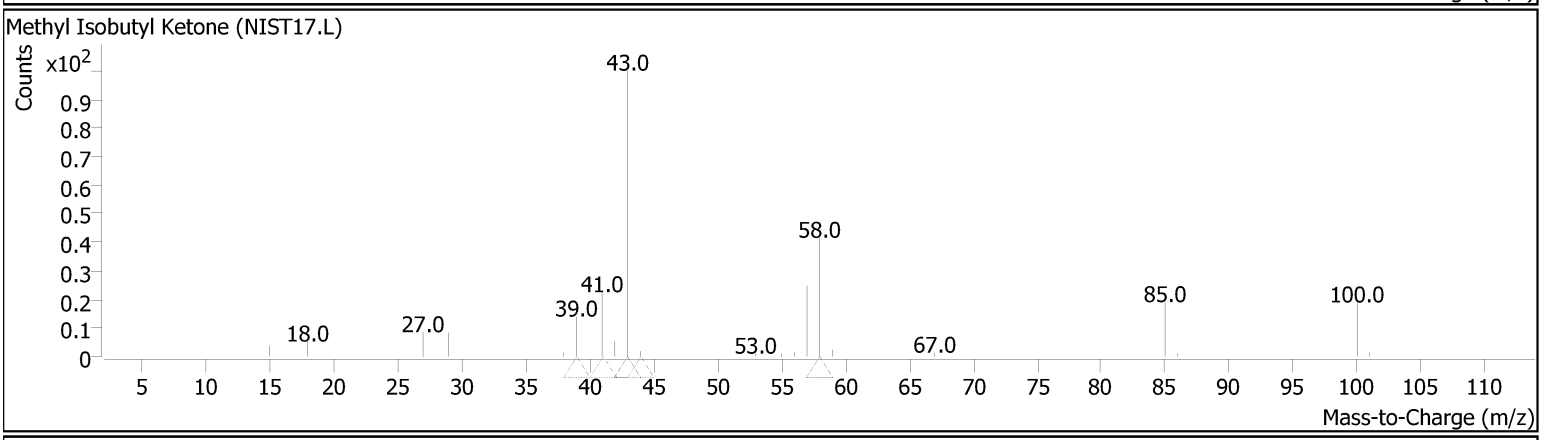


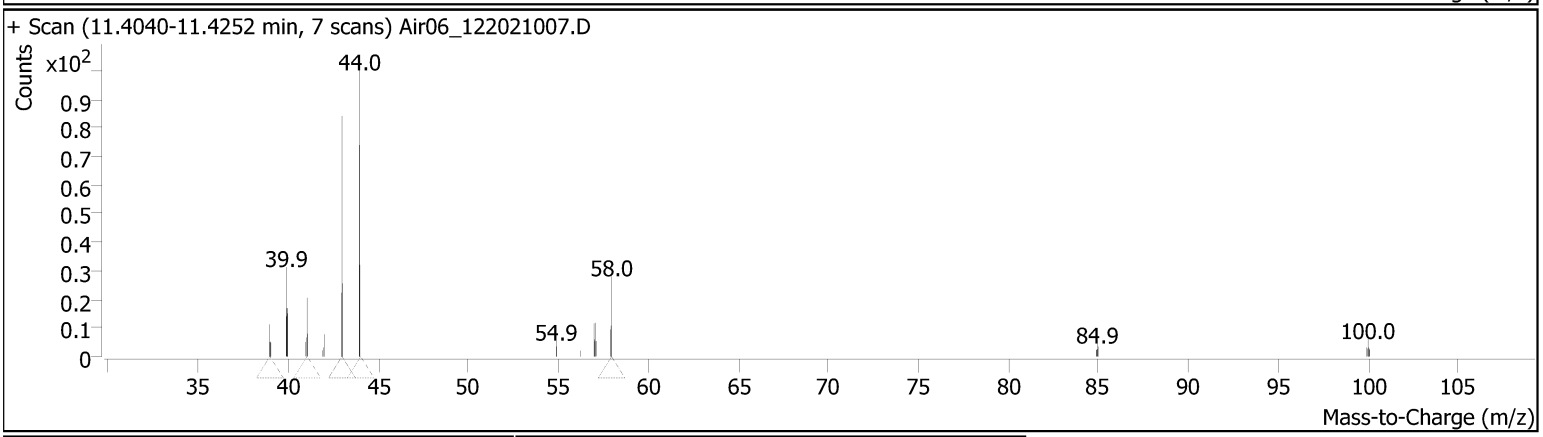


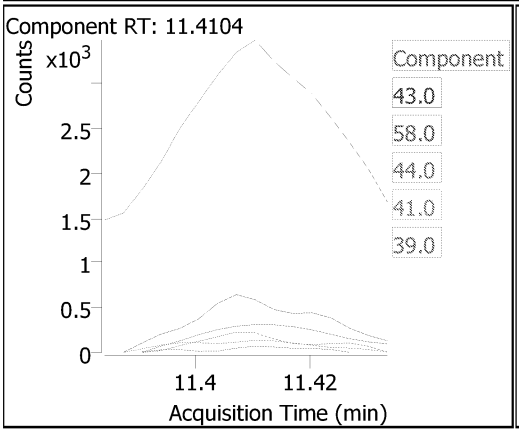


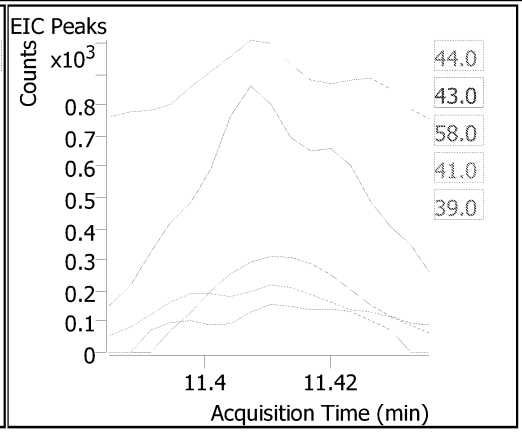
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.4104	Methyl Isobutyl Ketone	3110.3	87.6	108-10-1	C6H12O	0.009684

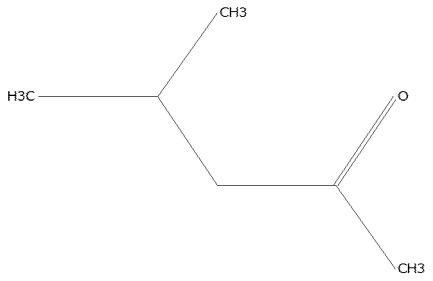




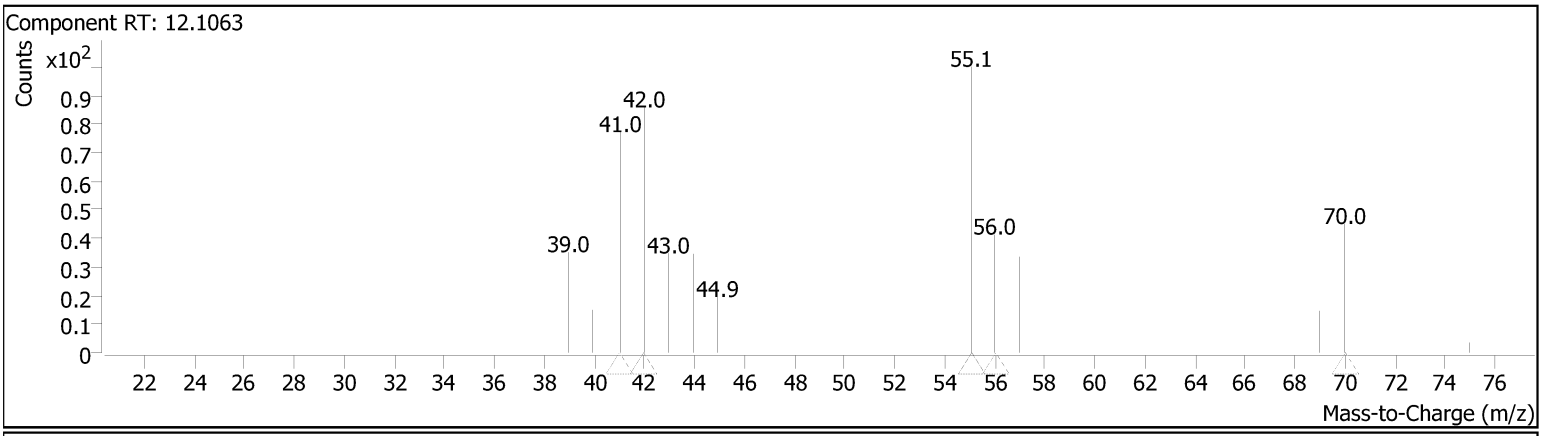


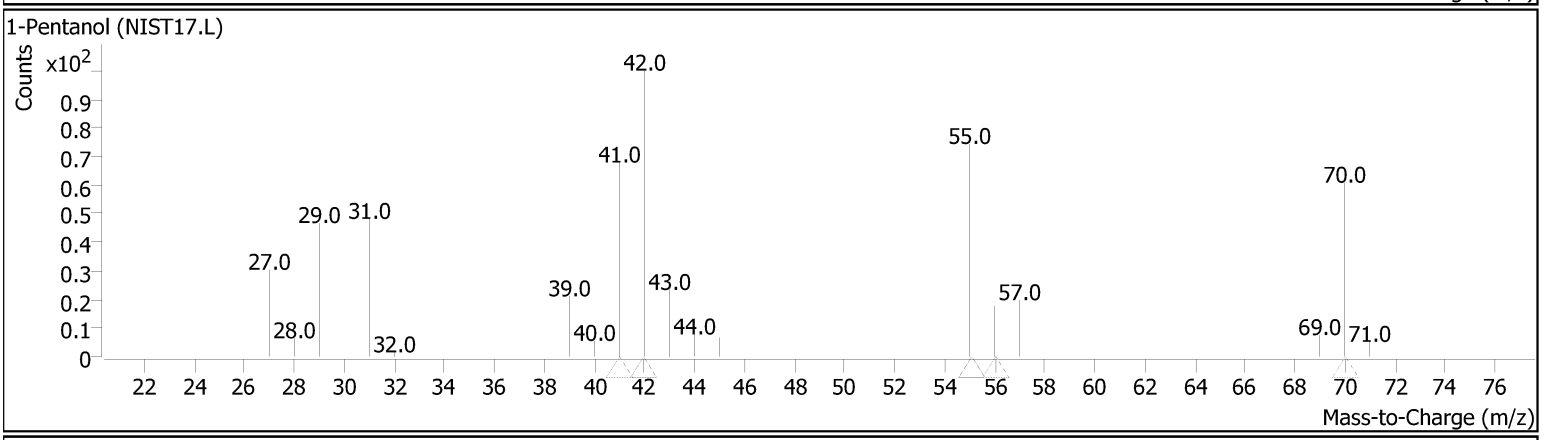


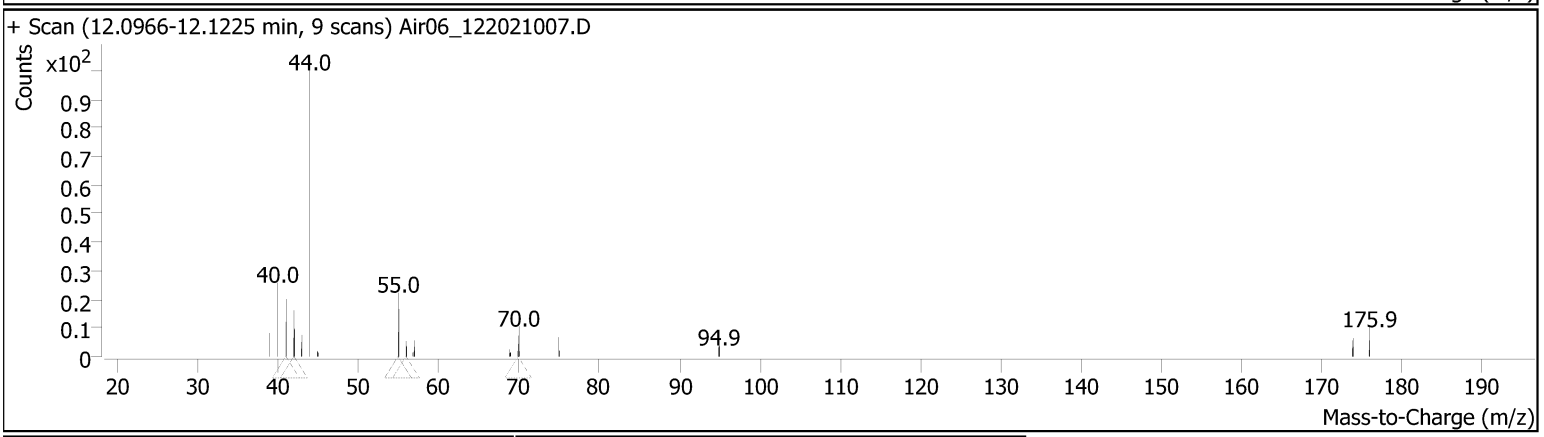


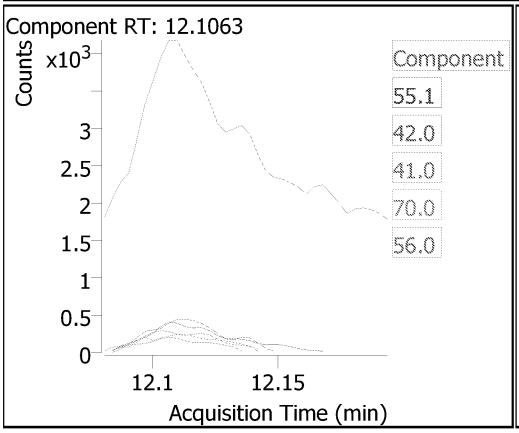


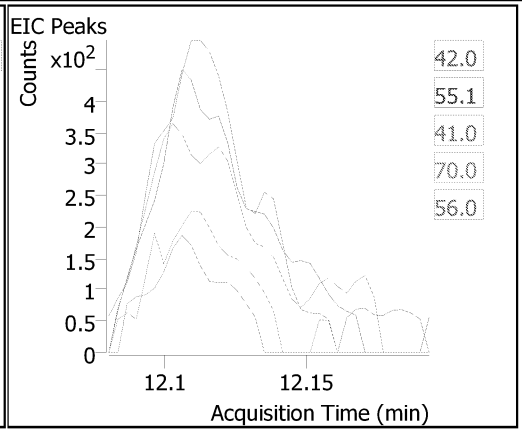
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.1063	1-Pentanol	6336.1	91.5	71-41-0	C5H12O	0.01607





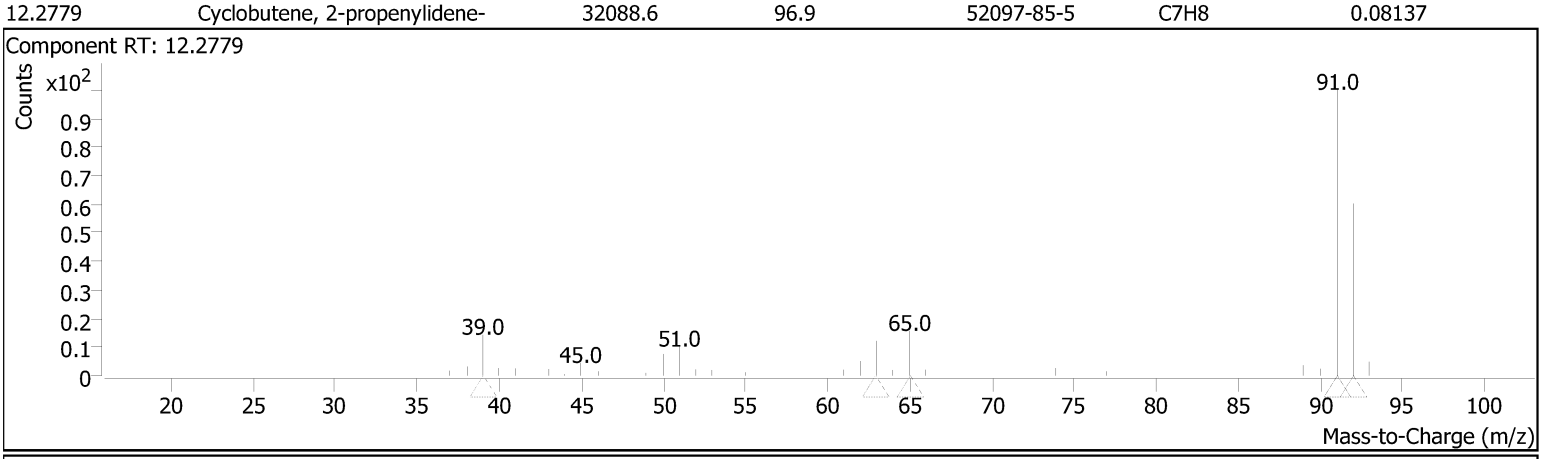


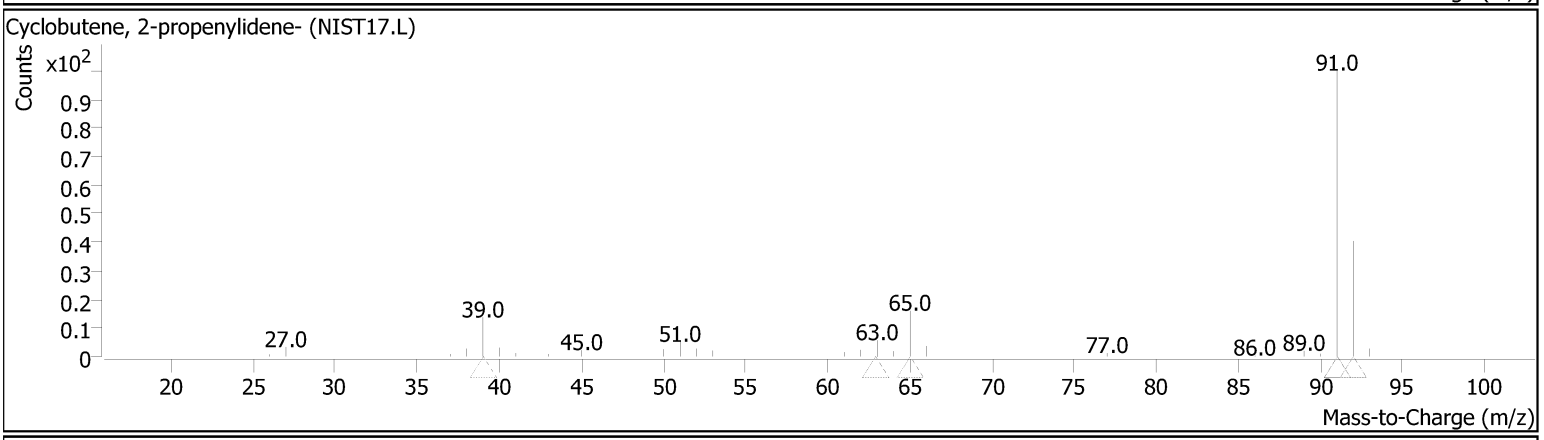


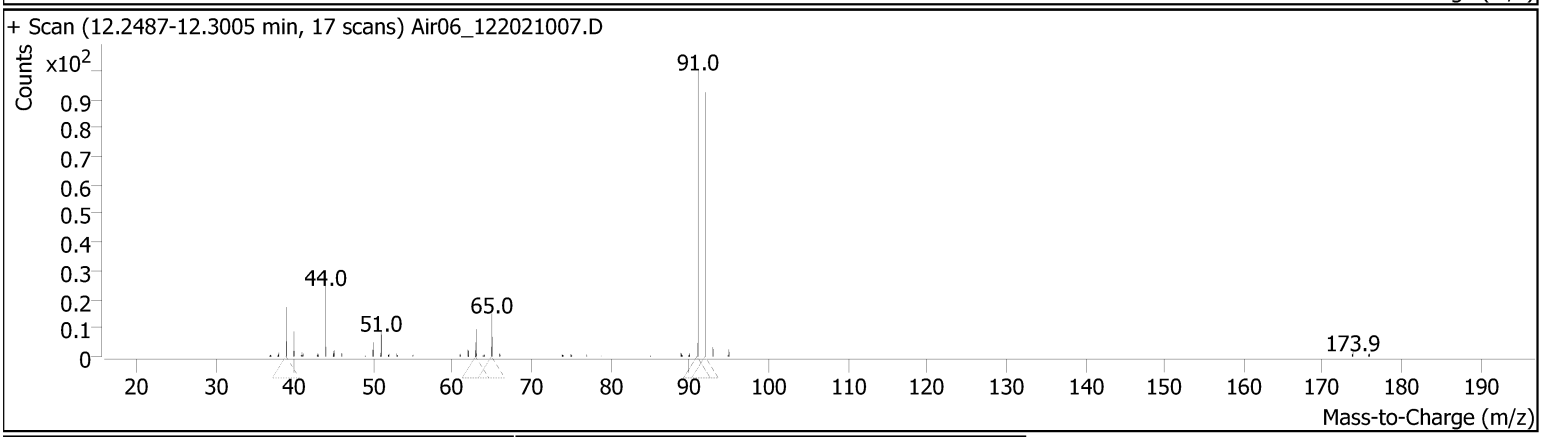


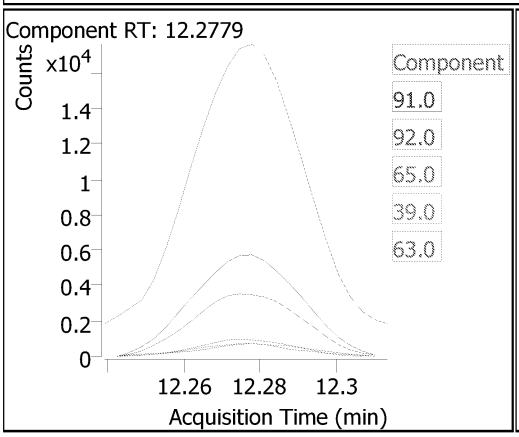


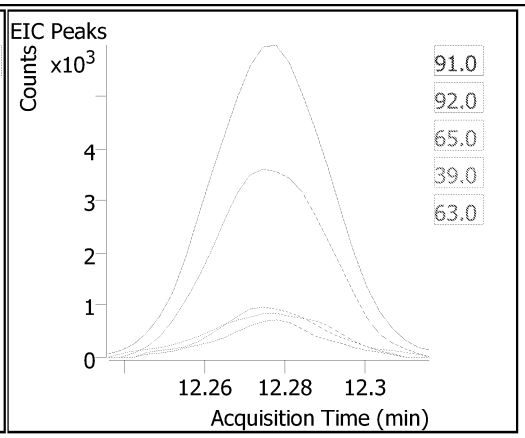
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.2779	Cyclobutene, 2-propenylidene-	32088.6	96.9	52097-85-5	C7H8	0.08137

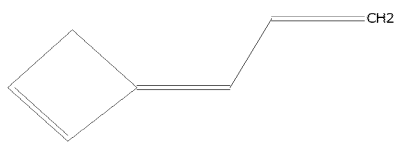




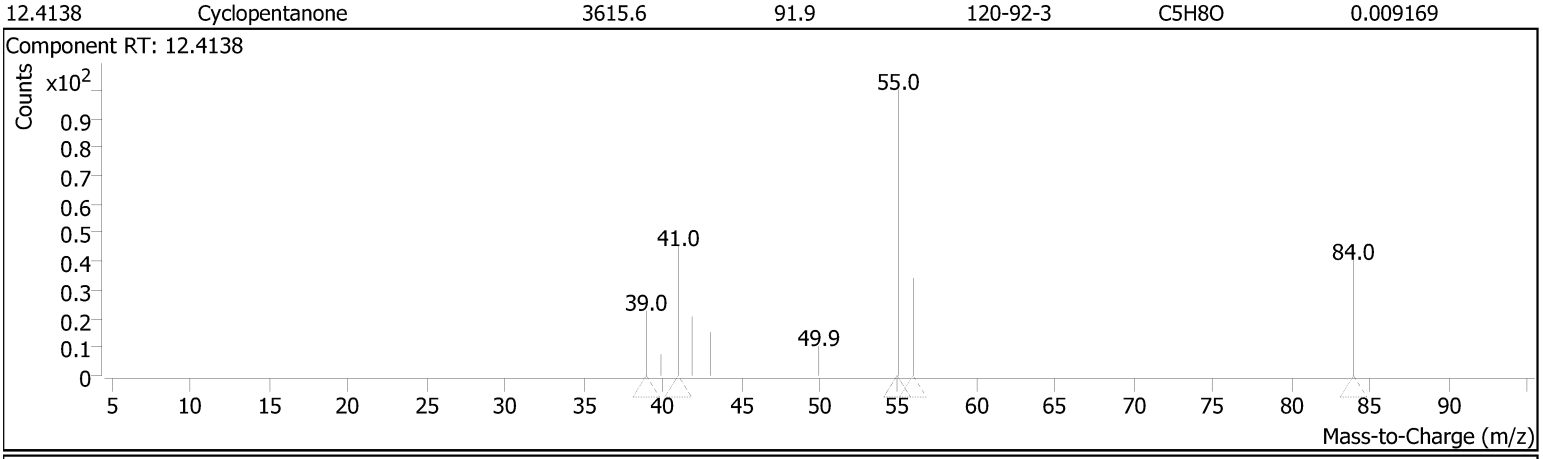


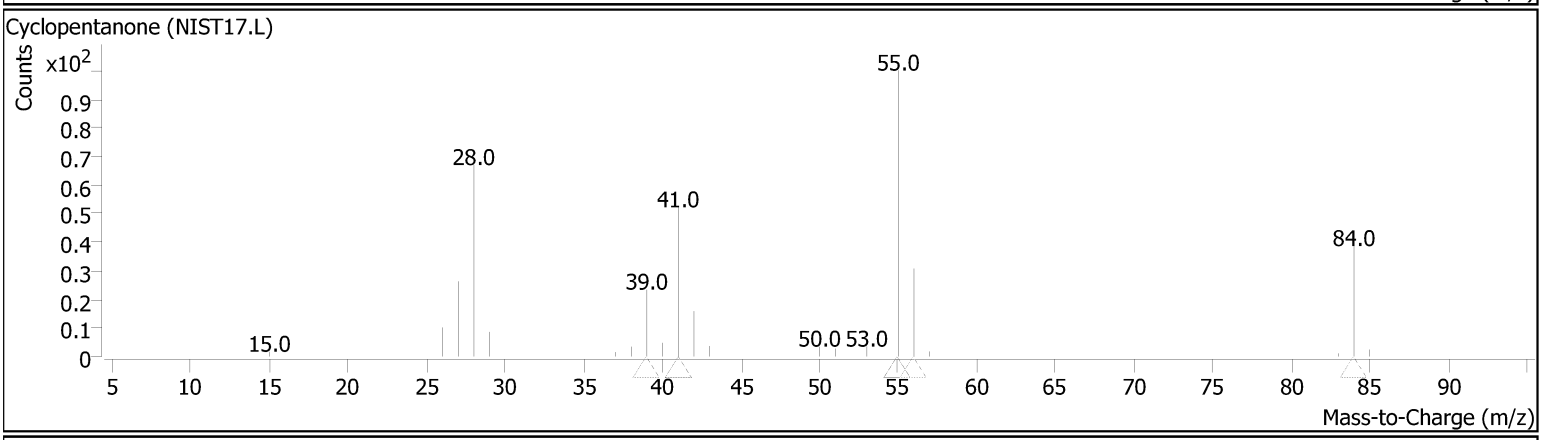


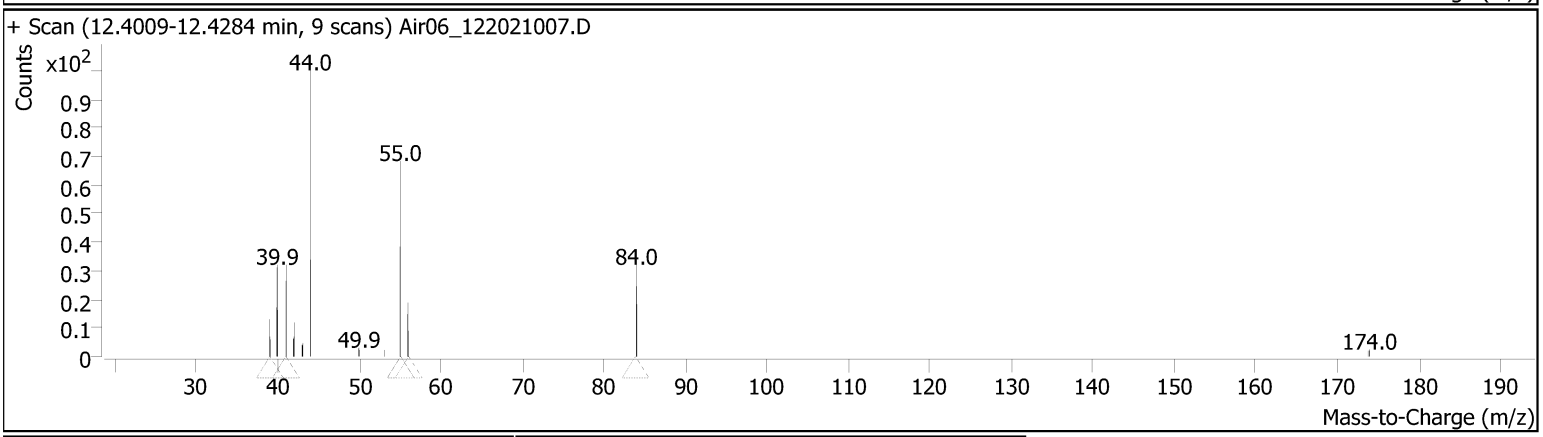


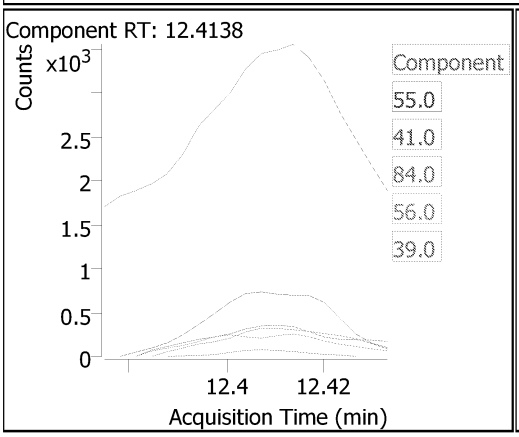


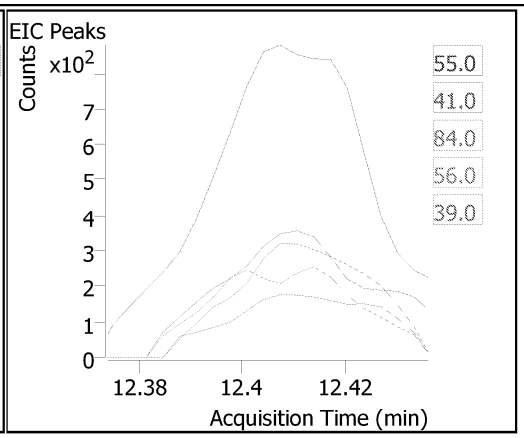
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.4138	Cyclopentanone	3615.6	91.9	120-92-3	C5H8O	0.009169

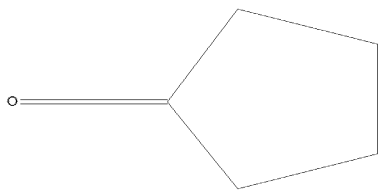




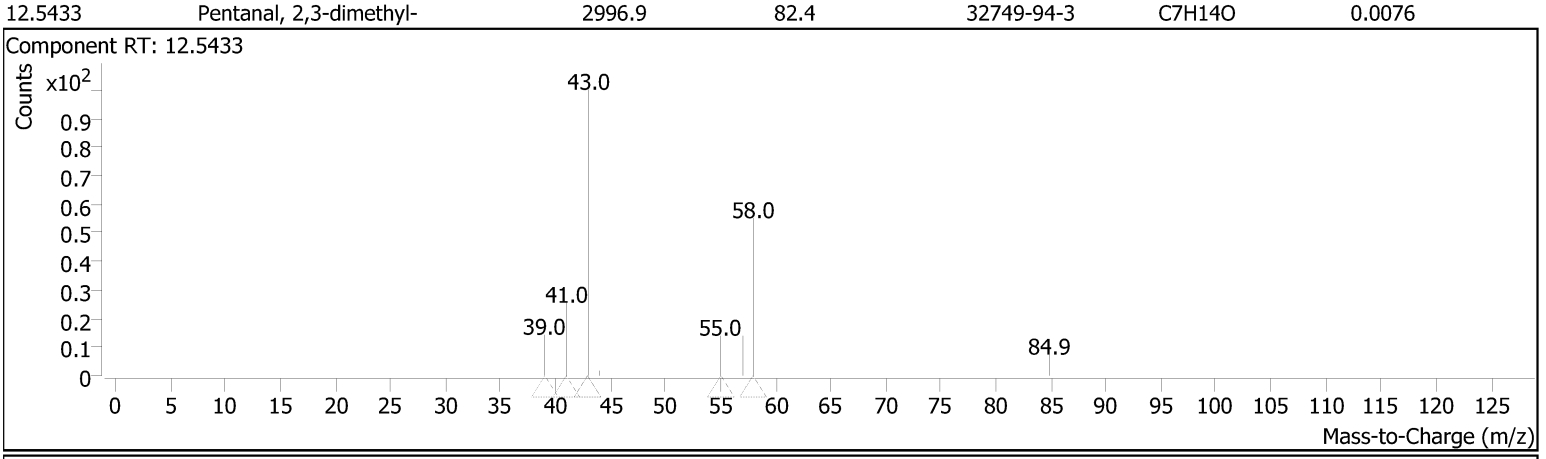


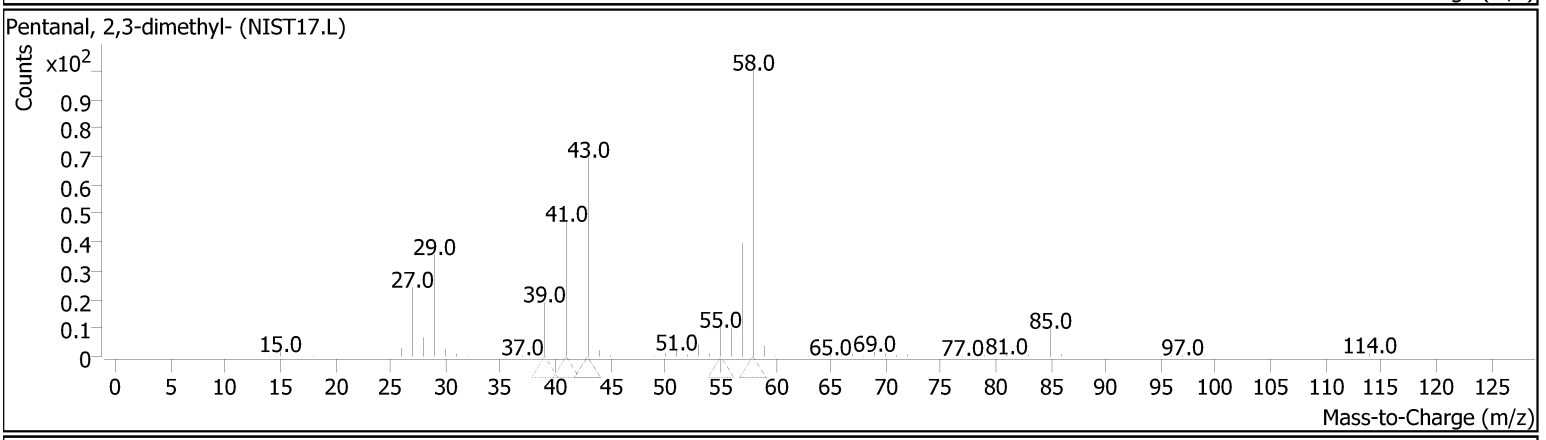


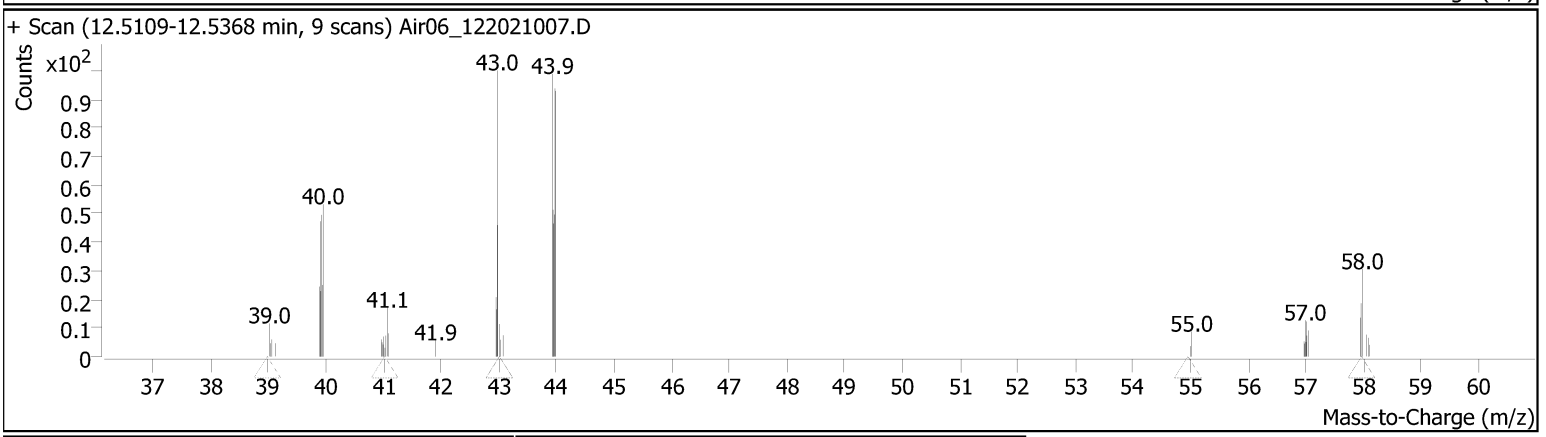


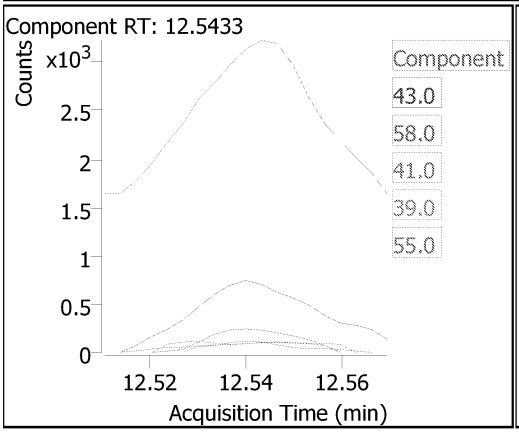


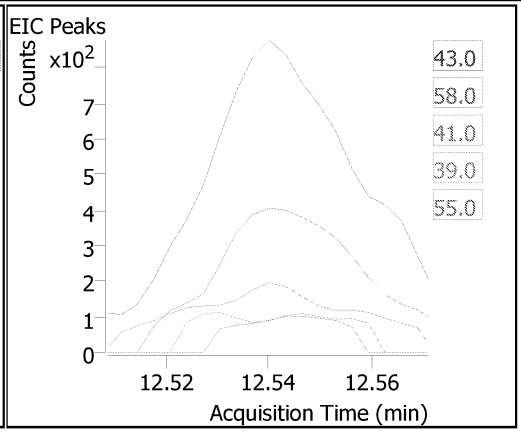
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.5433	Pentanal, 2,3-dimethyl-	2996.9	82.4	32749-94-3	C7H14O	0.0076

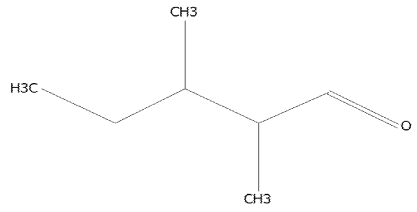




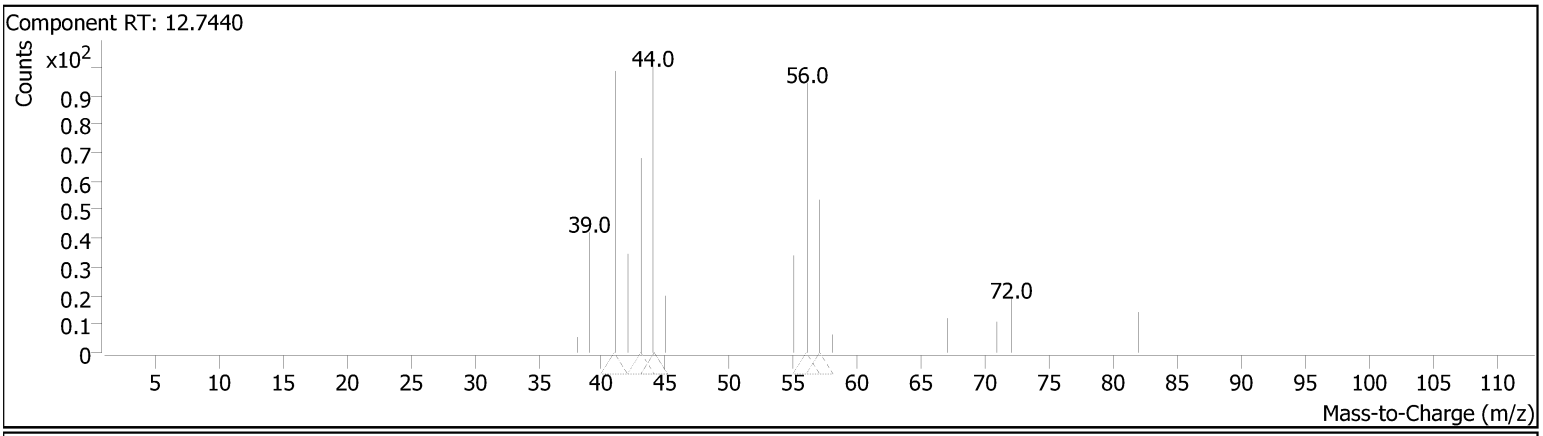


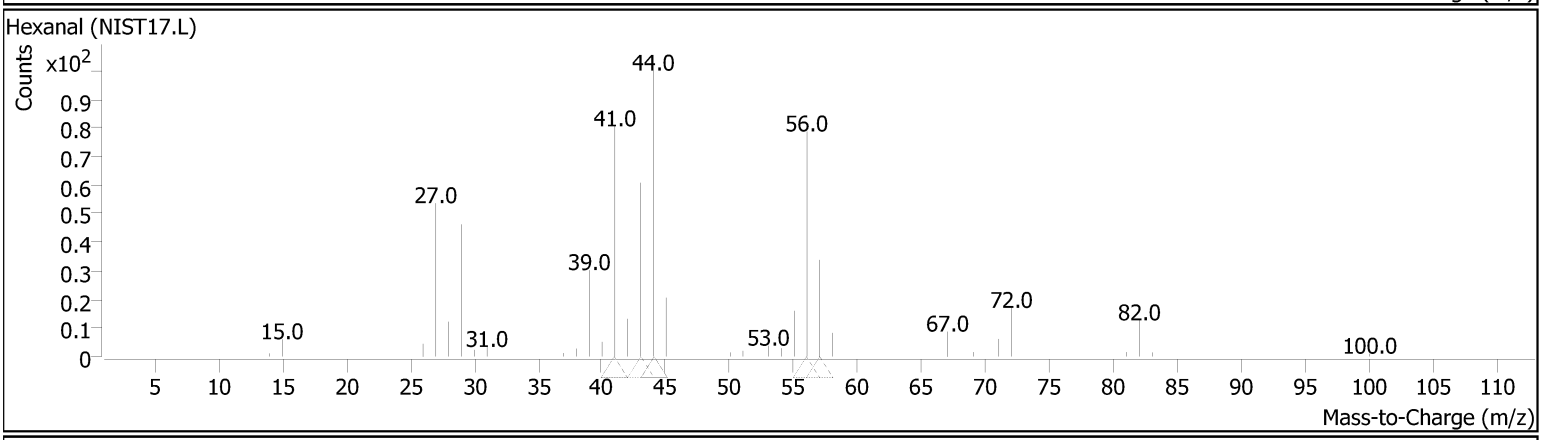


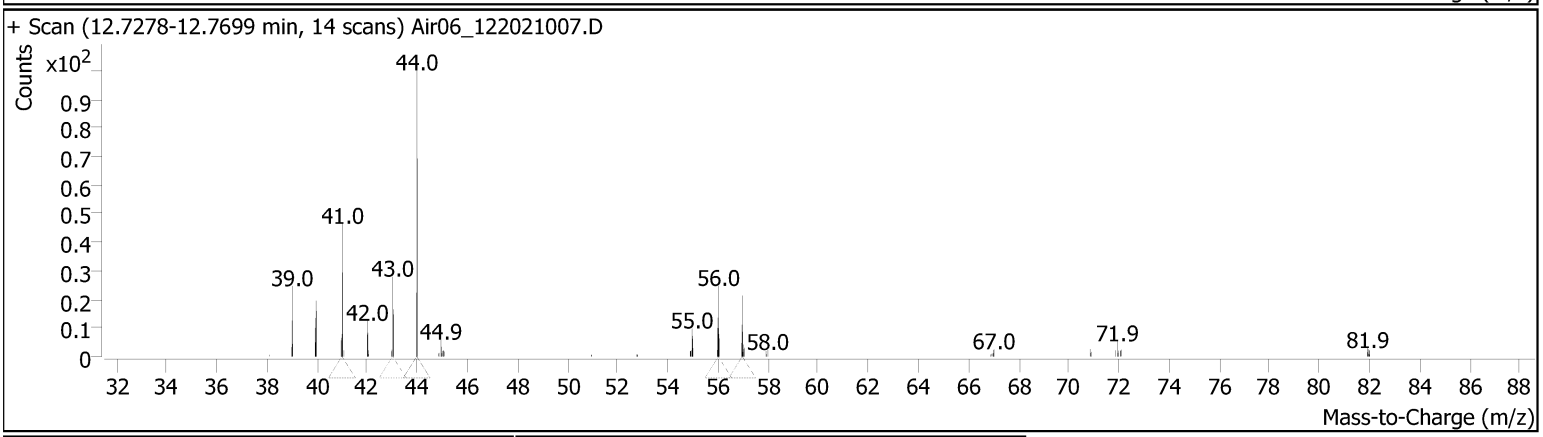


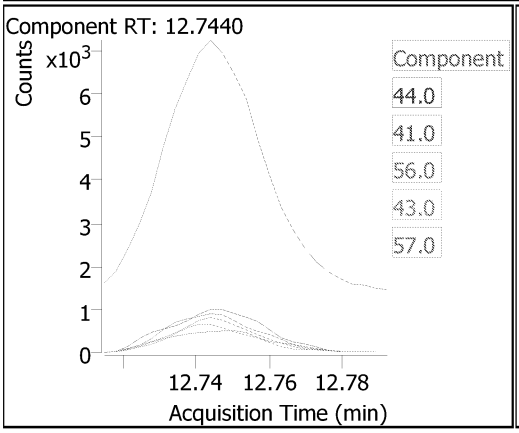


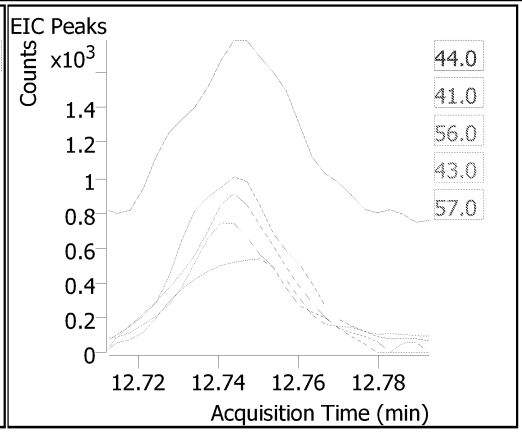
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.7440	Hexanal	10912.5	93.8	66-25-1	C6H12O	0.02767





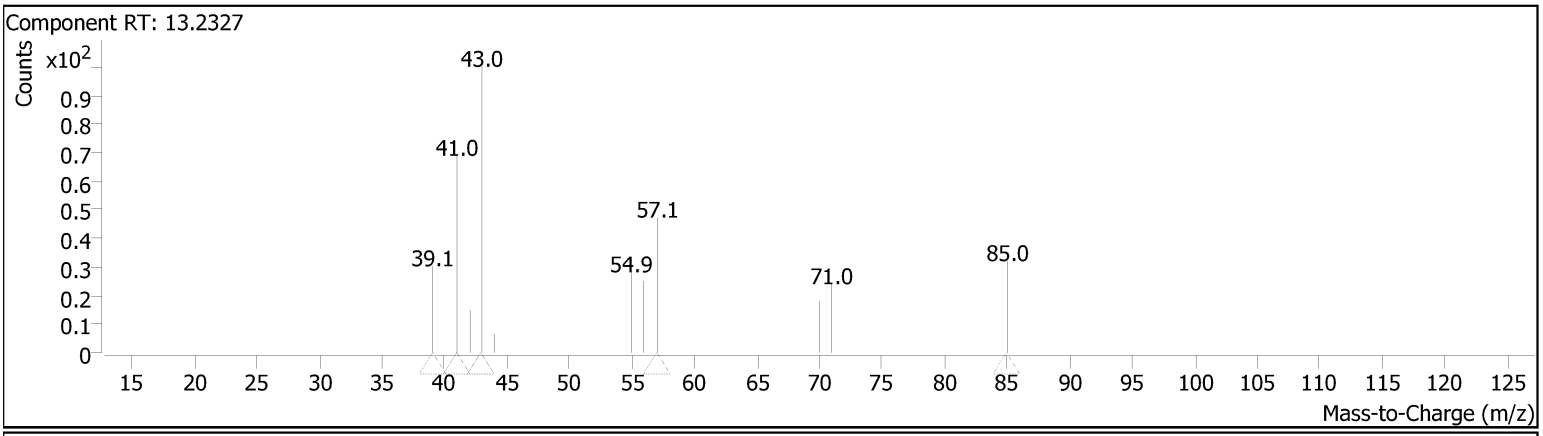


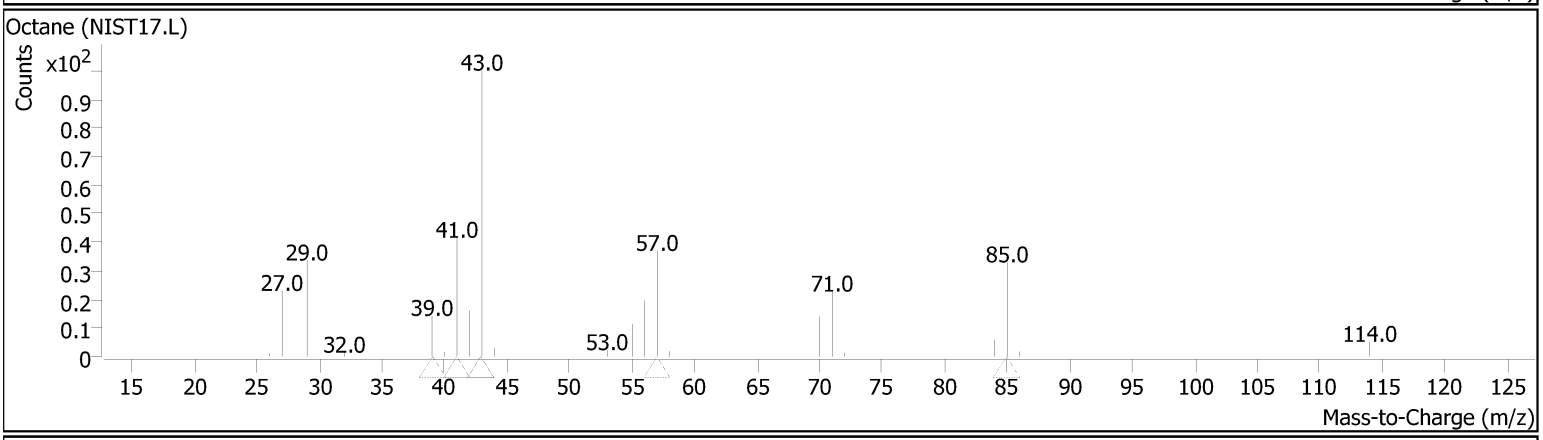


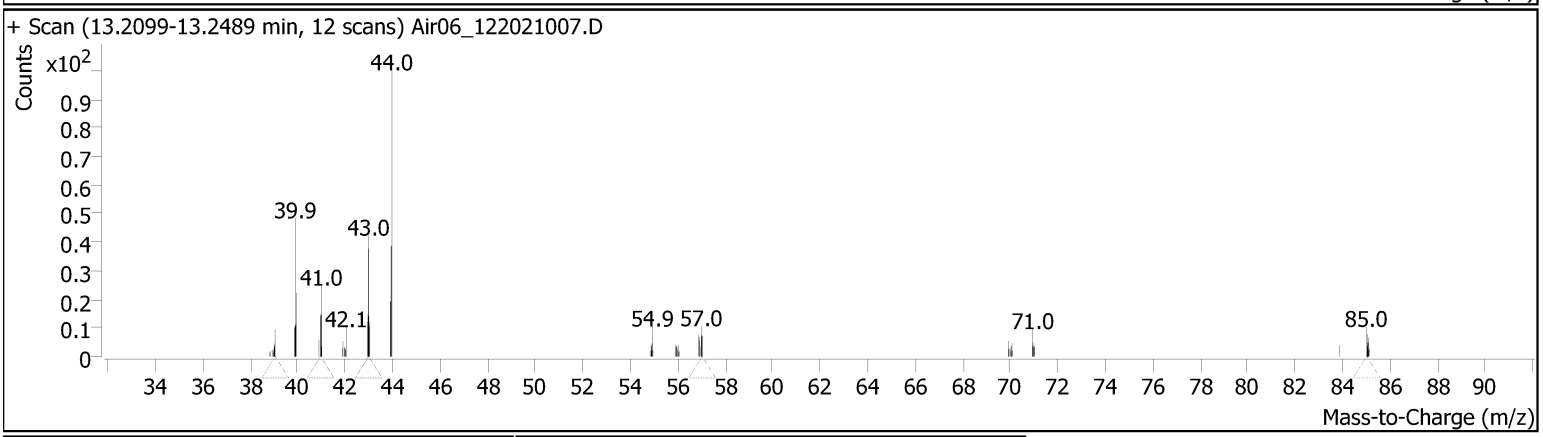


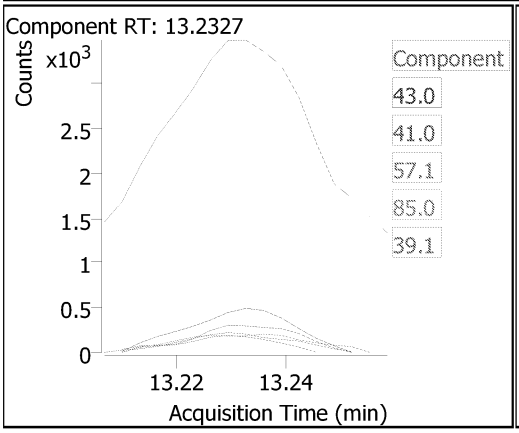


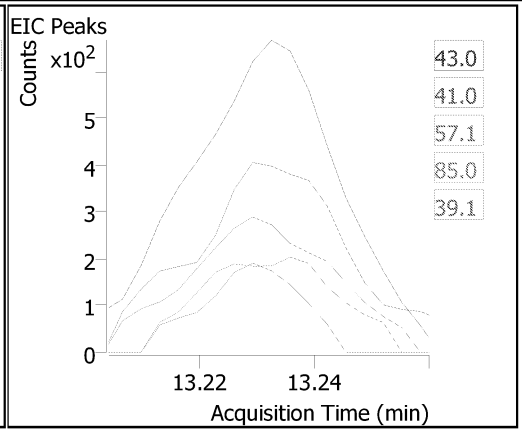
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.2327	Octane	3724.1	89.1	111-65-9	C8H18	0.009444





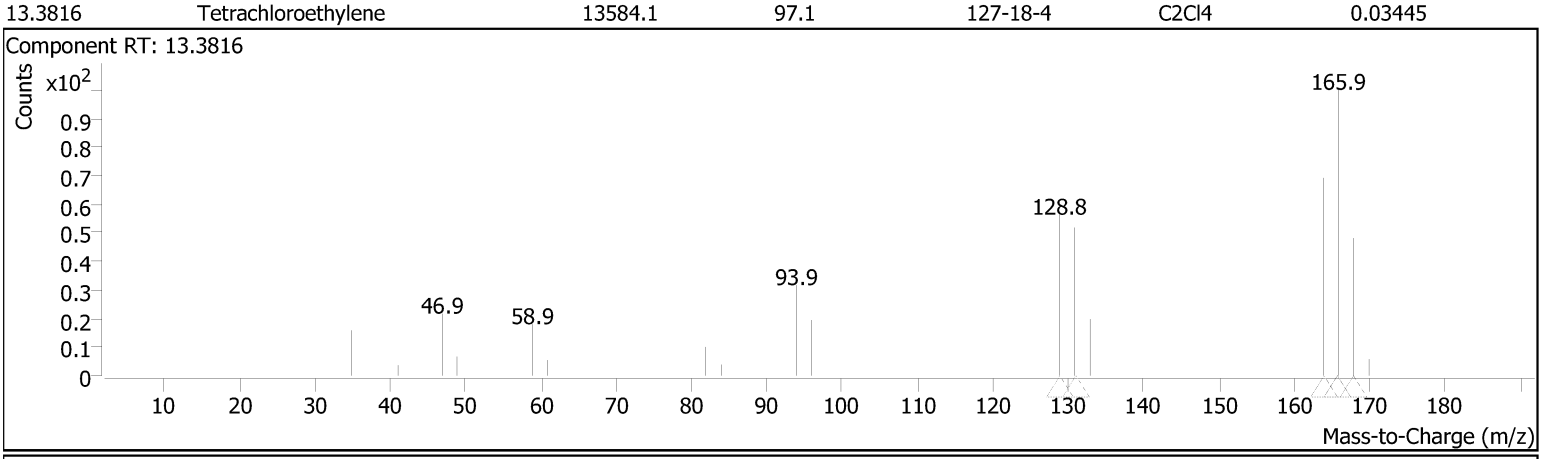


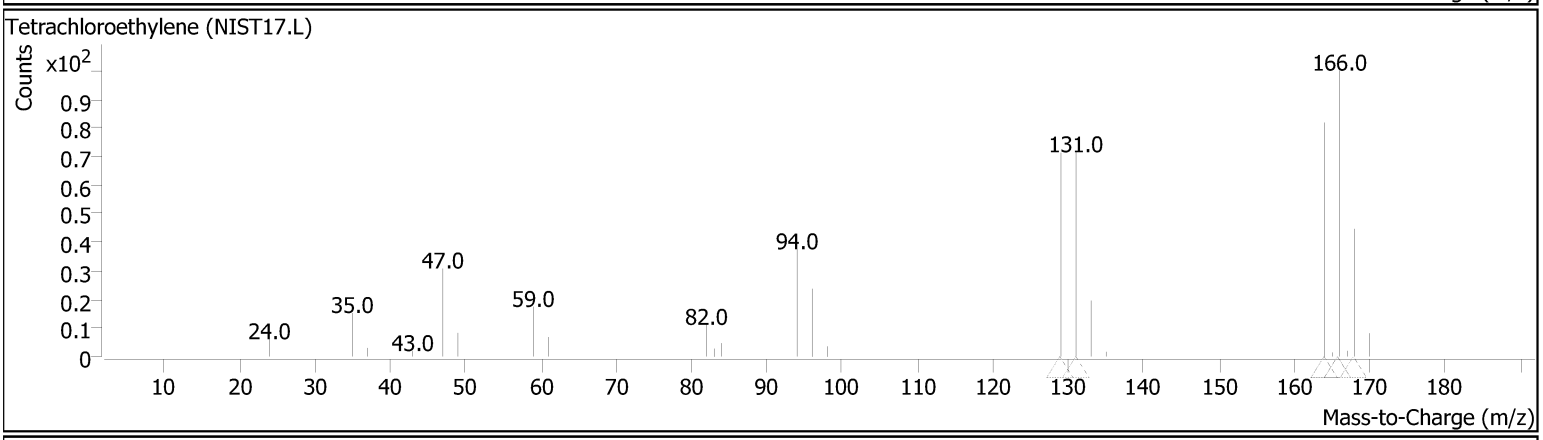


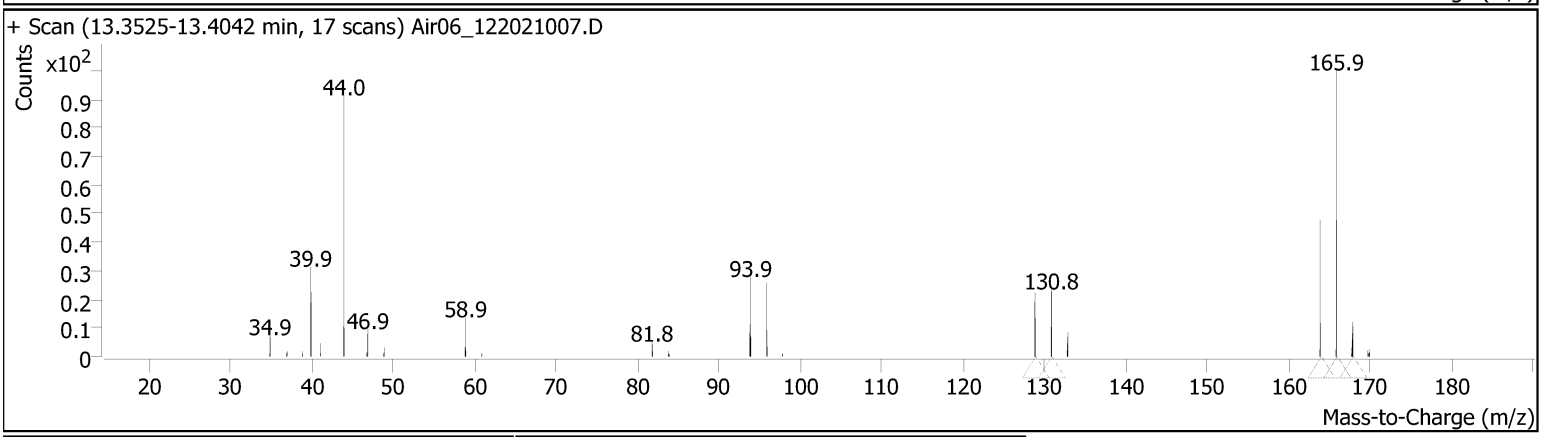


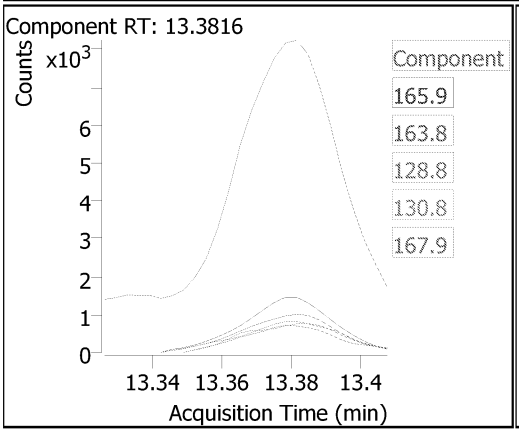


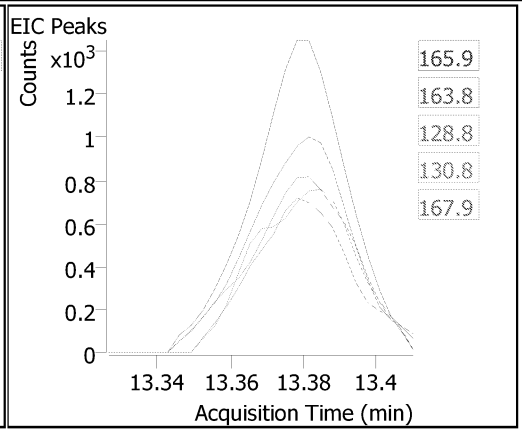
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.3816	Tetrachloroethylene	13584.1	97.1	127-18-4	C2Cl4	0.03445

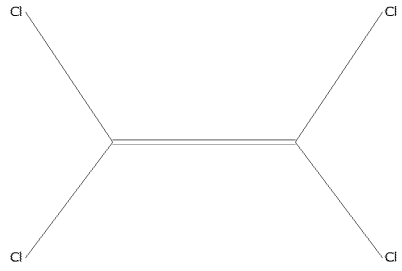




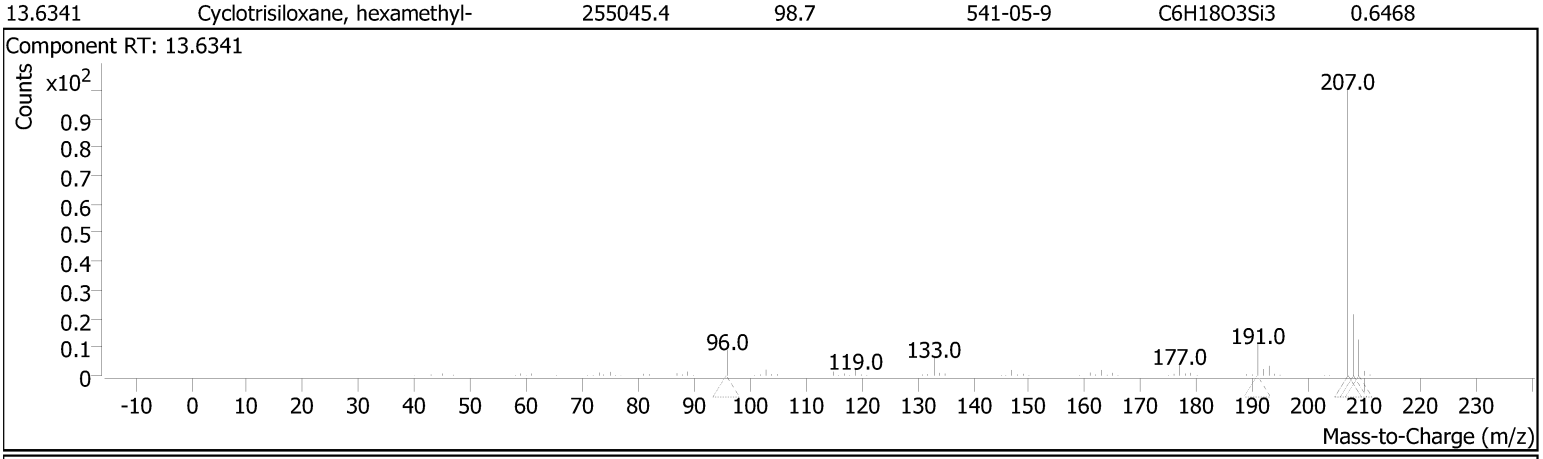


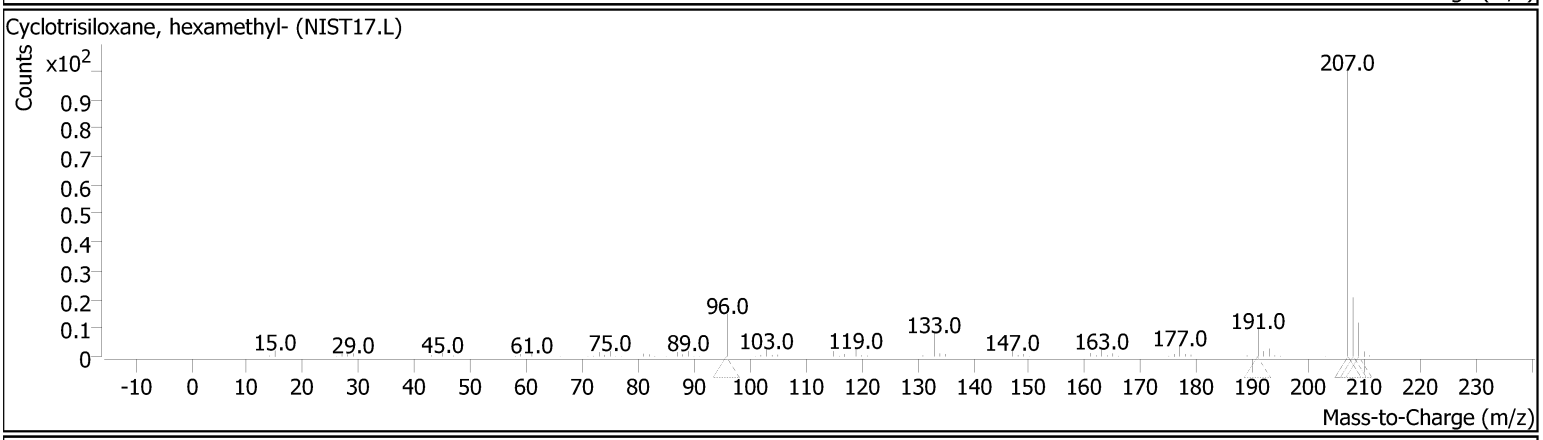


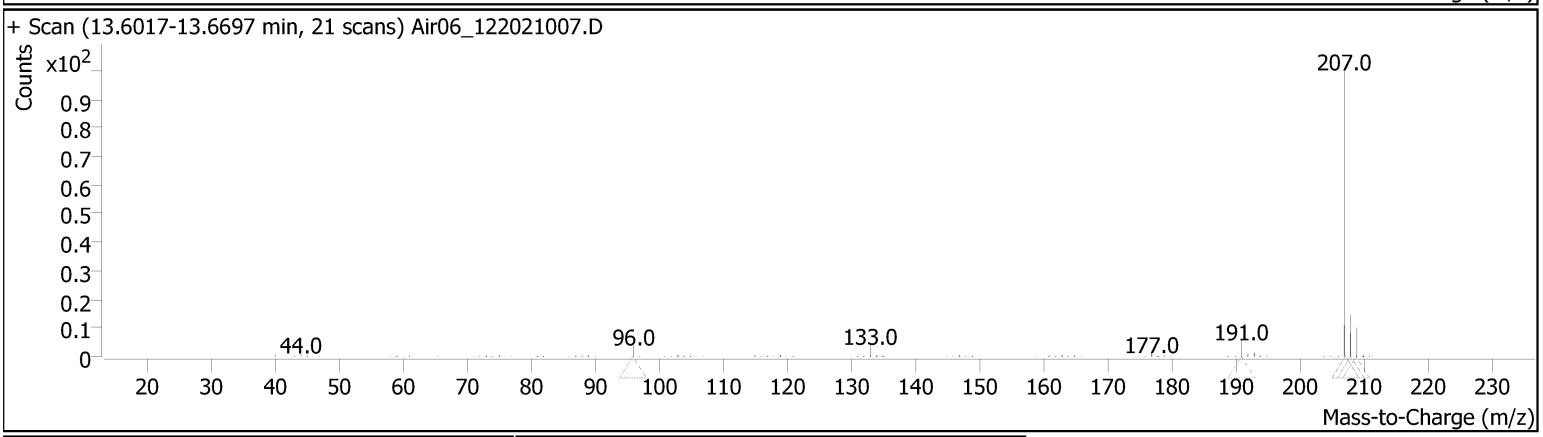


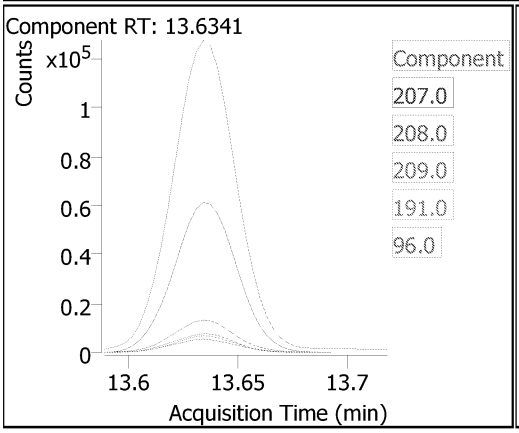


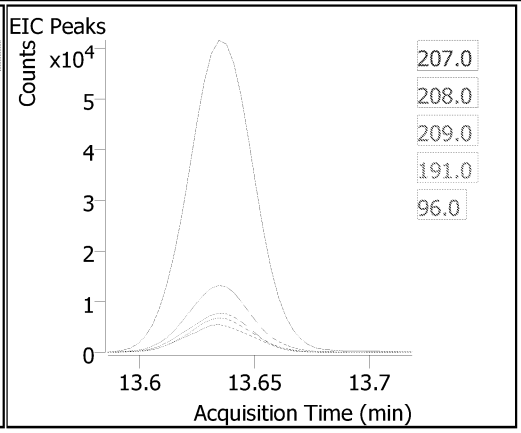
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.6341	Cyclotrisiloxane, hexamethyl-	255045.4	98.7	541-05-9	C6H18O3Si3	0.6468

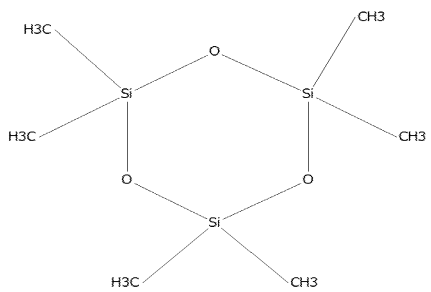




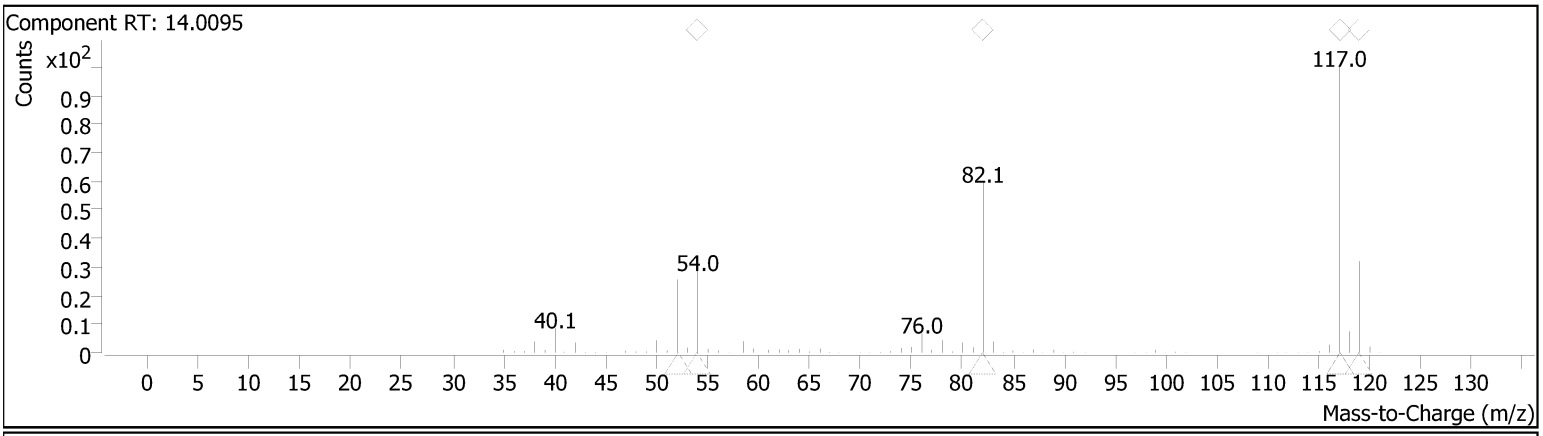


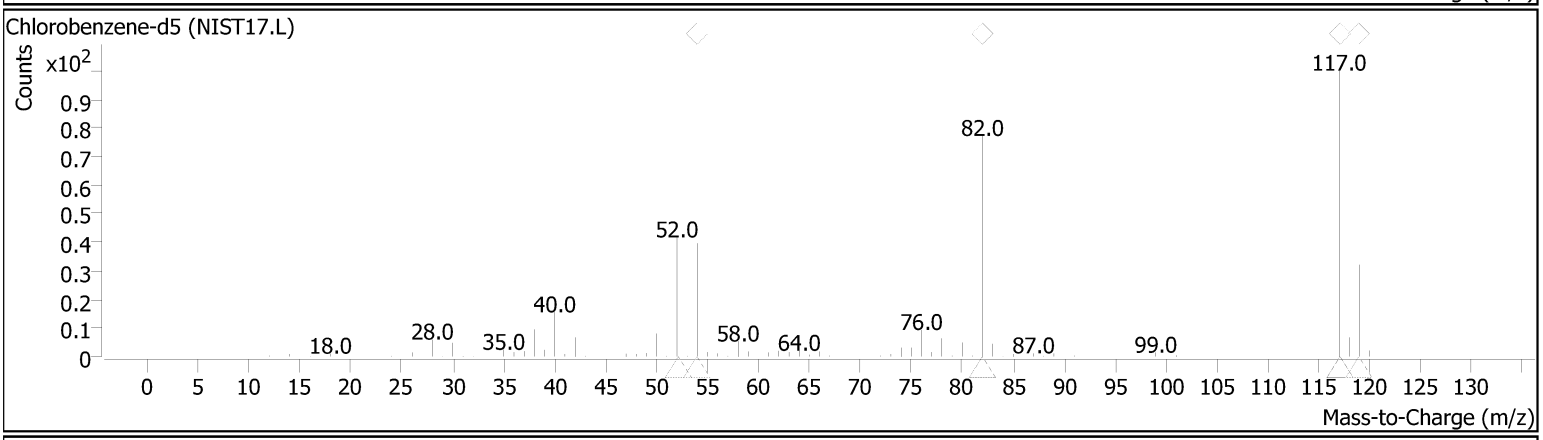


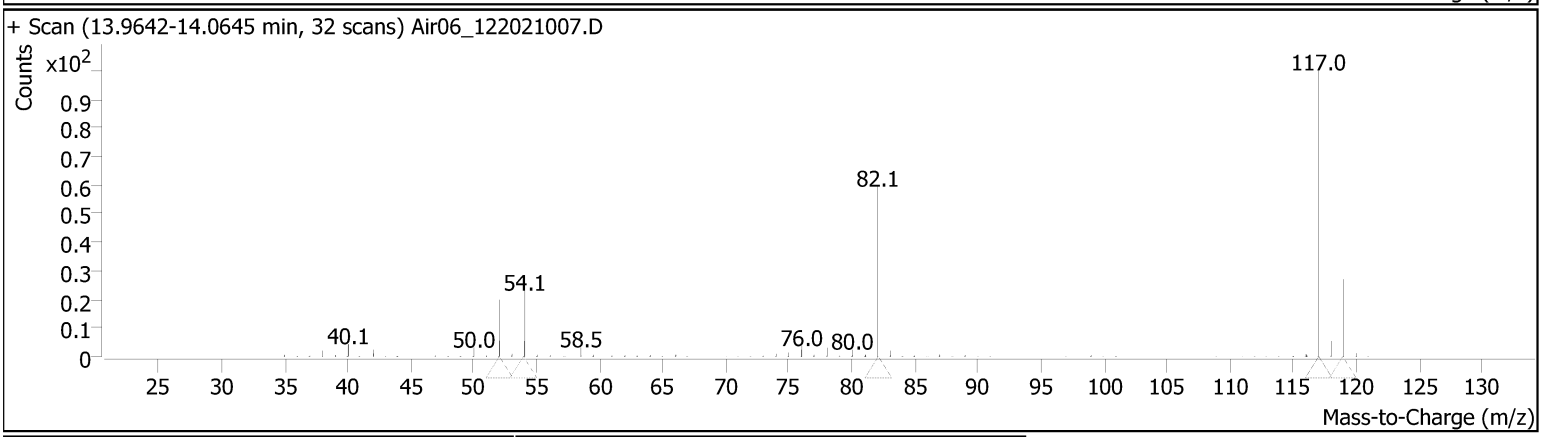


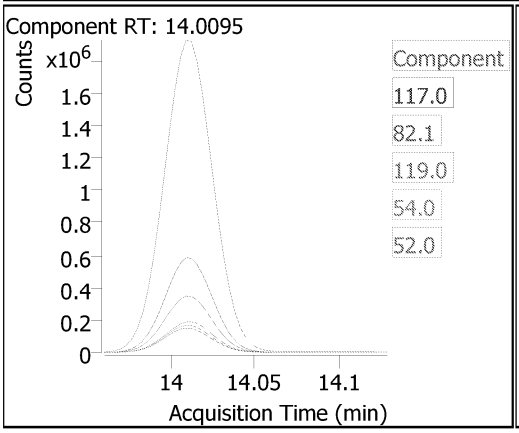


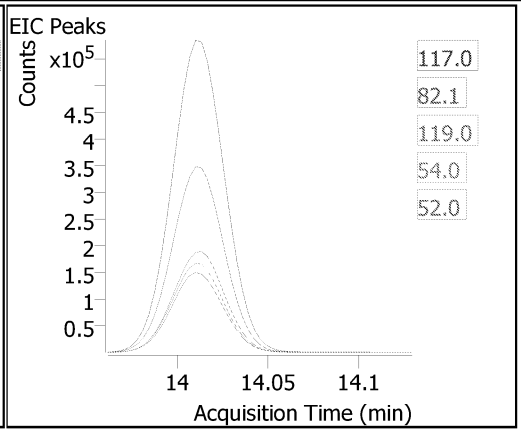
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.0095	Chlorobenzene-d5	3943313.9	96.3	3114-55-4	C6D5Cl	10

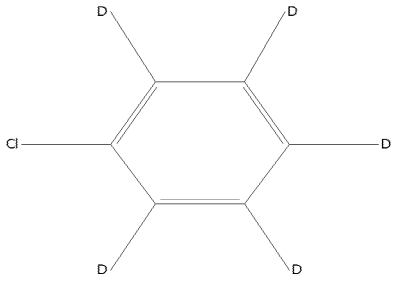




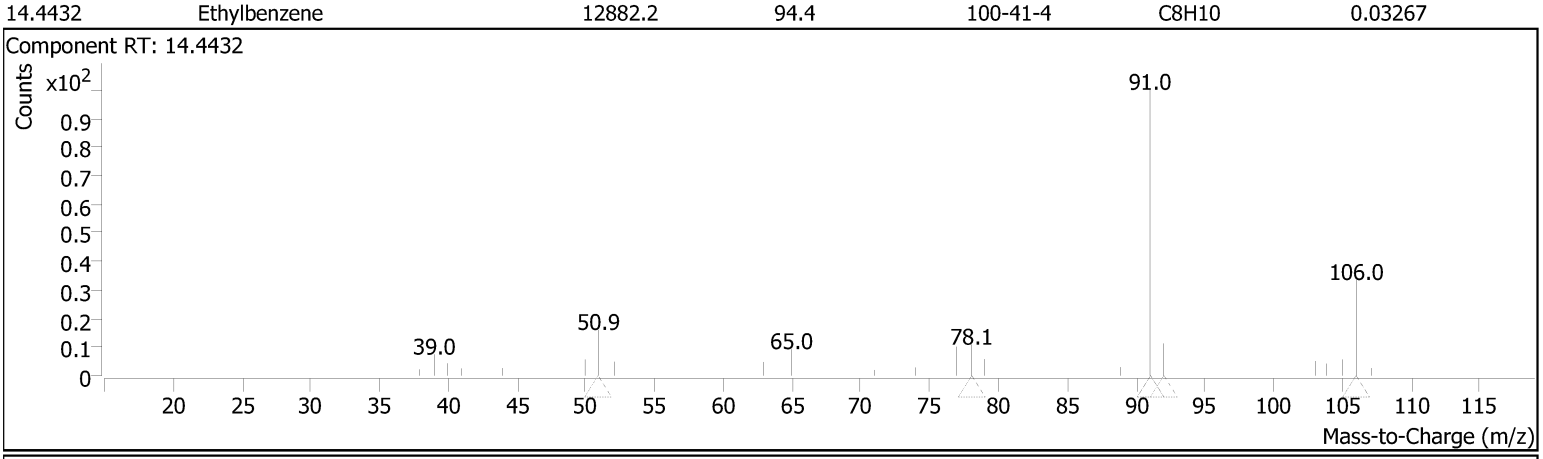


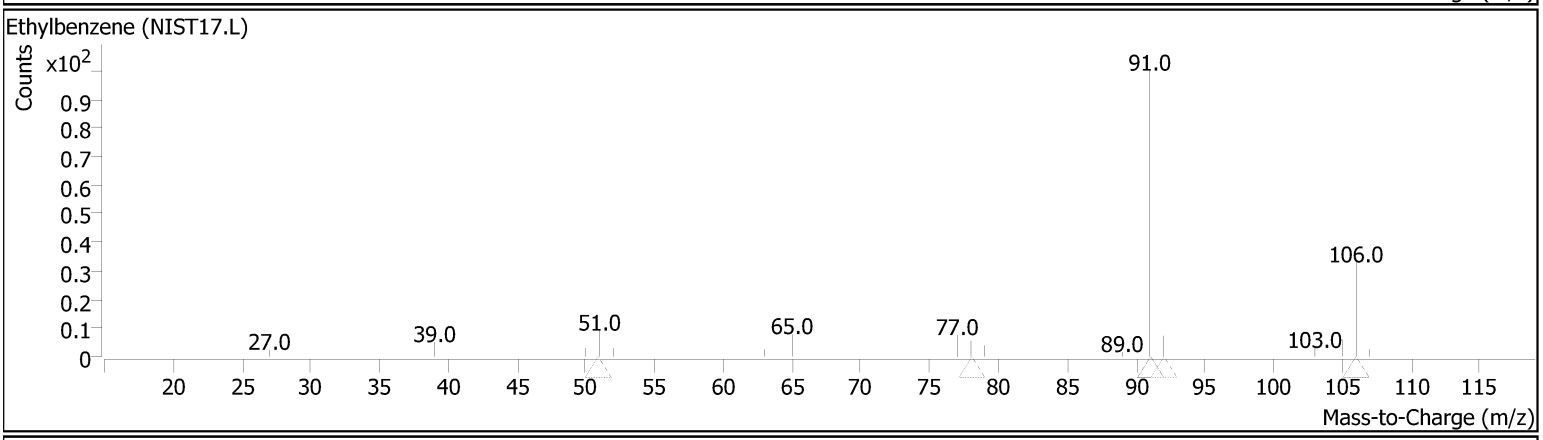


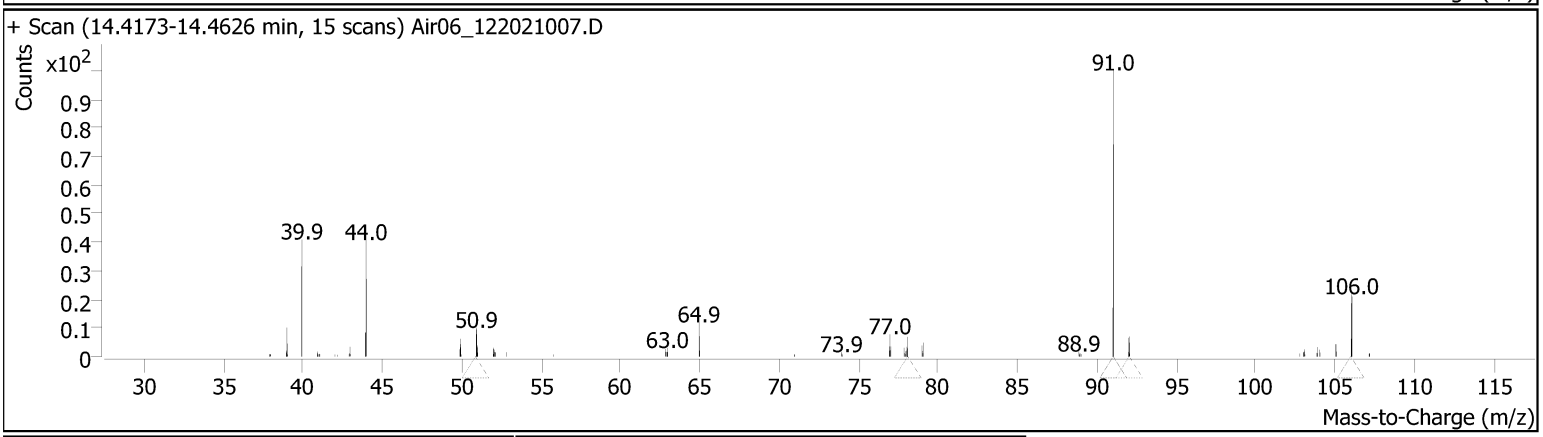


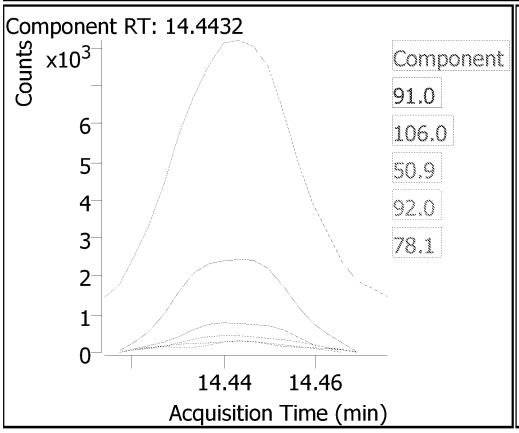


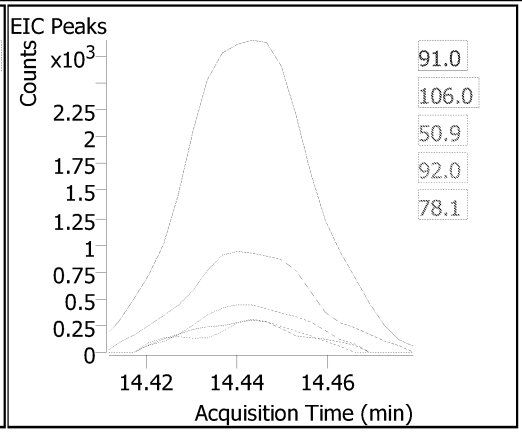
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.4432	Ethylbenzene	12882.2	94.4	100-41-4	C8H10	0.03267

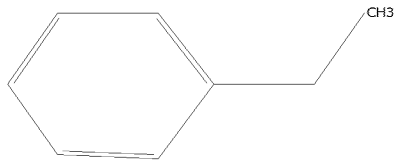




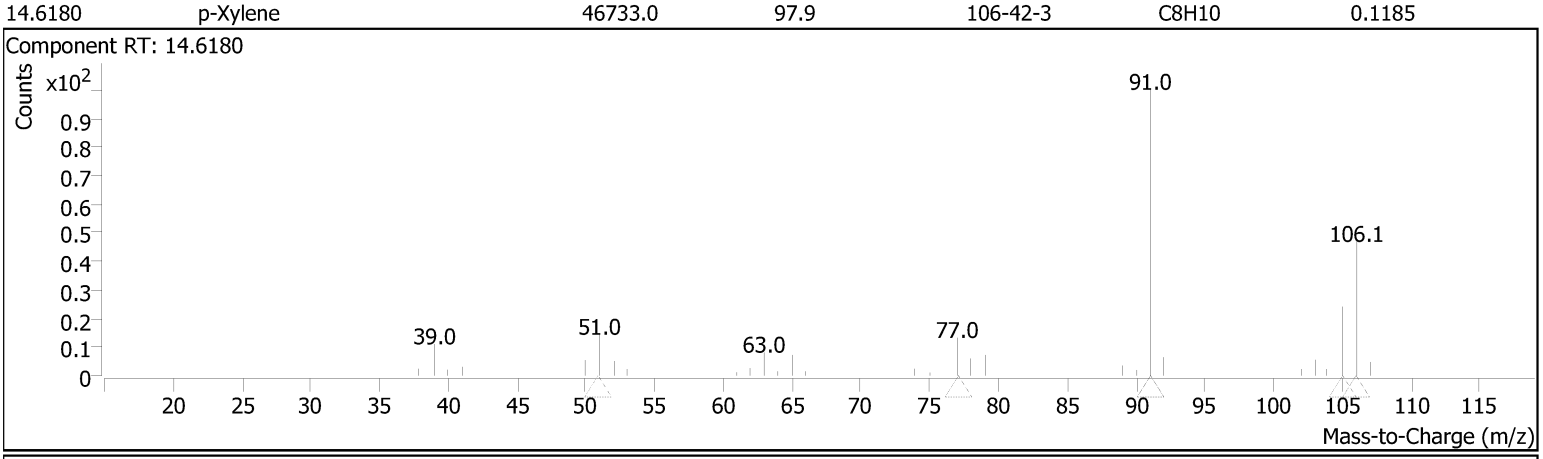


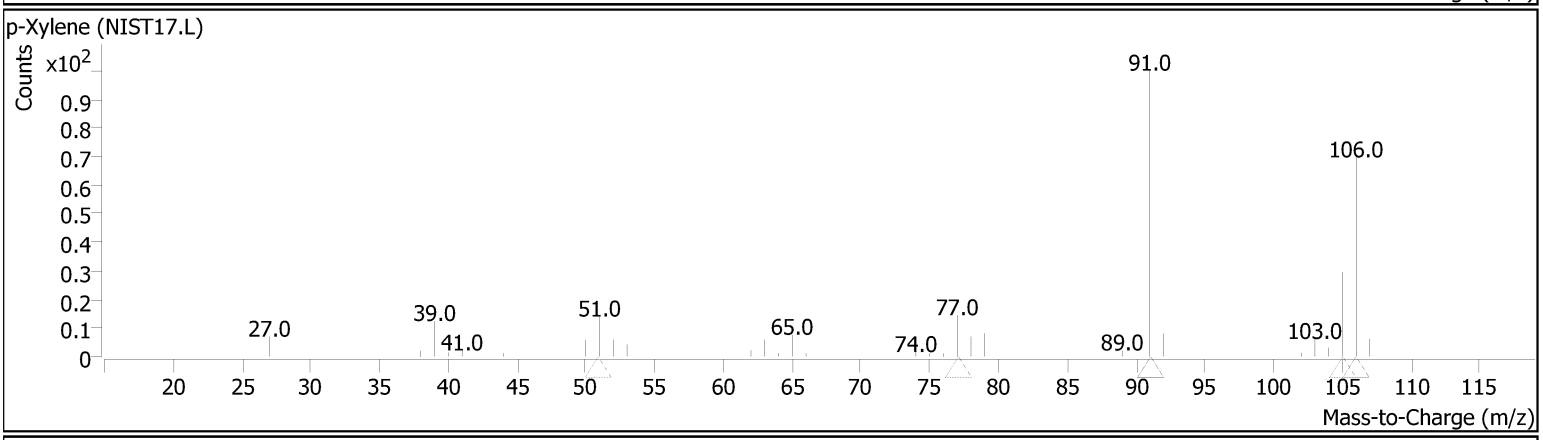


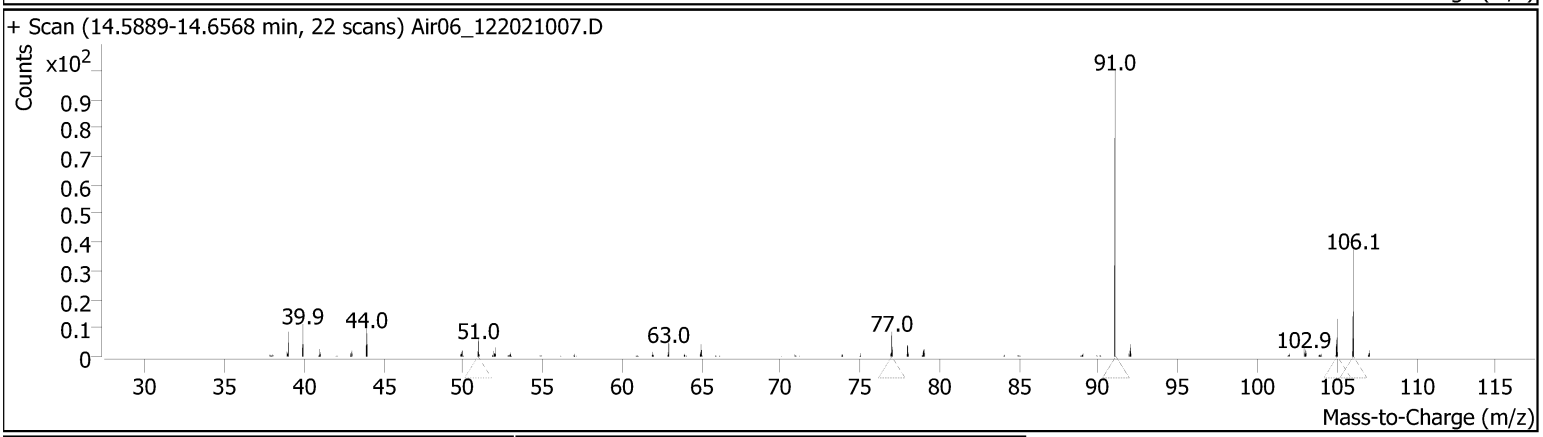


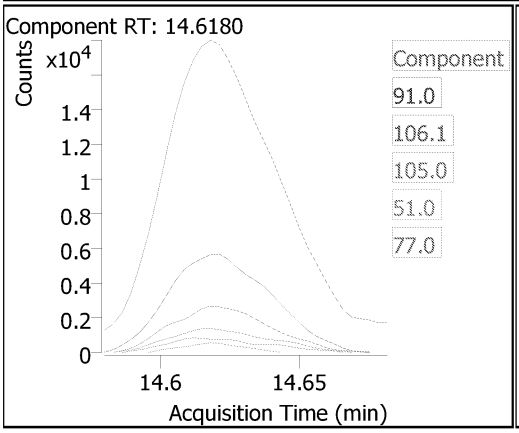


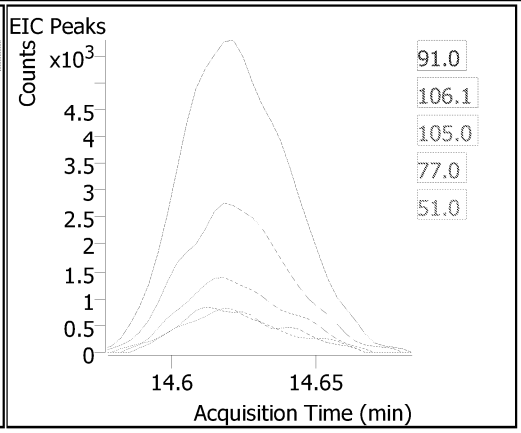
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.6180	p-Xylene	46733.0	97.9	106-42-3	C8H10	0.1185

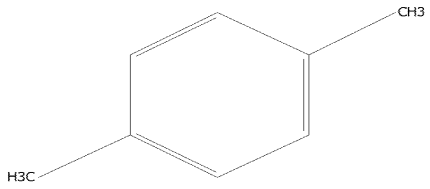




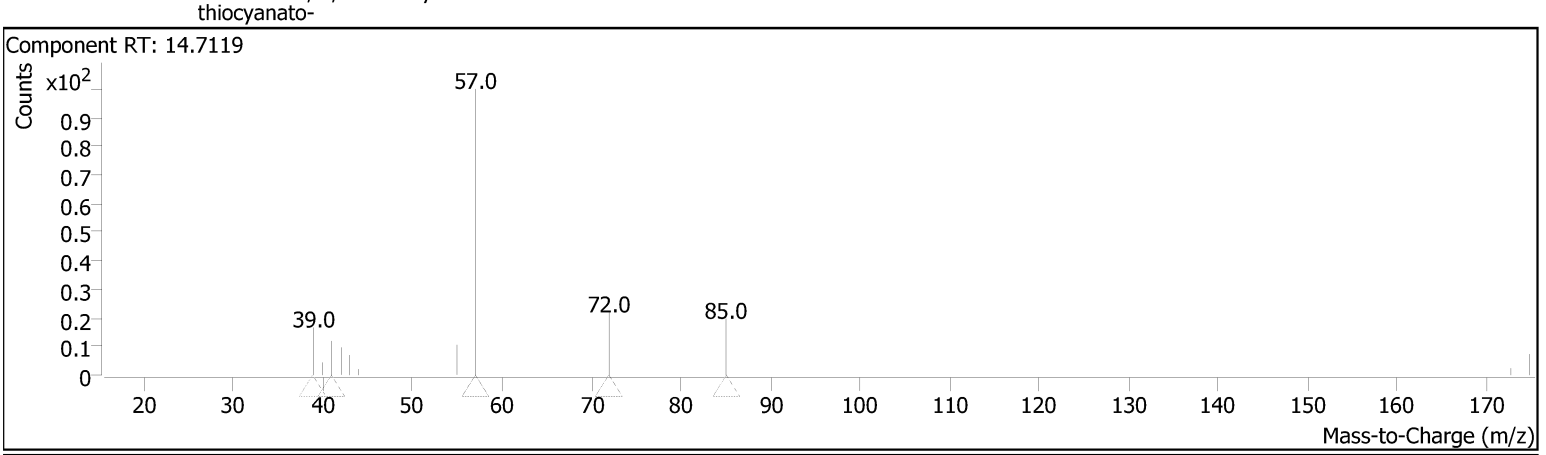


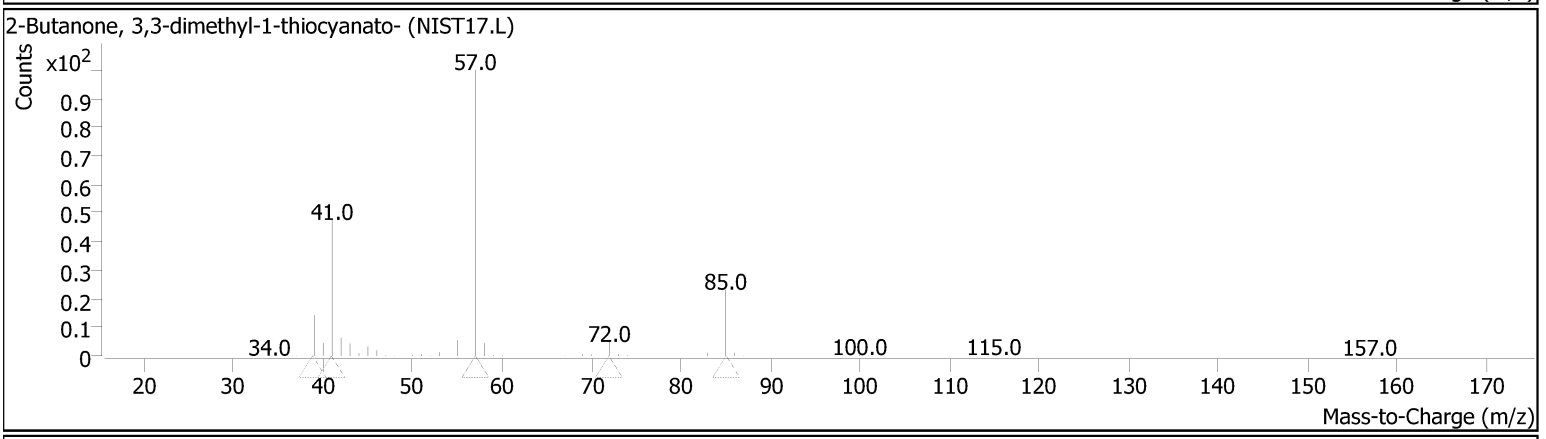


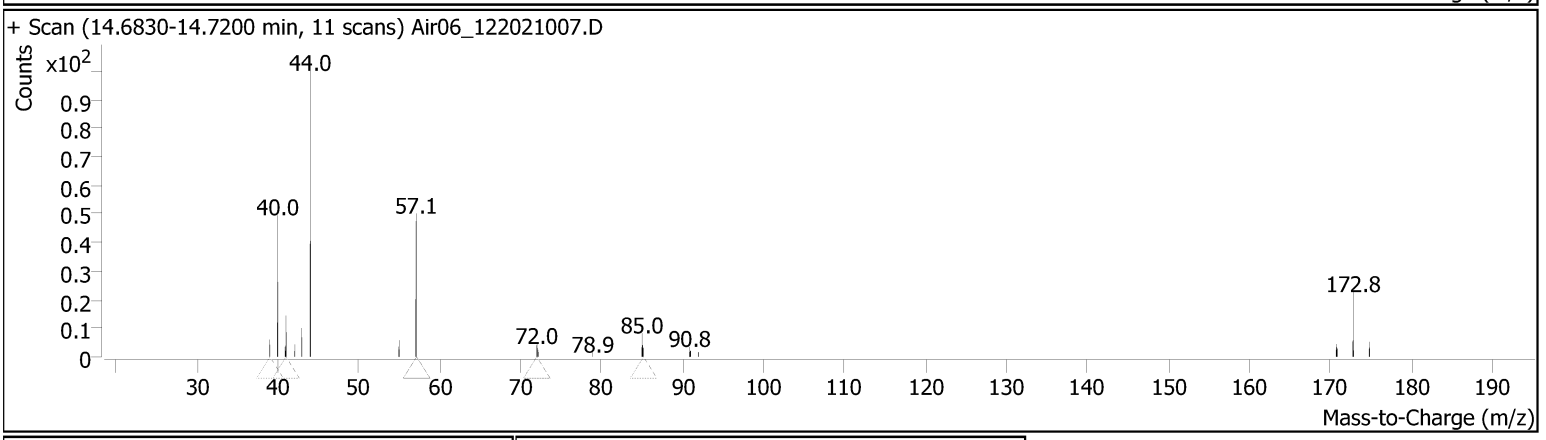


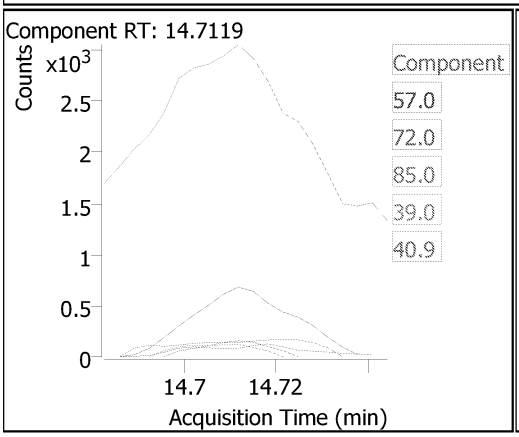


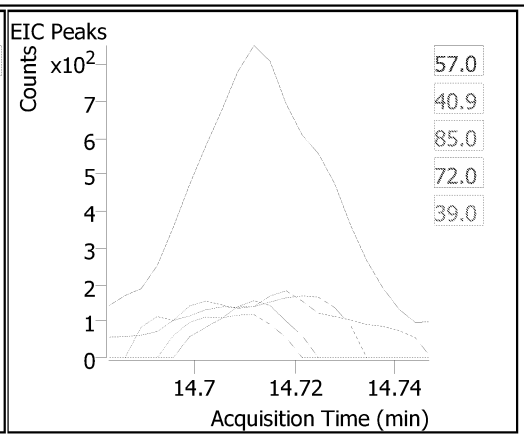
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.7119	2-Butanone, 3,3-dimethyl-1-thiocyanato-	3881.3	74.5	57518-71-5	C7H11NOS	0.009843

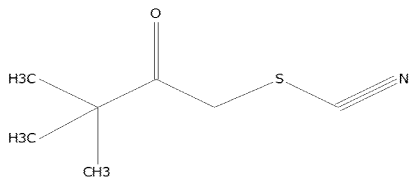




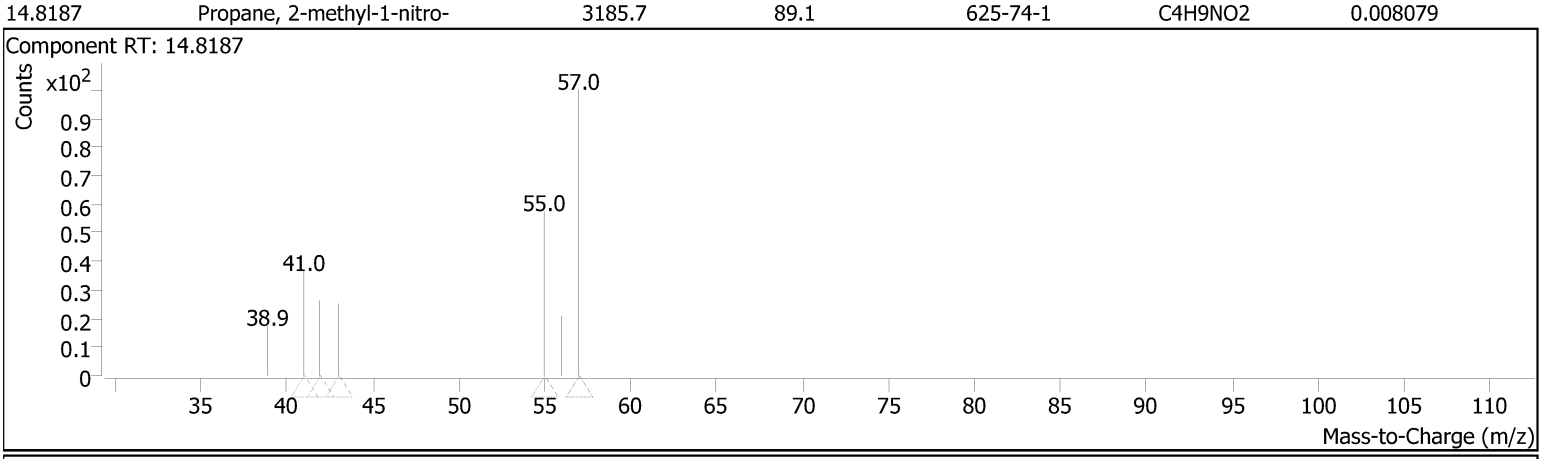


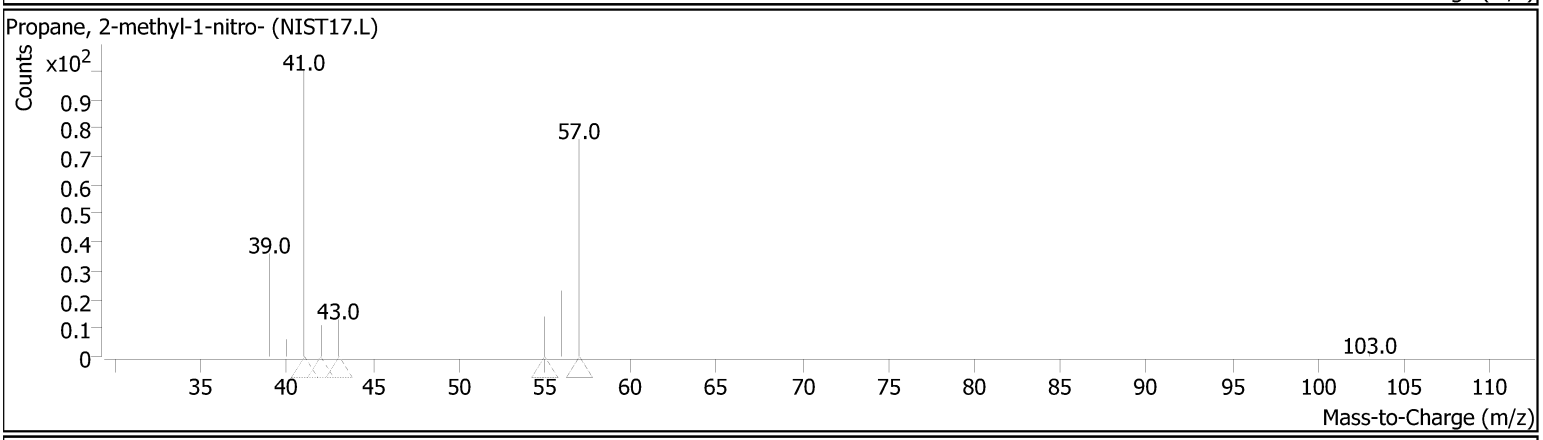


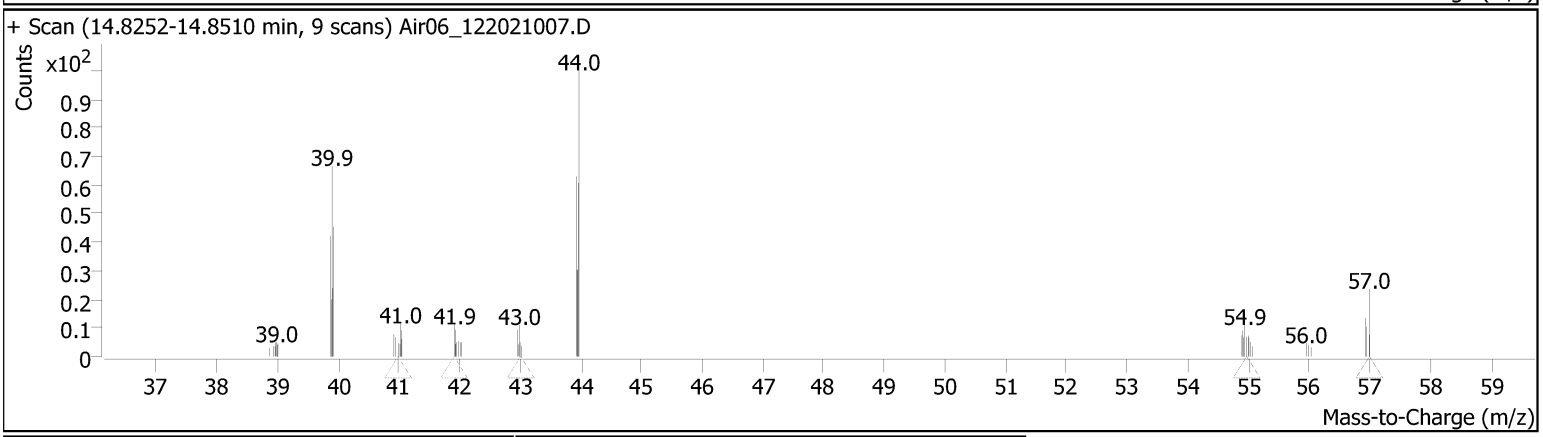


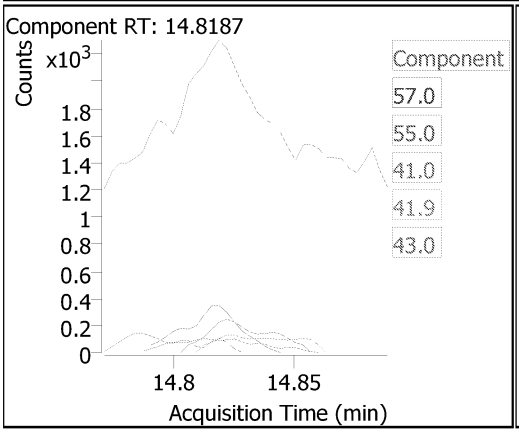


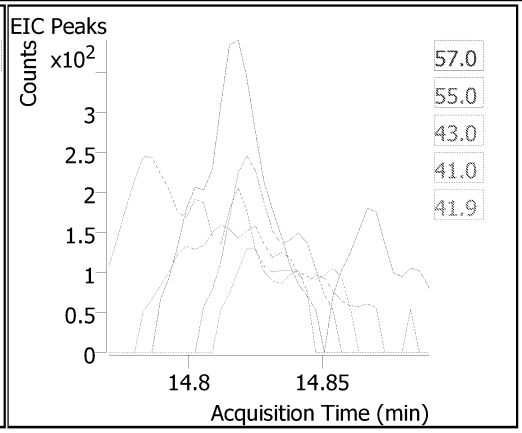
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.8187	Propane, 2-methyl-1-nitro-	3185.7	89.1	625-74-1	C4H9NO2	0.008079

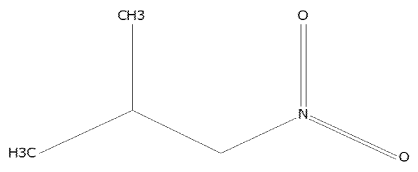




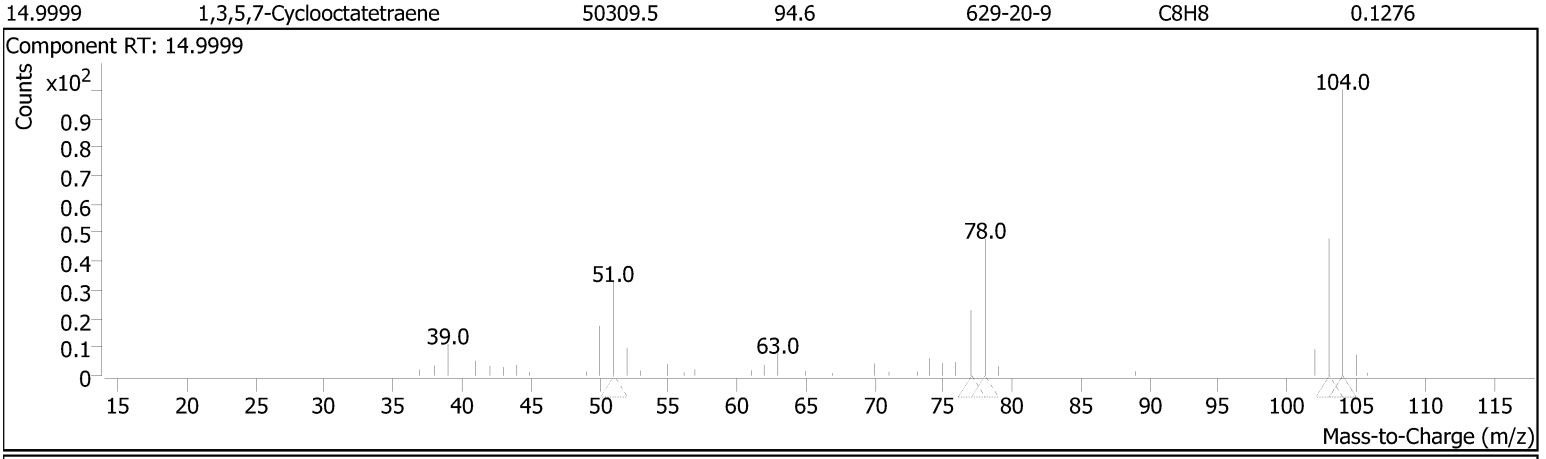


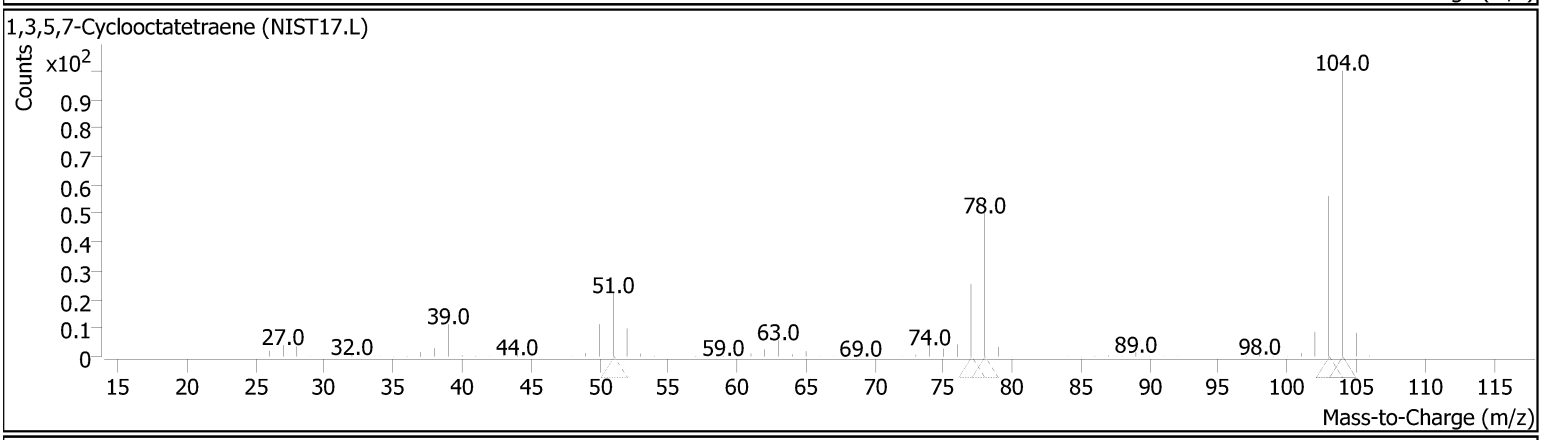


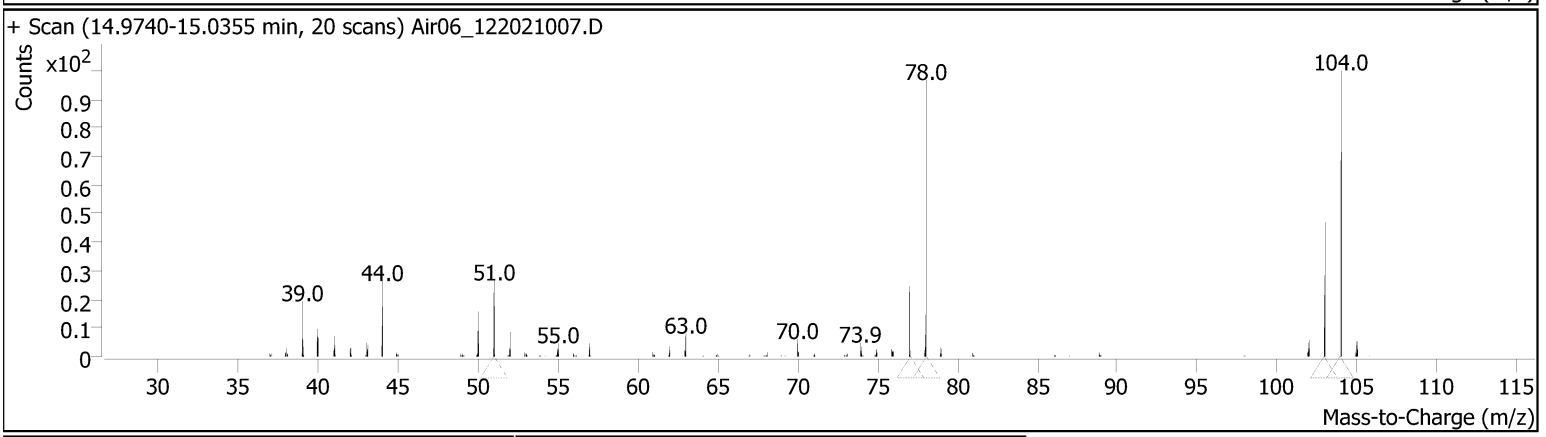


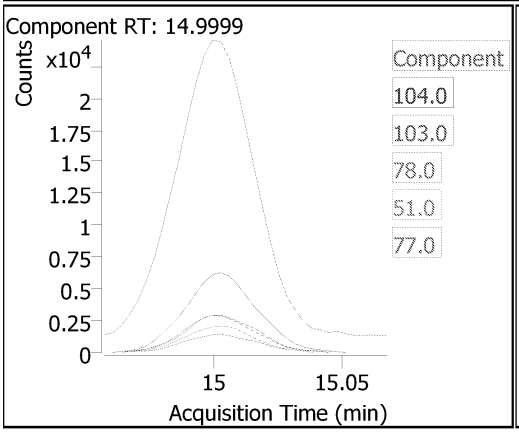


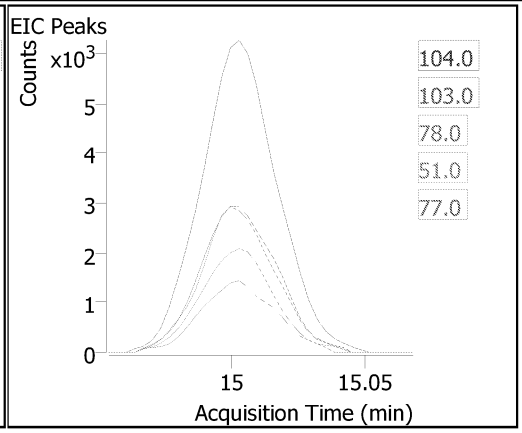
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.9999	1,3,5,7-Cyclooctatetraene	50309.5	94.6	629-20-9	C8H8	0.1276

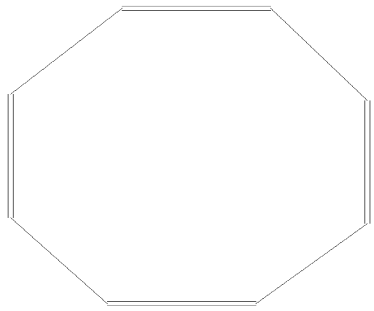




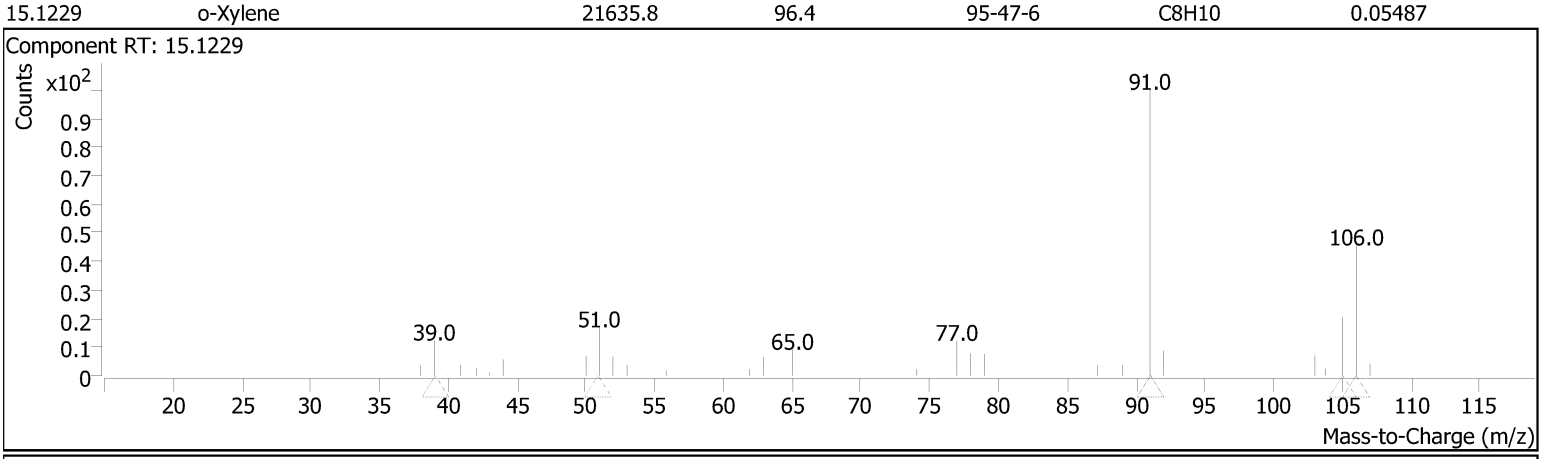


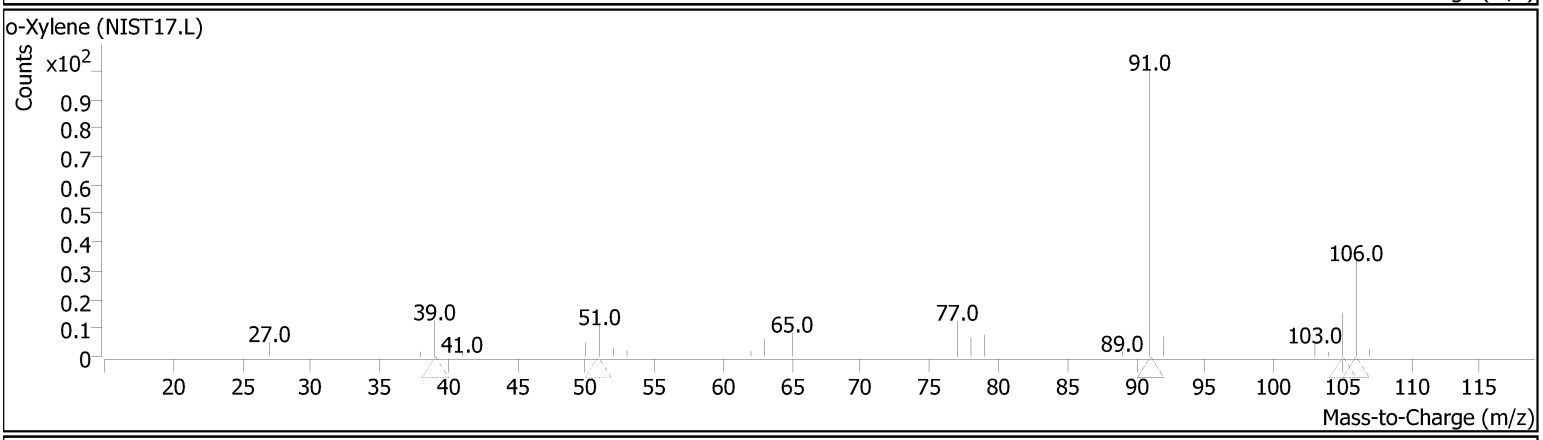


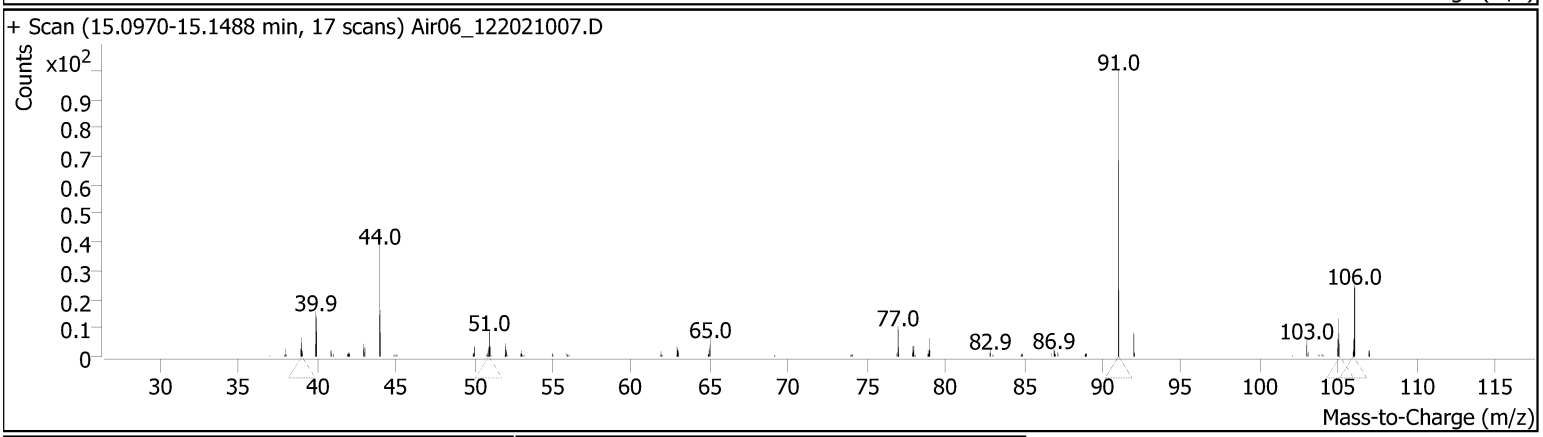


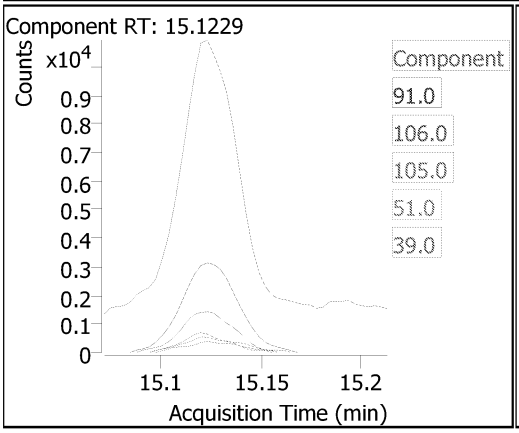


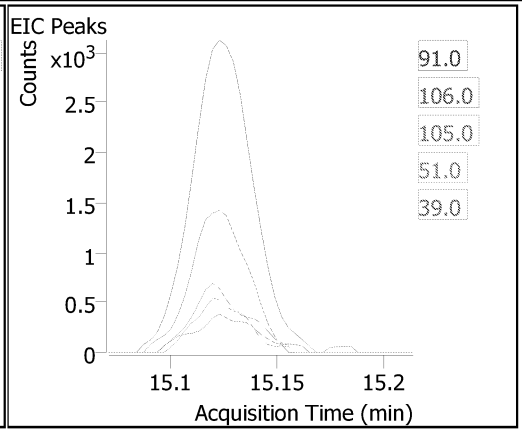
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.1229	o-Xylene	21635.8	96.4	95-47-6	C8H10	0.05487

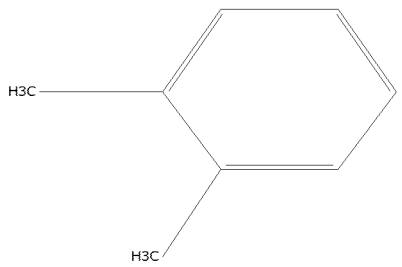




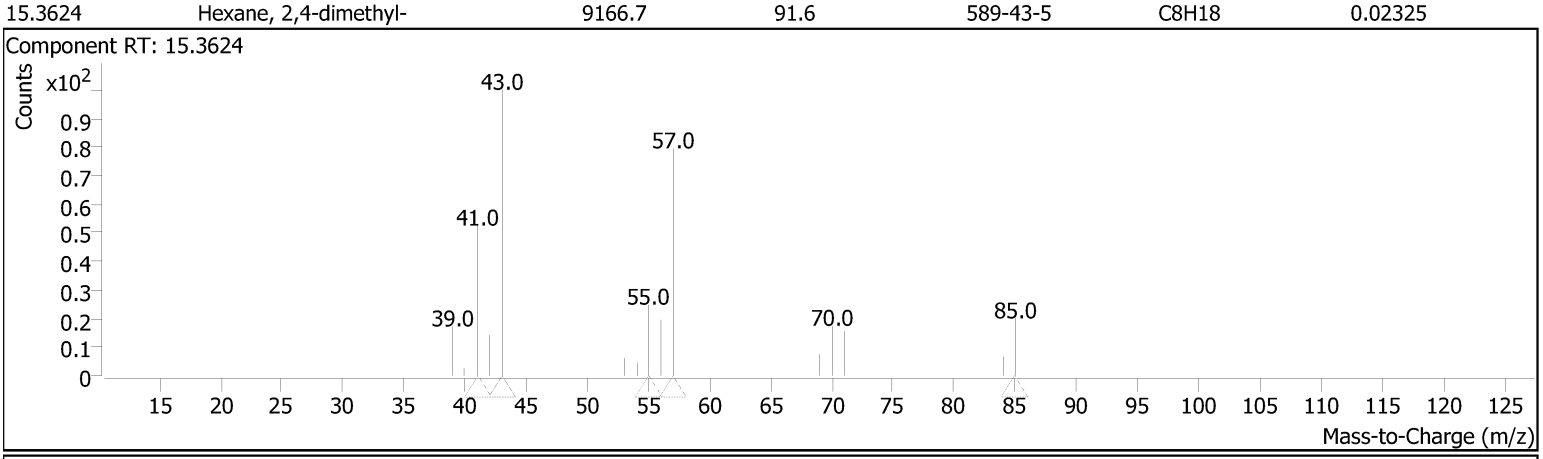


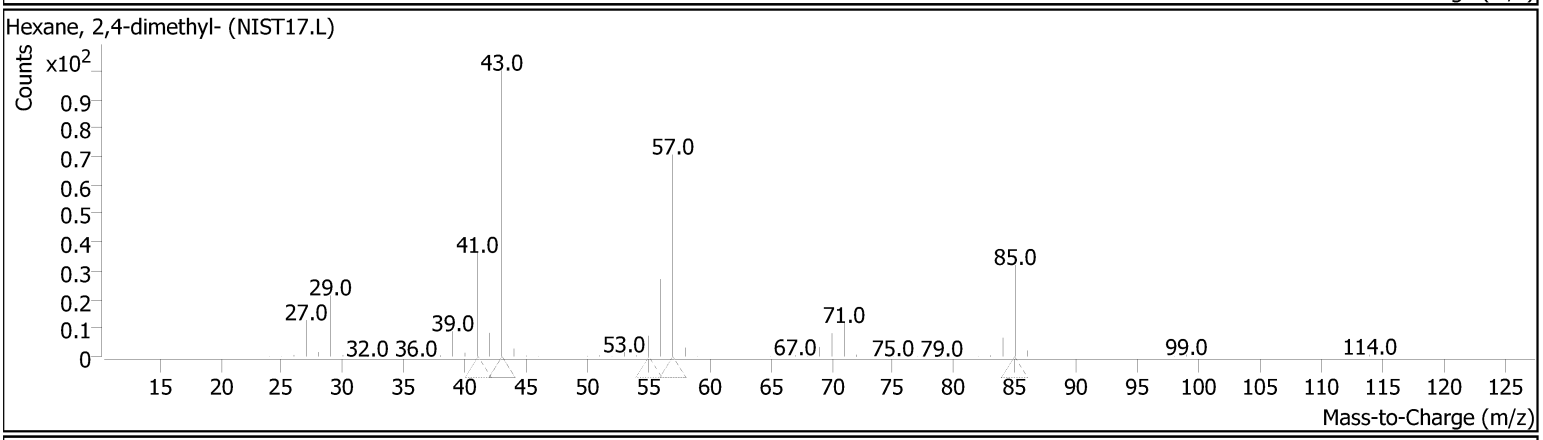


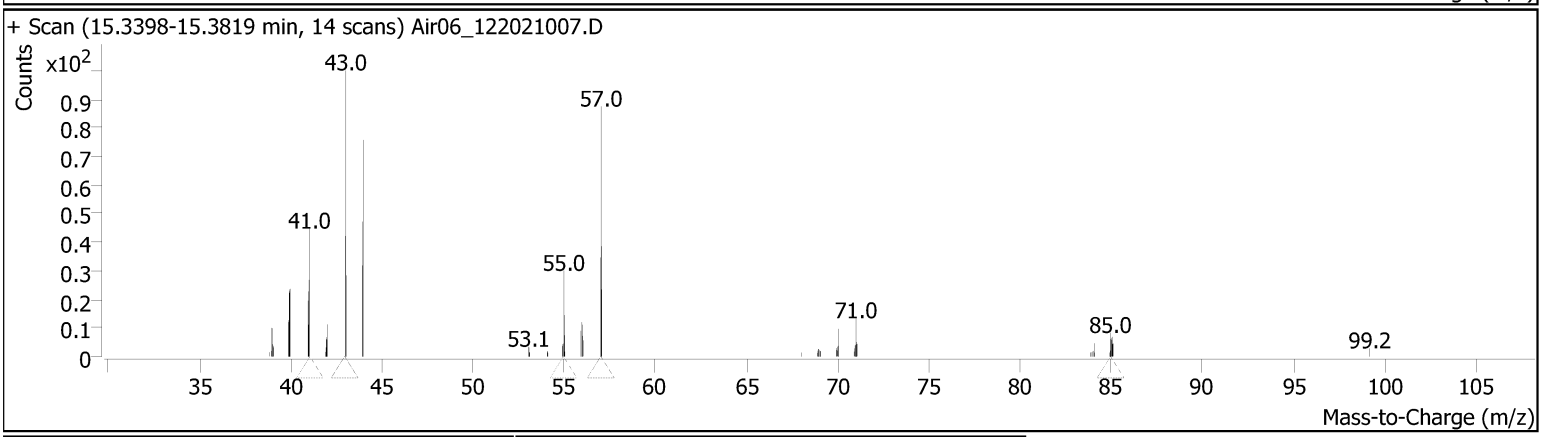


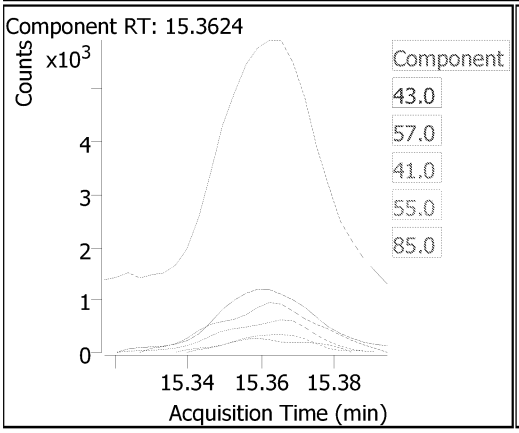


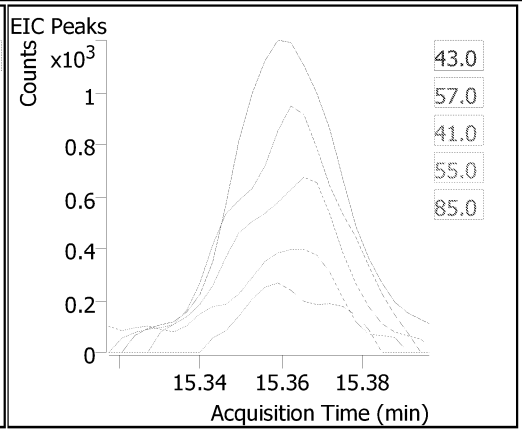
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.3624	Hexane, 2,4-dimethyl-	9166.7	91.6	589-43-5	C8H18	0.02325

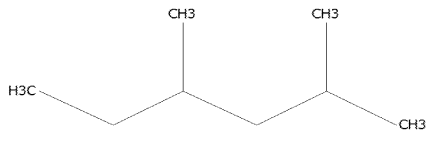




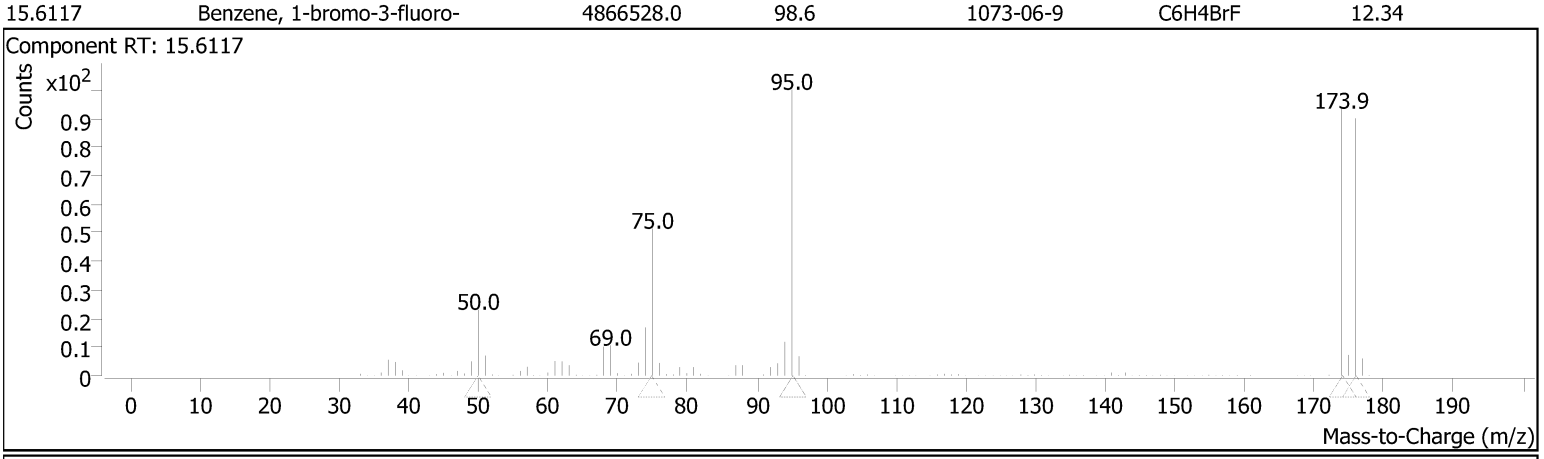


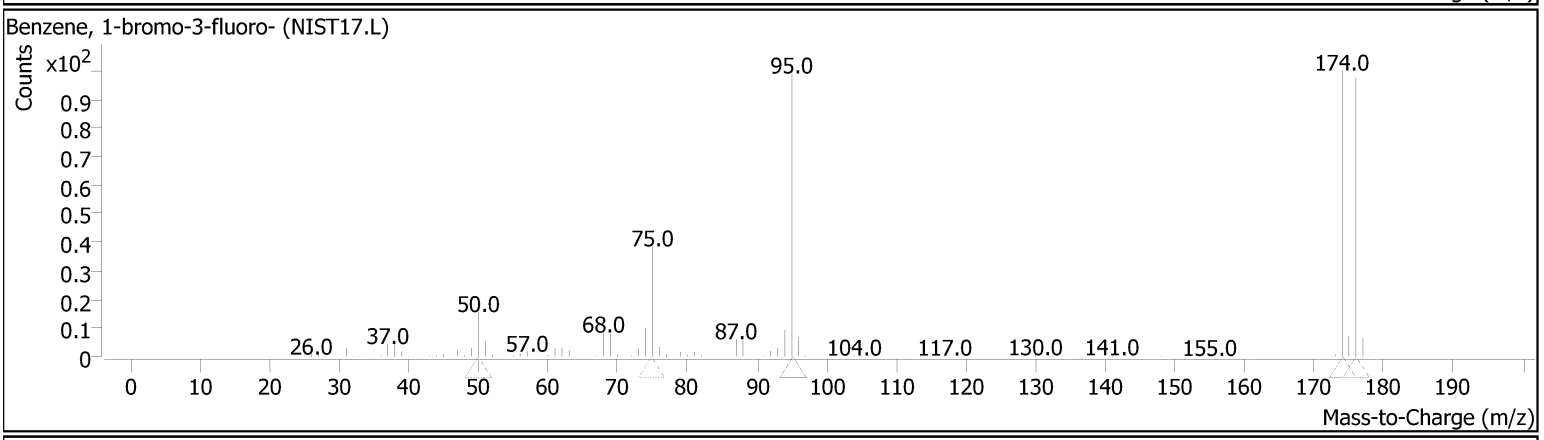


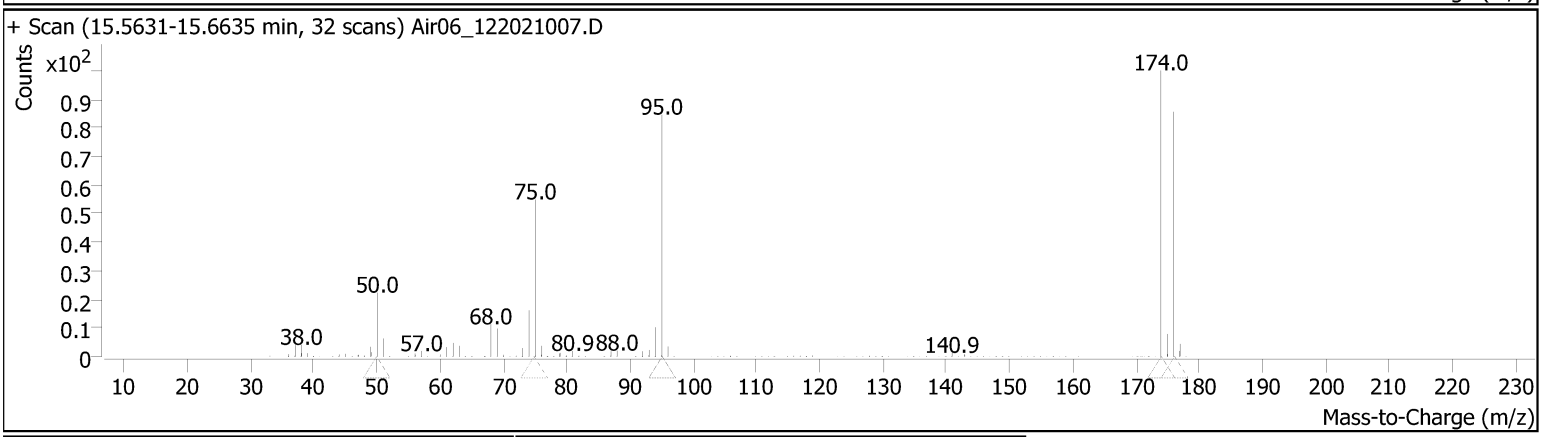


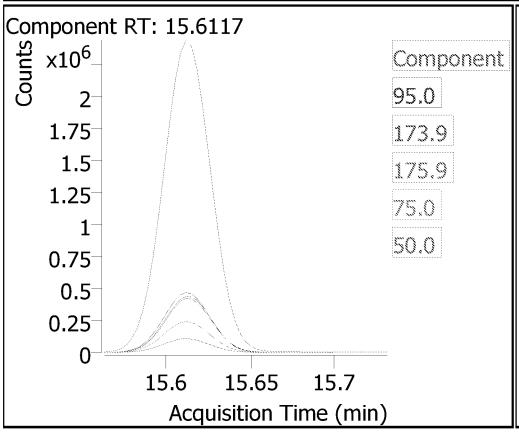


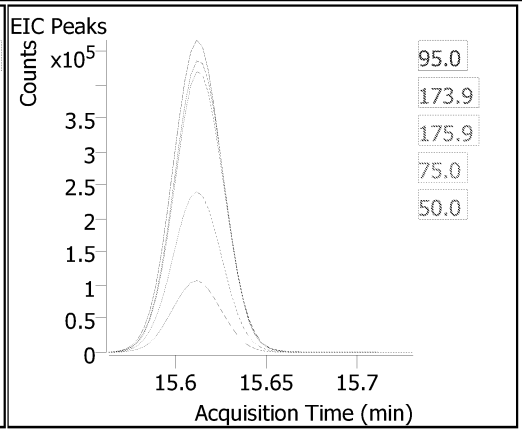
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.6117	Benzene, 1-bromo-3-fluoro-	4866528.0	98.6	1073-06-9	C6H4BrF	12.34

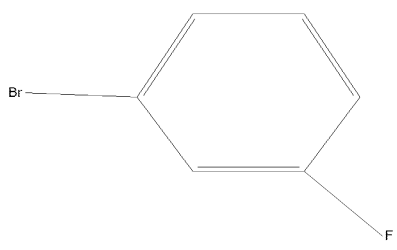




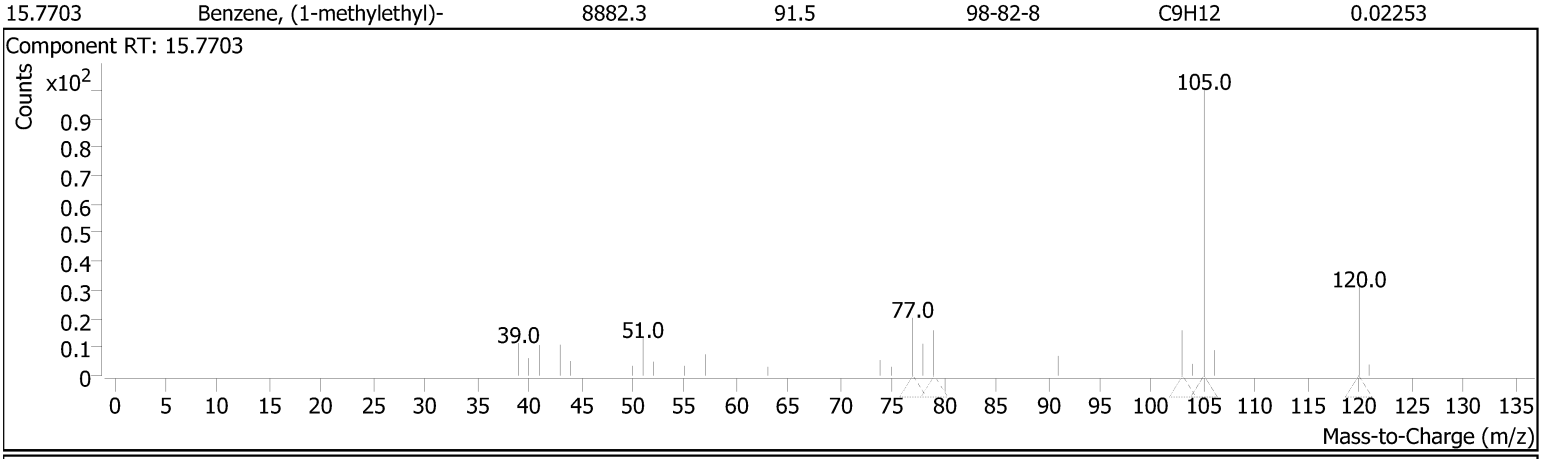


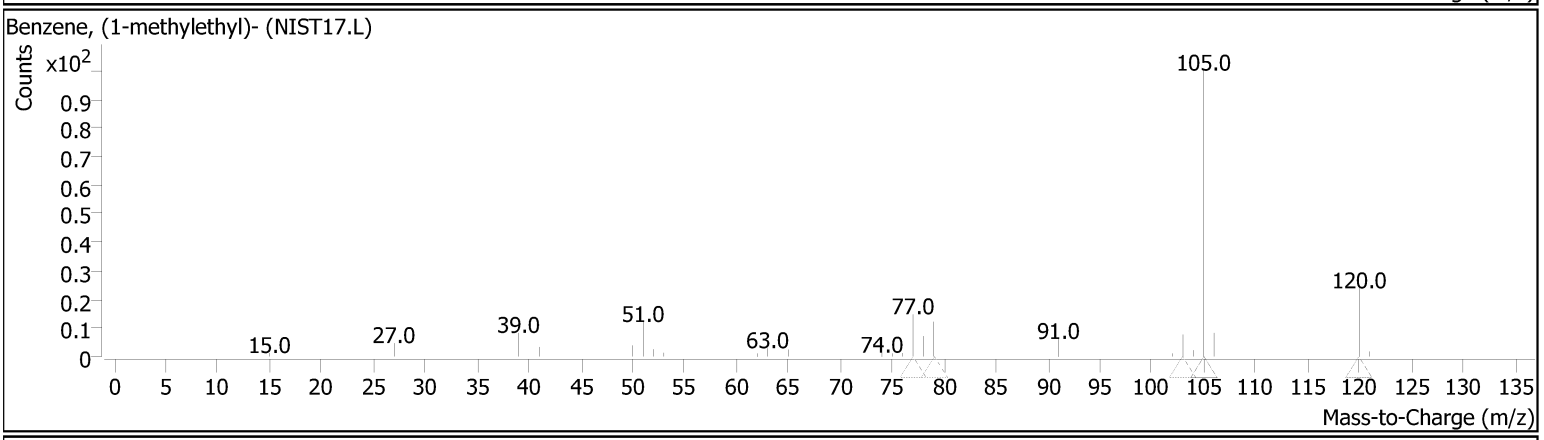


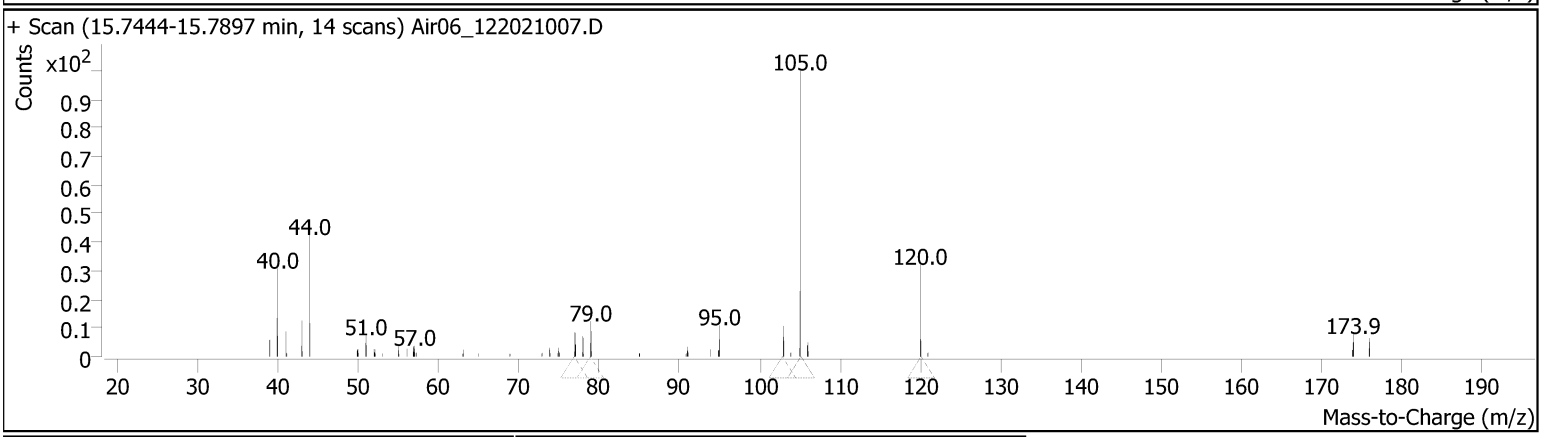


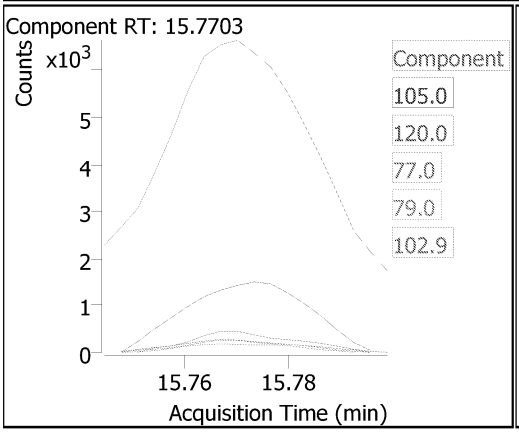


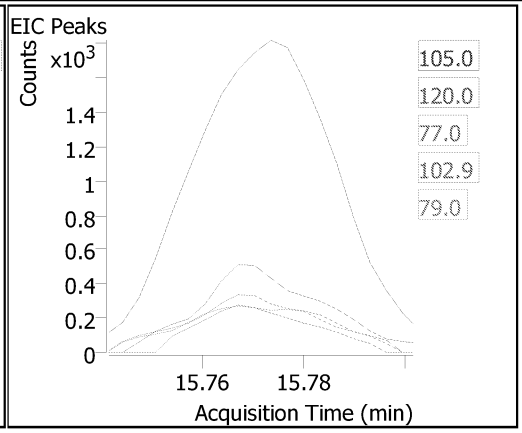
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.7703	Benzene, (1-methylethyl)-	8882.3	91.5	98-82-8	C9H12	0.02253

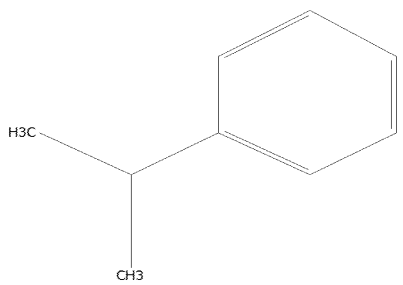




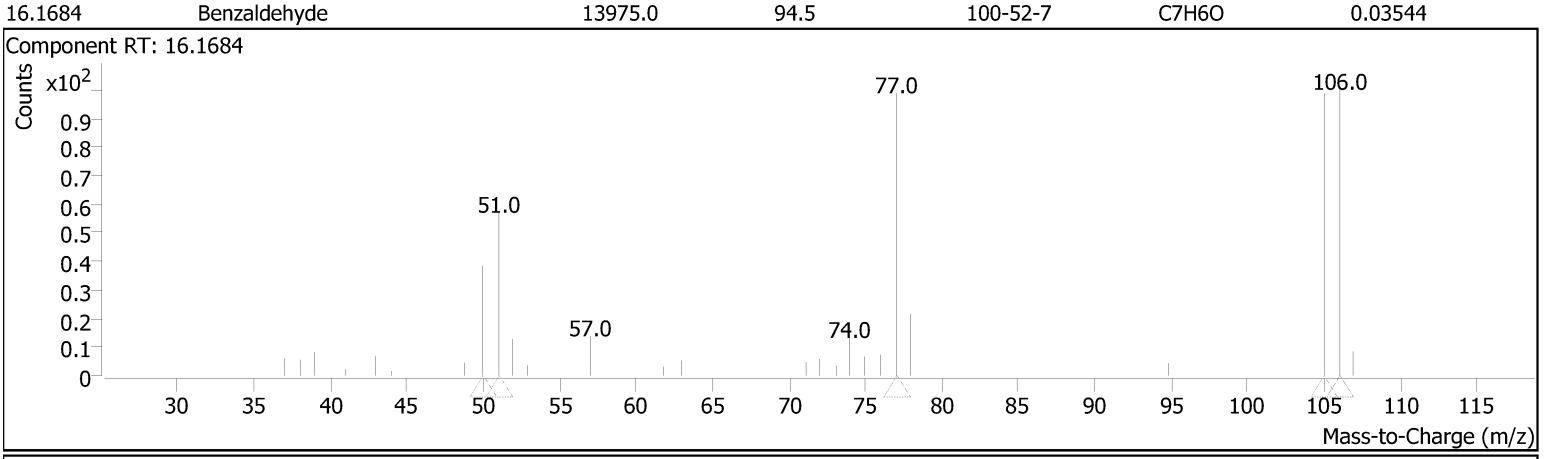


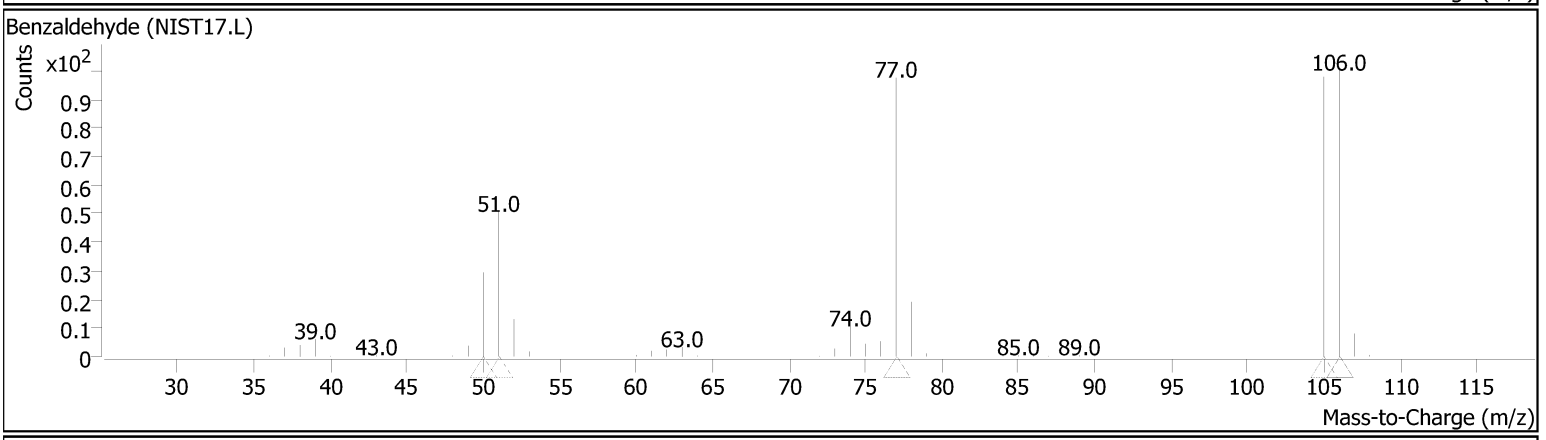


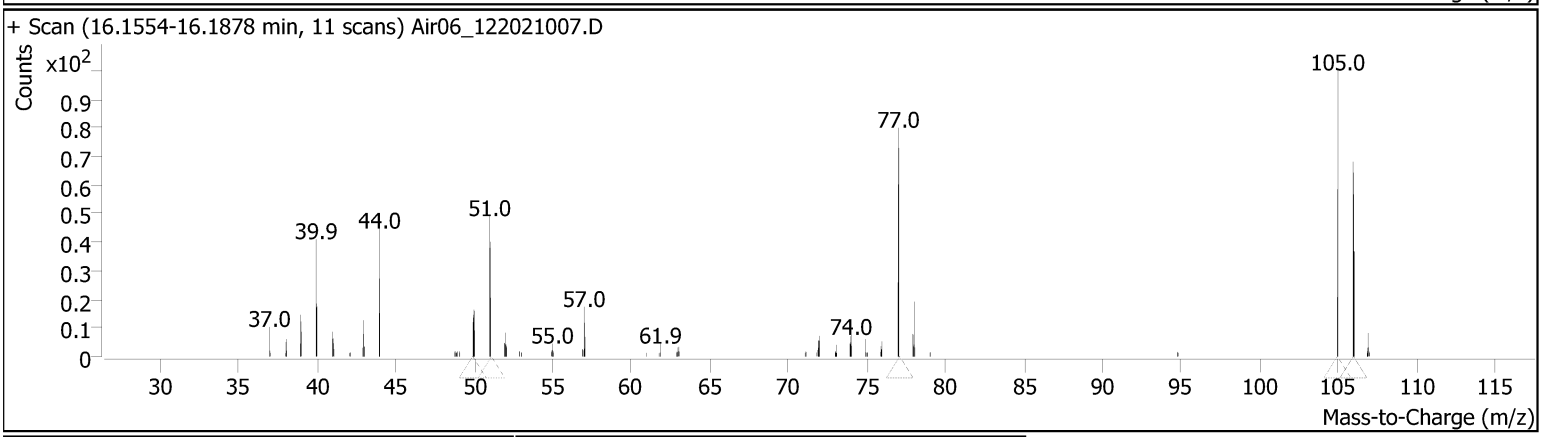


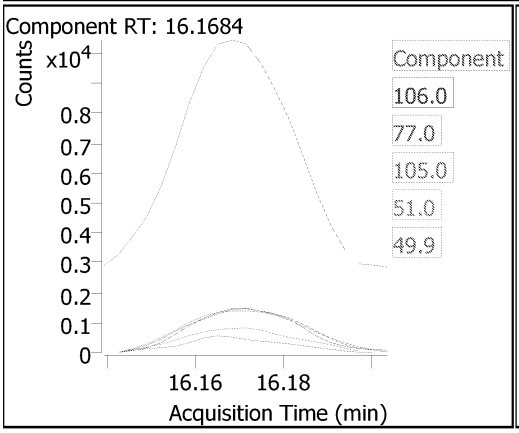


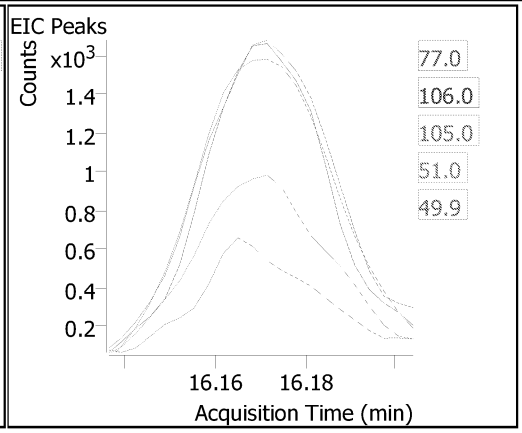
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.1684	Benzaldehyde	13975.0	94.5	100-52-7	C7H6O	0.03544

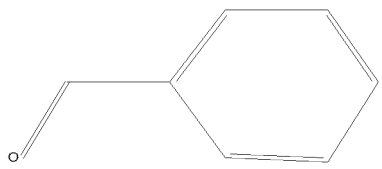




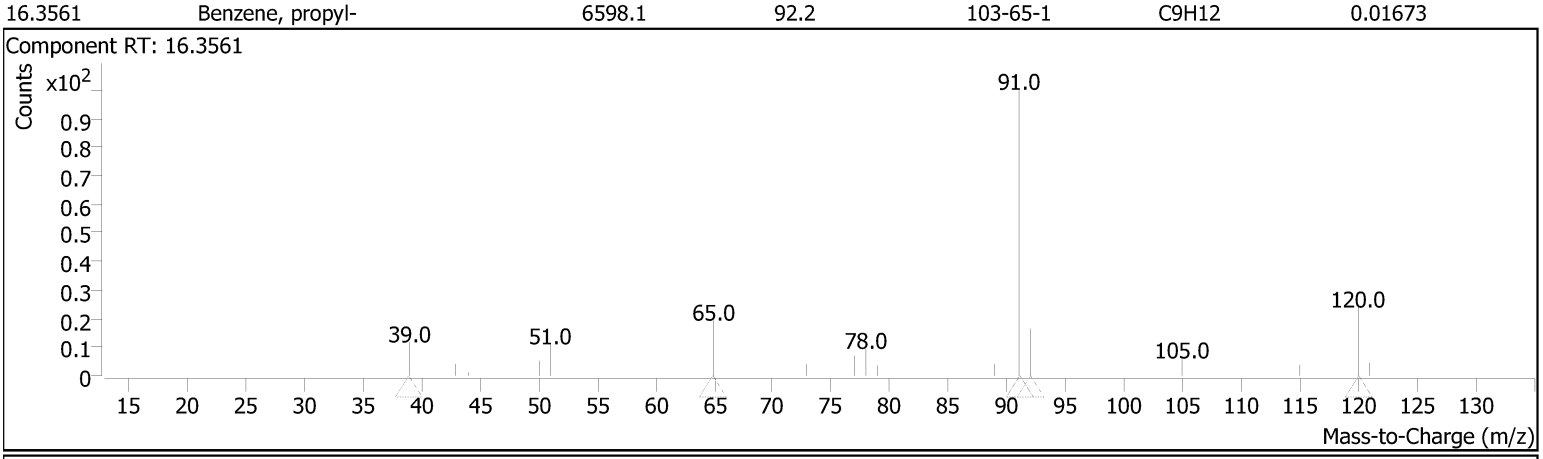


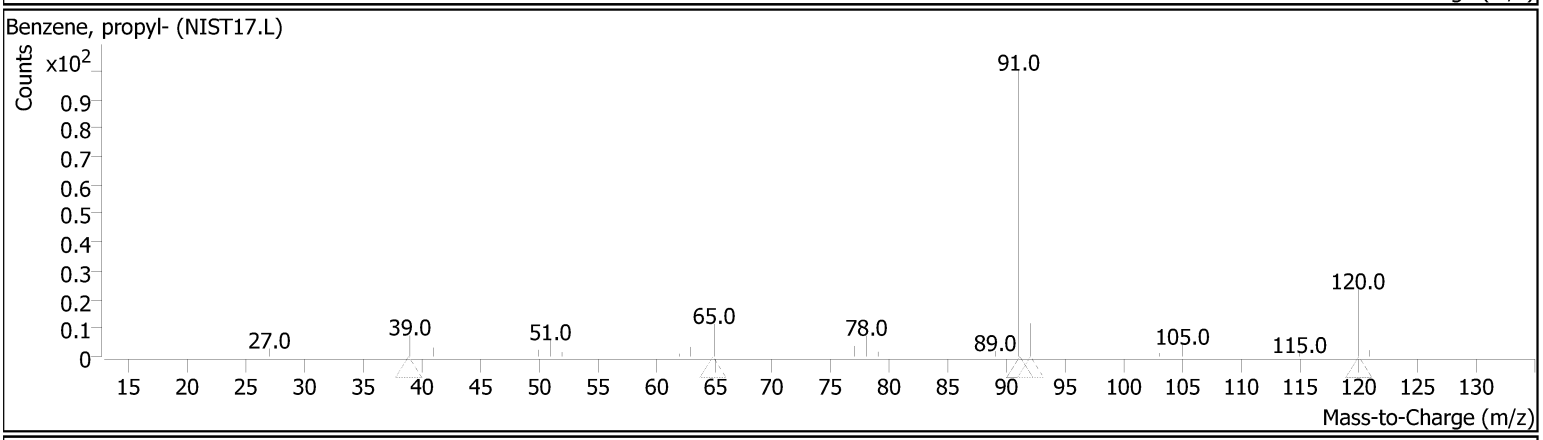


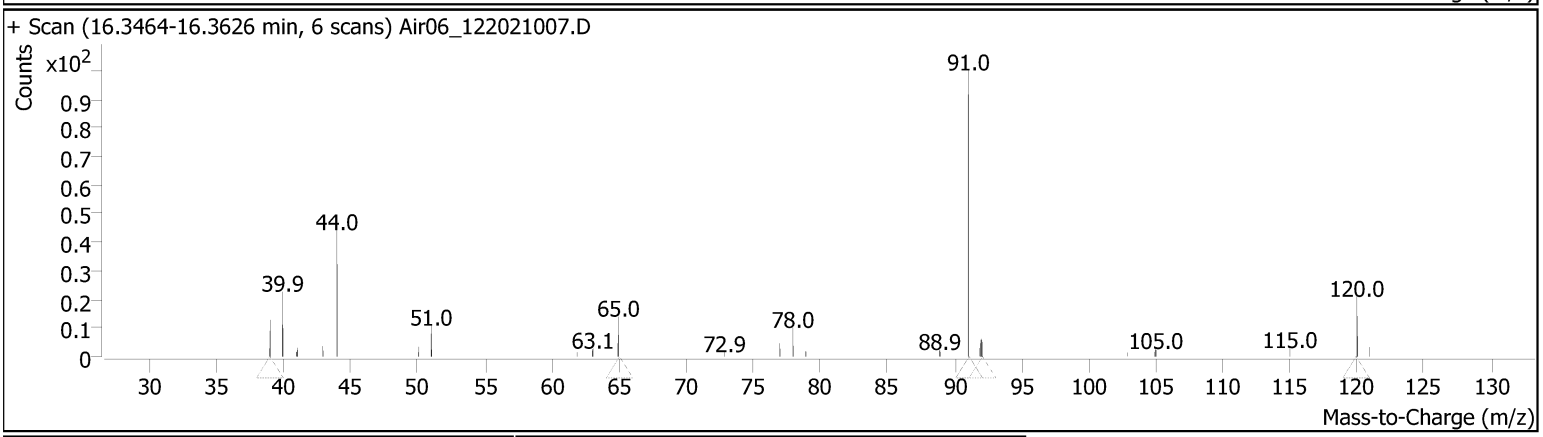


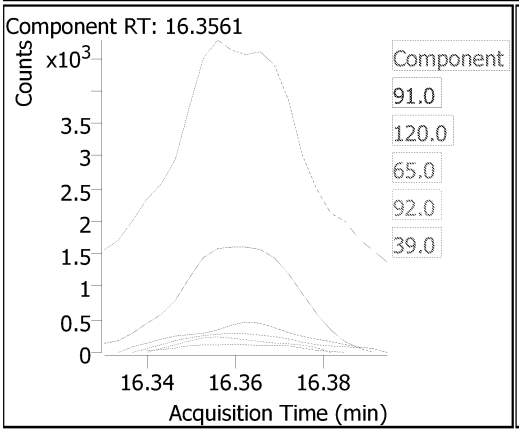


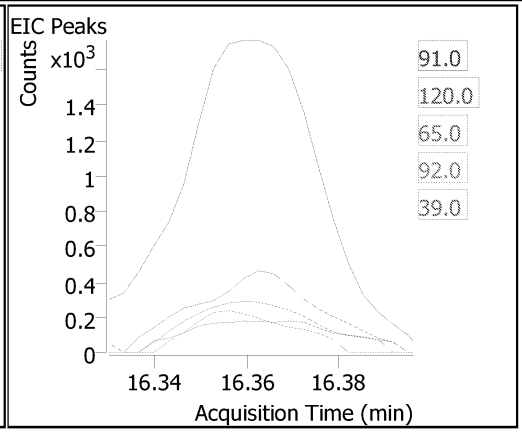
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.3561	Benzene, propyl-	6598.1	92.2	103-65-1	C9H12	0.01673

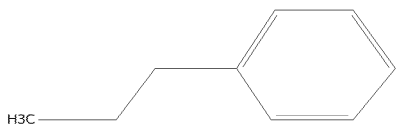




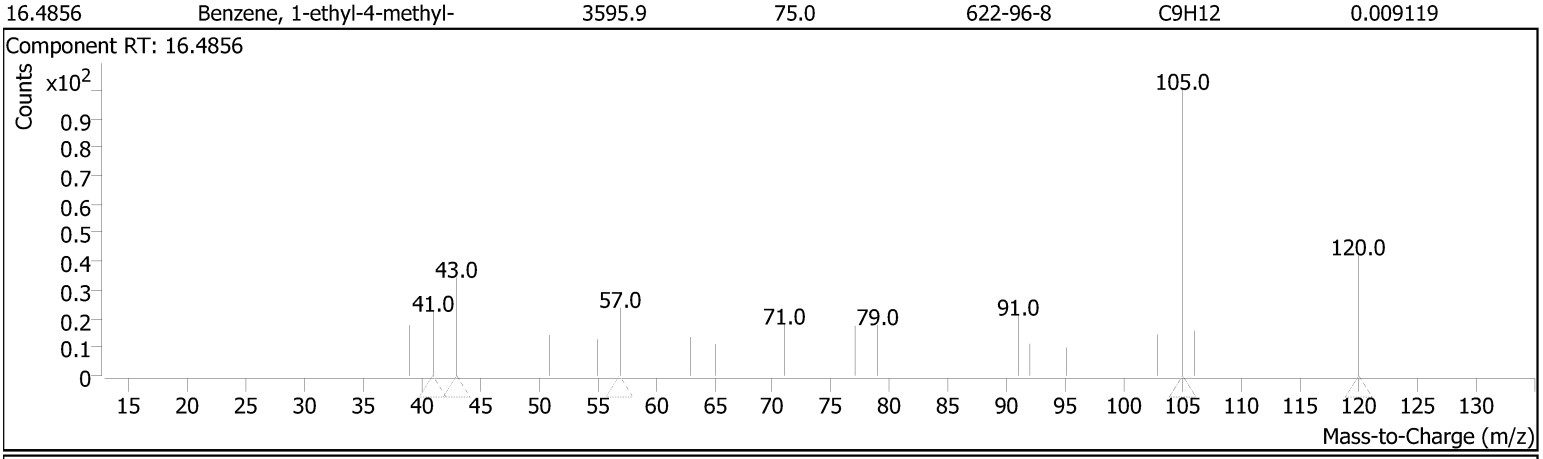


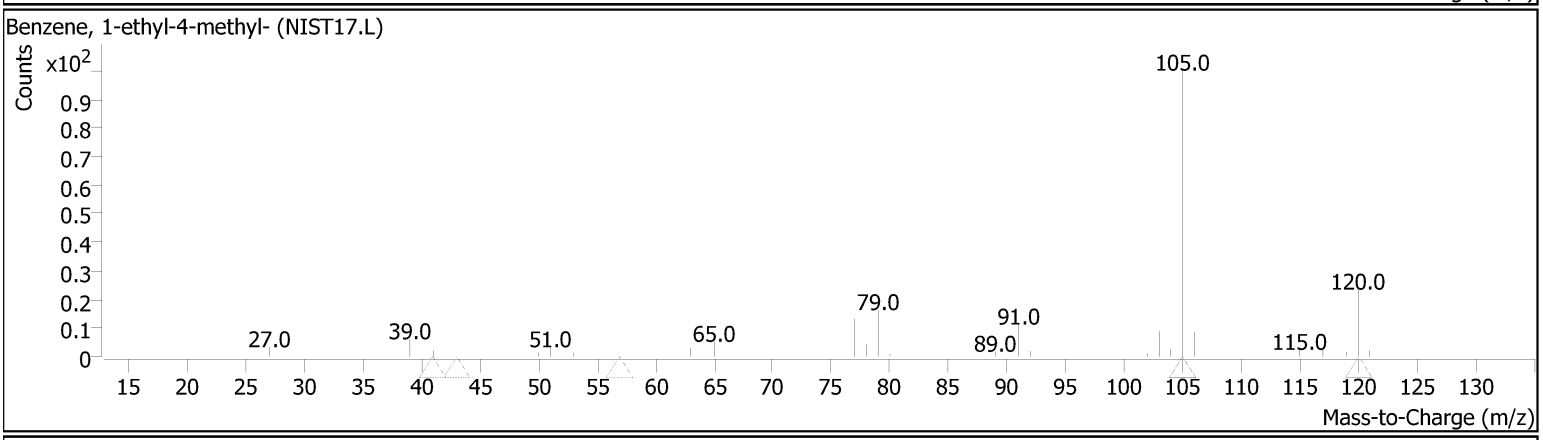


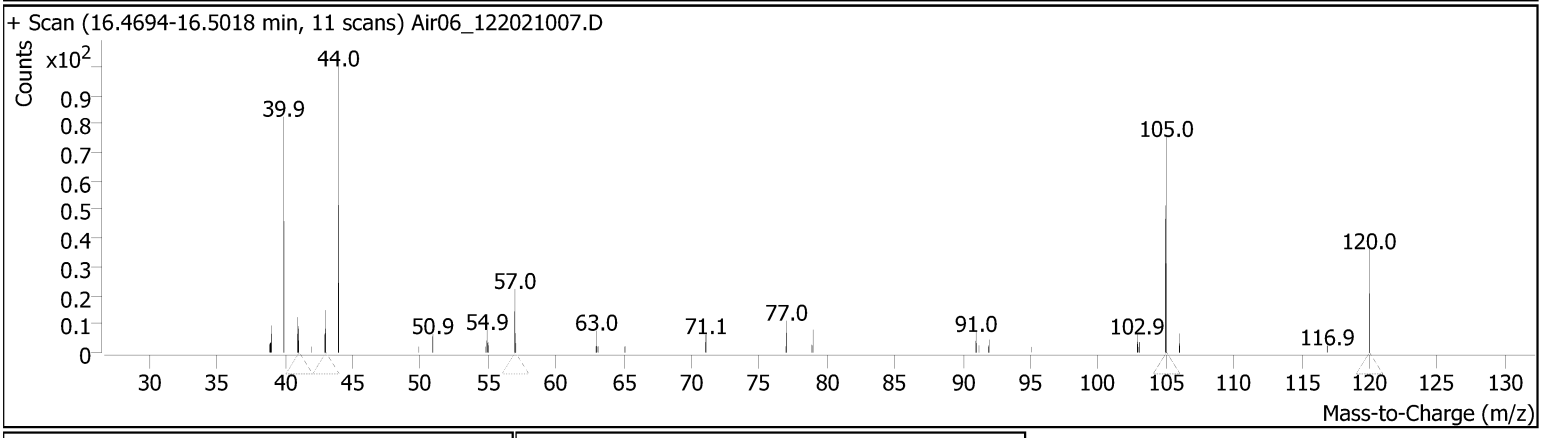


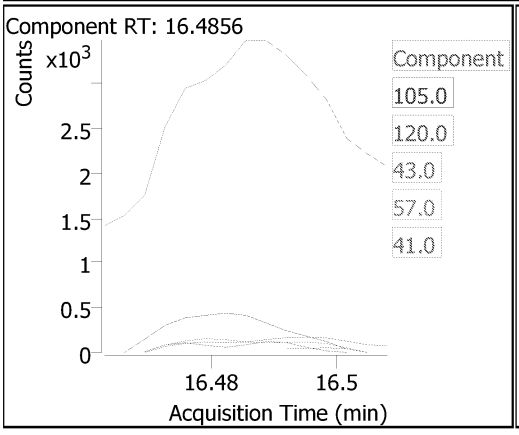


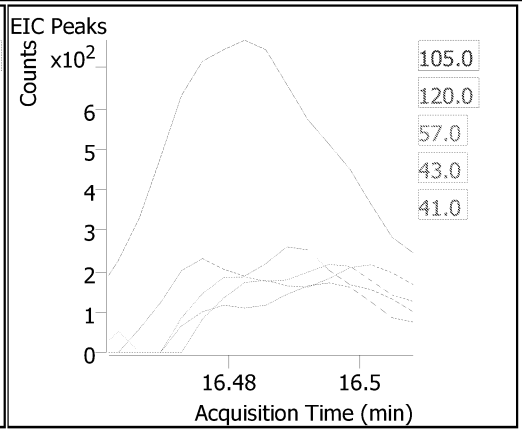
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.4856	Benzene, 1-ethyl-4-methyl-	3595.9	75.0	622-96-8	C9H12	0.009119

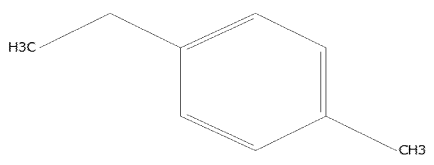




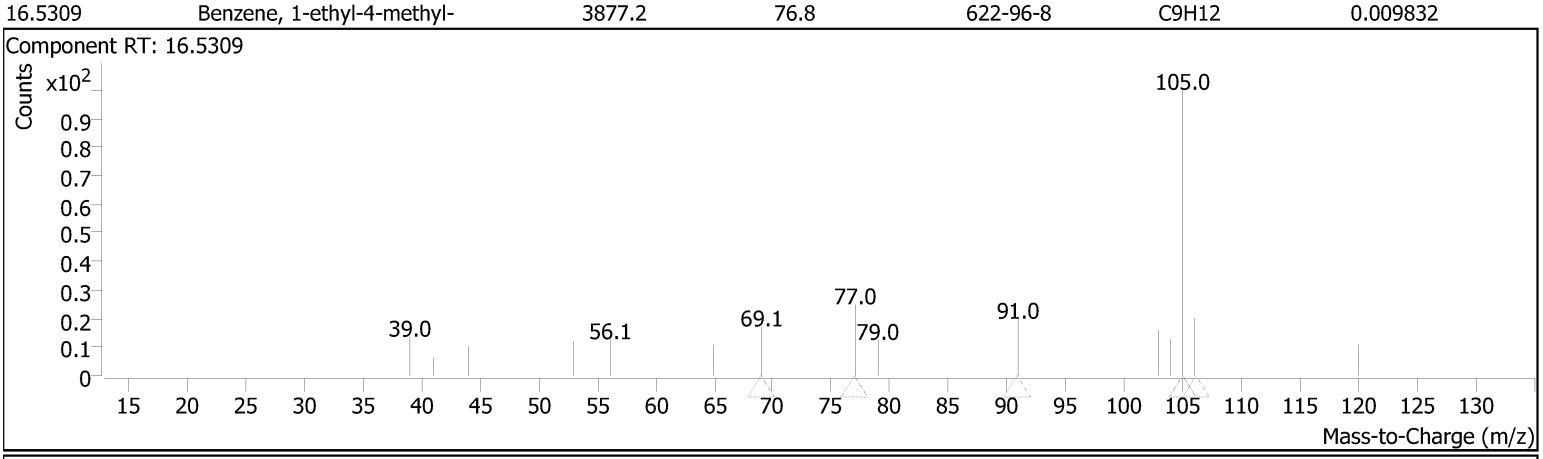


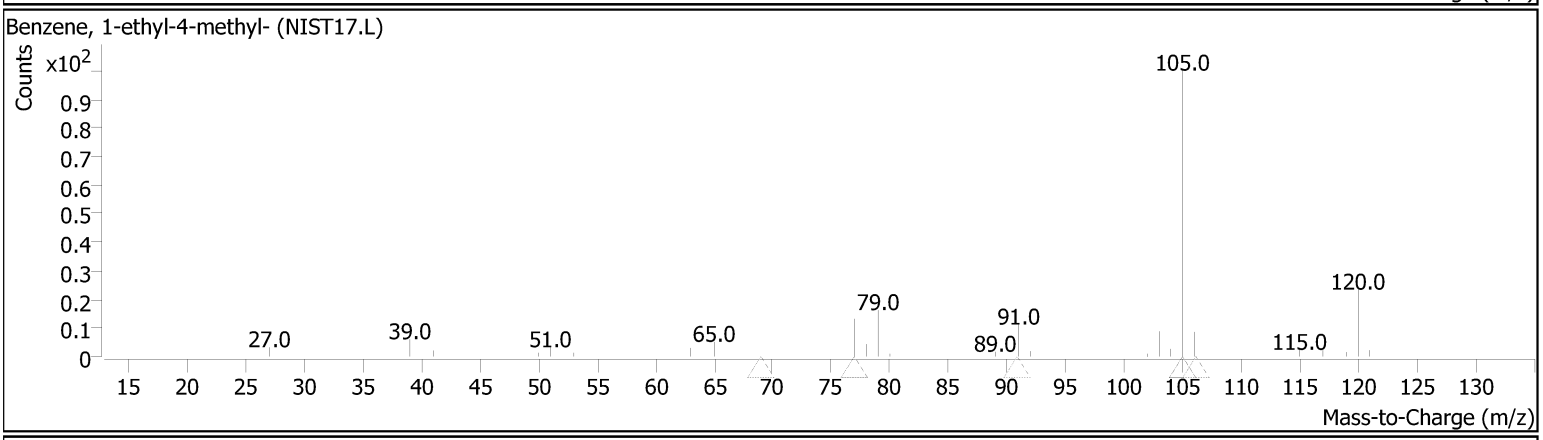


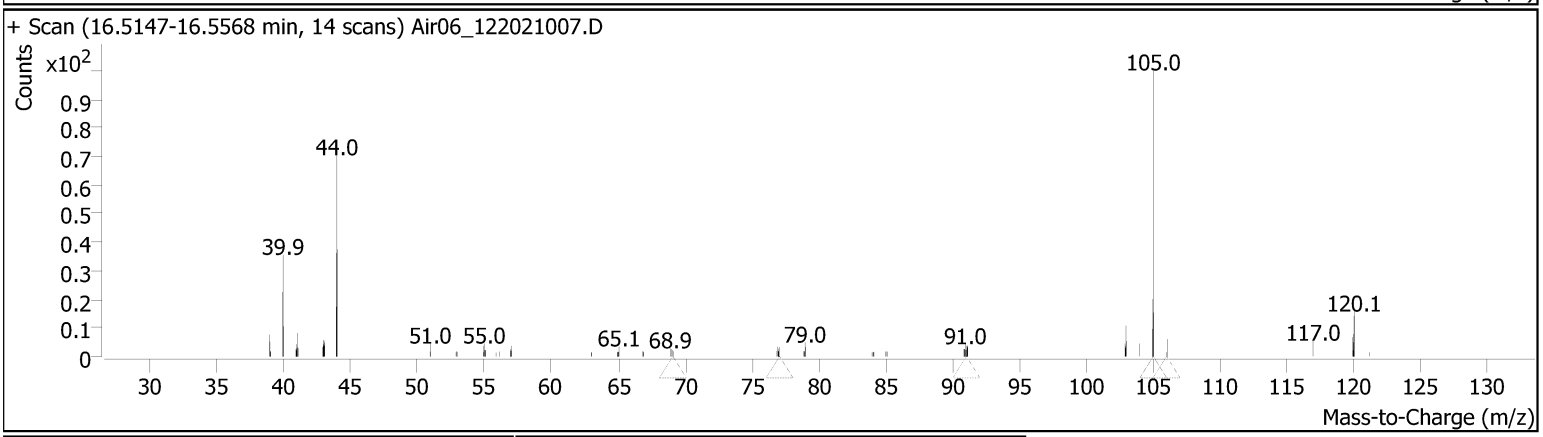


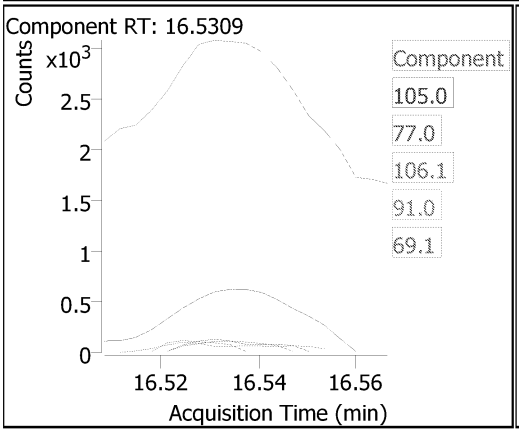


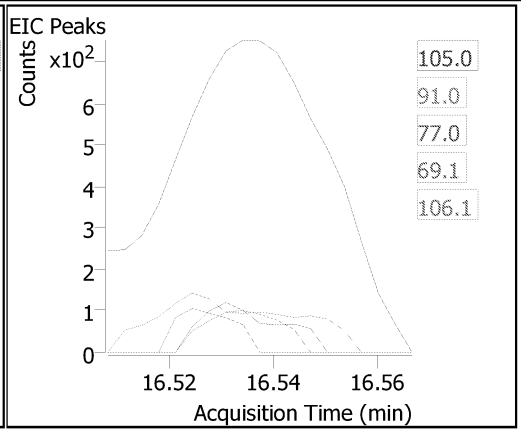
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.5309	Benzene, 1-ethyl-4-methyl-	3877.2	76.8	622-96-8	C9H12	0.009832

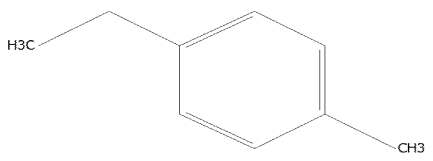




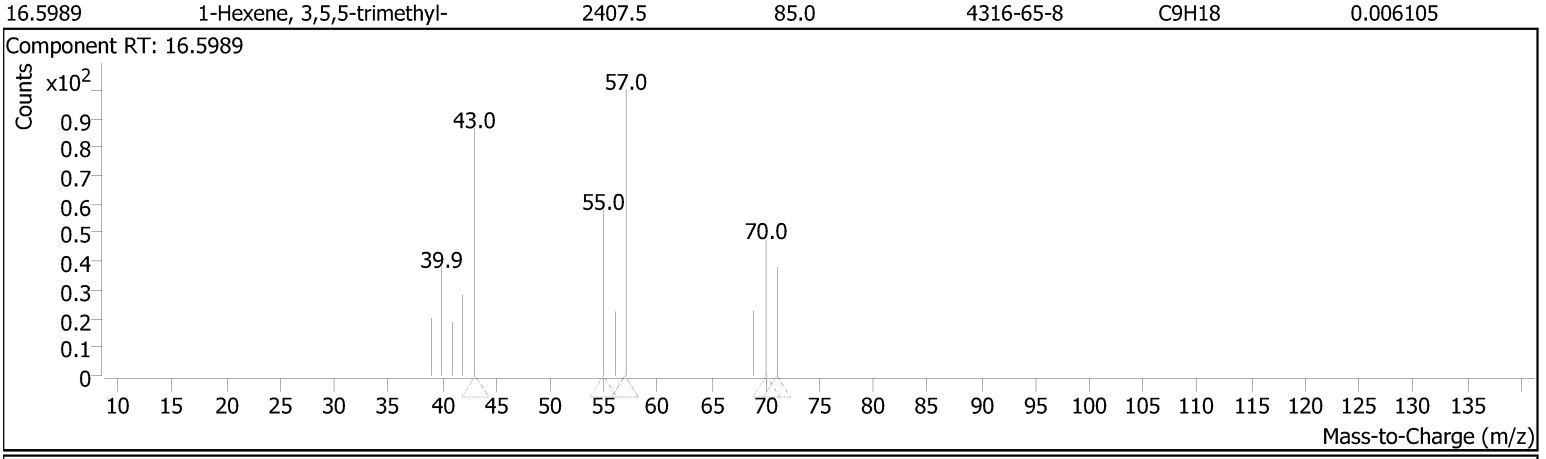


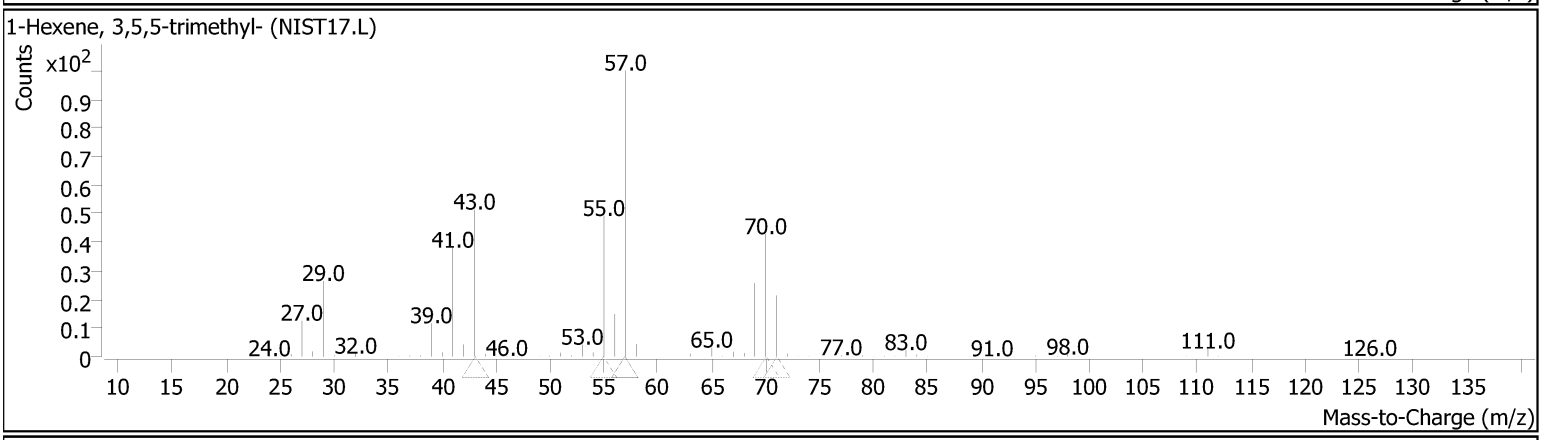


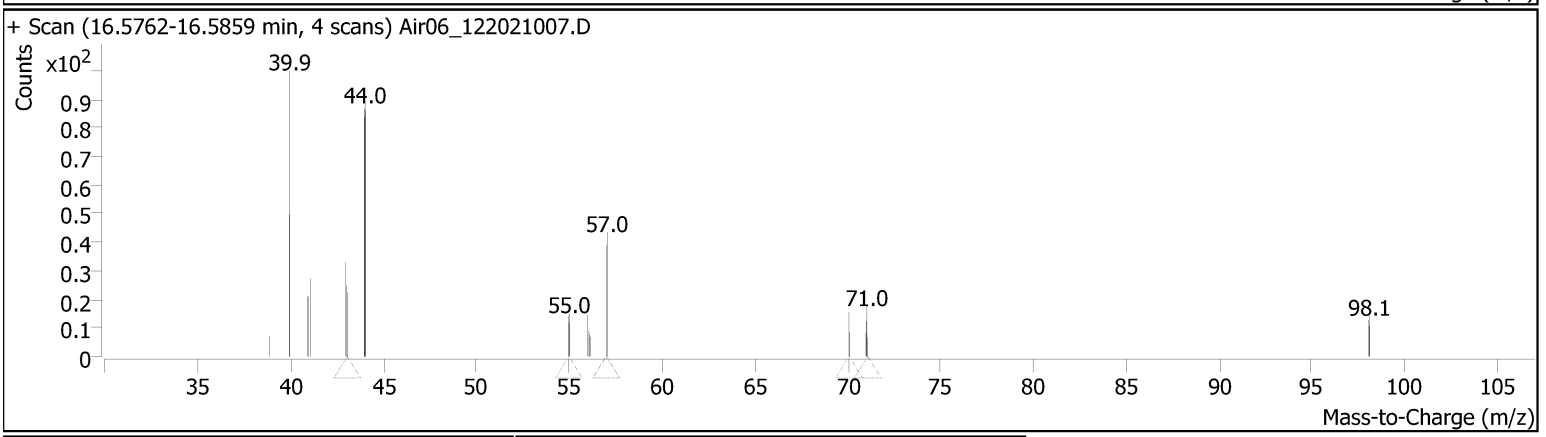


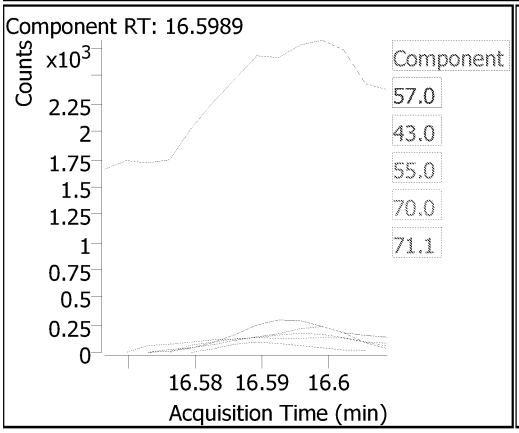


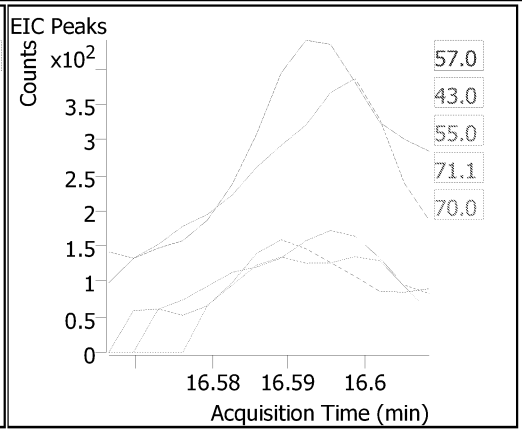
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.5989	1-Hexene, 3,5,5-trimethyl-	2407.5	85.0	4316-65-8	C9H18	0.006105

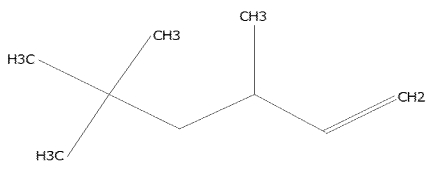




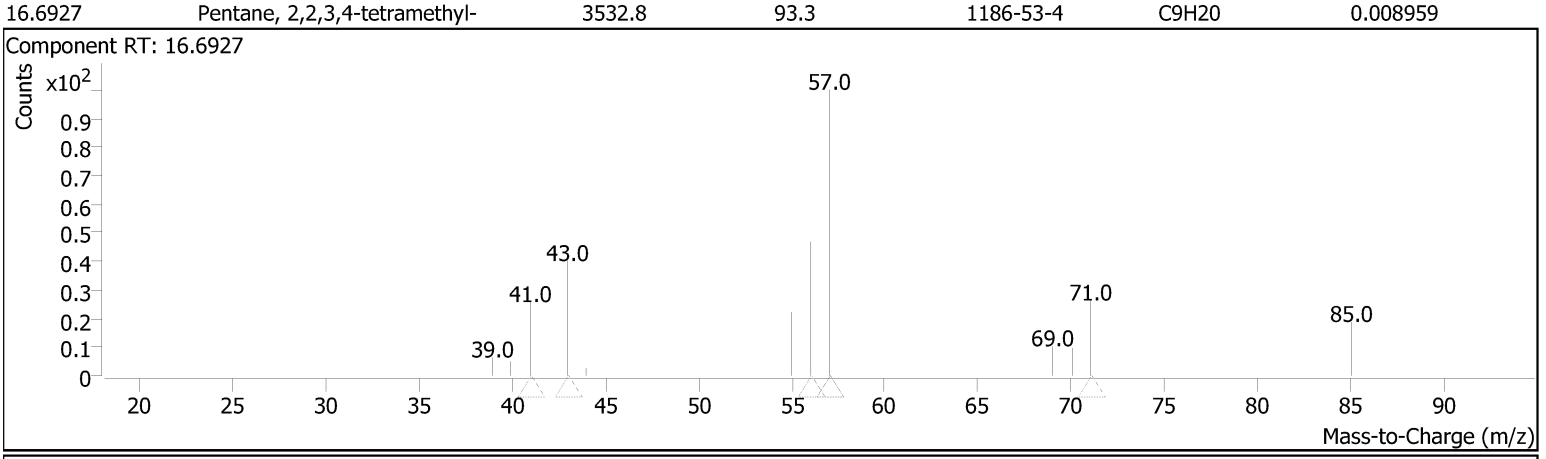


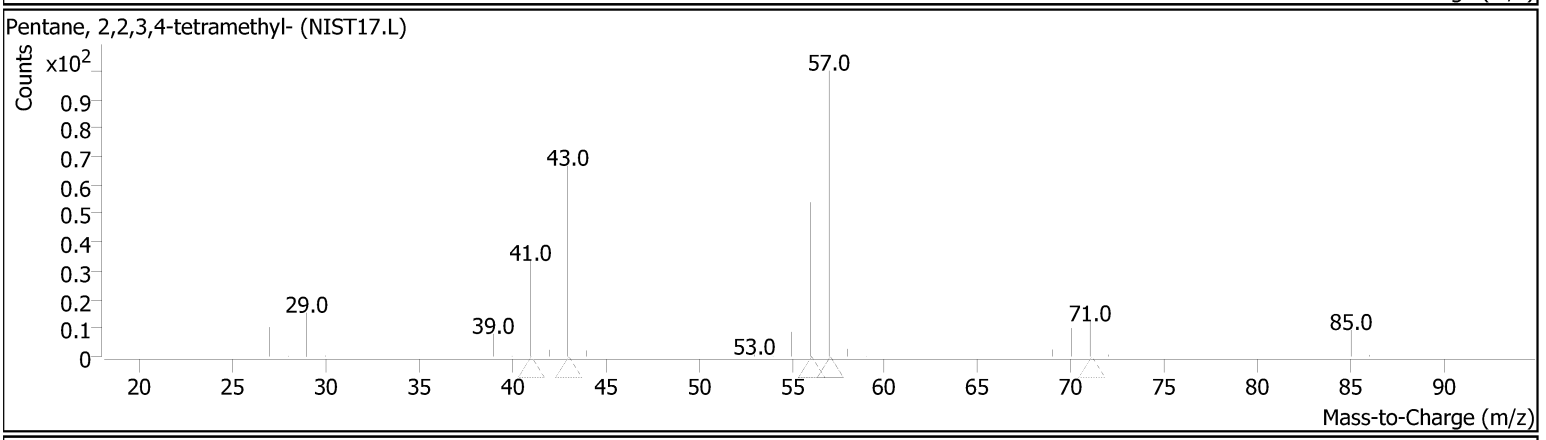


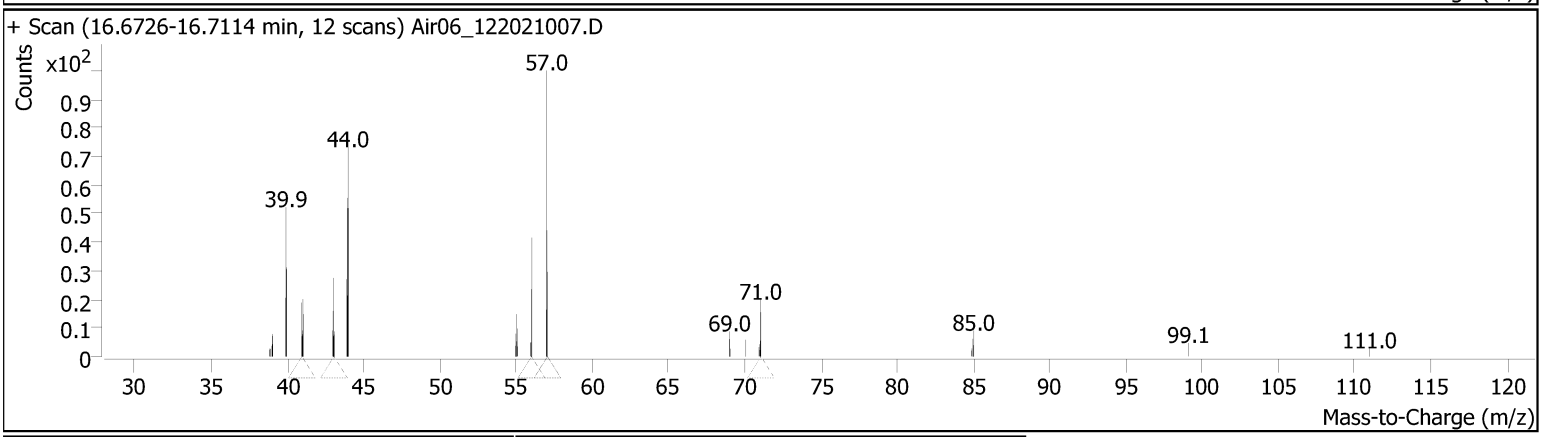


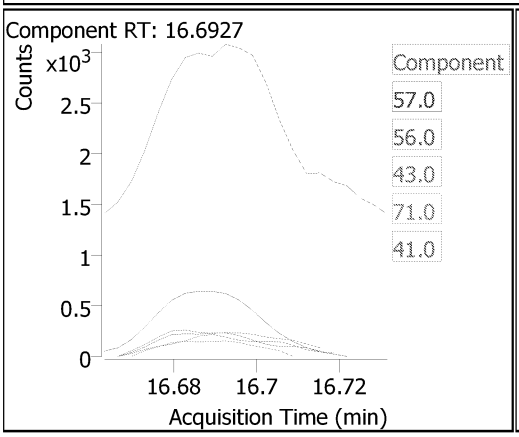


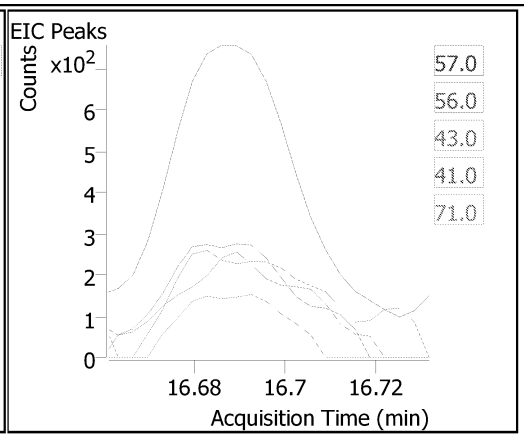
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.6927	Pentane, 2,2,3,4-tetramethyl-	3532.8	93.3	1186-53-4	C9H20	0.008959

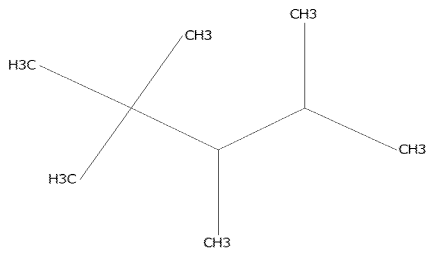




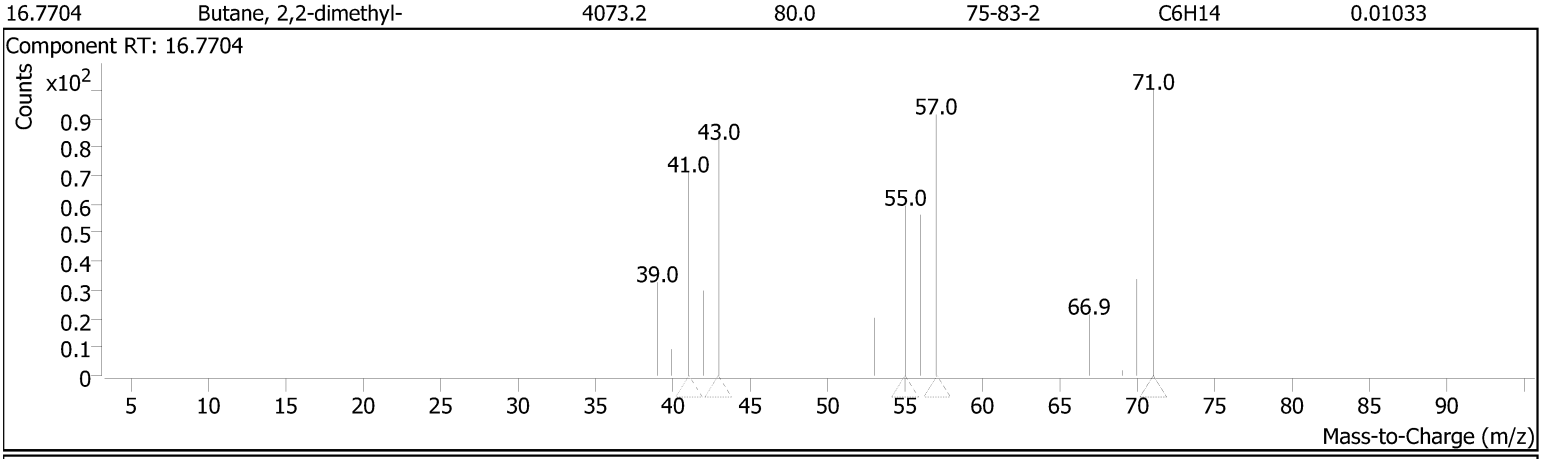


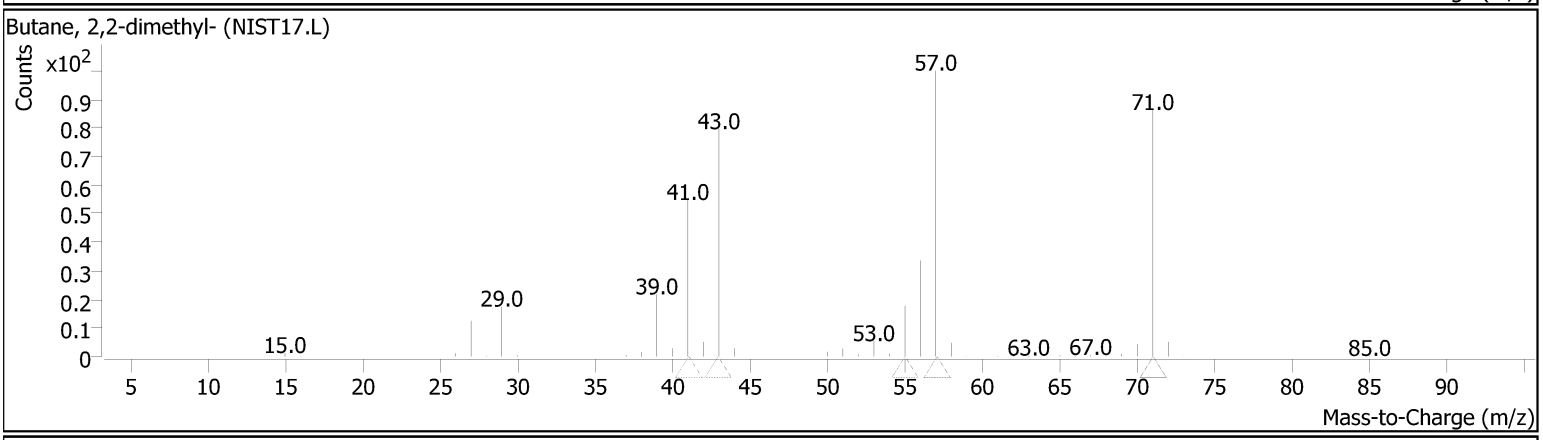


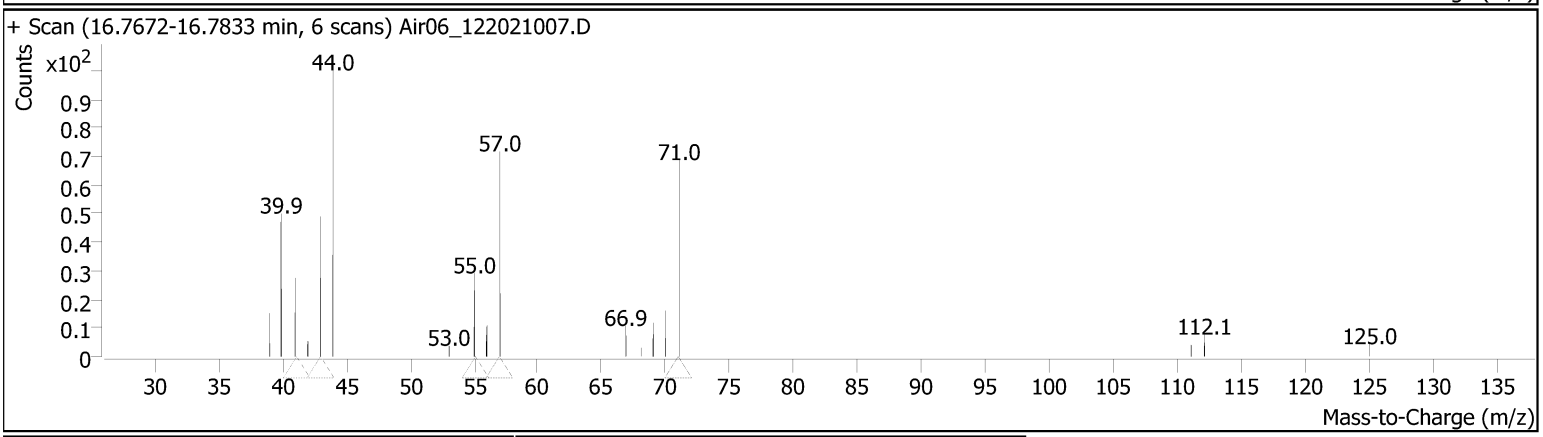


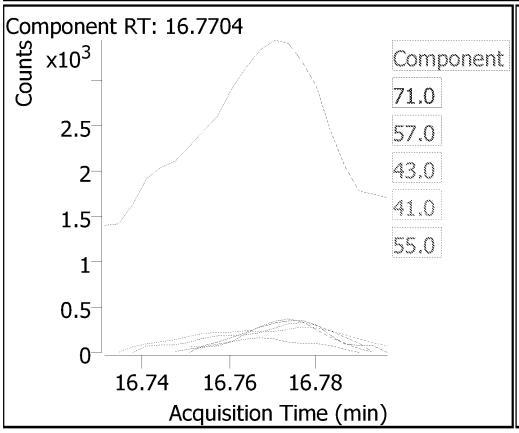


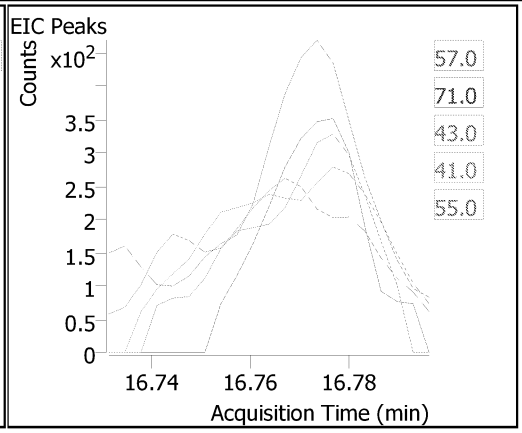
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.7704	Butane, 2,2-dimethyl-	4073.2	80.0	75-83-2	C6H14	0.01033

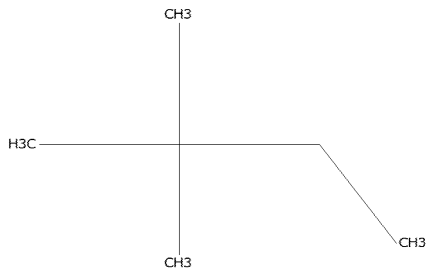




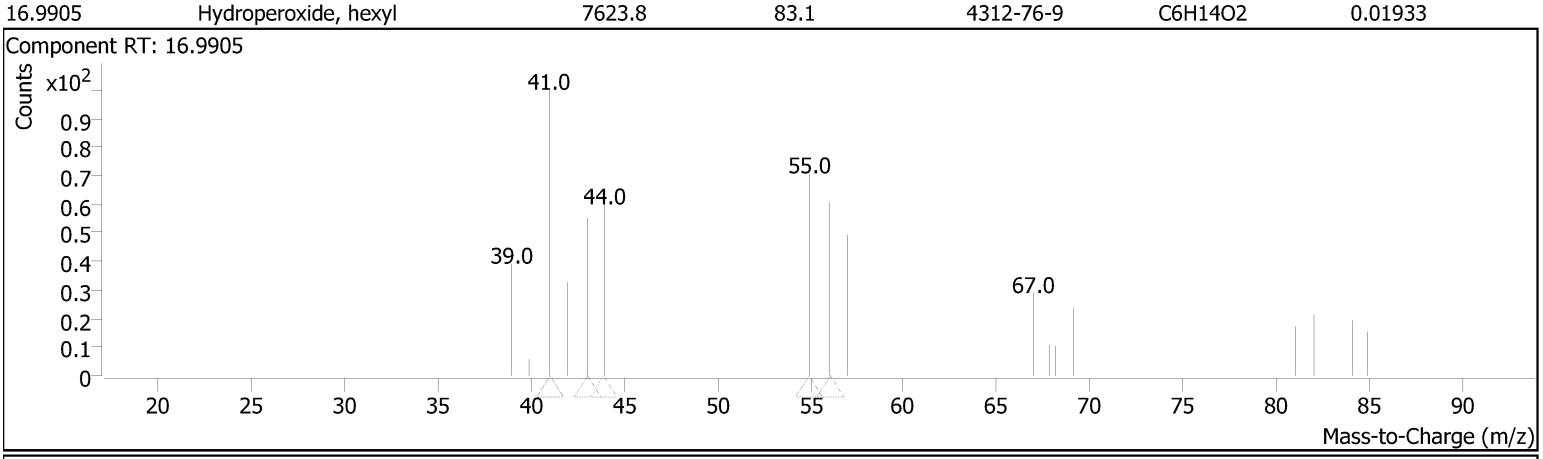


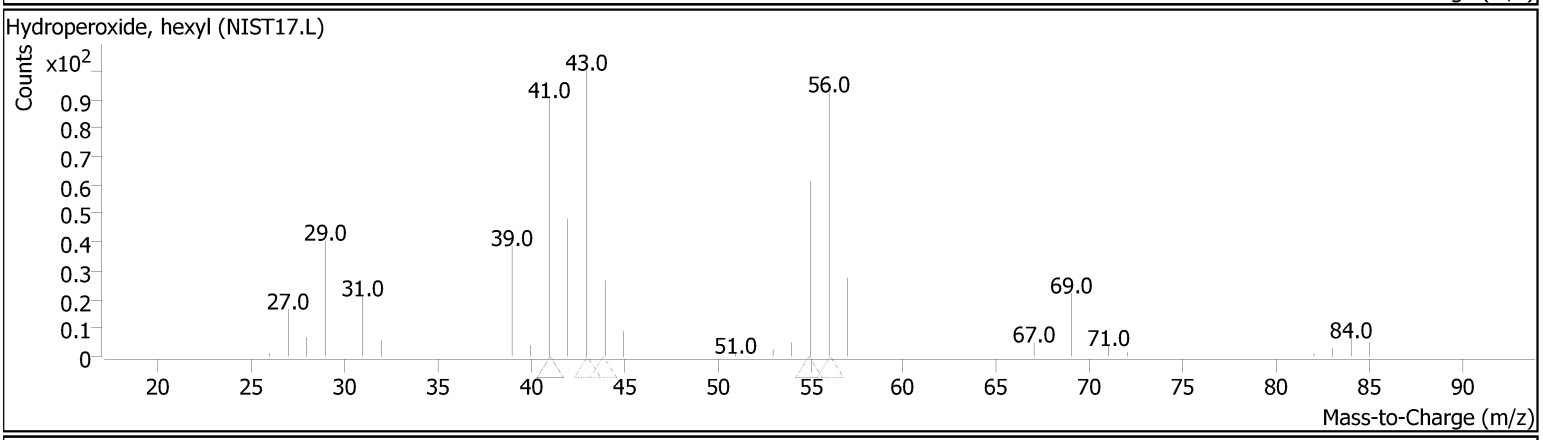


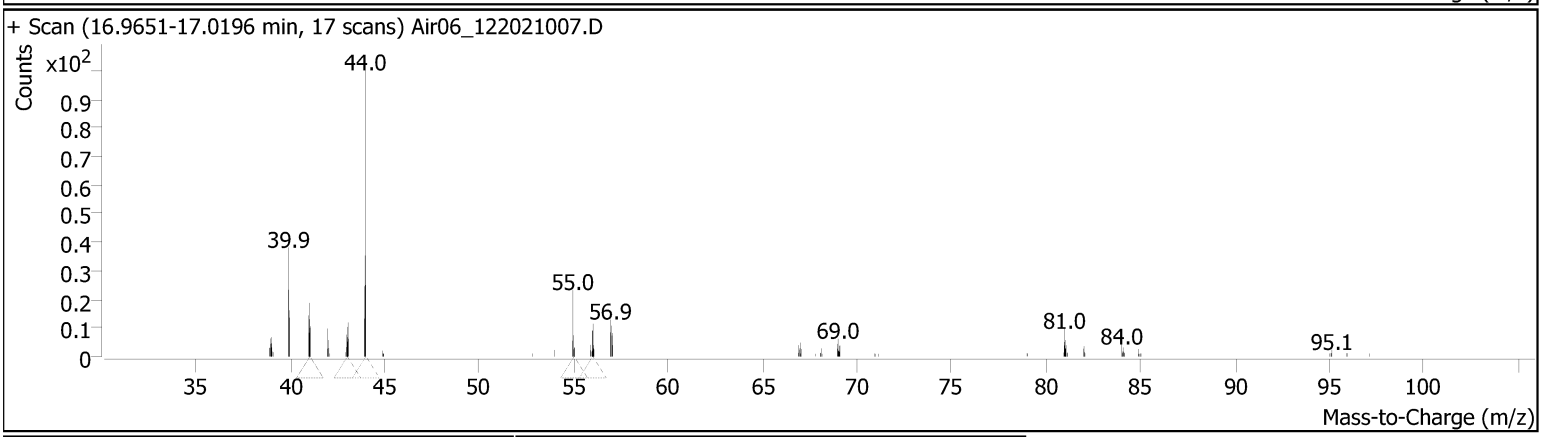


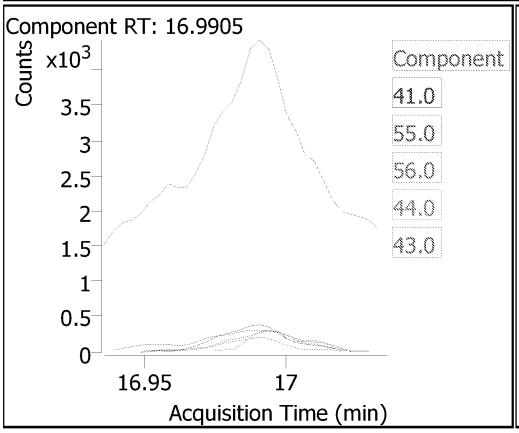


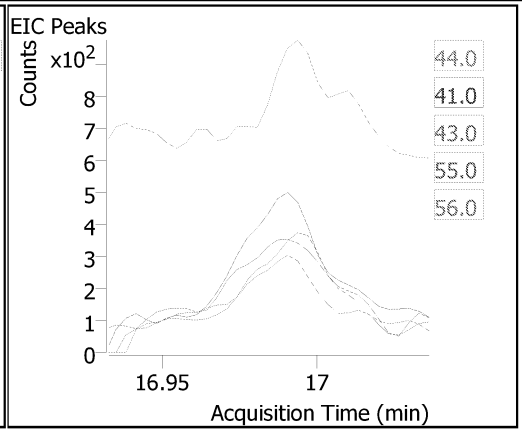
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.9905	Hydroperoxide, hexyl	7623.8	83.1	4312-76-9	C6H14O2	0.01933





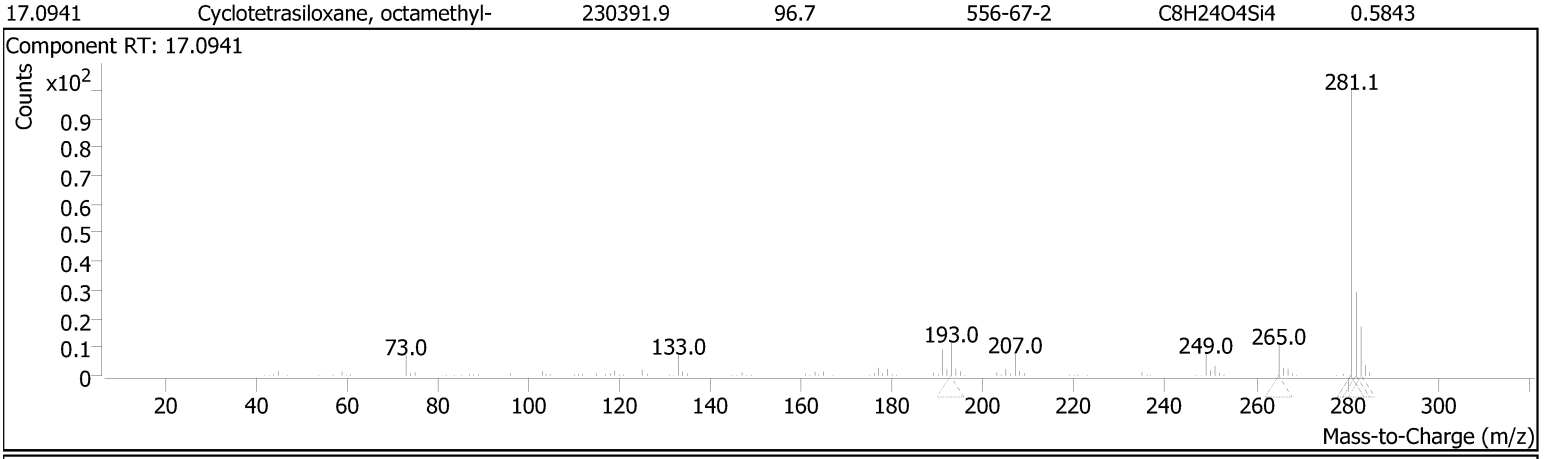


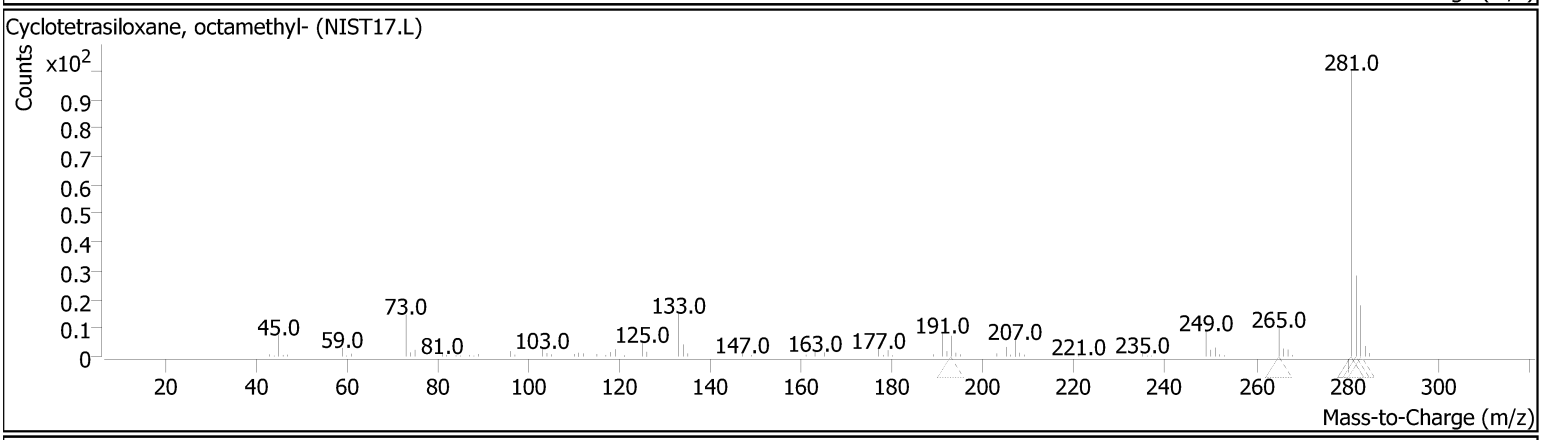


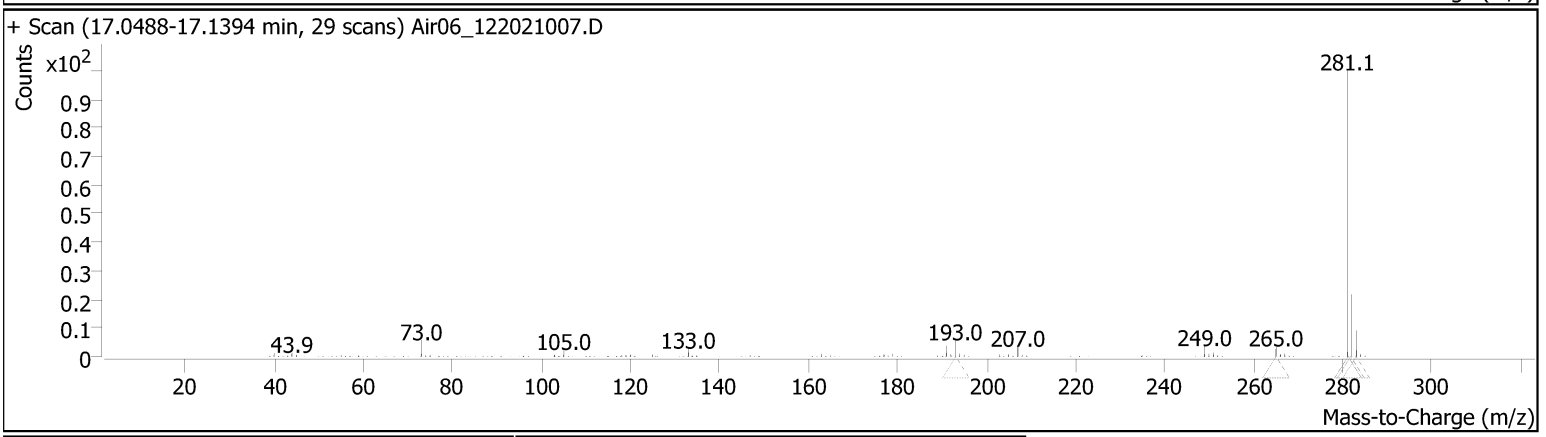


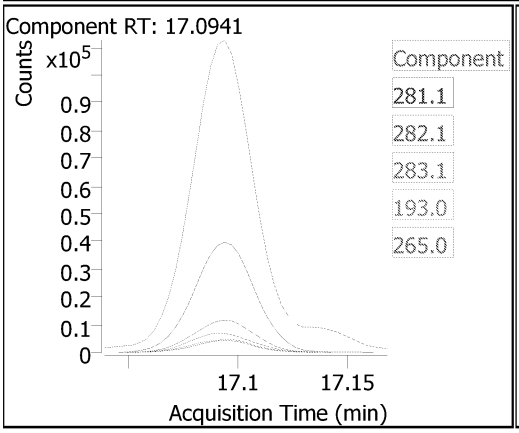


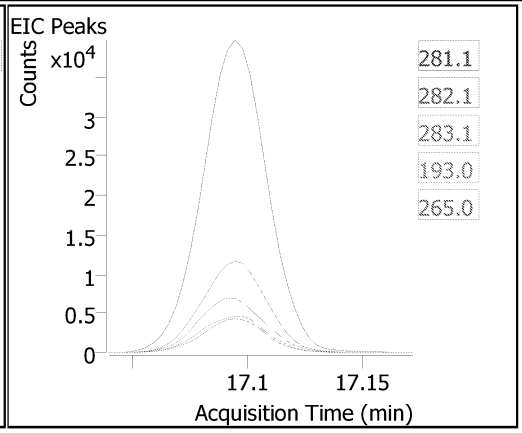
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.0941	Cyclotetrasiloxane, octamethyl-	230391.9	96.7	556-67-2	C8H24O4Si4	0.5843

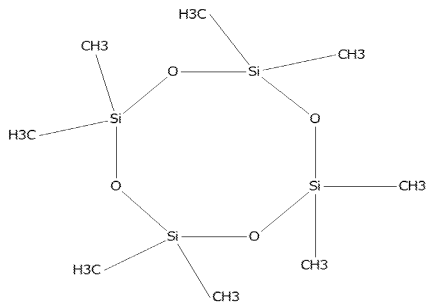




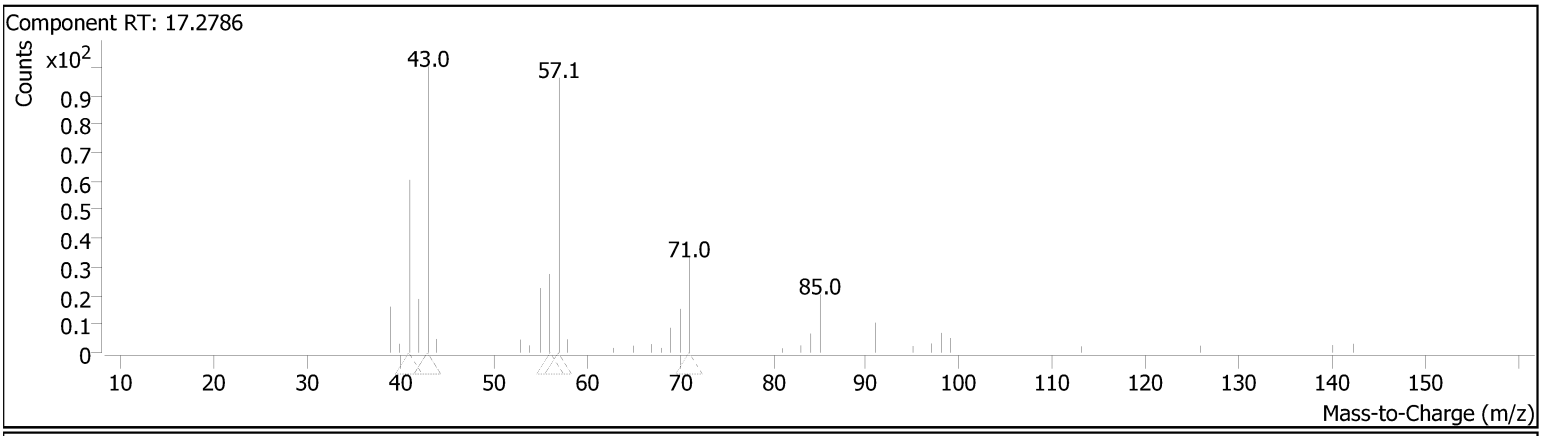


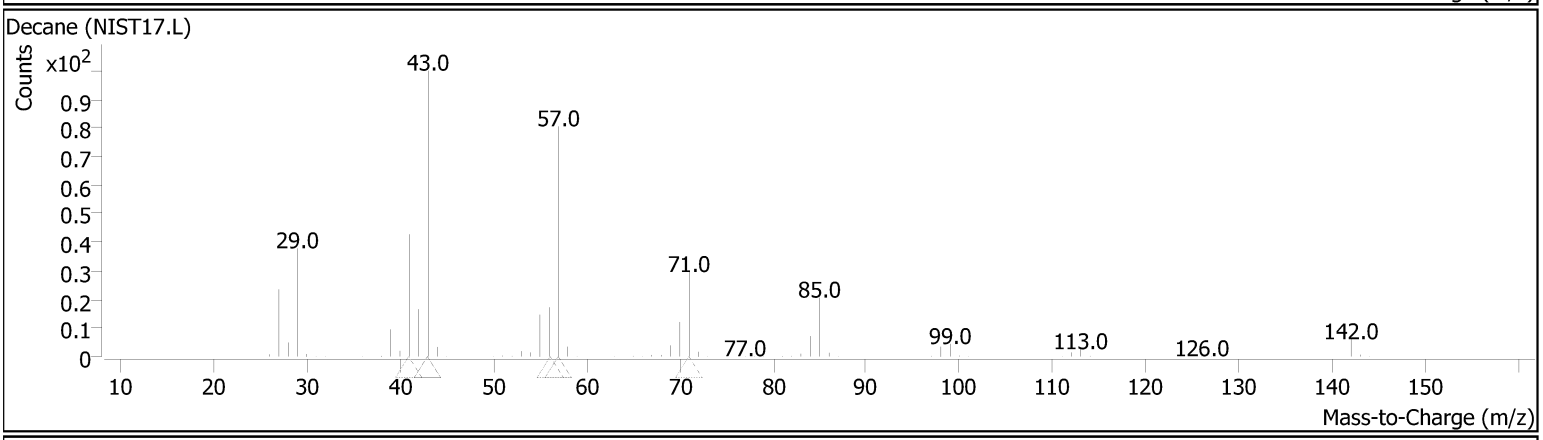


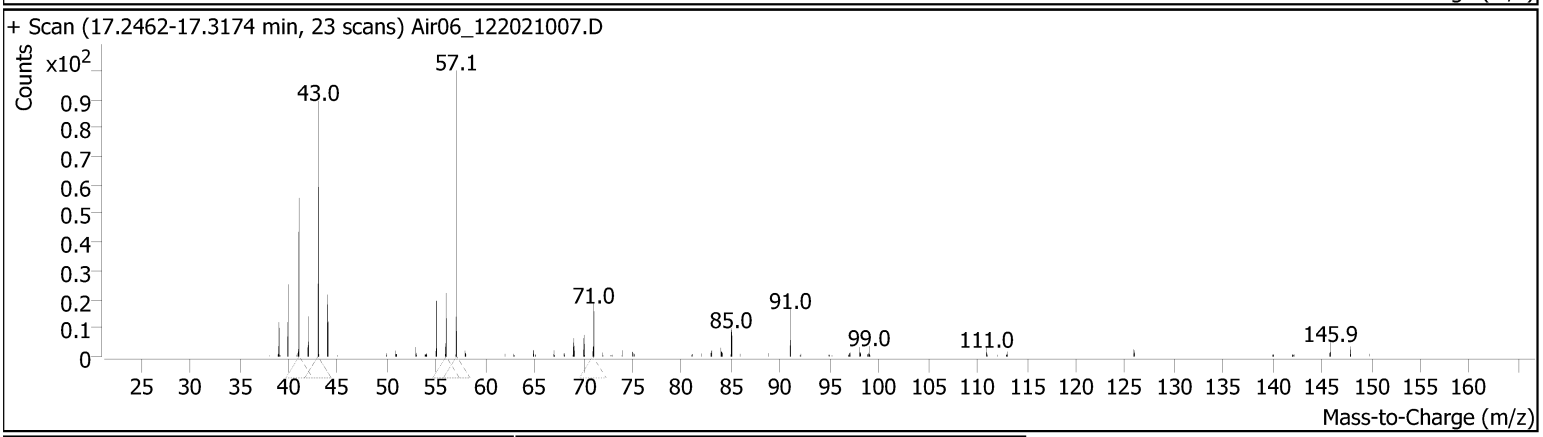


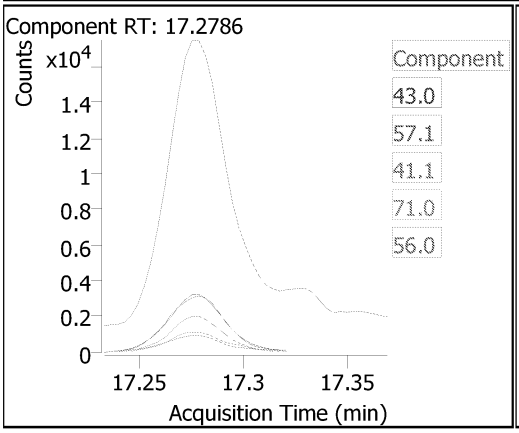


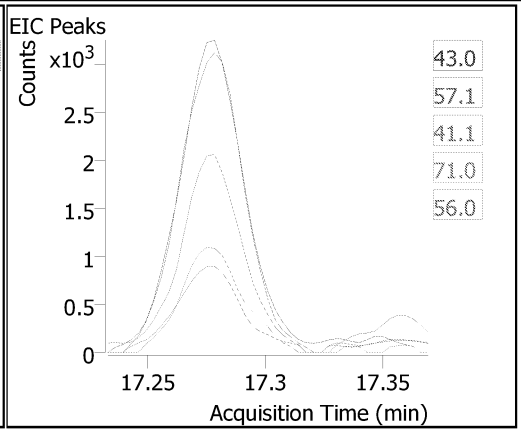
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.2786	Decane	37731.6	90.1	124-18-5	C10H22	0.09568





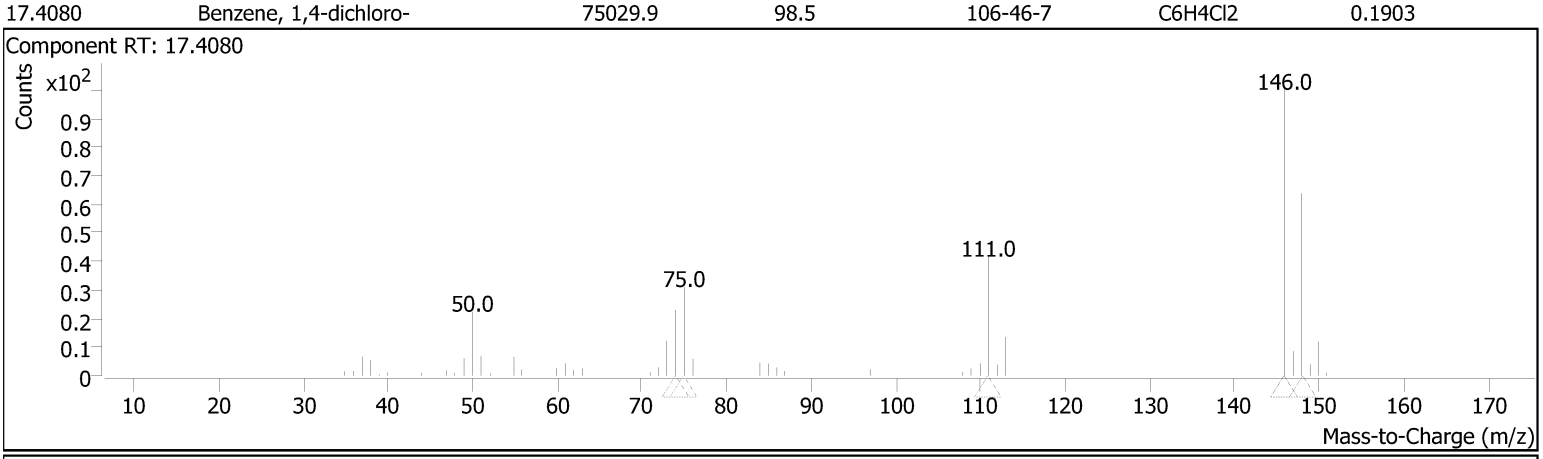


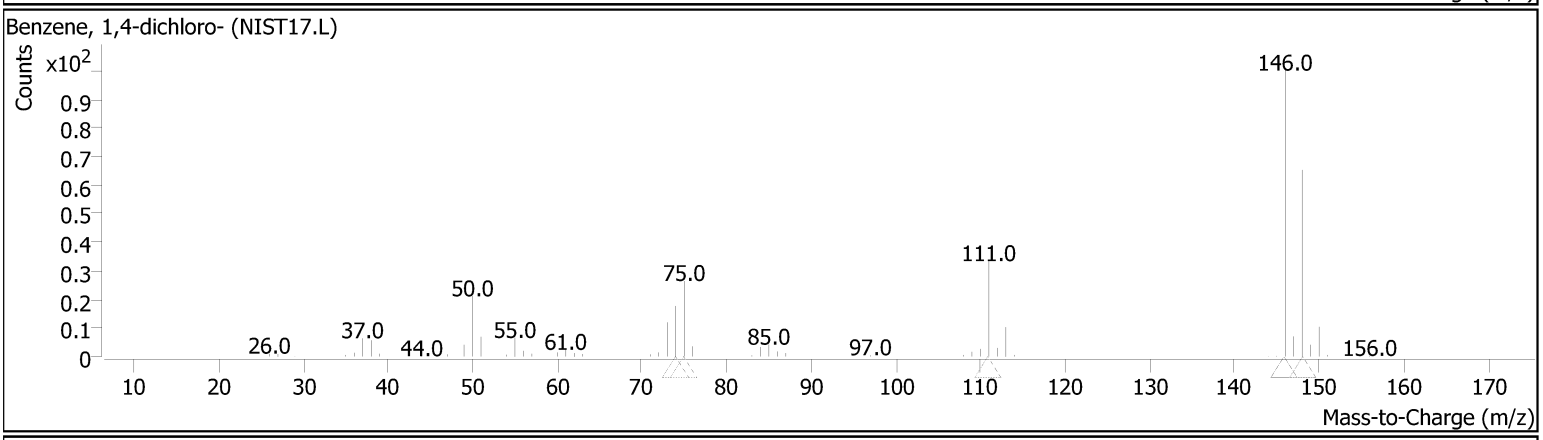


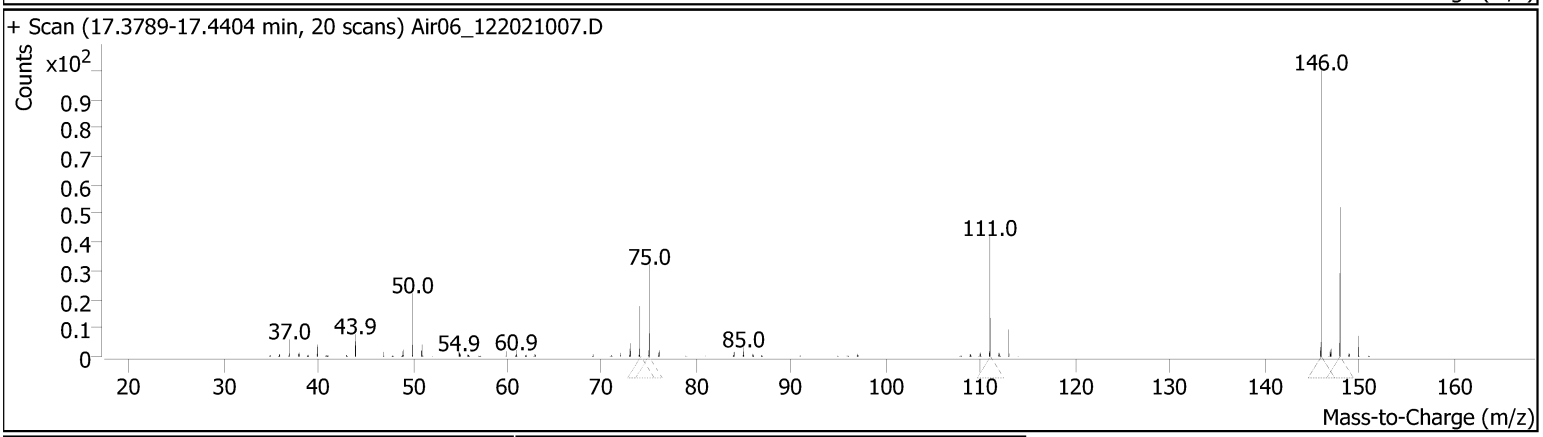


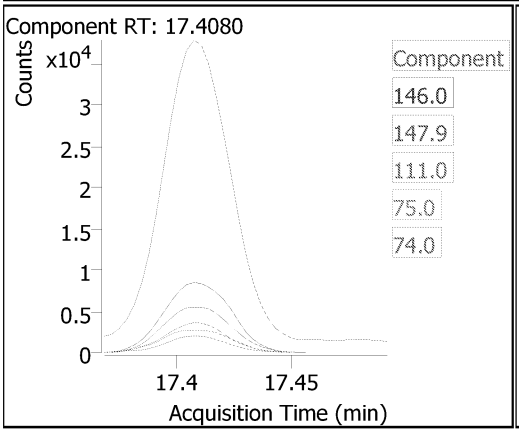


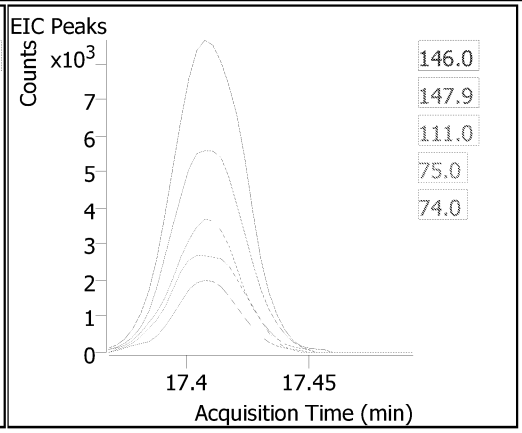
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.4080	Benzene, 1,4-dichloro-	75029.9	98.5	106-46-7	C6H4Cl2	0.1903

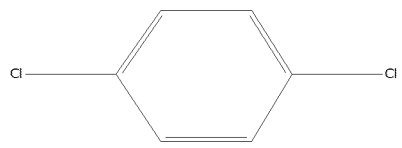




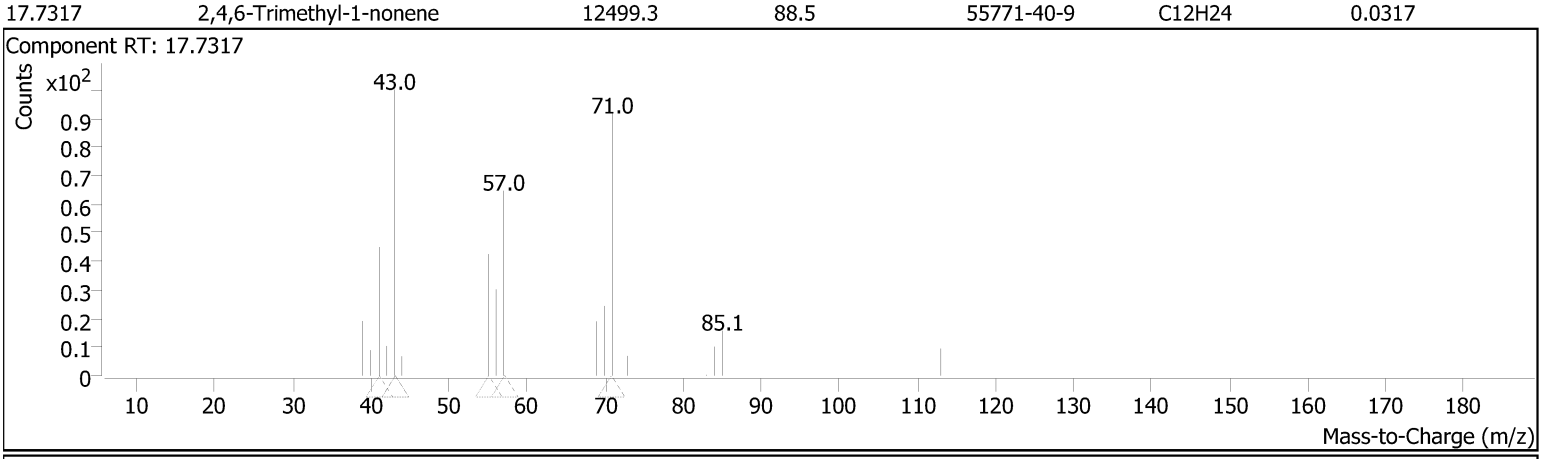


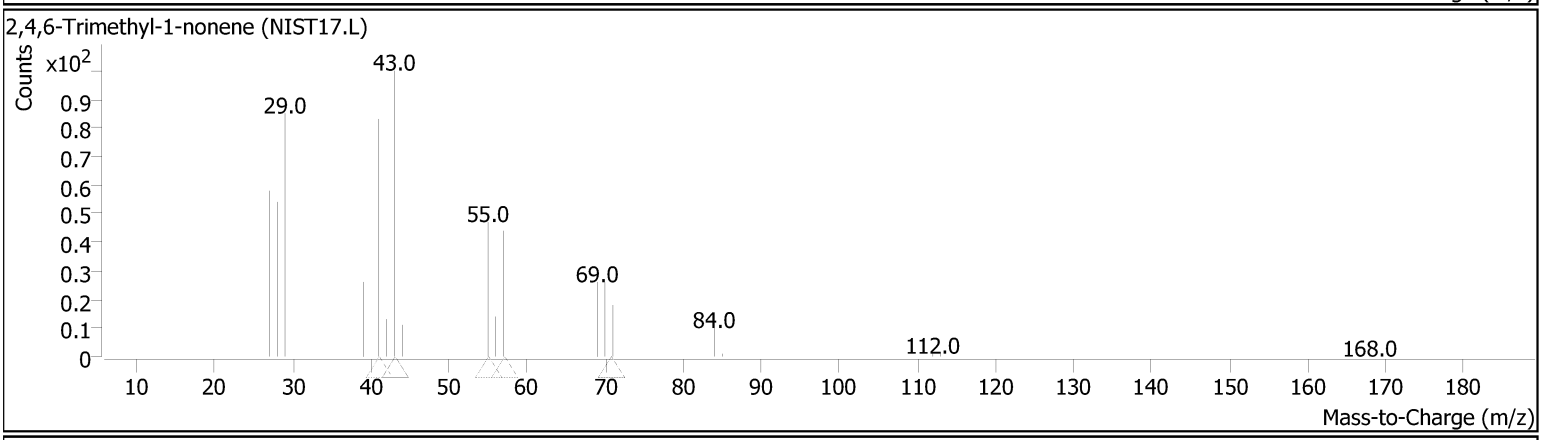


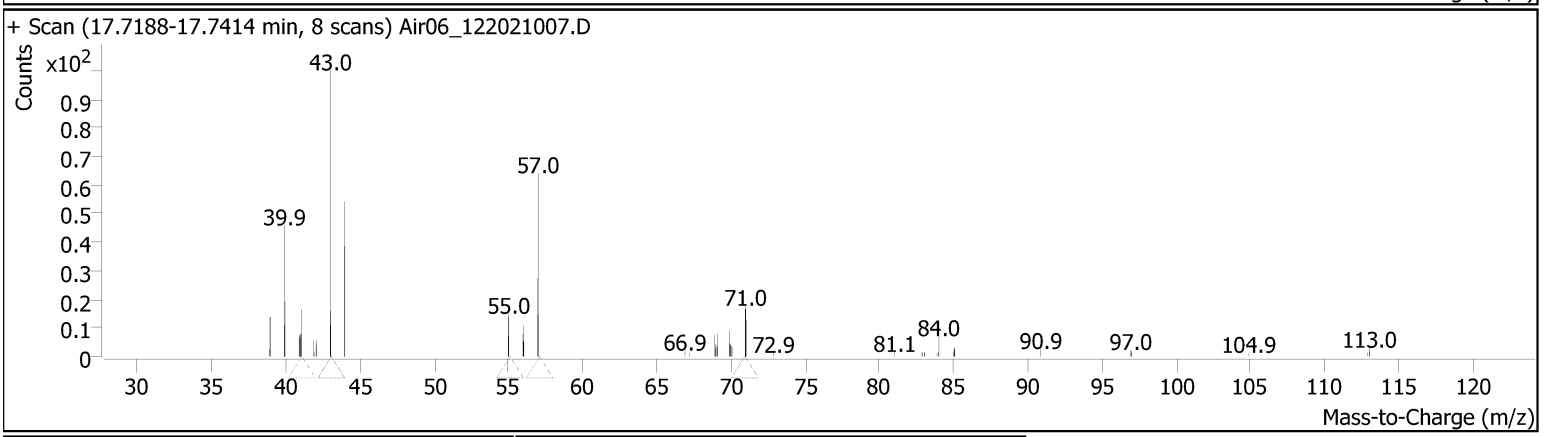


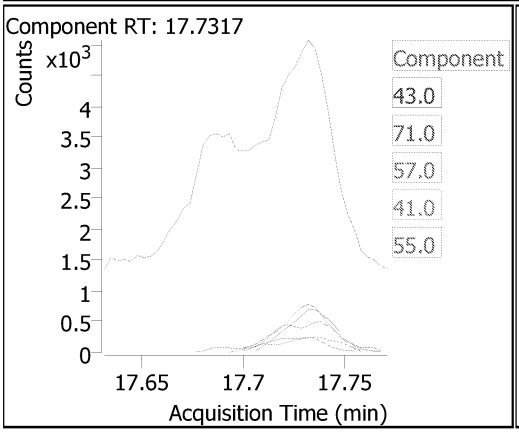


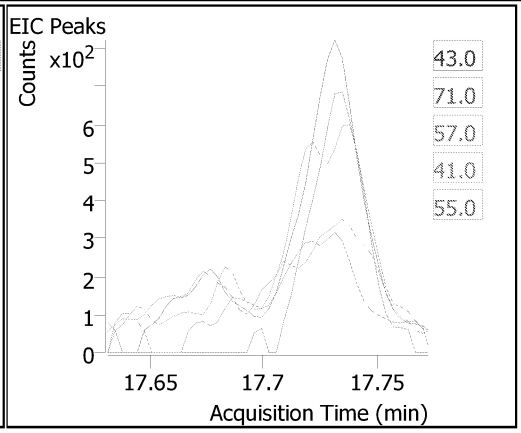
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.7317	2,4,6-Trimethyl-1-nonene	12499.3	88.5	55771-40-9	C12H24	0.0317

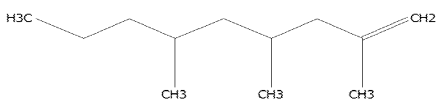




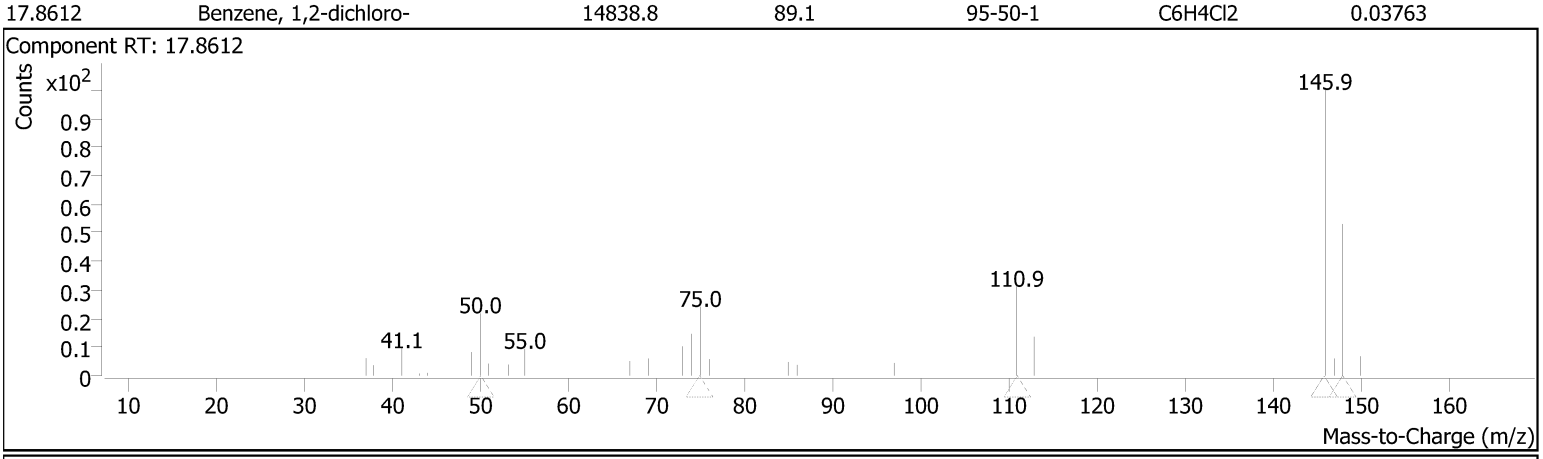


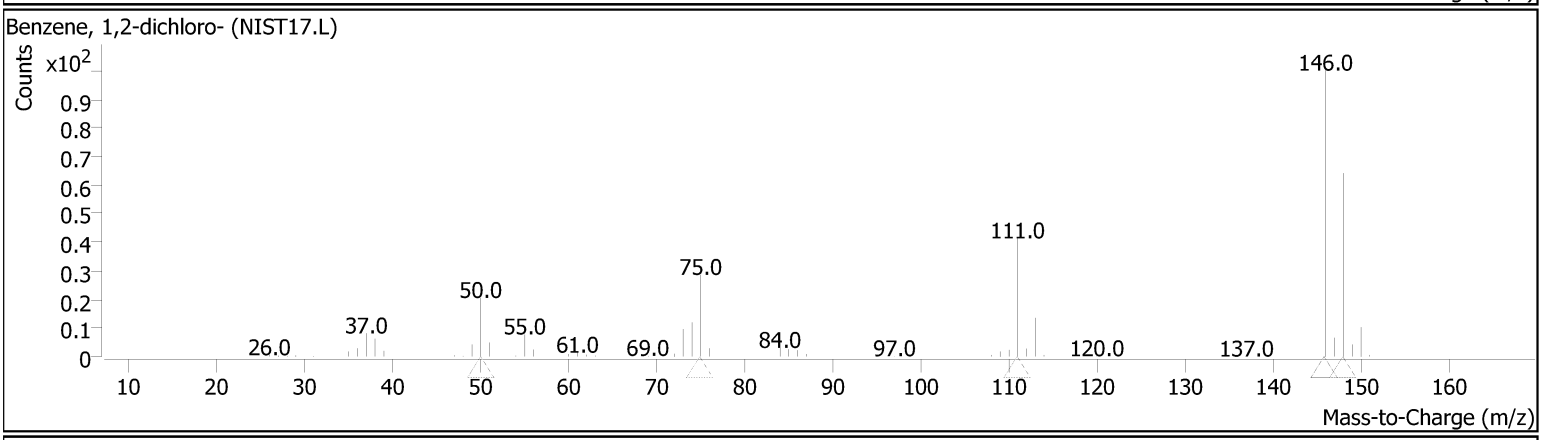


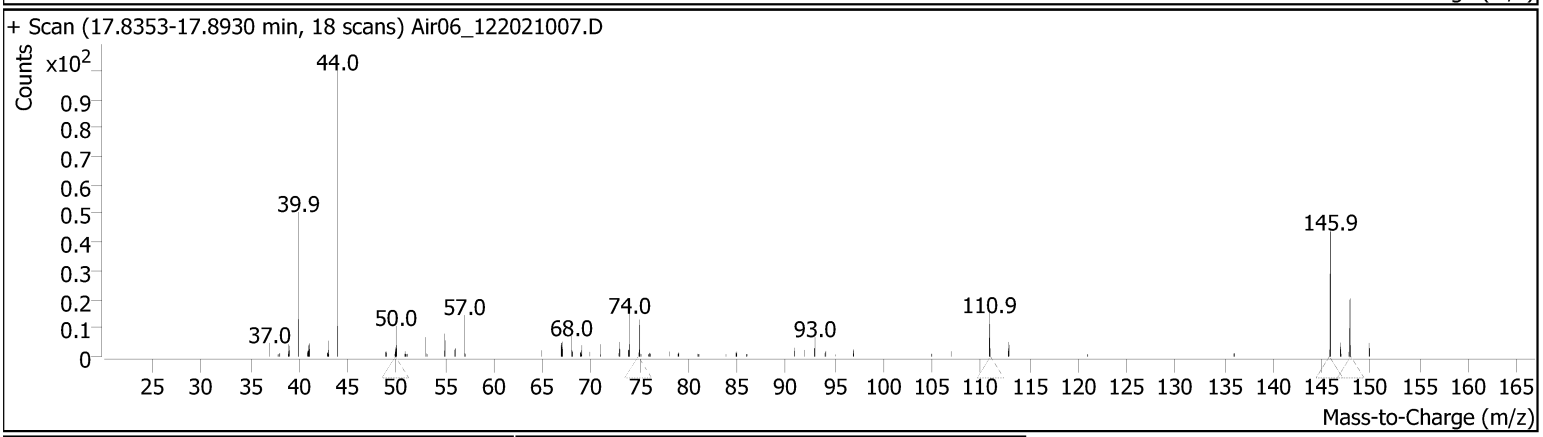


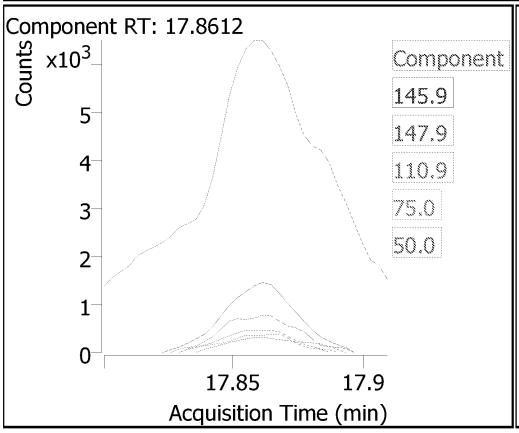


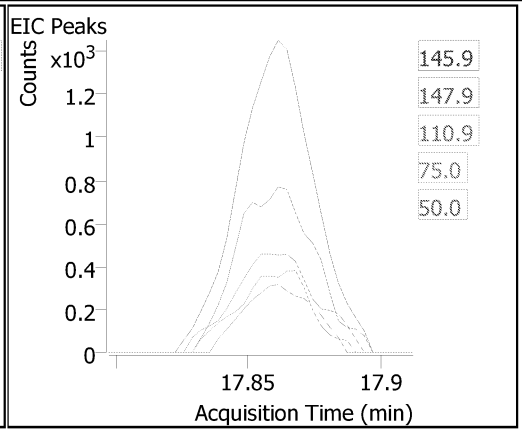
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.8612	Benzene, 1,2-dichloro-	14838.8	89.1	95-50-1	C6H4Cl2	0.03763

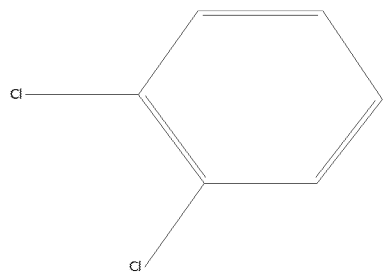




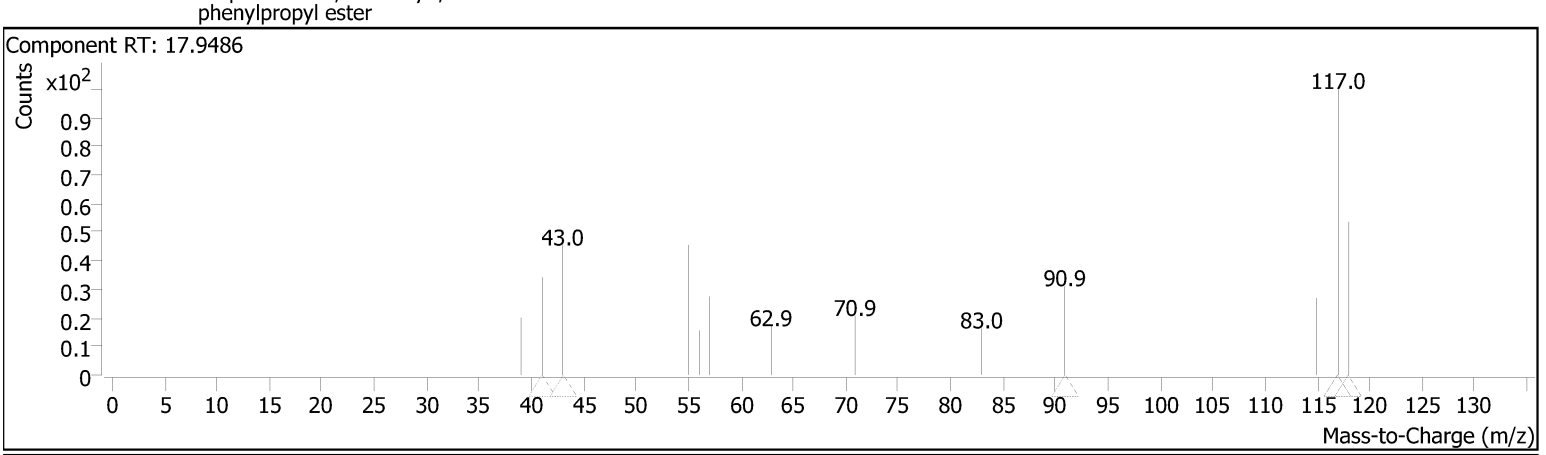


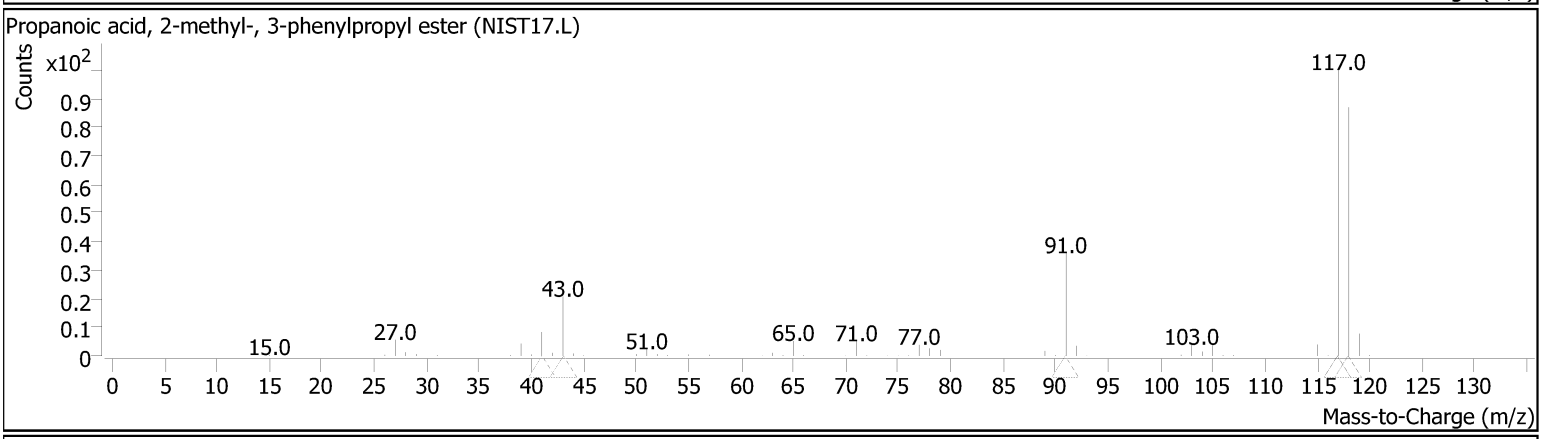


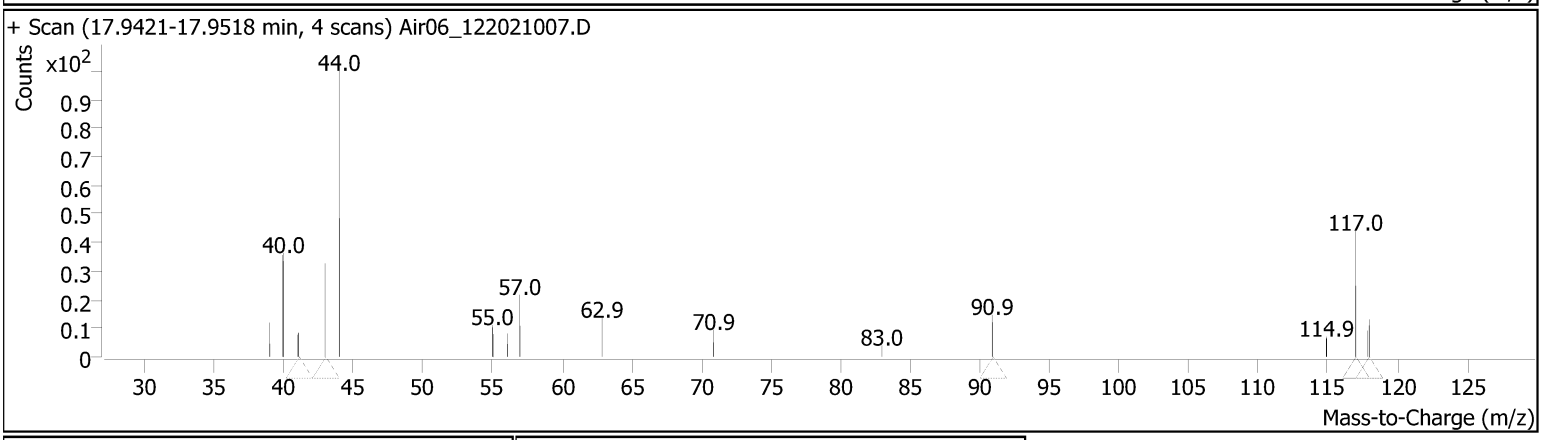


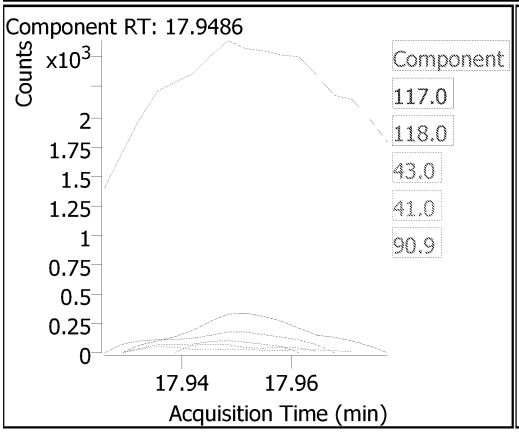


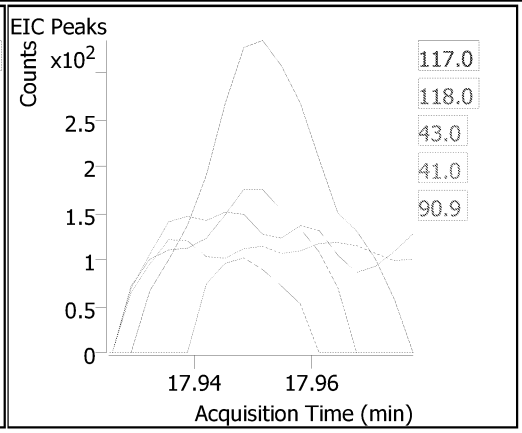
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.9486	Propanoic acid, 2-methyl-, 3-phenylpropyl ester	2808.9	70.5	103-58-2	C13H18O2	0.007123

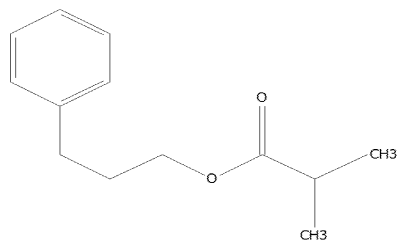




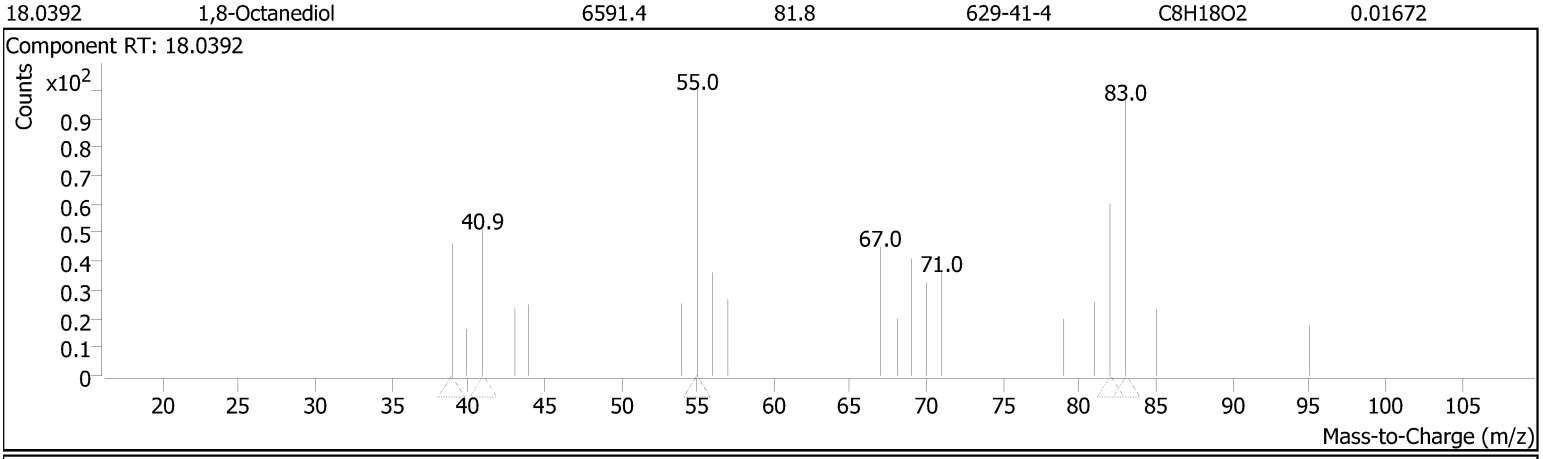


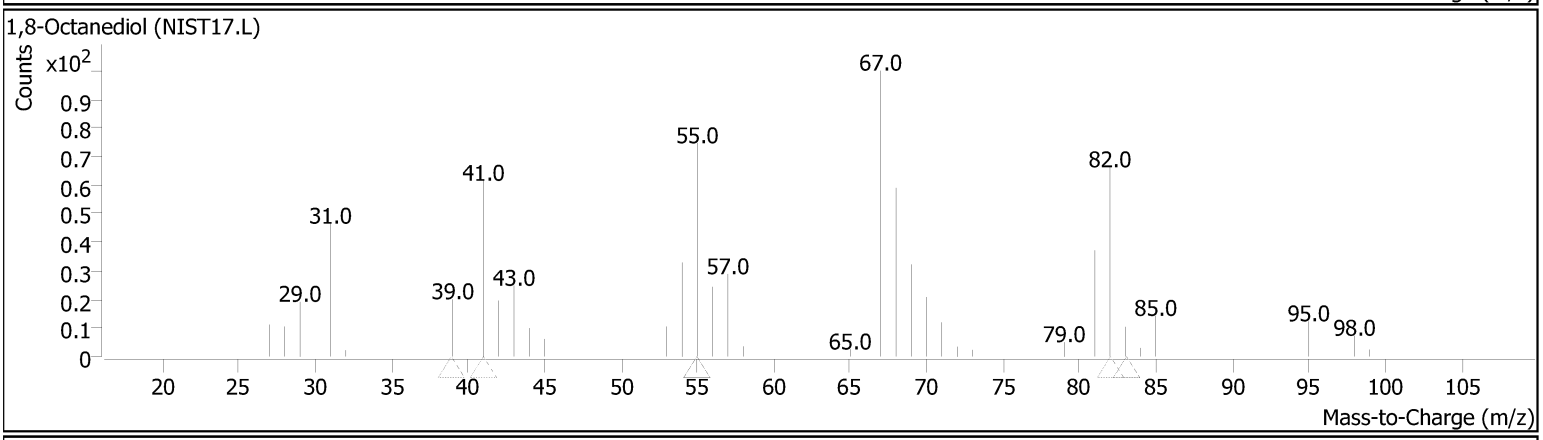


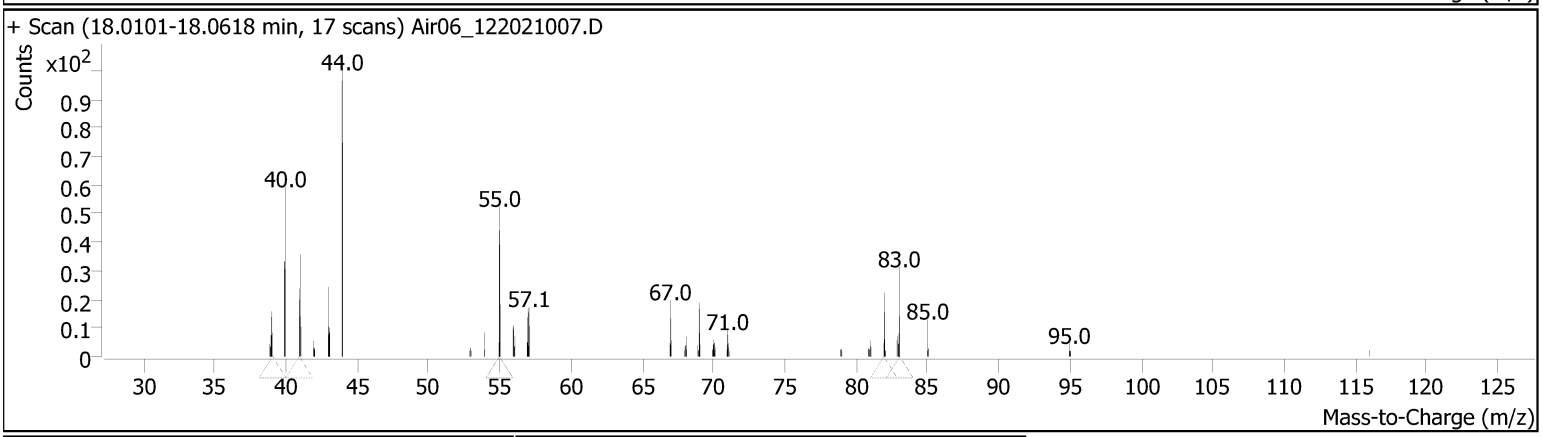


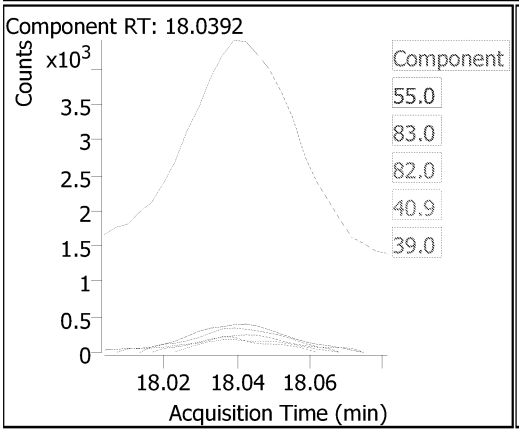


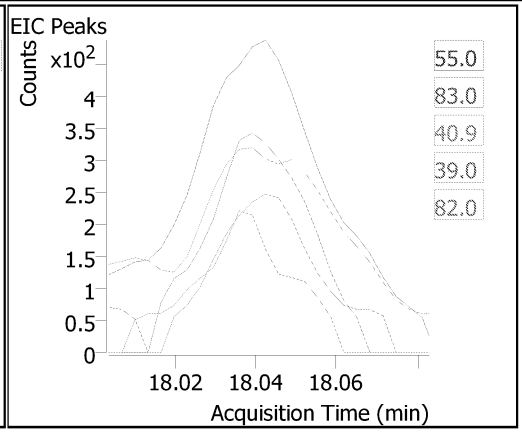
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.0392	1,8-Octanediol	6591.4	81.8	629-41-4	C8H18O2	0.01672





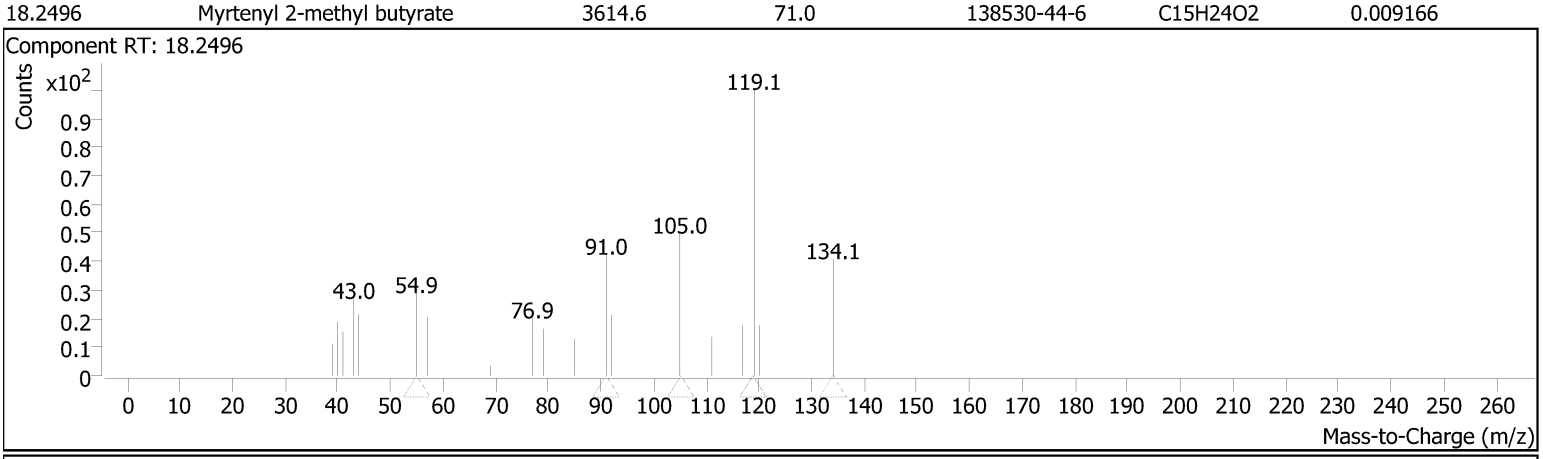


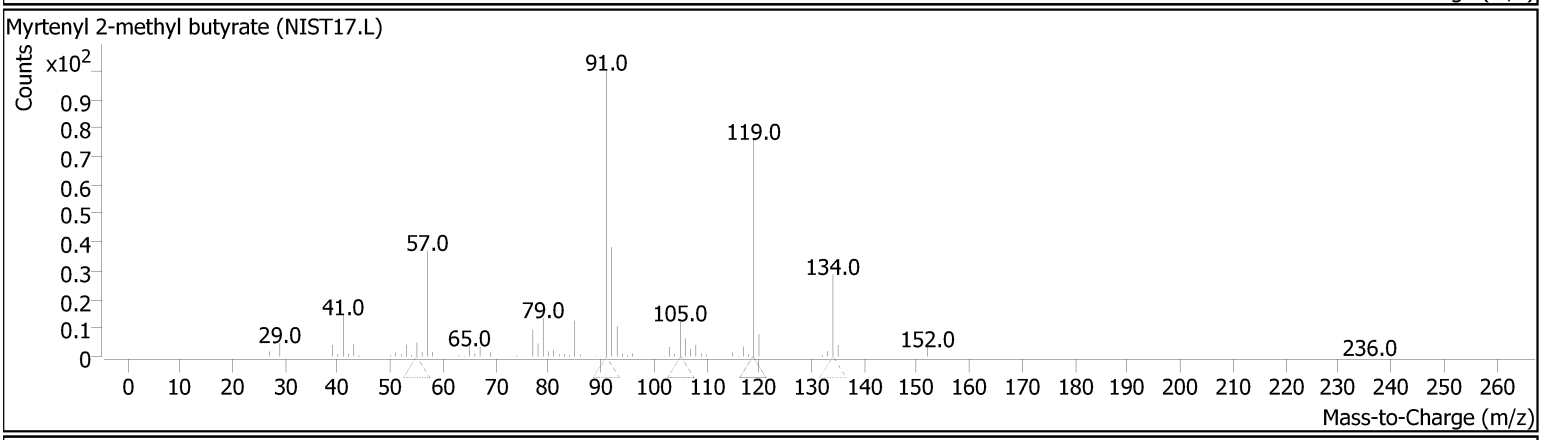


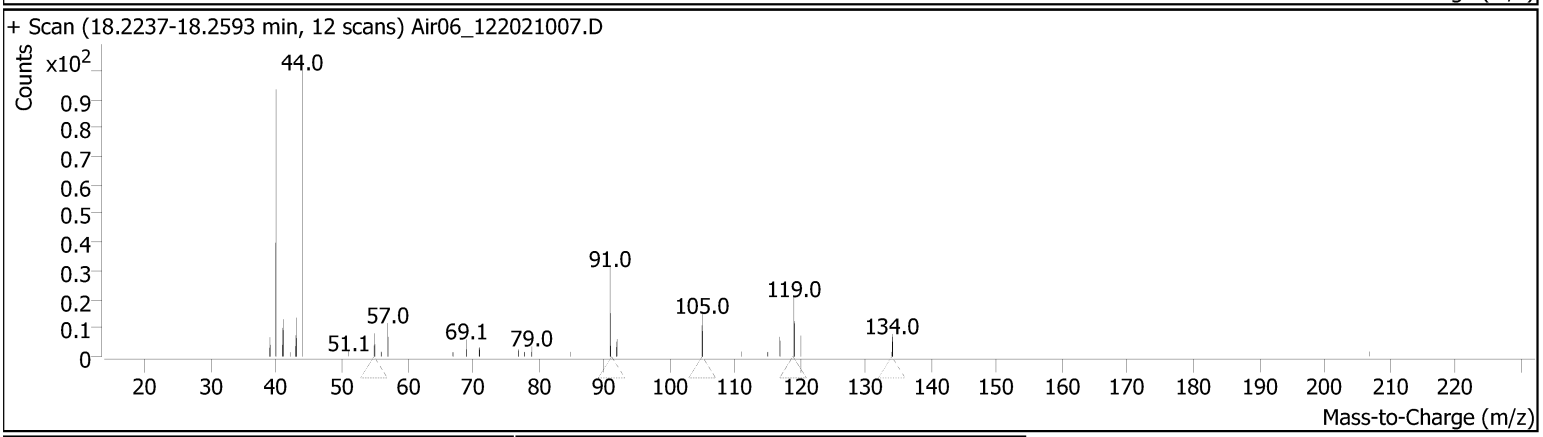


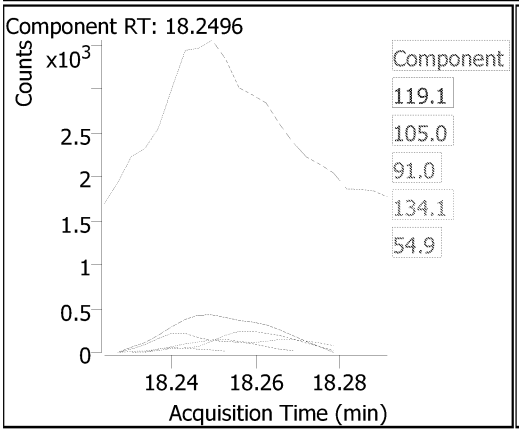


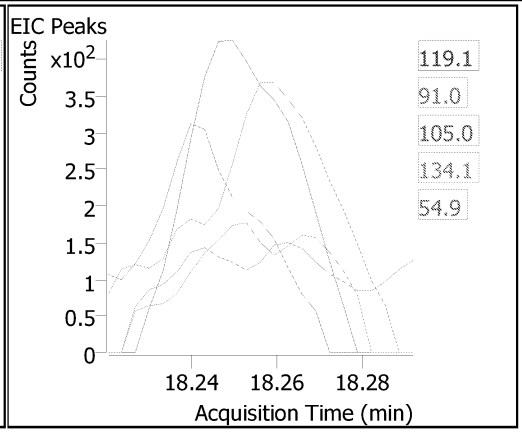
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.2496	Myrtenyl 2-methyl butyrate	3614.6	71.0	138530-44-6	C15H24O2	0.009166

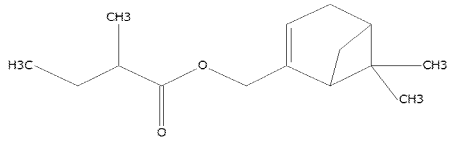








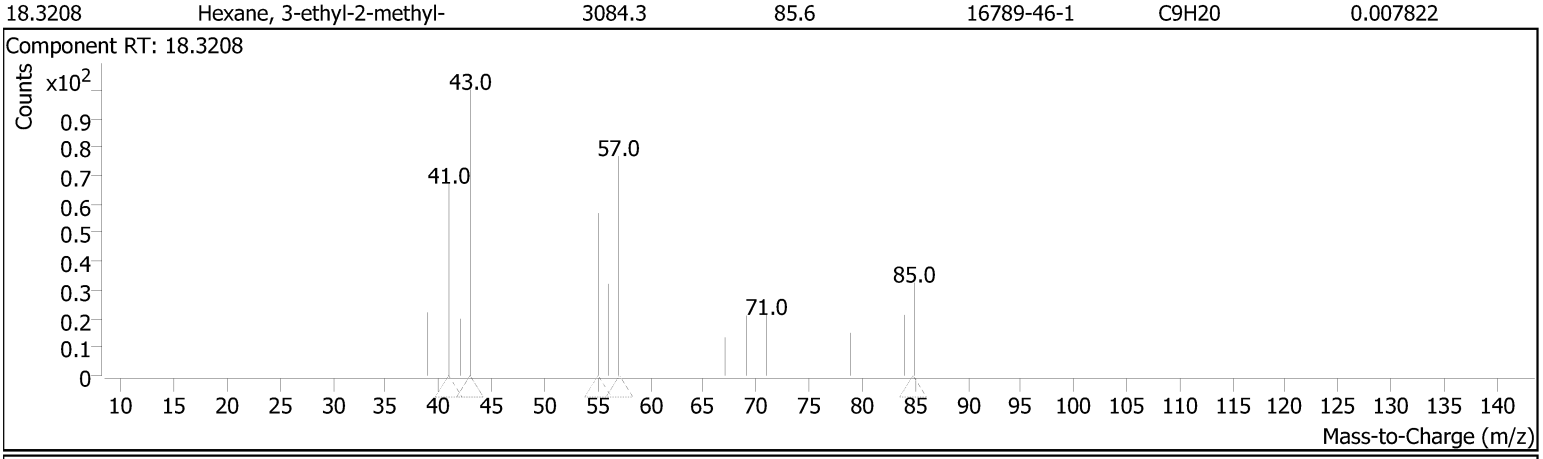


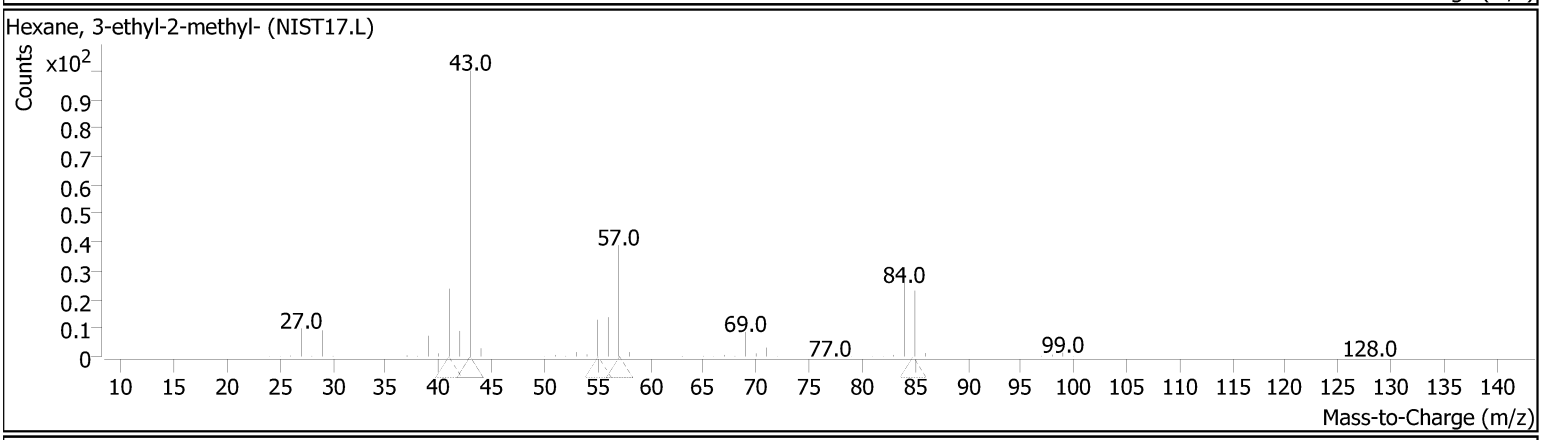


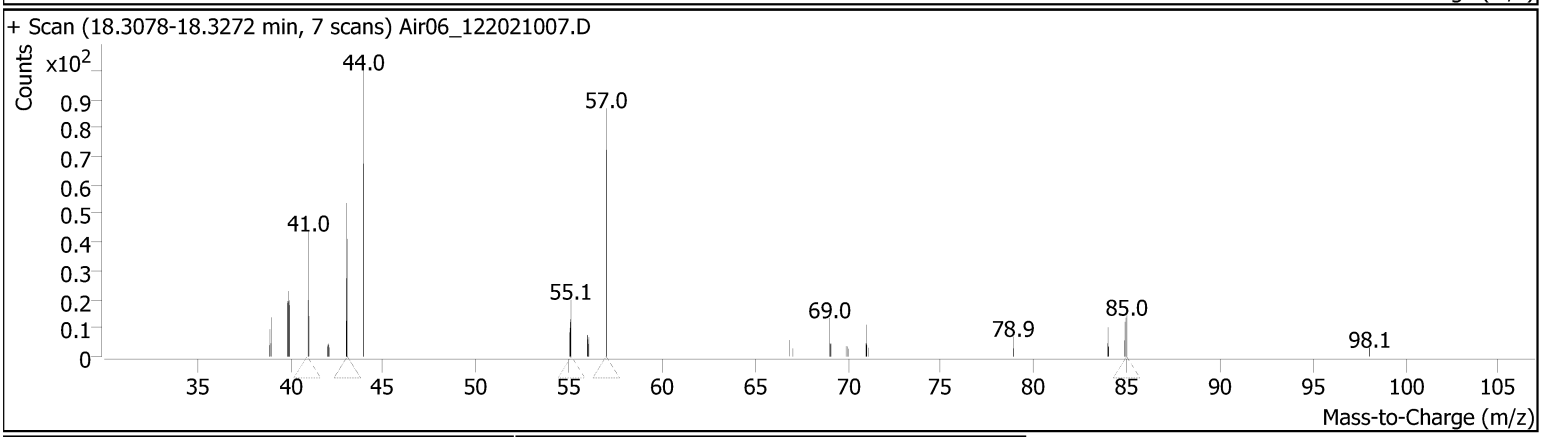
Library Search Results - NonTarget Hits with Details

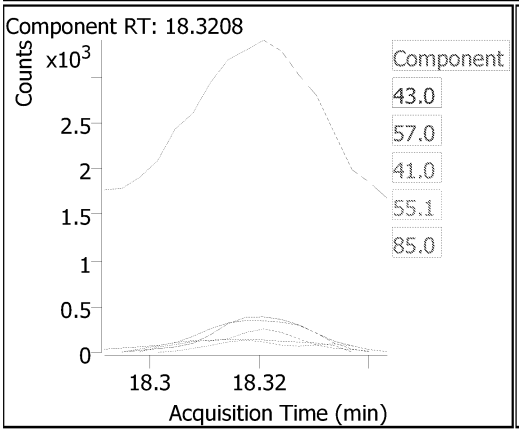
Agilent Technologies

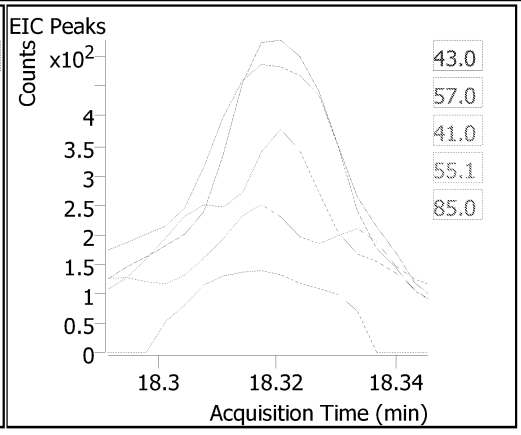
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3208	Hexane, 3-ethyl-2-methyl-	3084.3	85.6	16789-46-1	C9H20	0.007822

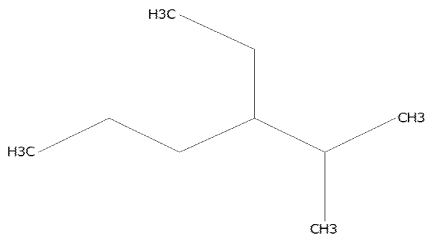




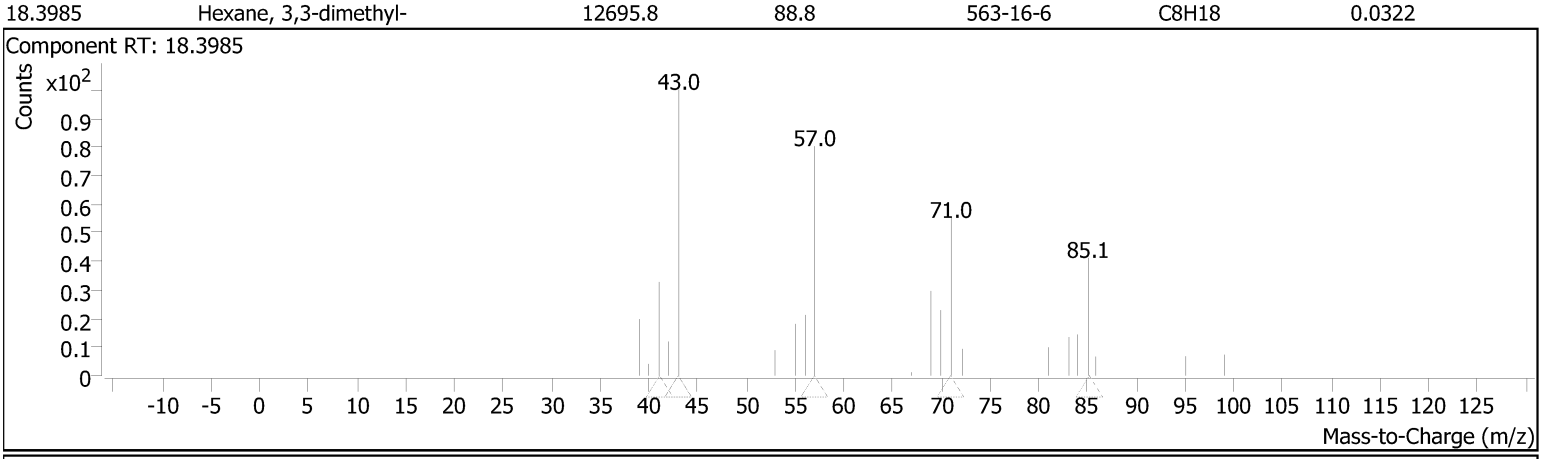


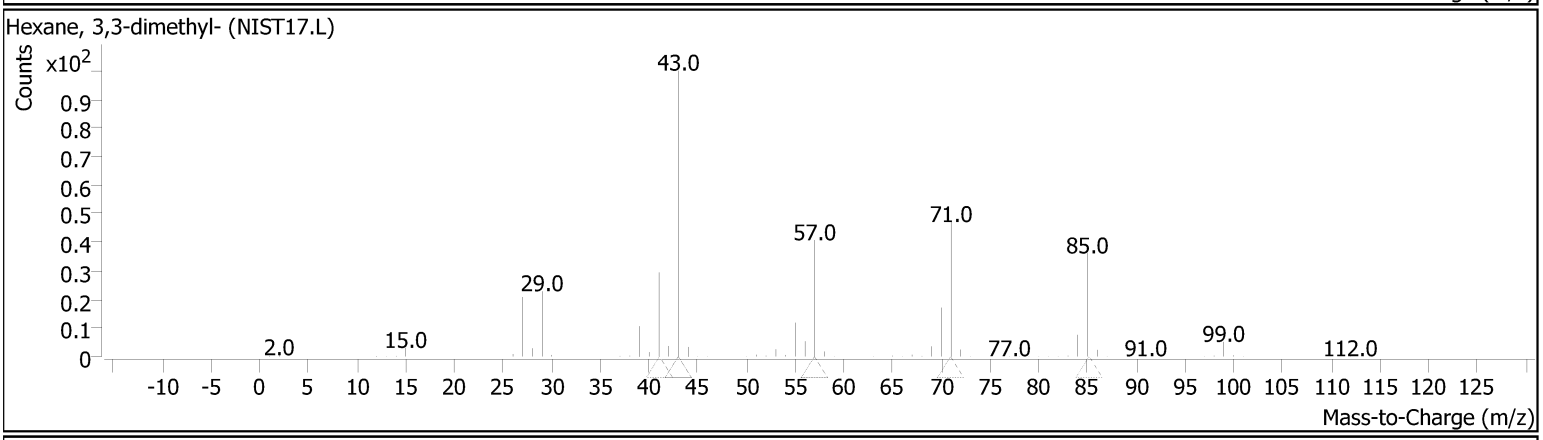


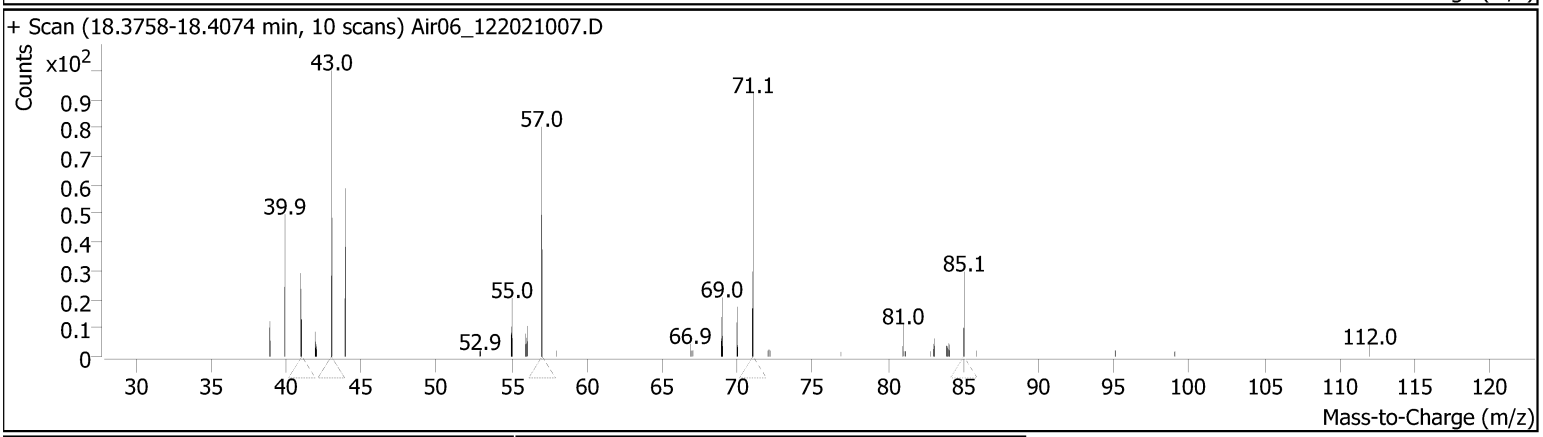


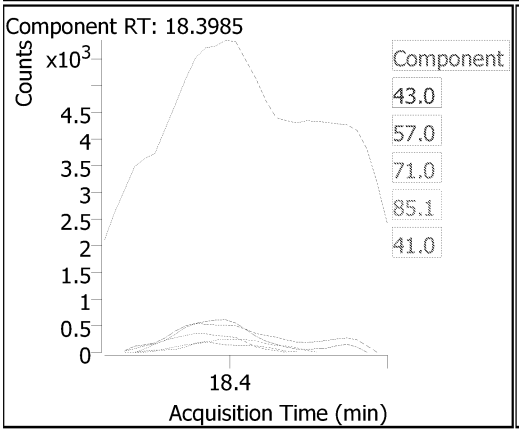


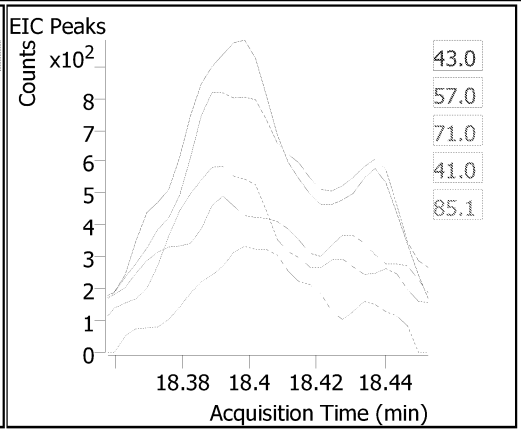
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3985	Hexane, 3,3-dimethyl-	12695.8	88.8	563-16-6	C8H18	0.0322

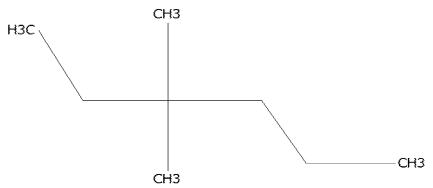




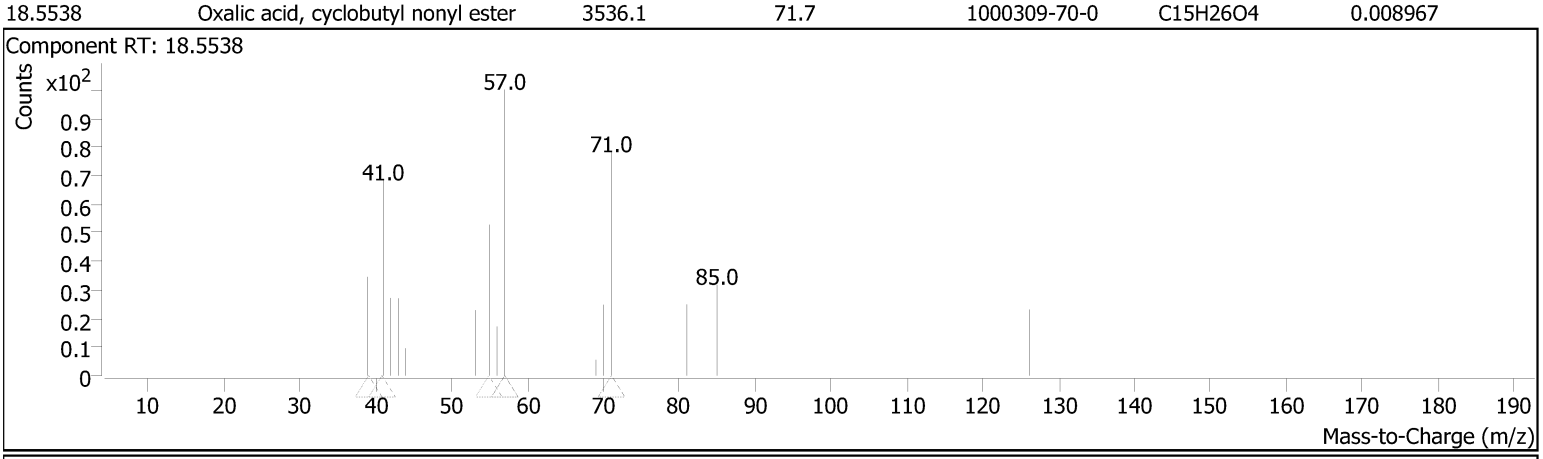


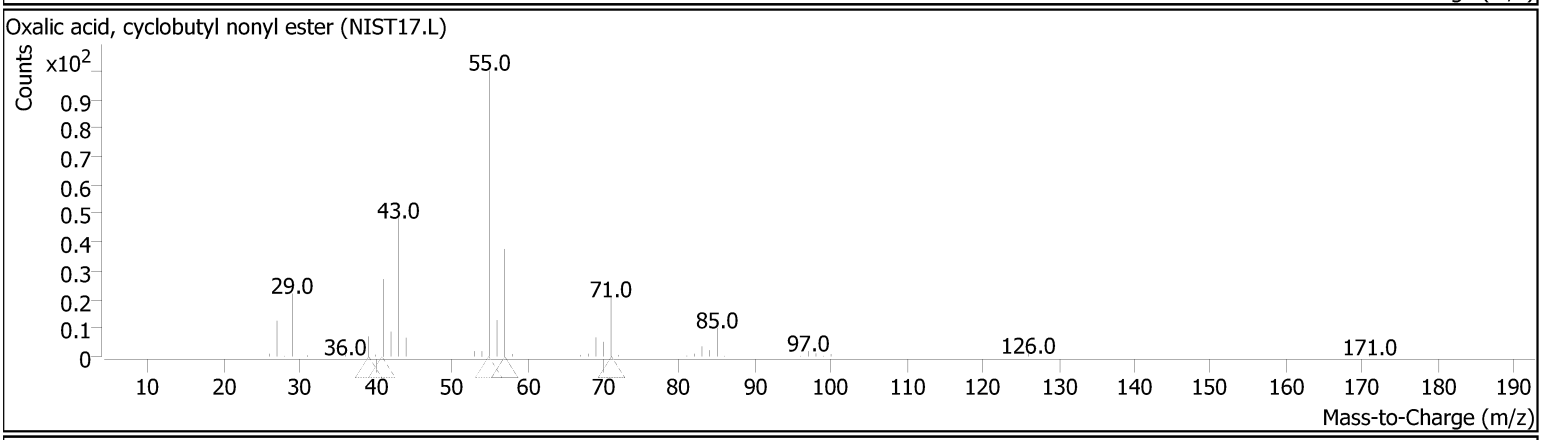


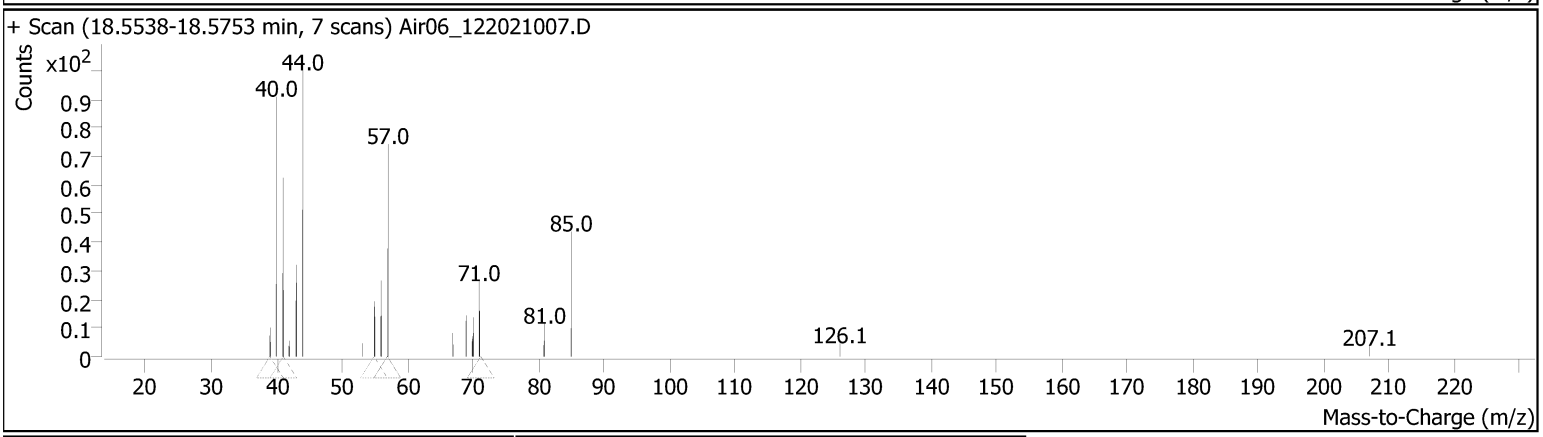


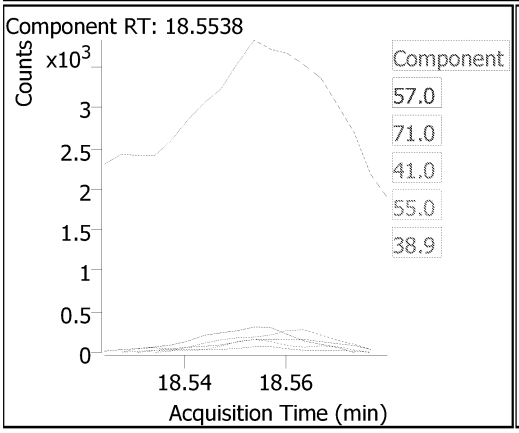


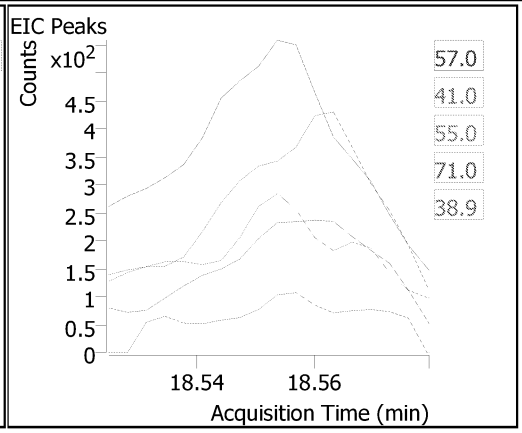
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.5538	Oxalic acid, cyclobutyl nonyl ester	3536.1	71.7	1000309-70-0	C15H26O4	0.008967

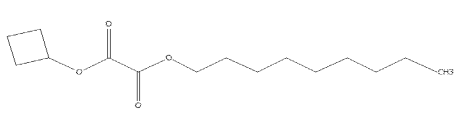




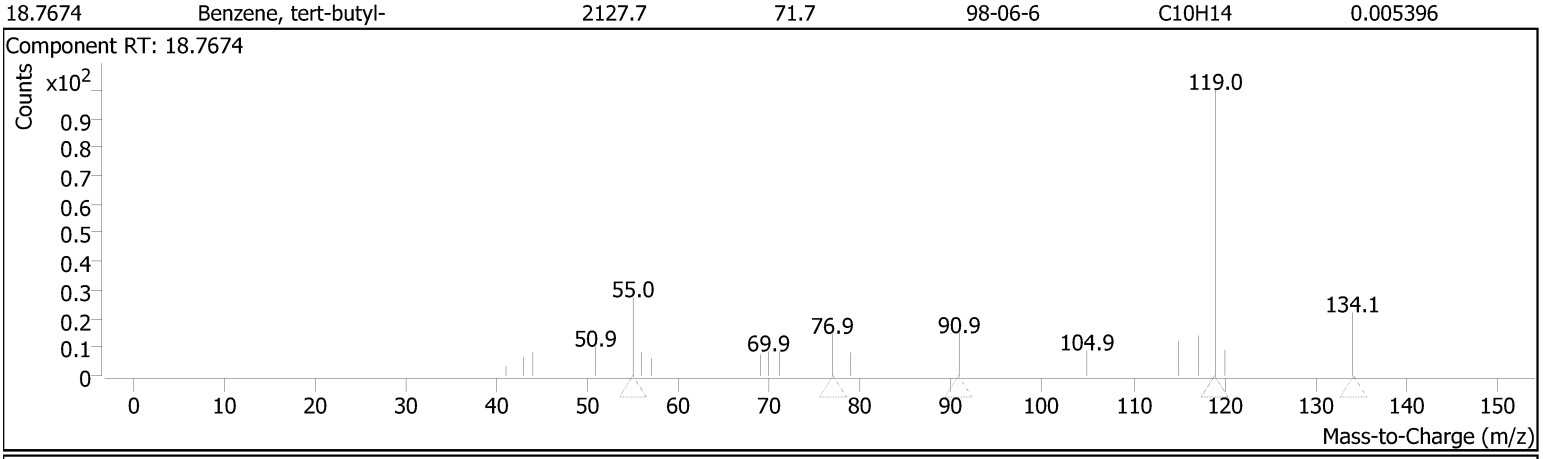


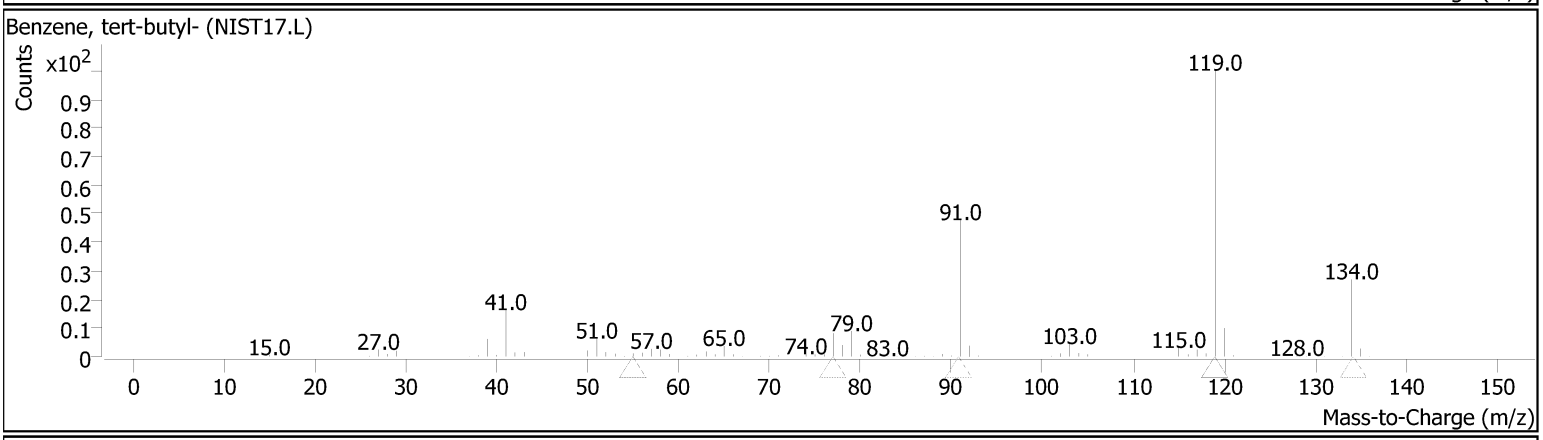


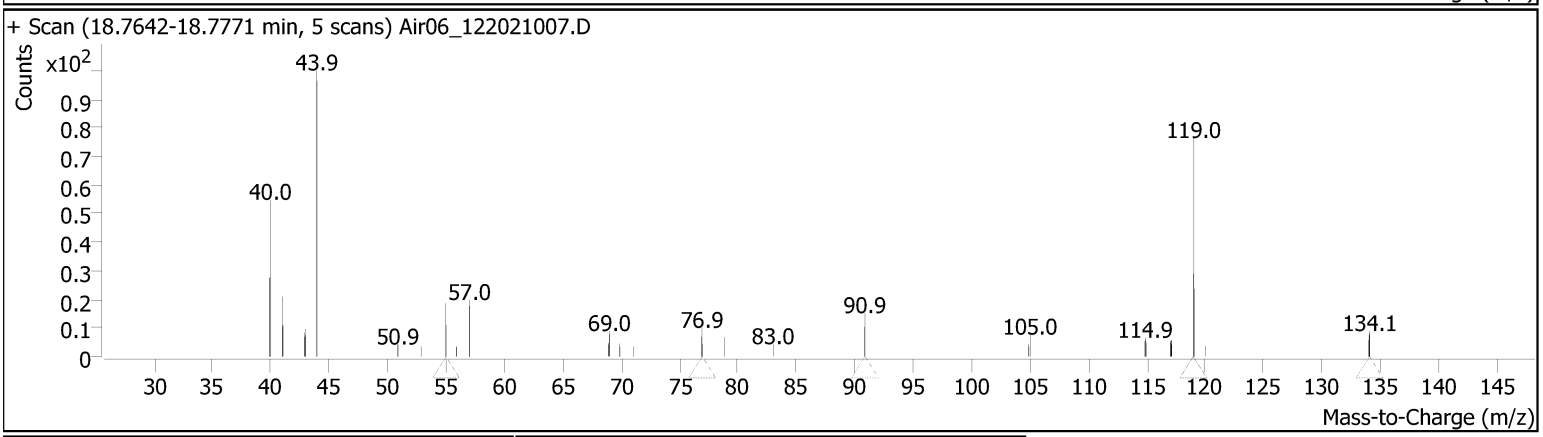


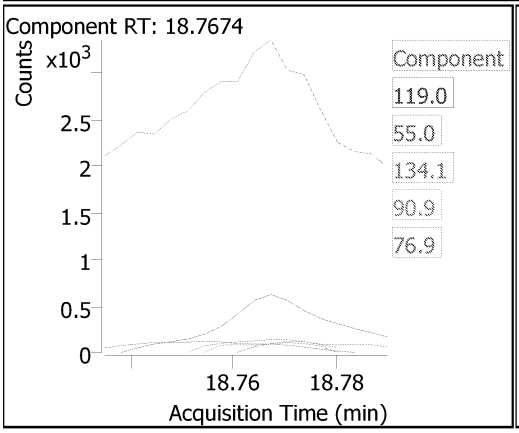


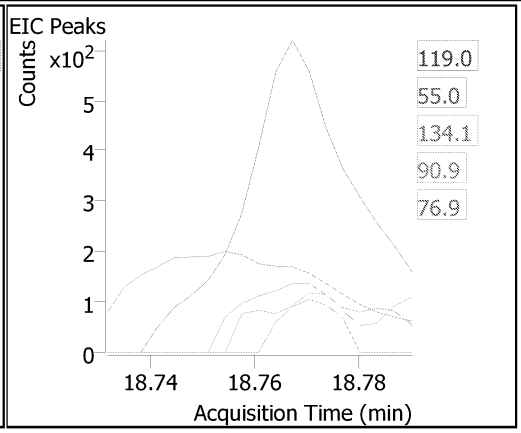
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.7674	Benzene, tert-butyl-	2127.7	71.7	98-06-6	C10H14	0.005396

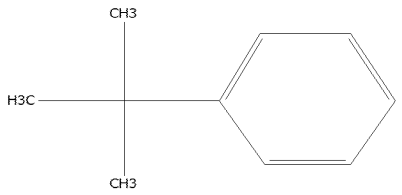




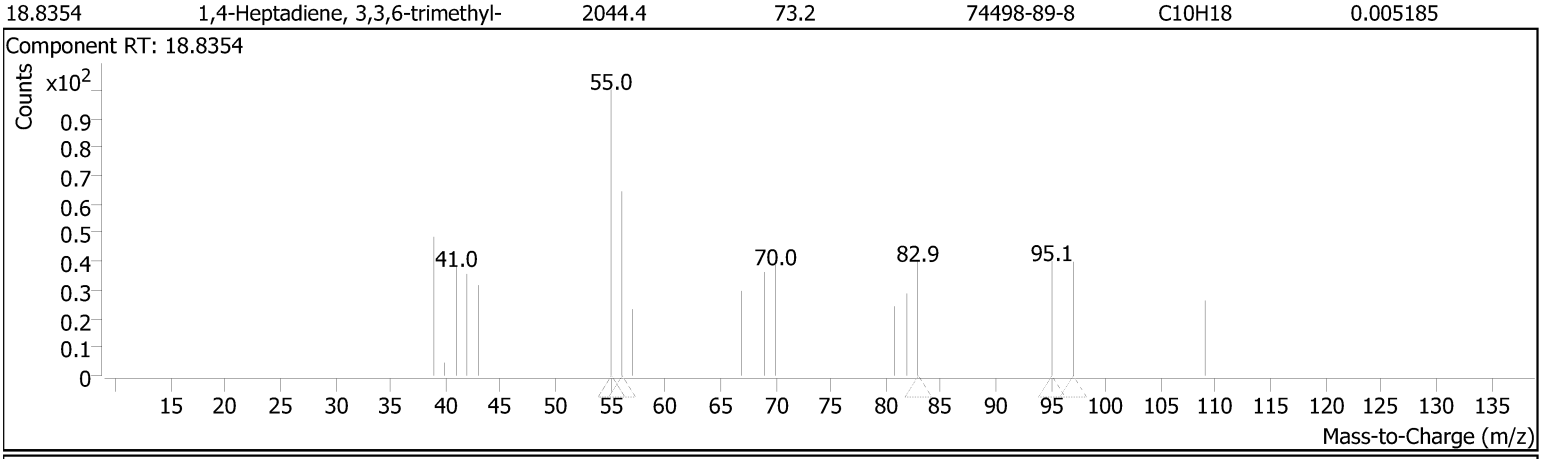


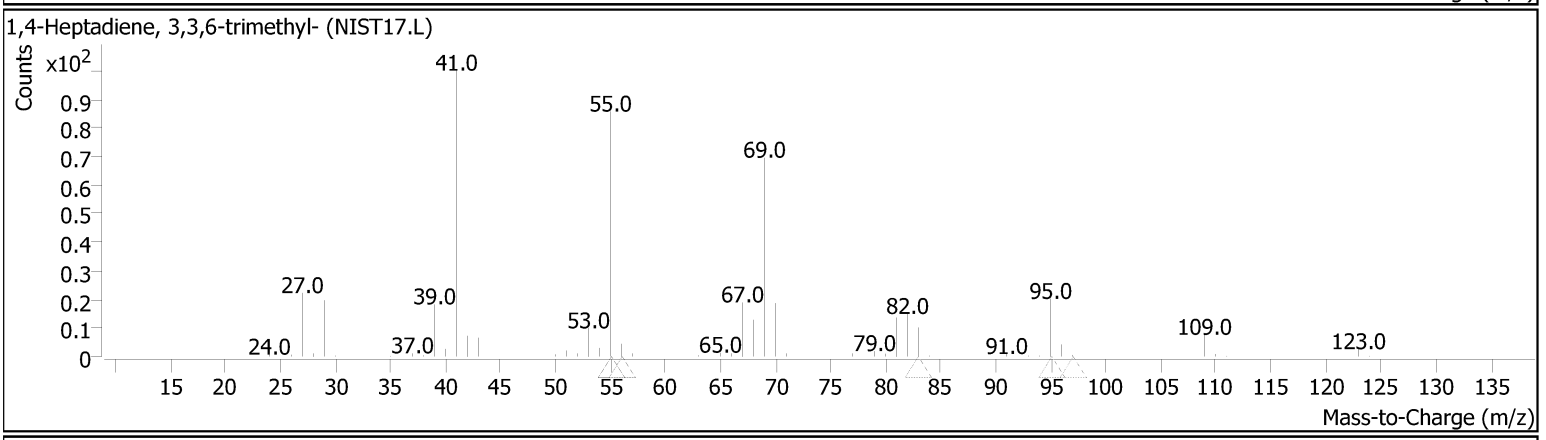


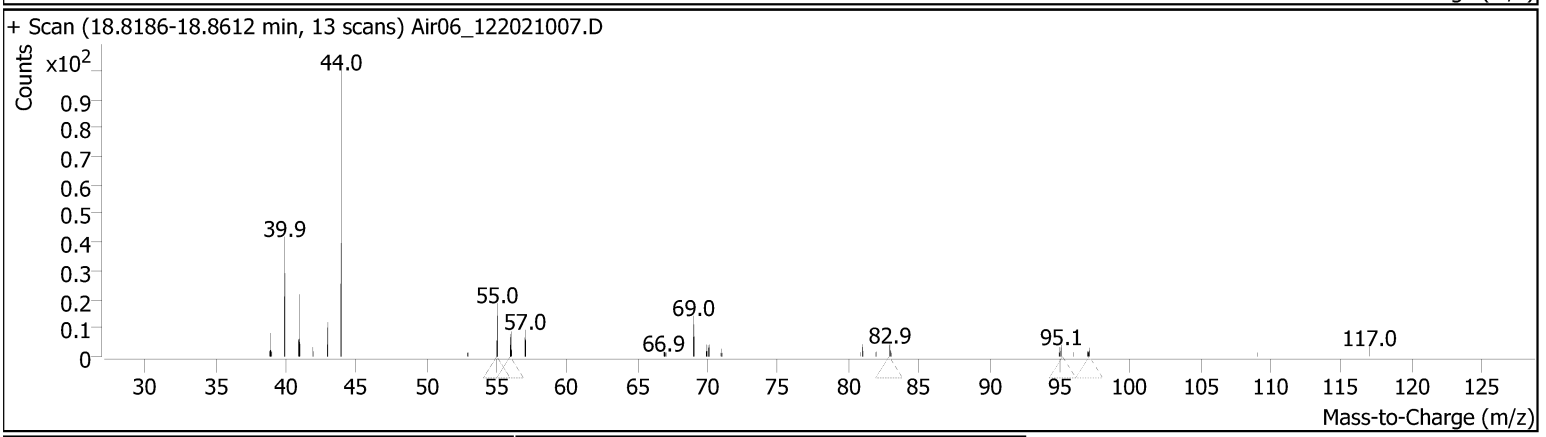


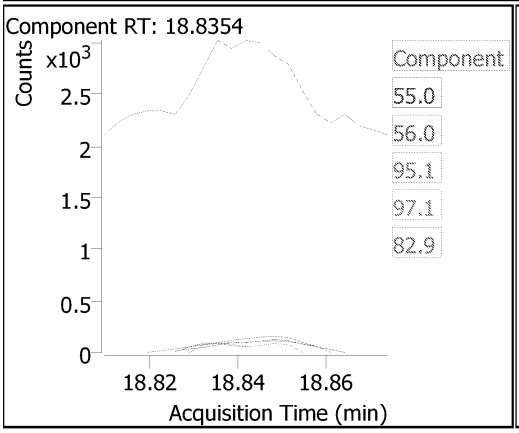


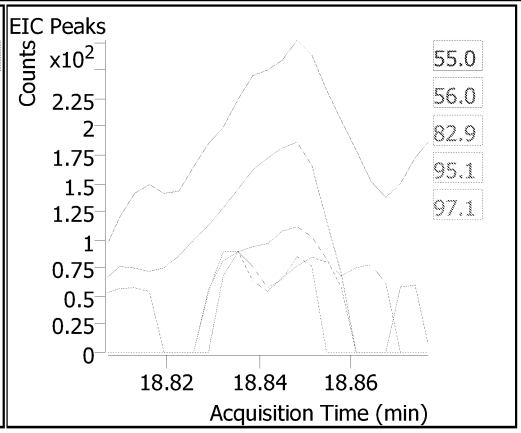
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.8354	1,4-Heptadiene, 3,3,6-trimethyl-	2044.4	73.2	74498-89-8	C10H18	0.005185

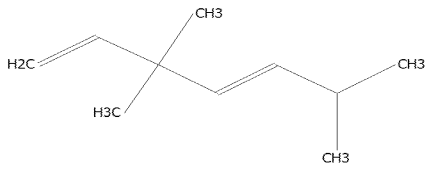




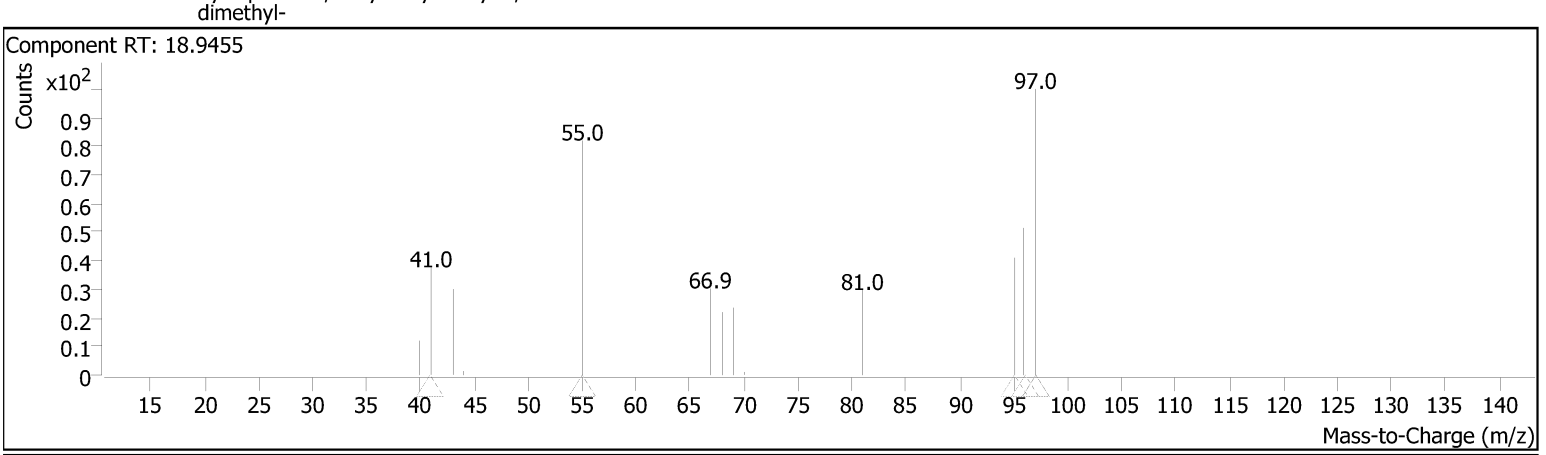


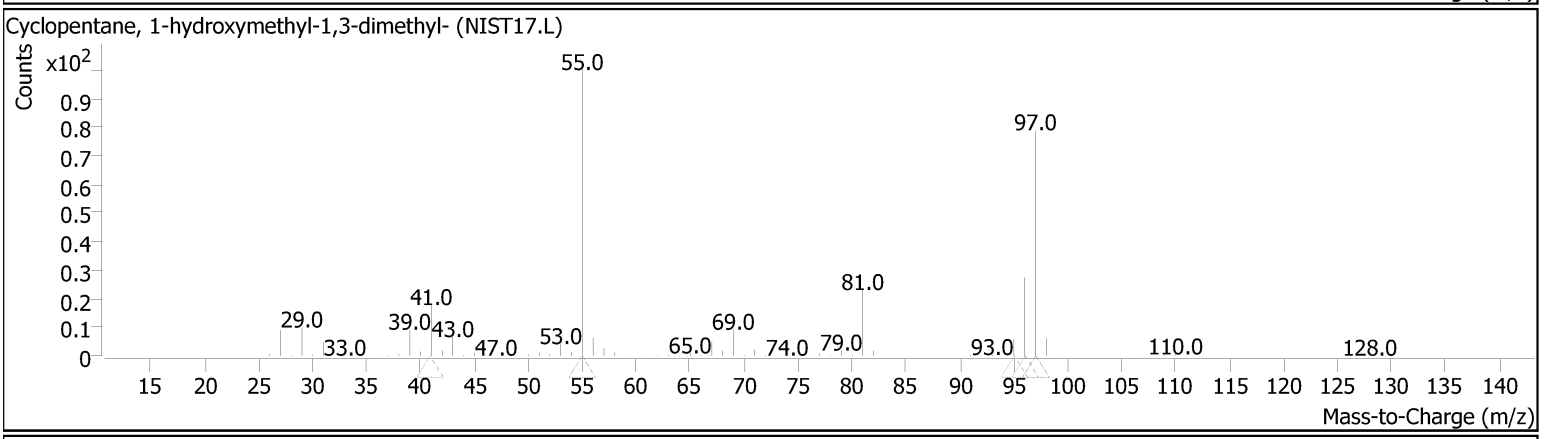


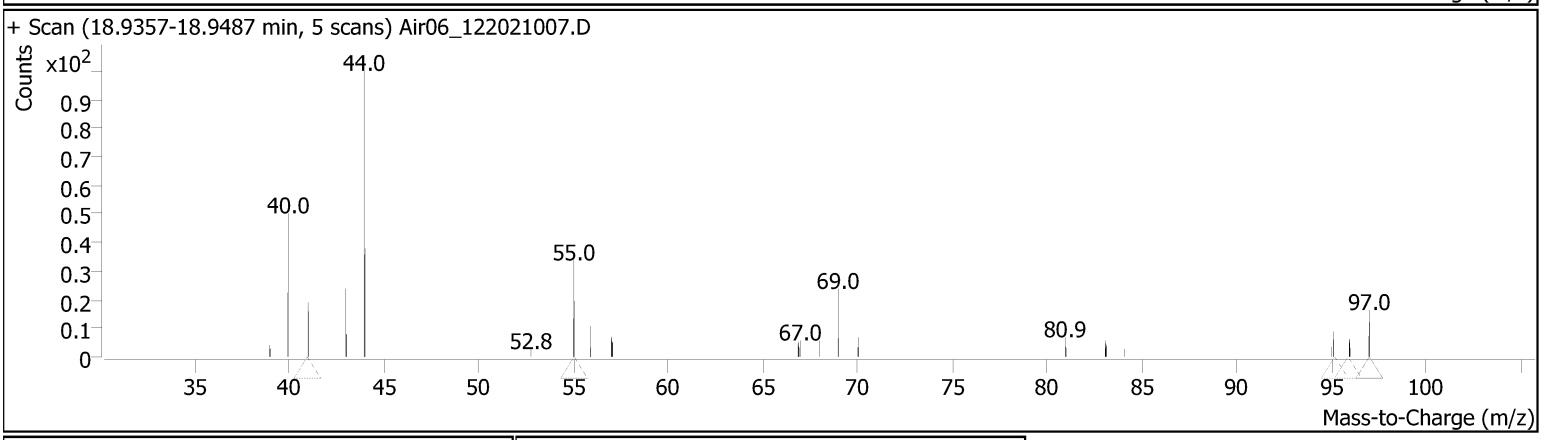


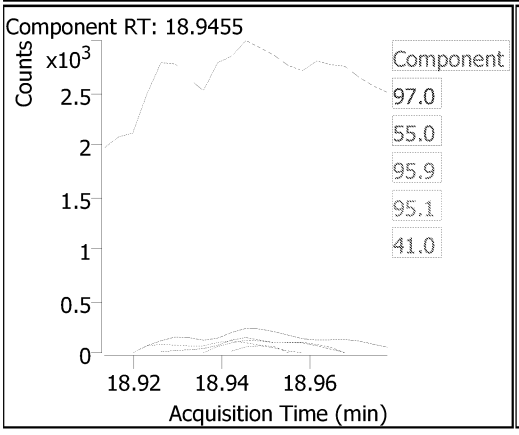


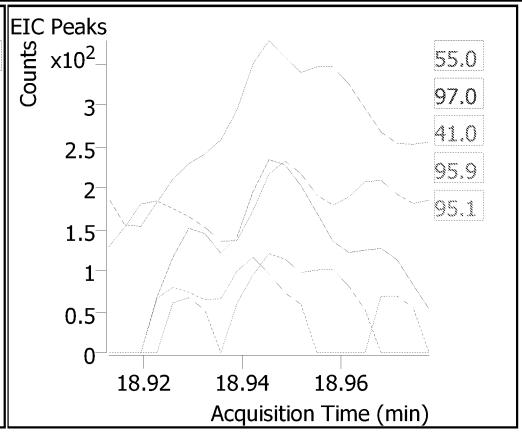
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.9455	Cyclopentane, 1-hydroxymethyl-1,3-dimethyl-	2756.7	80.1	1000156-73-8	C8H16O	0.006991

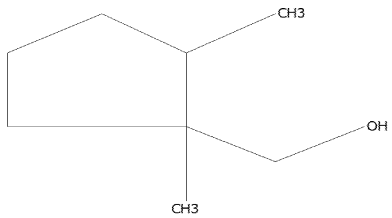




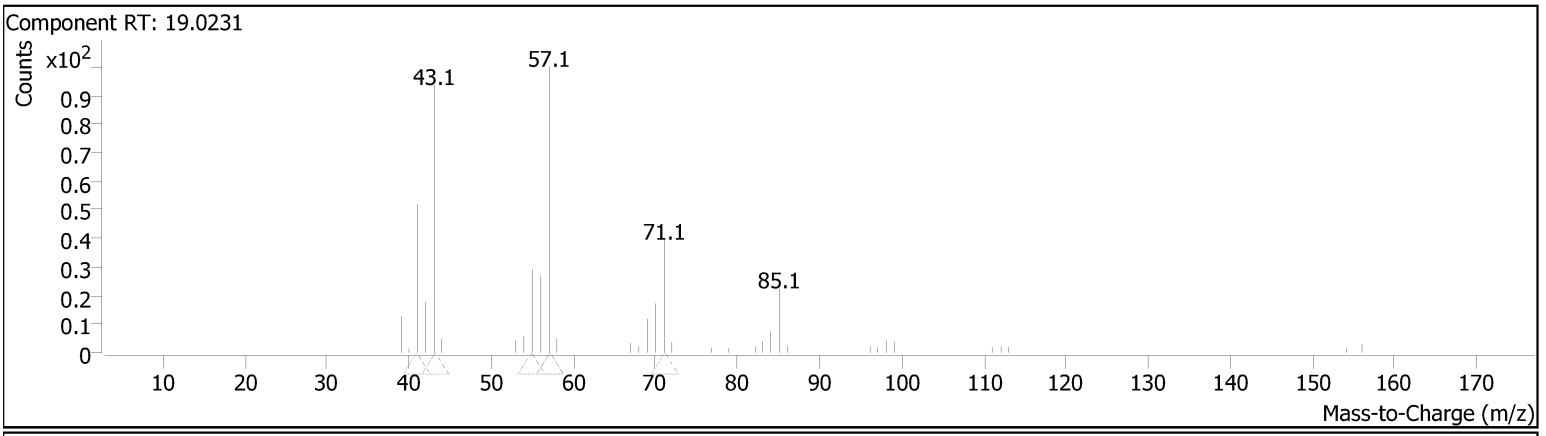


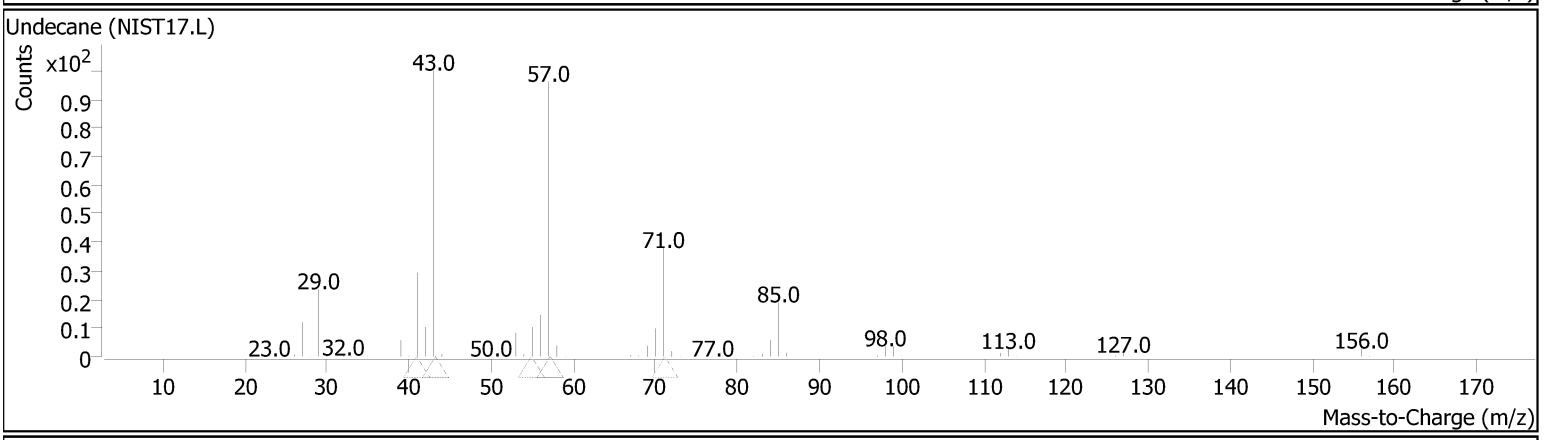


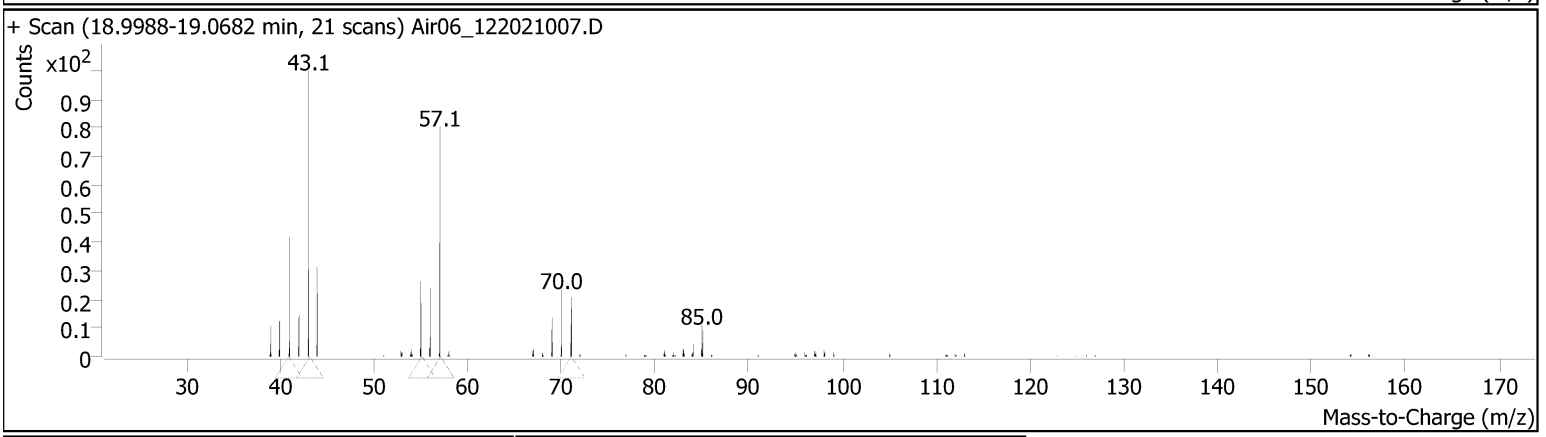


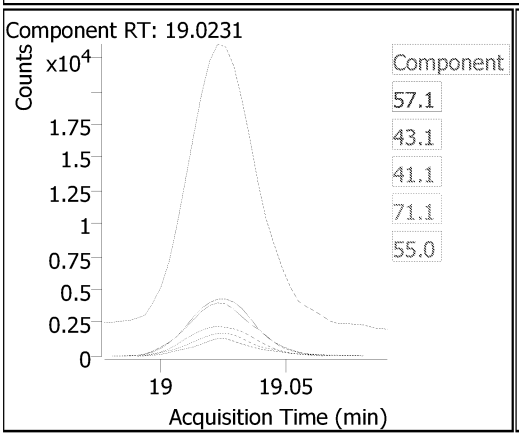


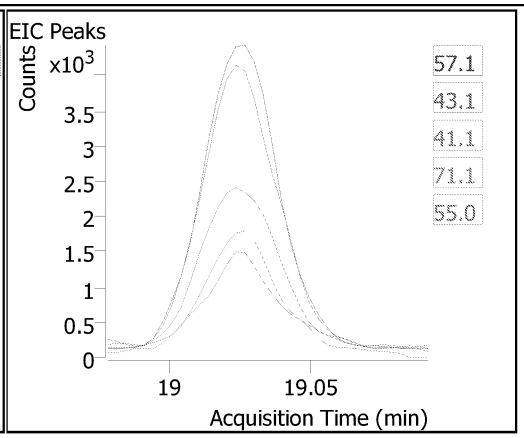
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.0231	Undecane	43770.3	93.4	1120-21-4	C11H24	0.111





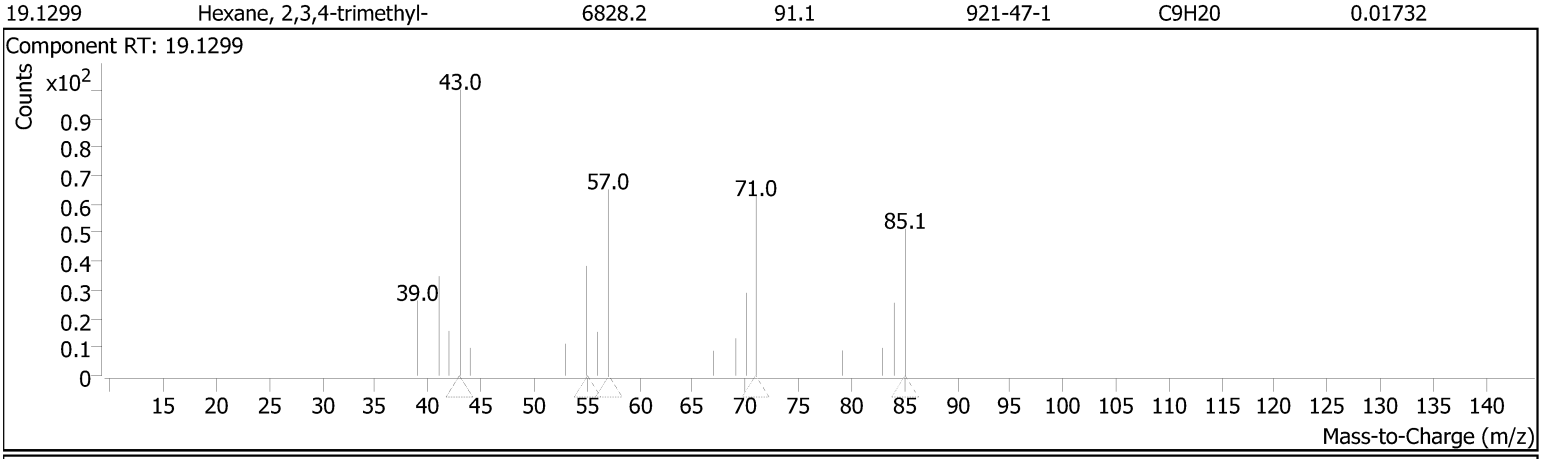


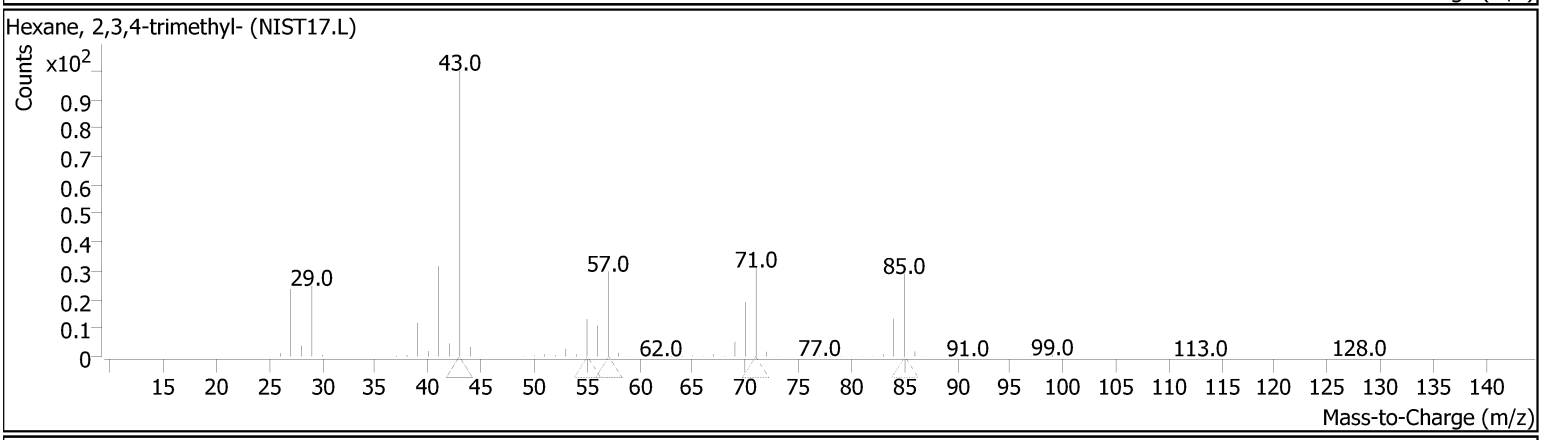


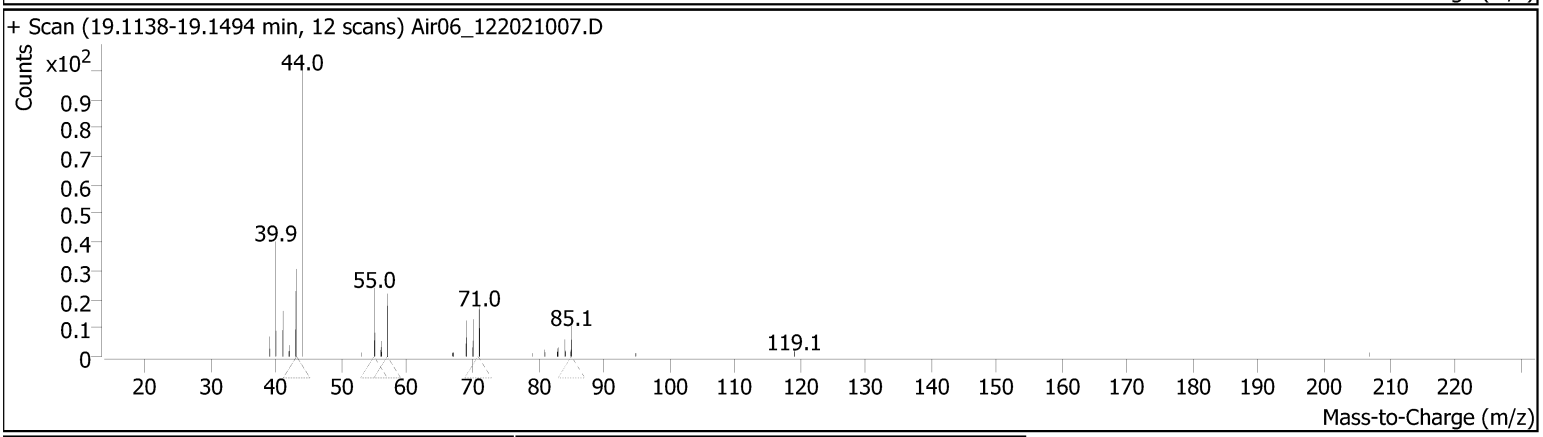


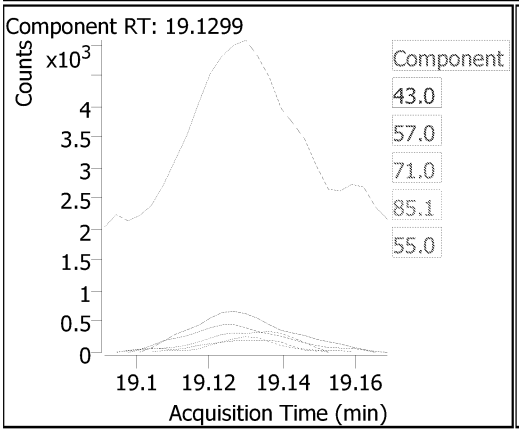


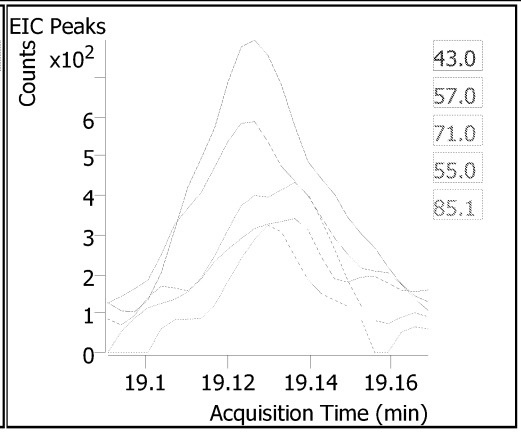
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.1299	Hexane, 2,3,4-trimethyl-	6828.2	91.1	921-47-1	C9H20	0.01732

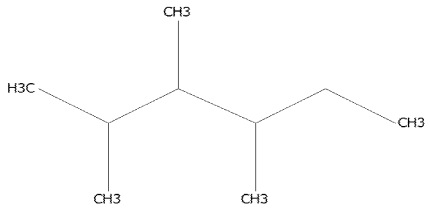




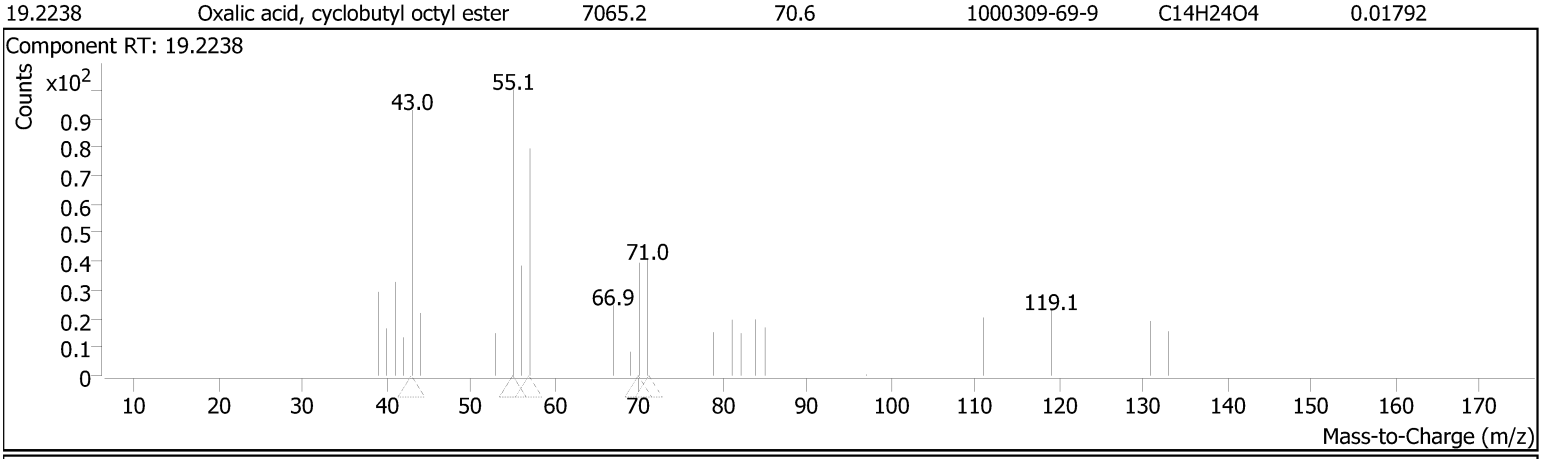


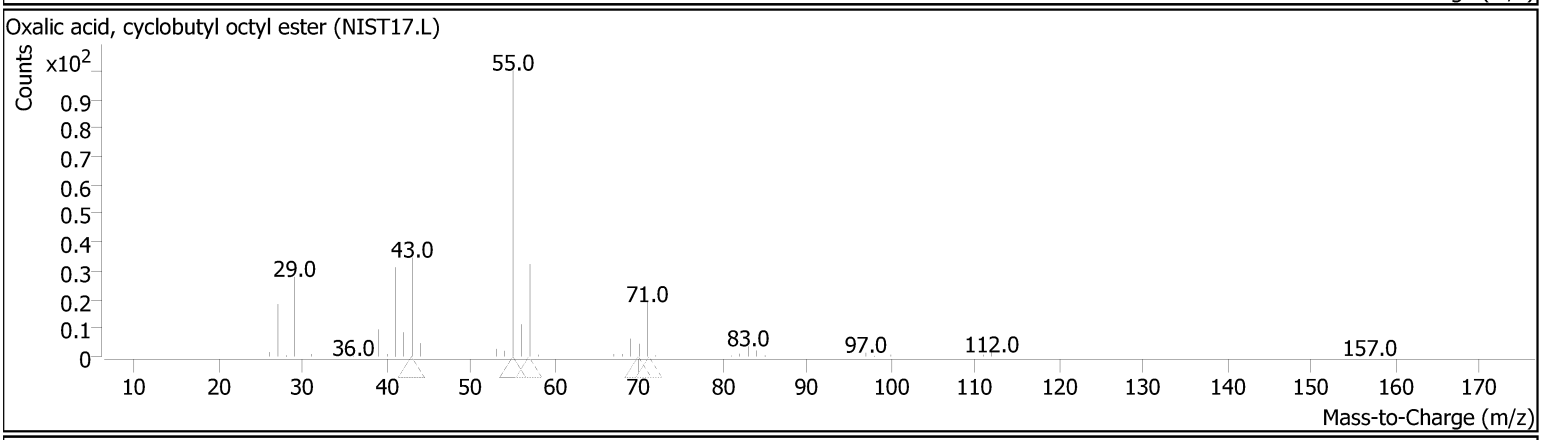


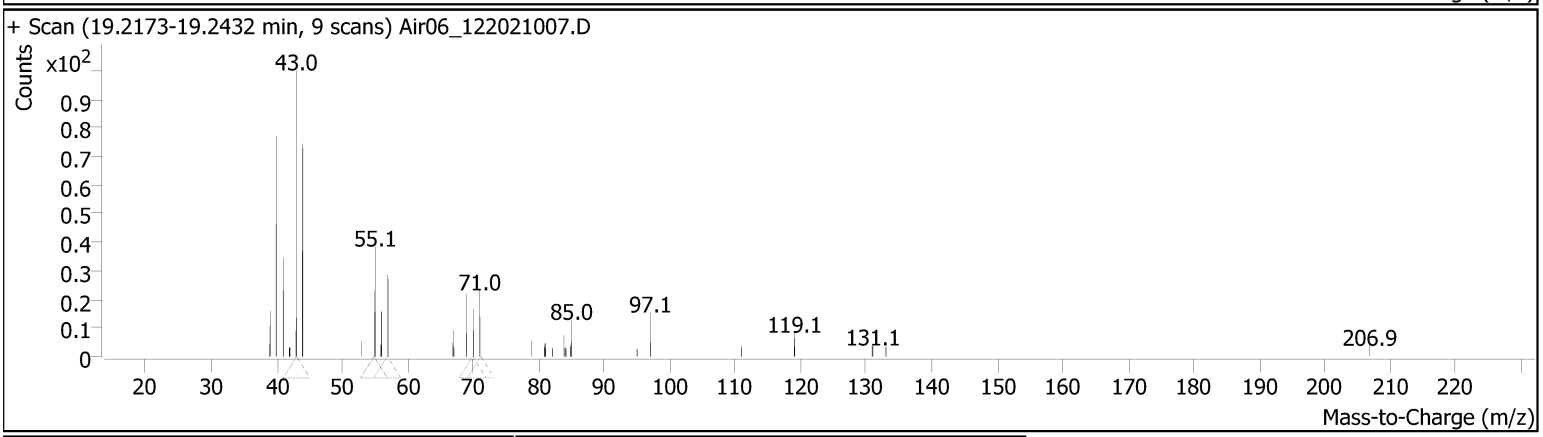


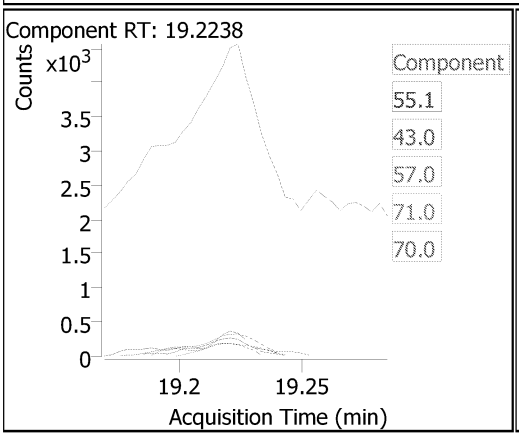


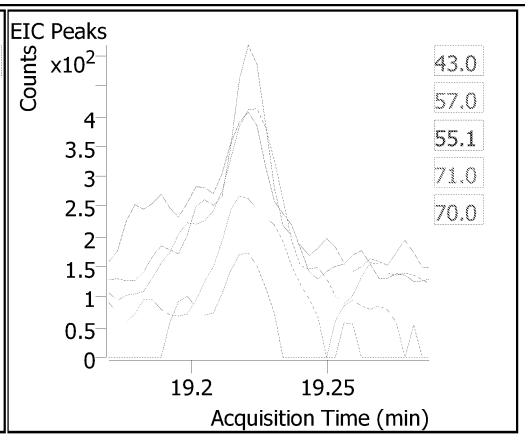
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.2238	Oxalic acid, cyclobutyl octyl ester	7065.2	70.6	1000309-69-9	C14H24O4	0.01792

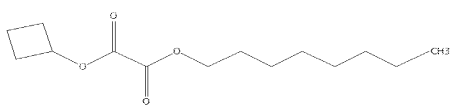




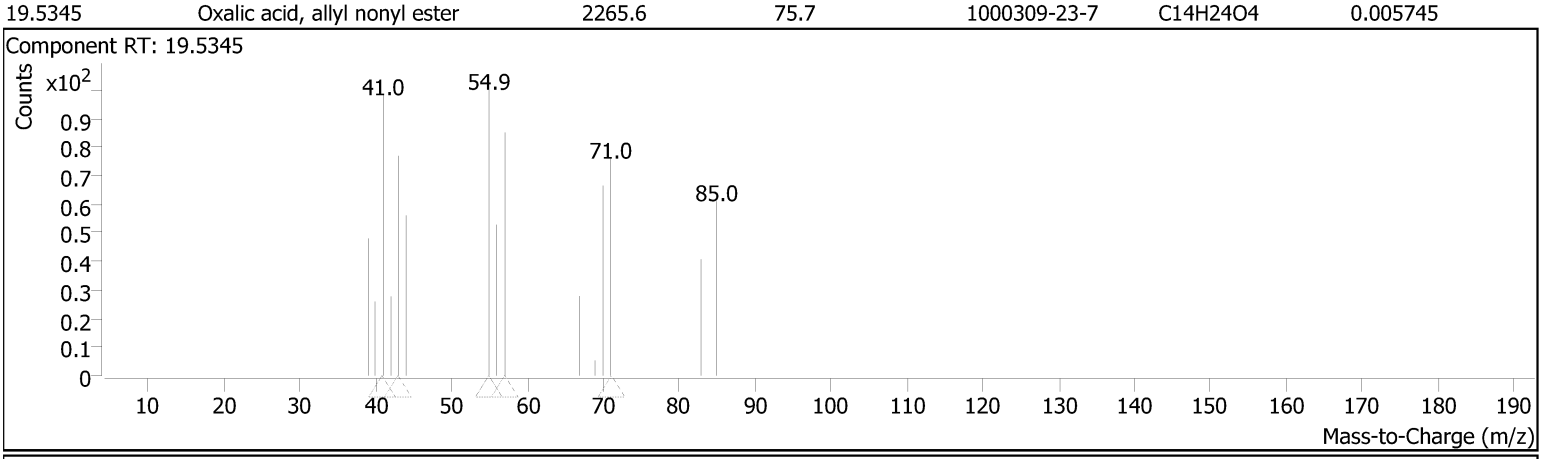


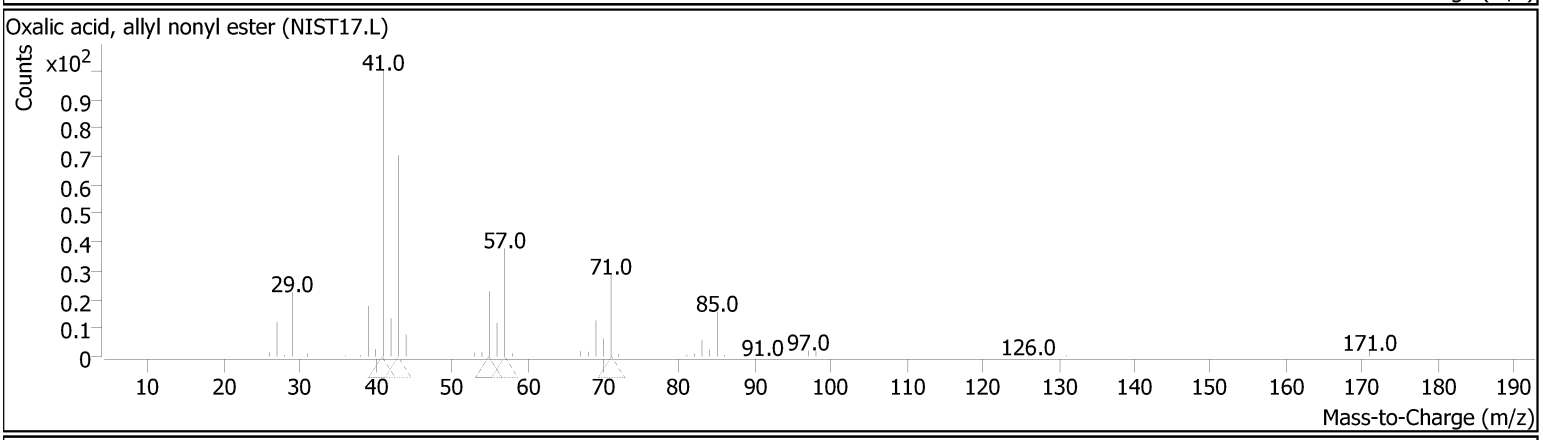


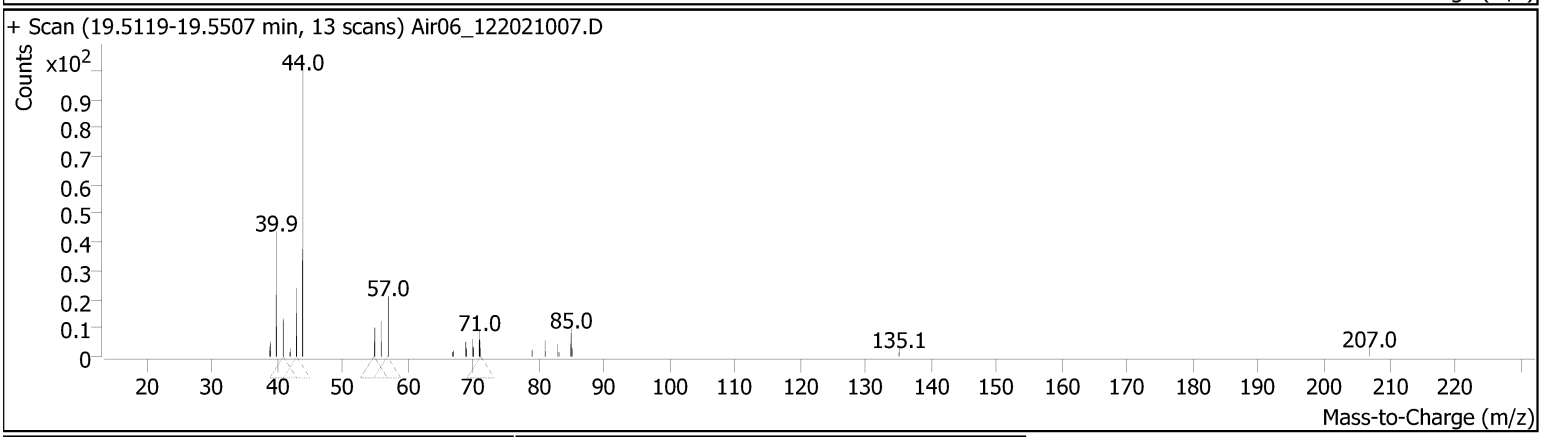


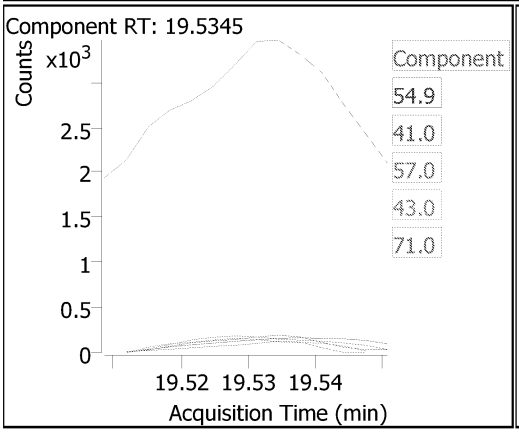


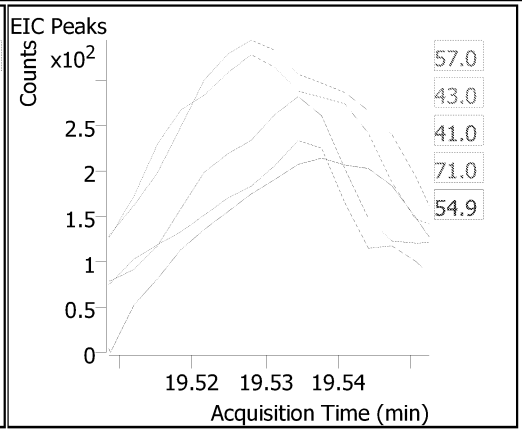
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.5345	Oxalic acid, allyl nonyl ester	2265.6	75.7	1000309-23-7	C14H24O4	0.005745

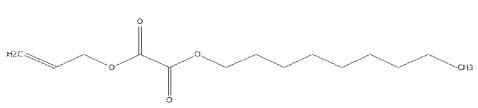




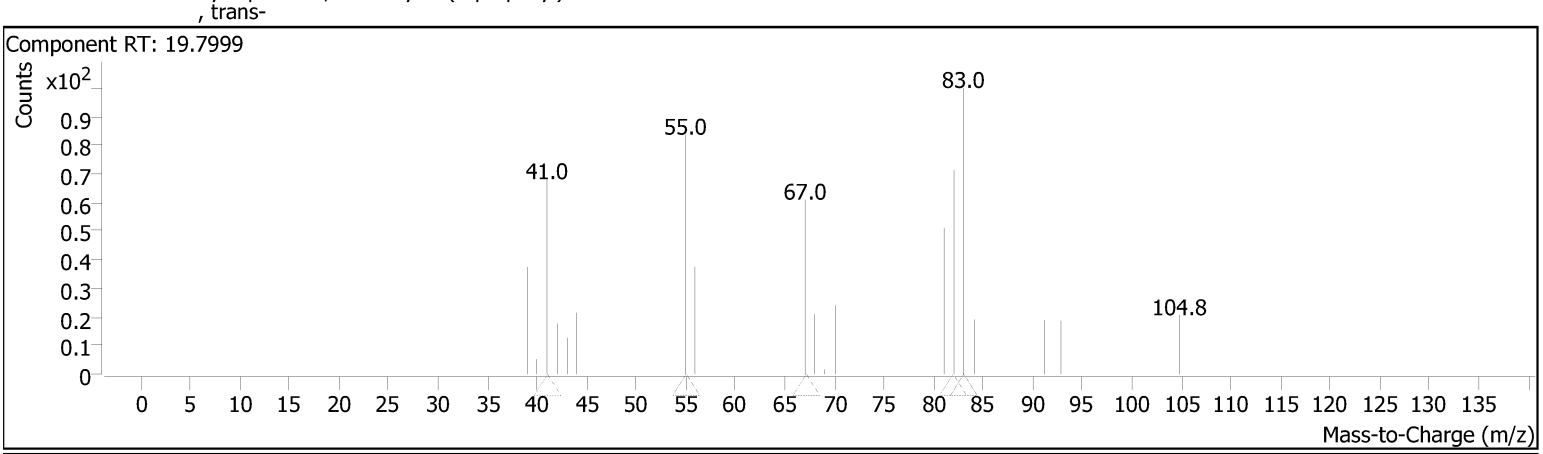


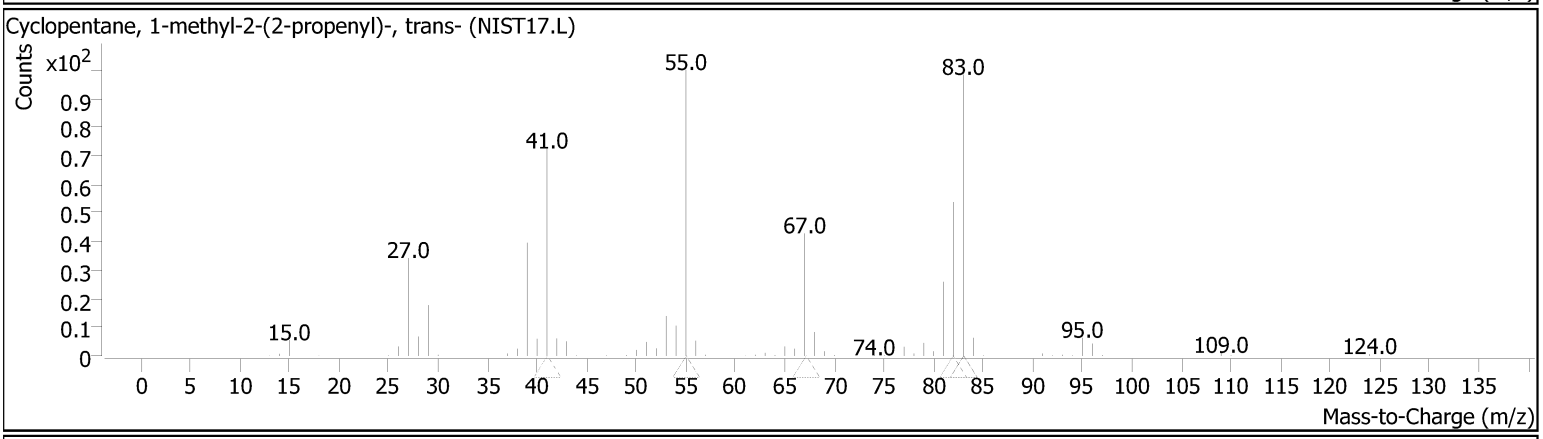


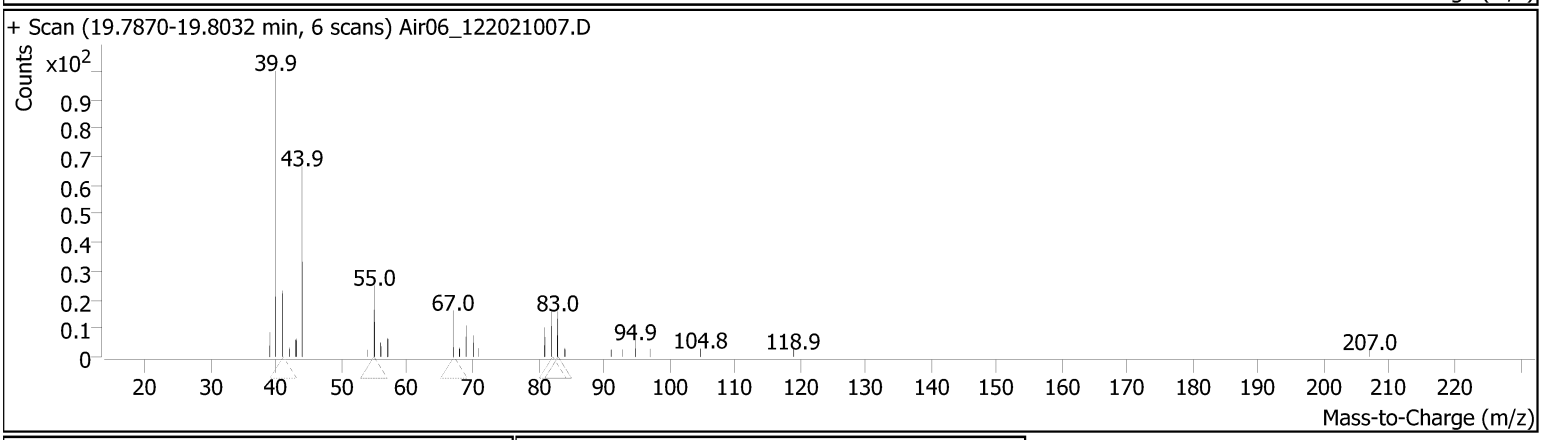


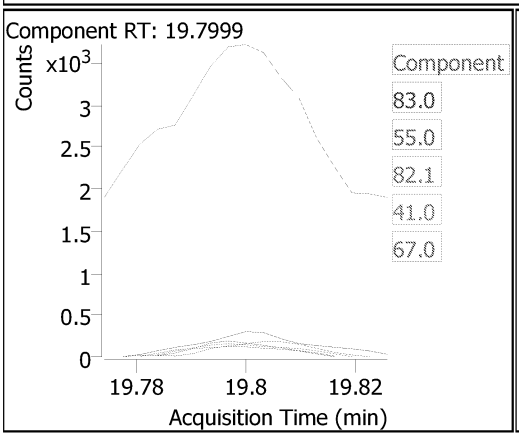


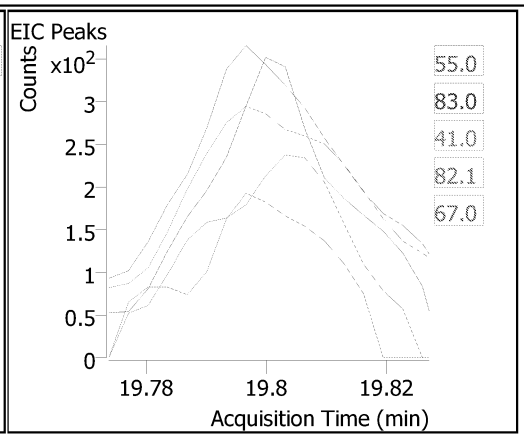
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.7999	Cyclopentane, 1-methyl-2-(2-propenyl)-, trans-	2936.9	74.7	50746-53-7	C9H16	0.007448

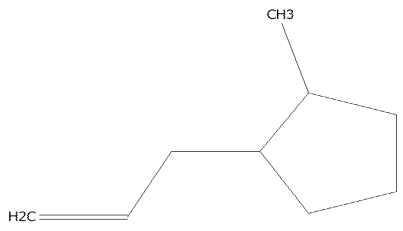




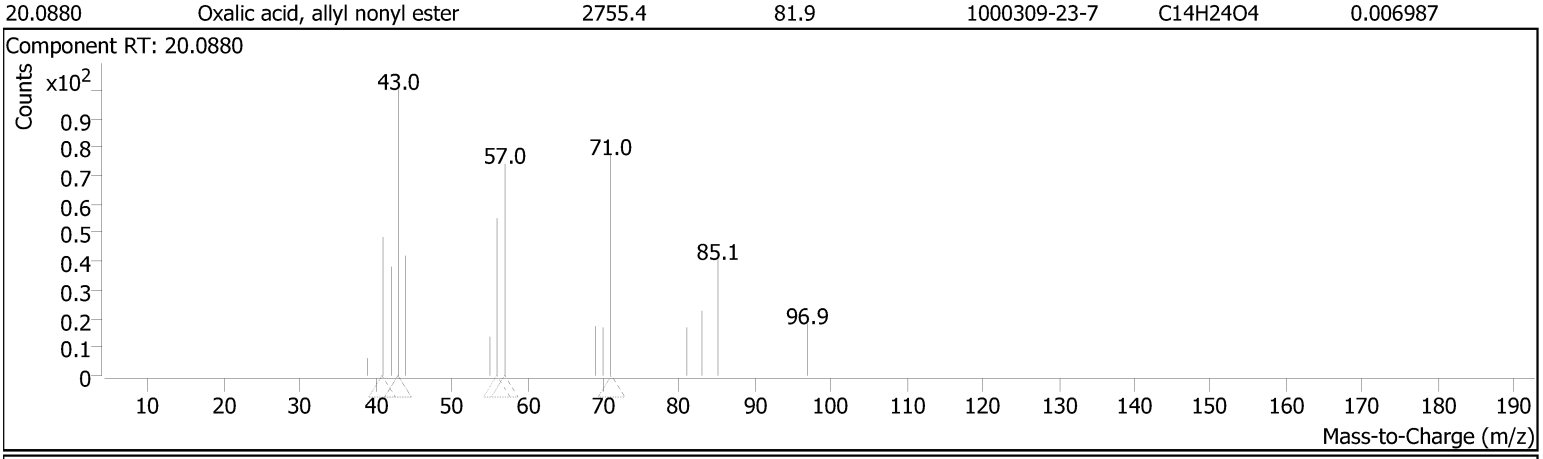


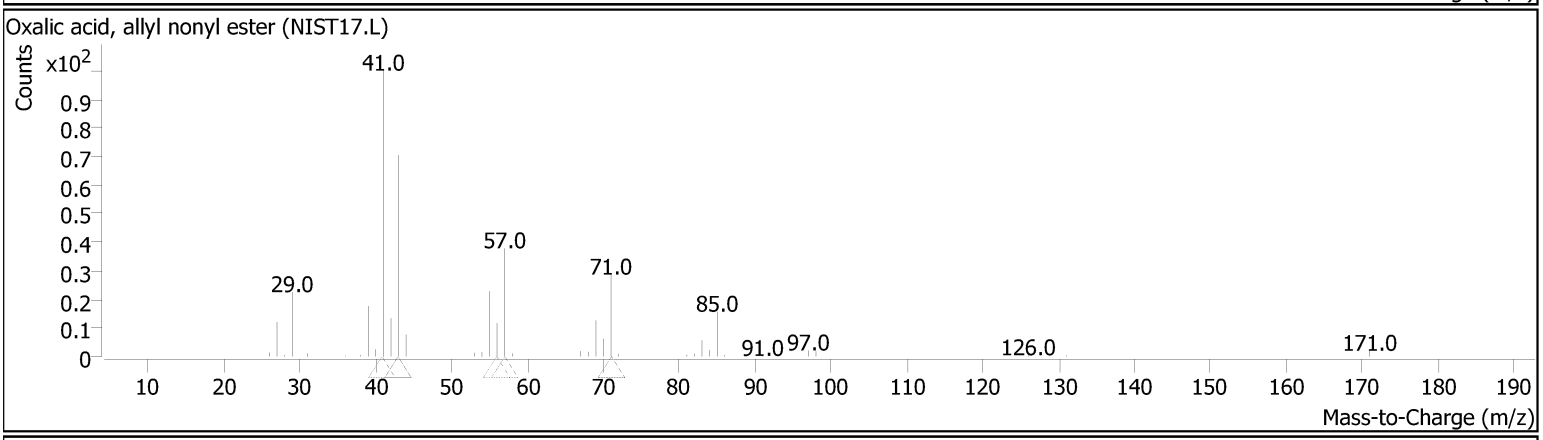


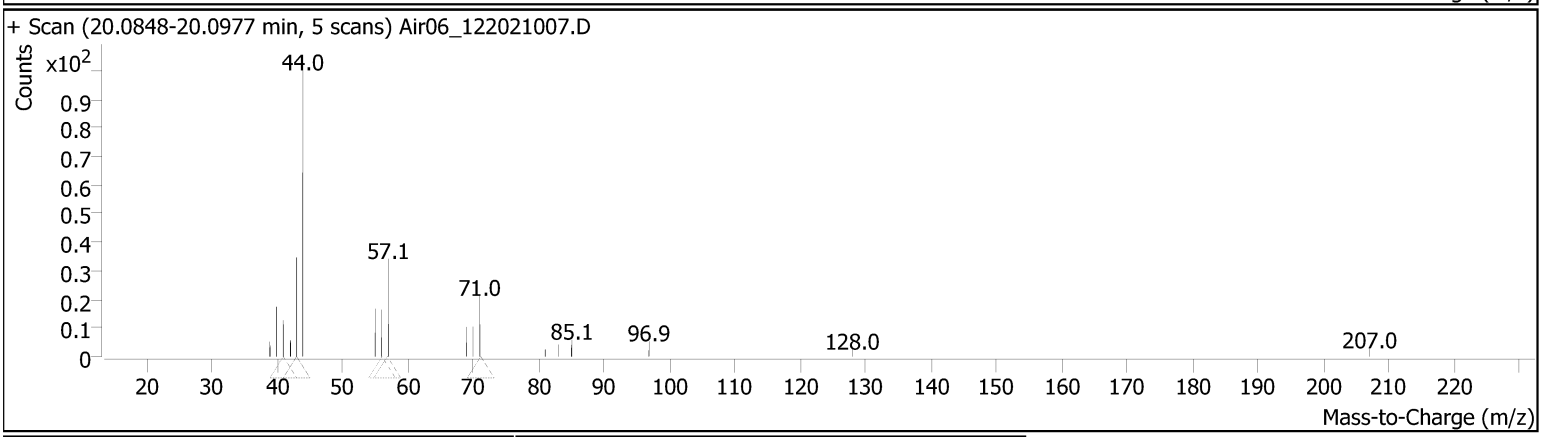


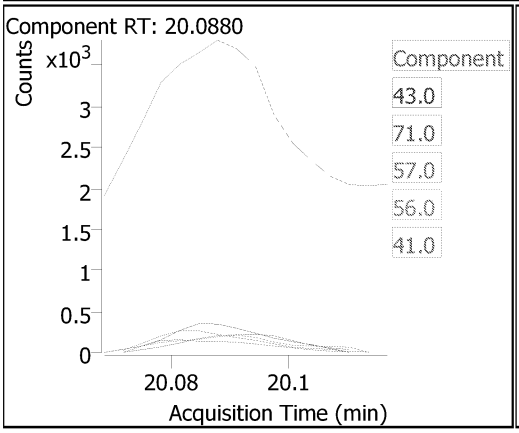


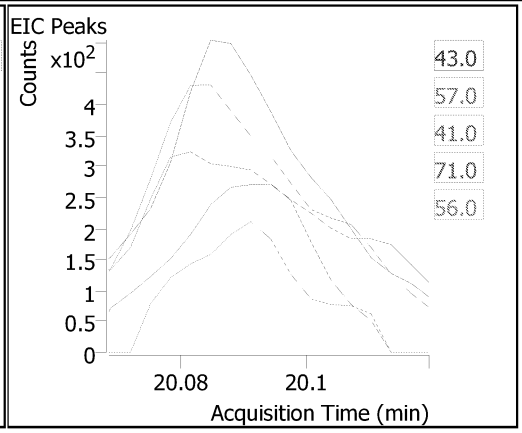
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.0880	Oxalic acid, allyl nonyl ester	2755.4	81.9	1000309-23-7	C14H24O4	0.006987

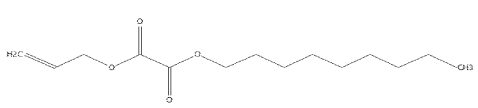




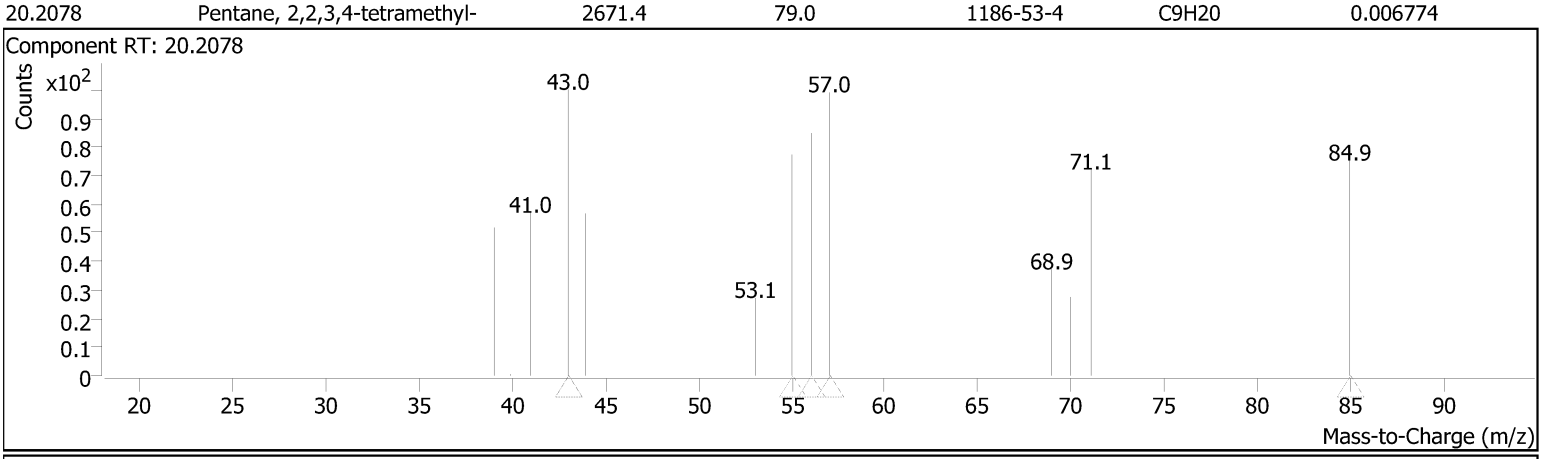


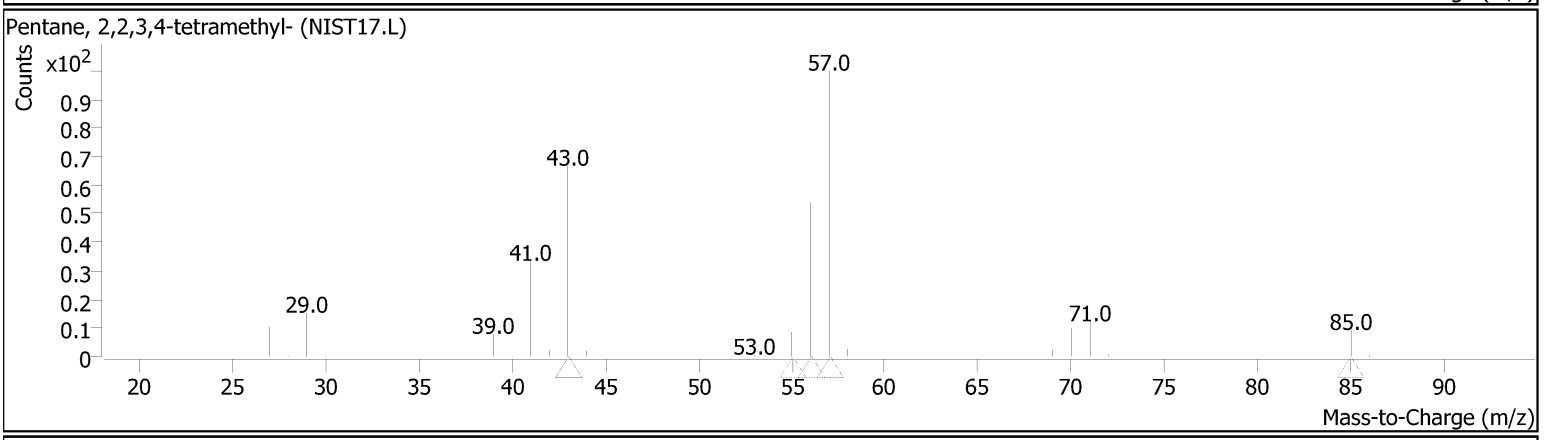


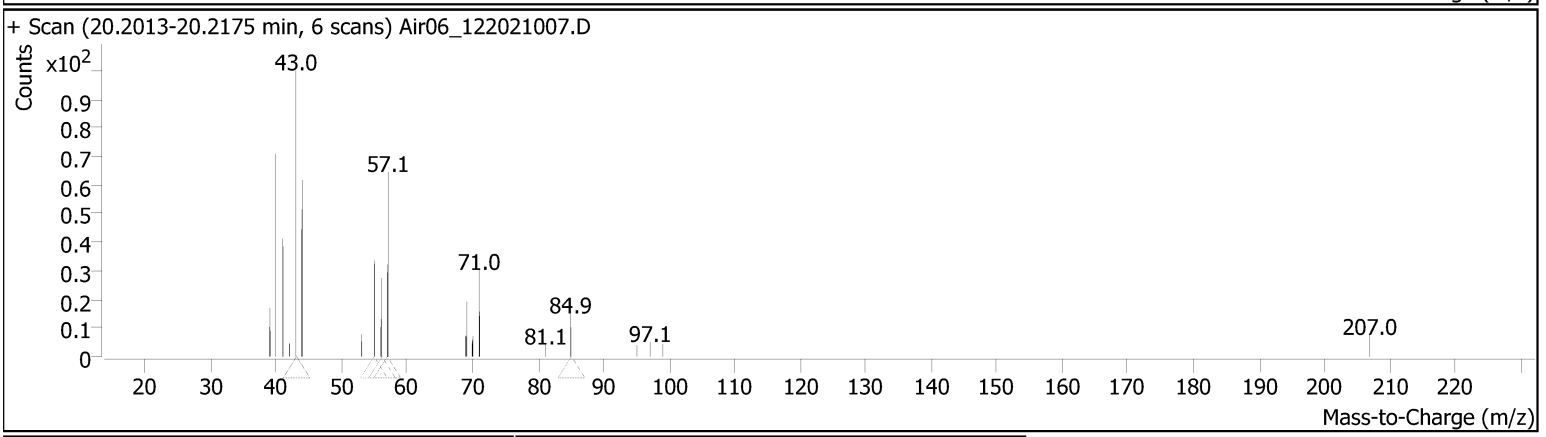


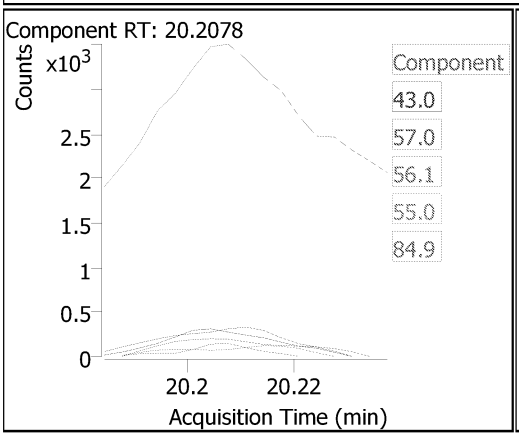


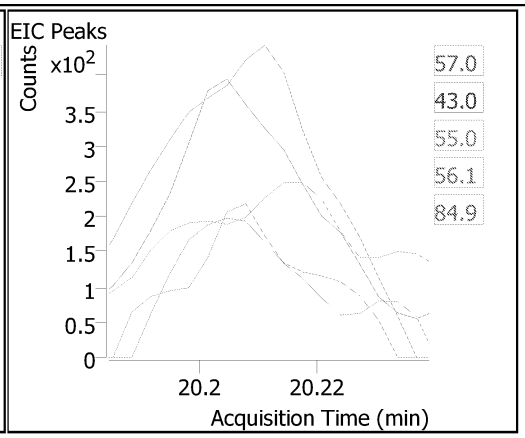
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.2078	Pentane, 2,2,3,4-tetramethyl-	2671.4	79.0	1186-53-4	C9H20	0.006774

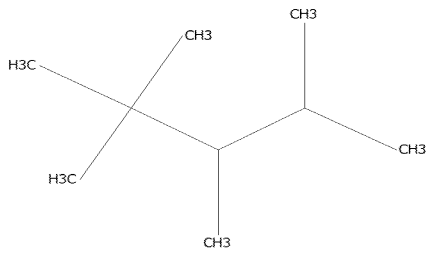




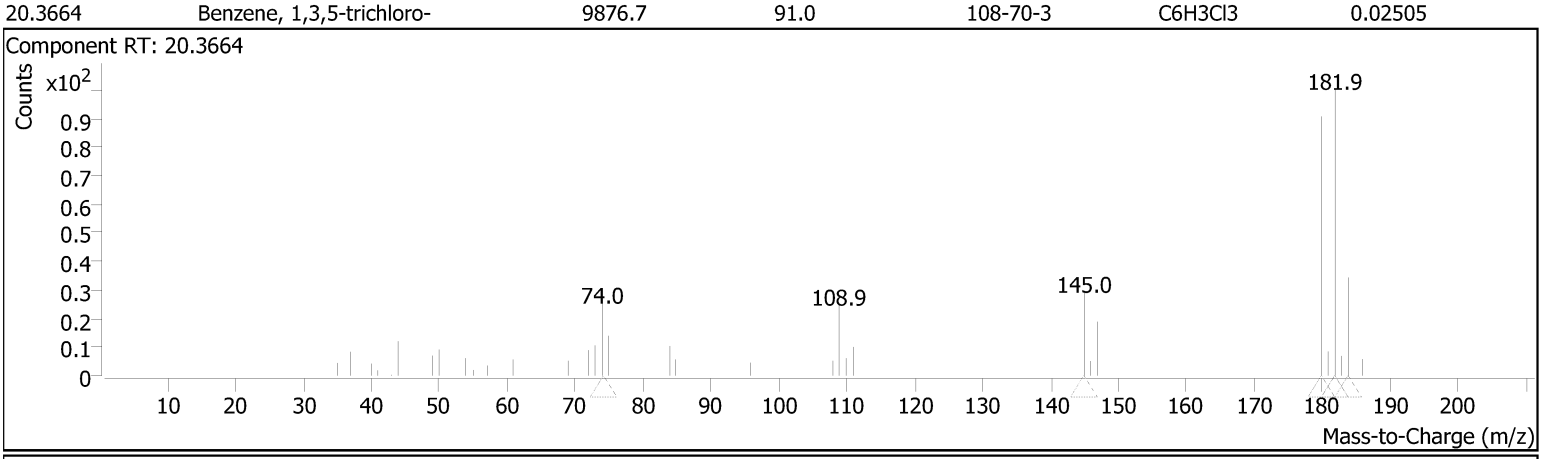


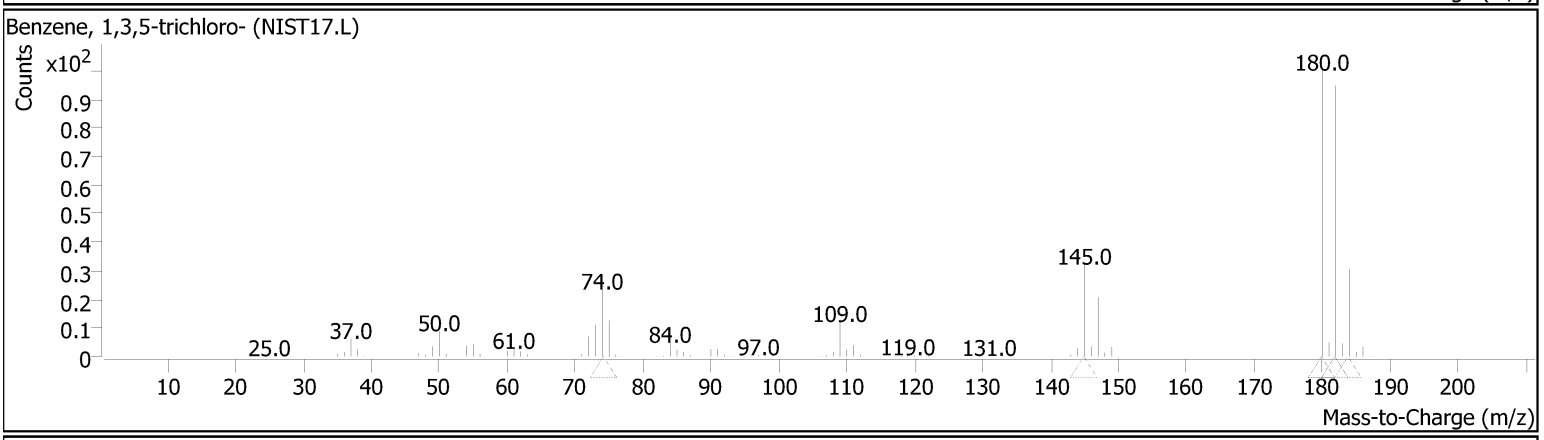


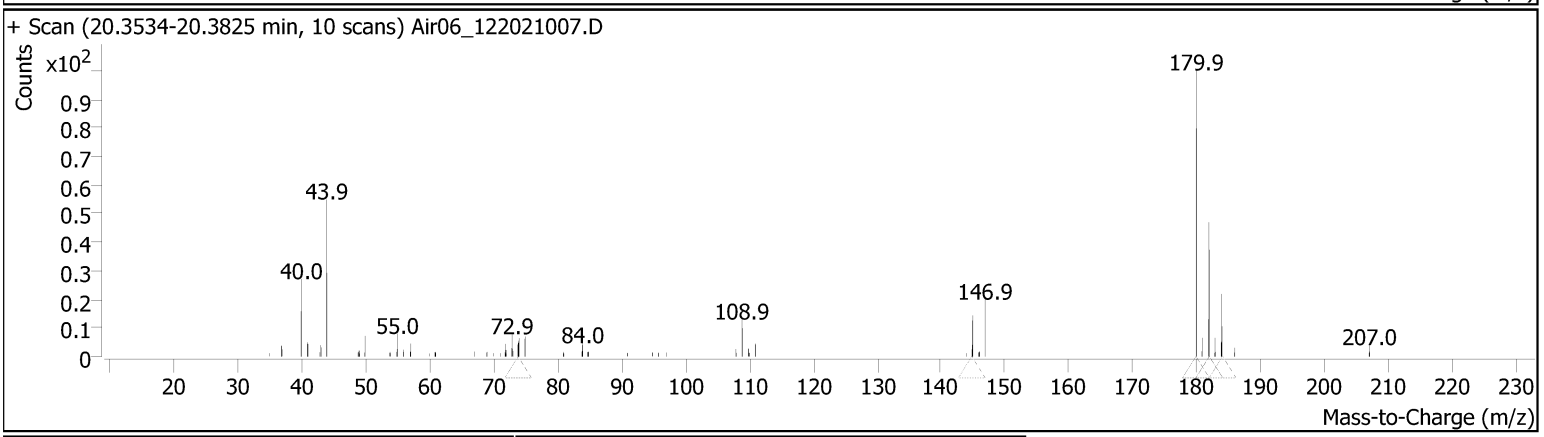


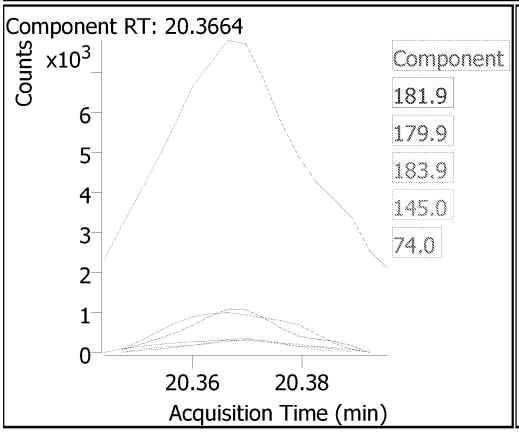


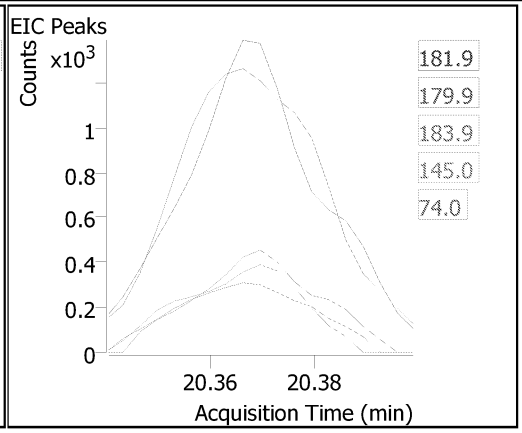
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.3664	Benzene, 1,3,5-trichloro-	9876.7	91.0	108-70-3	C6H3Cl3	0.02505

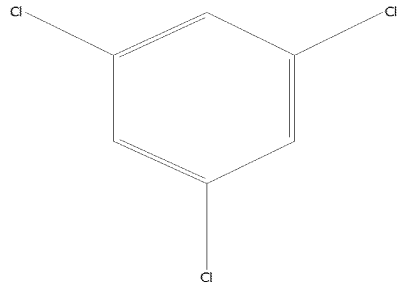








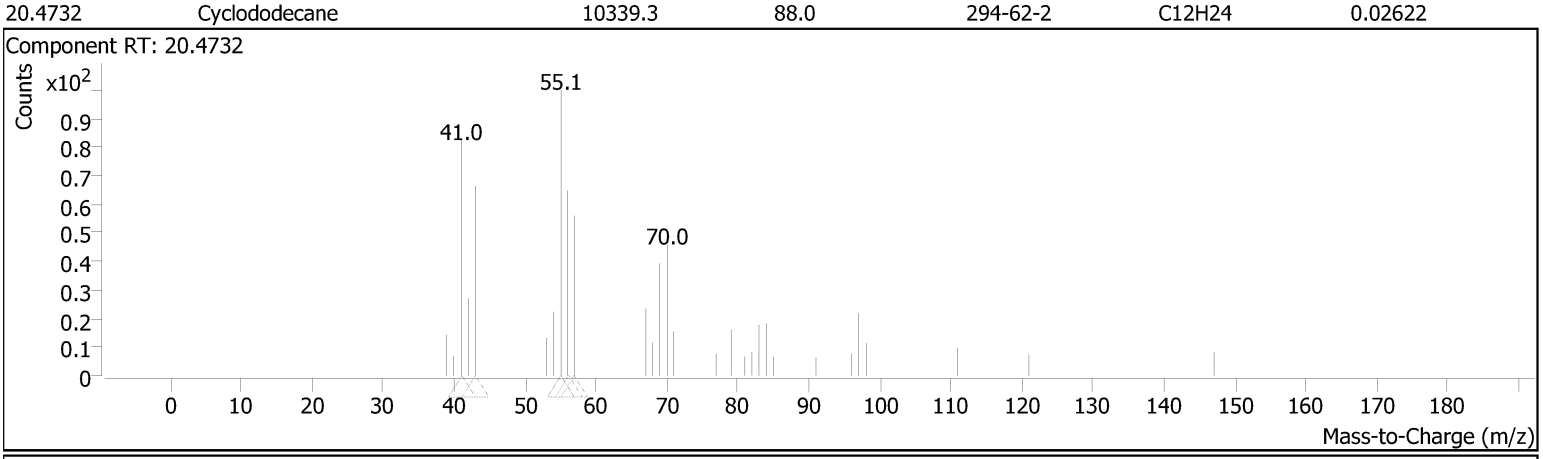


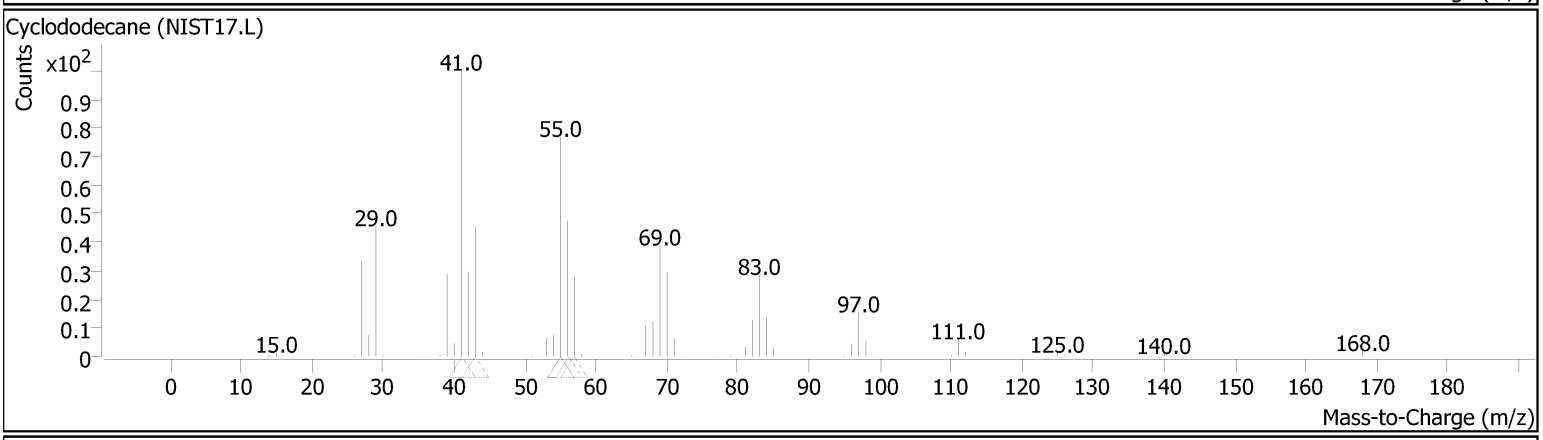


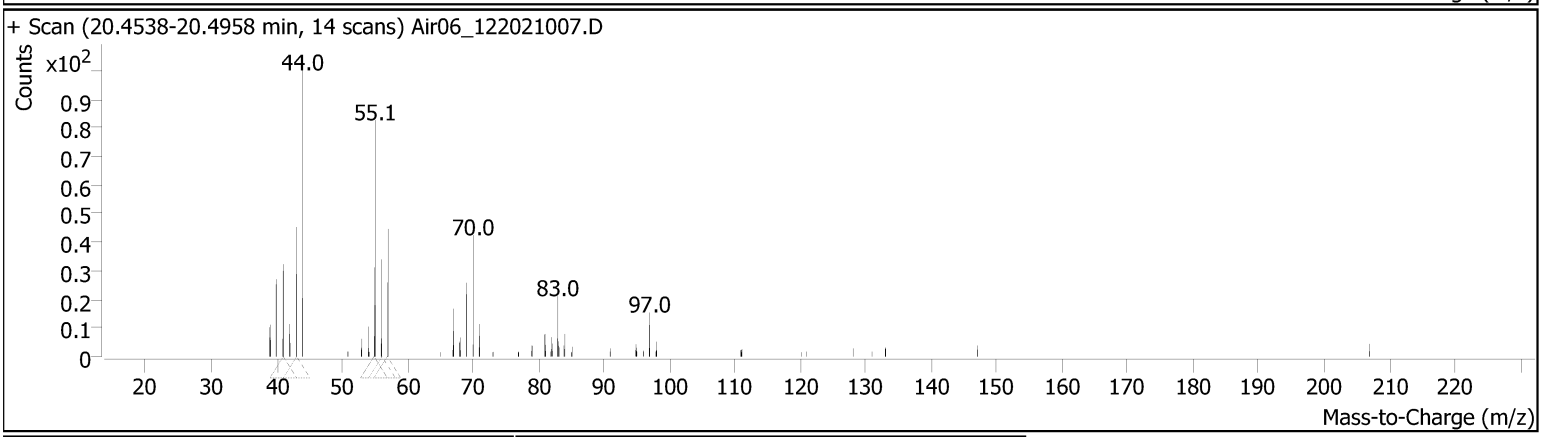
Library Search Results - NonTarget Hits with Details

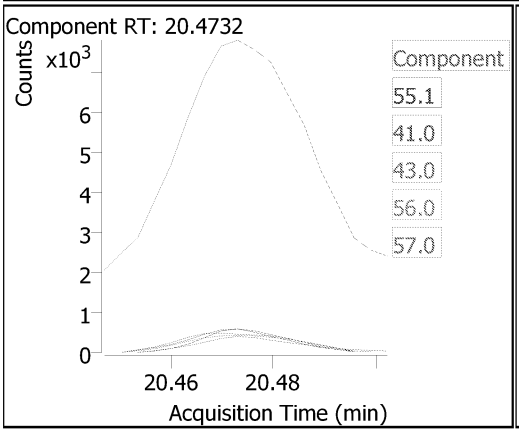
Agilent Technologies

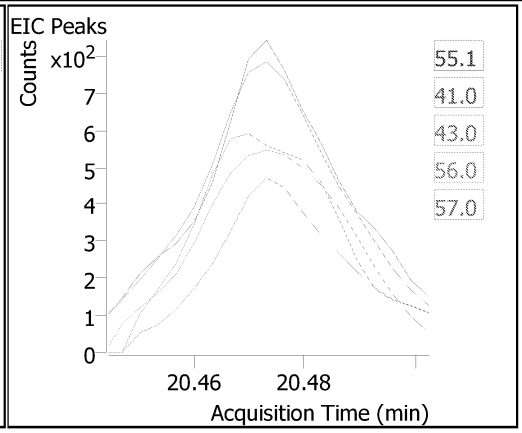
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.4732	Cyclododecane	10339.3	88.0	294-62-2	C12H24	0.02622

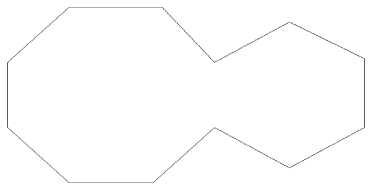




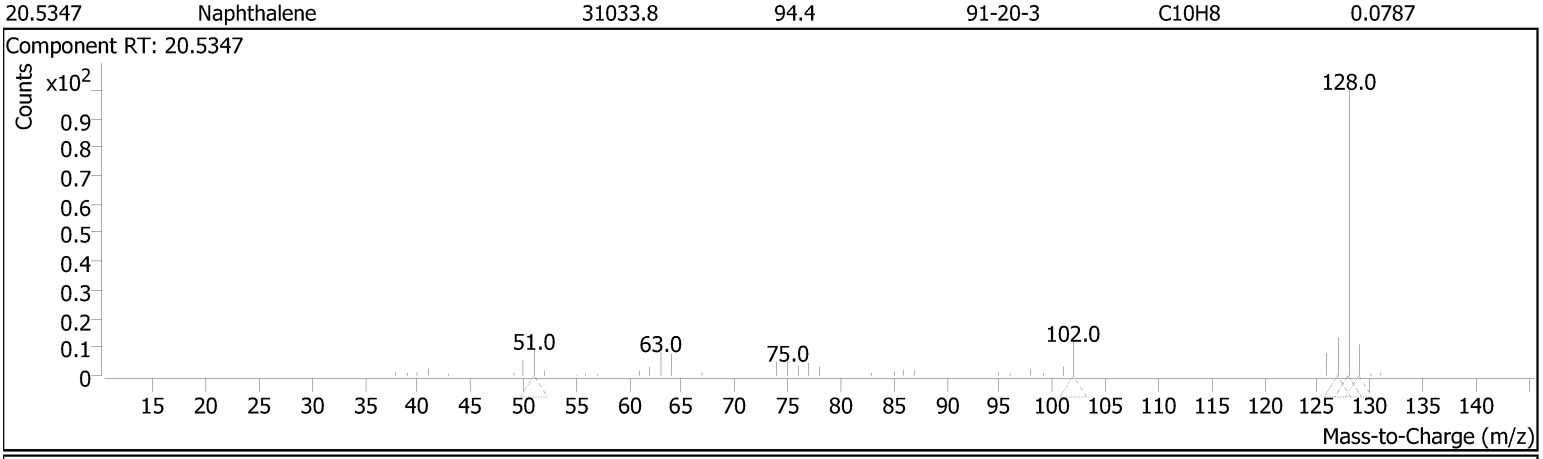


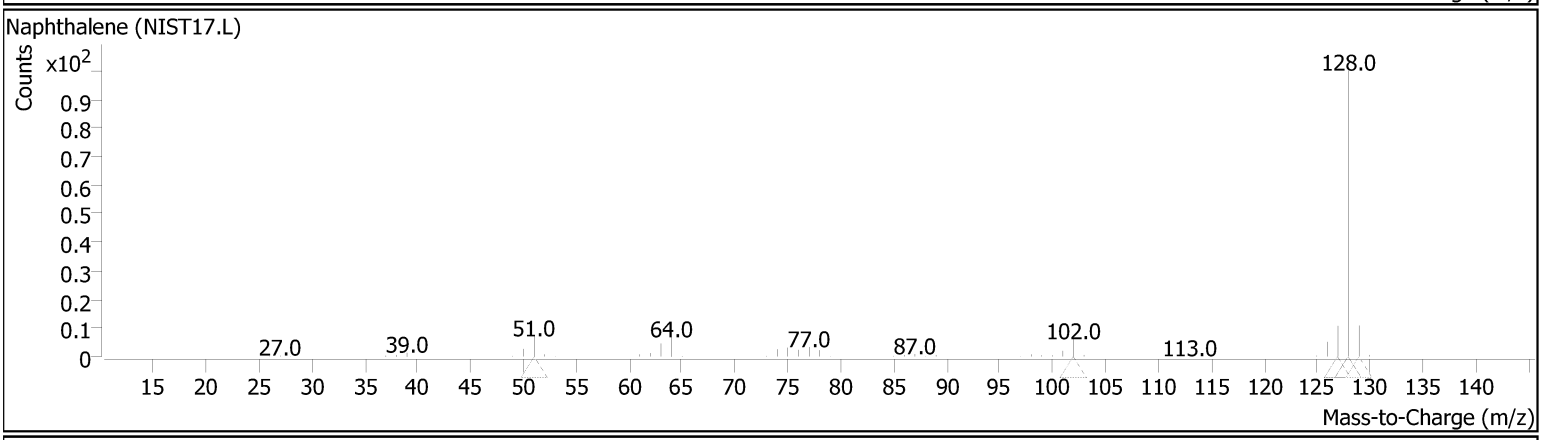


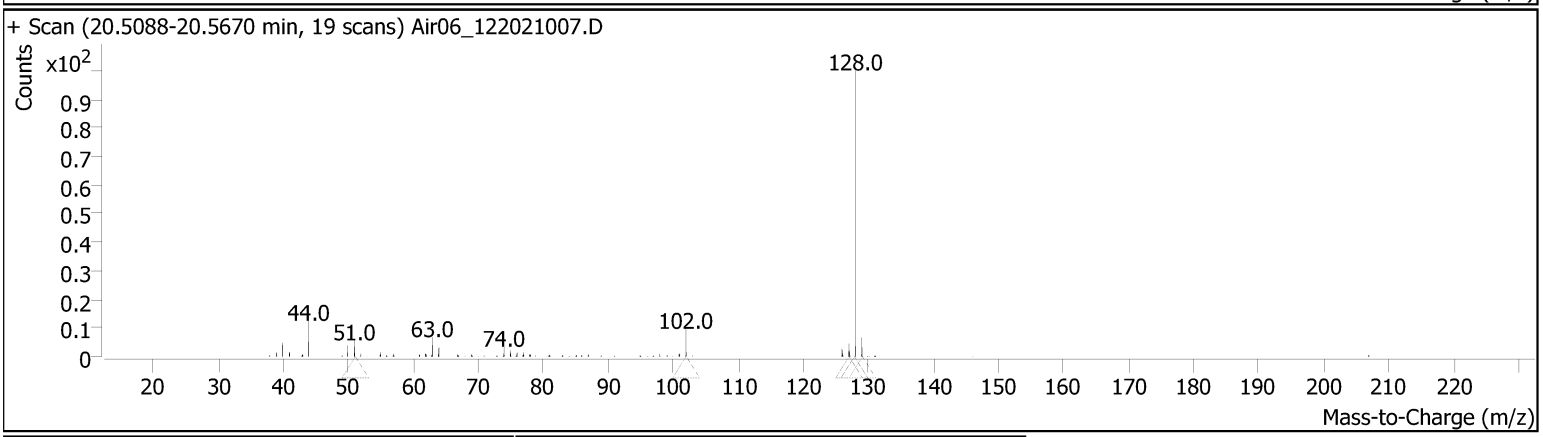


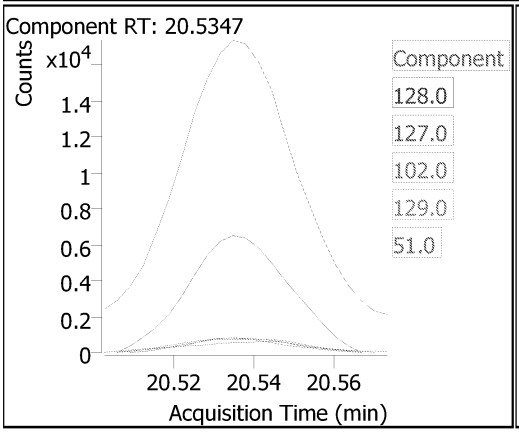


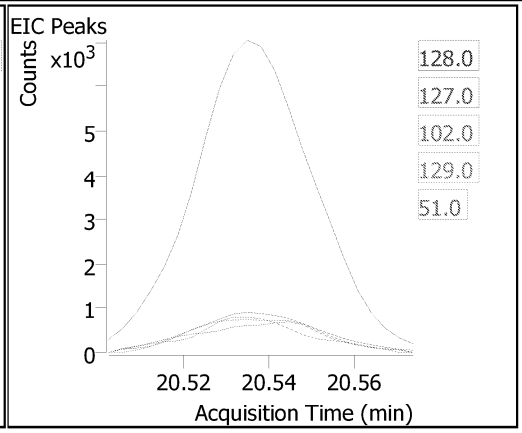
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.5347	Naphthalene	31033.8	94.4	91-20-3	C10H8	0.0787

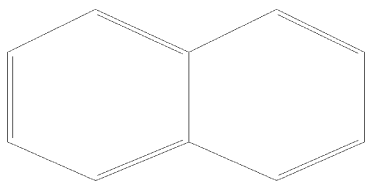




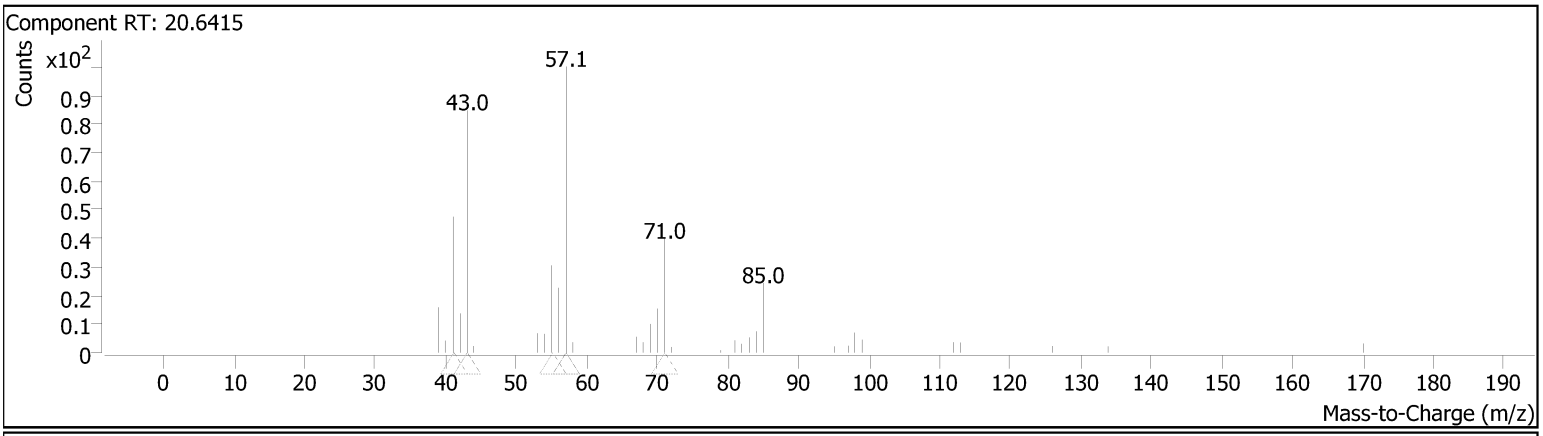


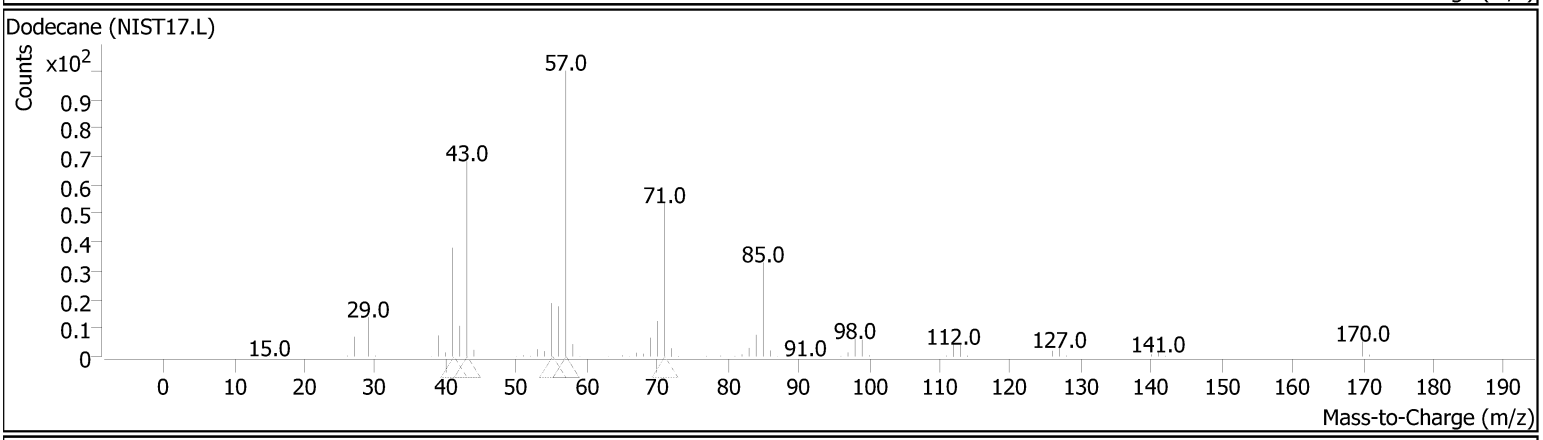


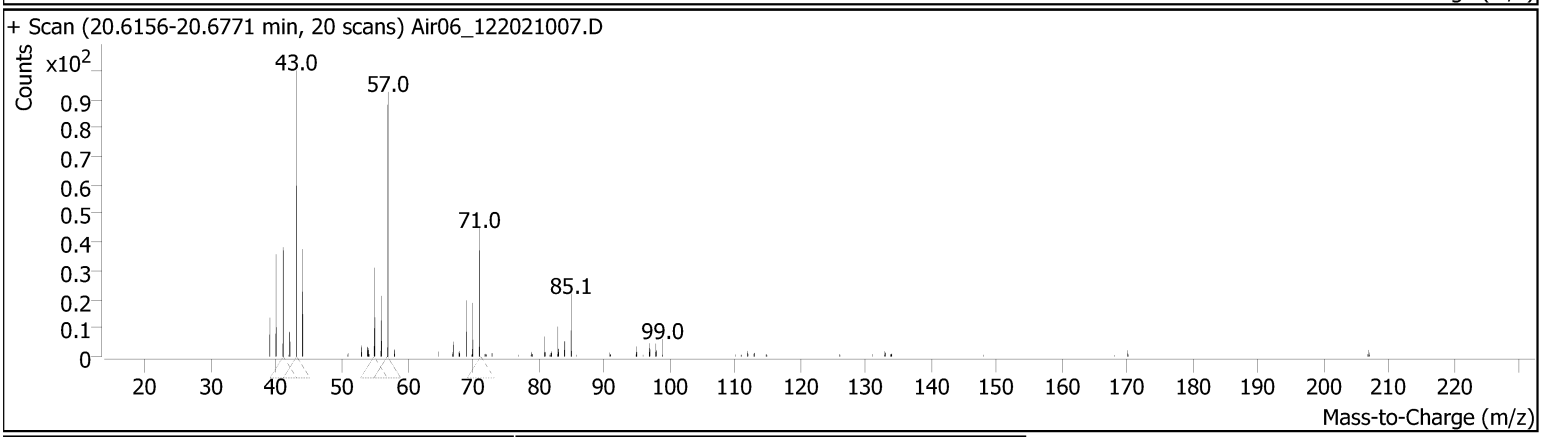


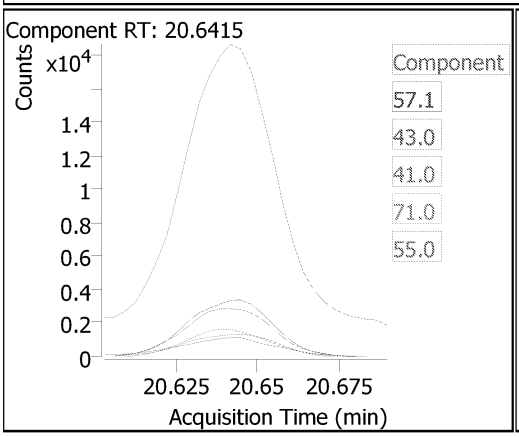


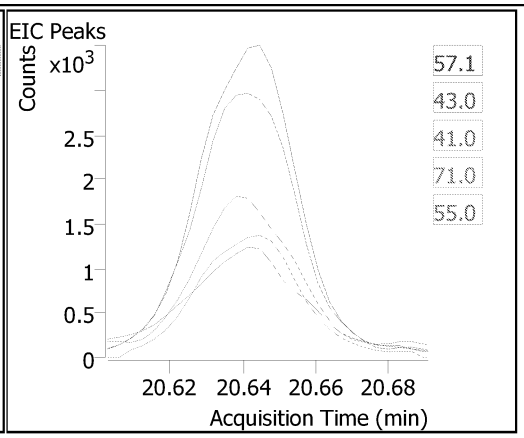
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.6415	Dodecane	33318.1	90.1	112-40-3	C12H26	0.08449





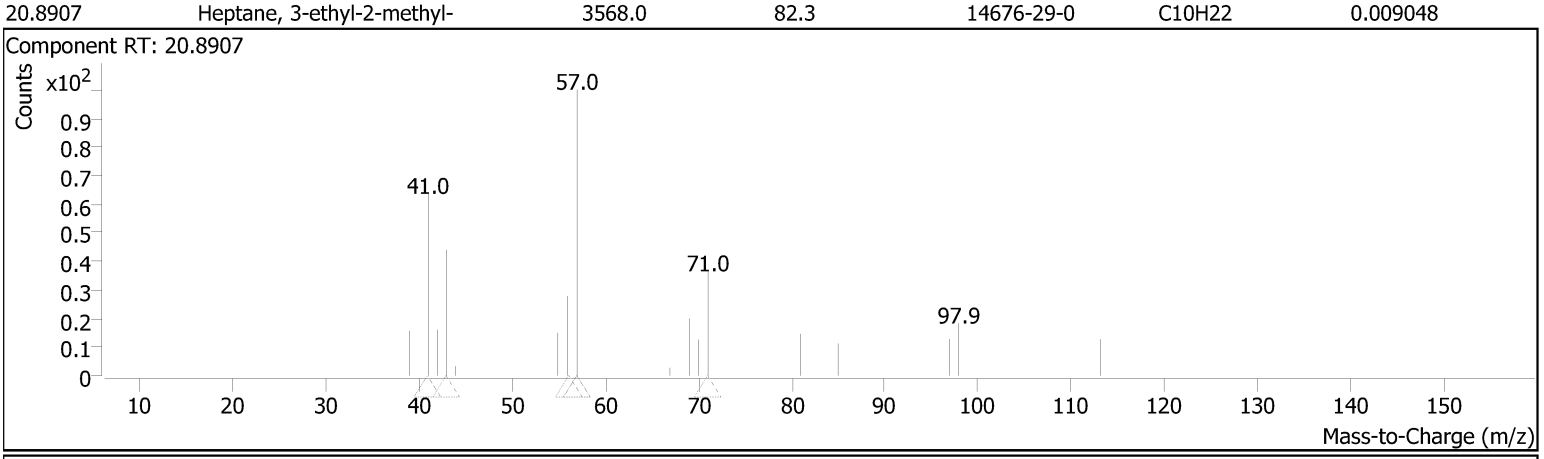


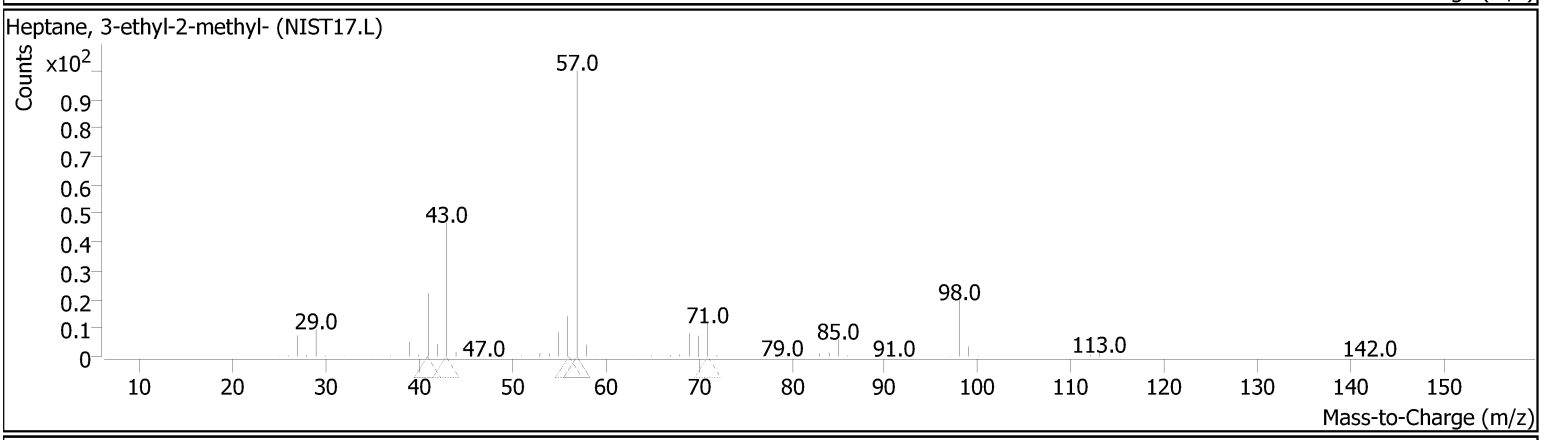


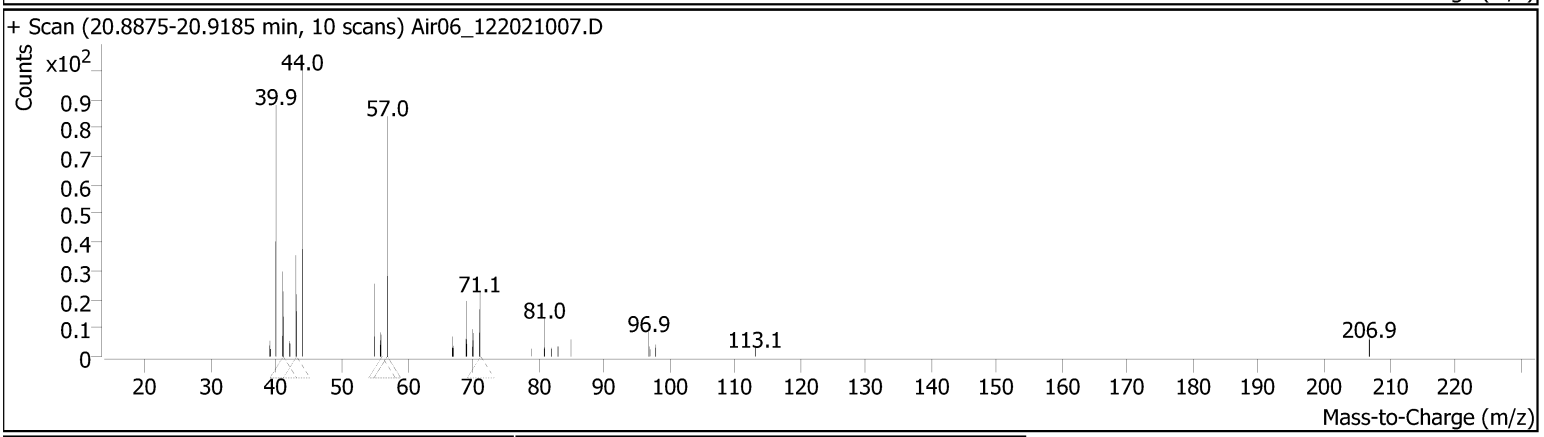


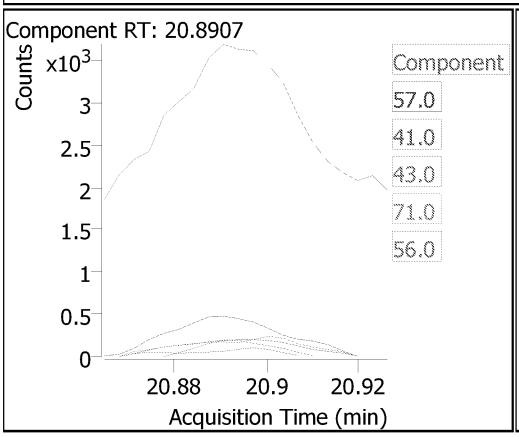


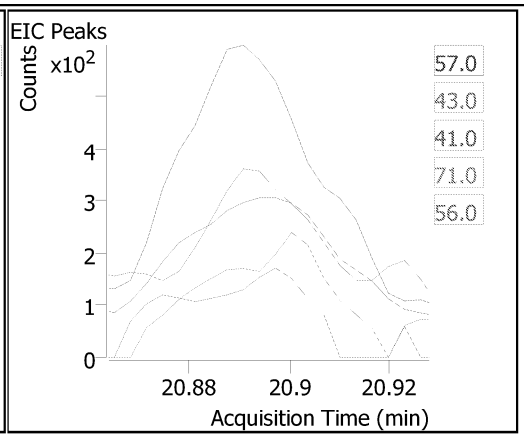
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.8907	Heptane, 3-ethyl-2-methyl-	3568.0	82.3	14676-29-0	C10H22	0.009048

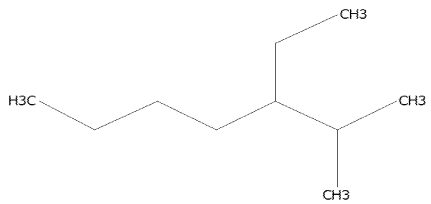




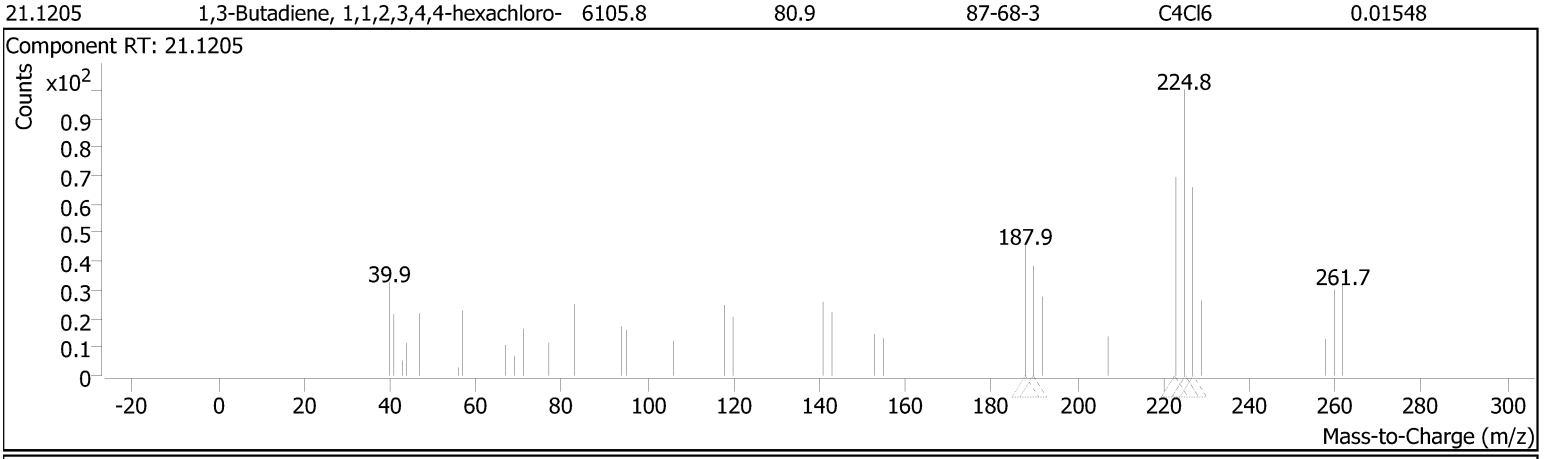


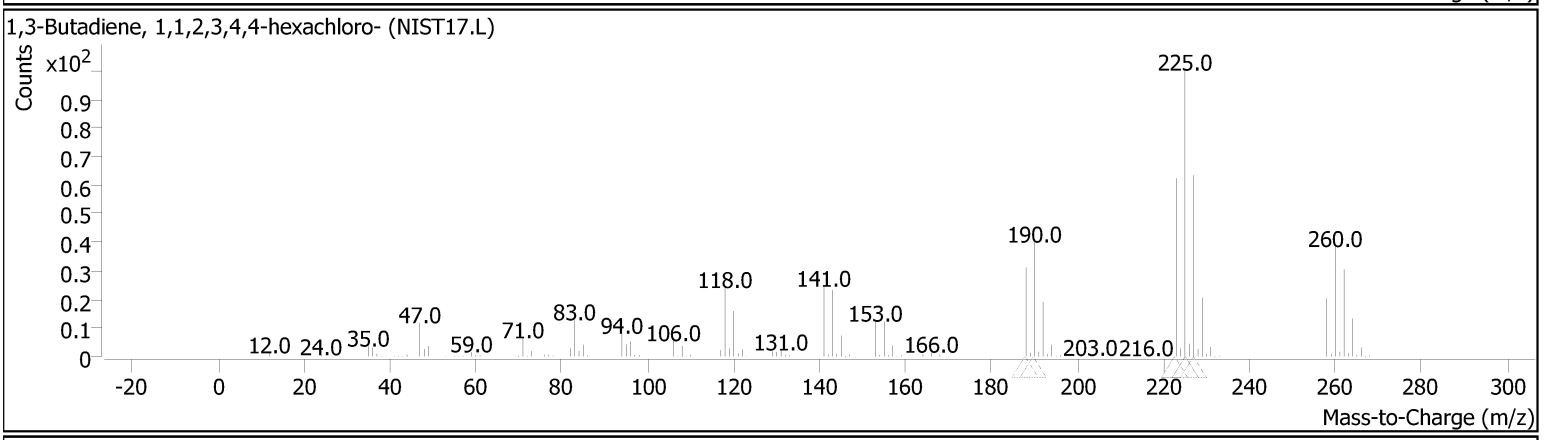


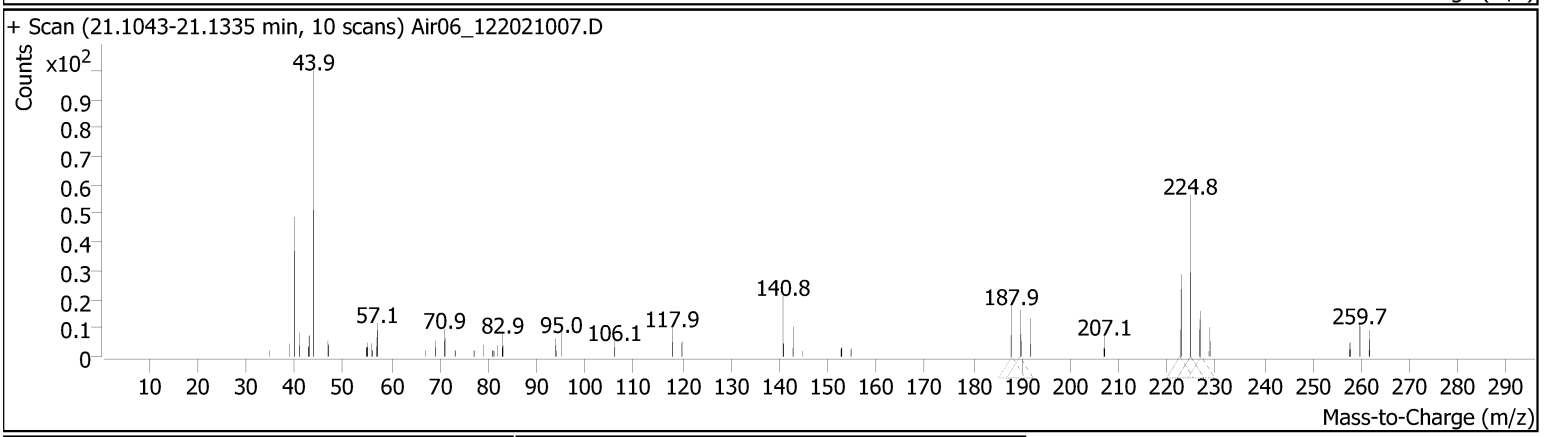


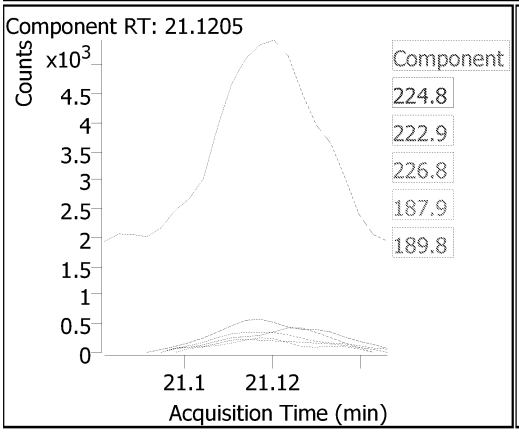


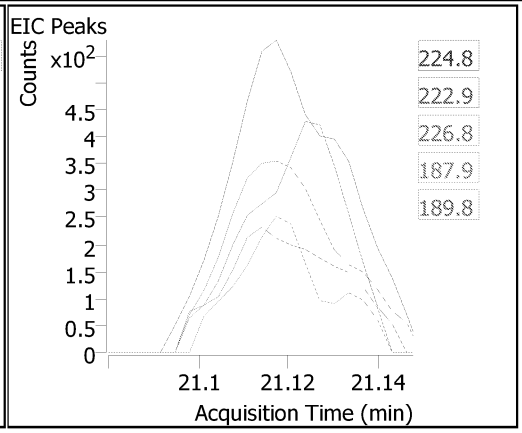
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.1205	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	6105.8	80.9	87-68-3	C4Cl6	0.01548

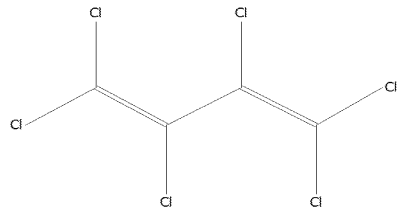




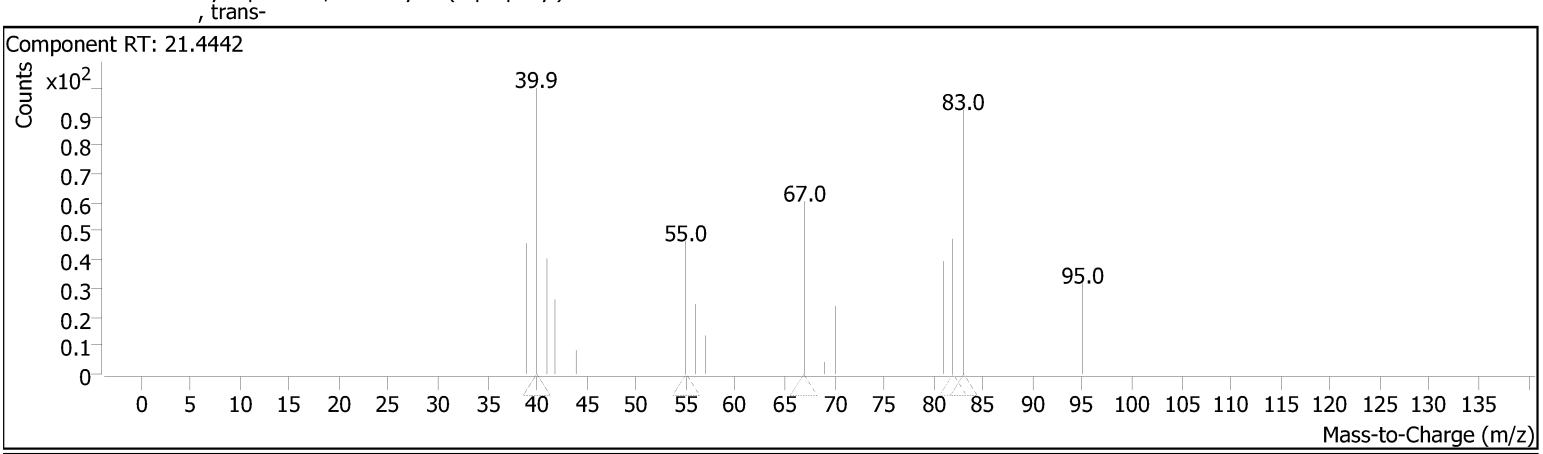


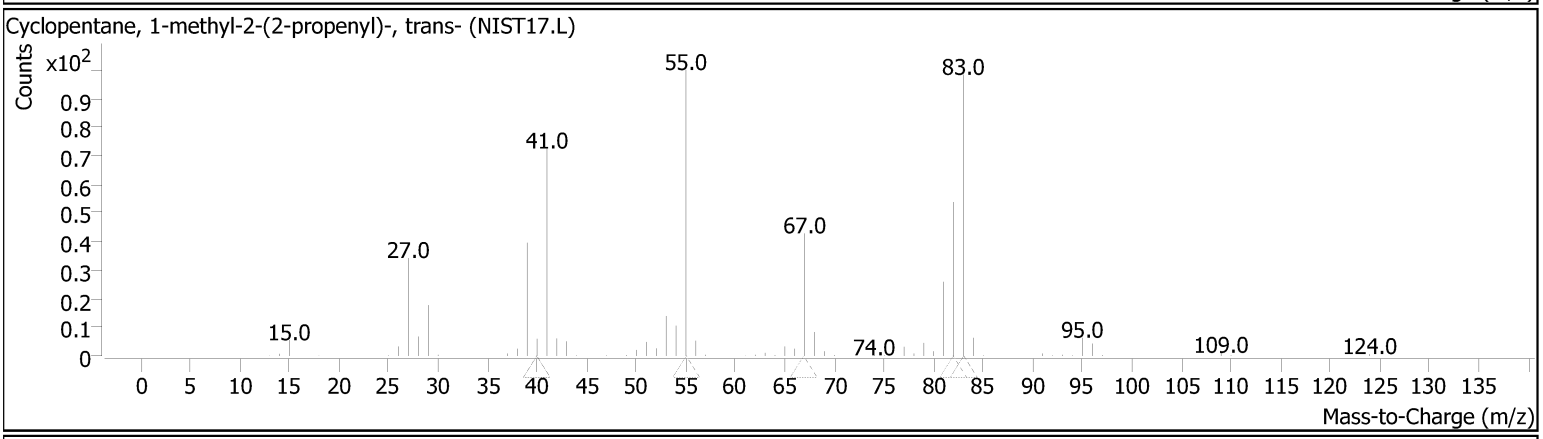


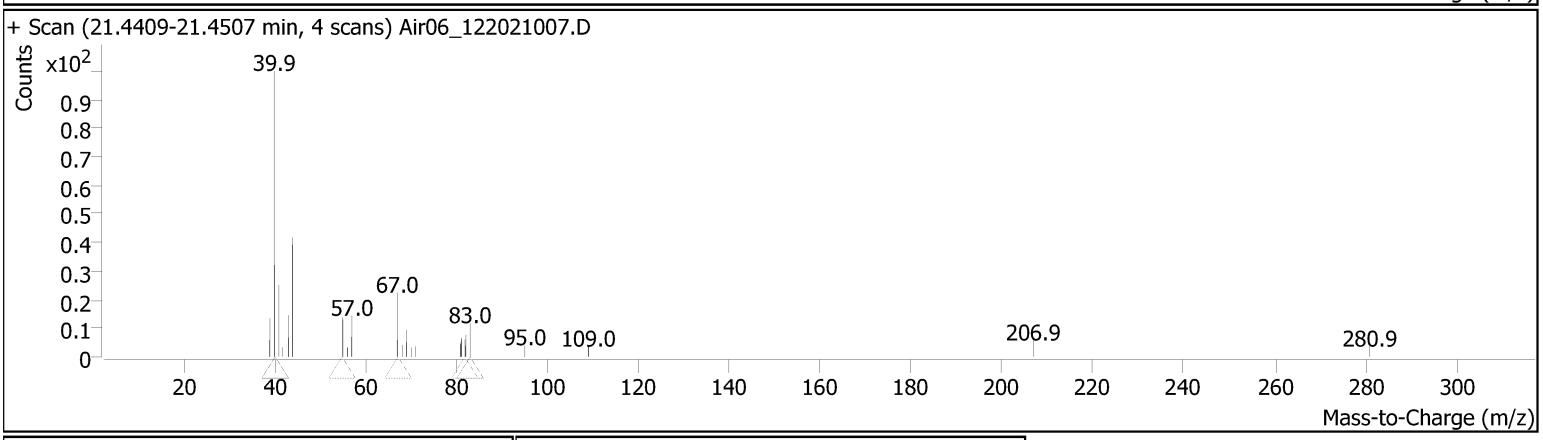


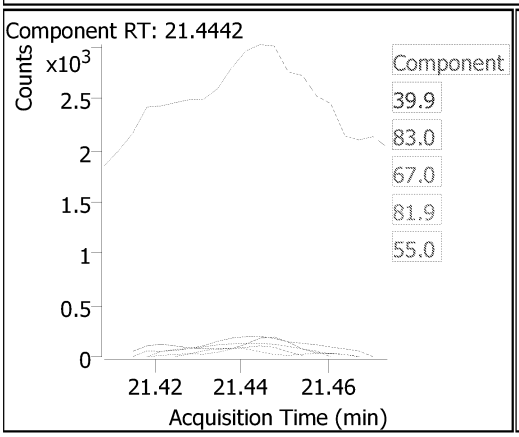


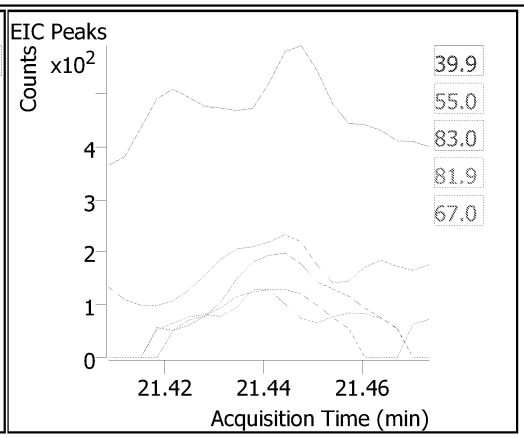
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.4442	Cyclopentane, 1-methyl-2-(2-propenyl)-, trans-	2545.3	72.4	50746-53-7	C9H16	0.006455

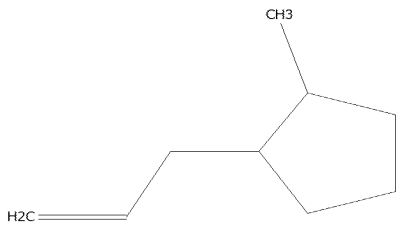




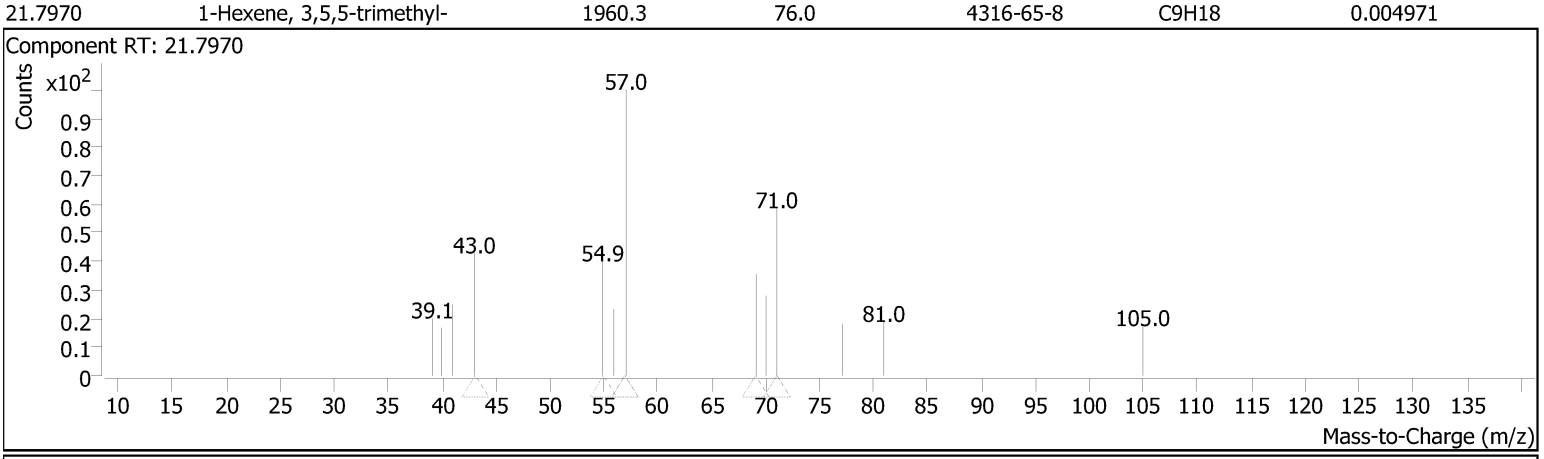


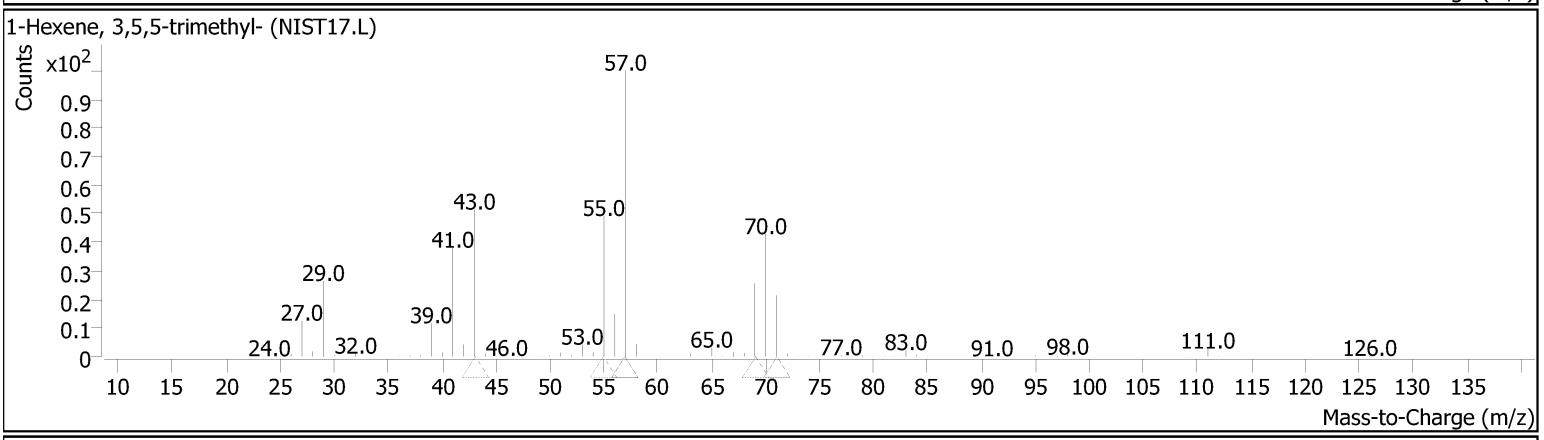


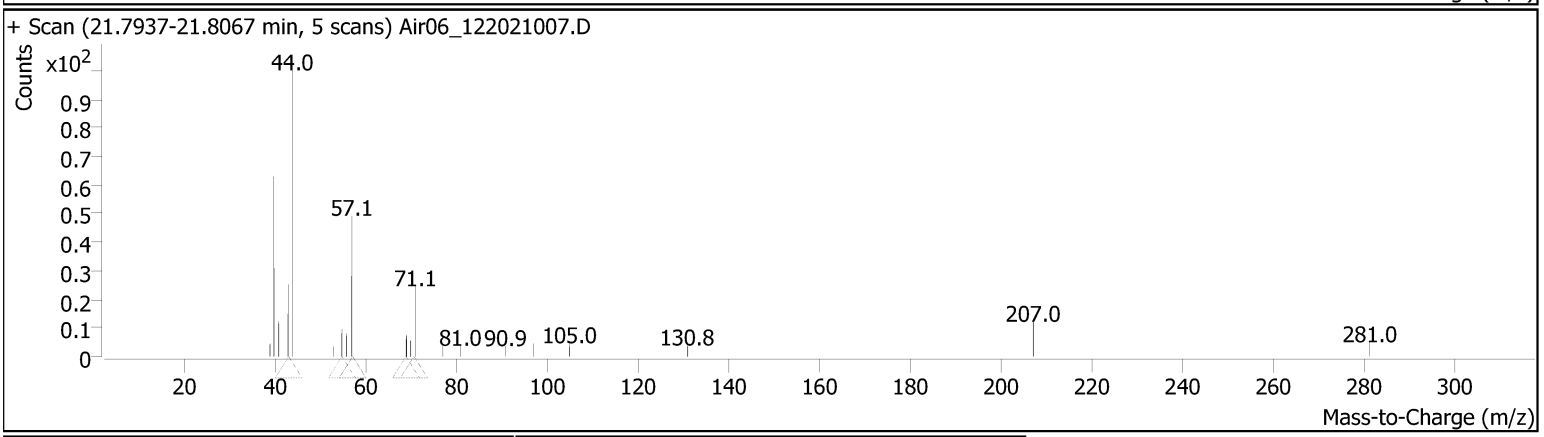


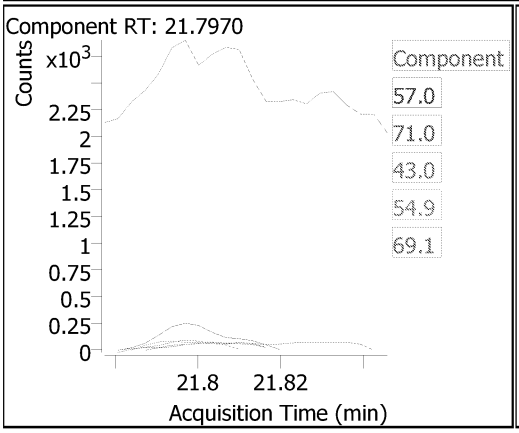


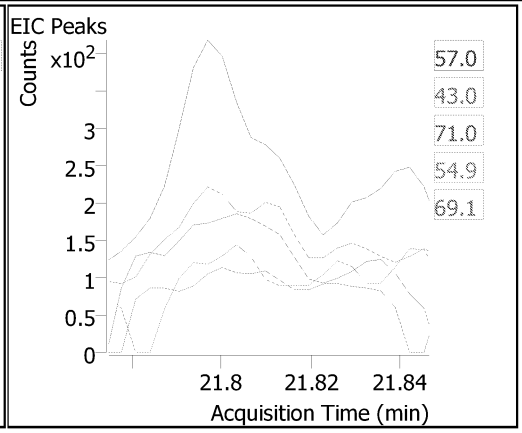
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.7970	1-Hexene, 3,5,5-trimethyl-	1960.3	76.0	4316-65-8	C9H18	0.004971

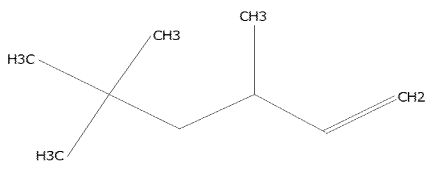




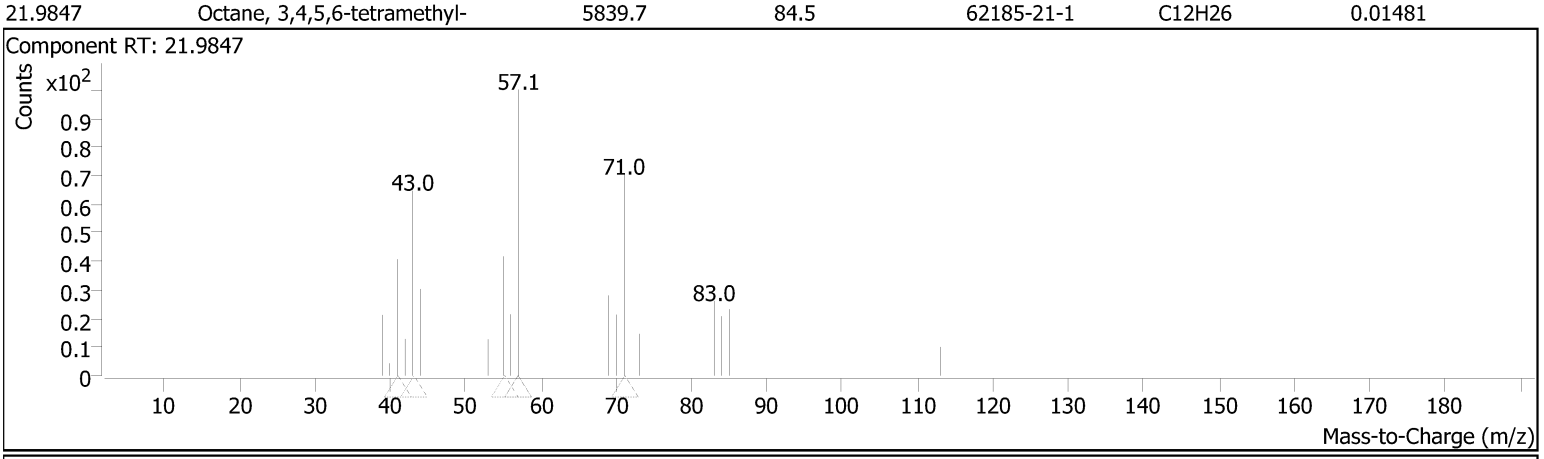


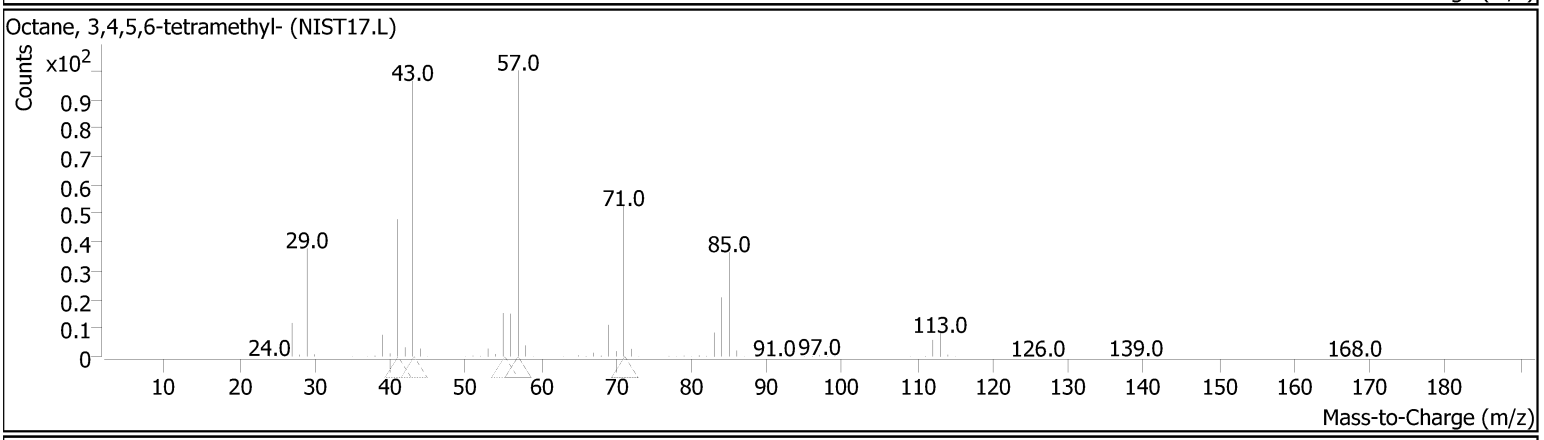


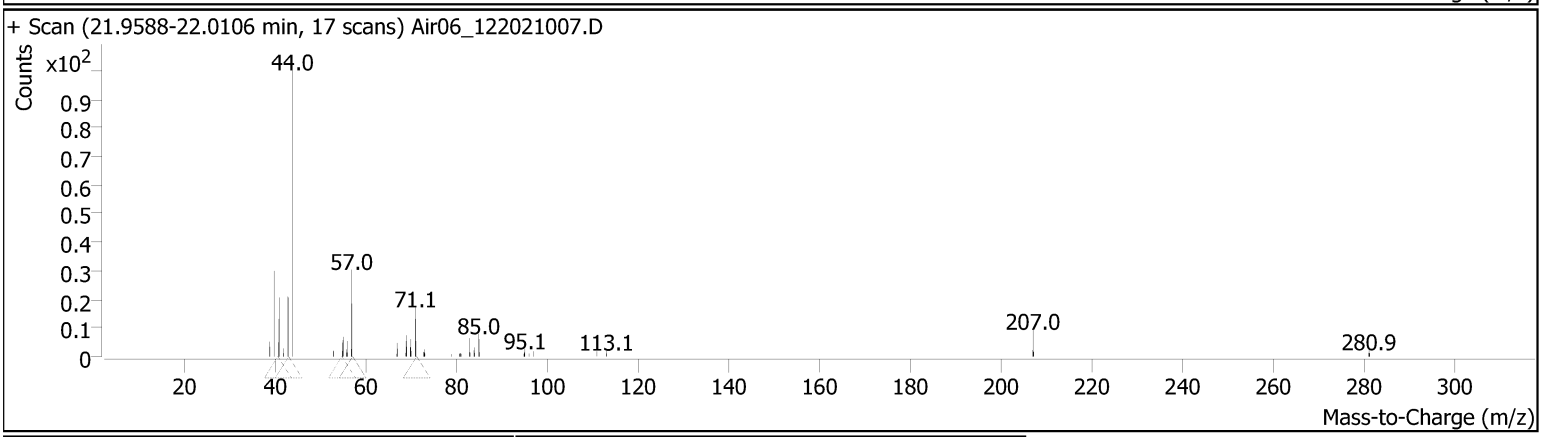


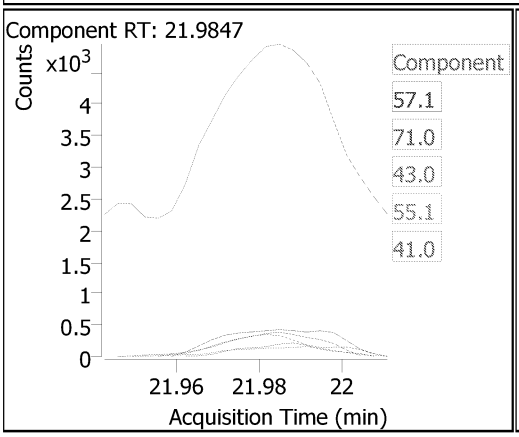


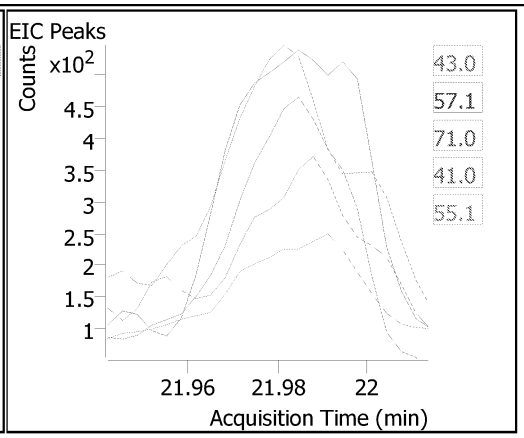
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.9847	Octane, 3,4,5,6-tetramethyl-	5839.7	84.5	62185-21-1	C12H26	0.01481

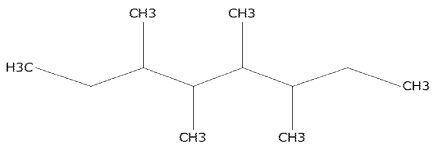




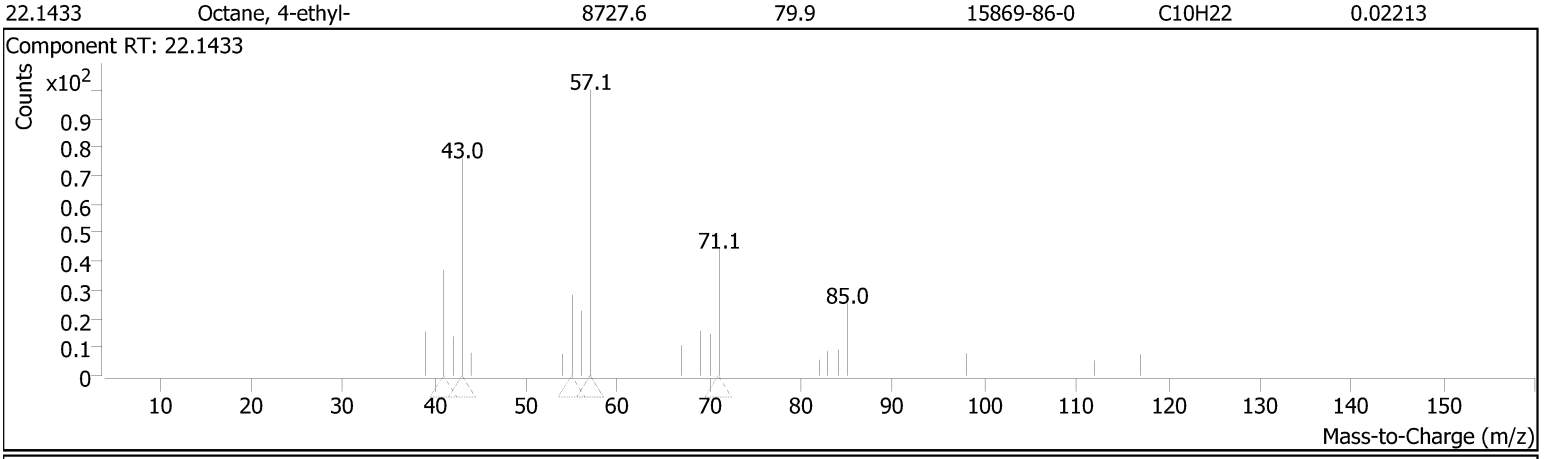


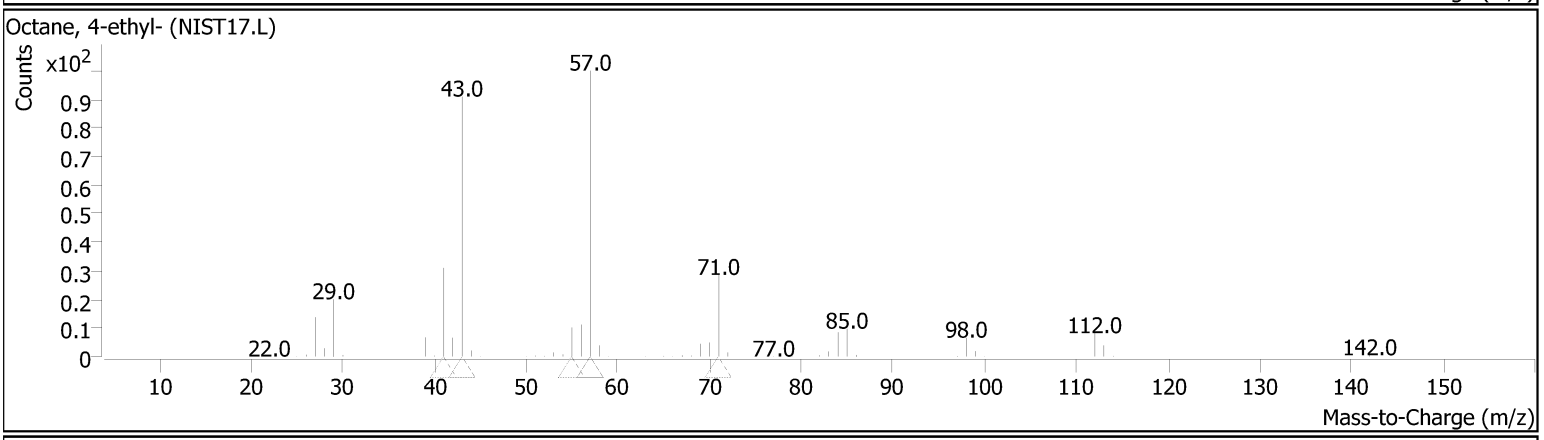


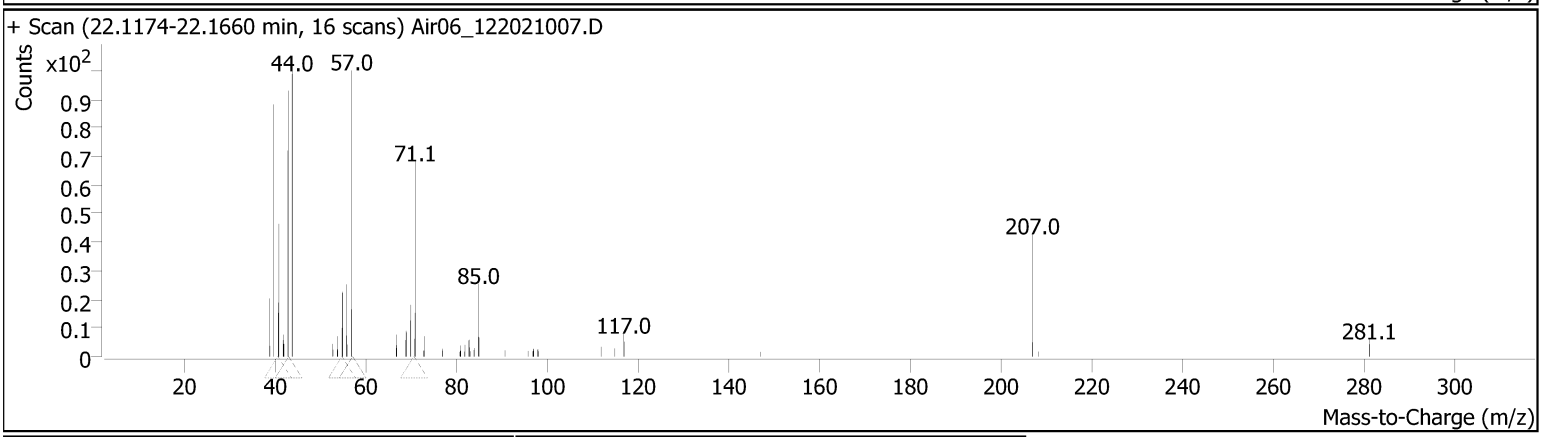


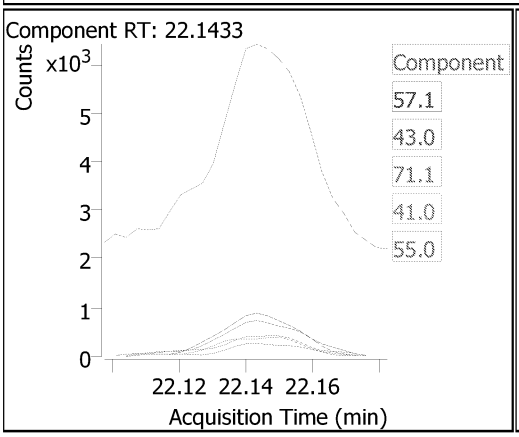


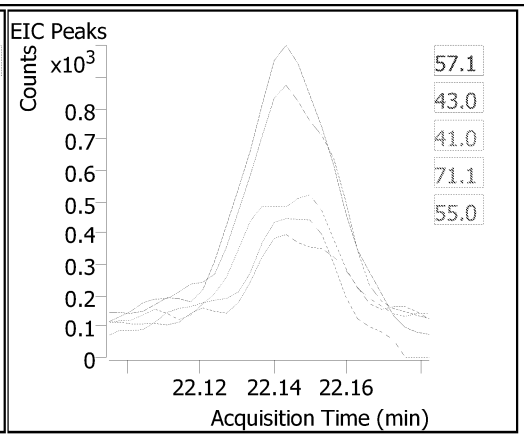
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.1433	Octane, 4-ethyl-	8727.6	79.9	15869-86-0	C10H22	0.02213

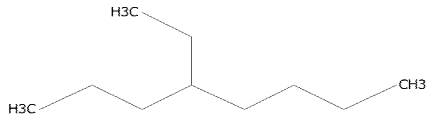




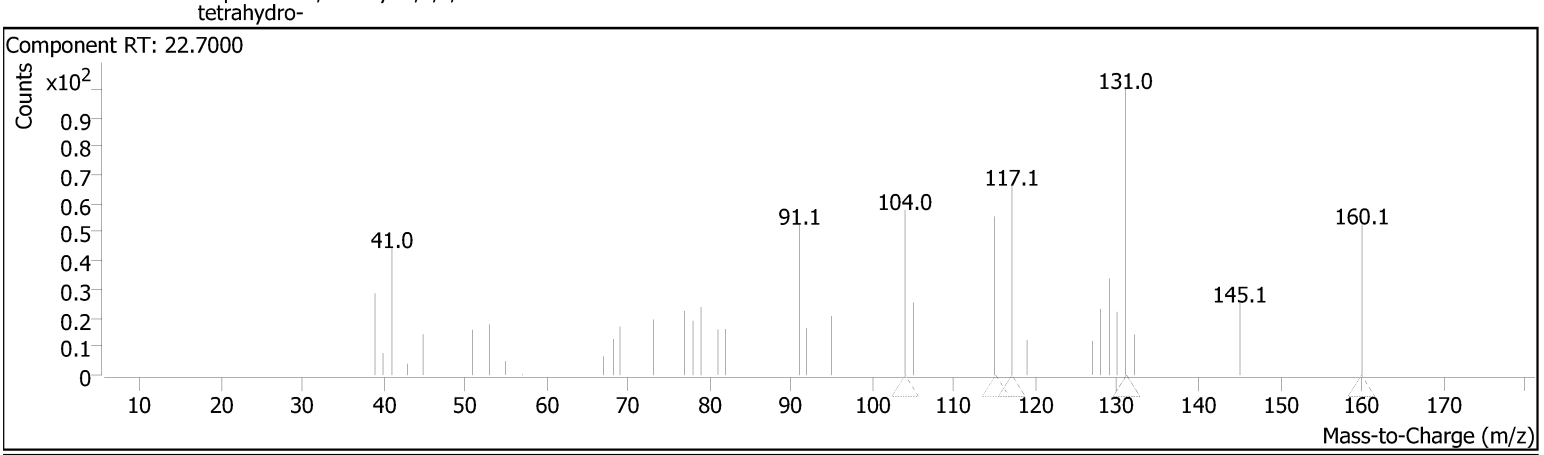


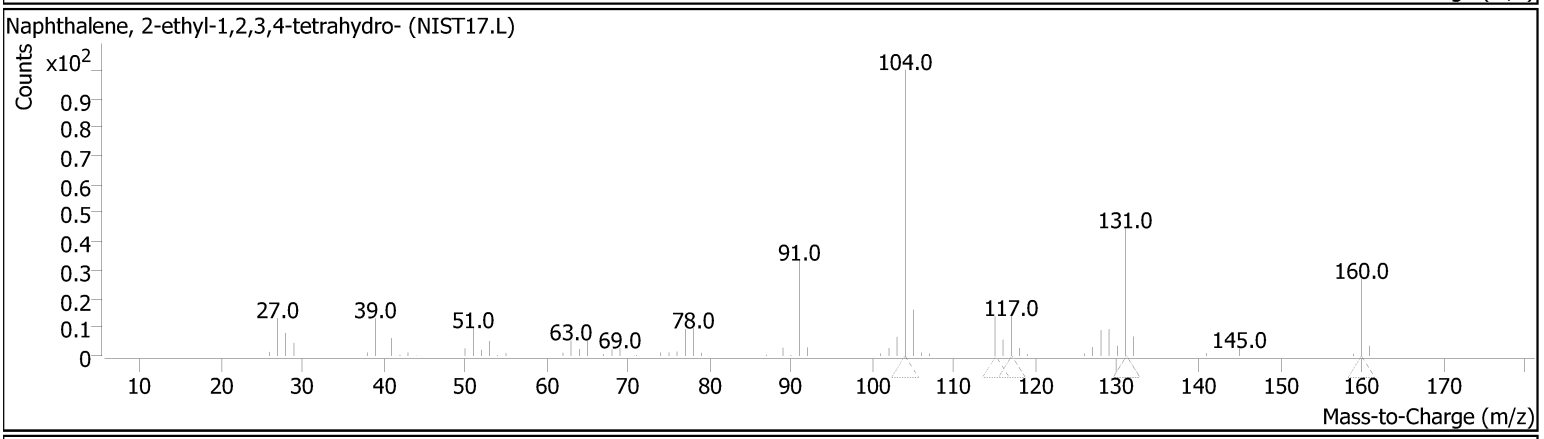


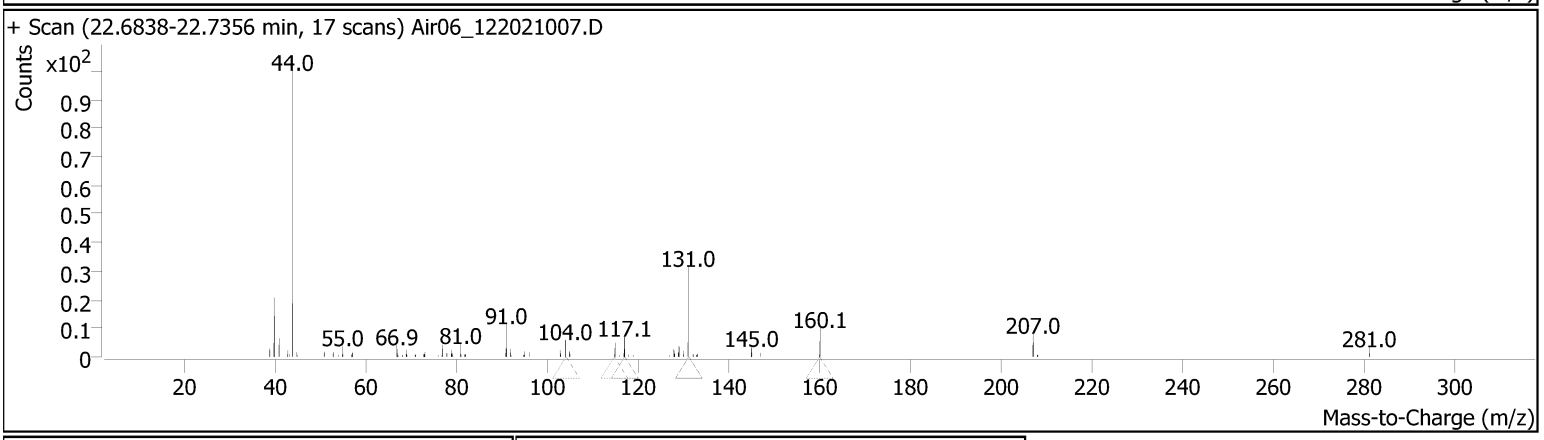


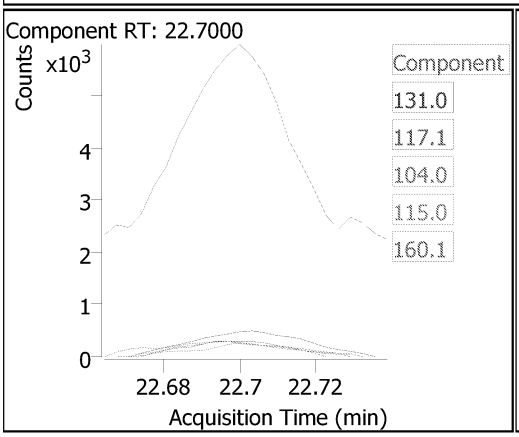


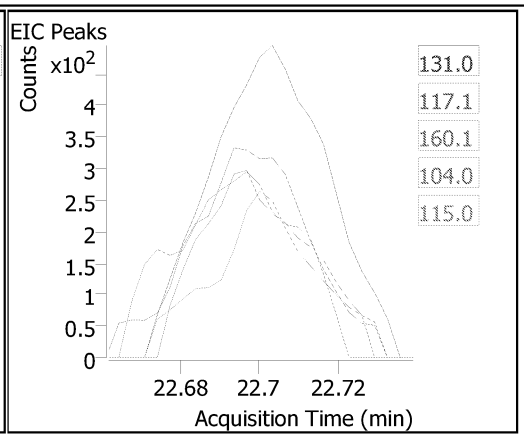
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.7000	Naphthalene, 2-ethyl-1,2,3,4-tetrahydro-	7485.5	75.5	32367-54-7	C12H16	0.01898

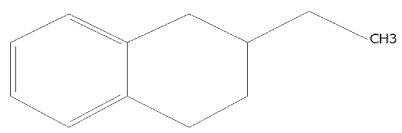








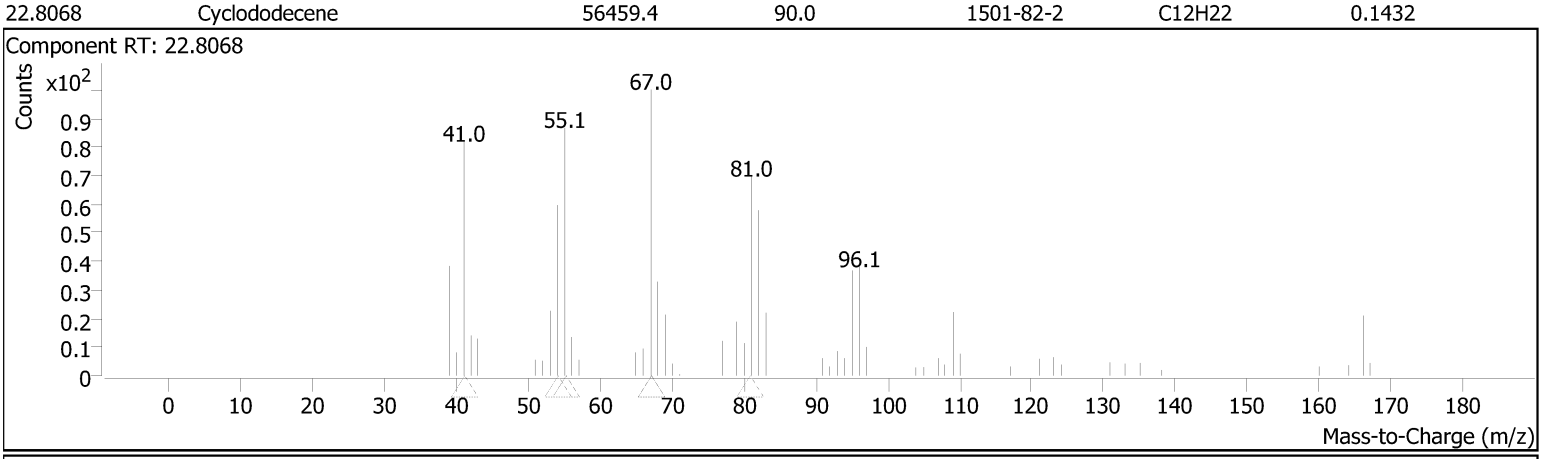


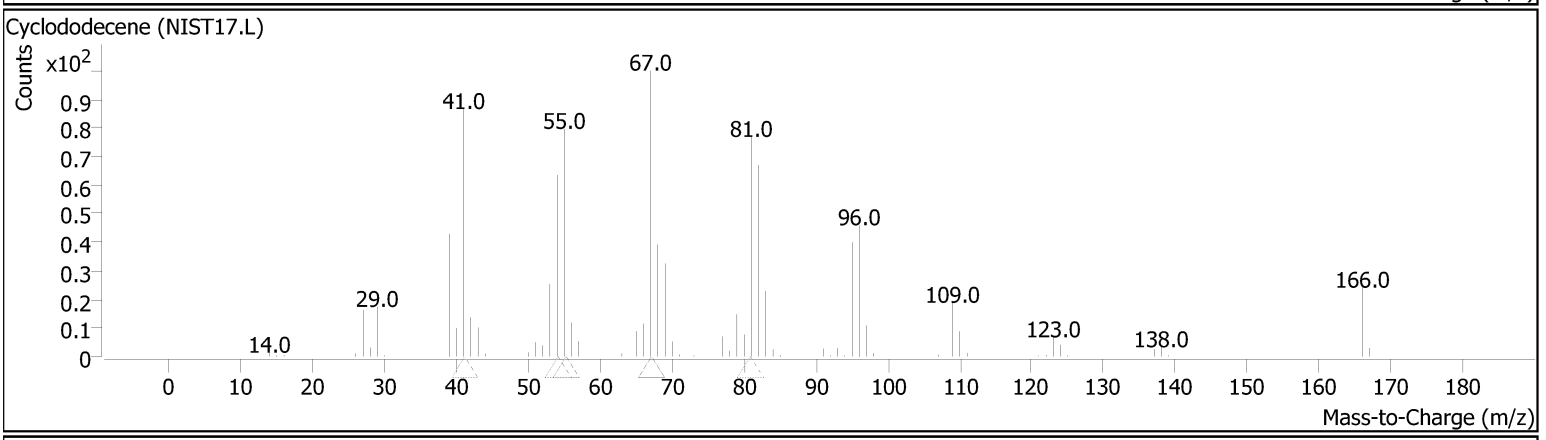


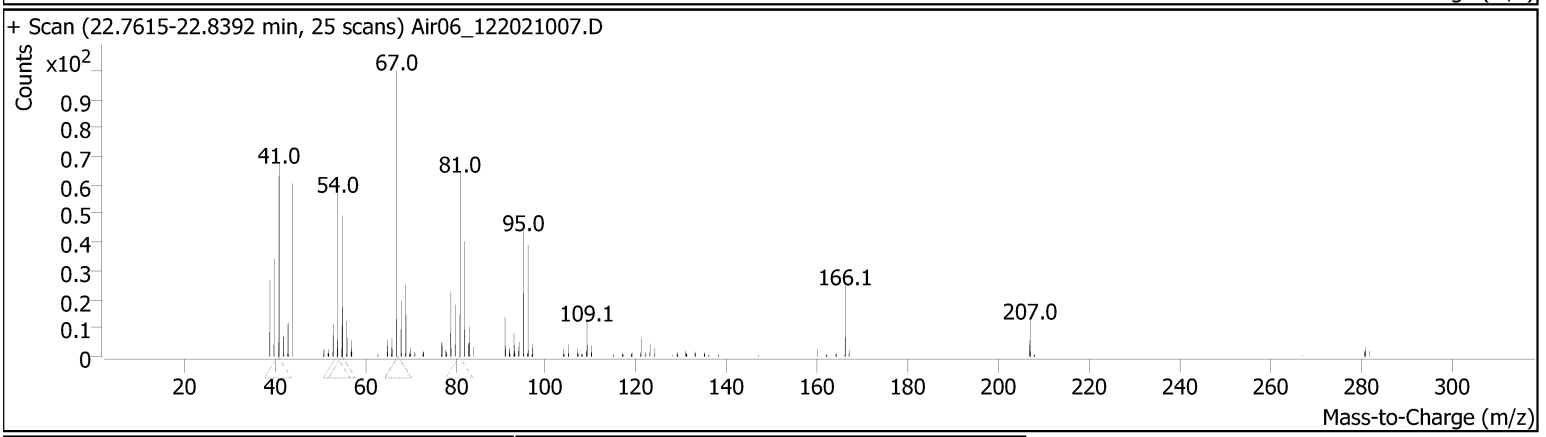
Library Search Results - NonTarget Hits with Details

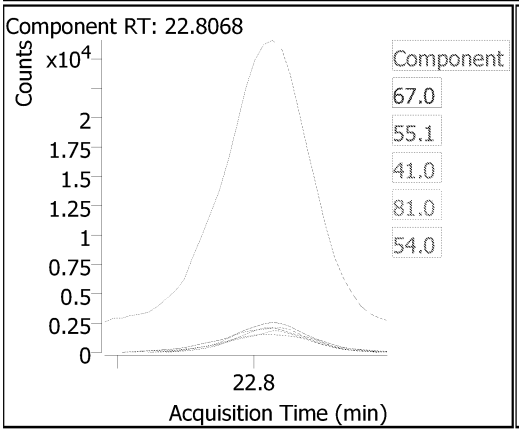
Agilent Technologies

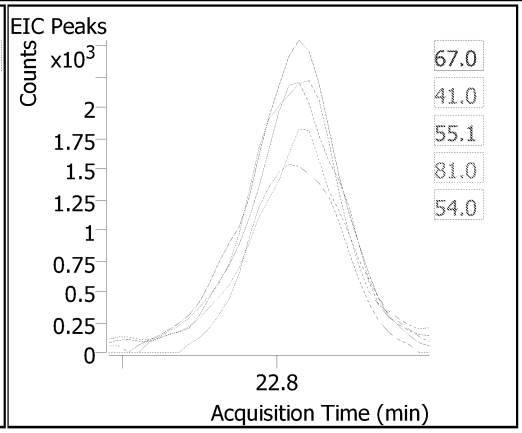
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.8068	Cyclododecene	56459.4	90.0	1501-82-2	C12H22	0.1432

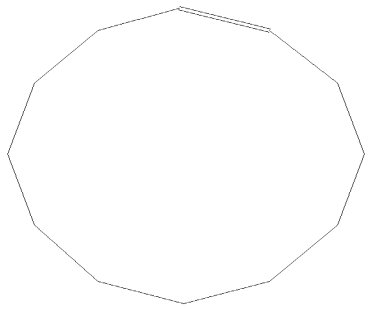








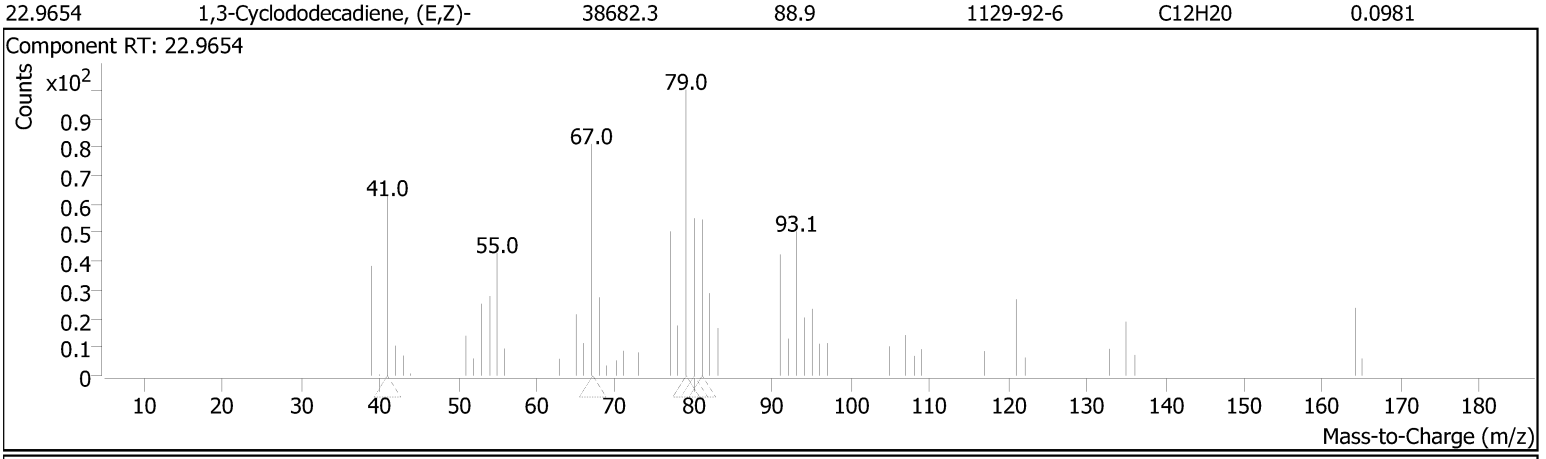


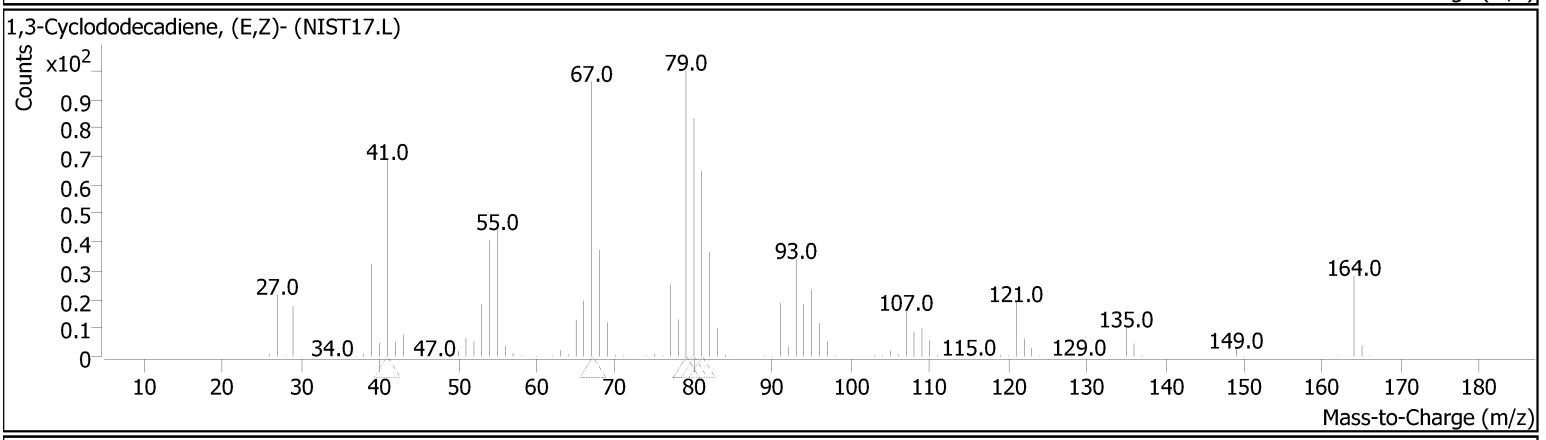


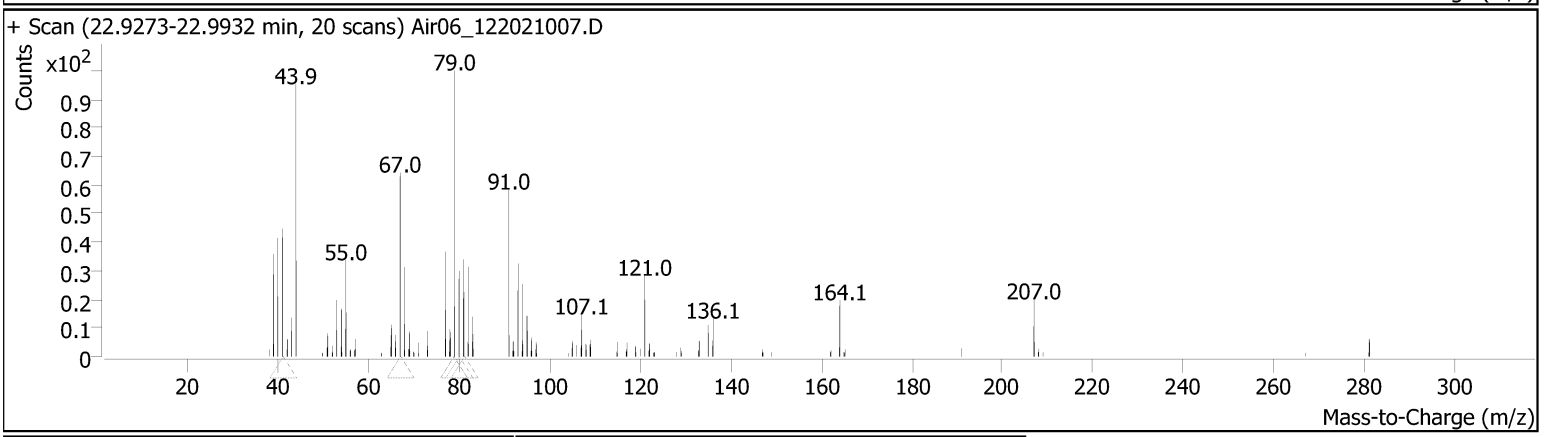
Library Search Results - NonTarget Hits with Details

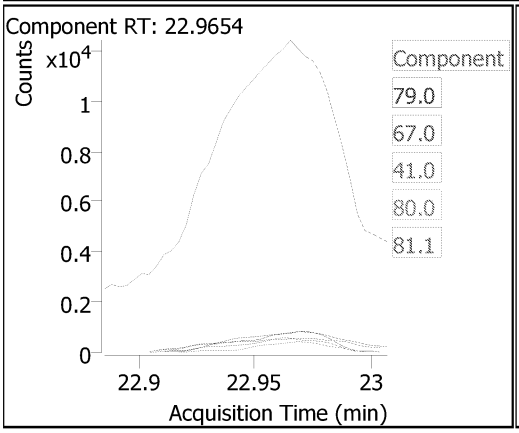
Agilent Technologies

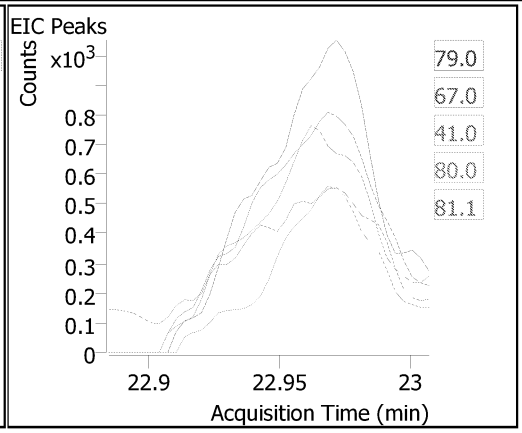
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.9654	1,3-Cyclododecadiene, (E,Z)-	38682.3	88.9	1129-92-6	C12H20	0.0981

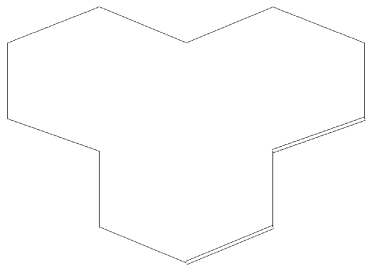




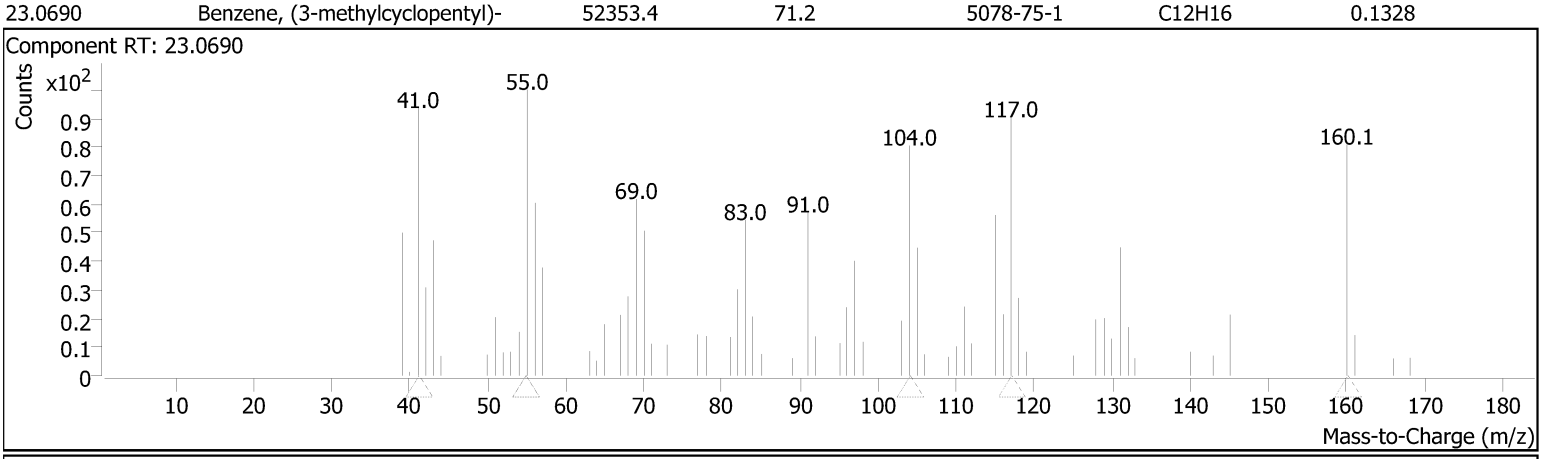


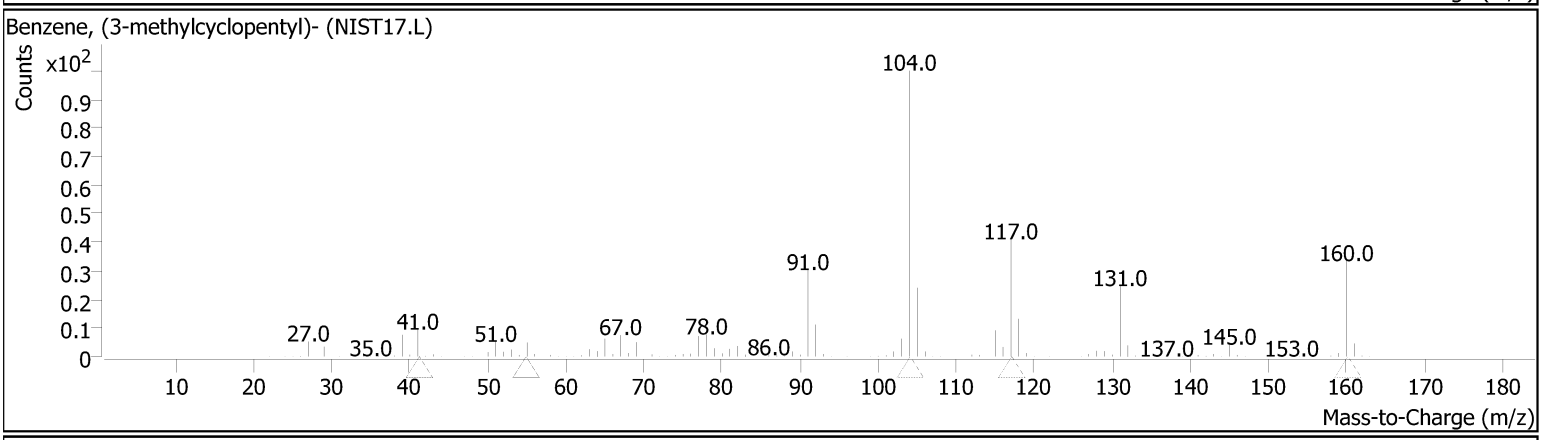


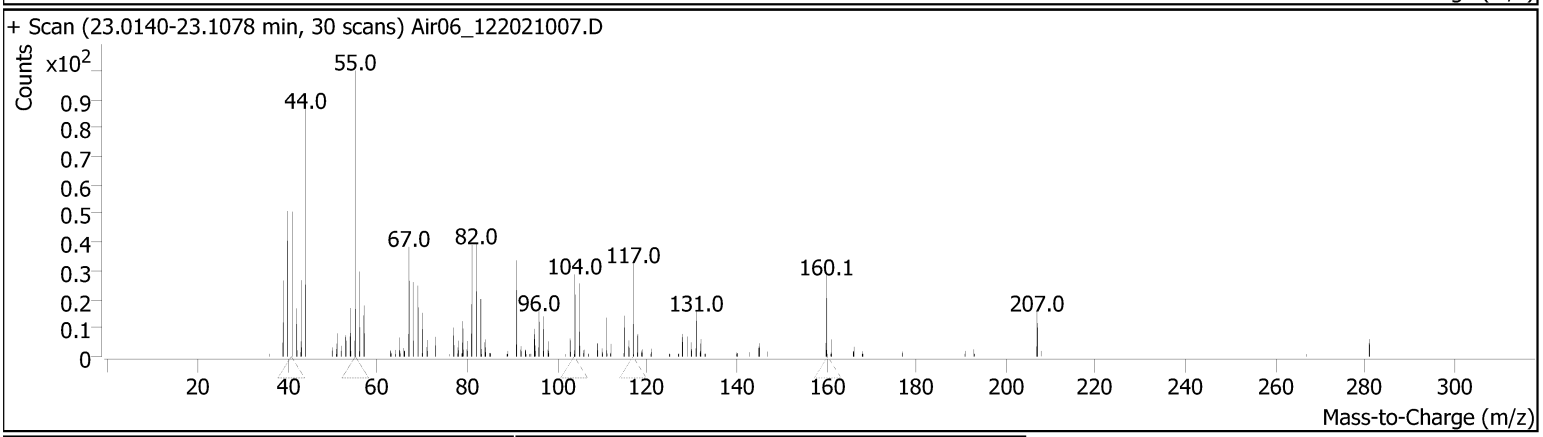


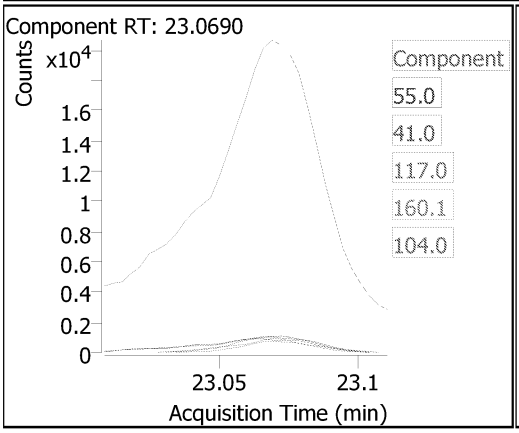


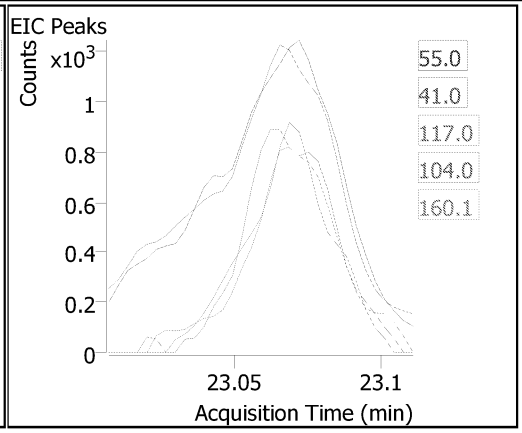
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.0690	Benzene, (3-methylcyclopentyl)-	52353.4	71.2	5078-75-1	C12H16	0.1328

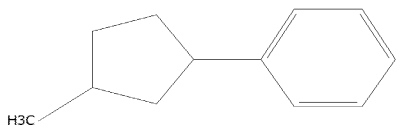




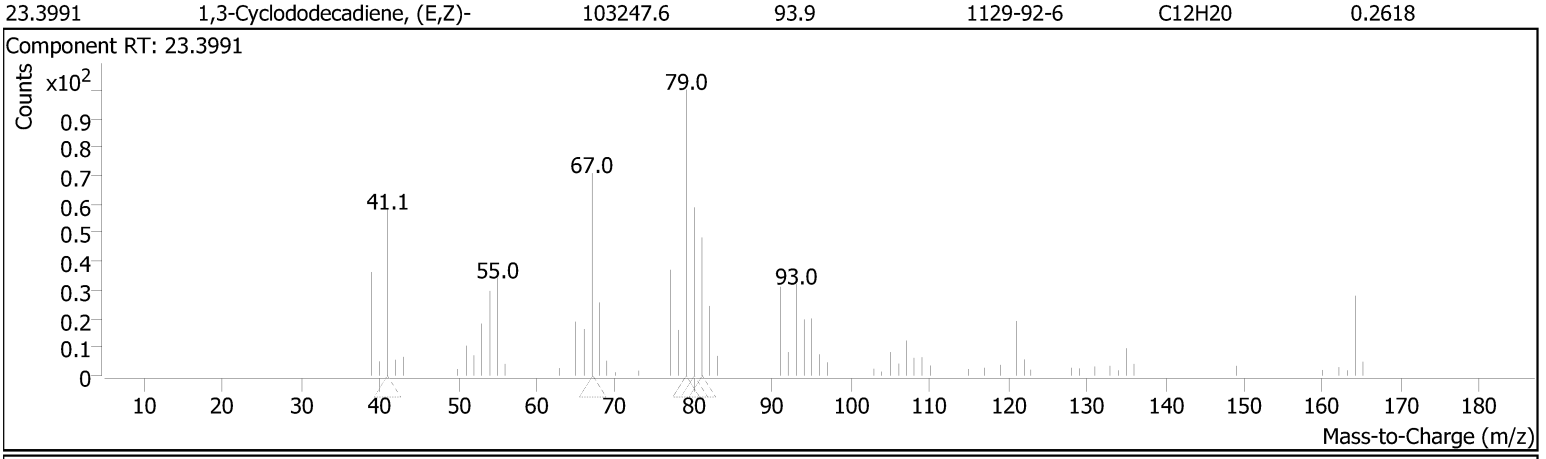


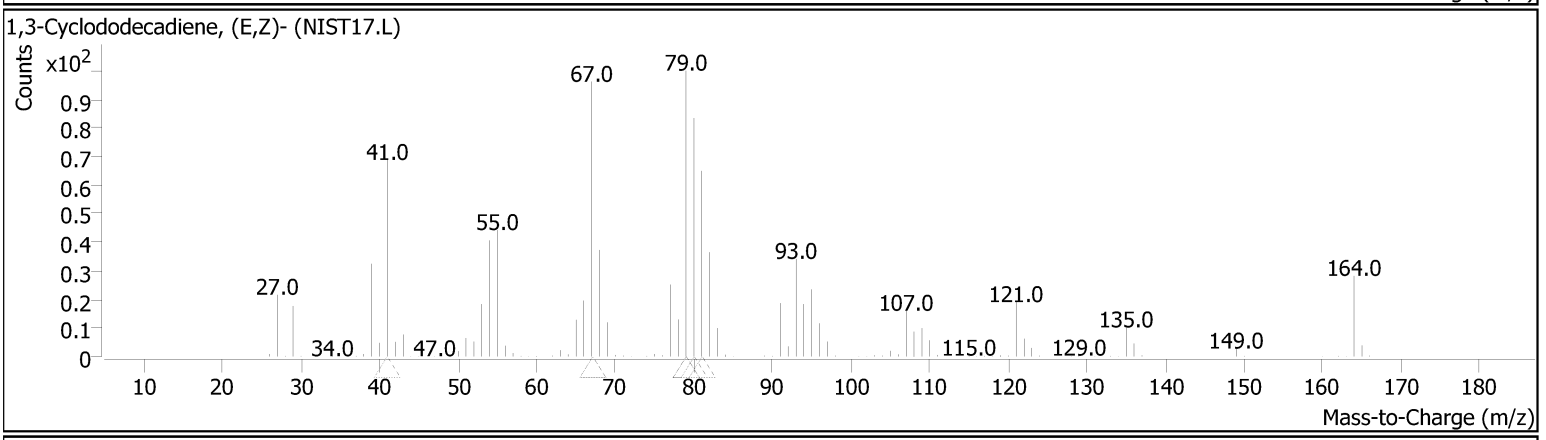


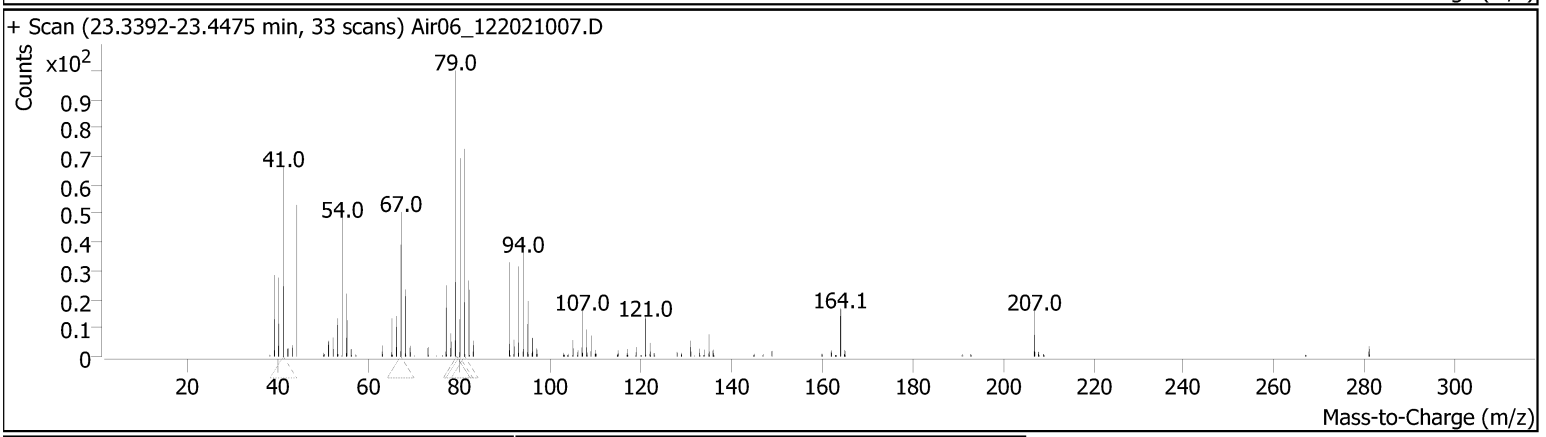


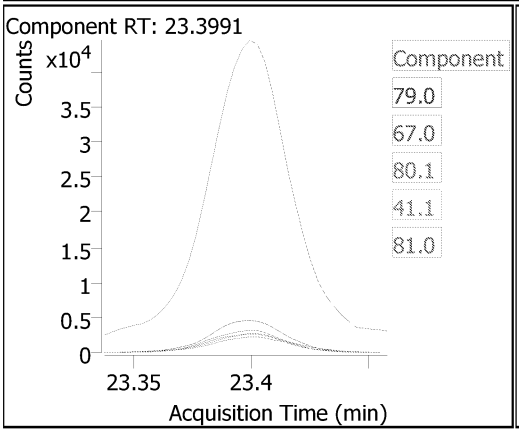


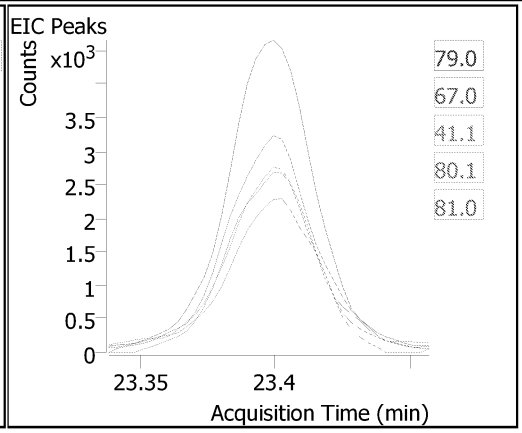
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.3991	1,3-Cyclododecadiene, (E,Z)-	103247.6	93.9	1129-92-6	C12H20	0.2618

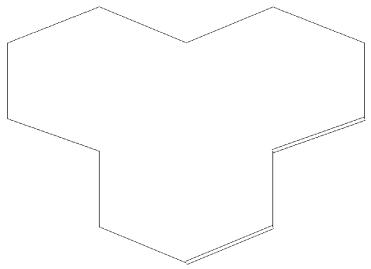












ENTHALPY SAMPLE USER REPORT FOR EPA TO-15

Inst	: AIR-MS-06	Lab ID	: 455620-002 C10031	Client ID	: SVMP-15D
Seqnum	: 371510273008	Matrix	: Air	Acct	: ELEMENT (JG)
File	: air06_122021008	Batch	: 280281	Time	: 20-DEC-2021 15:50
Cal	: 371497775001	Caldate	: 11-DEC-2021		
IDF	: 2.0	Raw Units	: nL/L	Units	: nL/L
PDF	: 1.0				

Analyte	Raw	Result	RTS	RL	Blank	Flags
Freon 12	4.021	8.0		0.40		u
Freon 114	0.006246	ND		0.40		u
Chloromethane	1.586	3.2	-0.140	0.40		u x
Vinyl Chloride	0	ND		0.40		u
Bromomethane	0	ND		0.40		u
Chloroethane	0.001712	ND		0.40		u
Trichlorofluoromethane	0.07418	ND		0.40		u
1,1-Dichloroethene	0.001668	ND		0.40		u
Freon 113	0.02407	ND		0.40		u
Acetone	1.291	2.6		2.0	0.13	u
Carbon Disulfide	0.02402	ND		0.40		u
Isopropanol (IPA)	0.3047	ND		2.0	0.067	u
Methylene Chloride	0.1180	ND		0.40	0.34	u
trans-1,2-Dichloroethene	0.007281	ND		0.40		u
MTBE	0.0008999	ND		0.40		u
n-Hexane	0.02400	ND		0.40		u
1,1-Dichloroethane	0	ND		0.40		u
Vinyl Acetate	0.03111	ND		2.0		u
cis-1,2-Dichloroethene	0.01058	ND		0.40		u
2-Butanone	0.09879	ND		2.0		u
Chloroform	0.02145	ND		0.40		calc u
1,1,1-Trichloroethane	0	ND		0.40		u
Carbon Tetrachloride	0.4657	0.93		0.40		u
Benzene	0.02723	ND		0.40		u
1,2-Dichloroethane	0	ND		0.40		u
Trichloroethene	0.0004499	ND		0.40		u
1,2-Dichloropropane	0.002587	ND		0.40		u
Bromodichloromethane	0.0005277	ND		0.40		u
cis-1,3-Dichloropropene	0	ND		0.40		u
4-Methyl-2-Pentanone	0.01053	ND		0.40		u
Toluene	0.09044	ND		0.40		u
trans-1,3-Dichloropropene	0	ND		0.40		u
1,1,2-Trichloroethane	0	ND		0.40		u
Tetrachloroethene	0.03817	ND		0.40		u
2-Hexanone	0.01226	ND		1.0		u
Dibromochloromethane	0.0003760	ND		0.40		u
1,2-Dibromoethane	0.0007624	ND		0.40		u
Chlorobenzene	0.002627	ND		0.40		u
Ethylbenzene	0.04997	ND		0.40		u
m,p-Xylenes	0.1687	ND		0.80		u
o-Xylene	0.07710	ND		0.40		u
Styrene	0.1793	ND		0.40		u
Bromoform	0.002089	ND		0.40		u
1,1,2,2-Tetrachloroethane	0.0003604	ND		0.40		u
1,1,1,2-Tetrachloroethane	0	ND		0.40		u
4-Ethyltoluene	0.01113	ND		0.40		u
1,3,5-Trimethylbenzene	0.01549	ND		0.40		u
1,2,4-Trimethylbenzene	0.04736	ND		0.40		u

Analyte	Raw	Result	RTS	RL	Blank	Flags
1,3-Dichlorobenzene	0.2324	0.46	0.080	0.40		u x
1,4-Dichlorobenzene	0.2355	0.47		0.40	0.027	u
Benzyl chloride	0.004919	ND		0.40	0.020	u
1,2-Dichlorobenzene	0.02617	ND		0.40	0.034	u
1,2,4-Trichlorobenzene	0.01748	ND		0.40	0.069	u v+
Hexachlorobutadiene	0.002659	ND		0.40		u

No TICs found.

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Bromofluorobenzene	10.26	20.00	20.53	103	60-140	u

ISTD (ICAL air06_121121009)	ICAL Area	SAMPLE Area	%Drift	ICAL RT	SAMPLE RT	Drift
Bromochloromethane	329831	338879	2.74	8.18	8.18	0.00
1,4-Difluorobenzene	1230119	1270464	3.28	9.91	9.91	0.00
Chlorobenzene-d5	754830	703583	-6.79	14.02	14.01	-0.01

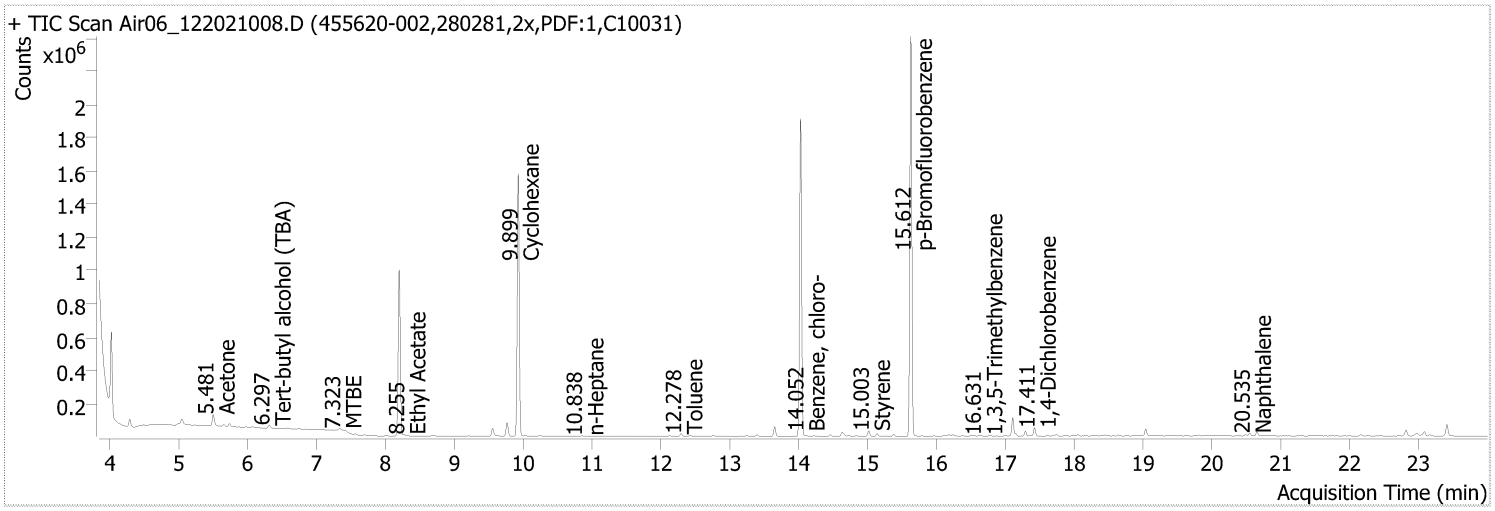
(not in upper half)

Analyst: GSG Date: 01/04/22 Reviewer: SLL Date: 01/04/22

+=high bias calc=check quantitation u=use v=ICV x=false positive

Quantitation Results Report (Not Reviewed)

Data File	Air06_122021008.D	Operator	ZNZ/DJL/LJB
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	12/20/2021 3:50:16 PM
Sample Name	455620-002,280281,2x,PDF:1,C10031	Instrument	Air-MS-06
Vial	6	Multiplier	1.00
DA Method File	TO15_121121.m	Comment	2x400mL
Tune File	bfb.u	Tune Date	12/14/2021 7:38:43 AM
Batch Name	2021 Dec 20 1433 TO15_121121.m.batch.bin	Last Calib Update	12/13/2021 9:29:07 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



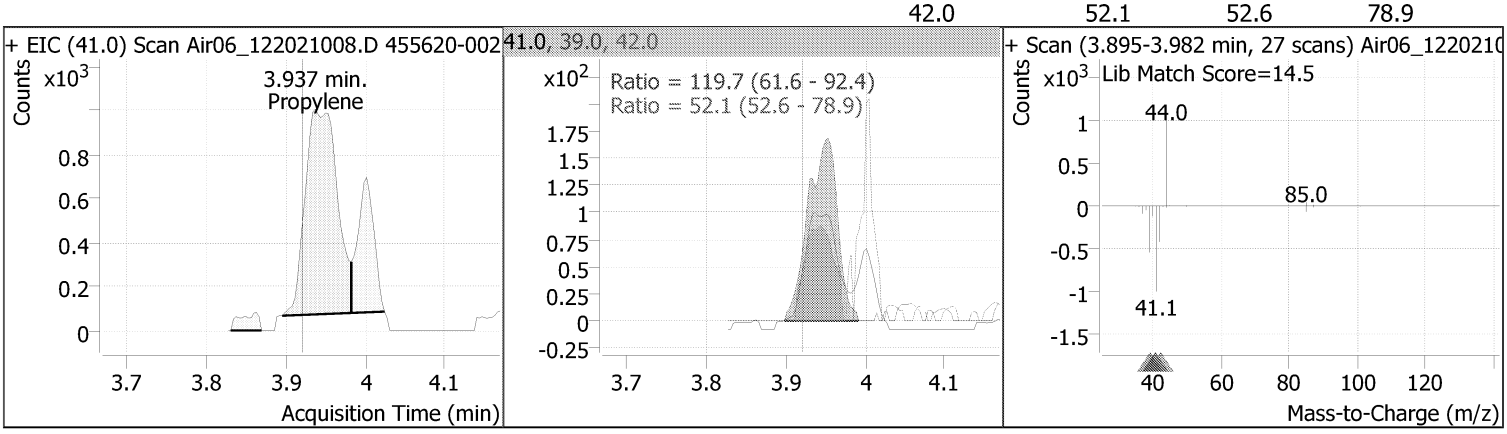
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.184	130.0	338879	10.0000	nL/L		0.004
M 1,4-Difluorobenzene	9.912	114.0	1270464	10.0000	nL/L		0.000
M Chlorobenzene-d5	14.013	82.0	703583	10.0000	nL/L	#	-0.003
System Monitoring Compounds							
S p-Bromofluorobenzene	15.612	95.0	926755	10.2627	nL/L		-0.006
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 102.63%			
Target Compounds							QValue
T Propylene	3.937	41.0	2635	0.0709	nL/L	#	65
T Freon 12	4.002	85.0	487331	4.0211	nL/L		99
T Chloromethane	4.002	50.0	67249	1.5861	nL/L	#	56
T Freon 114	4.264	135.0	442	0.0062	nL/L	#	63
T Vinyl Chloride	0.000		0	N.D.			
T 1,3-Butadiene	4.468	54.0	174	0.0051	nL/L	#	1
T Butane	4.568	43.0	3610	0.0529	nL/L	#	79
T Bromomethane	0.000		0	N.D.			
T Chloroethane	4.924	64.0	34	0.0017	nL/L	#	37
T Ethanol	5.025	45.0	37141	1.3969	nL/L		97
T Vinyl bromide	0.000		0	N.D.			
T Acrolein	5.348	56.0	482	0.0281	nL/L	#	79
T Acetone	5.481	58.0	29628	1.2912	nL/L	#	64
T Trichloromonofluoromethane	5.636	101.0	10175	0.0742	nL/L		97
T Isopropanol (IPA)	5.714	45.0	27331	0.3047	nL/L	#	90
T n-Pentane	5.954	43.0	3375	0.0384	nL/L	#	93
T 1,1-Dichloroethene	6.274	61.0	141	0.0017	nL/L		39
T Tert-butyl alcohol (TBA)	6.297	59.0	11103	0.1173	nL/L	#	90
T Methylene Chloride	6.293	84.0	4295	0.1181	nL/L		85
T 3-Chloropropene	6.581	76.0	2432	0.1588	nL/L	#	52
T Freon 113	6.546	101.0	2089	0.0241	nL/L		94
T Carbon Disulfide	6.581	76.0	2432	0.0240	nL/L	#	65

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.323	61.0	479	0.0073	nL/L	#	43
T 1,1-Dichloroethane	0.000		0	N.D.			
T MTBE	7.323	73.0	100	0.0009	nL/L		45
T Vinyl Acetate	7.413	43.0	4317	0.0311	nL/L	#	89
T 2-Butanone	7.679	43.0	10826	0.0988	nL/L		97
T cis-1,2-Dichloroethene	8.255	61.0	713	0.0106	nL/L	#	1
T Ethyl Acetate	8.255	61.0	713	0.0468	nL/L		67
T n-Hexane	8.255	57.0	1703	0.0240	nL/L		99
T Chloroform	8.297	83.0	2075	0.0215	nL/L		77
T Tetrahydrofuran	8.702	72.0	255	0.0161	nL/L		44
T 1,2-Dichloroethane	0.000		0	N.D.			
T 1,1,1-Trichloroethane	0.000		0	N.D.			
T Benzene	9.611	78.0	2928	0.0272	nL/L		94
T Carbon Tetrachloride	9.750	117.0	50978	0.4657	nL/L		98
T Cyclohexane	9.899	84.0	1968	0.0442	nL/L	#	1
T 1,2-Dichloropropane	10.346	63.0	127	0.0026	nL/L		24
T Methane, bromodichloro-	10.504	83.0	53	0.0005	nL/L		32
T 1,4-Dioxane	10.598	88.0	167	0.0071	nL/L	#	60
T Trichloroethene	10.569	132.0	22	0.0004	nL/L	#	1
T 2,2,4-Trimethylpentane	10.608	57.0	576	0.0025	nL/L		45
T Methyl methacrylate	0.000		0	N.D.			
T n-Heptane	10.838	71.0	576	0.0160	nL/L	#	77
T cis-1,3-Dichloropropene	0.000		0	N.D.			
T 4-Methyl-2-Pentanone	11.417	58.0	448	0.0105	nL/L	#	61
T trans-1,3-Dichloropropene	0.000		0	N.D.			
T 1,1,2-Trichloroethane	0.000		0	N.D.			
T Toluene	12.278	91.0	12432	0.0904	nL/L	#	98
T TPH Gasoline (C3 to C12)	12.396	165.0	14930292	1.4950	nL/L		100
T 2-Hexanone	12.547	58.0	652	0.0123	nL/L	#	84
T Dibromochloromethane	12.673	129.0	36	0.0004	nL/L		31
T 1,2-Dibromoethane	12.922	108.9	56	0.0008	nL/L	#	1
T Tetrachloroethene	13.385	166.0	3080	0.0382	nL/L		94
T 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
T Benzene, chloro-	14.052	112.0	263	0.0026	nL/L		29
T Ethylbenzene	14.443	91.0	8085	0.0500	nL/L	#	98
T TPH Gasoline (C6 to C12)	14.521	165.0	2911654	0.3917	nL/L		100
T m,p-Xylenes	14.621	91.0	23023	0.1687	nL/L		98
T Bromoform	14.693	173.0	225	0.0021	nL/L	#	1
T Styrene	15.003	104.0	16393	0.1793	nL/L		96
T 1,1,2,2-Tetrachloroethane	15.094	83.0	35	0.0004	nL/L		32
T o-Xylene	15.123	91.0	10923	0.0771	nL/L		99
T n-Nonane	15.366	85.0	1232	0.0426	nL/L	#	94
T Isopropylbenzene	15.777	105.0	2179	0.0113	nL/L		96
T 2-Chlorotoluene	16.114	126.0	124	0.0029	nL/L	#	1
T n-Propylbenzene	16.360	120.0	995	0.0205	nL/L		84
T 4-Ethyltoluene	16.534	105.1	2032	0.0111	nL/L	#	80
T 1,3,5-Trimethylbenzene	16.631	105.0	2575	0.0155	nL/L	#	88
T 1,2,4-Trimethylbenzene	17.136	105.0	7364	0.0474	nL/L	#	95
T Benzyl chloride	17.295	91.0	659	0.0049	nL/L	#	64
T 1,3-Dichlorobenzene	17.411	146.0	24997	0.2324	nL/L		97
T 1,4-Dichlorobenzene	17.411	146.0	24997	0.2355	nL/L		99
T 1,2-Dichlorobenzene	17.865	146.0	2711	0.0262	nL/L	#	89
T 1,2,4-Trichlorobenzene	20.367	179.9	1288	0.0175	nL/L	#	96
T Naphthalene	20.535	128.0	13581	0.1186	nL/L		98
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.121	225.0	321	0.0027	nL/L	#	67

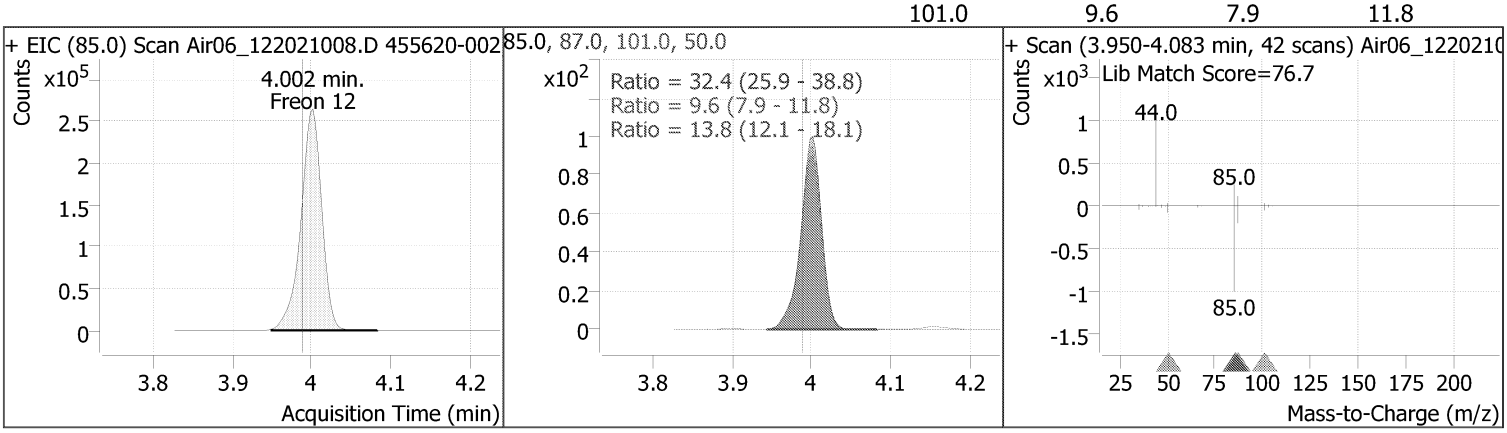
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

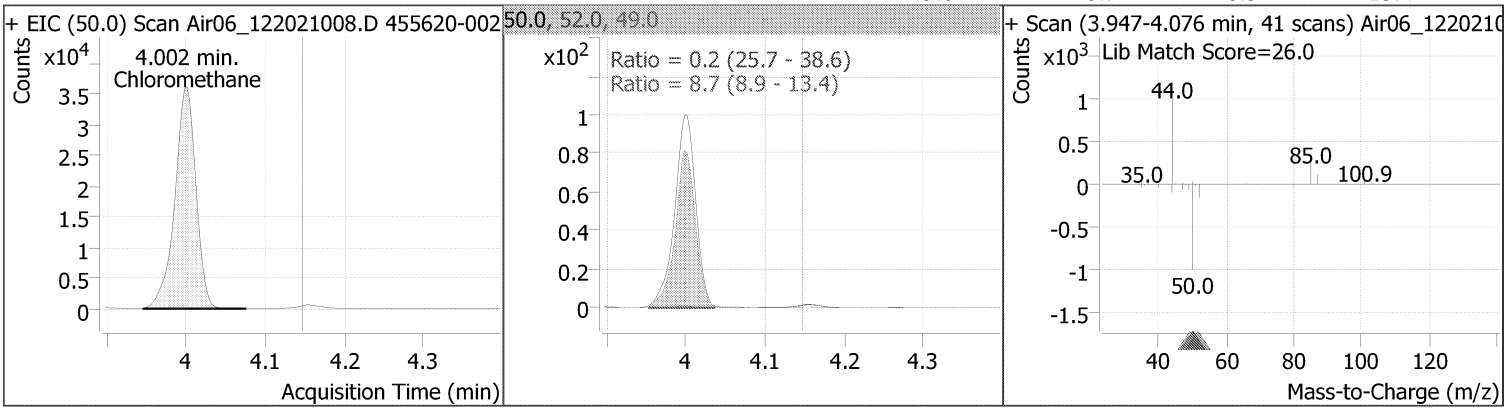
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.0709	3.94	0.02	2635	39.0	119.7	61.6	92.4
					42.0	52.1	52.6	78.9



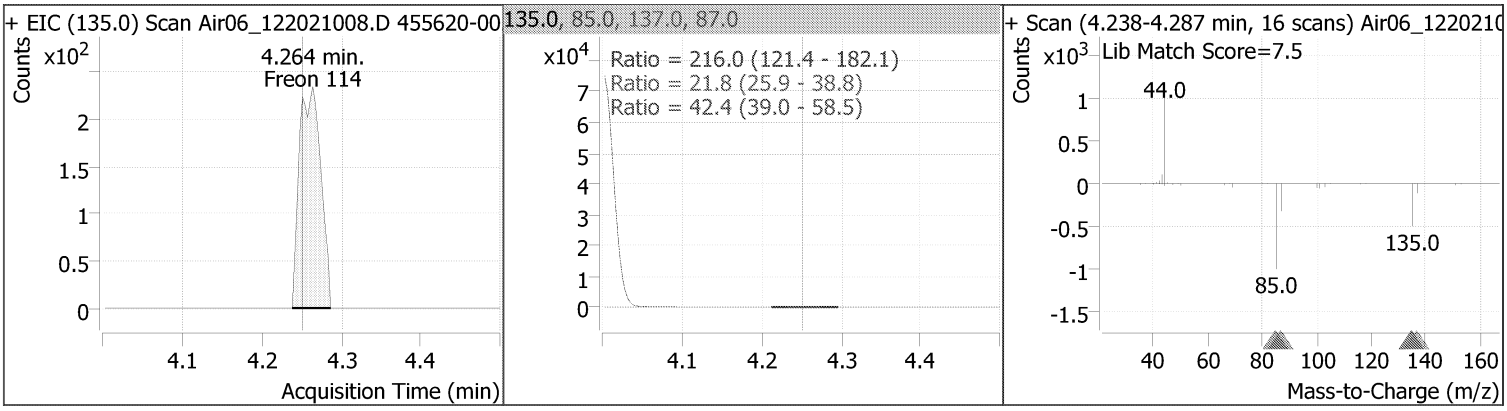
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	4.0211	4.00	0.02	487331	87.0	32.4	25.9	38.8
					50.0	13.8	12.1	18.1
					101.0	9.6	7.9	11.8



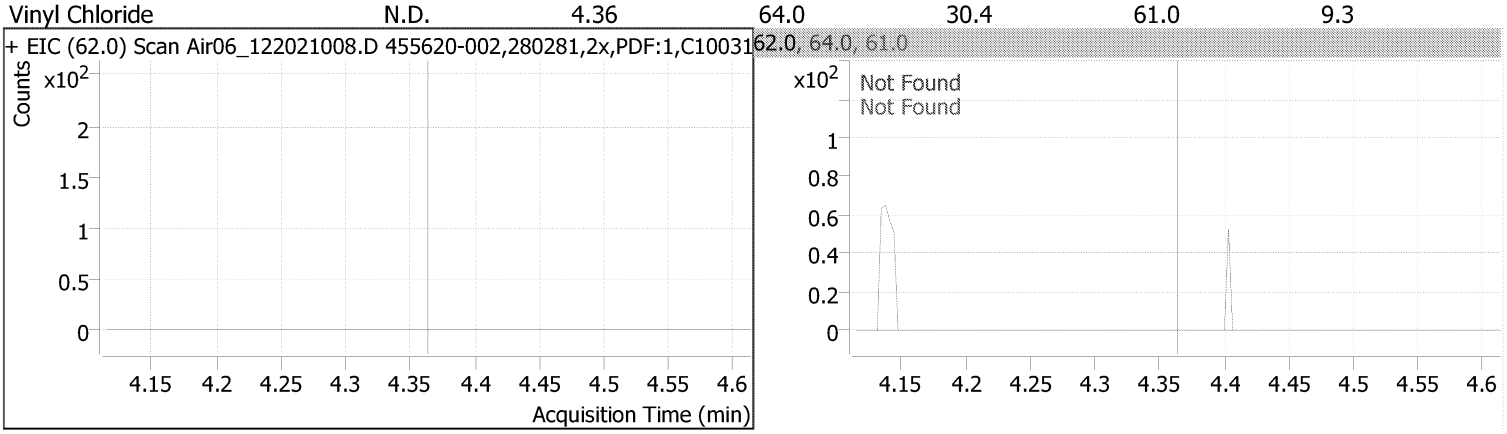
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	1.5861	4.00	-0.14	67249	52.0	0.2	25.7	38.6
					49.0	8.7	8.9	13.4



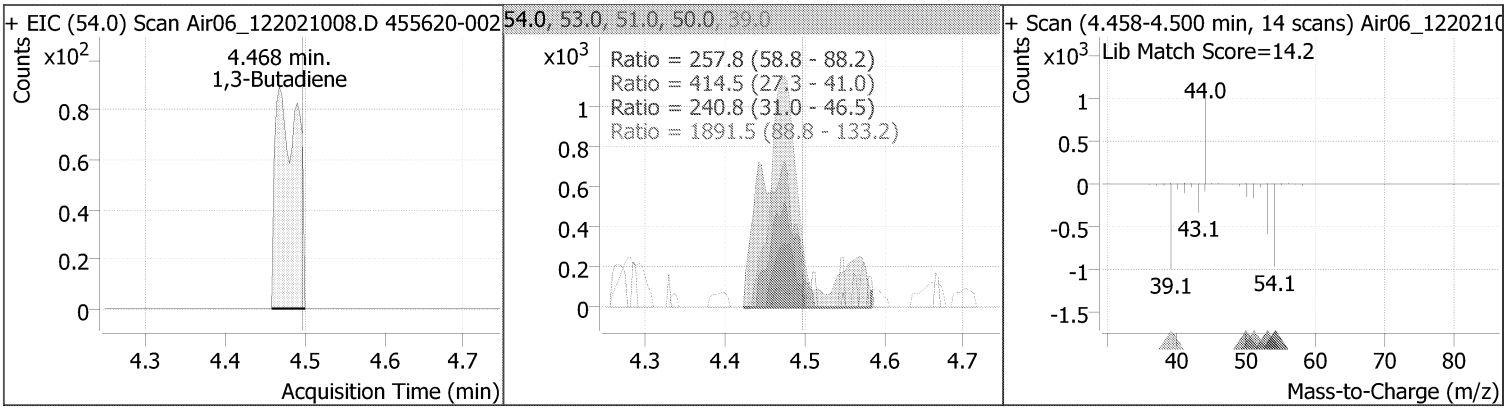
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	0.0062	4.26	0.02	442	85.0	216.0	121.4	182.1
					87.0	42.4	39.0	58.5
					137.0	21.8	25.9	38.8



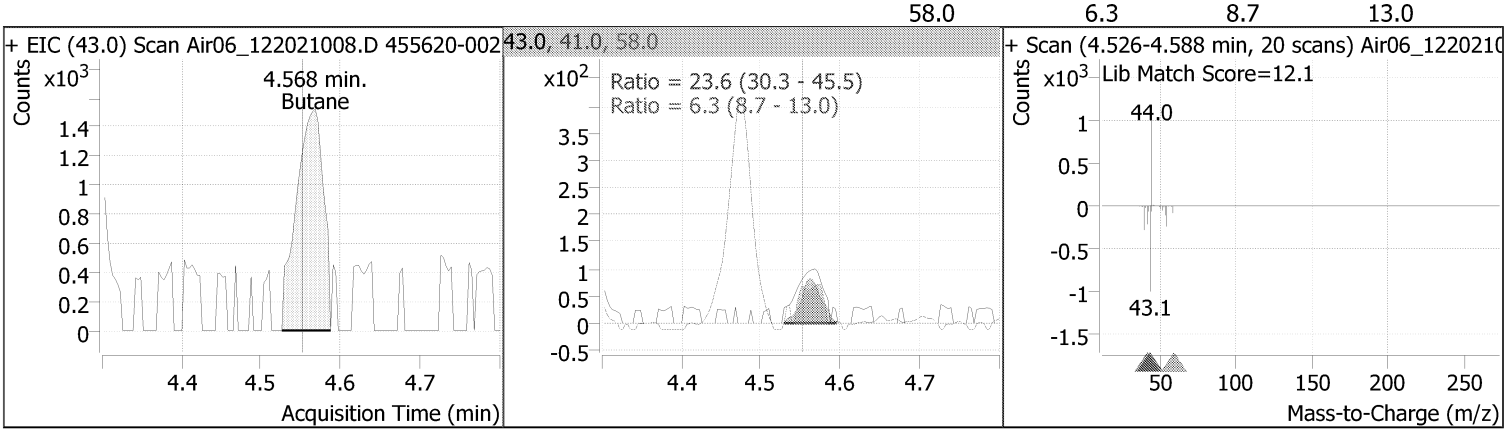
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl Chloride	N.D.	4.36	64.0	30.4	61.0	9.3



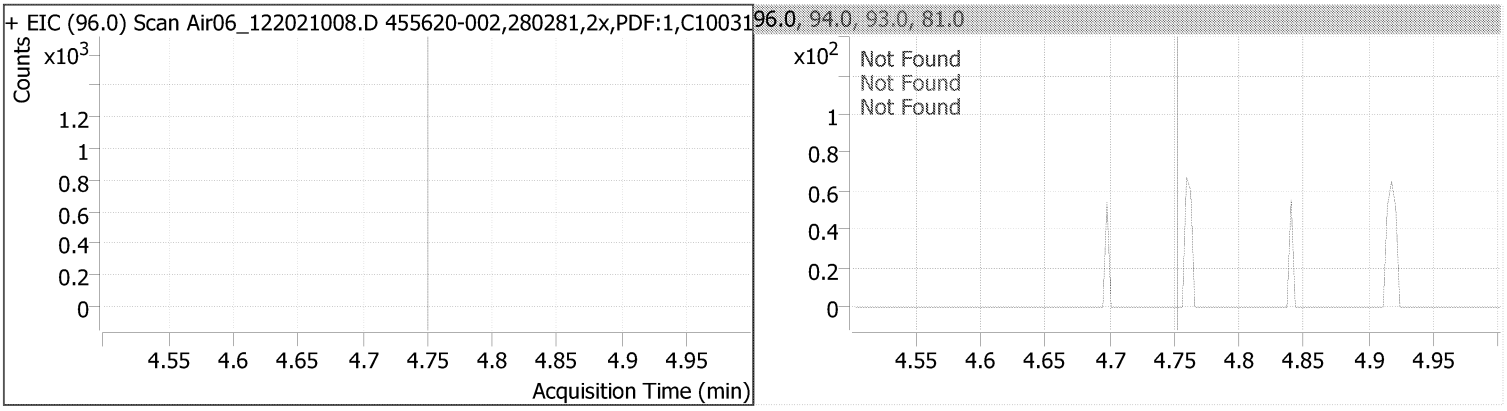
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	0.0051	4.47	-0.03	174	39.0	1891.5	88.8	133.2
					53.0	257.8	58.8	88.2
					50.0	240.8	31.0	46.5
					51.0	414.5	27.3	41.0



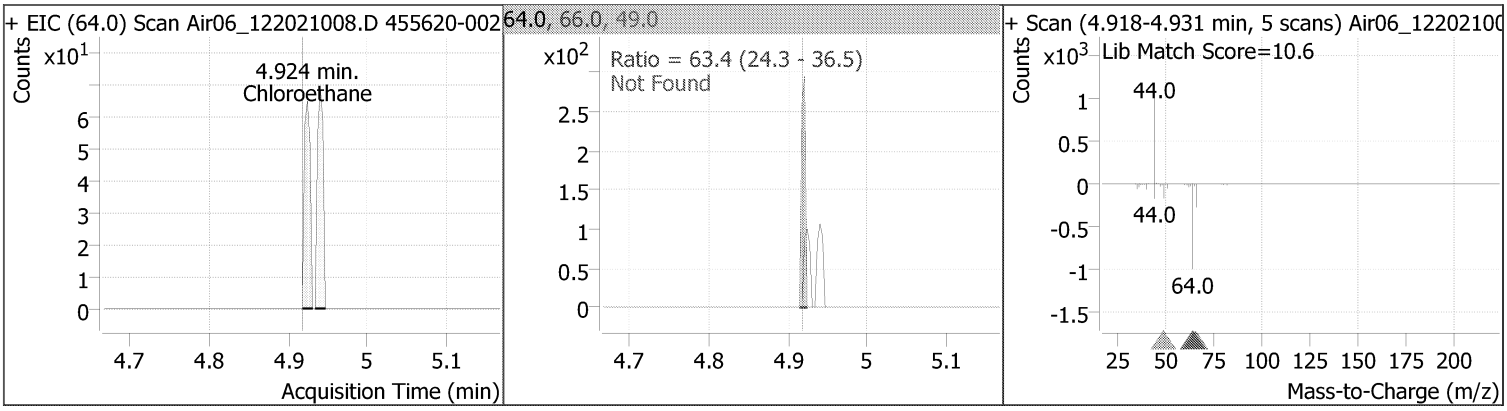
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	0.0529	4.57	0.02	3610	41.0	23.6	30.3	45.5
					58.0	6.3	8.7	13.0



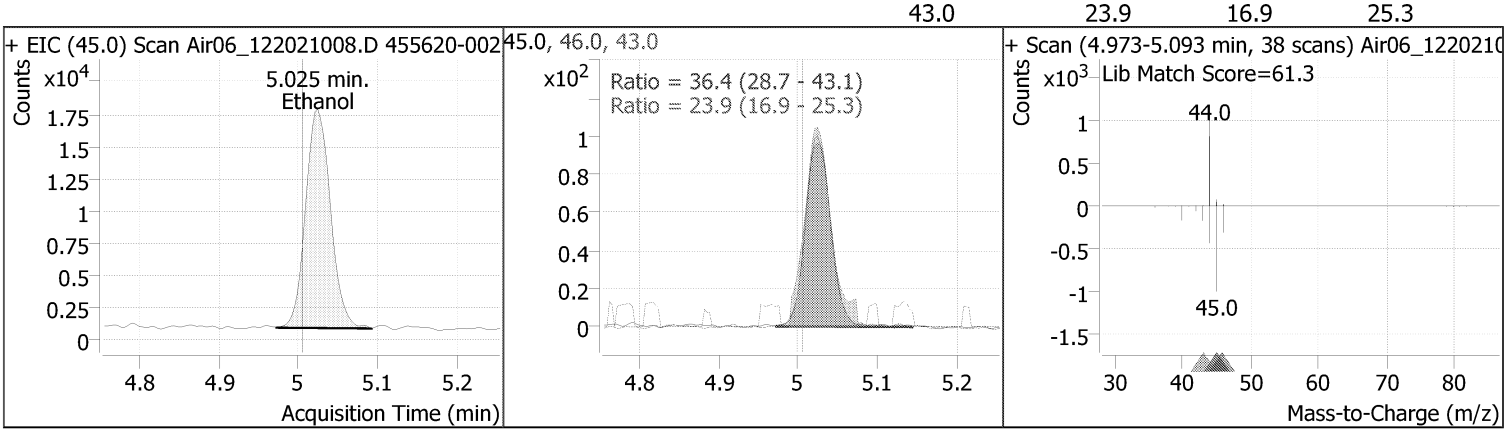
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Bromomethane	N.D.	4.75	94.0	107.8	93.0	23.9	81.0	23.8



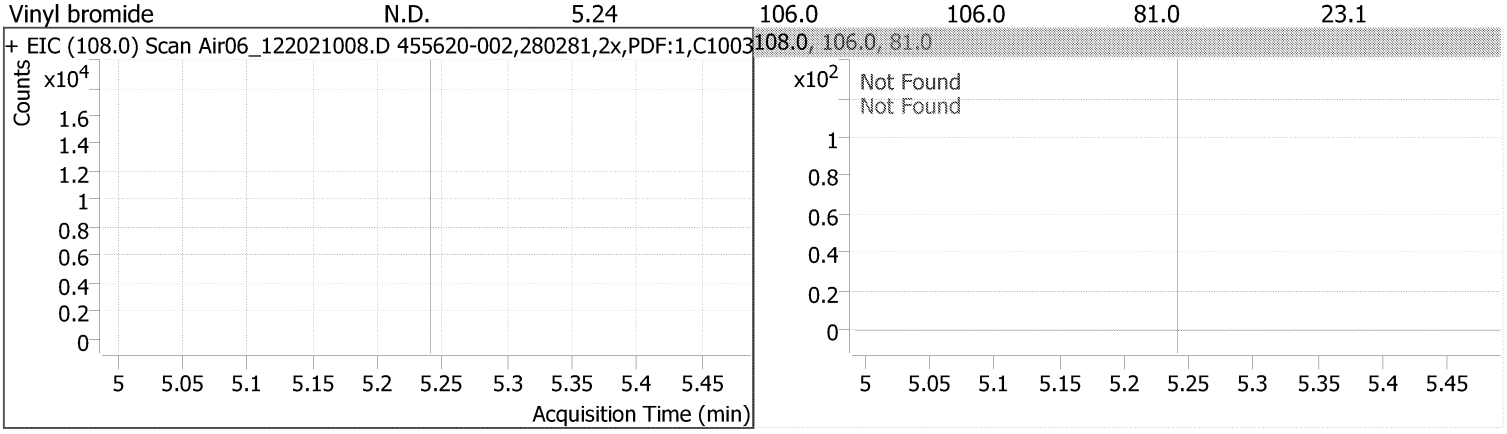
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	0.0017	4.92	0.01	34	49.0		31.7	47.6
					66.0	63.4	24.3	36.5



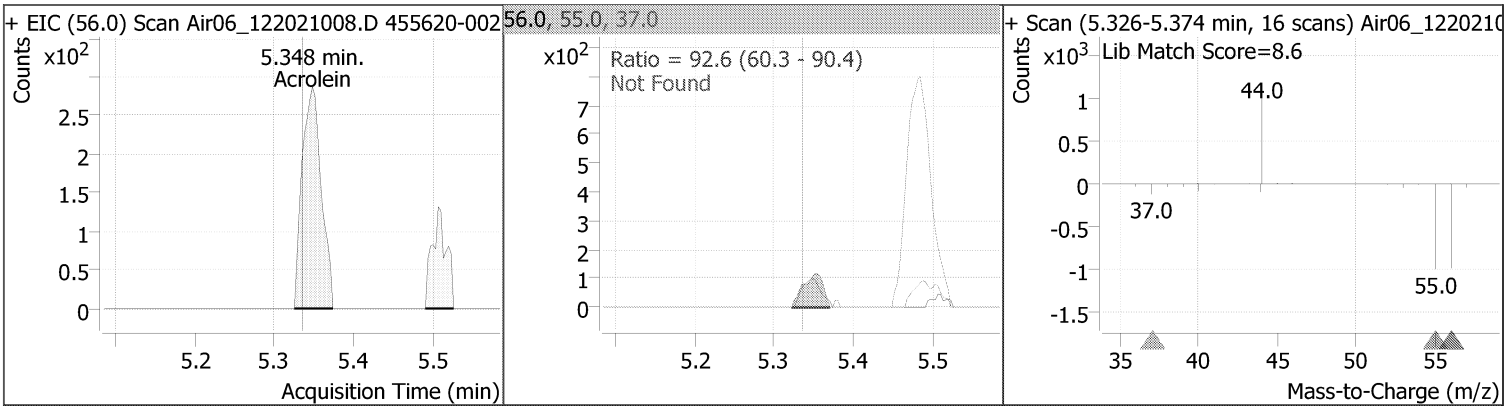
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	1.3969	5.02	0.02	37141	46.0	36.4	28.7	43.1
					43.0	23.9	16.9	25.3



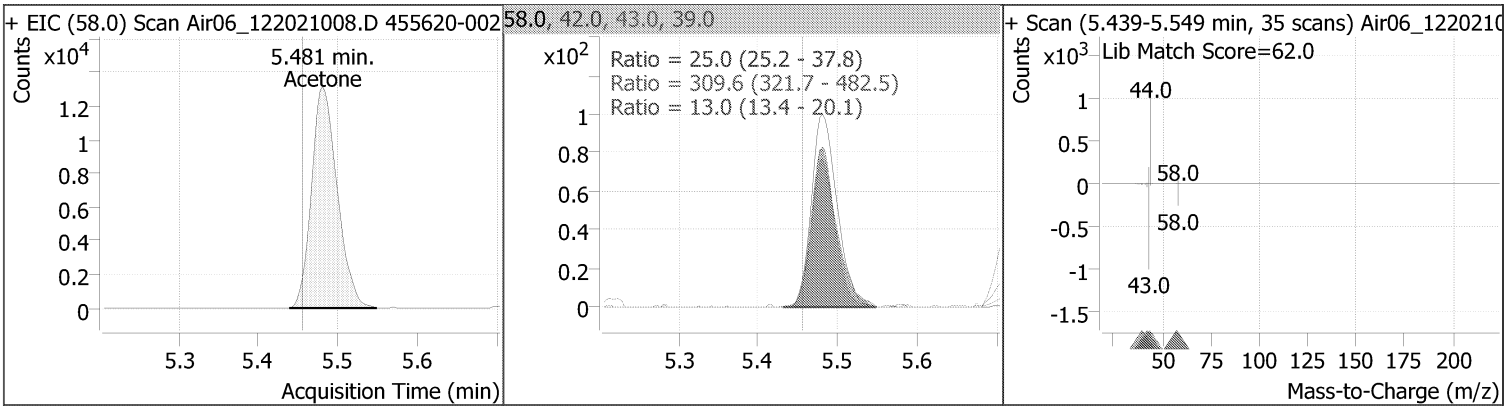
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl bromide	N.D.	5.24	106.0	106.0	81.0	23.1



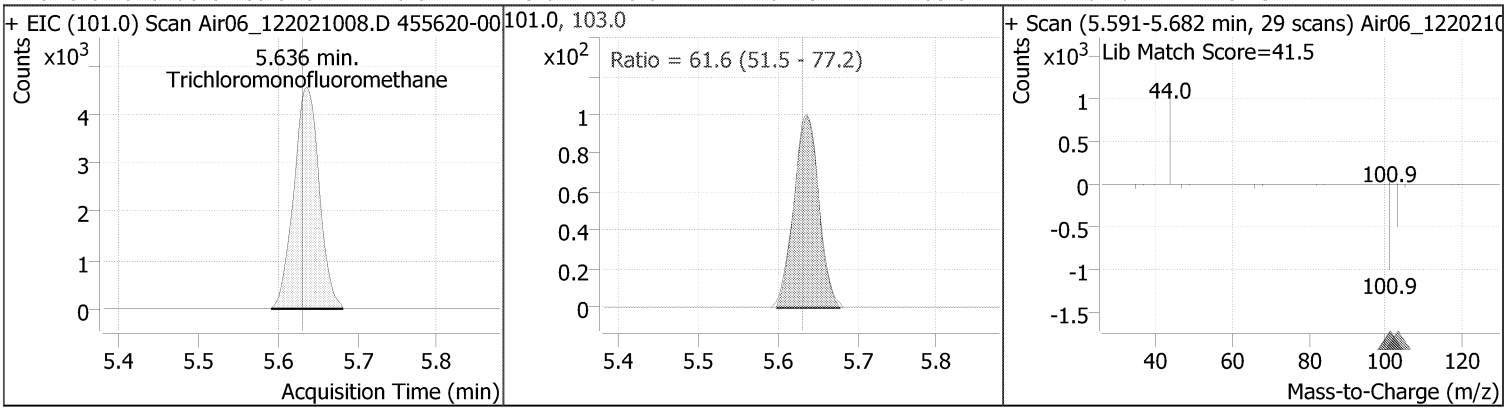
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	0.0281	5.35	0.02	482	55.0	92.6	60.3	90.4
					37.0		9.1	13.7



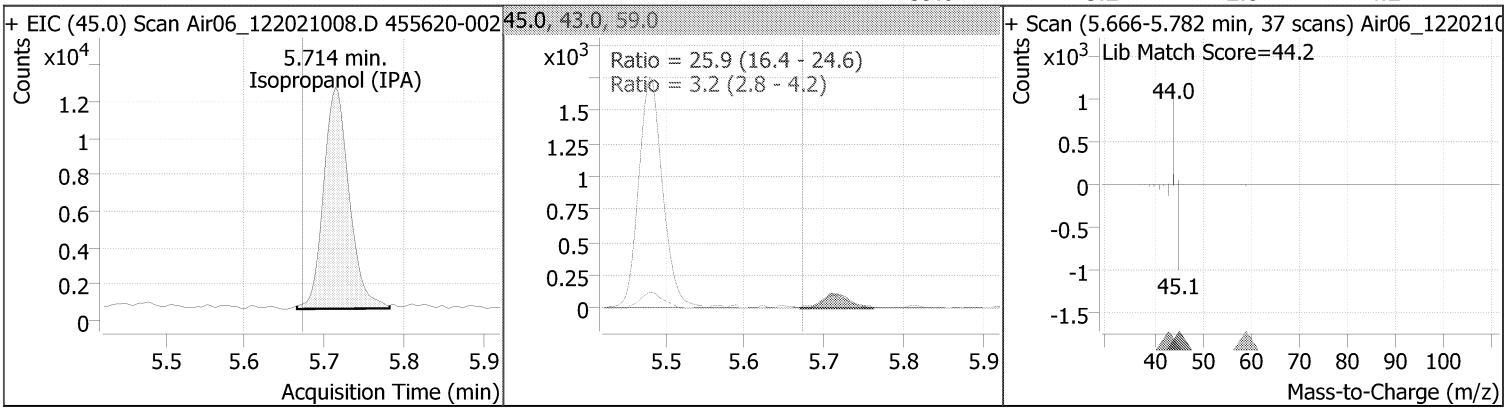
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	1.2912	5.48	0.03	29628	43.0	309.6	321.7	482.5
					42.0	25.0	25.2	37.8
					39.0	13.0	13.4	20.1



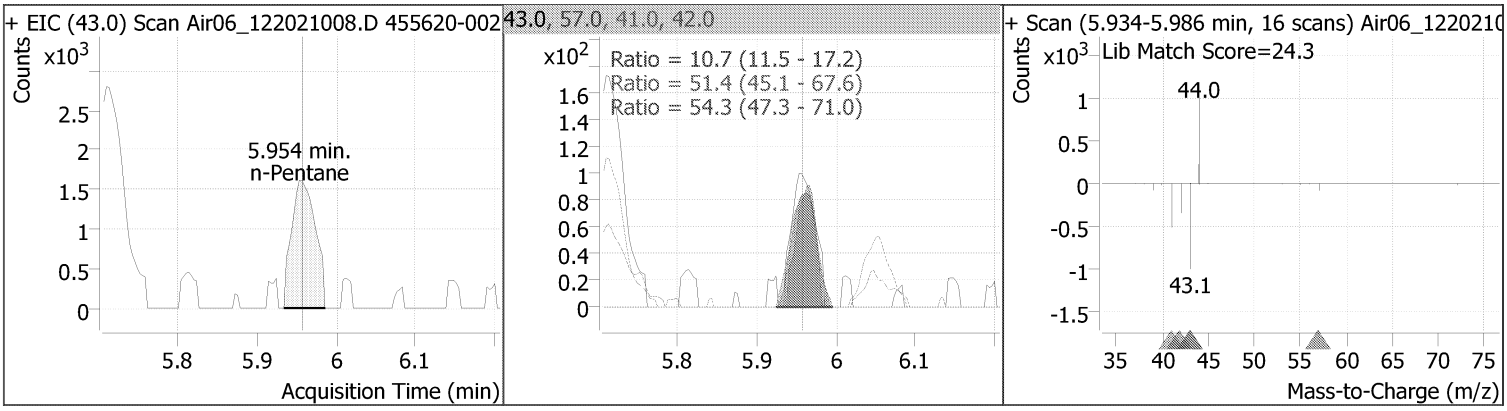
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	0.0742	5.64	0.01	10175	103.0	61.6	51.5	77.2



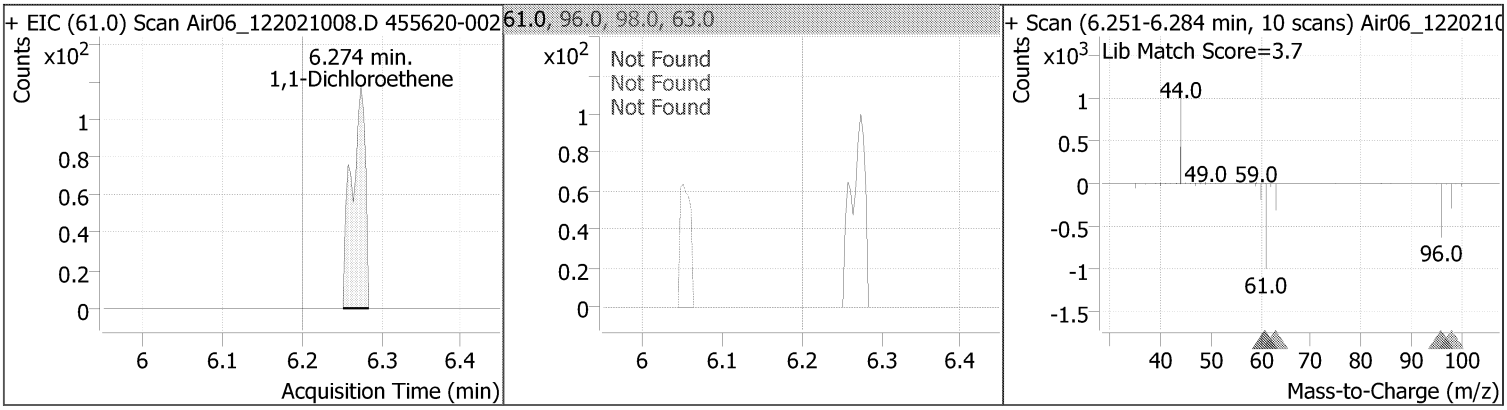
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.3047	5.71	0.05	27331	43.0	25.9	16.4	24.6
					59.0	3.2	2.8	4.2



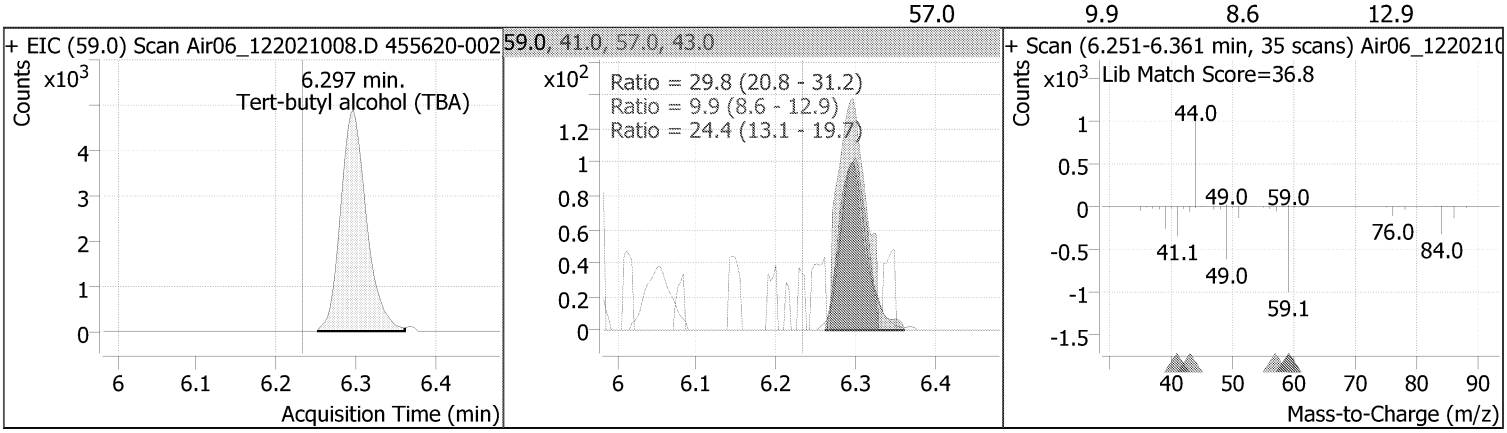
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.0384	5.95	0.00	3375	42.0	54.3	47.3	71.0
					41.0	51.4	45.1	67.6
					57.0	10.7	11.5	17.2



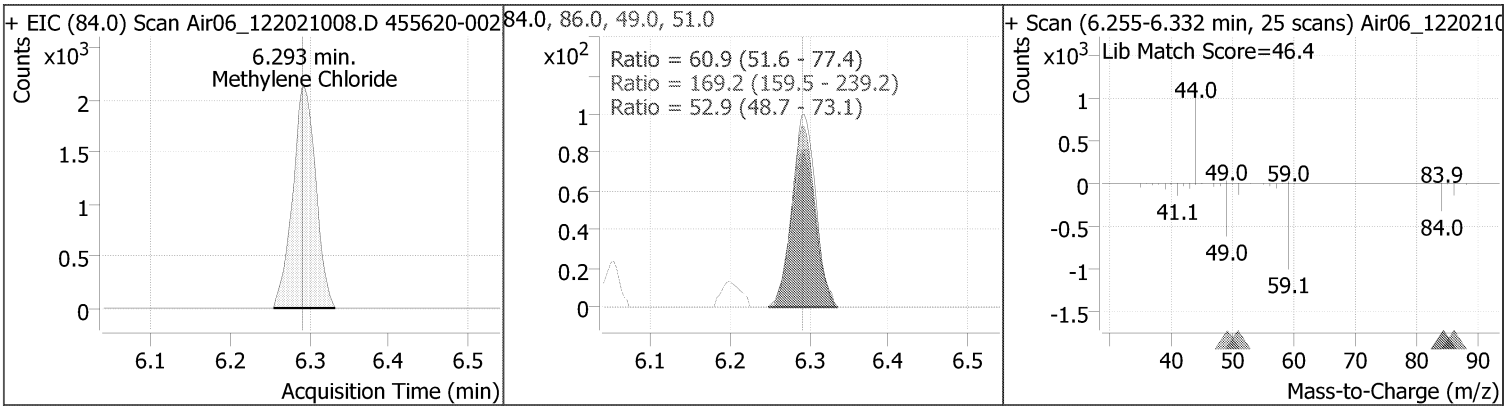
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	0.0017	6.27	0.08	141	96.0		35.3	53.0
					63.0		24.7	37.1
					98.0		22.7	34.0



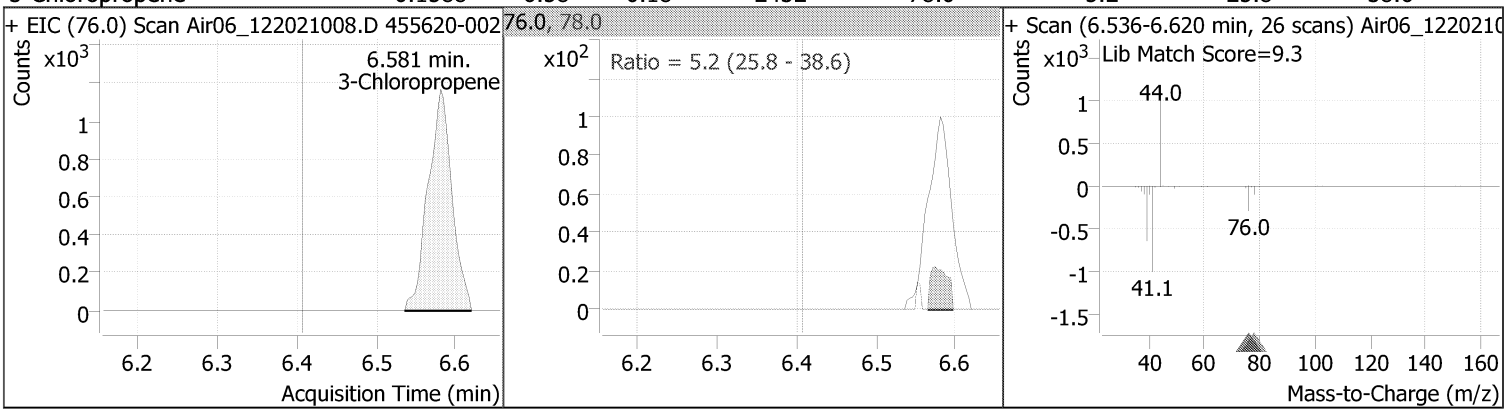
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.1173	6.30	0.07	11103	41.0	29.8	20.8	31.2
					43.0	24.4	13.1	19.7
					57.0	9.9	8.6	12.9



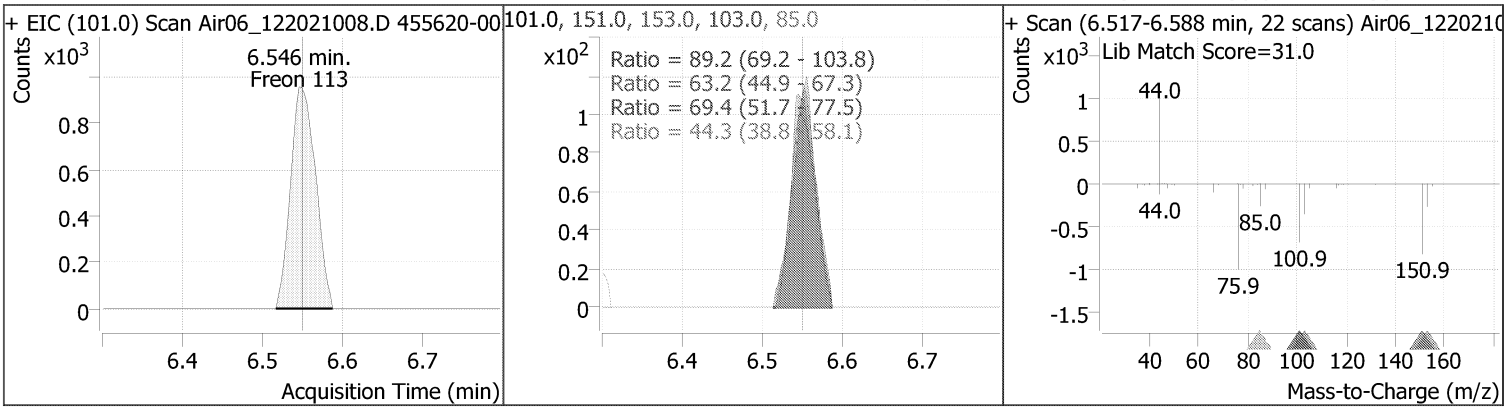
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.1181	6.29	0.01	4295	49.0	169.2	159.5	239.2
					86.0	60.9	51.6	77.4
					51.0	52.9	48.7	73.1



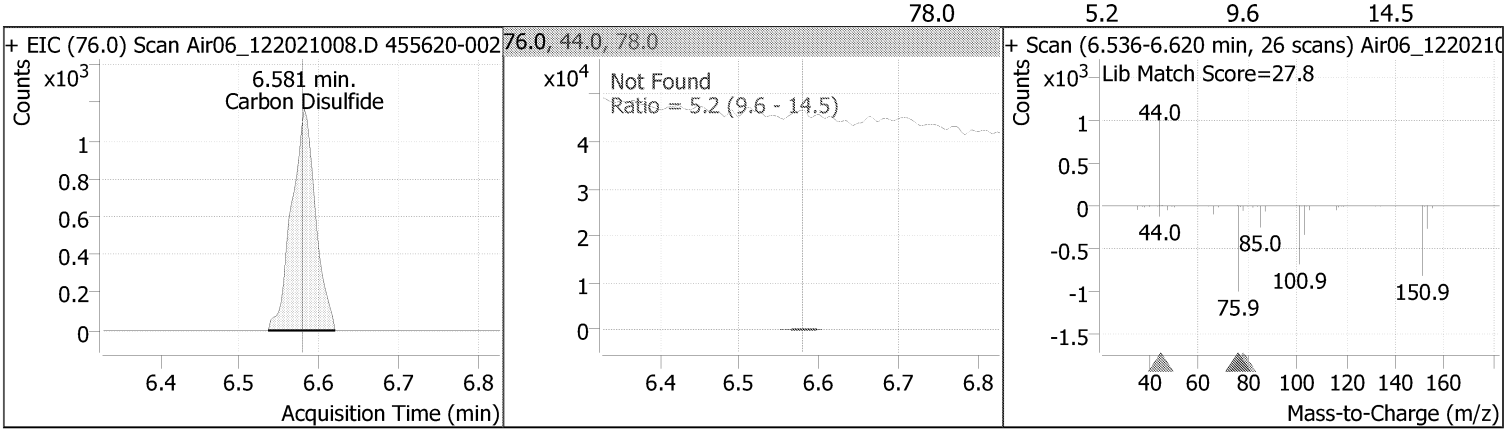
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	0.1588	6.58	0.18	2432	78.0	5.2	25.8	38.6



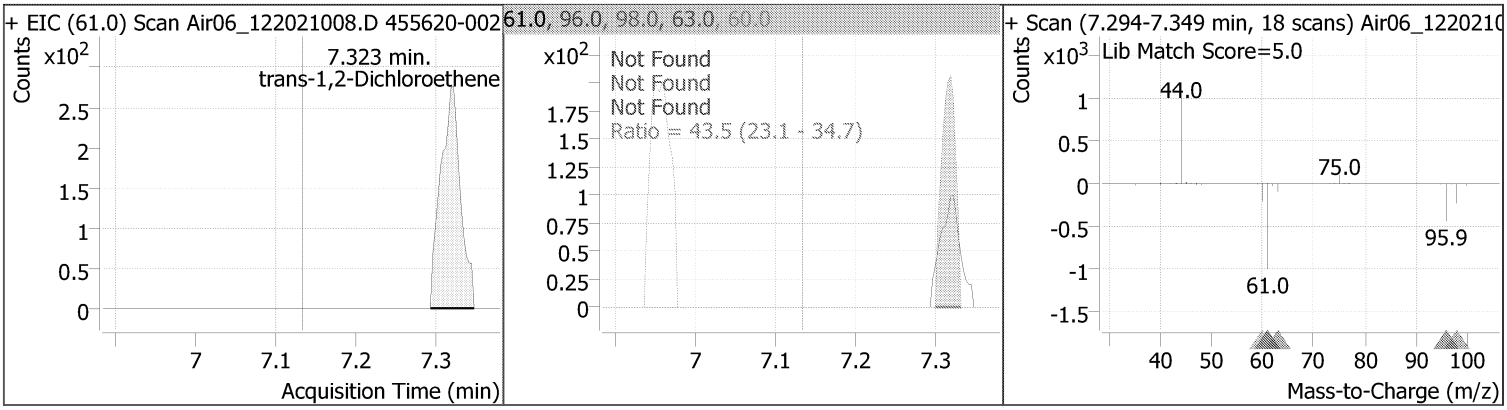
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	0.0241	6.55	0.00	2089	151.0	89.2	69.2	103.8
					103.0	69.4	51.7	77.5
					153.0	63.2	44.9	67.3
					85.0	44.3	38.8	58.1



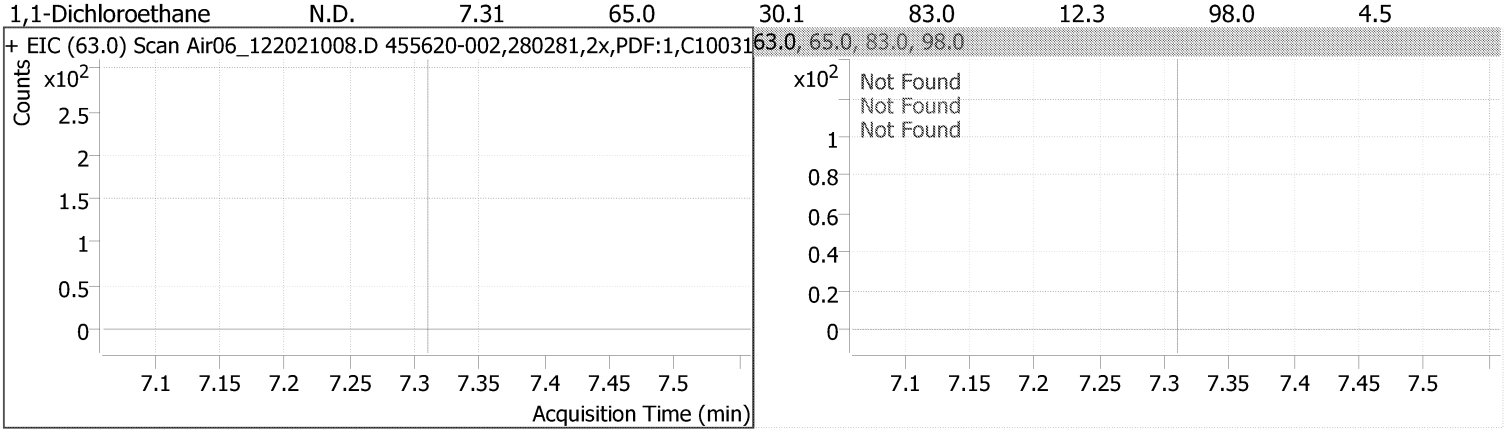
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.0240	6.58	0.01	2432	44.0		17.2	25.7
					78.0	5.2	9.6	14.5



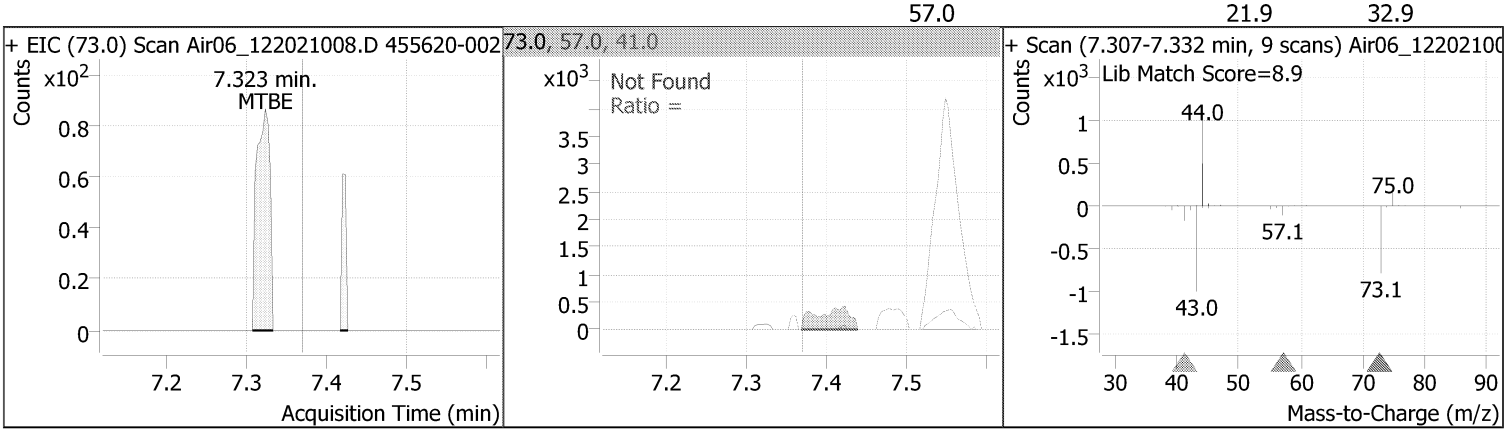
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.0073	7.32	0.19	479	96.0		41.3	61.9
					98.0		26.5	39.8
					63.0		24.6	36.9
					60.0	43.5	23.1	34.7



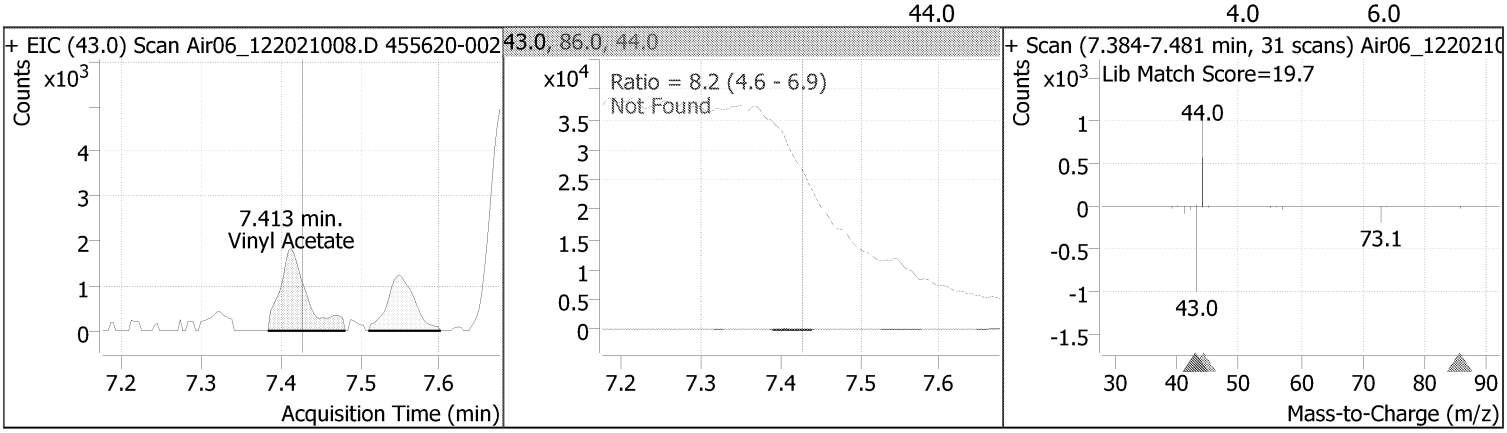
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethane	N.D.	7.31	65.0	30.1	83.0	12.3	98.0	4.5



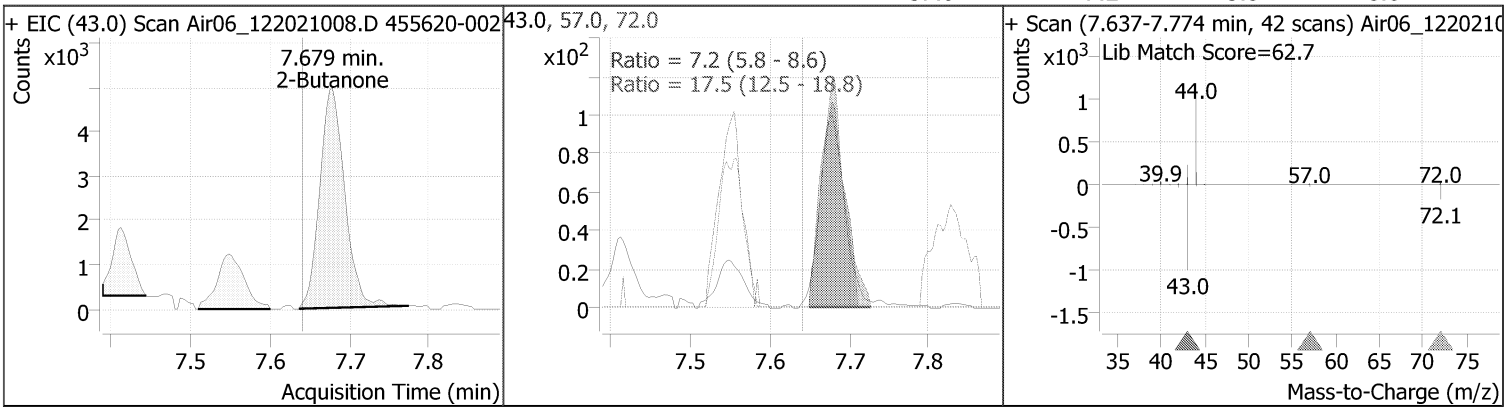
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	0.0009	7.32	-0.04	100	41.0		25.7	38.5
					57.0		21.9	32.9



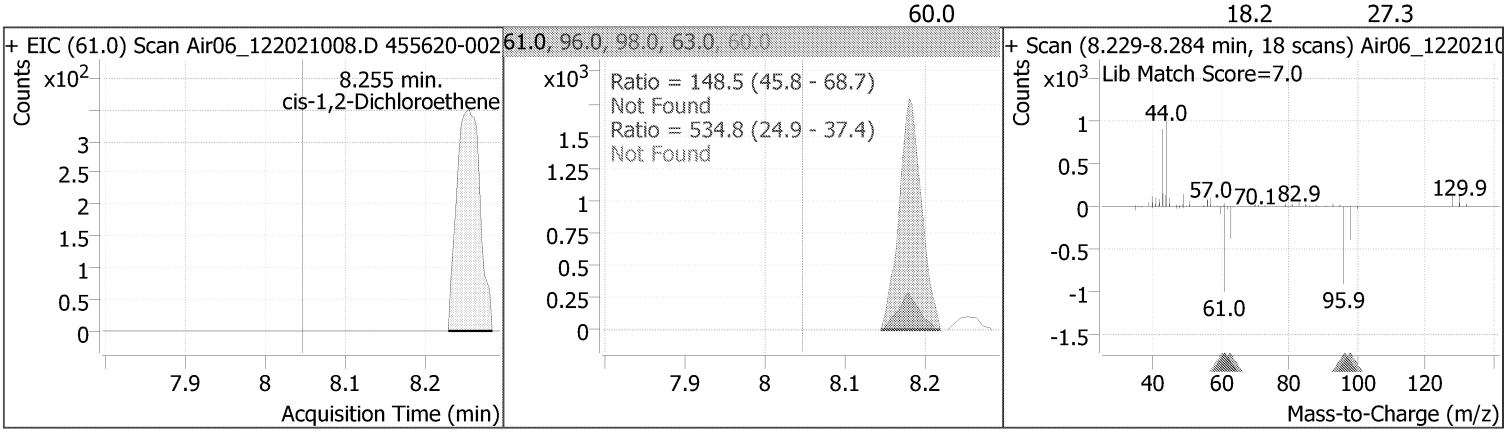
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.0311	7.41	-0.01	4317	86.0	8.2	4.6	6.9
					44.0		4.0	6.0



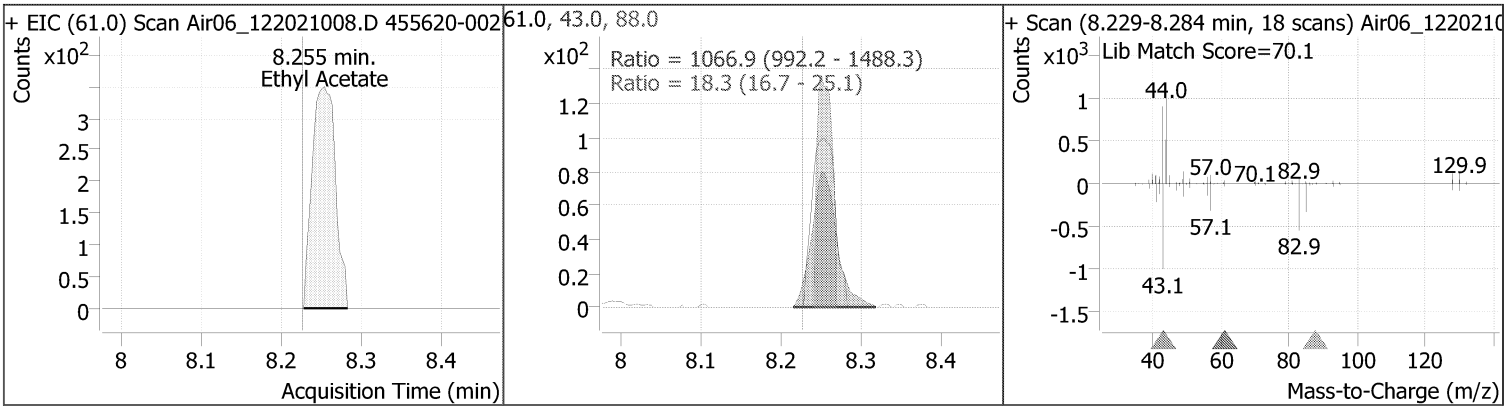
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.0988	7.68	0.04	10826	72.0	17.5	12.5	18.8
					57.0	7.2	5.8	8.6



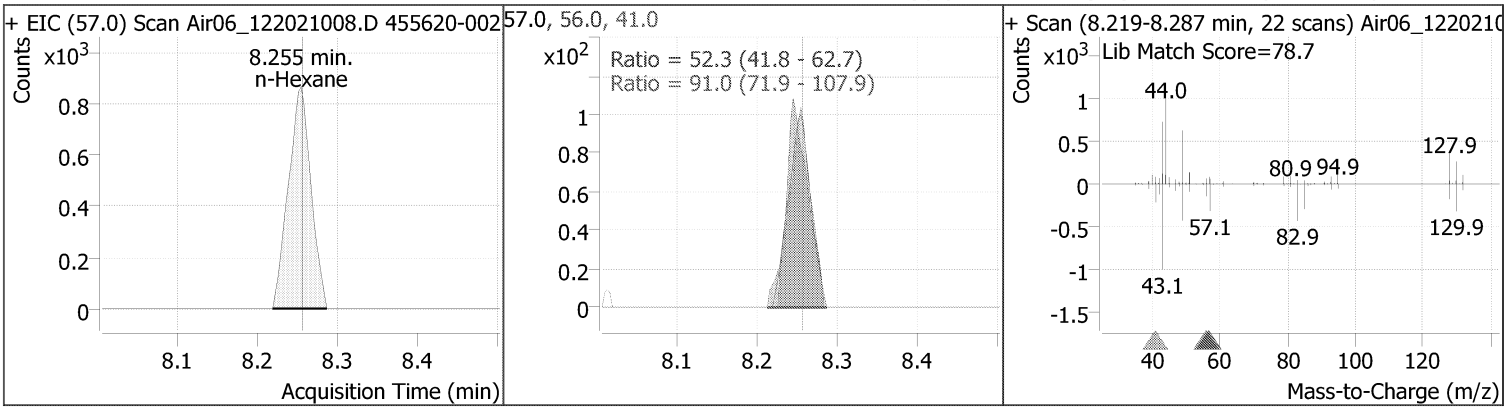
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.0106	8.25	0.21	713	96.0	148.5	45.8	68.7
					98.0		29.3	43.9
					63.0	534.8	24.9	37.4
					60.0		18.2	27.3



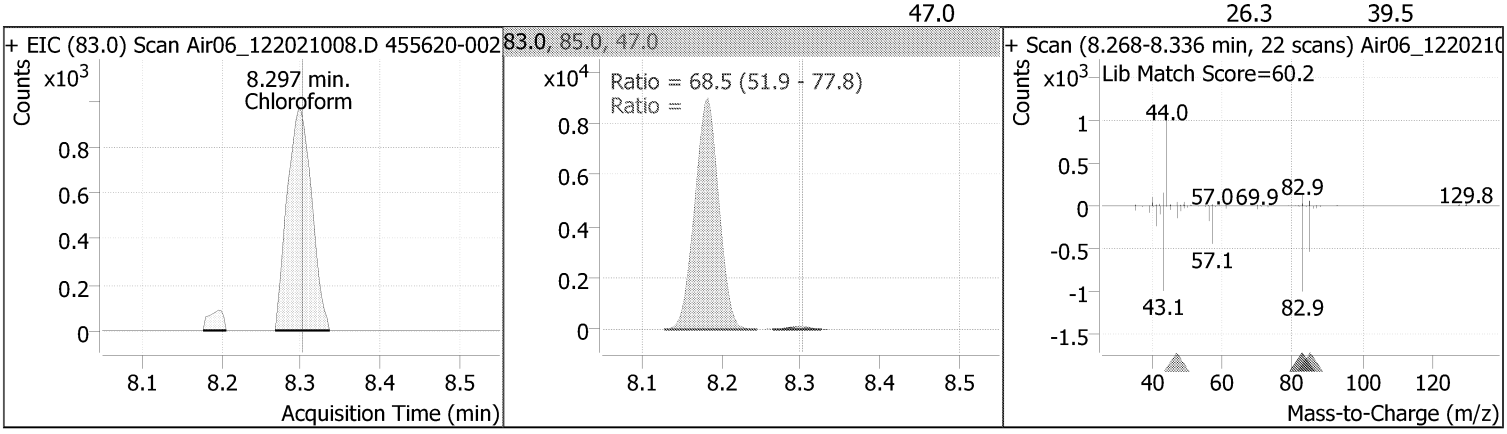
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	0.0468	8.25	0.03	713	43.0	1066.9	992.2	1488.3
					88.0	18.3	16.7	25.1



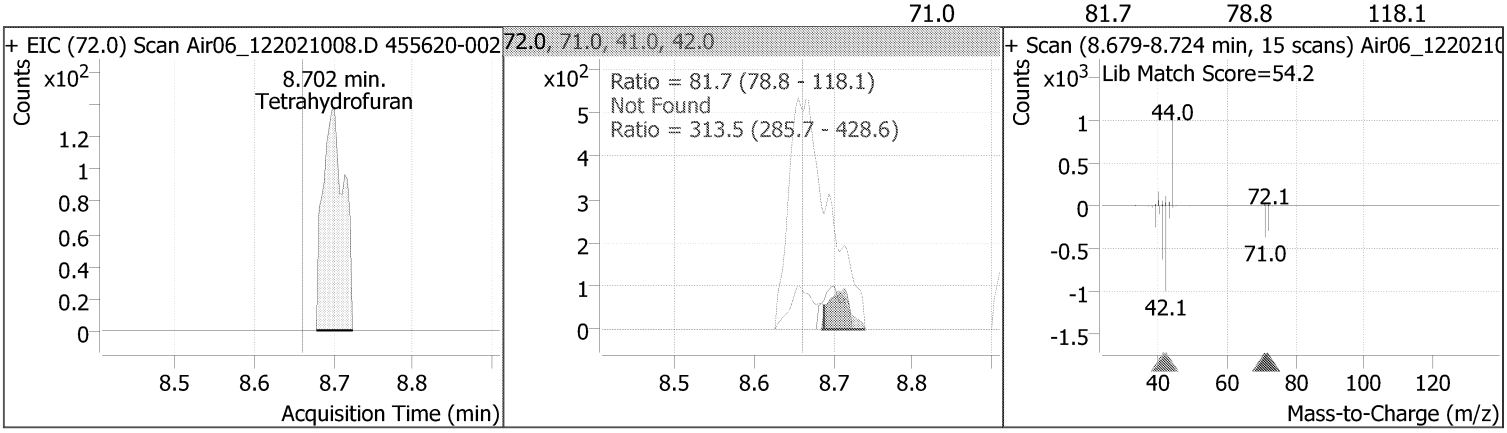
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.0240	8.25	0.00	1703	41.0	91.0	71.9	107.9
					56.0	52.3	41.8	62.7



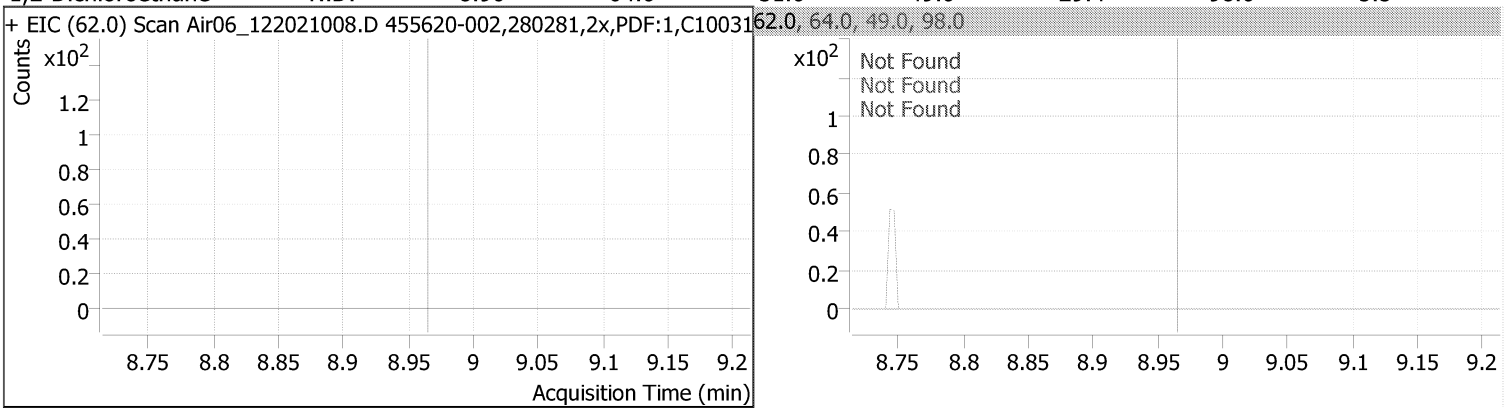
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.0215	8.30	0.00	2075	85.0	68.5	51.9	77.8
					47.0		26.3	39.5



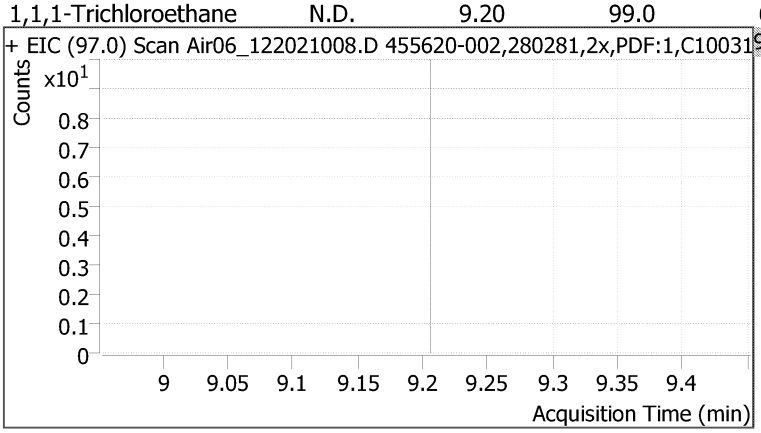
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	0.0161	8.70	0.05	255	42.0	313.5	285.7	428.6
					41.0		168.2	252.2
					71.0	81.7	78.8	118.1

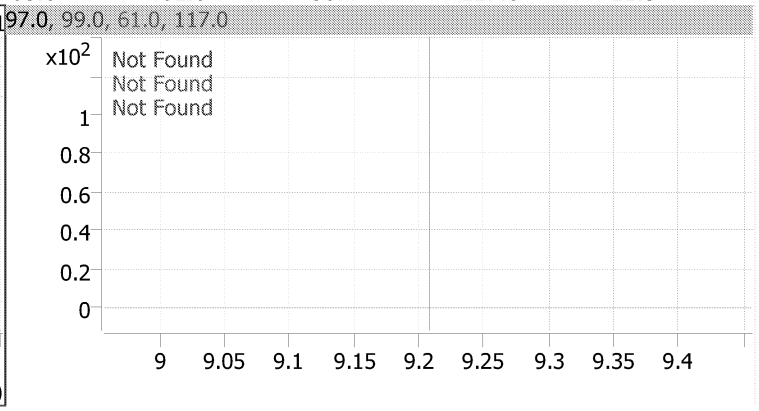


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,2-Dichloroethane	N.D.	8.96	64.0	31.0	49.0	29.4	98.0	5.5

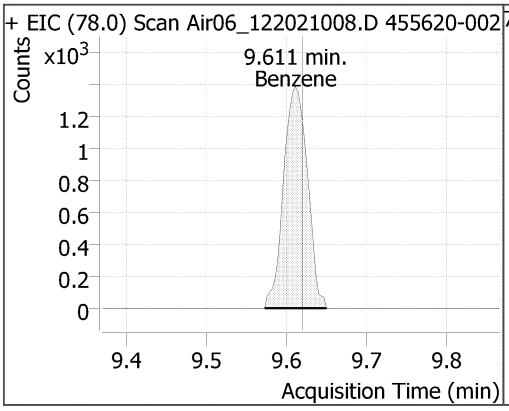


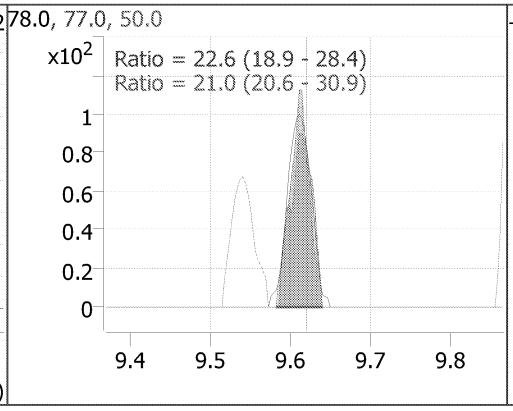
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1-Trichloroethane	N.D.	9.20	99.0	65.0	61.0	50.4	117.0	11.3

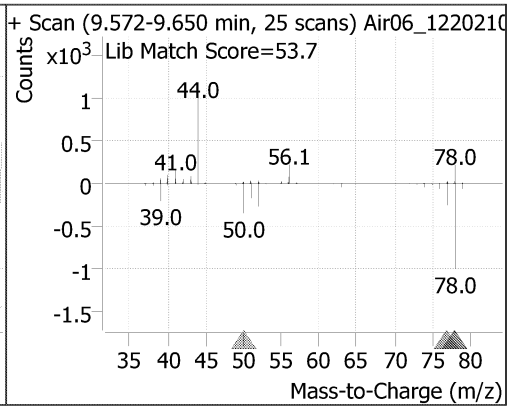




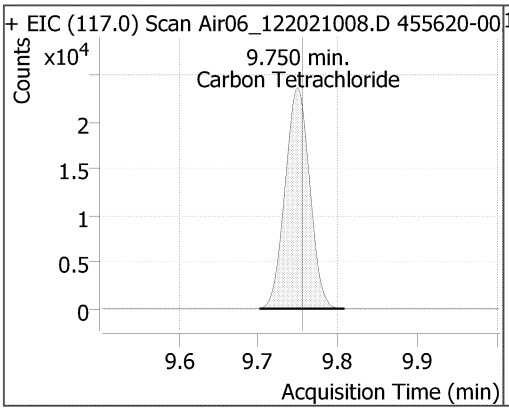
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.0272	9.61	0.00	2928	50.0	21.0	20.6	30.9
					77.0	22.6	18.9	28.4

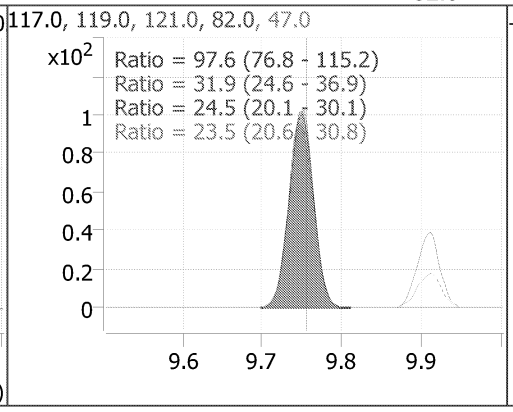


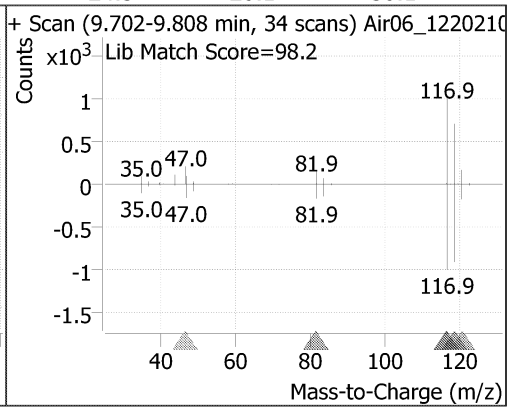




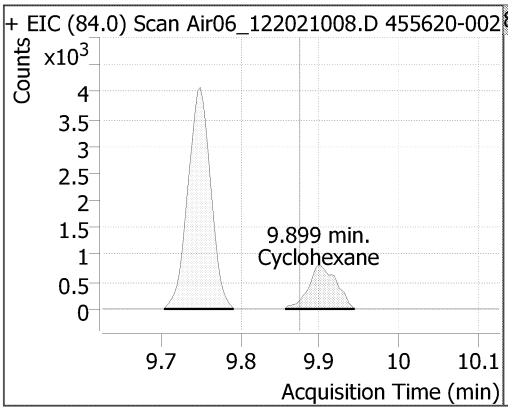
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	0.4657	9.75	0.00	50978	119.0	97.6	76.8	115.2
					121.0	31.9	24.6	36.9
					47.0	23.5	20.6	30.8
					82.0	24.5	20.1	30.1

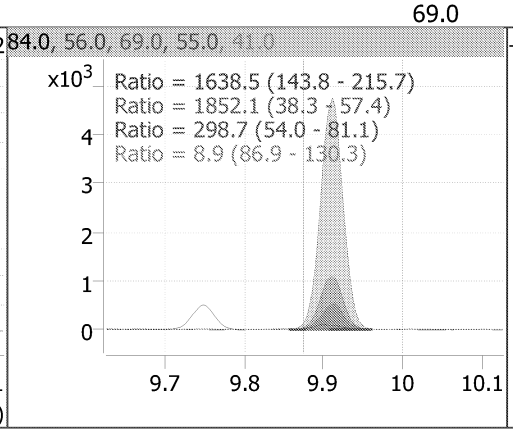


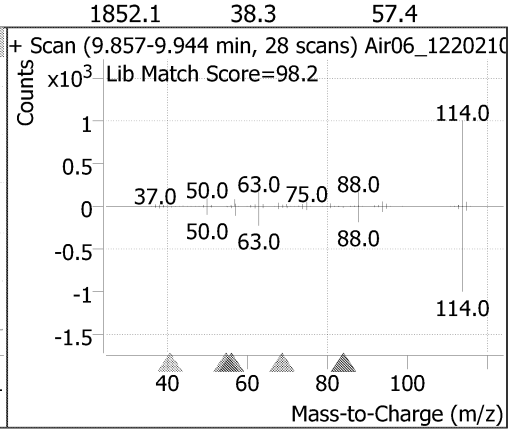




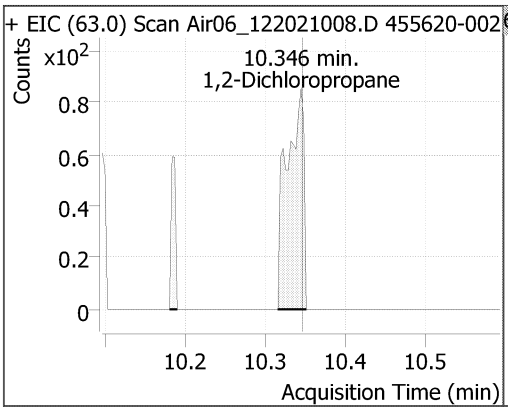
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.0442	9.90	0.03	1968	56.0	1638.5	143.8	215.7
					41.0	8.9	86.9	130.3
					55.0	298.7	54.0	81.1
					69.0	1852.1	38.3	57.4

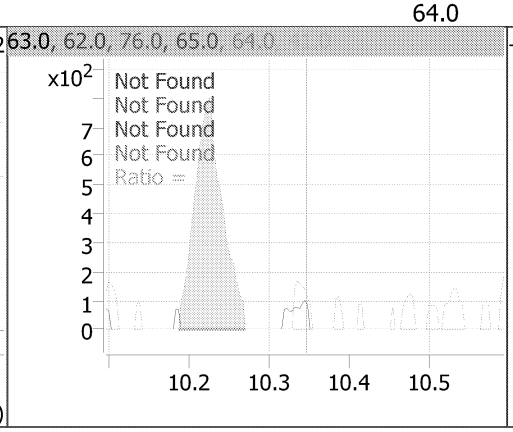


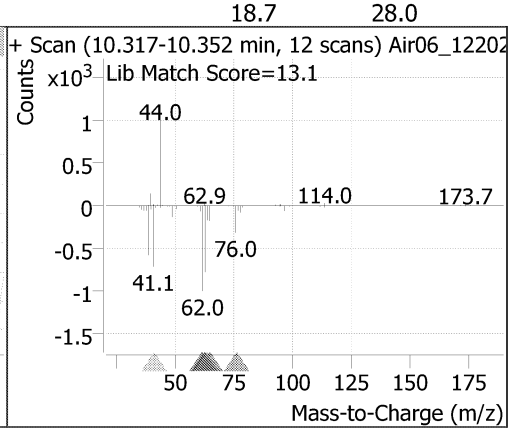




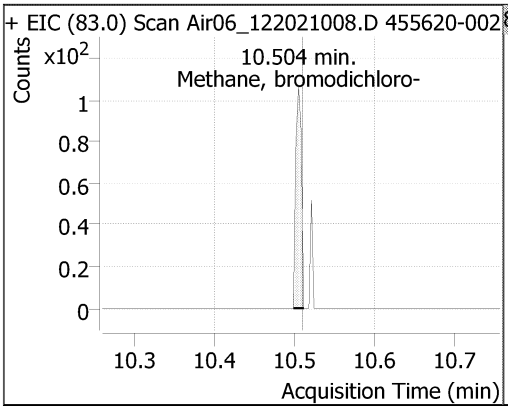
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.0026	10.35	0.00	127	41.0		60.7	91.1
					62.0		55.7	83.6
					76.0		35.7	53.6
					65.0		23.3	35.0
					64.0		18.7	28.0

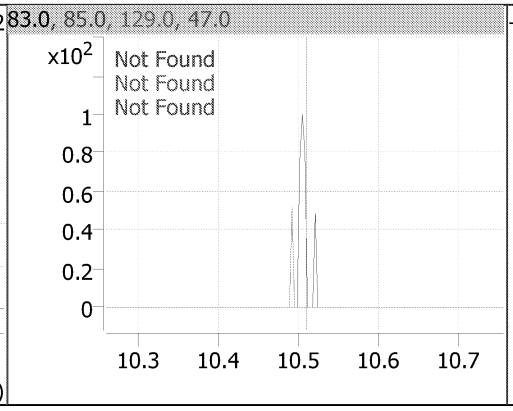


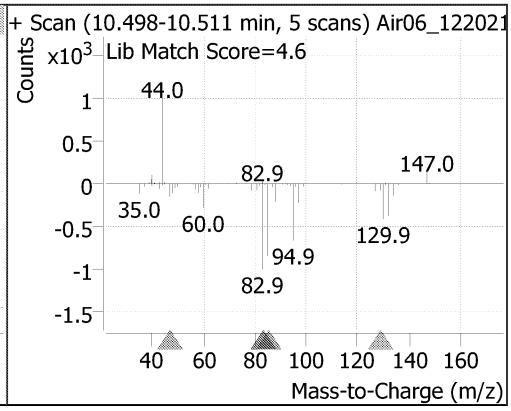




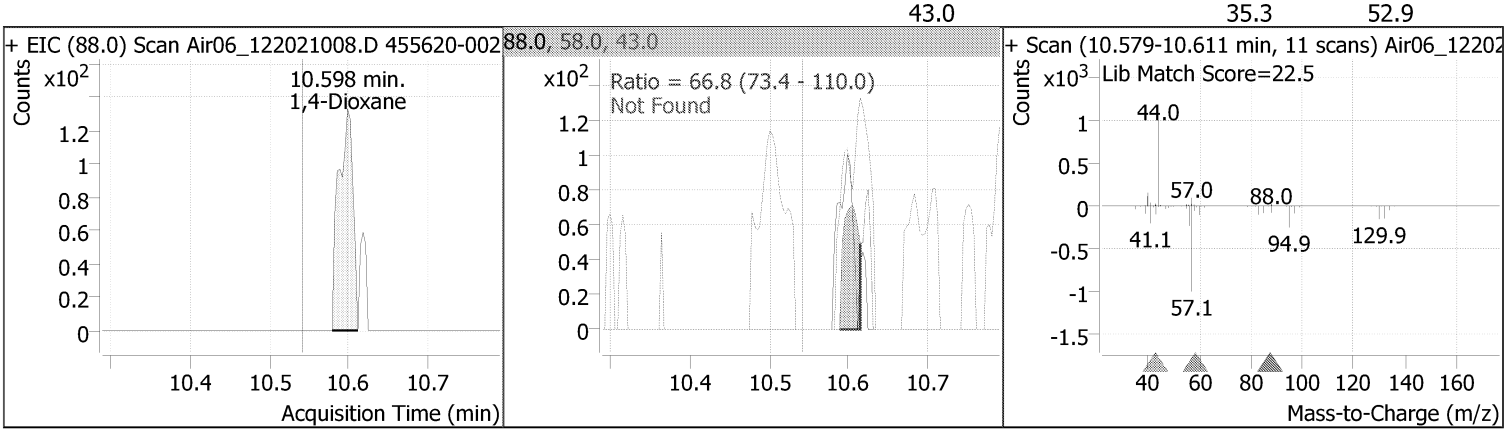
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	0.0005	10.50	0.00	53	85.0		50.9	76.3
					47.0		19.9	29.9
					129.0		9.1	13.7



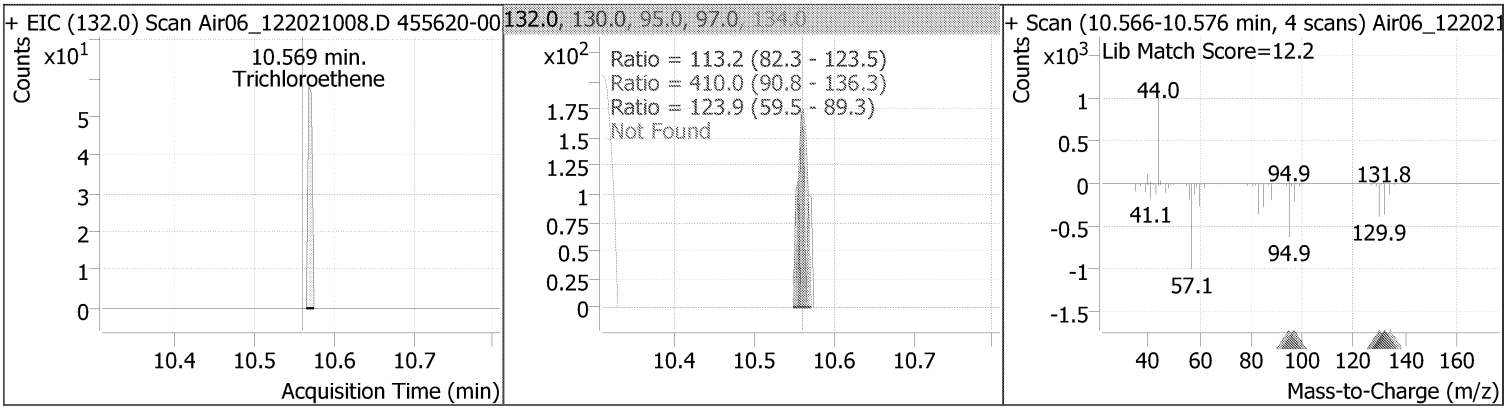




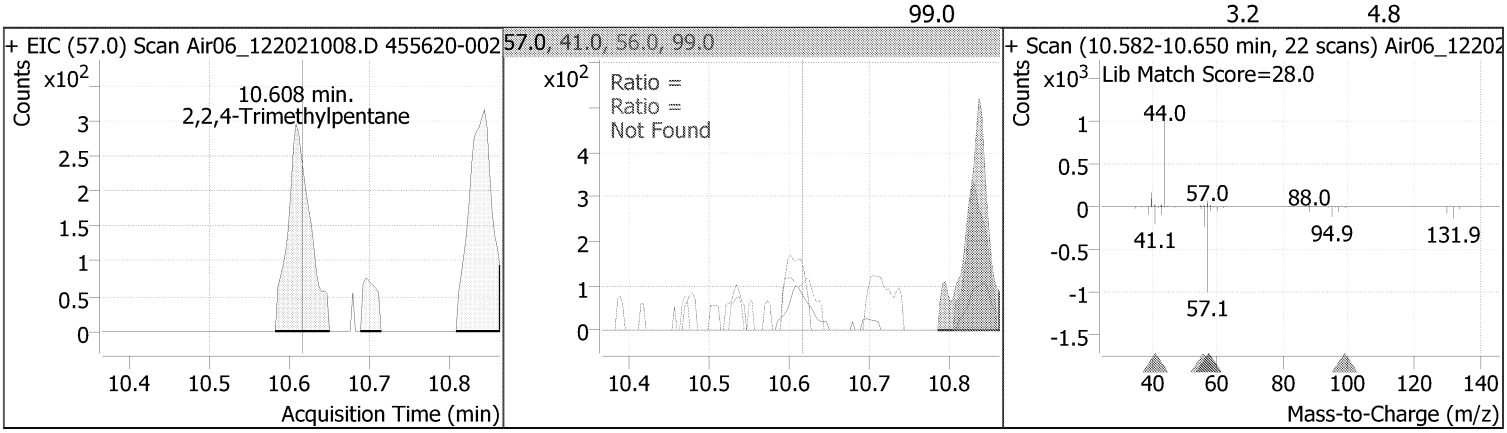
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.0071	10.60	0.06	167	58.0	66.8	73.4	110.0
					43.0		35.3	52.9



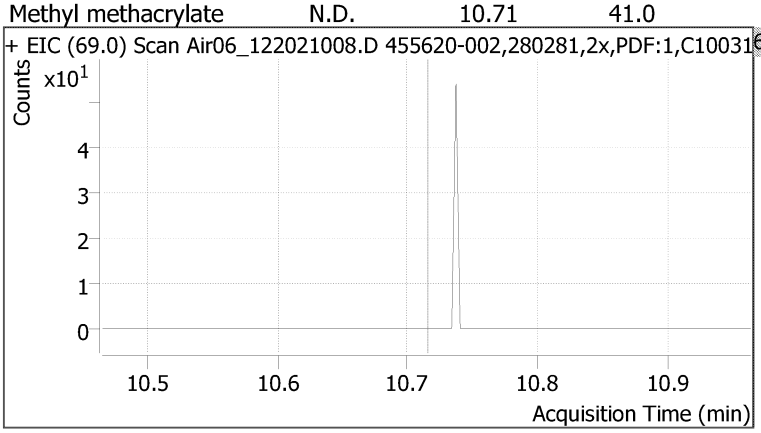
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.0004	10.57	0.01	22	95.0	410.0	90.8	136.3
					130.0	113.2	82.3	123.5
					97.0	123.9	59.5	89.3
					134.0		25.8	38.7

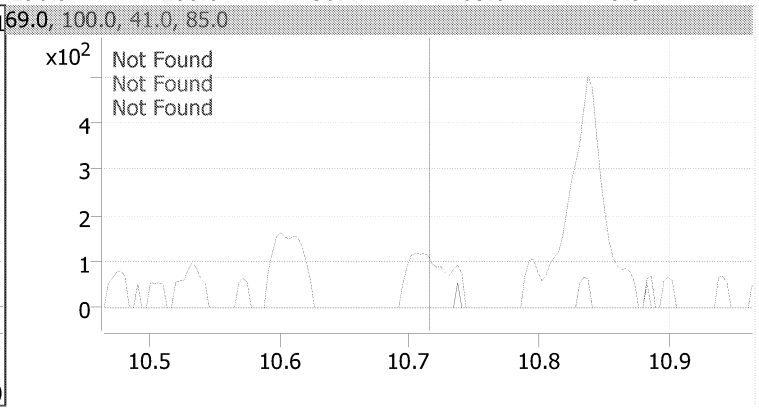


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.0025	10.61	-0.01	576	41.0		26.0	39.0
					56.0		24.9	37.3
					99.0		3.2	4.8

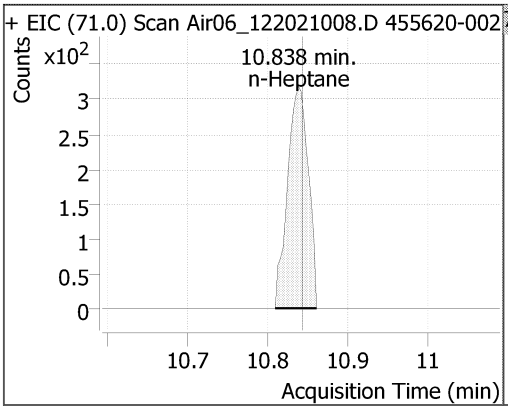


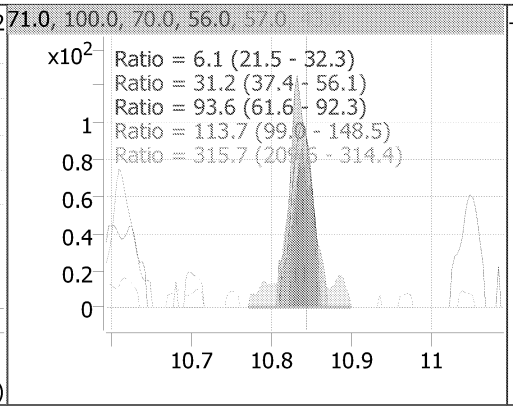
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Methyl methacrylate	N.D.	10.71	41.0	190.9	100.0	36.4	85.0	9.9

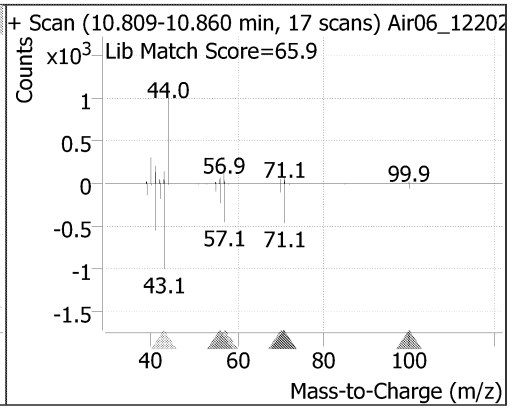




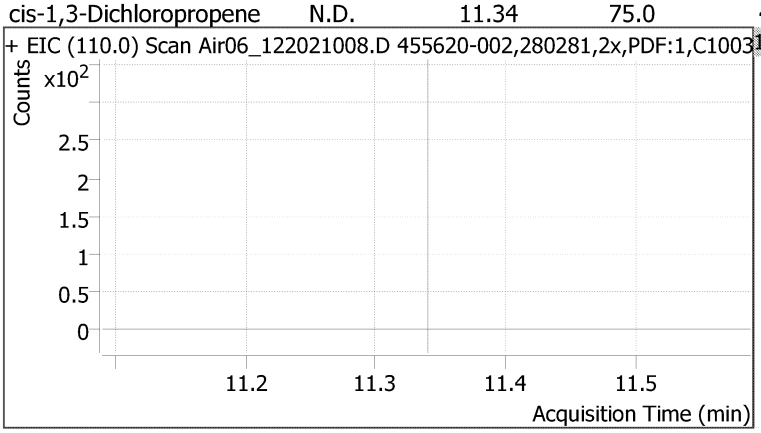
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	0.0160	10.84	0.00	576	43.0	315.7	209.6	314.4
					57.0	113.7	99.0	148.5
					56.0	93.6	61.6	92.3
					70.0	31.2	37.4	56.1
					100.0	6.1	21.5	32.3

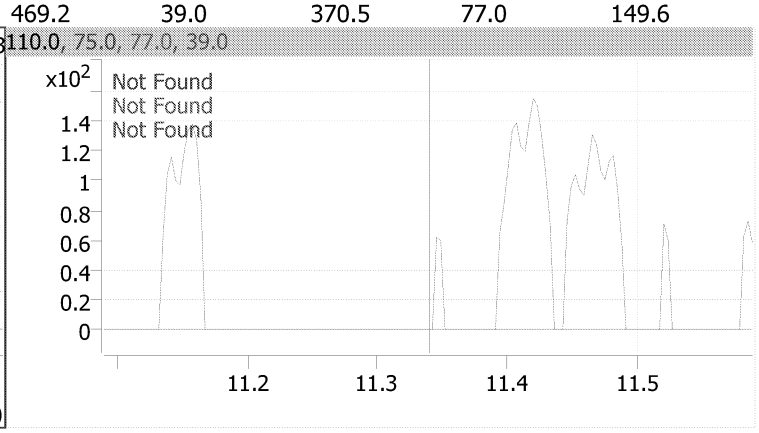




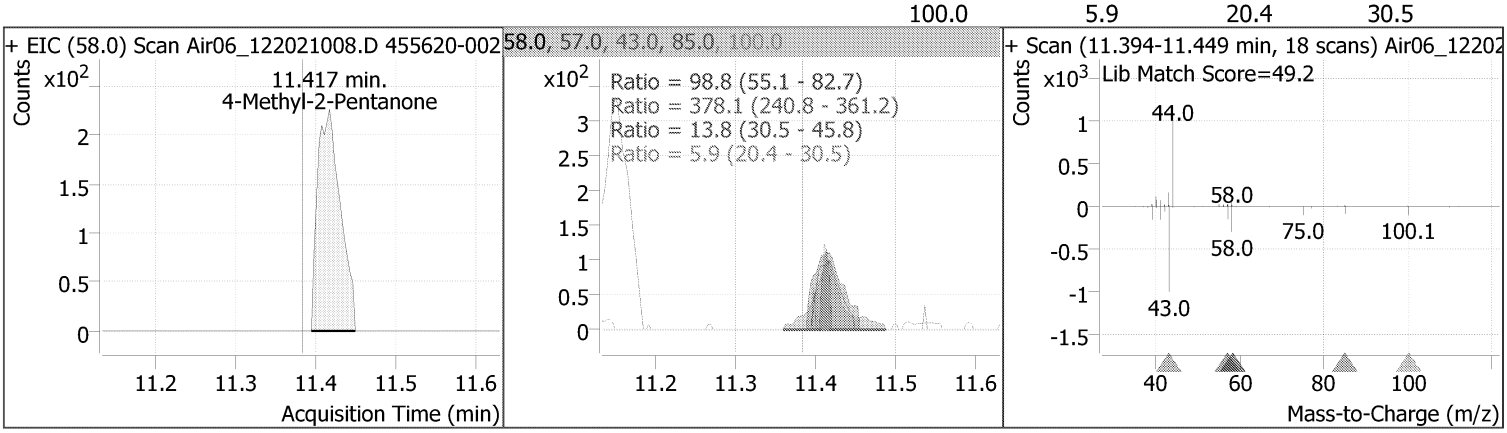


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
cis-1,3-Dichloropropene	N.D.	11.34	75.0	469.2	39.0	370.5	77.0	149.6

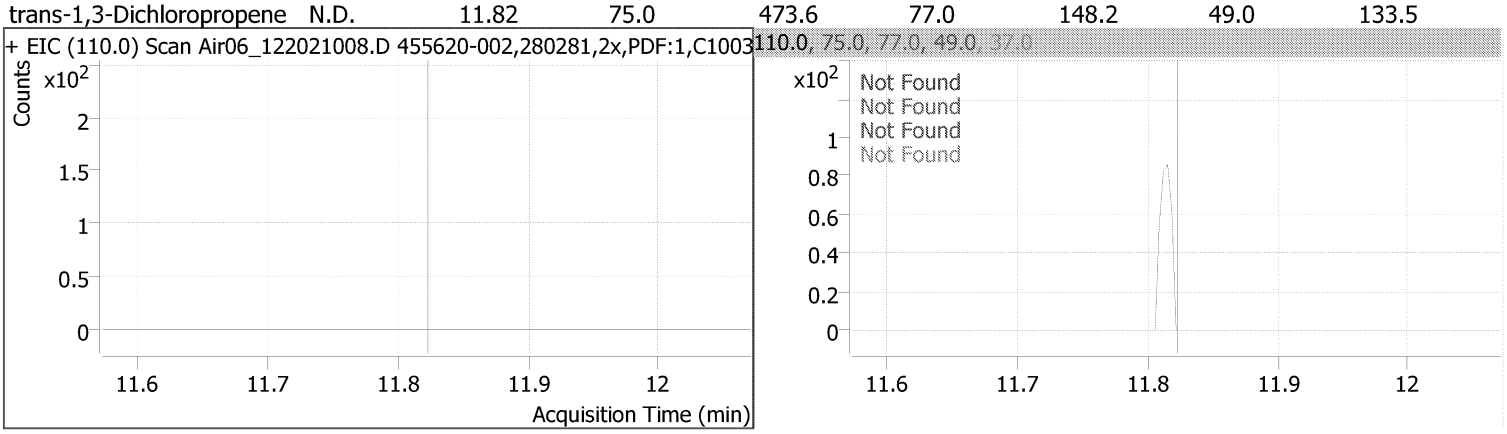




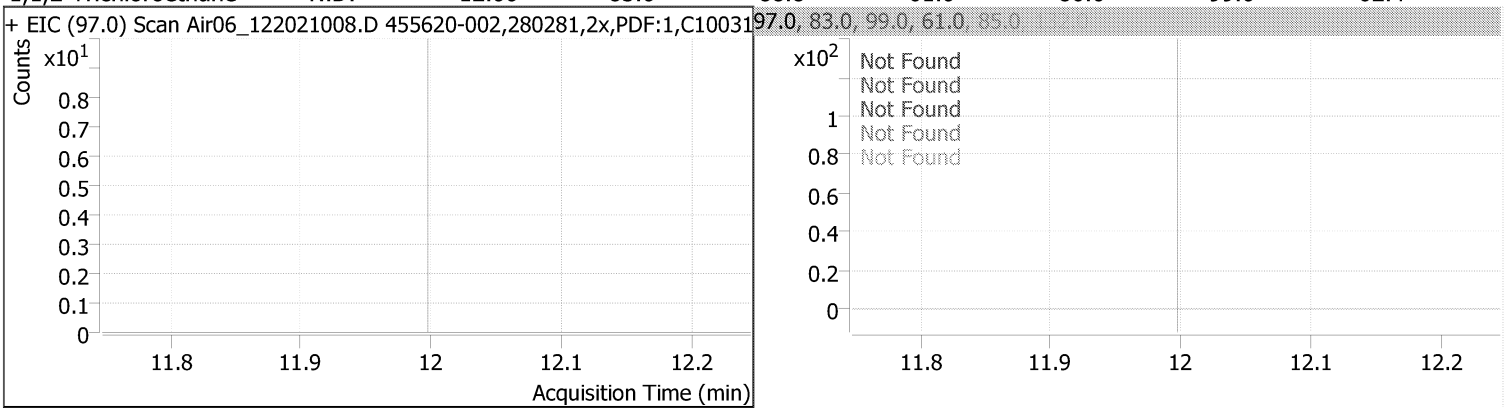
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.0105	11.42	0.04	448	43.0	378.1	240.8	361.2
					57.0	98.8	55.1	82.7
					85.0	13.8	30.5	45.8
					100.0	5.9	20.4	30.5



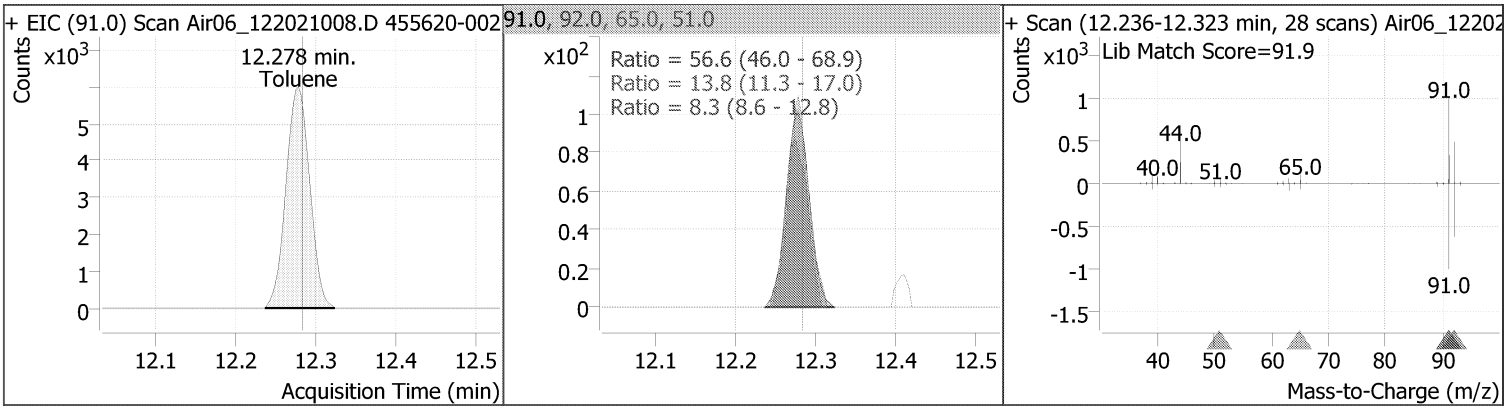
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
trans-1,3-Dichloropropene	N.D.	11.82	75.0	473.6	77.0	148.2	49.0	133.5



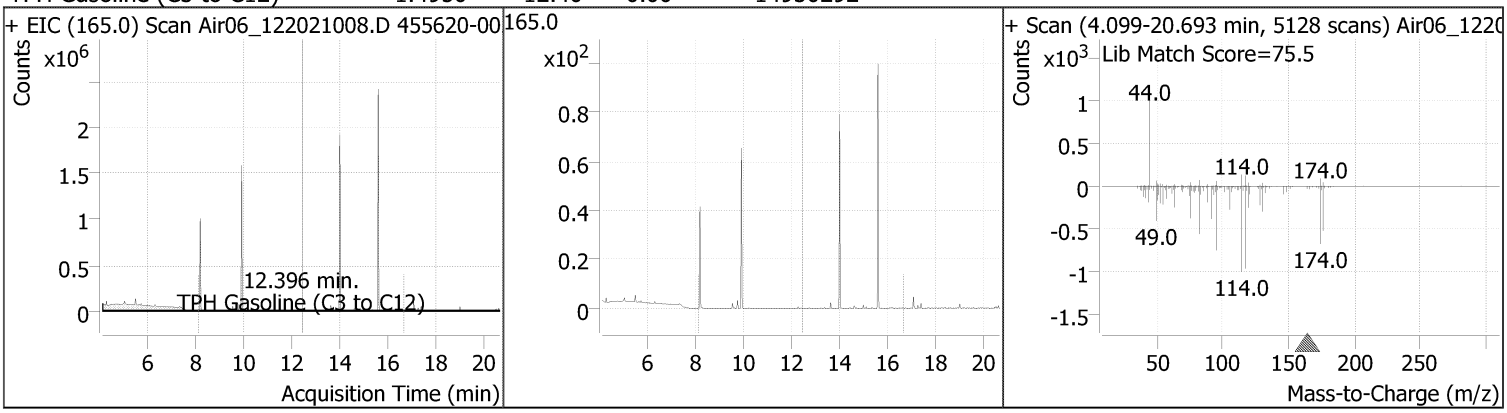
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,2-Trichloroethane	N.D.	12.00	83.0	88.8	61.0	86.6	99.0	62.4



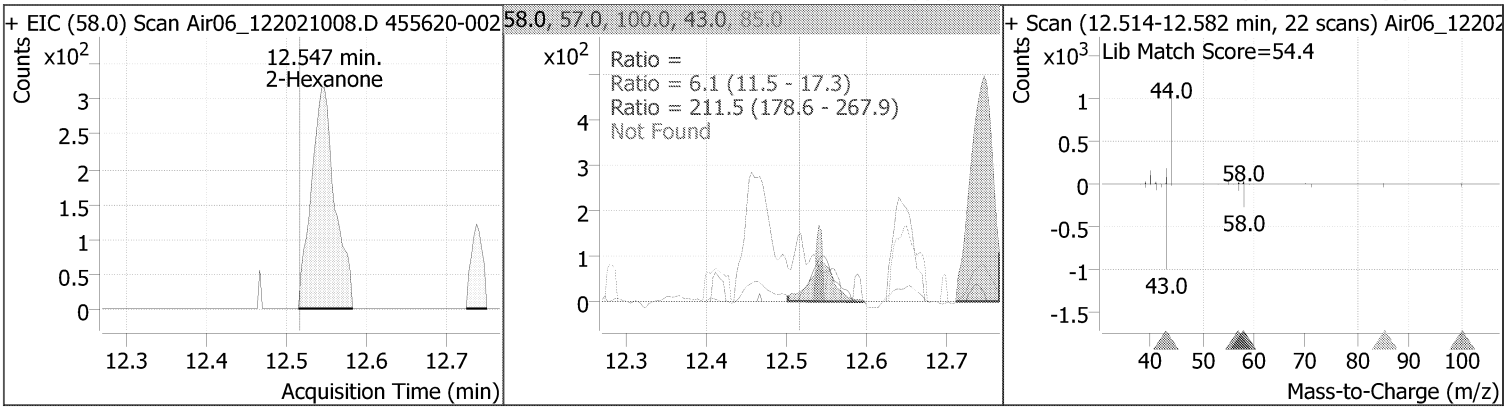
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.0904	12.28	0.00	12432	92.0	56.6	46.0	68.9
					65.0	13.8	11.3	17.0
					51.0	8.3	8.6	12.8



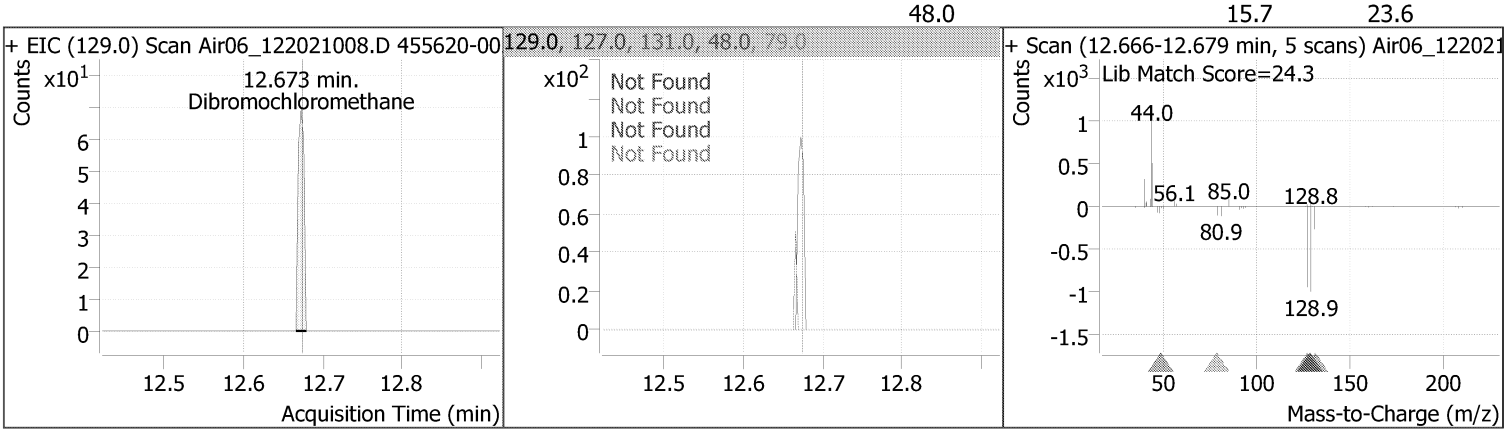
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	1.4950	12.40	0.00	14930292				



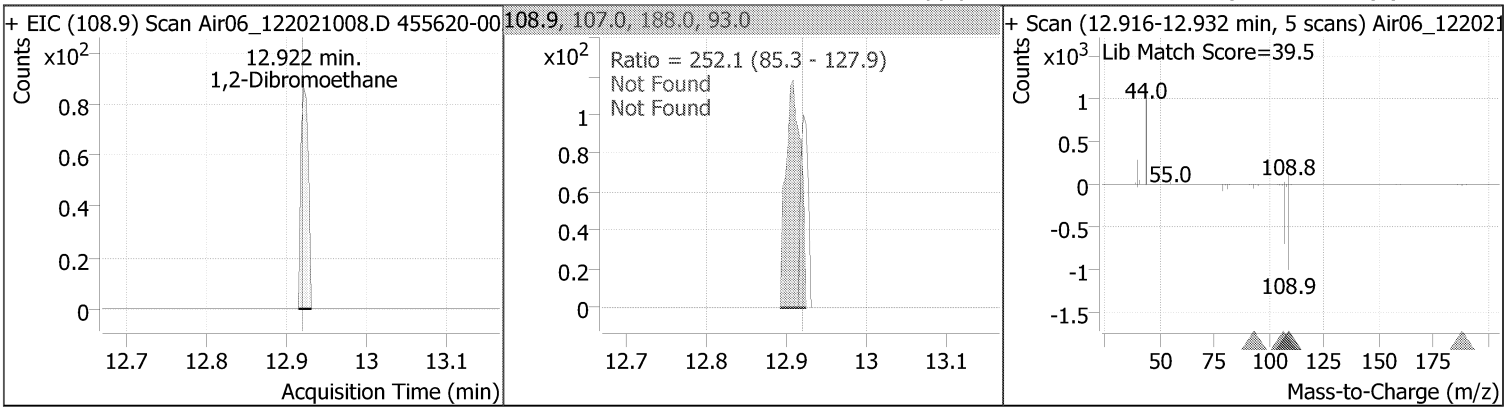
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.0123	12.55	0.03	652	43.0	211.5	178.6	267.9
					57.0		30.3	45.4
					100.0	6.1	11.5	17.3
					85.0		10.6	15.9



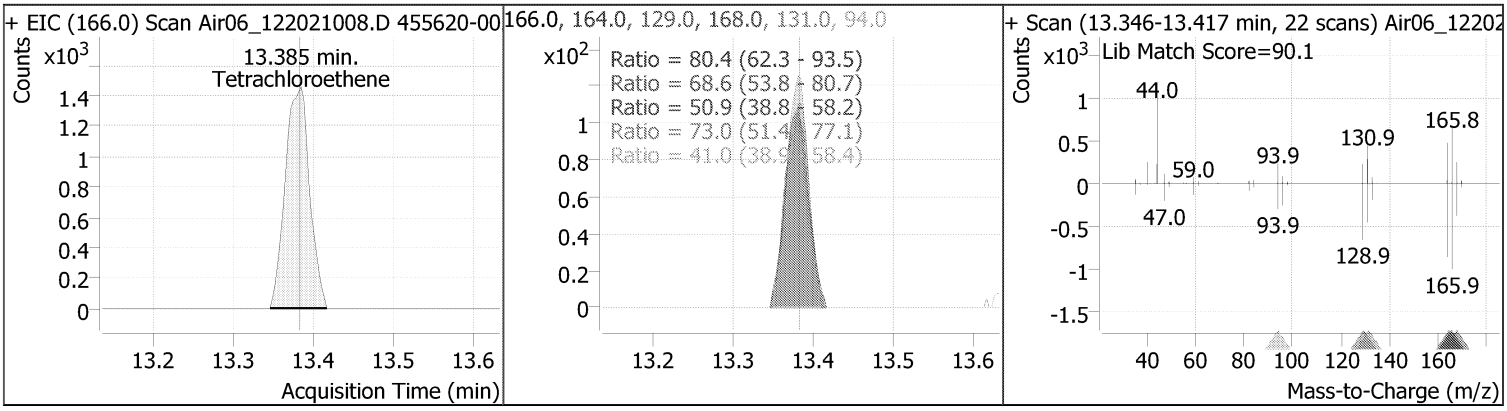
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.0004	12.67	0.00	36	127.0		61.8	92.7
					131.0		19.2	28.8
					79.0		16.0	24.0
					48.0		15.7	23.6



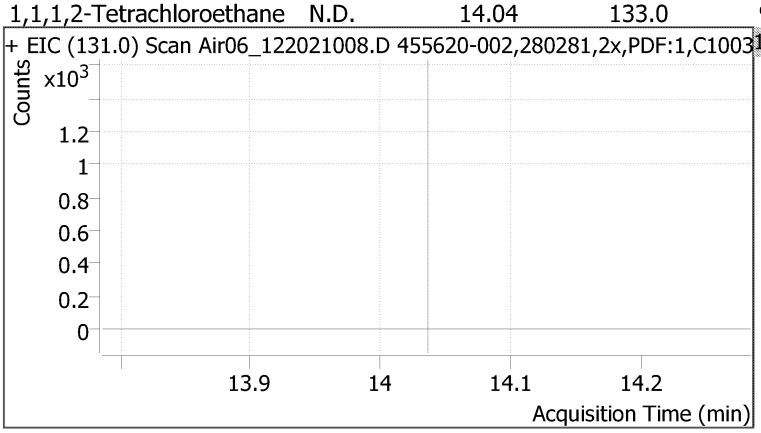
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.0008	12.92	0.00	56	107.0	252.1	85.3	127.9
					93.0		6.2	9.3
					188.0		3.7	5.5

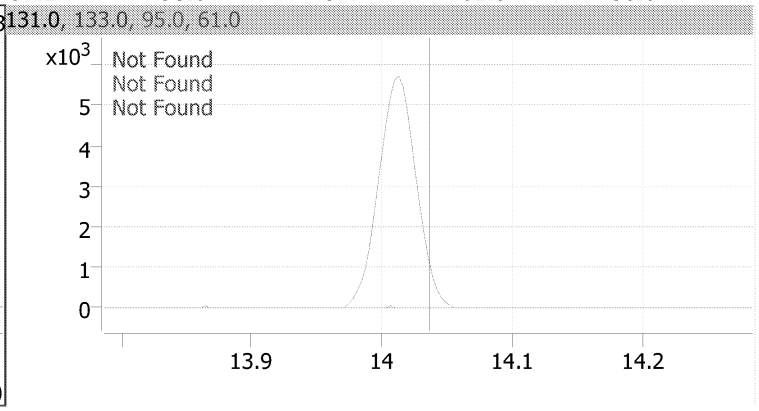


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.0382	13.39	0.00	3080	164.0	80.4	62.3	93.5
					129.0	68.6	53.8	80.7
					131.0	73.0	51.4	77.1
					94.0	41.0	38.9	58.4
					168.0	50.9	38.8	58.2

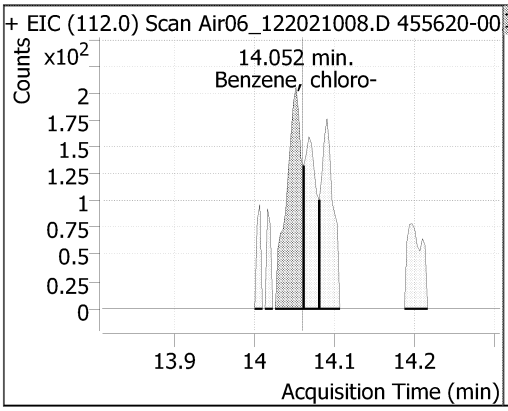


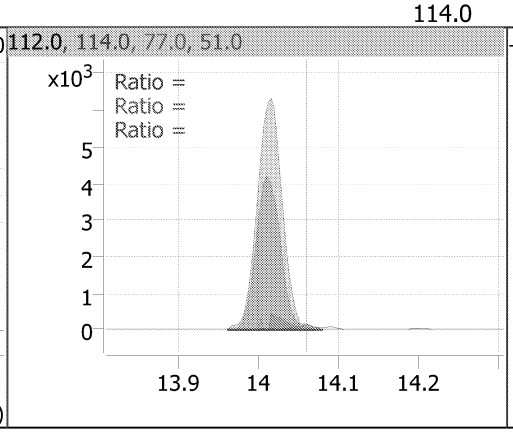
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1,2-Tetrachloroethane	N.D.	14.04	133.0	97.2	95.0	45.4	61.0	38.0

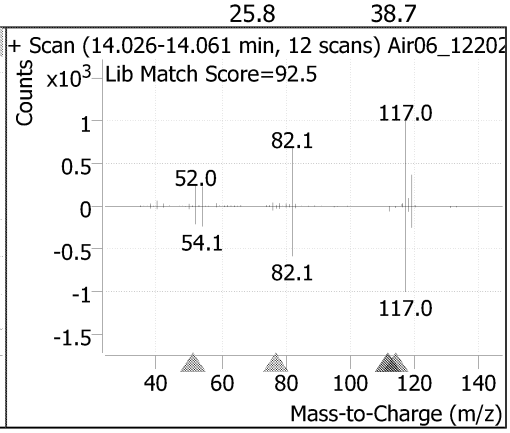




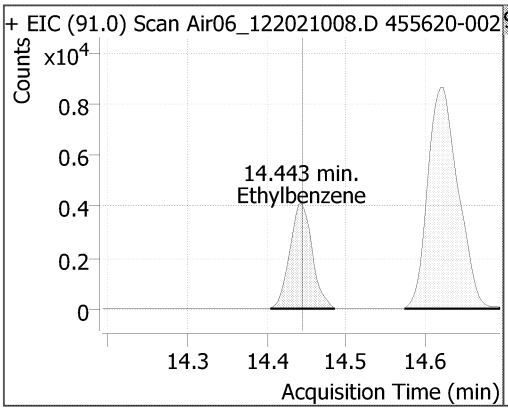
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0026	14.05	-0.01	263	77.0		53.0	79.5
					51.0		28.8	43.2
					114.0		25.8	38.7

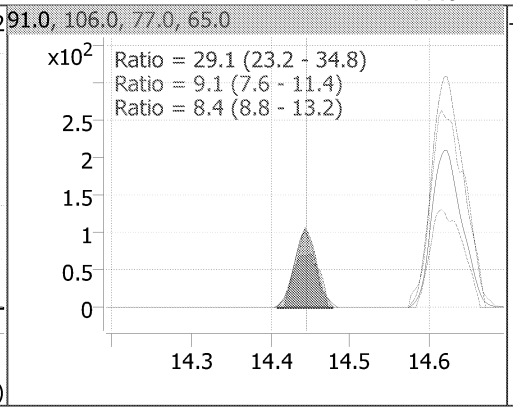


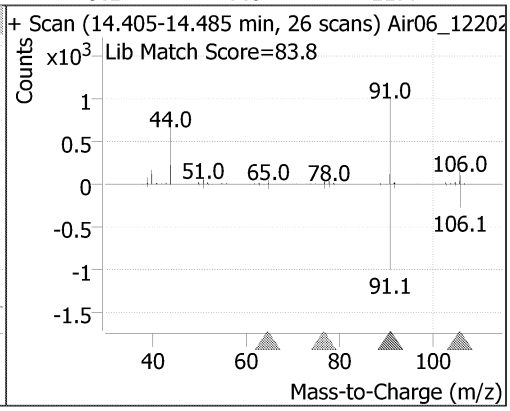




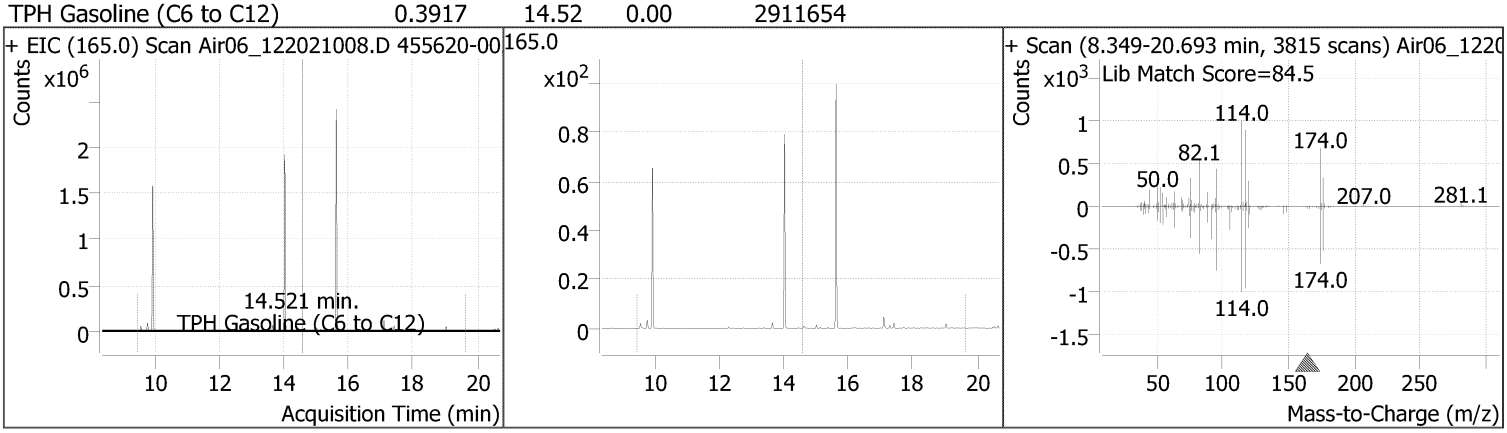
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.0500	14.44	0.00	8085	106.0	29.1	23.2	34.8
					65.0	8.4	8.8	13.2
					77.0	9.1	7.6	11.4



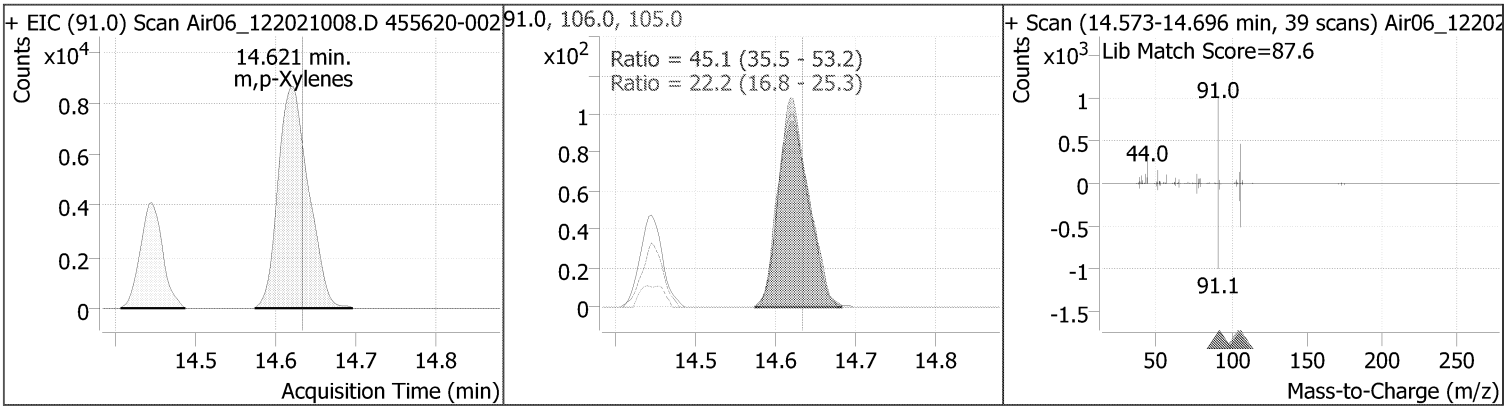




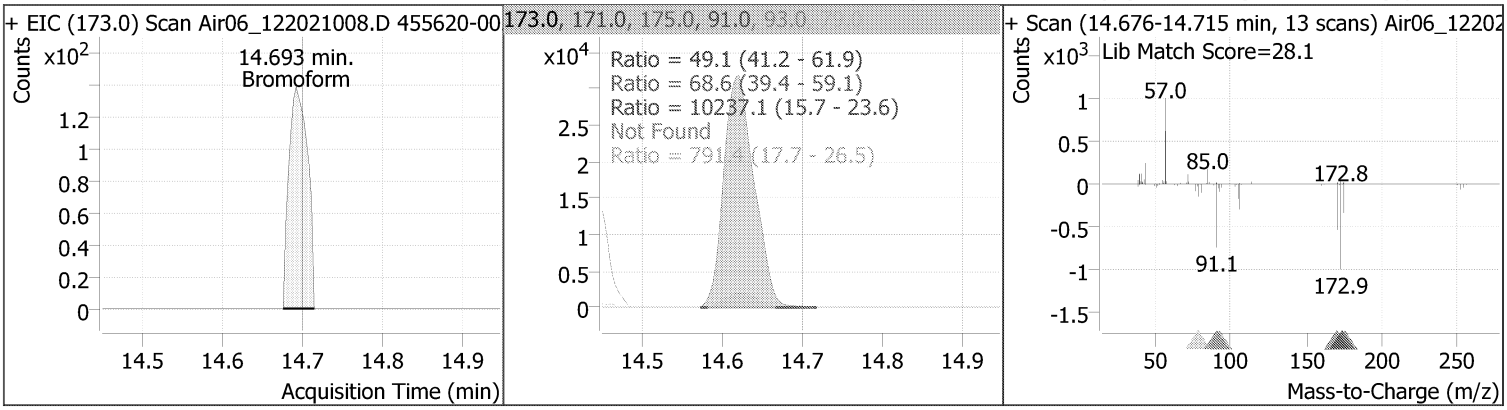
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	0.3917	14.52	0.00	2911654				



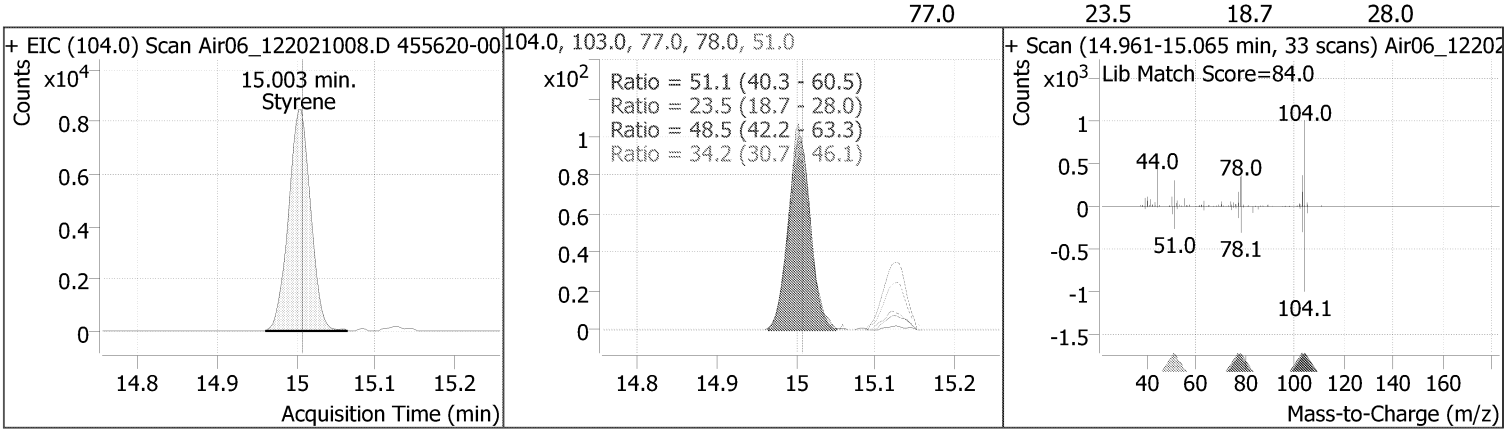
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	0.1687	14.62	-0.01	23023	106.0	45.1	35.5	53.2
					105.0	22.2	16.8	25.3



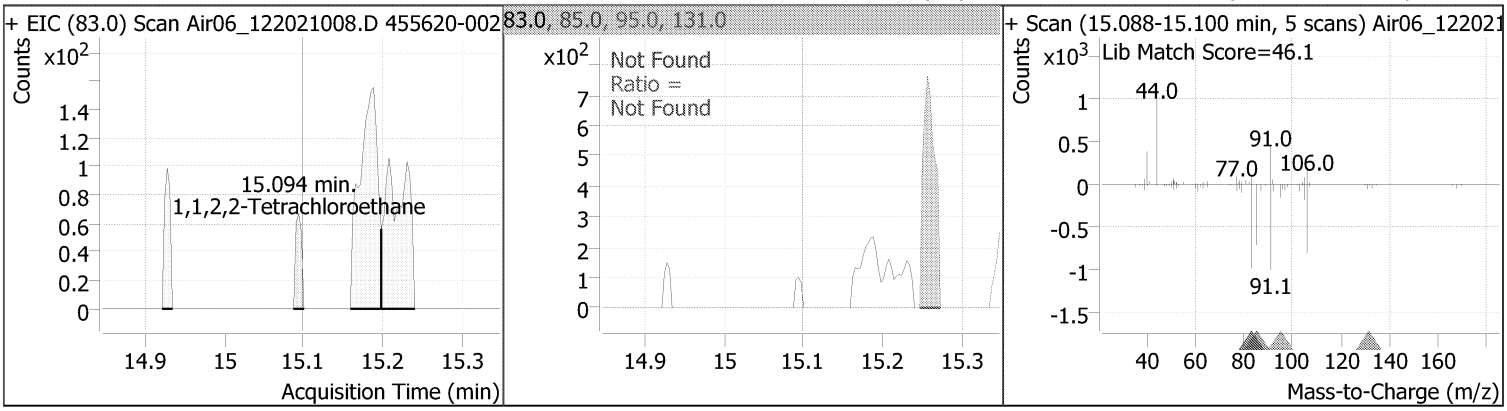
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.0021	14.69	-0.01	225	171.0	49.1	41.2	61.9
					175.0	68.6	39.4	59.1
					79.0	791.4	17.7	26.5
					93.0		16.1	24.1
					91.0	10237.1	15.7	23.6



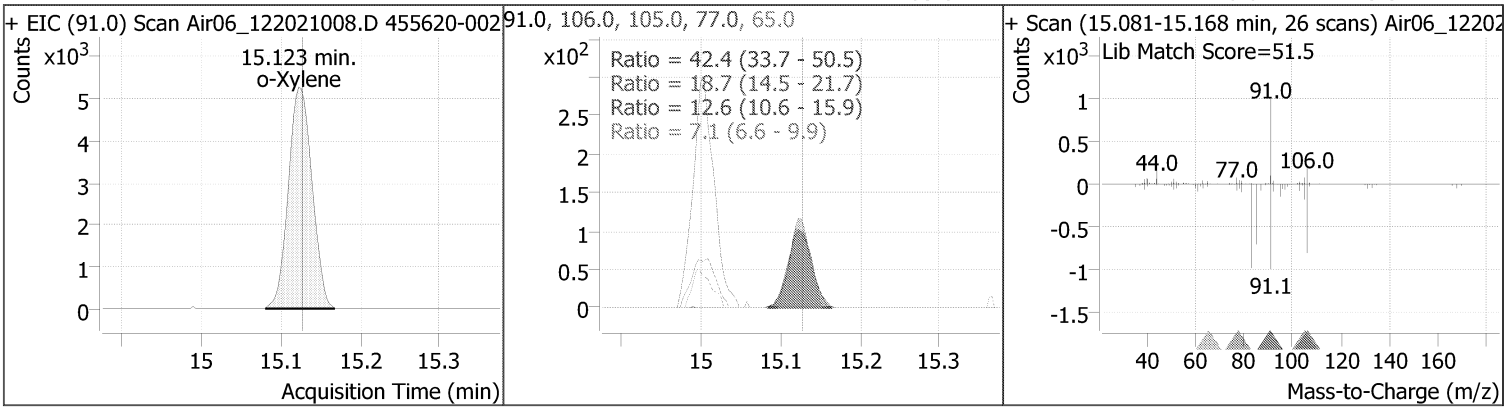
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	0.1793	15.00	-0.01	16393	78.0	48.5	42.2	63.3
					103.0	51.1	40.3	60.5
					51.0	34.2	30.7	46.1
					77.0	23.5	18.7	28.0



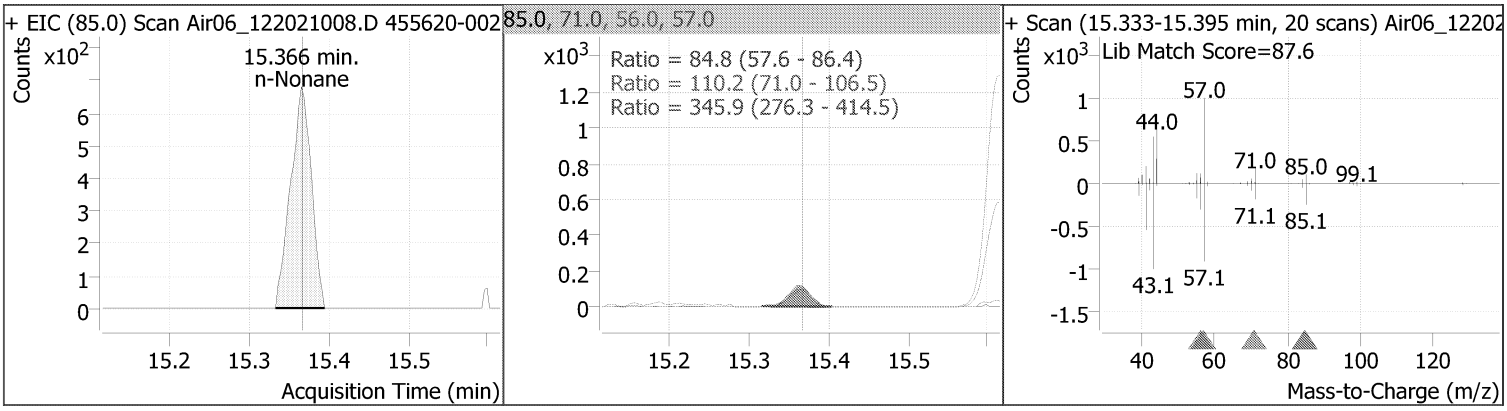
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.0004	15.09	-0.01	35	85.0		52.0	78.0
					95.0		16.0	24.0
					131.0		8.4	12.6



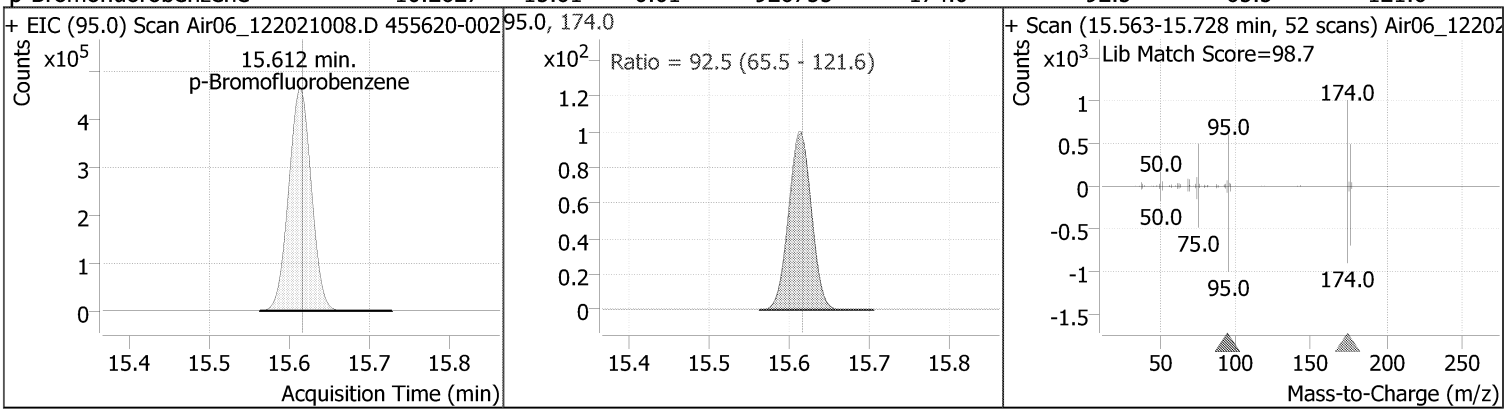
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.0771	15.12	-0.01	10923	106.0	42.4	33.7	50.5
					105.0	18.7	14.5	21.7
					77.0	12.6	10.6	15.9
					65.0	7.1	6.6	9.9



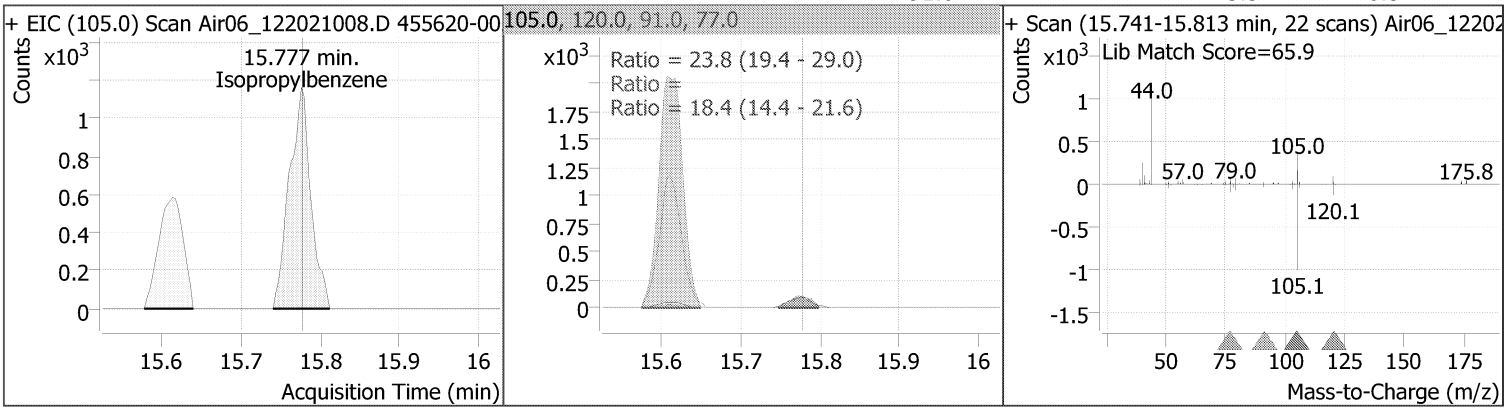
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	0.0426	15.37	0.00	1232	57.0	345.9	276.3	414.5
					56.0	110.2	71.0	106.5
					71.0	84.8	57.6	86.4



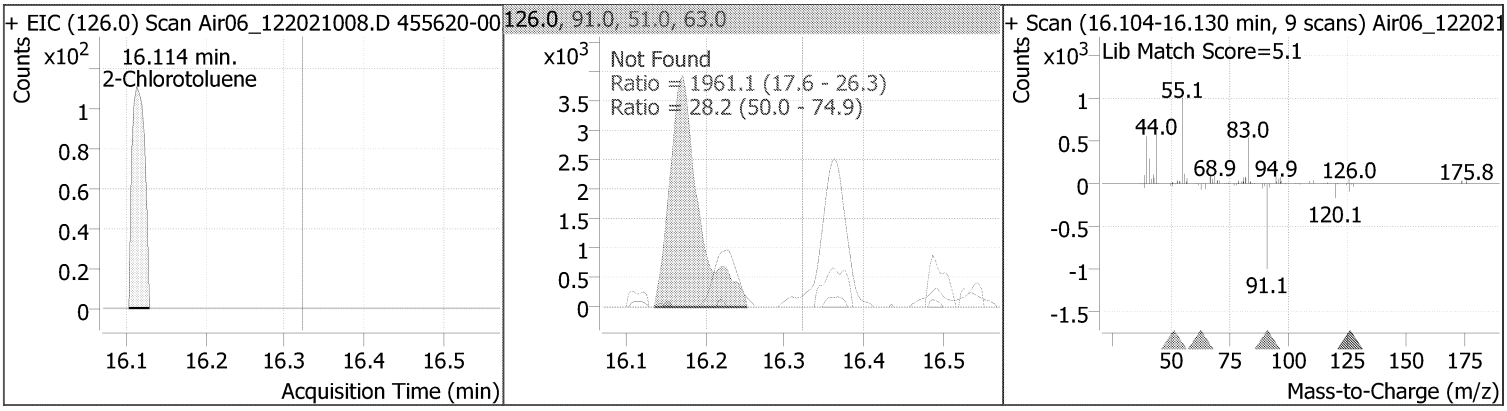
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.2627	15.61	-0.01	926755	174.0	92.5	65.5	121.6



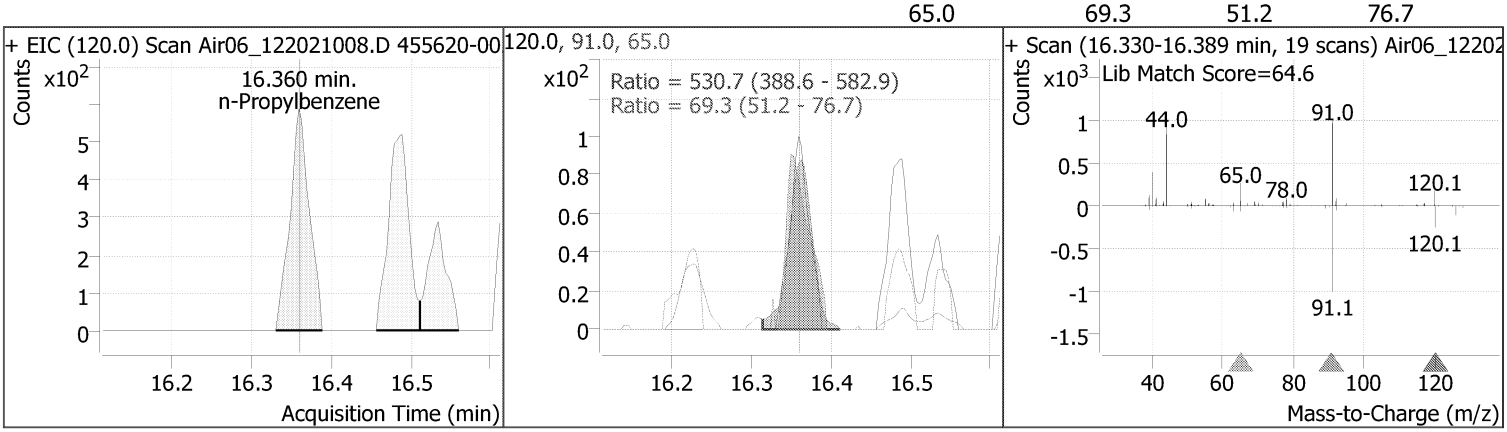
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.0113	15.78	0.00	2179	120.0	23.8	19.4	29.0
					77.0	18.4	14.4	21.6
					91.0		5.5	8.3



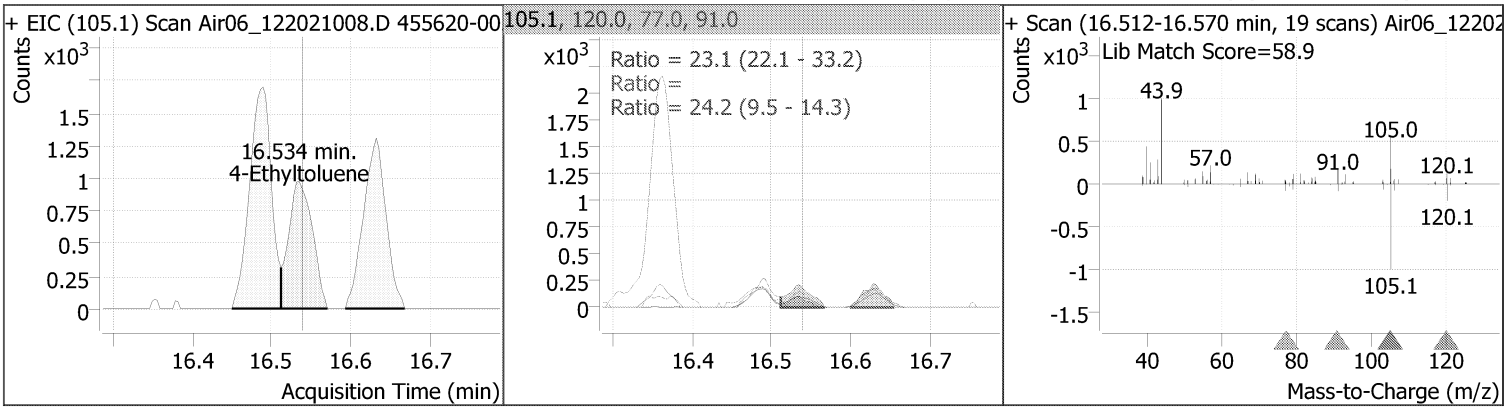
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	0.0029	16.11	-0.21	124	91.0		244.6	366.9
					63.0	28.2	50.0	74.9
					51.0	1961.1	17.6	26.3



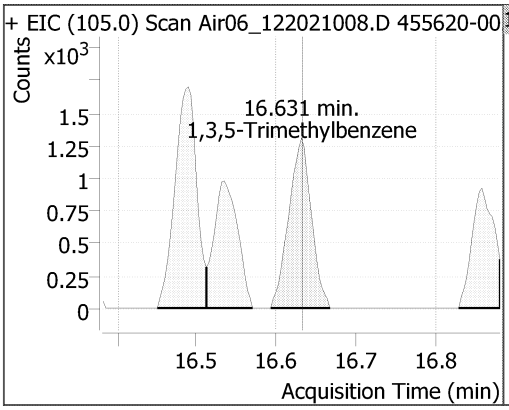
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.0205	16.36	-0.01	995	91.0	530.7	388.6	582.9
					65.0	69.3	51.2	76.7

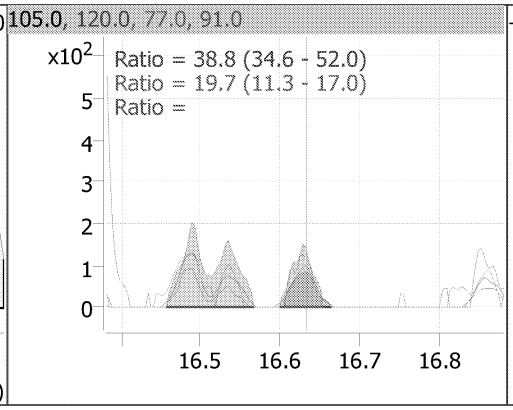


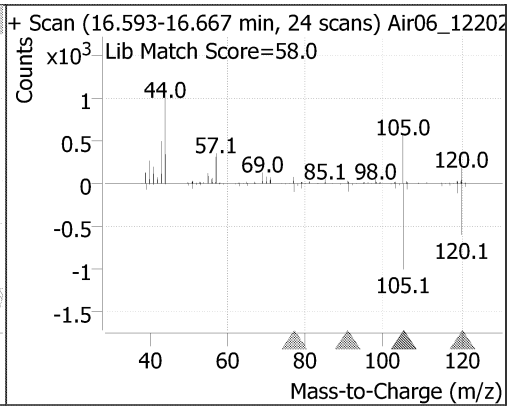
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.0111	16.53	-0.01	2032	120.0	23.1	22.1	33.2
					77.0		10.3	15.5
					91.0	24.2	9.5	14.3



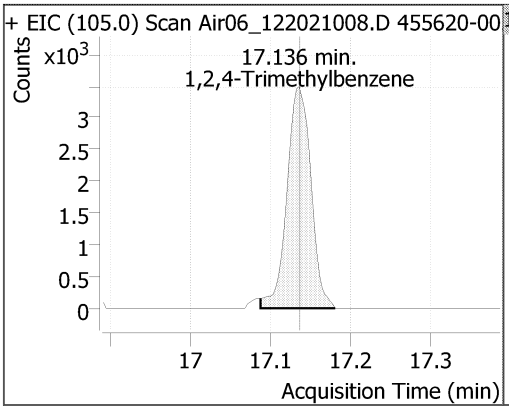
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.0155	16.63	0.00	2575	120.0	38.8	34.6	52.0
					77.0	19.7	11.3	17.0
					91.0		9.5	14.3

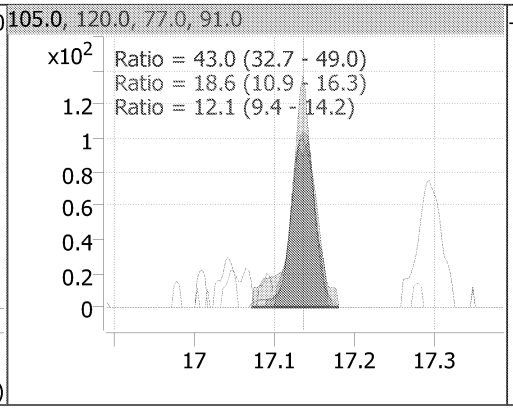


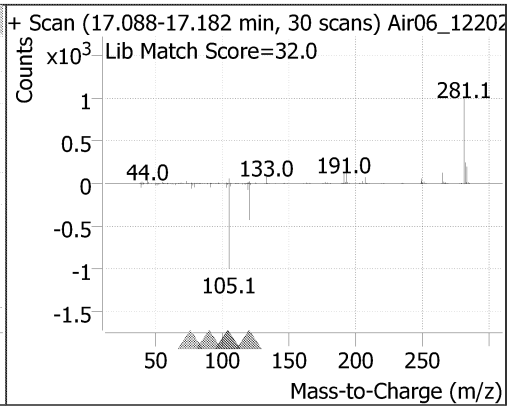




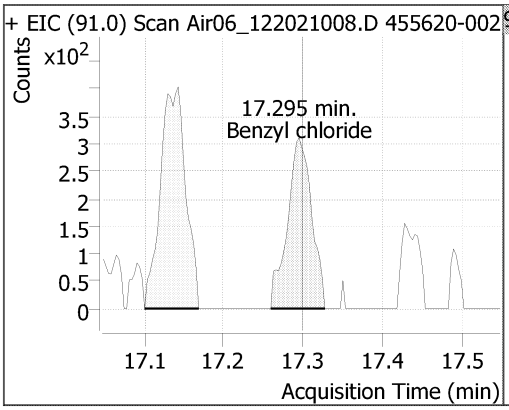
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	0.0474	17.14	-0.01	7364	120.0	43.0	32.7	49.0
					77.0	18.6	10.9	16.3
					91.0	12.1	9.4	14.2

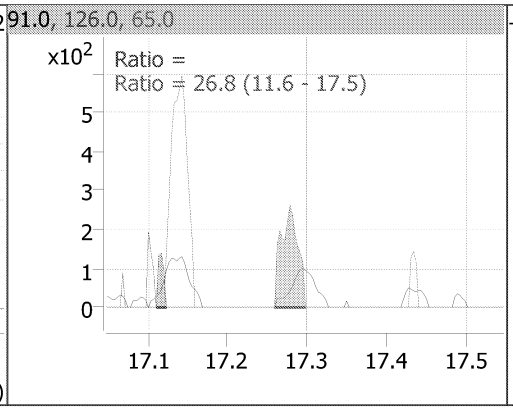


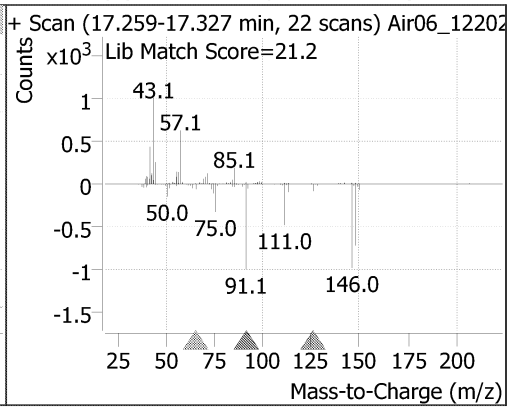




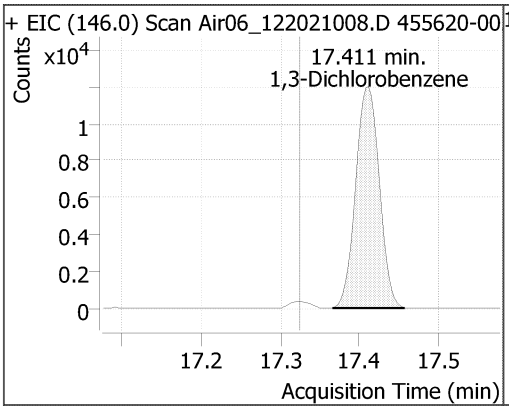
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.0049	17.29	-0.01	659	126.0		14.6	22.0
					65.0	26.8	11.6	17.5

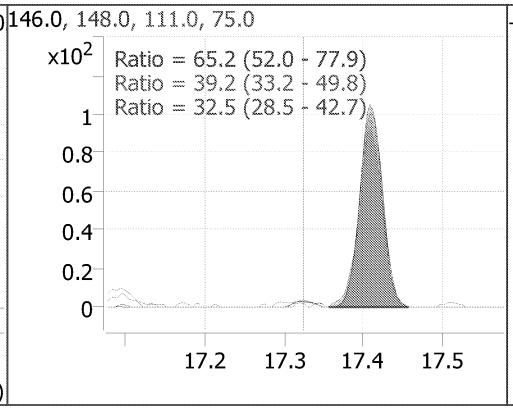


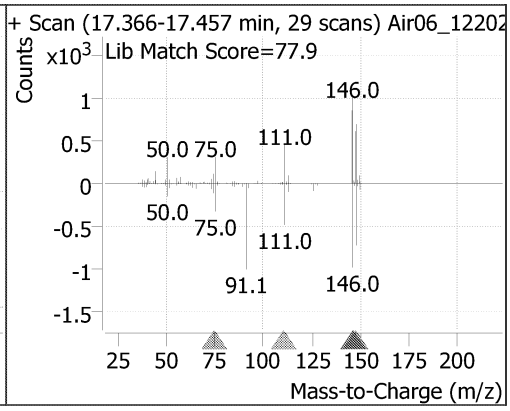




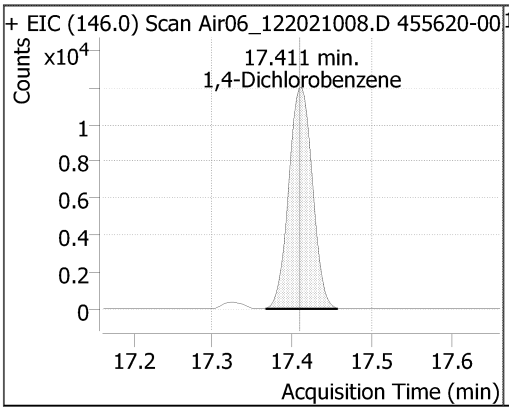
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.2324	17.41	0.08	24997	148.0	65.2	52.0	77.9
					111.0	39.2	33.2	49.8
					75.0	32.5	28.5	42.7

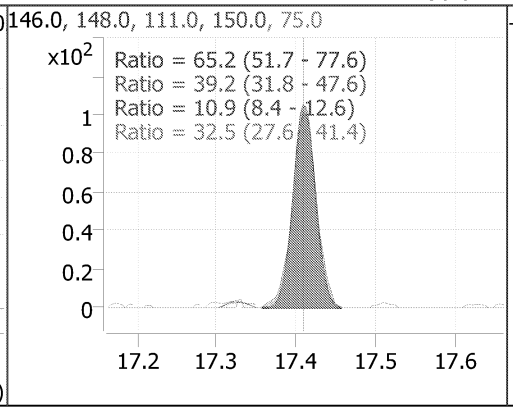


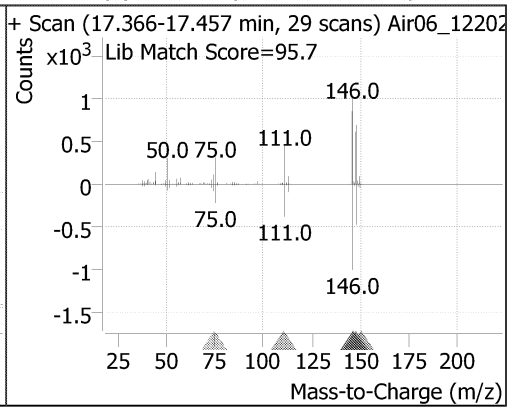




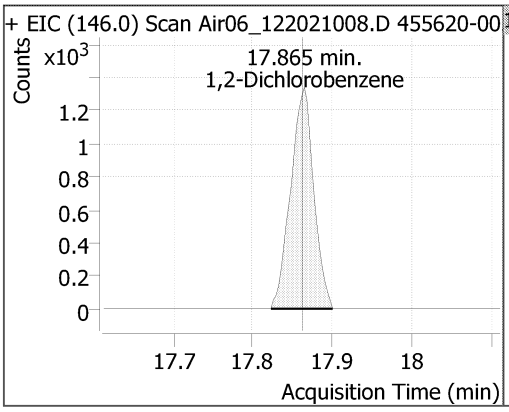
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.2355	17.41	0.00	24997	148.0	65.2	51.7	77.6
					111.0	39.2	31.8	47.6
					75.0	32.5	27.6	41.4
					150.0	10.9	8.4	12.6

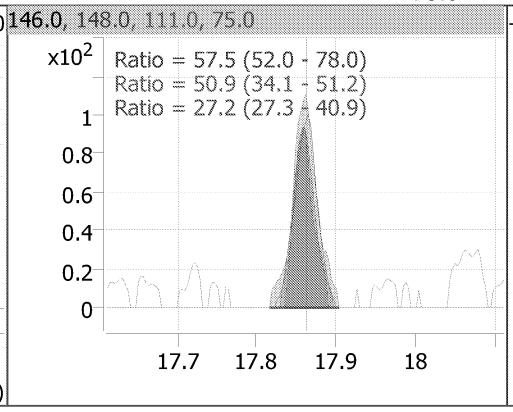


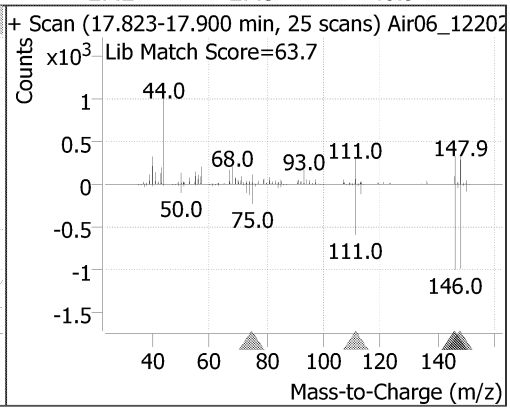




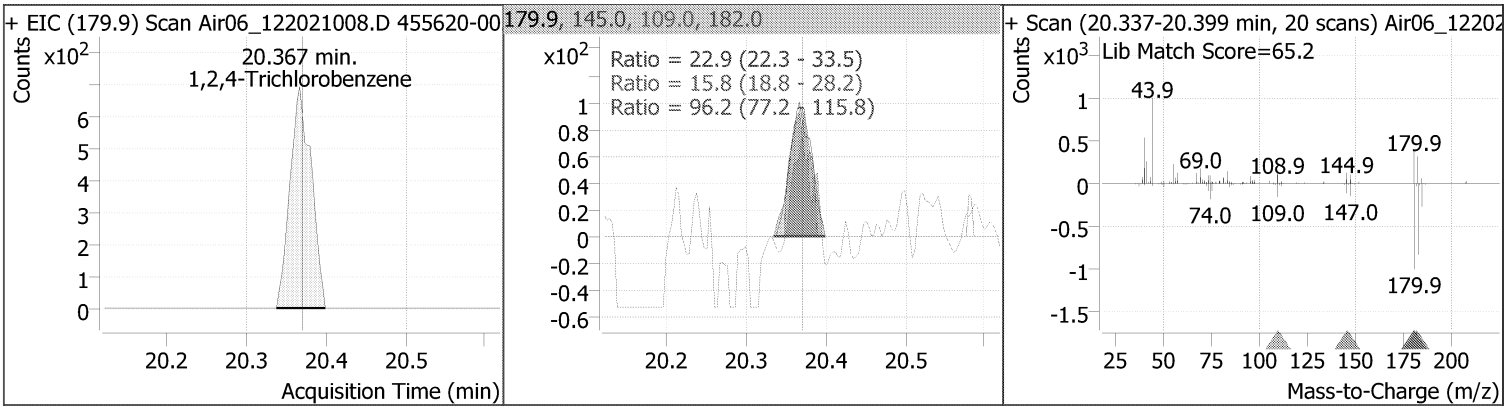
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.0262	17.86	0.00	2711	148.0	57.5	52.0	78.0
					111.0	50.9	34.1	51.2
					75.0	27.2	27.3	40.9



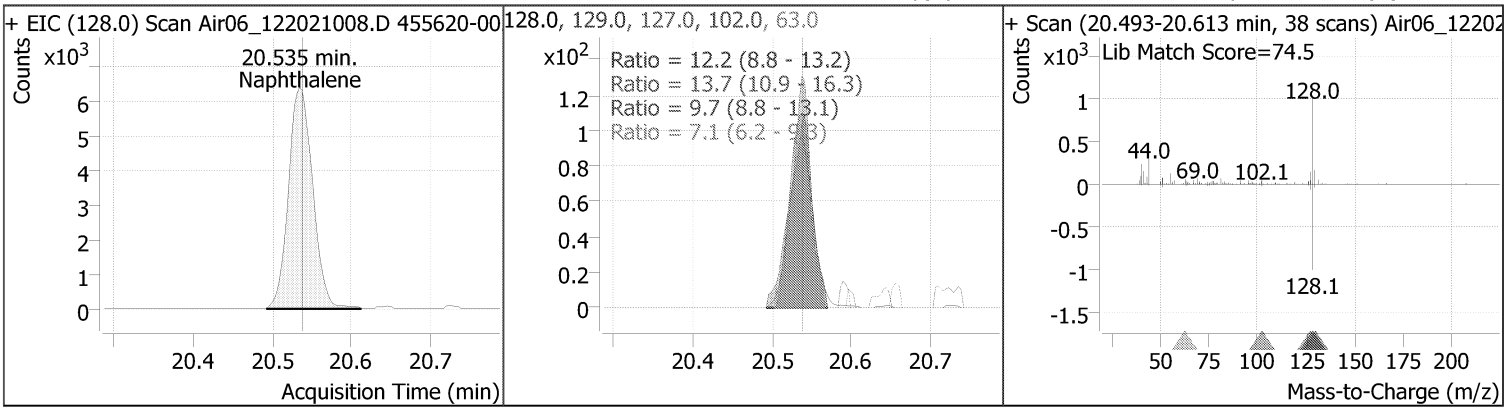




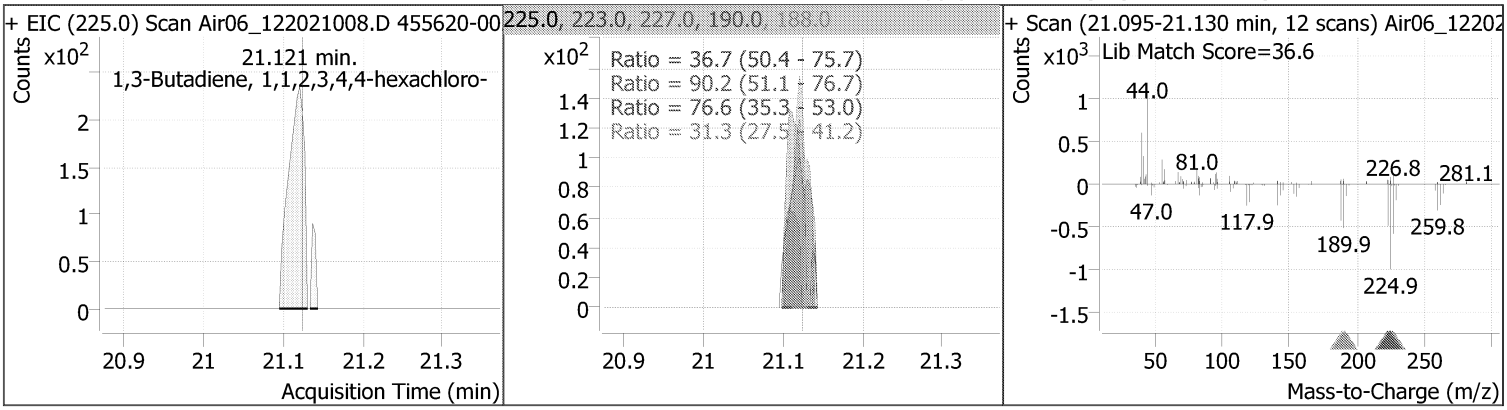
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.0175	20.37	-0.01	1288	182.0	96.2	77.2	115.8
					145.0	22.9	22.3	33.5
					109.0	15.8	18.8	28.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	0.1186	20.53	-0.01	13581	127.0	13.7	10.9	16.3
					129.0	12.2	8.8	13.2
					102.0	9.7	8.8	13.1
					63.0	7.1	6.2	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.0027	21.12	-0.01	321	227.0	90.2	51.1	76.7
					223.0	36.7	50.4	75.7
					190.0	76.6	35.3	53.0
					188.0	31.3	27.5	41.2



Library Search Results - NonTarget Hits with Details

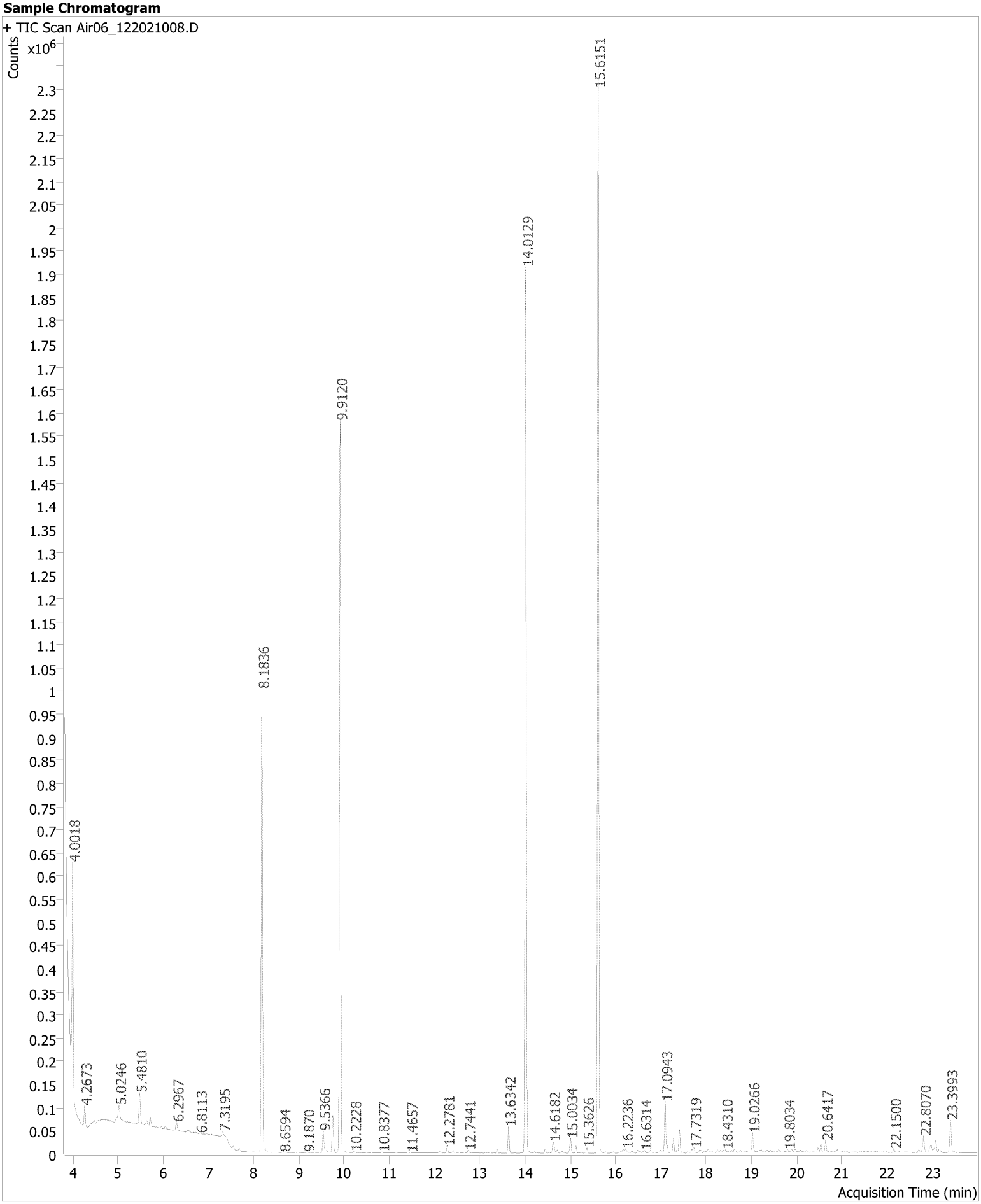
Agilent Technologies

Batch Path	D:\MassHunter\GCMS\1\data\2021\122021		
Analysis File Name	122021_1.uaf		
Analyst Name	003AIRMS06	**Analysis Time**	1/4/2022 11:18:48 AM
File Name	Air06_122021008.D	**Path Name**	D:\MassHunter\GCMS\1\data\2021\122021
Sample Name	455620-002,280281,2x,PDF:1,C10031	**Type**	Sample
Acq. Method File	TO15_Acq_013120_1	**Acq. Method Path**	D:\MassHunter\GCMS\1\methods\
Acq. Date-Time	12/20/2021 3:50:16 PM	**Acq. Operator**	ZNZ/DJL/LJB
Instrument Name	Air-MS-06	**Dil.**	1

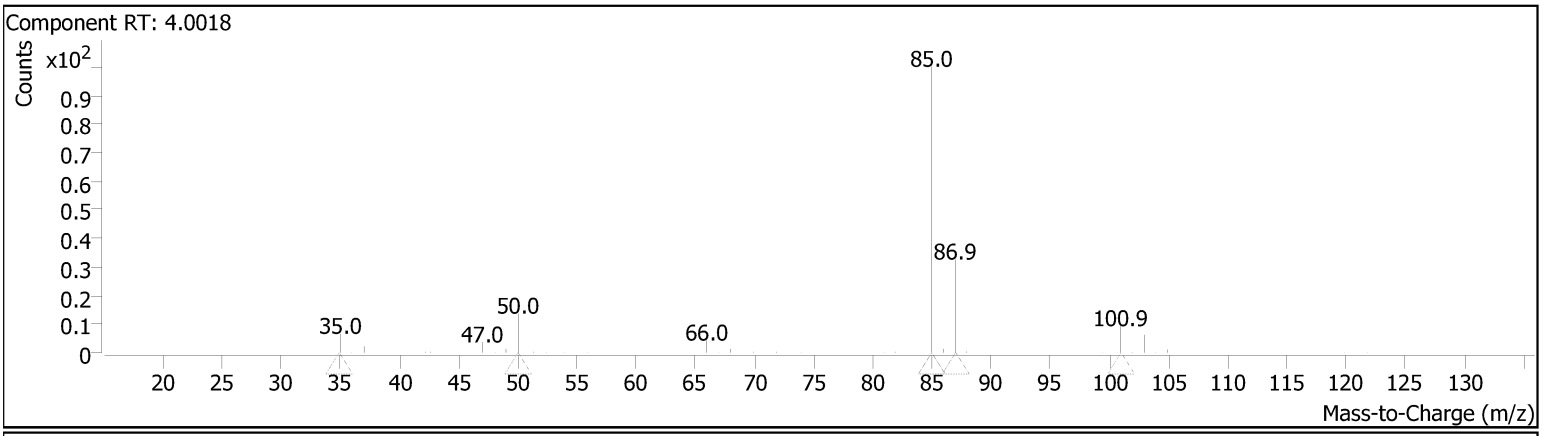
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
4.0018	Dichlorodifluoromethane	75-71-8	CCl2F2	1295110.1	99.1	6.076
4.2673	Glycidol	556-52-5	C3H6O2	78859.3	85.8	0.37
4.4744	1-Butene	106-98-9	C4H8	30660.8	81.1	0.1439
4.5650	2-Propanamine	75-31-0	C3H9N	6102.8	84.4	0.02863
5.0246	Oxalic acid	144-62-7	C2H2O4	124846.9	80.6	0.5857
5.4810	Acetone	67-64-1	C3H6O	139076.7	97.1	0.6525
5.6331	Trichloromonofluoromethane	75-69-4	CCl3F	23281.5	96.5	0.1092
5.7141	Isopropyl Alcohol	67-63-0	C3H8O	41382.0	96.7	0.1942
5.9665	Pentane	109-66-0	C5H12	7386.2	95.3	0.03465
6.0474	Isoprene	78-79-5	C5H8	14181.8	96.4	0.06654
6.2967	Methylene chloride	75-09-2	CH2Cl2	42980.5	73.6	0.2017
6.5459	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	76-13-1	C2Cl3F3	14940.4	90.2	0.0701
6.8113	Propanal, 2-methyl-	78-84-2	C4H8O	2990.8	81.7	0.01403
6.9569	Acetamide	60-35-5	C2H5NO	4385.5	87.8	0.02058
7.3195	Silanol, trimethyl-	1066-40-6	C3H10OSi	97265.4	95.3	0.4563
7.5460	Butanal	123-72-8	C4H8O	4520.9	89.1	0.02121
7.6787	2-Butanone	78-93-3	C4H8O	13593.3	92.4	0.06378
8.1836	Methane, bromochloro-	74-97-5	CH2BrCl	2131422.4	98.9	10
8.2516	Ethyl Acetate	141-78-6	C4H8O2	24779.5	78.0	0.1163
8.6594	Pentane	109-66-0	C5H12	6110.9	83.4	0.02867
9.1870	Pentanal	110-62-3	C5H10O	2485.3	87.3	0.007782
9.5366	1-Butanol	71-36-3	C4H10O	105285.7	97.9	0.3297
9.6110	Benzene	71-43-2	C6H6	9787.8	84.3	0.03065
9.7502	Carbon Tetrachloride	56-23-5	CCl4	172059.1	99.4	0.5387
9.9120	Benzene, 1,4-difluoro-	540-36-3	C6H4F2	3193792.8	99.5	10
10.0059	Cyclobutylamine, N-acetyl-	61771-98-0	C6H11NO	7237.2	77.1	0.02266
10.2228	Pentanal	110-62-3	C5H10O	7604.7	89.8	0.02381
10.8377	Heptane	142-82-5	C7H16	4961.1	94.2	0.01553
11.1452	Propane, 2-methyl-1-nitro-	625-74-1	C4H9NO2	2566.3	87.2	0.008035
11.4139	Methyl Isobutyl Ketone	108-10-1	C6H12O	3434.6	91.0	0.01075
11.4657	Cyclohexane, methyl-	108-87-2	C7H14	2912.8	86.3	0.00912
12.1098	1-Pentanol	71-41-0	C5H12O	7846.5	91.7	0.02012
12.2781	Toluene	108-88-3	C7H8	30229.6	96.8	0.0775
12.4075	Cyclopentanone	120-92-3	C5H8O	11002.2	93.6	0.02821
12.4593	Pentane, 2-methyl-	107-83-5	C6H14	3001.9	78.7	0.007696
12.5435	Acetone	67-64-1	C3H6O	3275.0	74.4	0.008396
12.6535	Heptane, 3-methyl-	589-81-1	C8H18	2125.6	85.2	0.00545
12.7441	Hexanal	66-25-1	C6H12O	12197.2	94.7	0.03127
13.1358	1-Butanamine	109-73-9	C4H11N	2327.5	80.2	0.005967
13.2329	Octane	111-65-9	C8H18	9538.8	93.4	0.02445
13.3818	Tetrachloroethylene	127-18-4	C2Cl4	17106.5	97.6	0.04386
13.6342	Cyclotrisiloxane, hexamethyl-	541-05-9	C6H18O3Si3	114034.4	98.6	0.2924
14.0129	Chlorobenzene-d5	3114-55-4	C6D5Cl	3900554.7	96.0	10
14.0874	Cyclohexane, ethyl-	1678-91-7	C8H16	7805.7	78.8	0.02001
14.2136	Cyclohexane, 1,1,3-trimethyl-	3073-66-3	C9H18	6376.8	89.6	0.01635
14.4434	Ethylbenzene	100-41-4	C8H10	18546.4	94.5	0.04755
14.5276	2,4,6,8-Tetramethyl-1-undecene	59920-26-2	C15H30	3440.0	83.7	0.008819
14.6182	p-Xylene	106-42-3	C8H10	71345.8	98.7	0.1829
14.7088	3-Heptanone	106-35-4	C7H14O	12366.6	83.0	0.0317
14.8156	Octane, 3-methyl-	2216-33-3	C9H20	9189.5	92.7	0.02356
15.0034	1,3,5,7-Cyclooctatetraene	629-20-9	C8H8	68944.9	96.2	0.1768
15.1263	p-Xylene	106-42-3	C8H10	30400.9	95.8	0.07794
15.2623	Cyclopentane, 1-hydroxymethyl-1,3-dimethyl-	1000156-73-8	C8H16O	4517.9	82.1	0.01158
15.3626	Nonane	111-84-2	C9H20	24081.6	95.3	0.06174
15.6151	Benzene, 1-bromo-3-fluoro-	1073-06-9	C6H4BrF	4815257.2	98.7	12.35
15.7737	Benzene, (1-methylethyl)-	98-82-8	C9H12	7535.3	70.9	0.01932
15.9517	Cyclohexanemethanol	100-49-2	C7H14O	6453.4	84.5	0.01654
16.0909	Nonane, 3-methyl-	5911-04-6	C10H22	8445.8	83.3	0.02165
16.1686	Benzaldehyde	100-52-7	C7H6O	20860.0	88.0	0.05348

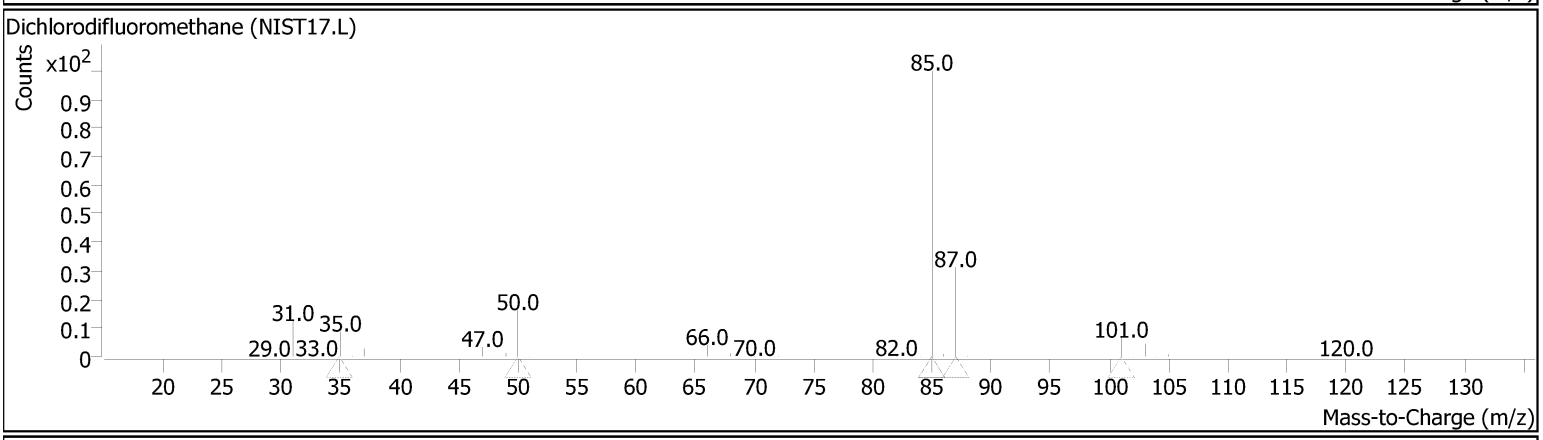
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
16.2236	Bicyclo[3.1.1]hept-2-ene, 3,6,6-trimethyl-	4889-83-2	C10H16	21088.3	85.2	0.05406
16.2689	Heptane, 3-ethyl-2-methyl-	14676-29-0	C10H22	5653.1	82.5	0.01449
16.3628	Benzene, propyl-	103-65-1	C9H12	11920.8	87.9	0.03056
16.4890	Benzene, 1-ethyl-3-methyl-	620-14-4	C9H12	11647.4	80.6	0.02986
16.5311	Benzene, 1-ethyl-4-methyl-	622-96-8	C9H12	8451.8	72.2	0.02167
16.6314	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	18756.8	73.0	0.04809
16.7706	1-Octanol, 3,7-dimethyl-	106-21-8	C10H22O	16326.4	89.4	0.04186
16.8612	Benzene, 1-ethyl-4-methyl-	622-96-8	C9H12	3081.5	79.7	0.0079
16.9907	Octanal	124-13-0	C8H16O	14132.1	82.6	0.03623
17.0943	Cyclotetrasiloxane, octamethyl-	556-67-2	C8H24O4Si4	249880.6	96.2	0.6406
17.2787	Decane	124-18-5	C10H22	51892.1	94.9	0.133
17.3564	Heptane, 2,2,4,6,6-pentamethyl-	13475-82-6	C12H26	6706.1	90.5	0.01719
17.4082	Benzene, 1,3-dichloro-	541-73-1	C6H4Cl2	97009.4	98.3	0.2487
17.5959	2-Propyl-1-pentanol, pentafluoropropionate	1000365-51-2	C11H17F5O2	9244.1	73.7	0.0237
17.6866	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	16326.8	81.5	0.04186
17.7319	Octane, 2,3,7-trimethyl-	62016-34-6	C11H24	23165.1	92.5	0.05939
17.8613	Benzene, 1,2-dichloro-	95-50-1	C6H4Cl2	19614.8	83.6	0.05029
18.0426	Oxalic acid, cyclohexyl dodecyl ester	1000309-31-4	C20H36O4	18742.9	85.1	0.04805
18.1624	Benzene, (1-methylpropyl)-	135-98-8	C10H14	8395.5	75.7	0.02152
18.2497	Benzene, 1,4-diethyl-	105-05-5	C10H14	12722.2	78.8	0.03262
18.3210	Hexane, 2,4-dimethyl-	589-43-5	C8H18	9215.8	83.3	0.02363
18.3760	Heptane, 3,3,5-trimethyl-	7154-80-5	C10H22	9616.7	82.5	0.02465
18.4310	2-Undecene, (Z)-	821-96-5	C11H22	12733.1	83.3	0.03264
18.5572	Decane, 3-methyl-	13151-34-3	C11H24	6023.2	83.9	0.01544
18.6220	Cyclohexane, 1-methyl-3-(1-methylethenyl)-, cis-	24399-15-3	C10H18	14820.3	79.2	0.038
18.7644	p-Cymene	99-87-6	C10H14	6688.6	74.9	0.01715
19.0266	Undecane	1120-21-4	C11H24	75223.2	94.7	0.1929
19.5315	Hexane, 2,3,4-trimethyl-	921-47-1	C9H20	6342.9	80.5	0.01626
19.5994	trans-Decalin, 2-methyl-	1000152-47-3	C11H20	11864.6	85.1	0.03042
19.8034	9-Decen-1-ol, pentafluoropropionate	1000352-65-6	C13H19F5O2	11562.2	76.9	0.02964
19.8907	Naphthalene, decahydro-2-methyl-	2958-76-1	C11H20	6698.5	77.4	0.01717
20.0882	Oxalic acid, allyl pentadecyl ester	1000309-24-3	C20H36O4	4568.1	76.9	0.01171
20.2112	Oxalic acid, allyl pentadecyl ester	1000309-24-3	C20H36O4	6419.9	71.1	0.01646
20.3601	Benzene, 1,3,5-trichloro-	108-70-3	C6H3Cl3	4829.3	77.9	0.01238
20.4766	Cyclooctane, methyl-	1502-38-1	C9H18	19368.1	80.5	0.04965
20.5381	Azulene	275-51-4	C10H8	37657.6	87.9	0.09654
20.6417	Dodecane	112-40-3	C12H26	51385.6	91.3	0.1317
20.8974	Hexane, 2,2,5-trimethyl-	3522-94-9	C9H20	8408.2	74.7	0.02156
22.1500	1-Octanol, 2-butyl-	3913-02-8	C12H26O	14343.3	81.4	0.03677
22.7002	Naphthalene, 2-ethyl-1,2,3,4-tetrahydro-	32367-54-7	C12H16	16604.0	79.7	0.04257
22.8070	Cyclododecene	1501-82-2	C12H22	87582.0	92.8	0.2245
22.9721	1,3-Cyclododecadiene, (E,Z)-	1129-92-6	C12H20	56816.9	91.4	0.1457
23.0724	Benzene, (3-methylcyclopentyl)-	5078-75-1	C12H16	74162.8	74.4	0.1901
23.3993	1,3-Cyclododecadiene, (E,Z)-	1129-92-6	C12H20	169413.5	94.8	0.4343

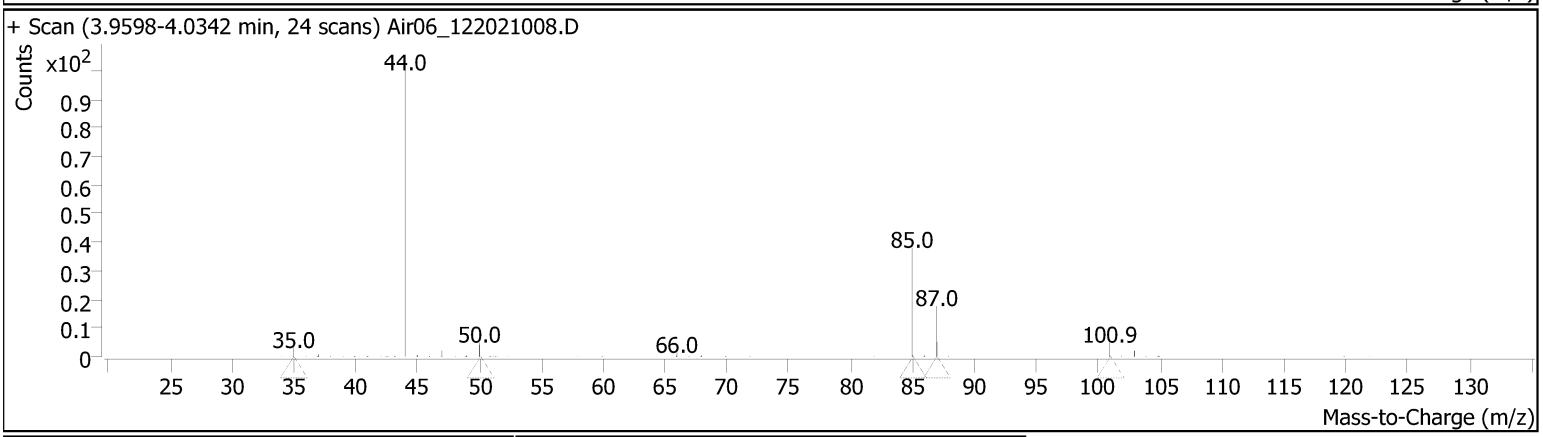
Sample Chromatogram

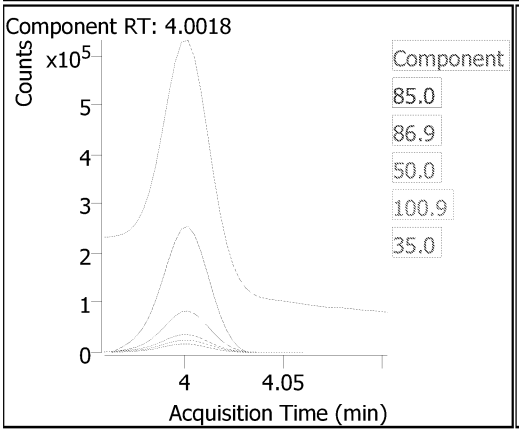


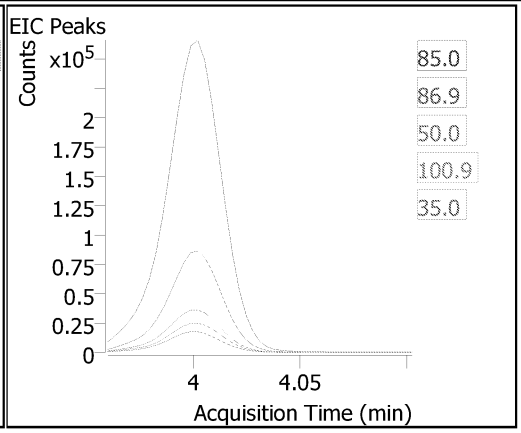
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.0018	Dichlorodifluoromethane	1295110.1	99.1	75-71-8	CCl2F2	6.076

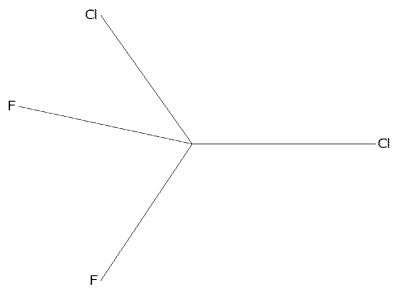




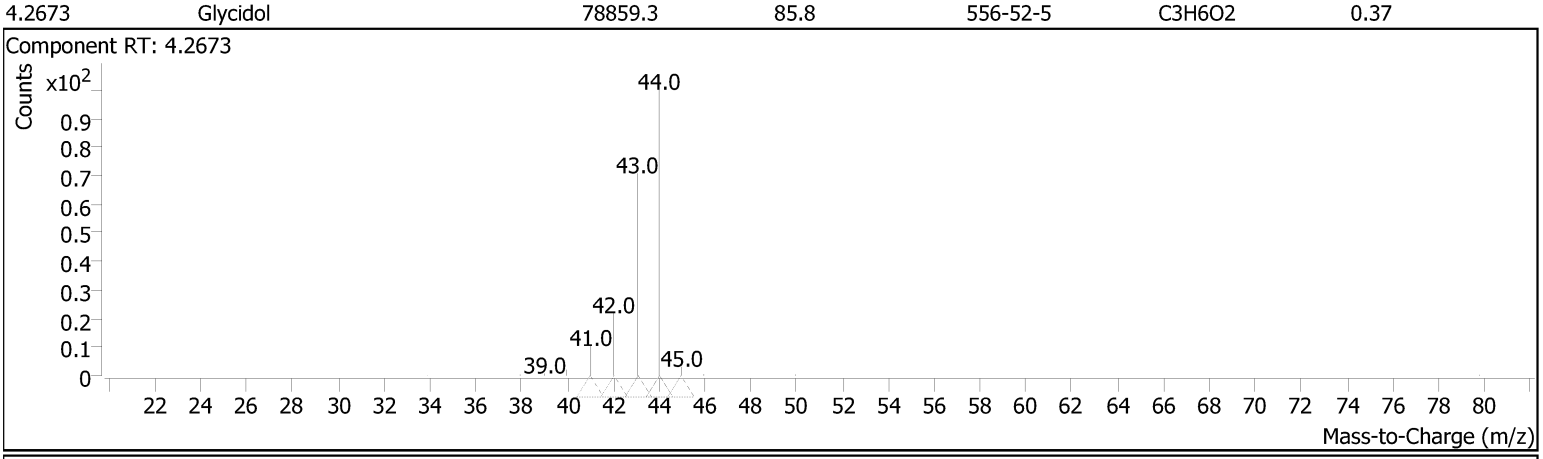


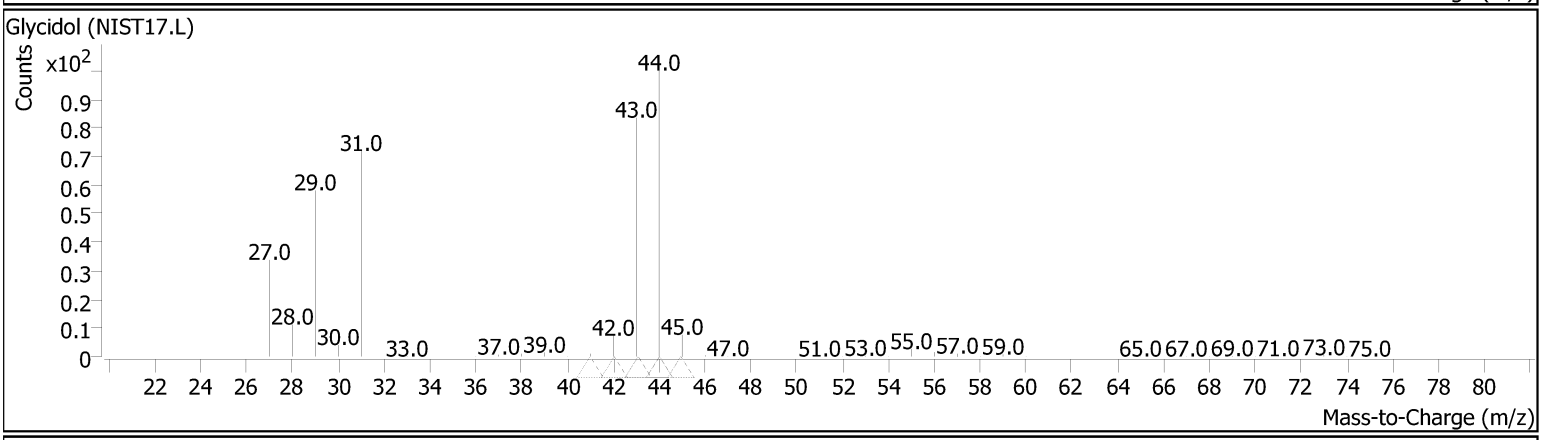


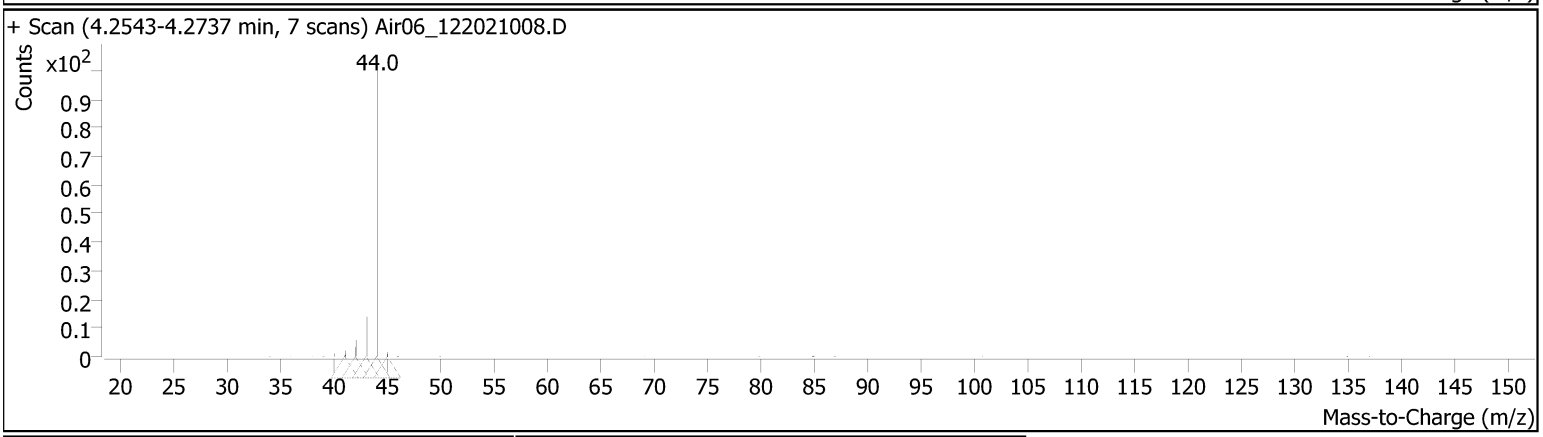


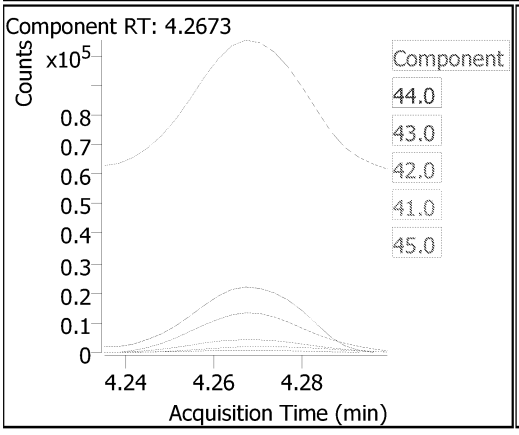


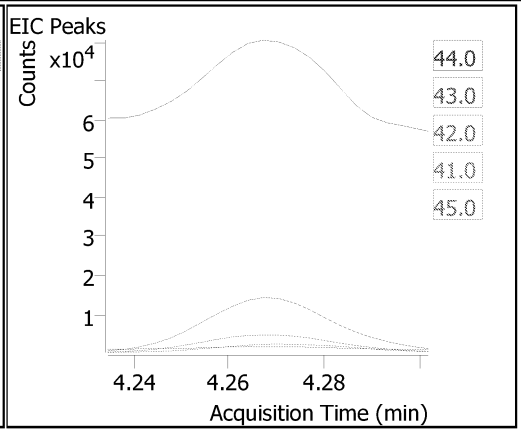
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.2673	Glycidol	78859.3	85.8	556-52-5	C3H6O2	0.37

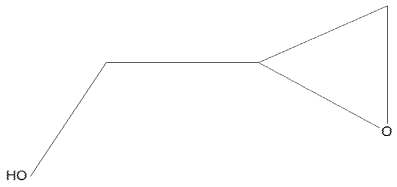








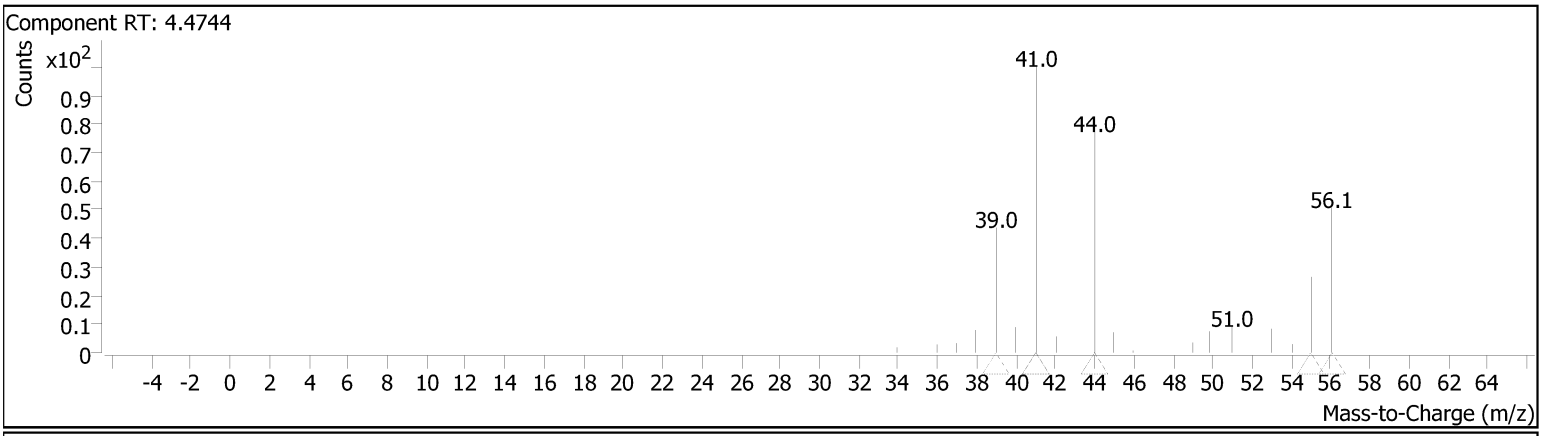


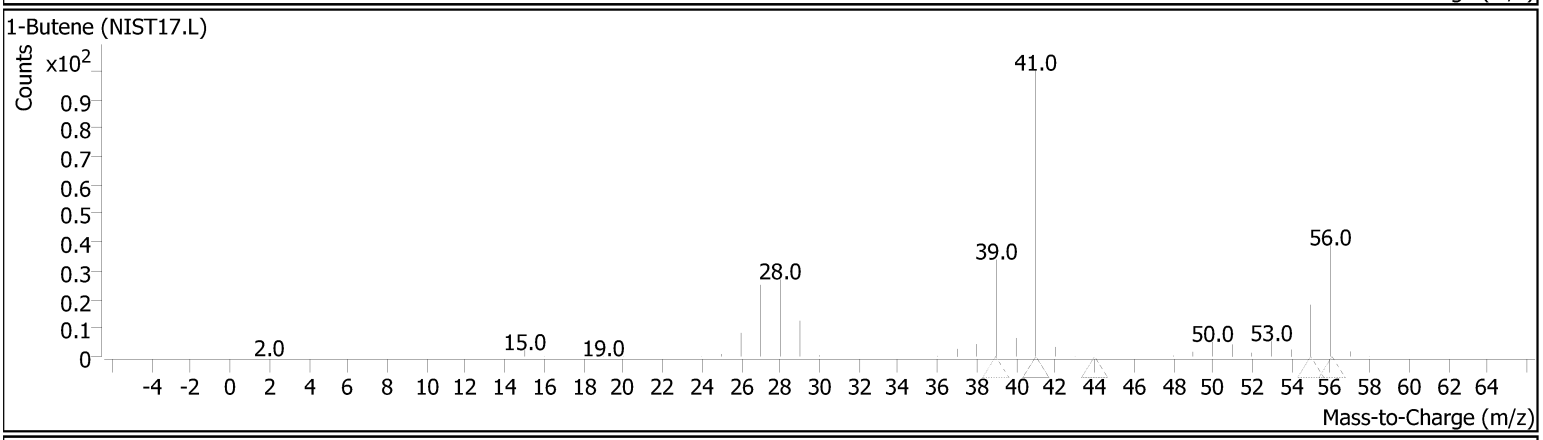


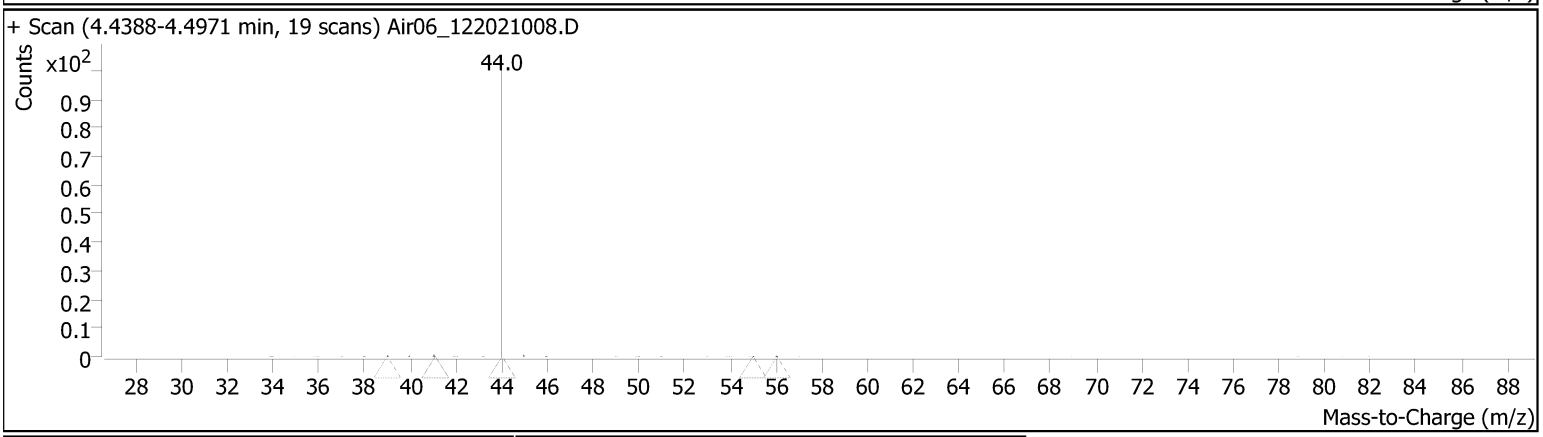
Library Search Results - NonTarget Hits with Details

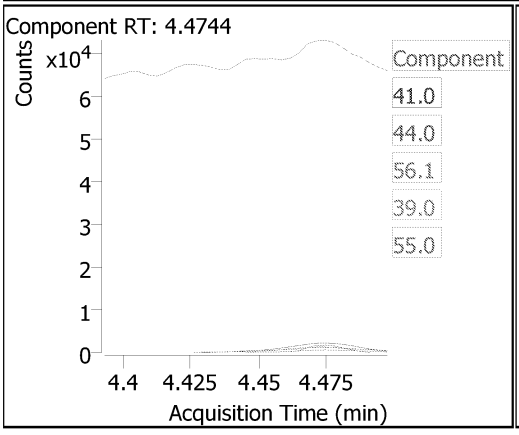
Agilent Technologies

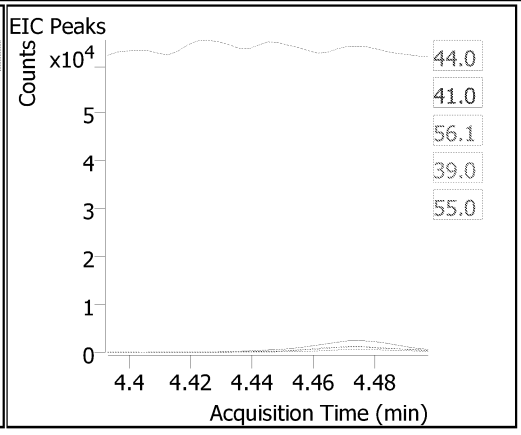
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.4744	1-Butene	30660.8	81.1	106-98-9	C4H8	0.1439

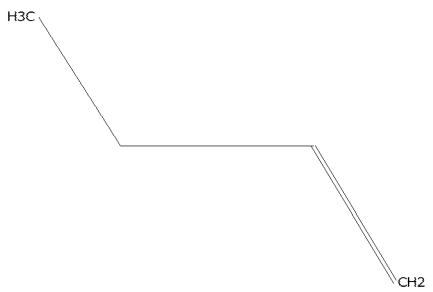




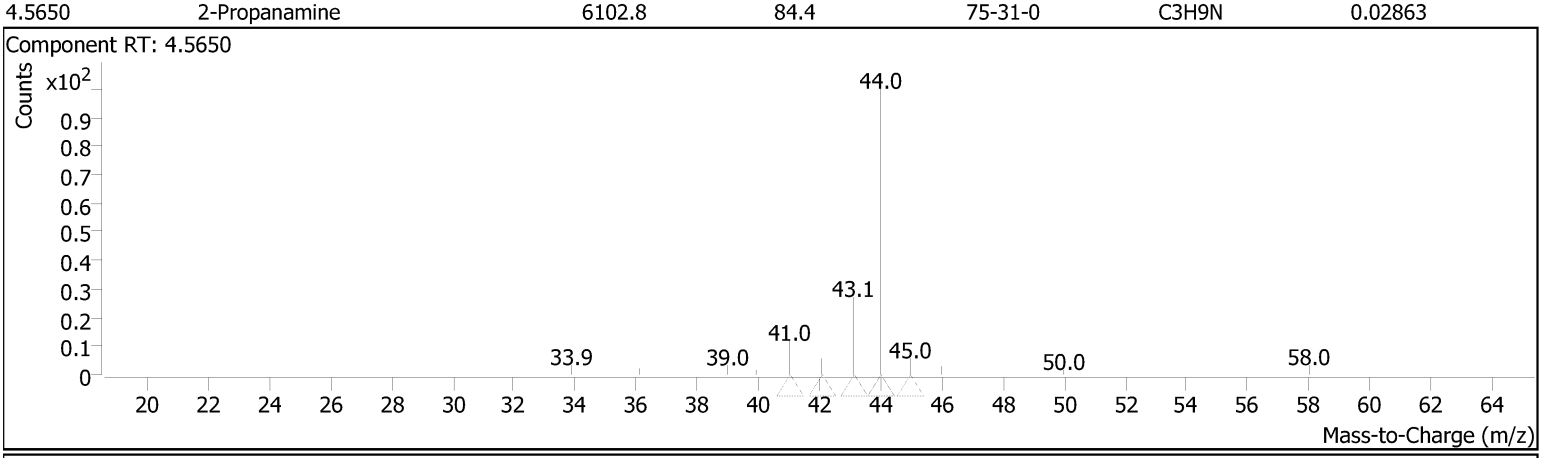


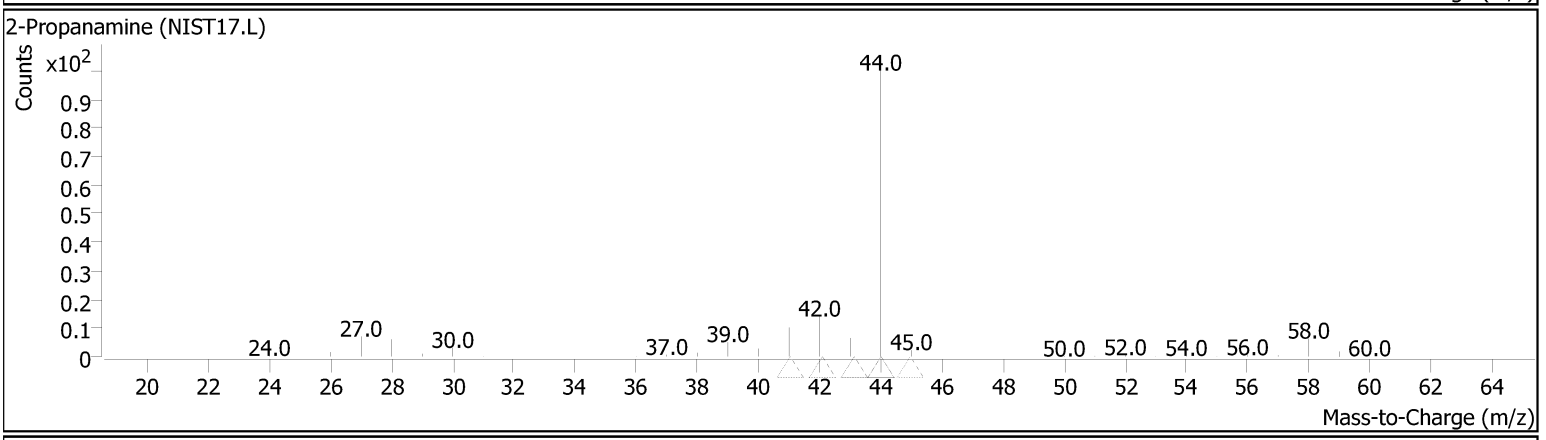


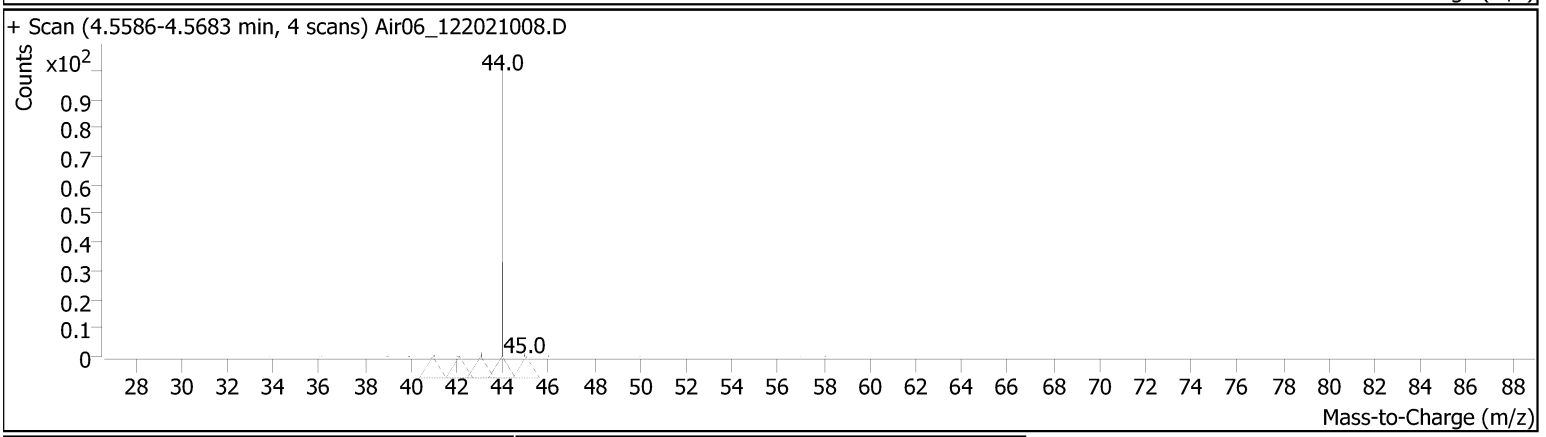


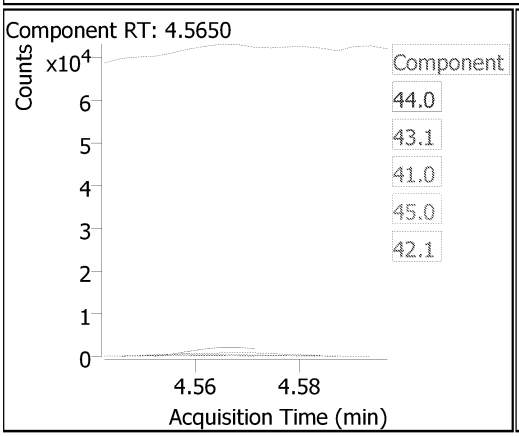


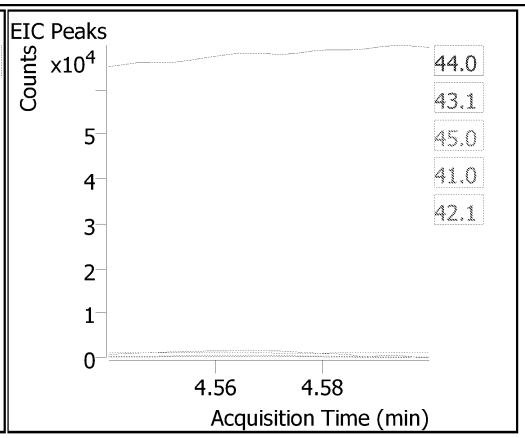
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.5650	2-Propanamine	6102.8	84.4	75-31-0	C3H9N	0.02863

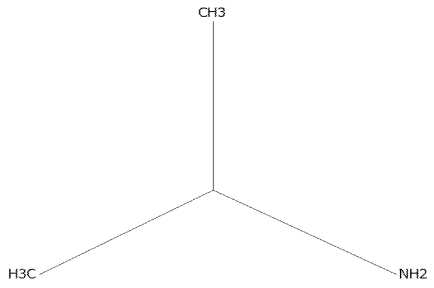




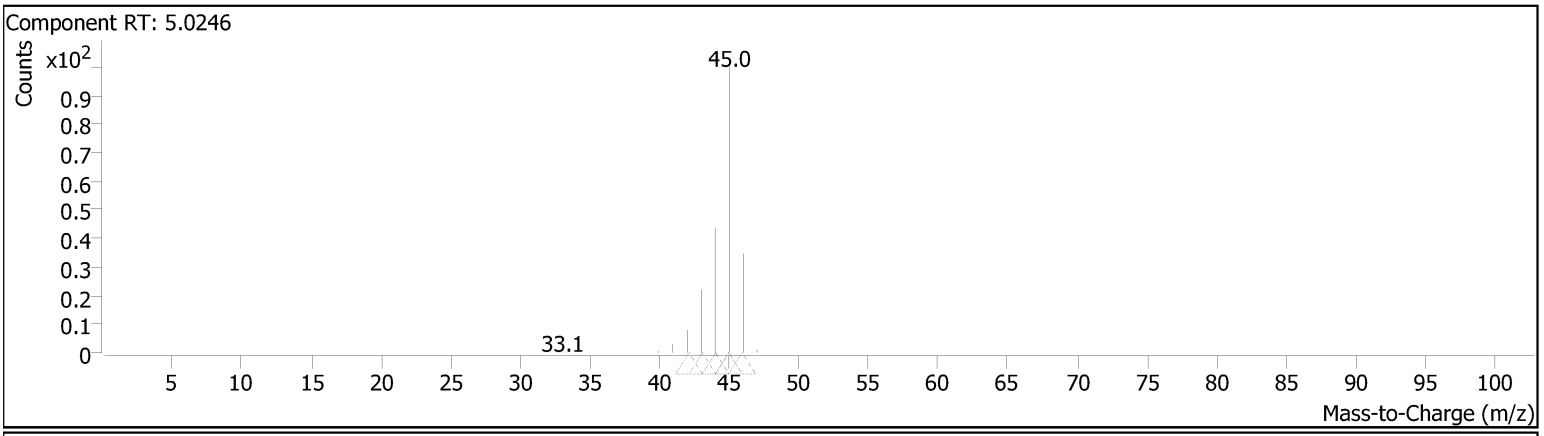


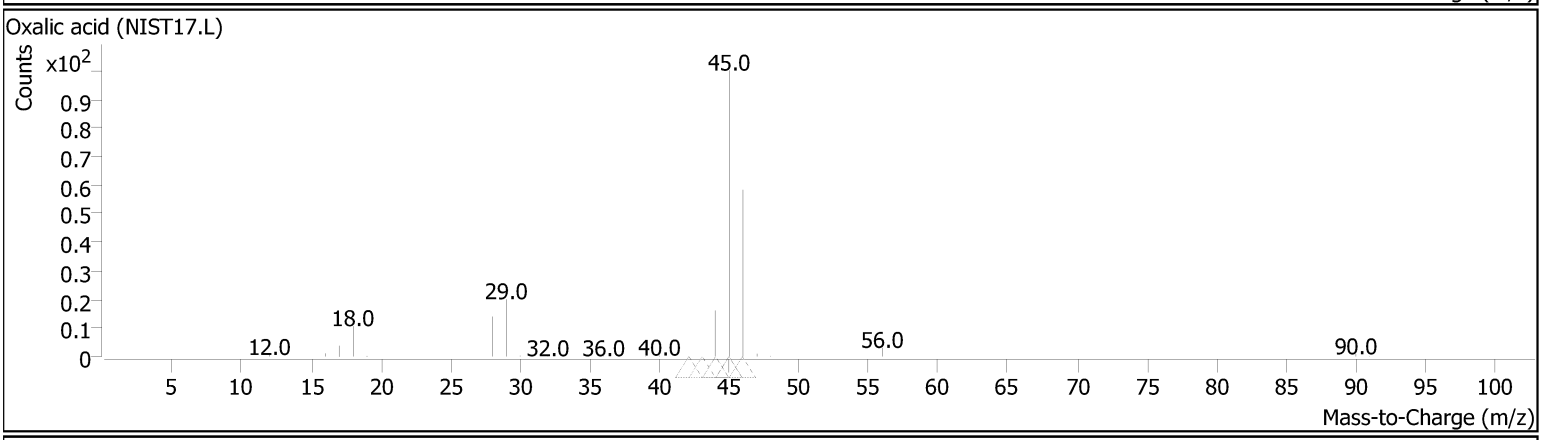


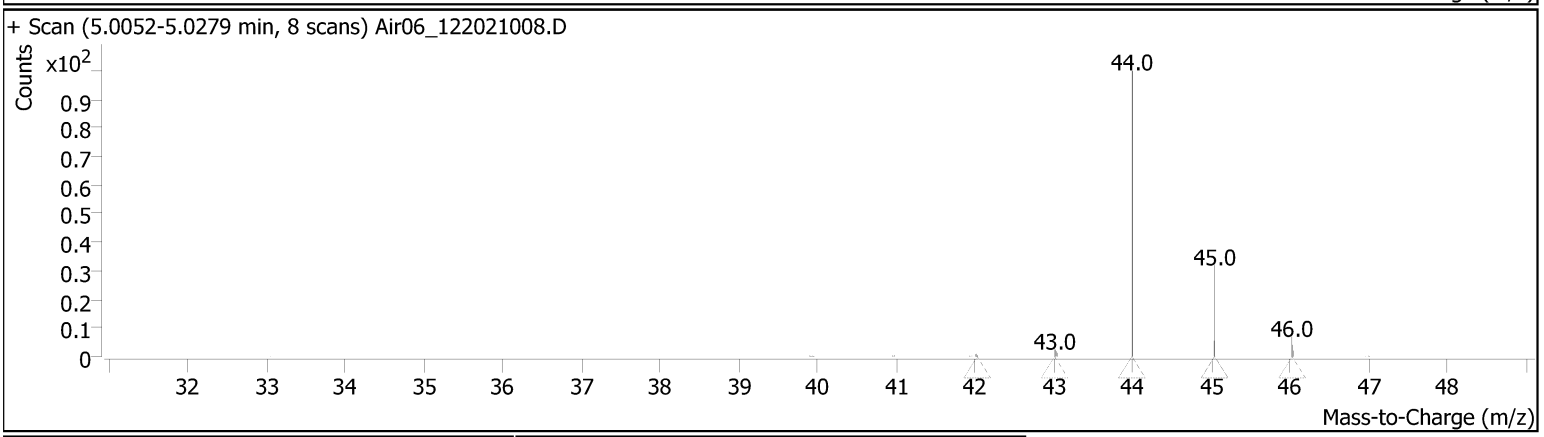


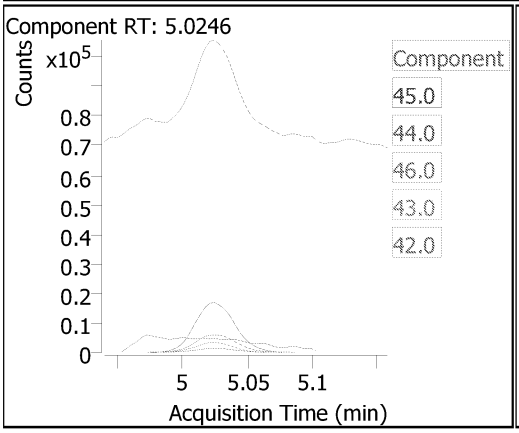


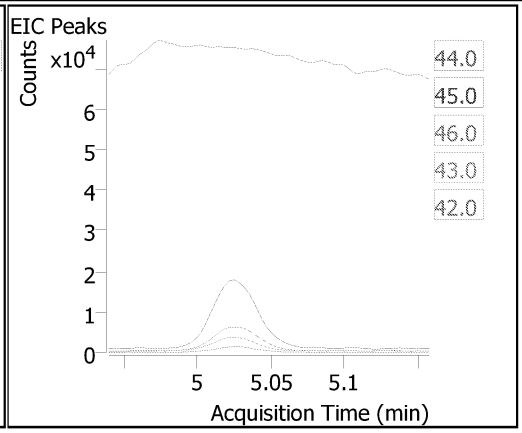
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.0246	Oxalic acid	124846.9	80.6	144-62-7	C2H2O4	0.5857

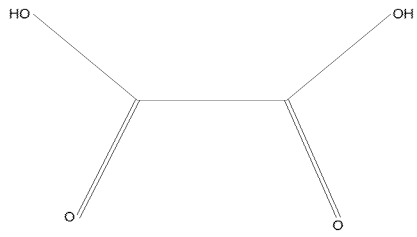




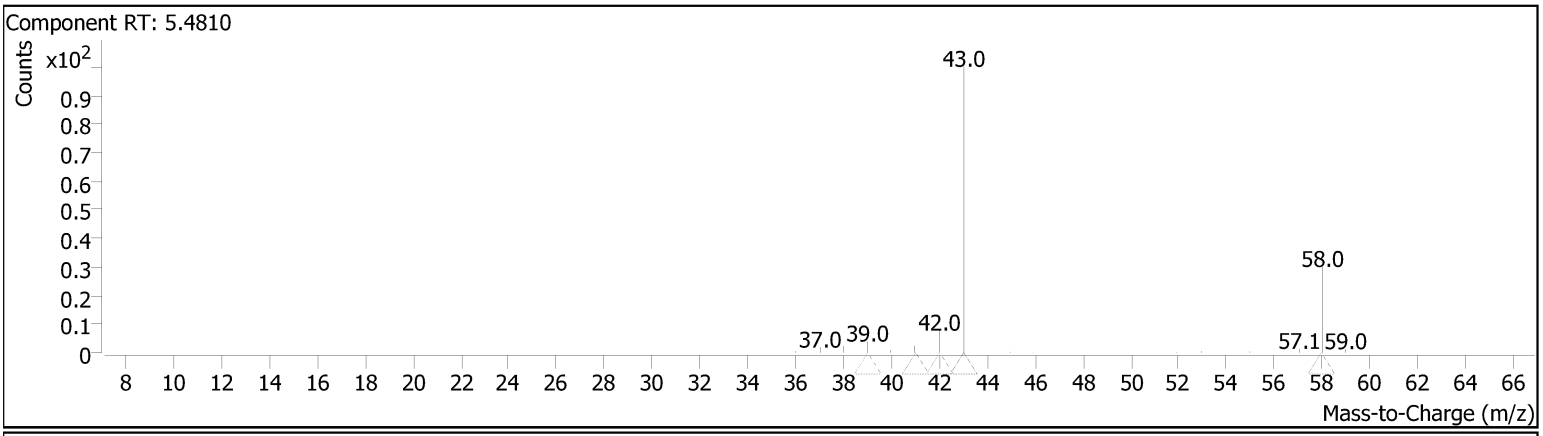


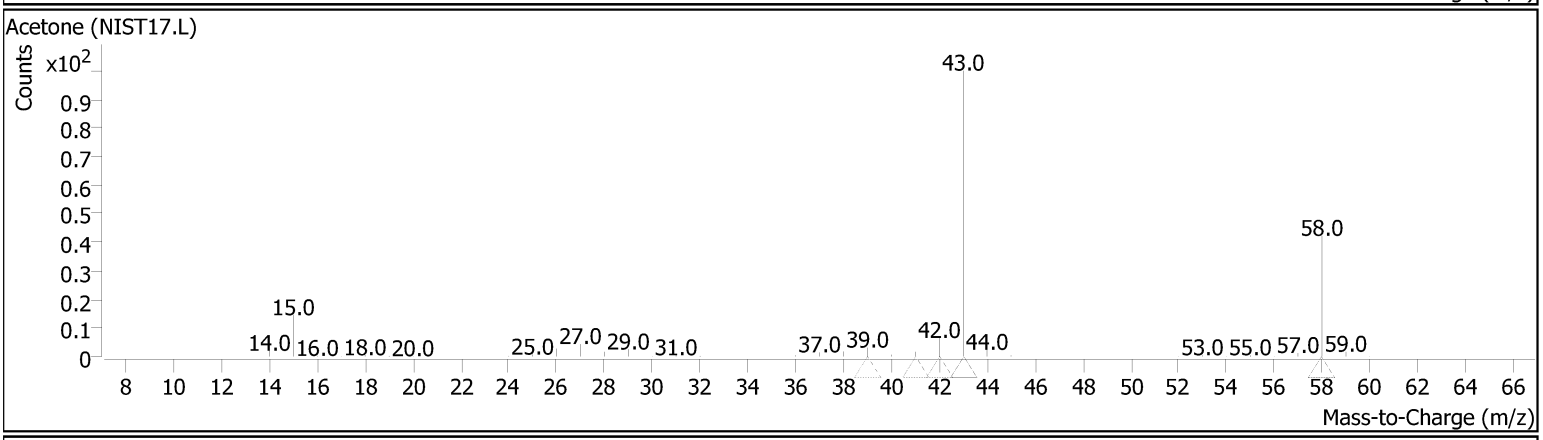


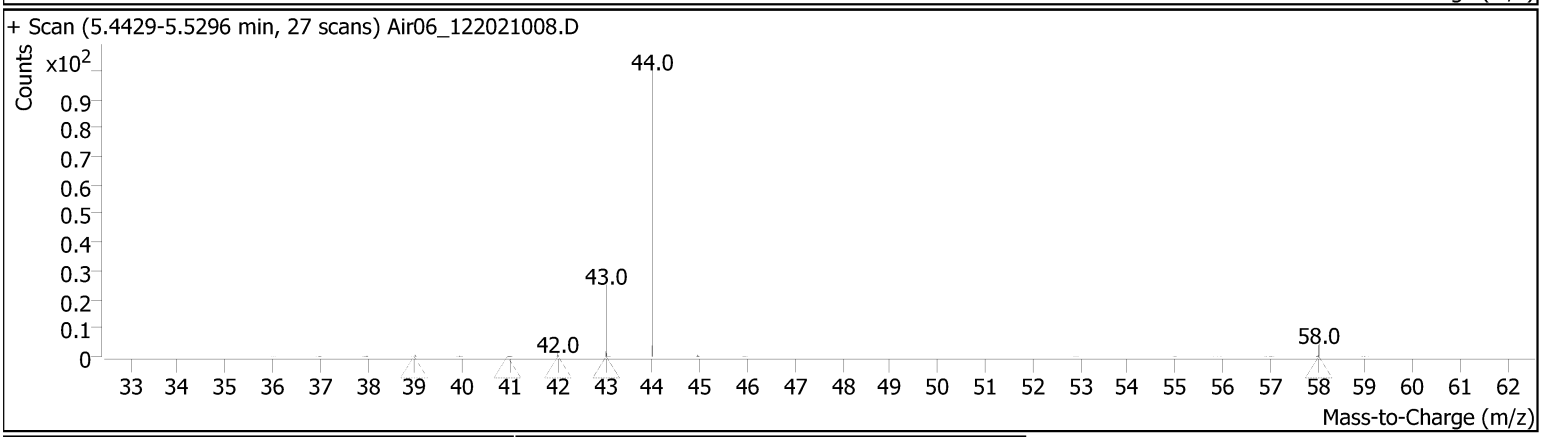


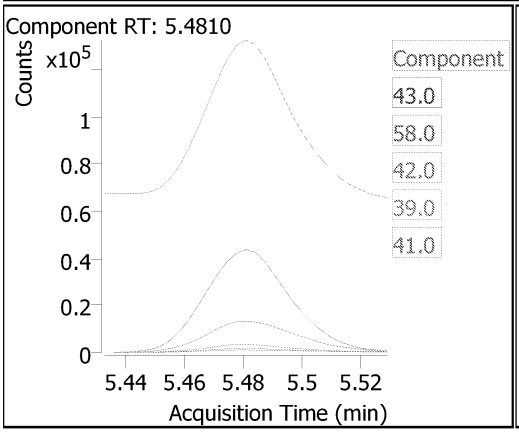


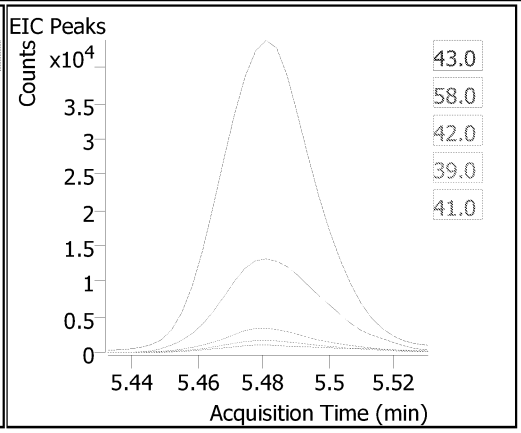
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.4810	Acetone	139076.7	97.1	67-64-1	C3H6O	0.6525

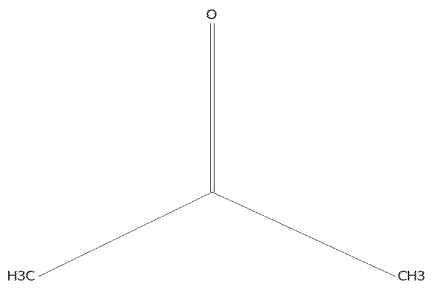




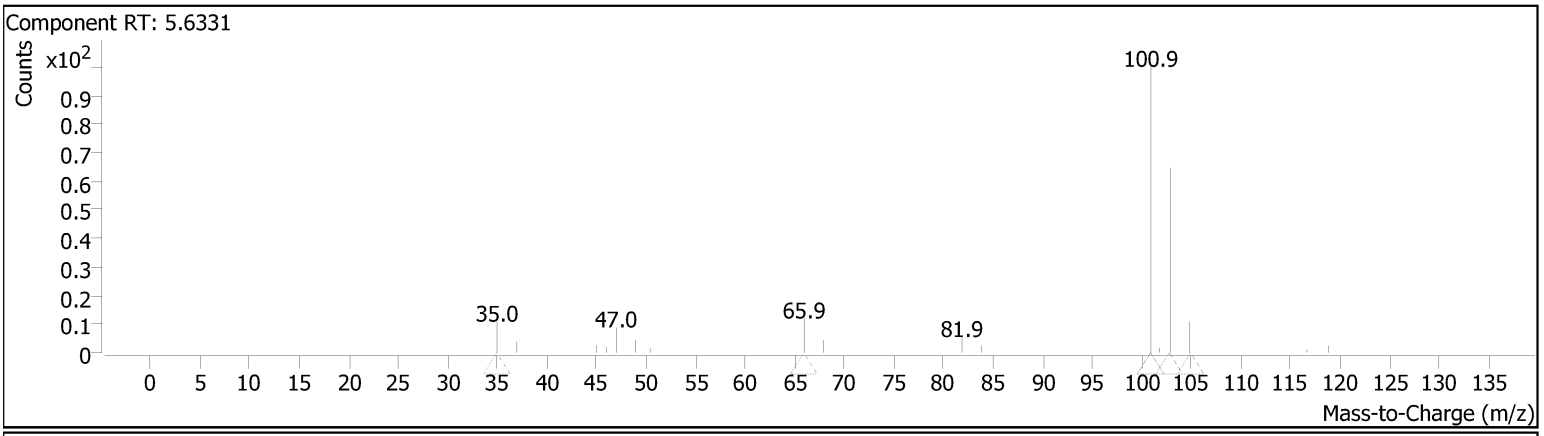


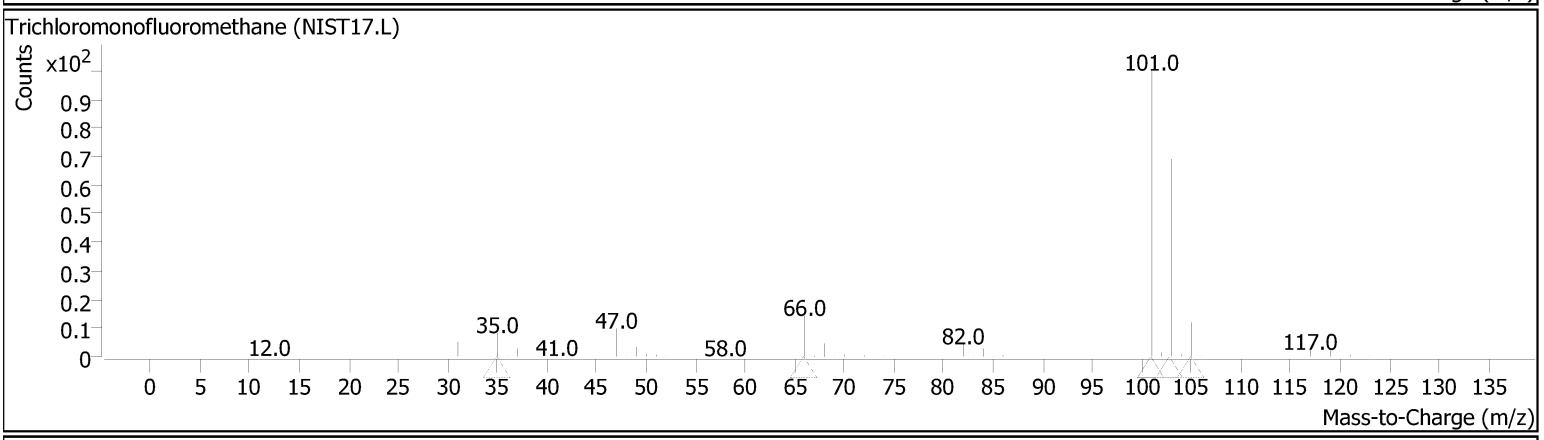


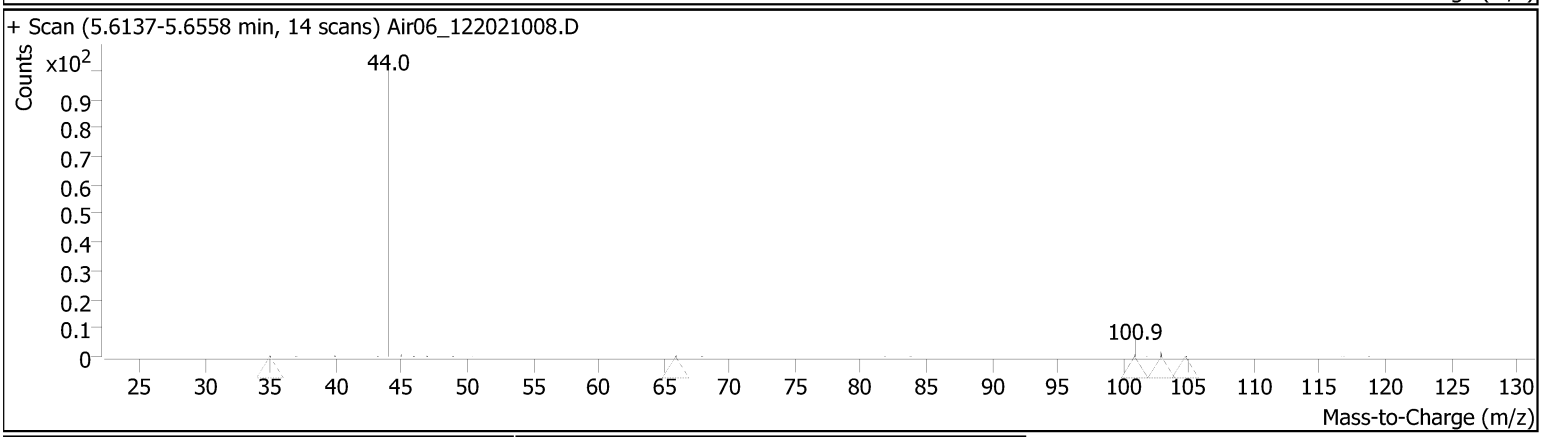


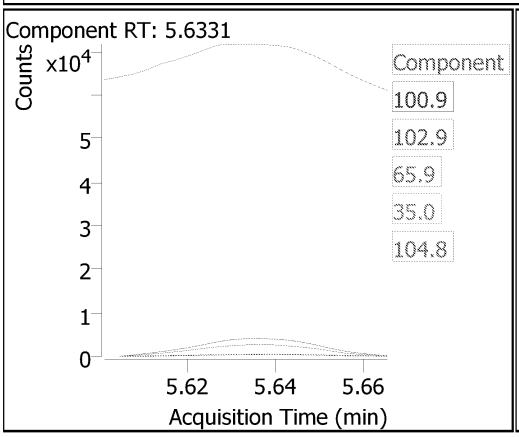


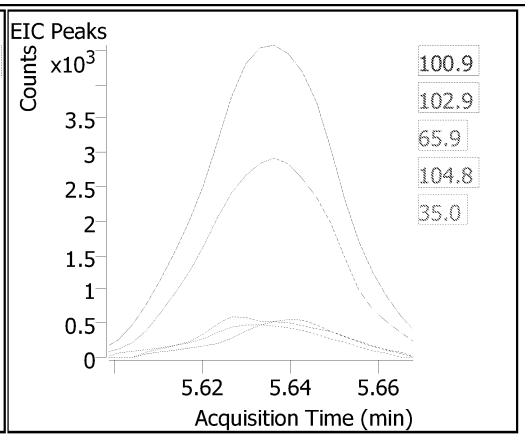
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.6331	Trichloromonofluoromethane	23281.5	96.5	75-69-4	CCl3F	0.1092

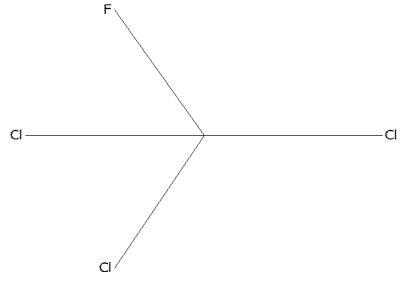




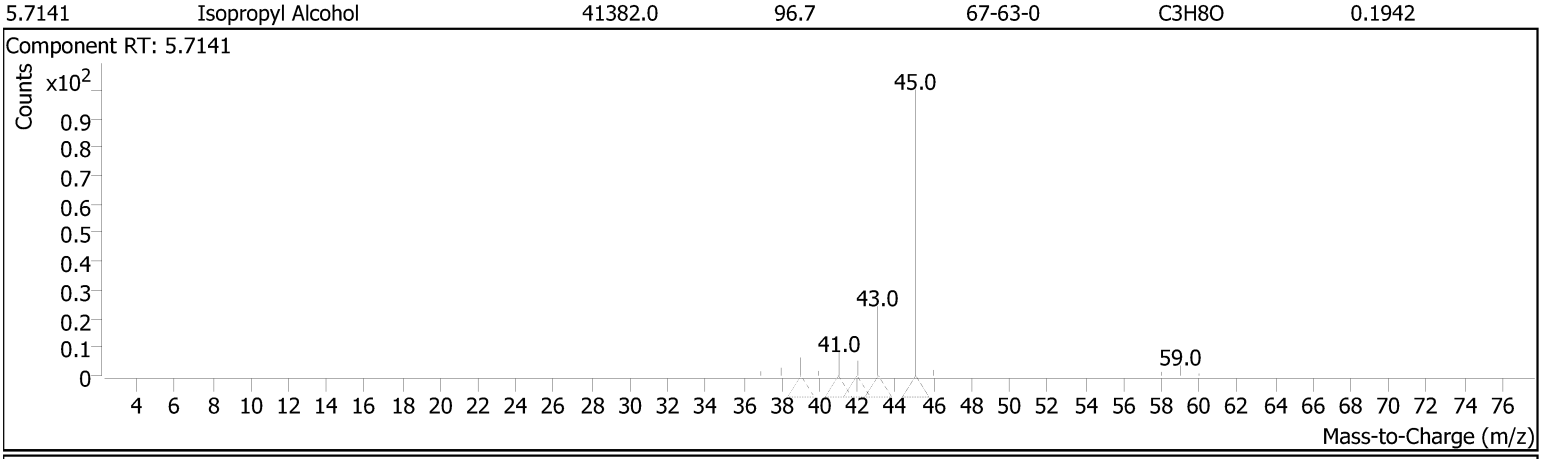


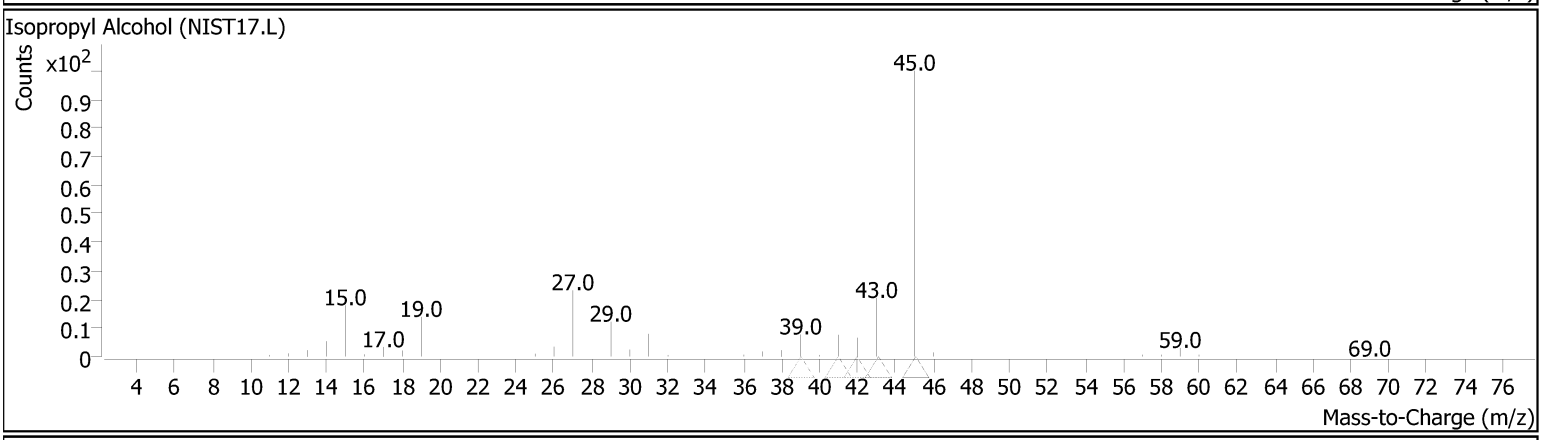


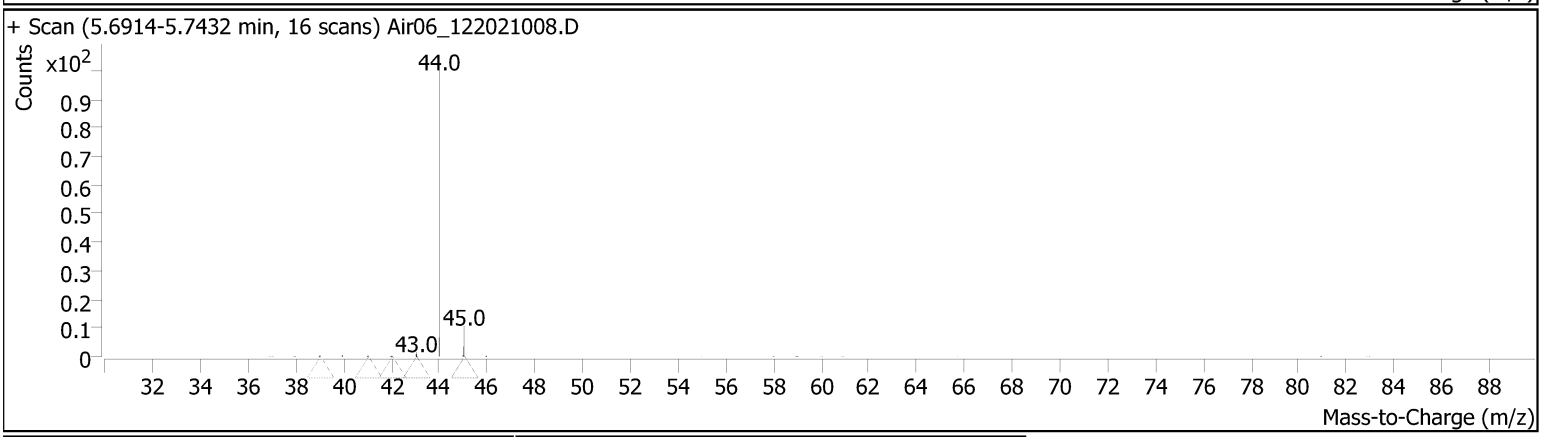


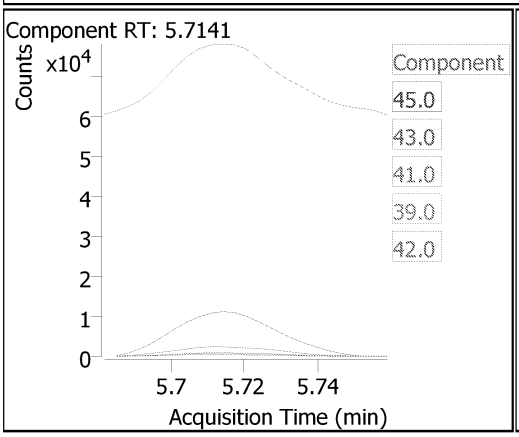


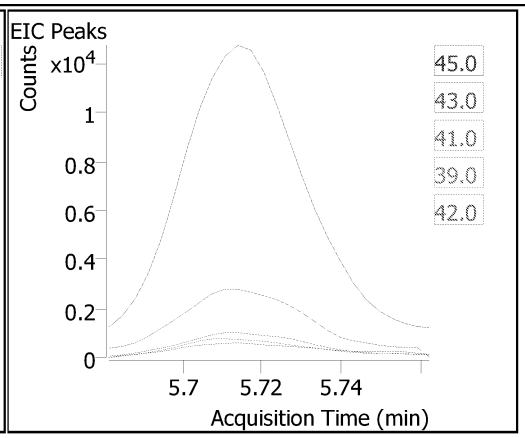
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.7141	Isopropyl Alcohol	41382.0	96.7	67-63-0	C3H8O	0.1942

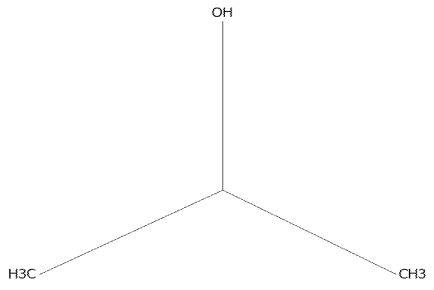




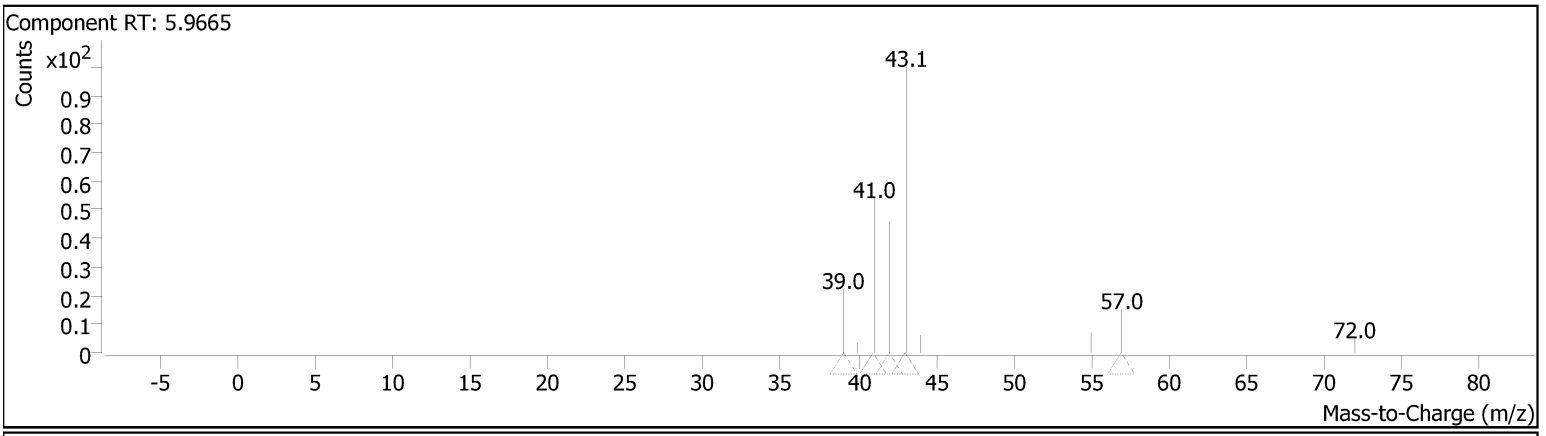


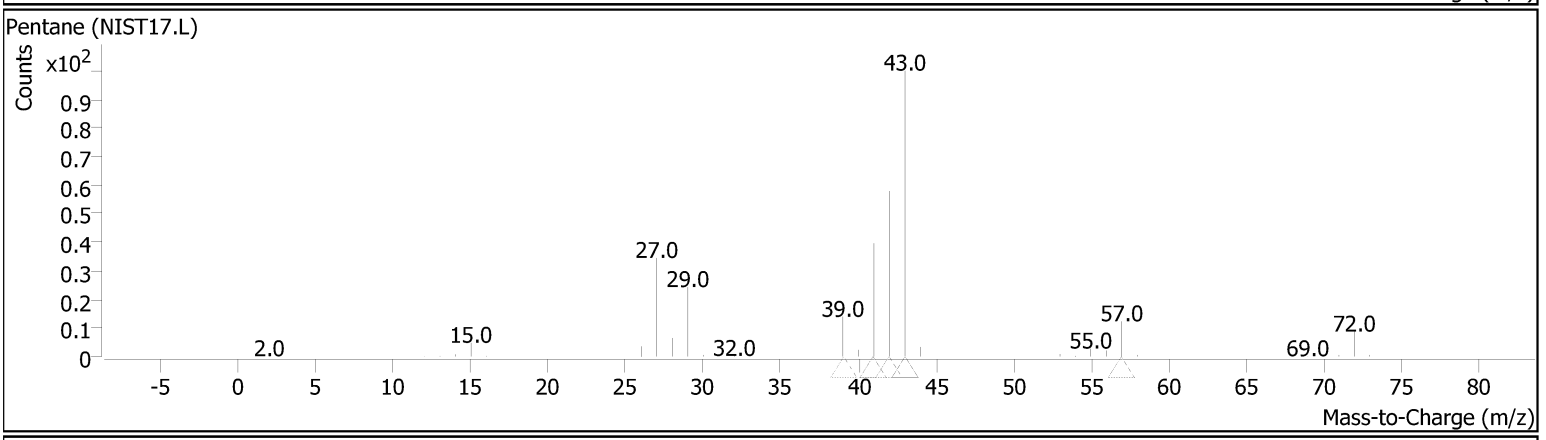


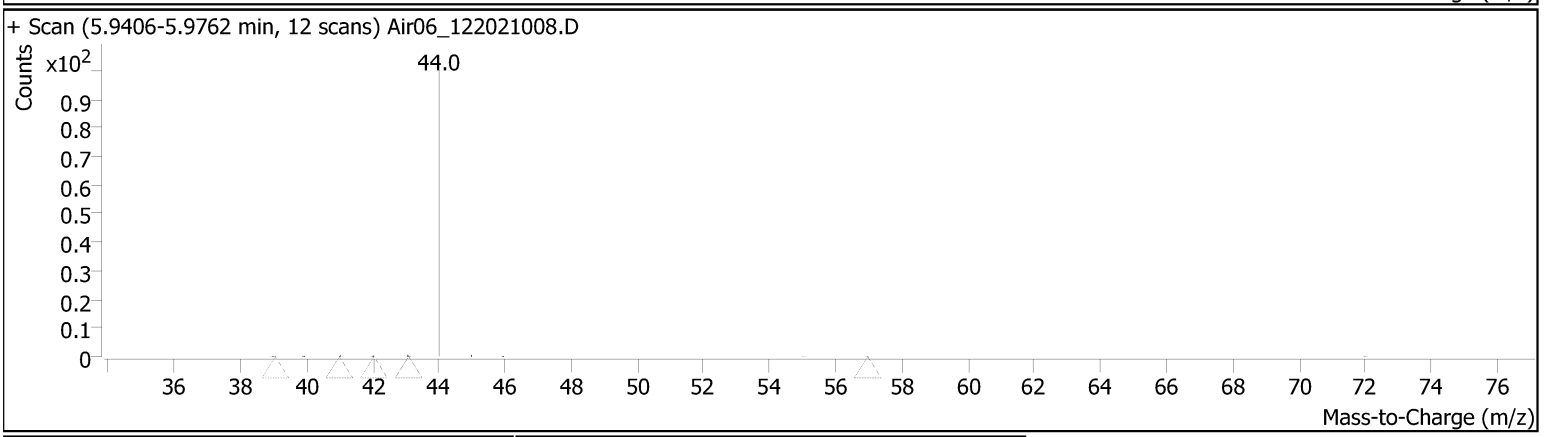


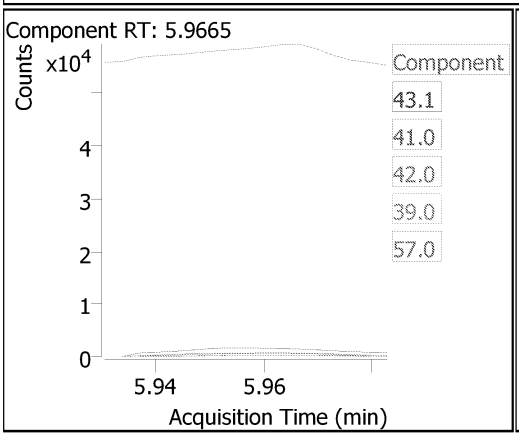


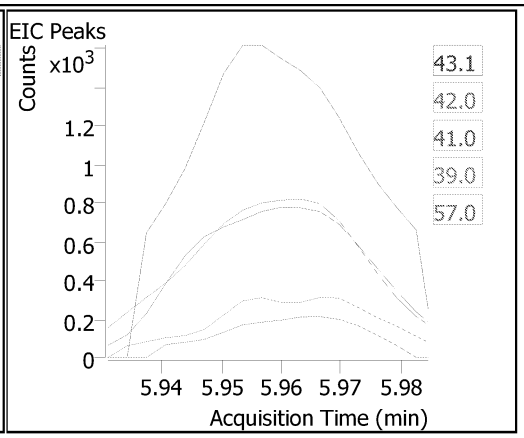
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.9665	Pentane	7386.2	95.3	109-66-0	C5H12	0.03465

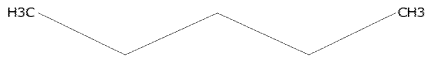




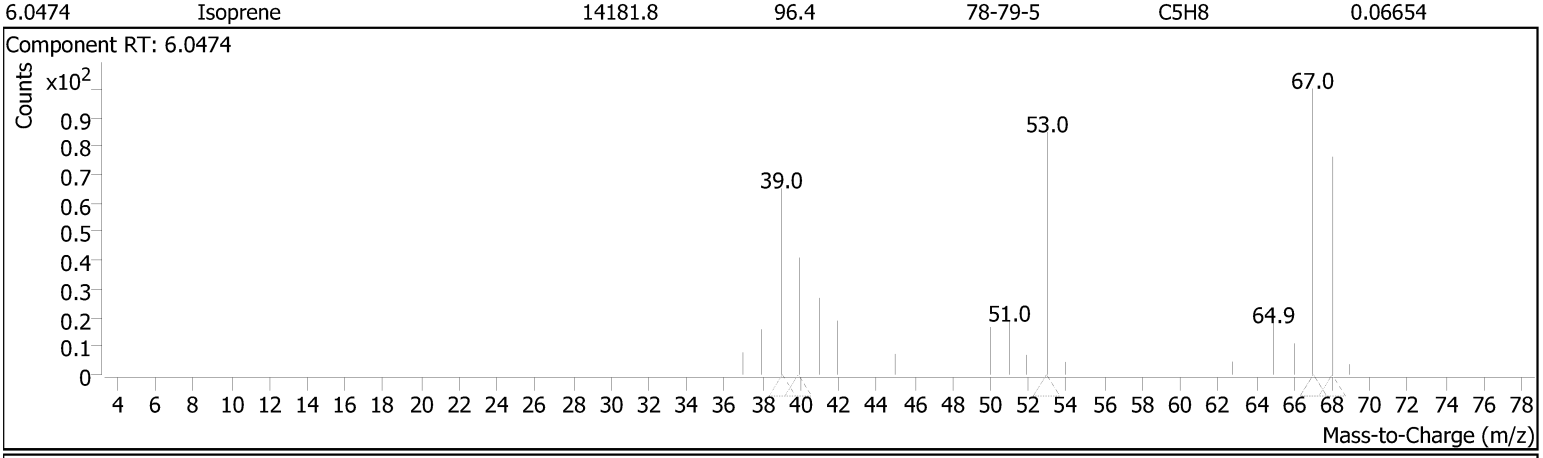


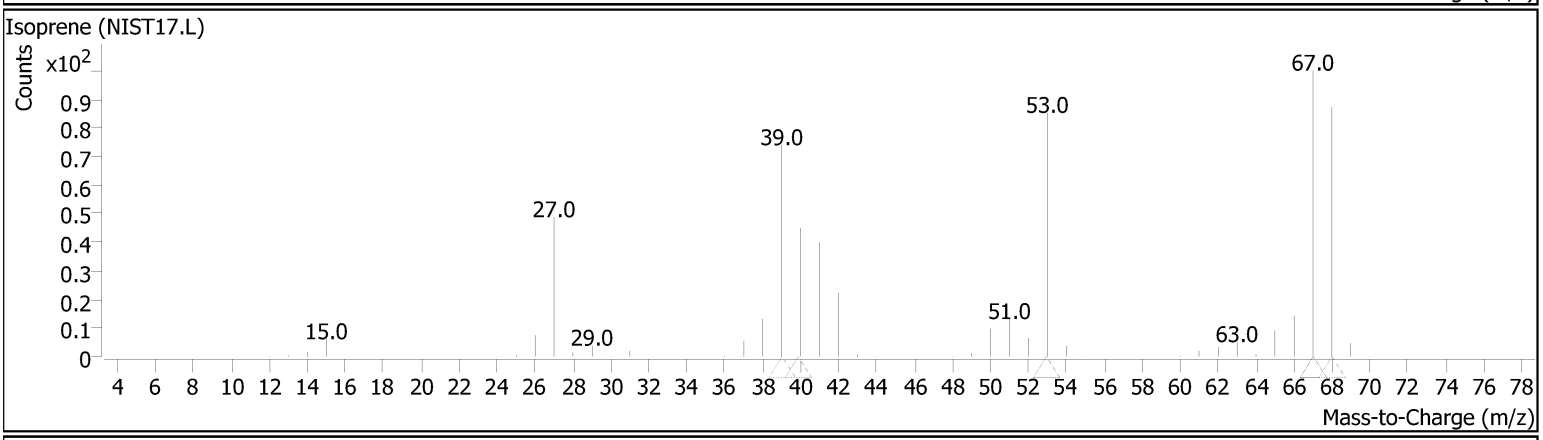


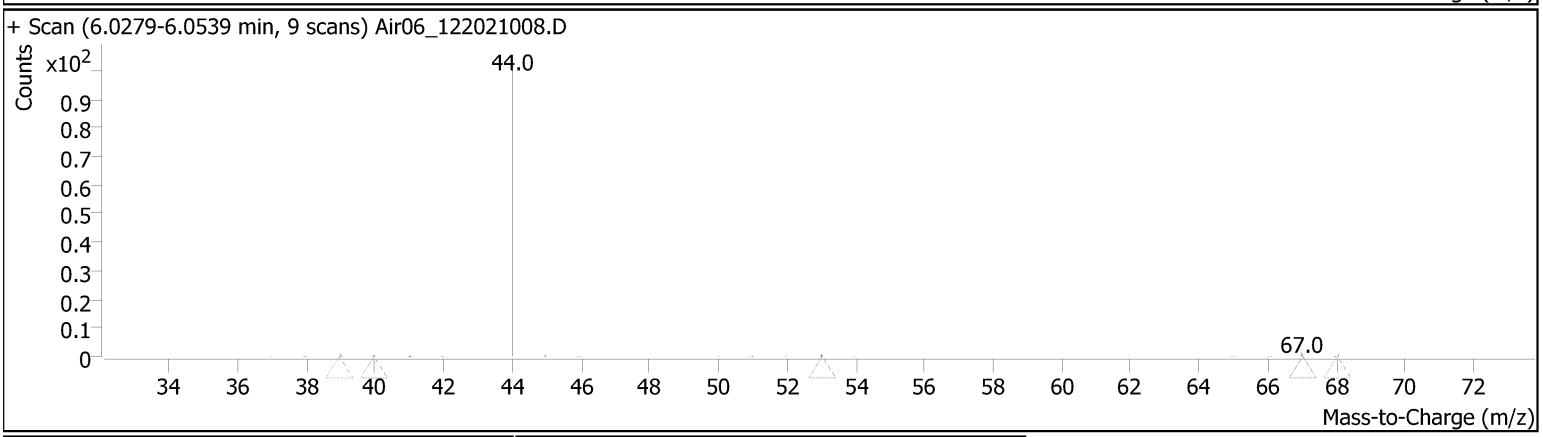


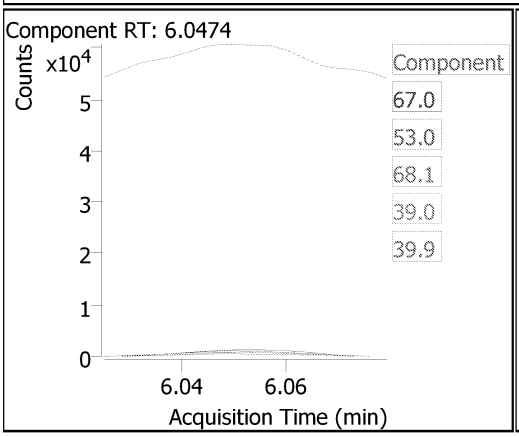


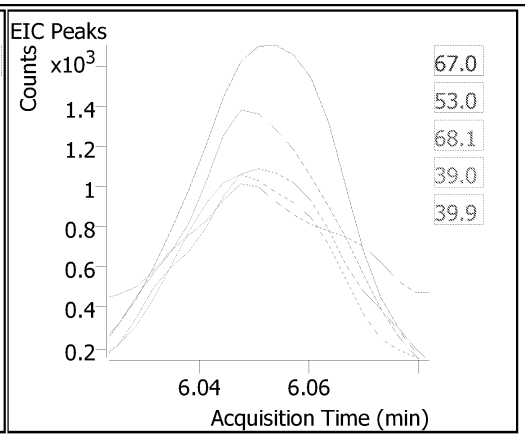
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.0474	Isoprene	14181.8	96.4	78-79-5	C5H8	0.06654

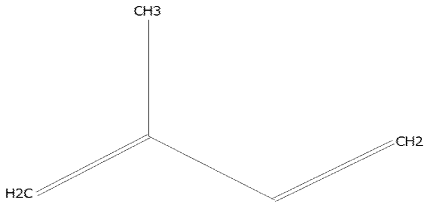




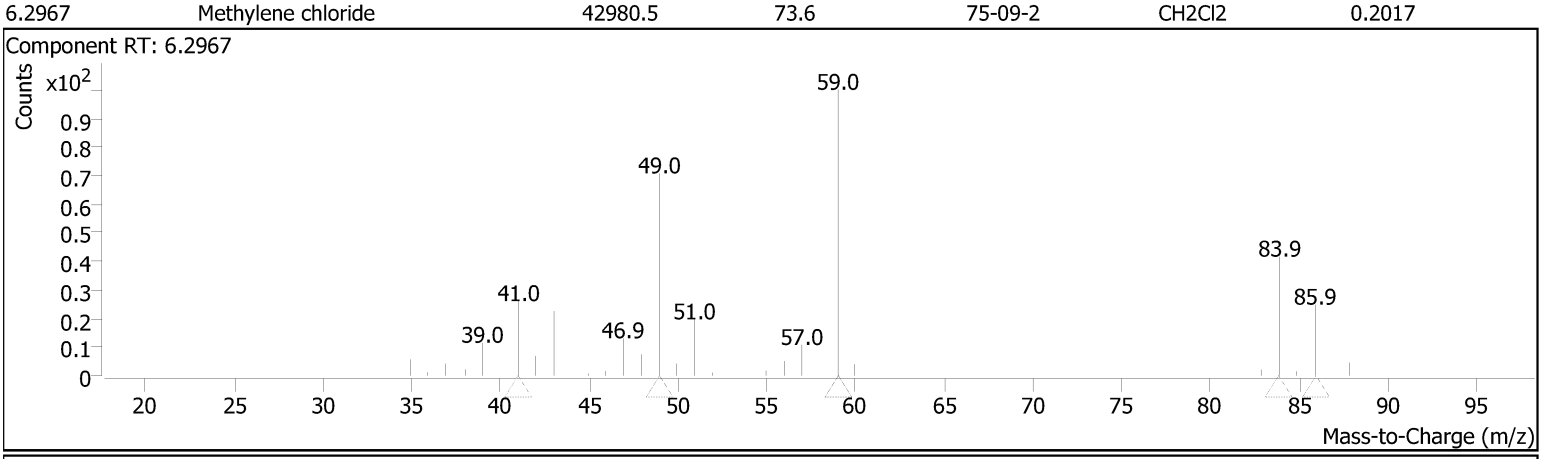


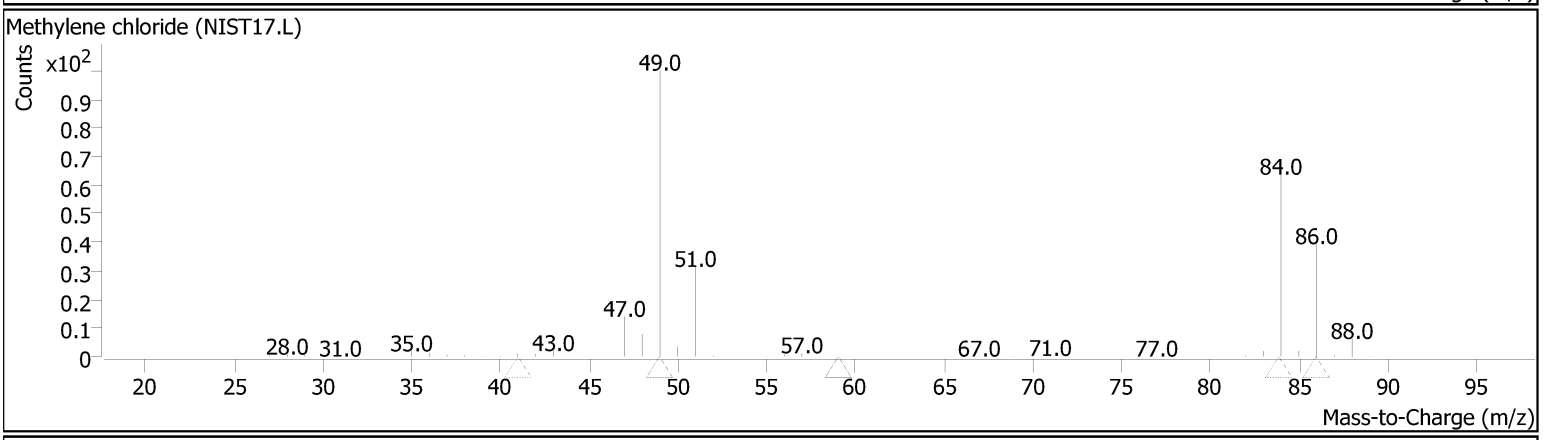


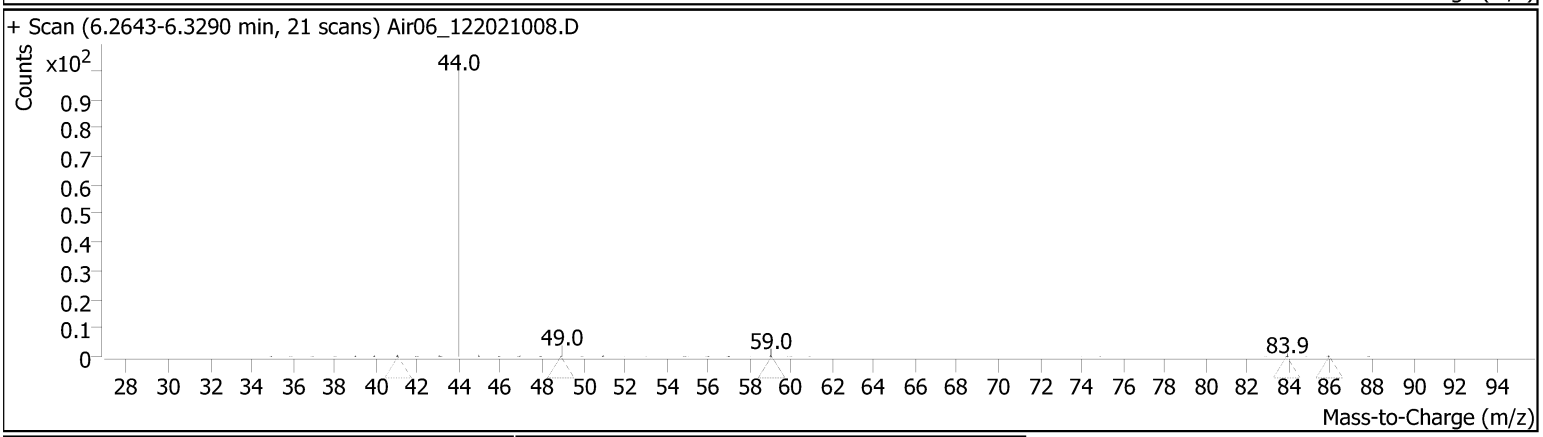


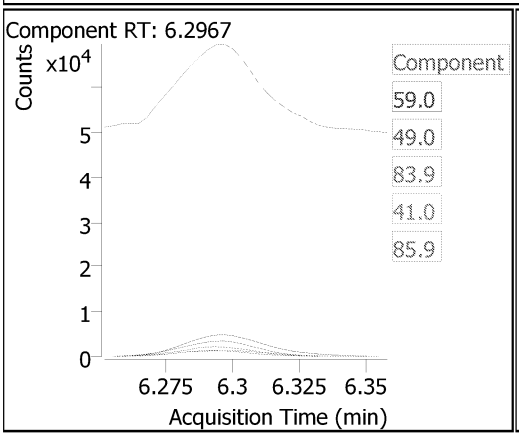


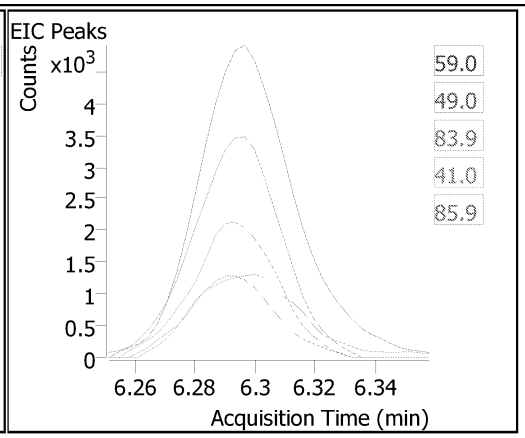
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.2967	Methylene chloride	42980.5	73.6	75-09-2	CH2Cl2	0.2017

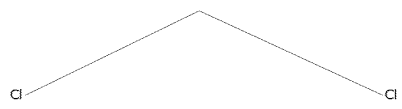




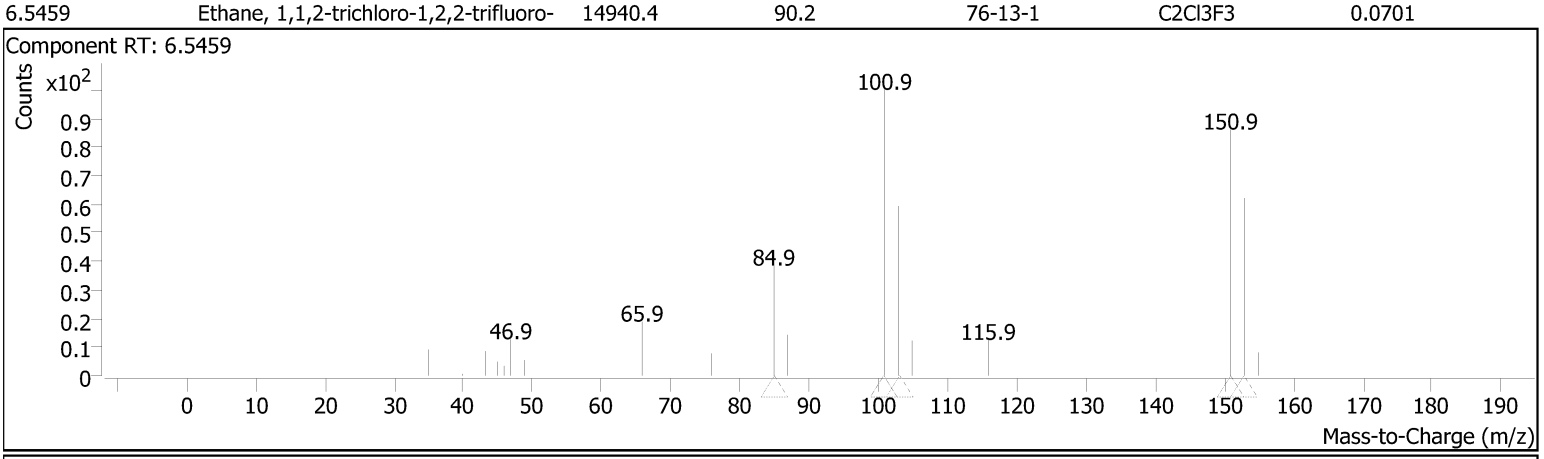


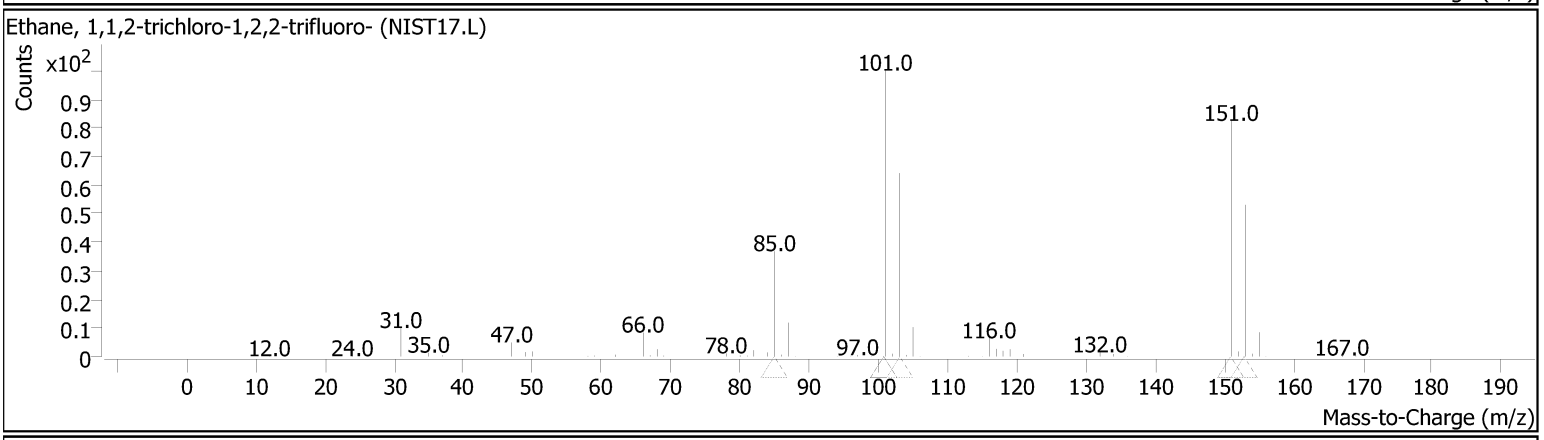


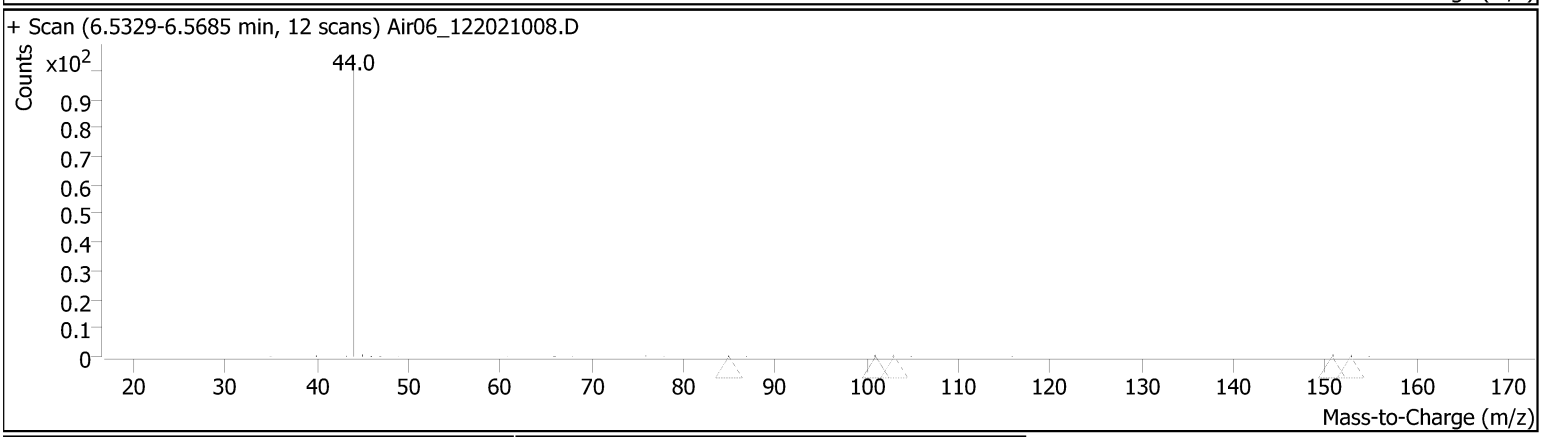


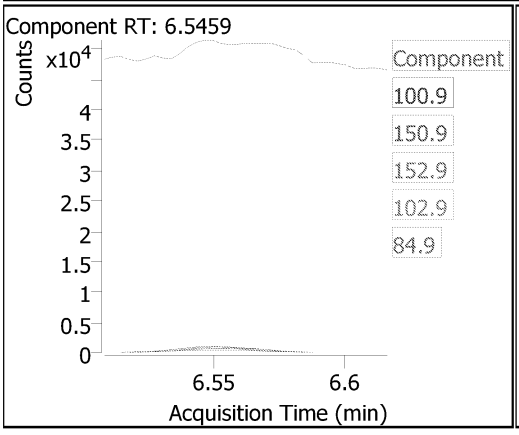


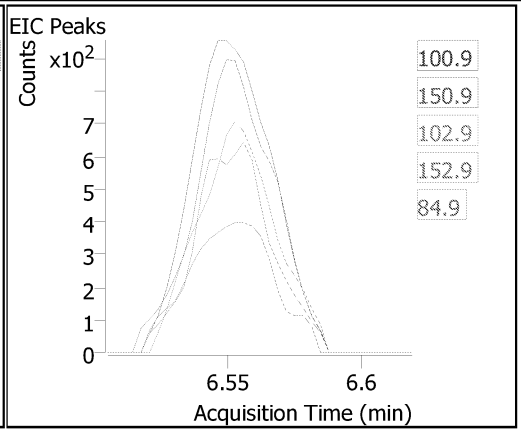
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.5459	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	14940.4	90.2	76-13-1	C2Cl3F3	0.0701

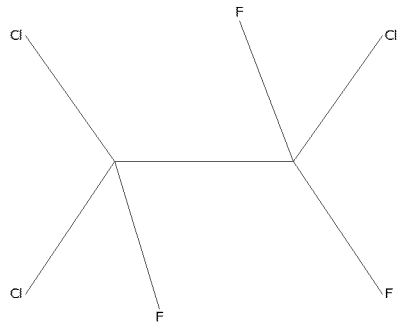




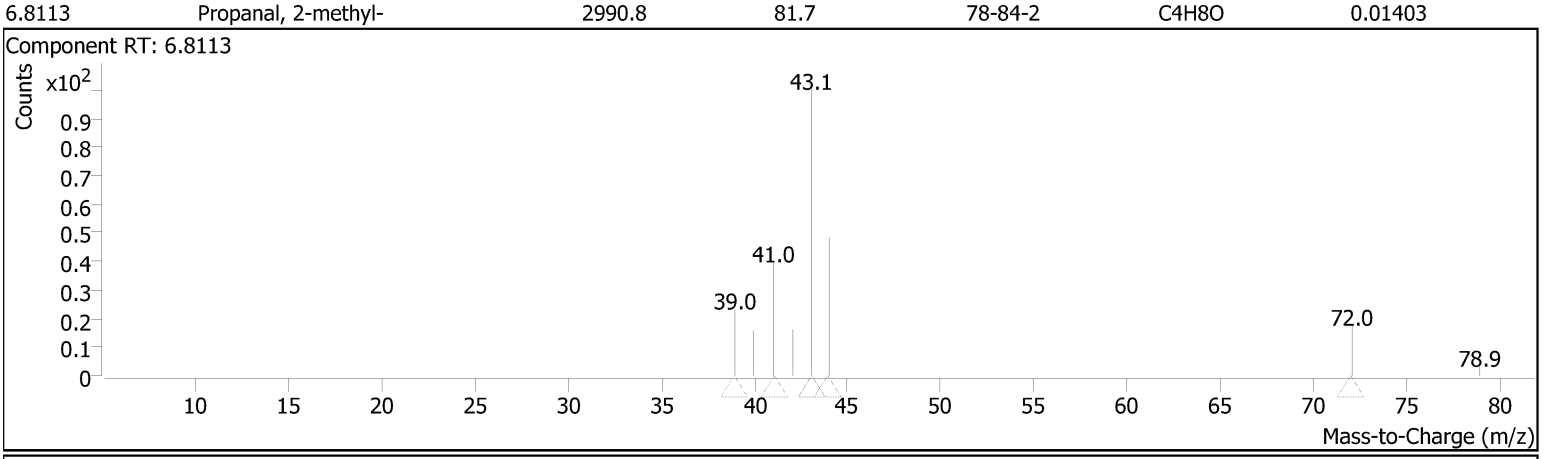


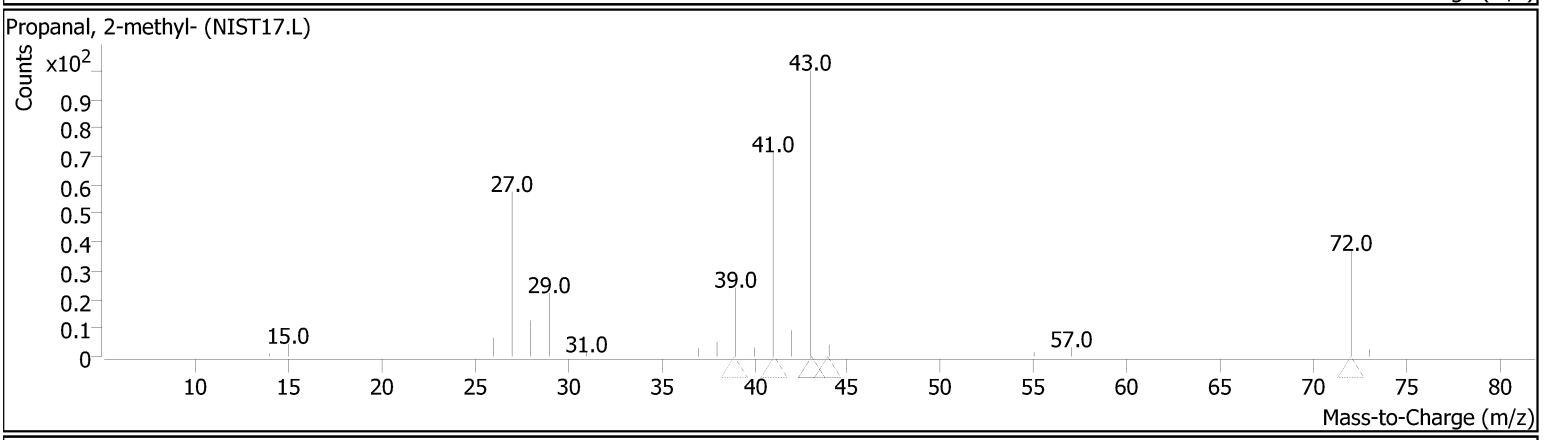


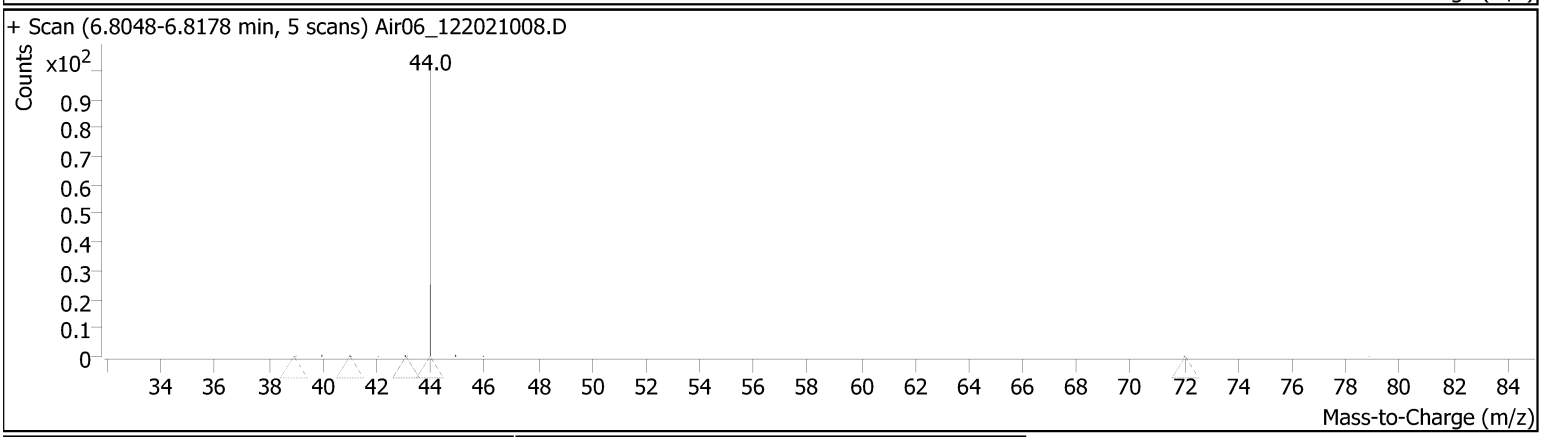


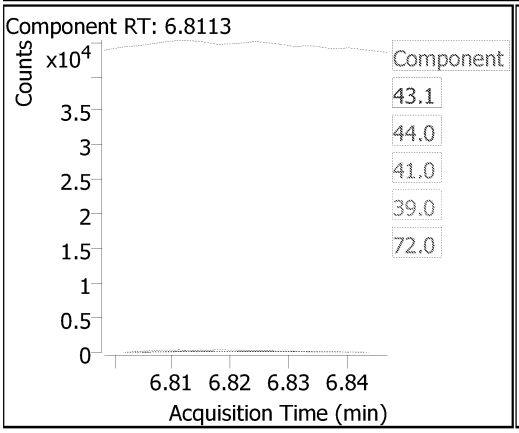


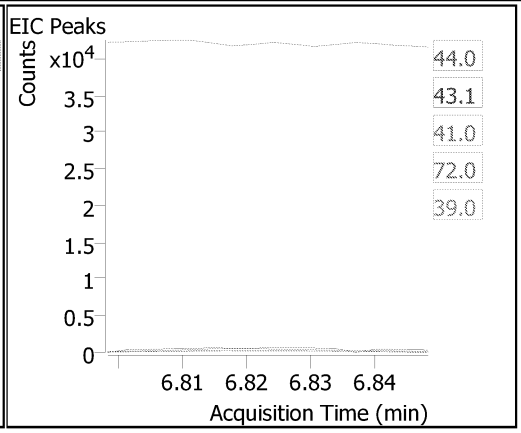
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.8113	Propanal, 2-methyl-	2990.8	81.7	78-84-2	C4H8O	0.01403

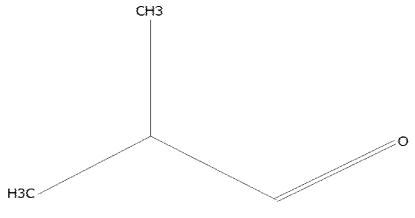




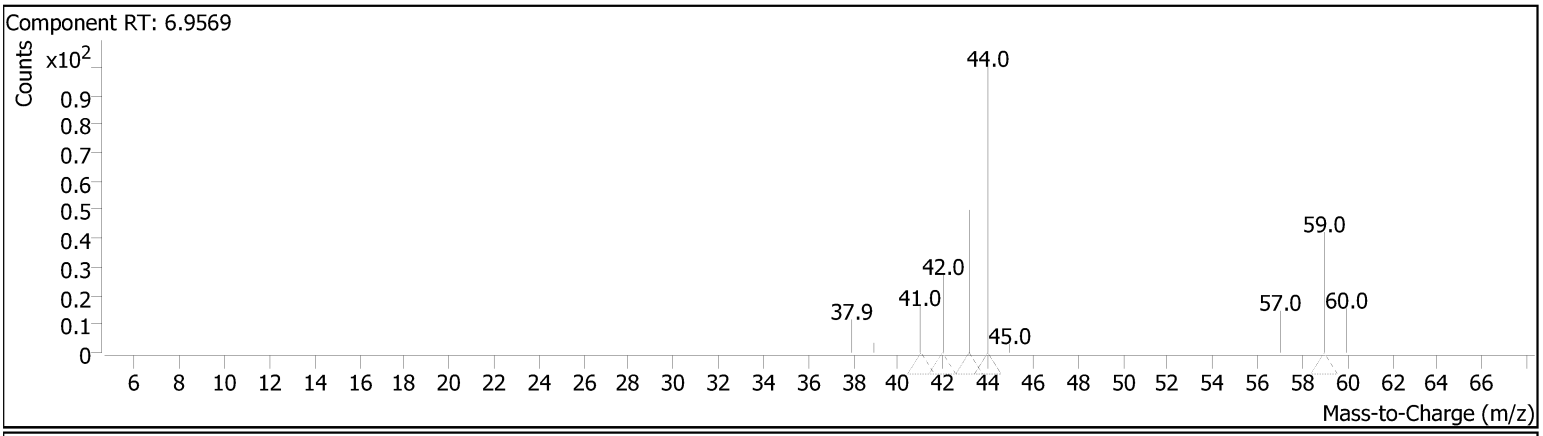


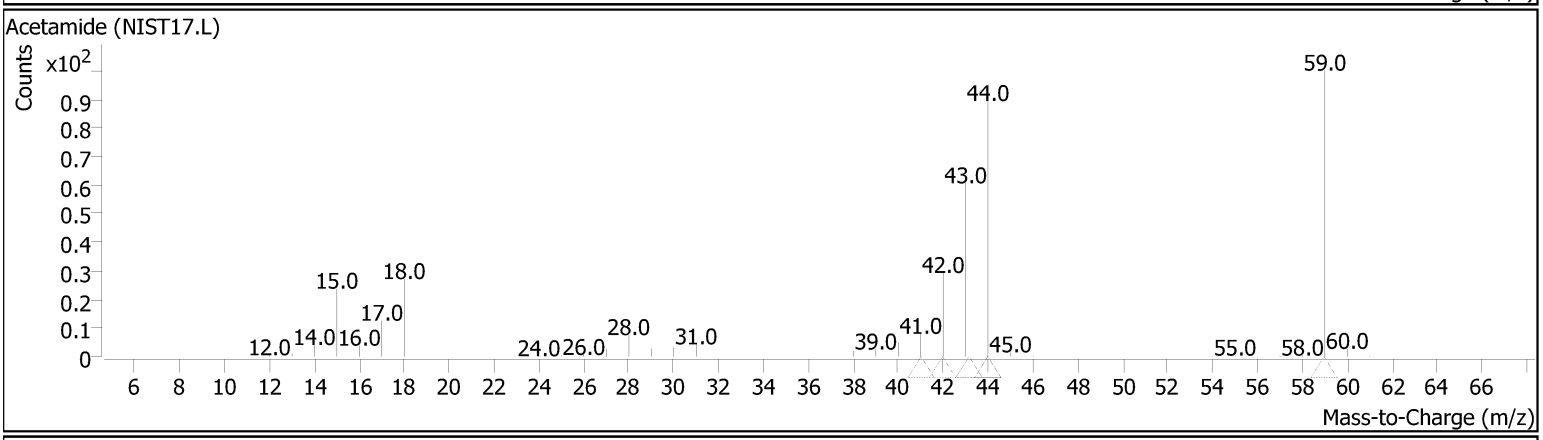


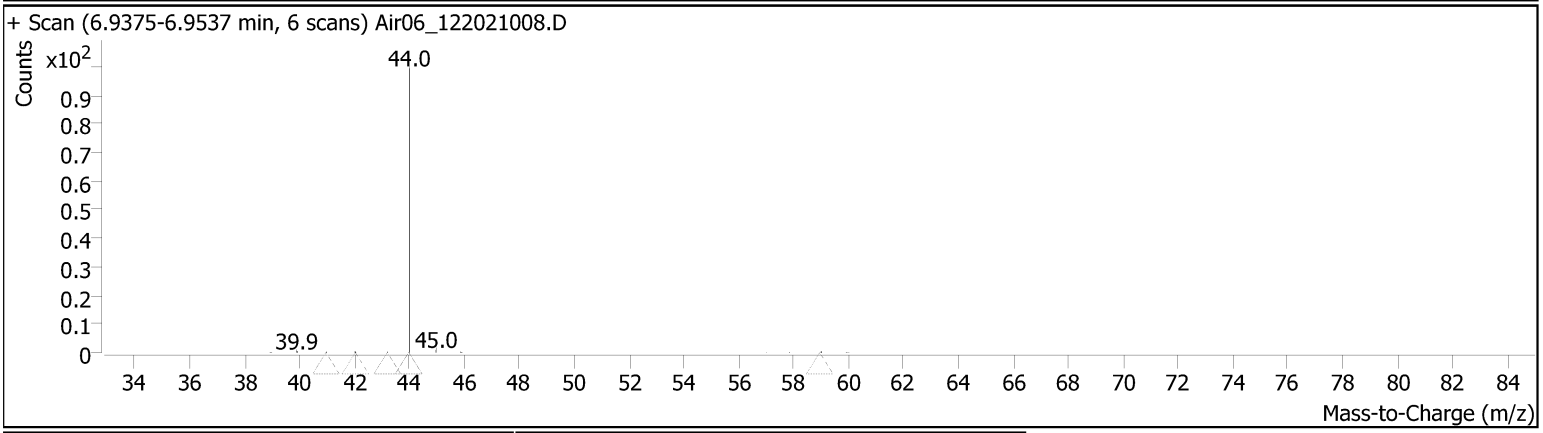


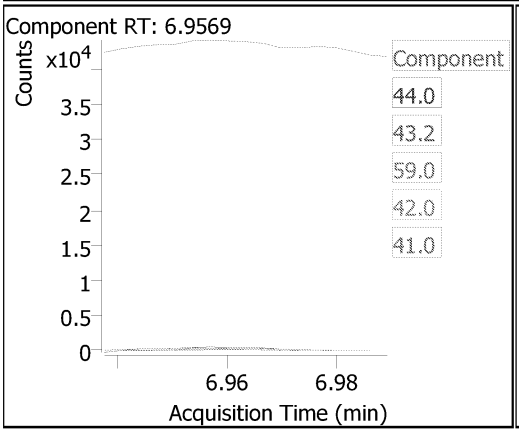


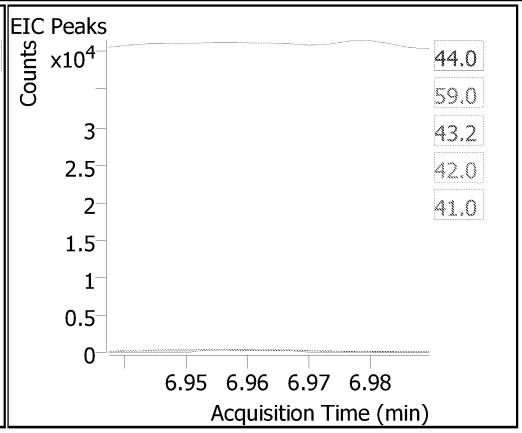
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.9569	Acetamide	4385.5	87.8	60-35-5	C2H5NO	0.02058

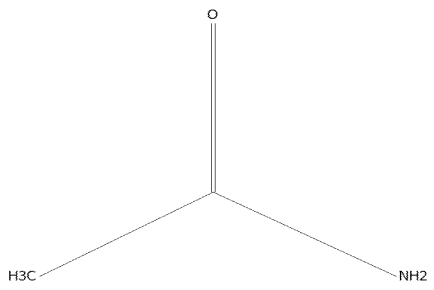




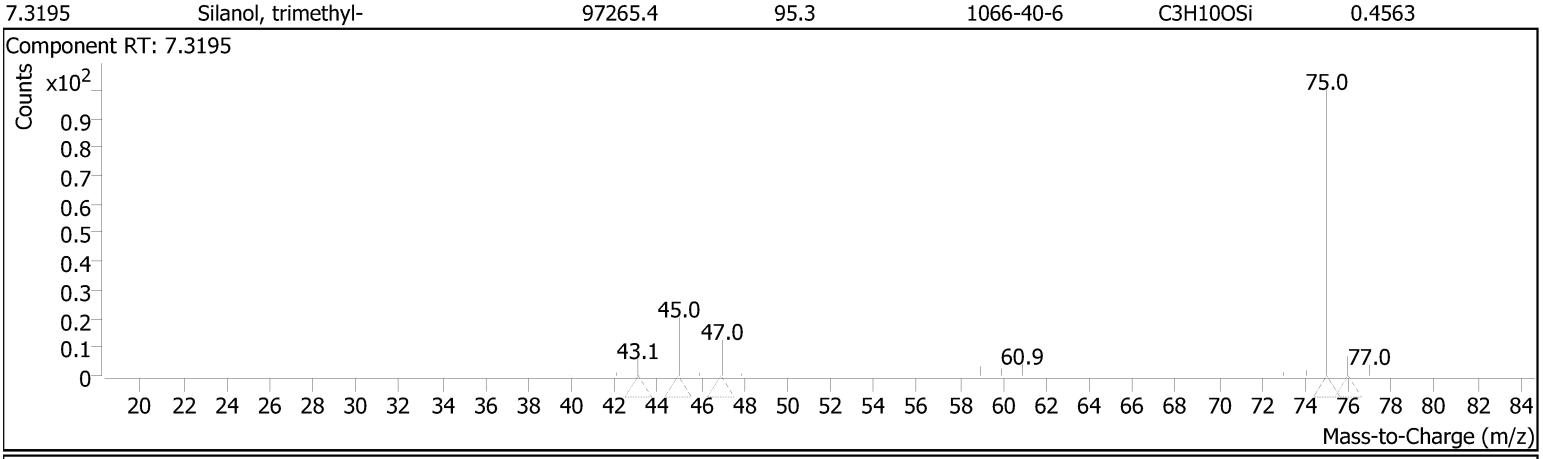


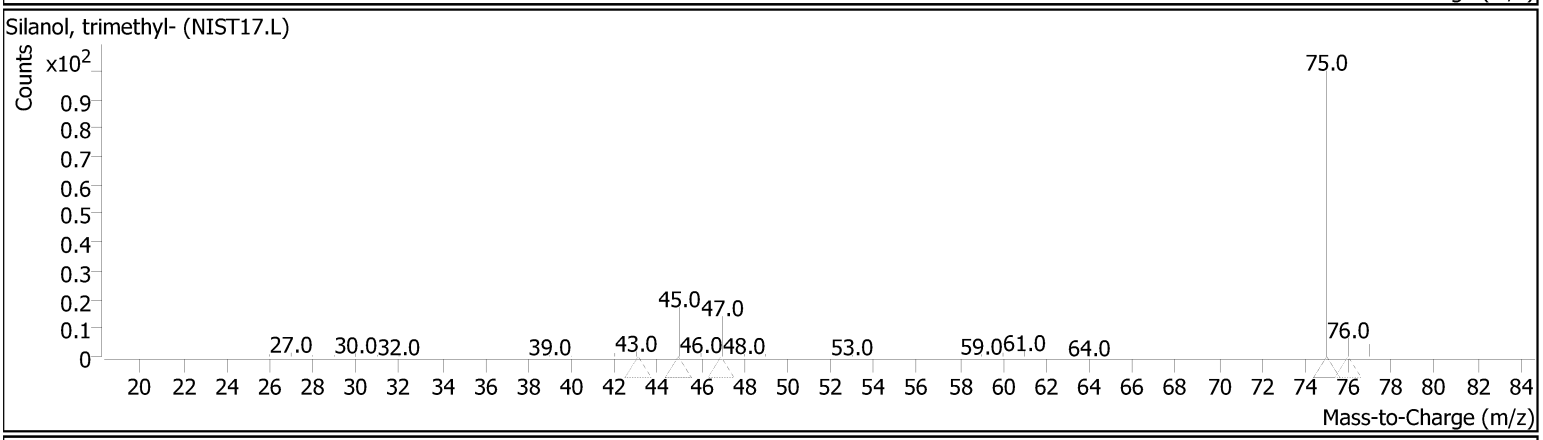


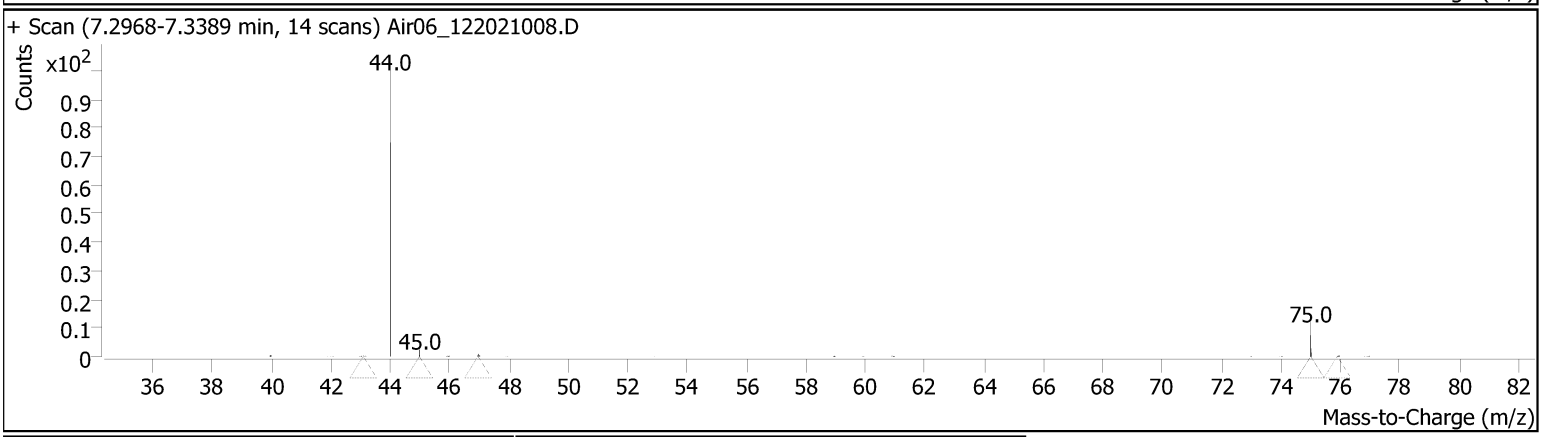


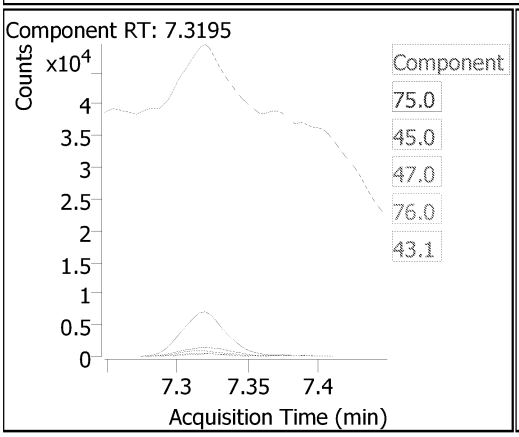


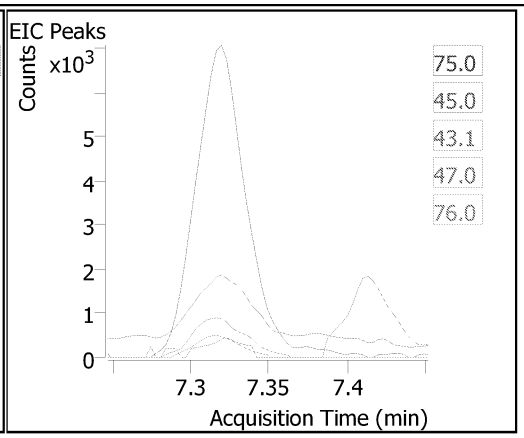
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.3195	Silanol, trimethyl-	97265.4	95.3	1066-40-6	C3H10OSi	0.4563

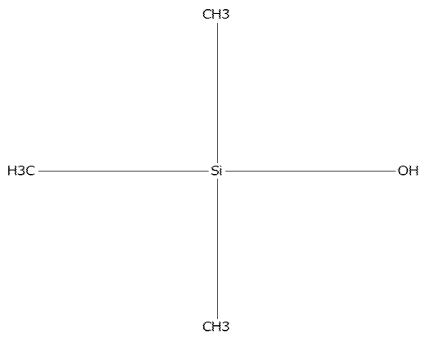




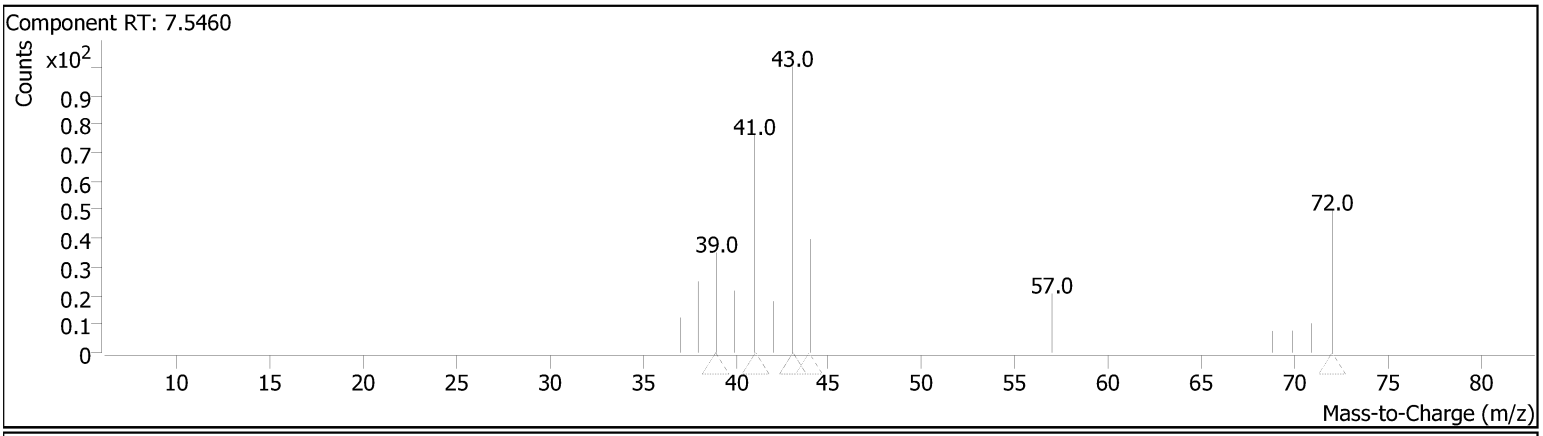


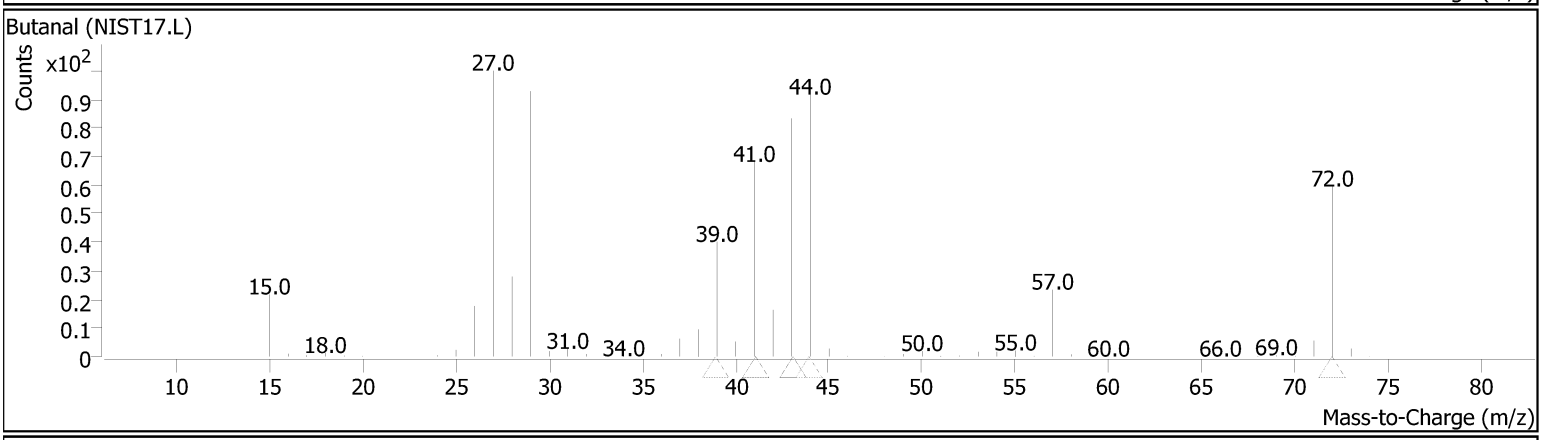


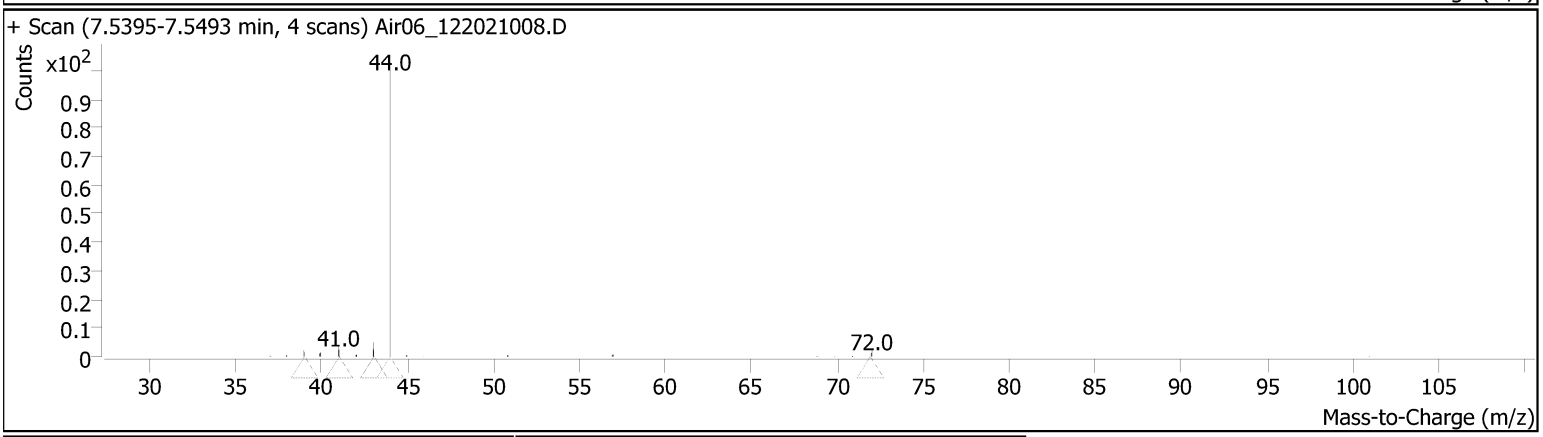


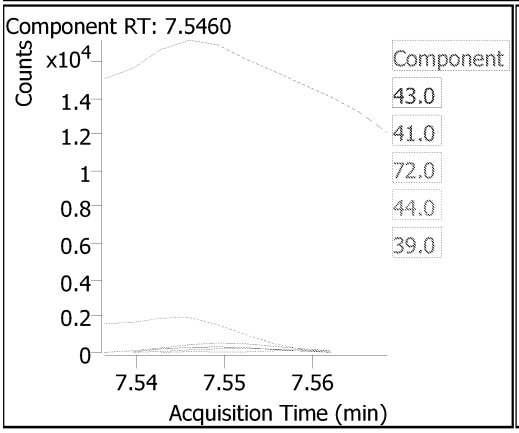


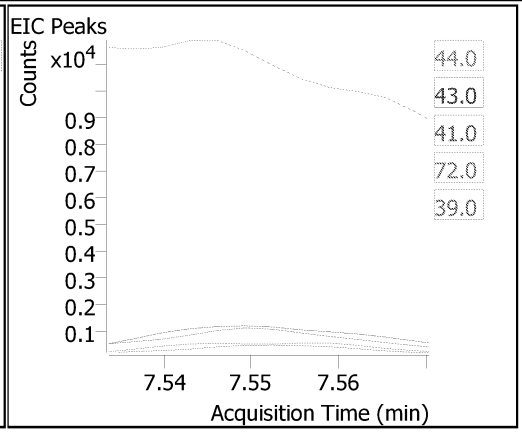
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.5460	Butanal	4520.9	89.1	123-72-8	C4H8O	0.02121

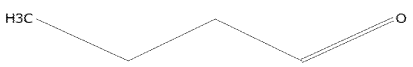




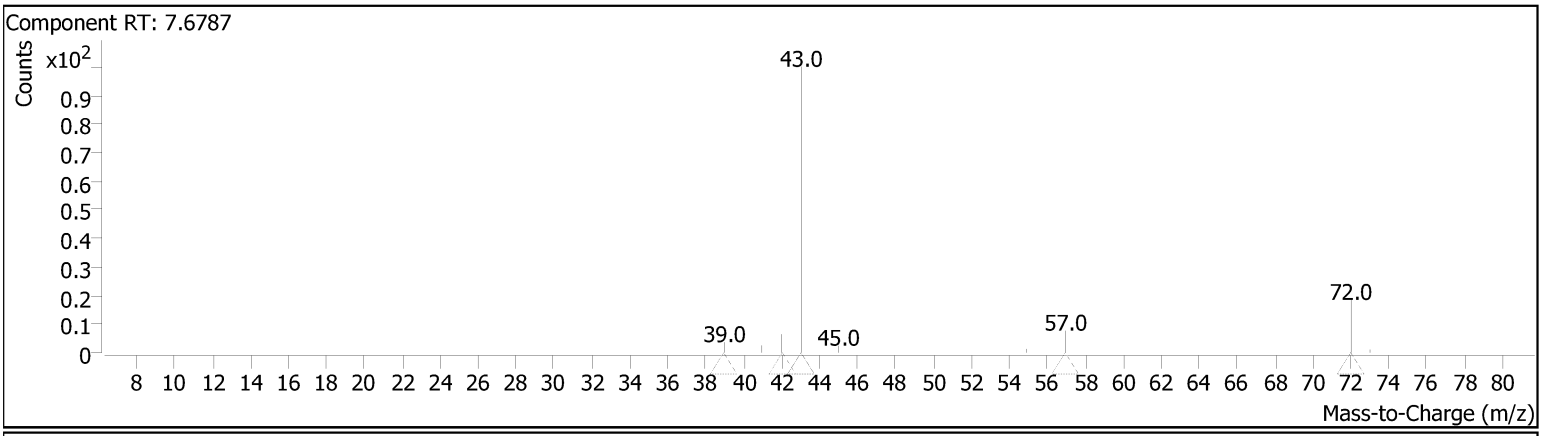


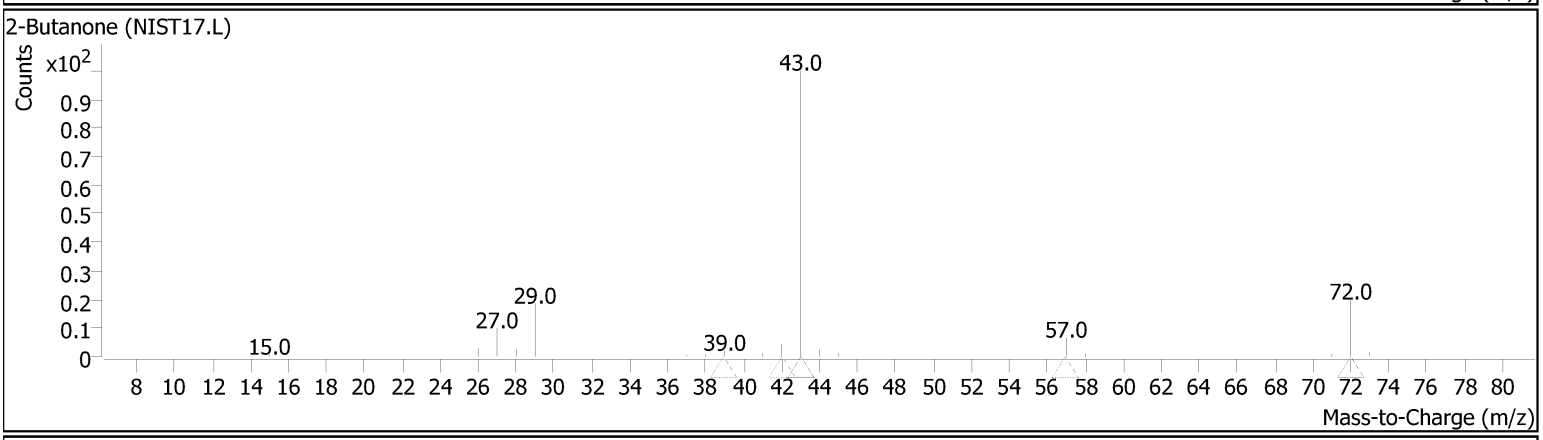


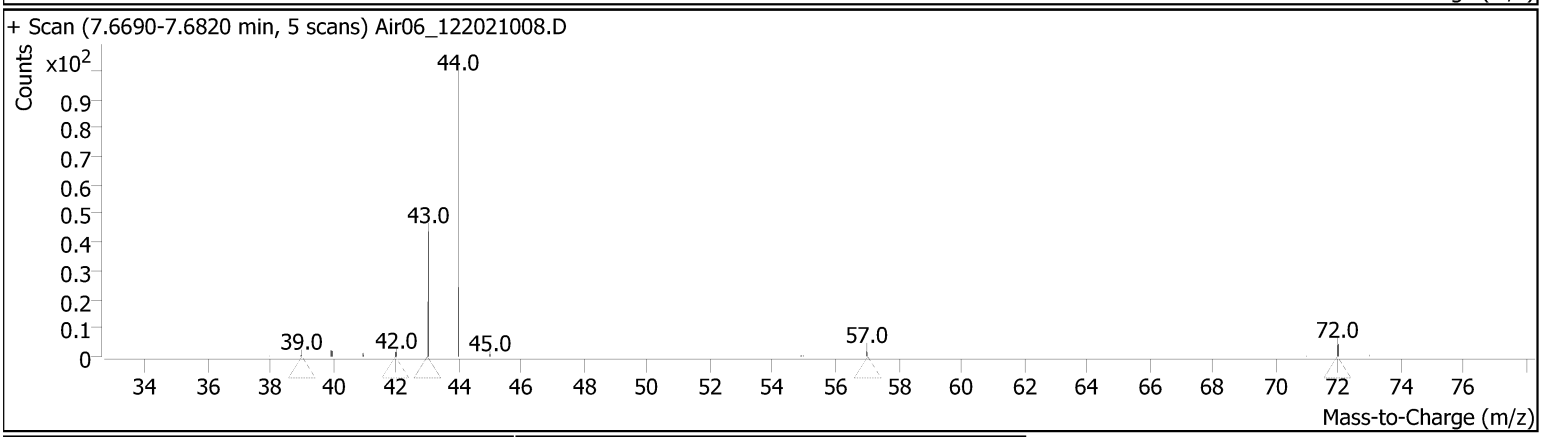


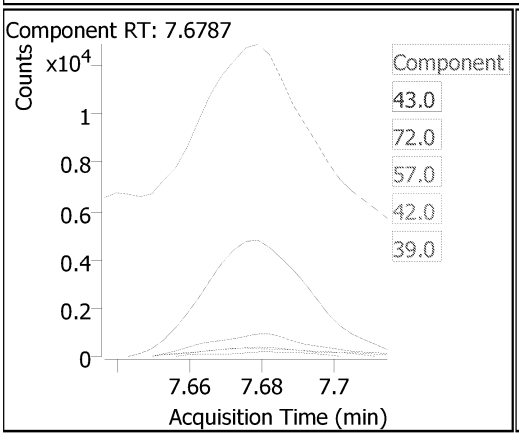


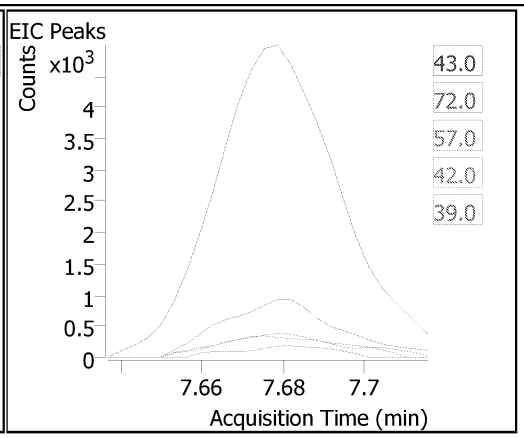
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.6787	2-Butanone	13593.3	92.4	78-93-3	C4H8O	0.06378

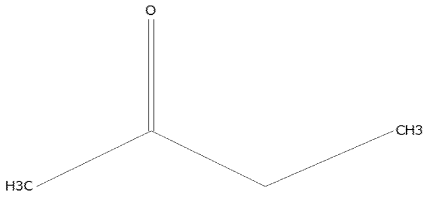




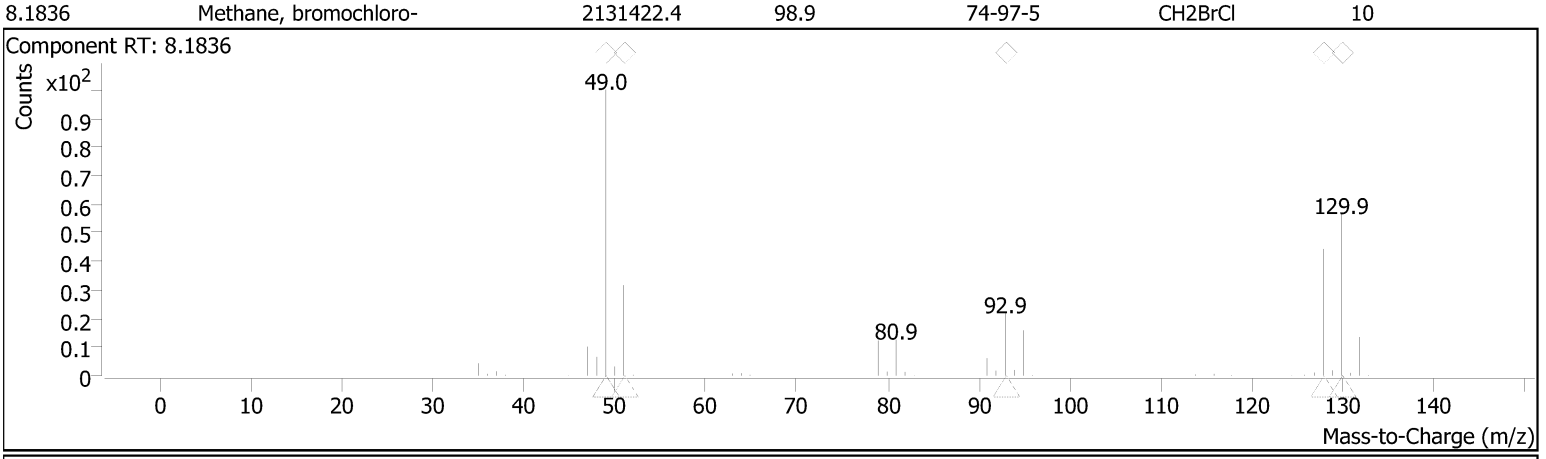


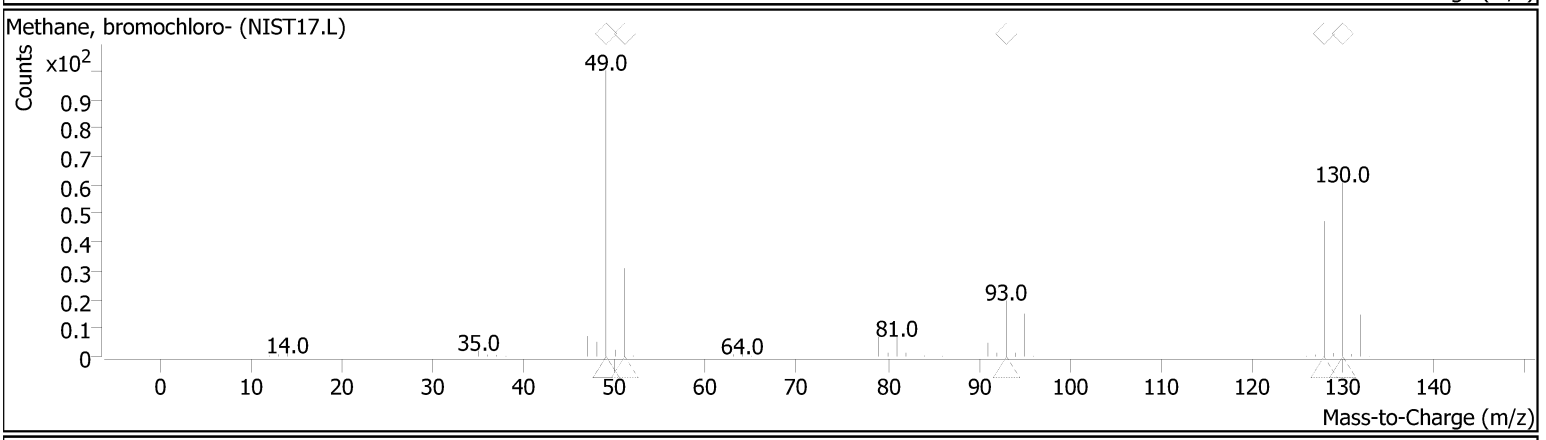


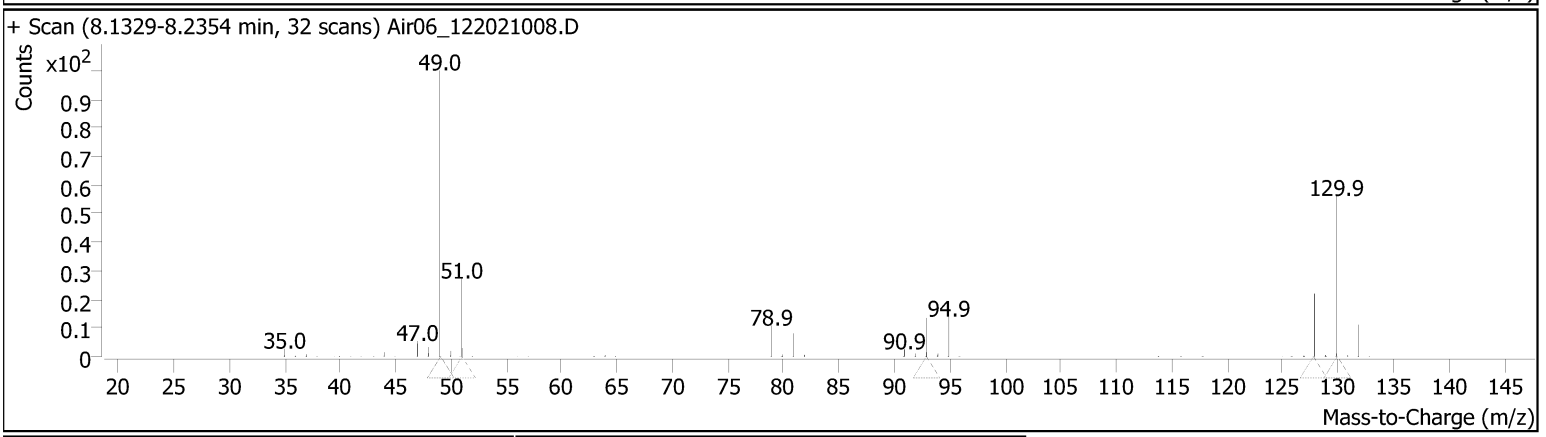


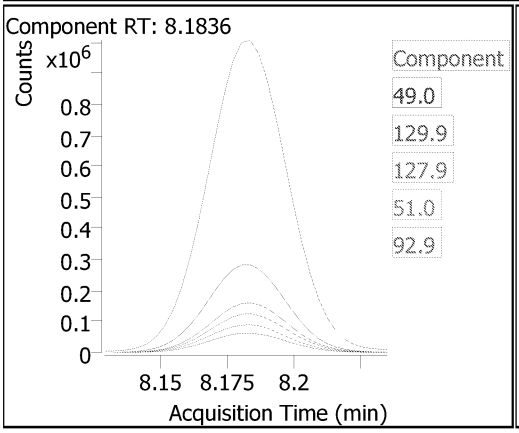


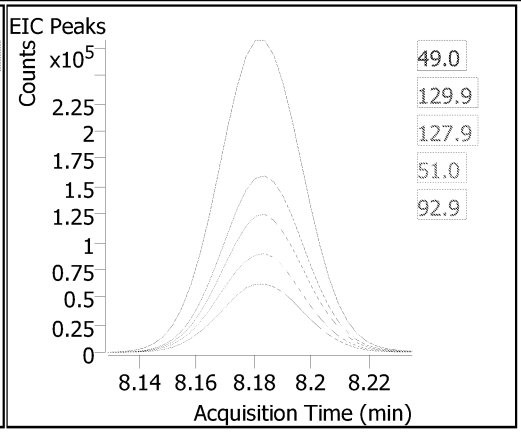
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.1836	Methane, bromochloro-	2131422.4	98.9	74-97-5	CH2BrCl	10

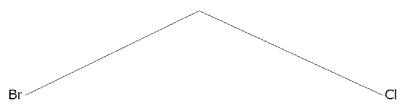




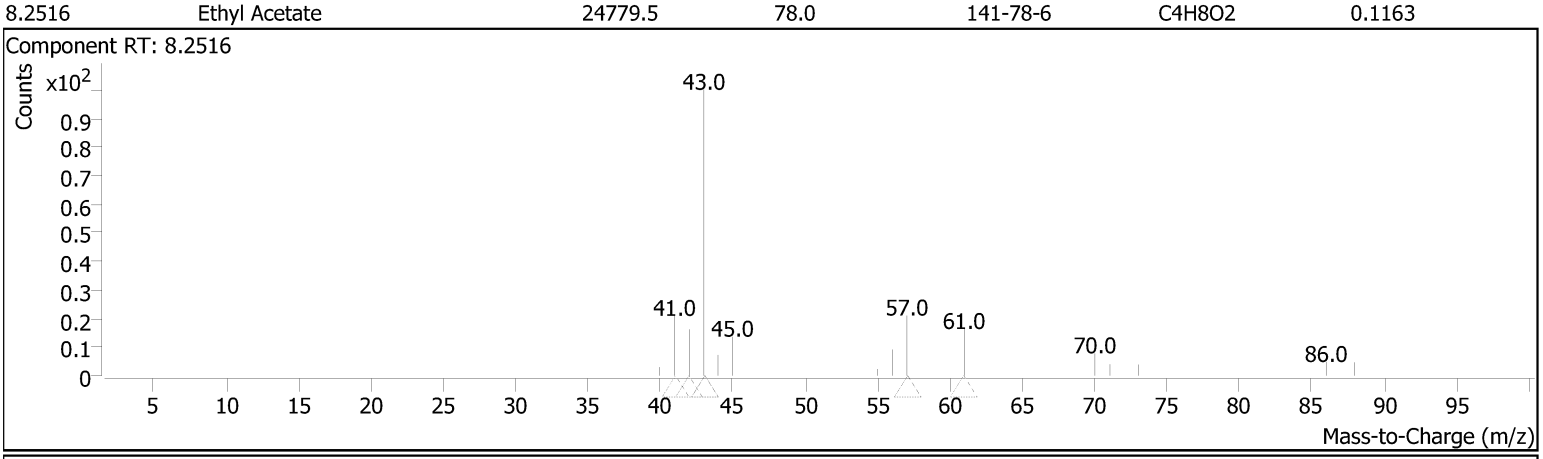


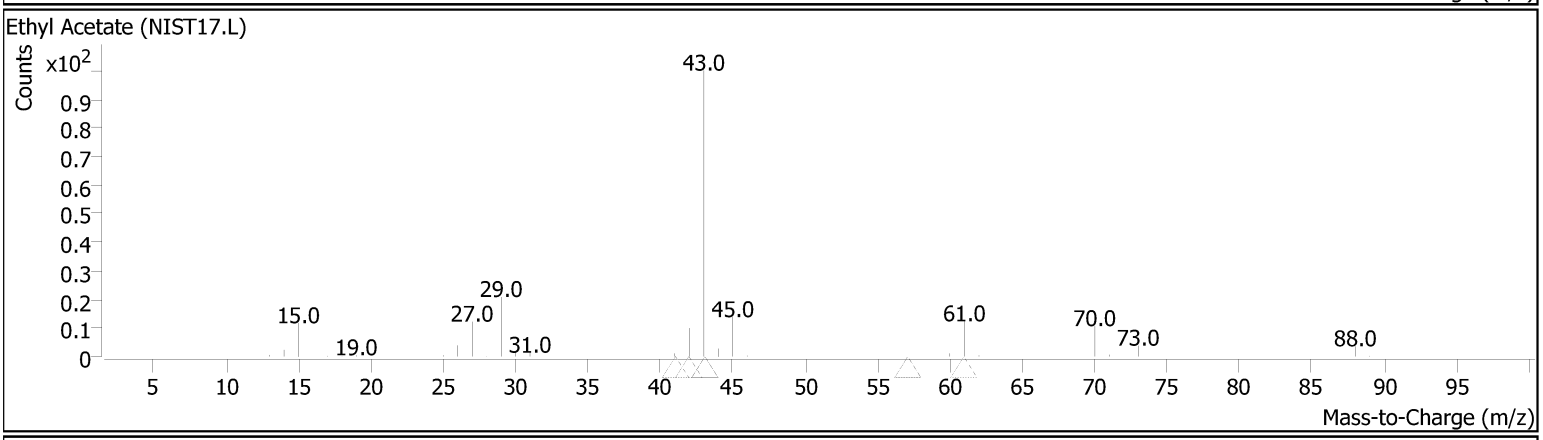


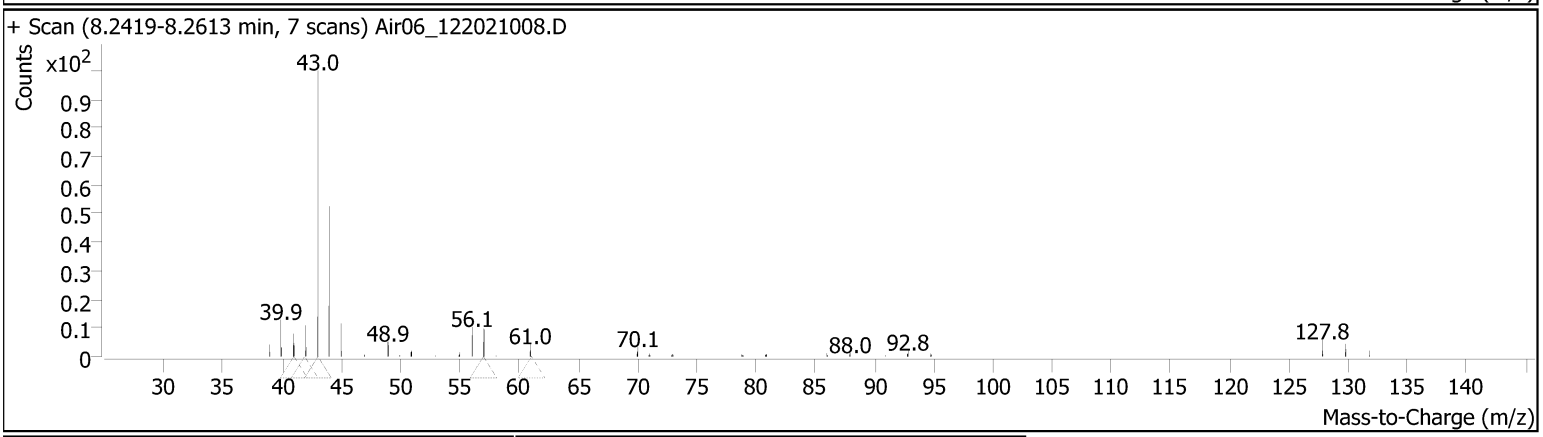


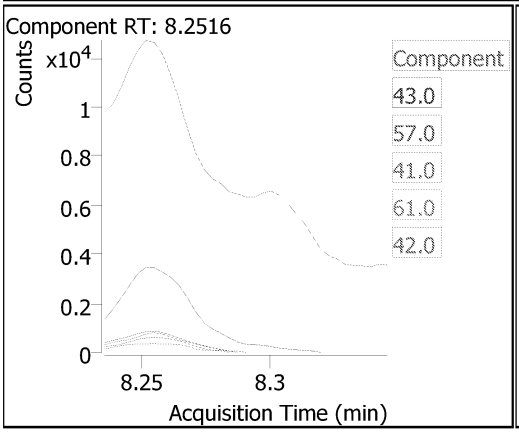


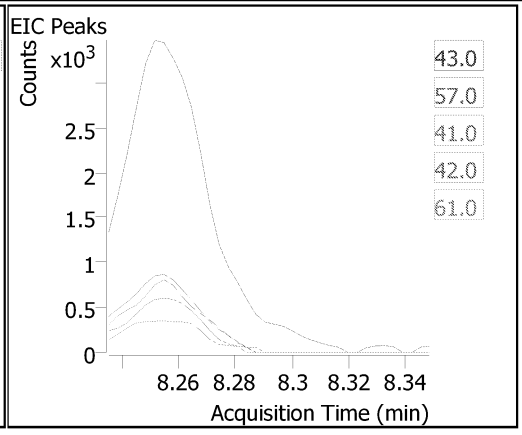
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.2516	Ethyl Acetate	24779.5	78.0	141-78-6	C4H8O2	0.1163

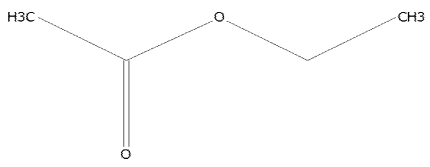




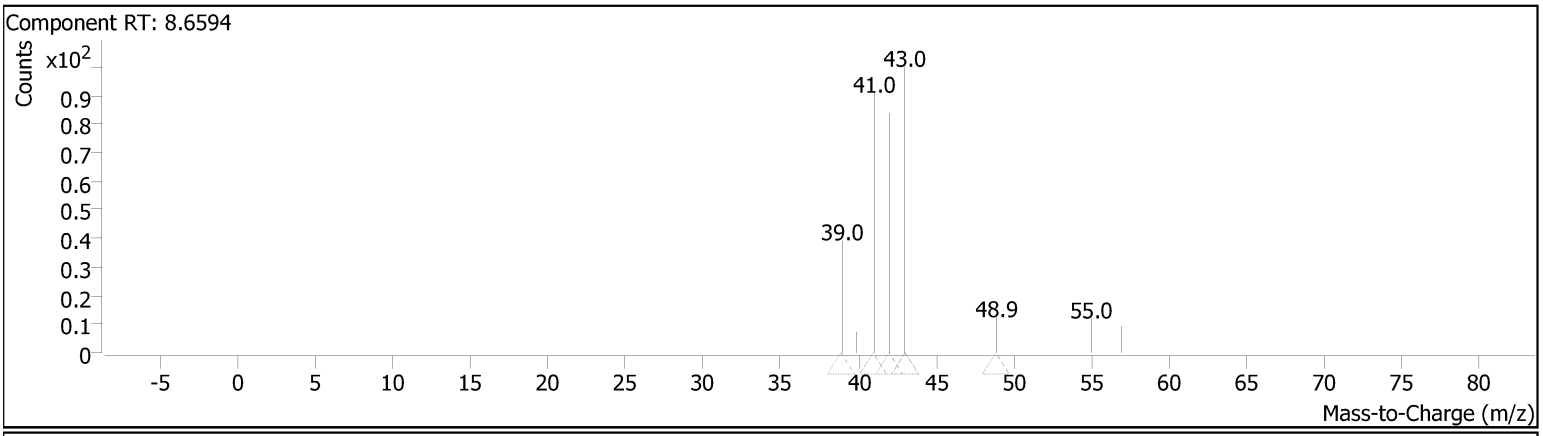


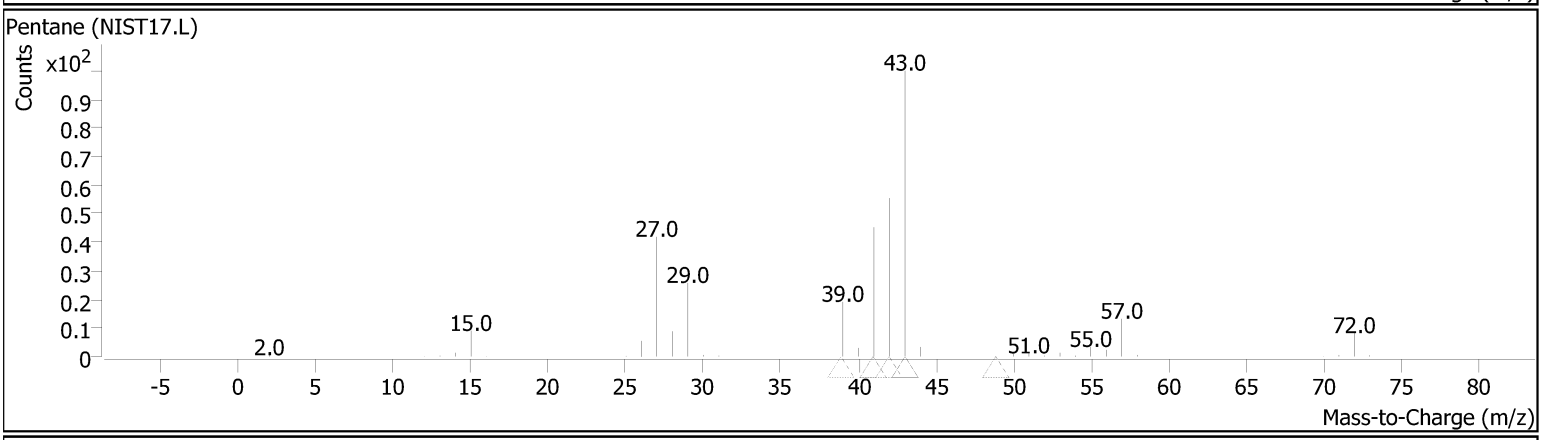


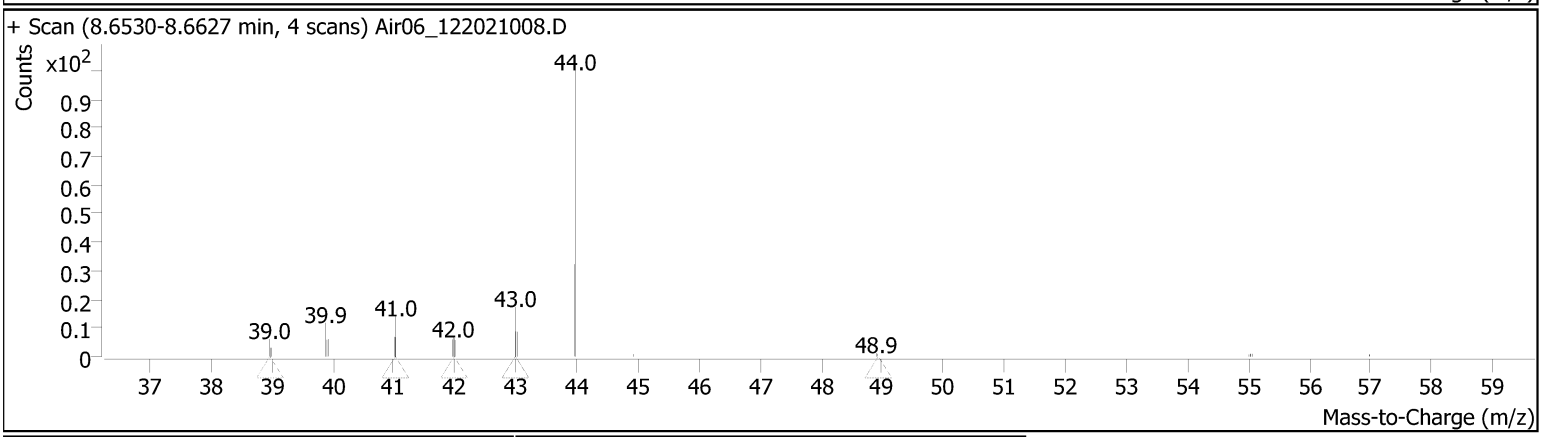


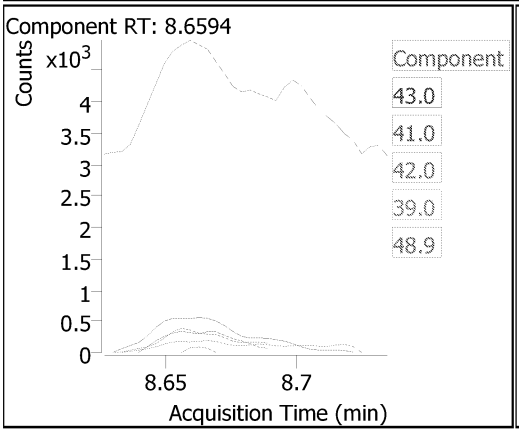


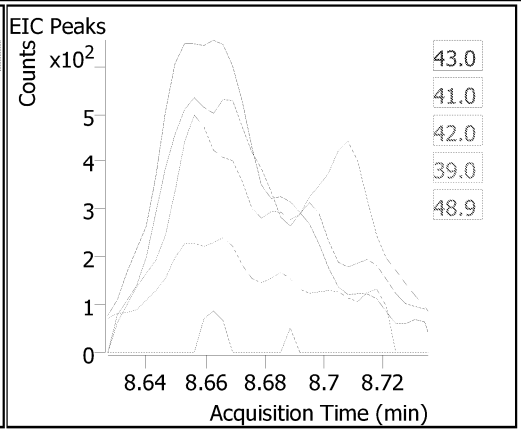
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.6594	Pentane	6110.9	83.4	109-66-0	C5H12	0.02867

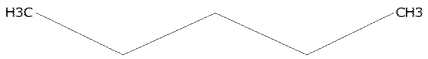




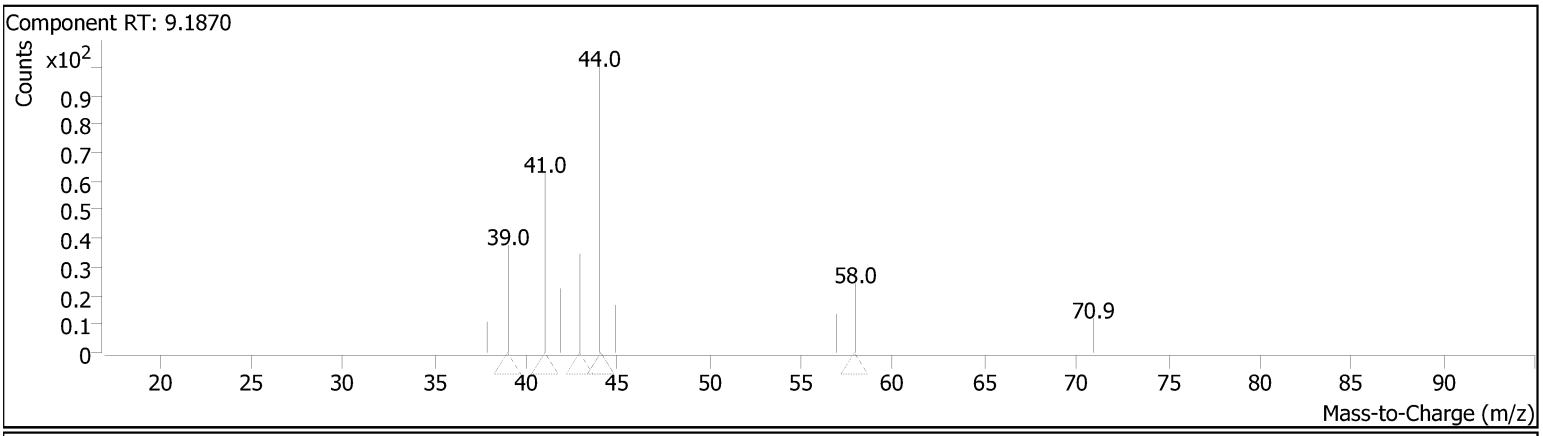


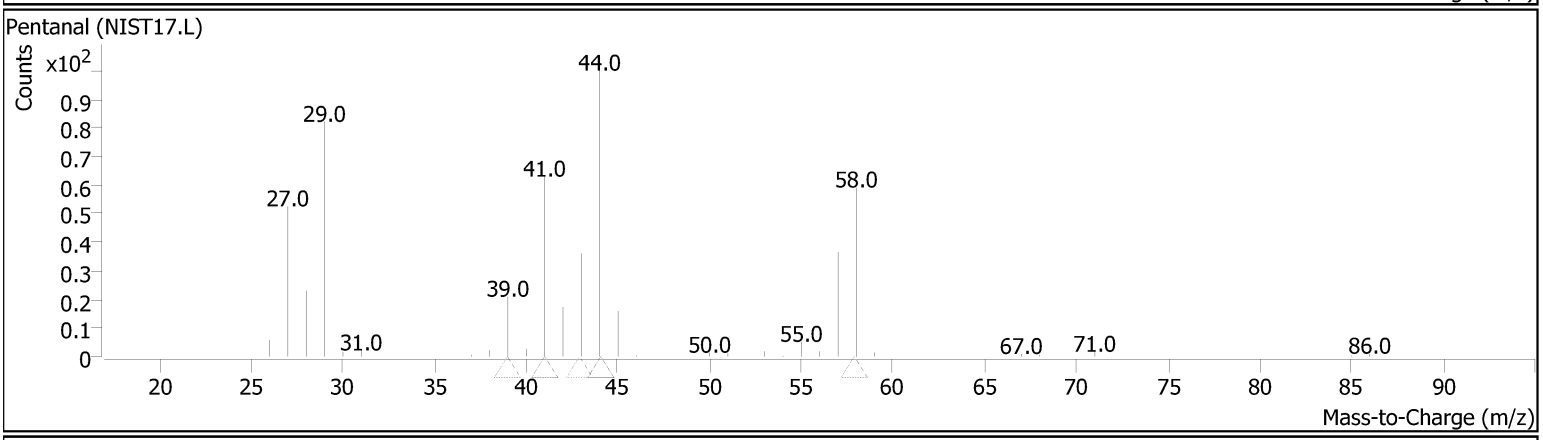


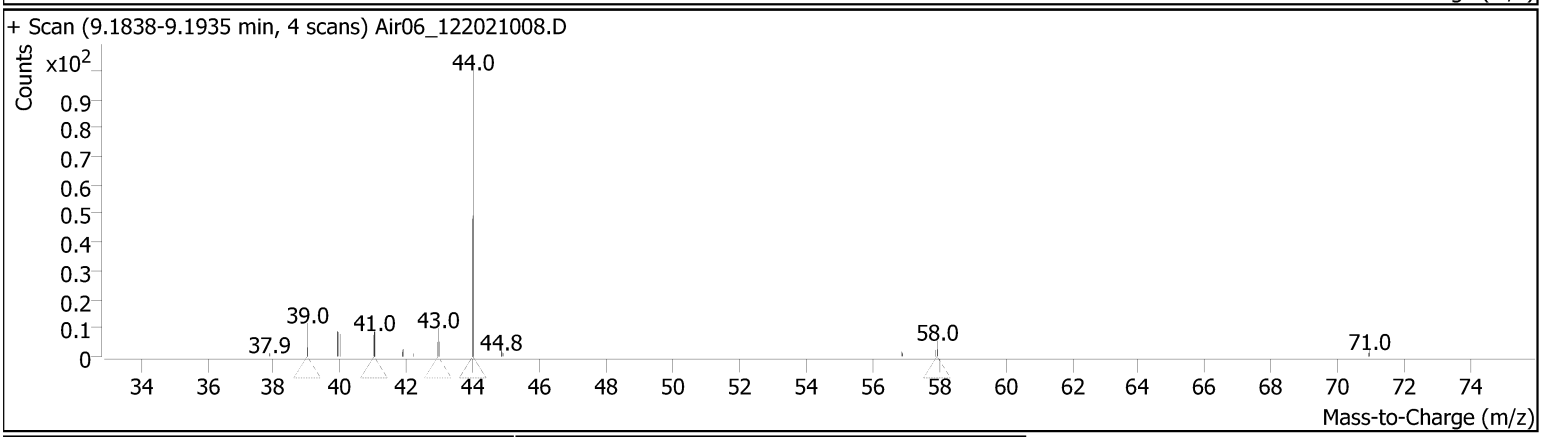


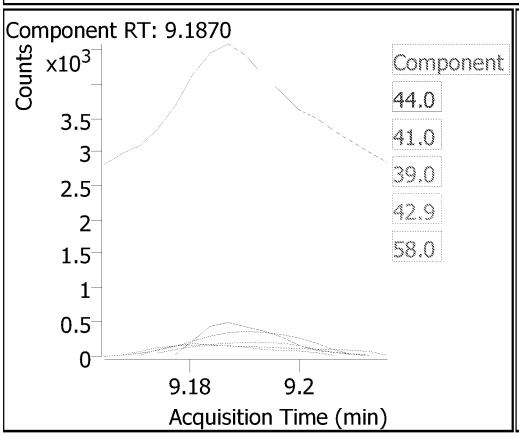


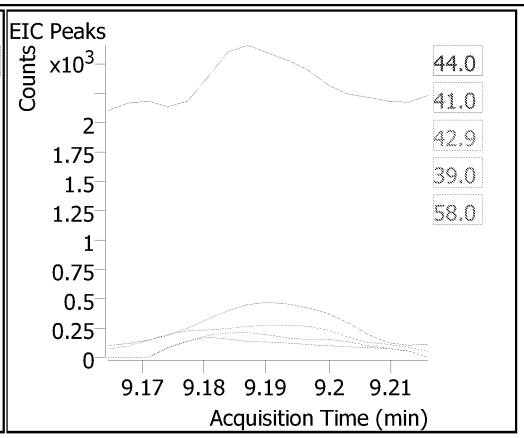
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.1870	Pentanal	2485.3	87.3	110-62-3	C5H10O	0.007782





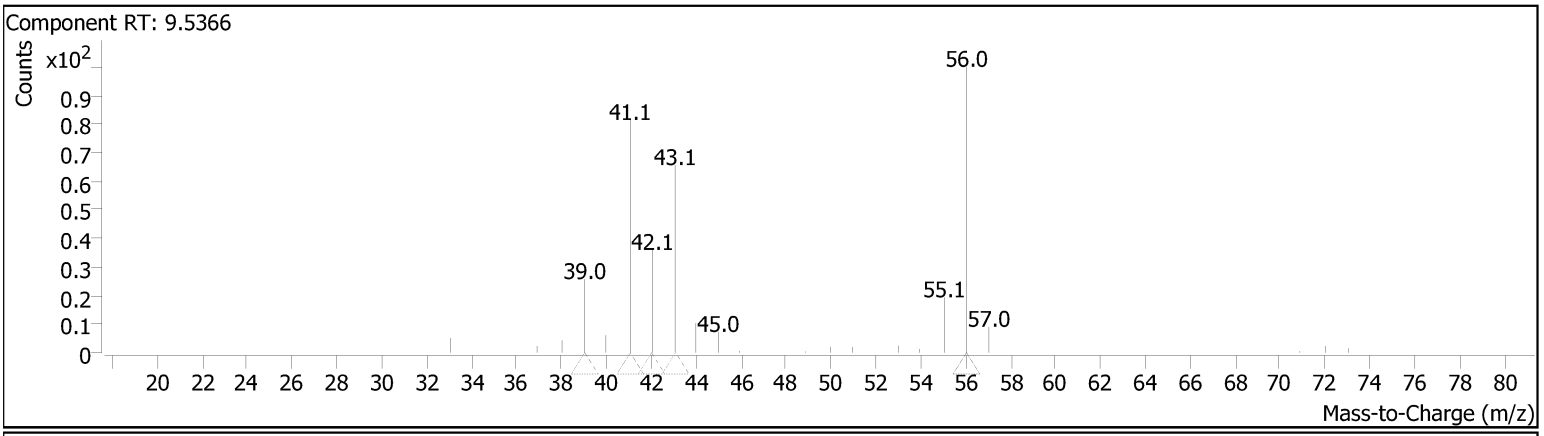


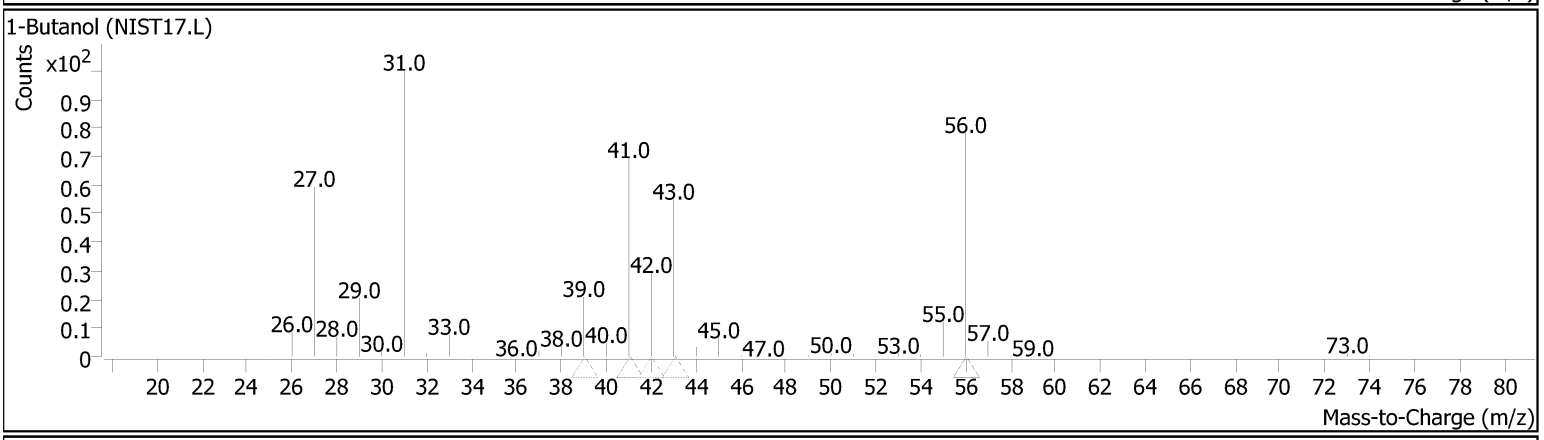


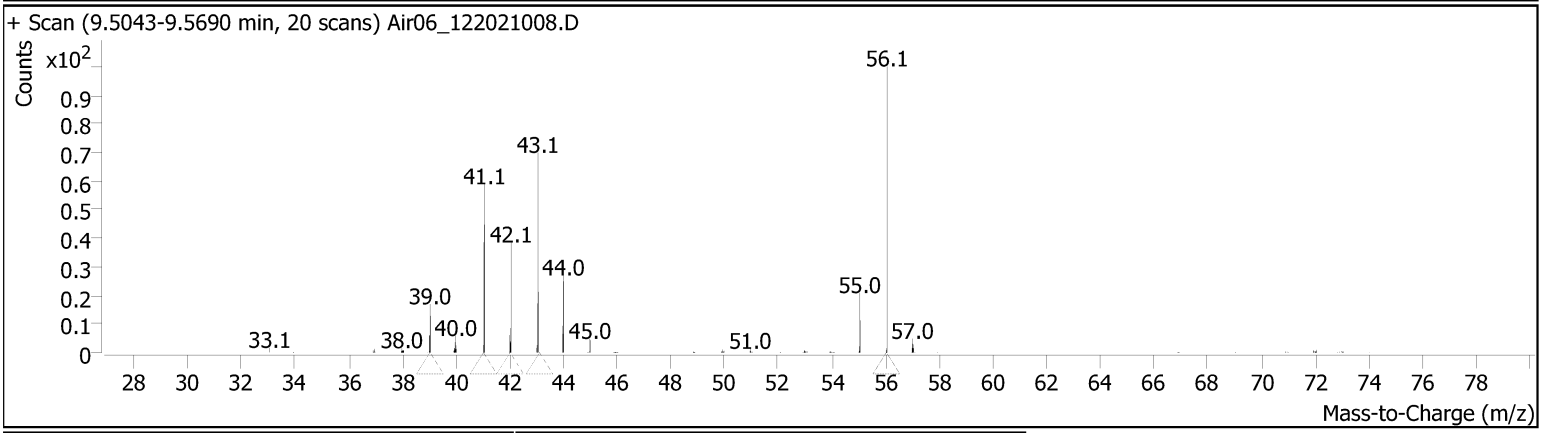


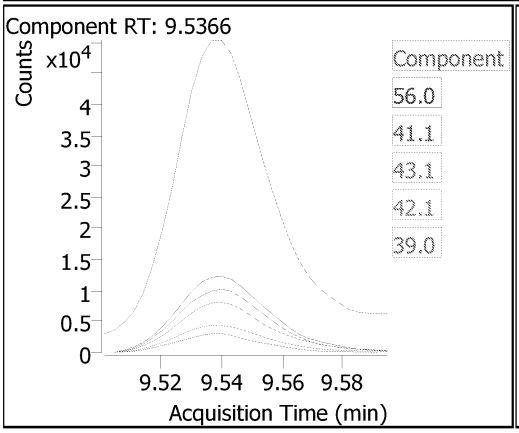


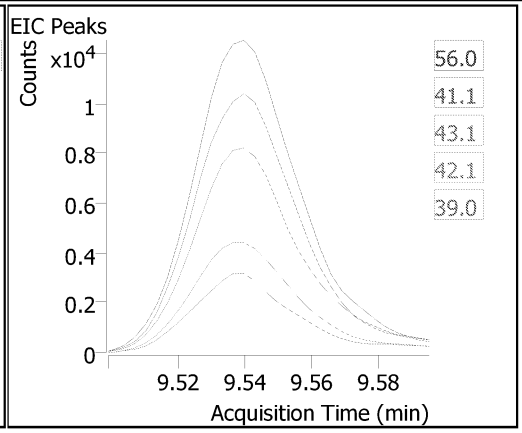
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.5366	1-Butanol	105285.7	97.9	71-36-3	C4H10O	0.3297

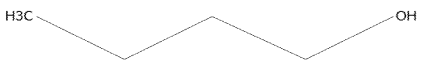




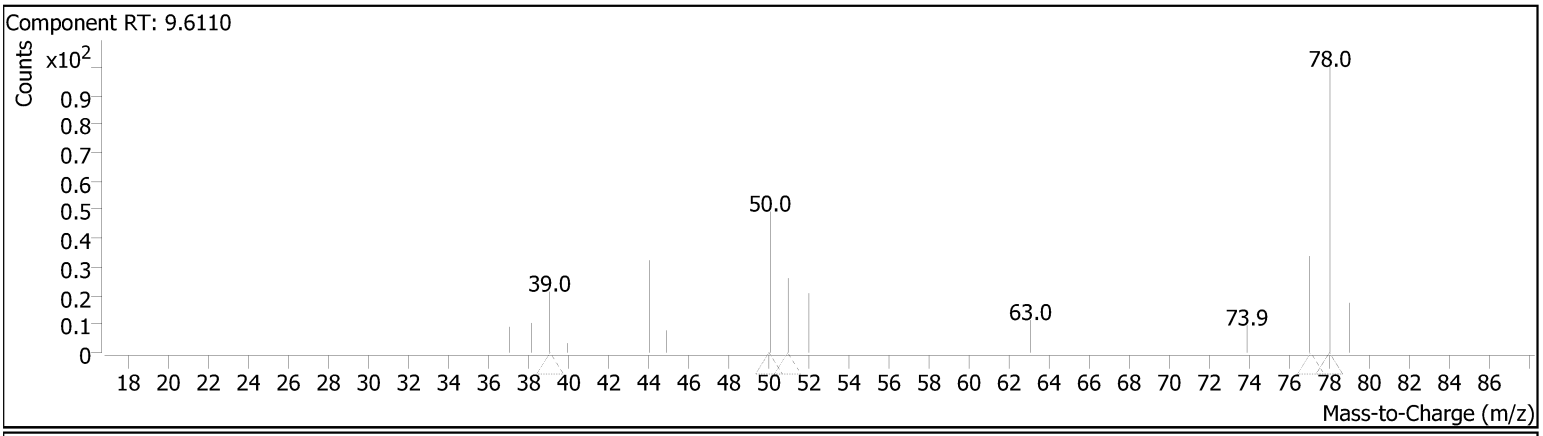


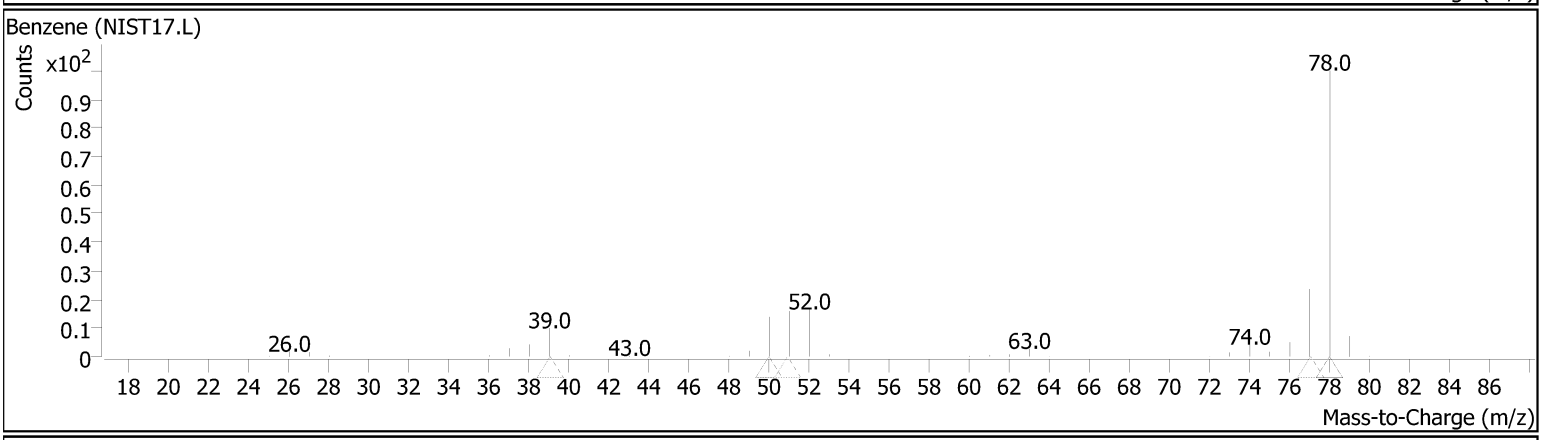


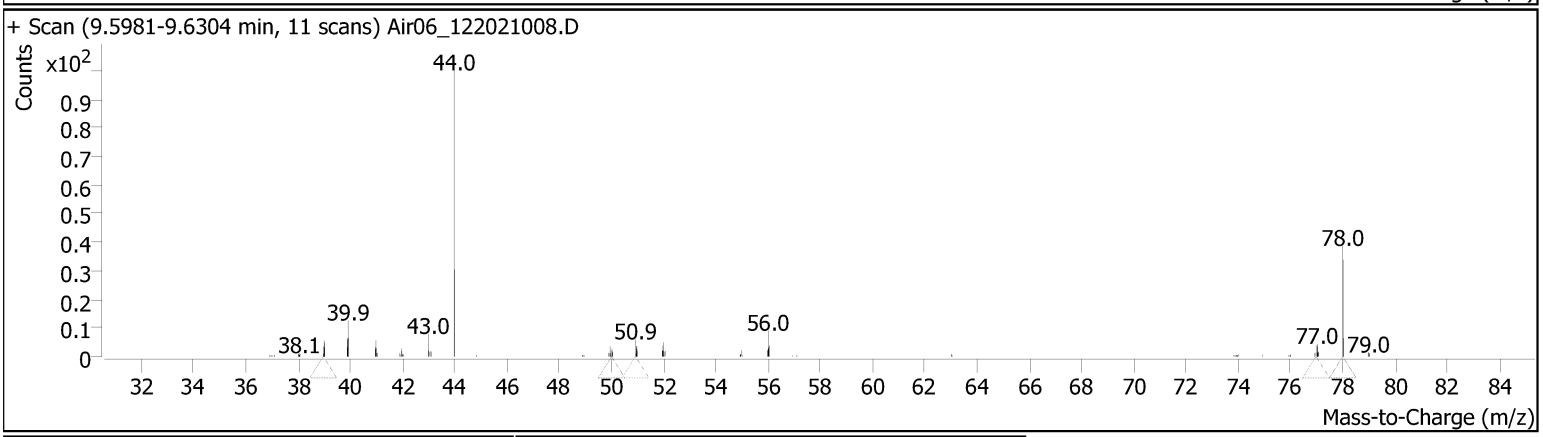


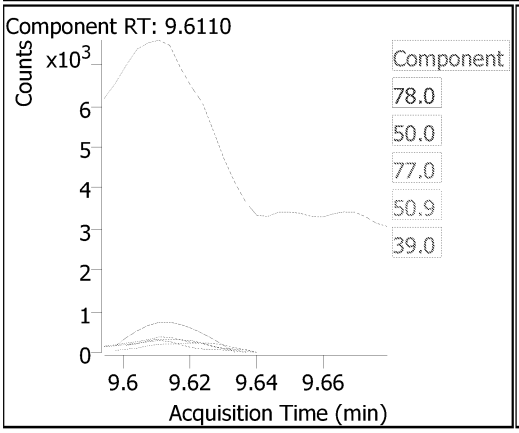


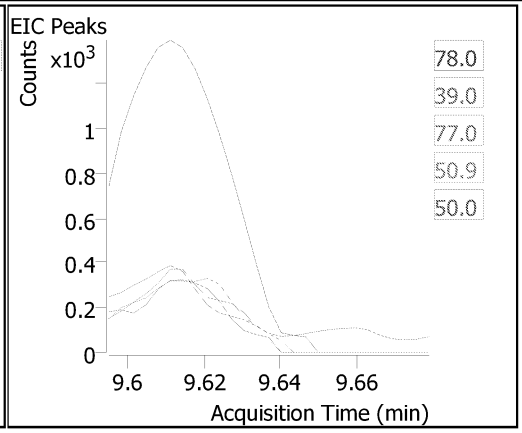
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.6110	Benzene	9787.8	84.3	71-43-2	C6H6	0.03065

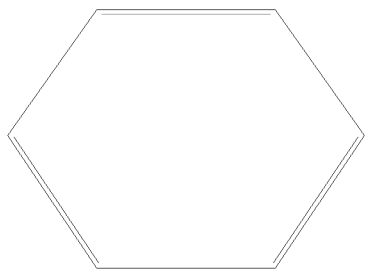




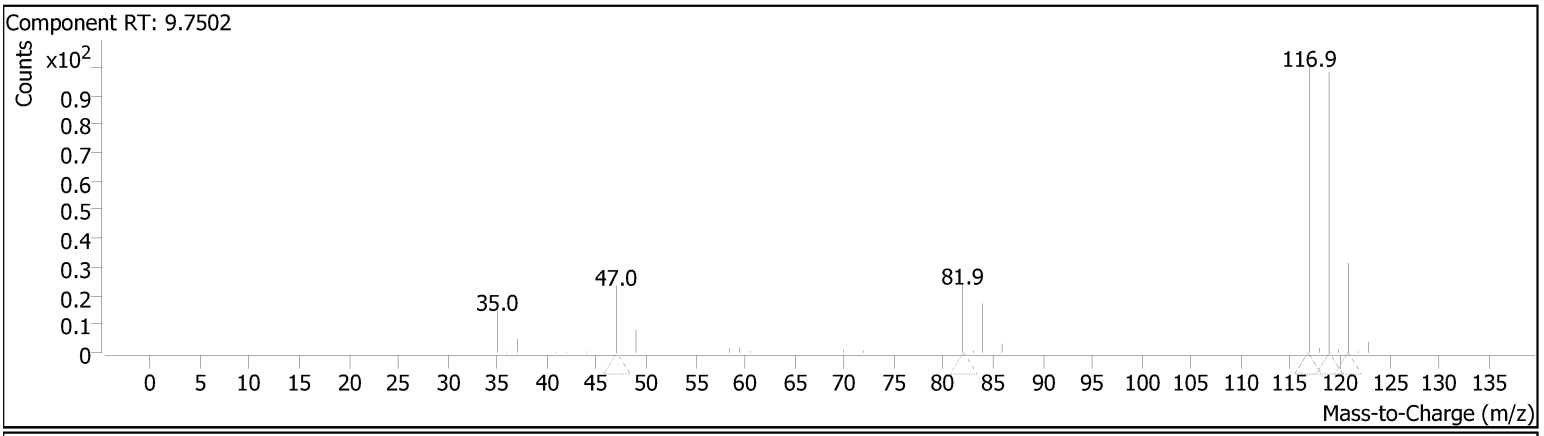


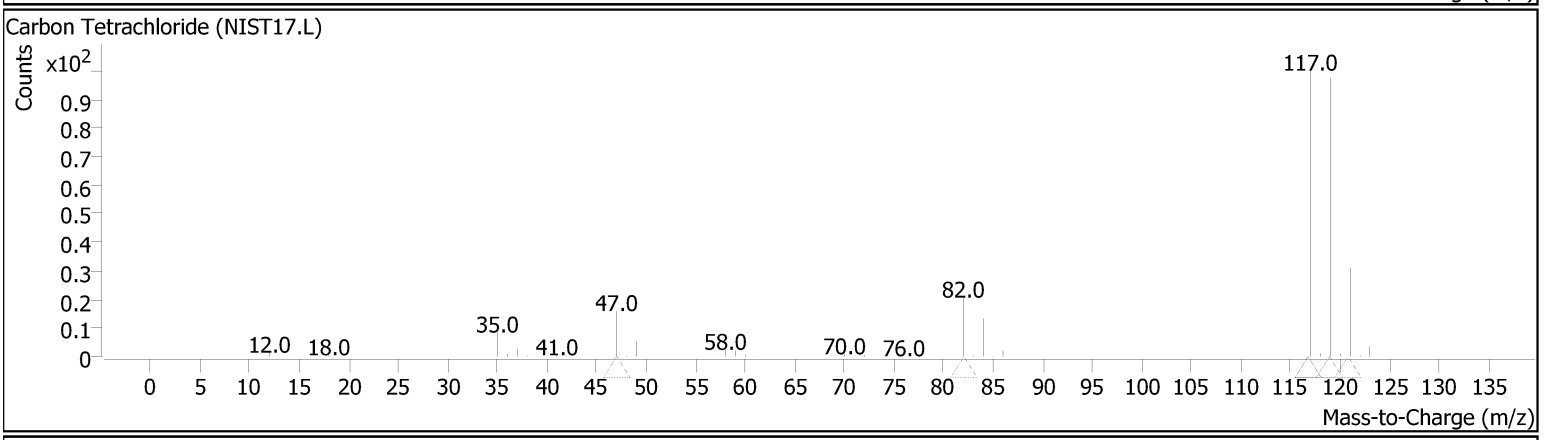


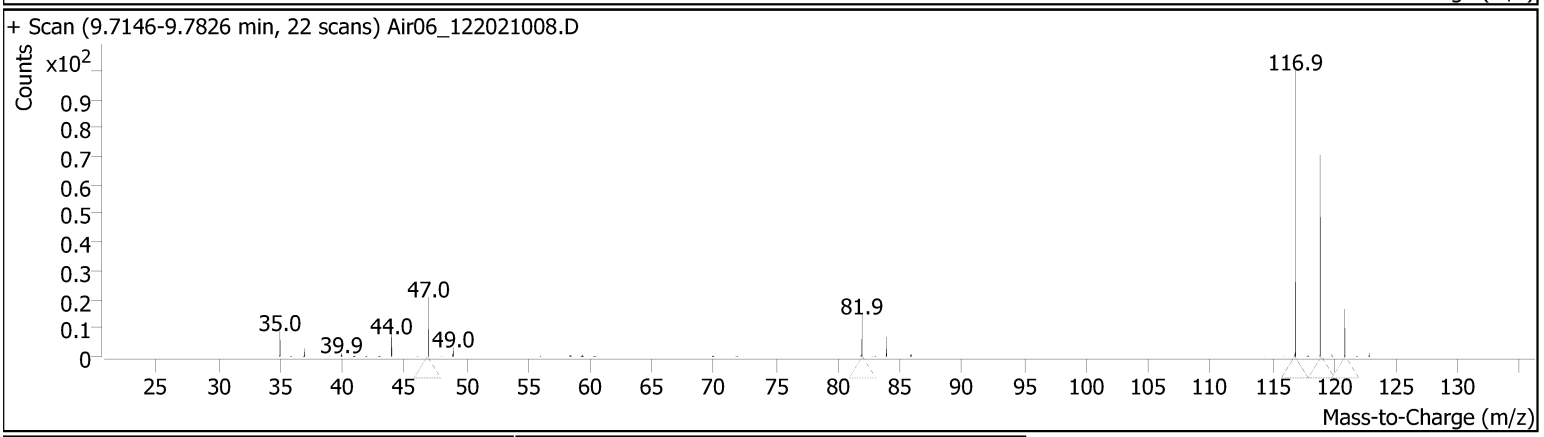


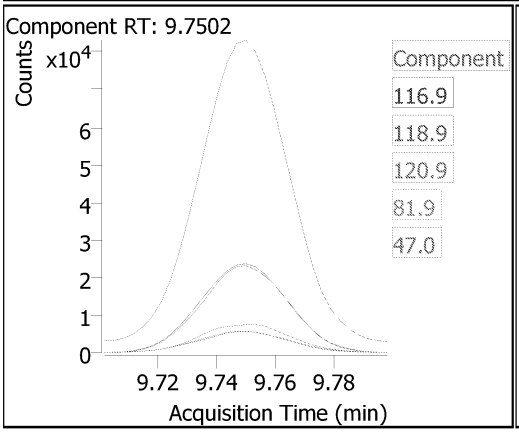


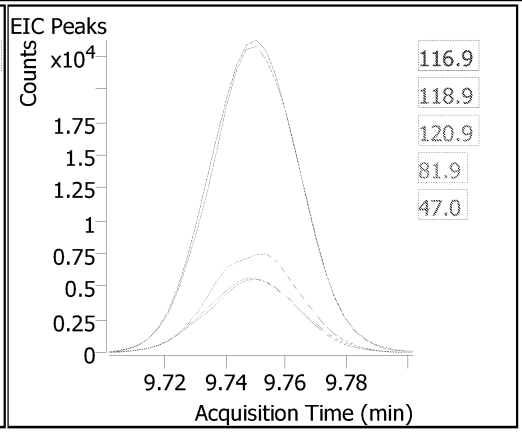
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.7502	Carbon Tetrachloride	172059.1	99.4	56-23-5	CCl4	0.5387

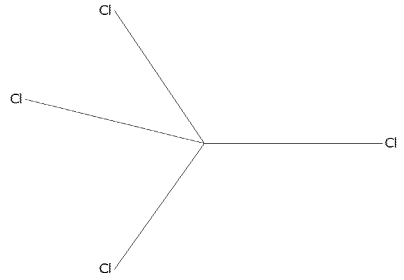




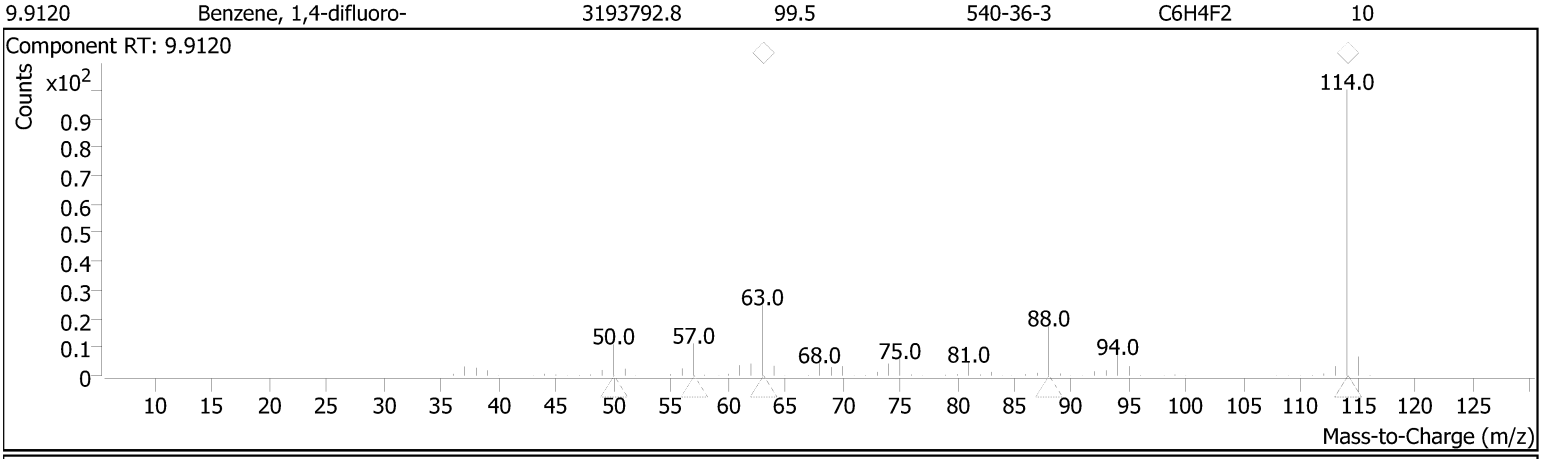


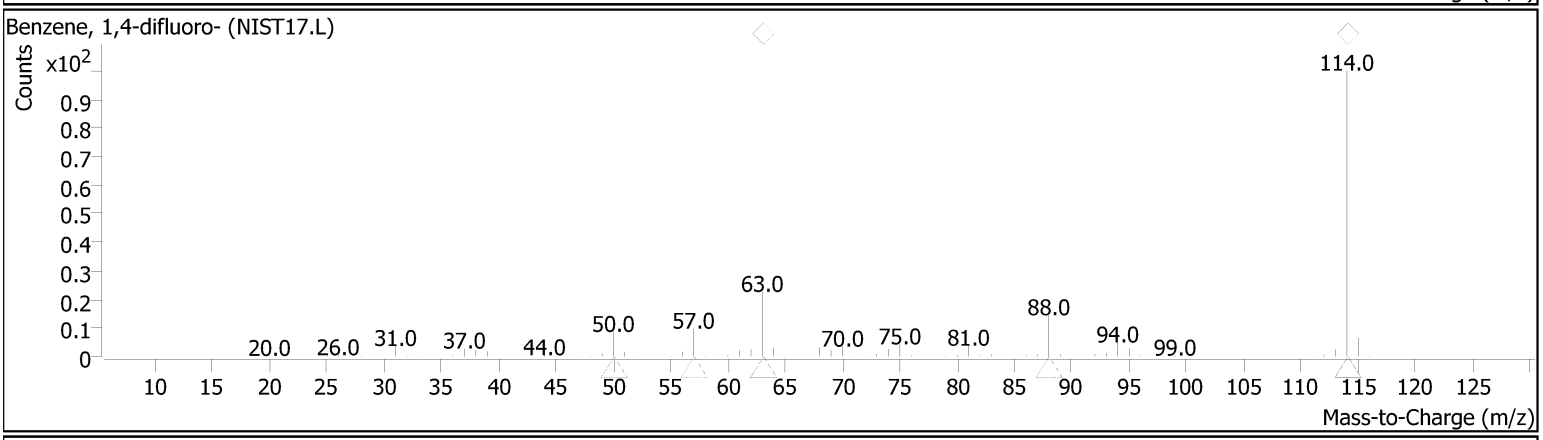


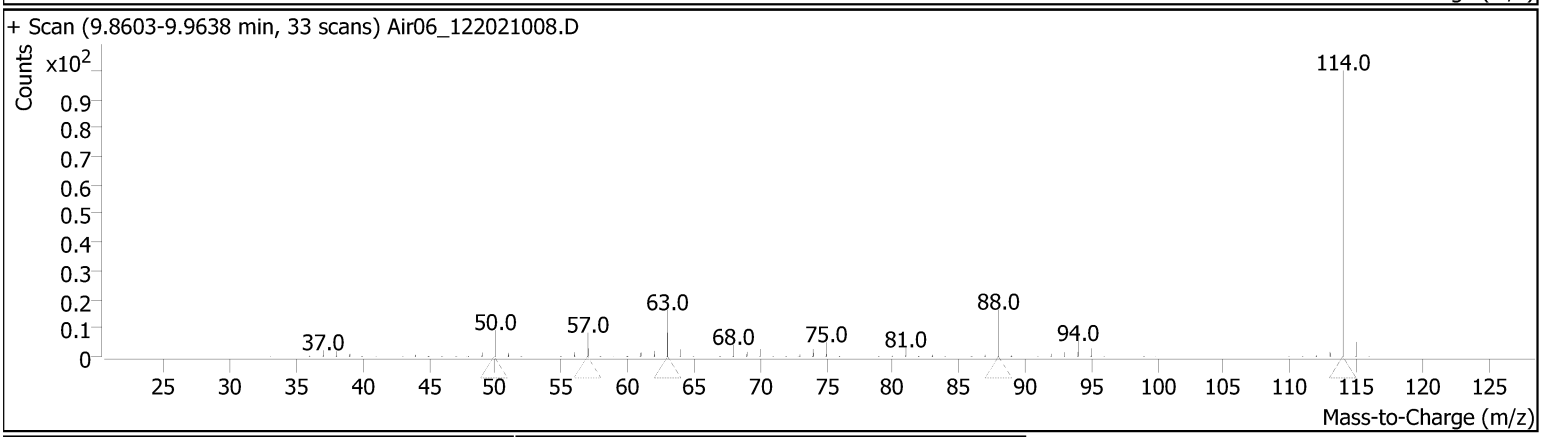


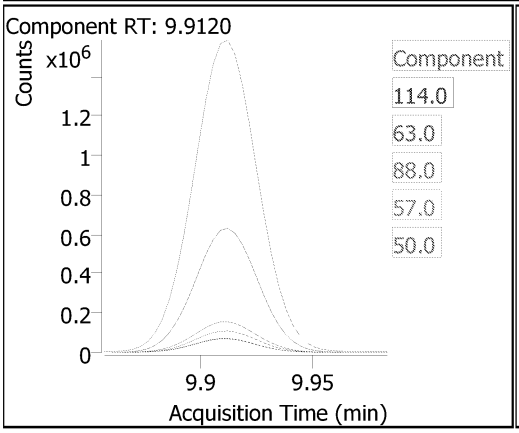


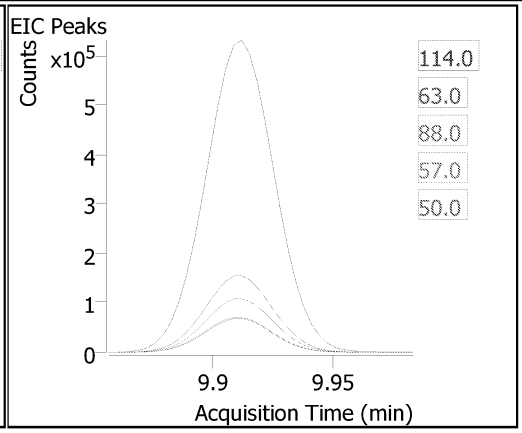
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.9120	Benzene, 1,4-difluoro-	3193792.8	99.5	540-36-3	C6H4F2	10





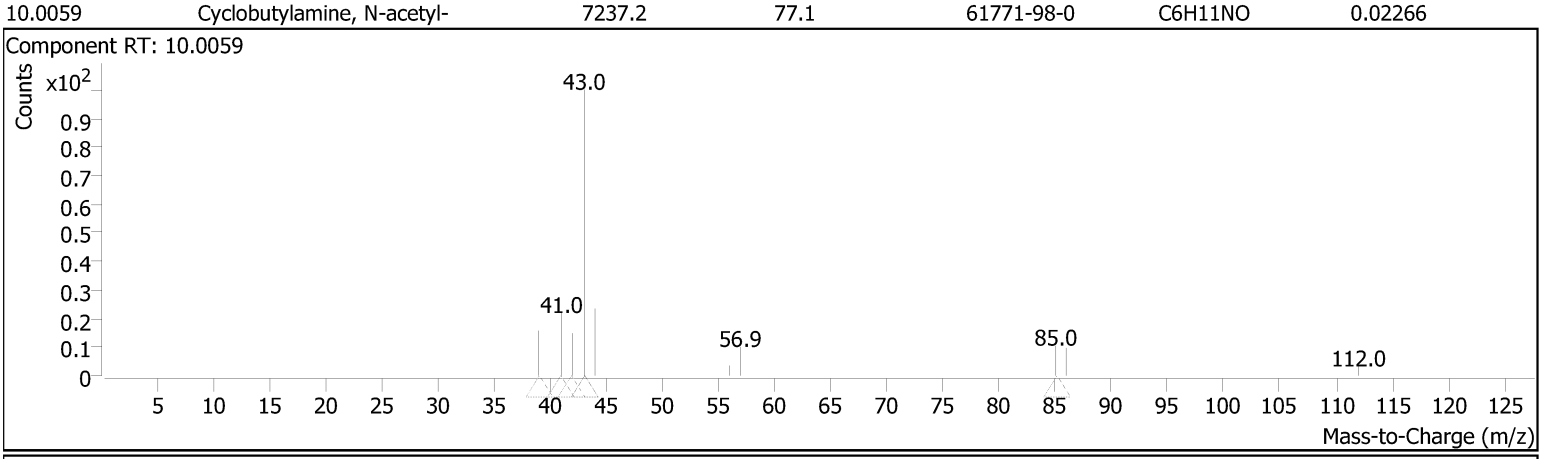


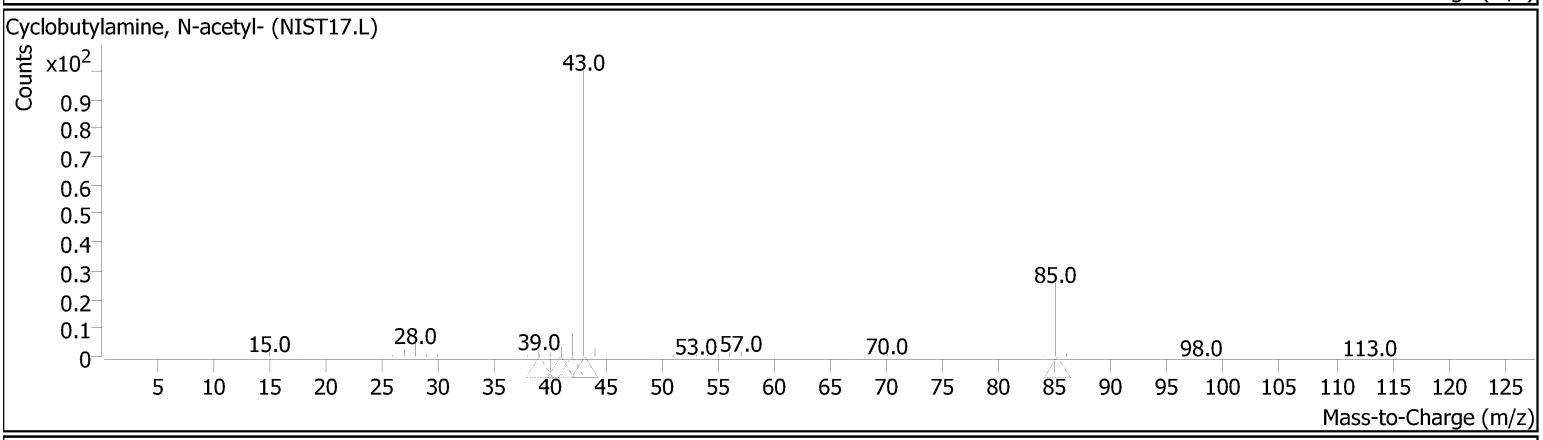


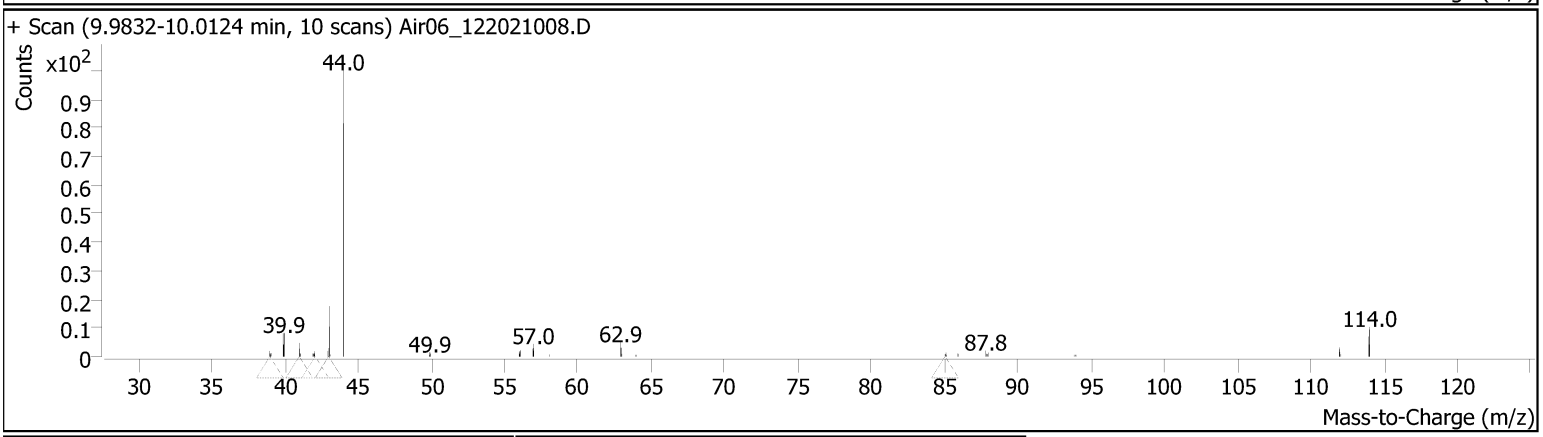


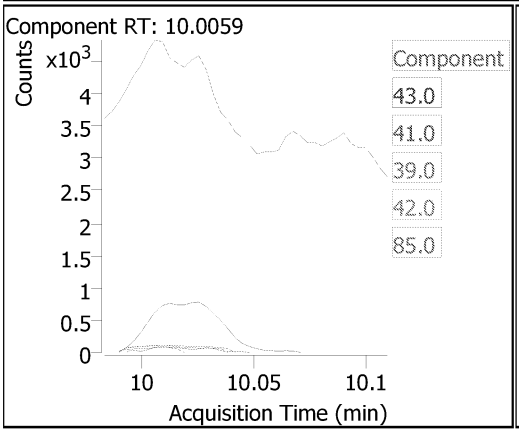


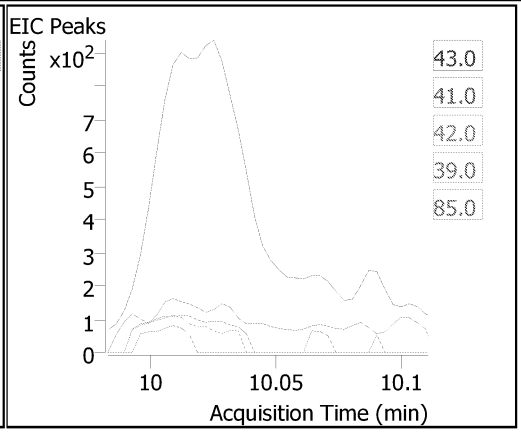
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.0059	Cyclobutylamine, N-acetyl-	7237.2	77.1	61771-98-0	C6H11NO	0.02266

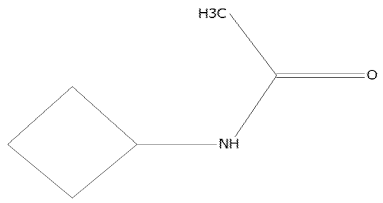




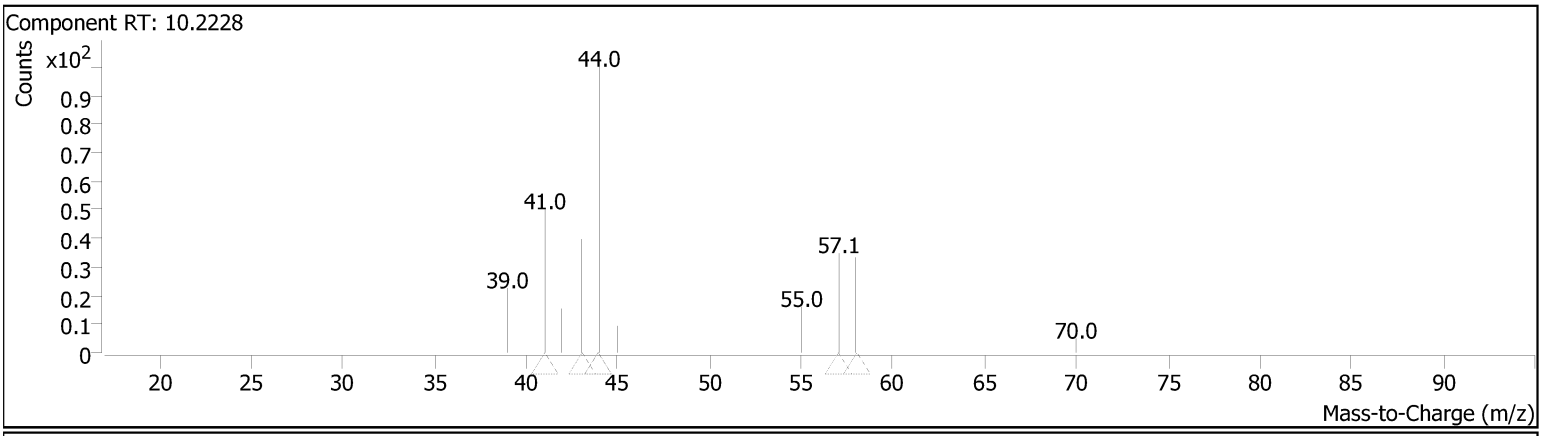


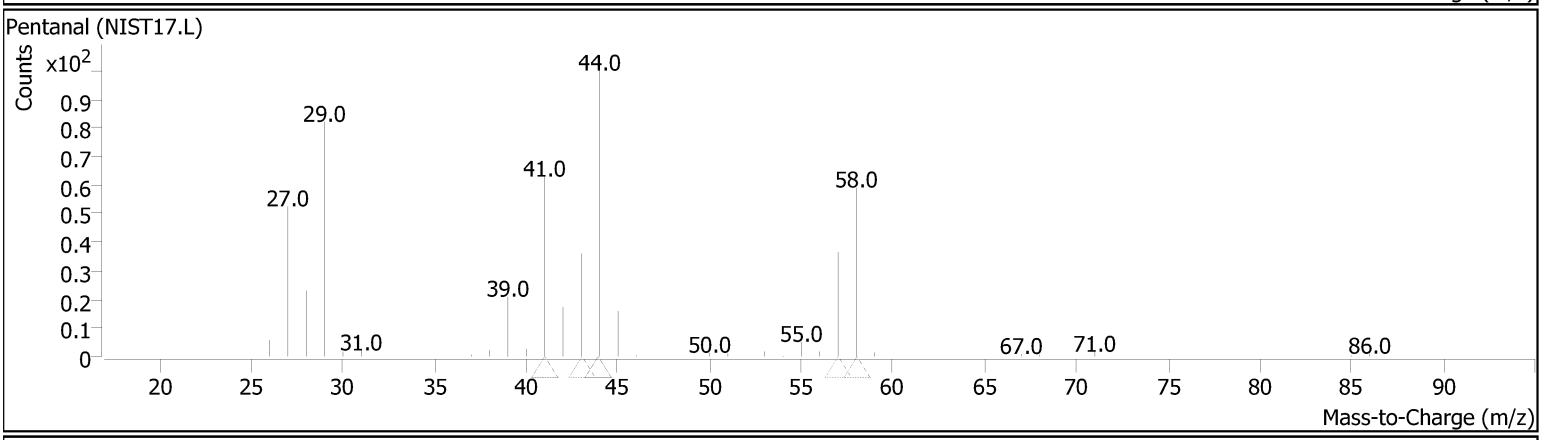


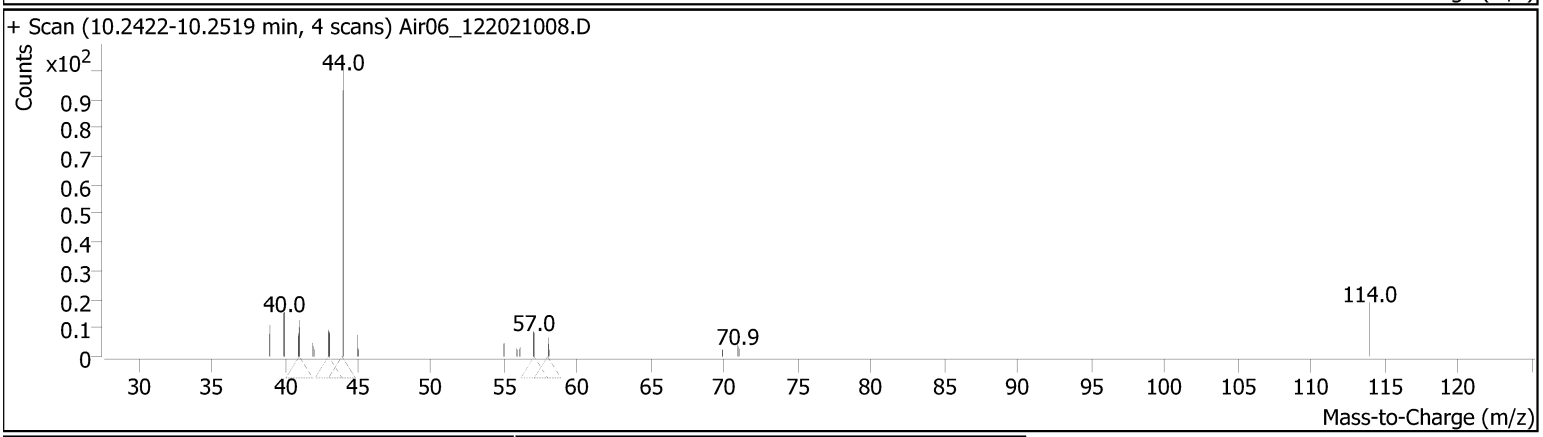


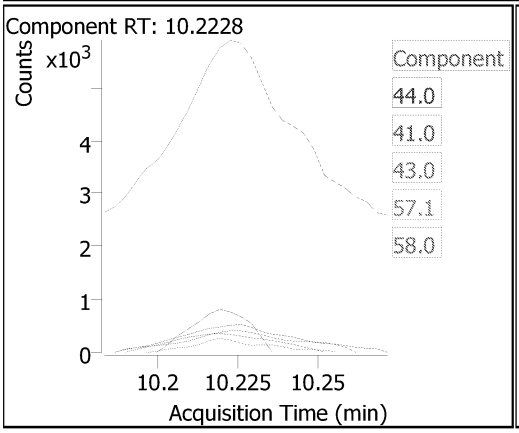


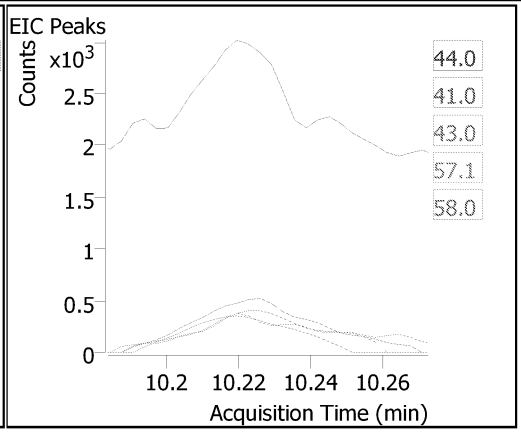
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.2228	Pentanal	7604.7	89.8	110-62-3	C5H10O	0.02381





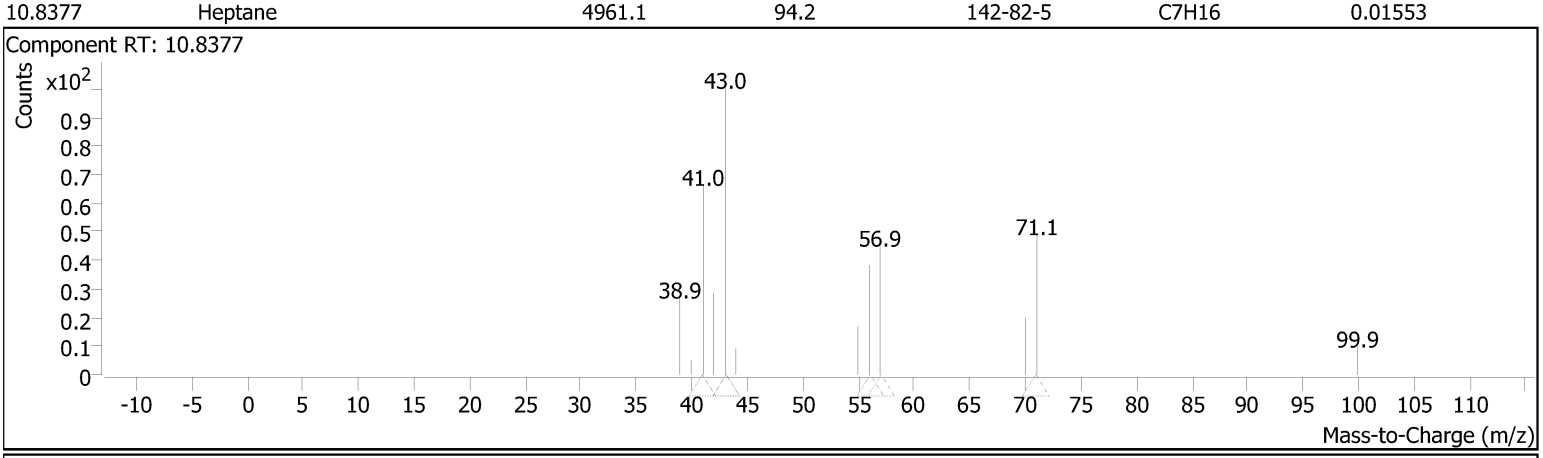


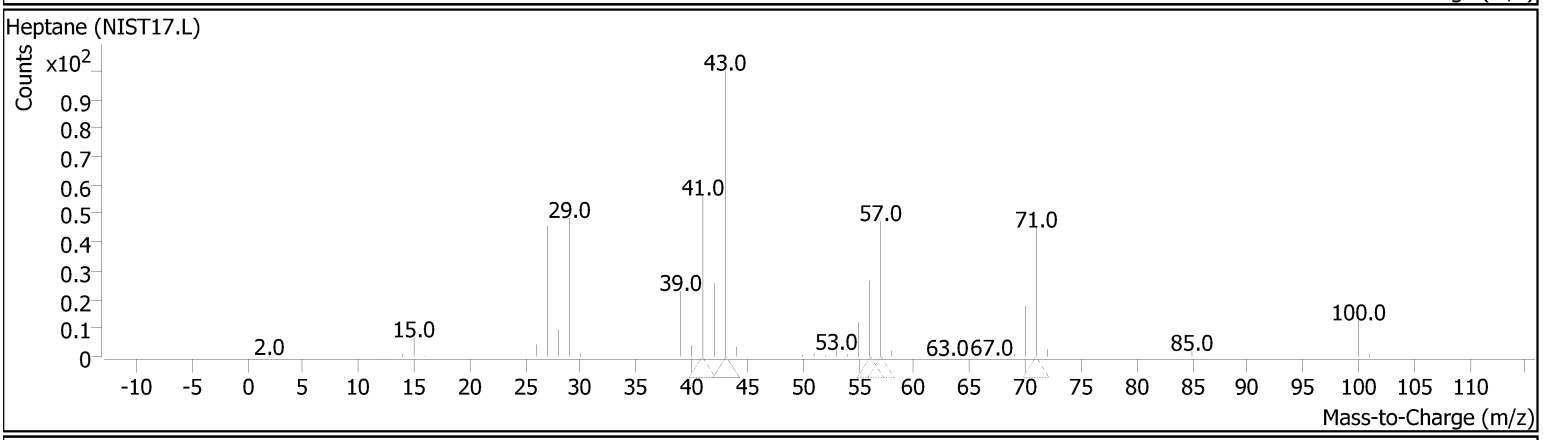


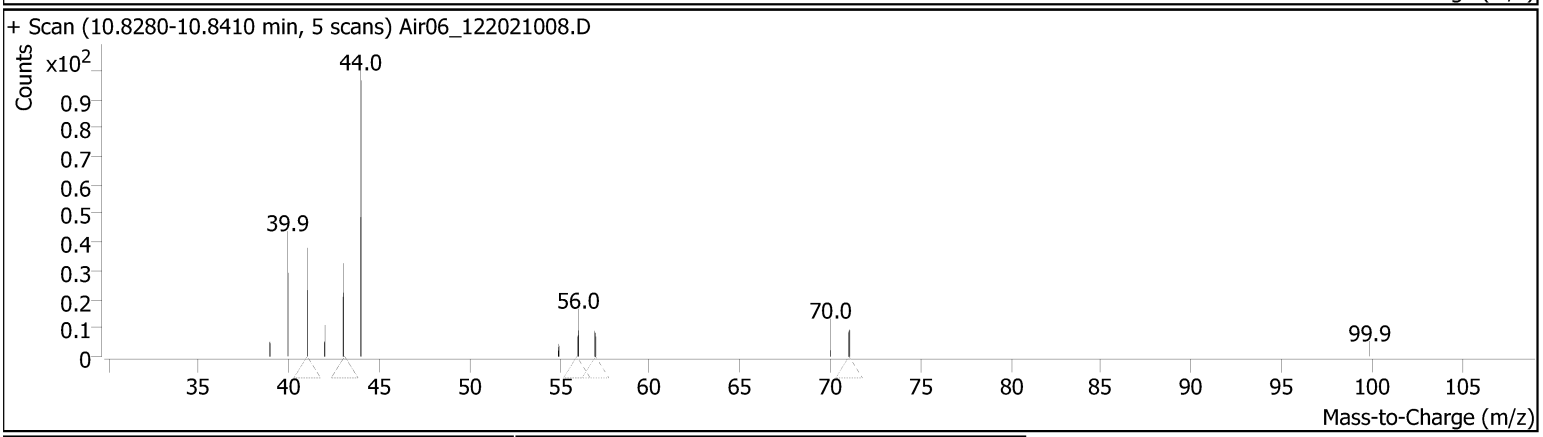


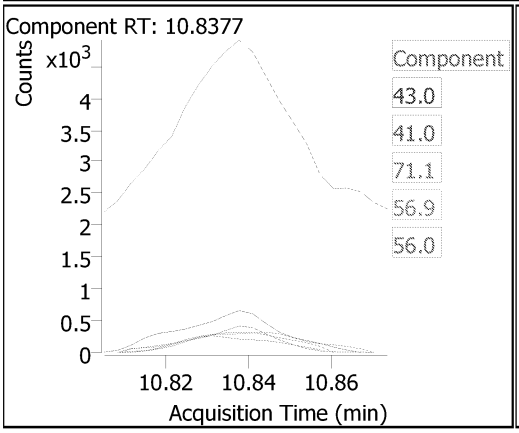


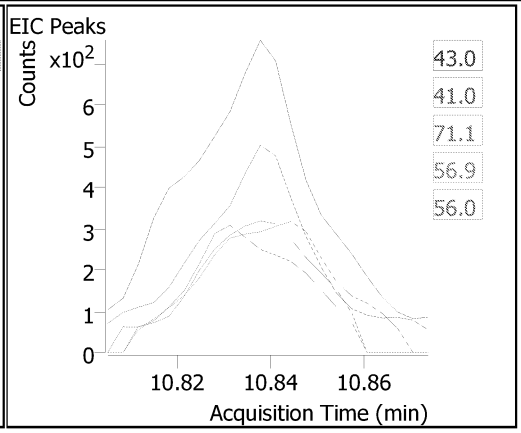
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.8377	Heptane	4961.1	94.2	142-82-5	C7H16	0.01553





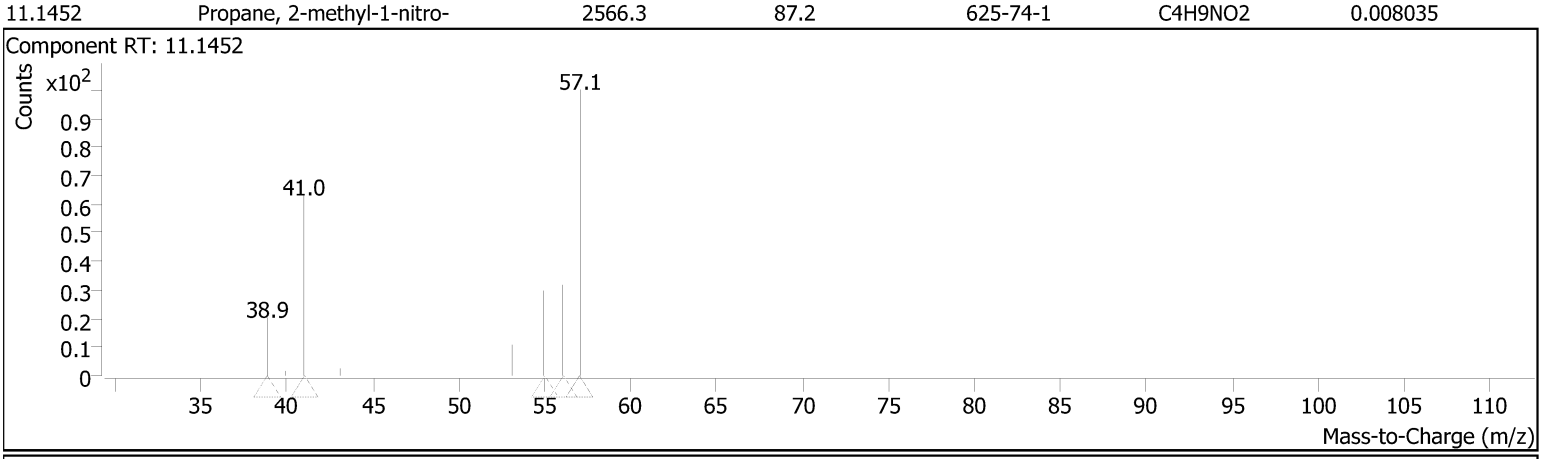


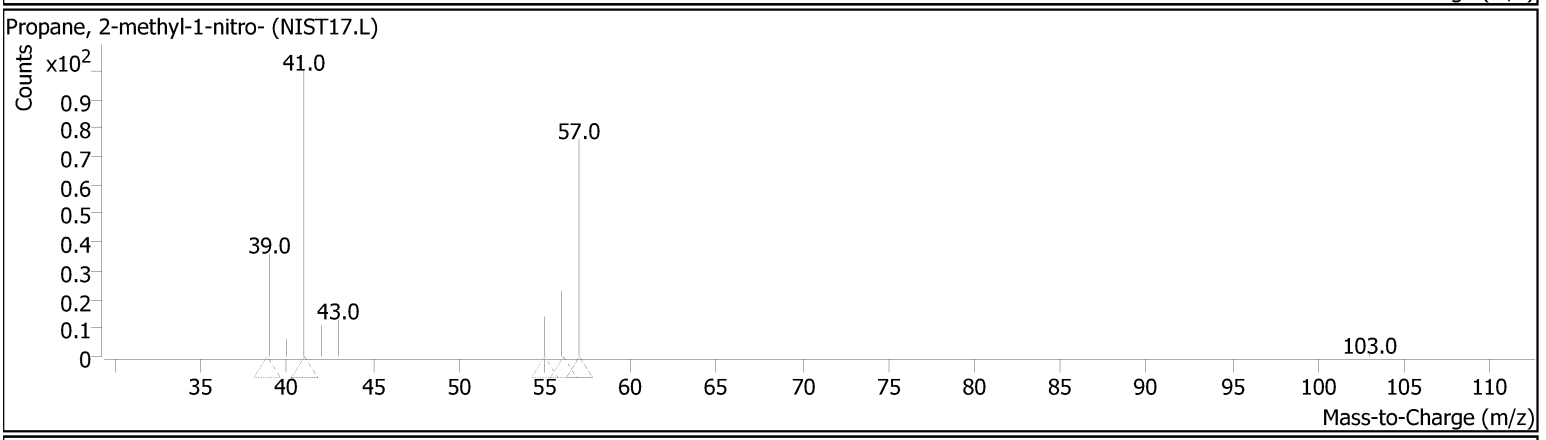


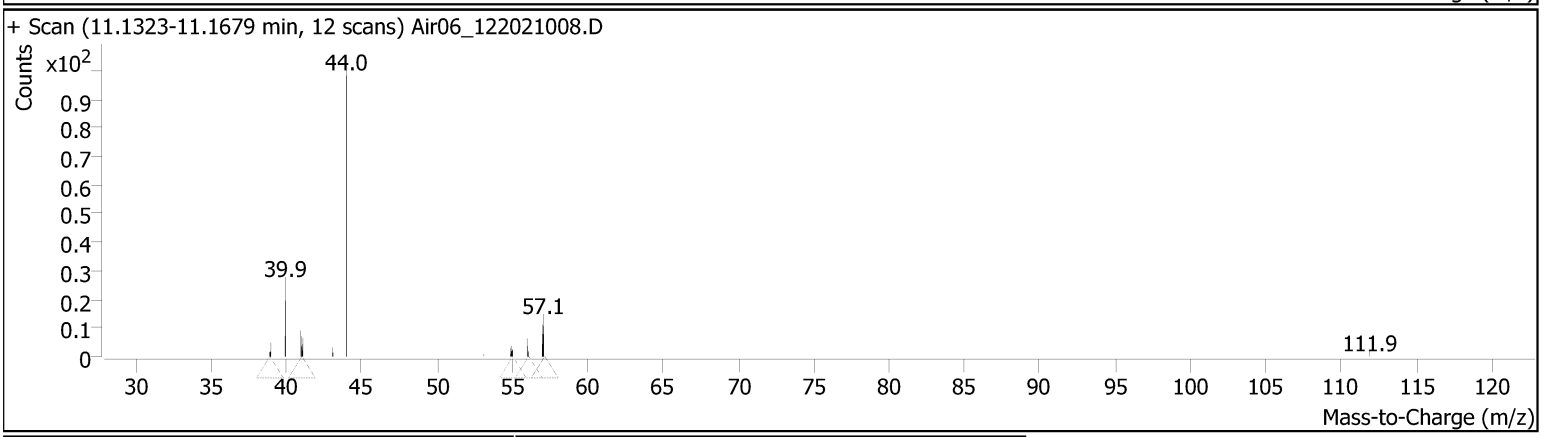


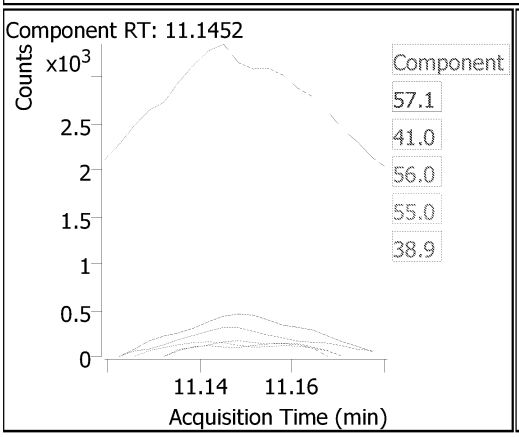


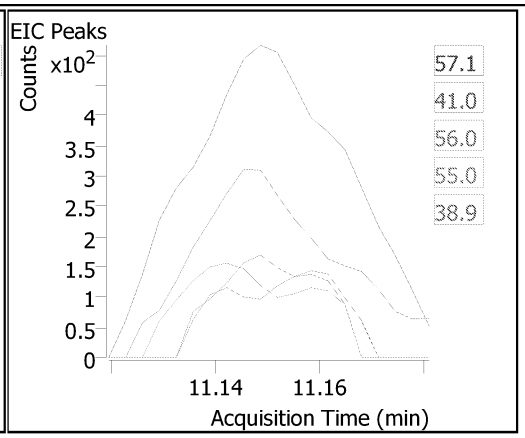
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.1452	Propane, 2-methyl-1-nitro-	2566.3	87.2	625-74-1	C4H9NO2	0.008035

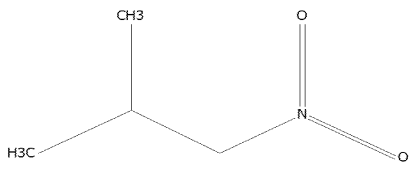




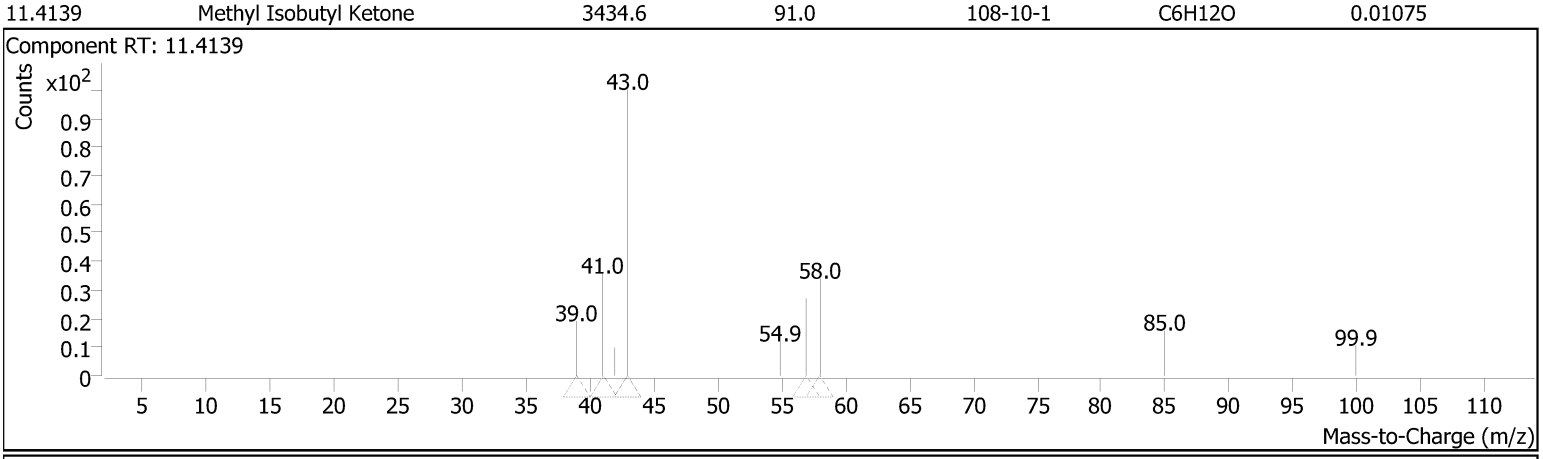


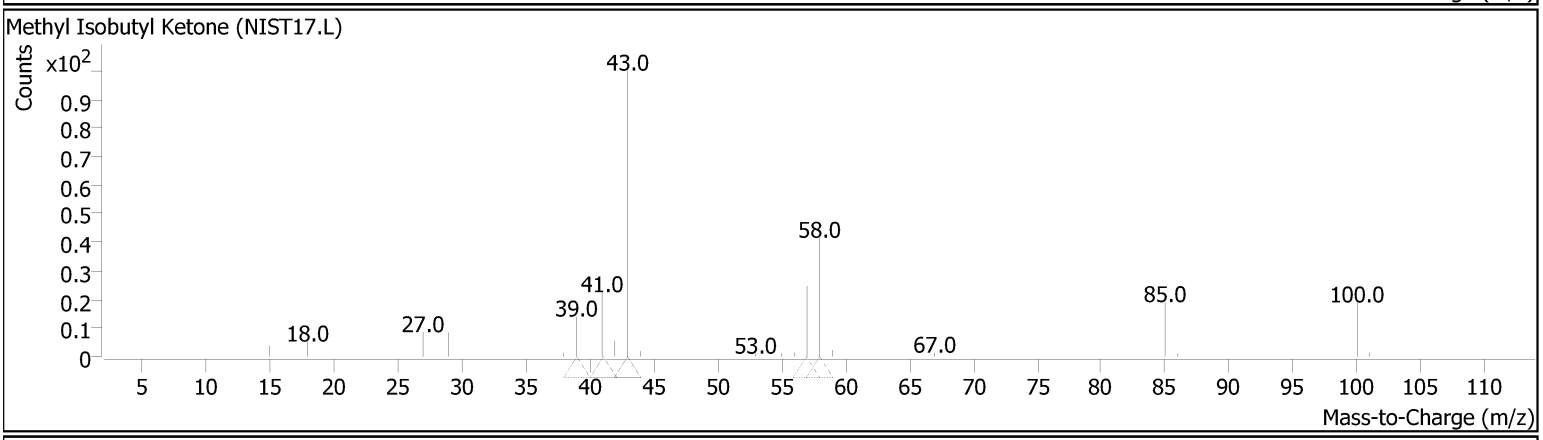


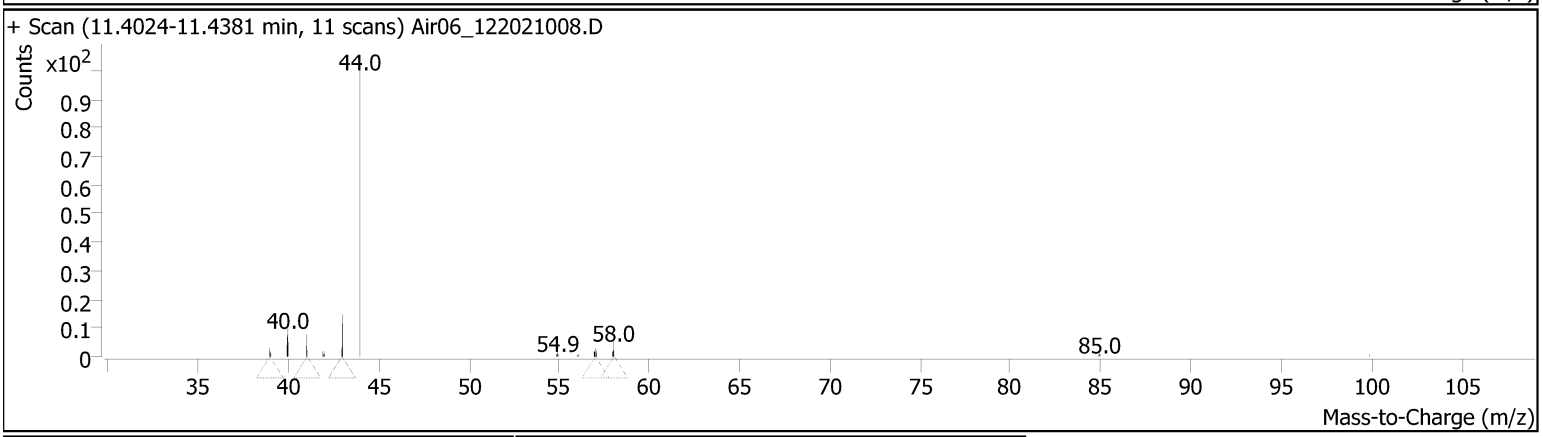


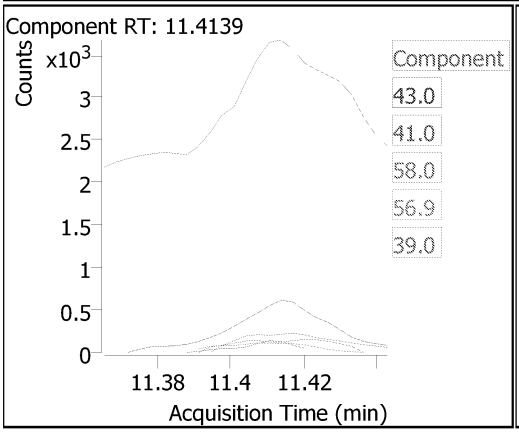


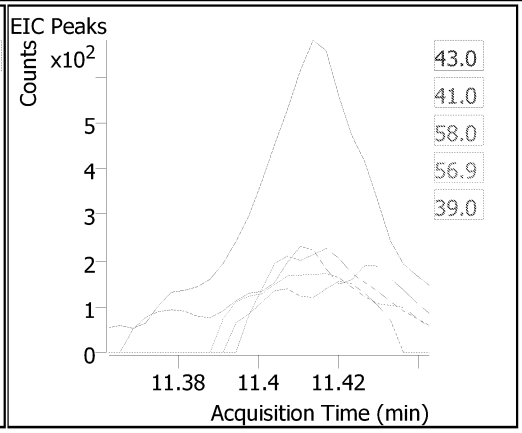
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.4139	Methyl Isobutyl Ketone	3434.6	91.0	108-10-1	C6H12O	0.01075

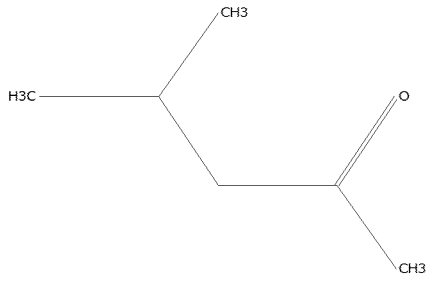




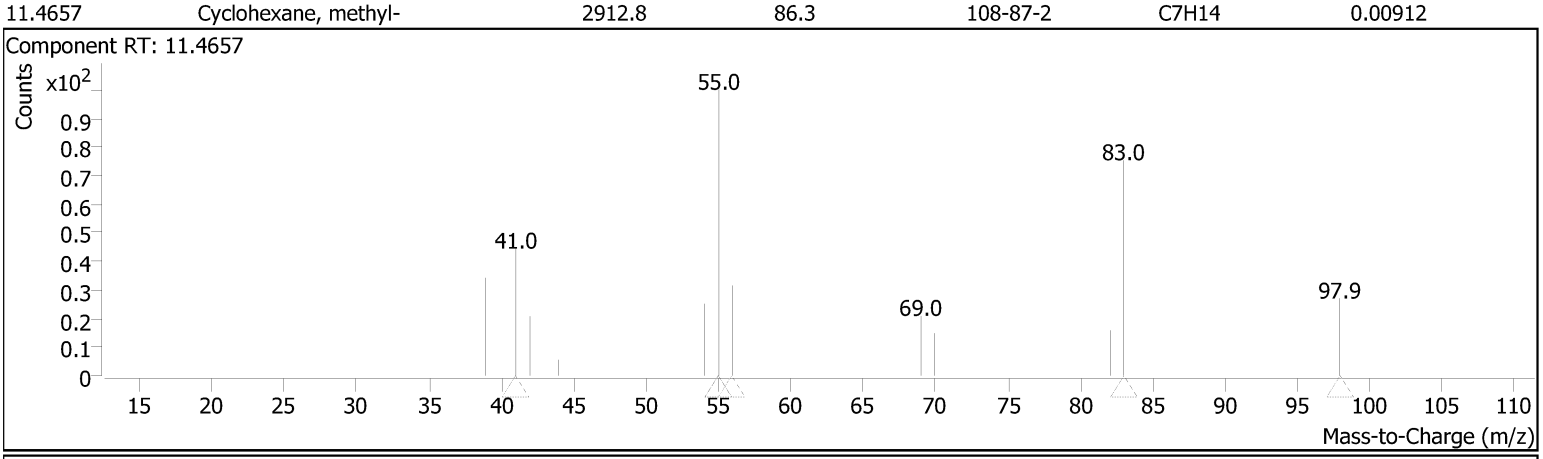


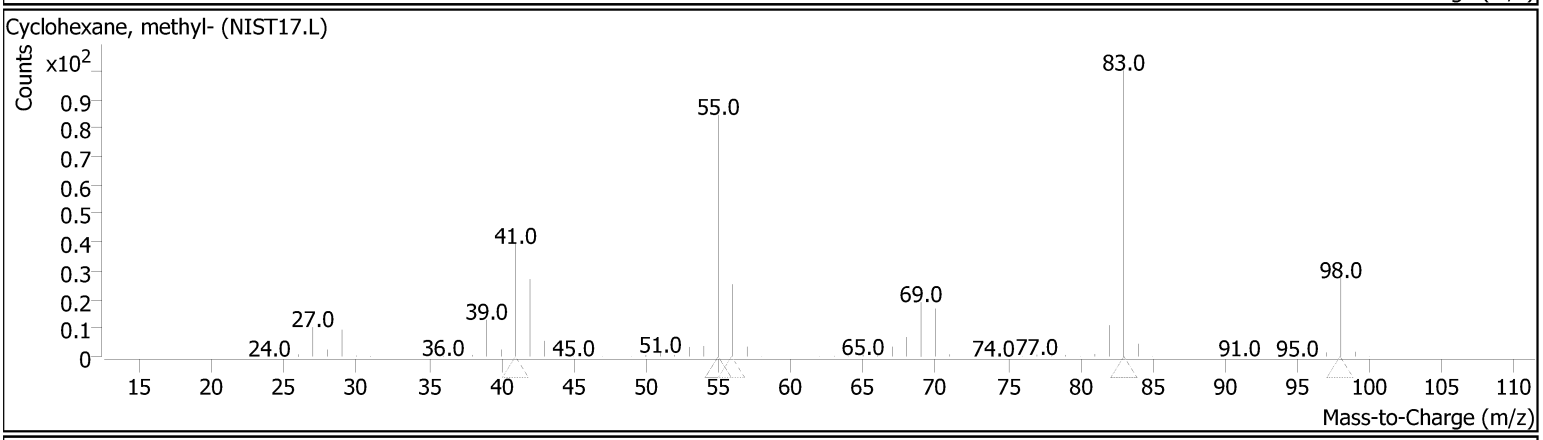


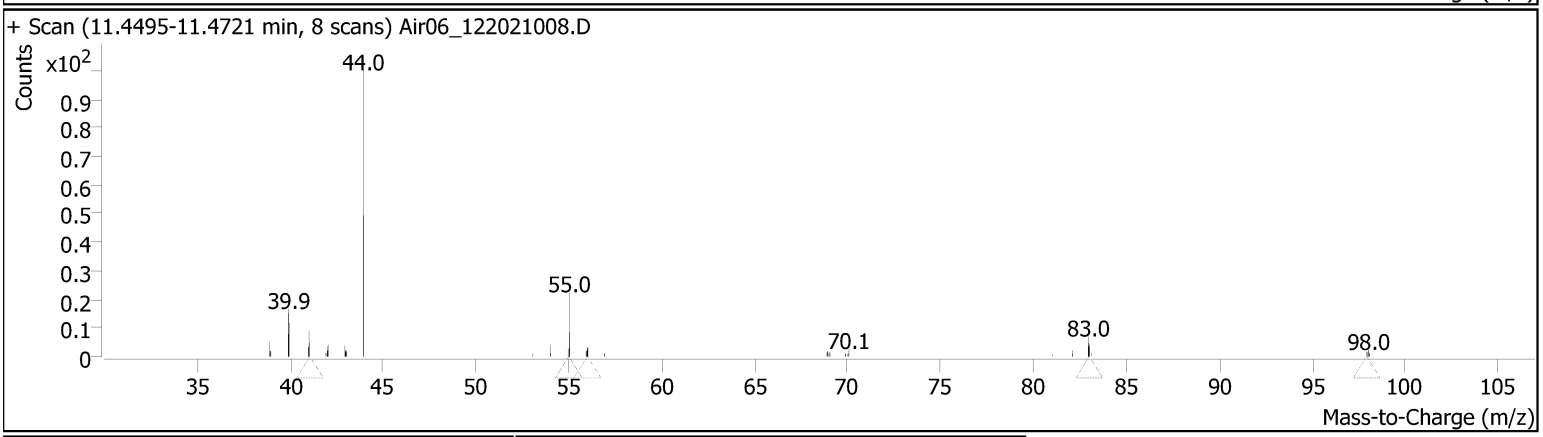


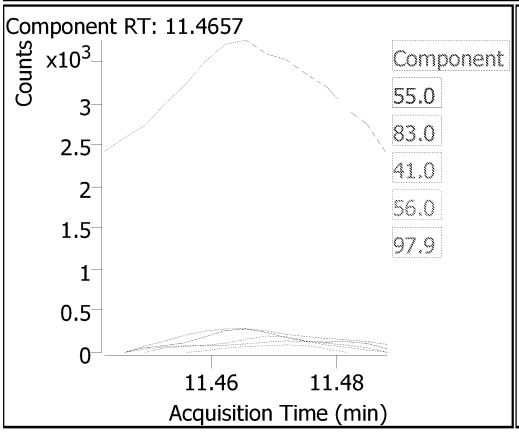


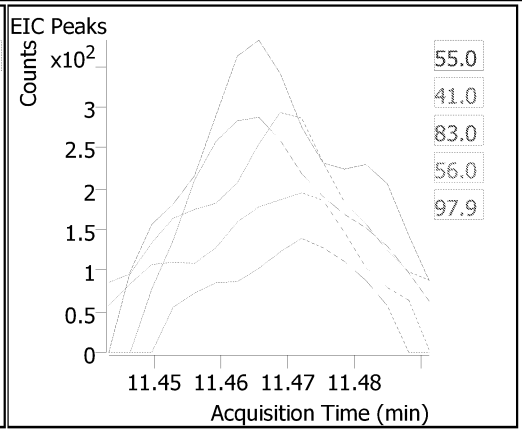
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.4657	Cyclohexane, methyl-	2912.8	86.3	108-87-2	C7H14	0.00912

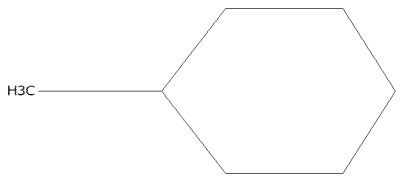




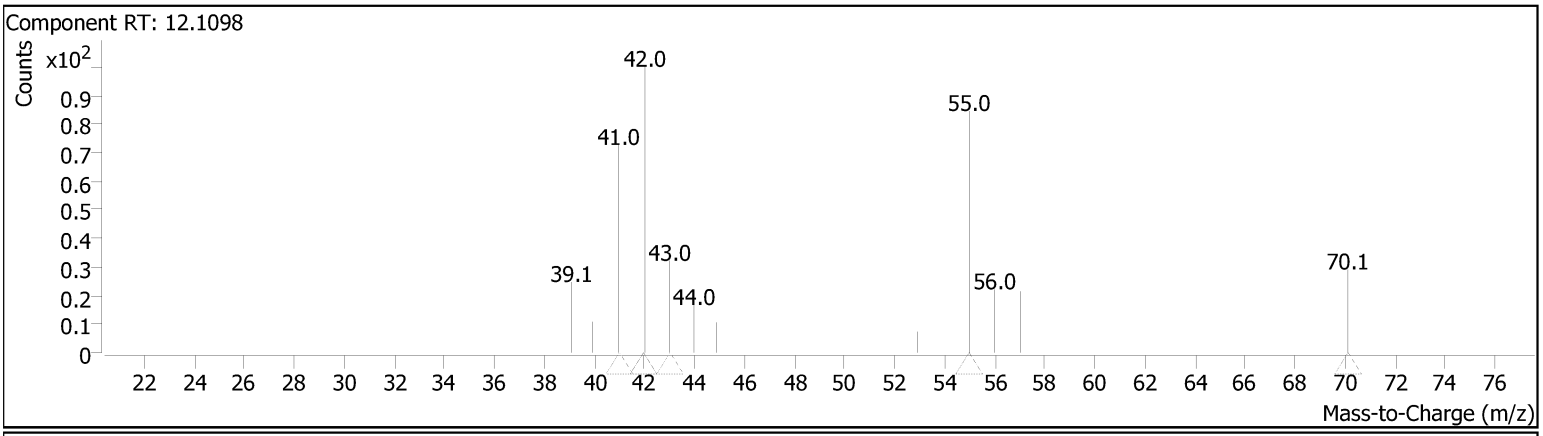


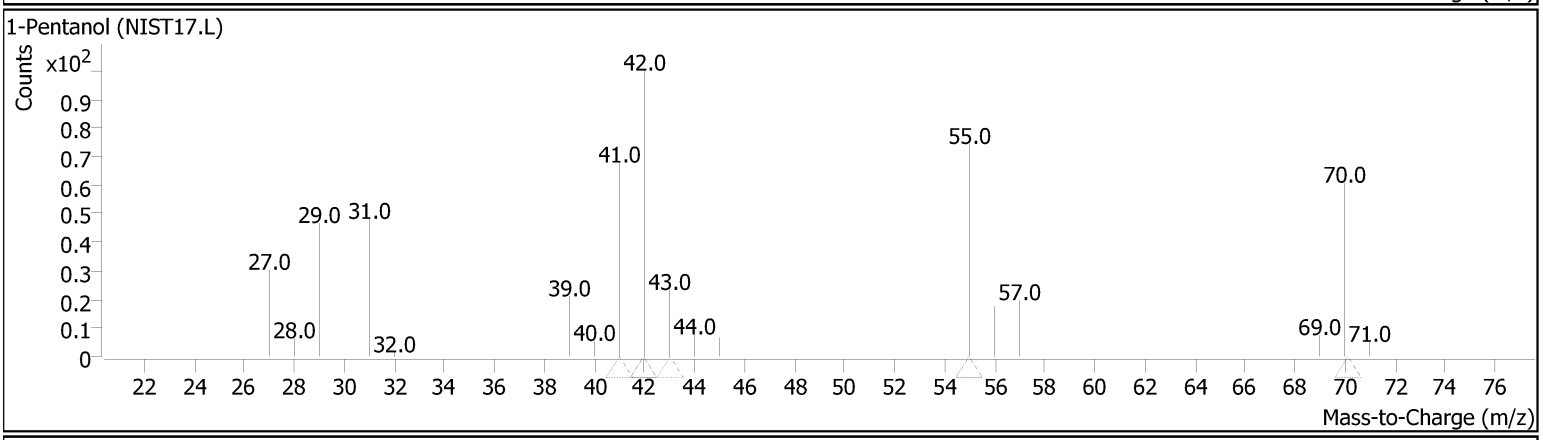


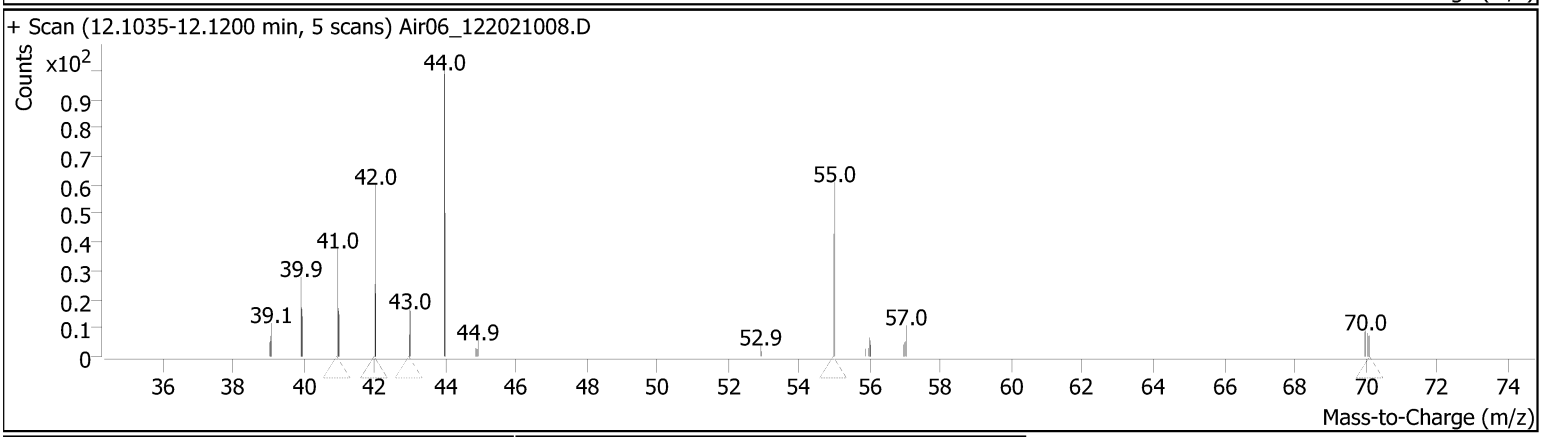


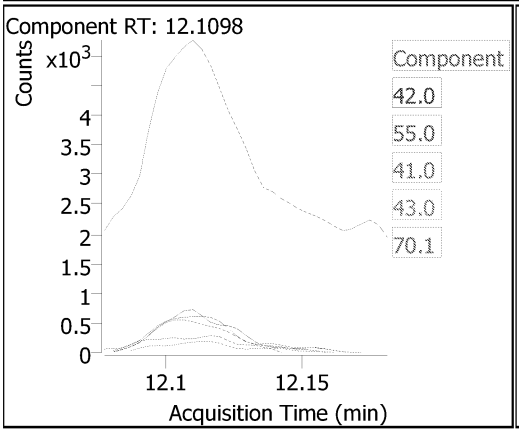


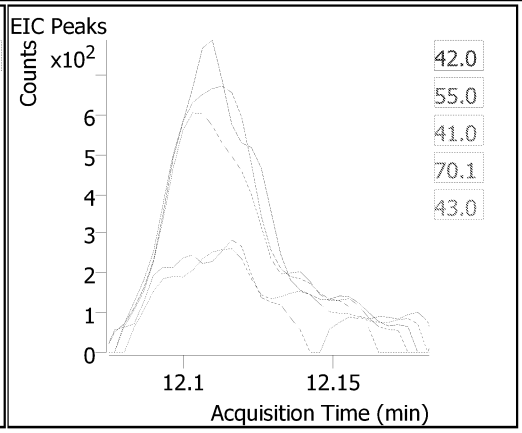
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.1098	1-Pentanol	7846.5	91.7	71-41-0	C5H12O	0.02012





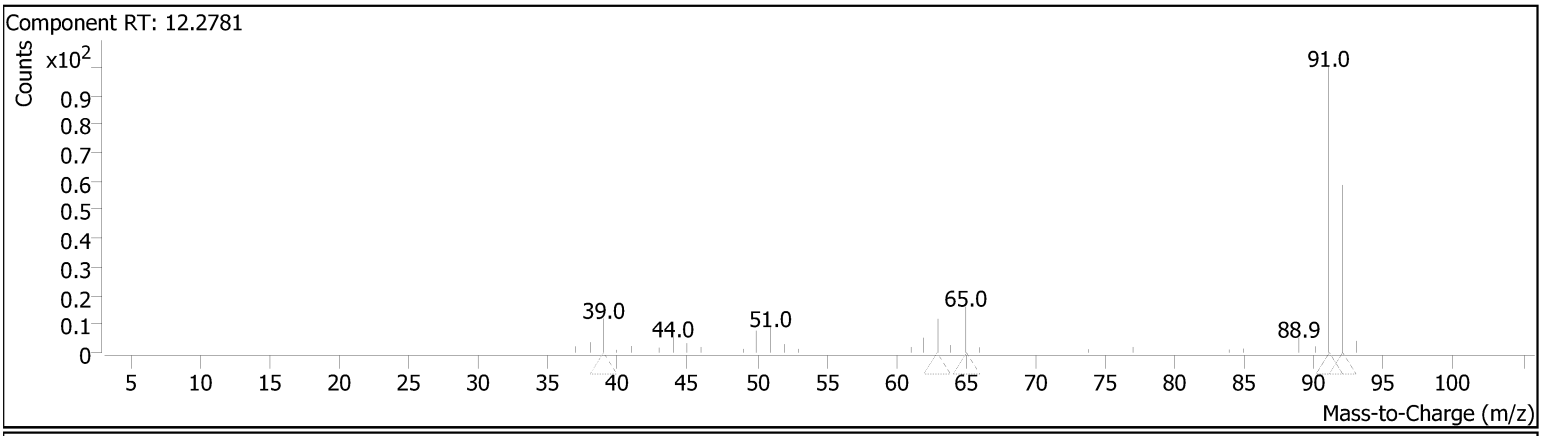


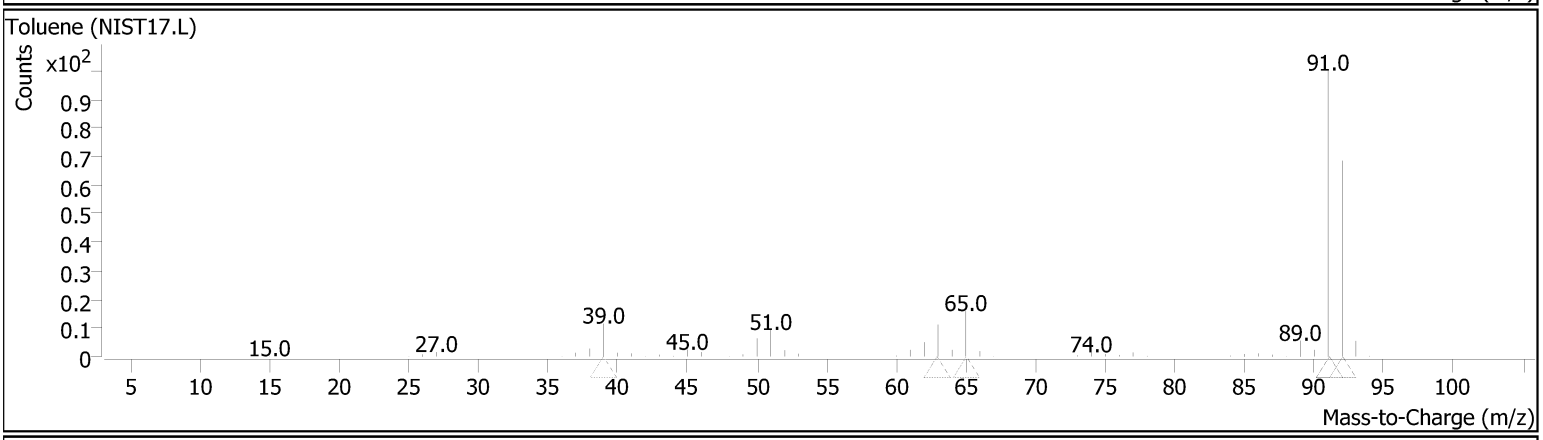


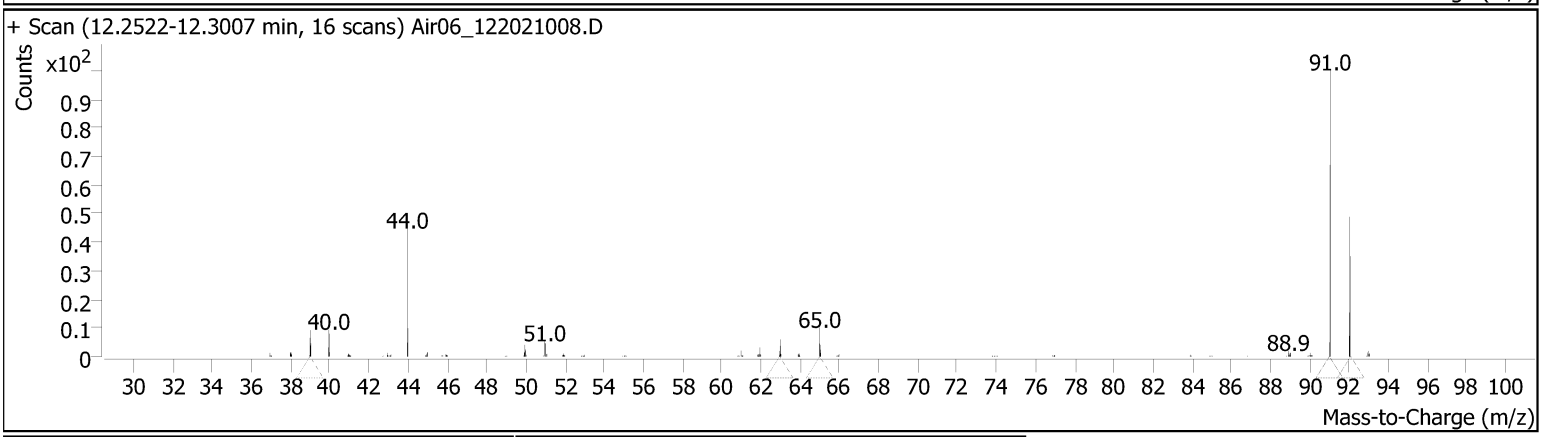


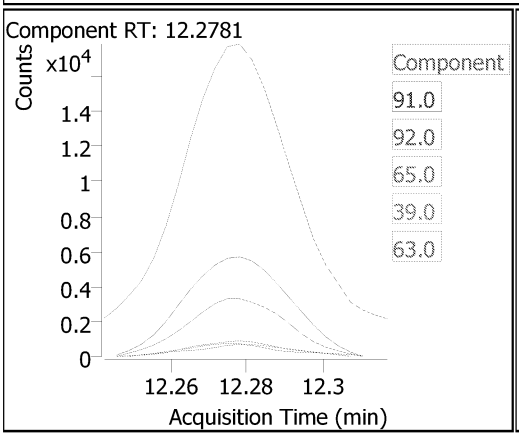


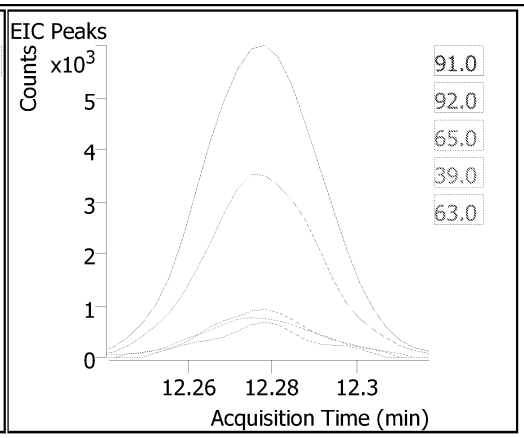
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.2781	Toluene	30229.6	96.8	108-88-3	C7H8	0.0775

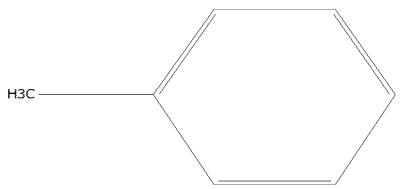




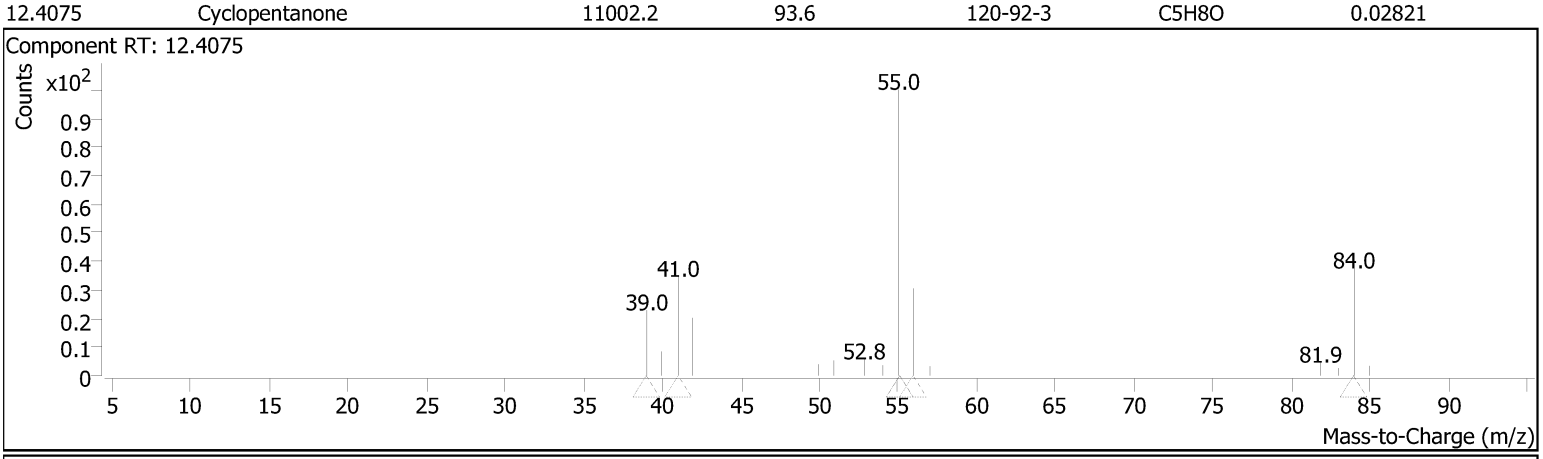


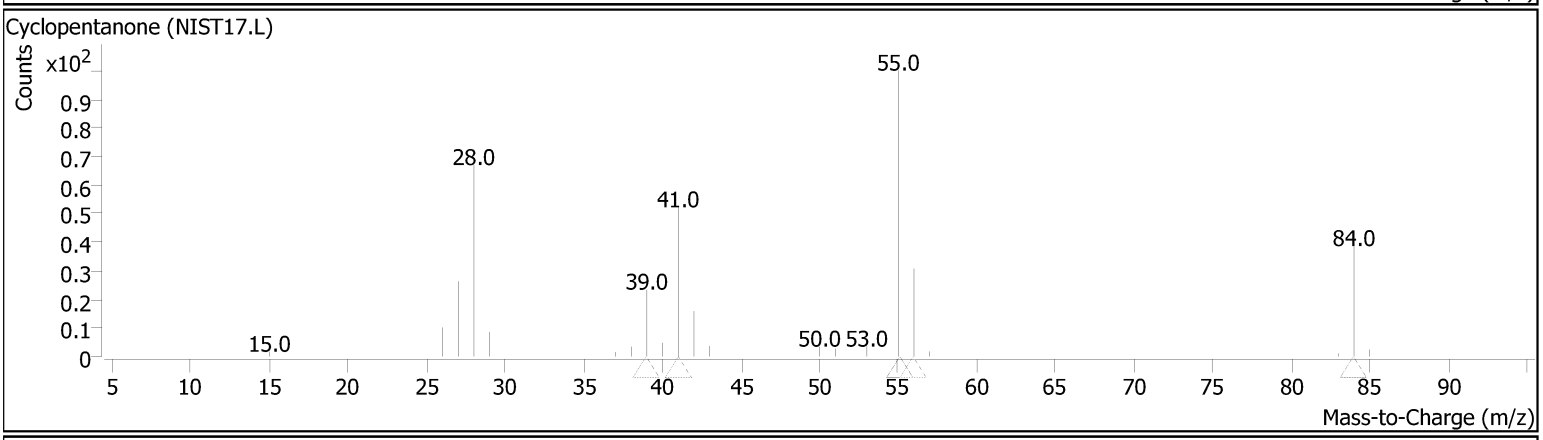


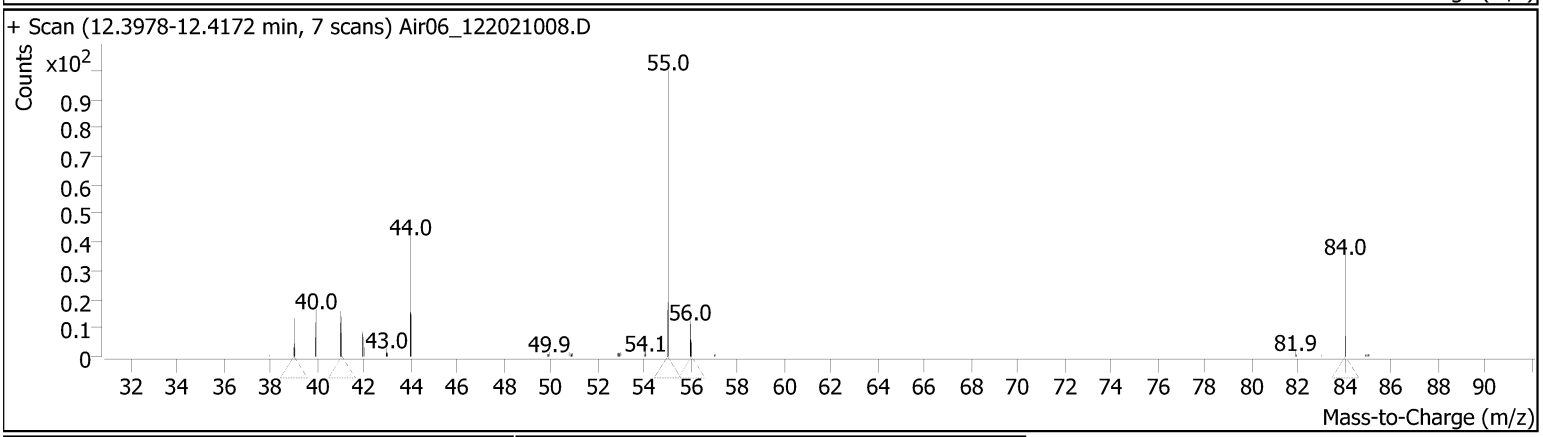


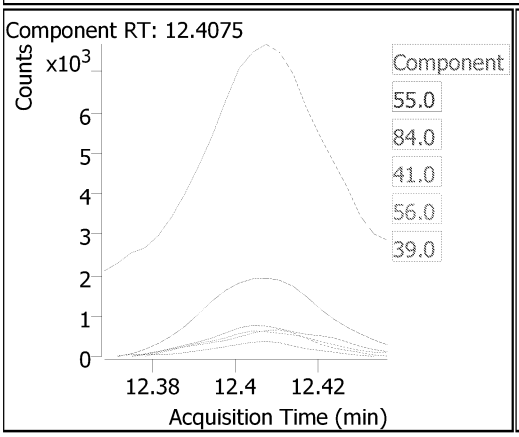


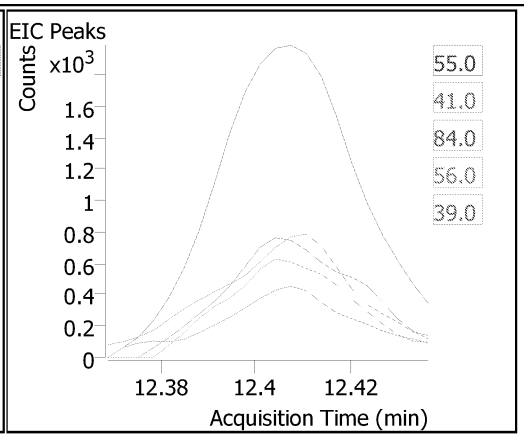
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.4075	Cyclopentanone	11002.2	93.6	120-92-3	C5H8O	0.02821

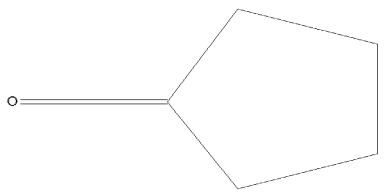




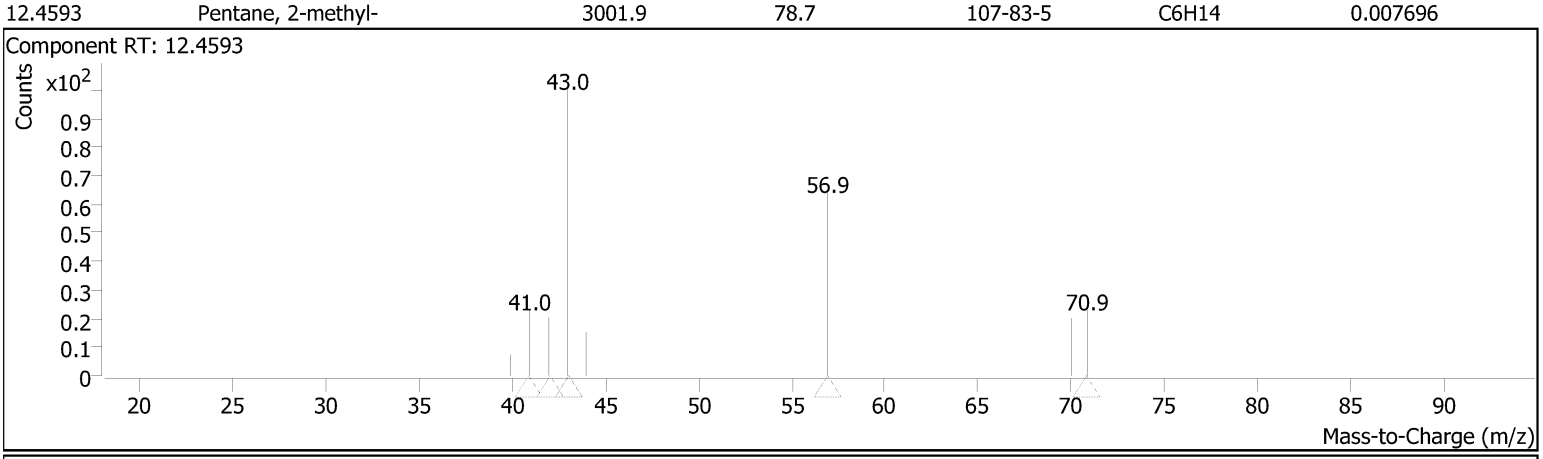


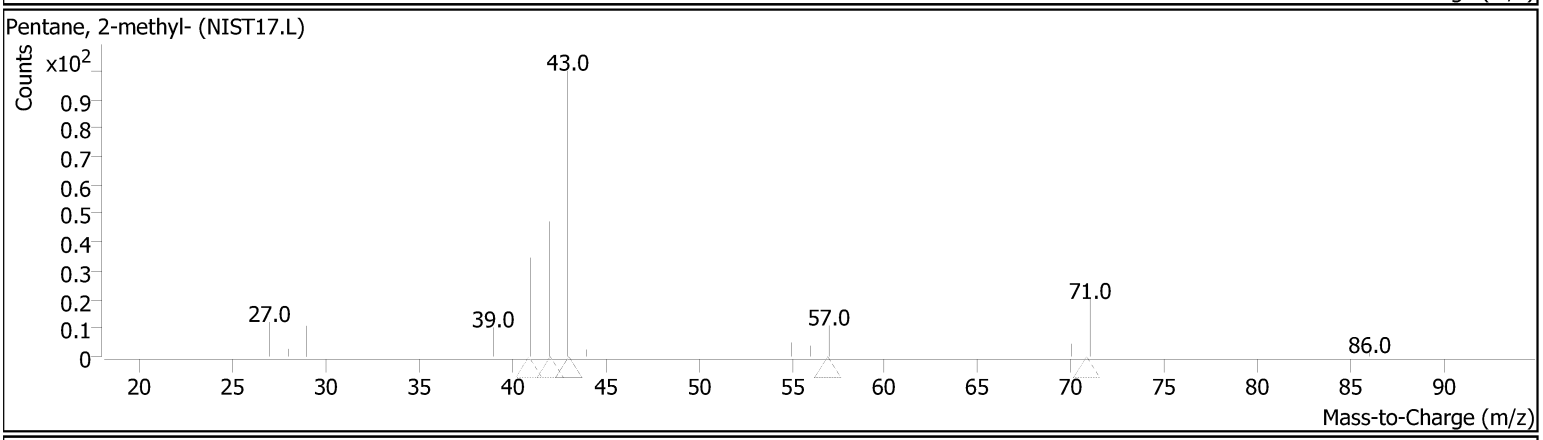


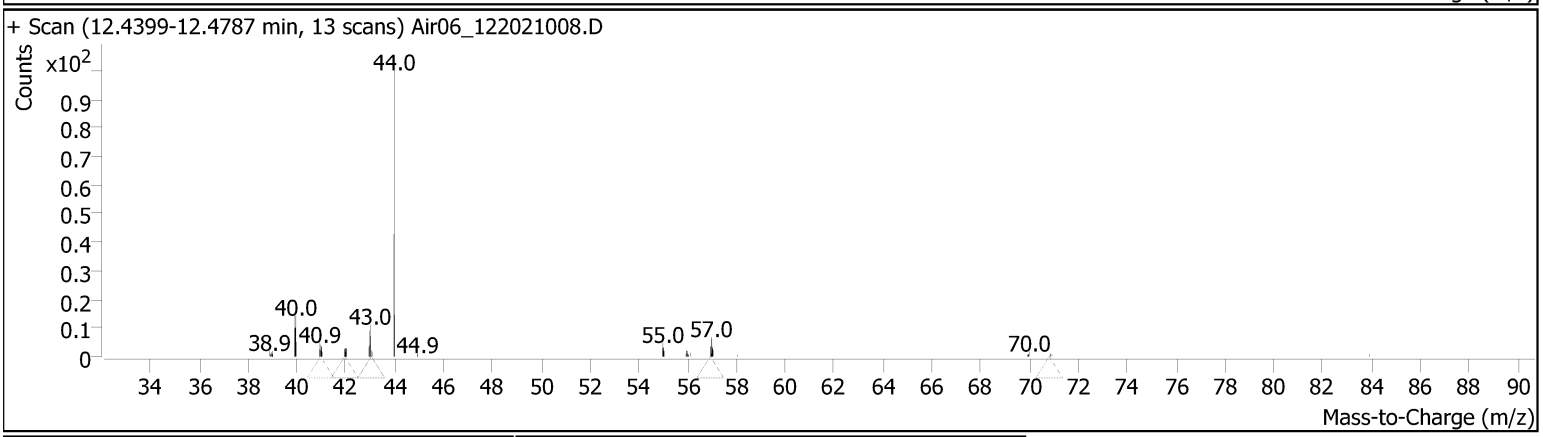


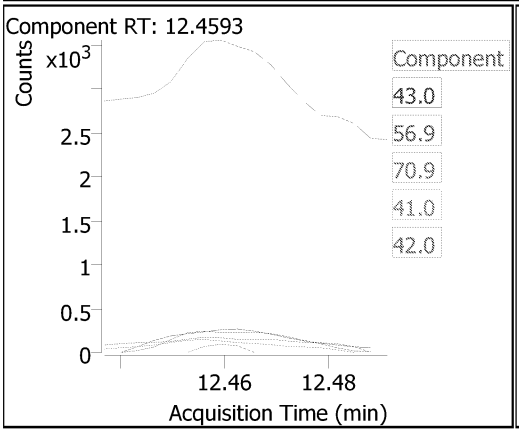


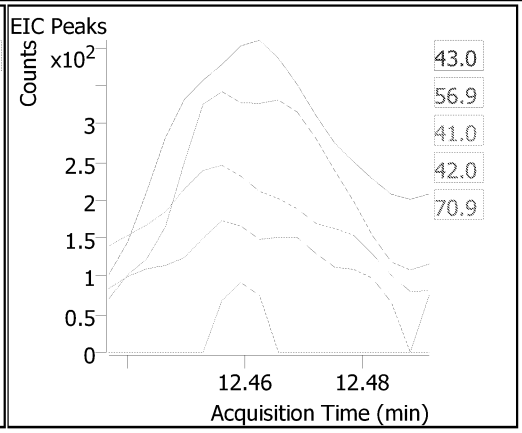
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.4593	Pentane, 2-methyl-	3001.9	78.7	107-83-5	C6H14	0.007696

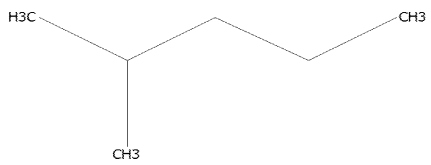




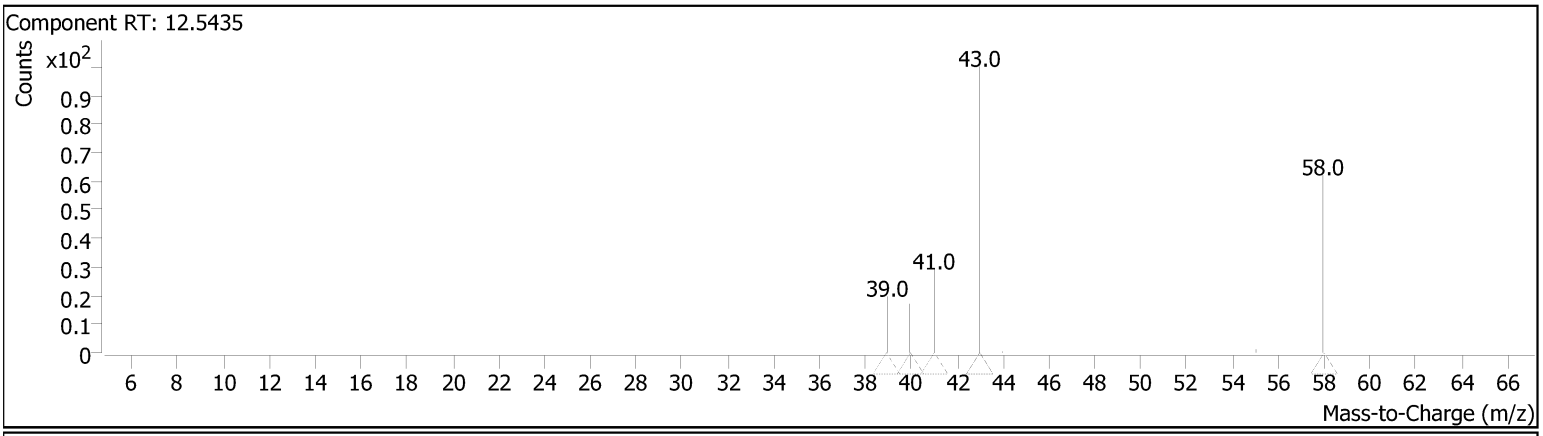


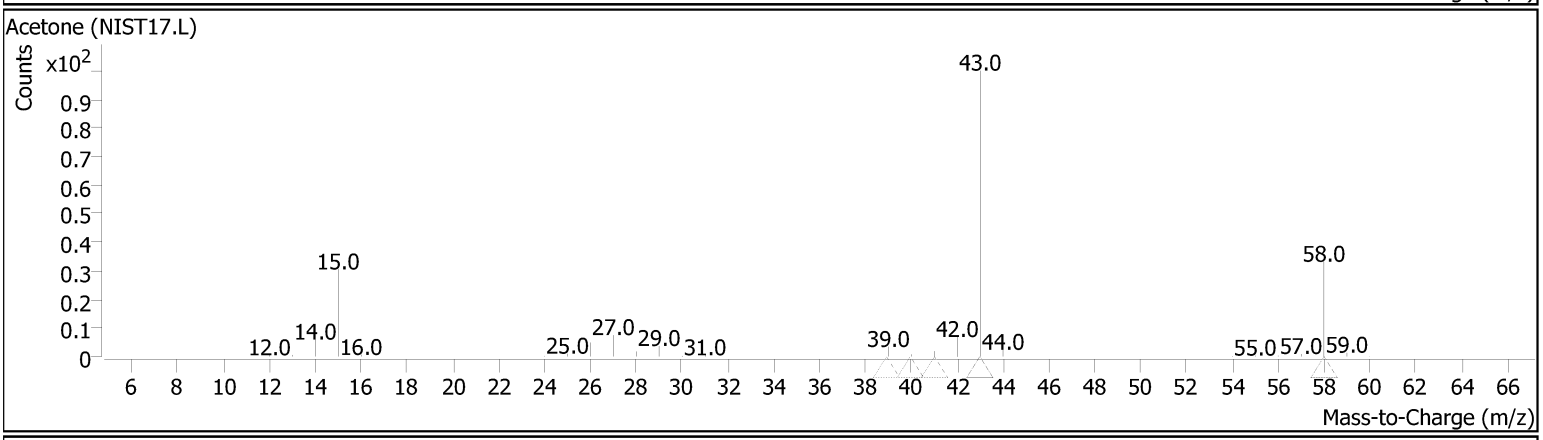


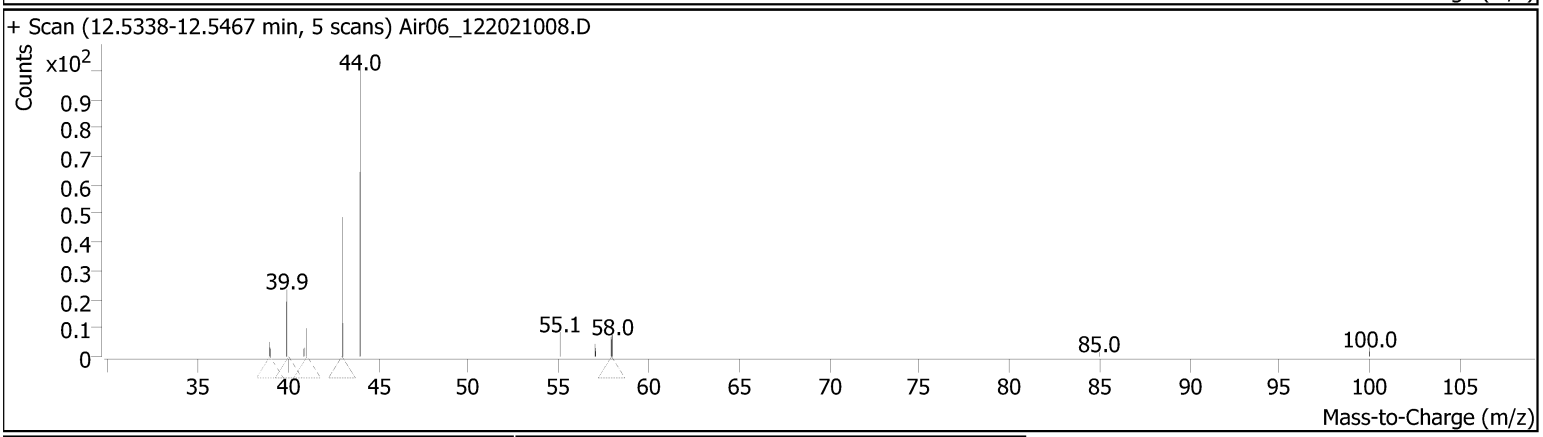


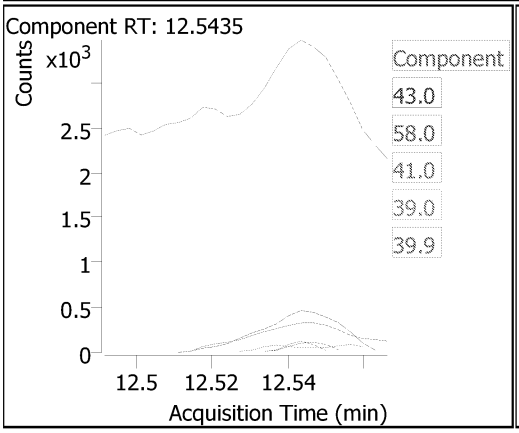


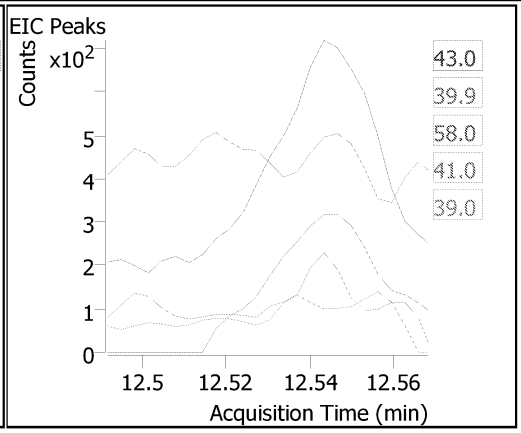
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.5435	Acetone	3275.0	74.4	67-64-1	C3H6O	0.008396

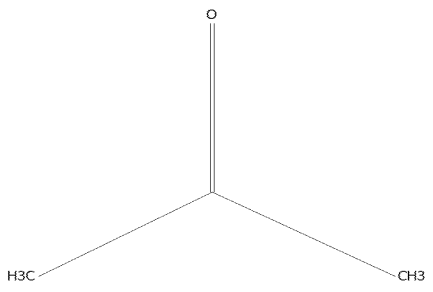




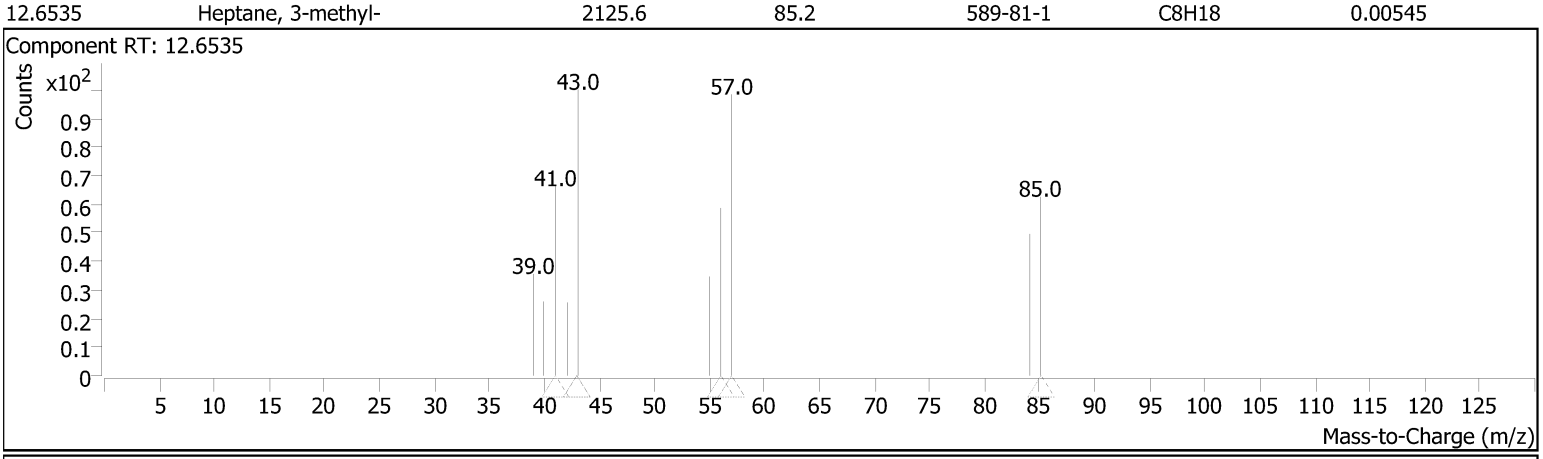


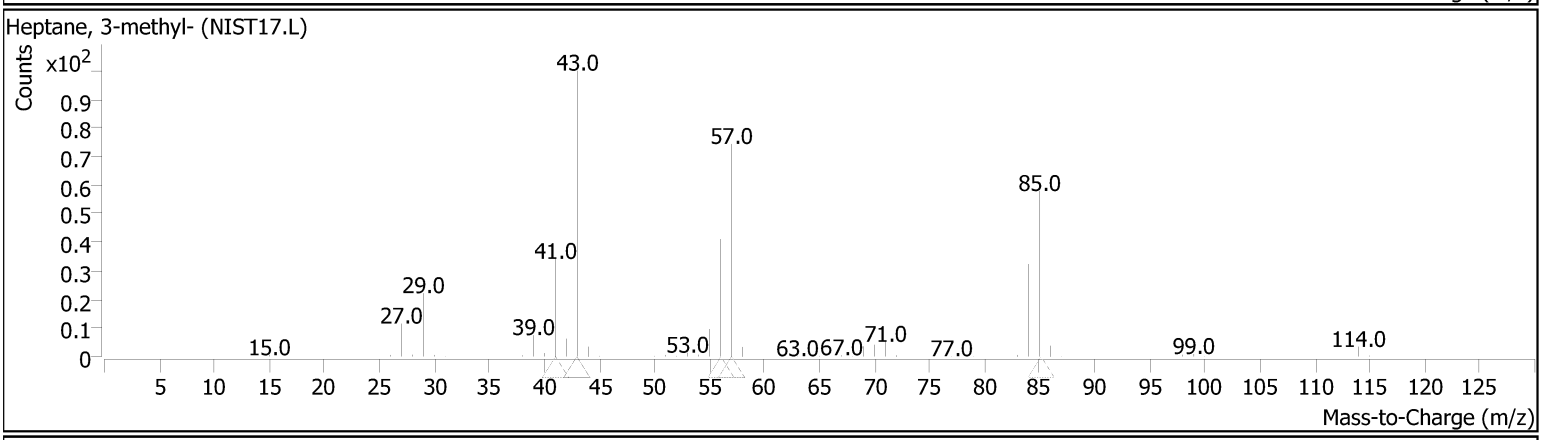


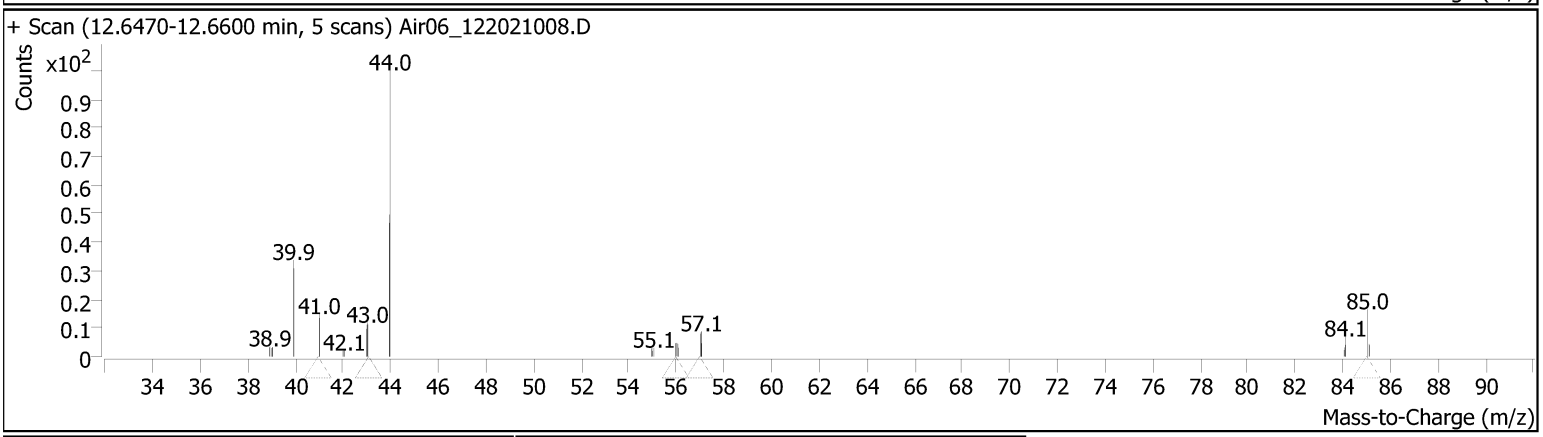


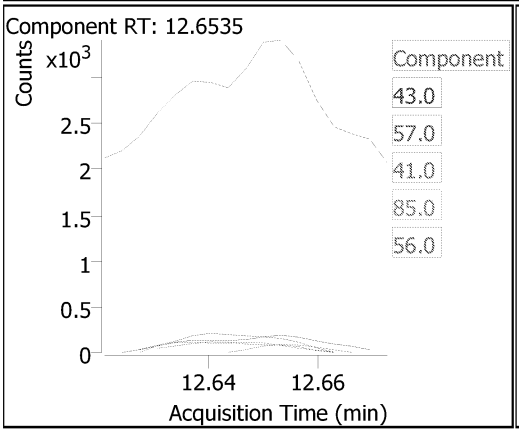


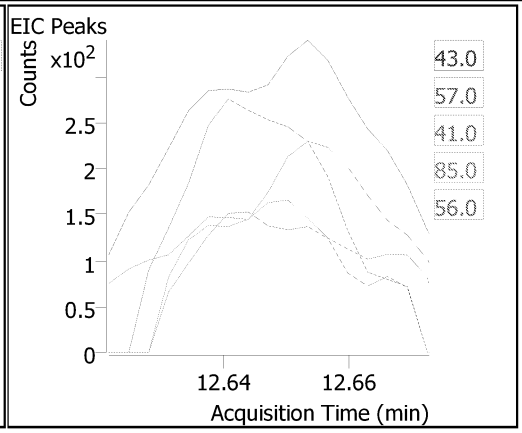
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.6535	Heptane, 3-methyl-	2125.6	85.2	589-81-1	C8H18	0.00545

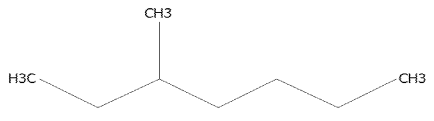




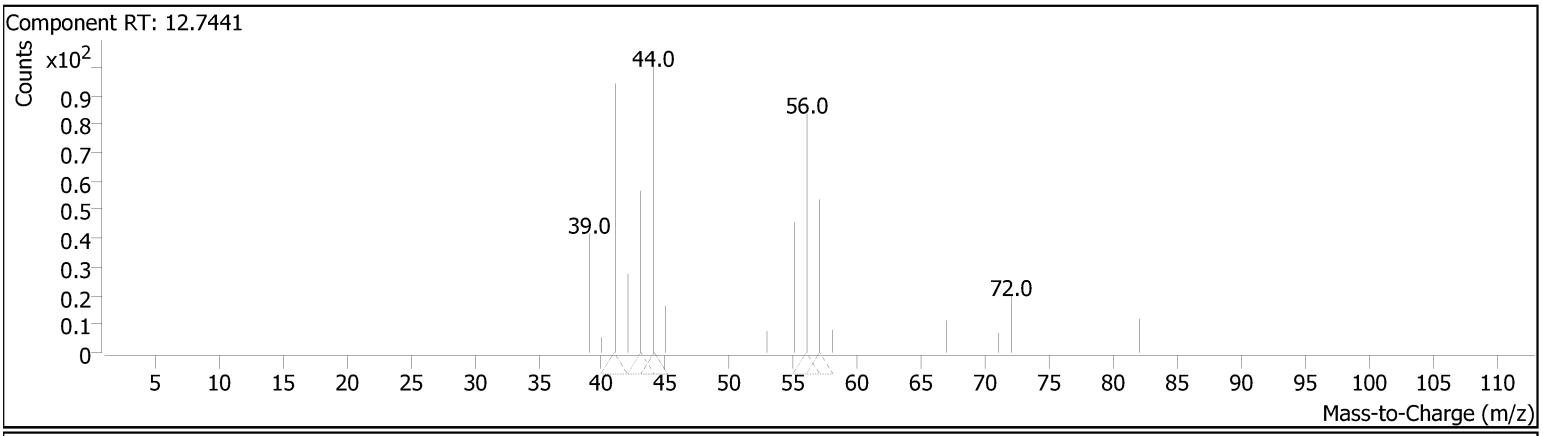


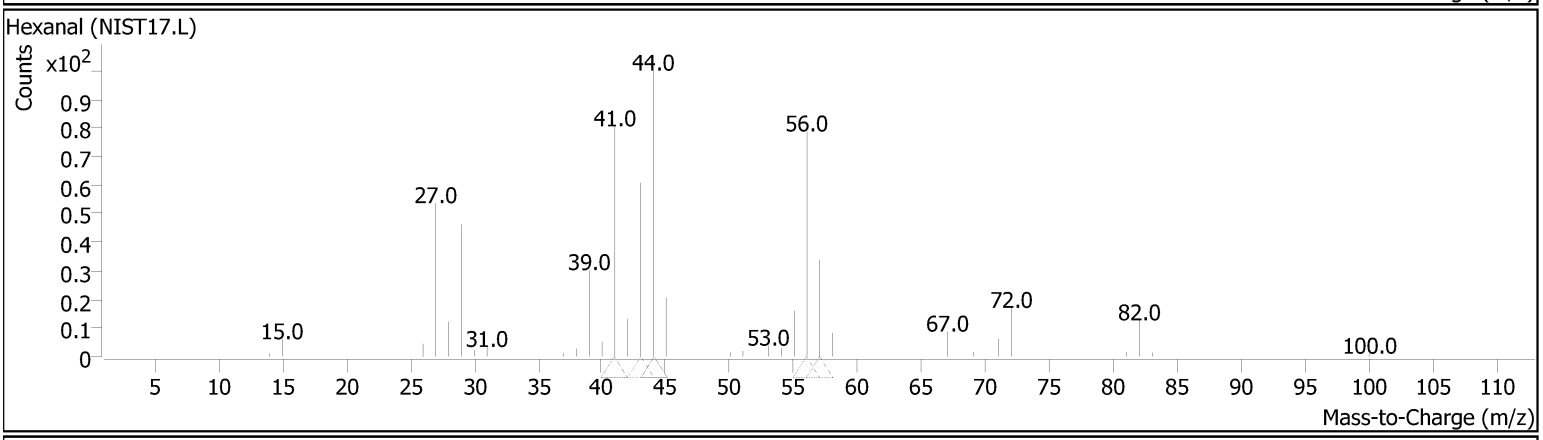


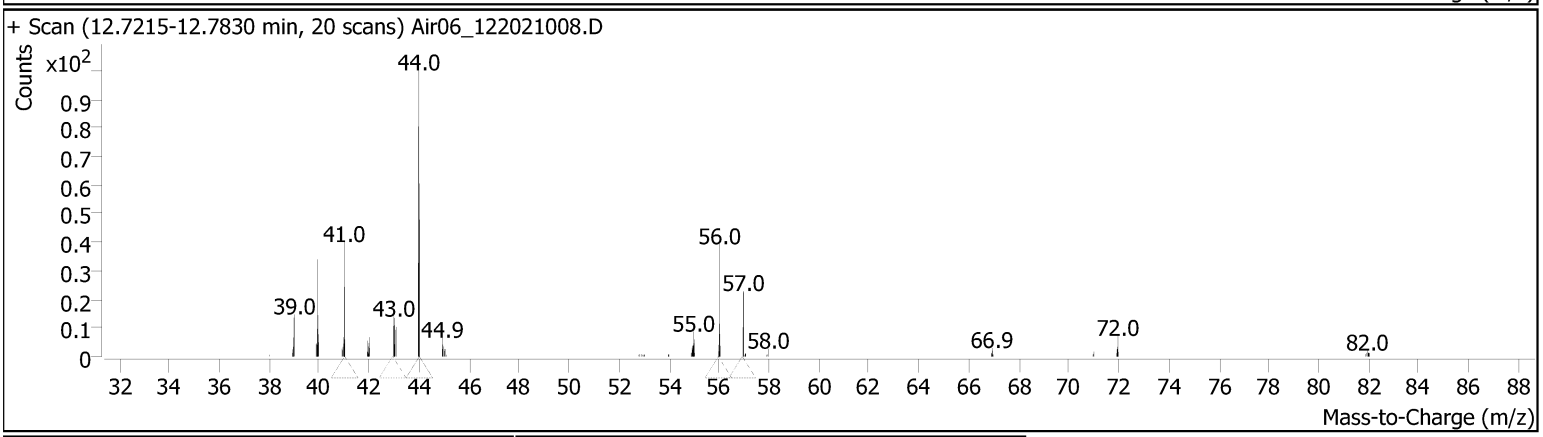


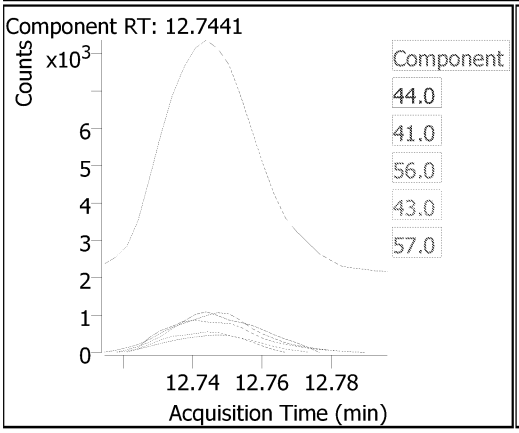


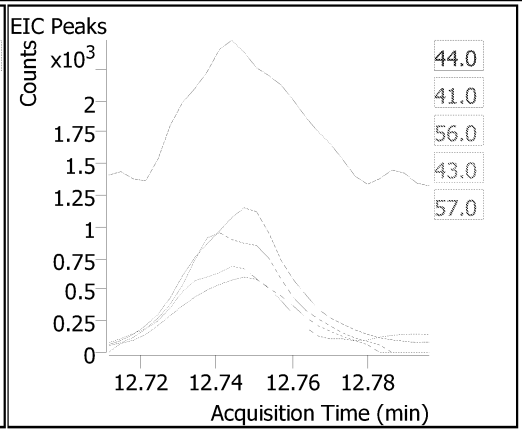
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.7441	Hexanal	12197.2	94.7	66-25-1	C6H12O	0.03127





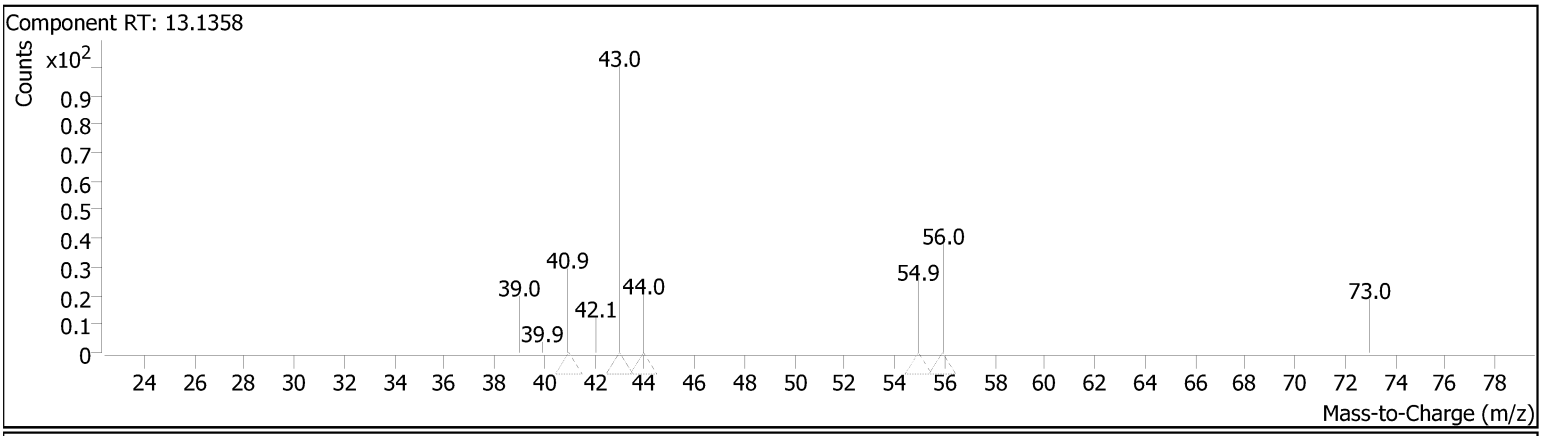


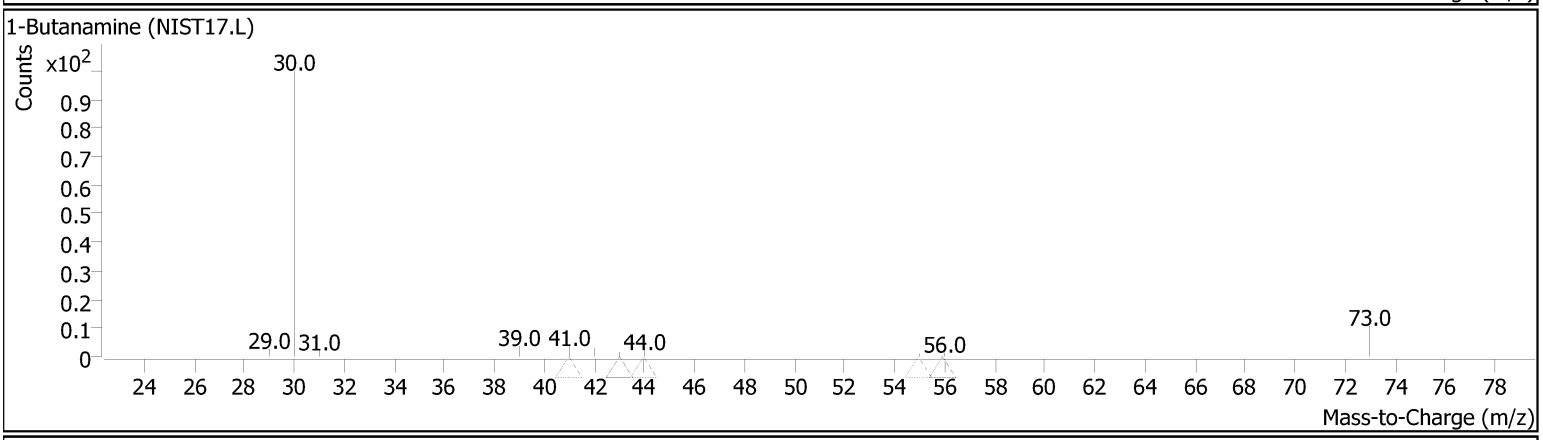


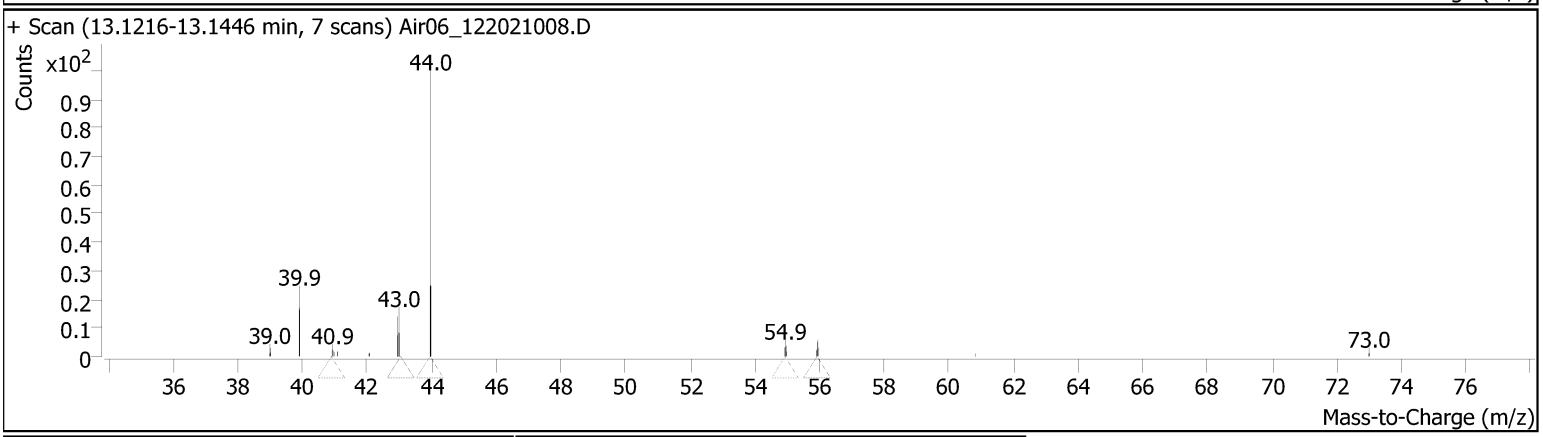


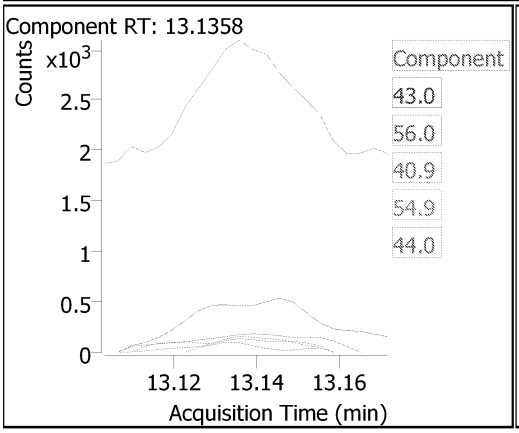


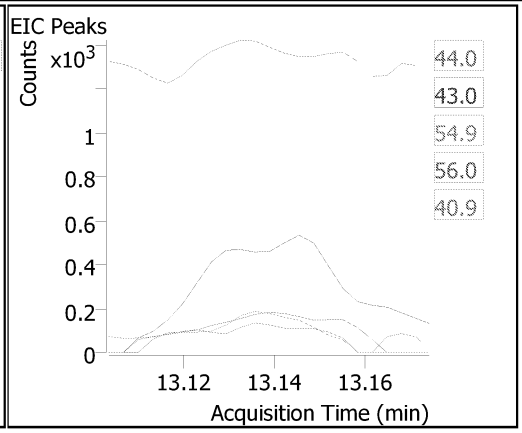
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.1358	1-Butanamine	2327.5	80.2	109-73-9	C4H11N	0.005967

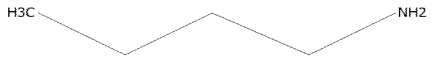




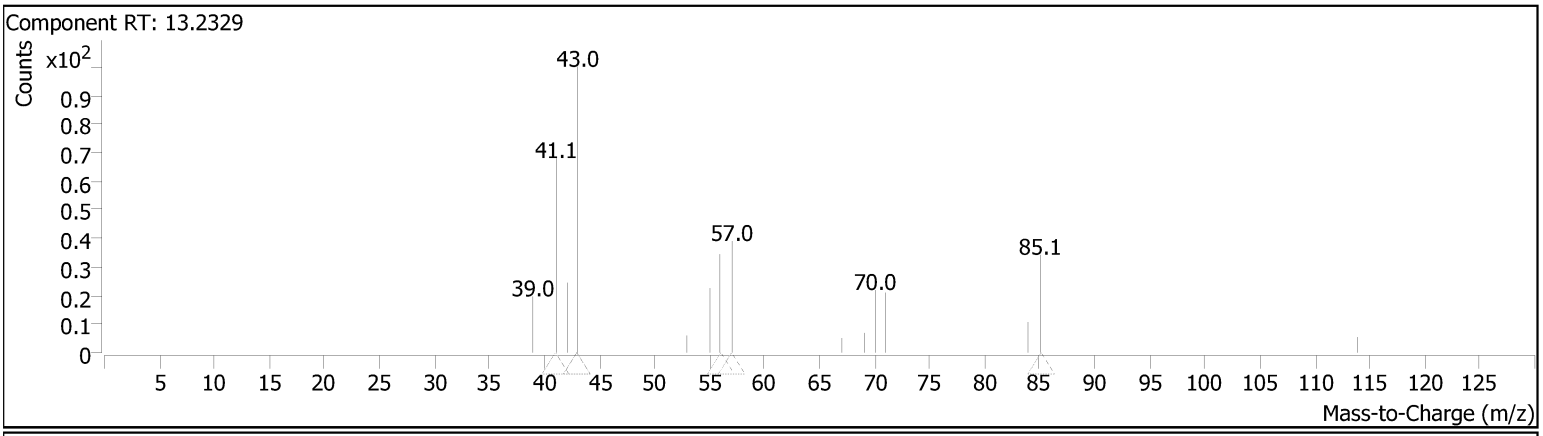


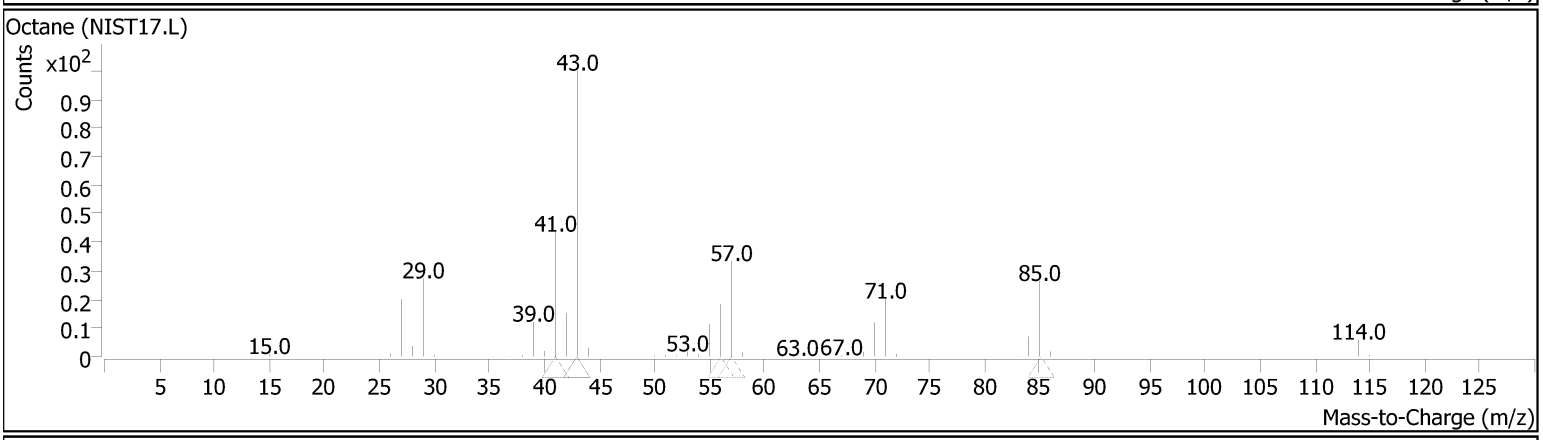


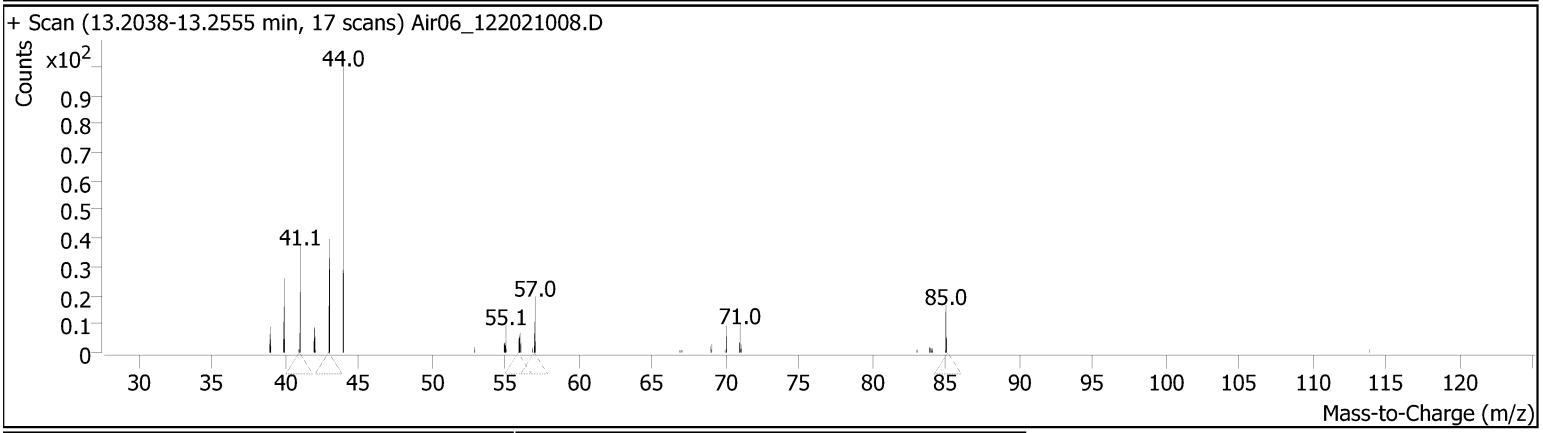


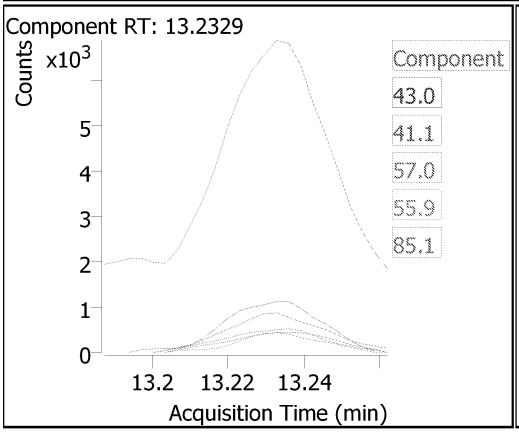


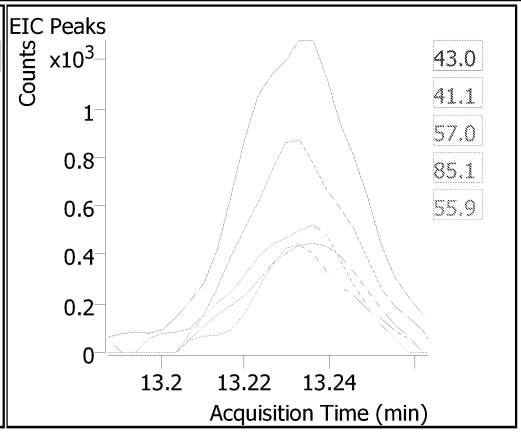
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.2329	Octane	9538.8	93.4	111-65-9	C8H18	0.02445





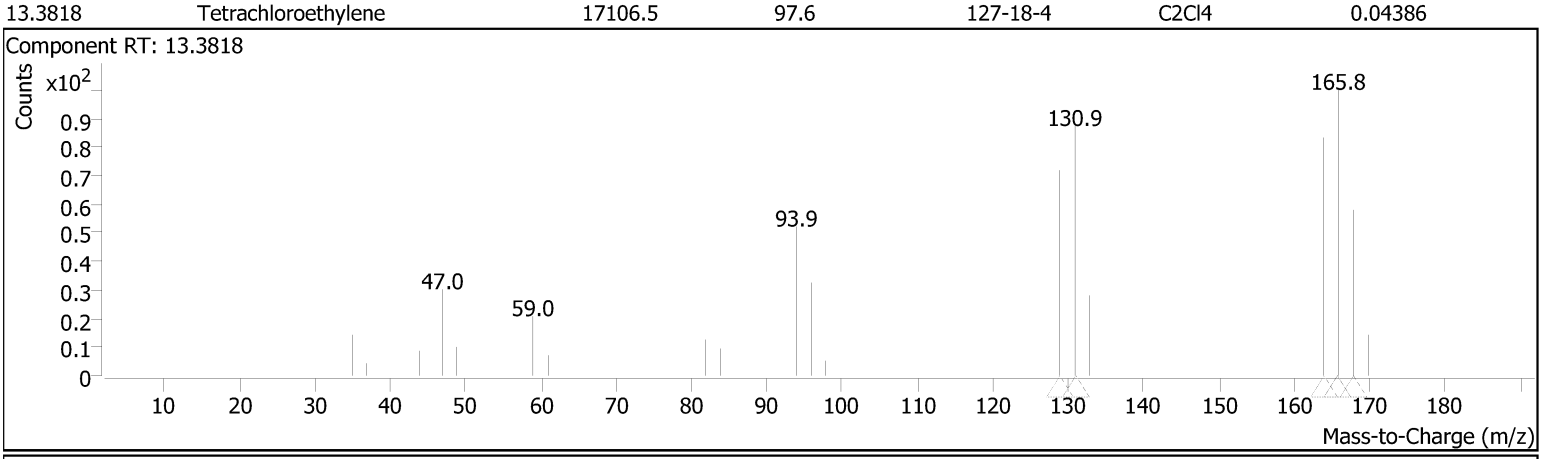


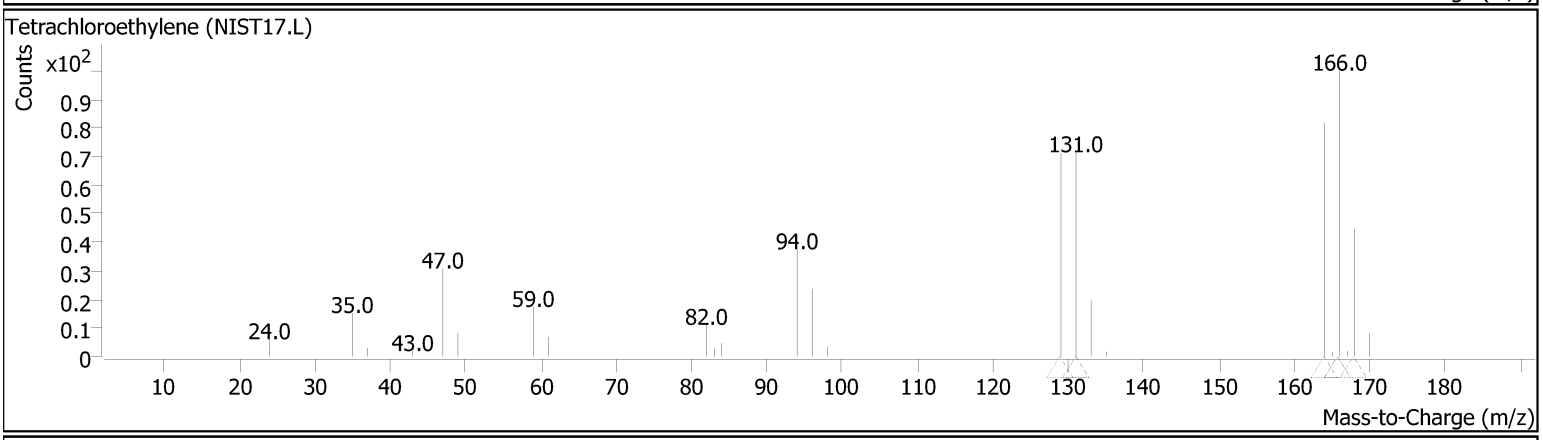


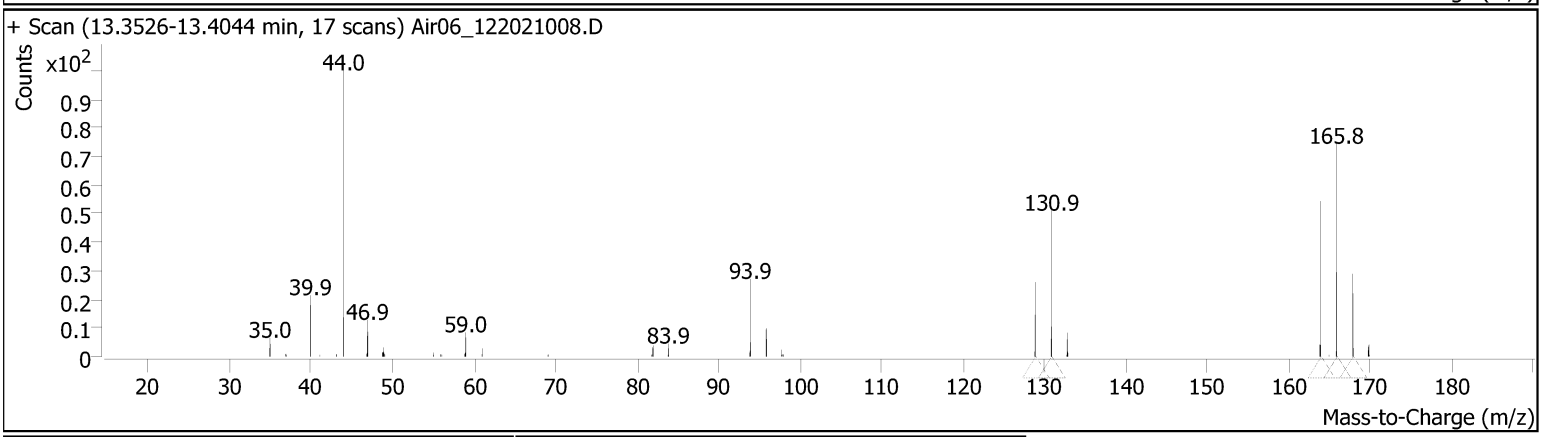


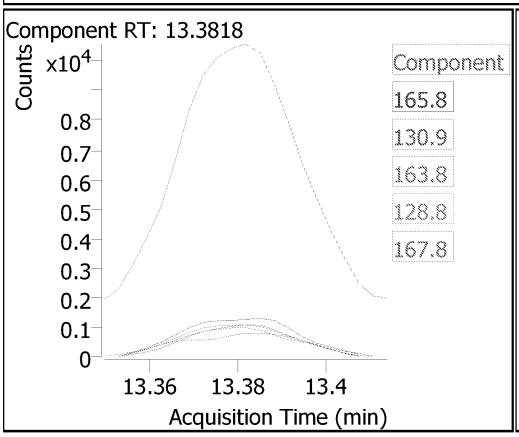


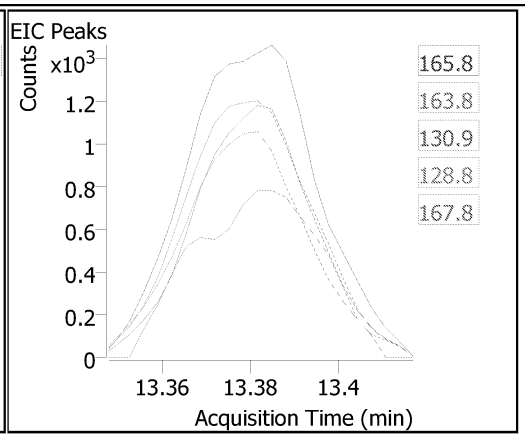
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.3818	Tetrachloroethylene	17106.5	97.6	127-18-4	C2Cl4	0.04386

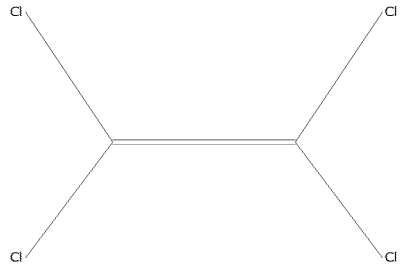




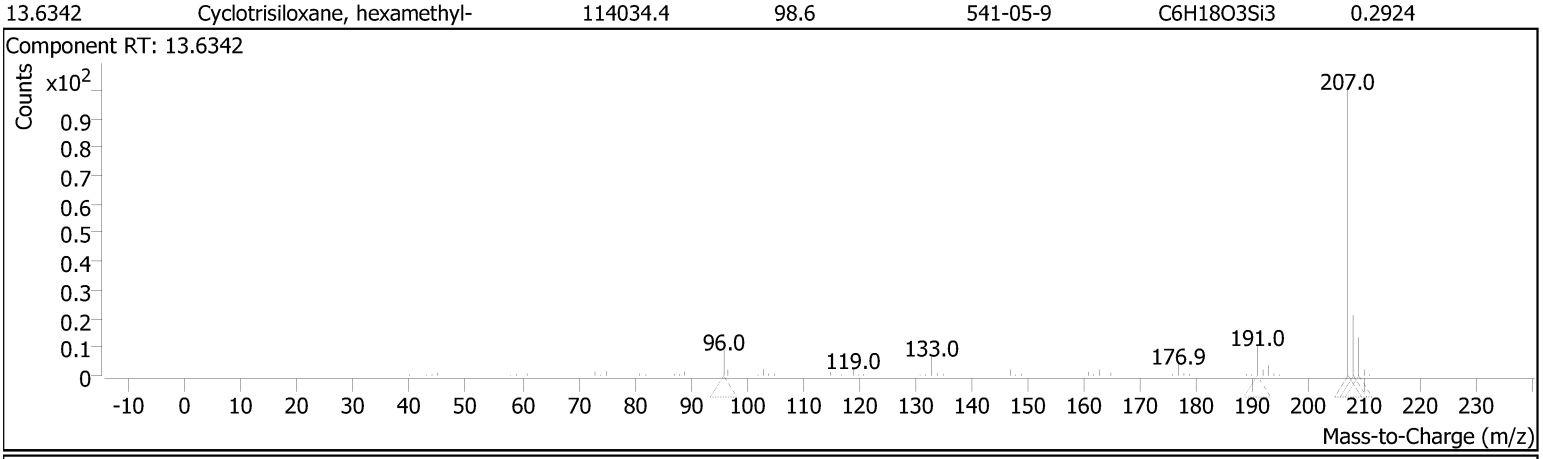


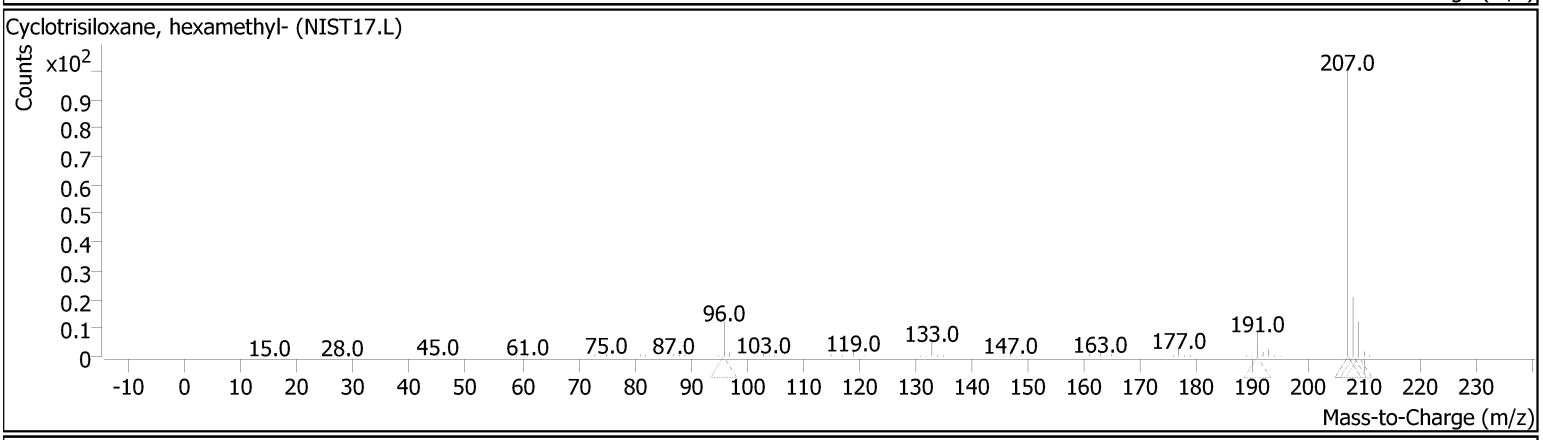


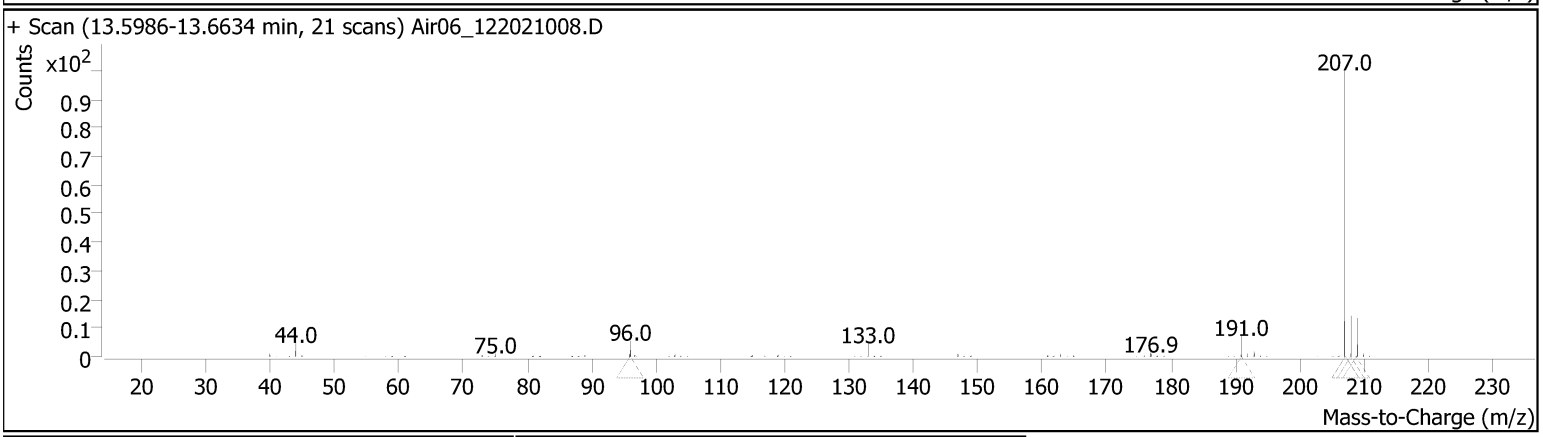


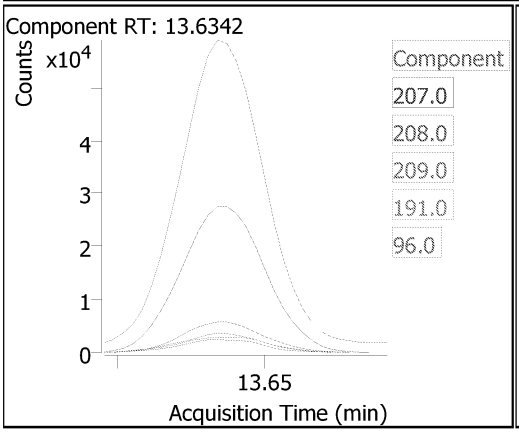


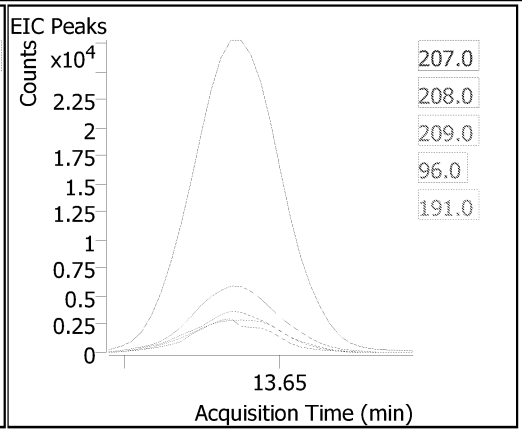
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.6342	Cyclotrisiloxane, hexamethyl-	114034.4	98.6	541-05-9	C6H18O3Si3	0.2924

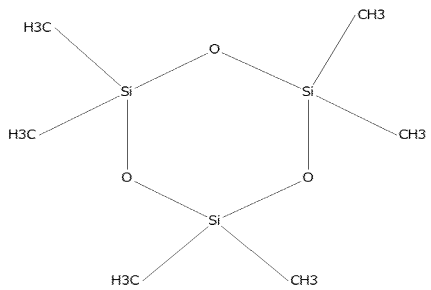




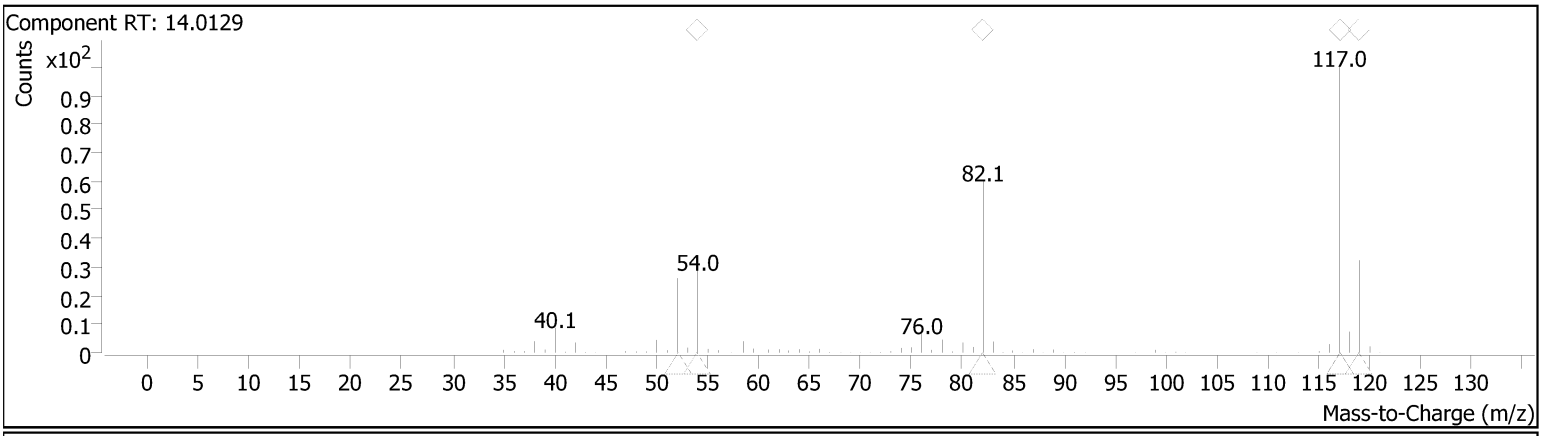


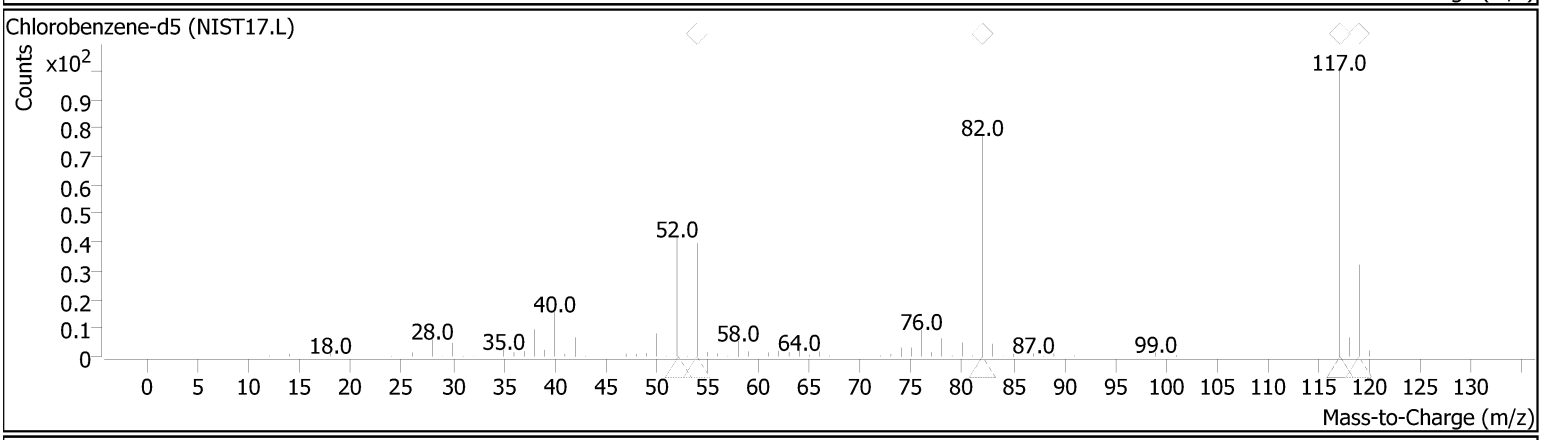


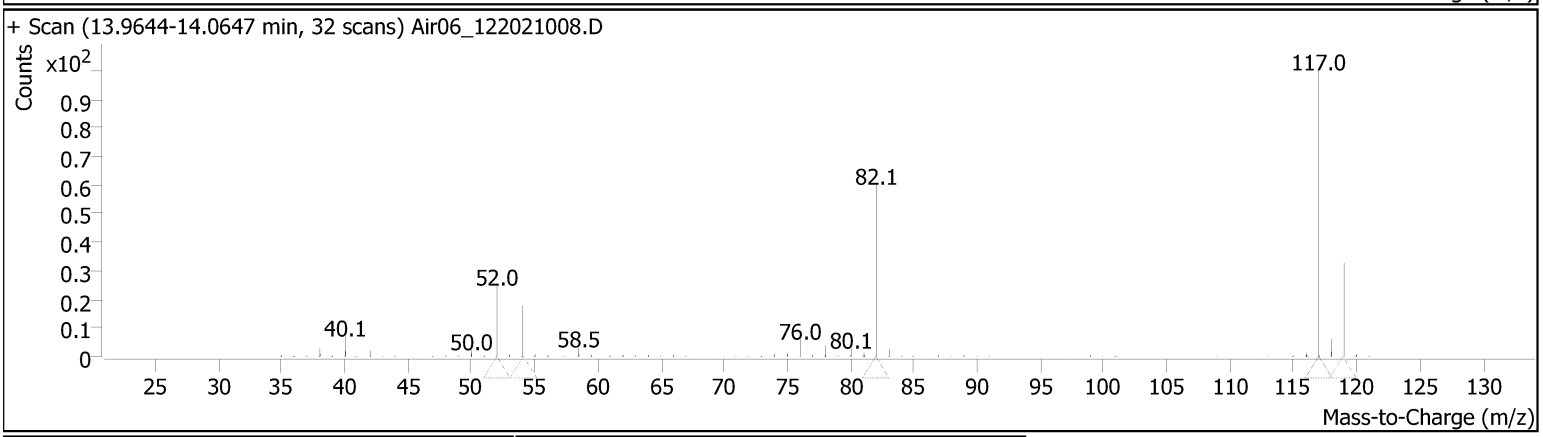


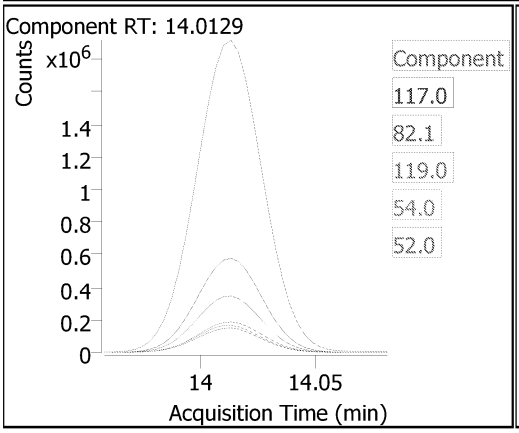


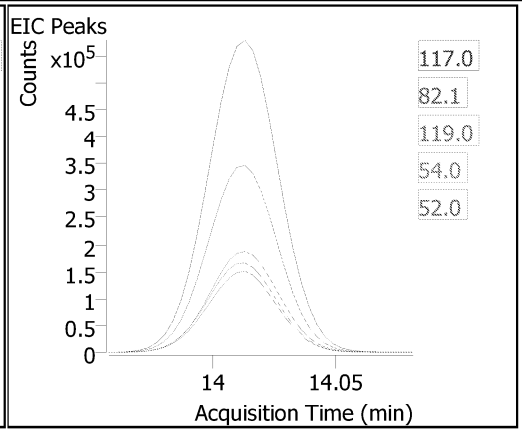
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.0129	Chlorobenzene-d5	3900554.7	96.0	3114-55-4	C6D5Cl	10

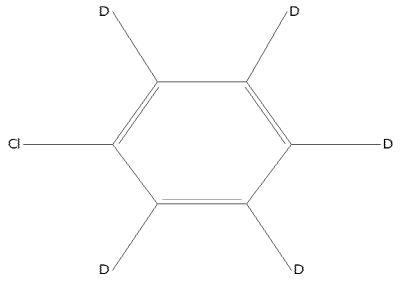




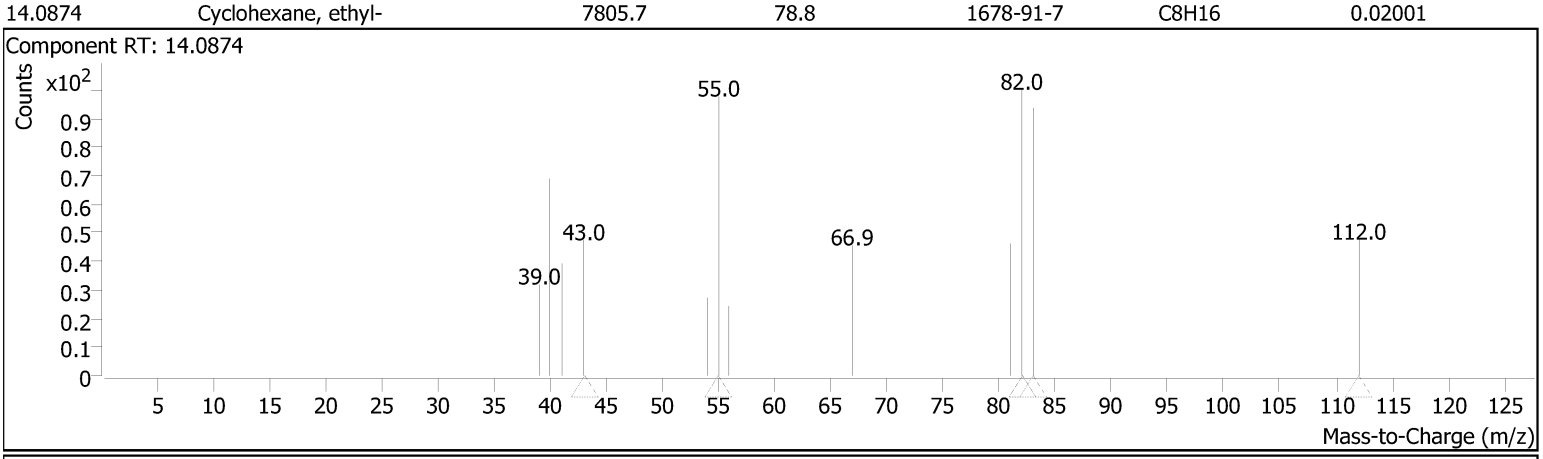


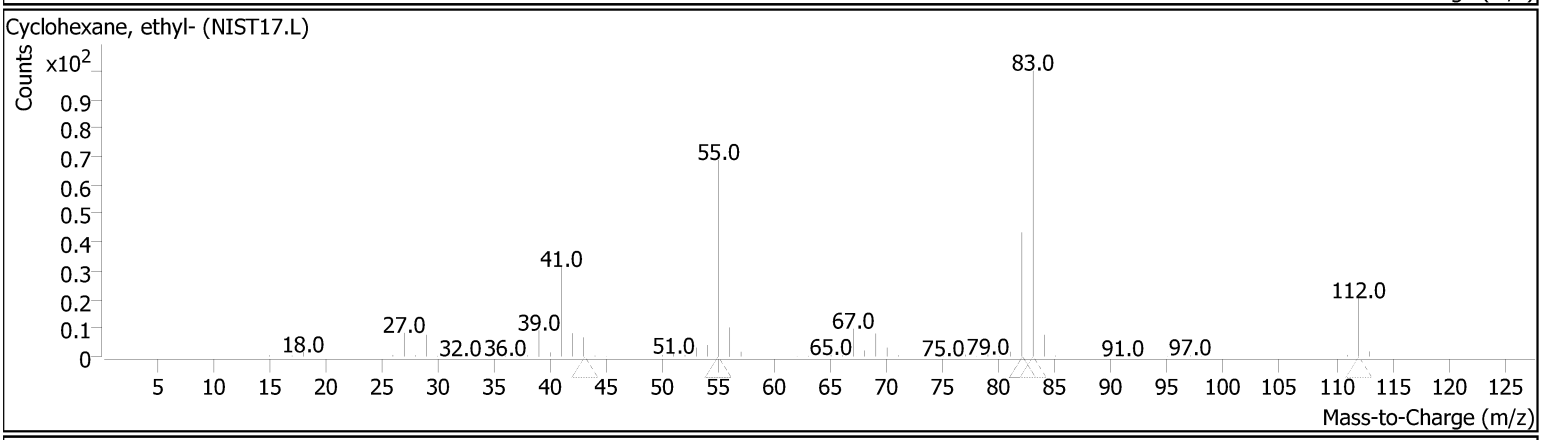


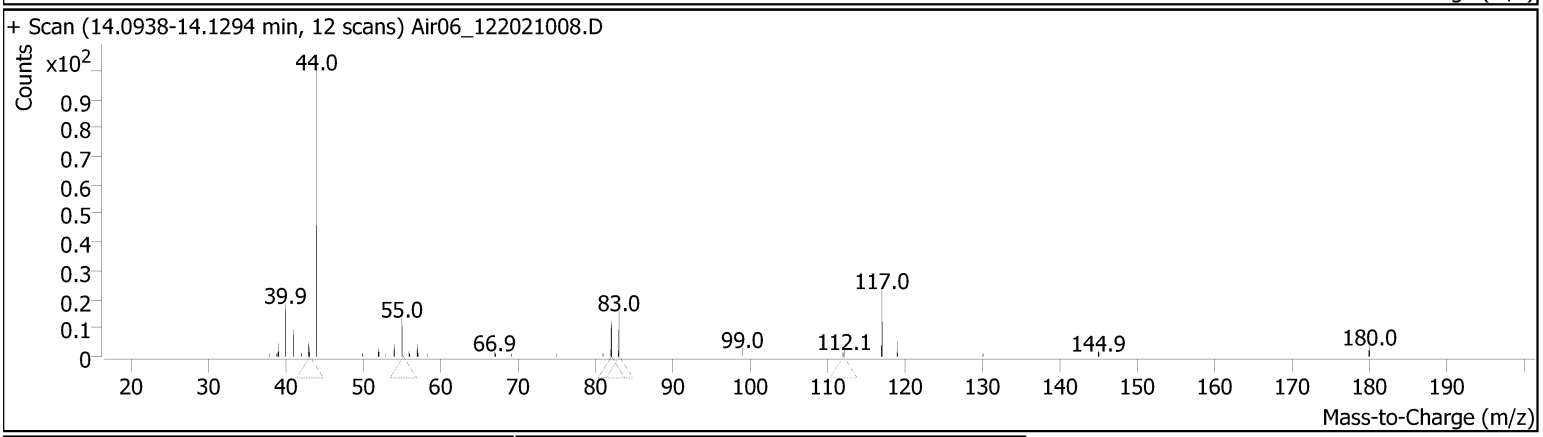


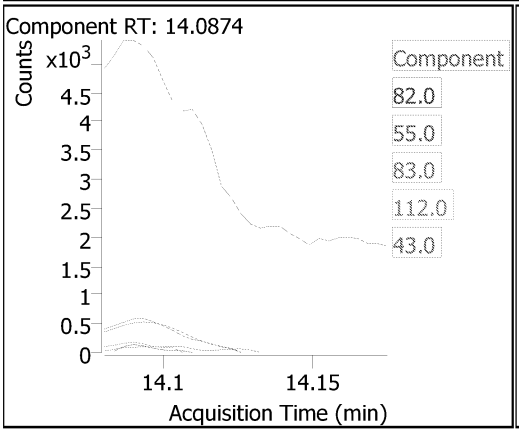


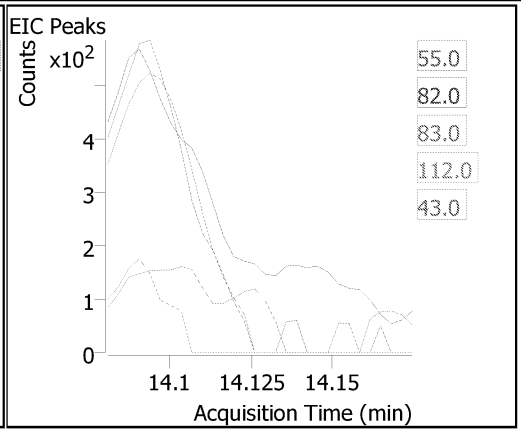
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.0874	Cyclohexane, ethyl-	7805.7	78.8	1678-91-7	C8H16	0.02001

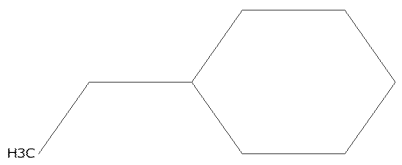




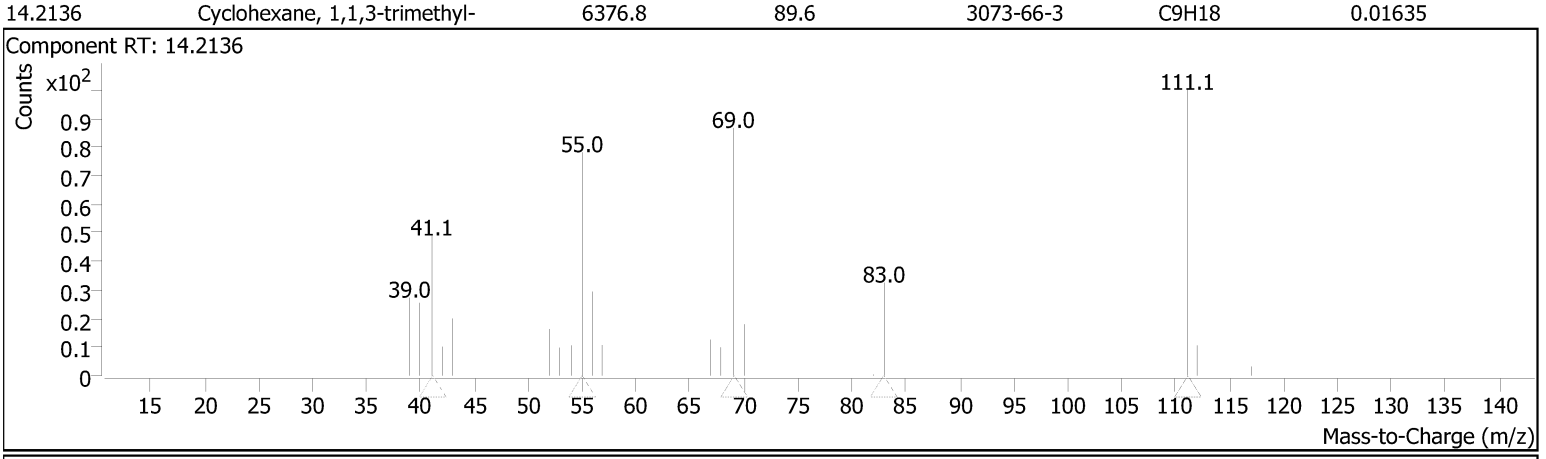


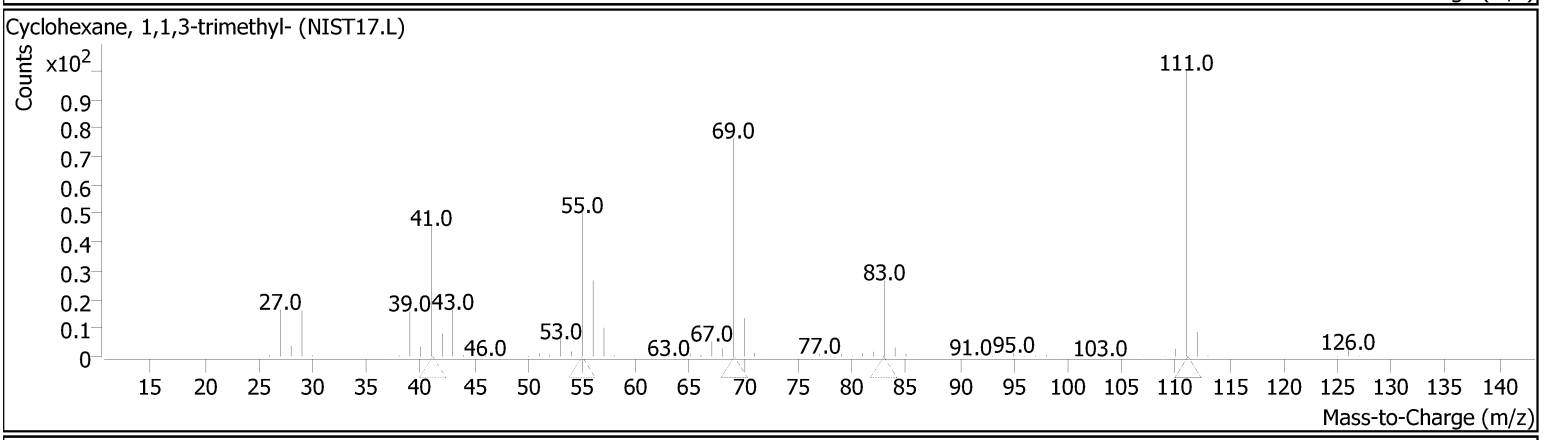


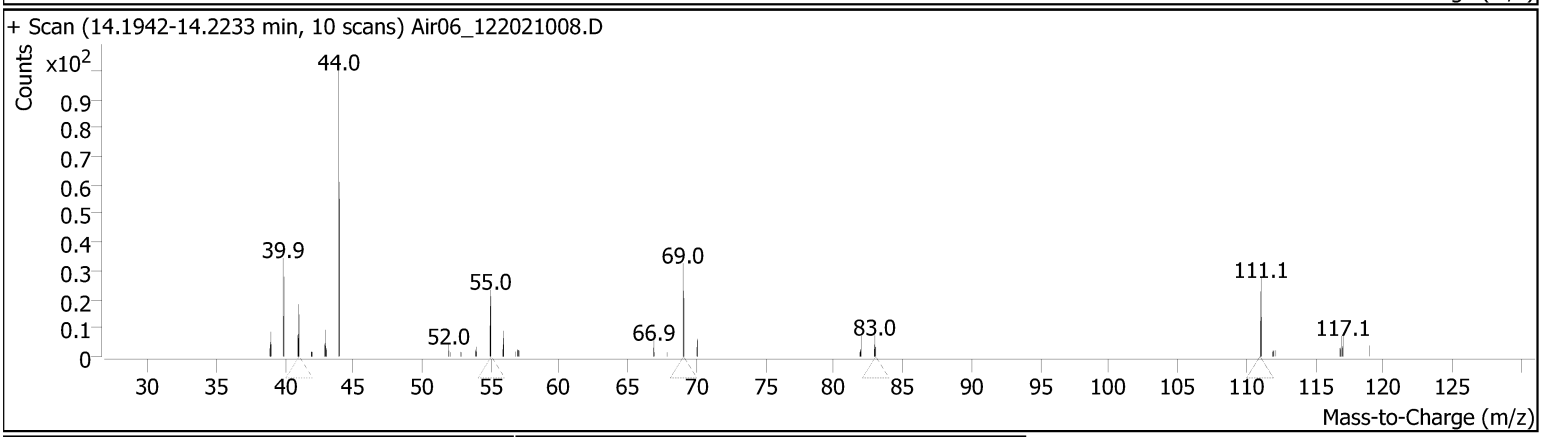


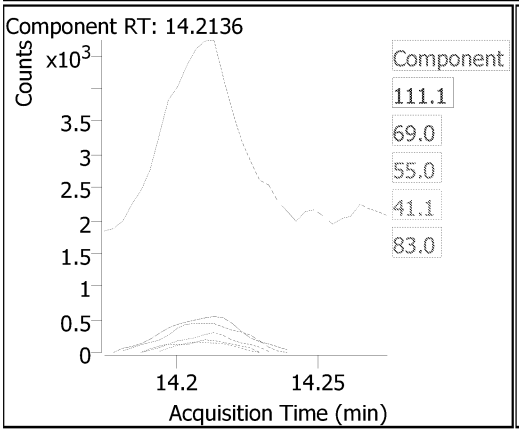


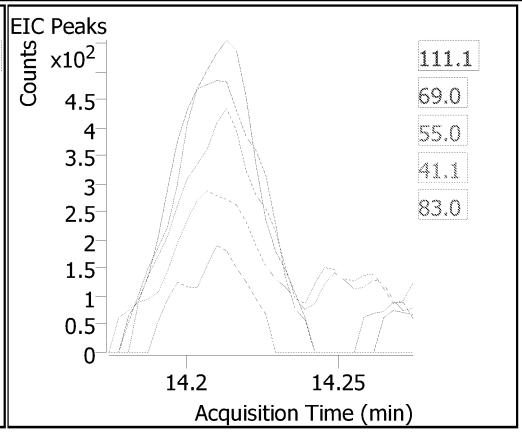
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.2136	Cyclohexane, 1,1,3-trimethyl-	6376.8	89.6	3073-66-3	C9H18	0.01635

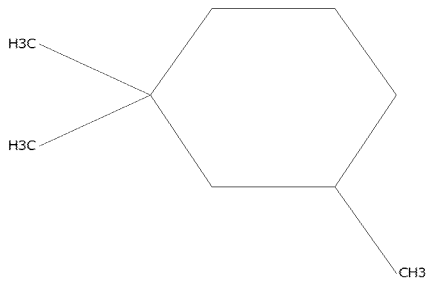




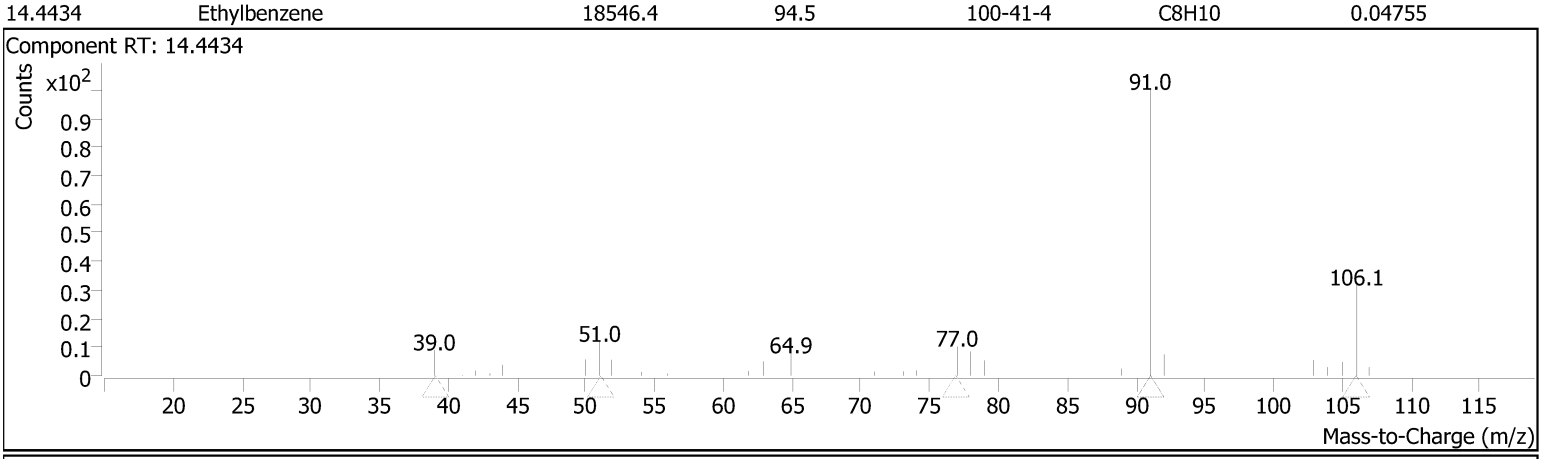


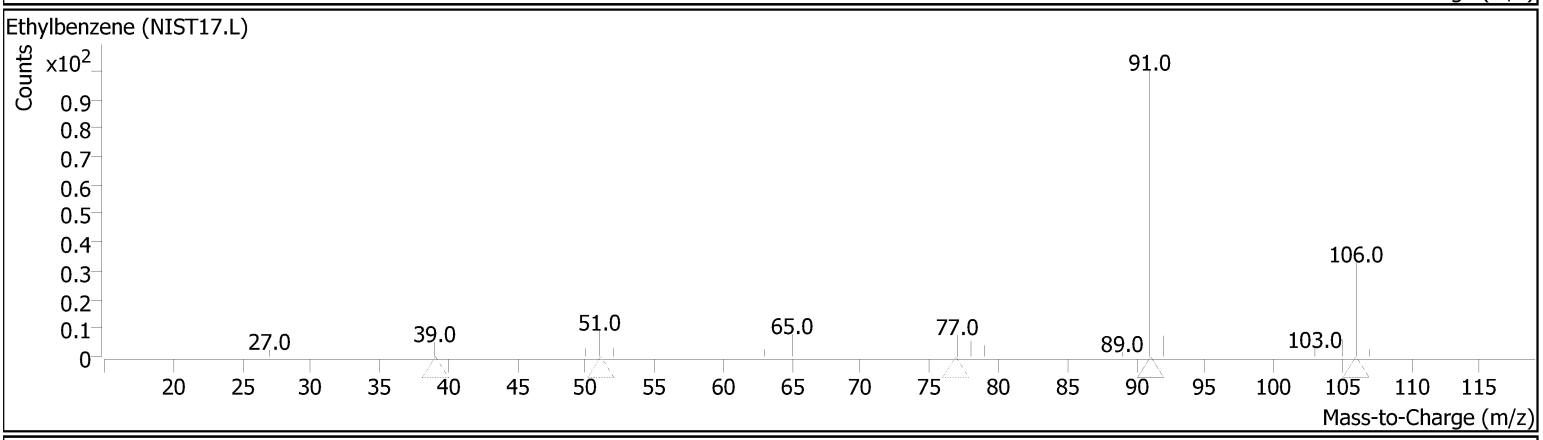


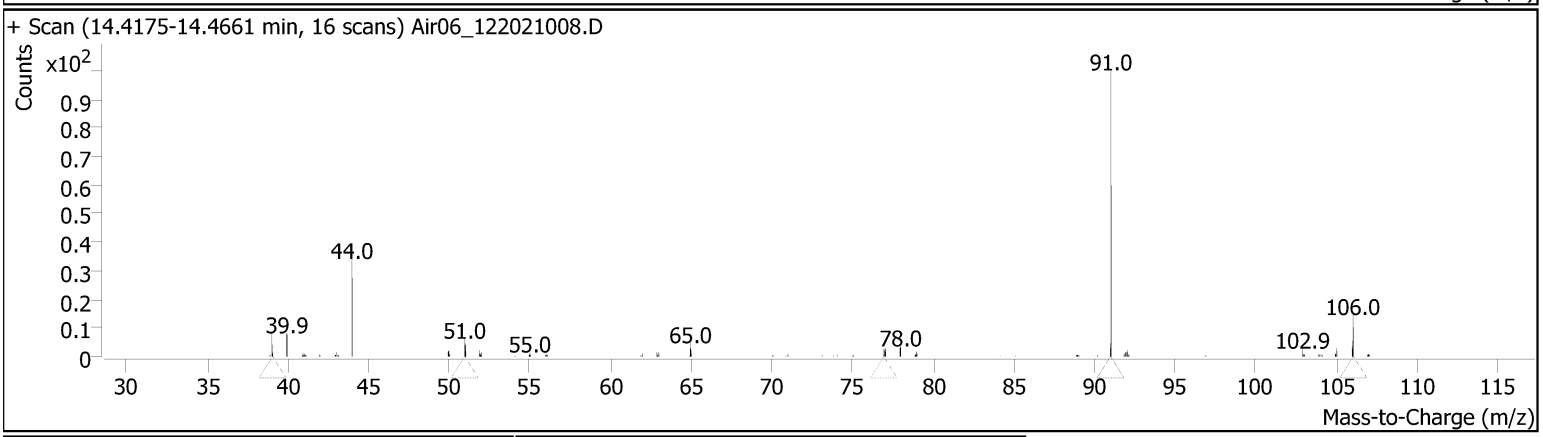


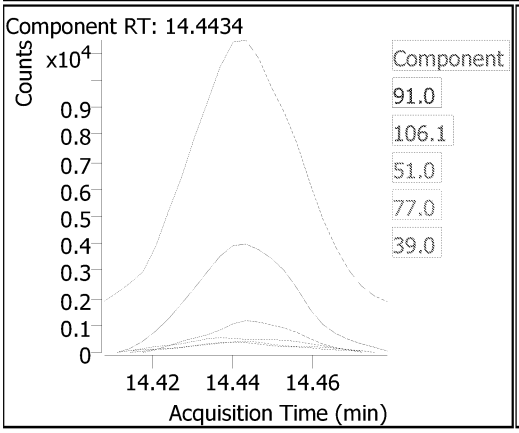


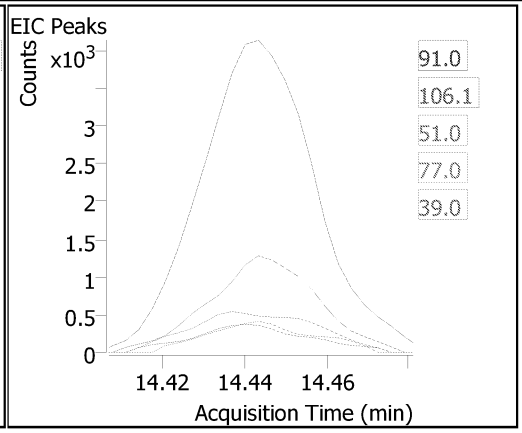
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.4434	Ethylbenzene	18546.4	94.5	100-41-4	C8H10	0.04755

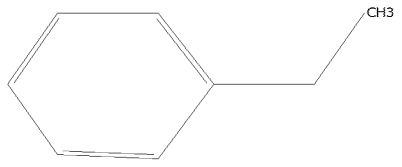




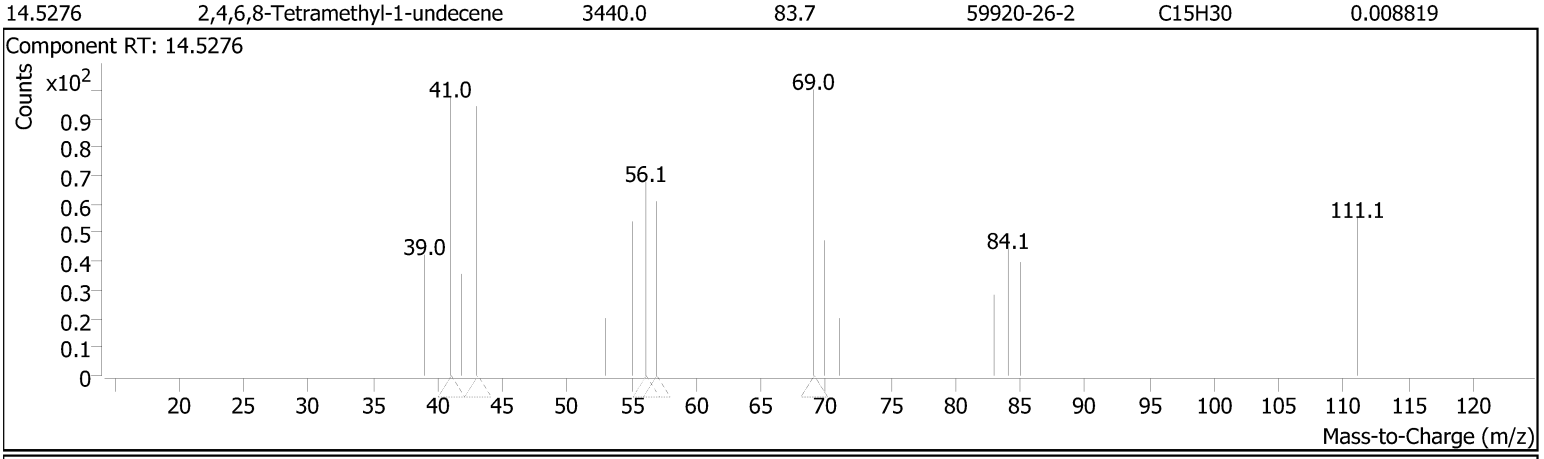


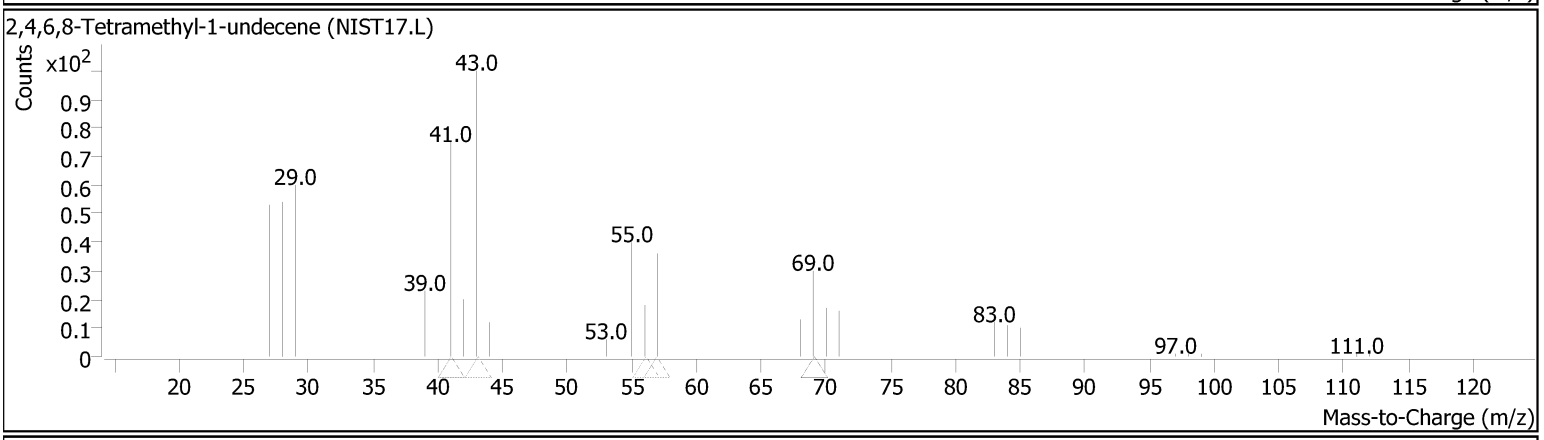


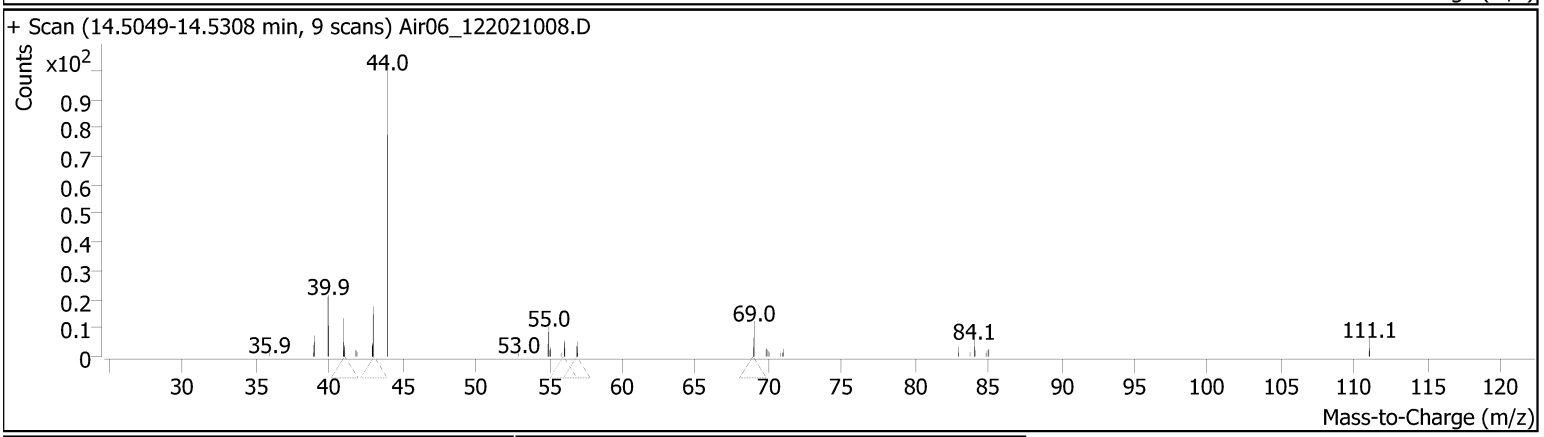


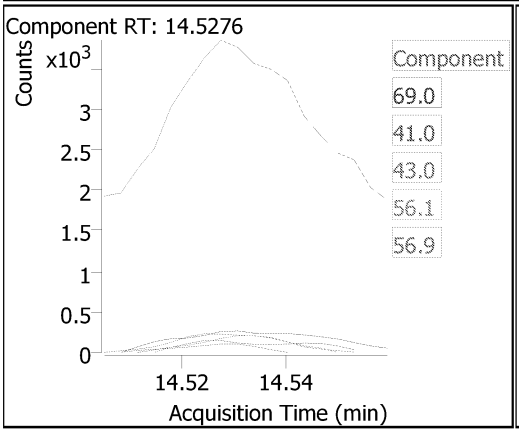


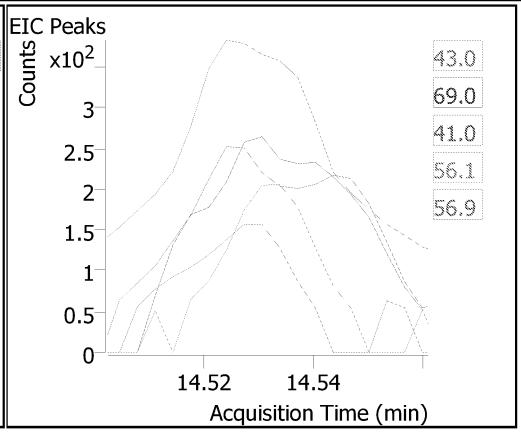
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.5276	2,4,6,8-Tetramethyl-1-undecene	3440.0	83.7	59920-26-2	C15H30	0.008819

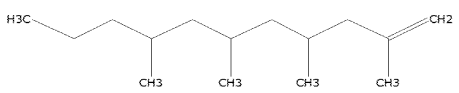




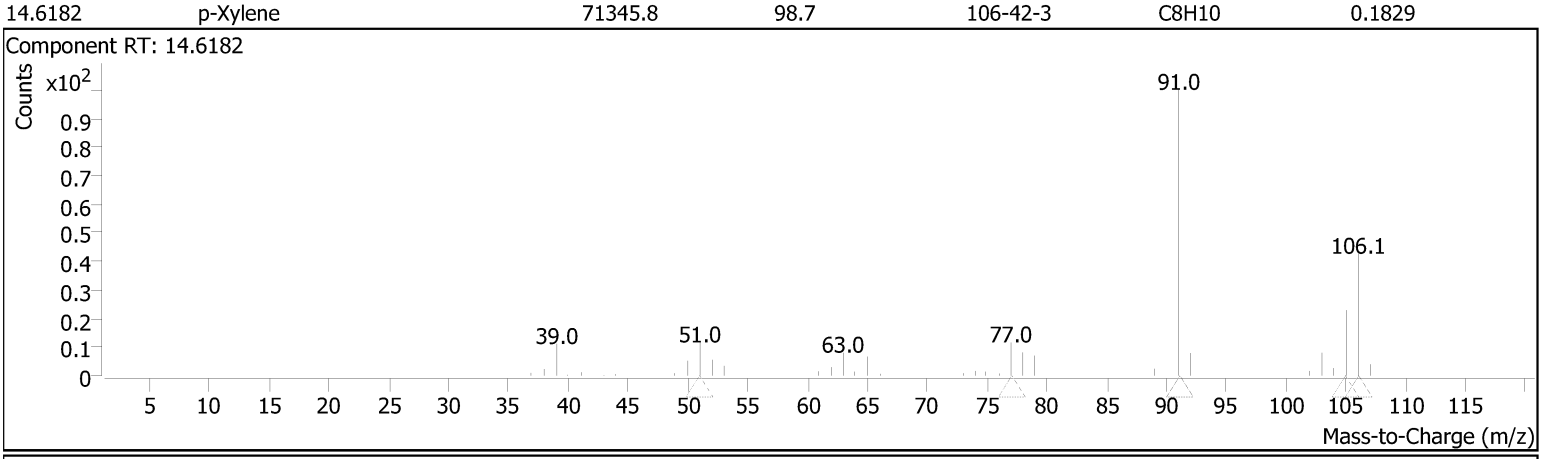


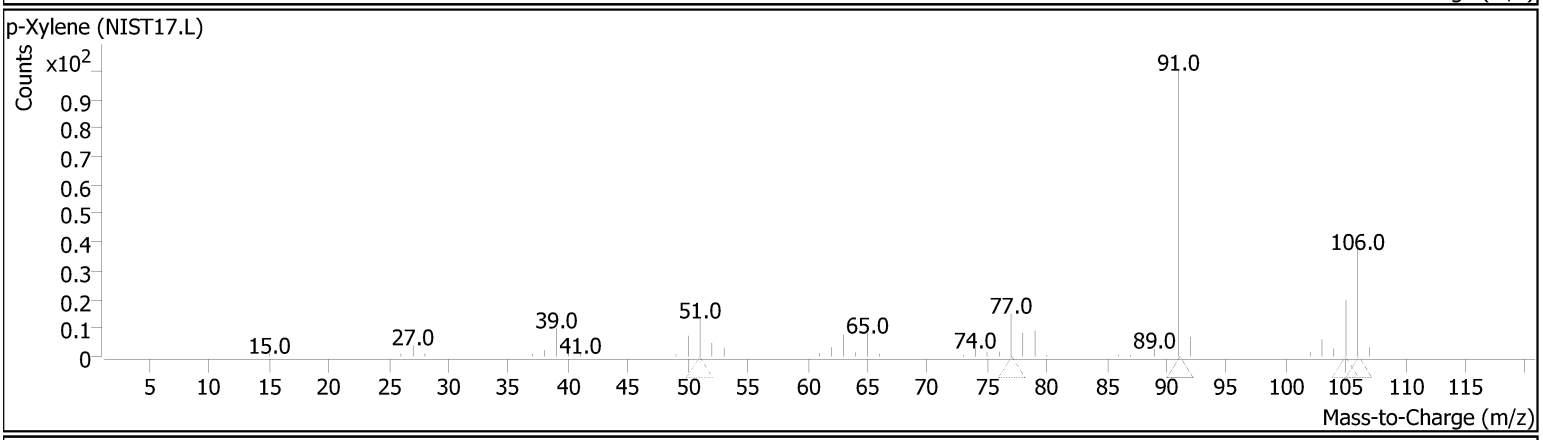


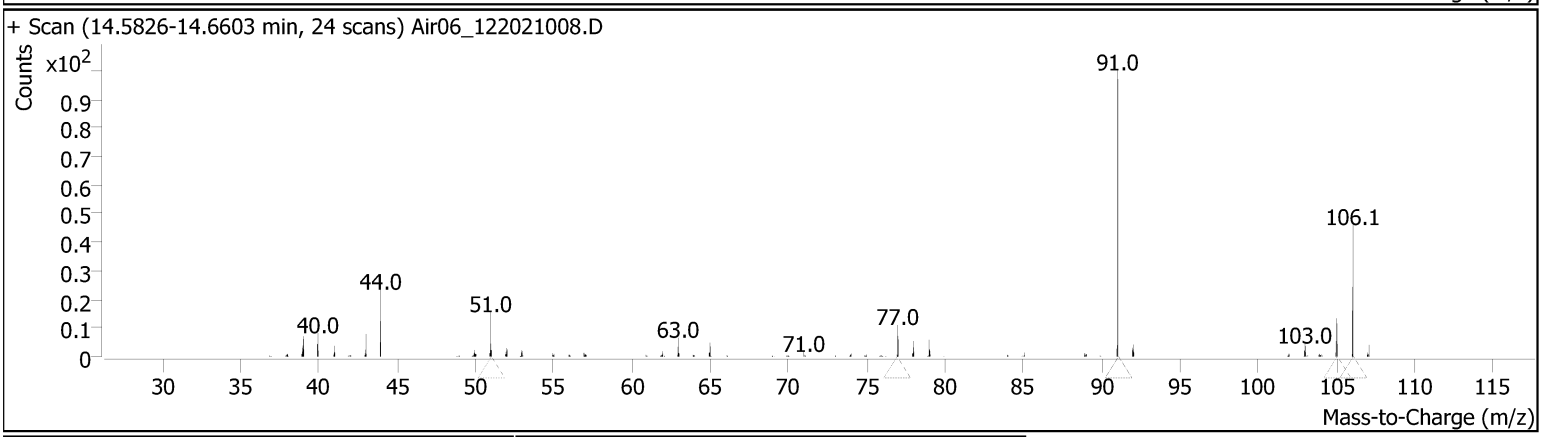


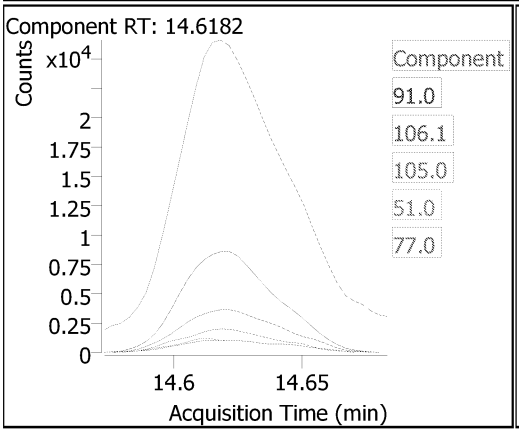


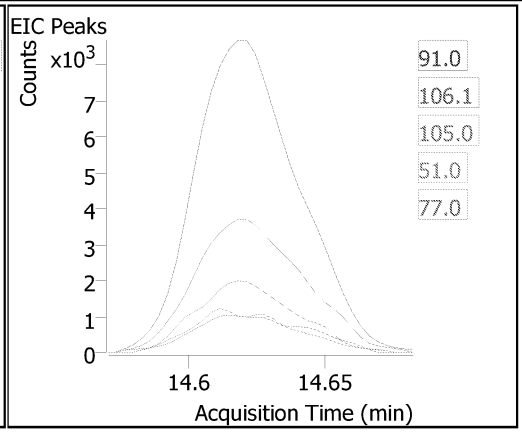
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.6182	p-Xylene	71345.8	98.7	106-42-3	C8H10	0.1829

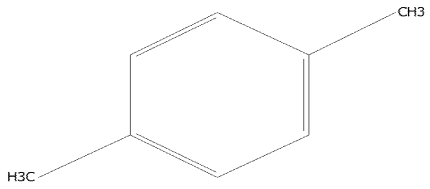




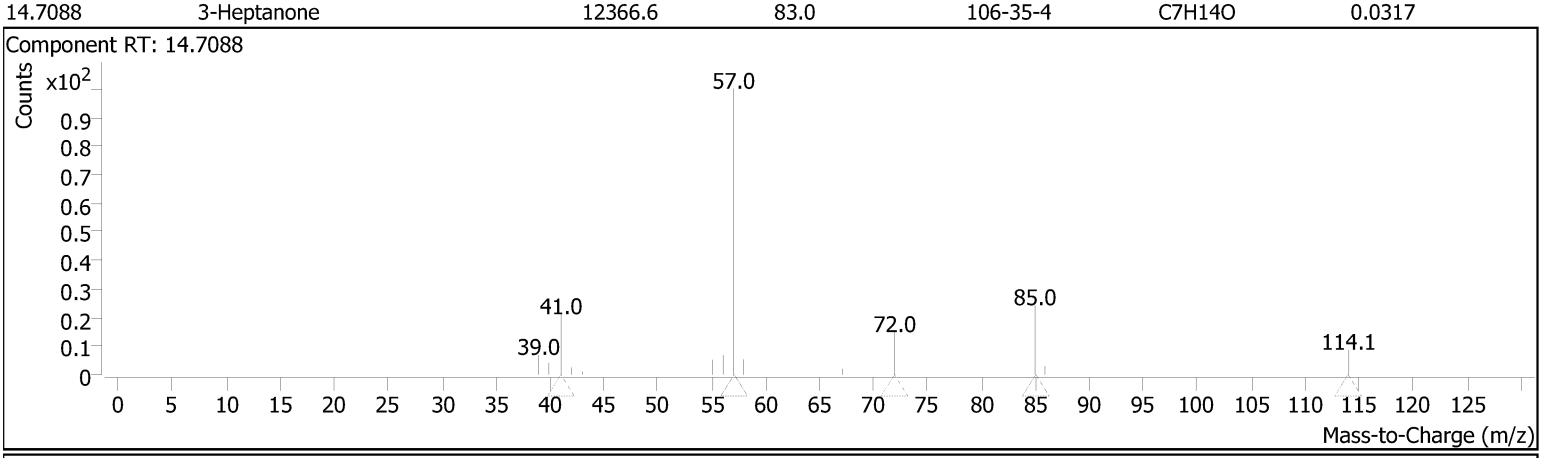


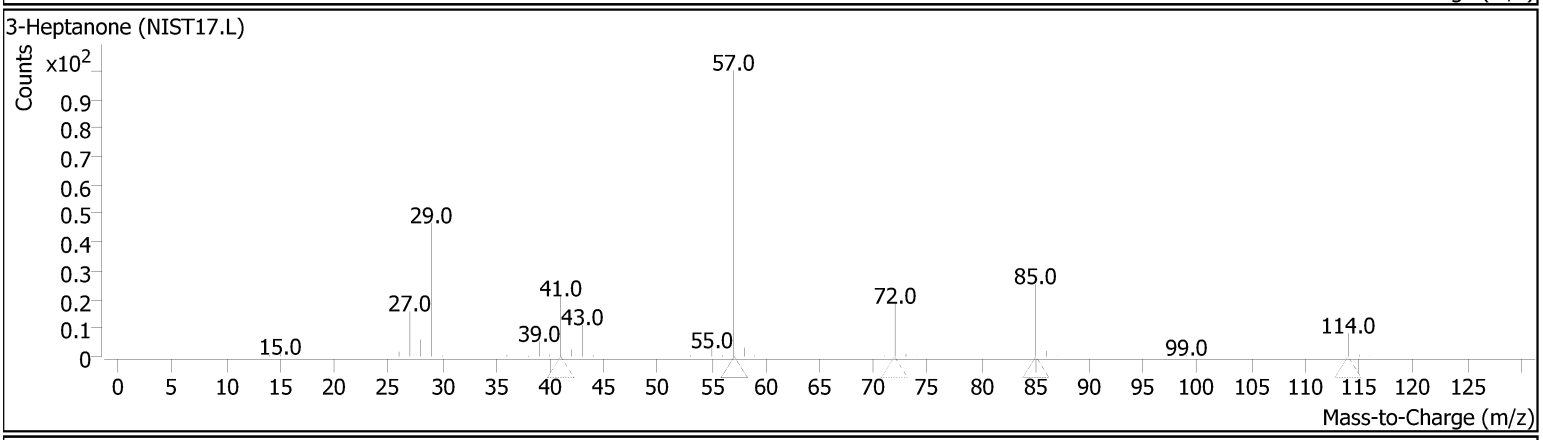


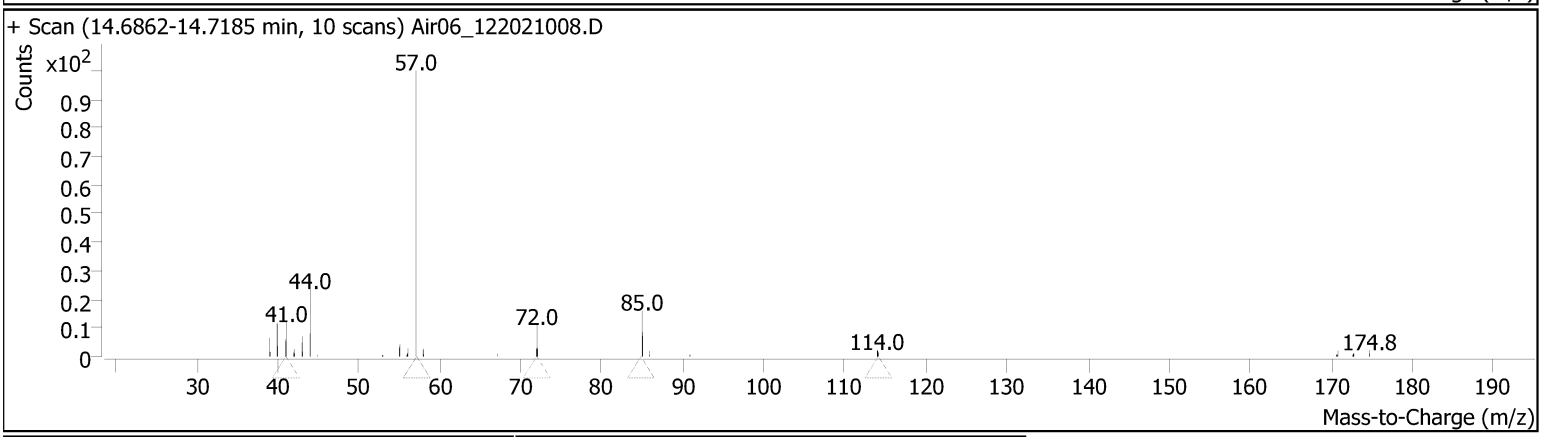


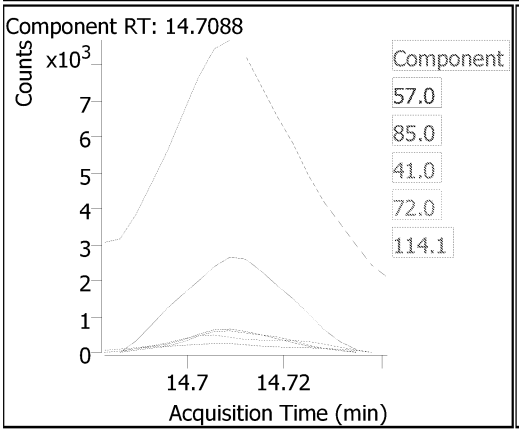


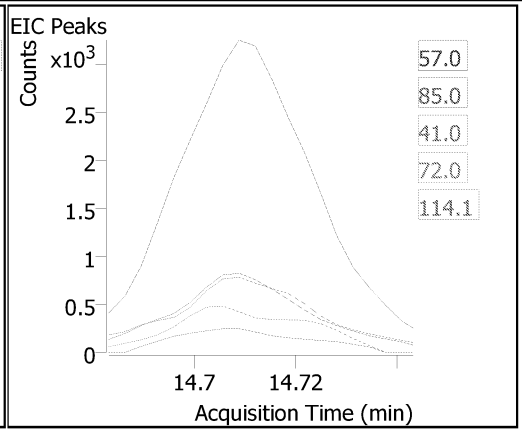
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.7088	3-Heptanone	12366.6	83.0	106-35-4	C7H14O	0.0317

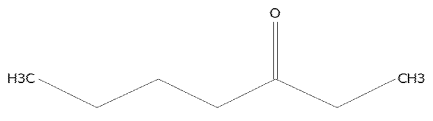




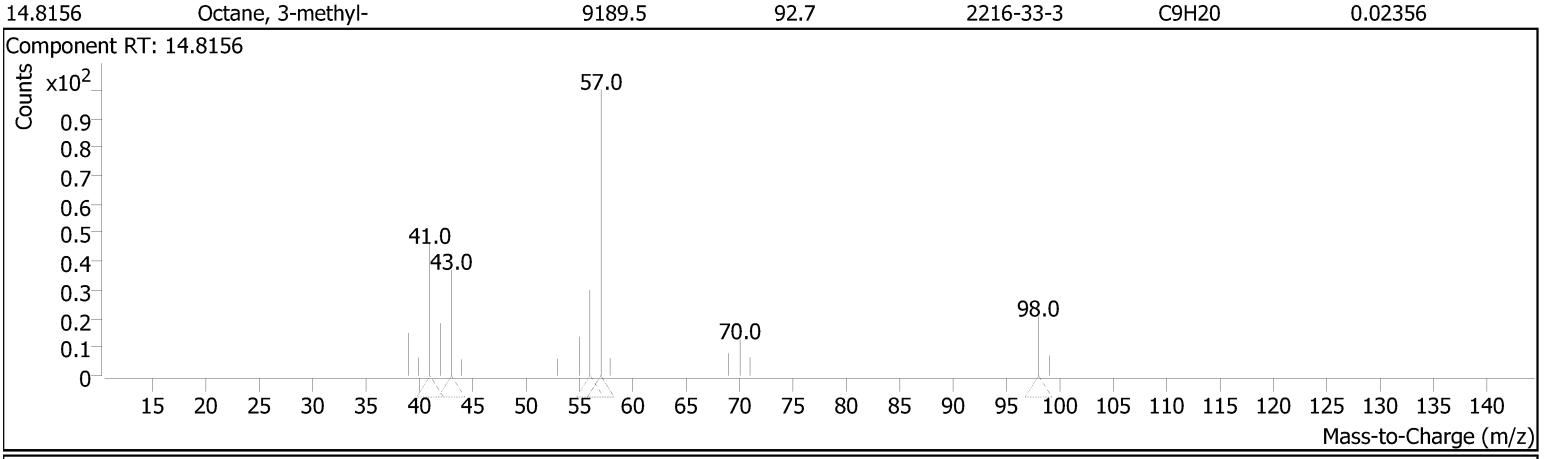


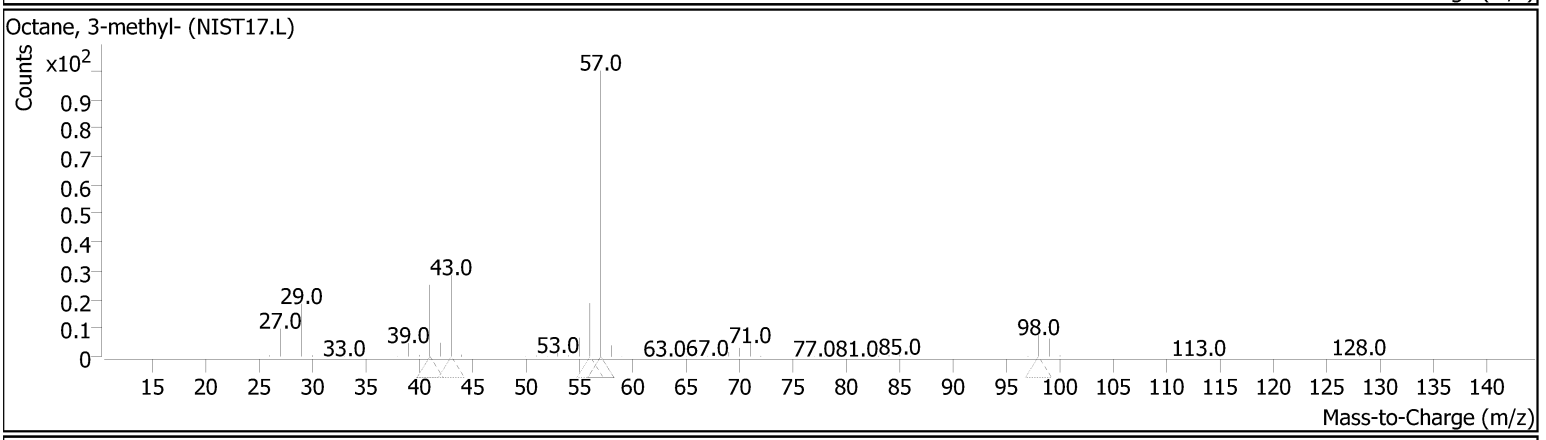


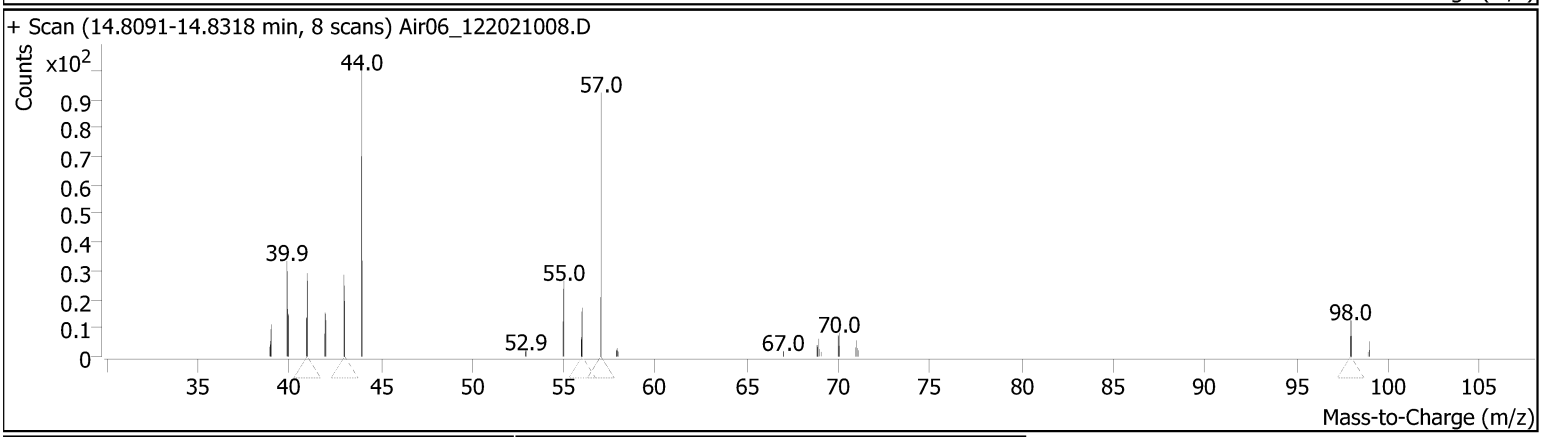


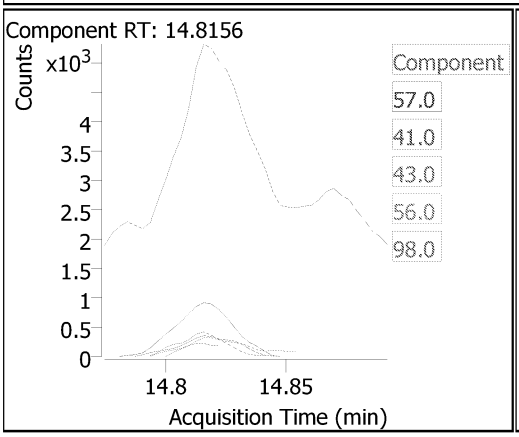


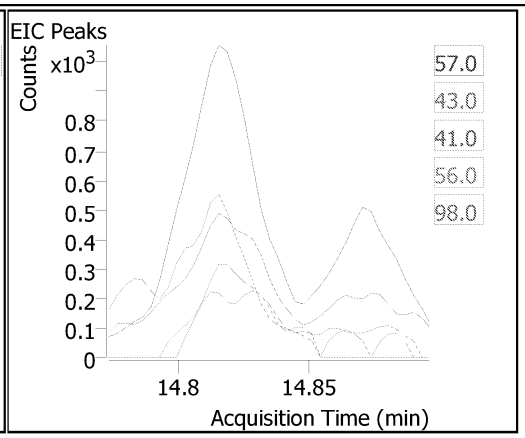
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.8156	Octane, 3-methyl-	9189.5	92.7	2216-33-3	C9H20	0.02356

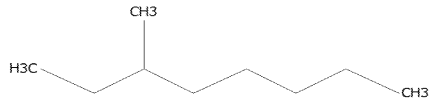




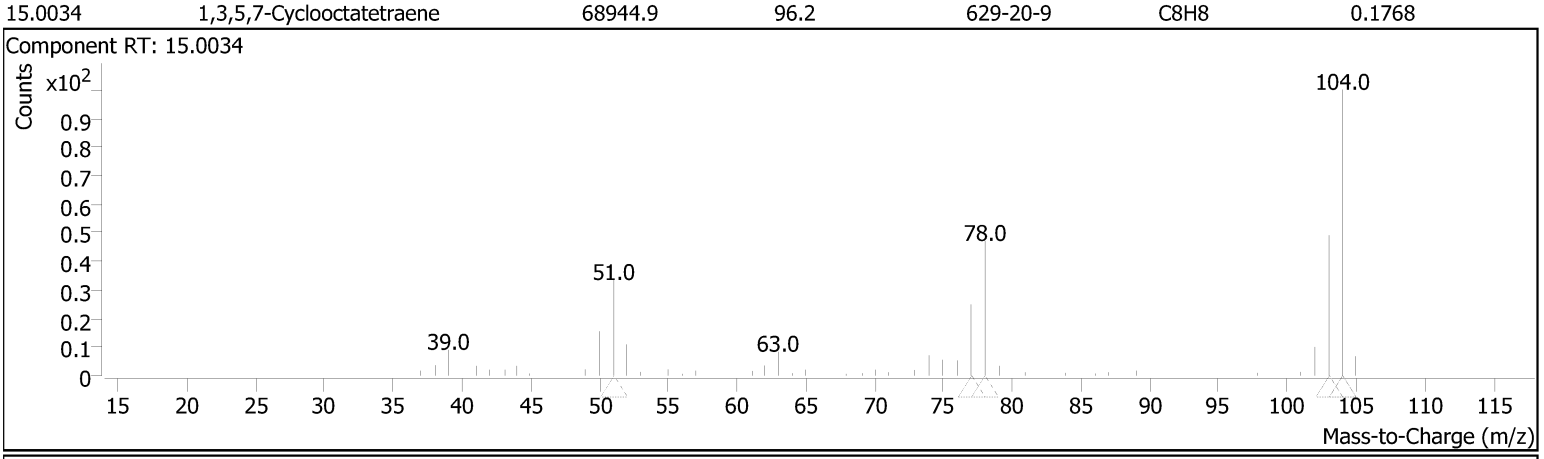


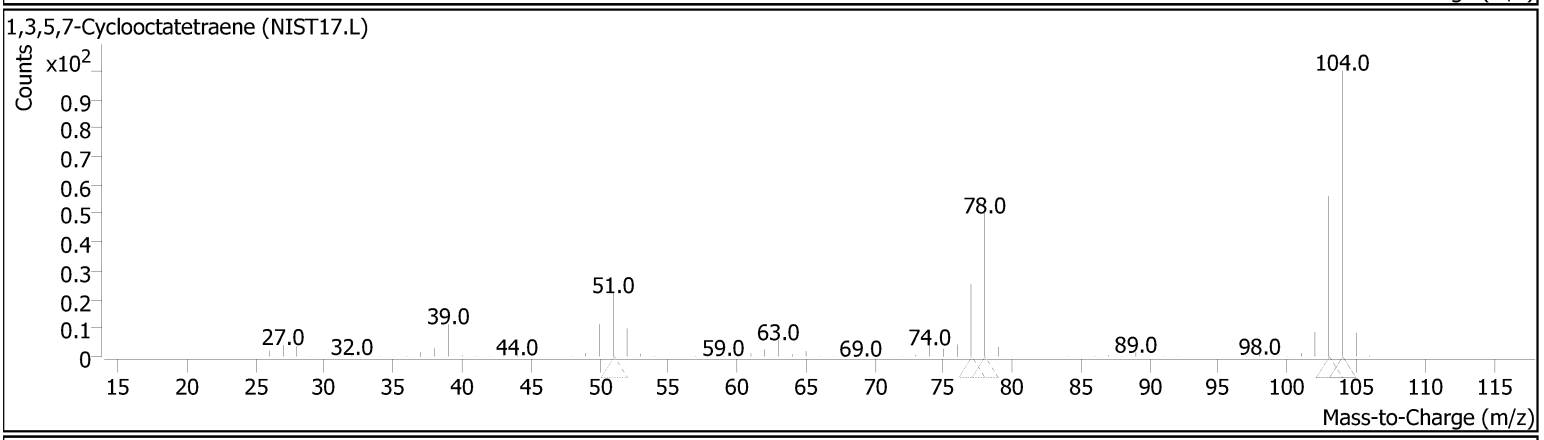


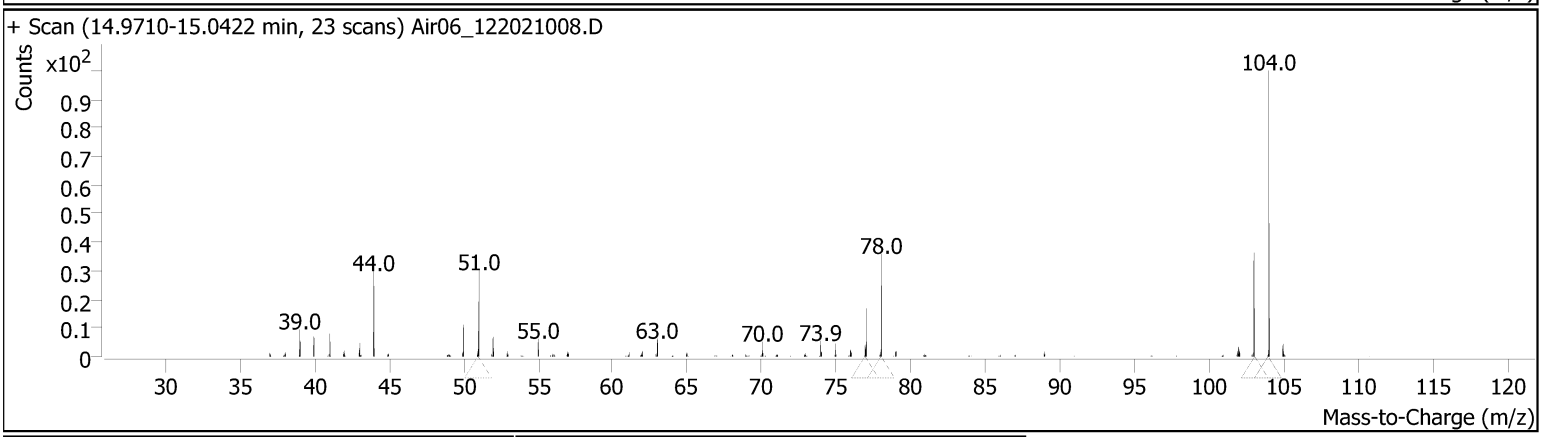


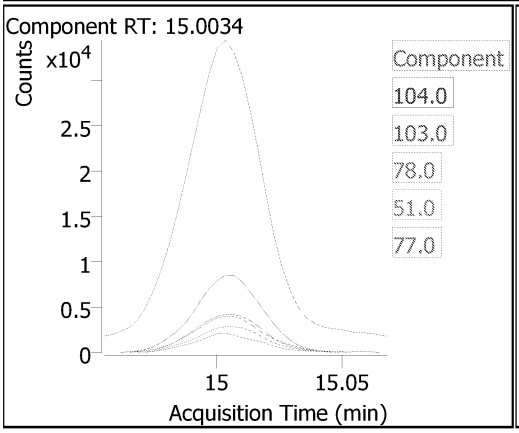


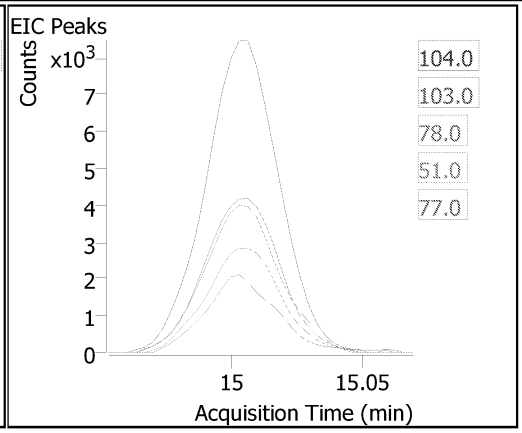
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.0034	1,3,5,7-Cyclooctatetraene	68944.9	96.2	629-20-9	C8H8	0.1768

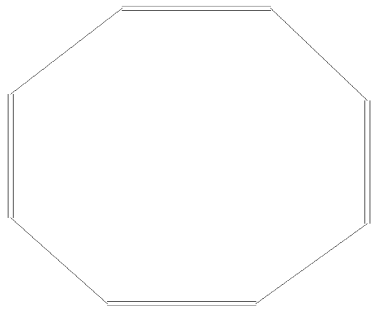




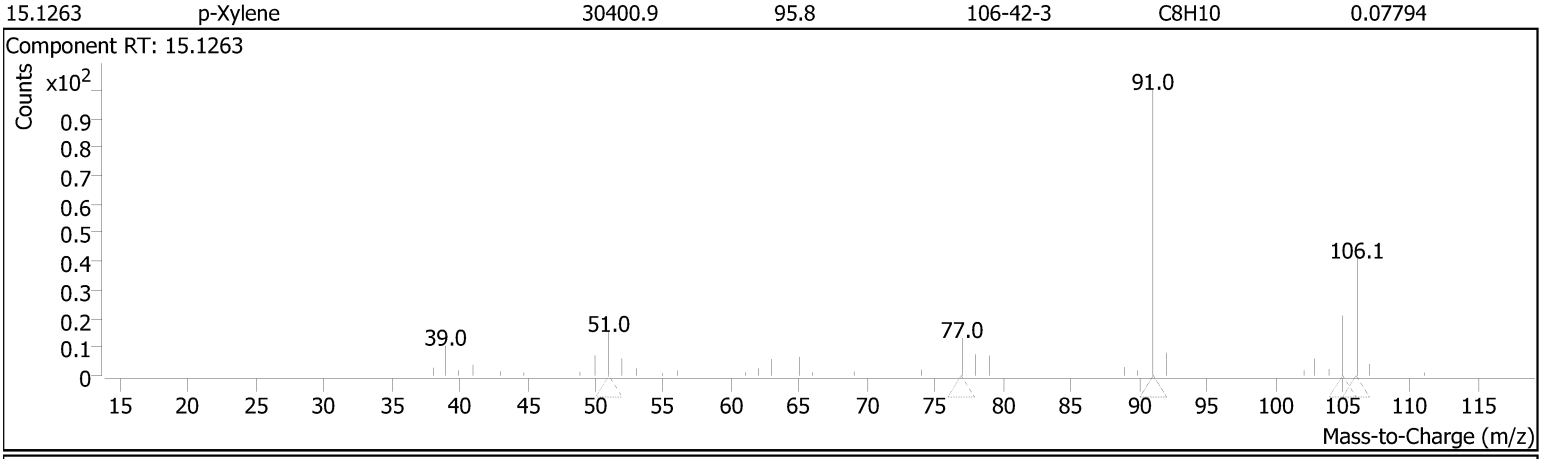


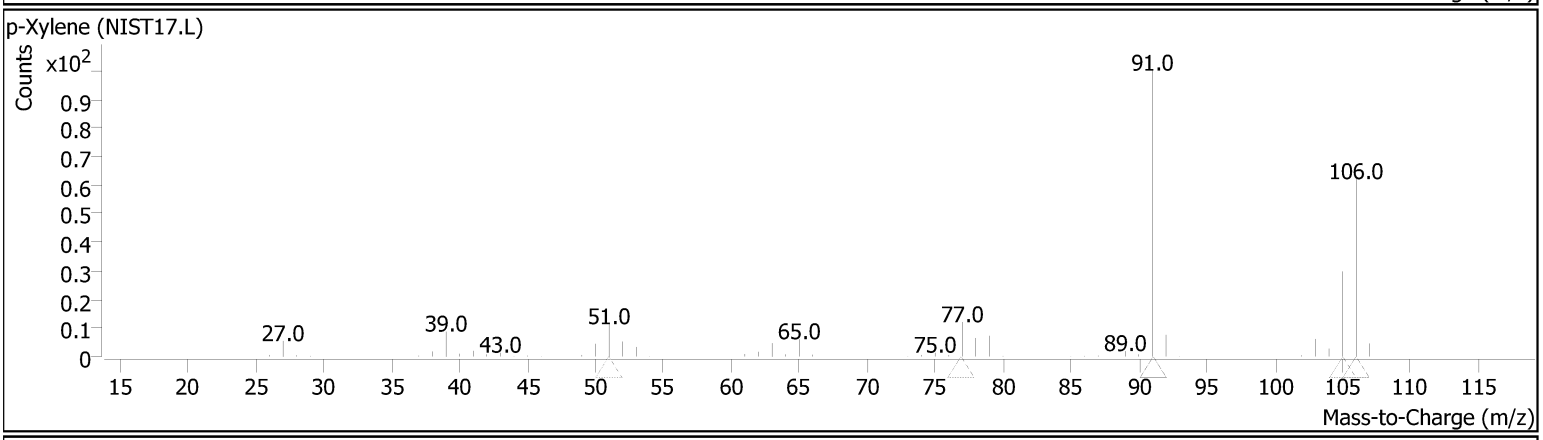


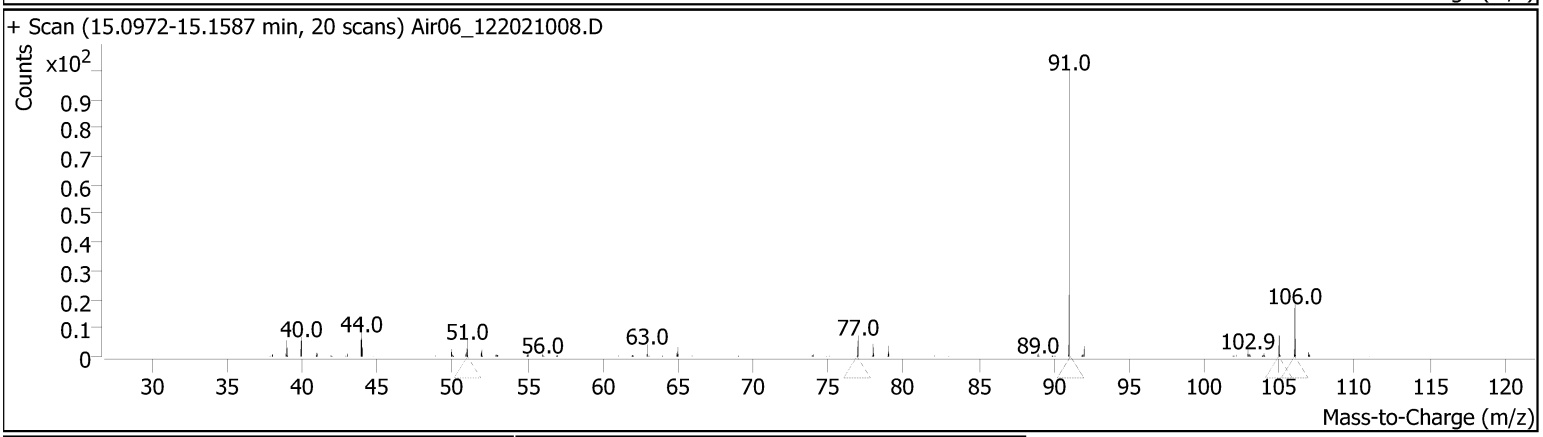


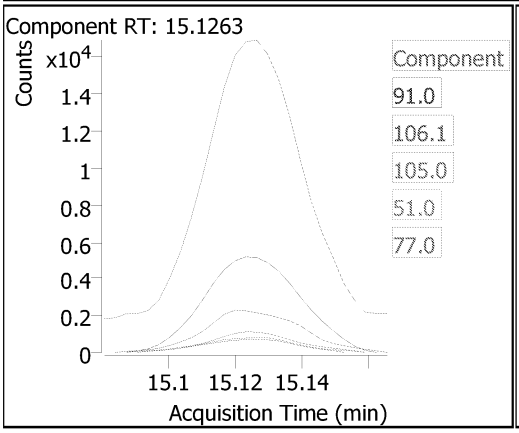


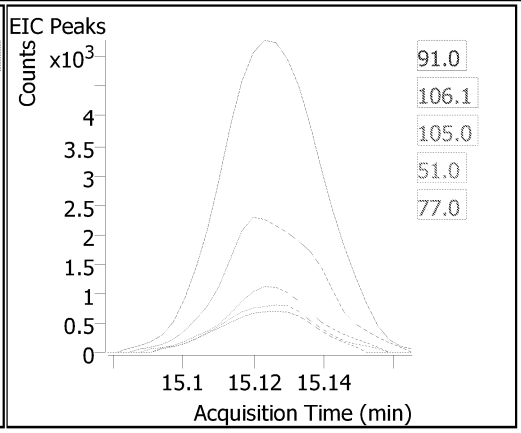
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.1263	p-Xylene	30400.9	95.8	106-42-3	C8H10	0.07794

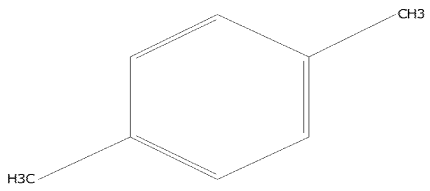








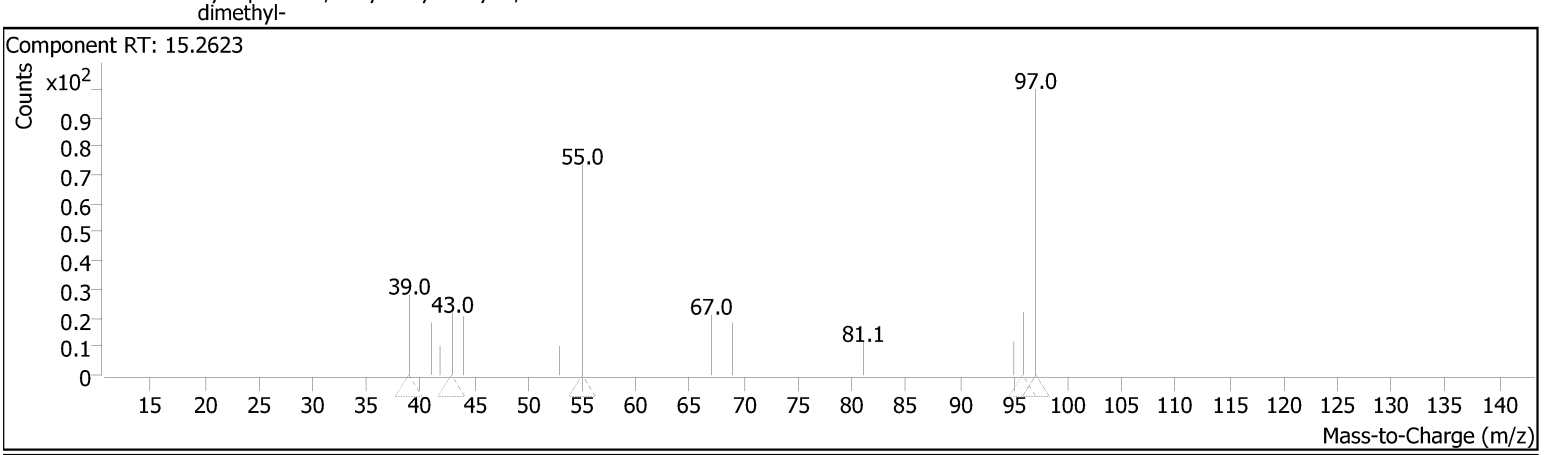


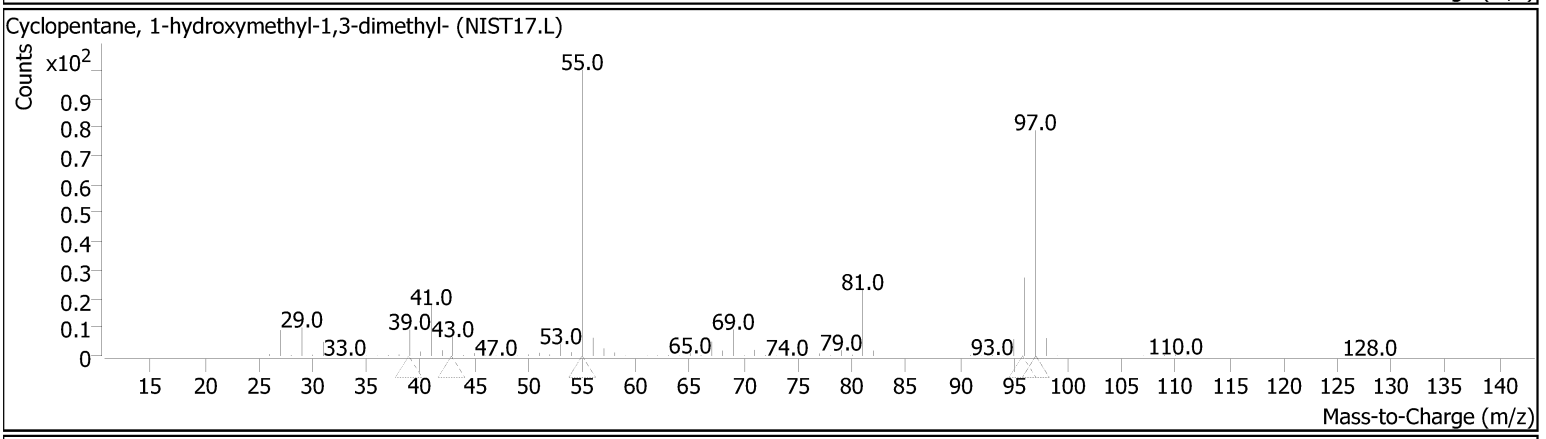


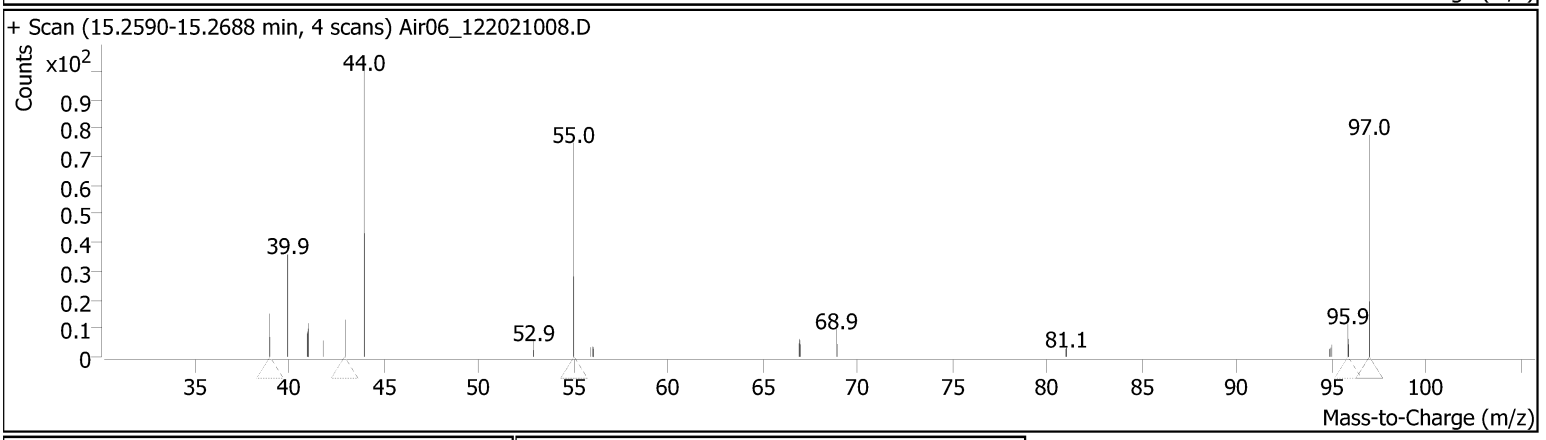
Library Search Results - NonTarget Hits with Details

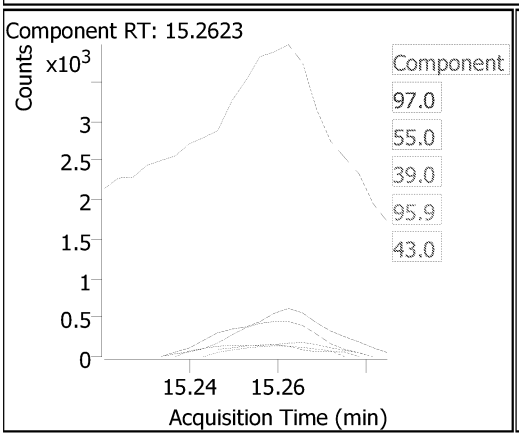
Agilent Technologies

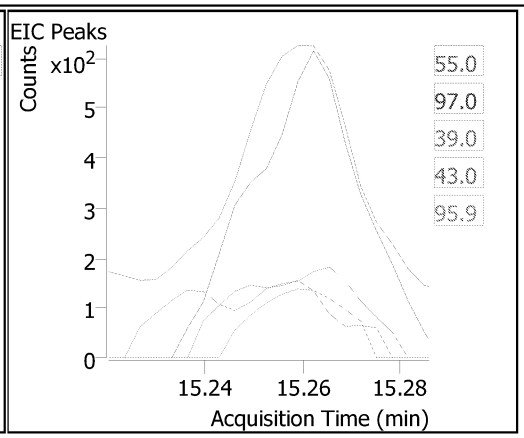
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.2623	Cyclopentane, 1-hydroxymethyl-1,3-dimethyl-	4517.9	82.1	1000156-73-8	C8H16O	0.01158

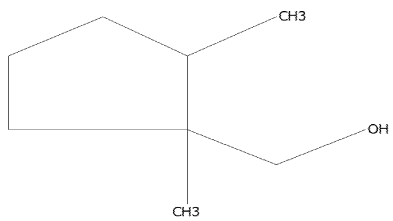




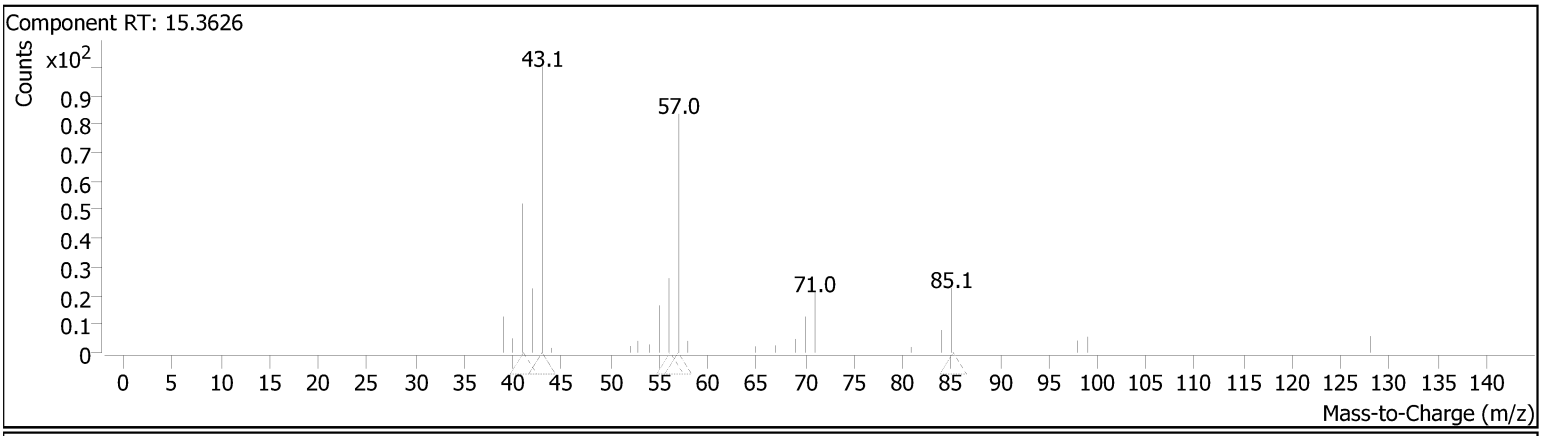


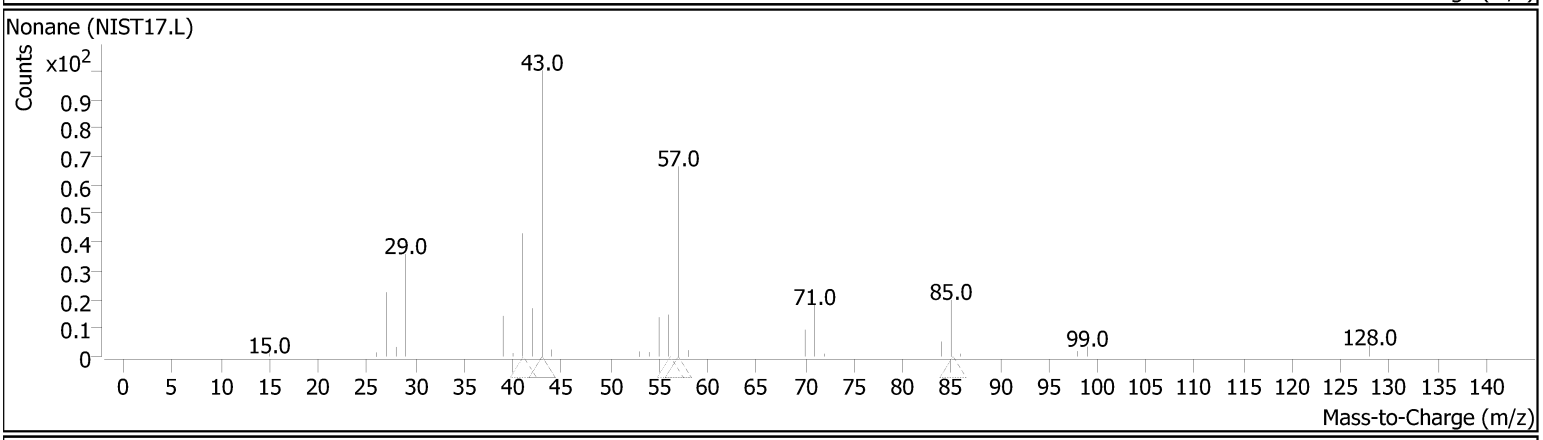


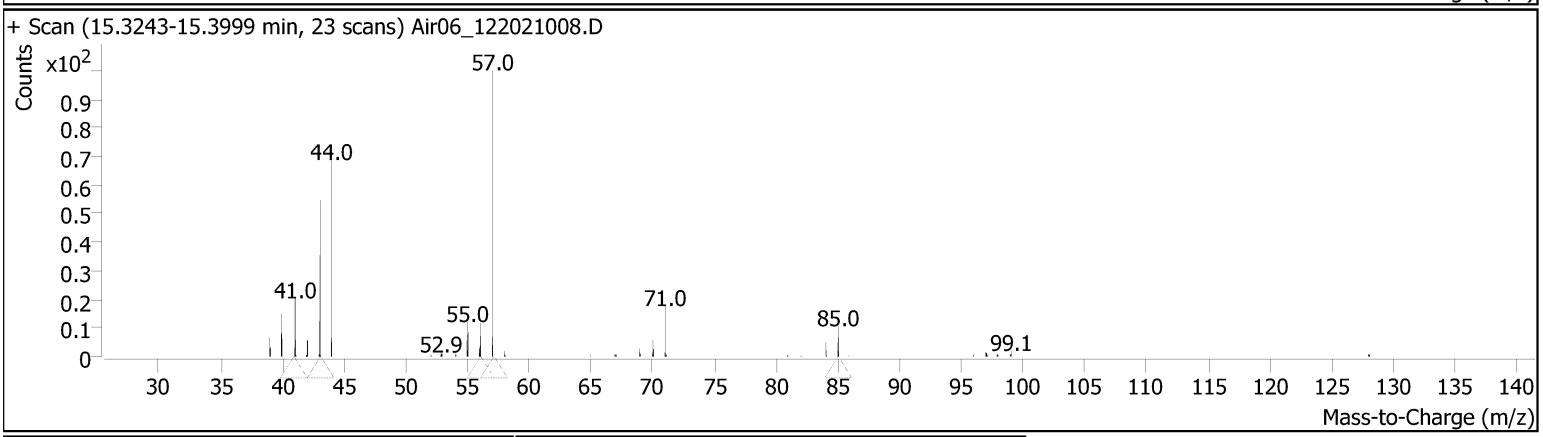


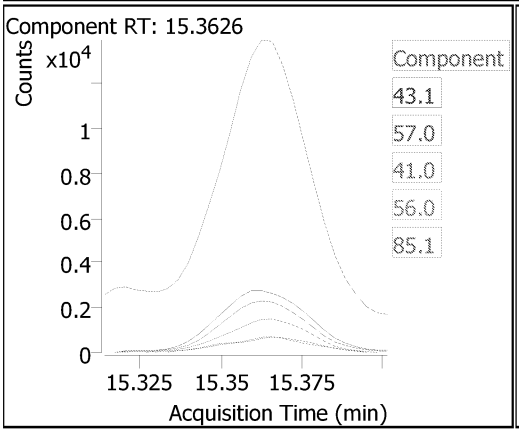


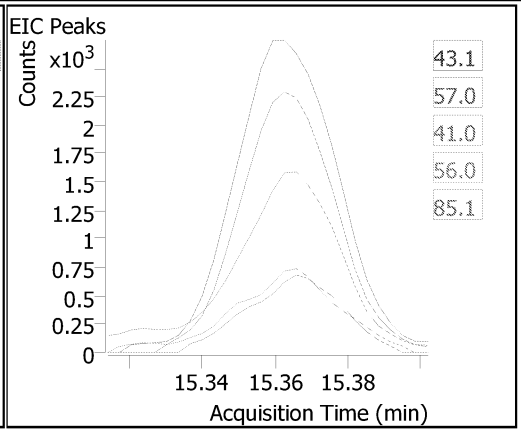
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.3626	Nonane	24081.6	95.3	111-84-2	C9H20	0.06174





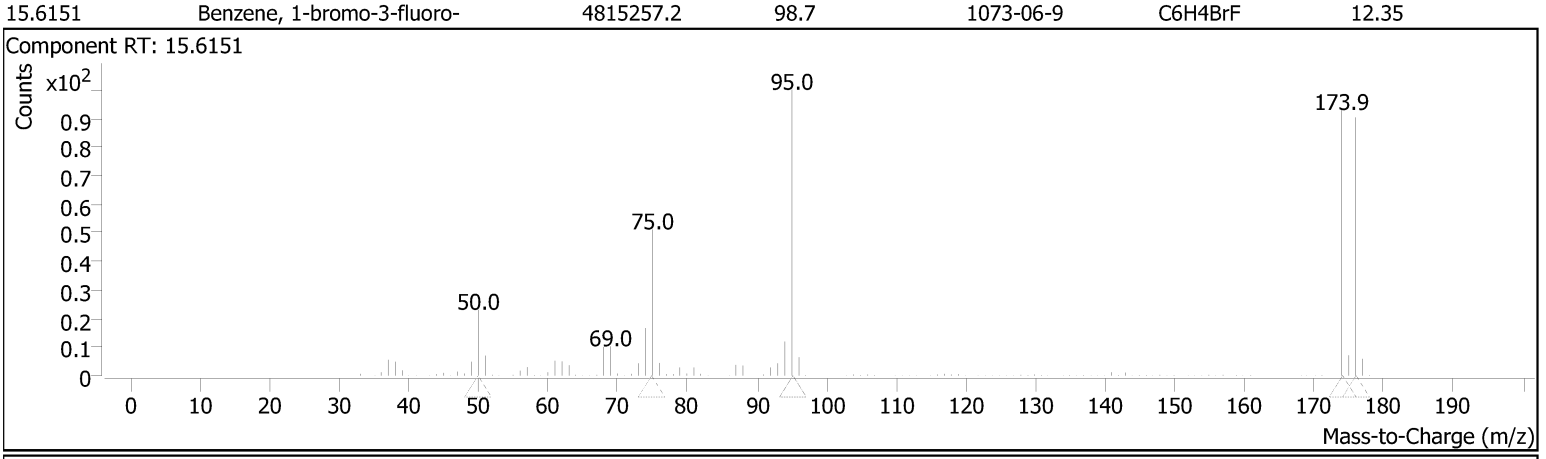


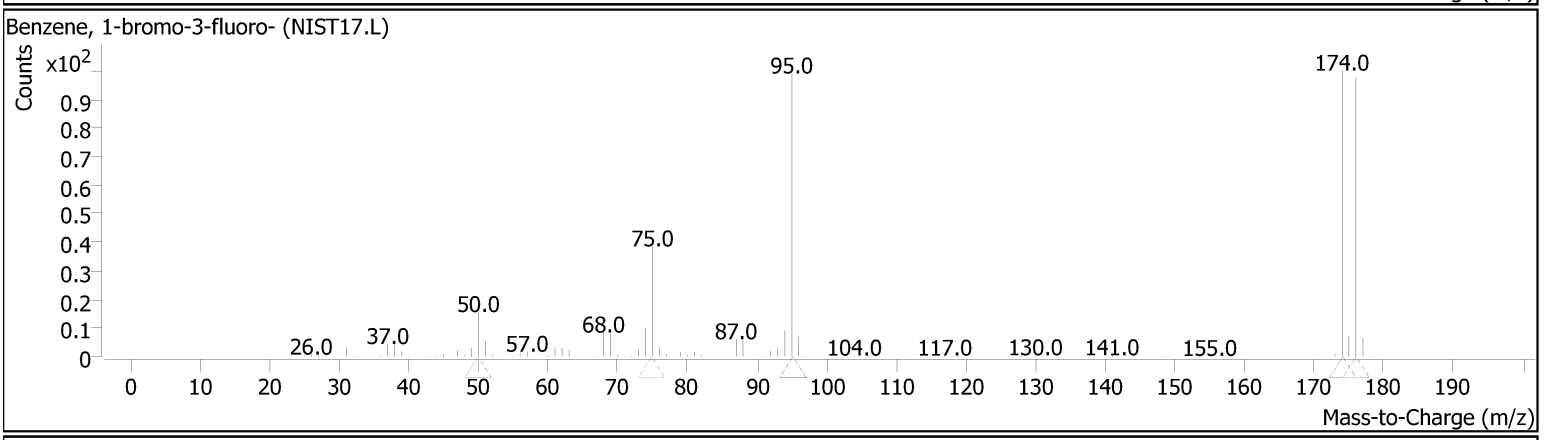


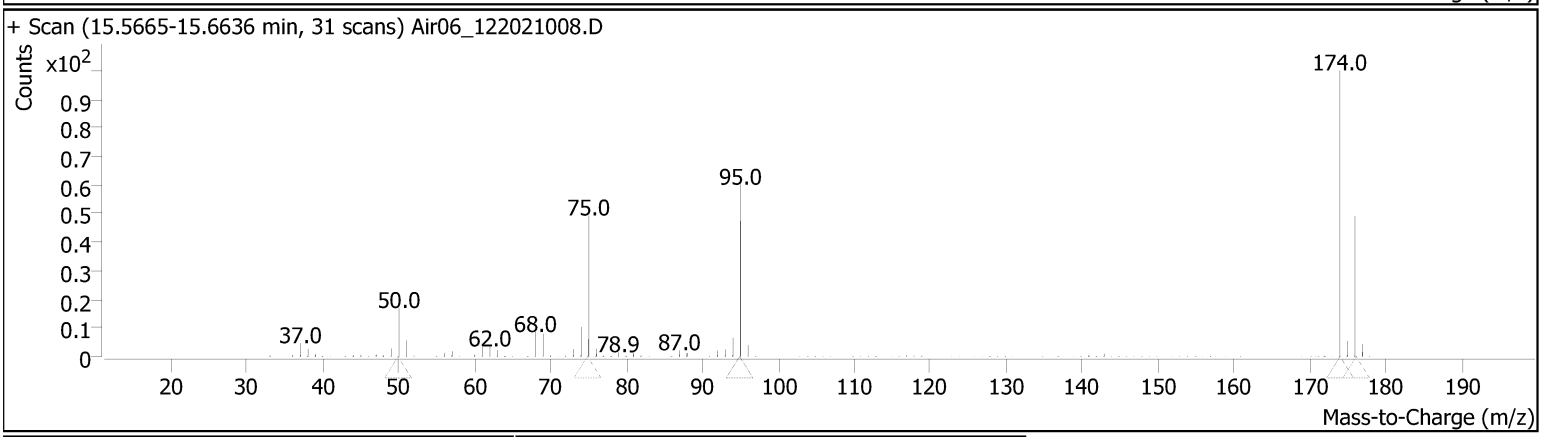


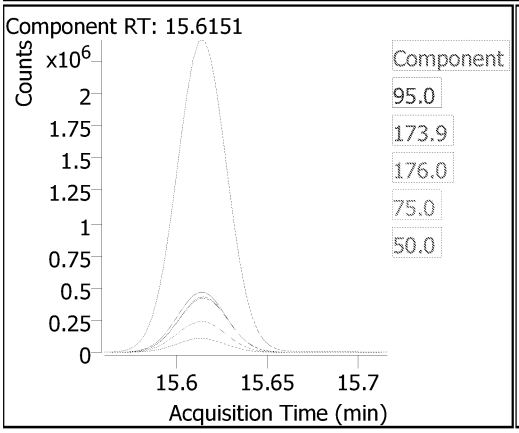


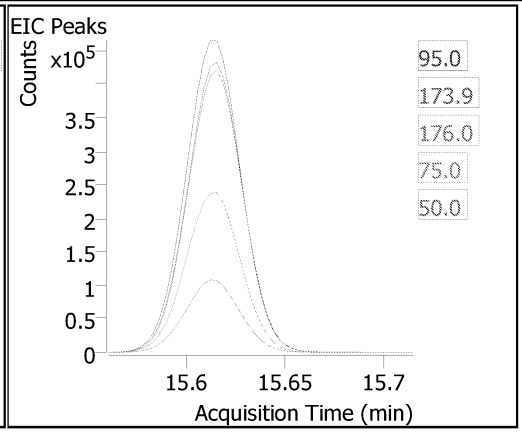
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.6151	Benzene, 1-bromo-3-fluoro-	4815257.2	98.7	1073-06-9	C6H4BrF	12.35

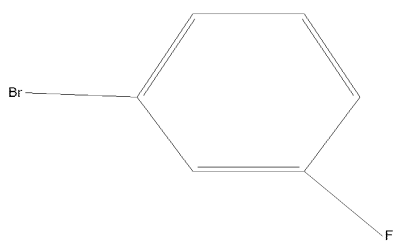




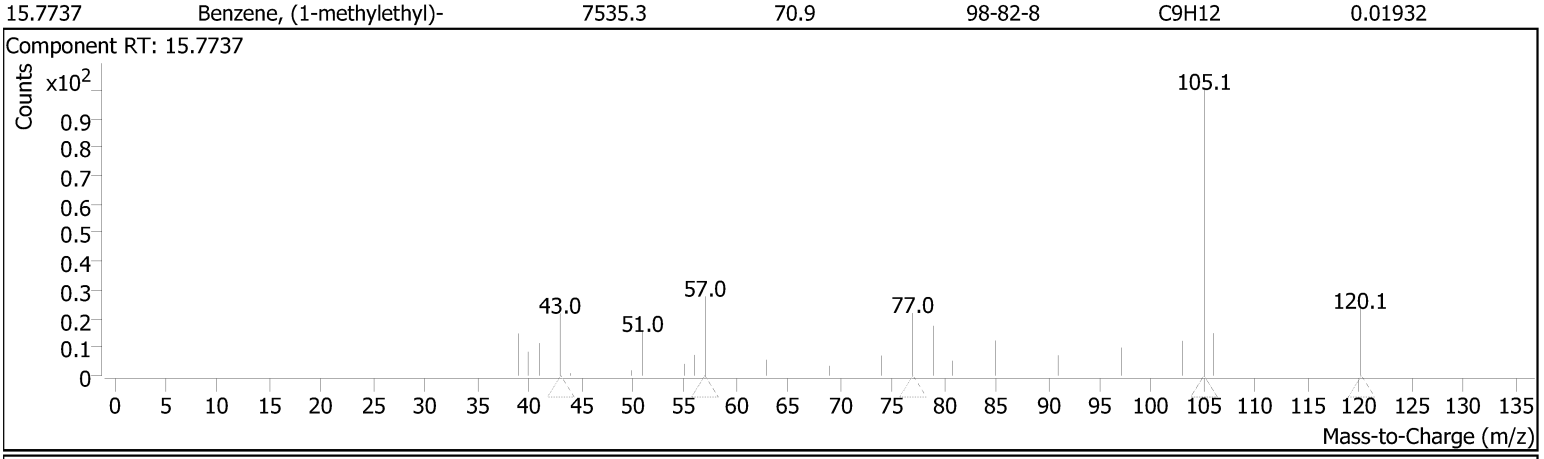


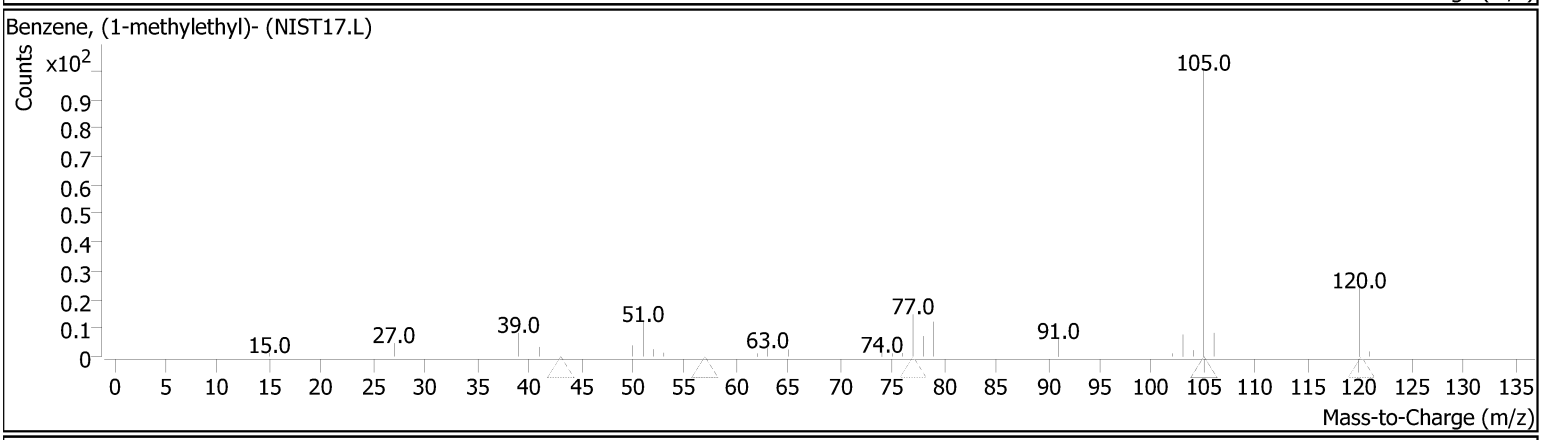


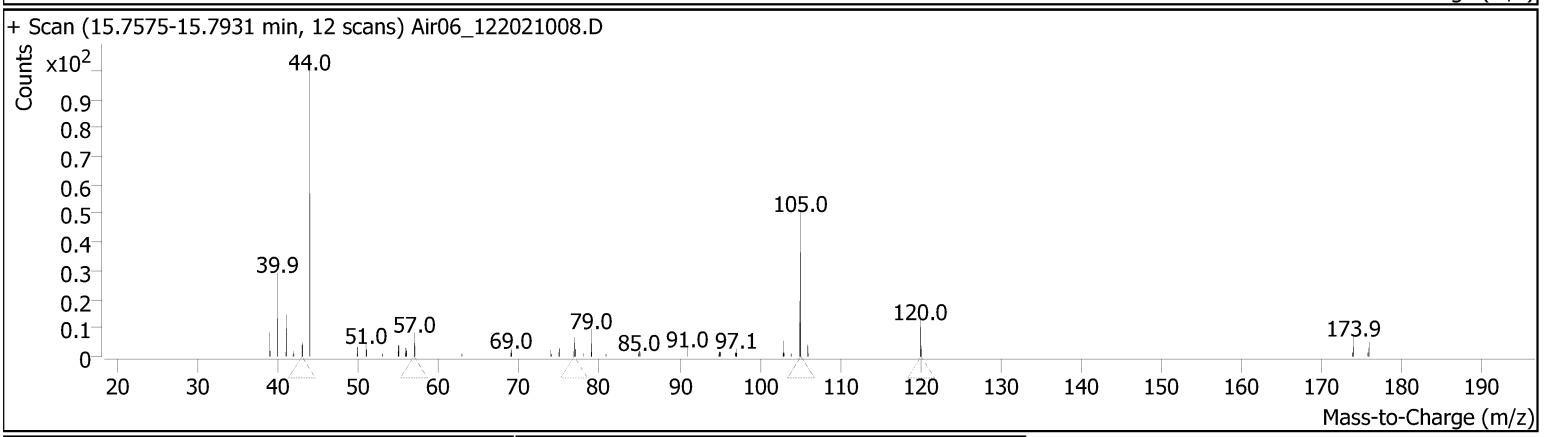


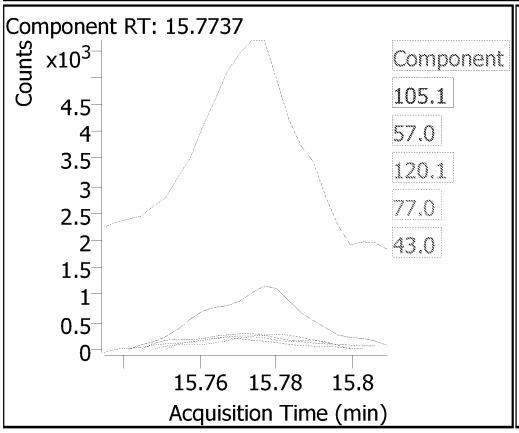


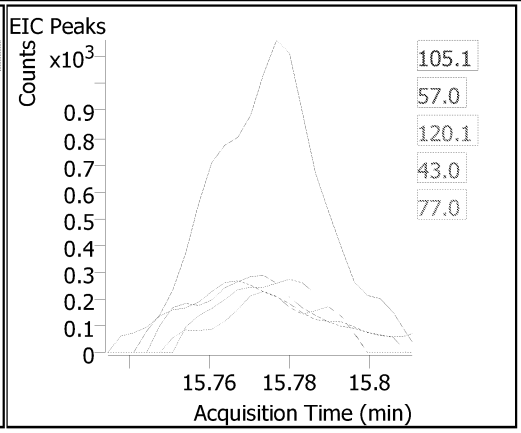
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.7737	Benzene, (1-methylethyl)-	7535.3	70.9	98-82-8	C9H12	0.01932

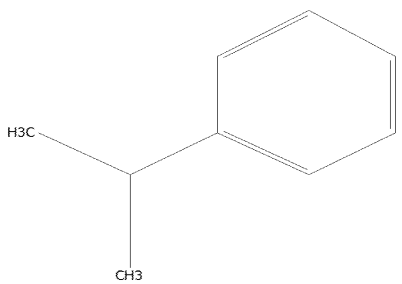




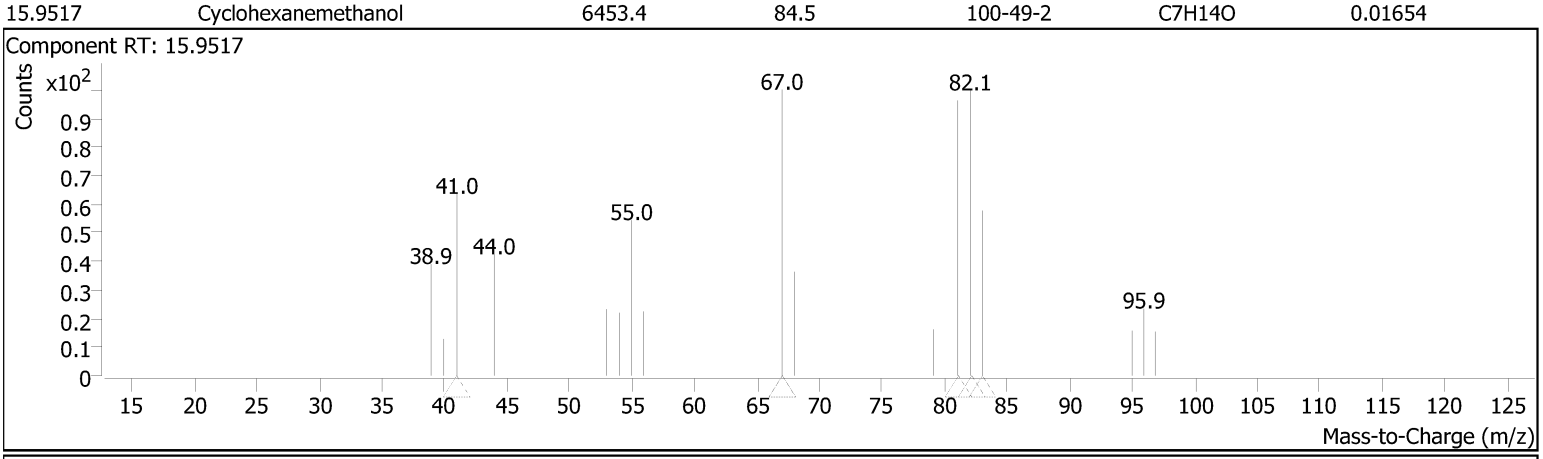


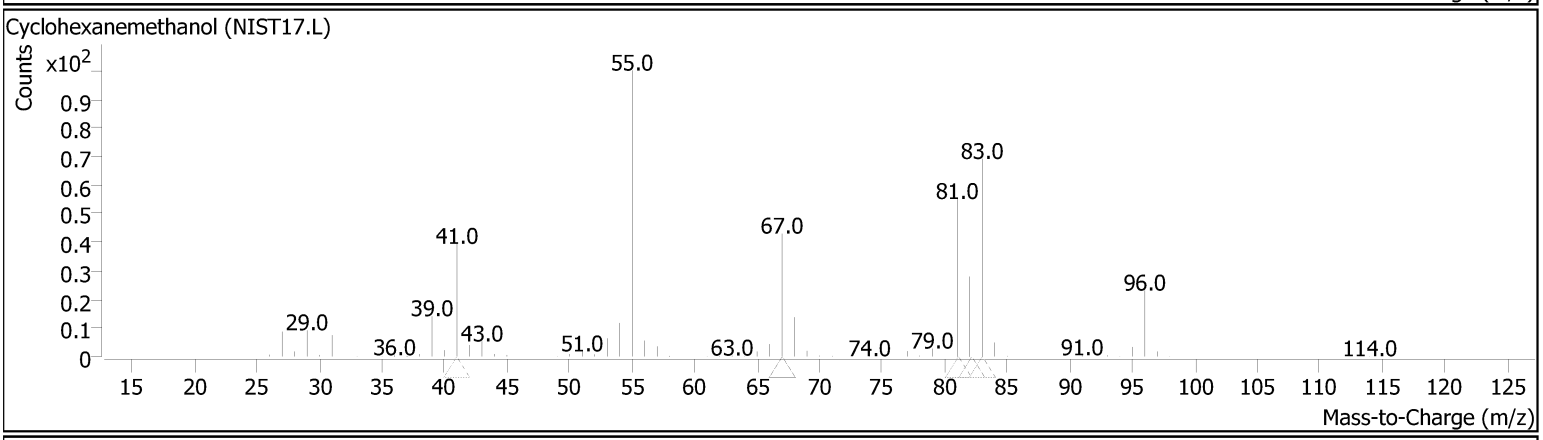


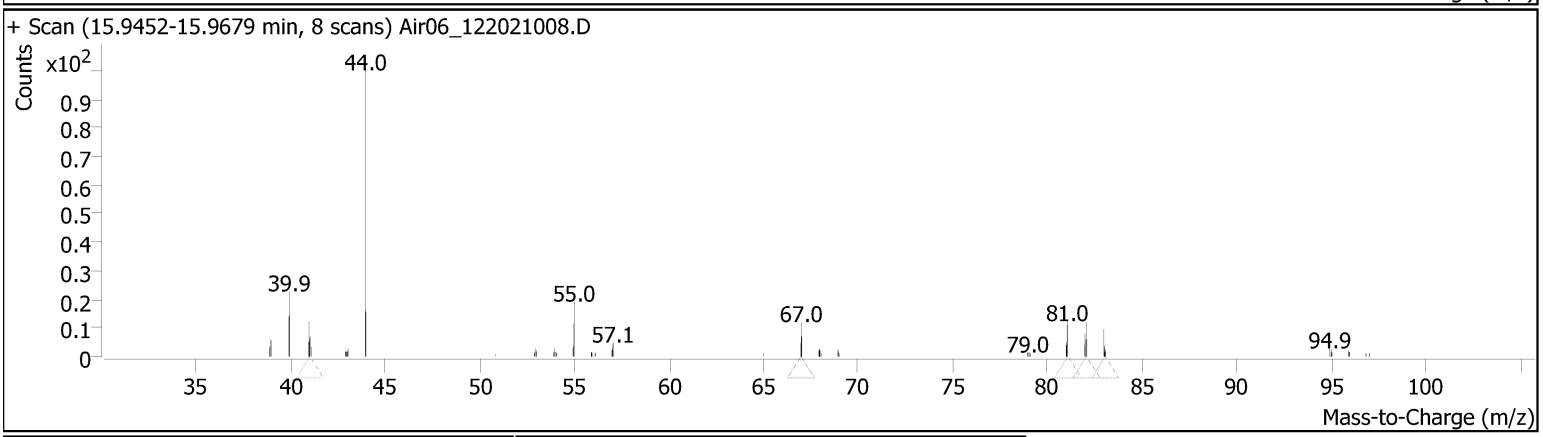


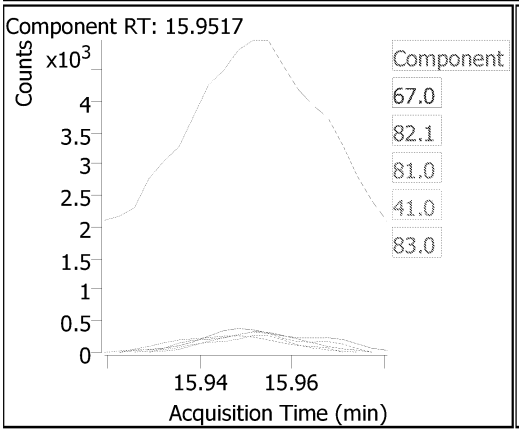


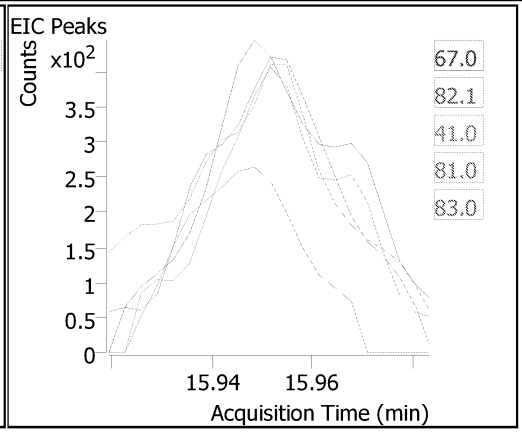
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.9517	Cyclohexanemethanol	6453.4	84.5	100-49-2	C7H14O	0.01654

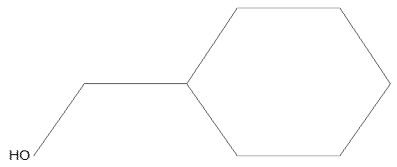




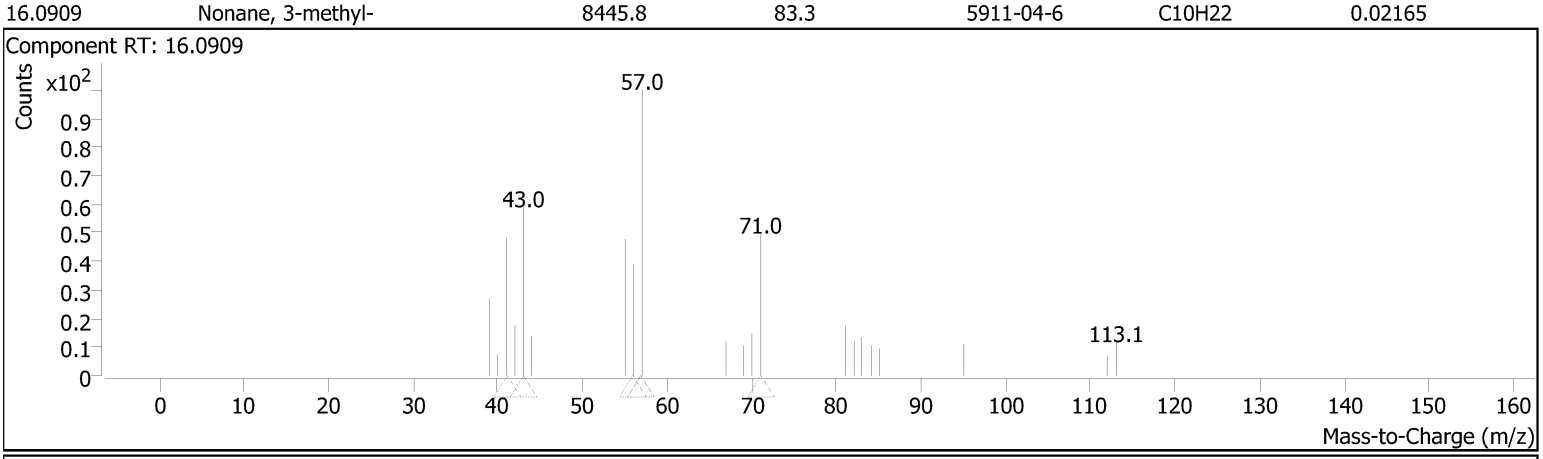


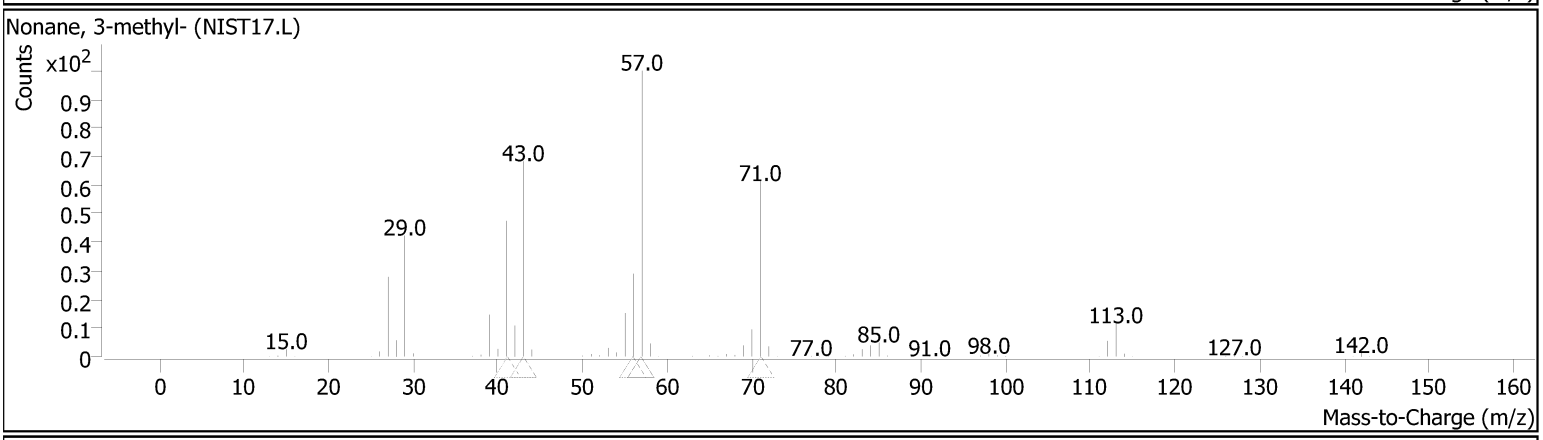


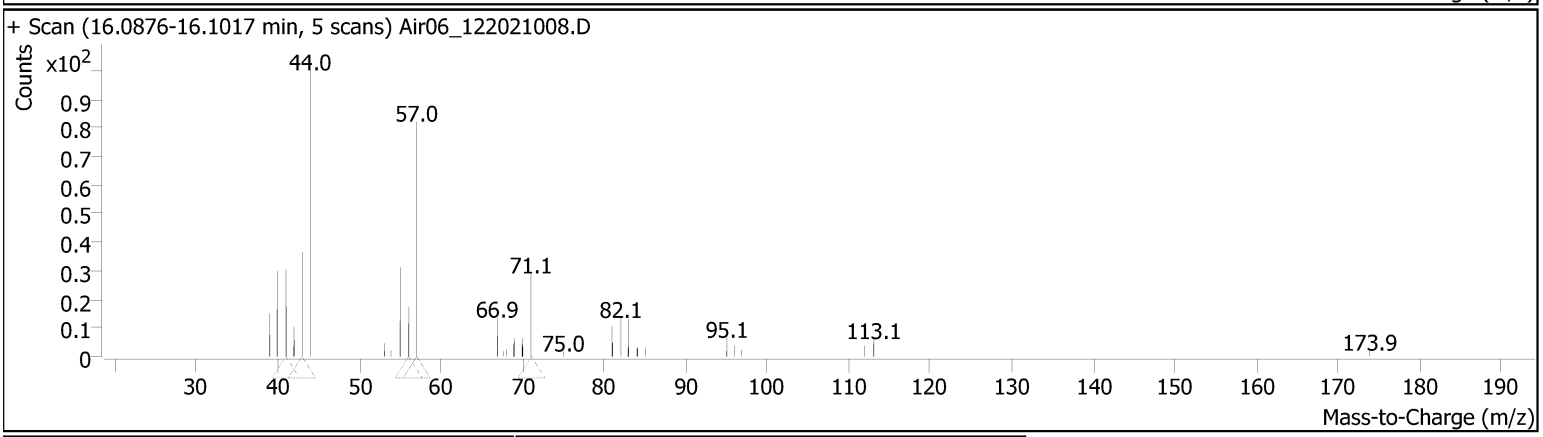


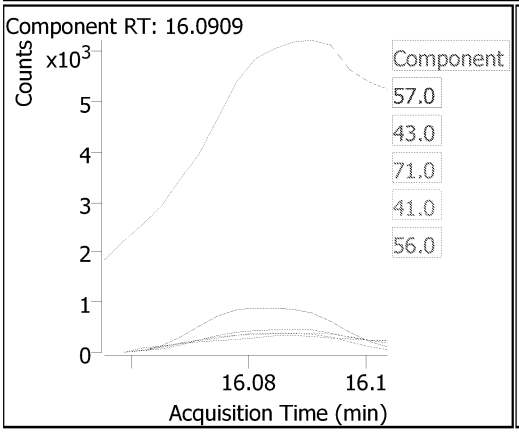


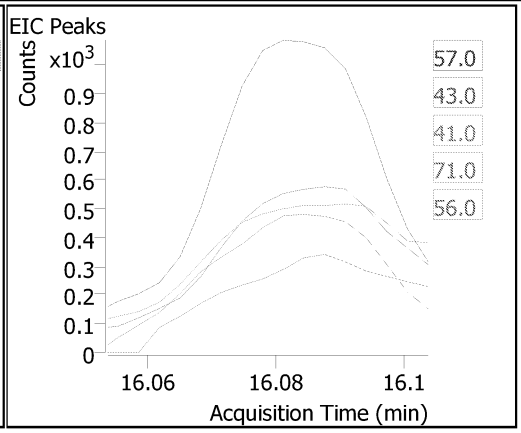
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.0909	Nonane, 3-methyl-	8445.8	83.3	5911-04-6	C10H22	0.02165





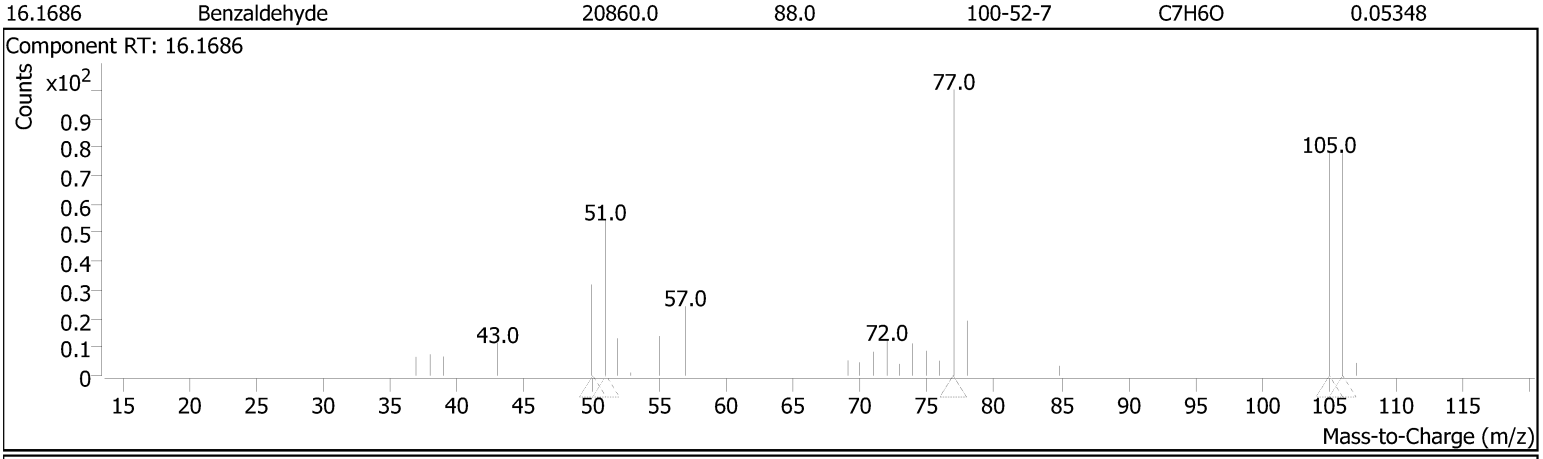


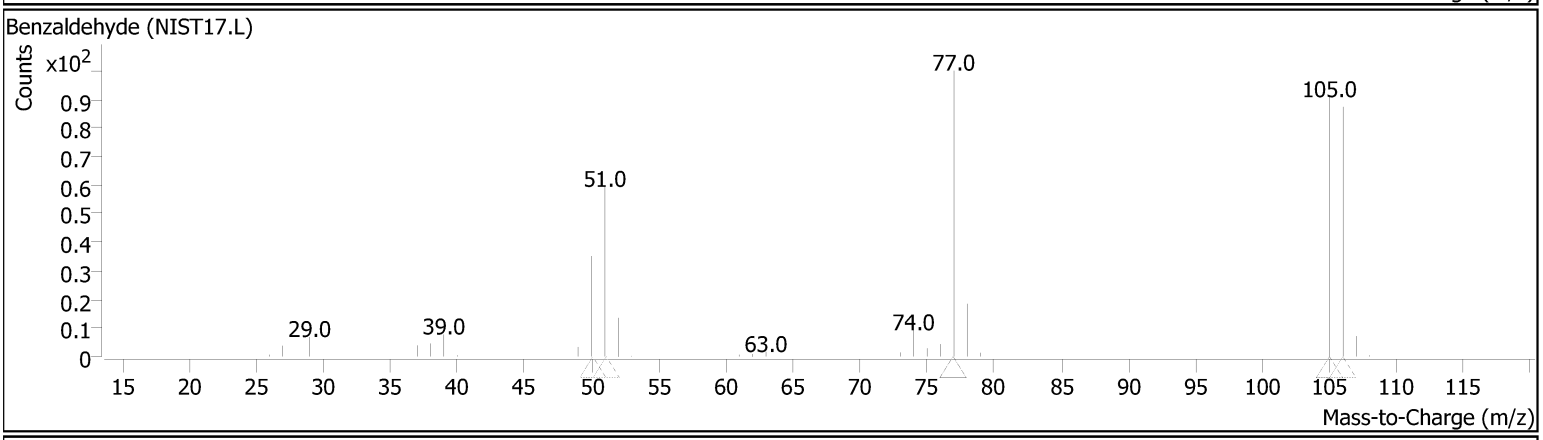


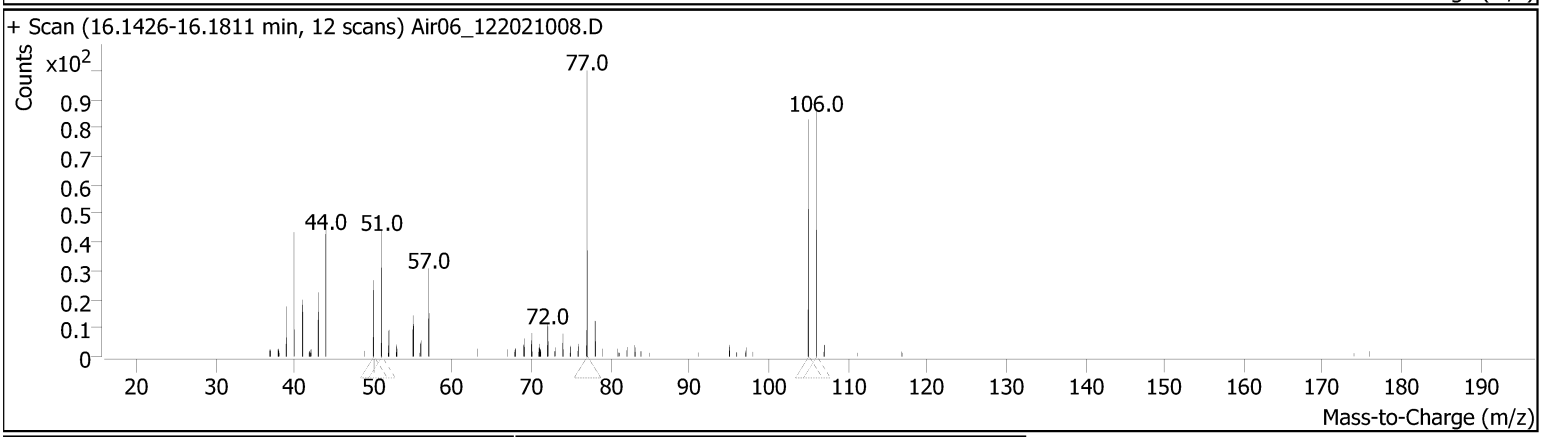


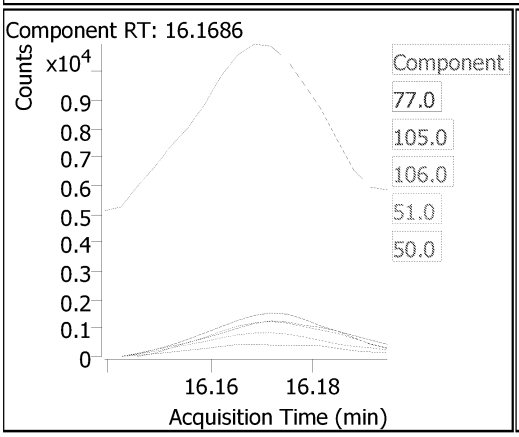


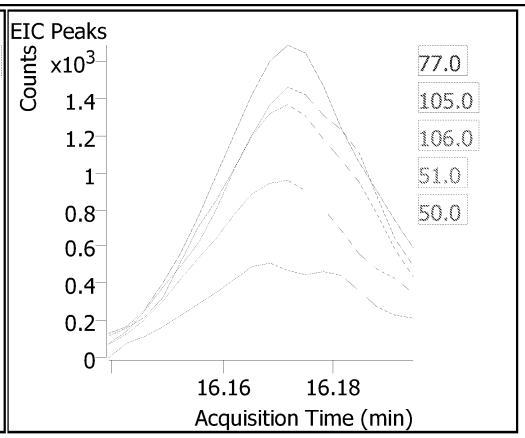
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.1686	Benzaldehyde	20860.0	88.0	100-52-7	C7H6O	0.05348

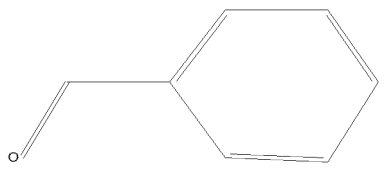




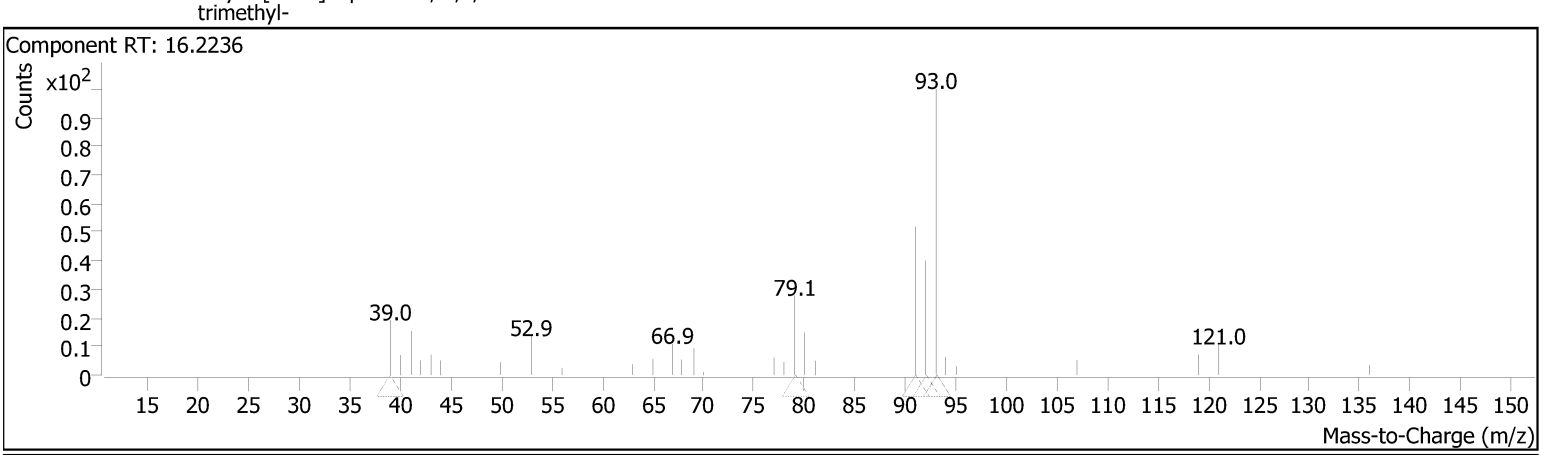


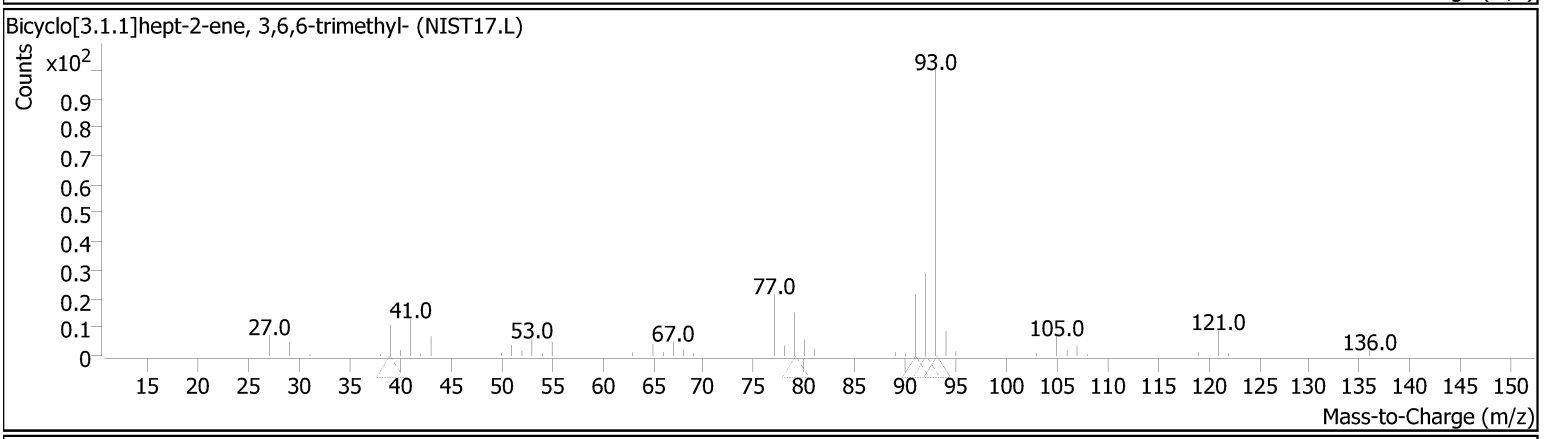


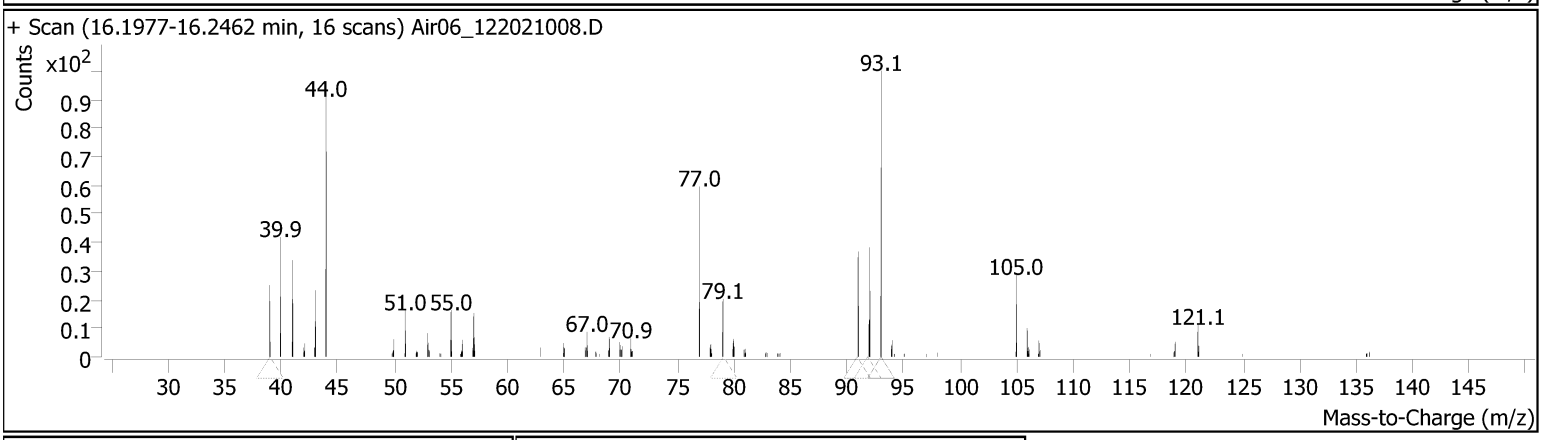


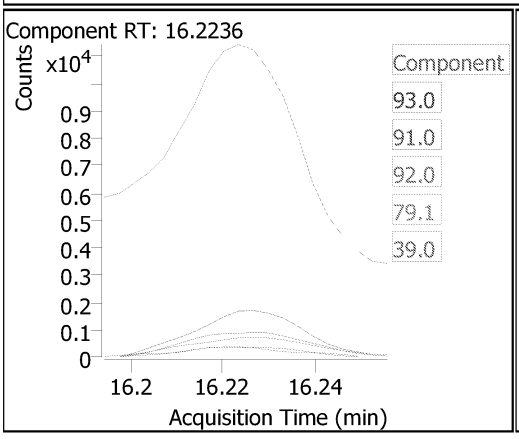


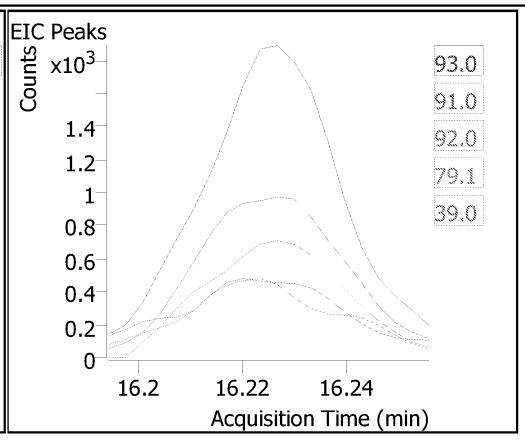
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.2236	Bicyclo[3.1.1]hept-2-ene, 3,6,6-trimethyl-	21088.3	85.2	4889-83-2	C10H16	0.05406

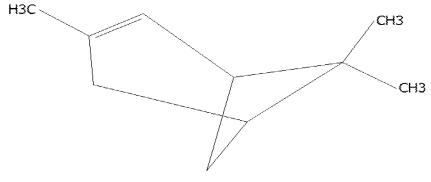




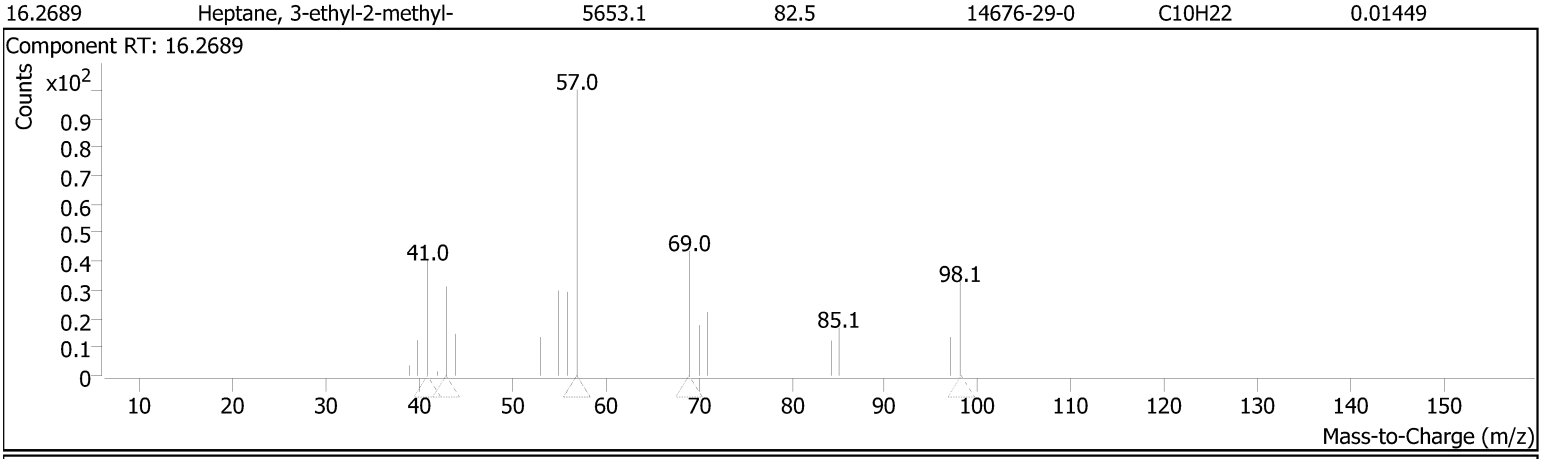


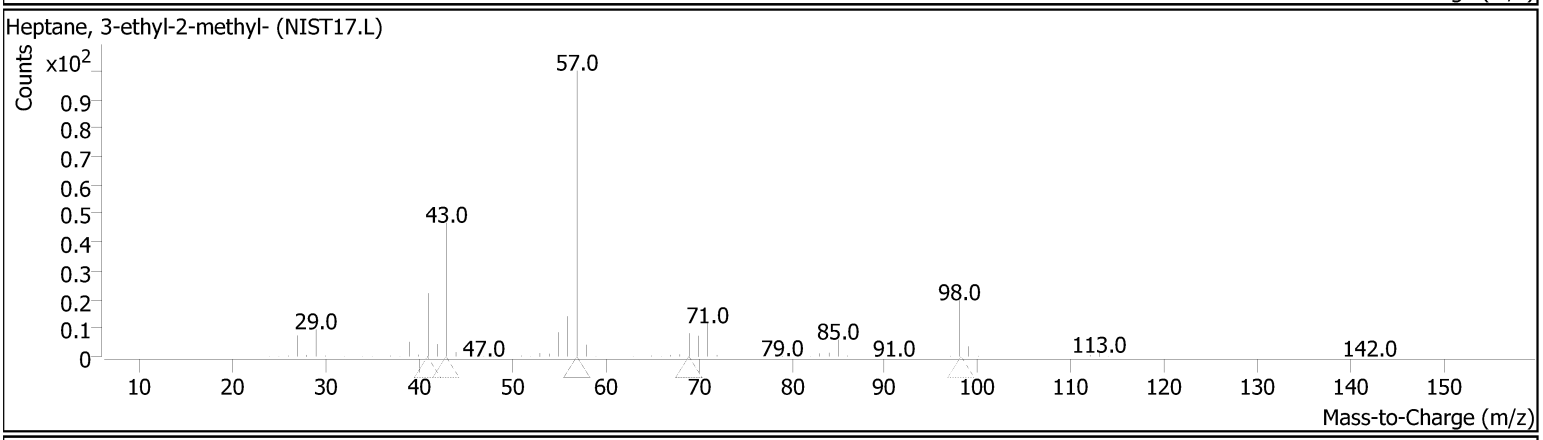


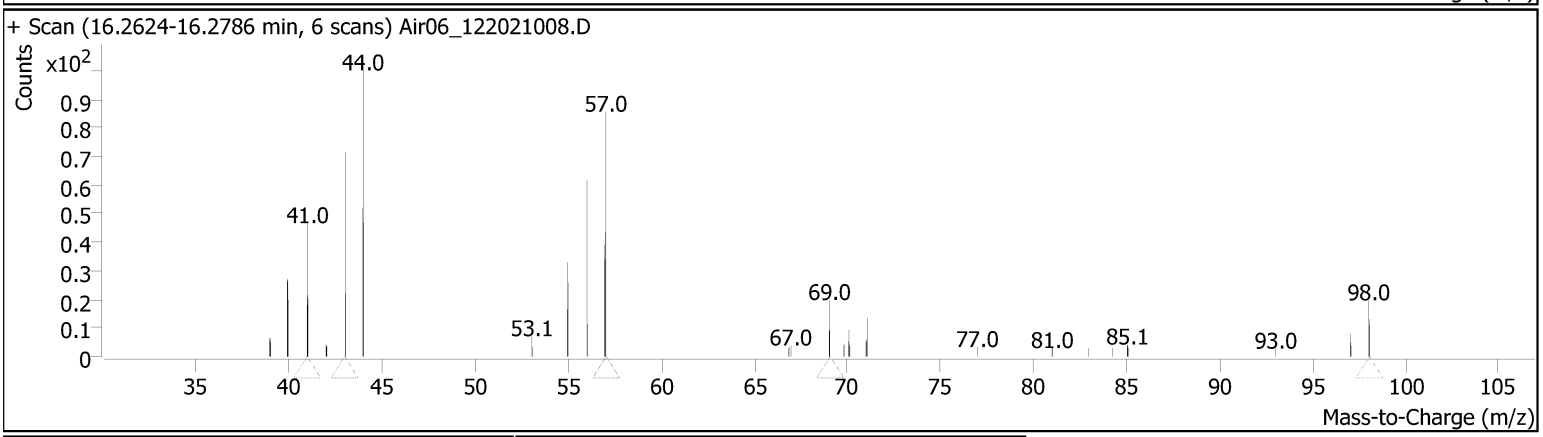


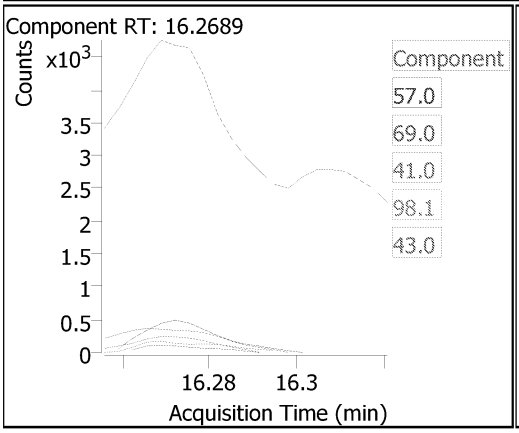


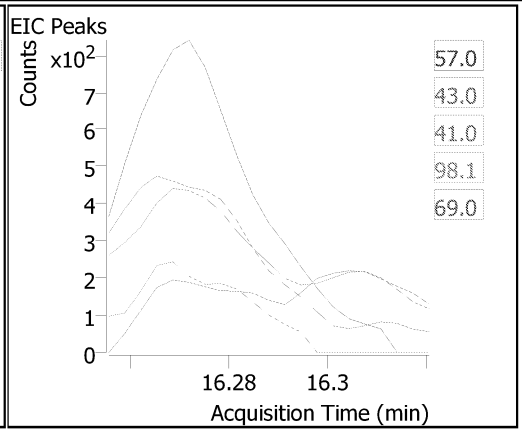
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.2689	Heptane, 3-ethyl-2-methyl-	5653.1	82.5	14676-29-0	C10H22	0.01449

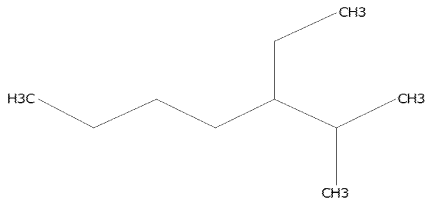




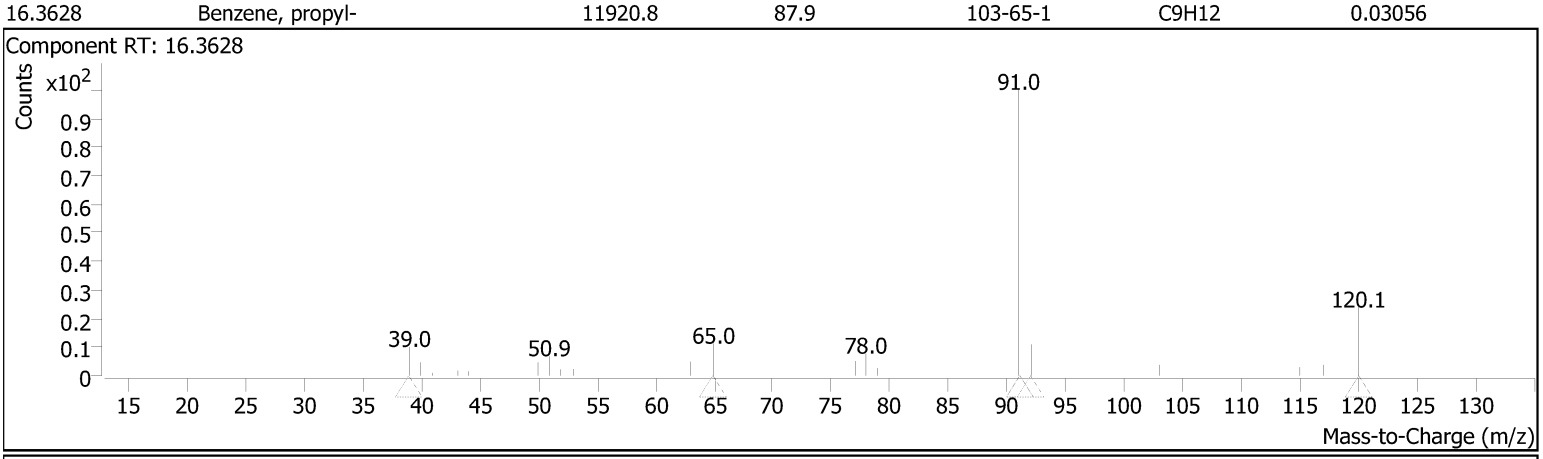


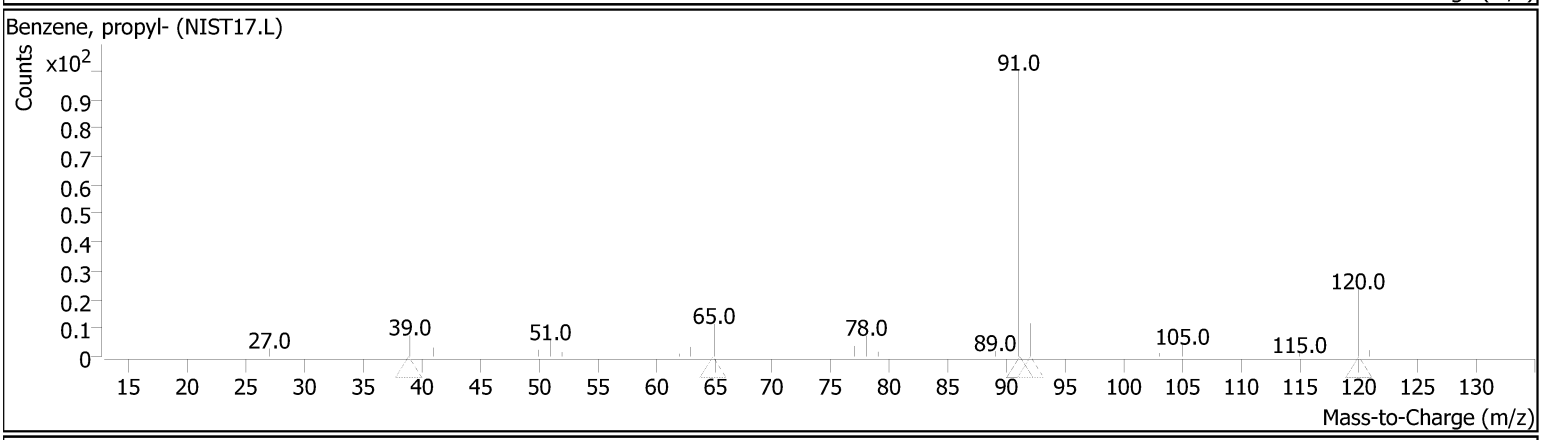


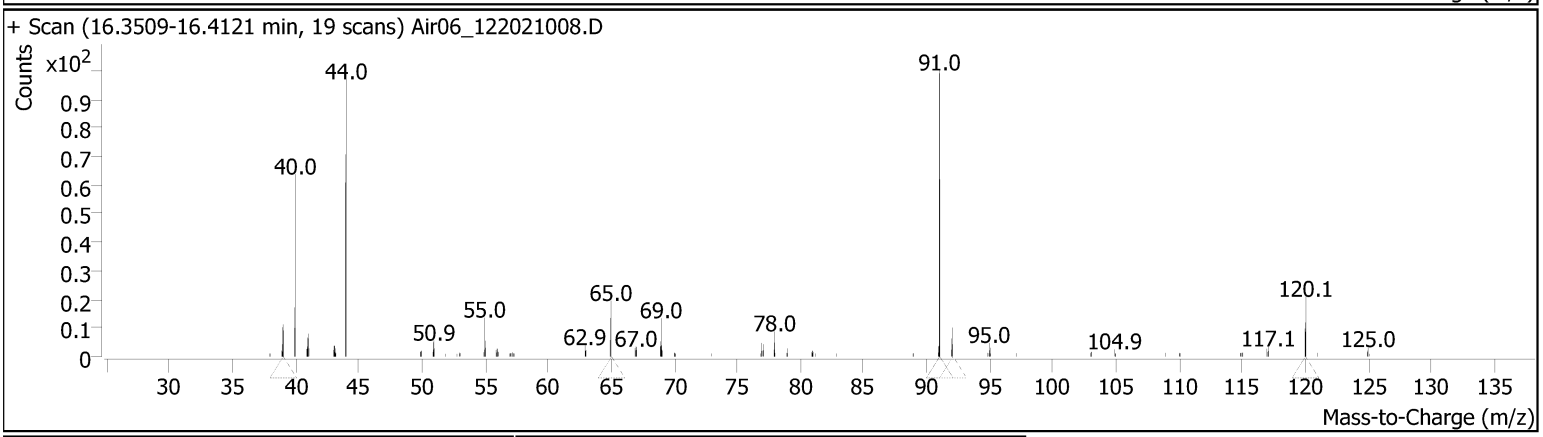


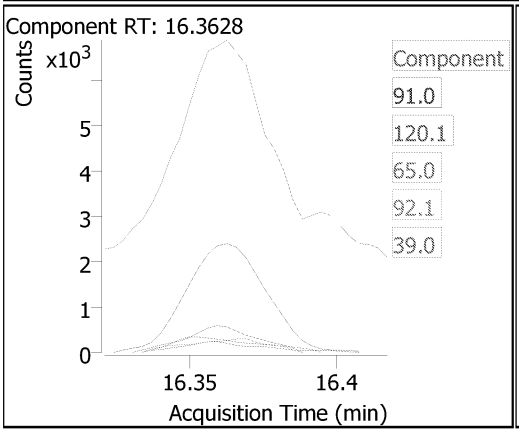


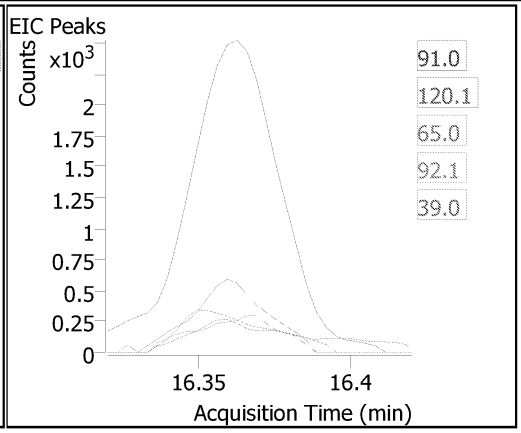
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.3628	Benzene, propyl-	11920.8	87.9	103-65-1	C9H12	0.03056

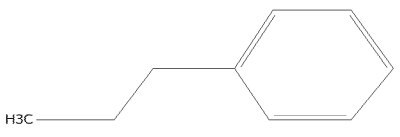




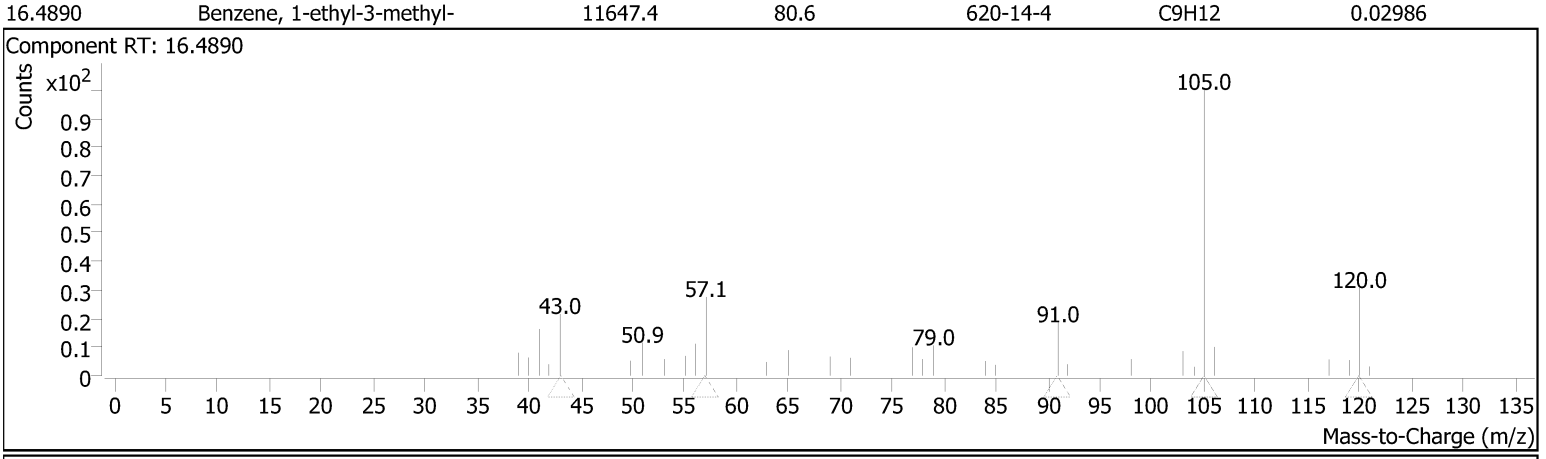


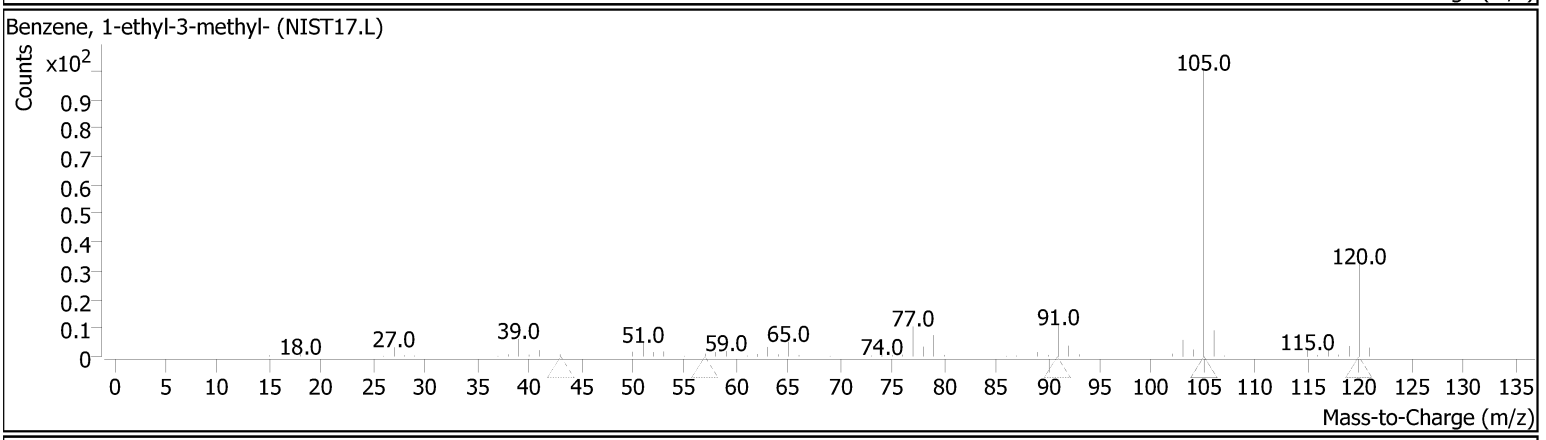


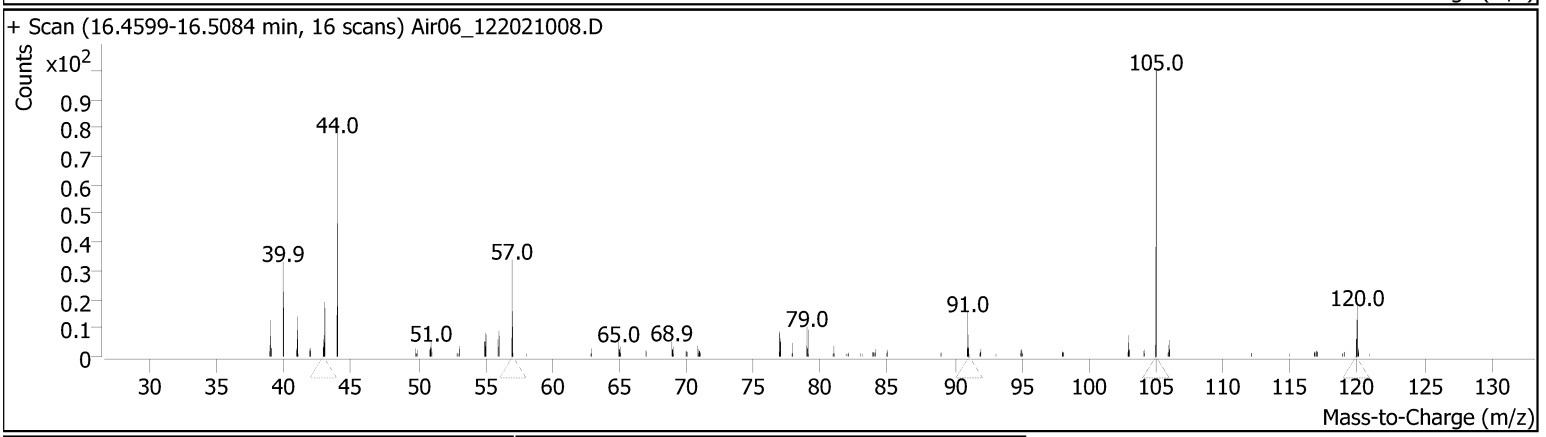


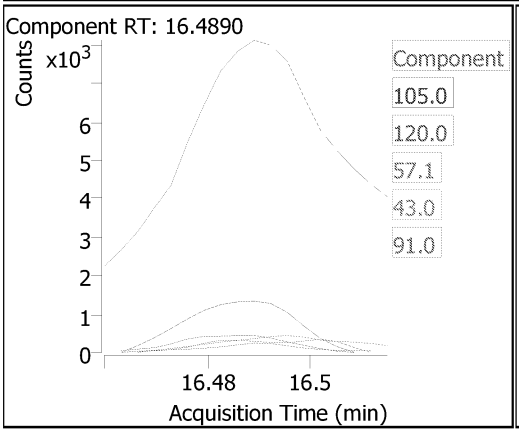


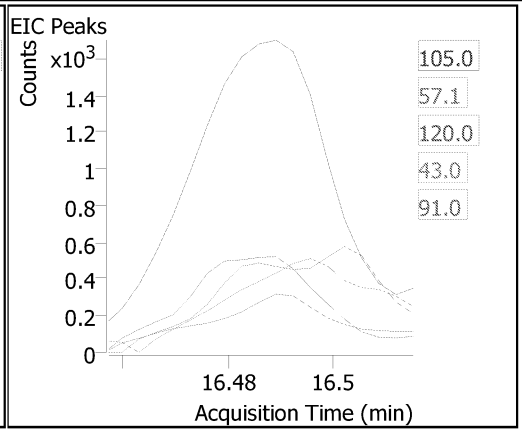
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.4890	Benzene, 1-ethyl-3-methyl-	11647.4	80.6	620-14-4	C9H12	0.02986

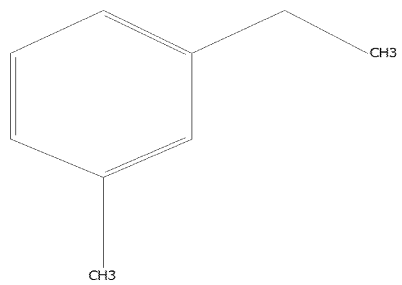




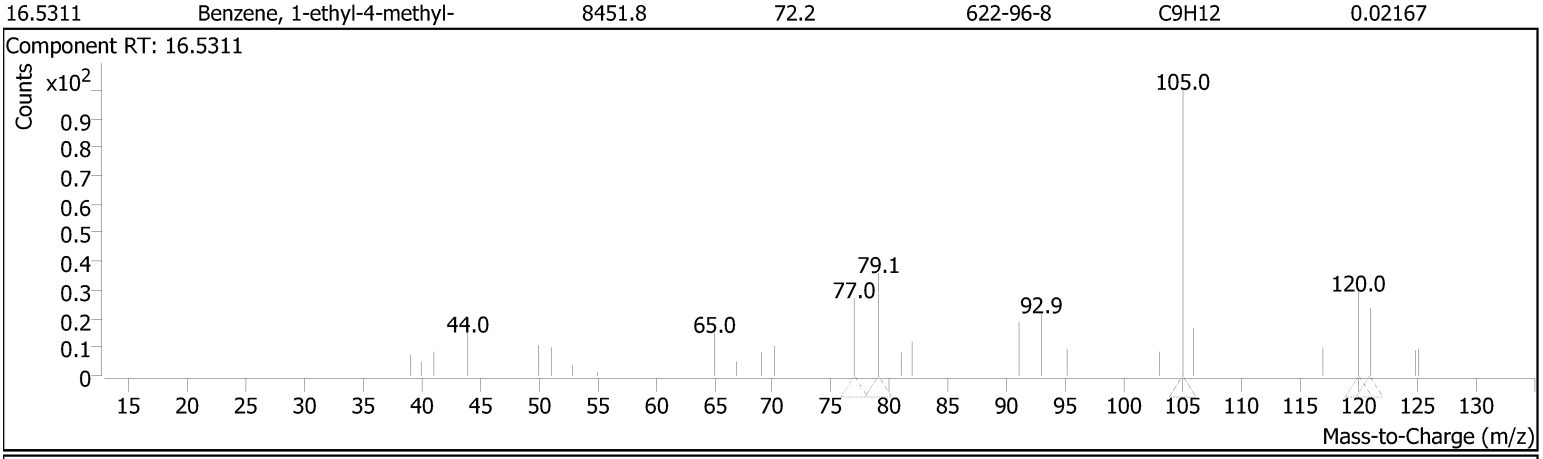


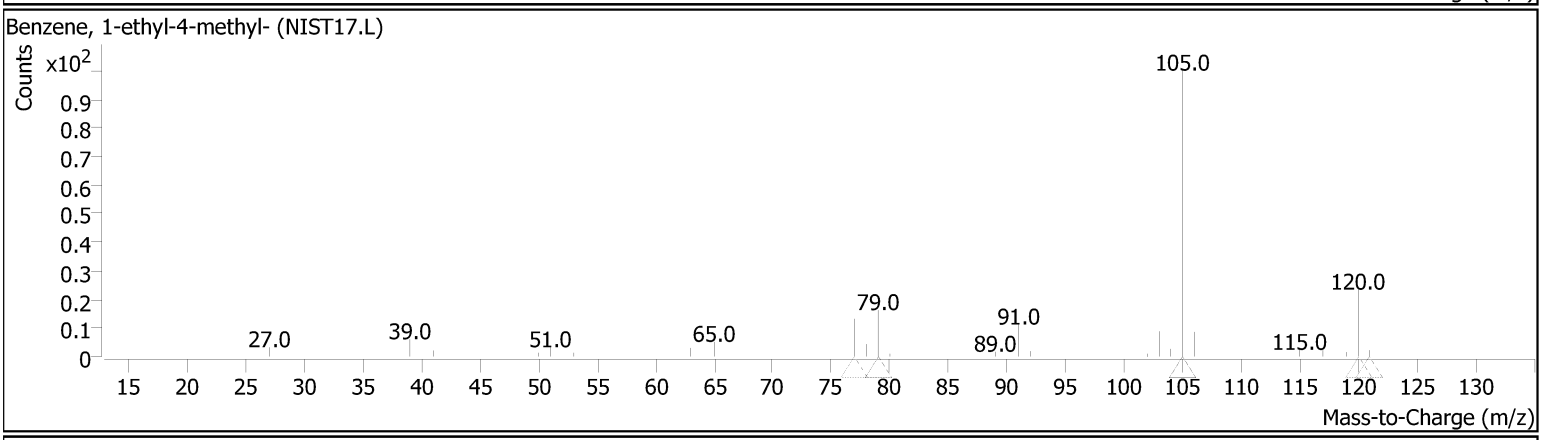


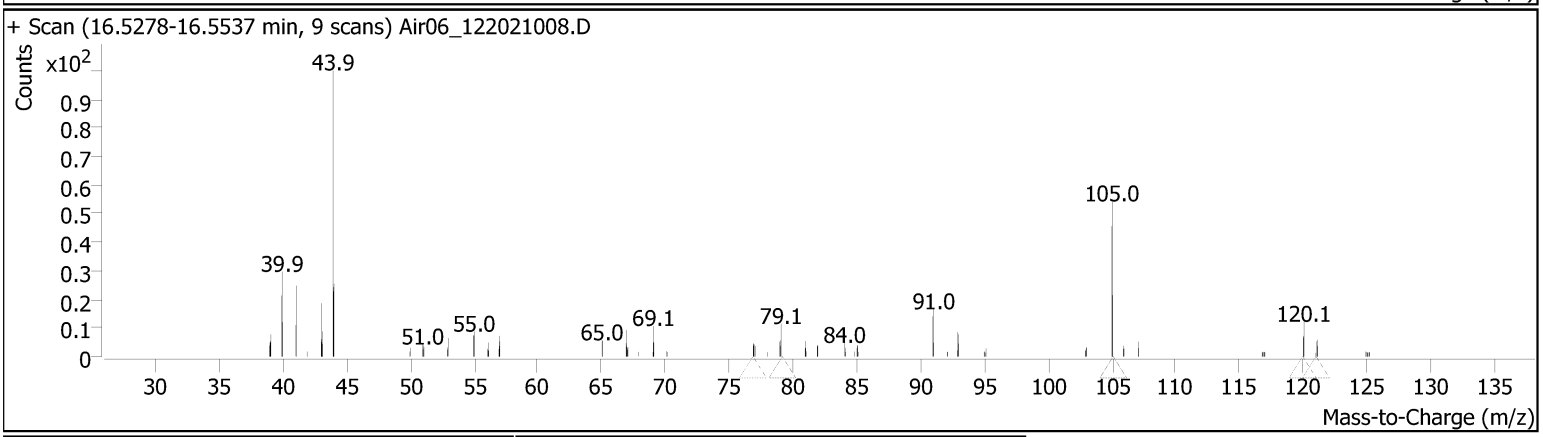


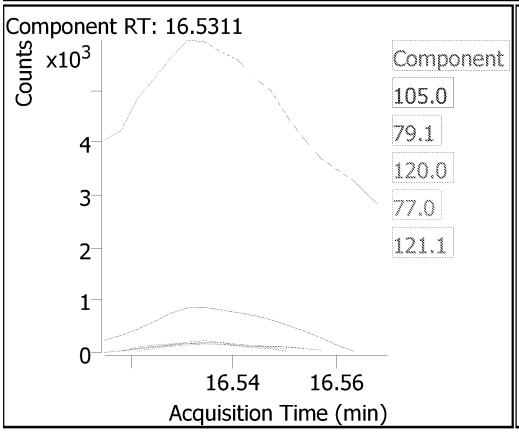


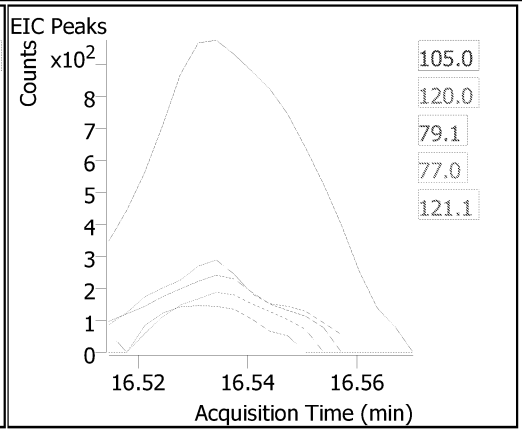
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.5311	Benzene, 1-ethyl-4-methyl-	8451.8	72.2	622-96-8	C9H12	0.02167

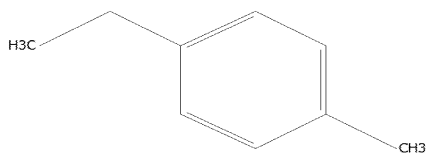




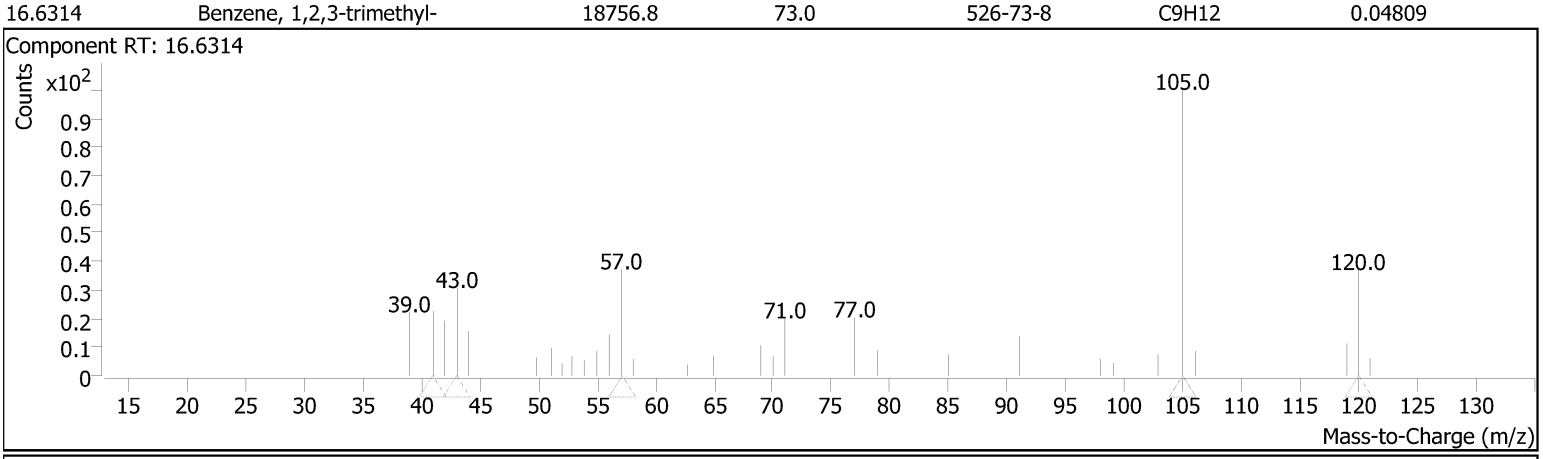


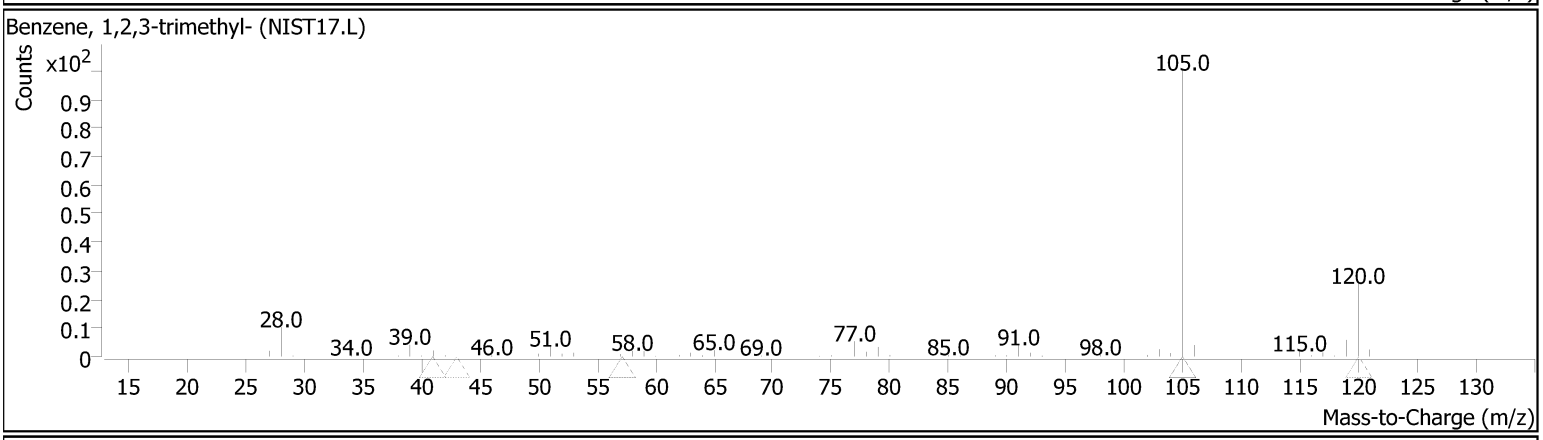


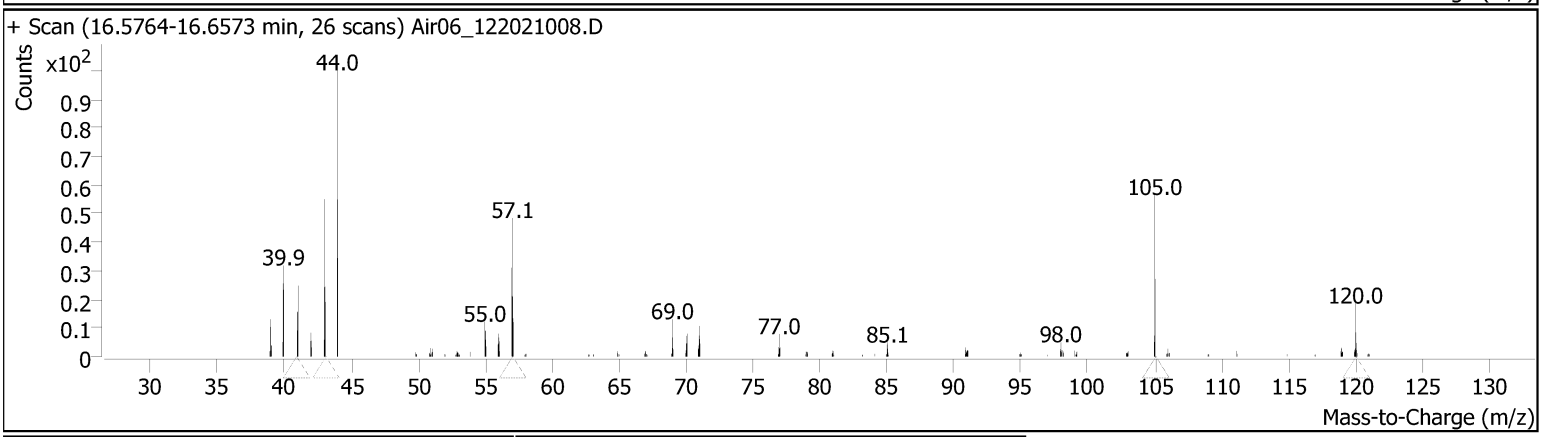


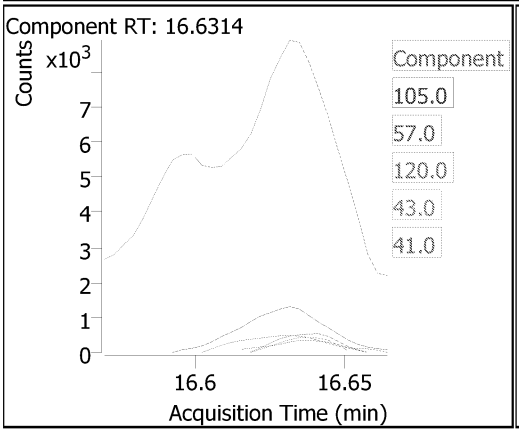


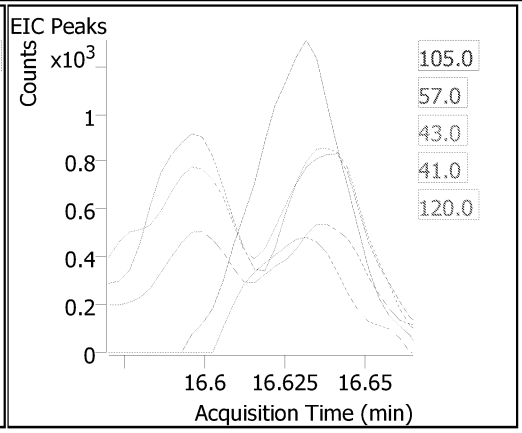
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.6314	Benzene, 1,2,3-trimethyl-	18756.8	73.0	526-73-8	C9H12	0.04809

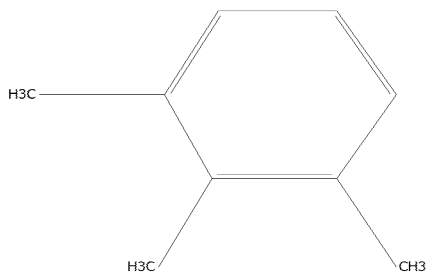




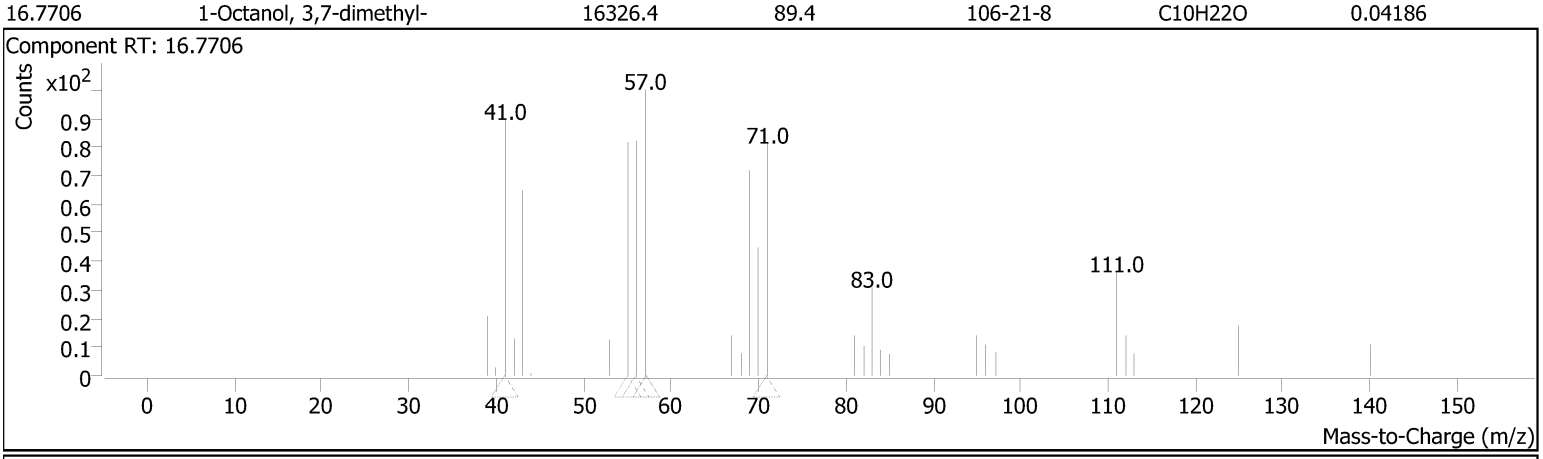


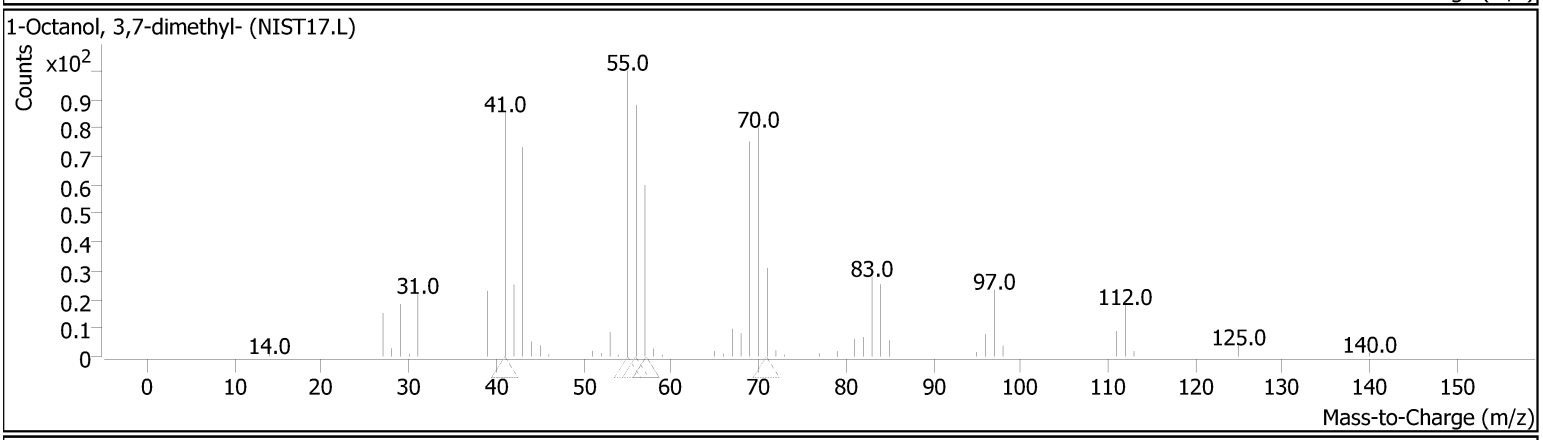


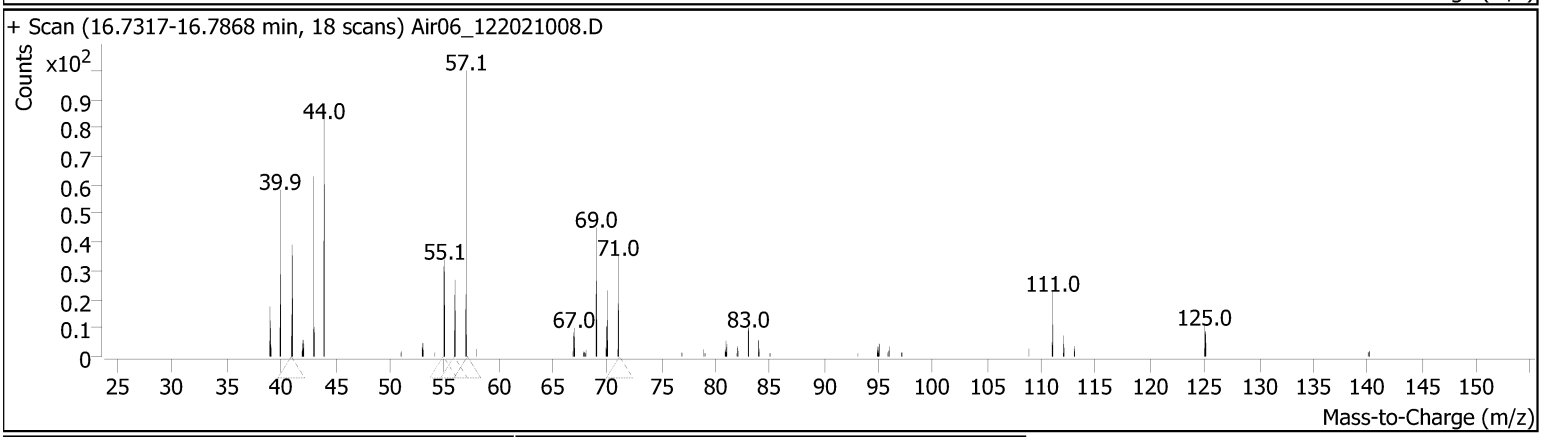


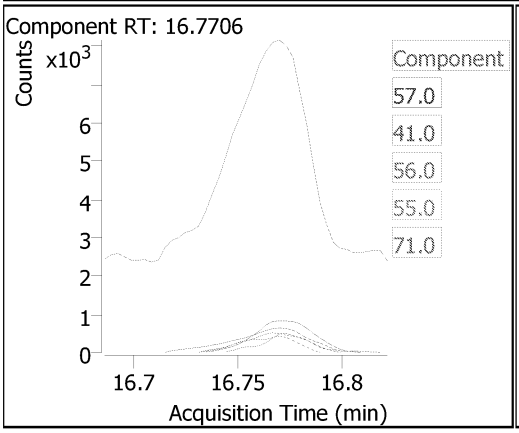


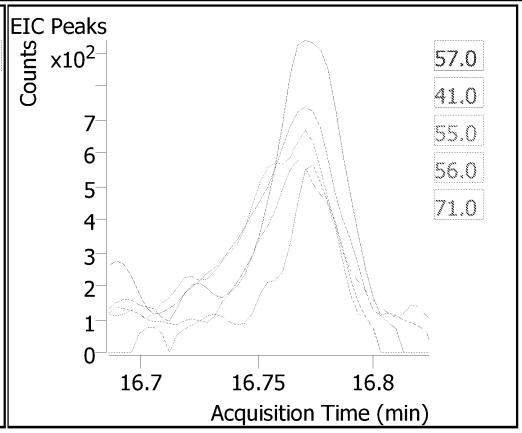
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.7706	1-Octanol, 3,7-dimethyl-	16326.4	89.4	106-21-8	C10H22O	0.04186

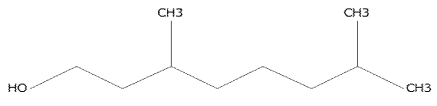




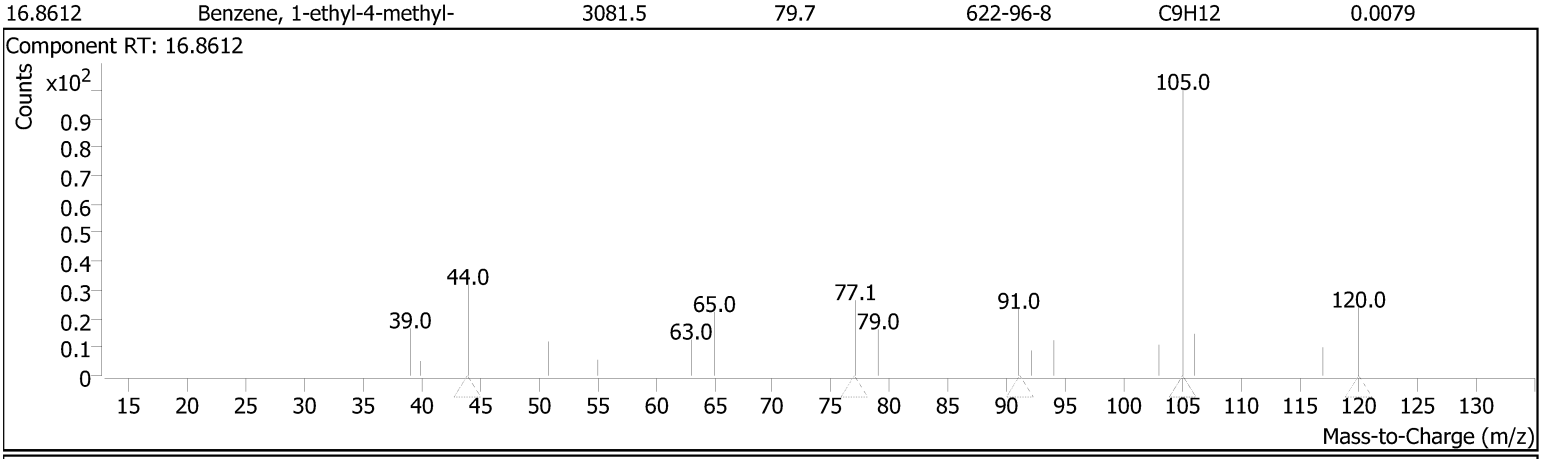


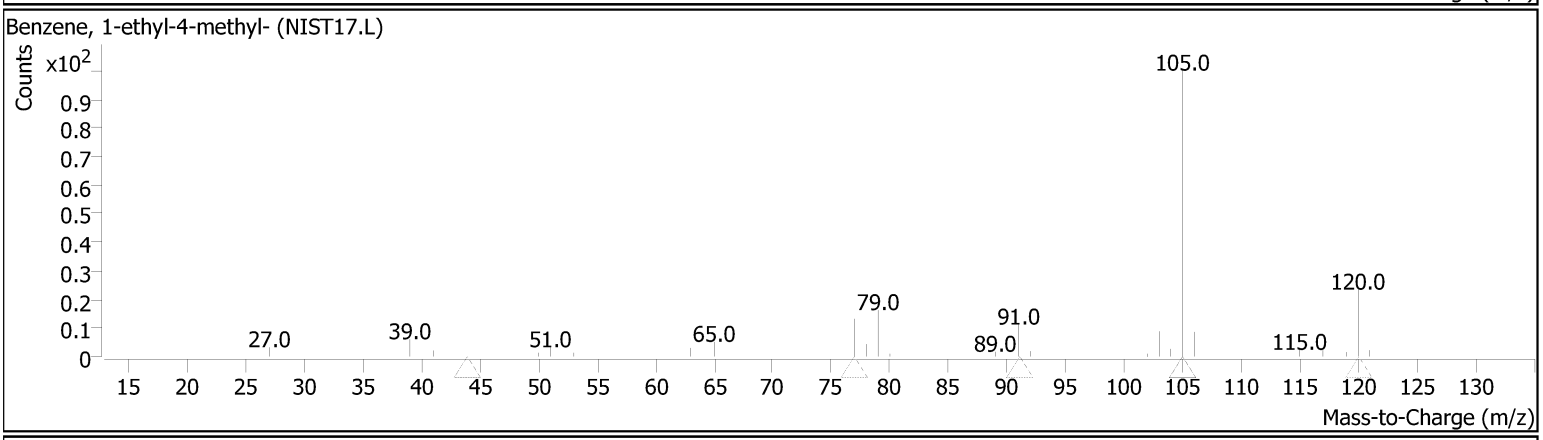


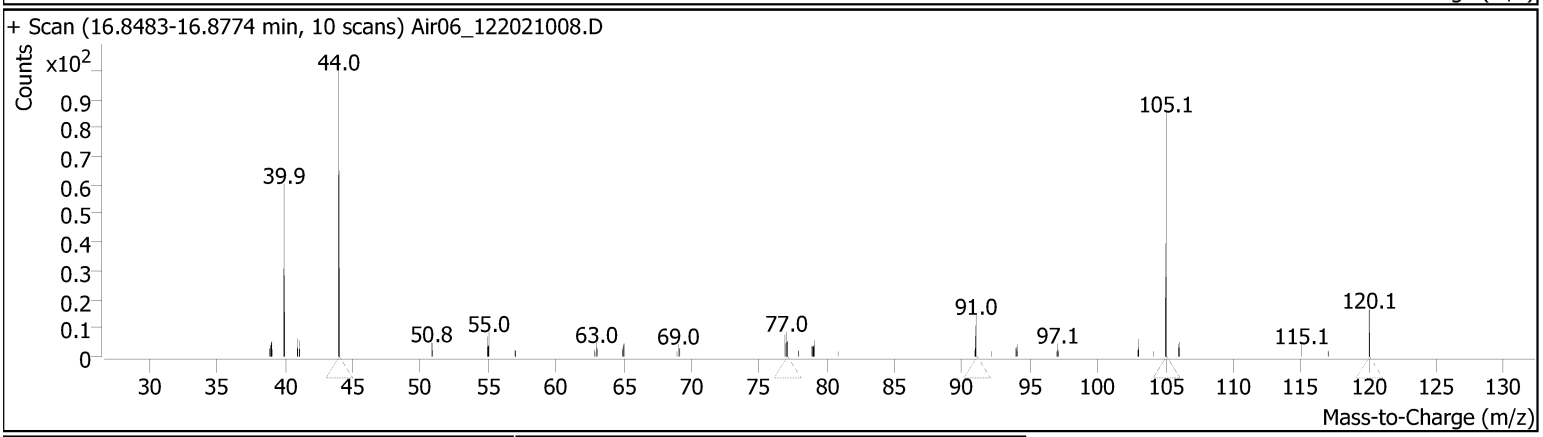


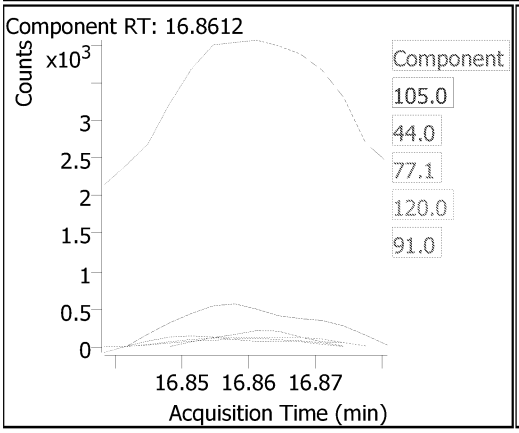


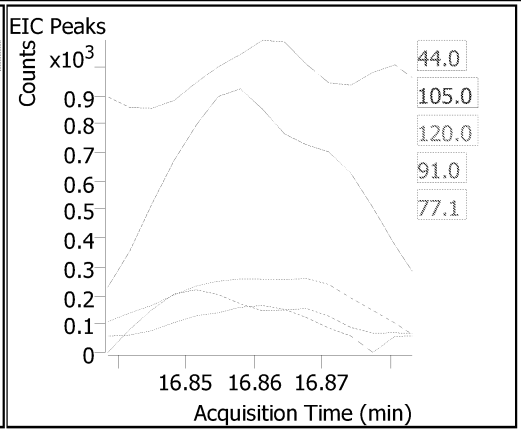
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.8612	Benzene, 1-ethyl-4-methyl-	3081.5	79.7	622-96-8	C9H12	0.0079

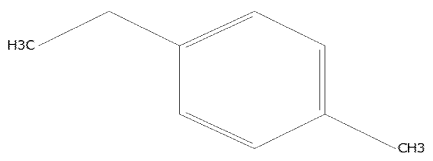




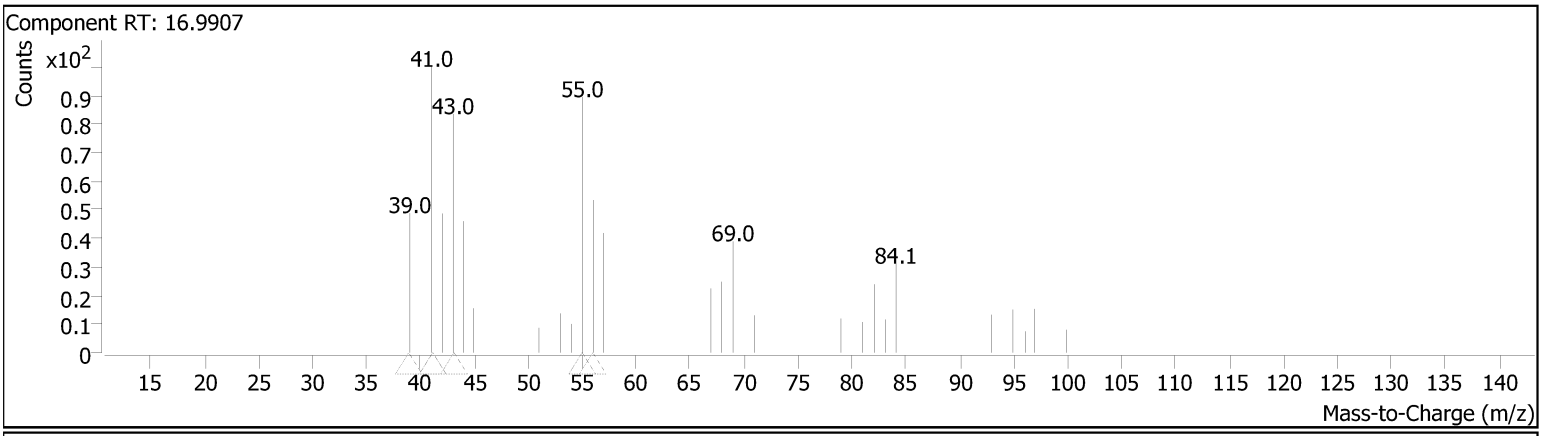


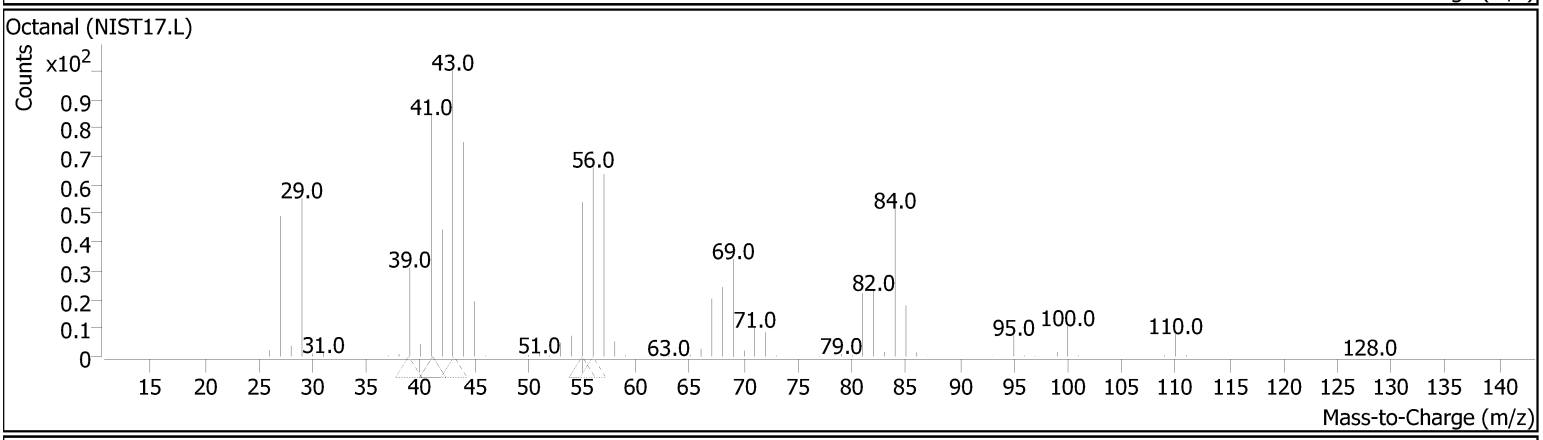


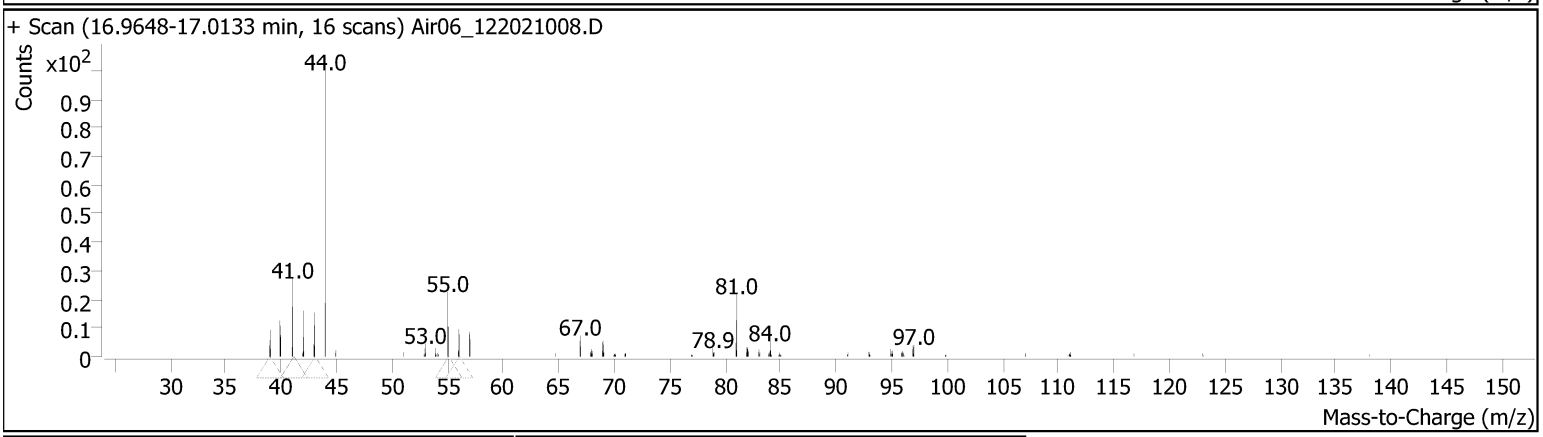


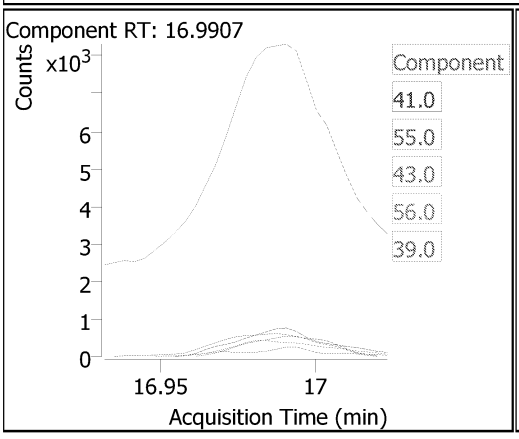


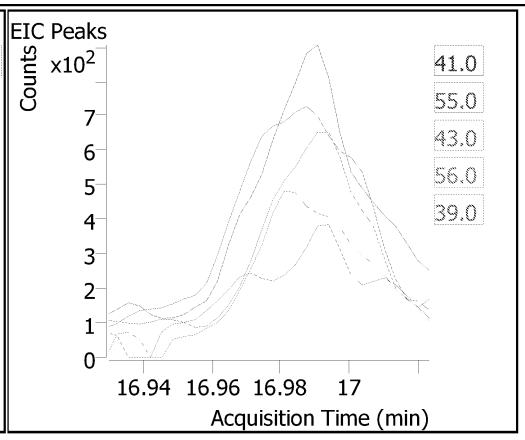
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.9907	Octanal	14132.1	82.6	124-13-0	C8H16O	0.03623





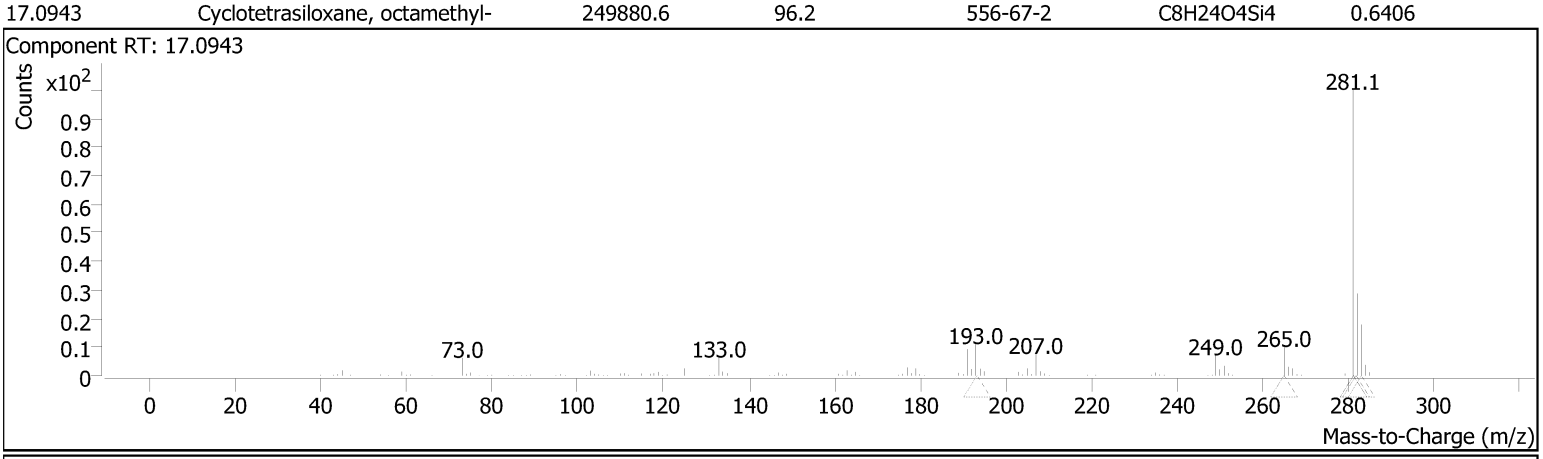


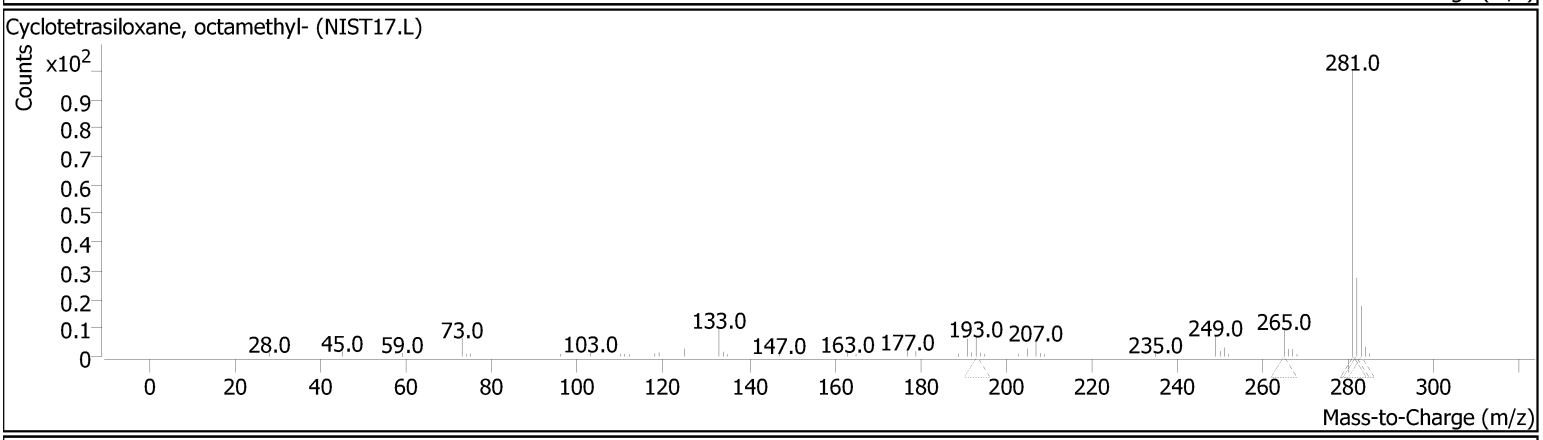


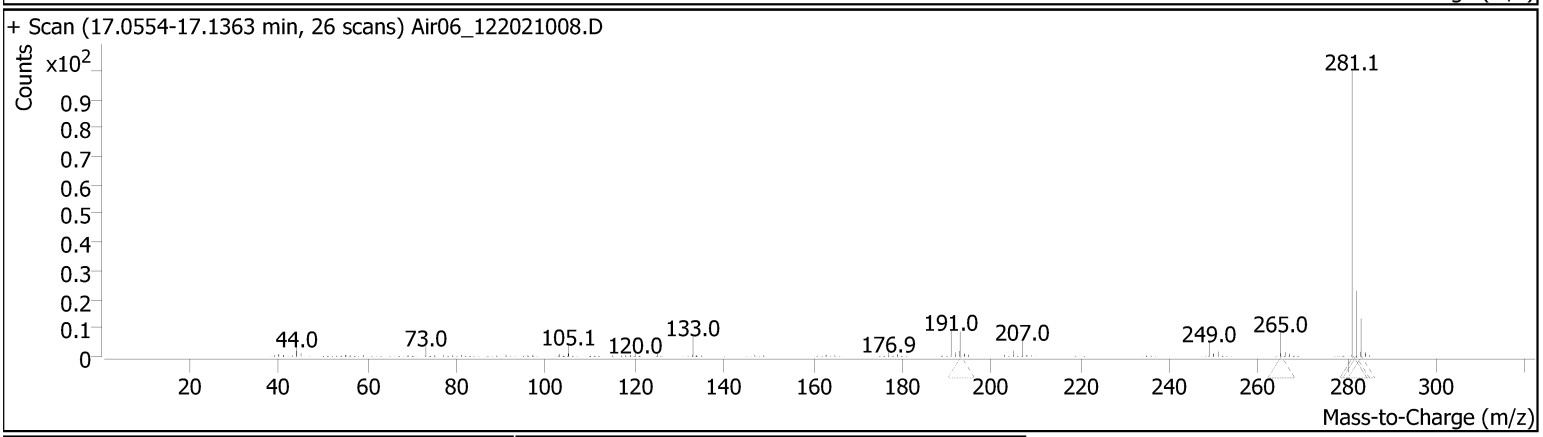


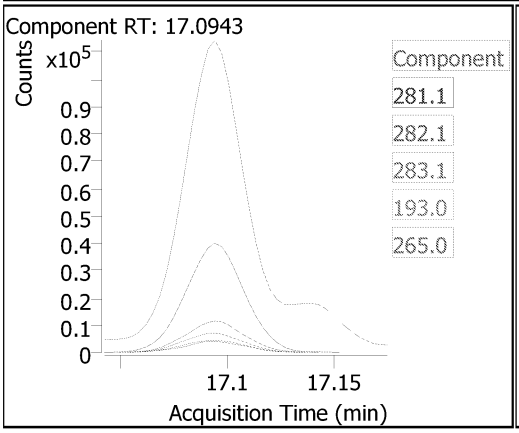


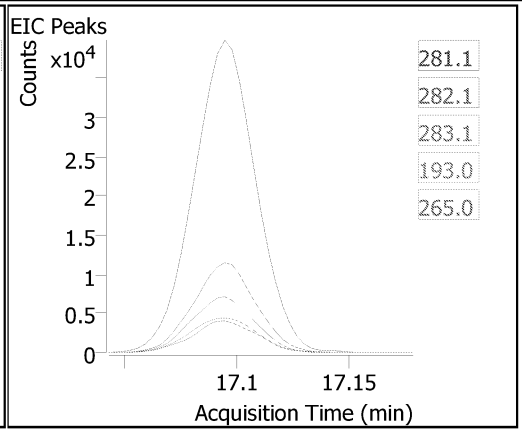
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.0943	Cyclotetrasiloxane, octamethyl-	249880.6	96.2	556-67-2	C8H24O4Si4	0.6406

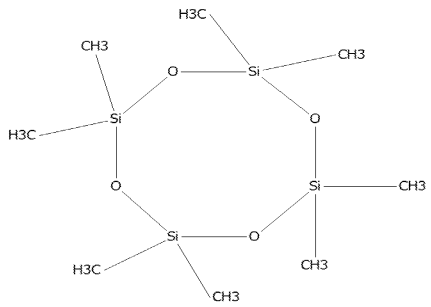




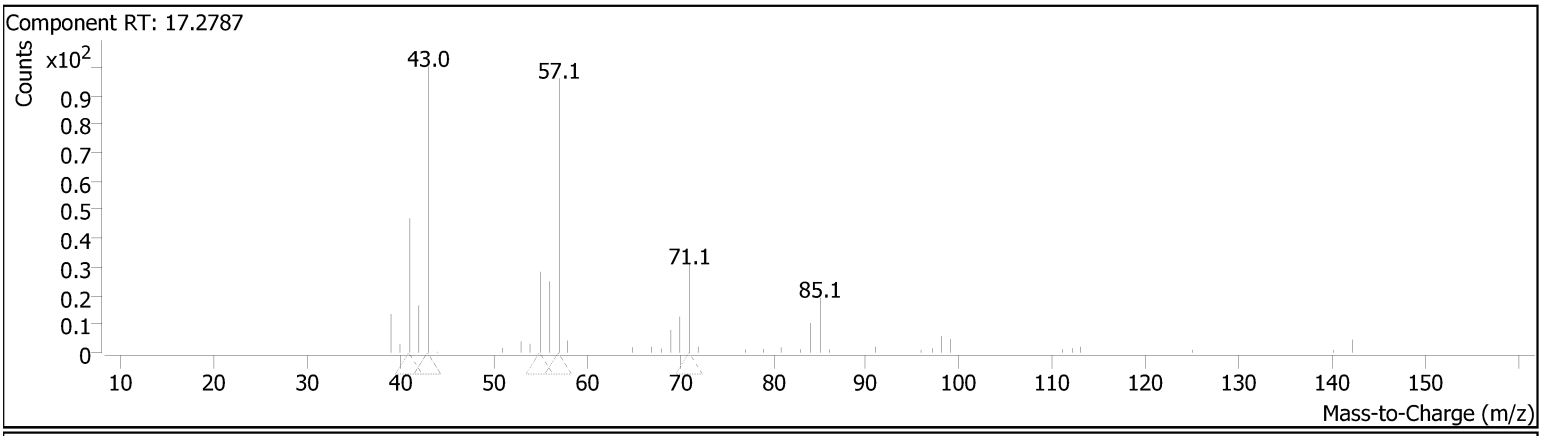


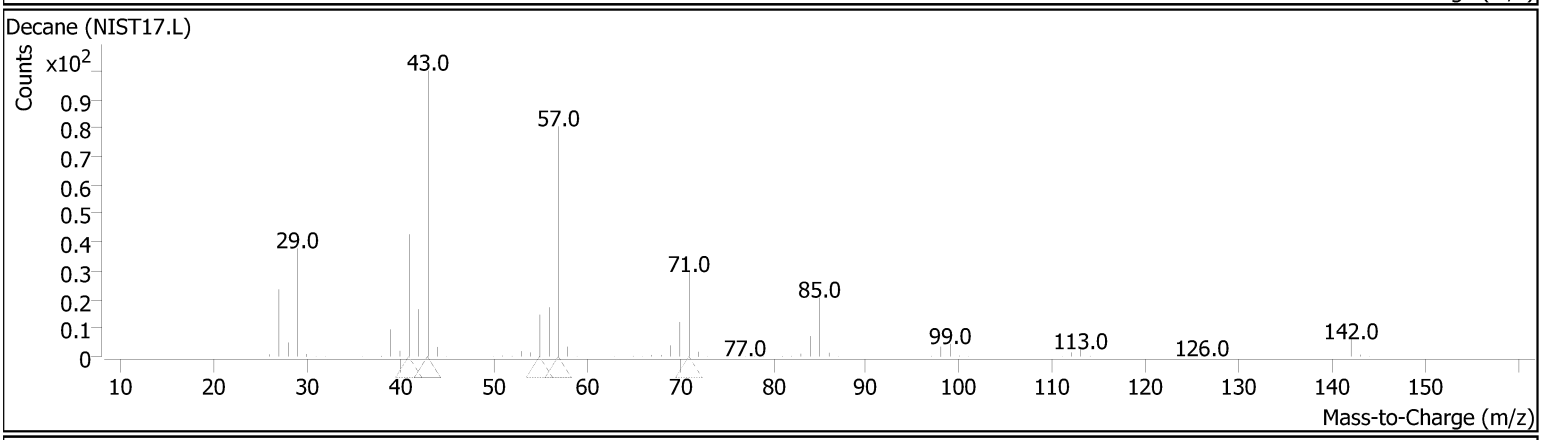


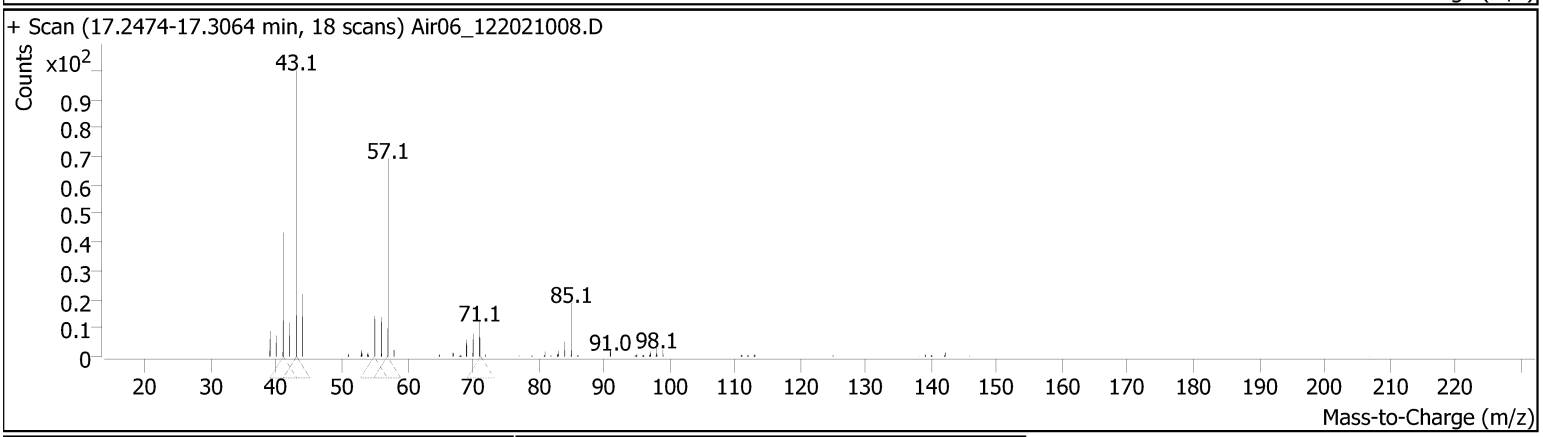


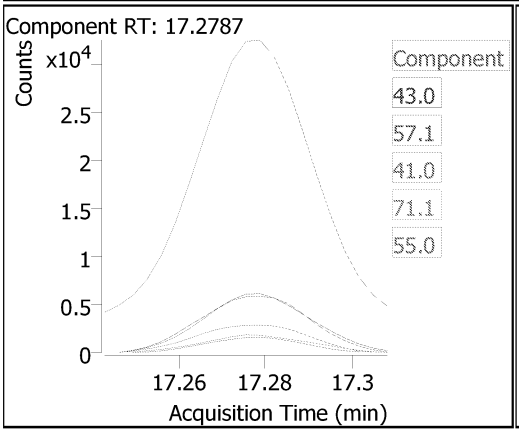


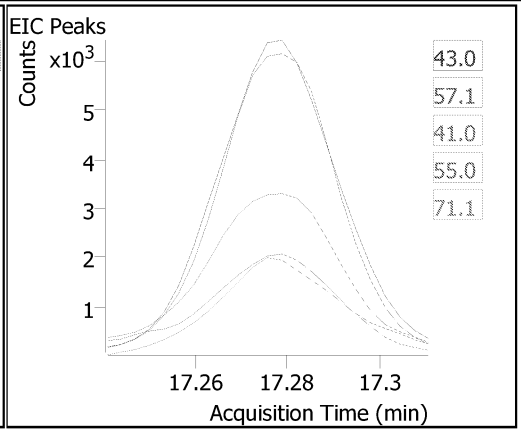
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.2787	Decane	51892.1	94.9	124-18-5	C10H22	0.133





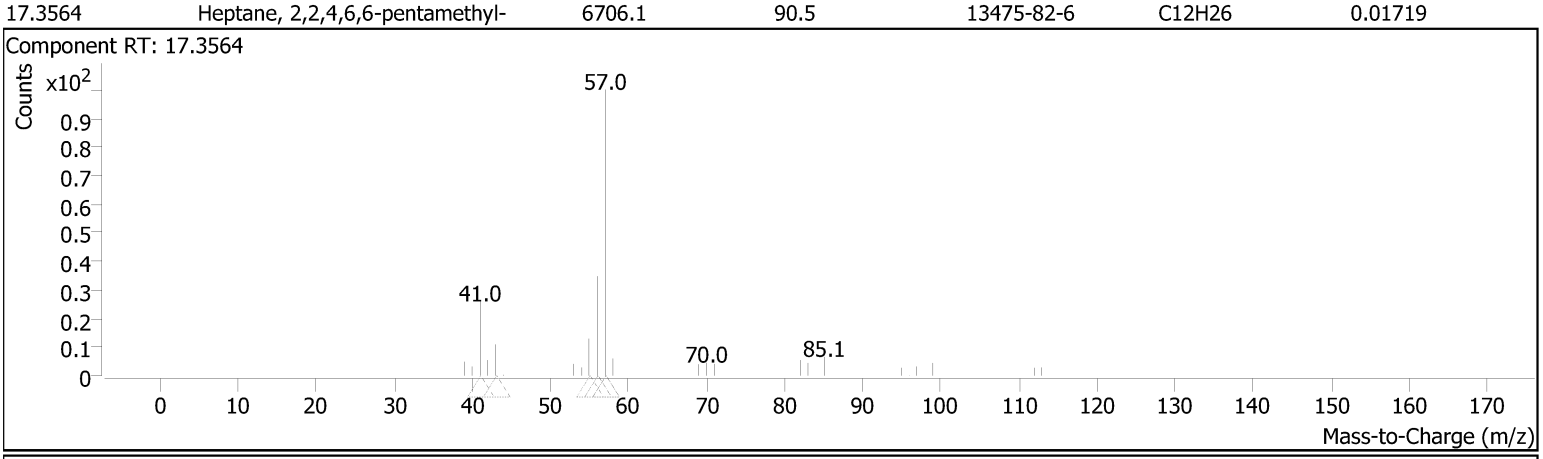


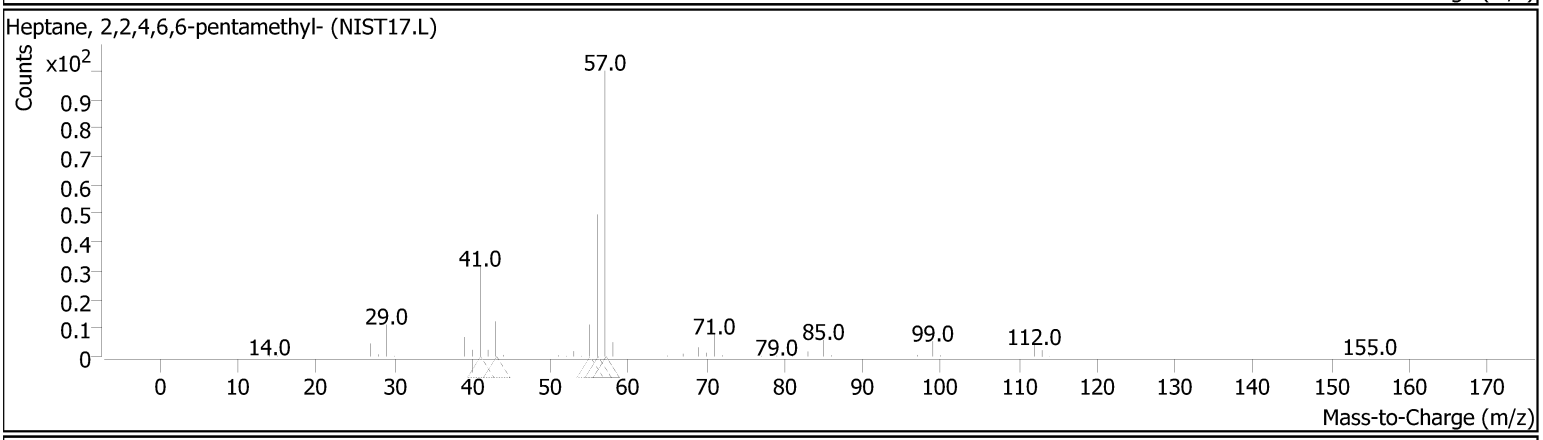


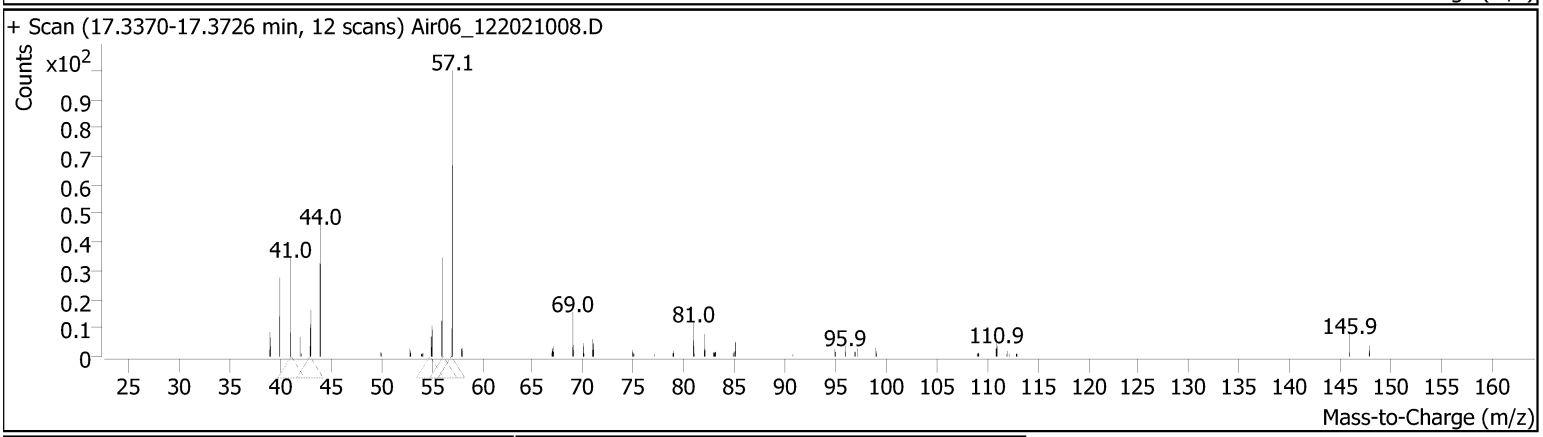


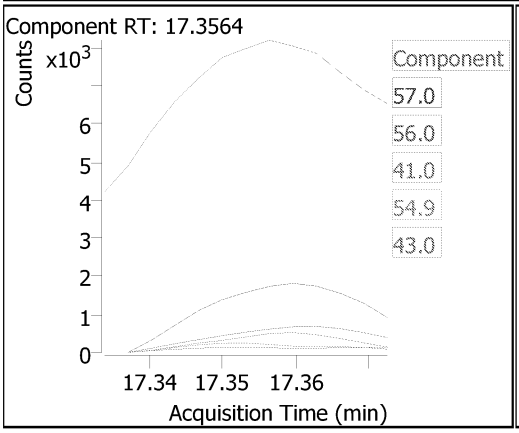


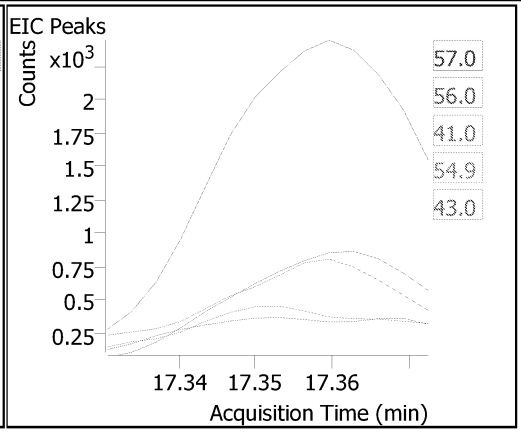
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.3564	Heptane, 2,2,4,6,6-pentamethyl-	6706.1	90.5	13475-82-6	C12H26	0.01719

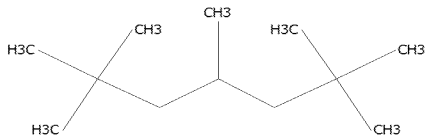




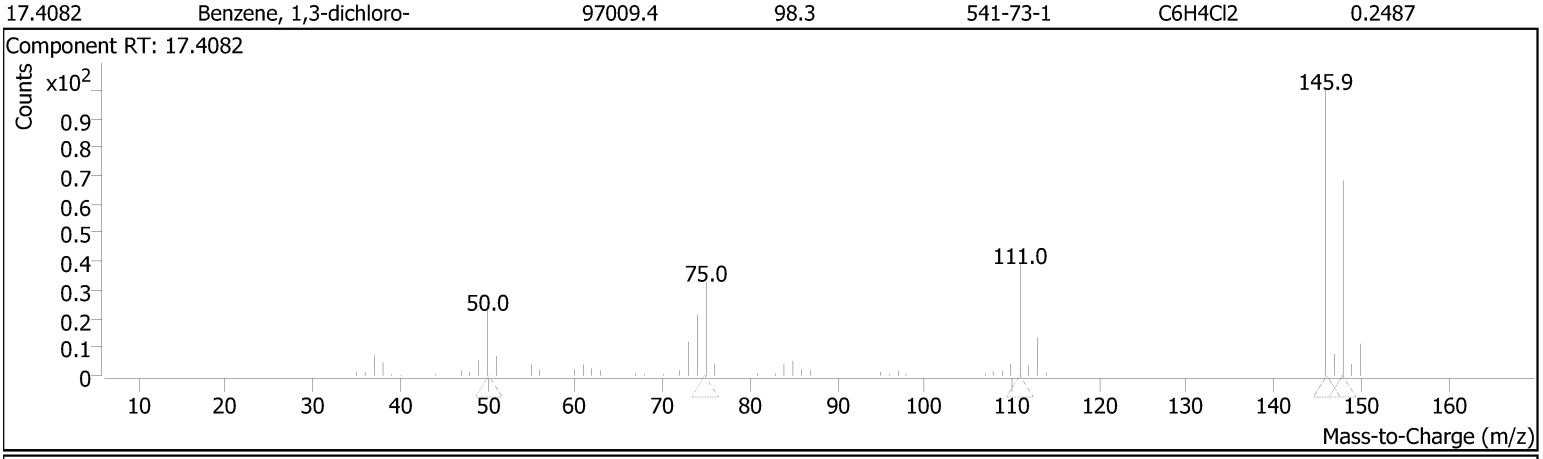


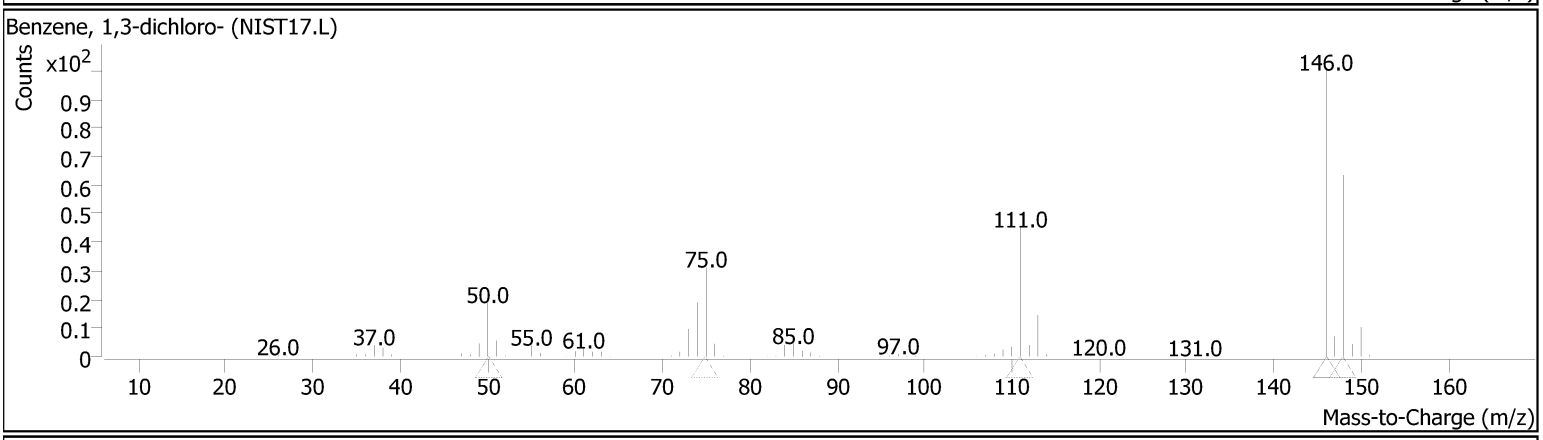


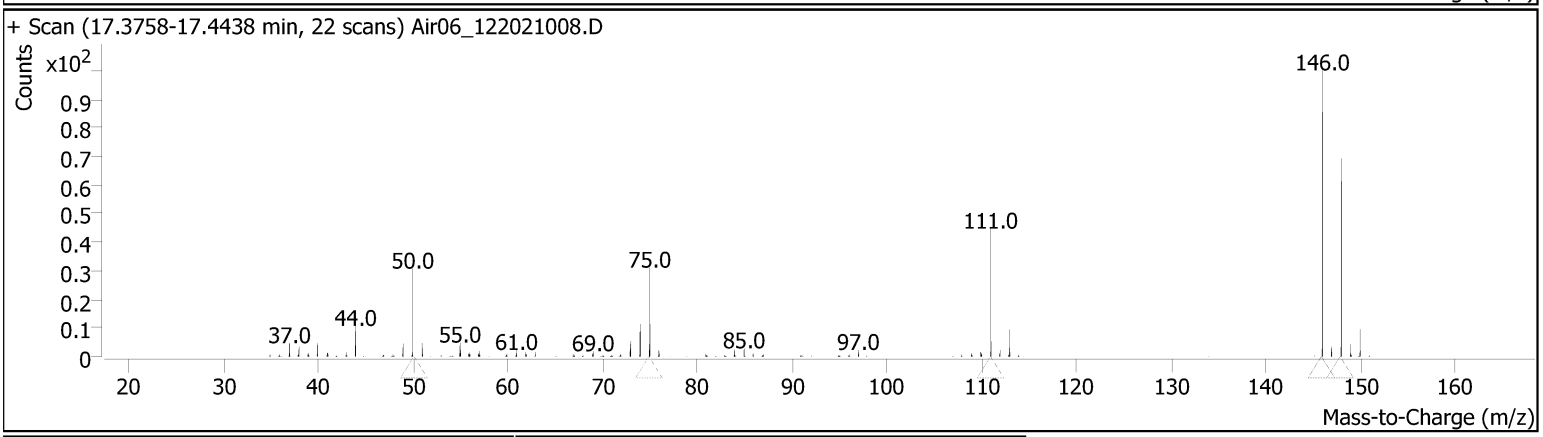


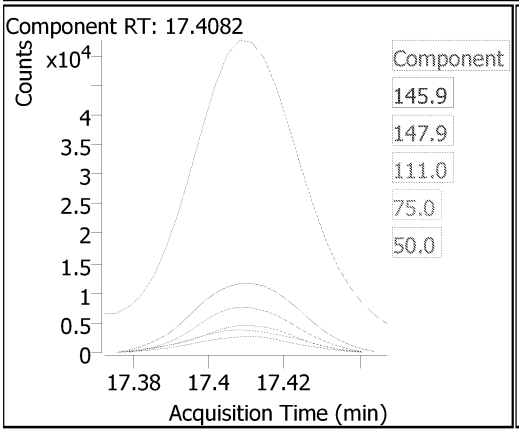


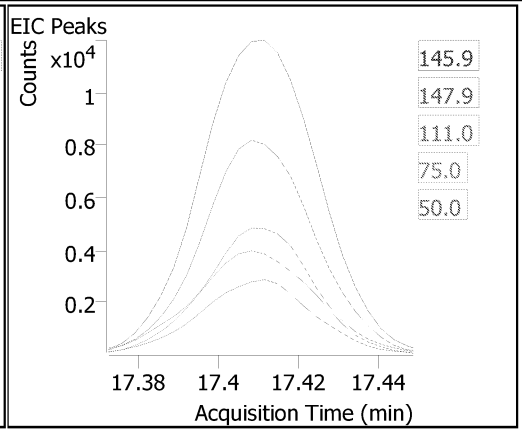
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.4082	Benzene, 1,3-dichloro-	97009.4	98.3	541-73-1	C6H4Cl2	0.2487

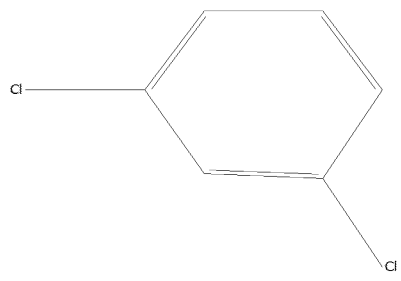




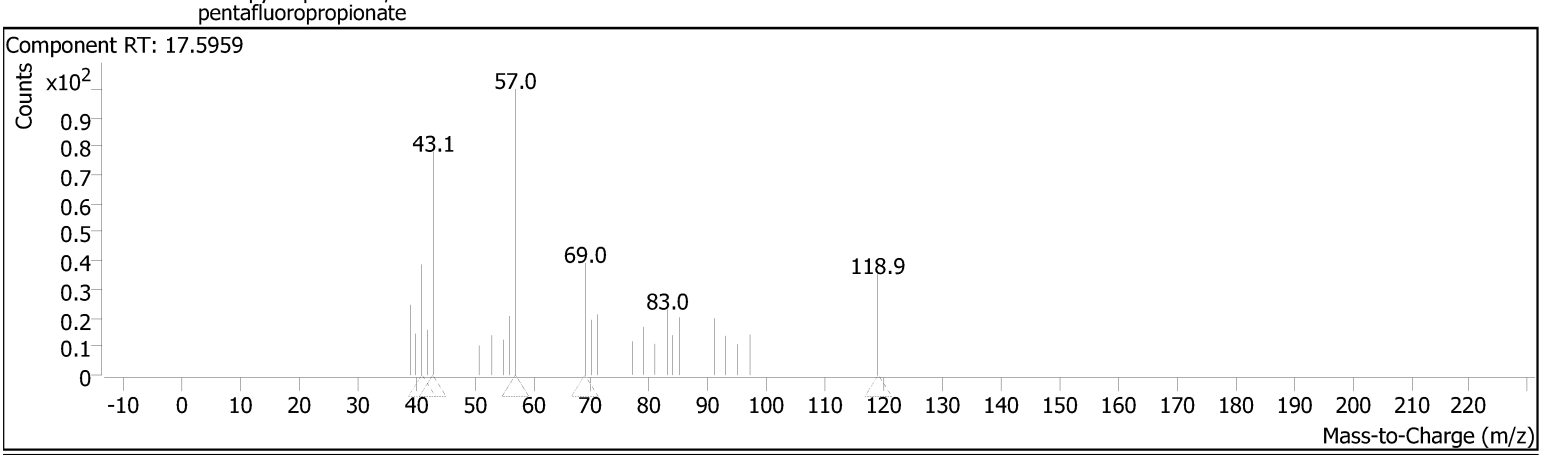


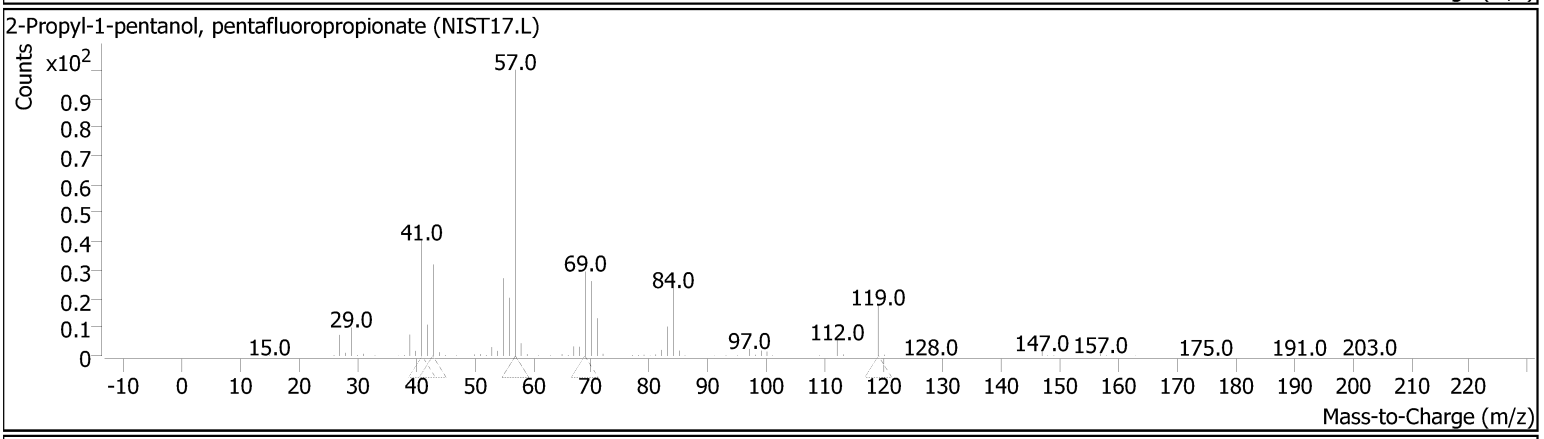


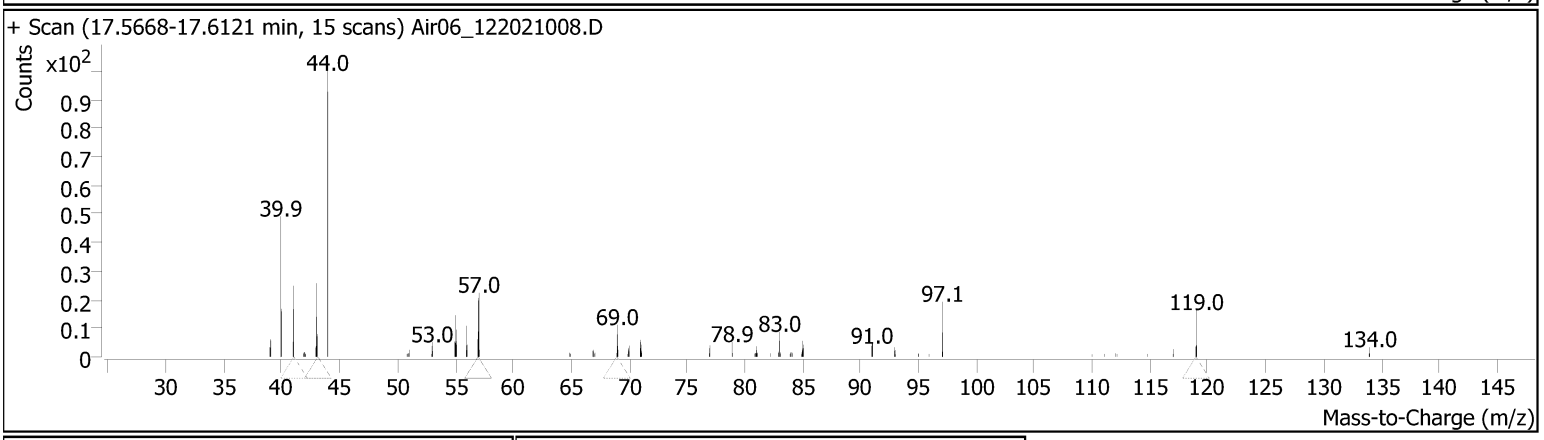


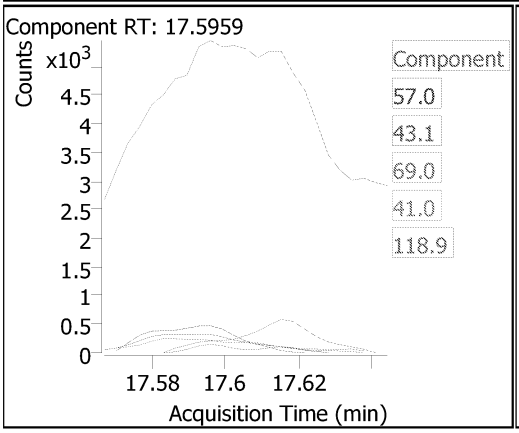


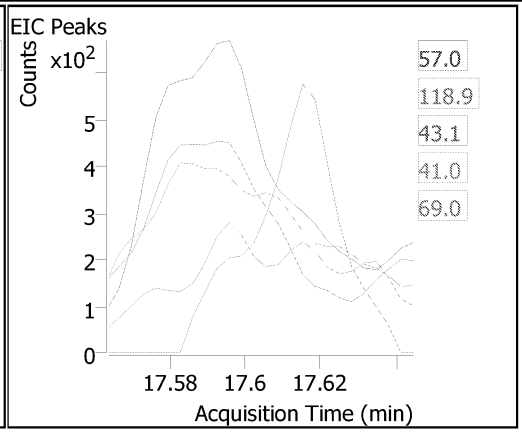
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.5959	2-Propyl-1-pentanol, pentafluoropropionate	9244.1	73.7	1000365-51-2	C11H17F5O2	0.0237

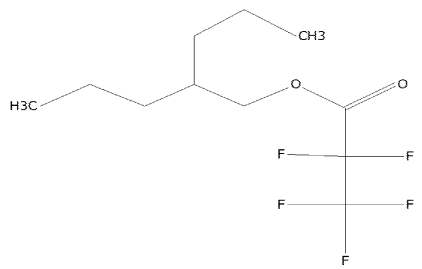




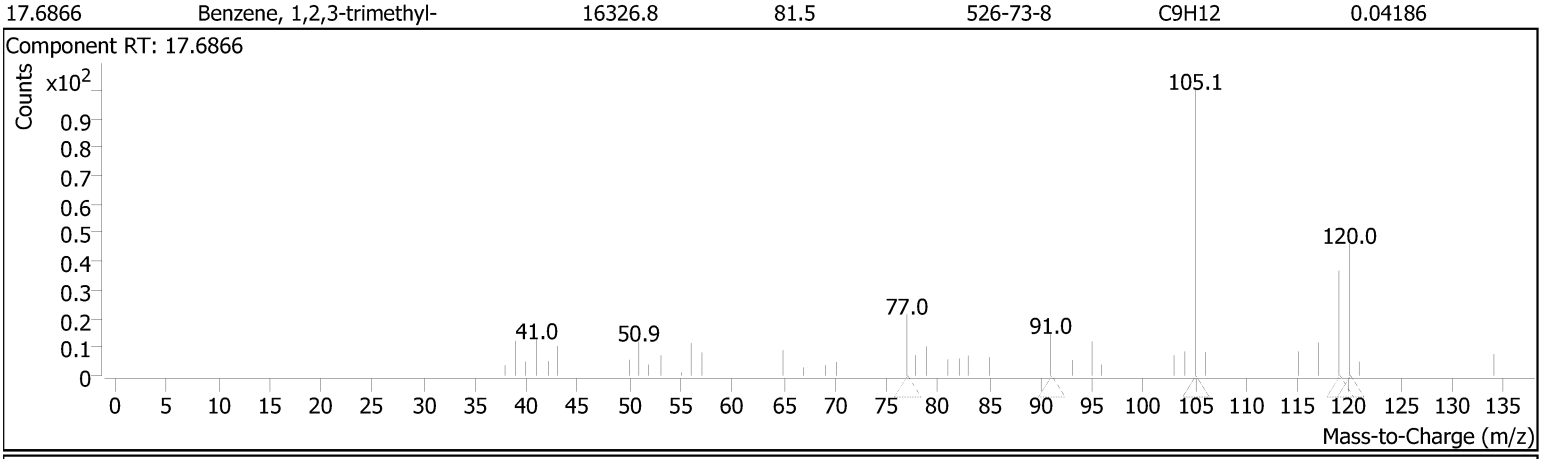


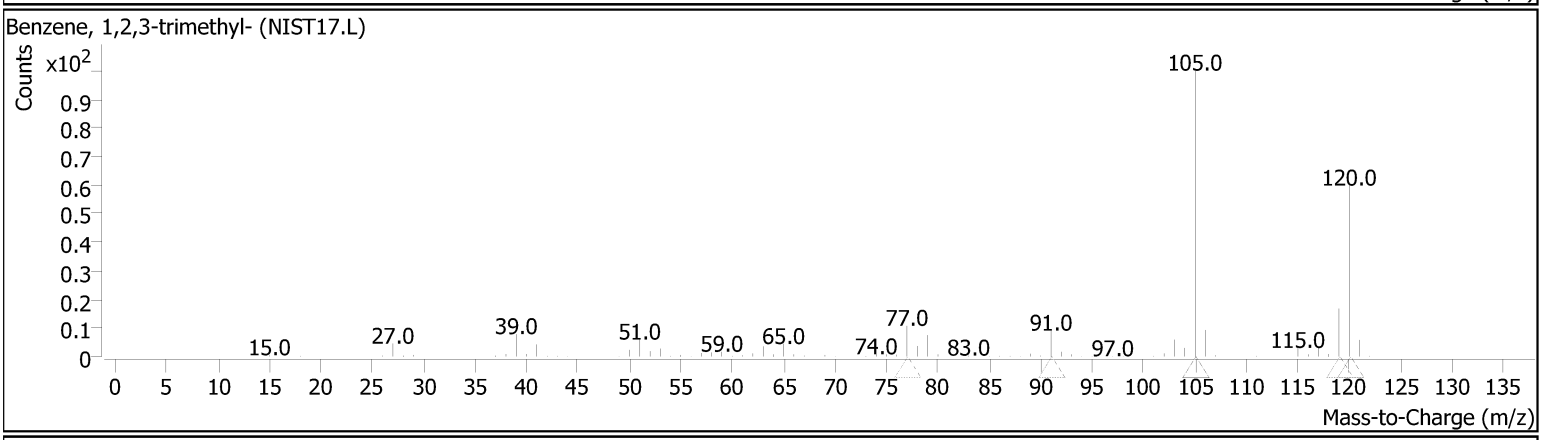


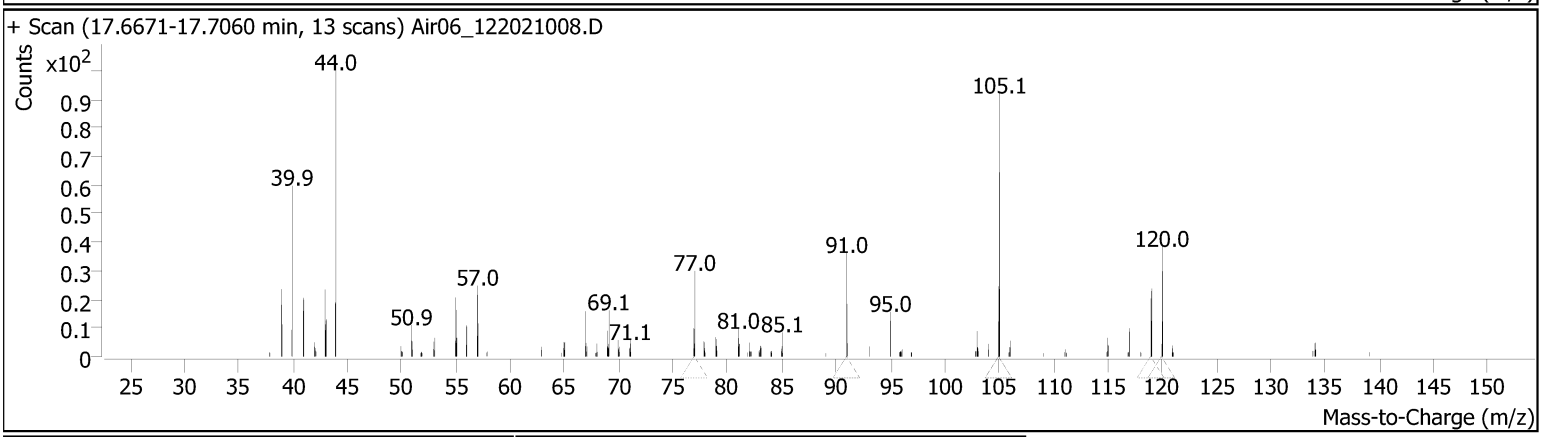


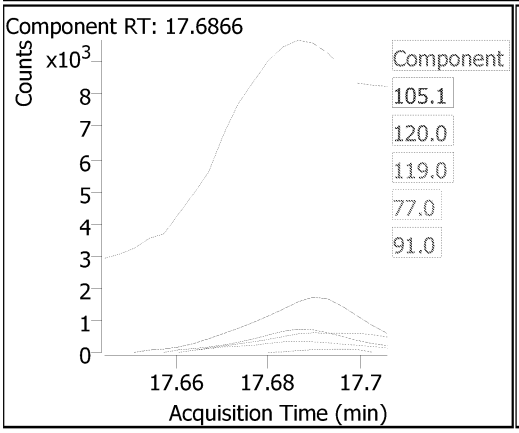


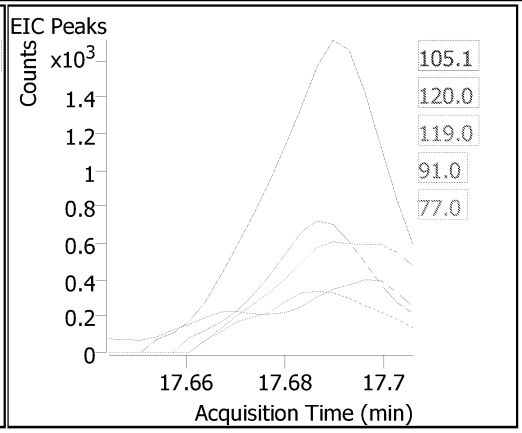
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.6866	Benzene, 1,2,3-trimethyl-	16326.8	81.5	526-73-8	C9H12	0.04186

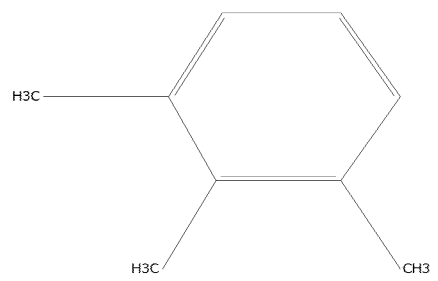




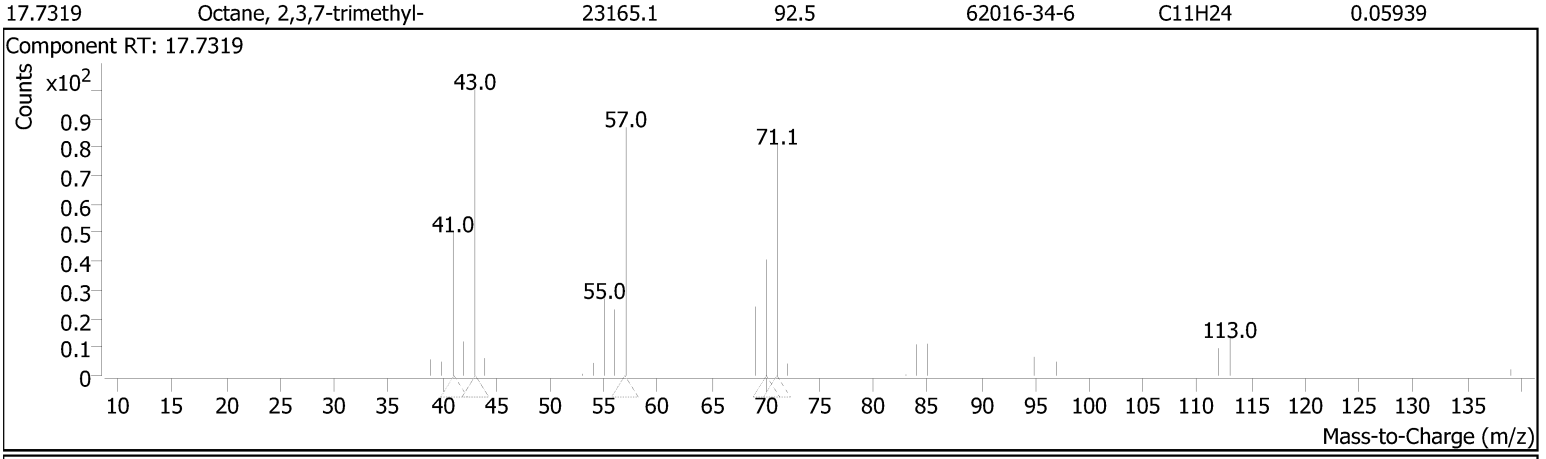


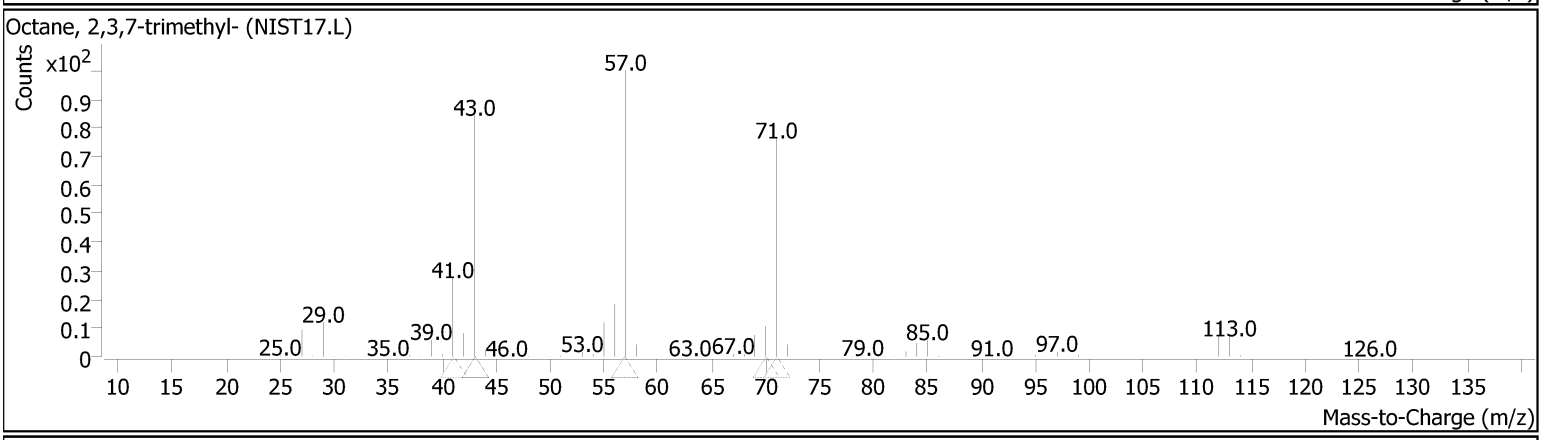


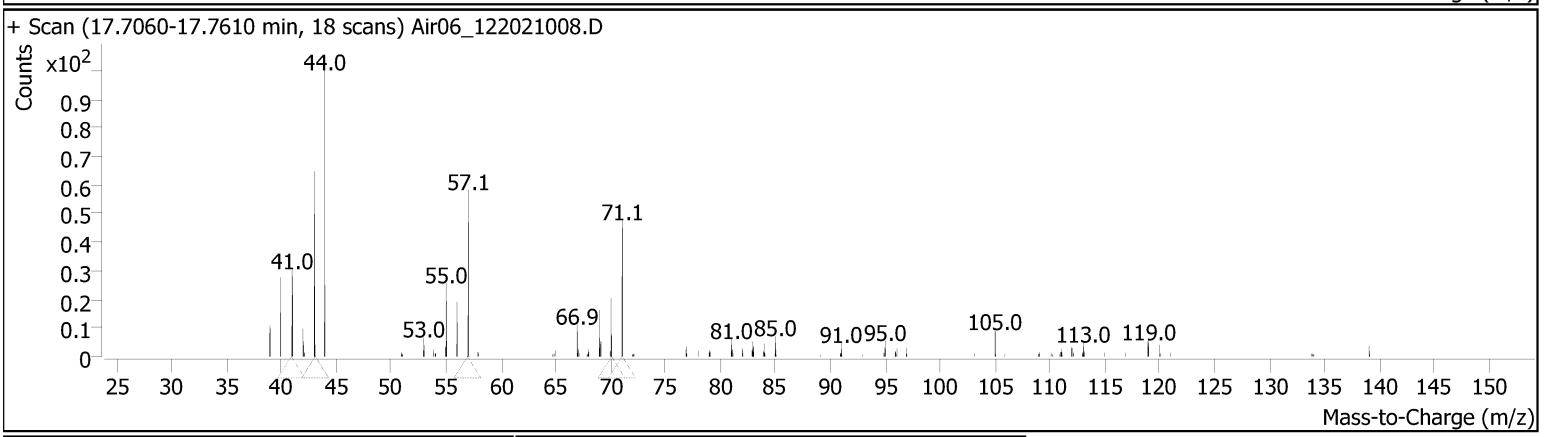


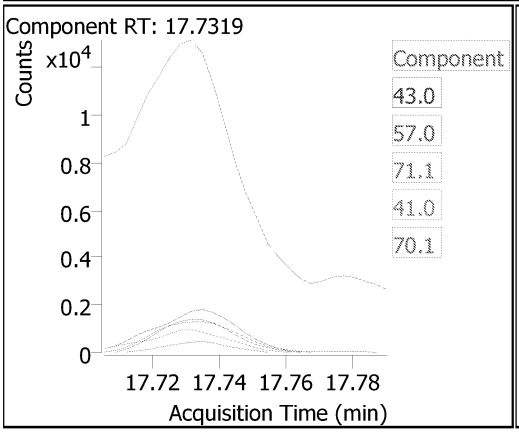


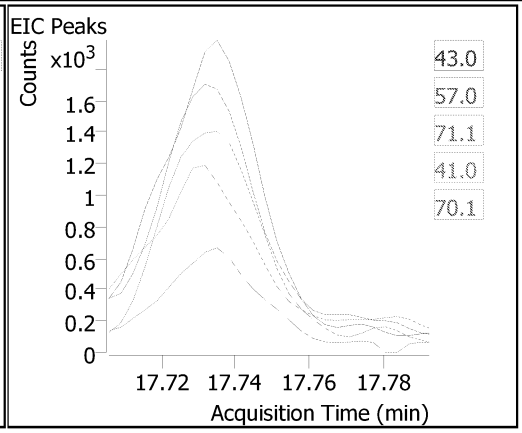
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.7319	Octane, 2,3,7-trimethyl-	23165.1	92.5	62016-34-6	C11H24	0.05939

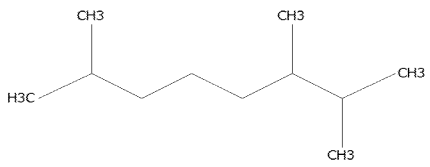




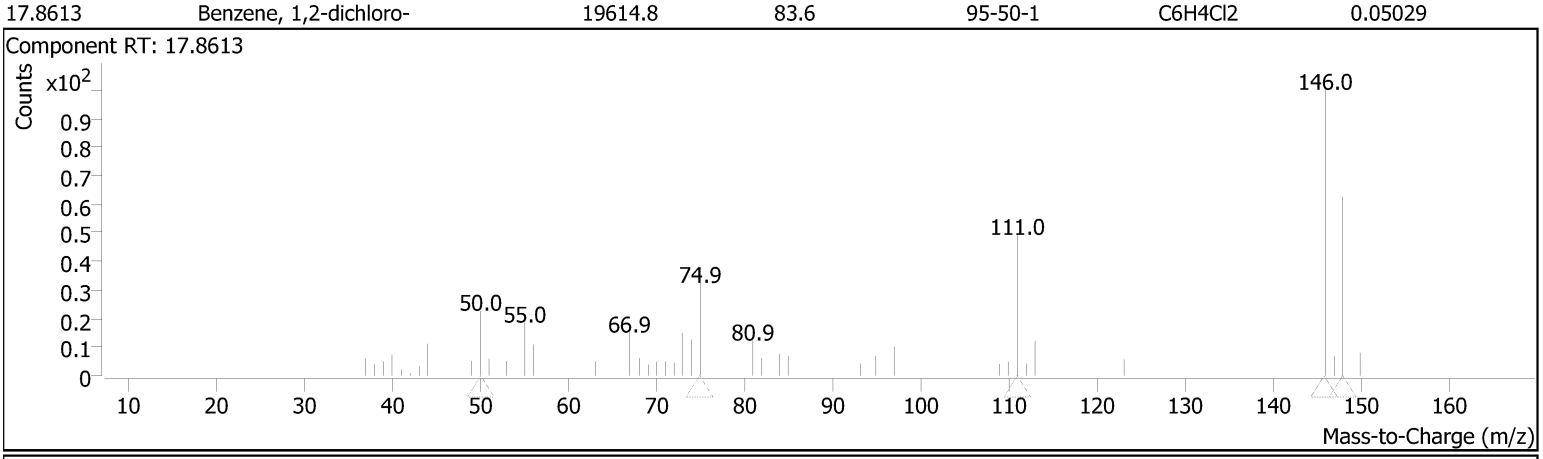


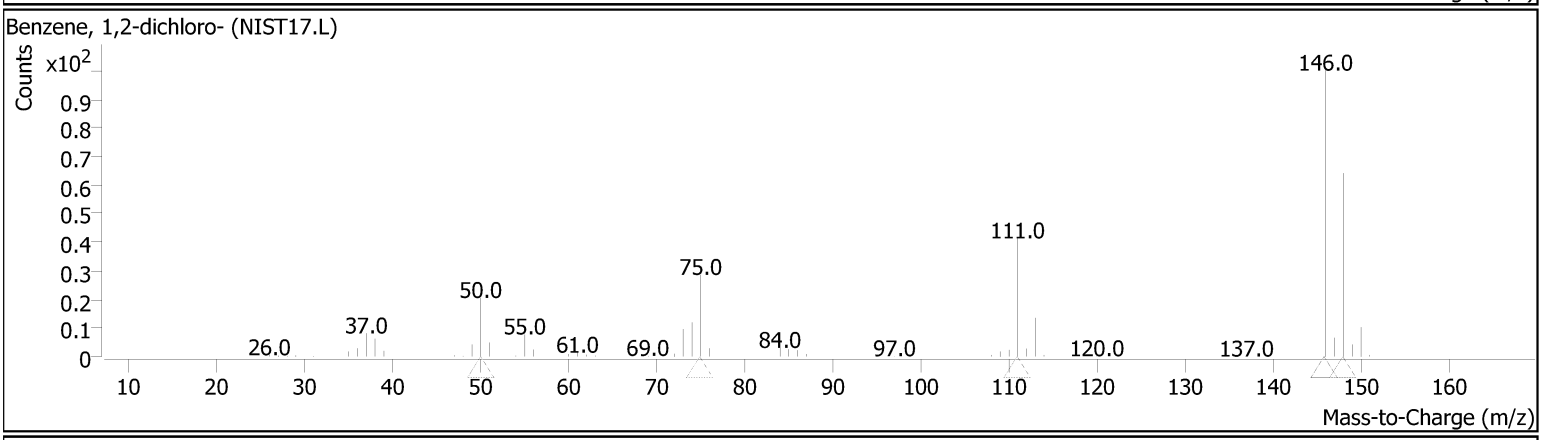


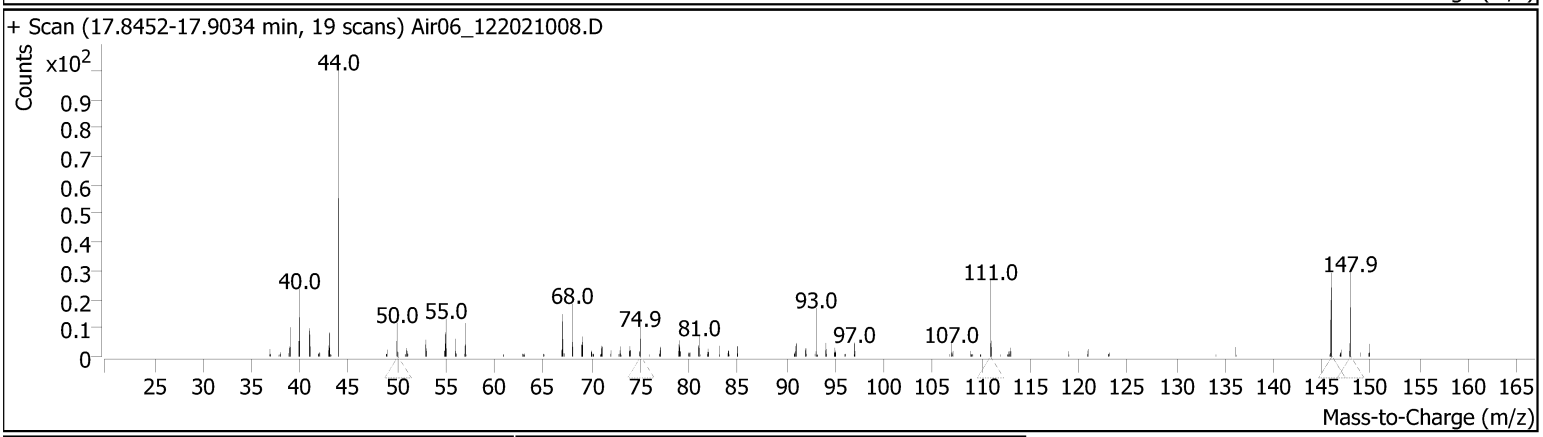


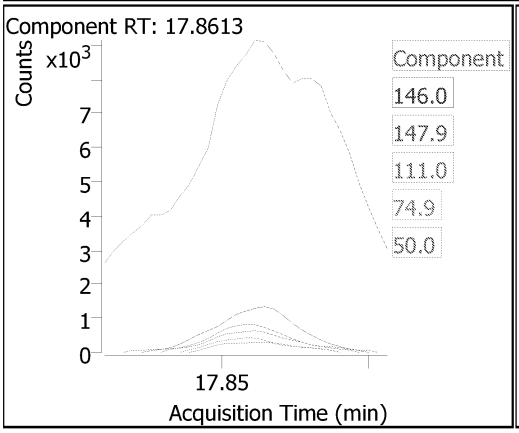


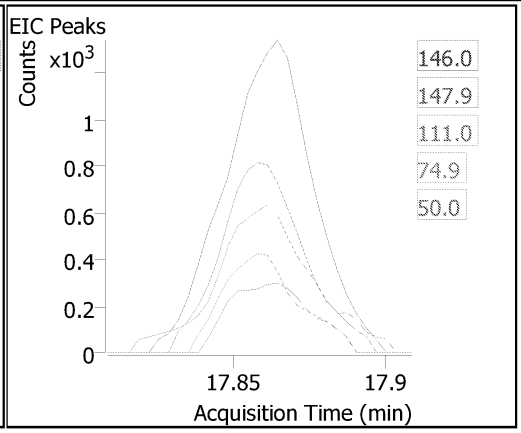
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.8613	Benzene, 1,2-dichloro-	19614.8	83.6	95-50-1	C6H4Cl2	0.05029

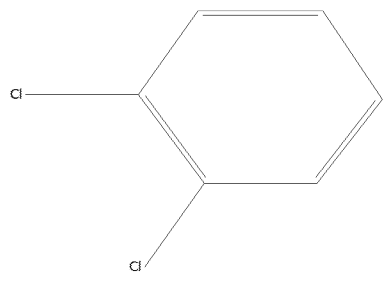




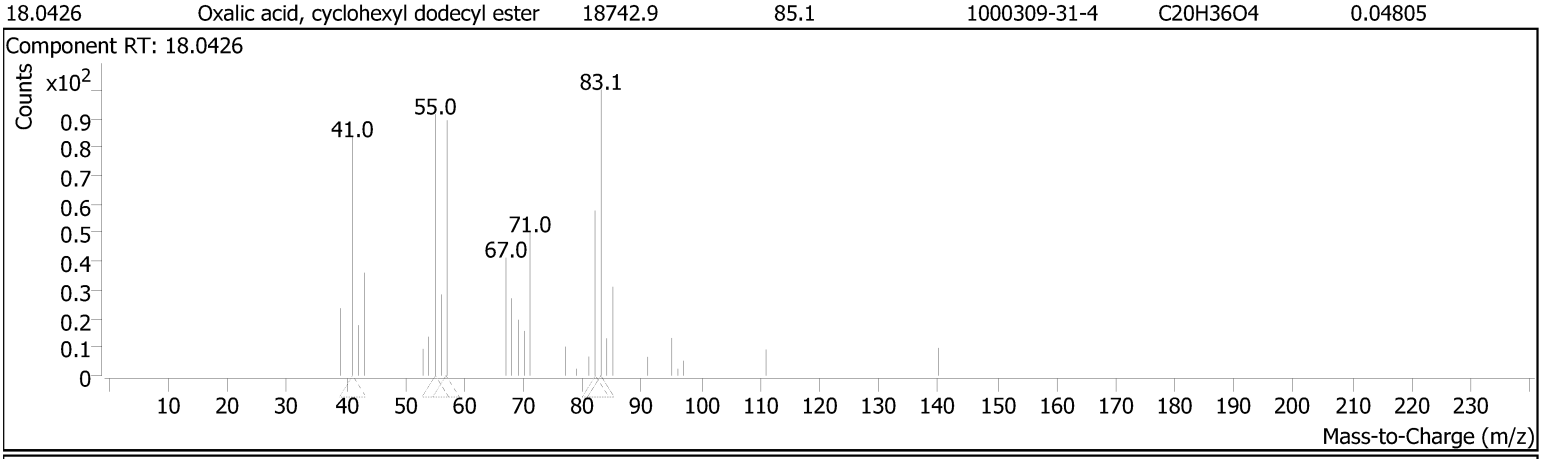


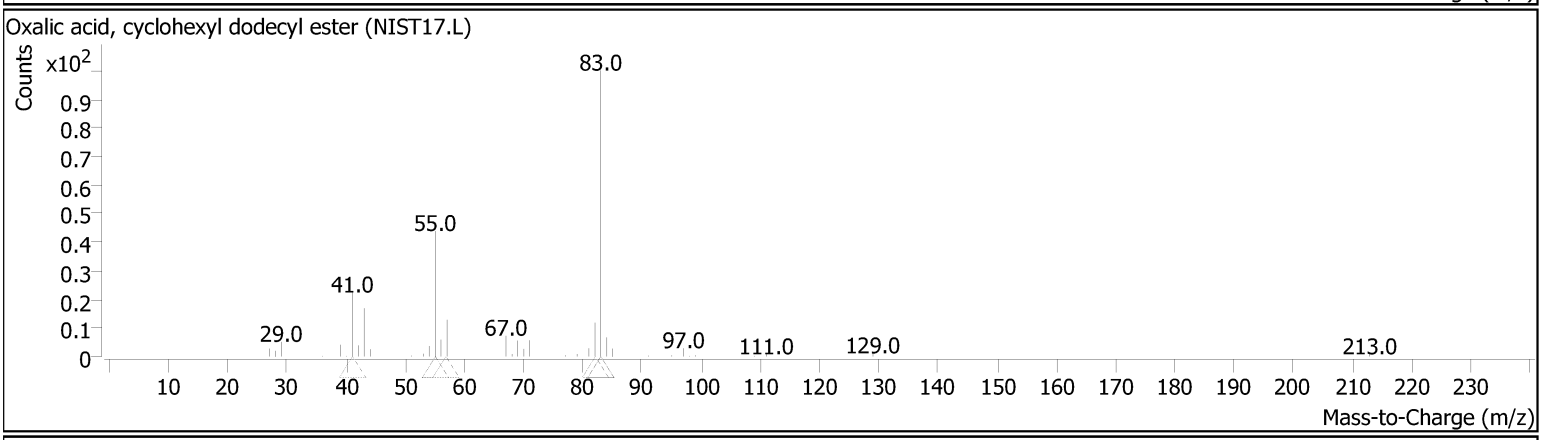


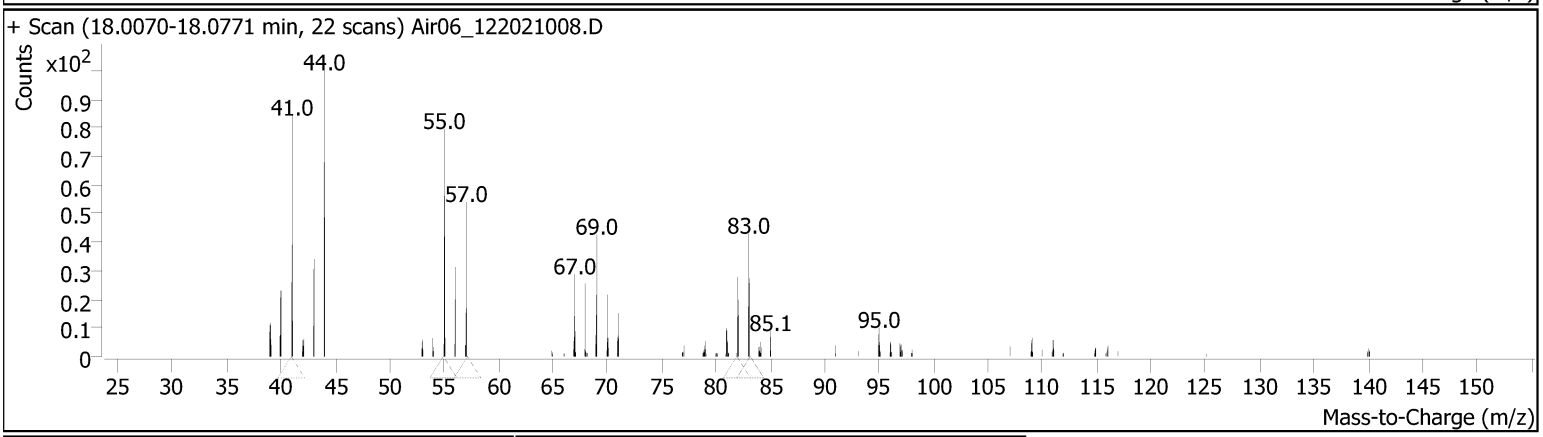


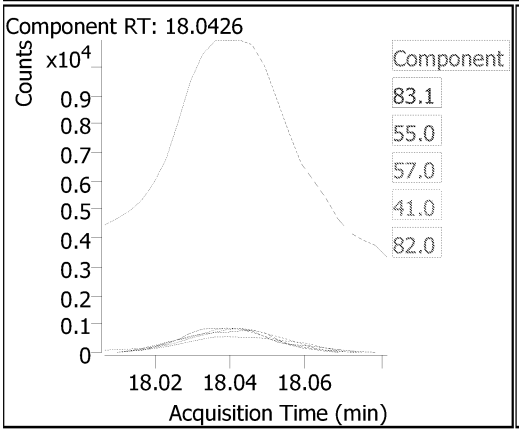


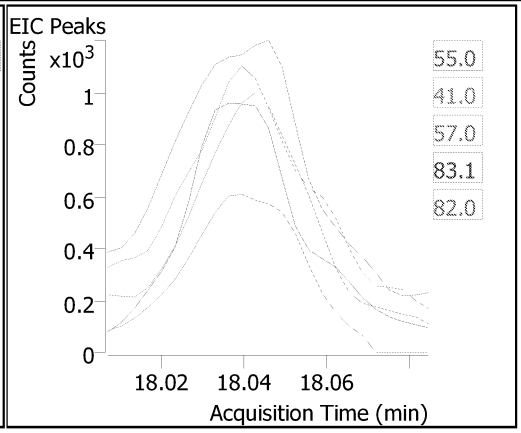
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.0426	Oxalic acid, cyclohexyl dodecyl ester	18742.9	85.1	1000309-31-4	C20H36O4	0.04805

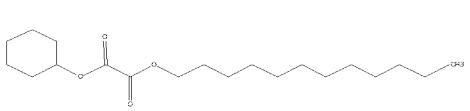




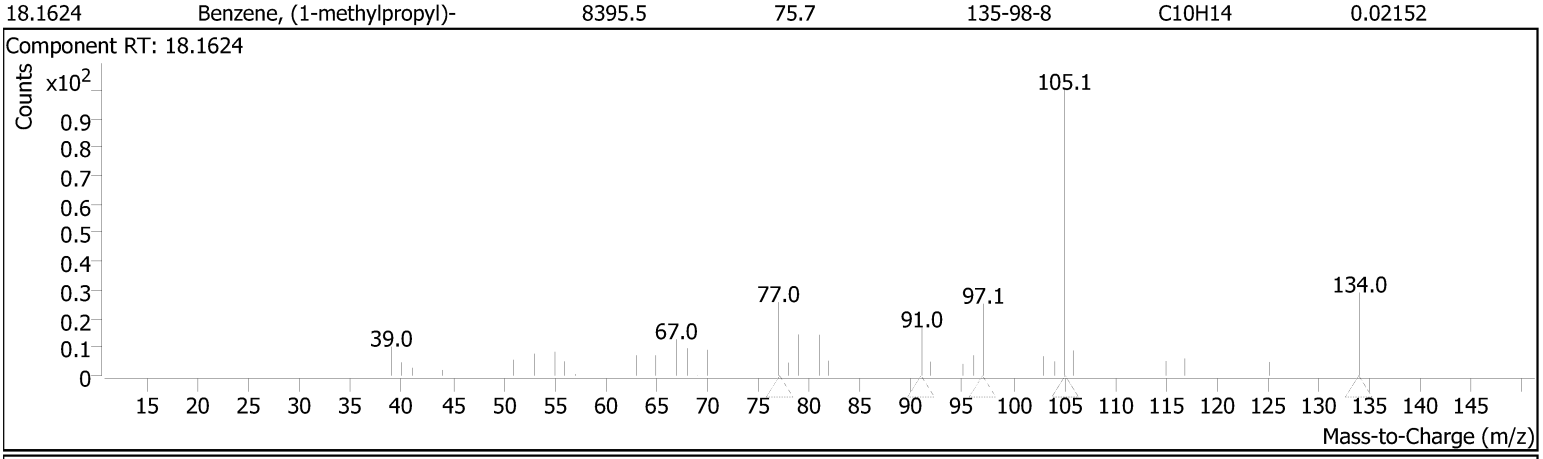


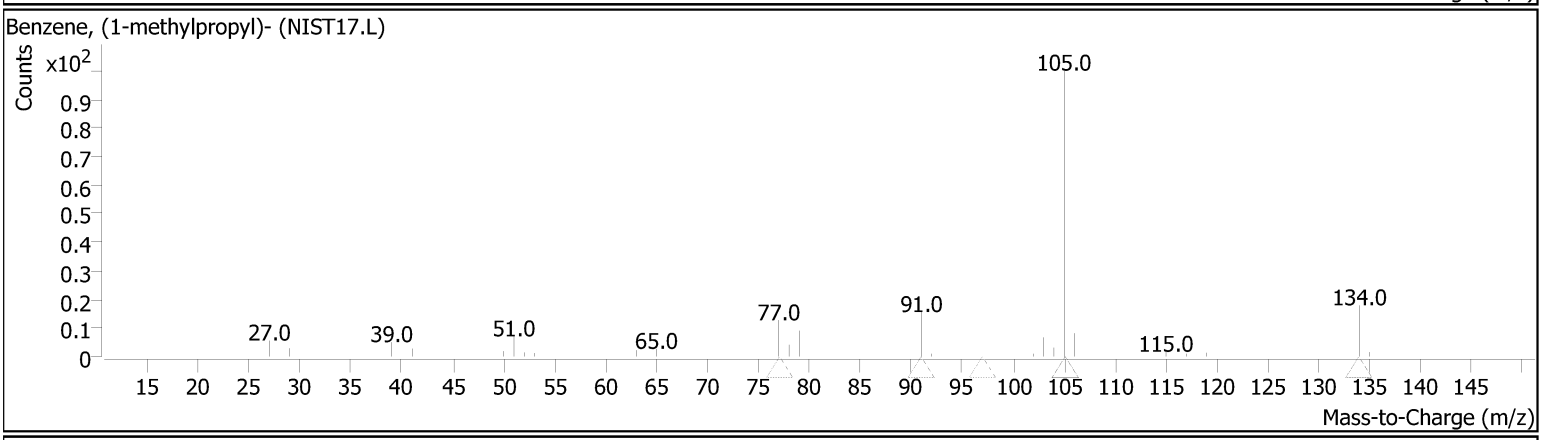


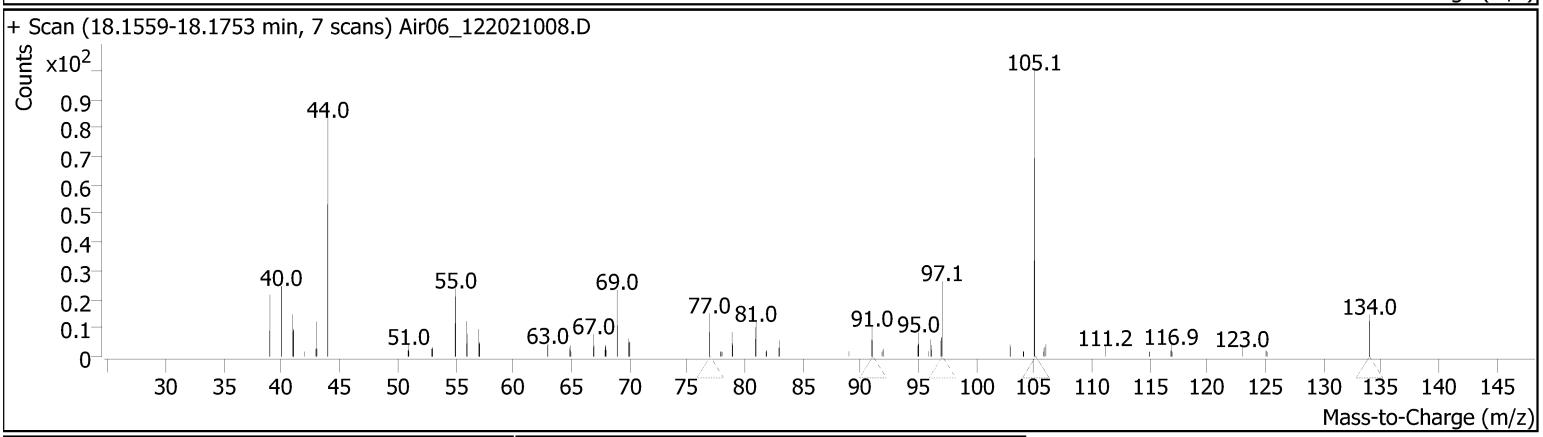


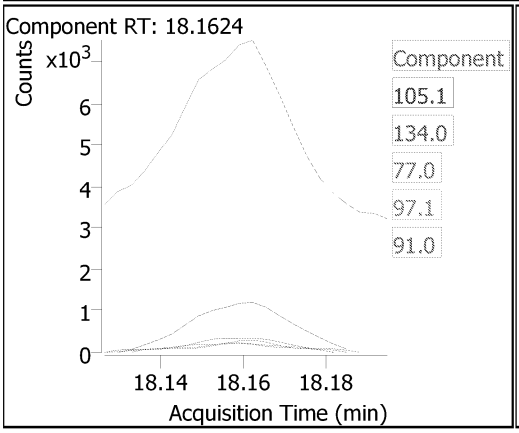


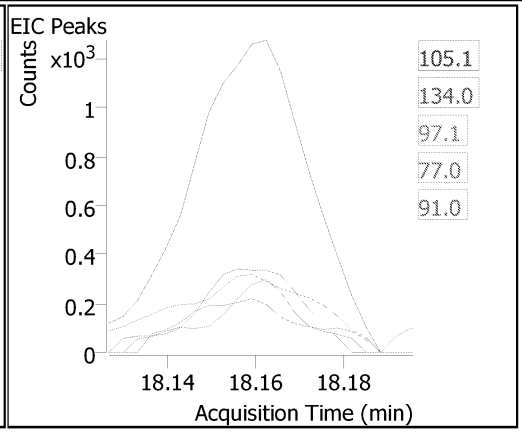
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.1624	Benzene, (1-methylpropyl)-	8395.5	75.7	135-98-8	C10H14	0.02152

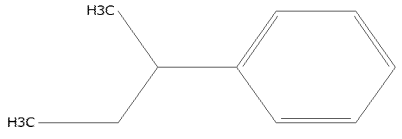




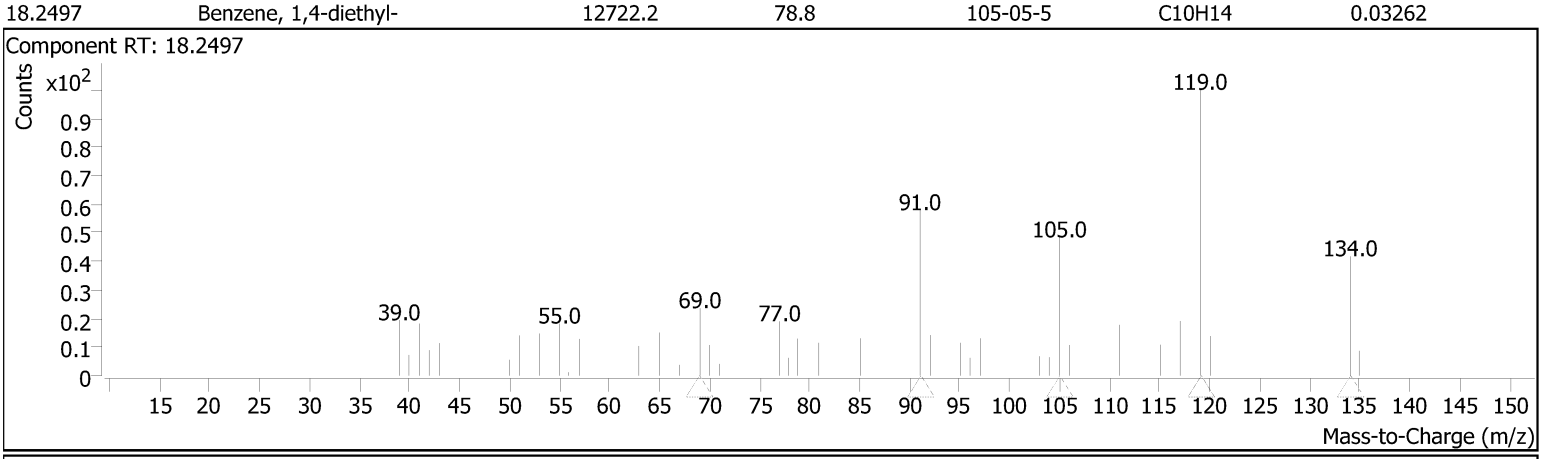


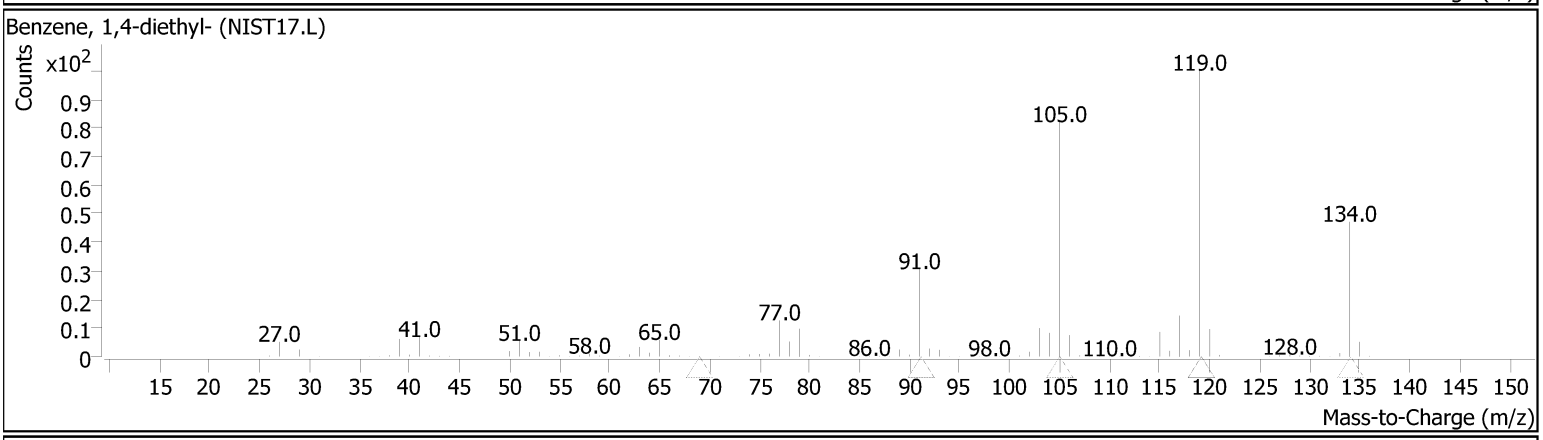


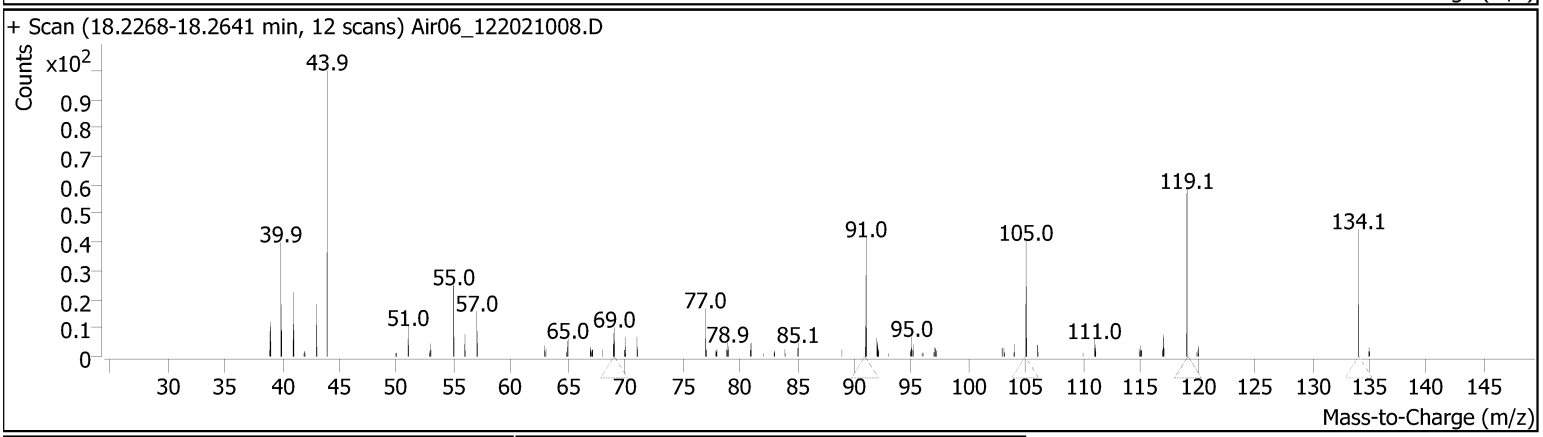


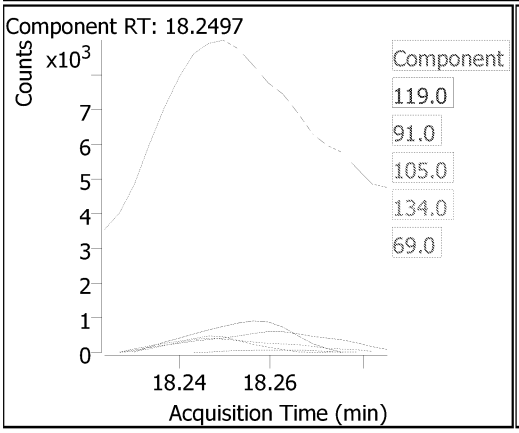


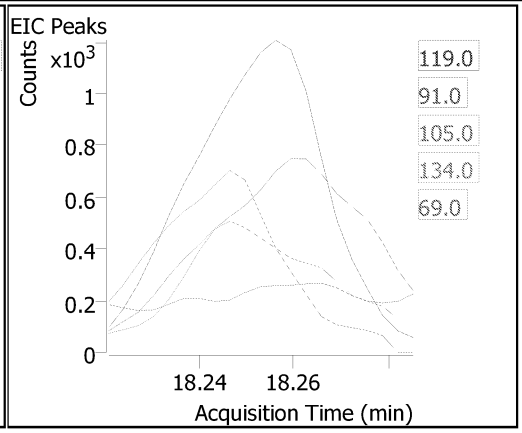
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.2497	Benzene, 1,4-diethyl-	12722.2	78.8	105-05-5	C10H14	0.03262

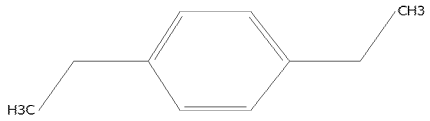




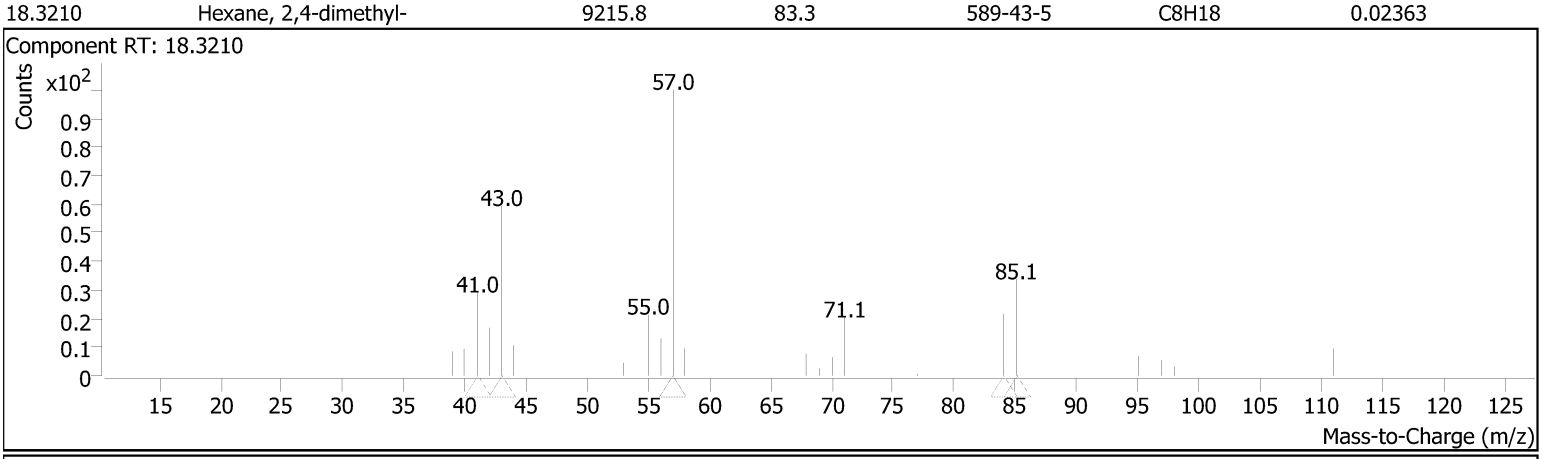


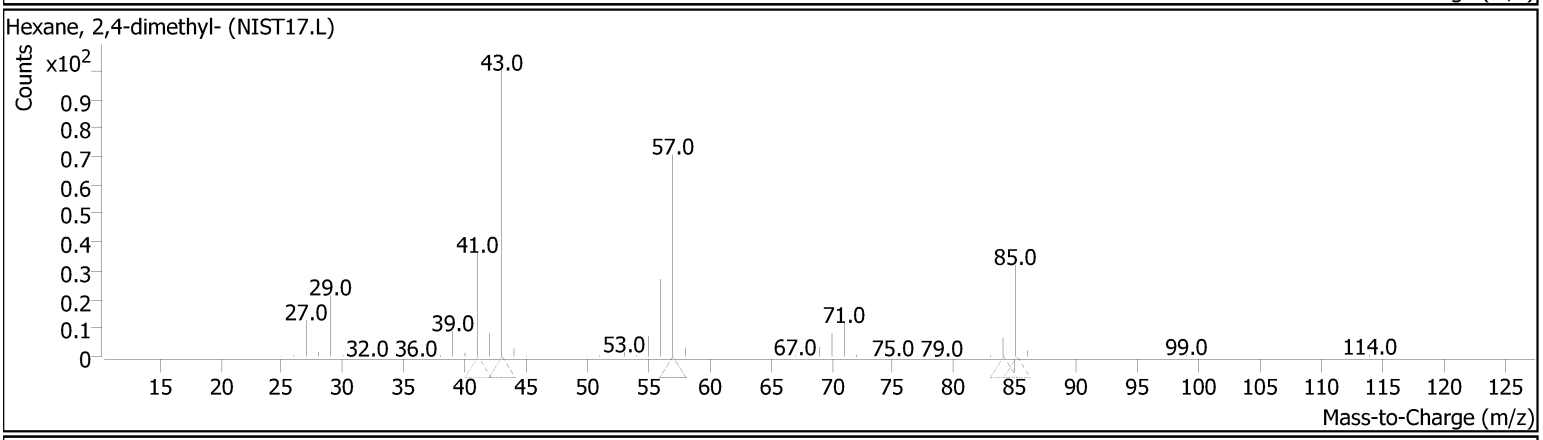


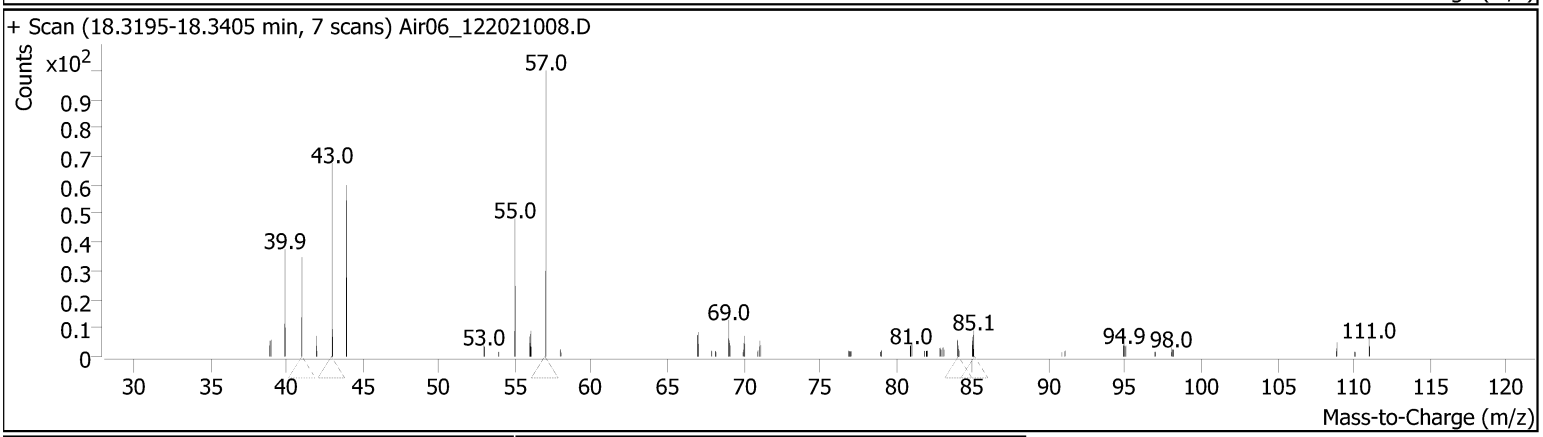


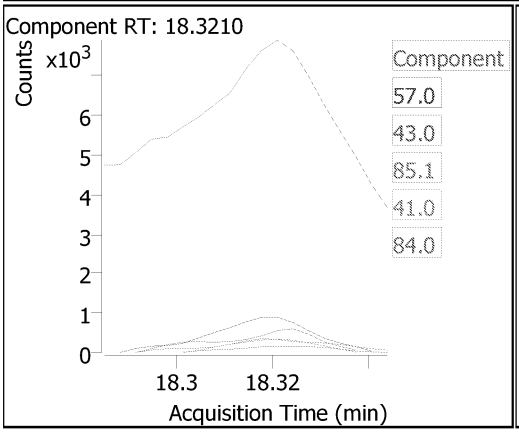


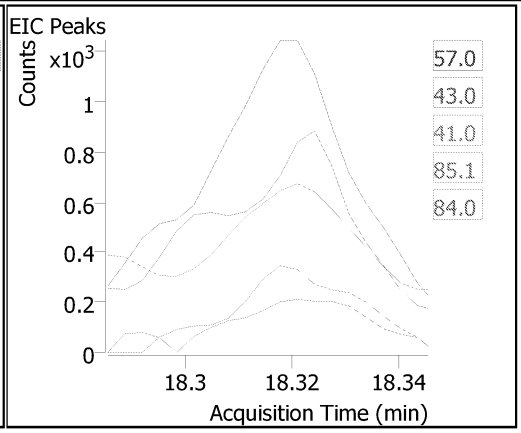
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3210	Hexane, 2,4-dimethyl-	9215.8	83.3	589-43-5	C8H18	0.02363

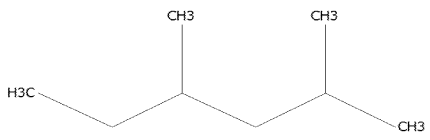




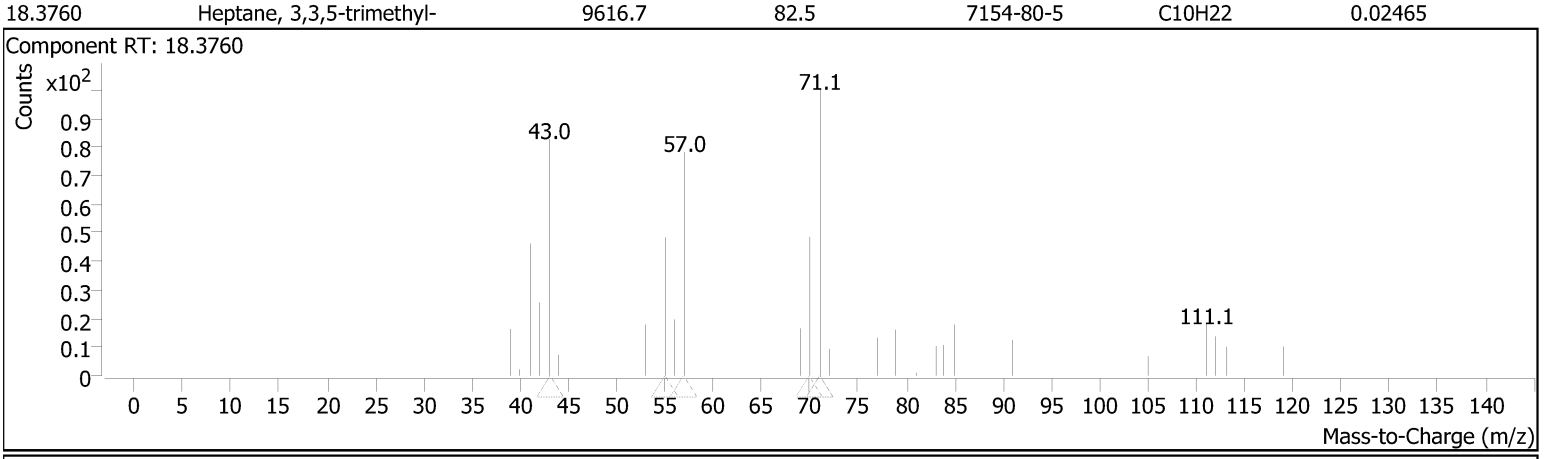


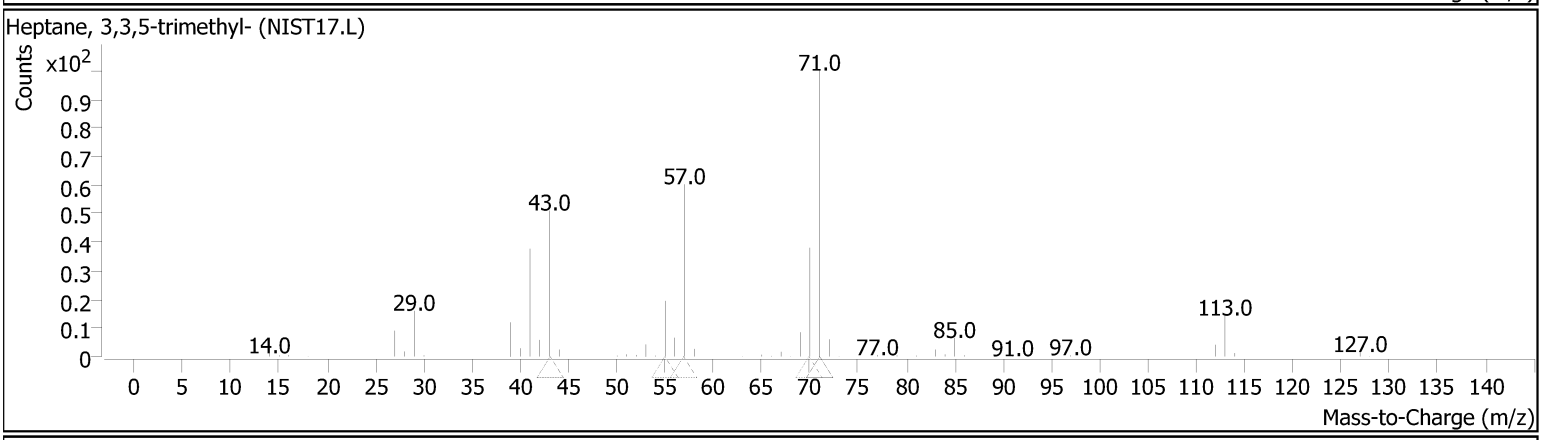


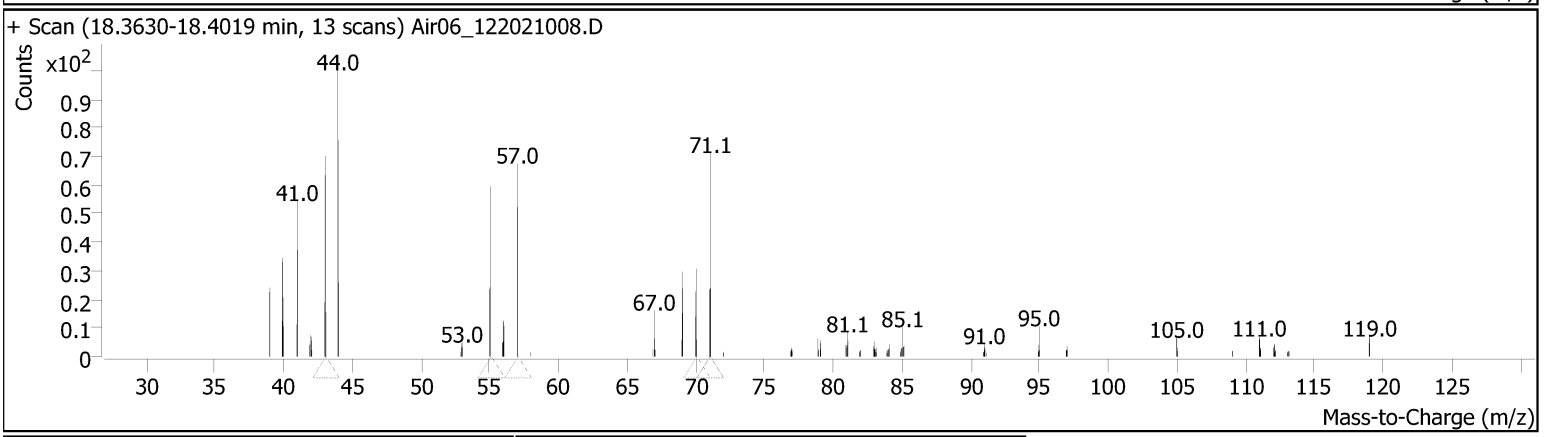


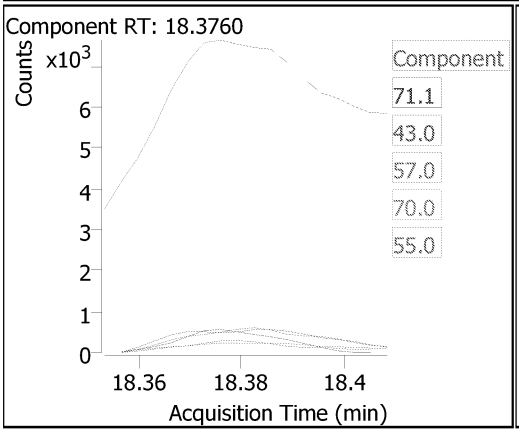


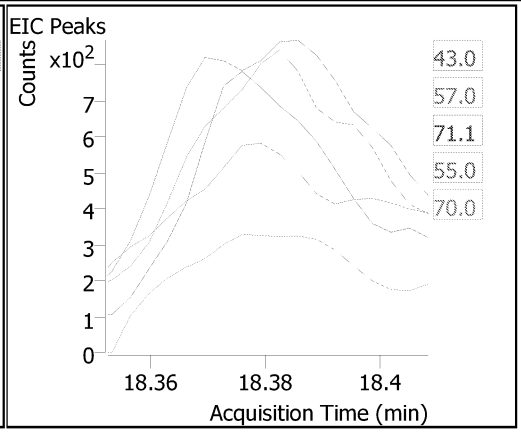
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3760	Heptane, 3,3,5-trimethyl-	9616.7	82.5	7154-80-5	C10H22	0.02465

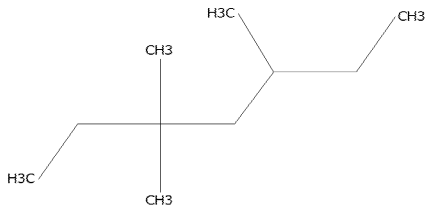




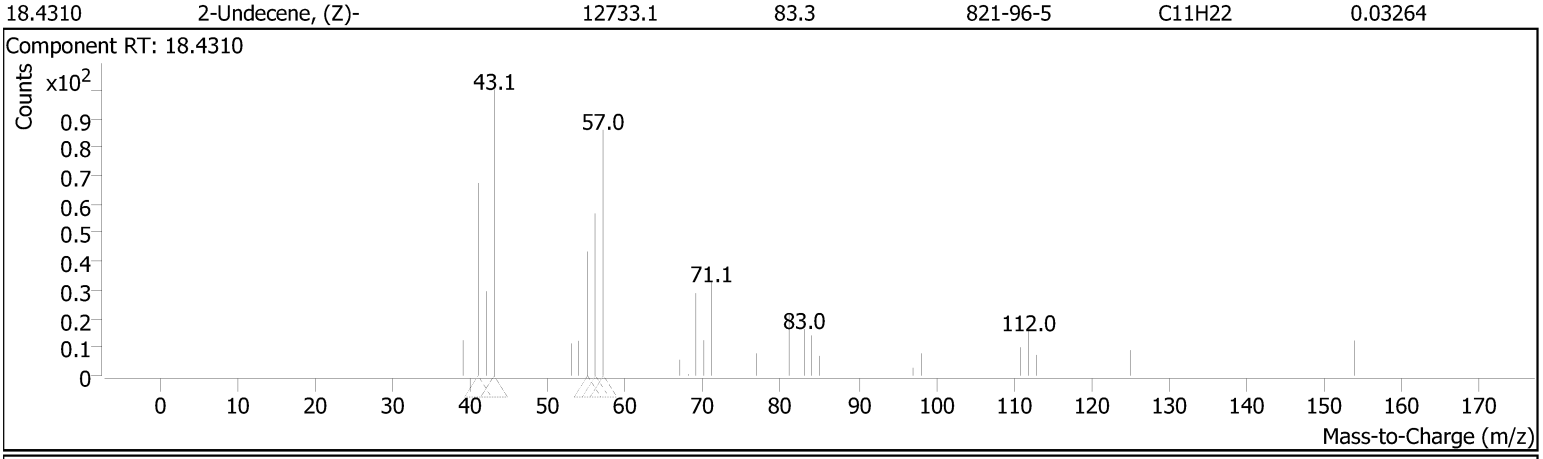


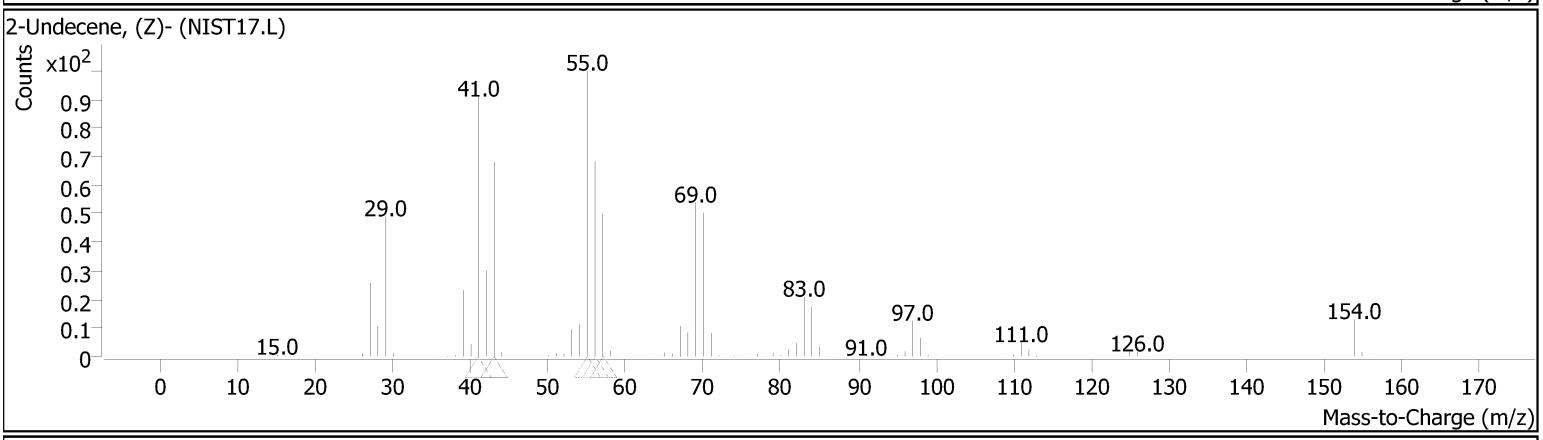


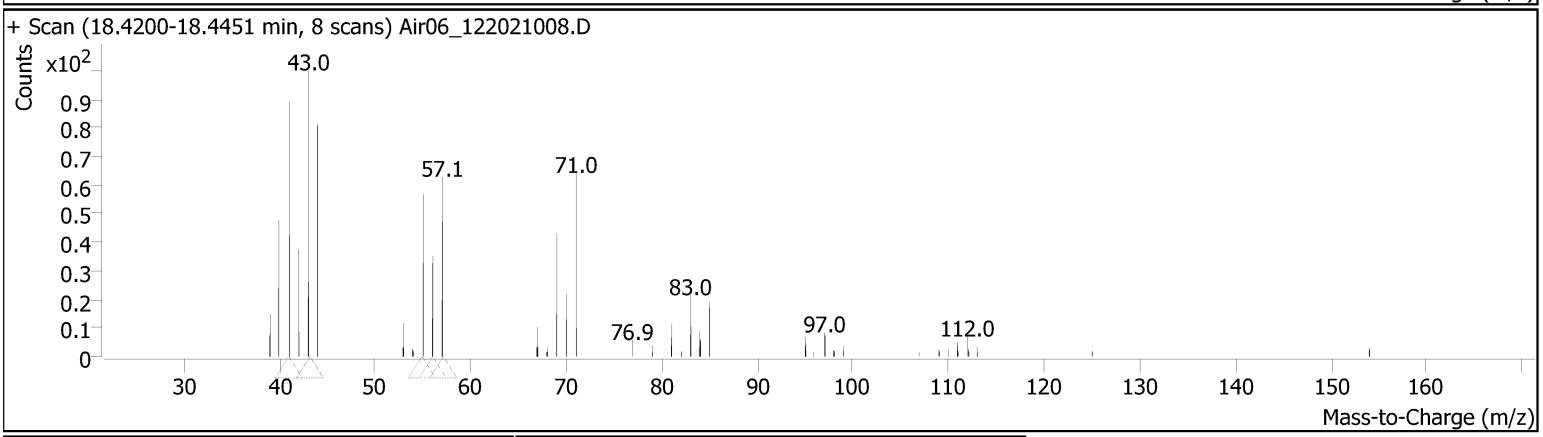


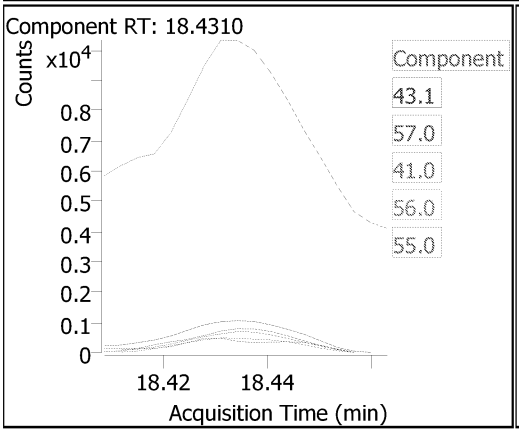


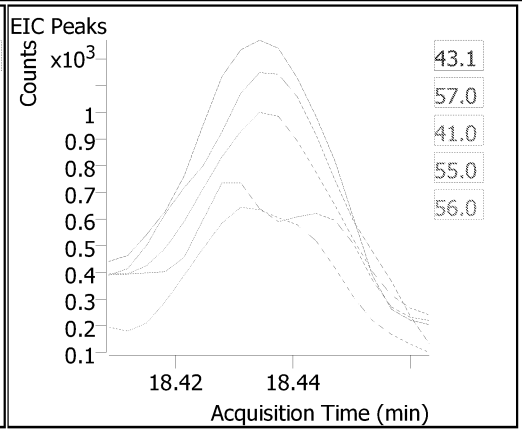
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.4310	2-Undecene, (Z)-	12733.1	83.3	821-96-5	C11H22	0.03264

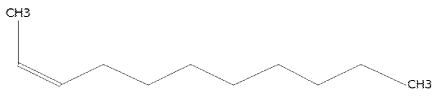




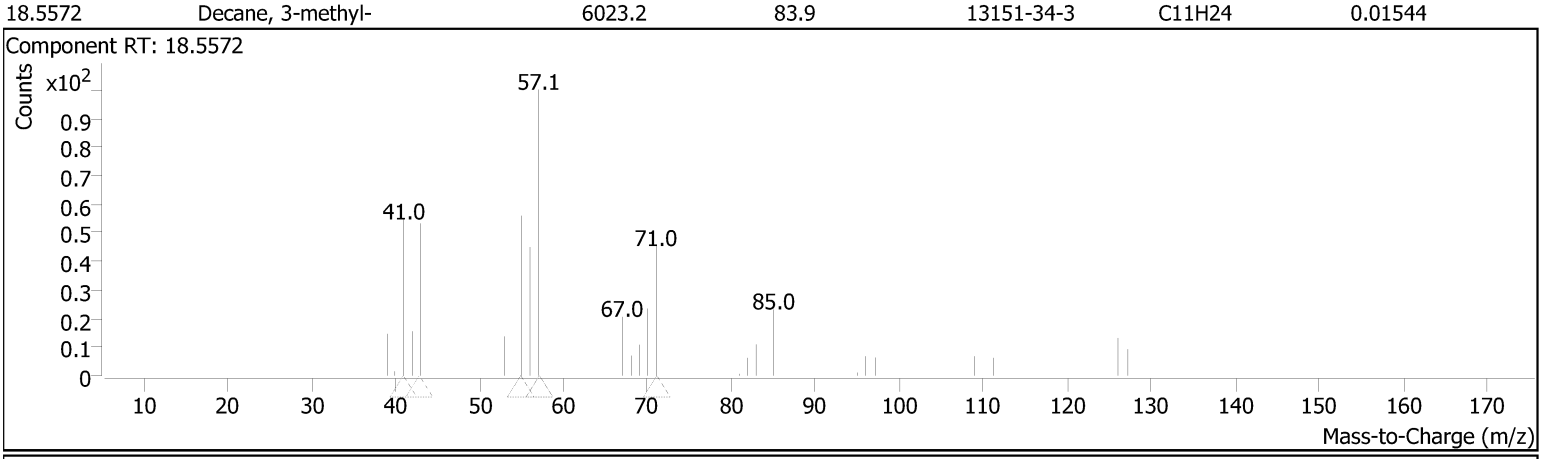


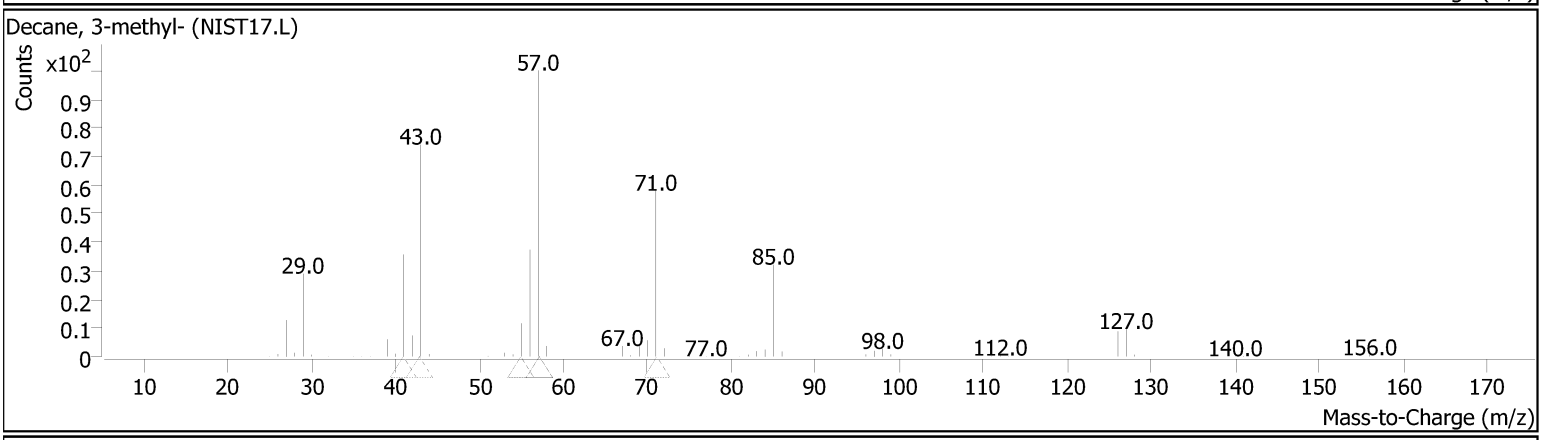


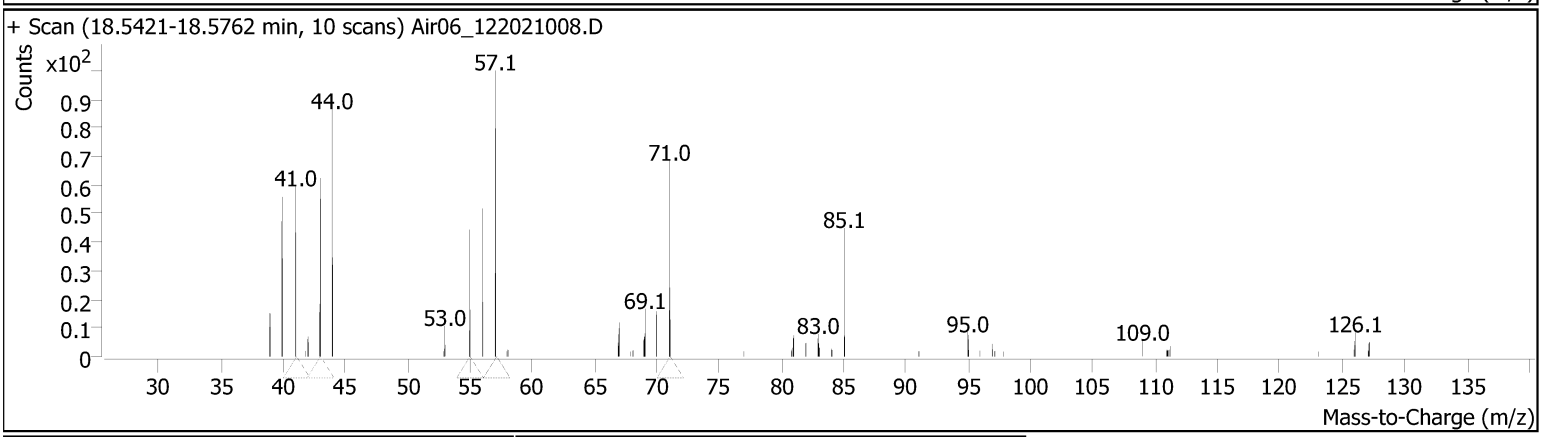


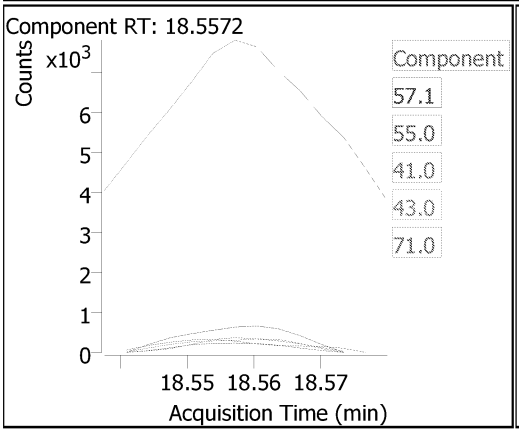


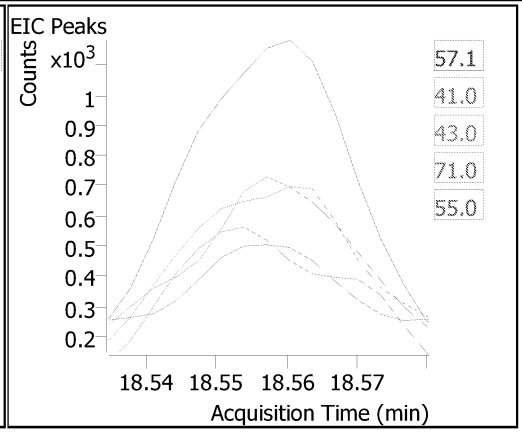
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.5572	Decane, 3-methyl-	6023.2	83.9	13151-34-3	C11H24	0.01544

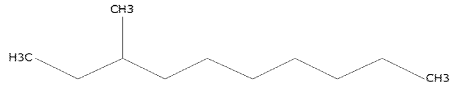




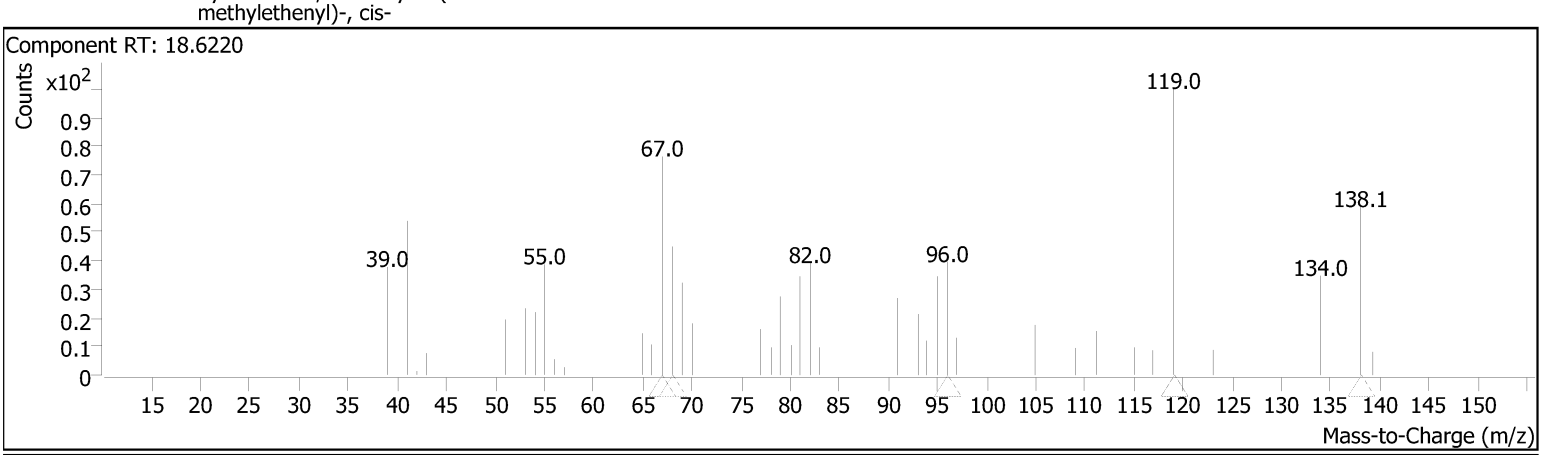


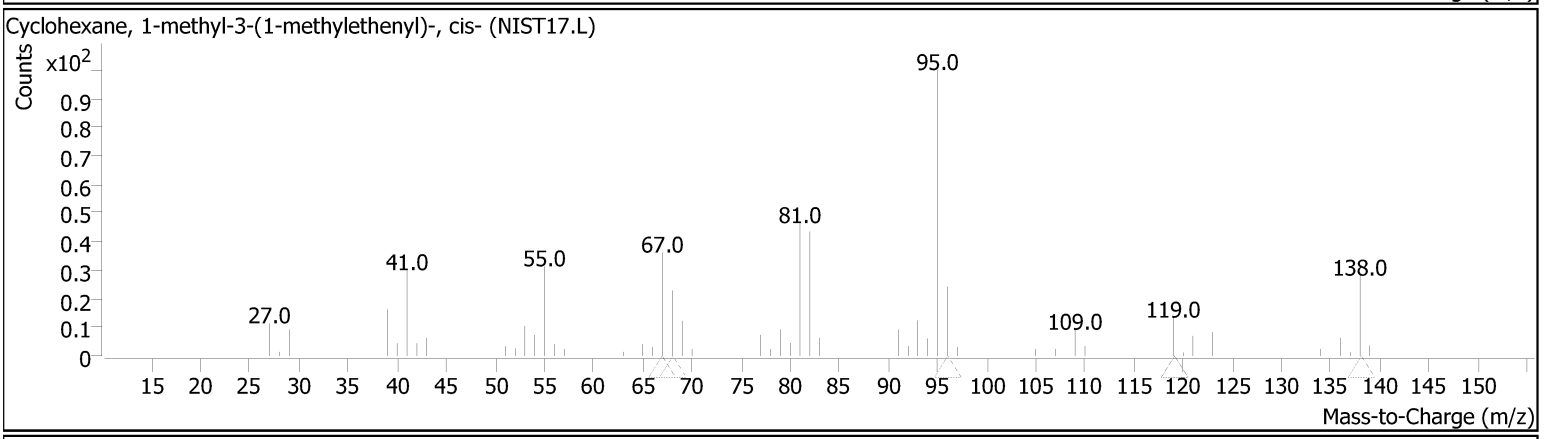


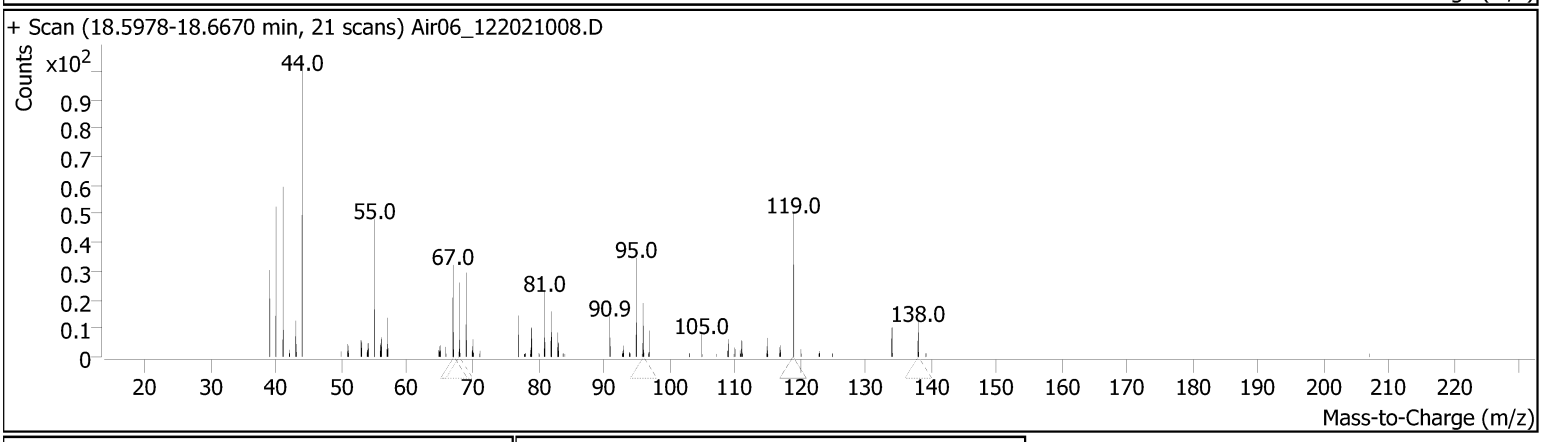


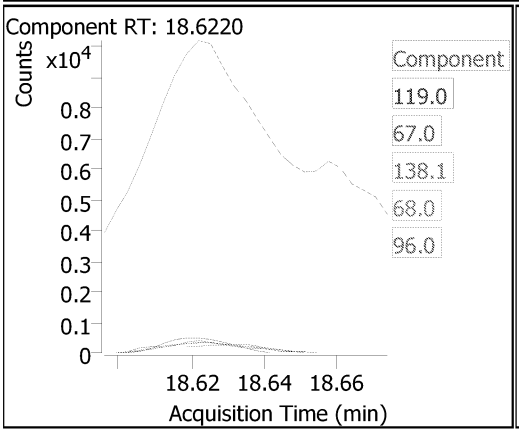


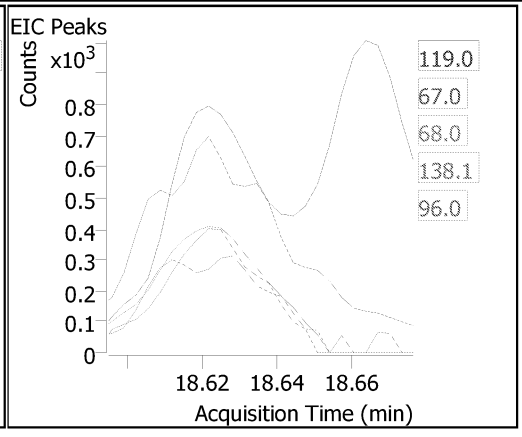
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.6220	Cyclohexane, 1-methyl-3-(1-methylethenyl)-, cis-	14820.3	79.2	24399-15-3	C10H18	0.038

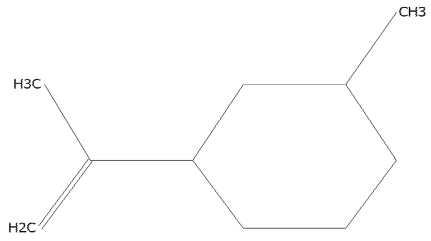




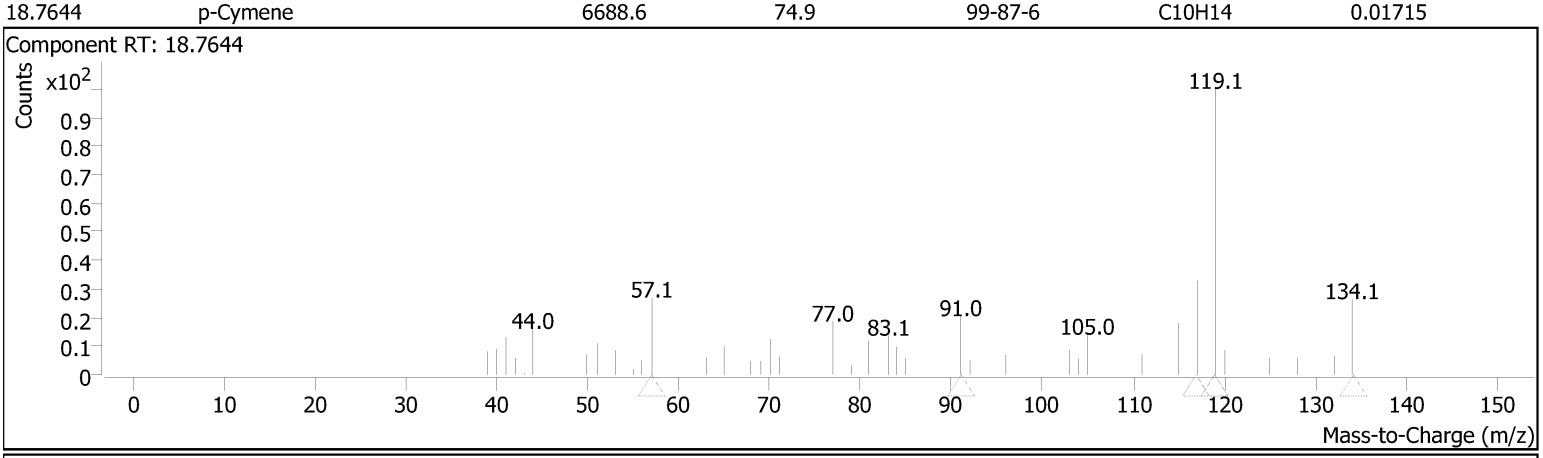


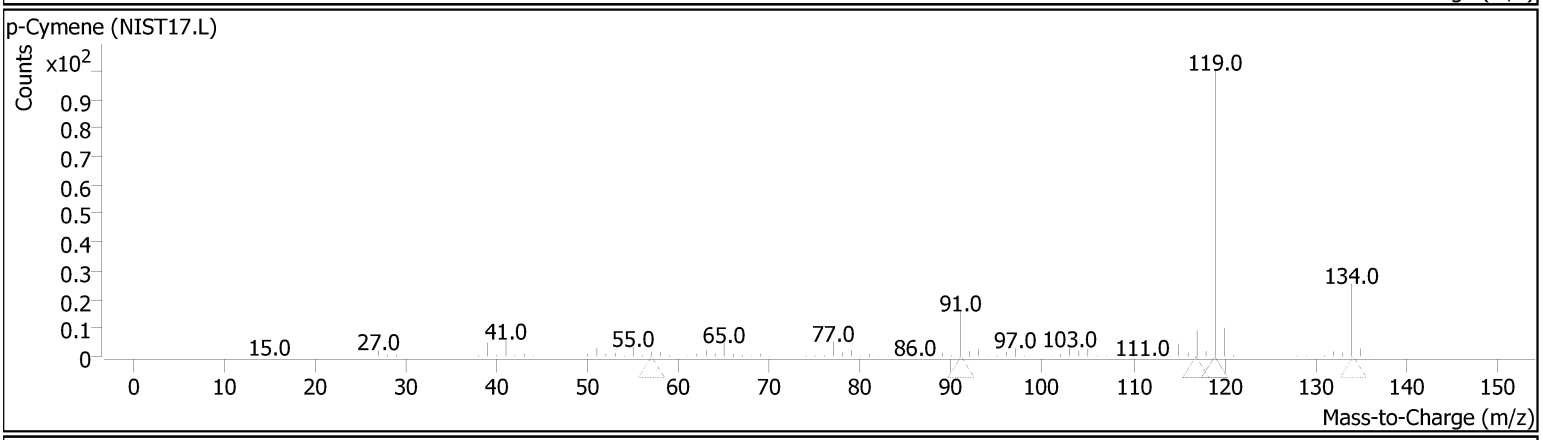


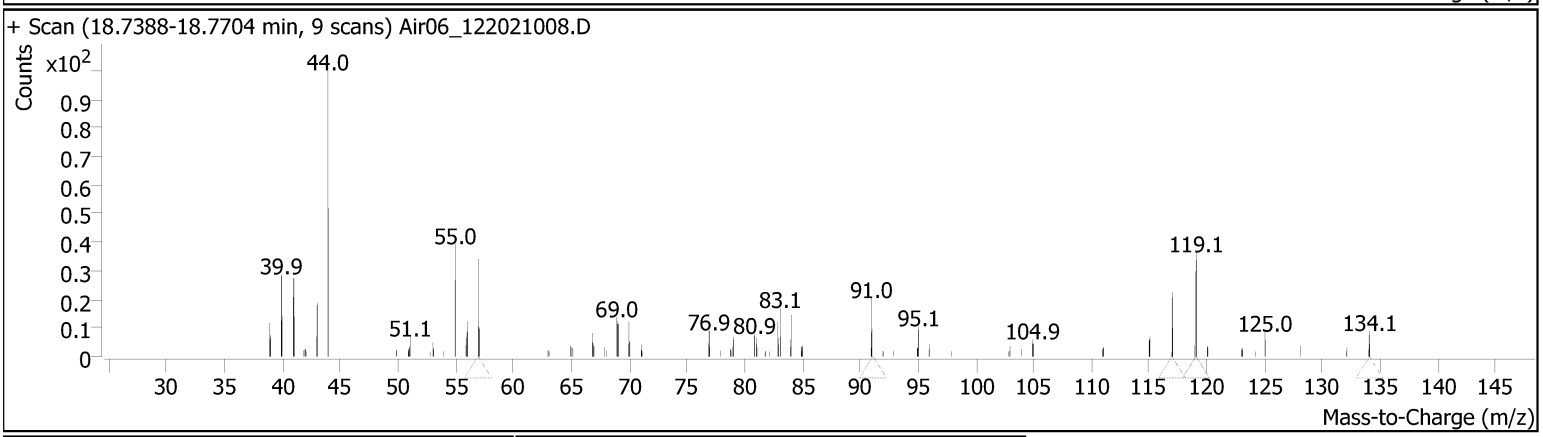


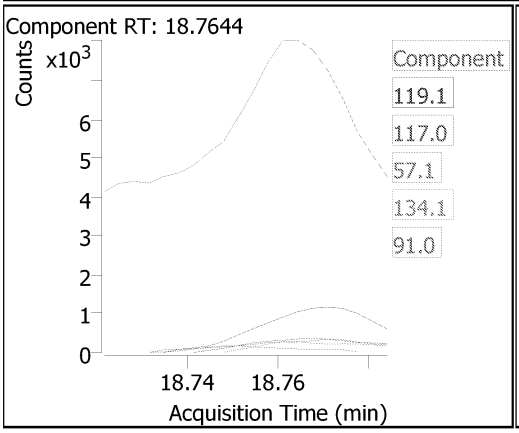


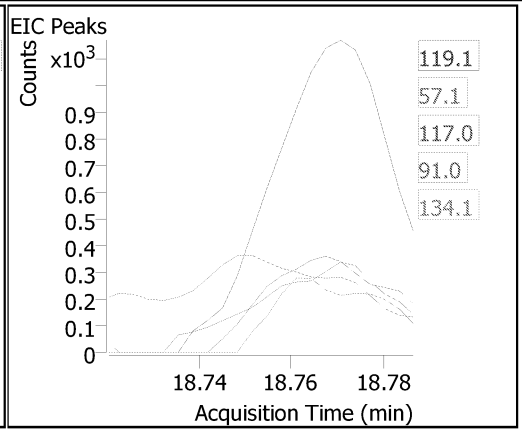
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.7644	p-Cymene	6688.6	74.9	99-87-6	C10H14	0.01715

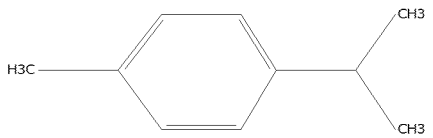




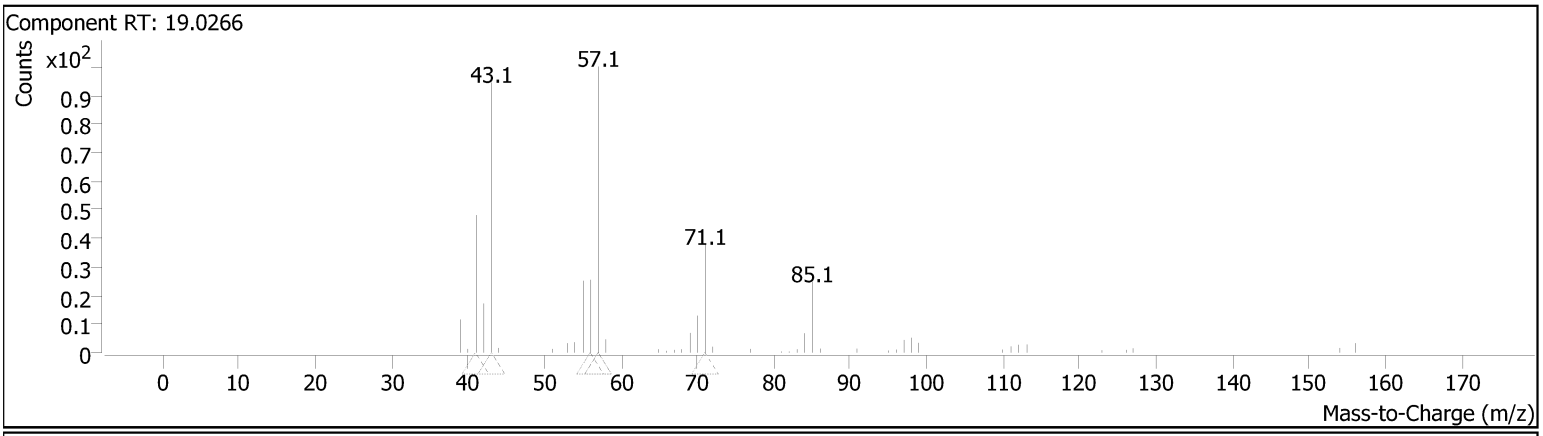


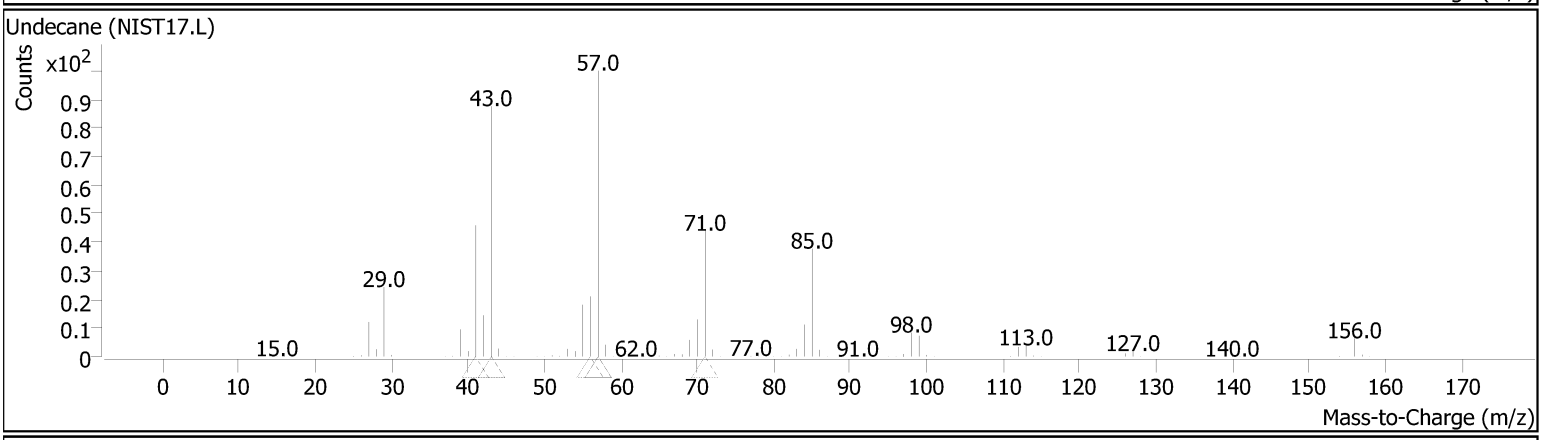


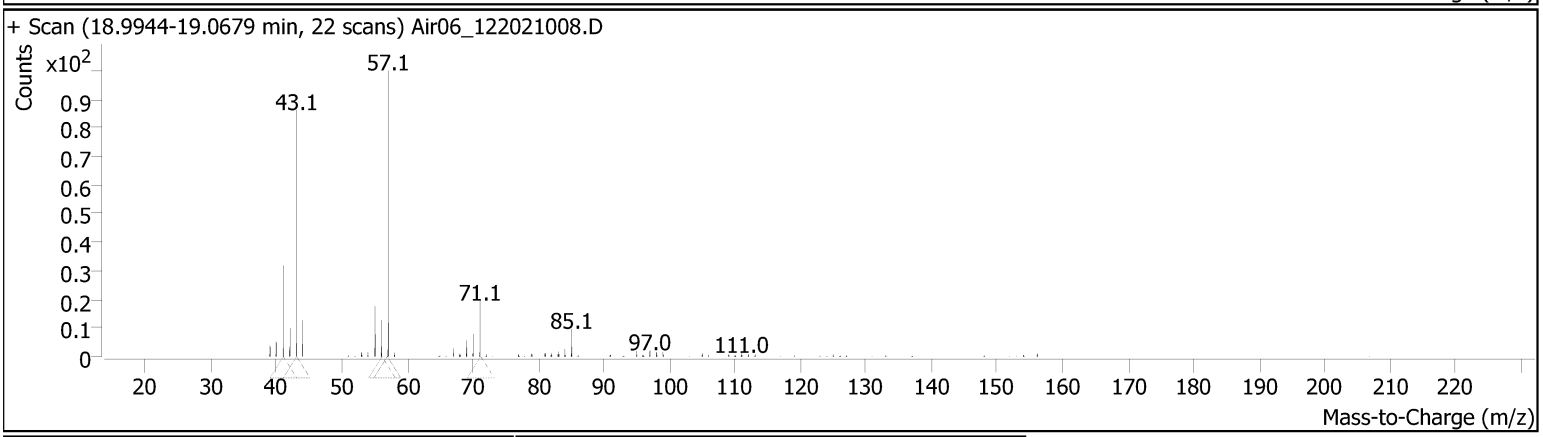


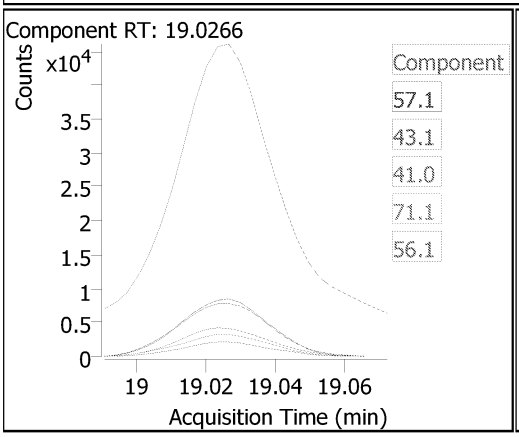


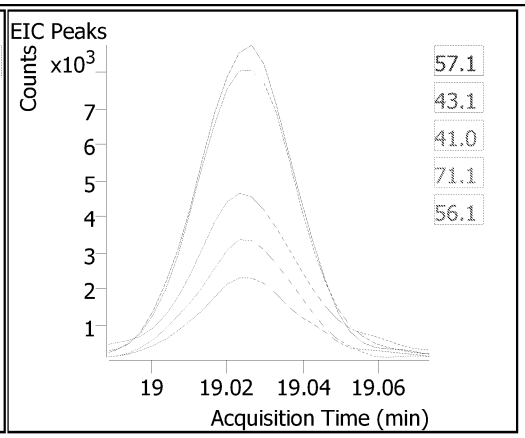
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.0266	Undecane	75223.2	94.7	1120-21-4	C11H24	0.1929





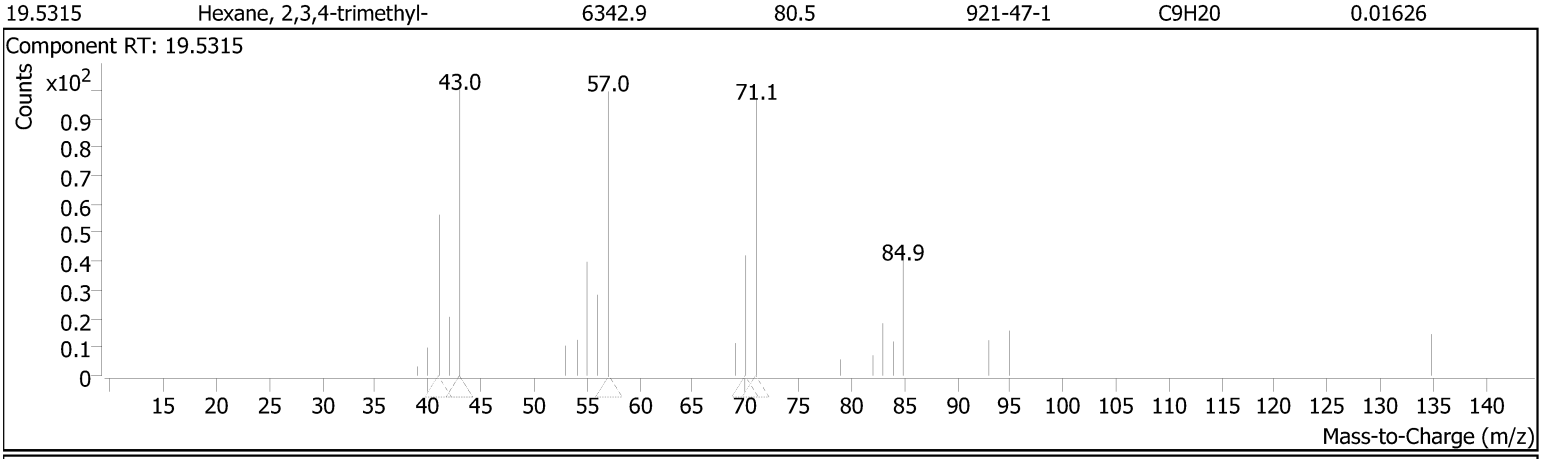


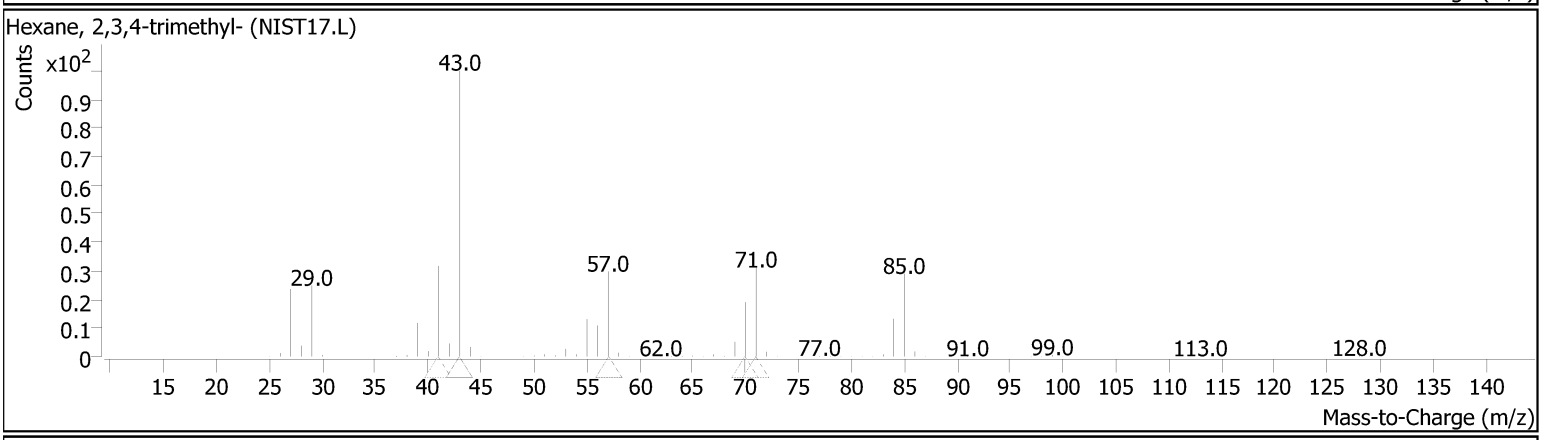


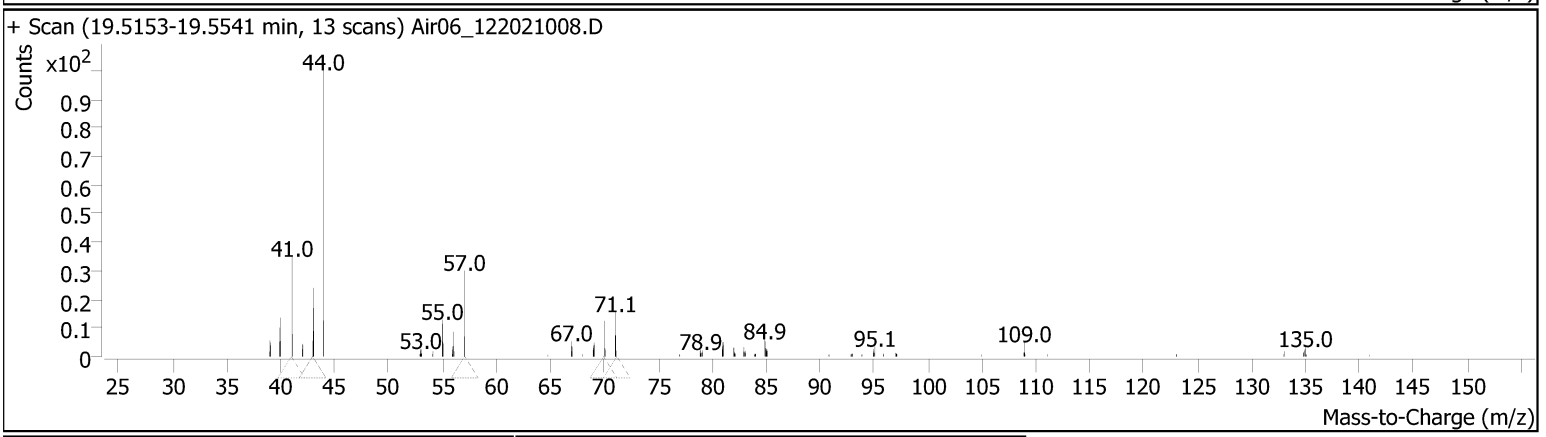


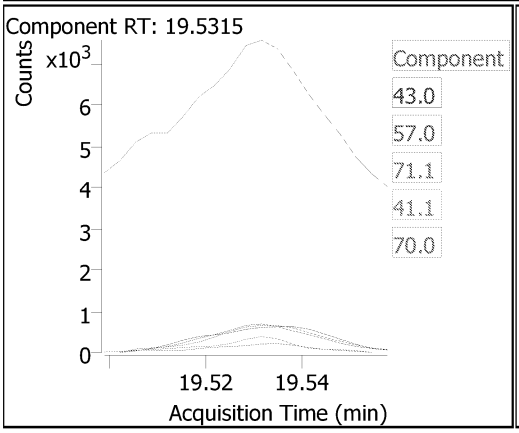


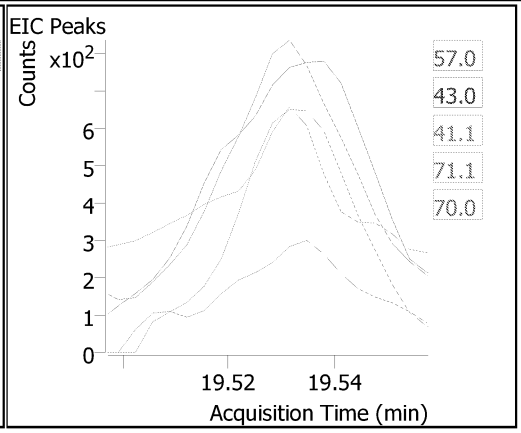
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.5315	Hexane, 2,3,4-trimethyl-	6342.9	80.5	921-47-1	C9H20	0.01626

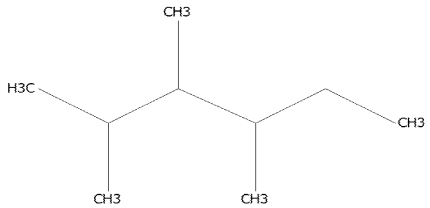




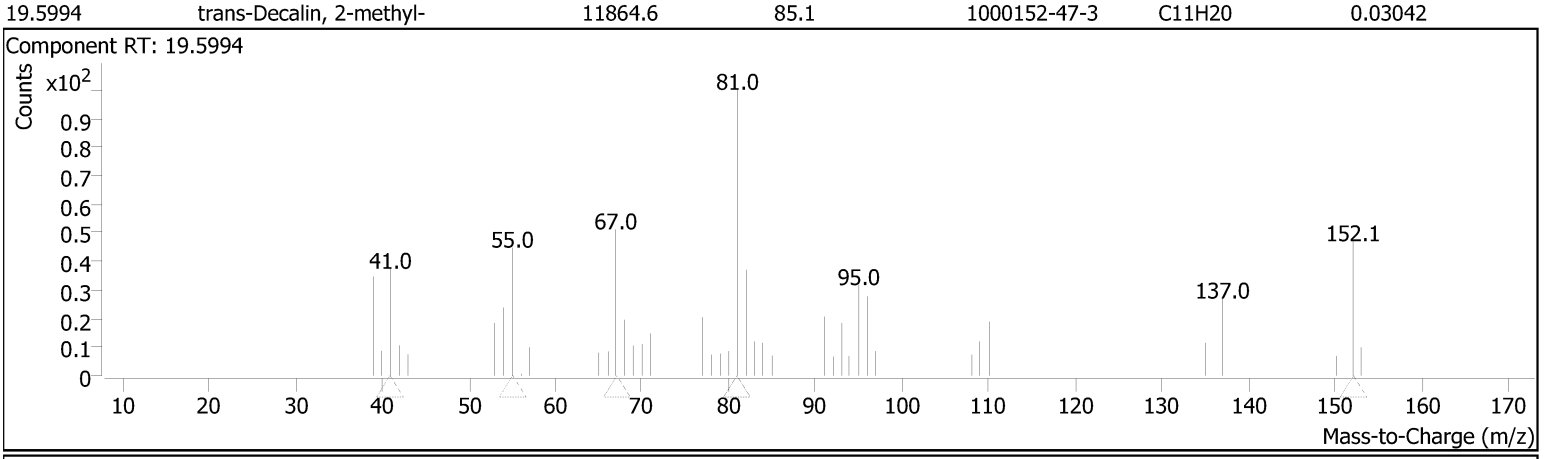


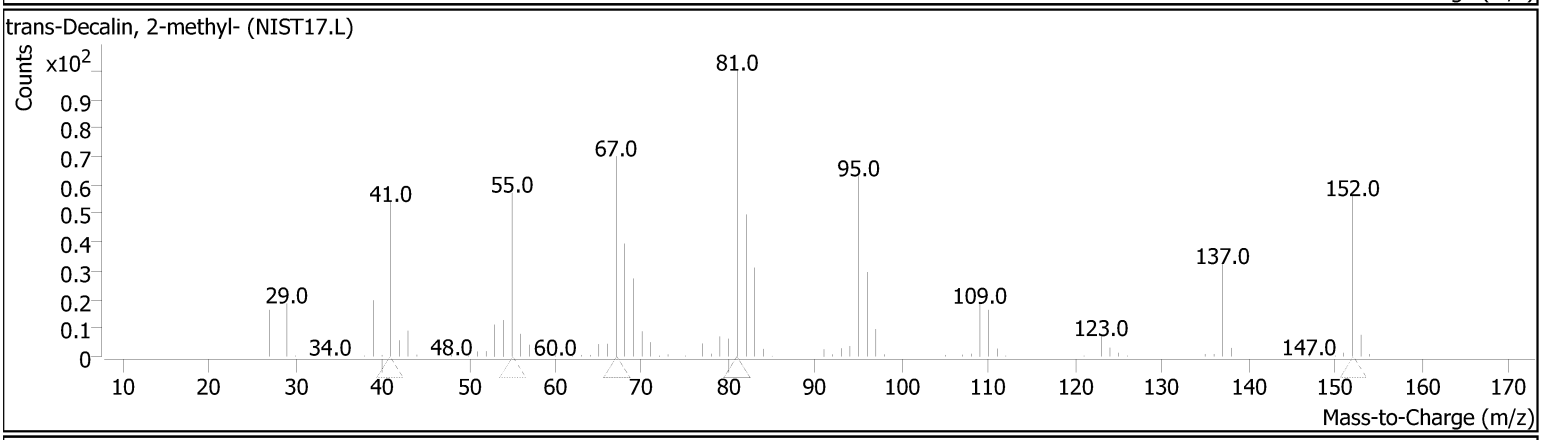


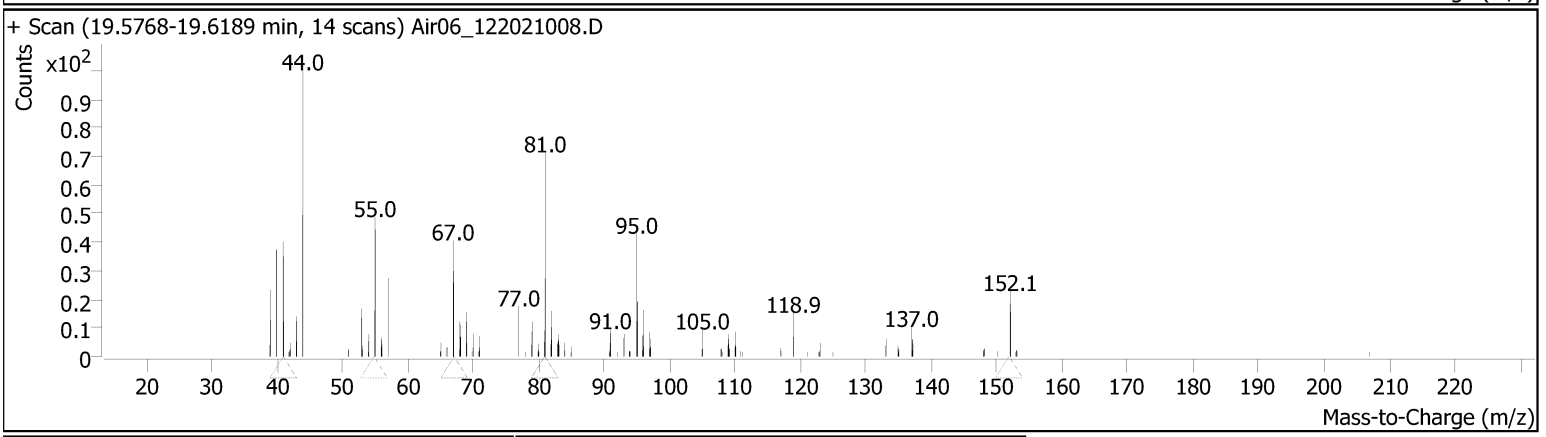


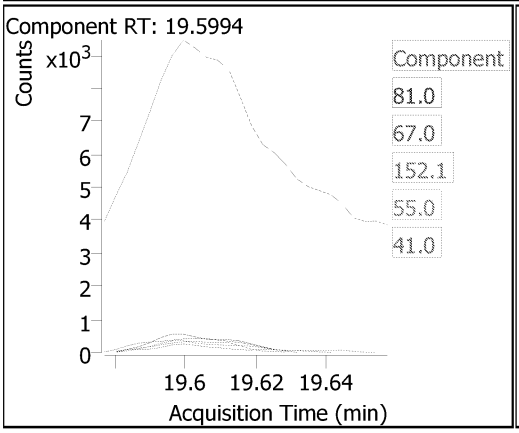


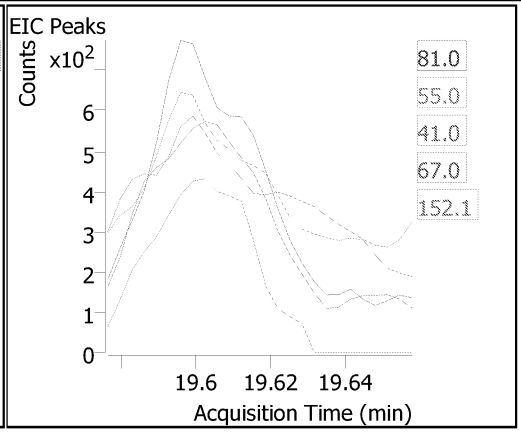
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.5994	trans-Decalin, 2-methyl-	11864.6	85.1	1000152-47-3	C11H20	0.03042

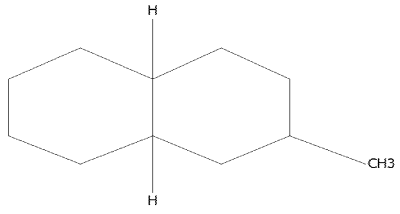




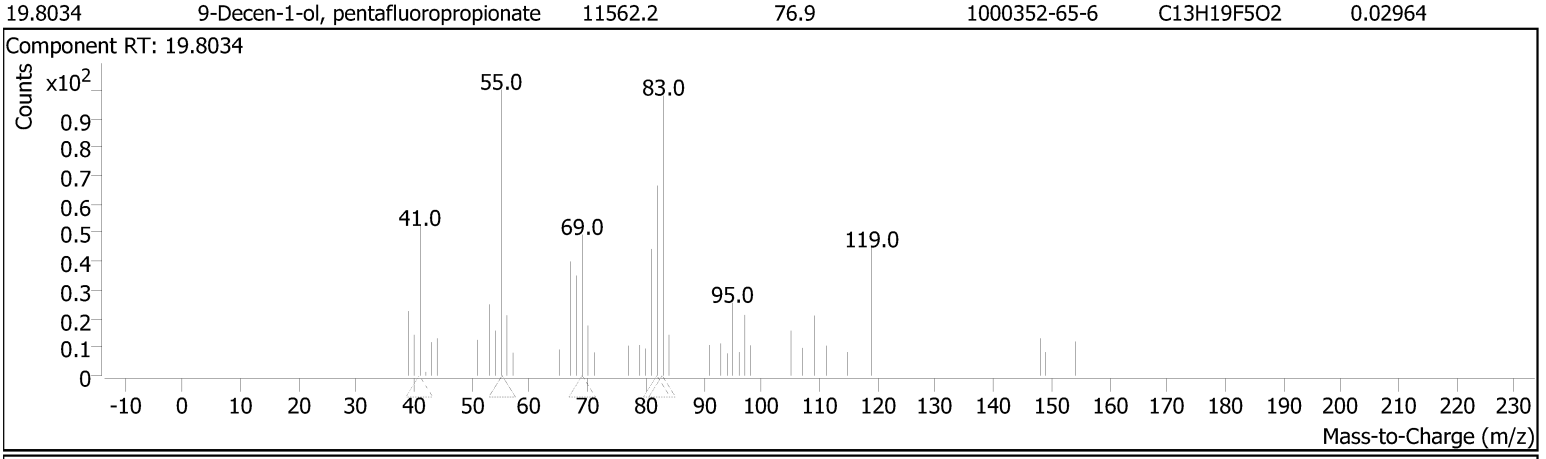


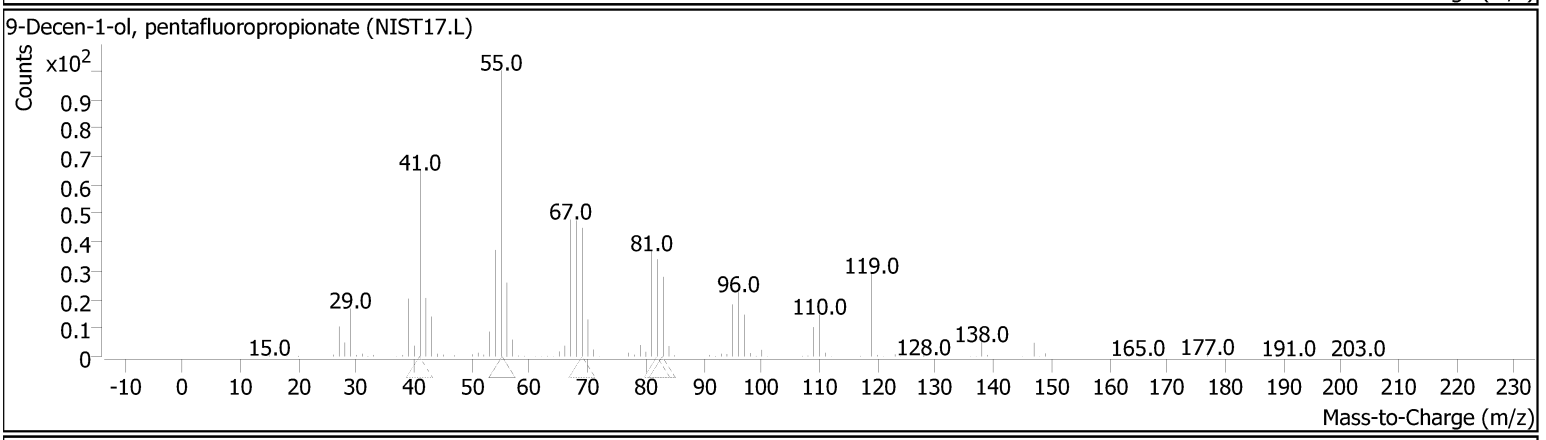


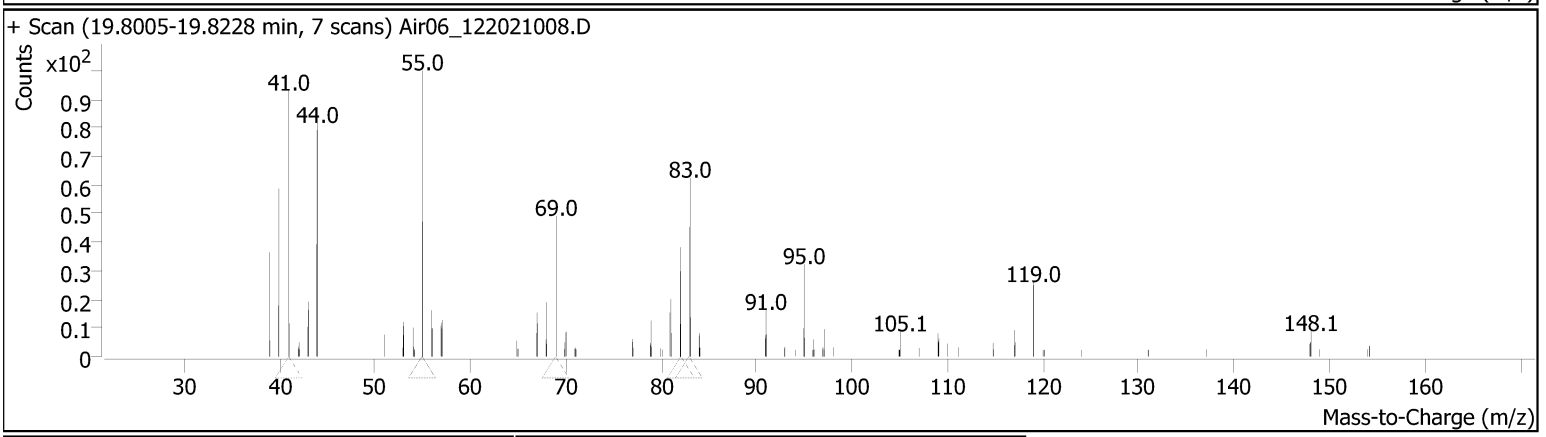


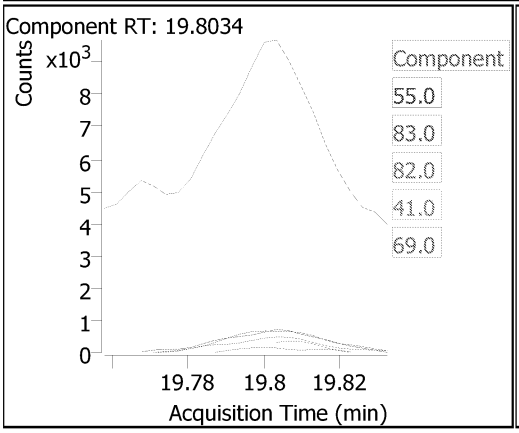


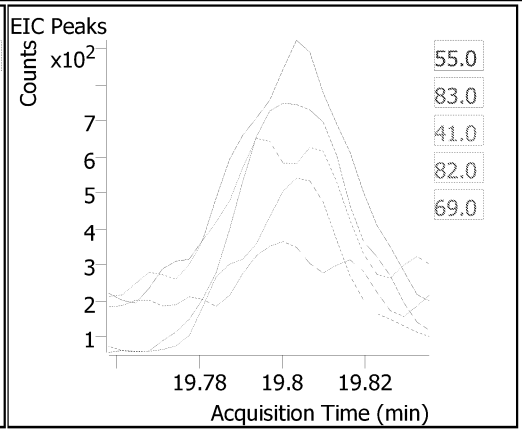
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.8034	9-Decen-1-ol, pentafluoropropionate	11562.2	76.9	1000352-65-6	C13H19F5O2	0.02964

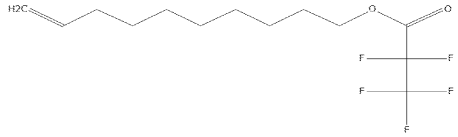




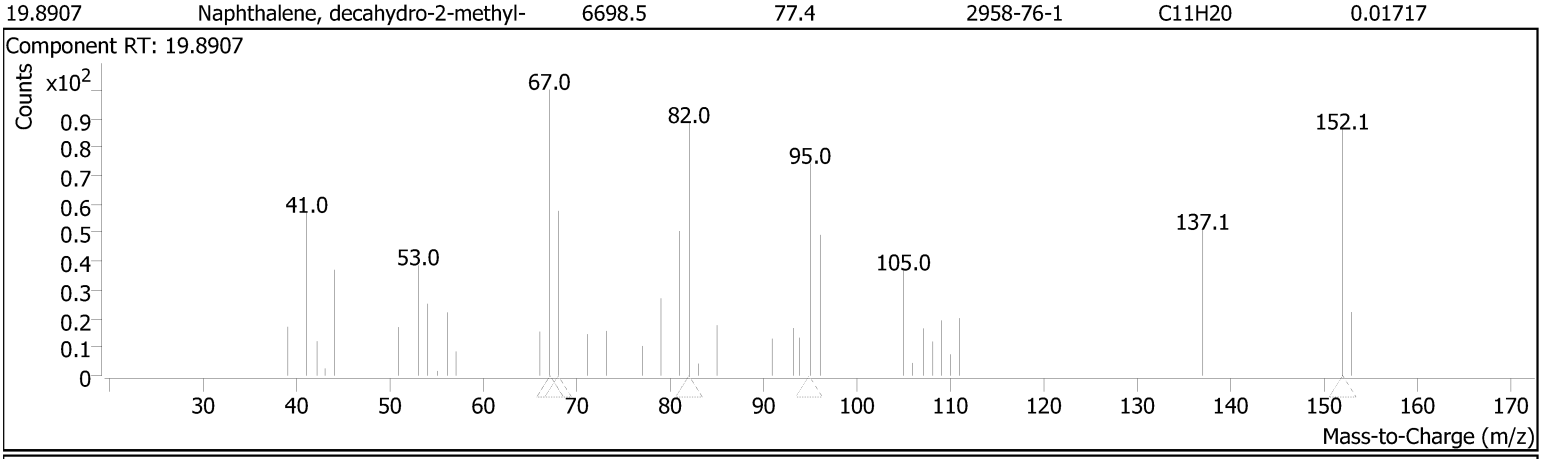


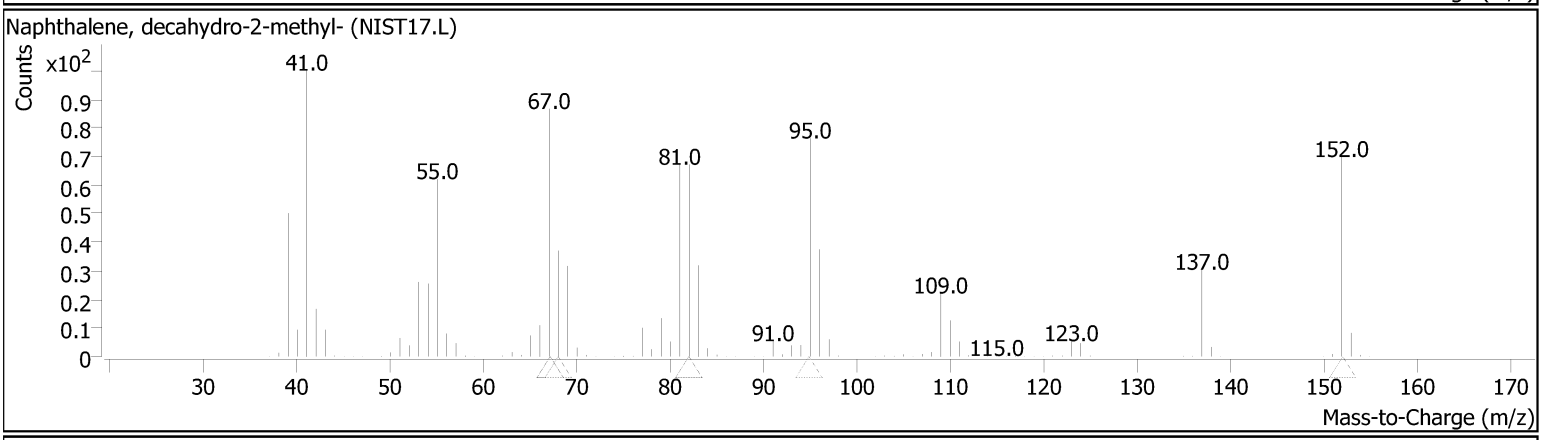


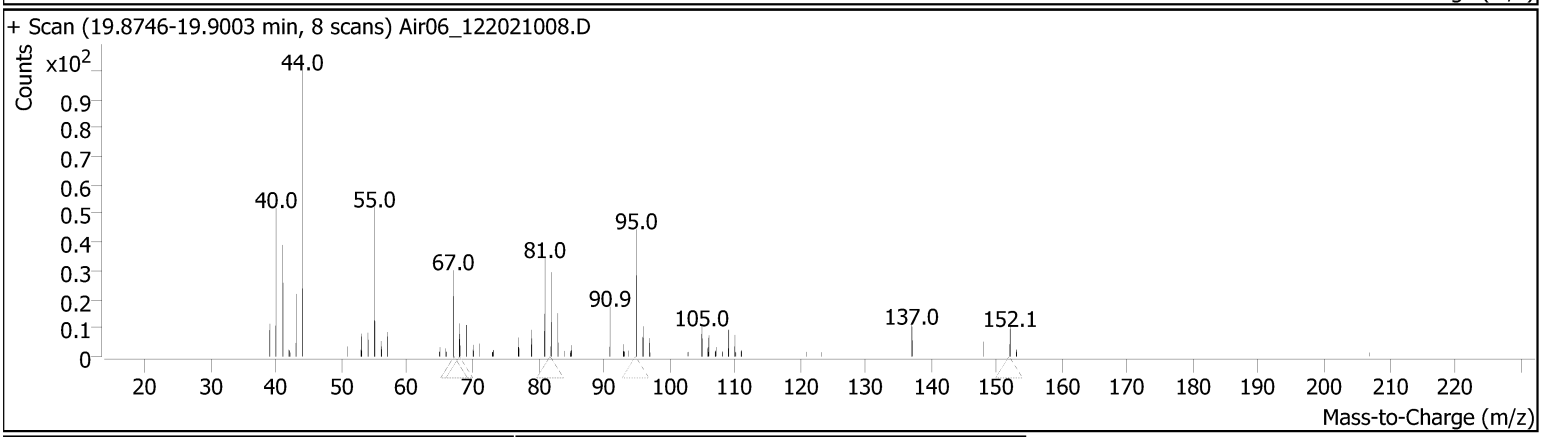


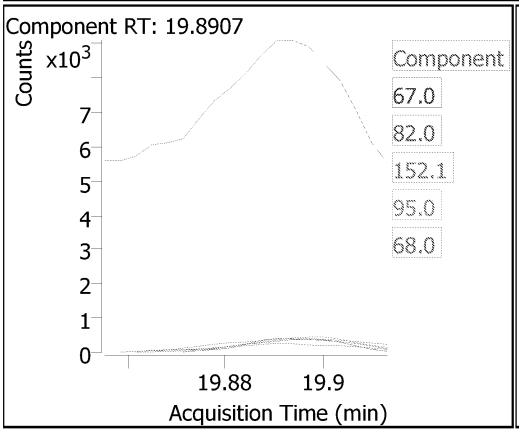


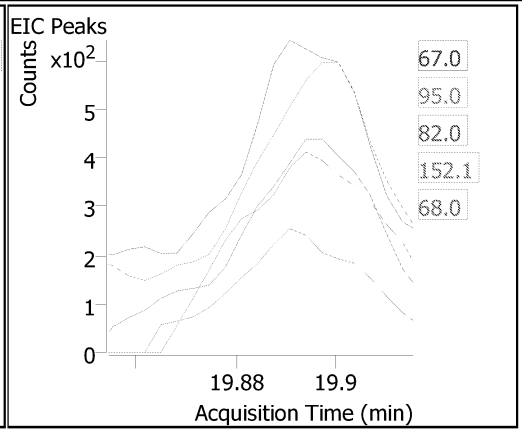
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.8907	Naphthalene, decahydro-2-methyl-	6698.5	77.4	2958-76-1	C11H20	0.01717

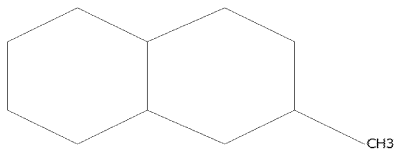




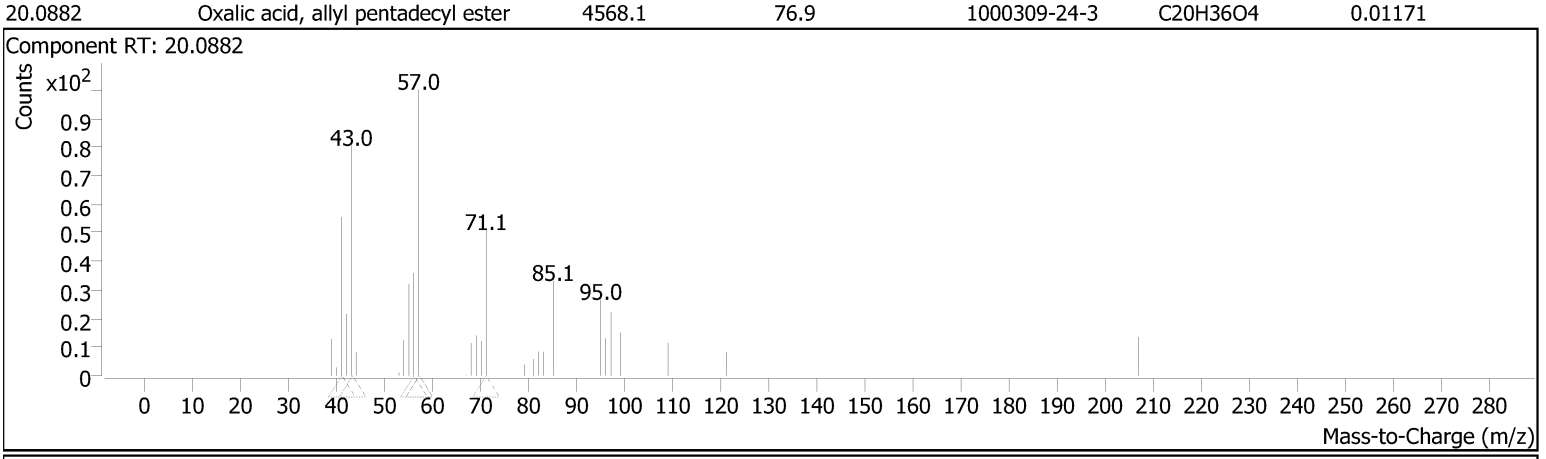


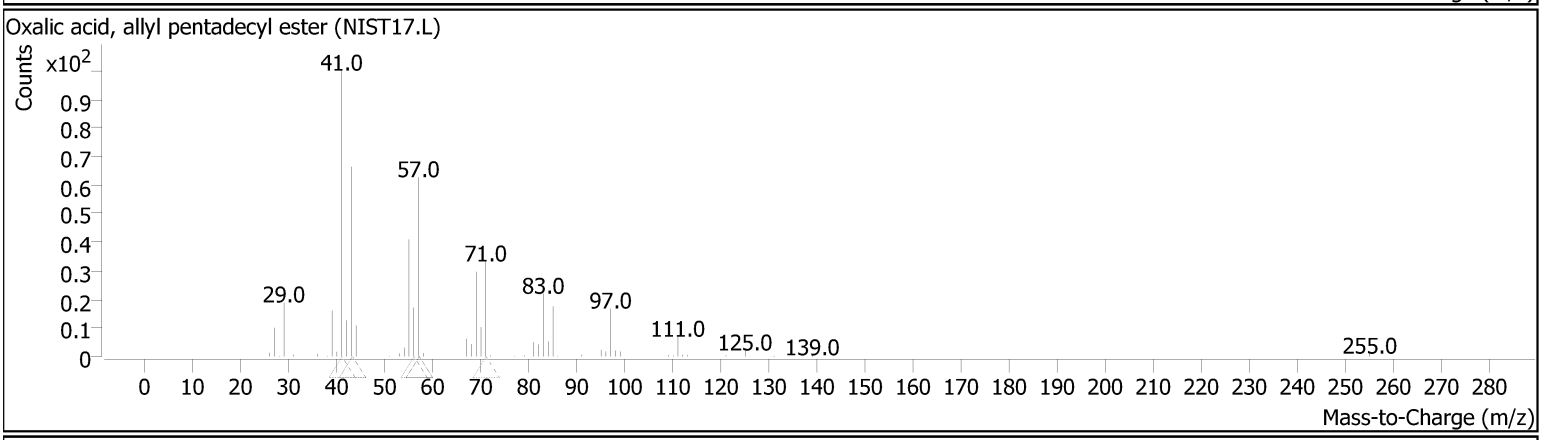


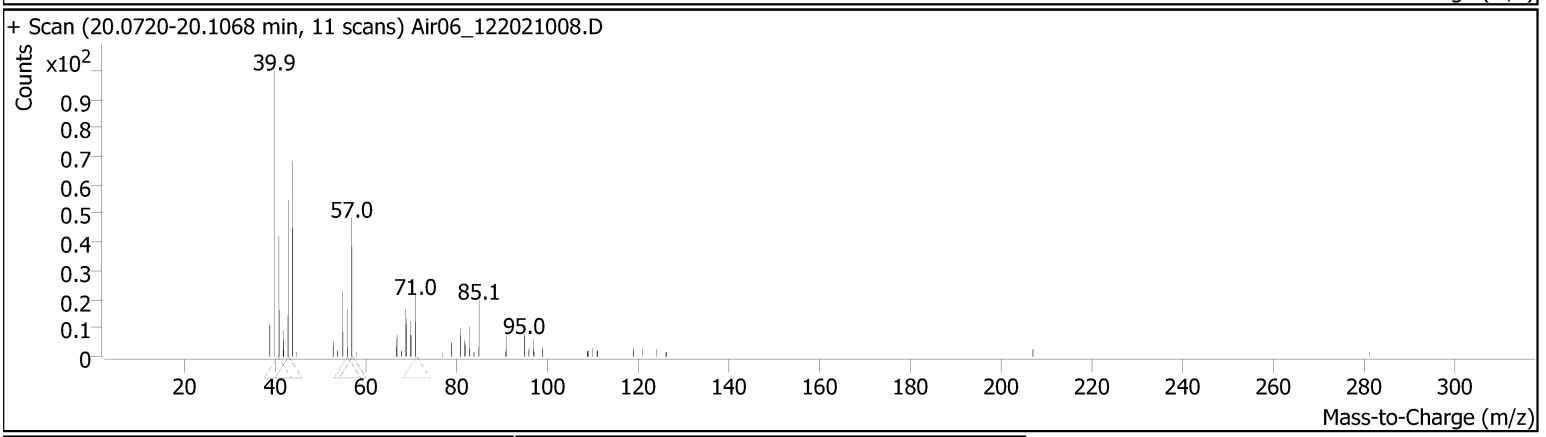


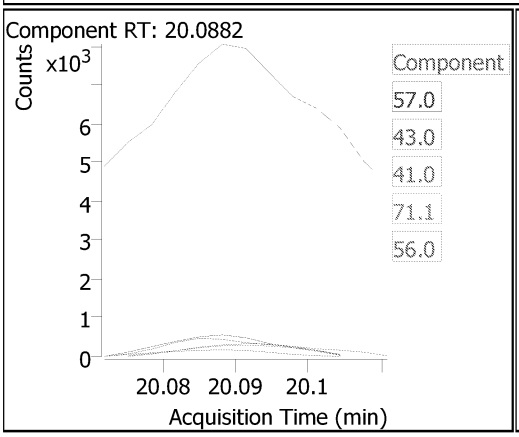


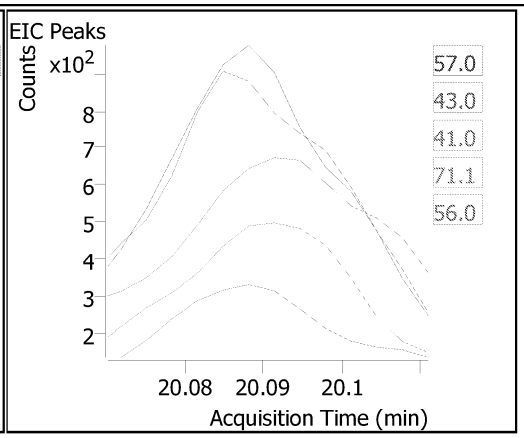
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.0882	Oxalic acid, allyl pentadecyl ester	4568.1	76.9	1000309-24-3	C20H36O4	0.01171

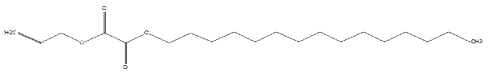




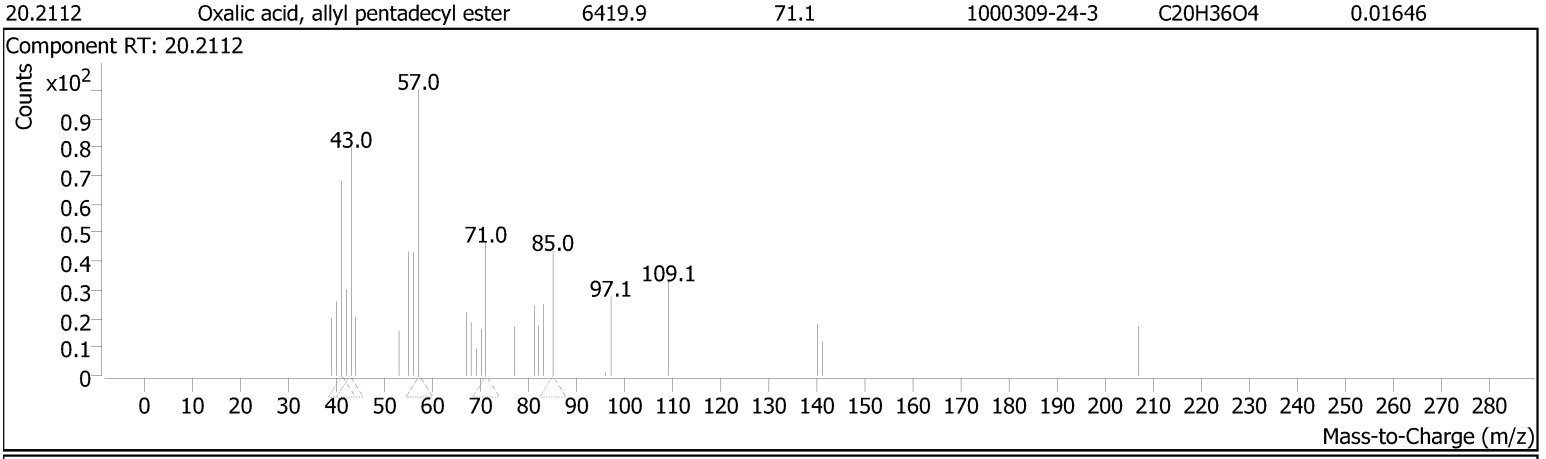


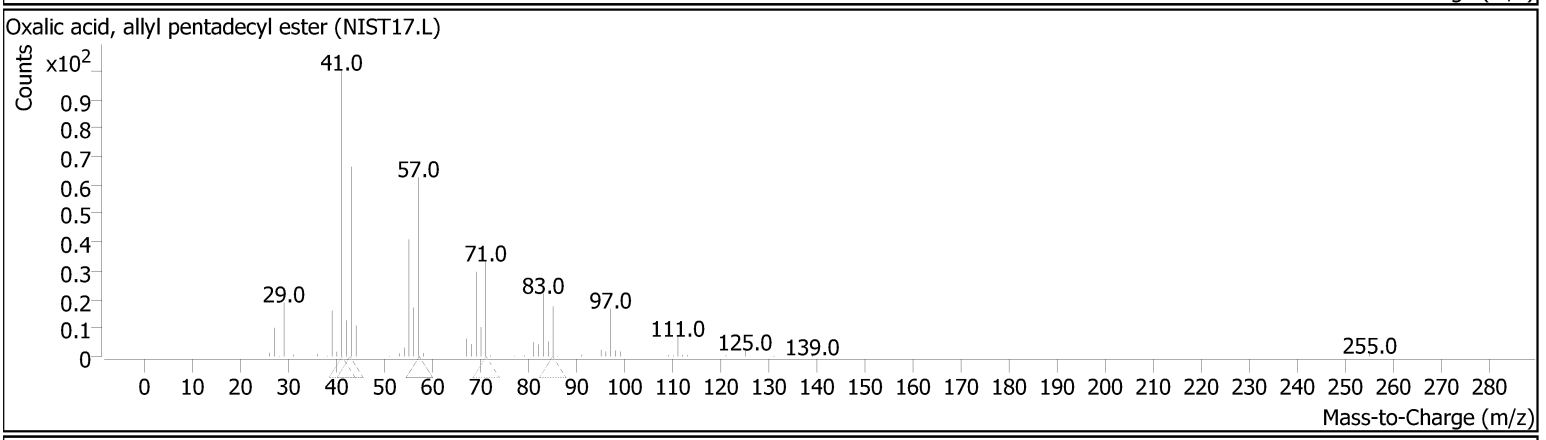


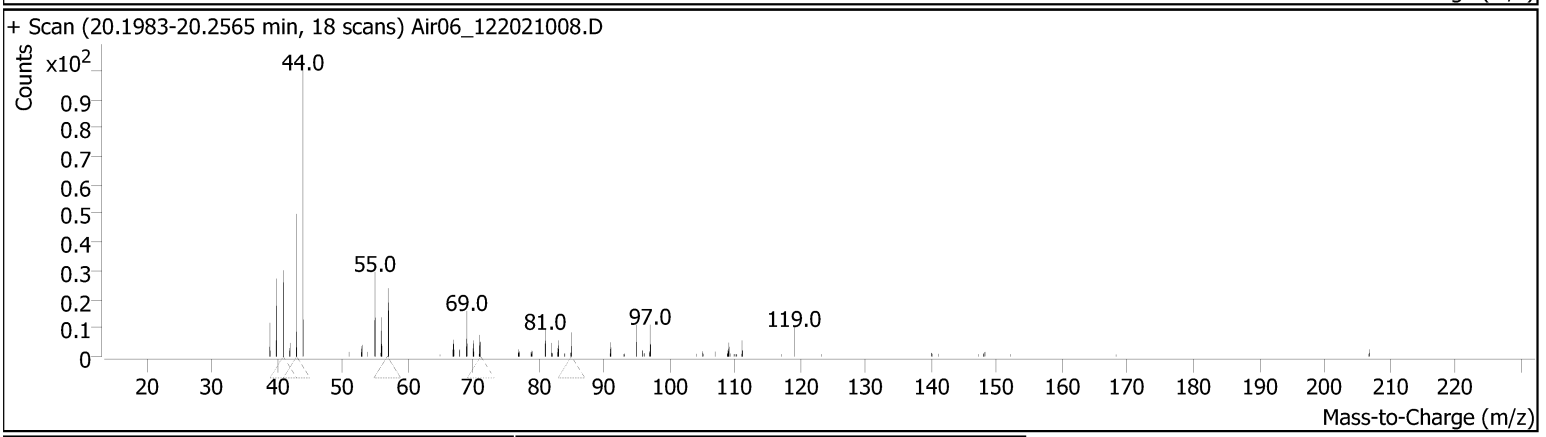


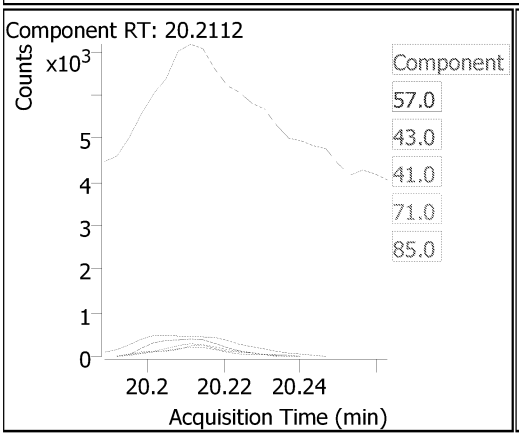


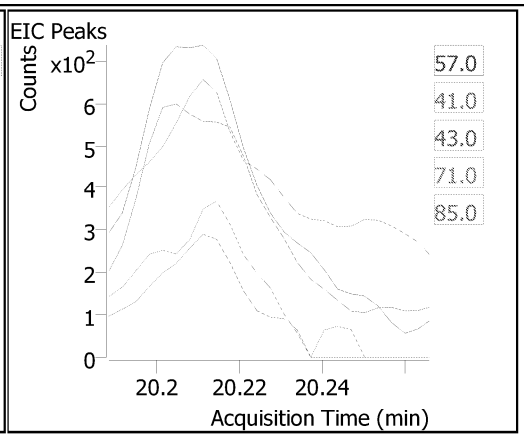
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.2112	Oxalic acid, allyl pentadecyl ester	6419.9	71.1	1000309-24-3	C20H36O4	0.01646

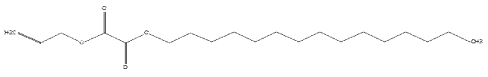




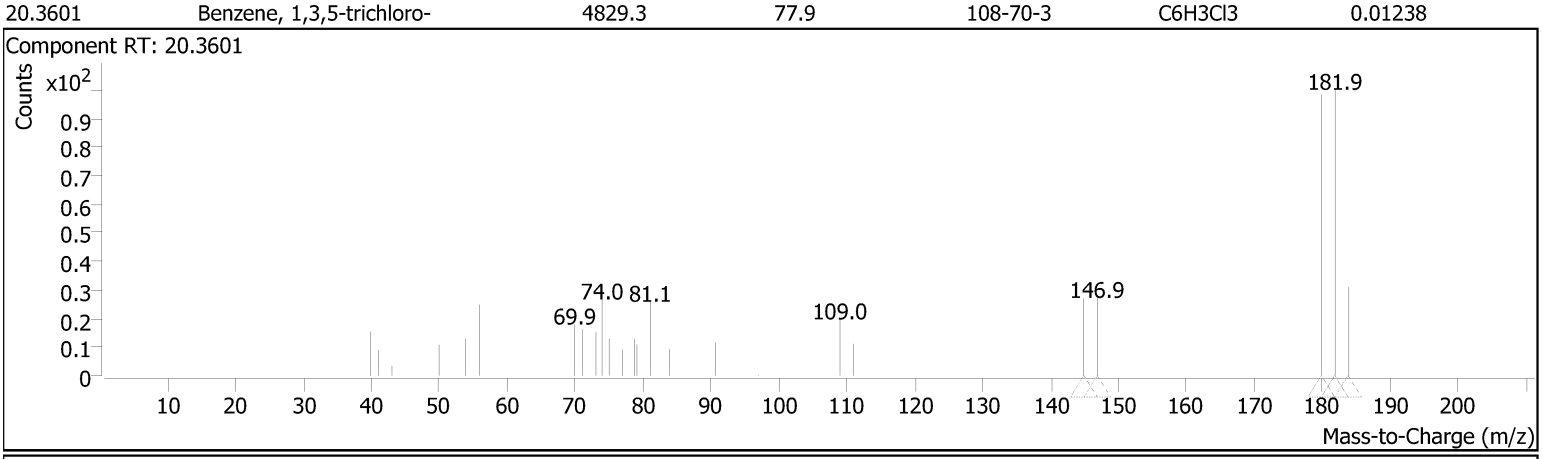


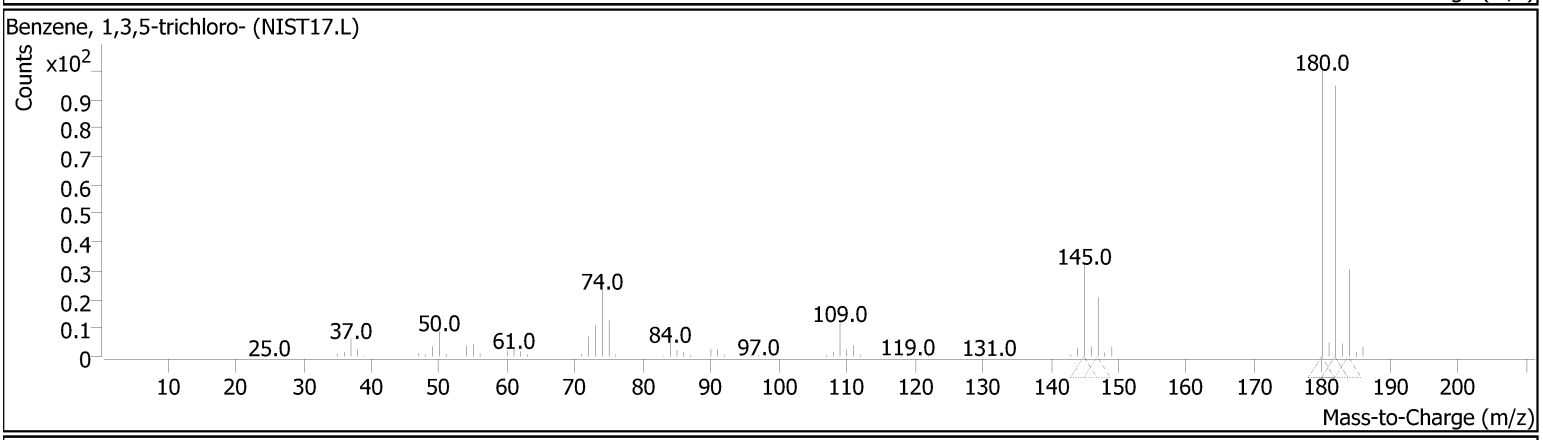


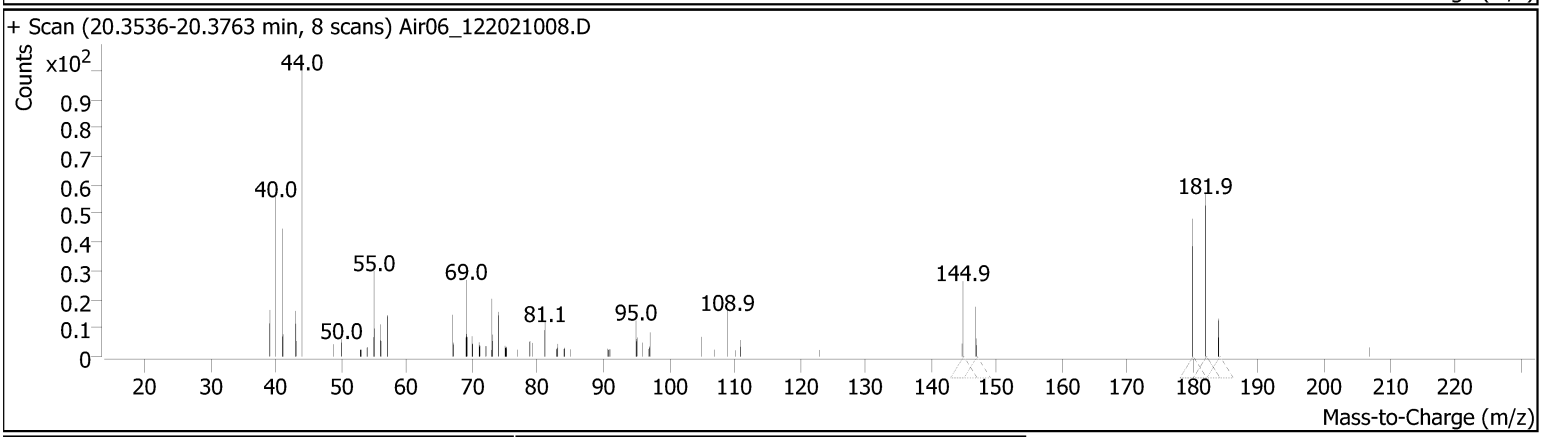


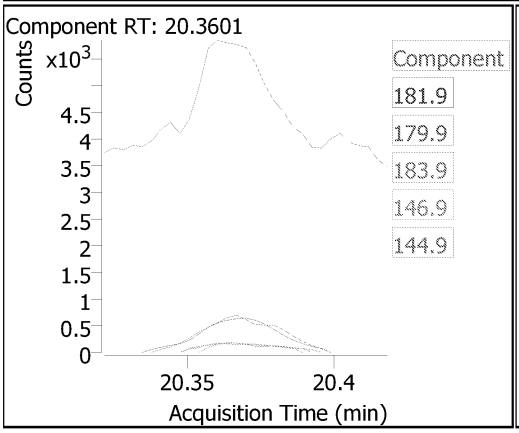


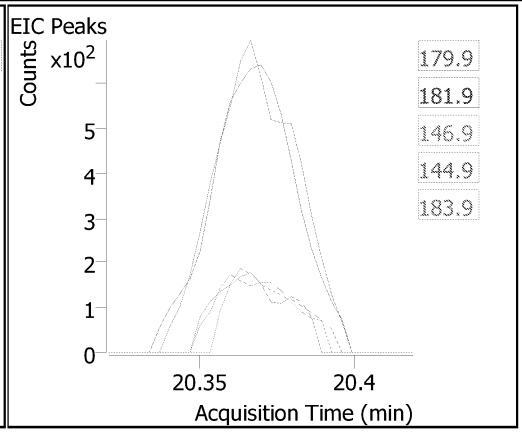
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.3601	Benzene, 1,3,5-trichloro-	4829.3	77.9	108-70-3	C6H3Cl3	0.01238

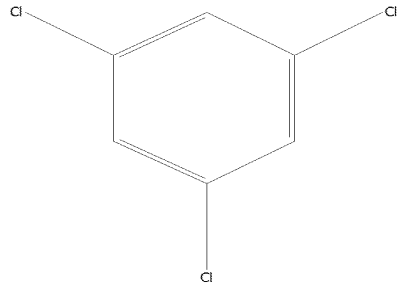




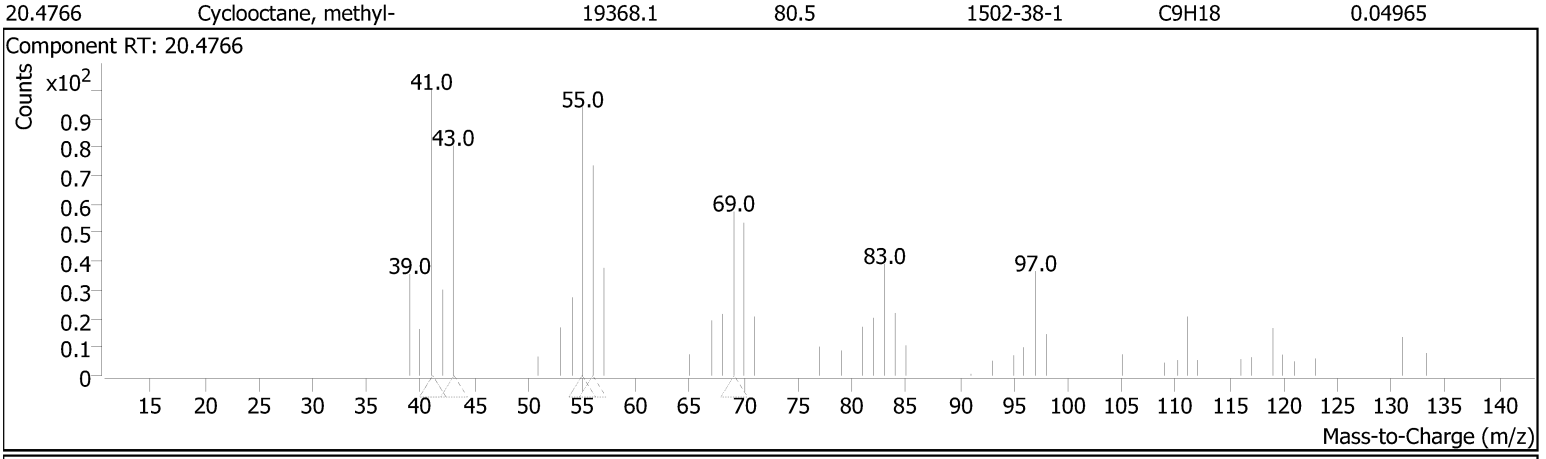


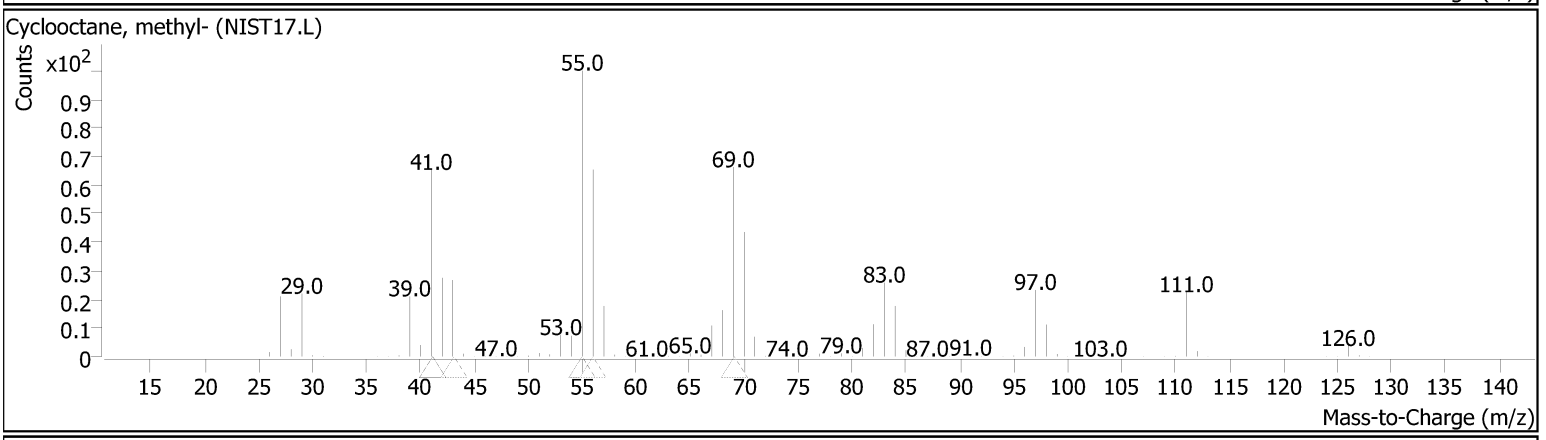


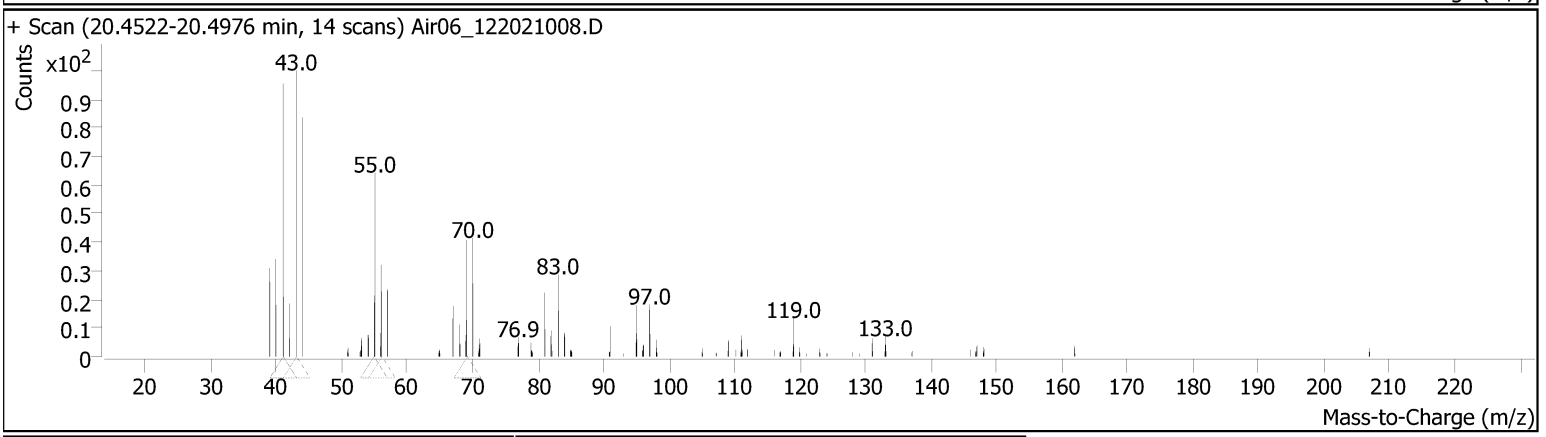


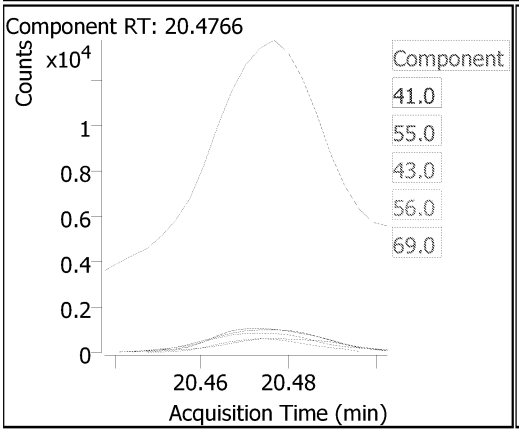


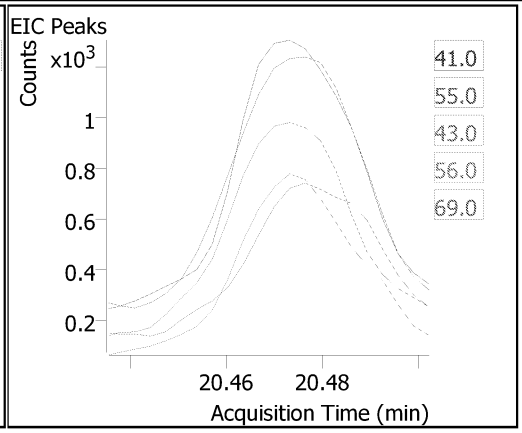
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.4766	Cyclooctane, methyl-	19368.1	80.5	1502-38-1	C9H18	0.04965

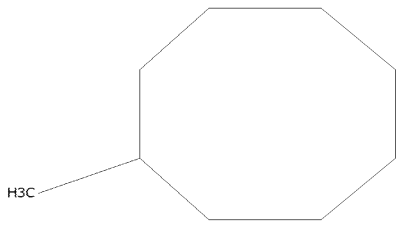




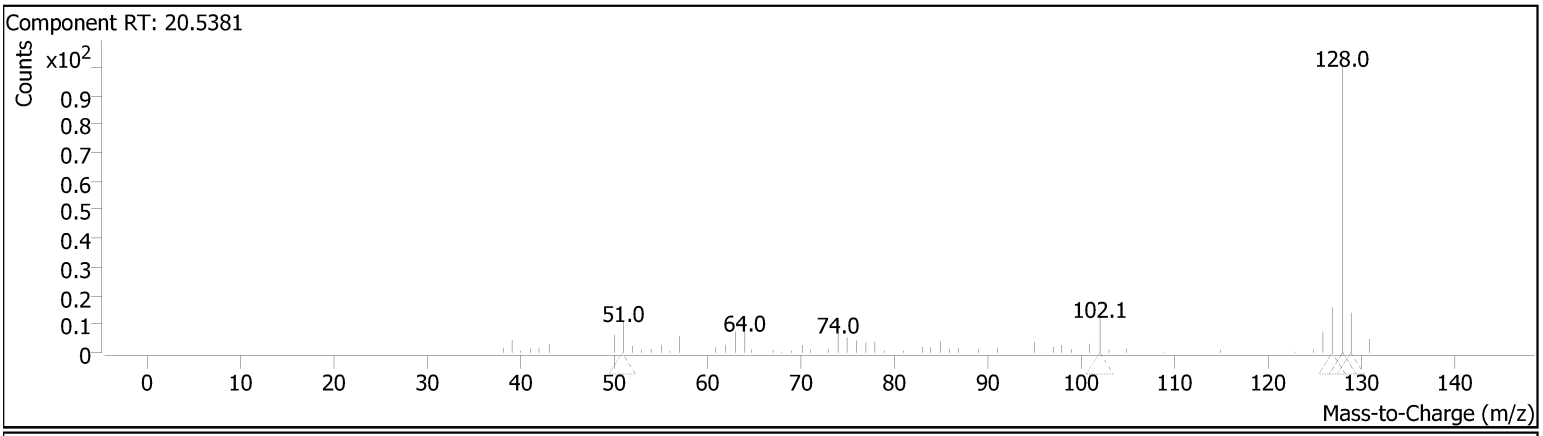


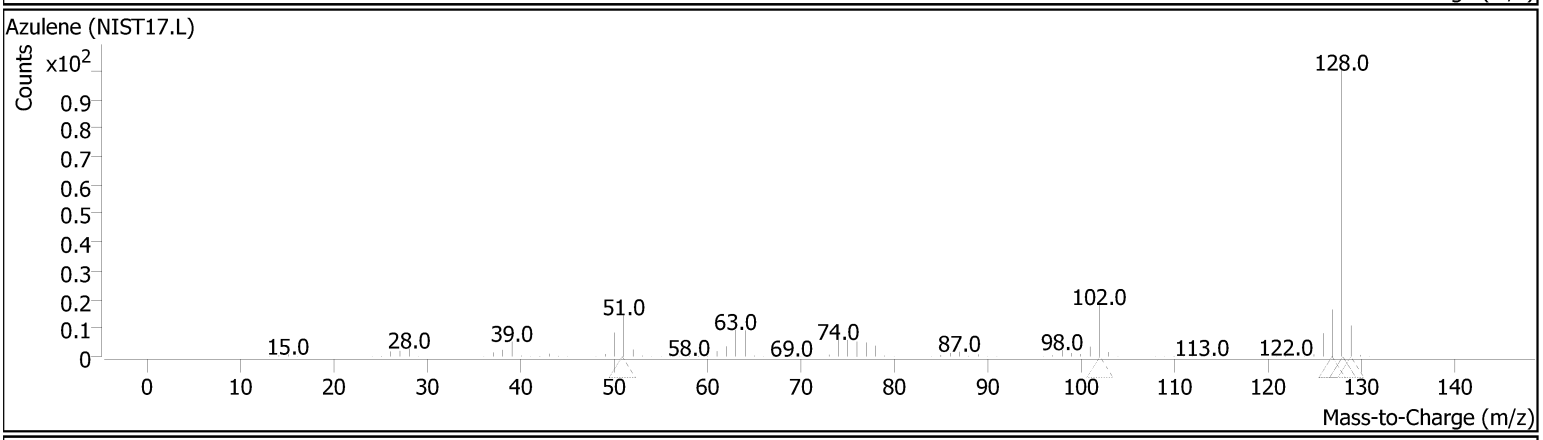


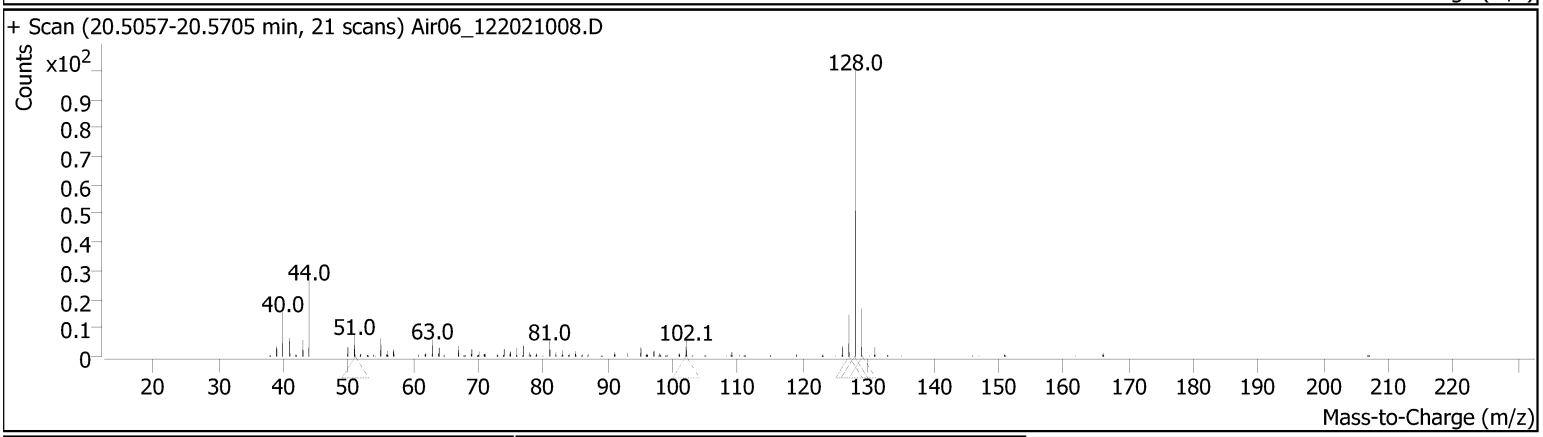


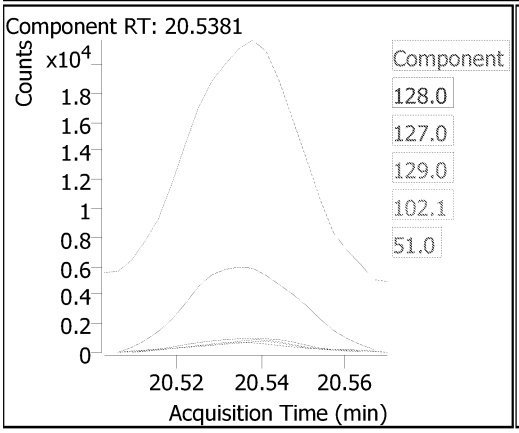


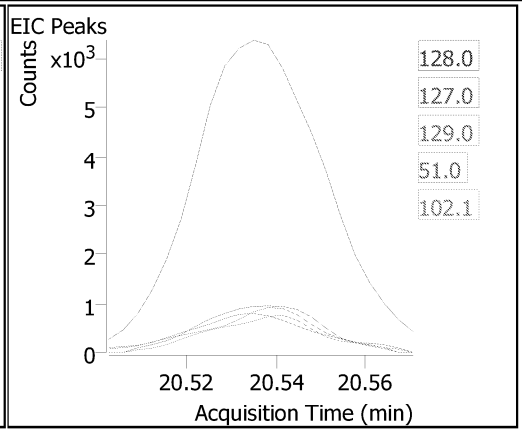
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.5381	Azulene	37657.6	87.9	275-51-4	C10H8	0.09654

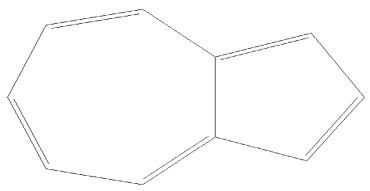




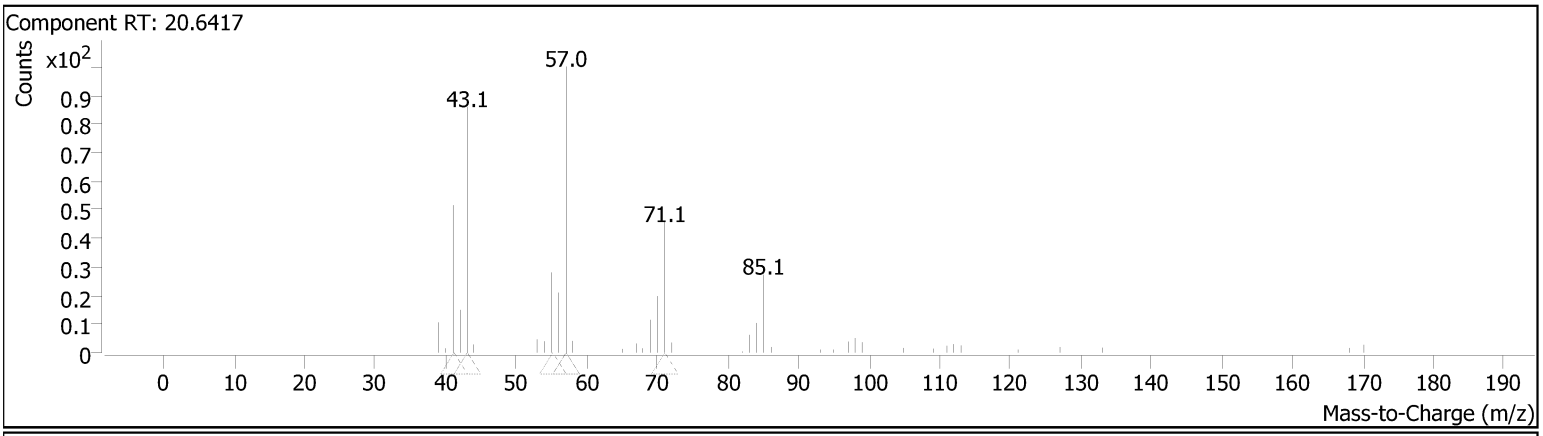


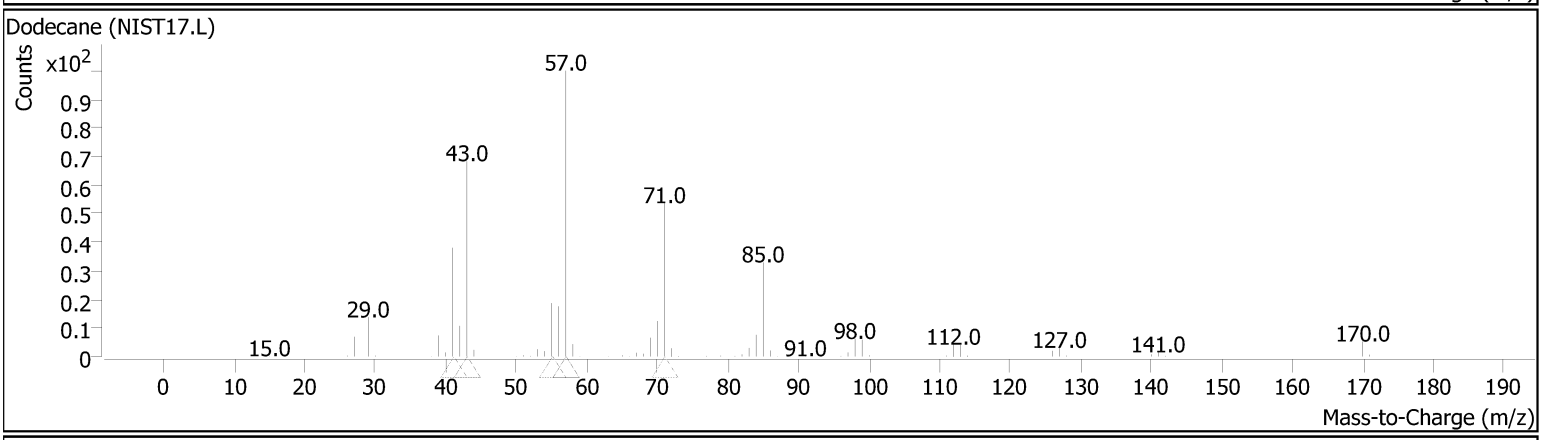


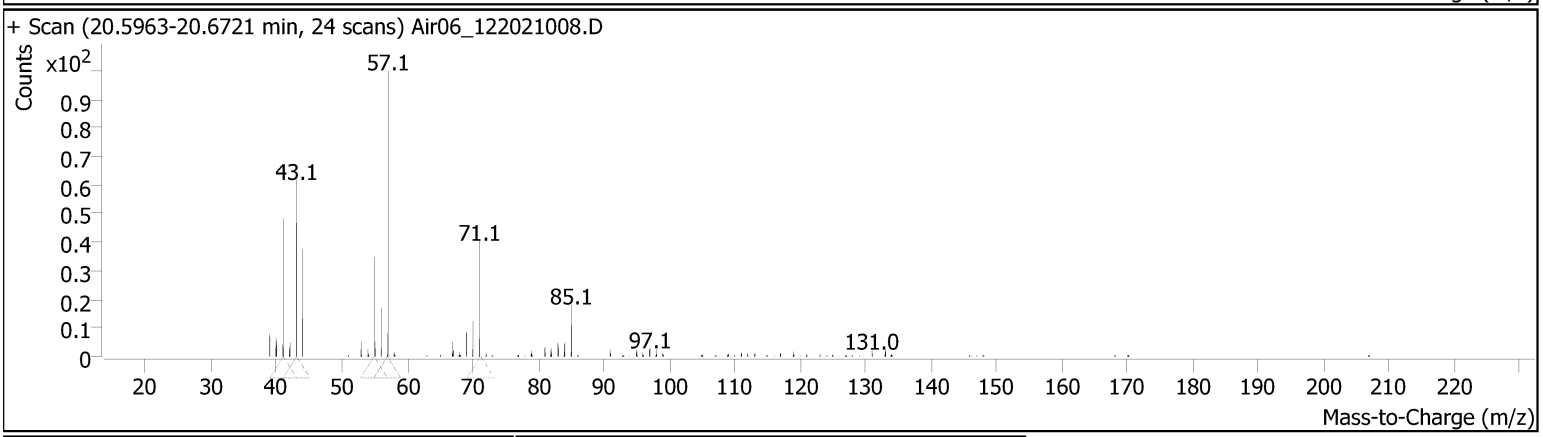


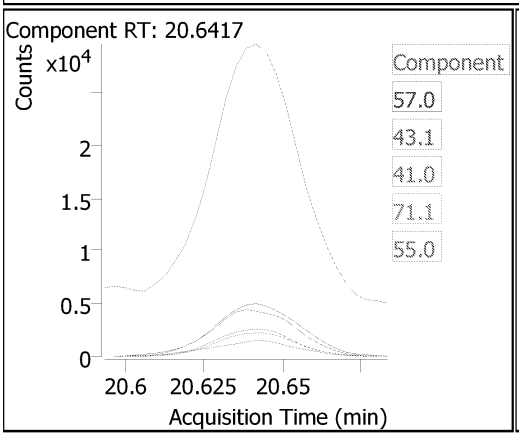


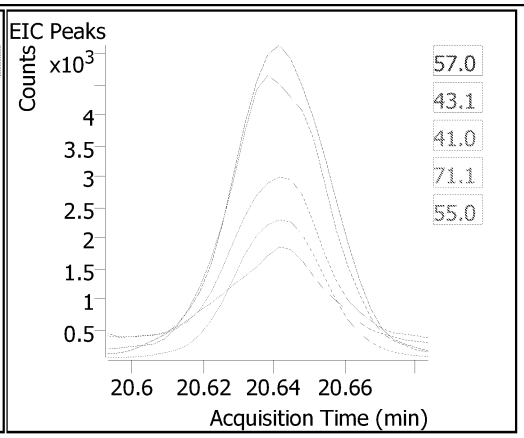
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.6417	Dodecane	51385.6	91.3	112-40-3	C12H26	0.1317





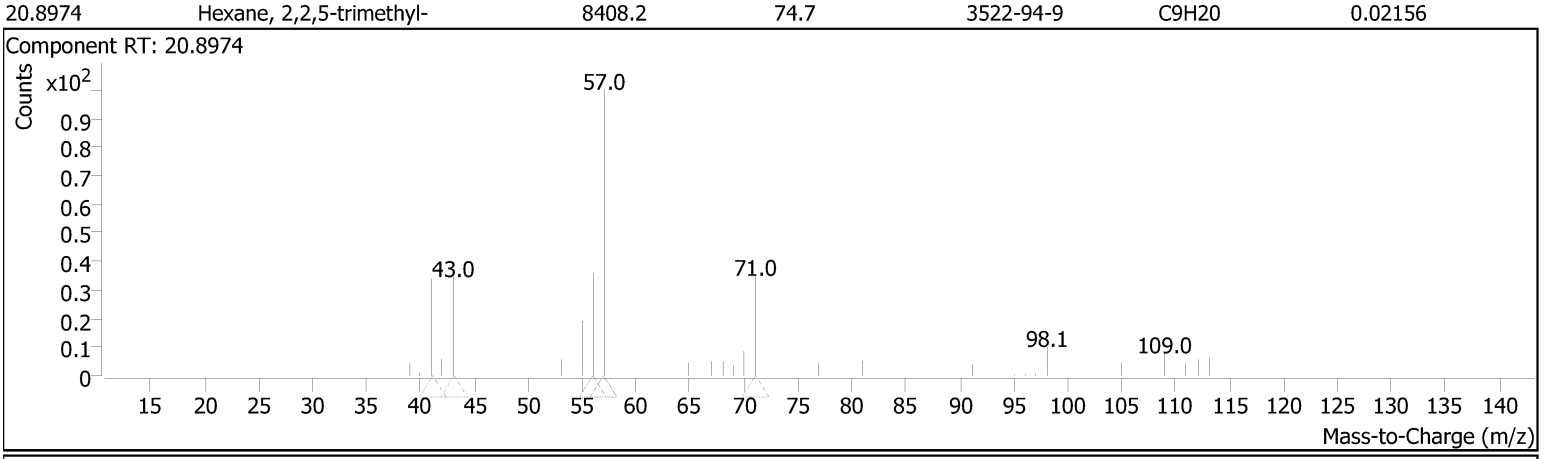


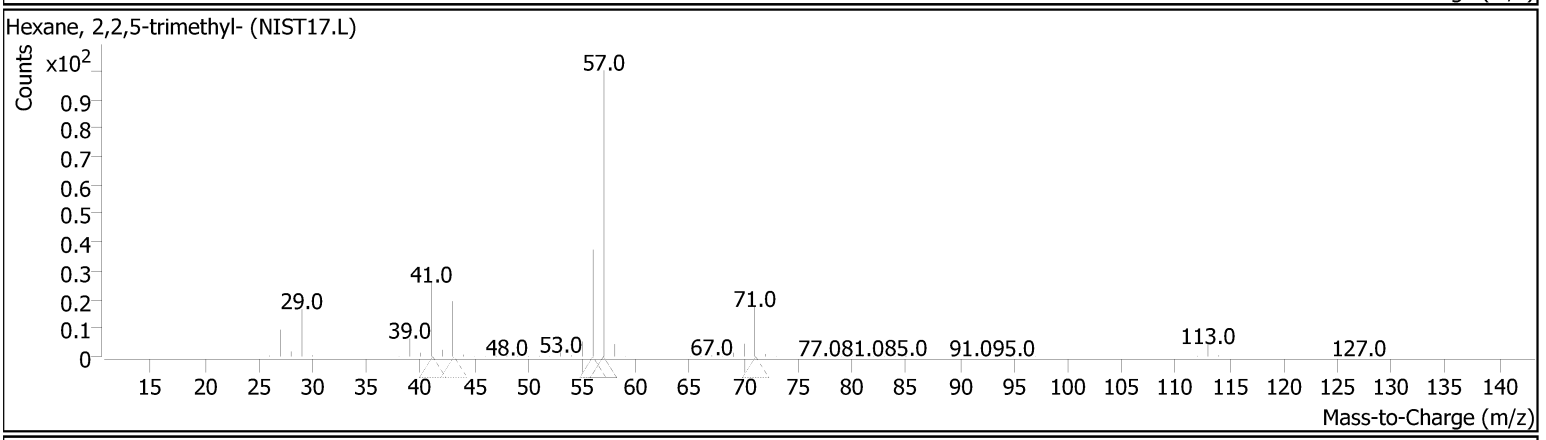


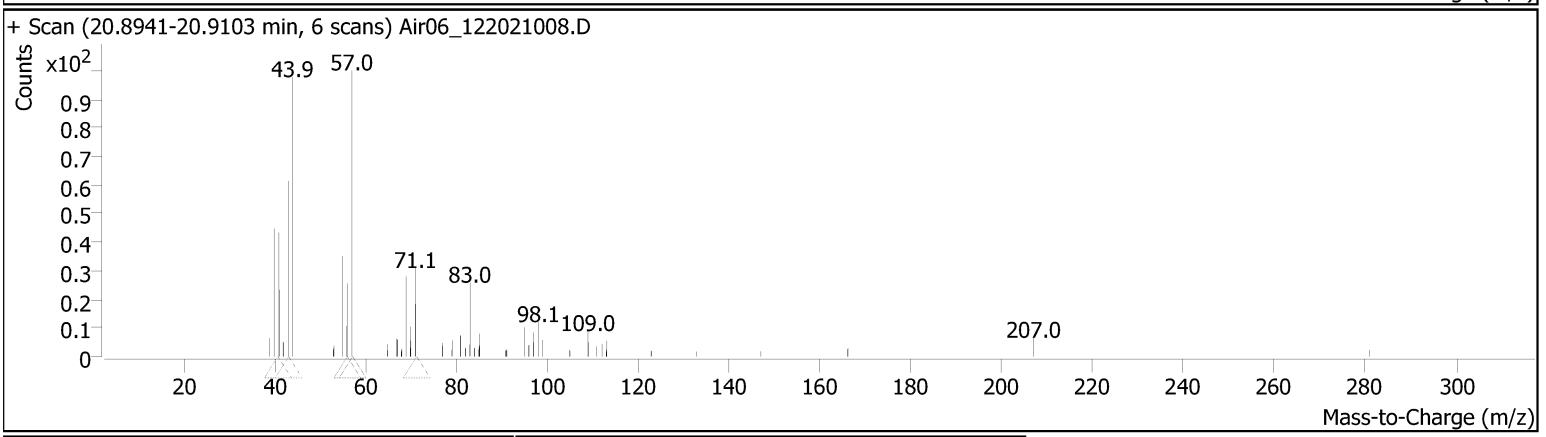


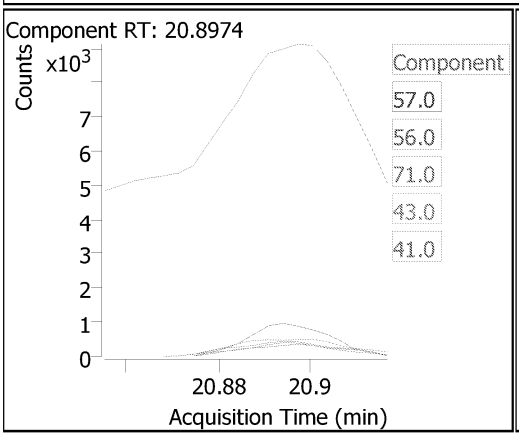


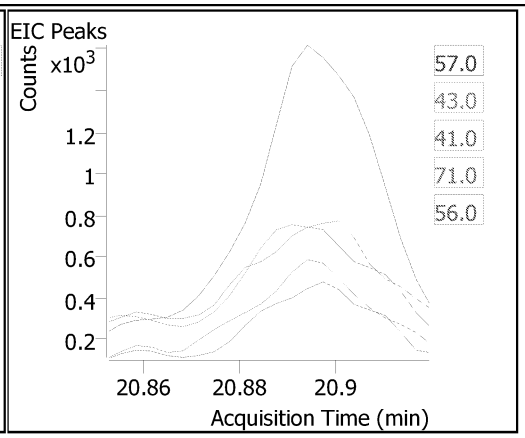
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.8974	Hexane, 2,2,5-trimethyl-	8408.2	74.7	3522-94-9	C9H20	0.02156

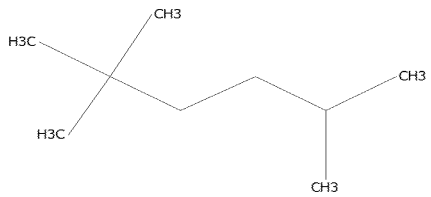




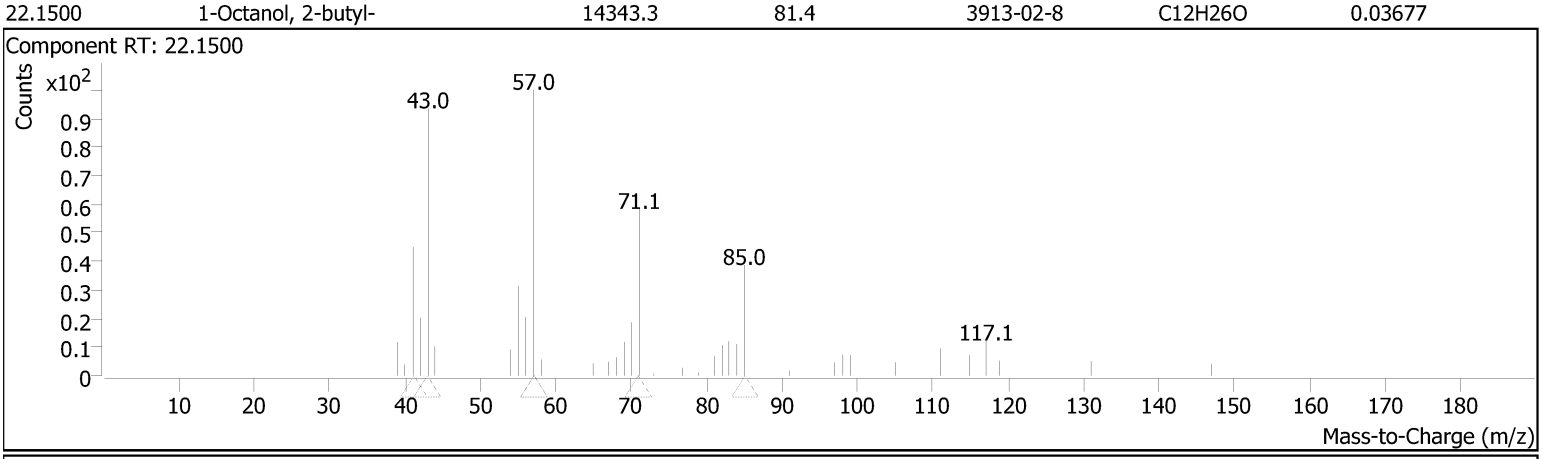


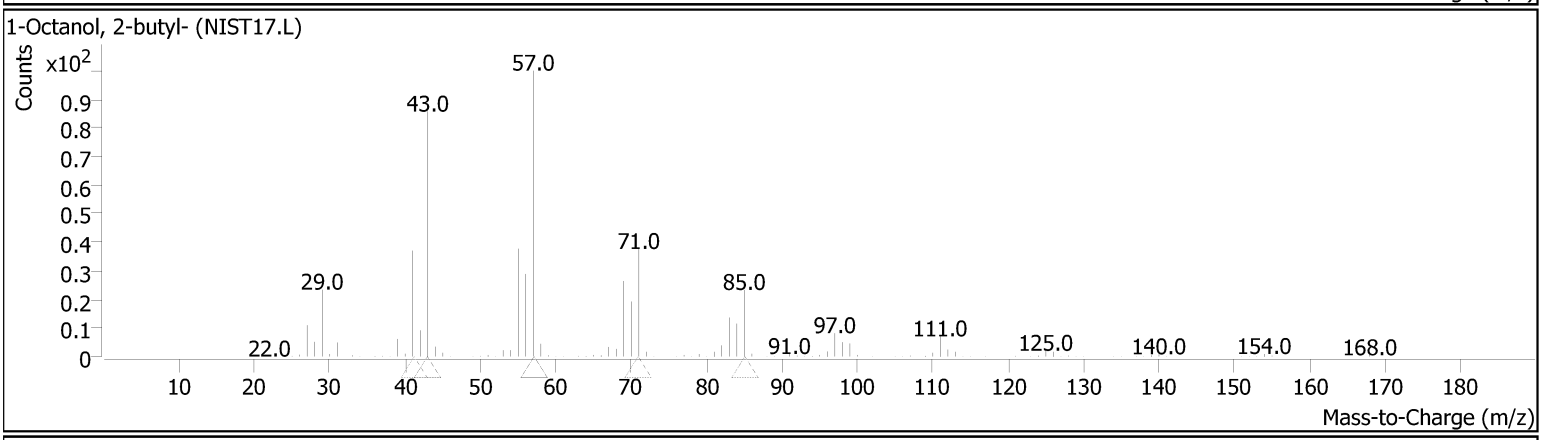


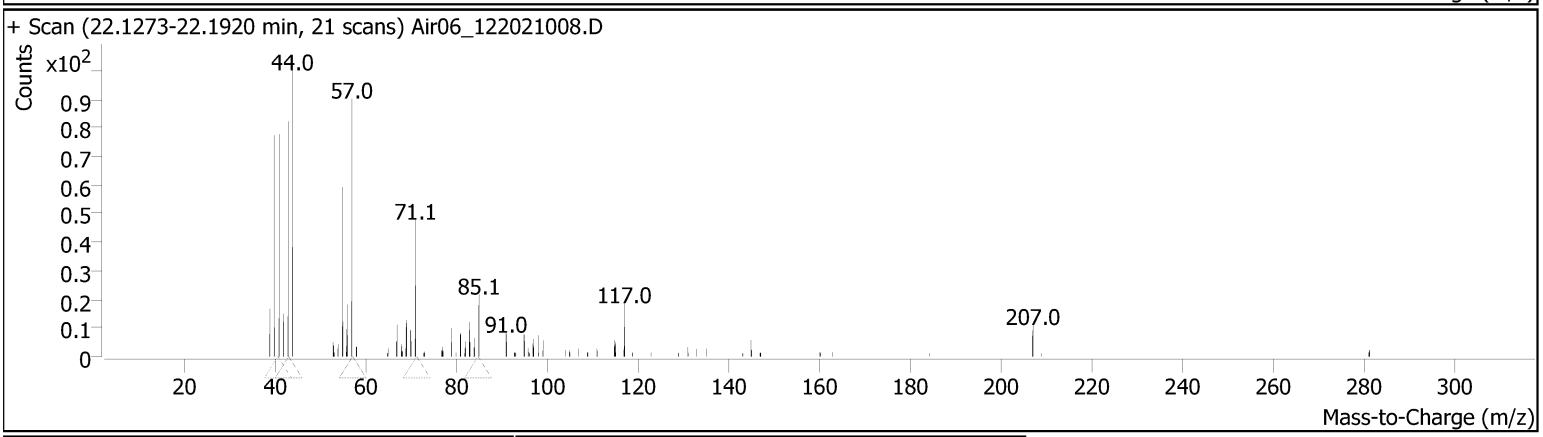


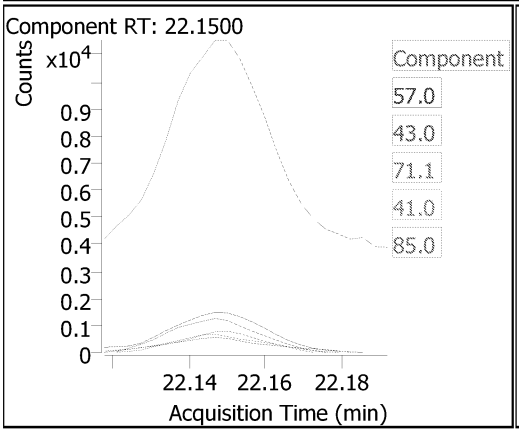


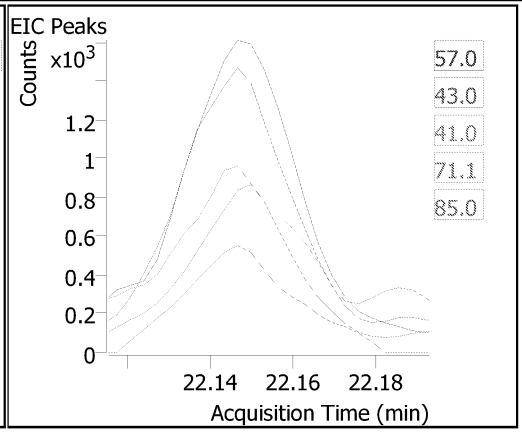
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.1500	1-Octanol, 2-butyl-	14343.3	81.4	3913-02-8	C12H26O	0.03677

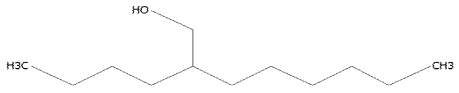




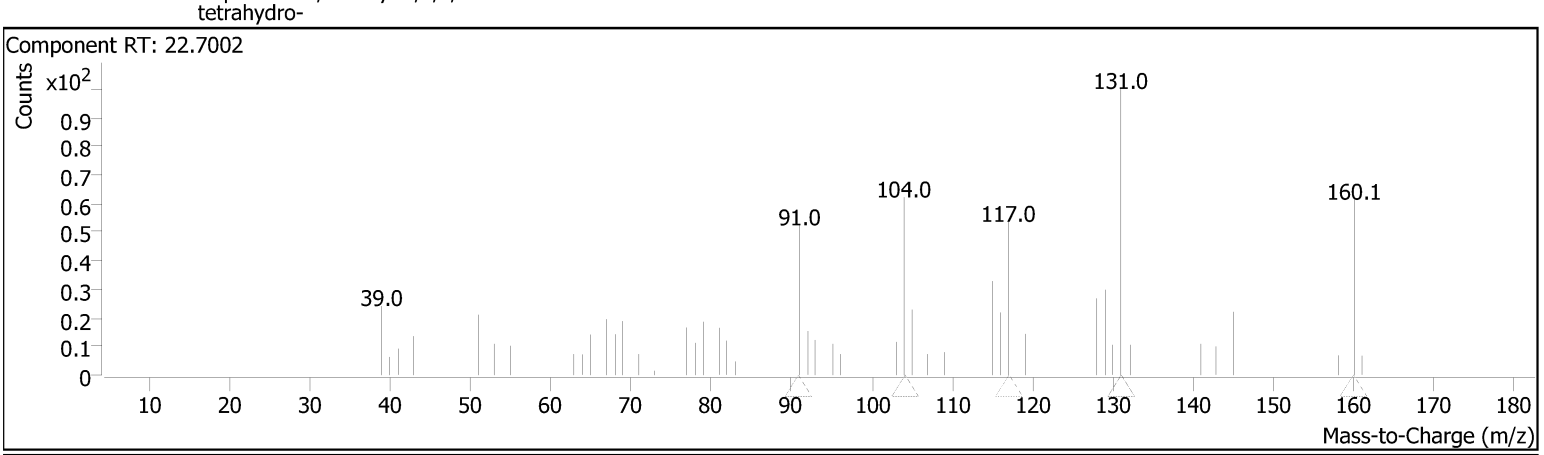


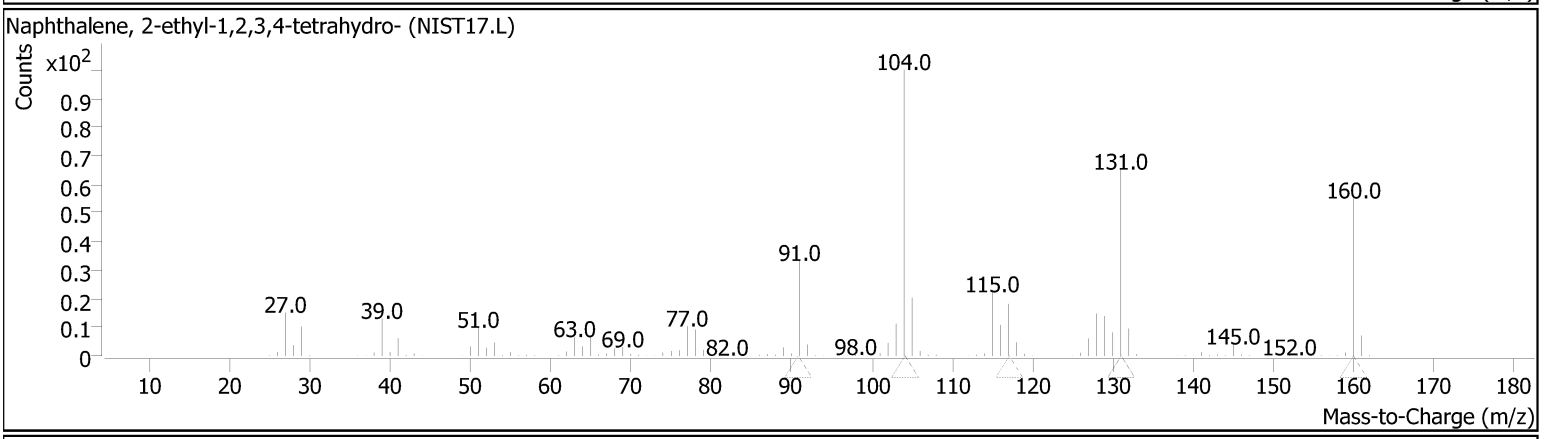


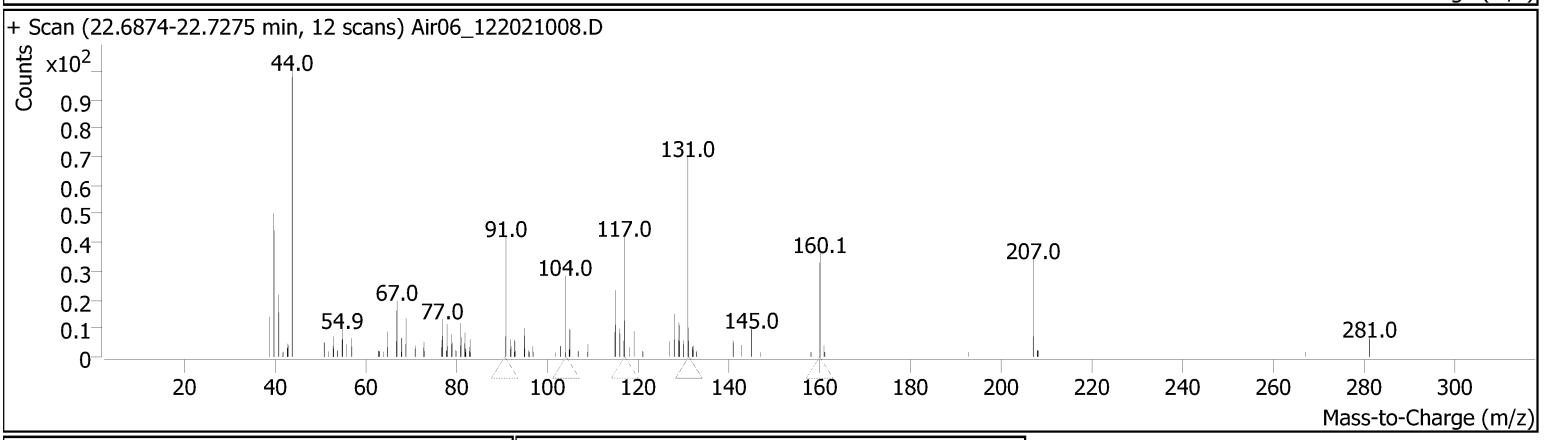


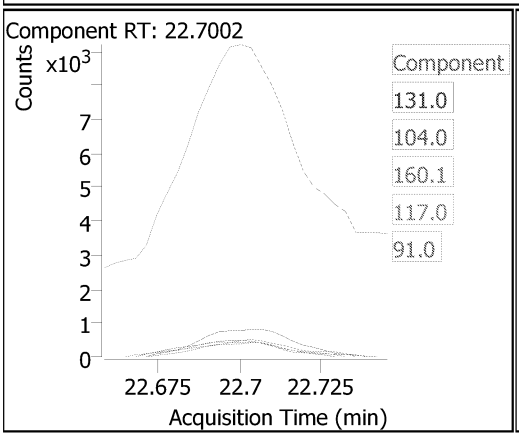


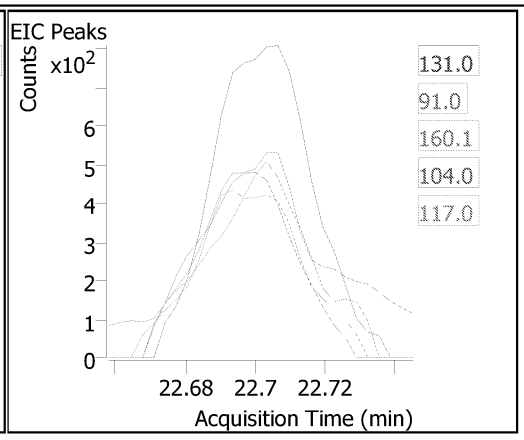
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.7002	Naphthalene, 2-ethyl-1,2,3,4-tetrahydro-	16604.0	79.7	32367-54-7	C12H16	0.04257

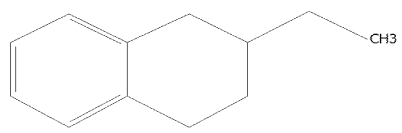




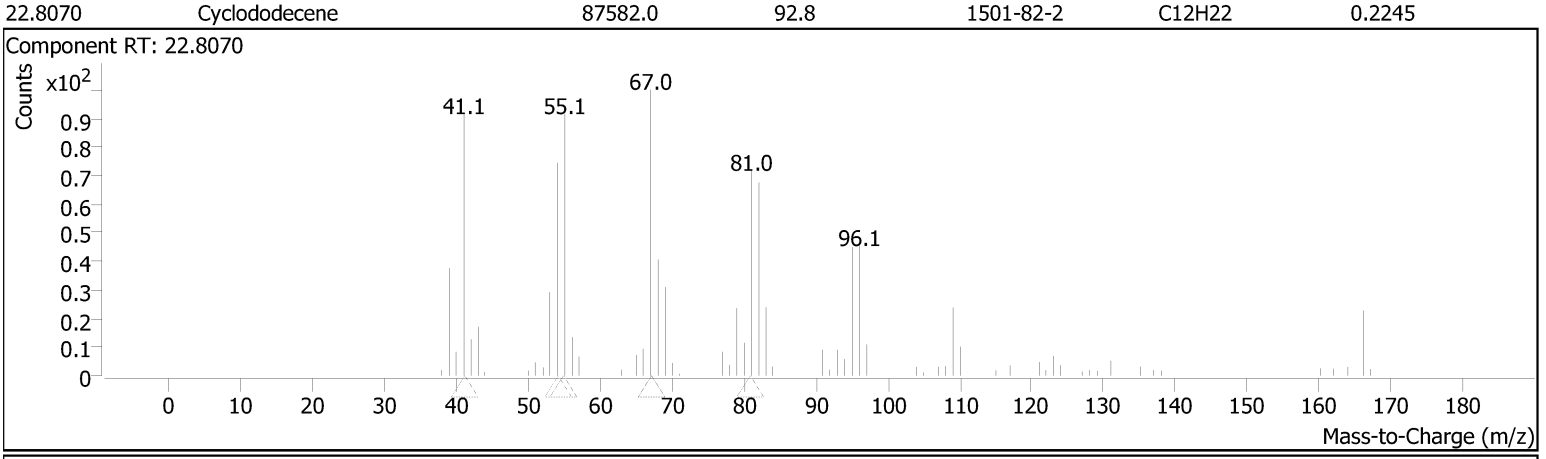


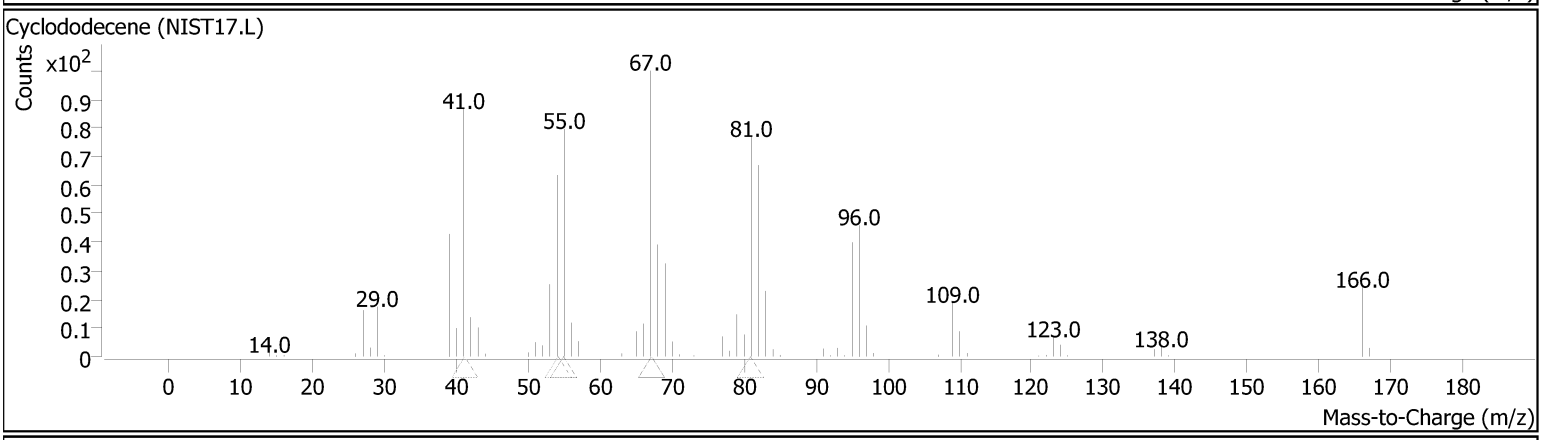


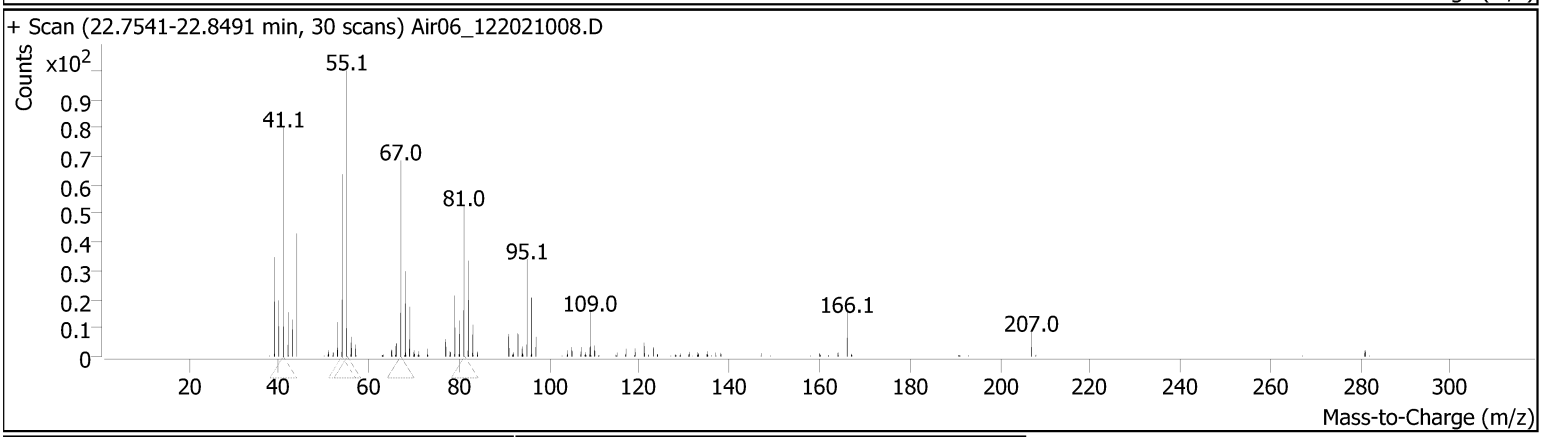


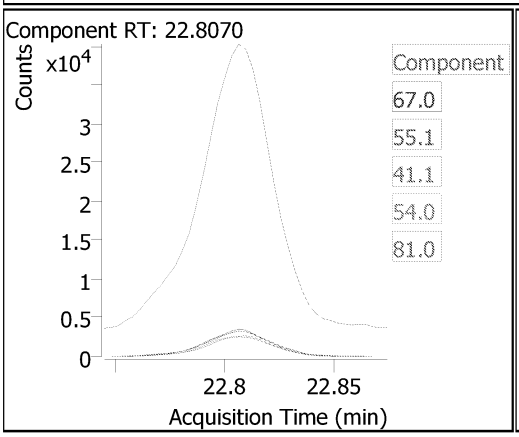


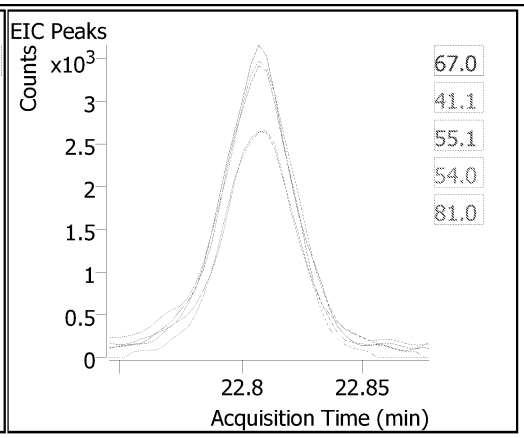
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.8070	Cyclododecene	87582.0	92.8	1501-82-2	C12H22	0.2245

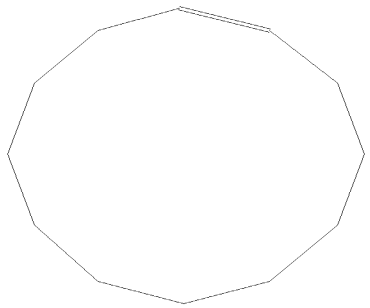




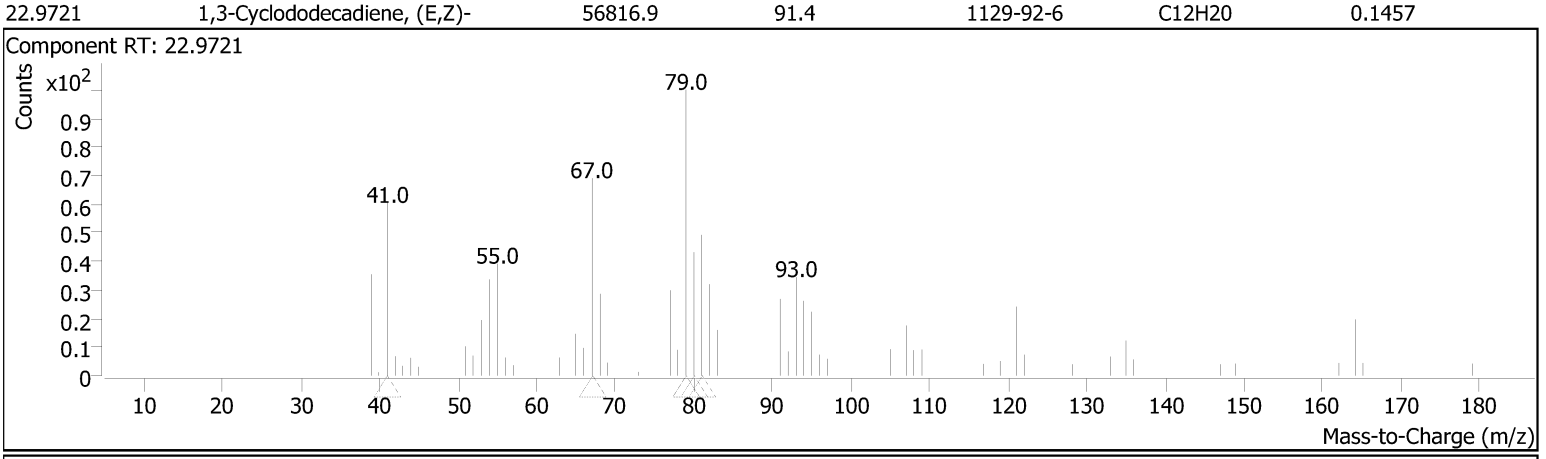


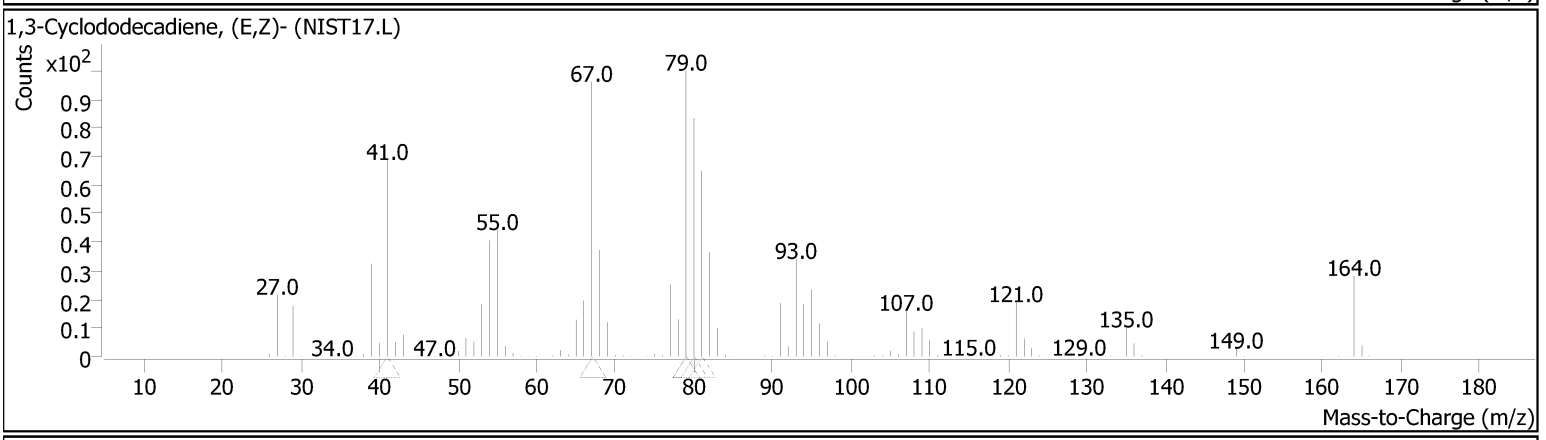


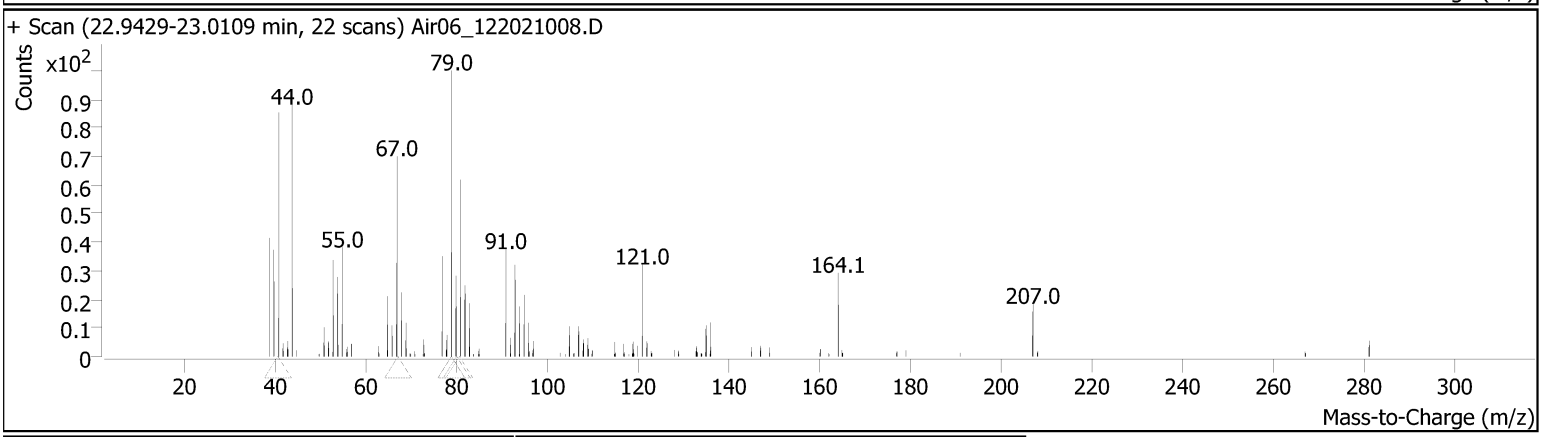


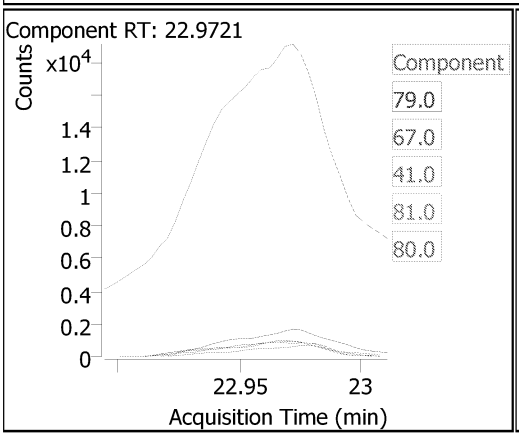


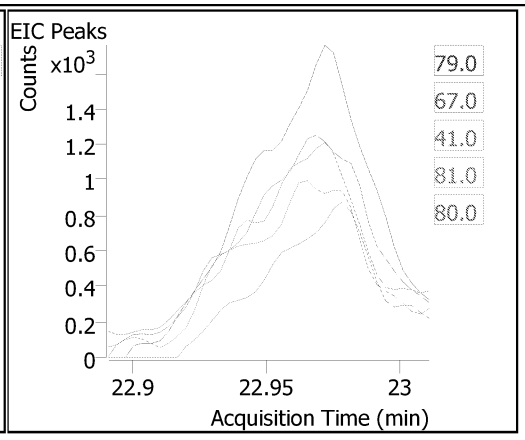
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.9721	1,3-Cyclododecadiene, (E,Z)-	56816.9	91.4	1129-92-6	C12H20	0.1457

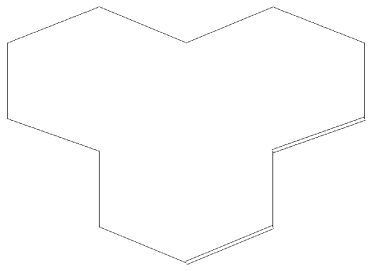




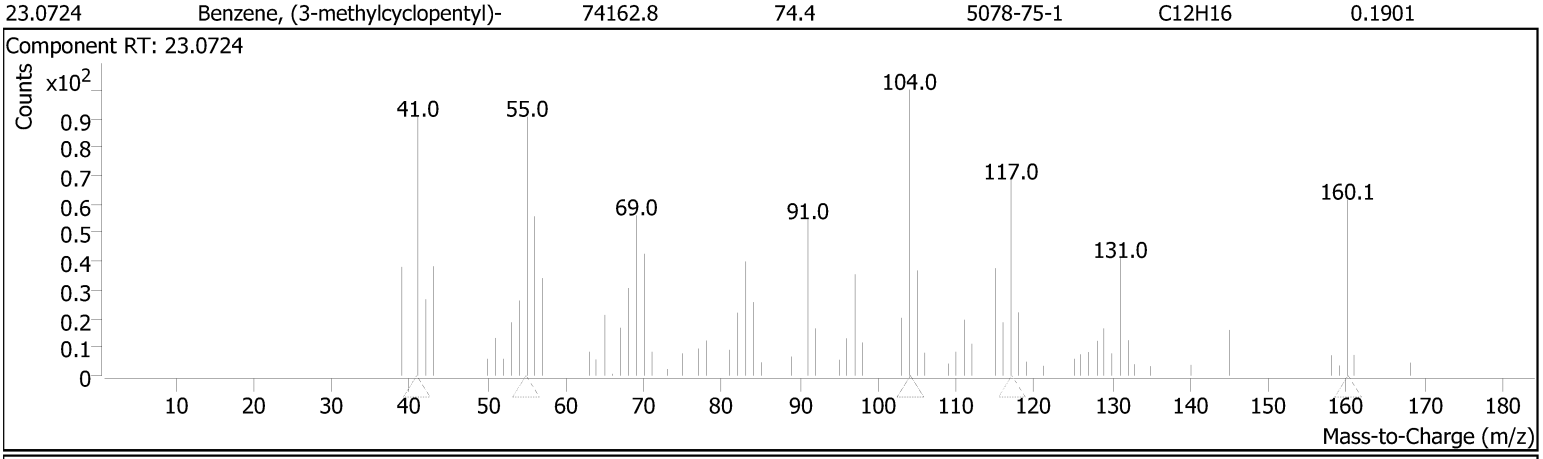


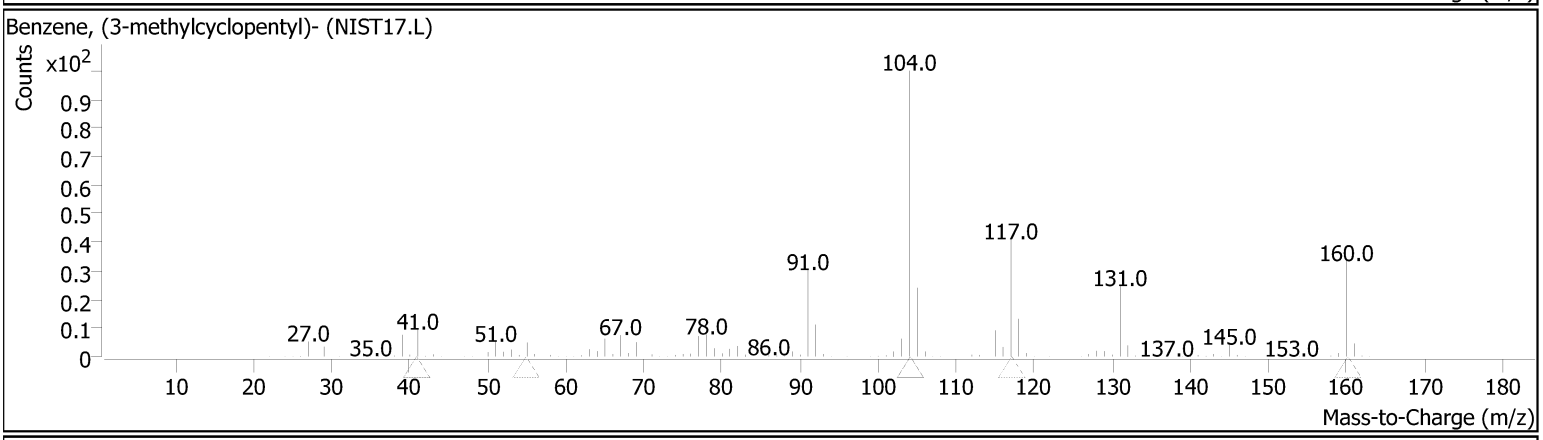


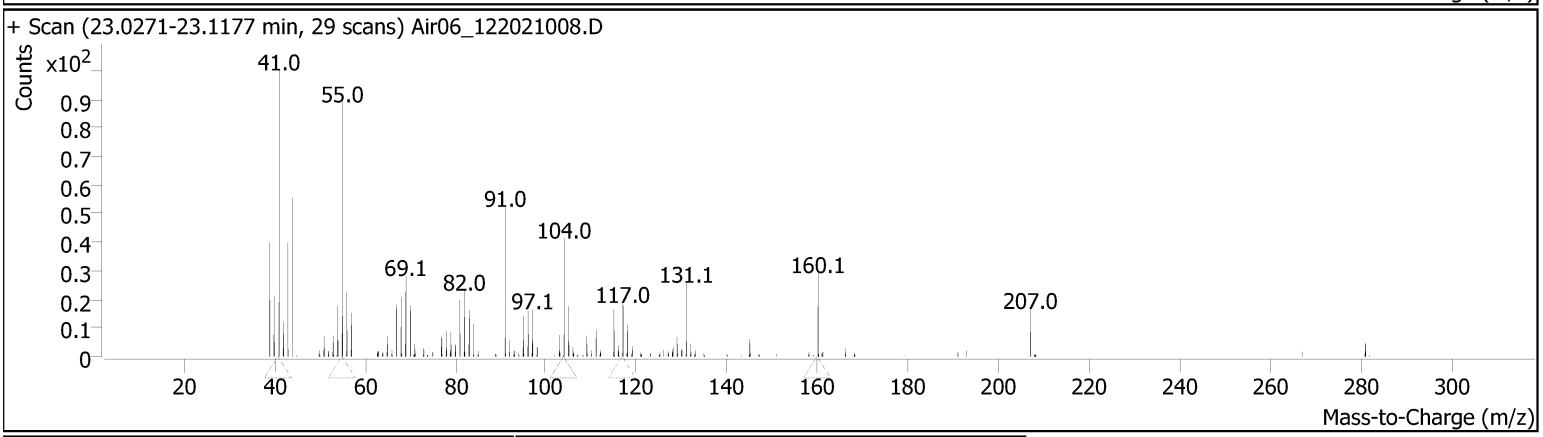


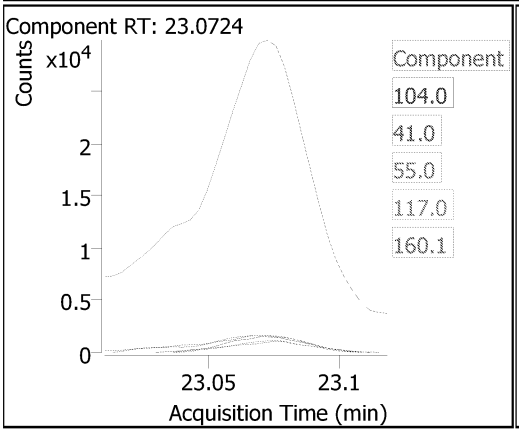


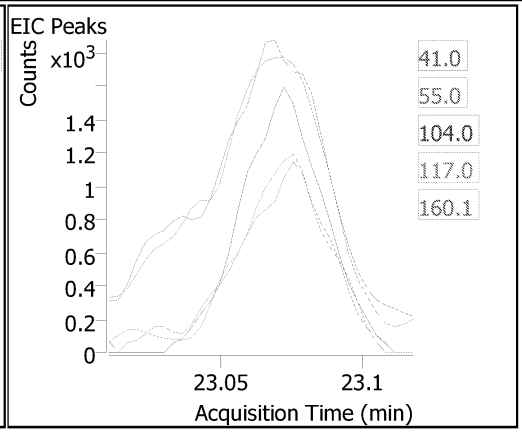
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.0724	Benzene, (3-methylcyclopentyl)-	74162.8	74.4	5078-75-1	C12H16	0.1901

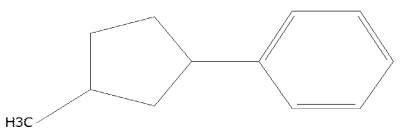








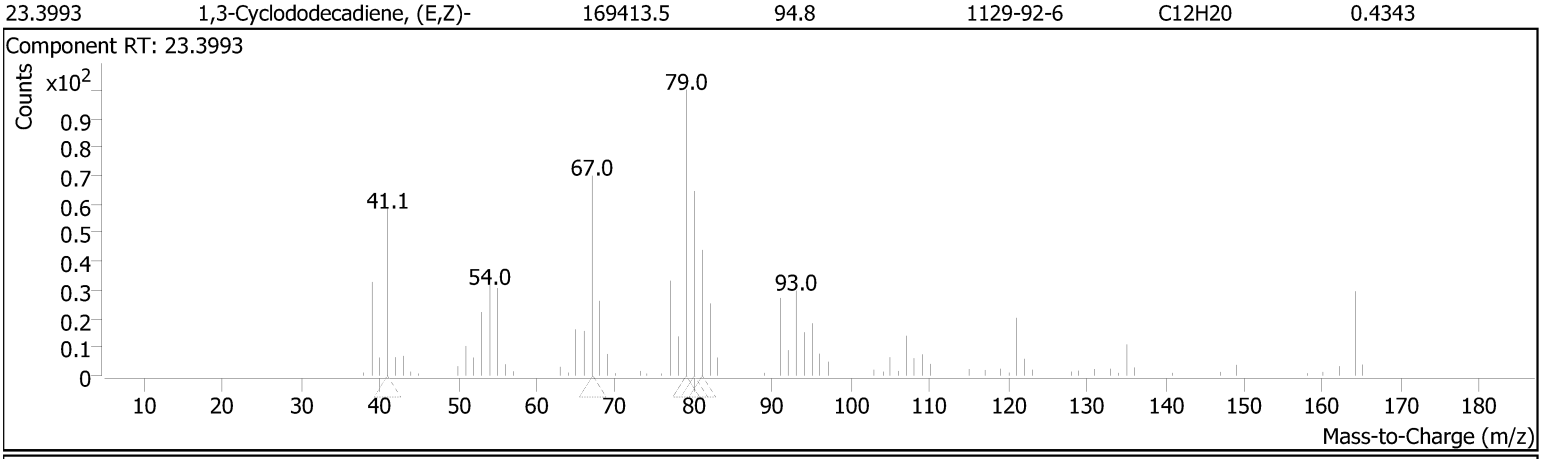


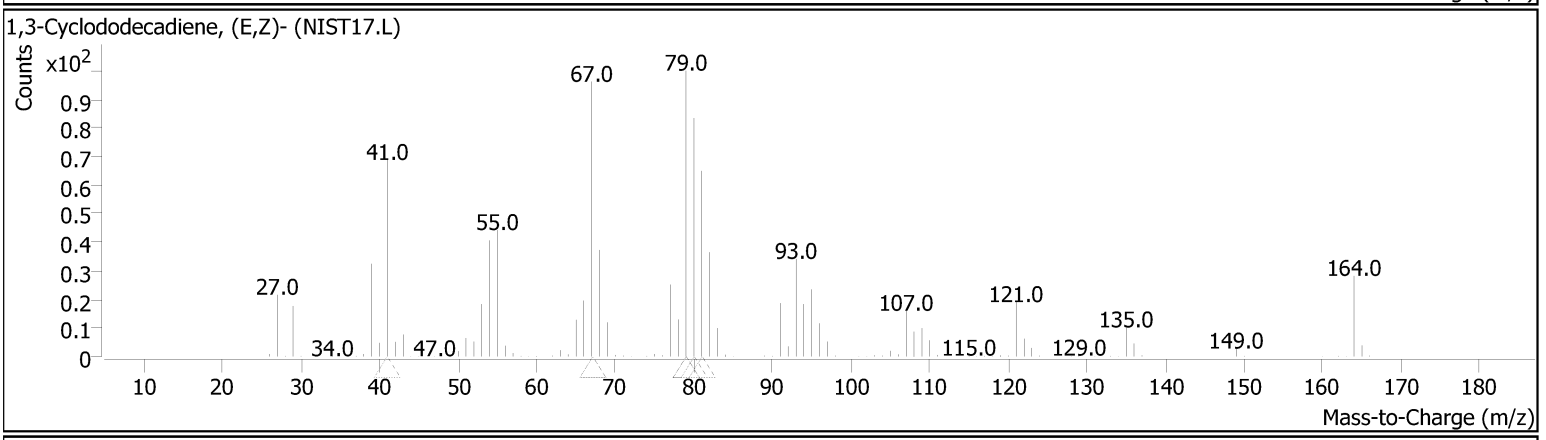


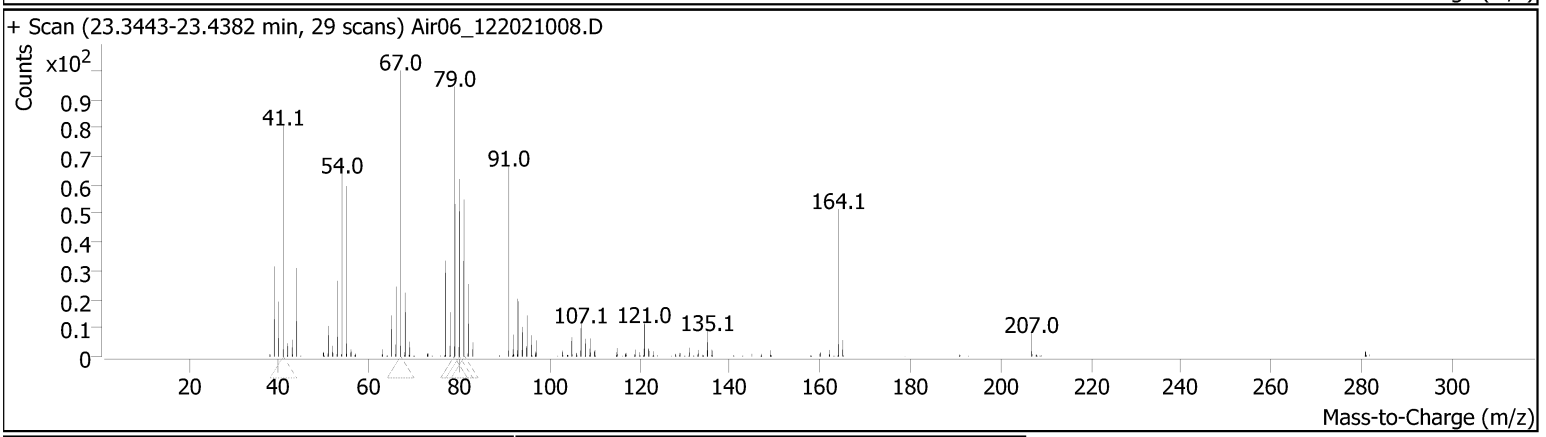
Library Search Results - NonTarget Hits with Details

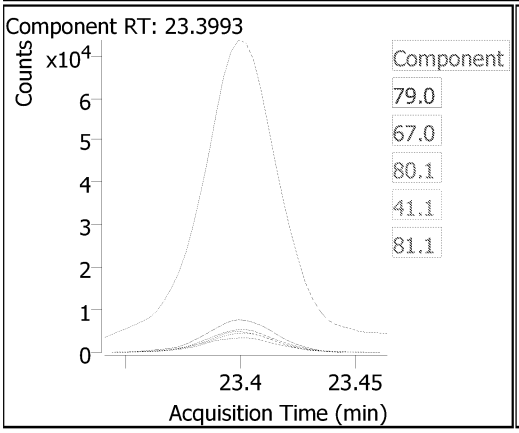
Agilent Technologies

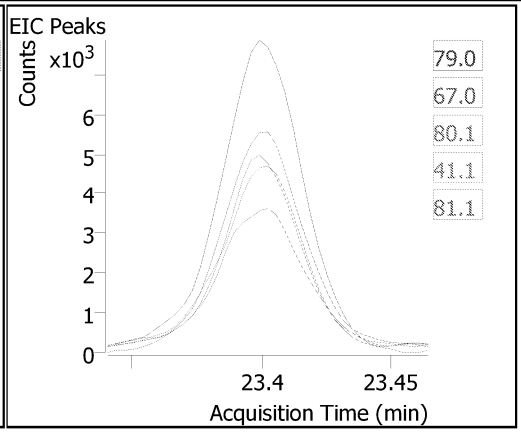
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.3993	1,3-Cyclododecadiene, (E,Z)-	169413.5	94.8	1129-92-6	C12H20	0.4343

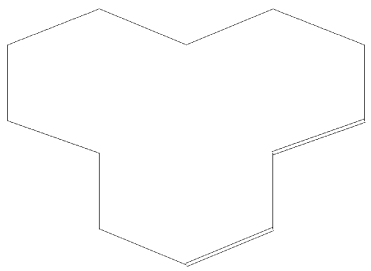












ENTHALPY SAMPLE USER REPORT FOR EPA TO-15

Inst	: AIR-MS-06	Lab ID	: 455620-003 C10076	Client ID	: SVMP-17S
Seqnum	: 371510273014	Matrix	: Air	Acct	: ELEMENT (JG)
File	: air06_122021014	Batch	: 280281	Time	: 20-DEC-2021 20:53
Cal	: 371497775001	Caldate	: 11-DEC-2021		
IDF	: 2.0	Raw Units	: nL/L	Units	: nL/L
PDF	: 1.0				

Analyte	Raw	Result	RTS	RL	Blank	Flags
Freon 12	5.222	10		0.40		u
Freon 114	0.006463	ND		0.40		u
Chloromethane	2.061	4.1	-0.150	0.40		u x
Vinyl Chloride	0.0008641	ND		0.40		u
Bromomethane	0	ND		0.40		u
Chloroethane	0	ND		0.40		u
Trichlorofluoromethane	0.09470	ND		0.40		u
1,1-Dichloroethene	0.0002371	ND		0.40		u
Freon 113	0.03173	ND		0.40		u
Acetone	1.758	3.5		2.0	0.13	u
Carbon Disulfide	0.02525	ND		0.40		calc u
Isopropanol (IPA)	0.4978	ND		2.0	0.067	u
Methylene Chloride	1.223	2.4		0.40	0.34	u
trans-1,2-Dichloroethene	0.009973	ND		0.40		u
MTBE	0.007691	ND		0.40		u
n-Hexane	0.1190	ND		0.40		u
1,1-Dichloroethane	0	ND		0.40		u
Vinyl Acetate	0.04491	ND		2.0		u
cis-1,2-Dichloroethene	0.004450	ND		0.40		u
2-Butanone	0.3368	ND		2.0		u
Chloroform	0.1250	ND		0.40		u
1,1,1-Trichloroethane	0	ND		0.40		u
Carbon Tetrachloride	0.01863	ND		0.40		u
Benzene	0.03119	ND		0.40		u
1,2-Dichloroethane	0.0002521	ND		0.40		u
Trichloroethene	0.01457	ND		0.40		u
1,2-Dichloropropane	0.001063	ND		0.40		u
Bromodichloromethane	0.005038	ND		0.40		u
cis-1,3-Dichloropropene	0	ND		0.40		u
4-Methyl-2-Pentanone	0.03478	ND		0.40		u
Toluene	0.2215	0.44		0.40		u
trans-1,3-Dichloropropene	0	ND		0.40		u
1,1,2-Trichloroethane	0.001220	ND		0.40		u
Tetrachloroethene	0.02551	ND		0.40		calc u
2-Hexanone	0.02068	ND		1.0		calc u
Dibromochloromethane	0.001365	ND		0.40		u
1,2-Dibromoethane	0.001797	ND		0.40		u
Chlorobenzene	0.005557	ND		0.40		u
Ethylbenzene	0.1792	ND		0.40		u
m,p-Xylenes	1.039	2.1		0.80		u
o-Xylene	0.5952	1.2		0.40		u
Styrene	0.1572	ND		0.40		u
Bromoform	0.004921	ND		0.40		u
1,1,2,2-Tetrachloroethane	0.02826	ND		0.40		calc u
1,1,1,2-Tetrachloroethane	0.0007649	ND		0.40		u
4-Ethyltoluene	0.1903	ND		0.40		u
1,3,5-Trimethylbenzene	0.9306	1.9		0.40		u
1,2,4-Trimethylbenzene	1.482	3.0		0.40		u

Analyte	Raw	Result	RTS	RL	Blank	Flags
1,3-Dichlorobenzene	0.2250	0.45	0.080	0.40		u x
1,4-Dichlorobenzene	0.2279	0.46		0.40	0.027	u
Benzyl chloride	0.01333	ND		0.40	0.020	u
1,2-Dichlorobenzene	0.02822	ND		0.40	0.034	u
1,2,4-Trichlorobenzene	0.01985	ND		0.40	0.069	u v+
Hexachlorobutadiene	0.005065	ND		0.40		u

Tentatively Identified Compound	CAS #	Raw	Units	Result	Units
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	12	nL/L	24	nL/L
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	9.5	nL/L	19	nL/L
Dodecane	112-40-3	11	nL/L	21	nL/L
Naphthalene, decahydro-1,5-dimethyl-	66552-62-3	12	nL/L	23	nL/L
Naphthalene, decahydro-1,6-dimethyl-	1750-51-2	14	nL/L	27	nL/L
Naphthalene, decahydro-2-methyl	2958-76-1	14	nL/L	28	nL/L
Naphthalene,decahydro-,trans-	493-02-7	14	nL/L	29	nL/L
Tridecane	629-50-5	11	nL/L	21	nL/L
Undecane	1120-21-4	22	nL/L	43	nL/L

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Bromofluorobenzene	10.33	20.00	20.67	103	60-140	u

ISTD (ICAL air06_121121009)	ICAL Area	SAMPLE Area	%Drift	ICAL RT	SAMPLE RT	Drift
Bromochloromethane	329831	344148	4.34	8.18	8.18	0.00
1,4-Difluorobenzene	1230119	1282136	4.23	9.91	9.91	0.00
Chlorobenzene-d5	754830	709898	-5.95	14.02	14.01	-0.01

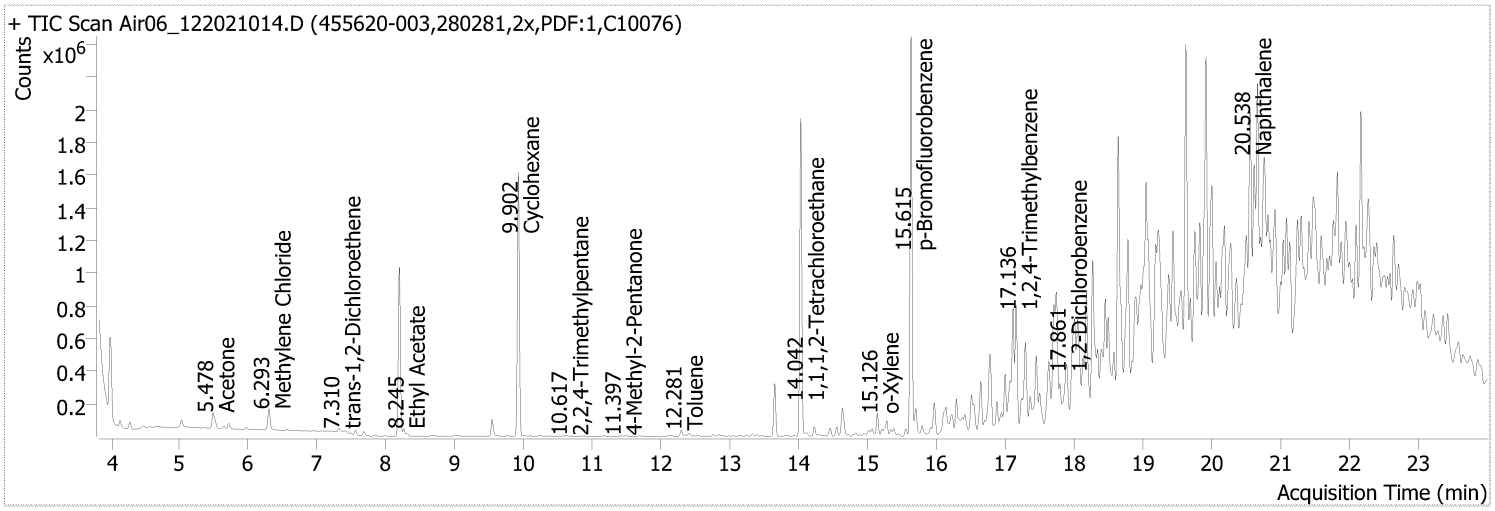
(not in upper half)

Analyst: GSG Date: 01/04/22 Reviewer: SLL Date: 01/04/22

+=high bias calc=check quantitation u=use v=ICV x=false positive

Quantitation Results Report (Not Reviewed)

Data File	Air06_122021014.D	Operator	ZNZ/DJL/LJB
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	12/20/2021 8:53:37 PM
Sample Name	455620-003,280281,2x,PDF:1,C10076	Instrument	Air-MS-06
Vial	12	Multiplier	1.00
DA Method File	TO15_121121.m	Comment	2x400mL
Tune File	bfb.u	Tune Date	12/14/2021 7:38:43 AM
Batch Name	2021 Dec 20 1433 TO15_121121.m.batch.bin	Last Calib Update	12/13/2021 9:29:07 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



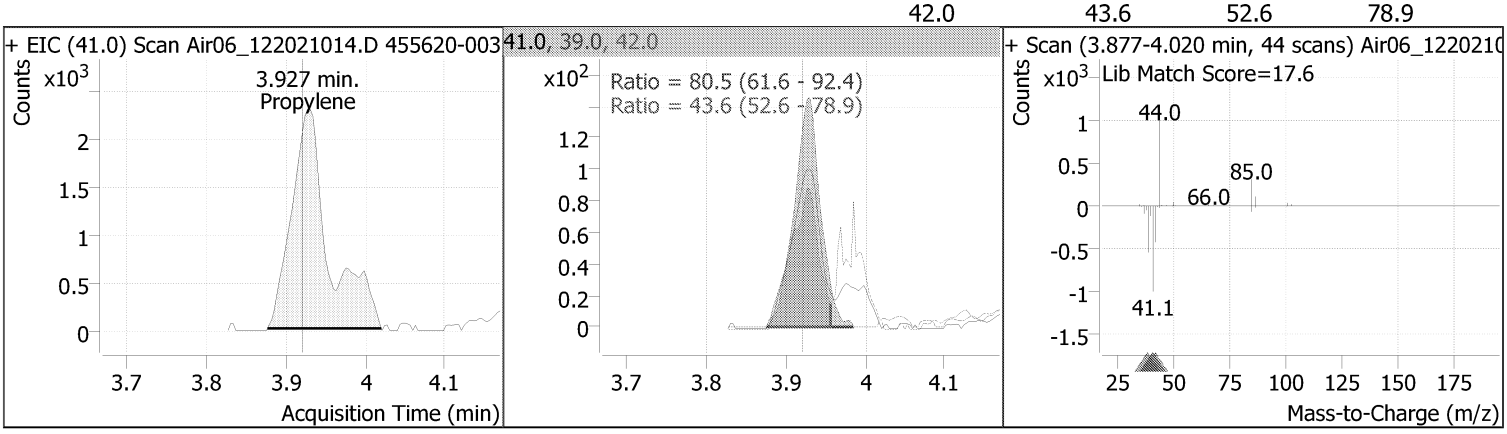
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.183	130.0	344148	10.0000	nL/L		0.003
M 1,4-Difluorobenzene	9.912	114.0	1282136	10.0000	nL/L		0.000
M Chlorobenzene-d5	14.013	82.0	709898	10.0000	nL/L	#	-0.003
System Monitoring Compounds							
S p-Bromofluorobenzene	15.615	95.0	941474	10.3330	nL/L		-0.003
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 103.33%			
Target Compounds							QValue
T Propylene	3.927	41.0	7442	0.1972	nL/L	#	85
T Freon 12	3.985	85.0	642716	5.2220	nL/L		99
T Chloromethane	3.985	50.0	88728	2.0607	nL/L	#	56
T Freon 114	4.257	135.0	465	0.0065	nL/L	#	84
T Vinyl Chloride	4.157	62.0	35	0.0009	nL/L		51
T 1,3-Butadiene	4.468	54.0	248	0.0071	nL/L	#	1
T Butane	4.558	43.0	9959	0.1436	nL/L		99
T Bromomethane	0.000		0	N.D.			
T Chloroethane	0.000		0	N.D.			
T Ethanol	5.021	45.0	50408	1.8669	nL/L		97
T Vinyl bromide	0.000		0	N.D.			
T Acrolein	5.351	56.0	755	0.0433	nL/L		93
T Acetone	5.478	58.0	40960	1.7577	nL/L	#	73
T Trichloromonofluoromethane	5.636	101.0	13193	0.0947	nL/L		99
T Isopropanol (IPA)	5.704	45.0	45351	0.4978	nL/L		99
T n-Pentane	5.957	43.0	10769	0.1205	nL/L		94
T 1,1-Dichloroethene	6.267	61.0	20	0.0002	nL/L		39
T Tert-butyl alcohol (TBA)	6.277	59.0	34412	0.3579	nL/L	#	87
T Methylene Chloride	6.293	84.0	45194	1.2232	nL/L		89
T 3-Chloropropene	6.581	76.0	2597	0.1670	nL/L	#	60
T Freon 113	6.549	101.0	2797	0.0317	nL/L		95
T Carbon Disulfide	6.581	76.0	2597	0.0253	nL/L		69

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.310	61.0	666	0.0100	nL/L	#	37
T 1,1-Dichloroethane	0.000		0	N.D.			
T MTBE	7.407	73.0	867	0.0077	nL/L	#	1
T Vinyl Acetate	7.410	43.0	6330	0.0449	nL/L	#	1
T 2-Butanone	7.669	43.0	37485	0.3368	nL/L	#	94
T cis-1,2-Dichloroethene	8.041	61.0	305	0.0045	nL/L	#	59
T Ethyl Acetate	8.245	61.0	4949	0.3197	nL/L	#	35
T n-Hexane	8.251	57.0	8578	0.1190	nL/L		98
T Chloroform	8.300	83.0	12277	0.1250	nL/L		97
T Tetrahydrofuran	8.646	72.0	55	0.0034	nL/L	#	1
T 1,2-Dichloroethane	8.963	62.0	20	0.0003	nL/L		48
T 1,1,1-Trichloroethane	0.000		0	N.D.			
T Benzene	9.617	78.0	3406	0.0312	nL/L		94
T Carbon Tetrachloride	9.750	117.0	2071	0.0186	nL/L		89
T Cyclohexane	9.902	84.0	2369	0.0524	nL/L	#	1
T 1,2-Dichloropropane	10.333	63.0	53	0.0011	nL/L		24
T Methane, bromodichloro-	10.511	83.0	509	0.0050	nL/L	#	68
T 1,4-Dioxane	10.582	88.0	128	0.0054	nL/L	#	1
T Trichloroethene	10.559	132.0	722	0.0146	nL/L	#	86
T 2,2,4-Trimethylpentane	10.617	57.0	4767	0.0205	nL/L	#	89
T Methyl methacrylate	10.601	69.0	152	0.0038	nL/L	#	1
T n-Heptane	10.838	71.0	411	0.0113	nL/L	#	73
T cis-1,3-Dichloropropene	0.000		0	N.D.			
T 4-Methyl-2-Pentanone	11.397	58.0	1494	0.0348	nL/L	#	85
T trans-1,3-Dichloropropene	0.000		0	N.D.			
T 1,1,2-Trichloroethane	12.097	97.0	59	0.0012	nL/L		13
T Toluene	12.281	91.0	30725	0.2215	nL/L		98
T TPH Gasoline (C3 to C12)	12.396	165.0	190078905	18.8641	nL/L		100
T 2-Hexanone	12.527	58.0	1110	0.0207	nL/L		82
T Dibromochloromethane	12.669	129.0	133	0.0014	nL/L	#	36
T 1,2-Dibromoethane	12.912	108.9	133	0.0018	nL/L	#	50
T Tetrachloroethene	13.378	166.0	2078	0.0255	nL/L		97
T 1,1,1,2-Tetrachloroethane	14.042	131.0	45	0.0008	nL/L	#	1
T Benzene, chloro-	14.061	112.0	562	0.0056	nL/L	#	35
T Ethylbenzene	14.443	91.0	29256	0.1792	nL/L		97
T TPH Gasoline (C6 to C12)	14.521	165.0	179639518	23.9516	nL/L		100
T m,p-Xylenes	14.618	91.0	143115	1.0392	nL/L		98
T Bromoform	14.692	173.0	535	0.0049	nL/L	#	74
T Styrene	15.003	104.0	14501	0.1572	nL/L		93
T 1,1,2,2-Tetrachloroethane	15.048	83.0	2793	0.0283	nL/L	#	35
T o-Xylene	15.126	91.0	85084	0.5952	nL/L		97
T n-Nonane	15.366	85.0	4166	0.1429	nL/L	#	73
T Isopropylbenzene	15.773	105.0	11510	0.0593	nL/L		95
T 2-Chlorotoluene	16.295	126.0	604	0.0140	nL/L		1
T n-Propylbenzene	16.363	120.0	10877	0.2226	nL/L		93
T 4-Ethyltoluene	16.537	105.1	35058	0.1903	nL/L		100
T 1,3,5-Trimethylbenzene	16.628	105.0	156090	0.9306	nL/L		97
T 1,2,4-Trimethylbenzene	17.136	105.0	232491	1.4819	nL/L		98
T Benzyl chloride	17.259	91.0	1803	0.0133	nL/L	#	1
T 1,3-Dichlorobenzene	17.411	146.0	24413	0.2250	nL/L	#	43
T 1,4-Dichlorobenzene	17.411	146.0	24413	0.2279	nL/L	#	46
T 1,2-Dichlorobenzene	17.861	146.0	2951	0.0282	nL/L	#	1
T 1,2,4-Trichlorobenzene	20.373	179.9	1476	0.0198	nL/L	#	10
T Naphthalene	20.538	128.0	239506	2.0733	nL/L	#	97
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.124	225.0	618	0.0051	nL/L	#	83

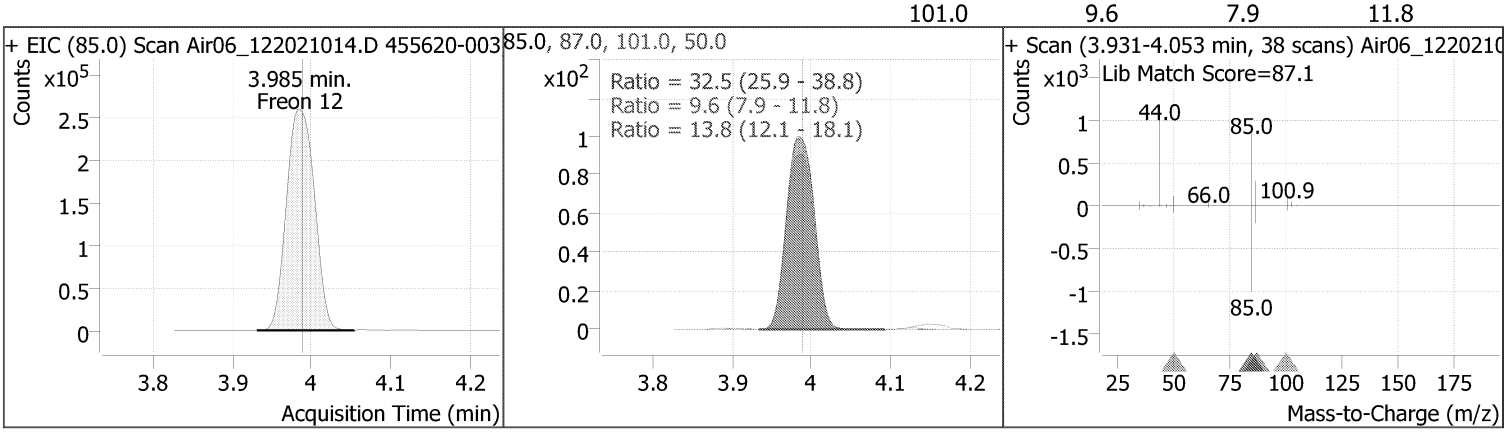
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

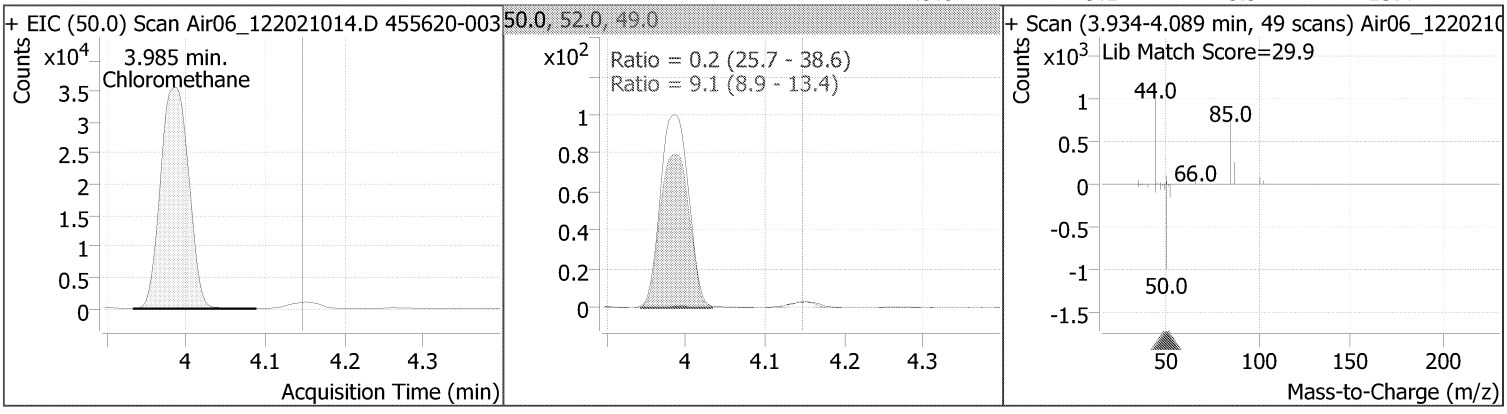
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.1972	3.93	0.01	7442	39.0	80.5	61.6	92.4
					42.0	43.6	52.6	78.9



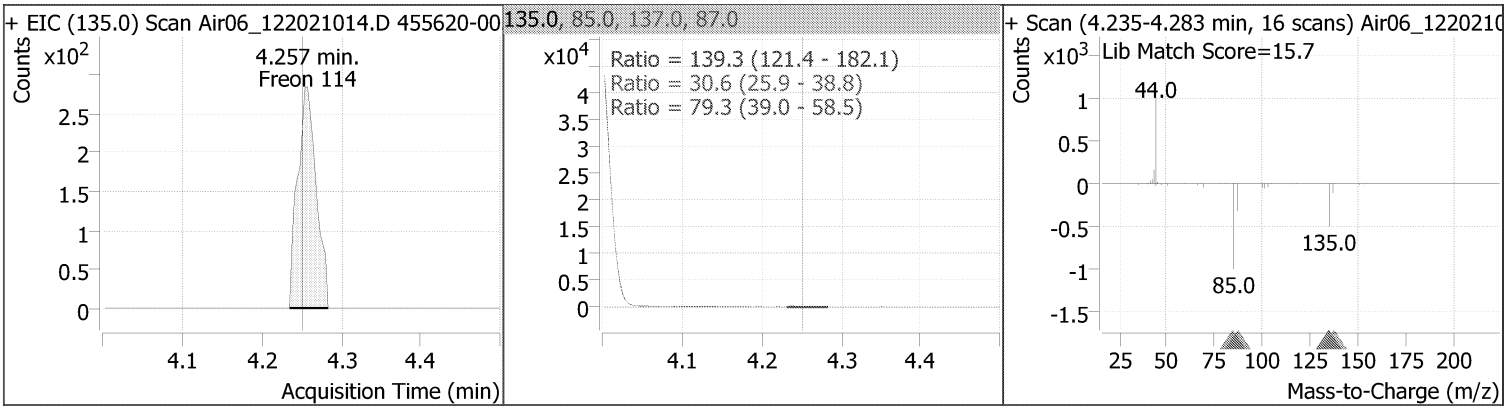
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	5.2220	3.99	0.00	642716	87.0	32.5	25.9	38.8
					50.0	13.8	12.1	18.1
					101.0	9.6	7.9	11.8



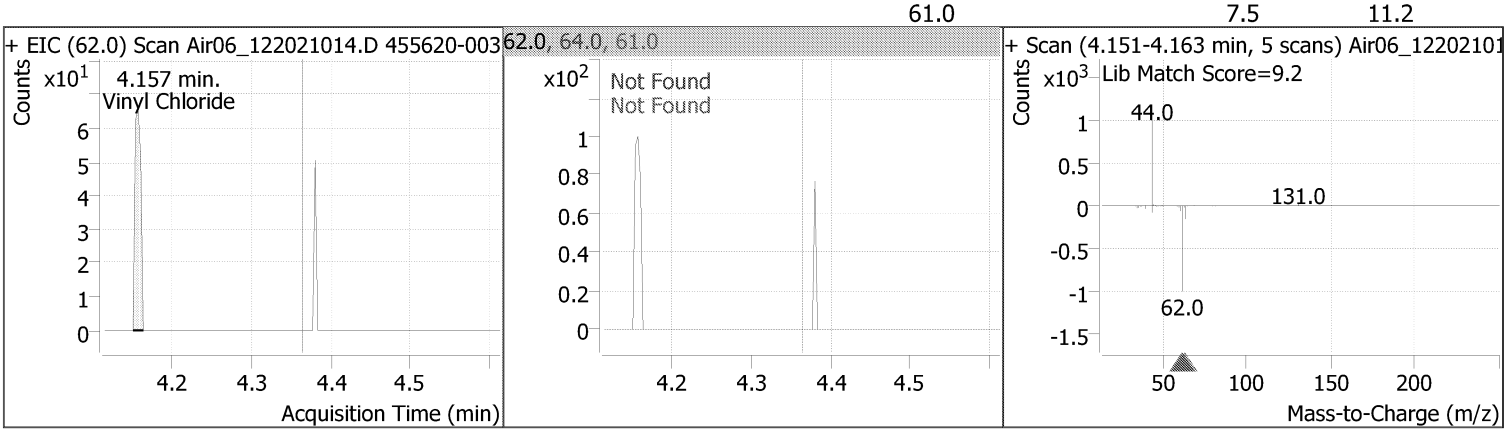
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	2.0607	3.99	-0.16	88728	52.0	0.2	25.7	38.6
					49.0	9.1	8.9	13.4



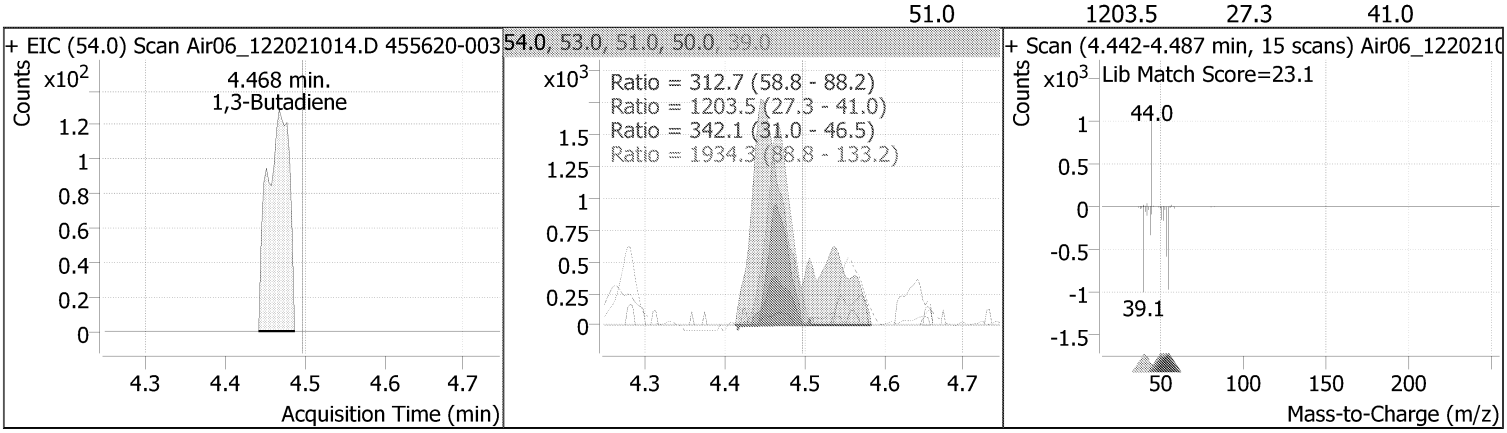
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	0.0065	4.26	0.01	465	85.0	139.3	121.4	182.1
					87.0	79.3	39.0	58.5
					137.0	30.6	25.9	38.8



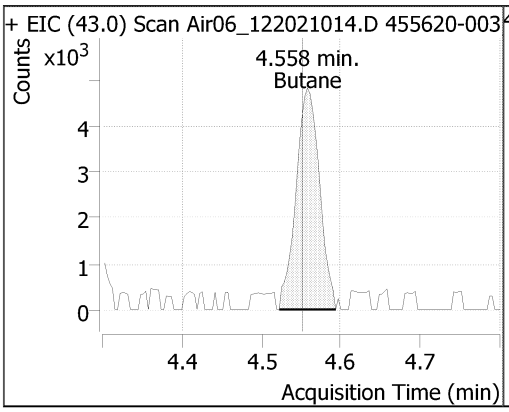
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	0.0009	4.16	-0.20	35	64.0		24.3	36.4
					61.0		7.5	11.2

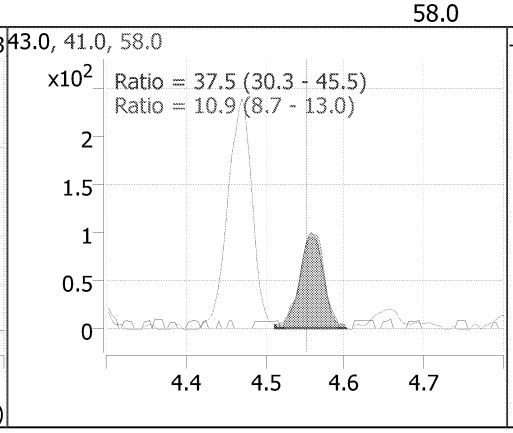


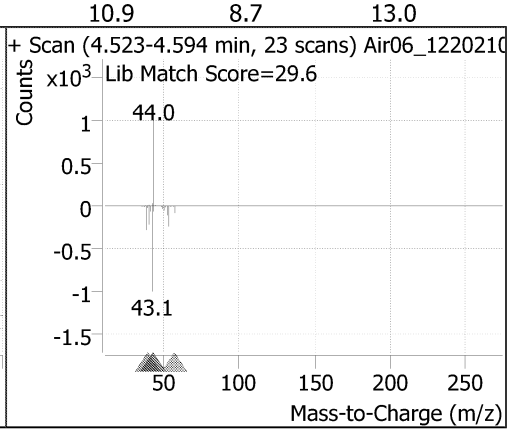
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	0.0071	4.47	-0.03	248	39.0	1934.3	88.8	133.2
					53.0	312.7	58.8	88.2
					50.0	342.1	31.0	46.5
					51.0	1203.5	27.3	41.0



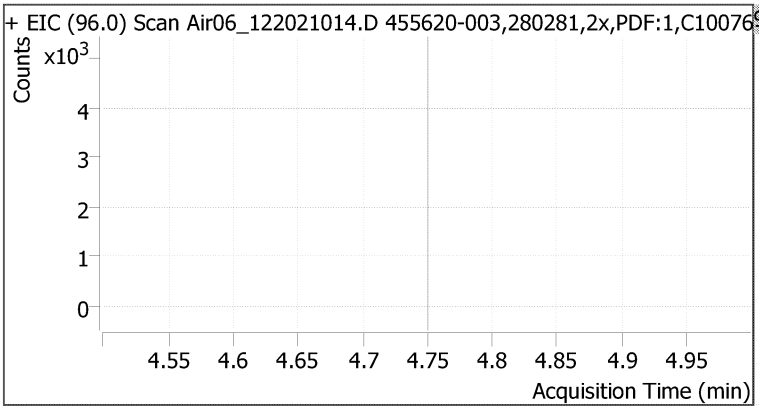
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	0.1436	4.56	0.01	9959	41.0	37.5	30.3	45.5
					58.0	10.9	8.7	13.0

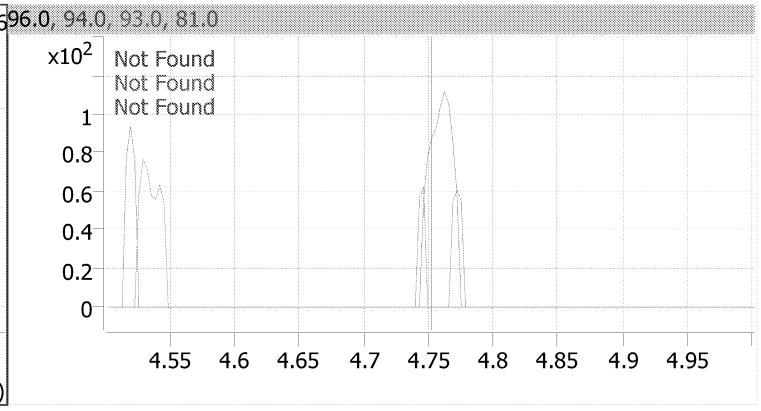




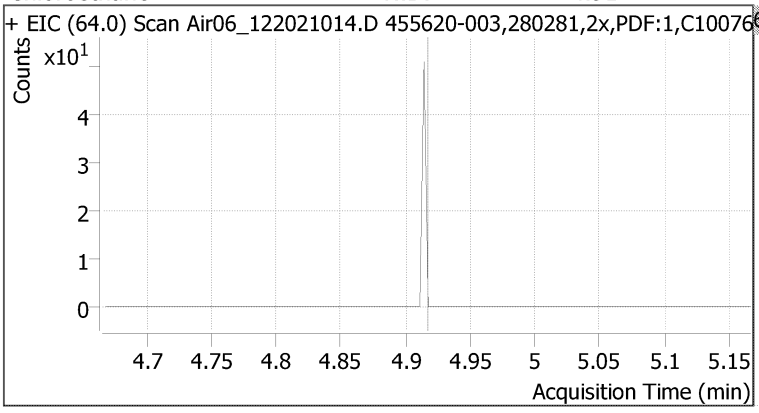


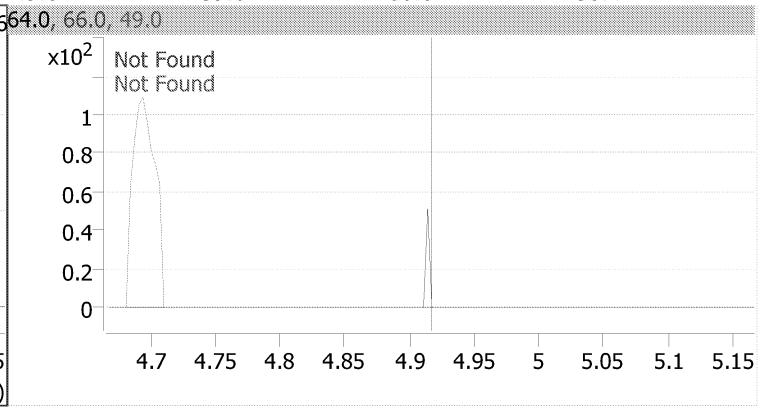
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Bromomethane	N.D.	4.75	94.0	107.8	93.0	23.9	81.0	23.8



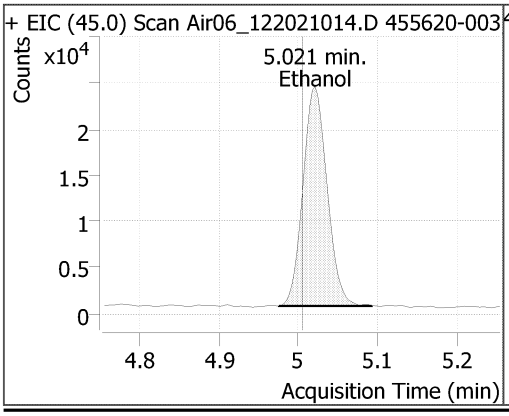


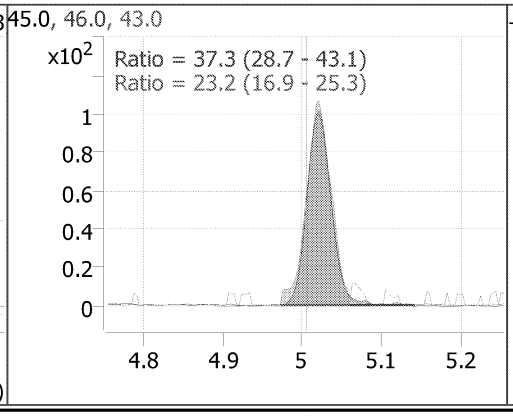
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Chloroethane	N.D.	4.91	49.0	39.6	66.0	30.4

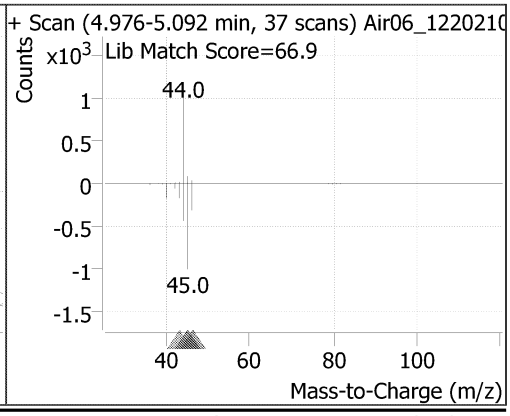




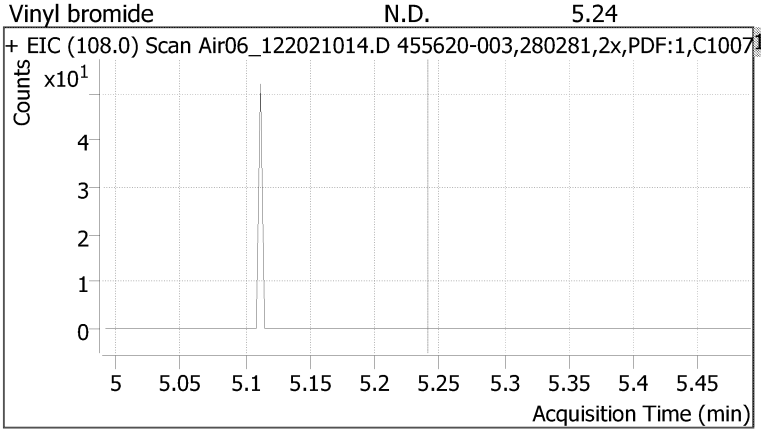
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	1.8669	5.02	0.02	50408	46.0	37.3	28.7	43.1
					43.0	23.2	16.9	25.3

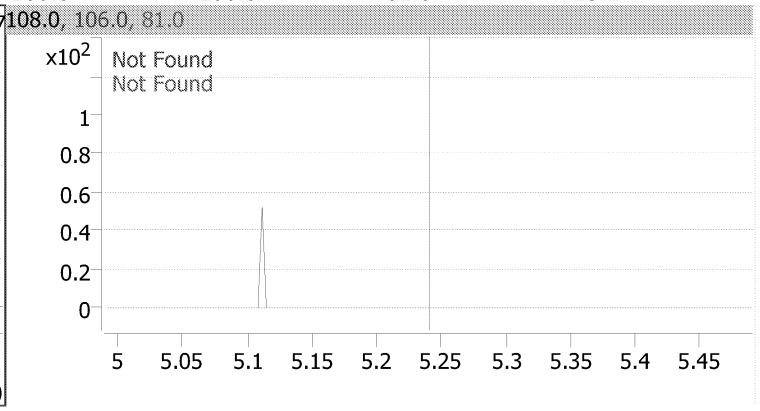




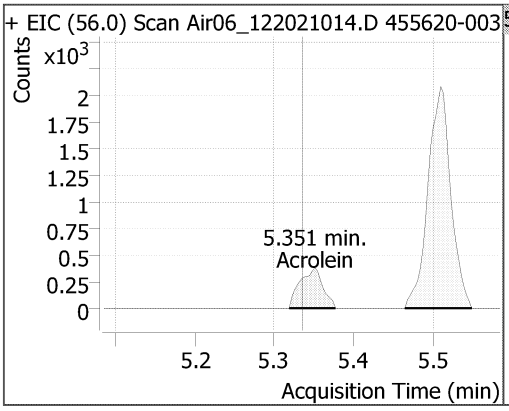


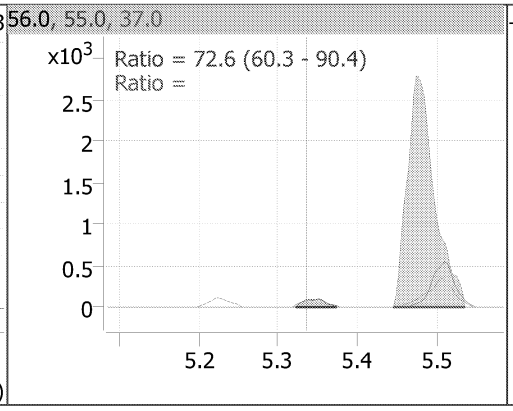
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl bromide	N.D.	5.24	106.0	106.0	81.0	23.1

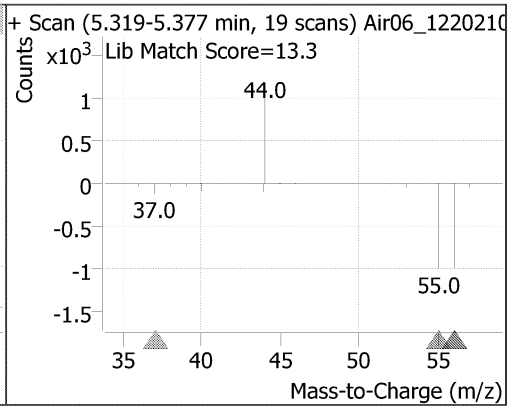




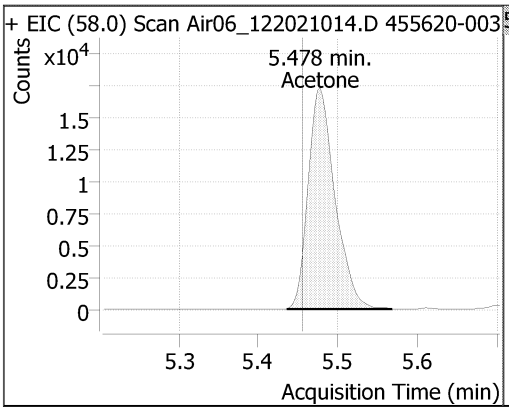
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	0.0433	5.35	0.02	755	55.0	72.6	60.3	90.4
					37.0		9.1	13.7

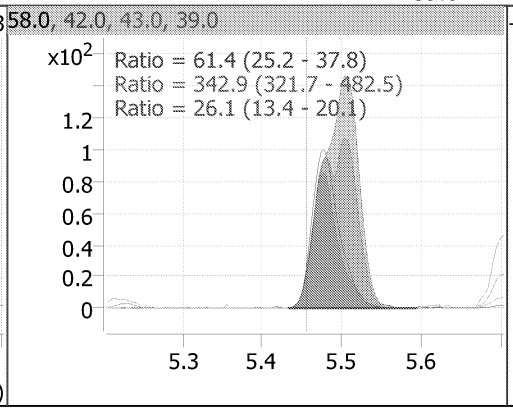


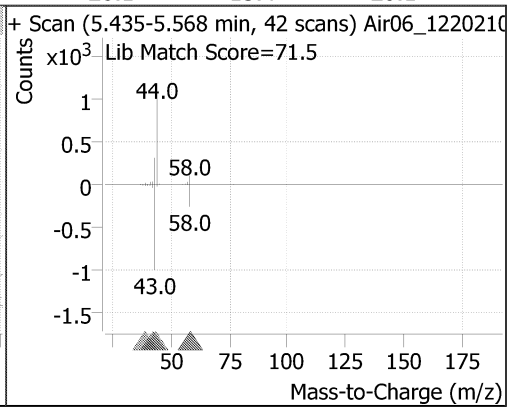




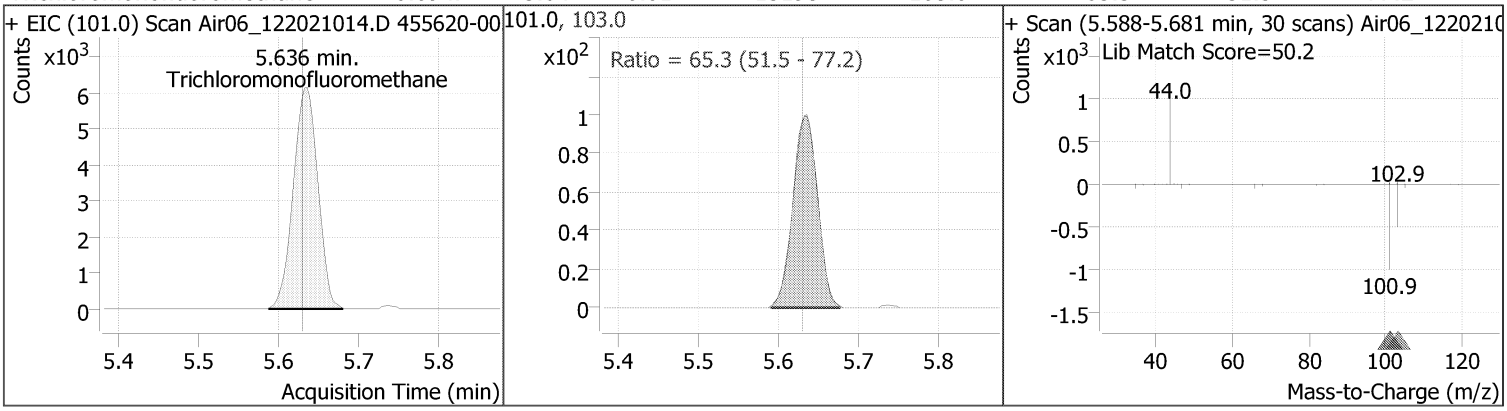
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	1.7577	5.48	0.03	40960	43.0	342.9	321.7	482.5
					42.0	61.4	25.2	37.8
					39.0	26.1	13.4	20.1



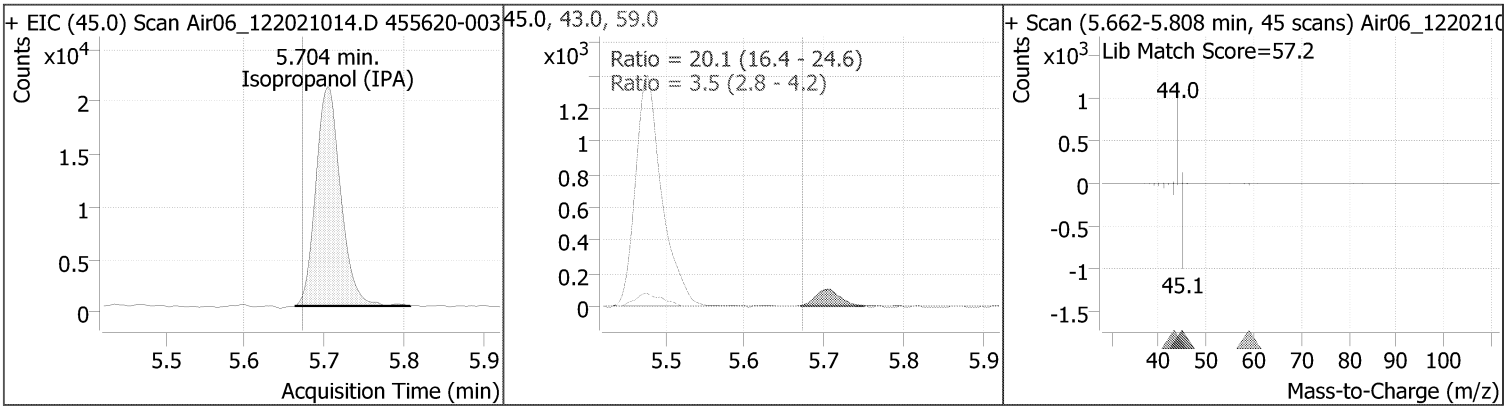




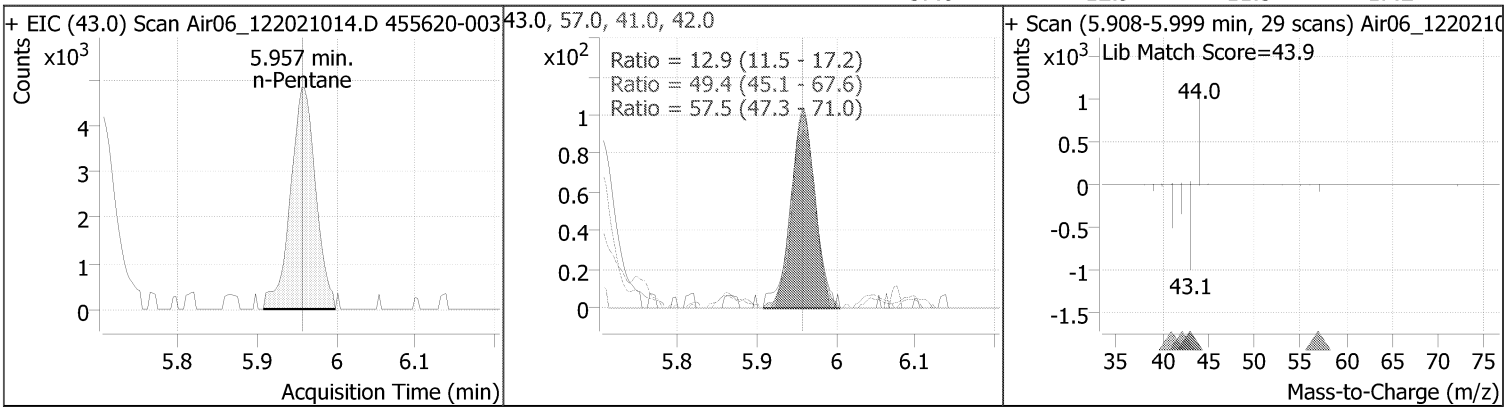
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	0.0947	5.64	0.01	13193	103.0	65.3	51.5	77.2



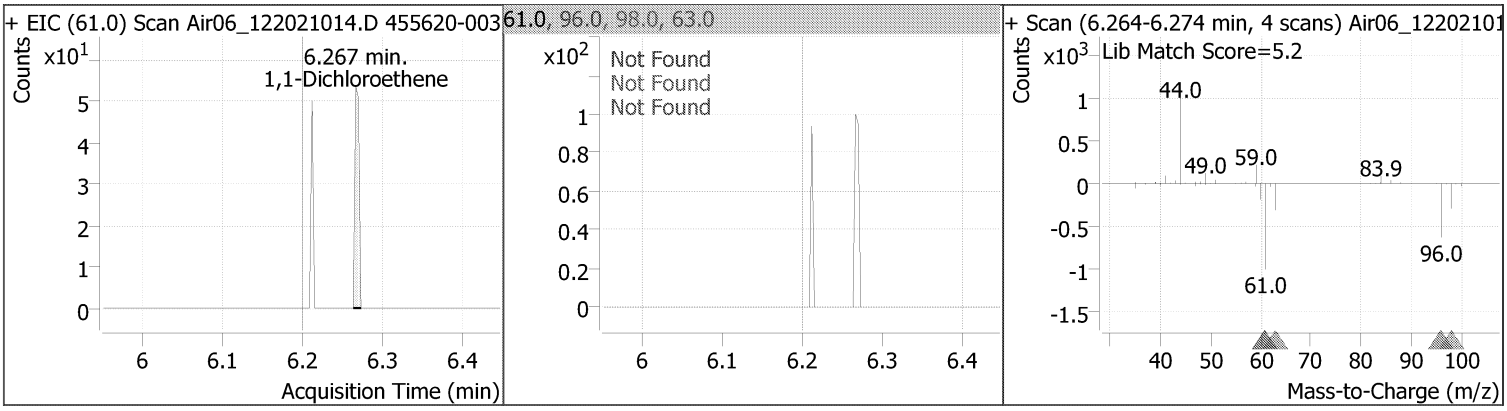
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.4978	5.70	0.04	45351	43.0	20.1	16.4	24.6
					59.0	3.5	2.8	4.2



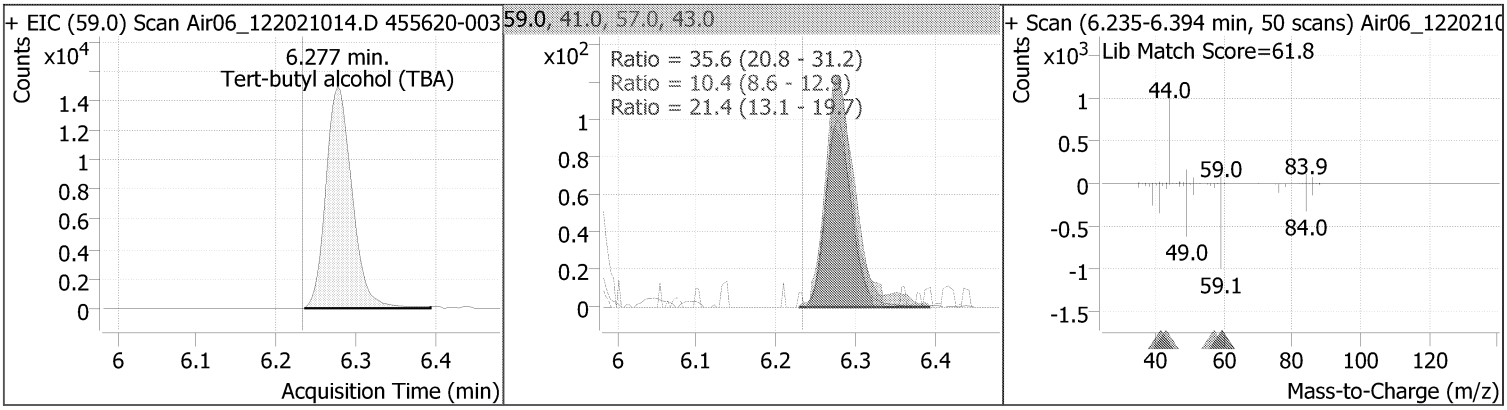
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.1205	5.96	0.00	10769	42.0	57.5	47.3	71.0
					41.0	49.4	45.1	67.6
					57.0	12.9	11.5	17.2



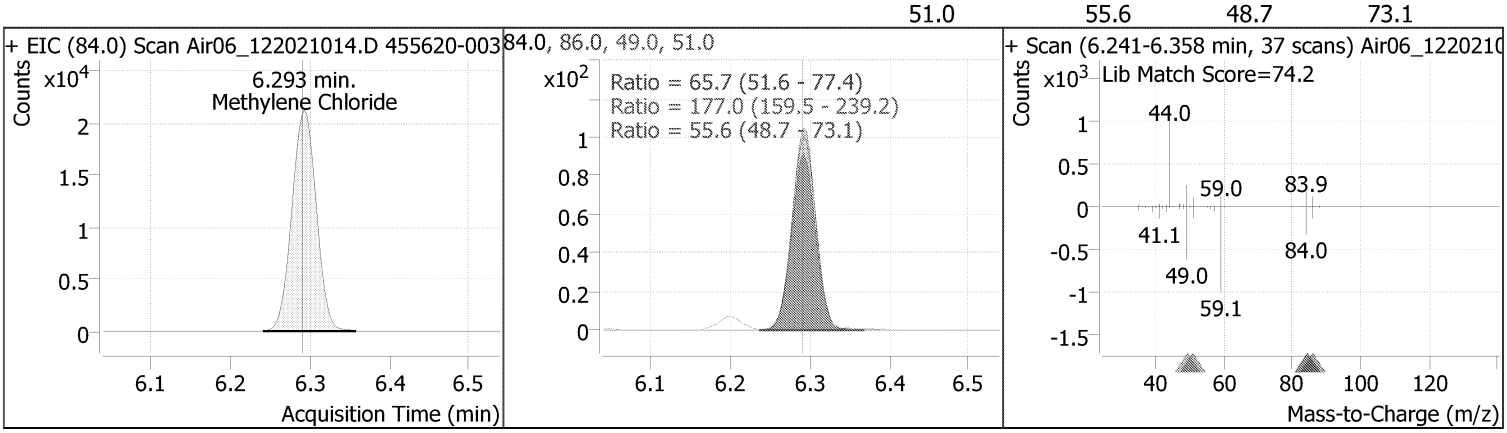
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	0.0002	6.27	0.07	20	96.0		35.3	53.0
					63.0		24.7	37.1
					98.0		22.7	34.0



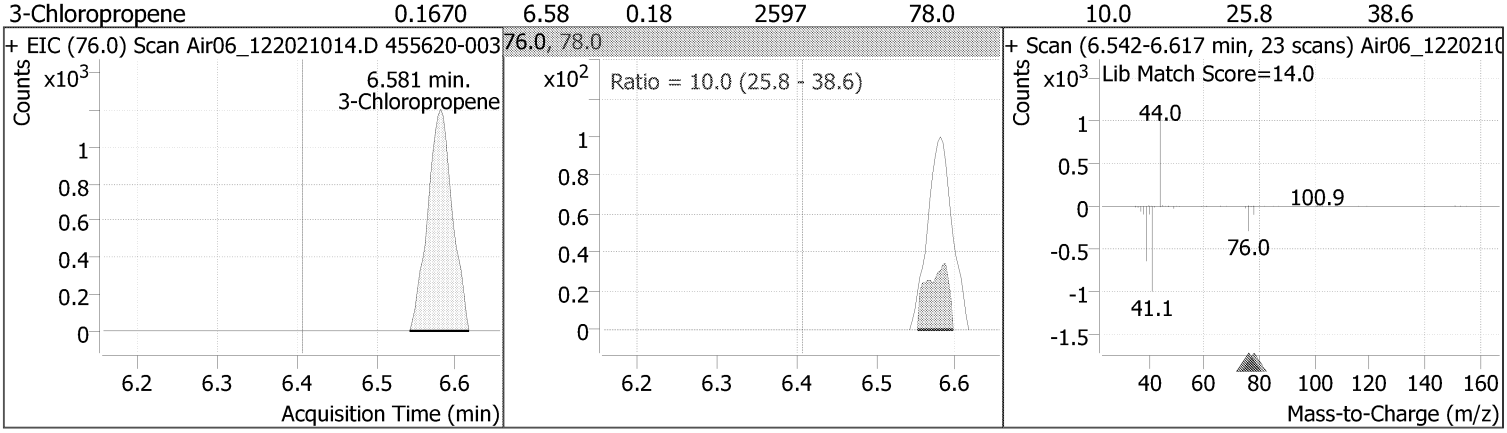
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.3579	6.28	0.05	34412	41.0	35.6	20.8	31.2
					43.0	21.4	13.1	19.7
					57.0	10.4	8.6	12.9



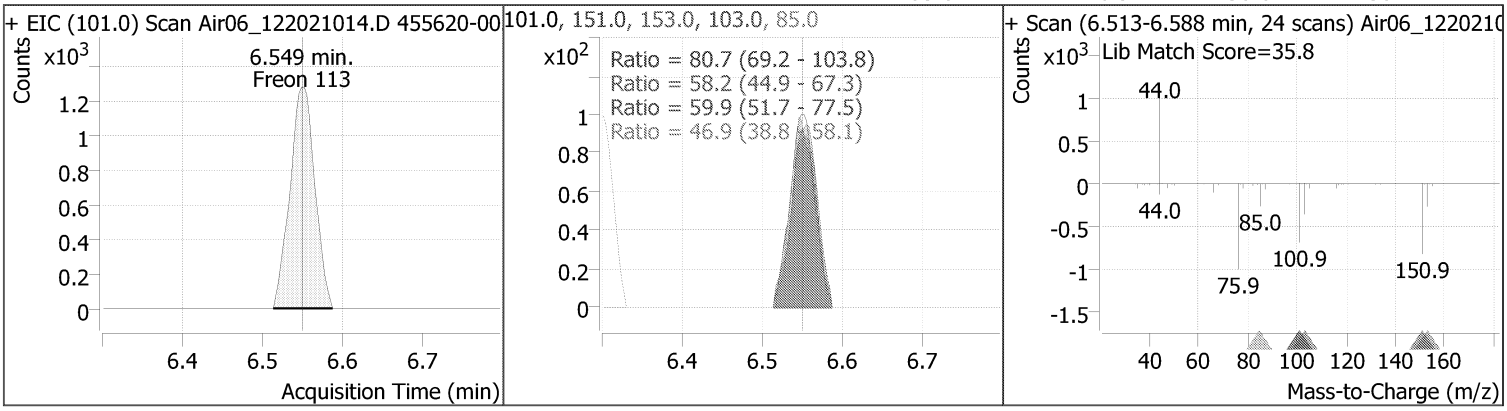
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	1.2232	6.29	0.01	45194	49.0	177.0	159.5	239.2
					86.0	65.7	51.6	77.4
					51.0	55.6	48.7	73.1



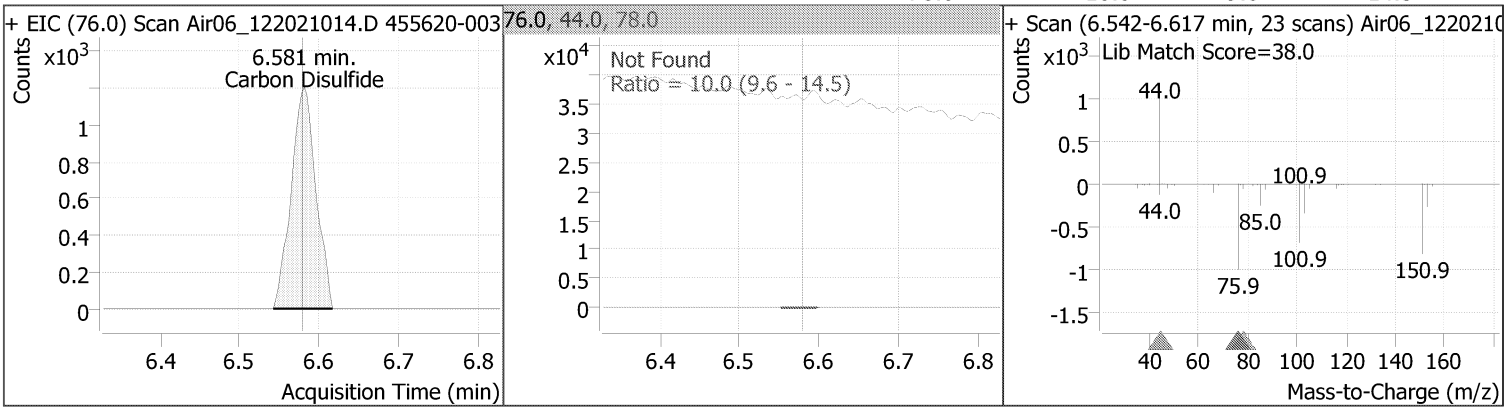
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	0.1670	6.58	0.18	2597	78.0	10.0	25.8	38.6



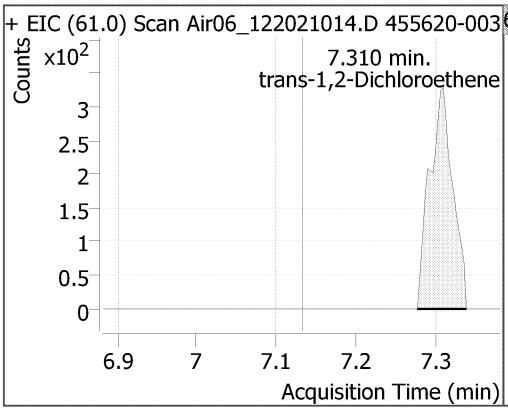
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	0.0317	6.55	0.00	2797	151.0	80.7	69.2	103.8
					103.0	59.9	51.7	77.5
					153.0	58.2	44.9	67.3
					85.0	46.9	38.8	58.1

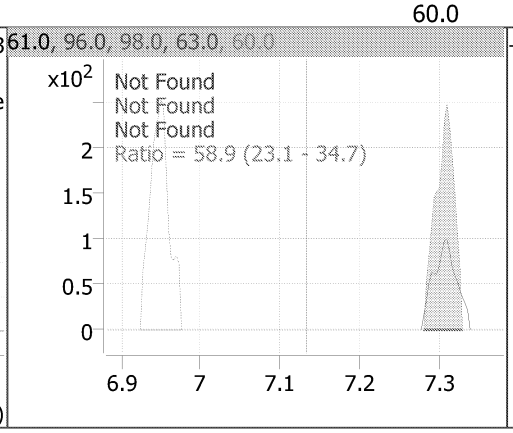


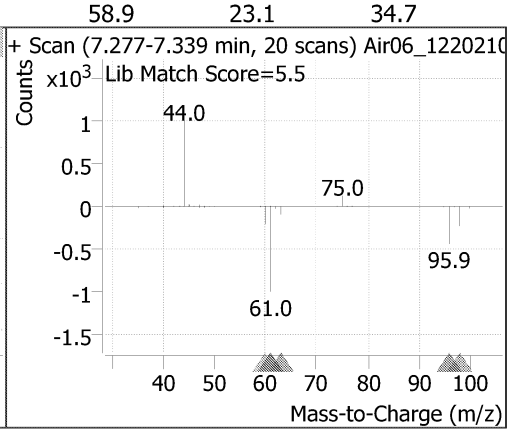
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.0253	6.58	0.01	2597	44.0		17.2	25.7
					78.0	10.0	9.6	14.5



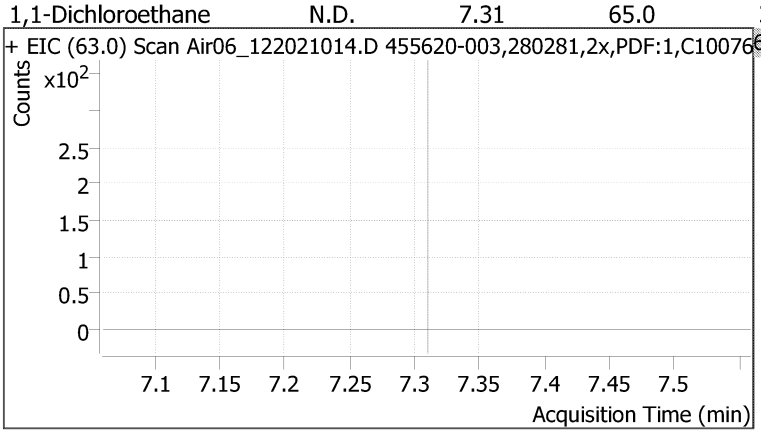
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.0100	7.31	0.18	666	96.0		41.3	61.9
					98.0		26.5	39.8
					63.0		24.6	36.9
					60.0	58.9	23.1	34.7

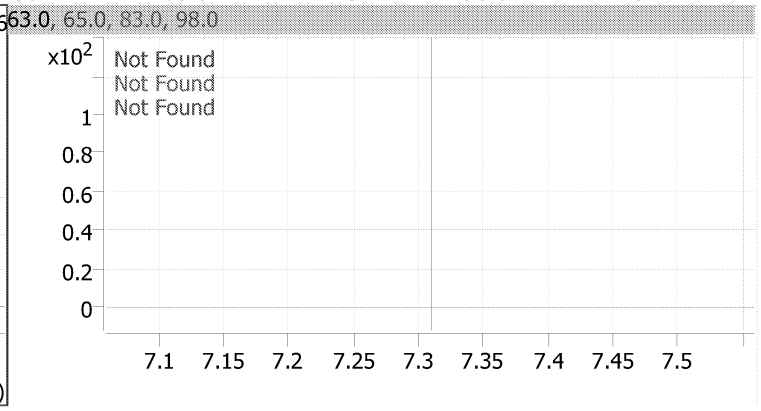




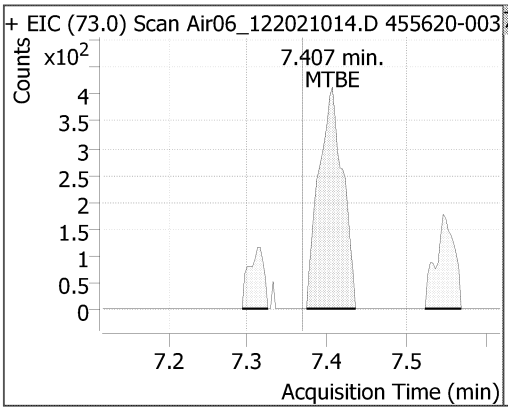


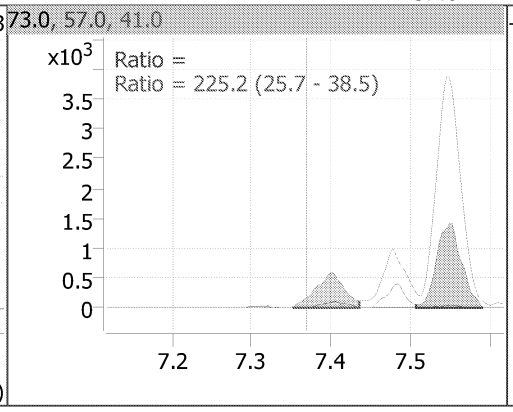
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethane	N.D.	7.31	65.0	30.1	83.0	12.3	98.0	4.5

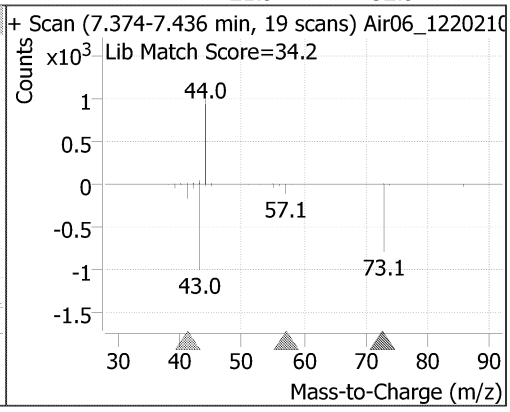




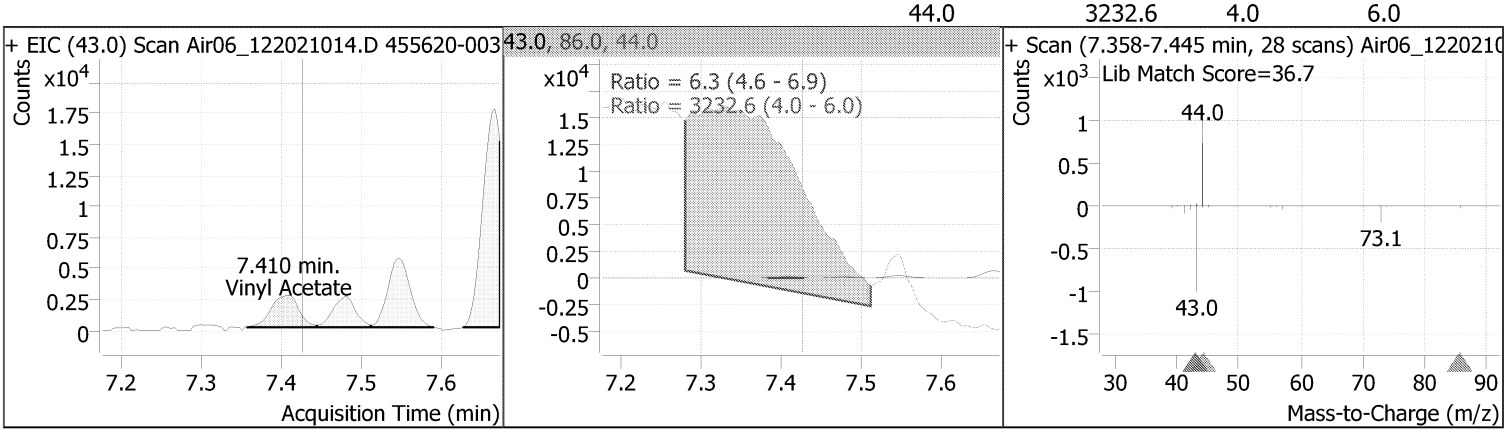
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	0.0077	7.41	0.04	867	41.0	225.2	25.7	38.5
					57.0		21.9	32.9



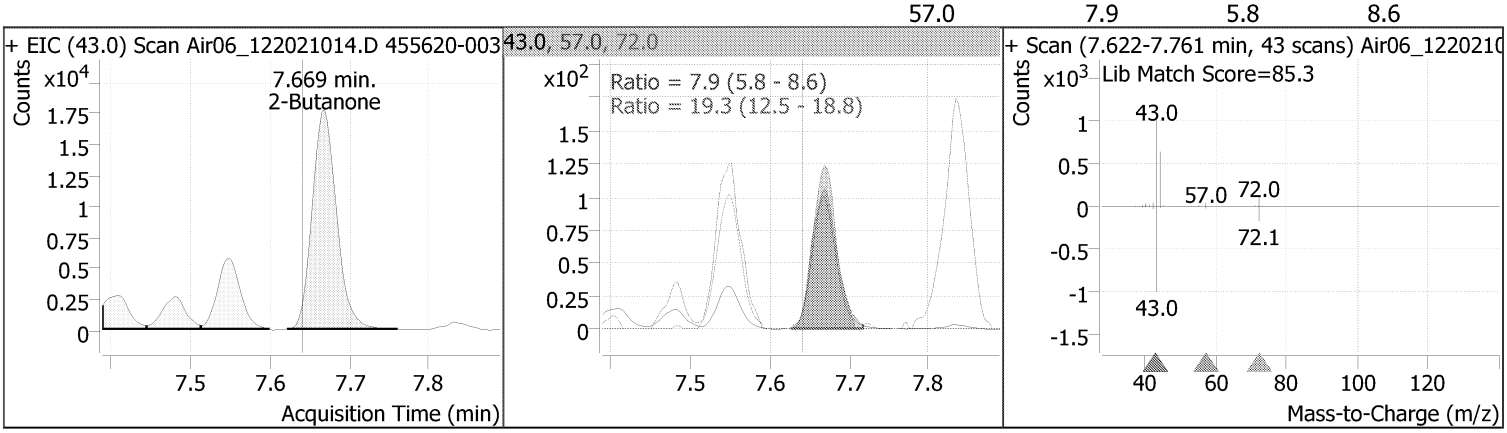




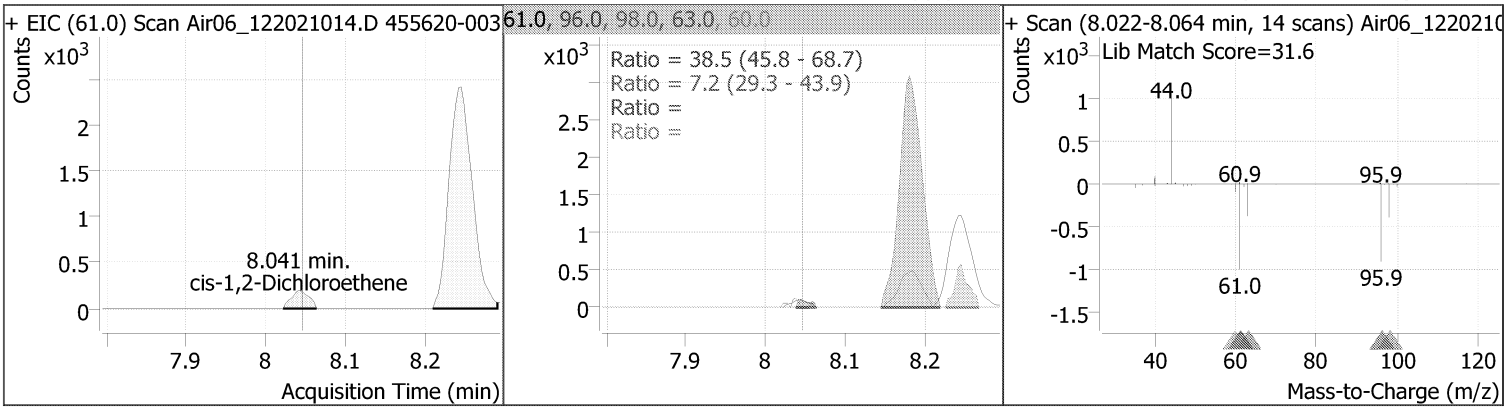
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.0449	7.41	-0.01	6330	86.0	6.3	4.6	6.9
					44.0	3232.6	4.0	6.0



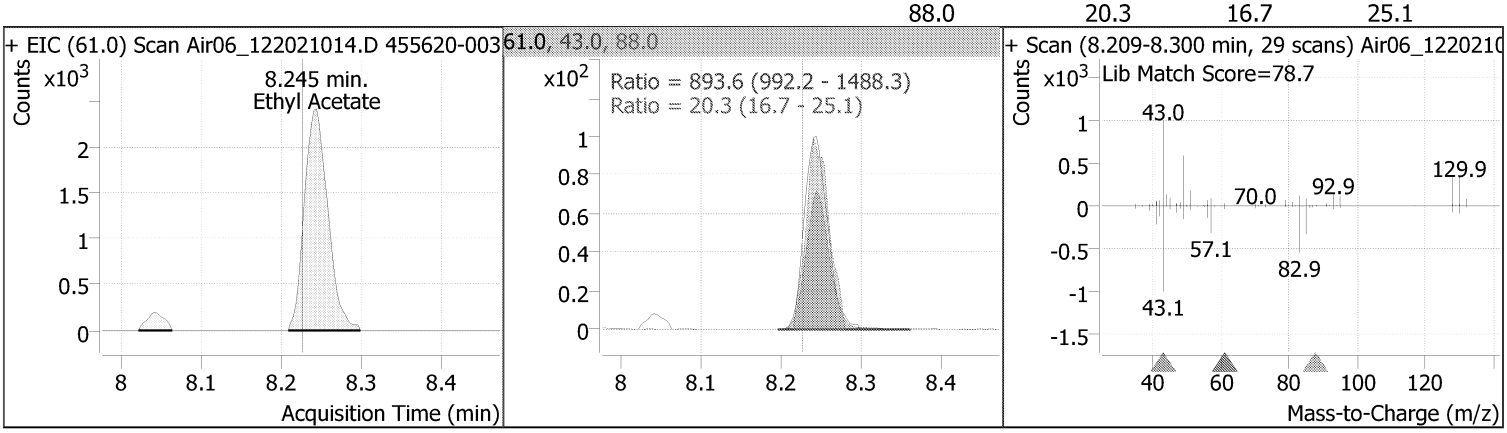
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.3368	7.67	0.03	37485	72.0	19.3	12.5	18.8
					57.0	7.9	5.8	8.6



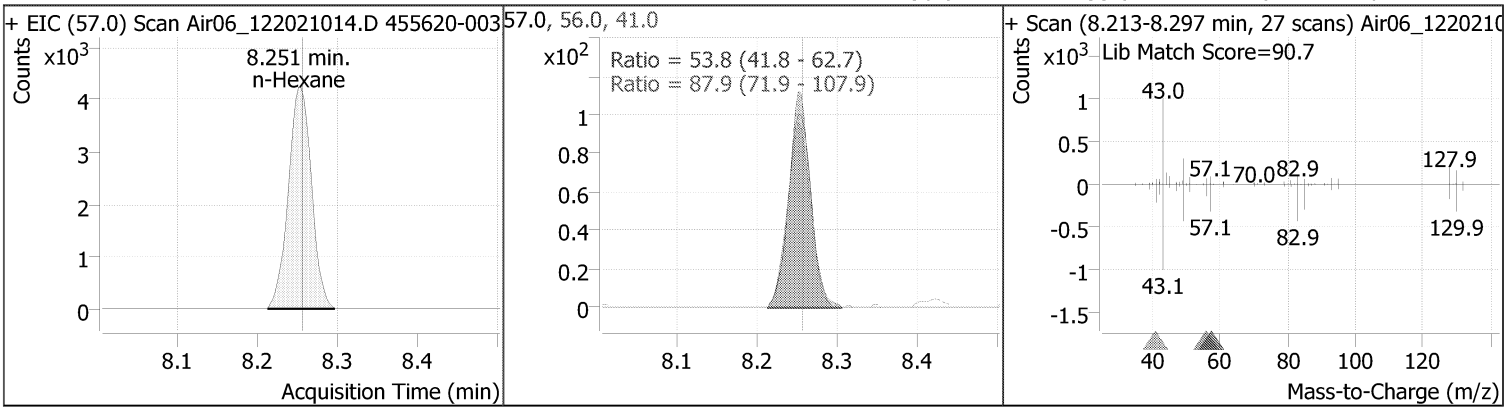
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.0045	8.04	0.00	305	96.0	38.5	45.8	68.7
					98.0	7.2	29.3	43.9
					63.0		24.9	37.4
					60.0		18.2	27.3



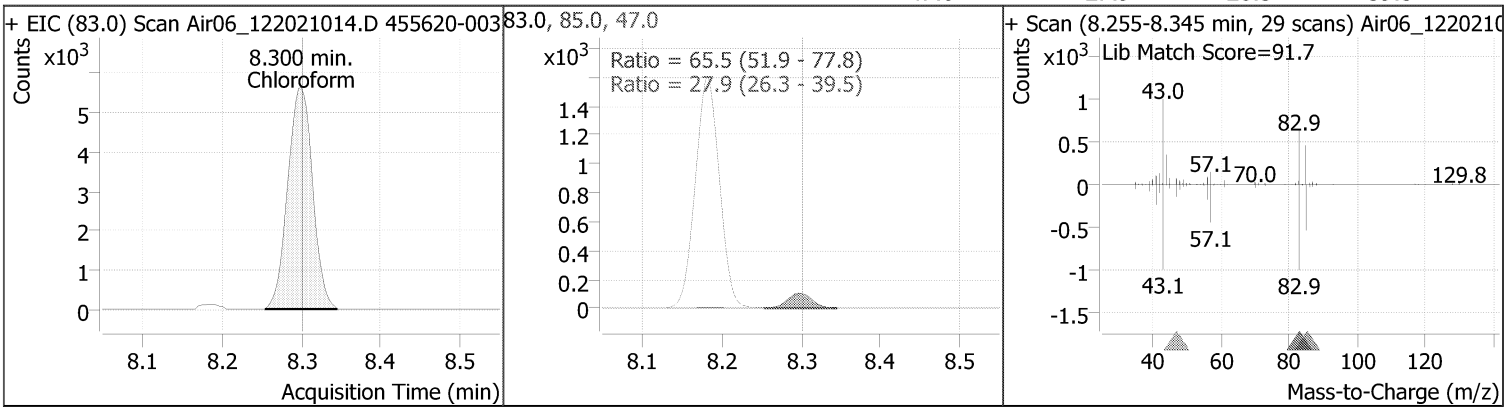
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	0.3197	8.24	0.02	4949	43.0	893.6	992.2	1488.3
					88.0	20.3	16.7	25.1



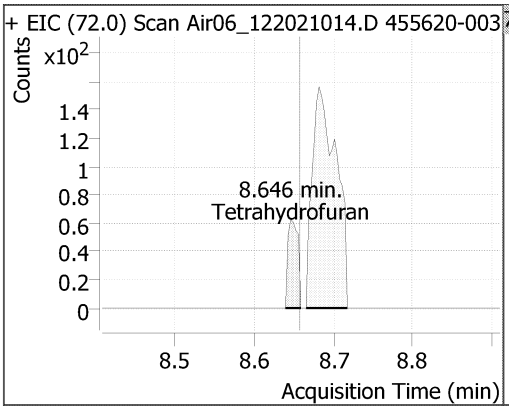
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.1190	8.25	0.00	8578	41.0	87.9	71.9	107.9
					56.0	53.8	41.8	62.7

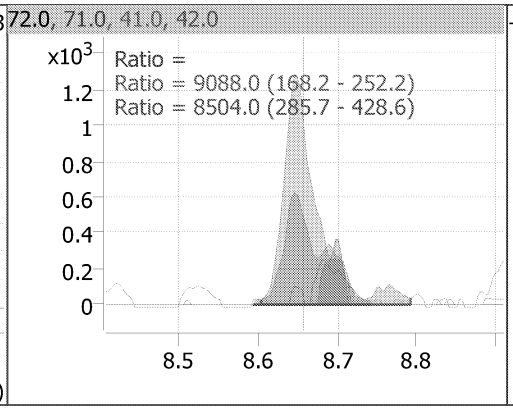


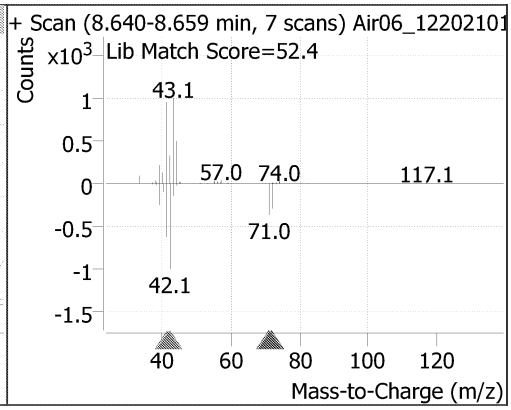
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.1250	8.30	0.00	12277	85.0	65.5	51.9	77.8
					47.0	27.9	26.3	39.5



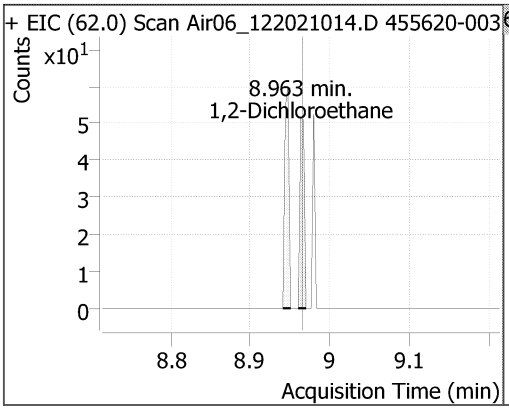
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	0.0034	8.65	-0.01	55	42.0	8504.0	285.7	428.6
					41.0	9088.0	168.2	252.2
					71.0		78.8	118.1

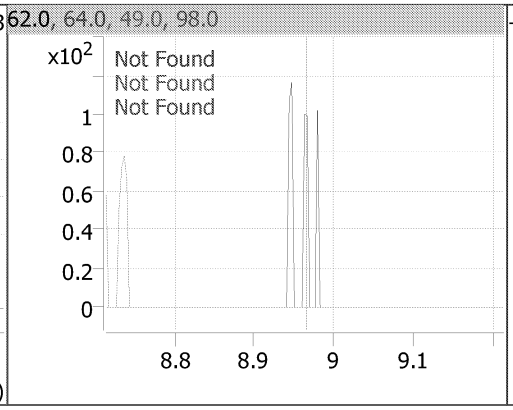


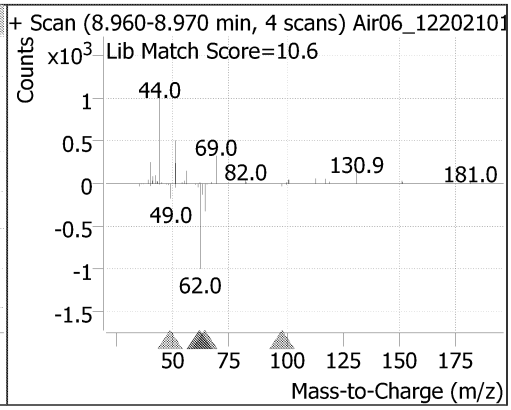




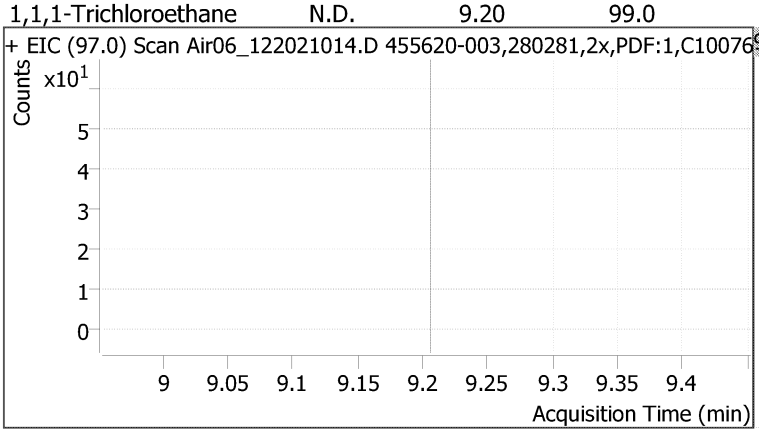
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	0.0003	8.96	0.00	20	64.0		24.8	37.2
					49.0		23.5	35.3
					98.0		4.4	6.6

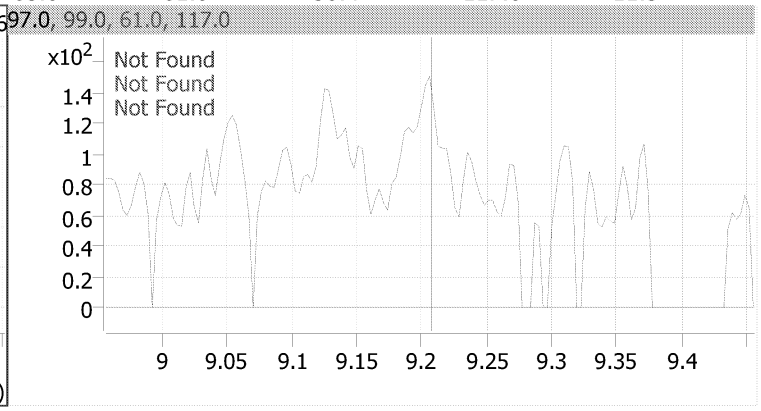




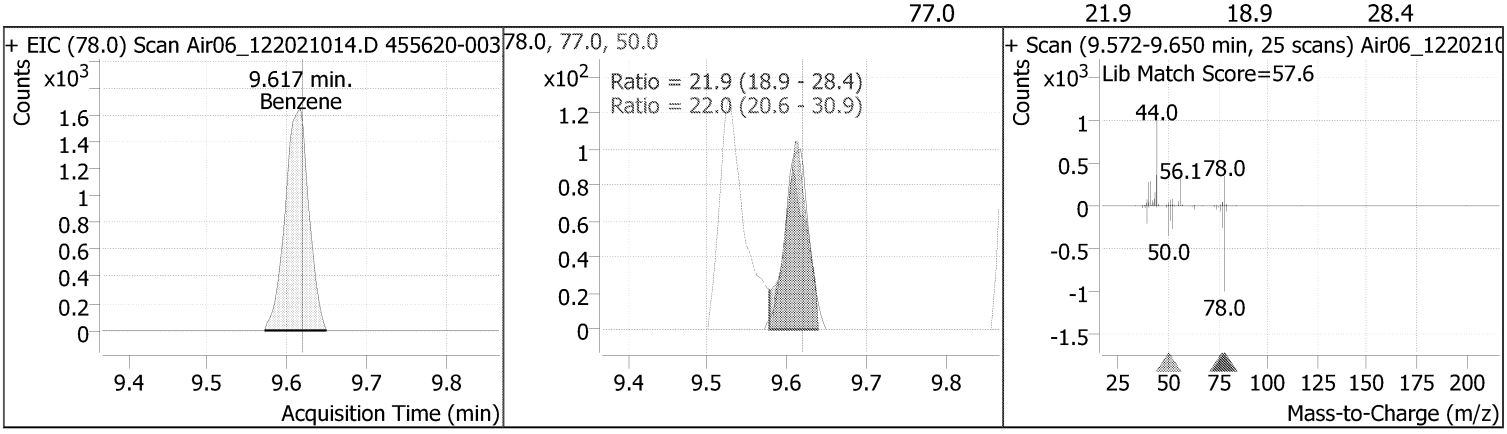


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1-Trichloroethane	N.D.	9.20	99.0	65.0	61.0	50.4	117.0	11.3

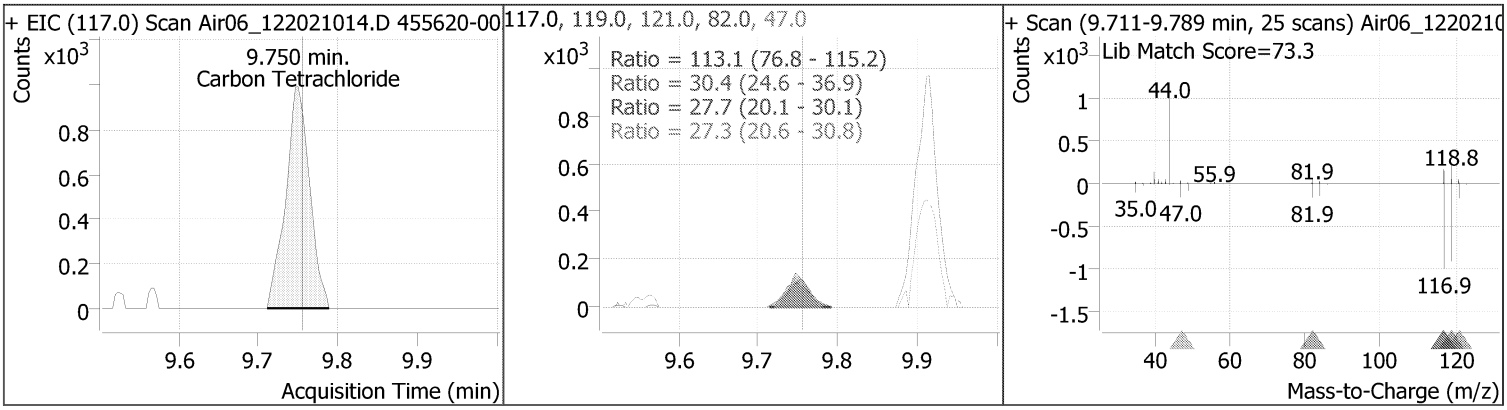




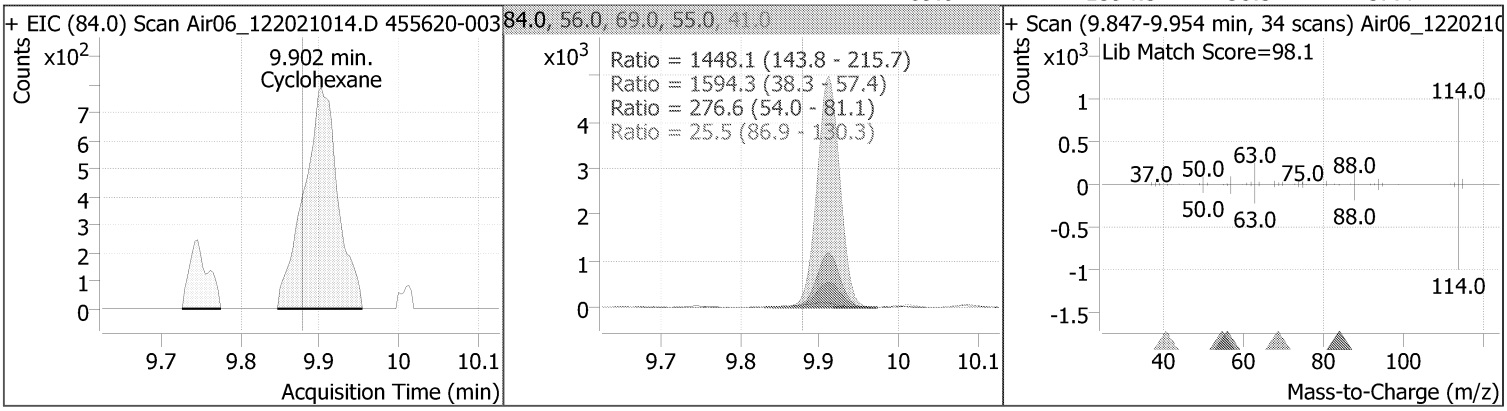
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.0312	9.62	0.00	3406	50.0	22.0	20.6	30.9
					77.0	21.9	18.9	28.4



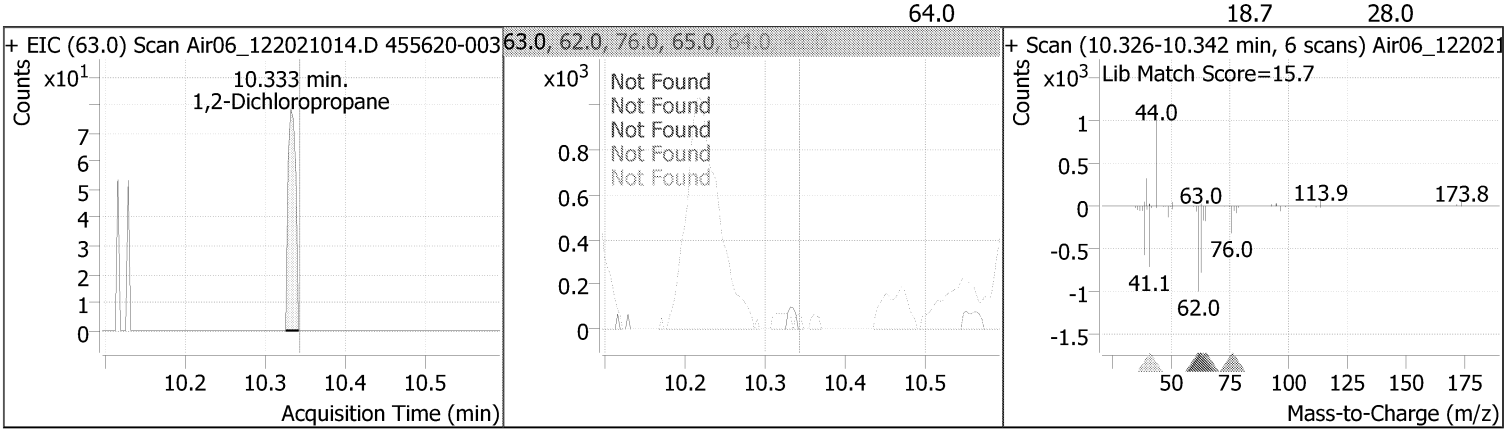
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	0.0186	9.75	0.00	2071	119.0	113.1	76.8	115.2
					121.0	30.4	24.6	36.9
					47.0	27.3	20.6	30.8
					82.0	27.7	20.1	30.1



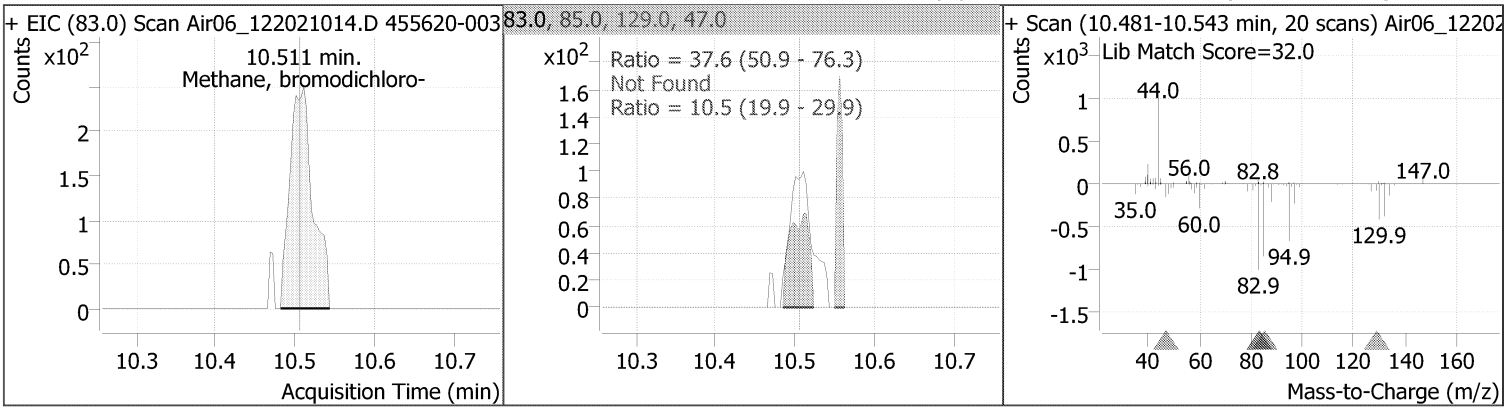
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.0524	9.90	0.03	2369	56.0	1448.1	143.8	215.7
					41.0	25.5	86.9	130.3
					55.0	276.6	54.0	81.1
					69.0	1594.3	38.3	57.4



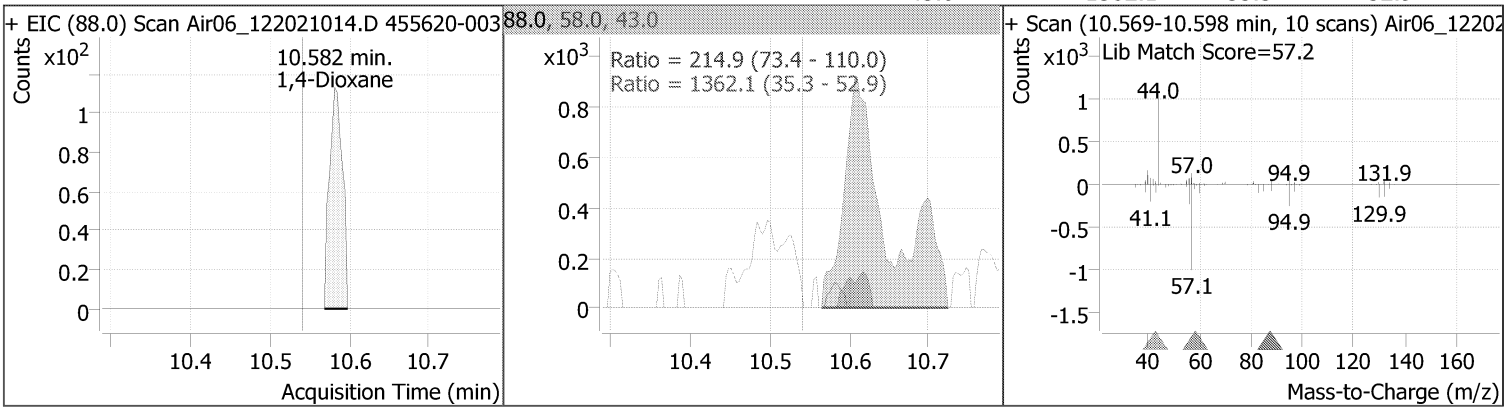
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.0011	10.33	-0.01	53	41.0		60.7	91.1
					62.0		55.7	83.6
					76.0		35.7	53.6
					65.0		23.3	35.0
					64.0		18.7	28.0



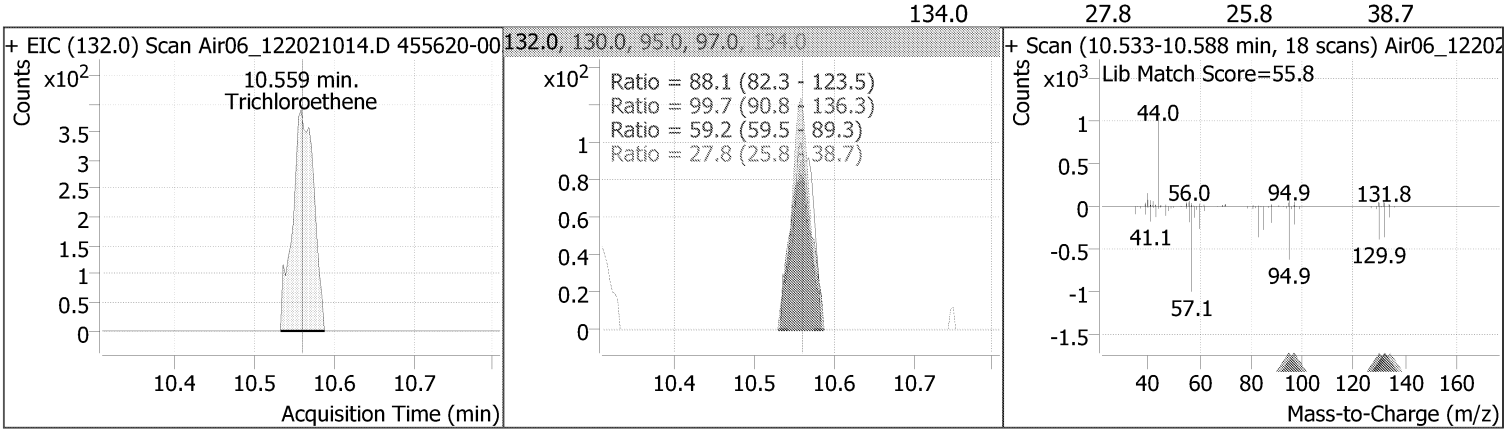
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	0.0050	10.51	0.00	509	85.0	37.6	50.9	76.3
					47.0	10.5	19.9	29.9
					129.0		9.1	13.7



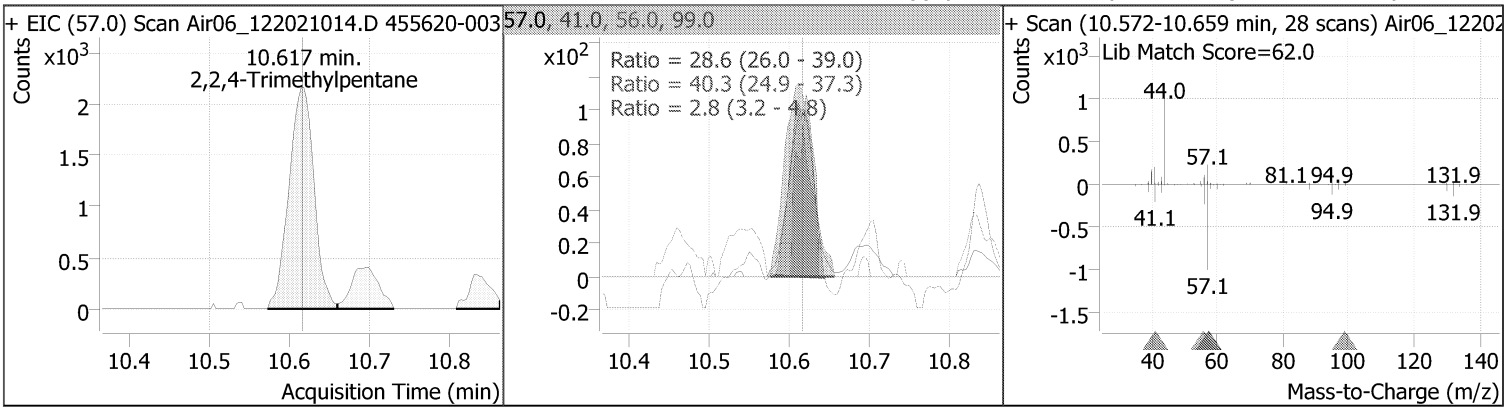
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.0054	10.58	0.04	128	58.0	214.9	73.4	110.0
					43.0	1362.1	35.3	52.9



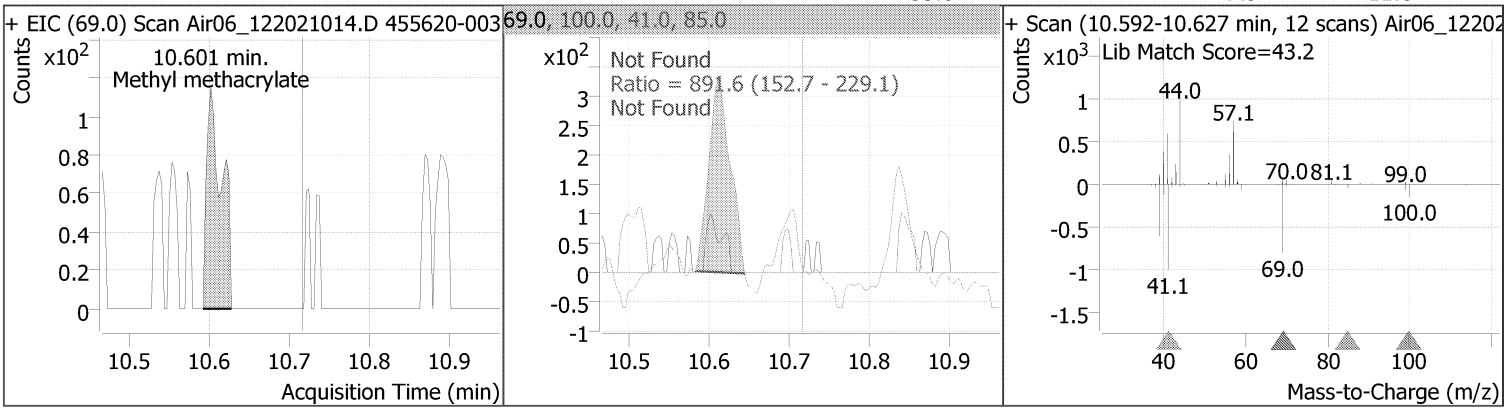
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.0146	10.56	0.00	722	95.0	99.7	90.8	136.3
					130.0	88.1	82.3	123.5
					97.0	59.2	59.5	89.3
					134.0	27.8	25.8	38.7



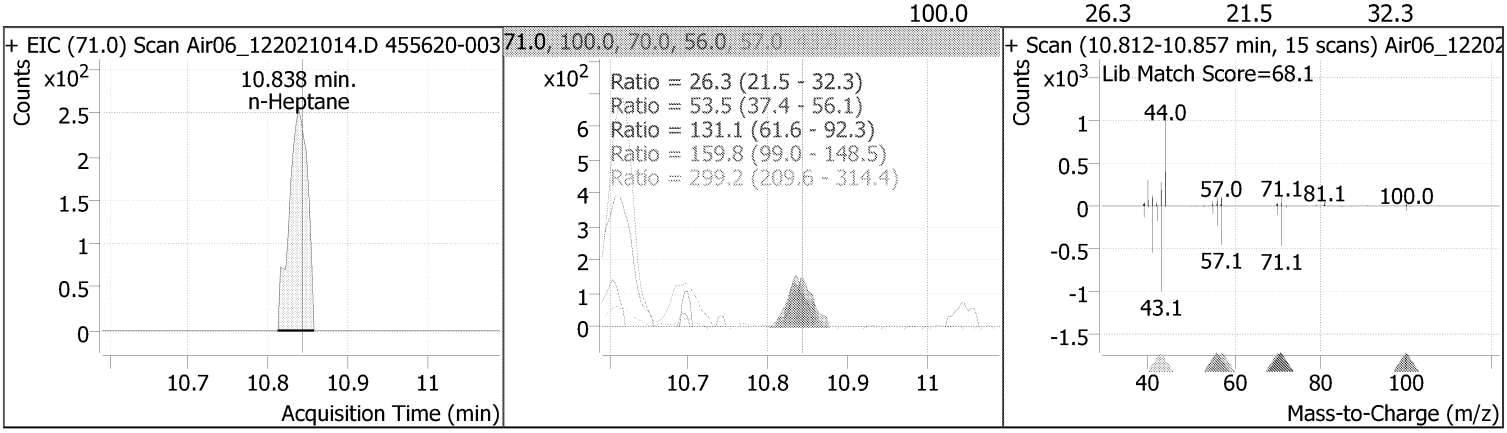
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.0205	10.62	0.00	4767	41.0	28.6	26.0	39.0
					56.0	40.3	24.9	37.3
					99.0	2.8	3.2	4.8



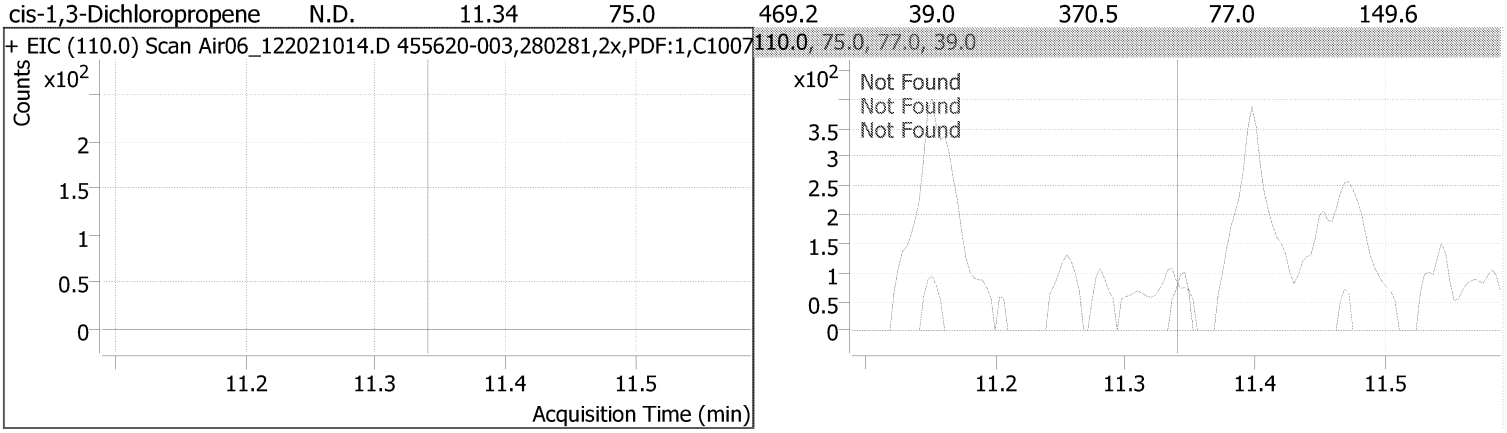
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	0.0038	10.60	-0.11	152	41.0	891.6	152.7	229.1
					100.0		29.1	43.6
					85.0		7.9	11.8



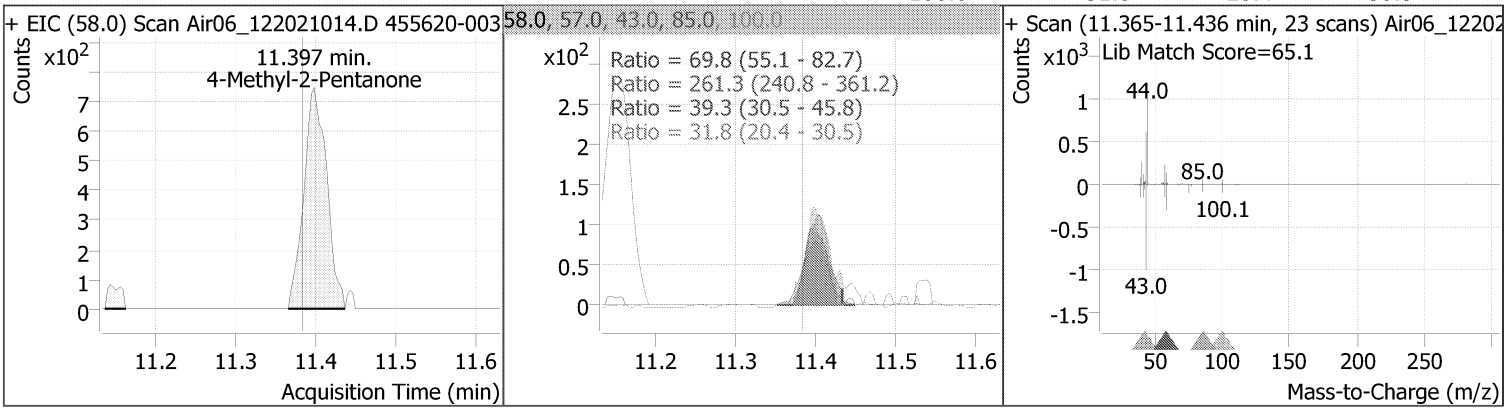
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	0.0113	10.84	0.00	411	43.0	299.2	209.6	314.4
					57.0	159.8	99.0	148.5
					56.0	131.1	61.6	92.3
					70.0	53.5	37.4	56.1
					100.0	26.3	21.5	32.3



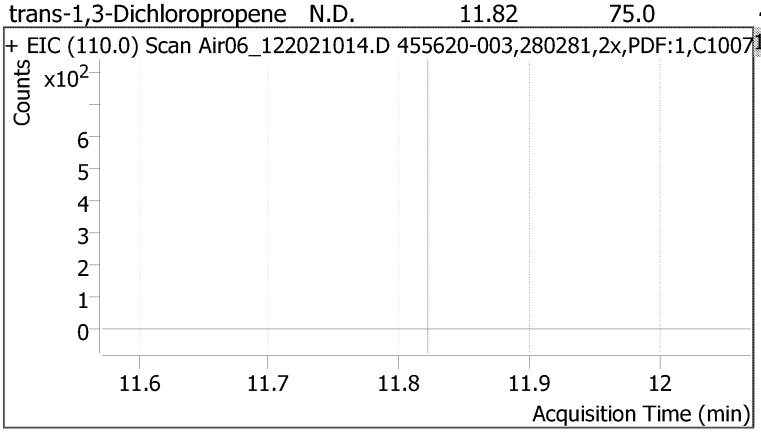
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
cis-1,3-Dichloropropene	N.D.	11.34	75.0	469.2	39.0	370.5	77.0	149.6

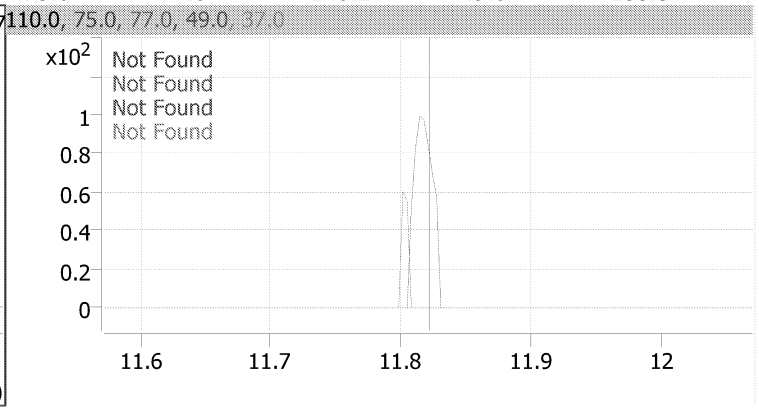


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.0348	11.40	0.02	1494	43.0	261.3	240.8	361.2
					57.0	69.8	55.1	82.7
					85.0	39.3	30.5	45.8
					100.0	31.8	20.4	30.5

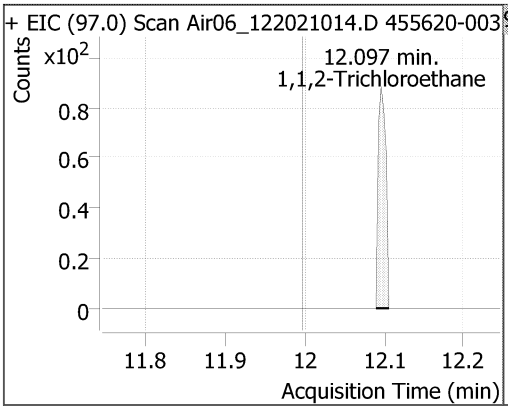


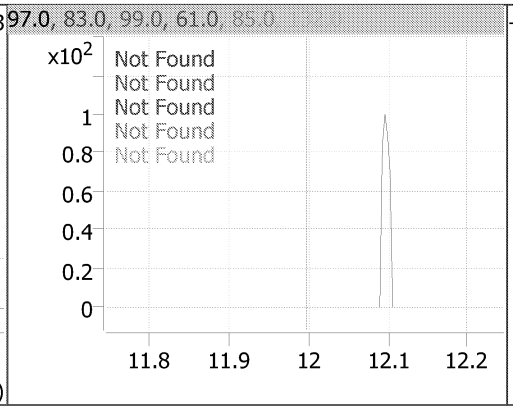
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
trans-1,3-Dichloropropene	N.D.	11.82	75.0	473.6	77.0	148.2	49.0	133.5

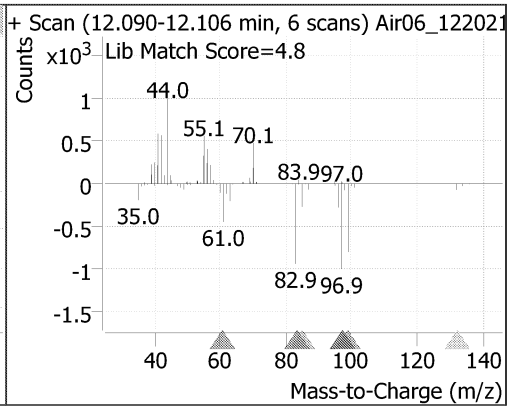




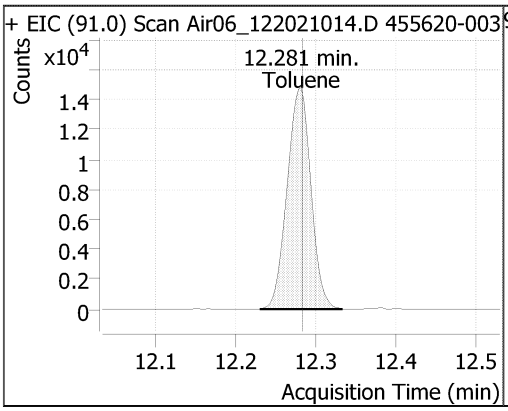
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	0.0012	12.10	0.10	59	83.0		71.0	106.6
					61.0		69.2	103.9
					99.0		49.9	74.9
					85.0		46.4	69.6
					132.0		6.5	9.7

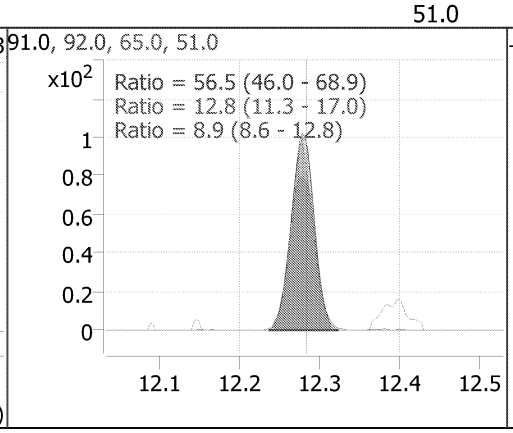


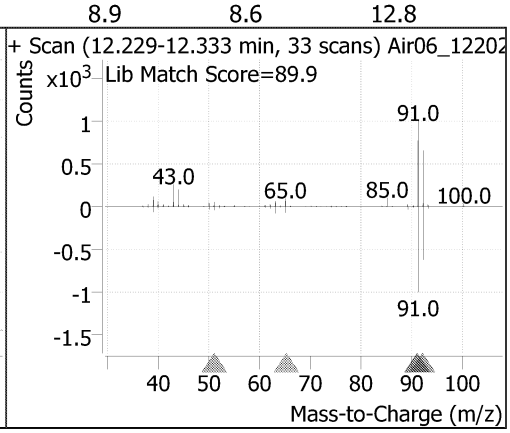




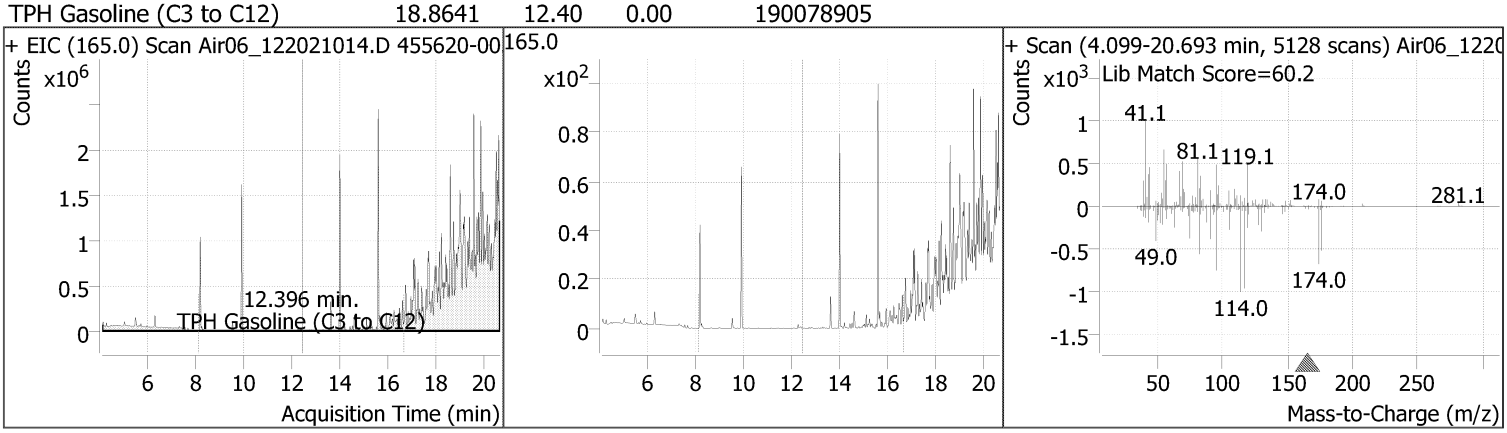
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.2215	12.28	0.00	30725	92.0	56.5	46.0	68.9
					65.0	12.8	11.3	17.0
					51.0	8.9	8.6	12.8



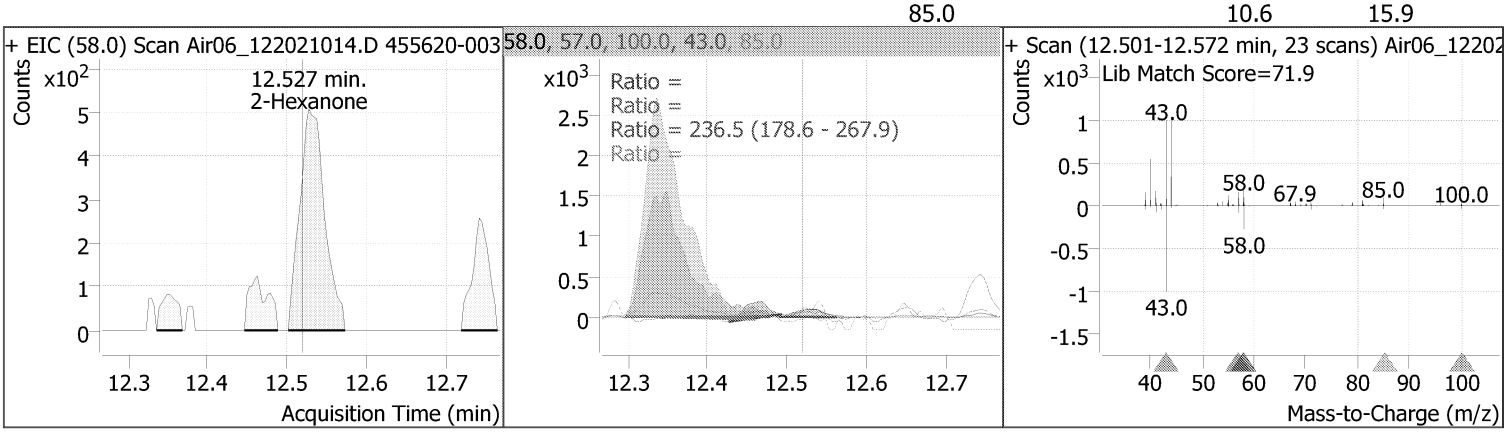




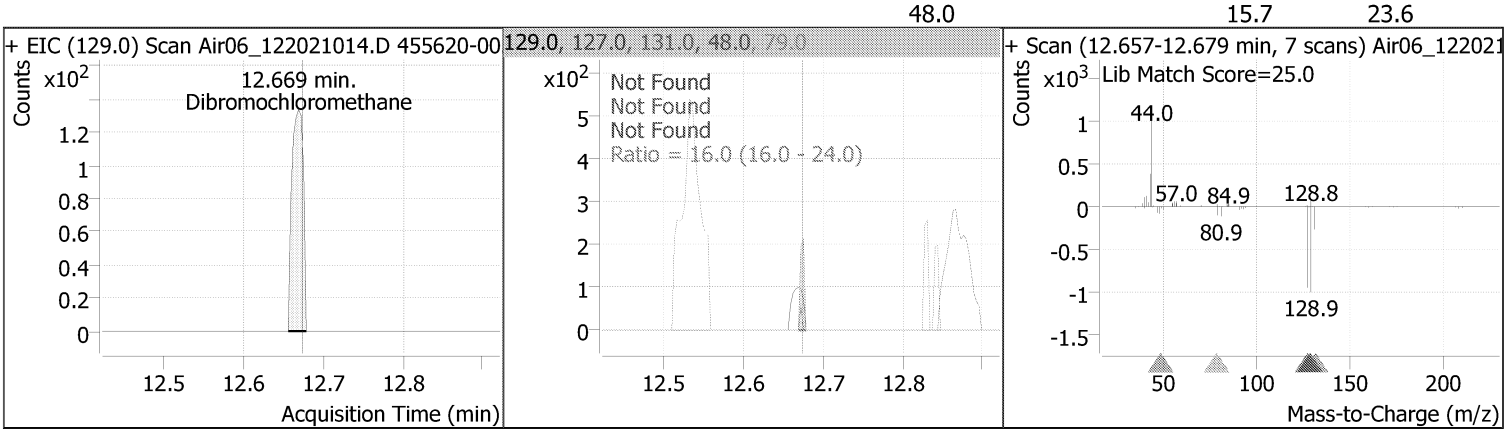
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	18.8641	12.40	0.00	190078905				



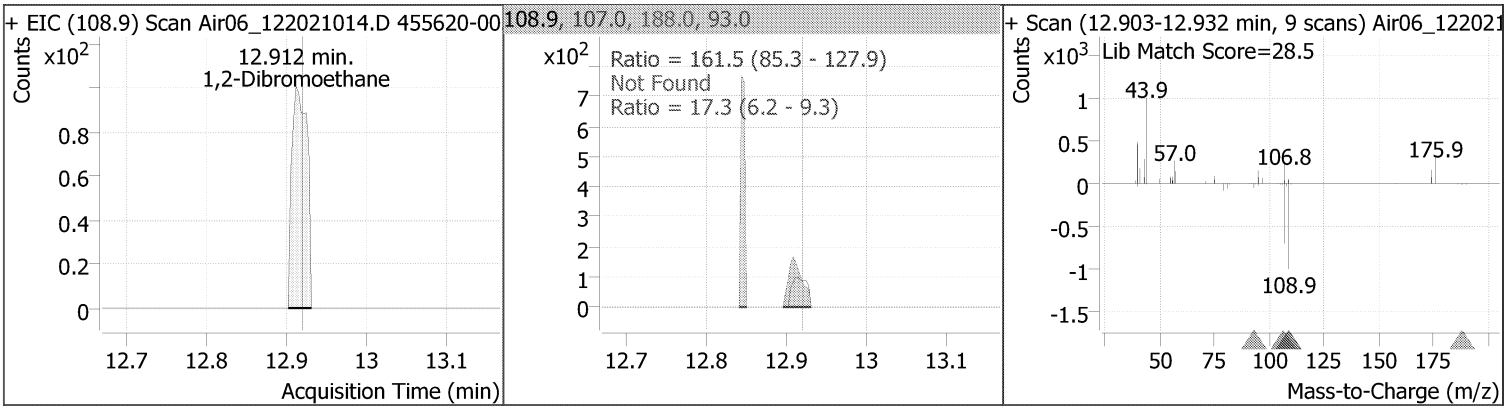
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.0207	12.53	0.01	1110	43.0	236.5	178.6	267.9
					57.0		30.3	45.4
					100.0		11.5	17.3
					85.0		10.6	15.9



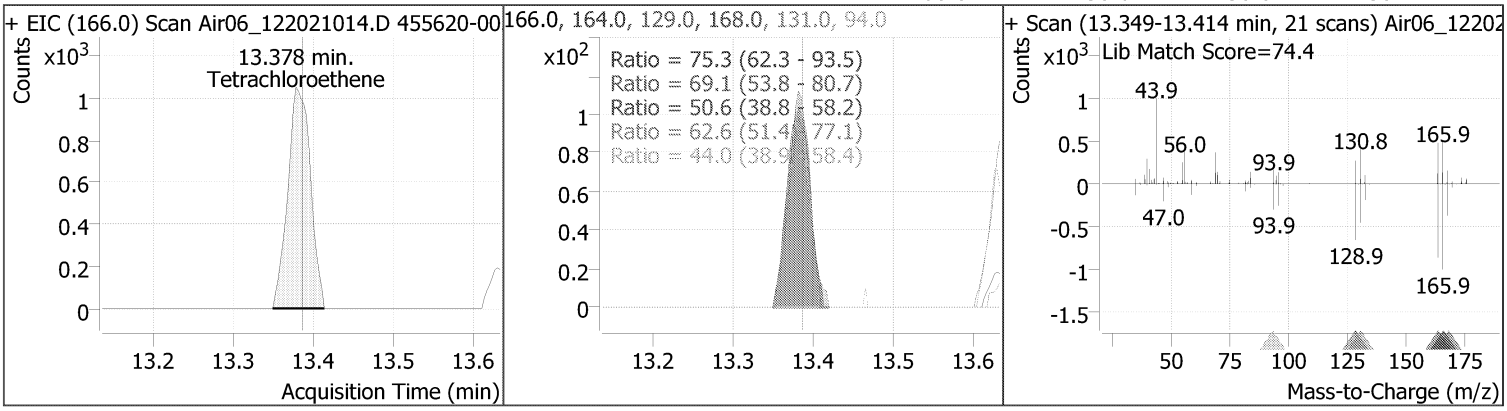
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.0014	12.67	0.00	133	127.0		61.8	92.7
					131.0		19.2	28.8
					79.0	16.0	16.0	24.0
					48.0		15.7	23.6



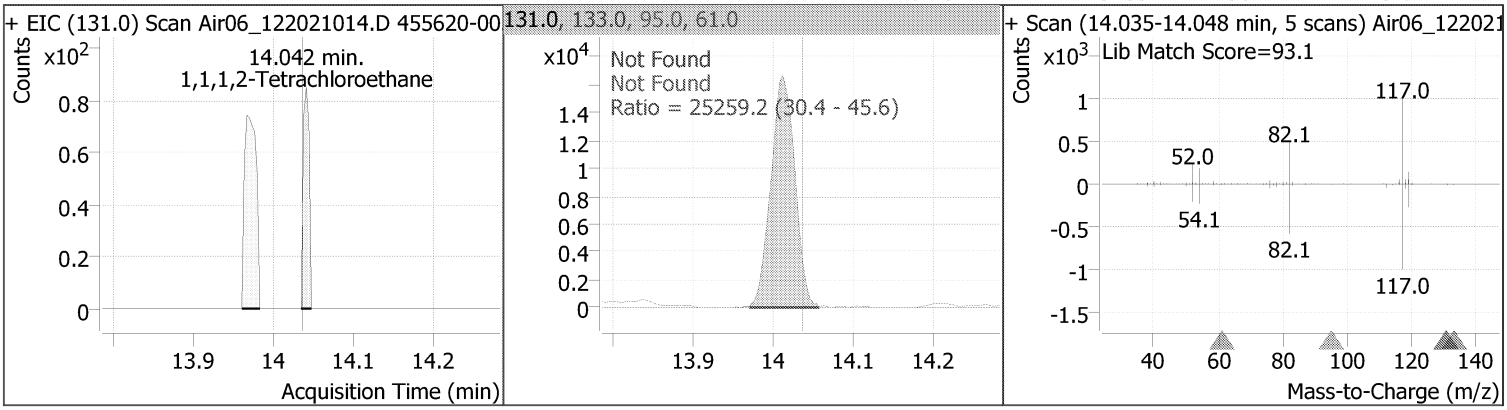
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.0018	12.91	-0.01	133	107.0	161.5	85.3	127.9
					93.0	17.3	6.2	9.3
					188.0		3.7	5.5



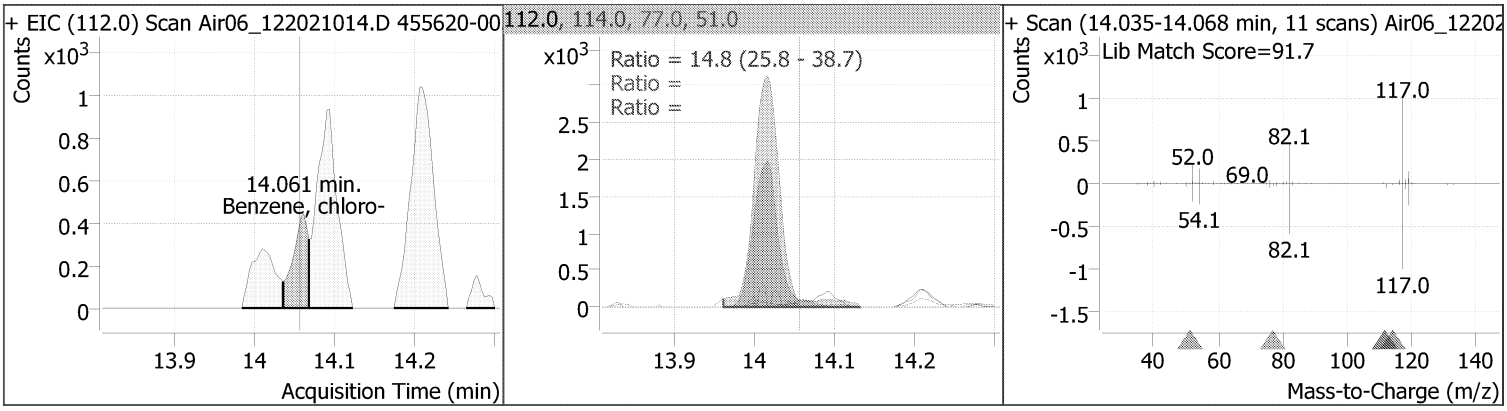
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.0255	13.38	-0.01	2078	164.0	75.3	62.3	93.5
					129.0	69.1	53.8	80.7
					131.0	62.6	51.4	77.1
					94.0	44.0	38.9	58.4
					168.0	50.6	38.8	58.2



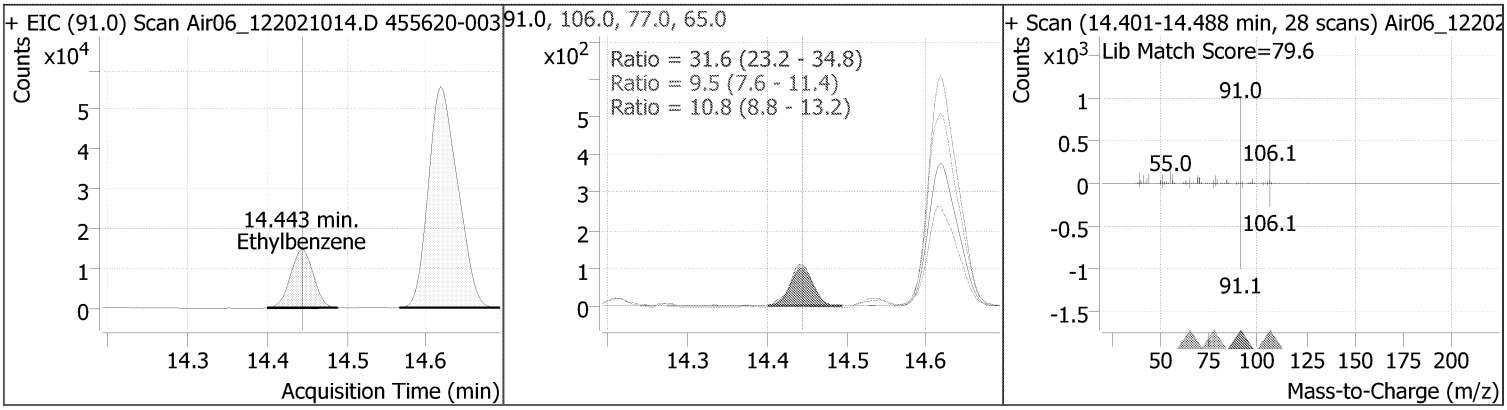
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	0.0008	14.04	0.00	45	133.0		77.8	116.6
					95.0		36.3	54.5
					61.0	25259.2	30.4	45.6



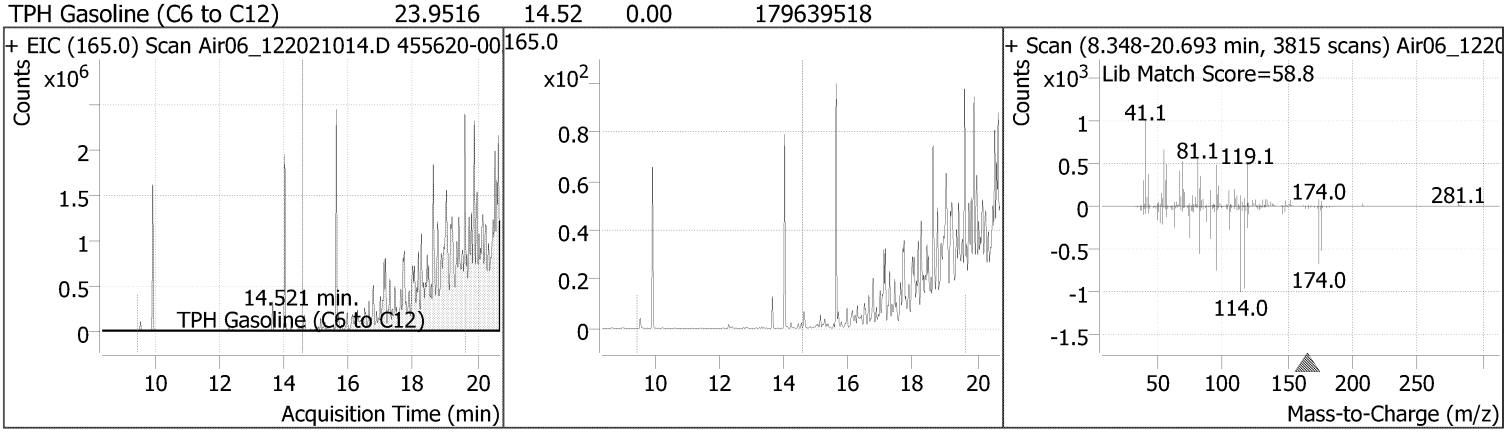
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0056	14.06	0.00	562	77.0		53.0	79.5
					51.0		28.8	43.2
					114.0	14.8	25.8	38.7



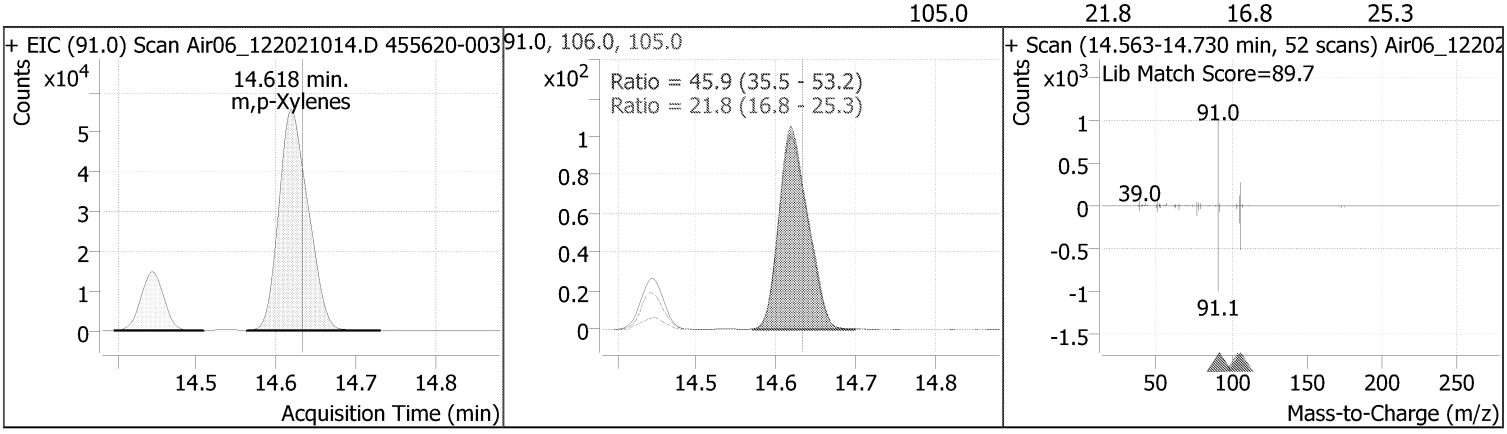
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.1792	14.44	0.00	29256	106.0	31.6	23.2	34.8
					65.0	10.8	8.8	13.2
					77.0	9.5	7.6	11.4



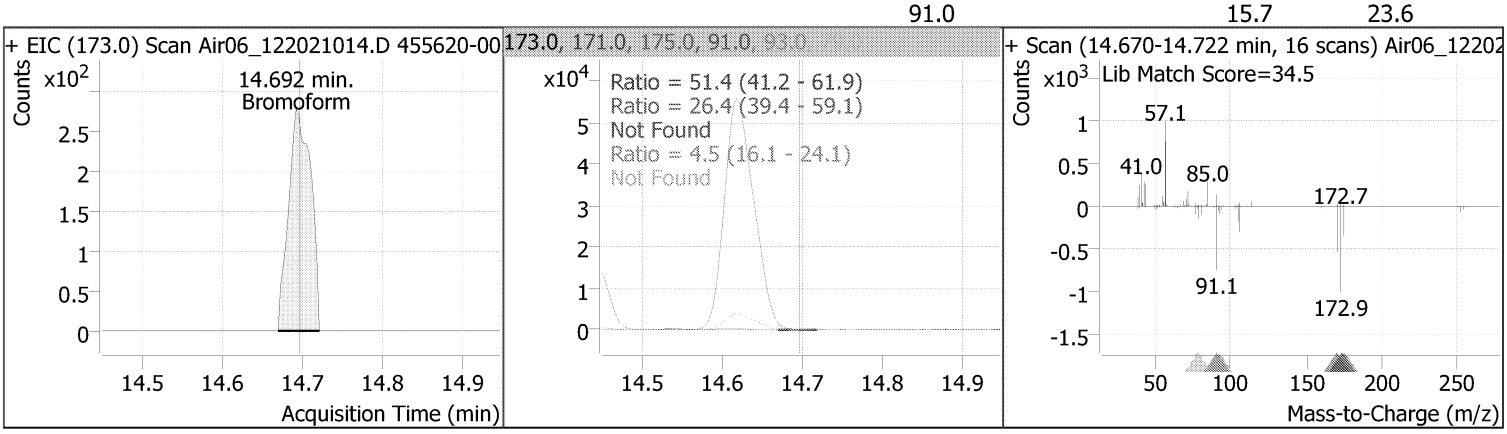
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	23.9516	14.52	0.00	179639518				



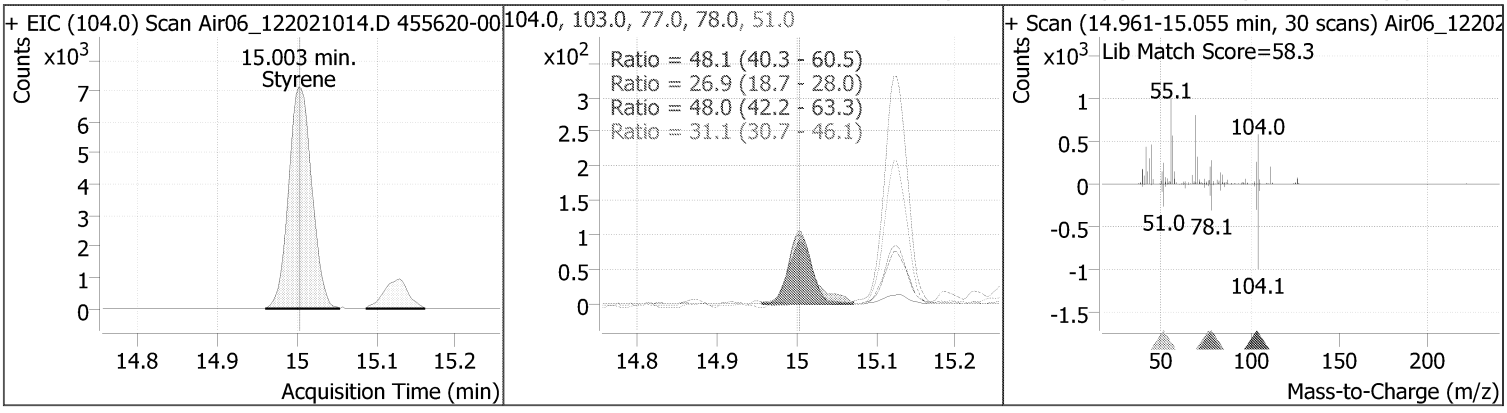
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	1.0392	14.62	-0.02	143115	106.0	45.9	35.5	53.2
					105.0	21.8	16.8	25.3



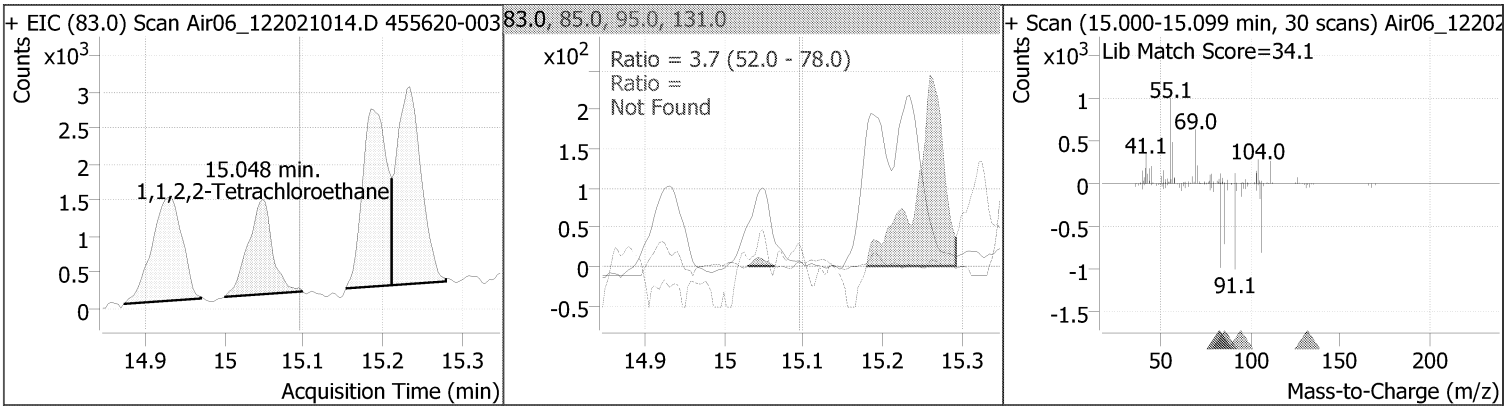
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.0049	14.69	-0.01	535	171.0	51.4	41.2	61.9
					175.0	26.4	39.4	59.1
					79.0		17.7	26.5
					93.0	4.5	16.1	24.1
					91.0		15.7	23.6



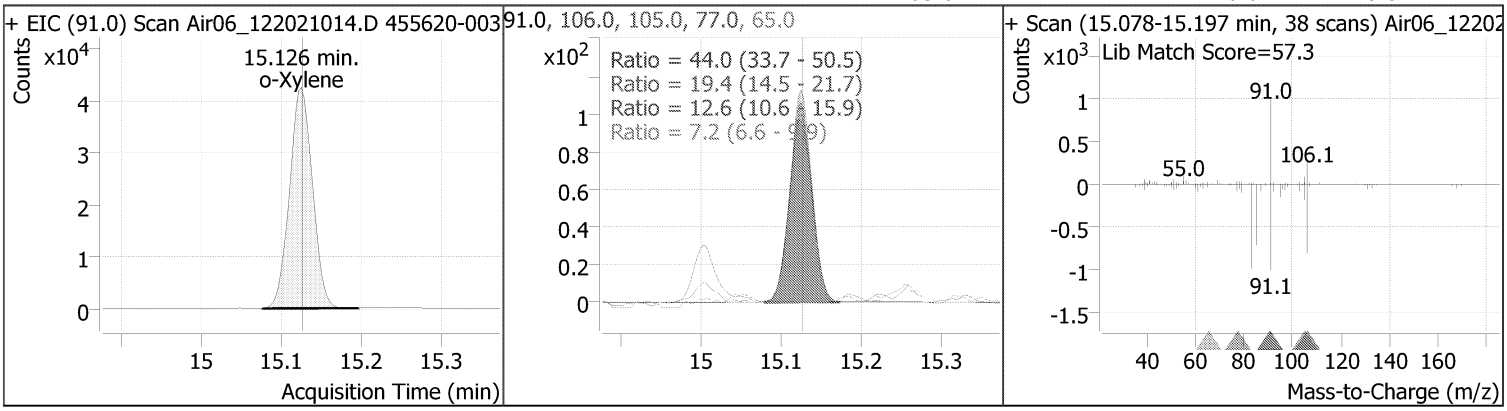
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	0.1572	15.00	-0.01	14501	78.0	48.0	42.2	63.3
					103.0	48.1	40.3	60.5
					51.0	31.1	30.7	46.1
					77.0	26.9	18.7	28.0



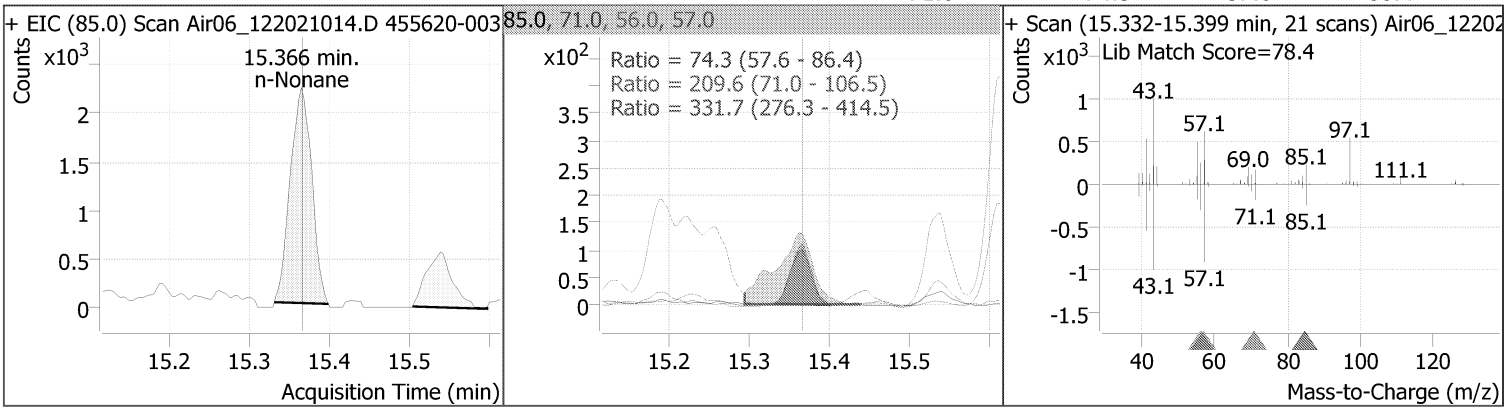
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.0283	15.05	-0.05	2793	85.0	3.7	52.0	78.0
					95.0		16.0	24.0
					131.0		8.4	12.6



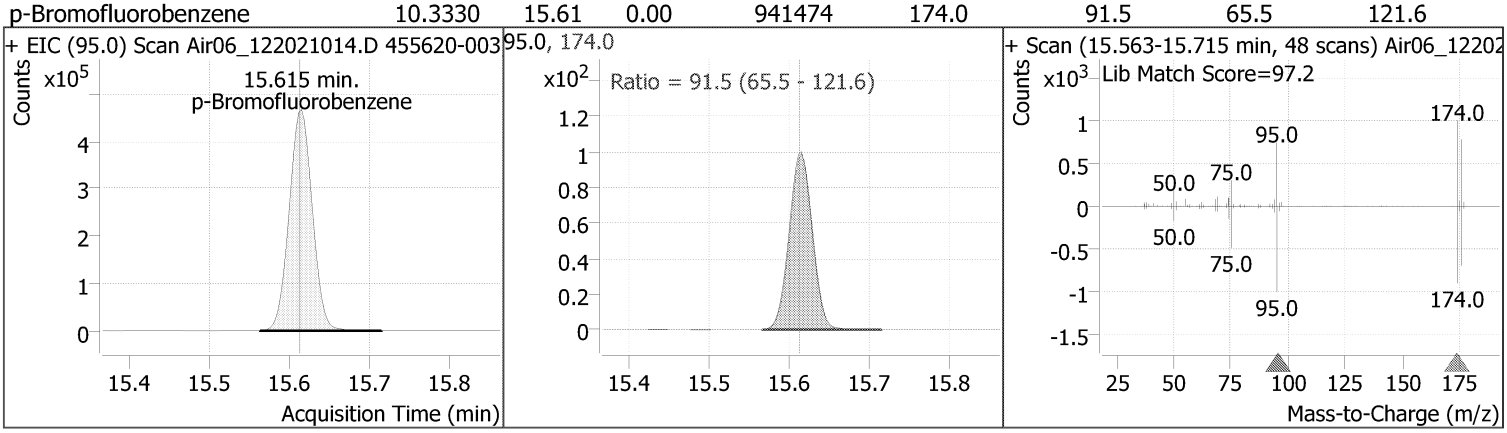
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.5952	15.13	0.00	85084	106.0	44.0	33.7	50.5
					105.0	19.4	14.5	21.7
					77.0	12.6	10.6	15.9
					65.0	7.2	6.6	9.9



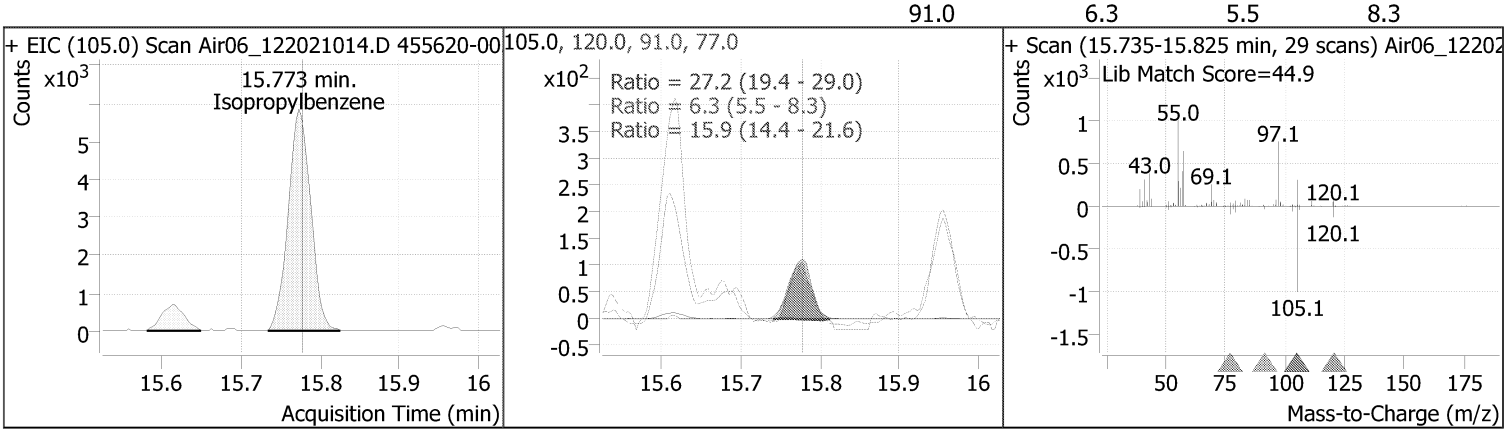
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	0.1429	15.37	0.00	4166	57.0	331.7	276.3	414.5
					56.0	209.6	71.0	106.5
					71.0	74.3	57.6	86.4



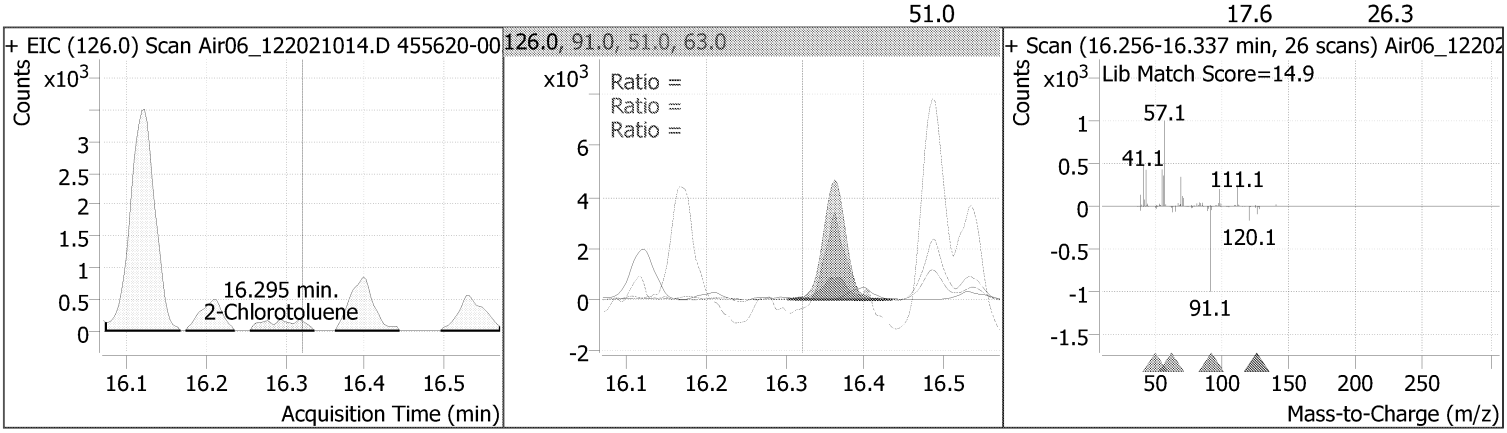
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.3330	15.61	0.00	941474	174.0	91.5	65.5	121.6



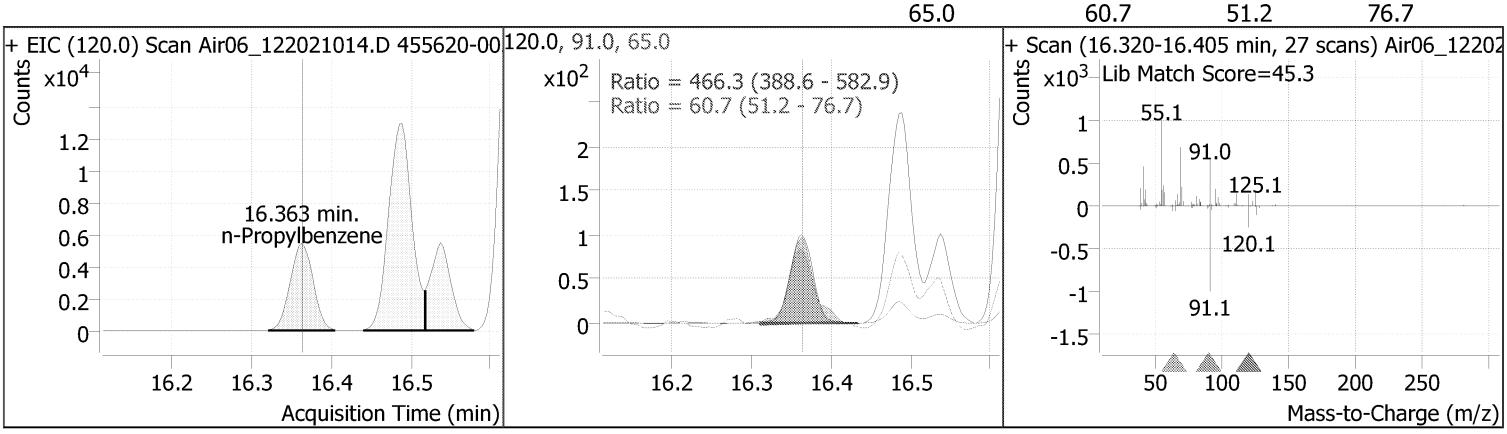
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.0593	15.77	-0.01	11510	120.0	27.2	19.4	29.0
					77.0	15.9	14.4	21.6
					91.0	6.3	5.5	8.3



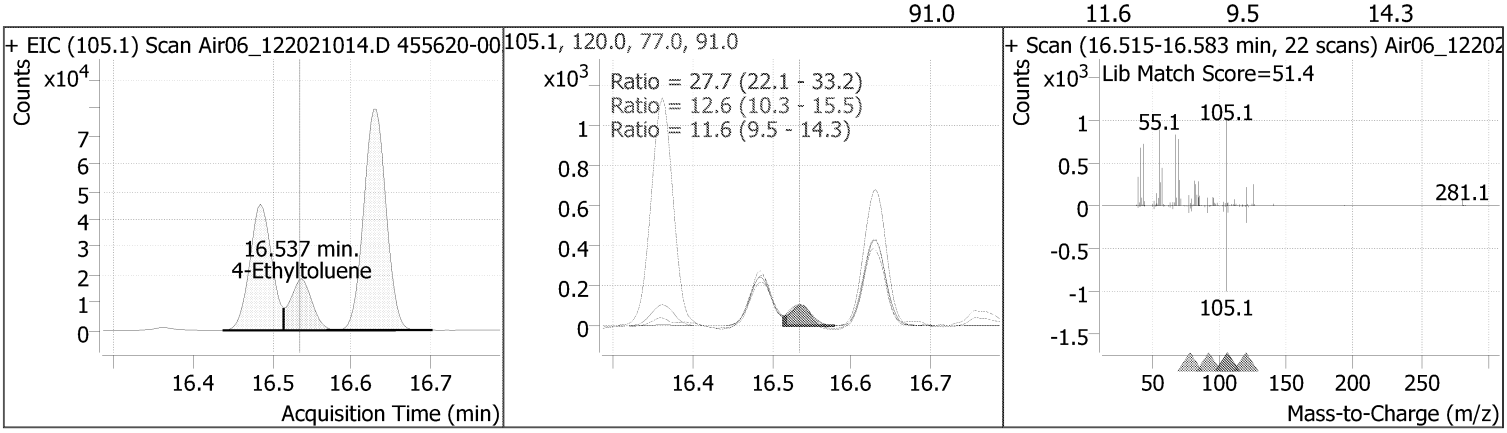
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	0.0140	16.29	-0.03	604	91.0		244.6	366.9
					63.0		50.0	74.9
					51.0		17.6	26.3



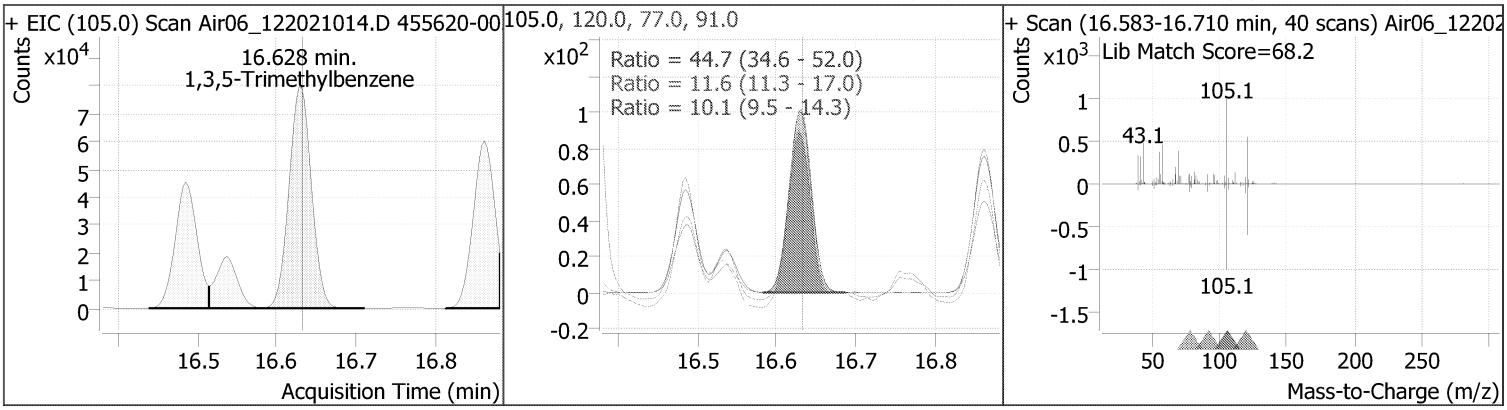
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.2226	16.36	0.00	10877	91.0	466.3	388.6	582.9
					65.0	60.7	51.2	76.7



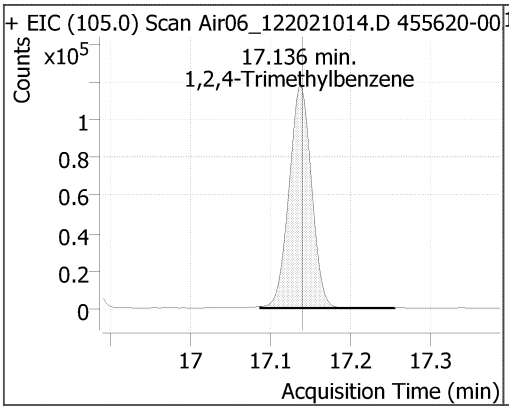
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.1903	16.54	0.00	35058	120.0	27.7	22.1	33.2
					77.0	12.6	10.3	15.5
					91.0	11.6	9.5	14.3

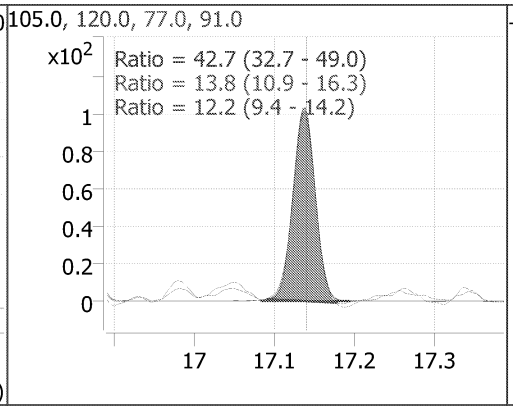


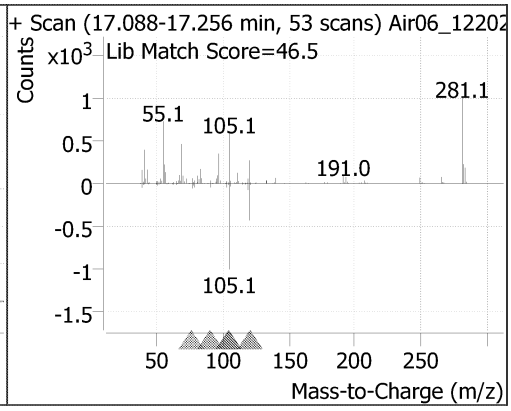
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.9306	16.63	-0.01	156090	120.0	44.7	34.6	52.0
					77.0	11.6	11.3	17.0
					91.0	10.1	9.5	14.3



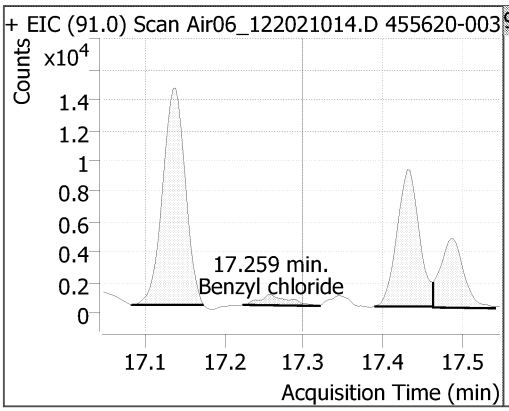
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	1.4819	17.14	-0.01	232491	120.0	42.7	32.7	49.0
					77.0	13.8	10.9	16.3
					91.0	12.2	9.4	14.2

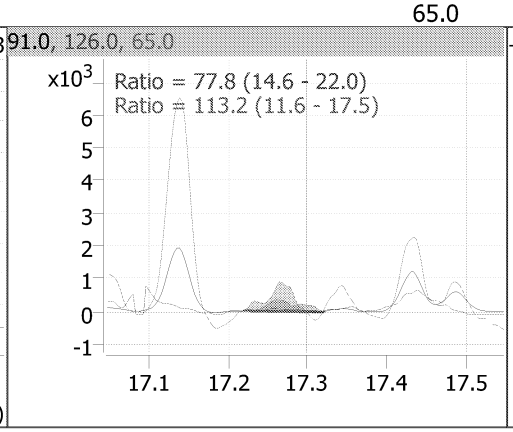


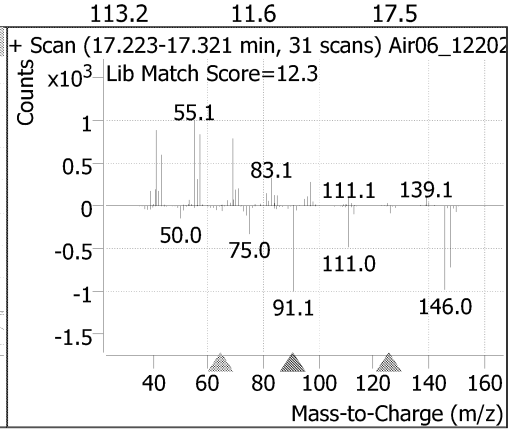




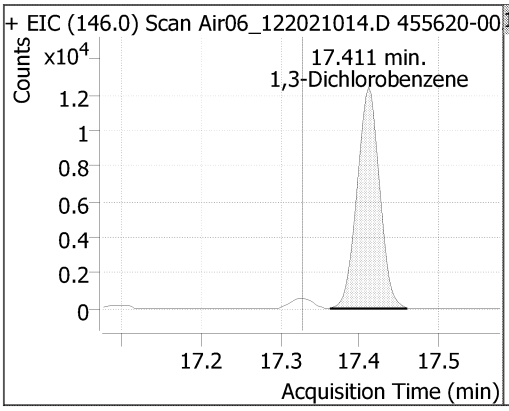
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.0133	17.26	-0.04	1803	126.0	77.8	14.6	22.0
					65.0	113.2	11.6	17.5

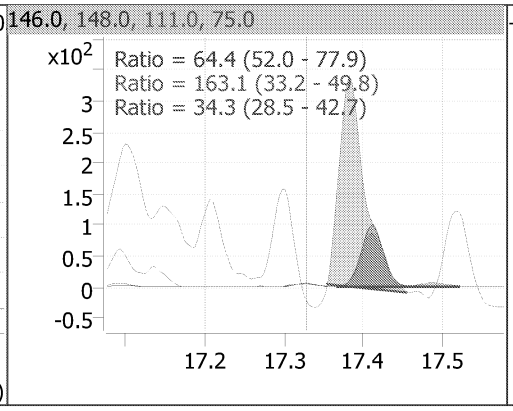


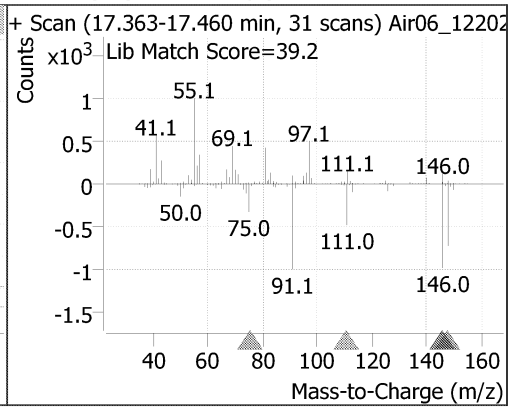




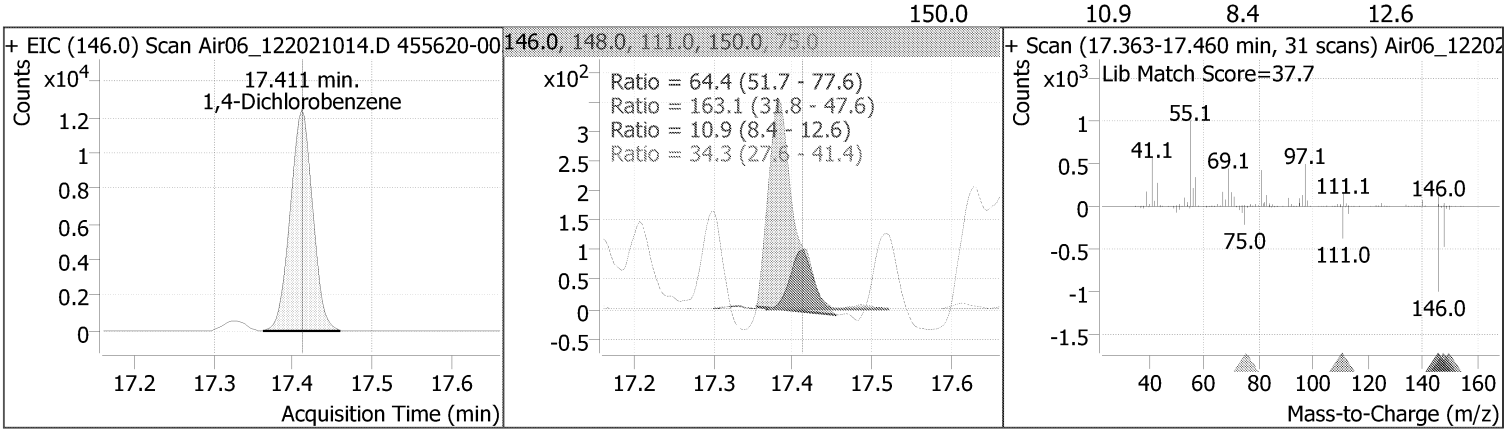
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.2250	17.41	0.08	24413	148.0	64.4	52.0	77.9
					111.0	163.1	33.2	49.8
					75.0	34.3	28.5	42.7



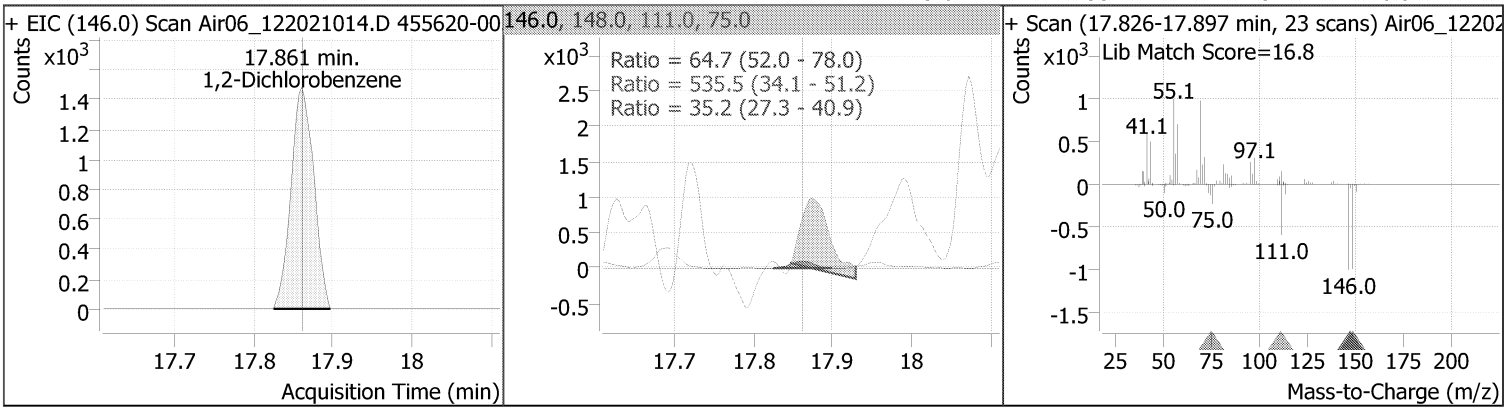




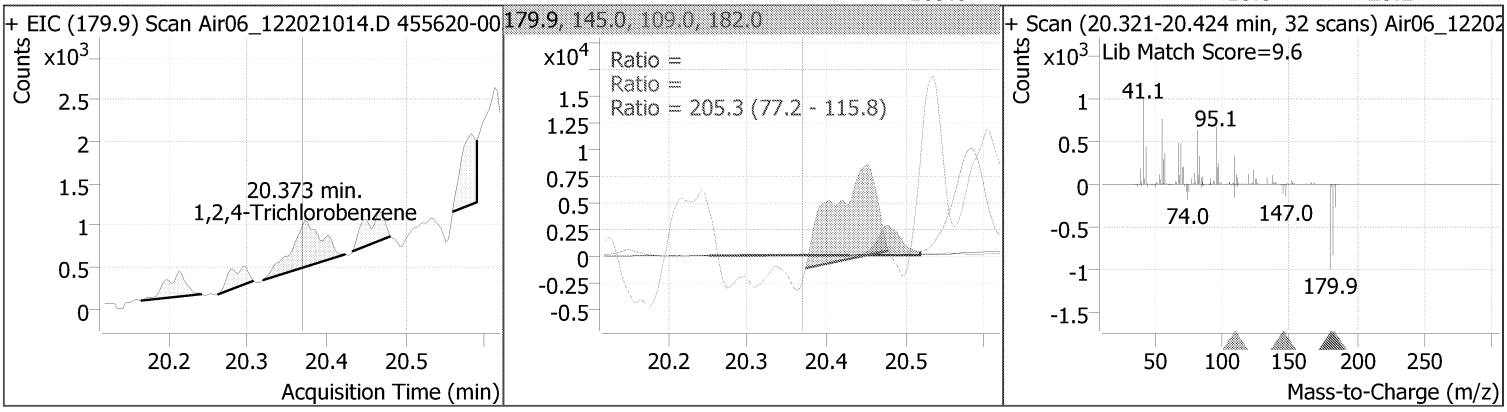
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.2279	17.41	0.00	24413	148.0	64.4	51.7	77.6
					111.0	163.1	31.8	47.6
					75.0	34.3	27.6	41.4
					150.0	10.9	8.4	12.6



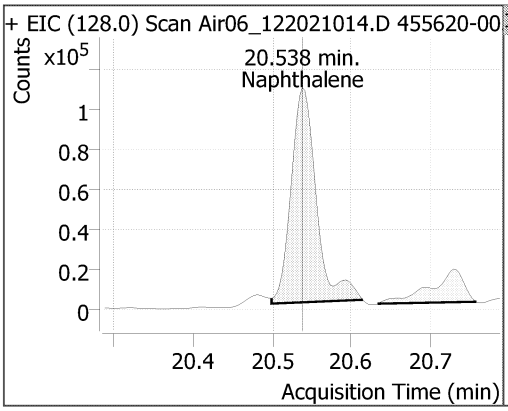
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.0282	17.86	0.00	2951	148.0	64.7	52.0	78.0
					111.0	535.5	34.1	51.2
					75.0	35.2	27.3	40.9

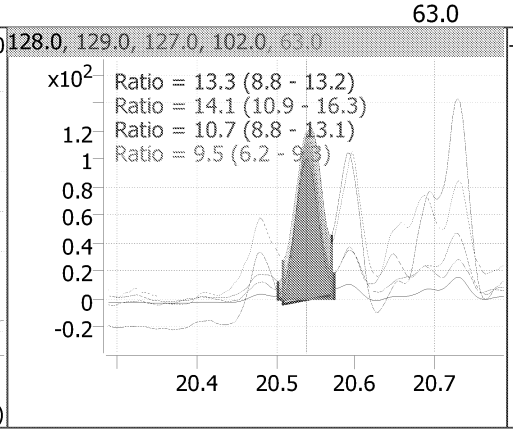


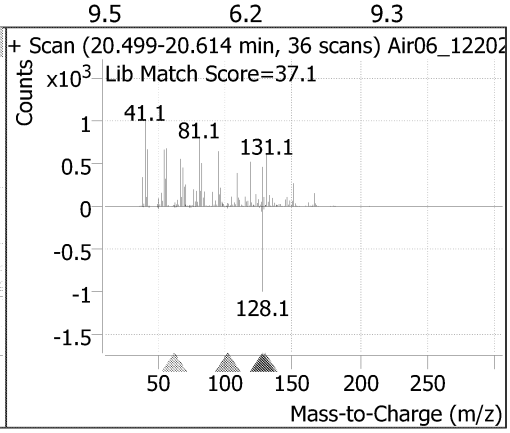
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.0198	20.37	0.00	1476	182.0	205.3	77.2	115.8
					145.0		22.3	33.5
					109.0		18.8	28.2



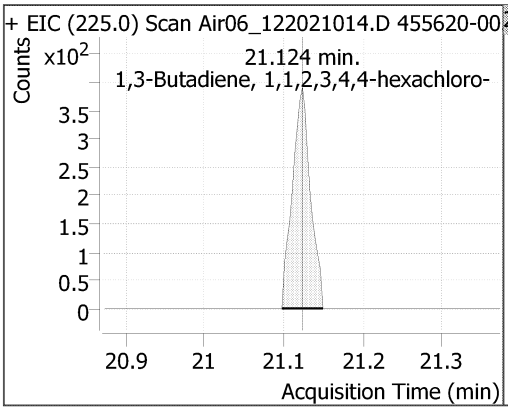
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	2.0733	20.54	0.00	239506	127.0	14.1	10.9	16.3
					129.0	13.3	8.8	13.2
					102.0	10.7	8.8	13.1
					63.0	9.5	6.2	9.3

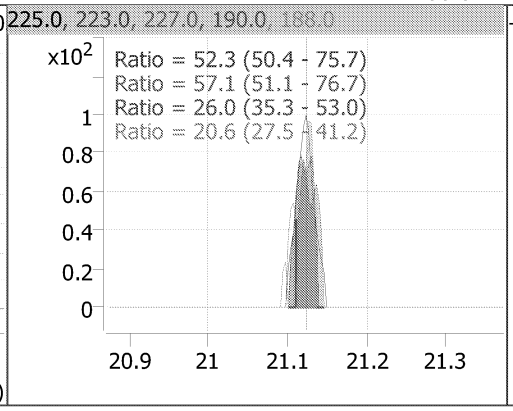


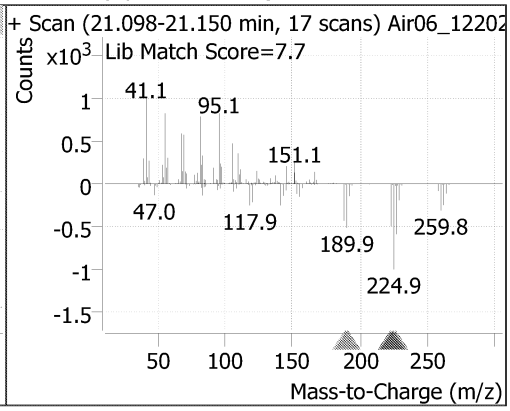




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.0051	21.12	0.00	618	227.0	57.1	51.1	76.7
					223.0	52.3	50.4	75.7
					190.0	26.0	35.3	53.0
					188.0	20.6	27.5	41.2







Library Search Results - NonTarget Hits with Details

Agilent Technologies

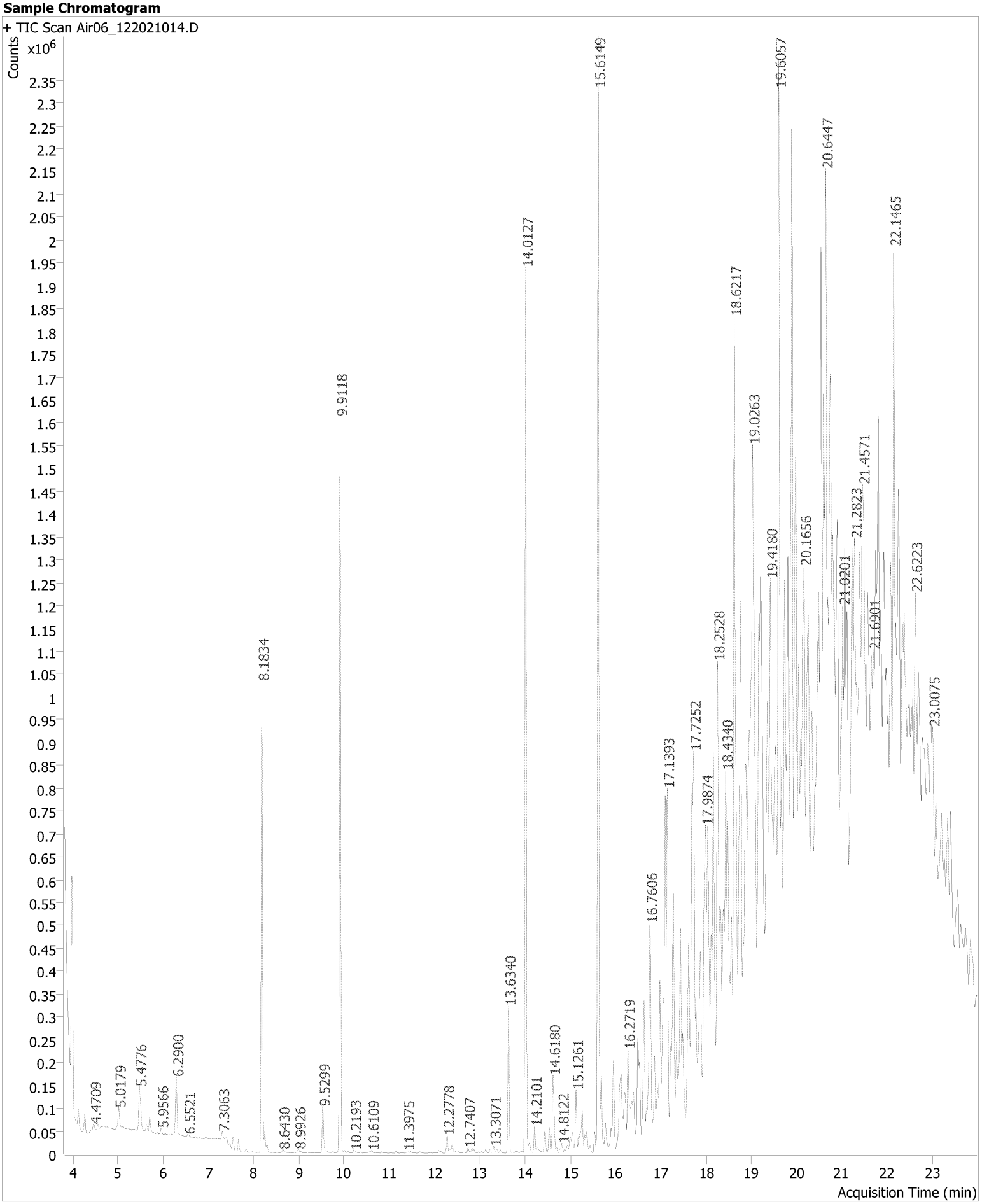
Batch Path	D:\MassHunter\GCMS\1\data\2021\122021		
Analysis File Name	122021_1.uaf		
Analyst Name	003AIRMS06	**Analysis Time**	1/4/2022 11:18:48 AM
File Name	Air06_122021014.D	**Path Name**	D:\MassHunter\GCMS\1\data\2021\122021
Sample Name	455620-003,280281,2x,PDF:1,C10076	**Type**	Sample
Acq. Method File	TO15_Acq_013120_1	**Acq. Method Path**	D:\MassHunter\GCMS\1\methods\
Acq. Date-Time	12/20/2021 8:53:37 PM	**Acq. Operator**	ZNZ/DJL/LJB
Instrument Name	Air-MS-06	**Dil.**	1

Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
3.9822	Dichlorodifluoromethane	75-71-8	CCl2F2	1676837.9	99.2	7.652
4.1279	Dimethyl ether	115-10-6	C2H6O	122595.6	81.9	0.5594
4.2670	Glycidol	556-52-5	C3H6O2	77503.6	84.7	0.3537
4.4709	1-Propene, 2-methyl-	115-11-7	C4H8	43004.5	87.2	0.1962
4.5616	Butane	106-97-8	C4H10	29214.3	85.6	0.1333
4.6910	Acetamide, 2-fluoro-	640-19-7	C2H4FNO	76706.2	74.9	0.35
5.0179	Dimethyl ether	115-10-6	C2H6O	123964.6	83.8	0.5657
5.4776	Acetone	67-64-1	C3H6O	277987.1	97.3	1.268
5.6329	Trichloromonofluoromethane	75-69-4	CCl3F	27162.2	95.9	0.1239
5.7041	Isopropyl Alcohol	67-63-0	C3H8O	72249.9	96.5	0.3297
5.9566	Pentane	109-66-0	C5H12	23153.1	95.7	0.1057
6.2900	Methylene chloride	75-09-2	CH2Cl2	309808.5	91.1	1.414
6.5521	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	76-13-1	C2Cl3F3	12281.9	87.6	0.05604
7.3063	Silanol, trimethyl-	1066-40-6	C3H10OSi	31179.1	92.1	0.1423
7.4778	Pentane, 2-methyl-	107-83-5	C6H14	6694.2	92.9	0.03055
7.5458	Butanal	123-72-8	C4H8O	42266.4	95.7	0.1929
7.6688	2-Butanone	78-93-3	C4H8O	56476.0	95.4	0.2577
7.8339	Pentane, 3-methyl-	96-14-0	C6H14	12211.4	94.2	0.05572
8.1834	Methane, bromochloro-	74-97-5	CH2BrCl	2191475.9	98.8	10
8.2482	Isobutyl acetate	110-19-0	C6H12O2	96655.7	83.0	0.4411
8.2967	Trichloromethane	67-66-3	CHCl3	34475.5	92.1	0.1573
8.6430	1-Propanol, 2-methyl-	78-83-1	C4H10O	18891.0	93.8	0.0862
8.9926	Cyclopentane, methyl-	96-37-7	C6H12	21137.1	89.7	0.09645
9.5299	1-Butanol	71-36-3	C4H10O	223747.1	96.9	0.6887
9.6076	Benzene	71-43-2	C6H6	13805.8	91.6	0.04249
9.9118	Benzene, 1,4-difluoro-	540-36-3	C6H4F2	3248885.8	99.4	10
10.0057	Hexane, 2-methyl-	591-76-4	C7H16	12631.4	84.3	0.03888
10.2193	Pentanal	110-62-3	C5H10O	18276.8	93.1	0.05626
10.6109	Hexane, 2,2-dimethyl-	590-73-8	C8H18	12266.7	93.5	0.03776
11.3975	Methyl Isobutyl Ketone	108-10-1	C6H12O	10760.6	86.4	0.03312
12.0966	1-Pentanol	71-41-0	C5H12O	13680.8	92.8	0.03441
12.2778	Toluene	108-88-3	C7H8	80570.6	98.0	0.2026
12.3329	Acetylacetone	123-54-6	C5H8O2	19702.0	95.2	0.04955
12.3911	Cyclopentanone	120-92-3	C5H8O	48403.1	93.6	0.1217
12.7407	Hexanal	66-25-1	C6H12O	23823.4	95.9	0.05992
12.8281	Cyclohexane, 1,4-dimethyl-	589-90-2	C8H16	22988.8	90.6	0.05782
13.1291	1-Octanol	111-87-5	C8H18O	15121.8	82.3	0.03803
13.2327	Octane	111-65-9	C8H18	15654.1	89.6	0.03937
13.3071	Cyclohexane, 1,2-dimethyl- (cis/trans)	583-57-3	C8H16	28306.1	94.5	0.07119
13.3751	Tetrachloroethylene	127-18-4	C2Cl4	17862.5	84.6	0.04493
13.4495	Cyclohexane, 1,4-dimethyl-	589-90-2	C8H16	12682.6	81.0	0.0319
13.6340	Cyclotrisiloxane, hexamethyl-	541-05-9	C6H18O3Si3	651421.3	98.3	1.638
14.0127	Chlorobenzene-d5	3114-55-4	C6D5Cl	3975915.8	96.0	10
14.0936	Cyclohexane, ethyl-	1678-91-7	C8H16	58974.3	81.5	0.1483
14.2101	Cyclohexane, 1,1,3-trimethyl-	3073-66-3	C9H18	119271.6	97.4	0.3
14.2749	1,1,4-Trimethylcyclohexane	7094-27-1	C9H18	40781.1	89.1	0.1026
14.4399	Ethylbenzene	100-41-4	C8H10	110765.6	84.2	0.2786
14.5338	Cyclohexane, 1,2,4-trimethyl-, (1.alpha.,2.beta.,4.beta.)-	7667-60-9	C9H18	114507.3	96.9	0.288
14.6180	Benzene, 1,3-dimethyl-	108-38-3	C8H10	476139.7	99.4	1.198
14.7021	3-Heptanone	106-35-4	C7H14O	18415.8	73.6	0.04632
14.7733	2-Nonanone, 9-hydroxy-	25368-56-3	C9H18O2	11055.7	78.9	0.02781
14.8122	Octane, 2,3-dimethyl-	7146-60-3	C10H22	45521.8	85.6	0.1145
14.8737	Pentalene, octahydro-	694-72-4	C8H14	15510.1	91.8	0.03901
14.9319	Cyclopentane, 1-methyl-3-(1-methylethyl)-	53771-88-3	C9H18	37921.9	86.5	0.09538
15.0031	Bicyclo[4.2.0]octa-1,3,5-triene	694-87-1	C8H8	94892.2	93.6	0.2387
15.0484	Cyclohexane, 1,2,4-trimethyl-	2234-75-5	C9H18	102676.4	95.9	0.2582
15.1261	o-Xylene	95-47-6	C8H10	290075.8	97.5	0.7296
15.1876	Cyclooctane, methyl-	1502-38-1	C9H18	83519.2	94.3	0.2101
15.2621	Cyclohexane, 1-ethyl-4-methyl-, trans-	6236-88-0	C9H18	275056.3	90.0	0.6918

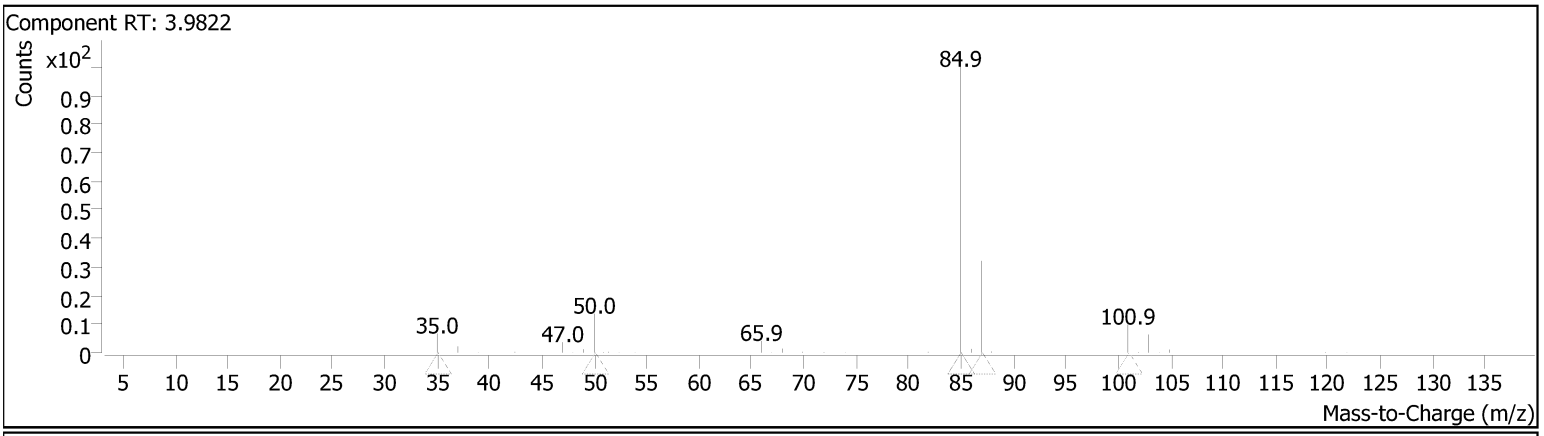
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
15.3203	Cyclohexane, 1-ethyl-4-methyl-, cis-	4926-78-7	C9H18	85963.4	95.9	0.2162
15.3656	Nonane	111-84-2	C9H20	103896.0	91.0	0.2613
15.4336	Cyclohexene,3-propyl-	3983-06-0	C9H16	31187.3	84.7	0.07844
15.5372	Cyclooctane, 1,2-dimethyl-	13151-94-5	C10H20	54081.4	91.2	0.136
15.6149	Benzene, 1-bromo-3-fluoro-	1073-06-9	C6H4BrF	4495182.7	98.6	11.31
15.6828	2-Hexene, 3,4,4-trimethyl-	53941-19-8	C9H18	149735.6	84.7	0.3766
15.7735	Carbonic acid, decyl propyl ester	1000314-53-7	C14H28O3	58945.2	71.2	0.1483
15.9515	1H-Indene, octahydro-, cis-	4551-51-3	C9H16	270049.1	93.4	0.6792
16.1198	Cyclohexanone, 3-ethyl-	22461-89-8	C8H14O	341919.1	85.7	0.86
16.2007	Cyclohexane, 1,1,2,3-tetramethyl-	6783-92-2	C10H20	40038.1	87.0	0.1007
16.2719	Heptane, 3-ethyl-2-methyl-	14676-29-0	C10H22	321551.8	95.3	0.8087
16.3625	Benzene, propyl-	103-65-1	C9H12	12665.7	88.1	0.03186
16.3949	Cyclohexaneethanol, .beta.,4-dimethyl-, trans-	5113-94-0	C10H20O	40794.6	78.6	0.1026
16.6279	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	491708.3	93.0	1.237
16.6830	1H-Indene, octahydro-, trans-	3296-50-2	C9H16	17402.6	83.3	0.04377
16.7606	Cyclohexane, 1,1,2,3-tetramethyl-	6783-92-2	C10H20	1179630.7	92.5	2.967
16.8610	Benzene, 1-ethyl-2-methyl-	611-14-3	C9H12	239564.2	94.5	0.6025
16.9290	Cyclohexene, 3-(2-methylpropyl)-	4104-56-7	C10H18	160396.0	81.9	0.4034
16.9807	Cycloheptanemethanol	4448-75-3	C8H16O	651341.2	87.4	1.638
17.0519	2-Ethoxy-2-cyclohexen-1-one	29941-82-0	C8H12O2	645214.5	80.5	1.623
17.0940	Cyclotetrasiloxane, octamethyl-	556-67-2	C8H24O4Si4	1532652.9	95.4	3.855
17.1393	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	1573144.1	73.2	3.957
17.2203	Cyclopentane, 1-methyl-3-(2-methylpropyl)-	29053-04-1	C10H20	331559.9	95.3	0.8339
17.2753	1-Decanol, 2-ethyl-	21078-65-9	C12H26O	1331558.5	86.6	3.349
17.3465	1-Pentadecyne	765-13-9	C15H28	394632.7	86.8	0.9926
17.4339	m-Menthane, (1S,3S)-(+)-	13837-67-7	C10H20	1165556.6	82.3	2.932
17.4824	Benzene, 1-methyl-2-propyl-	1074-17-5	C10H14	500916.5	77.3	1.26
17.6151	(S,E)-2,5-Dimethyl-4-vinylhexa-2,5-dien-1-yl acetate	20384-05-8	C12H18O2	1181008.6	73.6	2.97
17.6896	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	1595414.7	84.8	4.013
17.7252	1-Decene, 3,4-dimethyl-	50871-03-9	C12H24	2096975.6	88.9	5.274
17.7737	Cyclohexene, 1-butyl-	3282-53-9	C10H18	535687.9	80.5	1.347
17.8741	Cyclododecanemethanol	1892-12-2	C13H26O	1405637.3	81.8	3.535
17.9874	1-Octadecyne	629-89-0	C18H34	2470929.7	91.6	6.215
18.0359	Oxalic acid, cyclohexyl nonyl ester	1000309-31-1	C17H30O4	2155021.5	73.6	5.42
18.1136	trans-p-mentha-1(7),8-dien-2-ol	21391-84-4	C10H16O	884531.2	77.9	2.225
18.1621	Benzene, 1-methyl-2-propyl-	1074-17-5	C10H14	2312072.2	76.9	5.815
18.2528	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	3252550.1	90.0	8.181
18.3240	4-Octene, 2,3,7-trimethyl-, [S-(E)]-	52763-13-0	C11H22	985744.1	73.8	2.479
18.3790	Isobutyl octyl carbonate	1000372-74-6	C13H26O3	1345678.6	72.9	3.385
18.4340	Cyclohexane, 1,1-dimethyl-2-propyl-	81983-71-3	C11H22	1932801.7	87.8	4.861
18.4793	Benzene, 1-methyl-4-propyl-	1074-55-1	C10H14	1941540.7	93.9	4.883
18.5602	Decane, 3-methyl-	13151-34-3	C11H24	1184621.7	71.7	2.979
18.6217	Naphthalene, decahydro-, trans-	493-02-7	C10H18	5752800.2	90.0	14.47
18.7642	p-Cymene	99-87-6	C10H14	4162194.1	80.1	10.47
18.8224	Tetrahydrocarvone	499-70-7	C10H18O	699362.2	82.1	1.759
18.8742	Carane, 4,5-epoxy-, trans	6909-20-2	C10H16O	2868341.1	70.3	7.214
18.9519	Cyclohexane, 1-isopropyl-1-methyl-	16580-26-0	C10H20	2833671.6	85.7	7.127
19.0263	Undecane	1120-21-4	C11H24	8578992.7	87.0	21.58
19.1655	(S,E)-2,5-Dimethyl-4-vinylhexa-2,5-dien-1-yl acetate	20384-05-8	C12H18O2	2992513.5	79.8	7.527
19.3565	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	3766189.9	85.5	9.473
19.4180	Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	C10H14	4736278.1	78.7	11.91
19.5345	Decane, 3,7-dimethyl-	17312-54-8	C12H26	3502545.9	74.0	8.809
19.6057	Naphthalene, decahydro-2-methyl-	2958-76-1	C11H20	5653375.9	95.5	14.22
19.6704	Benzene, 1,3-diethyl-5-methyl-	2050-24-0	C11H16	832298.4	85.7	2.093
19.7362	Benzene, 1,3-diethyl-5-methyl-	2050-24-0	C11H16	2289315.0	84.7	5.758
19.8970	Naphthalene, decahydro-2-methyl-	2958-76-1	C11H20	5481526.1	97.1	13.79
19.9812	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	3730633.4	87.2	9.383
20.0426	Benzene, 1-methyl-4-(1-methylpropyl)-	1595-16-0	C11H16	1541027.5	80.8	3.876
20.0944	1-Undecene, 4-methyl-	74630-39-0	C12H24	949421.7	77.0	2.388
20.1656	Benzene, (1,2-dimethylpropyl)-	4481-30-5	C11H16	3222850.2	85.0	8.106
20.2563	Benzene, 1-methyl-4-(1-methylpropyl)-	1595-16-0	C11H16	3032790.5	73.5	7.628
20.3404	Cyclododecanemethanol	1892-12-2	C13H26O	1669418.7	82.5	4.199
20.4084	Benzene, 2,4-dimethyl-1-(1-methylpropyl)-	1483-60-9	C12H18	844126.3	70.6	2.123
20.4828	Benzene, 1,2,4-triethyl-	877-44-1	C12H18	2936303.9	79.5	7.385
20.5961	Benzene, 1-methyl-4-(1-methylpropyl)-	1595-16-0	C11H16	2907554.9	72.0	7.313
20.6447	Dodecane	112-40-3	C12H26	4250093.5	70.0	10.69
20.6900	1H-Indene, 2,3-dihydro-1,6-dimethyl-	17059-48-2	C11H14	1155401.6	73.3	2.906
20.7450	Naphthalene, decahydro-1,5-dimethyl-	66552-62-3	C12H22	4632878.3	90.4	11.65
20.8000	Naphthalene, decahydro-1,6-dimethyl-	1750-51-2	C12H22	2095603.1	75.8	5.271

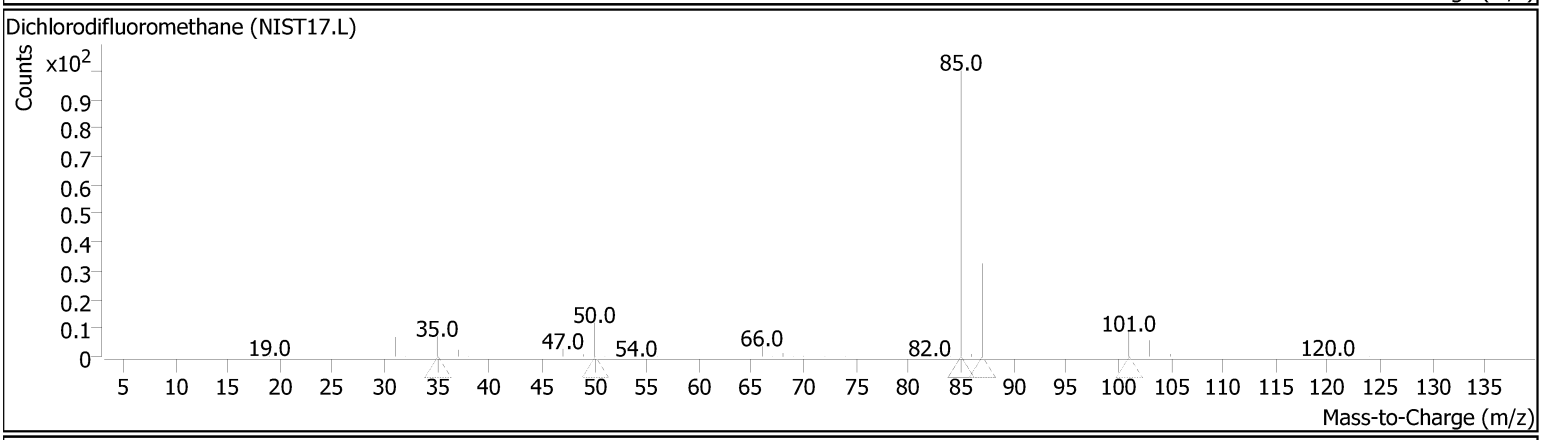
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
20.8324	Cyclohexane, 1-methyl-2-pentyl-	54411-01-7	C12H24	1315302.8	71.0	3.308
20.9813	Naphthalene, 1,2,3,4-tetrahydro-1,8-dimethyl-	25419-33-4	C12H16	1184568.1	79.9	2.979
21.0201	Benzene, 2,4-dimethyl-1-(1-methylethyl)-	4706-89-2	C11H16	1707758.2	74.4	4.295
21.2273	Naphth[1,2-b]oxirene, decahydro-1a,7-dimethyl-	55976-08-4	C12H20O	3144136.7	80.5	7.908
21.2823	Benzene, 1-ethyl-4-(1-methylethyl)-	4218-48-8	C11H16	3655102.2	70.6	9.193
21.3956	Cyclohexane, 2-butyl-1,1,3-trimethyl-	54676-39-0	C13H26	3247647.4	81.0	8.168
21.4571	Naphthalene, decahydro-1,6-dimethyl-	1750-51-2	C12H22	5431326.7	77.7	13.66
21.6545	Naphthalene, 2-ethyldecahydro-	1618-23-1	C12H22	1556230.3	77.6	3.914
21.6901	Benzene, 1,4-dimethyl-2-(2-methylpropyl)-	55669-88-0	C12H18	1663108.3	73.9	4.183
22.0785	2-Benzofuranmethanol, 2,4,5,6,7,7a-hexahydro-4,4,7a-trimethyl-, cis-	77384-15-7	C12H20O2	2428458.0	75.7	6.108
22.1465	Tridecane	629-50-5	C13H28	4175786.3	76.5	10.5
22.3407	4-Hydroxy-4-methyl-4H-naphthalen-1-one	42860-82-2	C11H10O2	1873480.4	73.4	4.712
22.3763	1H-Indene, 2,3-dihydro-1,1,5-trimethyl-	40650-41-7	C12H16	3057414.8	72.6	7.69
22.5349	Naphthalene, 2-methyl-	91-57-6	C11H10	1159269.6	78.2	2.916
22.6223	Benzene, 4-(2-butenyl)-1,2-dimethyl-, (E)-	54340-86-2	C12H16	2539259.8	85.3	6.387
22.9006	1H-Indene, 2,3-dihydro-1,1,4,7-tetramethyl-	1078-04-2	C13H18	1522307.4	74.1	3.829
23.0075	Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	13065-07-1	C12H16	1297609.0	72.1	3.264
23.0787	Cyclopentanone, 2-(2-nitro-2-heptenyl)-	104313-57-7	C12H19NO3	1126832.5	77.9	2.834
23.2017	Toluene, 4-(1,1-dimethyl-2-propynyloxy)-	82719-54-8	C12H14O	1401429.5	72.1	3.525
23.3408	8-Hexadecyne	19781-86-3	C16H30	957929.1	79.2	2.409
23.8458	8-Hexadecyne	19781-86-3	C16H30	416231.5	77.4	1.047

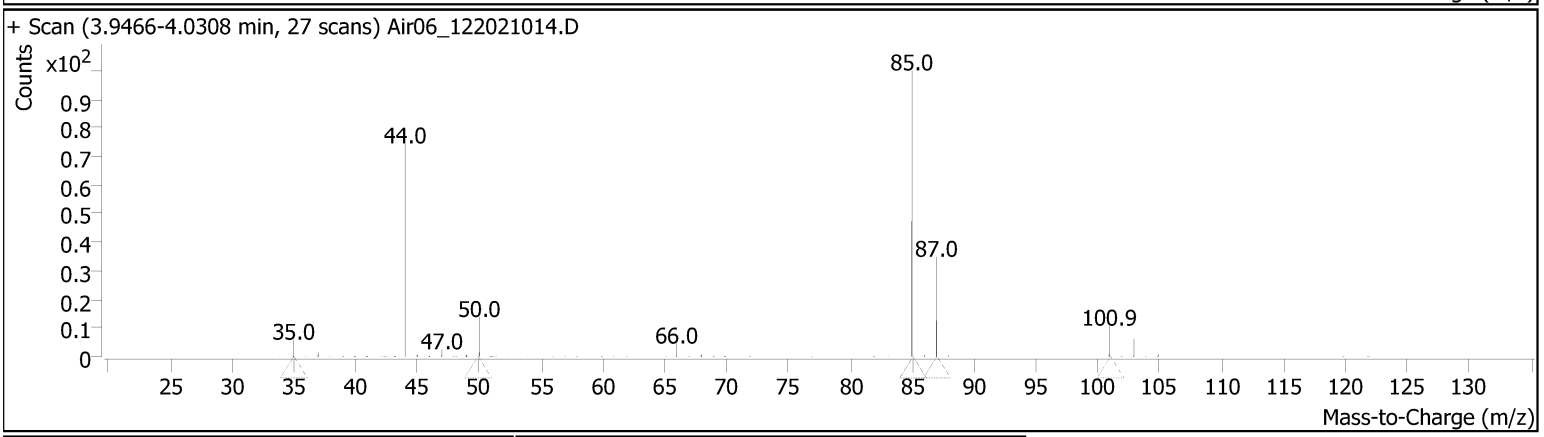
Sample Chromatogram

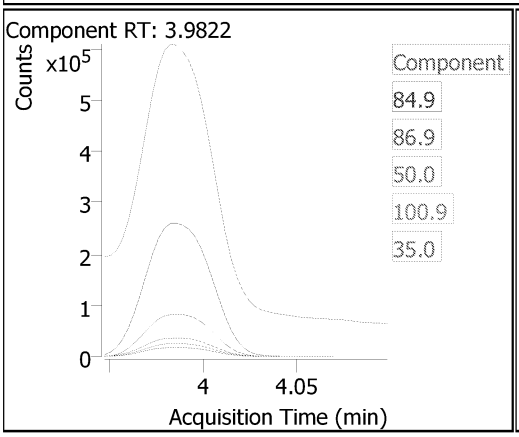


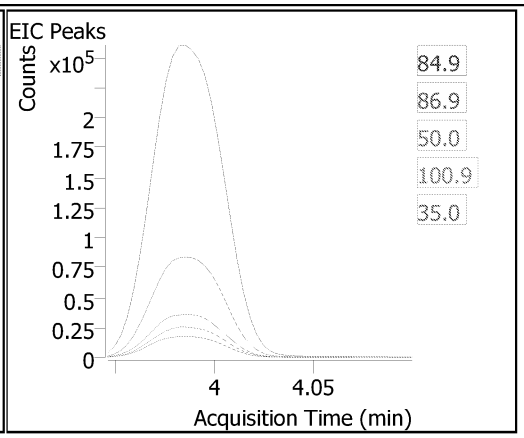
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
3.9822	Dichlorodifluoromethane	1676837.9	99.2	75-71-8	CCl2F2	7.652

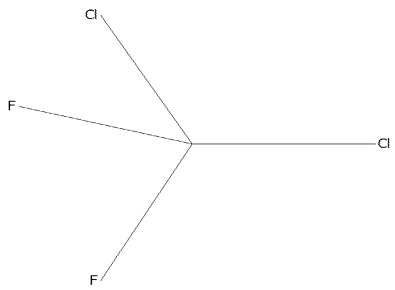




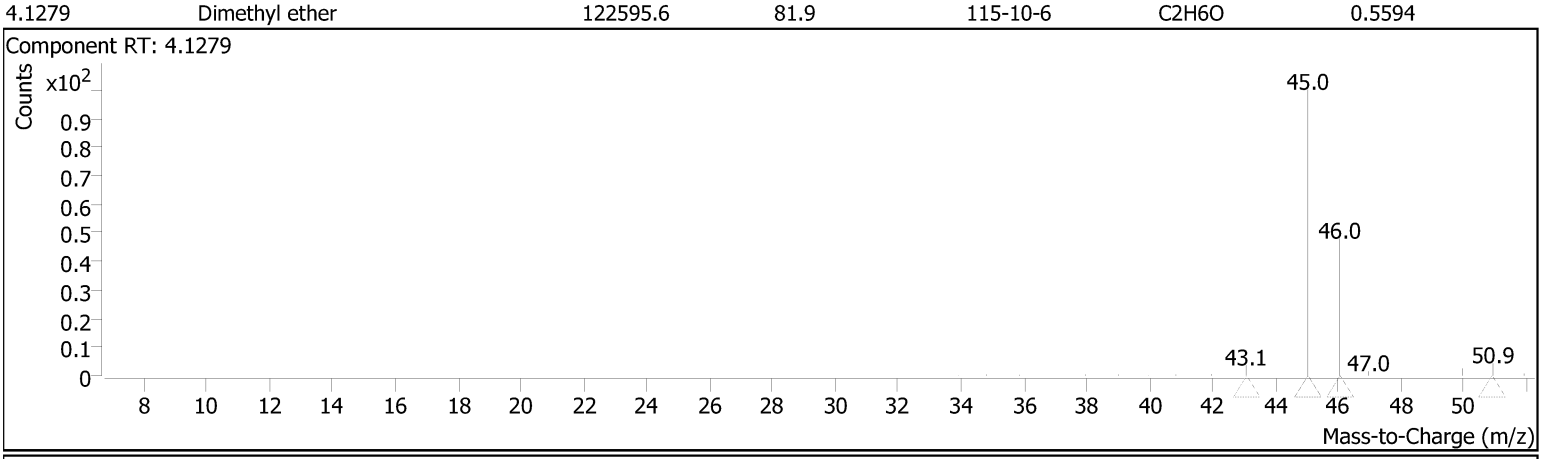


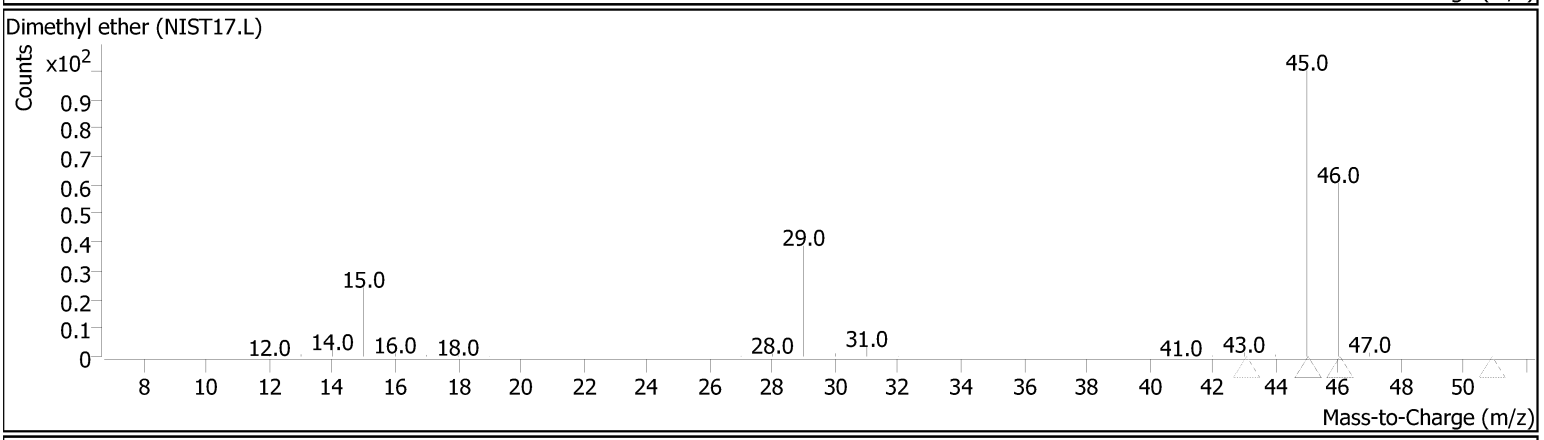


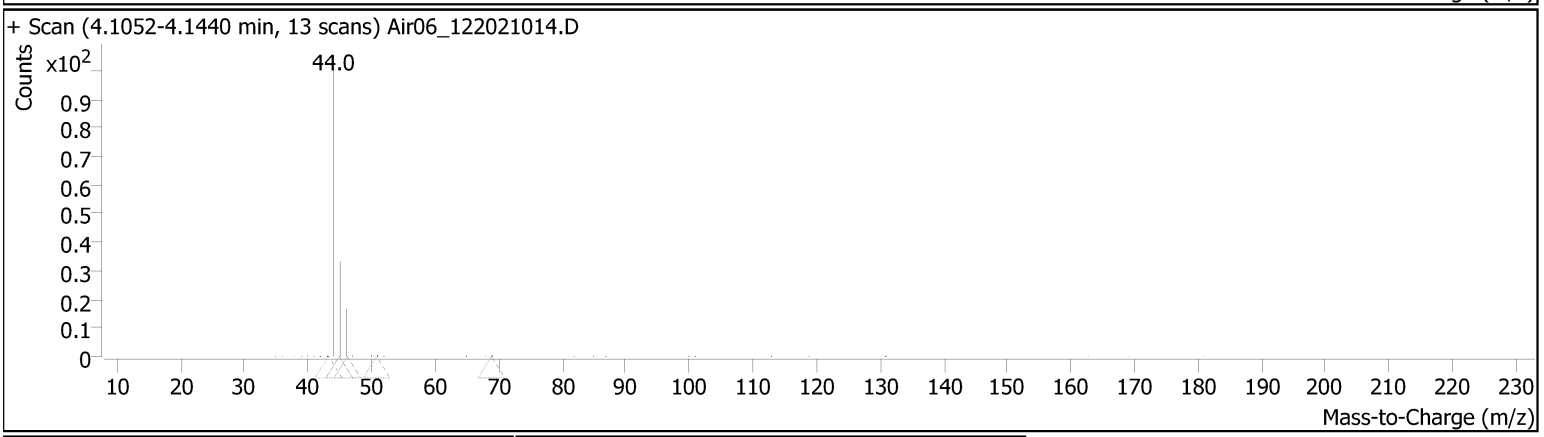


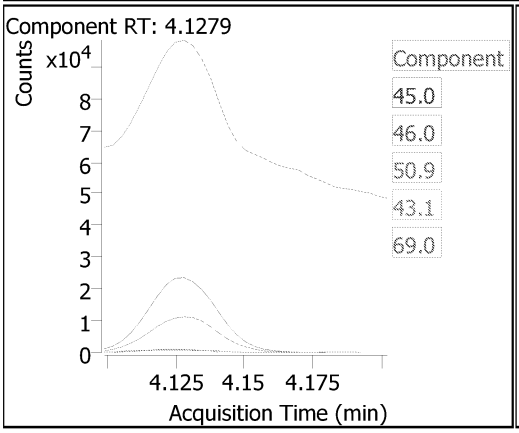


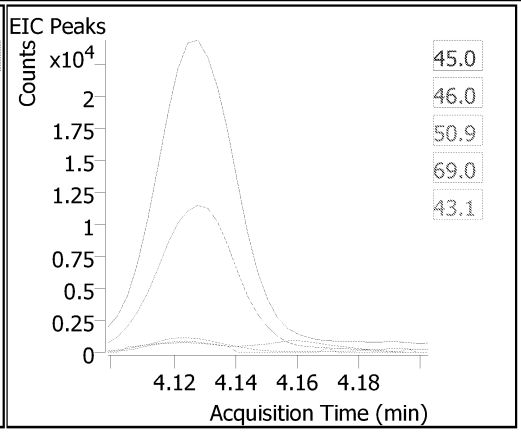
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.1279	Dimethyl ether	122595.6	81.9	115-10-6	C2H6O	0.5594

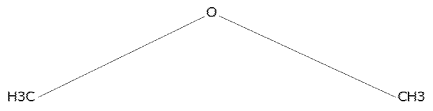




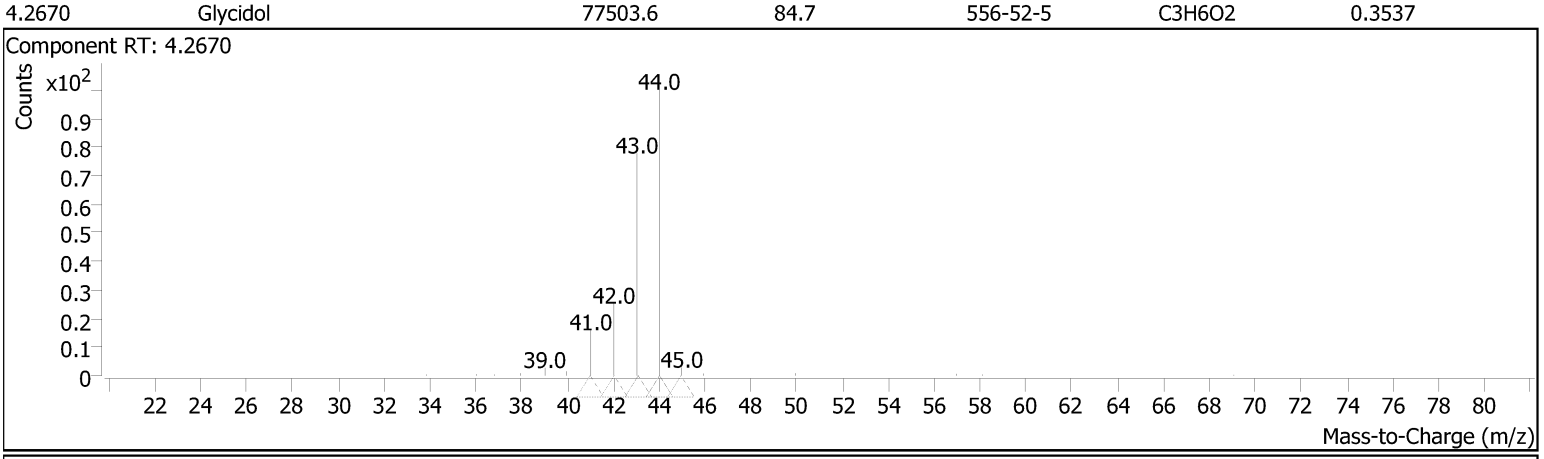


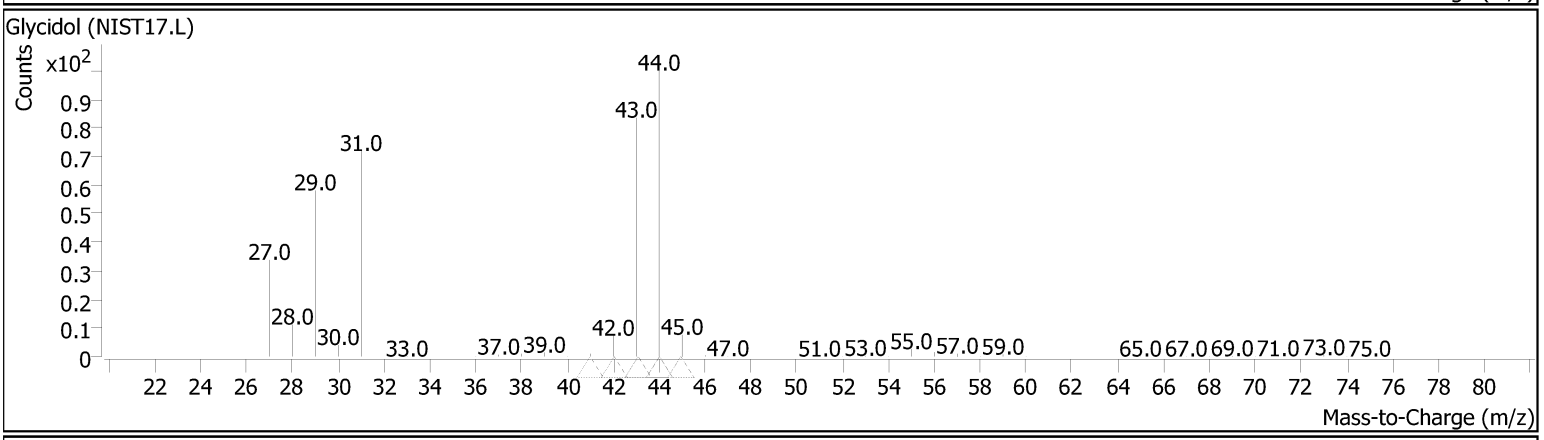


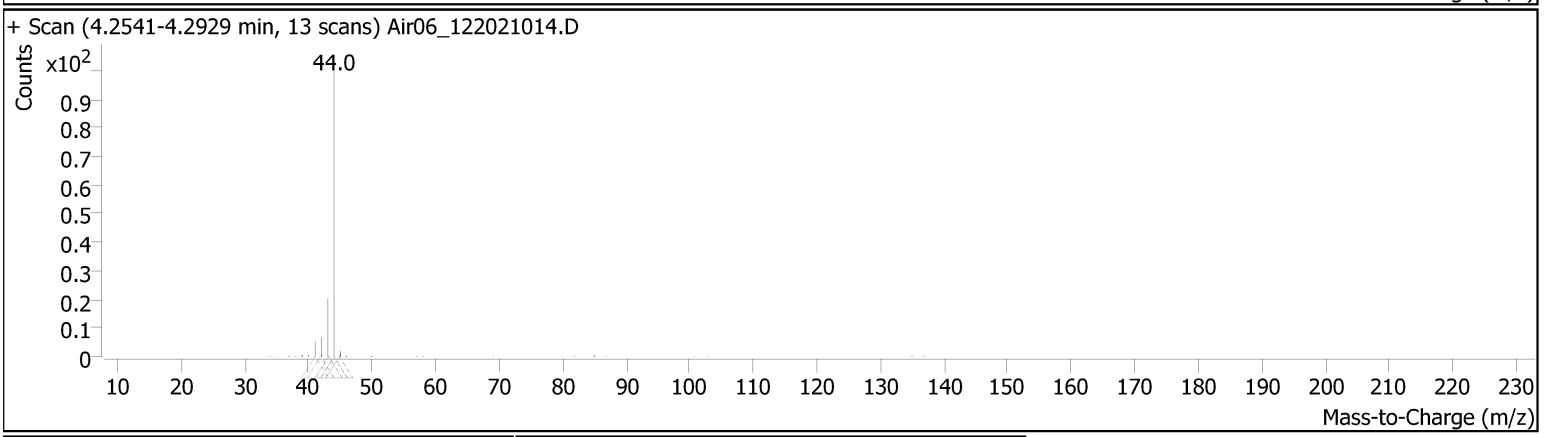


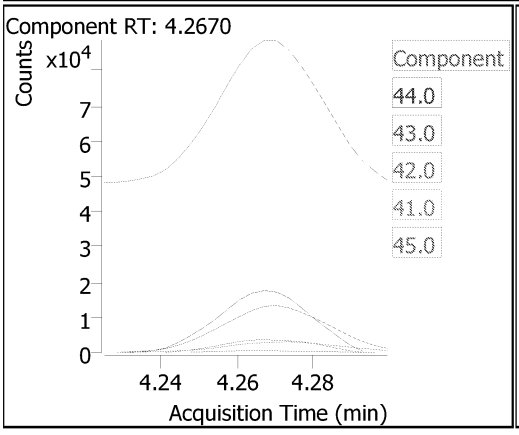


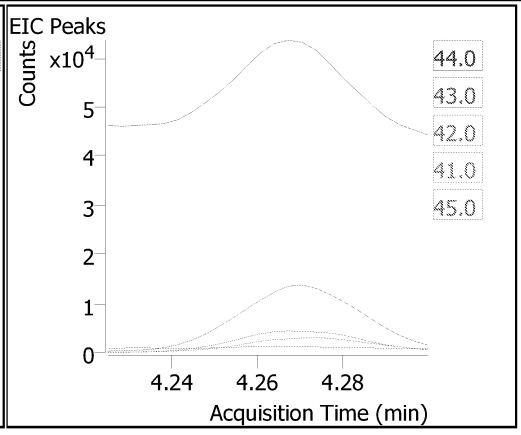
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.2670	Glycidol	77503.6	84.7	556-52-5	C3H6O2	0.3537

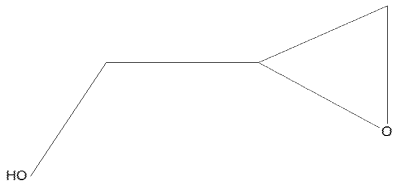




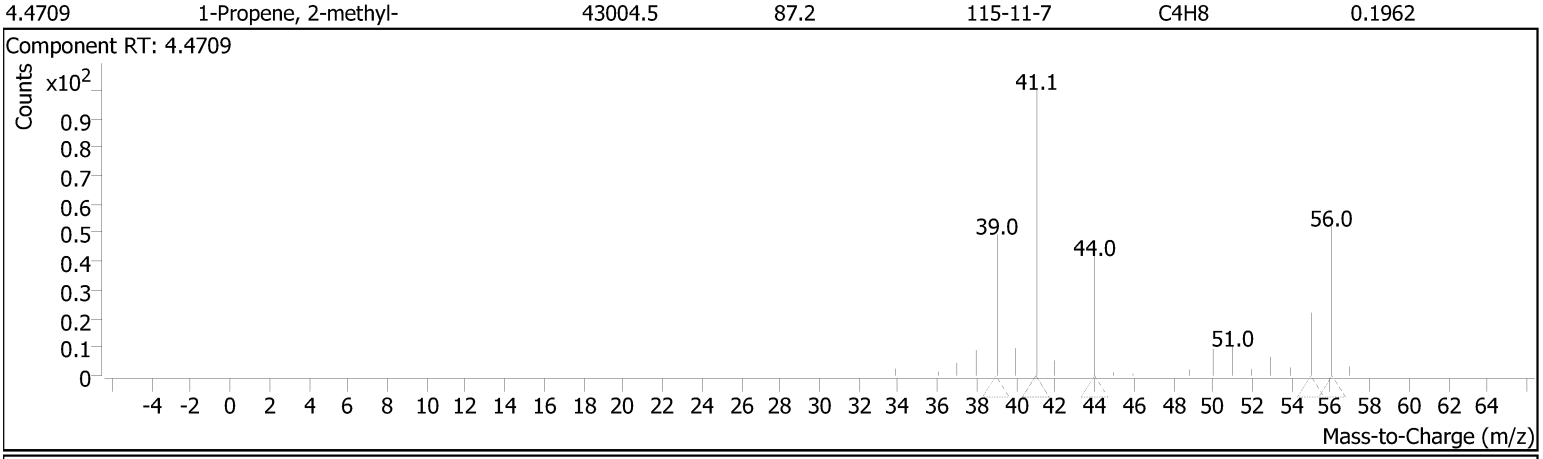


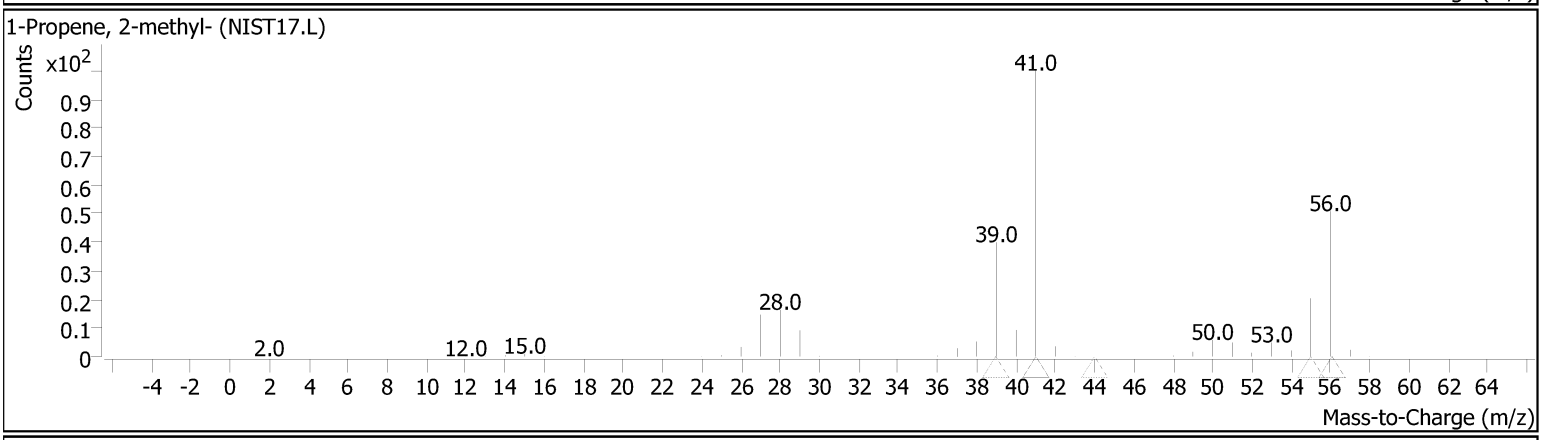


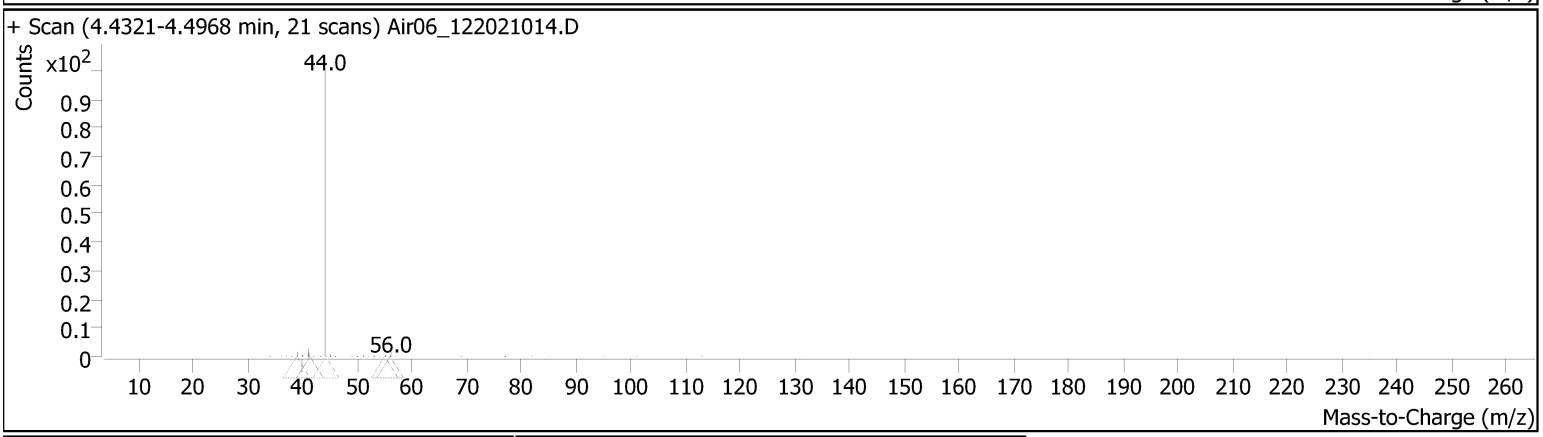


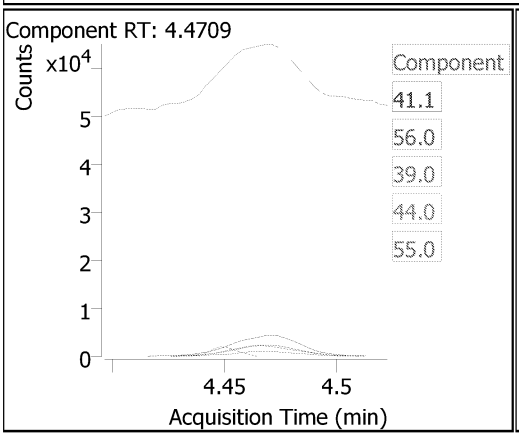


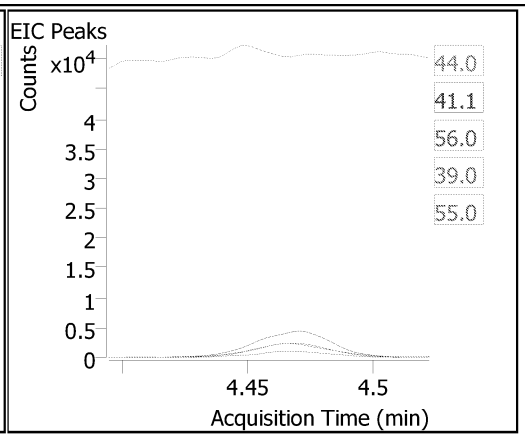
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.4709	1-Propene, 2-methyl-	43004.5	87.2	115-11-7	C4H8	0.1962

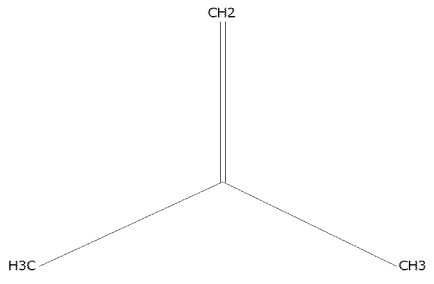




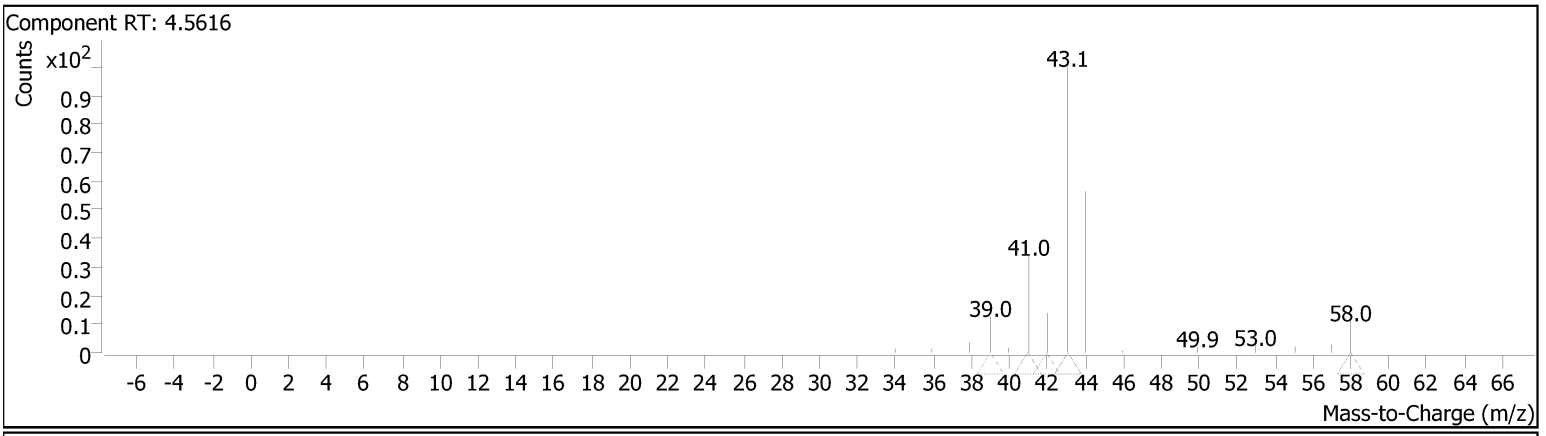


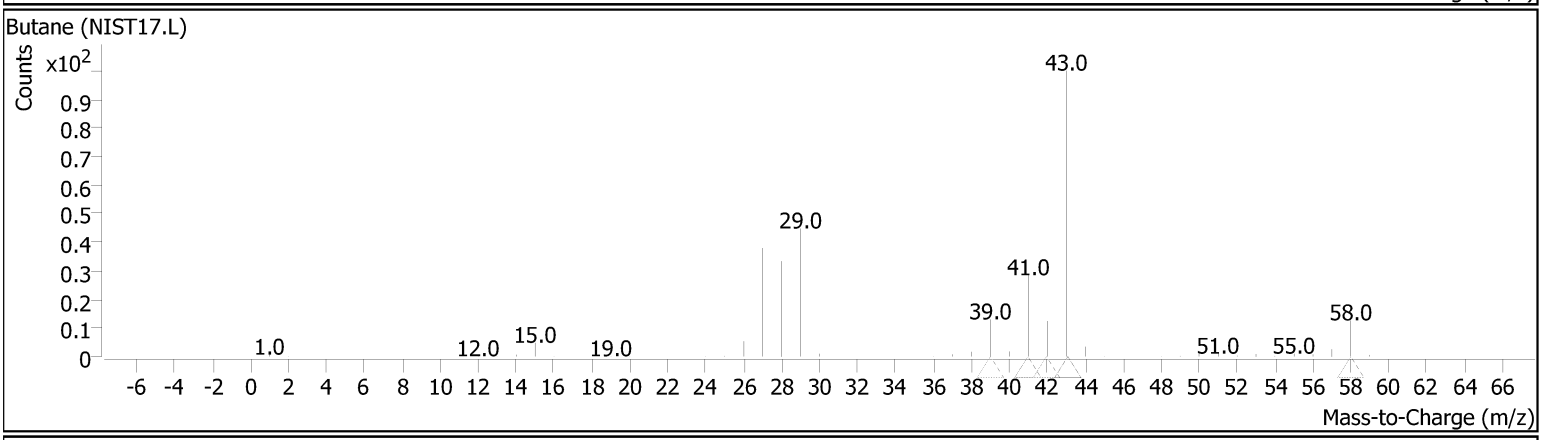


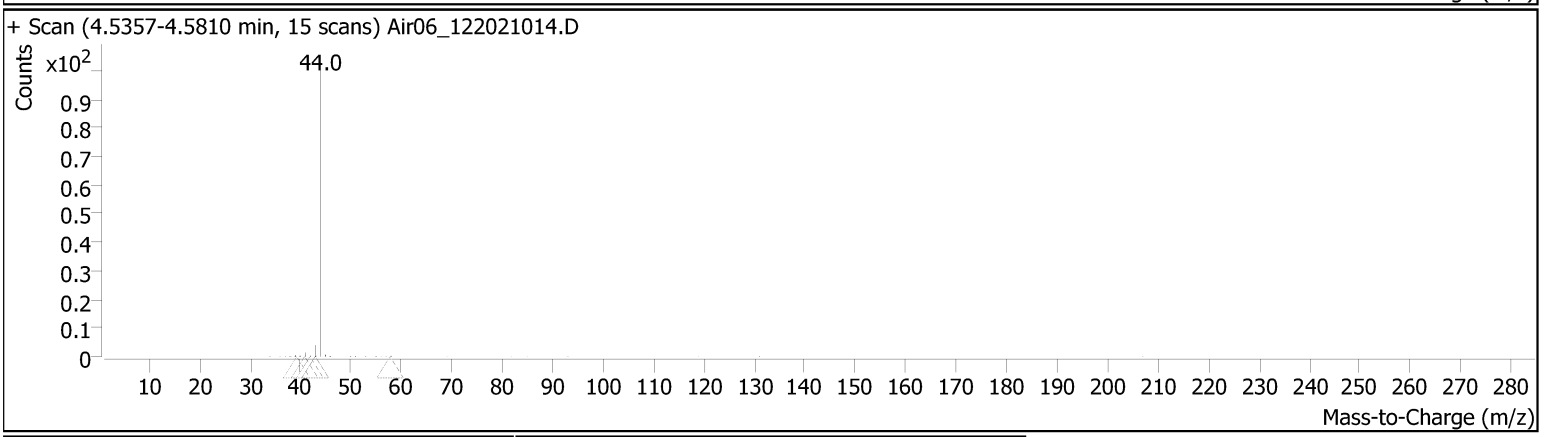


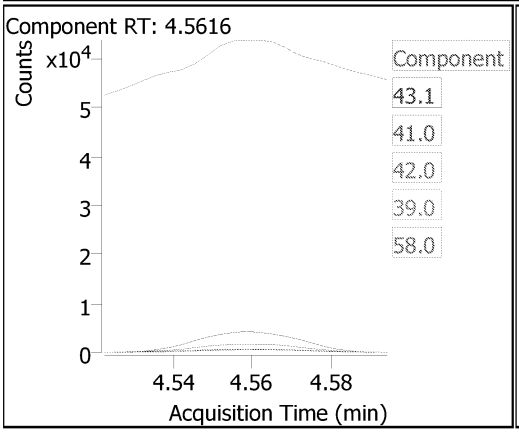


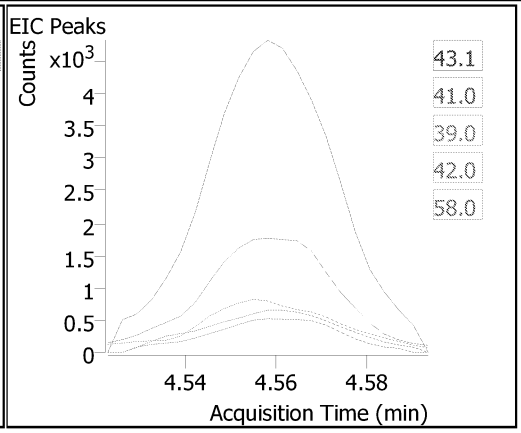
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.5616	Butane	29214.3	85.6	106-97-8	C4H10	0.1333





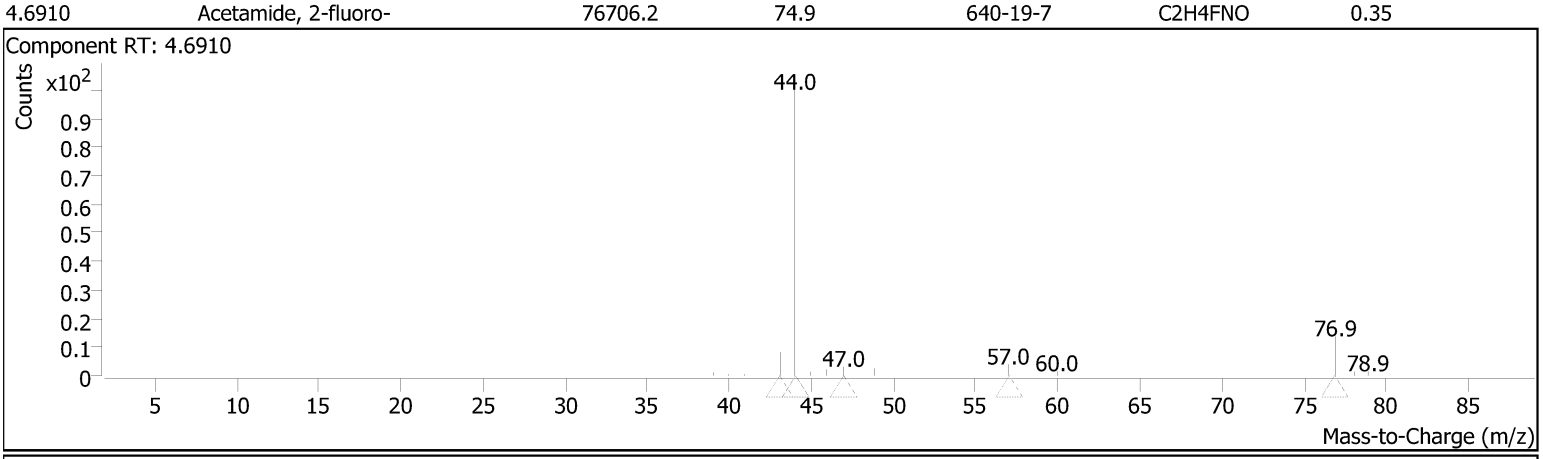


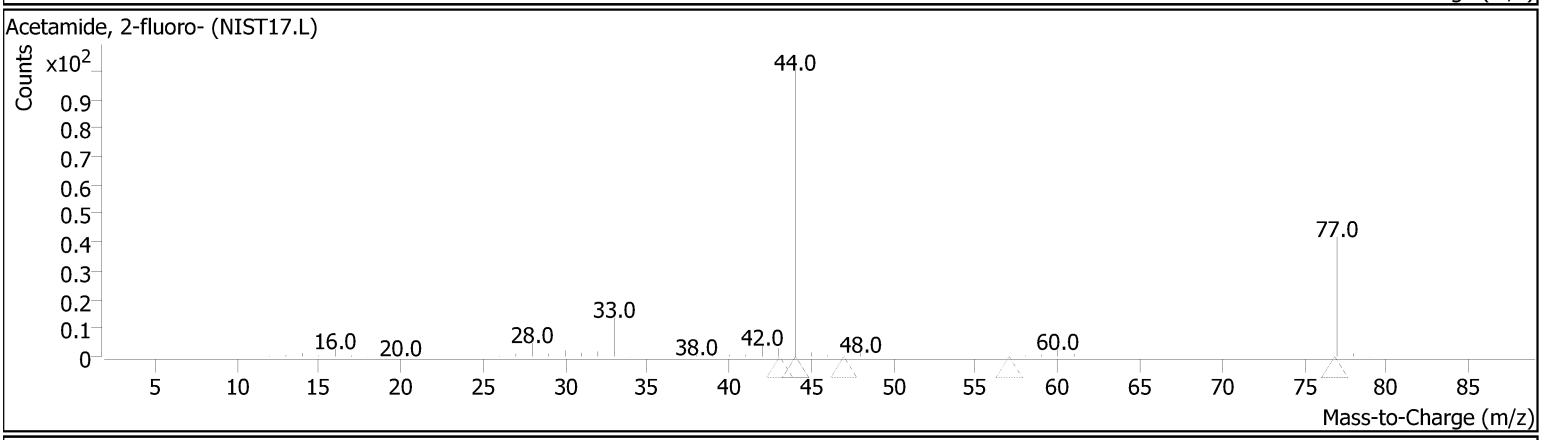


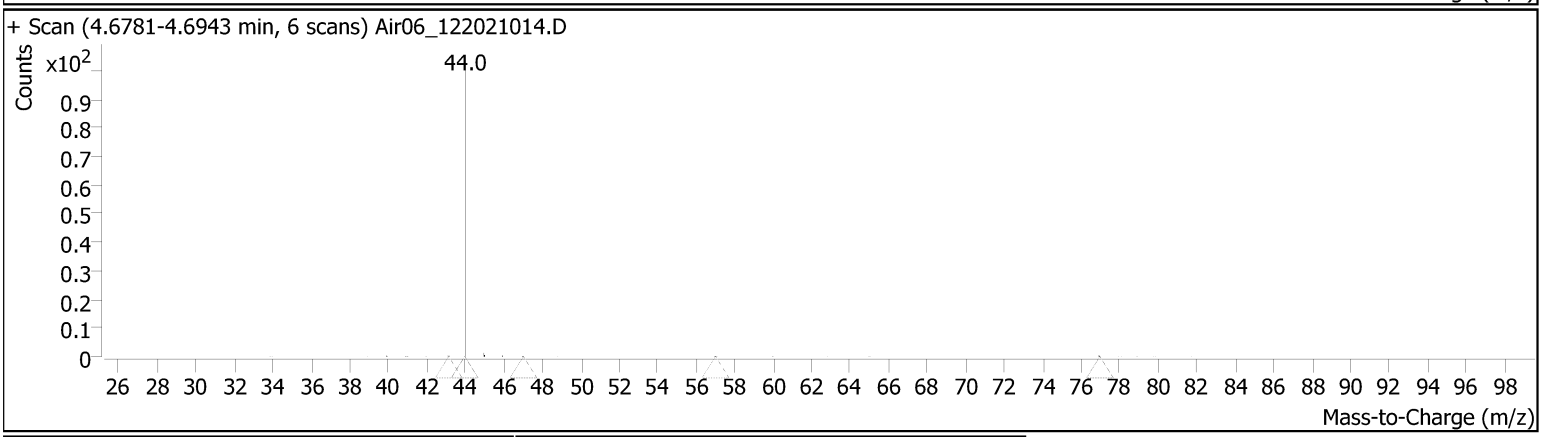


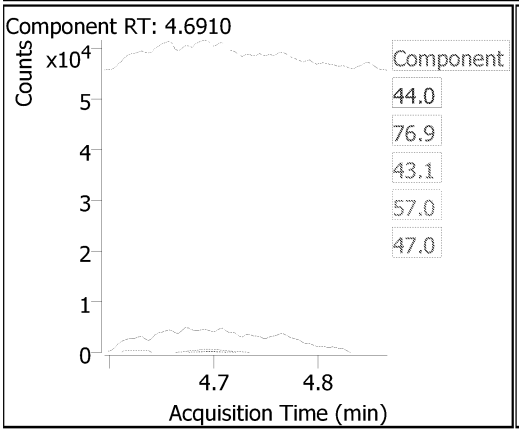


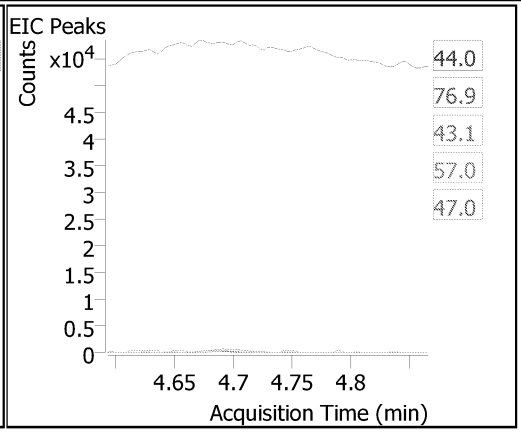
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.6910	Acetamide, 2-fluoro-	76706.2	74.9	640-19-7	C2H4FNO	0.35

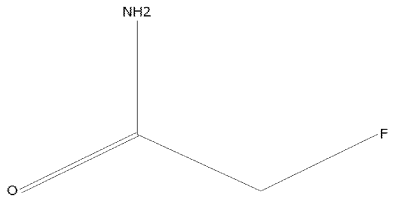




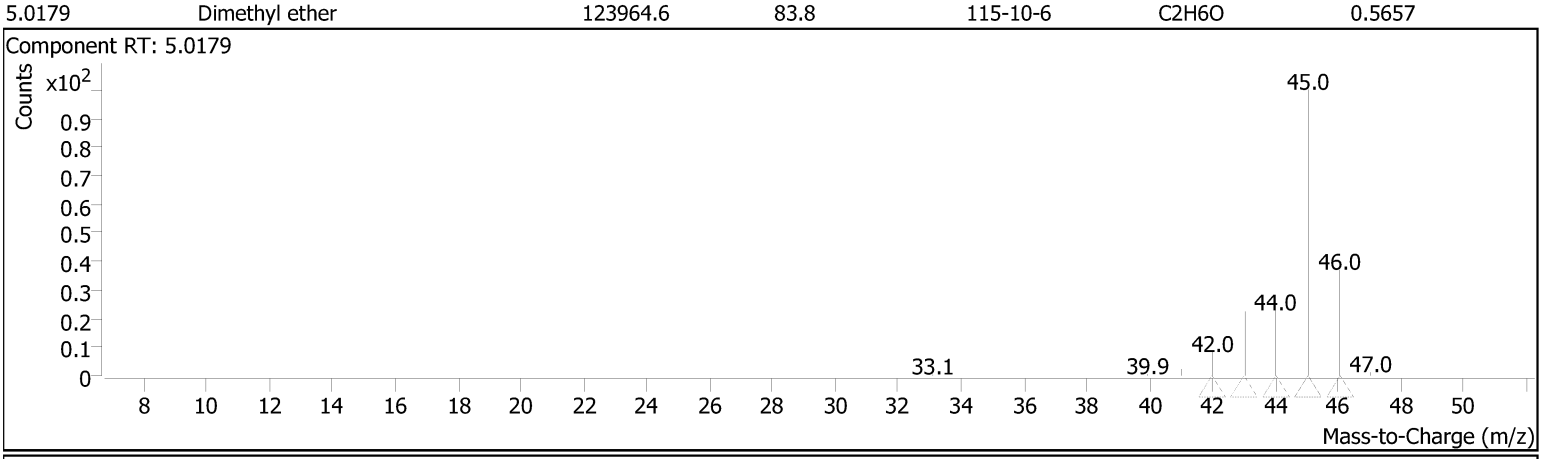


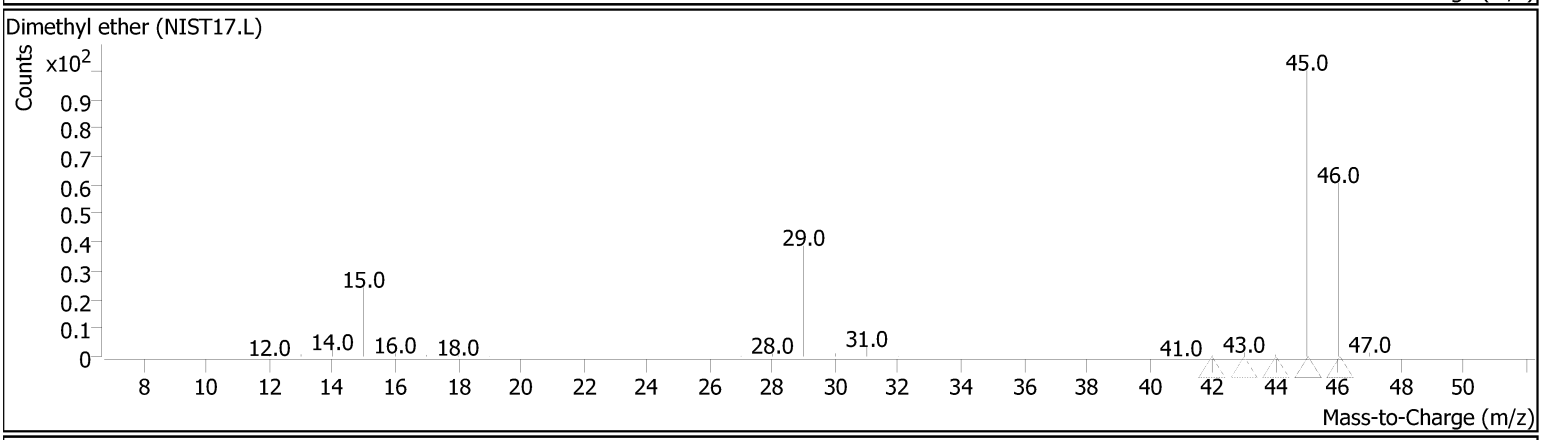


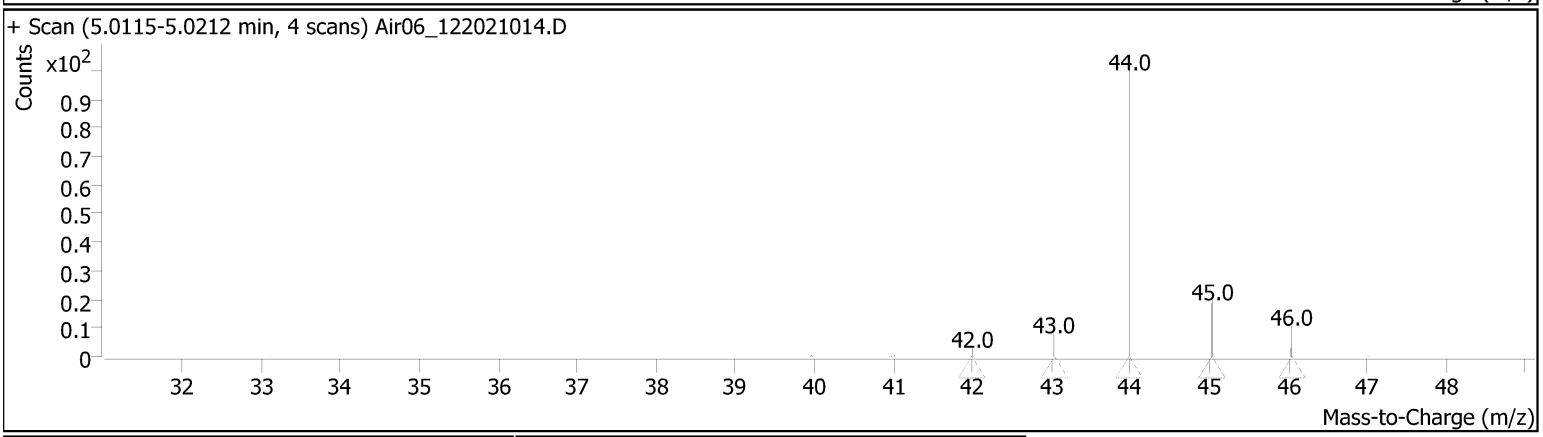


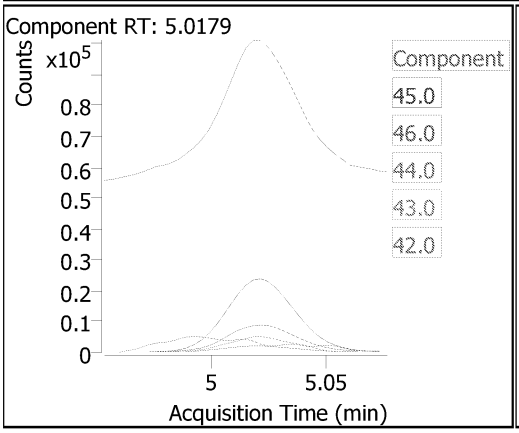


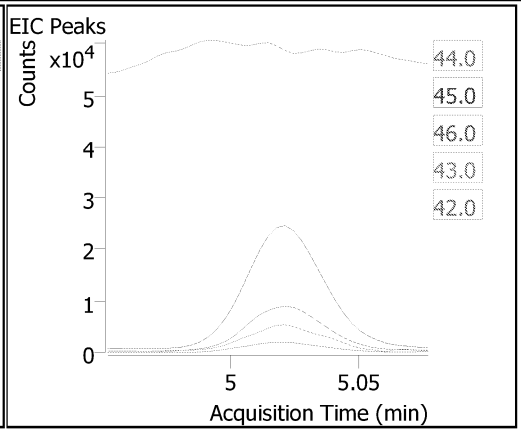
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.0179	Dimethyl ether	123964.6	83.8	115-10-6	C2H6O	0.5657

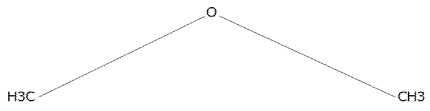




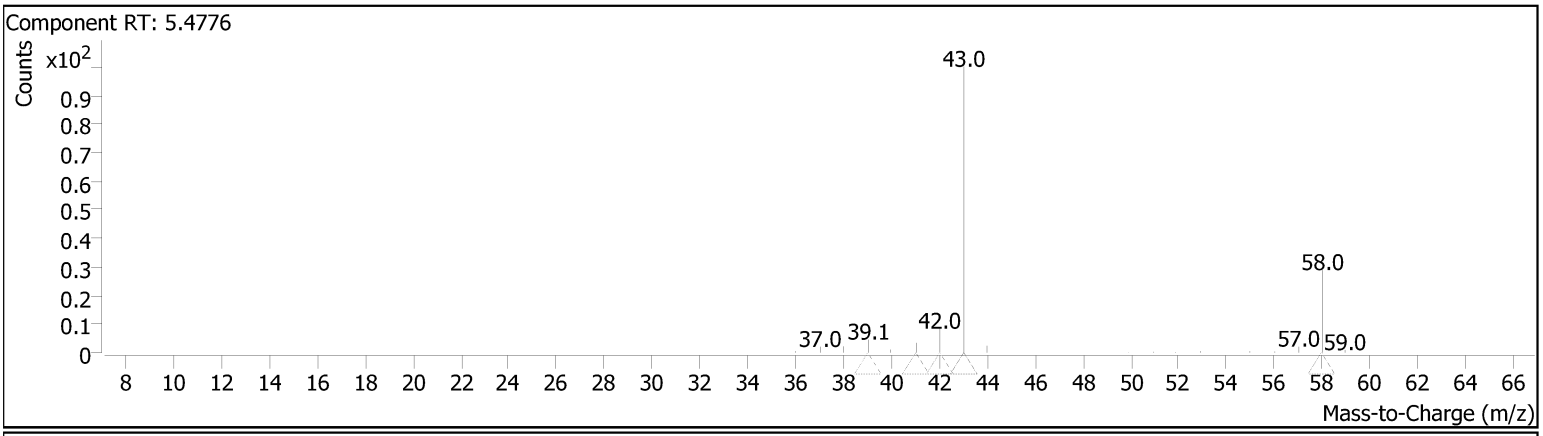


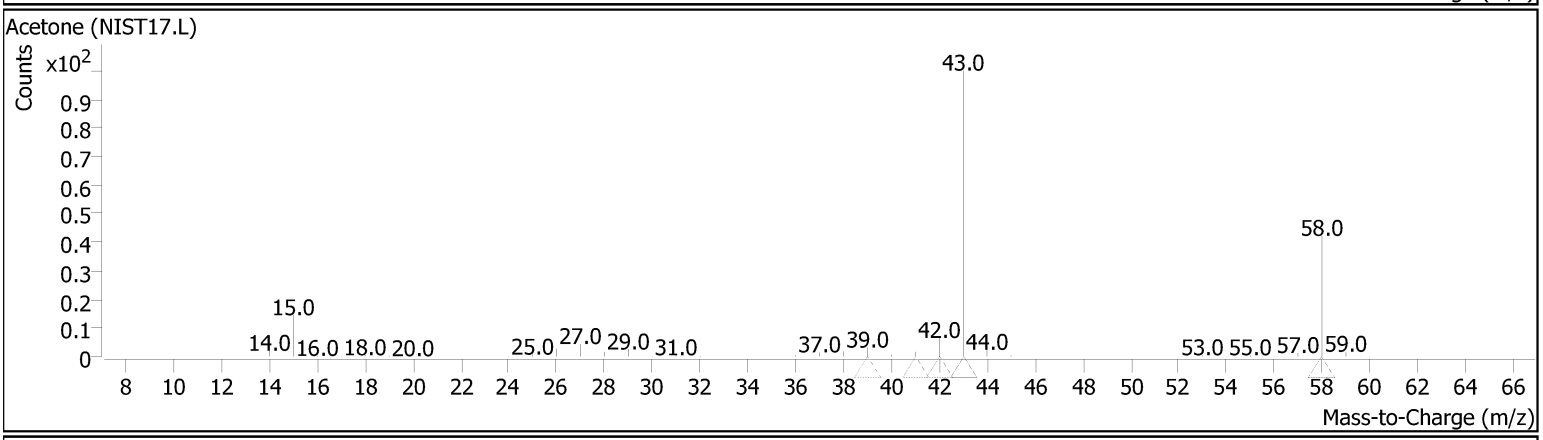


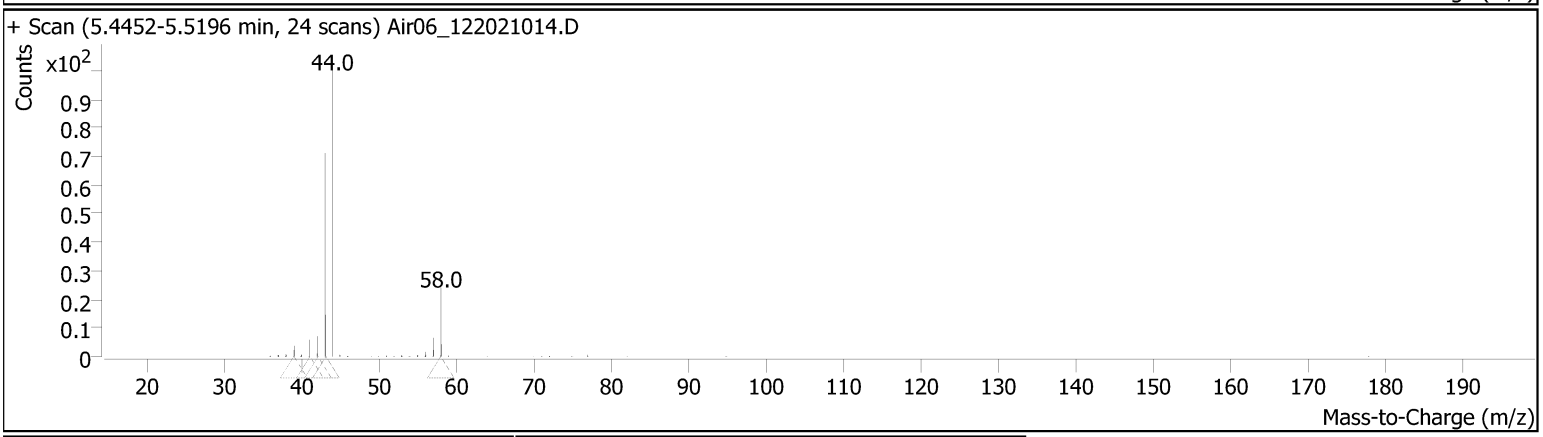


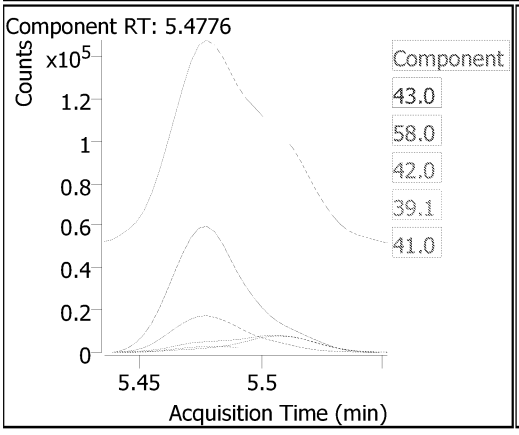


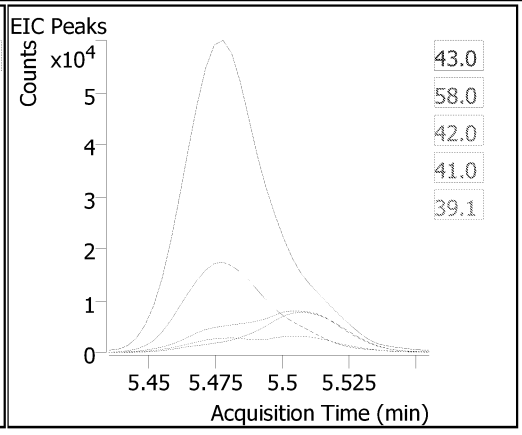
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.4776	Acetone	277987.1	97.3	67-64-1	C3H6O	1.268

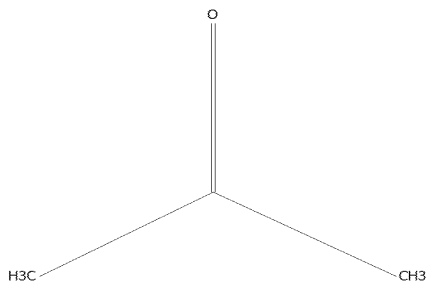




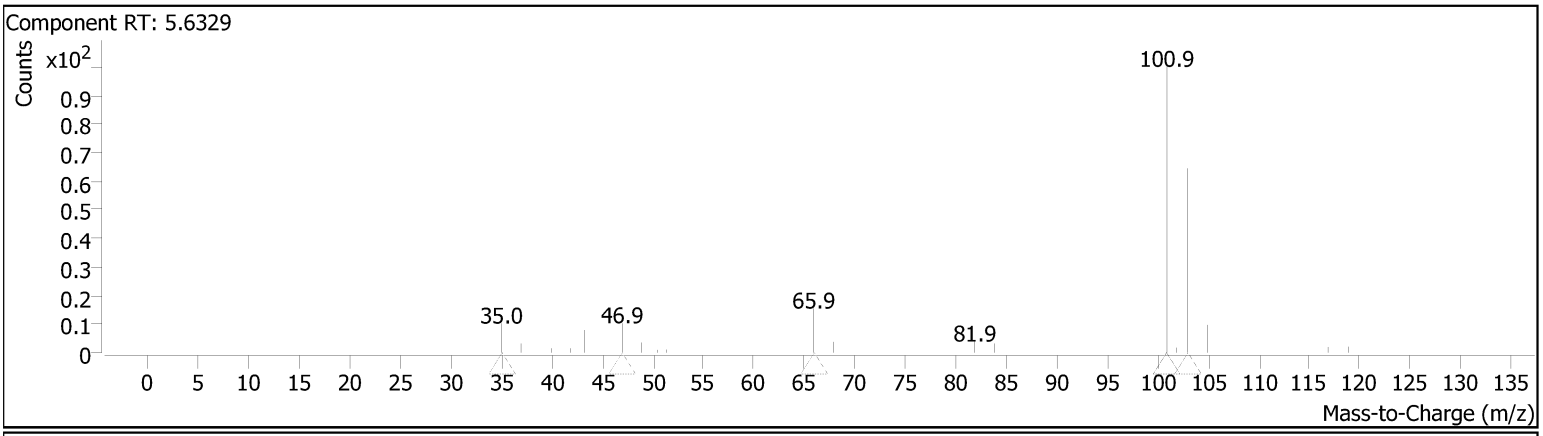


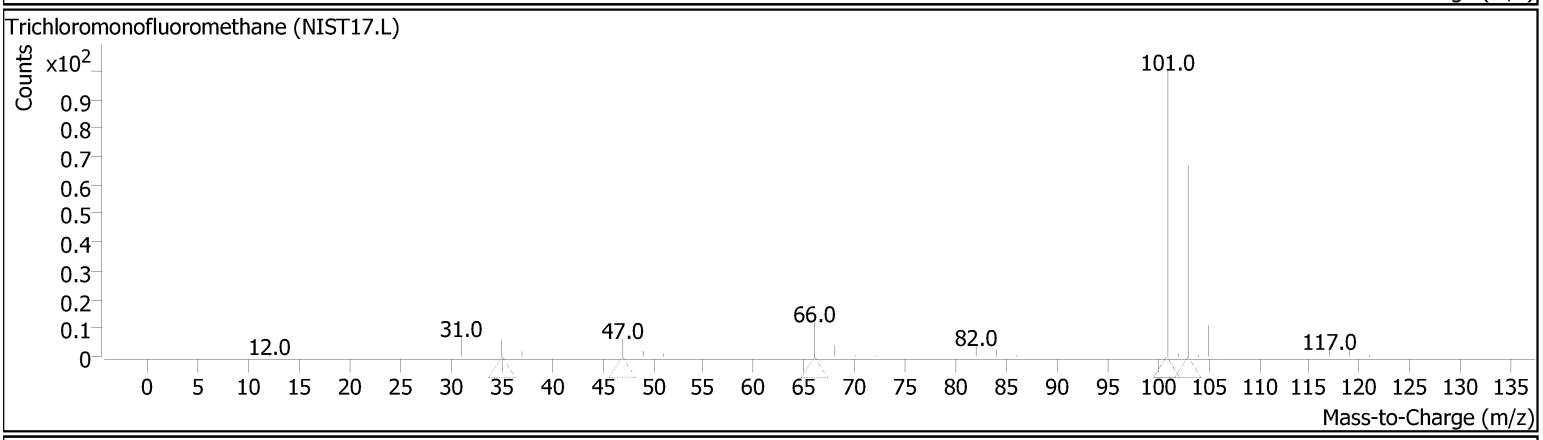


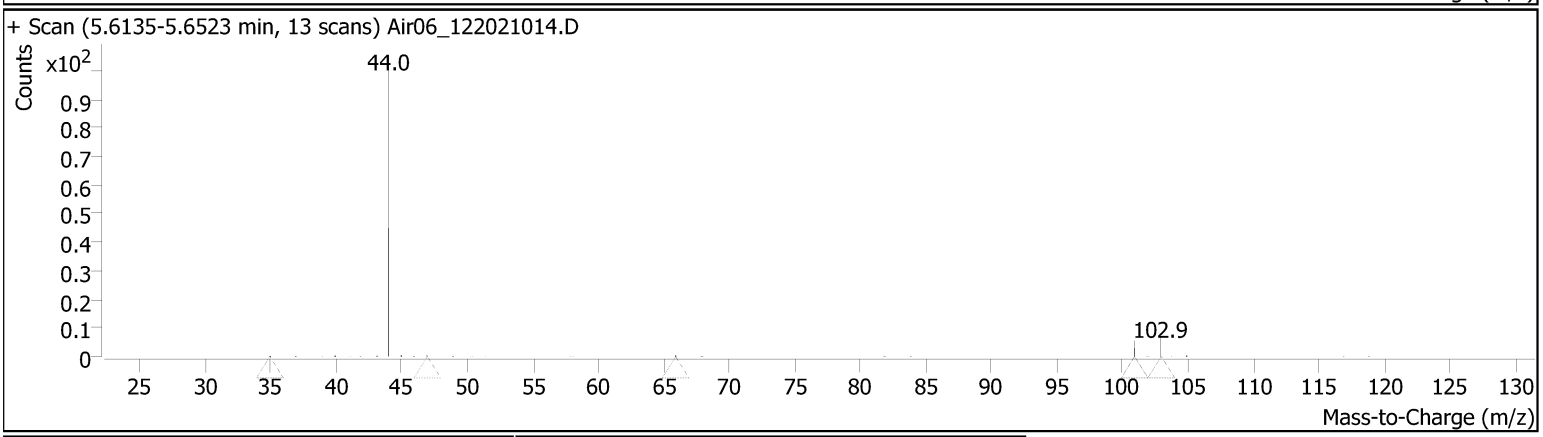


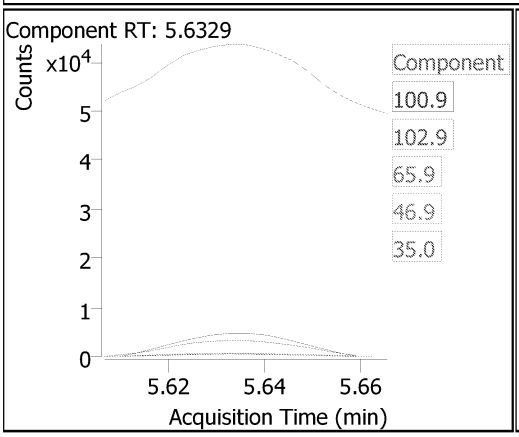


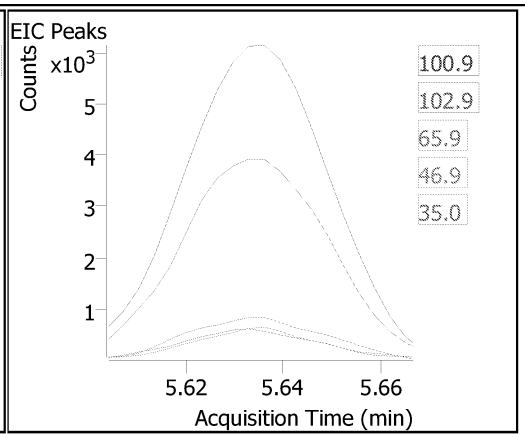
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.6329	Trichloromonofluoromethane	27162.2	95.9	75-69-4	CCl3F	0.1239

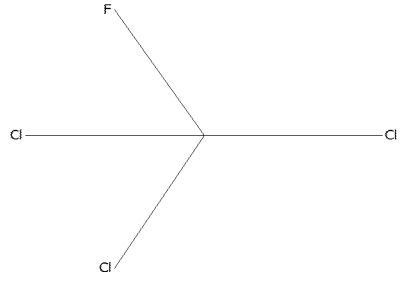




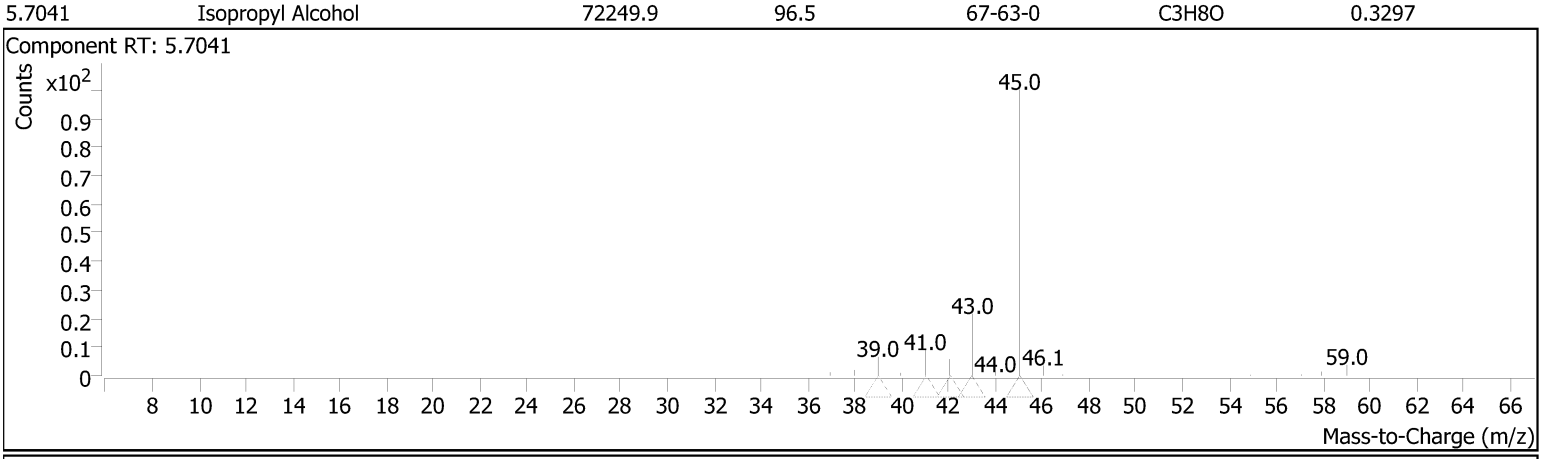


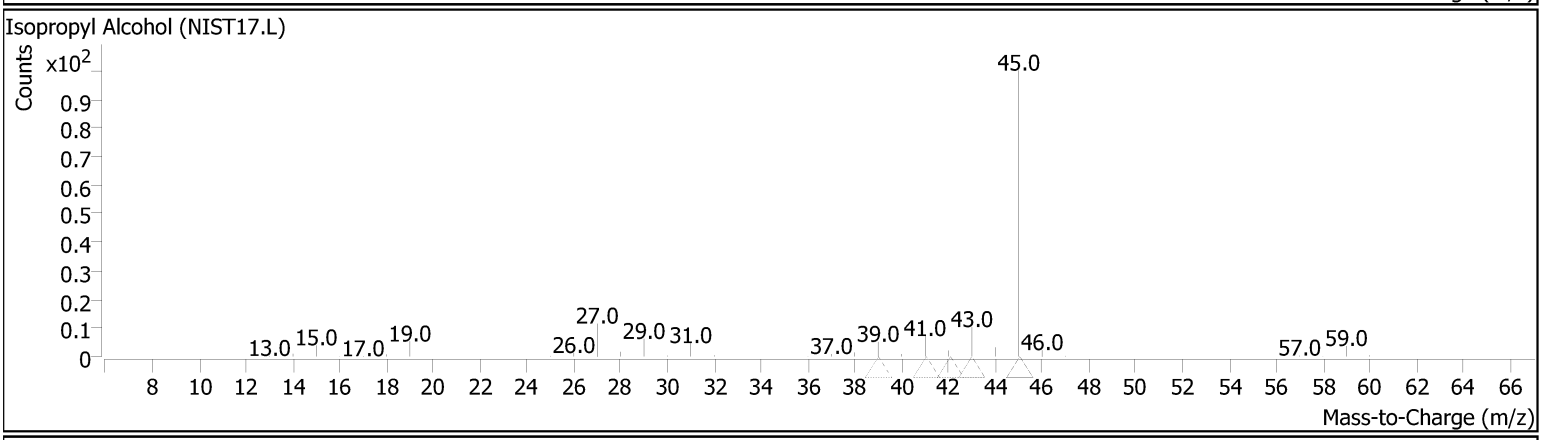


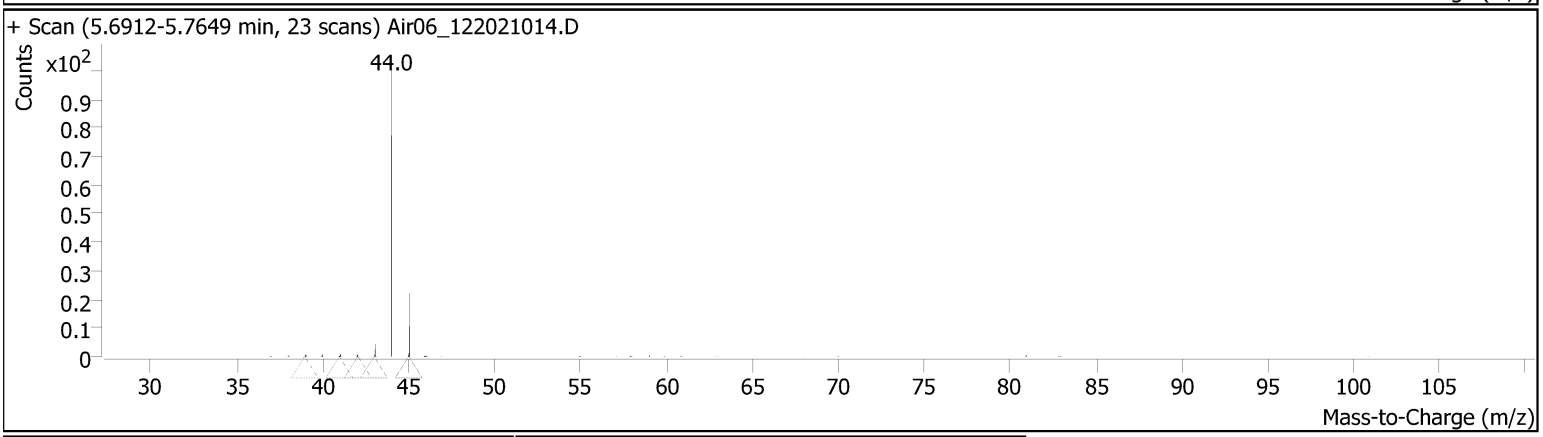


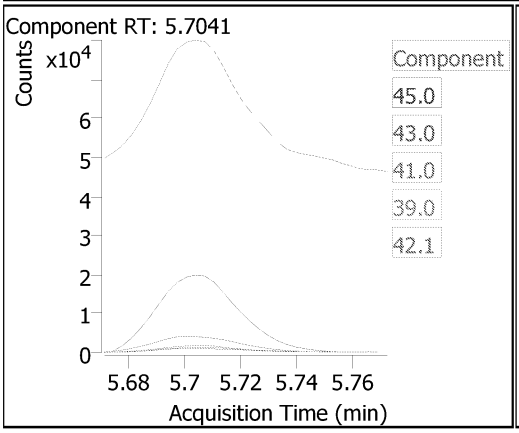


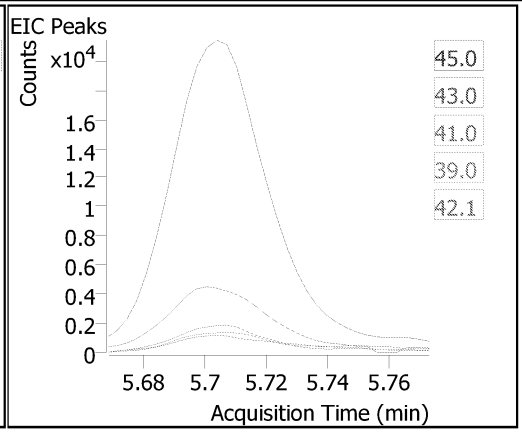
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.7041	Isopropyl Alcohol	72249.9	96.5	67-63-0	C3H8O	0.3297

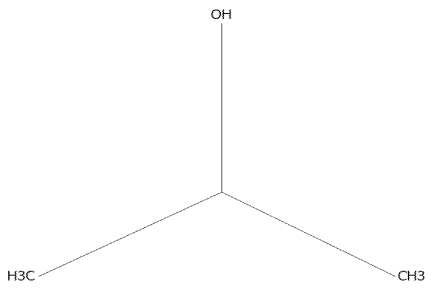




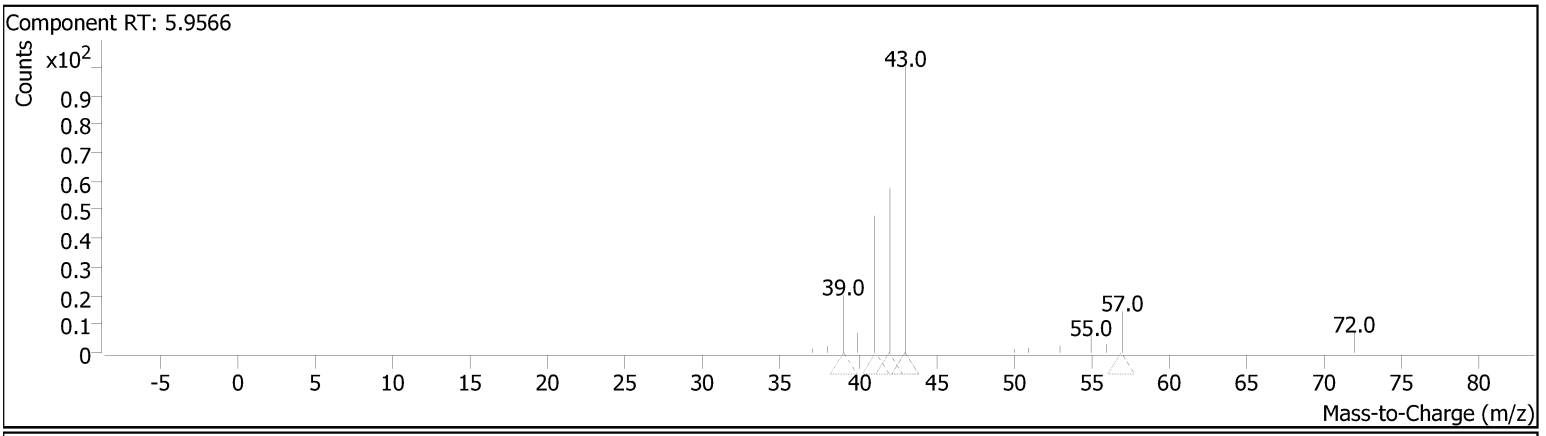


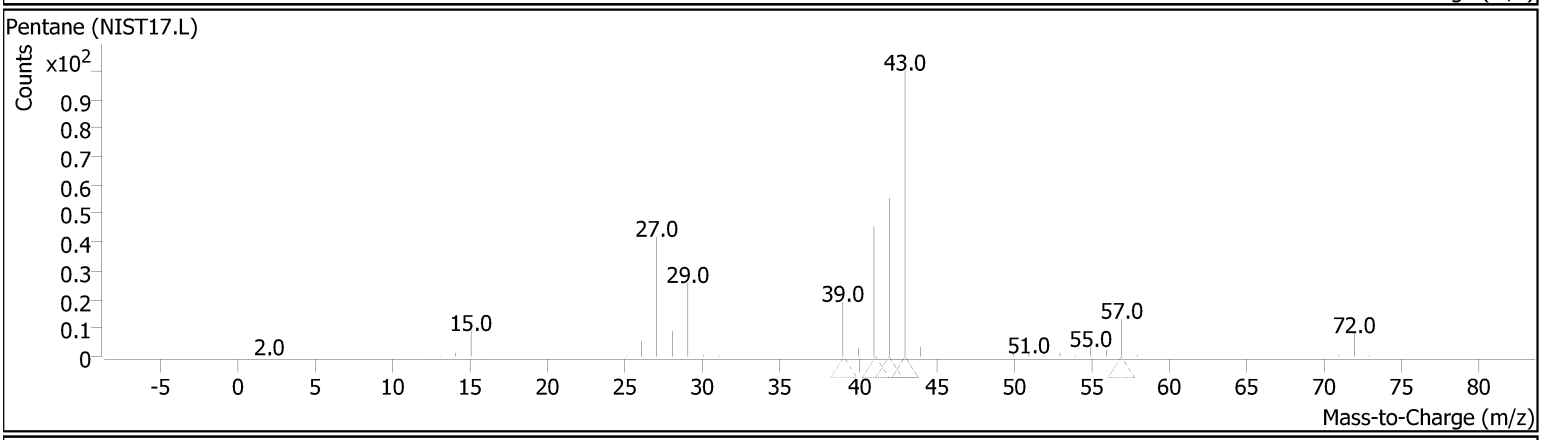


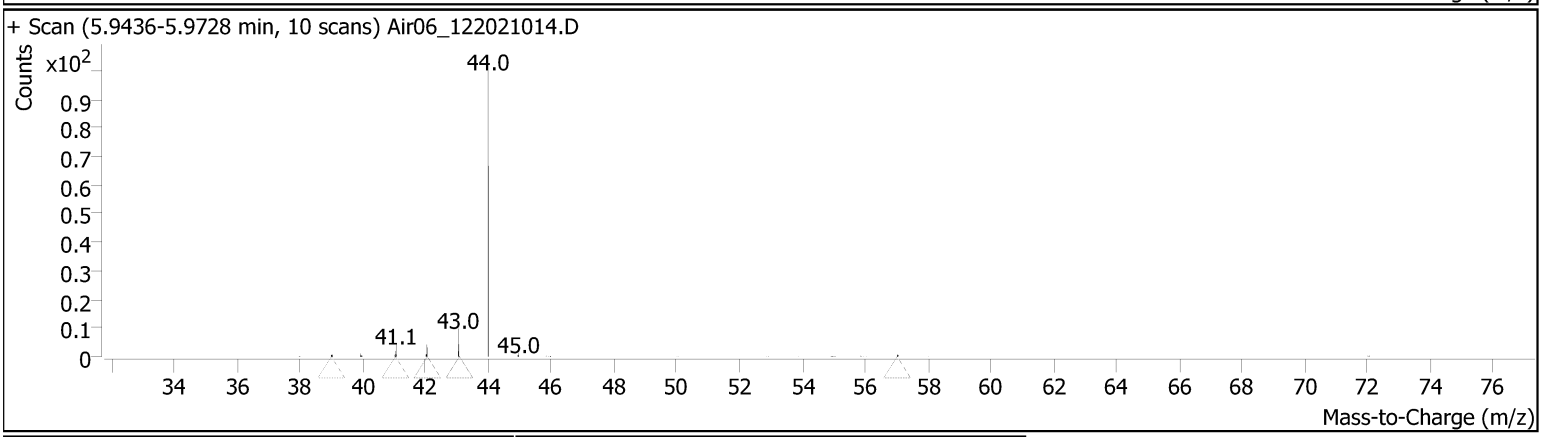


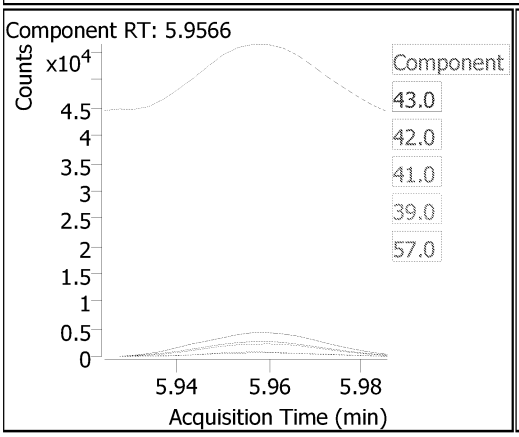


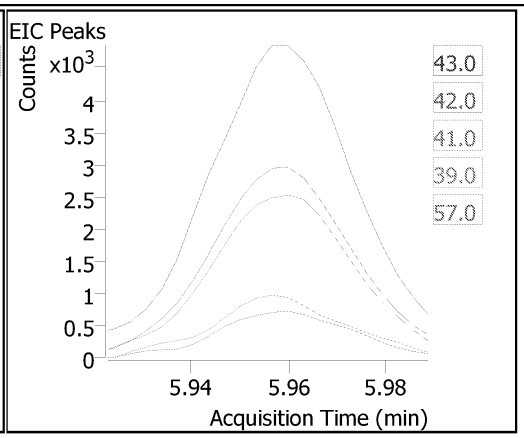
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.9566	Pentane	23153.1	95.7	109-66-0	C5H12	0.1057

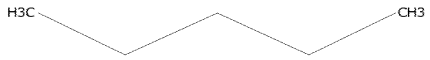




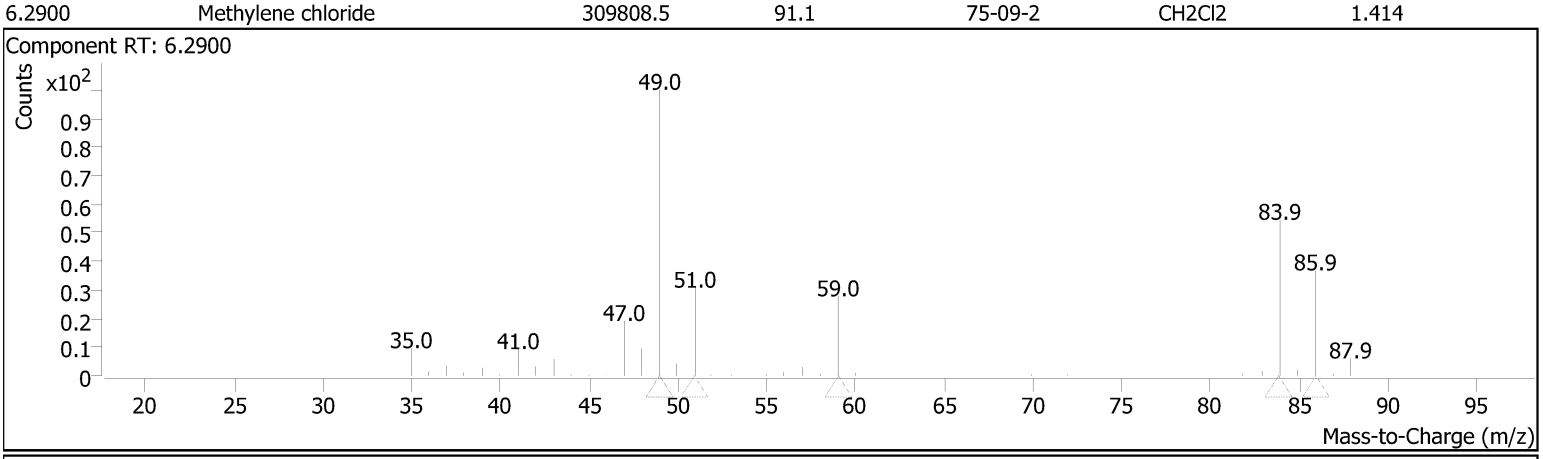


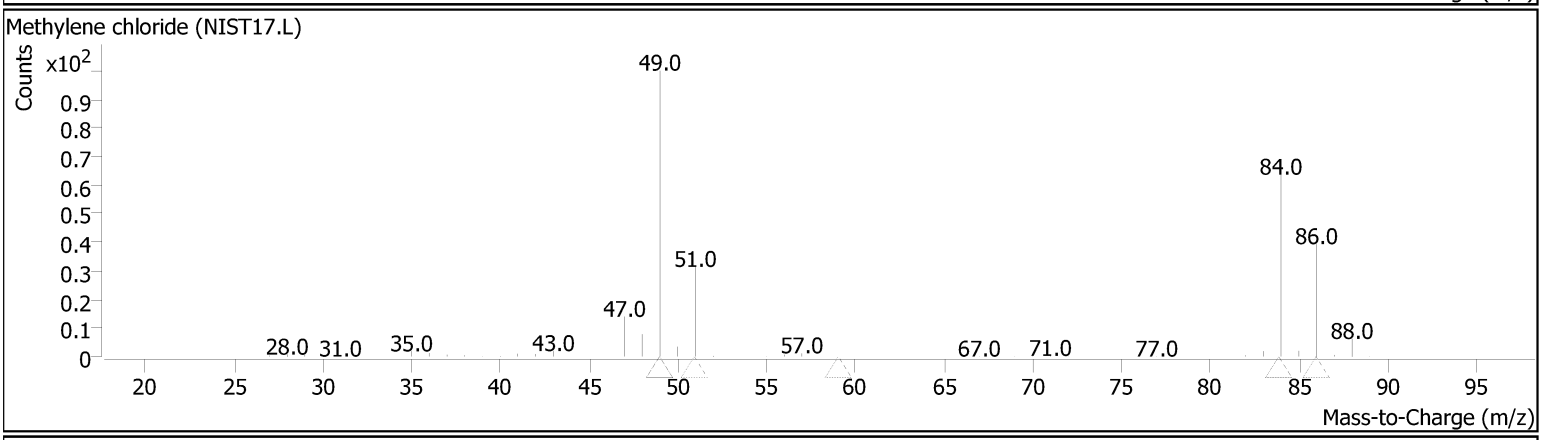


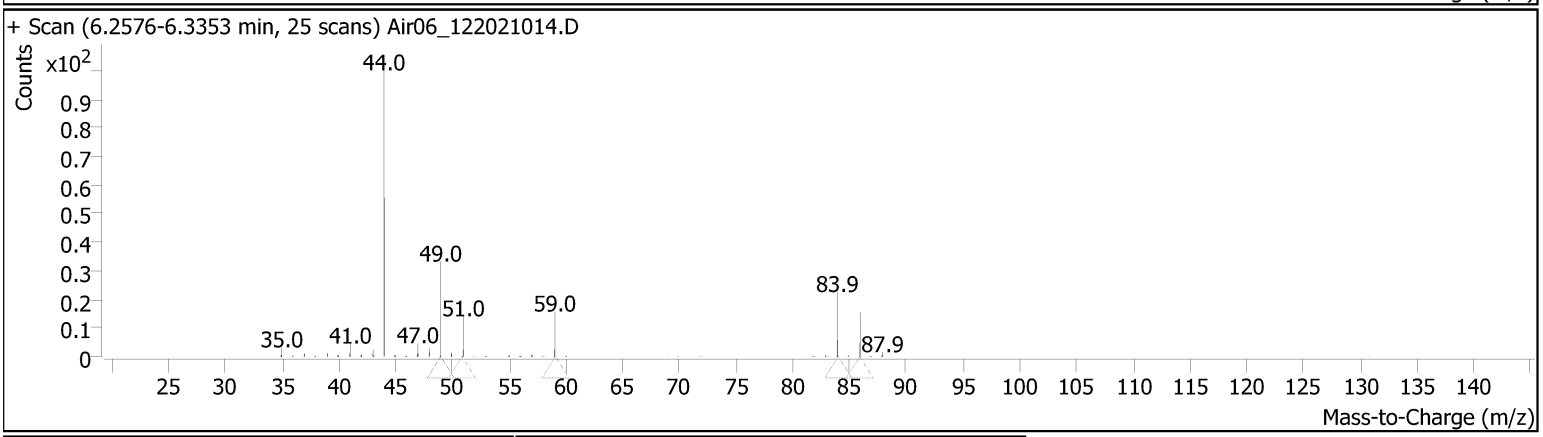


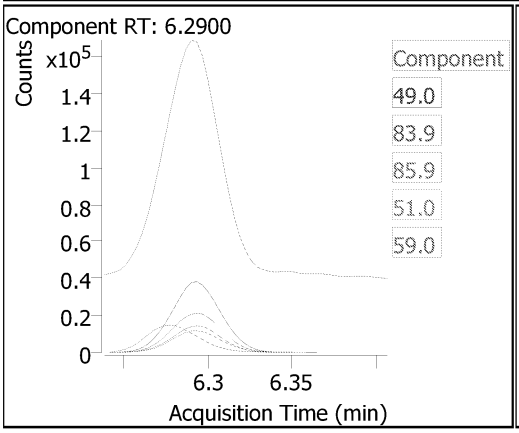


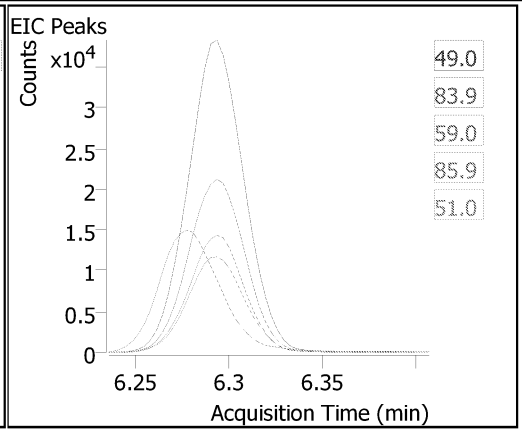
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.2900	Methylene chloride	309808.5	91.1	75-09-2	CH2Cl2	1.414

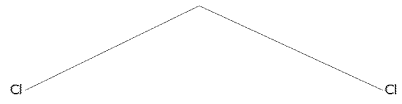




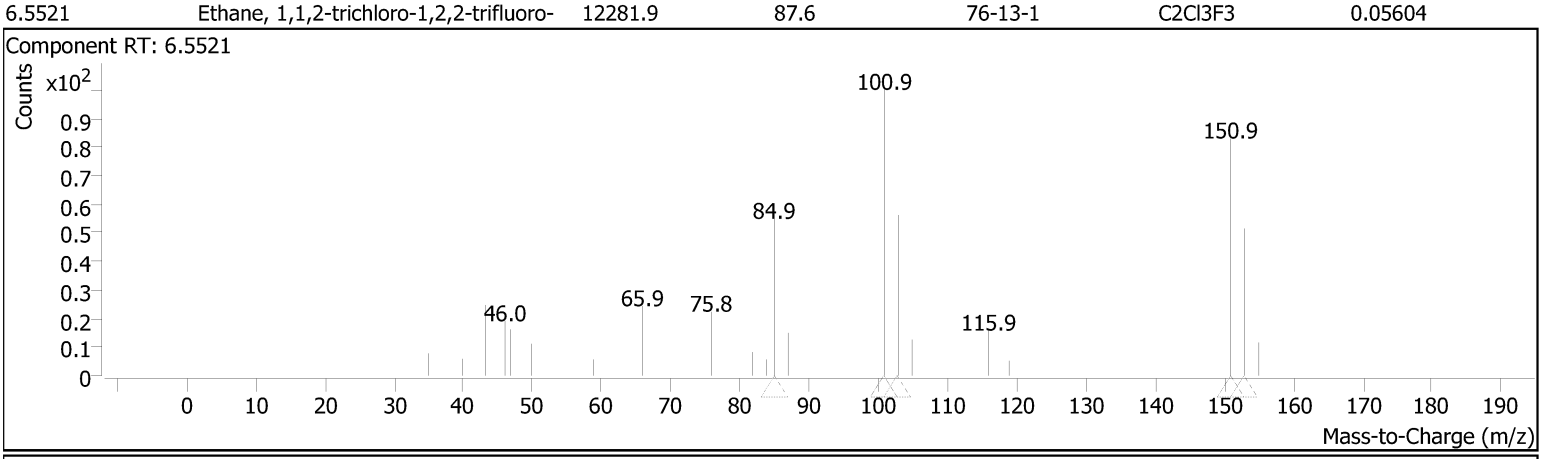


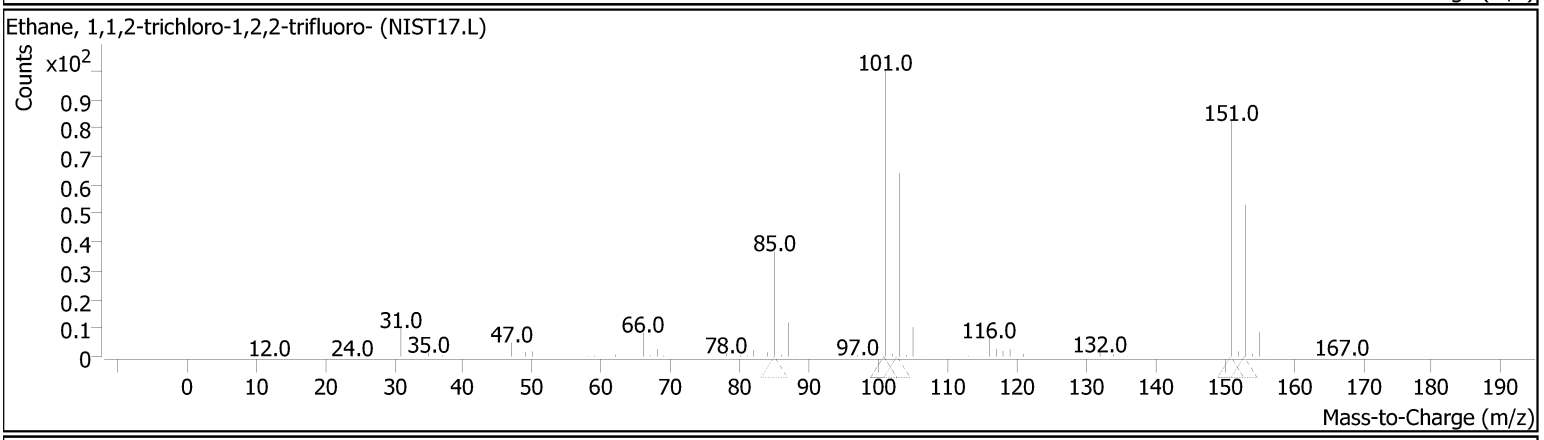


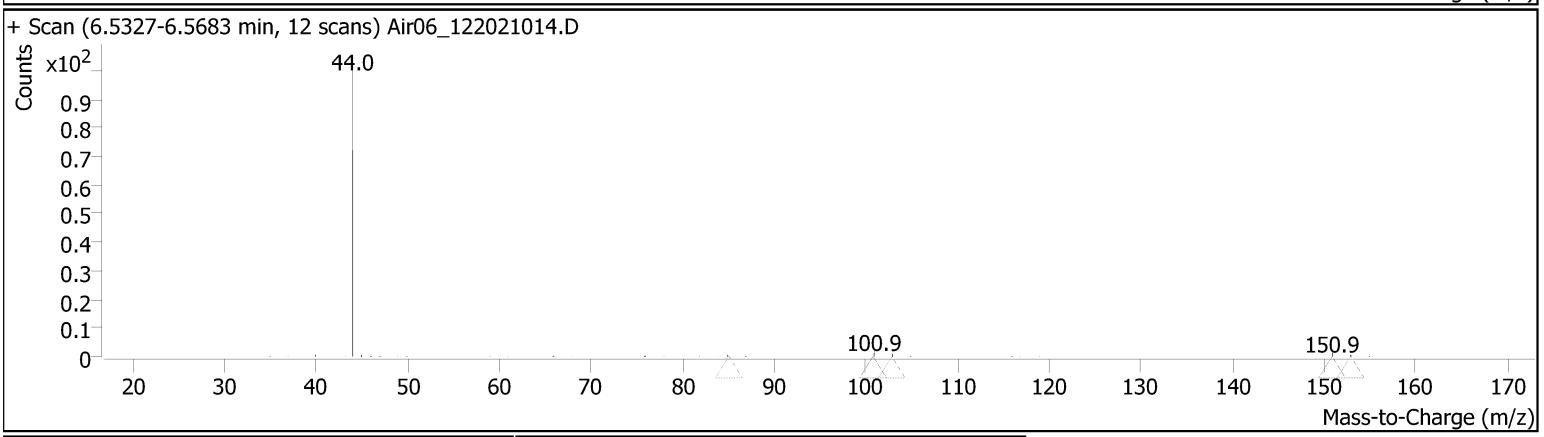


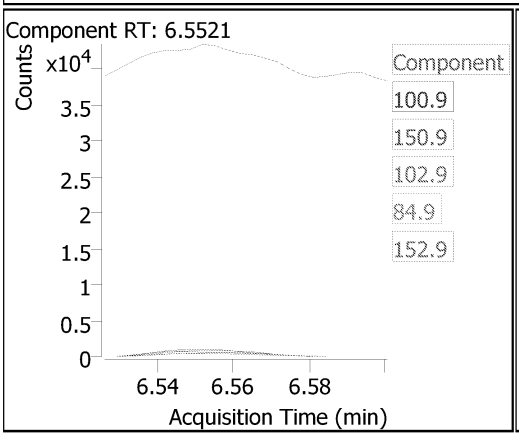


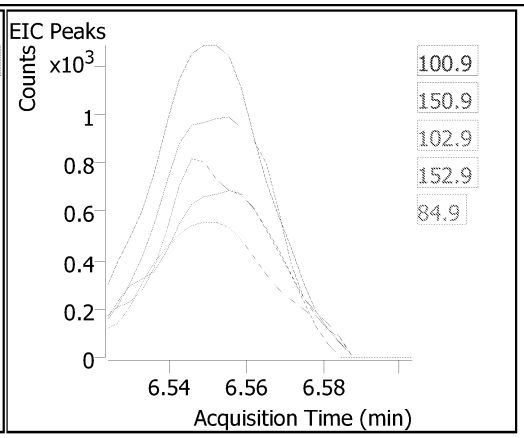
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.5521	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	12281.9	87.6	76-13-1	C2Cl3F3	0.05604

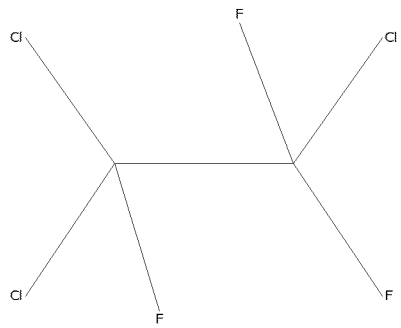




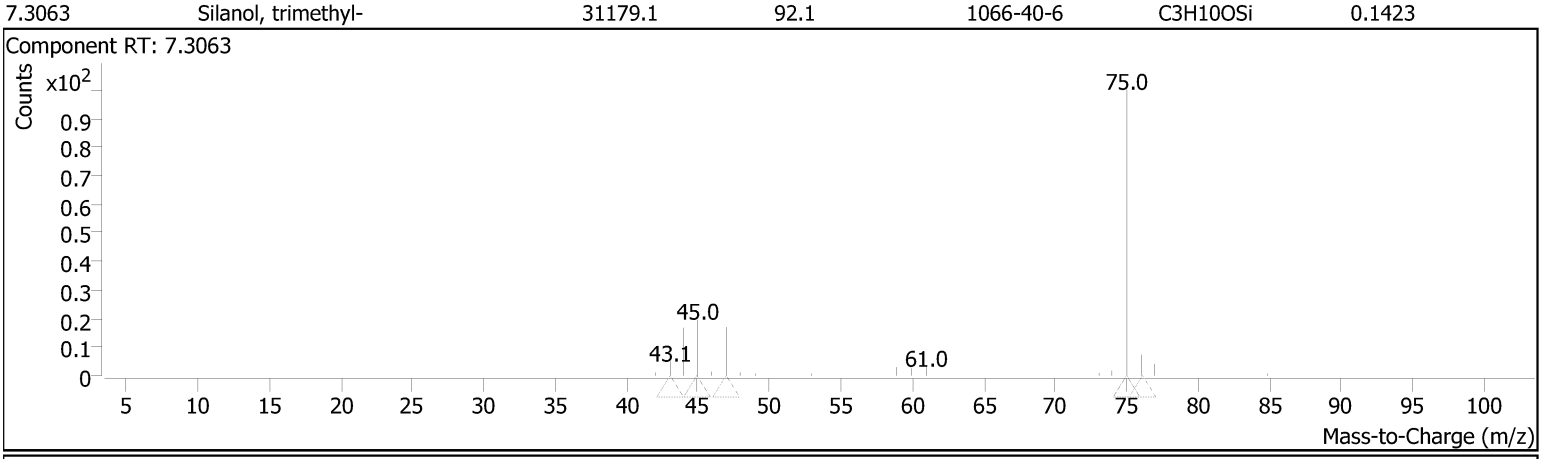


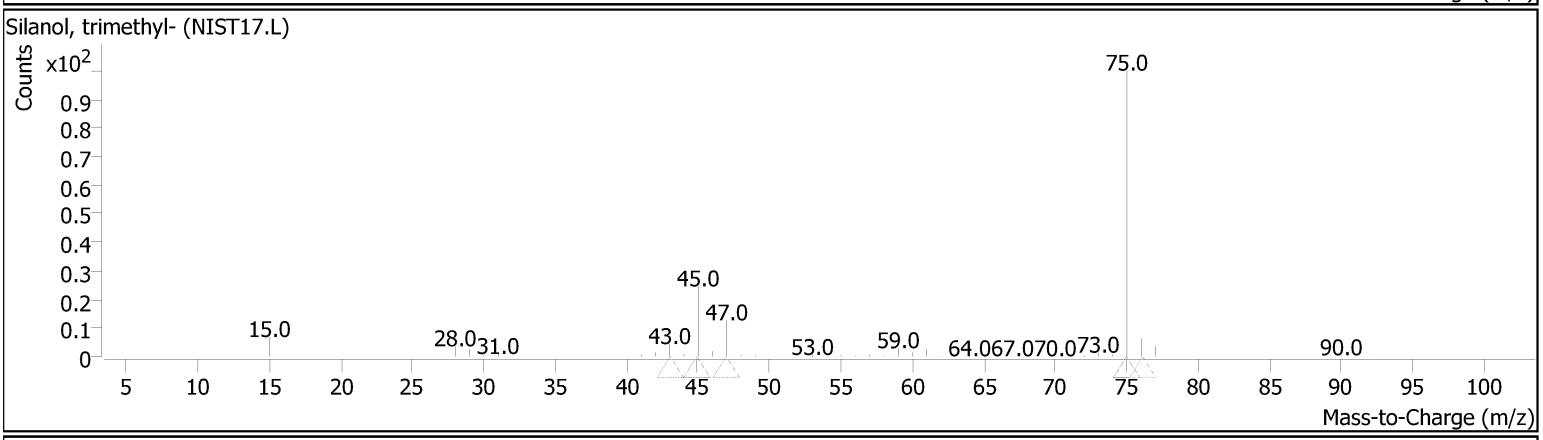


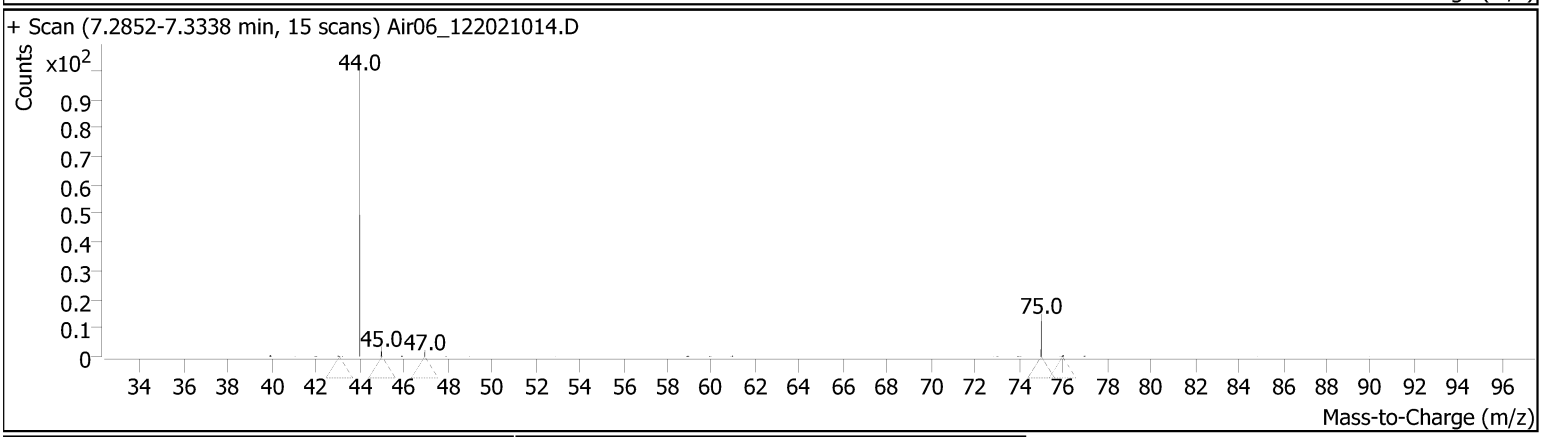


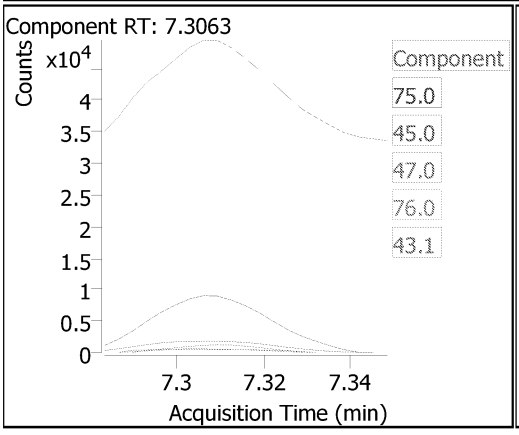


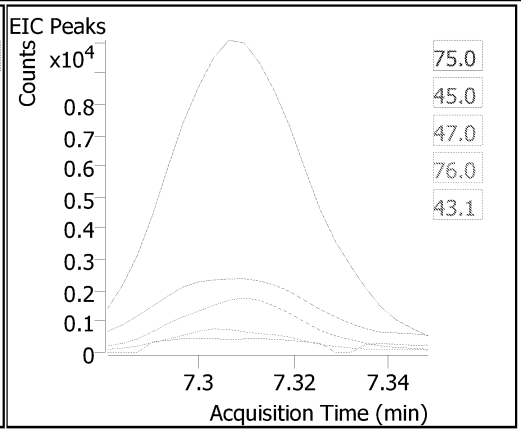
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.3063	Silanol, trimethyl-	31179.1	92.1	1066-40-6	C3H10OSi	0.1423

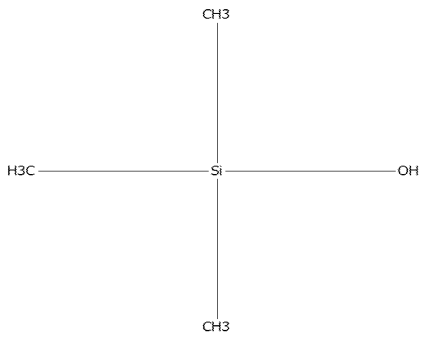




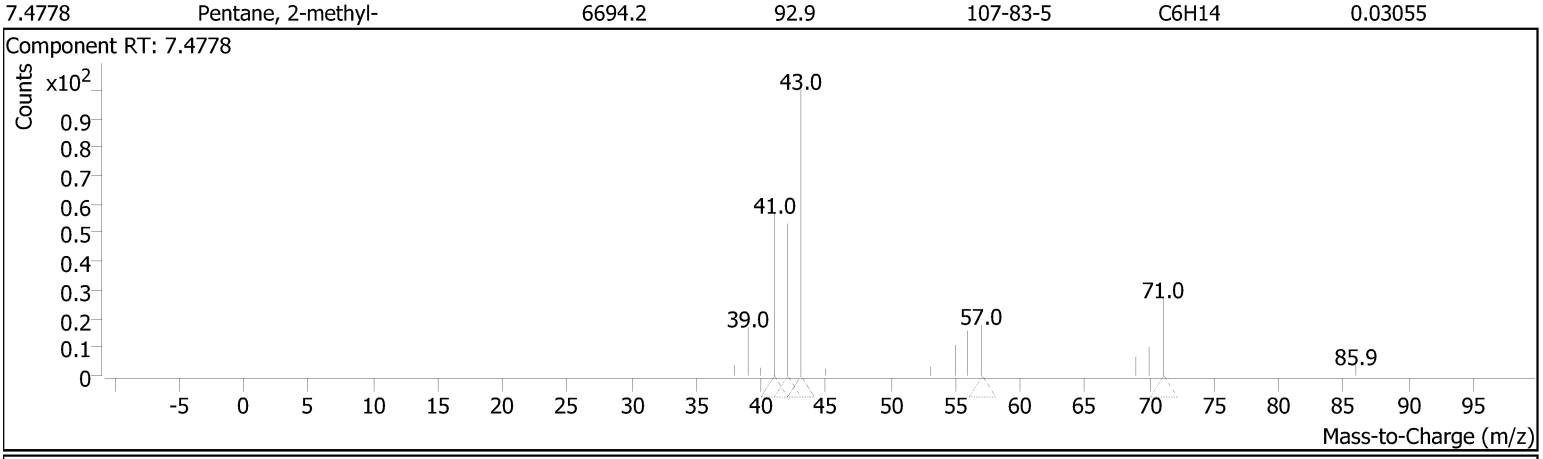


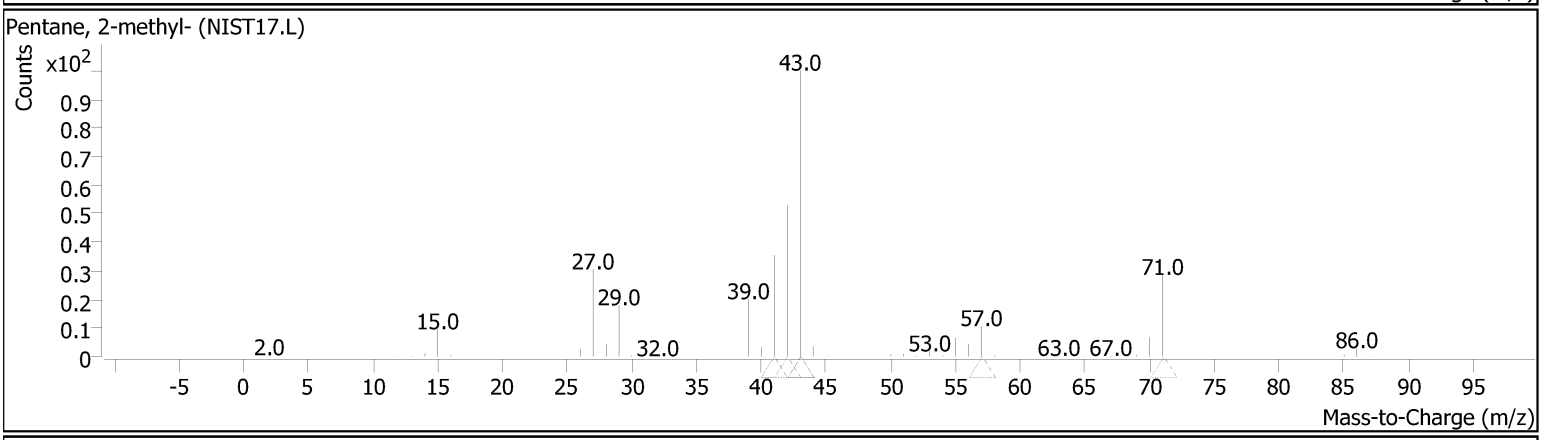


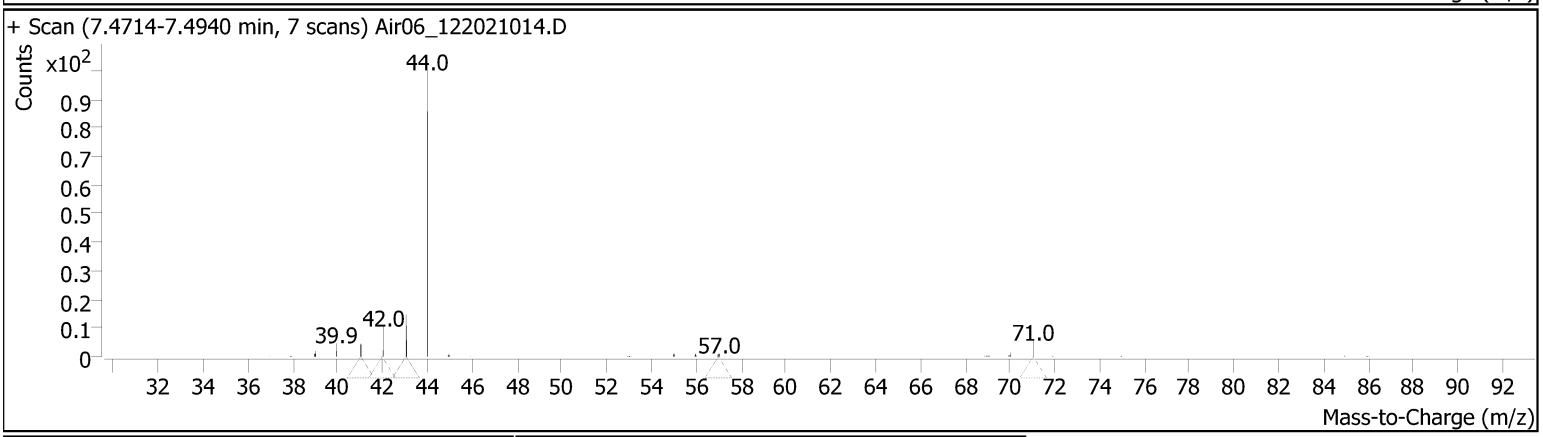


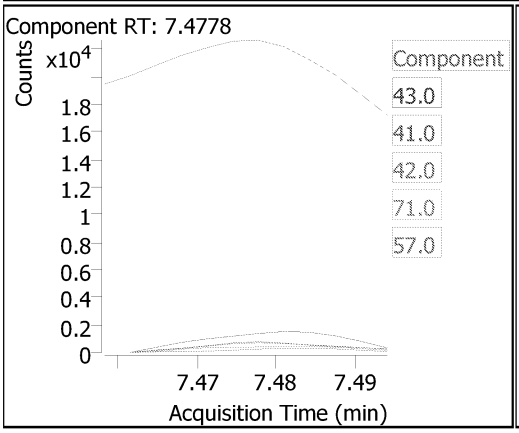


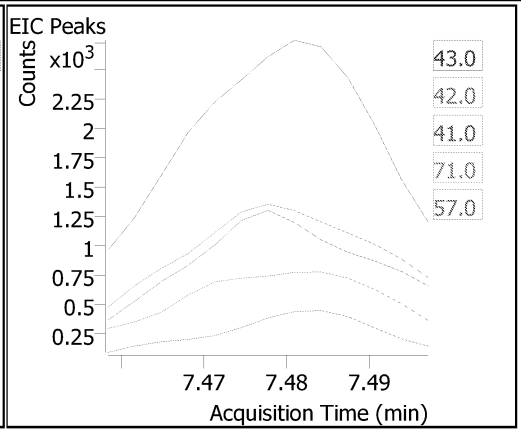
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.4778	Pentane, 2-methyl-	6694.2	92.9	107-83-5	C6H14	0.03055

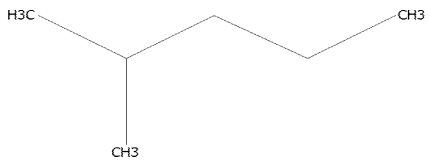




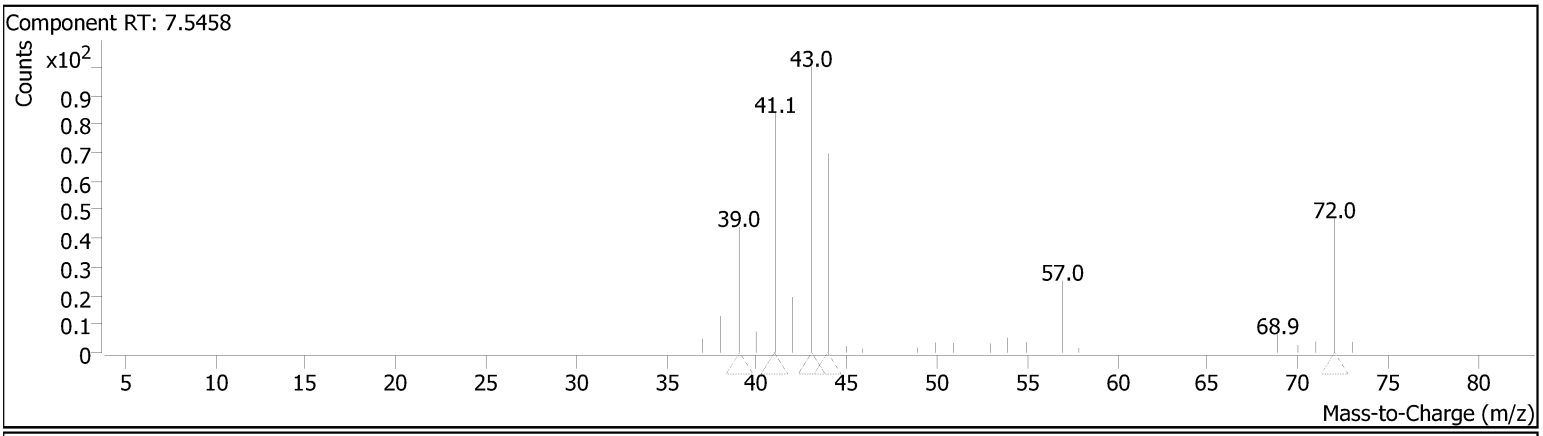


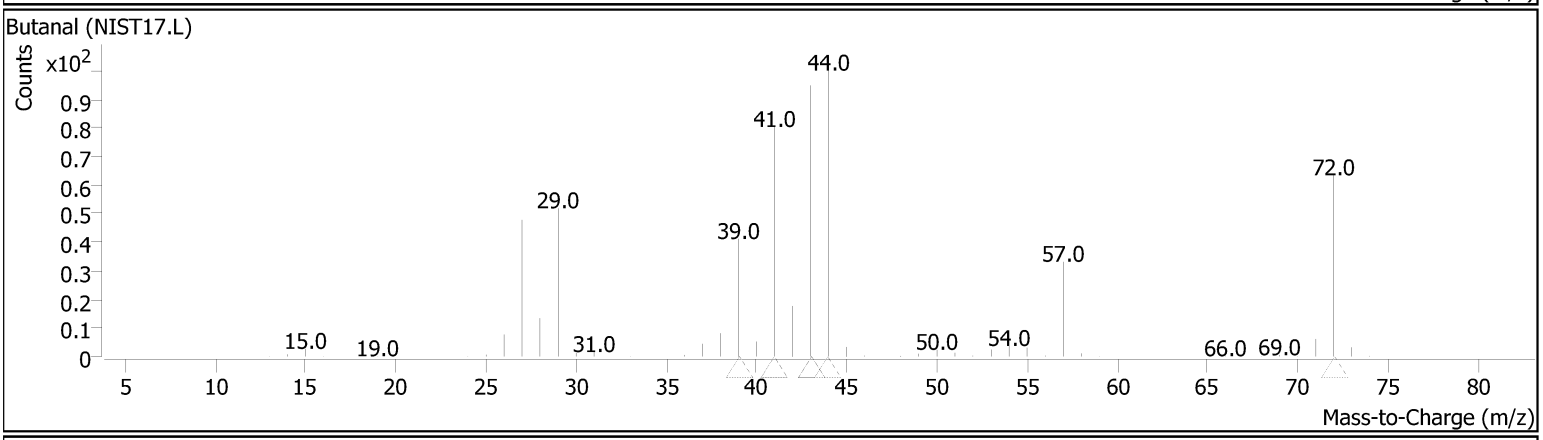


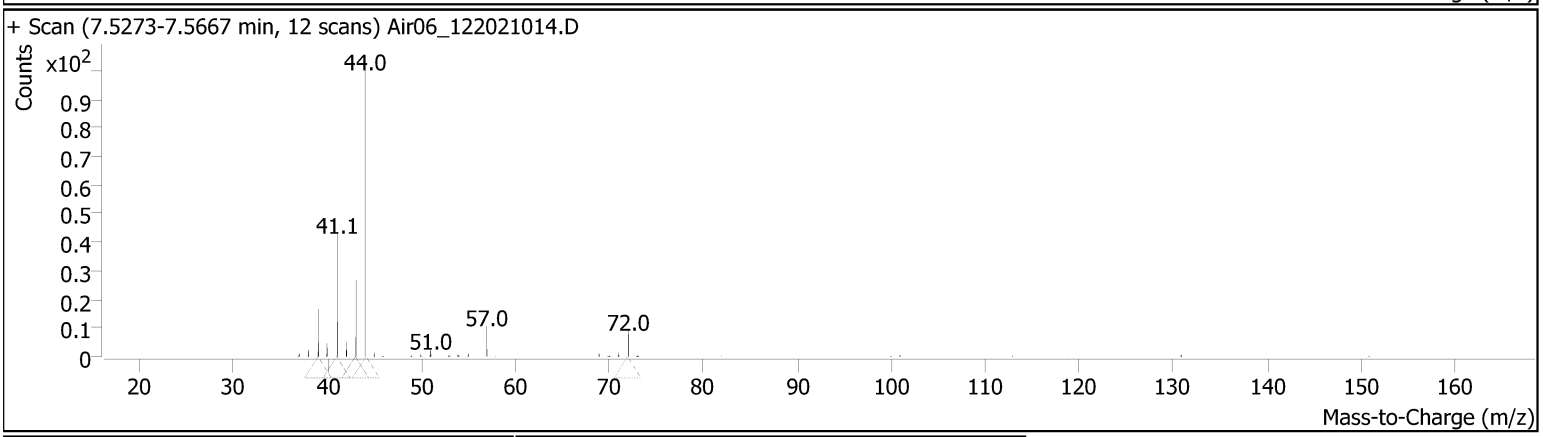


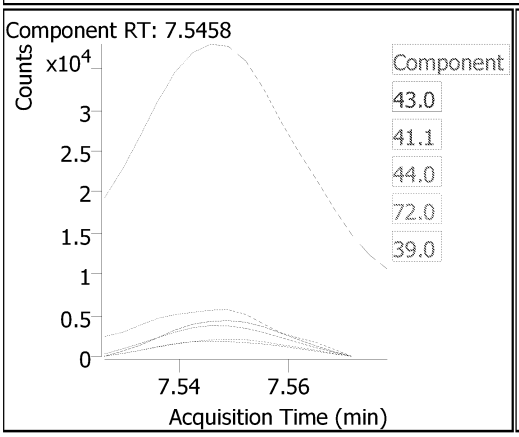


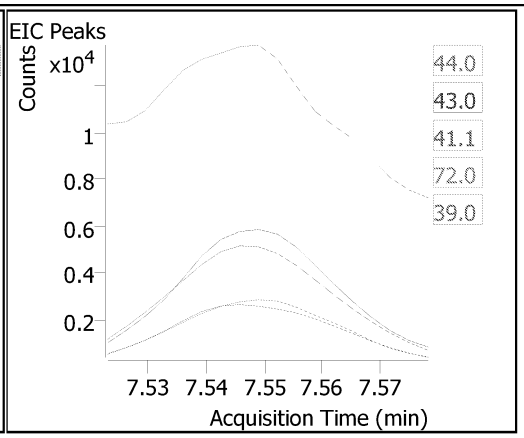
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.5458	Butanal	42266.4	95.7	123-72-8	C4H8O	0.1929

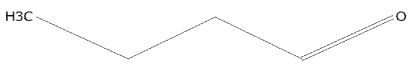




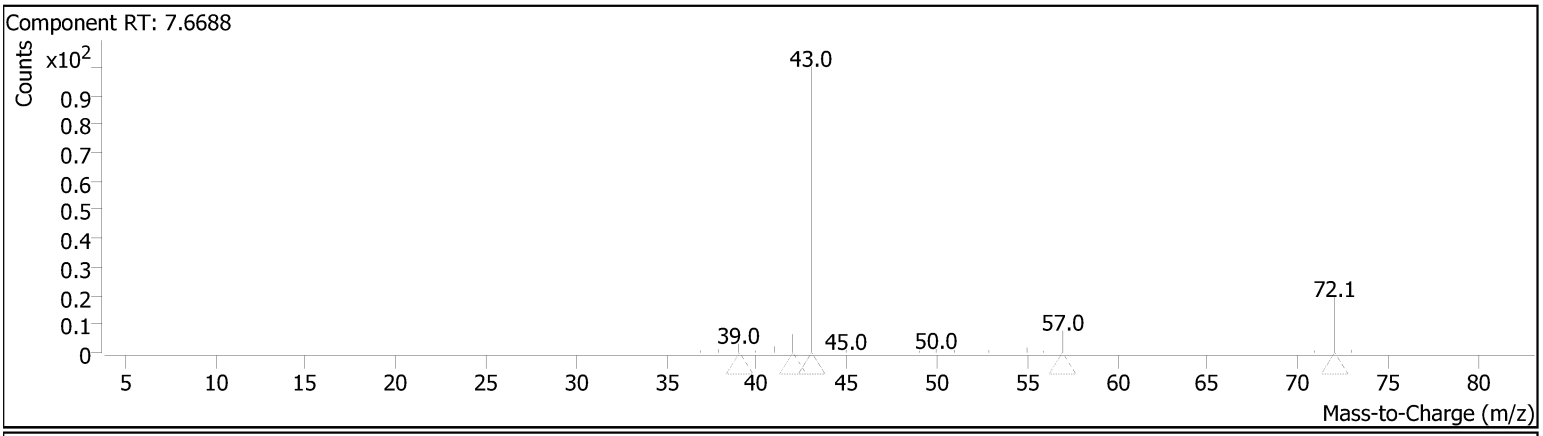


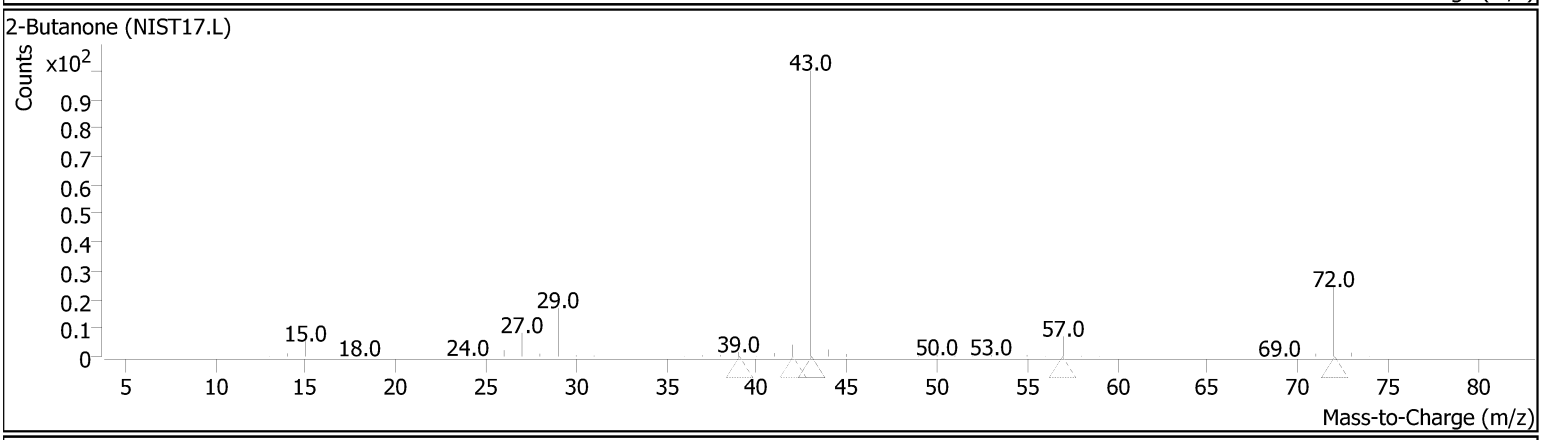


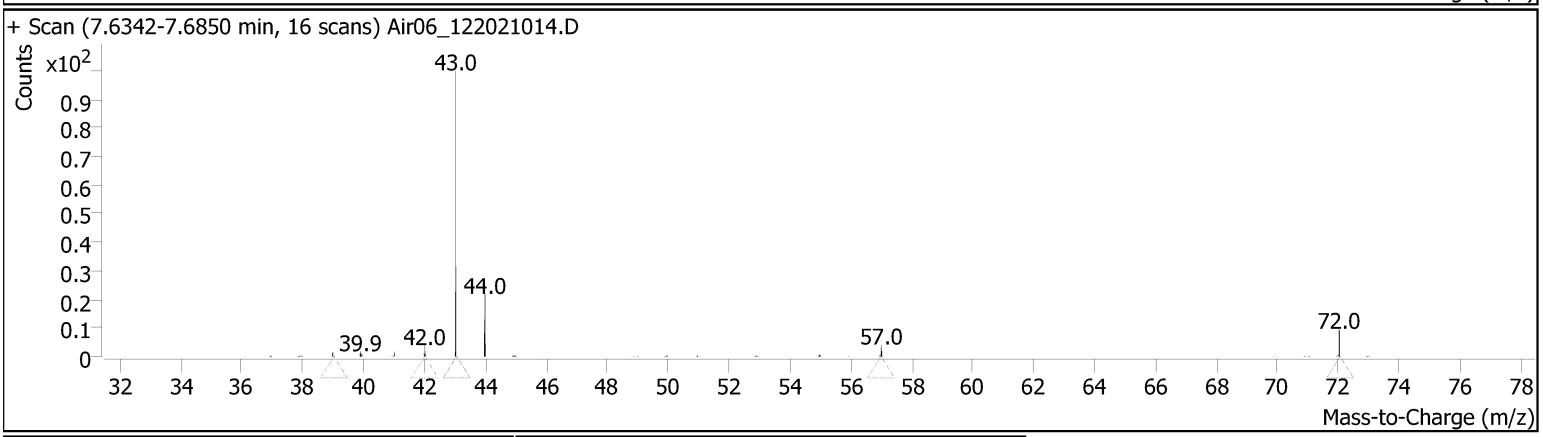


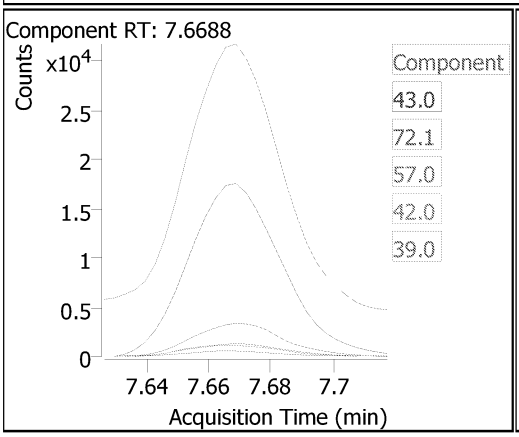


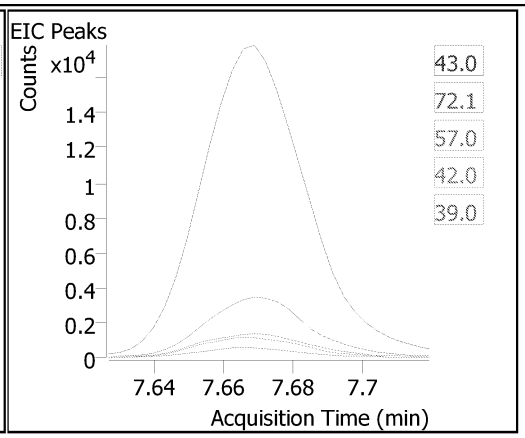
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.6688	2-Butanone	56476.0	95.4	78-93-3	C4H8O	0.2577

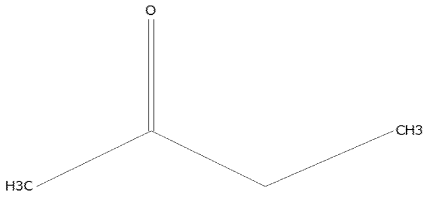




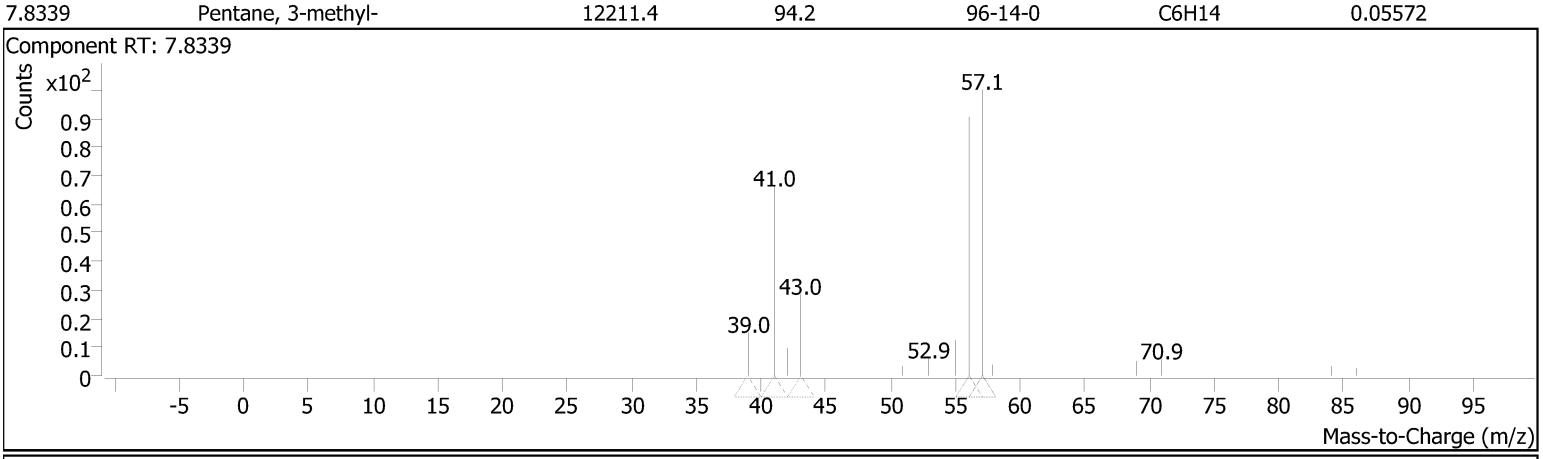


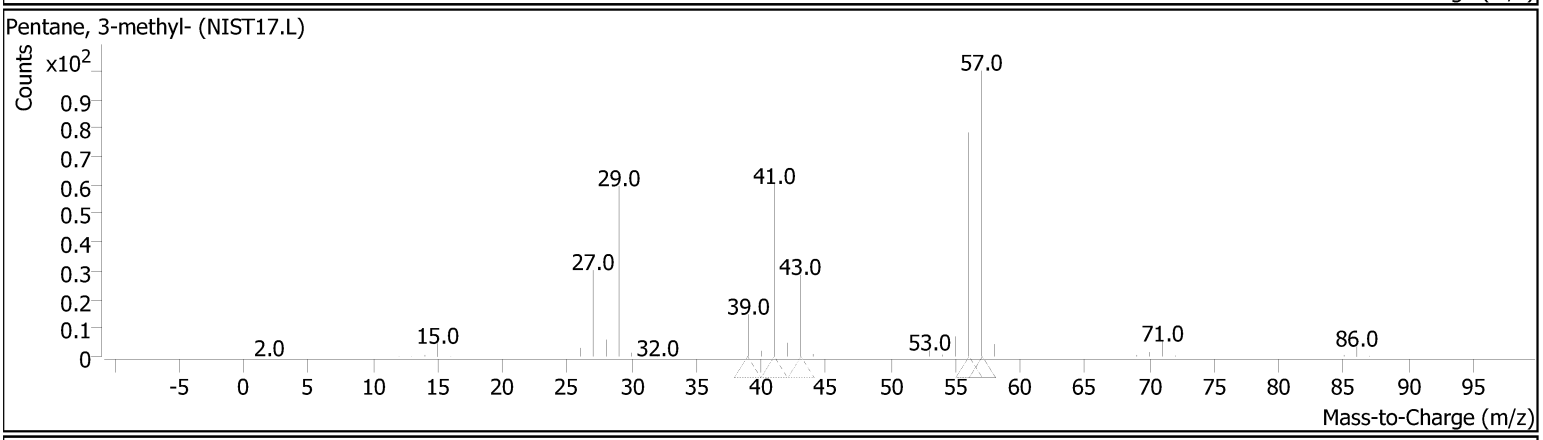


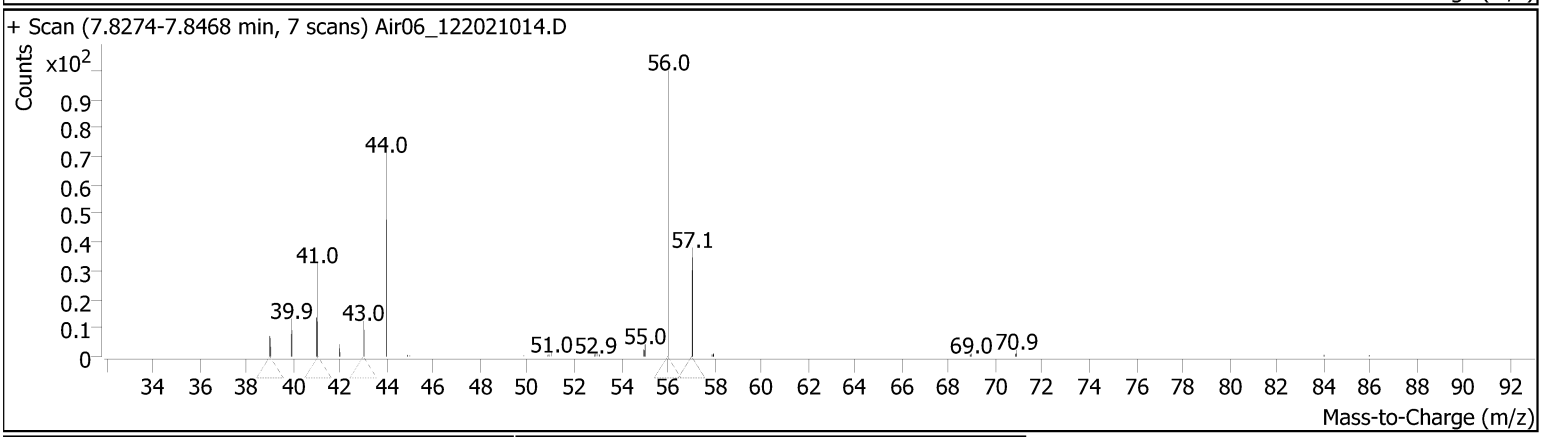


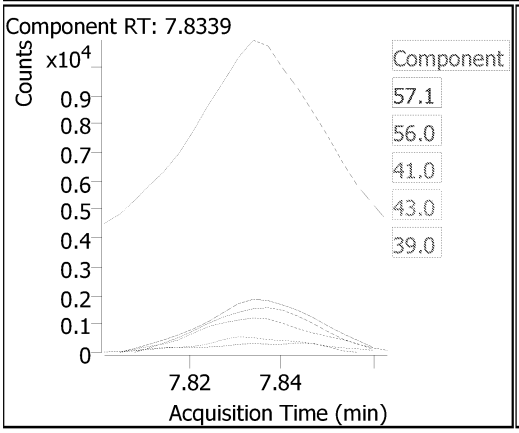


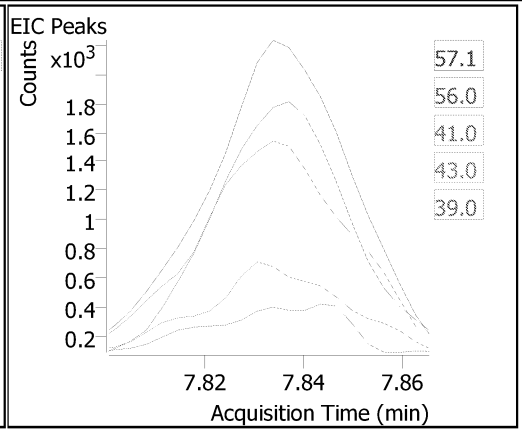
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.8339	Pentane, 3-methyl-	12211.4	94.2	96-14-0	C6H14	0.05572

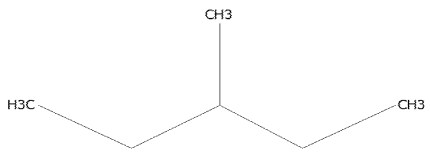




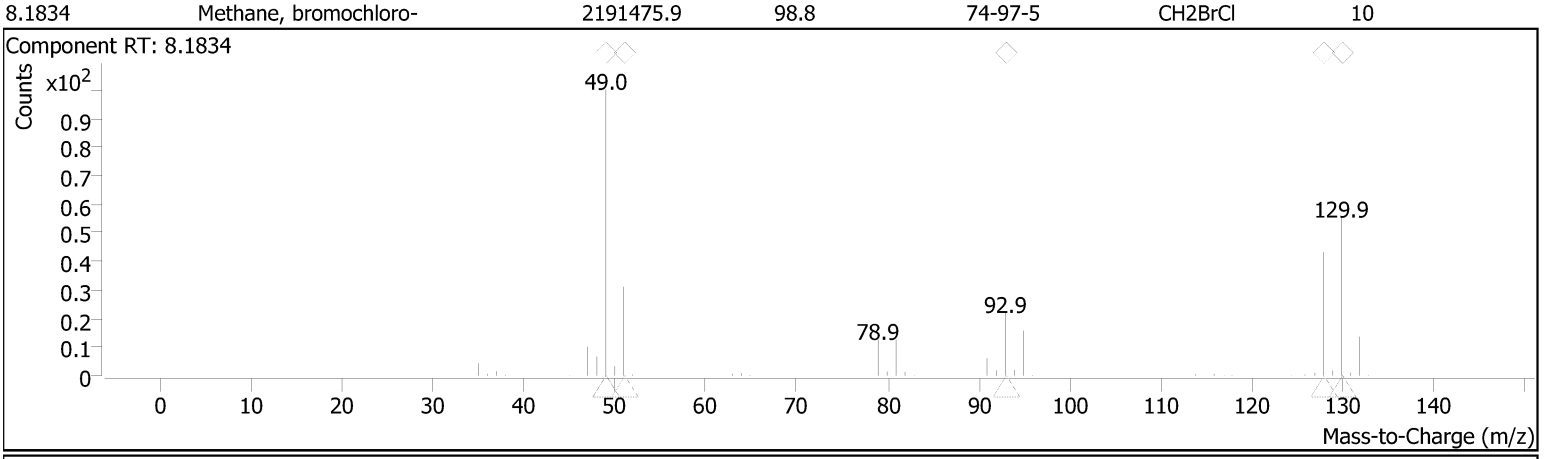


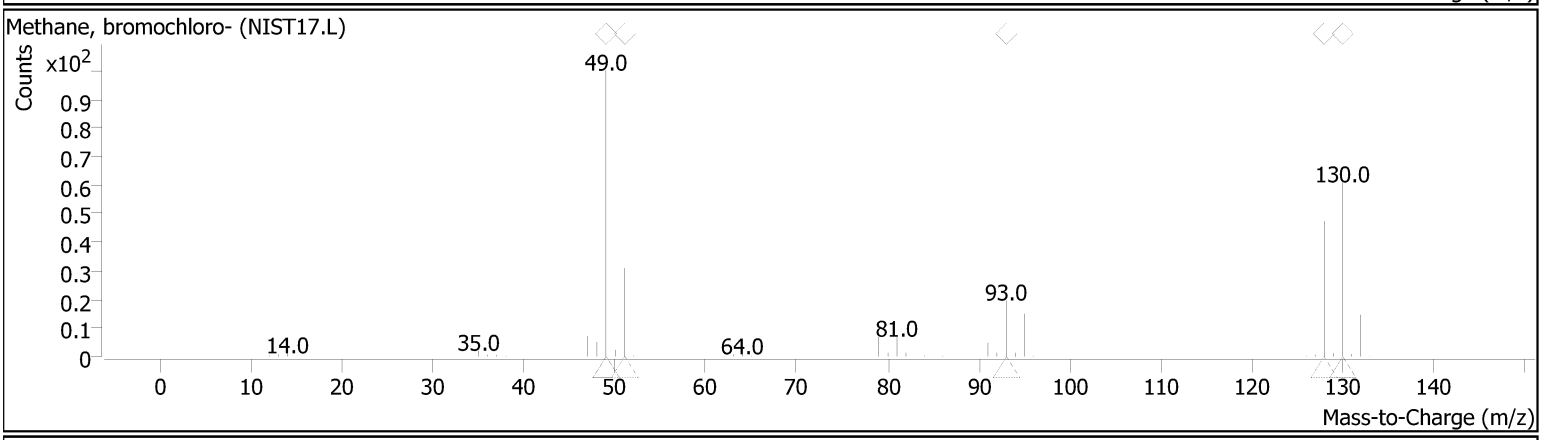


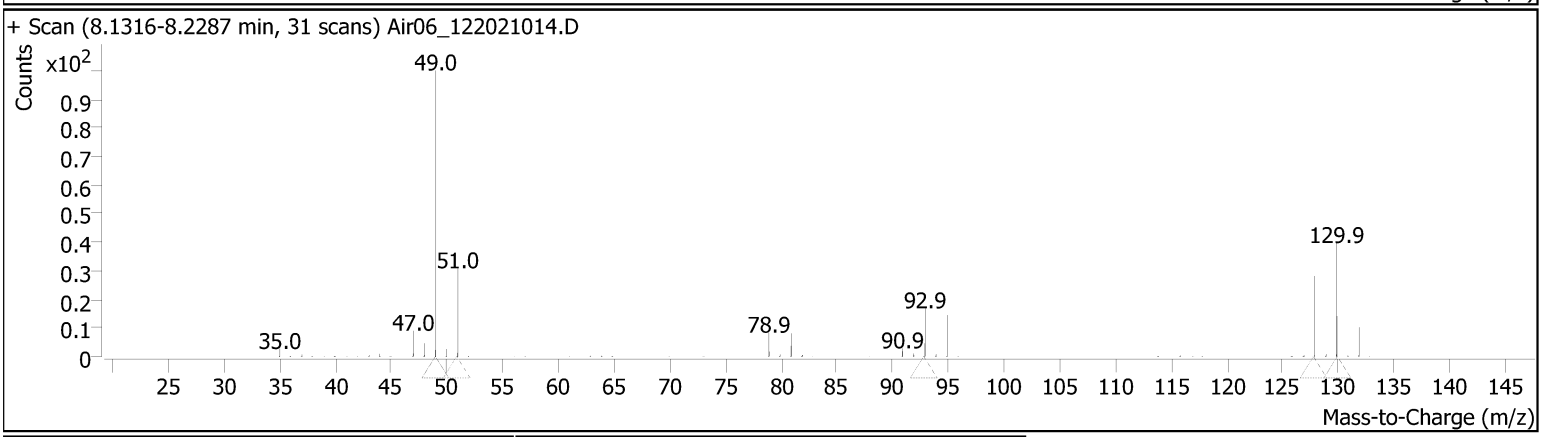


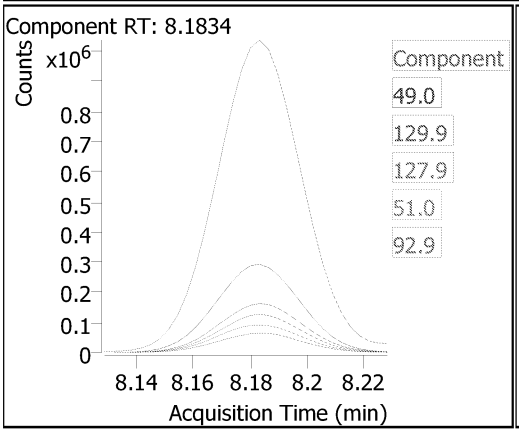


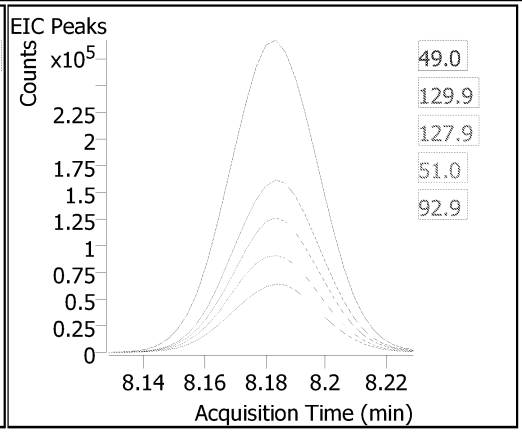
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.1834	Methane, bromochloro-	2191475.9	98.8	74-97-5	CH2BrCl	10

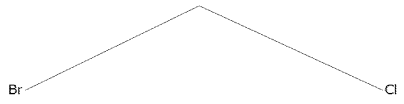




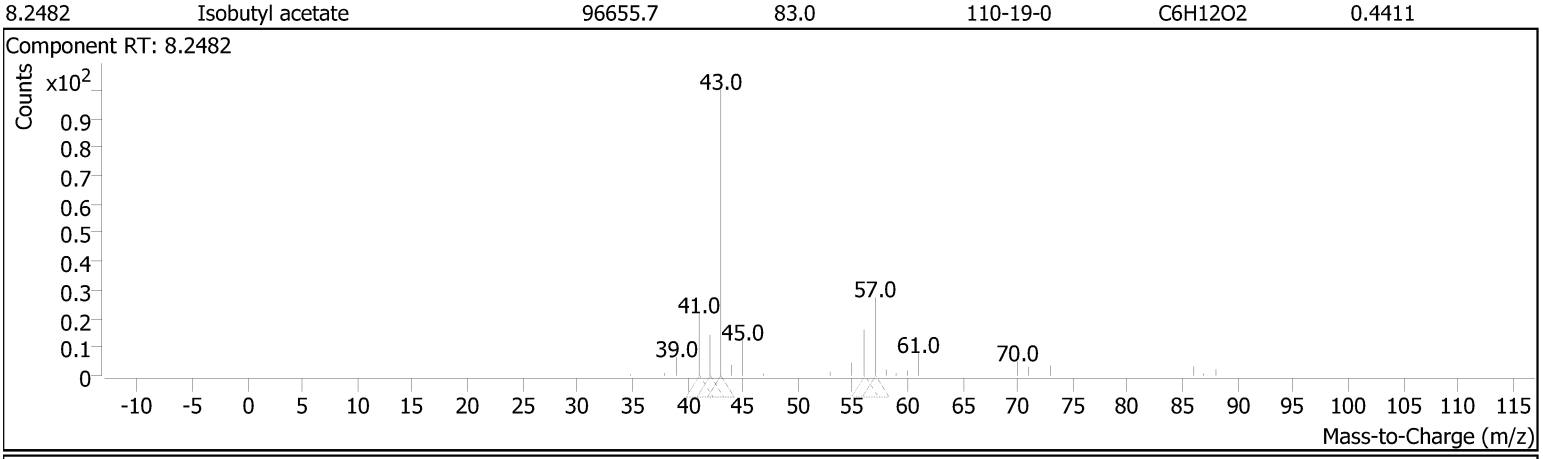


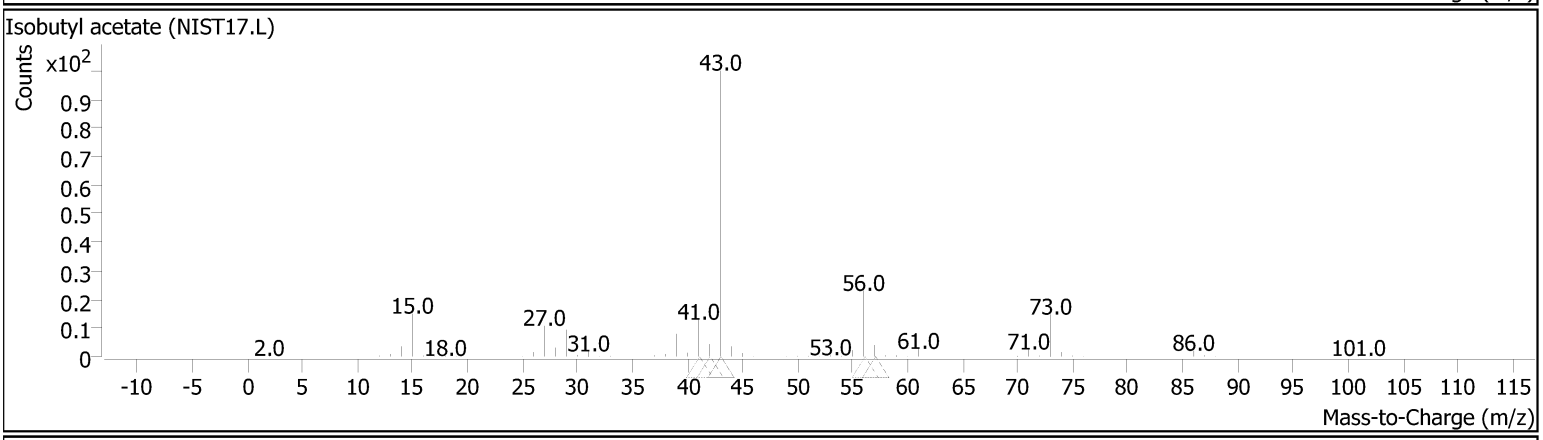


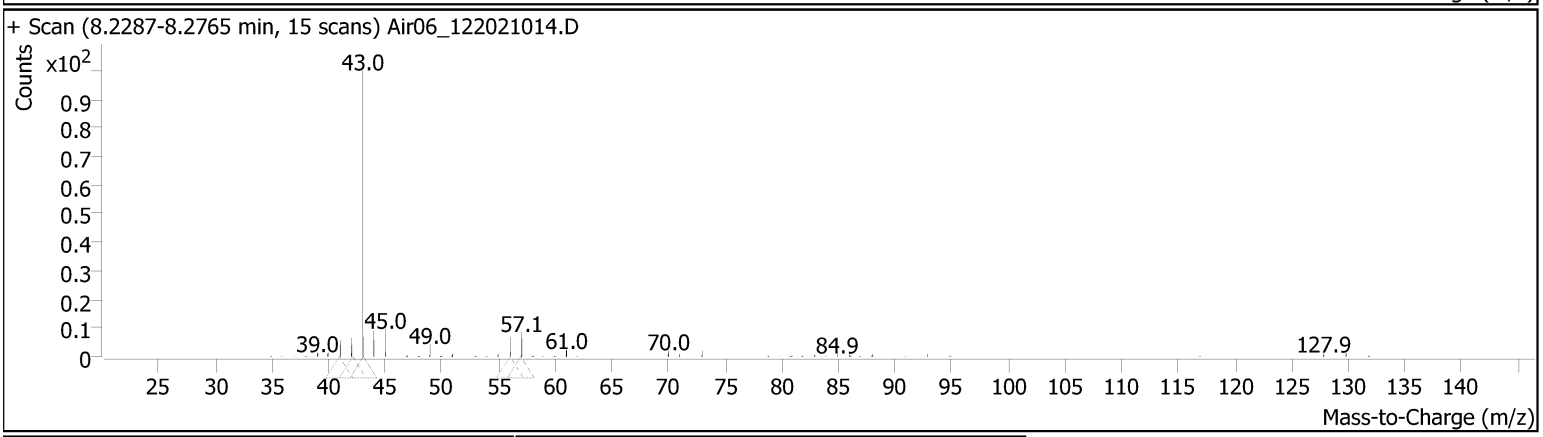


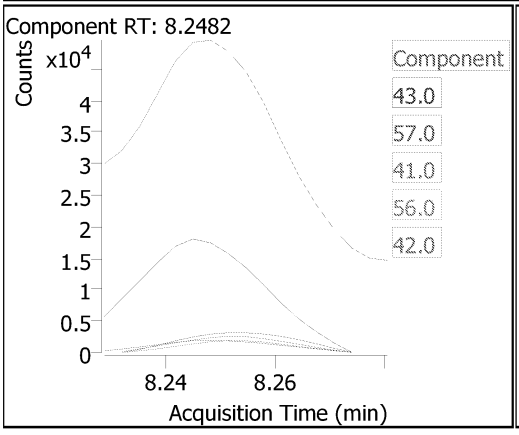


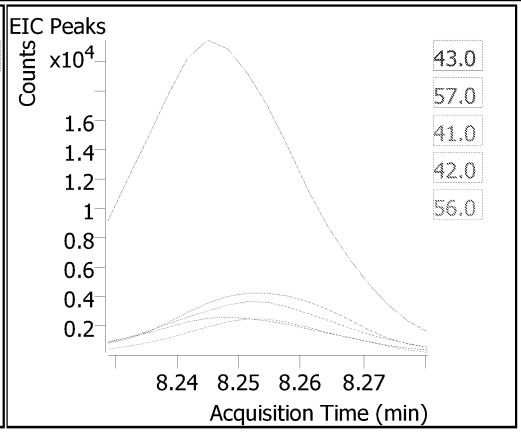
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.2482	Isobutyl acetate	96655.7	83.0	110-19-0	C6H12O2	0.4411

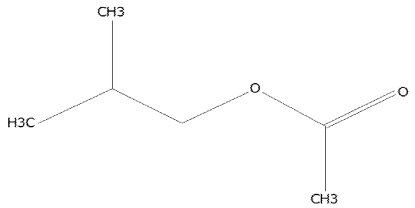




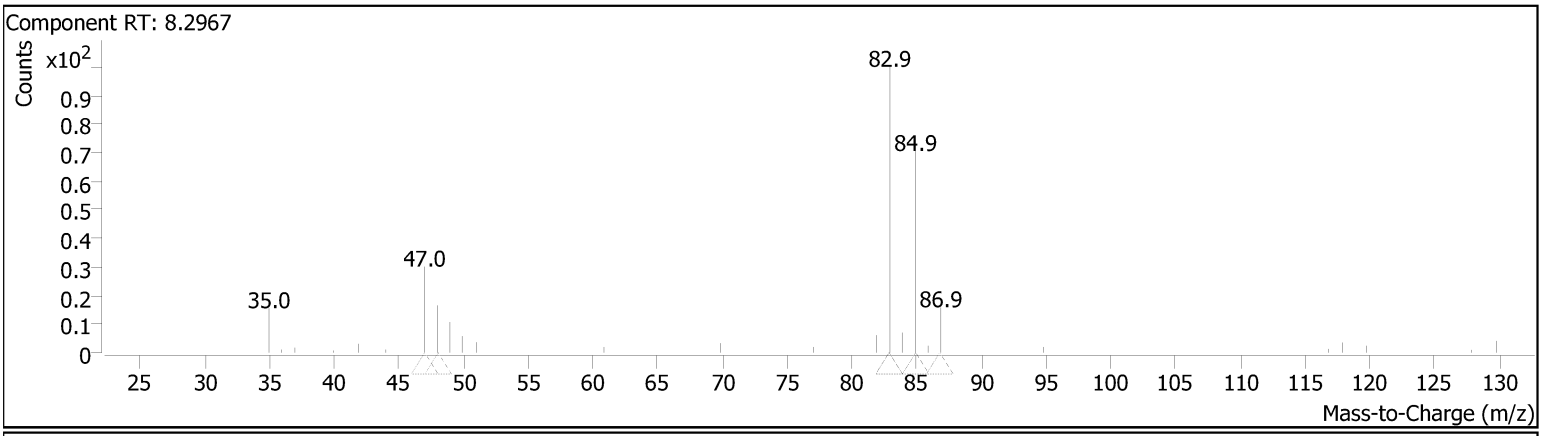


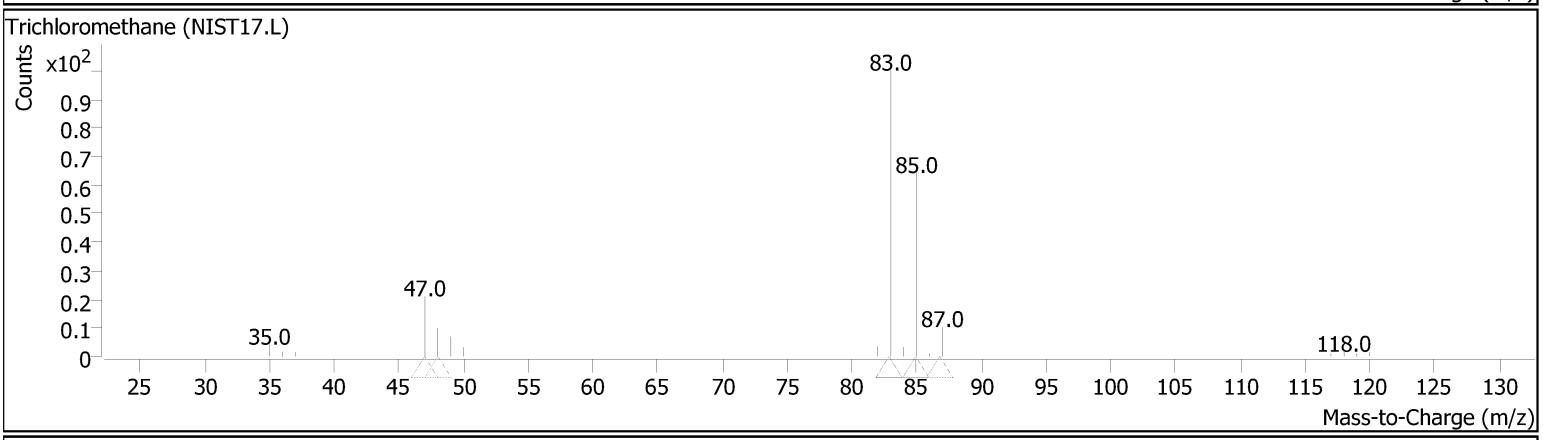


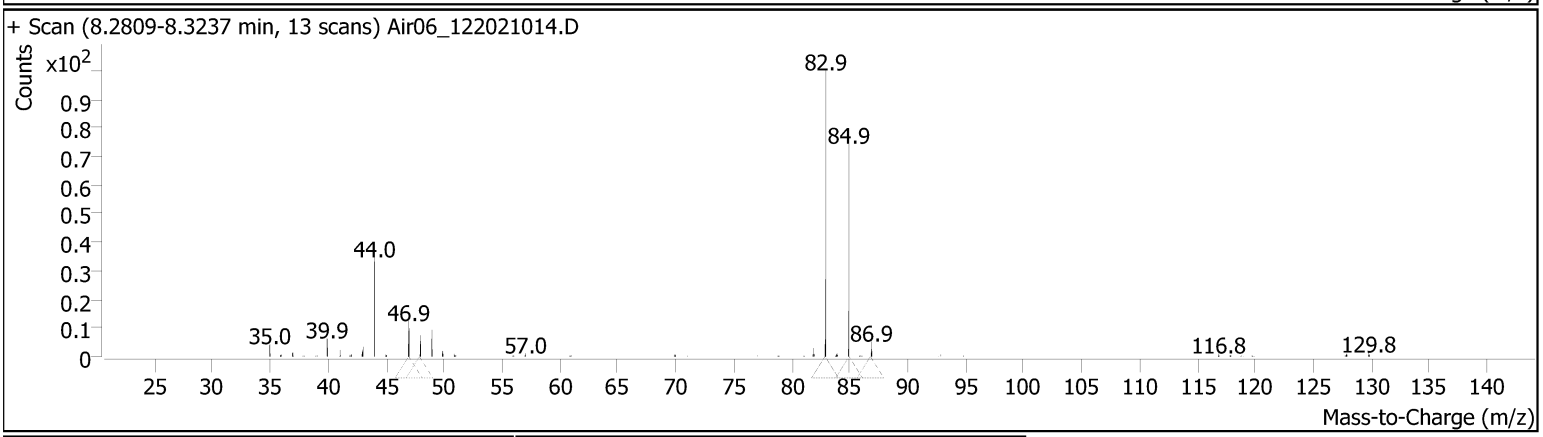


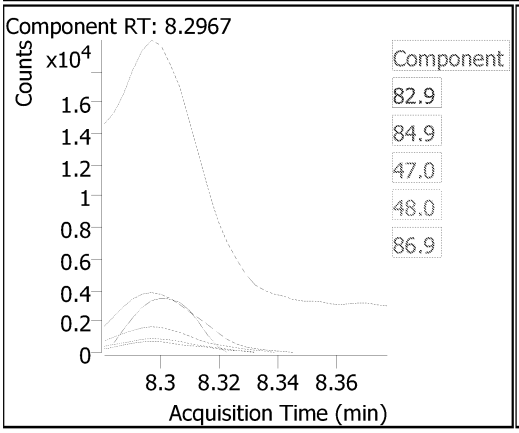


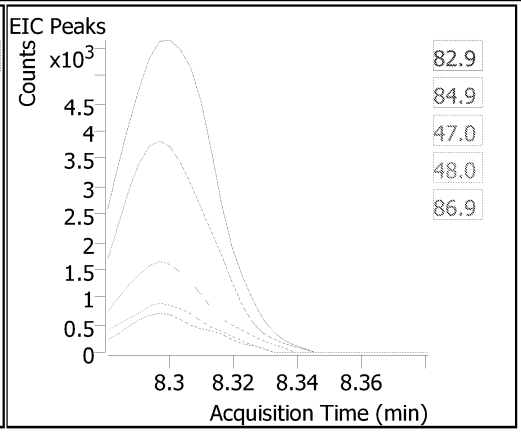
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.2967	Trichloromethane	34475.5	92.1	67-66-3	CHCl3	0.1573

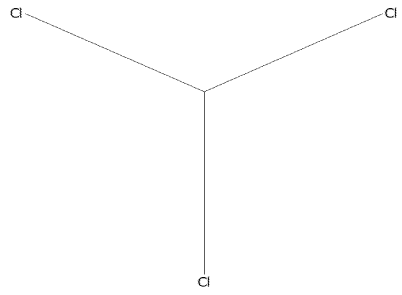




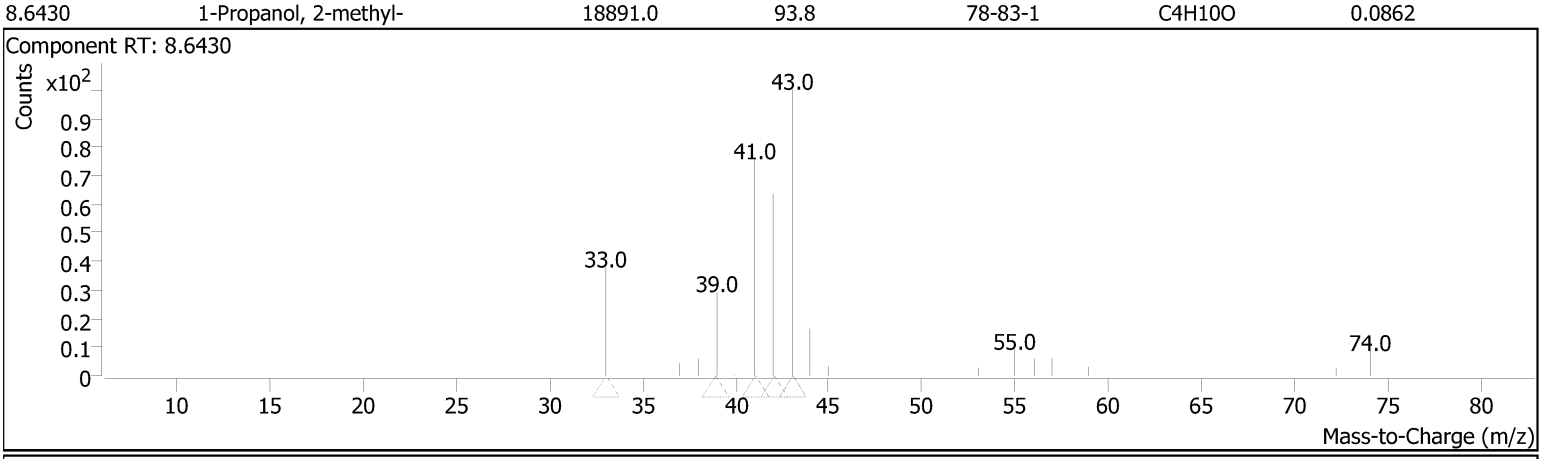


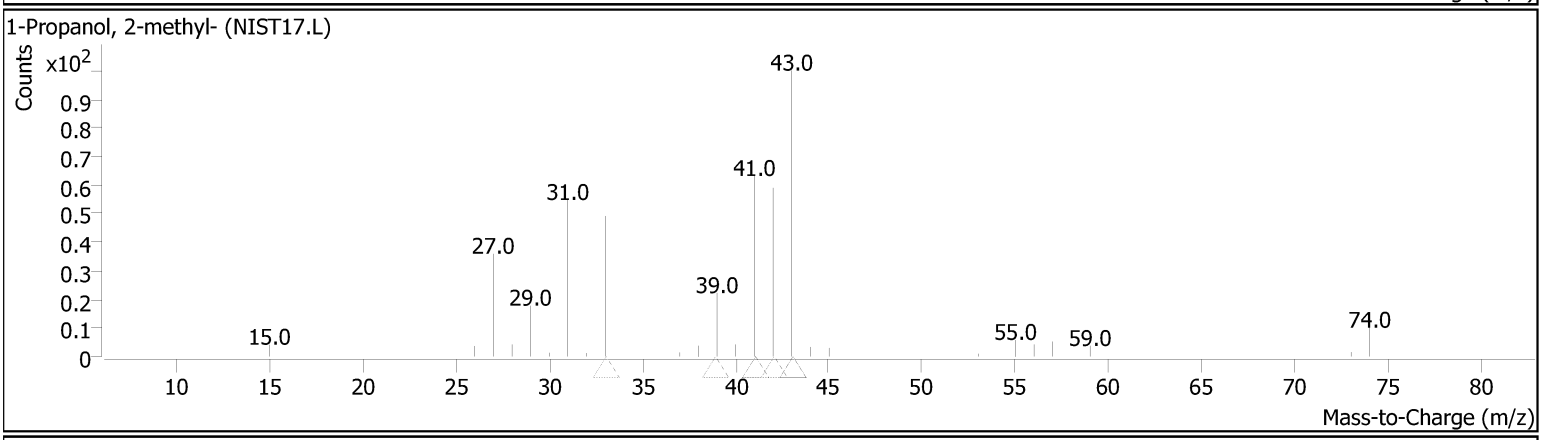


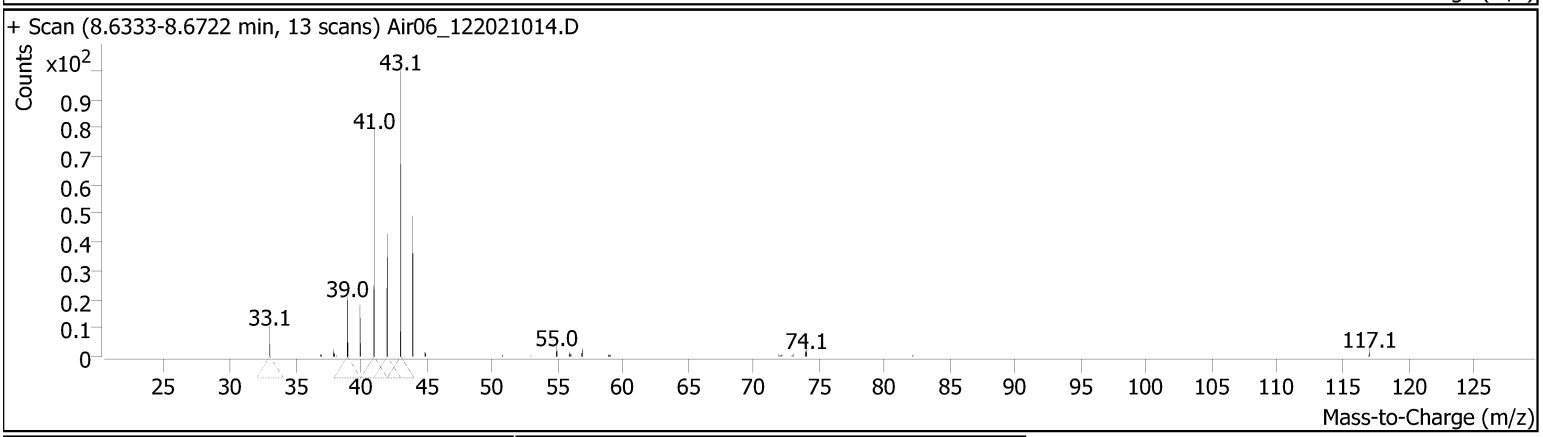


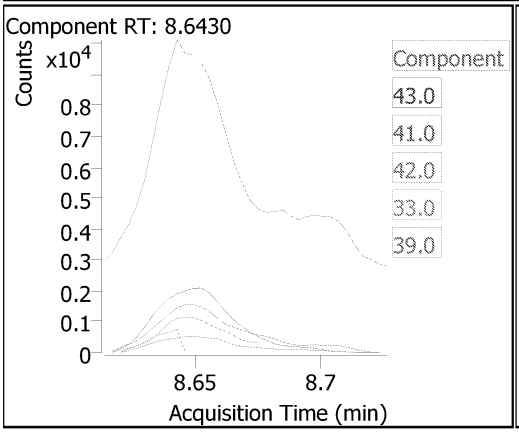


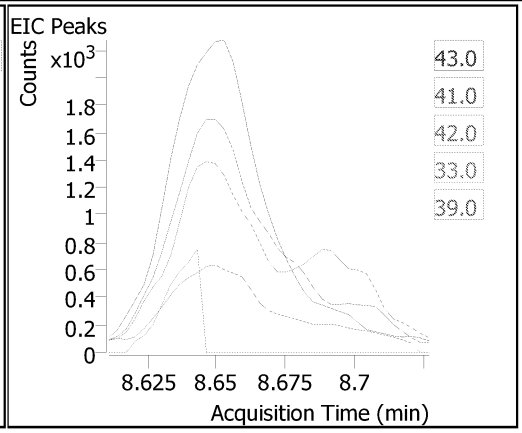
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.6430	1-Propanol, 2-methyl-	18891.0	93.8	78-83-1	C4H10O	0.0862

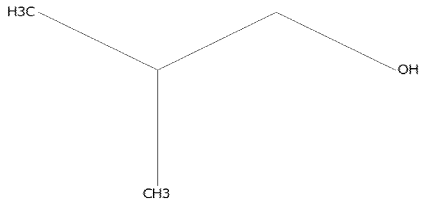




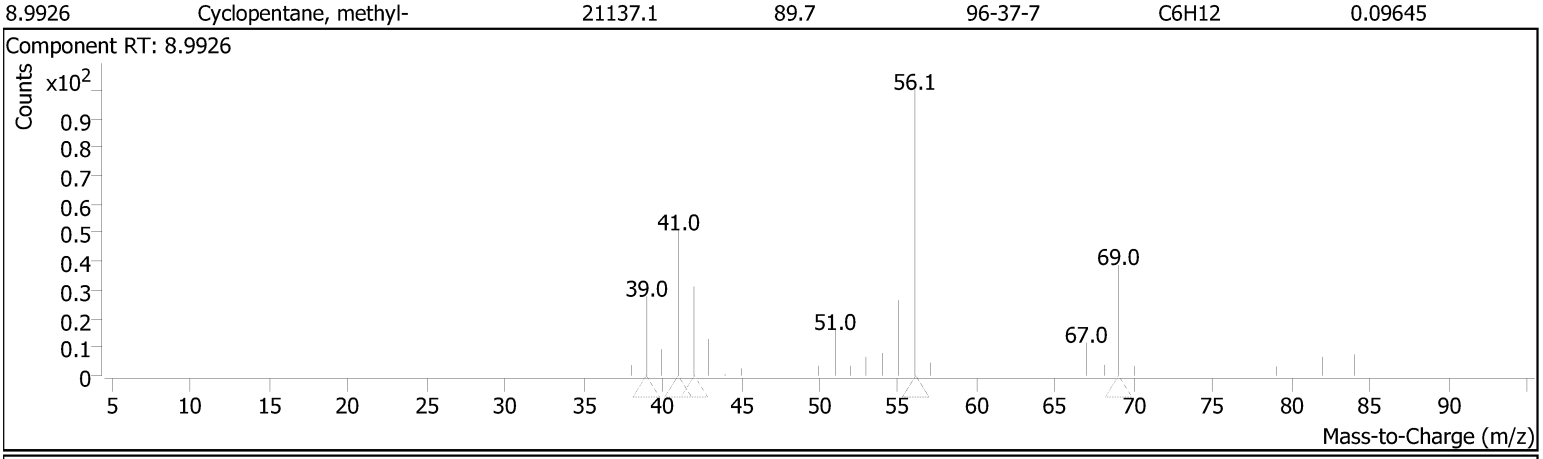


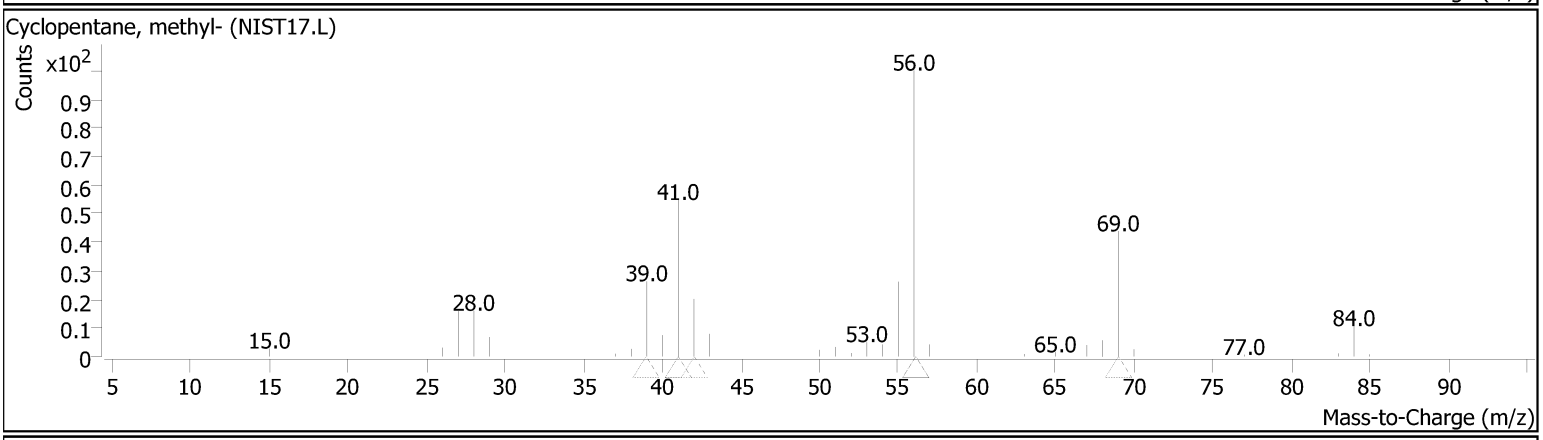


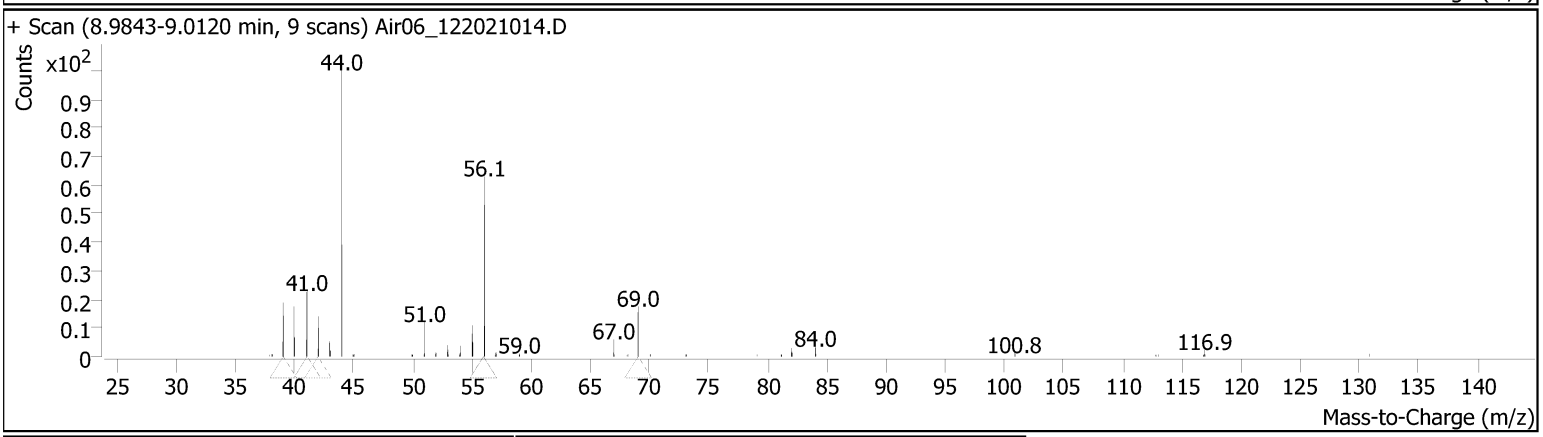


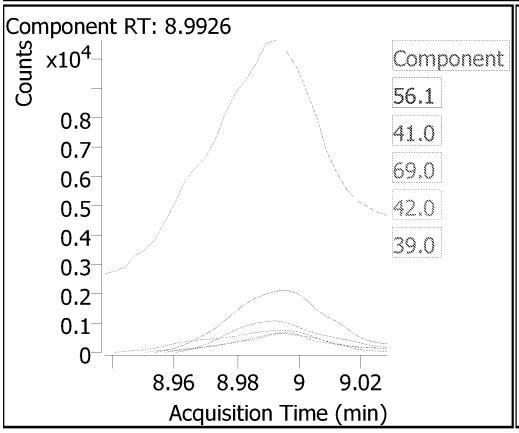


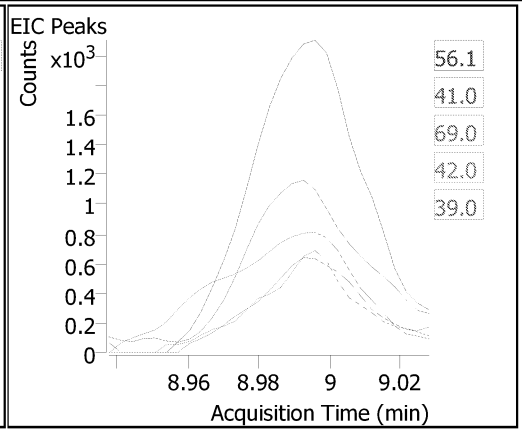
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.9926	Cyclopentane, methyl-	21137.1	89.7	96-37-7	C6H12	0.09645

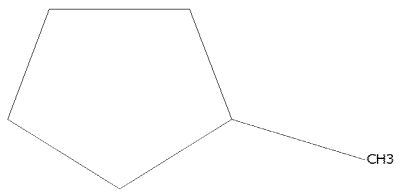




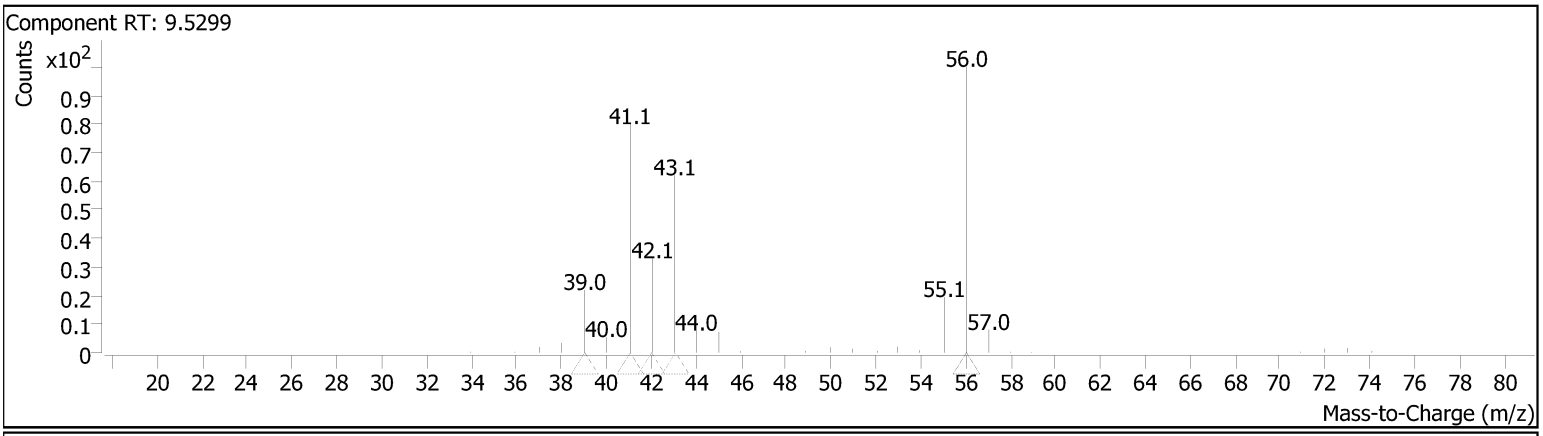


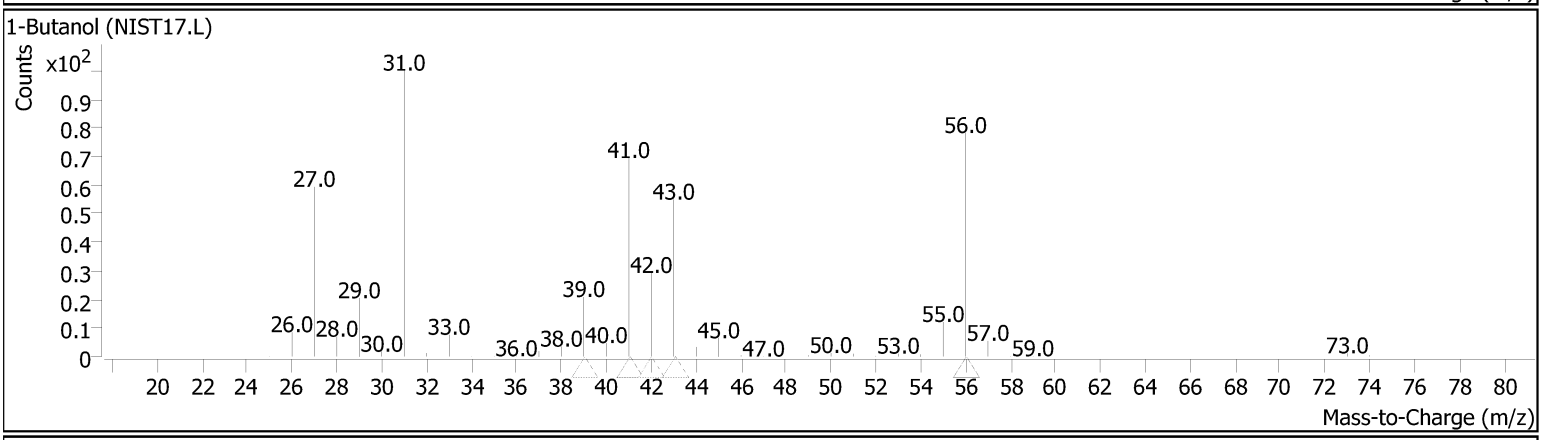


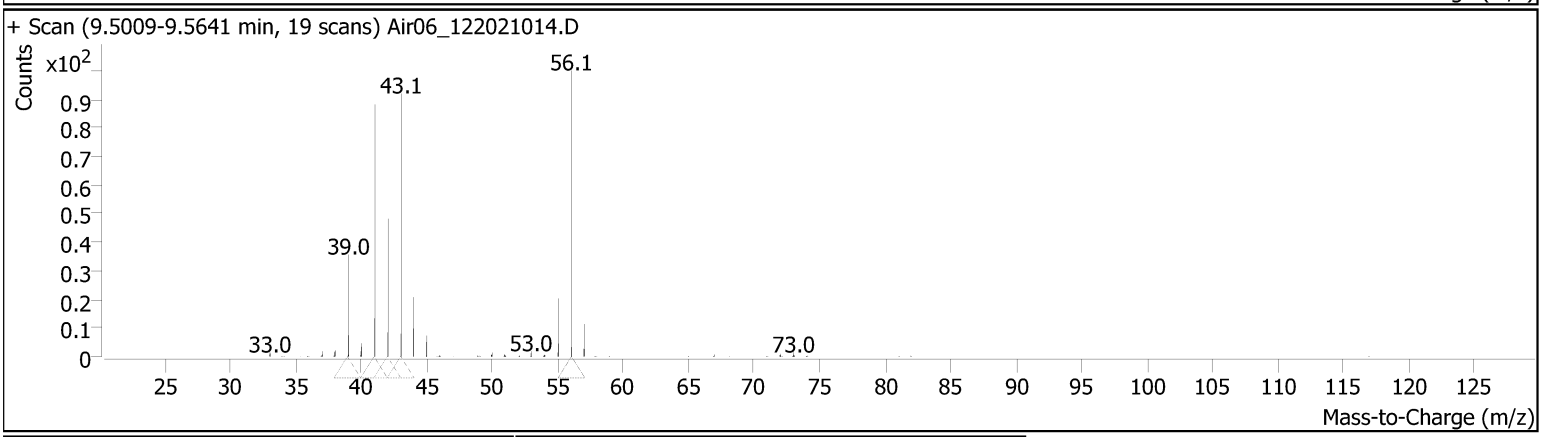


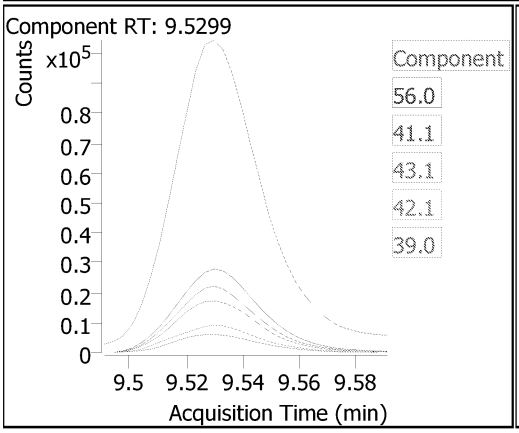


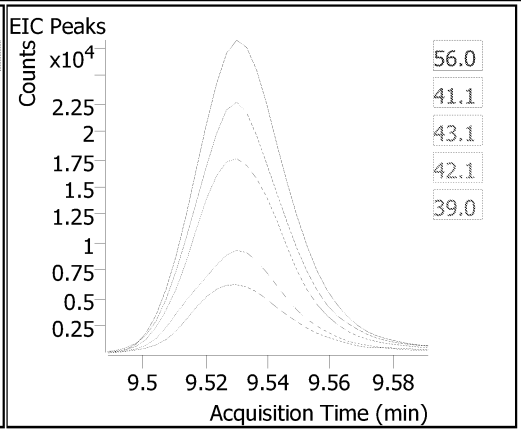
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.5299	1-Butanol	223747.1	96.9	71-36-3	C4H10O	0.6887

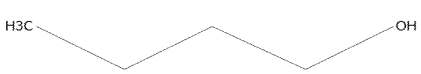




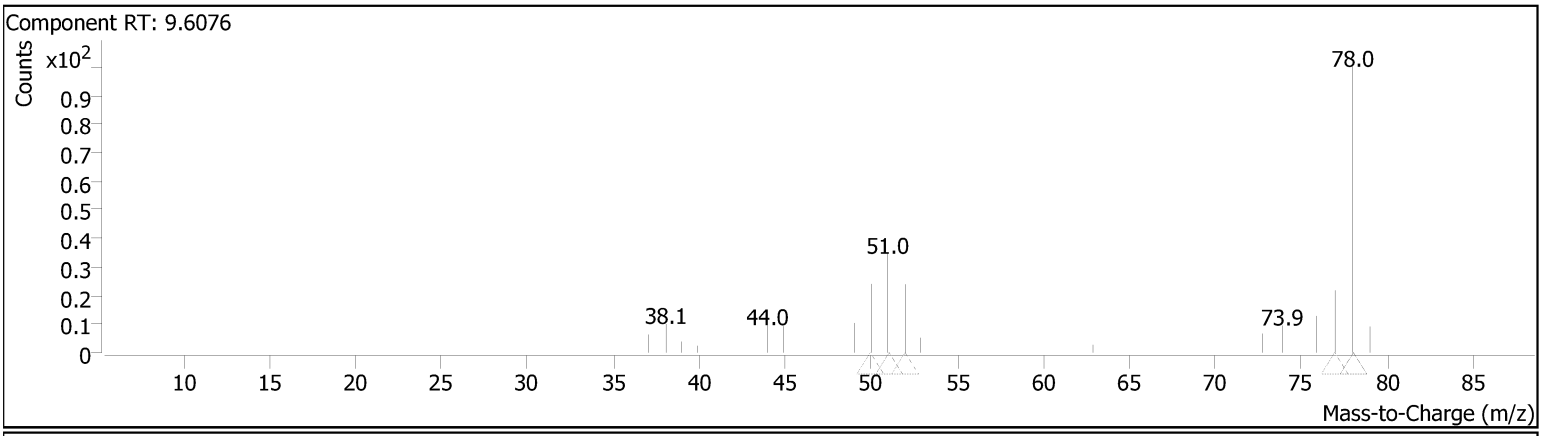


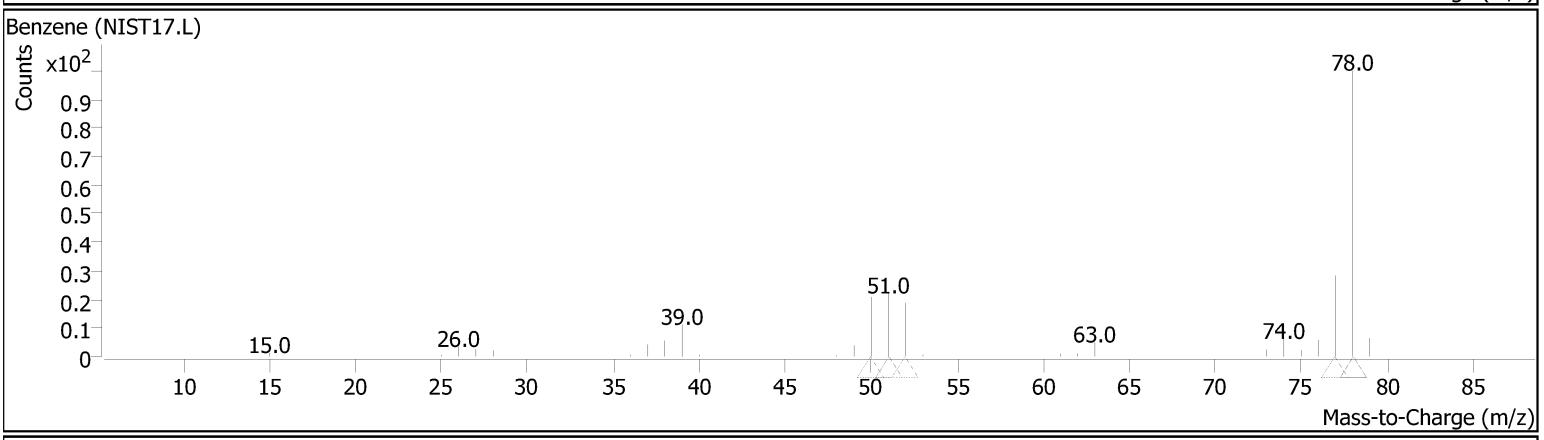


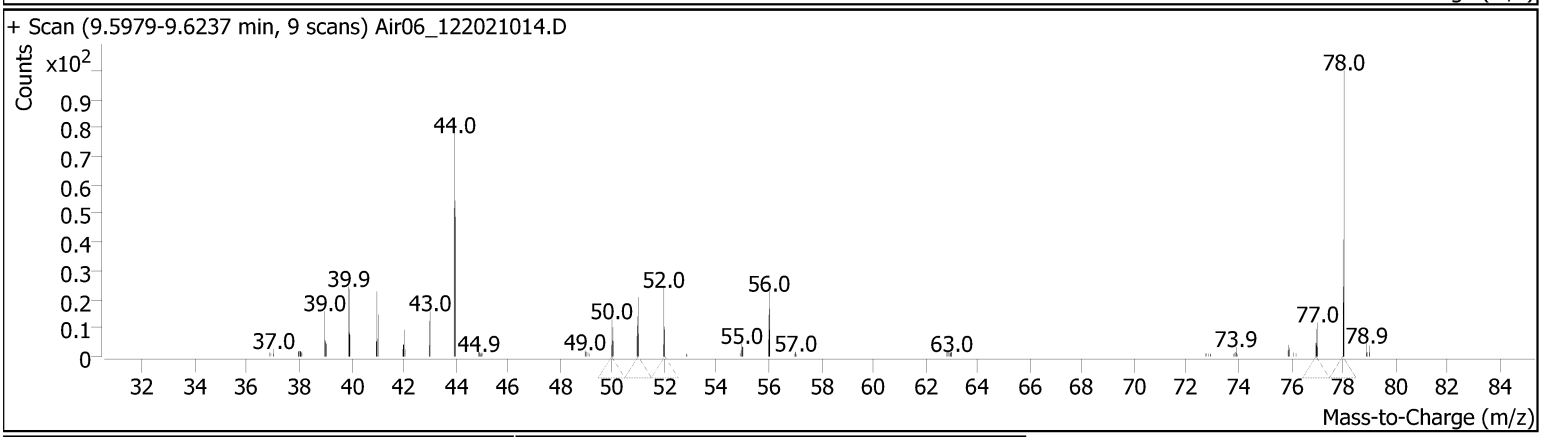


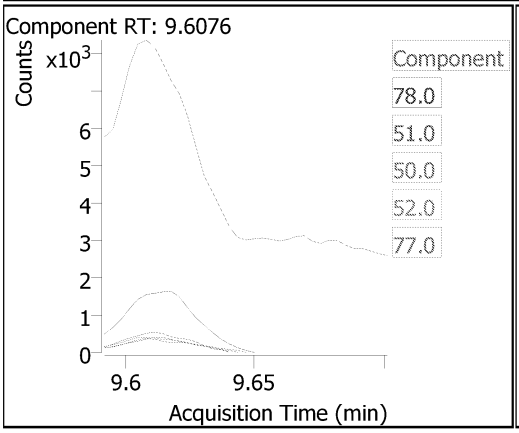


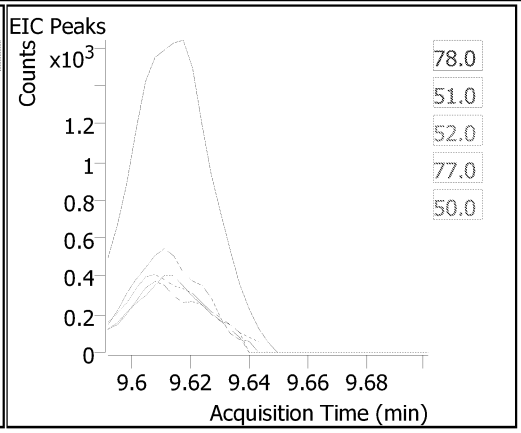
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.6076	Benzene	13805.8	91.6	71-43-2	C6H6	0.04249

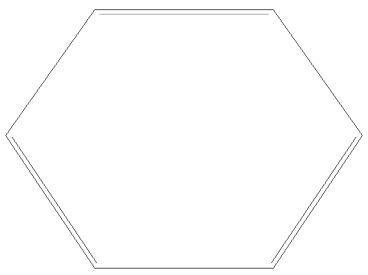




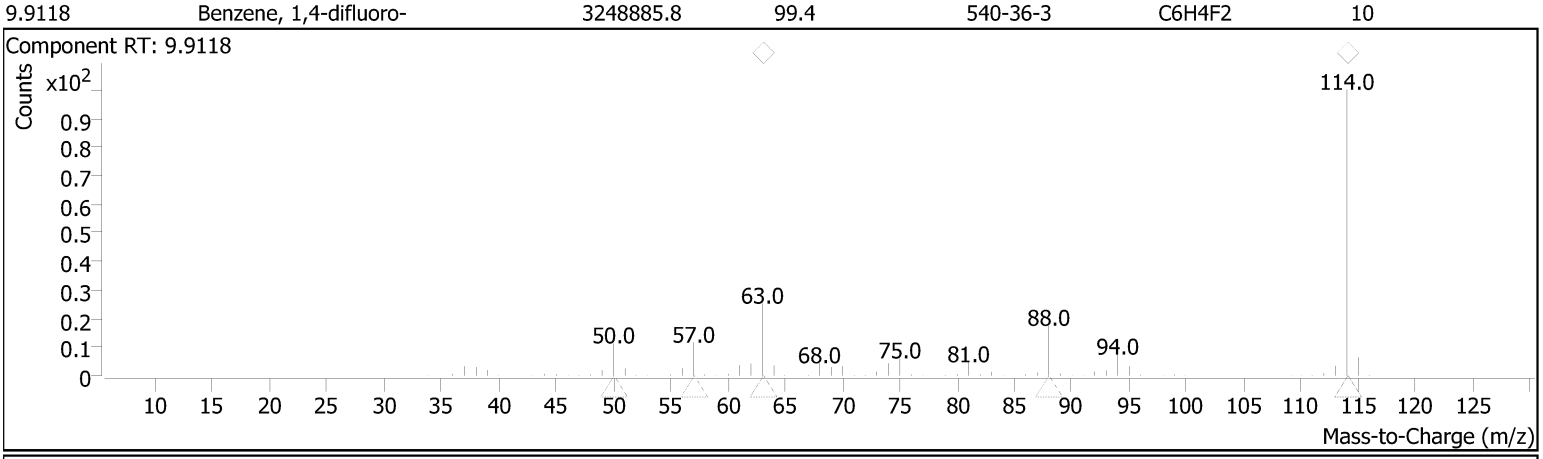


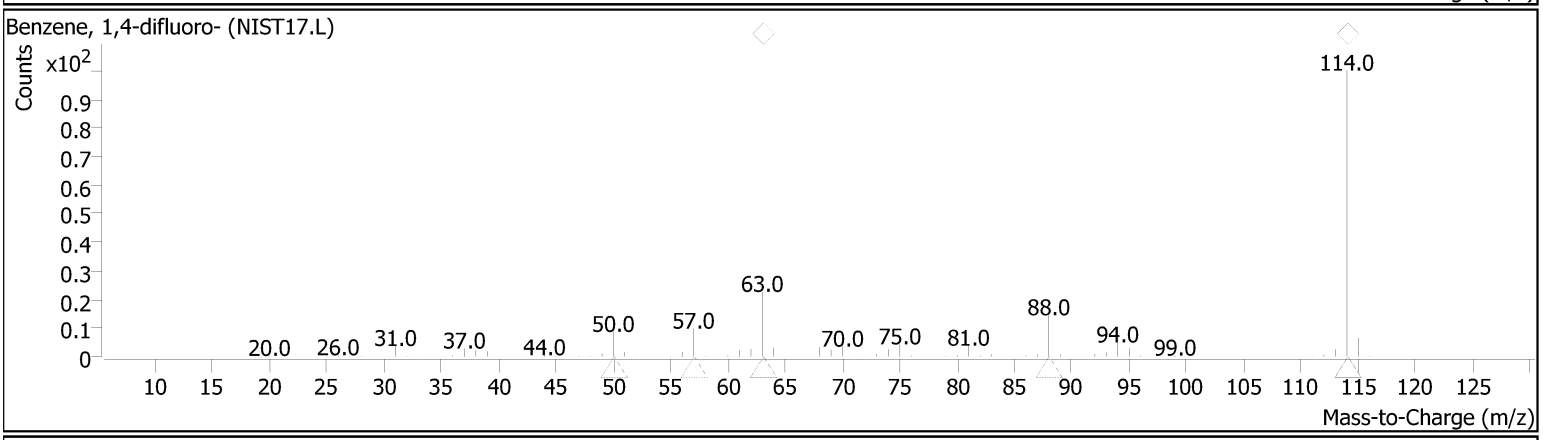


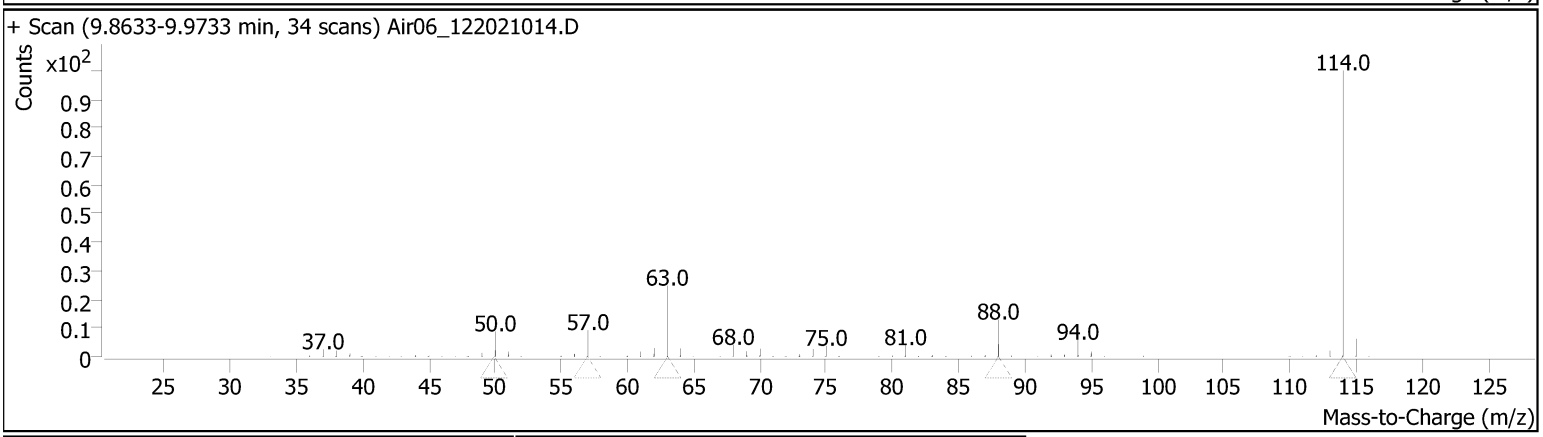


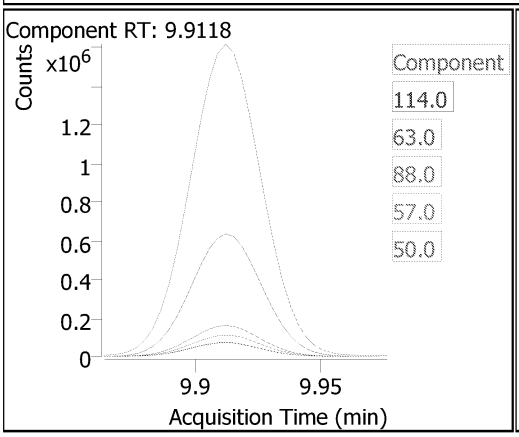


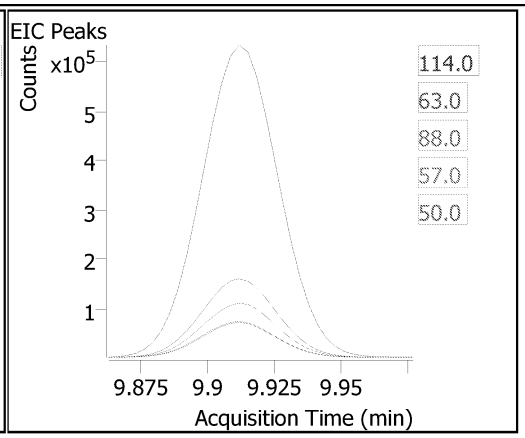
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.9118	Benzene, 1,4-difluoro-	3248885.8	99.4	540-36-3	C6H4F2	10

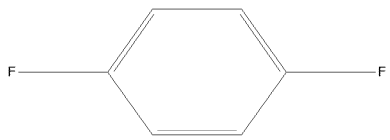




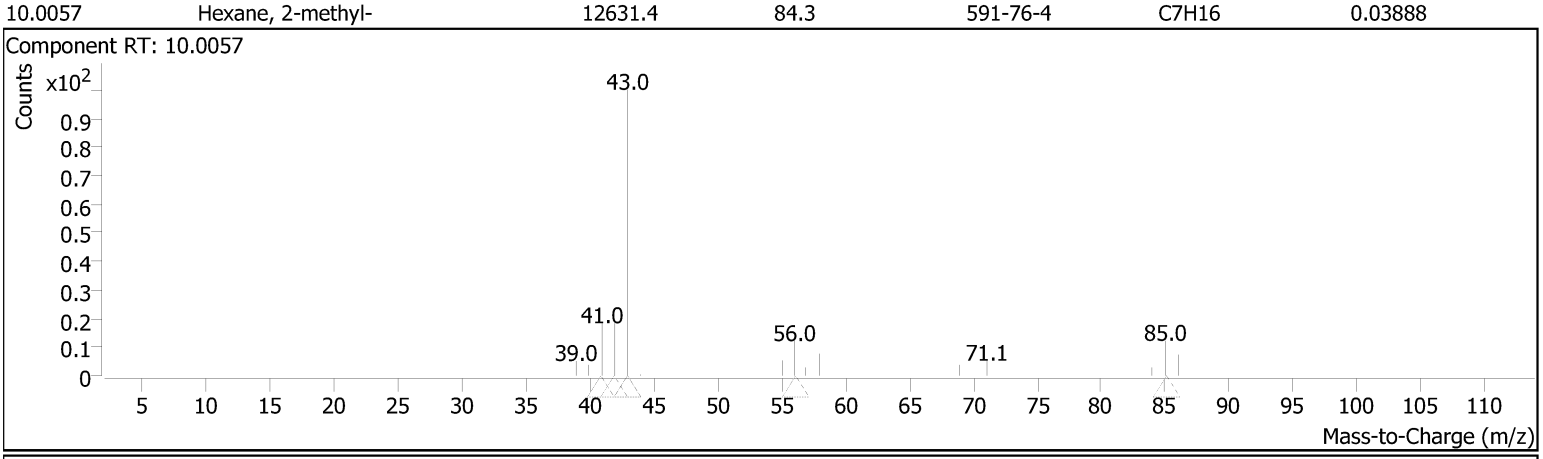


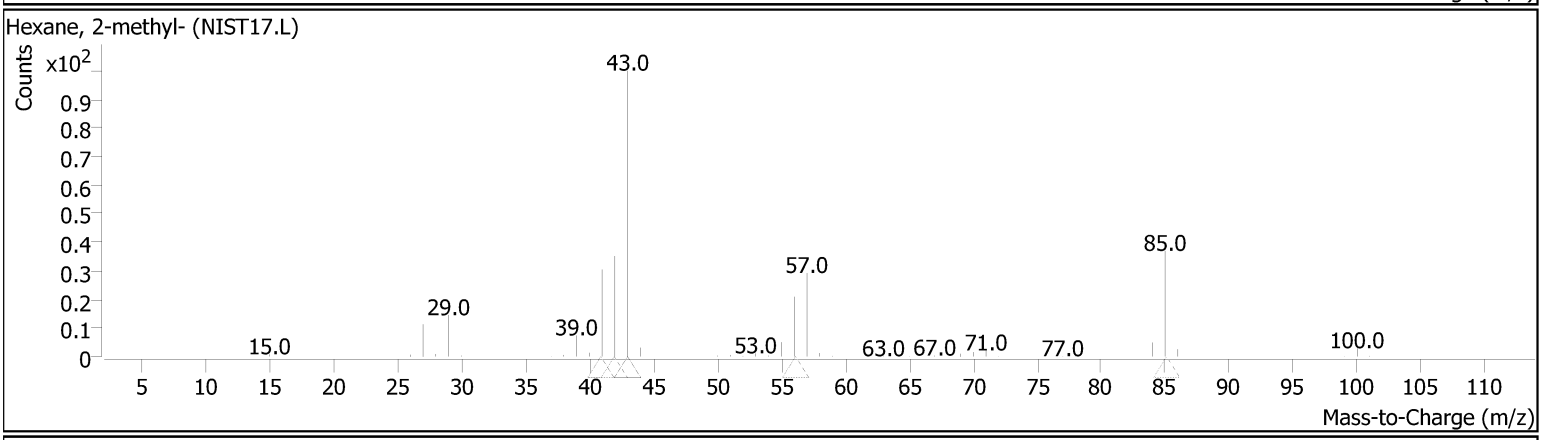


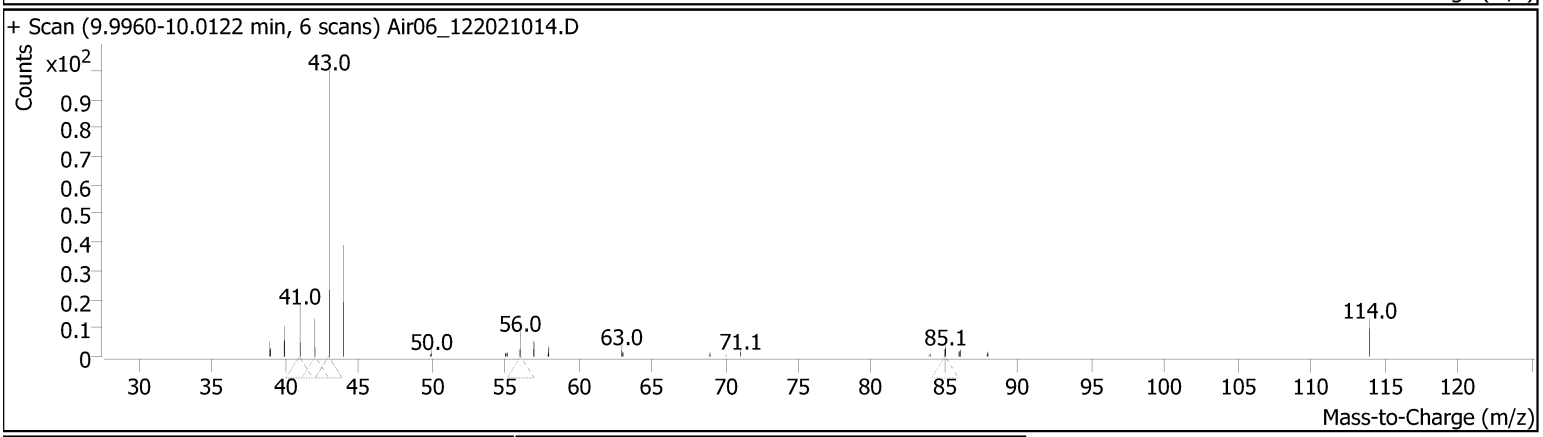


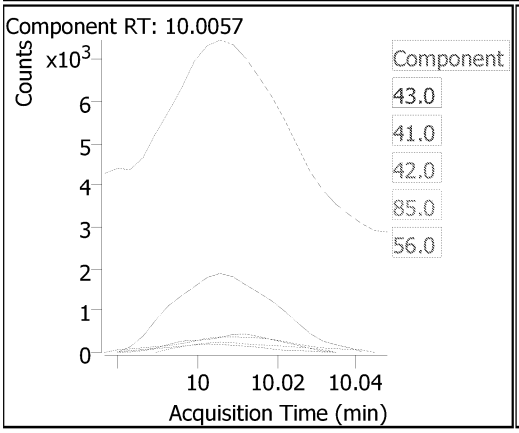


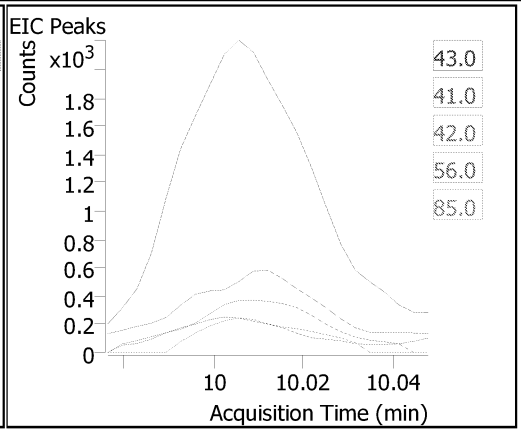
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.0057	Hexane, 2-methyl-	12631.4	84.3	591-76-4	C7H16	0.03888

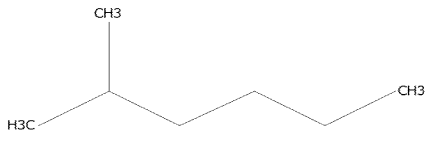




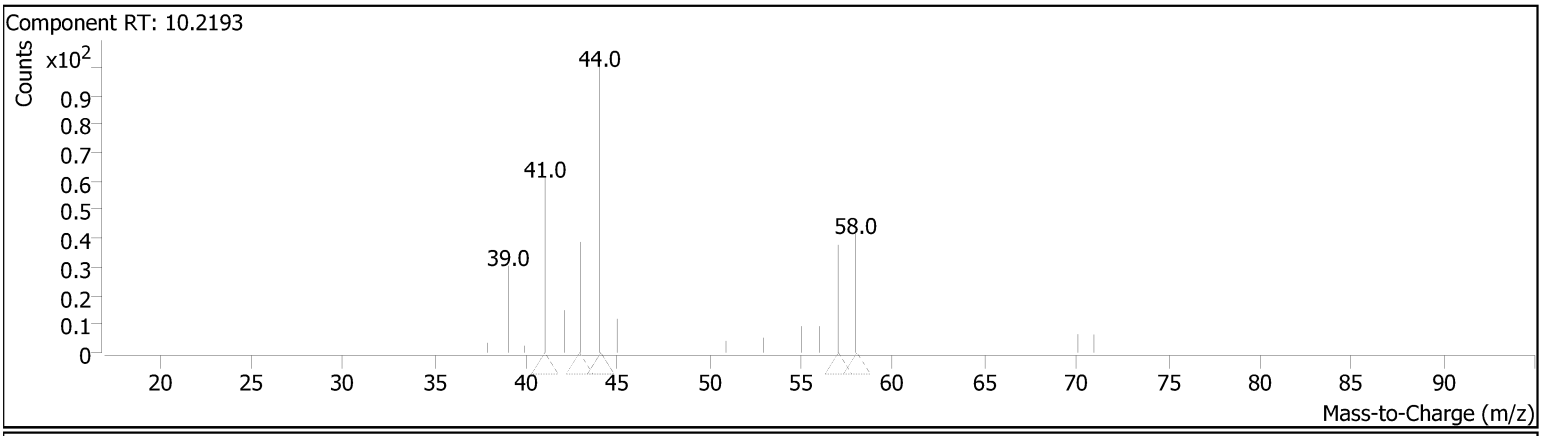


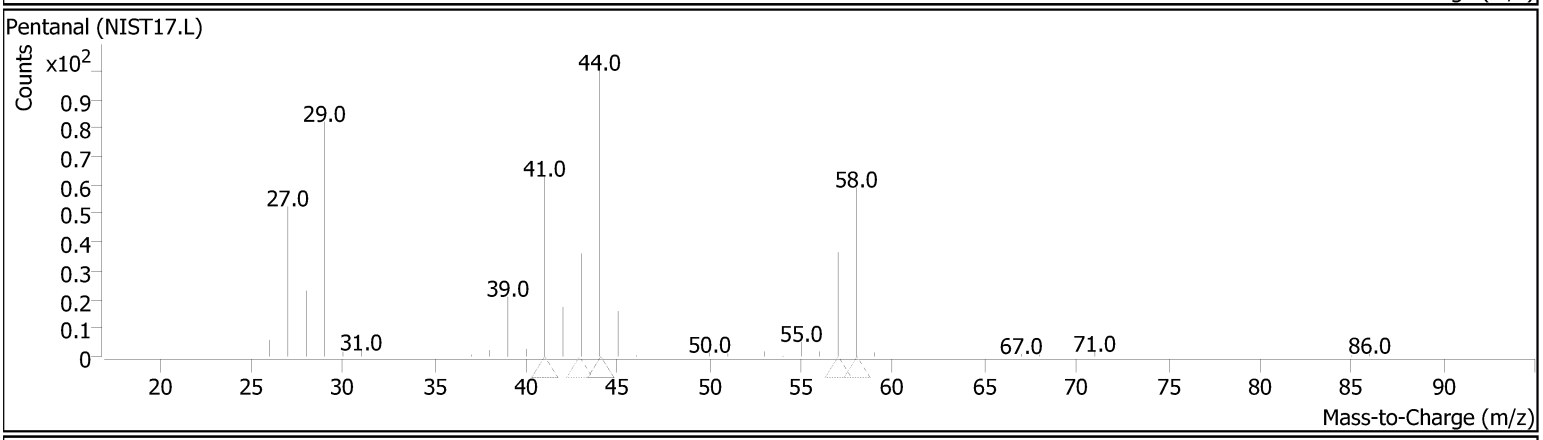


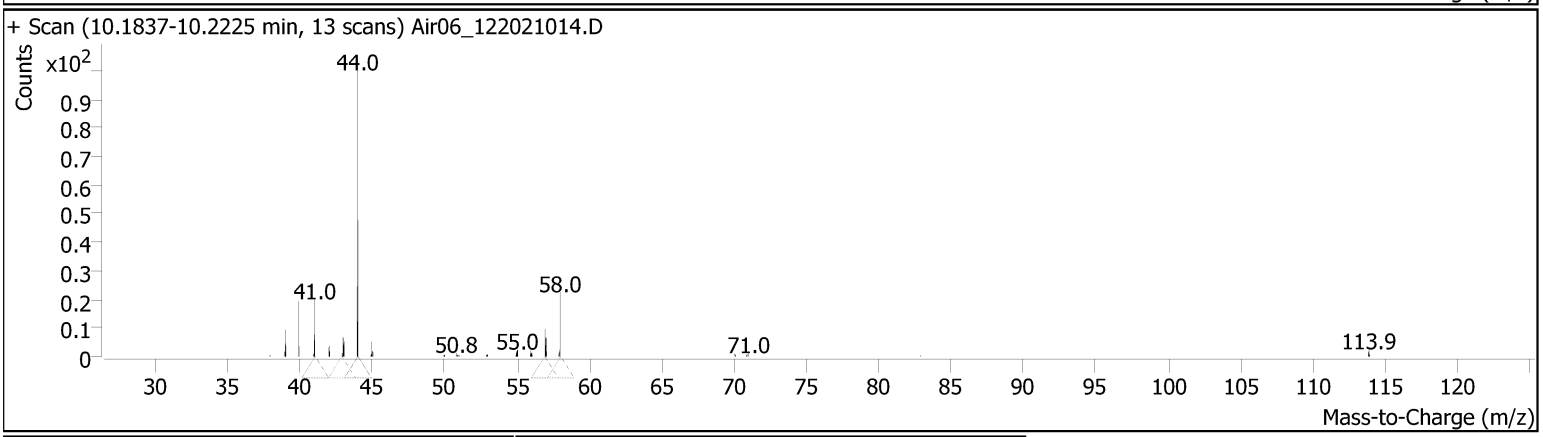


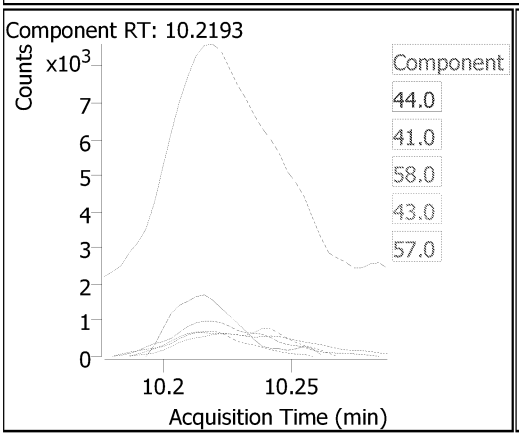


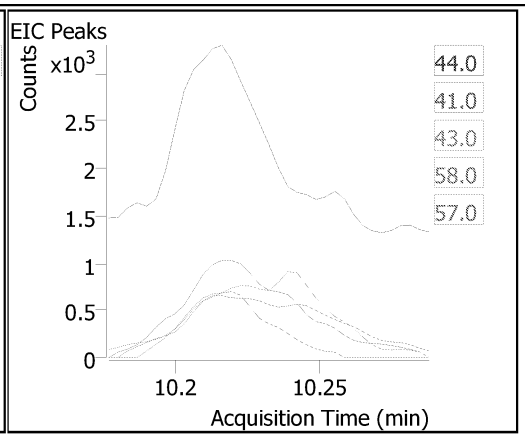
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.2193	Pentanal	18276.8	93.1	110-62-3	C5H10O	0.05626





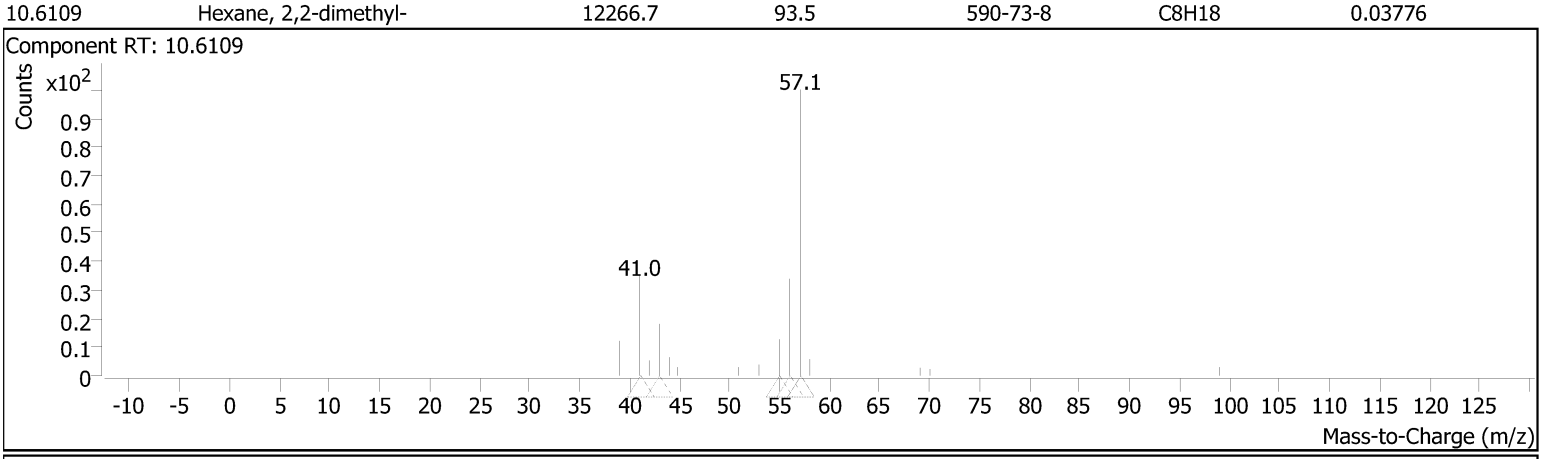


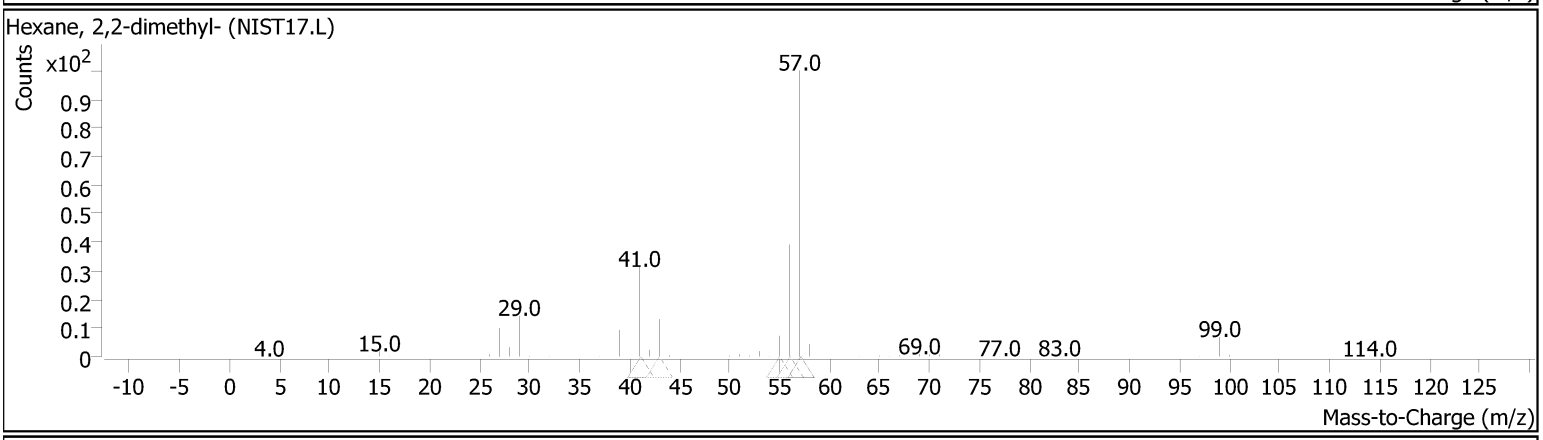


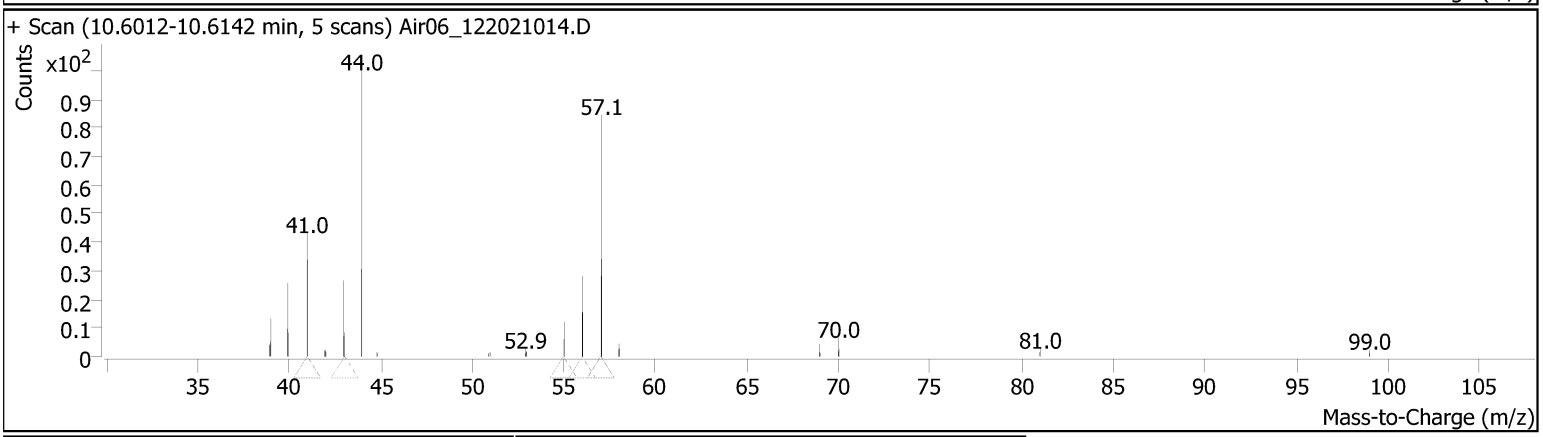


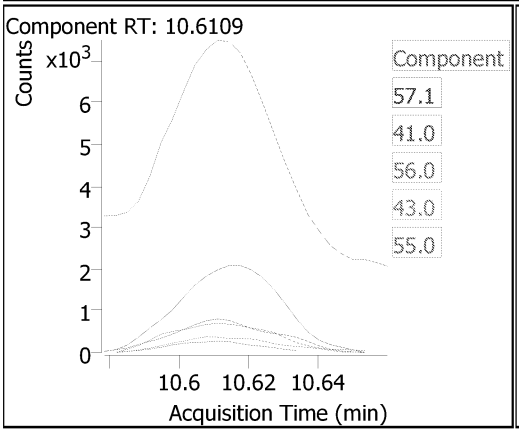


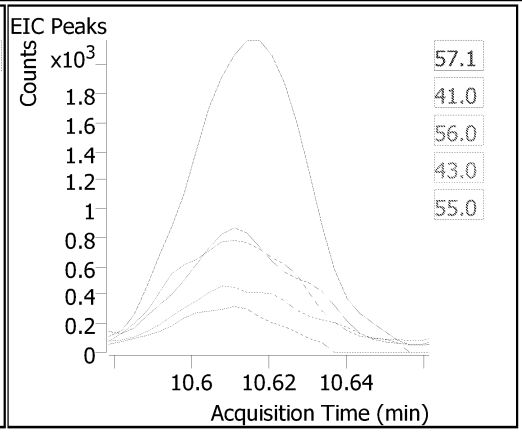
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.6109	Hexane, 2,2-dimethyl-	12266.7	93.5	590-73-8	C8H18	0.03776

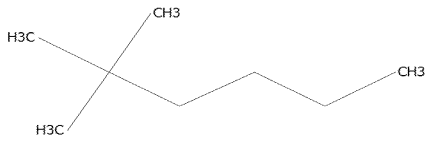




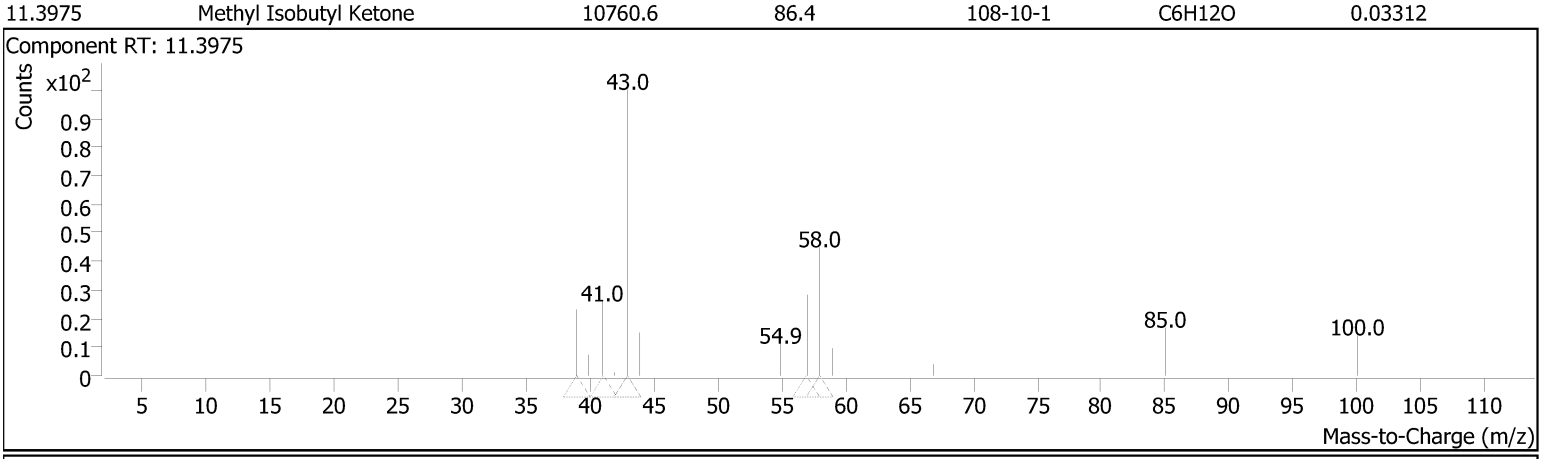


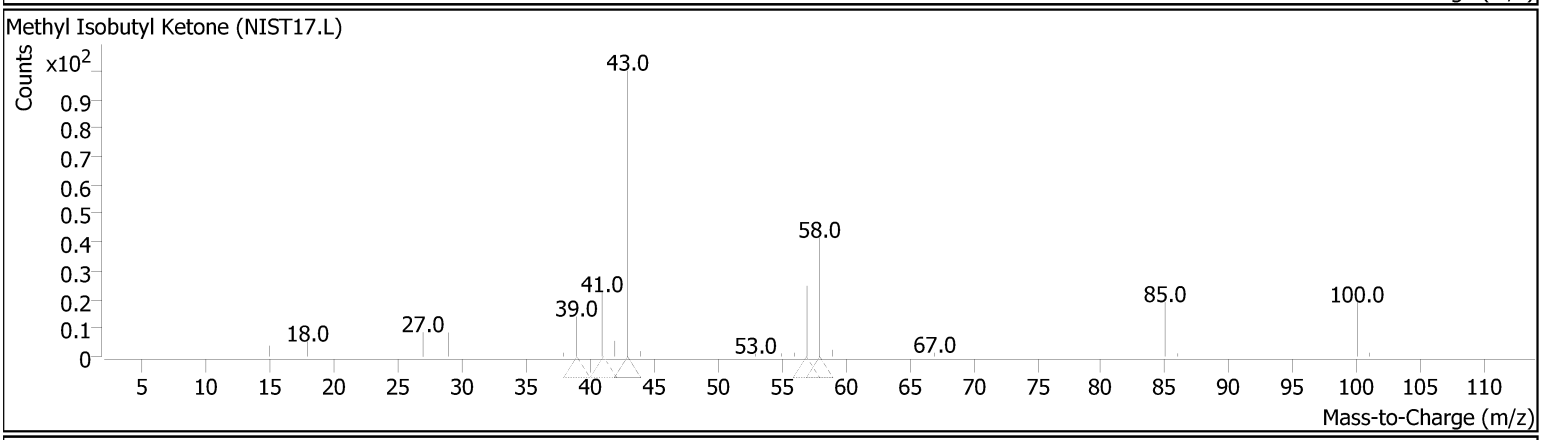


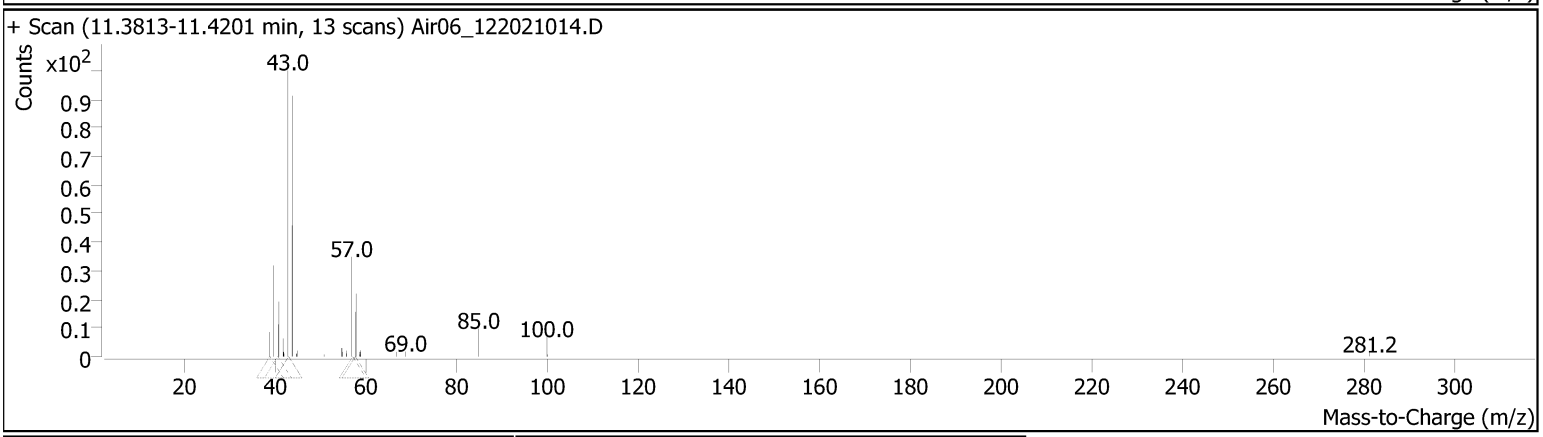


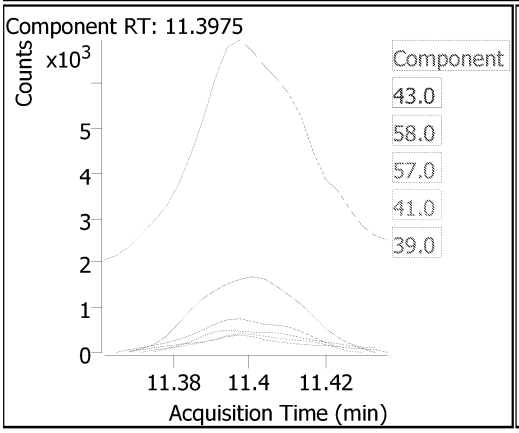


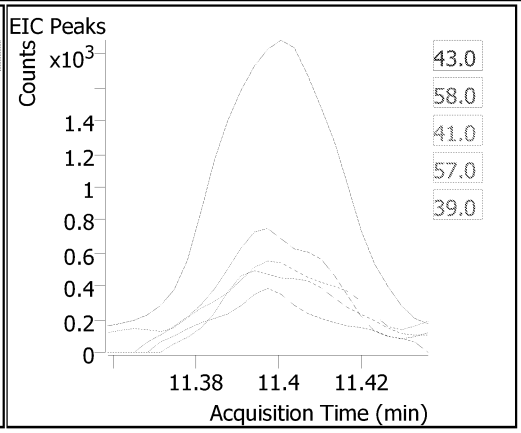
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.3975	Methyl Isobutyl Ketone	10760.6	86.4	108-10-1	C6H12O	0.03312

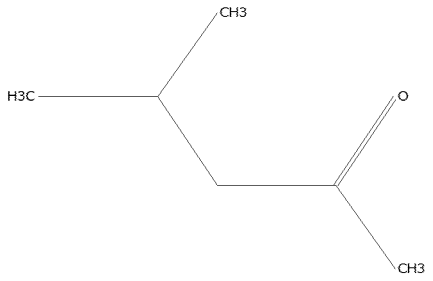




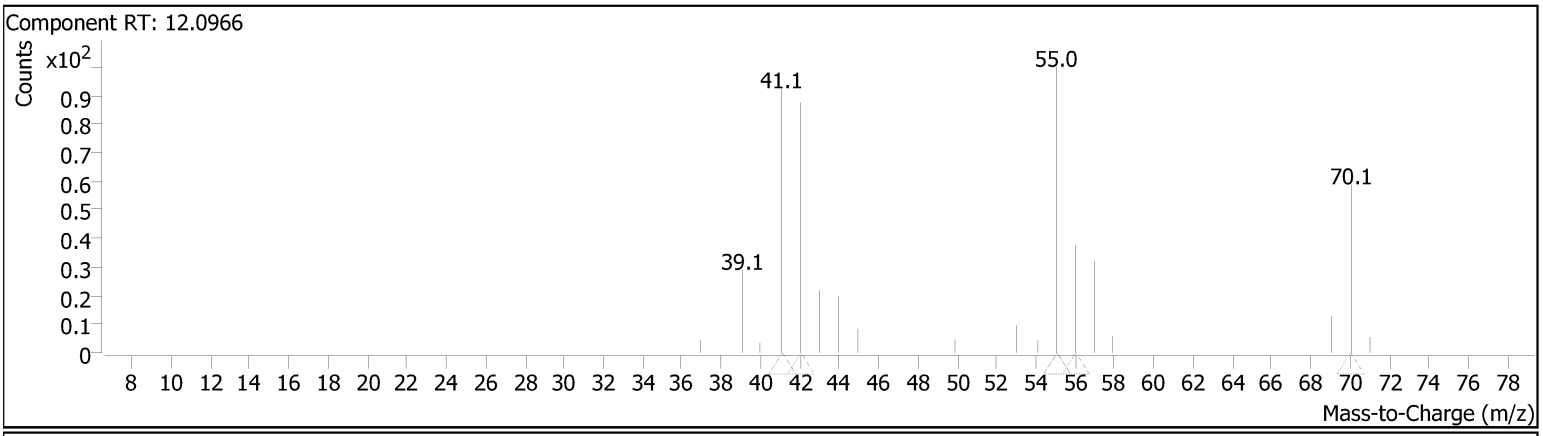


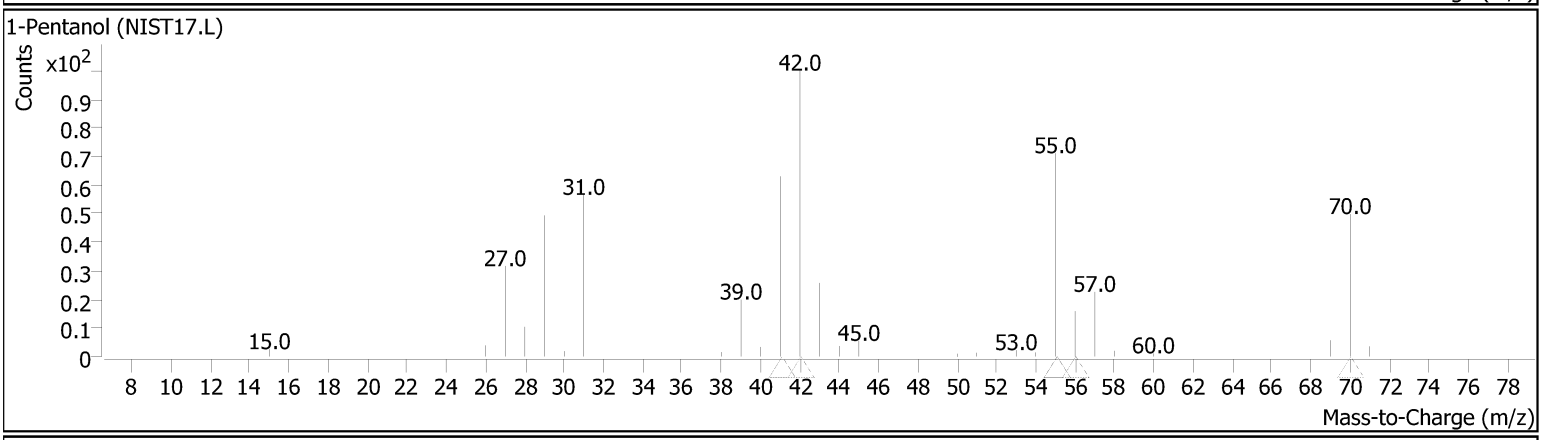


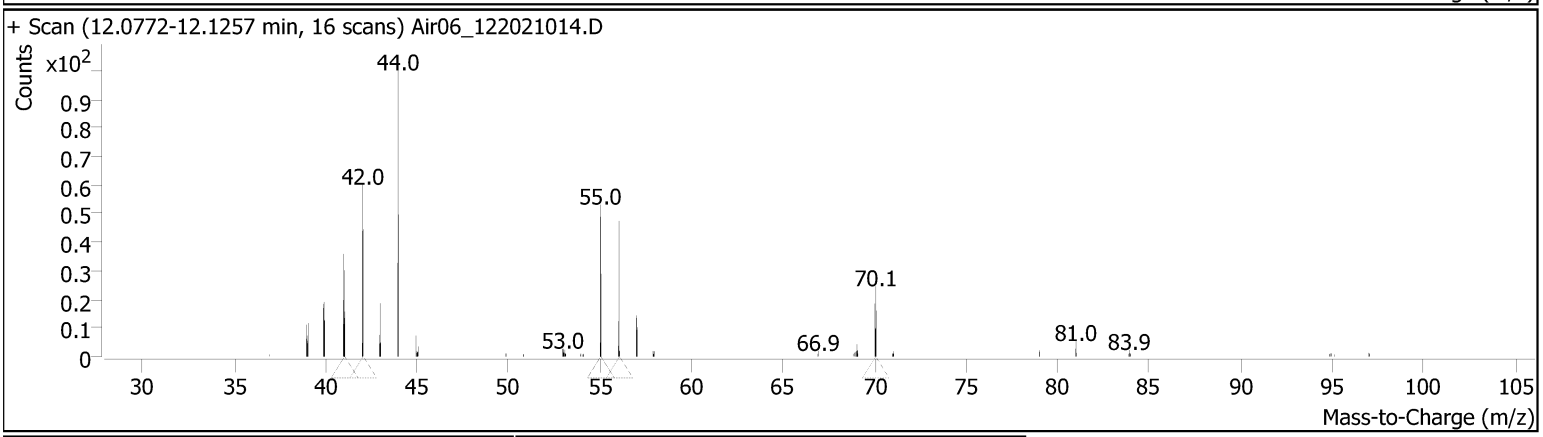


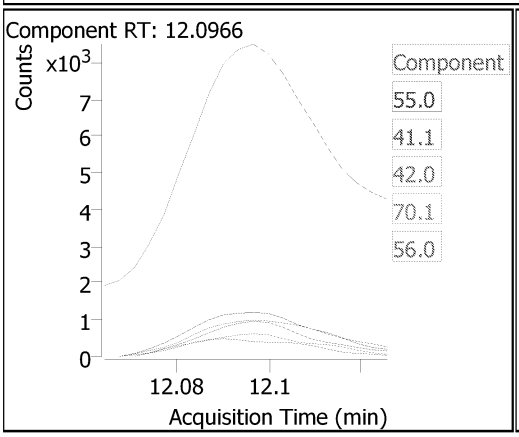


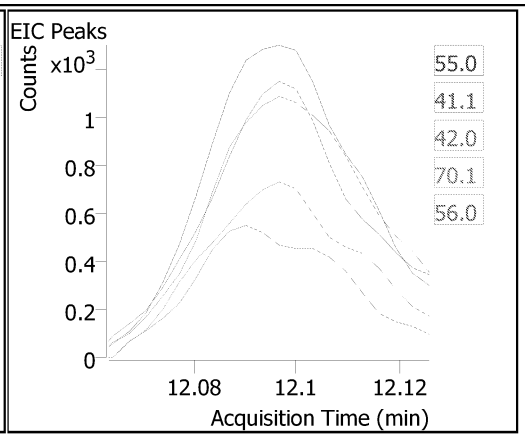
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.0966	1-Pentanol	13680.8	92.8	71-41-0	C5H12O	0.03441





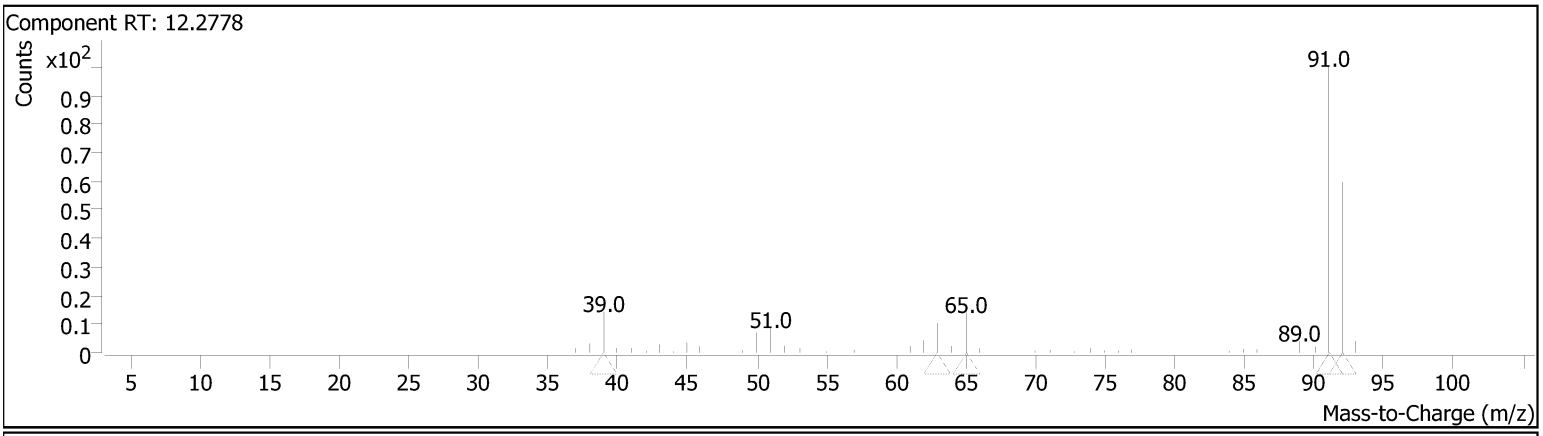


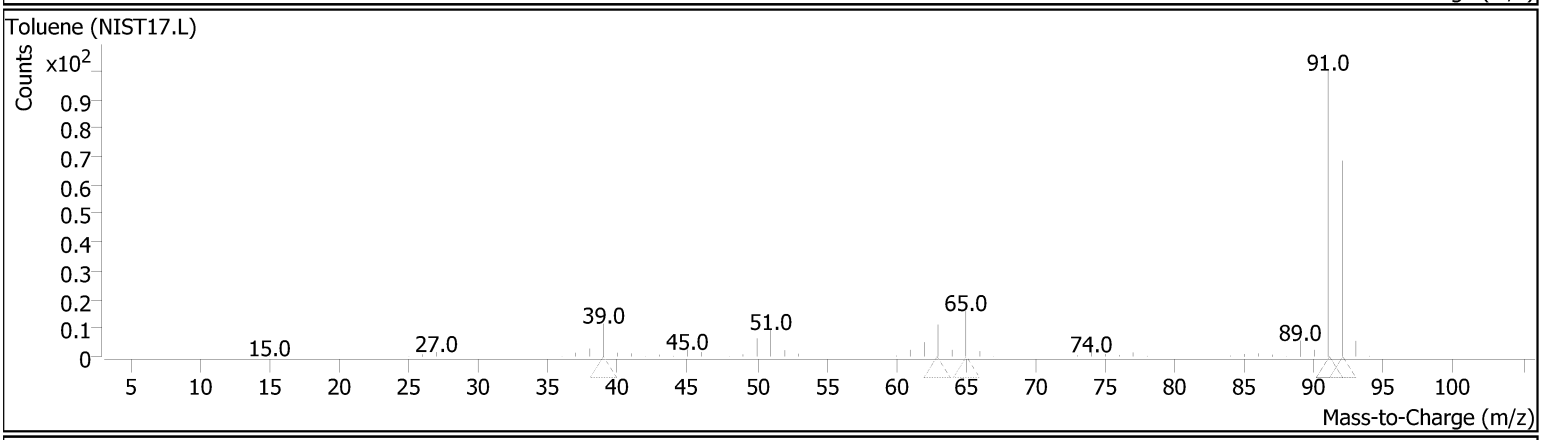


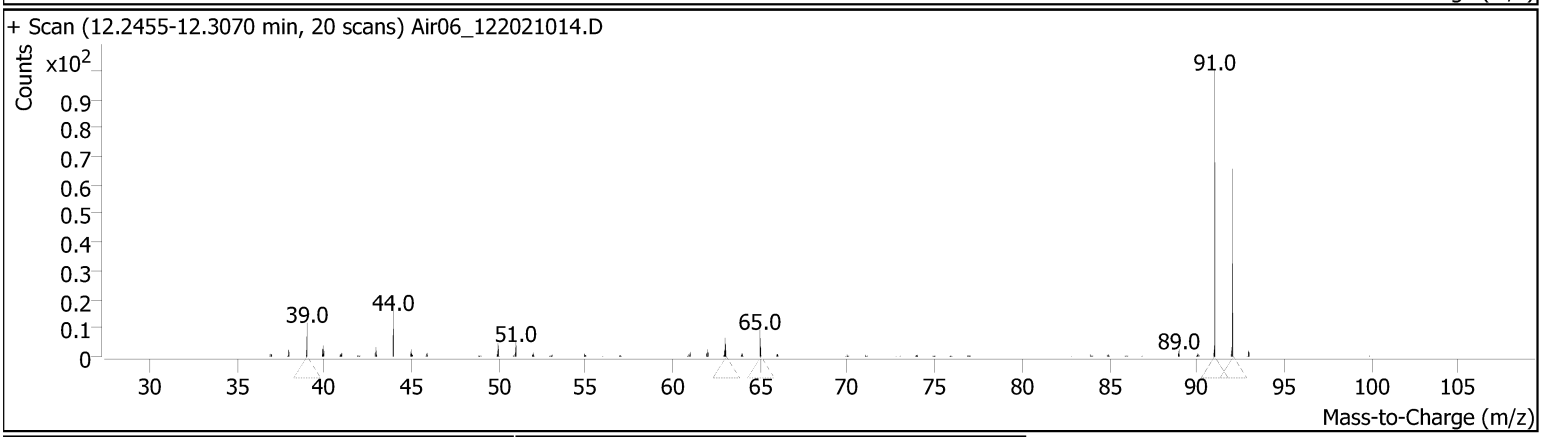


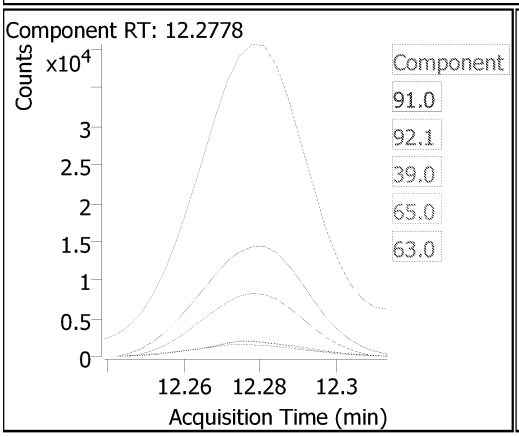


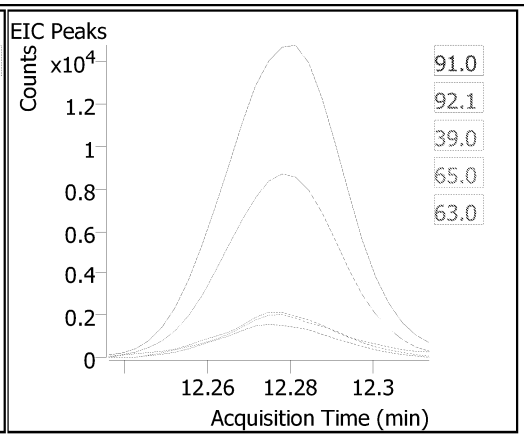
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.2778	Toluene	80570.6	98.0	108-88-3	C7H8	0.2026

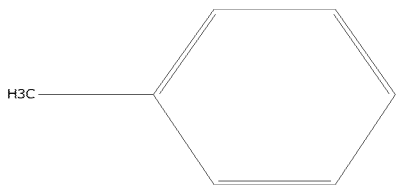




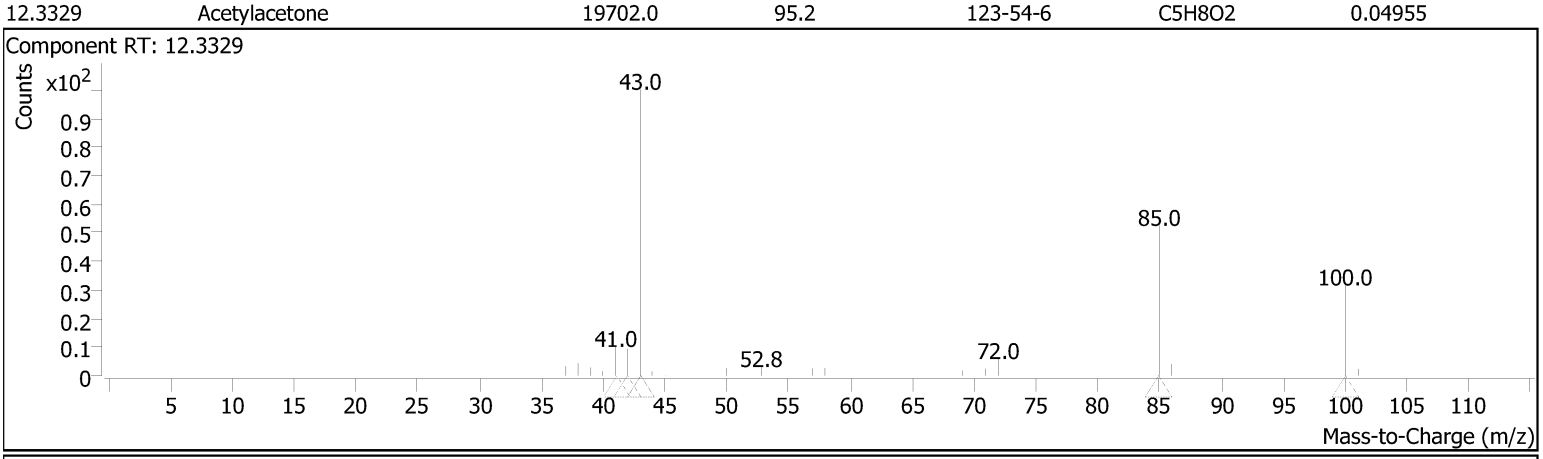


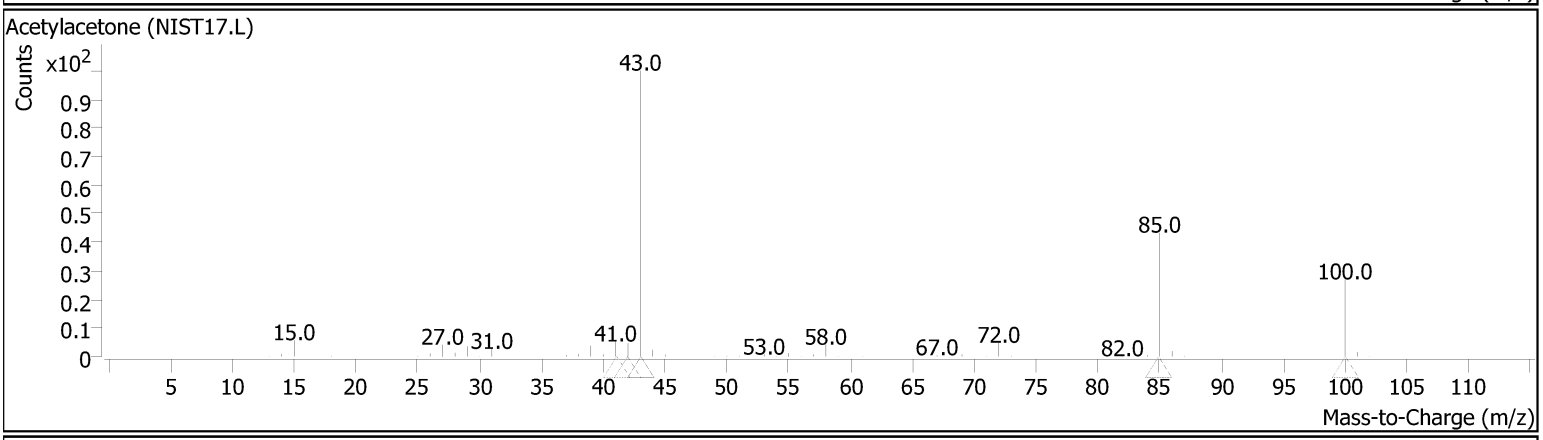


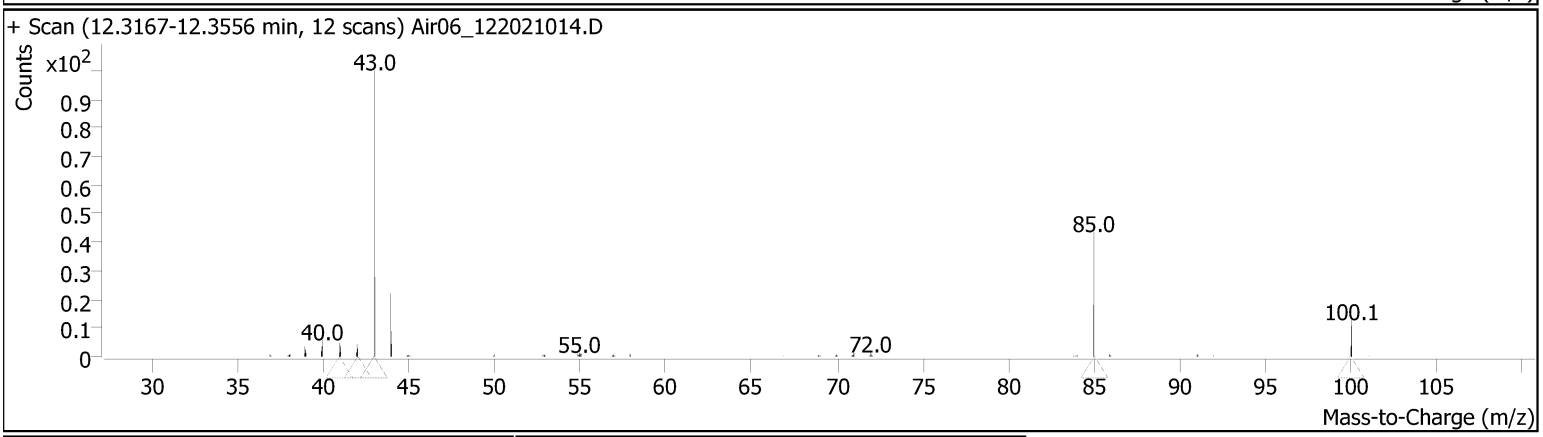


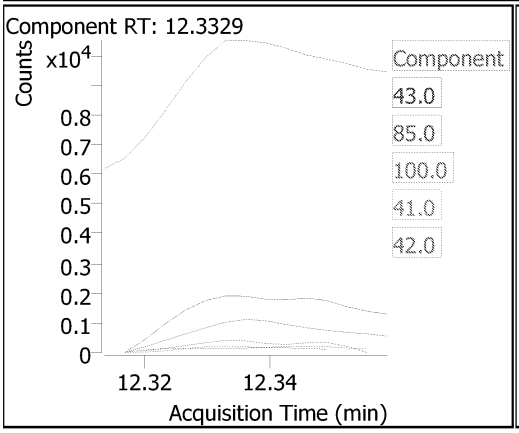


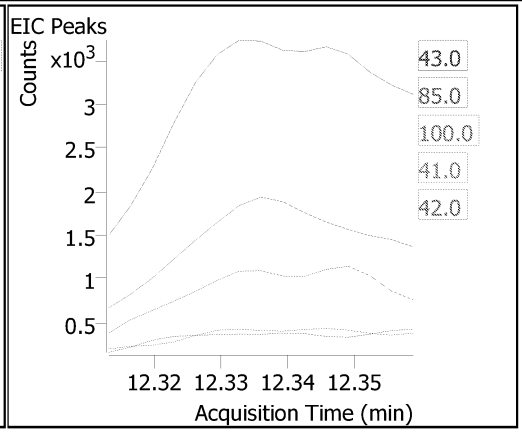
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.3329	Acetylacetone	19702.0	95.2	123-54-6	C5H8O2	0.04955

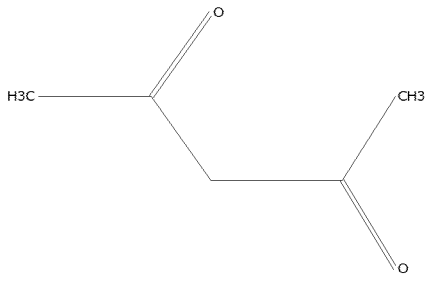




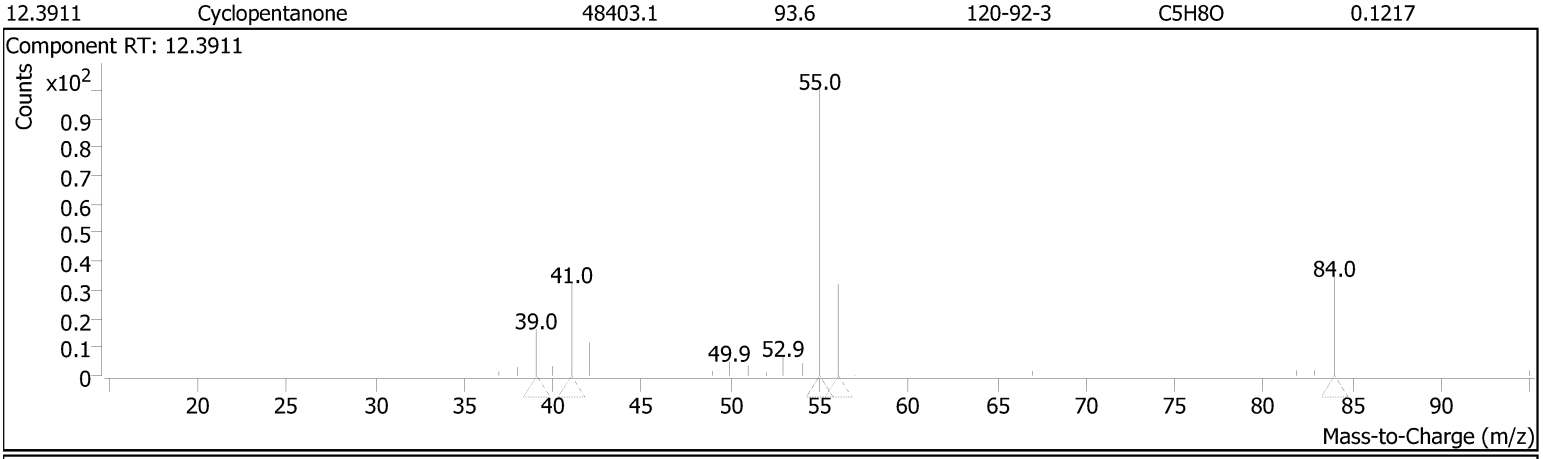


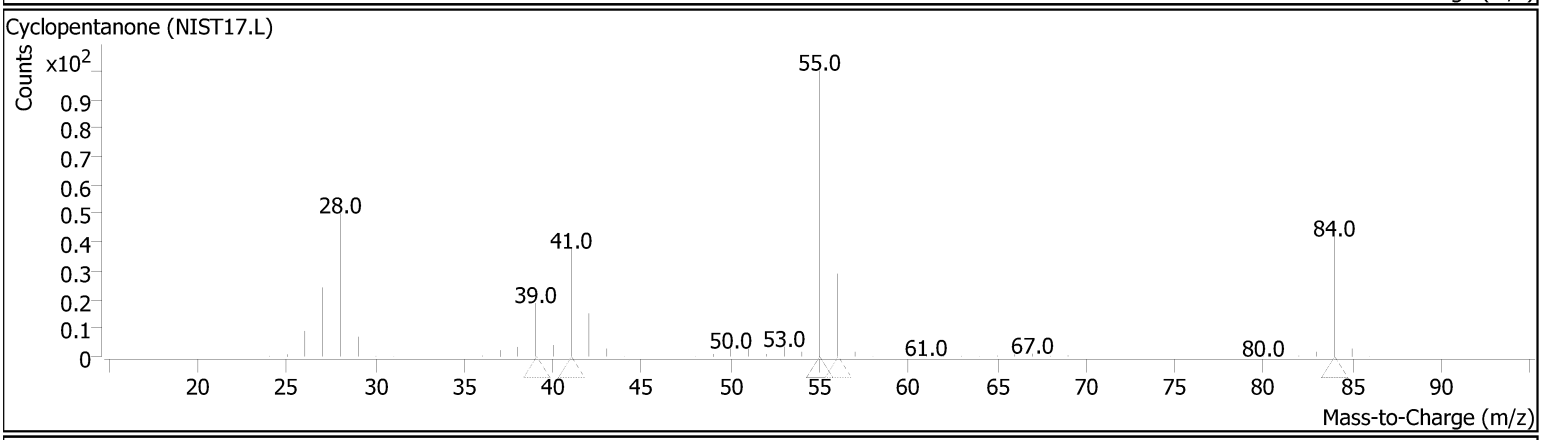


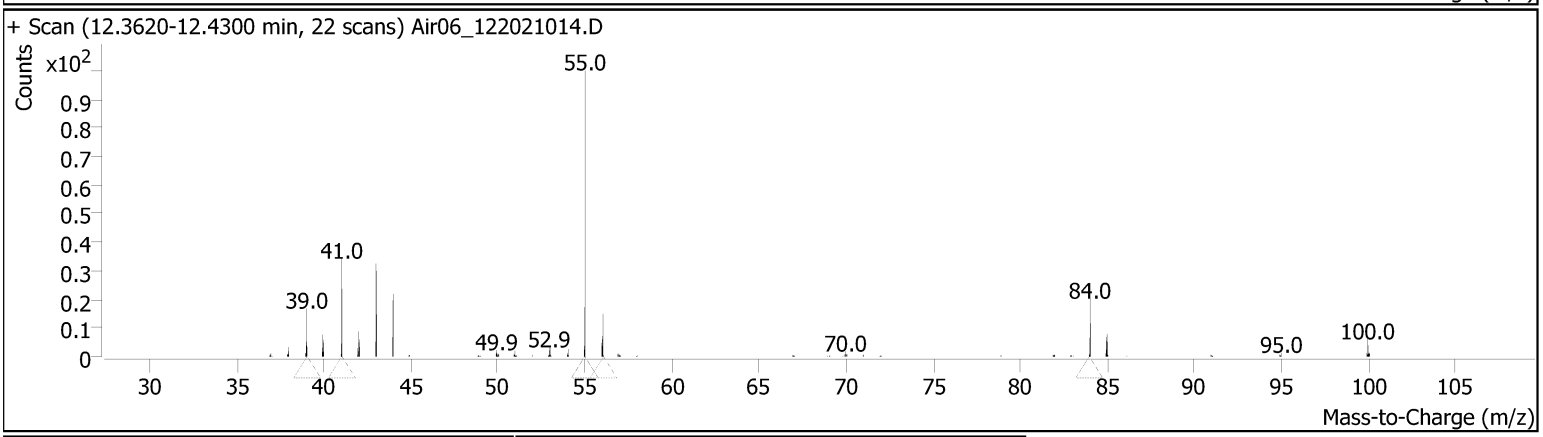


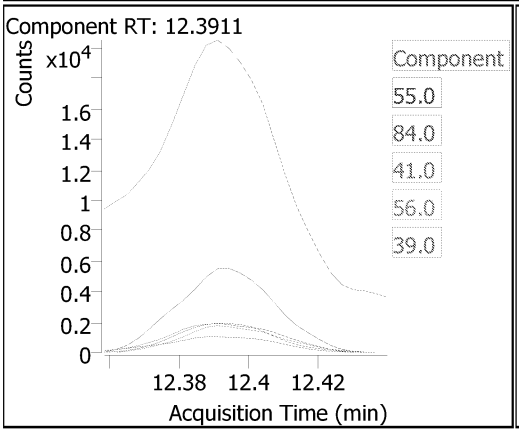


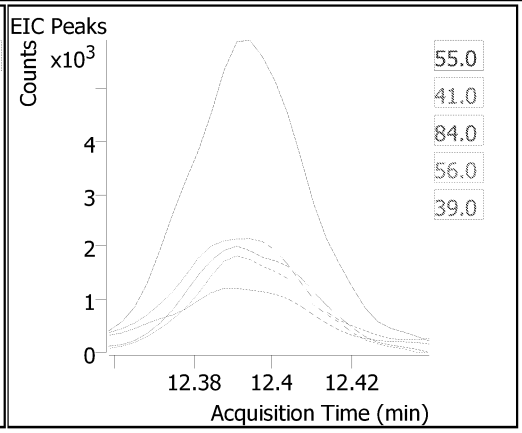
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.3911	Cyclopentanone	48403.1	93.6	120-92-3	C5H8O	0.1217

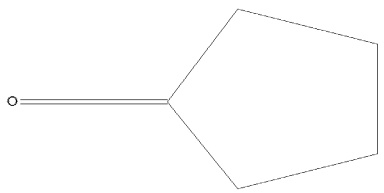




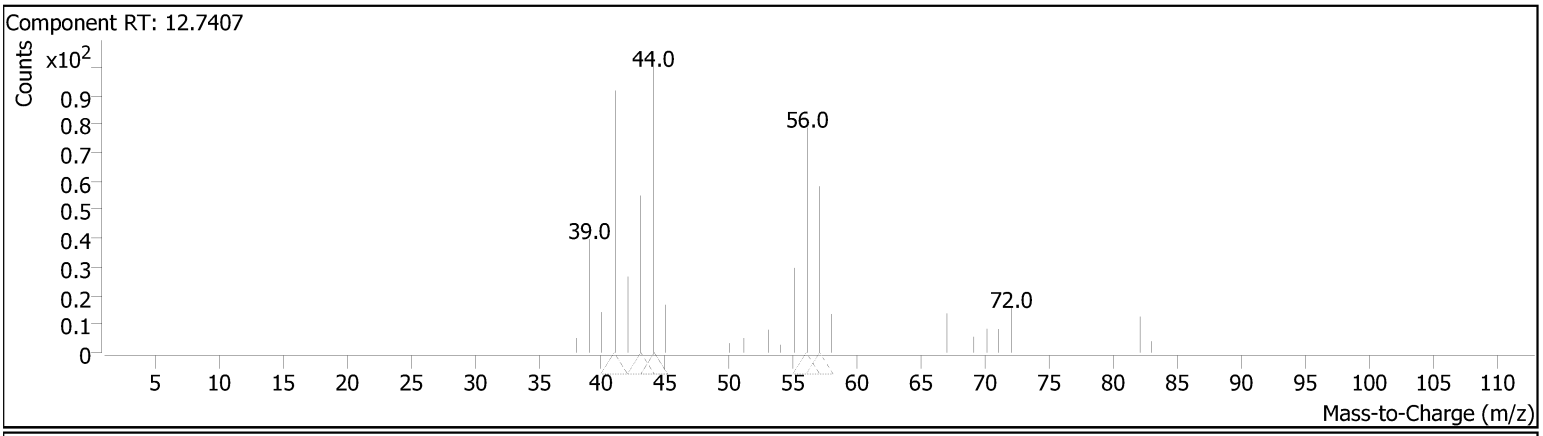


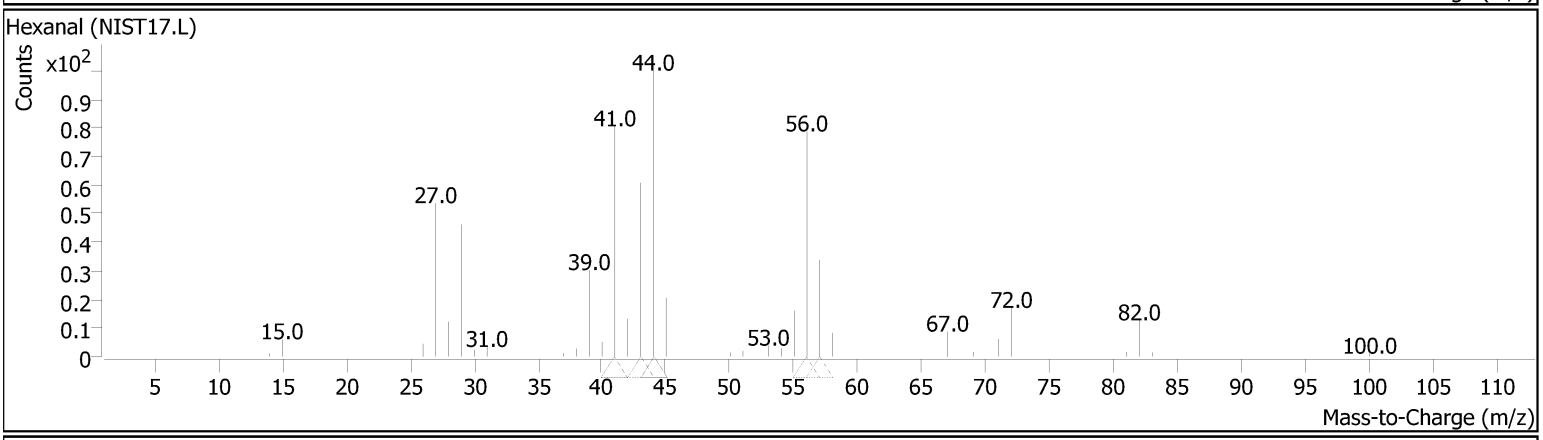


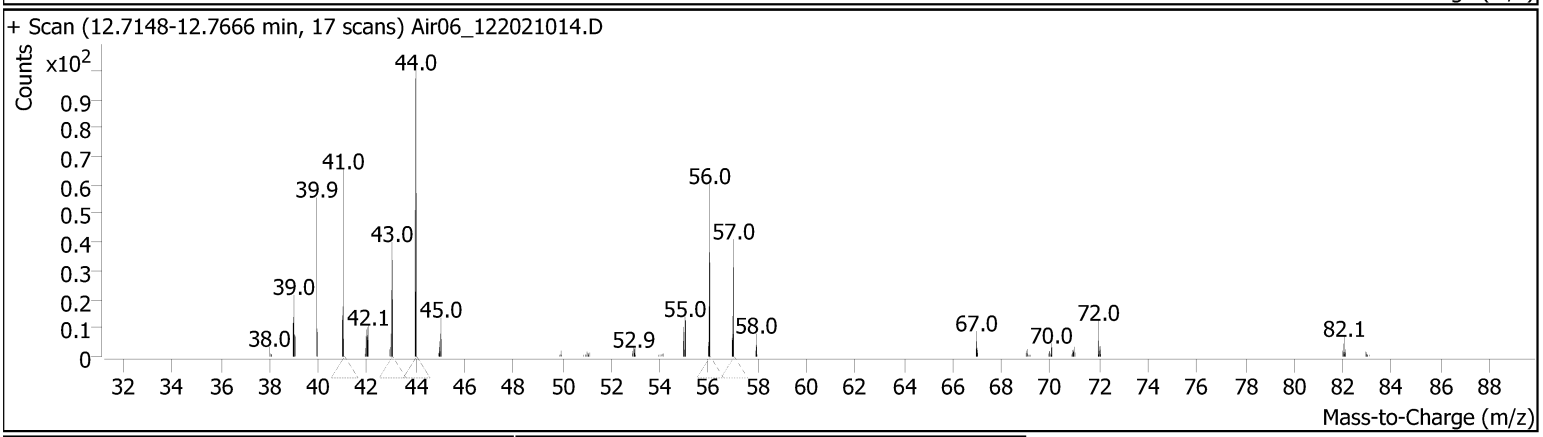


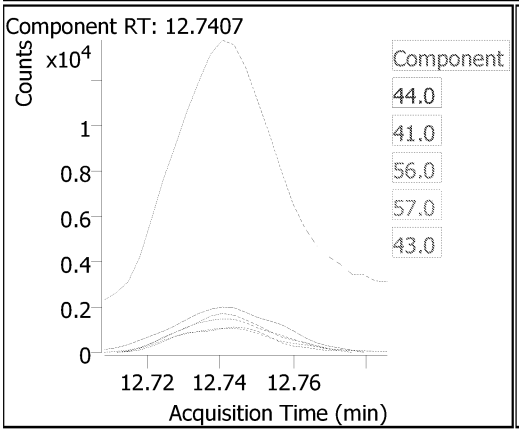


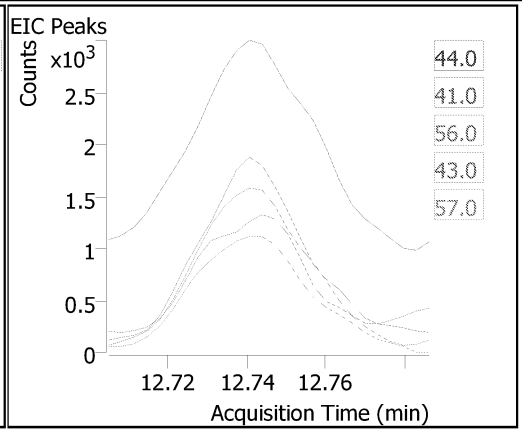
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.7407	Hexanal	23823.4	95.9	66-25-1	C6H12O	0.05992





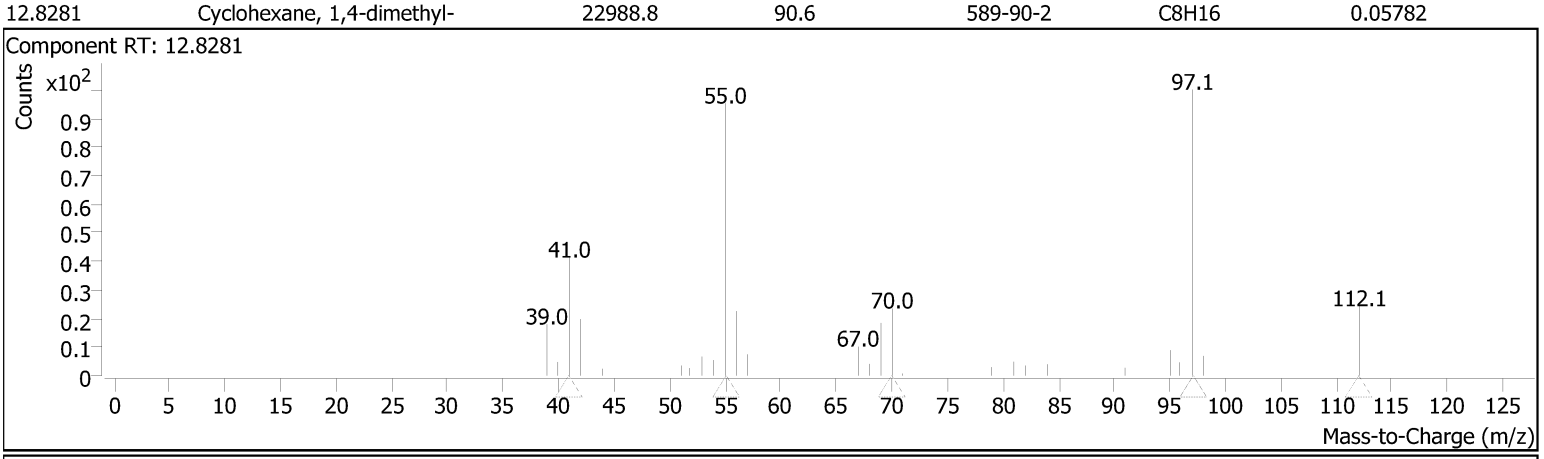


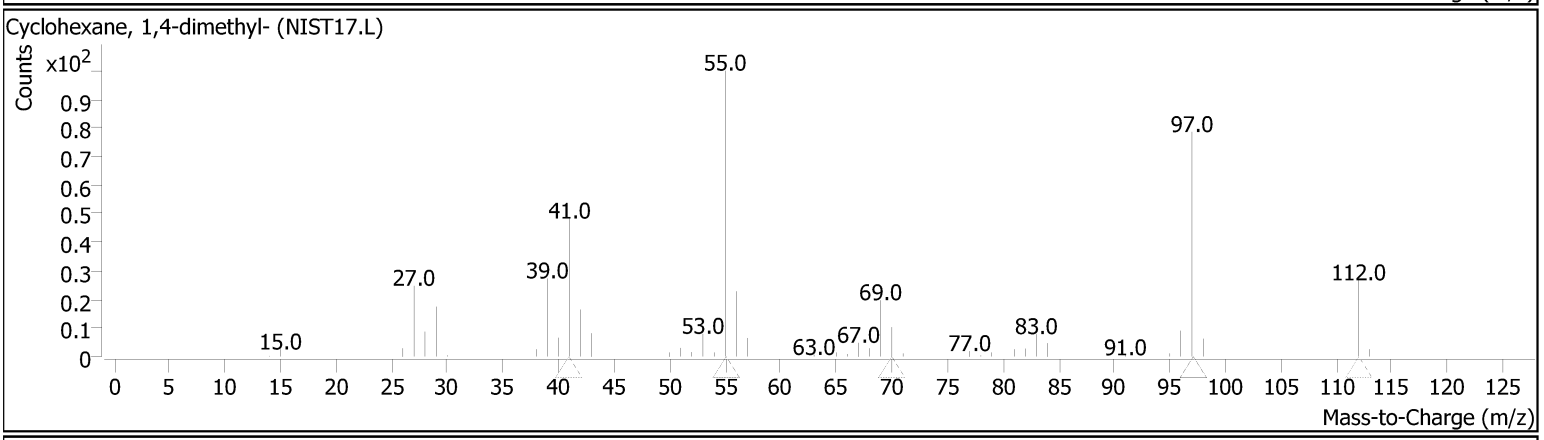


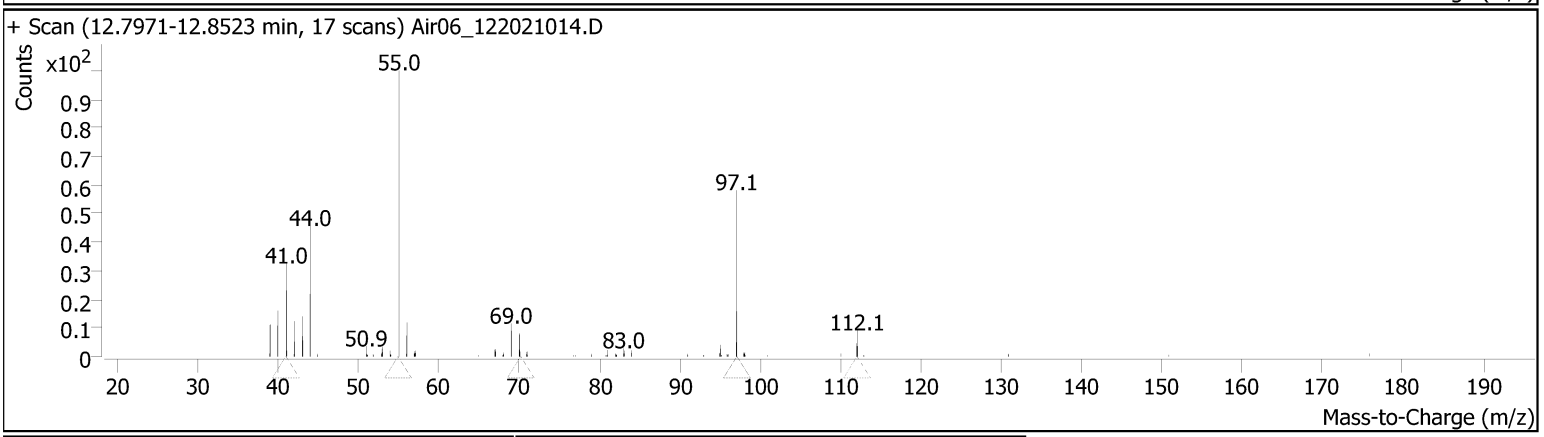


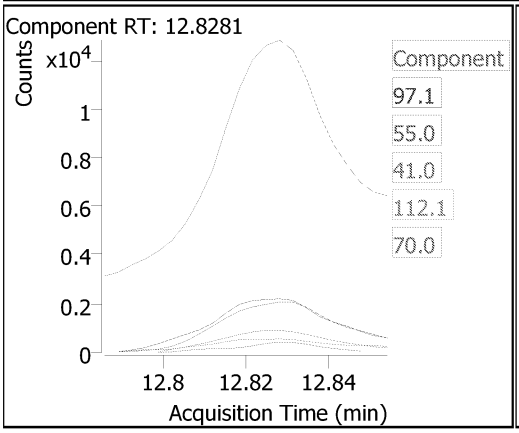


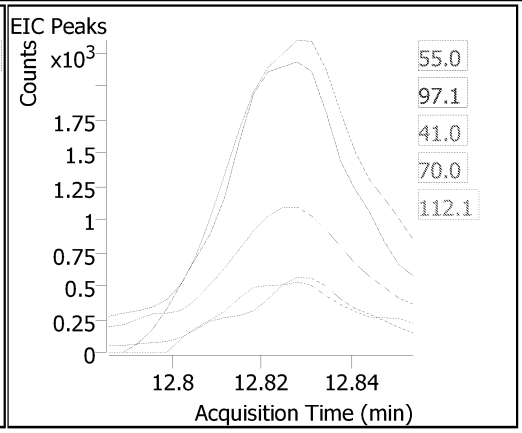
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.8281	Cyclohexane, 1,4-dimethyl-	22988.8	90.6	589-90-2	C8H16	0.05782

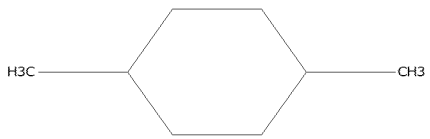




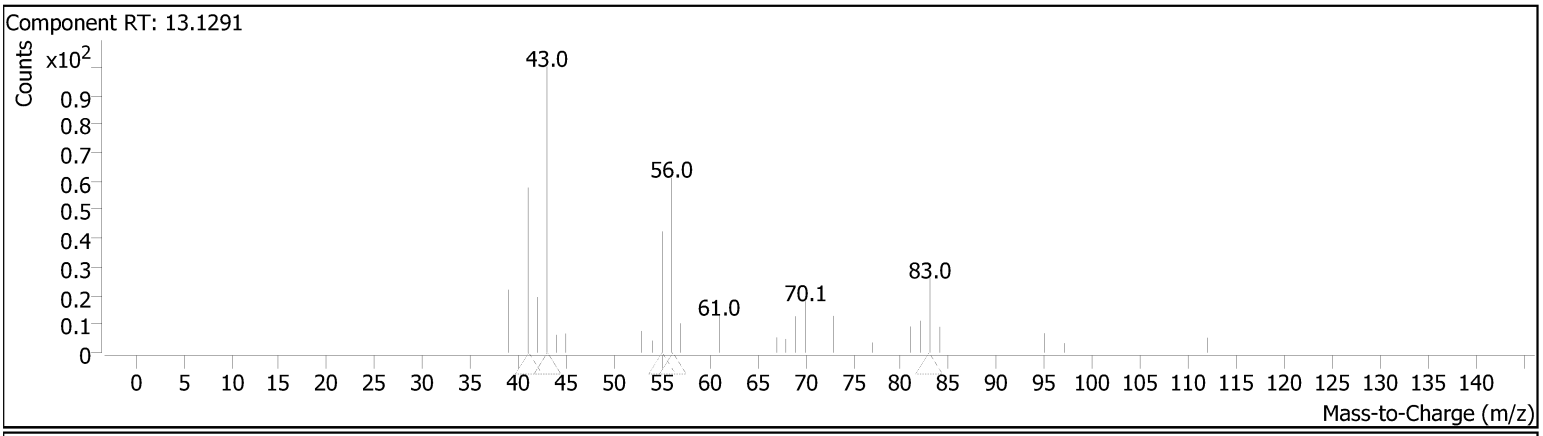


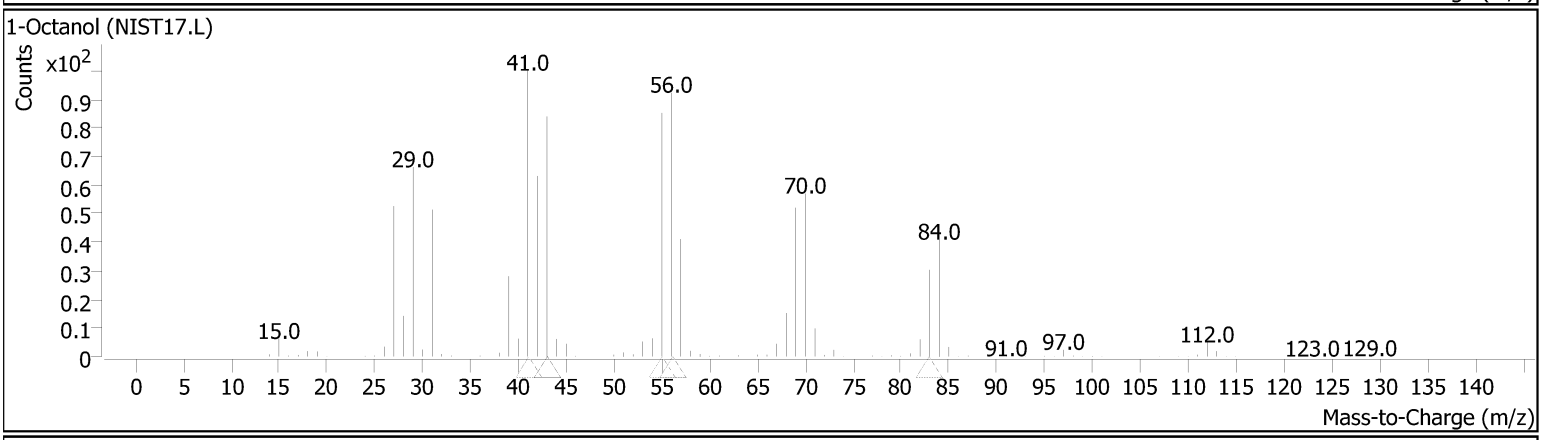


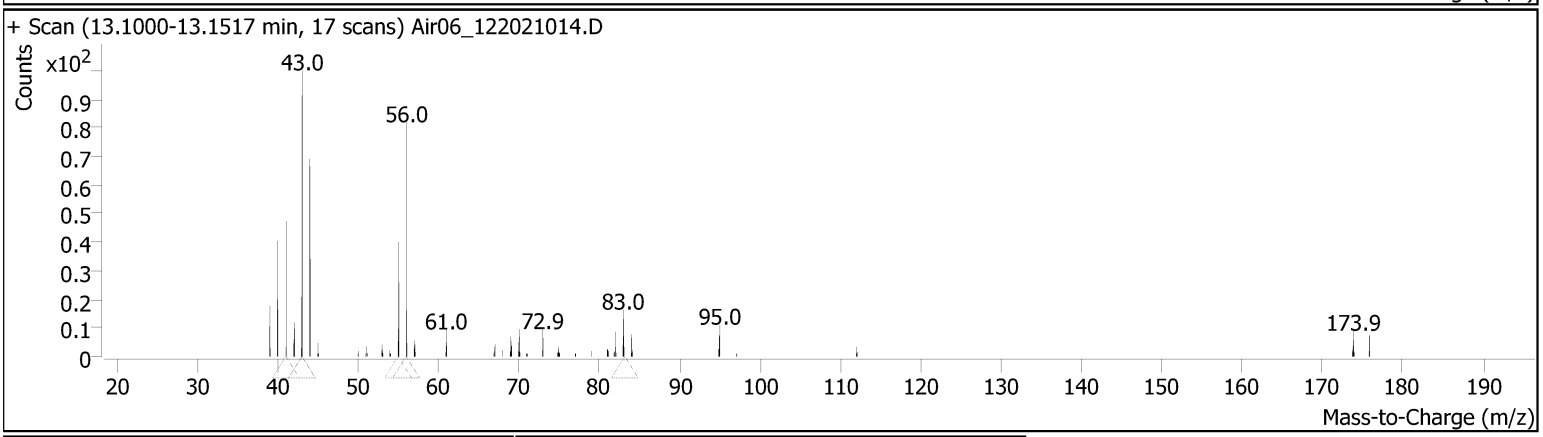


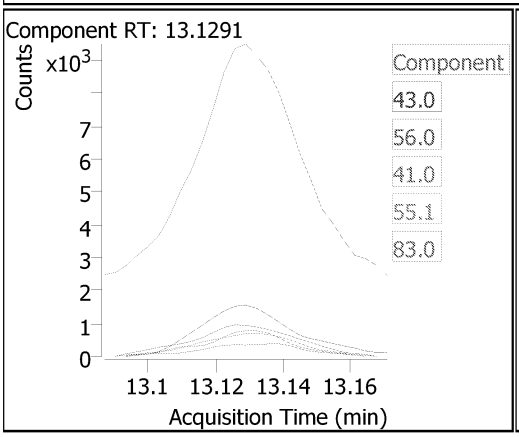


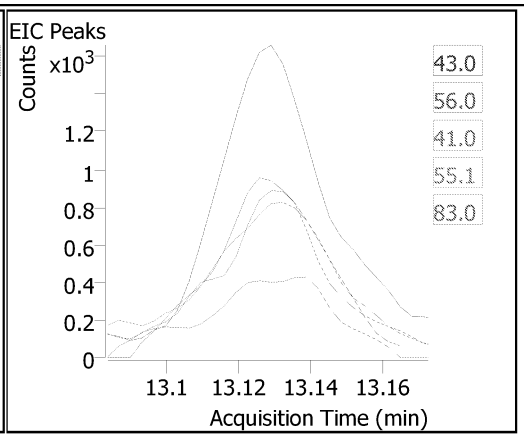
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.1291	1-Octanol	15121.8	82.3	111-87-5	C8H18O	0.03803





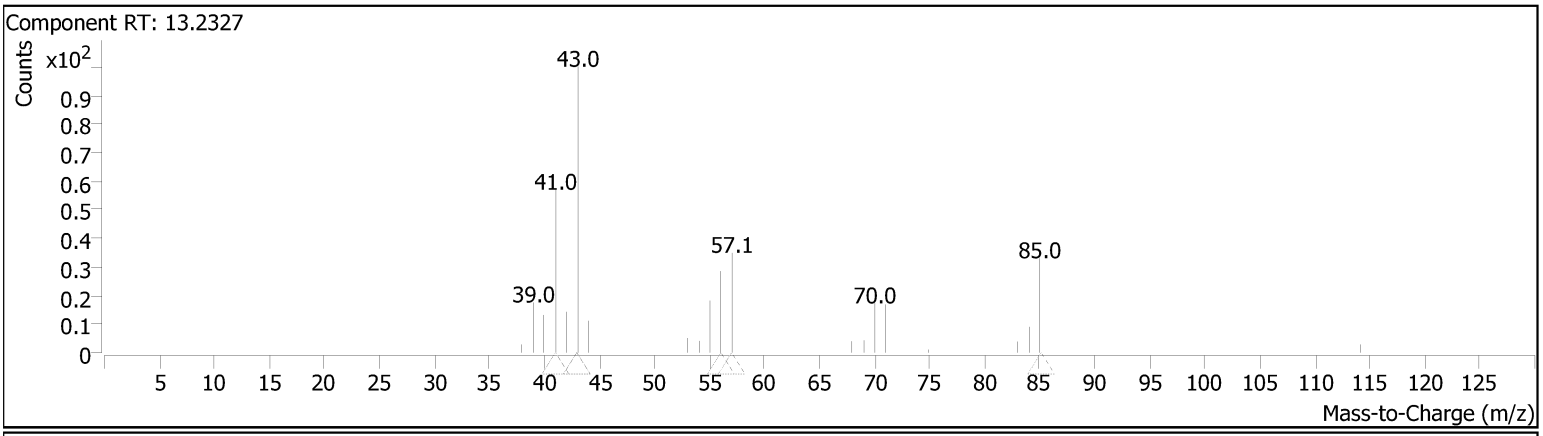


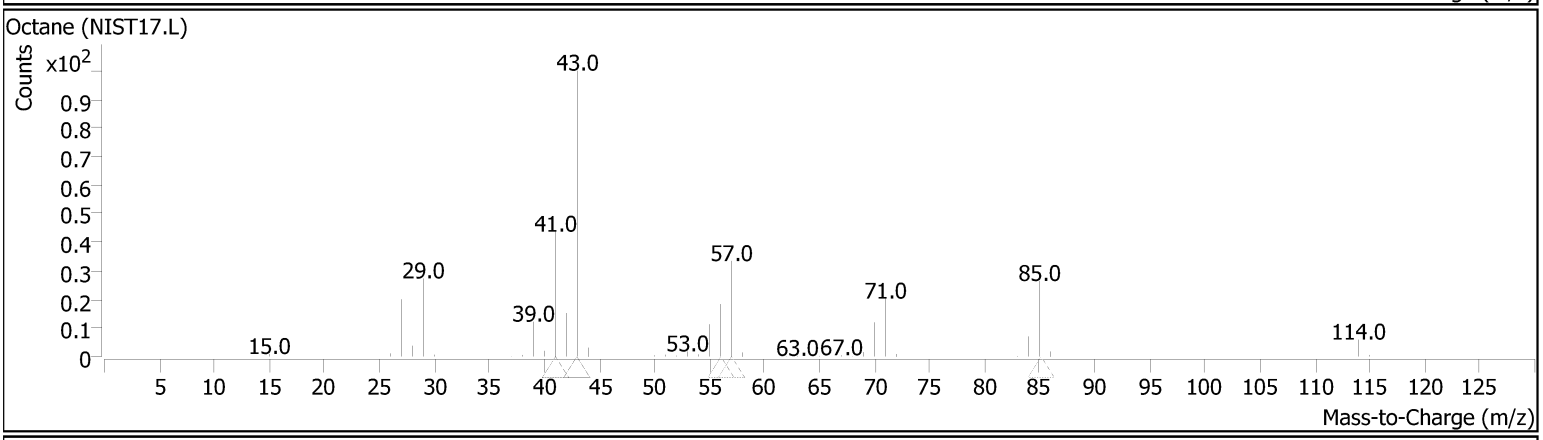


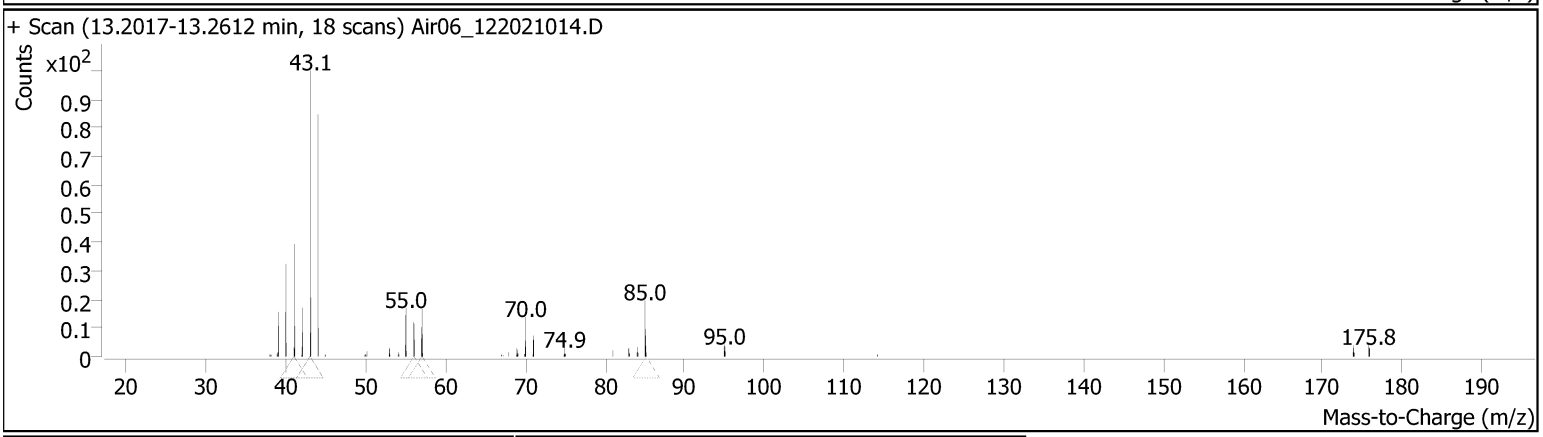


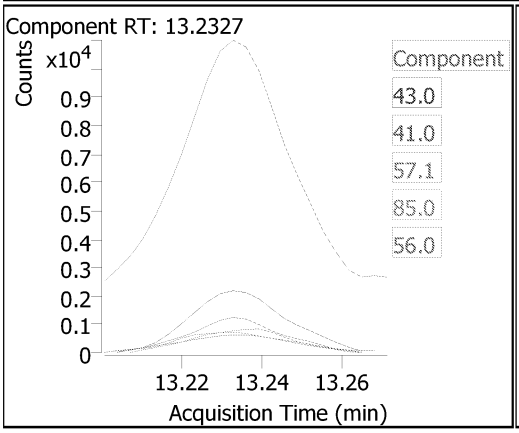


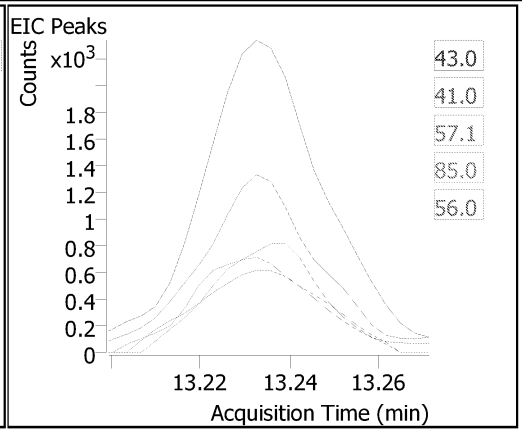
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.2327	Octane	15654.1	89.6	111-65-9	C8H18	0.03937





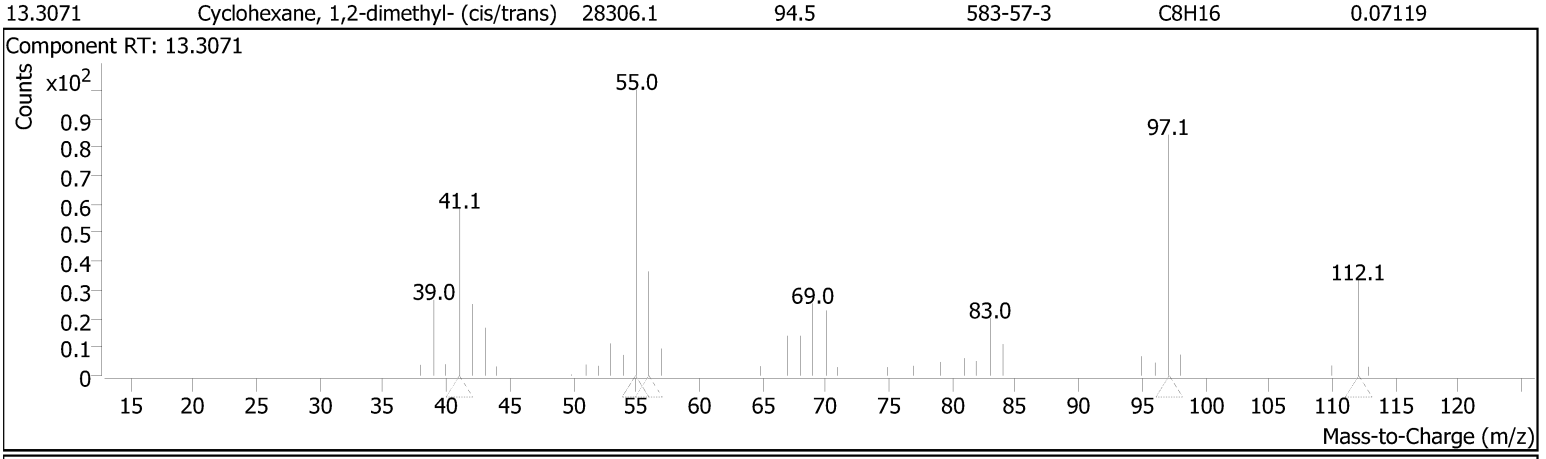


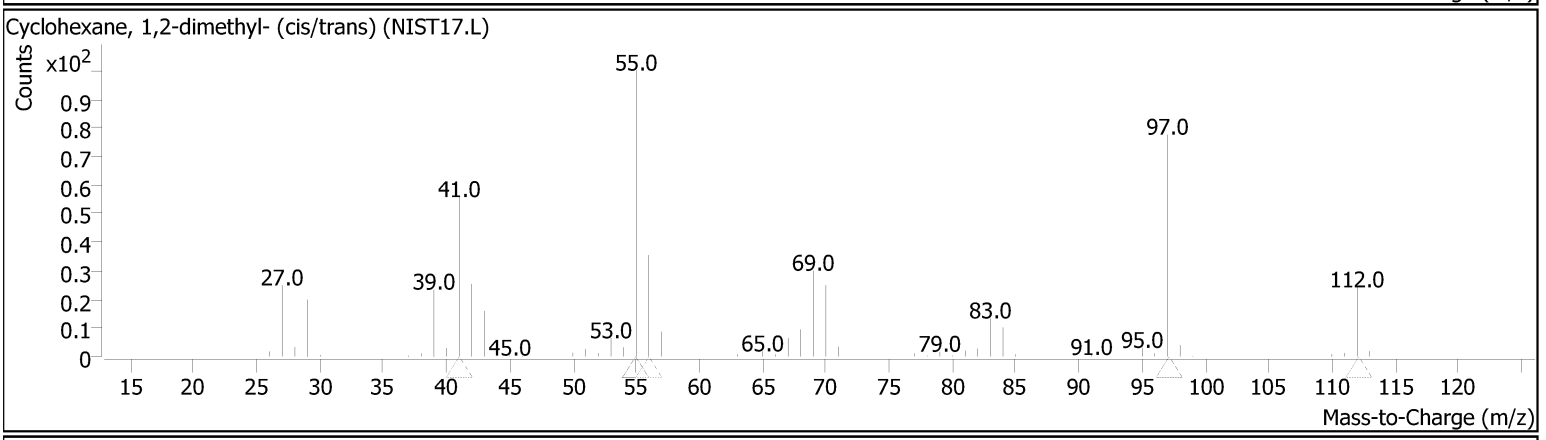


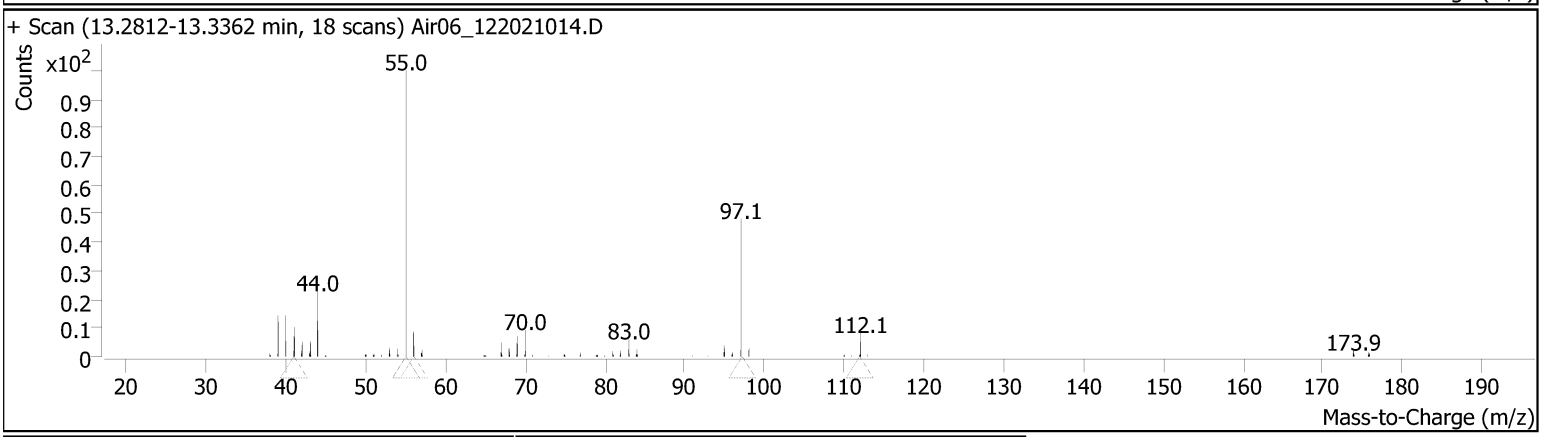


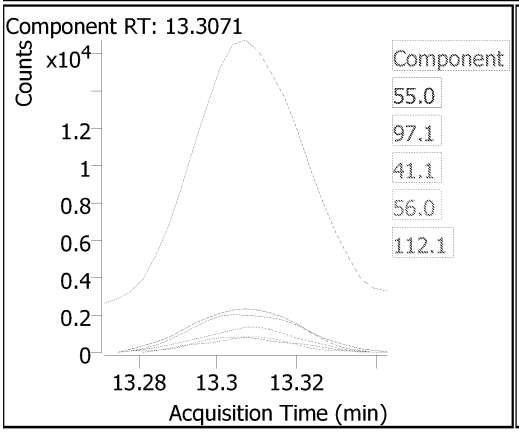


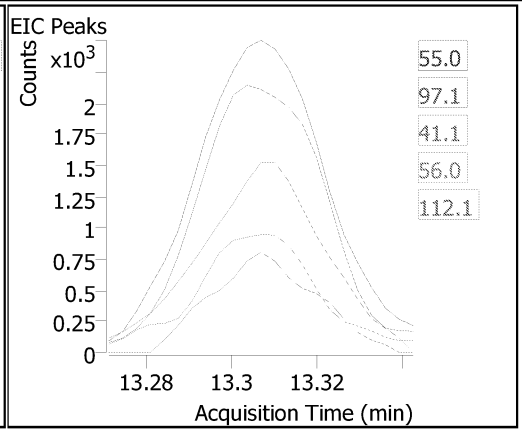
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.3071	Cyclohexane, 1,2-dimethyl- (cis/trans)	28306.1	94.5	583-57-3	C8H16	0.07119

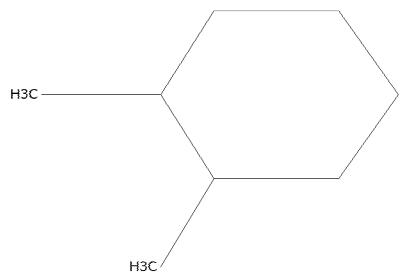




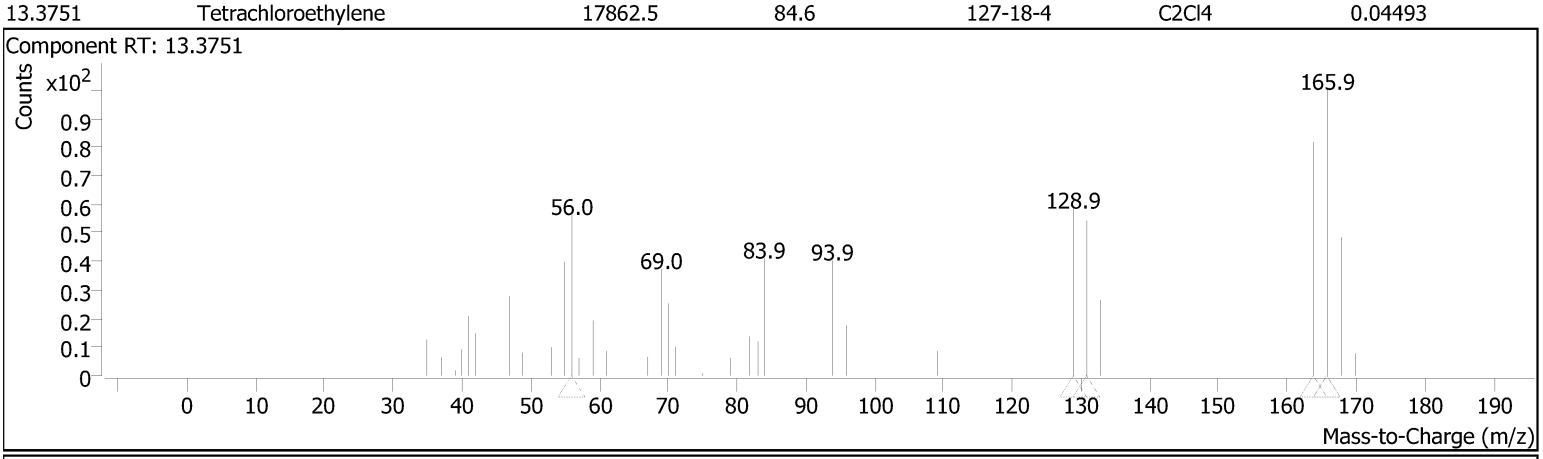


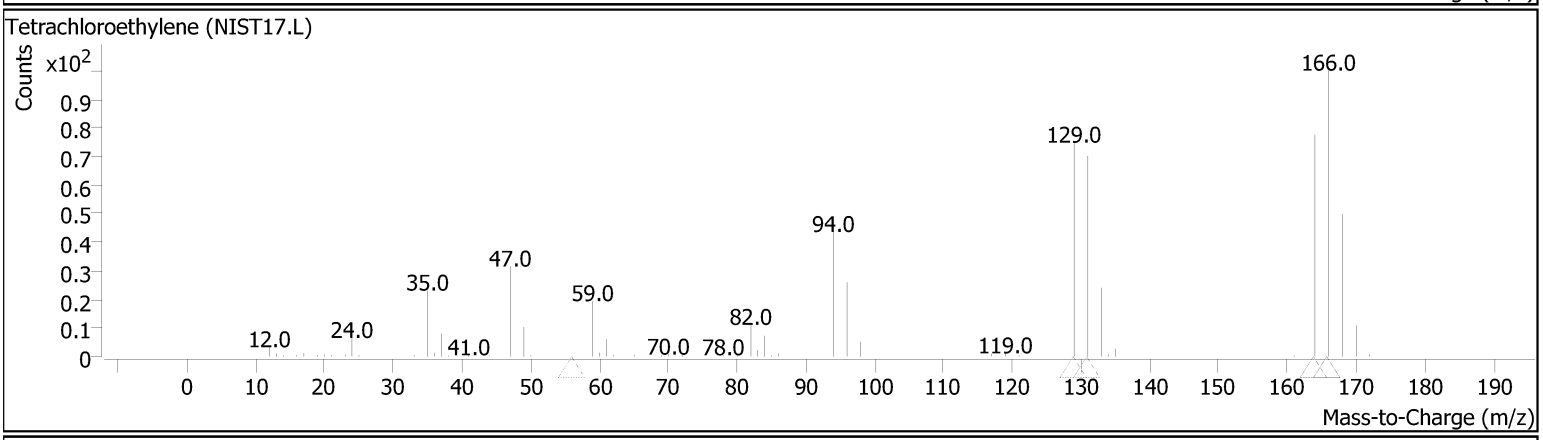


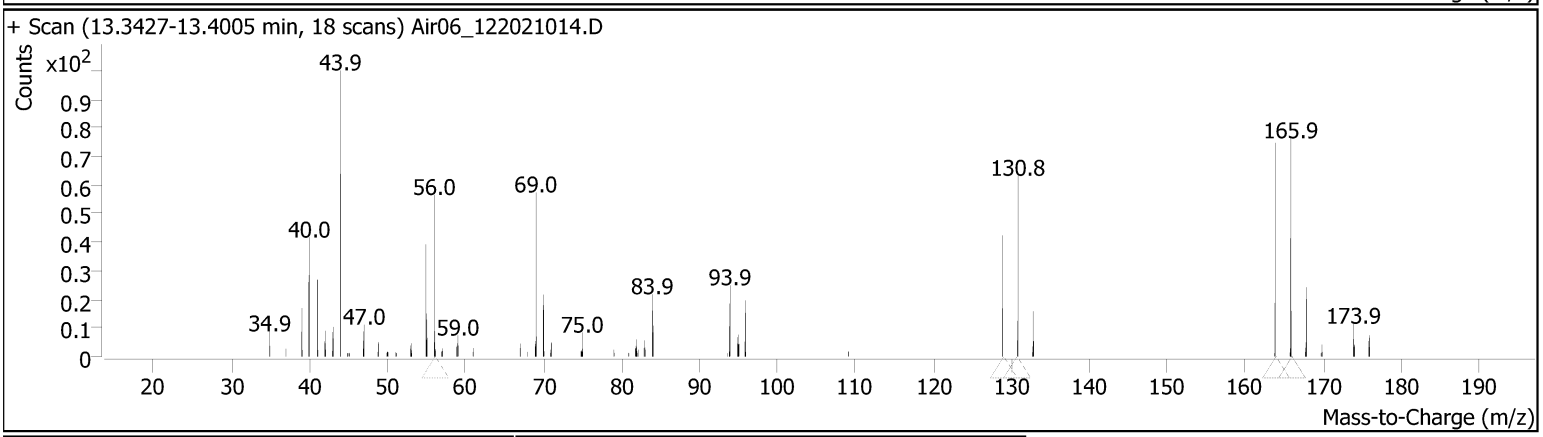


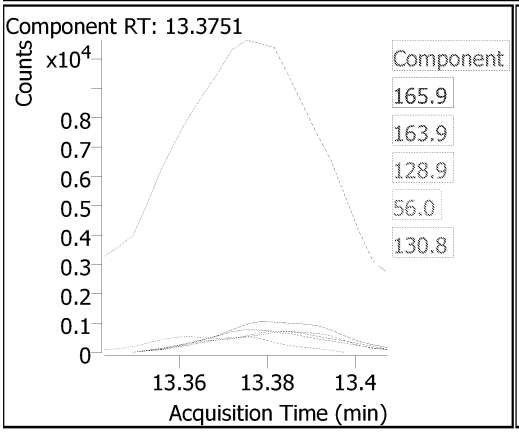


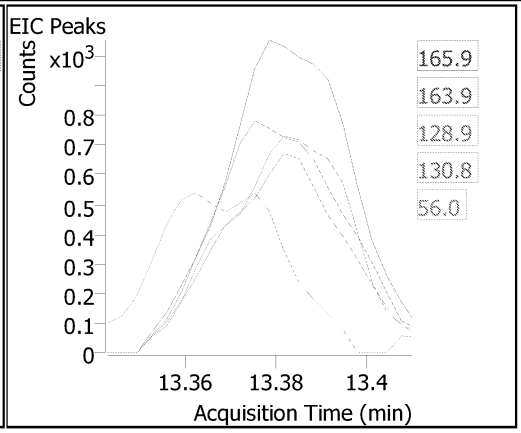
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.3751	Tetrachloroethylene	17862.5	84.6	127-18-4	C2Cl4	0.04493

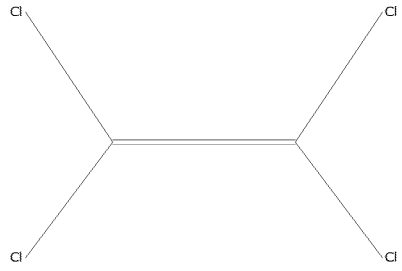




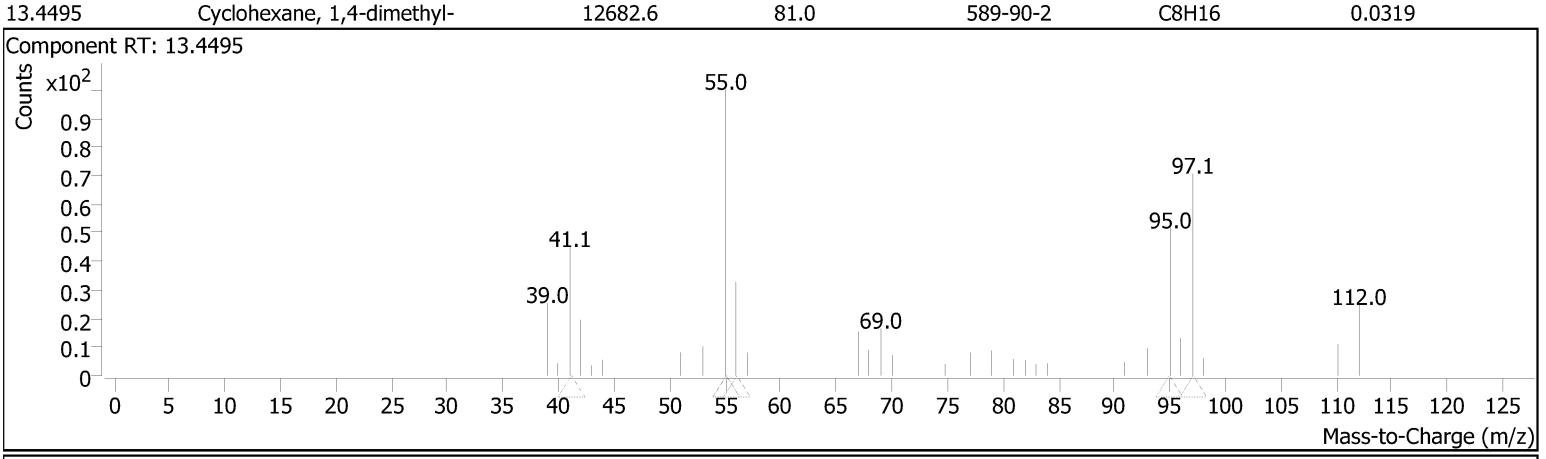


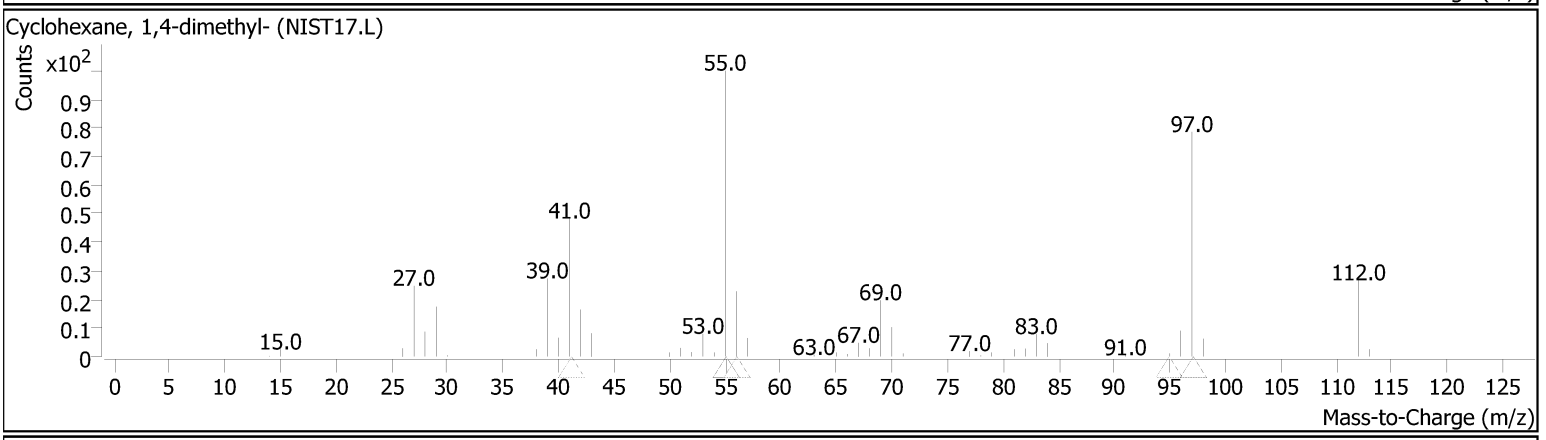


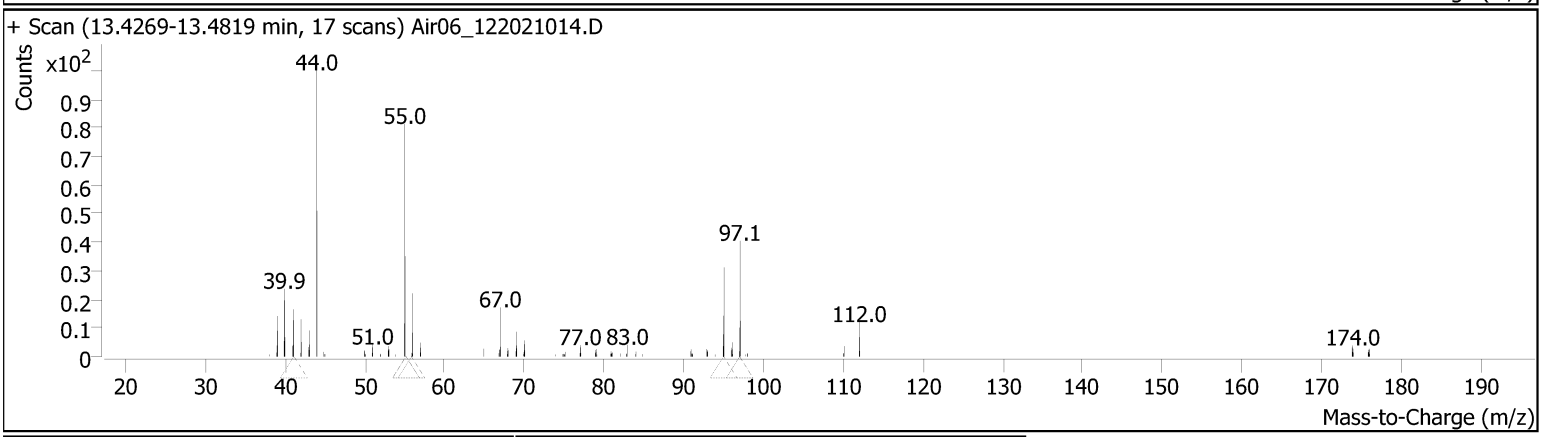


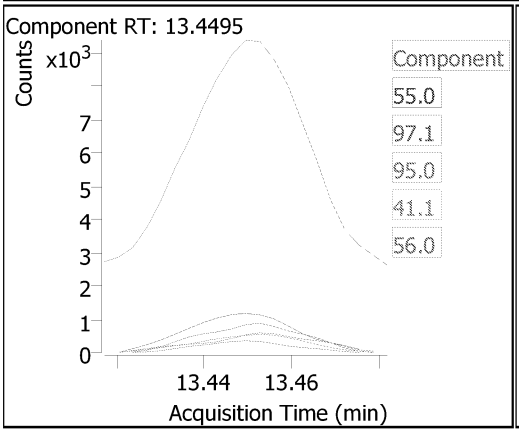


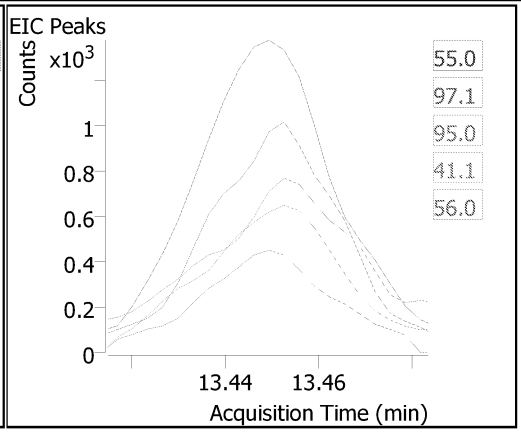
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.4495	Cyclohexane, 1,4-dimethyl-	12682.6	81.0	589-90-2	C8H16	0.0319

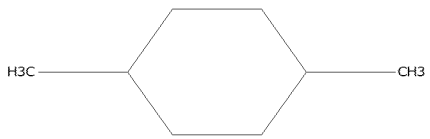




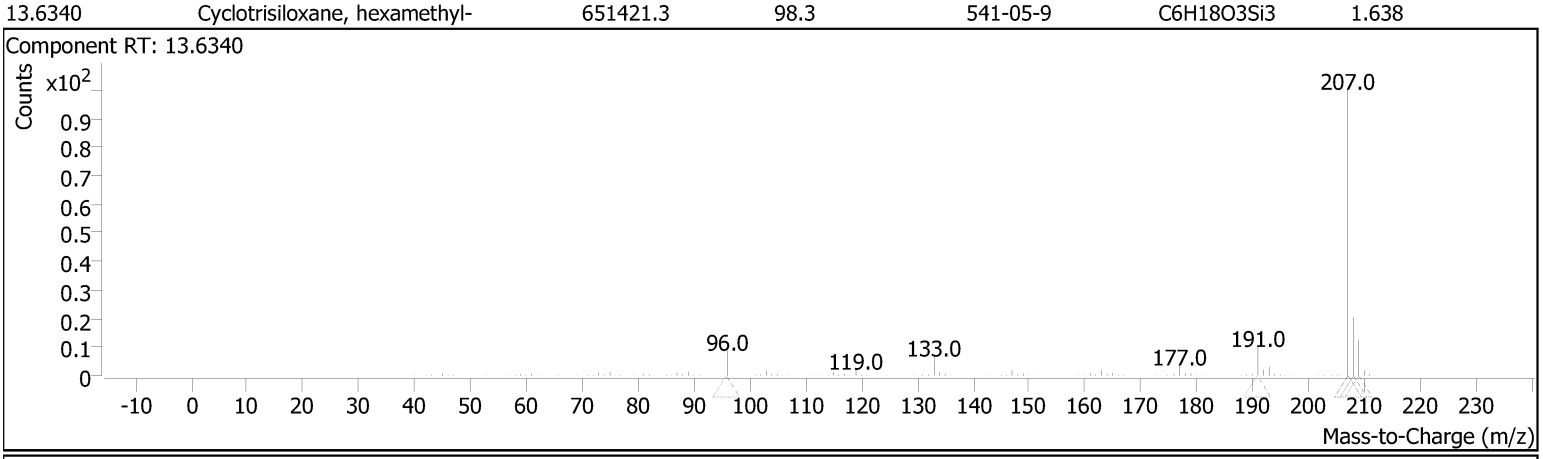


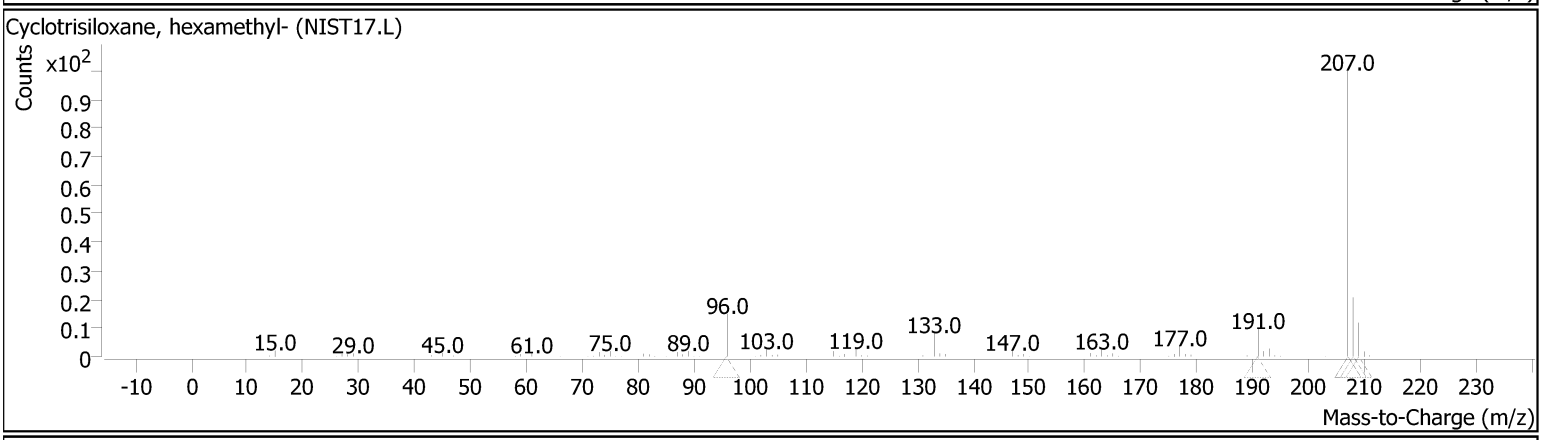


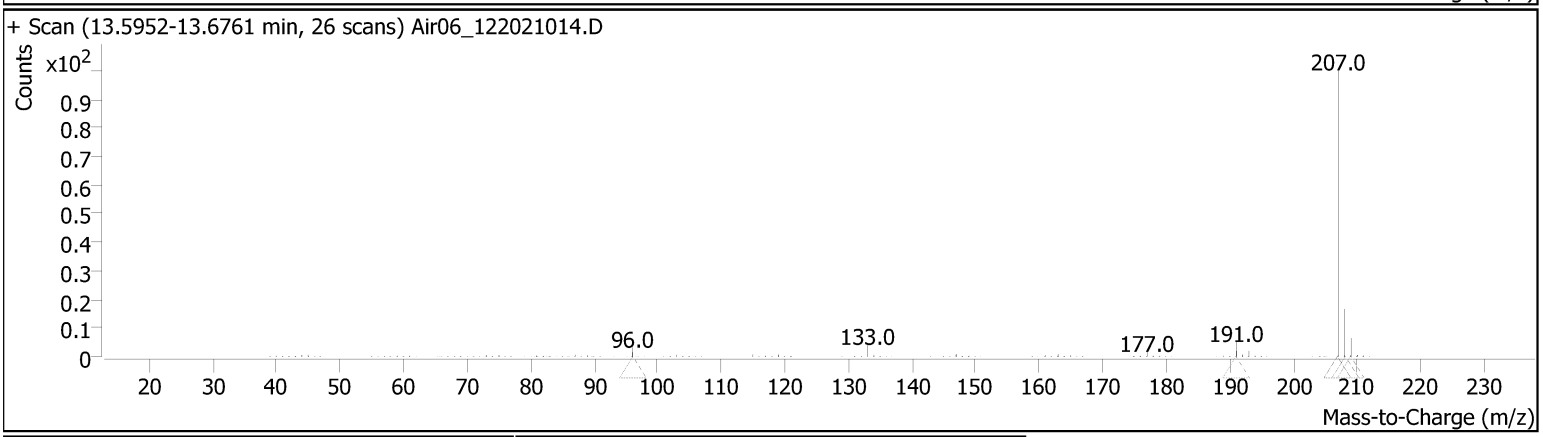


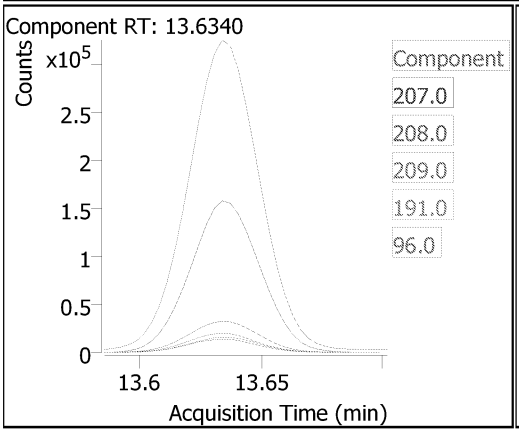


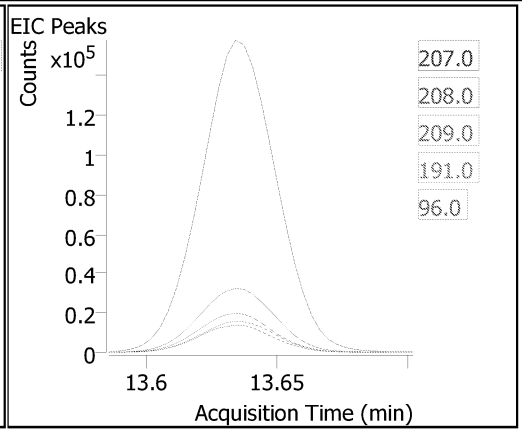
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.6340	Cyclotrisiloxane, hexamethyl-	651421.3	98.3	541-05-9	C6H18O3Si3	1.638

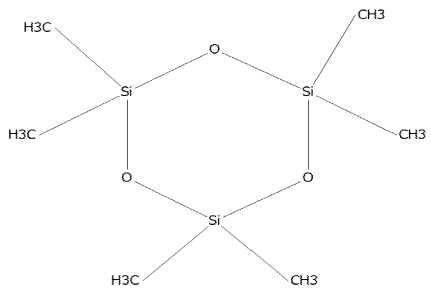




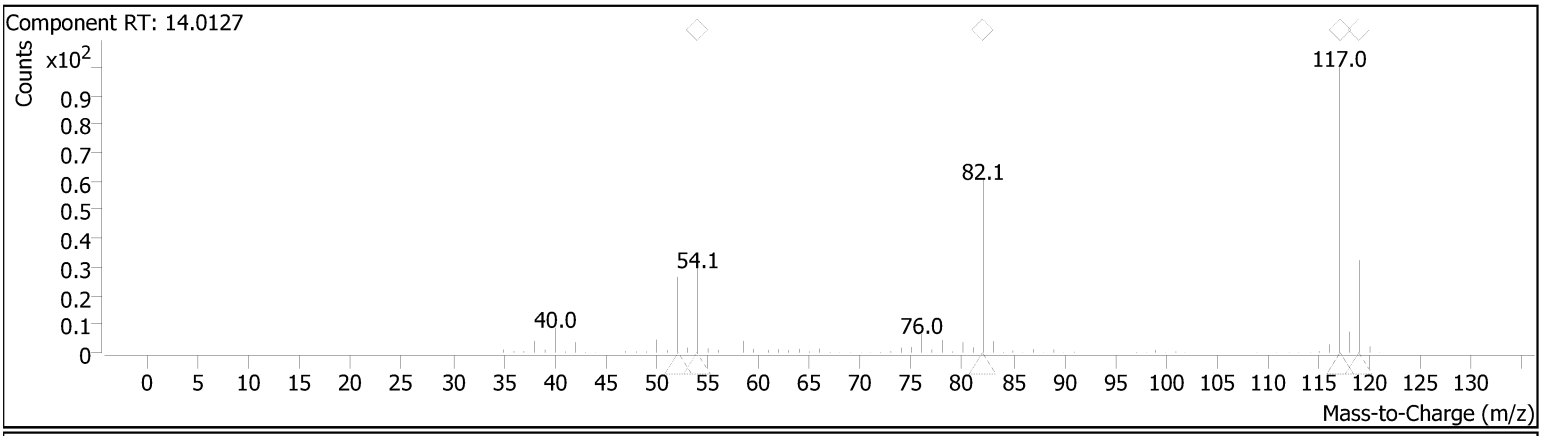


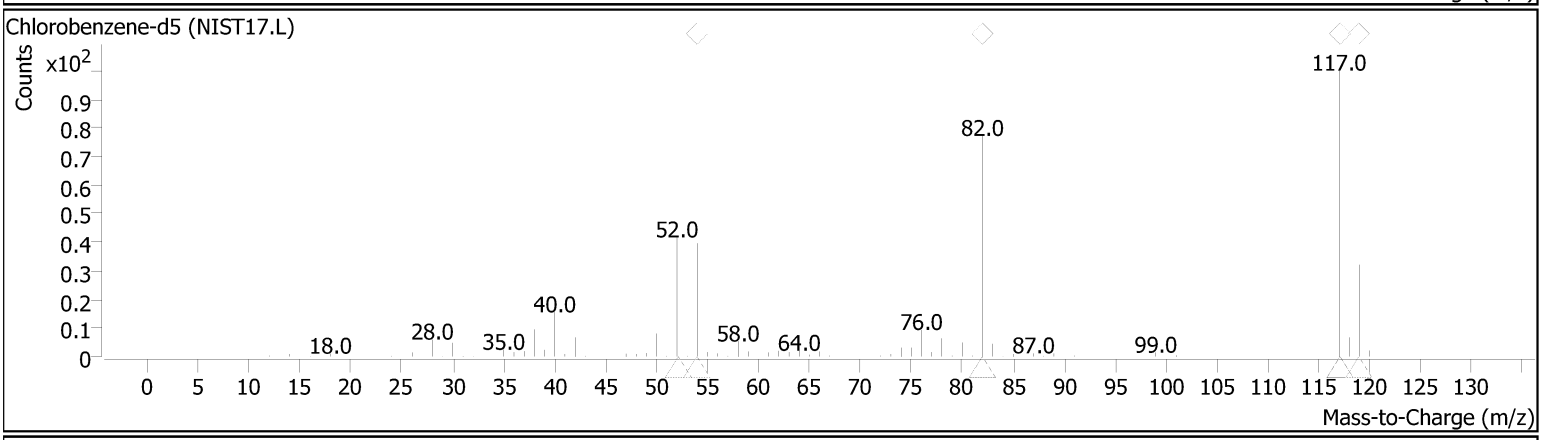


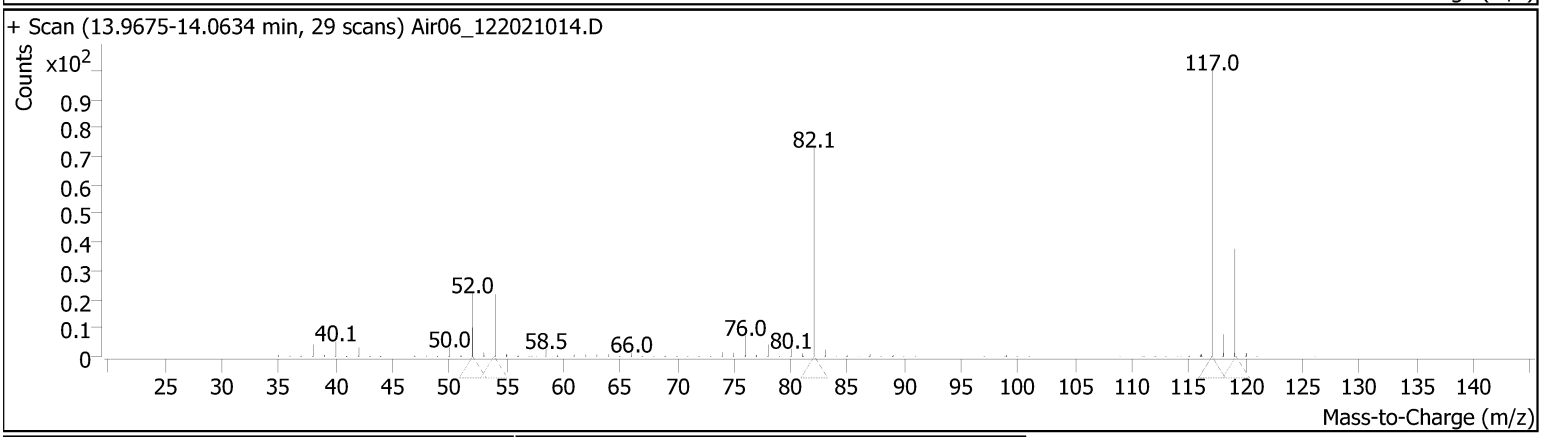


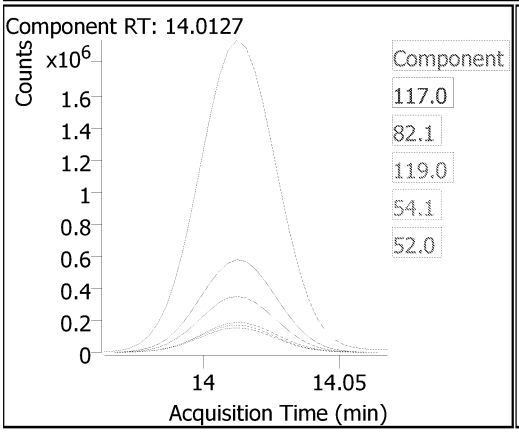


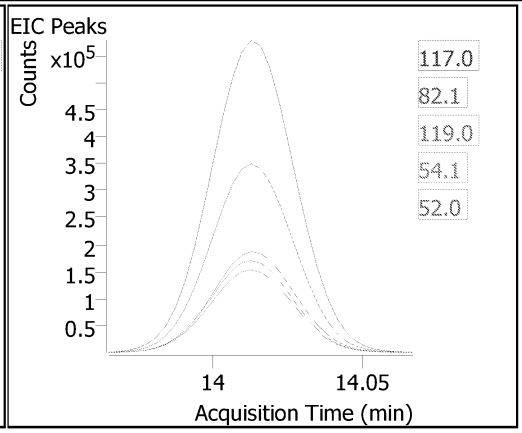
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.0127	Chlorobenzene-d5	3975915.8	96.0	3114-55-4	C6D5Cl	10

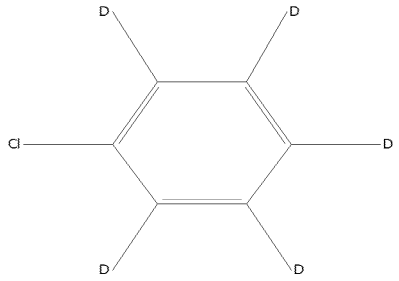




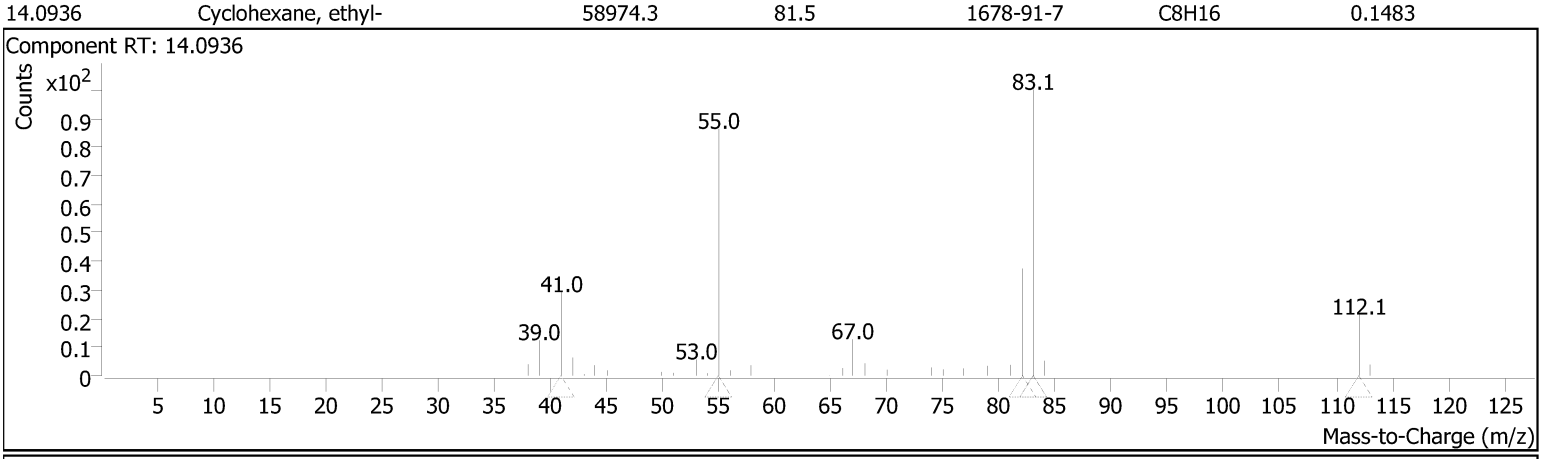


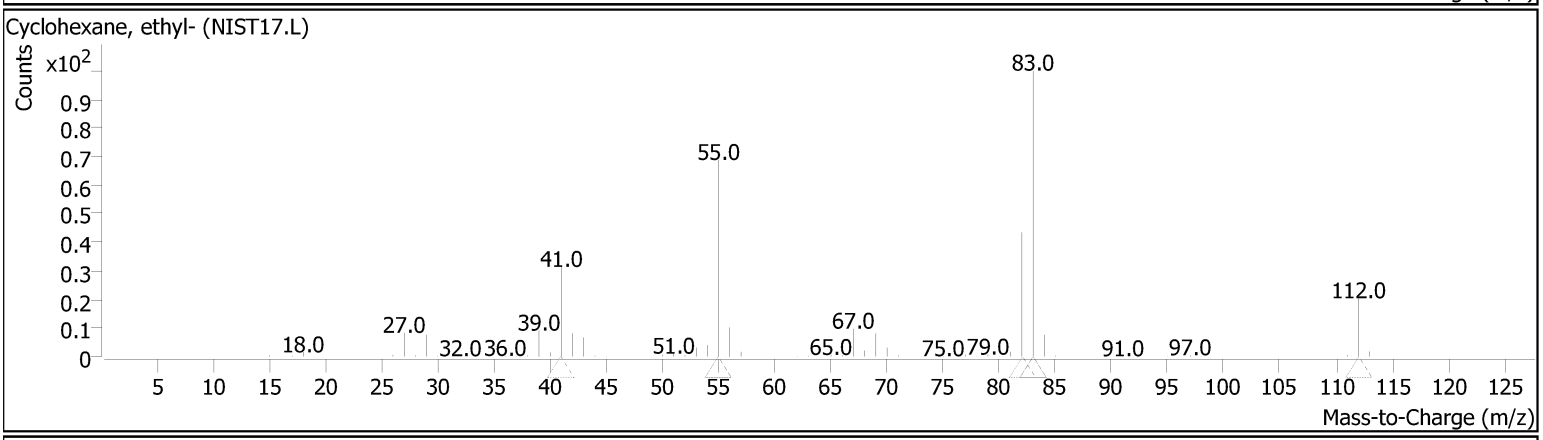


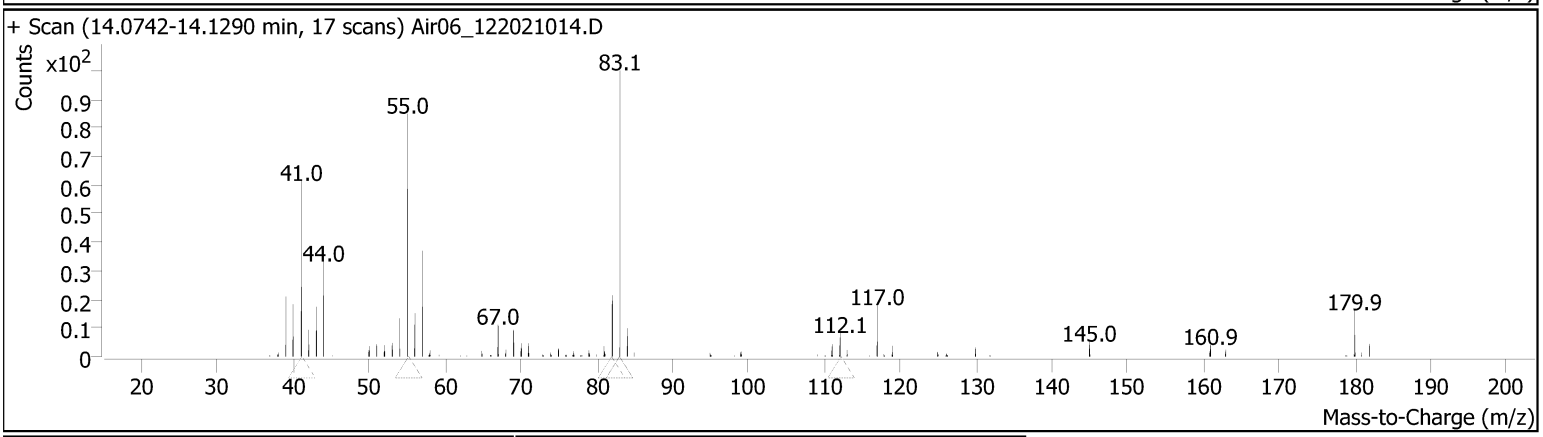


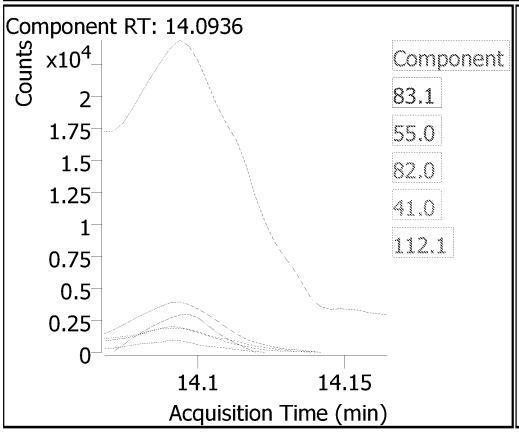


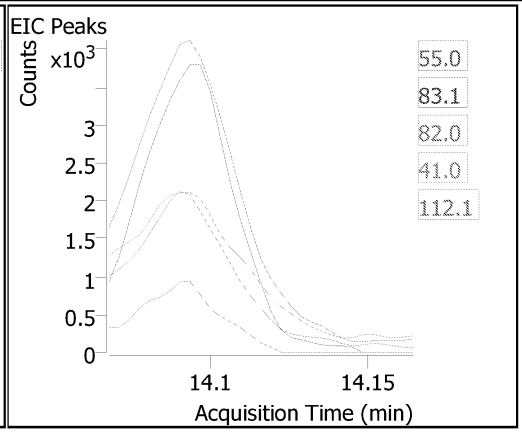
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.0936	Cyclohexane, ethyl-	58974.3	81.5	1678-91-7	C8H16	0.1483

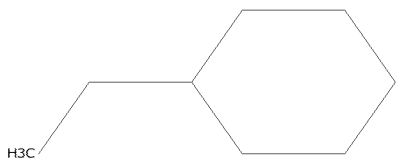




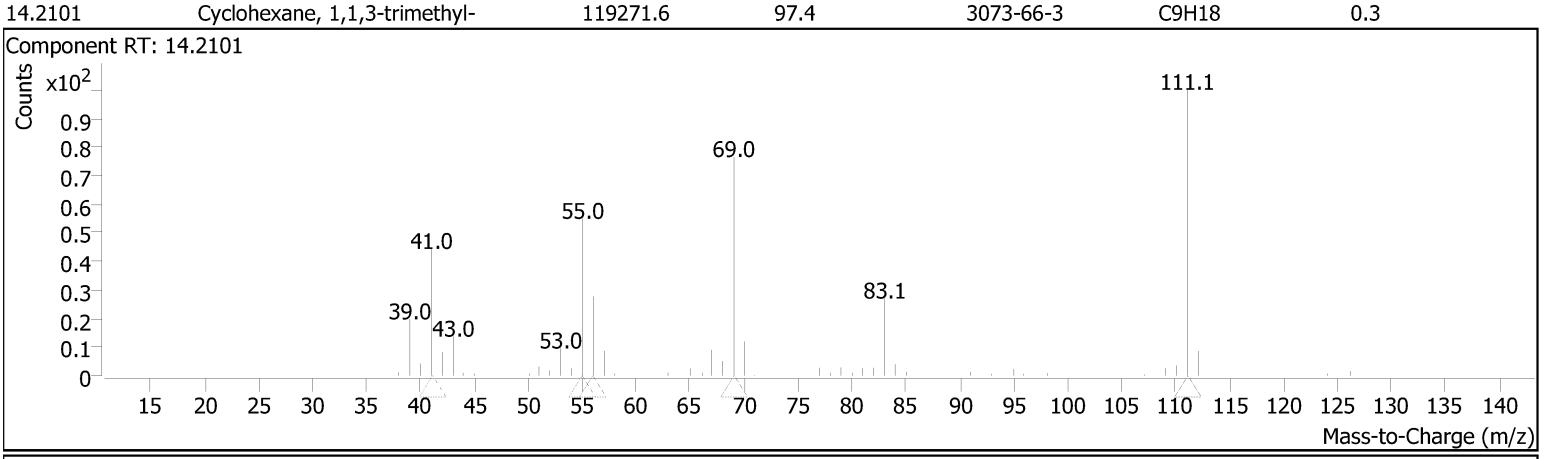


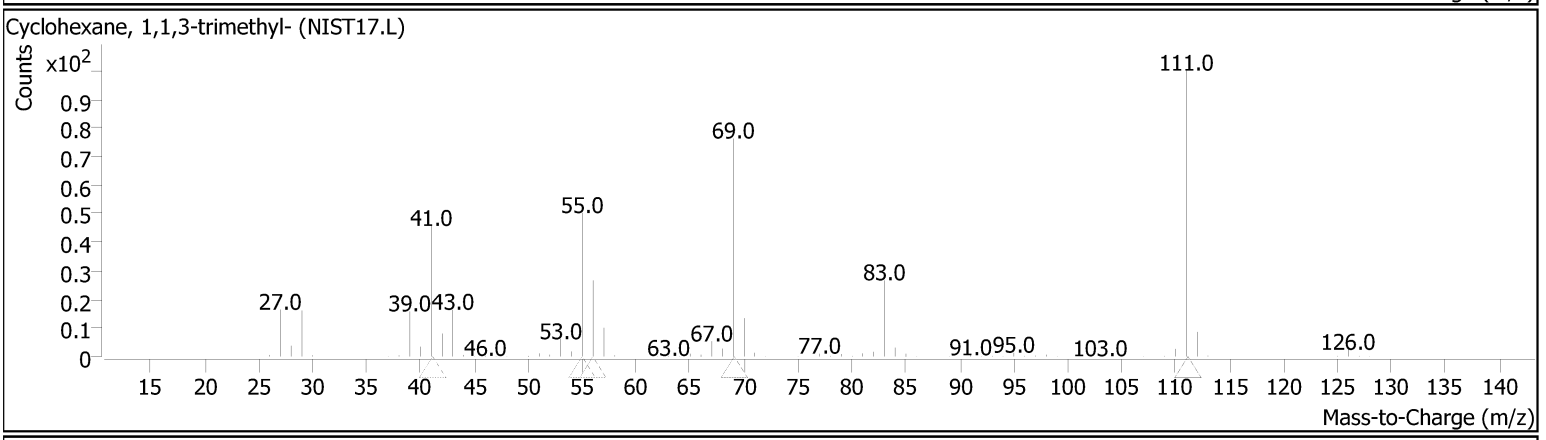


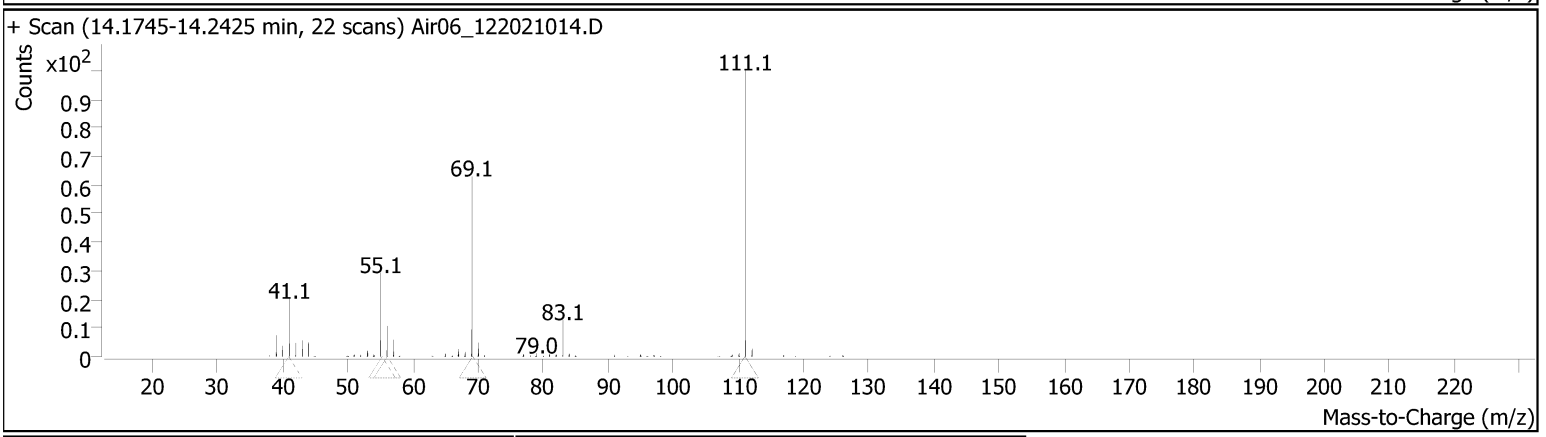


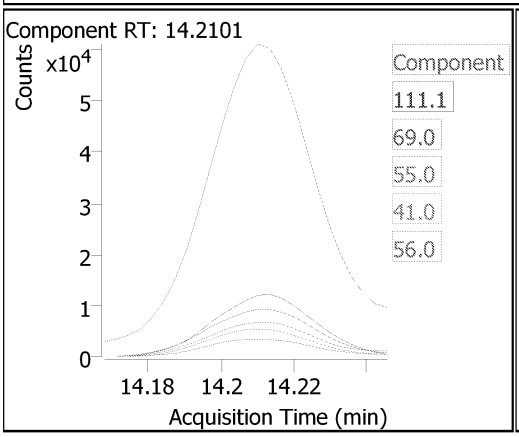


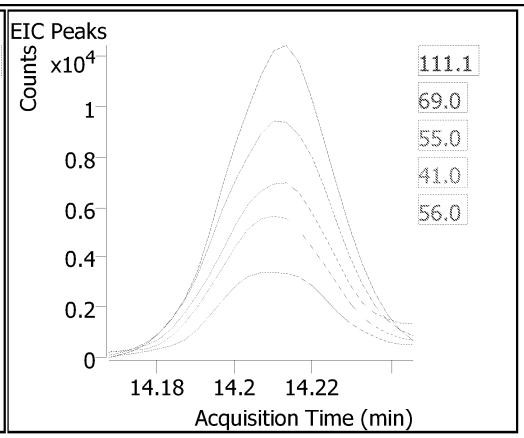
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.2101	Cyclohexane, 1,1,3-trimethyl-	119271.6	97.4	3073-66-3	C9H18	0.3

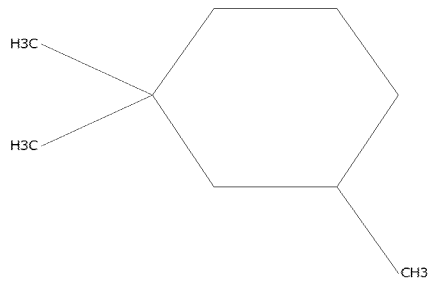








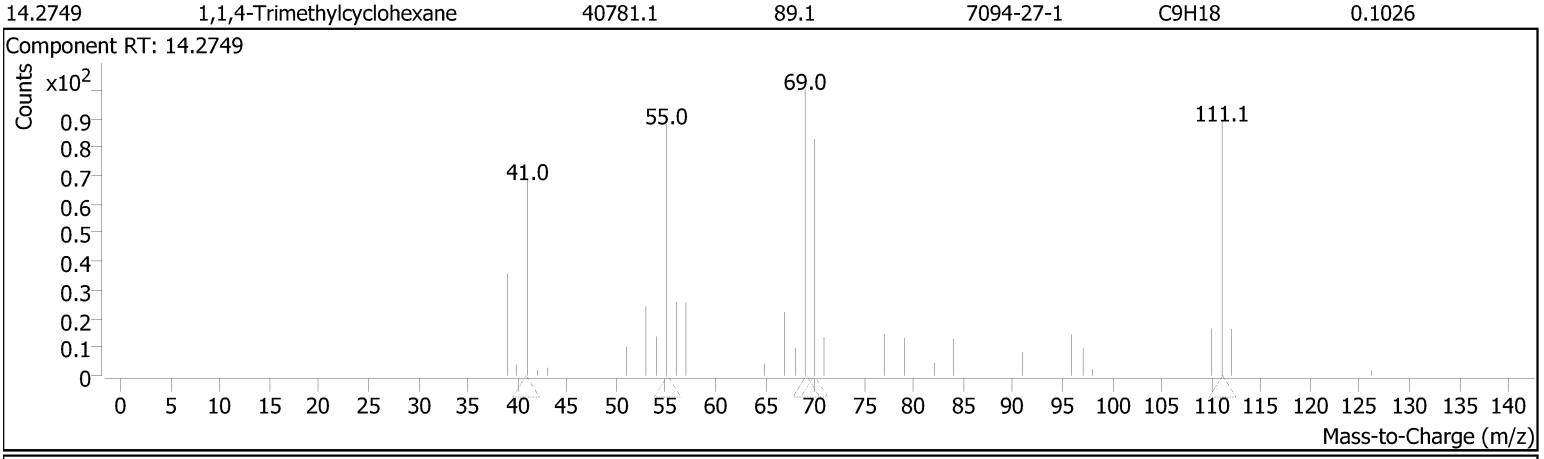


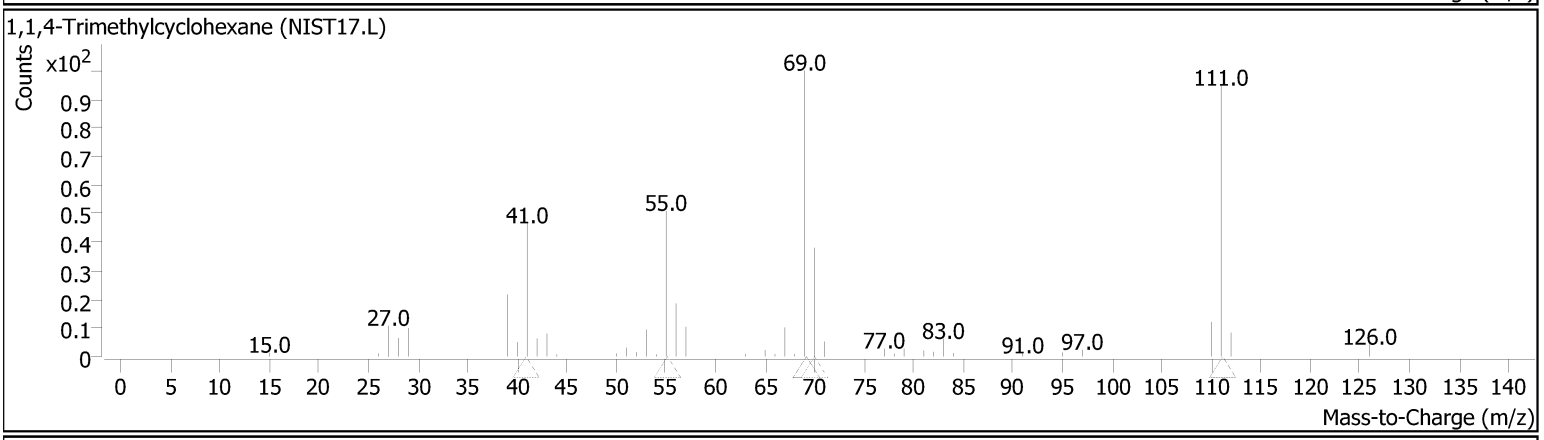


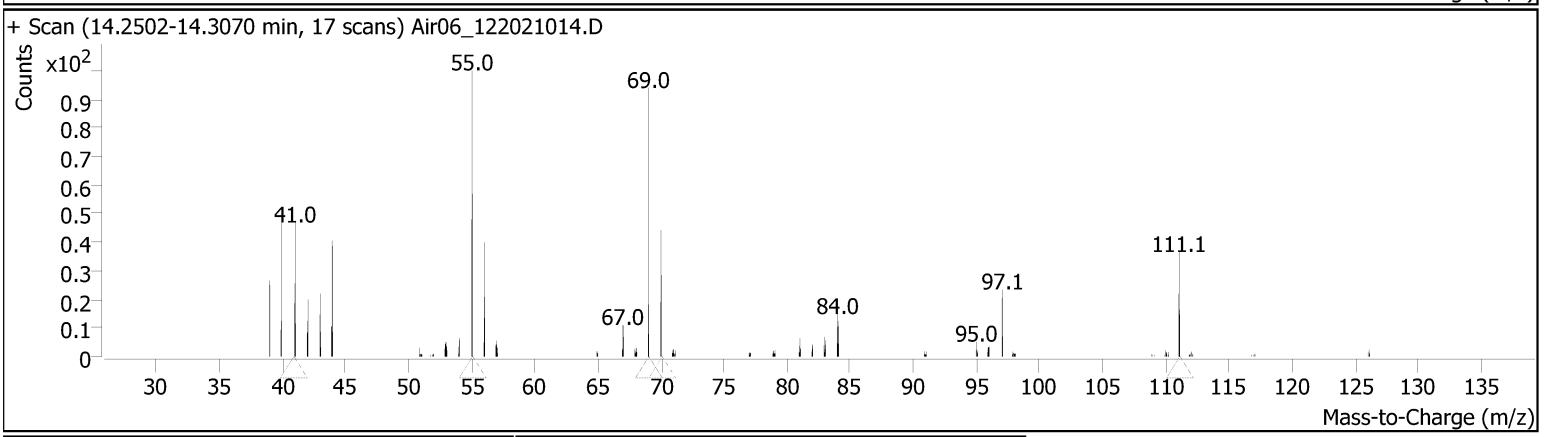
Library Search Results - NonTarget Hits with Details

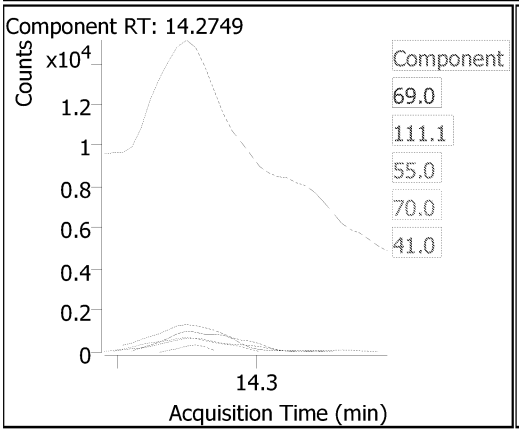
Agilent Technologies

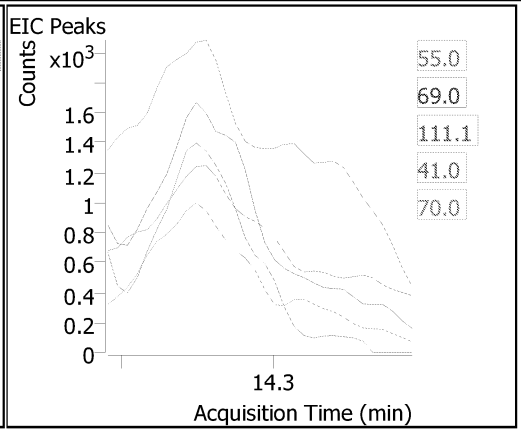
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.2749	1,1,4-Trimethylcyclohexane	40781.1	89.1	7094-27-1	C9H18	0.1026

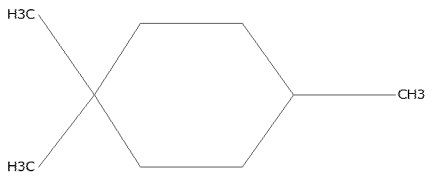




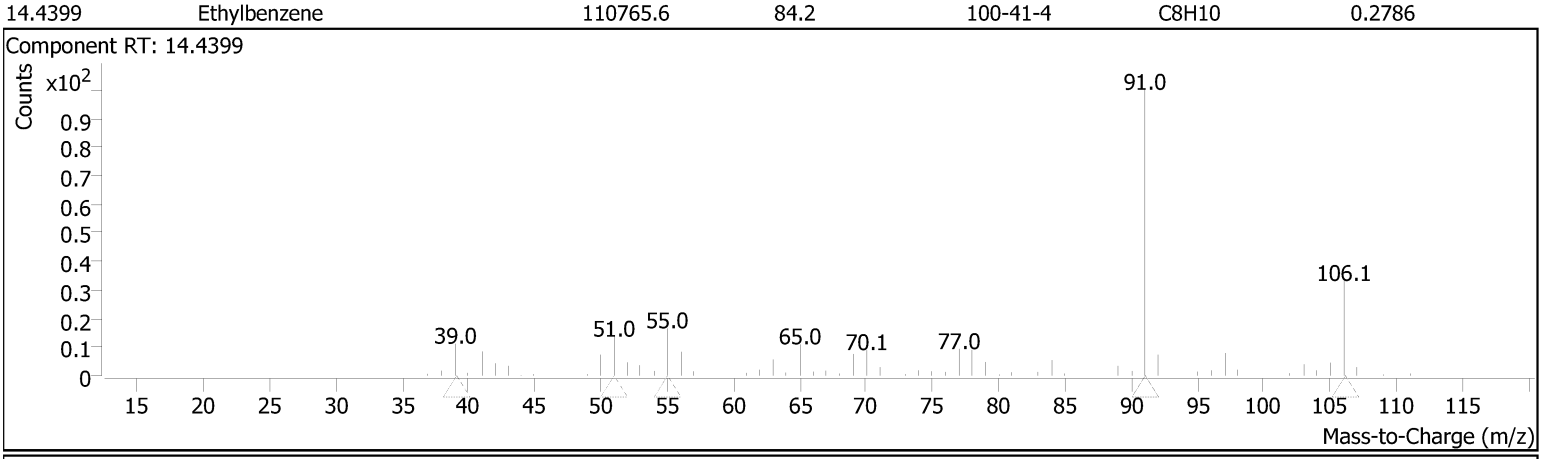


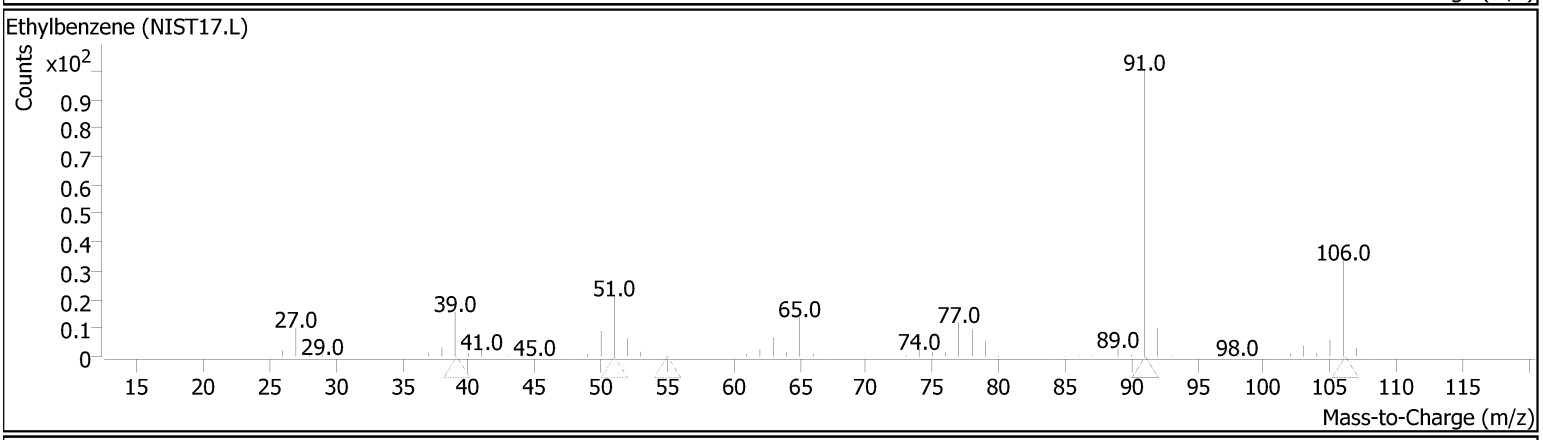


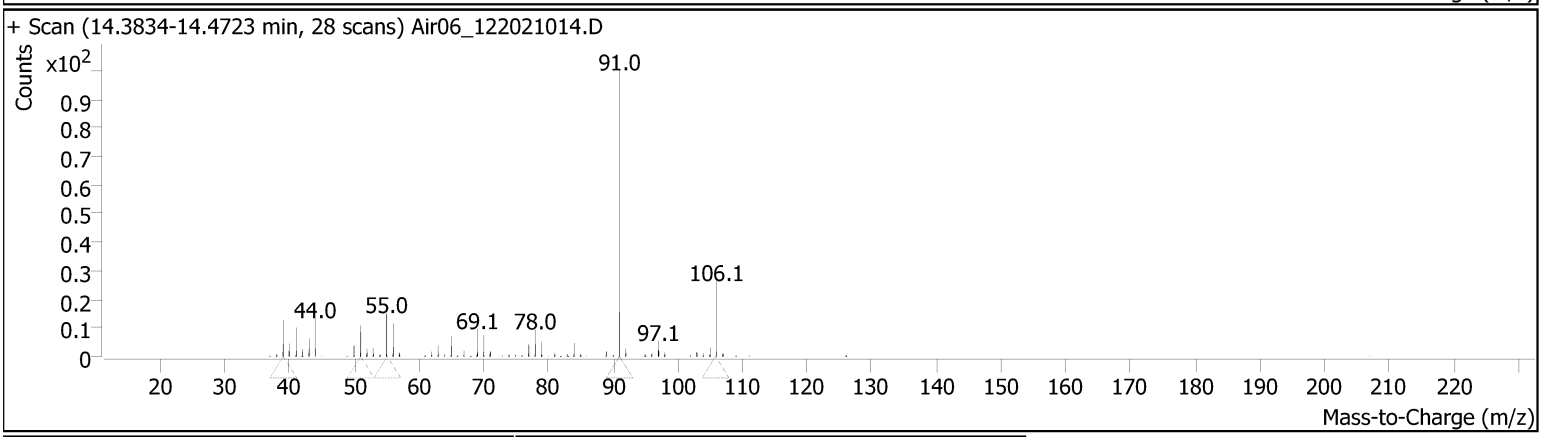


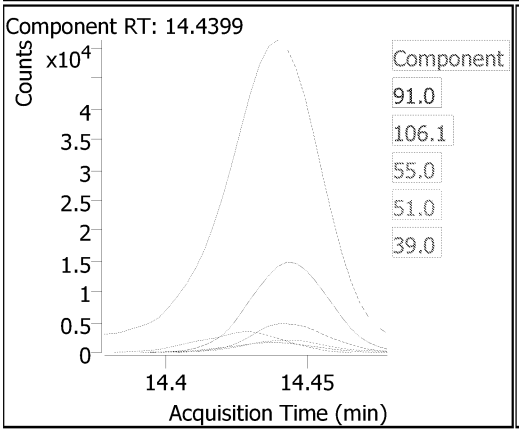


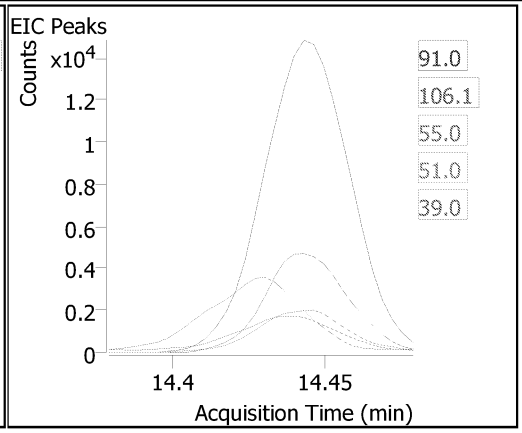
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.4399	Ethylbenzene	110765.6	84.2	100-41-4	C8H10	0.2786

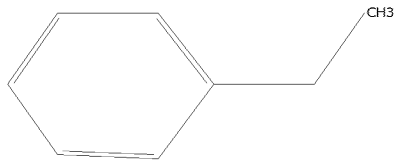




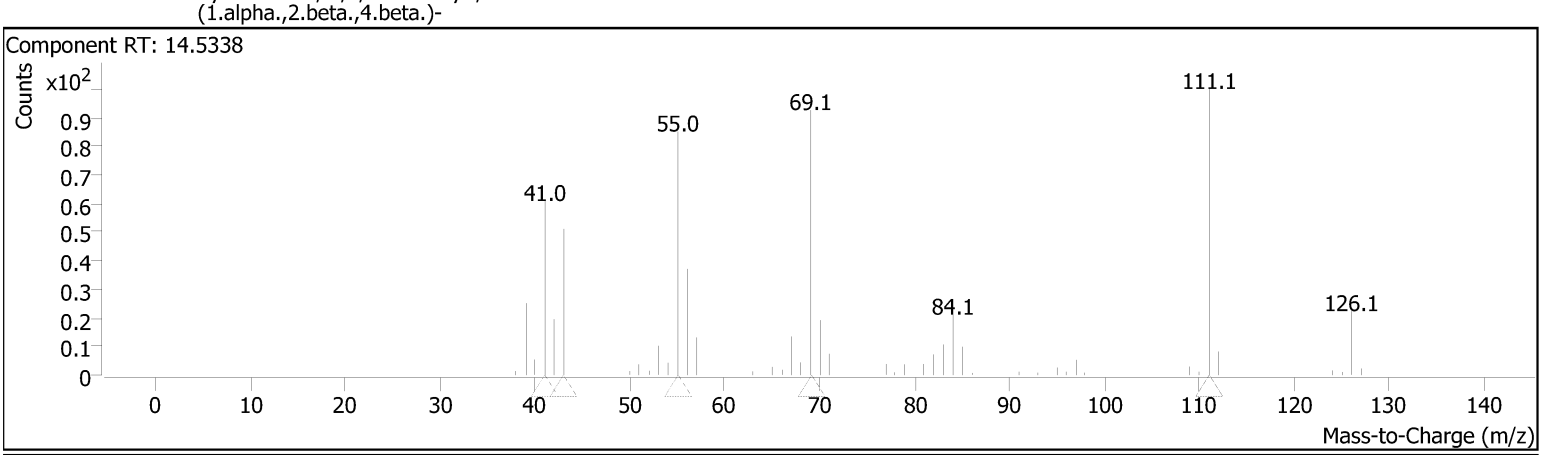


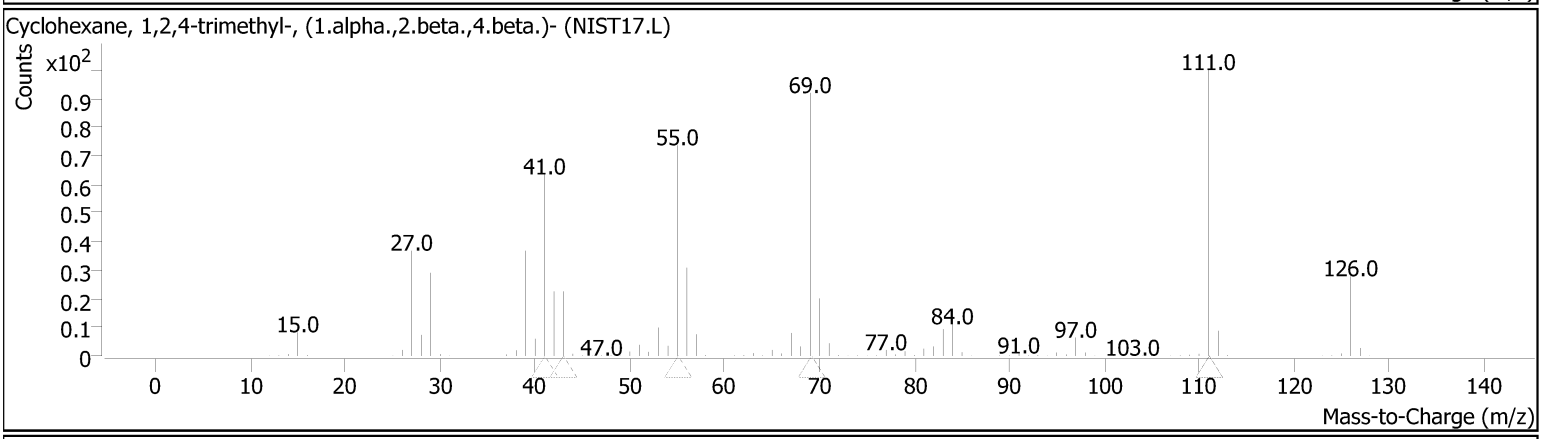


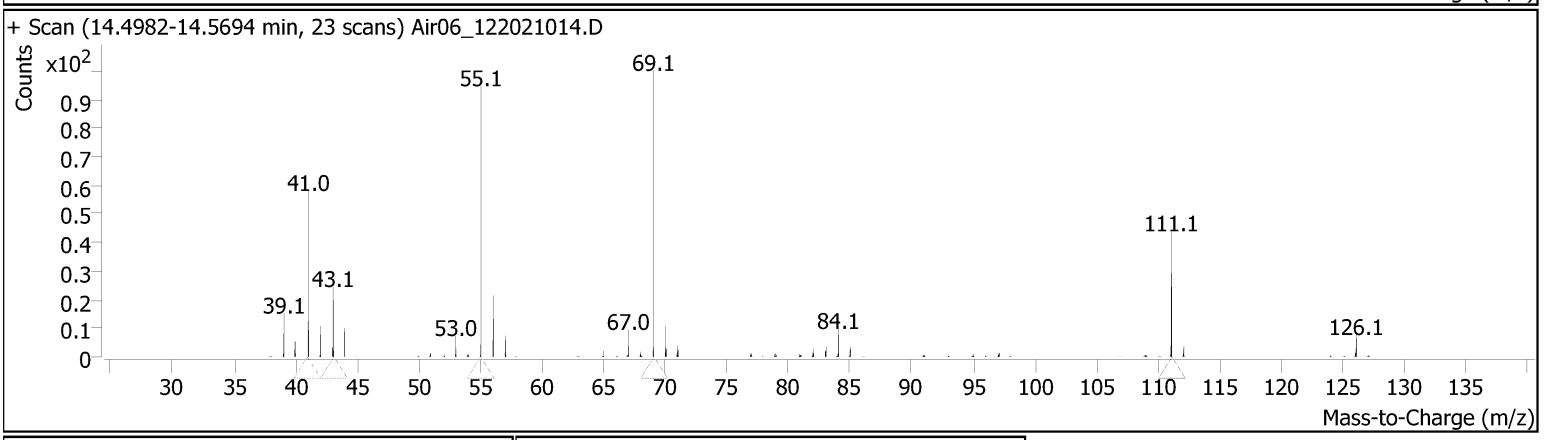


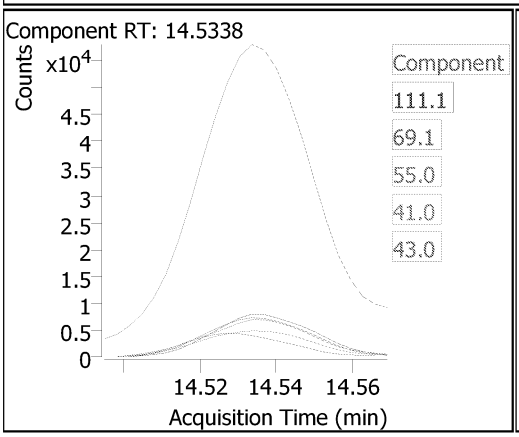


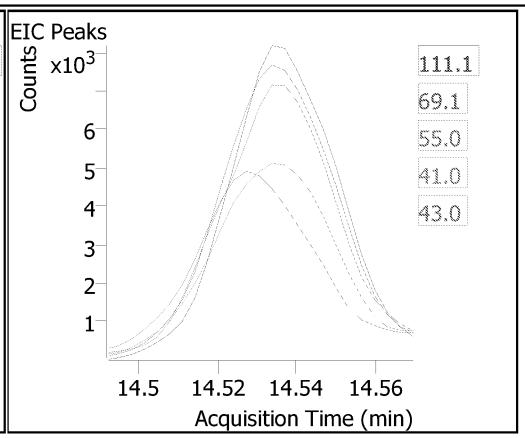
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.5338	Cyclohexane, 1,2,4-trimethyl-, (1.alpha.,2.beta.,4.beta.)-	114507.3	96.9	7667-60-9	C9H18	0.288

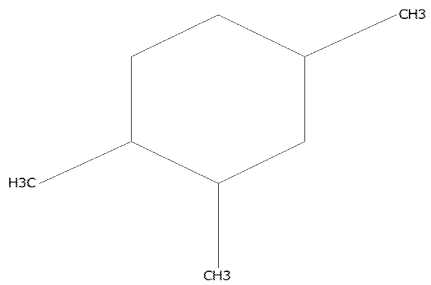




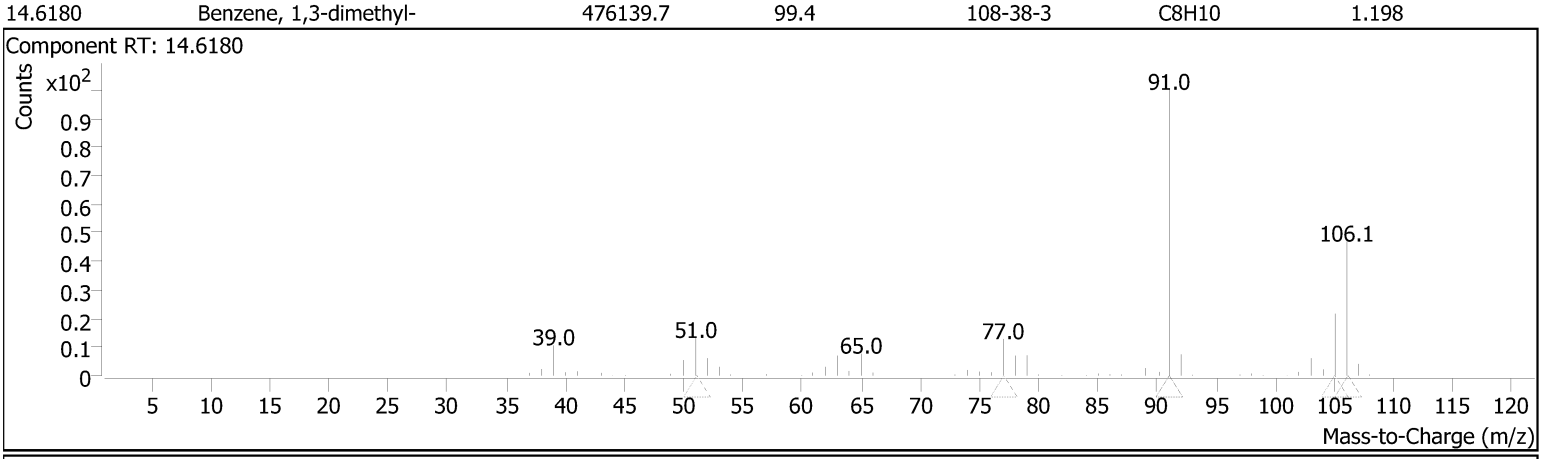


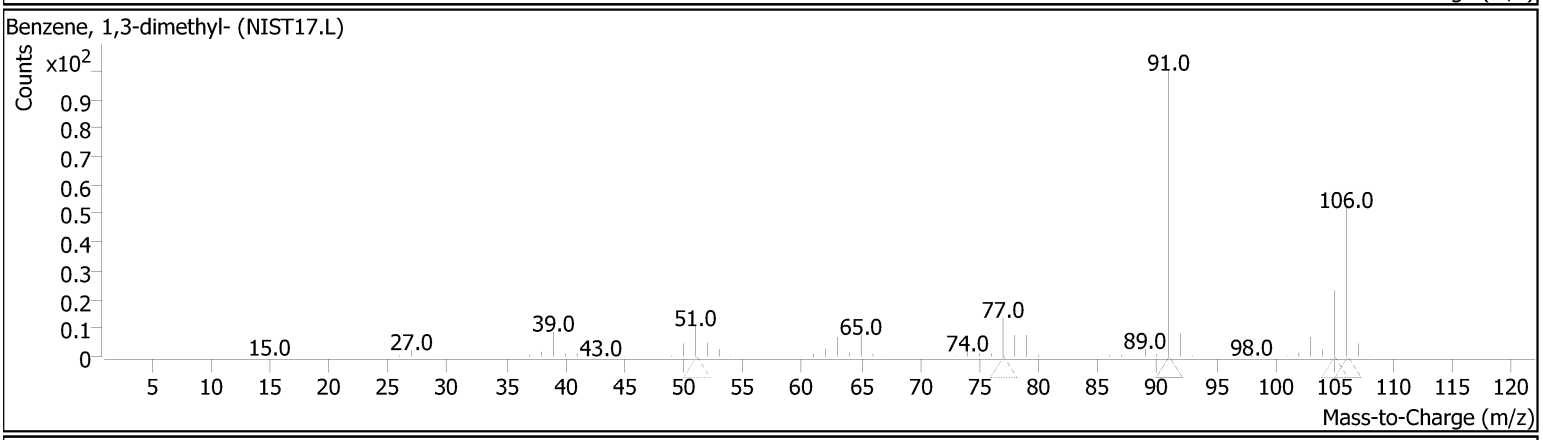


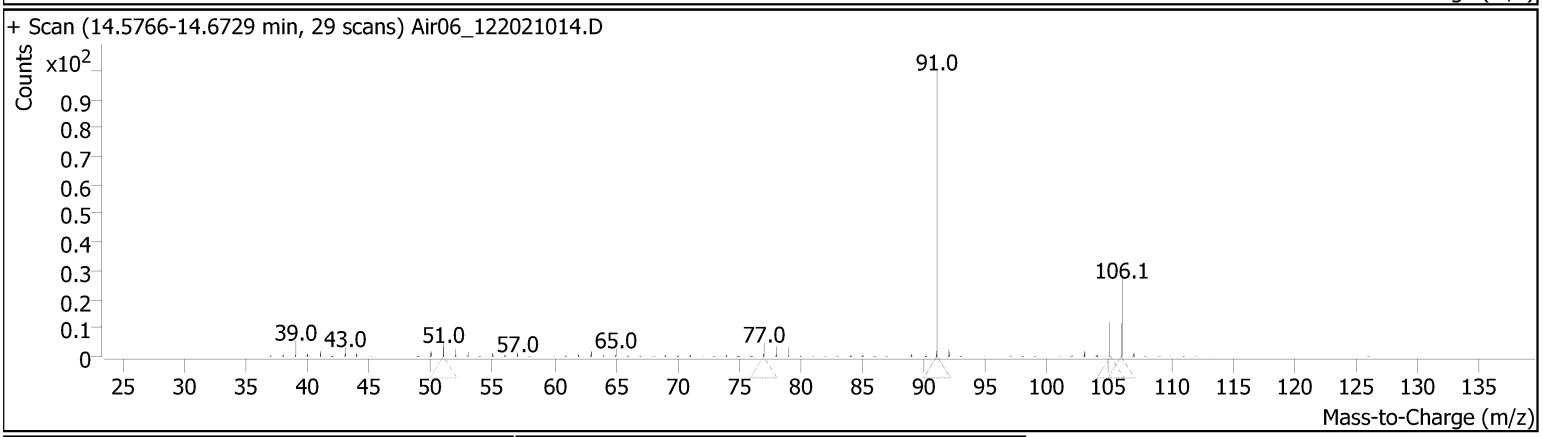


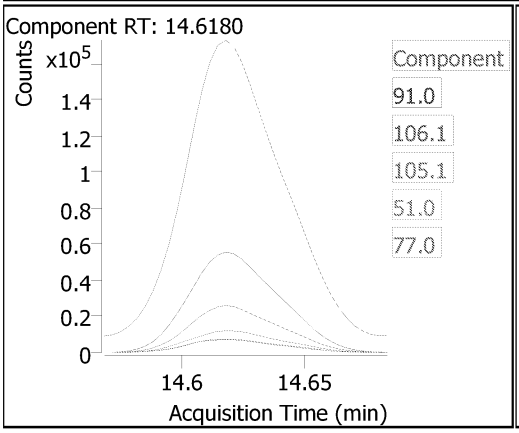


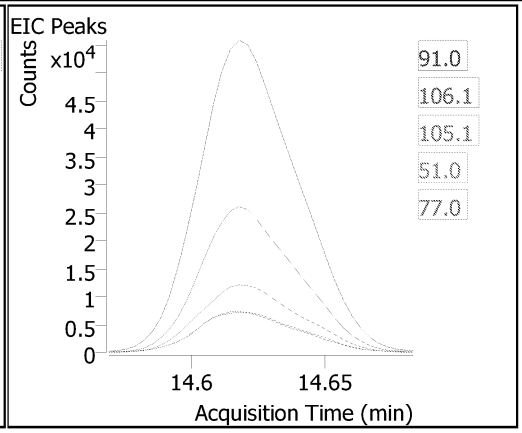
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.6180	Benzene, 1,3-dimethyl-	476139.7	99.4	108-38-3	C8H10	1.198

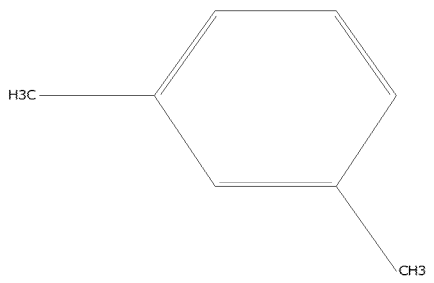




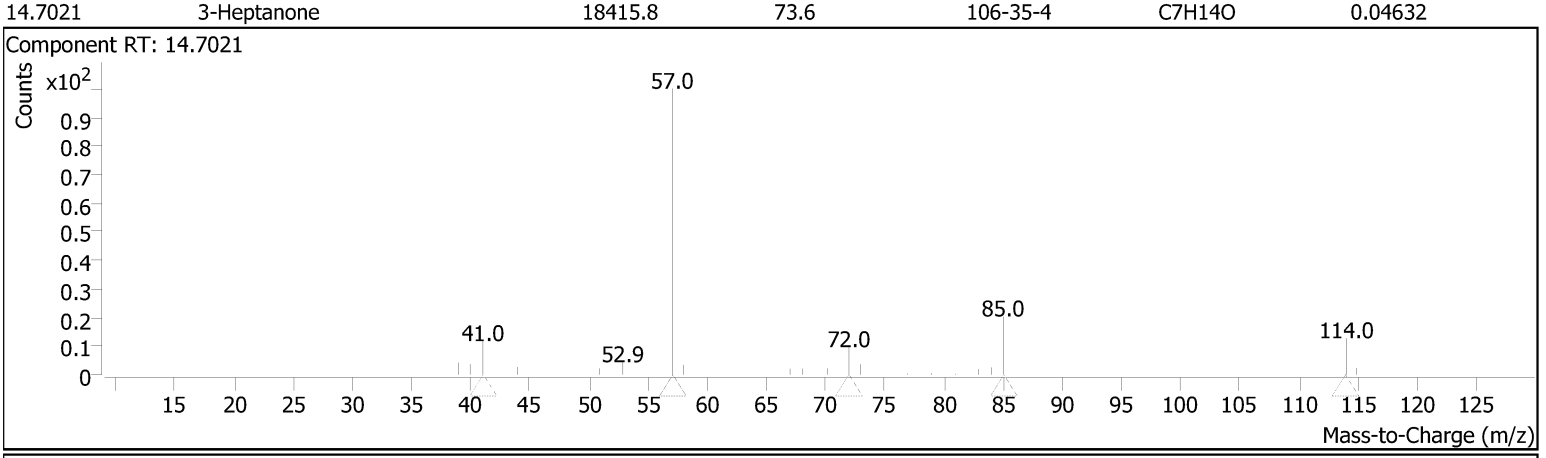


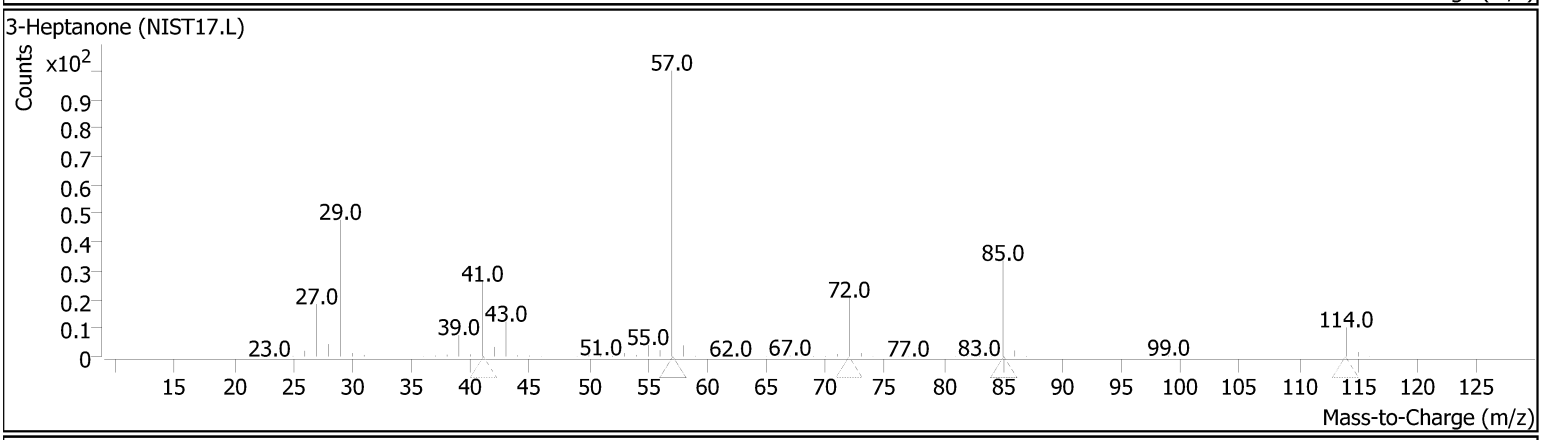


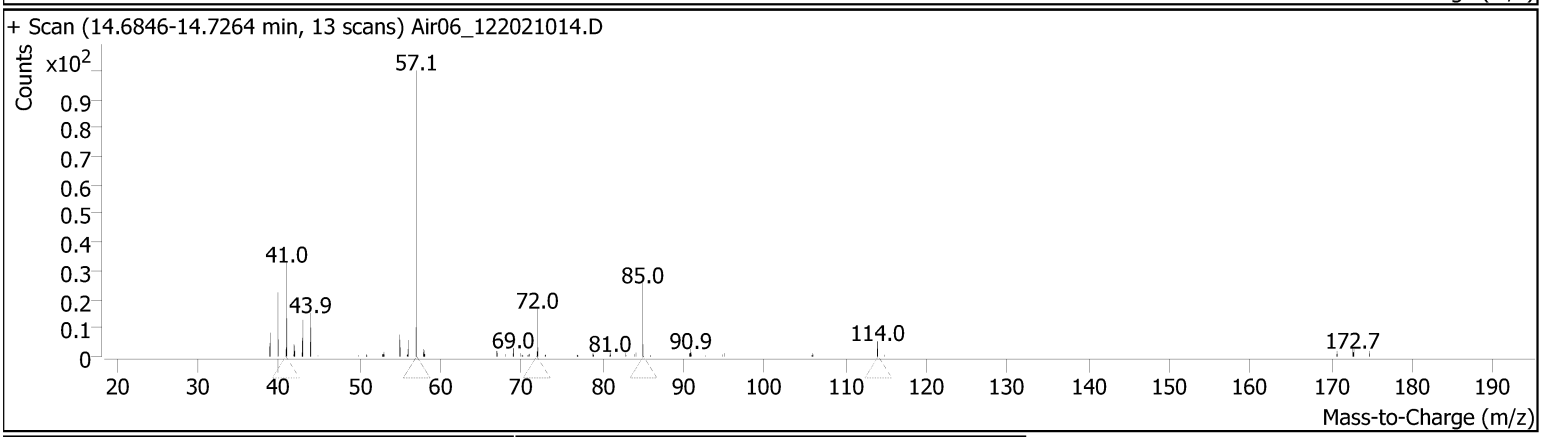


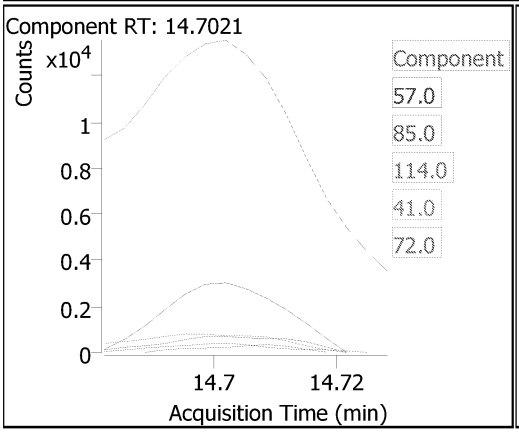


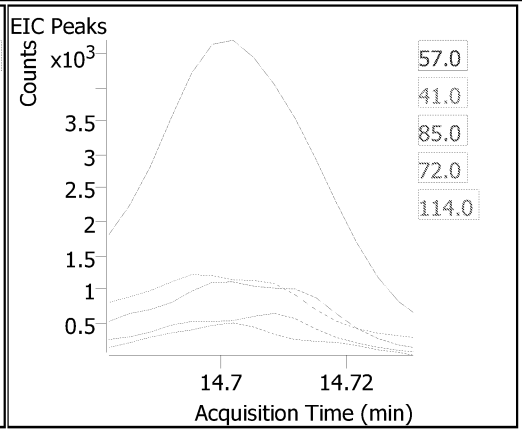
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.7021	3-Heptanone	18415.8	73.6	106-35-4	C7H14O	0.04632

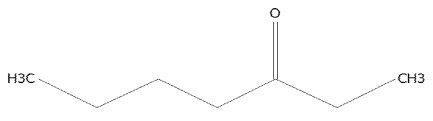




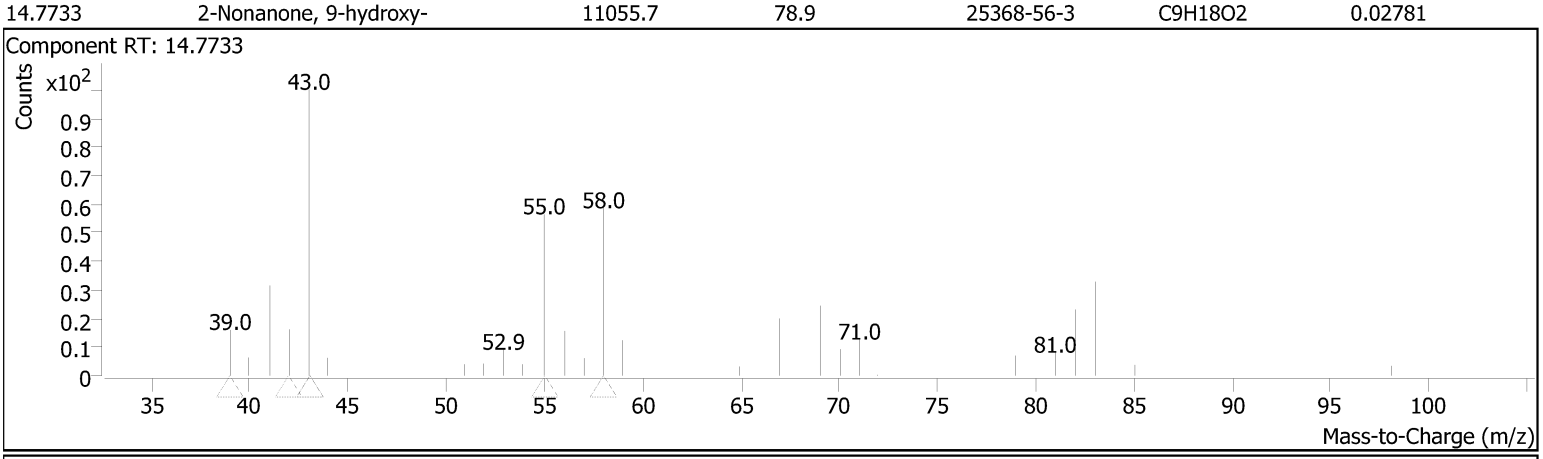


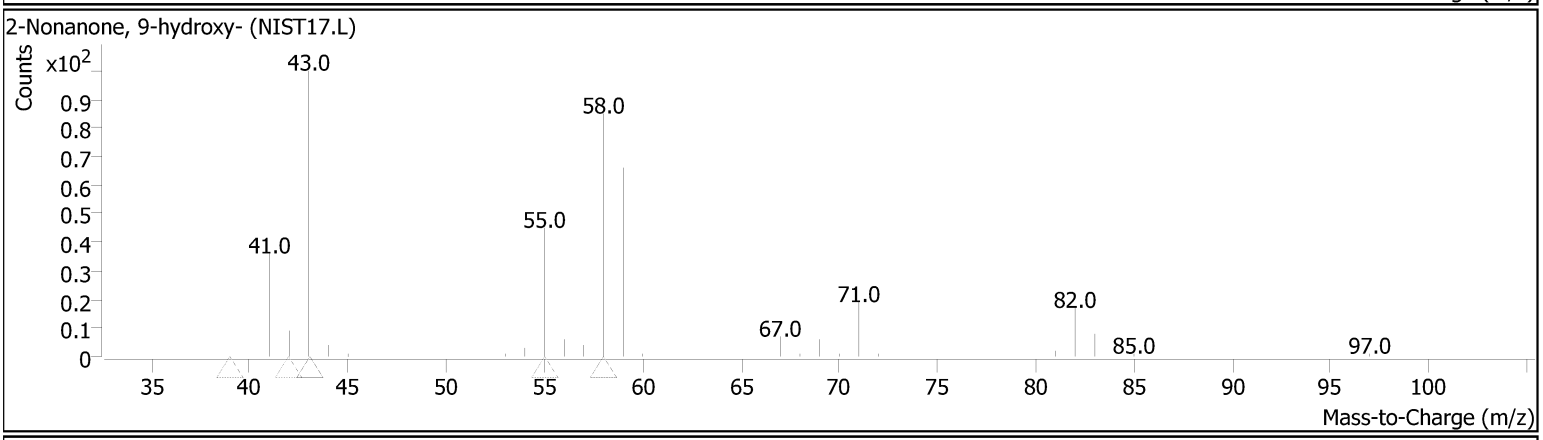


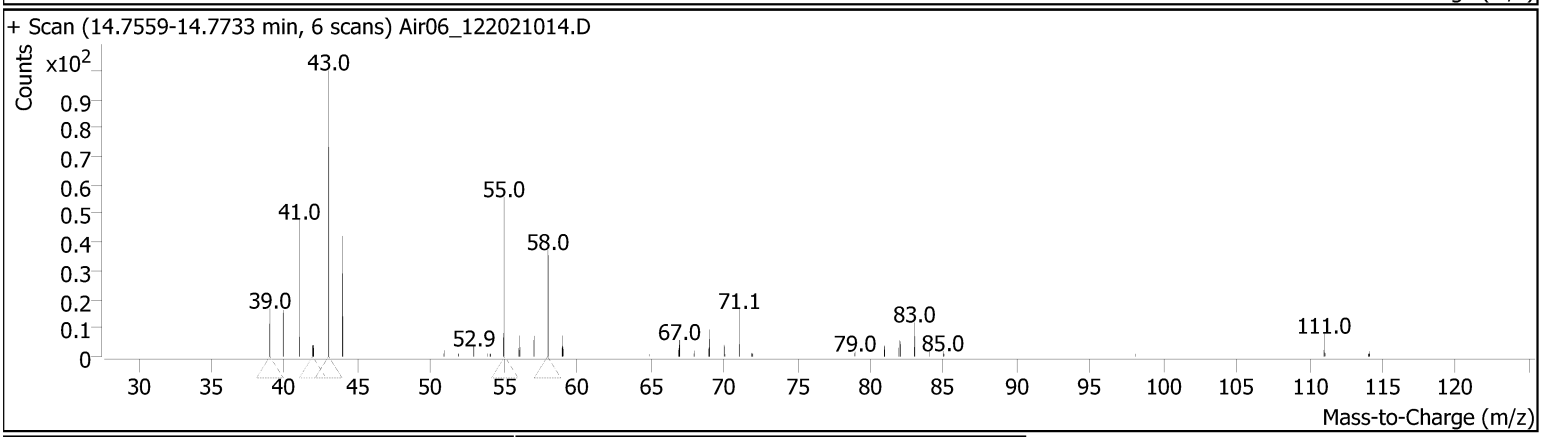


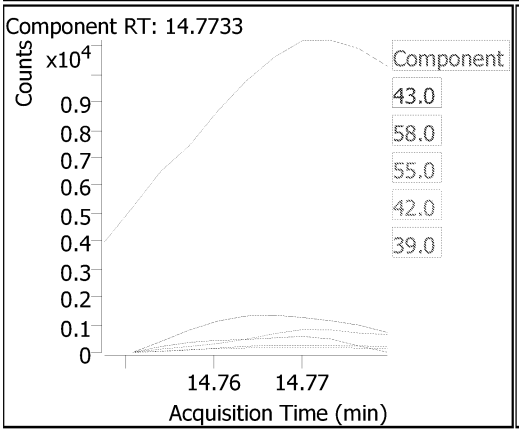


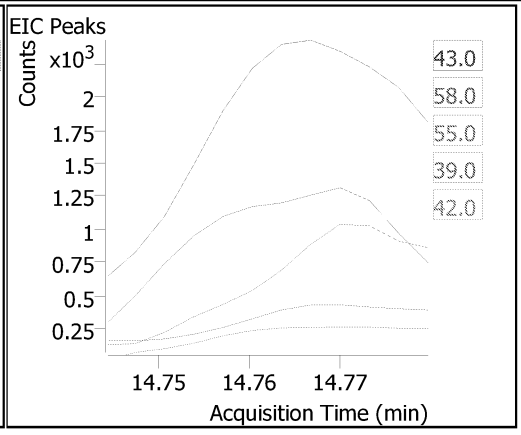
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.7733	2-Nonanone, 9-hydroxy-	11055.7	78.9	25368-56-3	C9H18O2	0.02781

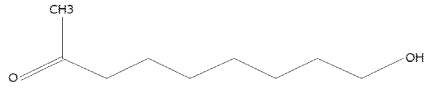




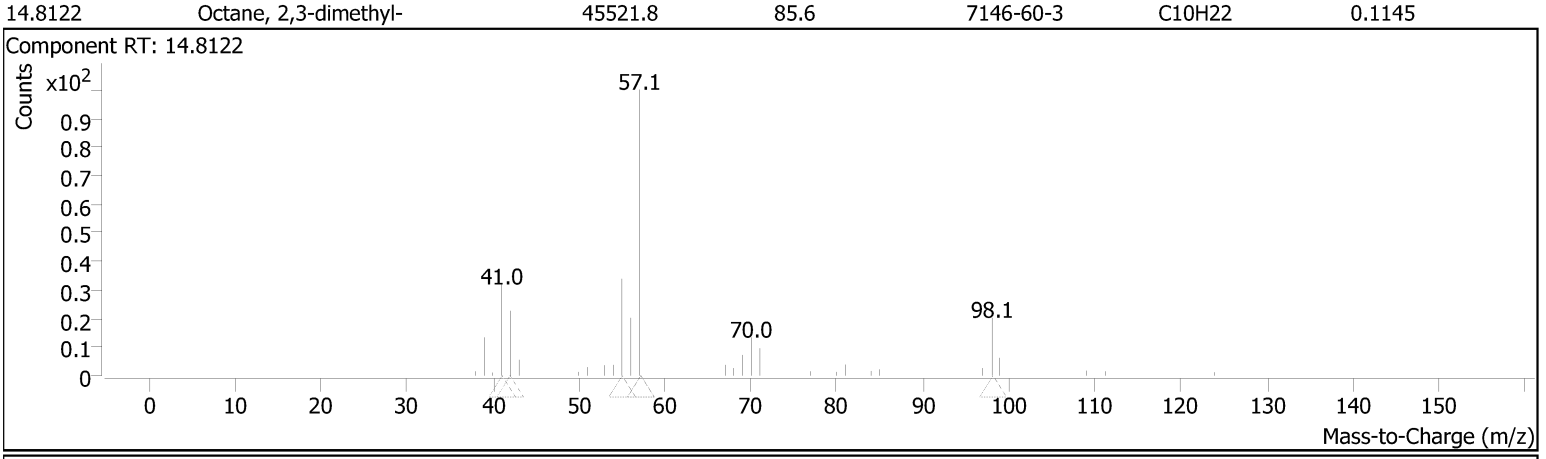


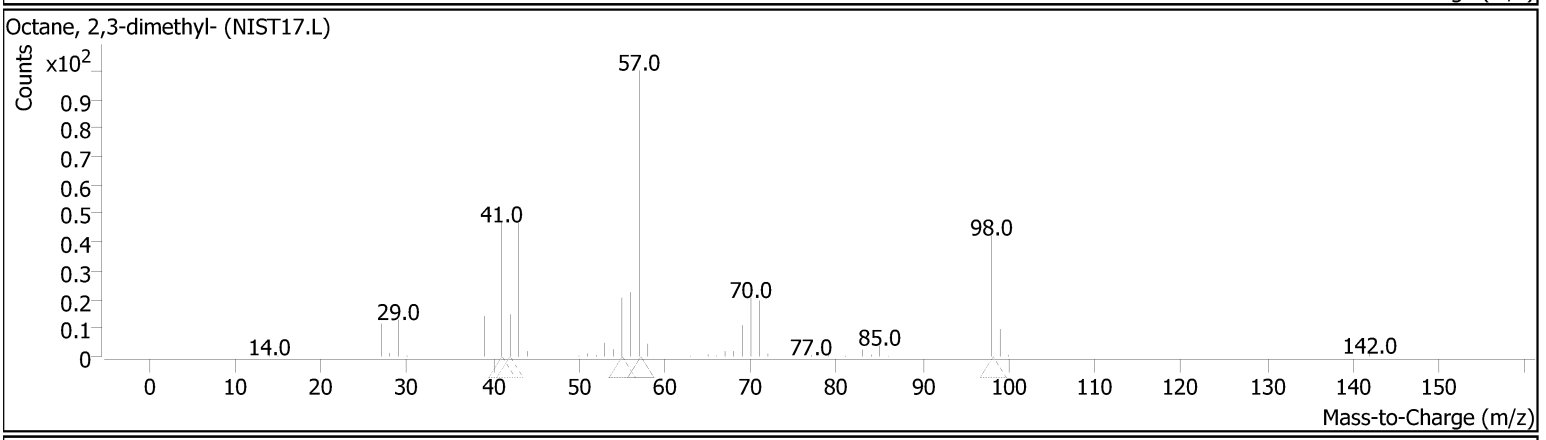


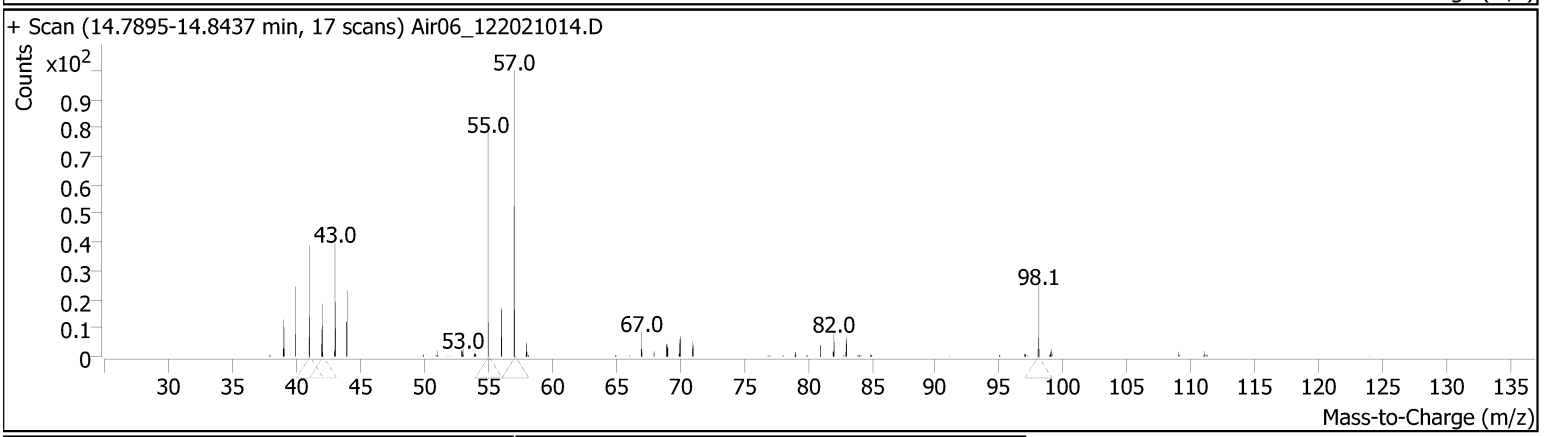


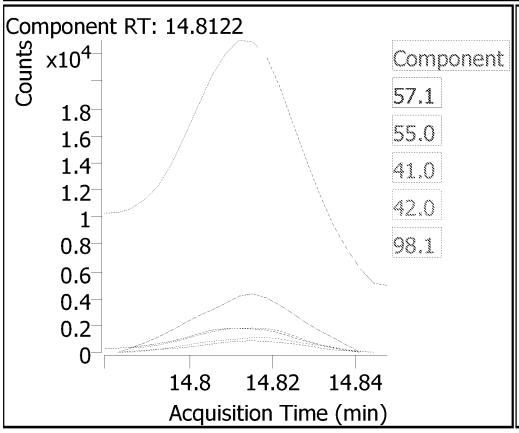


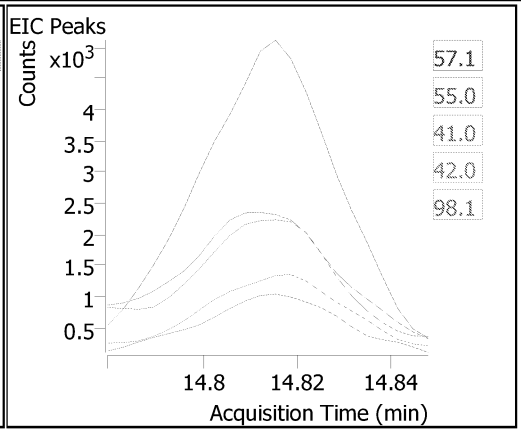
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.8122	Octane, 2,3-dimethyl-	45521.8	85.6	7146-60-3	C10H22	0.1145

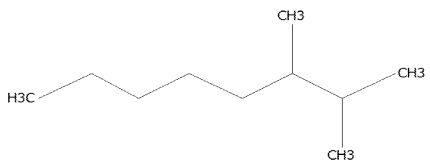




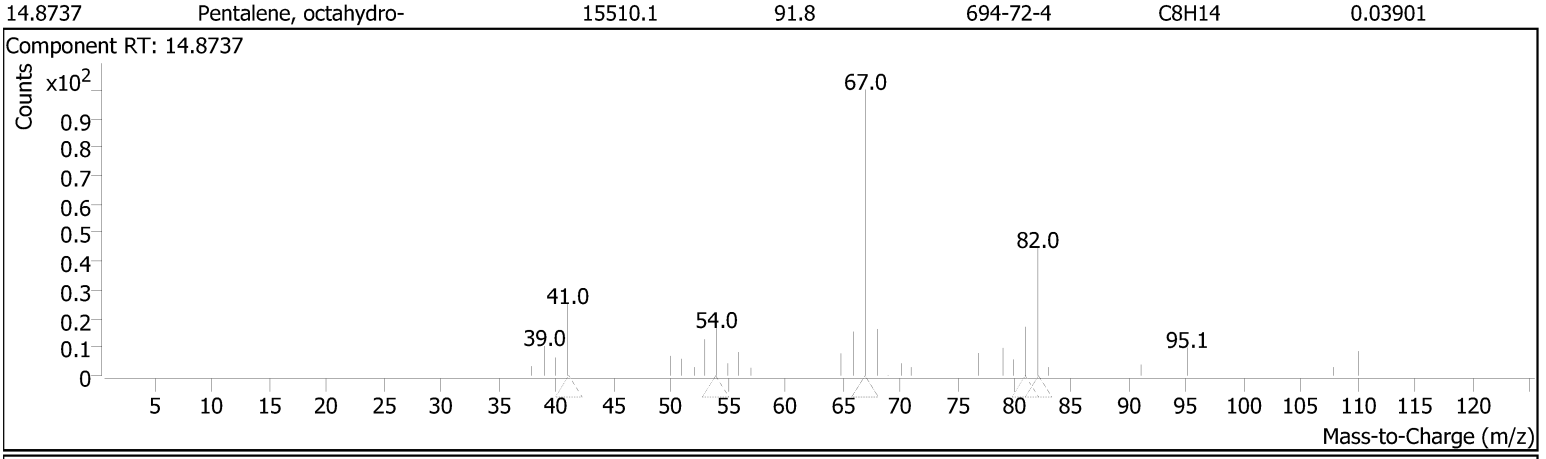


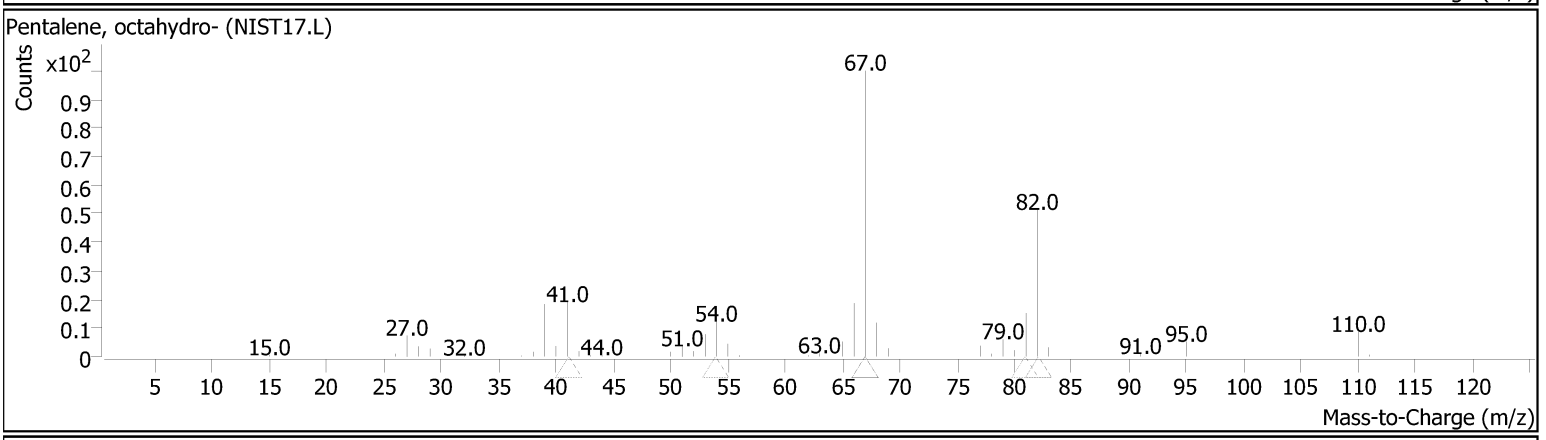


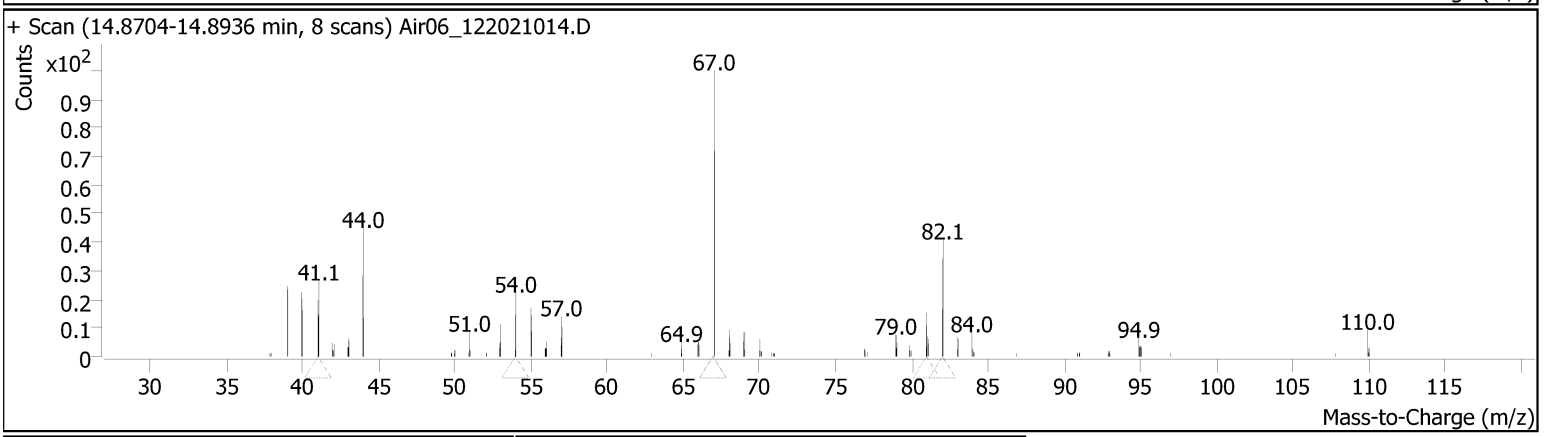


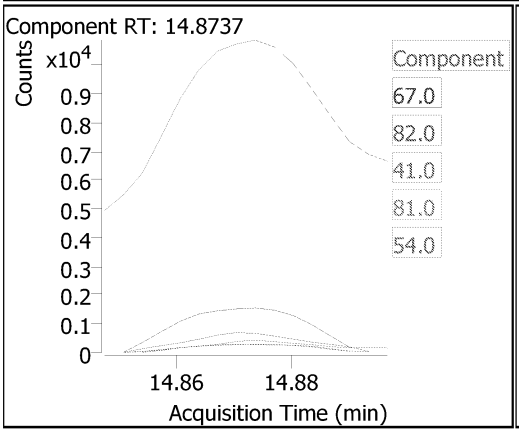


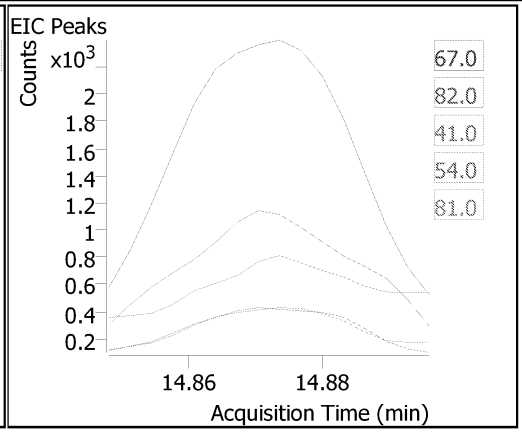
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.8737	Pentalene, octahydro-	15510.1	91.8	694-72-4	C8H14	0.03901

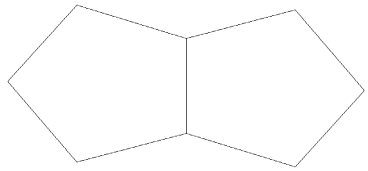




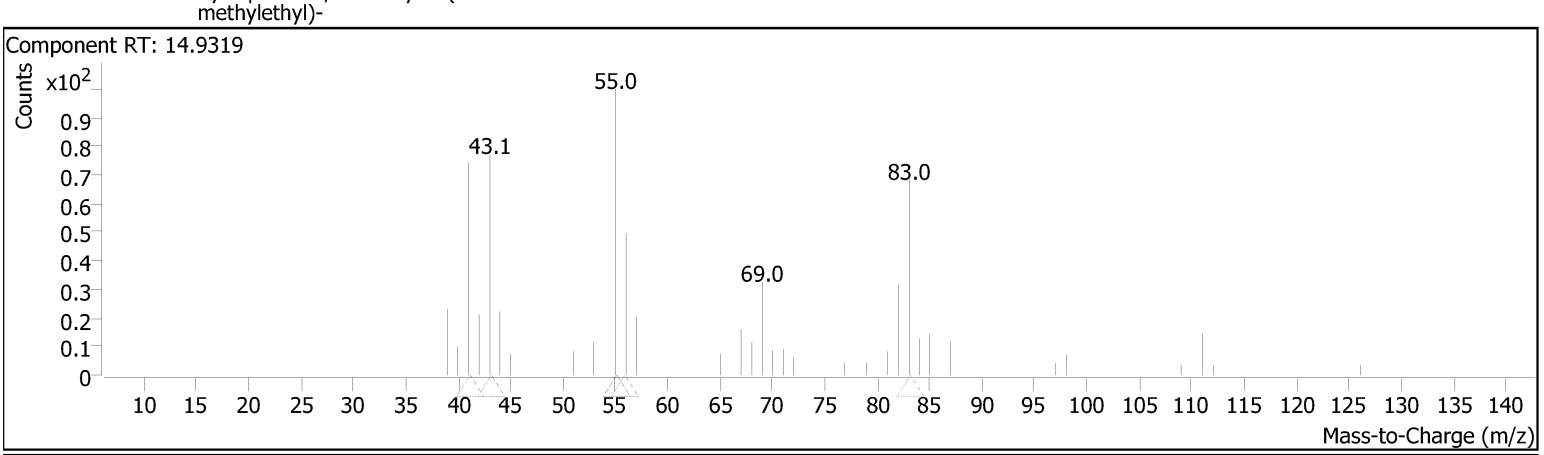


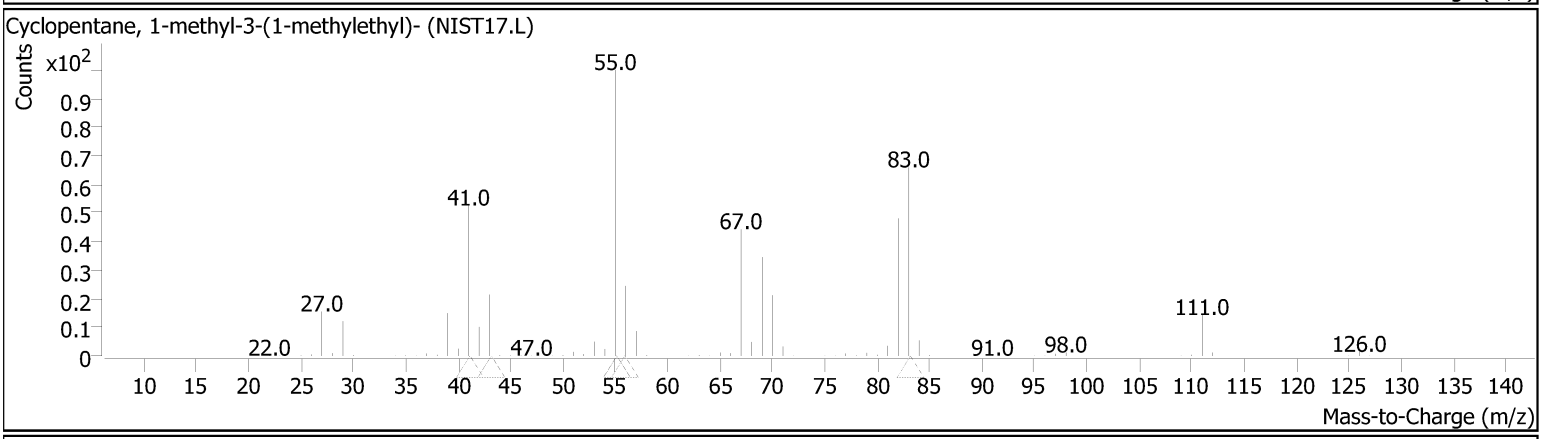


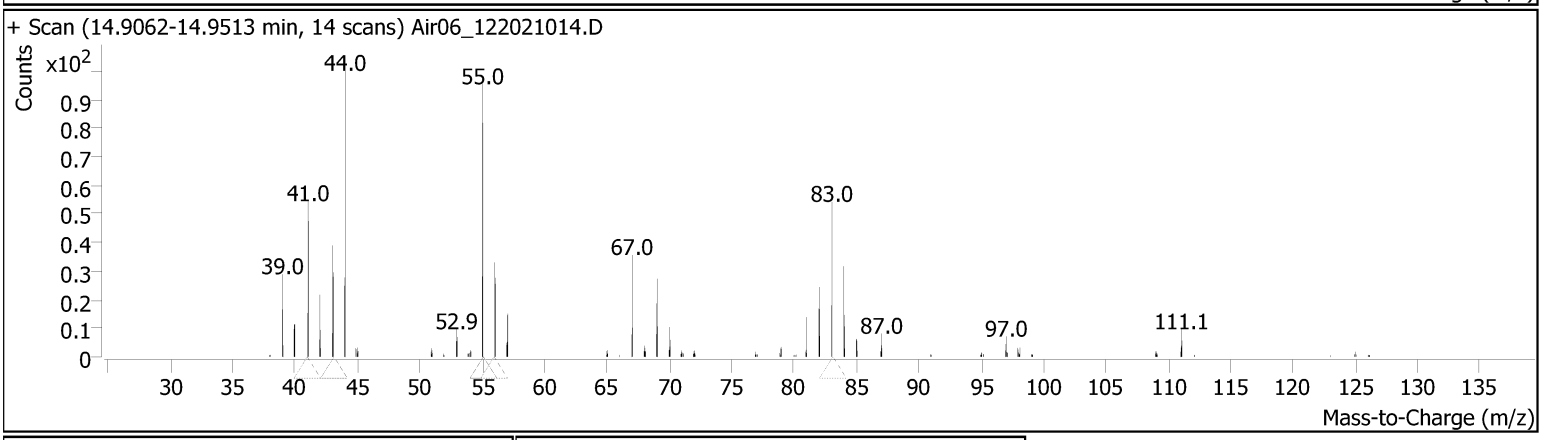


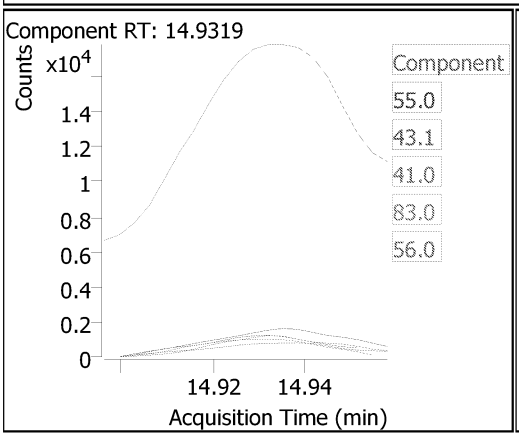


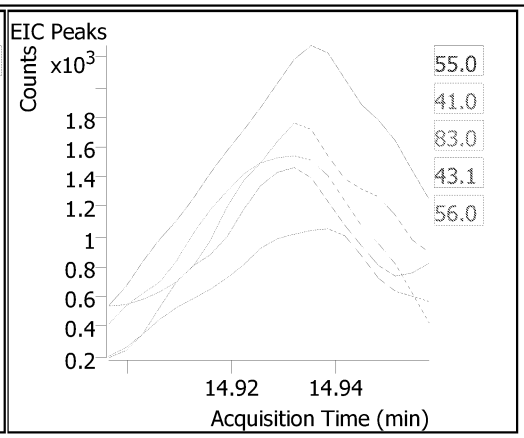
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.9319	Cyclopentane, 1-methyl-3-(1-methylethyl)-	37921.9	86.5	53771-88-3	C9H18	0.09538

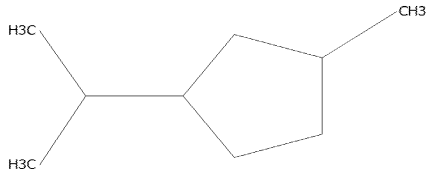








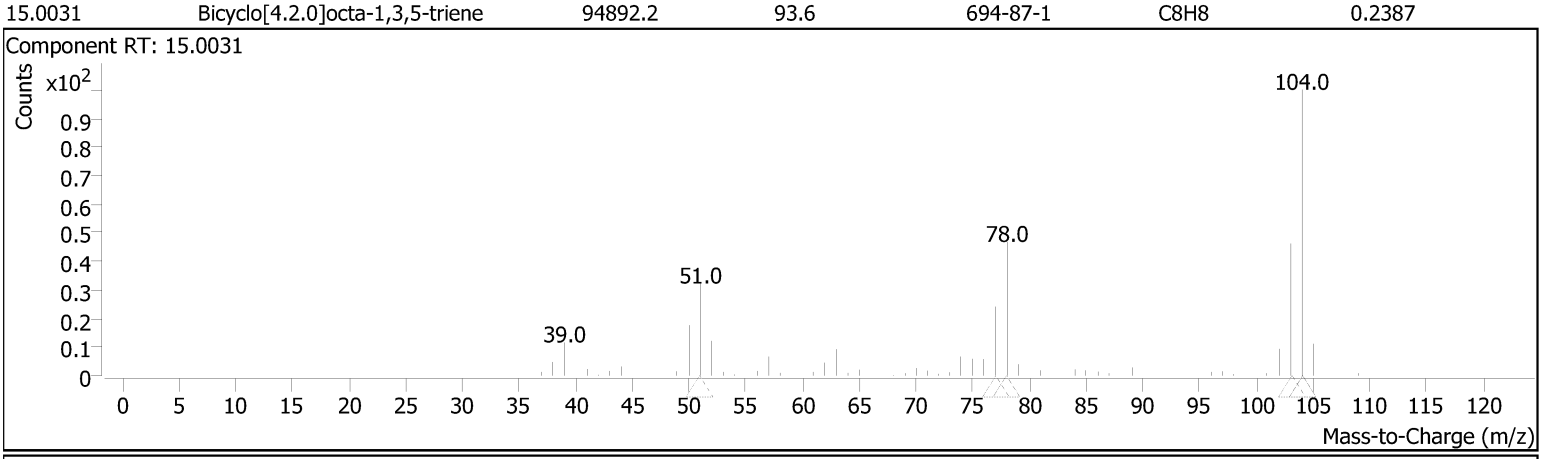


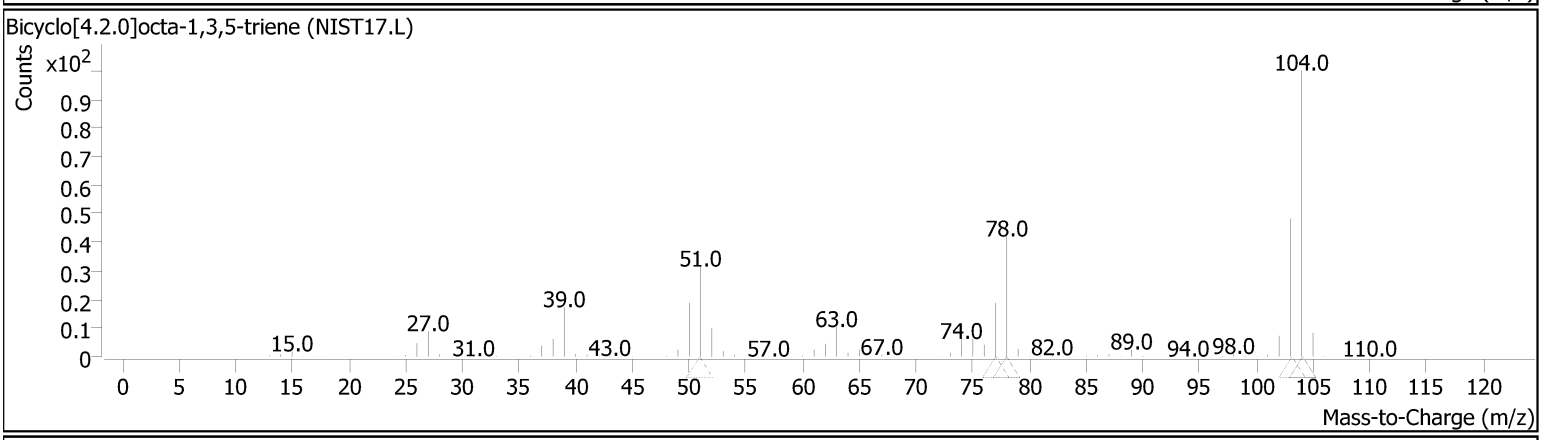


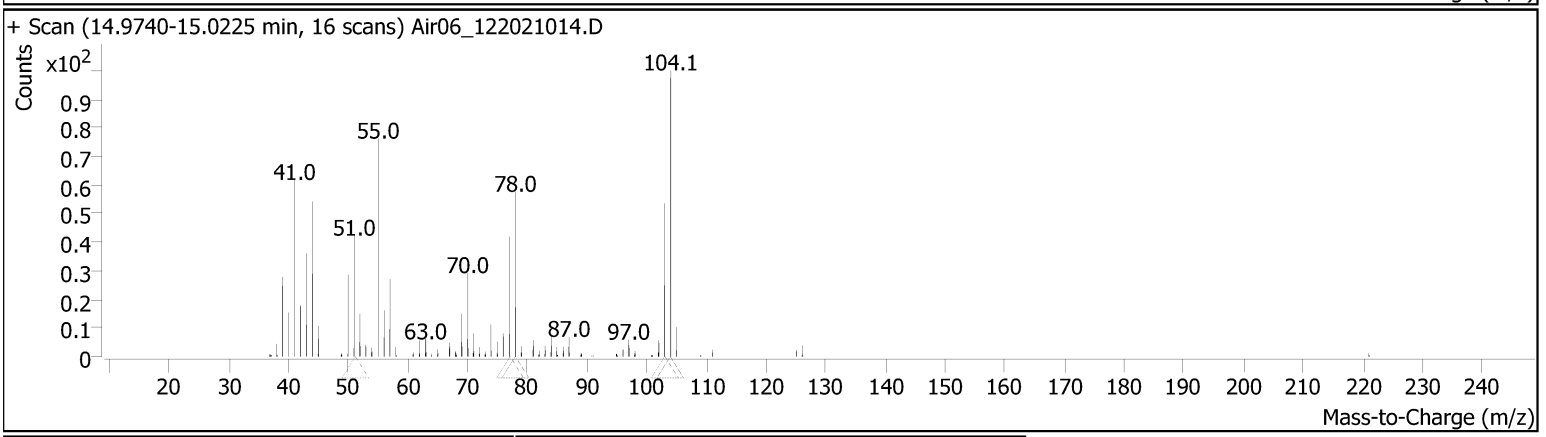
Library Search Results - NonTarget Hits with Details

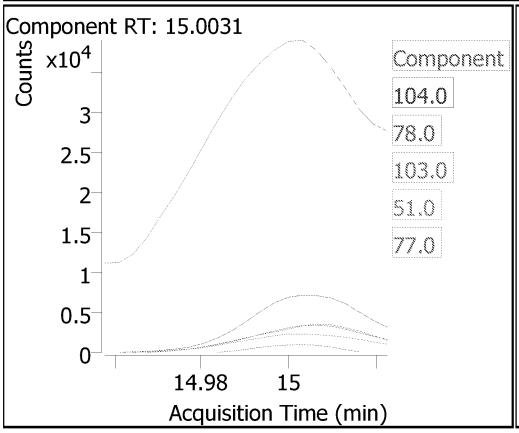
Agilent Technologies

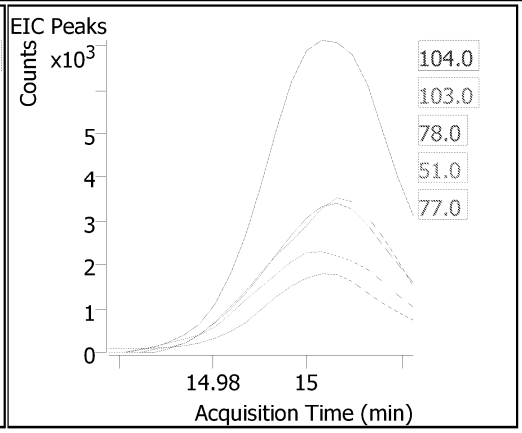
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.0031	Bicyclo[4.2.0]octa-1,3,5-triene	94892.2	93.6	694-87-1	C8H8	0.2387

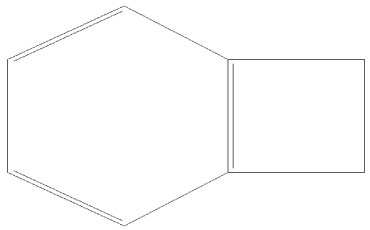




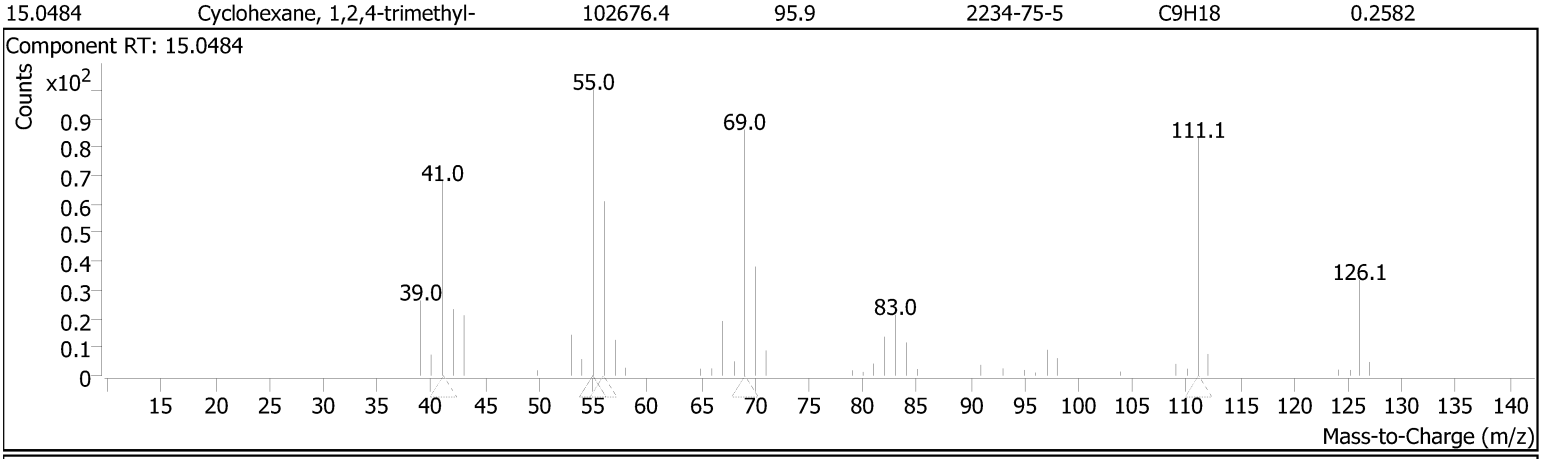


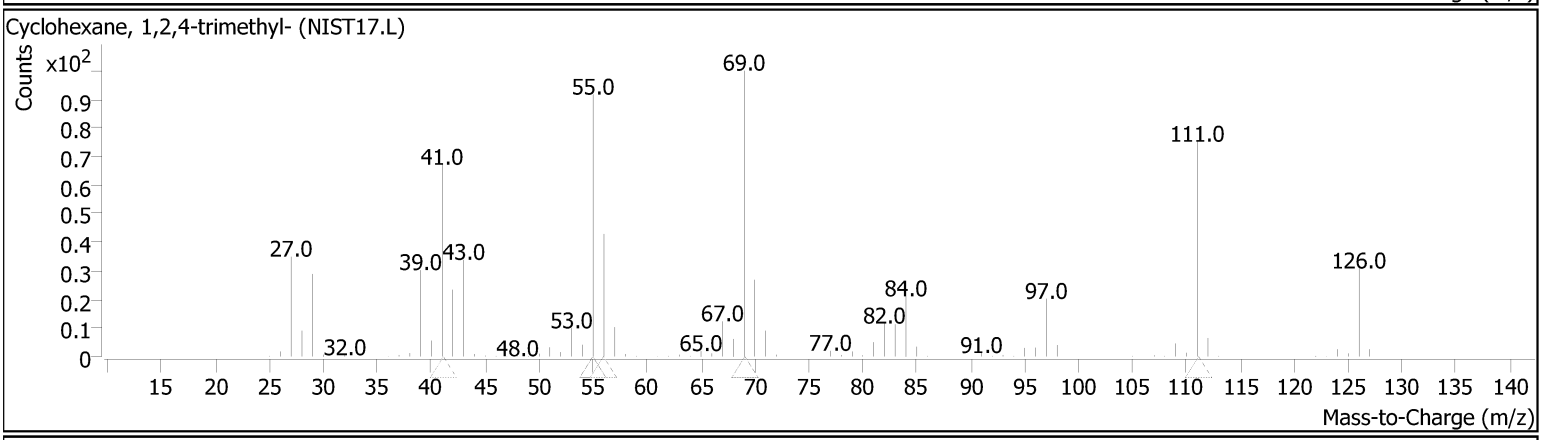


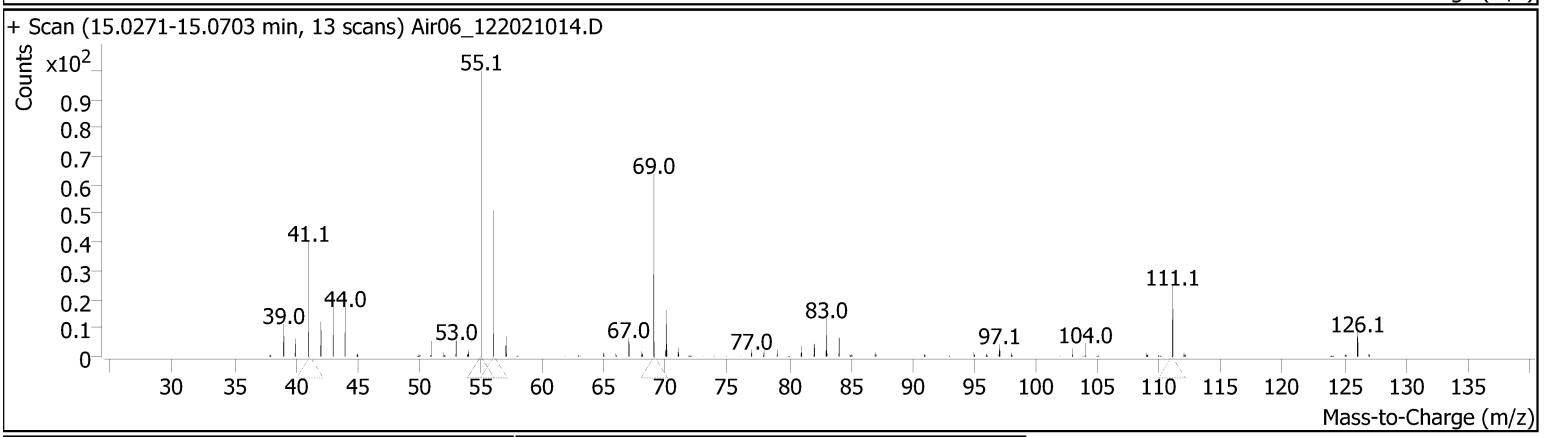


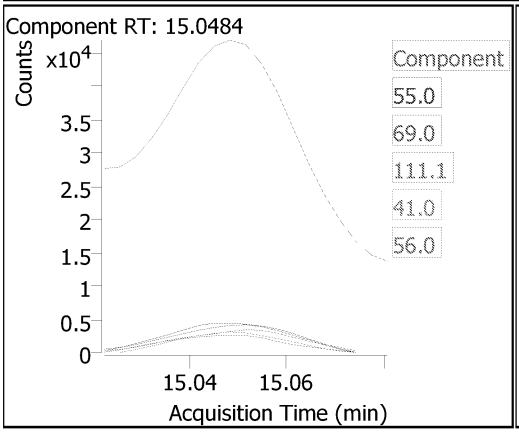


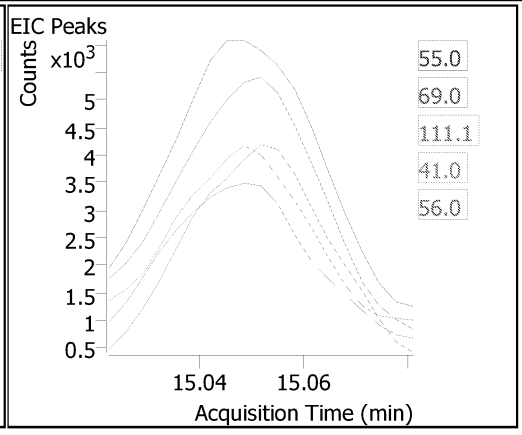
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.0484	Cyclohexane, 1,2,4-trimethyl-	102676.4	95.9	2234-75-5	C9H18	0.2582

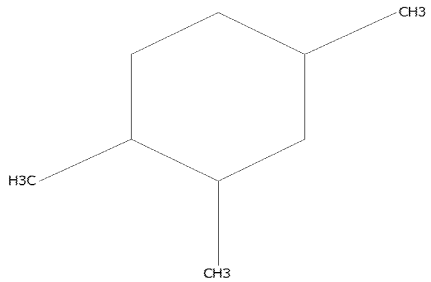




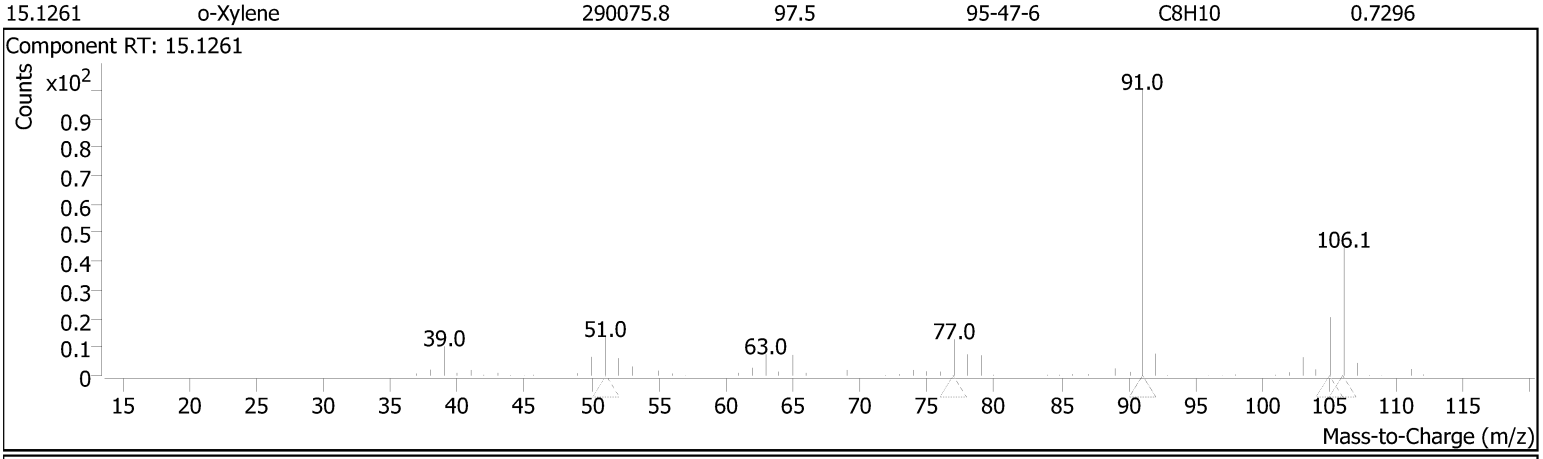


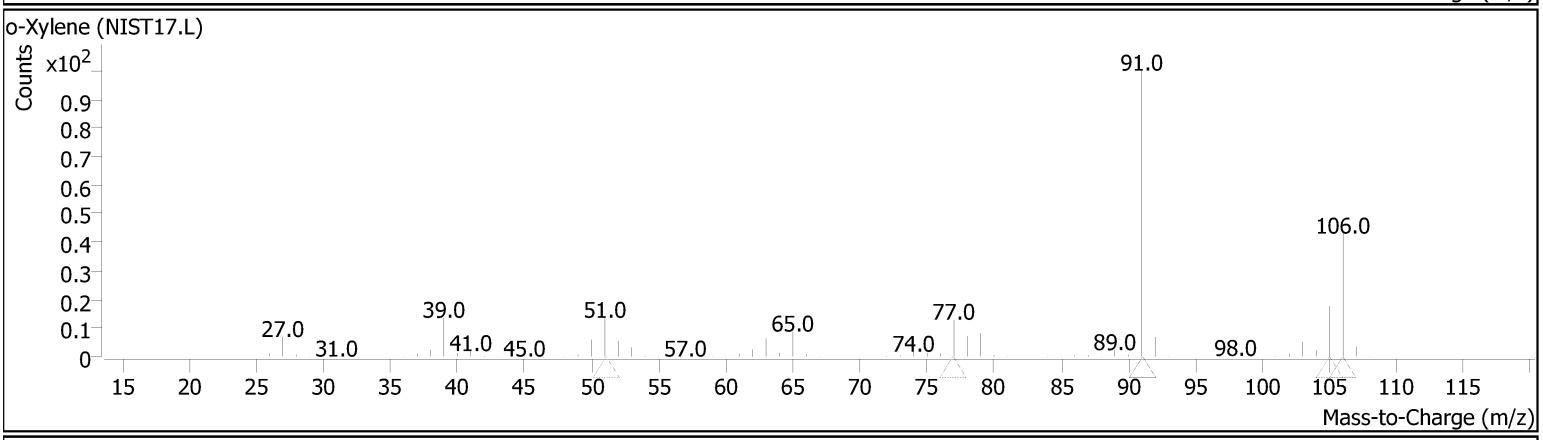


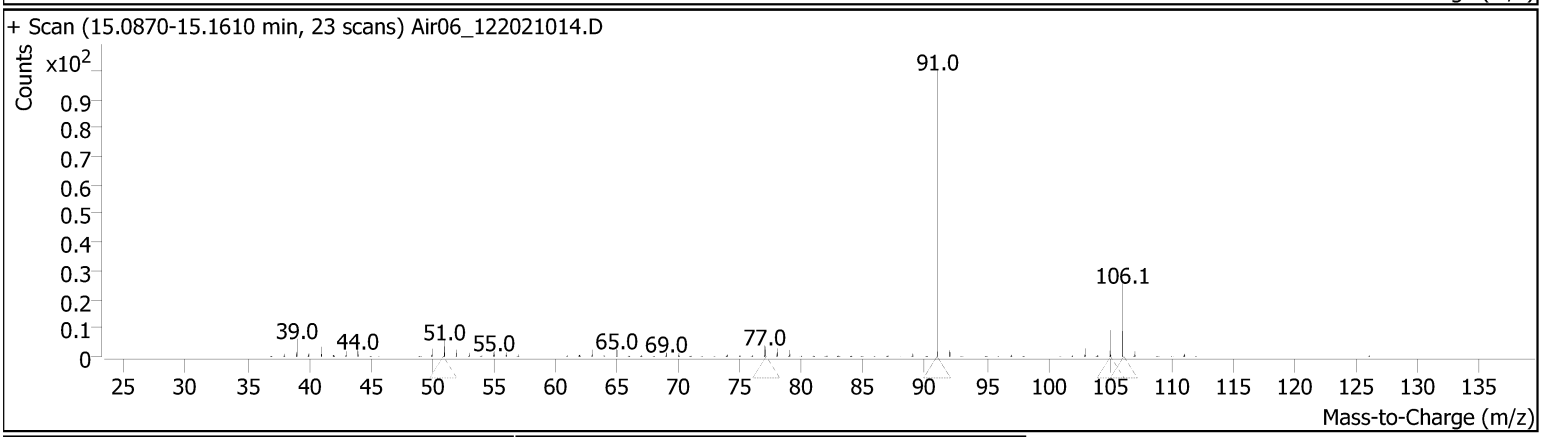


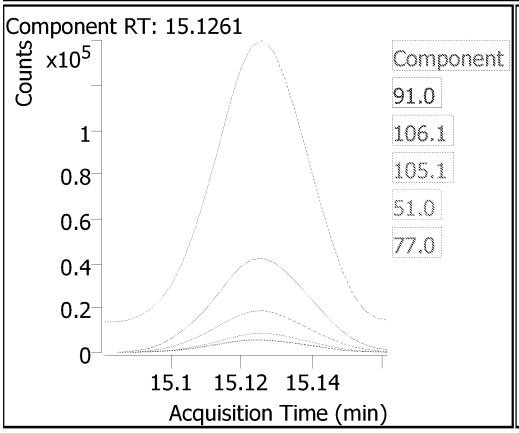


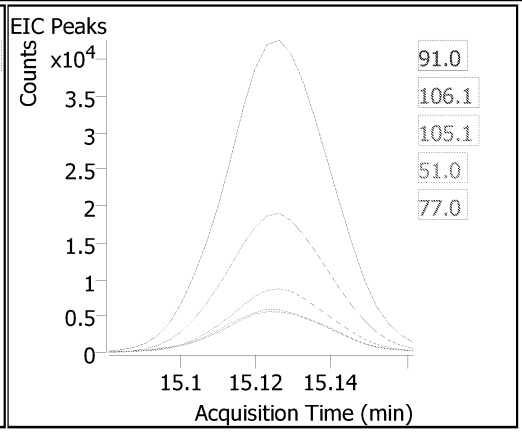
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.1261	o-Xylene	290075.8	97.5	95-47-6	C8H10	0.7296

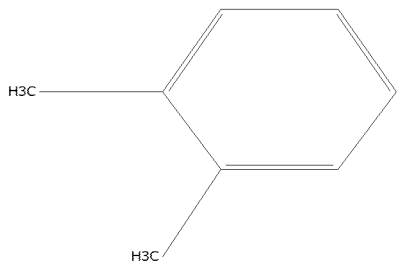




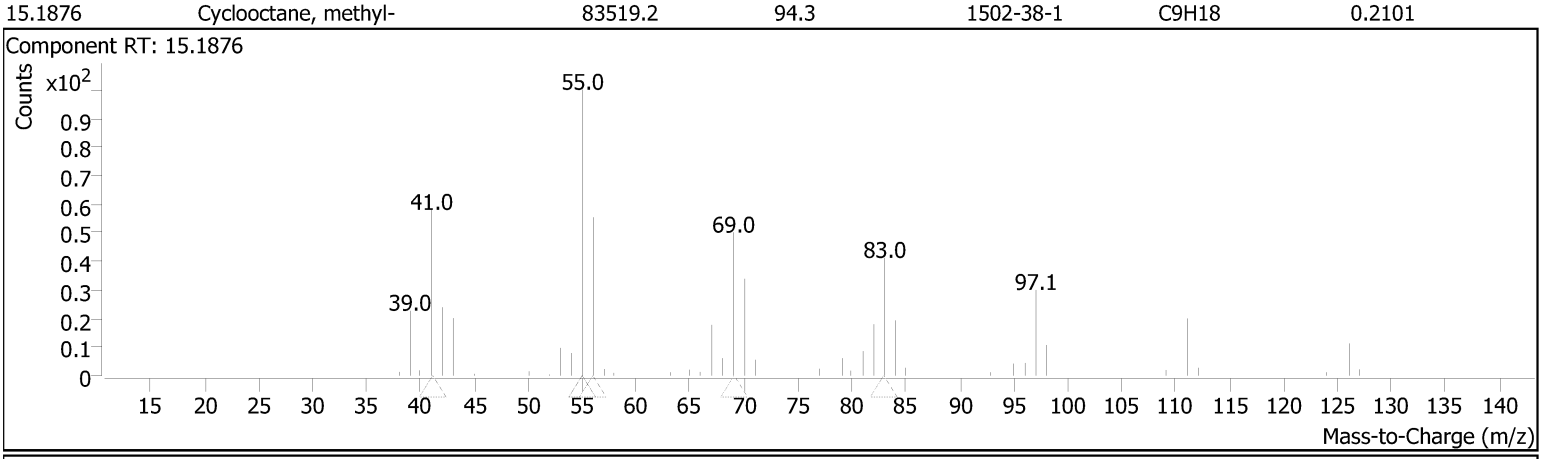


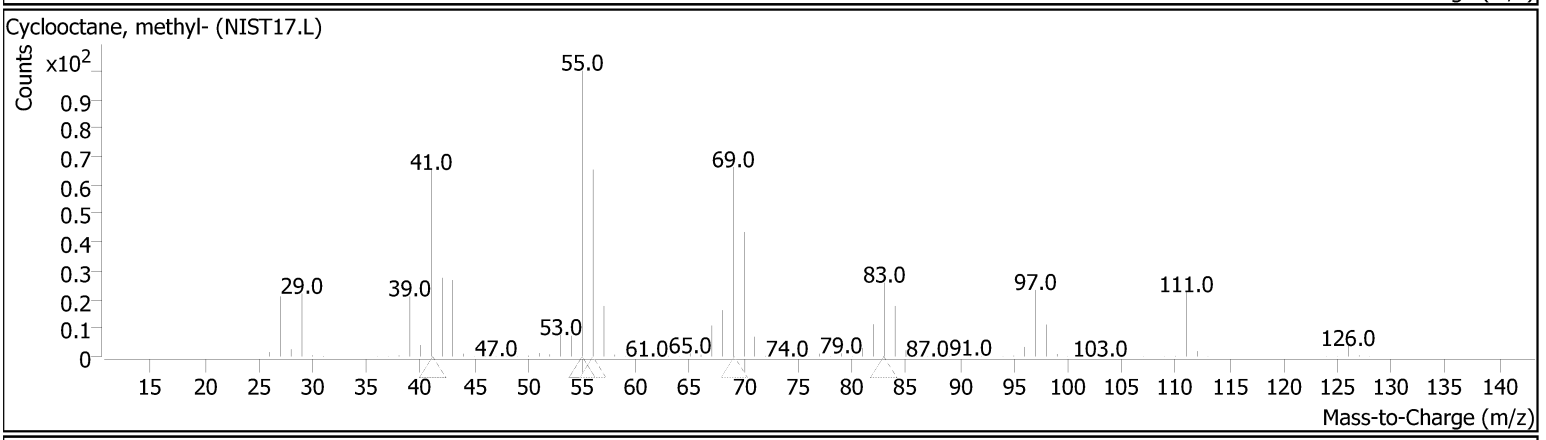


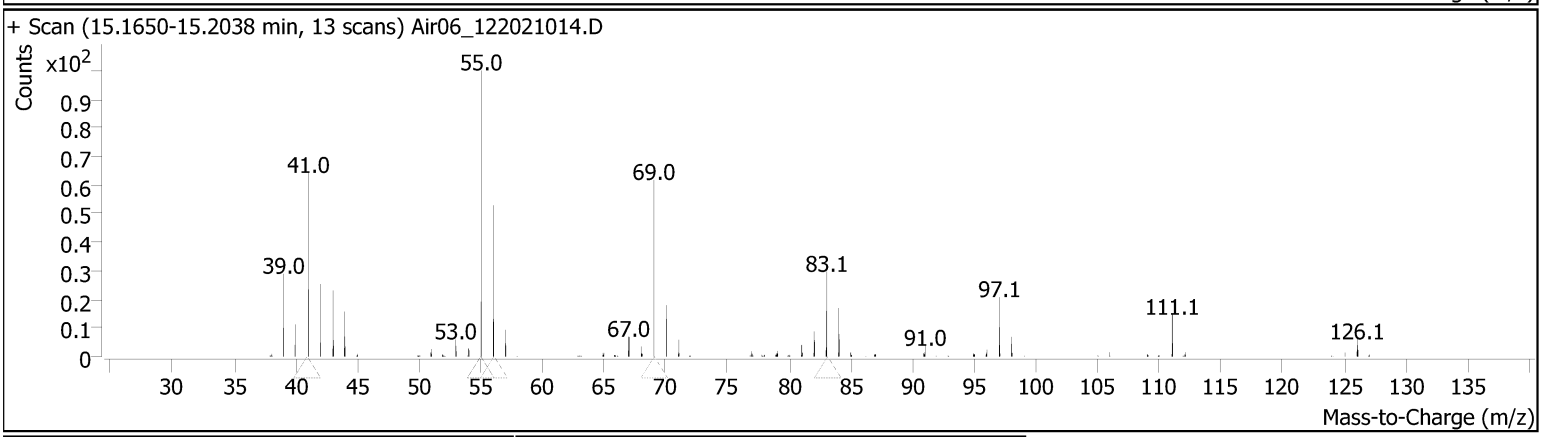


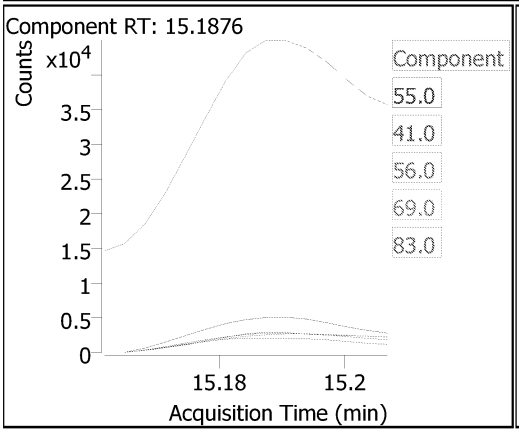


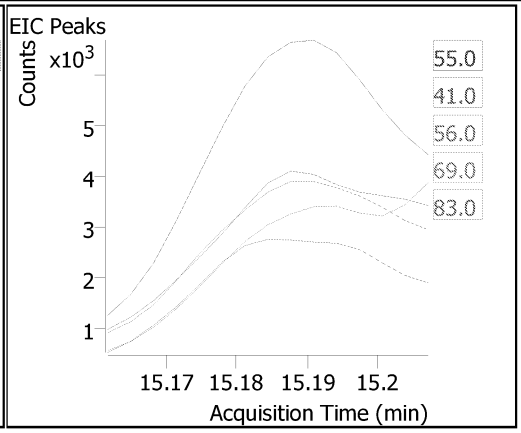
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.1876	Cyclooctane, methyl-	83519.2	94.3	1502-38-1	C9H18	0.2101

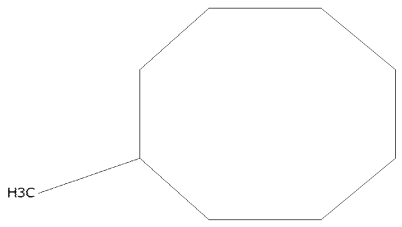




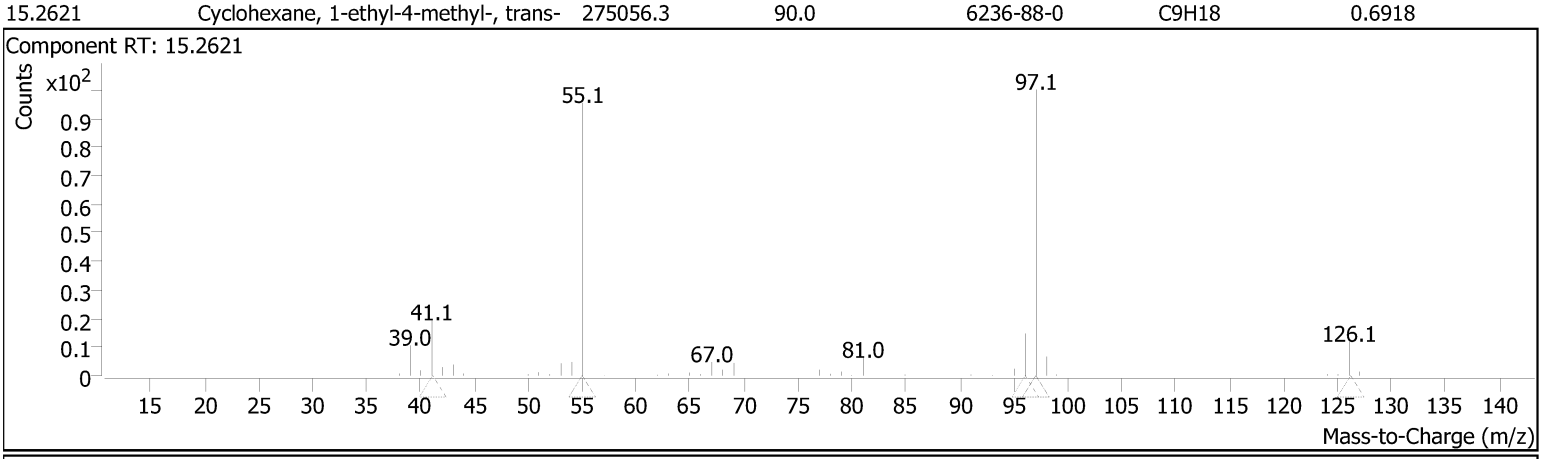


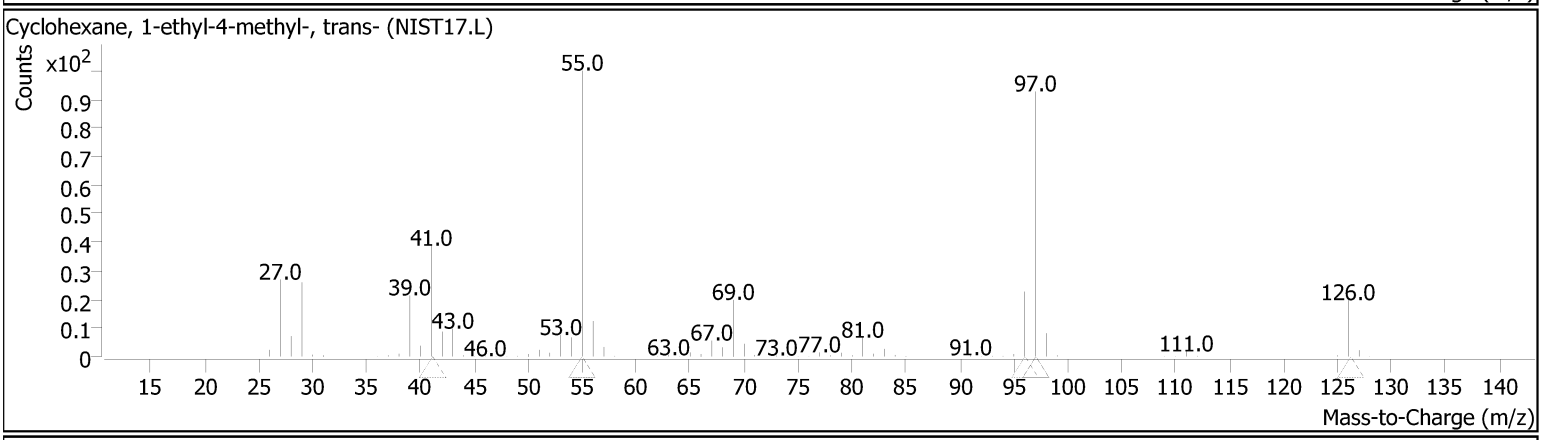


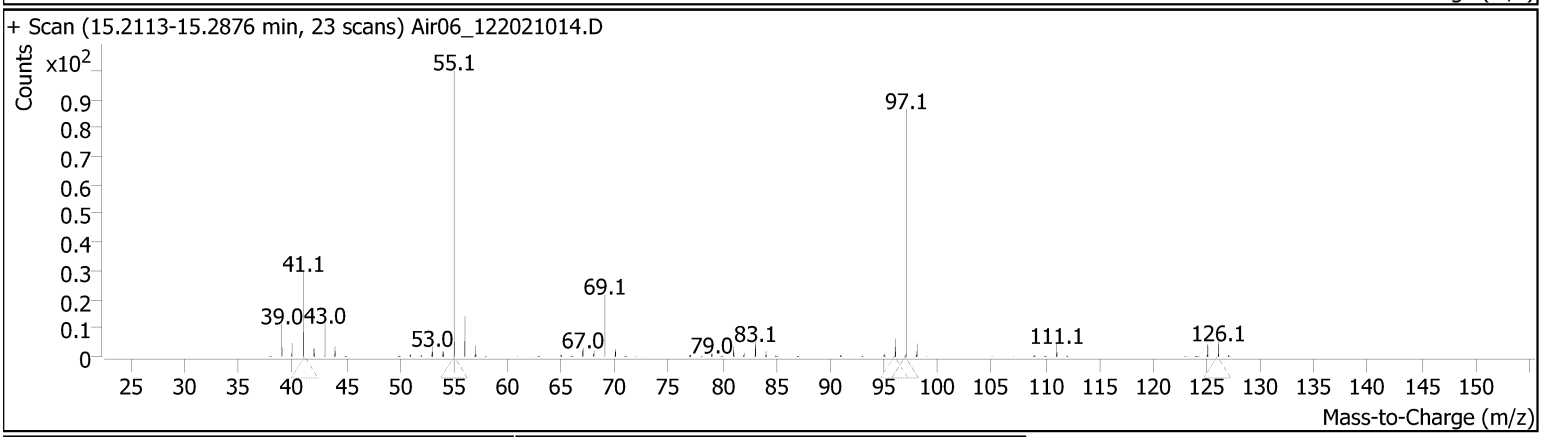


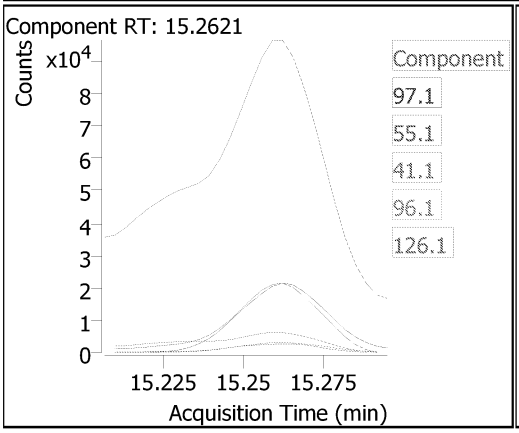


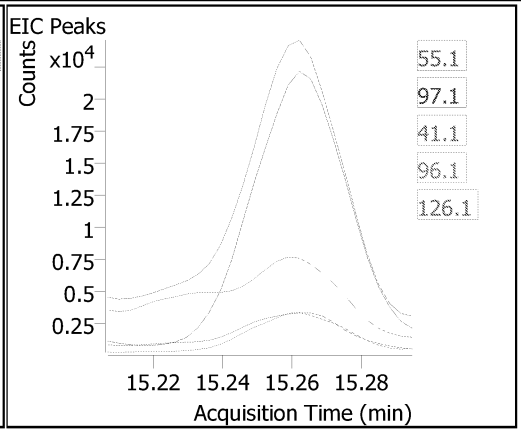
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.2621	Cyclohexane, 1-ethyl-4-methyl-, trans-	275056.3	90.0	6236-88-0	C9H18	0.6918

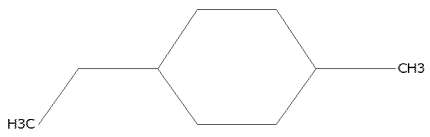




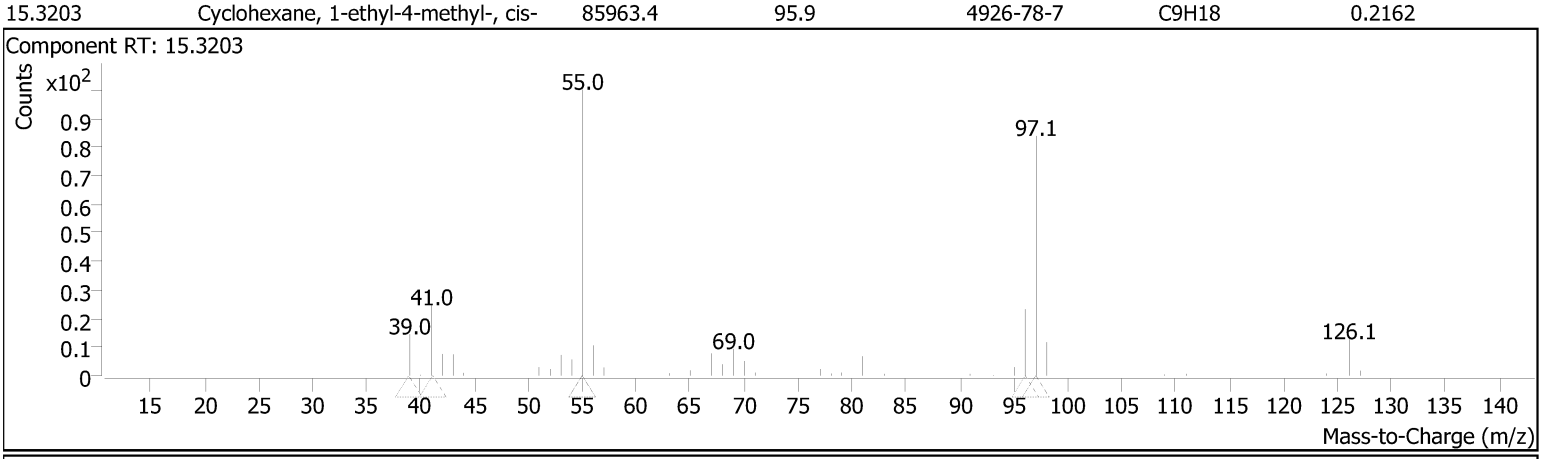


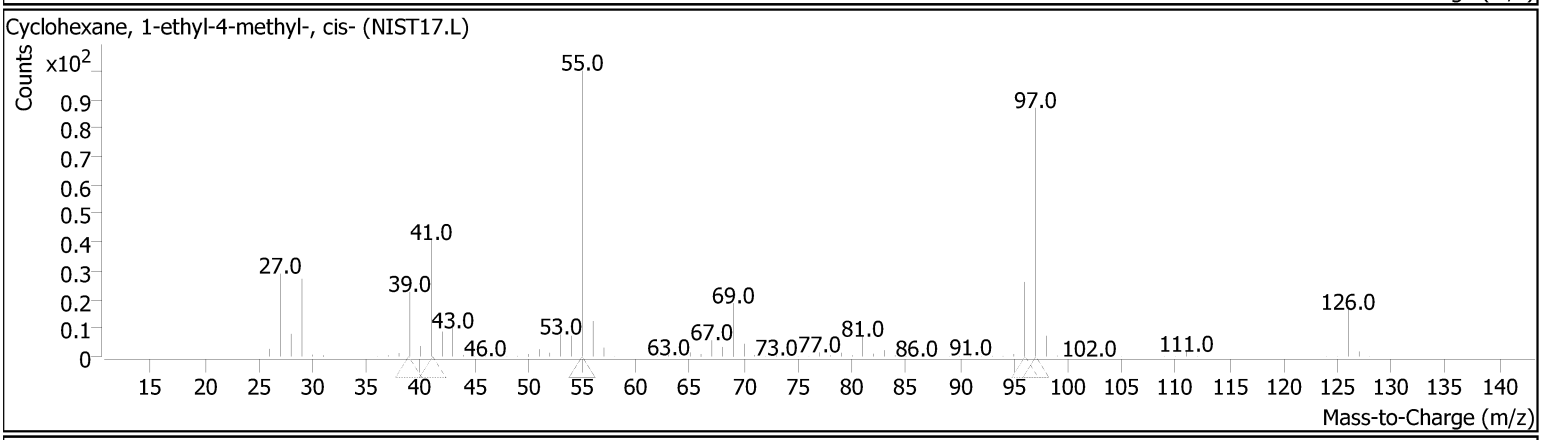


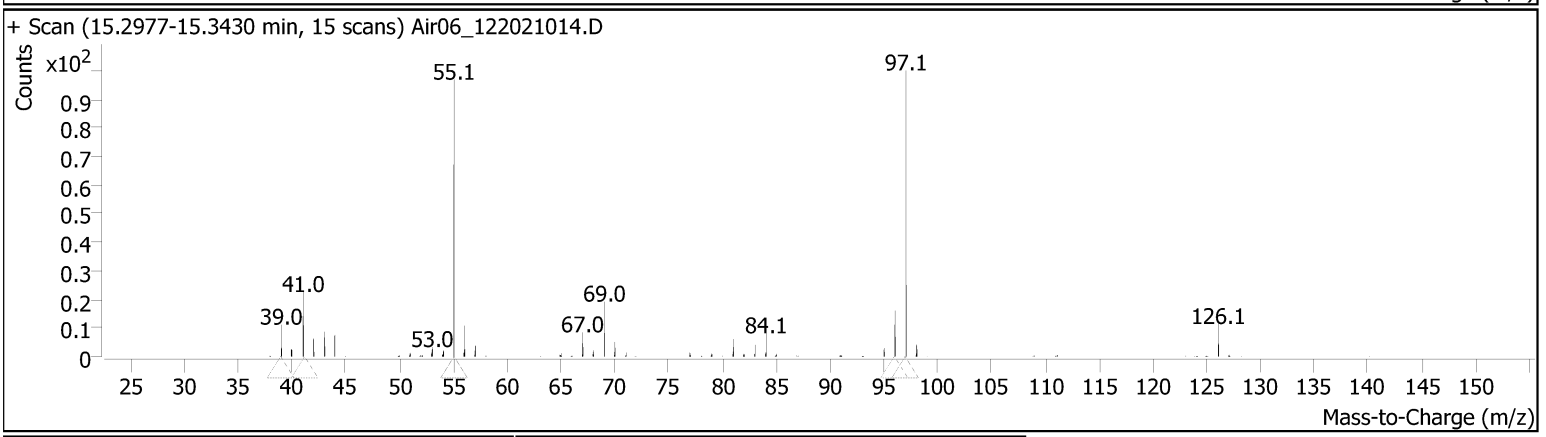


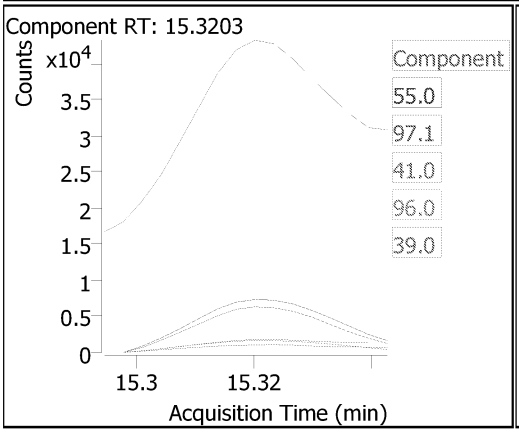


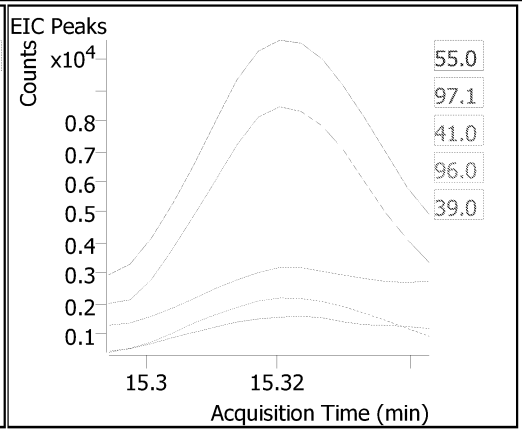
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.3203	Cyclohexane, 1-ethyl-4-methyl-, cis-	85963.4	95.9	4926-78-7	C9H18	0.2162

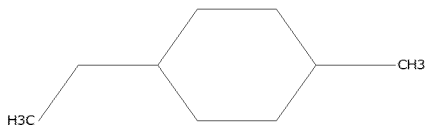




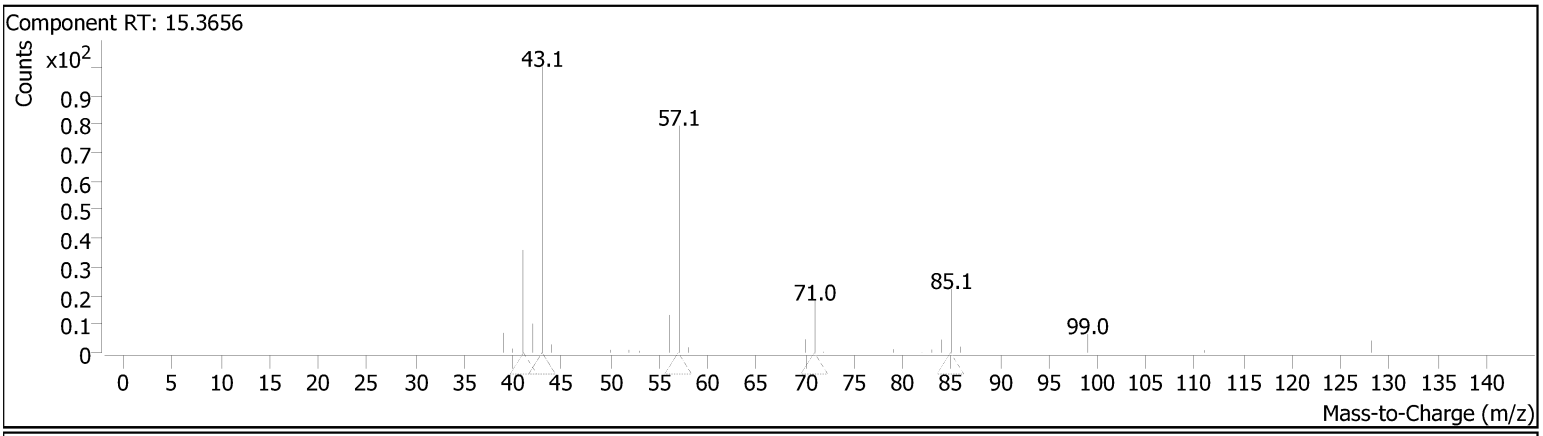


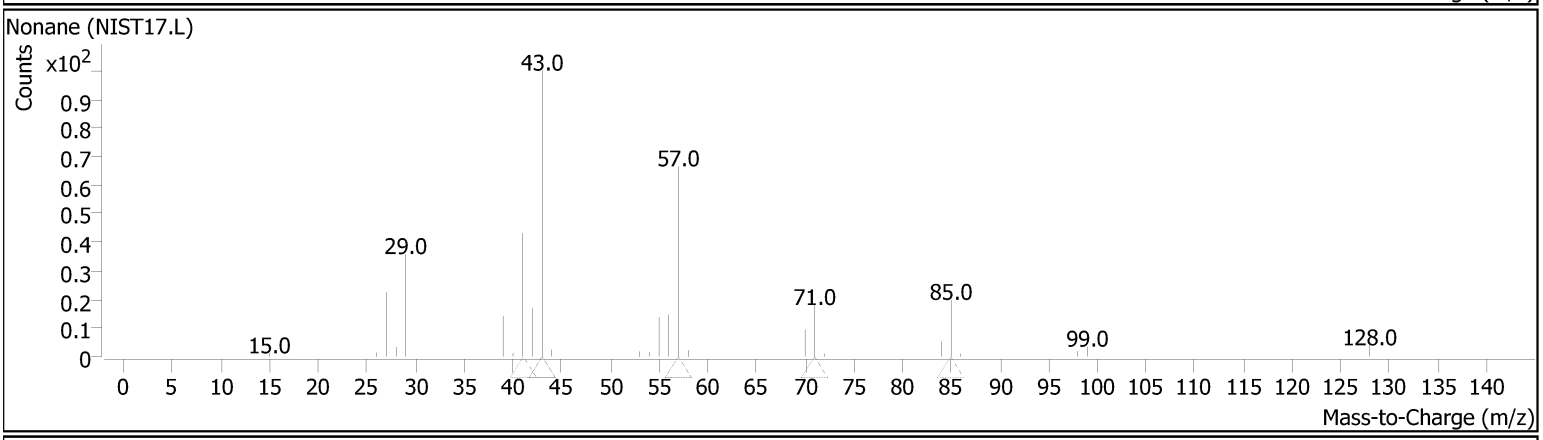


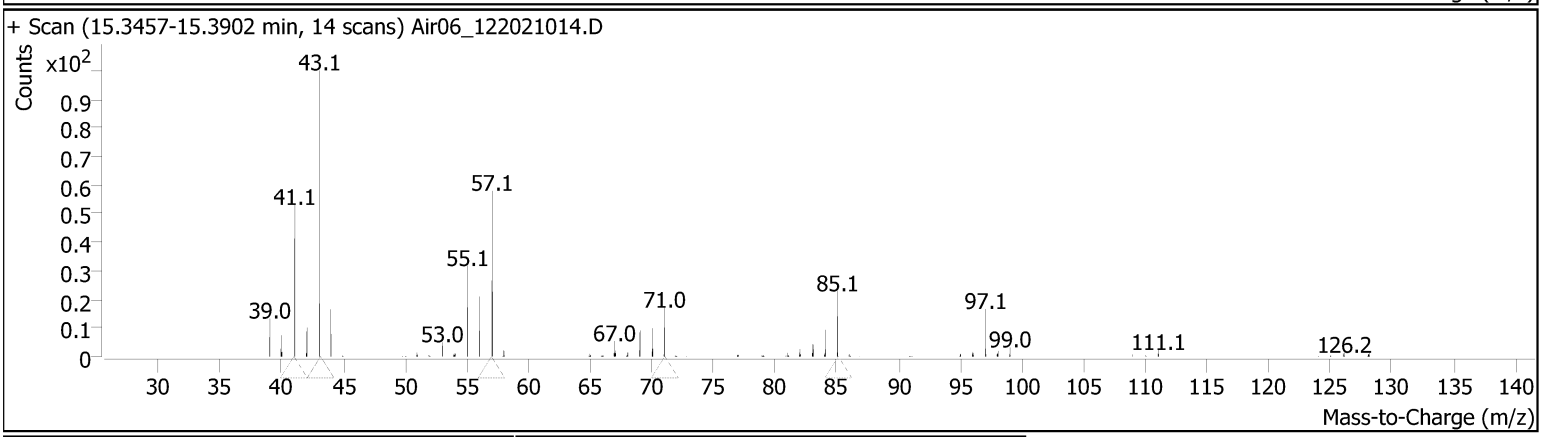


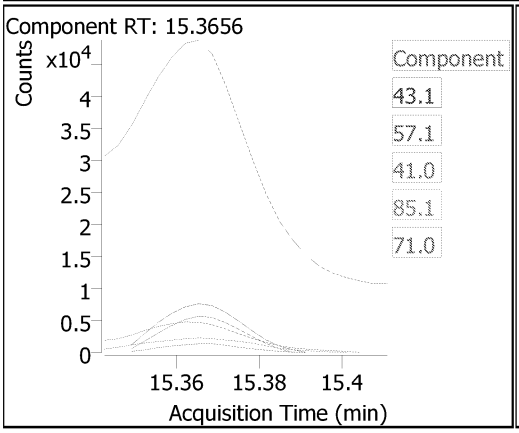


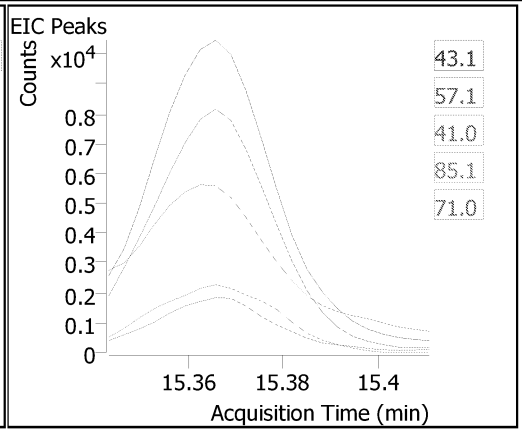
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.3656	Nonane	103896.0	91.0	111-84-2	C9H20	0.2613

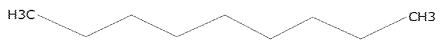




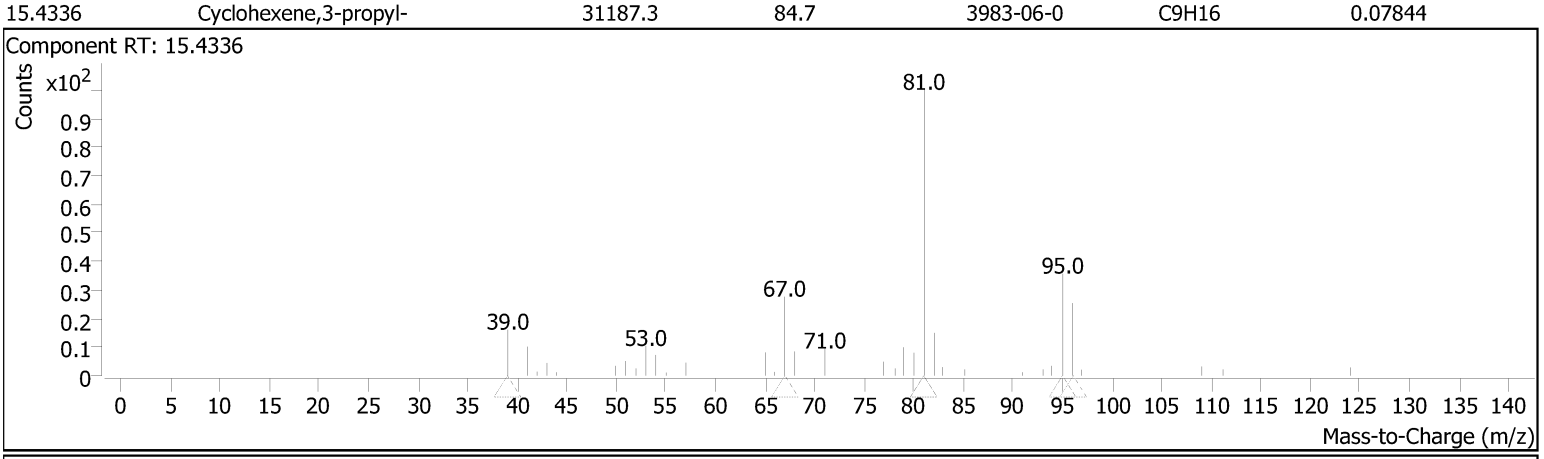


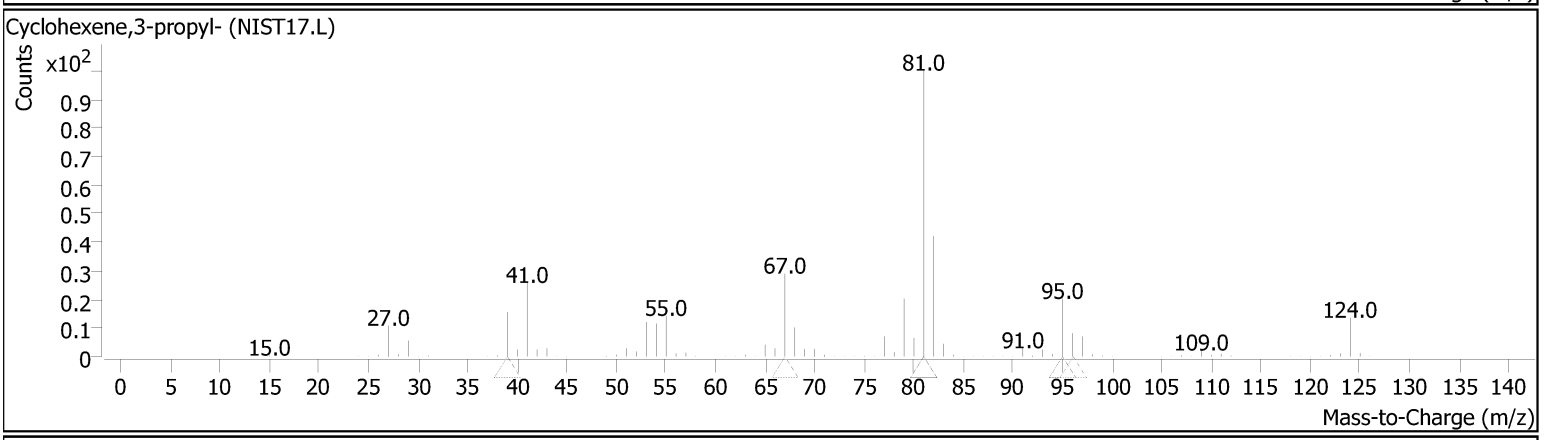


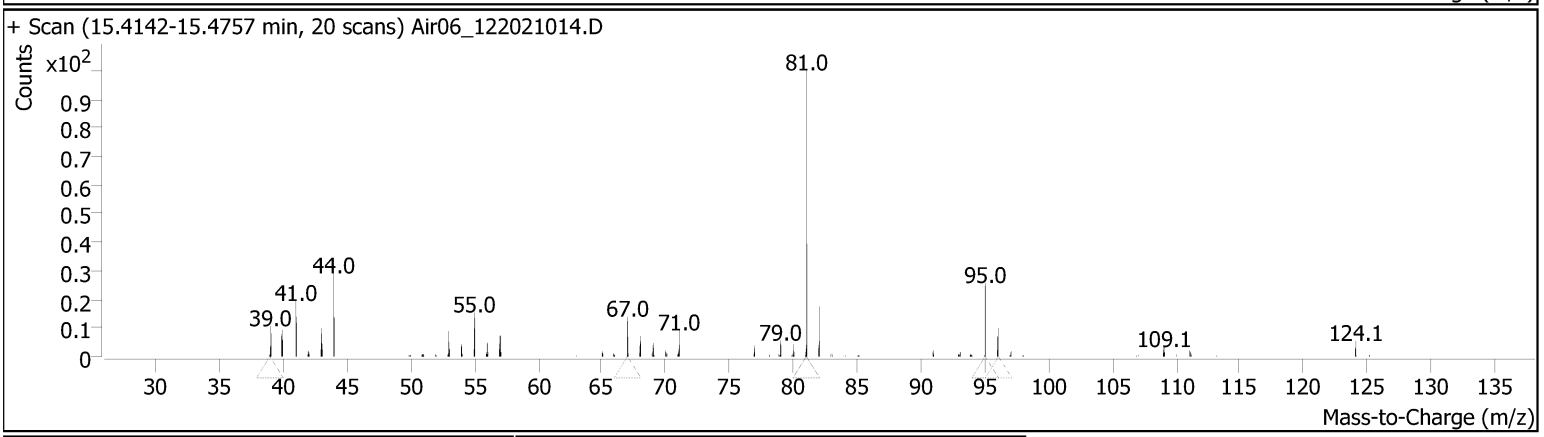


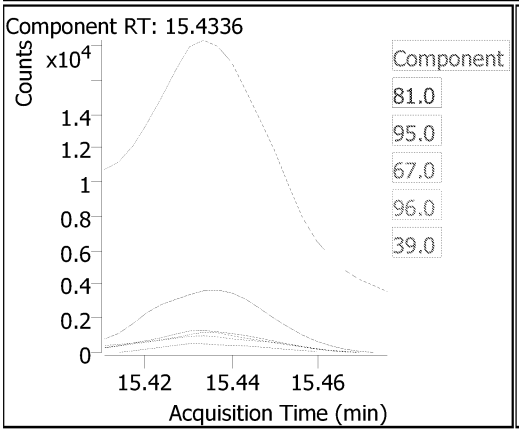


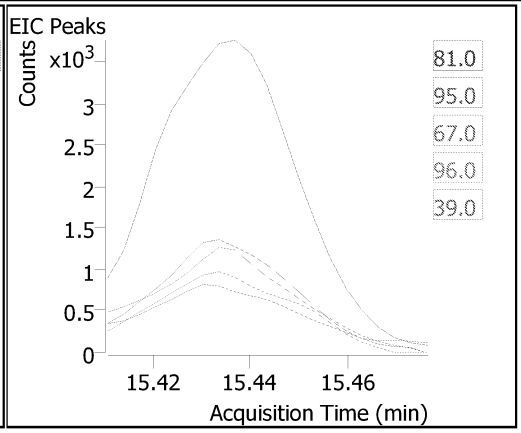
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.4336	Cyclohexene,3-propyl-	31187.3	84.7	3983-06-0	C9H16	0.07844

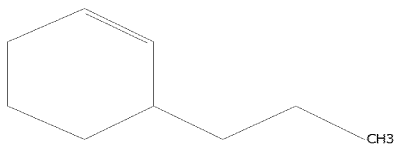




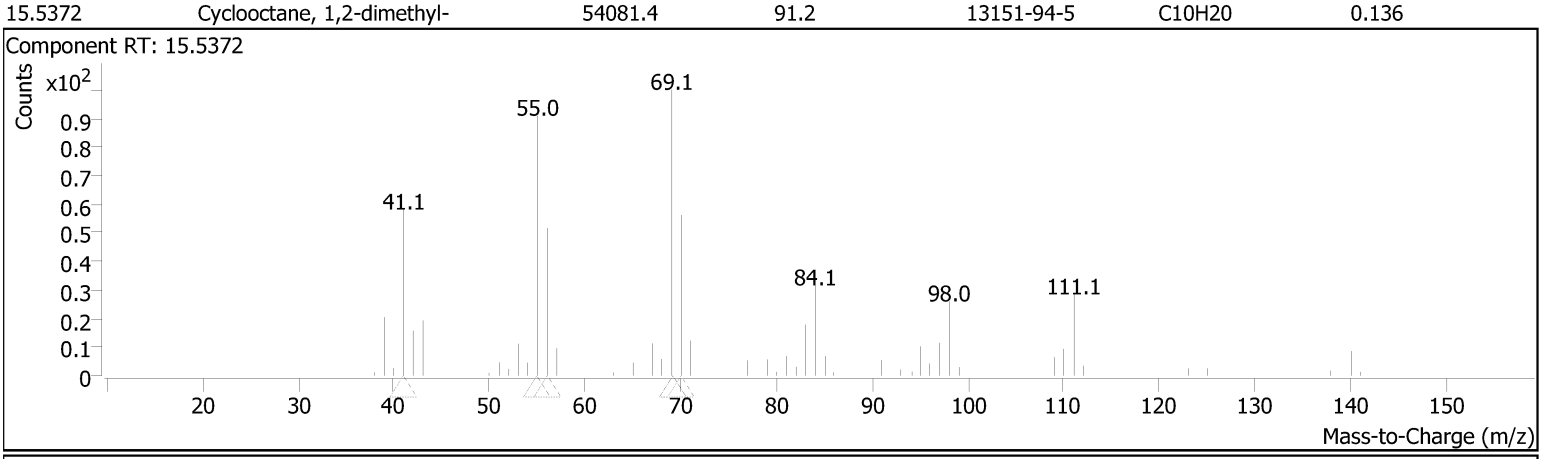


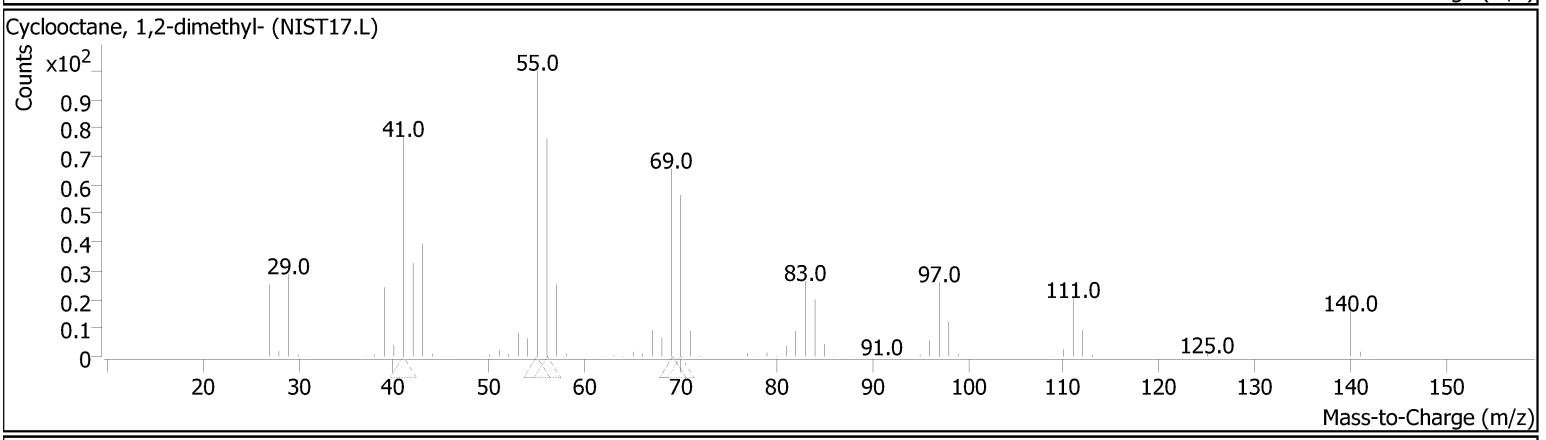


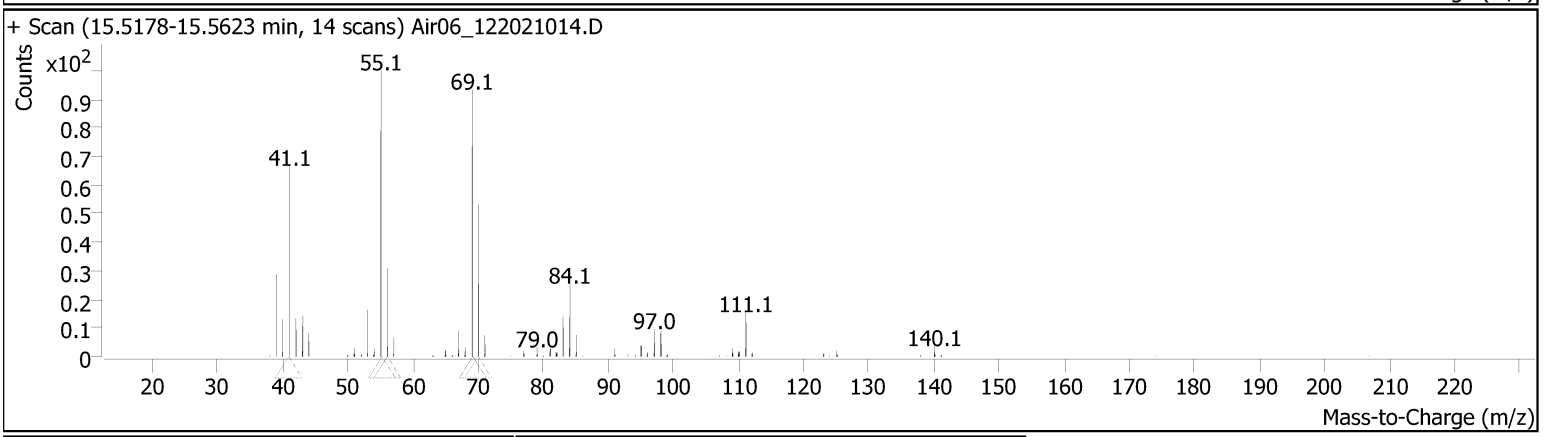


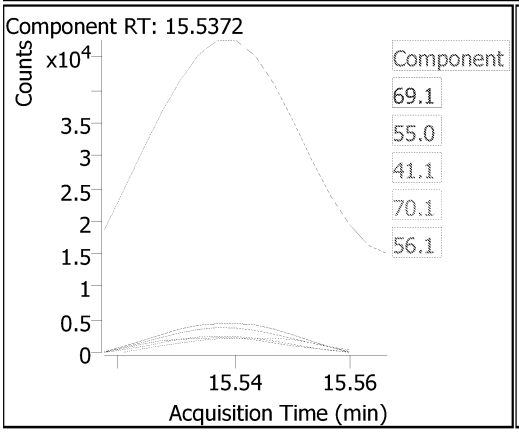


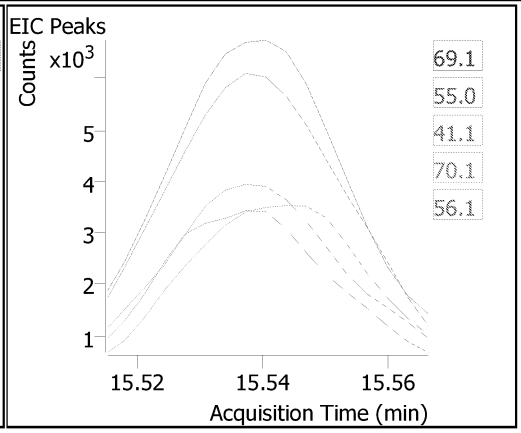
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.5372	Cyclooctane, 1,2-dimethyl-	54081.4	91.2	13151-94-5	C10H20	0.136

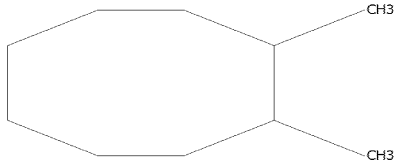




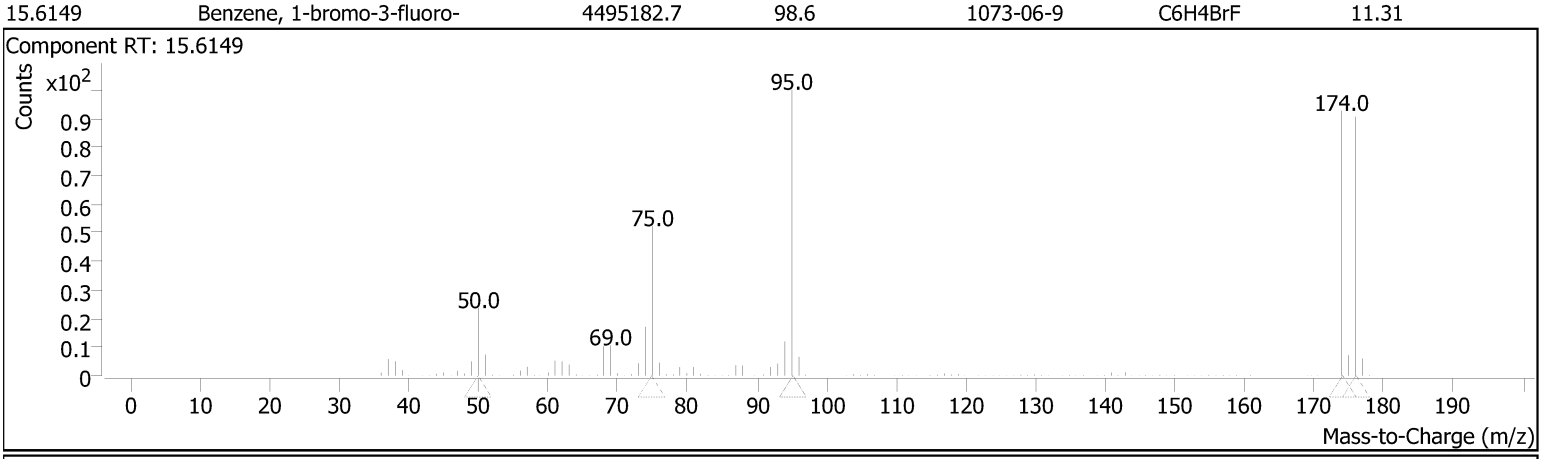


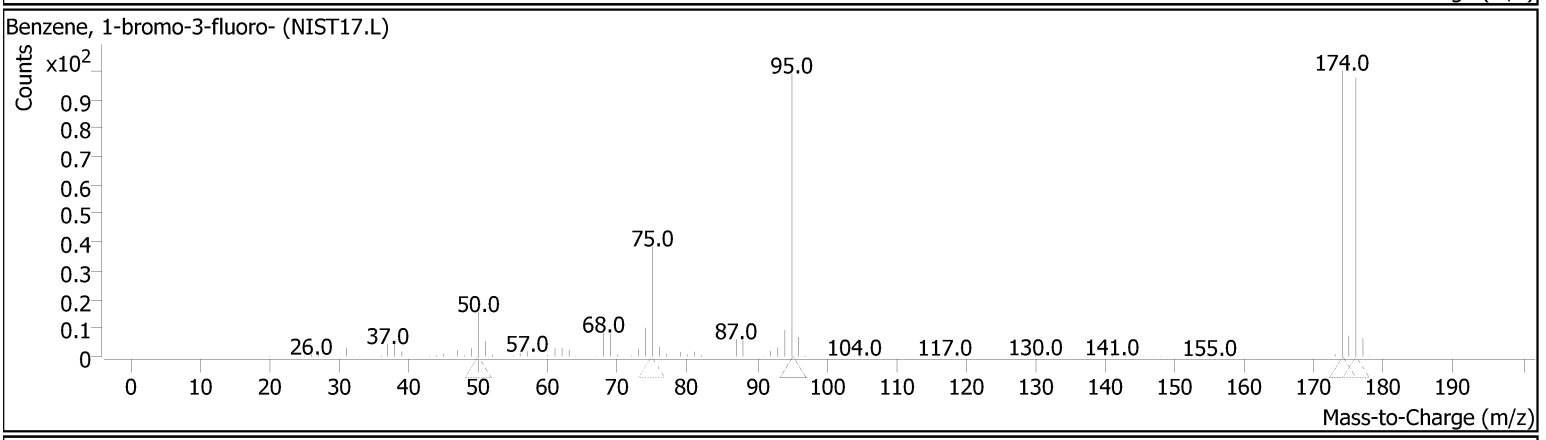


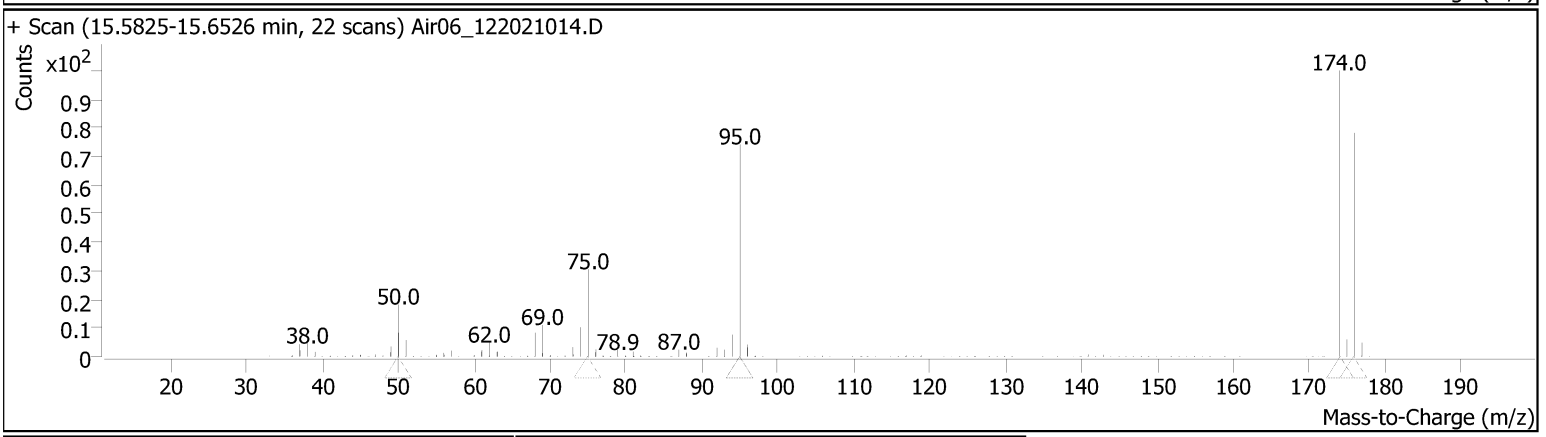


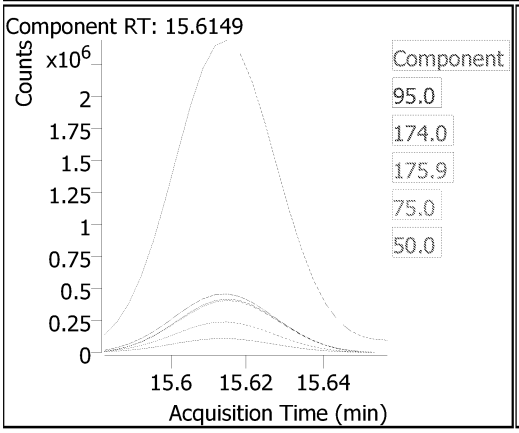


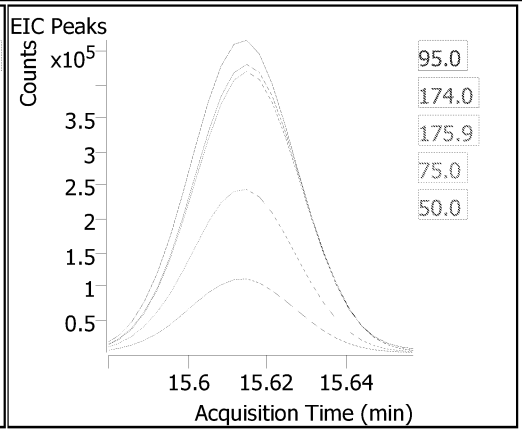
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.6149	Benzene, 1-bromo-3-fluoro-	4495182.7	98.6	1073-06-9	C6H4BrF	11.31

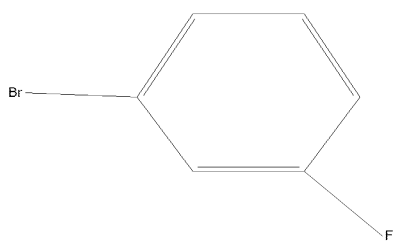




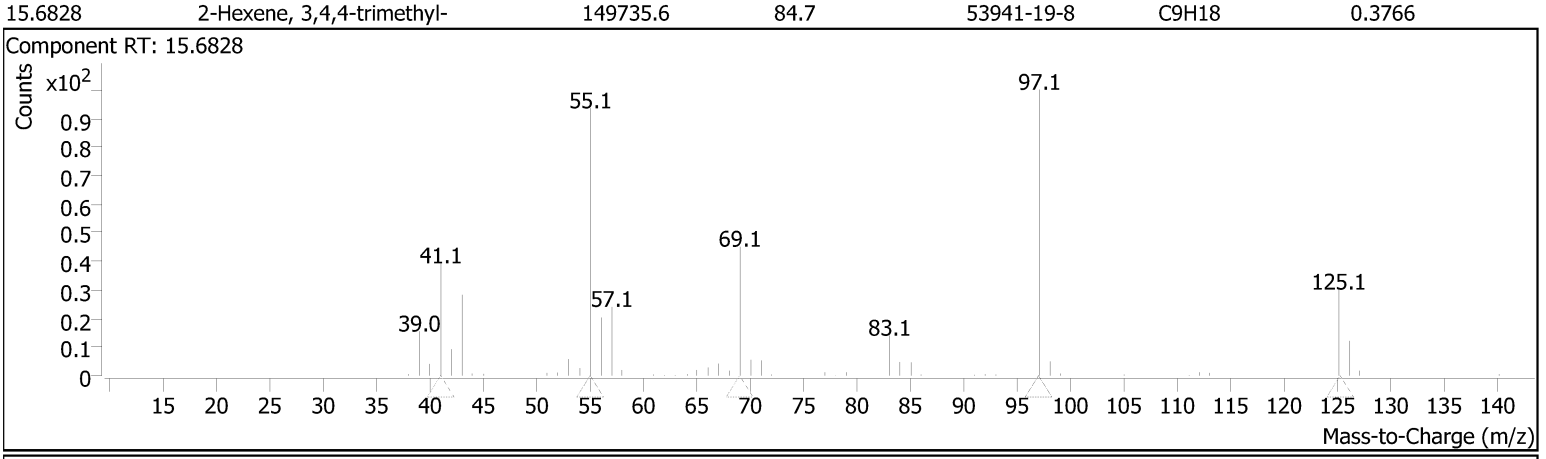


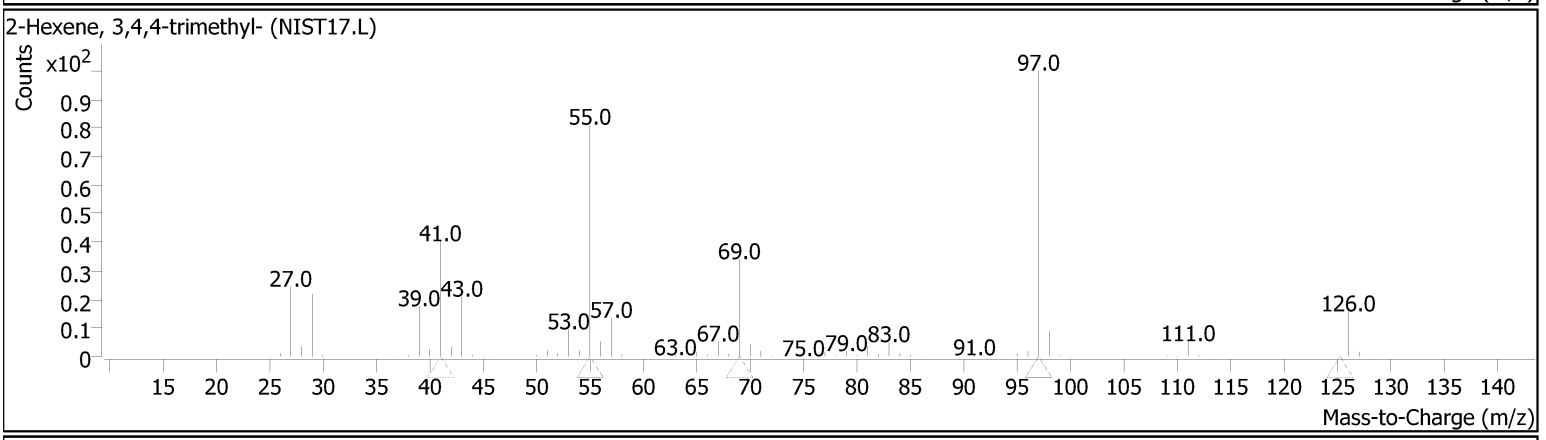


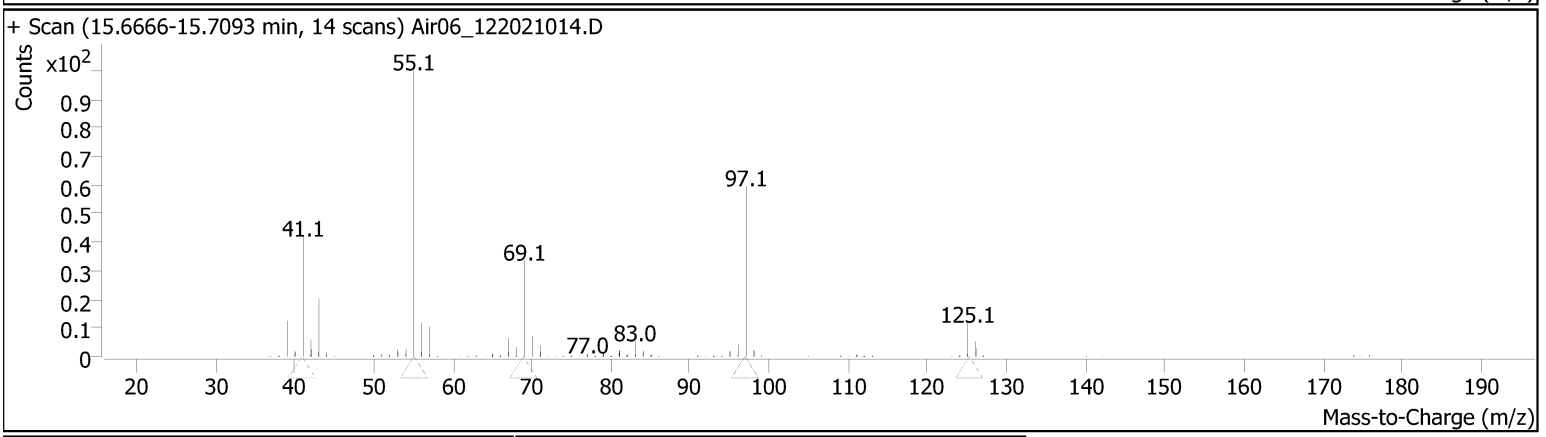


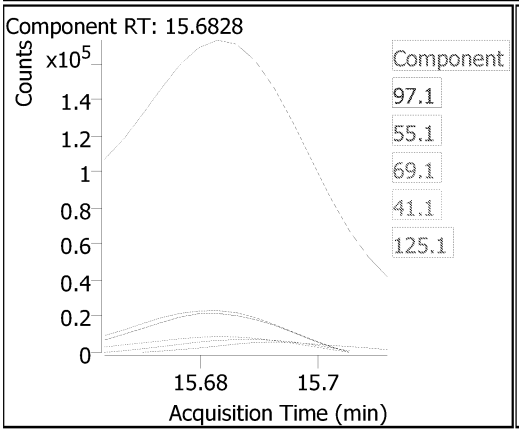


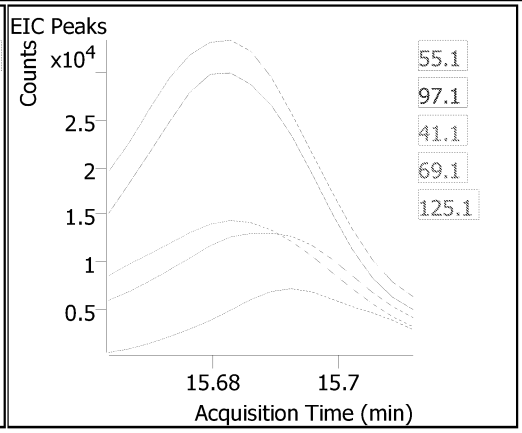
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.6828	2-Hexene, 3,4,4-trimethyl-	149735.6	84.7	53941-19-8	C9H18	0.3766

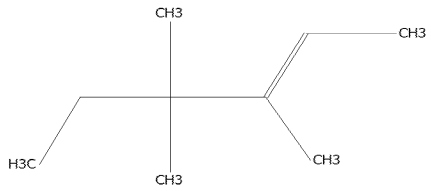




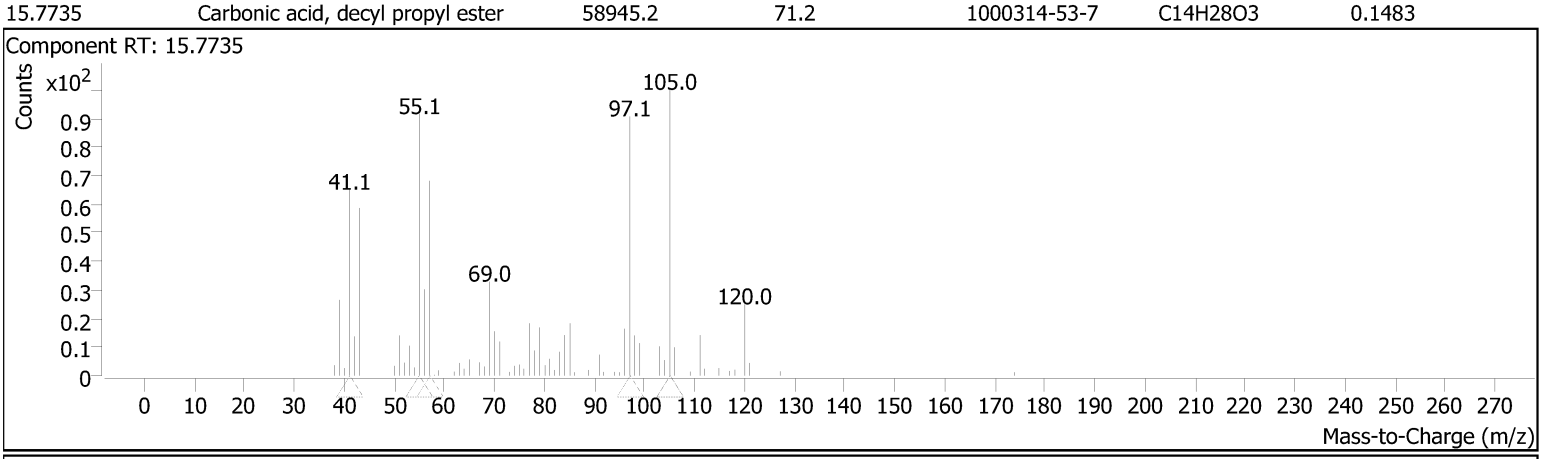


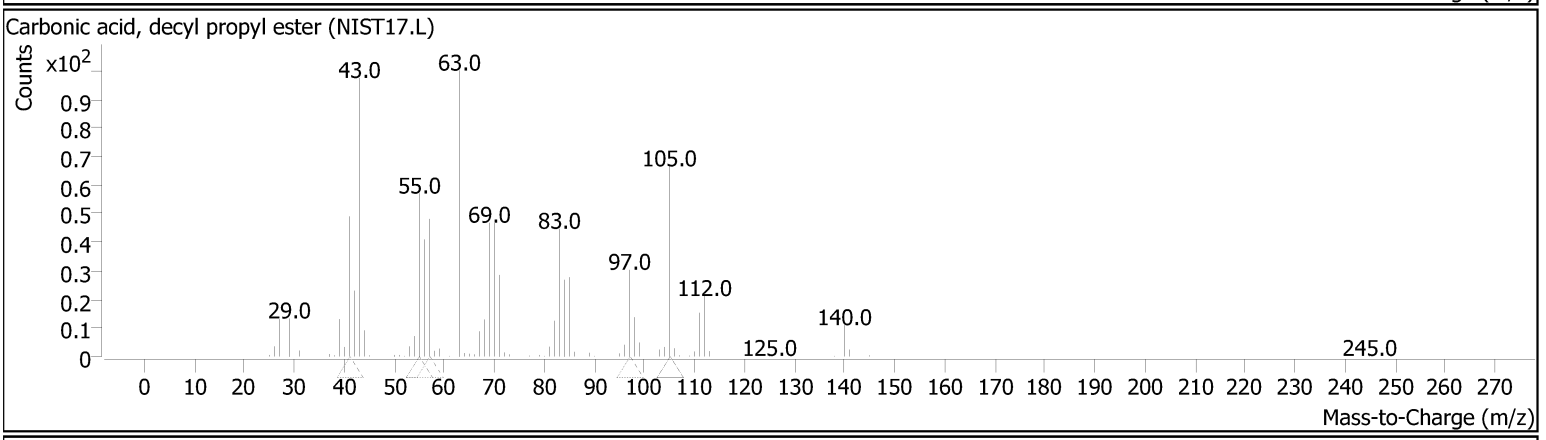


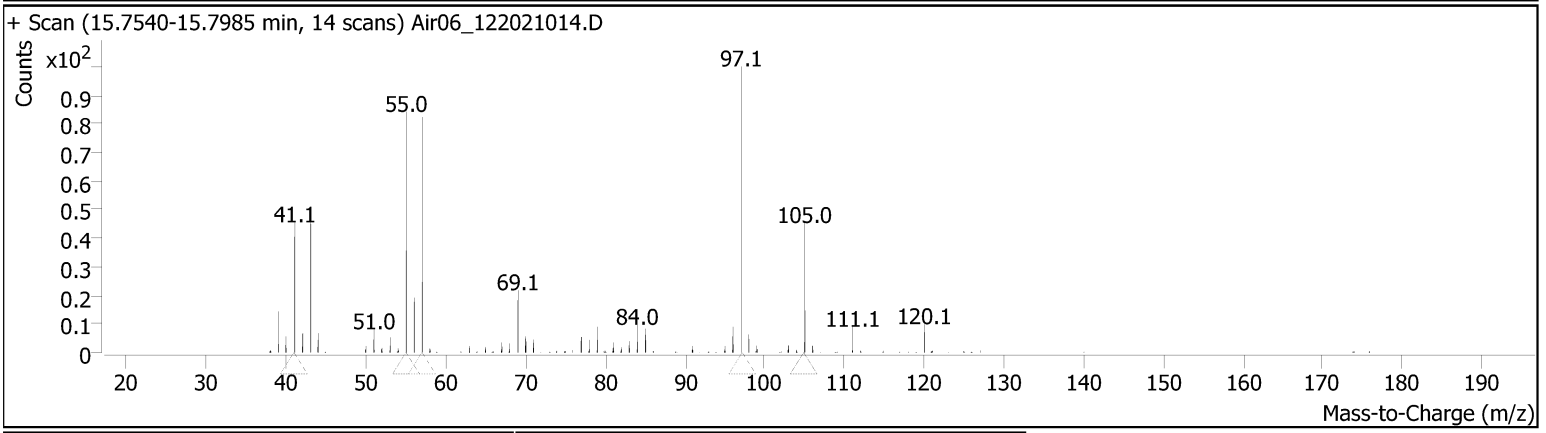


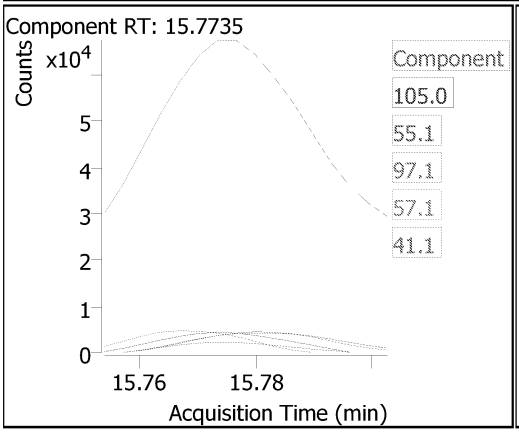


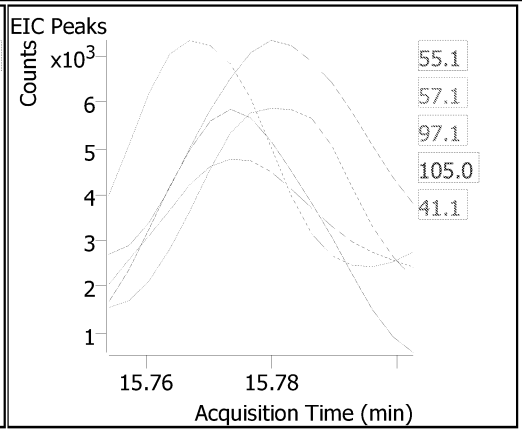
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.7735	Carbonic acid, decyl propyl ester	58945.2	71.2	1000314-53-7	C14H28O3	0.1483

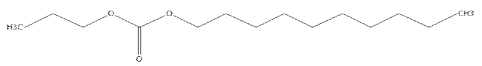




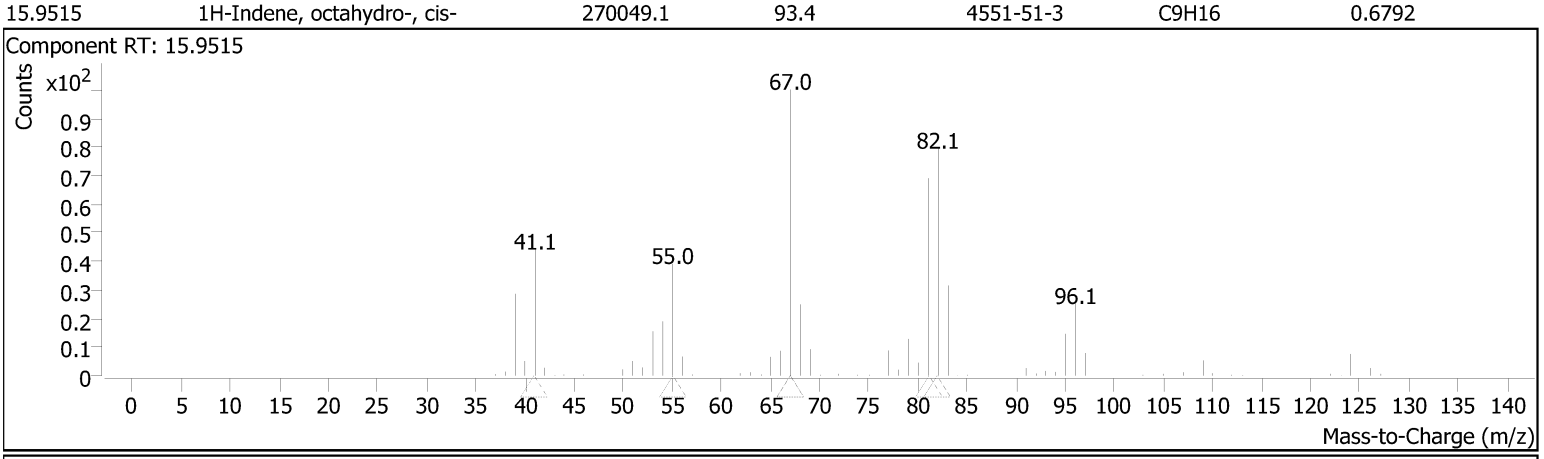


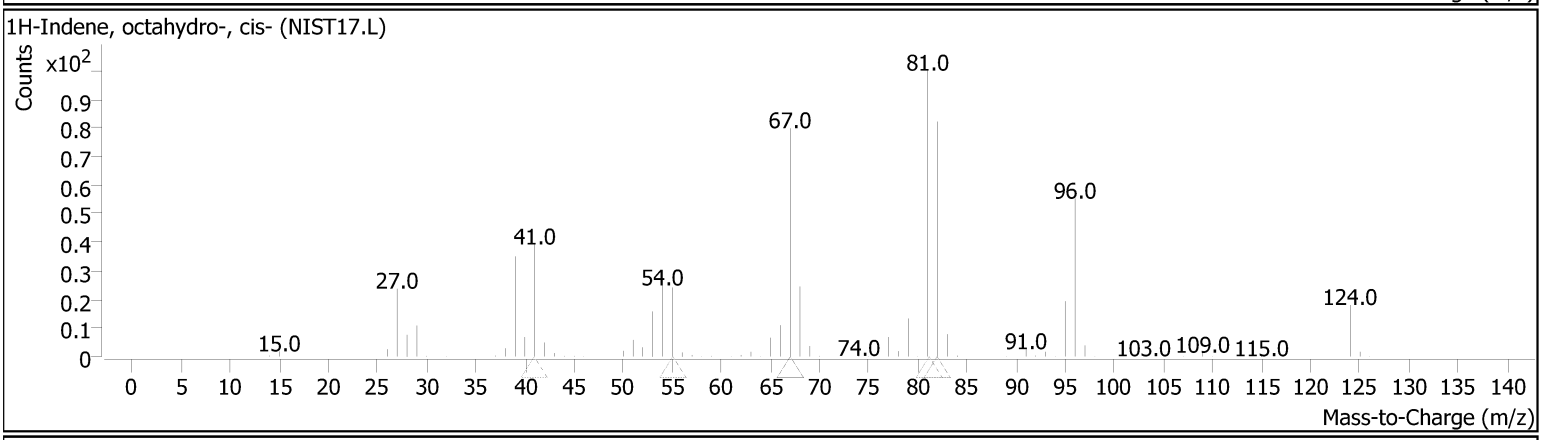


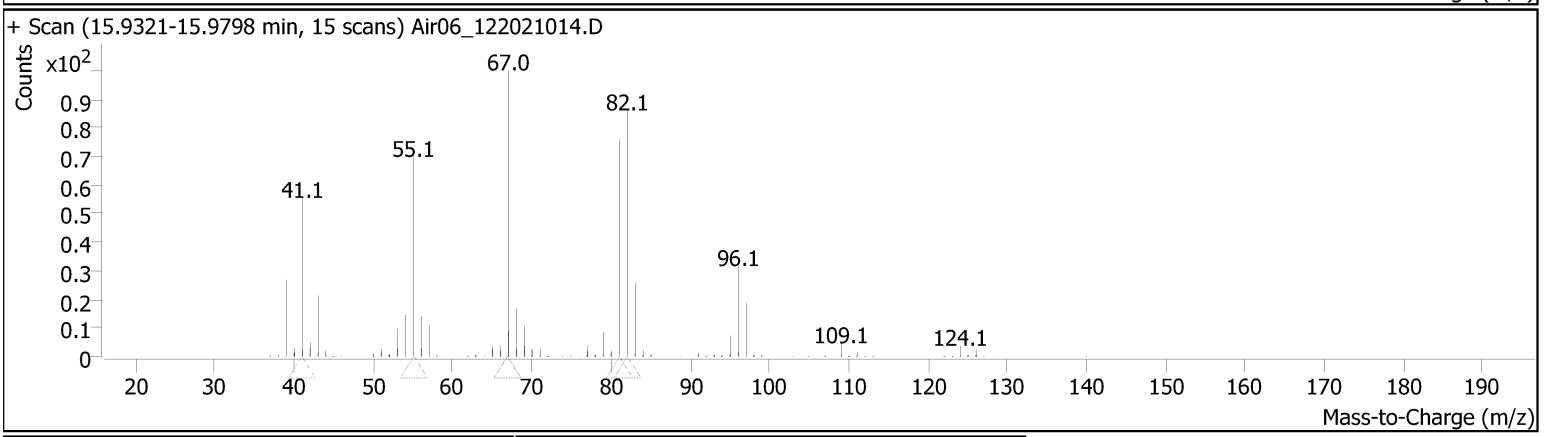


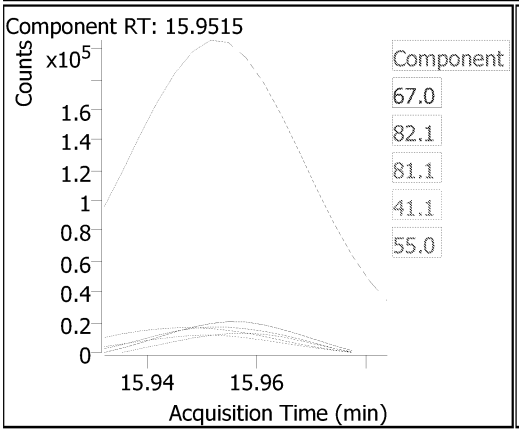


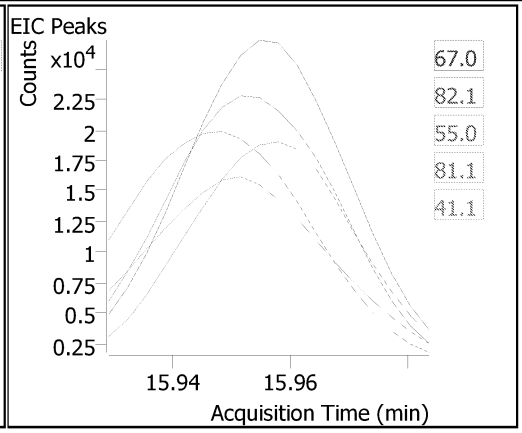
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.9515	1H-Indene, octahydro-, cis-	270049.1	93.4	4551-51-3	C9H16	0.6792



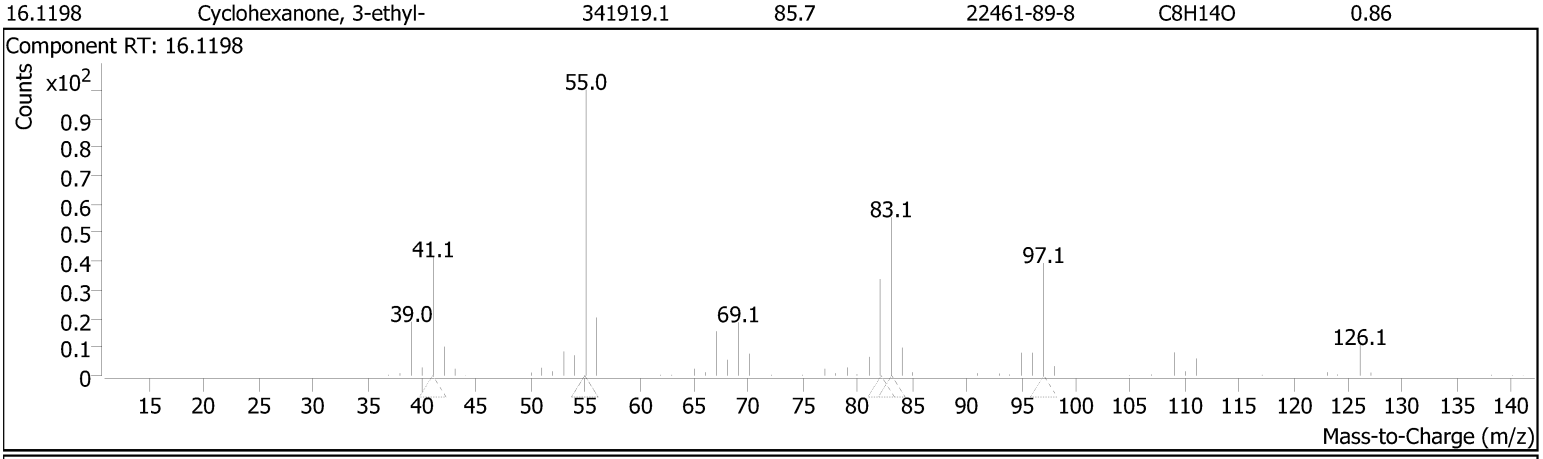


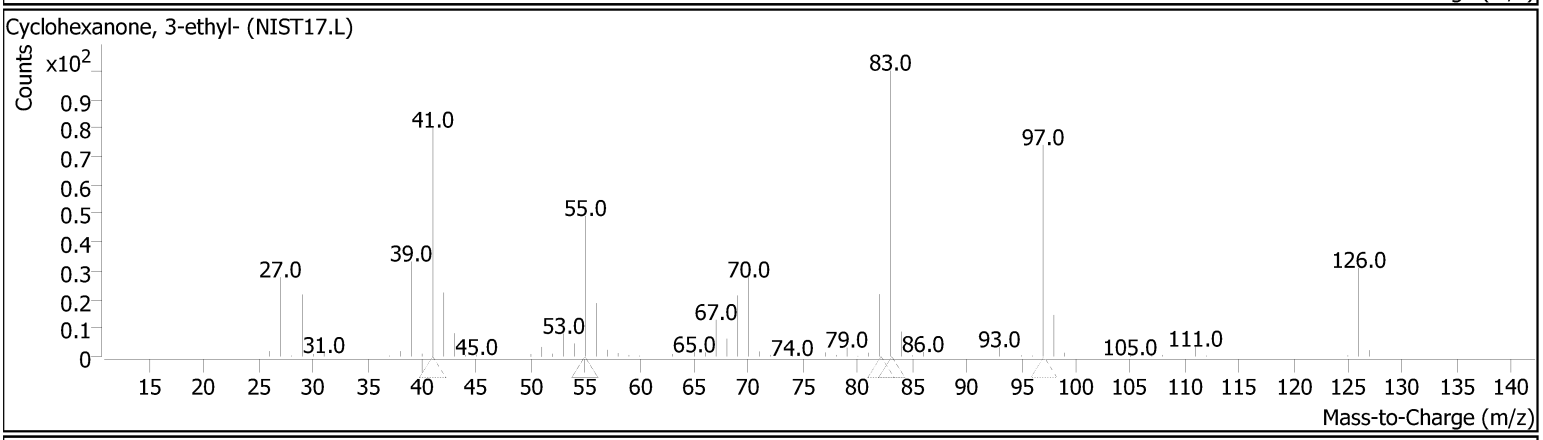


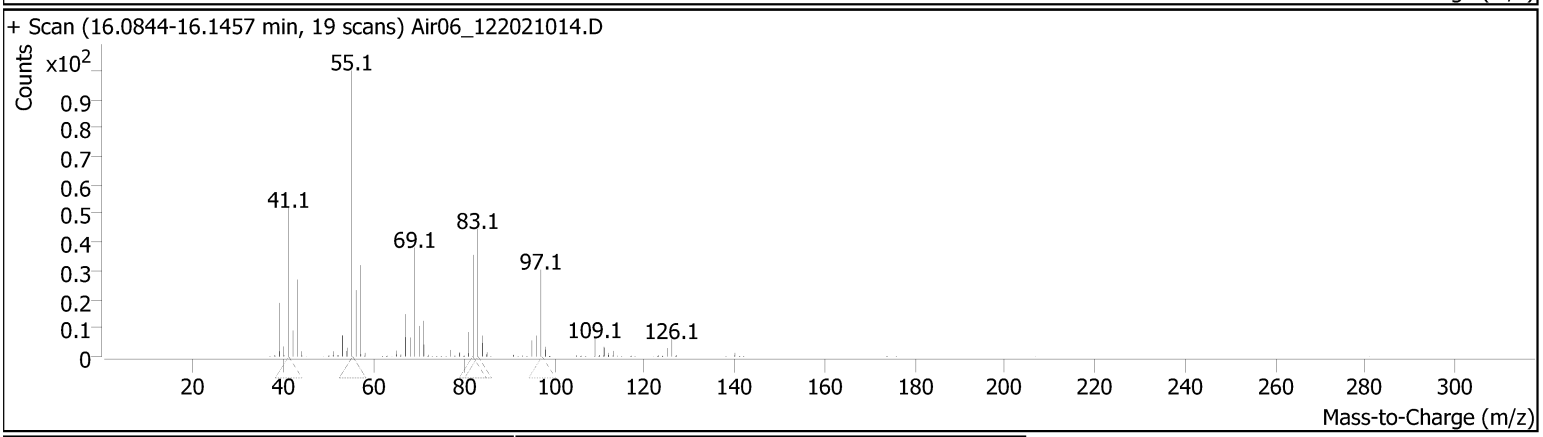


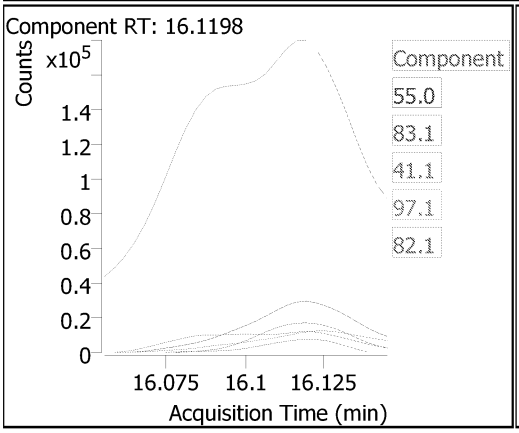


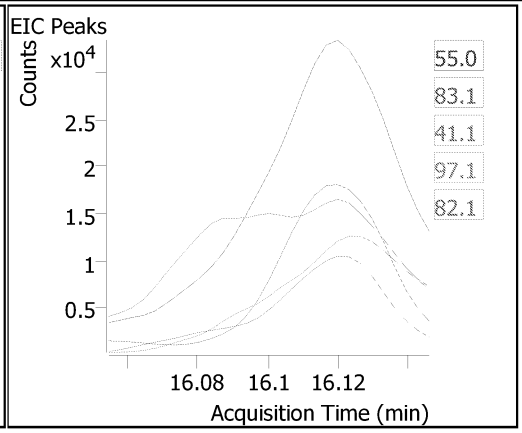
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.1198	Cyclohexanone, 3-ethyl-	341919.1	85.7	22461-89-8	C8H14O	0.86

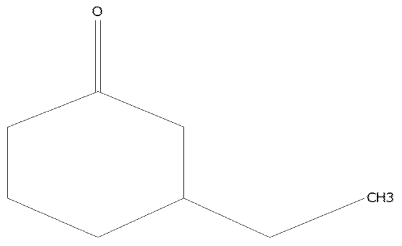




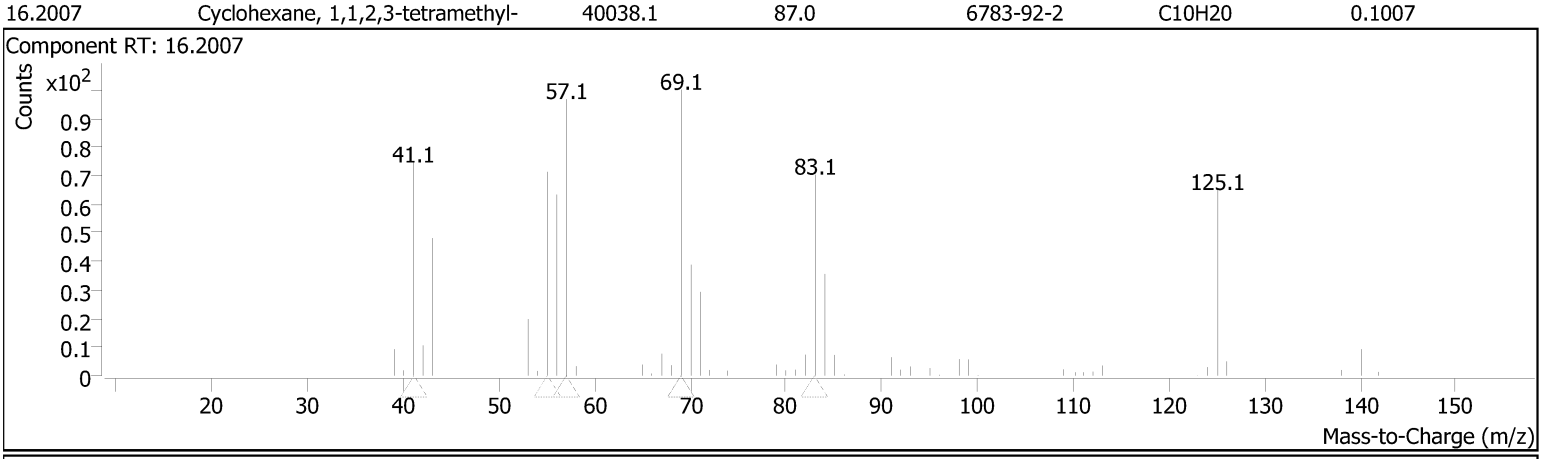


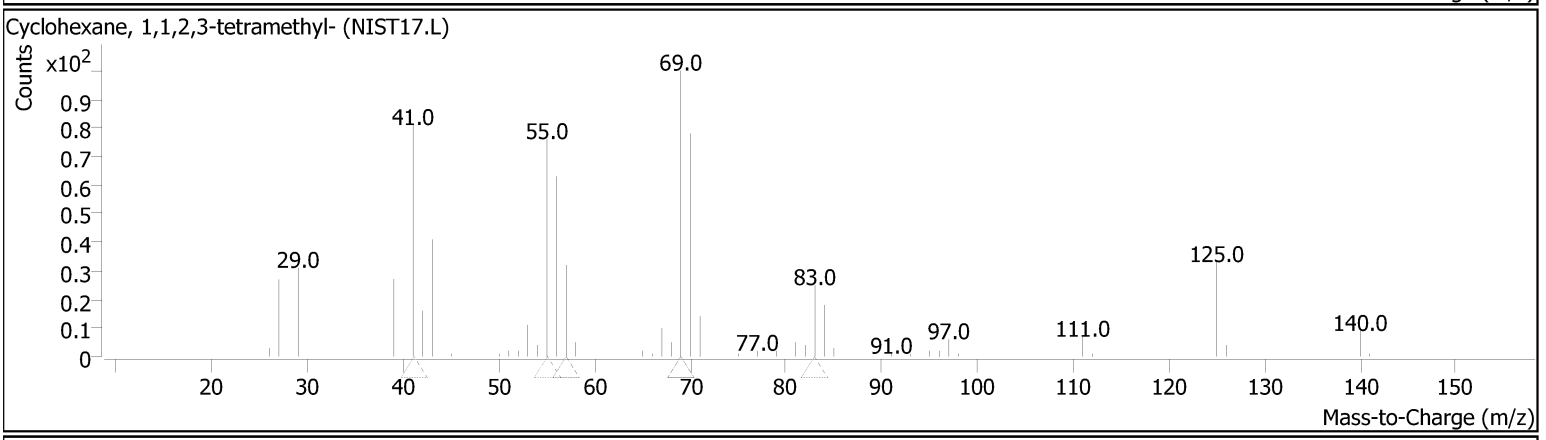


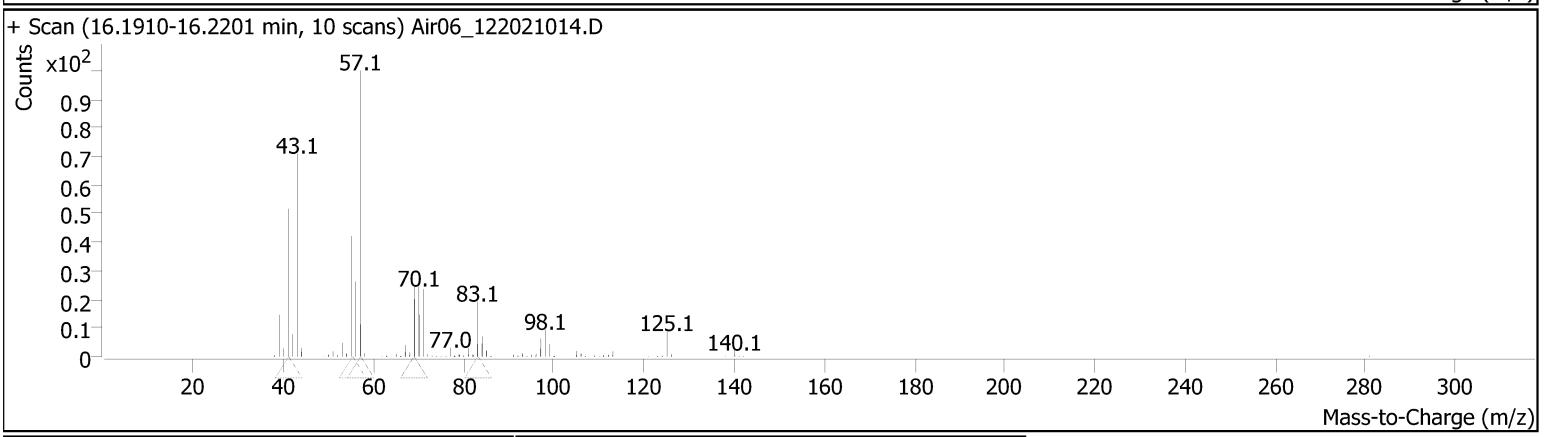


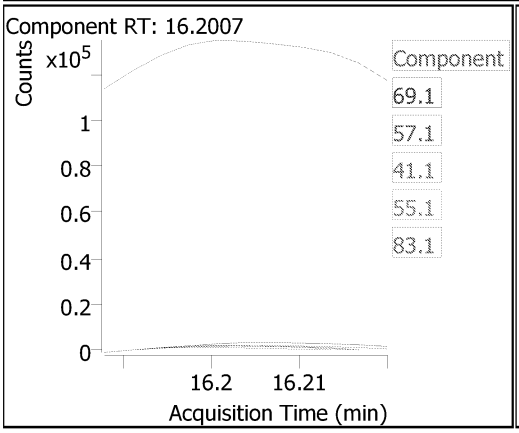


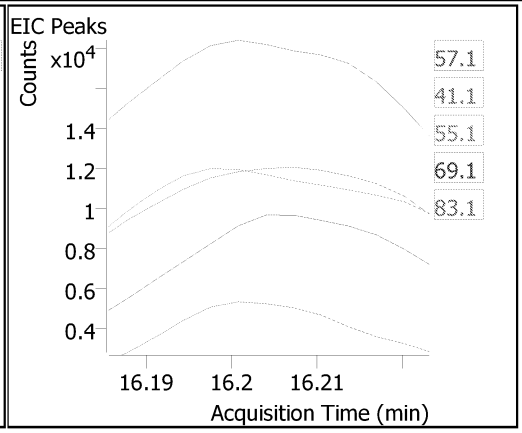
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.2007	Cyclohexane, 1,1,2,3-tetramethyl-	40038.1	87.0	6783-92-2	C10H20	0.1007

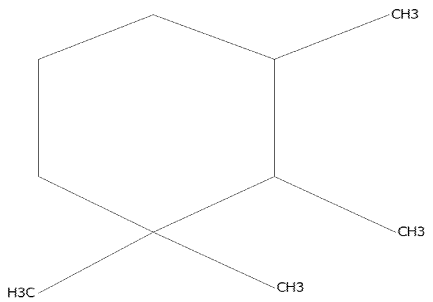




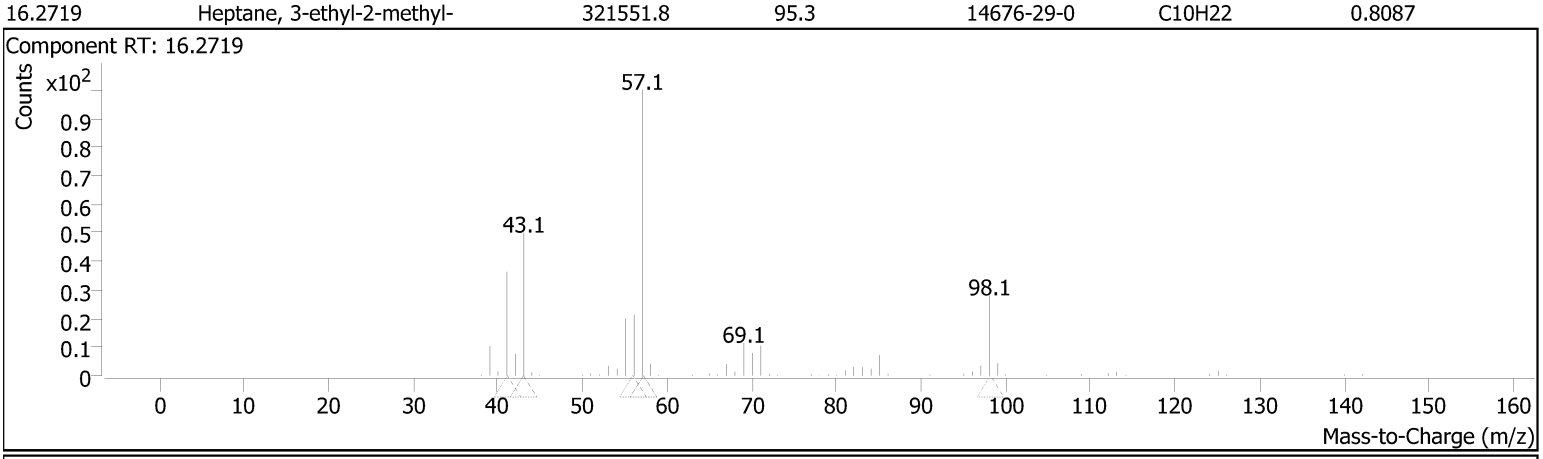


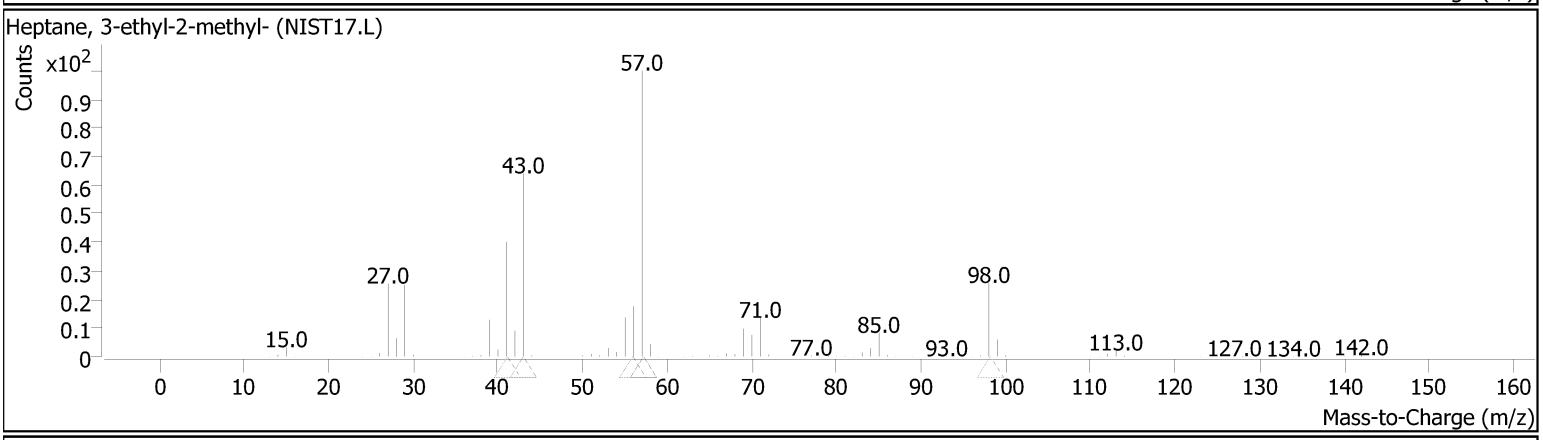


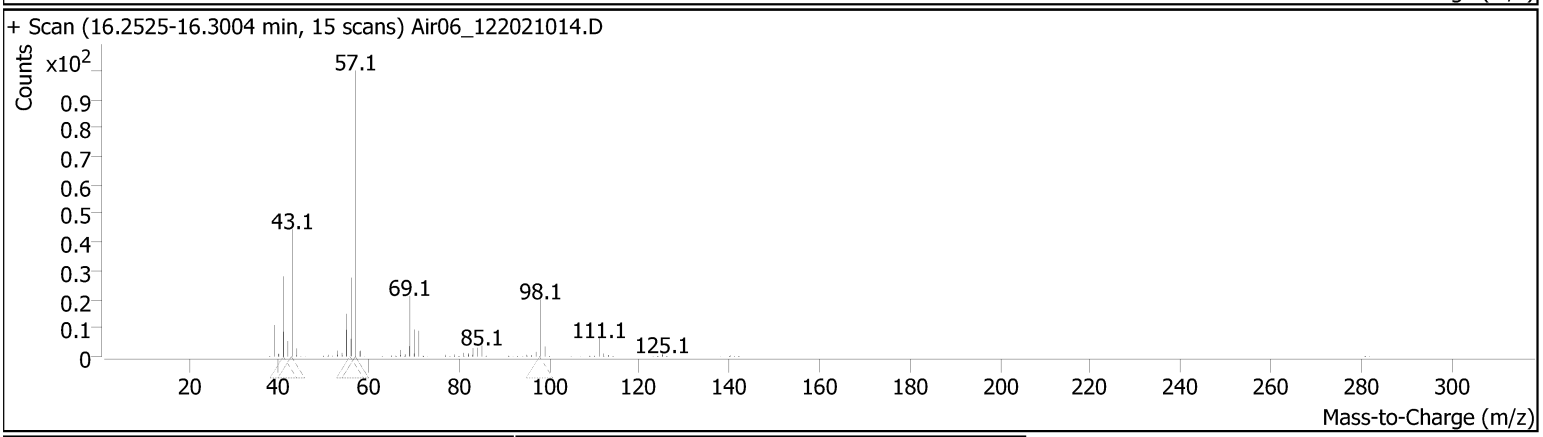


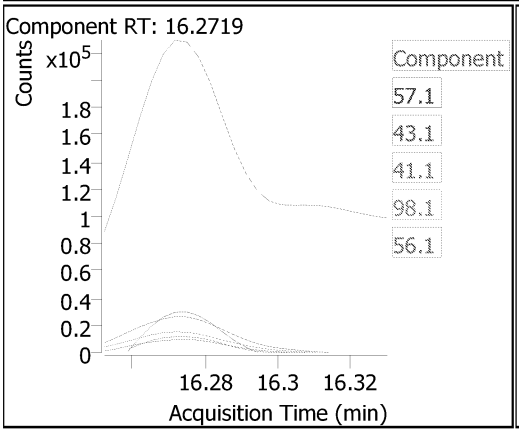


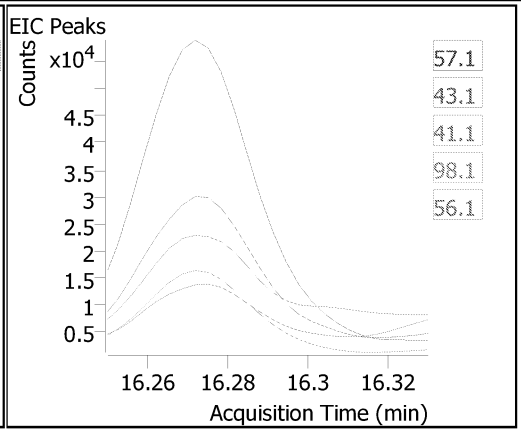
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.2719	Heptane, 3-ethyl-2-methyl-	321551.8	95.3	14676-29-0	C10H22	0.8087

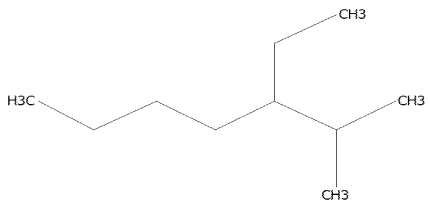




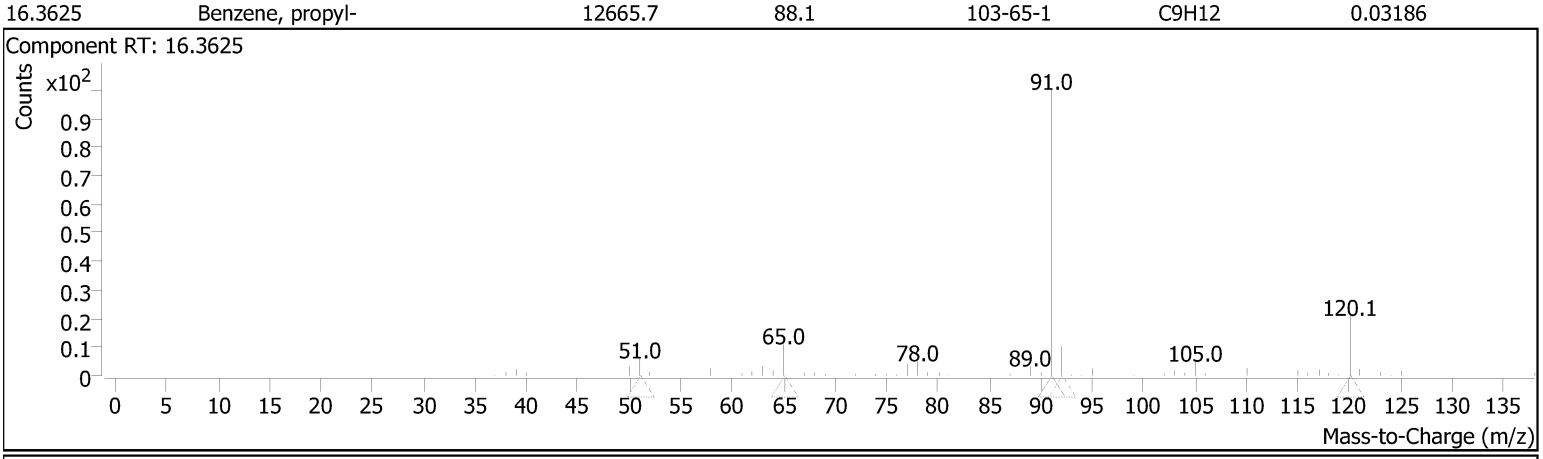


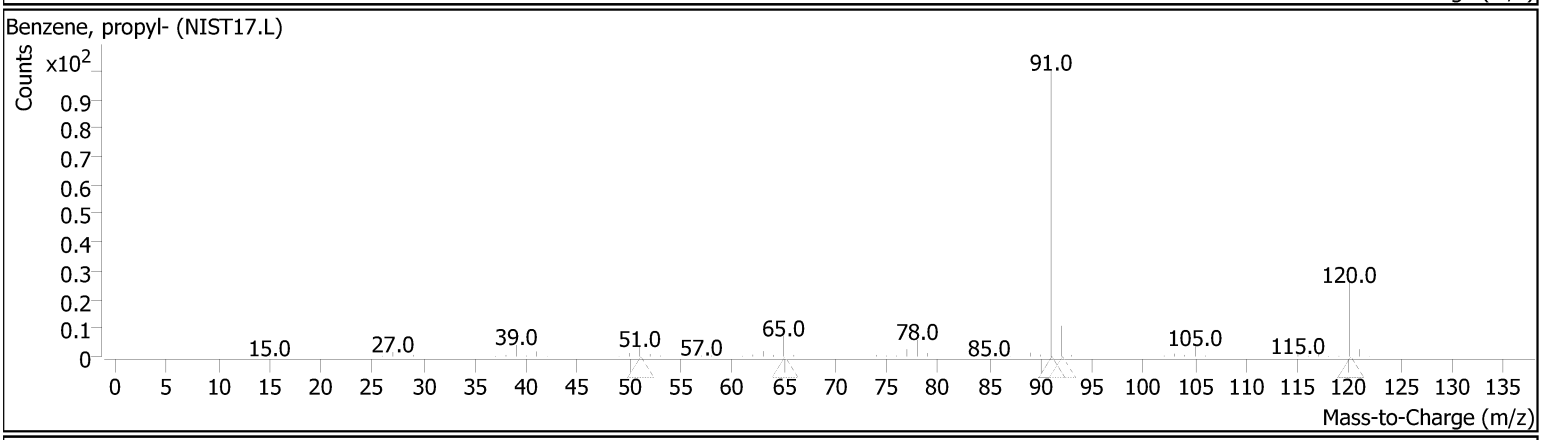


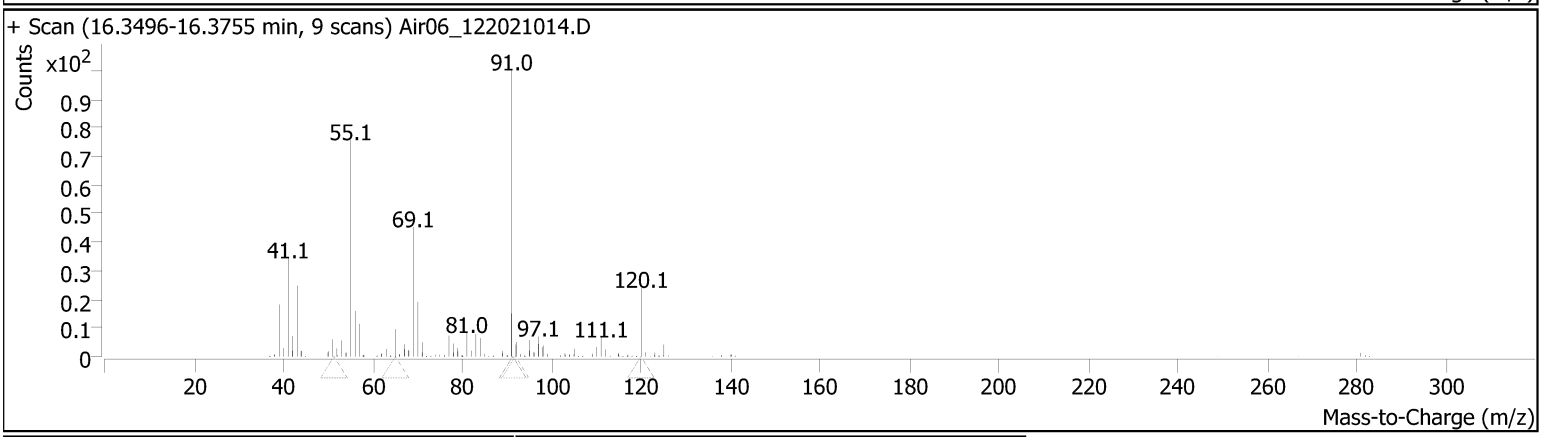


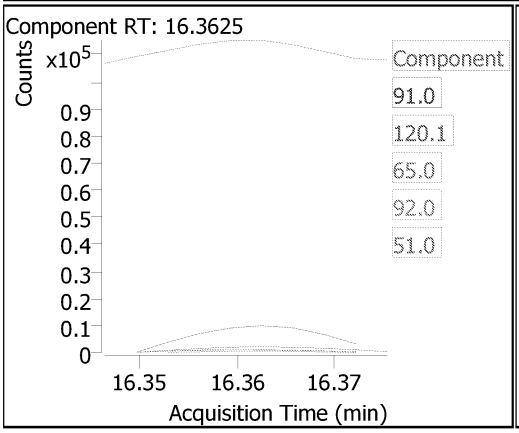


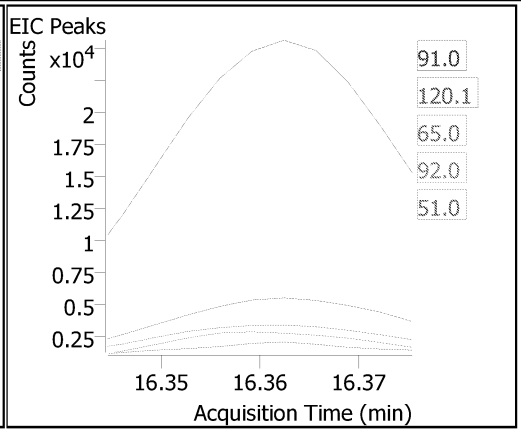
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.3625	Benzene, propyl-	12665.7	88.1	103-65-1	C9H12	0.03186

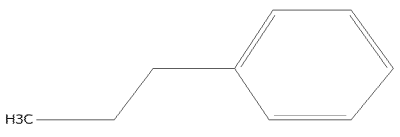




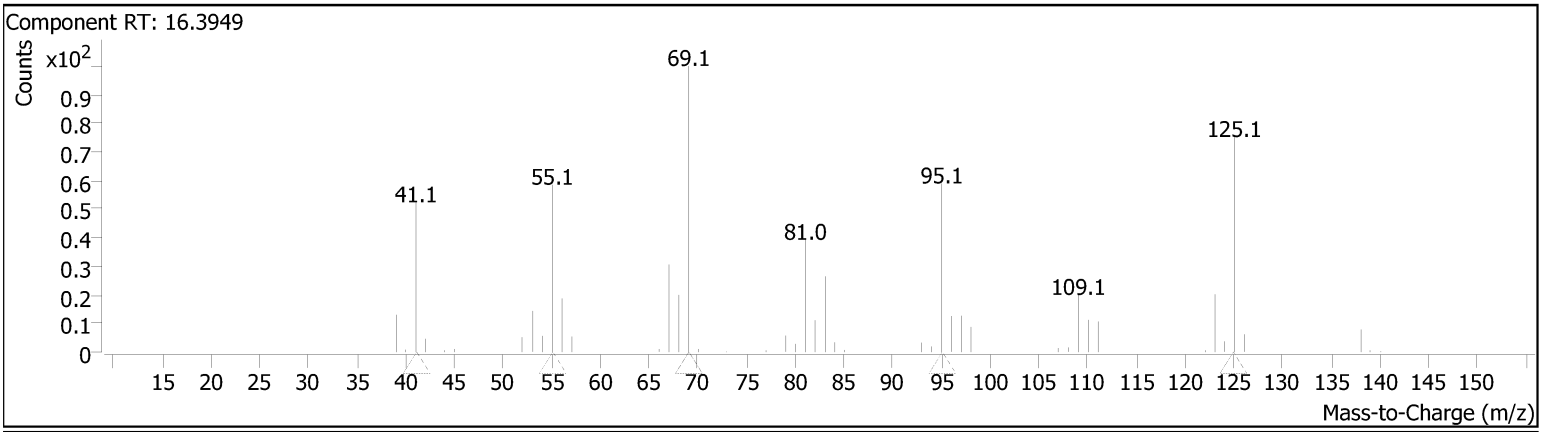


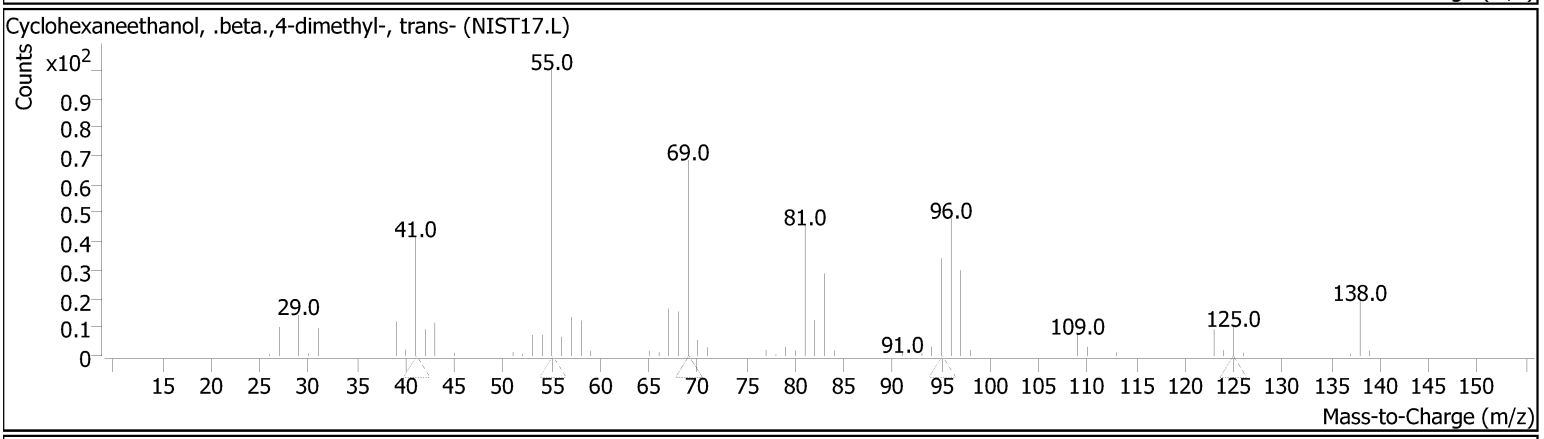


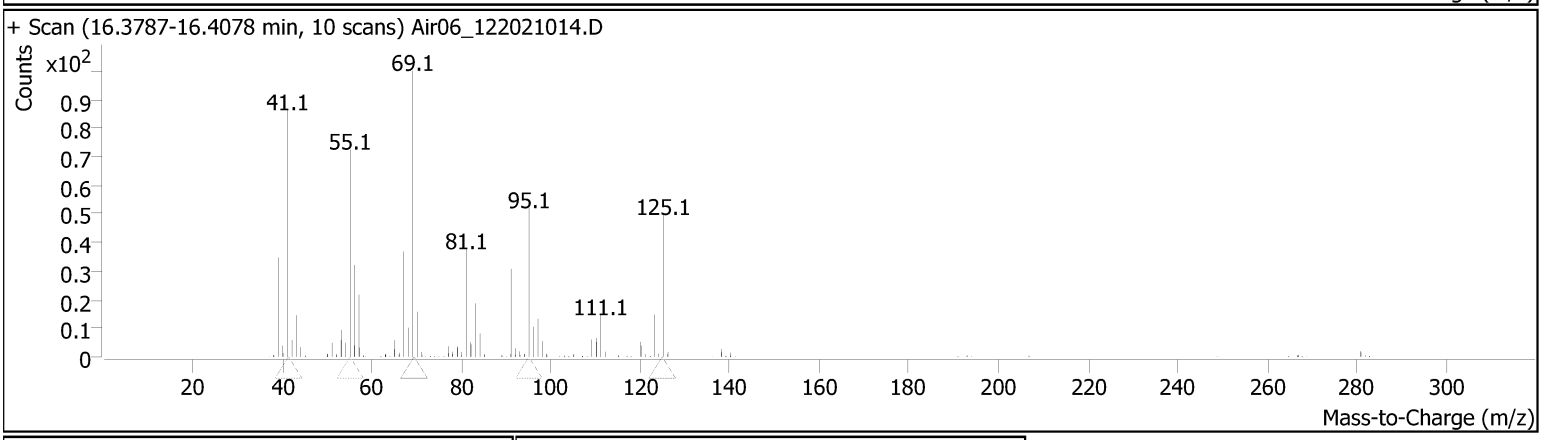


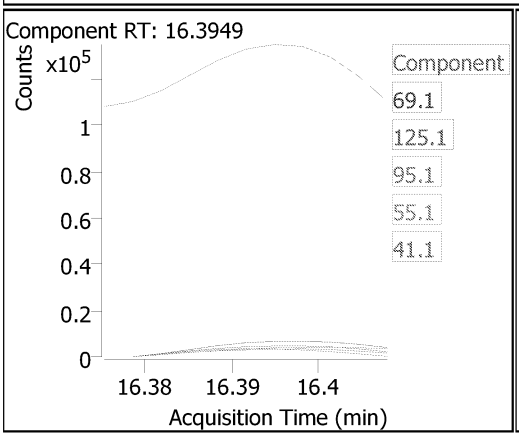


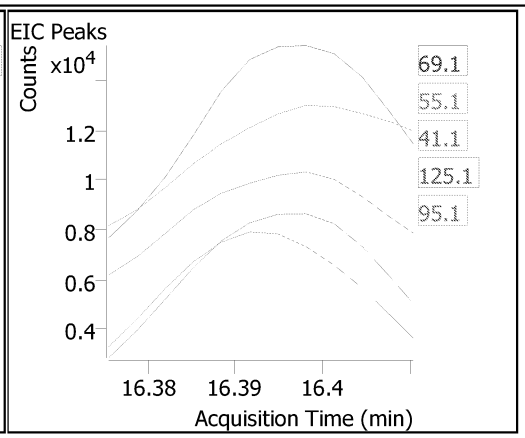
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.3949	Cyclohexaneethanol, .beta.,4-dimethyl-, trans-	40794.6	78.6	5113-94-0	C10H20O	0.1026

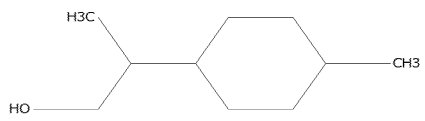




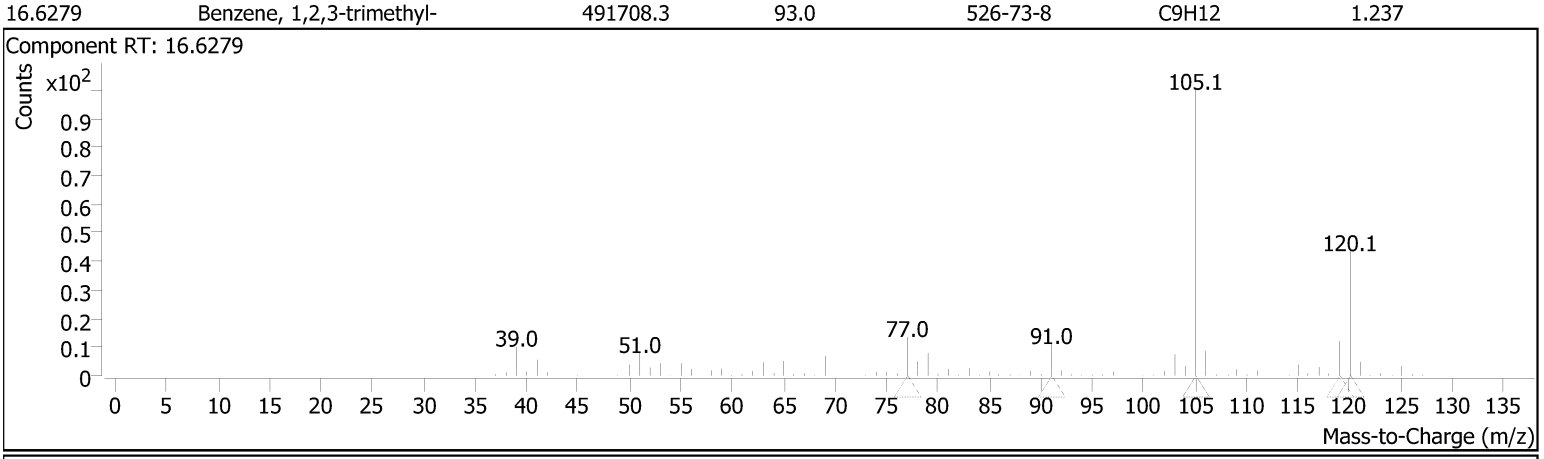


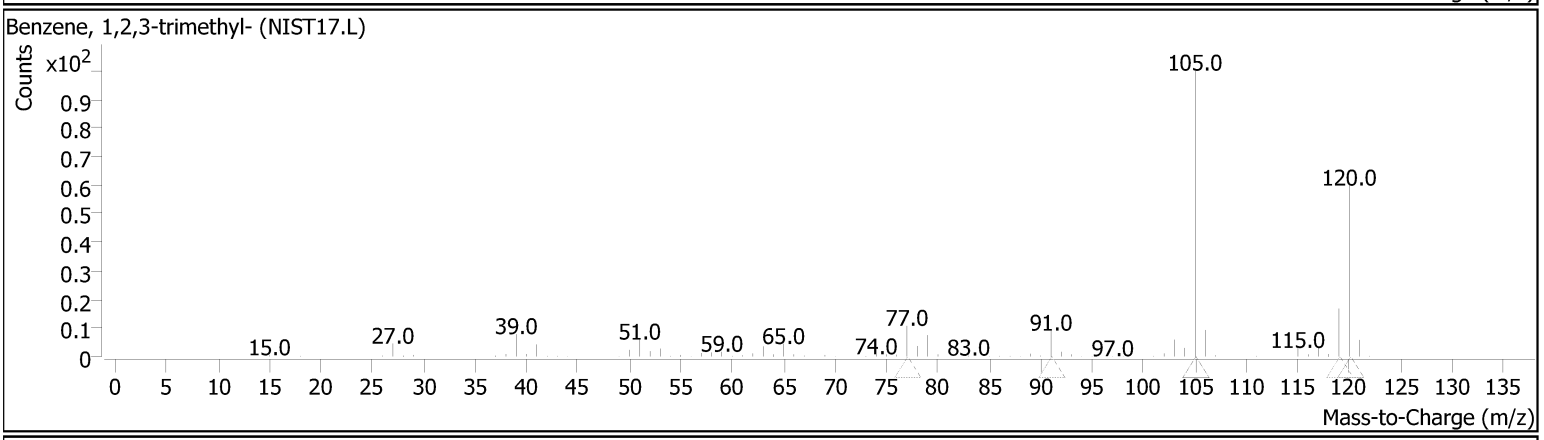


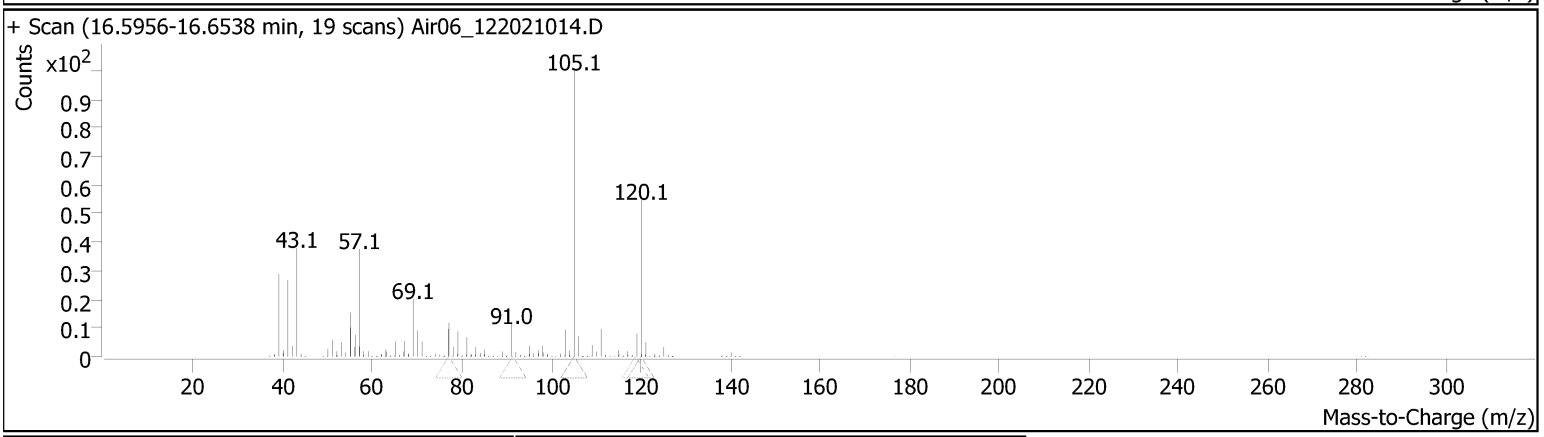


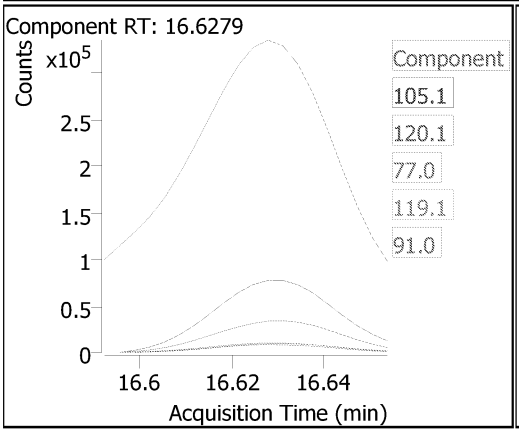


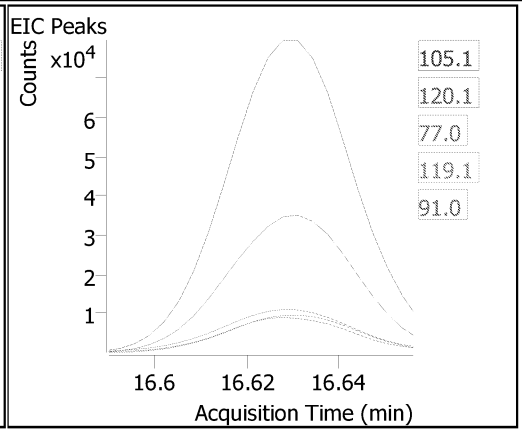
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.6279	Benzene, 1,2,3-trimethyl-	491708.3	93.0	526-73-8	C9H12	1.237

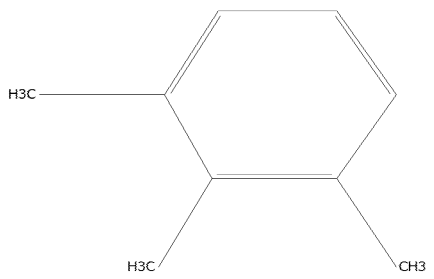




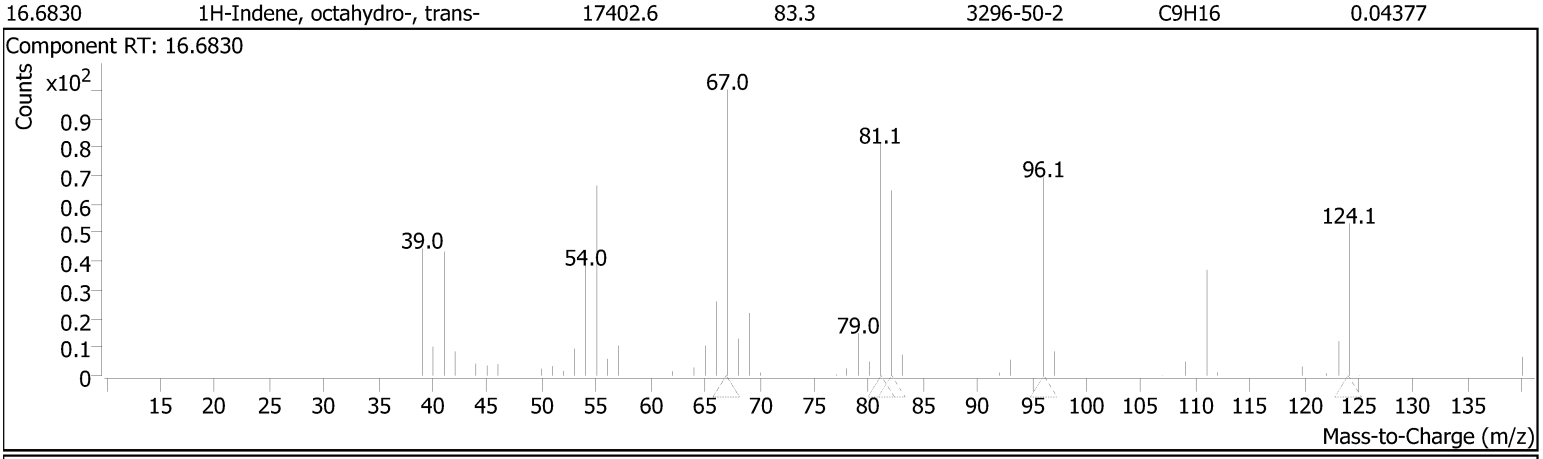


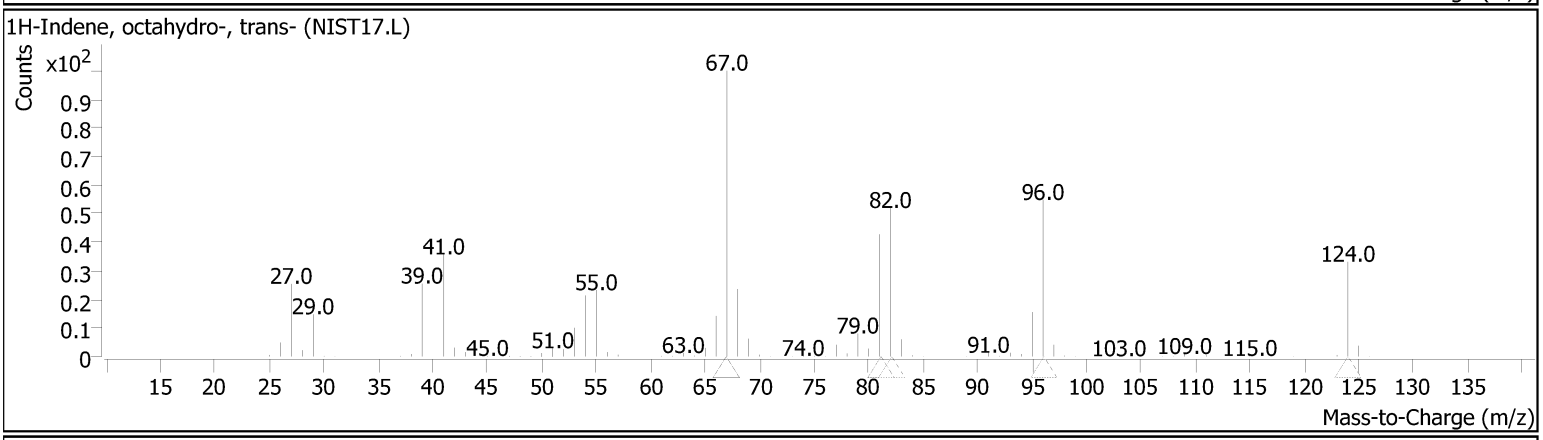


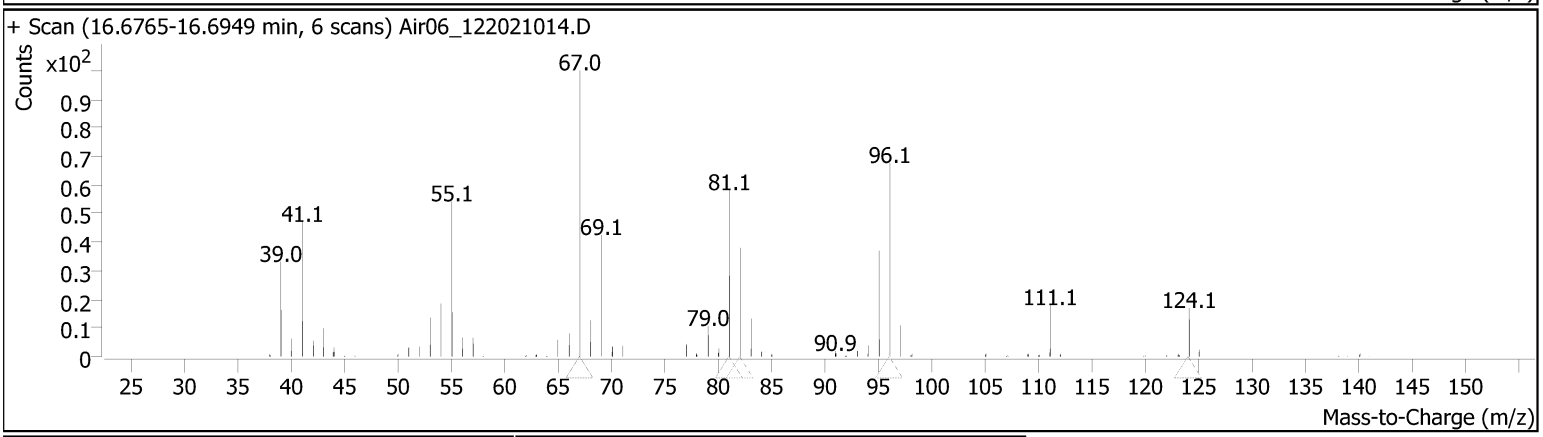


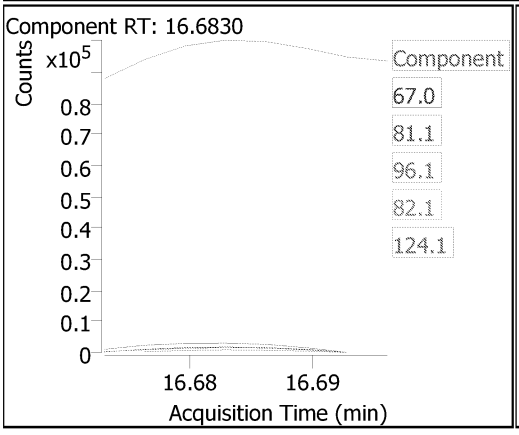


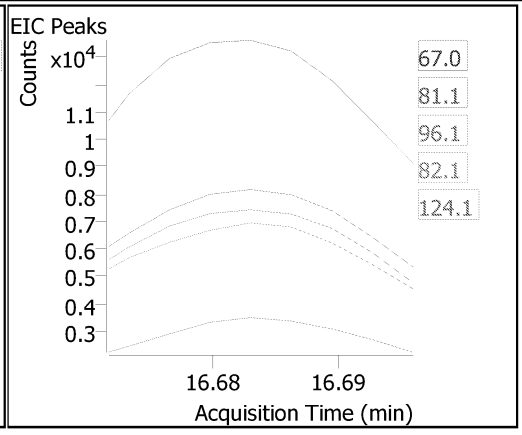
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.6830	1H-Indene, octahydro-, trans-	17402.6	83.3	3296-50-2	C9H16	0.04377

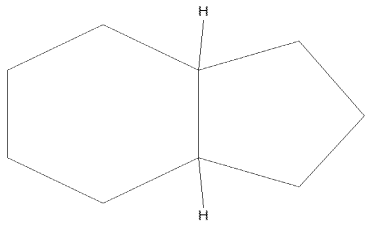




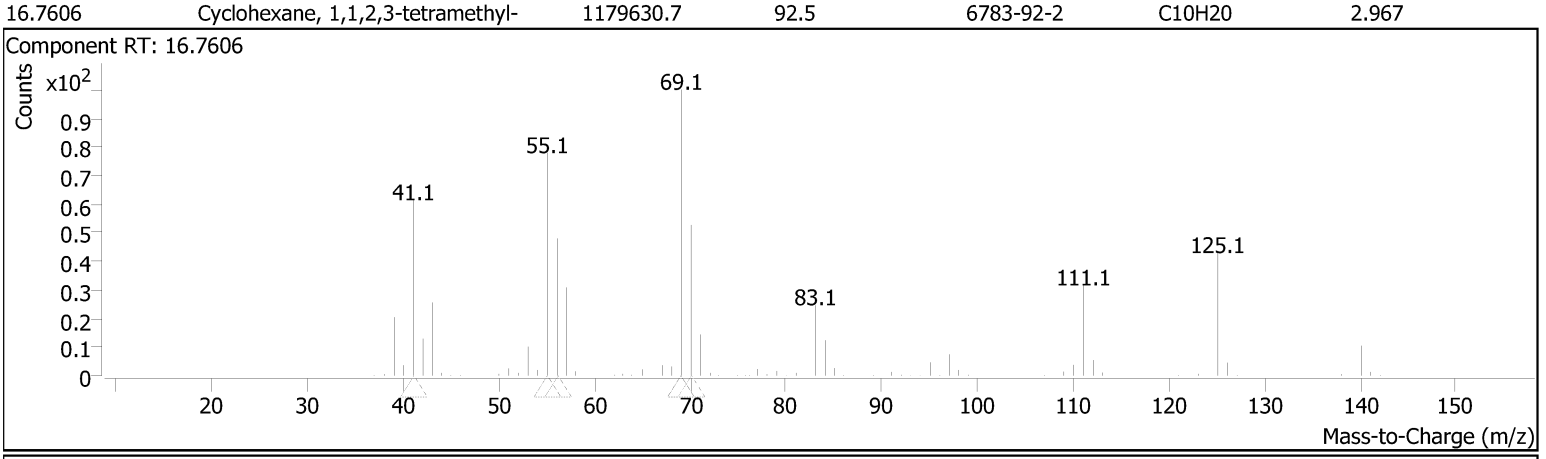


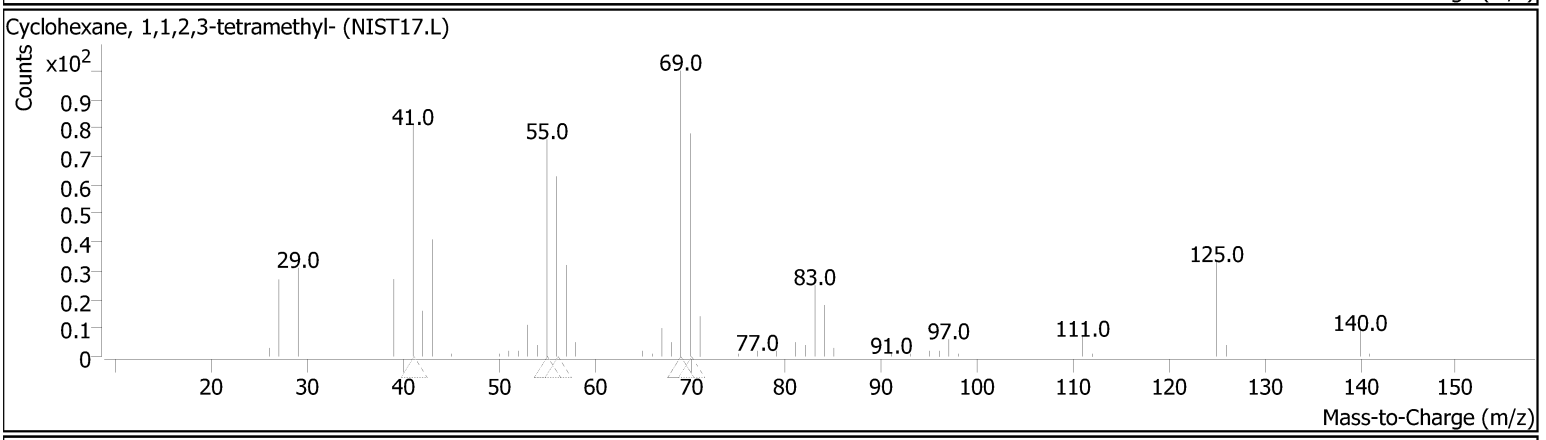


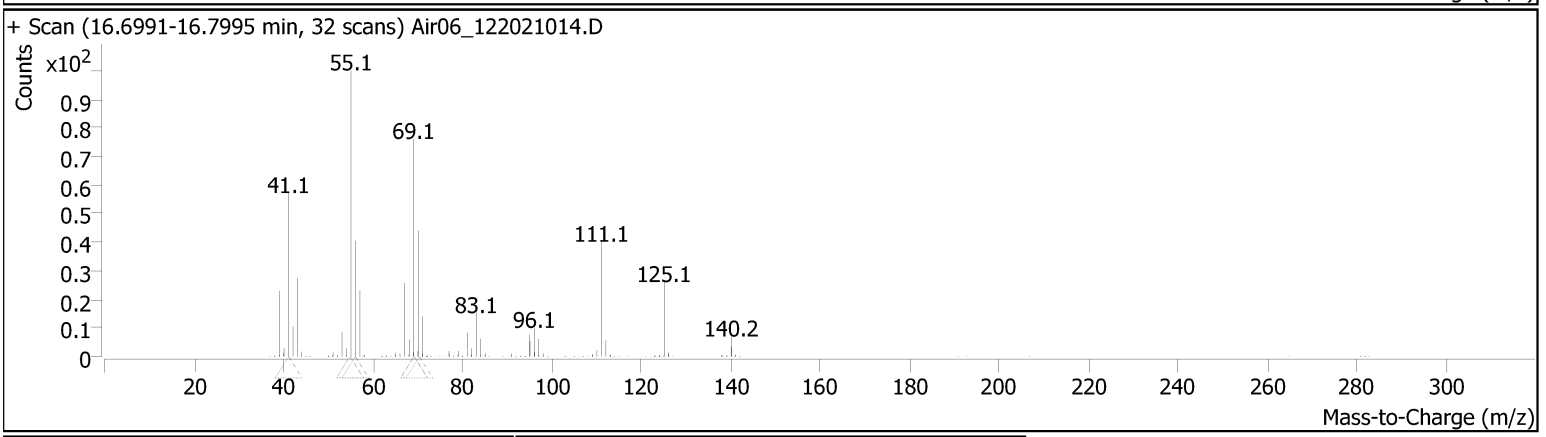


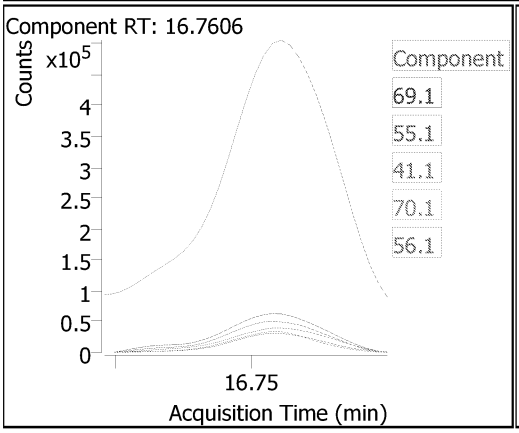


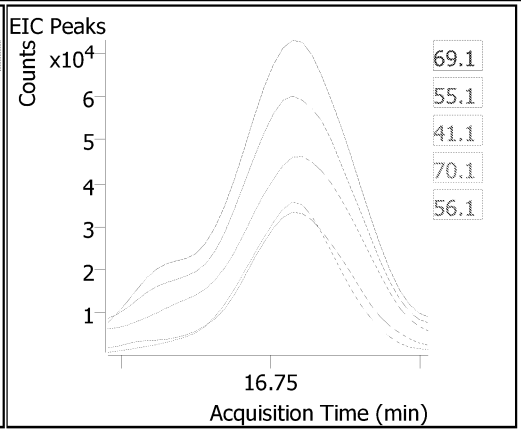
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.7606	Cyclohexane, 1,1,2,3-tetramethyl-	1179630.7	92.5	6783-92-2	C10H20	2.967

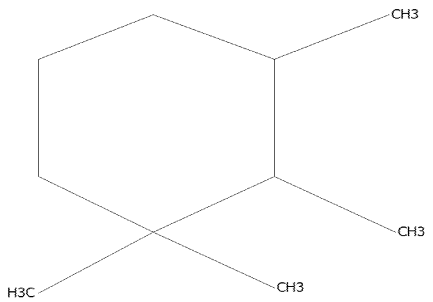




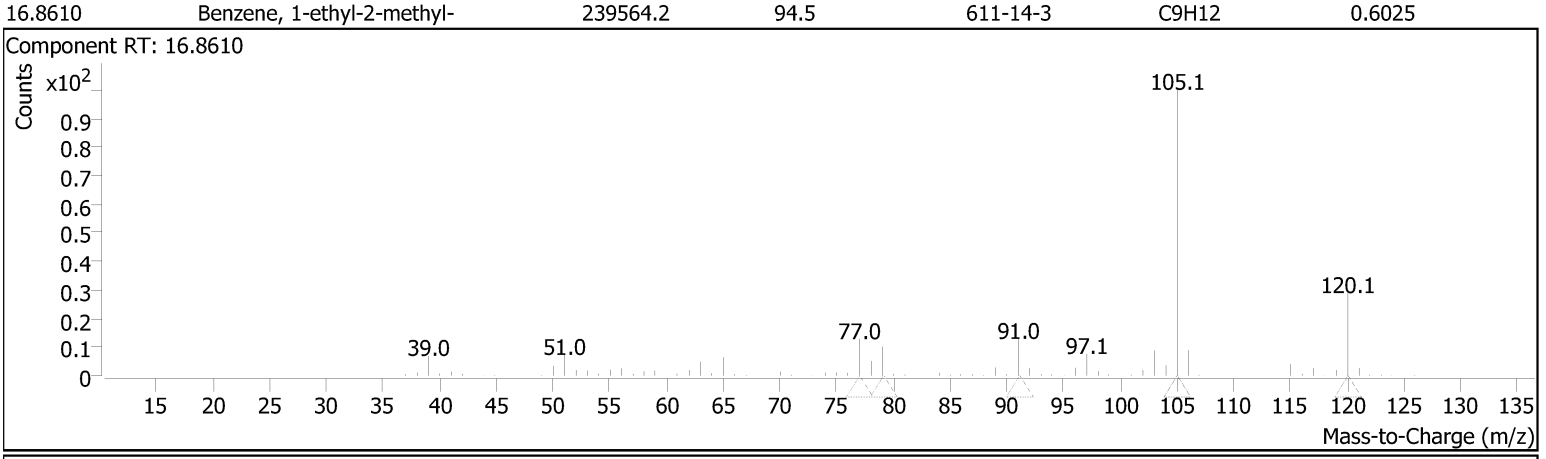


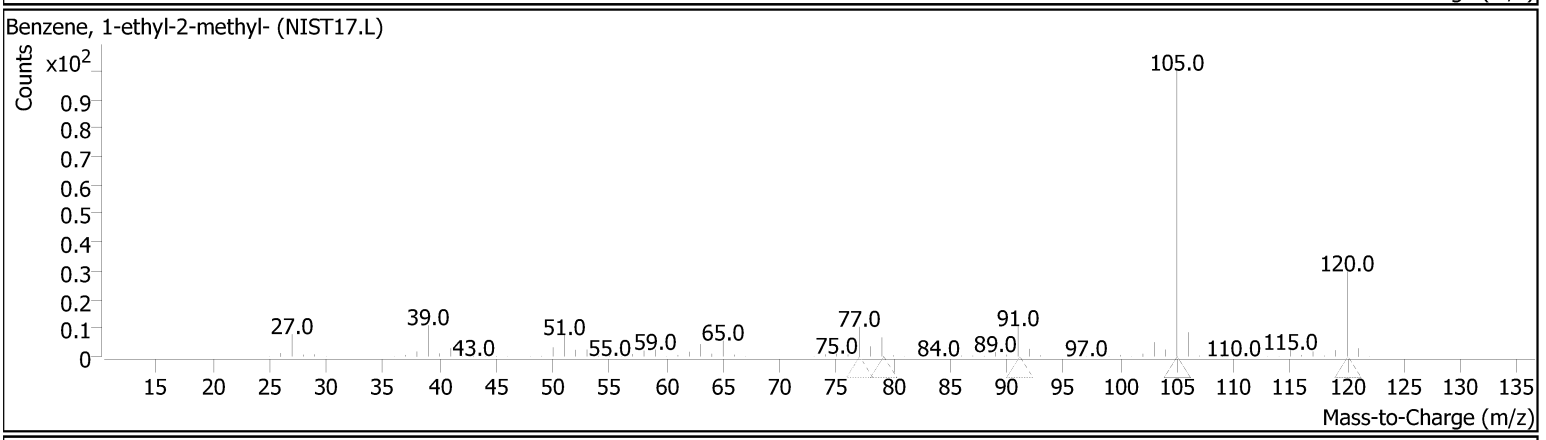


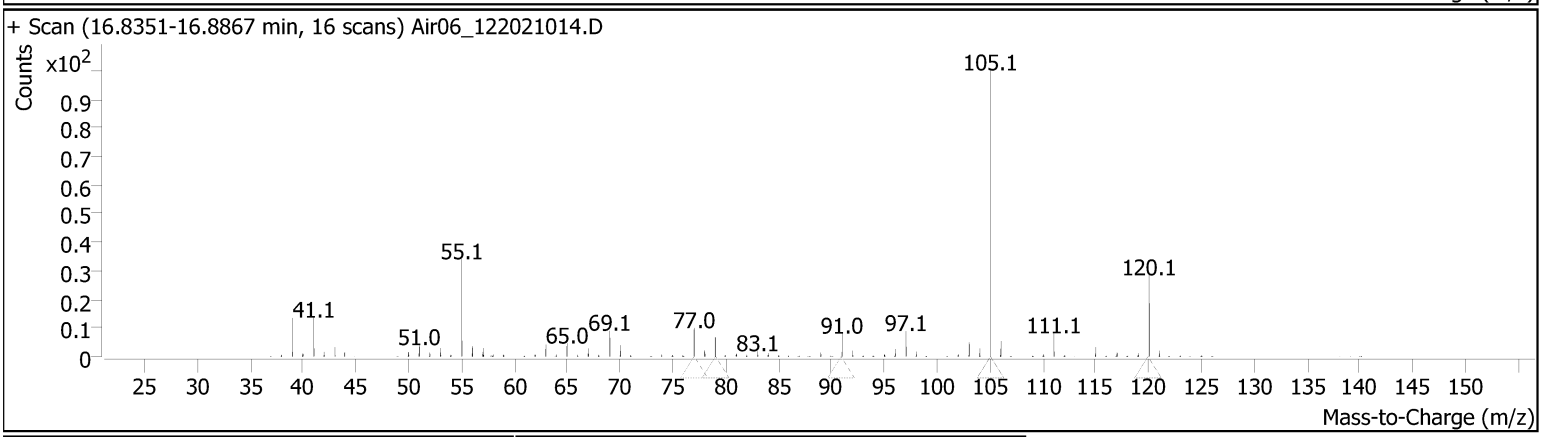


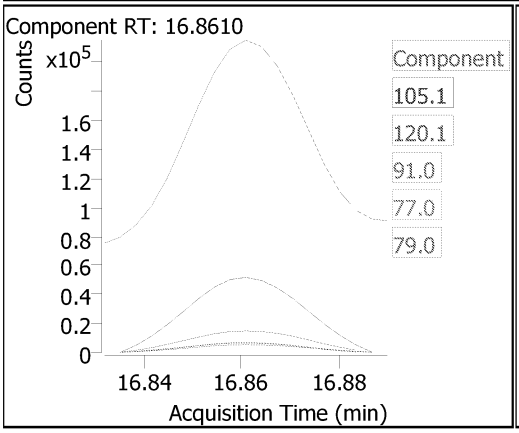


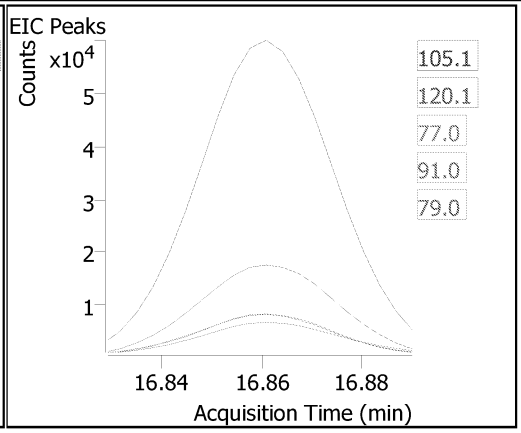
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.8610	Benzene, 1-ethyl-2-methyl-	239564.2	94.5	611-14-3	C9H12	0.6025

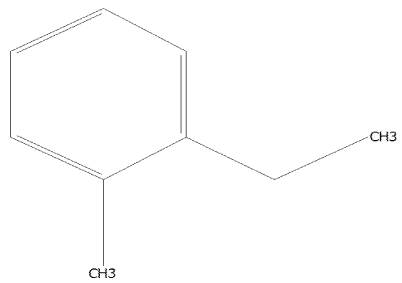




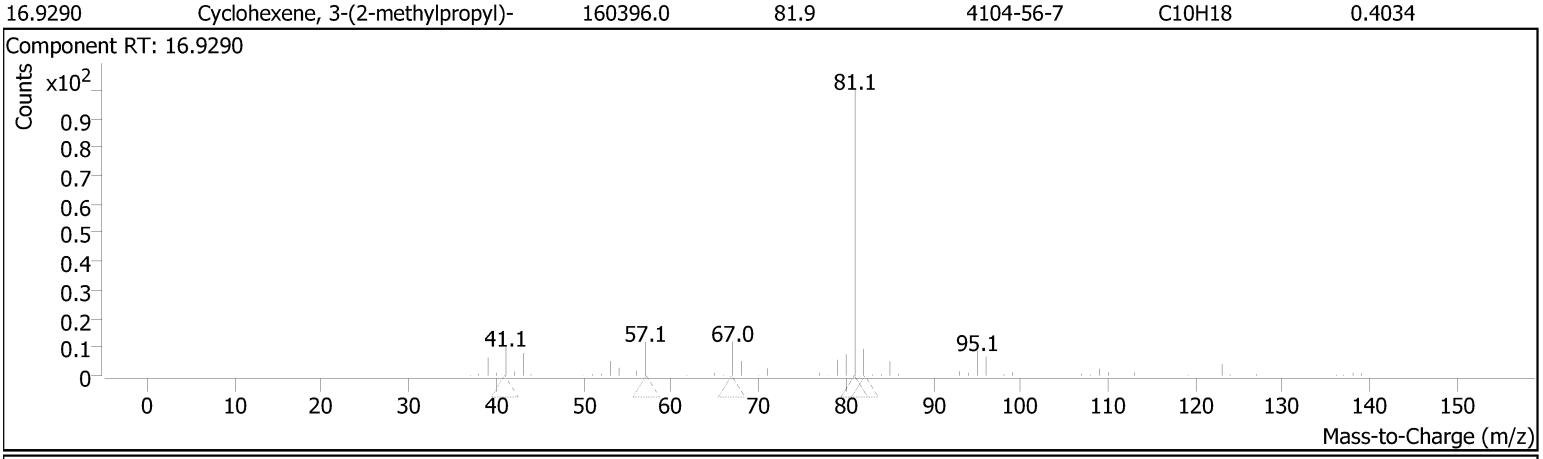


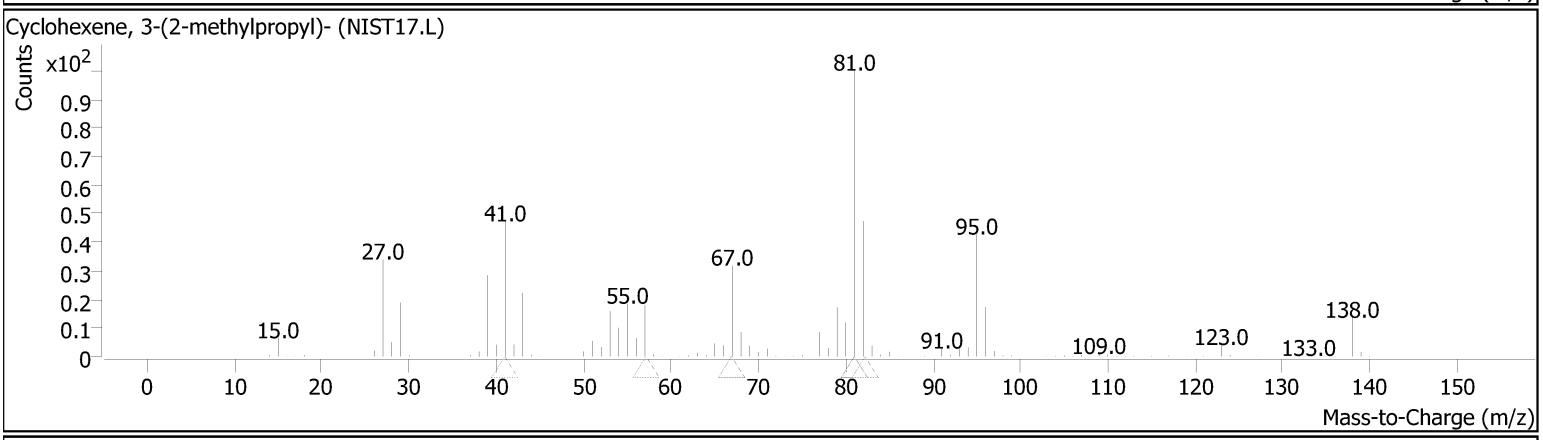


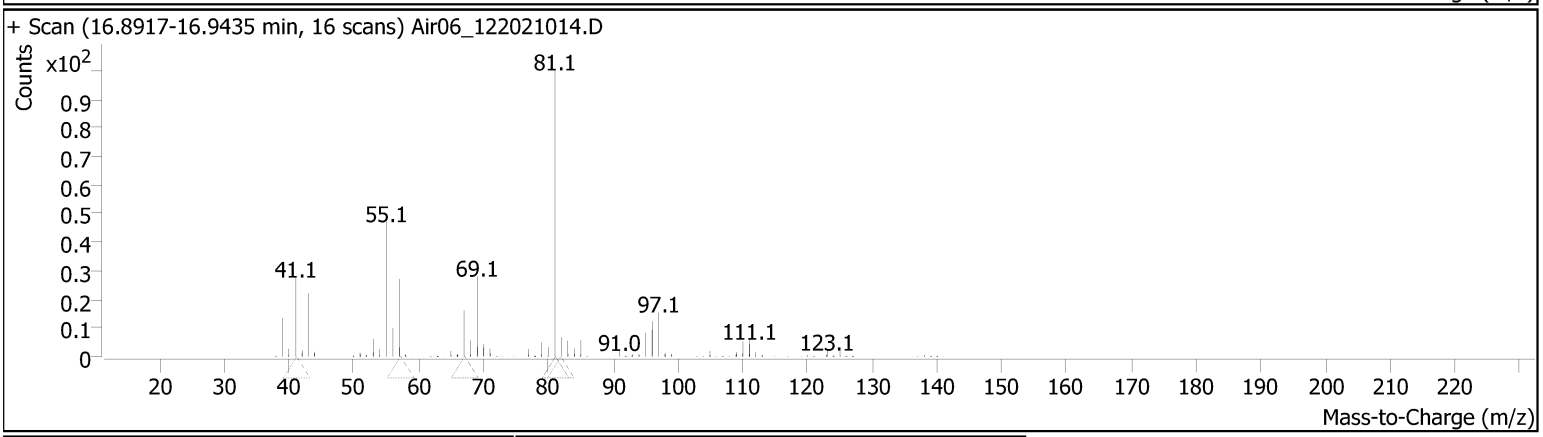


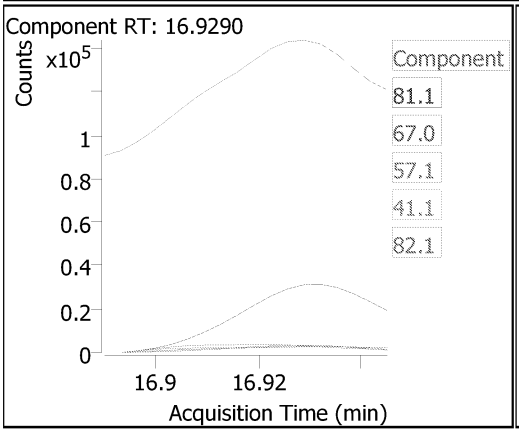


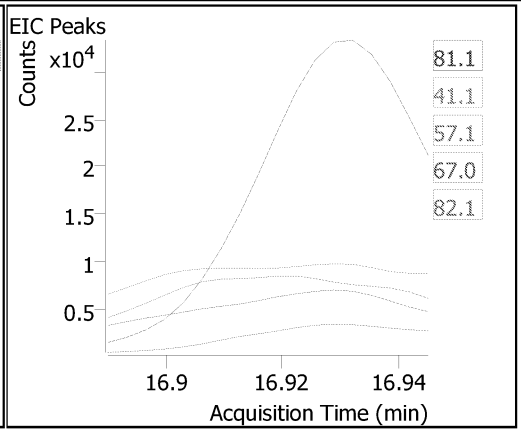
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.9290	Cyclohexene, 3-(2-methylpropyl)-	160396.0	81.9	4104-56-7	C10H18	0.4034

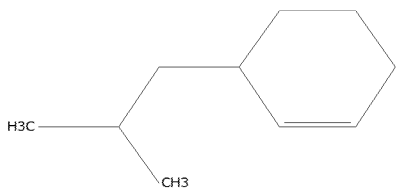




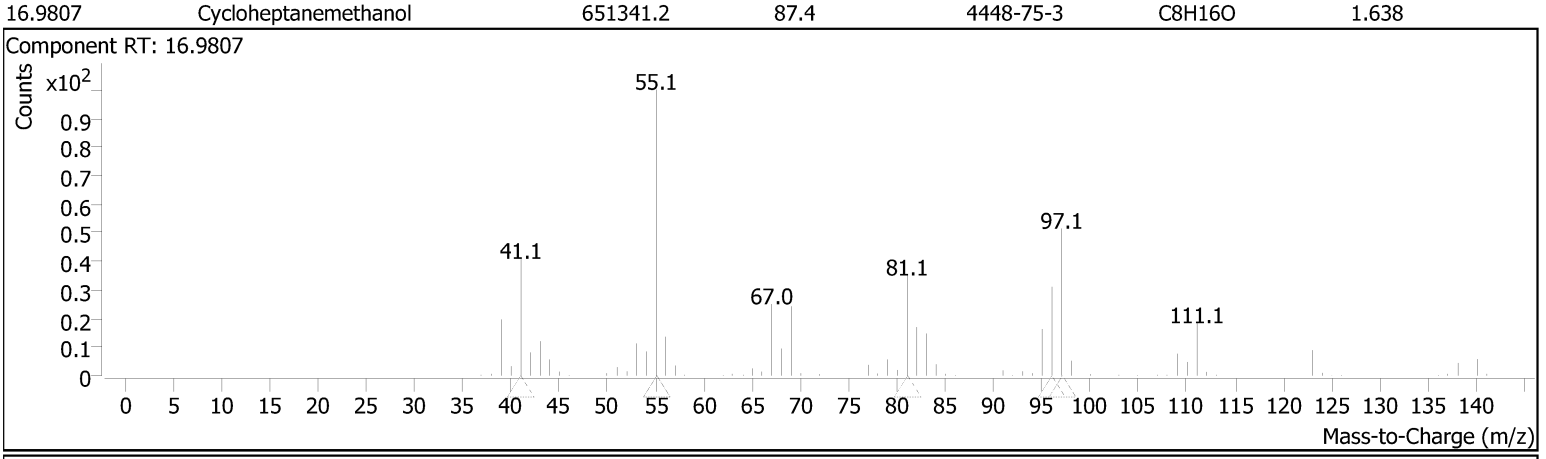


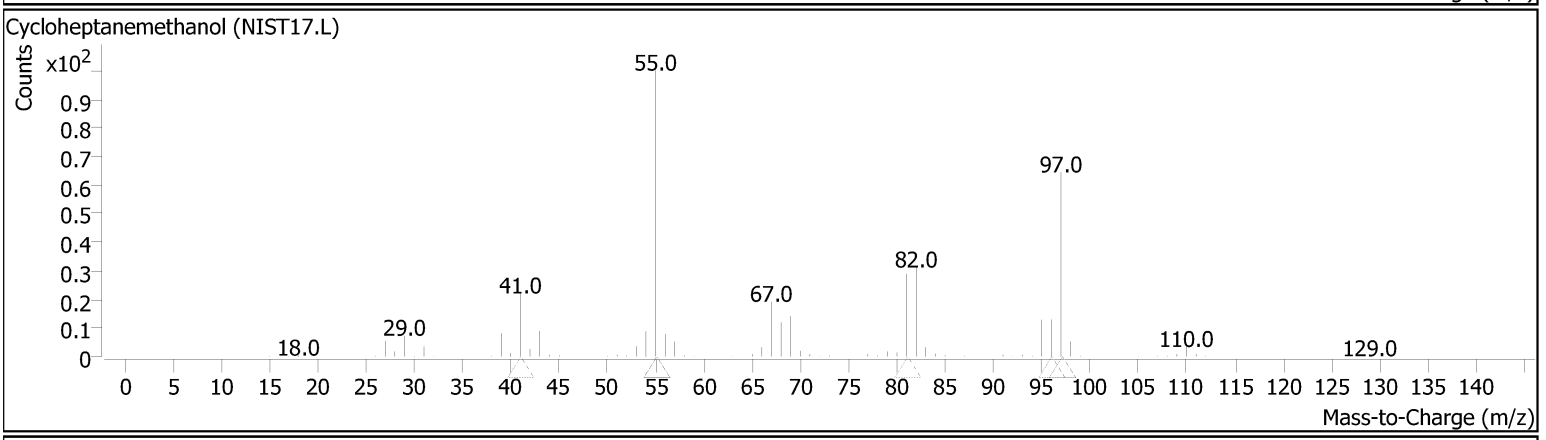


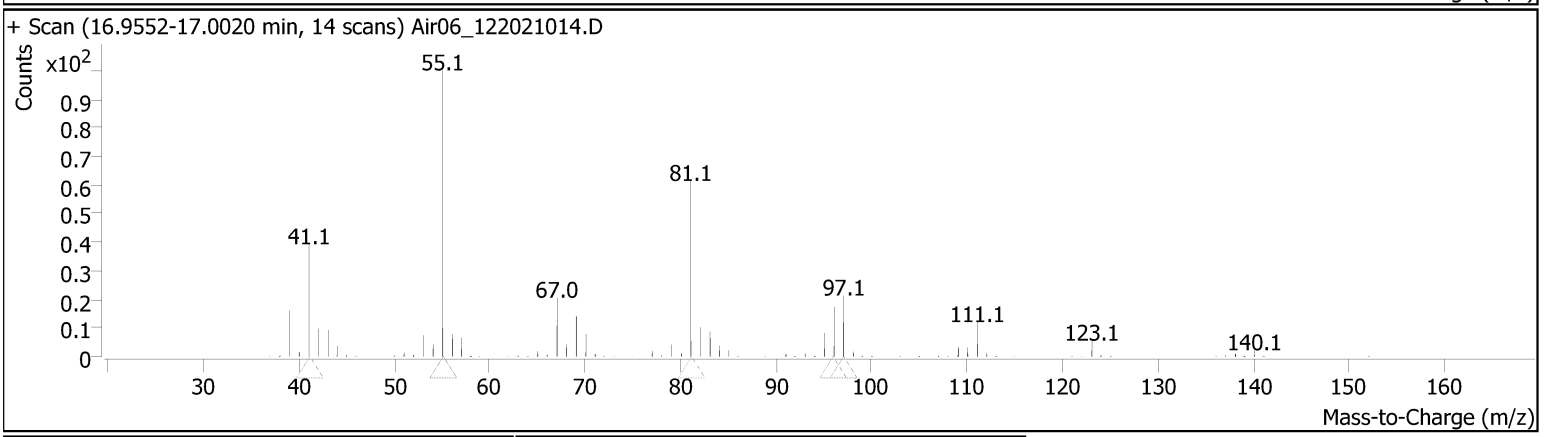


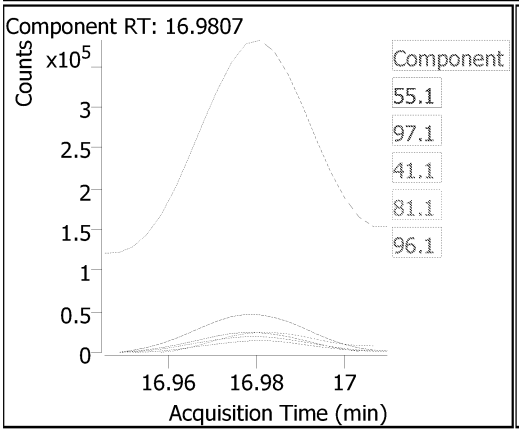


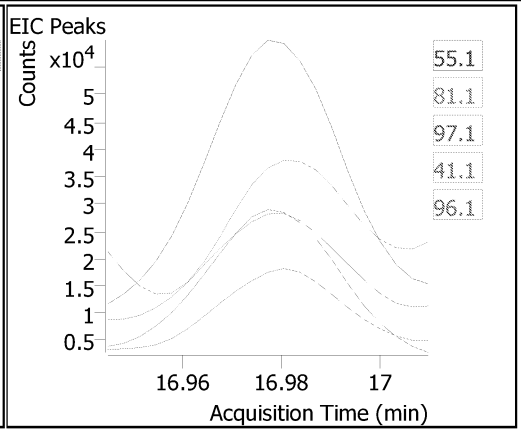
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.9807	Cycloheptanemethanol	651341.2	87.4	4448-75-3	C8H16O	1.638

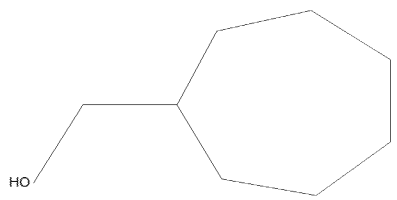




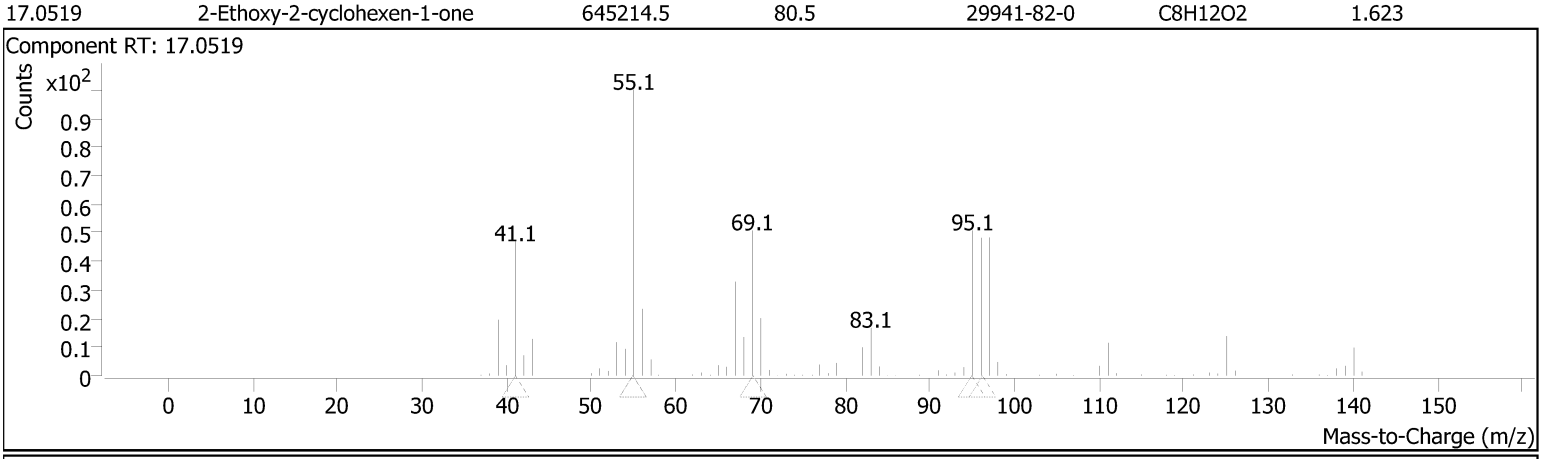


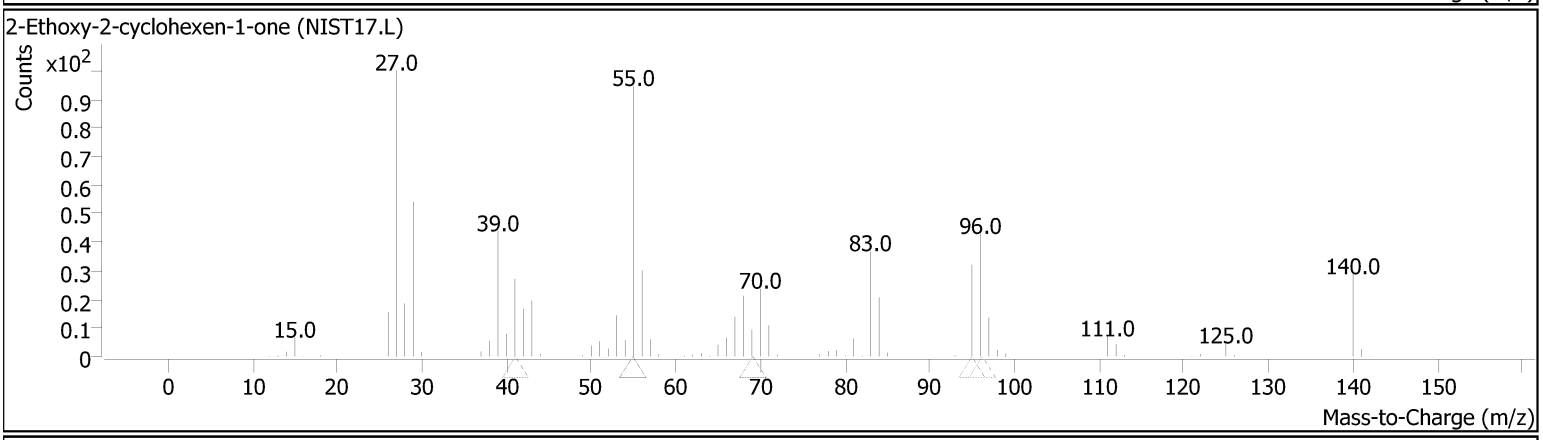


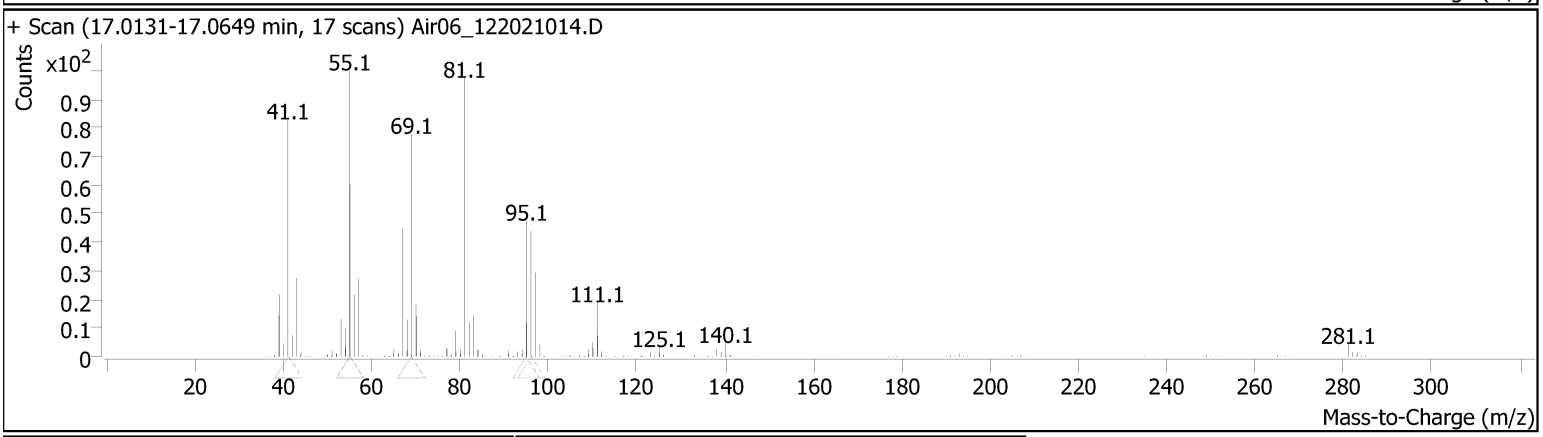


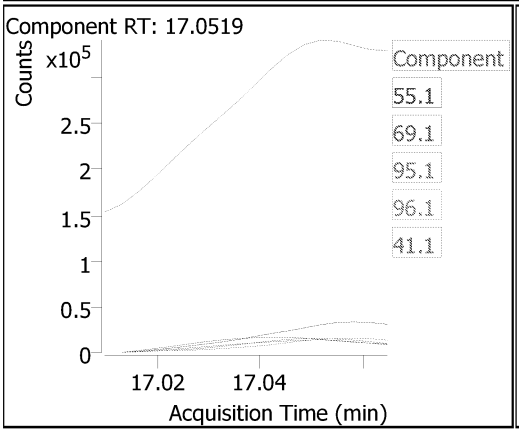


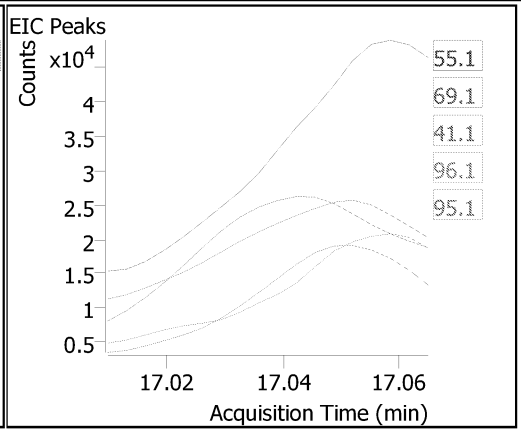
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.0519	2-Ethoxy-2-cyclohexen-1-one	645214.5	80.5	29941-82-0	C8H12O2	1.623

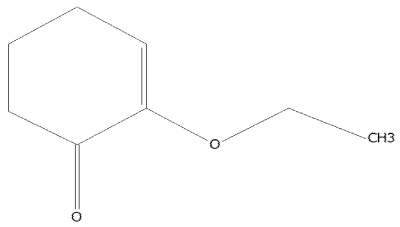




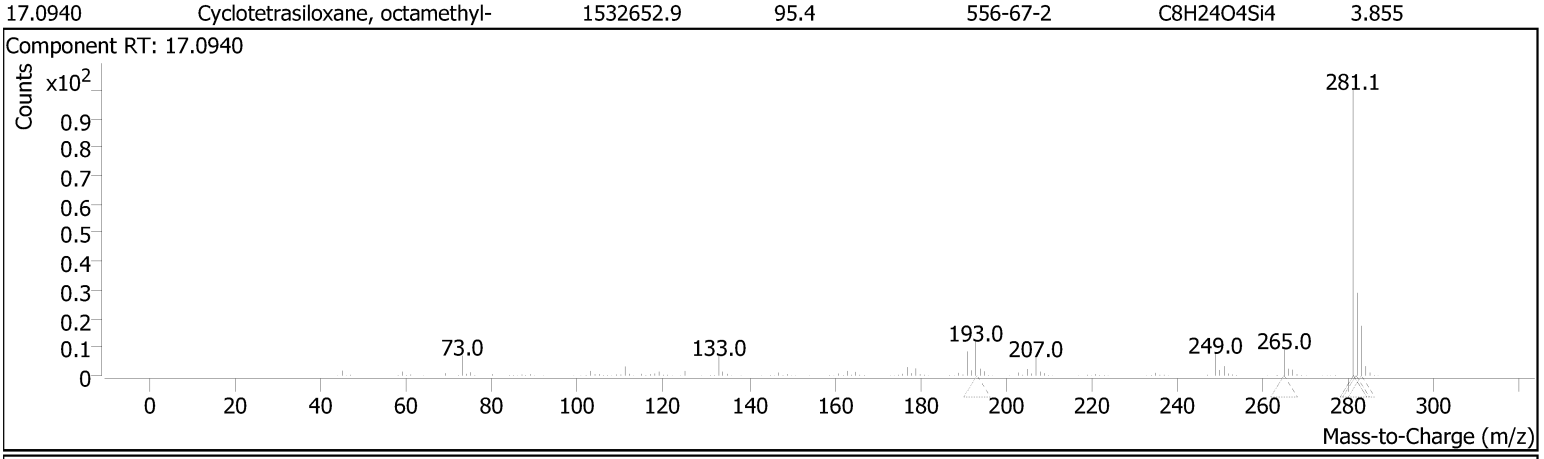


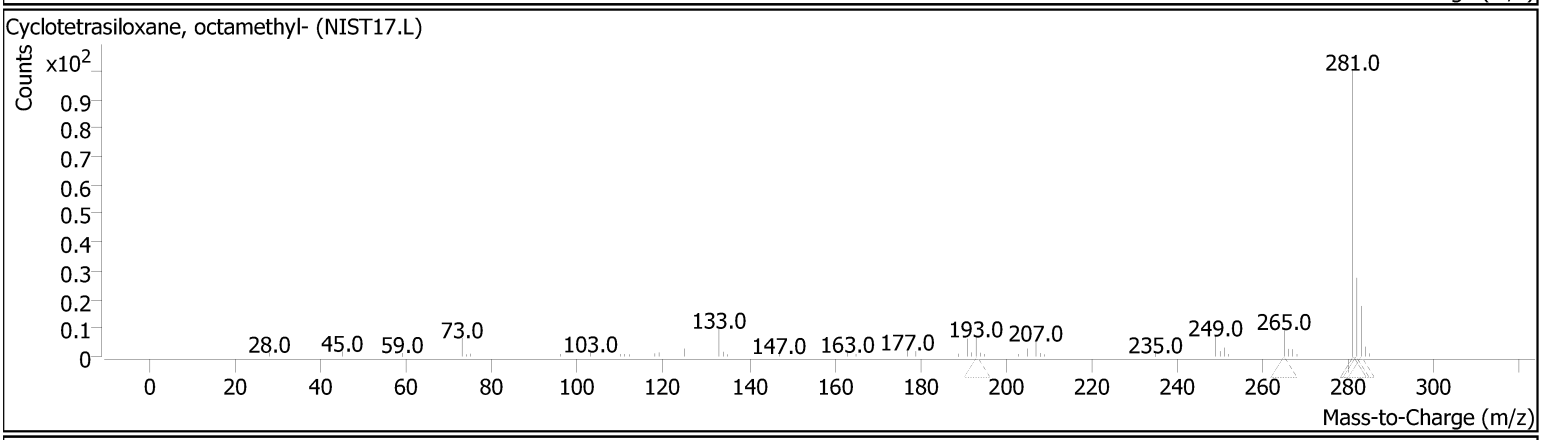


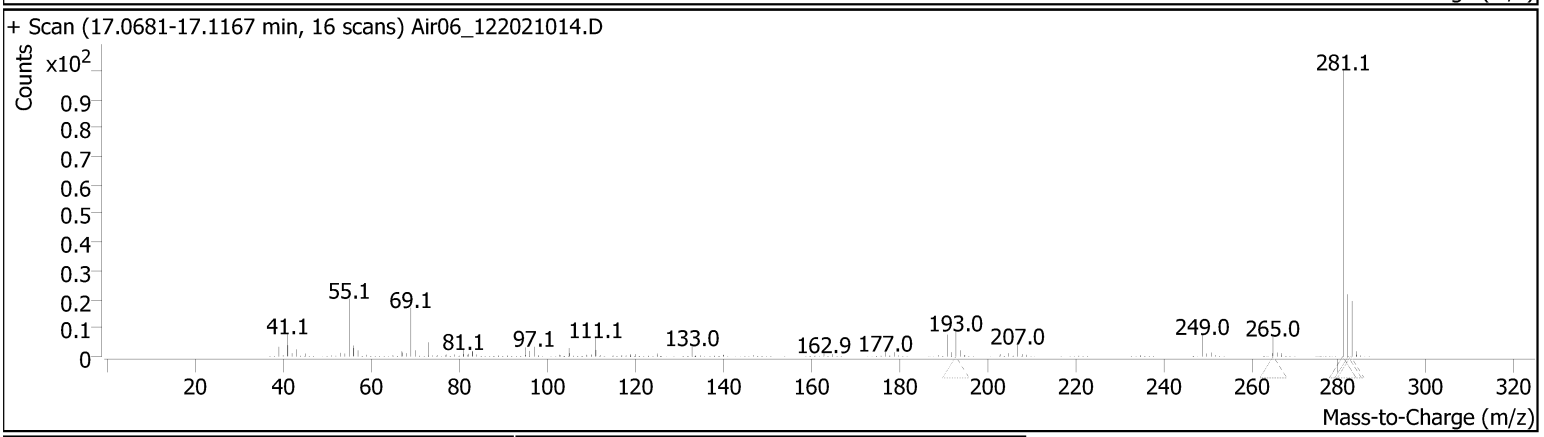


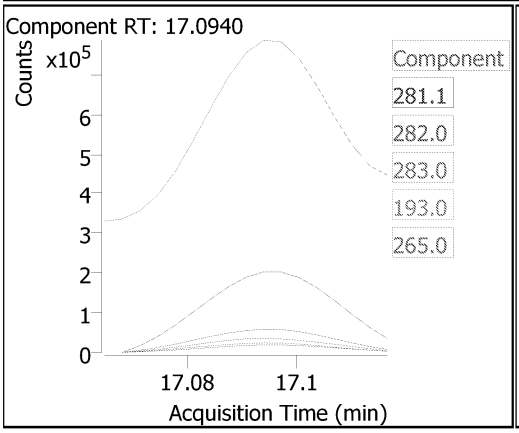


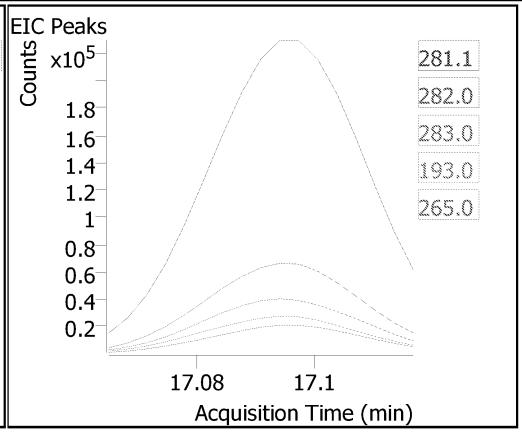
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.0940	Cyclotetrasiloxane, octamethyl-	1532652.9	95.4	556-67-2	C8H24O4Si4	3.855

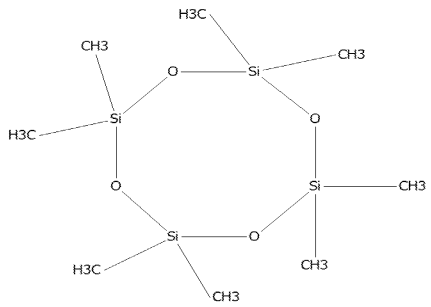




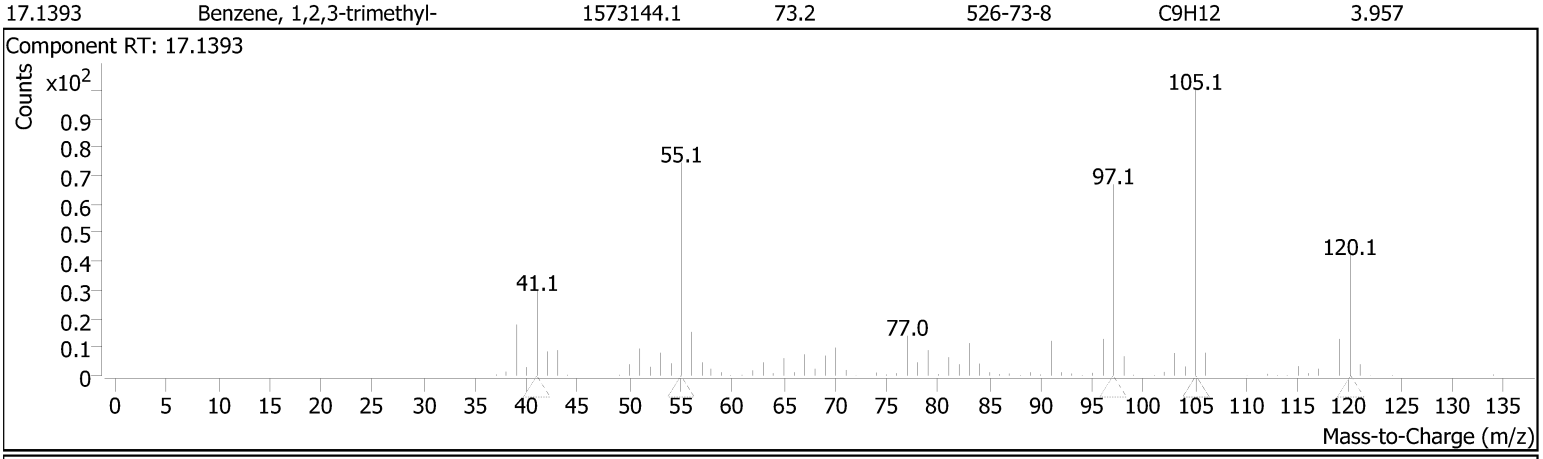


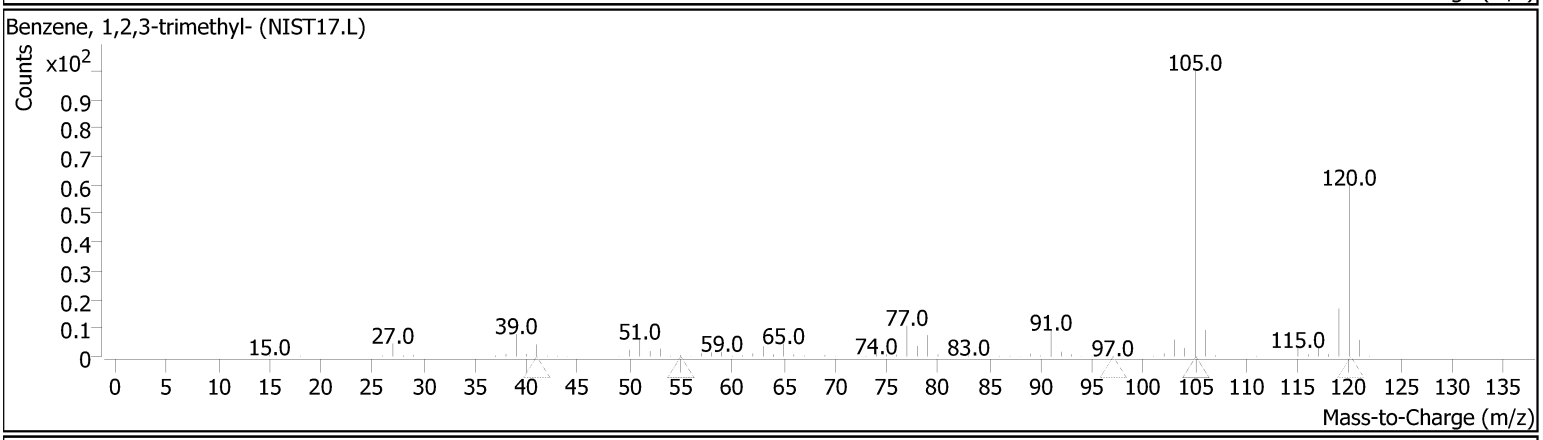


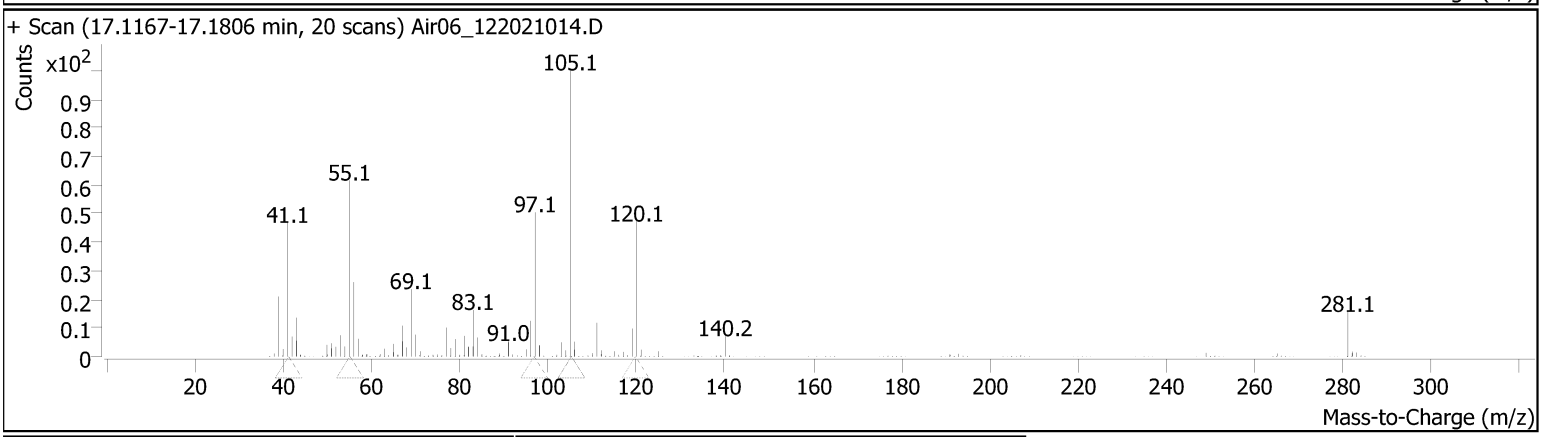


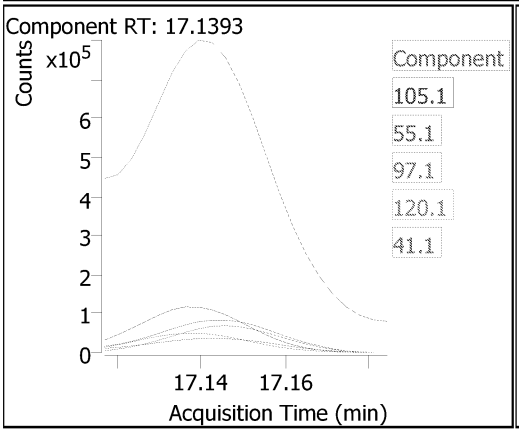


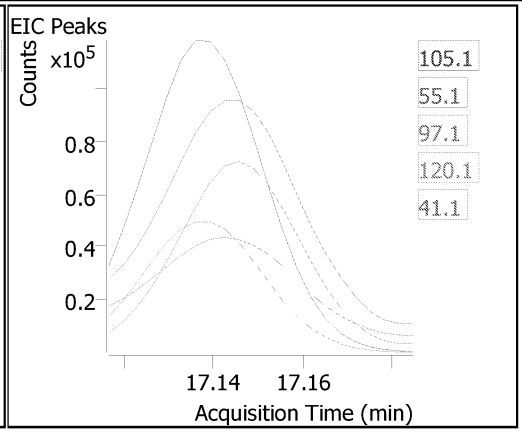
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.1393	Benzene, 1,2,3-trimethyl-	1573144.1	73.2	526-73-8	C9H12	3.957

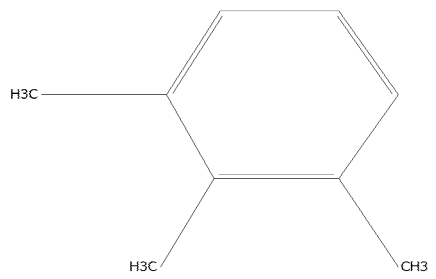




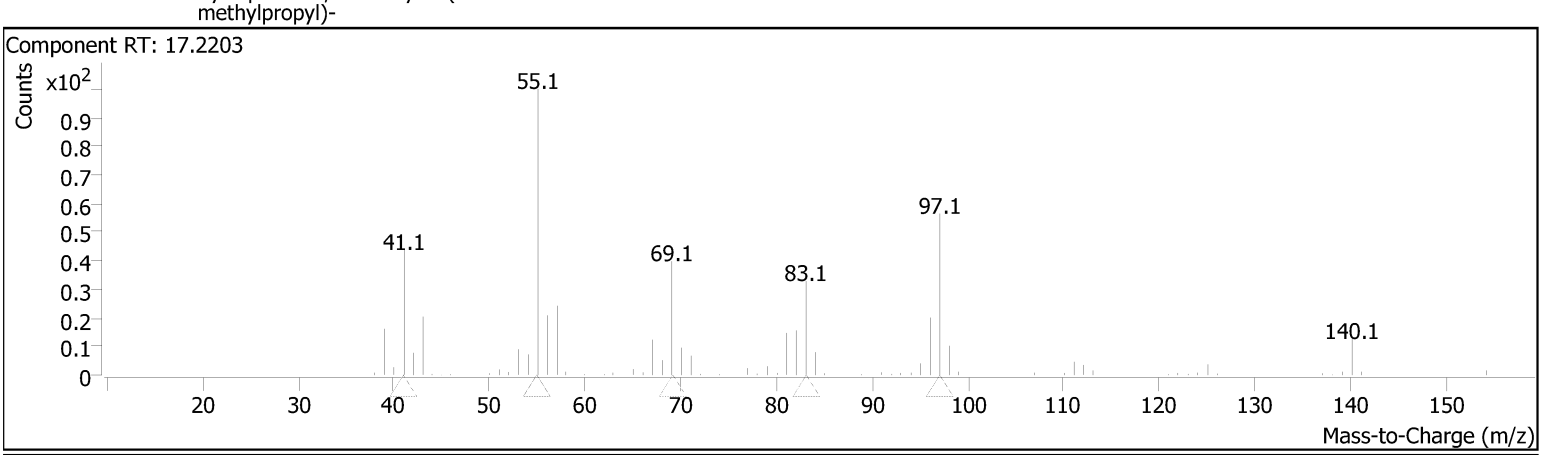


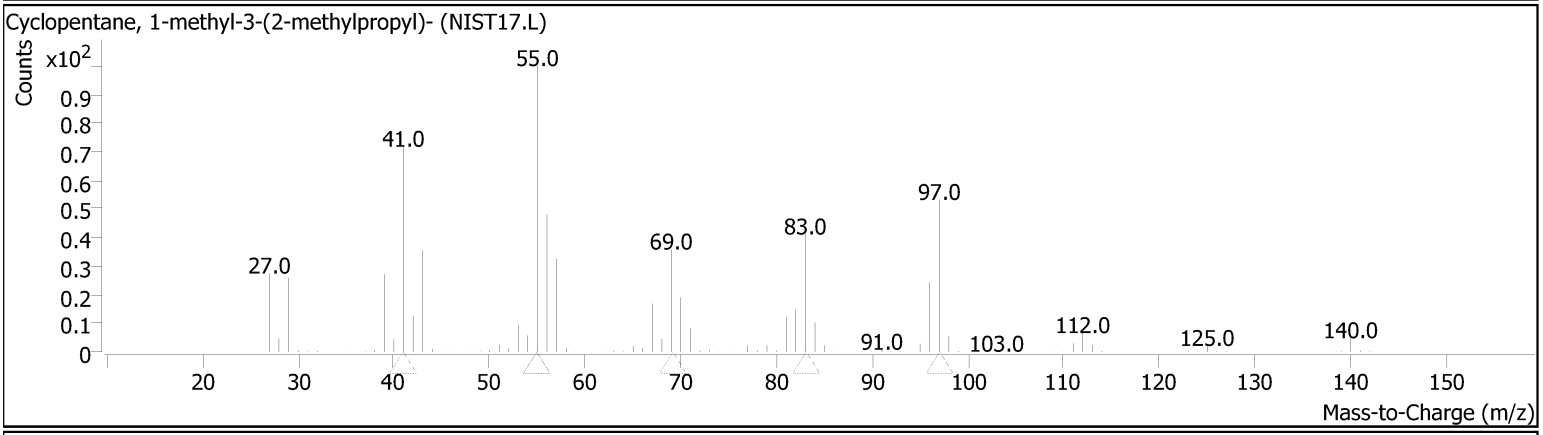


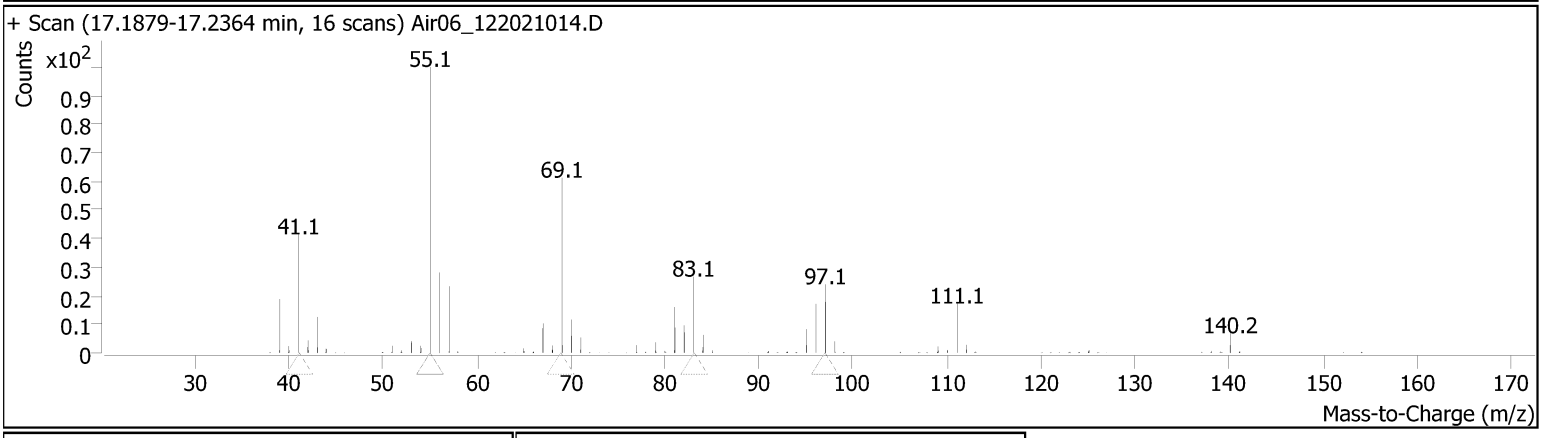


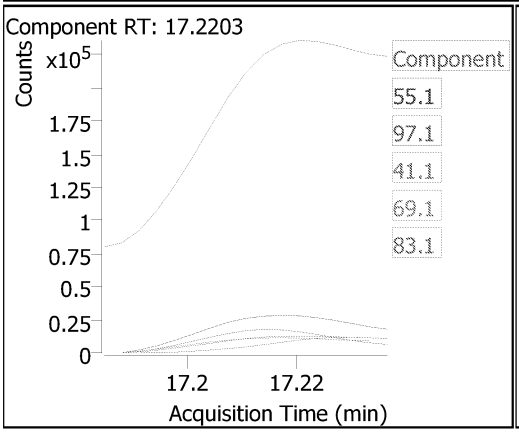


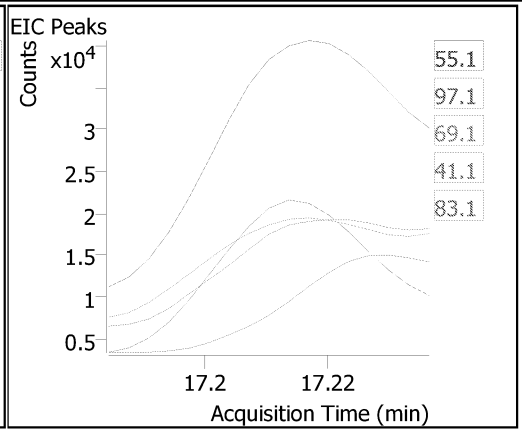
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.2203	Cyclopentane, 1-methyl-3-(2-methylpropyl)-	331559.9	95.3	29053-04-1	C10H20	0.8339

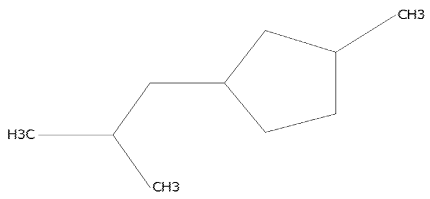




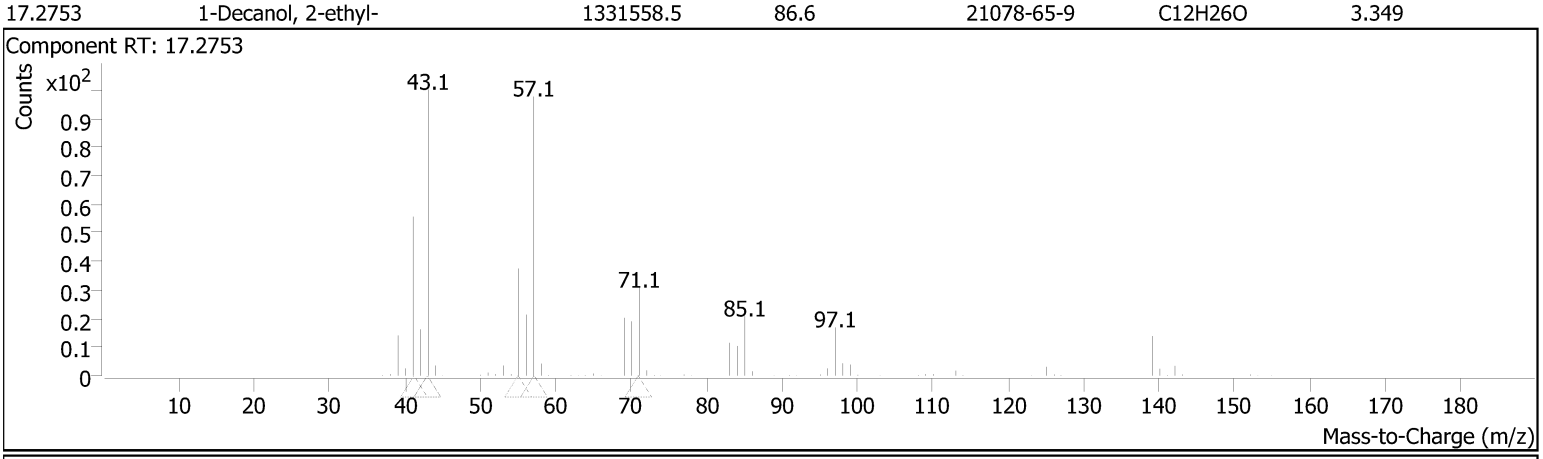


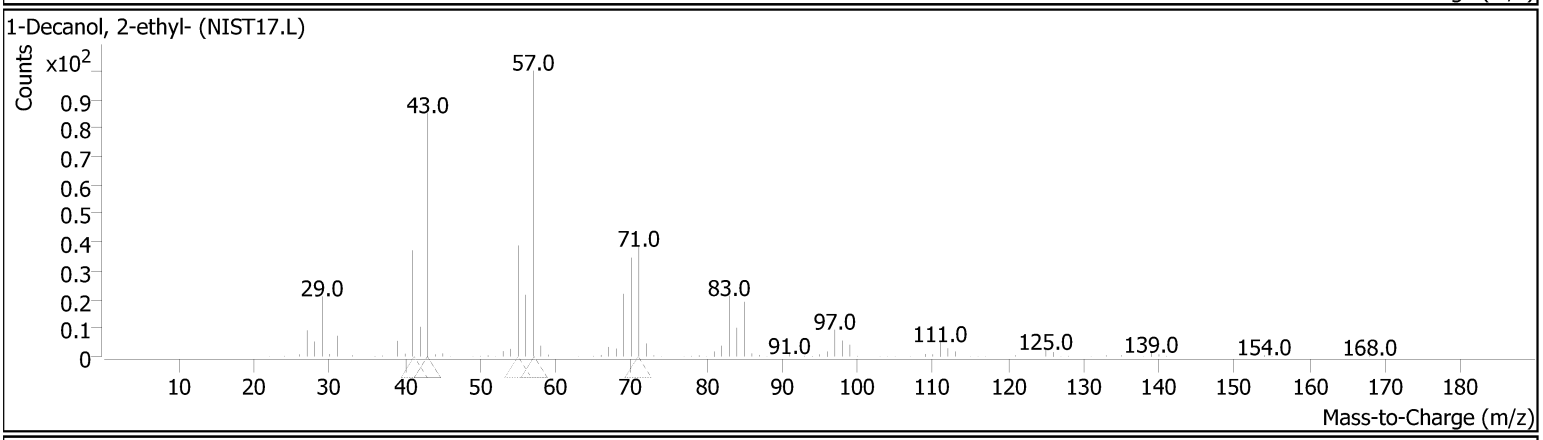


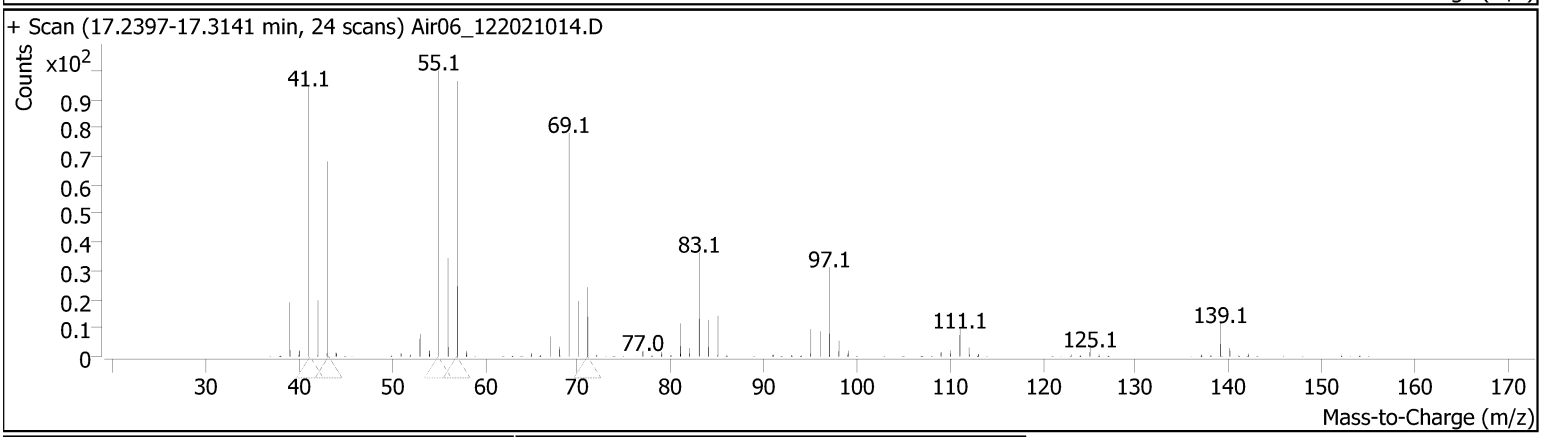


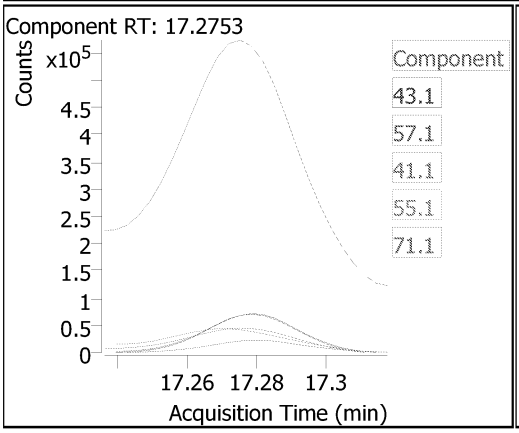


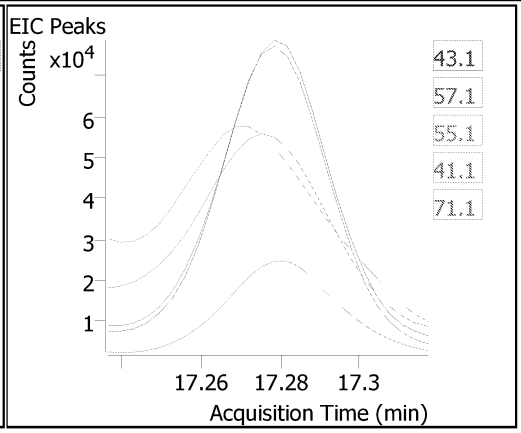
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.2753	1-Decanol, 2-ethyl-	1331558.5	86.6	21078-65-9	C12H26O	3.349

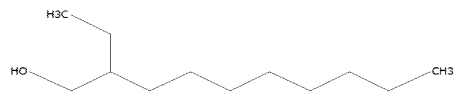




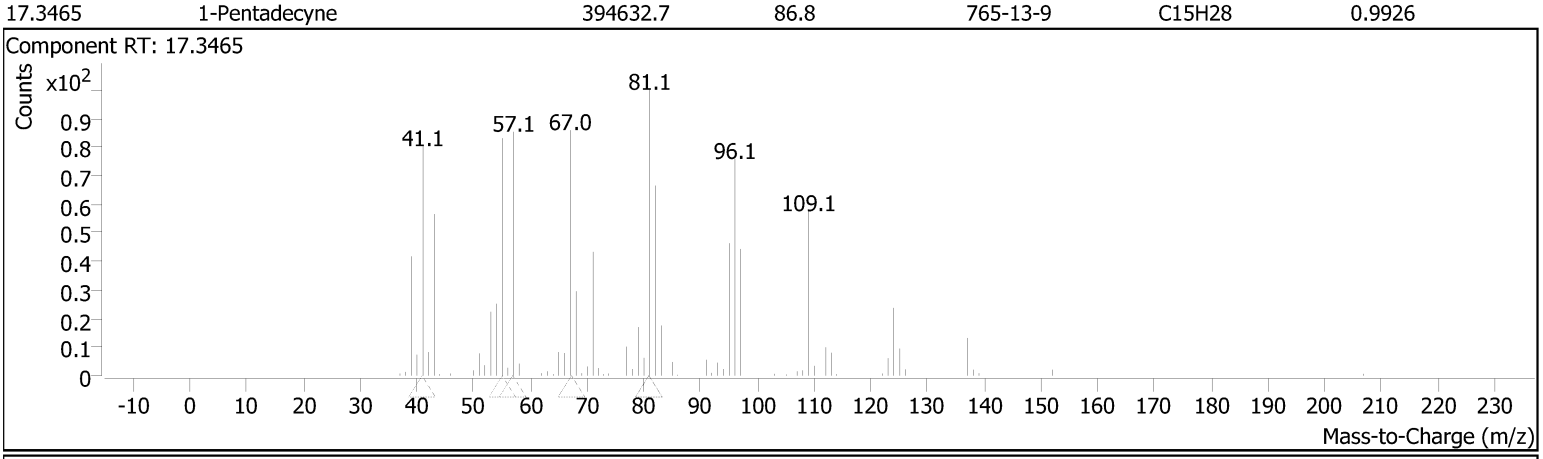


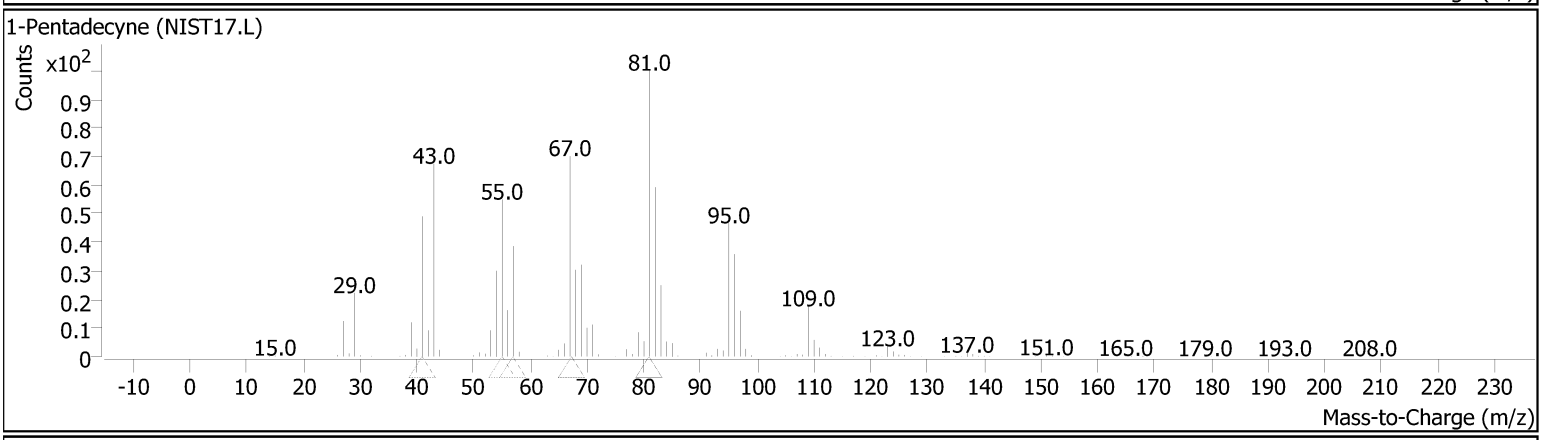


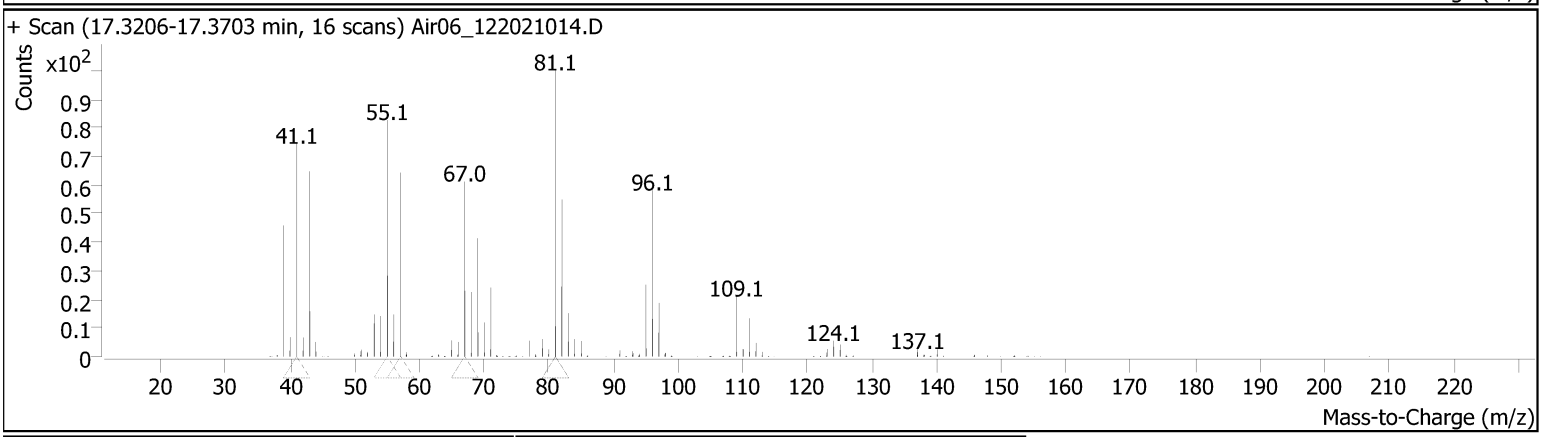


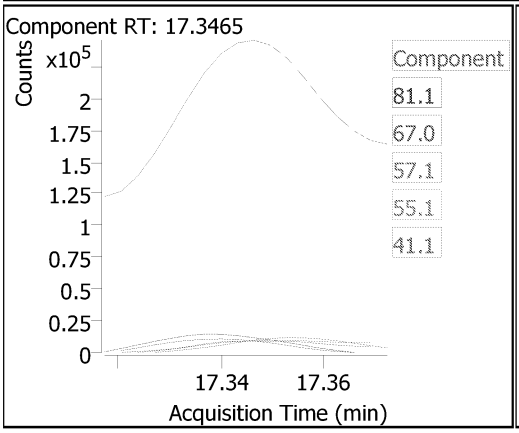


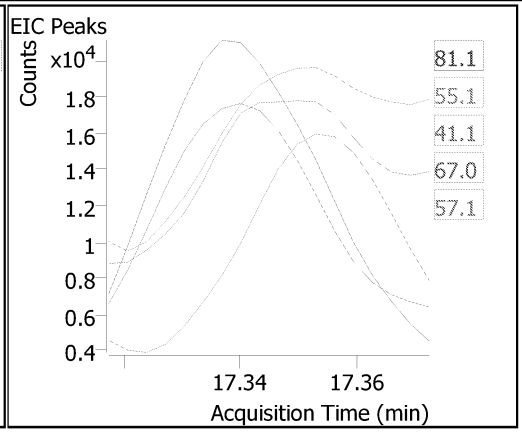
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.3465	1-Pentadecyne	394632.7	86.8	765-13-9	C15H28	0.9926

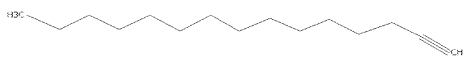




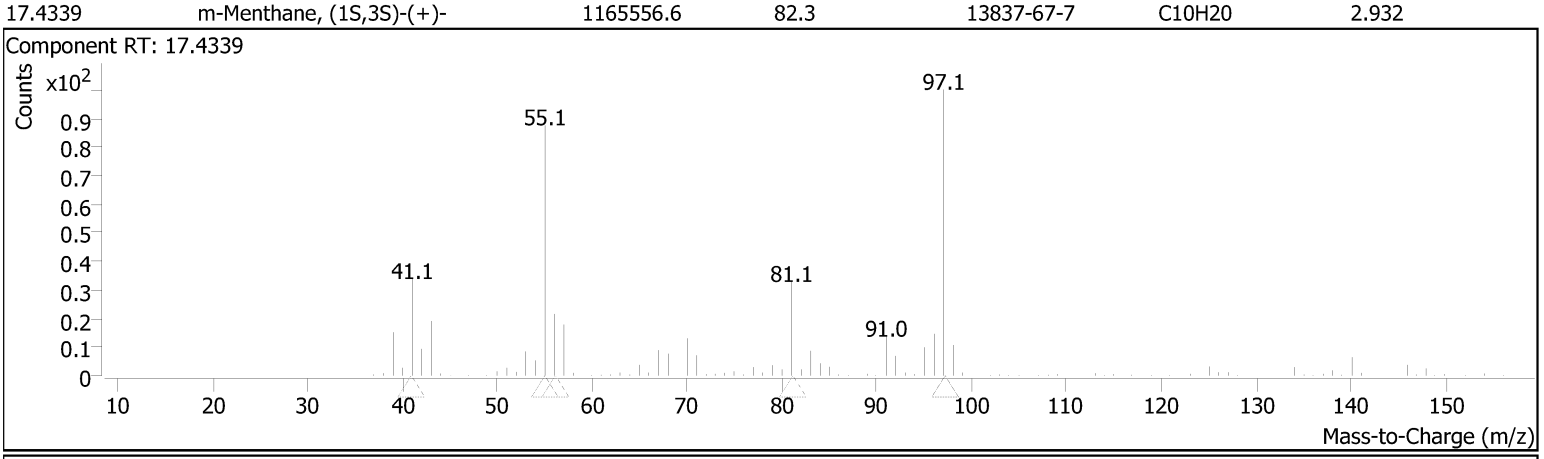


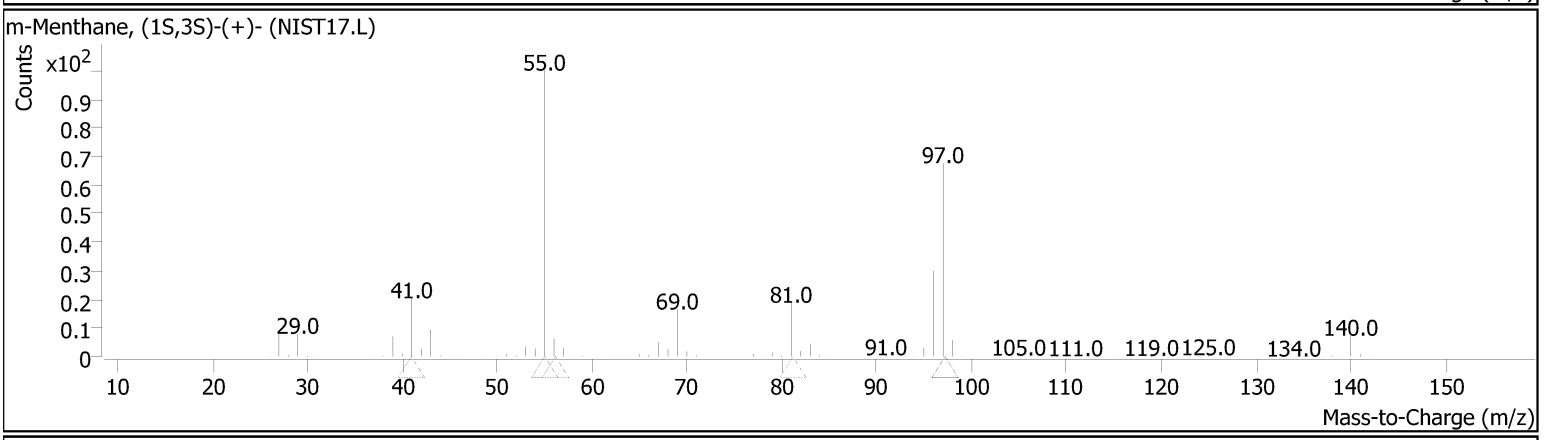


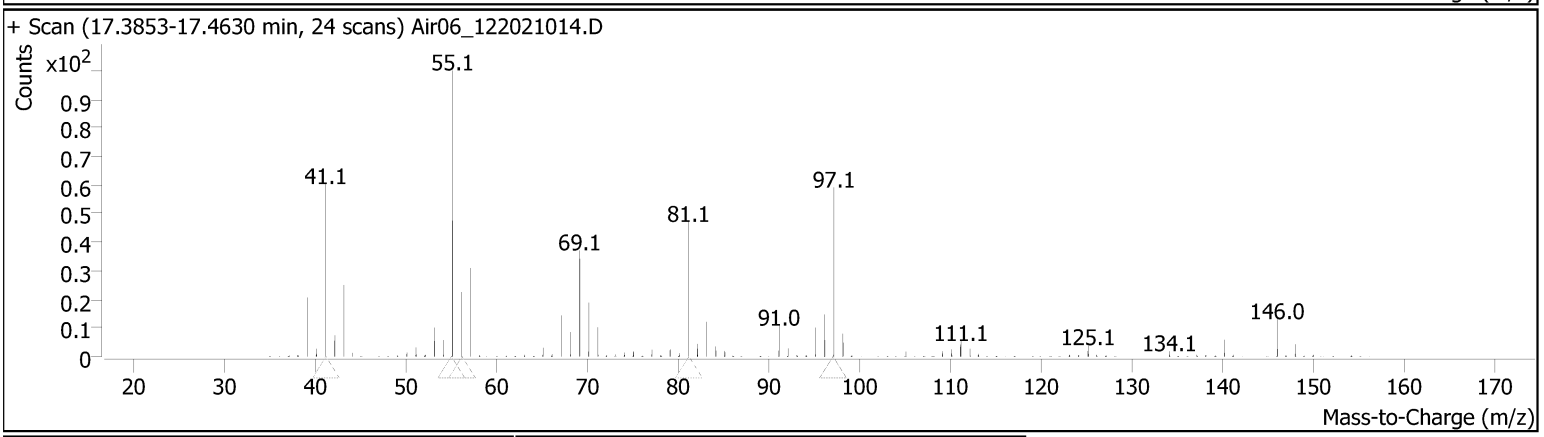


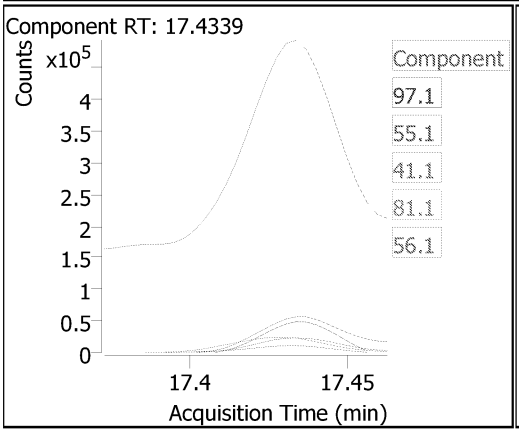


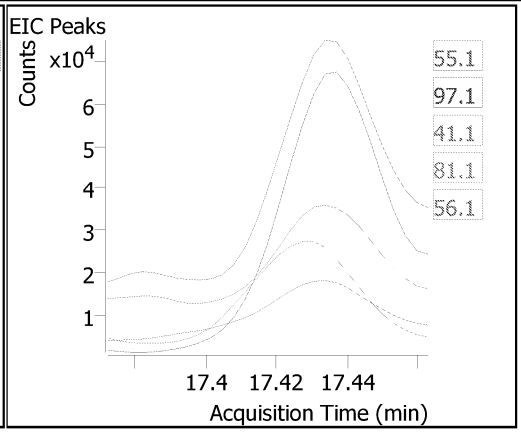
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.4339	m-Menthane, (1S,3S)-(+)-	1165556.6	82.3	13837-67-7	C10H20	2.932

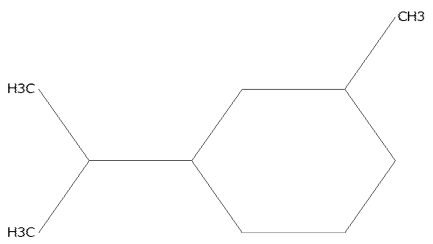




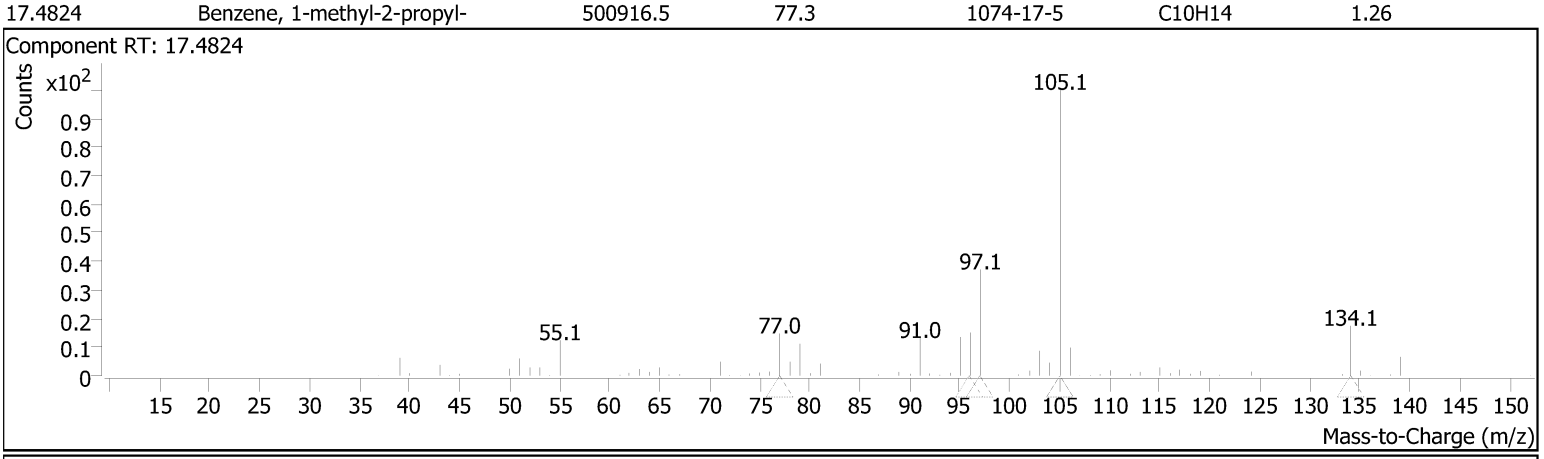


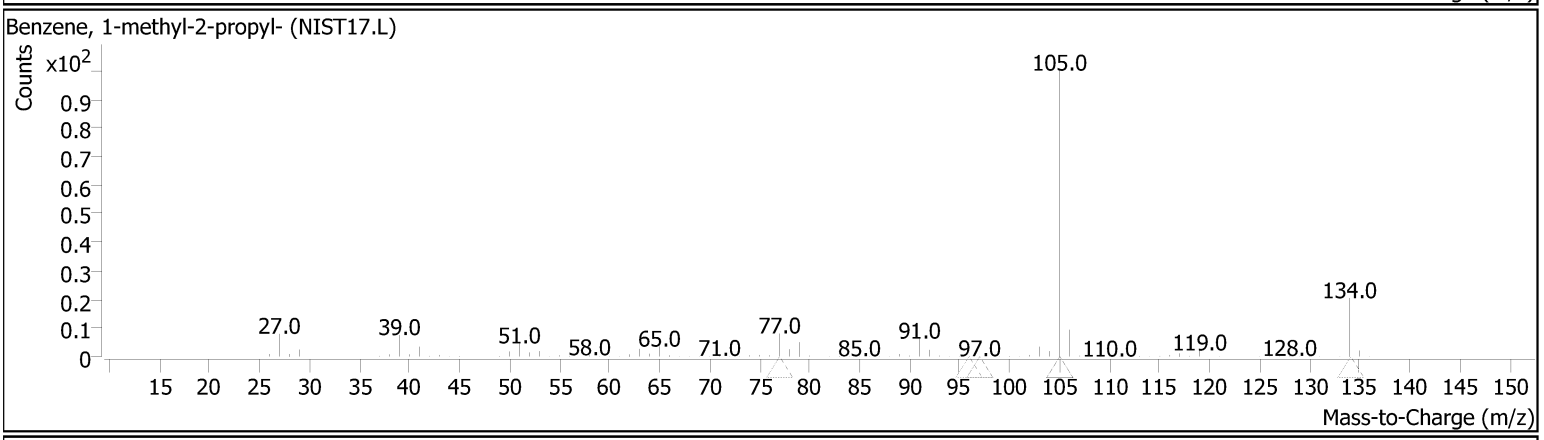


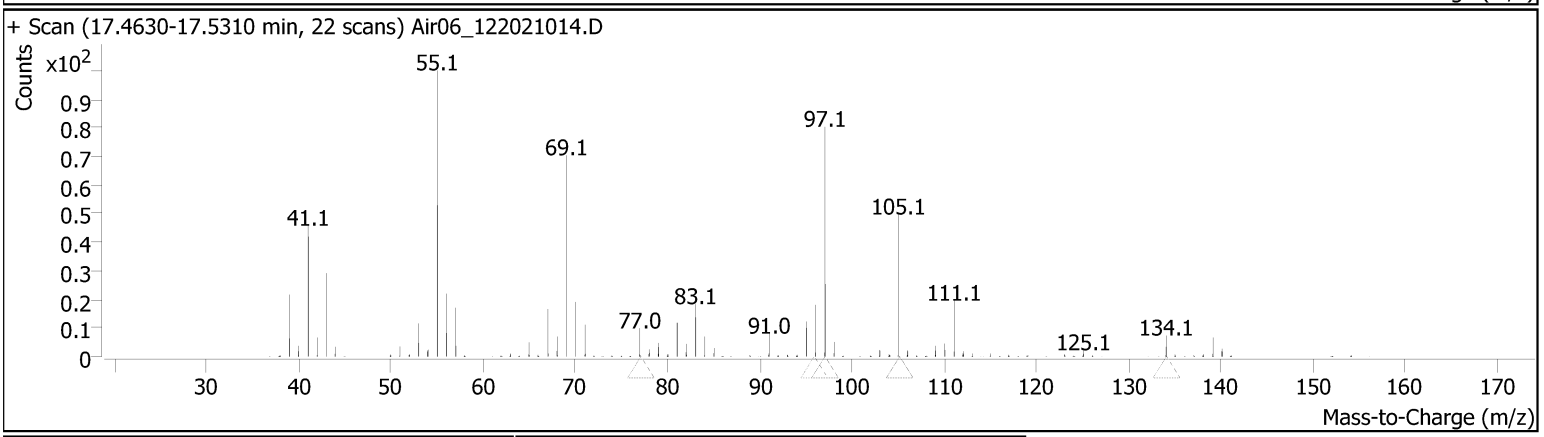


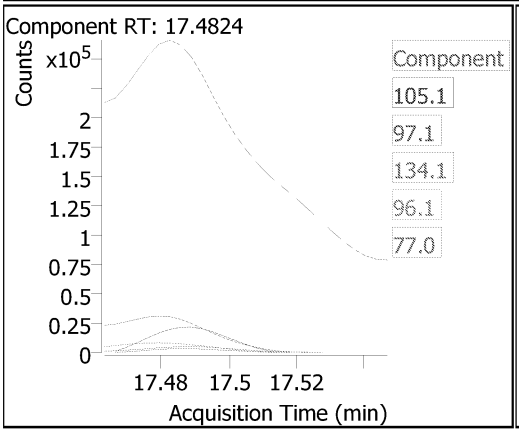


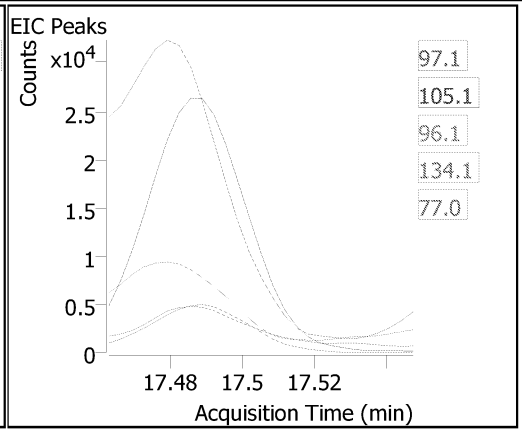
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.4824	Benzene, 1-methyl-2-propyl-	500916.5	77.3	1074-17-5	C10H14	1.26

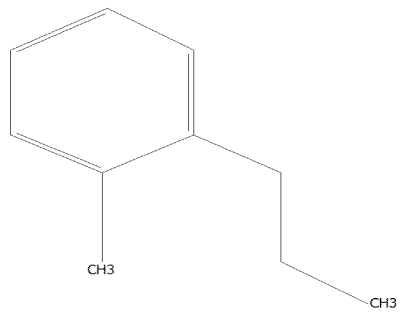




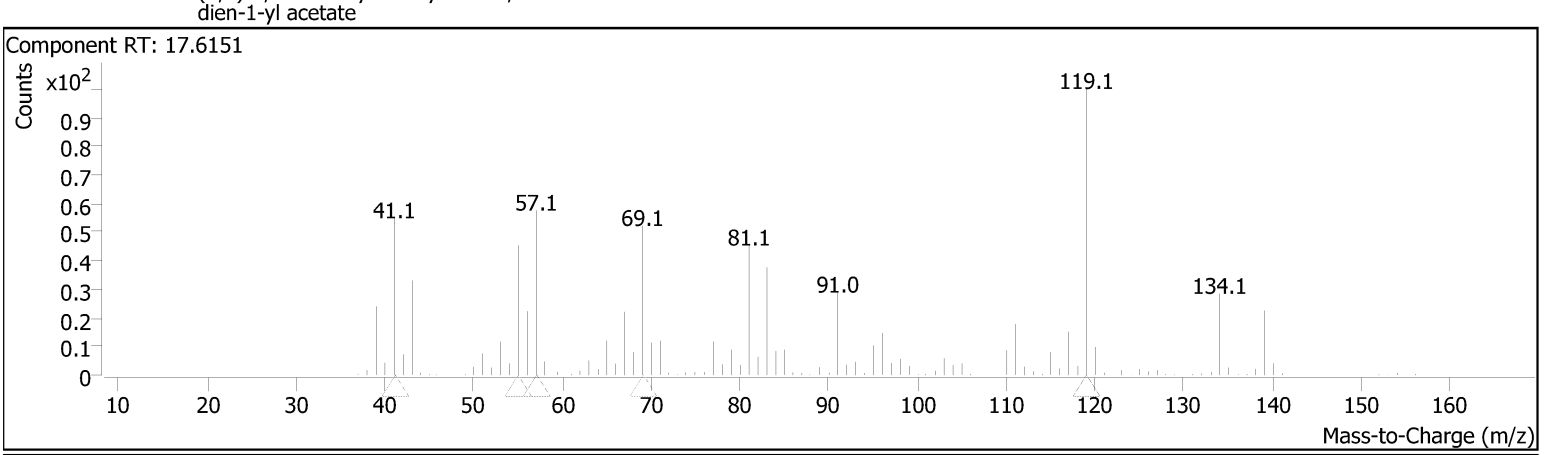


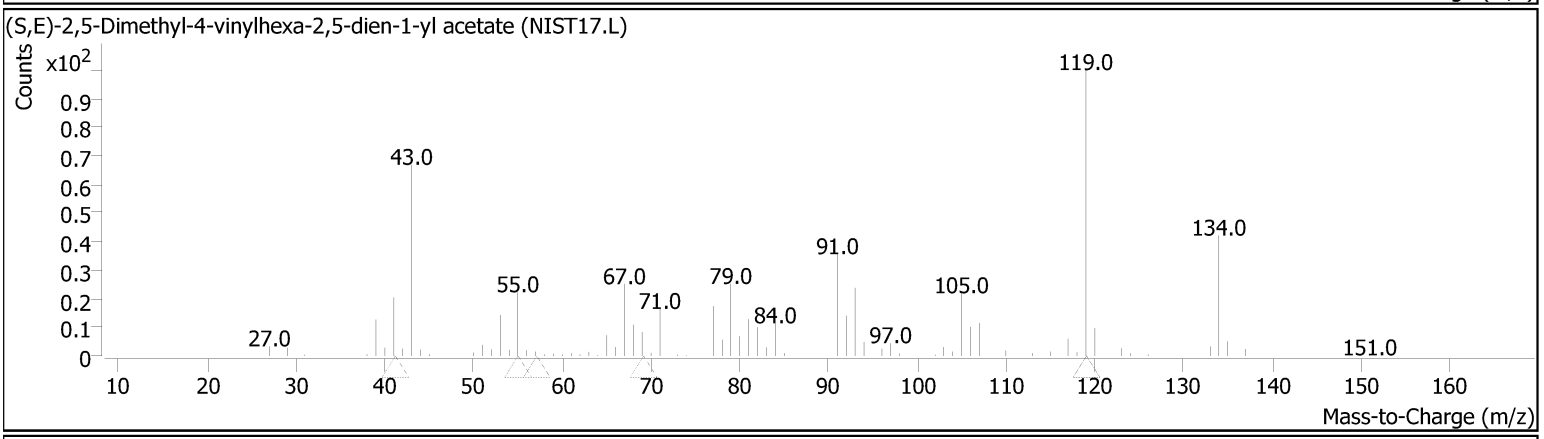


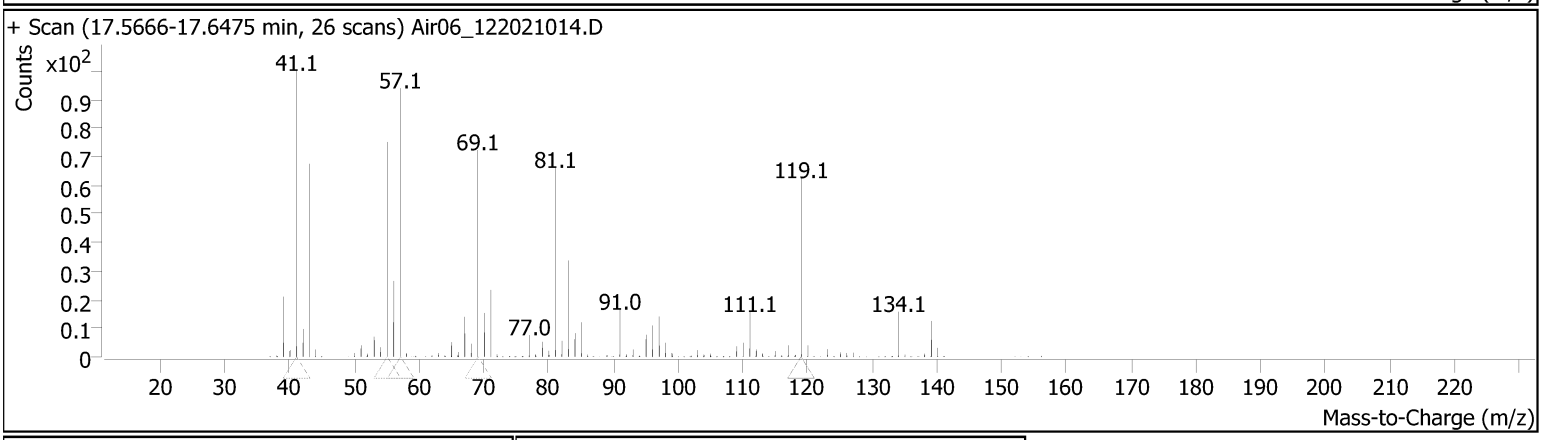


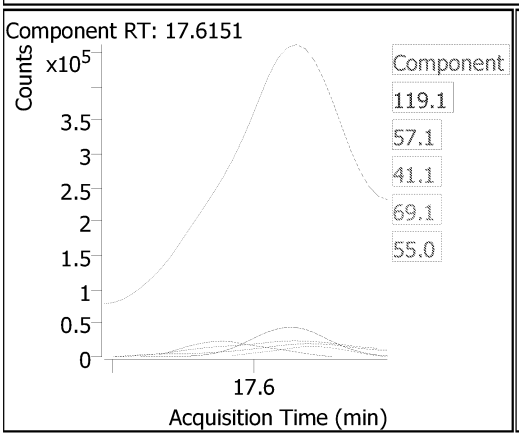


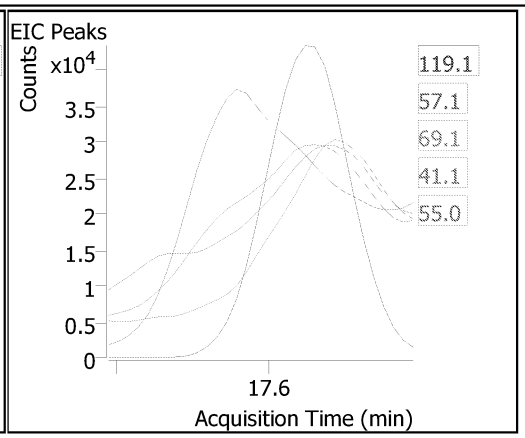
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.6151	(S,E)-2,5-Dimethyl-4-vinylhexa-2,5-dien-1-yl acetate	1181008.6	73.6	20384-05-8	C12H18O2	2.97

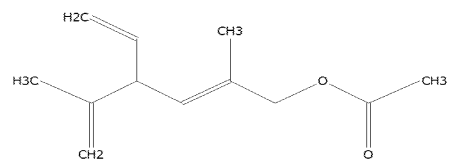




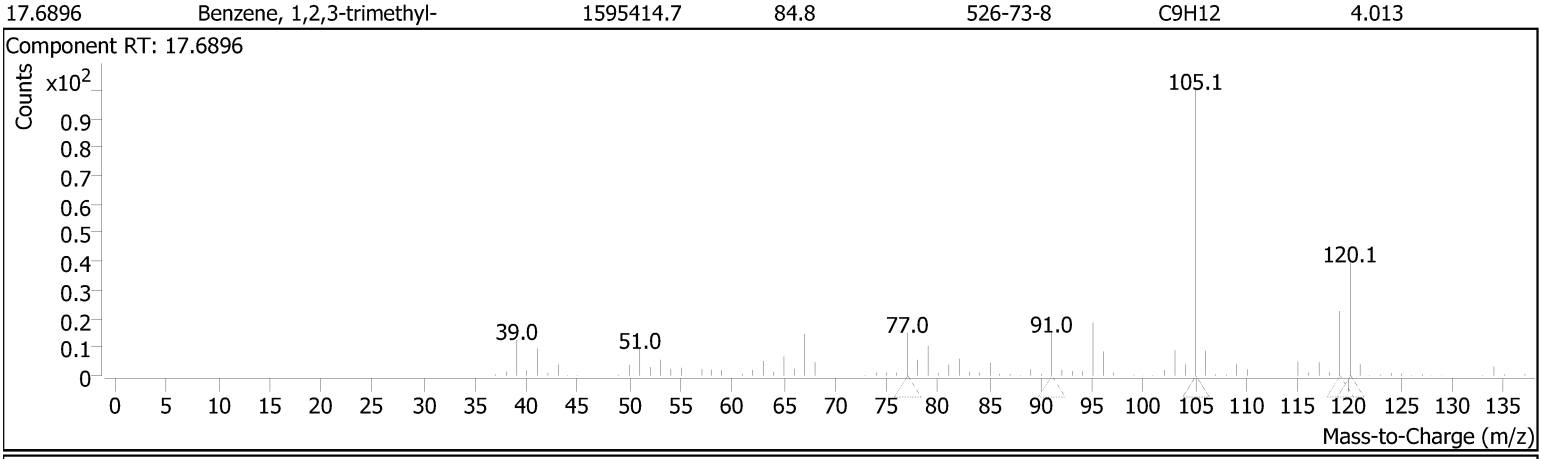


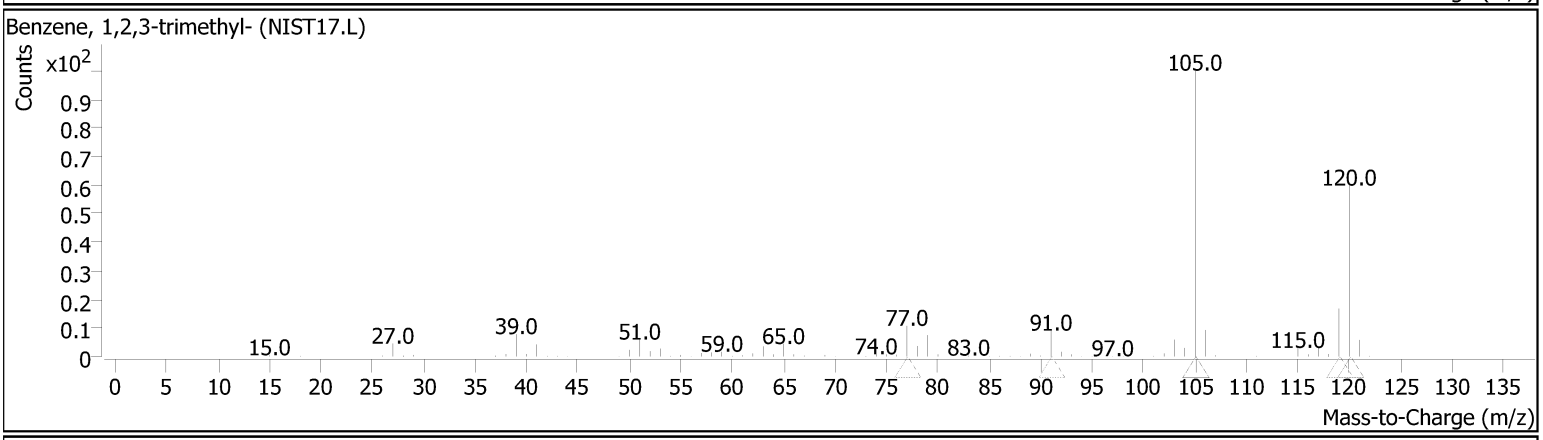


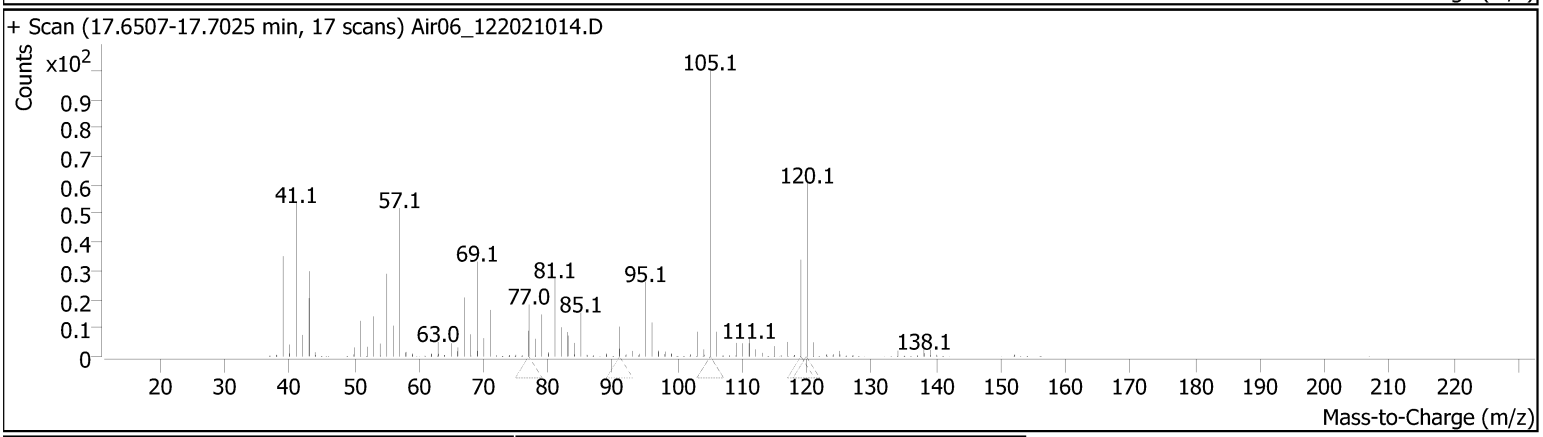


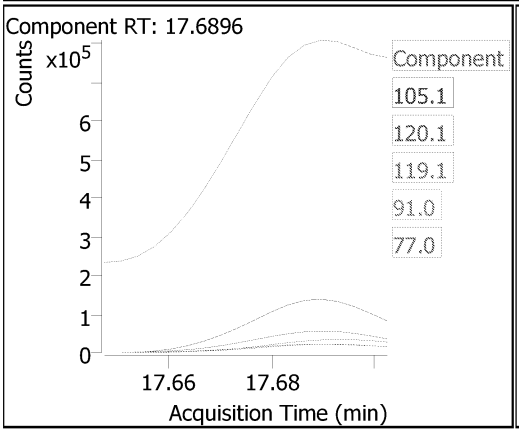


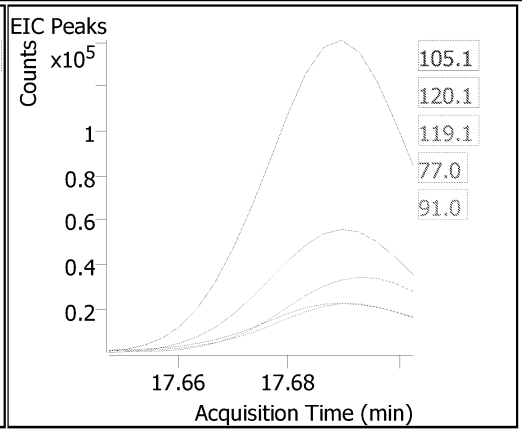
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.6896	Benzene, 1,2,3-trimethyl-	1595414.7	84.8	526-73-8	C9H12	4.013

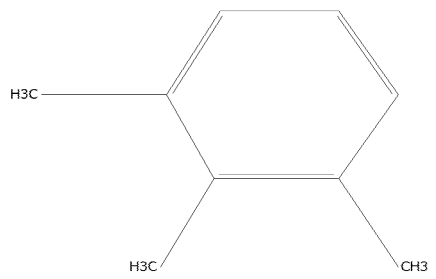




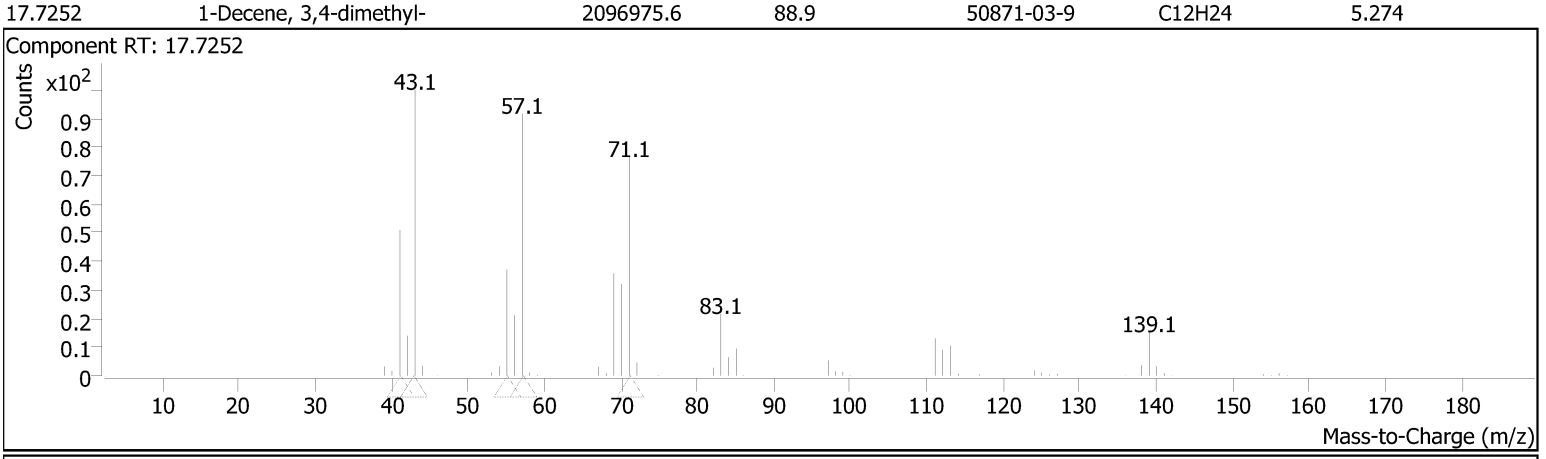


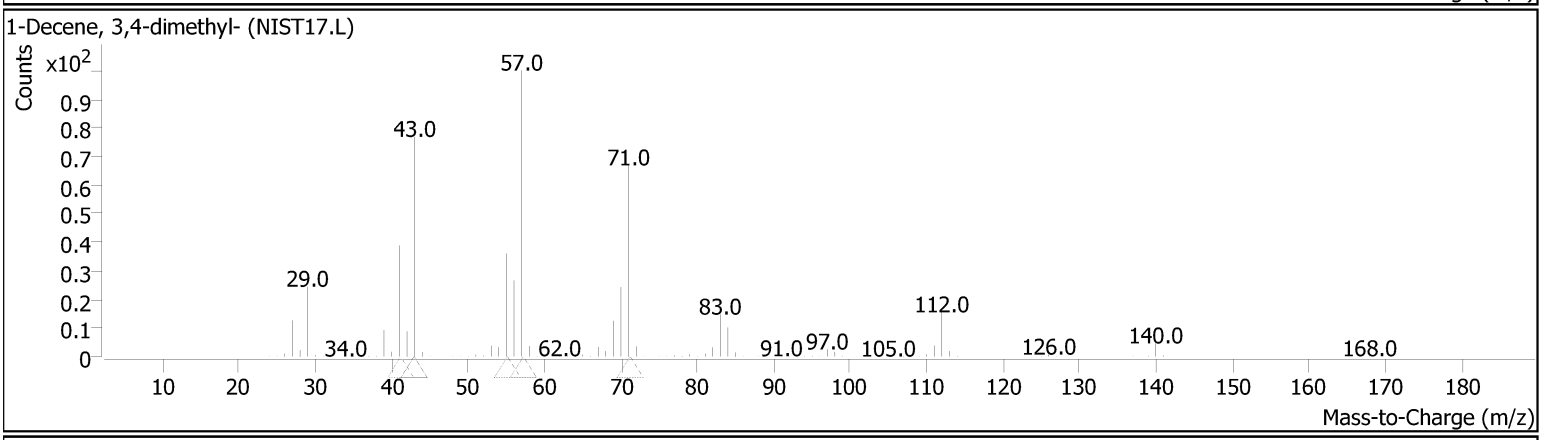


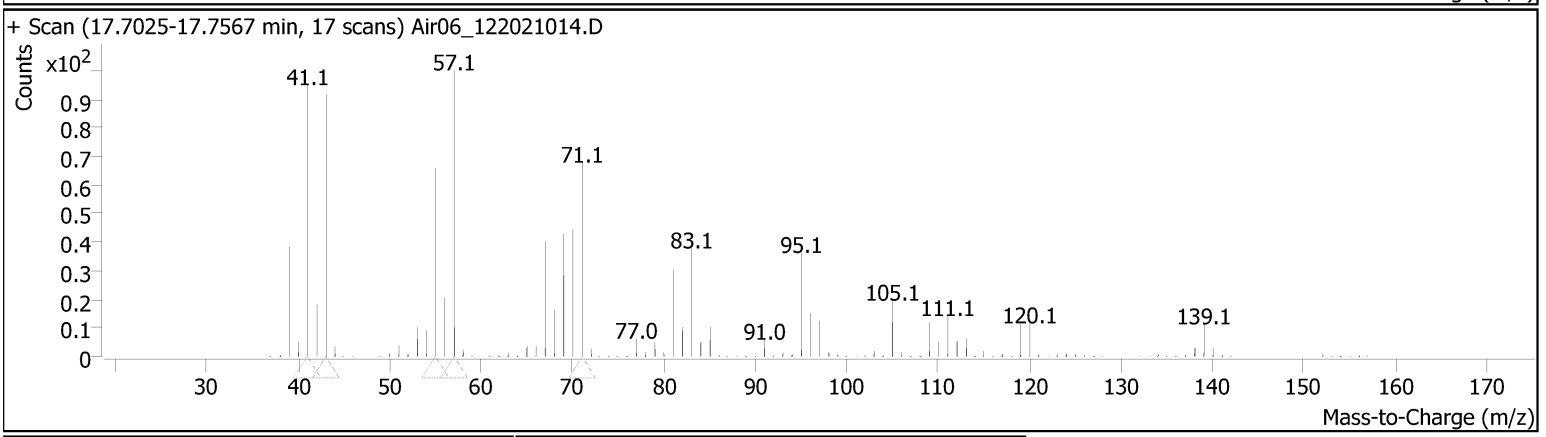


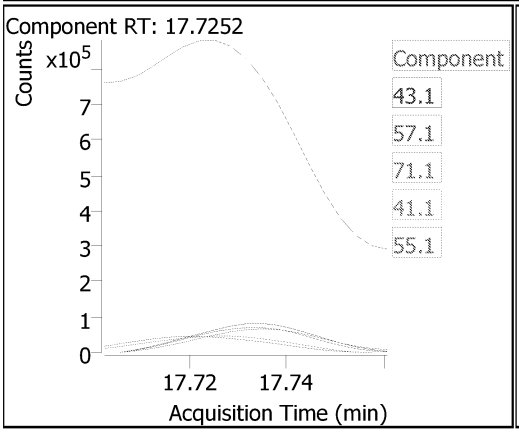


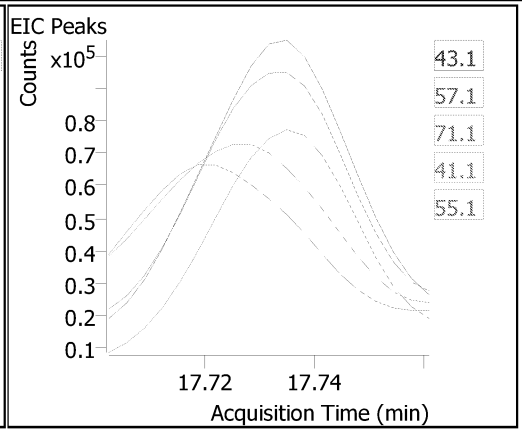
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.7252	1-Decene, 3,4-dimethyl-	2096975.6	88.9	50871-03-9	C12H24	5.274

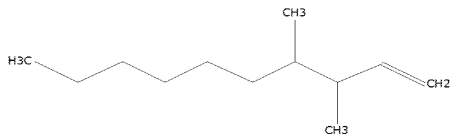




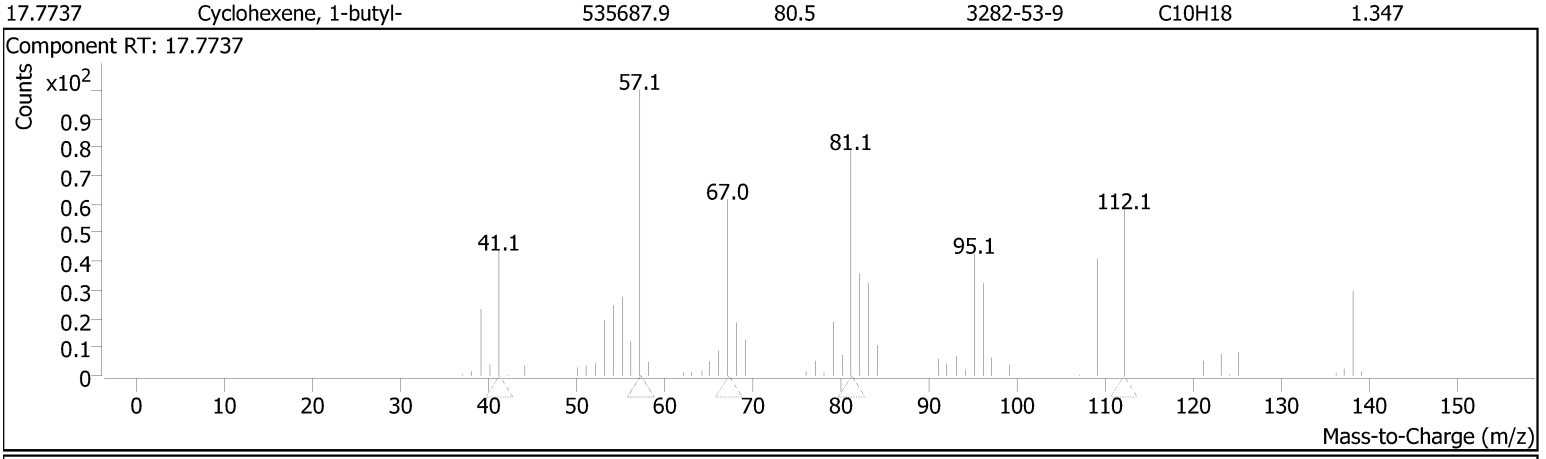


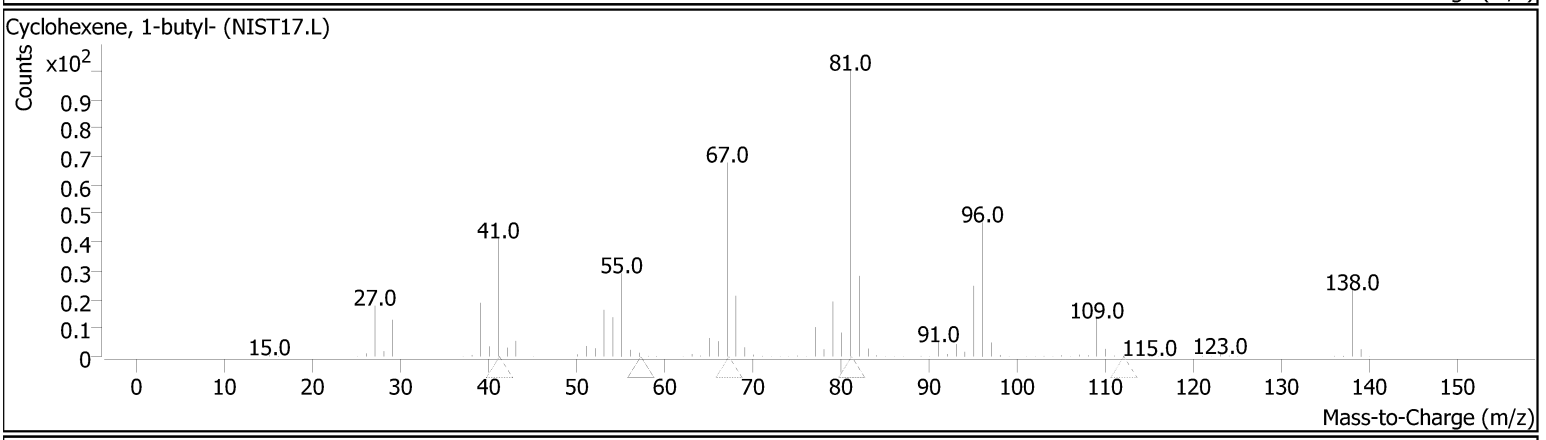


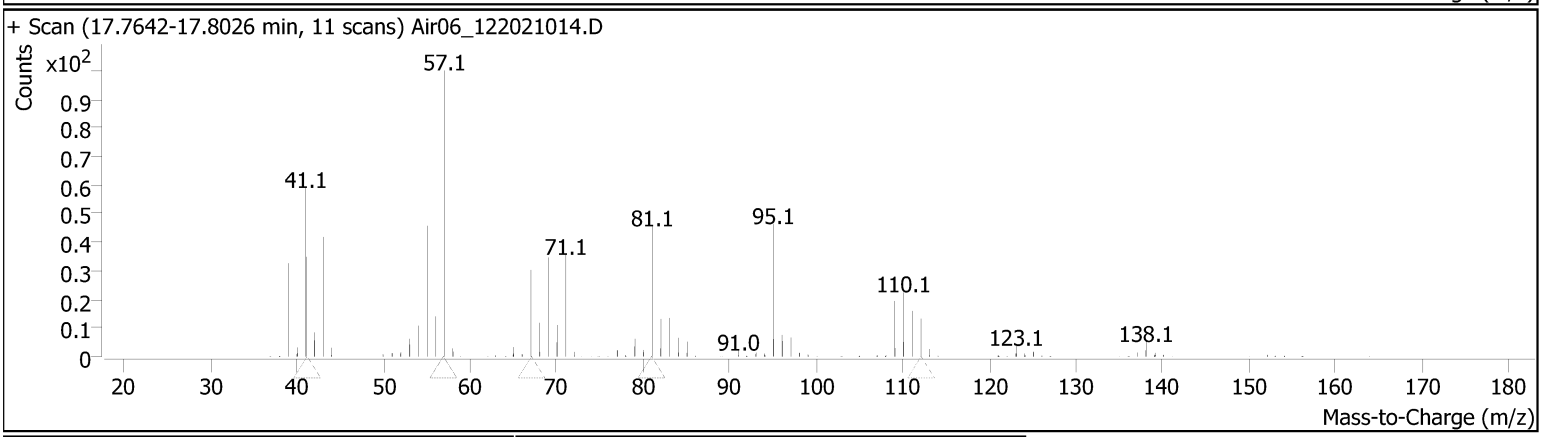


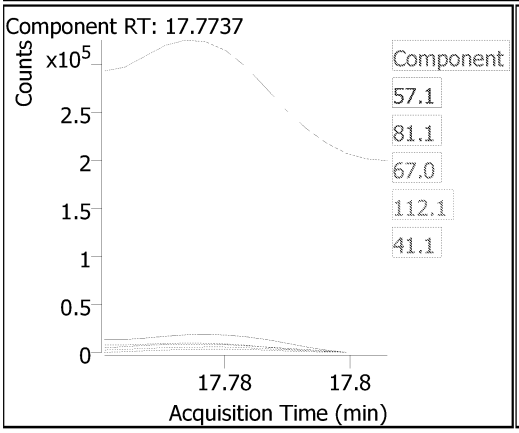


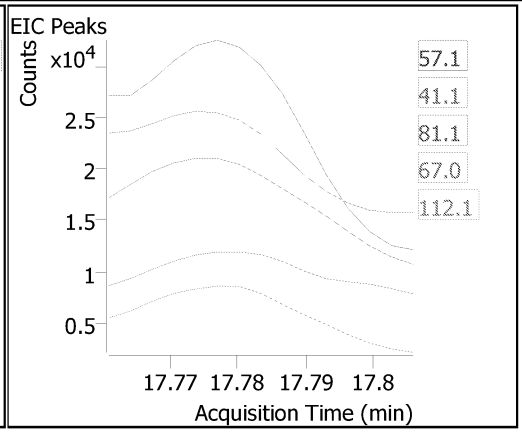
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.7737	Cyclohexene, 1-butyl-	535687.9	80.5	3282-53-9	C10H18	1.347

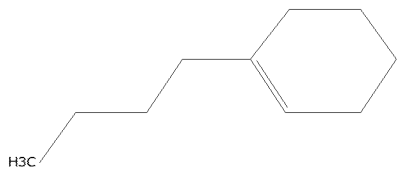




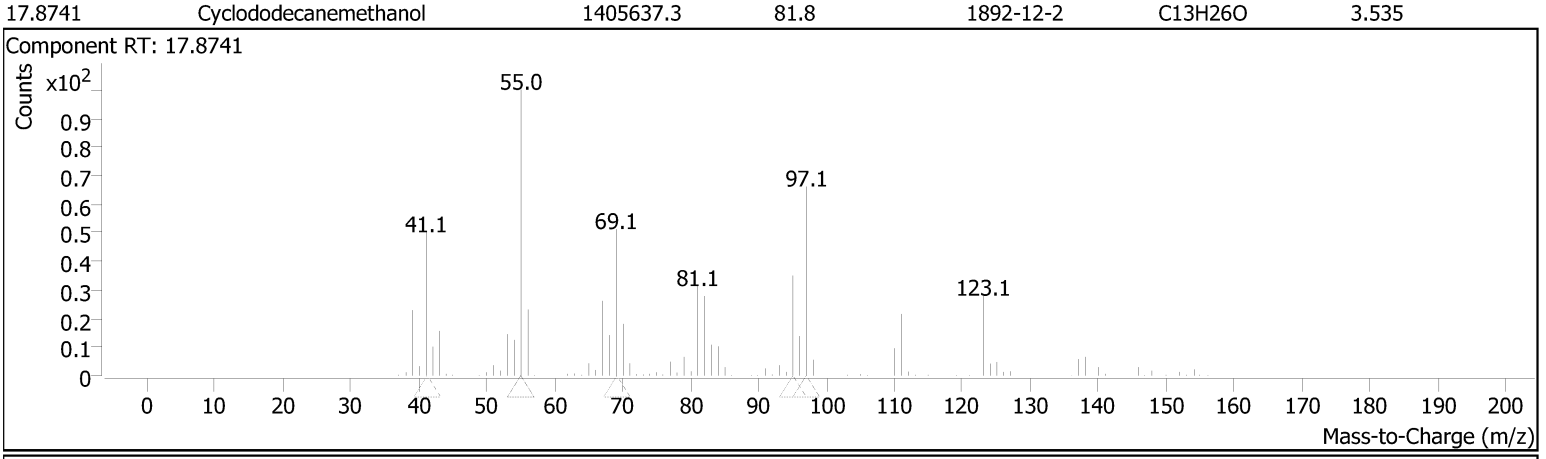


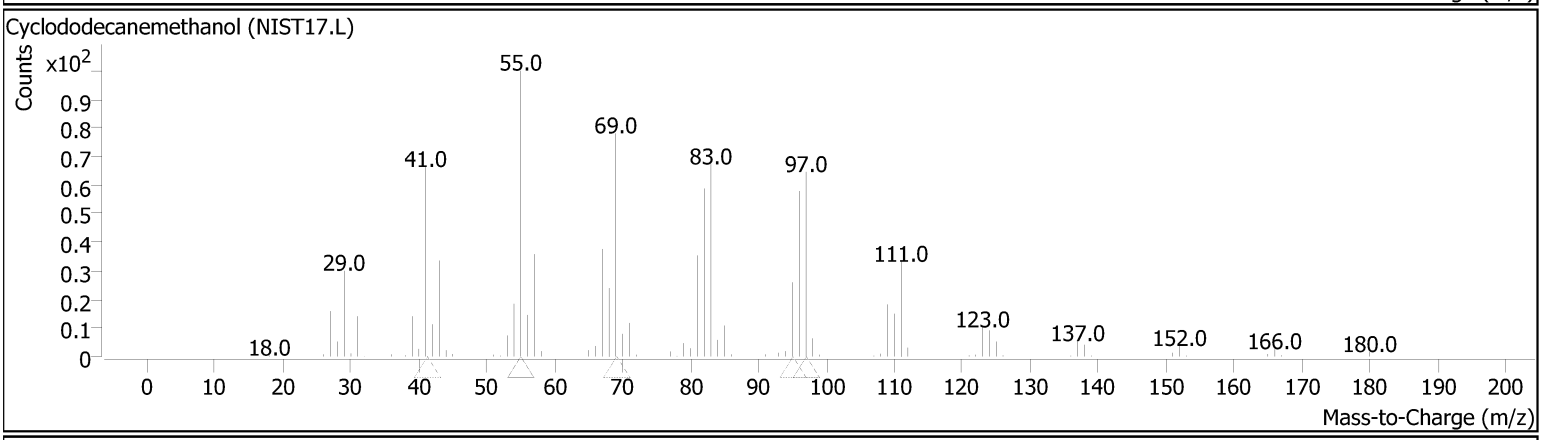


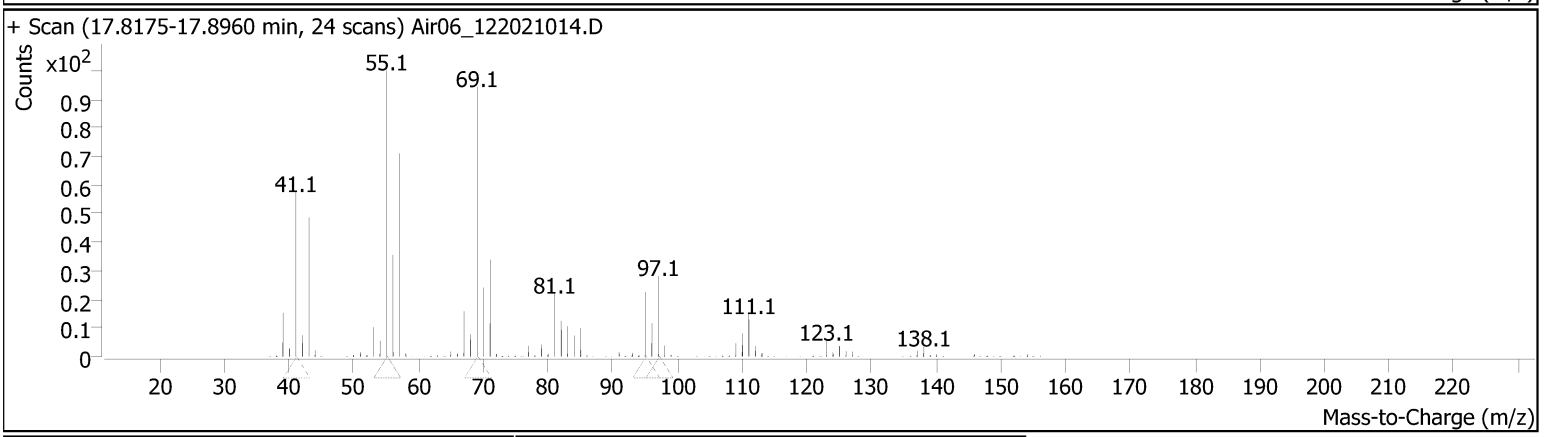


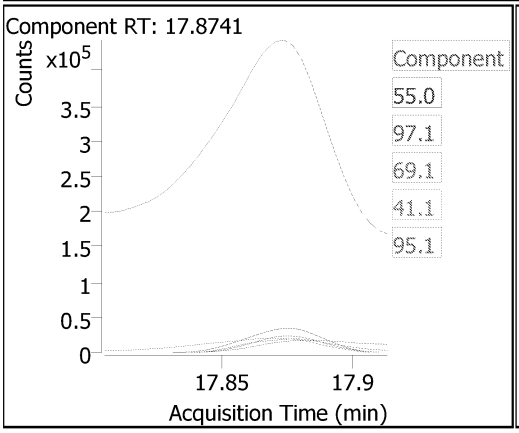


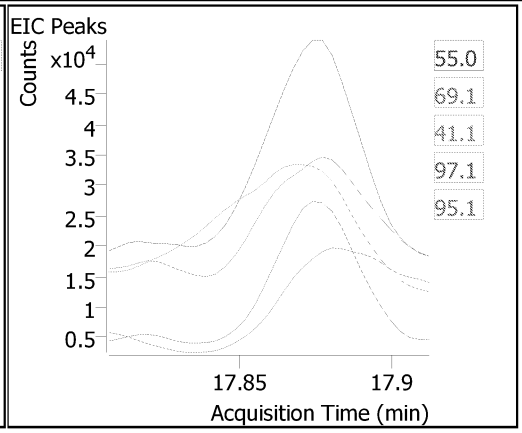
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.8741	Cyclododecanemethanol	1405637.3	81.8	1892-12-2	C13H26O	3.535

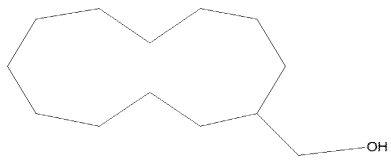




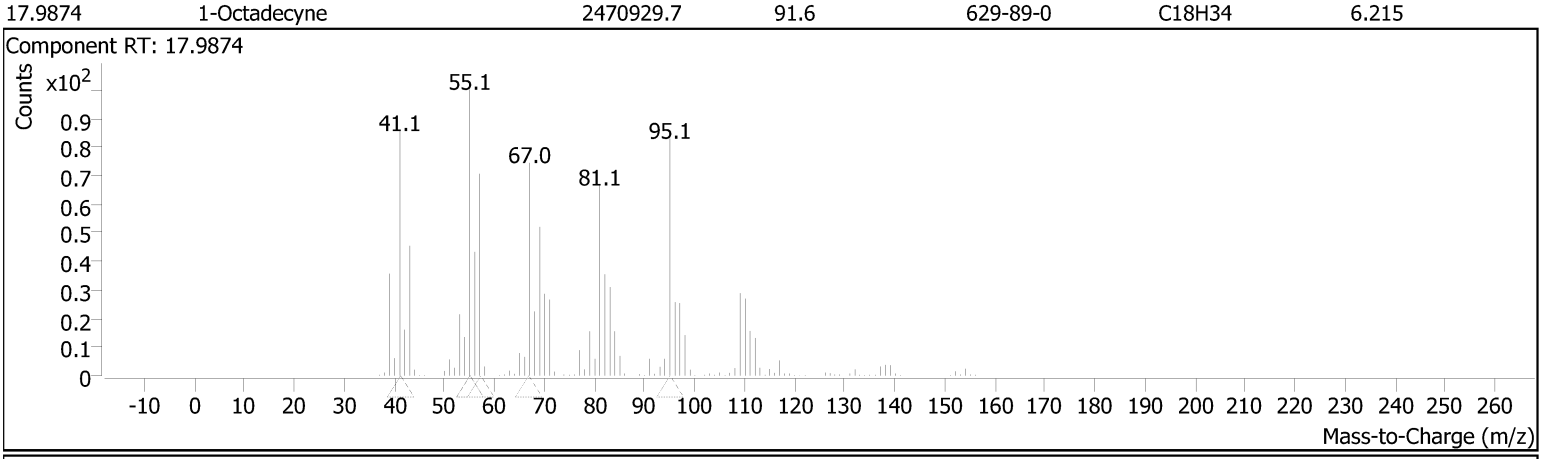


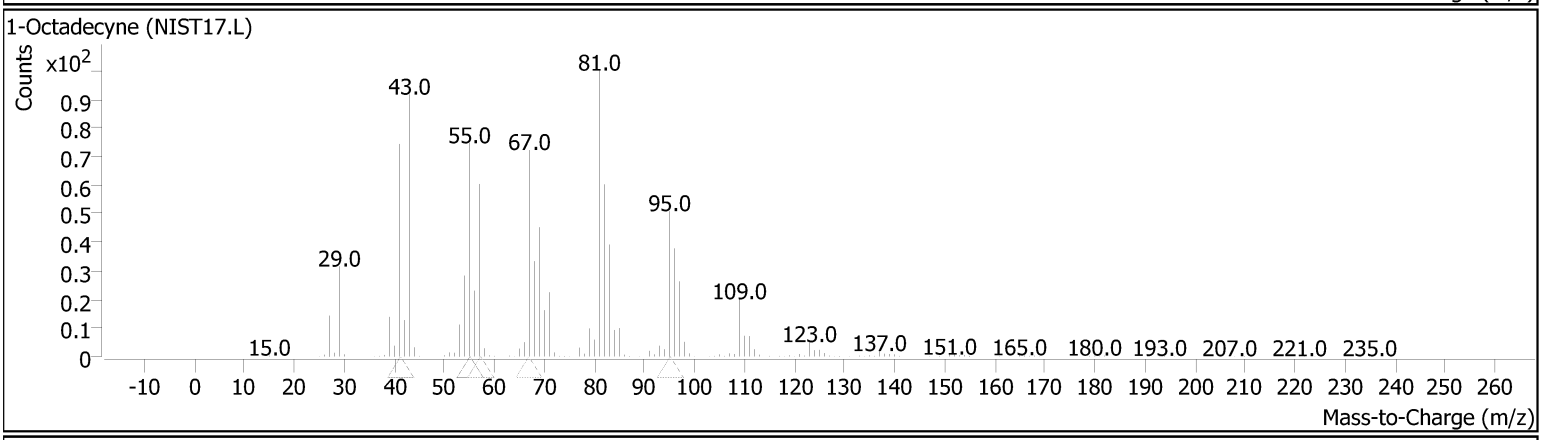


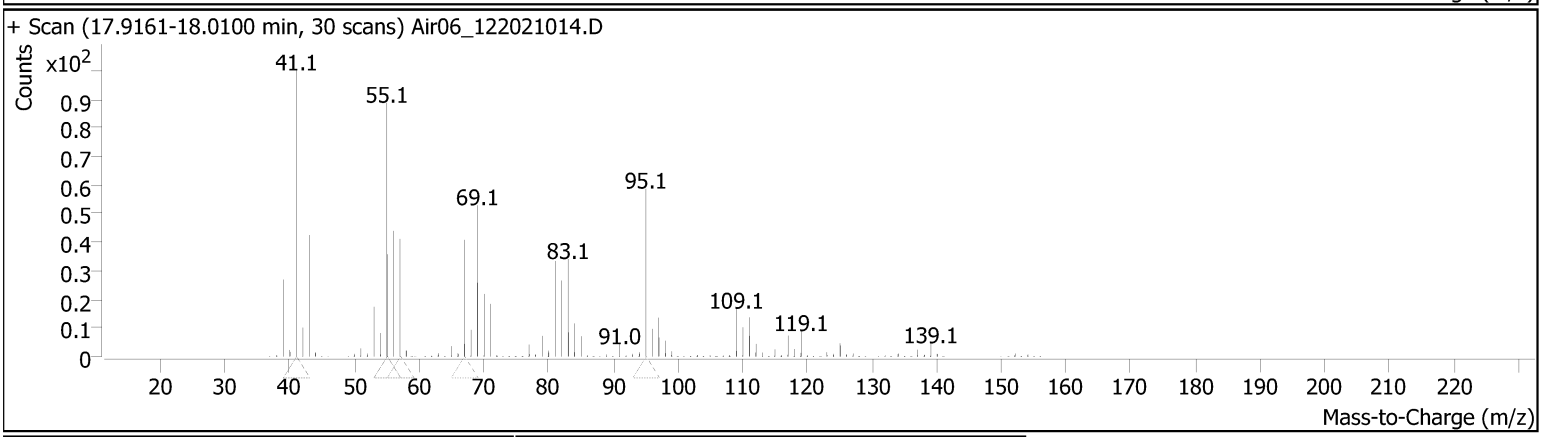


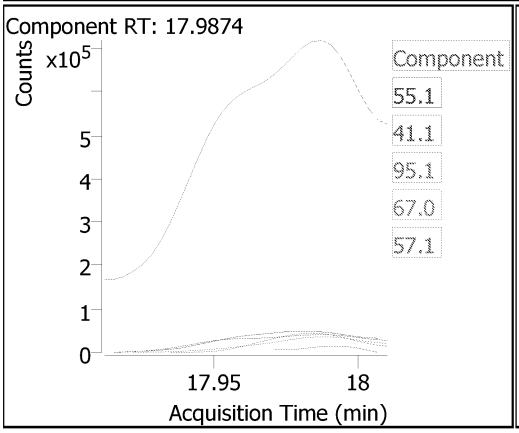


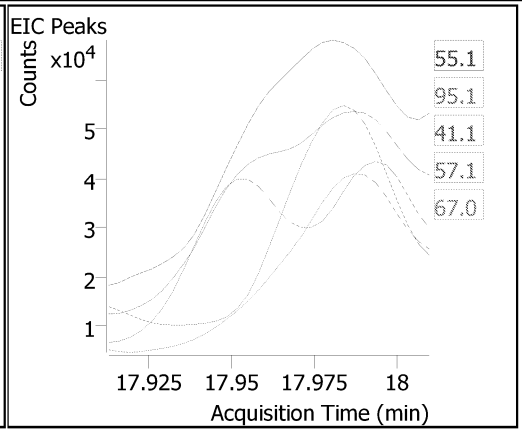
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.9874	1-Octadecyne	2470929.7	91.6	629-89-0	C18H34	6.215

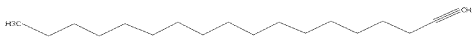




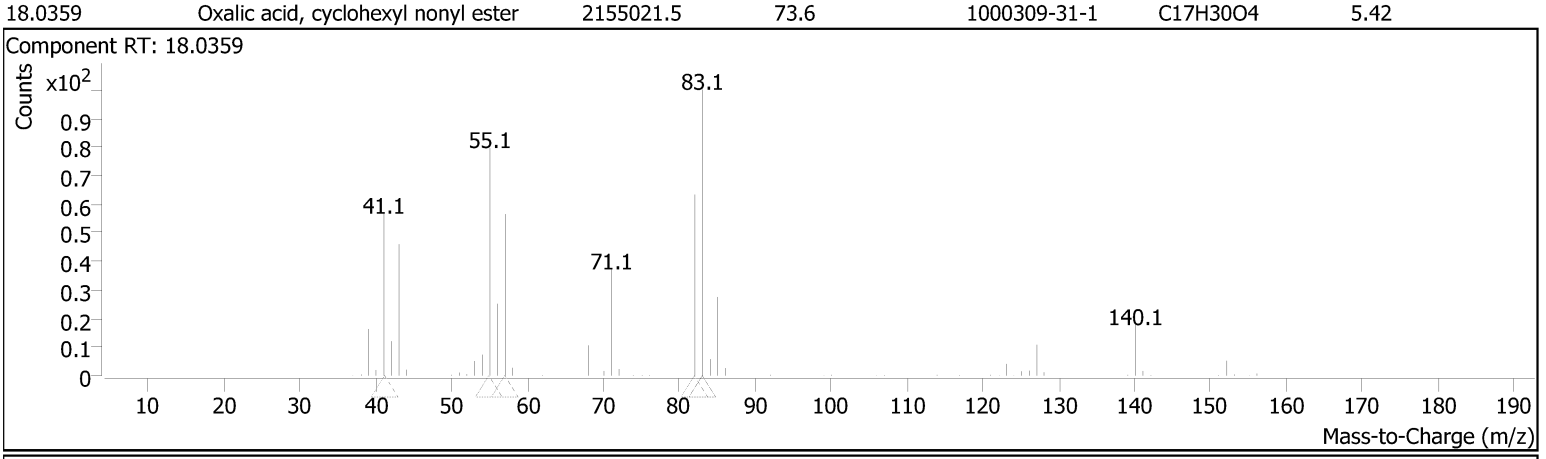


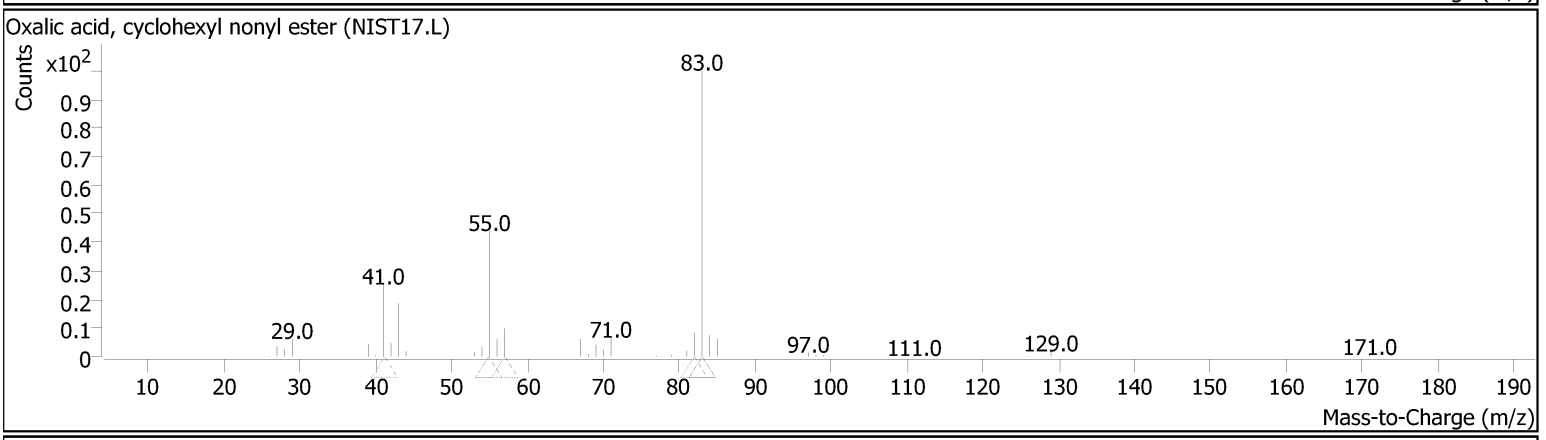


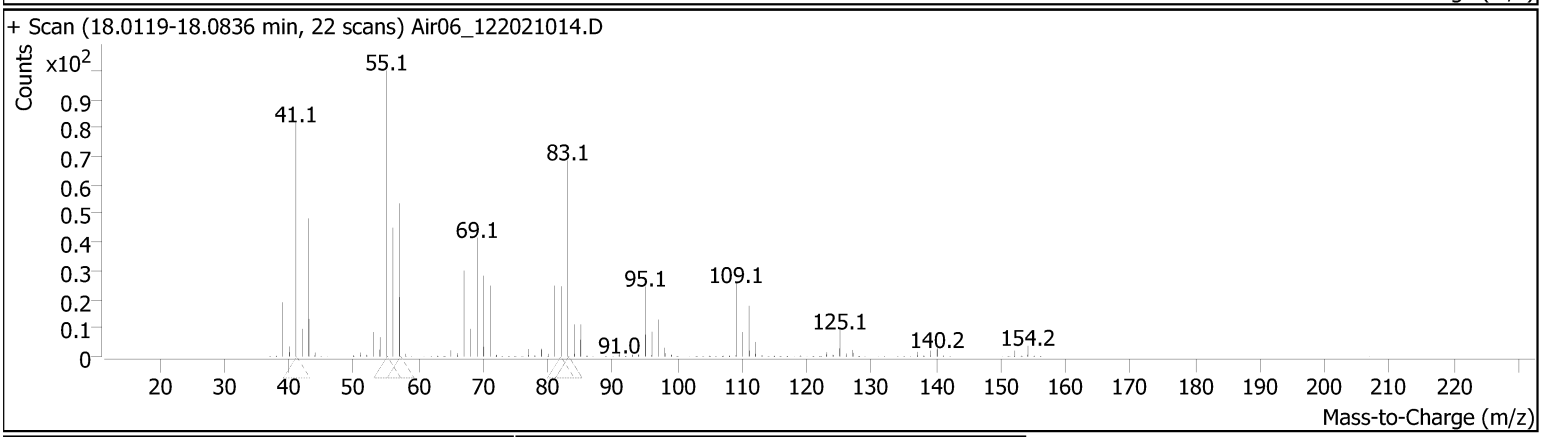


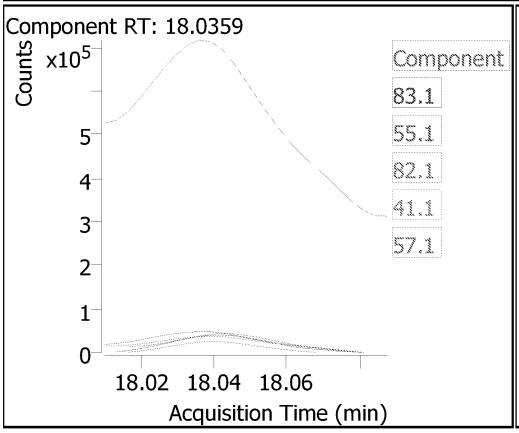


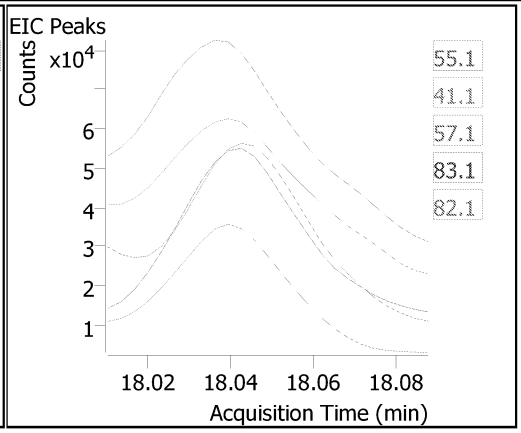
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.0359	Oxalic acid, cyclohexyl nonyl ester	2155021.5	73.6	1000309-31-1	C17H30O4	5.42

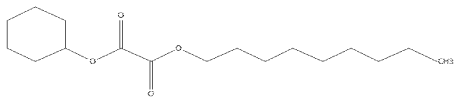




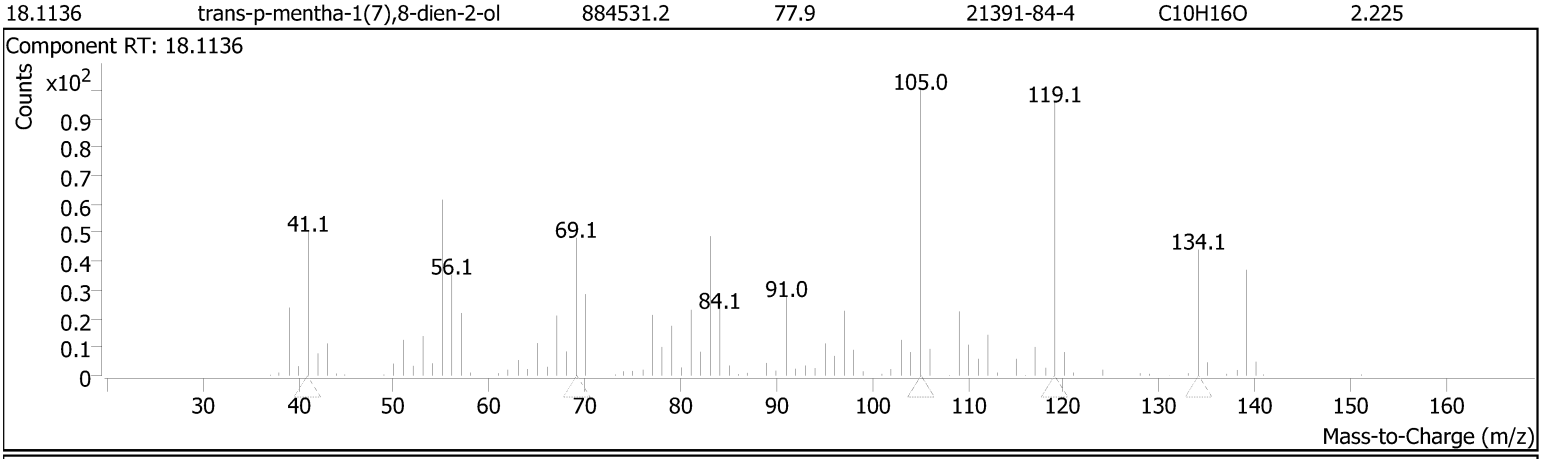


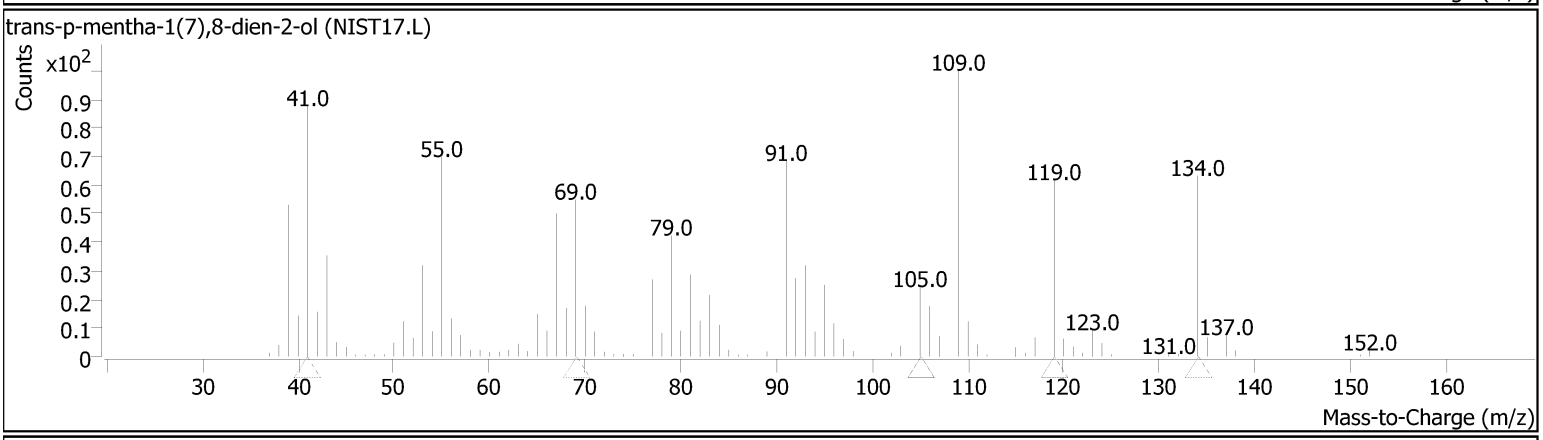


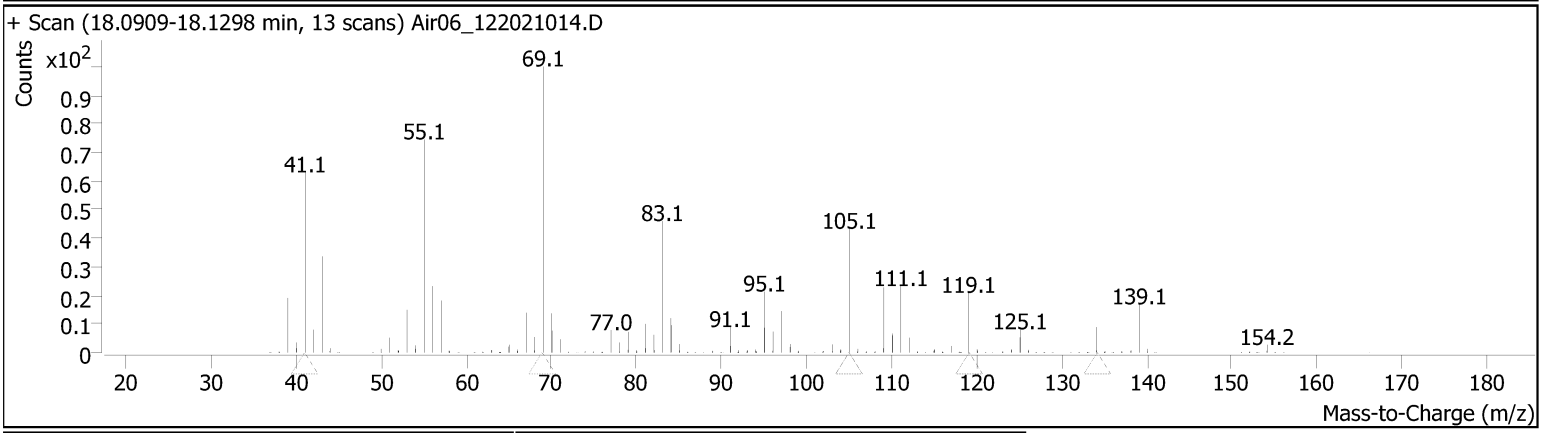


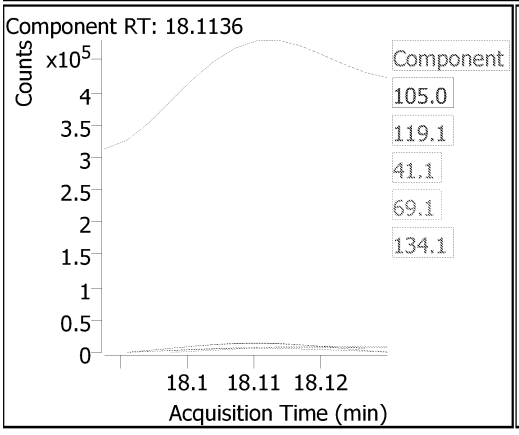


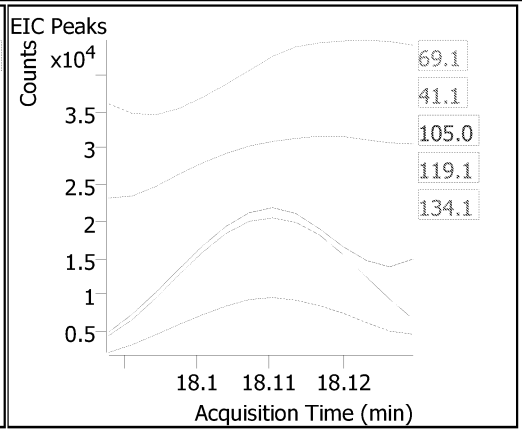
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.1136	trans-p-mentha-1(7),8-dien-2-ol	884531.2	77.9	21391-84-4	C10H16O	2.225

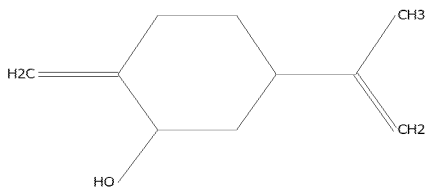




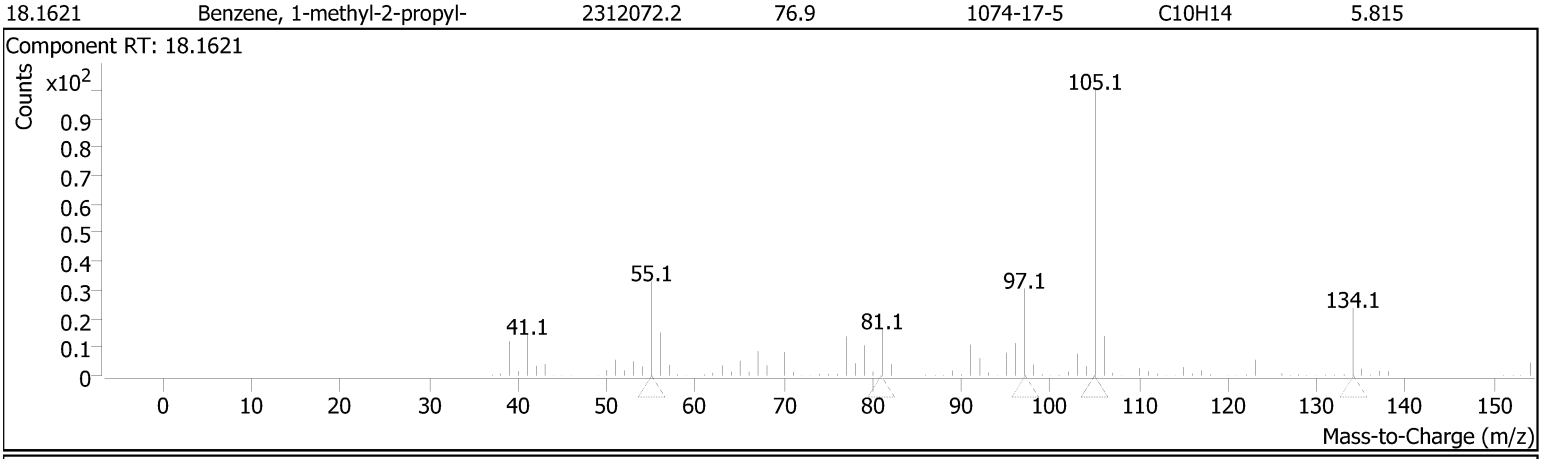


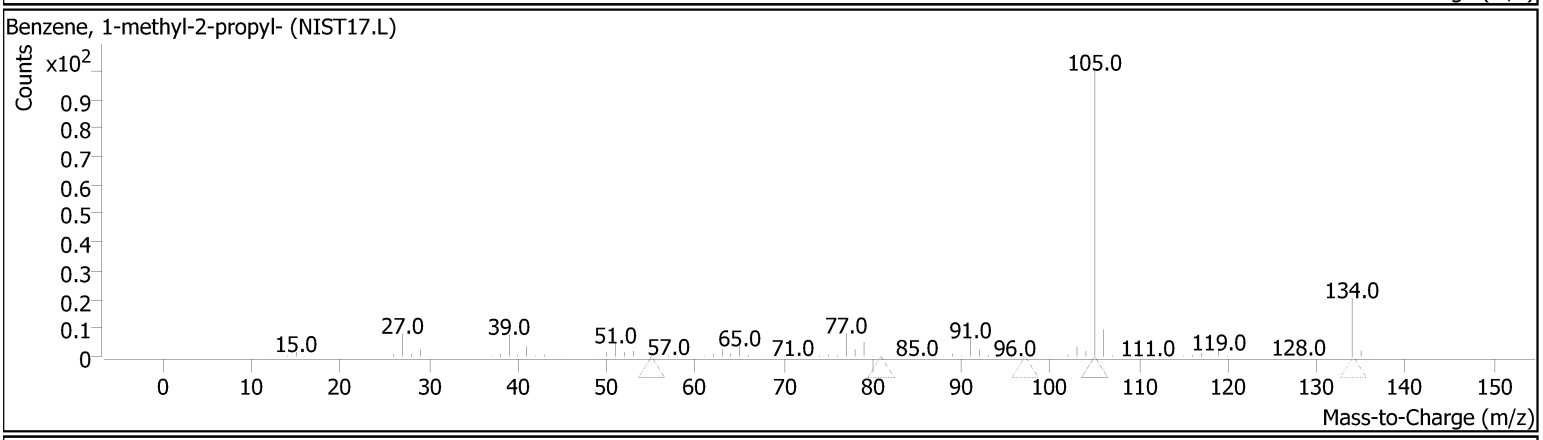


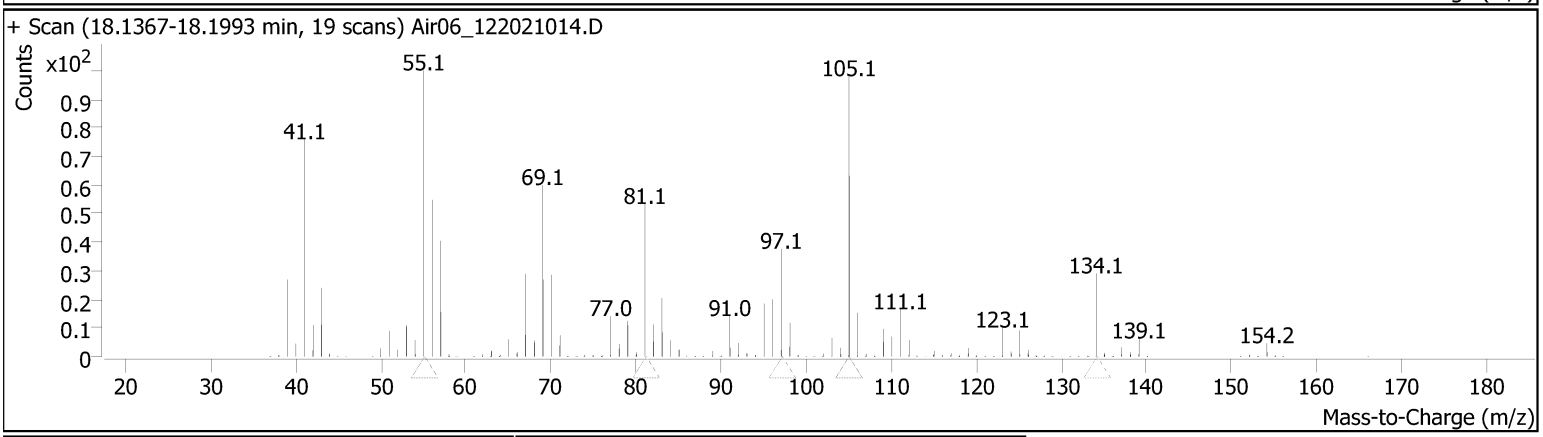


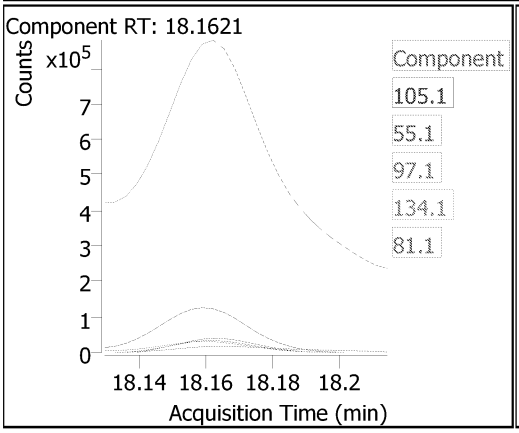


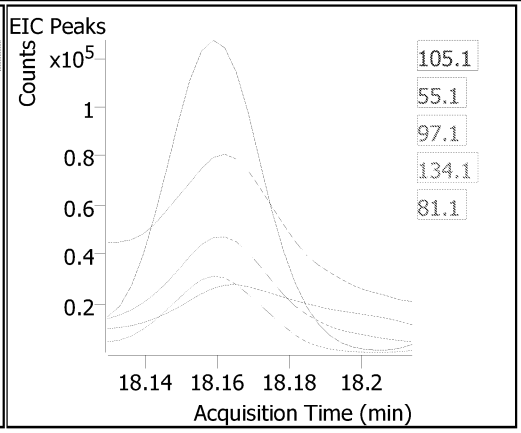
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.1621	Benzene, 1-methyl-2-propyl-	2312072.2	76.9	1074-17-5	C10H14	5.815

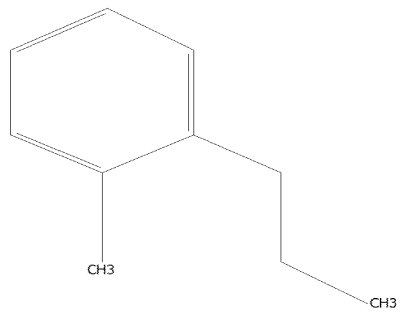




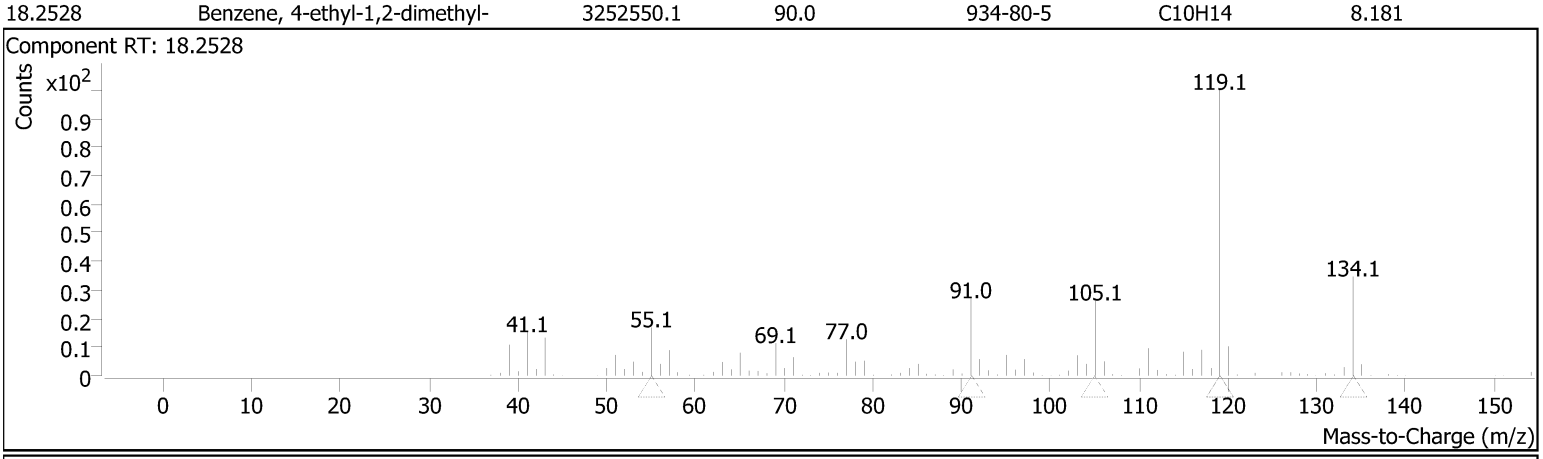


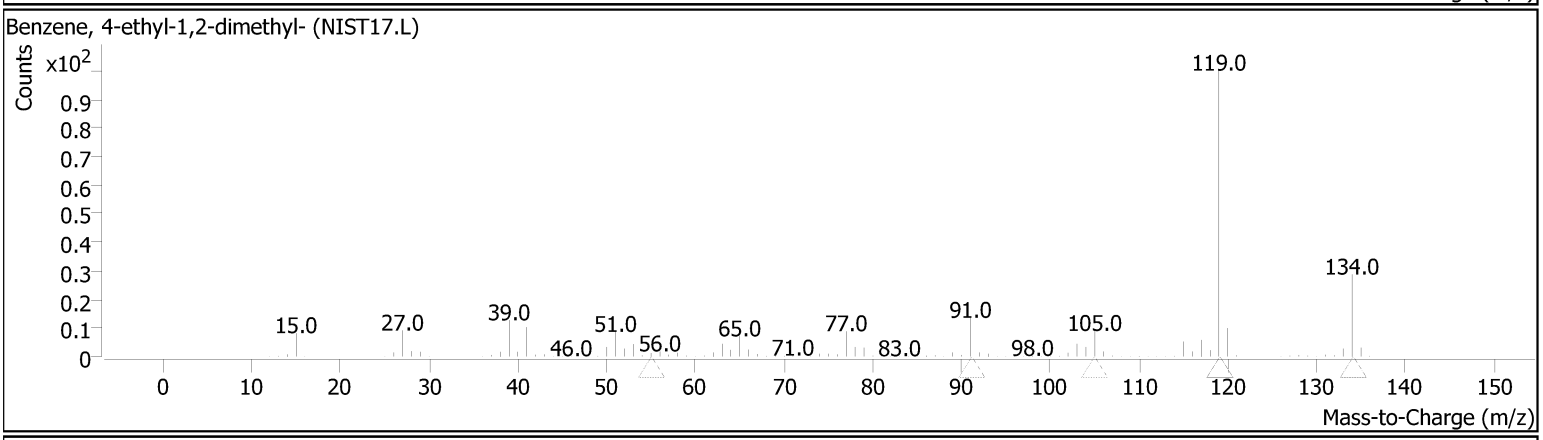


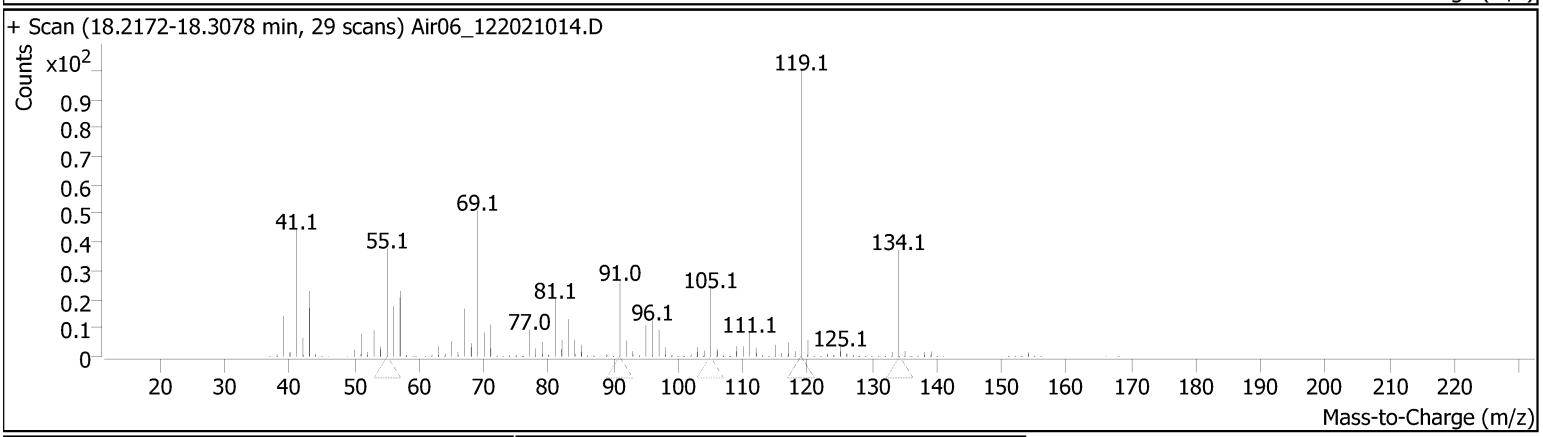


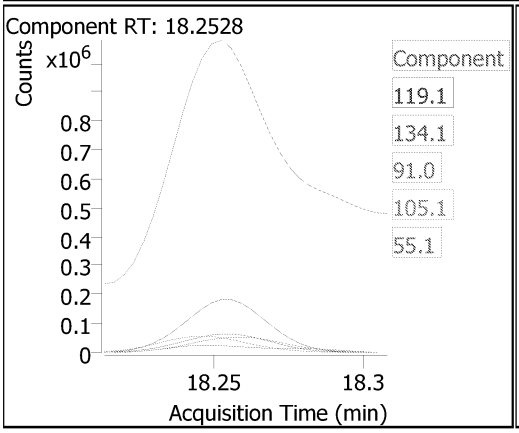


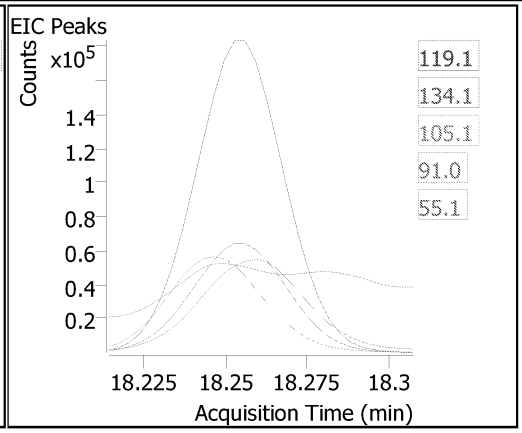
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.2528	Benzene, 4-ethyl-1,2-dimethyl-	3252550.1	90.0	934-80-5	C10H14	8.181

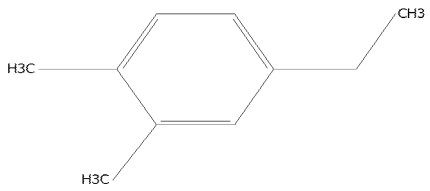




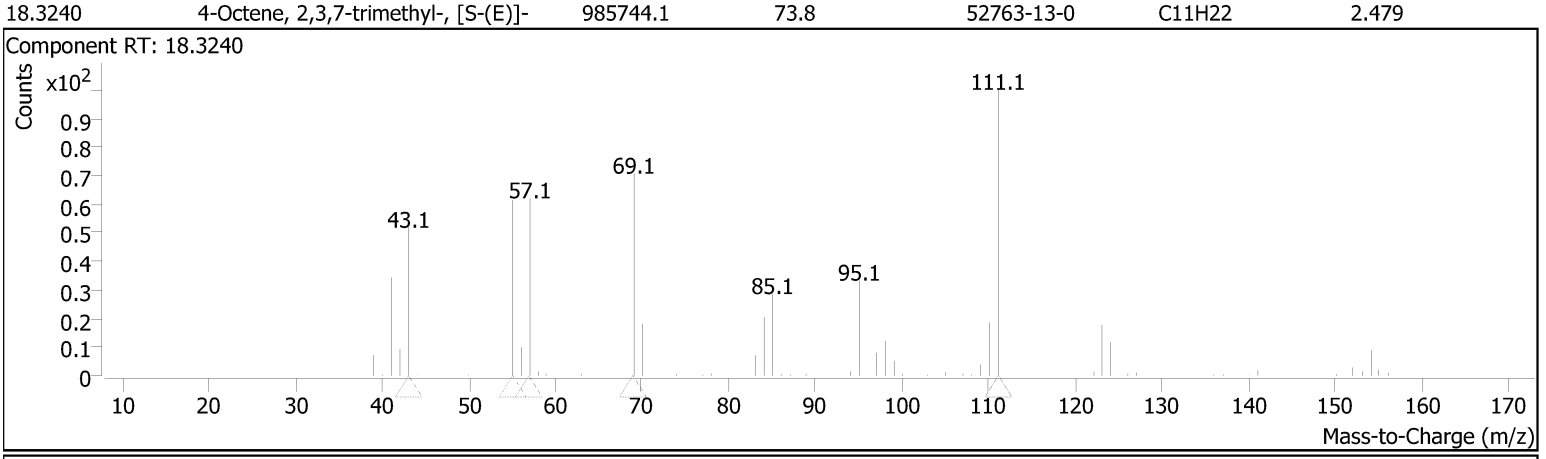


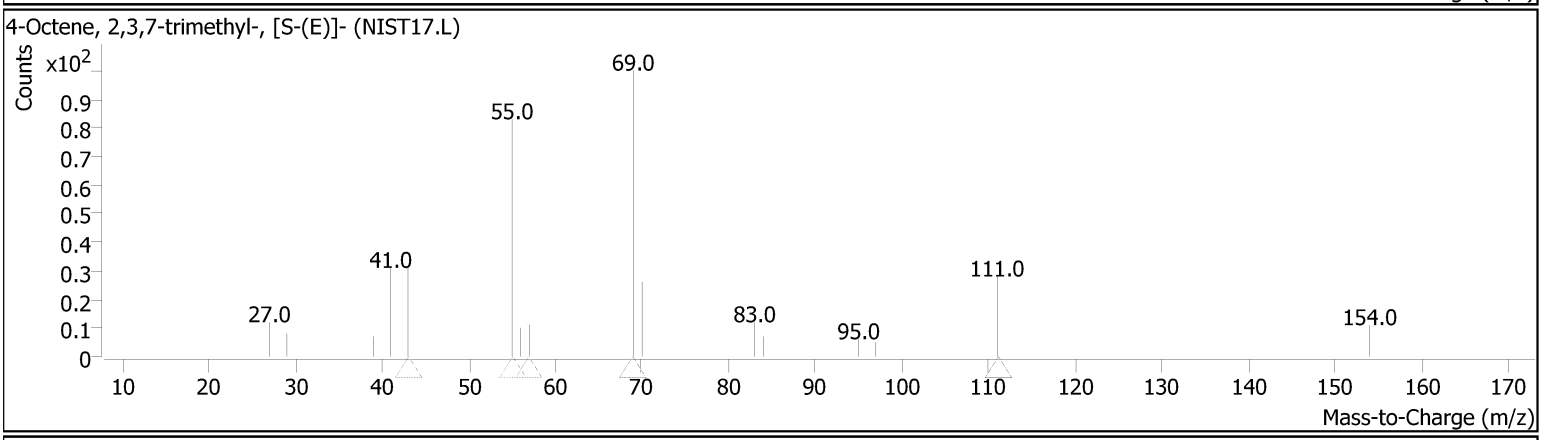


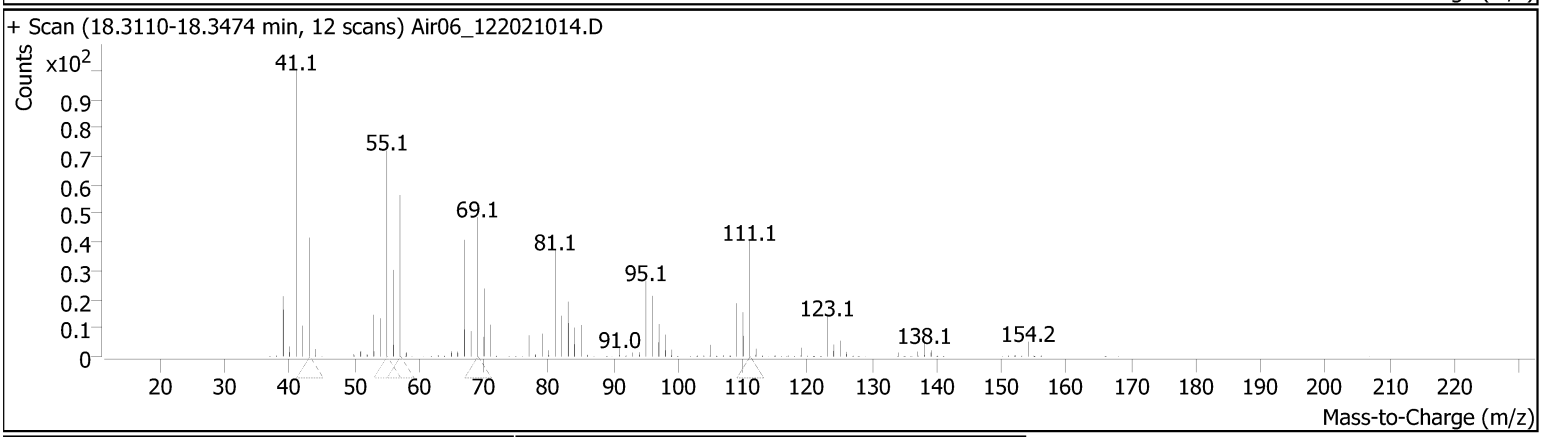


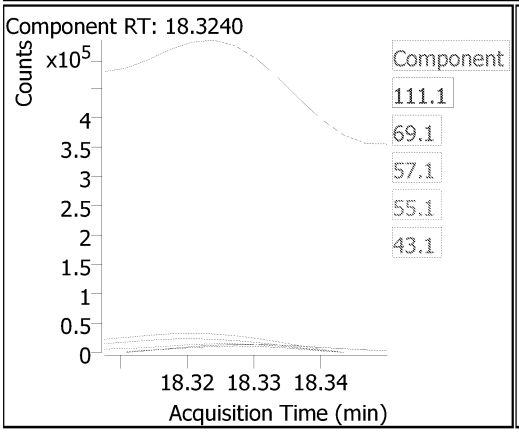


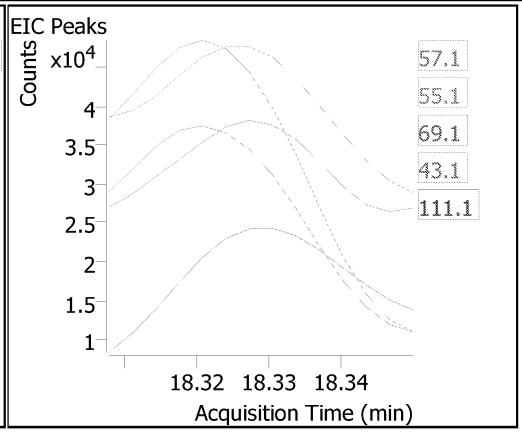
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3240	4-Octene, 2,3,7-trimethyl-, [S-(E)]-	985744.1	73.8	52763-13-0	C11H22	2.479

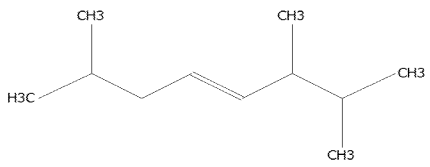




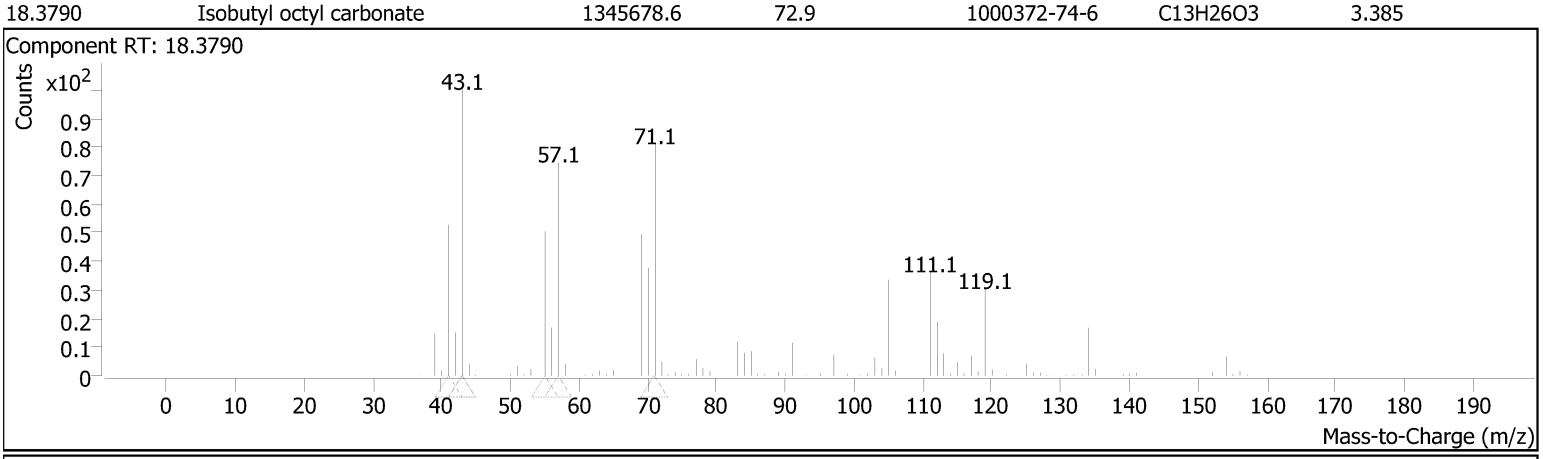


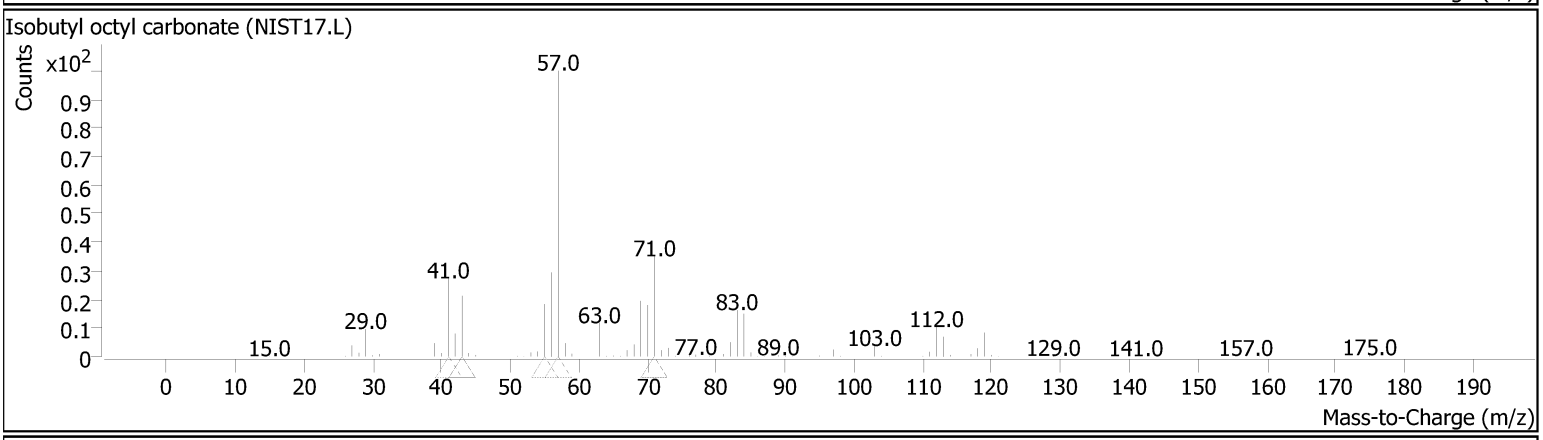


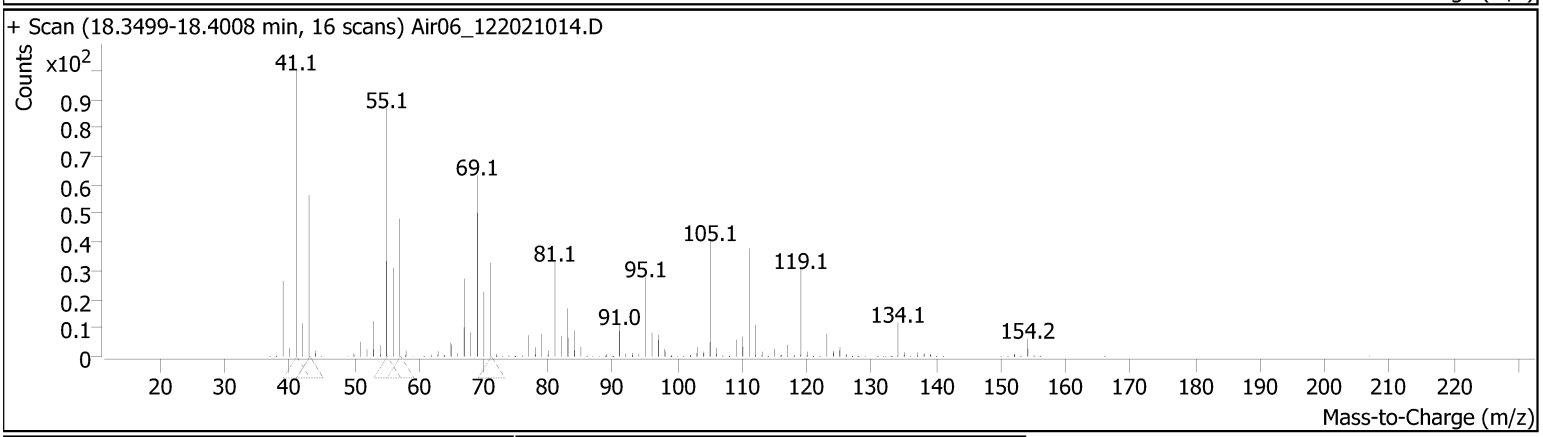


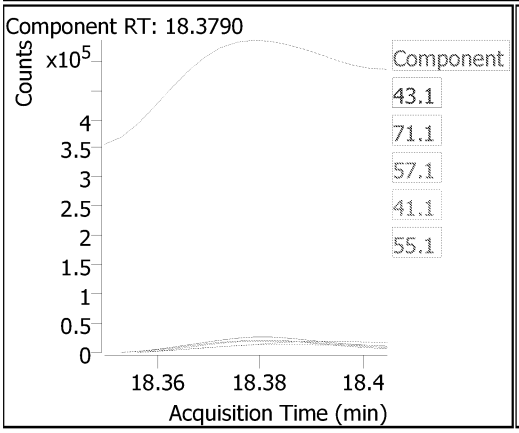


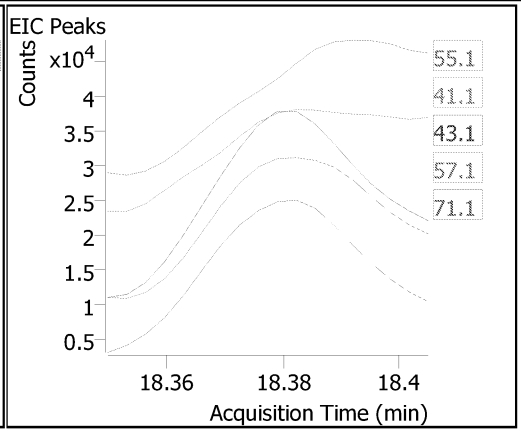
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3790	Isobutyl octyl carbonate	1345678.6	72.9	1000372-74-6	C13H26O3	3.385

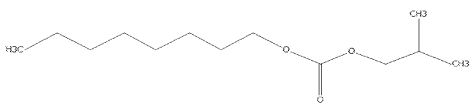








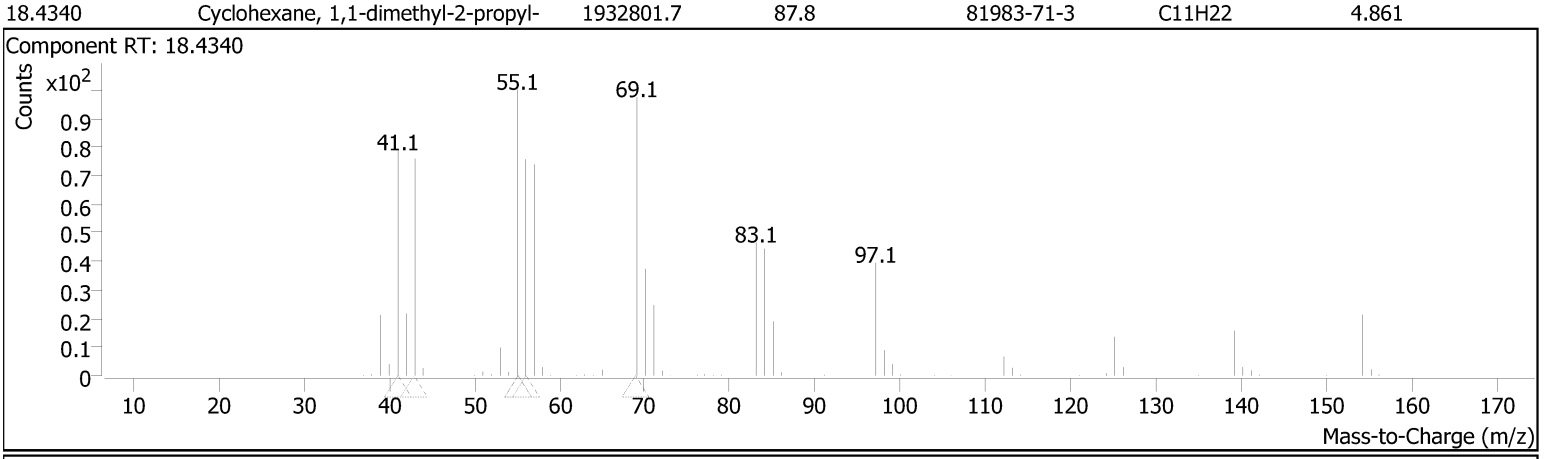


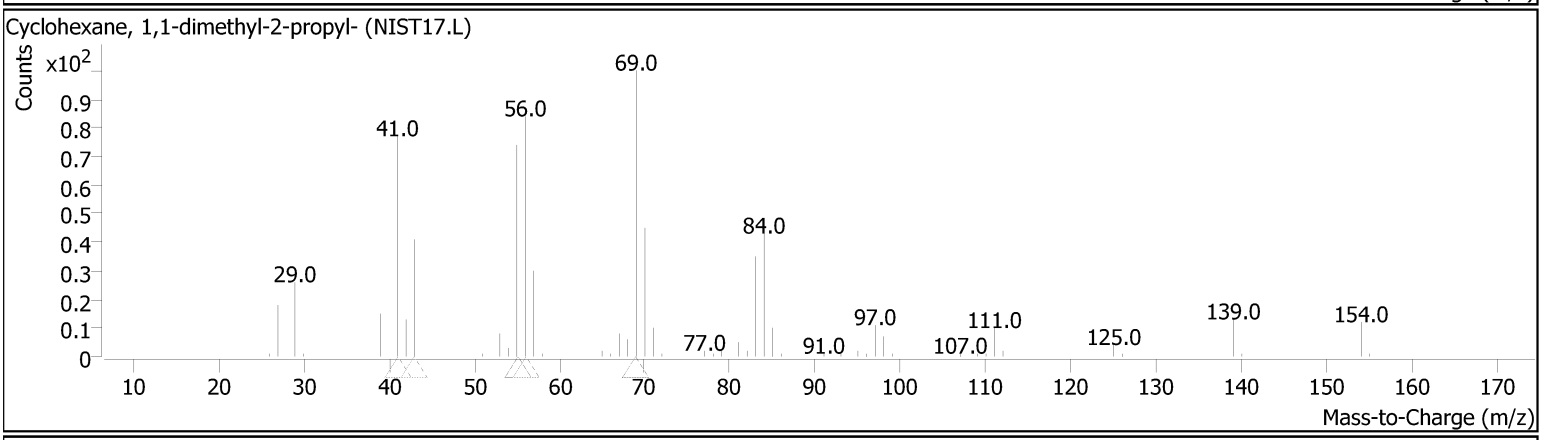


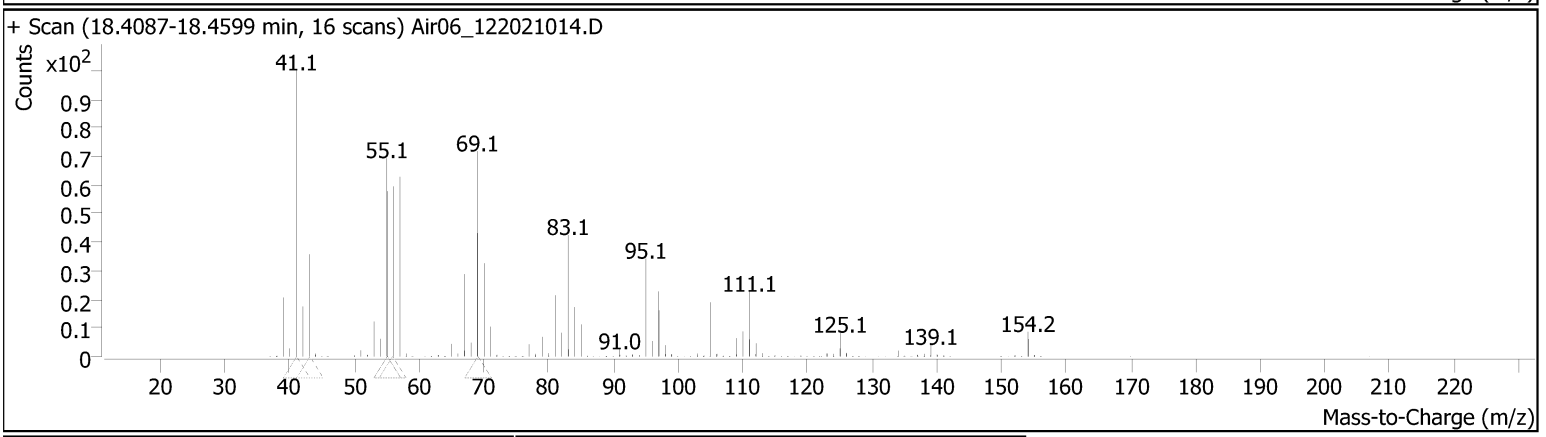
Library Search Results - NonTarget Hits with Details

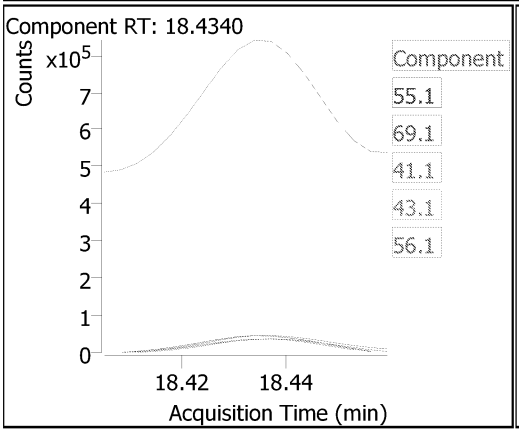
Agilent Technologies

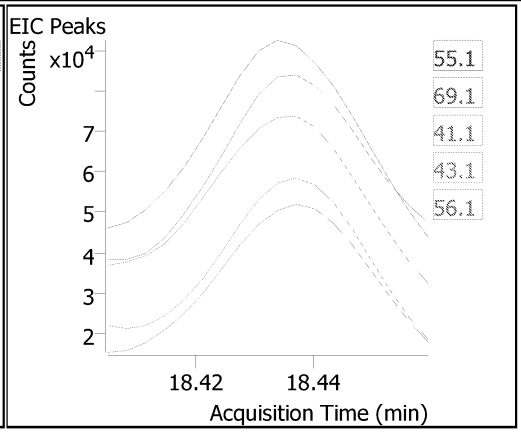
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.4340	Cyclohexane, 1,1-dimethyl-2-propyl-	1932801.7	87.8	81983-71-3	C11H22	4.861

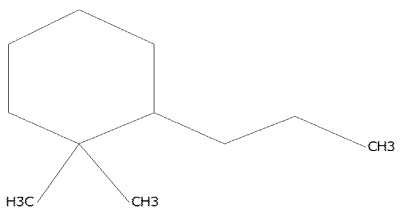




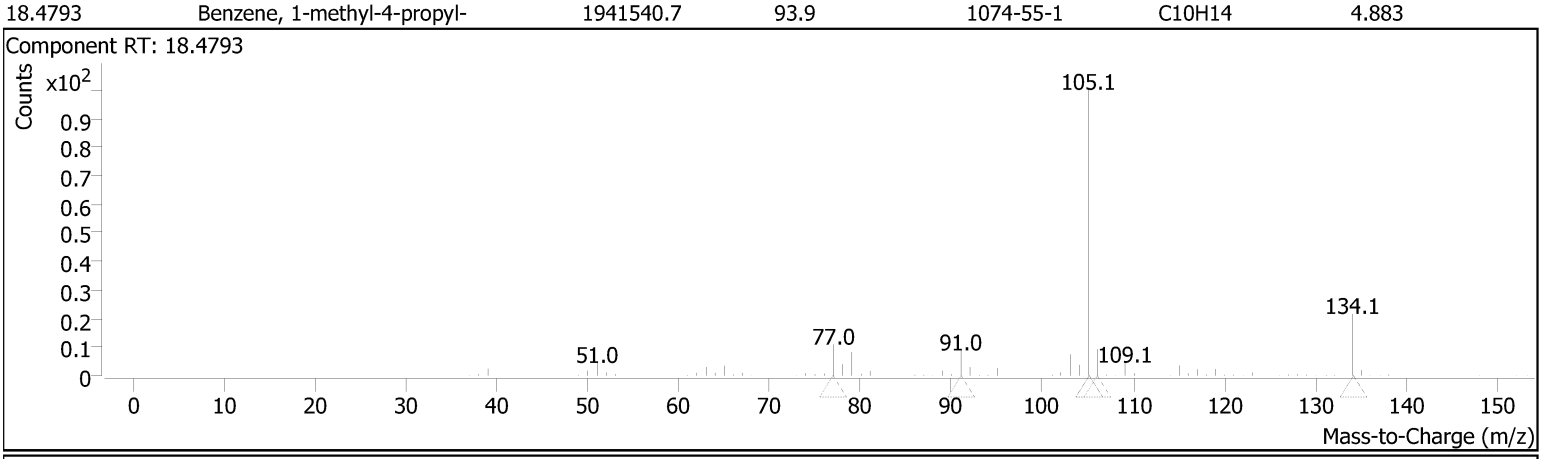


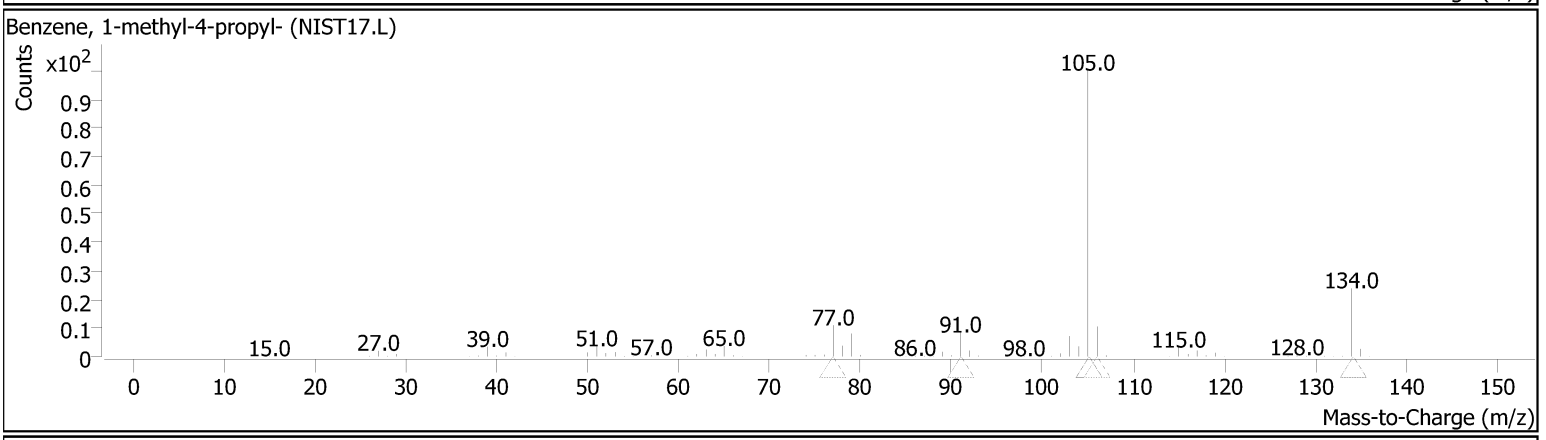


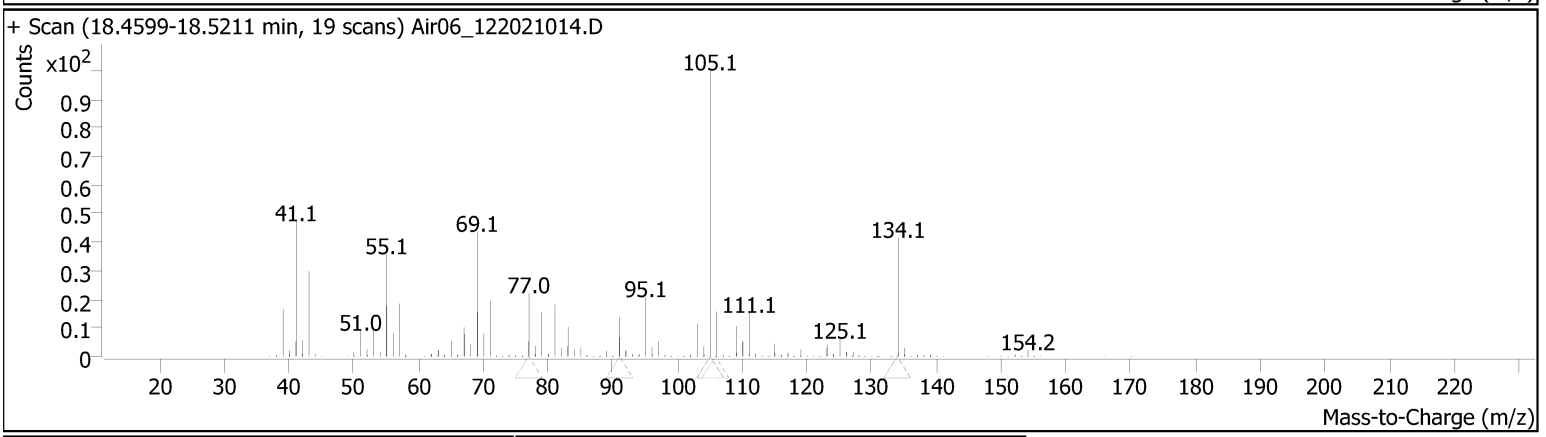


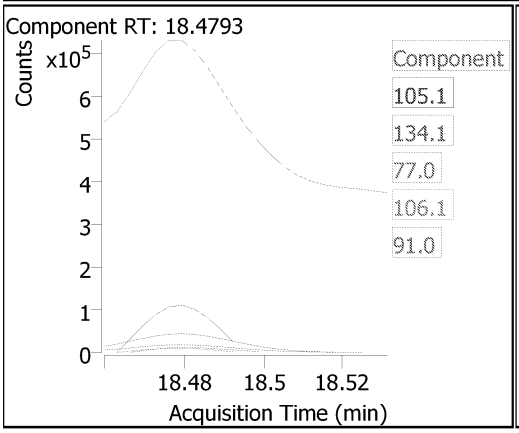


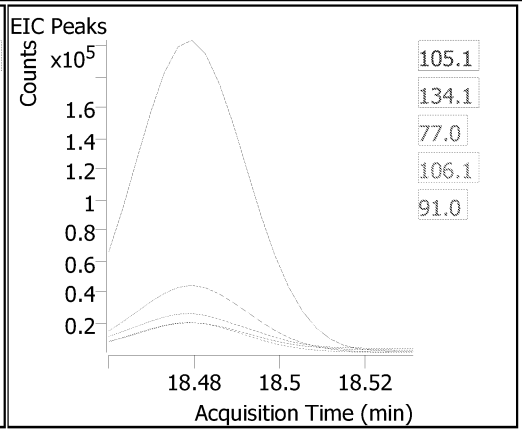
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.4793	Benzene, 1-methyl-4-propyl-	1941540.7	93.9	1074-55-1	C10H14	4.883

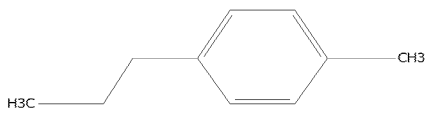




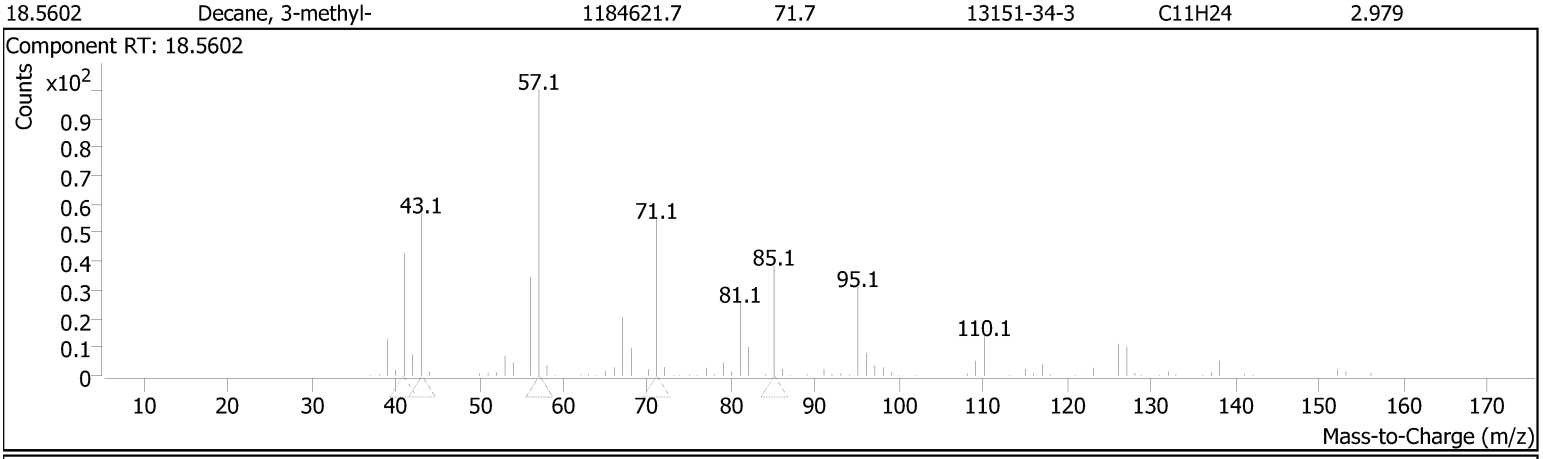


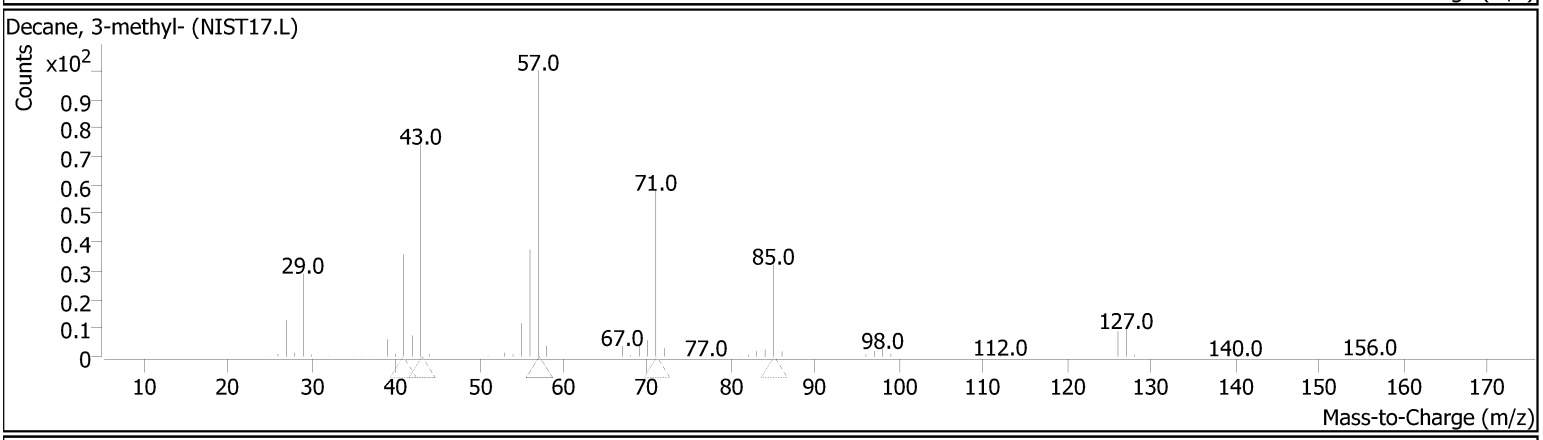


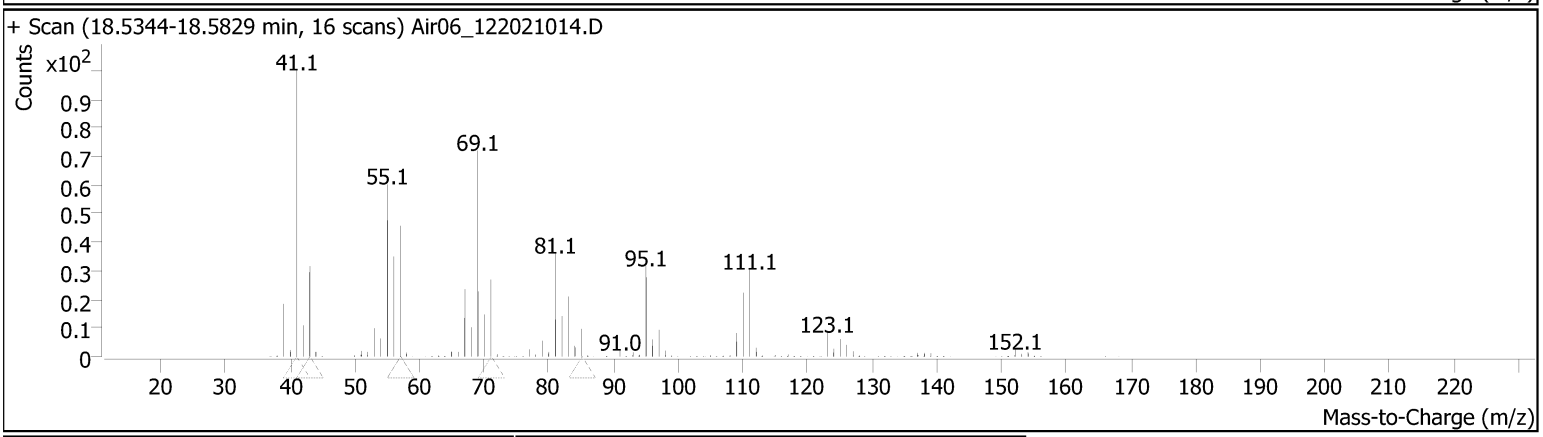


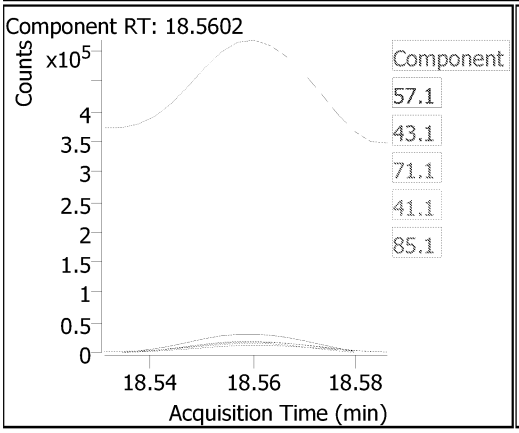


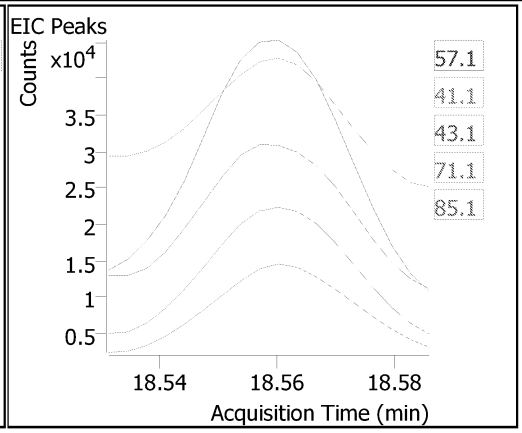
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.5602	Decane, 3-methyl-	1184621.7	71.7	13151-34-3	C11H24	2.979

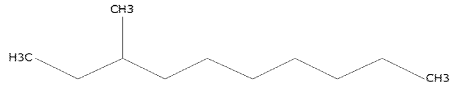








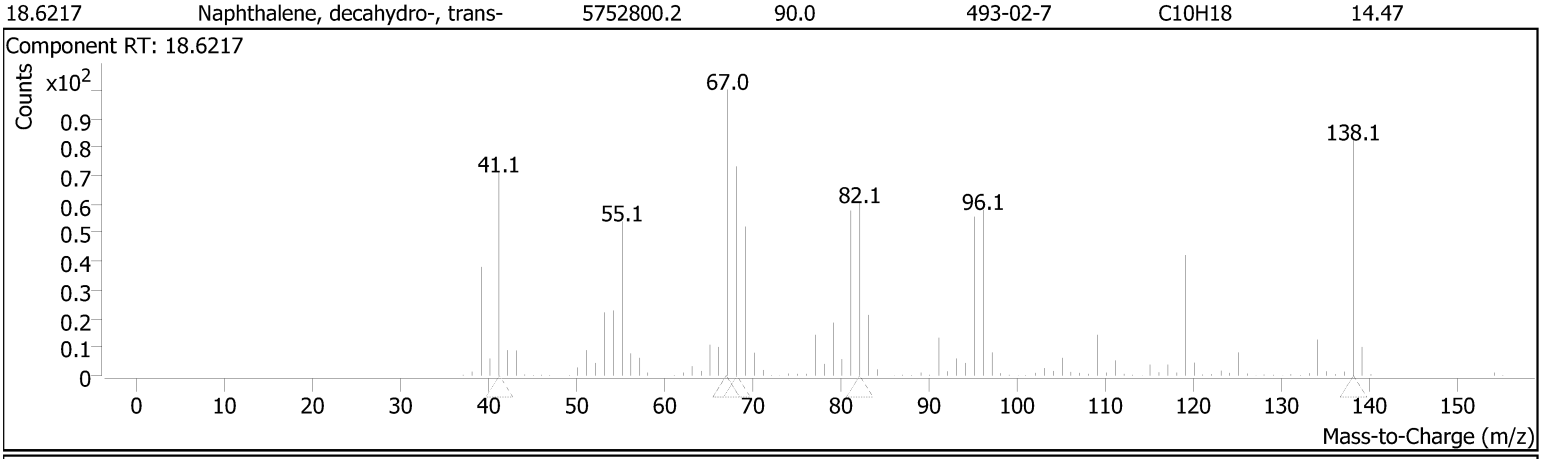


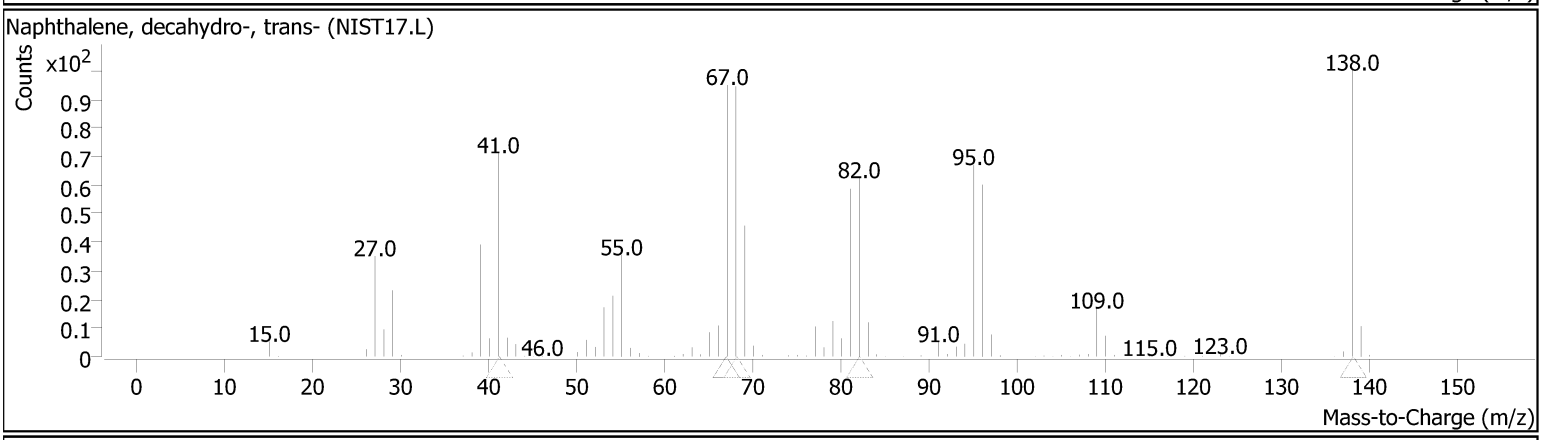


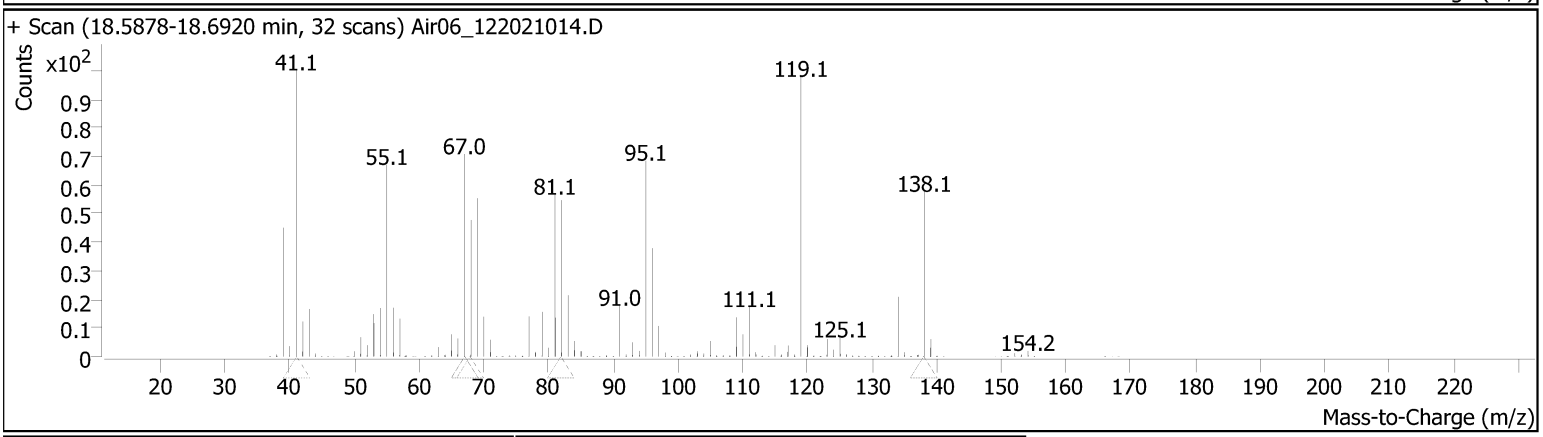
Library Search Results - NonTarget Hits with Details

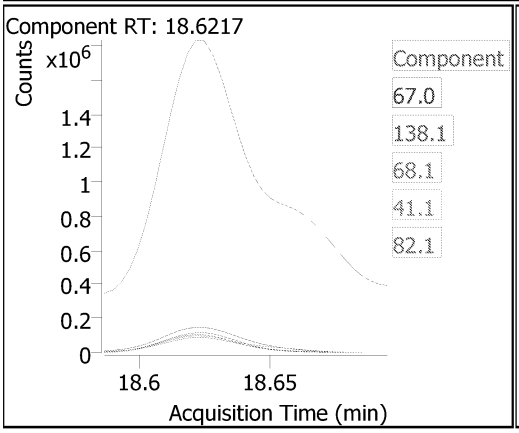
Agilent Technologies

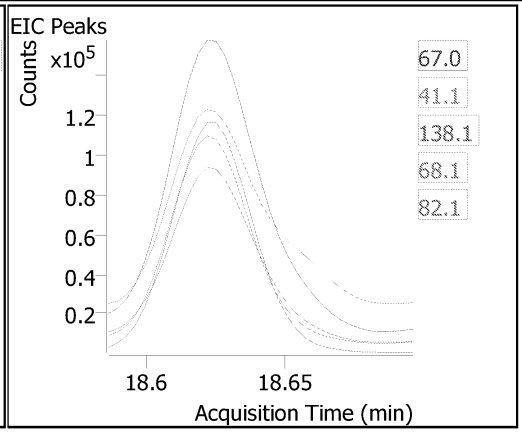
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.6217	Naphthalene, decahydro-, trans-	5752800.2	90.0	493-02-7	C10H18	14.47

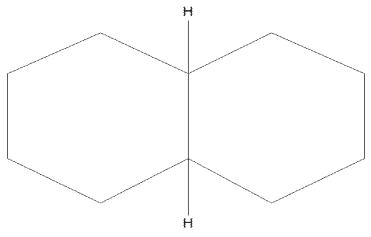




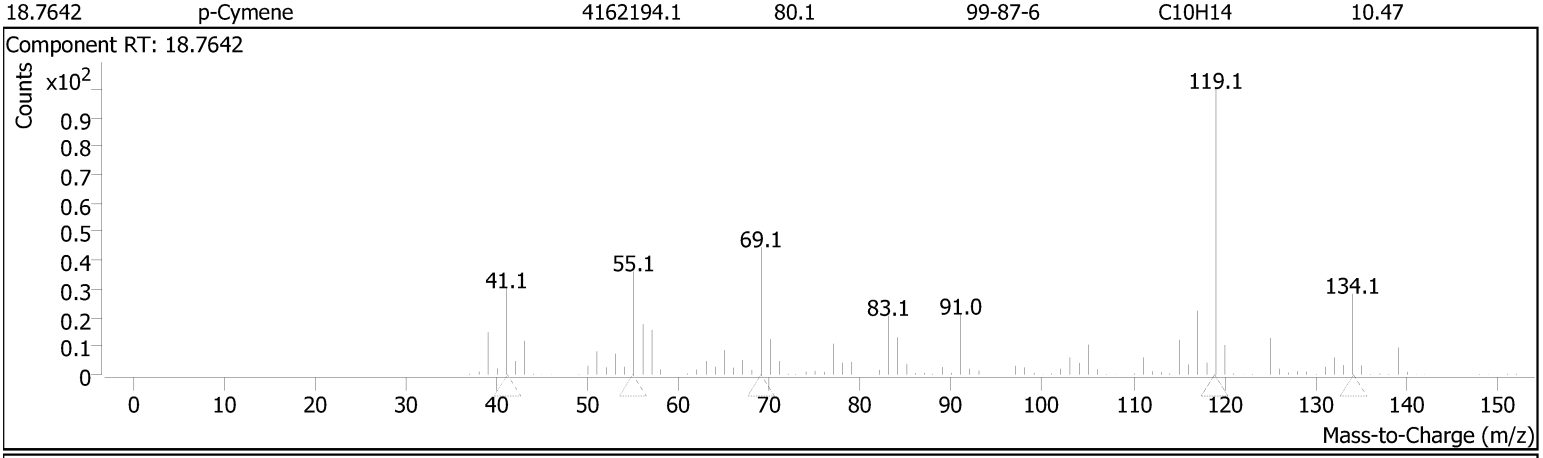


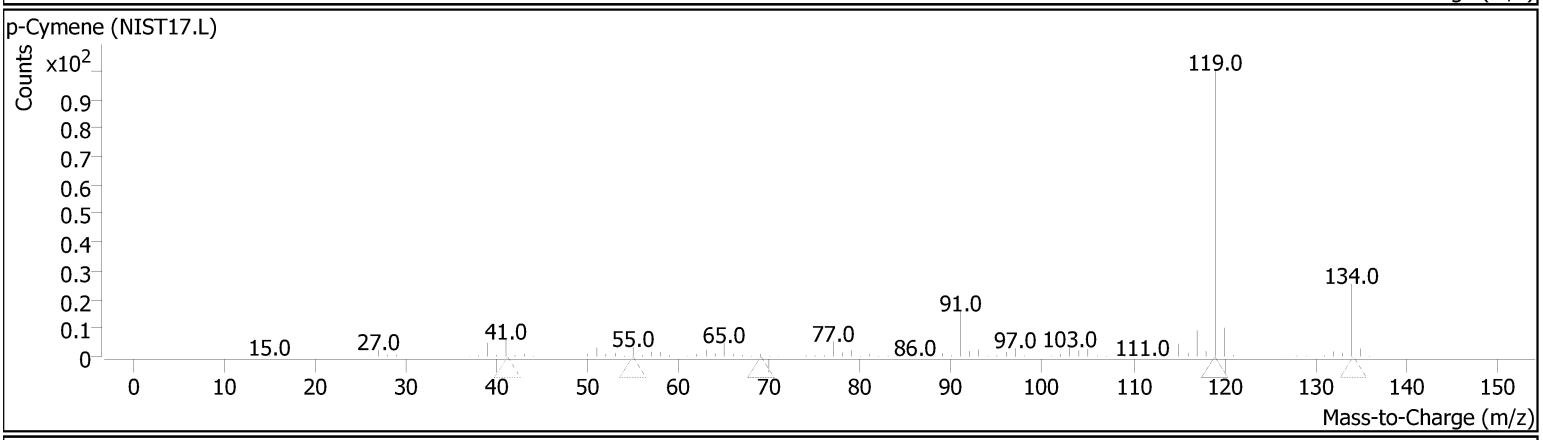


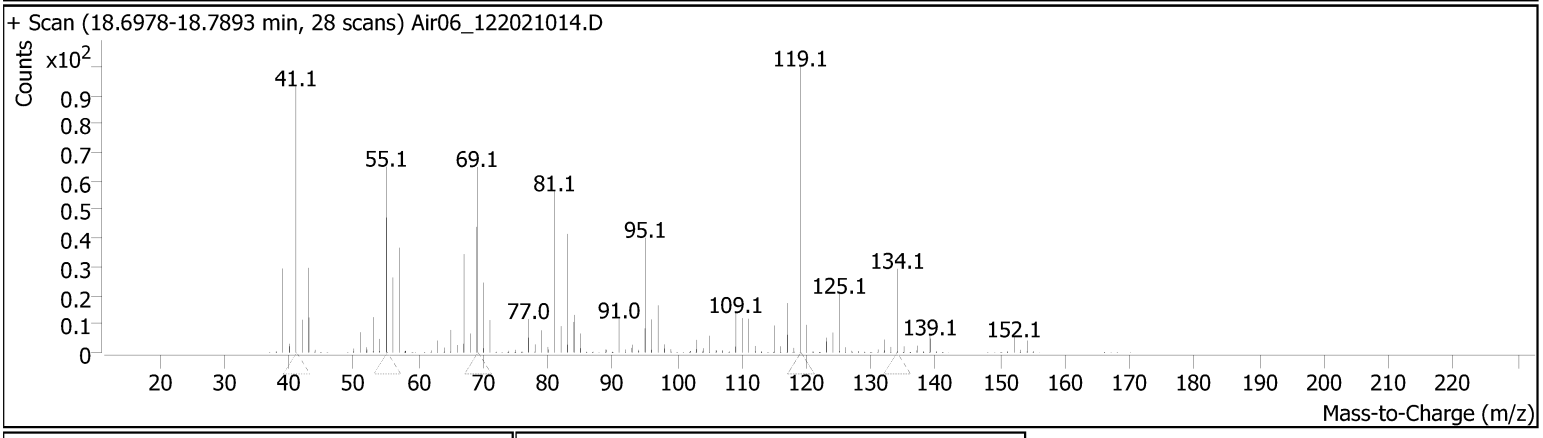


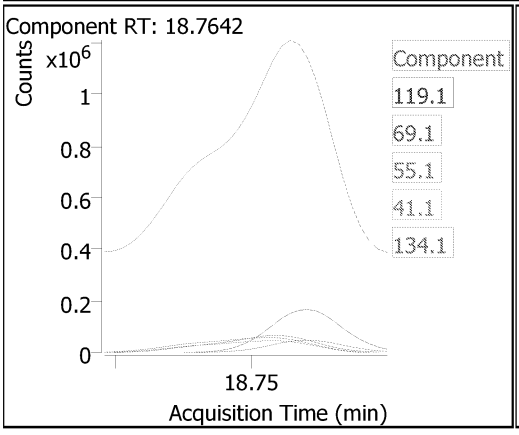


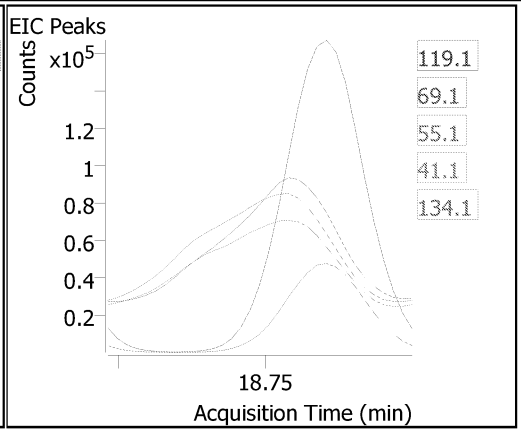
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.7642	p-Cymene	4162194.1	80.1	99-87-6	C10H14	10.47

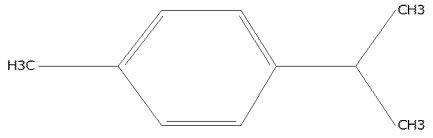




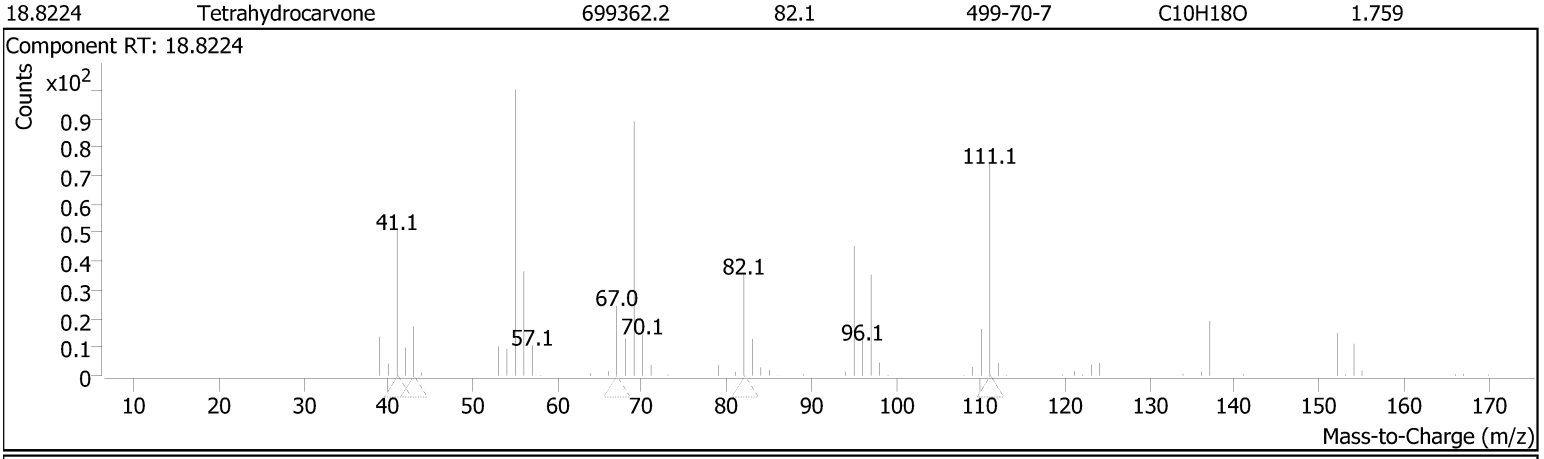


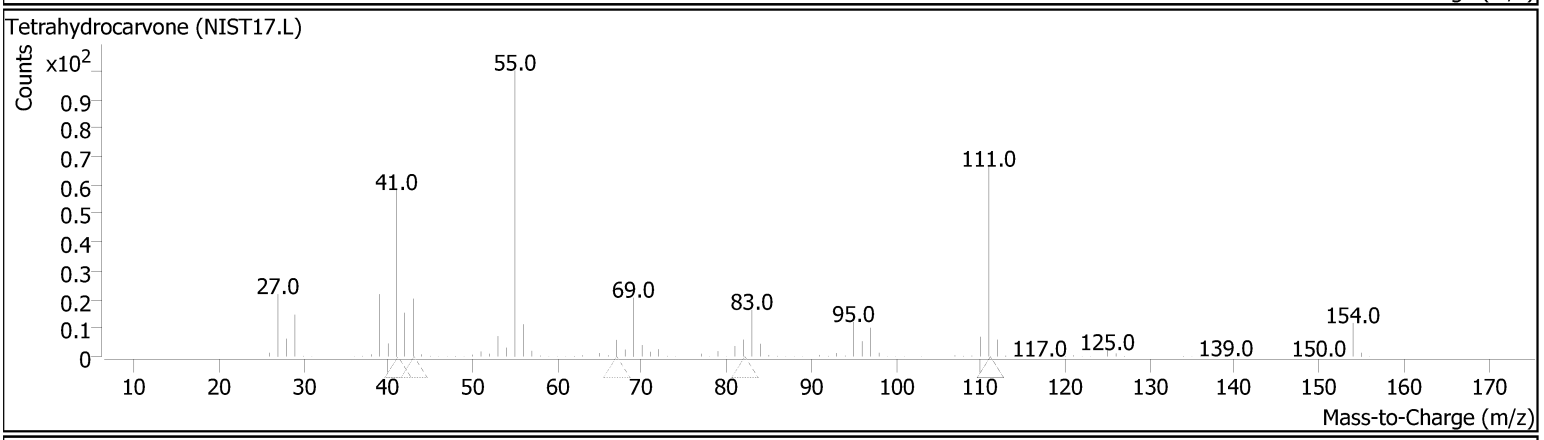


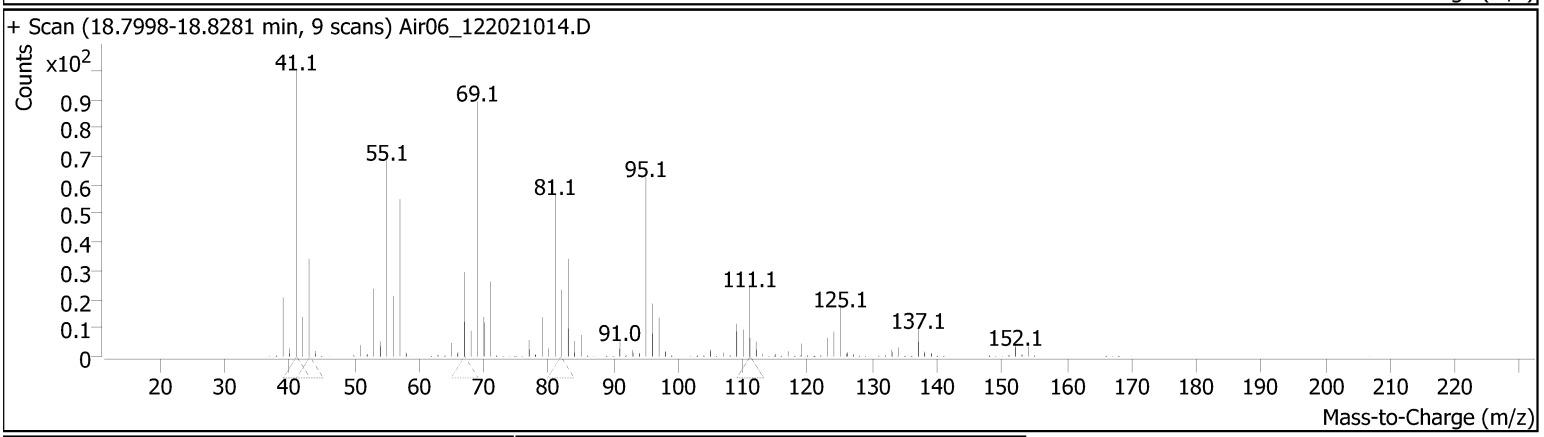


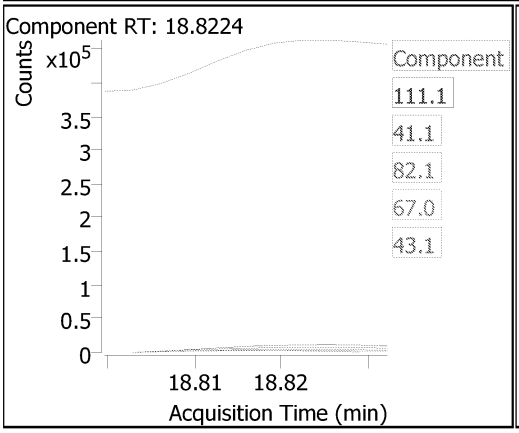


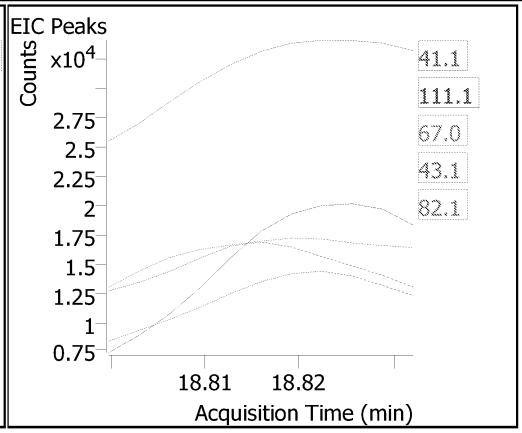
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.8224	Tetrahydrocarvone	699362.2	82.1	499-70-7	C10H18O	1.759

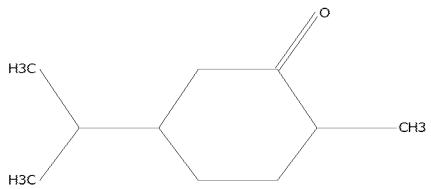




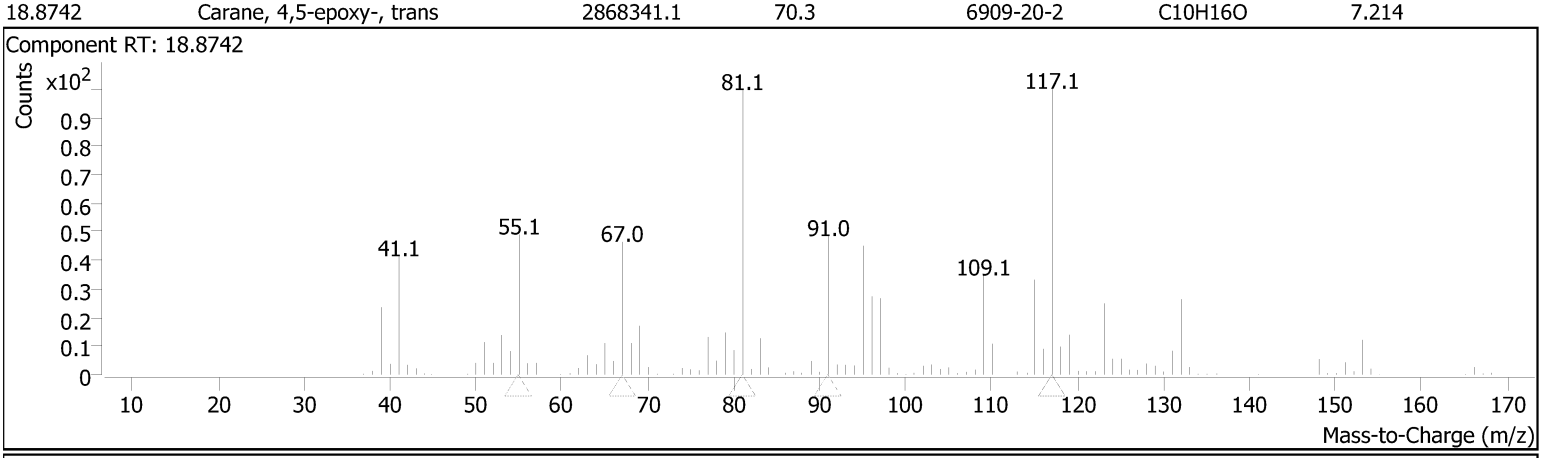


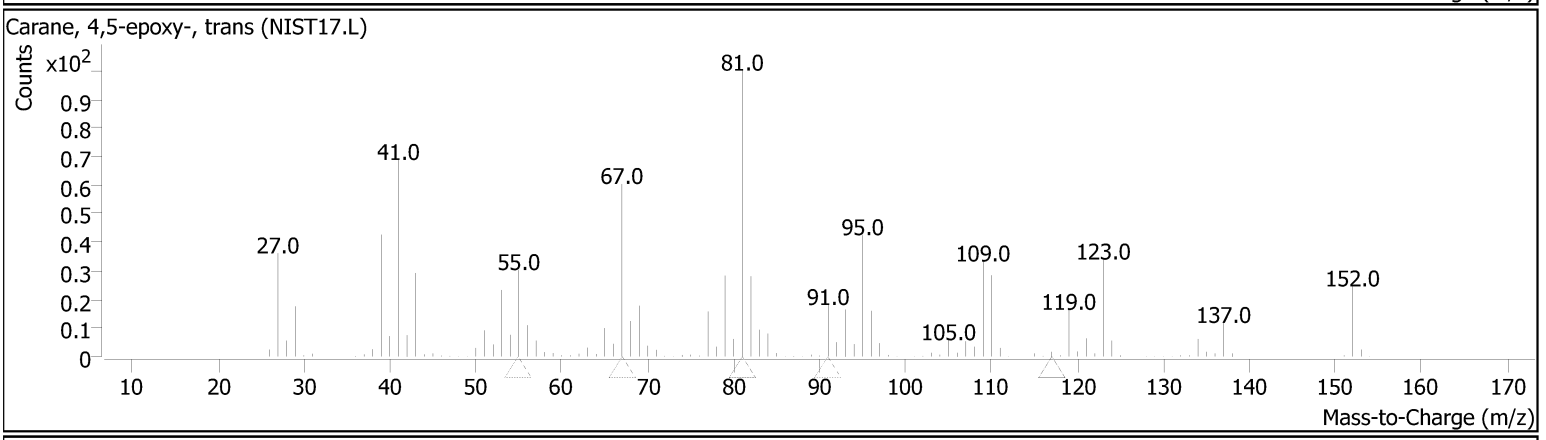


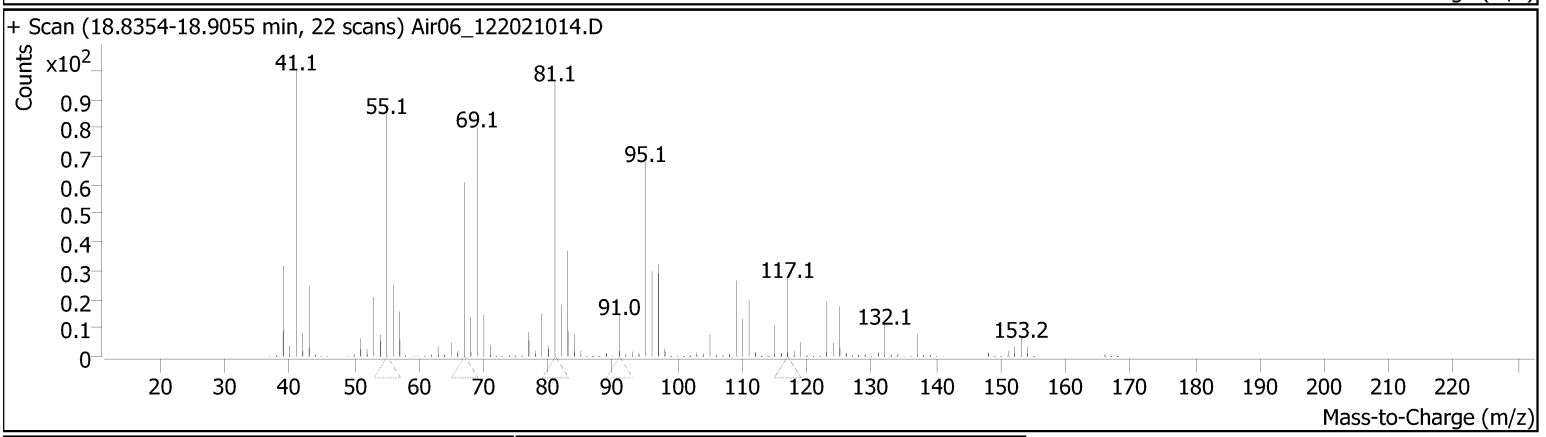


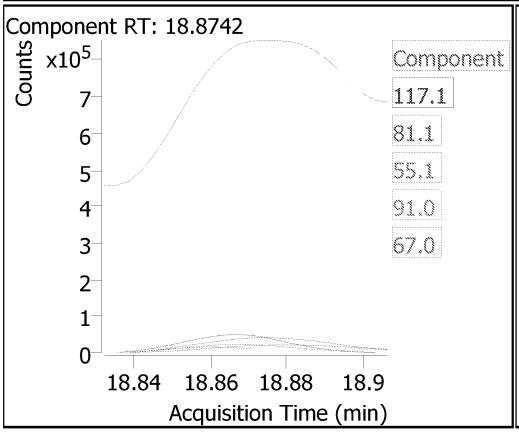


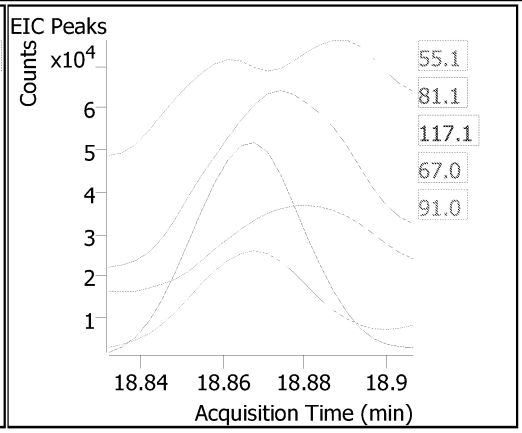
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.8742	Carane, 4,5-epoxy-, trans	2868341.1	70.3	6909-20-2	C10H16O	7.214

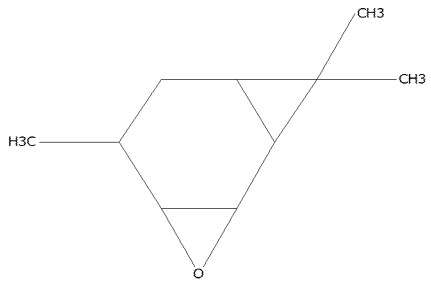




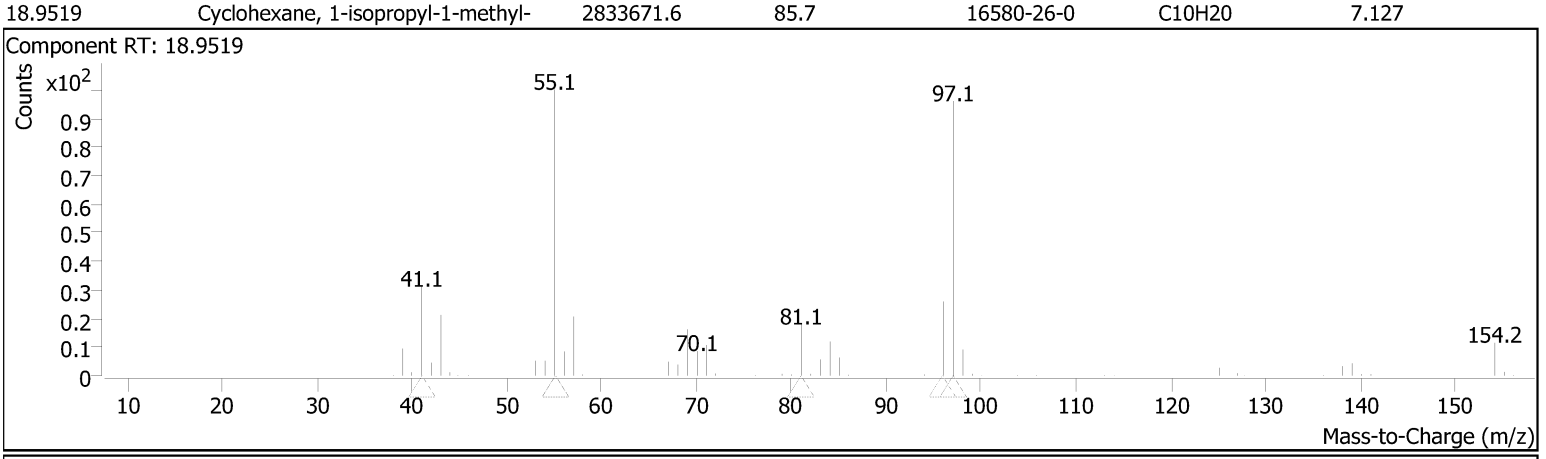


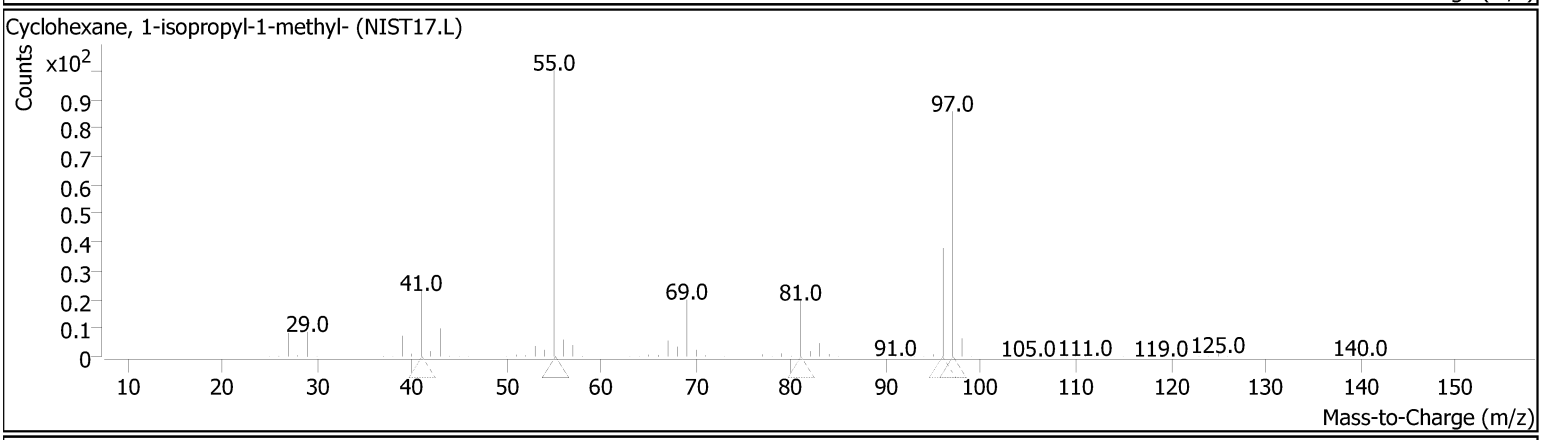


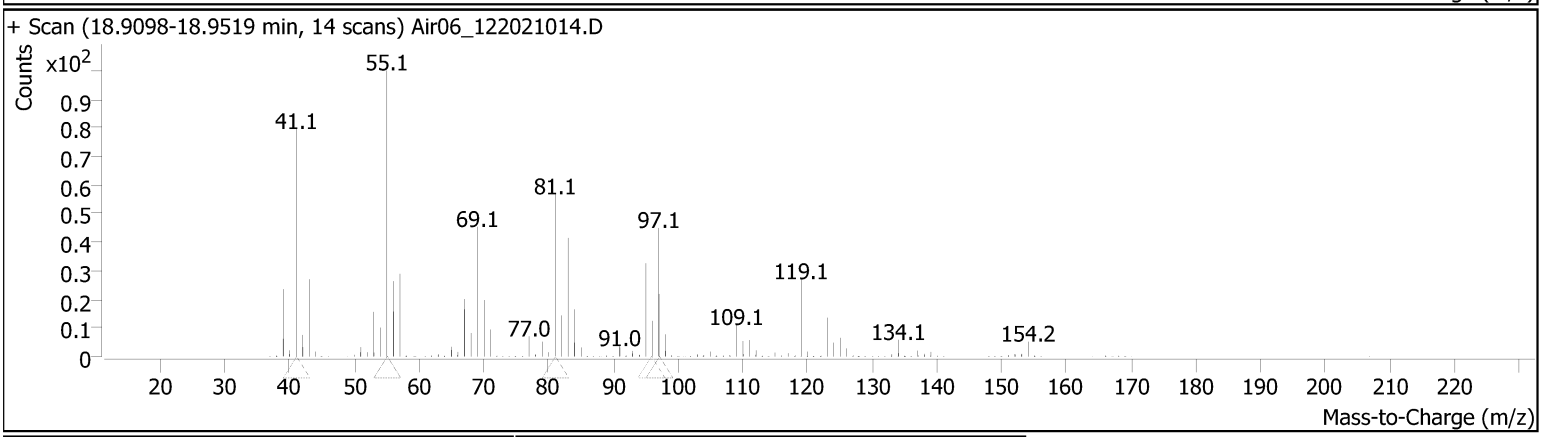


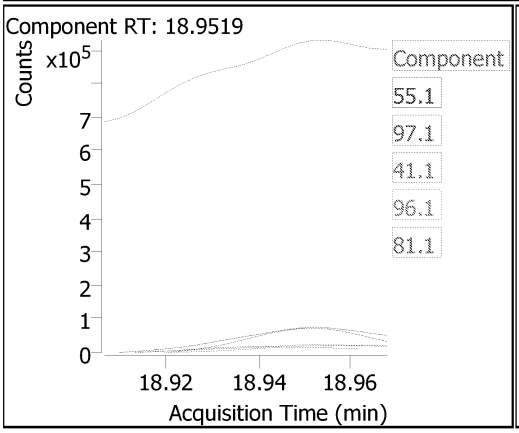


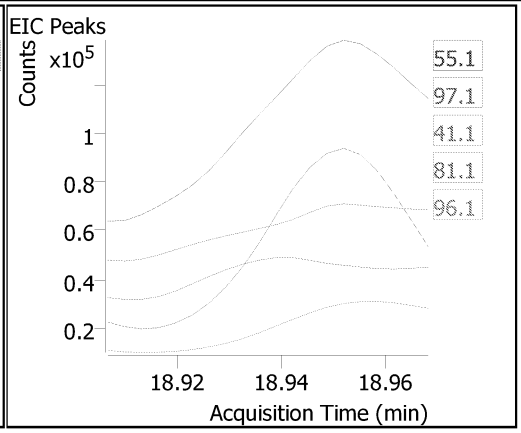
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.9519	Cyclohexane, 1-isopropyl-1-methyl-	2833671.6	85.7	16580-26-0	C10H20	7.127

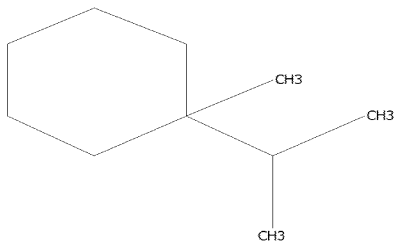




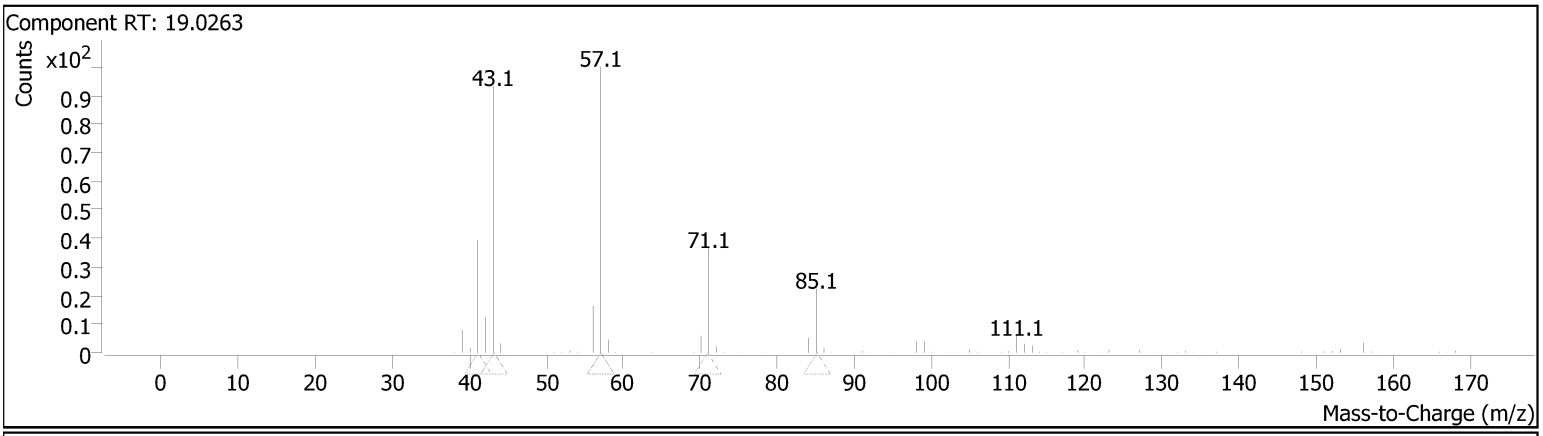


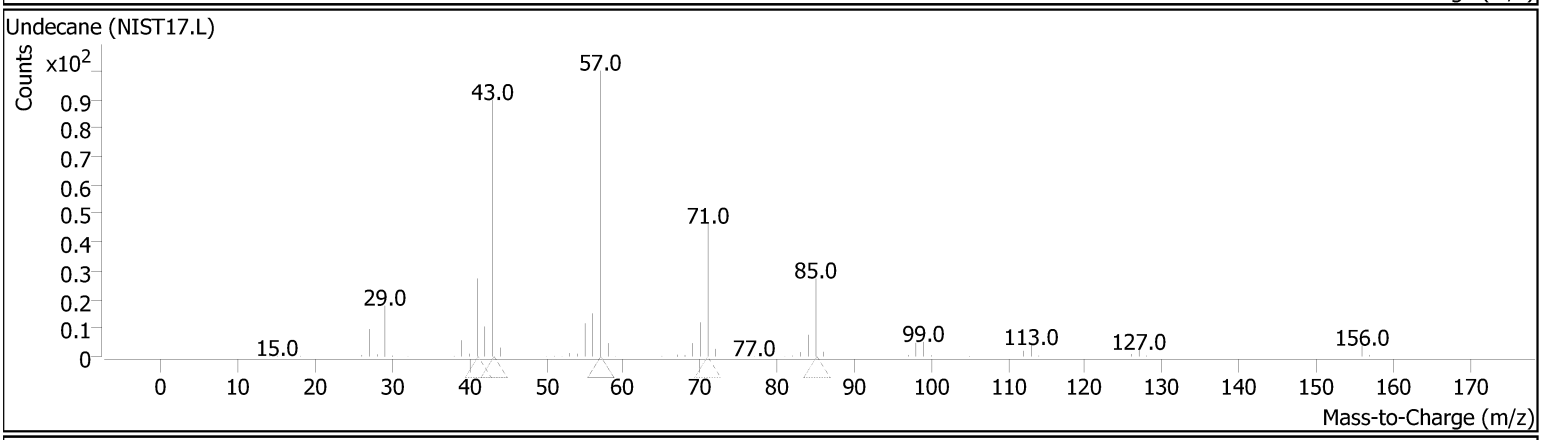


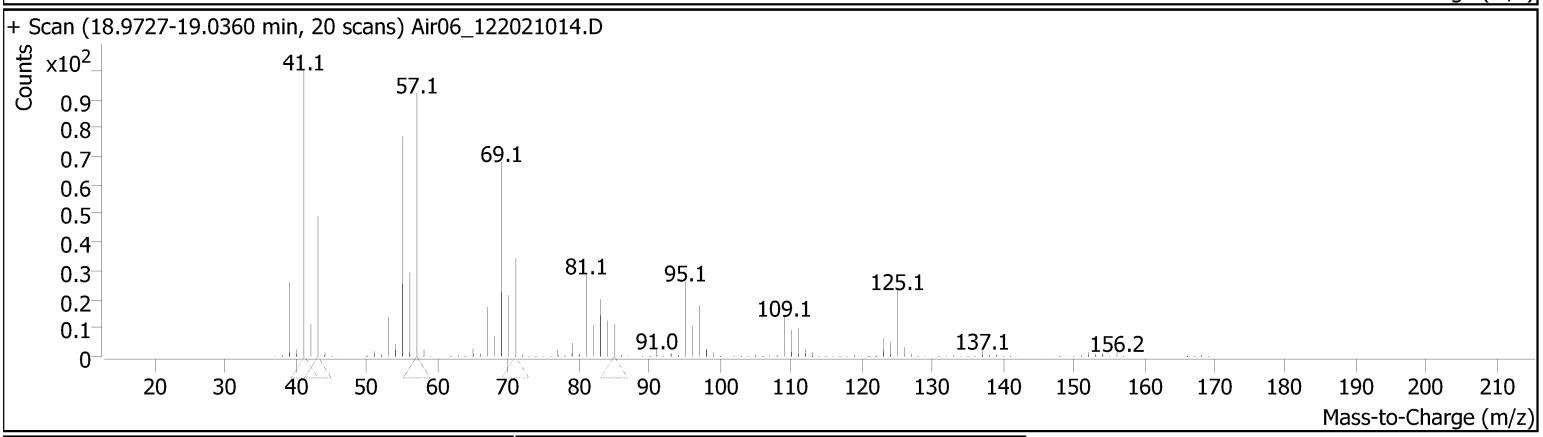


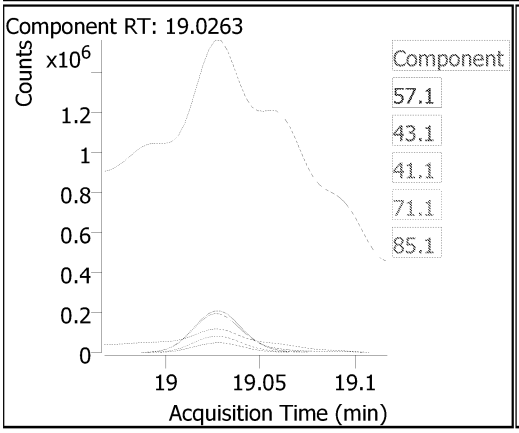


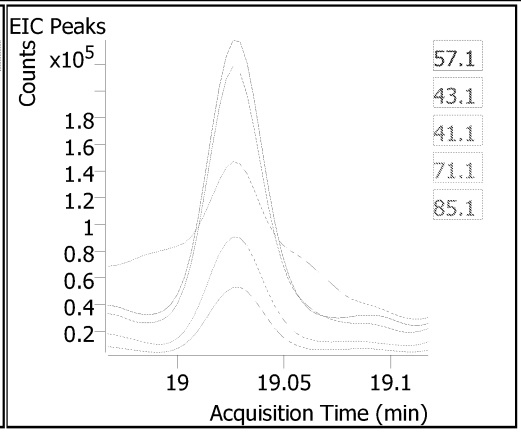
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.0263	Undecane	8578992.7	87.0	1120-21-4	C11H24	21.58





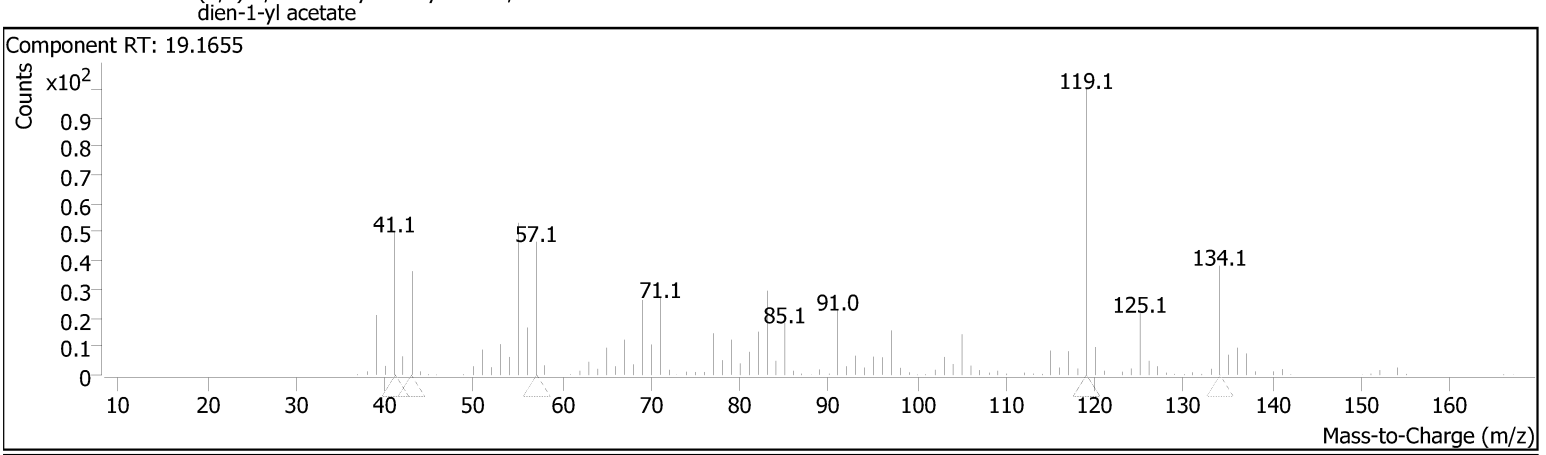


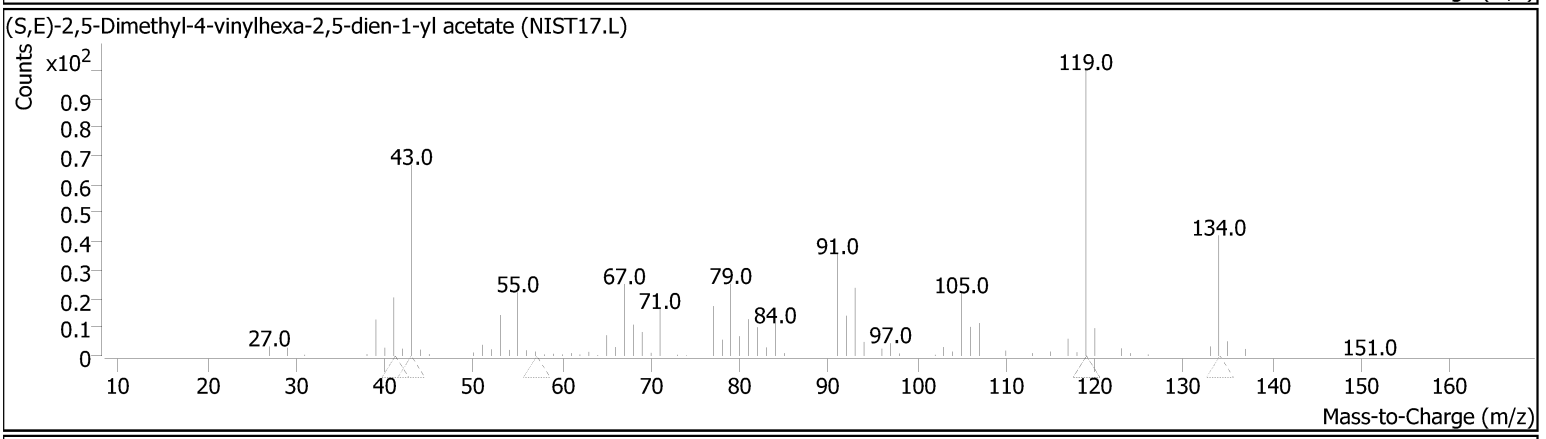


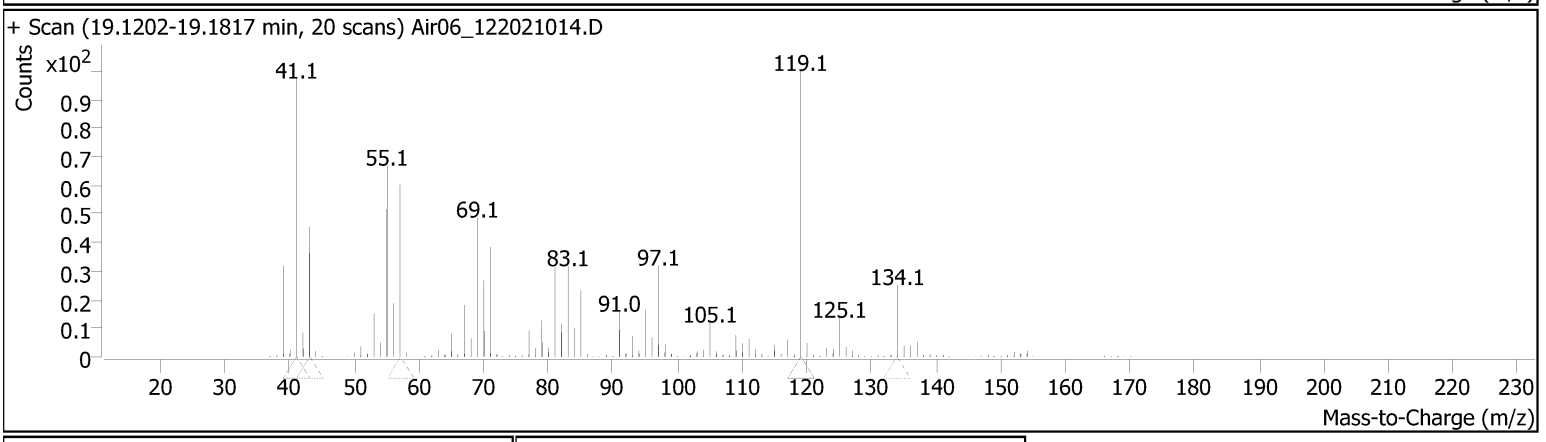


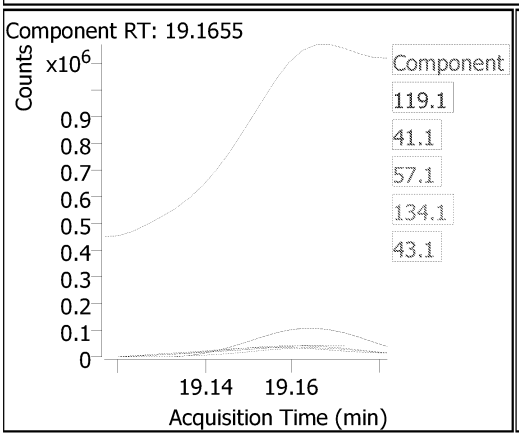


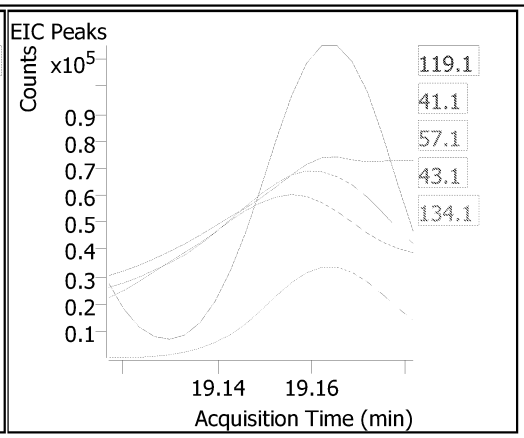
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.1655	(S,E)-2,5-Dimethyl-4-vinylhexa-2,5-dien-1-yl acetate	2992513.5	79.8	20384-05-8	C12H18O2	7.527

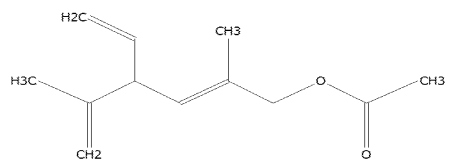




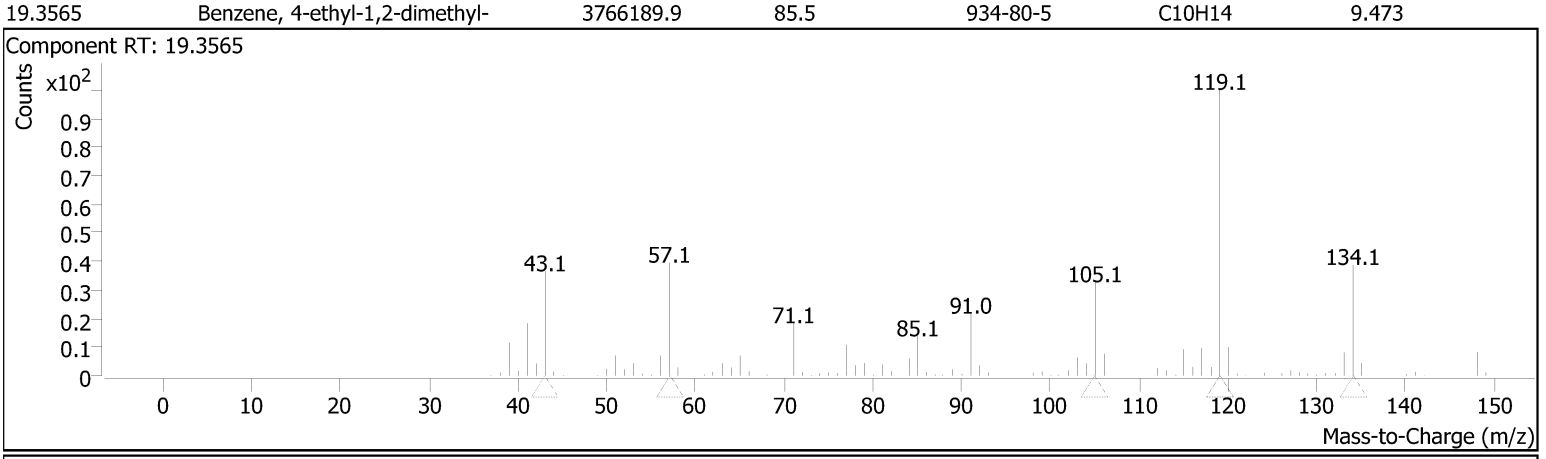


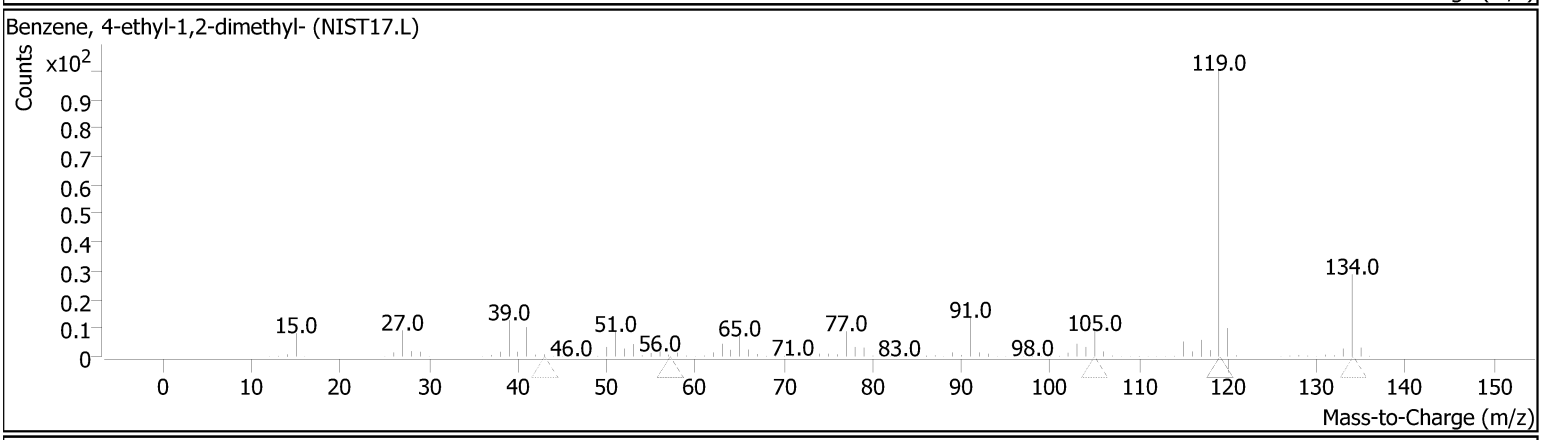


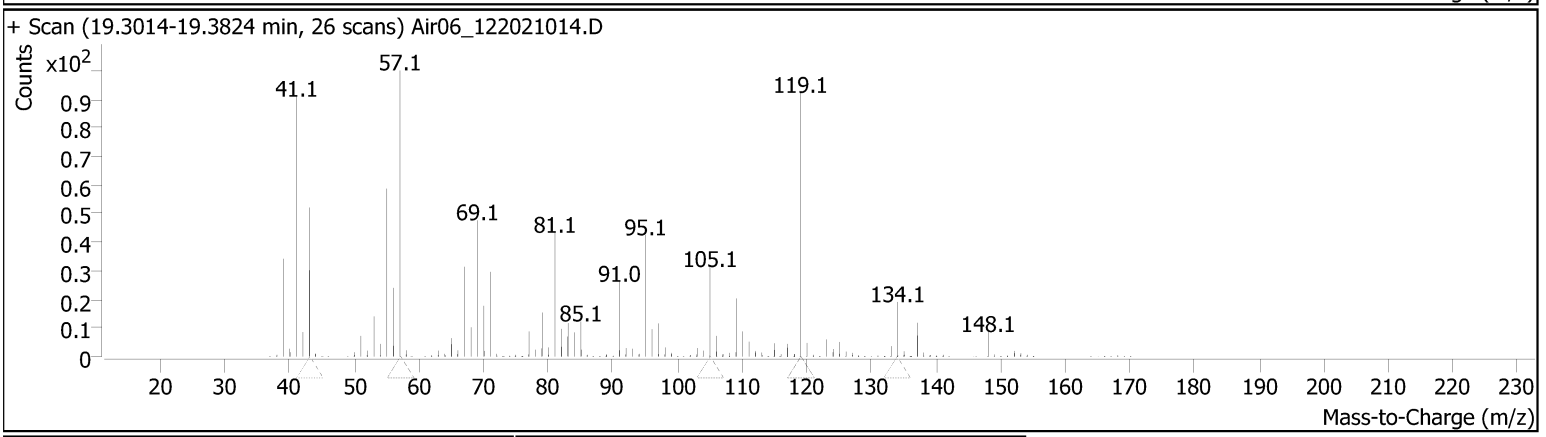


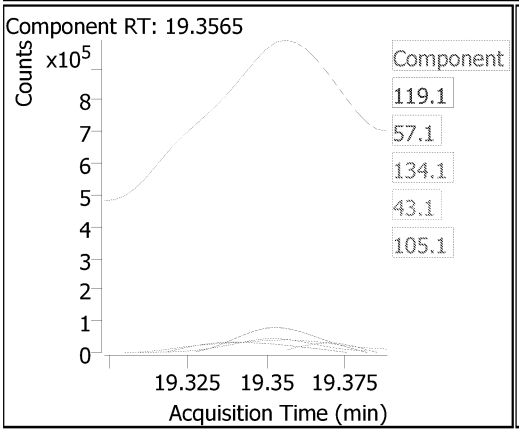


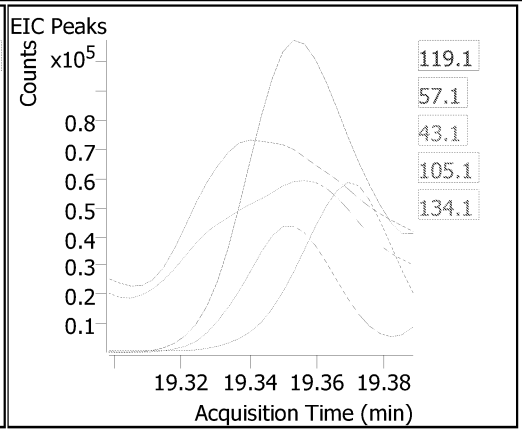
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.3565	Benzene, 4-ethyl-1,2-dimethyl-	3766189.9	85.5	934-80-5	C10H14	9.473

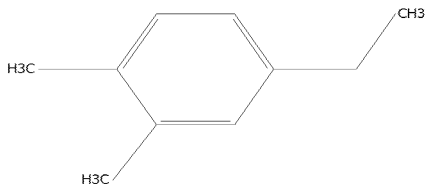




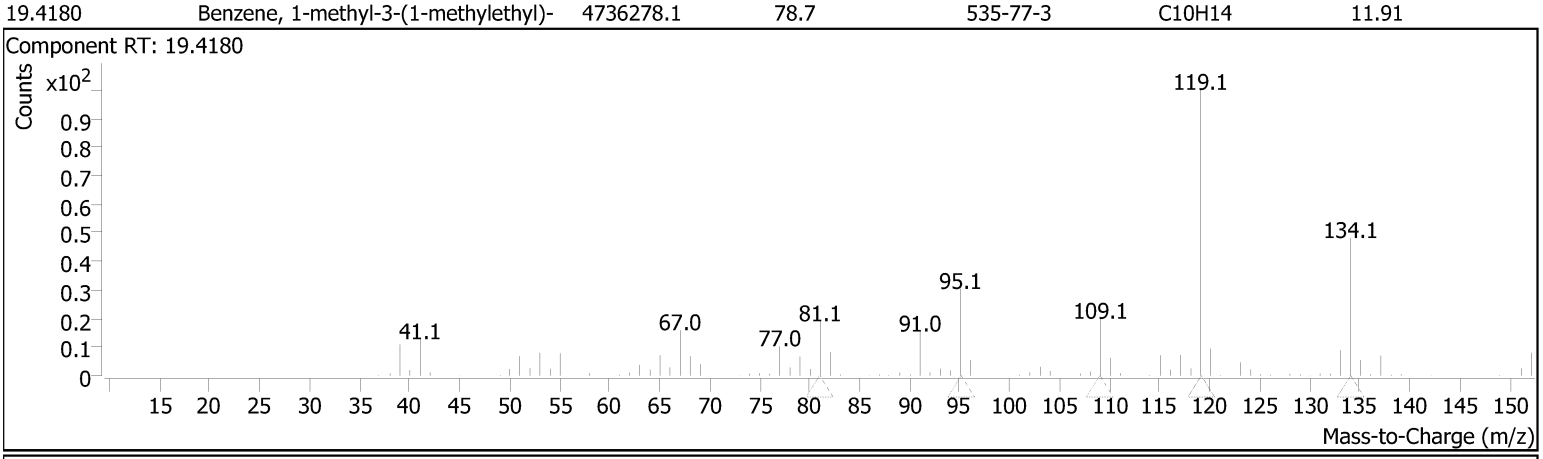


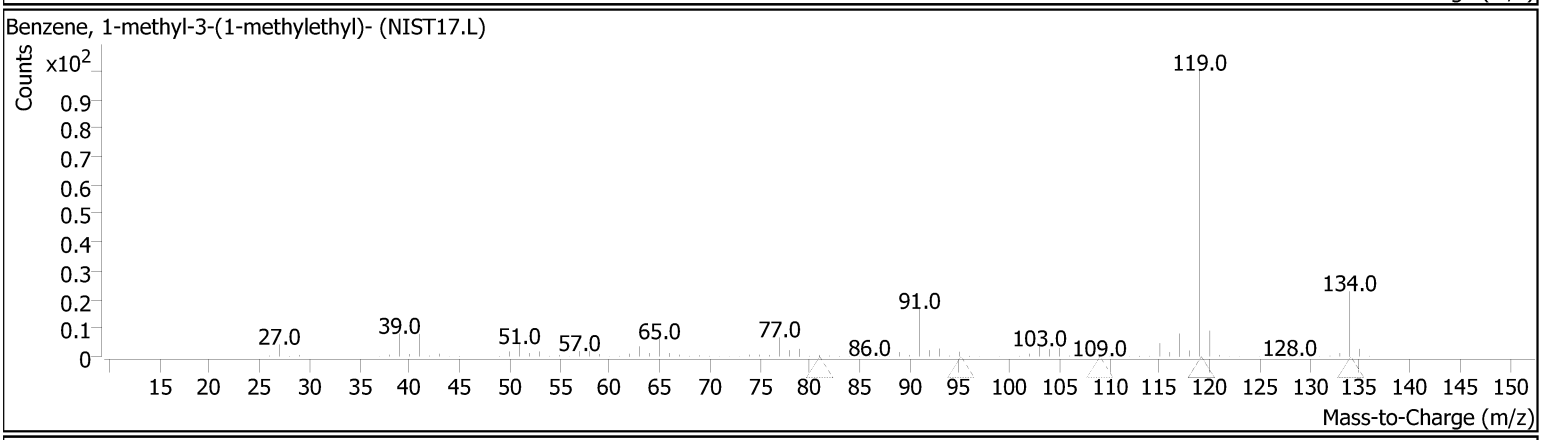


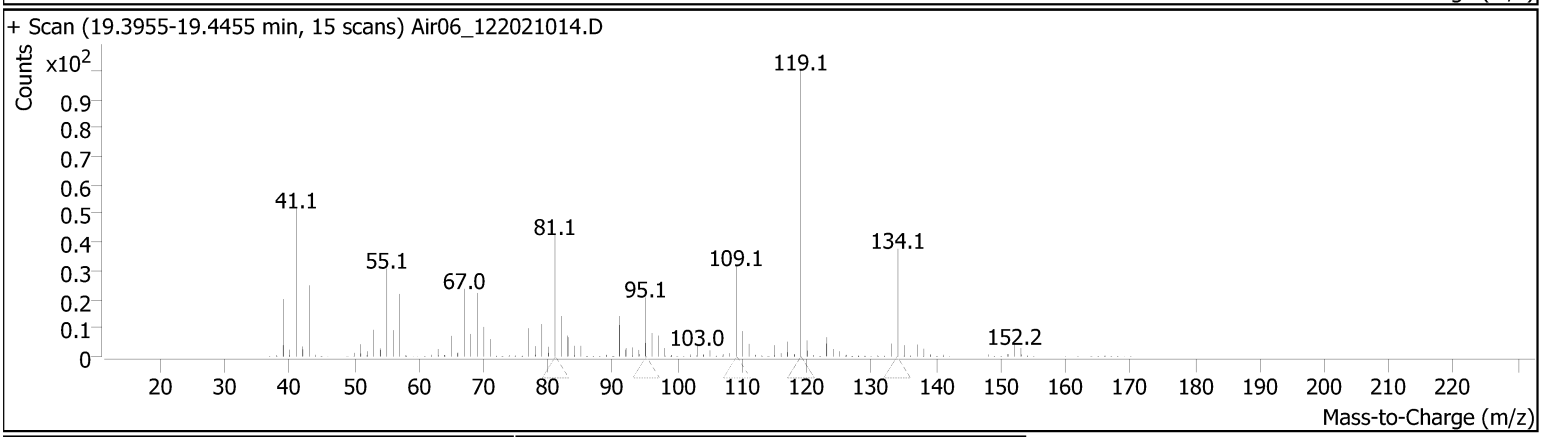


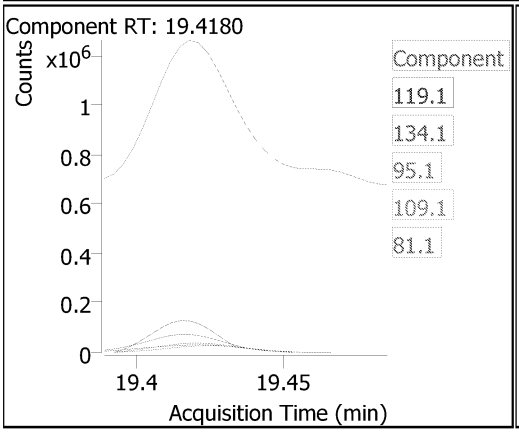


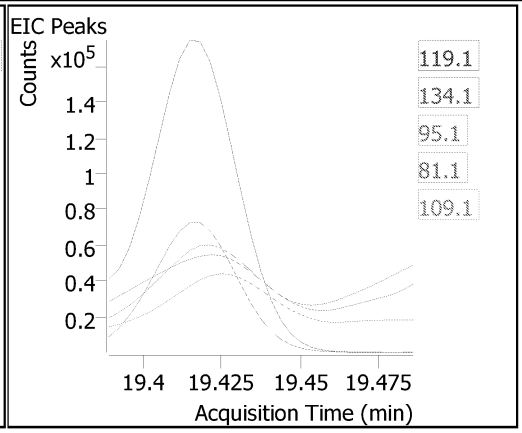
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.4180	Benzene, 1-methyl-3-(1-methylethyl)-	4736278.1	78.7	535-77-3	C10H14	11.91

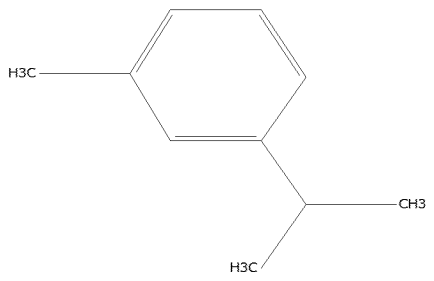




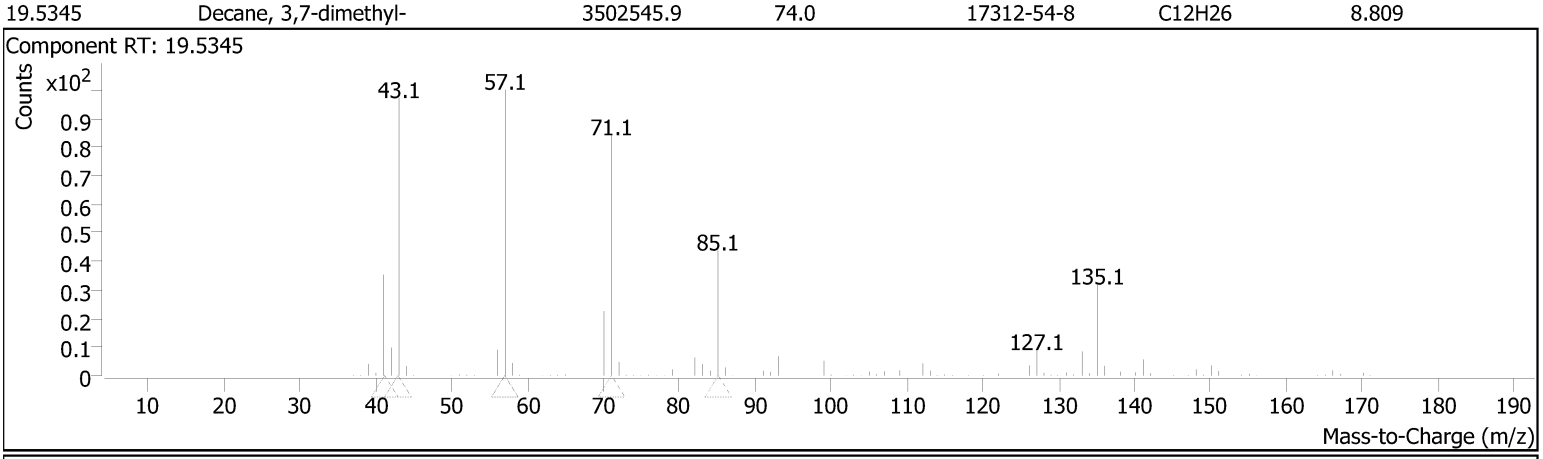


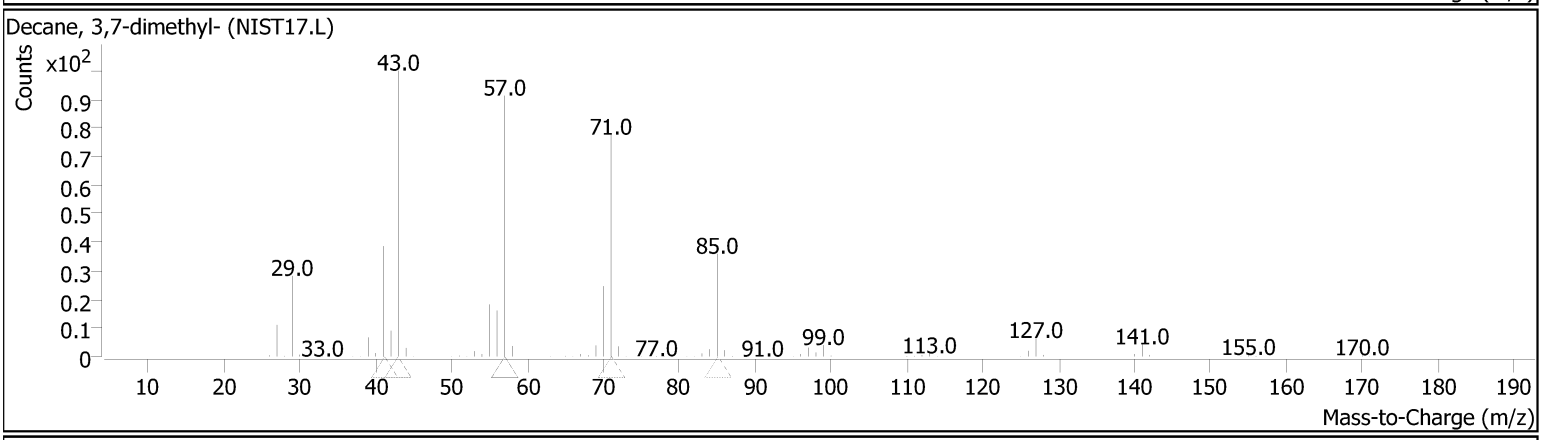


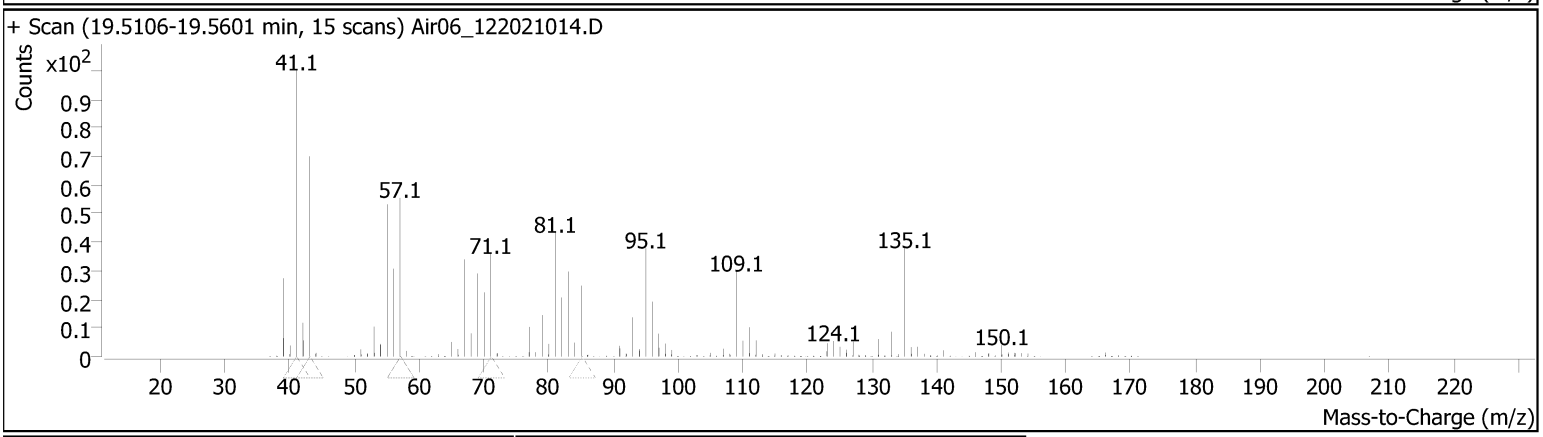


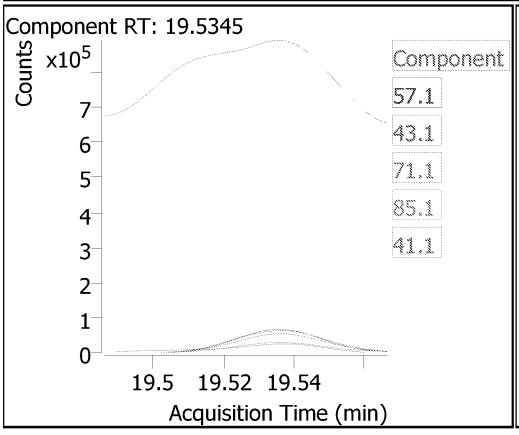


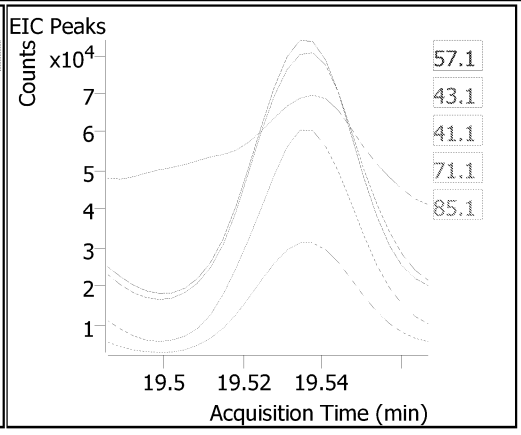
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.5345	Decane, 3,7-dimethyl-	3502545.9	74.0	17312-54-8	C12H26	8.809

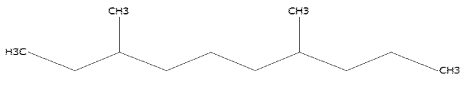








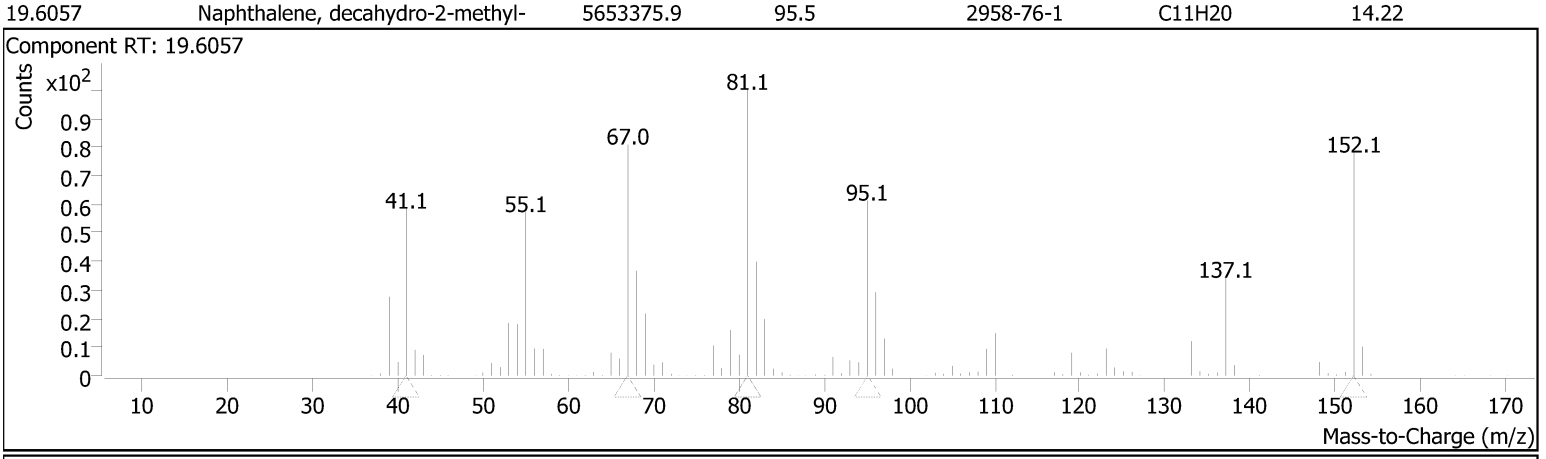


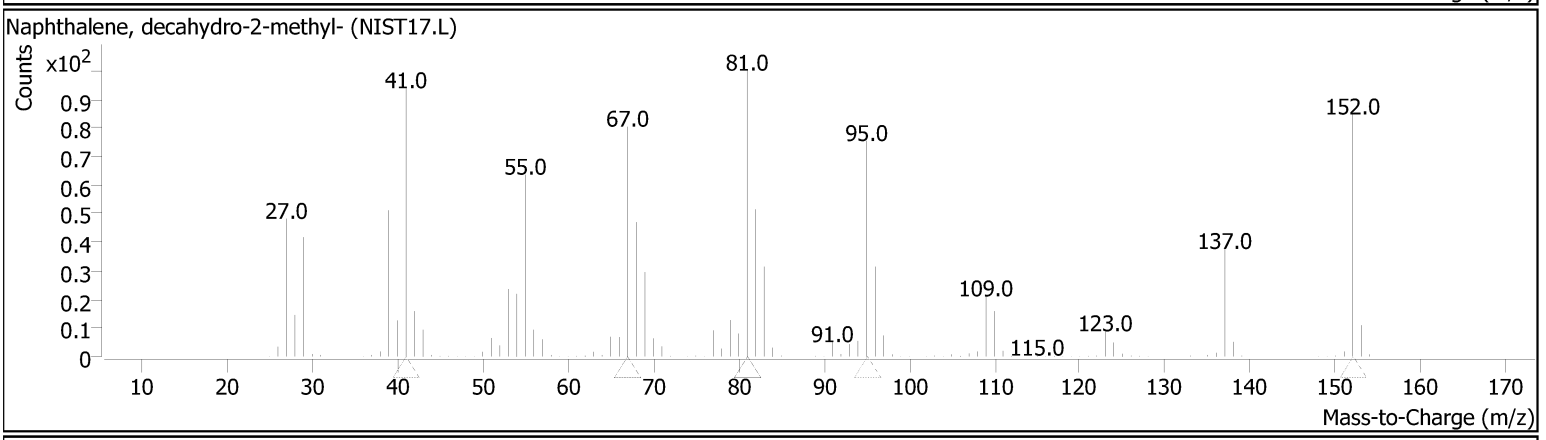


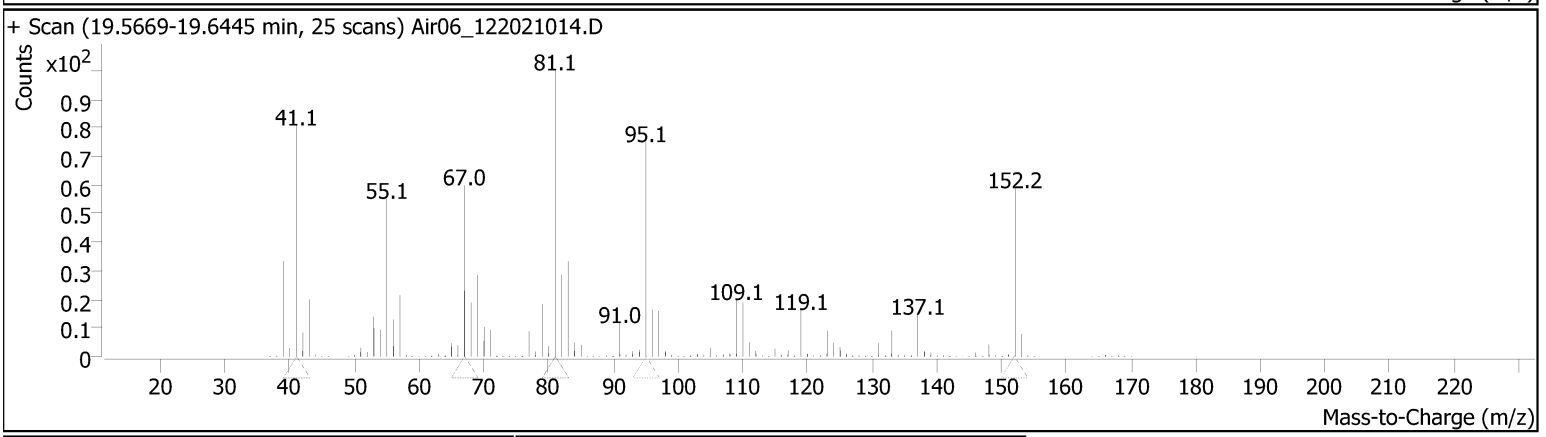
Library Search Results - NonTarget Hits with Details

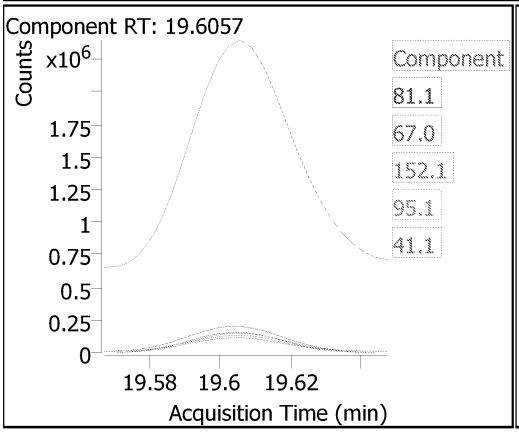
Agilent Technologies

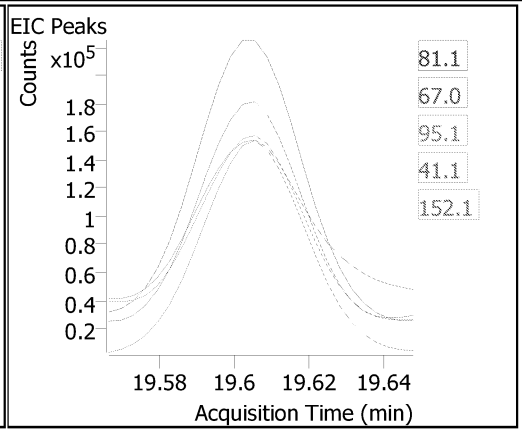
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.6057	Naphthalene, decahydro-2-methyl-	5653375.9	95.5	2958-76-1	C11H20	14.22

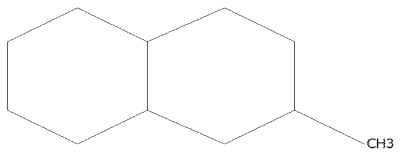




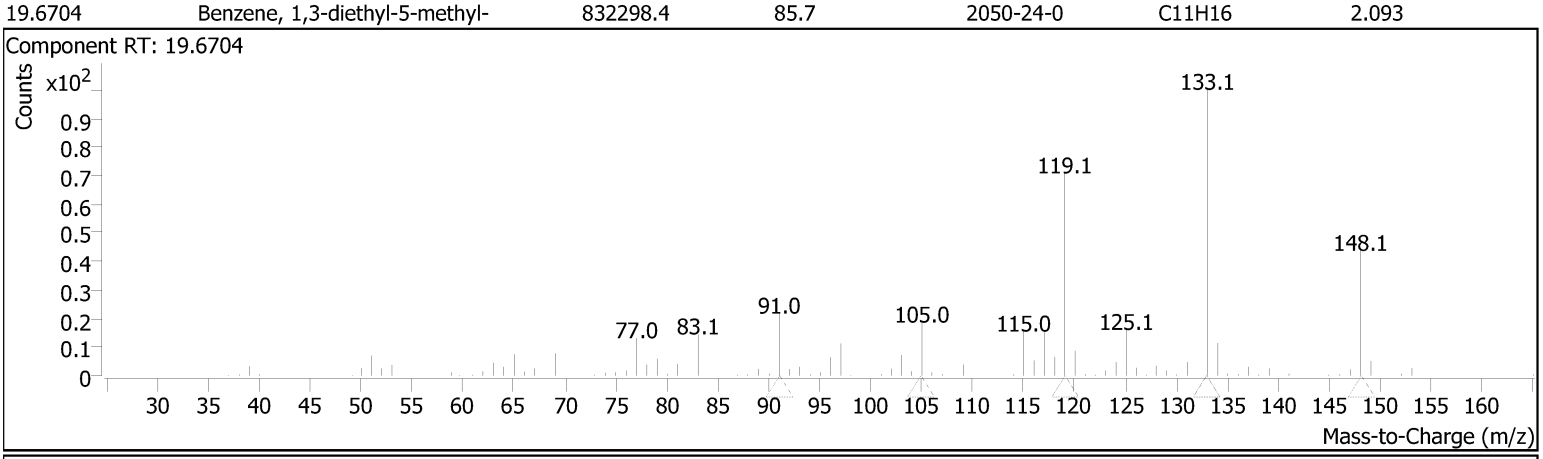


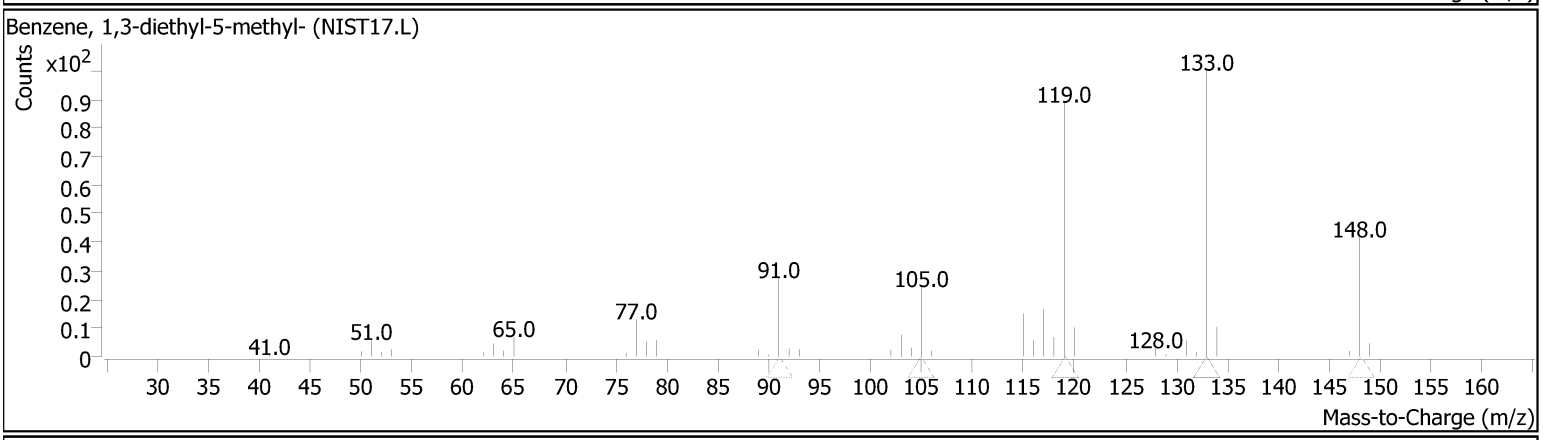


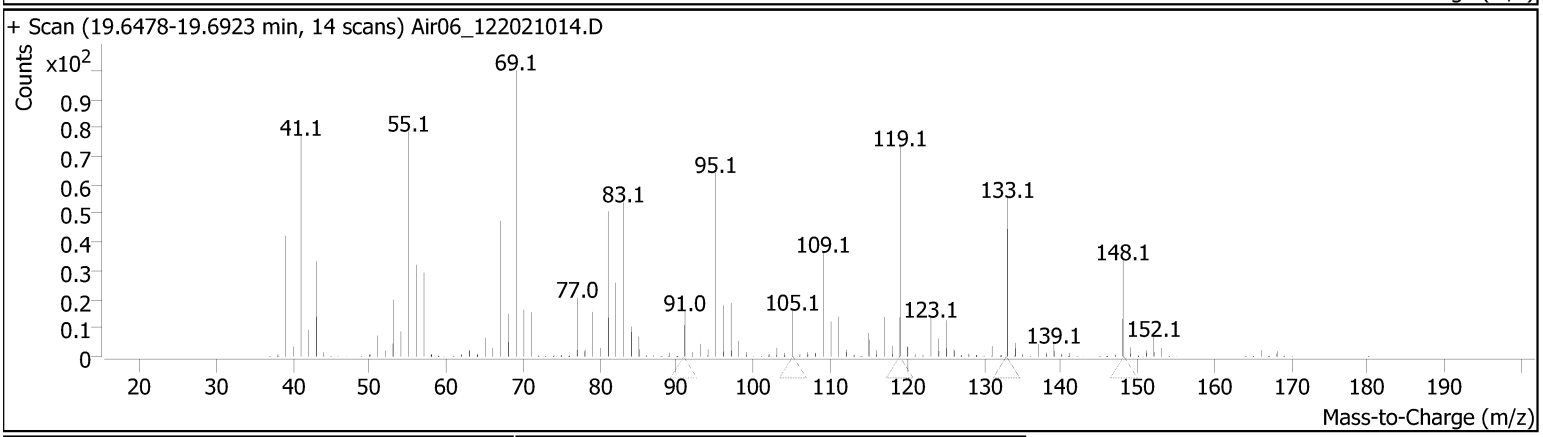


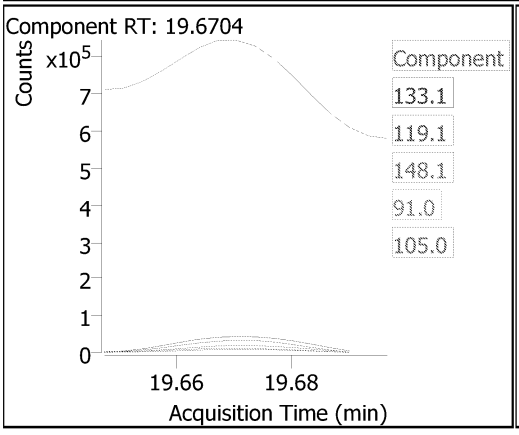


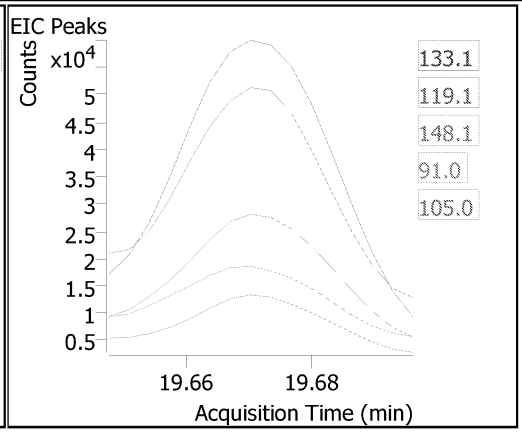
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.6704	Benzene, 1,3-diethyl-5-methyl-	832298.4	85.7	2050-24-0	C11H16	2.093

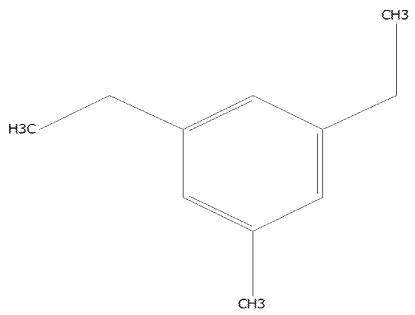




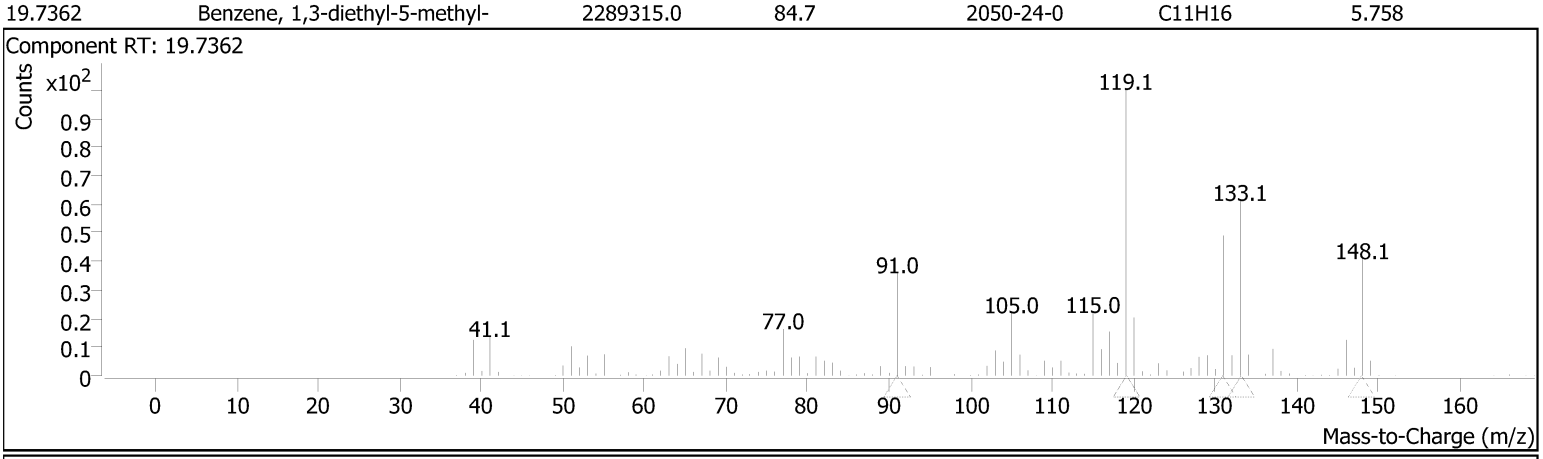


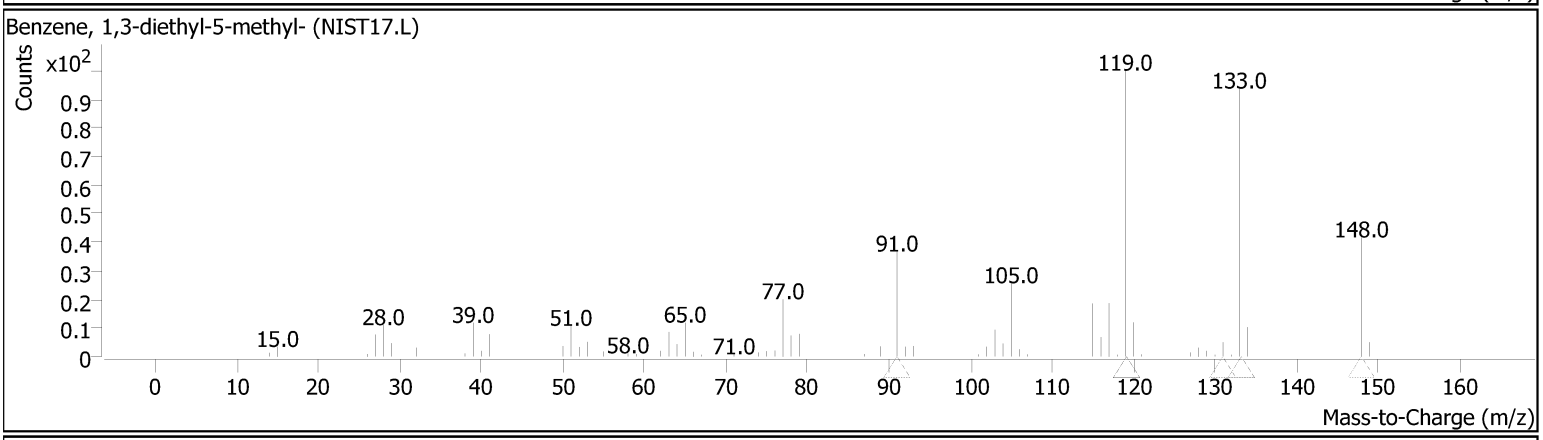


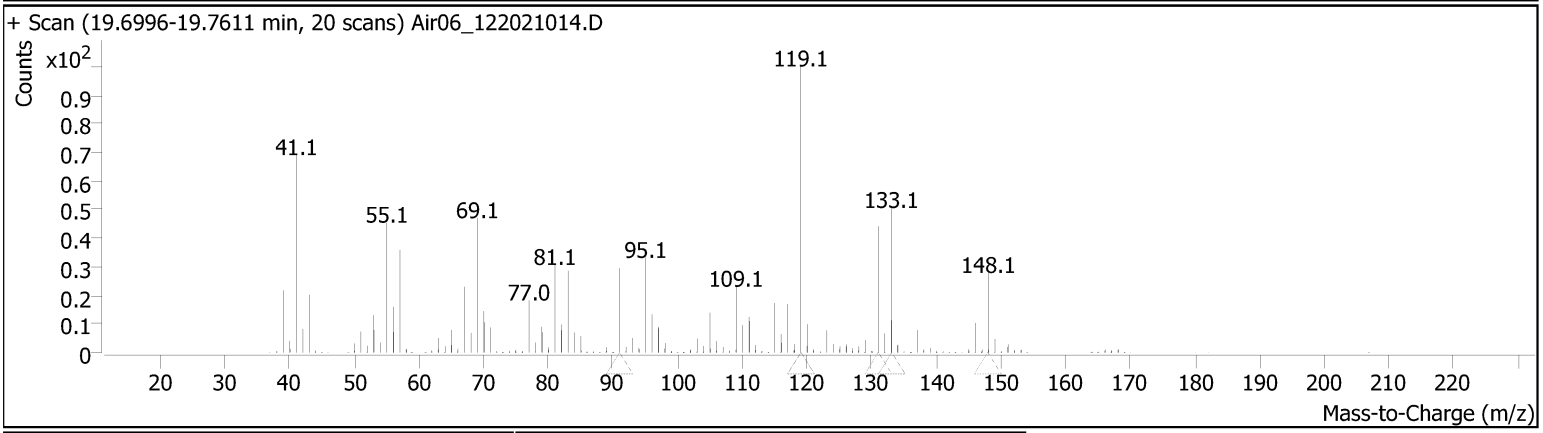


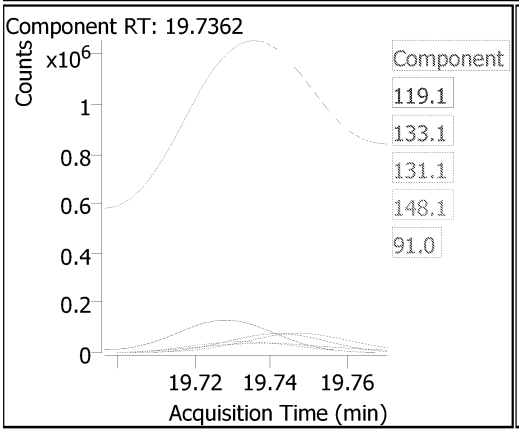


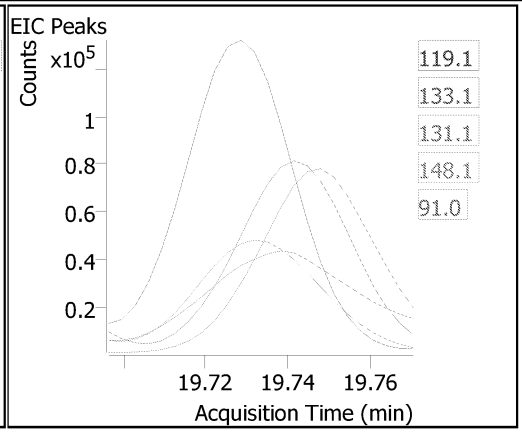
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.7362	Benzene, 1,3-diethyl-5-methyl-	2289315.0	84.7	2050-24-0	C11H16	5.758

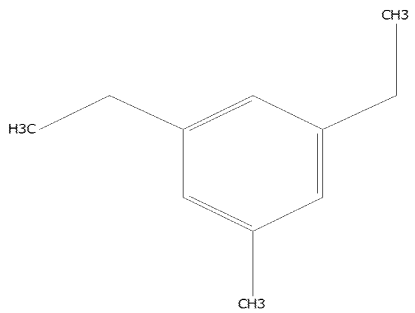








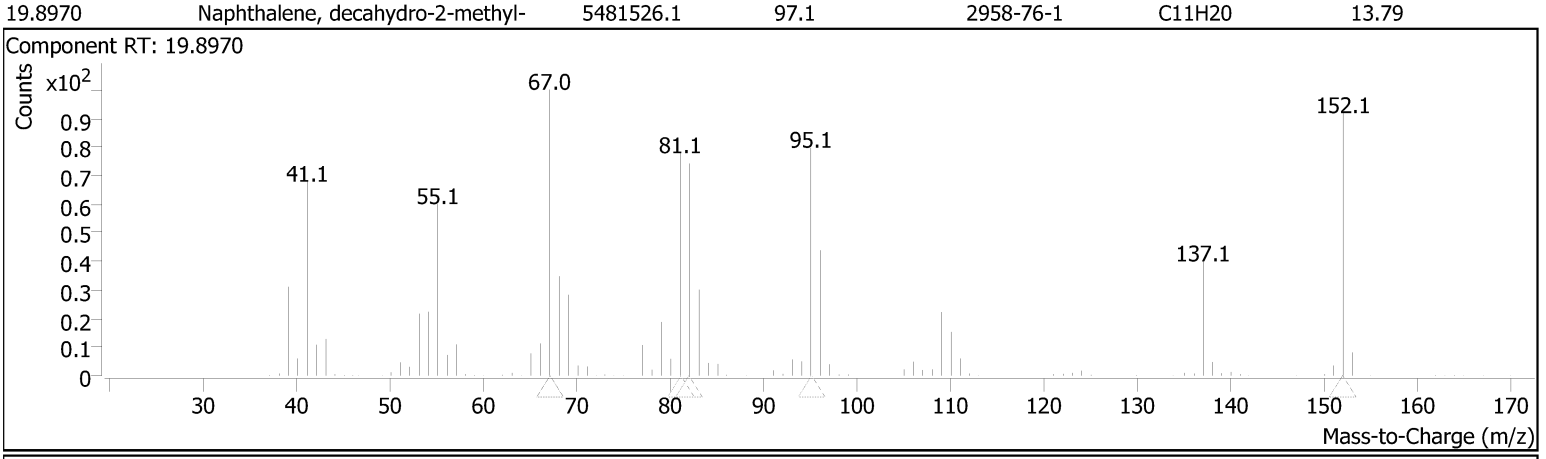


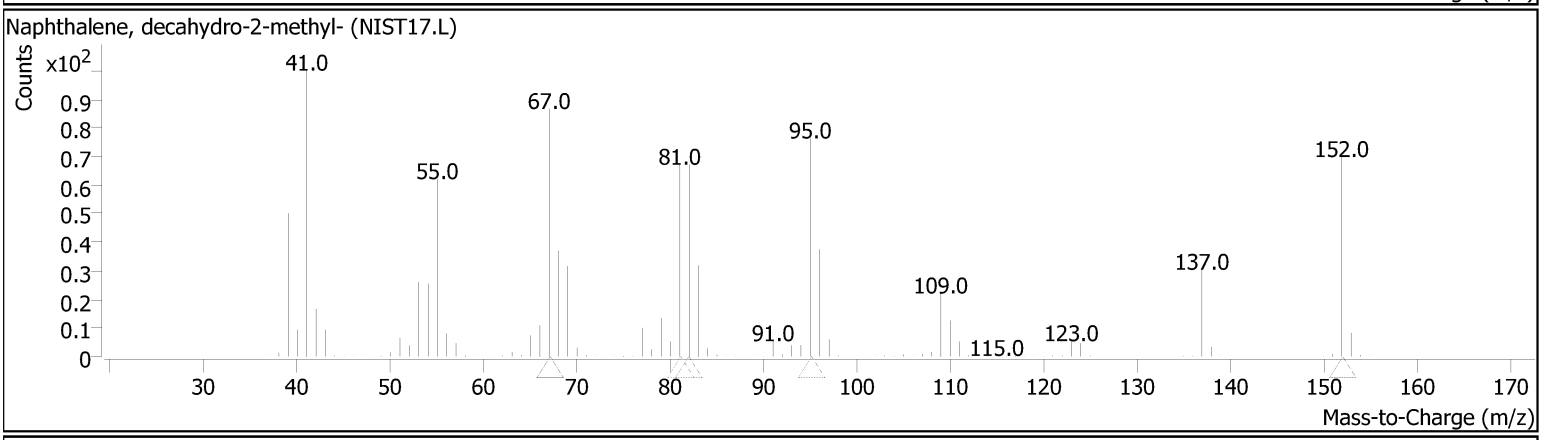


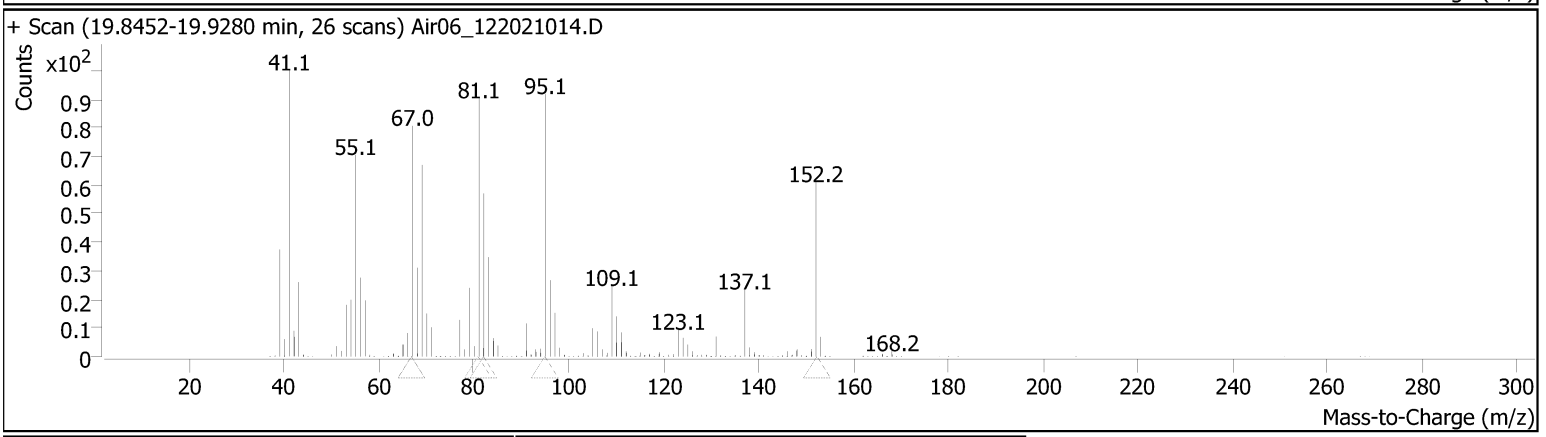
Library Search Results - NonTarget Hits with Details

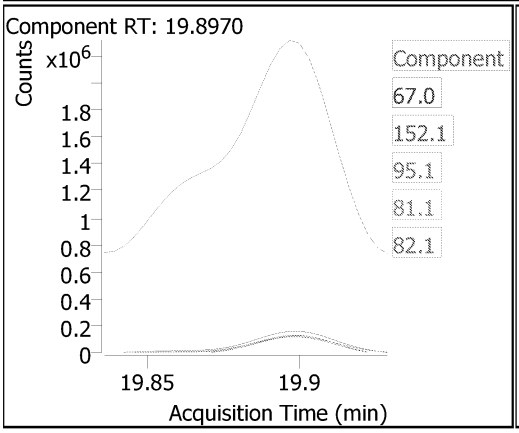
Agilent Technologies

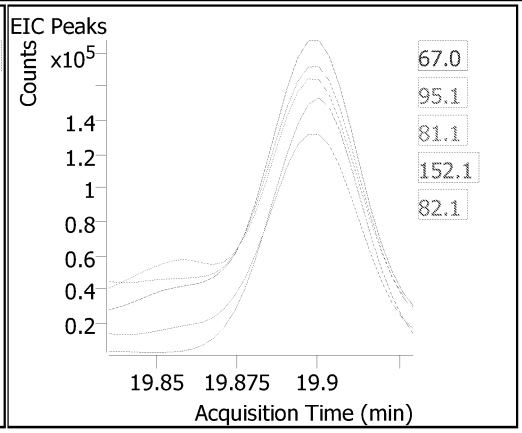
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.8970	Naphthalene, decahydro-2-methyl-	5481526.1	97.1	2958-76-1	C11H20	13.79

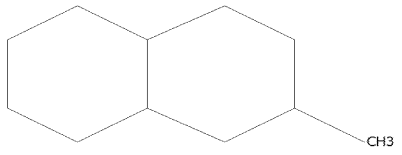




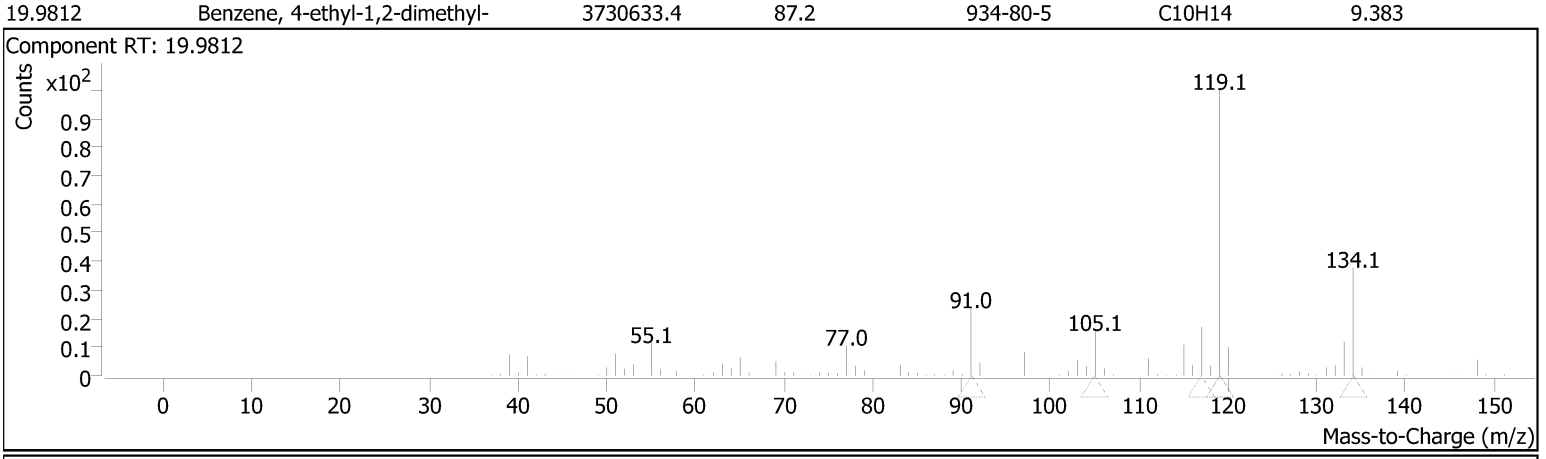


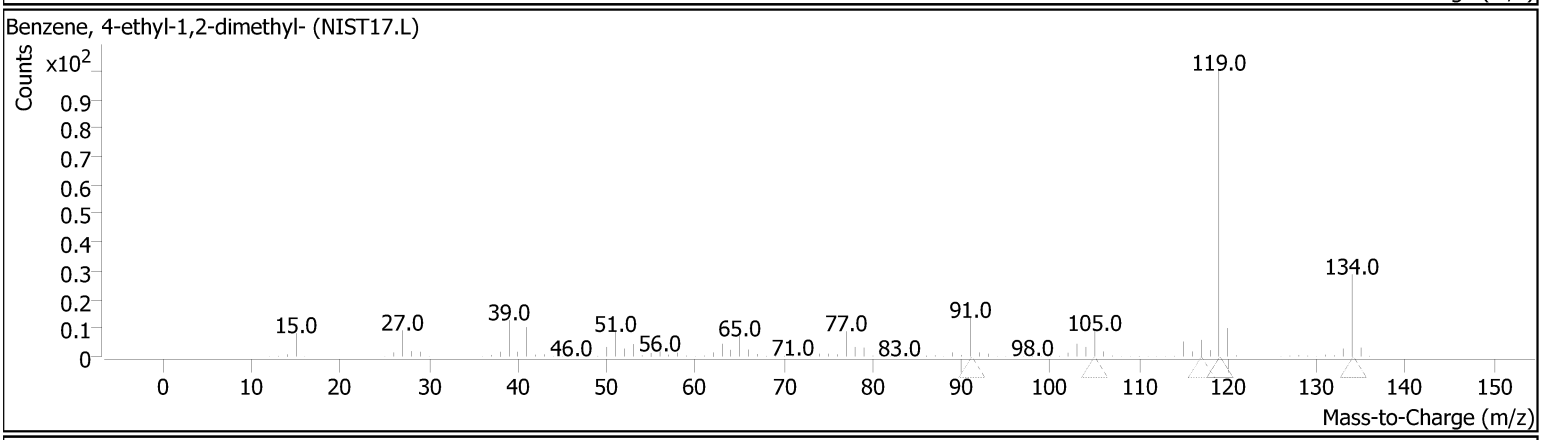


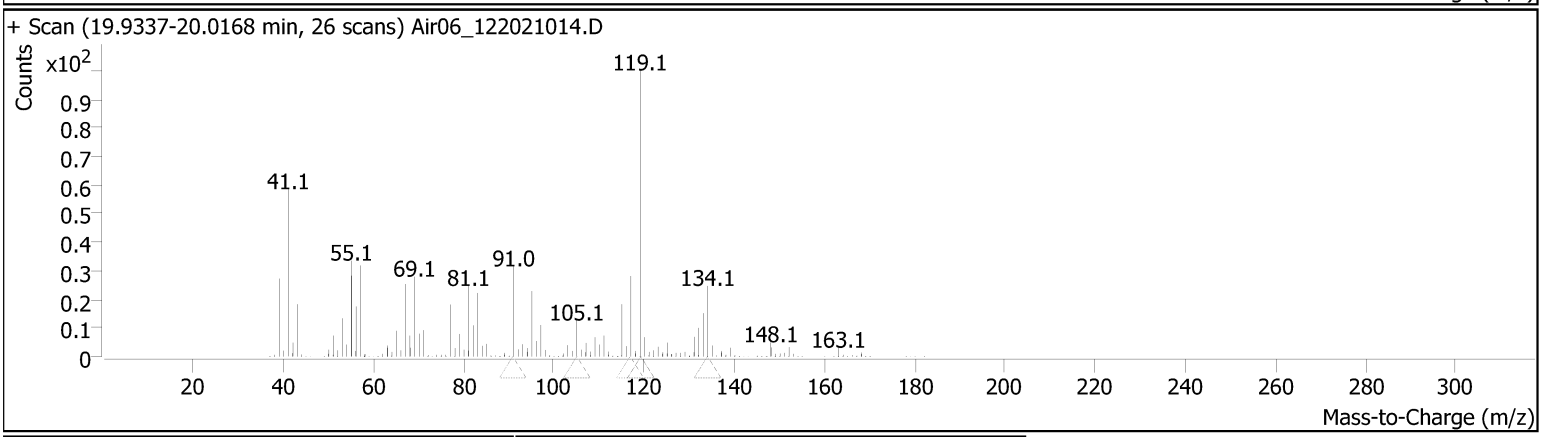


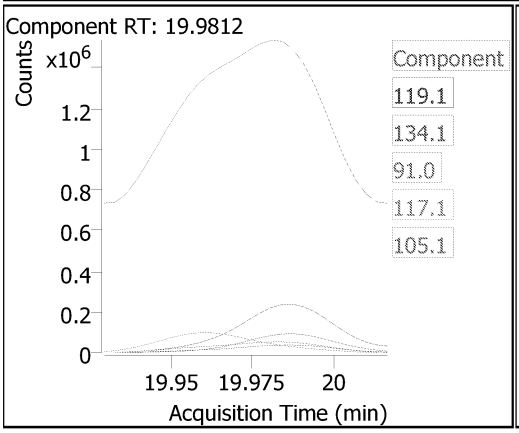


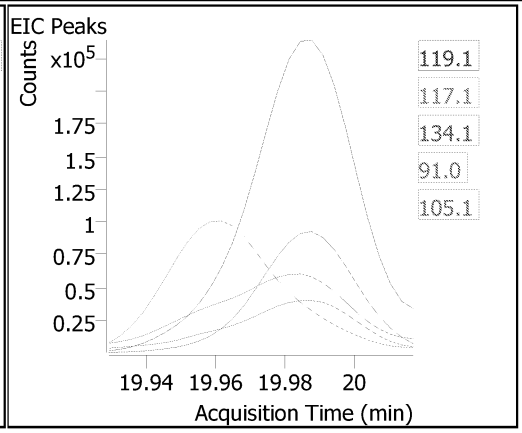
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.9812	Benzene, 4-ethyl-1,2-dimethyl-	3730633.4	87.2	934-80-5	C10H14	9.383

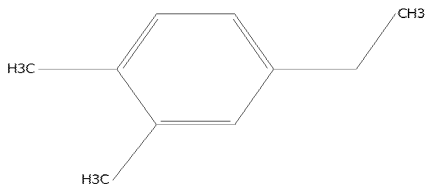




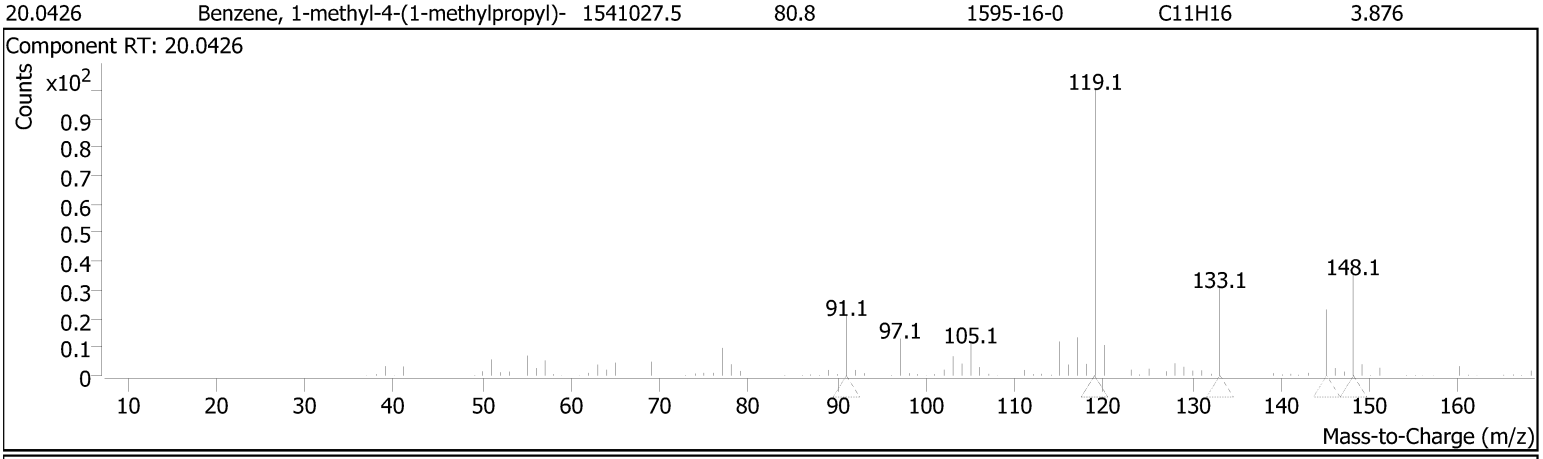


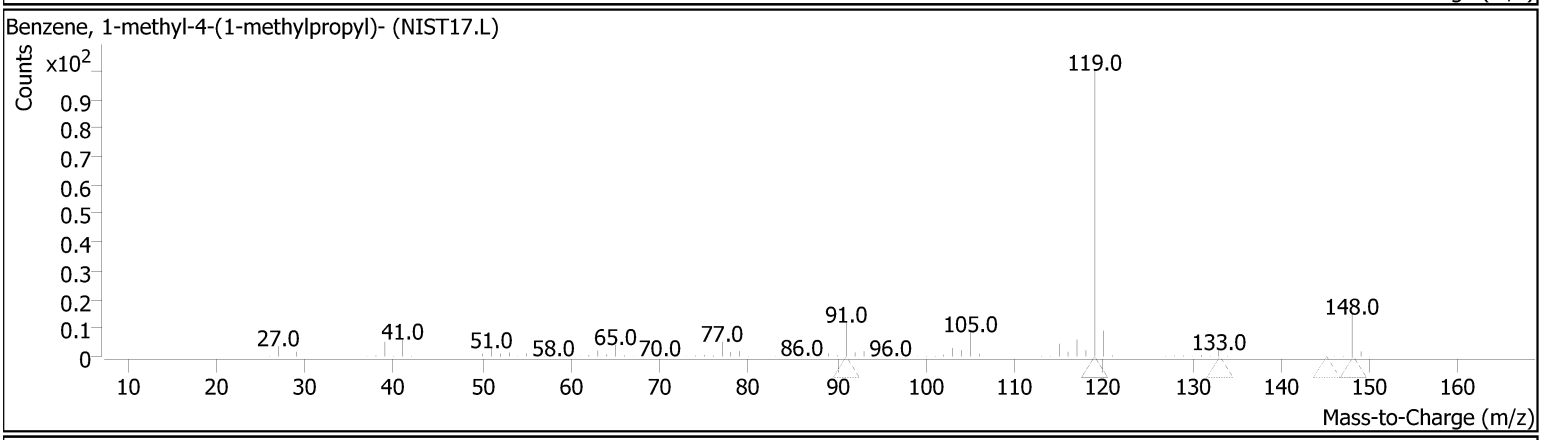


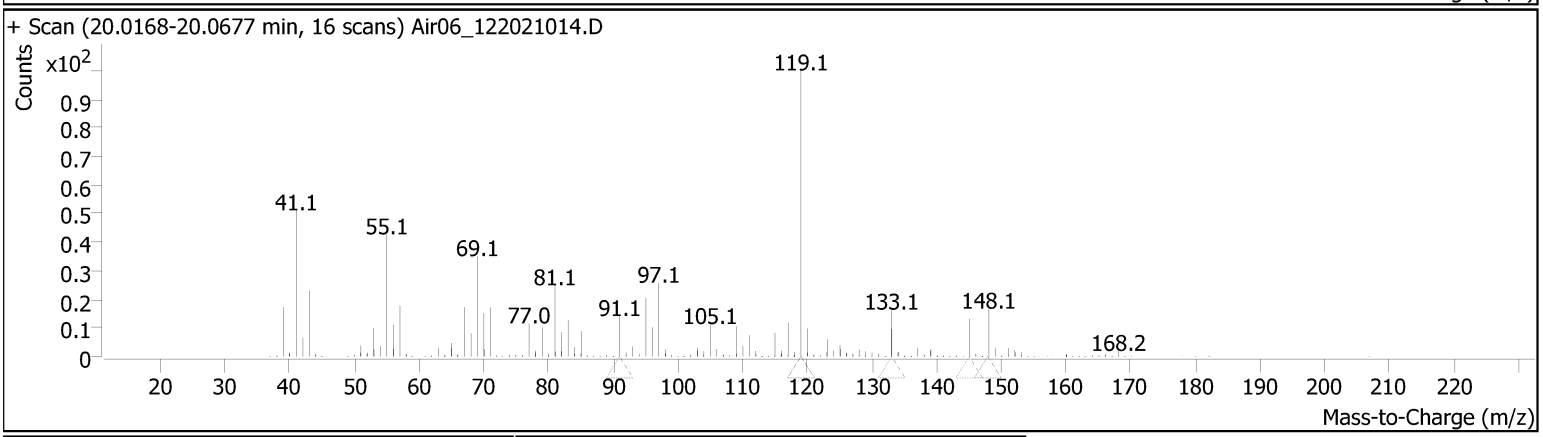


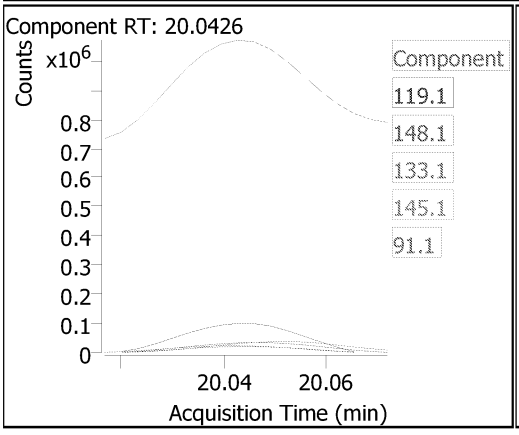


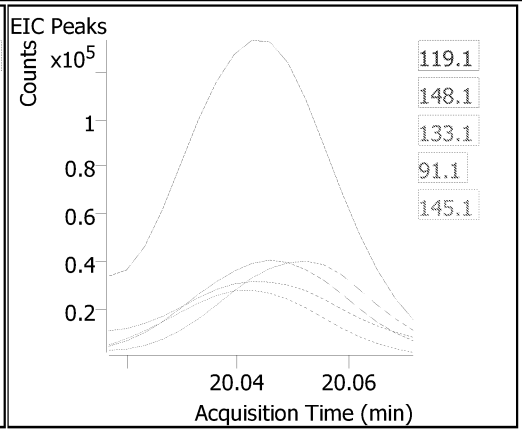
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.0426	Benzene, 1-methyl-4-(1-methylpropyl)-	1541027.5	80.8	1595-16-0	C11H16	3.876

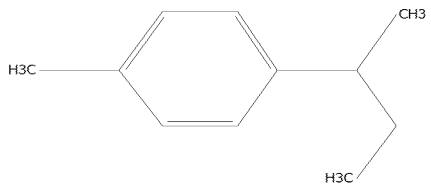




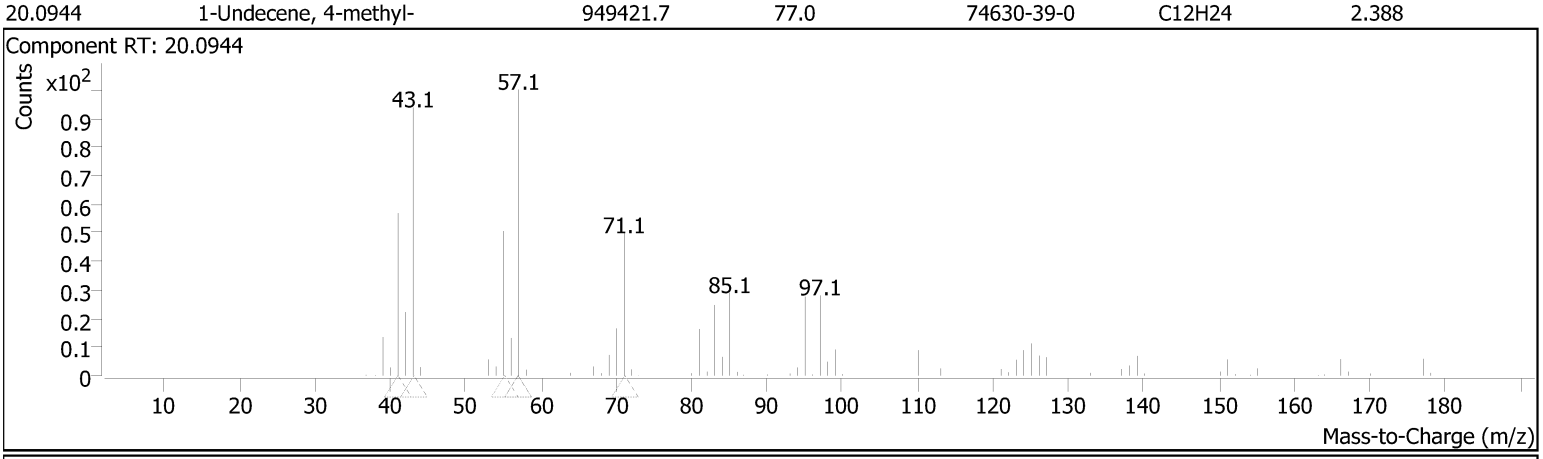


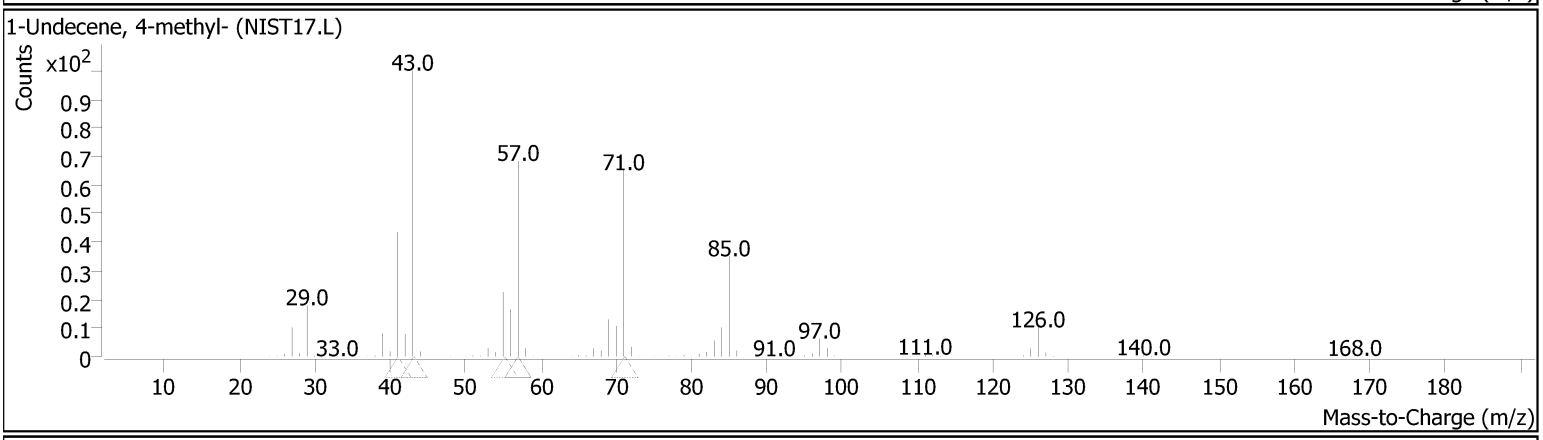


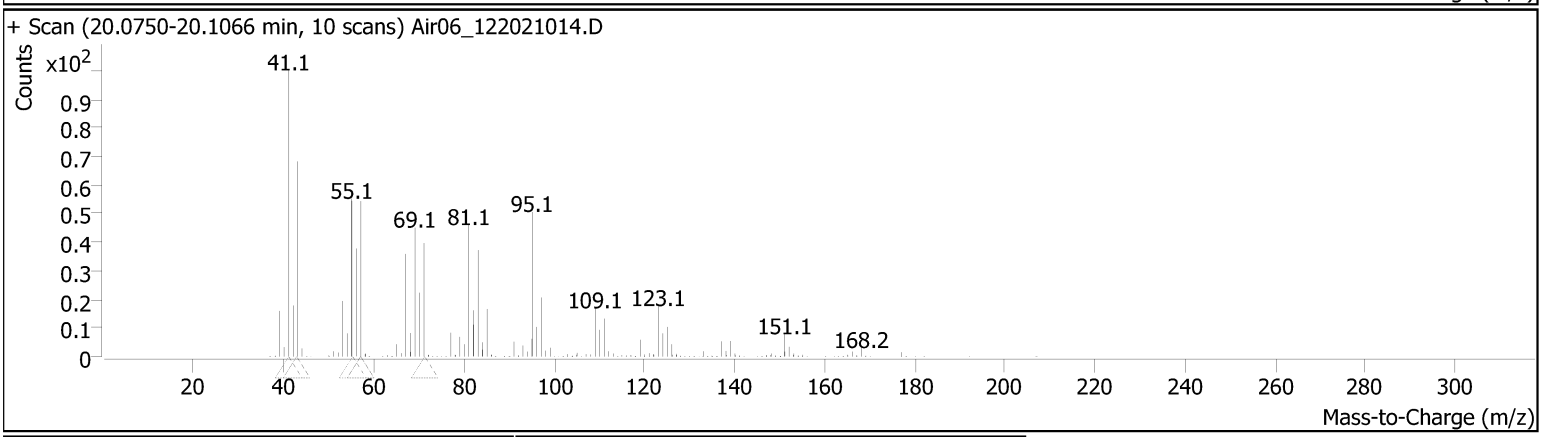


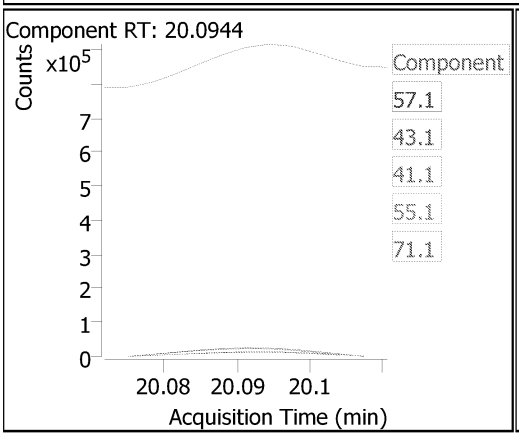


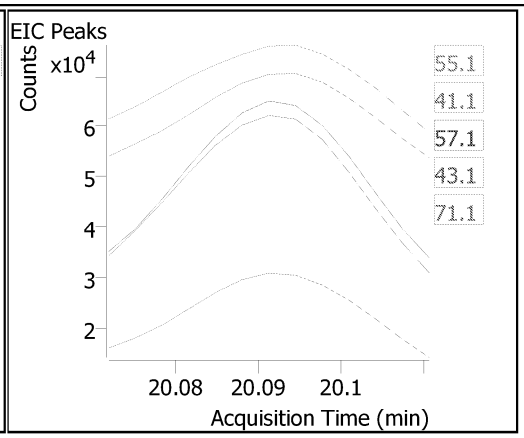
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.0944	1-Undecene, 4-methyl-	949421.7	77.0	74630-39-0	C12H24	2.388

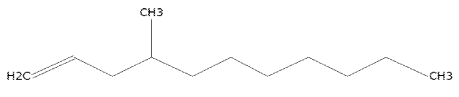




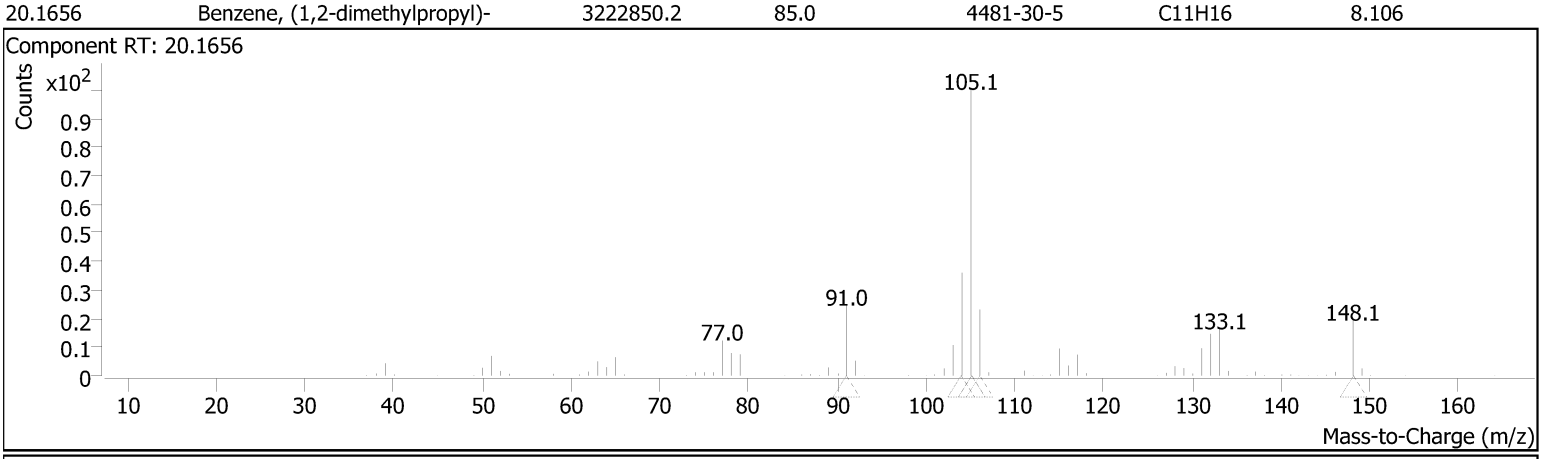


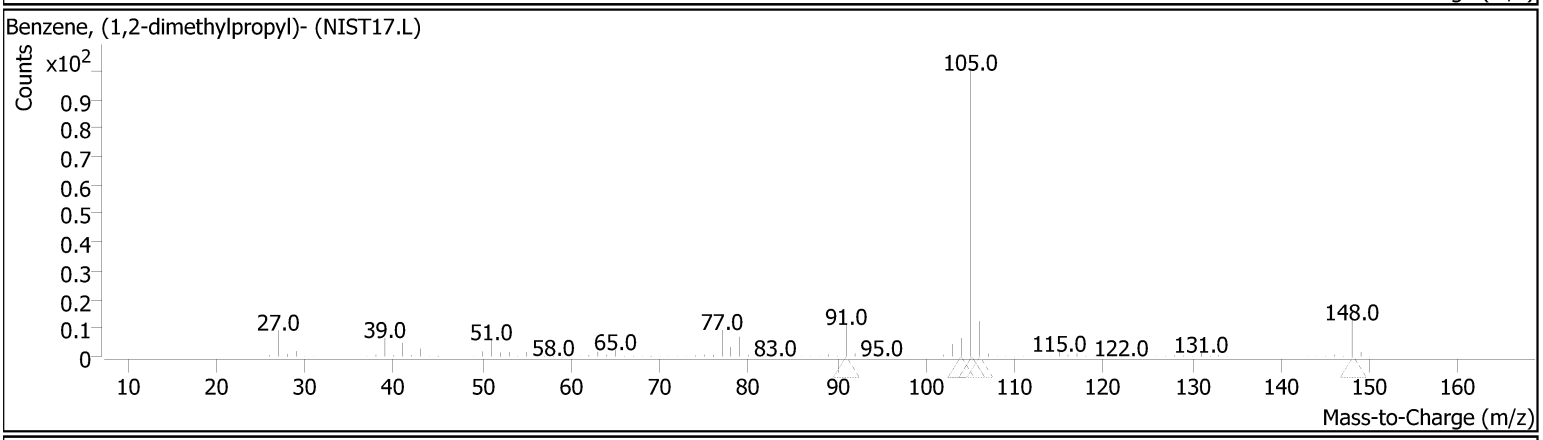


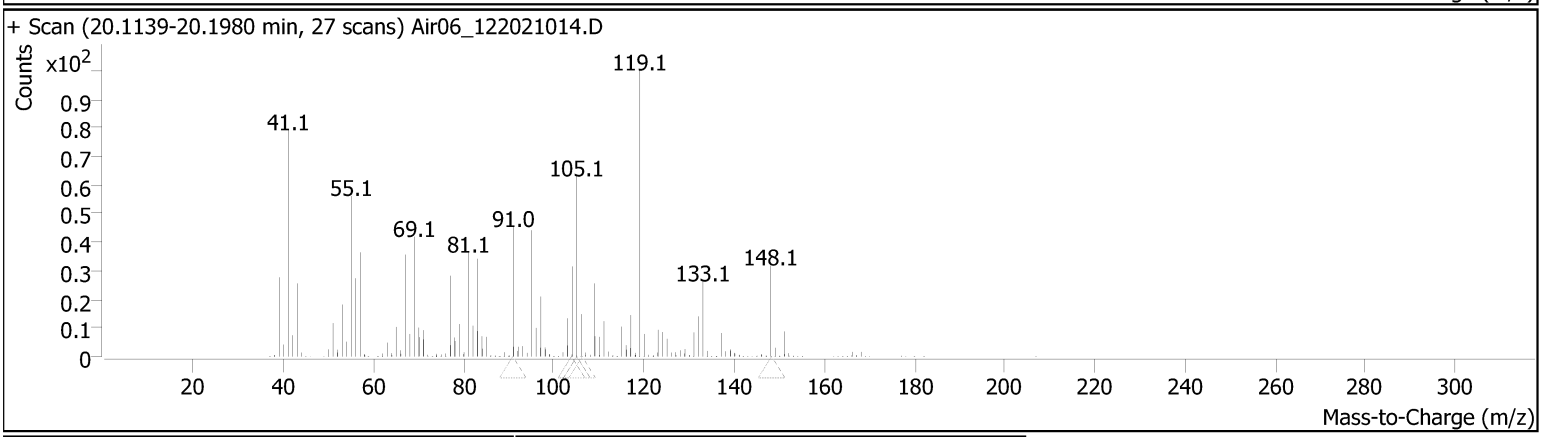


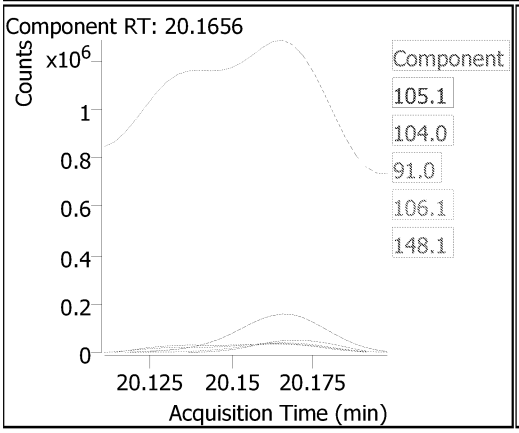


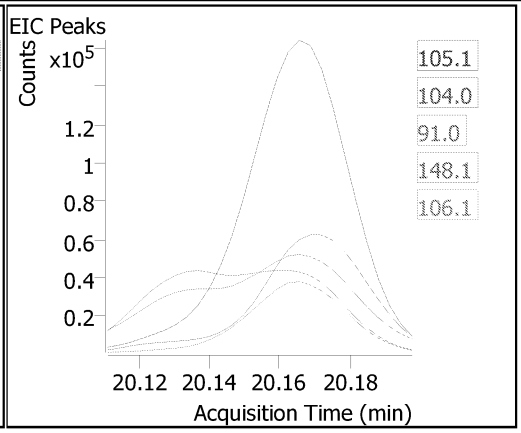
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.1656	Benzene, (1,2-dimethylpropyl)-	3222850.2	85.0	4481-30-5	C11H16	8.106

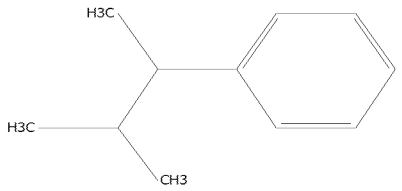




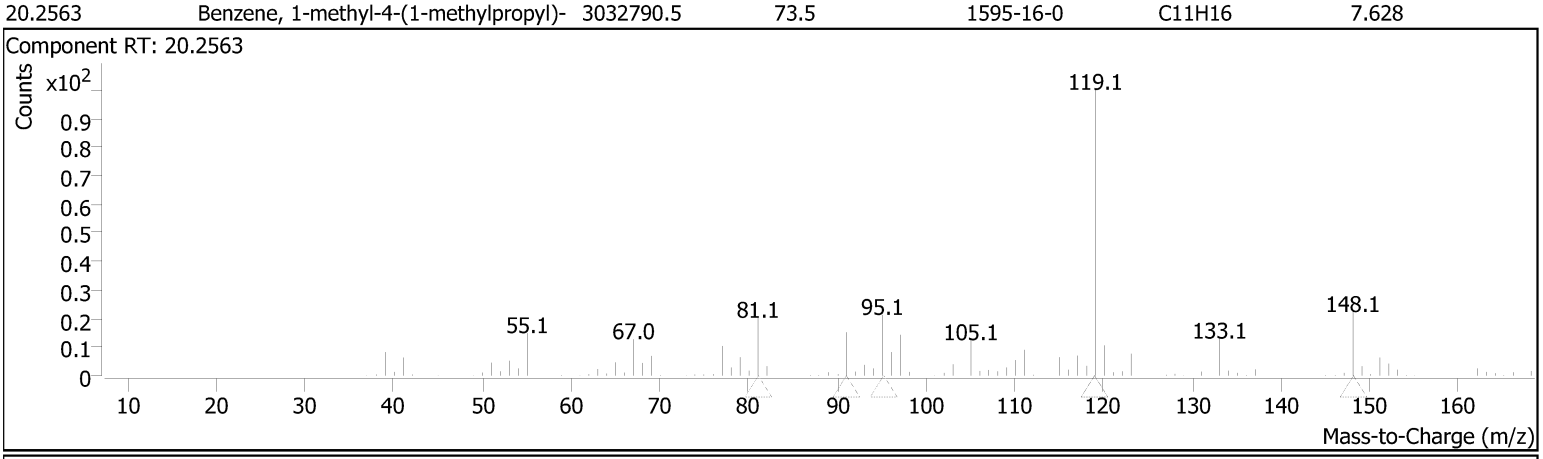


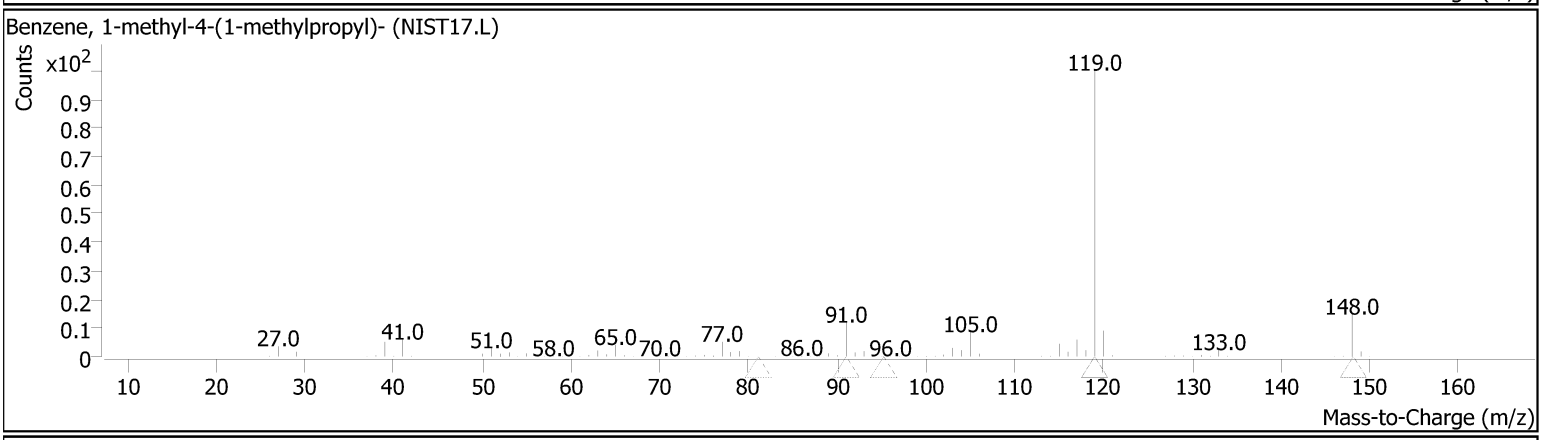


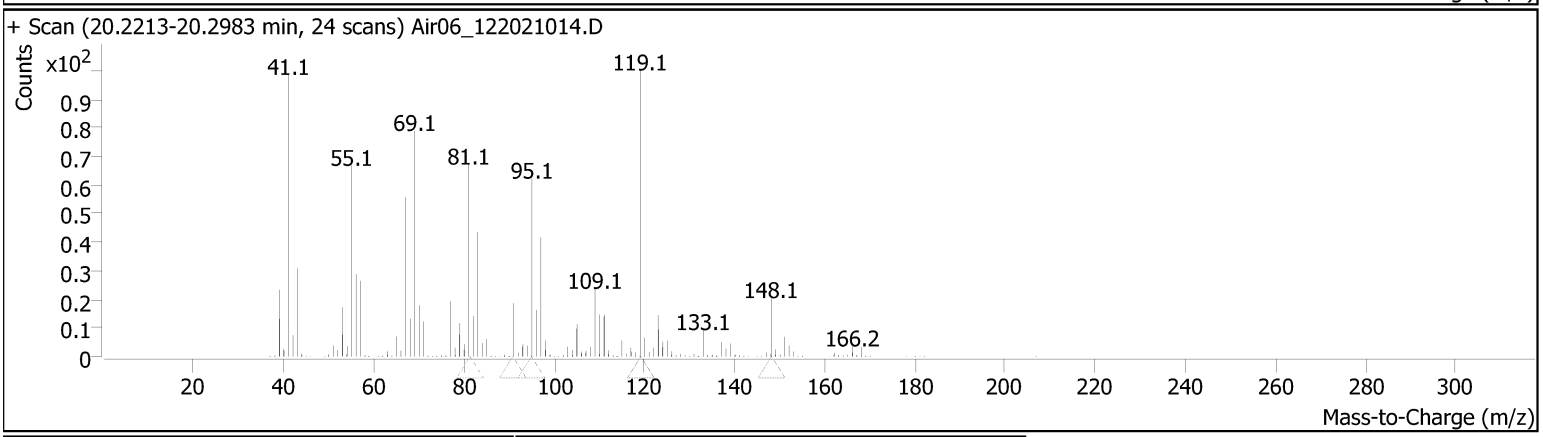


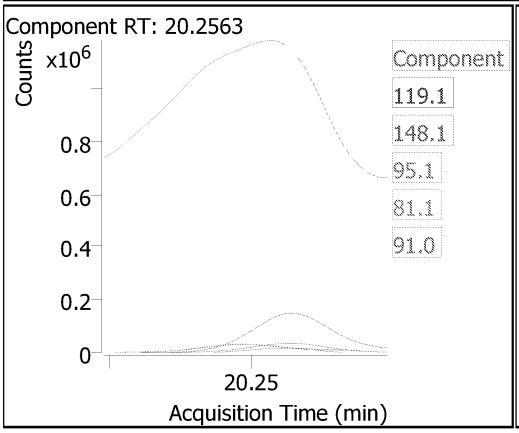


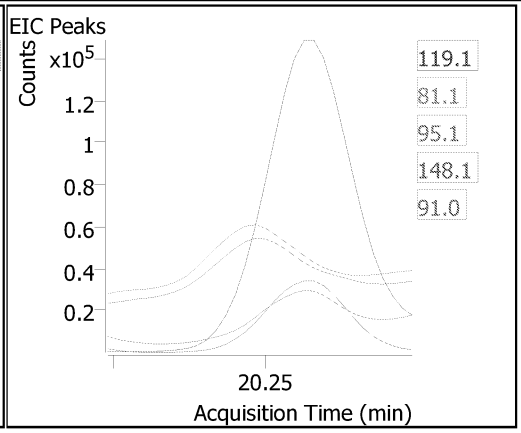
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.2563	Benzene, 1-methyl-4-(1-methylpropyl)-	3032790.5	73.5	1595-16-0	C11H16	7.628

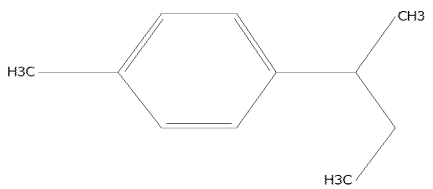




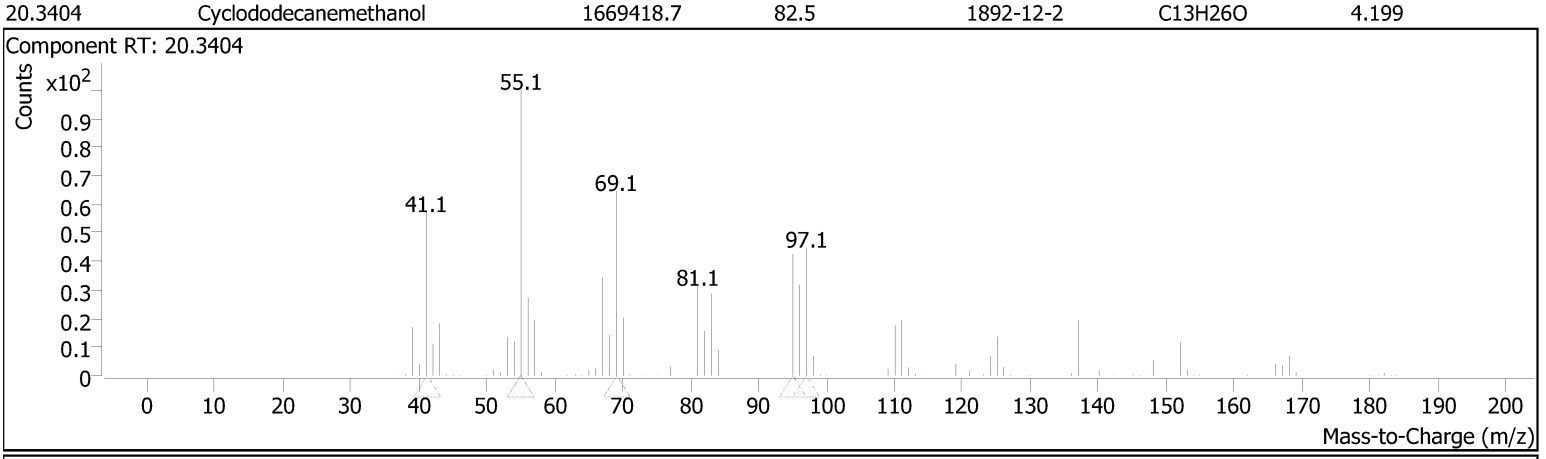


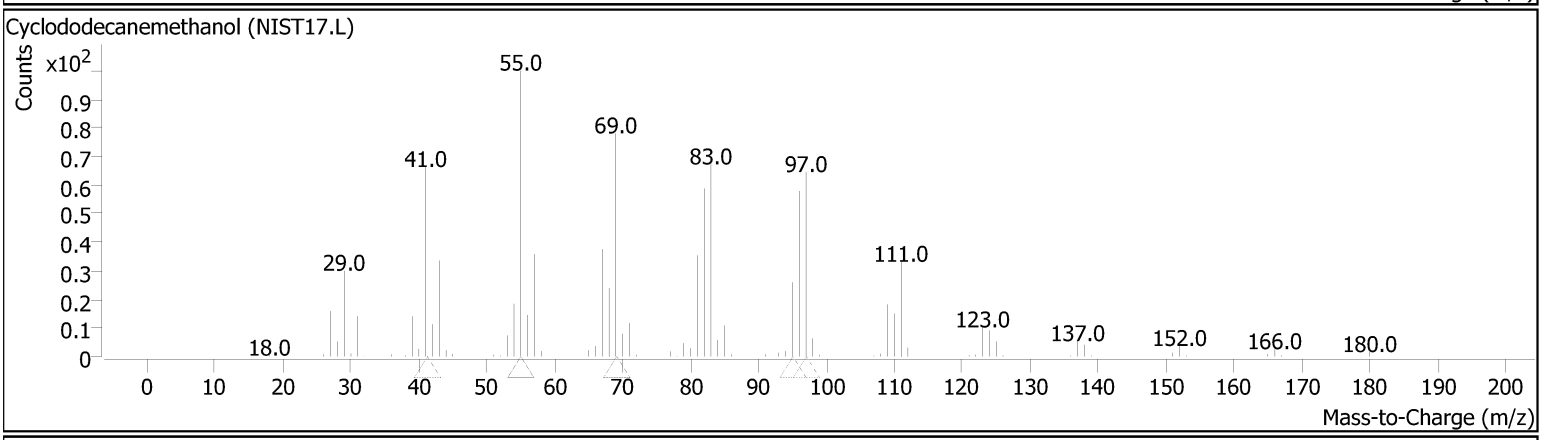


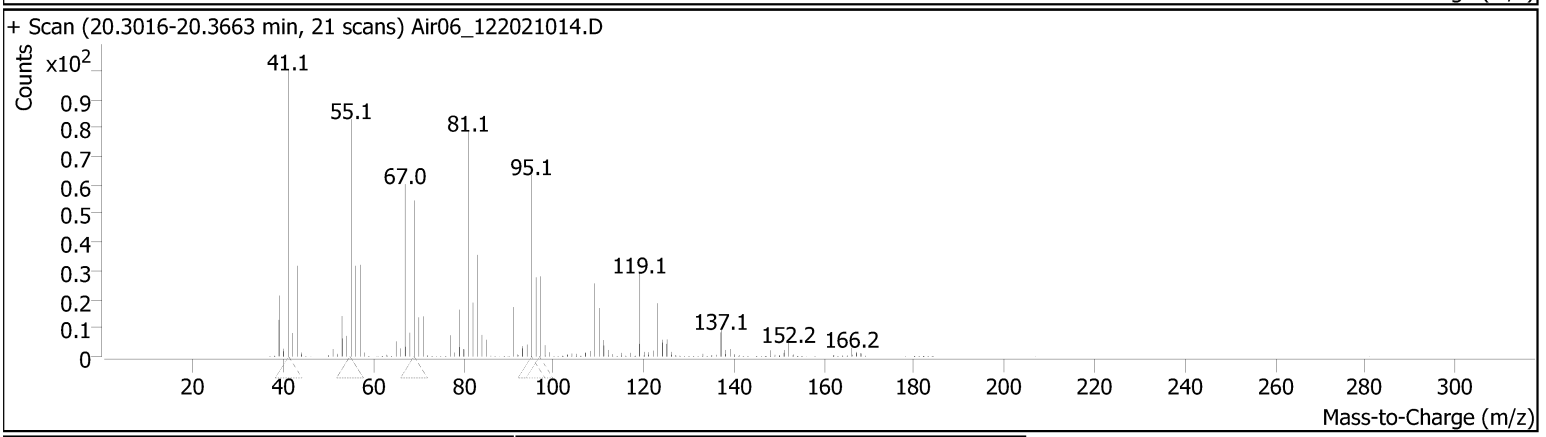


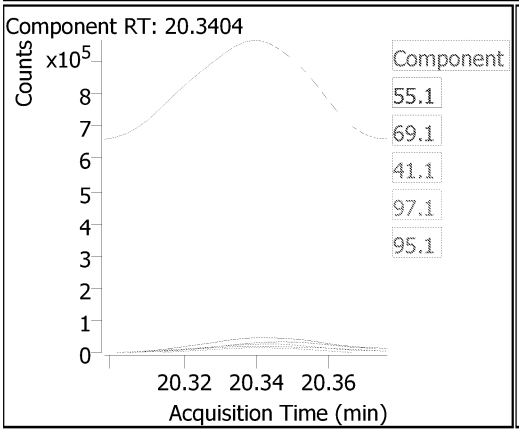


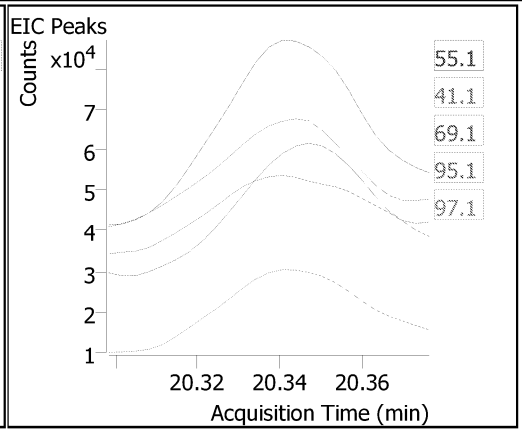
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.3404	Cyclododecanemethanol	1669418.7	82.5	1892-12-2	C13H26O	4.199

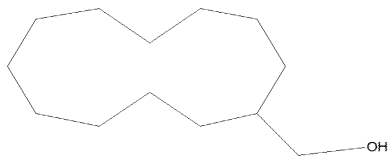




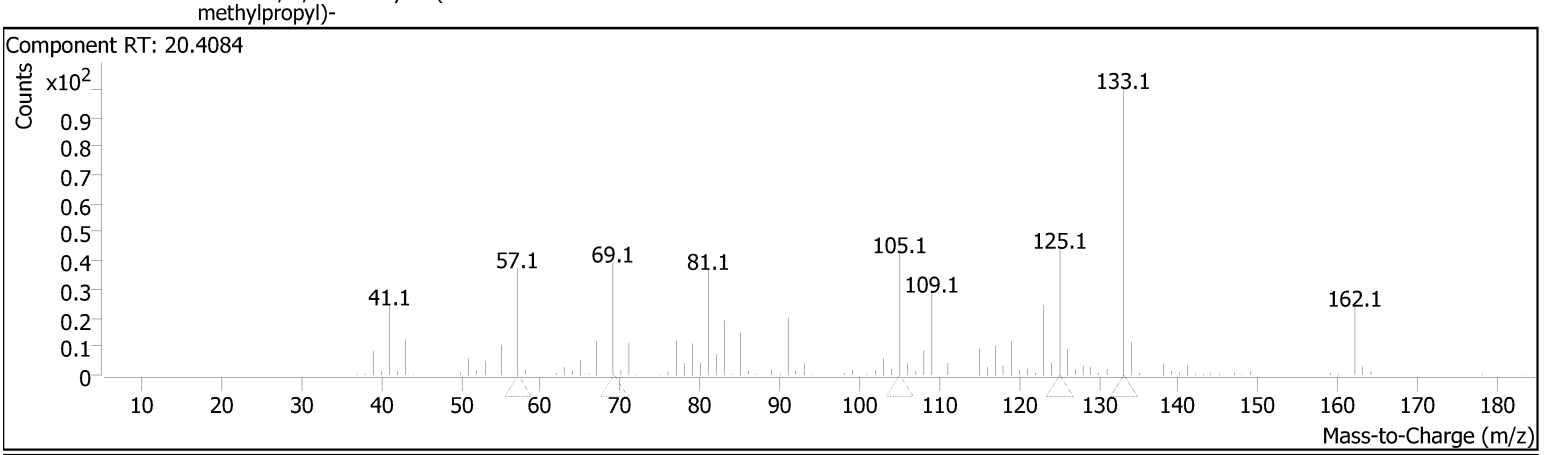


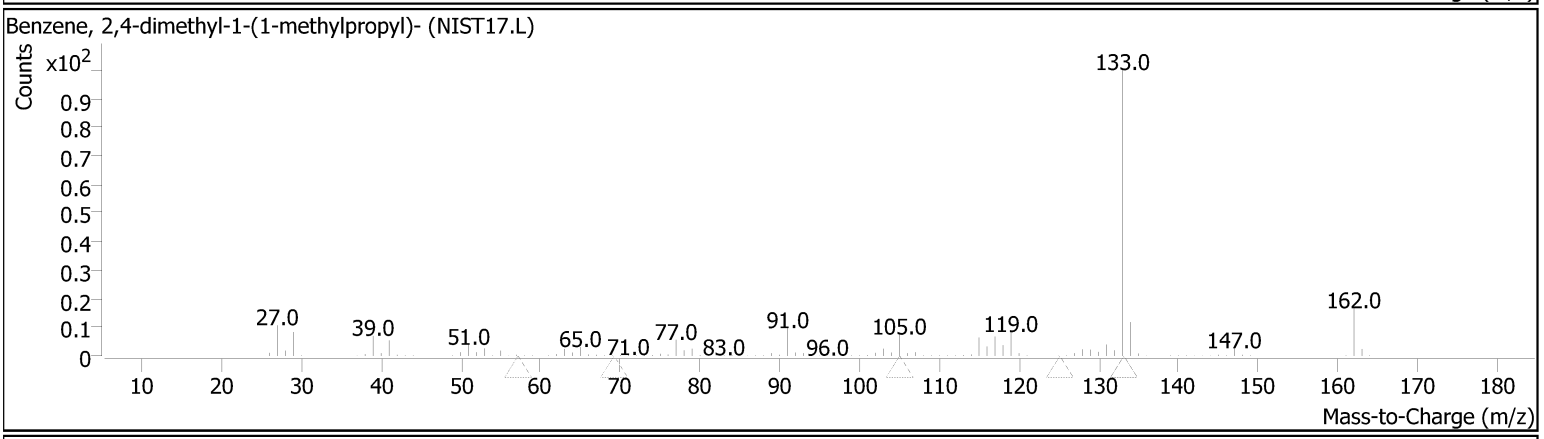


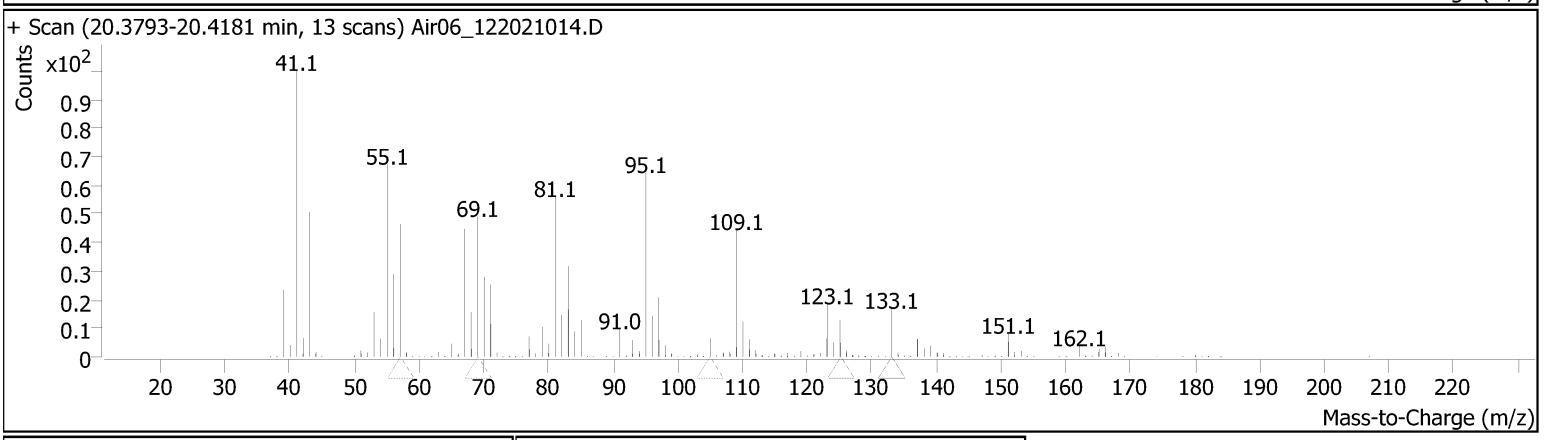


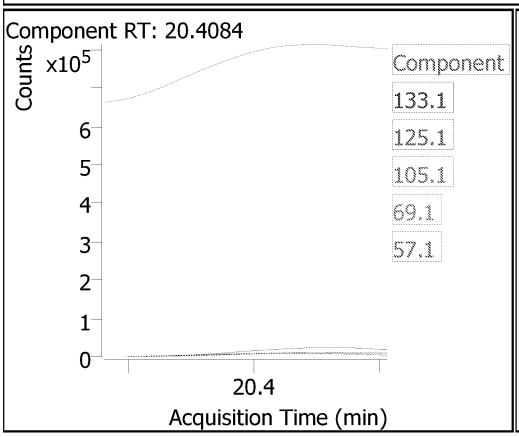


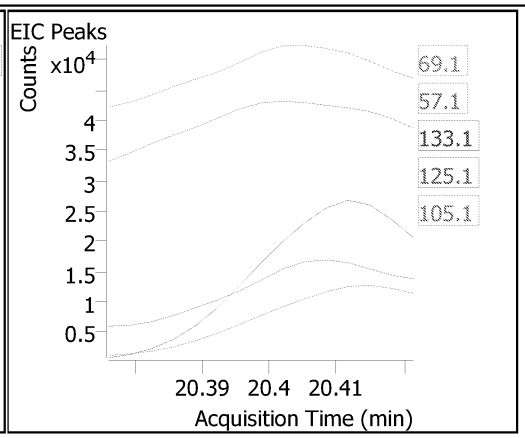
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.4084	Benzene, 2,4-dimethyl-1-(1-methylpropyl)-	844126.3	70.6	1483-60-9	C12H18	2.123

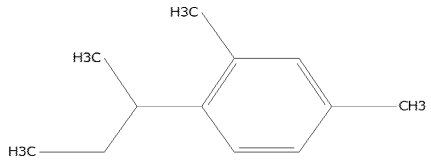








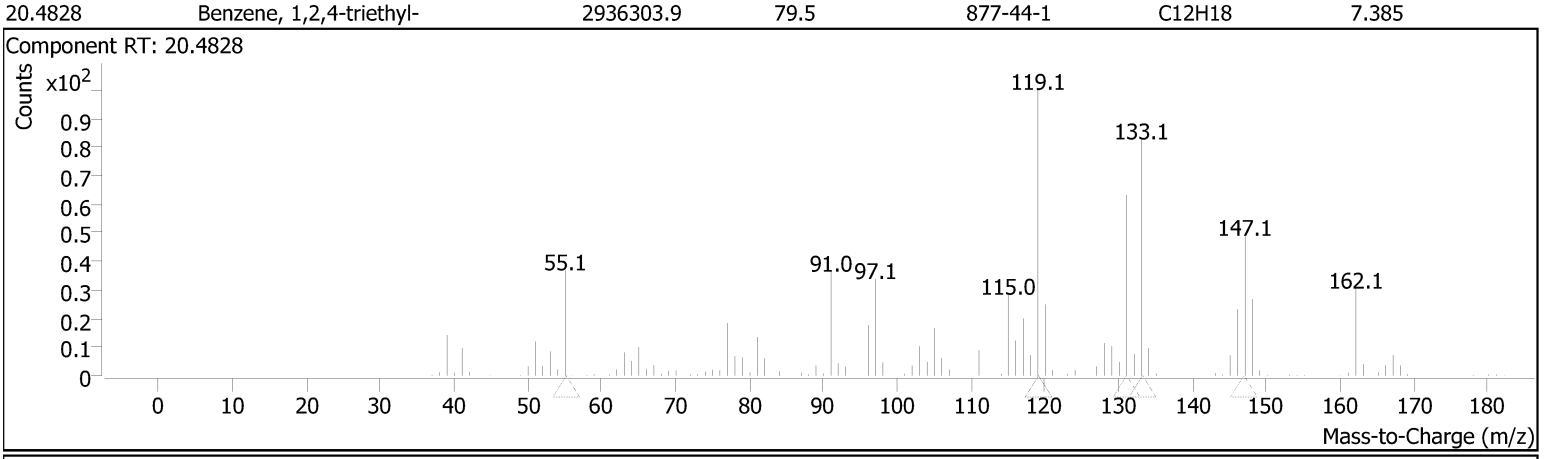


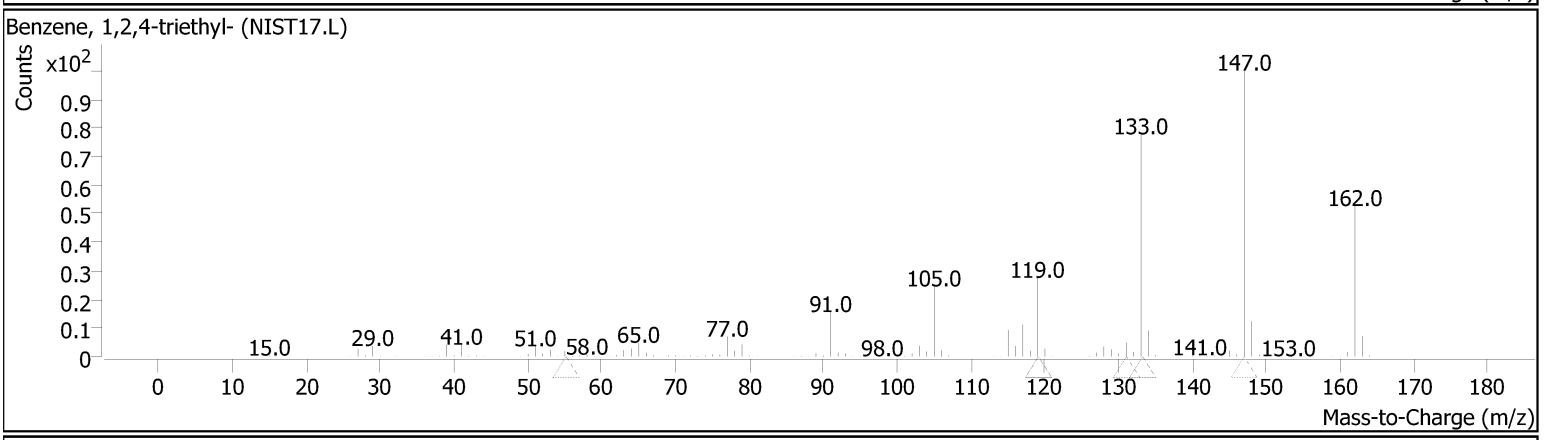


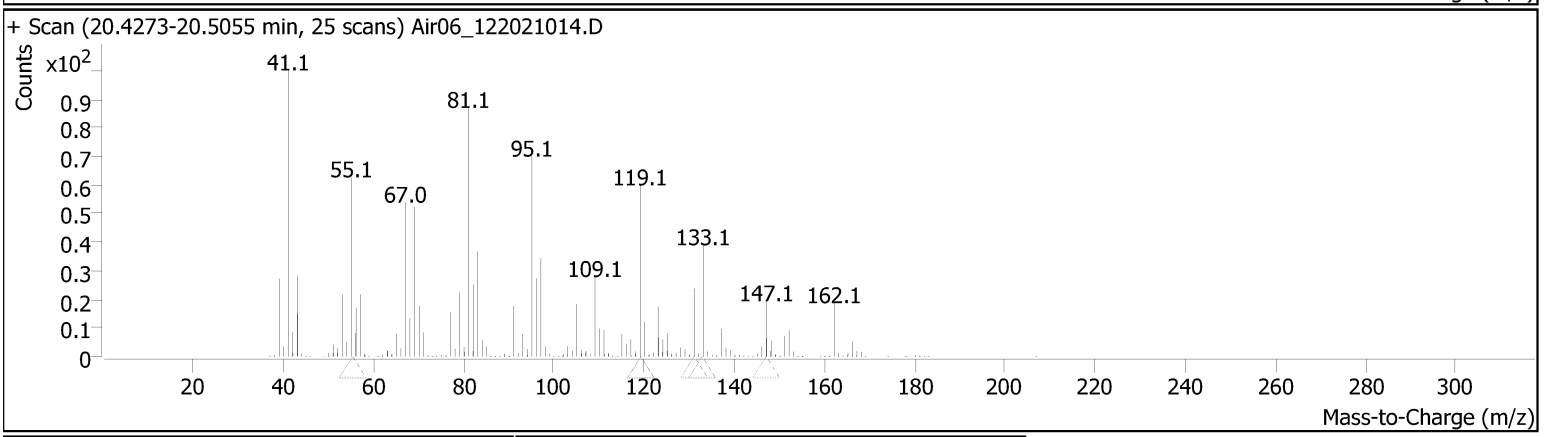
Library Search Results - NonTarget Hits with Details

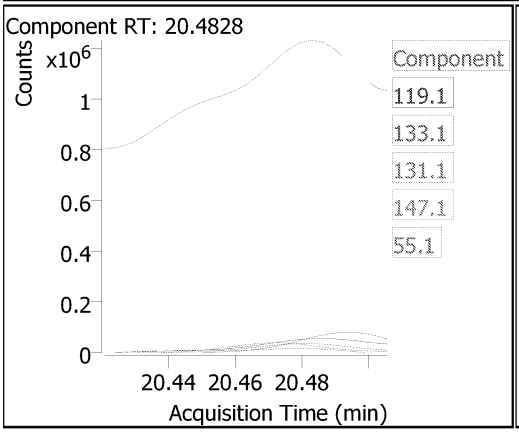
Agilent Technologies

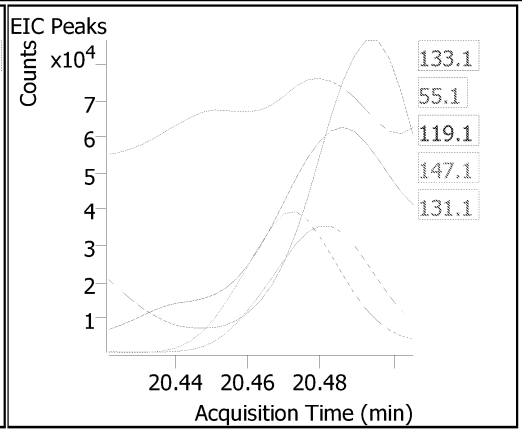
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.4828	Benzene, 1,2,4-triethyl-	2936303.9	79.5	877-44-1	C12H18	7.385

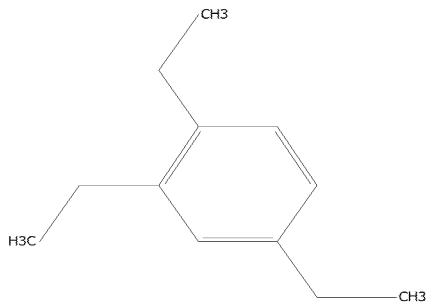




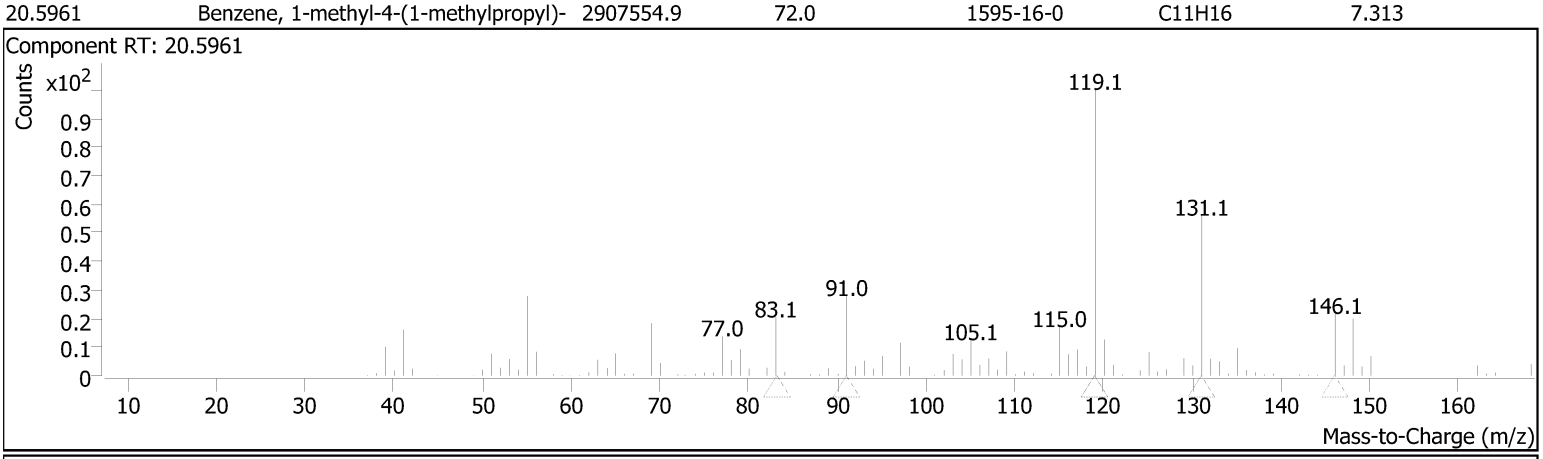


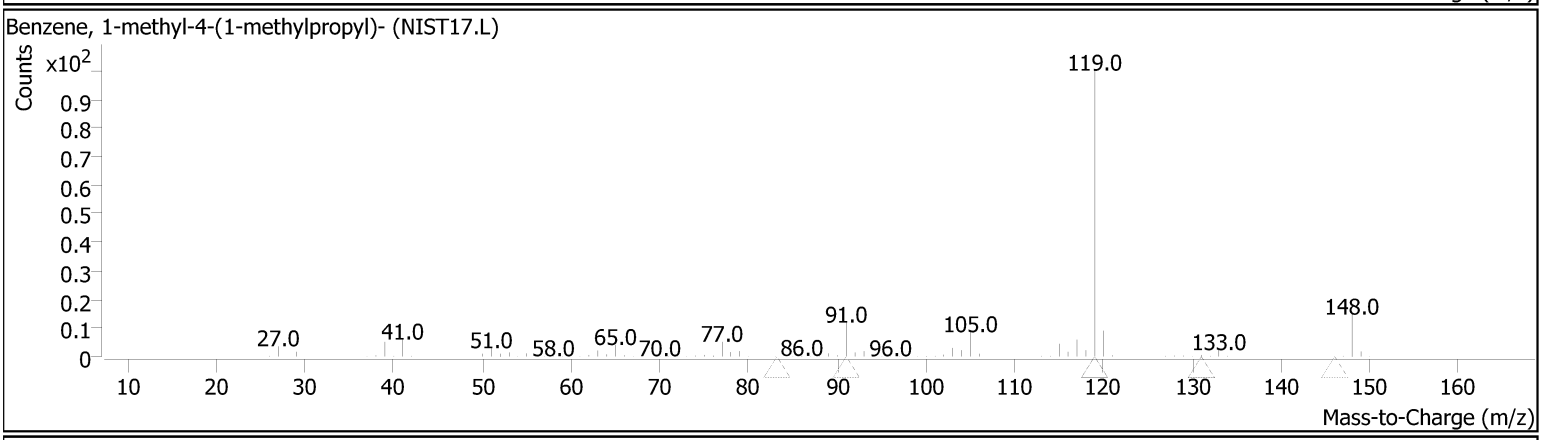


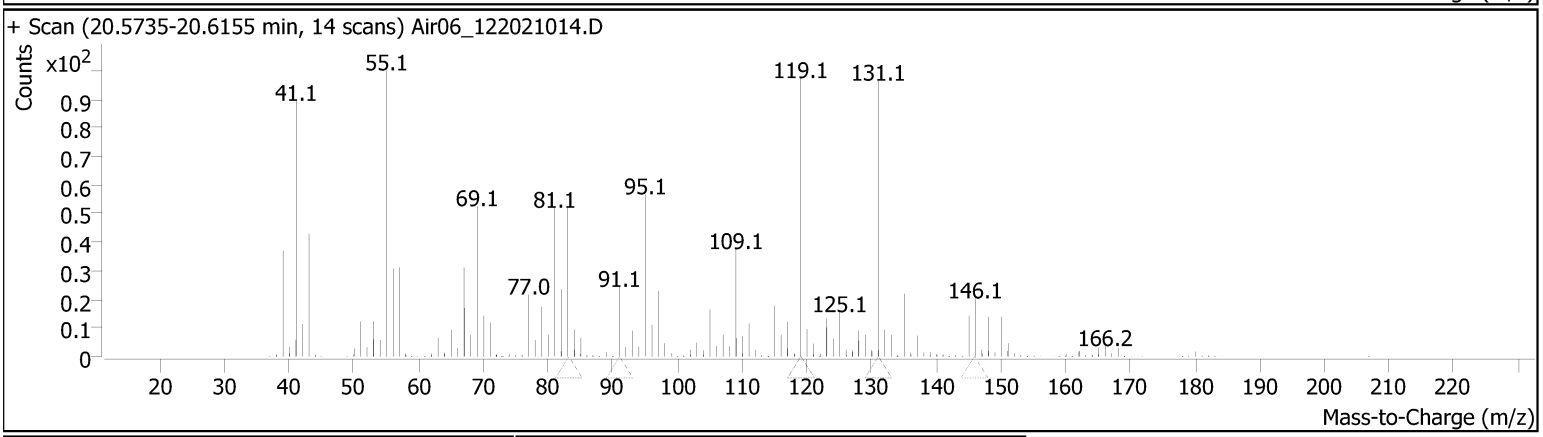


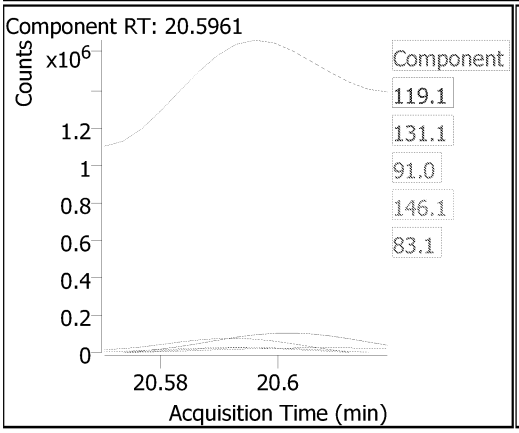


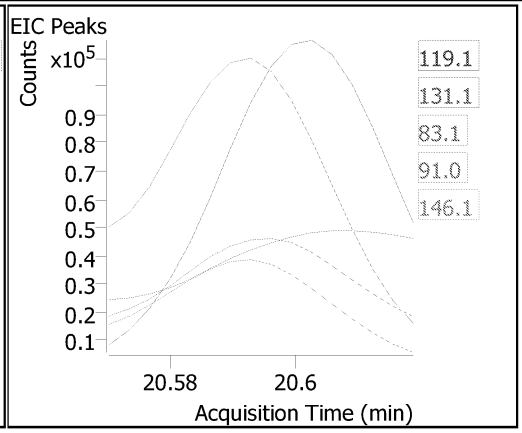
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.5961	Benzene, 1-methyl-4-(1-methylpropyl)-	2907554.9	72.0	1595-16-0	C11H16	7.313

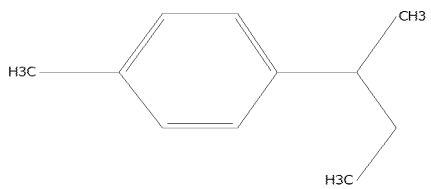




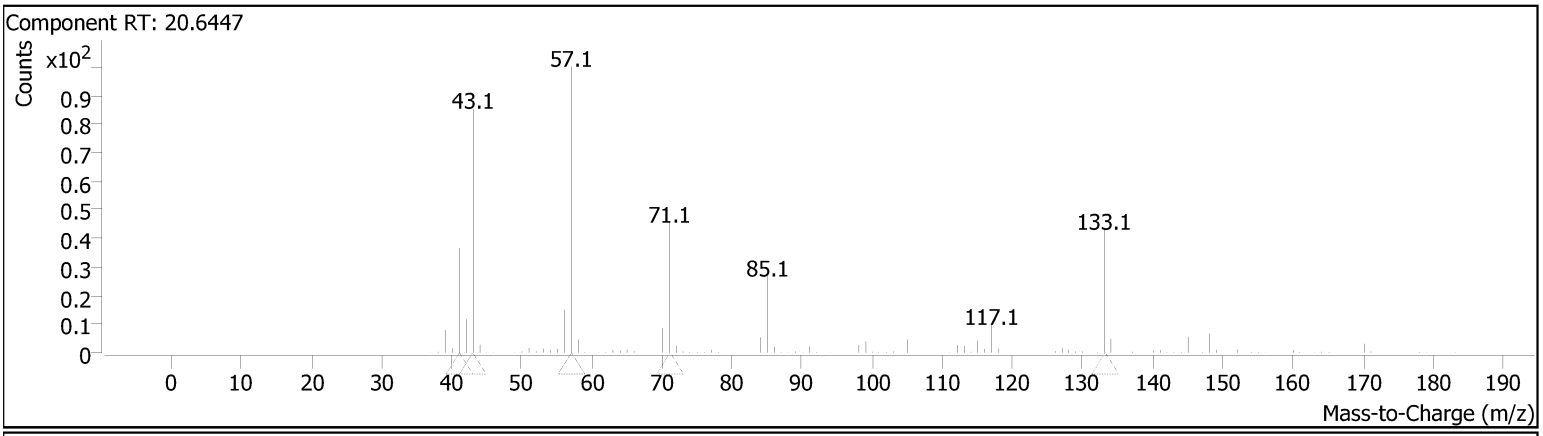


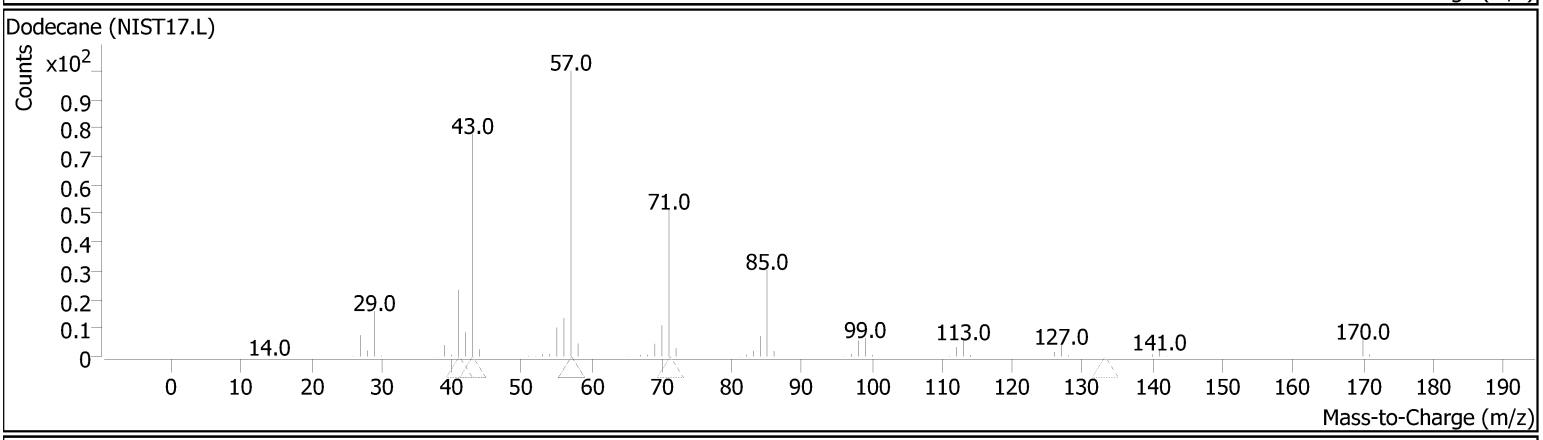


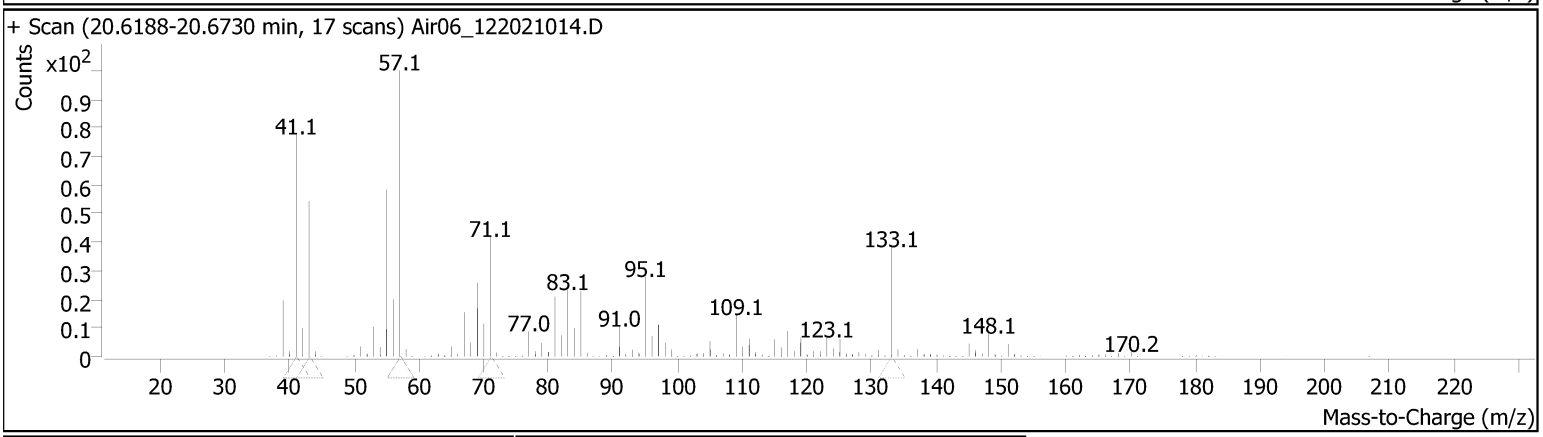


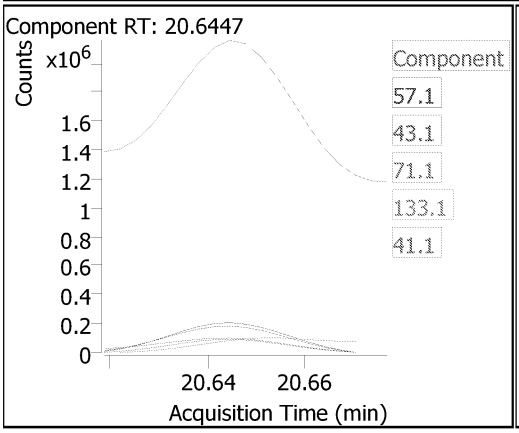


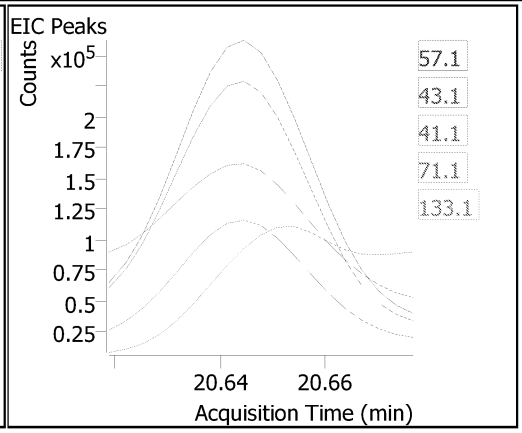
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.6447	Dodecane	4250093.5	70.0	112-40-3	C12H26	10.69





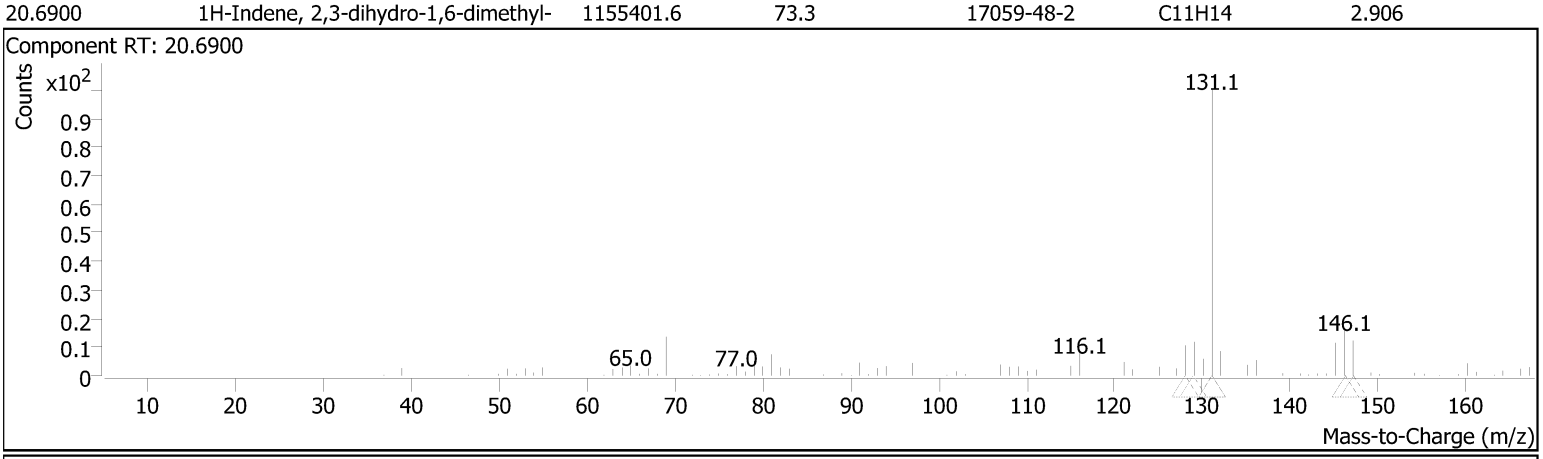


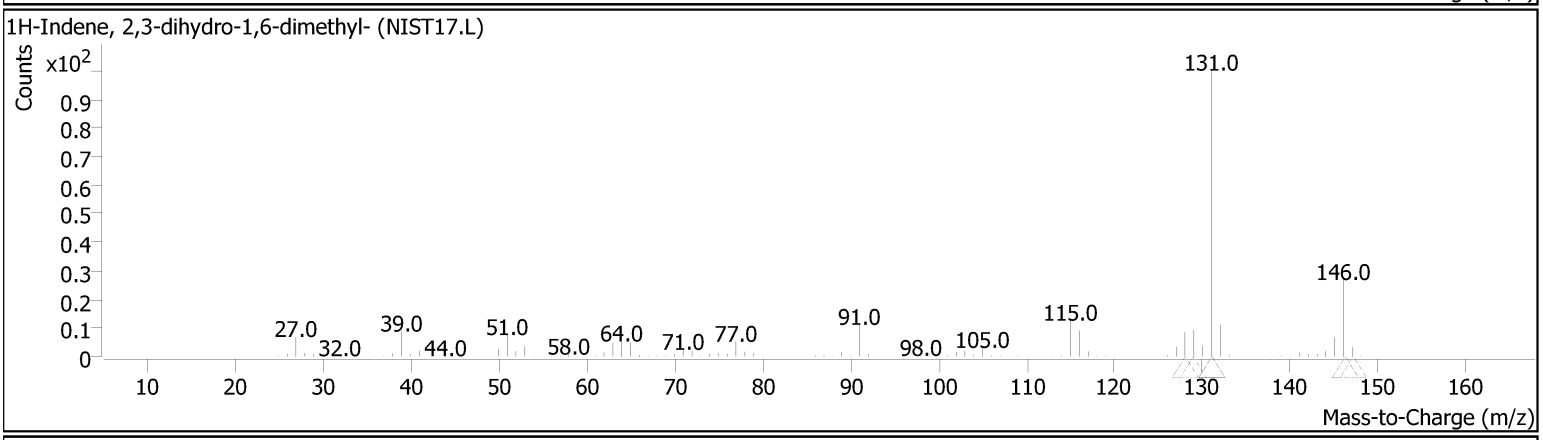


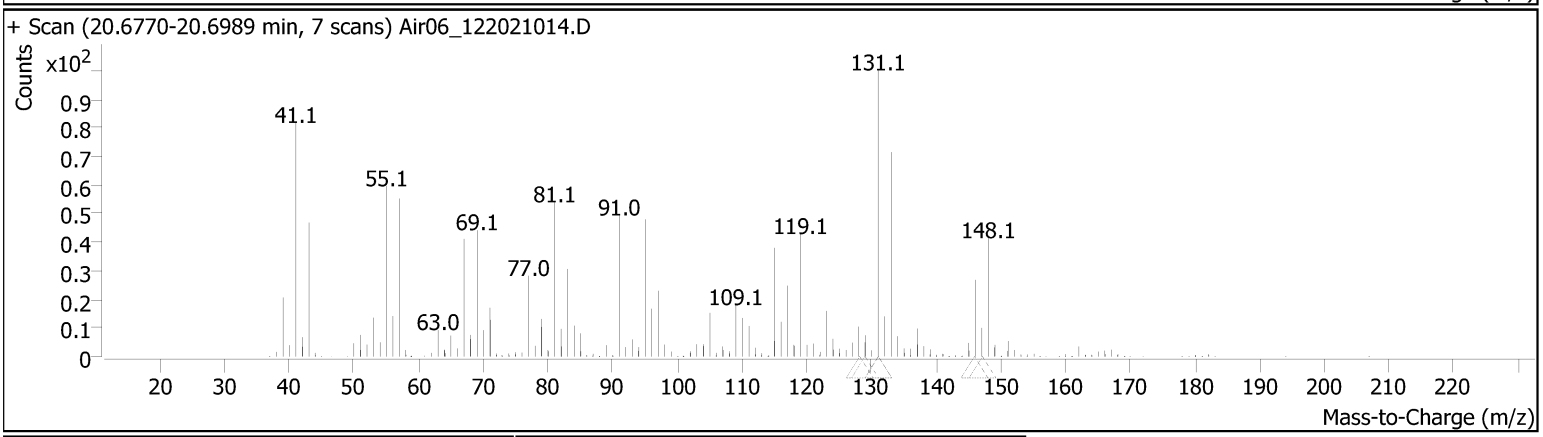


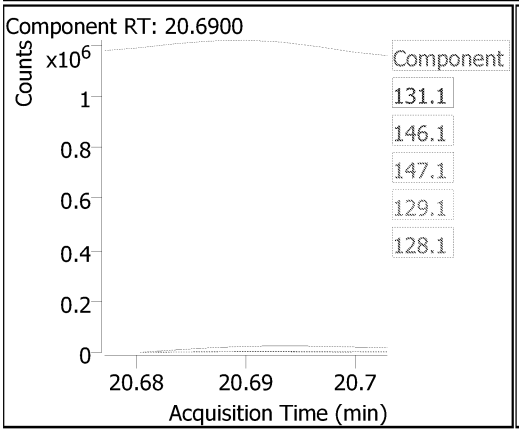


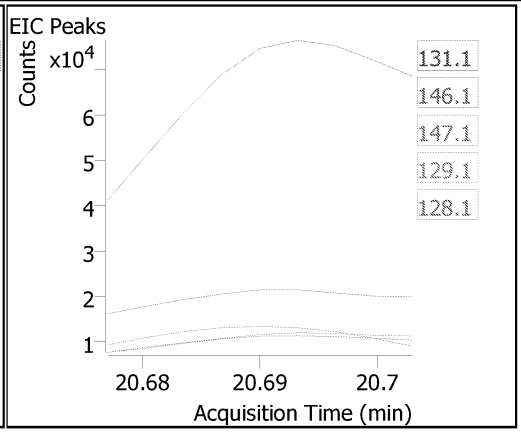
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.6900	1H-Indene, 2,3-dihydro-1,6-dimethyl-	1155401.6	73.3	17059-48-2	C11H14	2.906

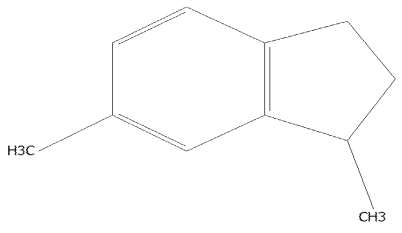








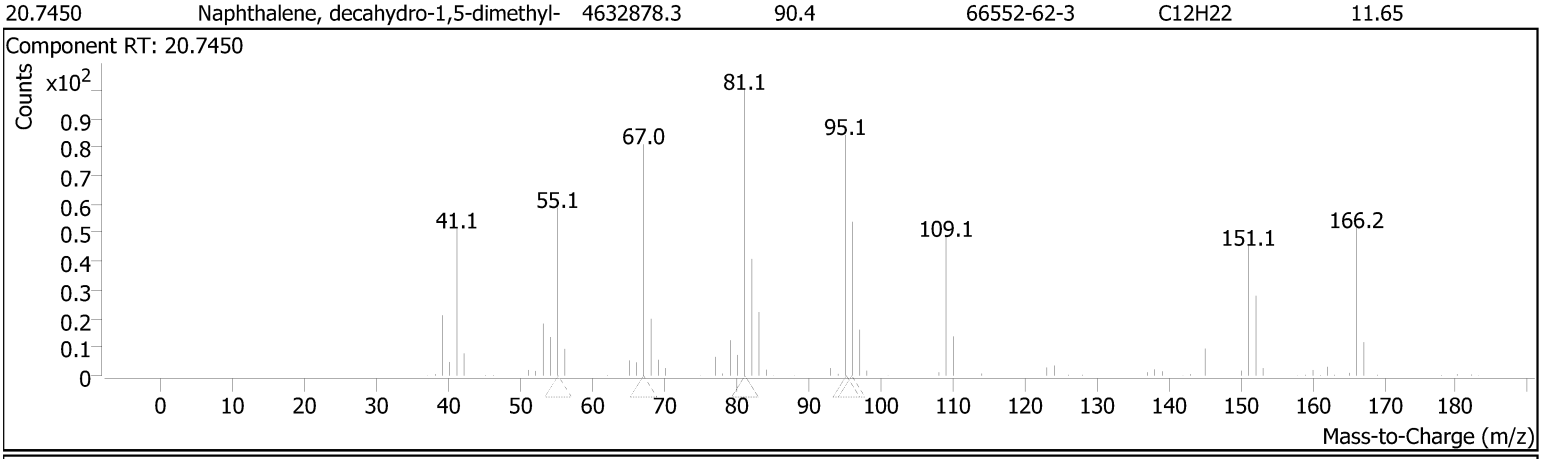


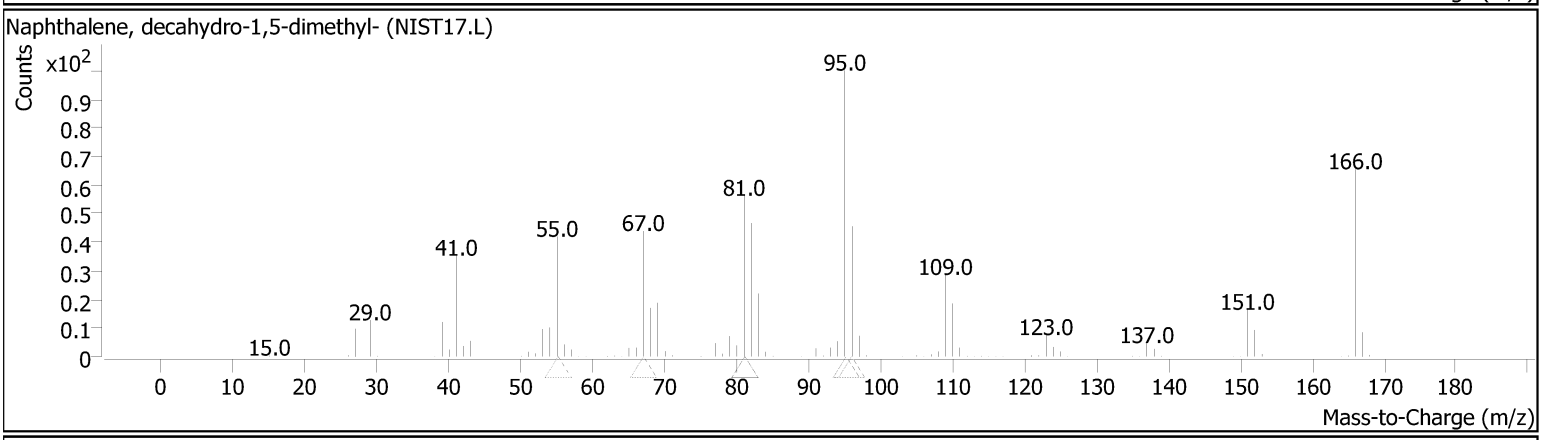


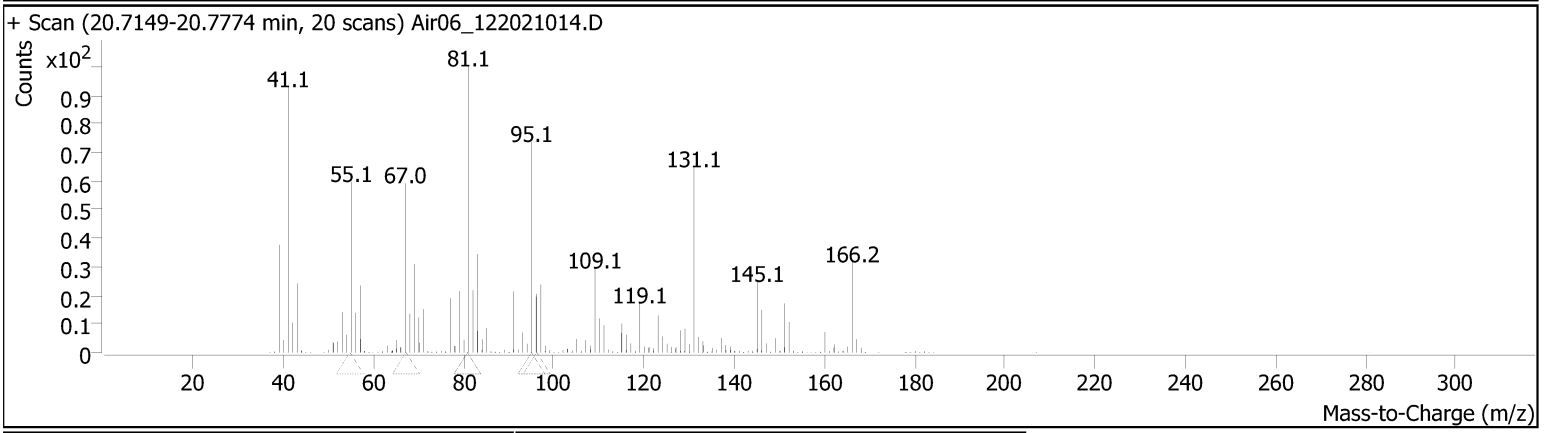
Library Search Results - NonTarget Hits with Details

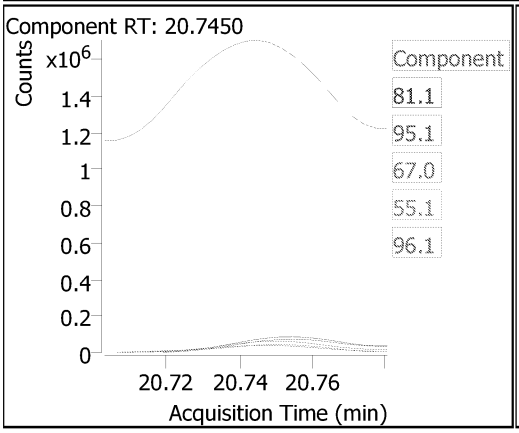
Agilent Technologies

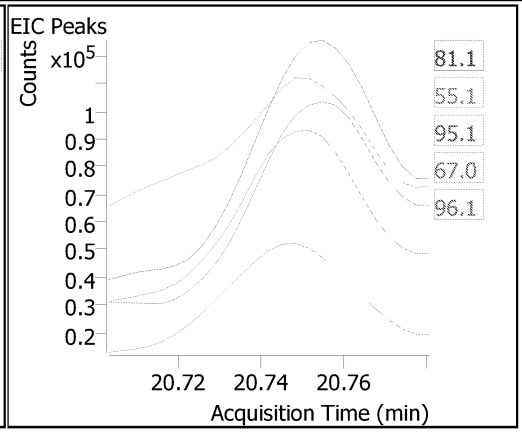
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.7450	Naphthalene, decahydro-1,5-dimethyl-	4632878.3	90.4	66552-62-3	C12H22	11.65

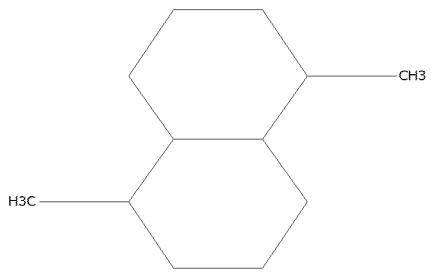




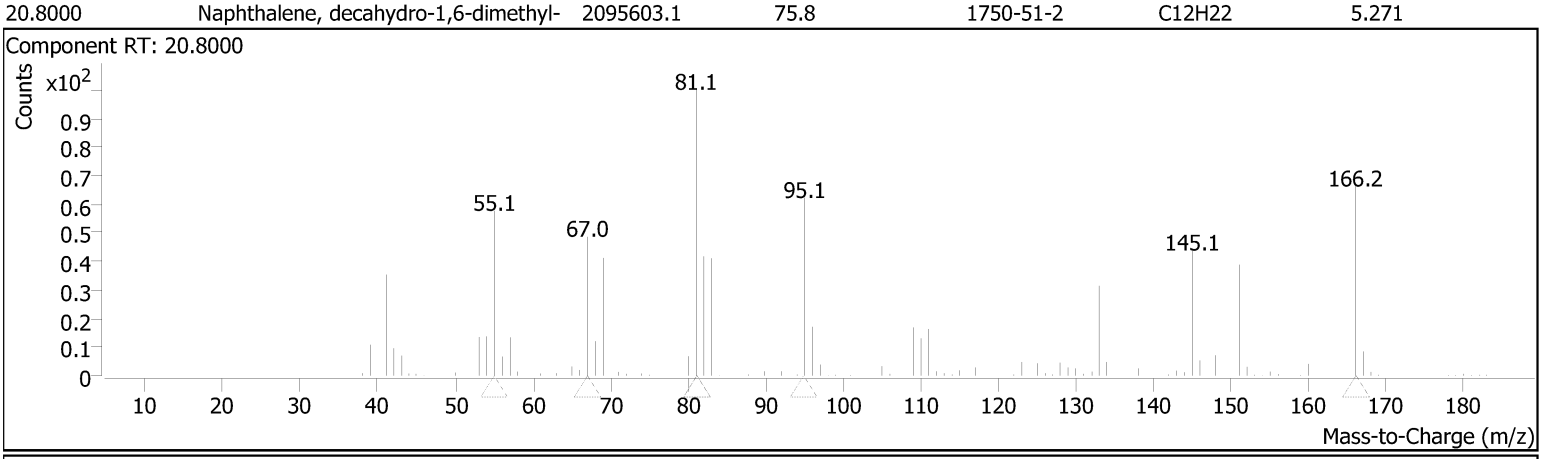


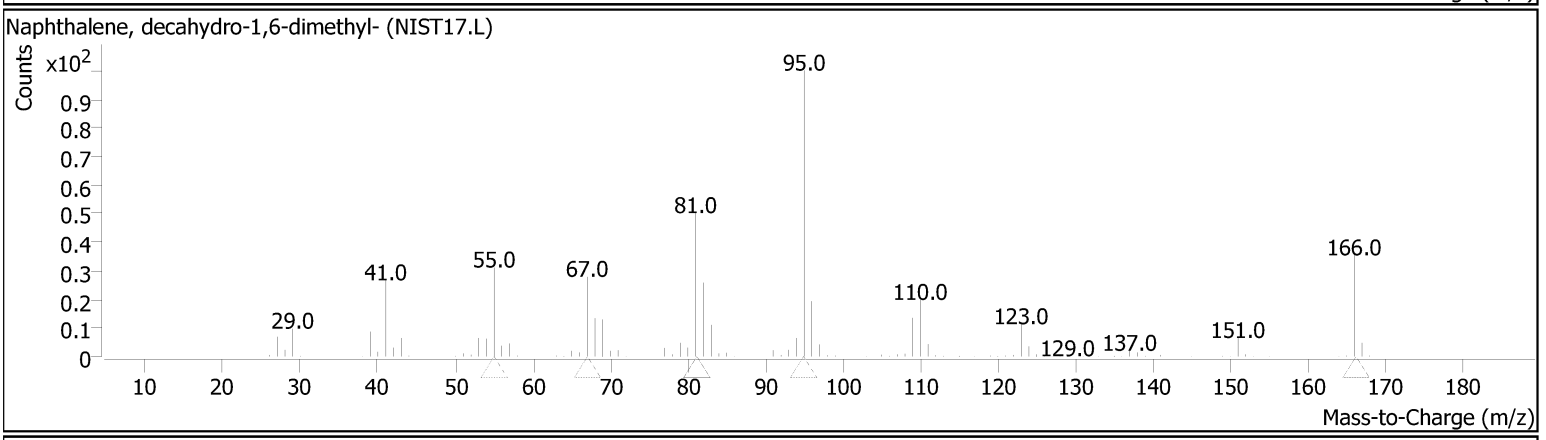


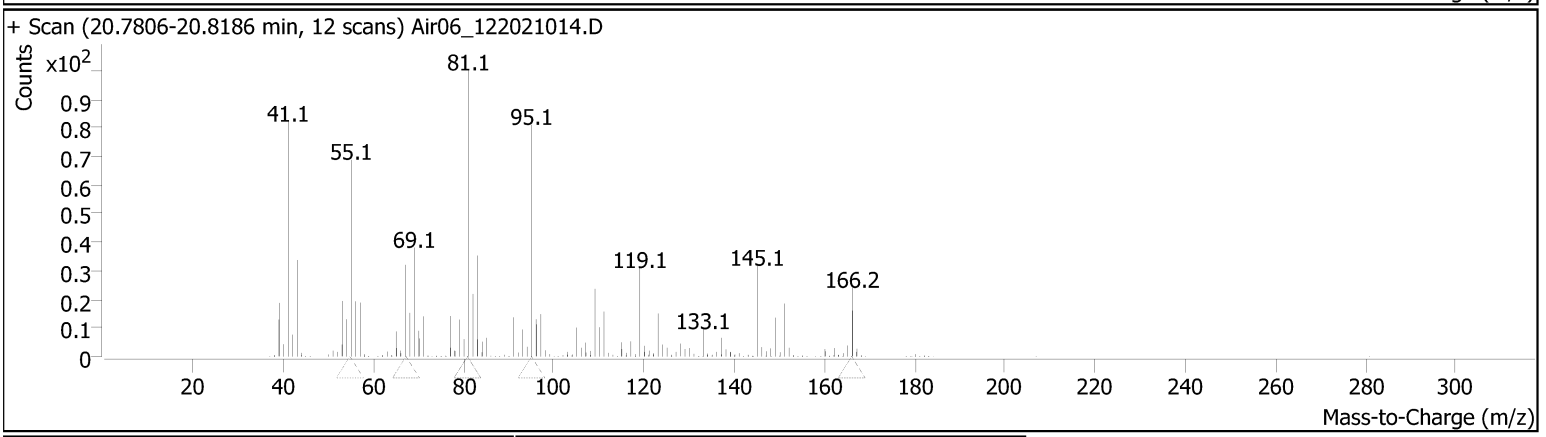


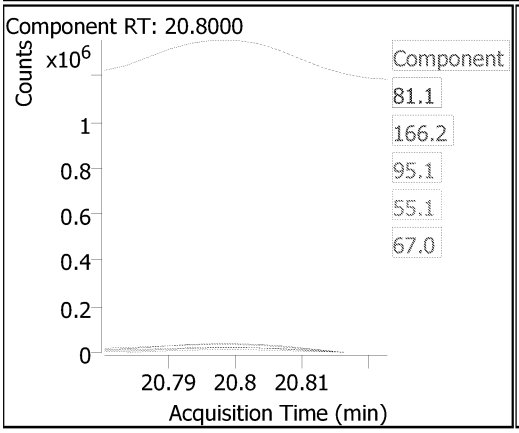


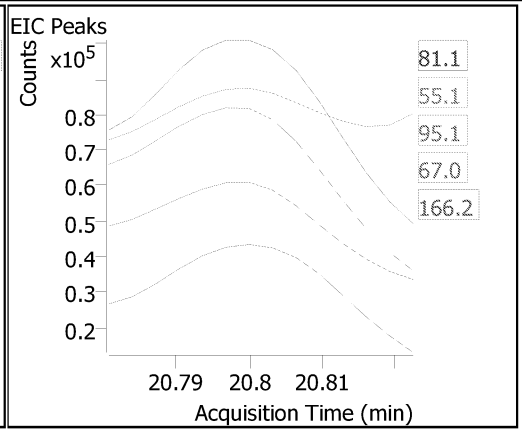
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.8000	Naphthalene, decahydro-1,6-dimethyl-	2095603.1	75.8	1750-51-2	C12H22	5.271

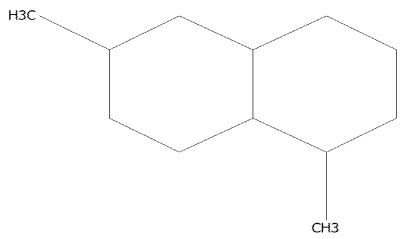




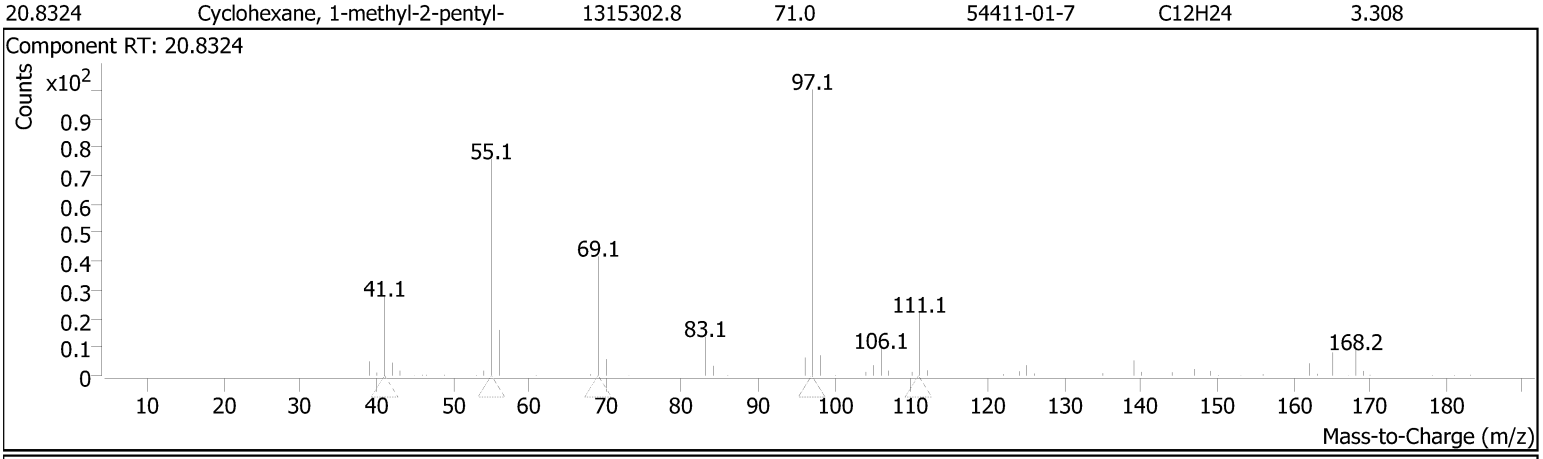


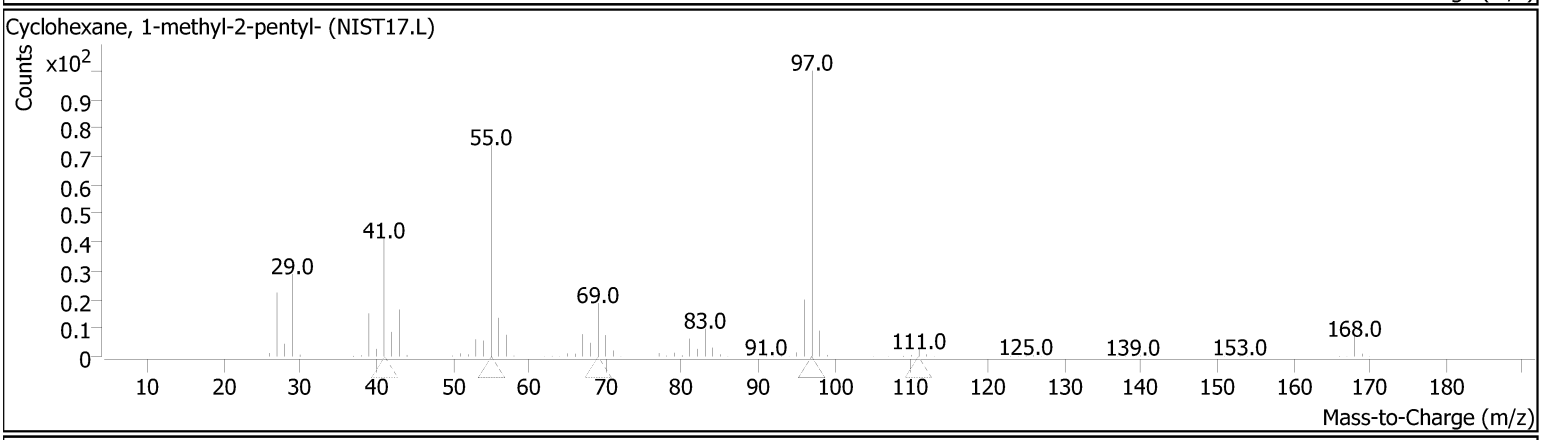


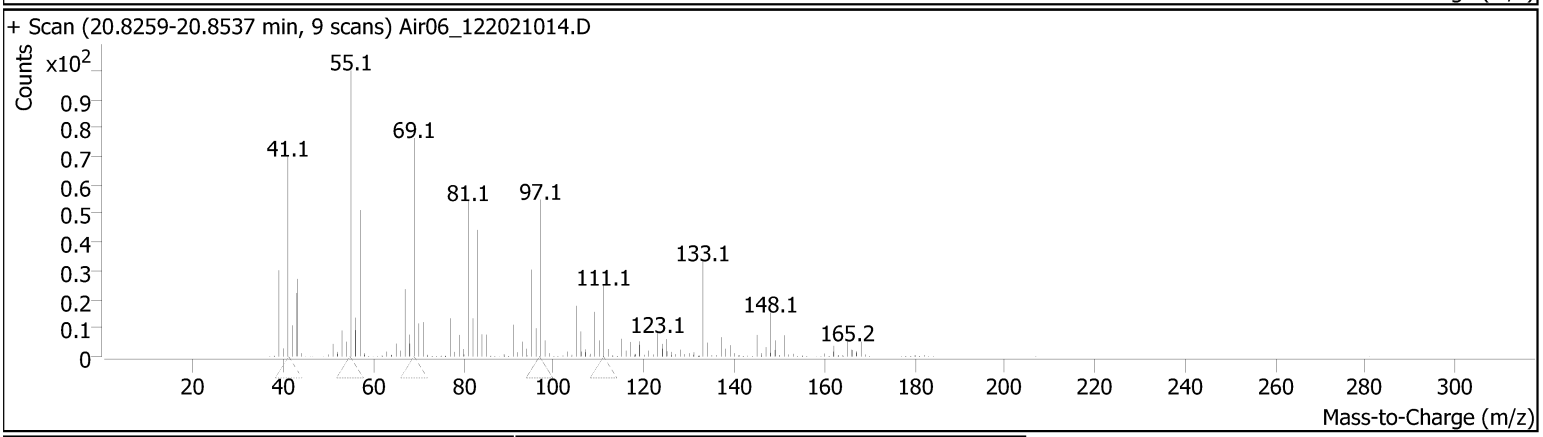


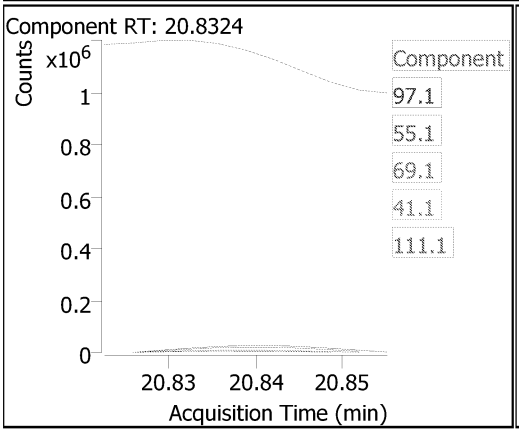


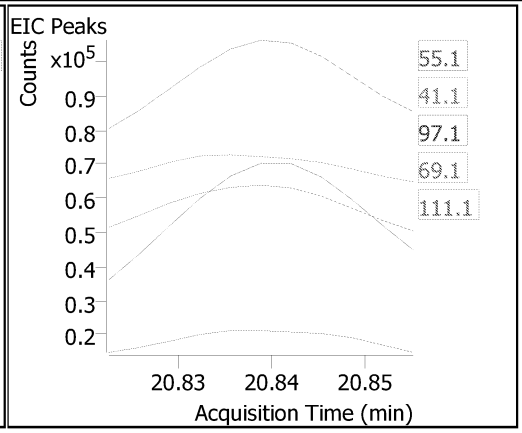
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.8324	Cyclohexane, 1-methyl-2-pentyl-	1315302.8	71.0	54411-01-7	C12H24	3.308

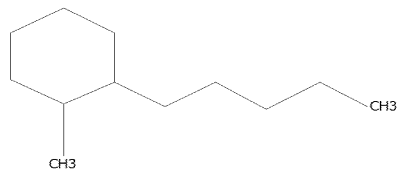




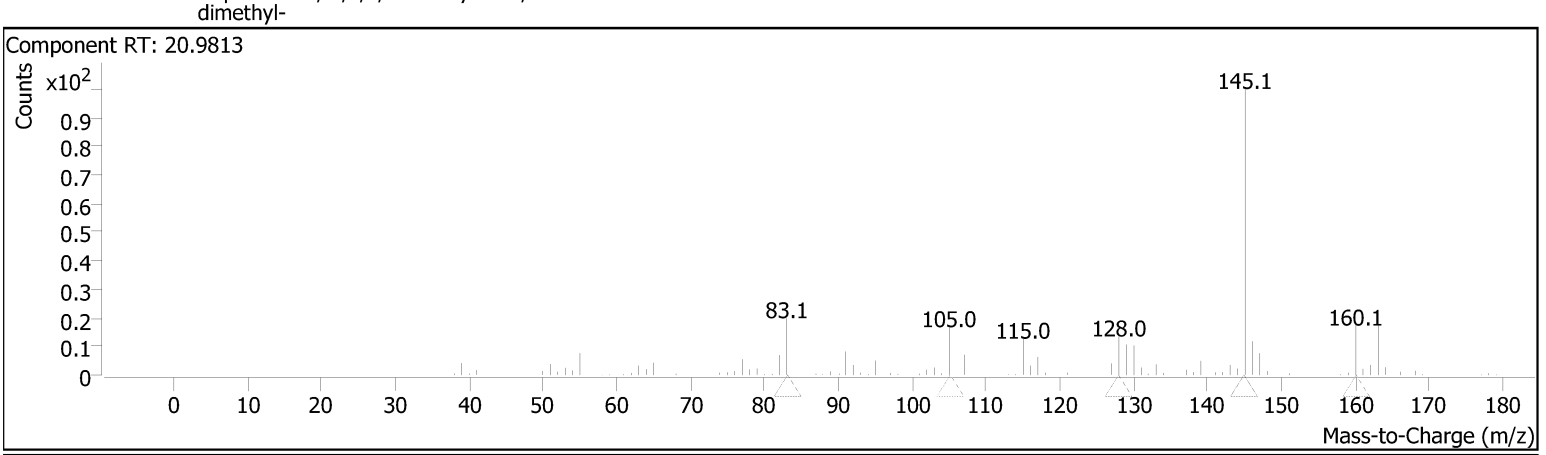


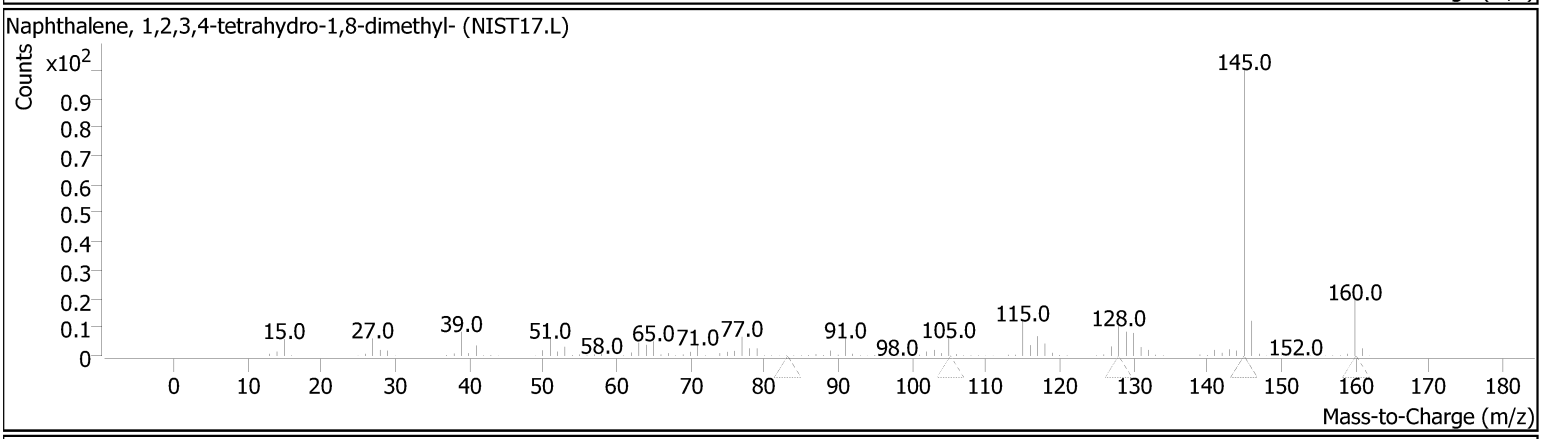


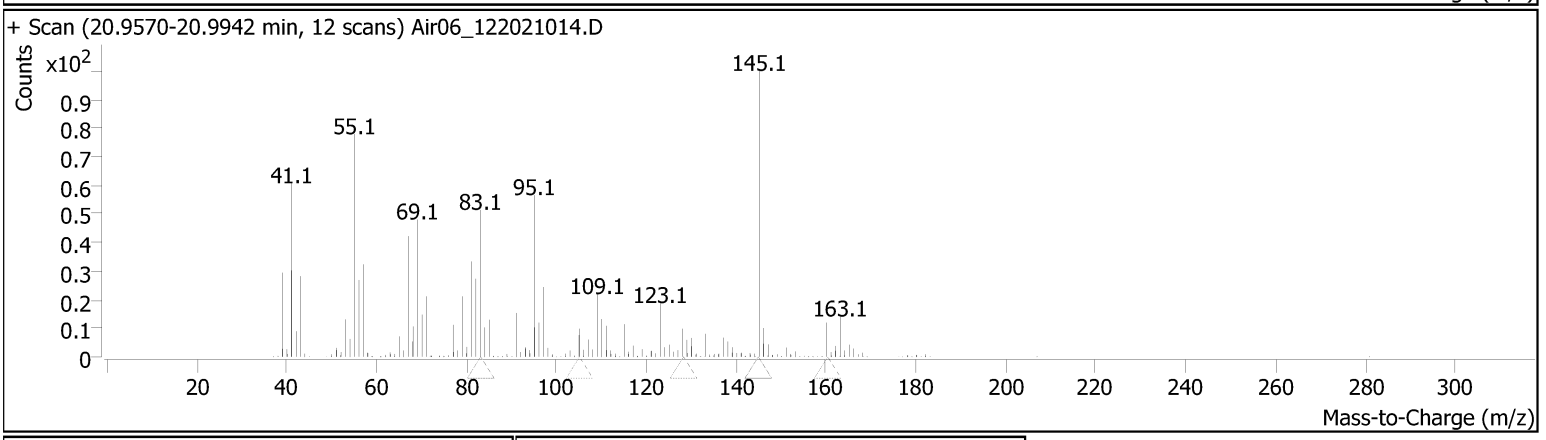


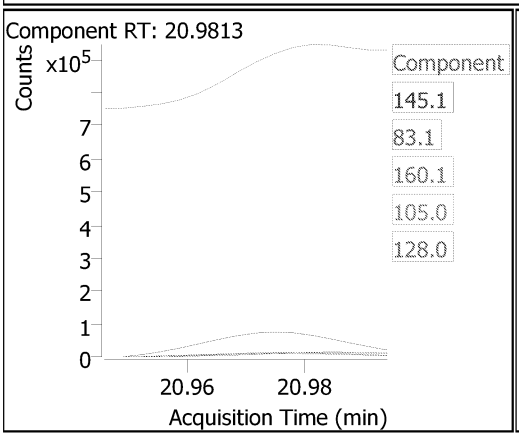


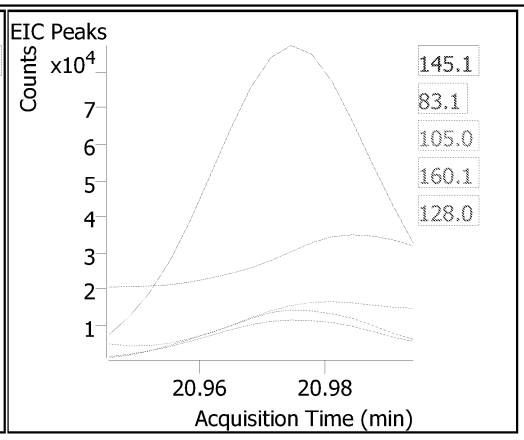
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.9813	Naphthalene, 1,2,3,4-tetrahydro-1,8-dimethyl-	1184568.1	79.9	25419-33-4	C12H16	2.979

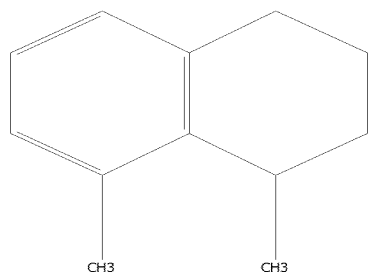




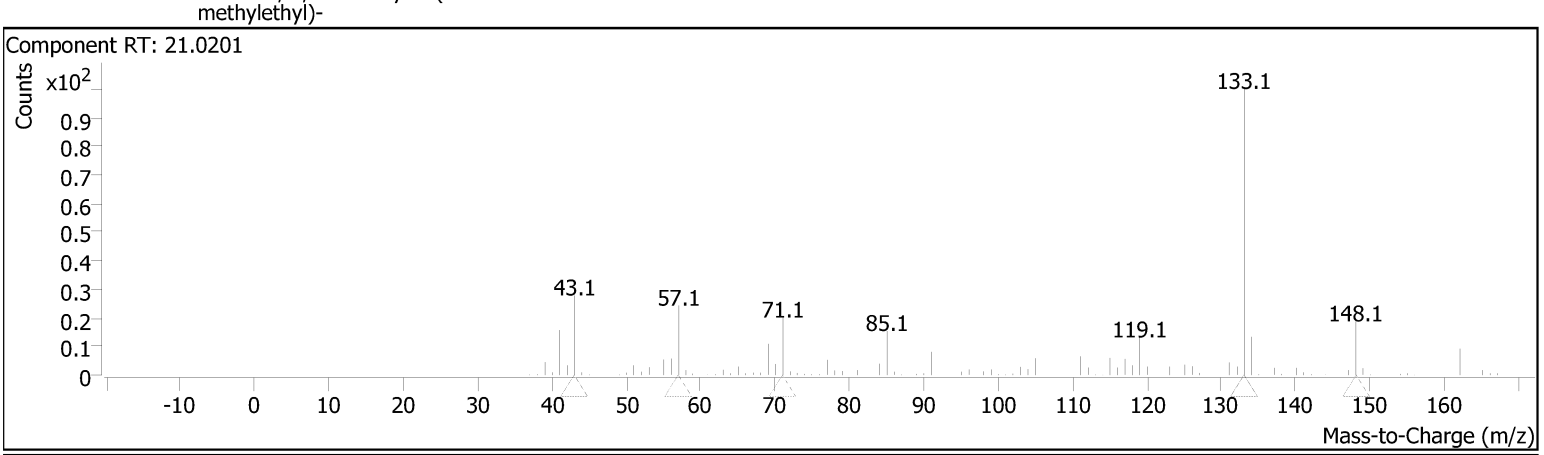


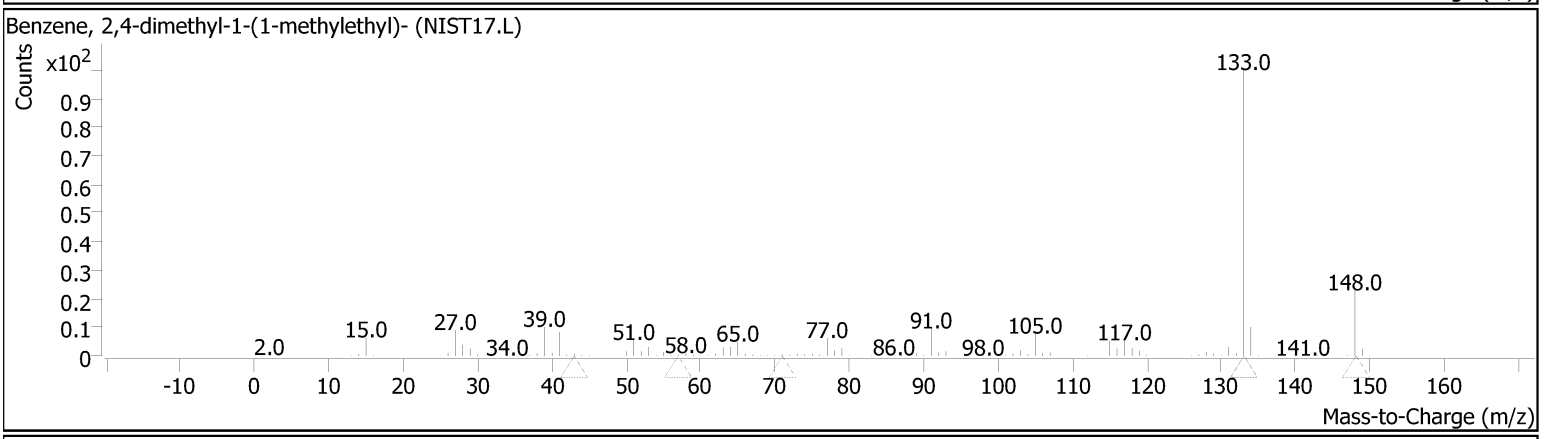


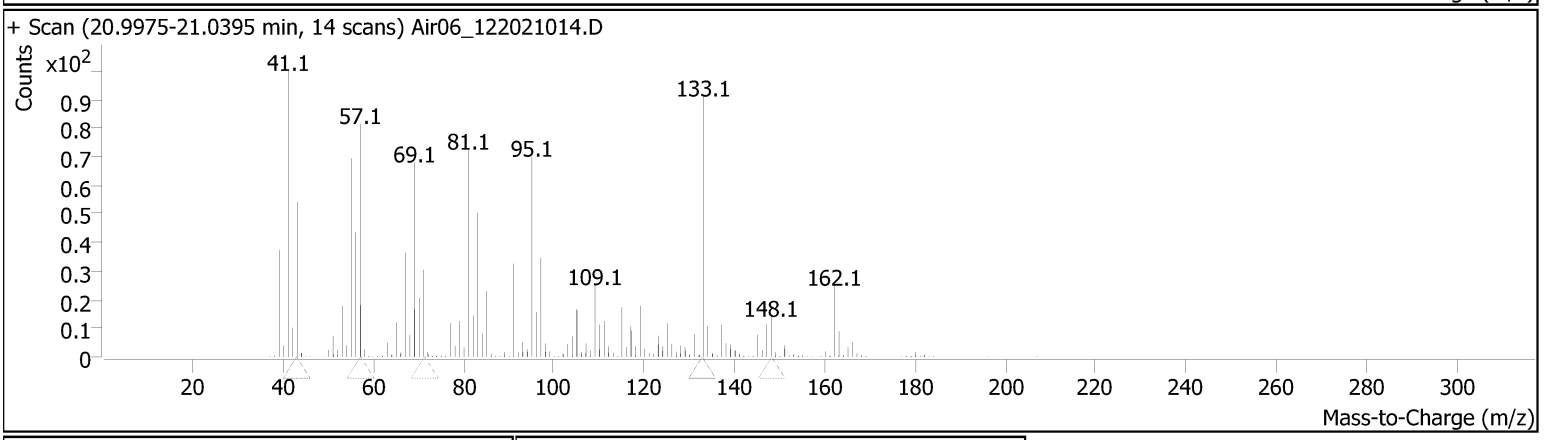


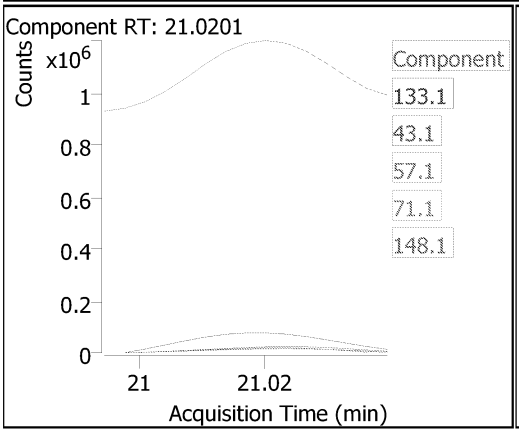


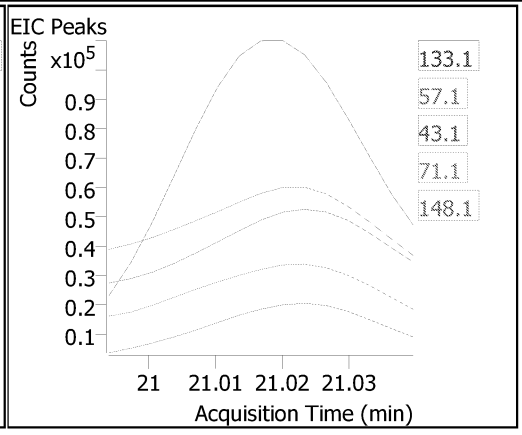
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.0201	Benzene, 2,4-dimethyl-1-(1-methylethyl)-	1707758.2	74.4	4706-89-2	C11H16	4.295

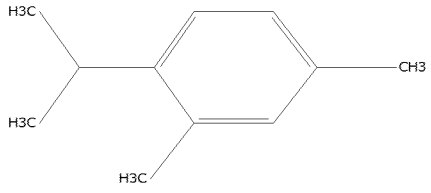




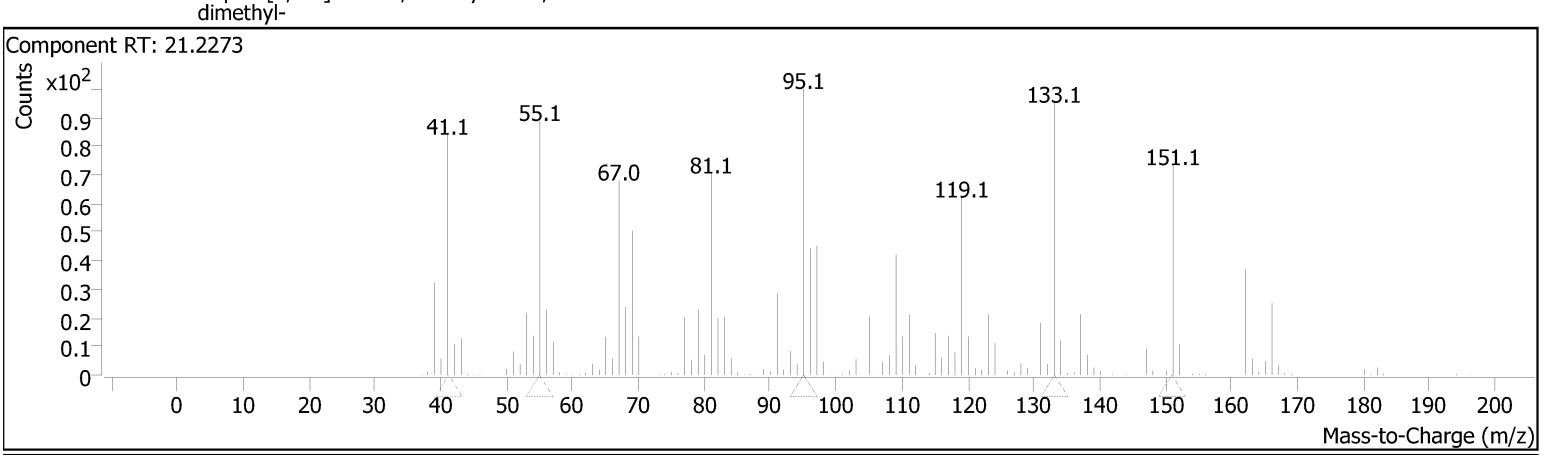


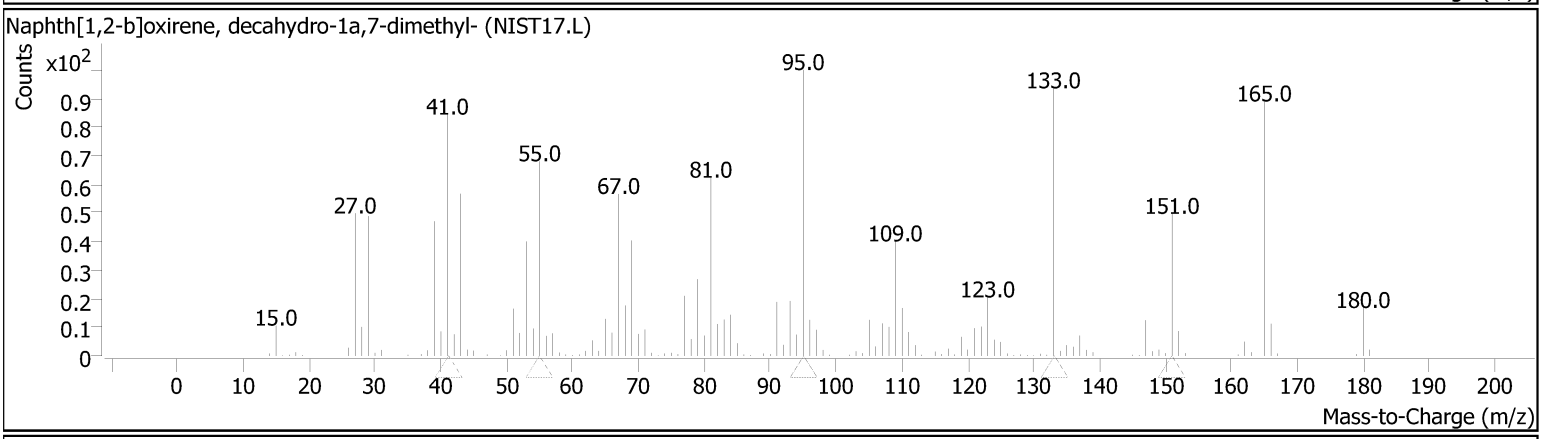


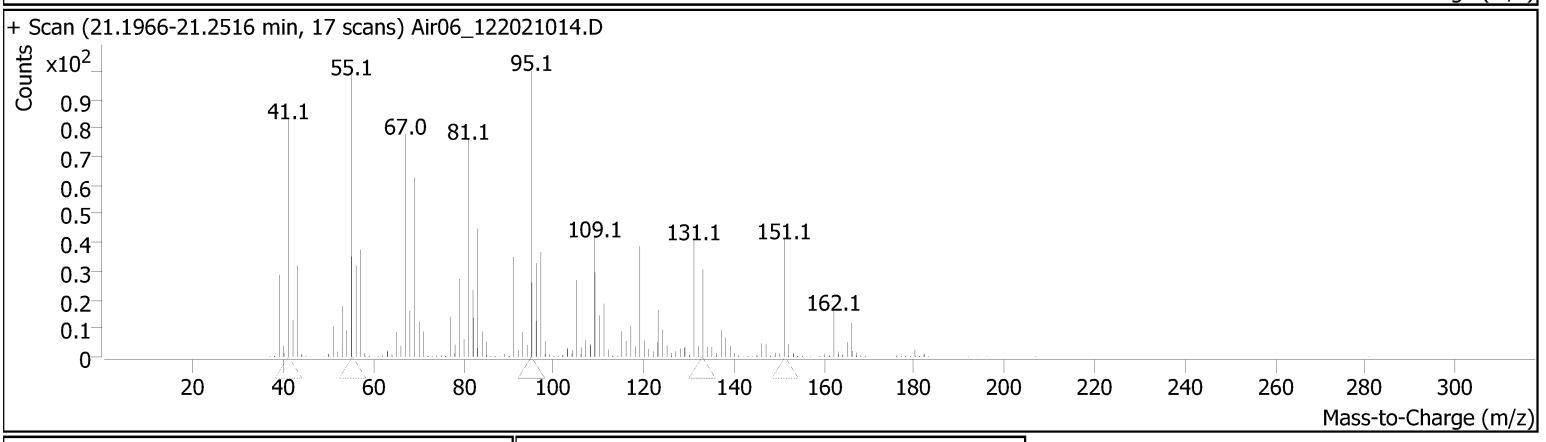


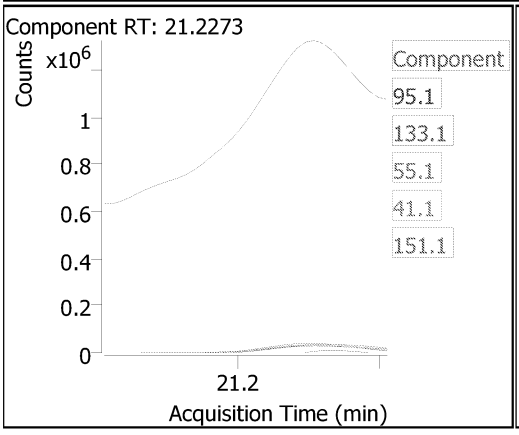


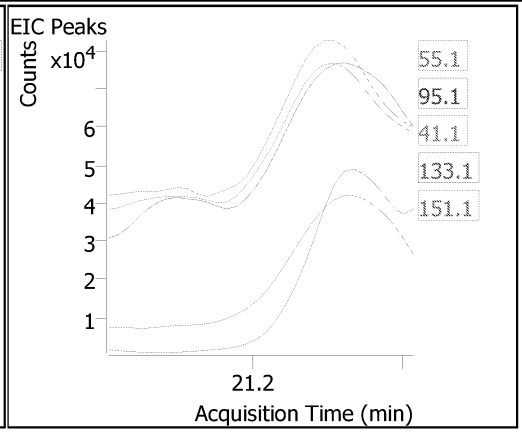
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.2273	Naphth[1,2-b]oxirene, decahydro-1a,7-dimethyl-	3144136.7	80.5	55976-08-4	C12H20O	7.908

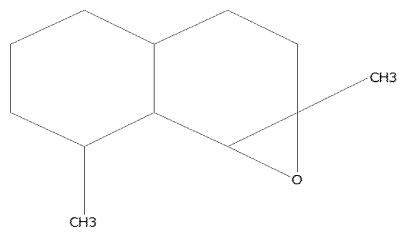




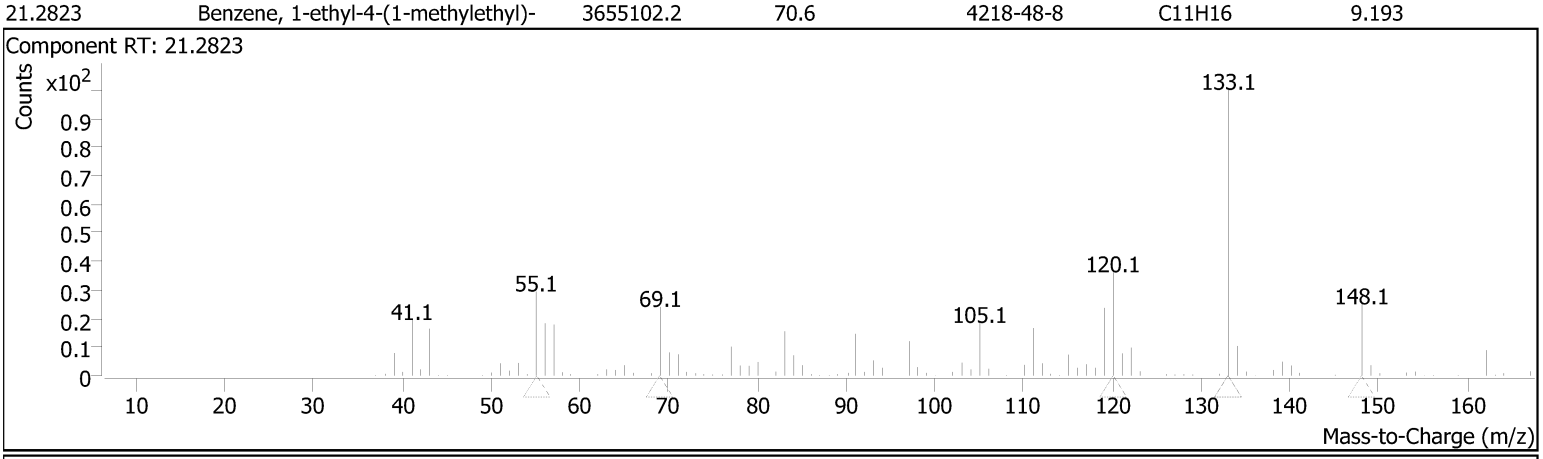


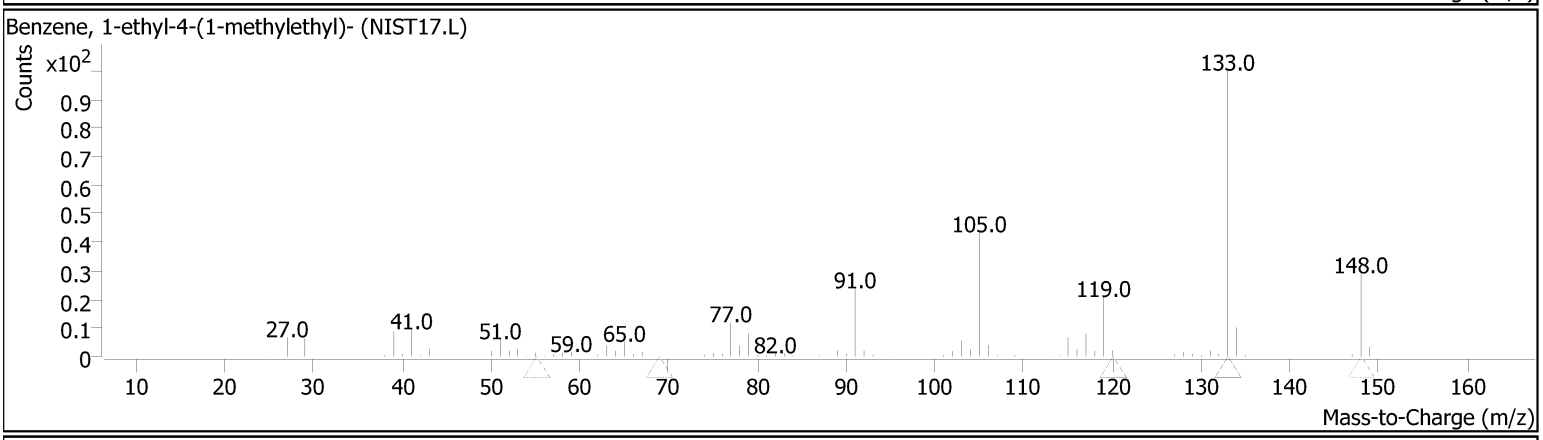


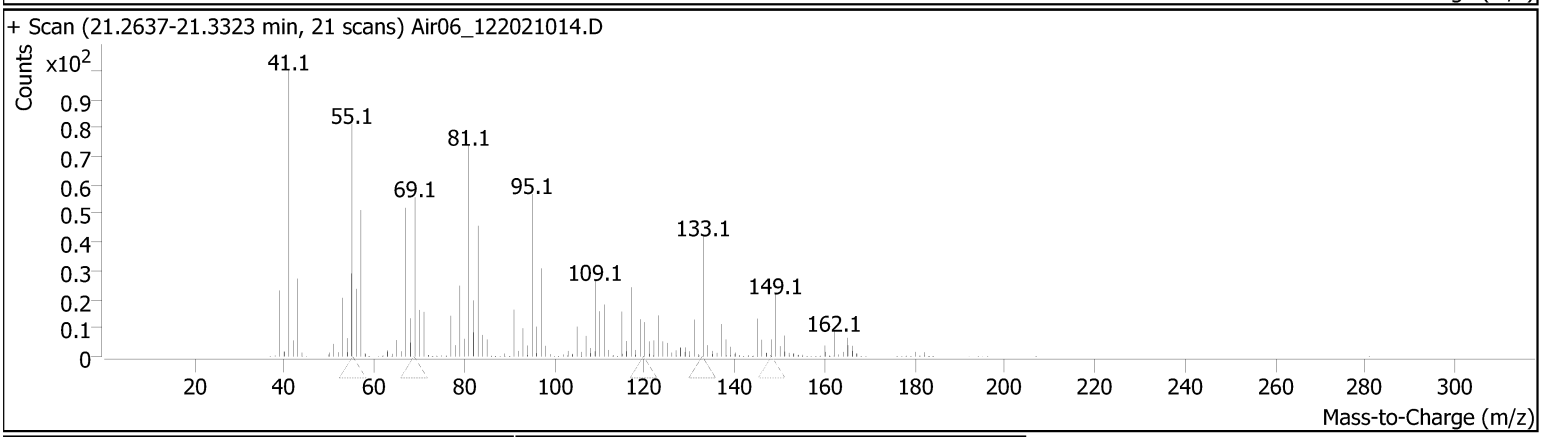


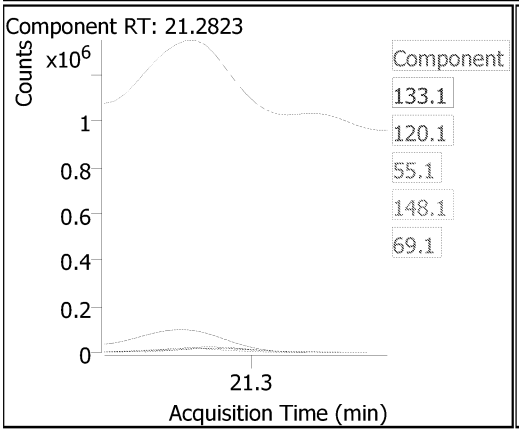


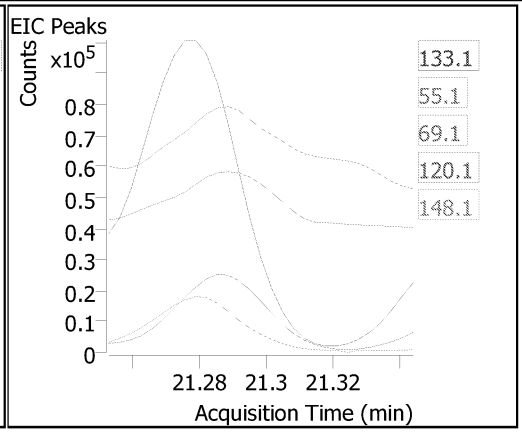
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.2823	Benzene, 1-ethyl-4-(1-methylethyl)-	3655102.2	70.6	4218-48-8	C11H16	9.193

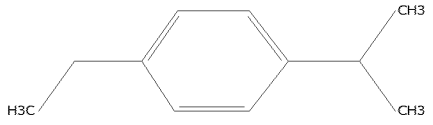




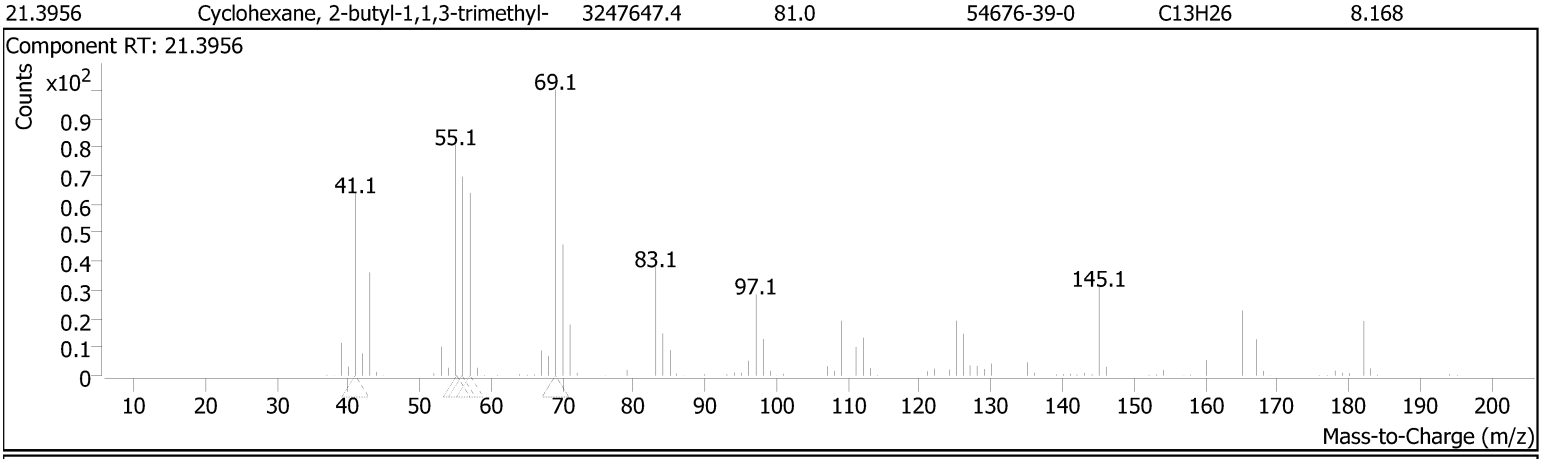


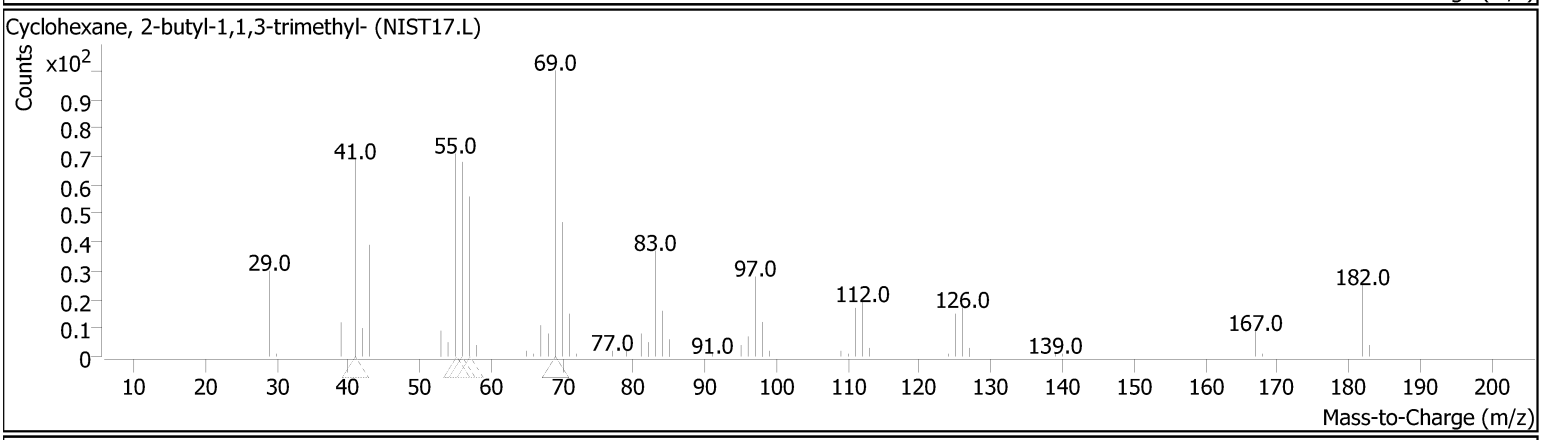


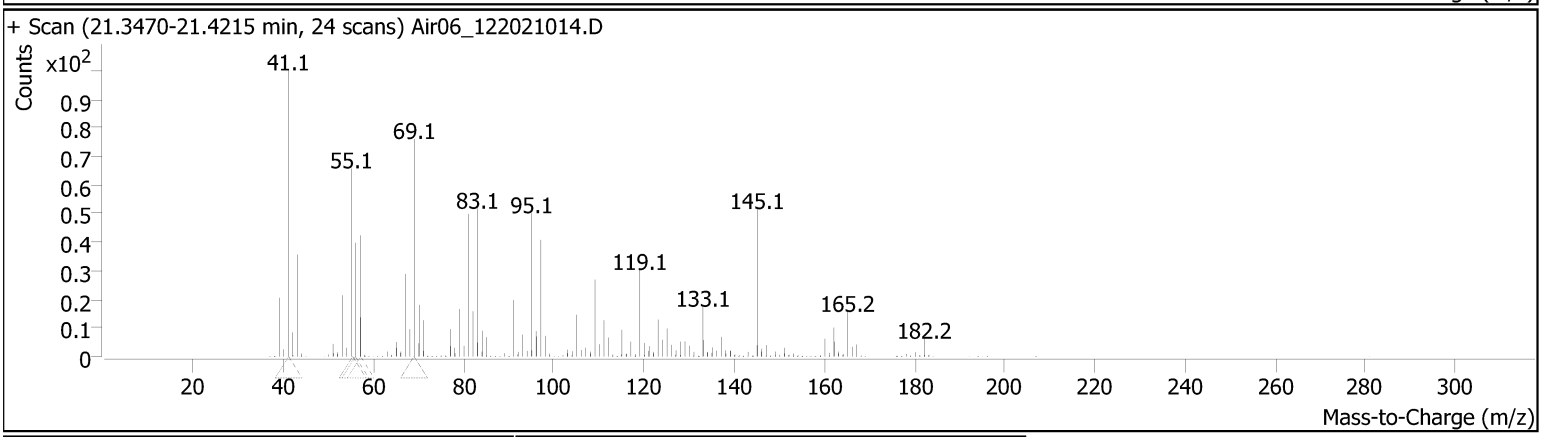


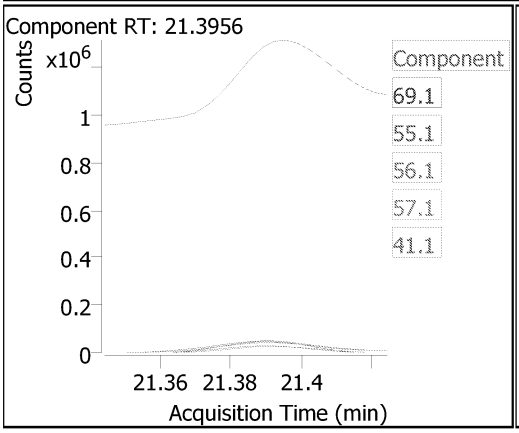


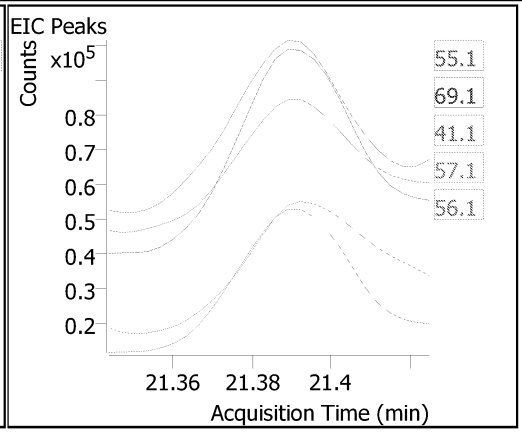
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.3956	Cyclohexane, 2-butyl-1,1,3-trimethyl-	3247647.4	81.0	54676-39-0	C13H26	8.168

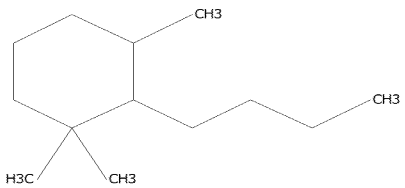








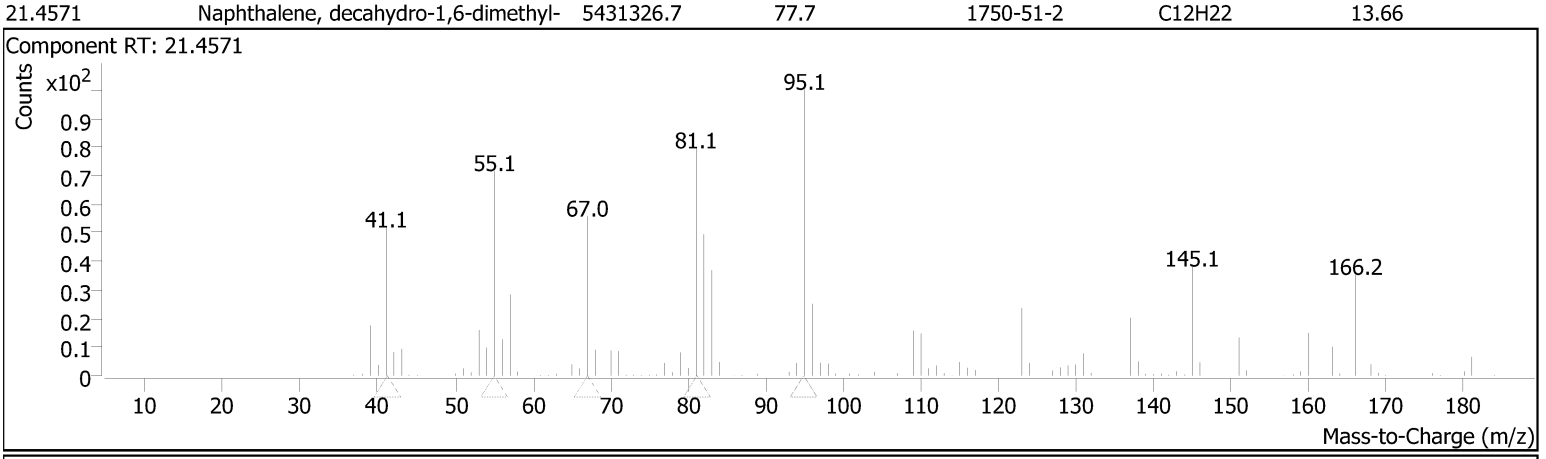


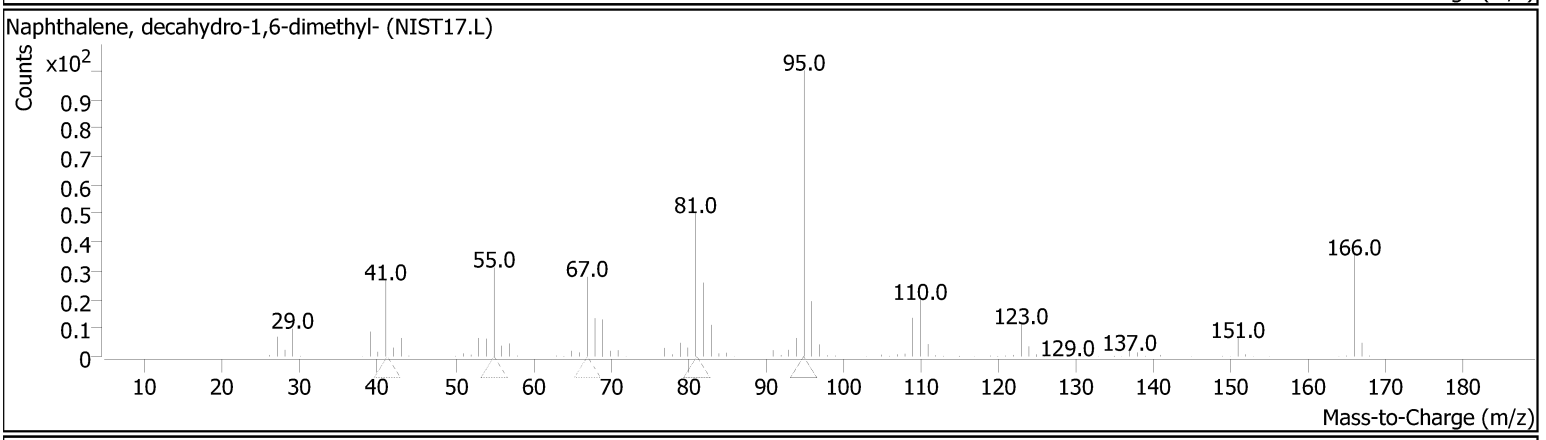


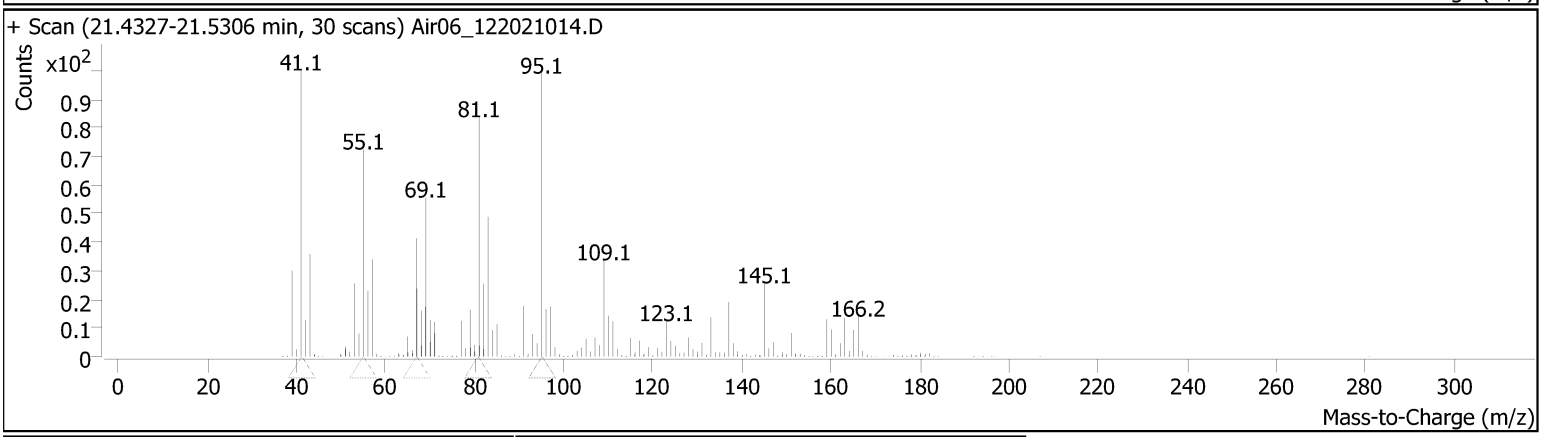
Library Search Results - NonTarget Hits with Details

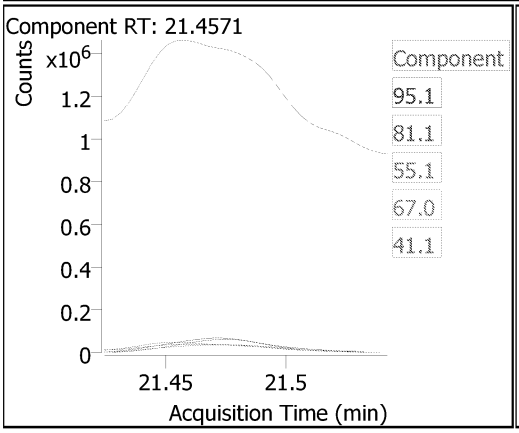
Agilent Technologies

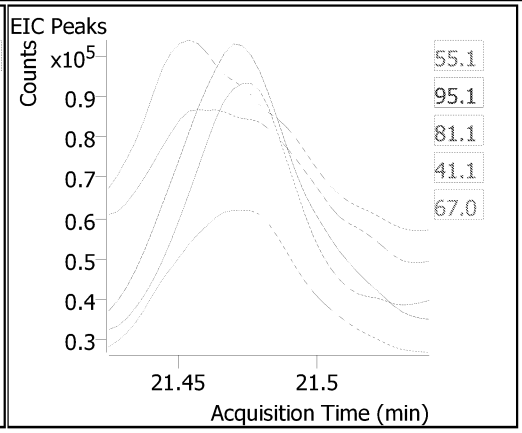
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.4571	Naphthalene, decahydro-1,6-dimethyl-	5431326.7	77.7	1750-51-2	C12H22	13.66

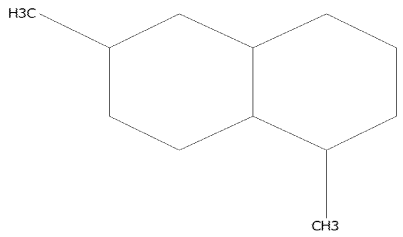




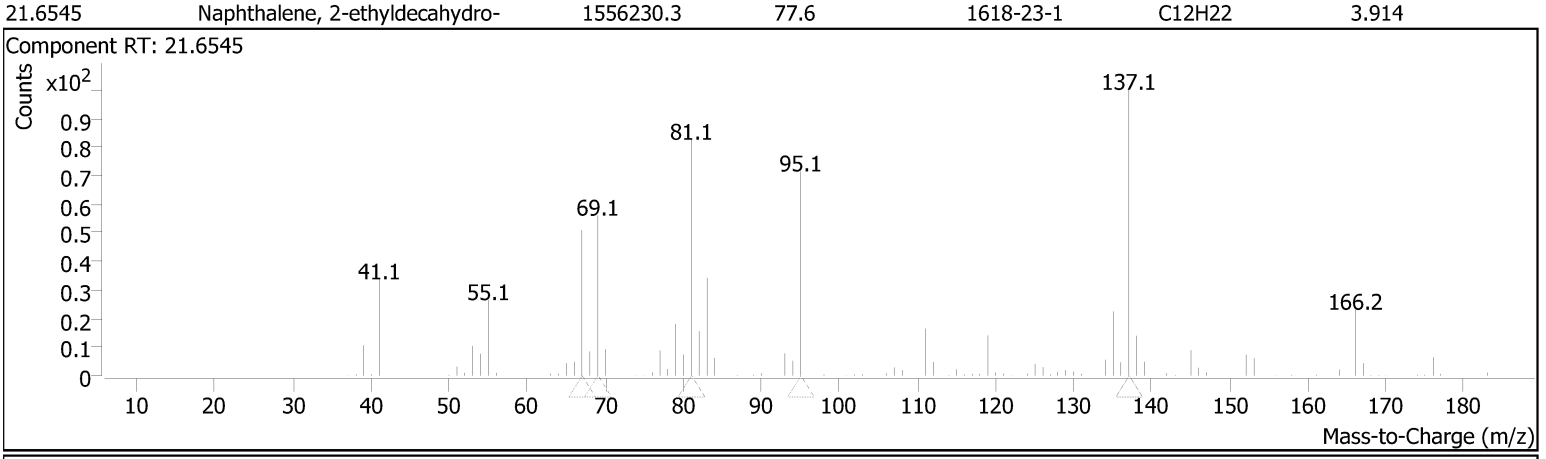


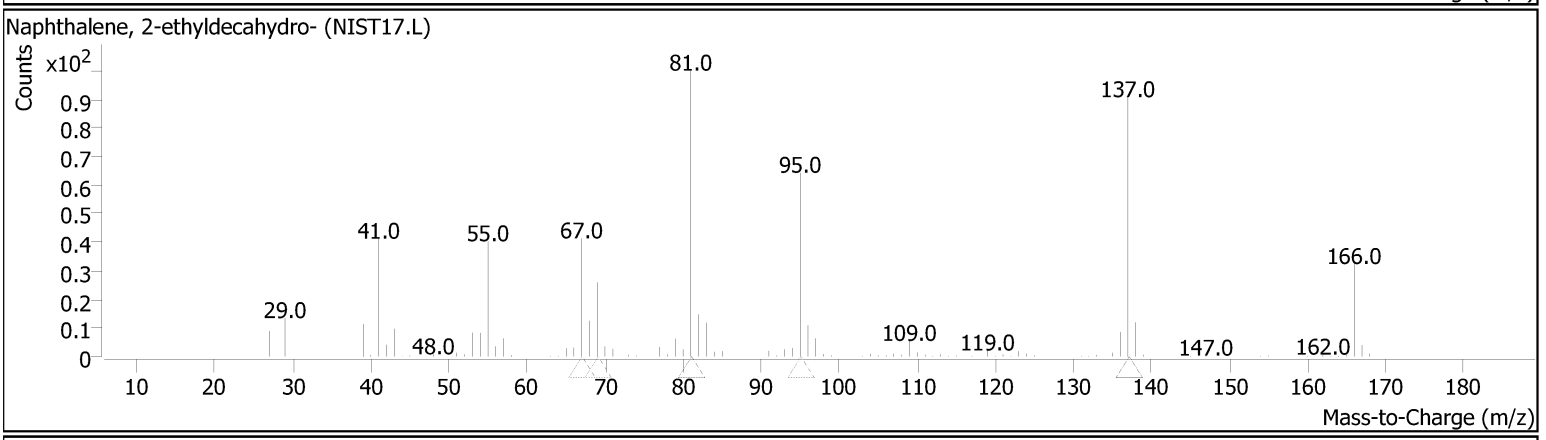


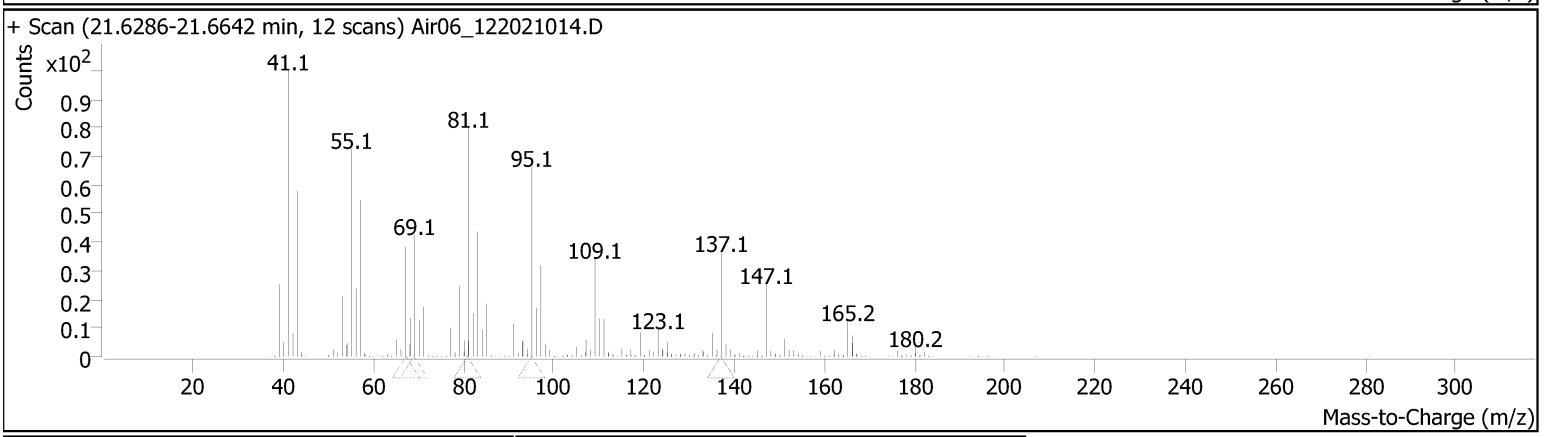


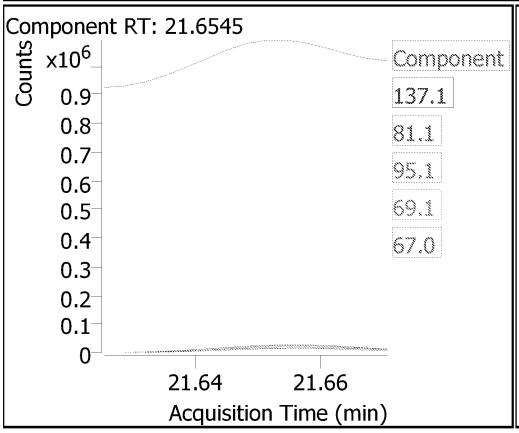


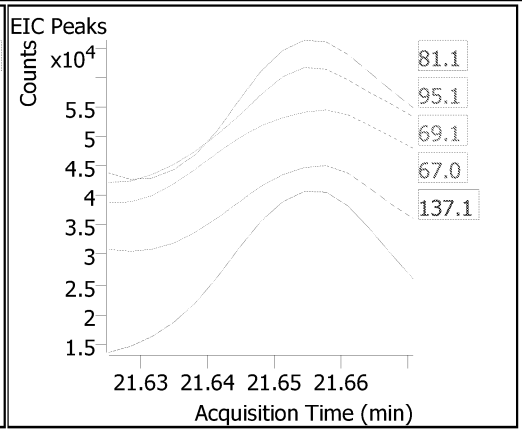
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.6545	Naphthalene, 2-ethyldecahydro-	1556230.3	77.6	1618-23-1	C12H22	3.914

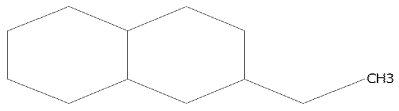




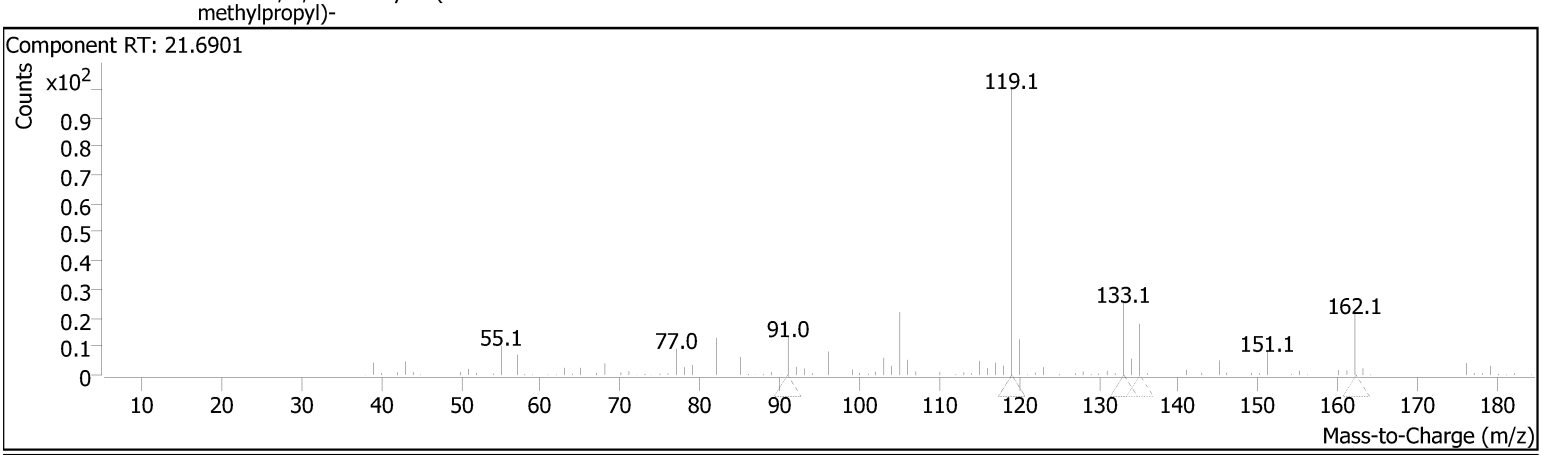


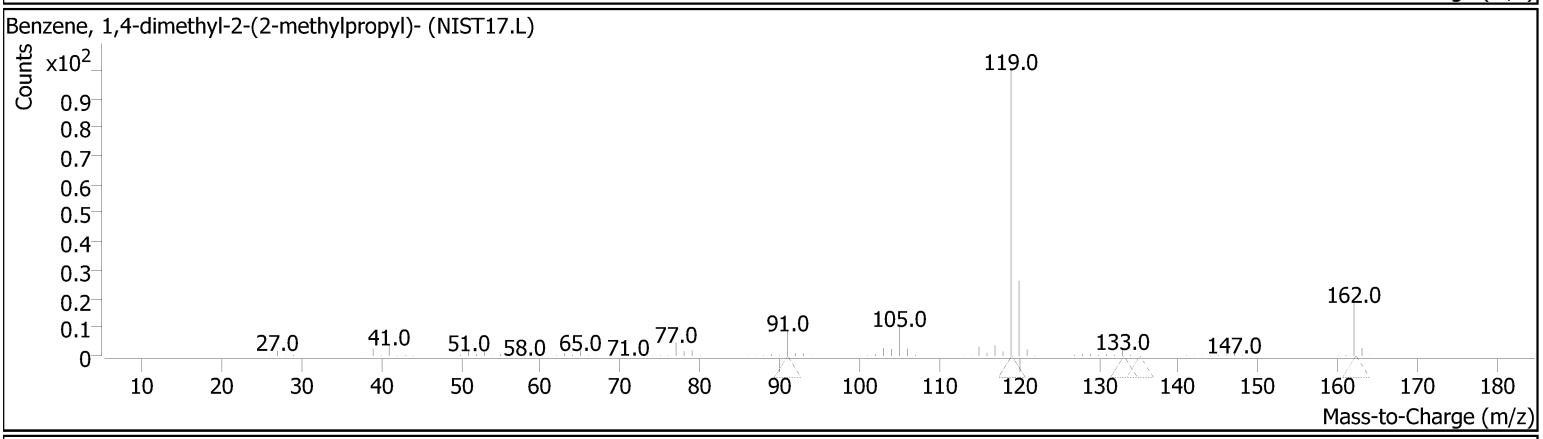


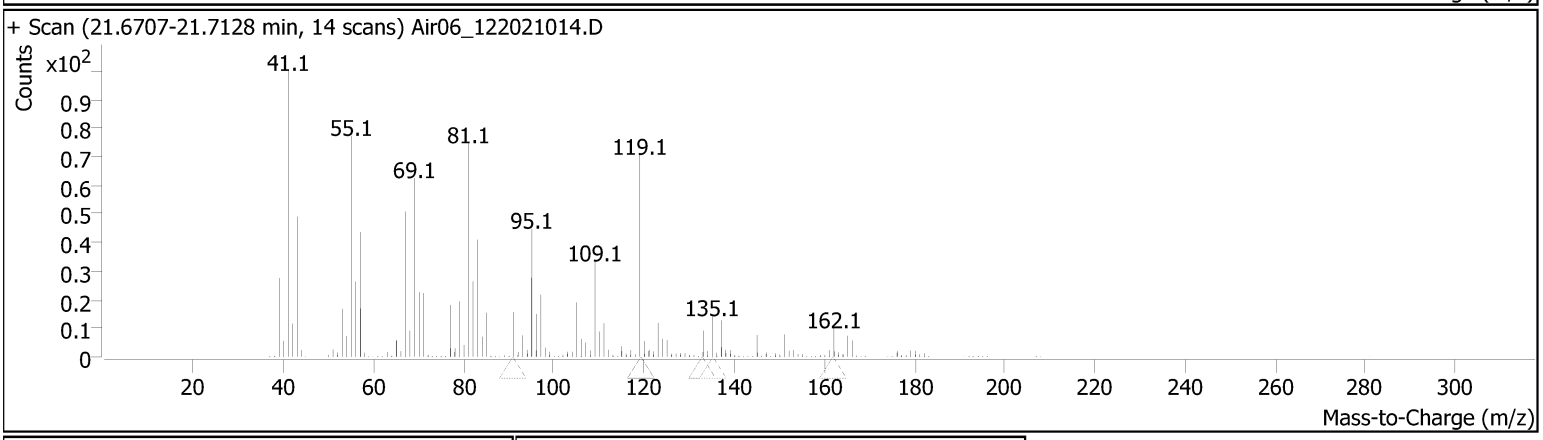


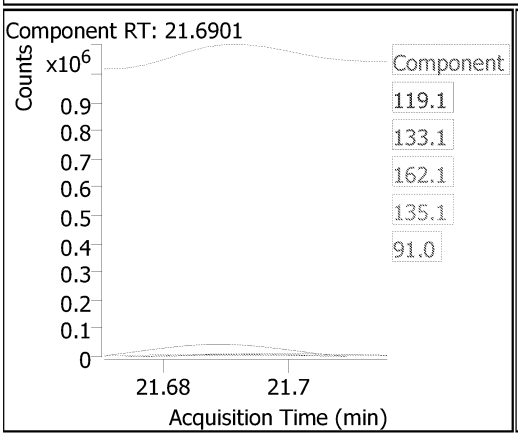


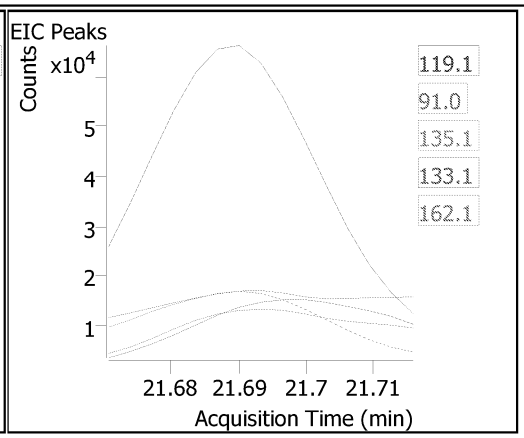
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.6901	Benzene, 1,4-dimethyl-2-(2-methylpropyl)-	1663108.3	73.9	55669-88-0	C12H18	4.183

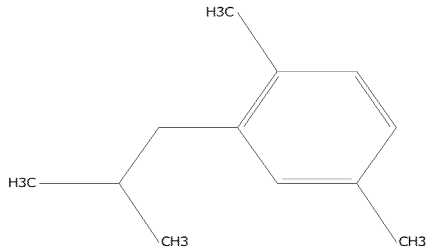




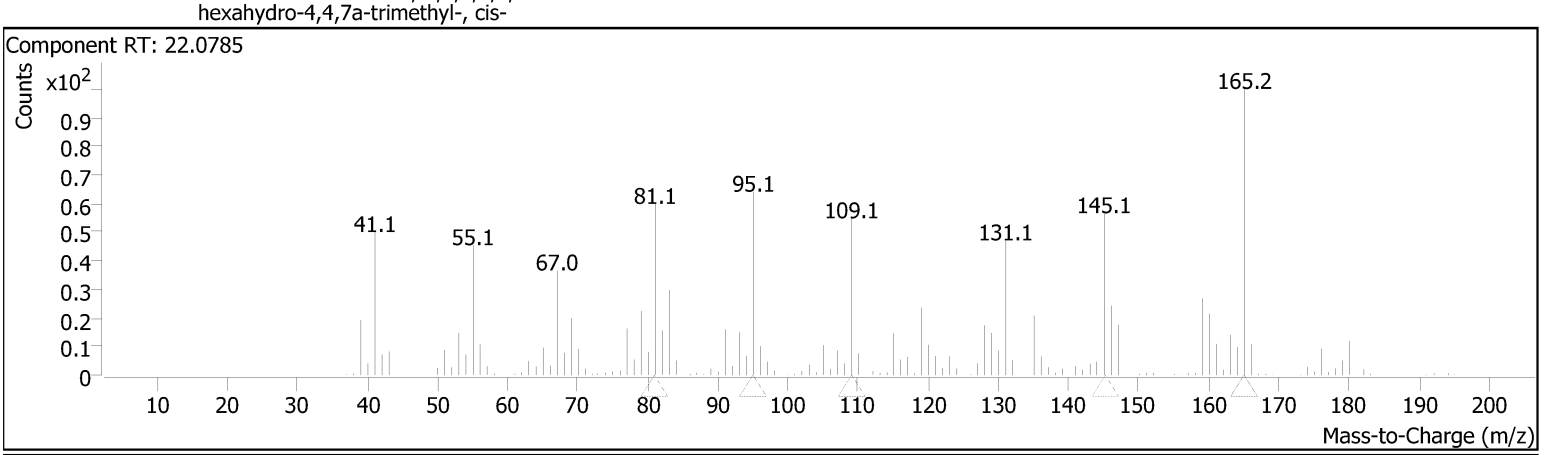


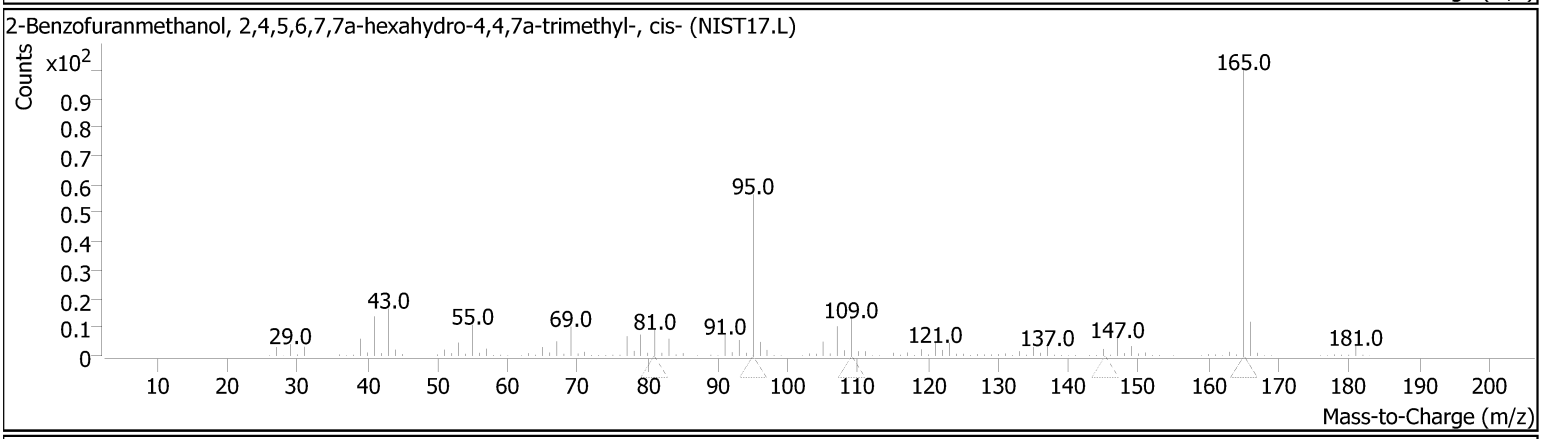


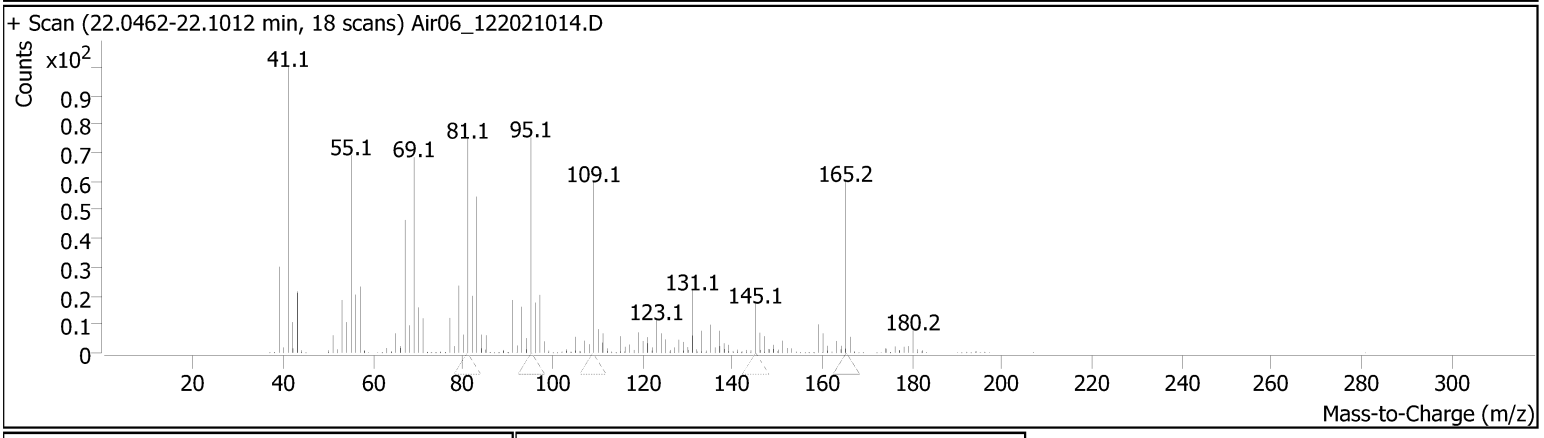


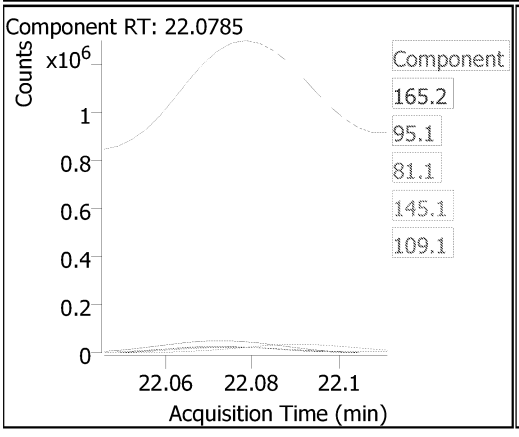


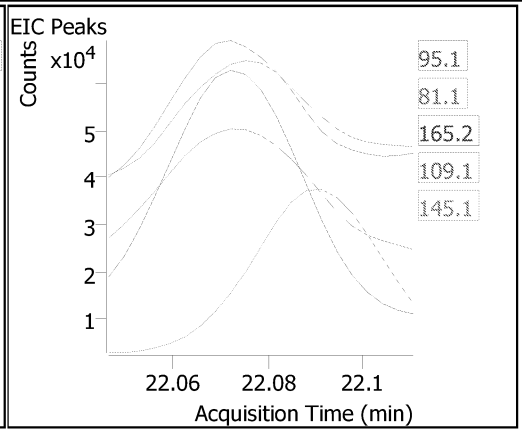
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.0785	2-Benzofuranmethanol, 2,4,5,6,7,7a-hexahydro-4,4,7a-trimethyl-, cis-	2428458.0	75.7	77384-15-7	C12H20O2	6.108

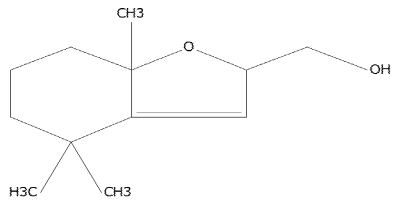




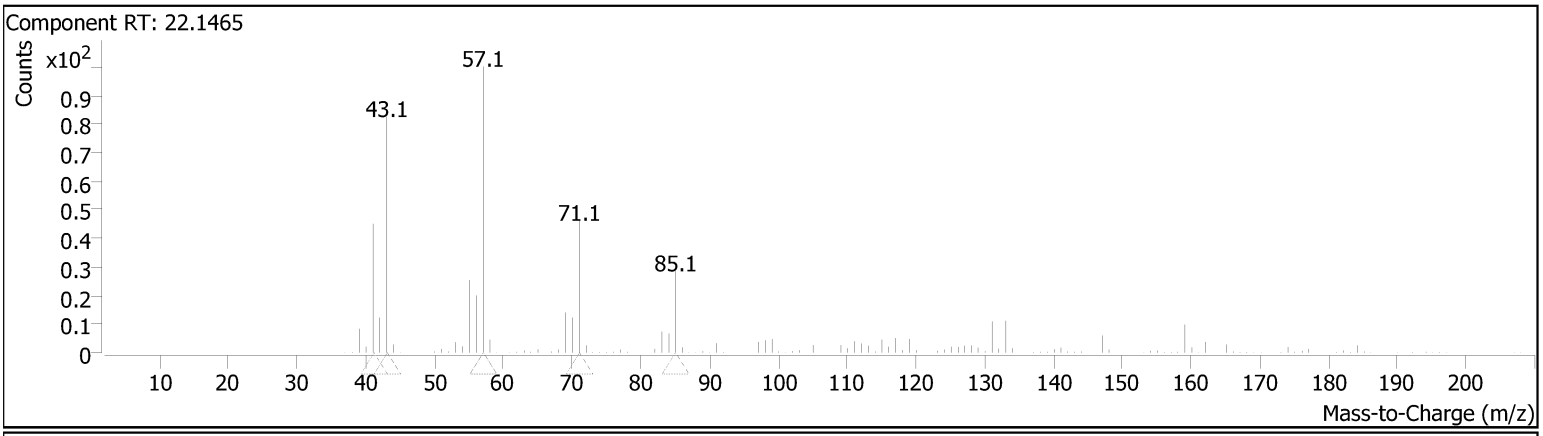


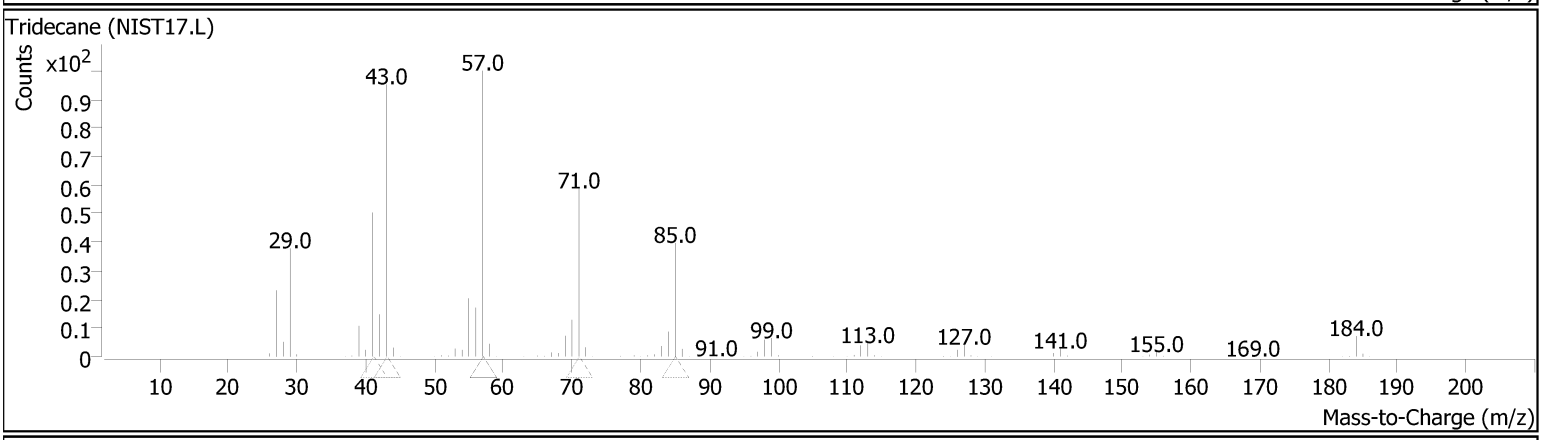


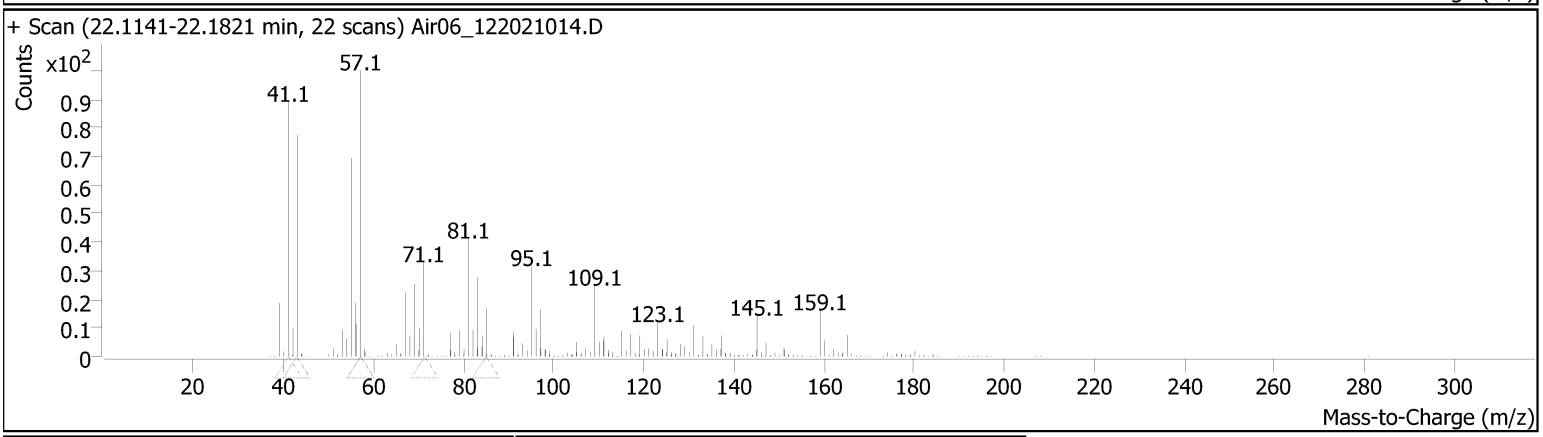


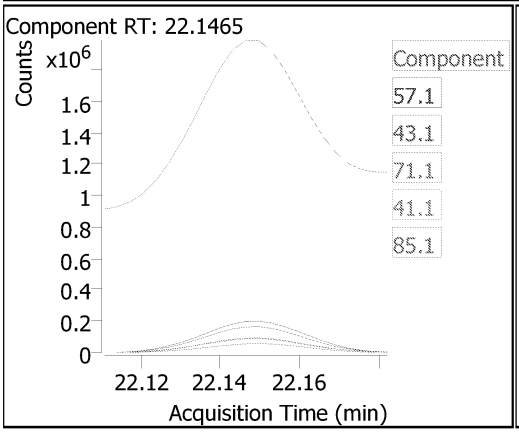


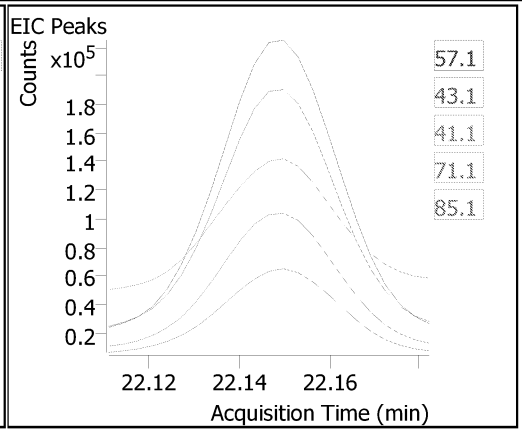
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.1465	Tridecane	4175786.3	76.5	629-50-5	C13H28	10.5

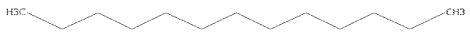












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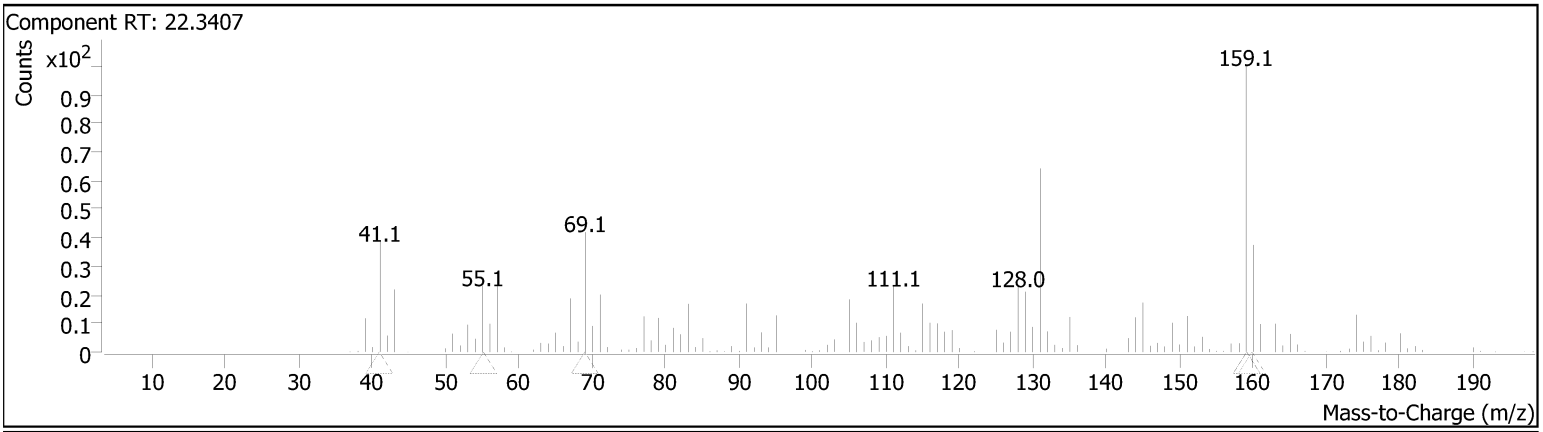
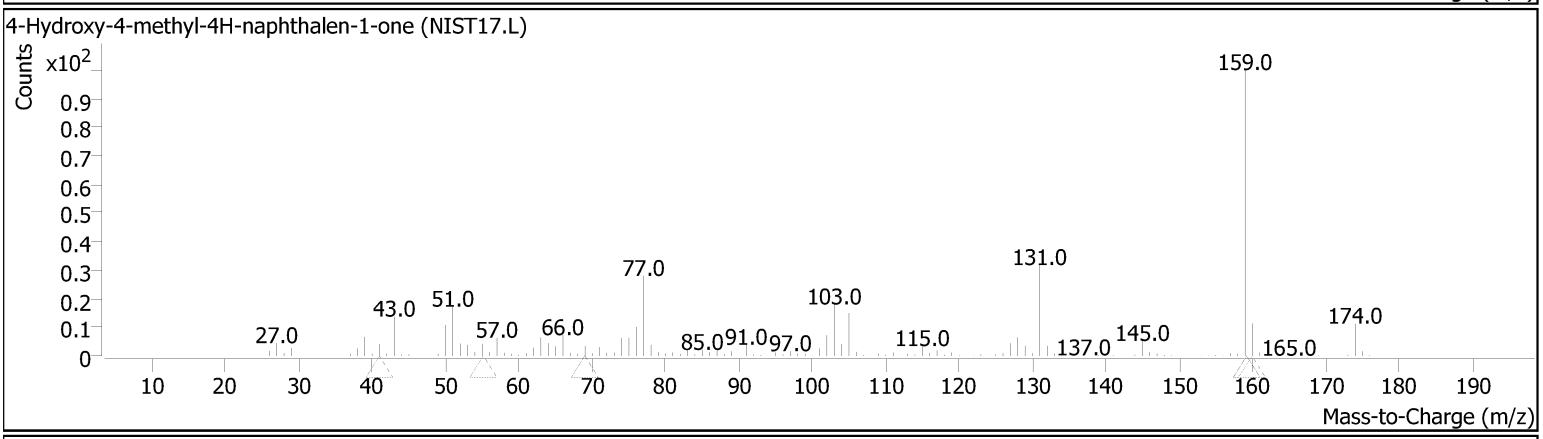
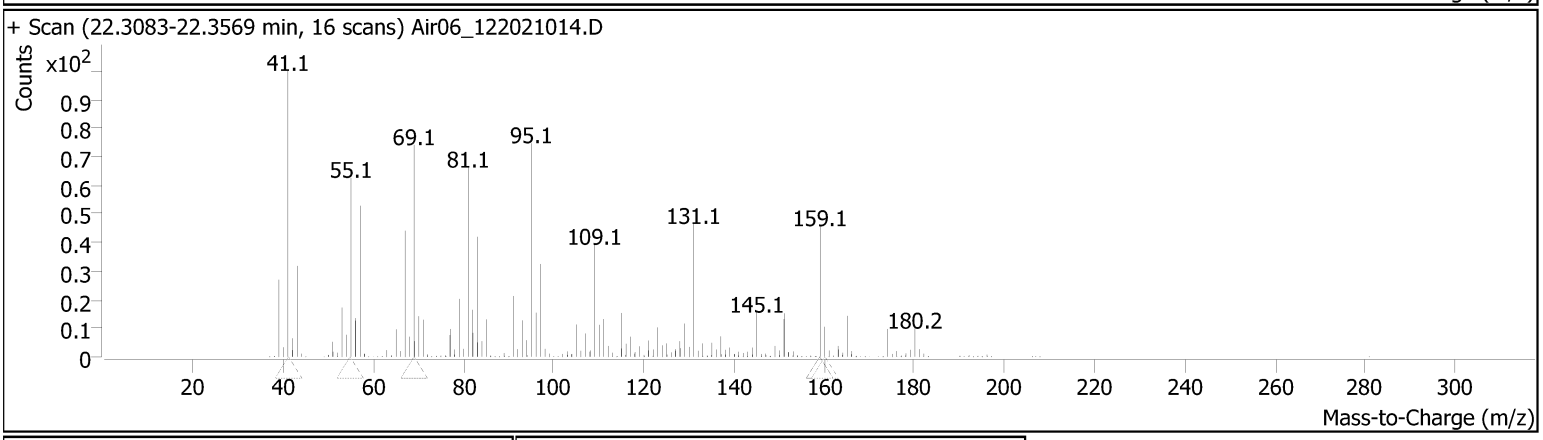
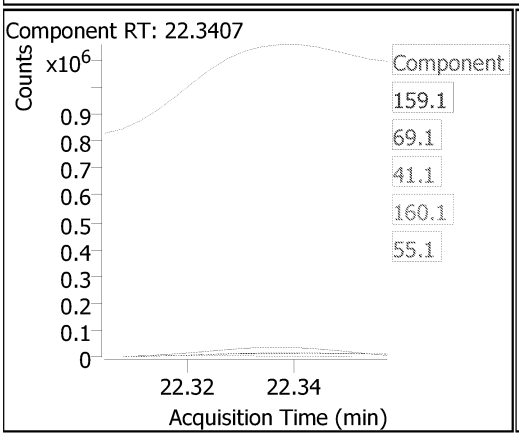
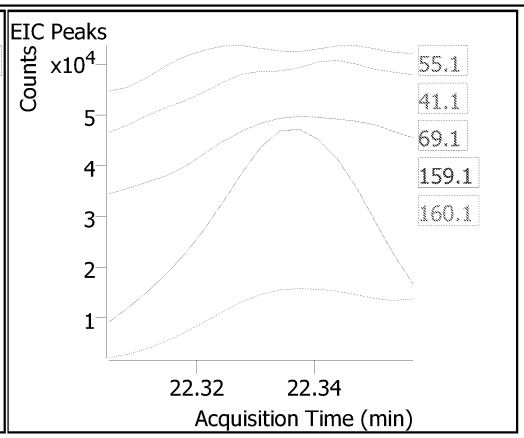
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.3407	4-Hydroxy-4-methyl-4H-naphthalen-1-one	1873480.4	73.4	42860-82-2	C11H10O2	4.712

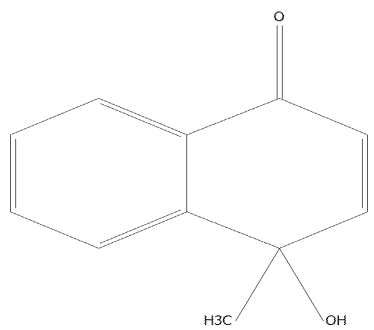




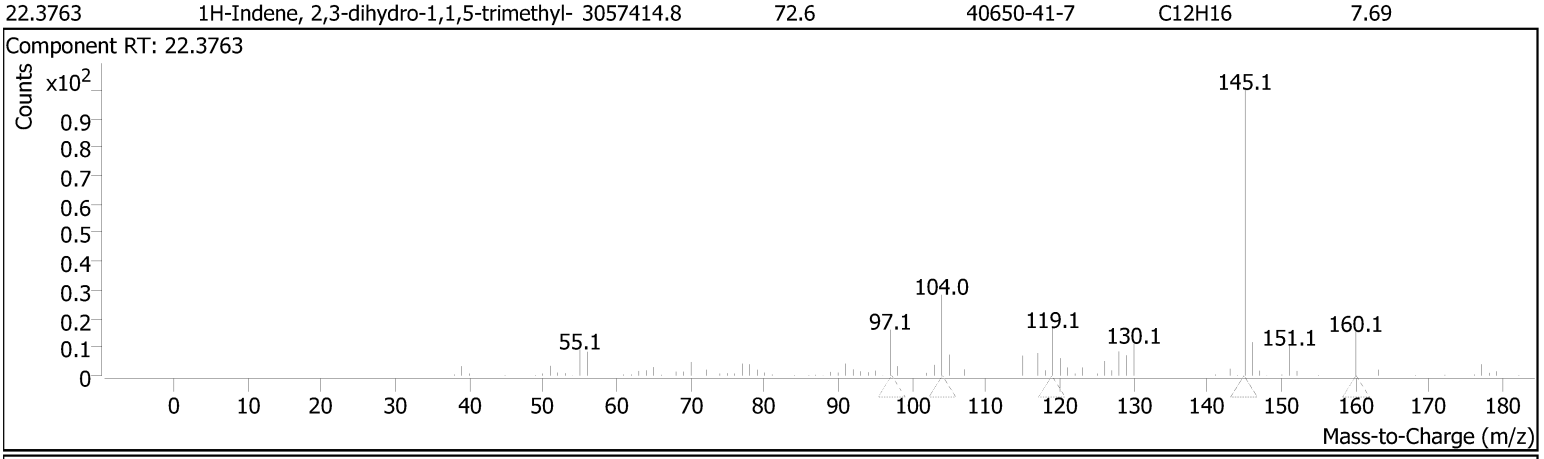


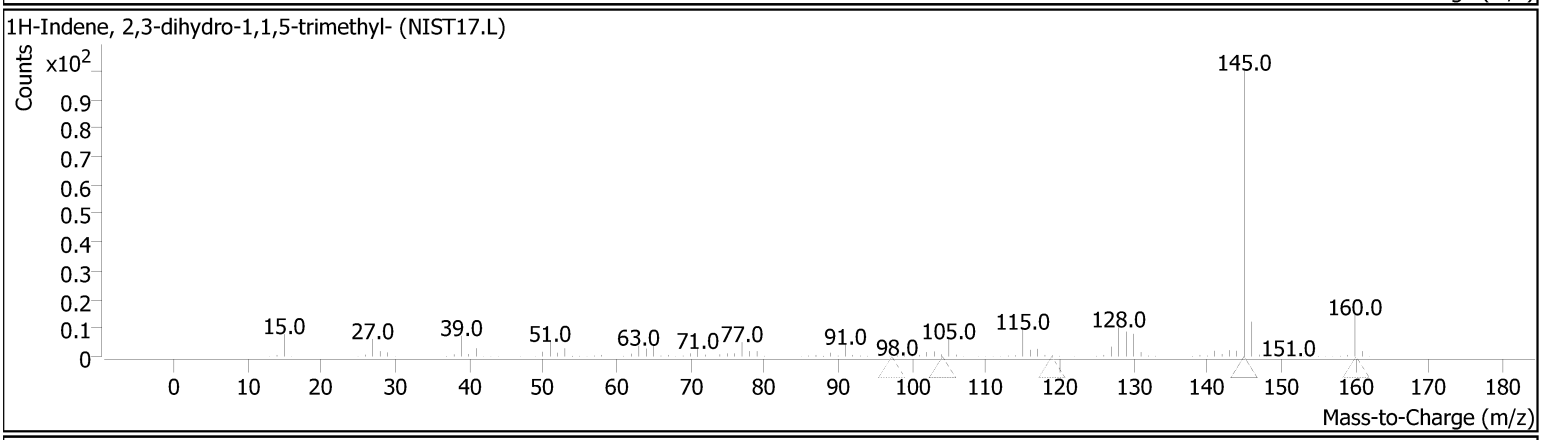


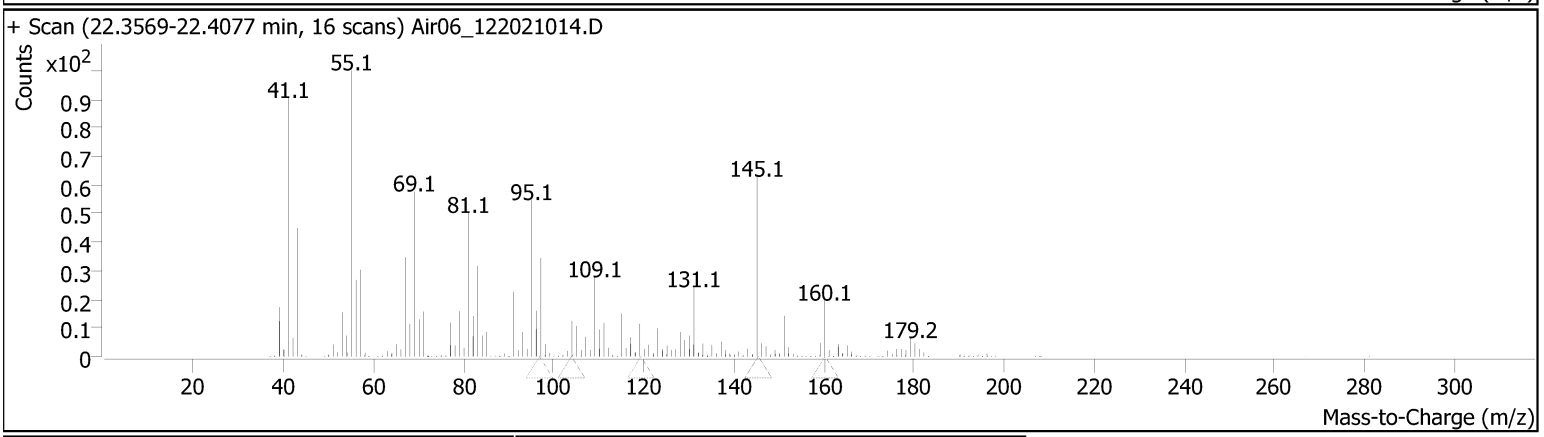


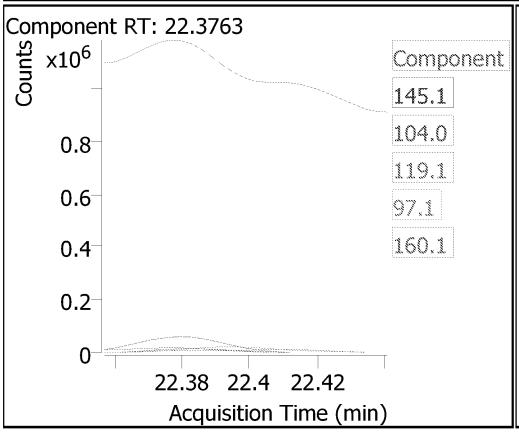


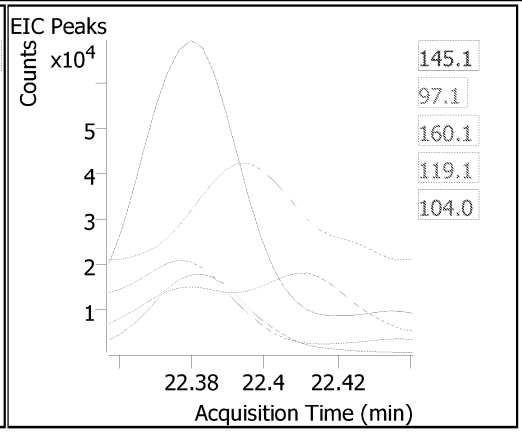
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.3763	1H-Indene, 2,3-dihydro-1,1,5-trimethyl-	3057414.8	72.6	40650-41-7	C12H16	7.69

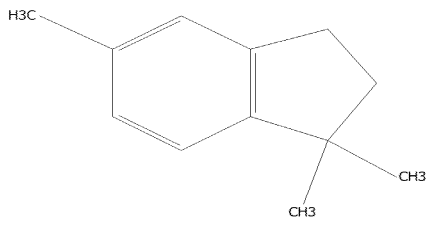




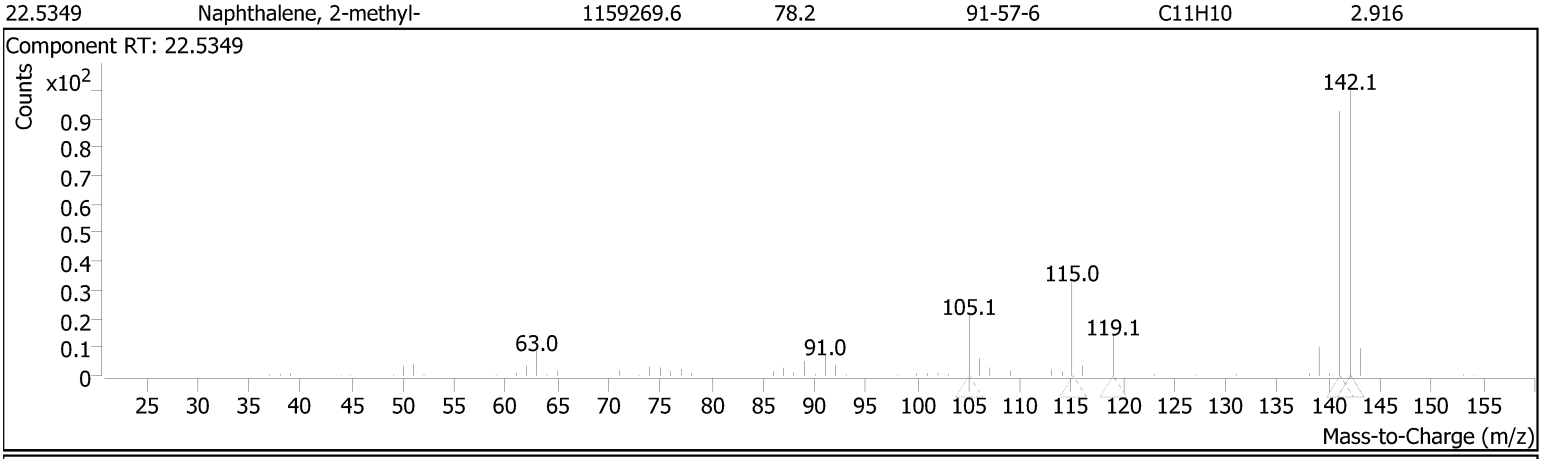


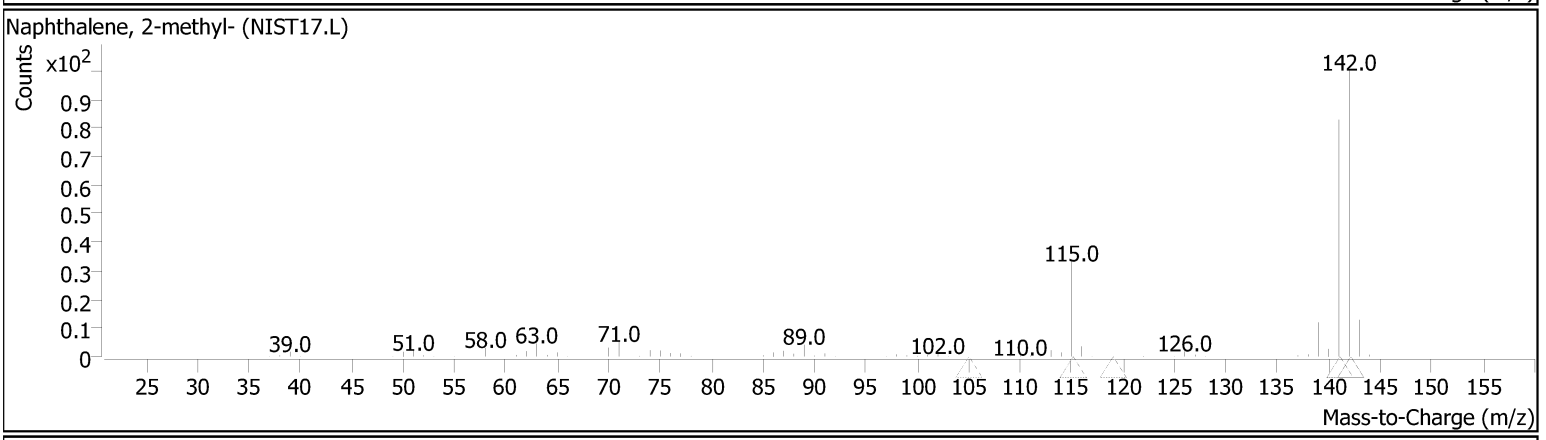


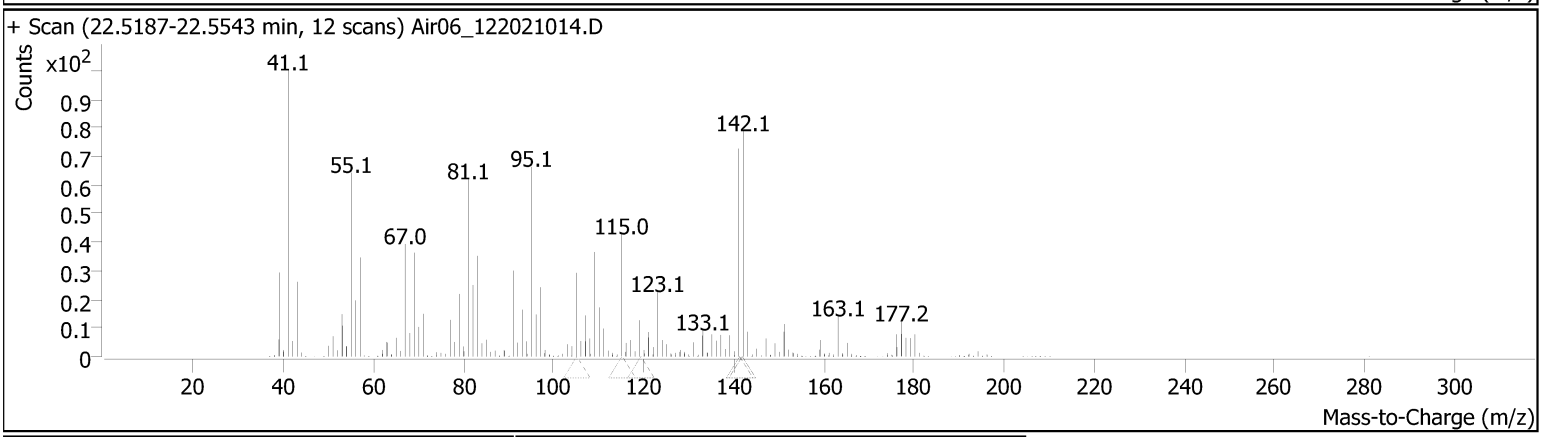


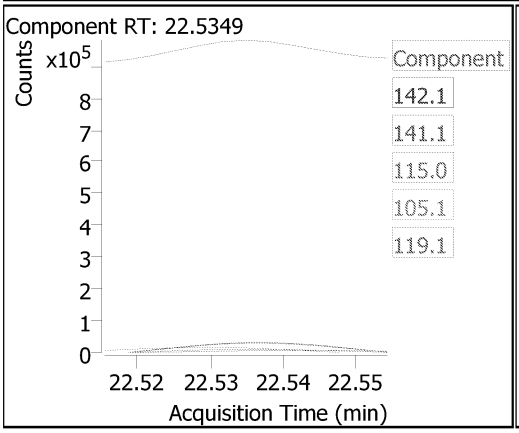


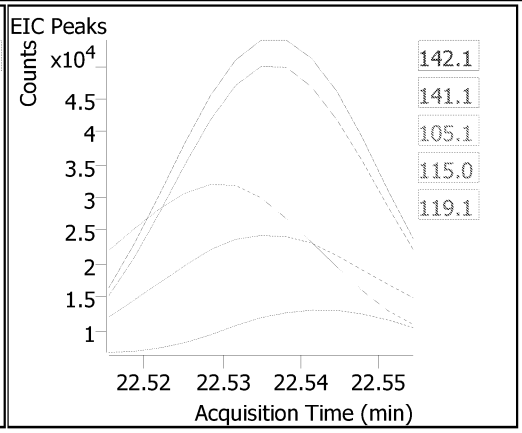
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.5349	Naphthalene, 2-methyl-	1159269.6	78.2	91-57-6	C11H10	2.916

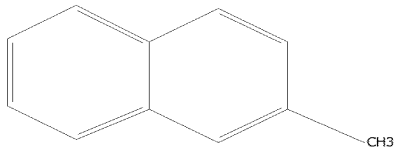




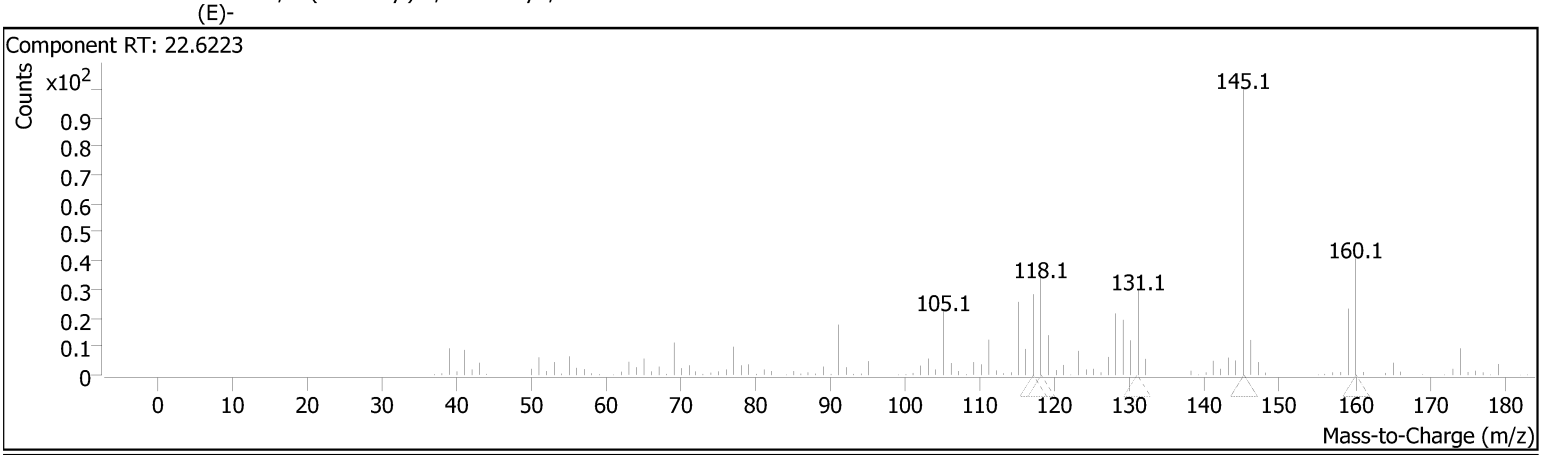


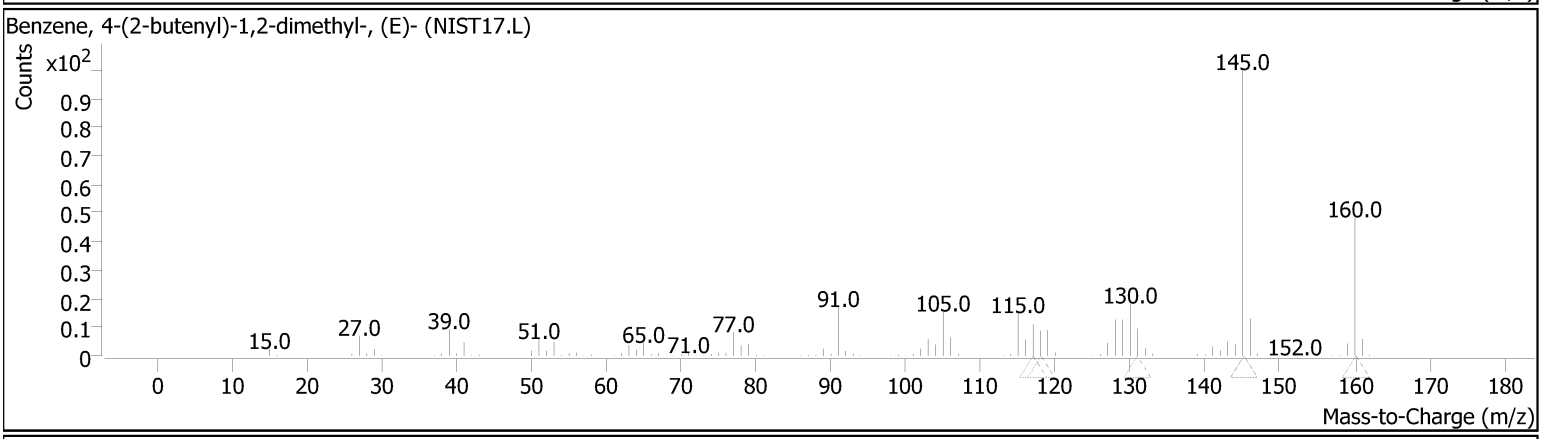


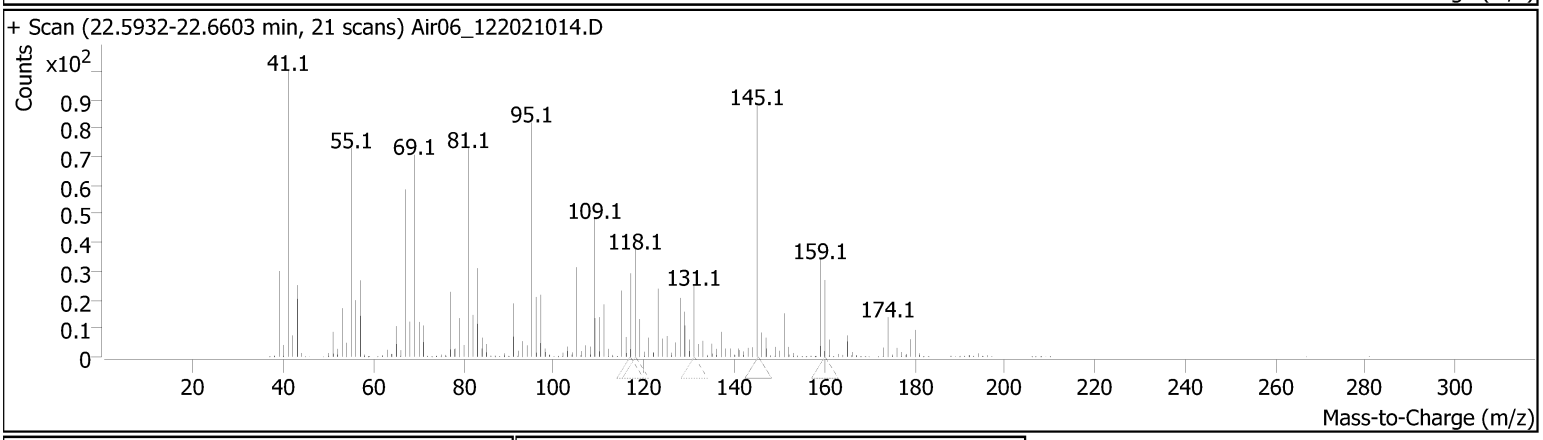


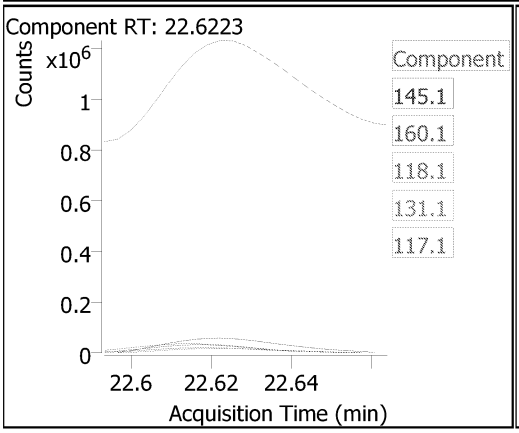


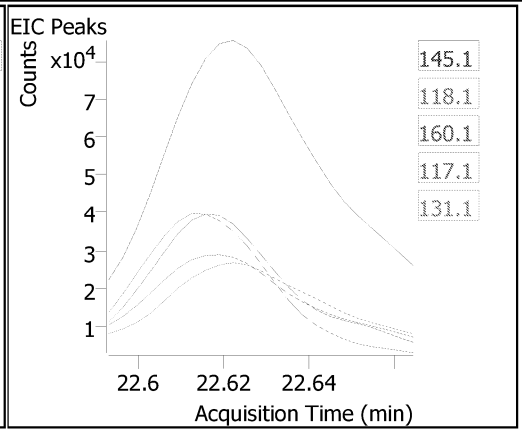
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.6223	Benzene, 4-(2-butenyl)-1,2-dimethyl-, (E)-	2539259.8	85.3	54340-86-2	C12H16	6.387

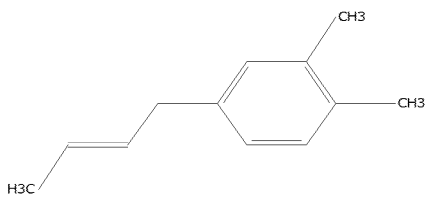












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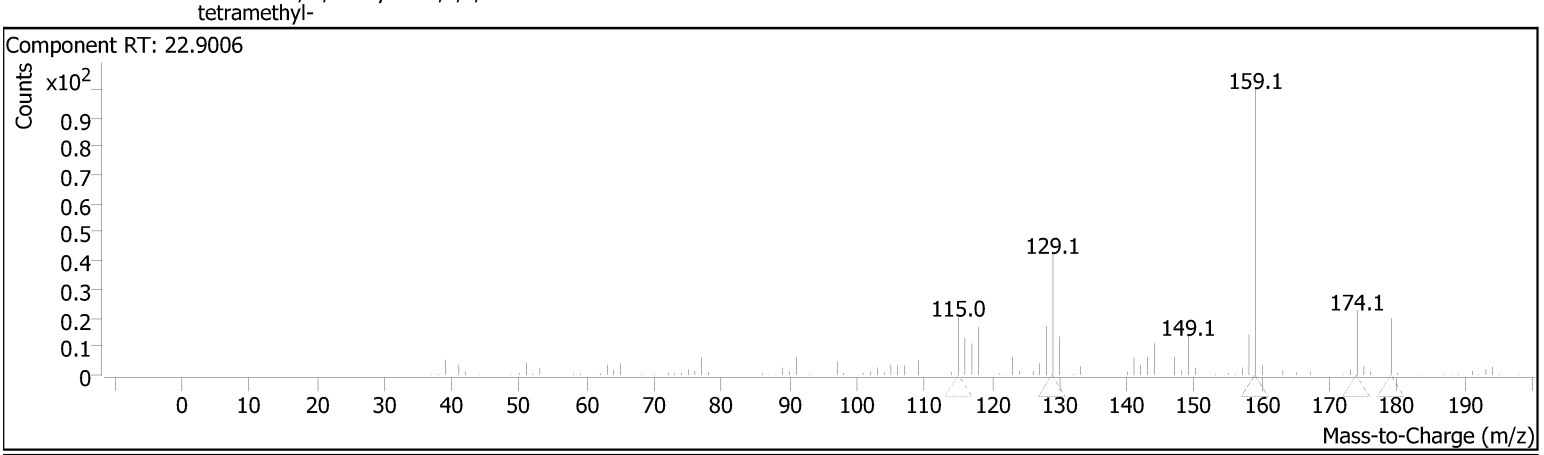
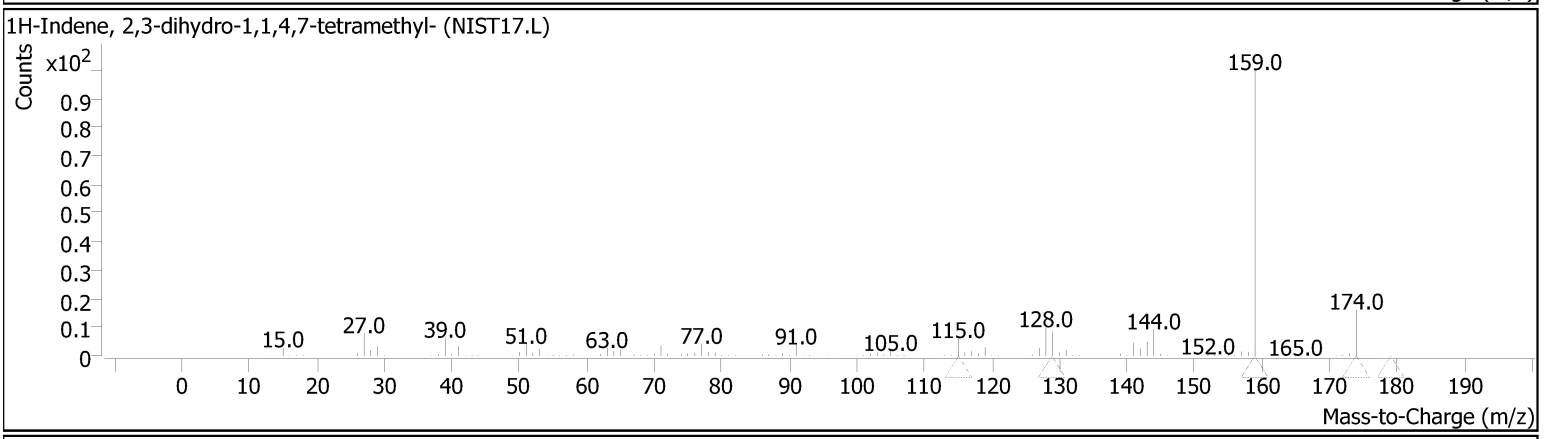
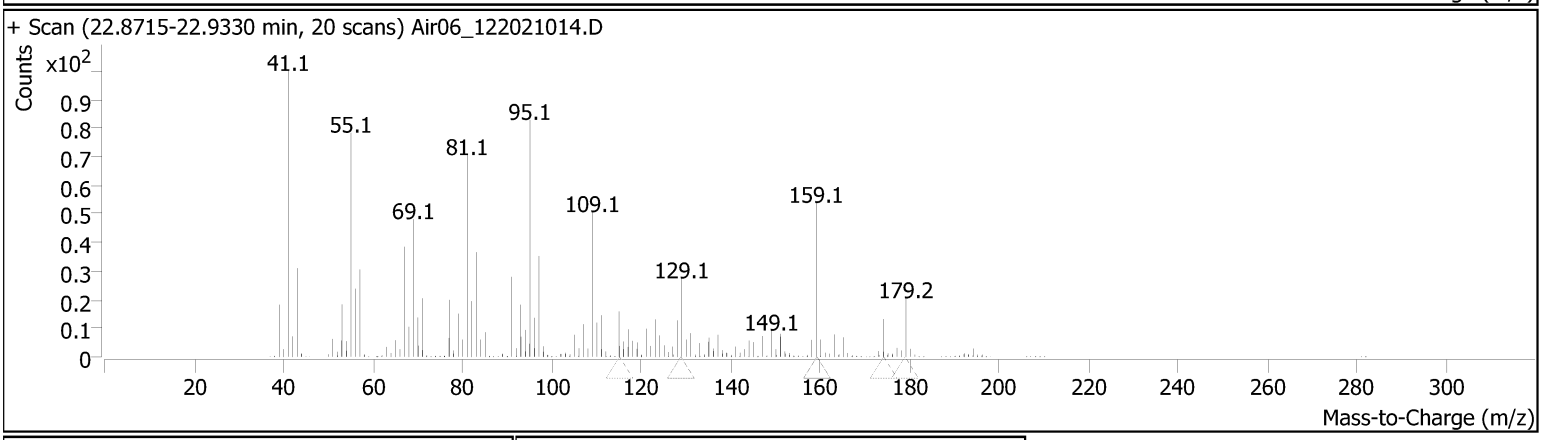
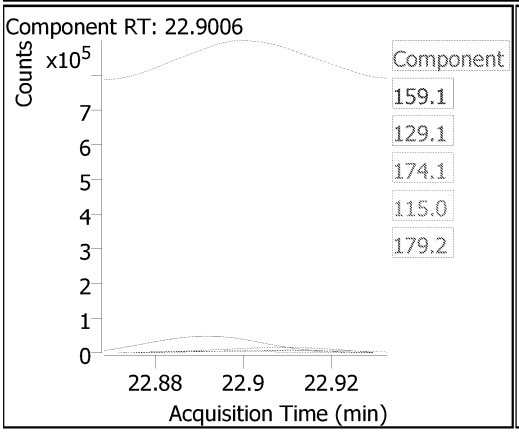
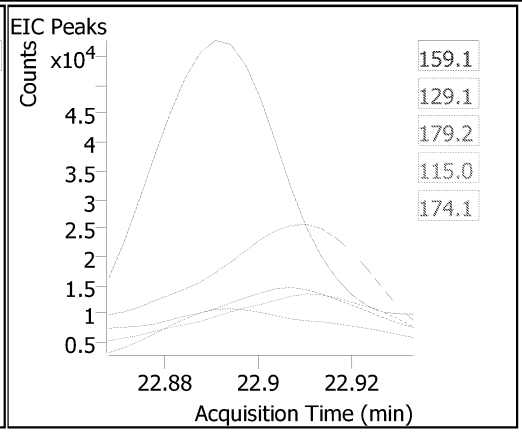
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.9006	1H-Indene, 2,3-dihydro-1,1,4,7-tetramethyl-	1522307.4	74.1	1078-04-2	C13H18	3.829

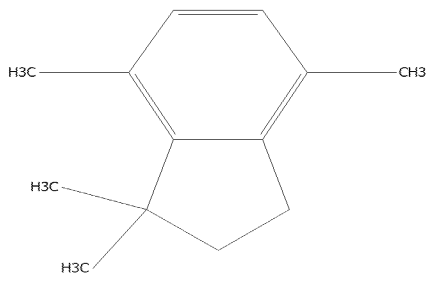




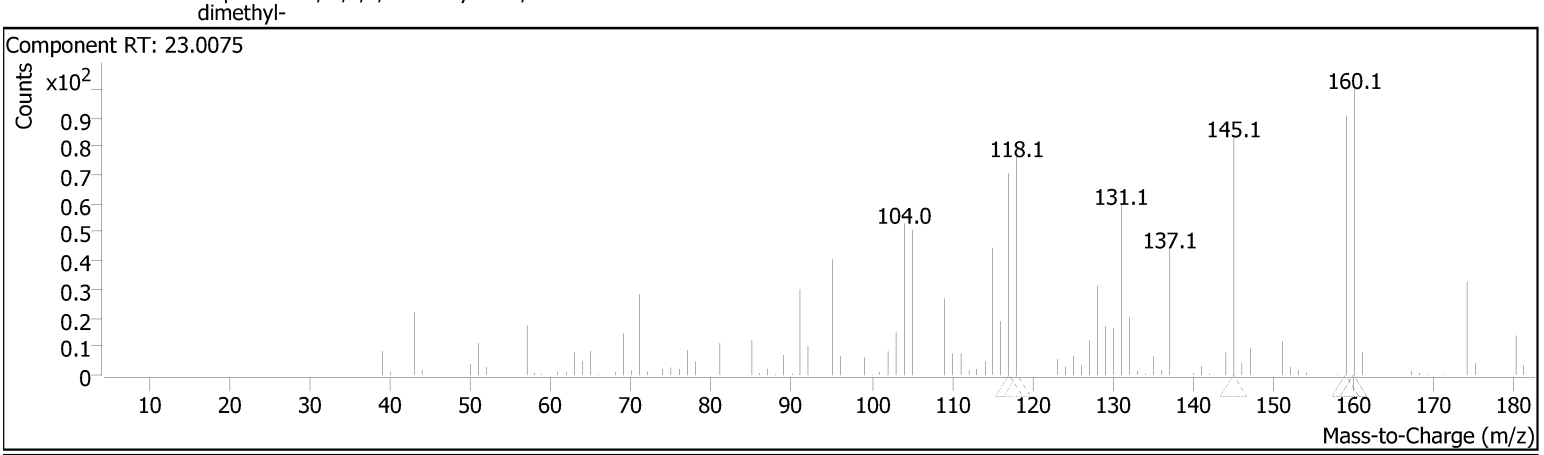


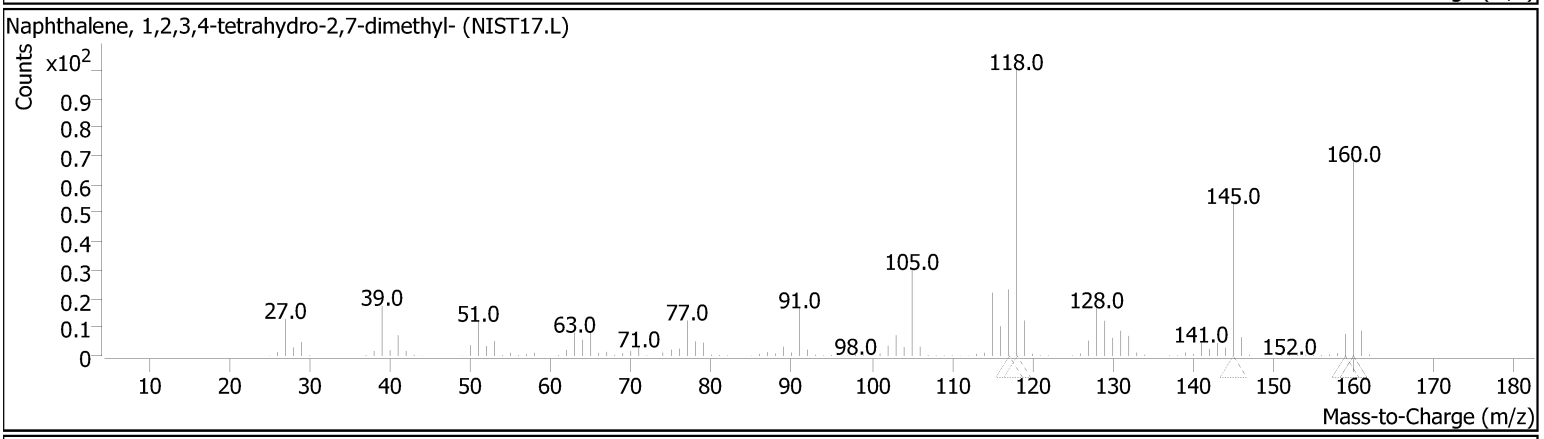


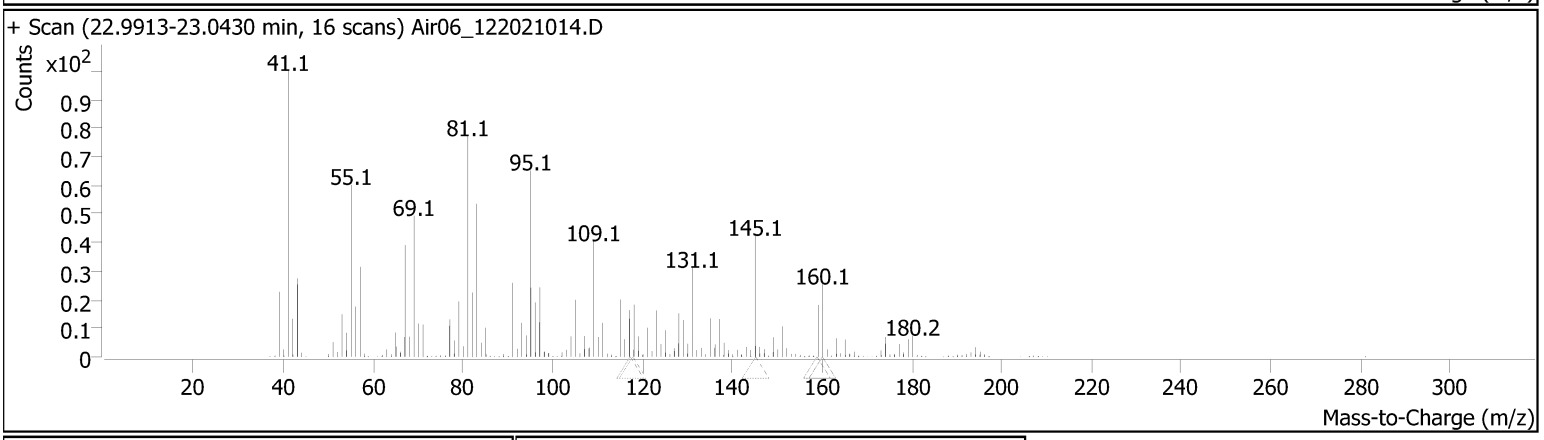


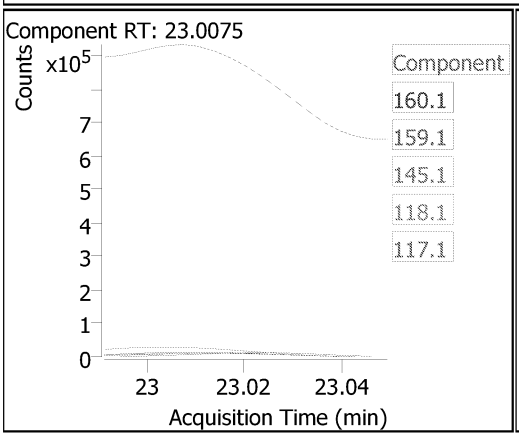


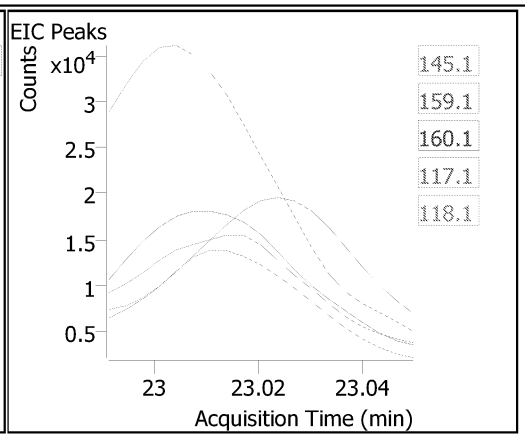
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.0075	Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	1297609.0	72.1	13065-07-1	C12H16	3.264

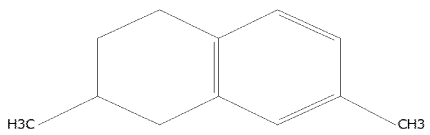




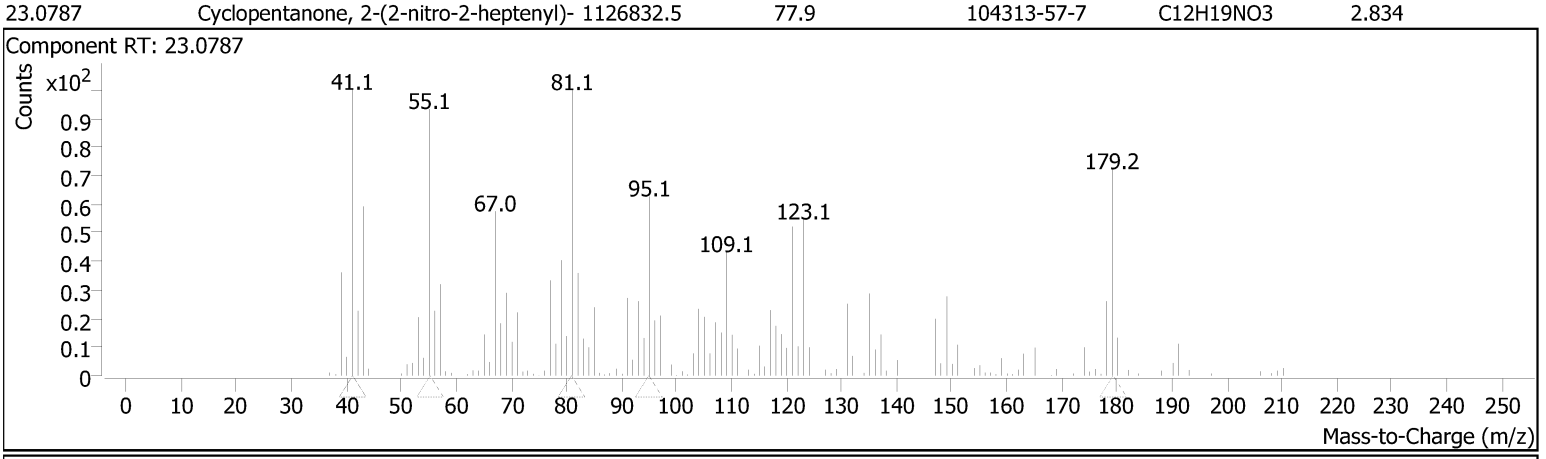


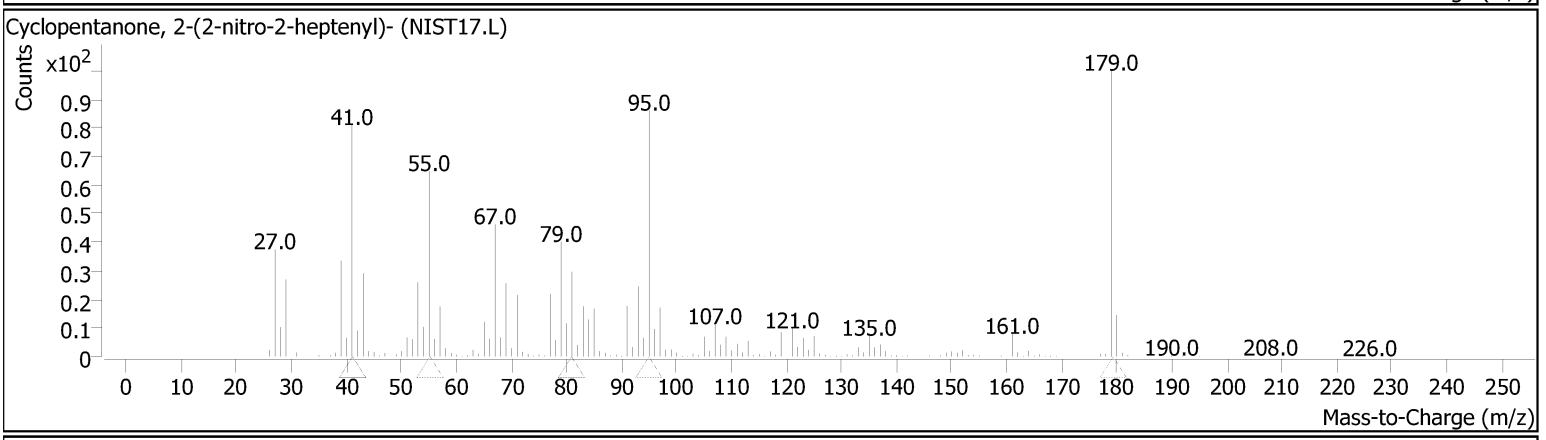


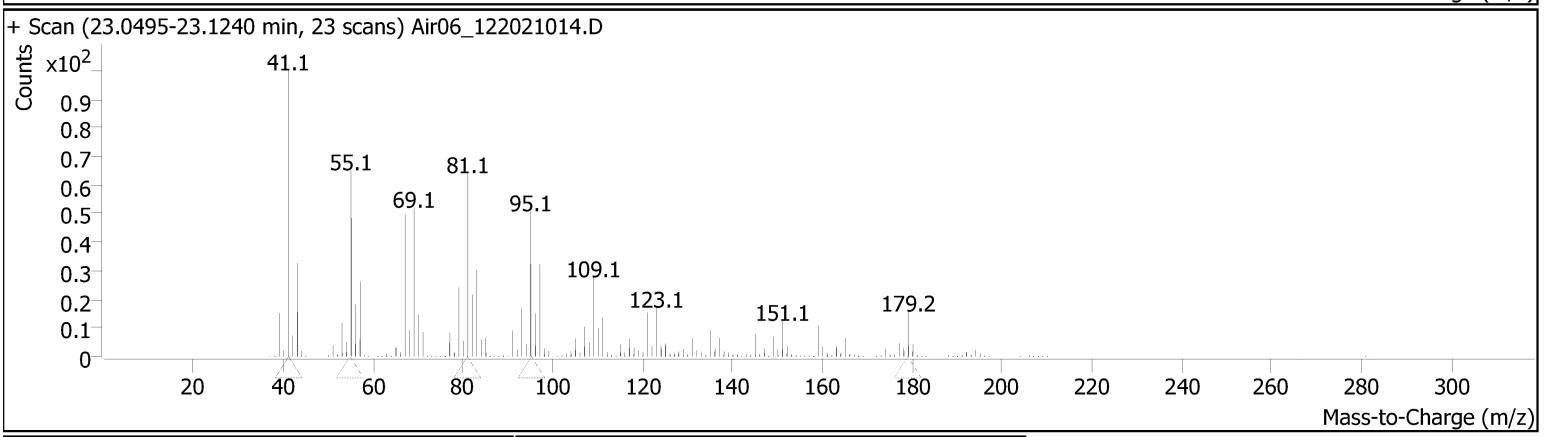


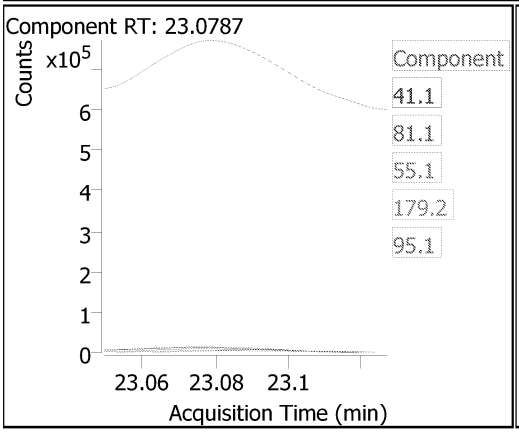


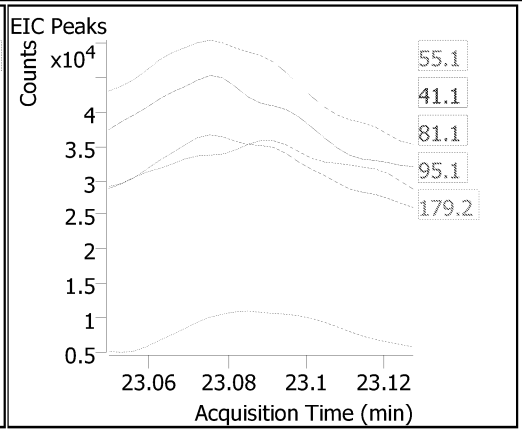
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.0787	Cyclopentanone, 2-(2-nitro-2-heptenyl)-	1126832.5	77.9	104313-57-7	C12H19NO3	2.834

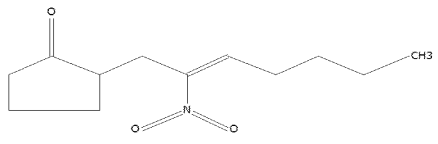




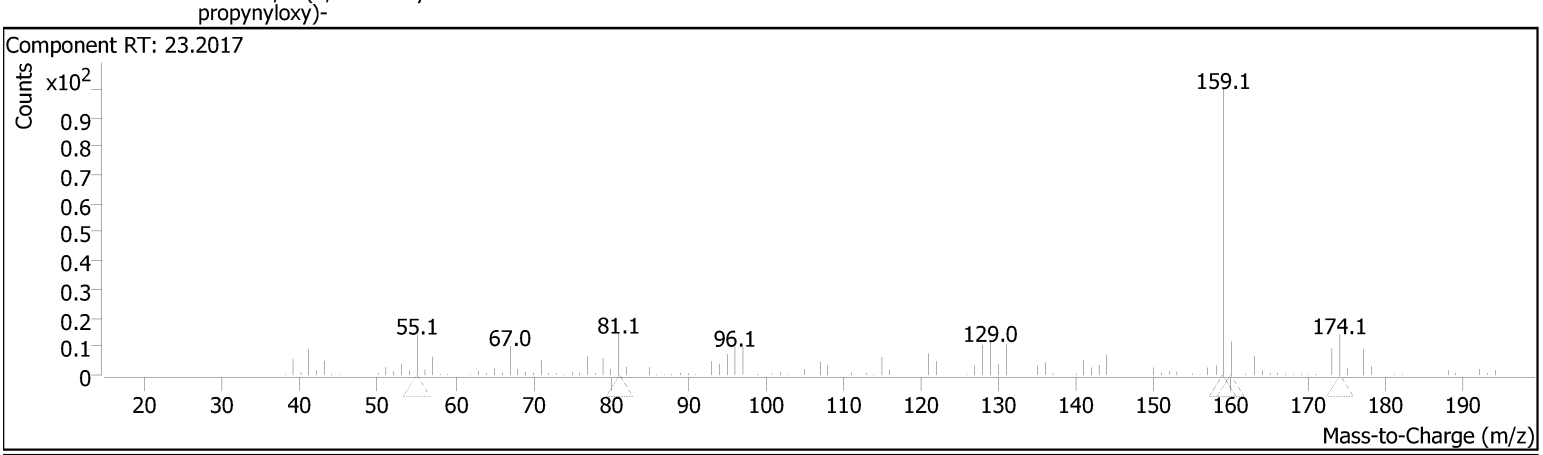


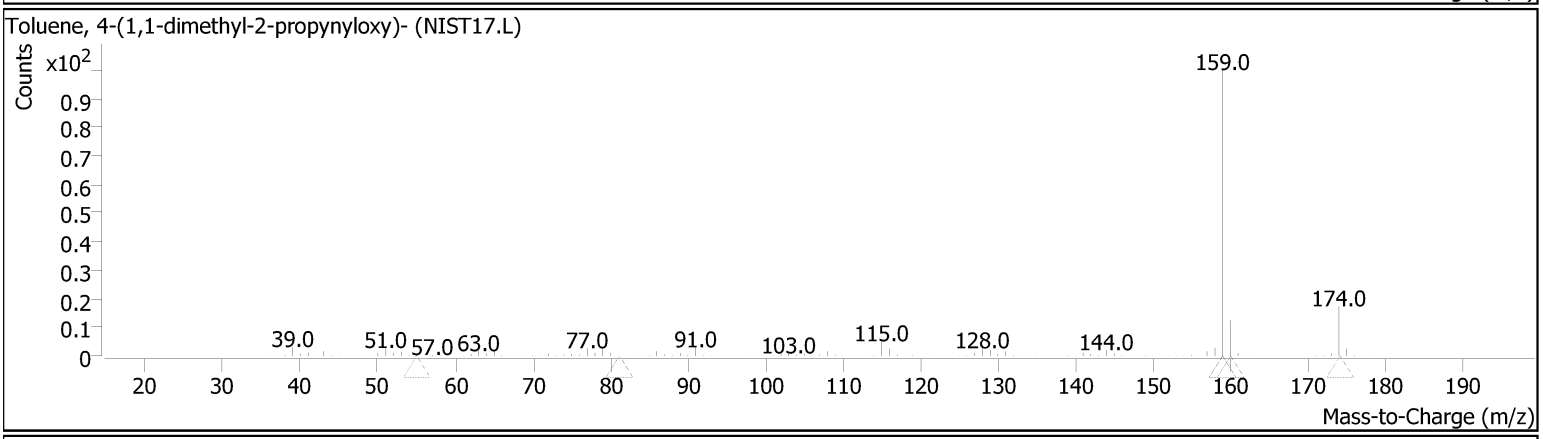


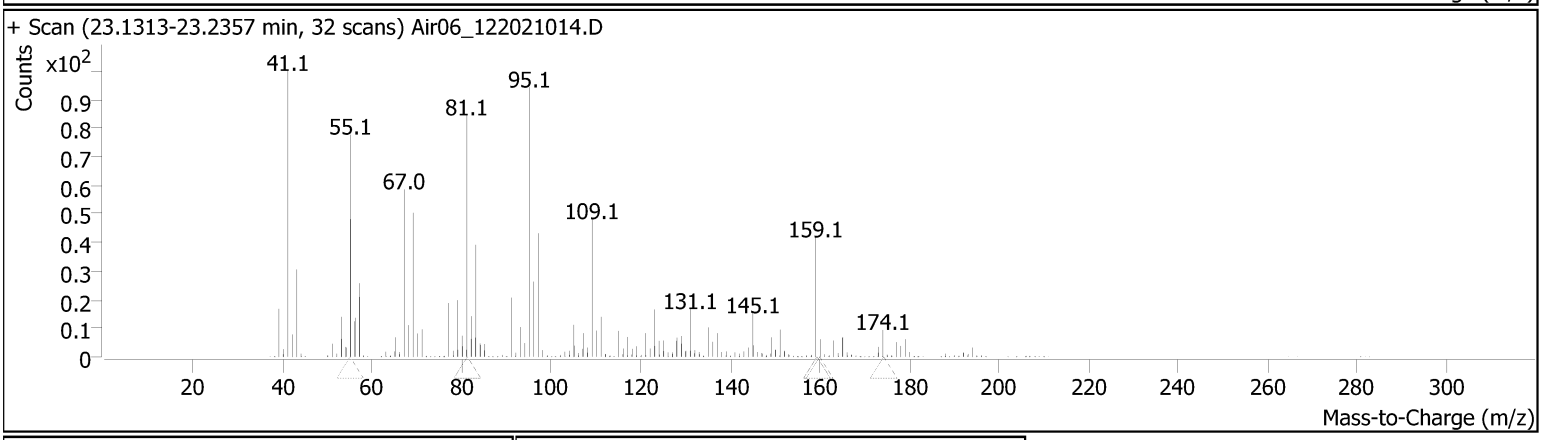


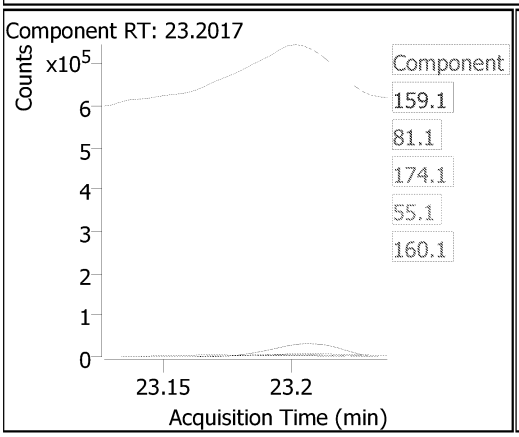


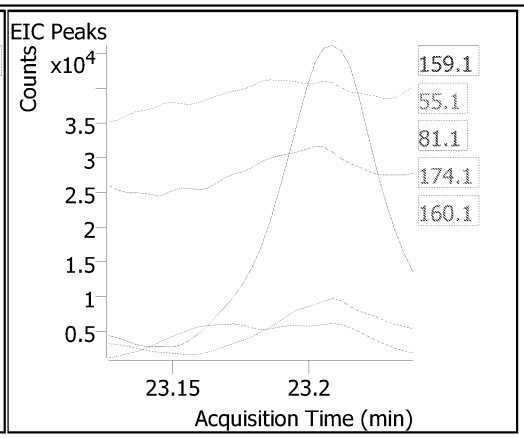
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.2017	Toluene, 4-(1,1-dimethyl-2-propynyloxy)-	1401429.5	72.1	82719-54-8	C12H14O	3.525

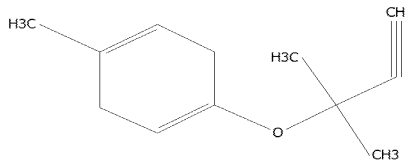




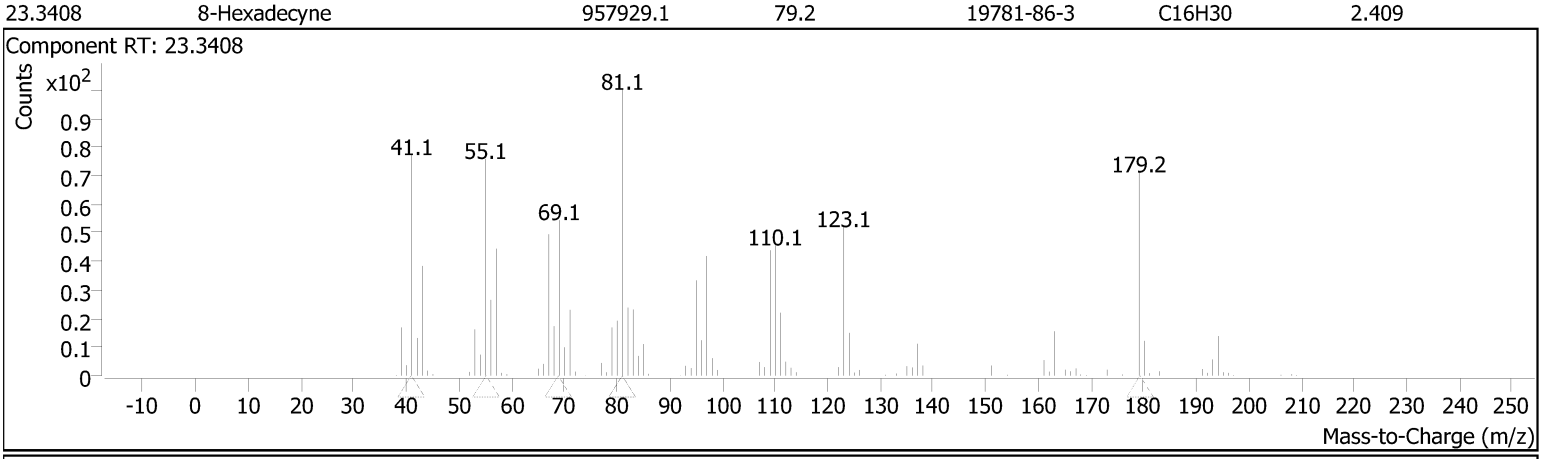


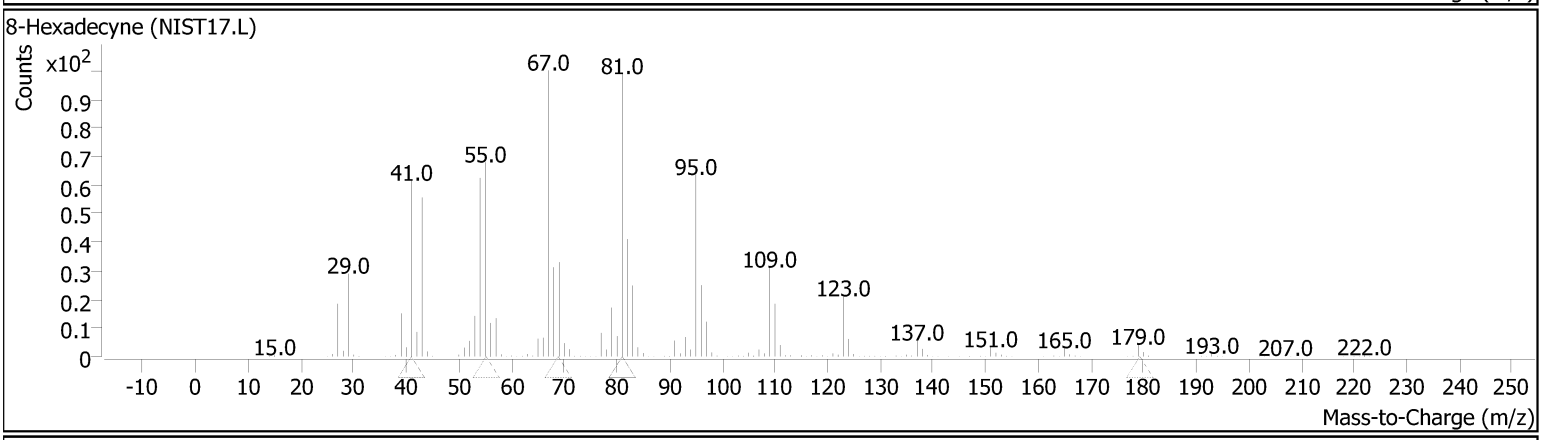


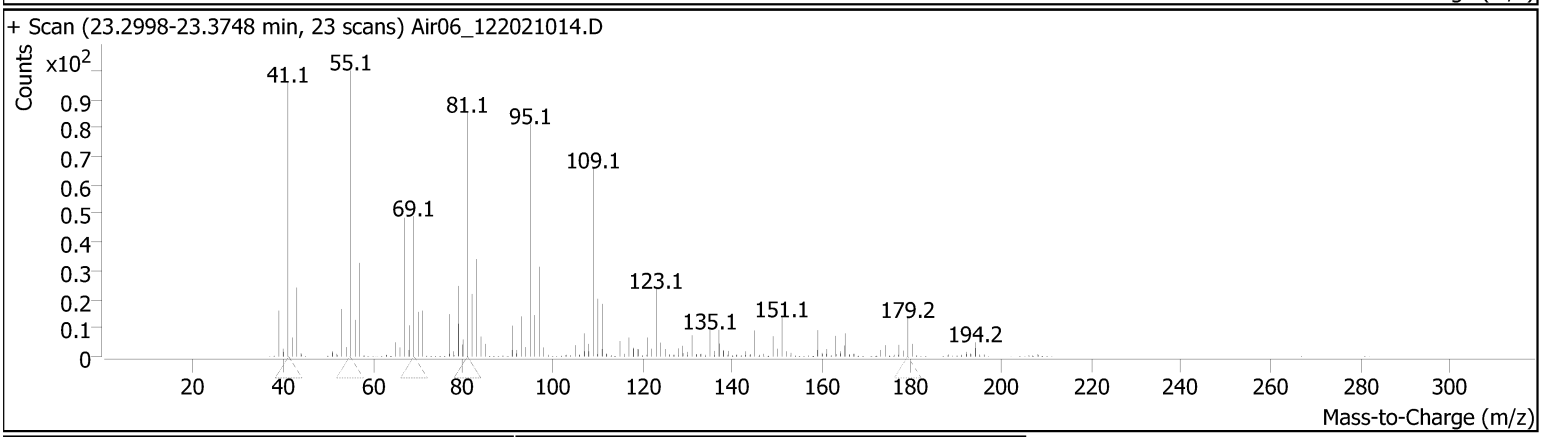


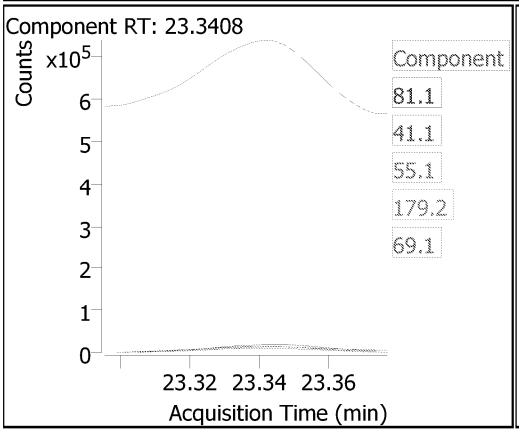


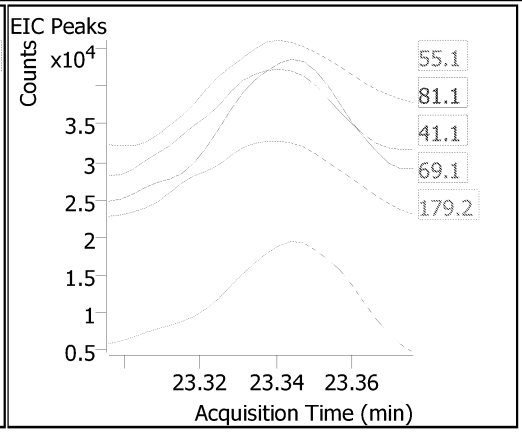
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.3408	8-Hexadecyne	957929.1	79.2	19781-86-3	C16H30	2.409





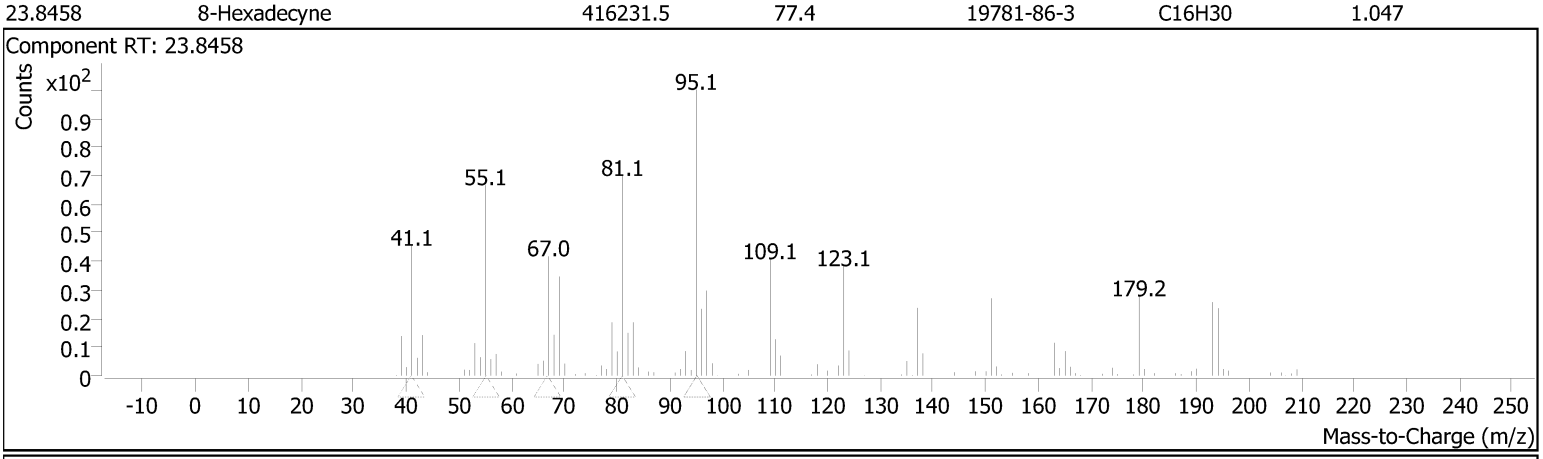


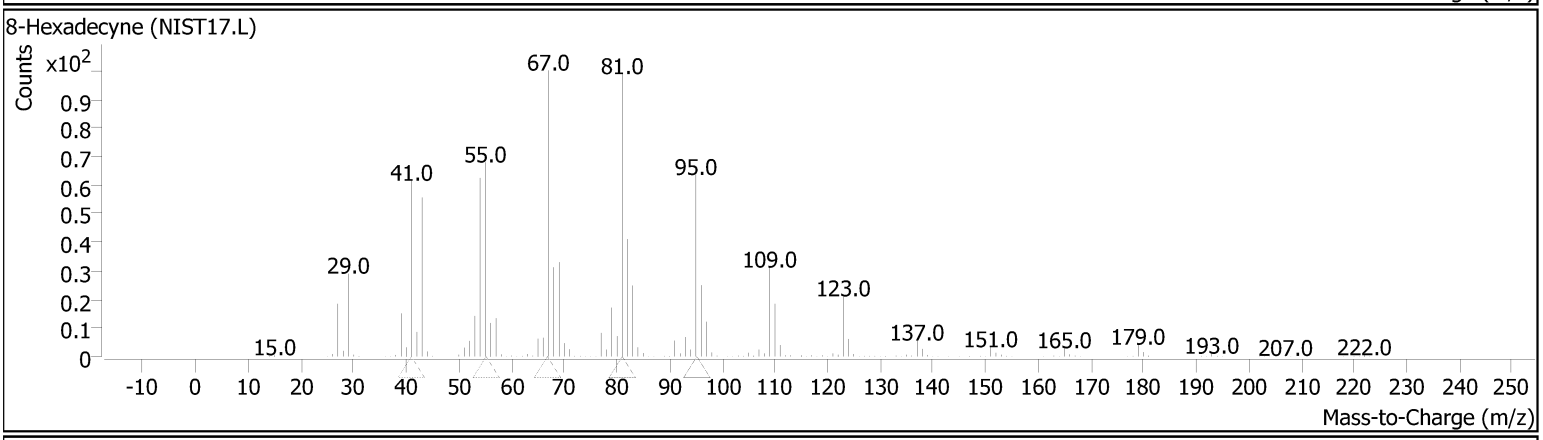


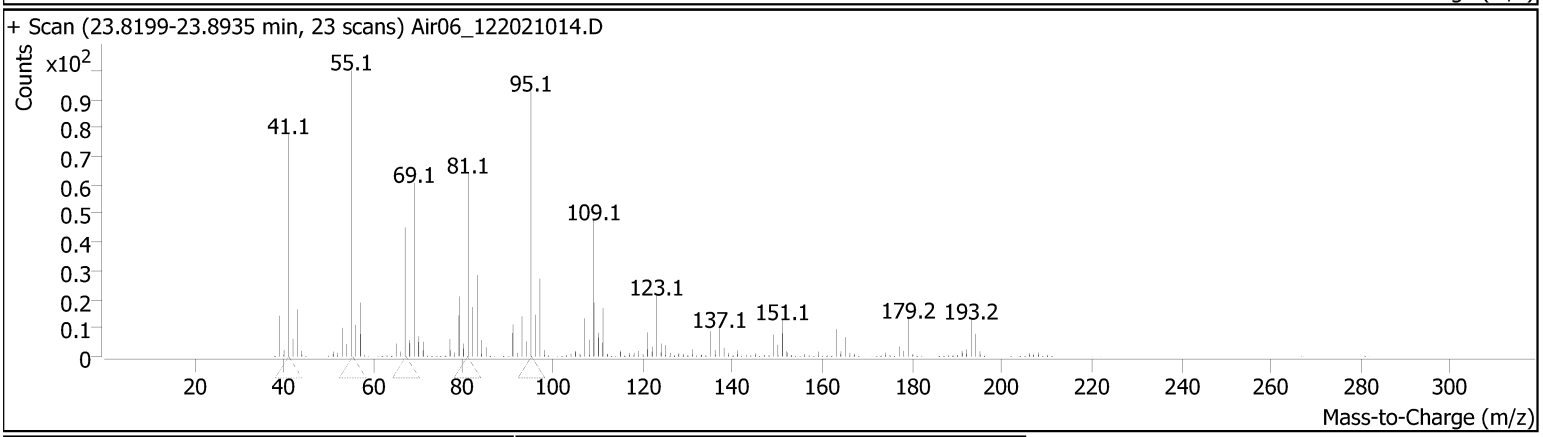


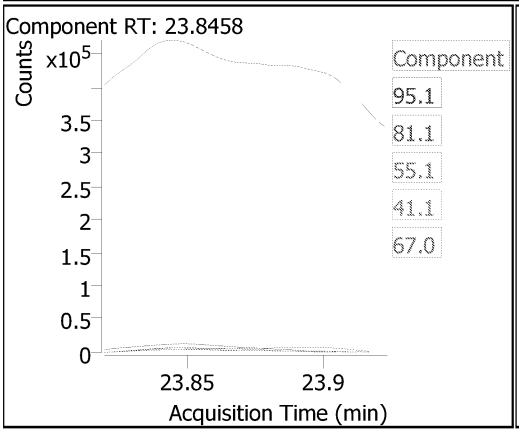


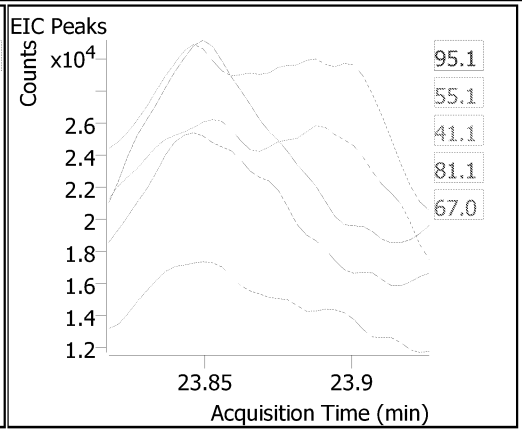
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.8458	8-Hexadecyne	416231.5	77.4	19781-86-3	C16H30	1.047













ENTHALPY SAMPLE USER REPORT FOR EPA TO-15

Inst	: AIR-MS-06	Lab ID	: 455620-005 C10057	Client ID	: SVMP-18S
Seqnum	: 371510273016	Matrix	: Air	Acct	: ELEMENT (JG)
File	: air06_122021016	Batch	: 280281	Time	: 20-DEC-2021 23:45
Cal	: 371497775001	Caldate	: 11-DEC-2021		
IDF	: 2.0	Raw Units	: nL/L	Units	: nL/L
PDF	: 1.0				

Analyte	Raw	Result	RTS	RL	Blank	Flags
Freon 12	0.1716	ND		0.40		u
Freon 114	0.006491	ND		0.40		u
Chloromethane	0.02738	ND		0.40		calc u
Vinyl Chloride	0.05358	ND		0.40		u
Bromomethane	0.0006504	ND		0.40		u
Chloroethane	0.4029	0.81		0.40		u
Trichlorofluoromethane	0.07014	ND		0.40		u
1,1-Dichloroethene	0	ND		0.40		u
Freon 113	0.02717	ND		0.40		u
Acetone	1.163	2.3		2.0	0.13	u
Carbon Disulfide	0.2816	0.56		0.40		u
Isopropanol (IPA)	0.8723	ND		2.0	0.067	u
Methylene Chloride	0.1978	ND		0.40	0.34	u
trans-1,2-Dichloroethene	0.03395	ND		0.40		u
MTBE	0.05892	ND		0.40		u
n-Hexane	0.08327	ND		0.40		u
1,1-Dichloroethane	0.002980	ND		0.40		u
Vinyl Acetate	0.1103	ND		2.0		u
cis-1,2-Dichloroethene	0.07574	ND		0.40		u
2-Butanone	0.1903	ND		2.0		u
Chloroform	0.04032	ND		0.40		u
1,1,1-Trichloroethane	0	ND		0.40		u
Carbon Tetrachloride	0.02256	ND		0.40		calc u
Benzene	0.05538	ND		0.40		u
1,2-Dichloroethane	0.04061	ND		0.40		calc u
Trichloroethene	0.01788	ND		0.40		u
1,2-Dichloropropane	0.001346	ND		0.40		u
Bromodichloromethane	0.01541	ND		0.40		u
cis-1,3-Dichloropropene	0.001607	ND		0.40		u
4-Methyl-2-Pentanone	0.01949	ND		0.40		u
Toluene	0.5944	1.2		0.40		u
trans-1,3-Dichloropropene	0.002699	ND		0.40		u
1,1,2-Trichloroethane	0	ND		0.40		u
Tetrachloroethene	0.1939	ND		0.40		u
2-Hexanone	0.02553	ND		1.0		calc u
Dibromochloromethane	0.0004243	ND		0.40		u
1,2-Dibromoethane	0.001920	ND		0.40		u
Chlorobenzene	0.04711	ND		0.40		u
Ethylbenzene	0.3060	0.61		0.40		u
m,p-Xylenes	1.219	2.4		0.80		u
o-Xylene	0.5803	1.2		0.40		u
Styrene	1.161	2.3		0.40		u
Bromoform	0.001133	ND		0.40		u
1,1,2,2-Tetrachloroethane	0.06525	ND		0.40		u
1,1,1,2-Tetrachloroethane	0	ND		0.40		u
4-Ethyltoluene	0.1738	ND		0.40		u
1,3,5-Trimethylbenzene	0.9730	1.9		0.40		u
1,2,4-Trimethylbenzene	1.992	4.0		0.40		u

Analyte	Raw	Result	RTS	RL	Blank	Flags
1,3-Dichlorobenzene	0.8675	1.7	0.080	0.40		u x
1,4-Dichlorobenzene	0.8789	1.8		0.40	0.027	u
Benzyl chloride	0.03300	ND		0.40	0.020	u
1,2-Dichlorobenzene	0.06035	ND		0.40	0.034	u
1,2,4-Trichlorobenzene	0.01568	ND		0.40	0.069	u v+
Hexachlorobutadiene	0.001182	ND		0.40		u

Tentatively Identified Compound	CAS #	Raw	Units	Result	Units
Benzene, 1-ethyl-3,5-dimethyl-	934-74-7	10	nL/L	20	nL/L
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	6.2	nL/L	12	nL/L
Cyclohexane, 2-butyl-1,1,3-trimethyl-	54676-39-0	8.2	nL/L	16	nL/L
Dodecane	112-40-3	20	nL/L	41	nL/L
Naphthalene, 2-methyl-	91-57-6	12	nL/L	24	nL/L
Naphthalene, decahydro-1,5-dimethyl-	66552-62-3	9.6	nL/L	19	nL/L
Naphthalene, decahydro-2-methyl	2958-76-1	8.3	nL/L	17	nL/L
Tridecane	629-50-5	9.0	nL/L	18	nL/L
Undecane	1120-21-4	17	nL/L	33	nL/L
Undecane, 2,6-dimethyl-	17301-23-4	8.3	nL/L	17	nL/L

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Bromofluorobenzene	10.29	20.00	20.58	103	60-140	u

ISTD (ICAL air06_121121009)	ICAL Area	SAMPLE Area	%Drift	ICAL RT	SAMPLE RT	Drift
Bromochloromethane	329831	359448	8.98	8.18	8.18	0.00
1,4-Difluorobenzene	1230119	1361073	10.65	9.91	9.91	0.00
Chlorobenzene-d5	754830	753432	-0.19	14.02	14.01	-0.01

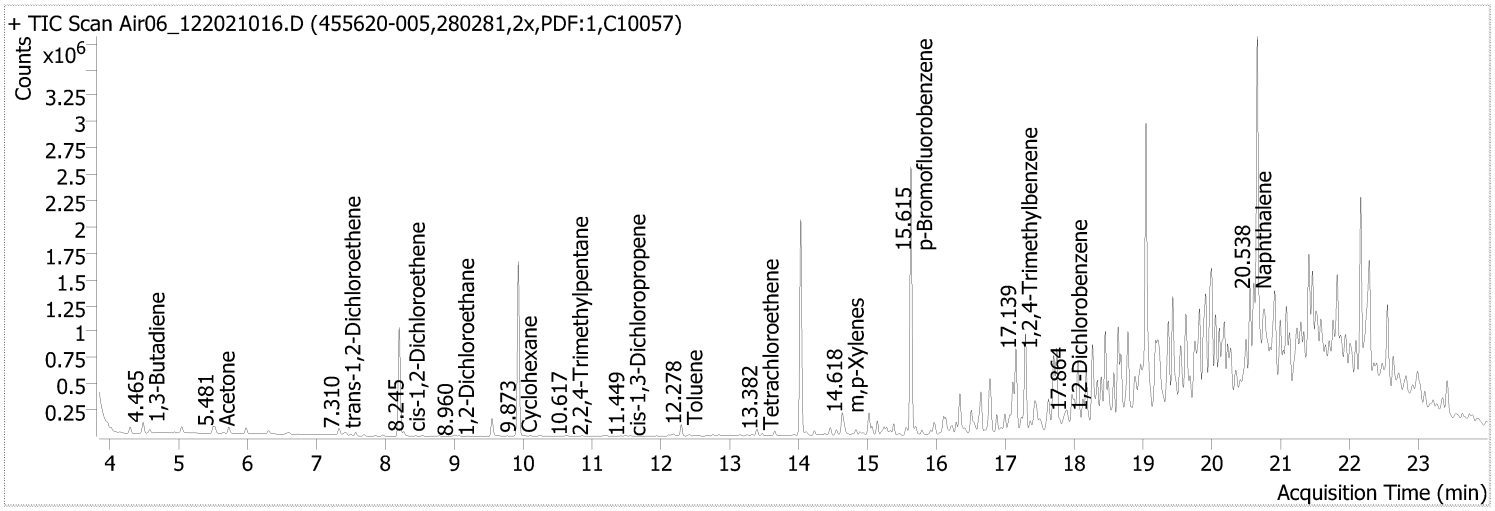
(not in upper half)

Analyst: GSG Date: 01/04/22 Reviewer: SLL Date: 01/04/22

+=high bias calc=check quantitation u=use v=ICV x=false positive

Quantitation Results Report (Not Reviewed)

Data File	Air06_122021016.D	Operator	ZNZ/DJL/LJB
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	12/20/2021 11:45:31 PM
Sample Name	455620-005,280281,2x,PDF:1,C10057	Instrument	Air-MS-06
Vial	14	Multiplier	1.00
DA Method File	TO15_121121.m	Comment	2x400mL
Tune File	bfb.u	Tune Date	12/14/2021 7:38:43 AM
Batch Name	2021 Dec 20 1433 TO15_121121.m.batch.bin	Last Calib Update	12/13/2021 9:29:07 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



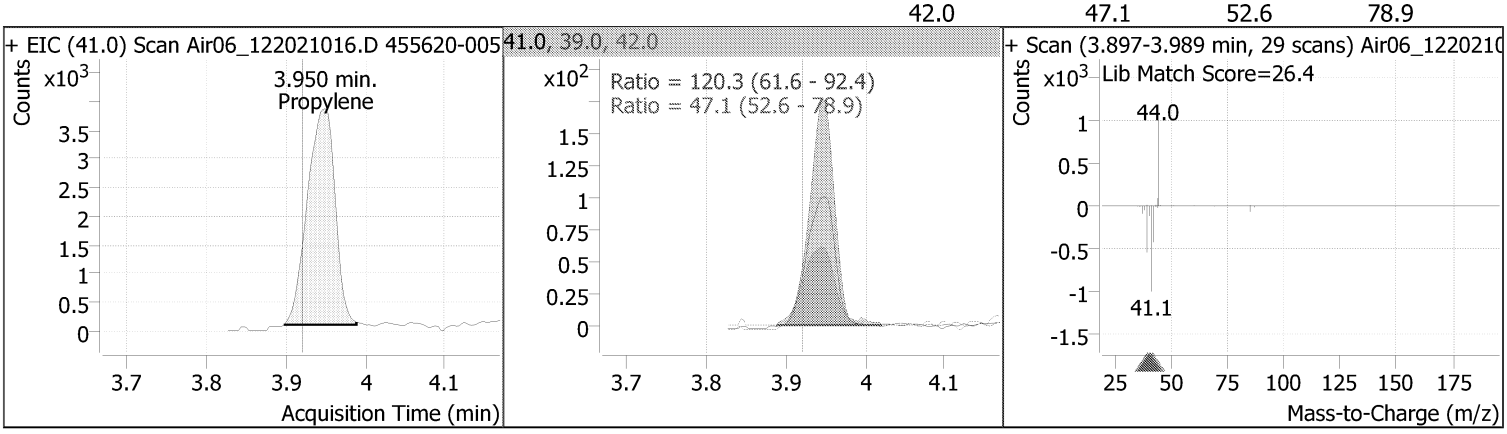
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.183	130.0	359448	10.0000	nL/L		0.003
M 1,4-Difluorobenzene	9.912	114.0	1361073	10.0000	nL/L		0.000
M Chlorobenzene-d5	14.013	82.0	753432	10.0000	nL/L	#	-0.003
System Monitoring Compounds							
S p-Bromofluorobenzene	15.615	95.0	994818	10.2876	nL/L		-0.003
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 102.88%			
Target Compounds							QValue
T Propylene	3.950	41.0	9193	0.2332	nL/L	#	62
T Freon 12	3.998	85.0	22066	0.1717	nL/L		99
T Chloromethane	4.154	50.0	1231	0.0274	nL/L	#	89
T Freon 114	4.264	135.0	488	0.0065	nL/L	#	81
T Vinyl Chloride	4.371	62.0	2261	0.0536	nL/L	#	98
T 1,3-Butadiene	4.465	54.0	1882	0.0519	nL/L	#	1
T Butane	4.558	43.0	34152	0.4715	nL/L		97
T Bromomethane	4.911	96.0	22	0.0006	nL/L	#	1
T Chloroethane	4.921	64.0	8485	0.4029	nL/L		93
T Ethanol	5.024	45.0	69631	2.4691	nL/L		99
T Vinyl bromide	0.000		0	N.D.			
T Acrolein	5.348	56.0	539	0.0296	nL/L	#	67
T Acetone	5.481	58.0	28300	1.1627	nL/L	#	72
T Trichloromonofluoromethane	5.633	101.0	10205	0.0701	nL/L		99
T Isopropanol (IPA)	5.707	45.0	82999	0.8723	nL/L		99
T n-Pentane	5.960	43.0	44462	0.4764	nL/L		97
T 1,1-Dichloroethene	0.000		0	N.D.			
T Tert-butyl alcohol (TBA)	6.280	59.0	20291	0.2021	nL/L	#	88
T Methylene Chloride	6.293	84.0	7634	0.1978	nL/L		87
T 3-Chloropropene	6.578	76.0	30237	1.8616	nL/L	#	60
T Freon 113	6.549	101.0	2501	0.0272	nL/L		96
T Carbon Disulfide	6.578	76.0	30237	0.2816	nL/L	#	73

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.310	61.0	2366	0.0339	nL/L	#	41
T 1,1-Dichloroethane	7.313	63.0	260	0.0030	nL/L		89
T MTBE	7.403	73.0	6938	0.0589	nL/L	#	4
T Vinyl Acetate	7.407	43.0	16240	0.1103	nL/L	#	91
T 2-Butanone	7.669	43.0	22122	0.1903	nL/L		94
T cis-1,2-Dichloroethene	8.245	61.0	5417	0.0757	nL/L	#	45
T Ethyl Acetate	8.245	61.0	5417	0.3351	nL/L	#	18
T n-Hexane	8.251	57.0	6268	0.0833	nL/L	#	57
T Chloroform	8.300	83.0	4136	0.0403	nL/L		76
T Tetrahydrofuran	8.692	72.0	810	0.0482	nL/L	#	37
T 1,2-Dichloroethane	8.960	62.0	3348	0.0406	nL/L	#	92
T 1,1,1-Trichloroethane	0.000		0	N.D.			
T Benzene	9.611	78.0	6318	0.0554	nL/L		92
T Carbon Tetrachloride	9.750	117.0	2620	0.0226	nL/L		96
T Cyclohexane	9.873	84.0	4838	0.1025	nL/L	#	1
T 1,2-Dichloropropane	10.333	63.0	71	0.0013	nL/L		30
T Methane, bromodichloro-	10.524	83.0	1652	0.0154	nL/L	#	38
T 1,4-Dioxane	10.588	88.0	25	0.0010	nL/L	#	1
T Trichloroethene	10.556	132.0	941	0.0179	nL/L	#	78
T 2,2,4-Trimethylpentane	10.617	57.0	6319	0.0256	nL/L	#	72
T Methyl methacrylate	10.724	69.0	485	0.0114	nL/L	#	52
T n-Heptane	10.838	71.0	674	0.0175	nL/L	#	79
T cis-1,3-Dichloropropene	11.449	110.0	25	0.0016	nL/L	#	1
T 4-Methyl-2-Pentanone	11.404	58.0	889	0.0195	nL/L	#	47
T trans-1,3-Dichloropropene	11.912	110.0	43	0.0027	nL/L		1
T 1,1,2-Trichloroethane	0.000		0	N.D.			
T Toluene	12.278	91.0	87527	0.5944	nL/L	#	98
T TPH Gasoline (C3 to C12)	12.396	165.0	159154777	14.8824	nL/L		100
T 2-Hexanone	12.527	58.0	1455	0.0255	nL/L	#	77
T Dibromochloromethane	12.657	129.0	44	0.0004	nL/L	#	1
T 1,2-Dibromoethane	12.925	108.9	151	0.0019	nL/L	#	75
T Tetrachloroethene	13.382	166.0	16767	0.1940	nL/L		98
T 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
T Benzene, chloro-	14.090	112.0	5058	0.0471	nL/L	#	34
T Ethylbenzene	14.446	91.0	53015	0.3060	nL/L		98
T TPH Gasoline (C6 to C12)	14.521	165.0	152007561	19.0963	nL/L		100
T m,p-Xylenes	14.618	91.0	178200	1.2192	nL/L		97
T Bromoform	14.696	173.0	131	0.0011	nL/L	#	35
T Styrene	15.006	104.0	113701	1.1613	nL/L		95
T 1,1,2,2-Tetrachloroethane	15.048	83.0	6845	0.0653	nL/L	#	36
T o-Xylene	15.126	91.0	88041	0.5803	nL/L		98
T n-Nonane	15.366	85.0	11487	0.3712	nL/L		91
T Isopropylbenzene	15.774	105.0	10919	0.0530	nL/L	#	97
T 2-Chlorotoluene	16.388	126.0	654	0.0142	nL/L	#	1
T n-Propylbenzene	16.363	120.0	9239	0.1782	nL/L	#	48
T 4-Ethyltoluene	16.537	105.1	33978	0.1738	nL/L		94
T 1,3,5-Trimethylbenzene	16.631	105.0	173223	0.9730	nL/L		96
T 1,2,4-Trimethylbenzene	17.139	105.0	331615	1.9916	nL/L		98
T Benzyl chloride	17.298	91.0	4737	0.0330	nL/L	#	1
T 1,3-Dichlorobenzene	17.411	146.0	99913	0.8675	nL/L	#	92
T 1,4-Dichlorobenzene	17.411	146.0	99913	0.8789	nL/L	#	92
T 1,2-Dichlorobenzene	17.864	146.0	6696	0.0604	nL/L	#	65
T 1,2,4-Trichlorobenzene	20.386	179.9	1237	0.0157	nL/L	#	50
T Naphthalene	20.538	128.0	440719	3.5946	nL/L	#	97
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.130	225.0	153	0.0012	nL/L	#	65

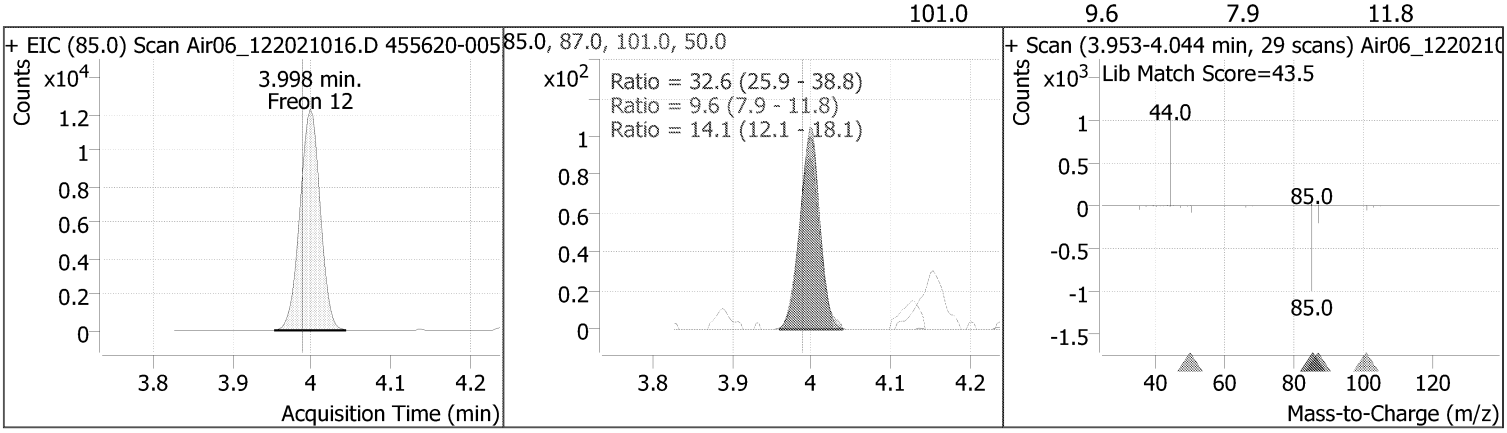
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

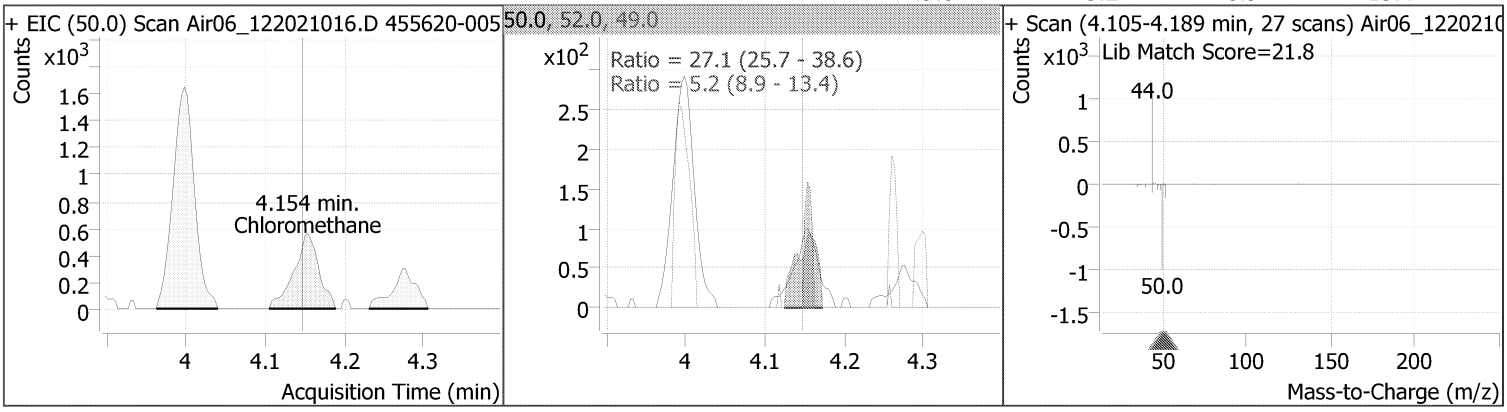
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.2332	3.95	0.03	9193	39.0	120.3	61.6	92.4
					42.0	47.1	52.6	78.9



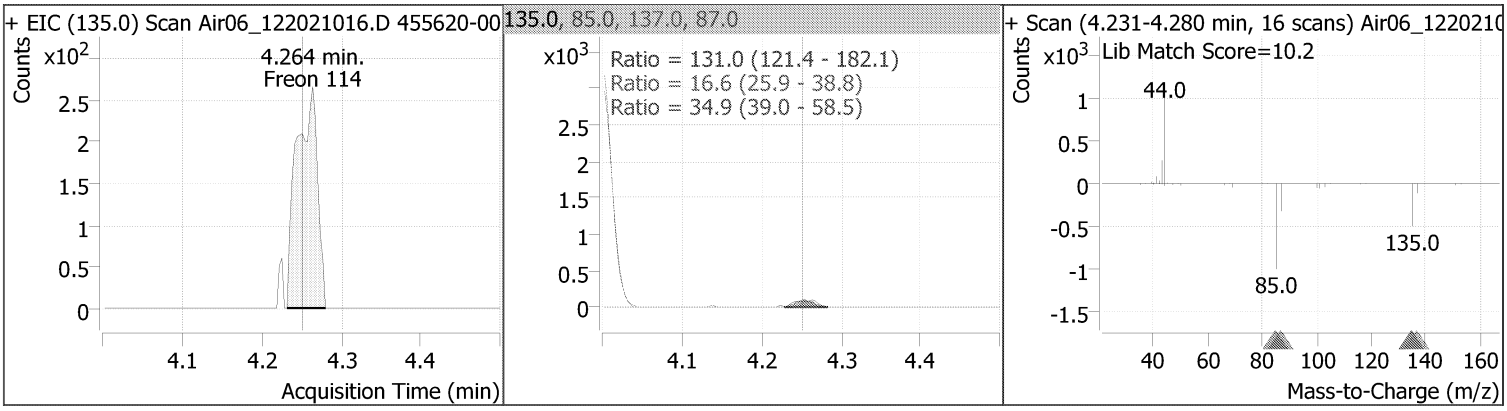
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	0.1717	4.00	0.01	22066	87.0	32.6	25.9	38.8
					50.0	14.1	12.1	18.1
					101.0	9.6	7.9	11.8



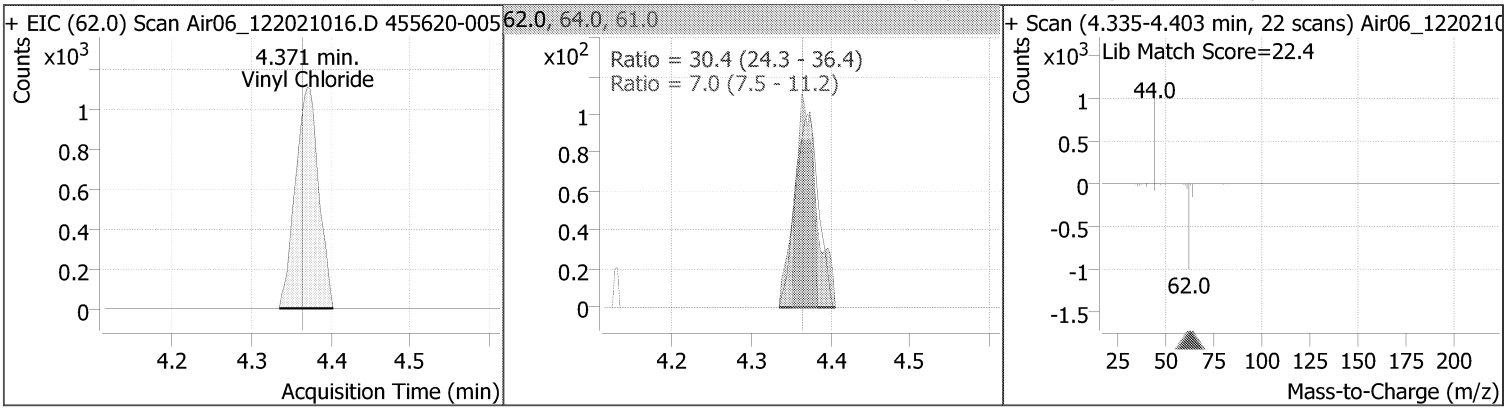
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	0.0274	4.15	0.01	1231	52.0	27.1	25.7	38.6
					49.0	5.2	8.9	13.4



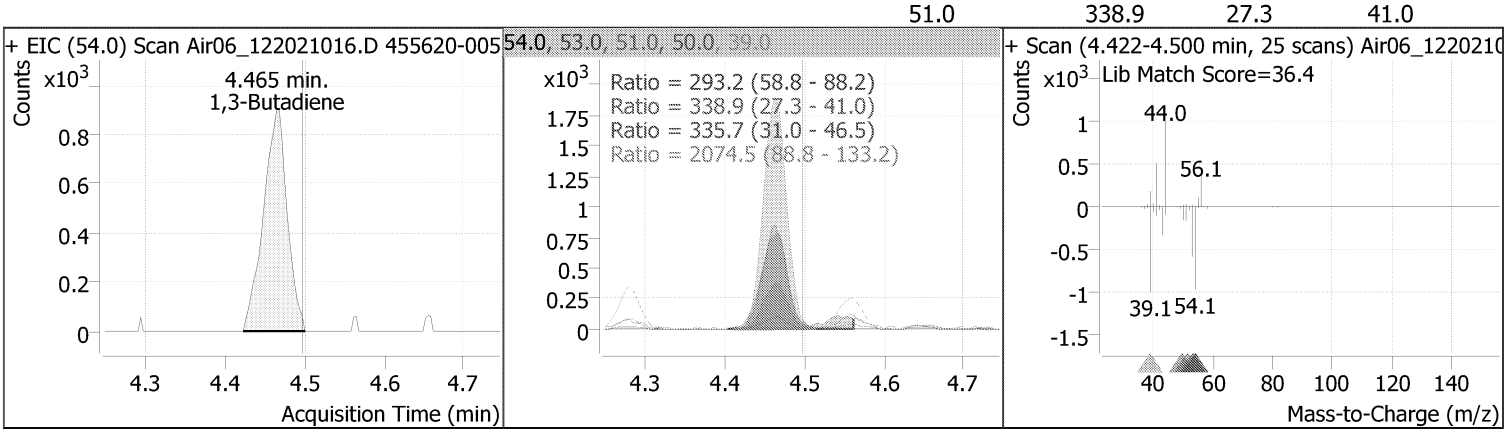
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	0.0065	4.26	0.02	488	85.0	131.0	121.4	182.1
					87.0	34.9	39.0	58.5
					137.0	16.6	25.9	38.8



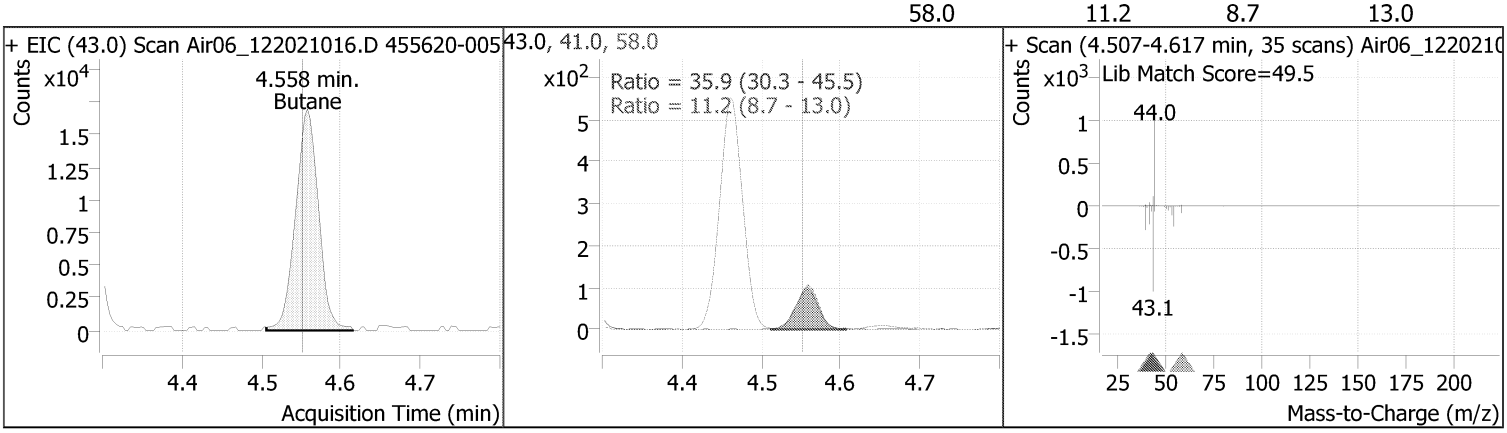
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	0.0536	4.37	0.01	2261	64.0	30.4	24.3	36.4
					61.0	7.0	7.5	11.2



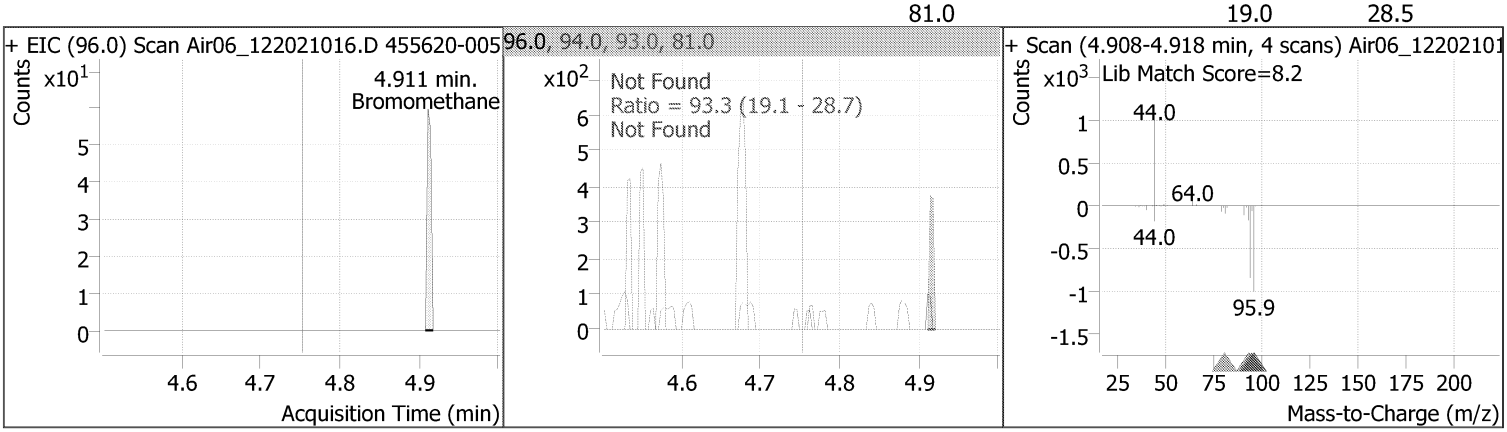
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	0.0519	4.46	-0.03	1882	39.0	2074.5	88.8	133.2
					53.0	293.2	58.8	88.2
					50.0	335.7	31.0	46.5
					51.0	338.9	27.3	41.0



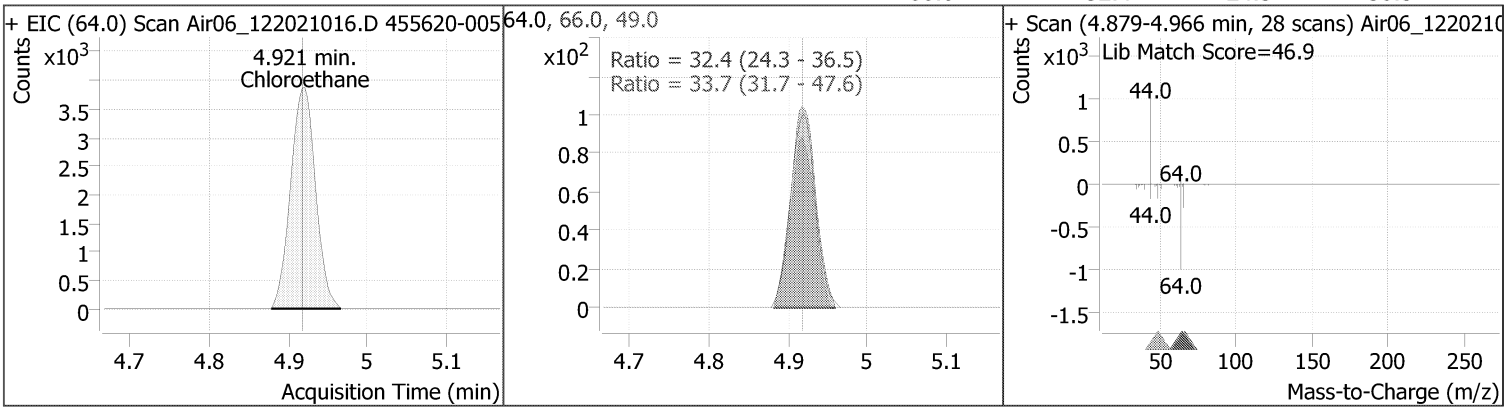
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	0.4715	4.56	0.01	34152	41.0	35.9	30.3	45.5
					58.0	11.2	8.7	13.0



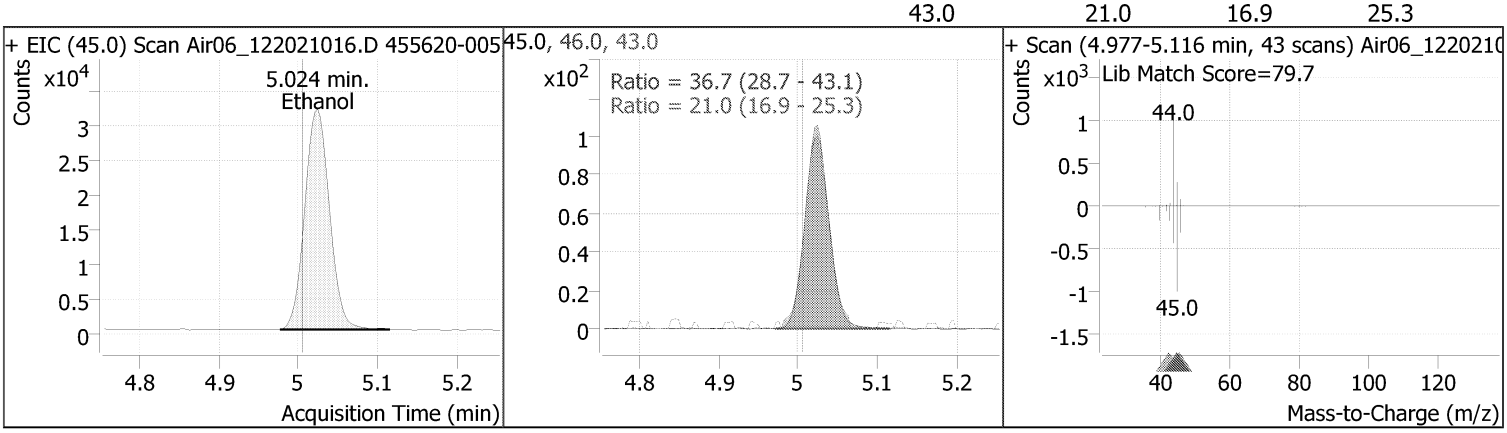
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromomethane	0.0006	4.91	0.16	22	94.0		86.3	129.4
					93.0	93.3	19.1	28.7
					81.0		19.0	28.5



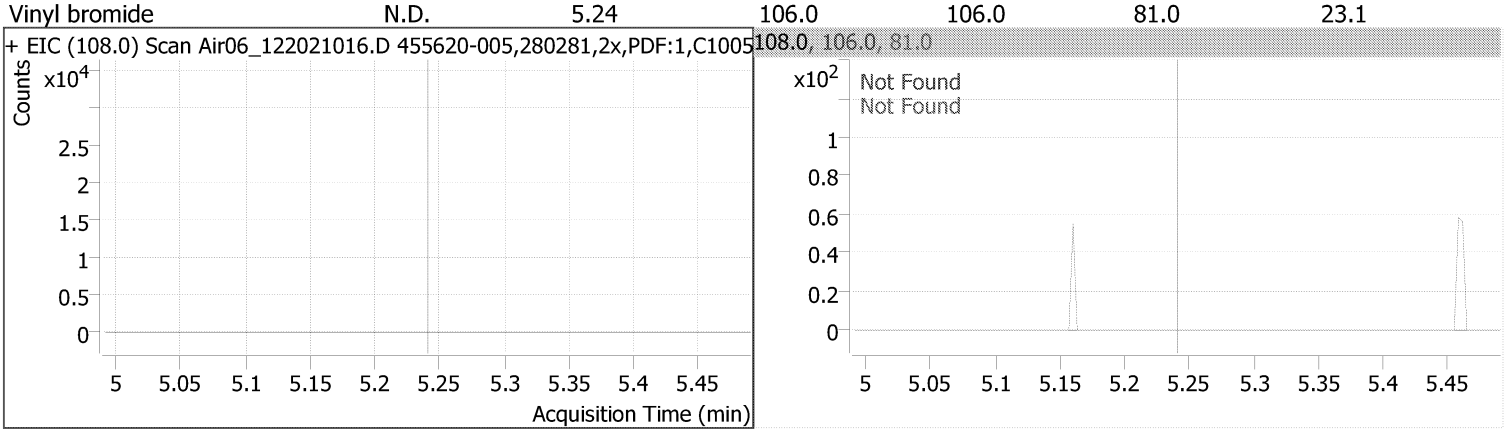
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	0.4029	4.92	0.01	8485	49.0	33.7	31.7	47.6
					66.0	32.4	24.3	36.5



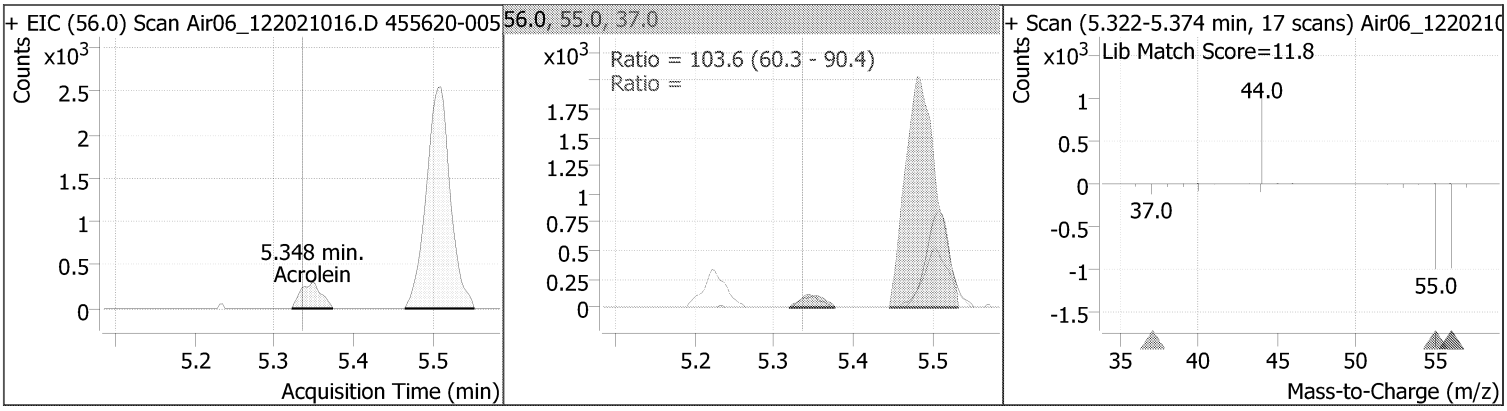
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	2.4691	5.02	0.02	69631	46.0	36.7	28.7	43.1
					43.0	21.0	16.9	25.3



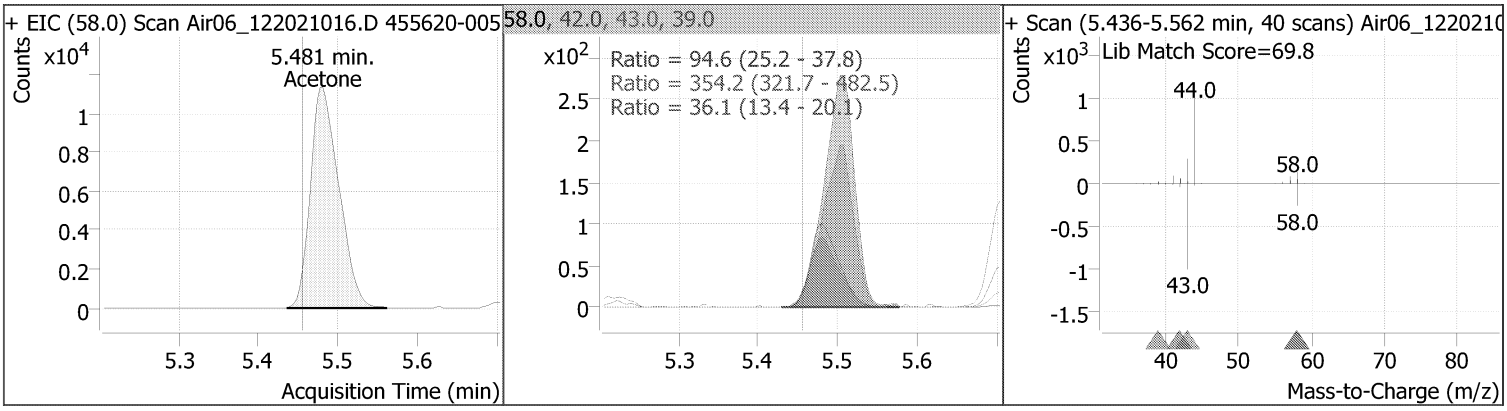
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl bromide	N.D.	5.24	106.0	106.0	81.0	23.1



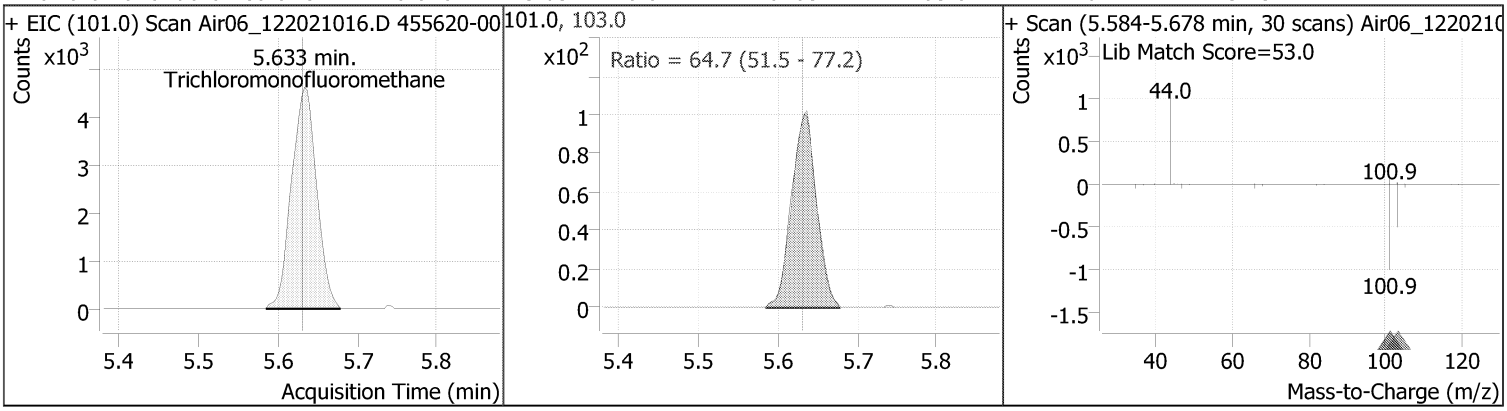
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	0.0296	5.35	0.02	539	55.0	103.6	60.3	90.4
					37.0		9.1	13.7



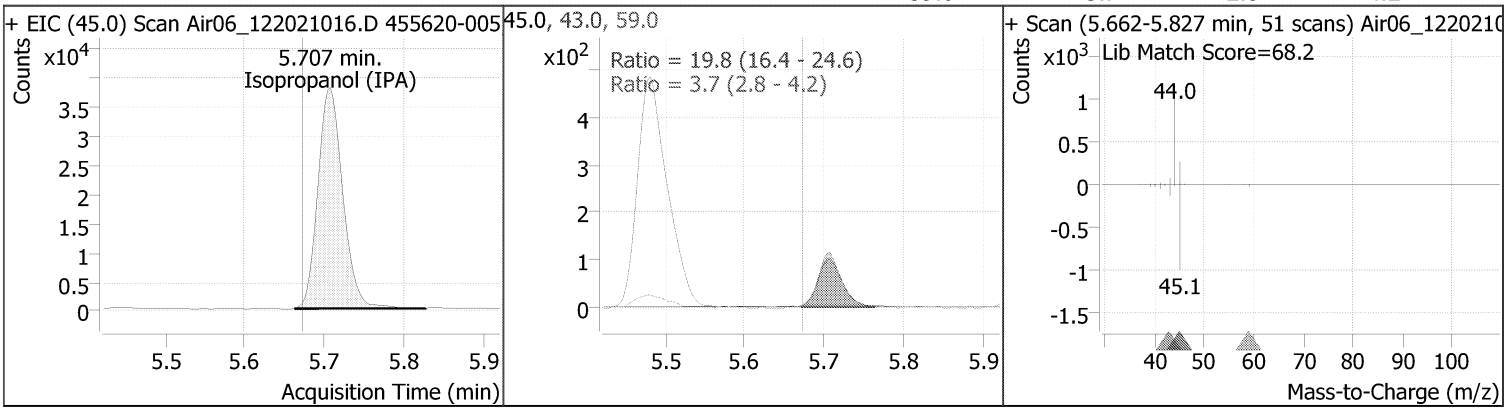
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	1.1627	5.48	0.03	28300	43.0	354.2	321.7	482.5
					42.0	94.6	25.2	37.8
					39.0	36.1	13.4	20.1



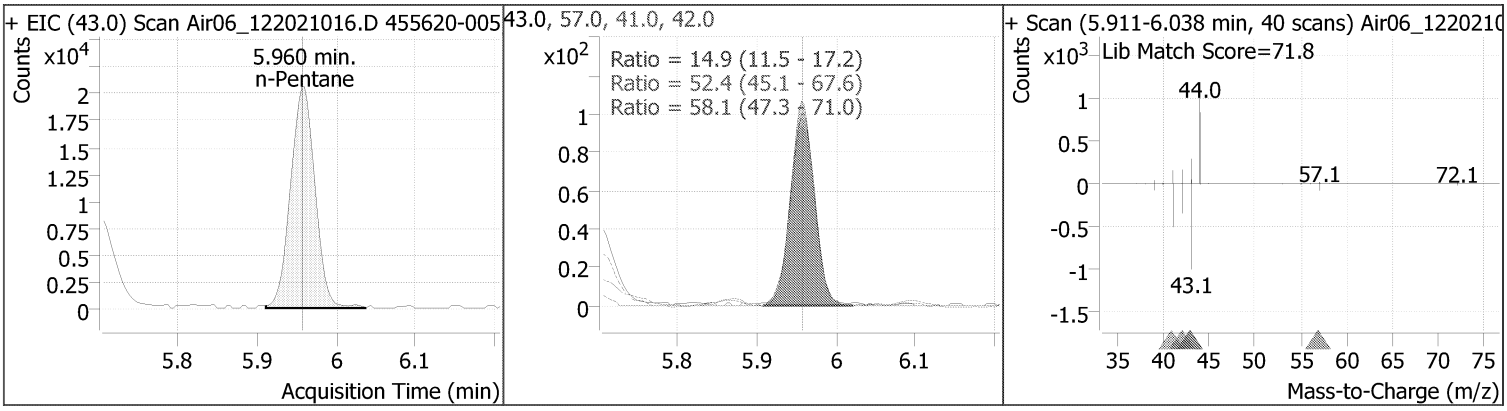
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	0.0701	5.63	0.01	10205	103.0	64.7	51.5	77.2



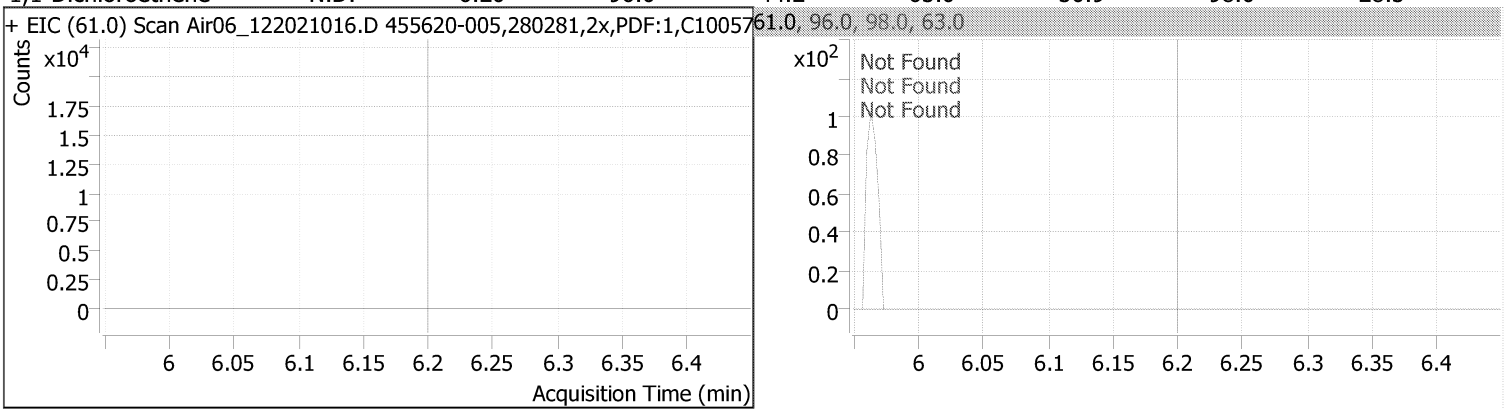
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.8723	5.71	0.04	82999	43.0	19.8	16.4	24.6
					59.0	3.7	2.8	4.2



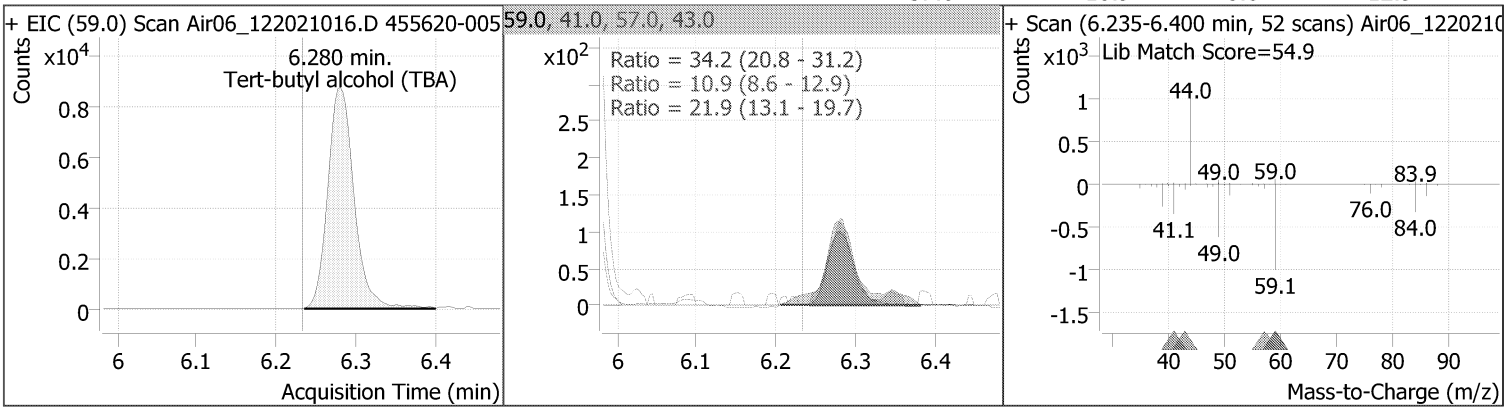
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.4764	5.96	0.01	44462	42.0	58.1	47.3	71.0
					41.0	52.4	45.1	67.6
					57.0	14.9	11.5	17.2



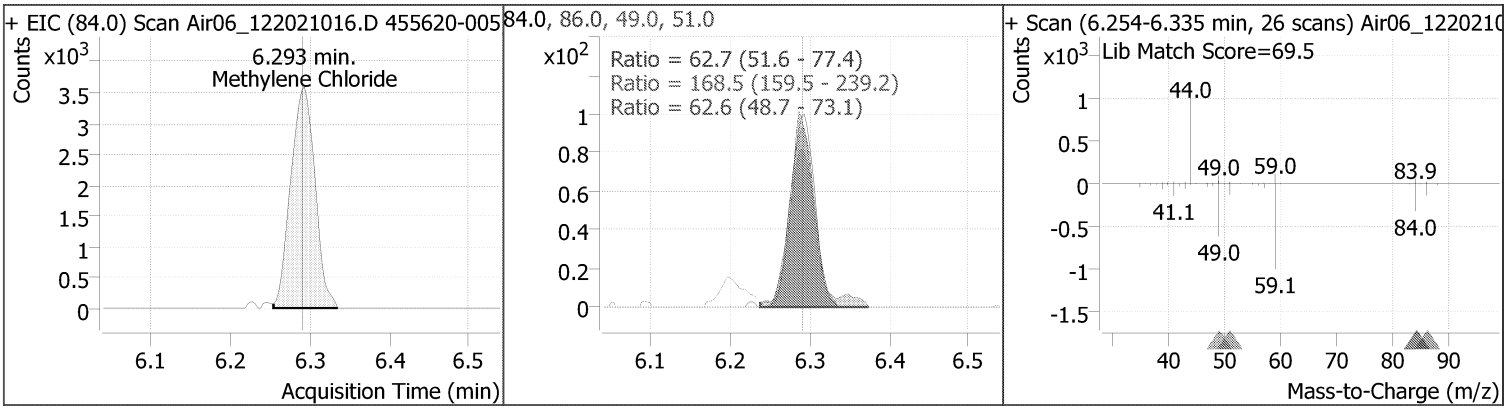
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethene	N.D.	6.20	96.0	44.2	63.0	30.9	98.0	28.3



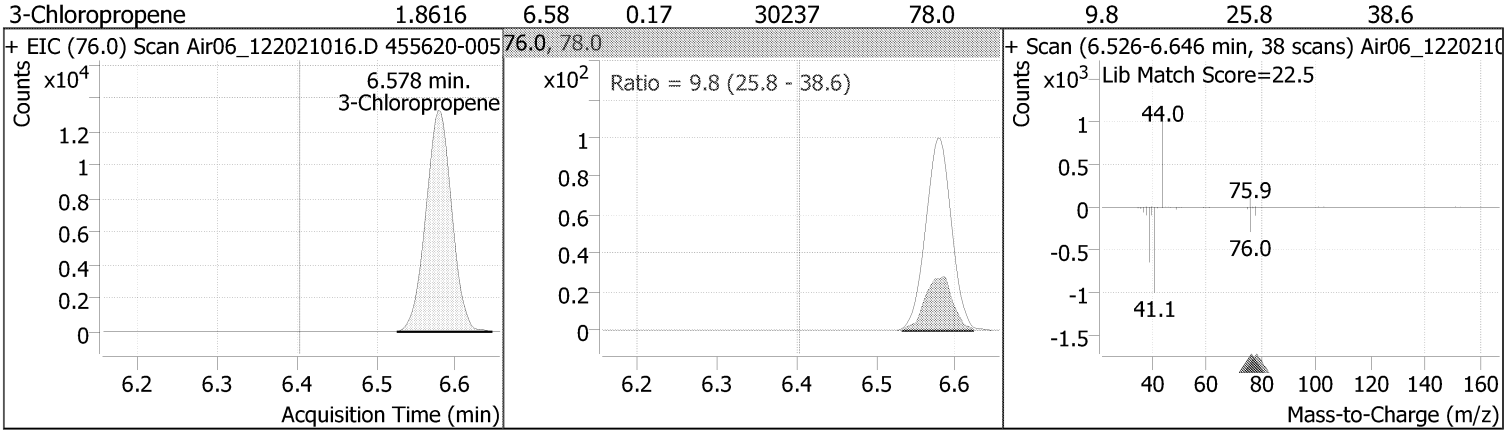
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.2021	6.28	0.05	20291	41.0	34.2	20.8	31.2
					43.0	21.9	13.1	19.7
					57.0	10.9	8.6	12.9



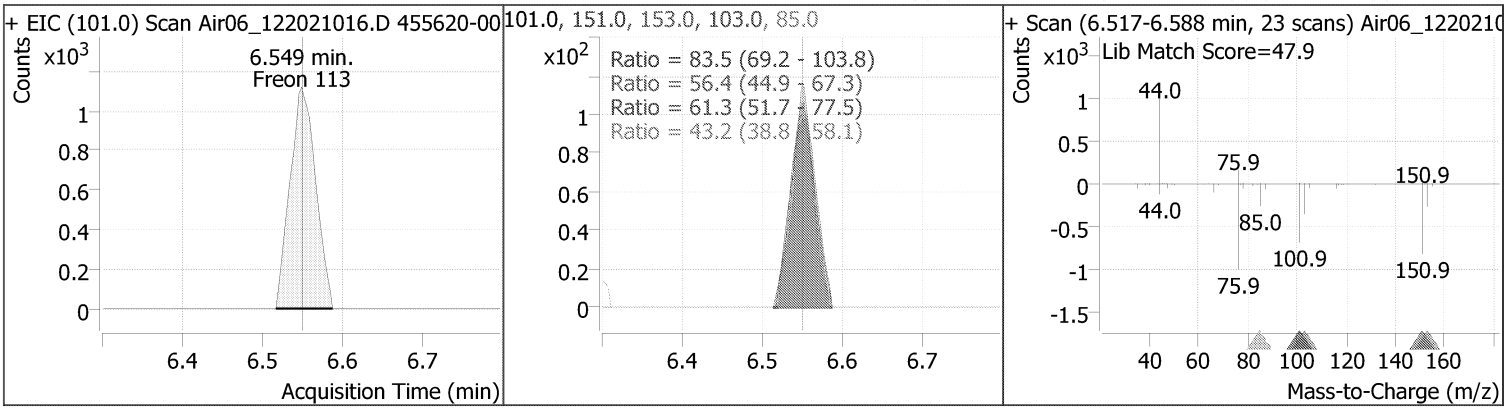
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.1978	6.29	0.01	7634	49.0	168.5	159.5	239.2
					86.0	62.7	51.6	77.4
					51.0	62.6	48.7	73.1



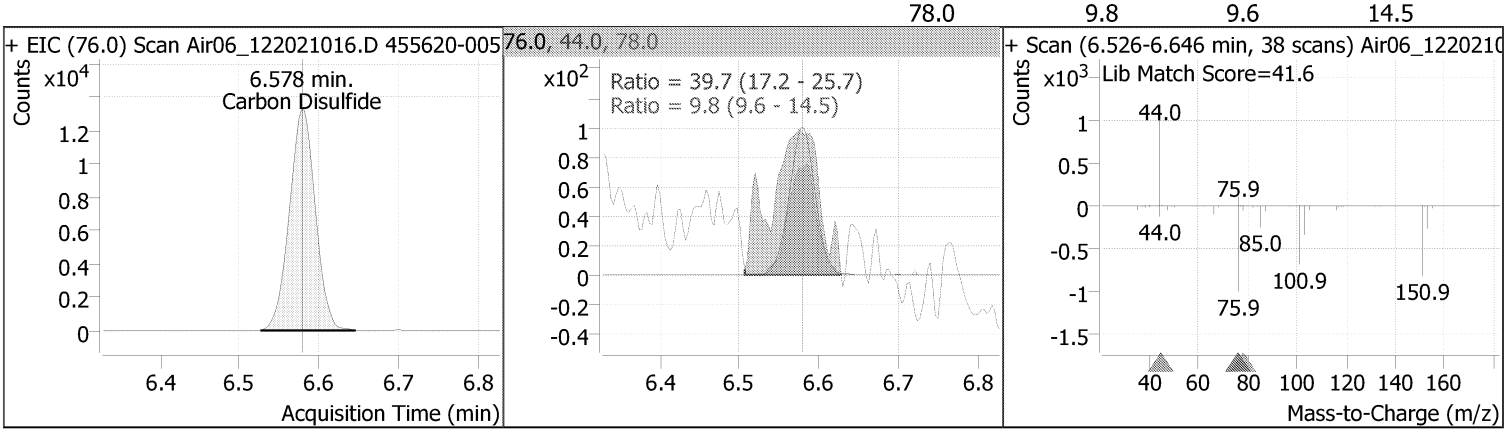
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	1.8616	6.58	0.17	30237	78.0	9.8	25.8	38.6



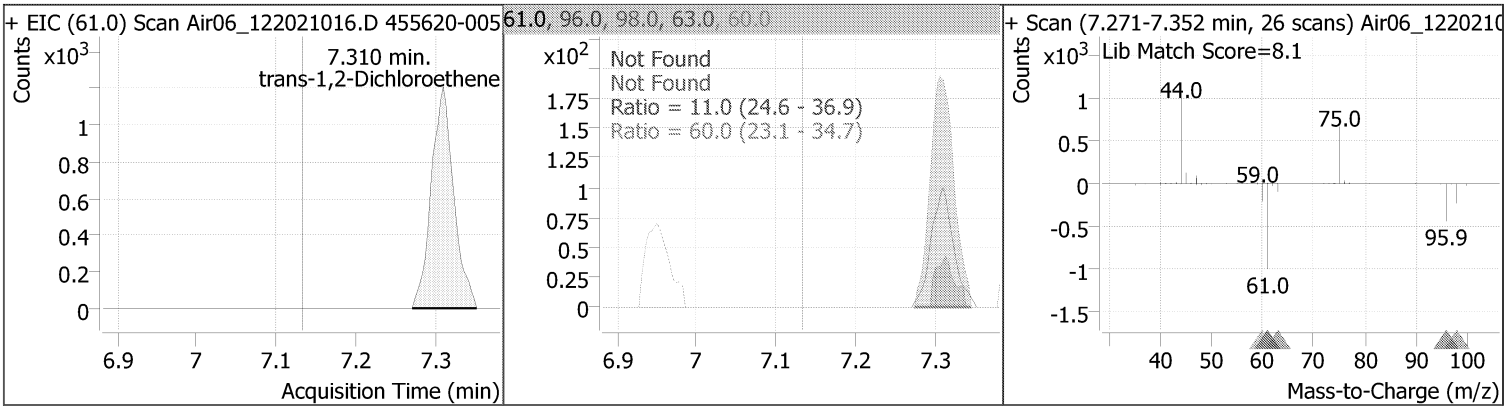
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	0.0272	6.55	0.00	2501	151.0	83.5	69.2	103.8
					103.0	61.3	51.7	77.5
					153.0	56.4	44.9	67.3
					85.0	43.2	38.8	58.1



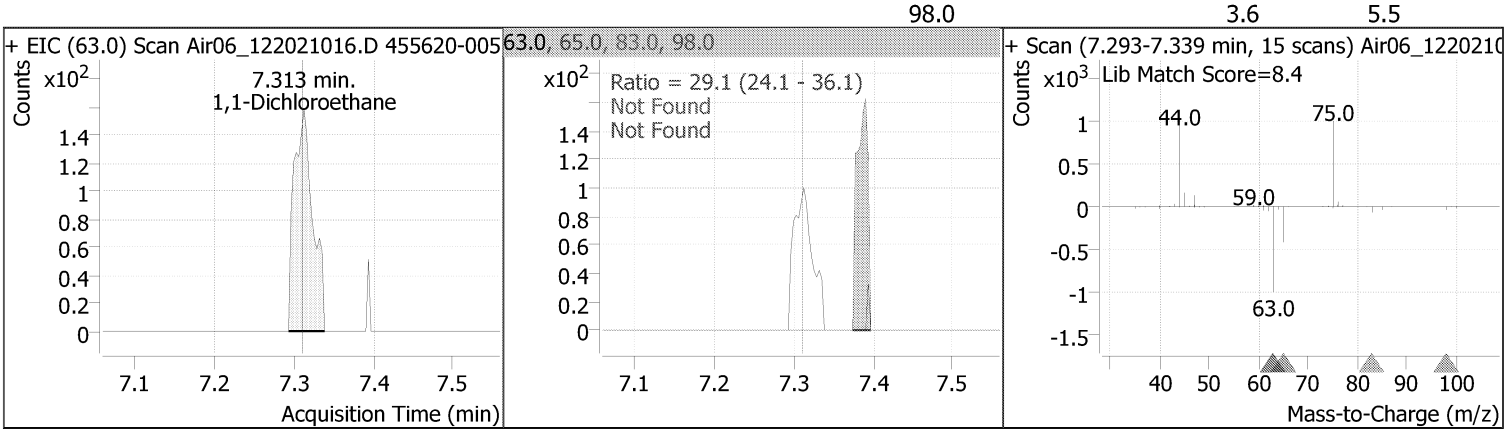
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.2816	6.58	0.00	30237	44.0		39.7	17.2	25.7
					78.0		9.8	9.6	14.5



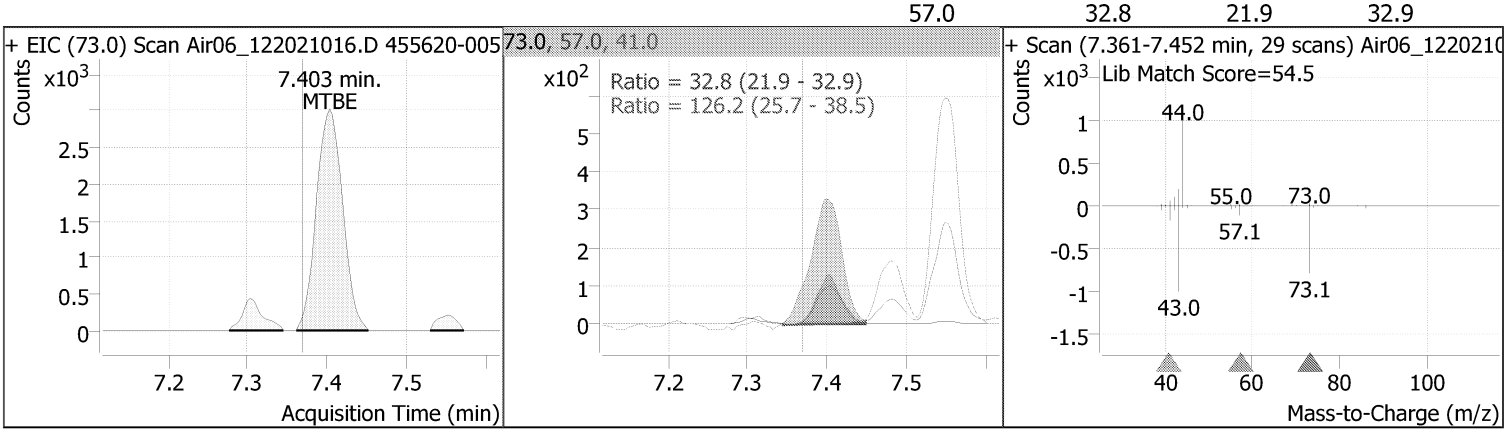
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.0339	7.31	0.18	2366	96.0		41.3	61.9
					98.0		26.5	39.8
					63.0	11.0	24.6	36.9
					60.0	60.0	23.1	34.7



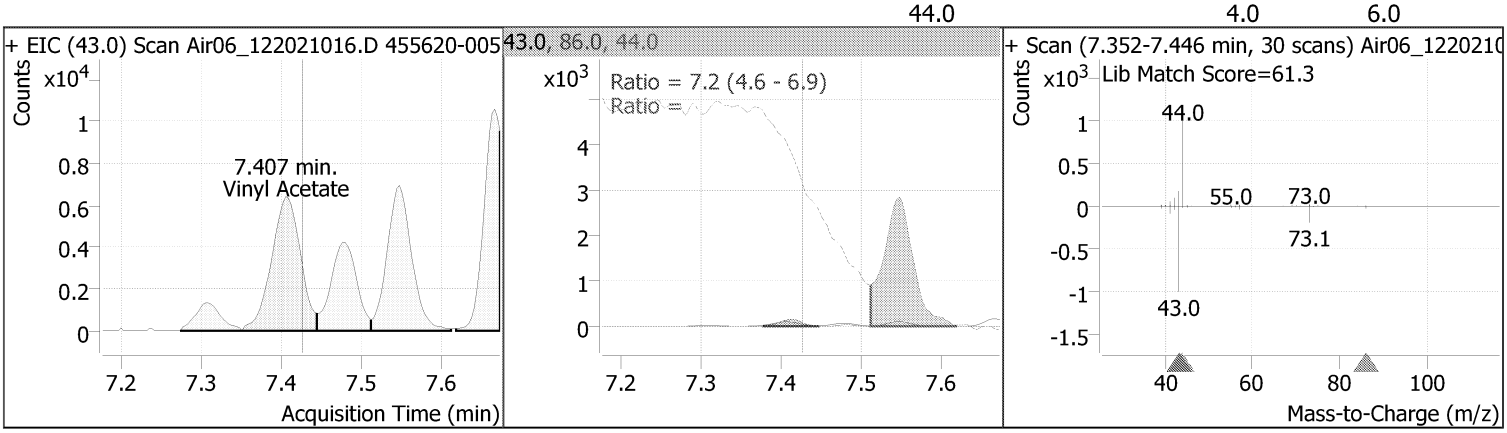
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	0.0030	7.31	0.01	260	65.0	29.1	24.1	36.1
					83.0		9.9	14.8
					98.0		3.6	5.5



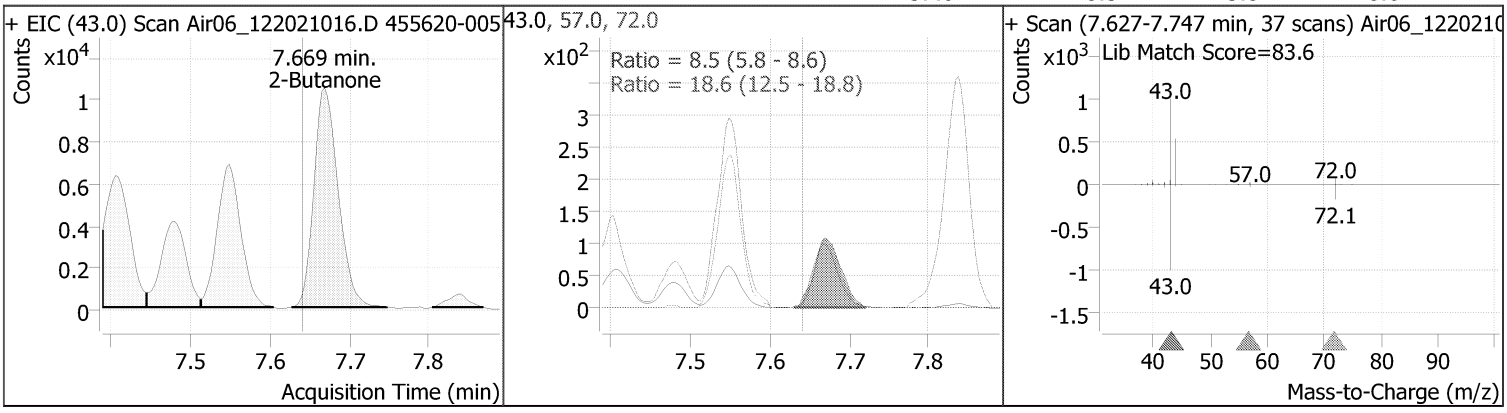
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	0.0589	7.40	0.04	6938	41.0	126.2	25.7	38.5
					57.0	32.8	21.9	32.9



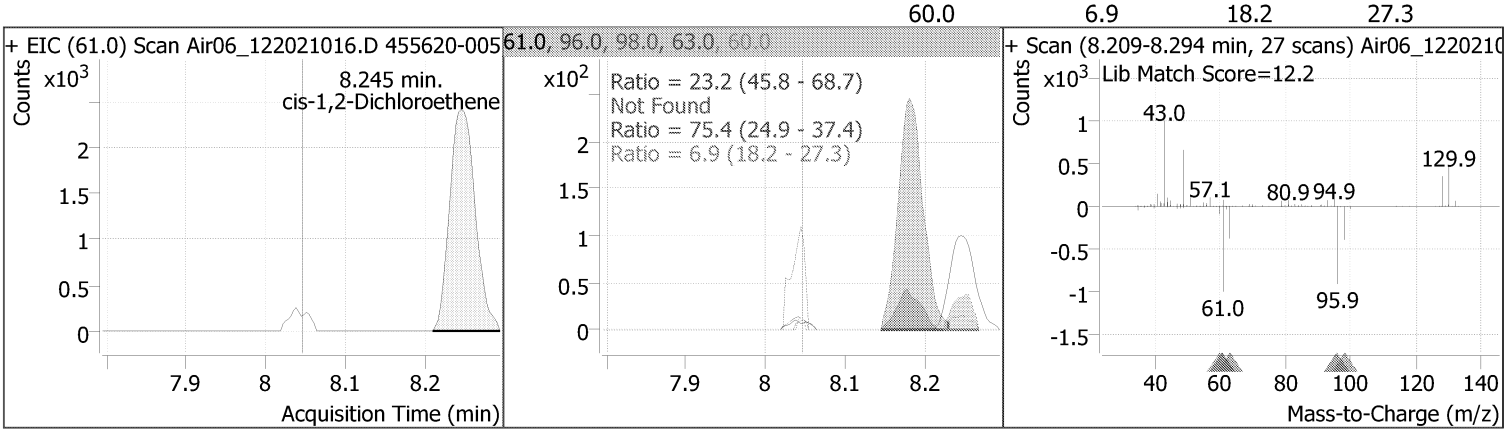
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.1103	7.41	-0.02	16240	86.0	7.2	4.6	6.9
					44.0		4.0	6.0



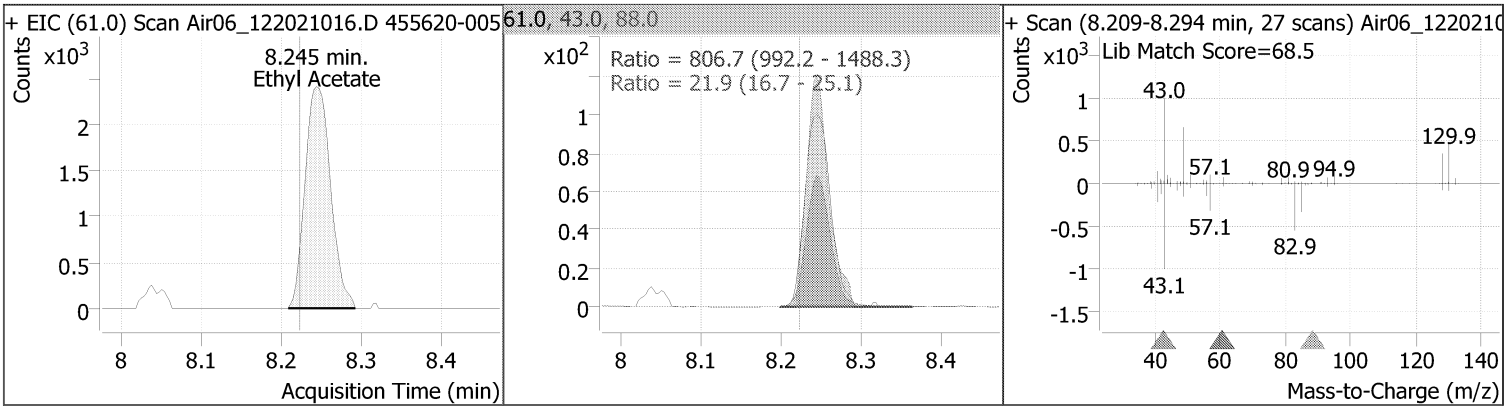
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.1903	7.67	0.03	22122	72.0	18.6	12.5	18.8
					57.0	8.5	5.8	8.6



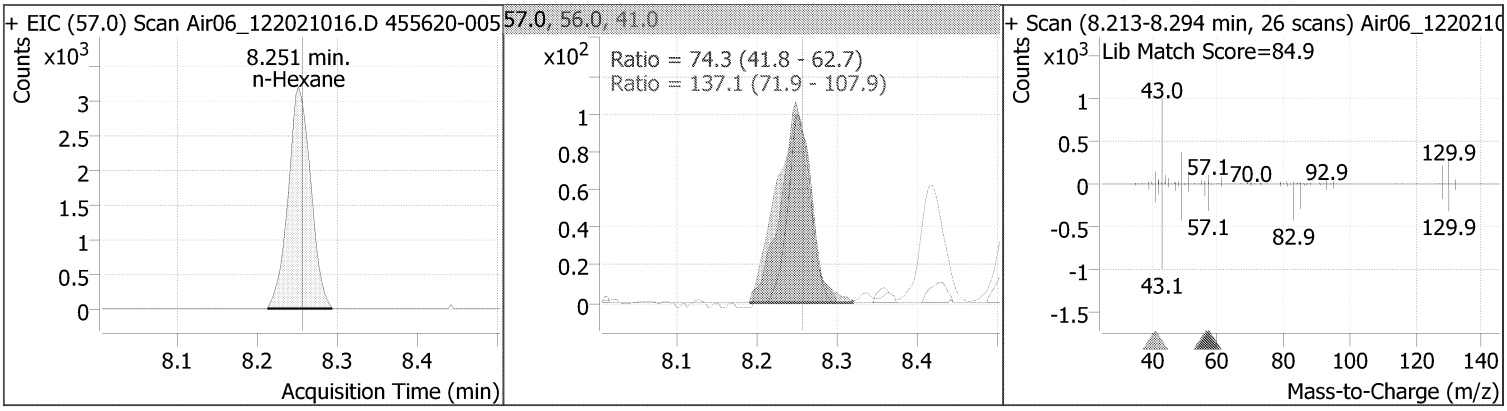
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.0757	8.24	0.20	5417	96.0	23.2	45.8	68.7
					98.0		29.3	43.9
					63.0	75.4	24.9	37.4
					60.0	6.9	18.2	27.3



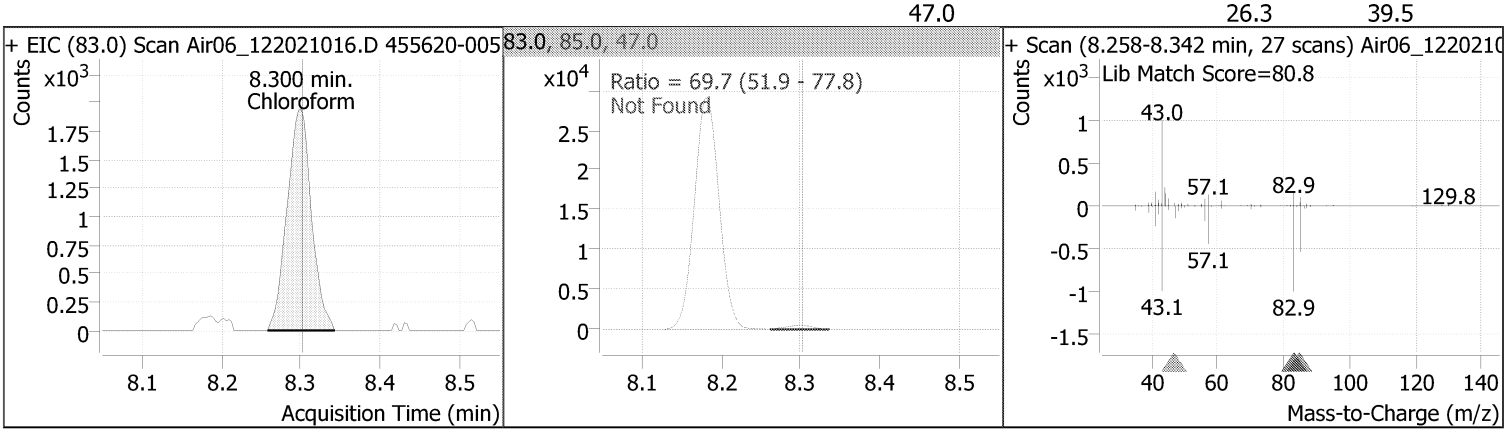
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	0.3351	8.24	0.02	5417	43.0	806.7	992.2	1488.3
					88.0	21.9	16.7	25.1



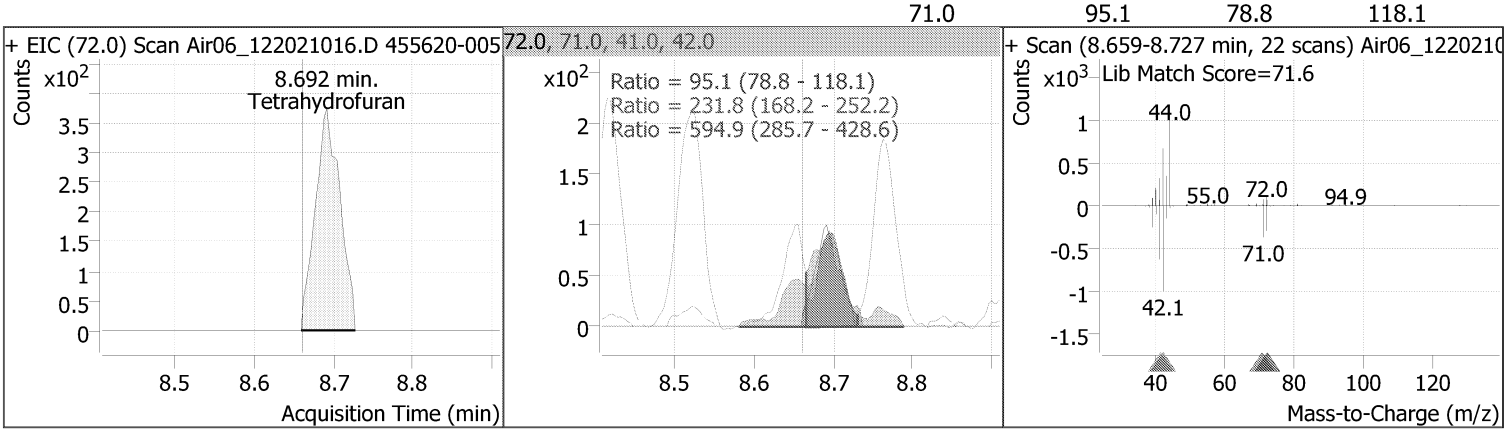
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.0833	8.25	0.00	6268	41.0	137.1	71.9	107.9
					56.0	74.3	41.8	62.7



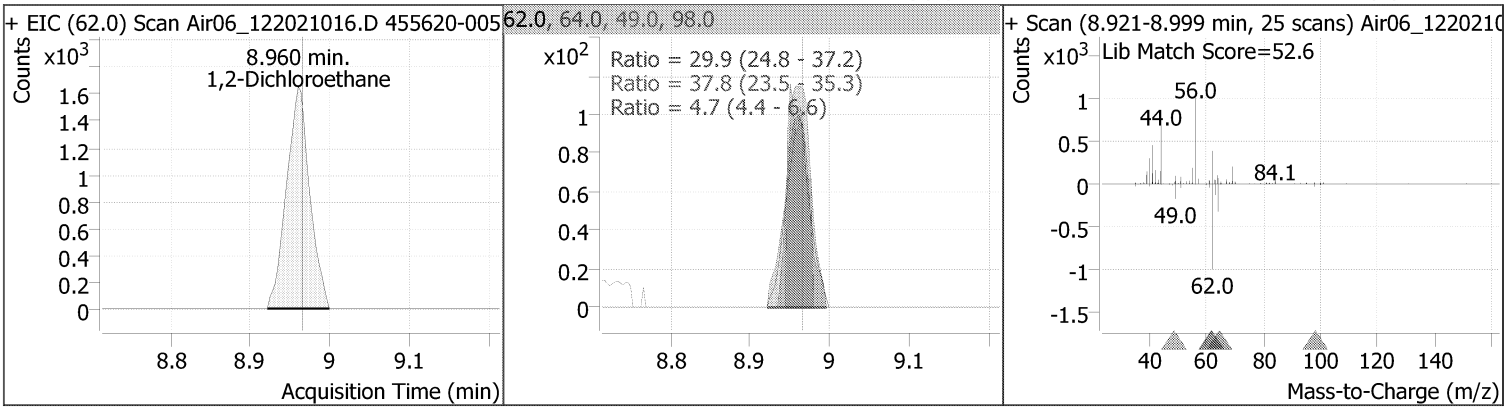
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.0403	8.30	0.00	4136	85.0	69.7	51.9	77.8
					47.0		26.3	39.5



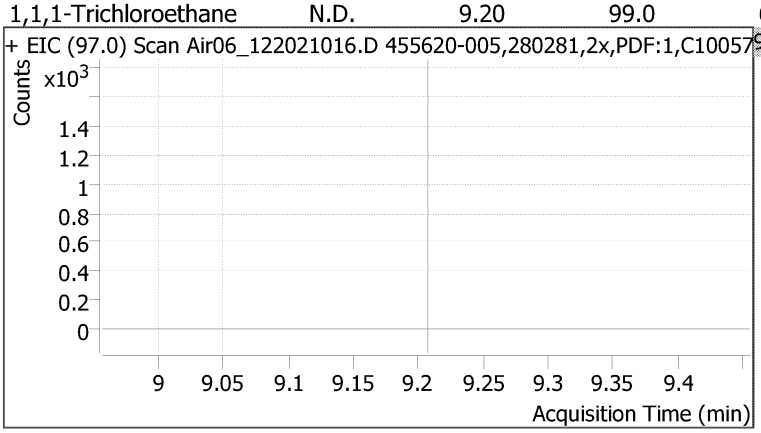
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	0.0482	8.69	0.04	810	42.0	594.9	285.7	428.6
					41.0	231.8	168.2	252.2
					71.0	95.1	78.8	118.1

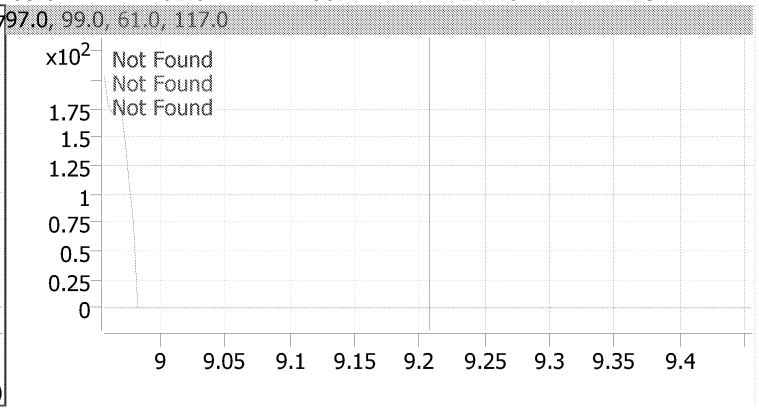


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	0.0406	8.96	0.00	3348	64.0	29.9	24.8	37.2
					49.0	37.8	23.5	35.3
					98.0	4.7	4.4	6.6

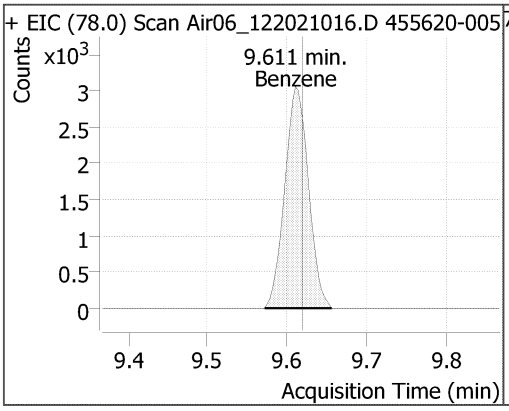


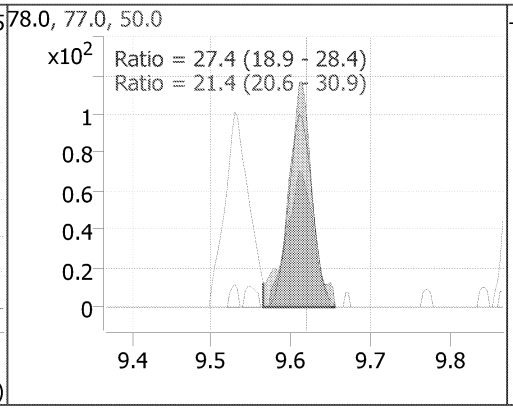
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1-Trichloroethane	N.D.	9.20	99.0	65.0	61.0	50.4	117.0	11.3

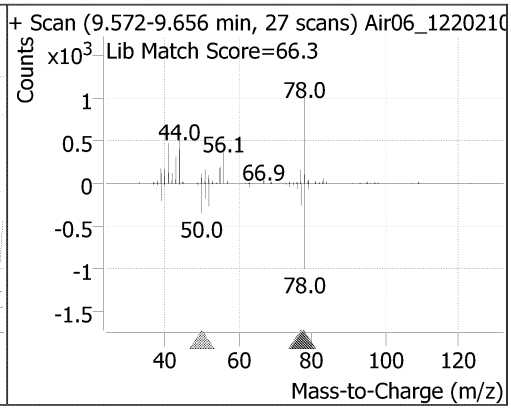




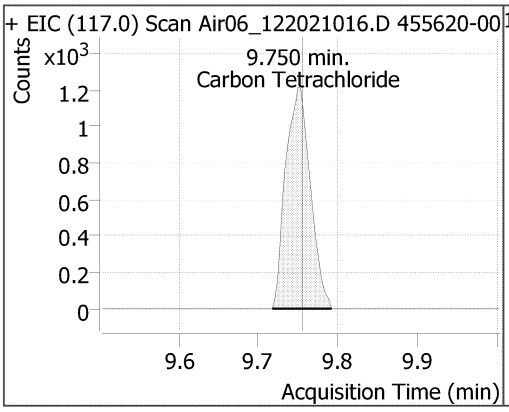
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.0554	9.61	0.00	6318	50.0	21.4	20.6	30.9
					77.0	27.4	18.9	28.4

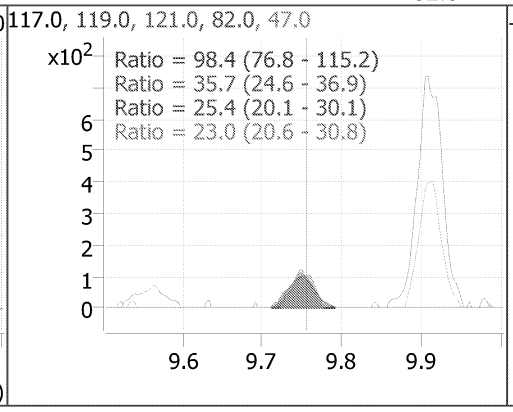


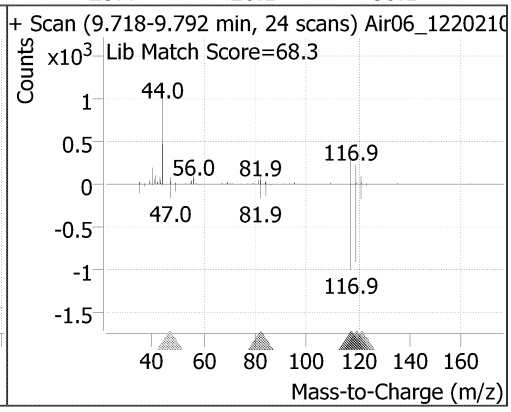




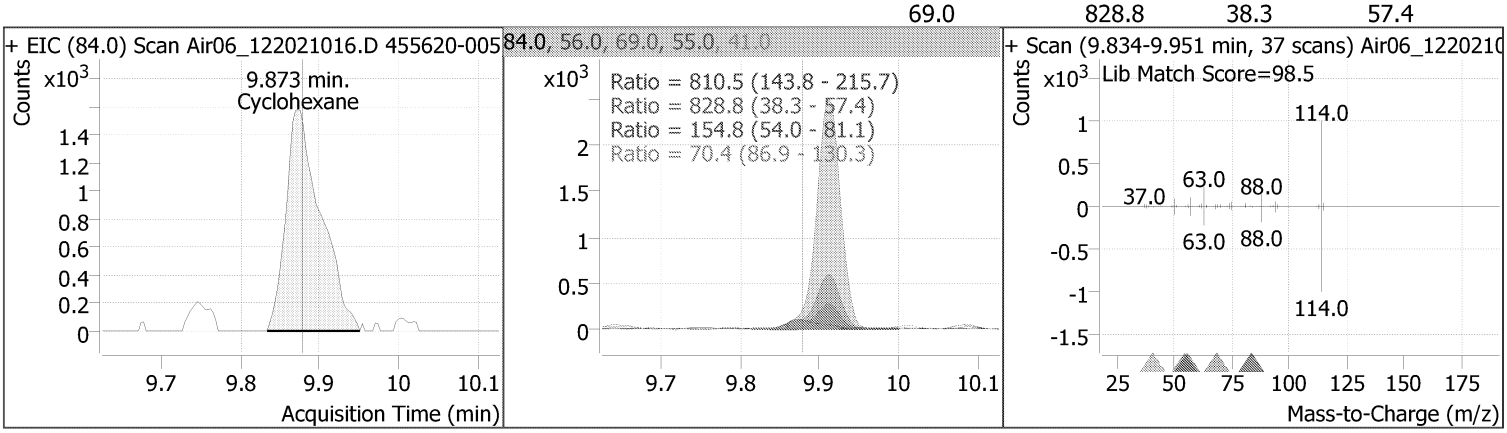
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	0.0226	9.75	0.00	2620	119.0	98.4	76.8	115.2
					121.0	35.7	24.6	36.9
					47.0	23.0	20.6	30.8
					82.0	25.4	20.1	30.1



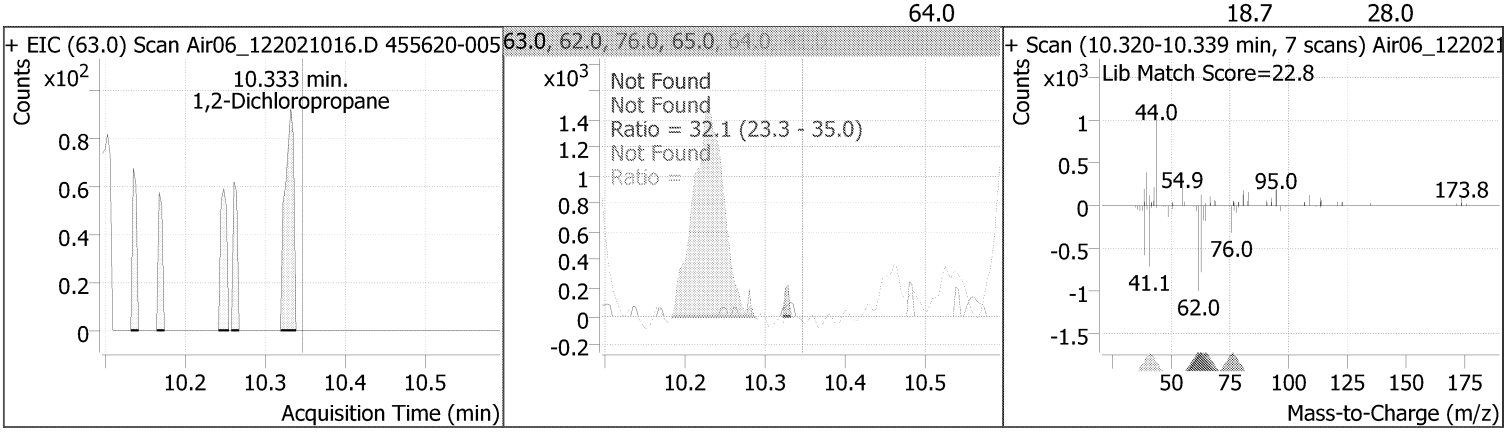




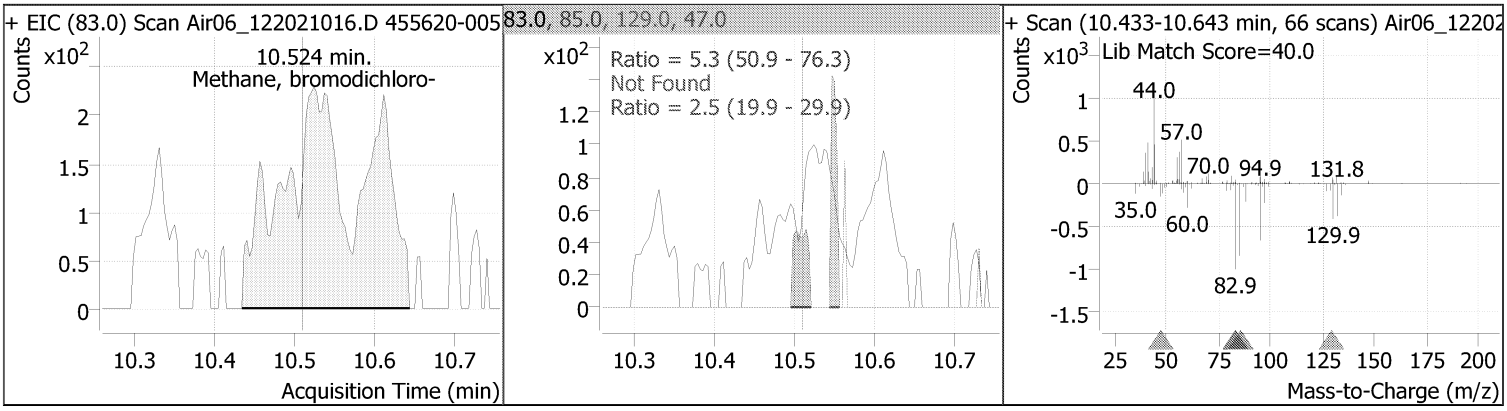
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.1025	9.87	0.00	4838	56.0	810.5	143.8	215.7
					41.0	70.4	86.9	130.3
					55.0	154.8	54.0	81.1
					69.0	828.8	38.3	57.4



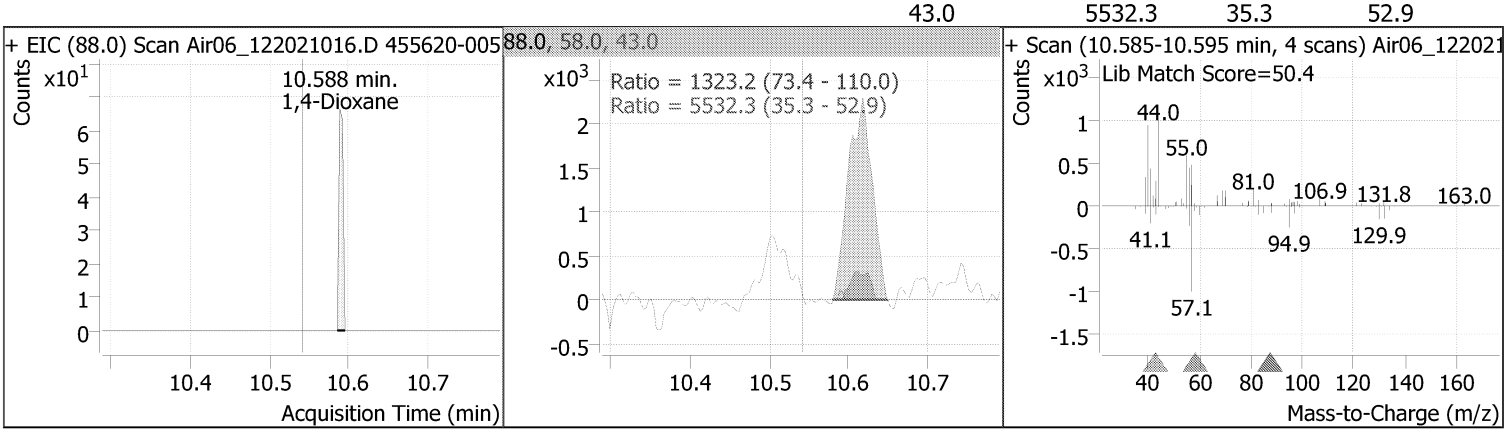
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.0013	10.33	-0.01	71	41.0		60.7	91.1
					62.0		55.7	83.6
					76.0		35.7	53.6
					65.0	32.1	23.3	35.0
					64.0		18.7	28.0



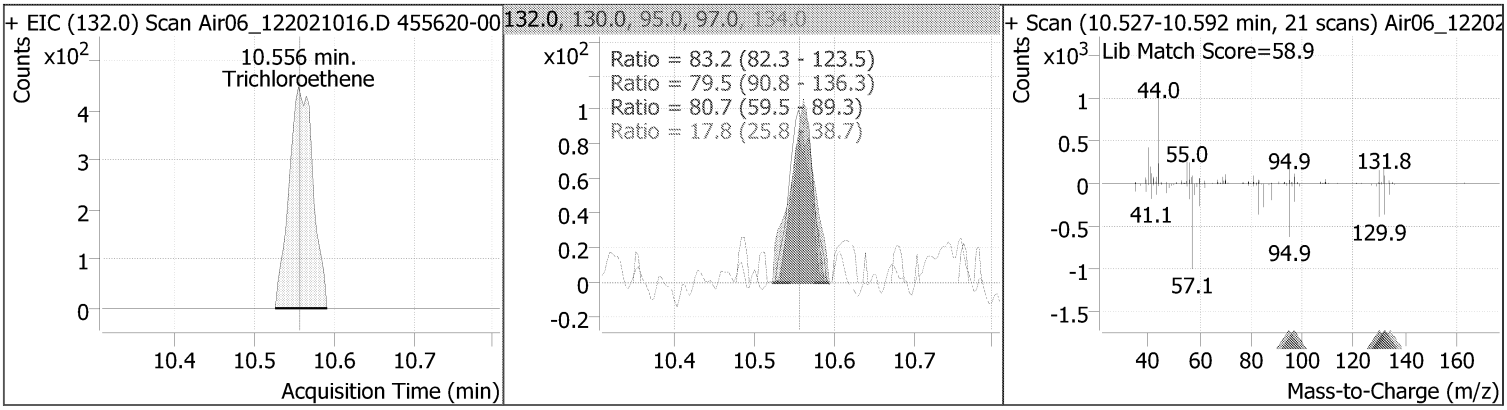
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	0.0154	10.52	0.02	1652	85.0	5.3	50.9	76.3
					47.0	2.5	19.9	29.9
					129.0		9.1	13.7



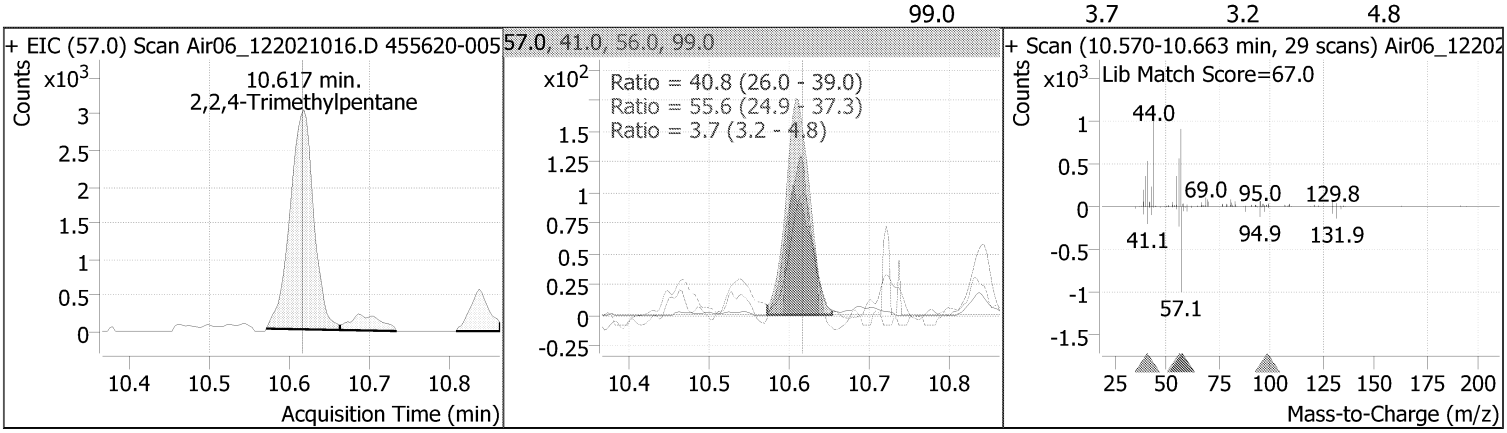
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.0010	10.59	0.05	25	58.0	1323.2	73.4	110.0
					43.0	5532.3	35.3	52.9



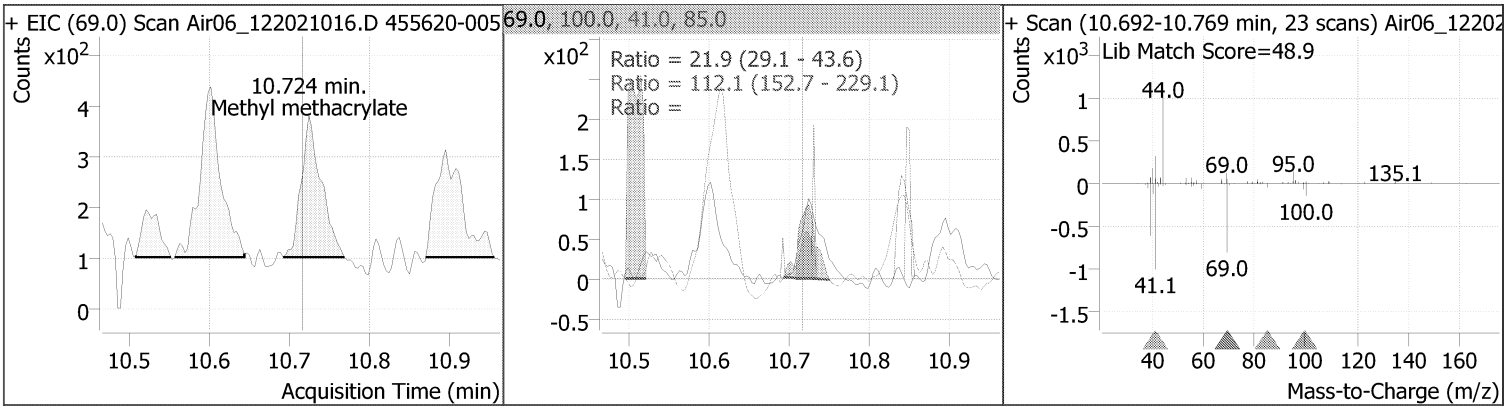
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.0179	10.56	0.00	941	95.0	79.5	90.8	136.3
					130.0	83.2	82.3	123.5
					97.0	80.7	59.5	89.3
					134.0	17.8	25.8	38.7



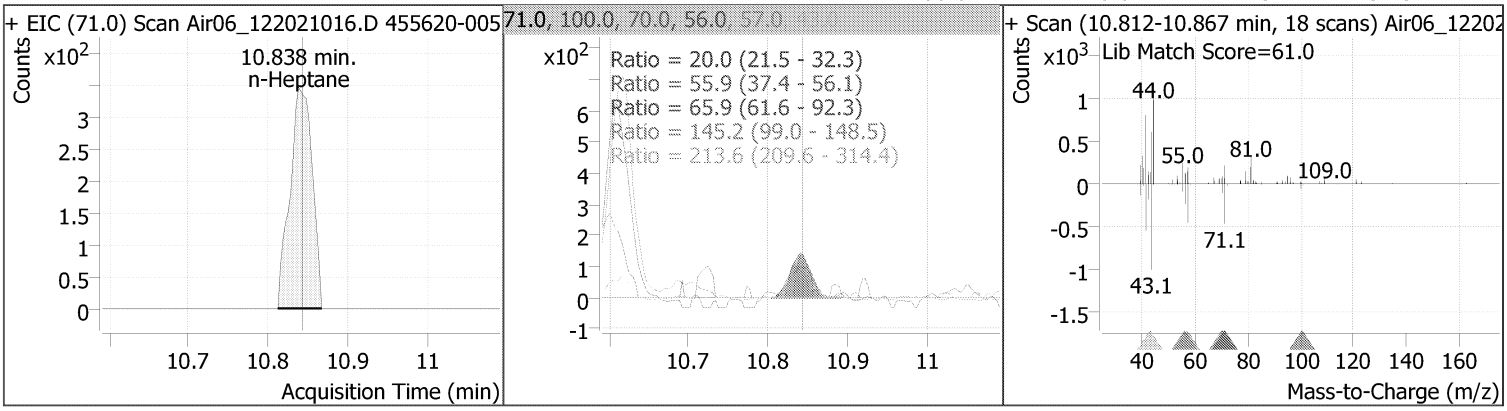
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.0256	10.62	0.00	6319	41.0	40.8	26.0	39.0
					56.0	55.6	24.9	37.3
					99.0	3.7	3.2	4.8



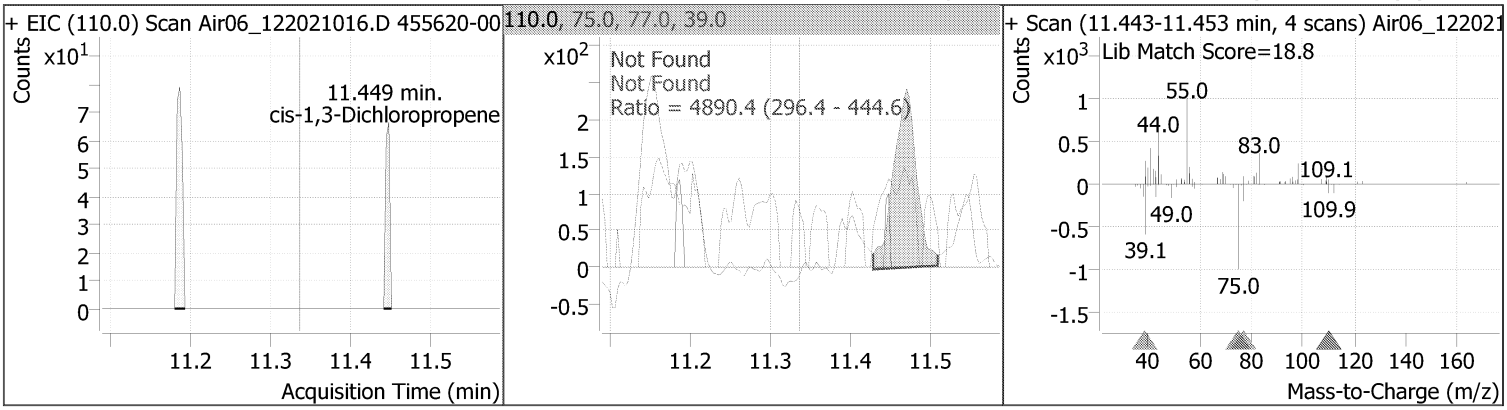
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	0.0114	10.72	0.01	485	41.0	112.1	152.7	229.1
					100.0	21.9	29.1	43.6
					85.0		7.9	11.8



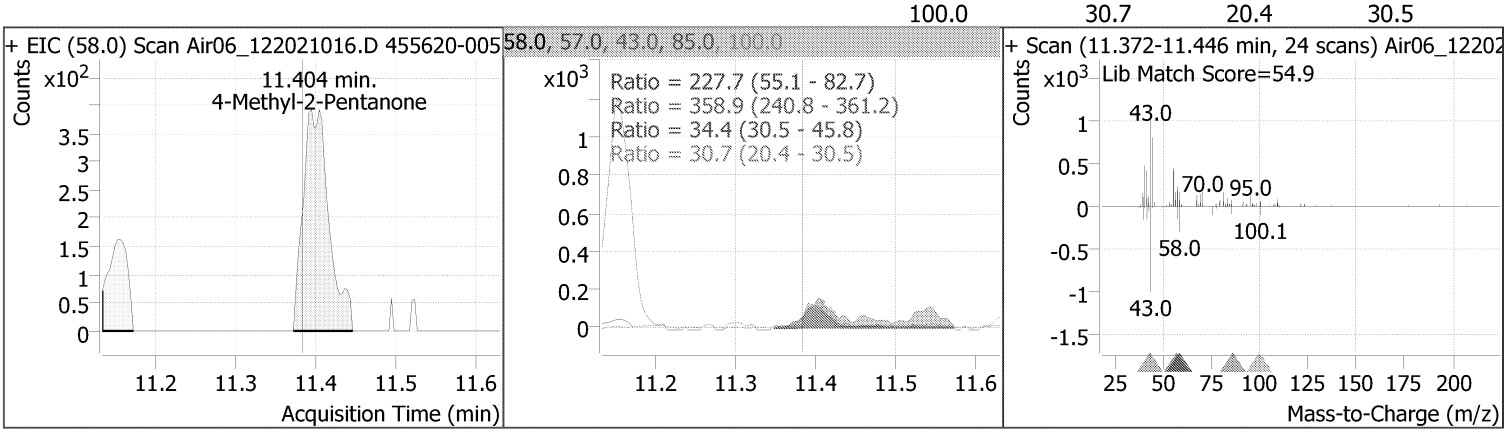
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	0.0175	10.84	0.00	674	43.0	213.6	209.6	314.4
					57.0	145.2	99.0	148.5
					56.0	65.9	61.6	92.3
					70.0	55.9	37.4	56.1
					100.0	20.0	21.5	32.3



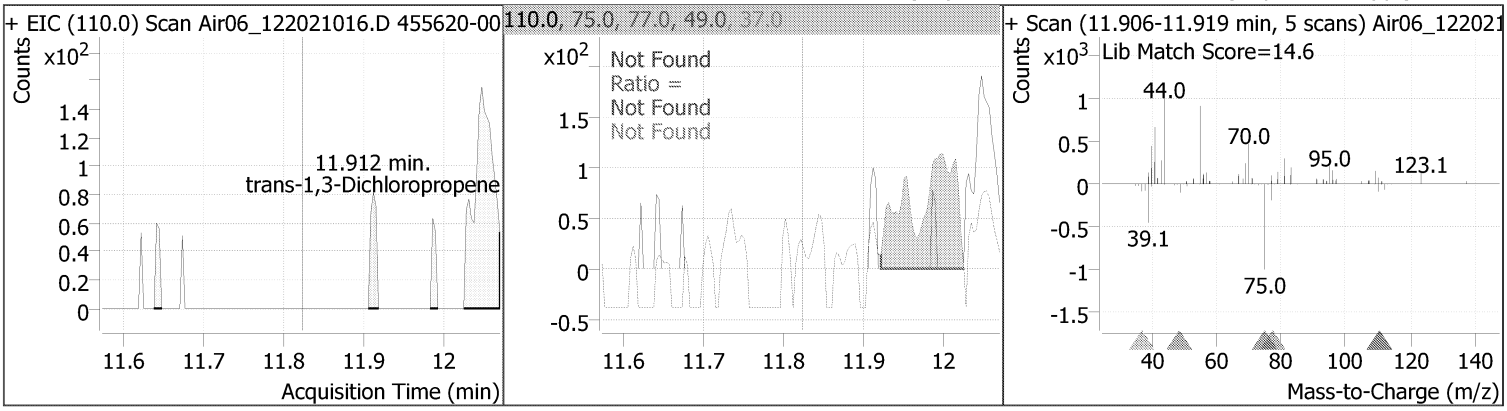
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	0.0016	11.45	0.11	25	75.0		375.4	563.1
					39.0	4890.4	296.4	444.6
					77.0		119.7	179.5



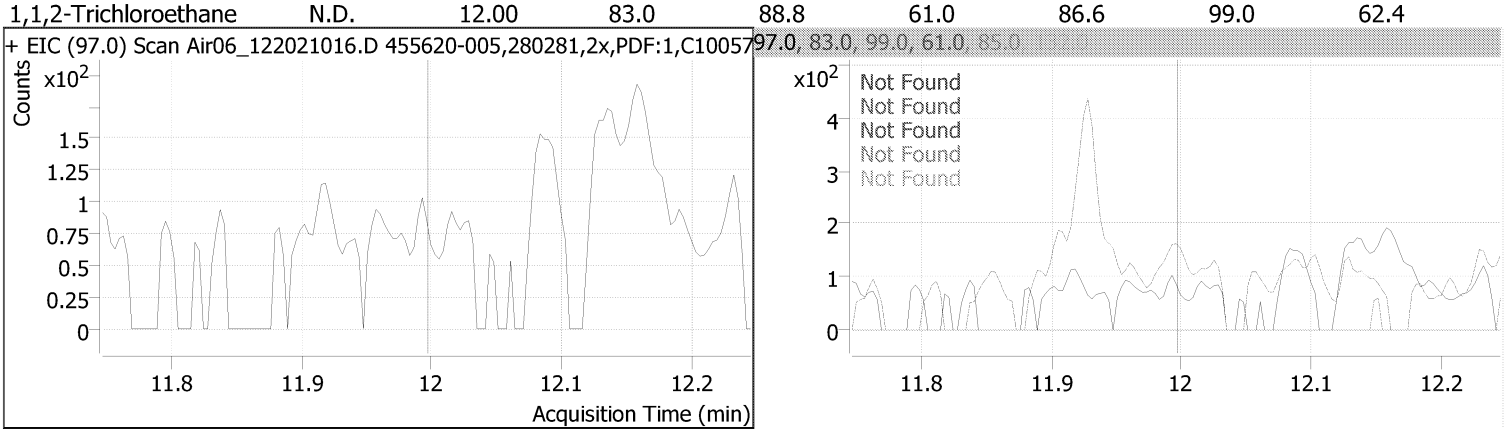
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.0195	11.40	0.02	889	43.0	358.9	240.8	361.2
					57.0	227.7	55.1	82.7
					85.0	34.4	30.5	45.8
					100.0	30.7	20.4	30.5



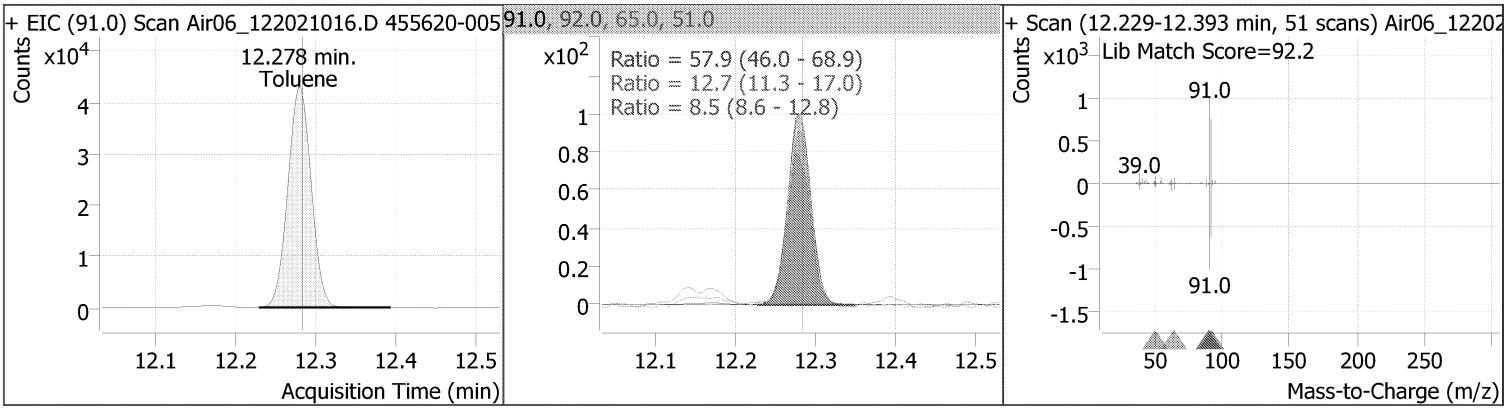
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	0.0027	11.91	0.09	43	75.0		378.9	568.4
					77.0		118.6	177.9
					49.0		106.8	160.1
					37.0		57.6	86.5



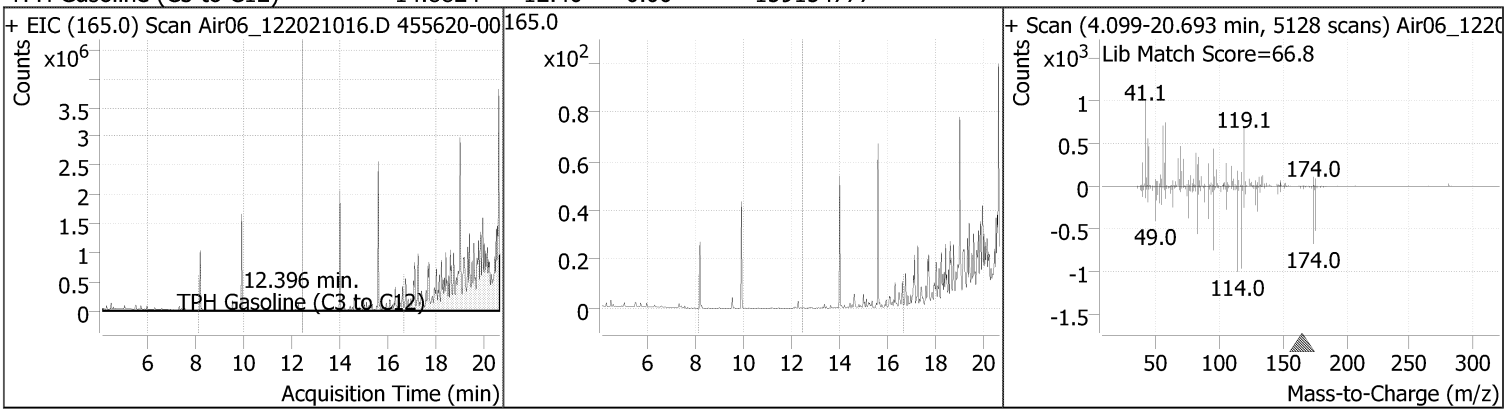
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,2-Trichloroethane	N.D.	12.00	83.0	88.8	61.0	86.6	99.0	62.4



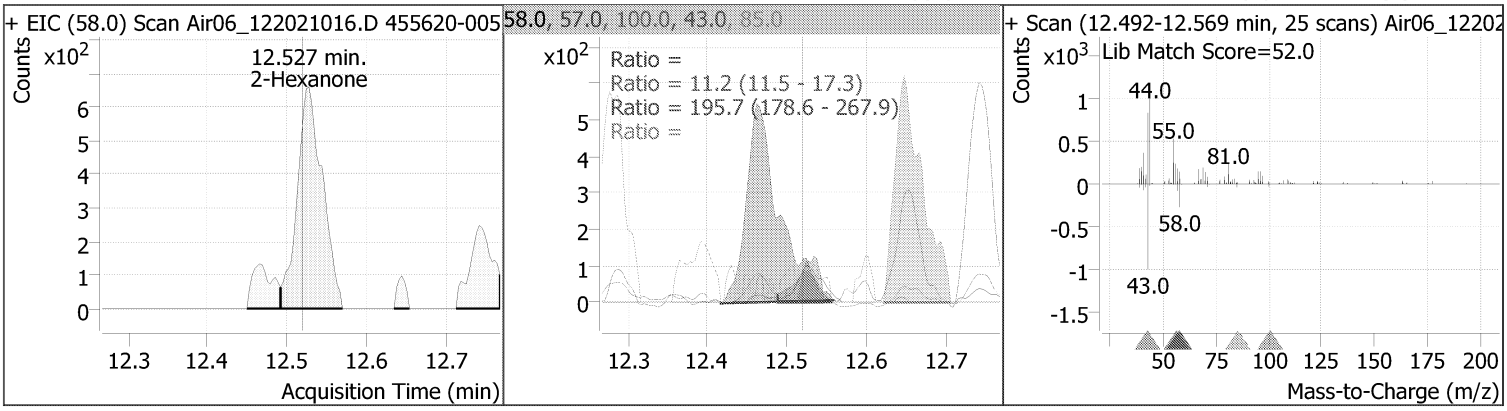
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.5944	12.28	0.00	87527	92.0	57.9	46.0	68.9
					65.0	12.7	11.3	17.0
					51.0	8.5	8.6	12.8



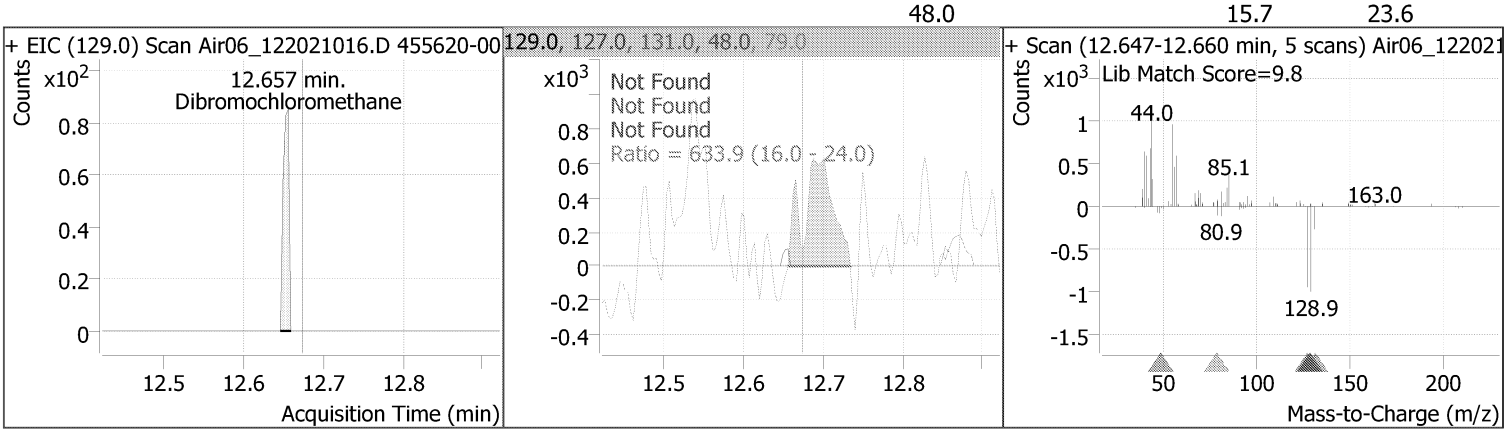
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	14.8824	12.40	0.00	159154777				



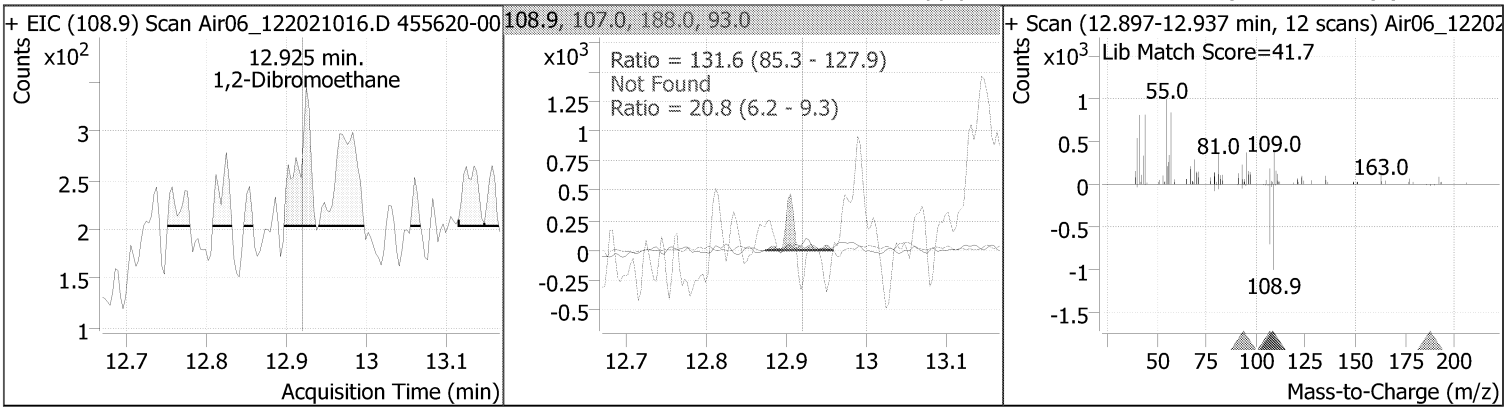
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.0255	12.53	0.01	1455	43.0	195.7	178.6	267.9
					57.0		30.3	45.4
					100.0	11.2	11.5	17.3
					85.0		10.6	15.9



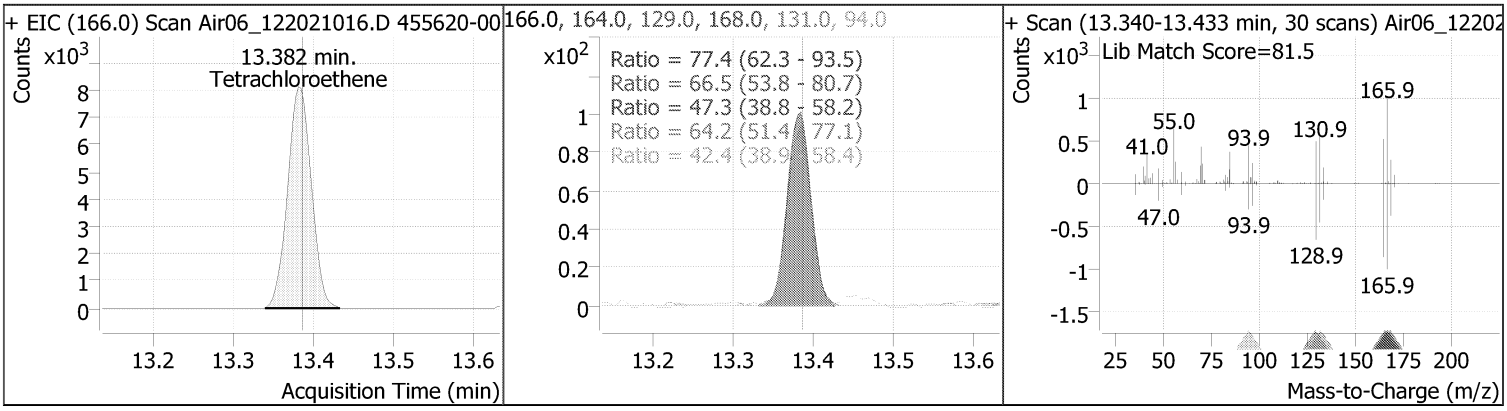
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.0004	12.66	-0.02	44	127.0		61.8	92.7
					131.0		19.2	28.8
					79.0	633.9	16.0	24.0
					48.0		15.7	23.6



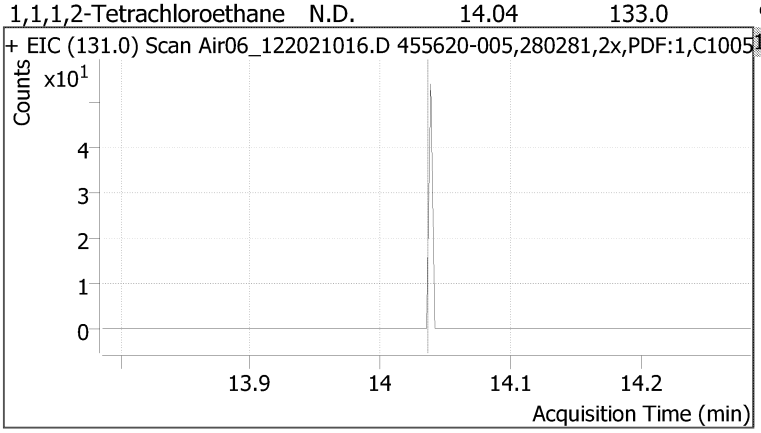
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.0019	12.93	0.01	151	107.0	131.6	85.3	127.9
					93.0	20.8	6.2	9.3
					188.0		3.7	5.5

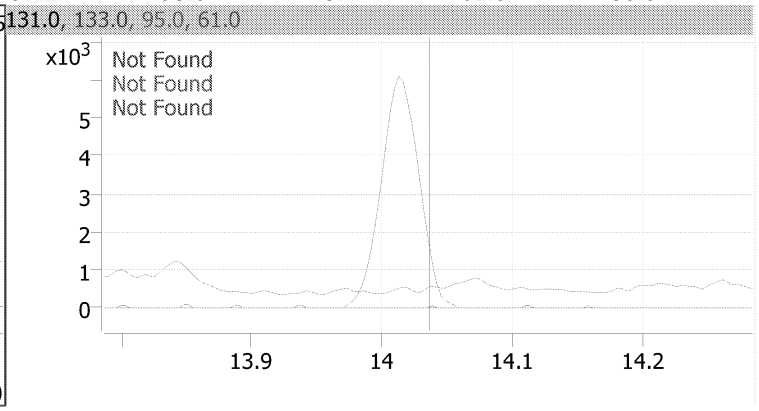


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.1940	13.38	0.00	16767	164.0	77.4	62.3	93.5
					129.0	66.5	53.8	80.7
					131.0	64.2	51.4	77.1
					94.0	42.4	38.9	58.4
					168.0	47.3	38.8	58.2

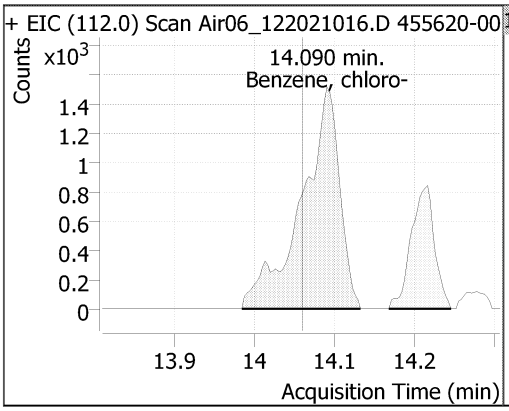


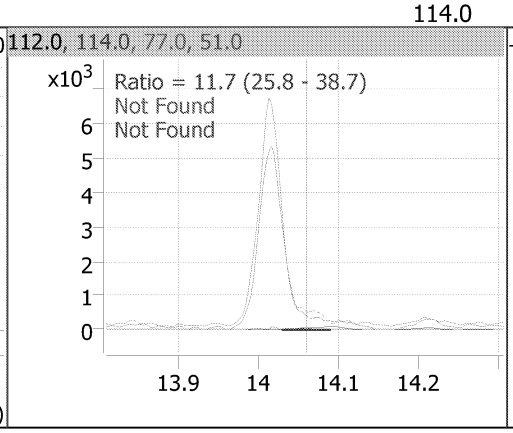
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1,2-Tetrachloroethane	N.D.	14.04	133.0	97.2	95.0	45.4	61.0	38.0

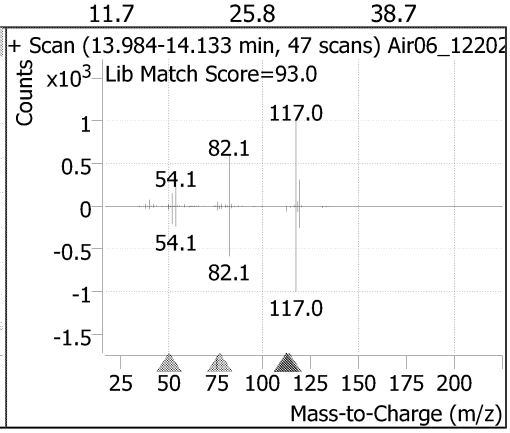




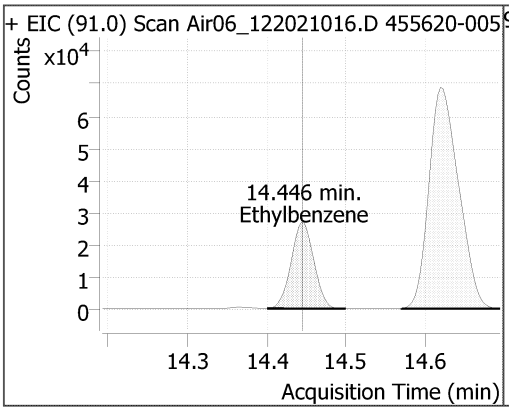
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0471	14.09	0.03	5058	77.0		53.0	79.5
					51.0		28.8	43.2
					114.0	11.7	25.8	38.7

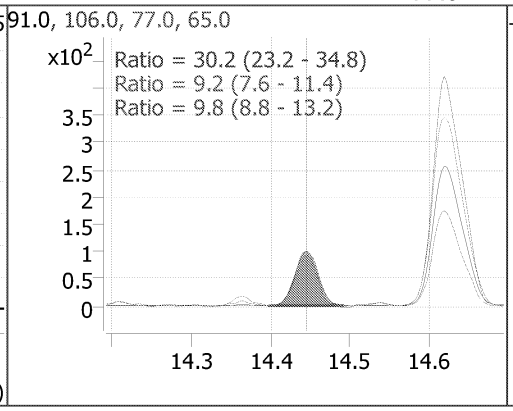


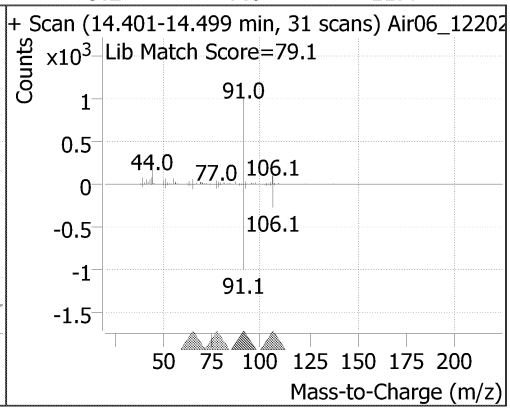




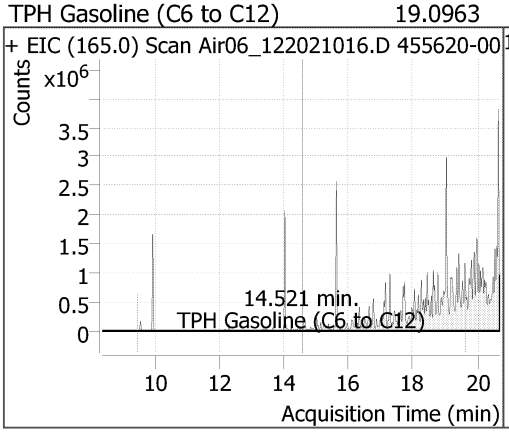
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.3060	14.45	0.00	53015	106.0	30.2	23.2	34.8
					65.0	9.8	8.8	13.2
					77.0	9.2	7.6	11.4

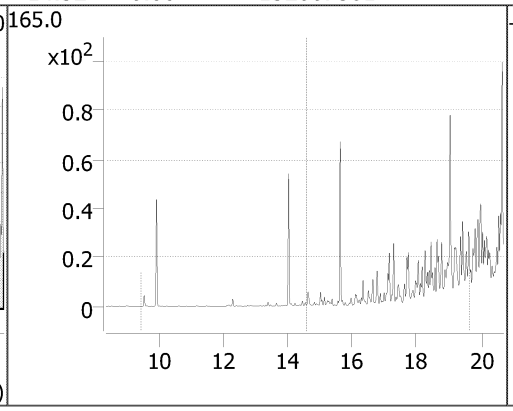


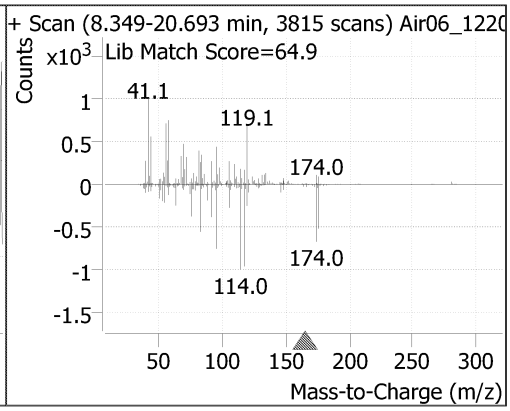




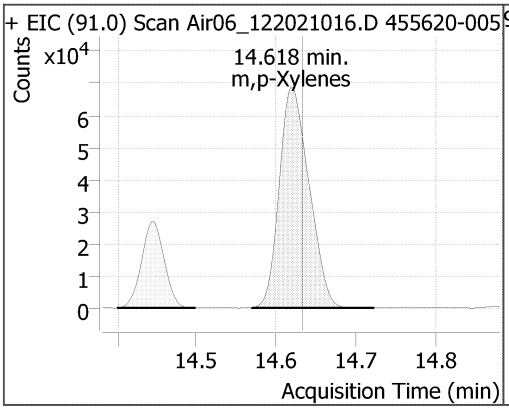
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	19.0963	14.52	0.00	152007561				

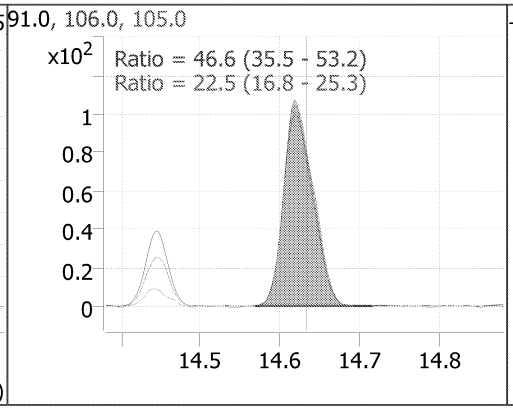


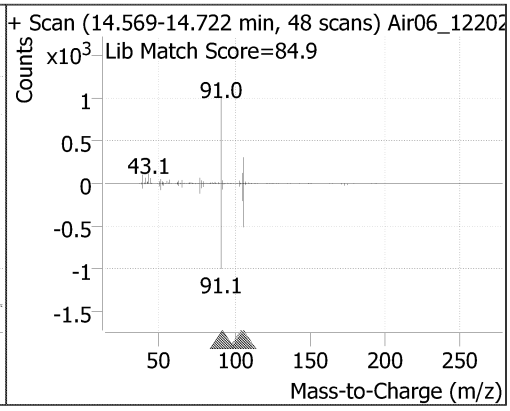




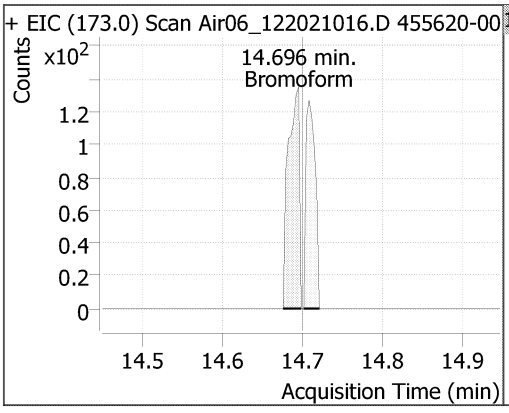
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	1.2192	14.62	-0.02	178200	106.0	46.6	35.5	53.2
					105.0	22.5	16.8	25.3

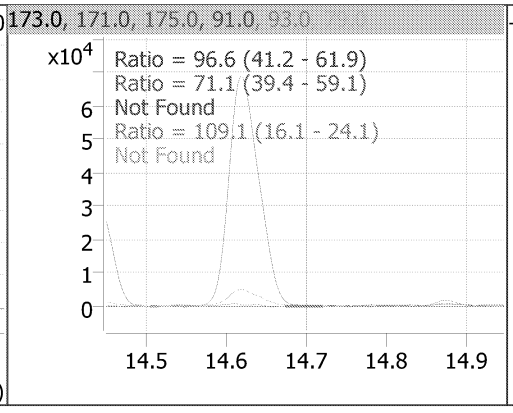


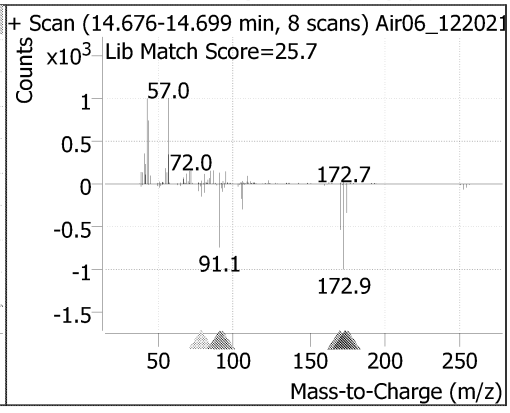




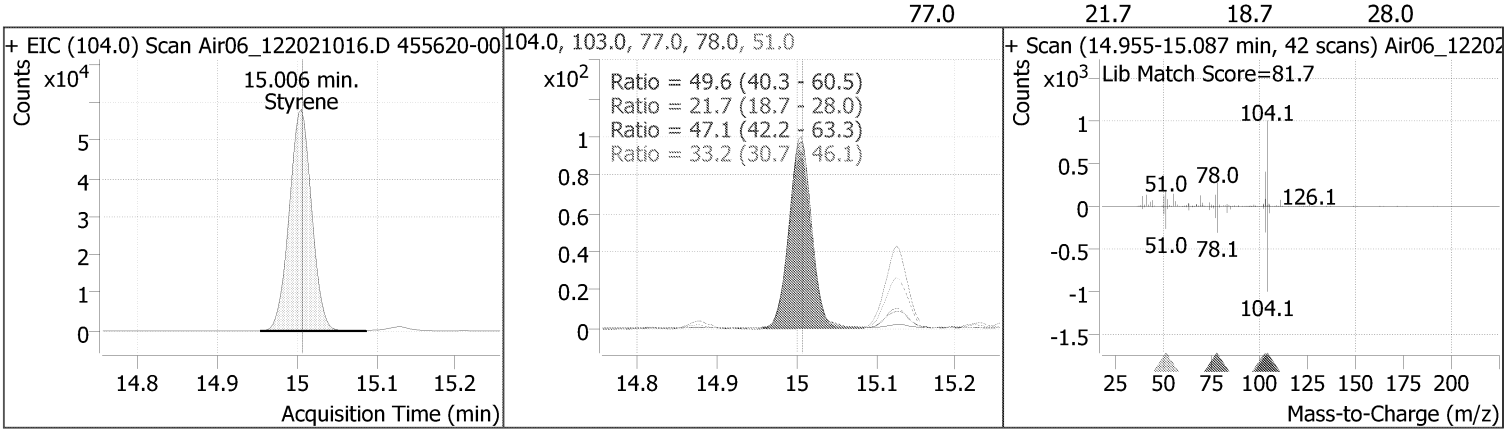
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.0011	14.70	-0.01	131	171.0	96.6	41.2	61.9
					175.0	71.1	39.4	59.1
					79.0		17.7	26.5
					93.0	109.1	16.1	24.1
					91.0		15.7	23.6



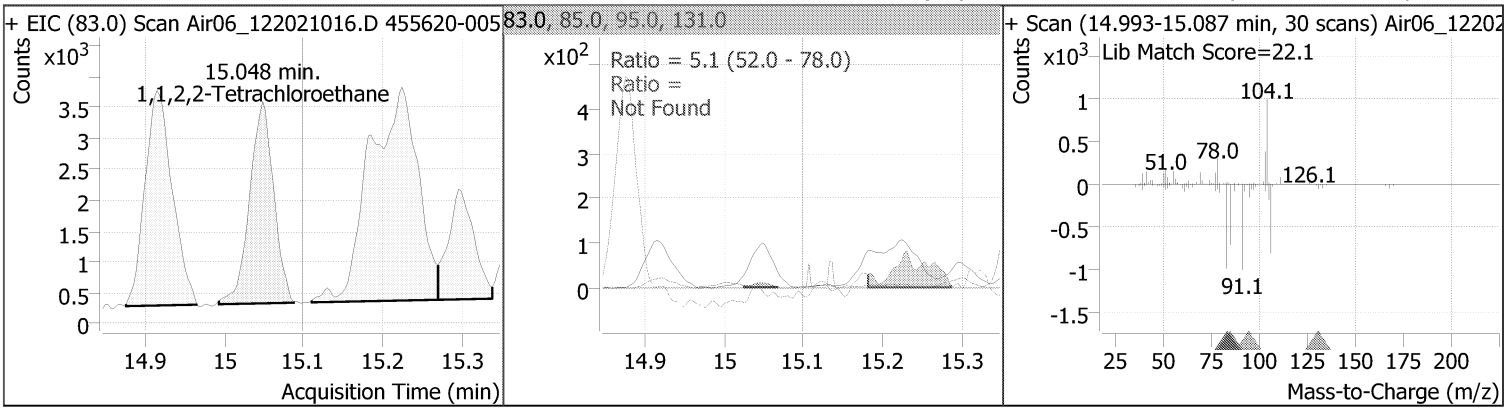




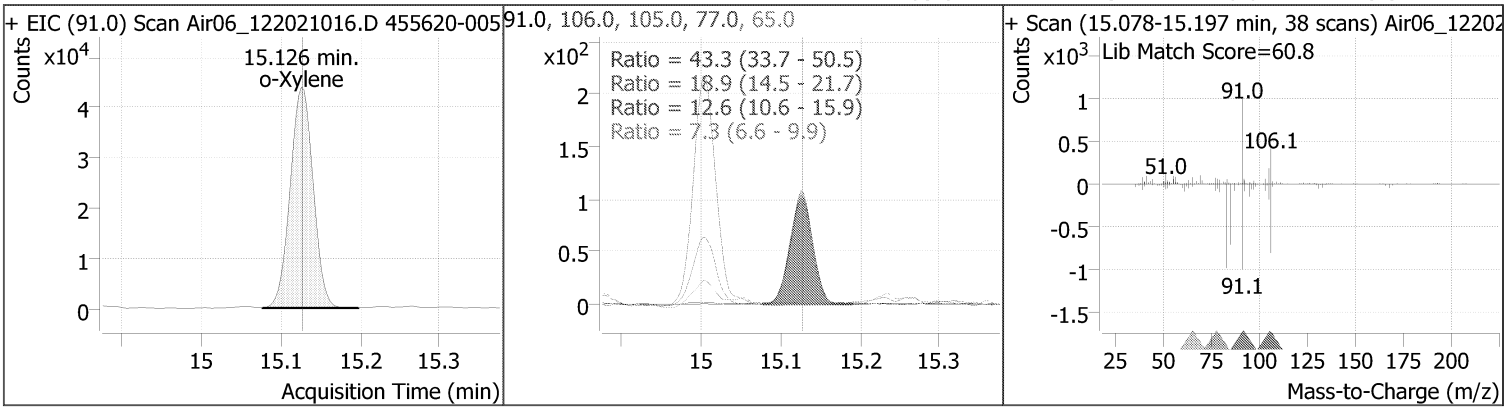
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	1.1613	15.01	0.00	113701	78.0	47.1	42.2	63.3
					103.0	49.6	40.3	60.5
					51.0	33.2	30.7	46.1
					77.0	21.7	18.7	28.0



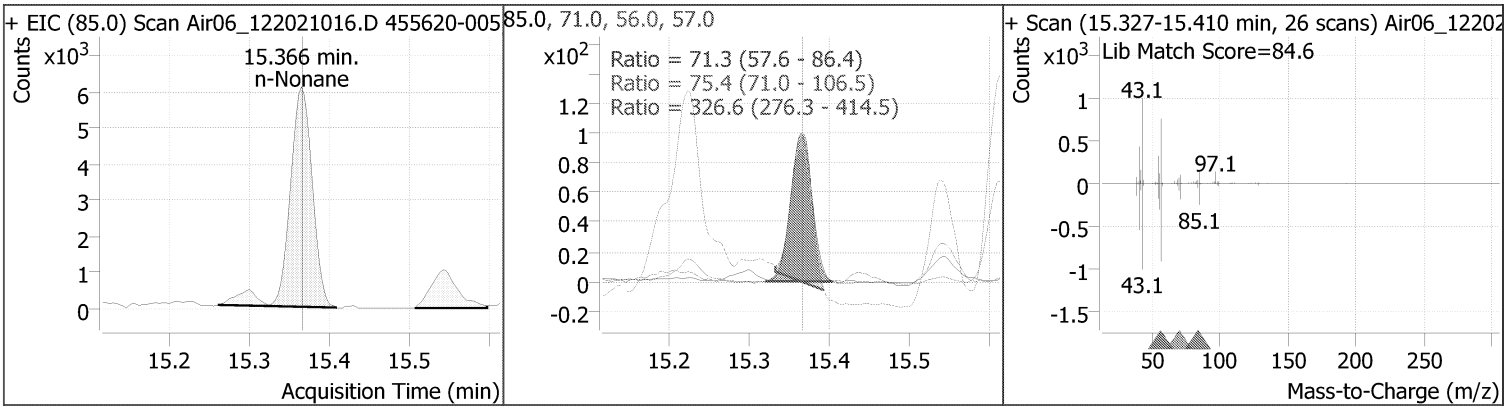
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.0653	15.05	-0.05	6845	85.0	5.1	52.0	78.0
					95.0		16.0	24.0
					131.0		8.4	12.6



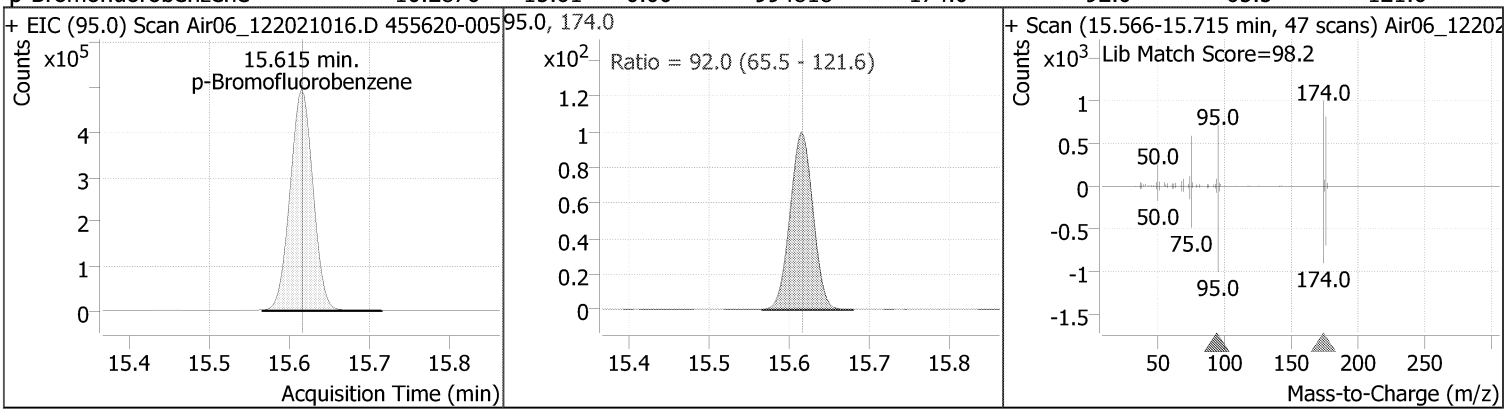
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.5803	15.13	0.00	88041	106.0	43.3	33.7	50.5
					105.0	18.9	14.5	21.7
					77.0	12.6	10.6	15.9
					65.0	7.3	6.6	9.9



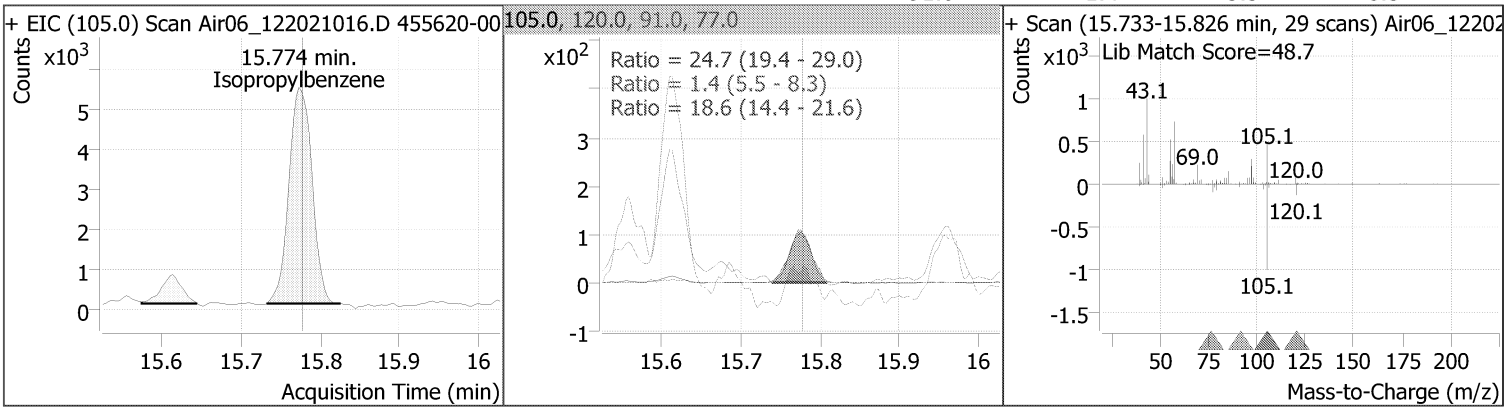
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	0.3712	15.37	0.00	11487	57.0	326.6	276.3	414.5
					56.0	75.4	71.0	106.5
					71.0	71.3	57.6	86.4



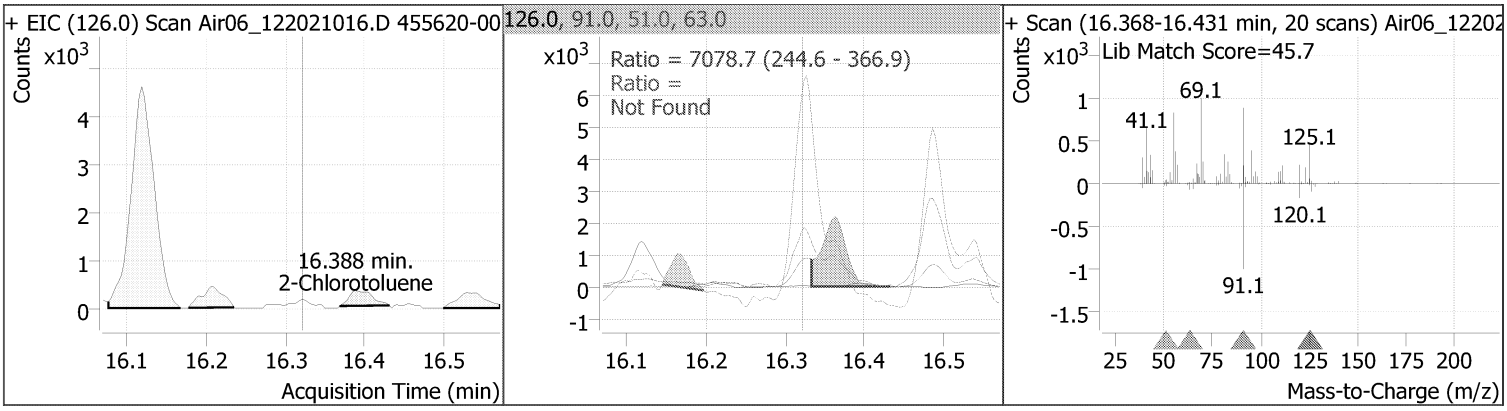
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.2876	15.61	0.00	994818	174.0	92.0	65.5	121.6



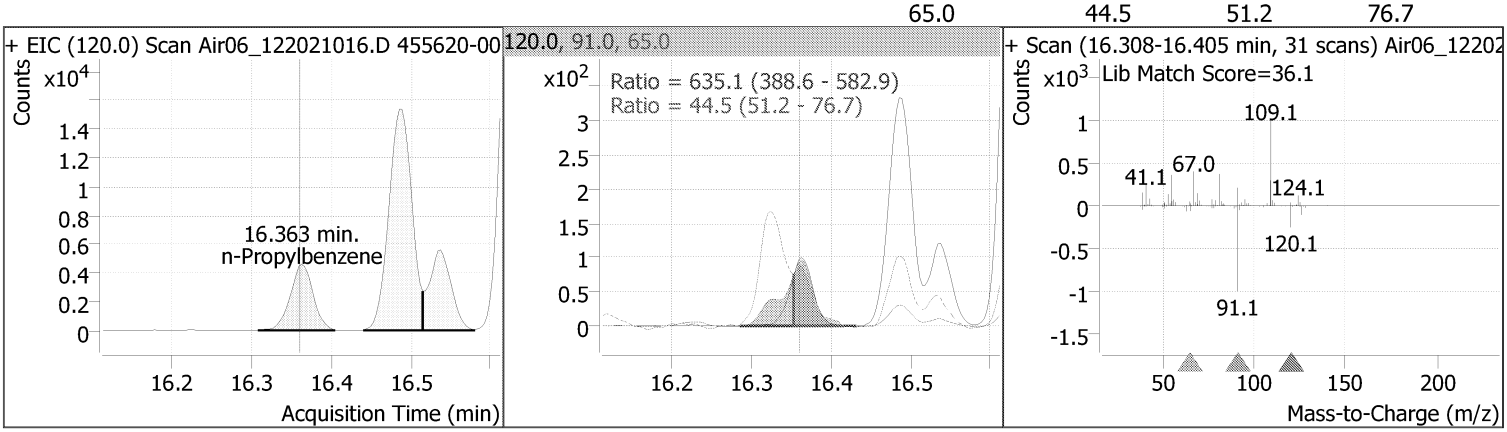
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.0530	15.77	-0.01	10919	120.0	24.7	19.4	29.0
					77.0	18.6	14.4	21.6
					91.0	1.4	5.5	8.3



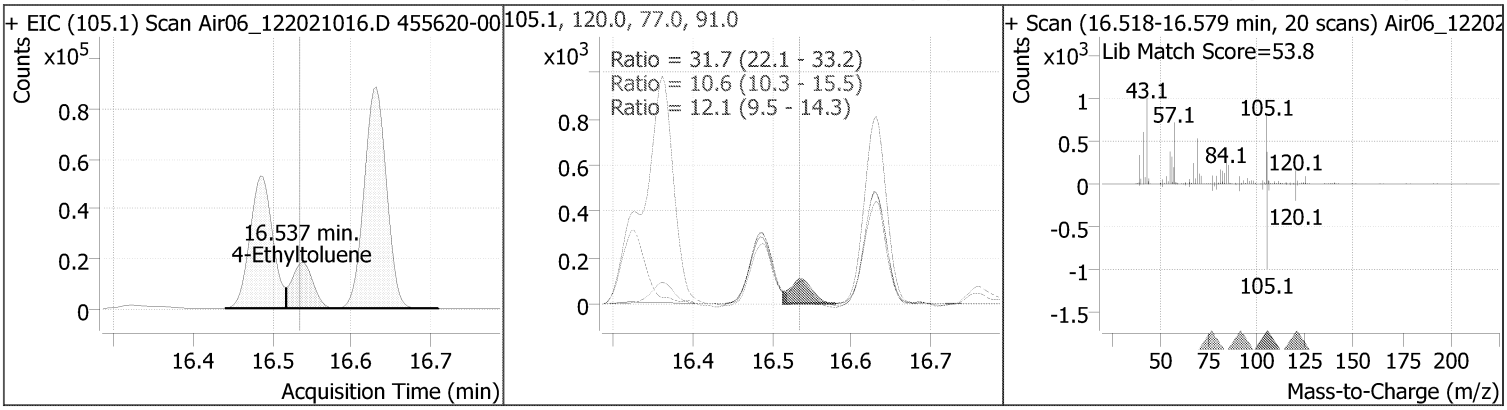
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	0.0142	16.39	0.06	654	91.0	7078.7	244.6	366.9
					63.0		50.0	74.9
					51.0		17.6	26.3



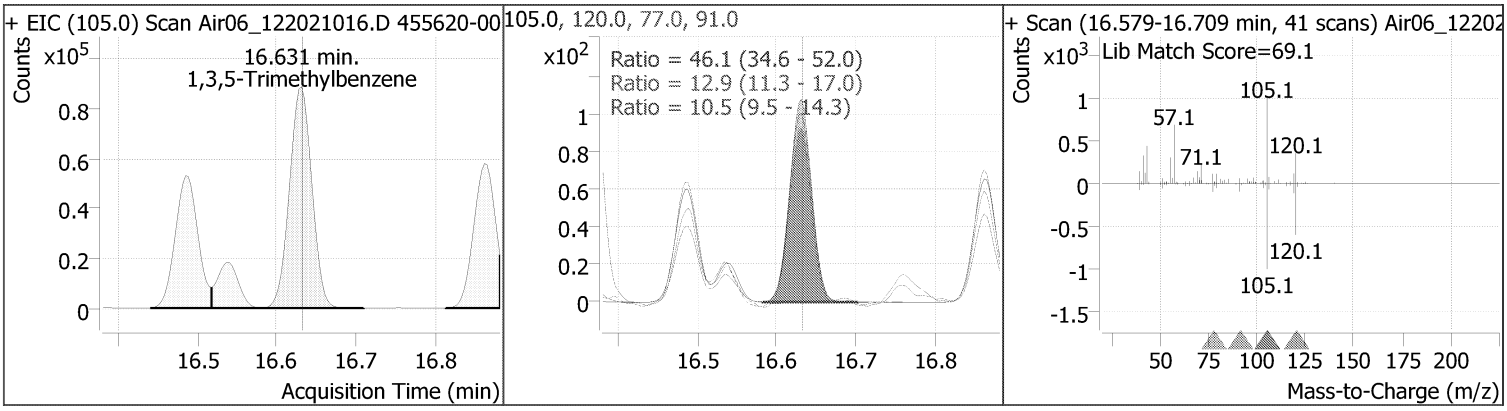
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.1782	16.36	0.00	9239	91.0	635.1	388.6	582.9
					65.0	44.5	51.2	76.7



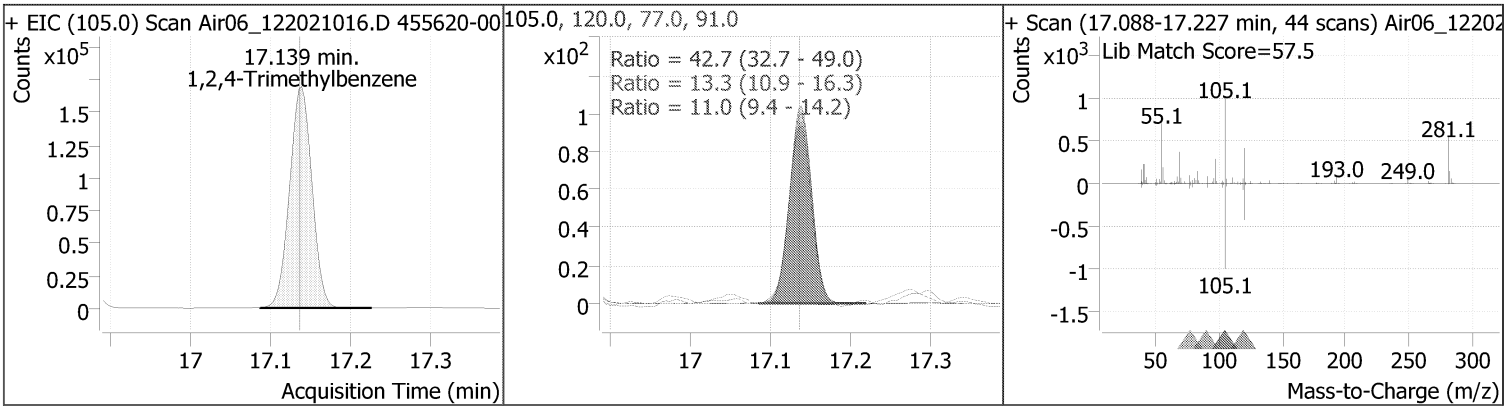
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.1738	16.54	0.00	33978	120.0	31.7	22.1	33.2
					77.0	10.6	10.3	15.5
					91.0	12.1	9.5	14.3



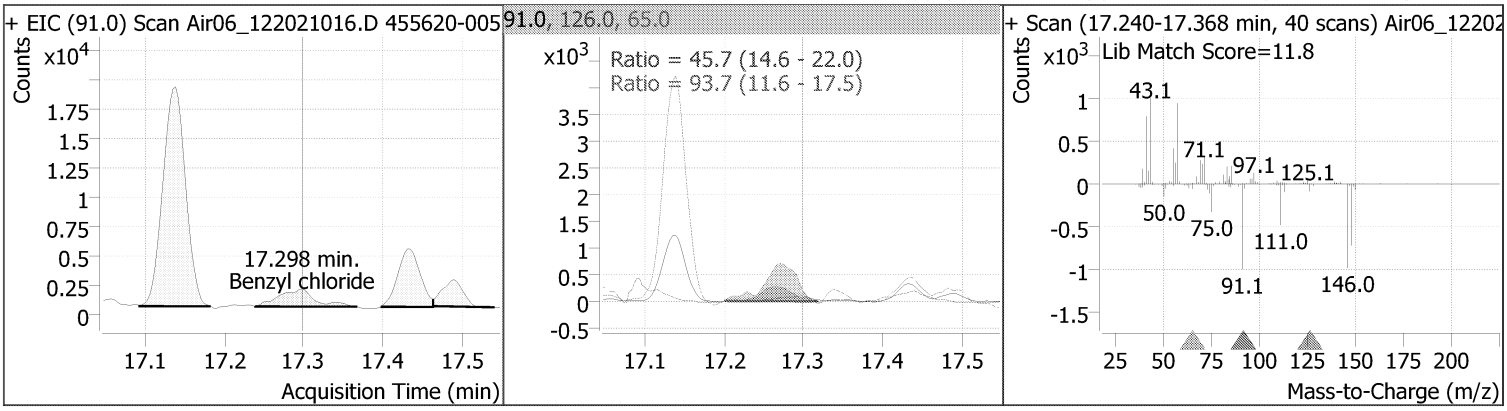
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.9730	16.63	0.00	173223	120.0	46.1	34.6	52.0
					77.0	12.9	11.3	17.0
					91.0	10.5	9.5	14.3



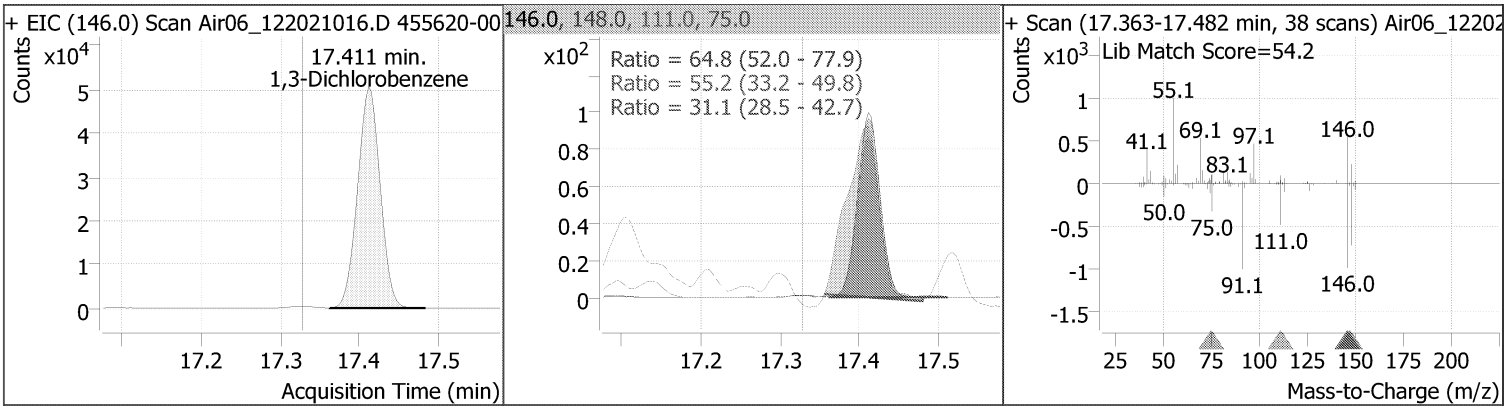
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	1.9916	17.14	0.00	331615	120.0	42.7	32.7	49.0
					77.0	13.3	10.9	16.3
					91.0	11.0	9.4	14.2



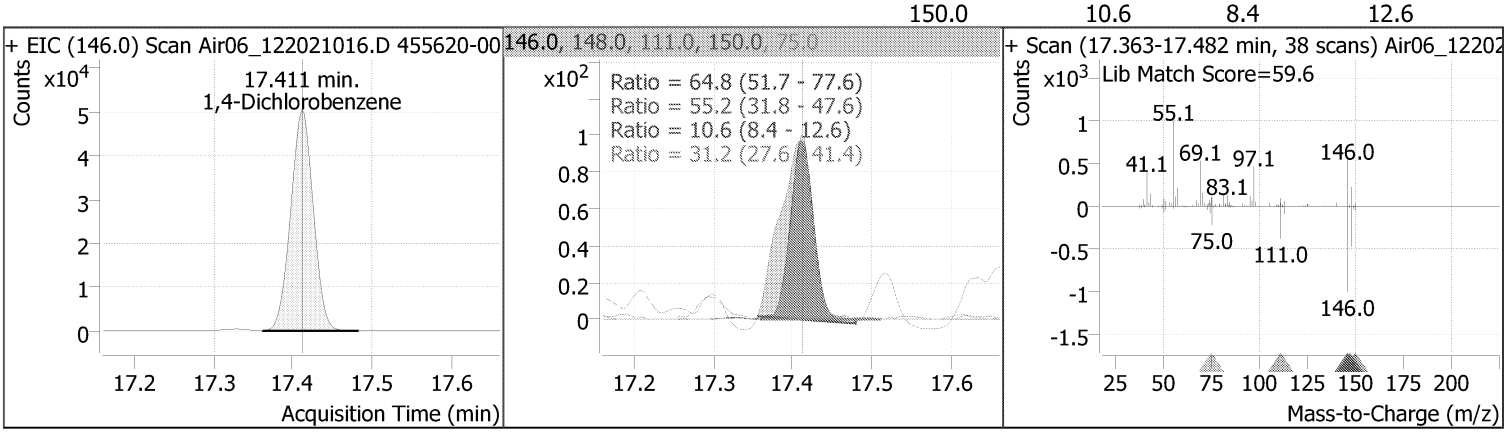
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.0330	17.30	0.00	4737	126.0	45.7	14.6	22.0
					65.0	93.7	11.6	17.5



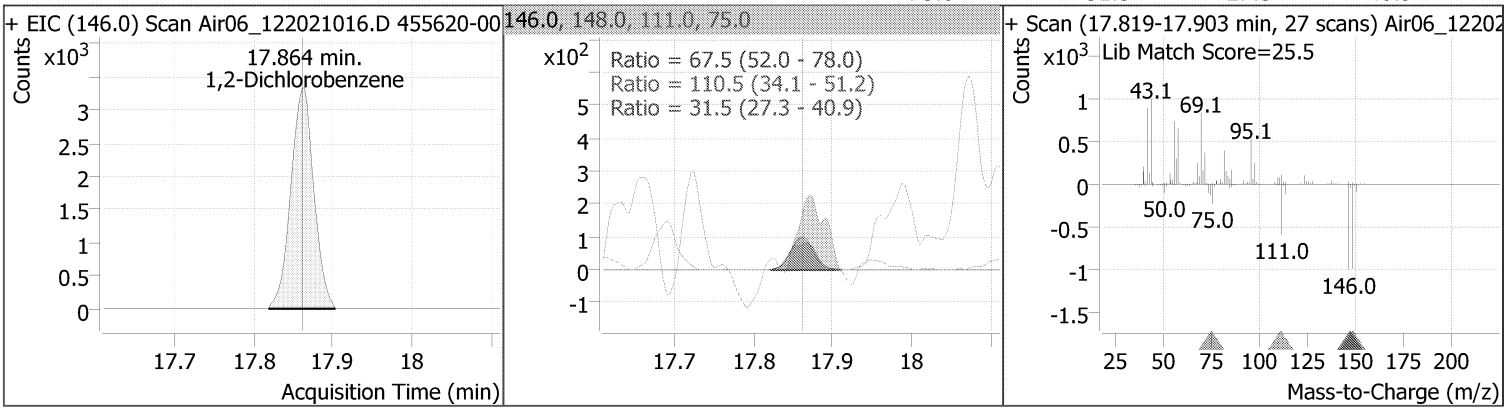
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.8675	17.41	0.08	99913	148.0	64.8	52.0	77.9
					111.0	55.2	33.2	49.8
					75.0	31.1	28.5	42.7



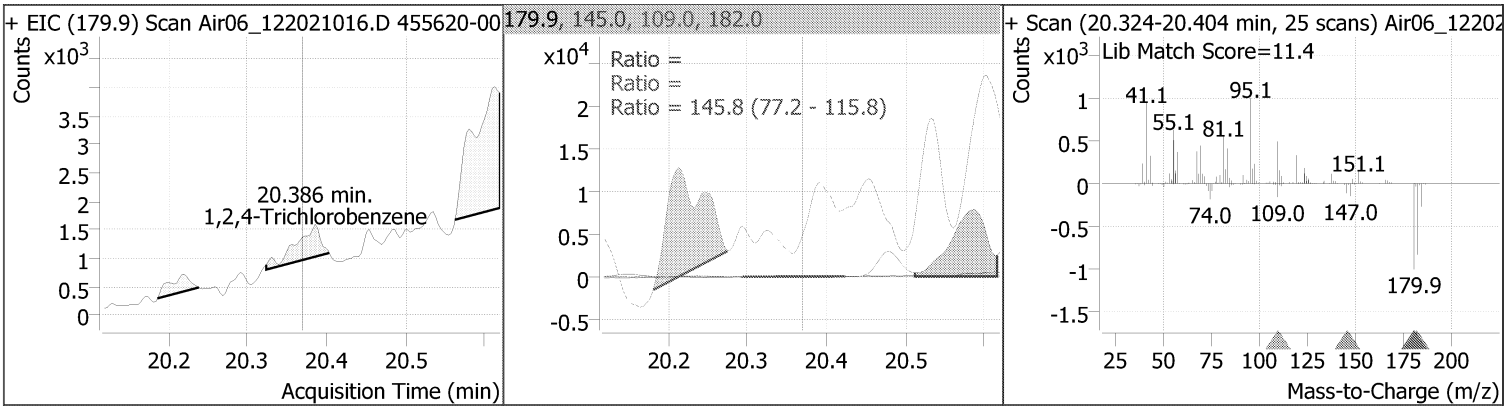
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.8789	17.41	0.00	99913	148.0	64.8	51.7	77.6
					111.0	55.2	31.8	47.6
					75.0	31.2	27.6	41.4
					150.0	10.6	8.4	12.6



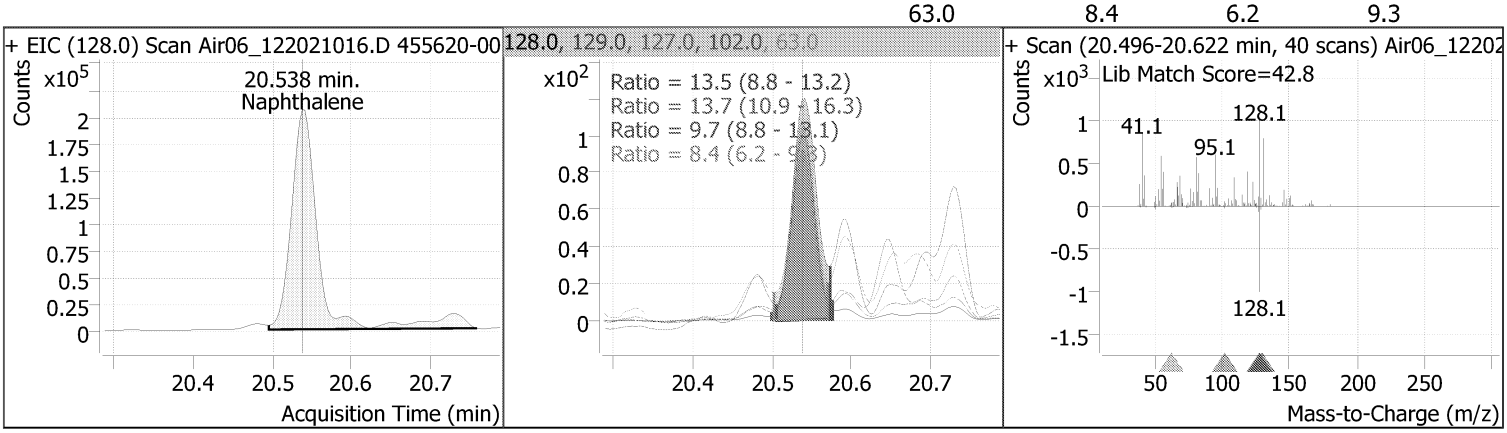
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.0604	17.86	0.00	6696	148.0	67.5	52.0	78.0
					111.0	110.5	34.1	51.2
					75.0	31.5	27.3	40.9



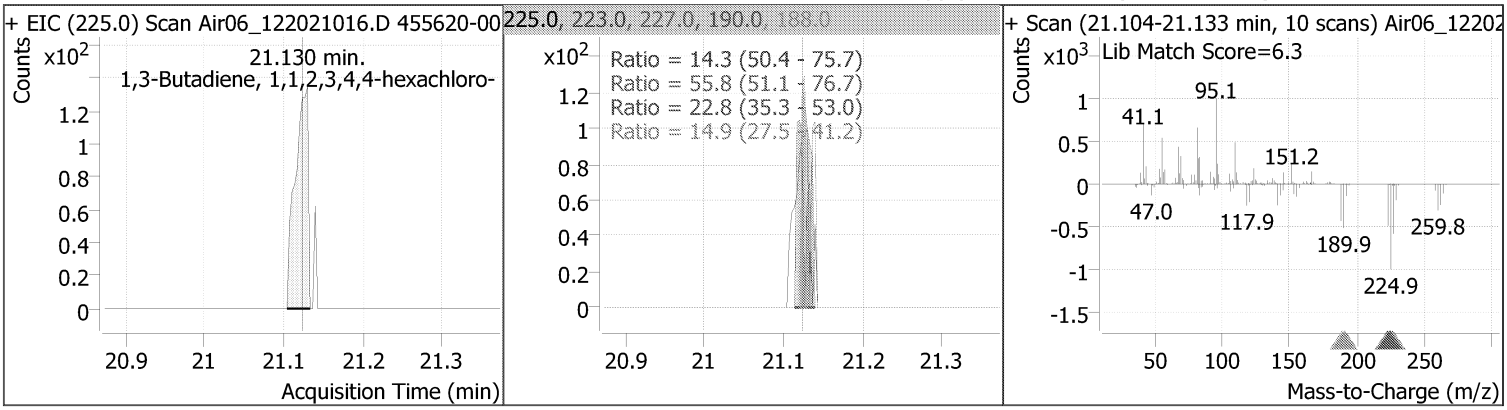
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.0157	20.39	0.01	1237	182.0	145.8	77.2	115.8
					145.0		22.3	33.5
					109.0		18.8	28.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	3.5946	20.54	0.00	440719	127.0	13.7	10.9	16.3
					129.0	13.5	8.8	13.2
					102.0	9.7	8.8	13.1
					63.0	8.4	6.2	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.0012	21.13	0.00	153	227.0	55.8	51.1	76.7
					223.0	14.3	50.4	75.7
					190.0	22.8	35.3	53.0
					188.0	14.9	27.5	41.2



Library Search Results - NonTarget Hits with Details

Agilent Technologies

Batch Path	D:\MassHunter\GCMS\1\data\2021\122021		
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Analyst Name	003AIRMS06	**Analysis Time**	1/4/2022 11:18:48 AM
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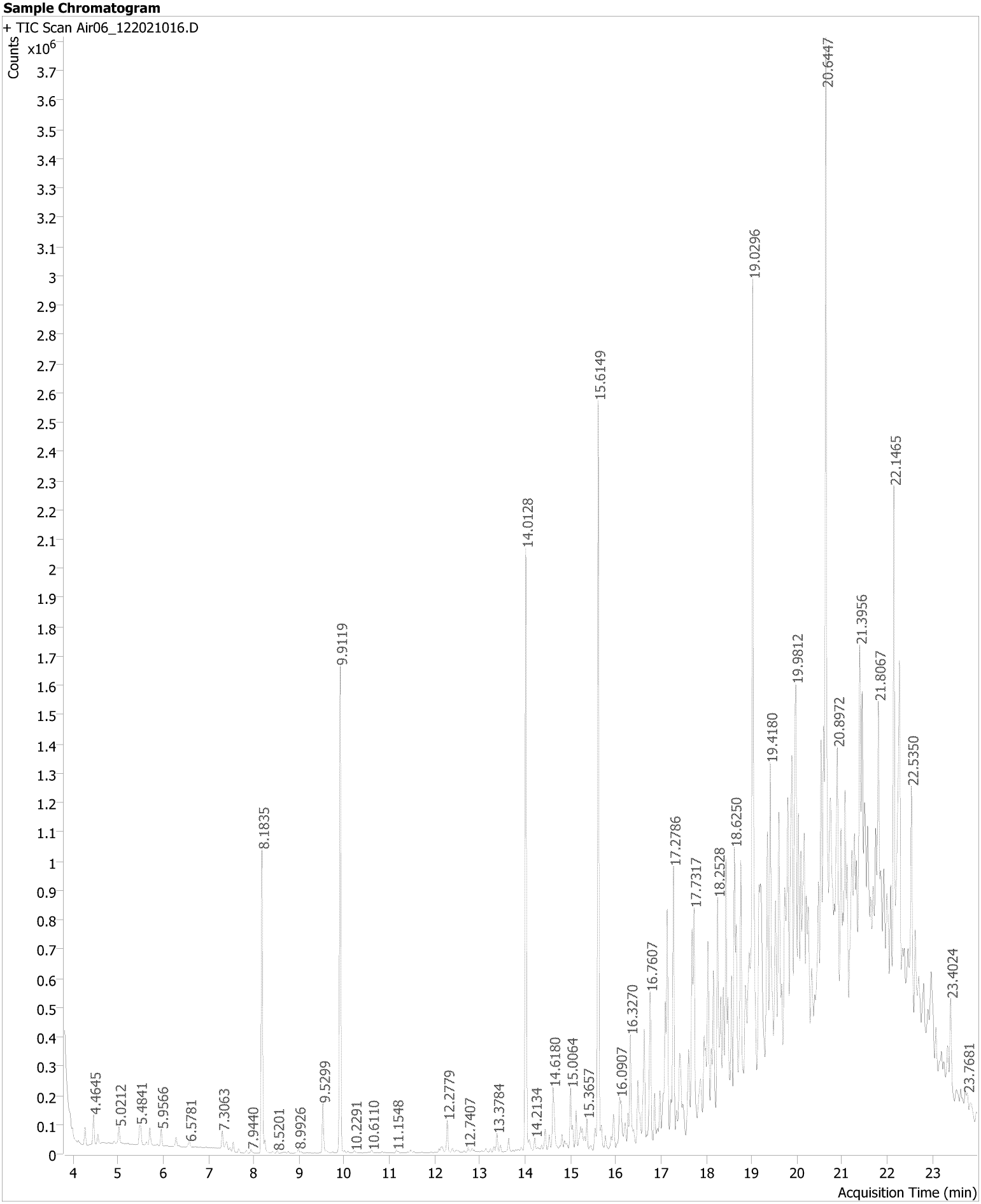
Sample Name	455620-005,280281,2x,PDF:1,C10057	**Type**	Sample
Acq. Method File	TO15_Acq_013120_1	**Acq. Method Path**	D:\MassHunter\GCMS\1\methods\
Acq. Date-Time	12/20/2021 11:45:31 PM	**Acq. Operator**	ZNZ/DJL/LJB
Instrument Name	Air-MS-06	**Dil.**	1

Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
3.9952	Dichlorodifluoromethane	75-71-8	CCl2F2	96511.1	94.9	0.4296
4.2736	Isobutane	75-28-5	C4H10	102860.1	88.9	0.4579
4.4645	1-Propene, 2-methyl-	115-11-7	C4H8	196815.8	98.9	0.8761
4.5584	Butane	106-97-8	C4H10	61008.4	97.6	0.2716
4.9144	Ethyl Chloride	75-00-3	C2H5Cl	11658.7	89.0	0.0519
5.0212	Dimethyl ether	115-10-6	C2H6O	124805.3	88.9	0.5555
5.4841	Acetone	67-64-1	C3H6O	225260.5	94.0	1.003
5.6330	Trichloromonofluoromethane	75-69-4	CCl3F	21586.0	96.0	0.09608
5.7074	Isopropyl Alcohol	67-63-0	C3H8O	132973.8	97.9	0.5919
5.9566	Pentane	109-66-0	C5H12	116931.3	98.7	0.5205
6.2868	Methylene chloride	75-09-2	CH2Cl2	72839.4	75.3	0.3242
6.5781	Carbon disulfide	75-15-0	CS2	50406.0	89.9	0.2244
7.3063	Silanol, trimethyl-	1066-40-6	C3H10OSi	127741.7	97.6	0.5686
7.4034	Acetic acid, 2-ethylbutyl ester	10031-87-5	C8H16O2	63517.3	80.2	0.2827
7.4779	Pentane, 2-methyl-	107-83-5	C6H14	18898.5	94.7	0.08412
7.5491	Butanal	123-72-8	C4H8O	57395.7	98.9	0.2555
7.6688	2-Butanone	78-93-3	C4H8O	25008.0	96.4	0.1113
7.8372	Pentane, 3-methyl-	96-14-0	C6H14	19374.7	95.4	0.08624
7.9440	1-Pentene, 2-methyl-	763-29-1	C6H12	30425.9	95.7	0.1354
8.1835	Methane, bromochloro-	74-97-5	CH2BrCl	2246585.5	98.9	10
8.2482	Ethyl Acetate	141-78-6	C4H8O2	114060.6	79.3	0.5077
8.4198	2-Butene, 2,3-dimethyl-	563-79-1	C6H12	11816.3	94.5	0.0526
8.5201	2-Pentene, 3-methyl-, (E)-	616-12-6	C6H12	17650.0	87.3	0.07856
8.7661	2-Pentene, 3-methyl-, (Z)-	922-62-3	C6H12	11389.9	88.6	0.0507
8.9926	Cyclopentane, methyl-	96-37-7	C6H12	34567.1	92.0	0.1539
9.0444	Pentane, 2,3,3,4-tetramethyl-	16747-38-9	C9H20	13306.3	77.9	0.05923
9.5299	1-Butanol	71-36-3	C4H10O	373926.5	98.9	1.097
9.6109	Benzene	71-43-2	C6H6	28037.7	94.8	0.08228
9.9119	Benzene, 1,4-difluoro-	540-36-3	C6H4F2	3407787.3	99.5	10
10.0090	Hexane, 2-methyl-	591-76-4	C7H16	17163.7	80.4	0.05037
10.0834	Pentane, 2,3-dimethyl-	565-59-3	C7H16	12129.7	84.9	0.03559
10.2291	Hydroxylamine, O-(2-methylpropyl)-	5618-62-2	C4H11NO	17248.1	78.7	0.05061
10.6110	1-Hexene, 4-methyl-	3769-23-1	C7H14	19662.2	85.7	0.0577
11.1548	Pentane, 2,2,4-trimethyl-4-nitro-	5342-78-9	C8H17NO2	21520.2	84.4	0.06315
11.2001	2-Pentene, 3,4-dimethyl-, (Z)-	4914-91-4	C7H14	10701.9	78.5	0.0314
11.4687	Cyclohexane, methyl-	108-87-2	C7H14	23414.2	88.9	0.06871
12.0966	1-Pentanol	71-41-0	C5H12O	22858.9	90.7	0.05388
12.1711	Cyclopentene, 1,2,3-trimethyl-	473-91-6	C8H14	76201.0	89.2	0.1796
12.2779	Toluene	108-88-3	C7H8	235149.9	98.5	0.5543
12.3944	Cyclopentanone	120-92-3	C5H8O	32841.3	87.6	0.07741
12.4947	Pentane, 2-isocyano-2,4,4-trimethyl-	14542-93-9	C9H17N	30269.2	76.0	0.07135
12.7407	Hexanal	66-25-1	C6H12O	29810.0	88.7	0.07027
12.8281	Cyclohexane, 1,3-dimethyl-, cis-	638-04-0	C8H16	33266.9	86.6	0.07841
13.1324	2-Pentadecyn-1-ol	2834-00-6	C15H28O	27875.5	73.9	0.06571
13.2359	Octane	111-65-9	C8H18	18836.8	82.5	0.0444
13.3072	Cyclohexane, 1,2-dimethyl- (cis/trans)	583-57-3	C8H16	33534.1	92.5	0.07904
13.3784	Tetrachloroethylene	127-18-4	C2Cl4	140411.0	89.5	0.331
13.4560	Cyclopentene, 1,2,3-trimethyl-	473-91-6	C8H14	42679.7	87.2	0.1006
13.6373	Cyclotrisiloxane, hexamethyl-	541-05-9	C6H18O3Si3	98105.0	97.3	0.2312
13.9157	Heptane, 2,6-dimethyl-	1072-05-5	C9H20	19622.0	78.9	0.04625
14.0128	Chlorobenzene-d5	3114-55-4	C6D5Cl	4242447.4	95.9	10
14.0904	Cyclohexane, ethyl-	1678-91-7	C8H16	96167.6	82.1	0.2267
14.2134	Cyclohexane, 1,1,3-trimethyl-	3073-66-3	C9H18	76789.7	93.3	0.181
14.3656	6,6-Dimethylhepta-2,4-diene	1000195-03-3	C9H16	18675.0	86.2	0.04402
14.4432	Ethylbenzene	100-41-4	C8H10	139290.2	94.3	0.3283
14.5339	Cyclohexane, 1,2,4-trimethyl-	2234-75-5	C9H18	91027.4	92.8	0.2146
14.6180	o-Xylene	95-47-6	C8H10	643127.2	98.4	1.516
14.8155	Heptane, 4-(1-methylethyl)-	52896-87-4	C10H22	70275.5	85.3	0.1656
14.8737	Cyclohexene, 1,2-dimethyl-	1674-10-8	C8H14	29552.0	91.4	0.06966

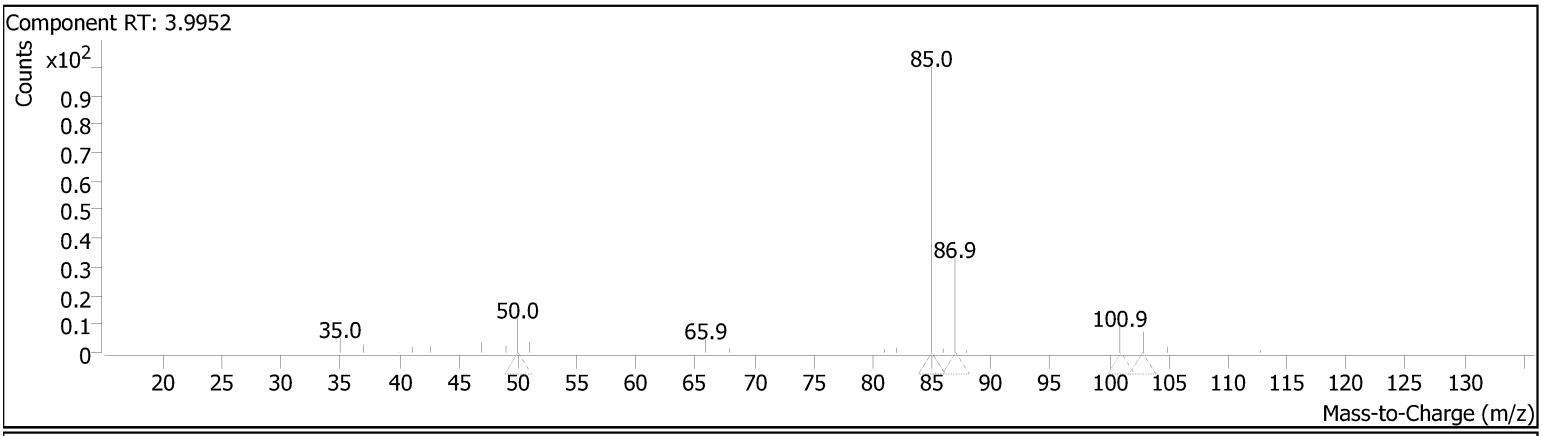
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
14.9158	1-Undecene, 8-methyl-	74630-40-3	C12H24	12438.6	73.0	0.02932
15.0064	Styrene	100-42-5	C8H8	390026.3	98.6	0.9193
15.0485	Cyclohexane, 1,2,4-trimethyl-	2234-75-5	C9H18	122283.9	92.9	0.2882
15.1262	o-Xylene	95-47-6	C8H10	218023.5	95.2	0.5139
15.2265	Cyclohexane, 1,1,2-trimethyl-	7094-26-0	C9H18	166897.6	90.3	0.3934
15.2621	1-Ethyl-4-methylcyclohexane	3728-56-1	C9H18	103259.8	77.6	0.2434
15.3204	Cyclohexane, 1-ethyl-4-methyl-, cis-	4926-78-7	C9H18	64181.4	81.8	0.1513
15.3657	Nonane	111-84-2	C9H20	155275.6	93.5	0.366
15.4434	2-Methylbicyclo[3.2.1]octane	1000215-28-0	C9H16	30989.7	77.2	0.07305
15.5469	3-Octene, 4-ethyl-	53966-51-1	C10H20	112102.8	84.9	0.2642
15.6149	Benzene, 1-bromo-3-fluoro-	1073-06-9	C6H4BrF	5099496.3	98.7	12.02
15.6829	2-Hexene, 3,4,4-trimethyl-	53941-19-8	C9H18	129677.3	78.3	0.3057
15.7735	Hydratropic acid, isohexyl ester	1000415-06-2	C15H22O2	59500.6	70.8	0.1403
15.9030	Octane, 2,5-dimethyl-	15869-89-3	C10H22	38326.0	89.1	0.09034
15.9548	Cyclohexane, 1-propenyl-	5364-83-0	C9H16	226202.3	91.3	0.5332
16.0907	1-Decene, 4-methyl-	13151-29-6	C11H22	120745.1	90.9	0.2846
16.1166	Cyclohexane, propyl-	1678-92-8	C9H18	88288.4	82.1	0.2081
16.2105	Cyclohexane, 1,1,4,4-tetramethyl-	2223-52-1	C10H20	102068.4	79.7	0.2406
16.2720	Heptane, 3-ethyl-2-methyl-	14676-29-0	C10H22	59225.5	90.6	0.1396
16.3270	1,2,4,4-Tetramethylcyclopentene	65378-76-9	C9H16	674280.9	94.2	1.589
16.3950	Cyclohexaneethanol, .beta.,4-dimethyl-, trans-	5113-94-0	C10H20O	22913.0	79.1	0.05401
16.4921	Benzene, 1-ethyl-2-methyl-	611-14-3	C9H12	584824.0	82.8	1.379
16.6312	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	837746.2	89.1	1.975
16.7607	Cyclohexane, 1,1,2,3-tetramethyl-	6783-92-2	C10H20	901795.9	95.7	2.126
16.8610	Benzene, 1-ethyl-2-methyl-	611-14-3	C9H12	194920.8	91.4	0.4595
16.9808	Cyclododecanemethanol	1892-12-2	C13H26O	172923.1	87.6	0.4076
17.0973	Cyclotetrasiloxane, octamethyl-	556-67-2	C8H24O4Si4	656004.9	95.4	1.546
17.1394	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	1288790.7	84.6	3.038
17.2786	Decane	124-18-5	C10H22	1500908.0	93.7	3.538
17.3465	5-t-Butyl-cycloheptene	1000189-30-7	C11H20	63053.1	85.2	0.1486
17.4177	Benzene, 1,3-dichloro-	541-73-1	C6H4Cl2	504647.9	84.3	1.19
17.6119	Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	C10H14	413315.1	78.8	0.9742
17.6896	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	1095080.9	89.0	2.581
17.7317	Decane, 4-methyl-	2847-72-5	C11H24	1212740.2	96.4	2.859
17.8774	cis-Decalin, 2-syn-methyl-	1000155-85-6	C11H20	347334.2	80.8	0.8187
17.9550	Decyl isobutyl carbonate	959226-07-4	C15H30O3	483536.4	79.1	1.14
18.0392	Cyclohexane, butyl-	1678-93-9	C10H20	1014693.9	84.3	2.392
18.1136	trans-p-mentha-1(7),8-dien-2-ol	21391-84-4	C10H16O	181615.9	79.1	0.4281
18.1622	Benzene, 1-methyl-2-propyl-	1074-17-5	C10H14	670705.0	87.4	1.581
18.2528	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	1310027.7	93.7	3.088
18.3208	Decane, 5-methyl-	13151-35-4	C11H24	592276.7	86.3	1.396
18.3790	Decane, 4-methyl-	2847-72-5	C11H24	590196.7	87.0	1.391
18.4373	1-Octanol, 2-butyl-	3913-02-8	C12H26O	1421852.7	90.1	3.351
18.4794	Benzene, 1-methyl-4-propyl-	1074-55-1	C10H14	478398.2	96.5	1.128
18.5603	Decane, 3-methyl-	13151-34-3	C11H24	515831.4	94.6	1.216
18.6250	Cyclohexane, 1-methyl-3-(1-methylethenyl)-, cis-	24399-15-3	C10H18	1494697.1	76.9	3.523
18.6639	Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	C10H14	993226.1	94.1	2.341
18.7674	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	1624874.7	89.3	3.83
18.8678	1H-Indene, 2,3-dihydro-4-methyl-	824-22-6	C10H12	769400.8	75.7	1.814
18.9519	Cyclohexane, 1-isopropyl-1-methyl-	16580-26-0	C10H20	1239088.2	87.0	2.921
19.0296	Undecane	1120-21-4	C11H24	7023932.1	95.2	16.56
19.1688	Carveol	99-48-9	C10H16O	1138963.6	80.0	2.685
19.3533	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	1957110.3	89.1	4.613
19.4180	Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	C10H14	2620273.9	86.7	6.176
19.5313	Decane, 3,7-dimethyl-	17312-54-8	C12H26	1482109.5	71.9	3.494
19.6090	Naphthalene, decahydro-2-methyl-	2958-76-1	C11H20	2293286.8	89.3	5.406
19.6672	Benzene, 1,3-diethyl-5-methyl-	2050-24-0	C11H16	411296.1	82.1	0.9695
19.7385	Benzene, 1,3-diethyl-5-methyl-	2050-24-0	C11H16	1508412.9	83.7	3.556
19.8064	Cyclohexane, pentyl-	4292-92-6	C11H22	2453710.8	77.0	5.784
19.8938	Naphthalene, decahydro-2-methyl-	2958-76-1	C11H20	3511401.6	93.5	8.277
19.9812	Benzene, 1-ethyl-3,5-dimethyl-	934-74-7	C10H14	4257492.9	89.6	10.04
20.0395	Benzene, 1-methyl-4-(1-methylpropyl)-	1595-16-0	C11H16	1863646.5	73.9	4.393
20.0945	Undecane, 2-methyl-	7045-71-8	C12H26	1352803.0	87.0	3.189
20.1657	Benzene, (1,2-dimethylpropyl)-	4481-30-5	C11H16	2509935.6	82.5	5.916
20.2142	Undecane, 3-methyl-	1002-43-3	C12H26	1041106.6	82.0	2.454
20.2596	Benzene, 1-methyl-4-(1-methylpropyl)-	1595-16-0	C11H16	1225145.0	90.9	2.888
20.3340	trans-2-Dodecen-1-ol, pentafluoropropionate	1000352-26-1	C15H23F5O2	709056.5	71.5	1.671
20.4829	Anisole, o-(1-ethylvinyl)-	18272-74-7	C11H14O	1719125.1	76.9	4.052
20.5412	Azulene	275-51-4	C10H8	2370517.9	70.5	5.588

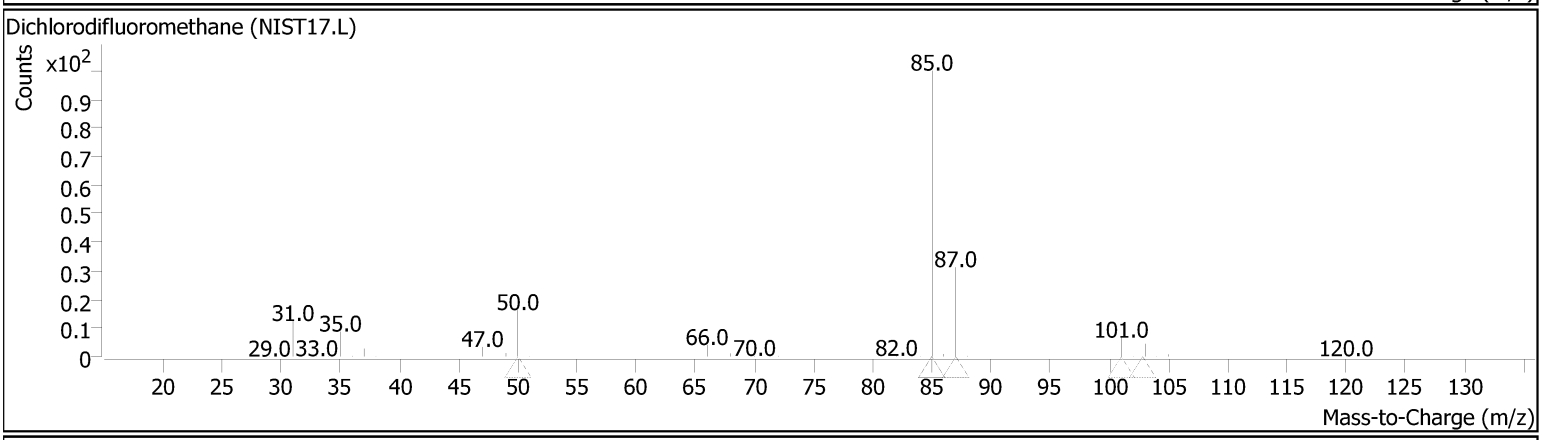
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
20.5962	7,10,10-Trimethyl-4-oxa-3,5-diazatricyclo[5.2.1.0(2,6)]deca-2,5-dien-3-one	20653-19-4	C10H14N2O2	2303407.6	72.3	5.429
20.6447	Dodecane	112-40-3	C12H26	8592631.4	86.0	20.25
20.7451	Naphthalene, decahydro-1,5-dimethyl-	66552-62-3	C12H22	4059660.7	87.2	9.569
20.8972	Undecane, 2,6-dimethyl-	17301-23-4	C13H28	3511720.6	88.4	8.278
20.9781	1H-Indene, 2,3-dihydro-1,1,5-trimethyl-	40650-41-7	C12H16	1745843.6	84.8	4.115
21.0687	Benzene, (1,3-dimethyl-2-butenyl)-	50704-01-3	C12H16	1992818.4	77.9	4.697
21.1140	Naphthalene, decahydro-1,1-dimethyl-	35431-04-0	C12H22	1276201.1	78.0	3.008
21.2209	Naphth[1,2-b]oxirene, decahydro-1a,7-dimethyl-	55976-08-4	C12H20O	2313517.7	81.8	5.453
21.2791	Benzene, 1-ethyl-4-(1-methylethyl)-	4218-48-8	C11H16	1706095.6	71.4	4.021
21.3956	Cyclohexane, 2-butyl-1,1,3-trimethyl-	54676-39-0	C13H26	3464053.1	75.7	8.165
21.6352	Undecane, 2,10-dimethyl-	17301-27-8	C13H28	1051793.8	70.3	2.479
21.6902	Quinoxaline-2(1H)-one, 5,6,7,8-tetrahydro-1-hydroxy-3-[2-oxo-2-(4-tolyl)ethyl]-, 4-oxide	1000295-63-8	C17H18N2O4	1182464.1	71.6	2.787
21.8067	Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	1680-51-9	C11H14	2967744.8	71.9	6.995
21.9944	2-Propenal, 3-(2,6,6-trimethyl-1-cyclohexen-1-yl)-	4951-40-0	C12H18O	1440640.8	70.7	3.396
22.1465	Tridecane	629-50-5	C13H28	3827696.1	84.4	9.022
22.2728	Naphthalene, 2-methyl-	91-57-6	C11H10	5031099.9	94.2	11.86
22.3375	Naphthalene, 1,2,3,4-tetrahydro-1,1,6-trimethyl-	475-03-6	C13H18	444514.9	77.5	1.048
22.5350	Naphthalene, 2-methyl-	91-57-6	C11H10	1740445.9	92.6	4.102
22.6191	Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	13065-07-1	C12H16	451628.0	82.0	1.065
22.6968	Benzene, cyclohexyl-	827-52-1	C12H16	139889.7	72.3	0.3297
23.0787	Hexadecane, 1-chloro-	4860-03-1	C16H33Cl	184596.1	70.0	0.4351
23.3377	Phytol	150-86-7	C20H40O	175361.2	76.0	0.4133
23.4024	1,3-Cyclododecadiene, (E,Z)-	1129-92-6	C12H20	505666.9	80.5	1.192
23.7681	Naphthalene, 1-ethyl-	1127-76-0	C12H12	38286.0	70.9	0.09025
23.8426	1H-Indene, octahydro-2,2,4,4,7,7-hexamethyl-, trans-	54832-83-6	C15H28	146545.4	77.7	0.3454
23.9720	Benzene, 2,5-cyclohexadien-1-yl-	4794-05-2	C12H12	16327.1	75.3	0.03849

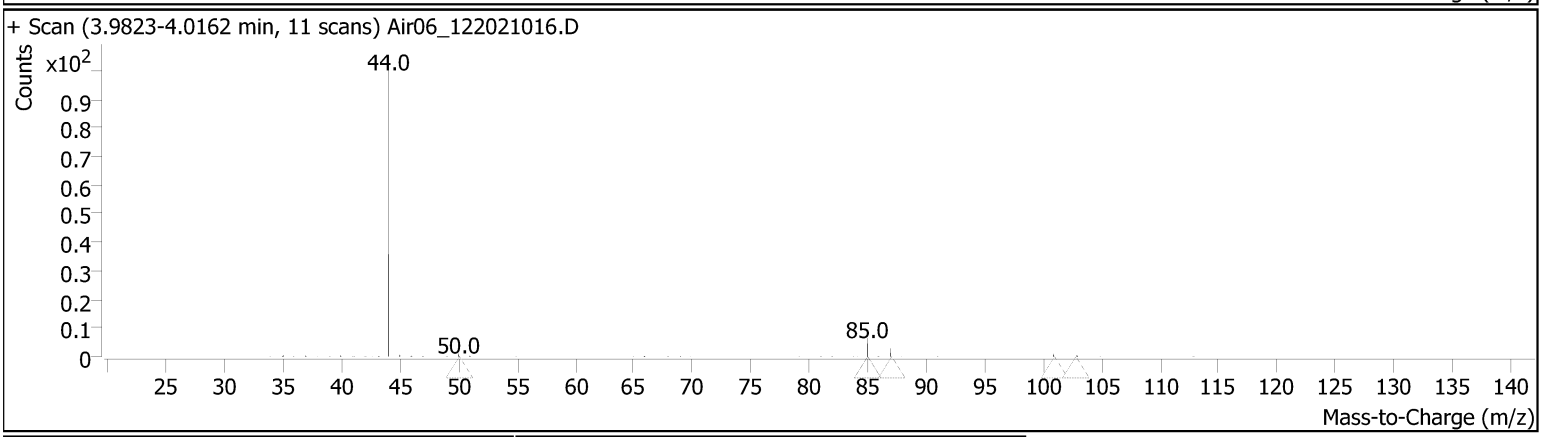
Sample Chromatogram

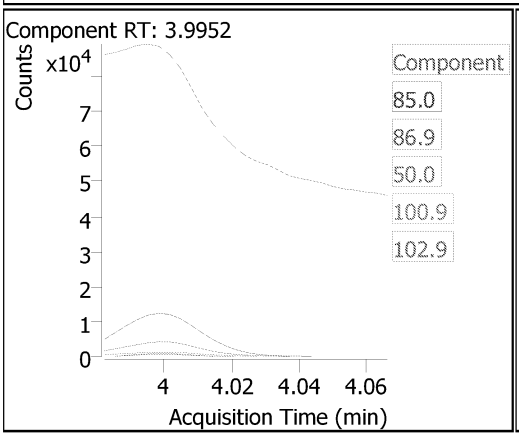


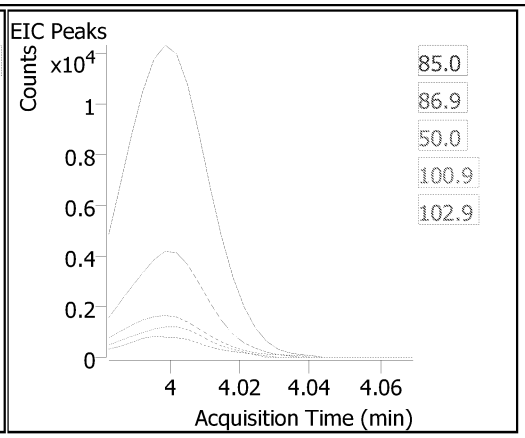
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
3.9952	Dichlorodifluoromethane	96511.1	94.9	75-71-8	CCl2F2	0.4296

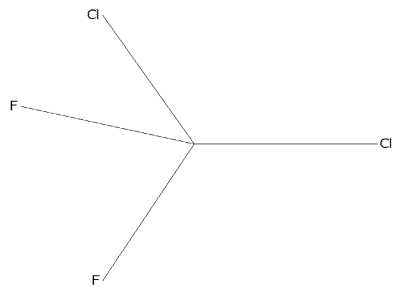




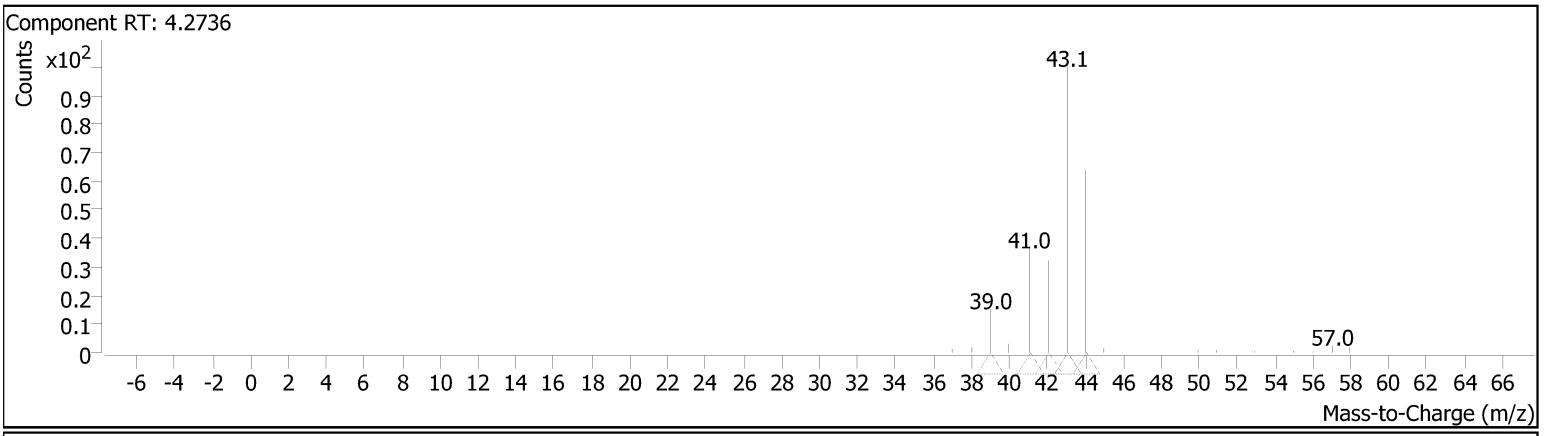


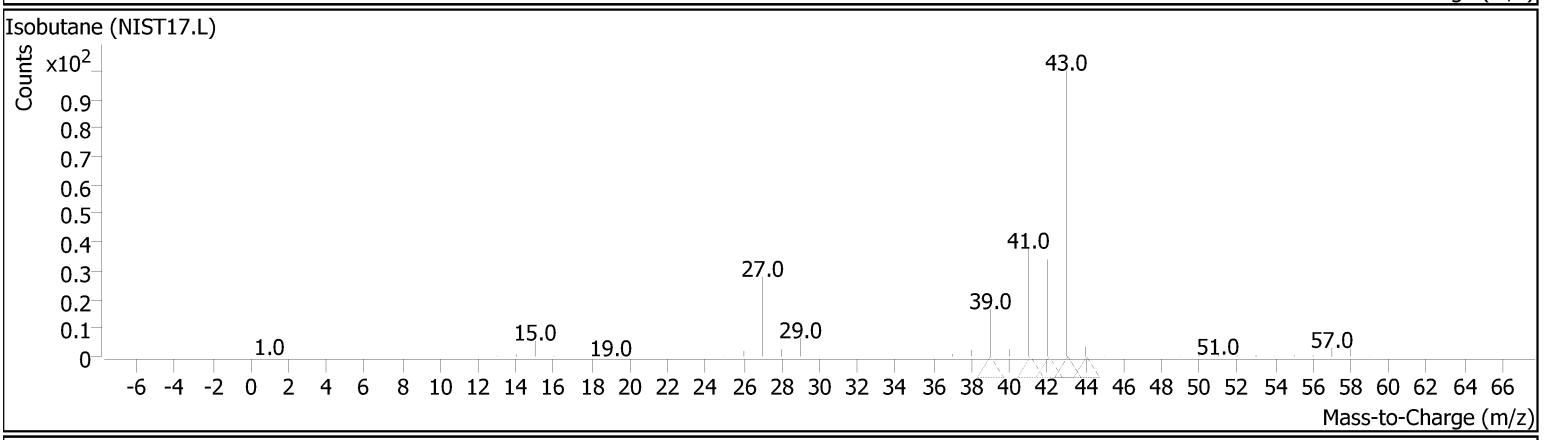


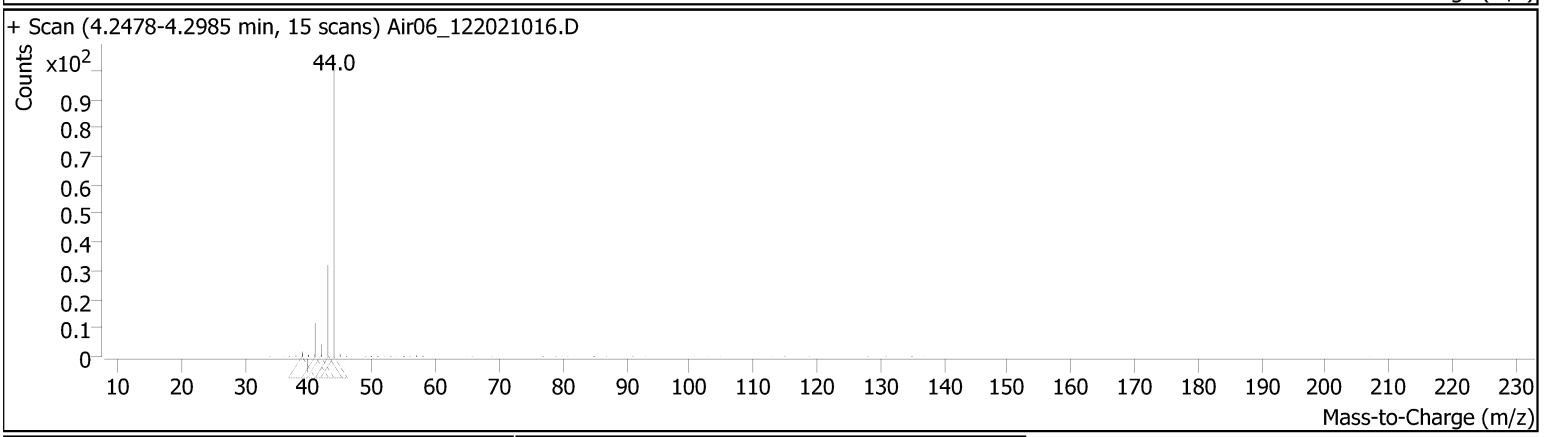


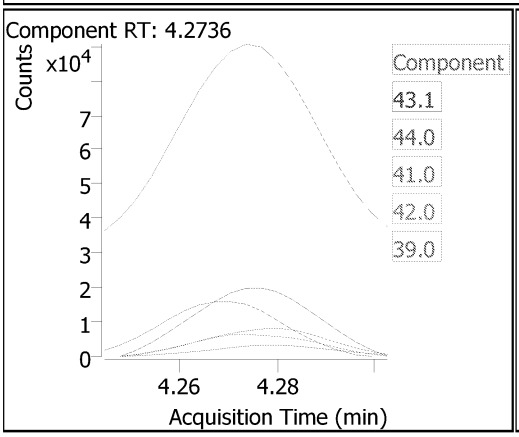


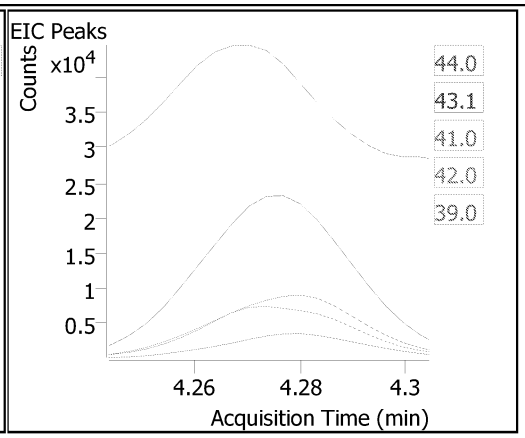
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.2736	Isobutane	102860.1	88.9	75-28-5	C4H10	0.4579

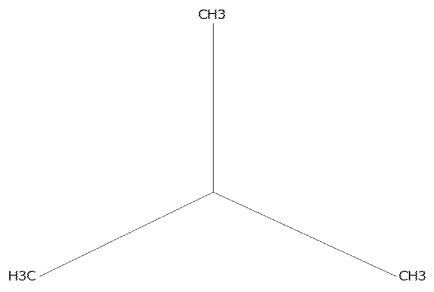












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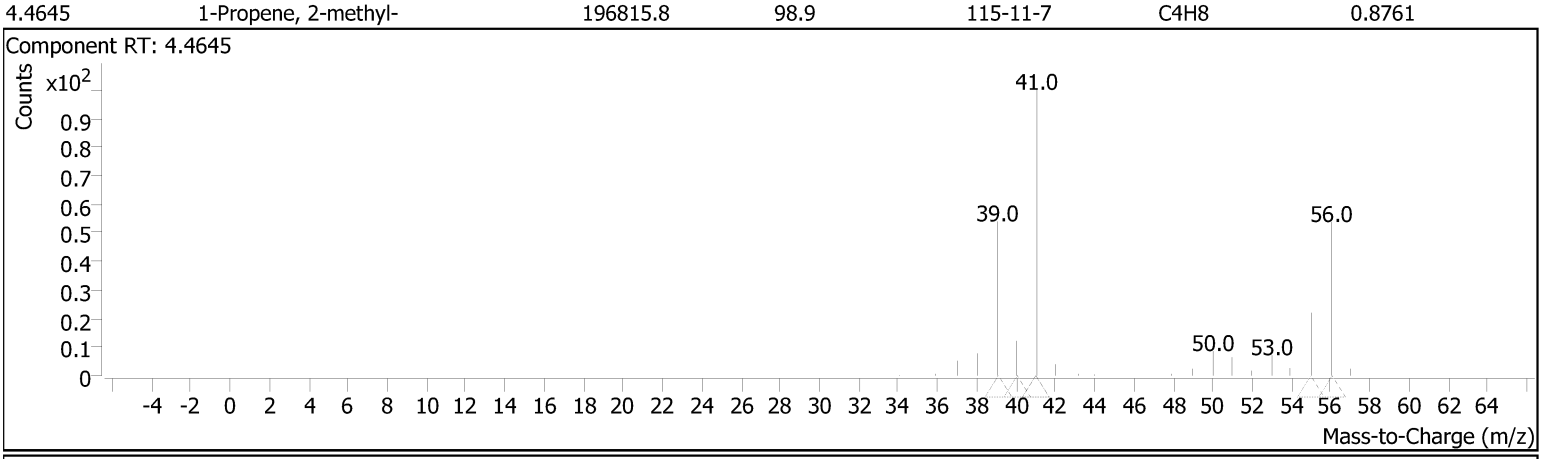
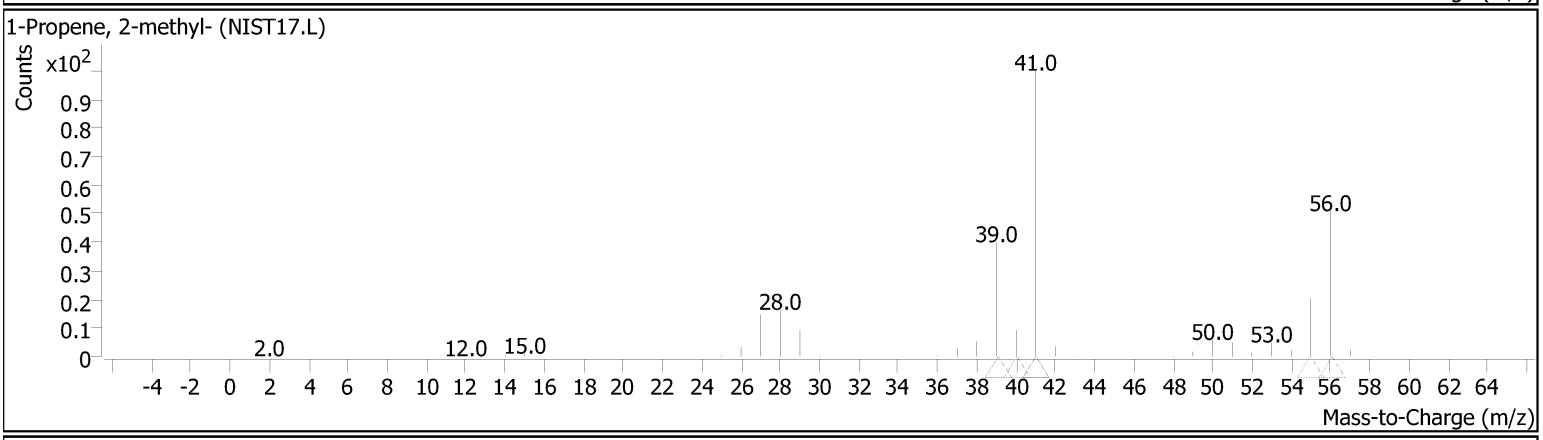
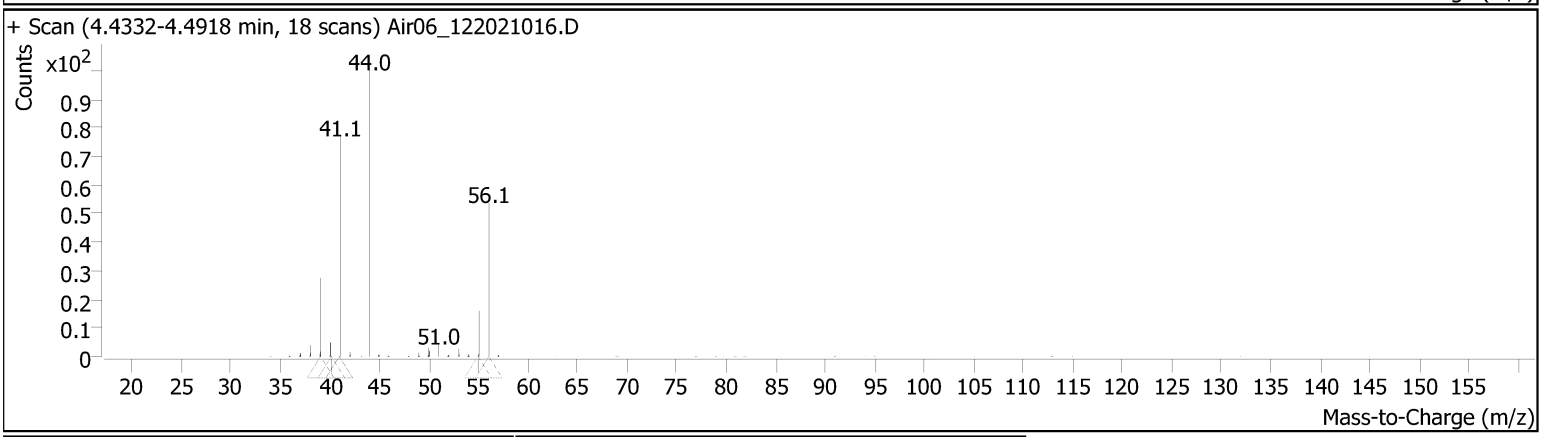
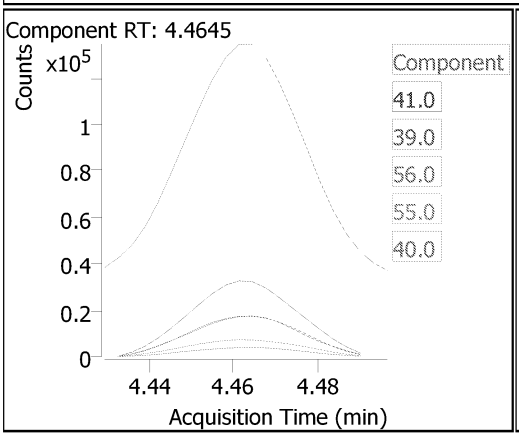
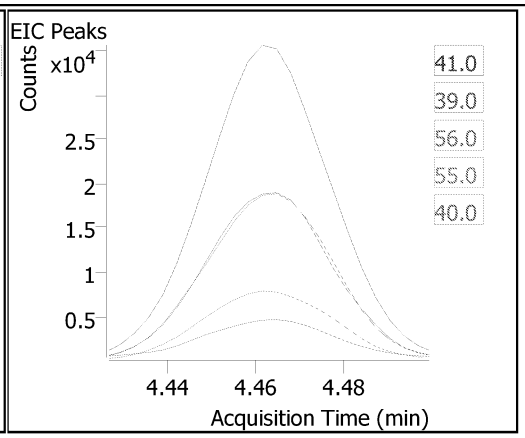
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.4645	1-Propene, 2-methyl-	196815.8	98.9	115-11-7	C4H8	0.8761

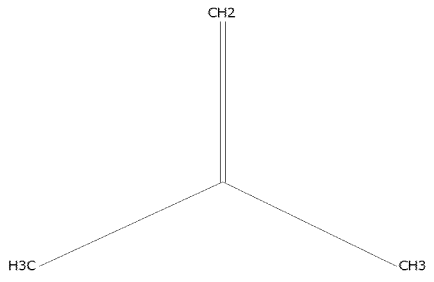




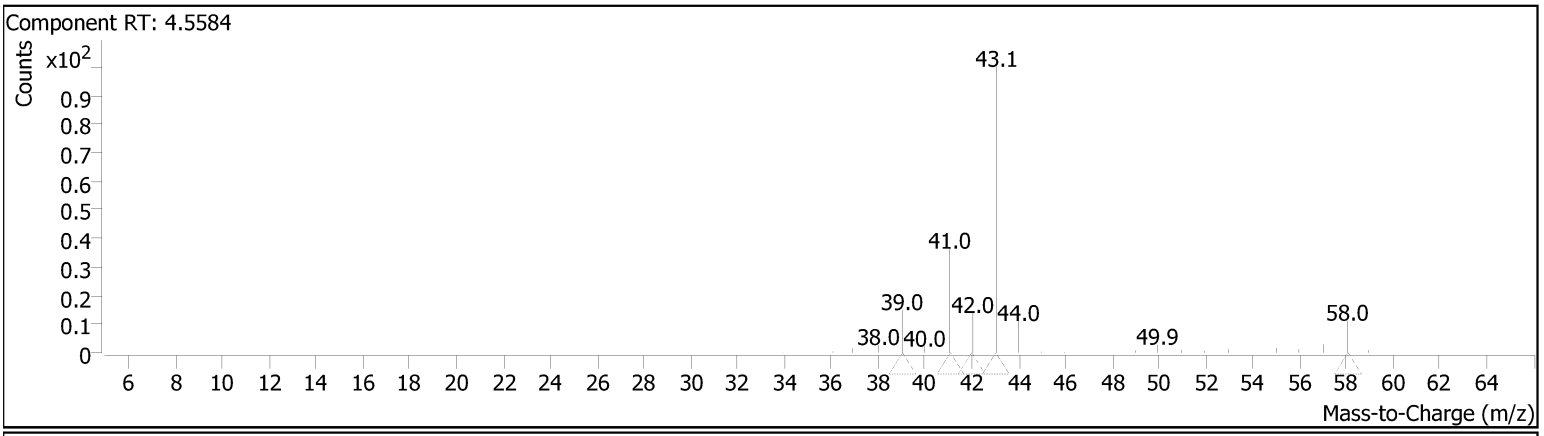


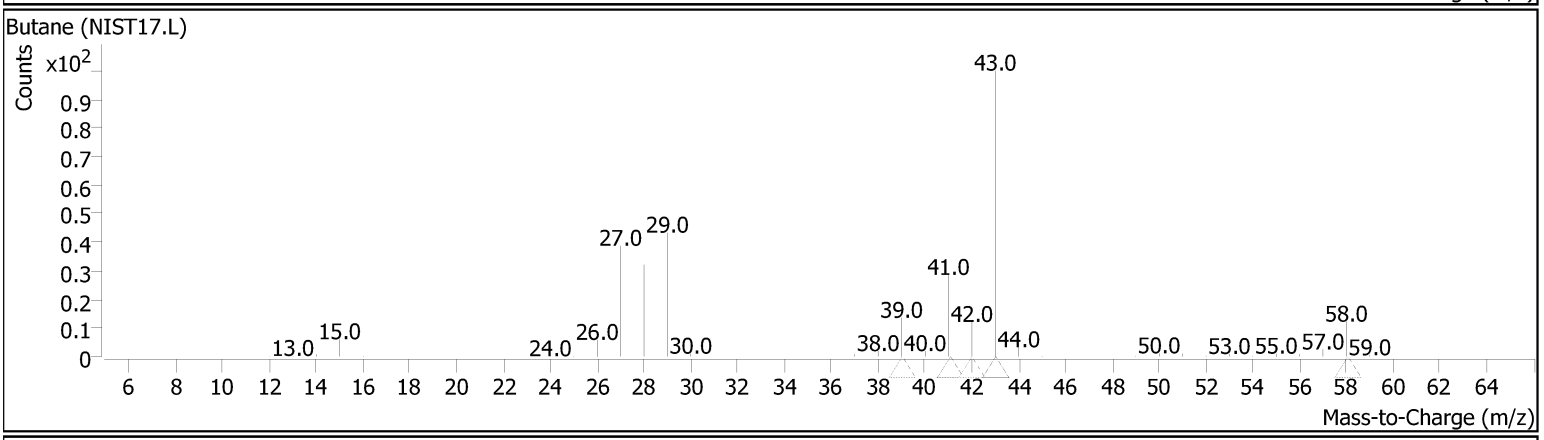


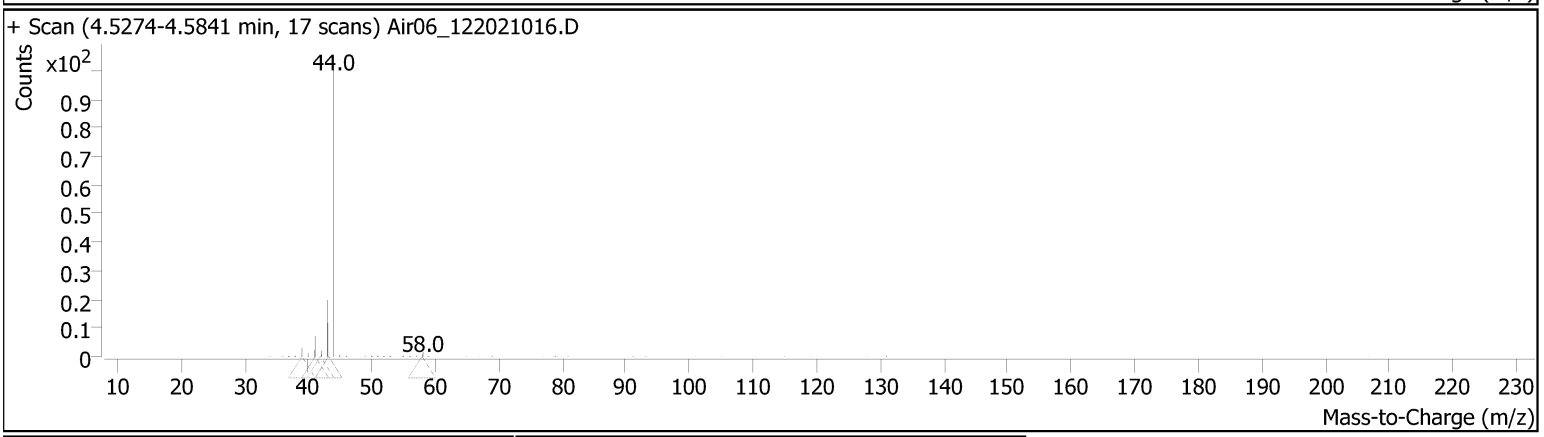


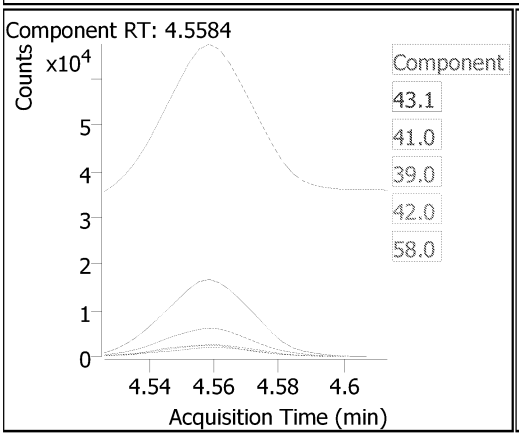


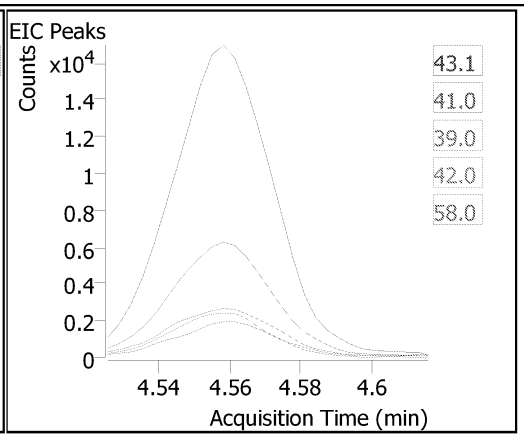
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.5584	Butane	61008.4	97.6	106-97-8	C4H10	0.2716





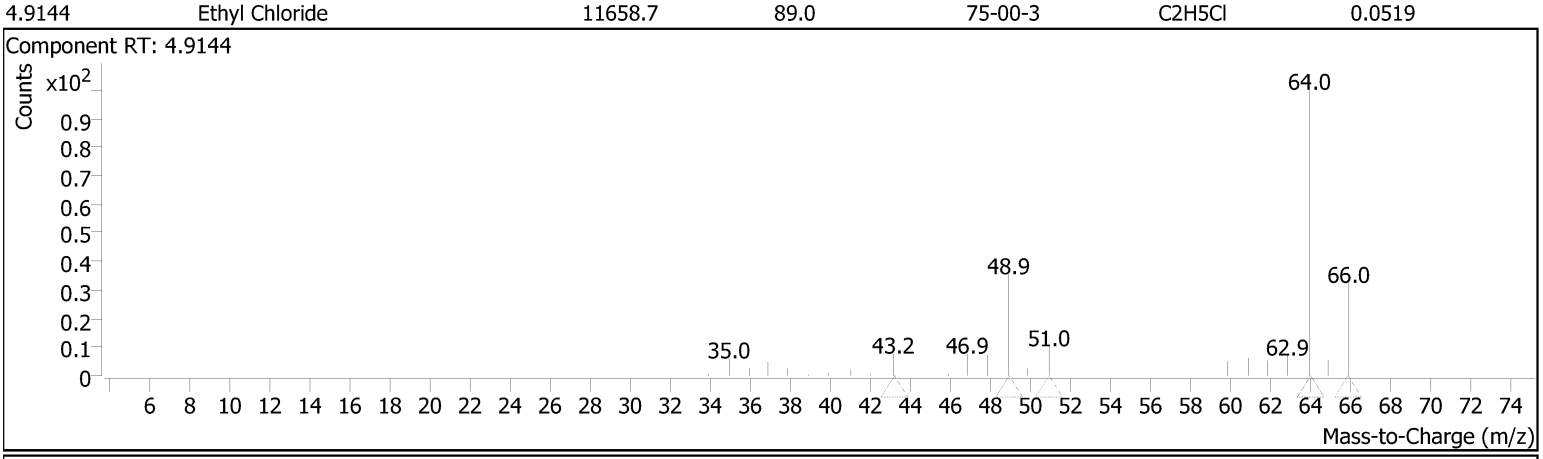


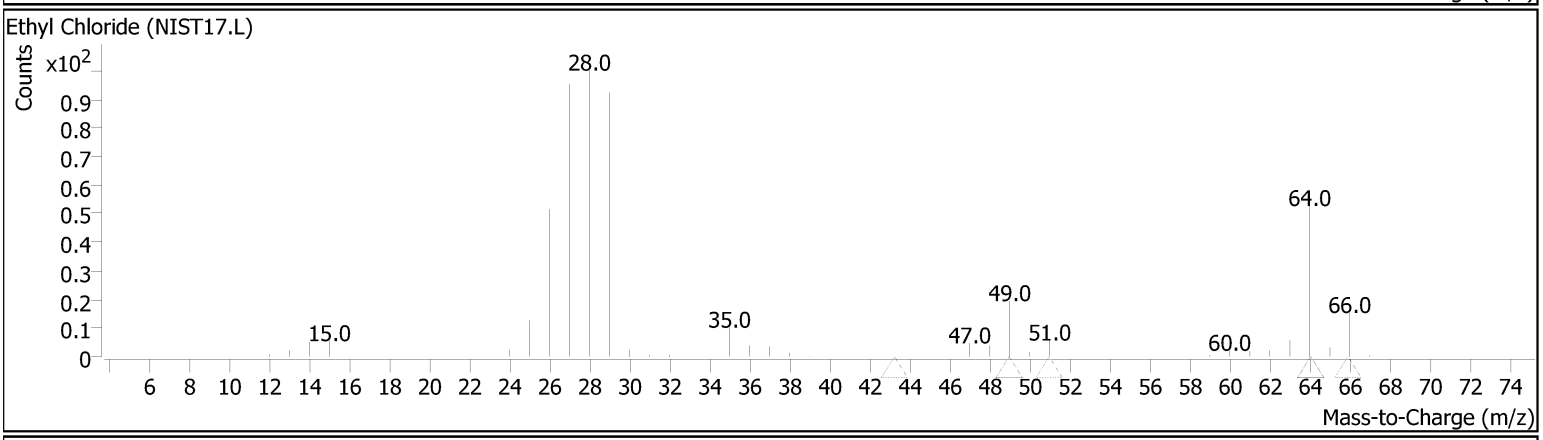


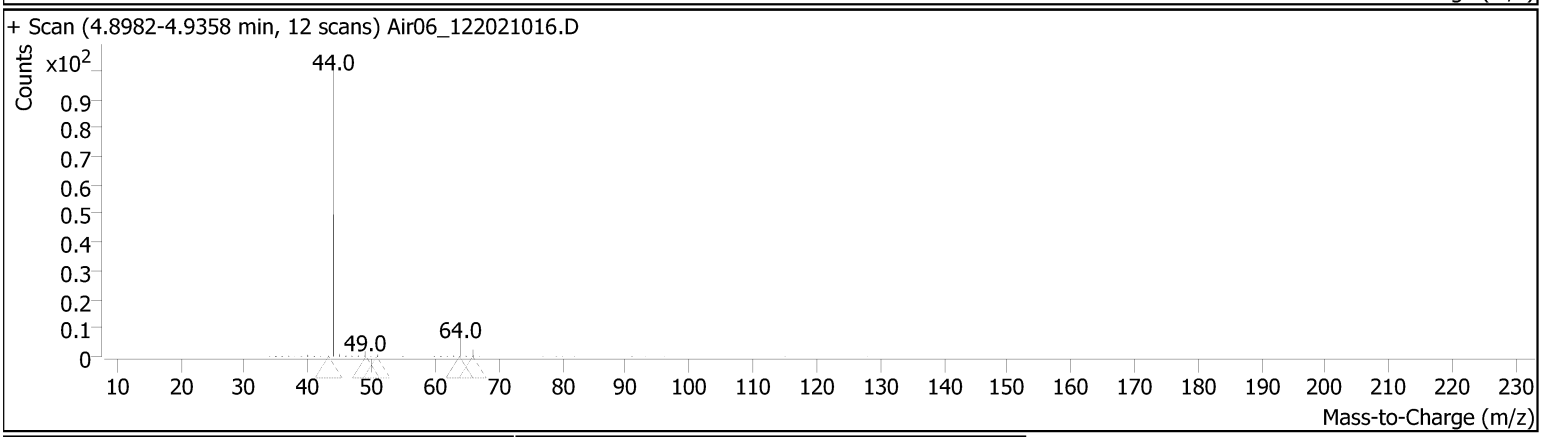


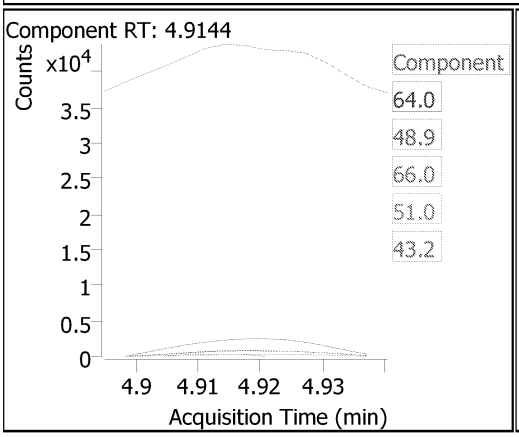


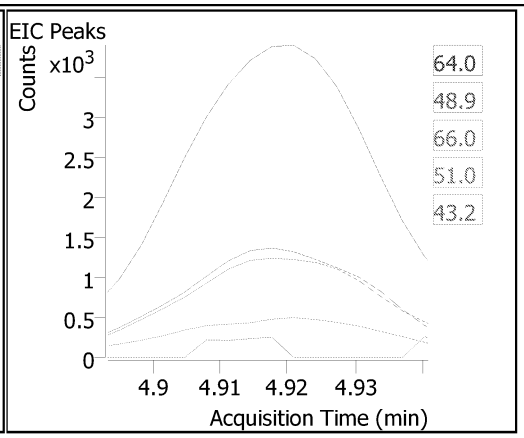
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.9144	Ethyl Chloride	11658.7	89.0	75-00-3	C2H5Cl	0.0519





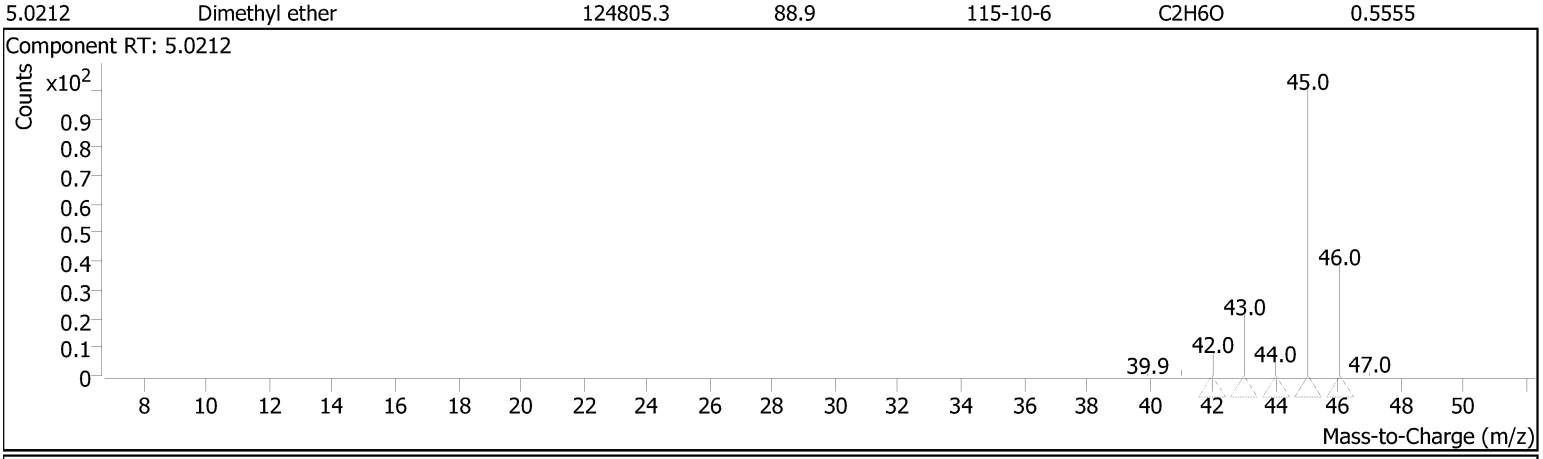


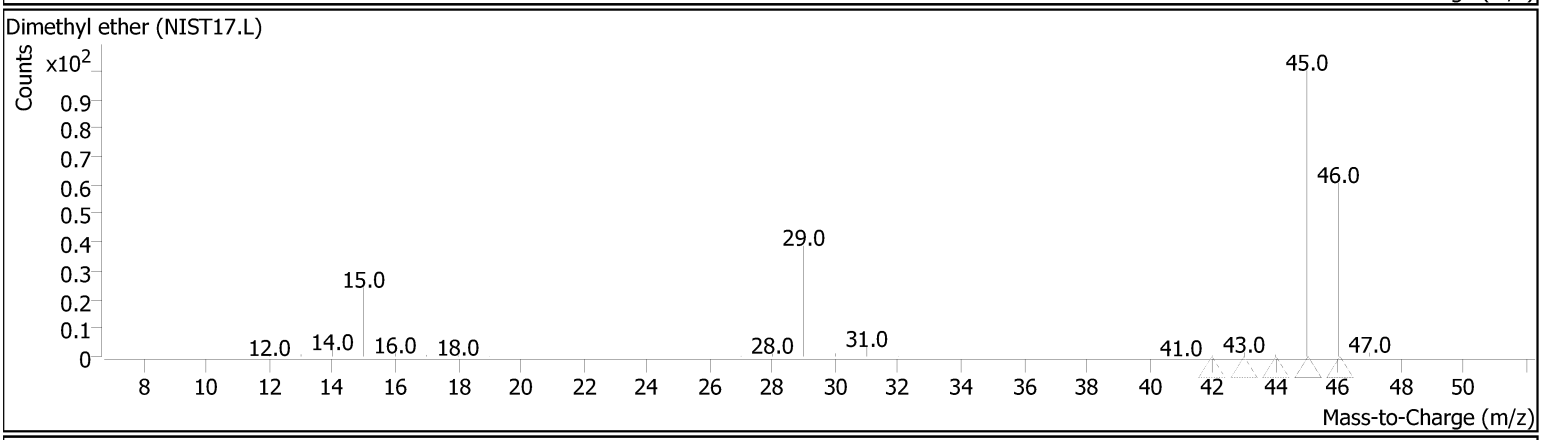


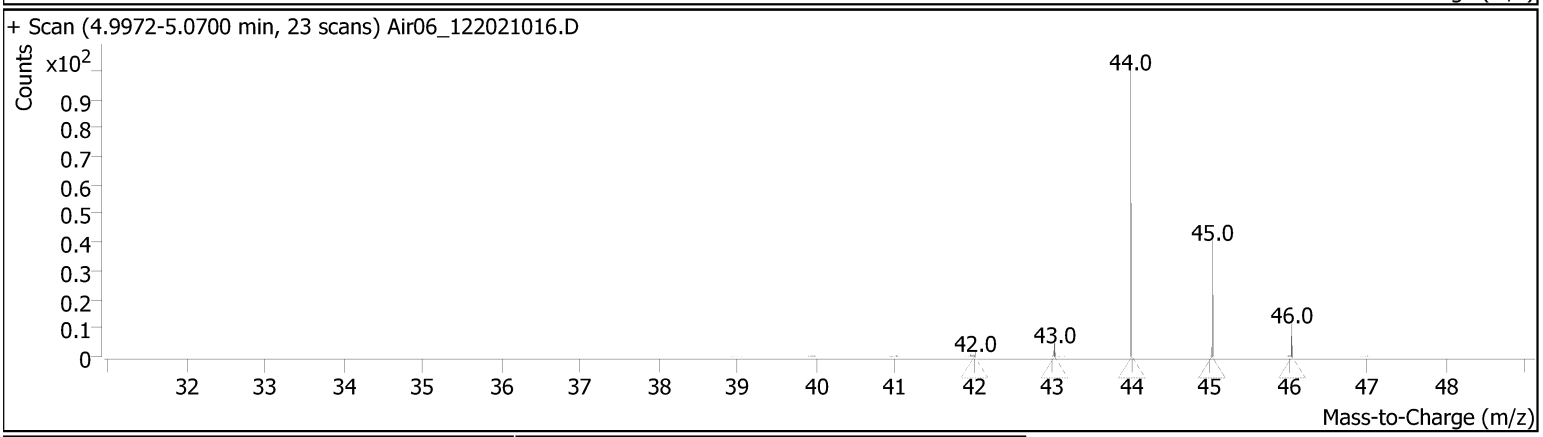


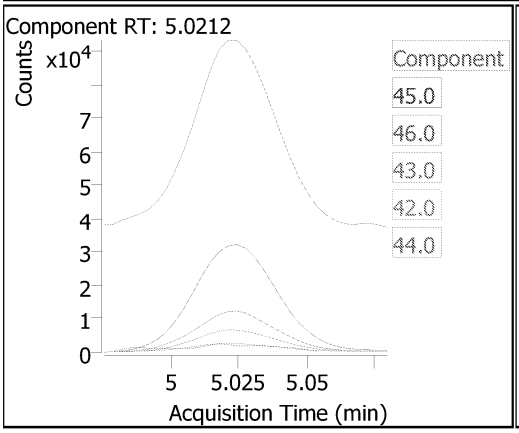


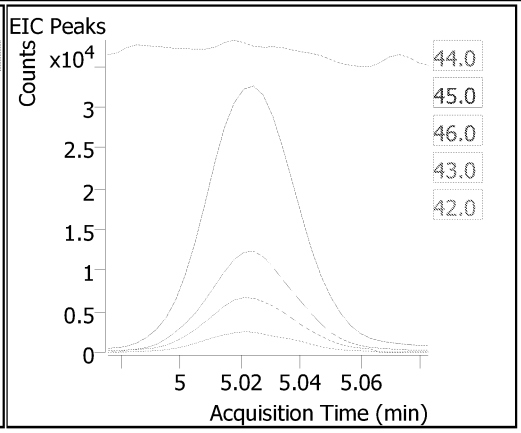
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.0212	Dimethyl ether	124805.3	88.9	115-10-6	C2H6O	0.5555

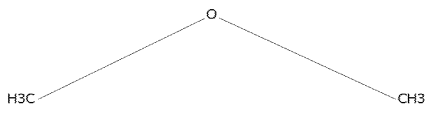




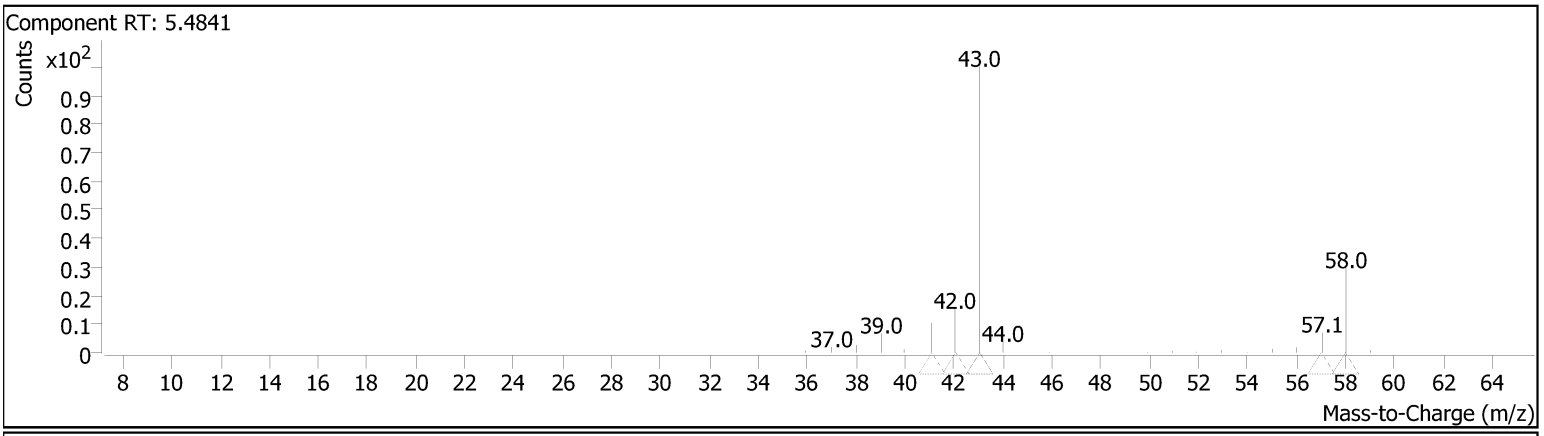


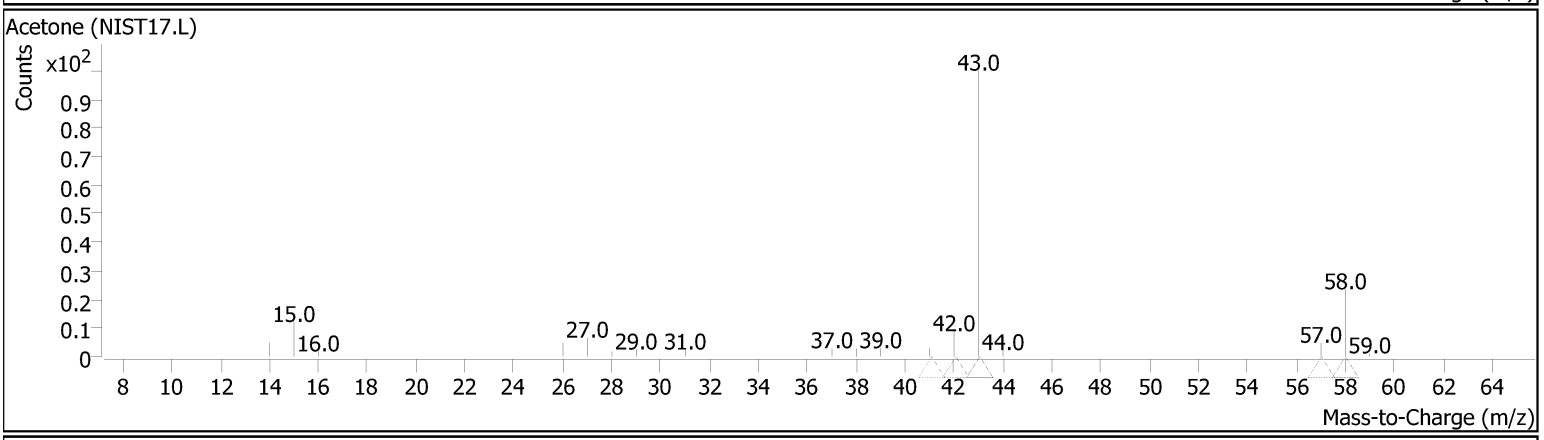


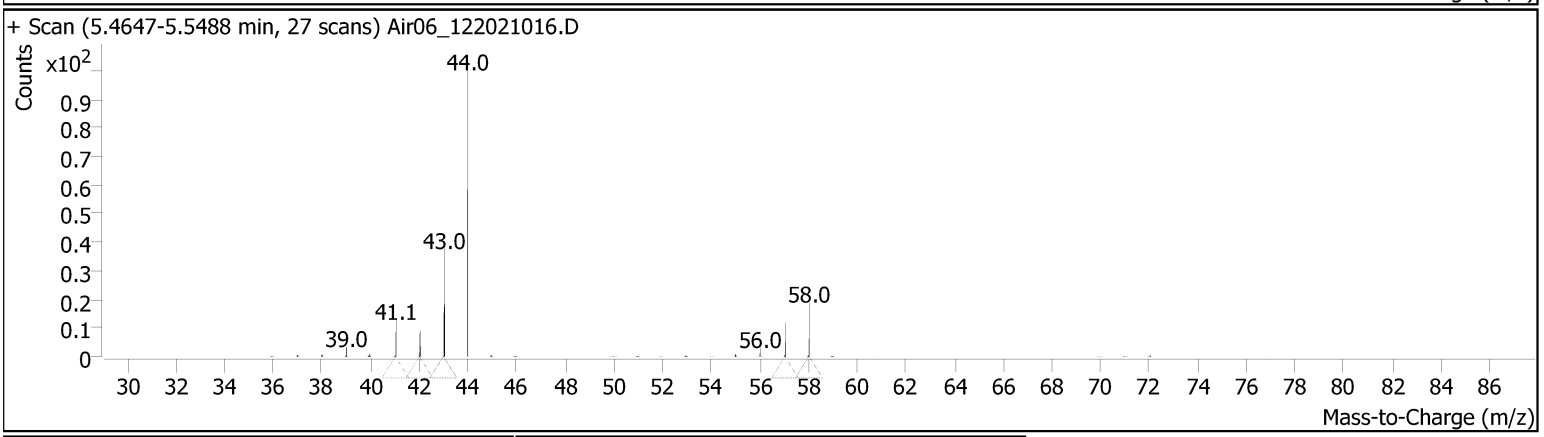


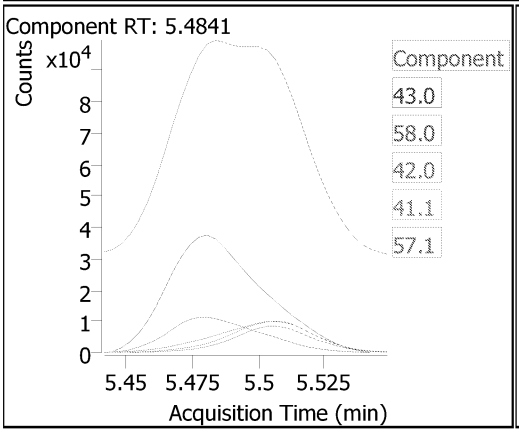


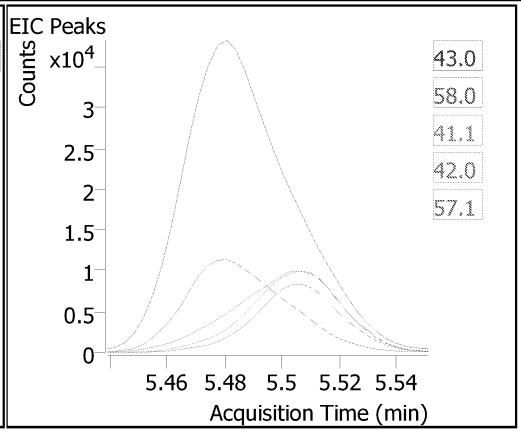
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.4841	Acetone	225260.5	94.0	67-64-1	C3H6O	1.003

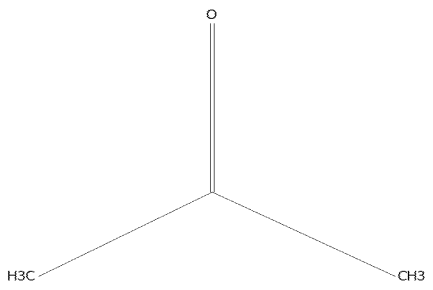




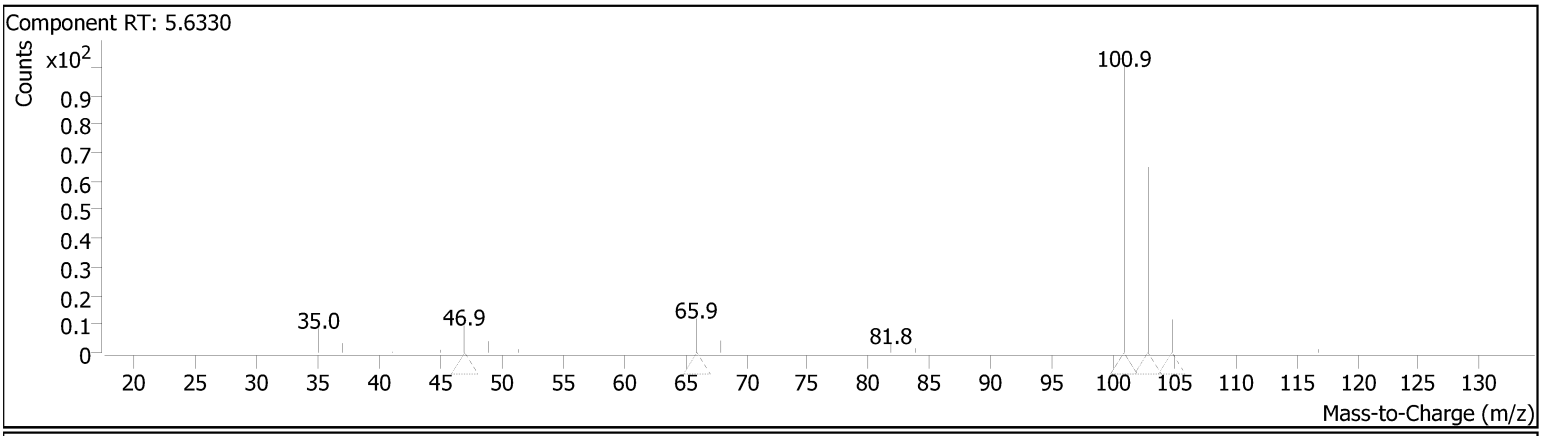


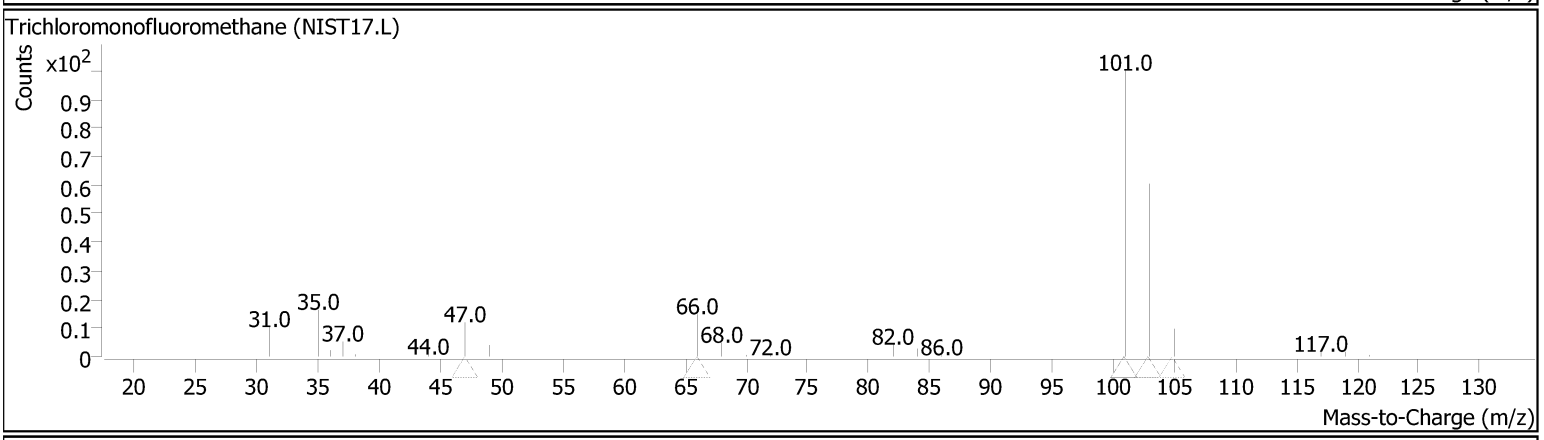


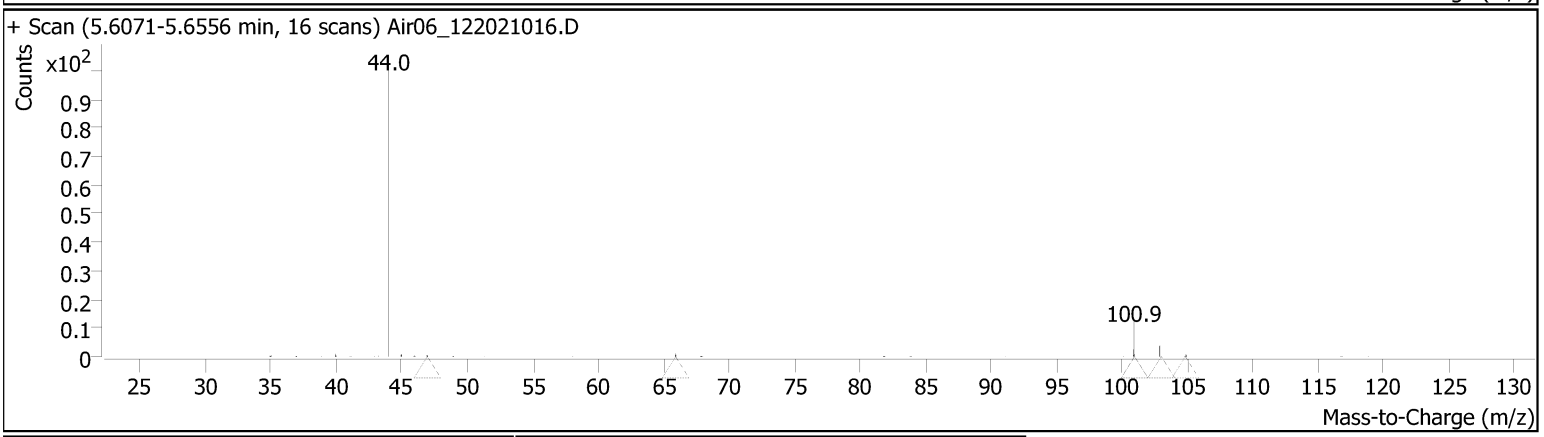


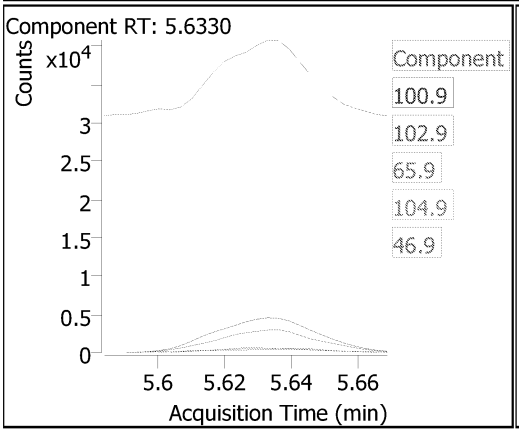


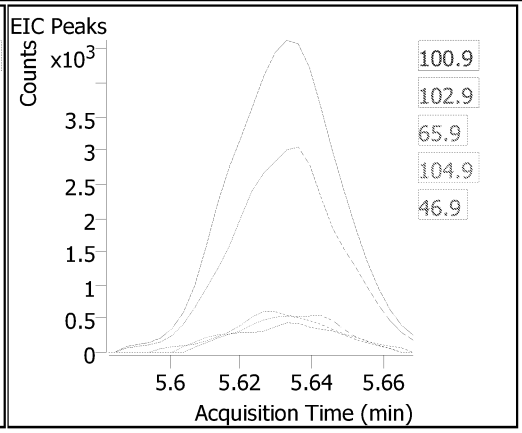
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.6330	Trichloromonofluoromethane	21586.0	96.0	75-69-4	CCl3F	0.09608

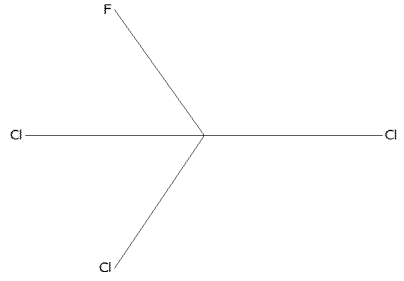




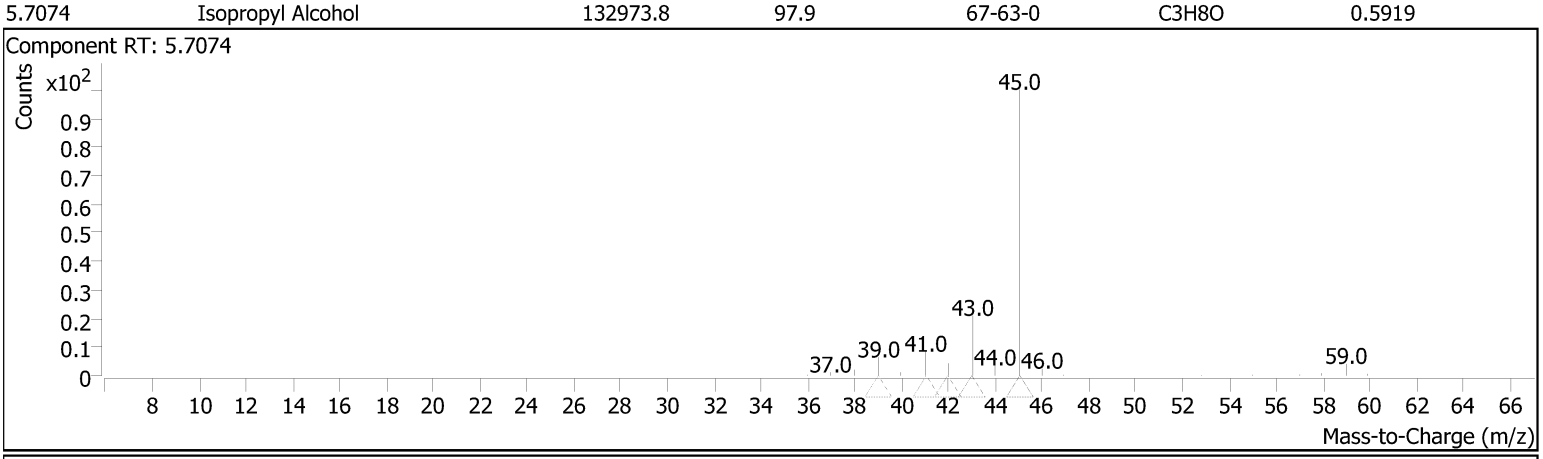


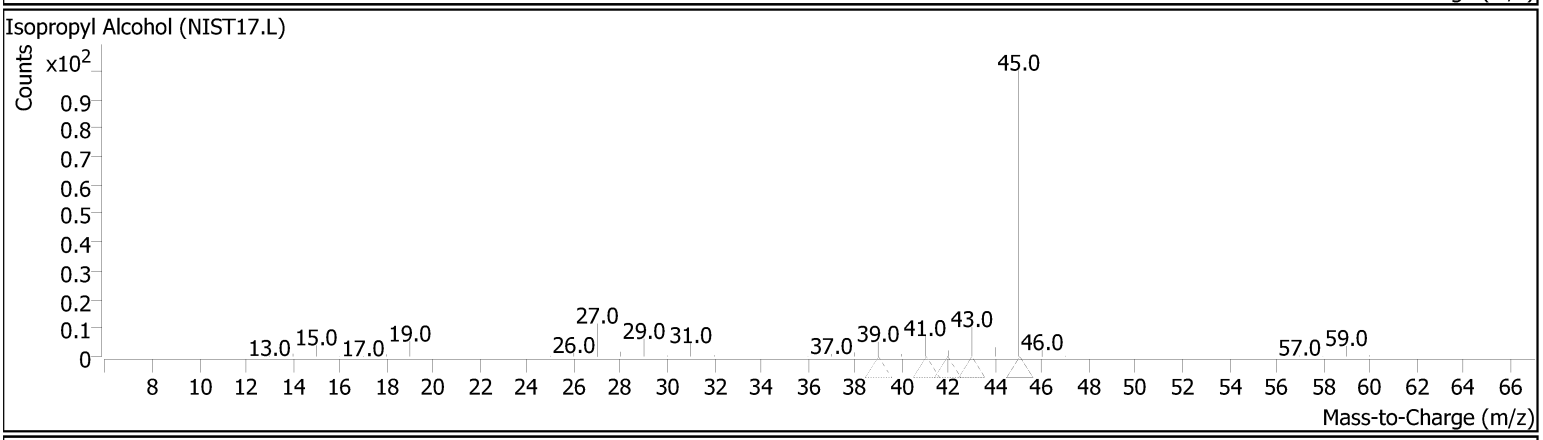


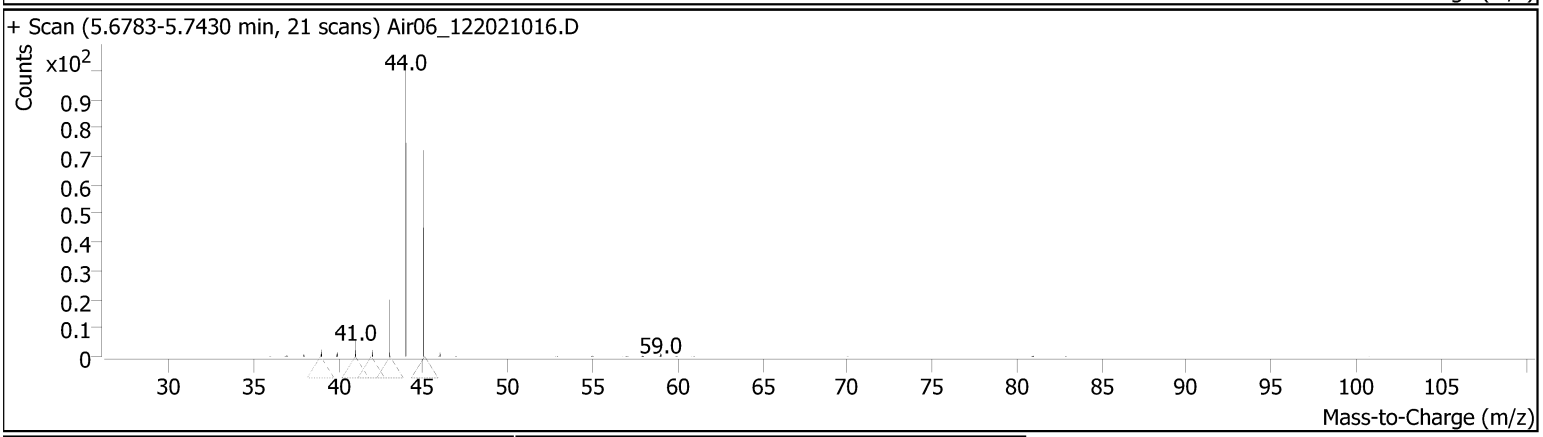


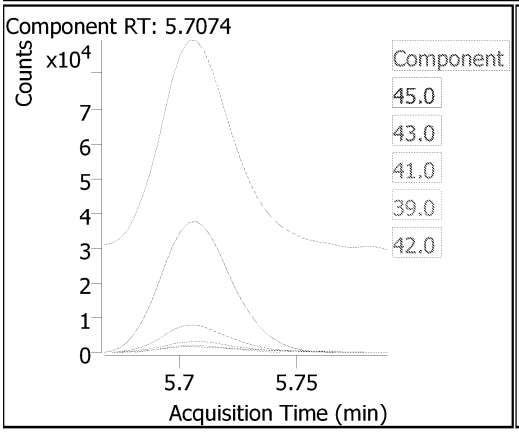


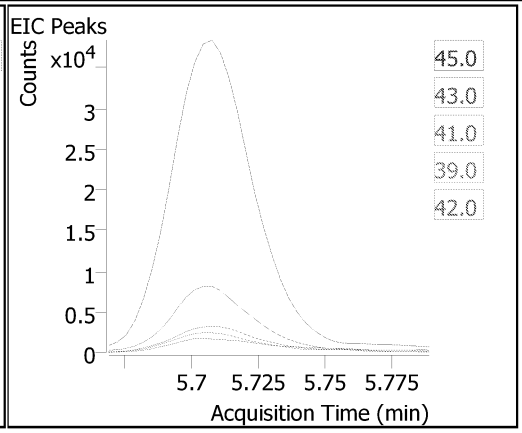
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.7074	Isopropyl Alcohol	132973.8	97.9	67-63-0	C3H8O	0.5919

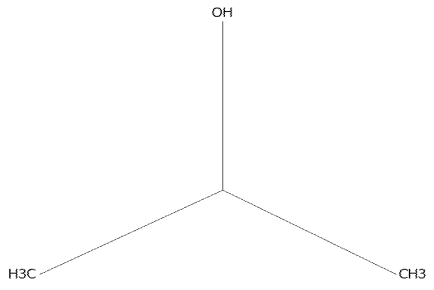




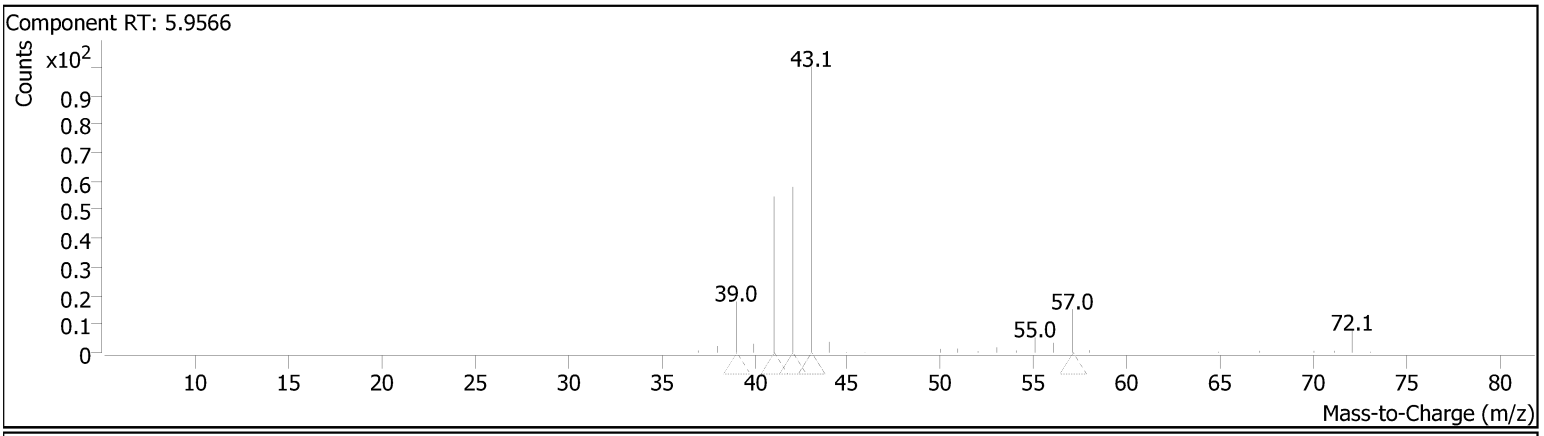


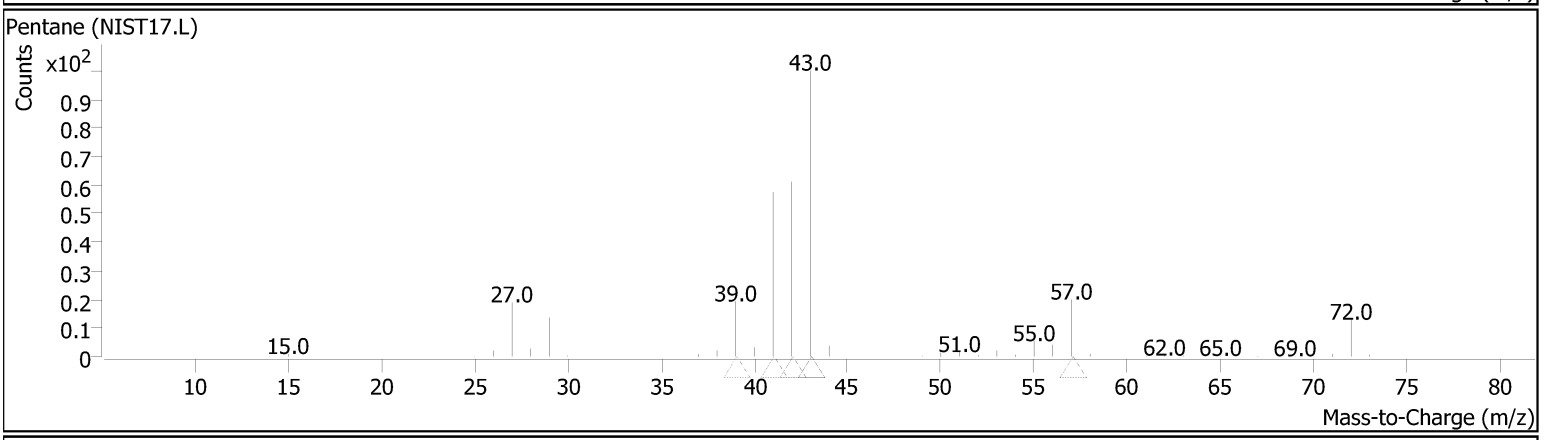


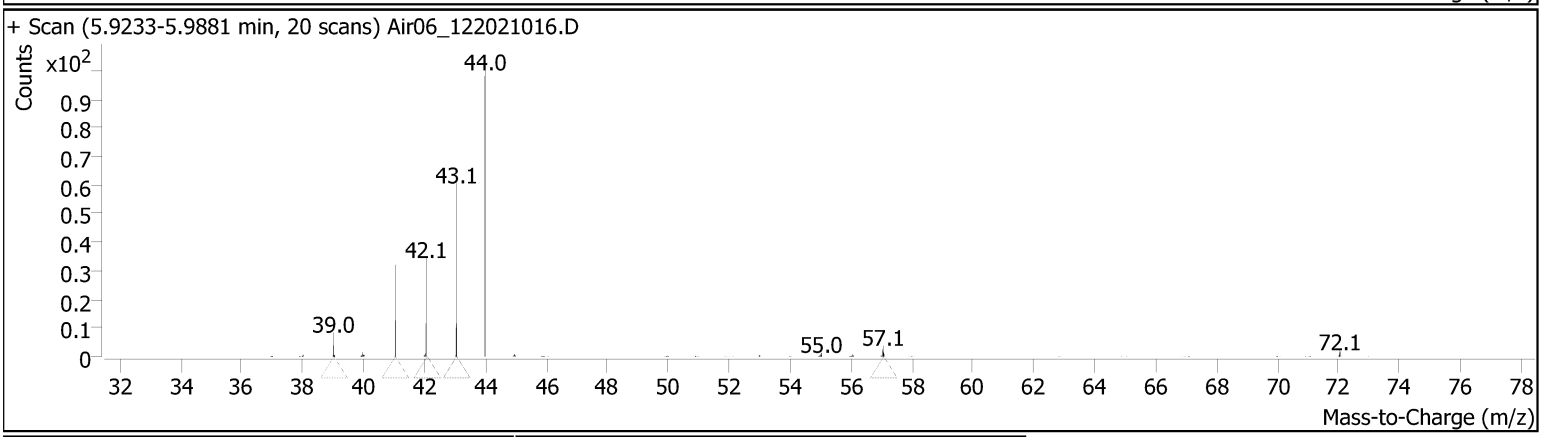


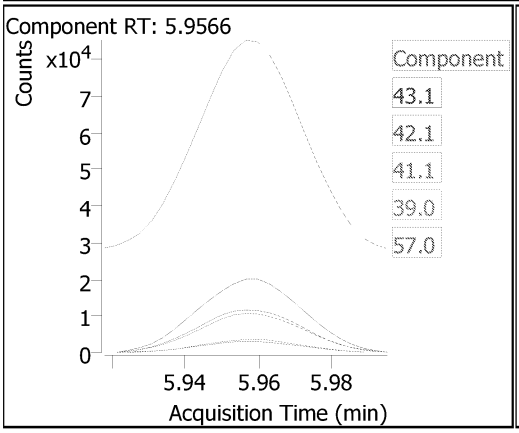


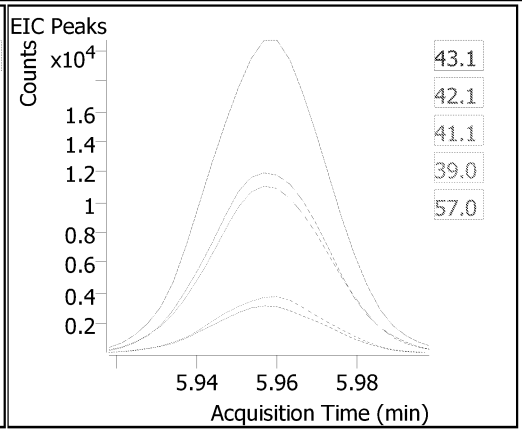
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.9566	Pentane	116931.3	98.7	109-66-0	C5H12	0.5205

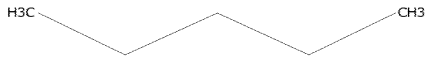




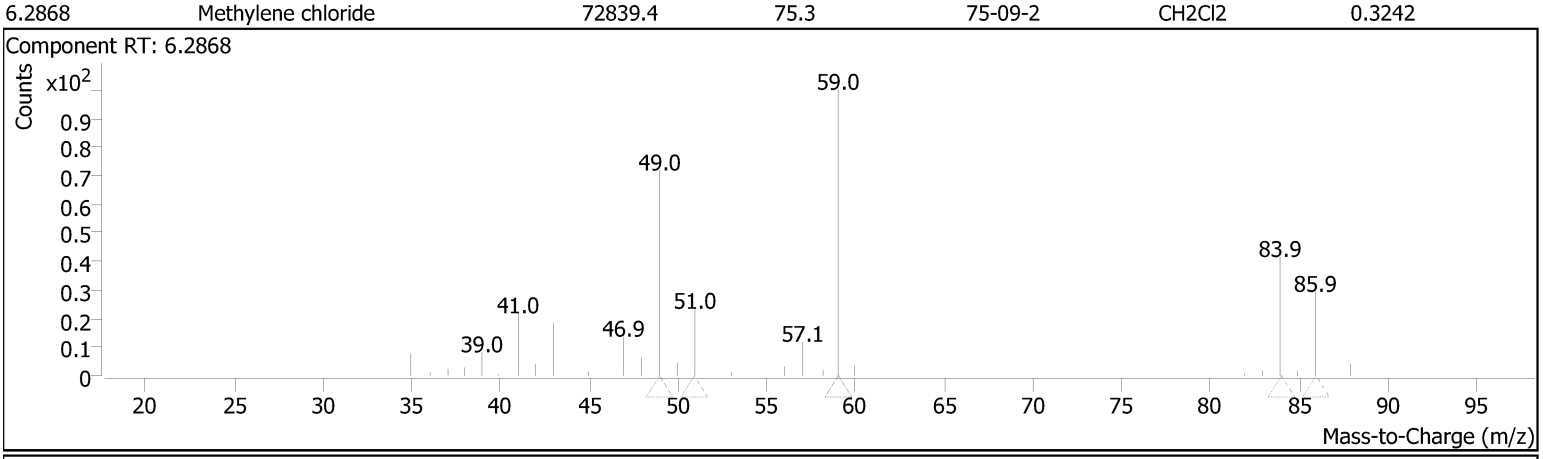


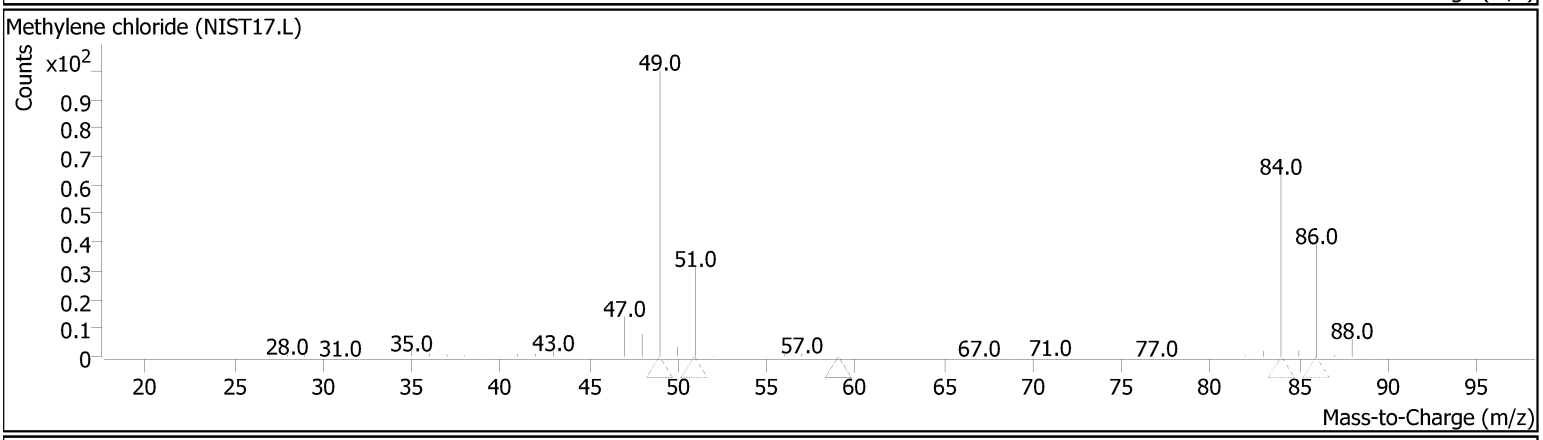


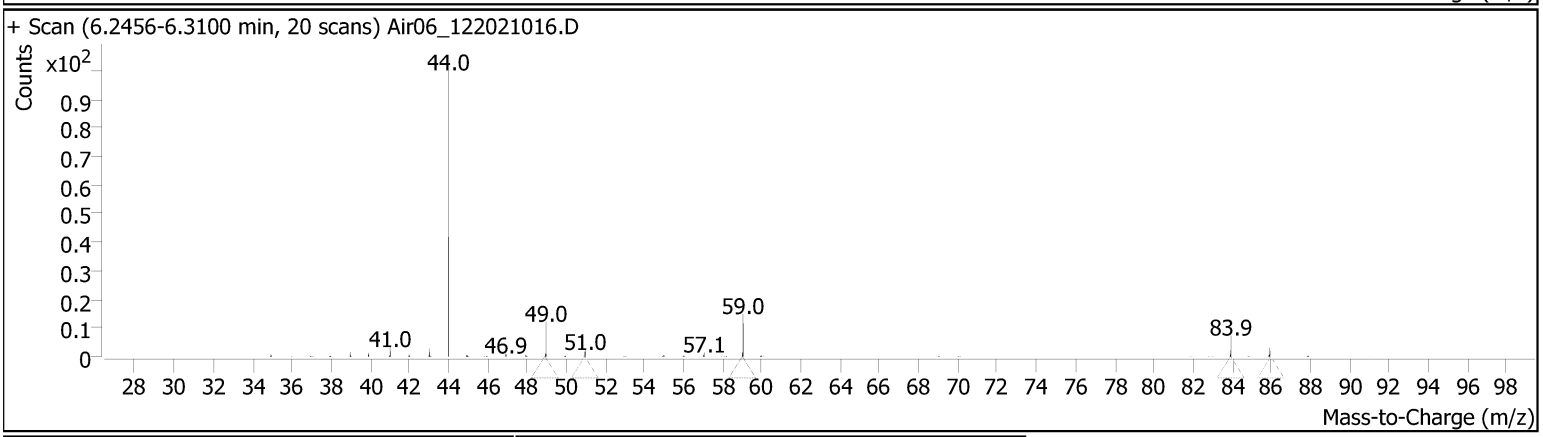


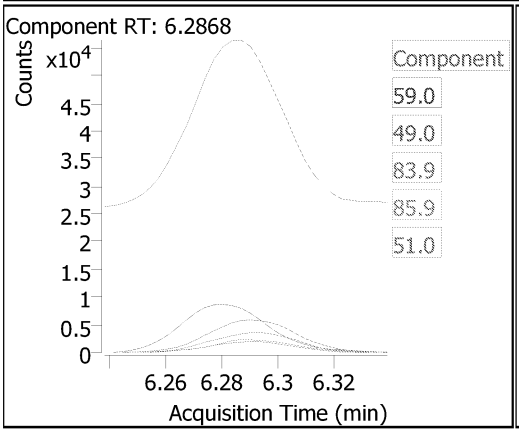


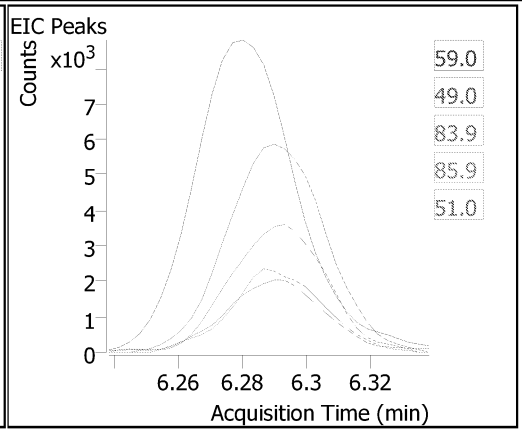
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.2868	Methylene chloride	72839.4	75.3	75-09-2	CH2Cl2	0.3242

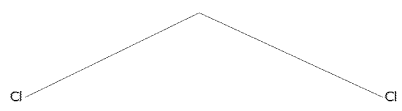




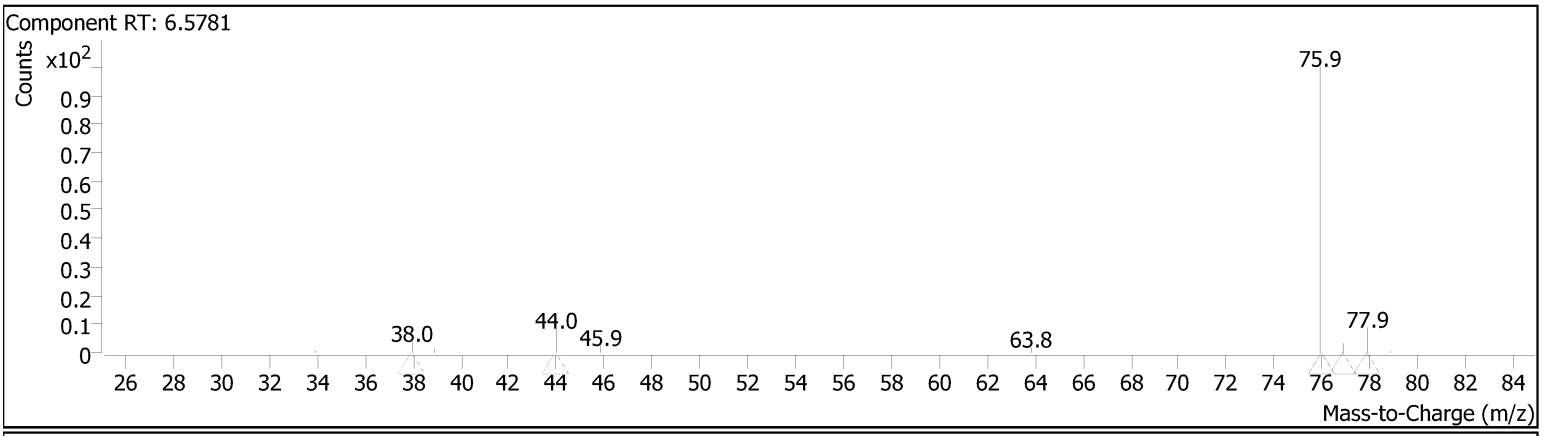


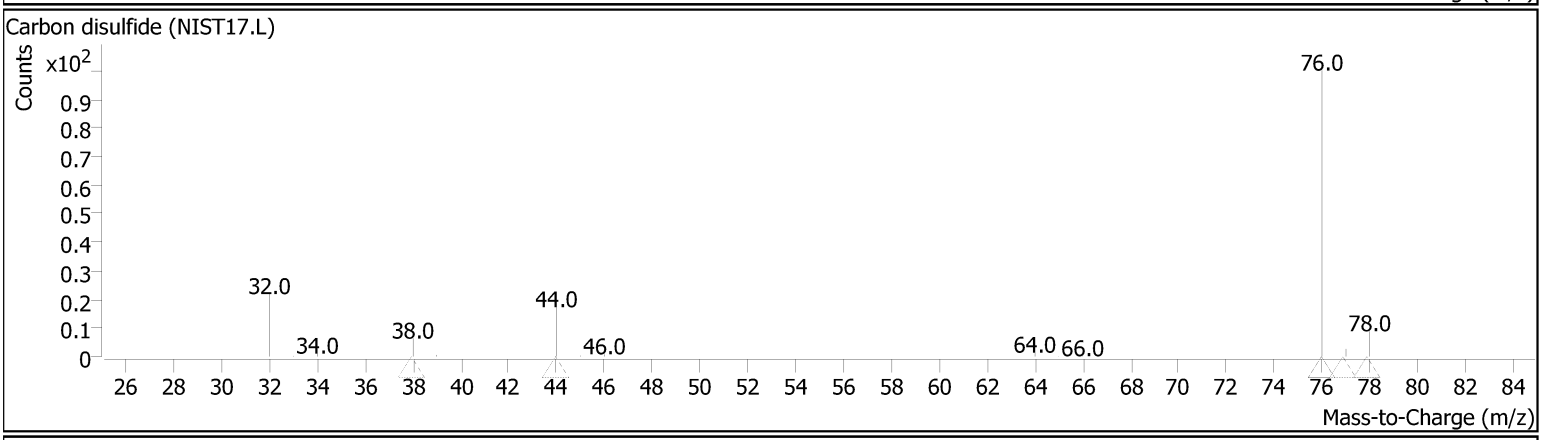


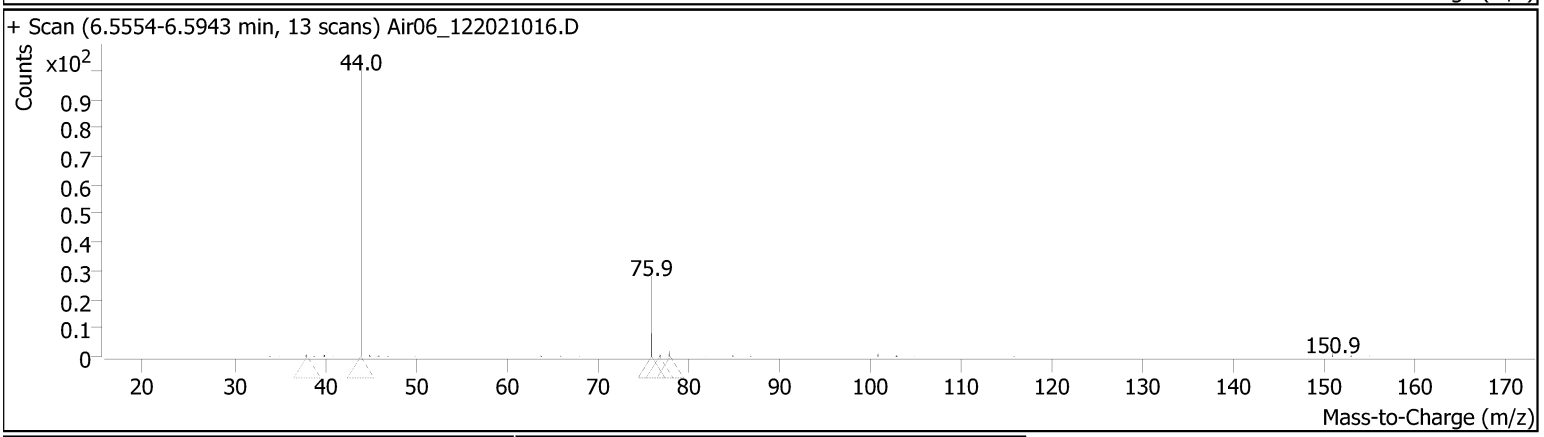


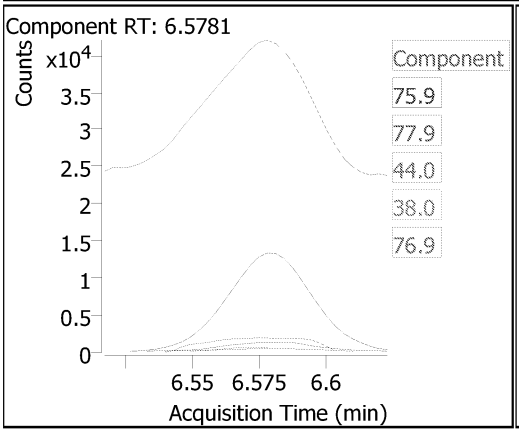


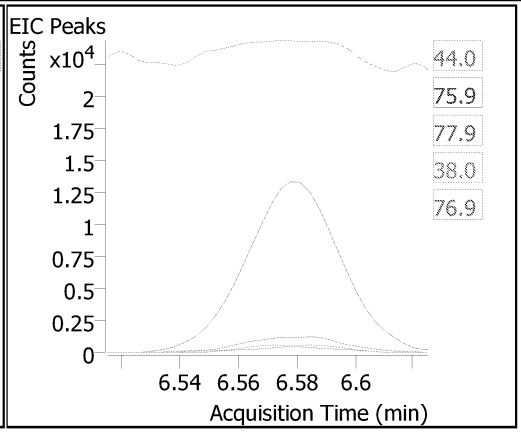
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.5781	Carbon disulfide	50406.0	89.9	75-15-0	CS2	0.2244



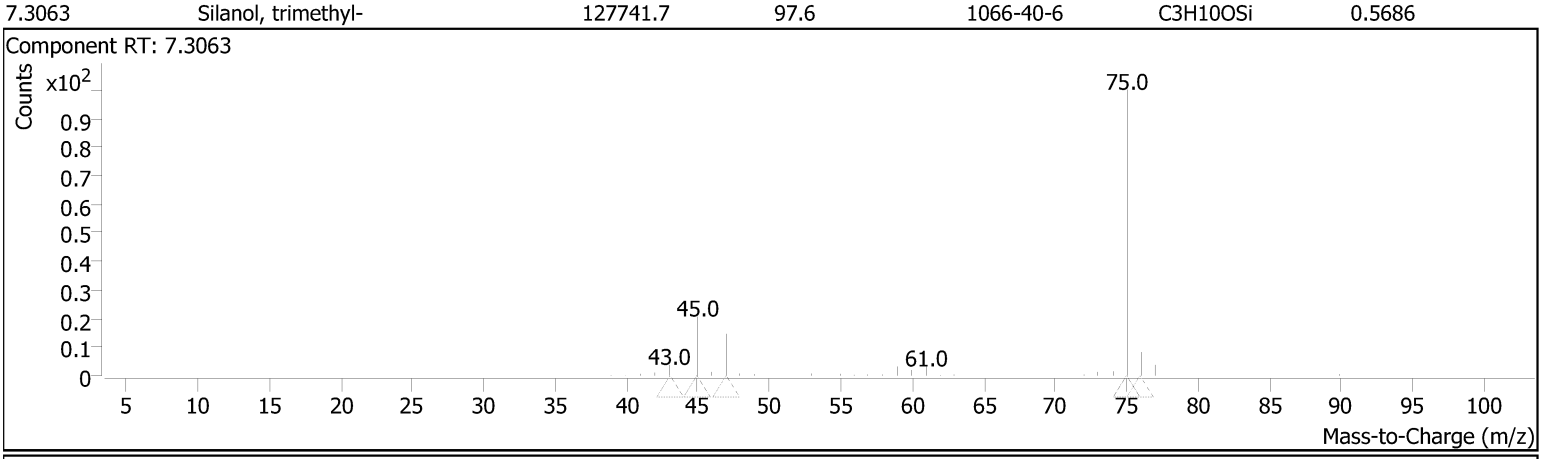


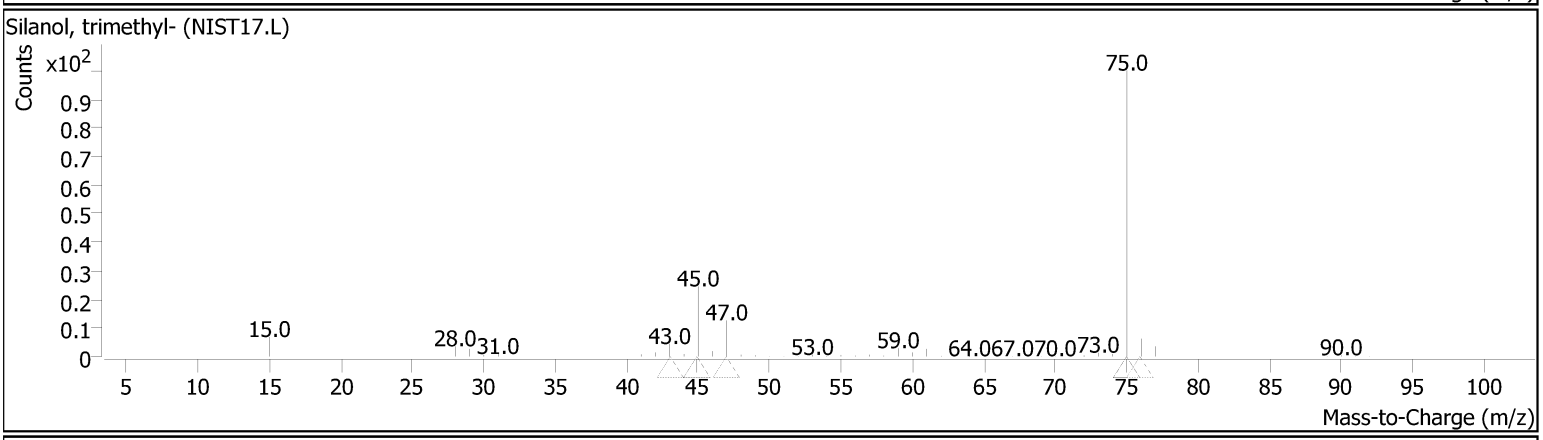


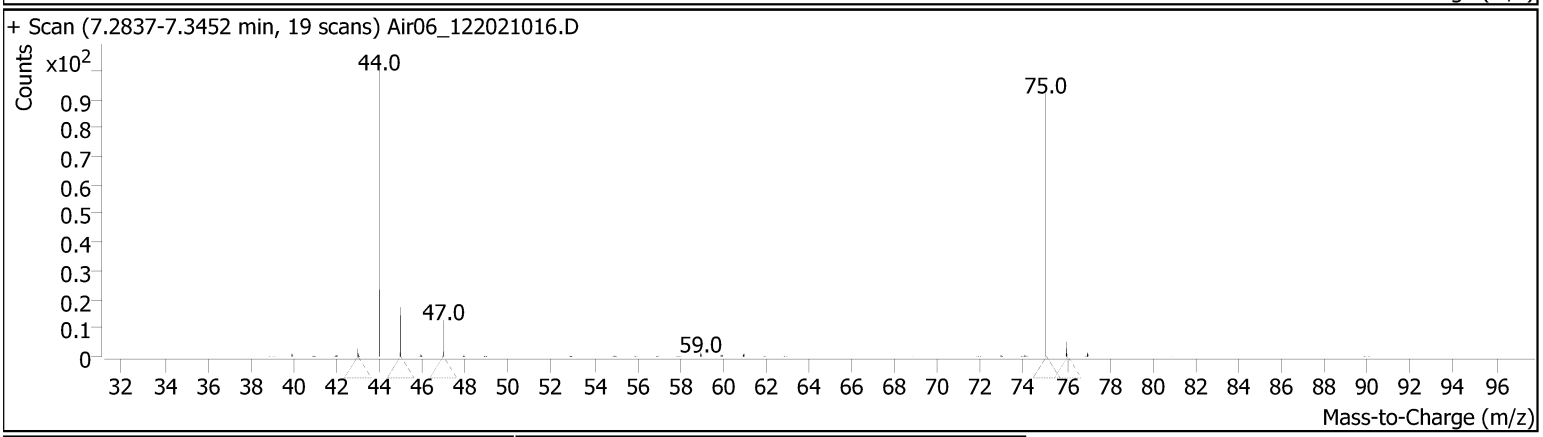


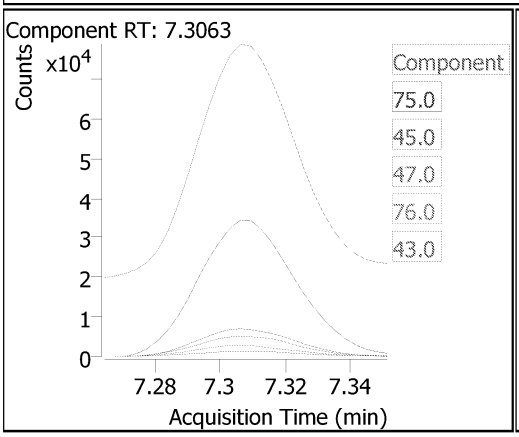


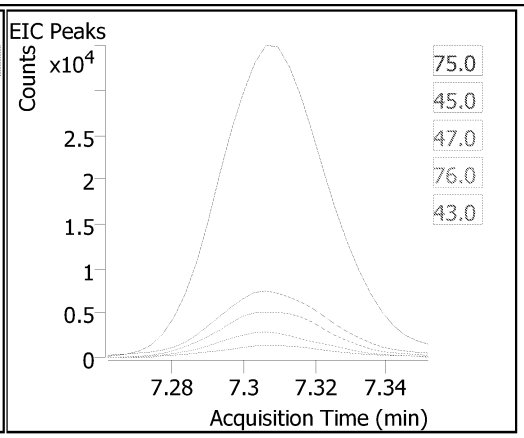
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.3063	Silanol, trimethyl-	127741.7	97.6	1066-40-6	C3H10OSi	0.5686

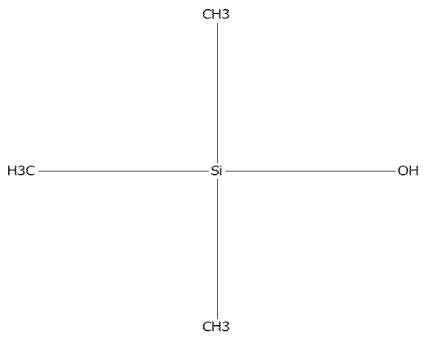




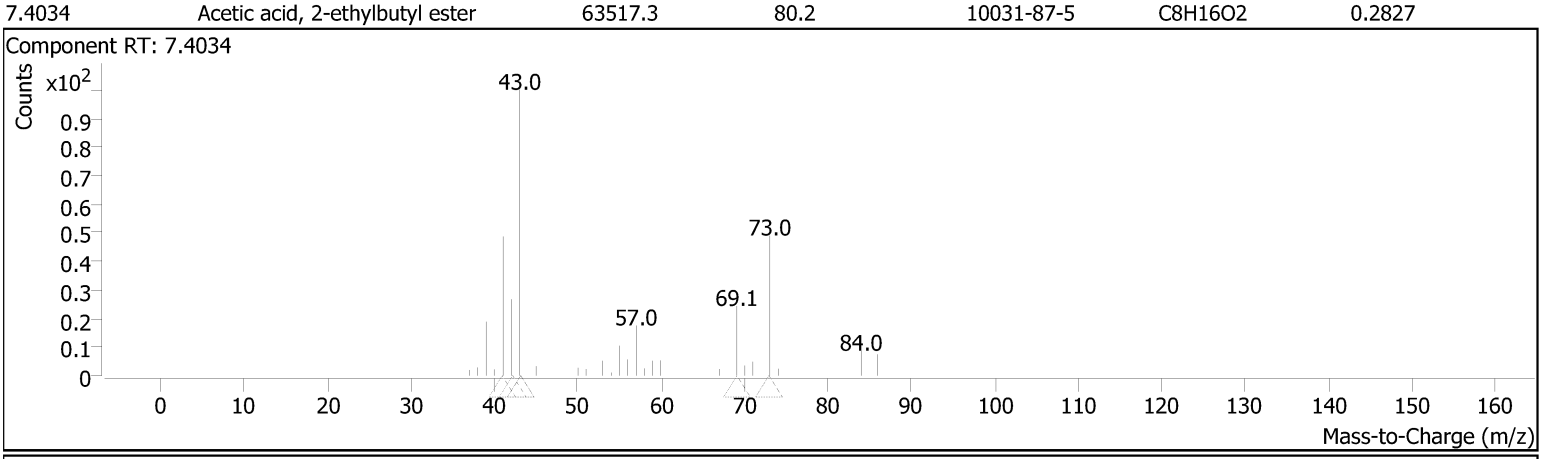


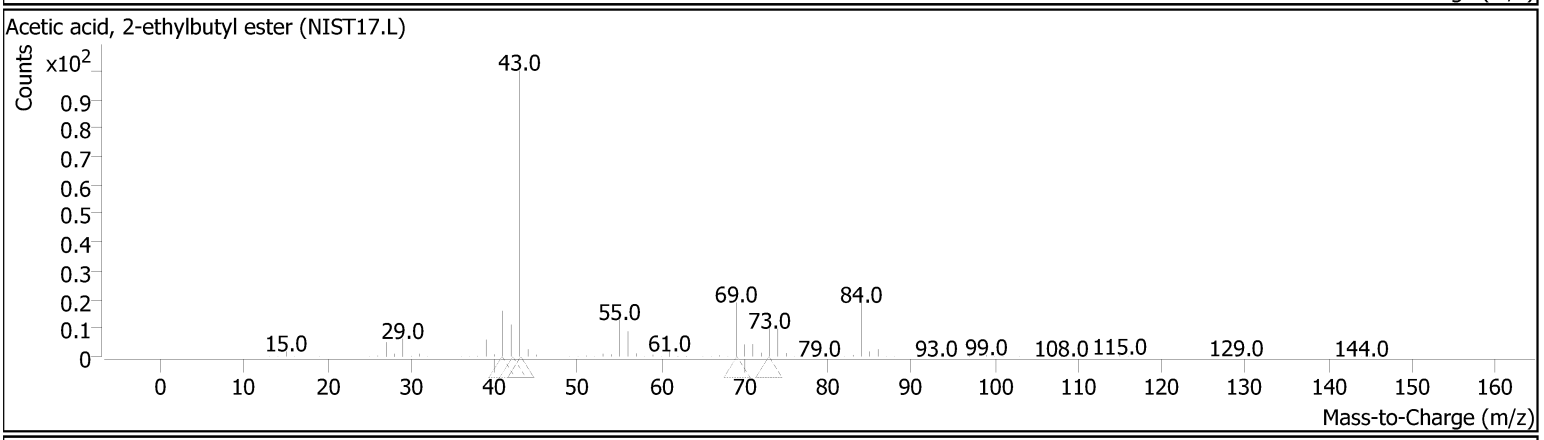


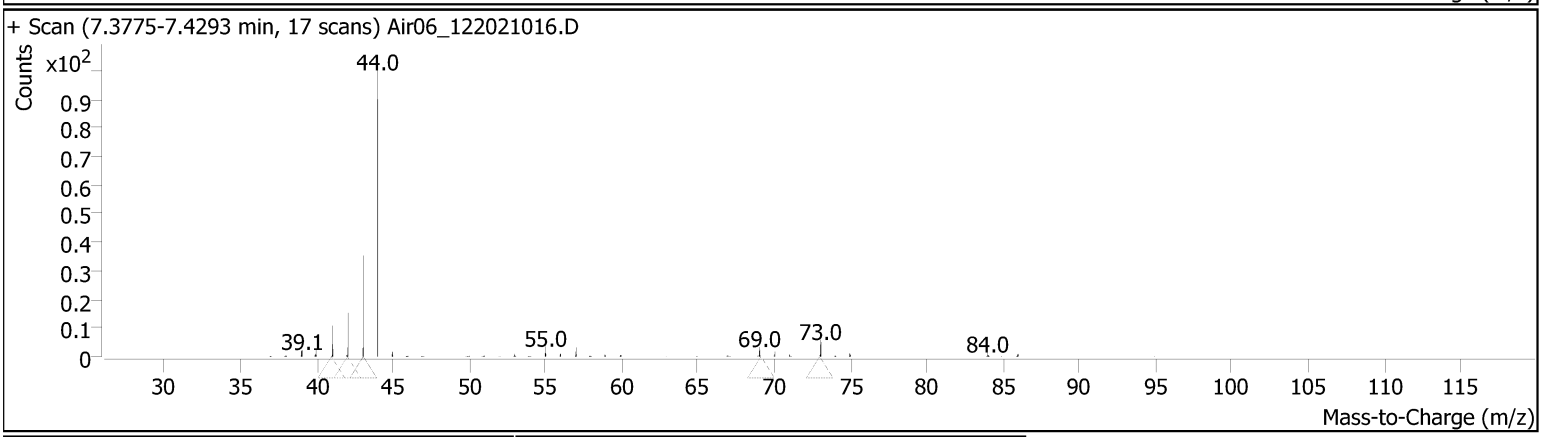


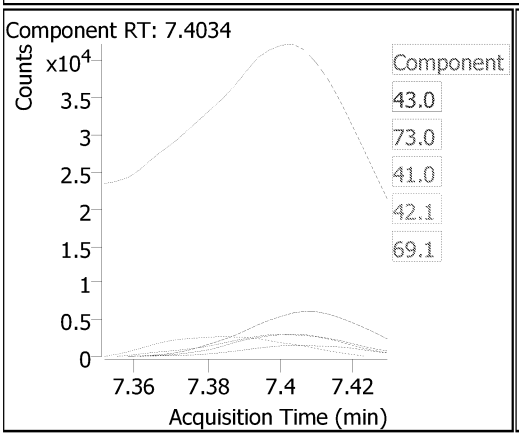


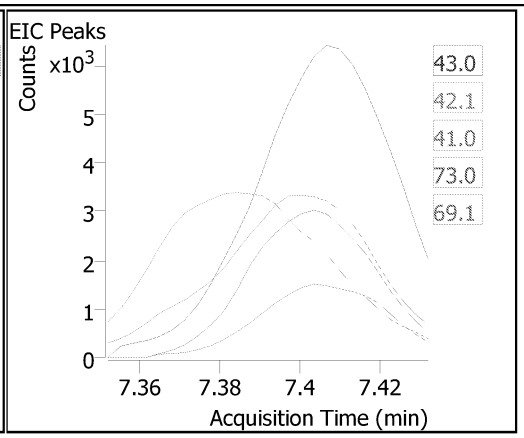
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.4034	Acetic acid, 2-ethylbutyl ester	63517.3	80.2	10031-87-5	C8H16O2	0.2827

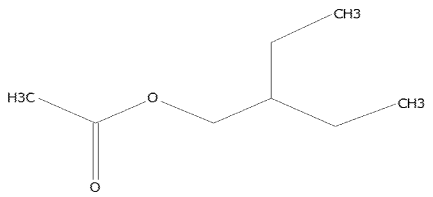




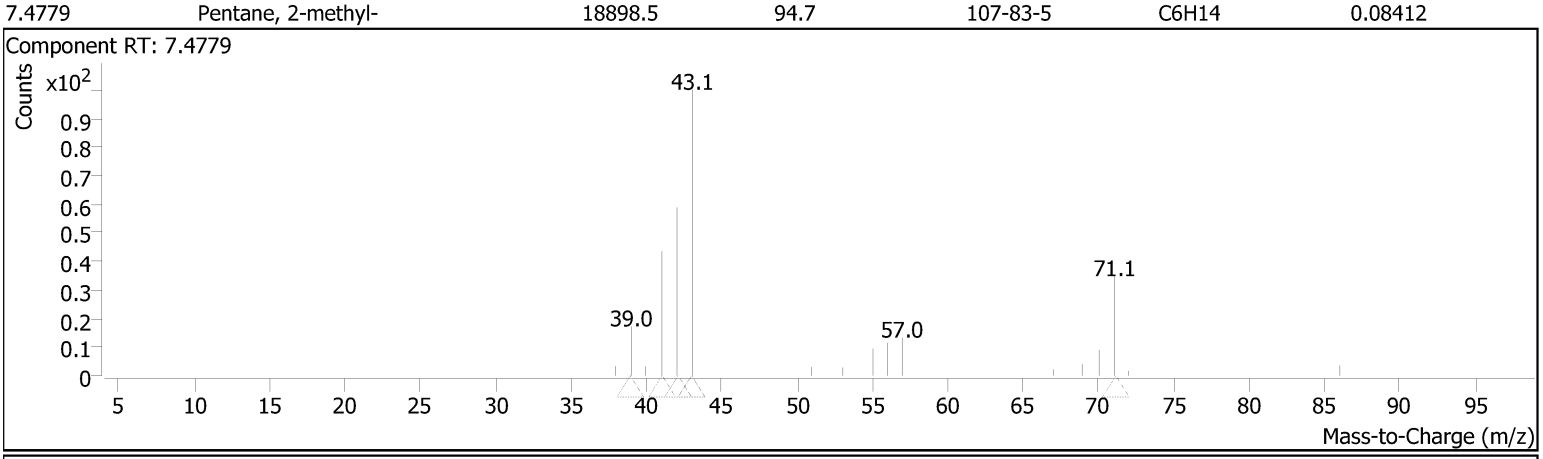


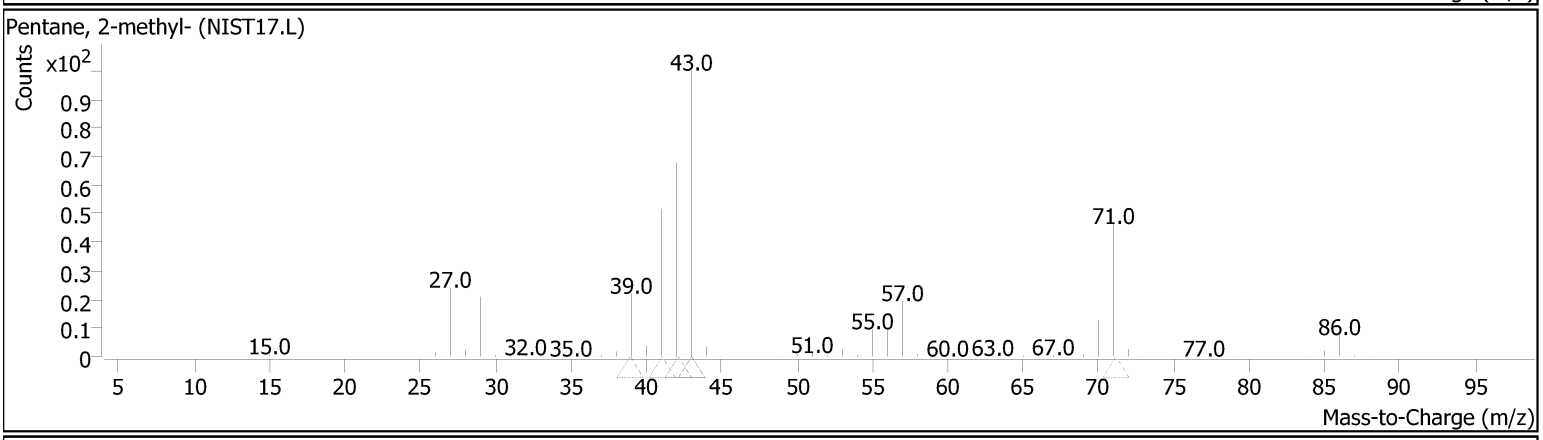


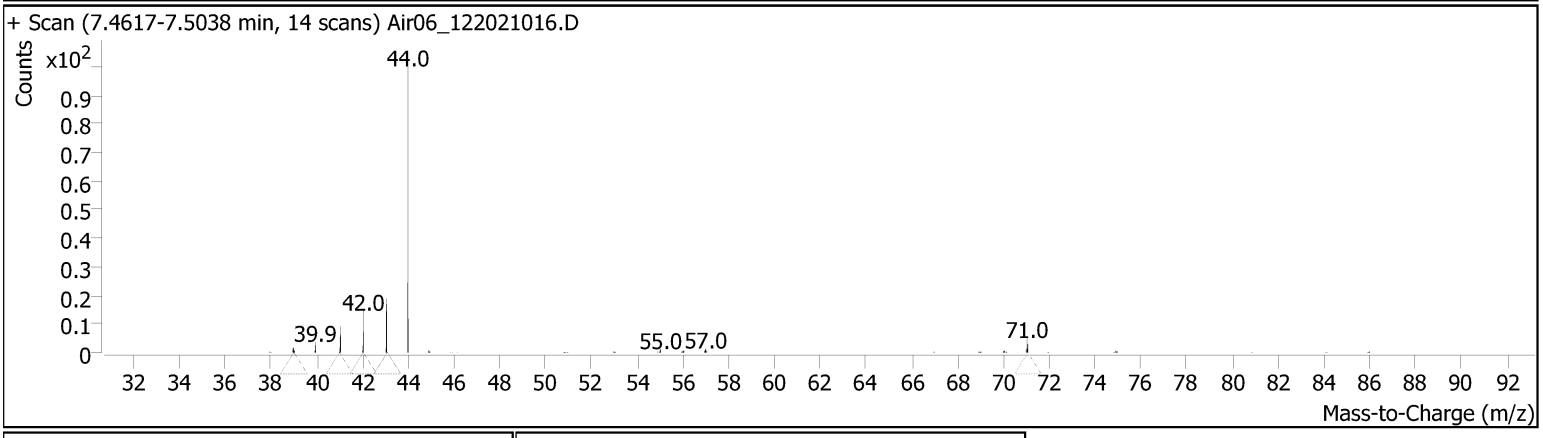


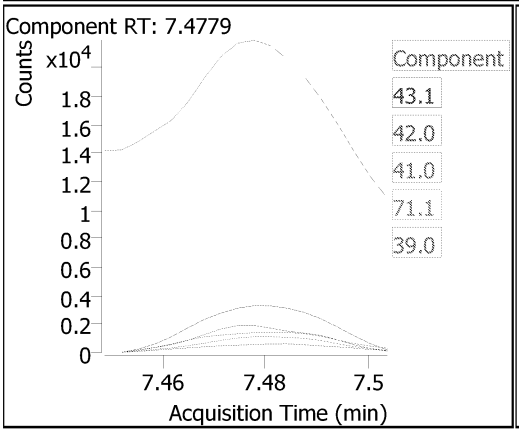


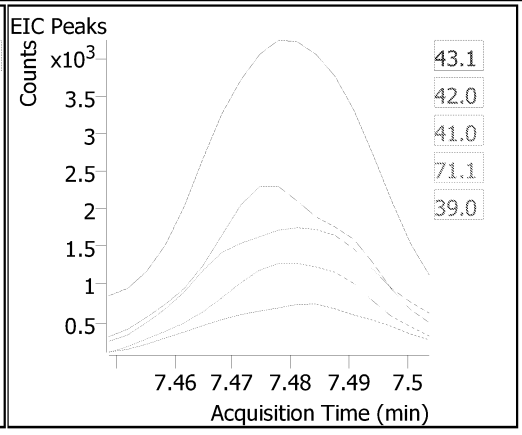
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.4779	Pentane, 2-methyl-	18898.5	94.7	107-83-5	C6H14	0.08412

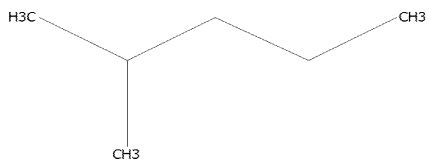




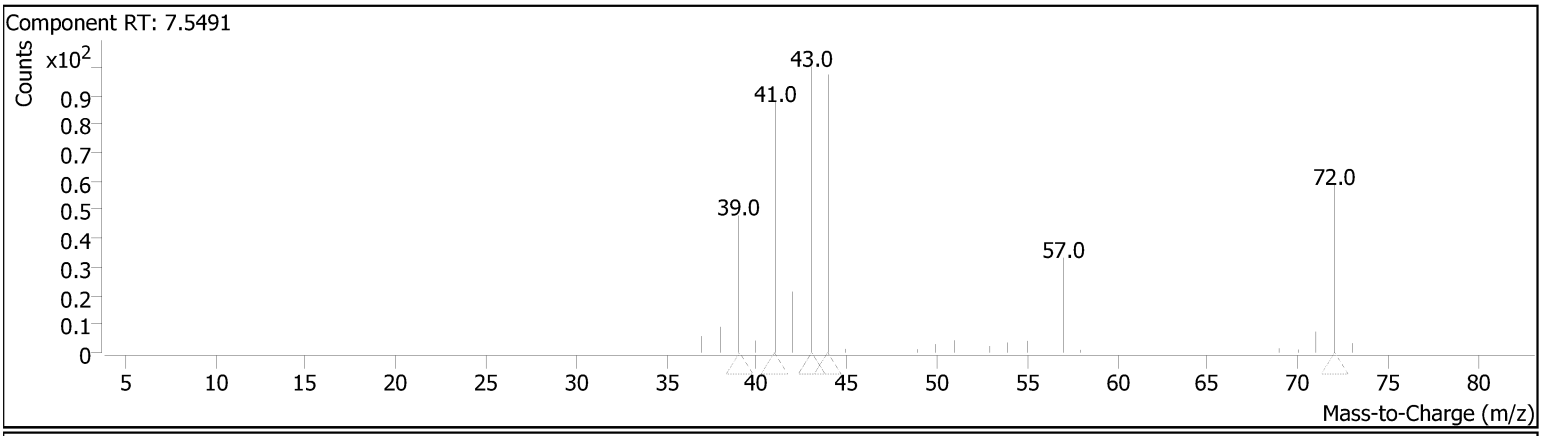


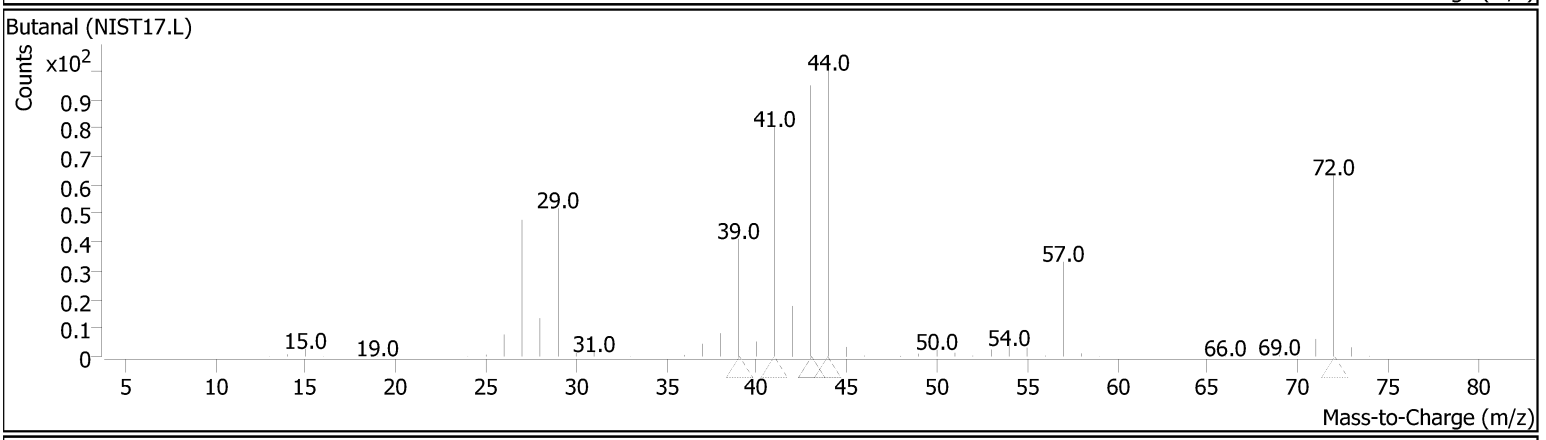


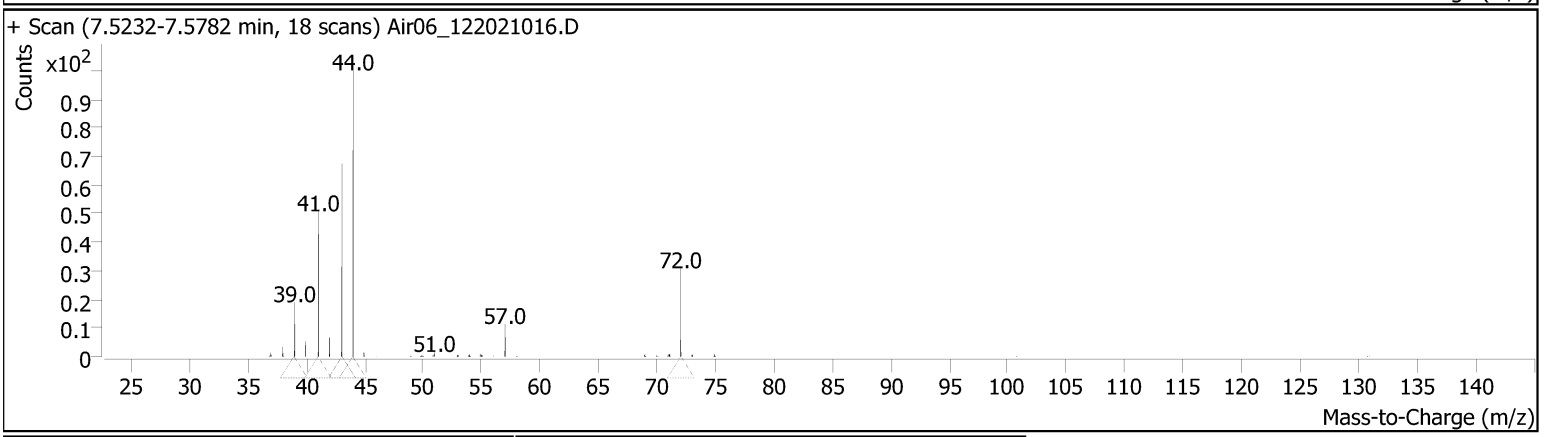


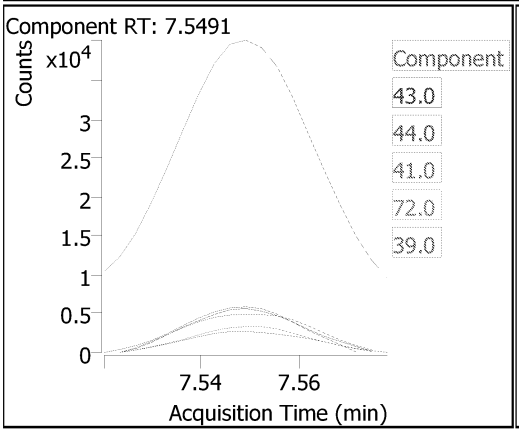


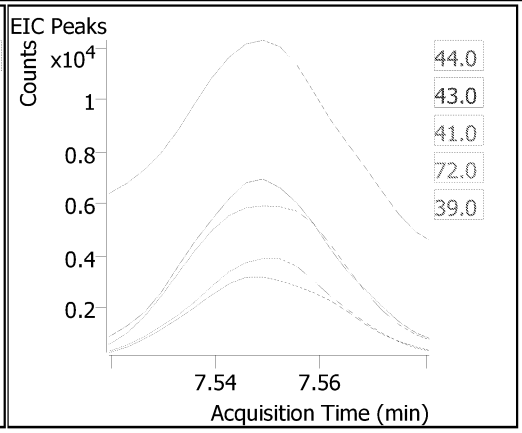
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.5491	Butanal	57395.7	98.9	123-72-8	C4H8O	0.2555

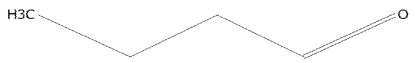




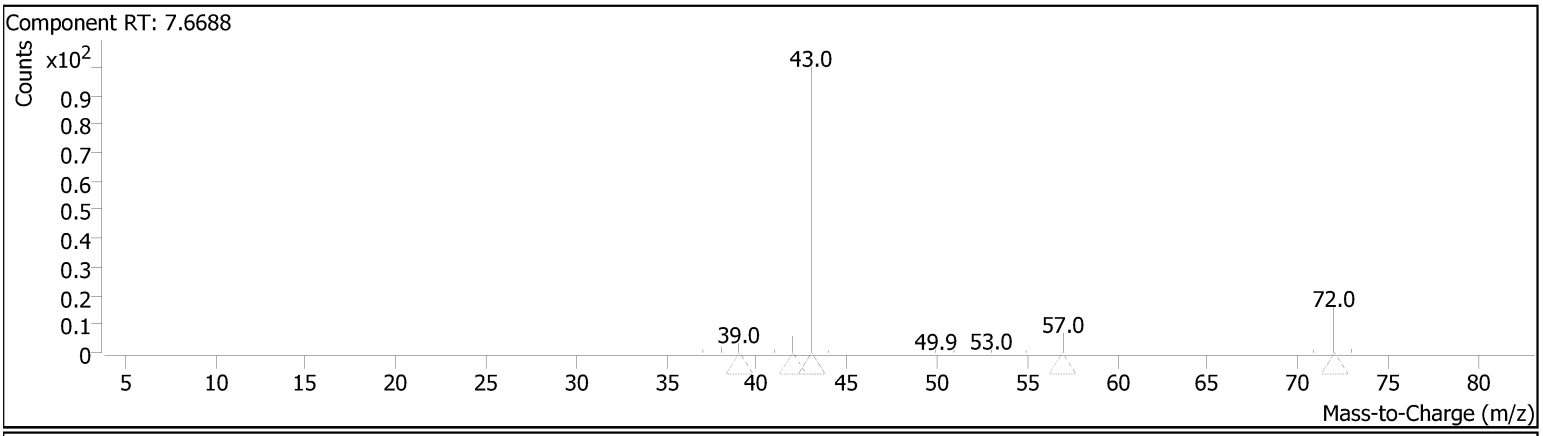


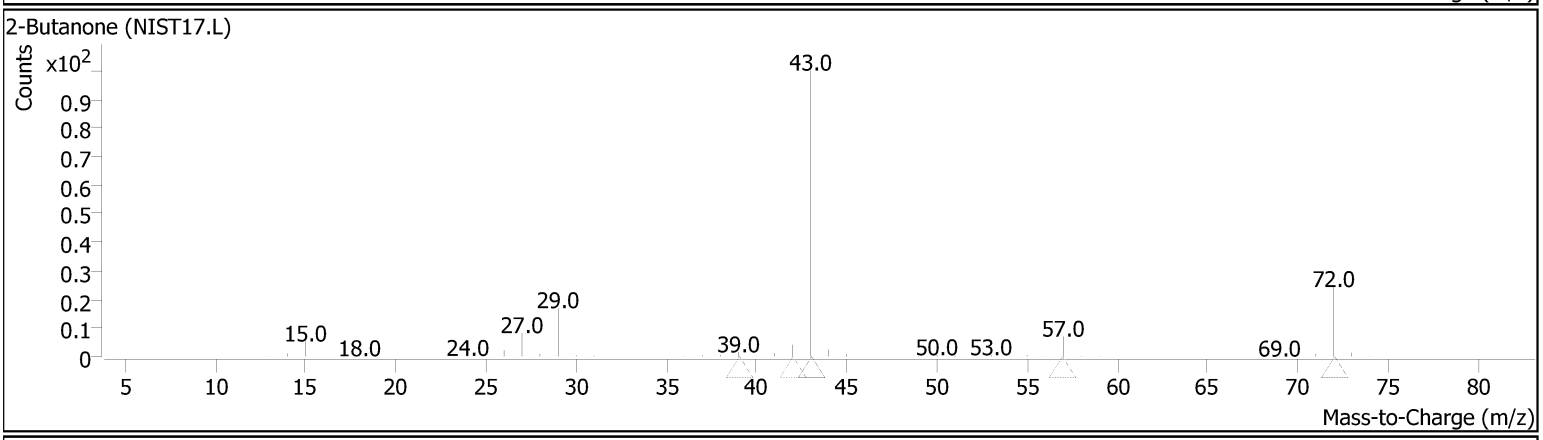


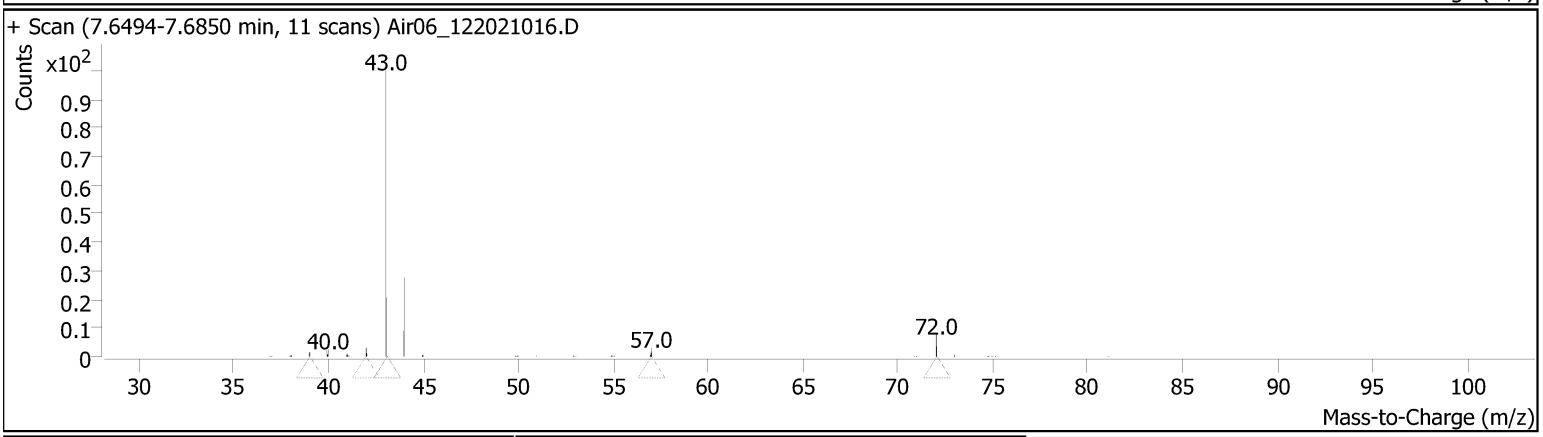


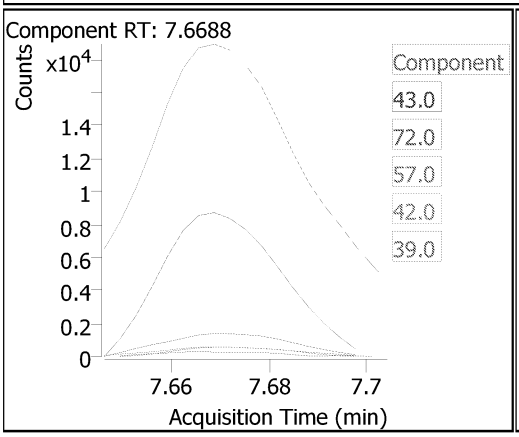


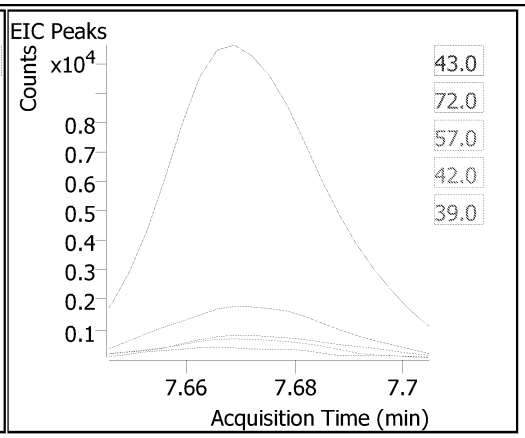
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.6688	2-Butanone	25008.0	96.4	78-93-3	C4H8O	0.1113

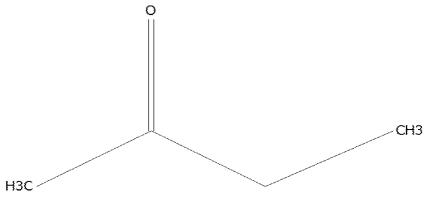




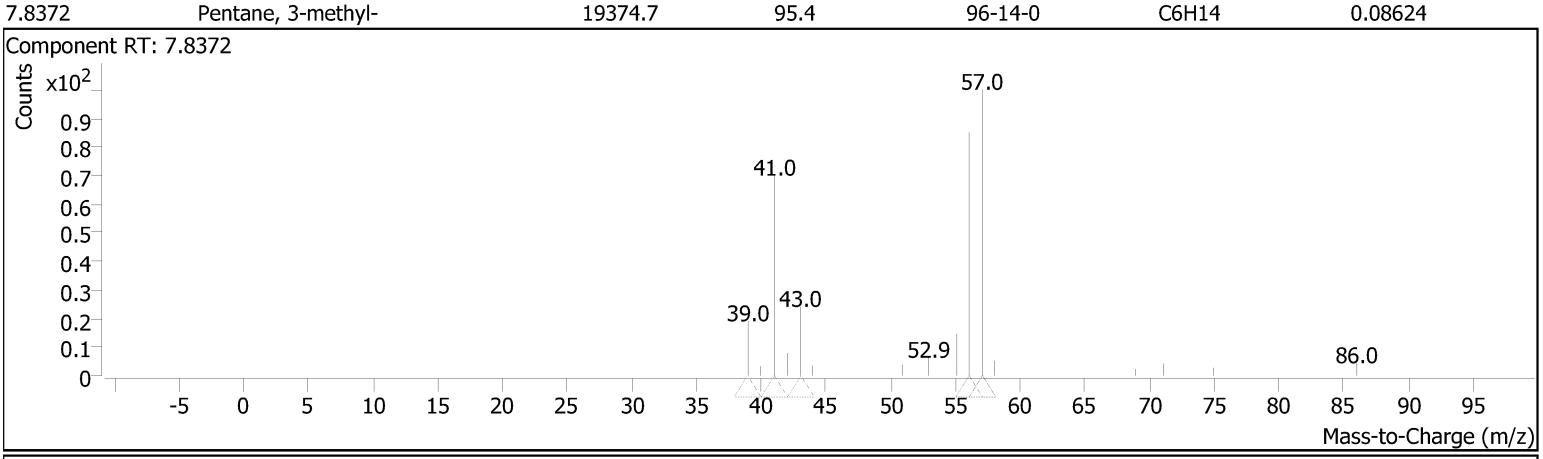


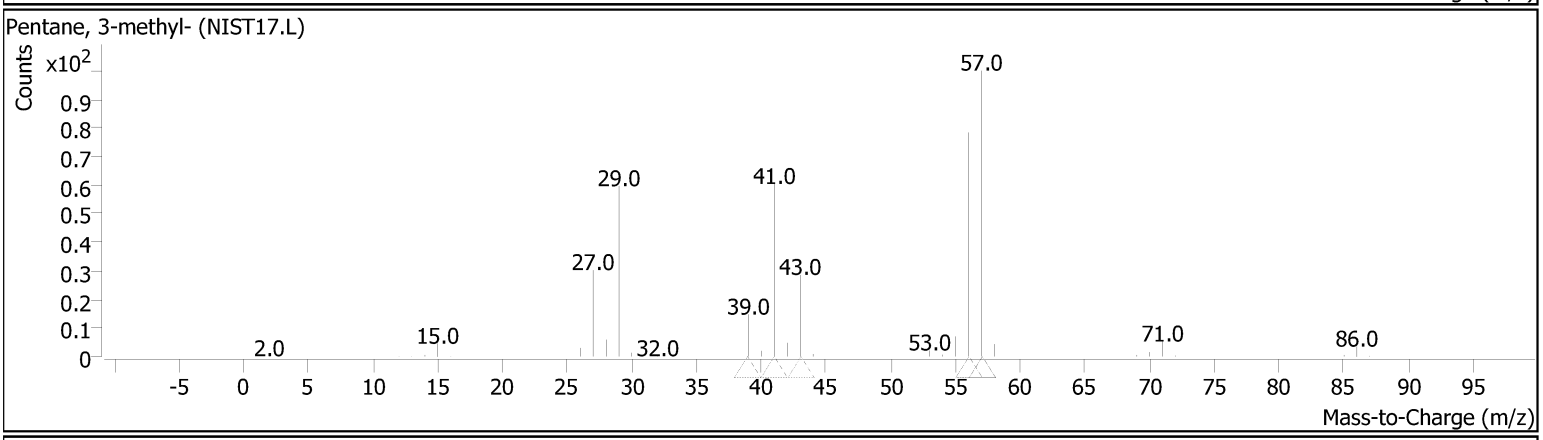


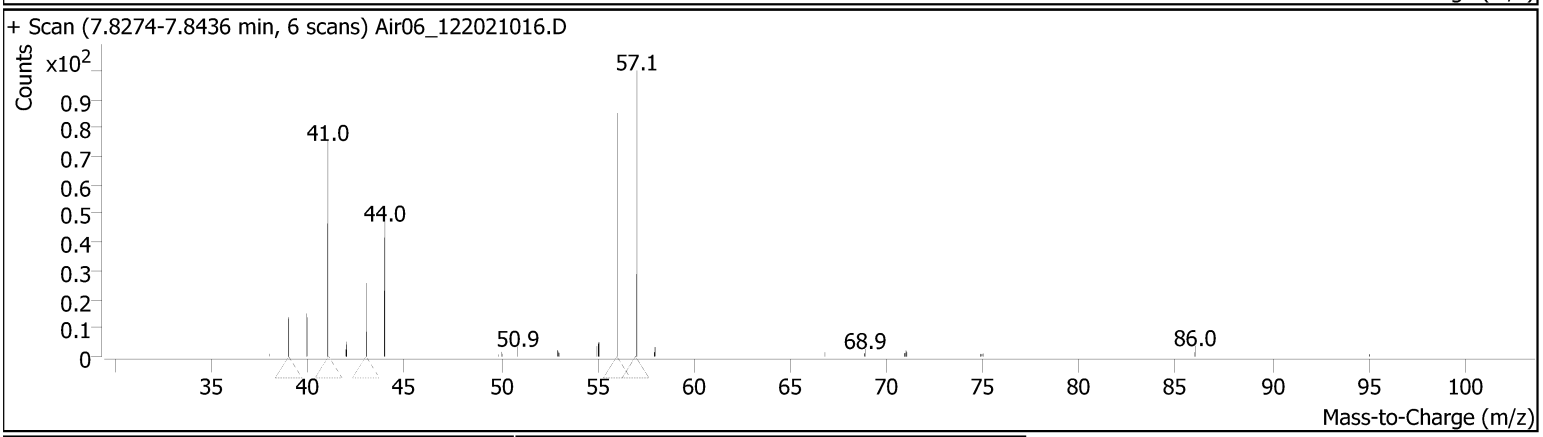


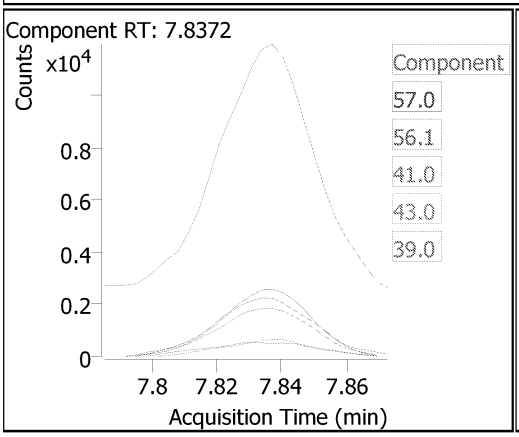


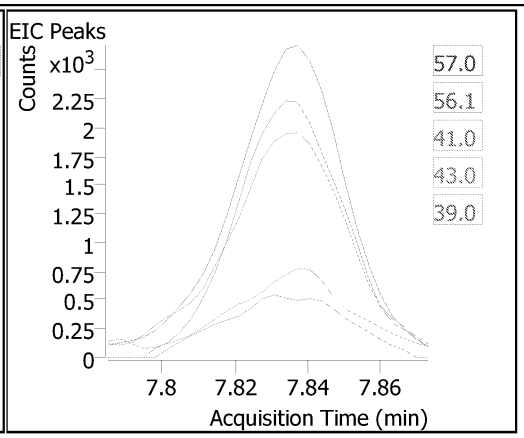
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.8372	Pentane, 3-methyl-	19374.7	95.4	96-14-0	C6H14	0.08624

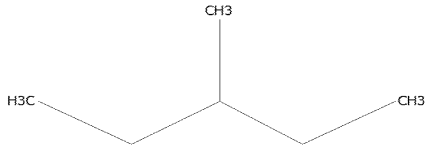




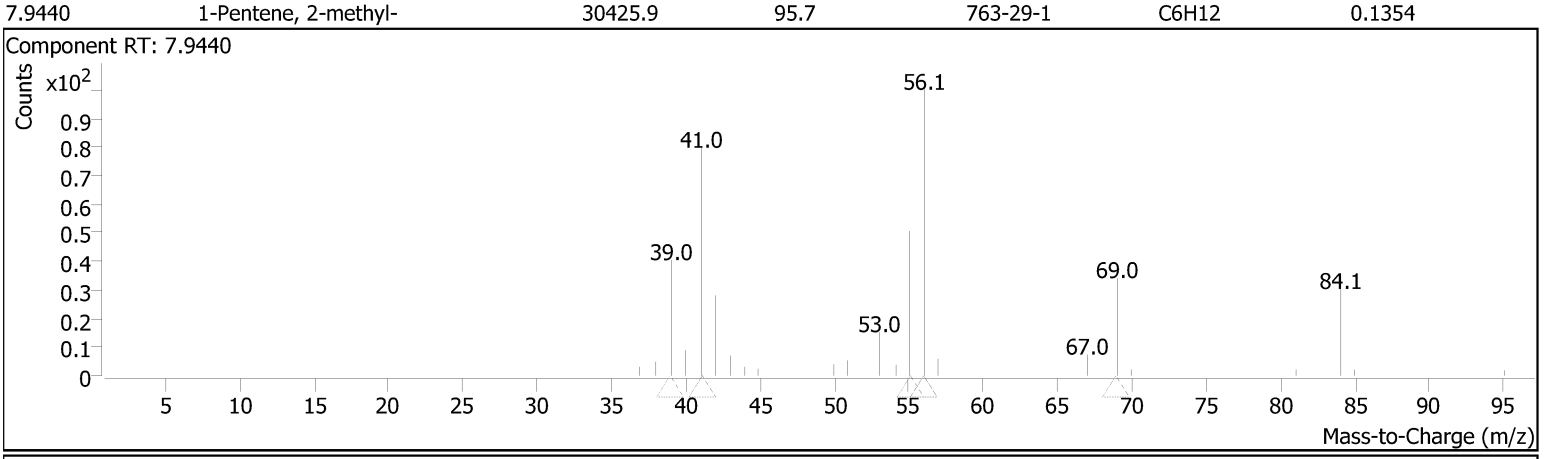


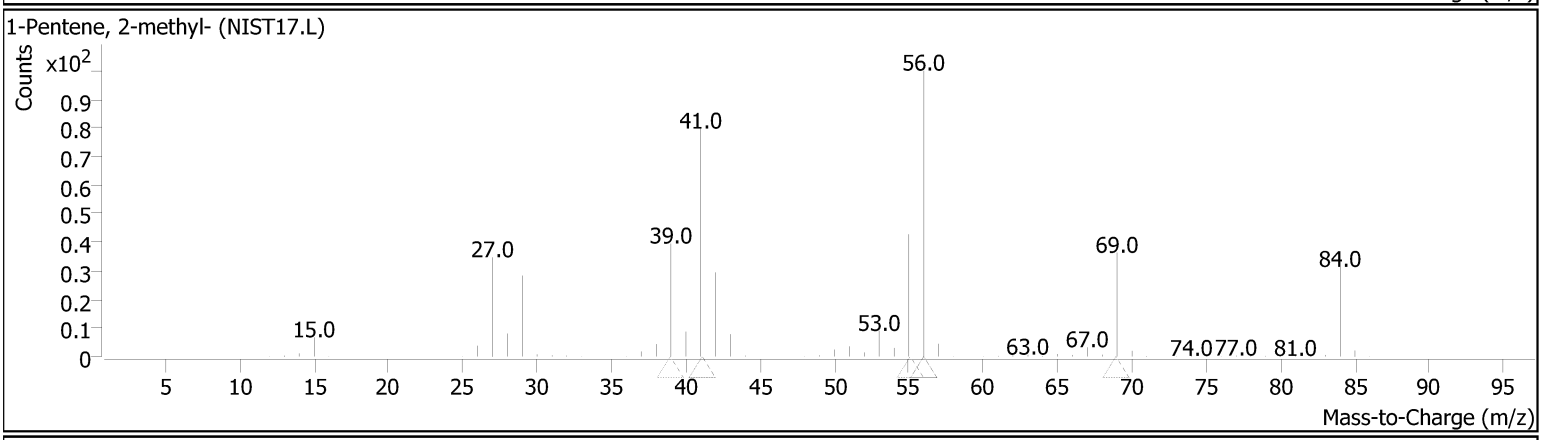


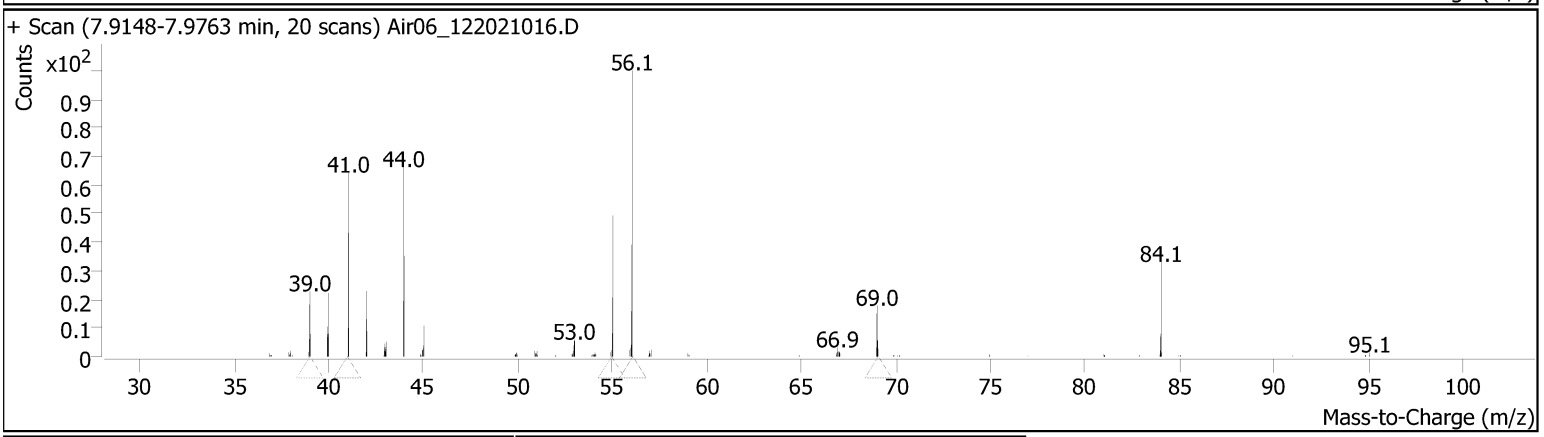


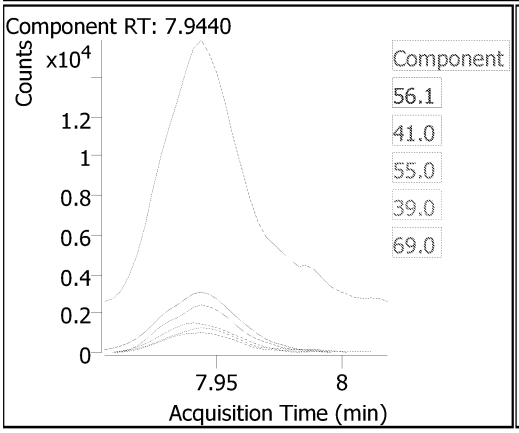


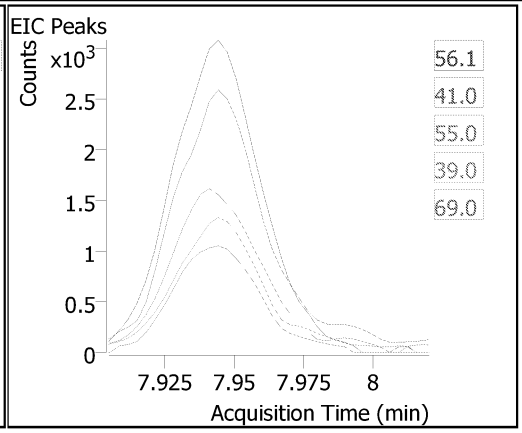
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.9440	1-Pentene, 2-methyl-	30425.9	95.7	763-29-1	C6H12	0.1354

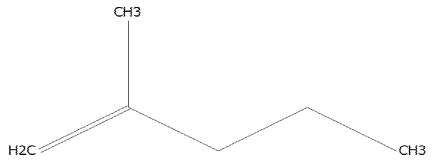




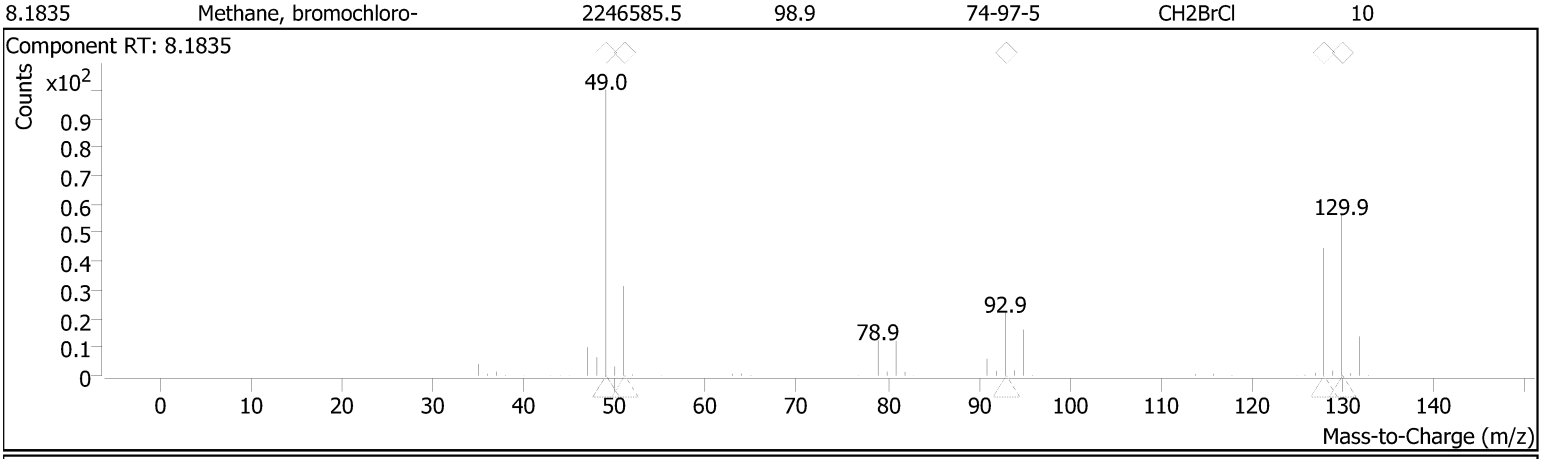


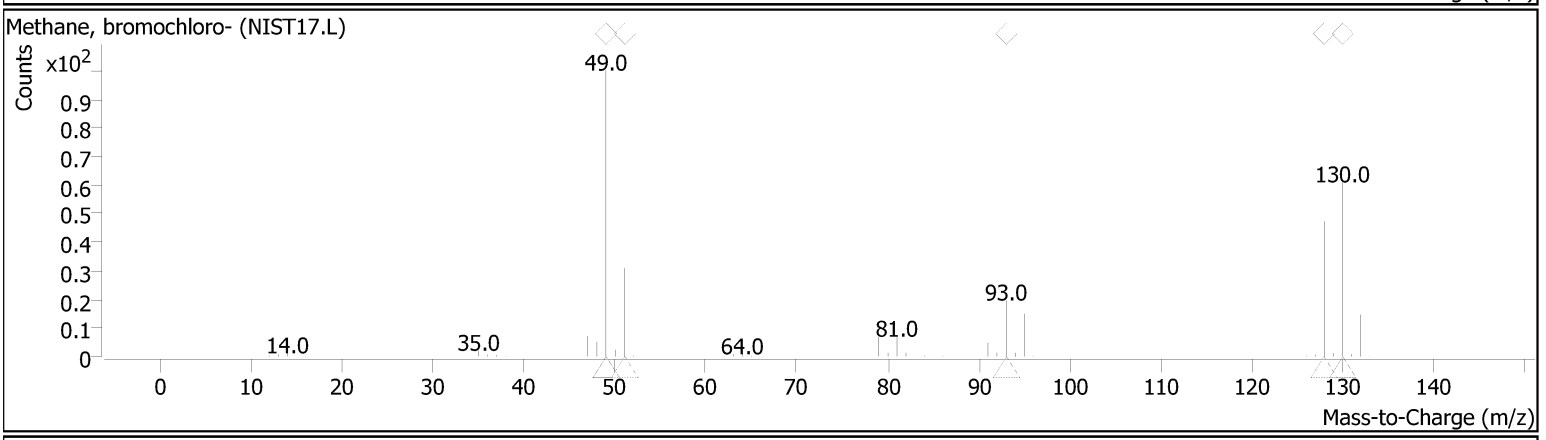


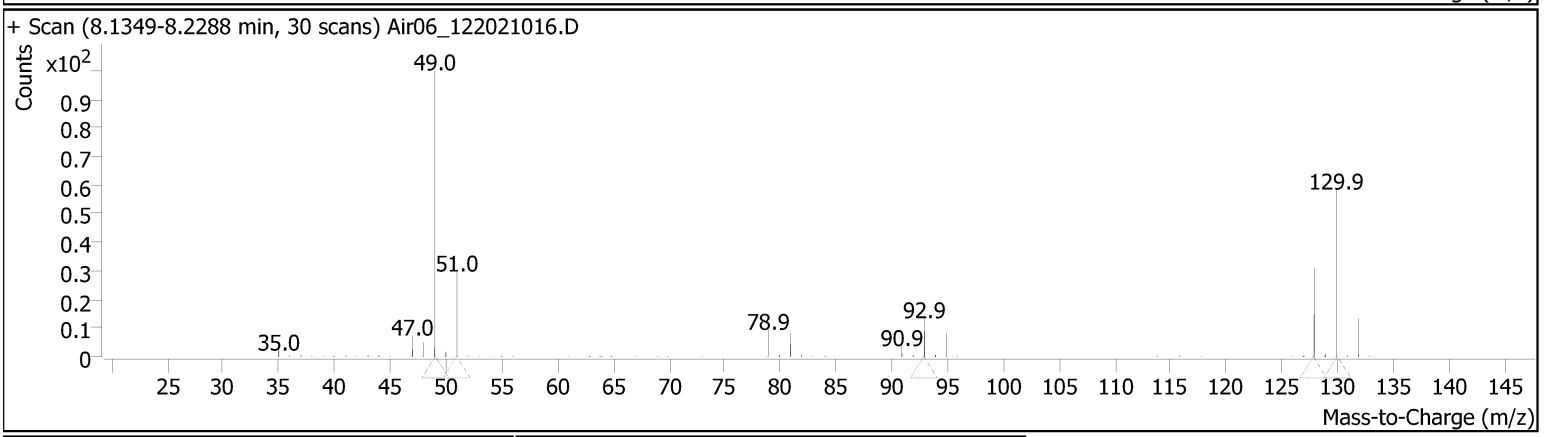


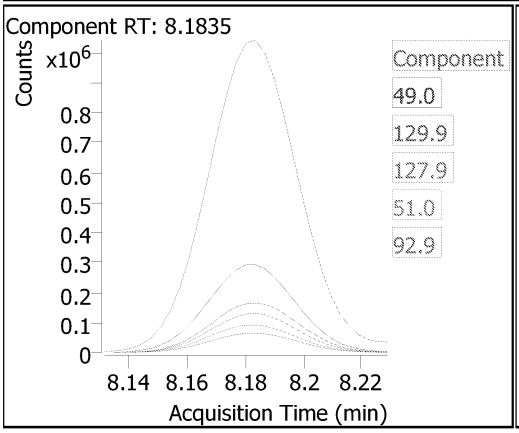


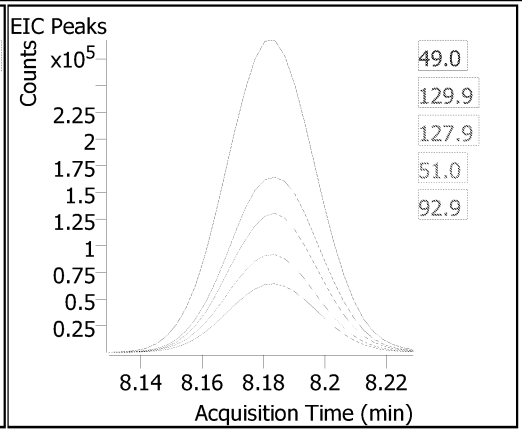
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.1835	Methane, bromochloro-	2246585.5	98.9	74-97-5	CH2BrCl	10

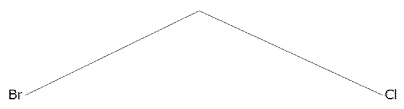




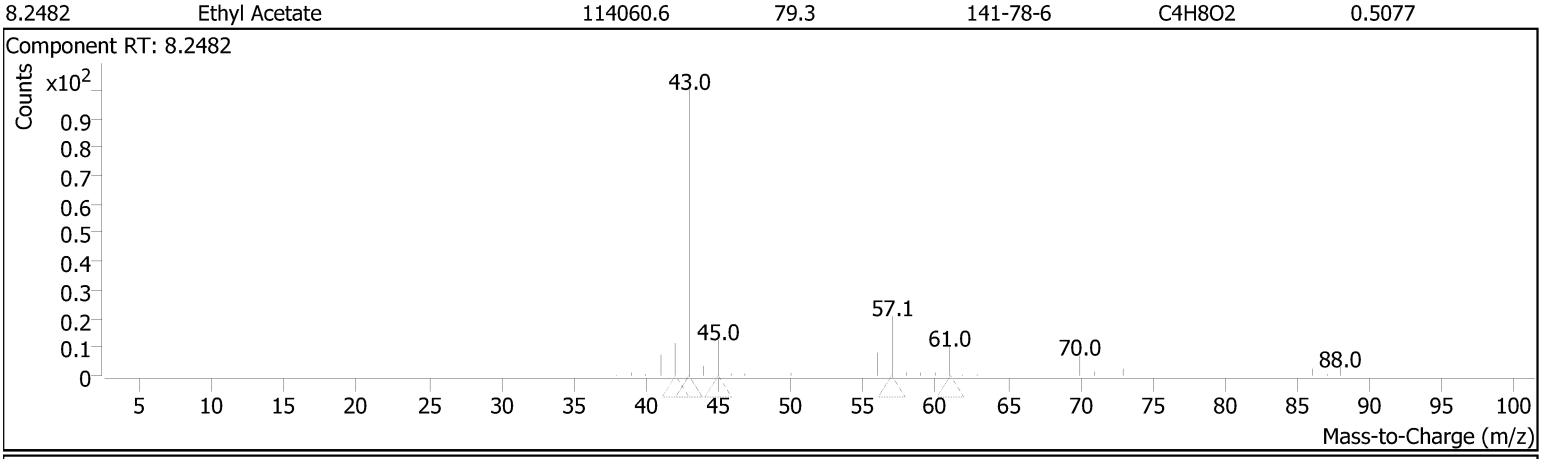


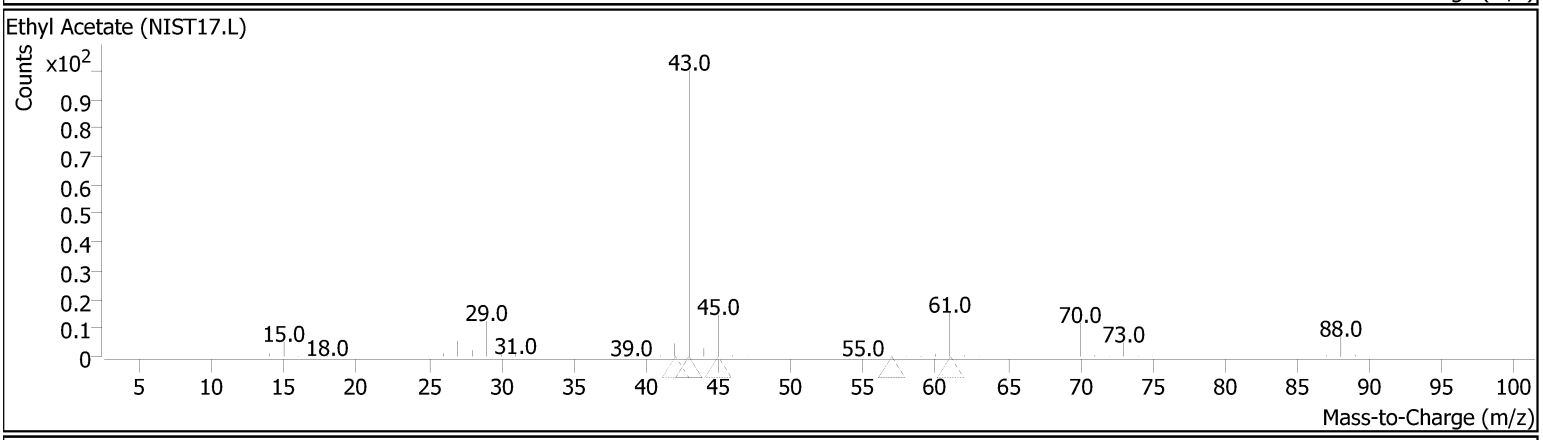


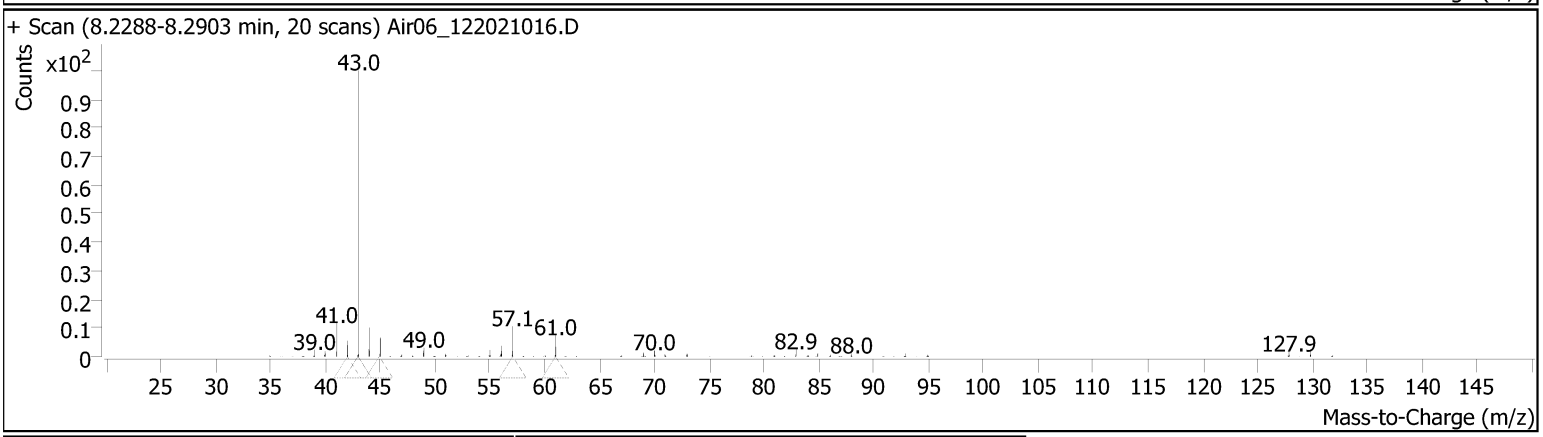


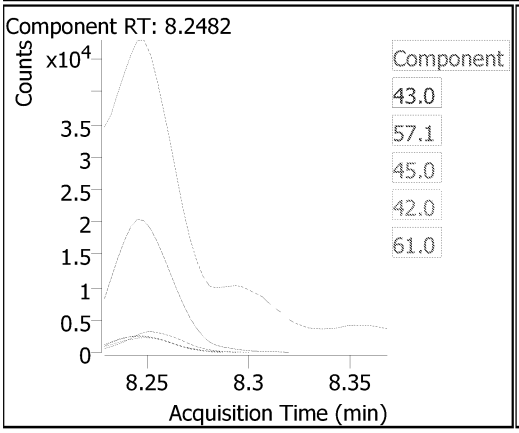


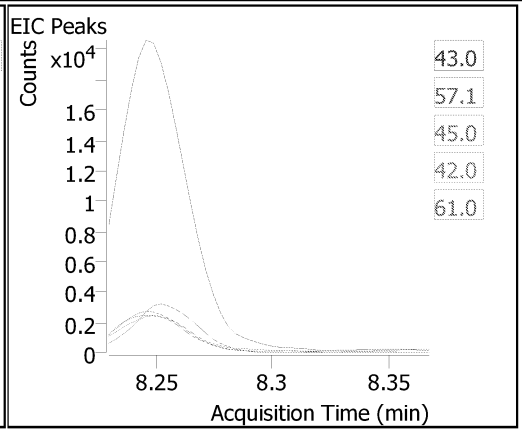
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.2482	Ethyl Acetate	114060.6	79.3	141-78-6	C4H8O2	0.5077

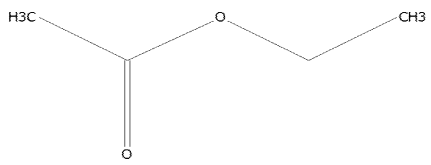




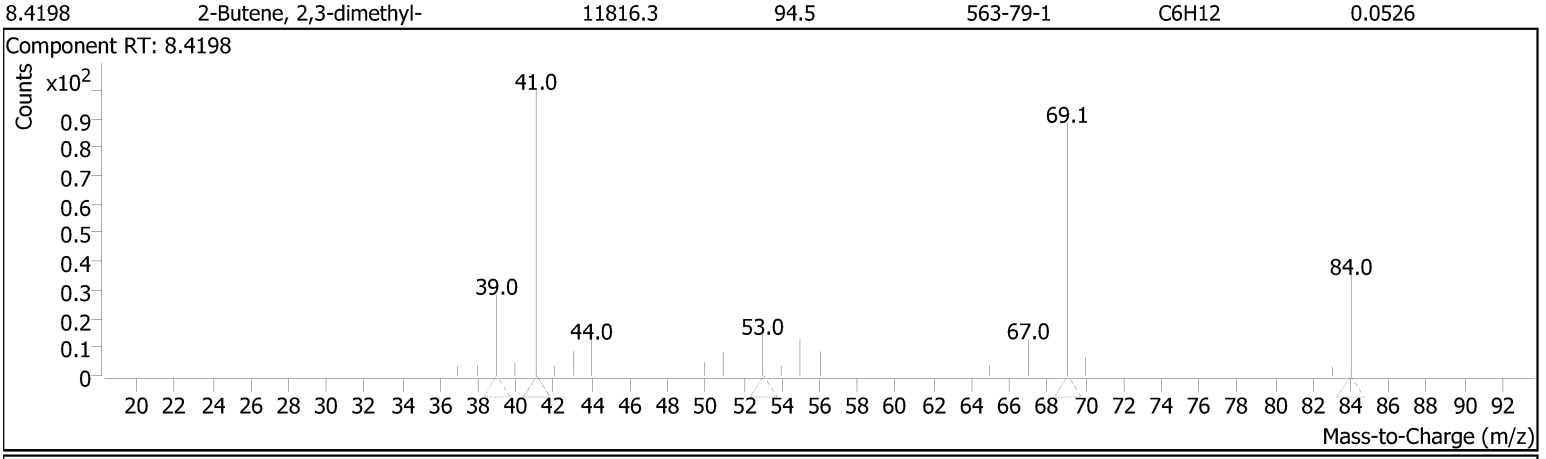


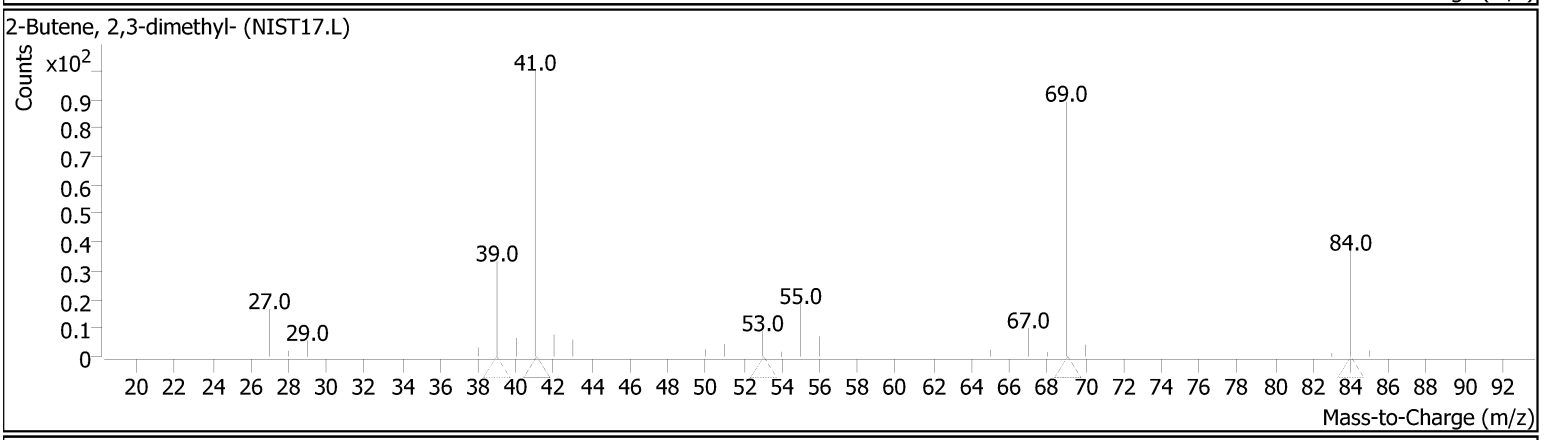


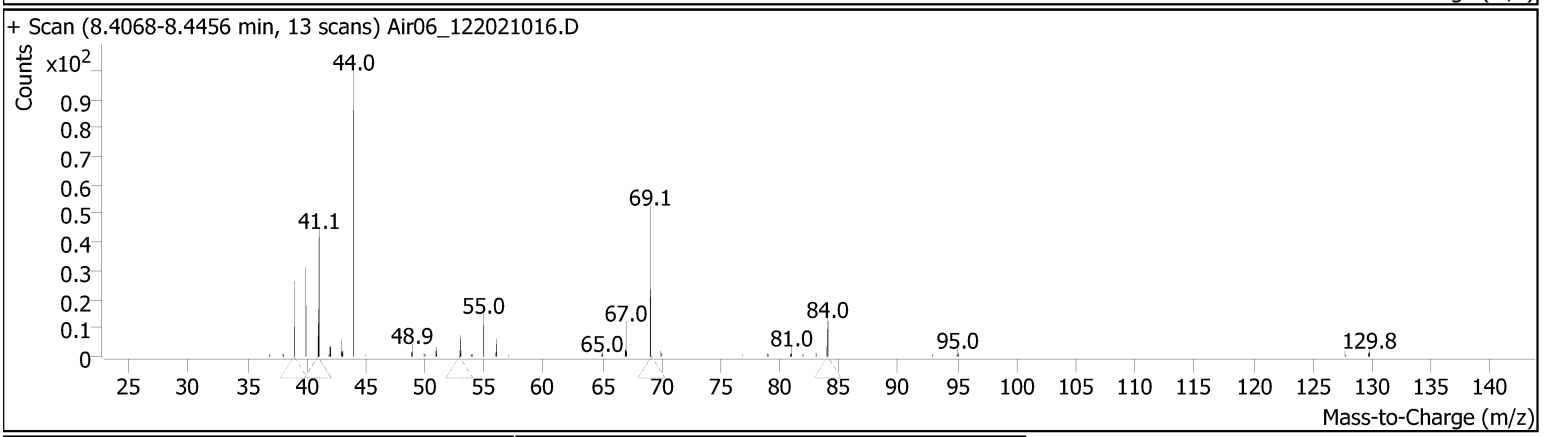


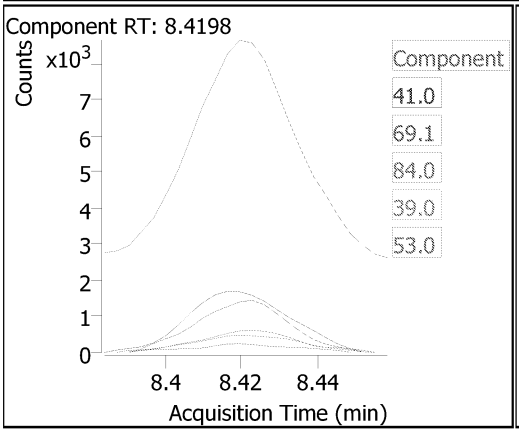


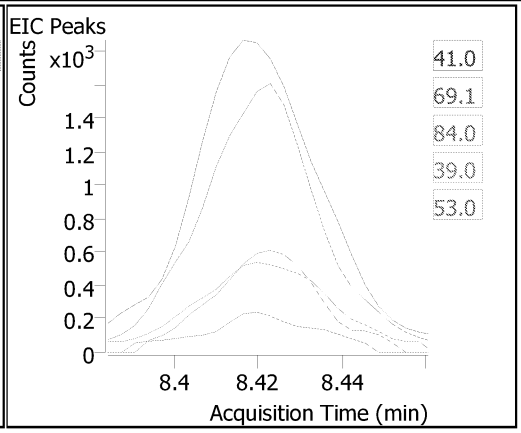
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.4198	2-Butene, 2,3-dimethyl-	11816.3	94.5	563-79-1	C6H12	0.0526

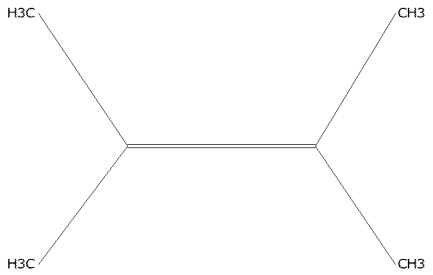




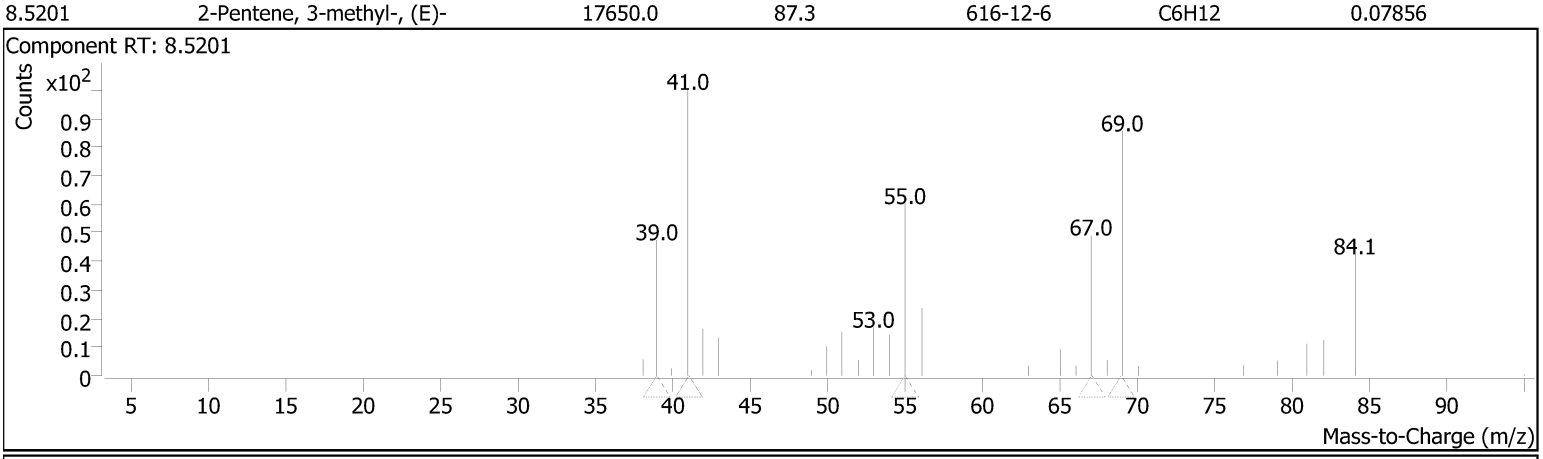


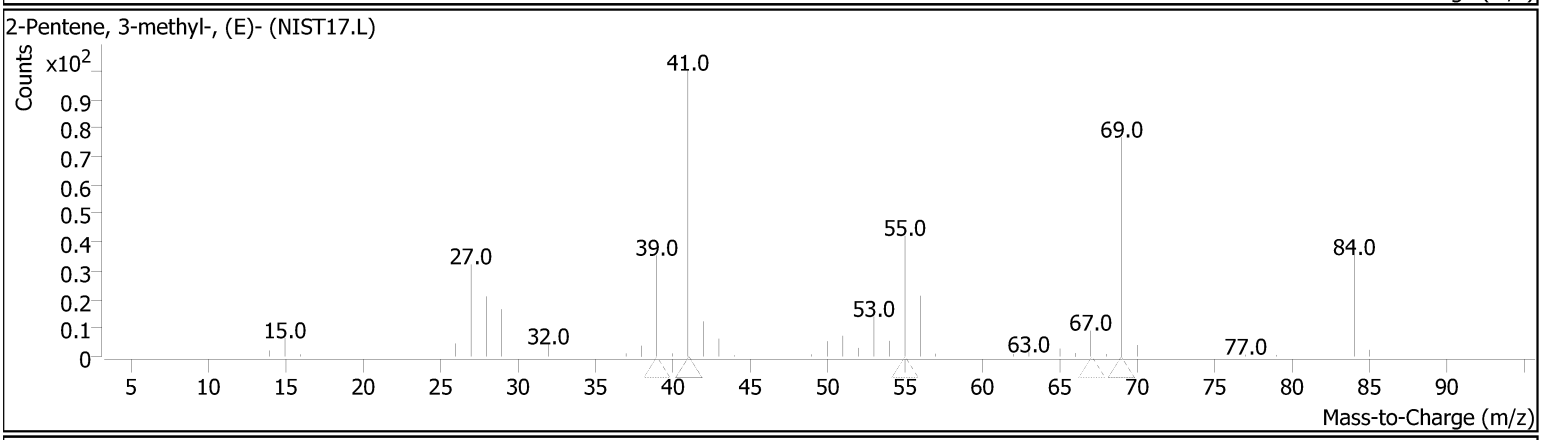


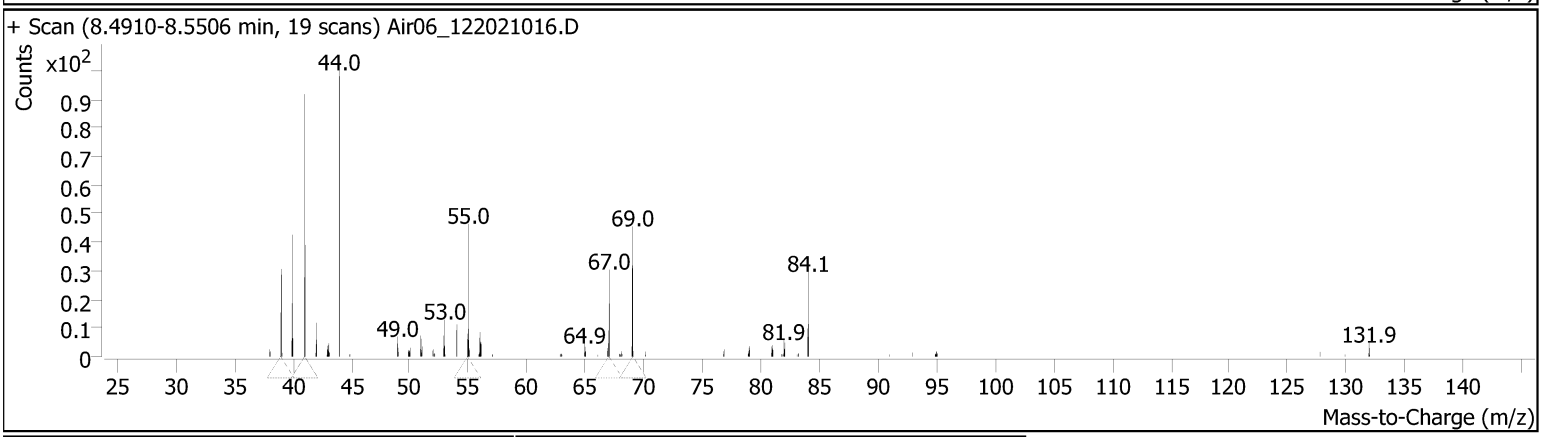


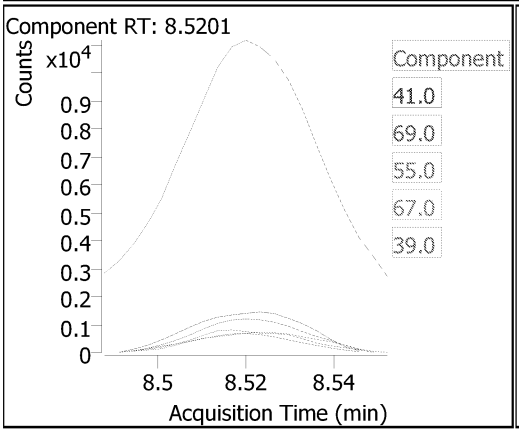


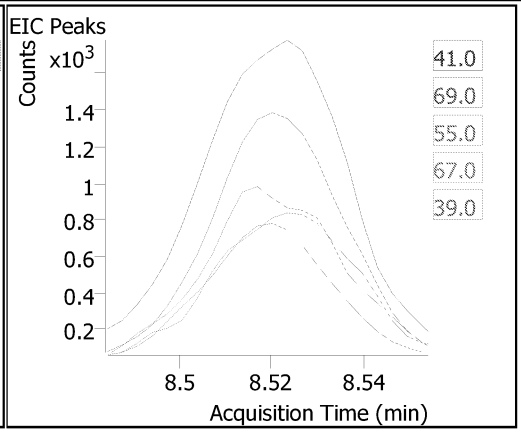
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.5201	2-Pentene, 3-methyl-, (E)-	17650.0	87.3	616-12-6	C6H12	0.07856

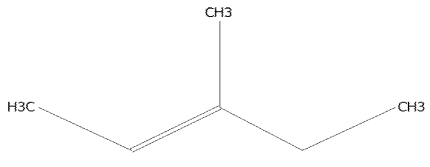




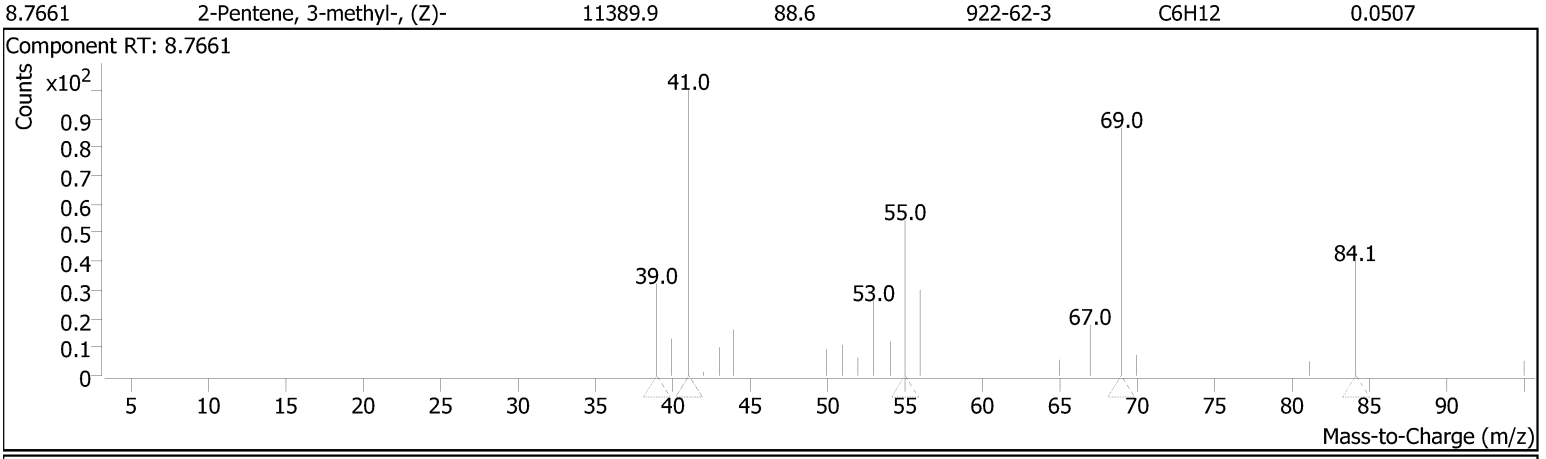


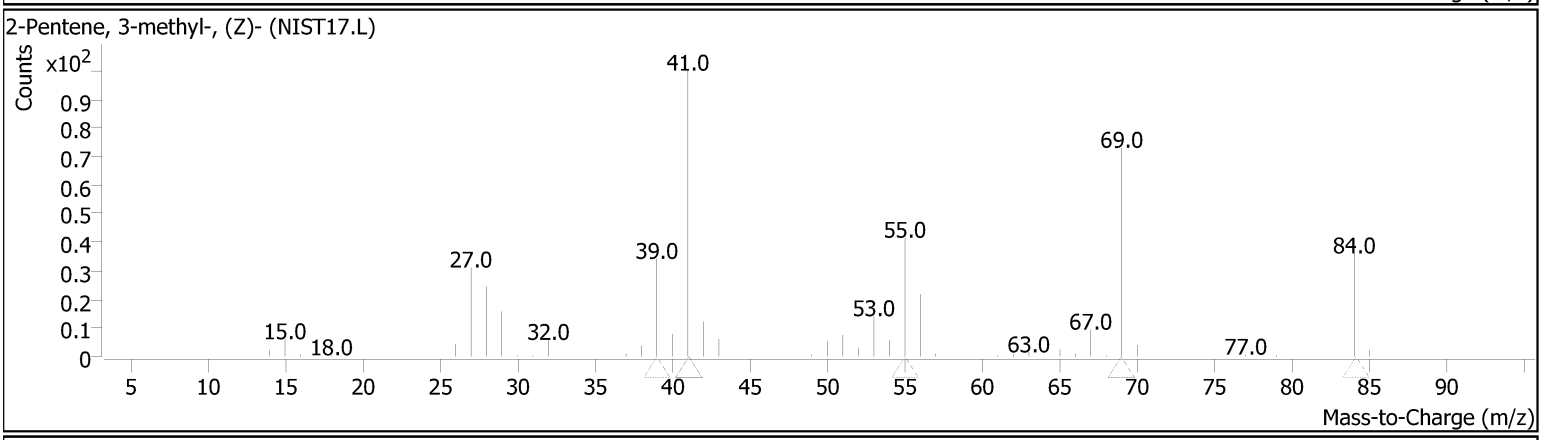


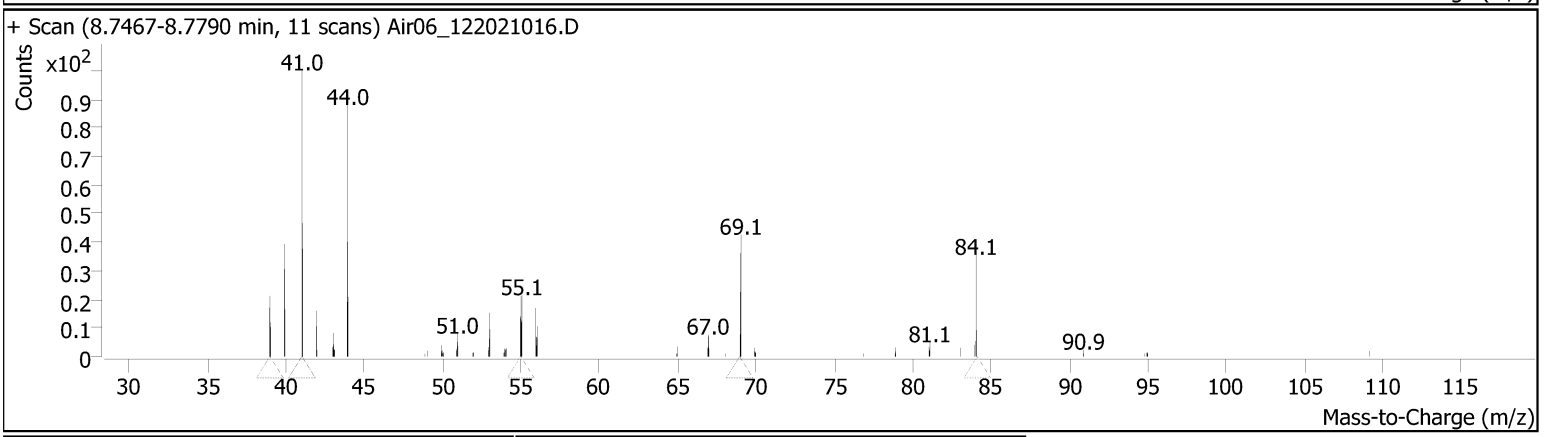


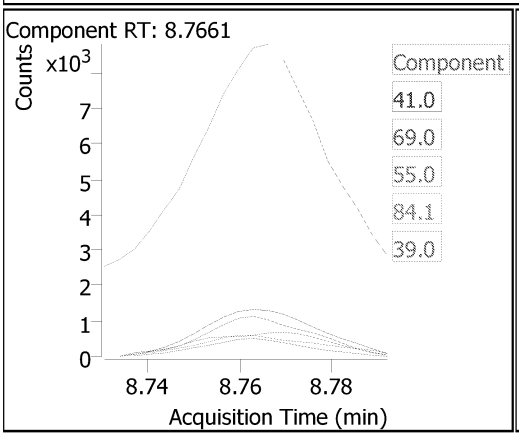


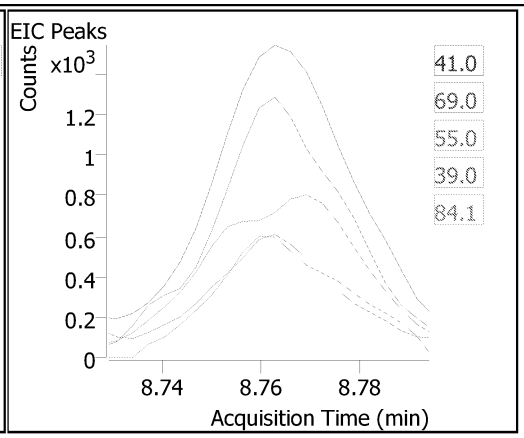
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.7661	2-Pentene, 3-methyl-, (Z)-	11389.9	88.6	922-62-3	C6H12	0.0507

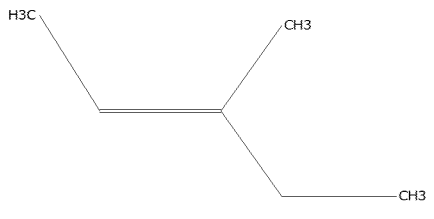




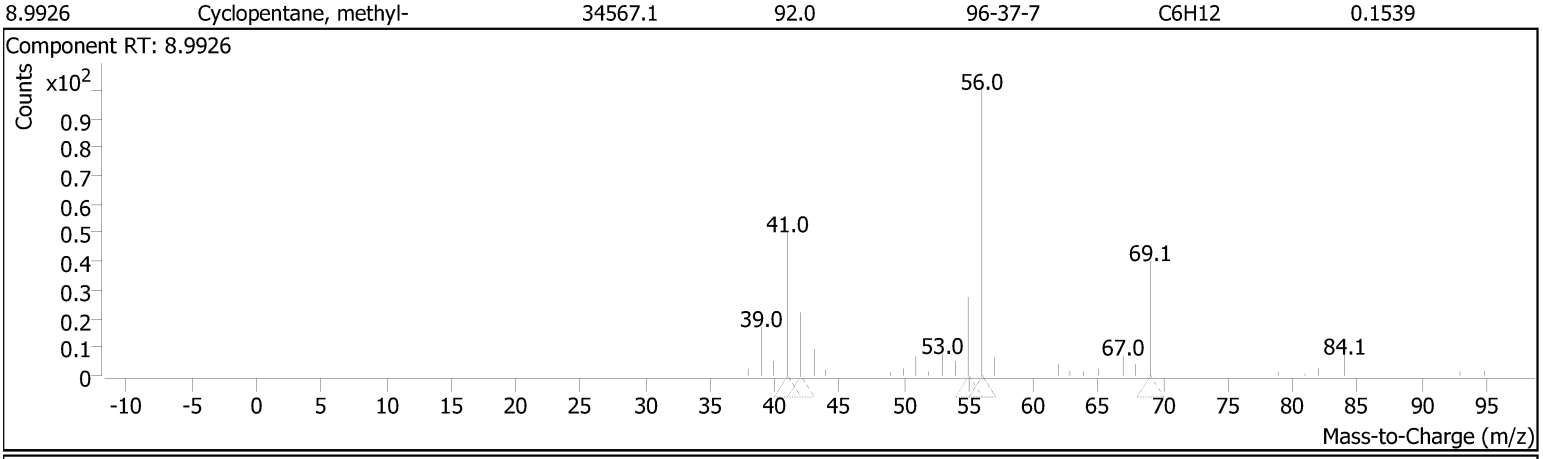


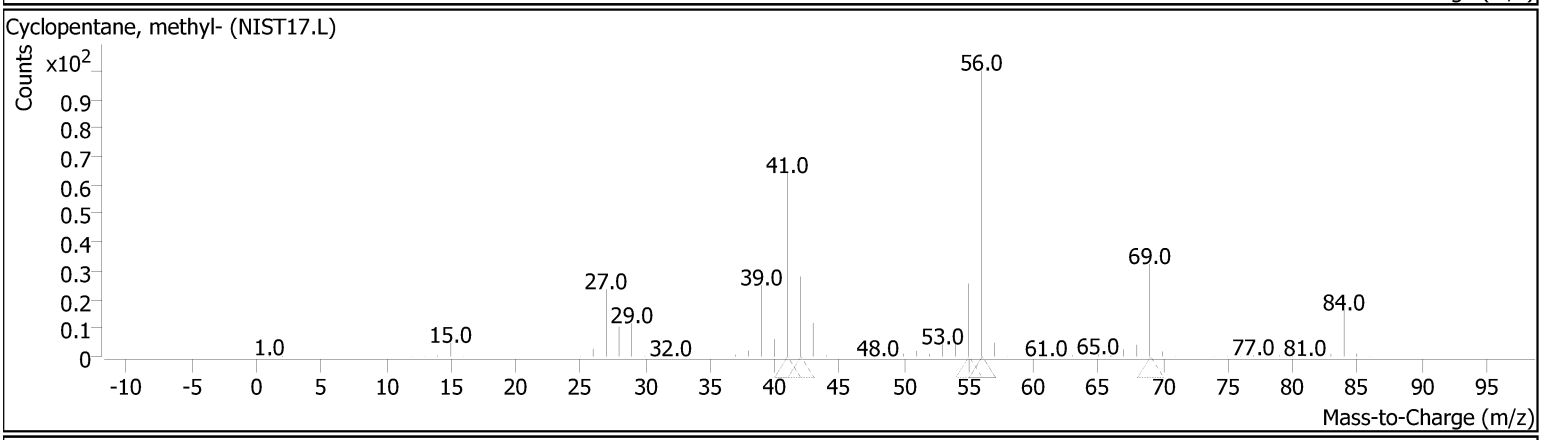


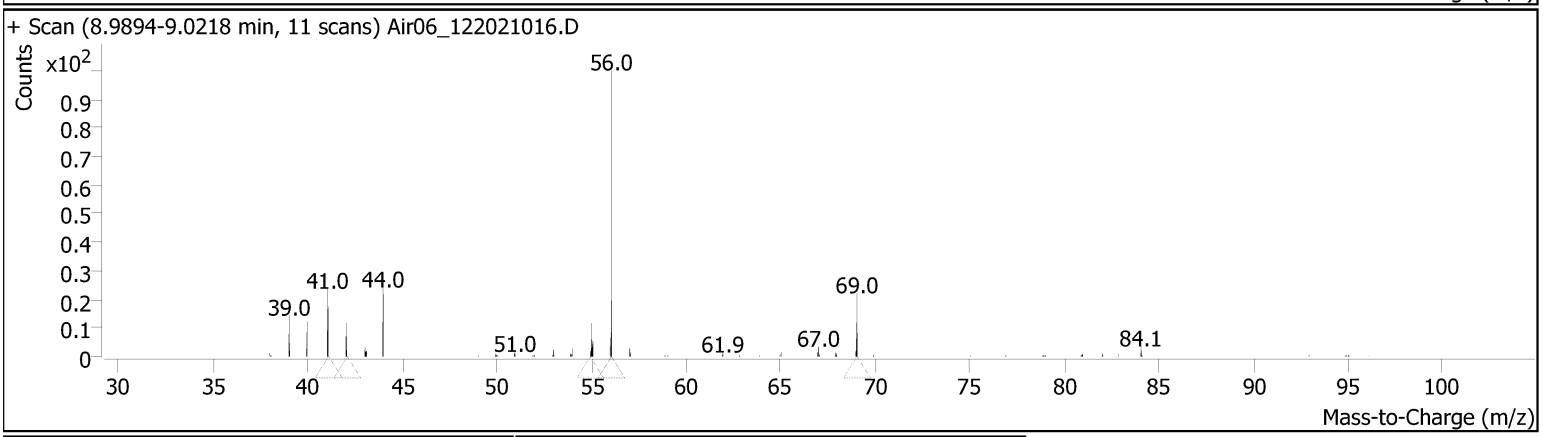


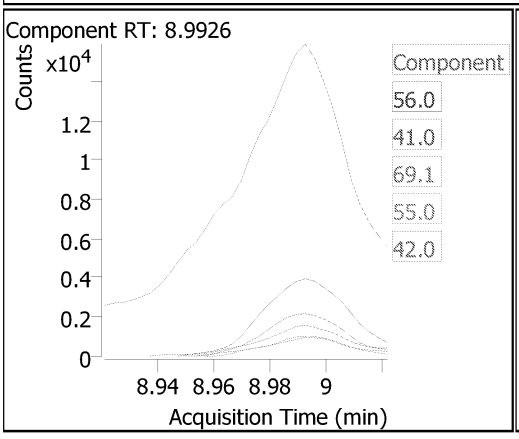


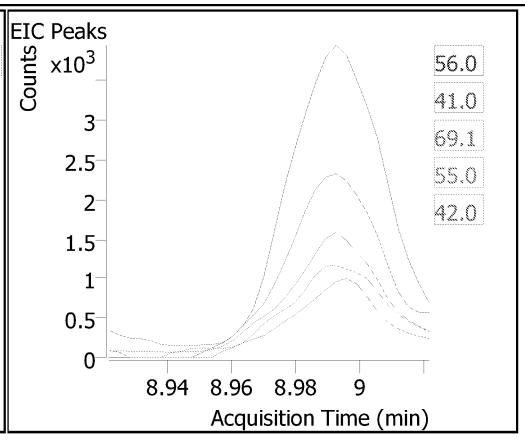
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.9926	Cyclopentane, methyl-	34567.1	92.0	96-37-7	C6H12	0.1539

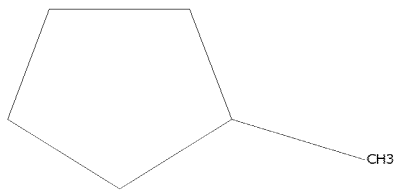




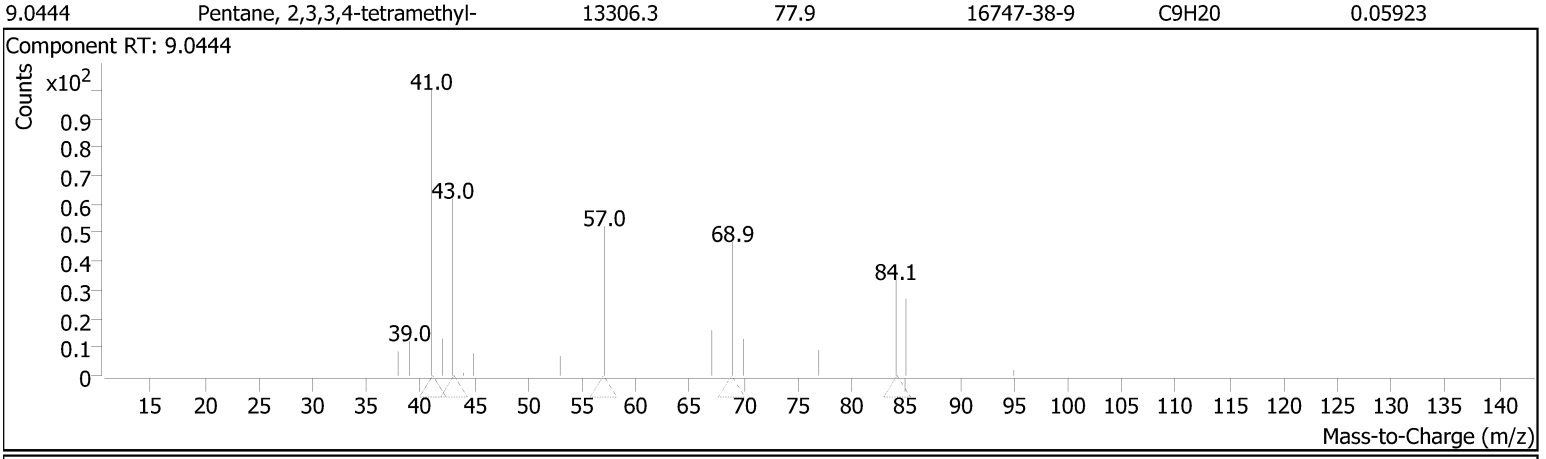


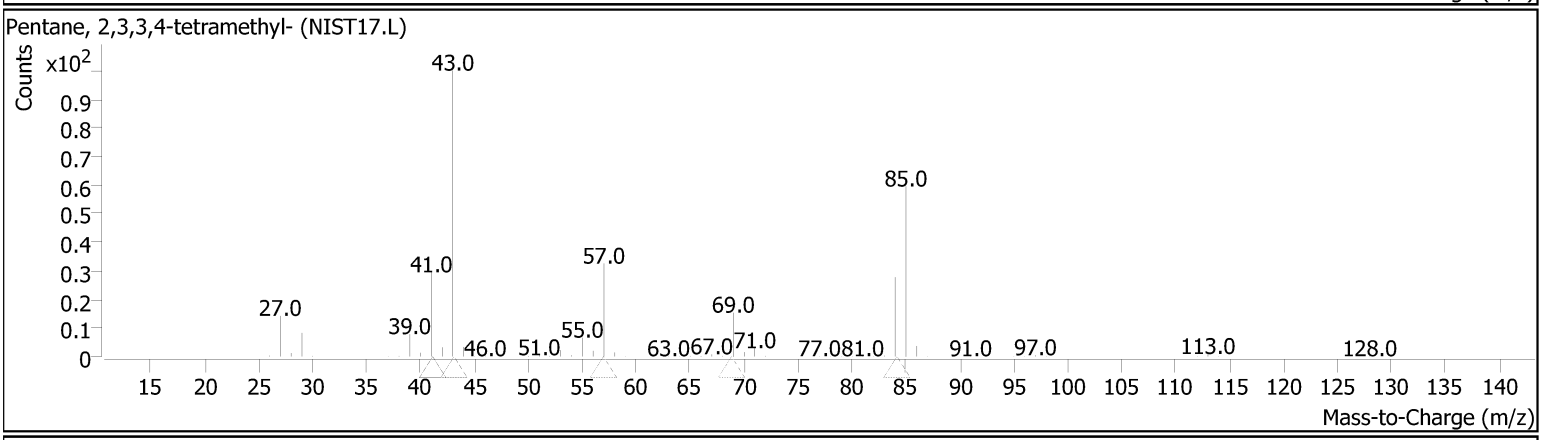


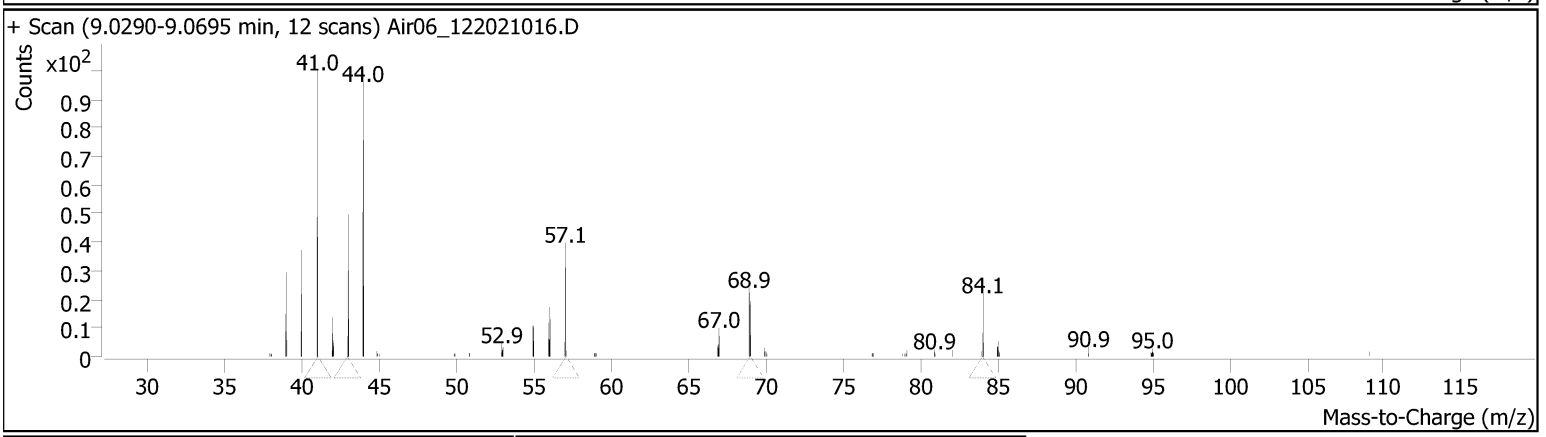


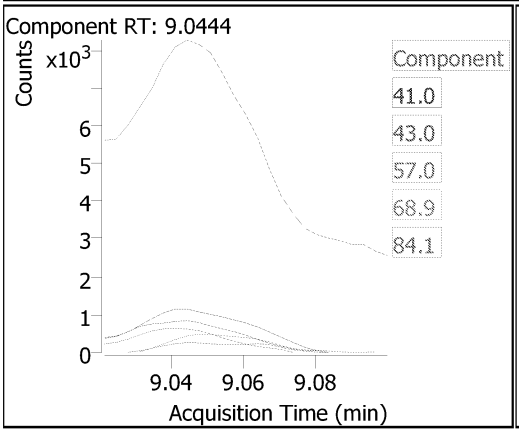


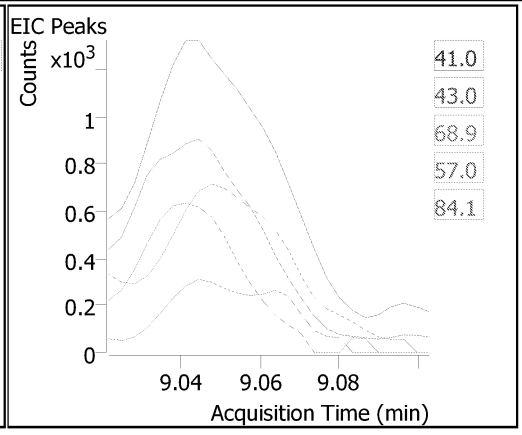
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.0444	Pentane, 2,3,3,4-tetramethyl-	13306.3	77.9	16747-38-9	C9H20	0.05923

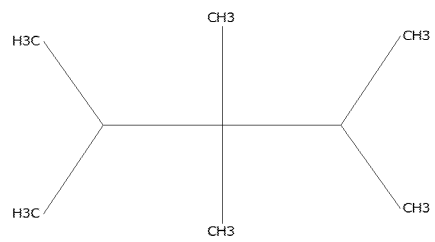




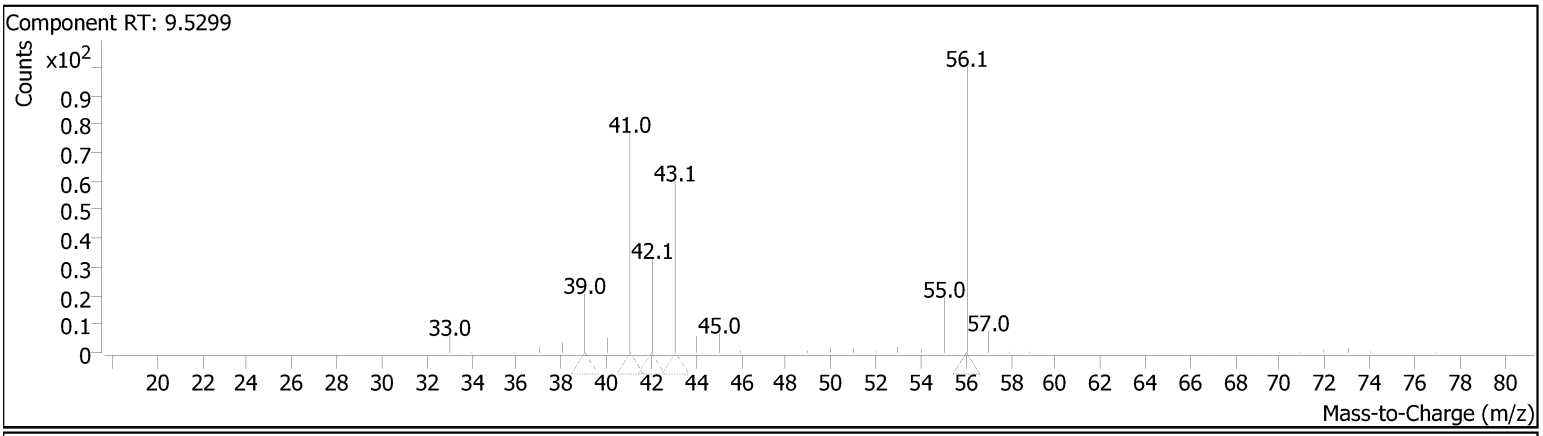


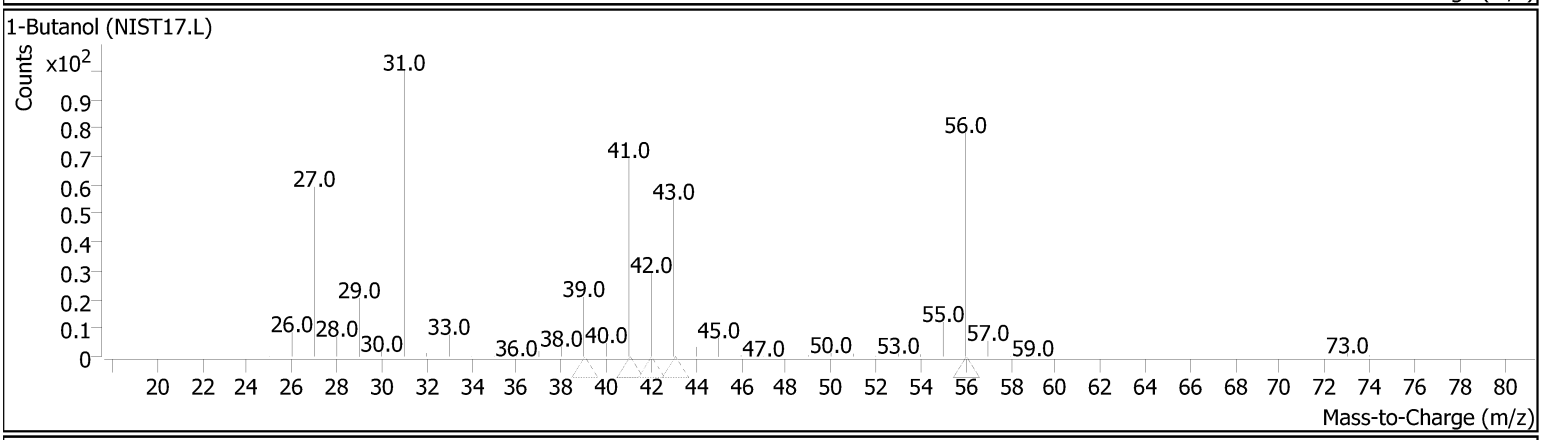


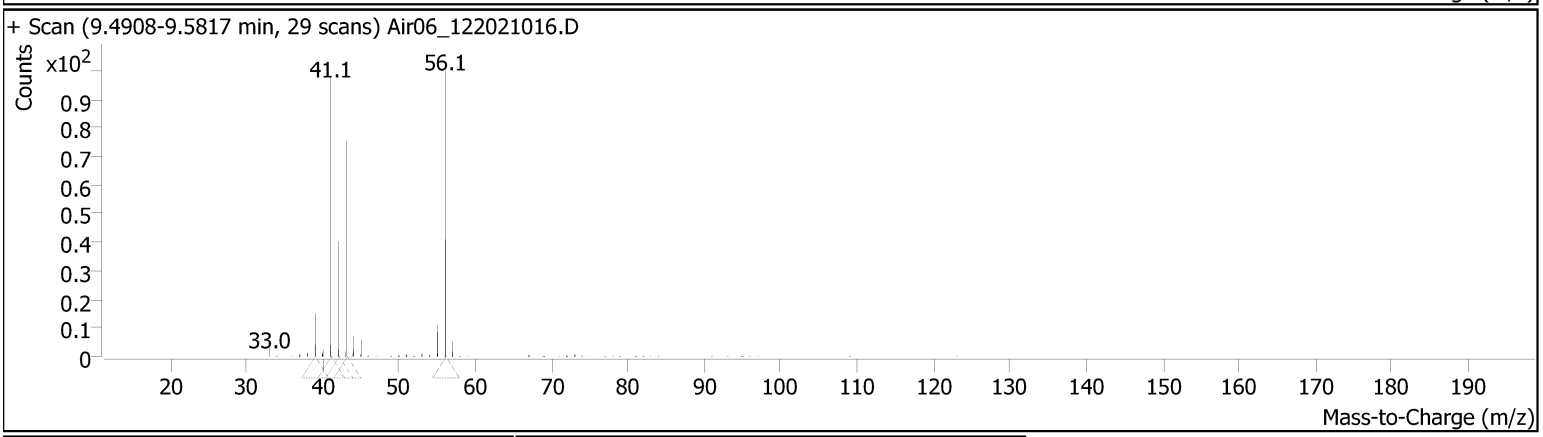


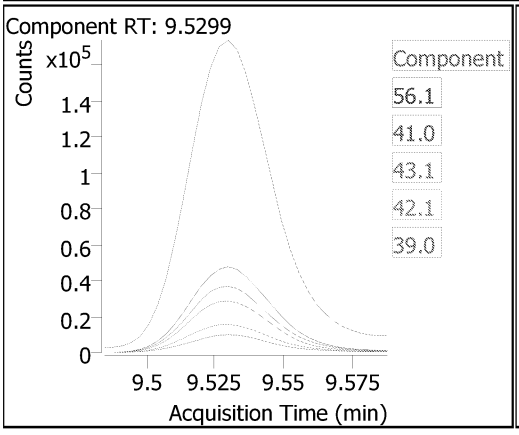


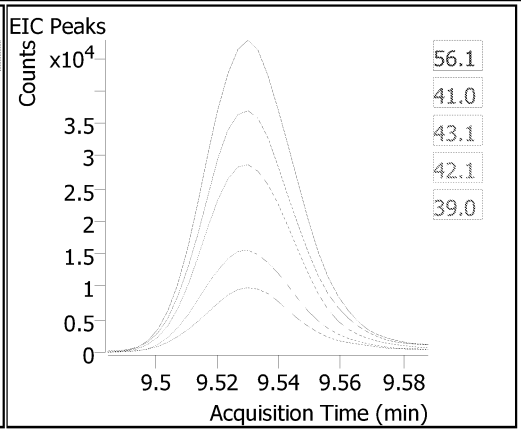
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.5299	1-Butanol	373926.5	98.9	71-36-3	C4H10O	1.097

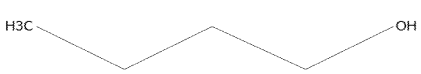




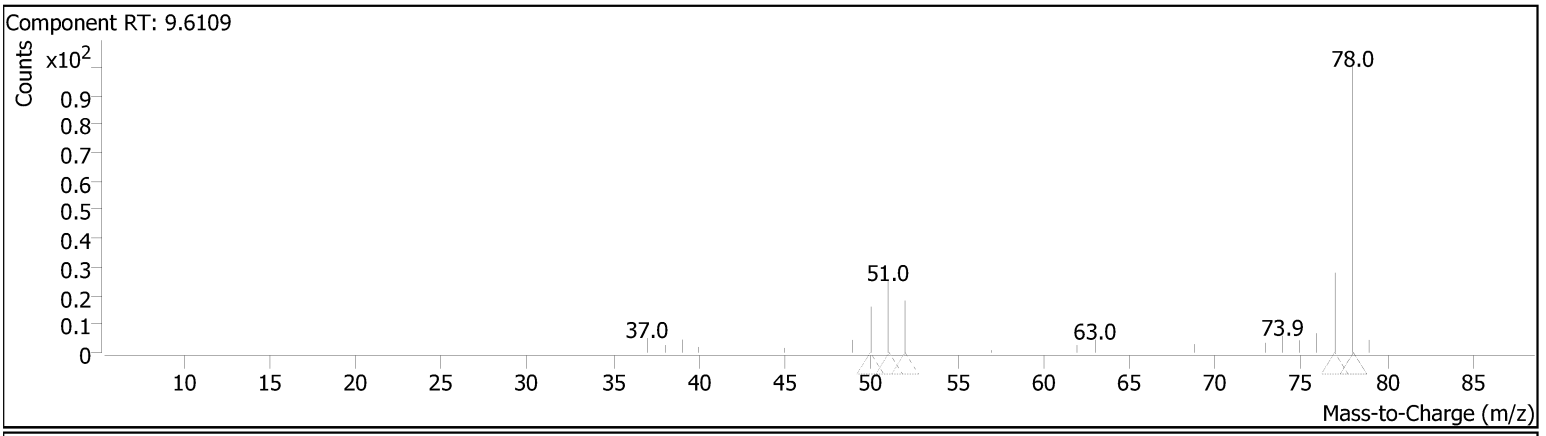


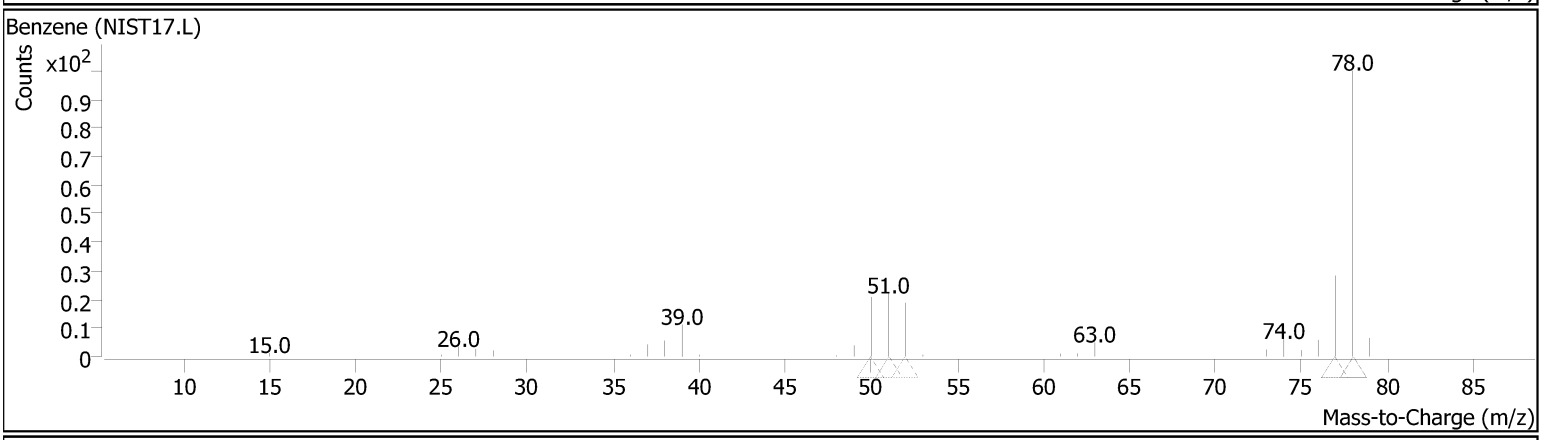


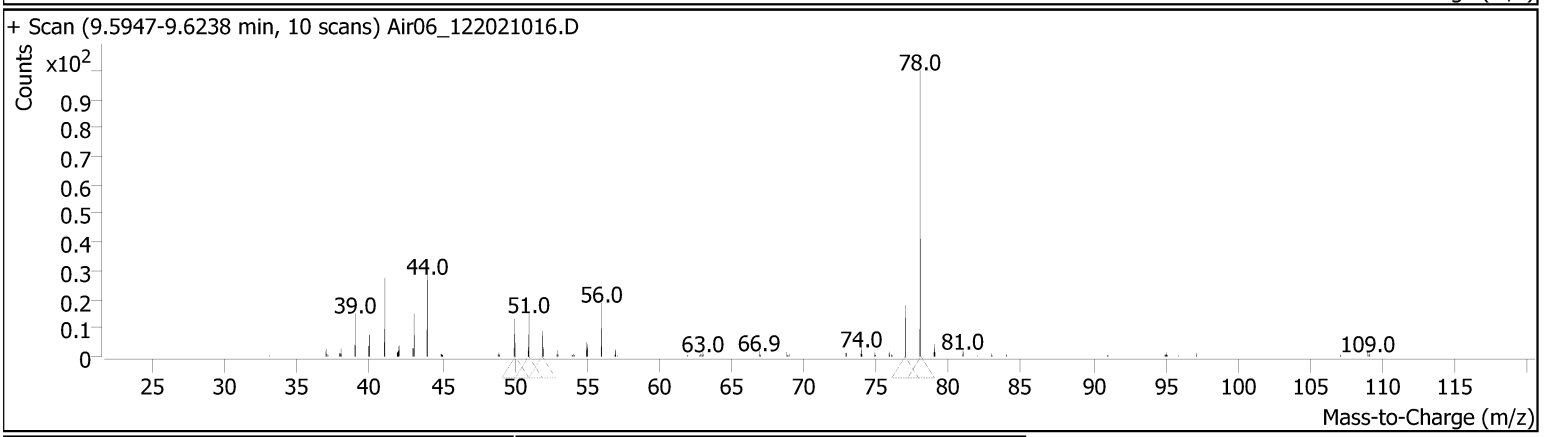


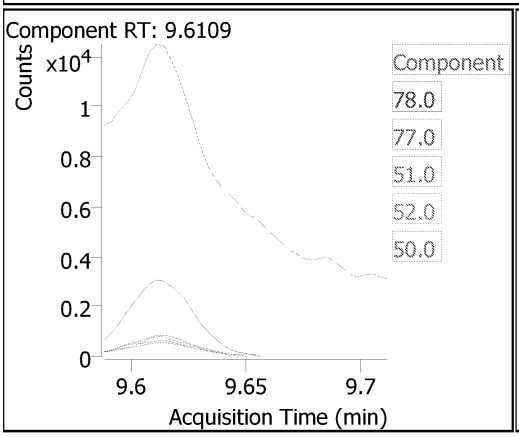


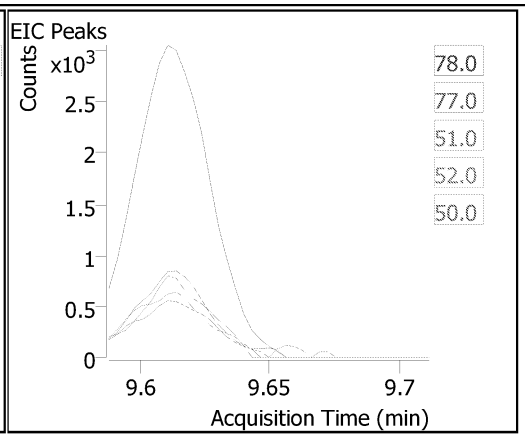
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.6109	Benzene	28037.7	94.8	71-43-2	C6H6	0.08228

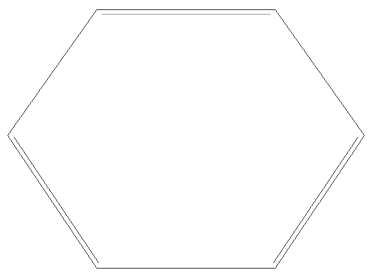




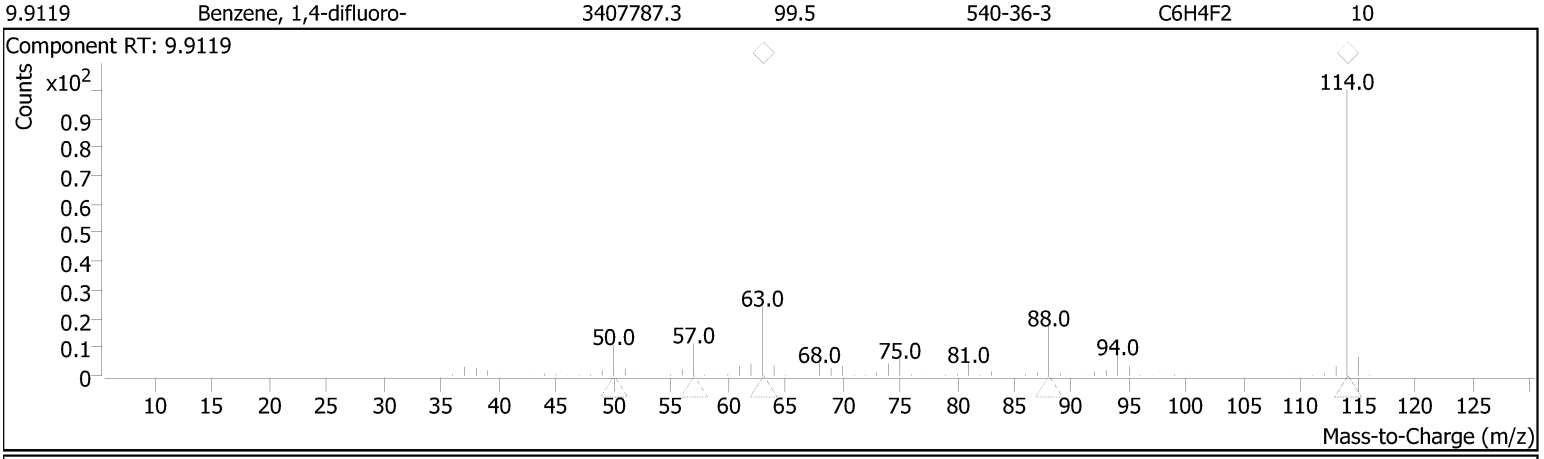


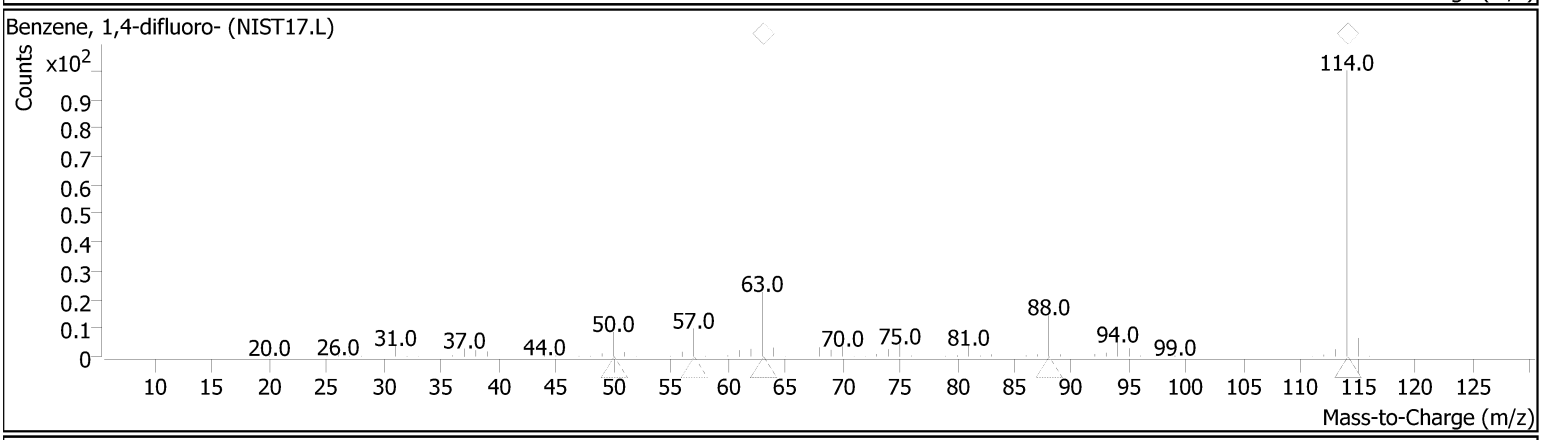


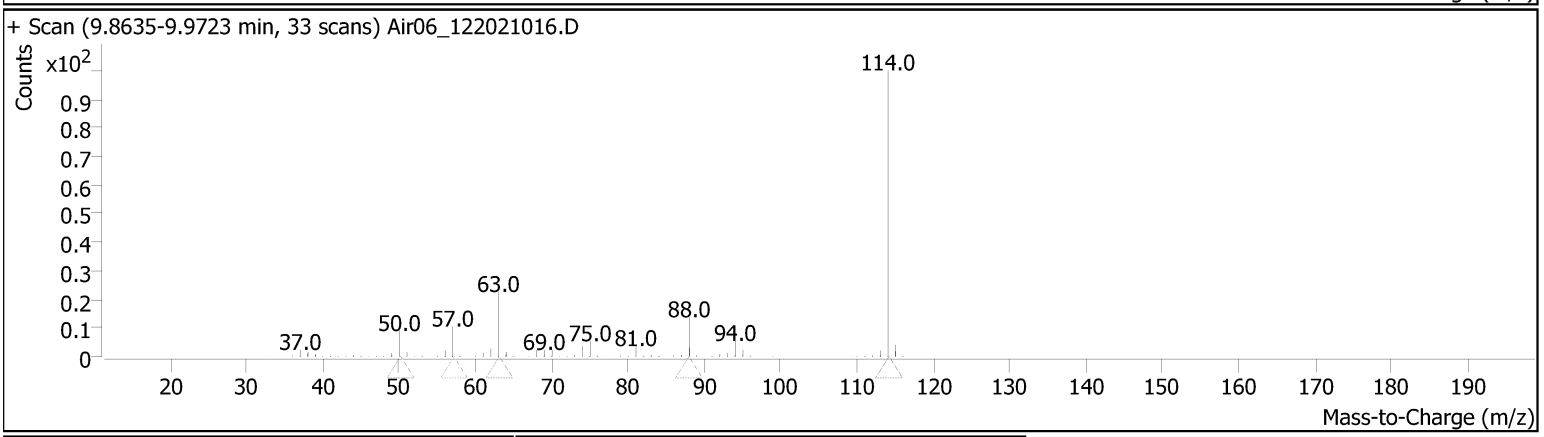


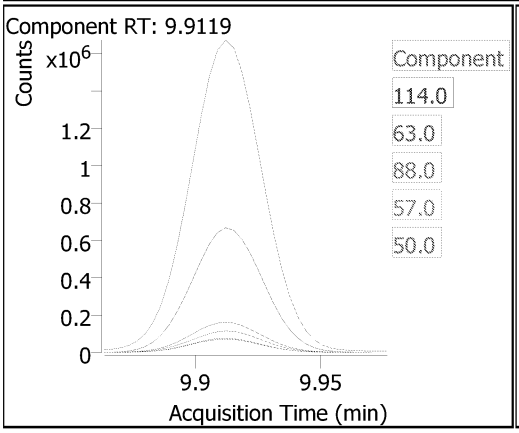


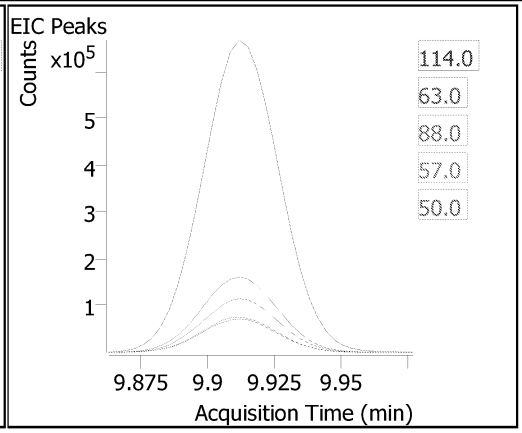
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.9119	Benzene, 1,4-difluoro-	3407787.3	99.5	540-36-3	C6H4F2	10

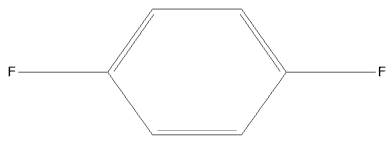




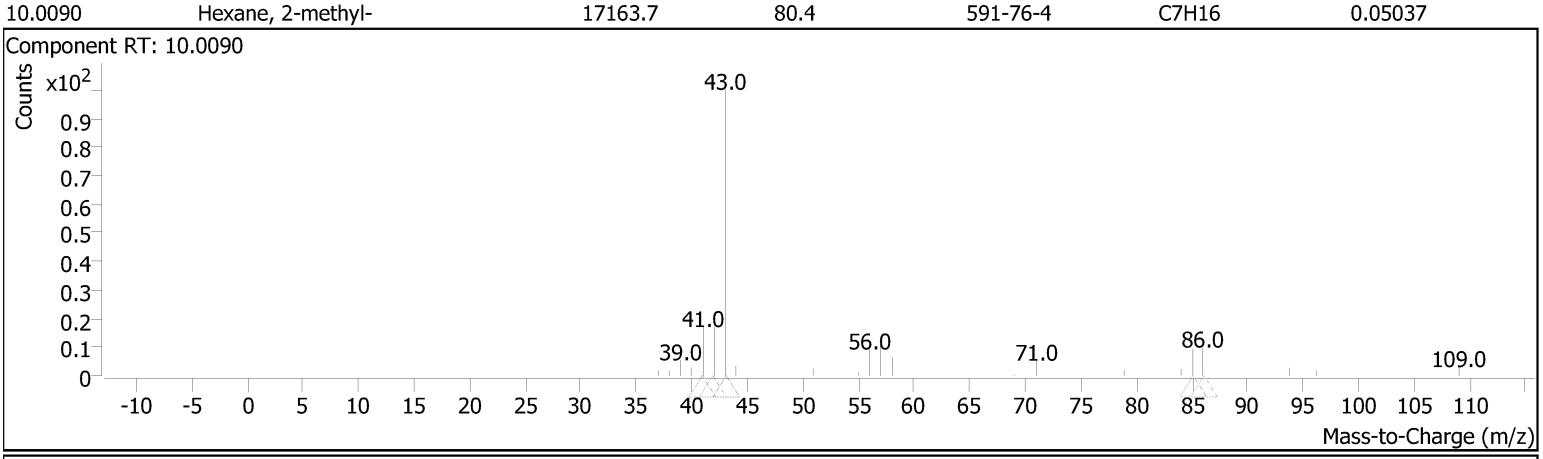


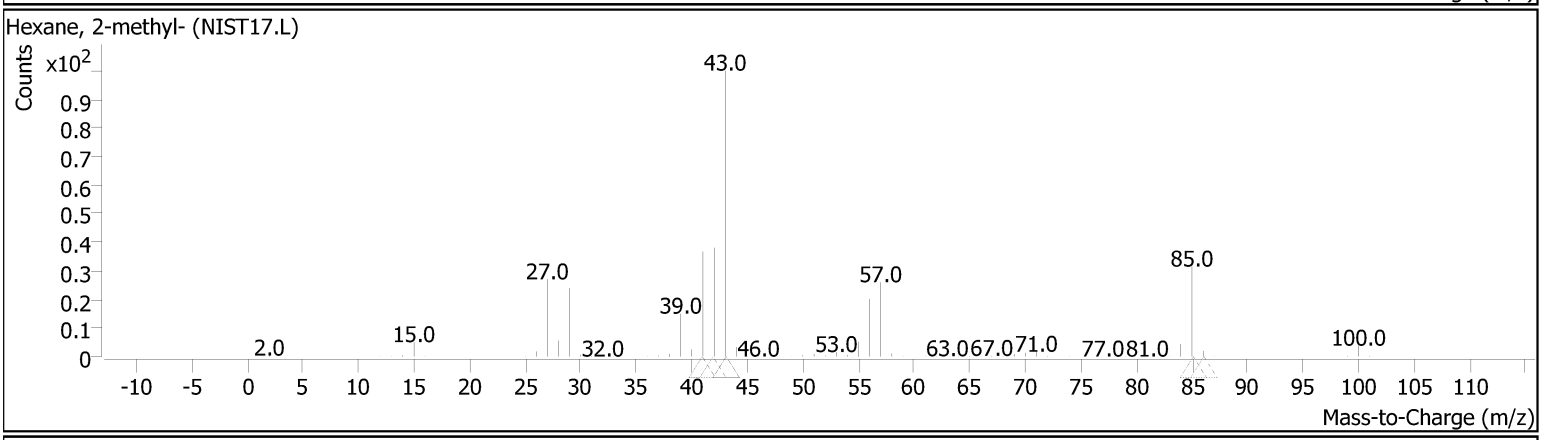


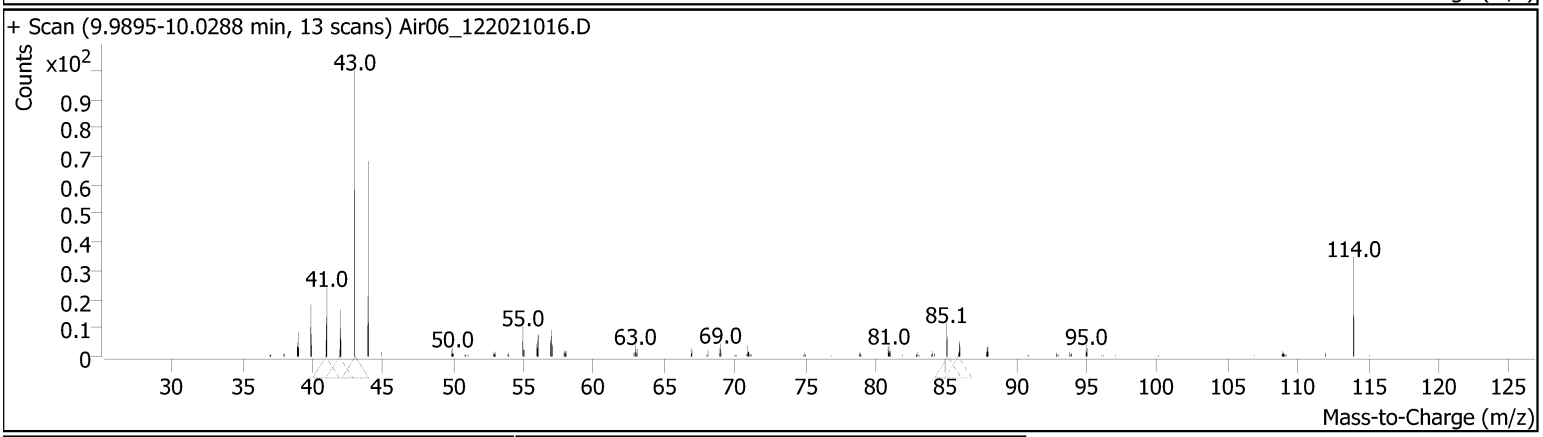


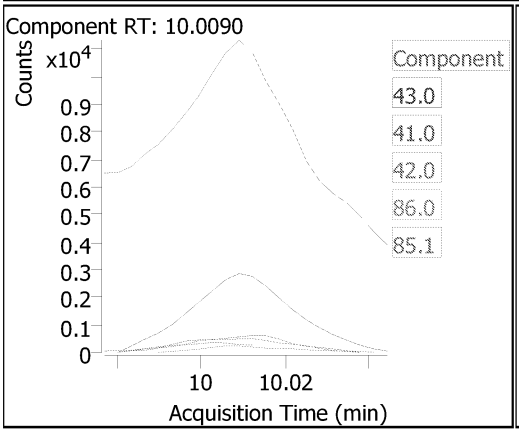


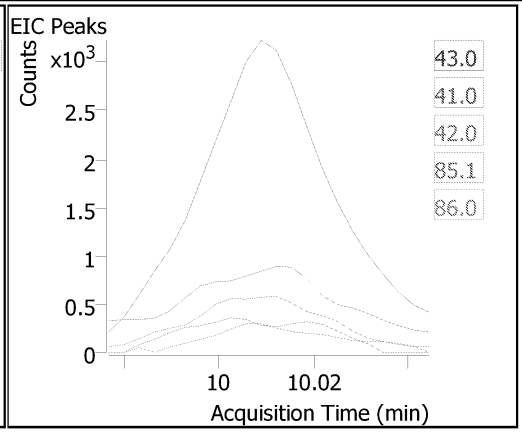
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.0090	Hexane, 2-methyl-	17163.7	80.4	591-76-4	C7H16	0.05037

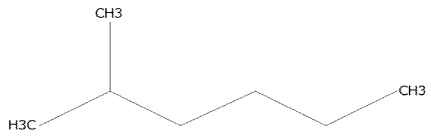




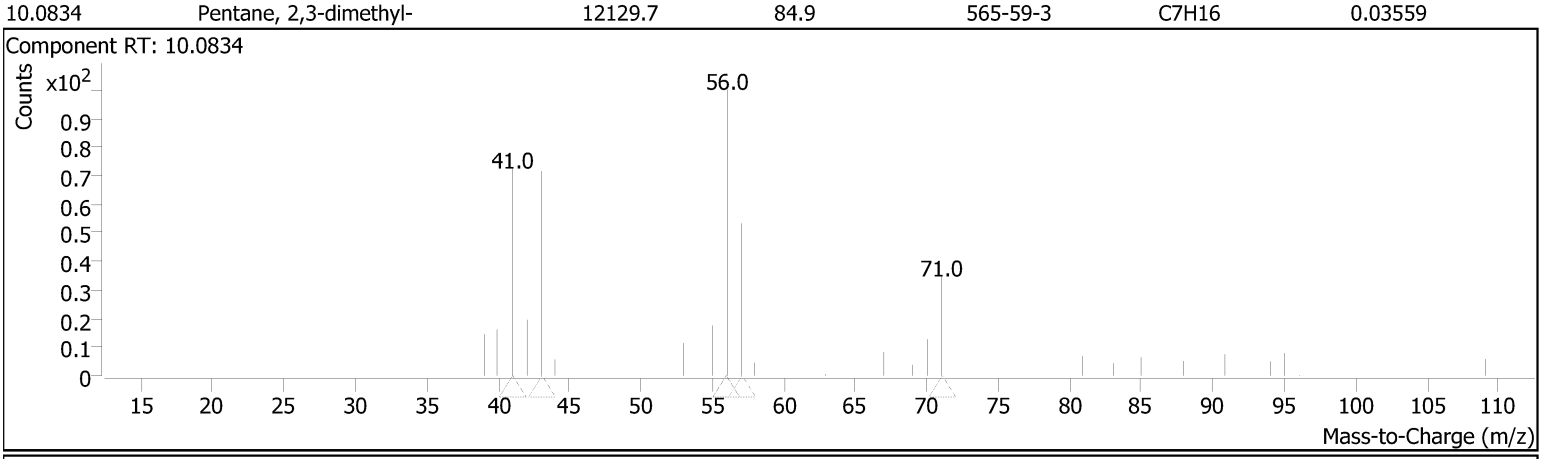


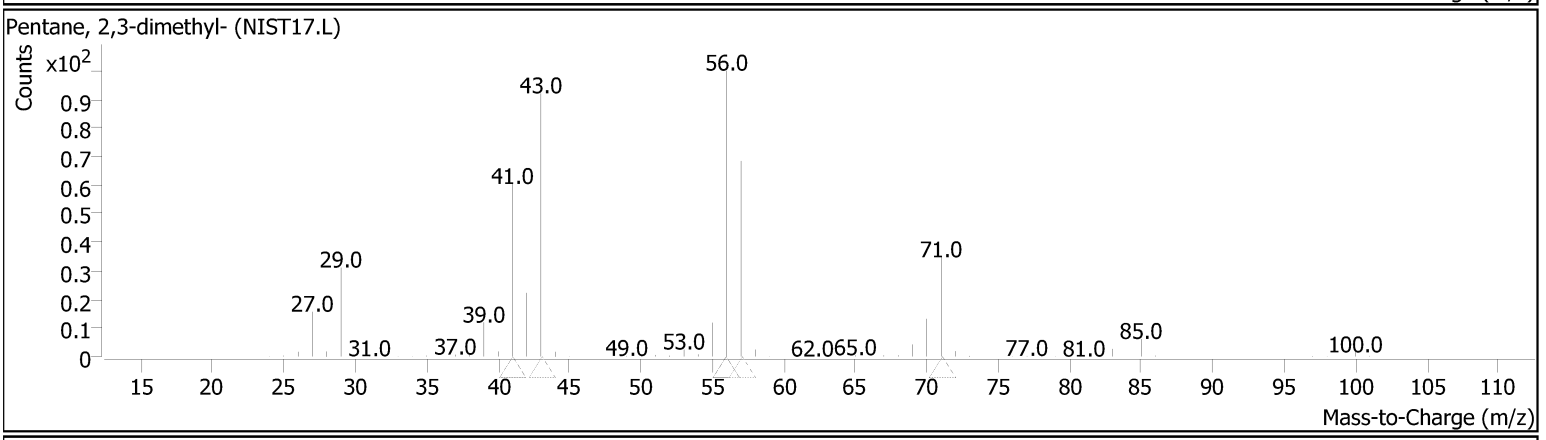


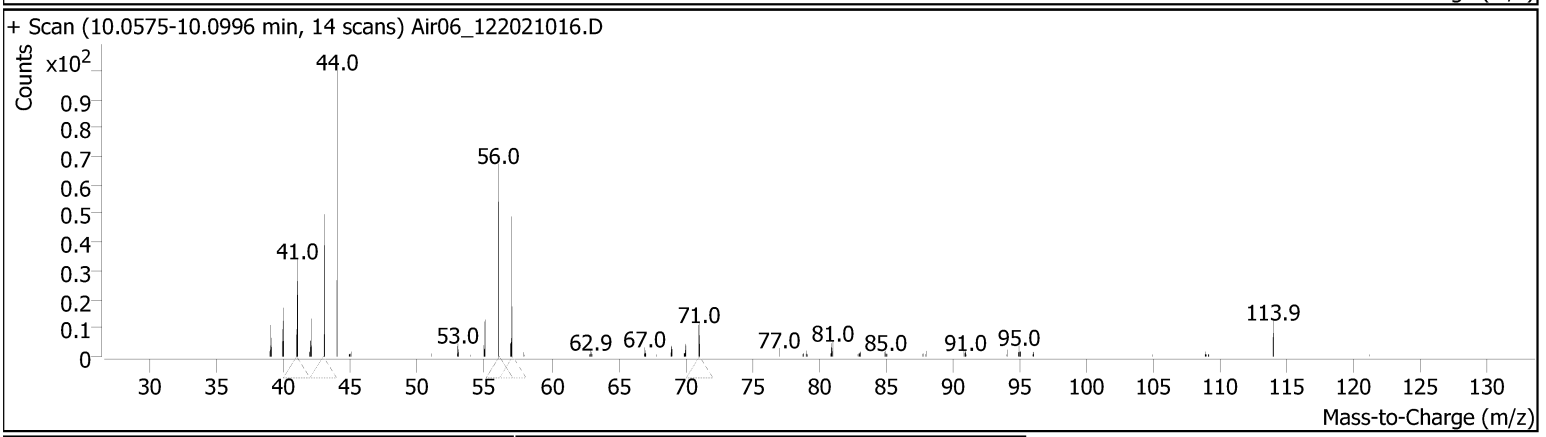


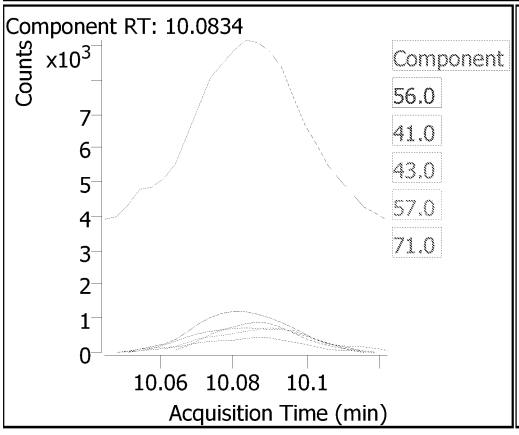


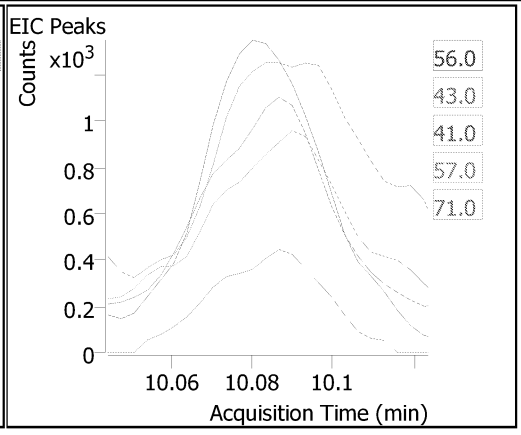
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.0834	Pentane, 2,3-dimethyl-	12129.7	84.9	565-59-3	C7H16	0.03559

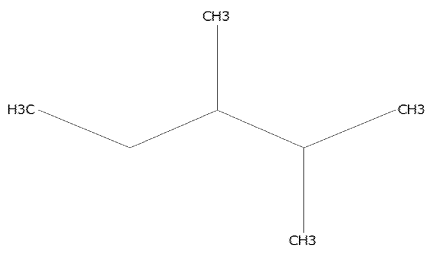








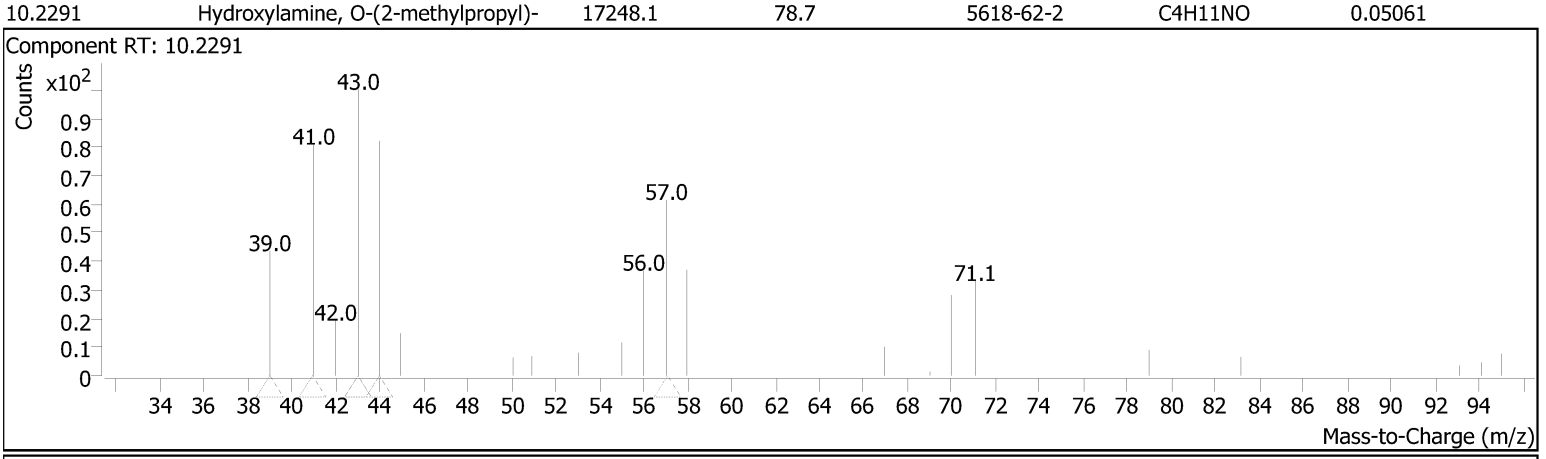


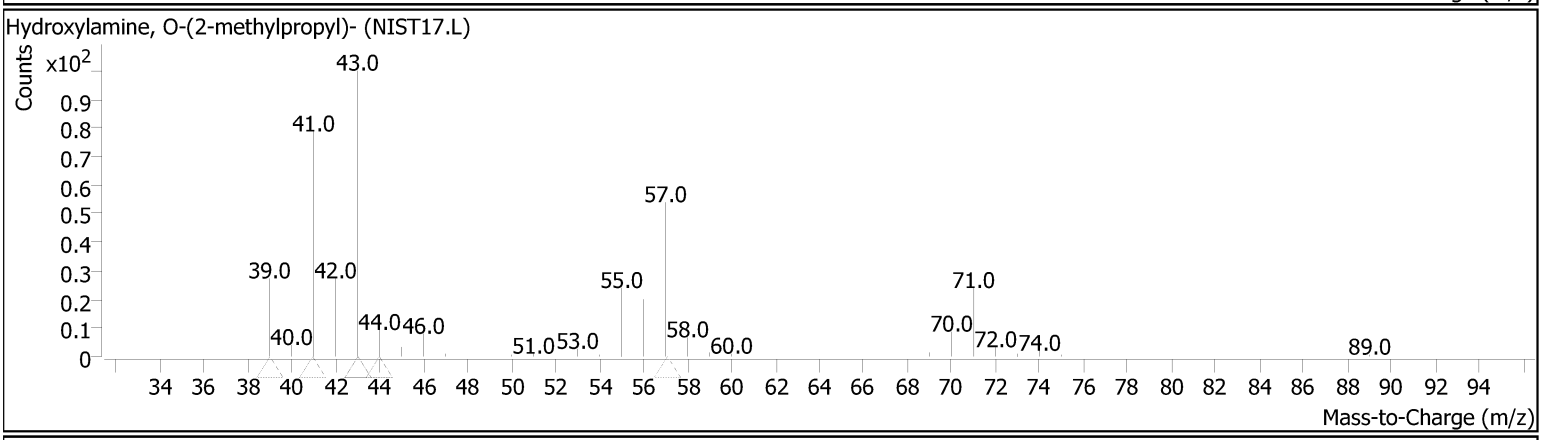


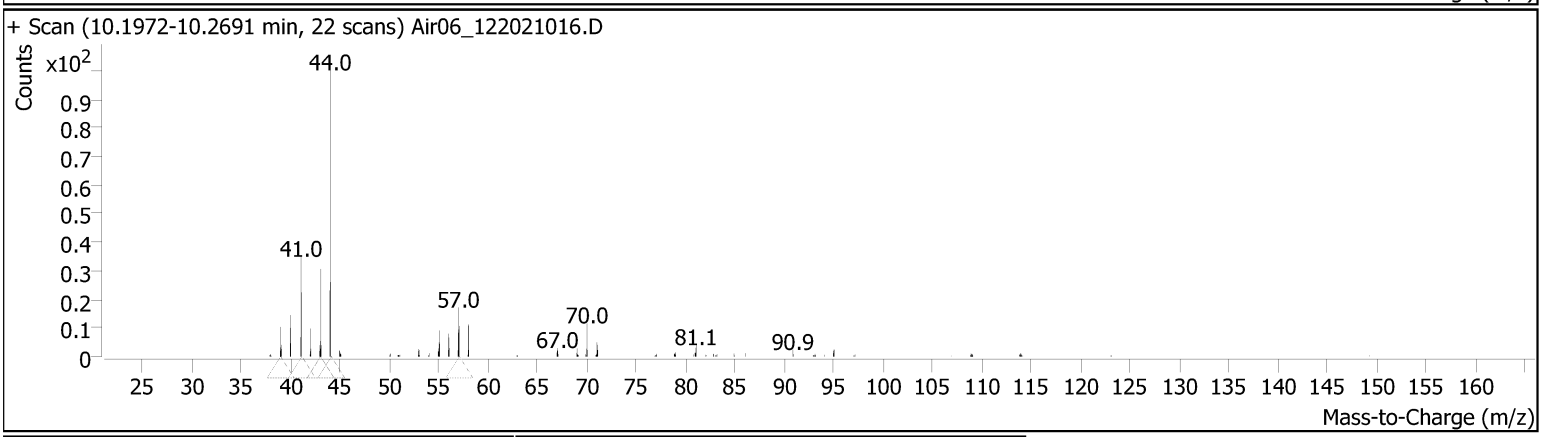
Library Search Results - NonTarget Hits with Details

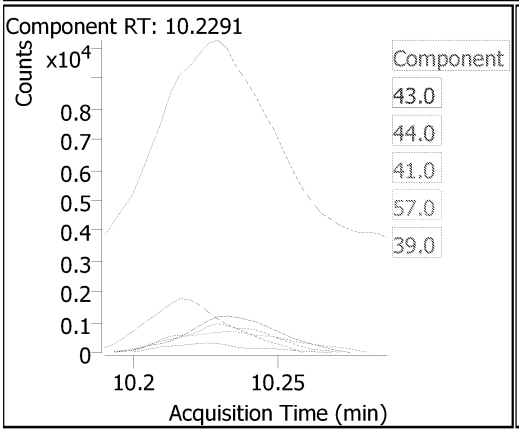
Agilent Technologies

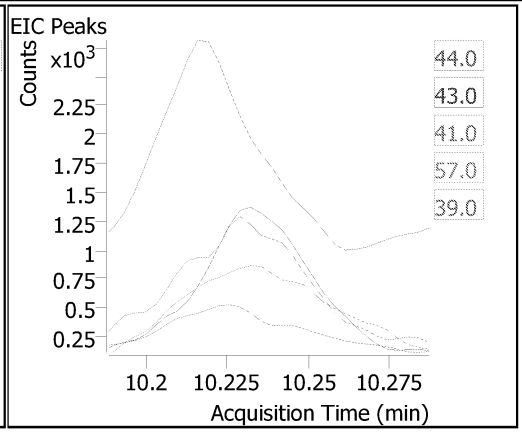
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.2291	Hydroxylamine, O-(2-methylpropyl)-	17248.1	78.7	5618-62-2	C4H11NO	0.05061

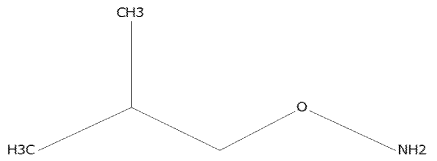




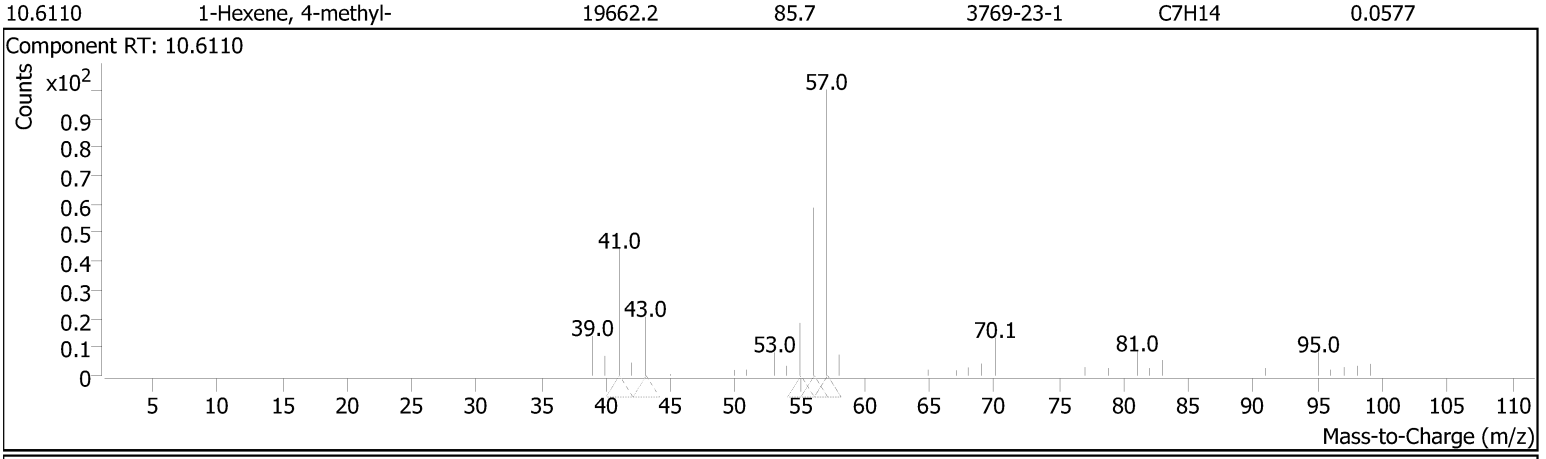


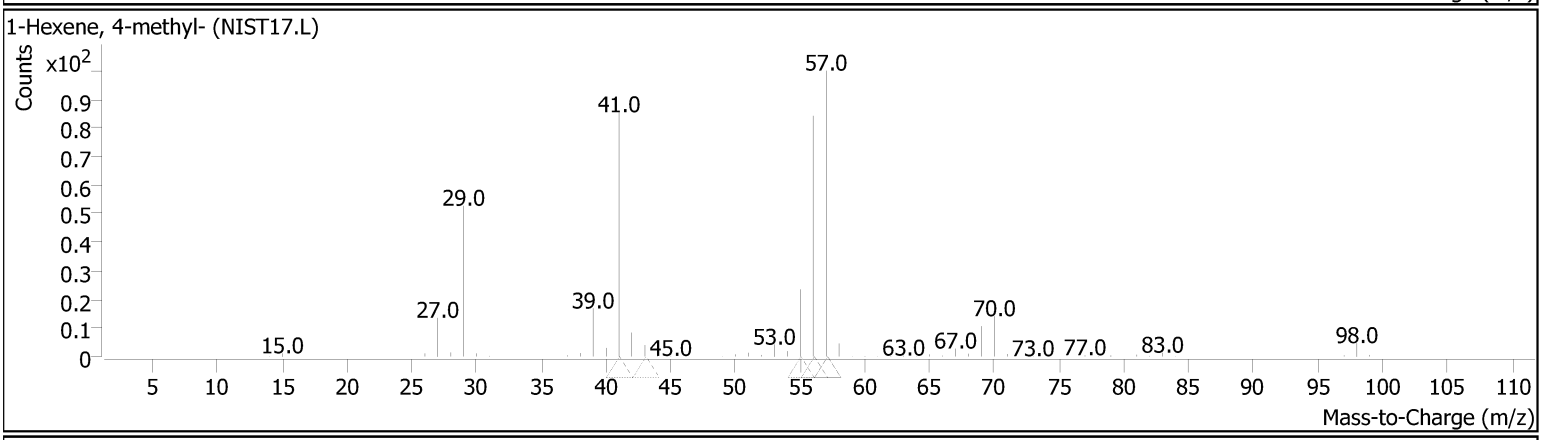


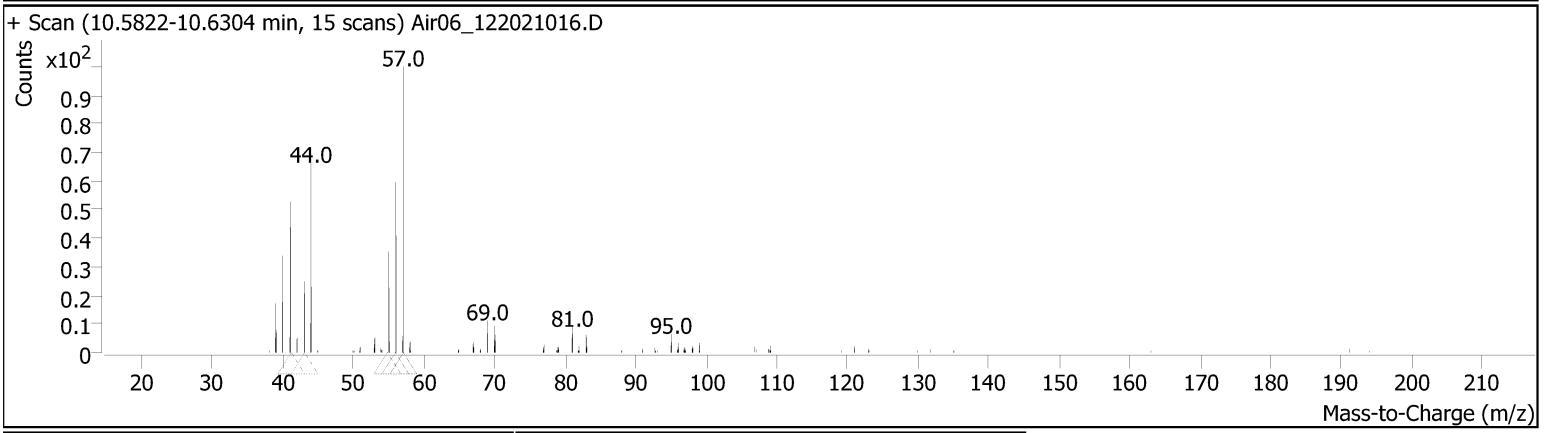


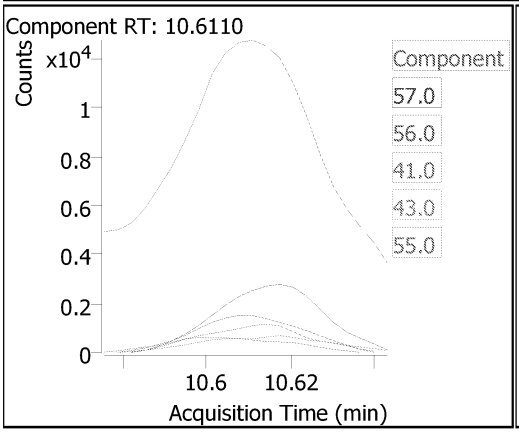


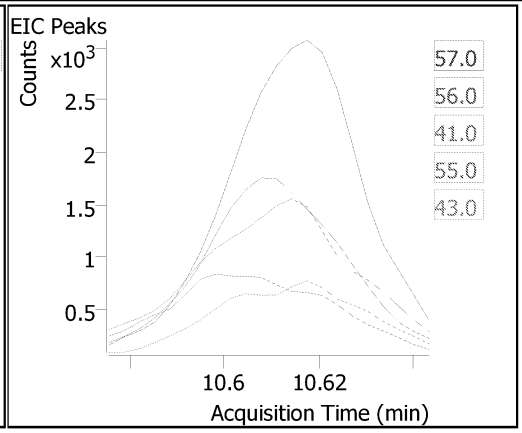
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.6110	1-Hexene, 4-methyl-	19662.2	85.7	3769-23-1	C7H14	0.0577

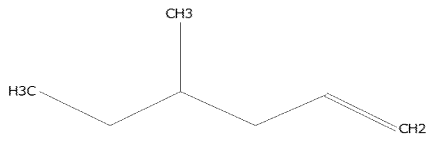




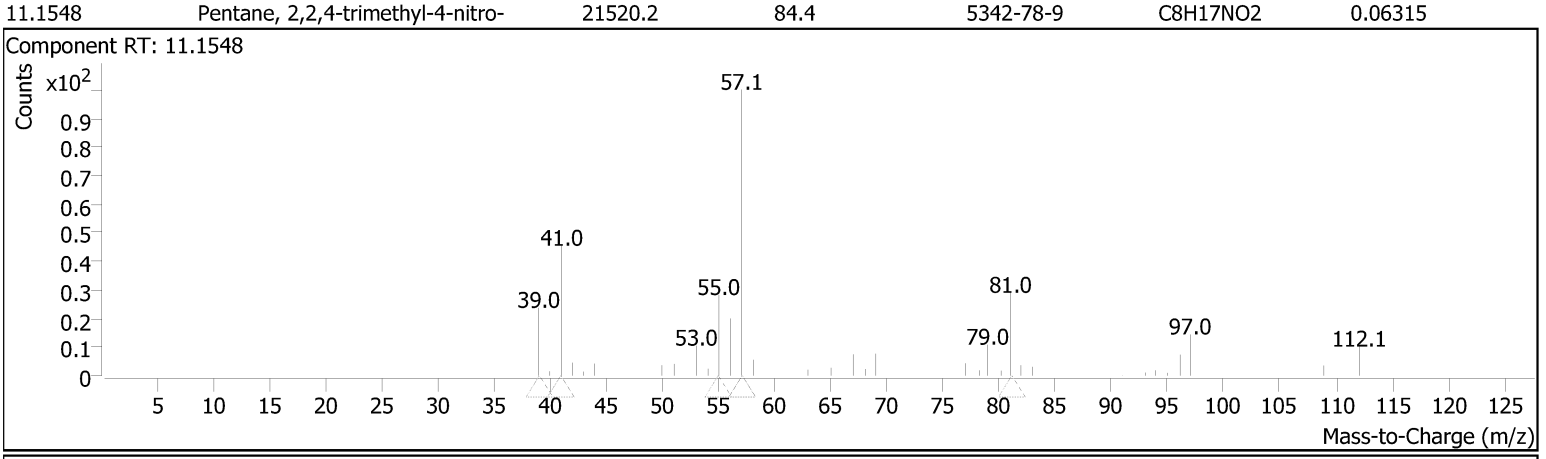


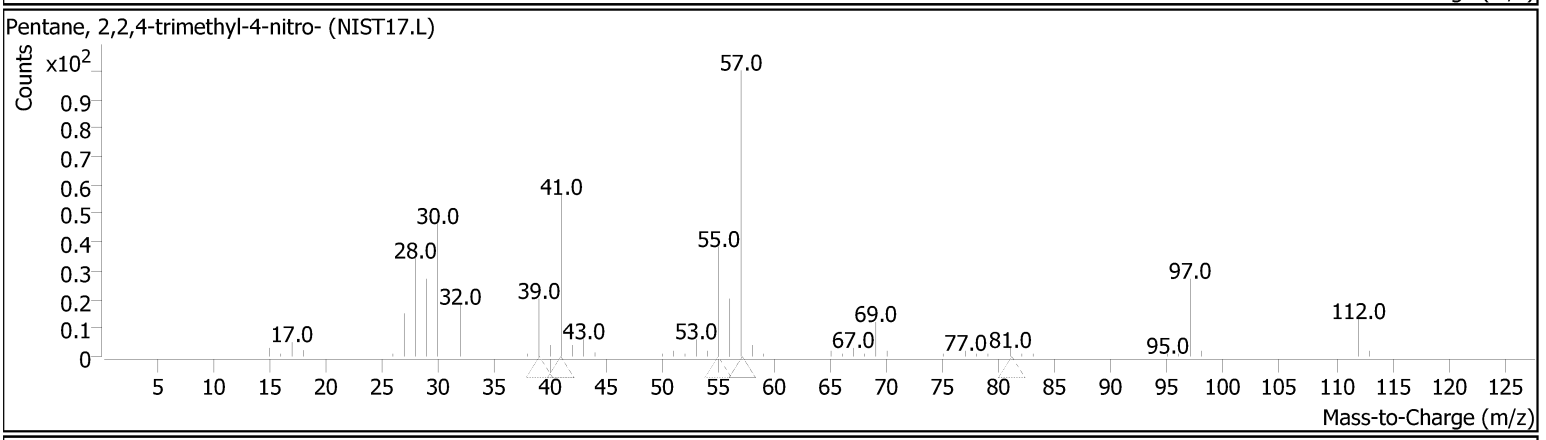


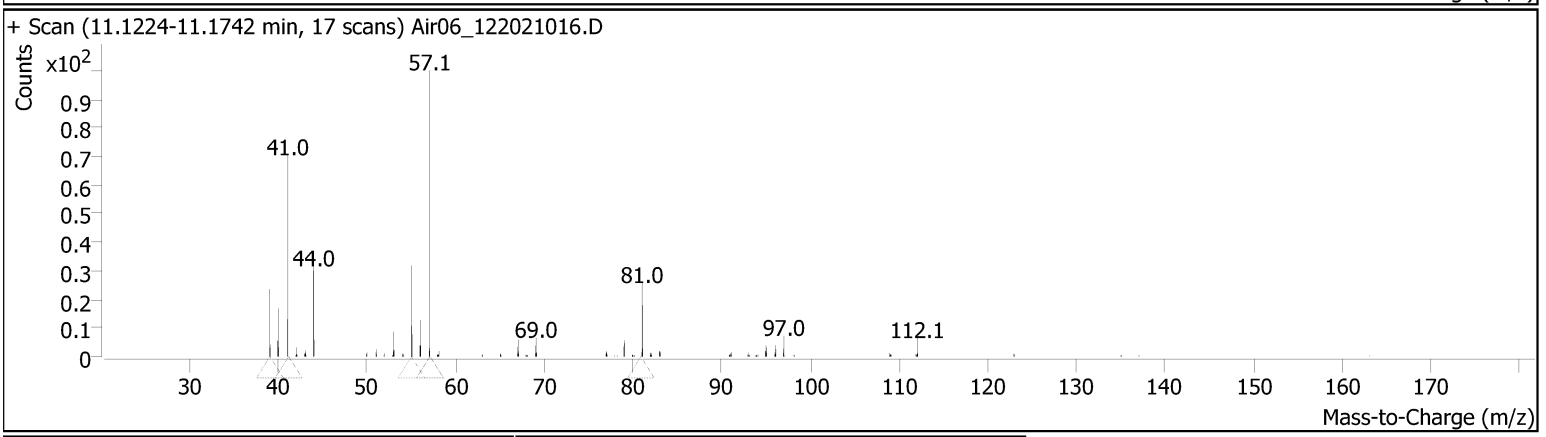


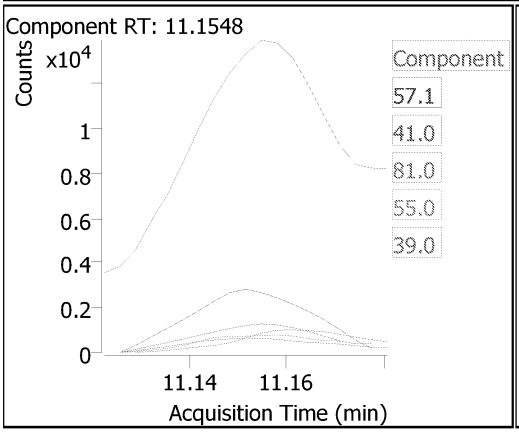


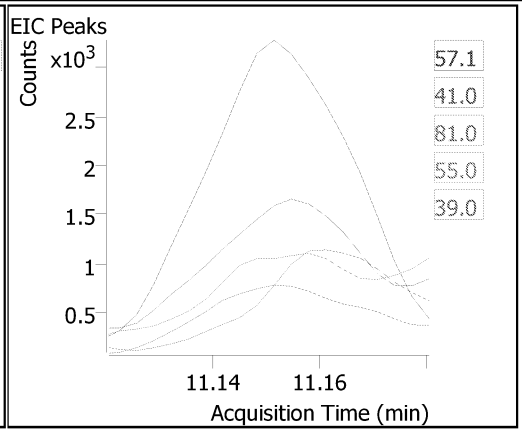
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.1548	Pentane, 2,2,4-trimethyl-4-nitro-	21520.2	84.4	5342-78-9	C8H17NO2	0.06315

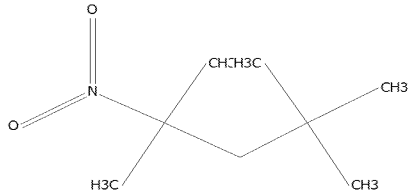




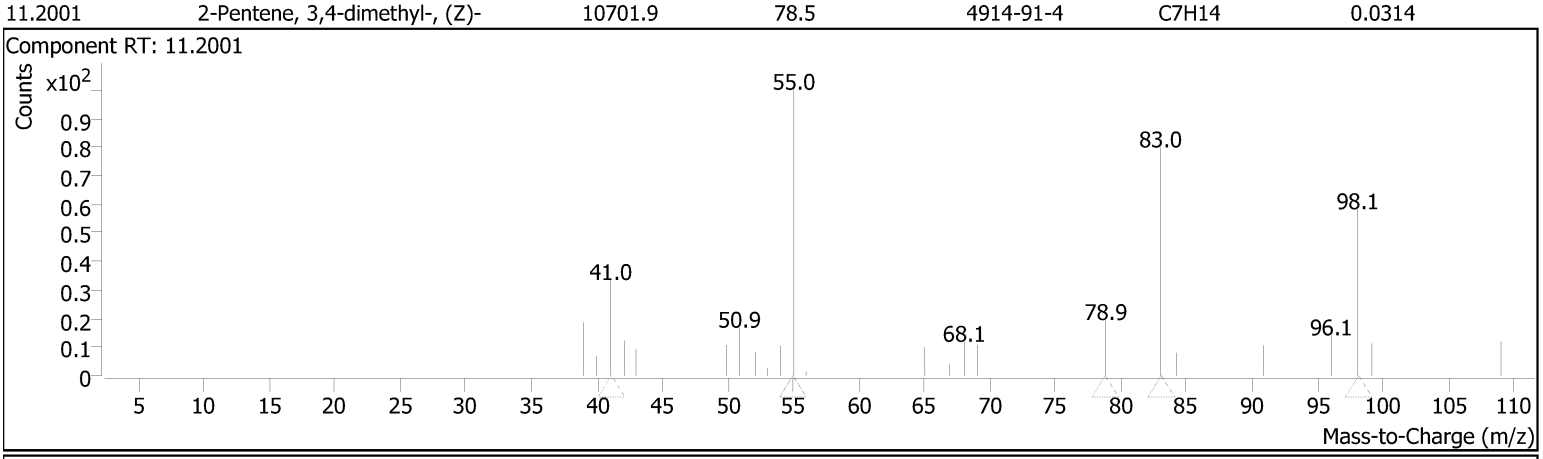


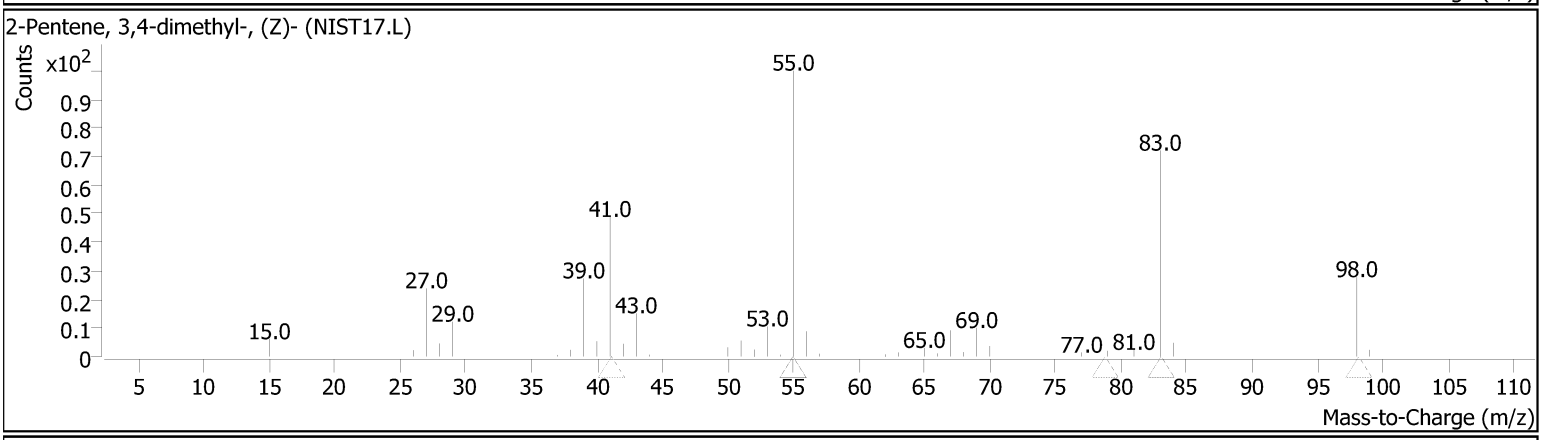


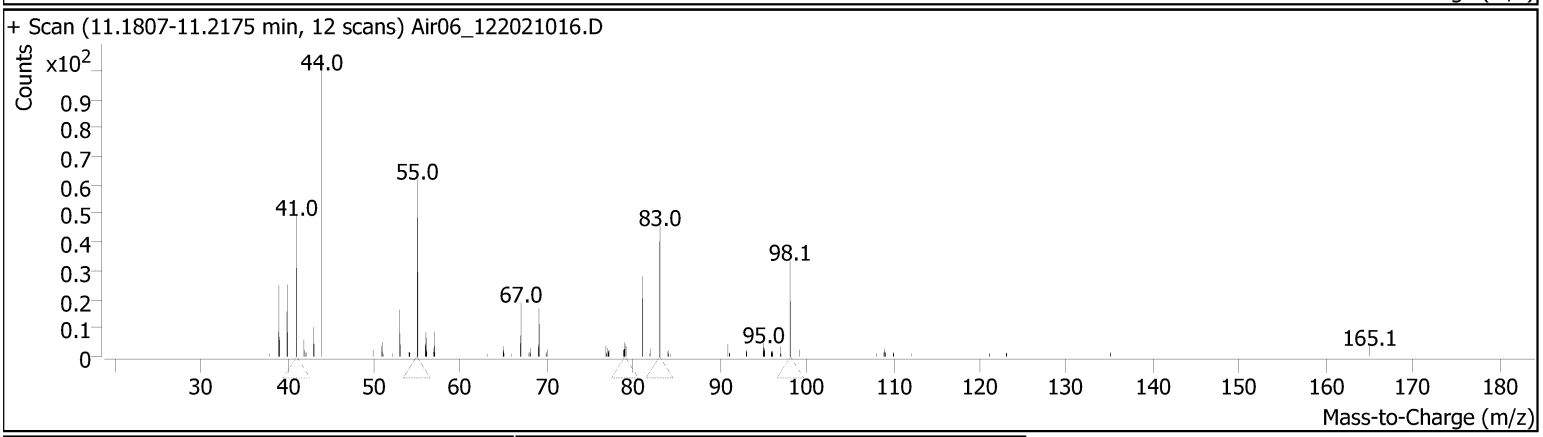


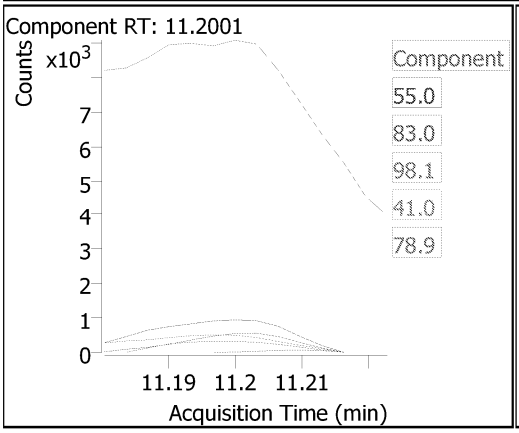


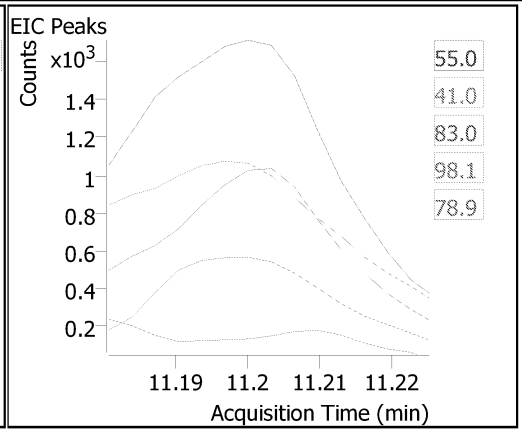
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.2001	2-Pentene, 3,4-dimethyl-, (Z)-	10701.9	78.5	4914-91-4	C7H14	0.0314

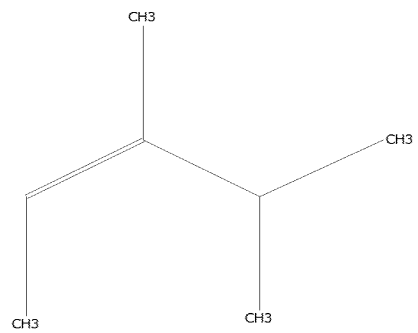




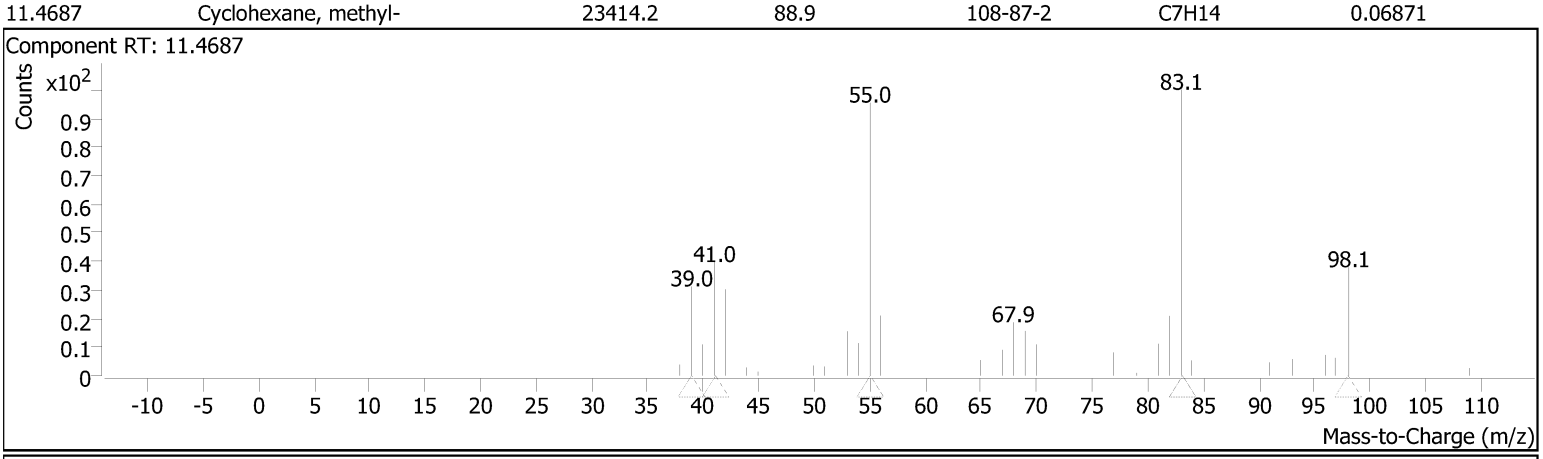


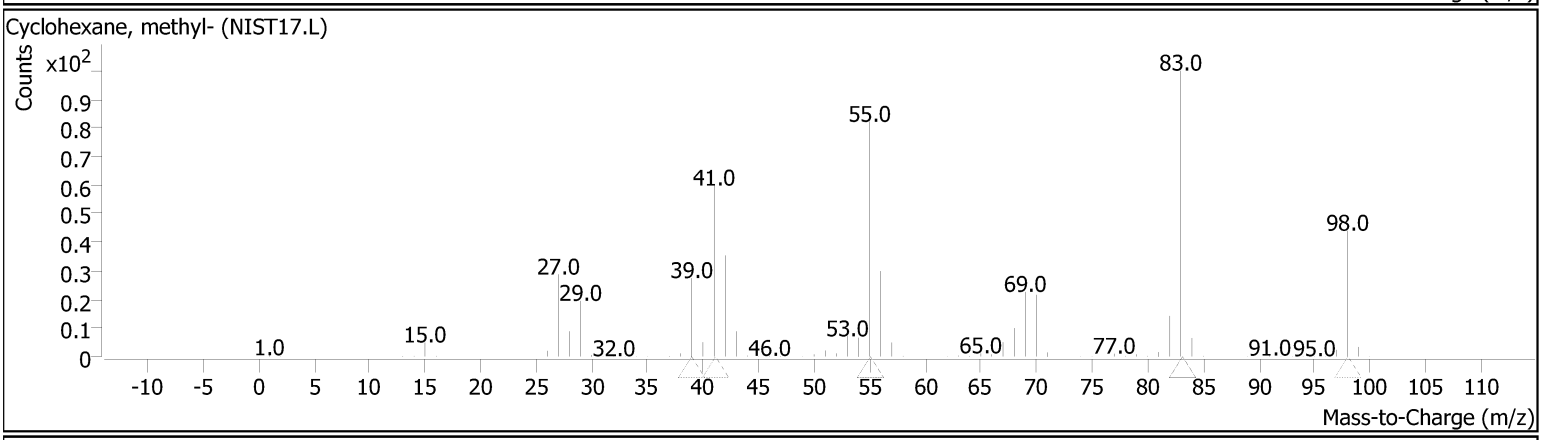


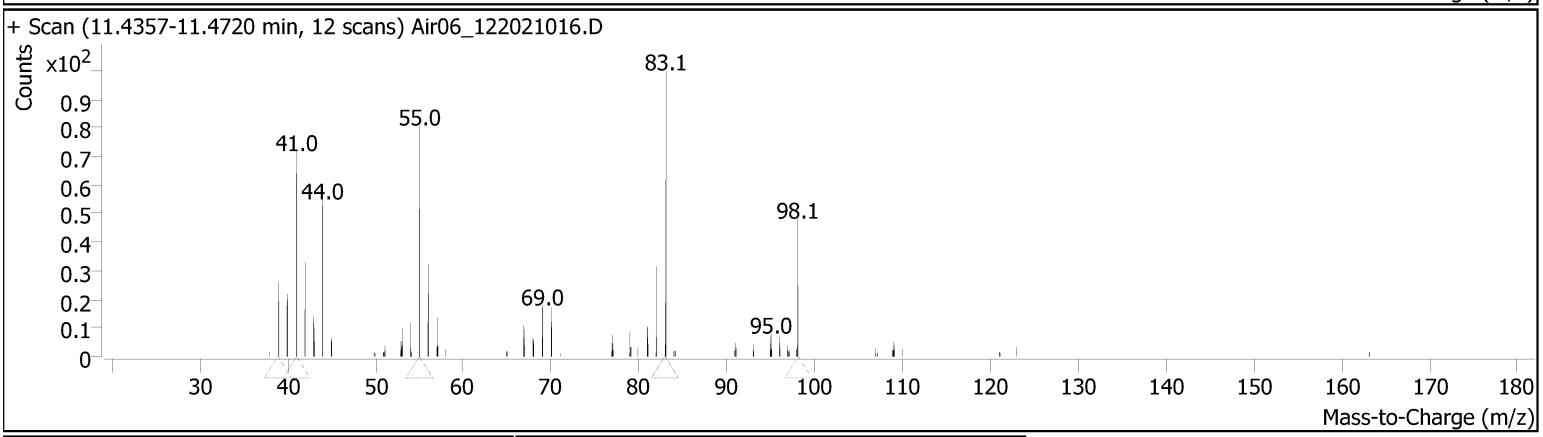


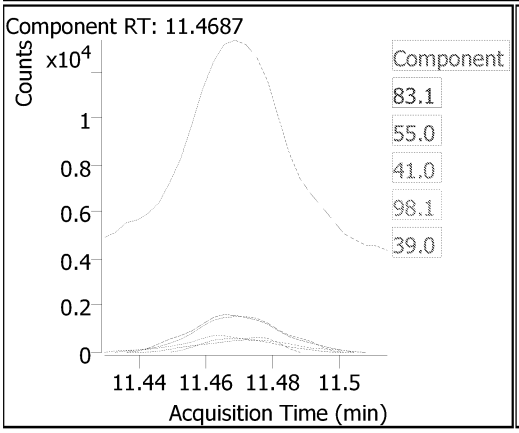


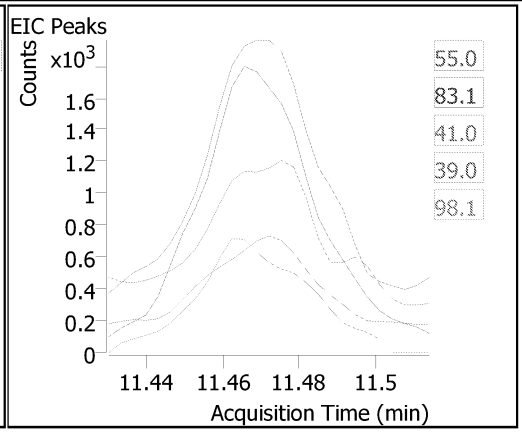
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.4687	Cyclohexane, methyl-	23414.2	88.9	108-87-2	C7H14	0.06871

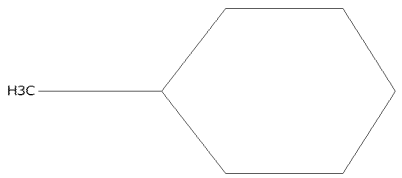




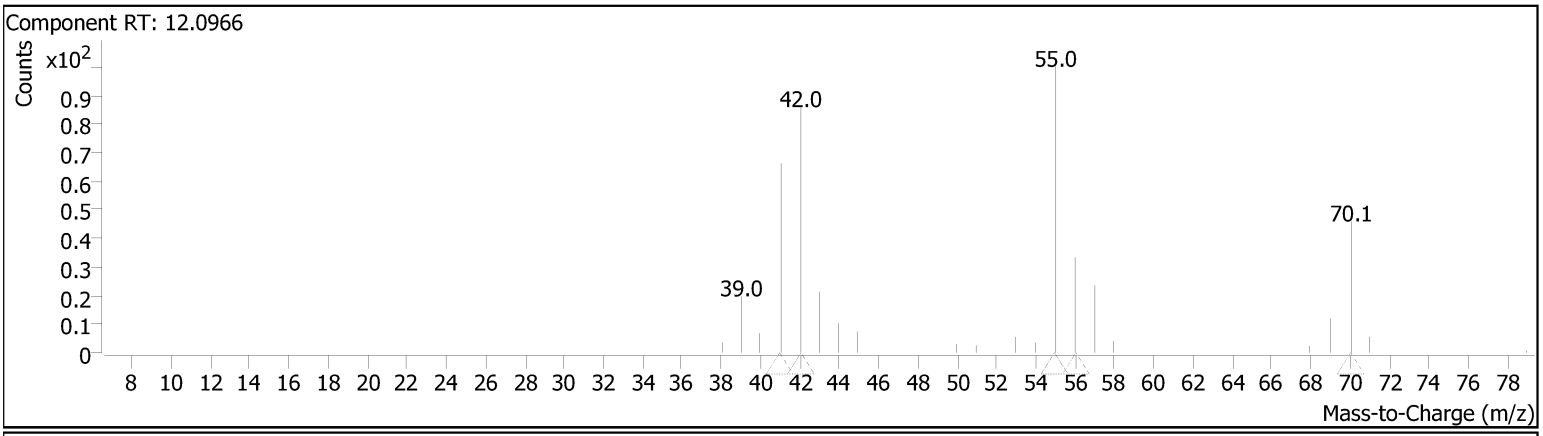


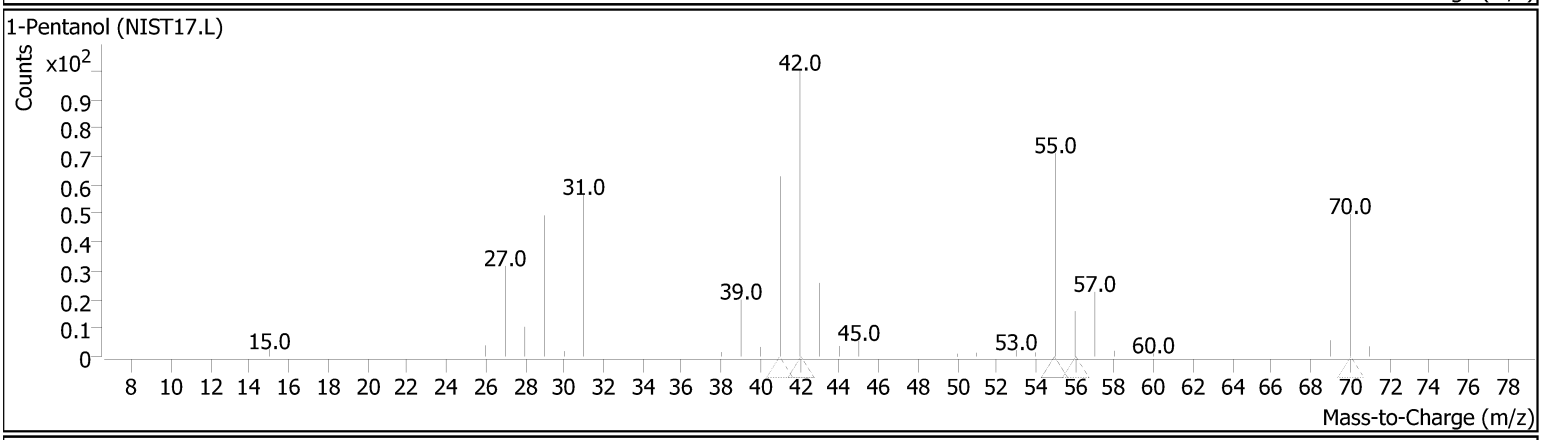


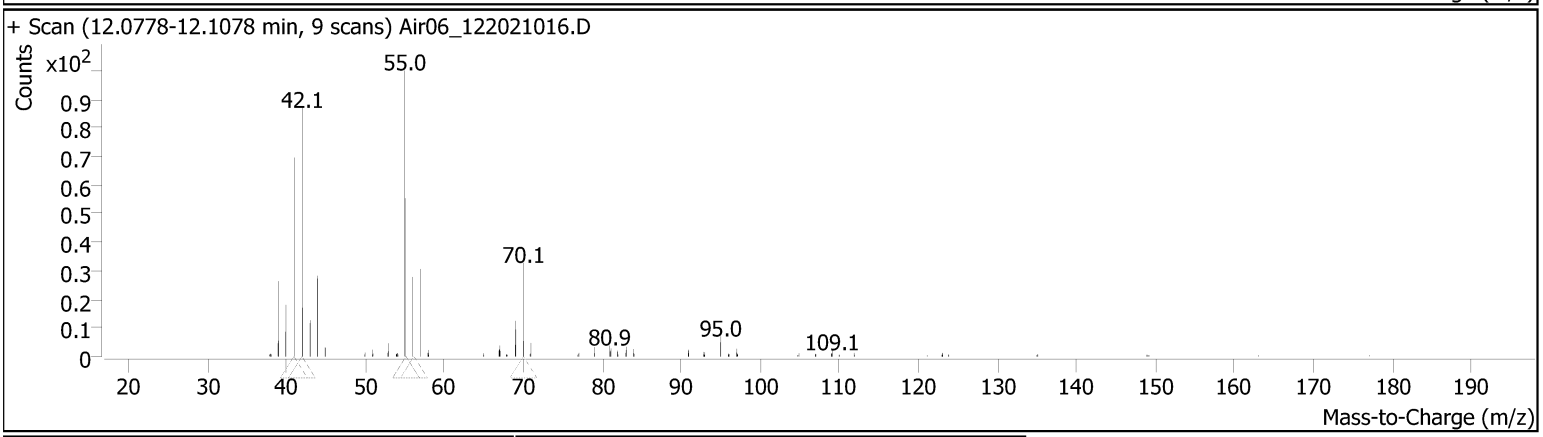


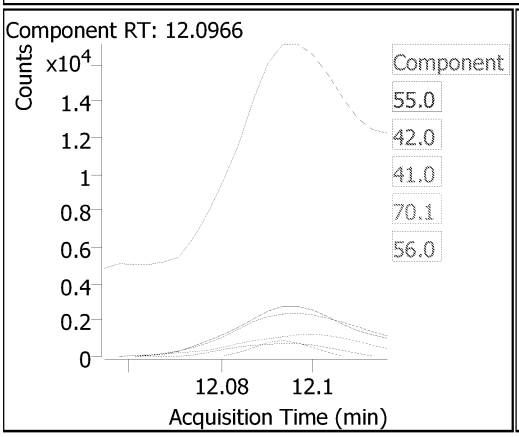


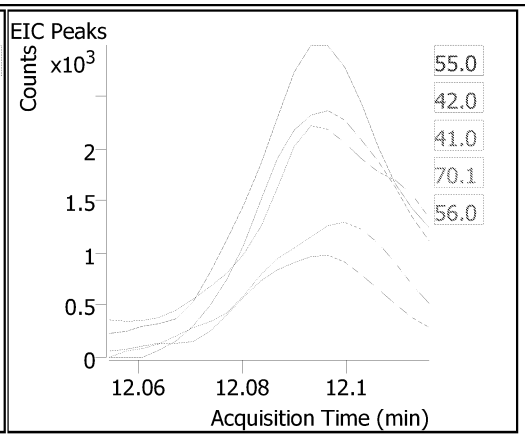
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.0966	1-Pentanol	22858.9	90.7	71-41-0	C5H12O	0.05388





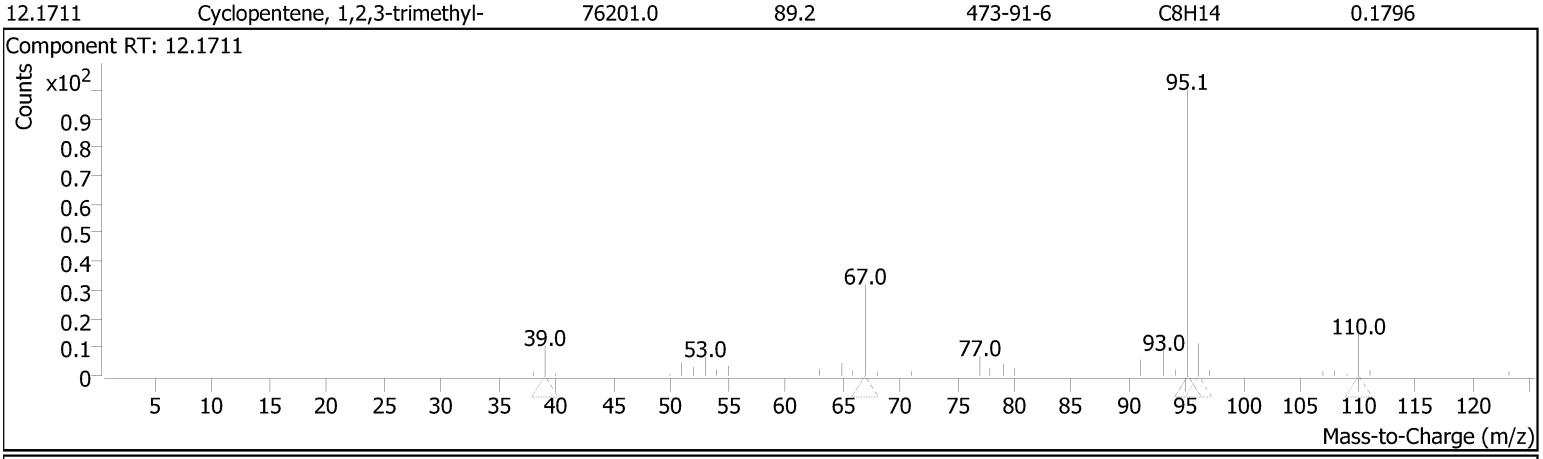


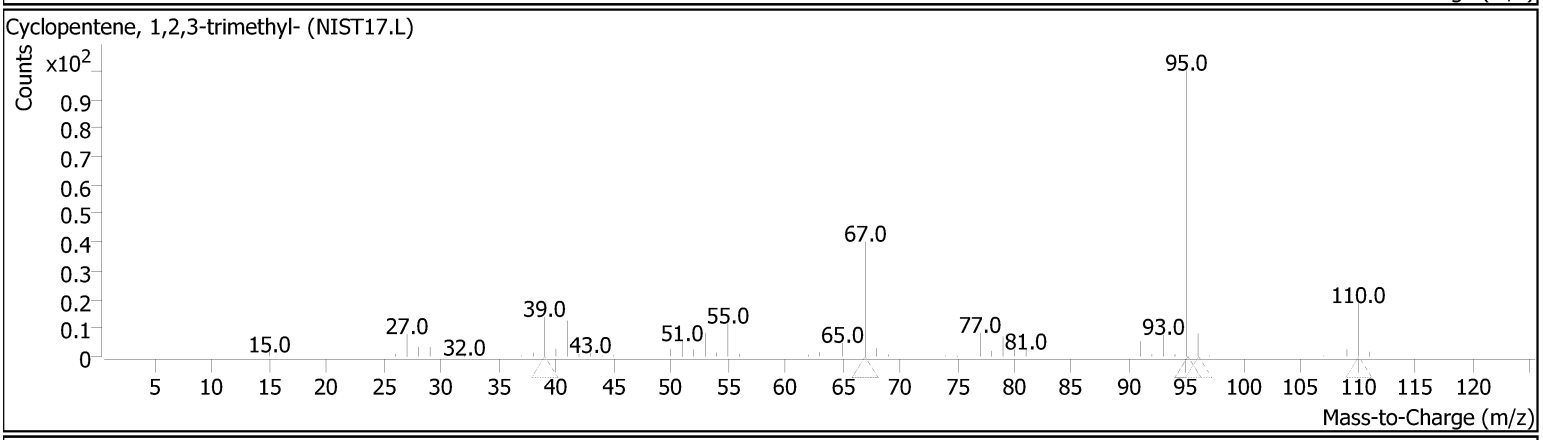


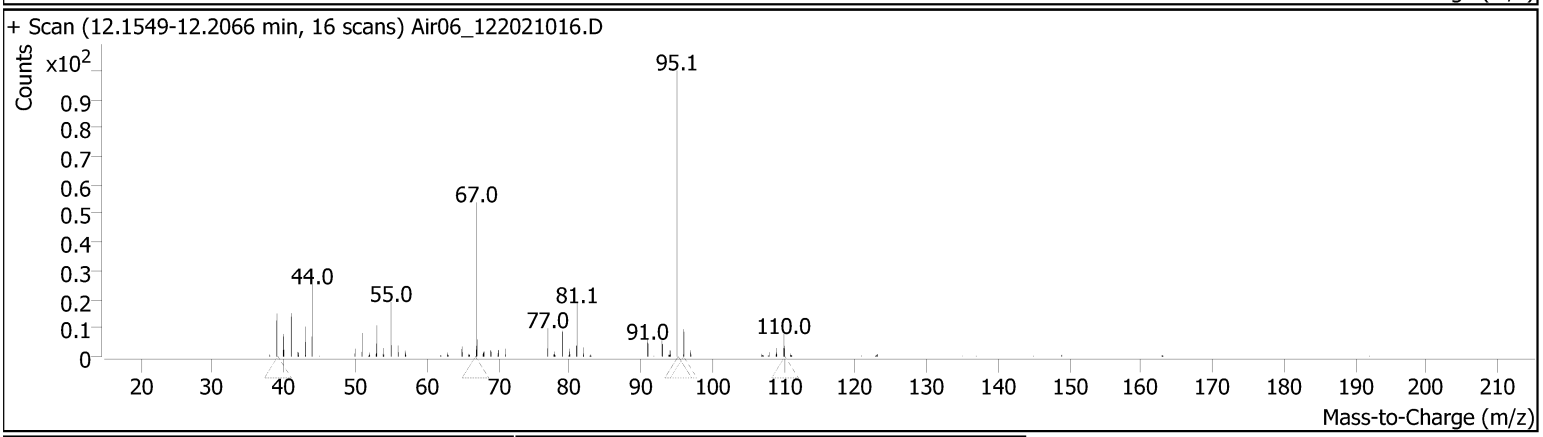


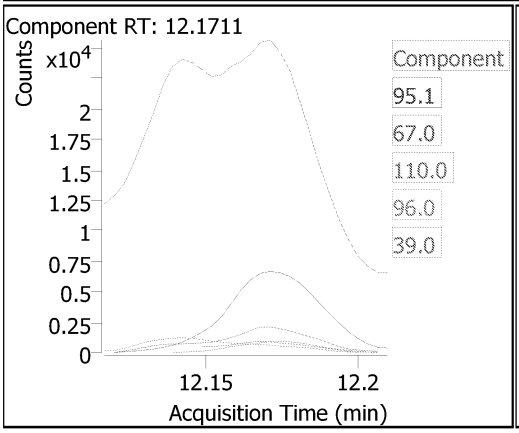


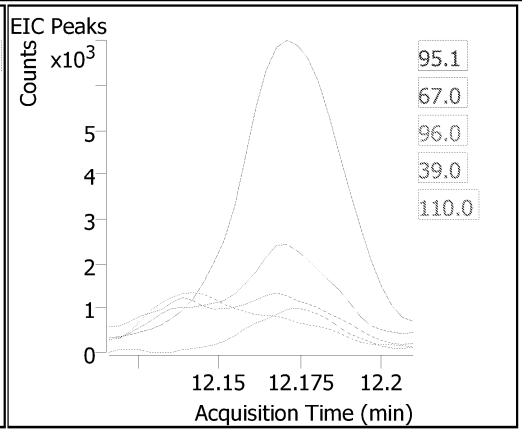
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.1711	Cyclopentene, 1,2,3-trimethyl-	76201.0	89.2	473-91-6	C8H14	0.1796

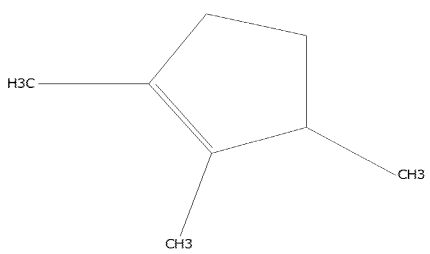




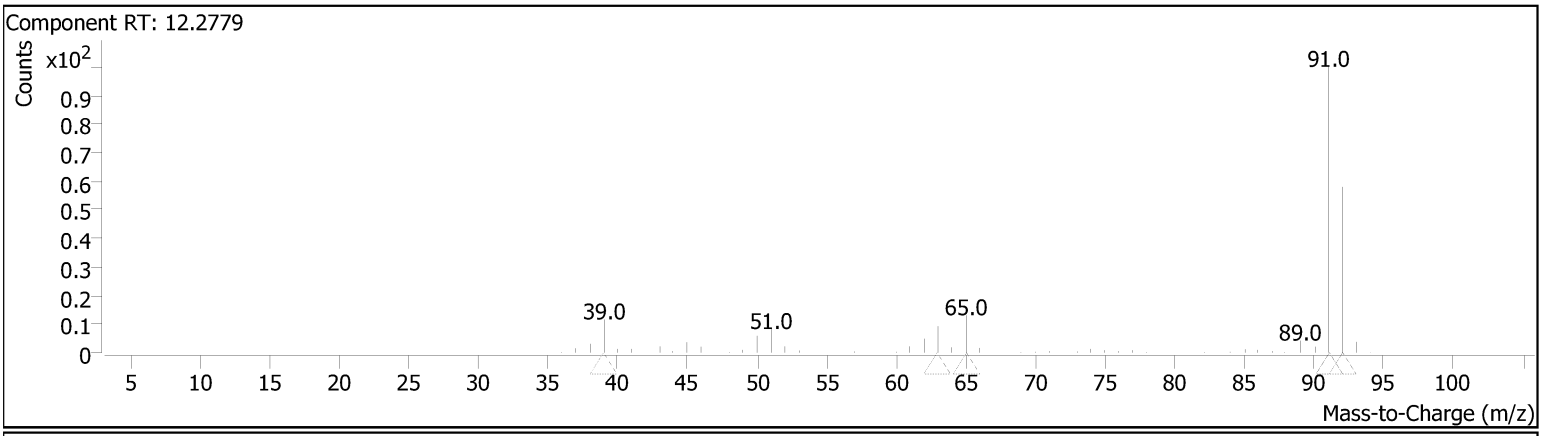


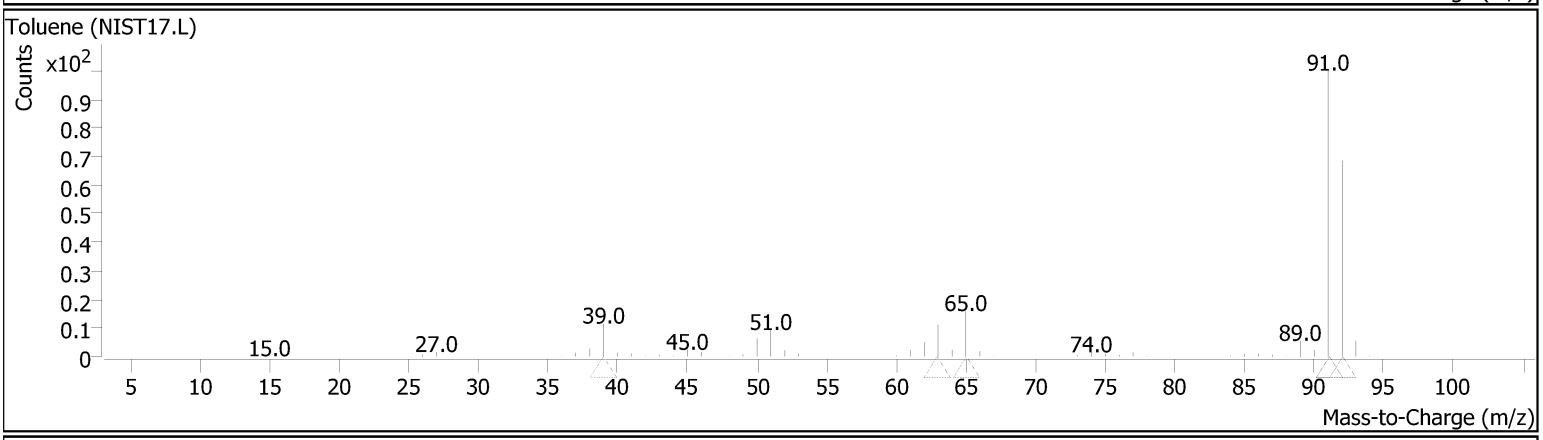


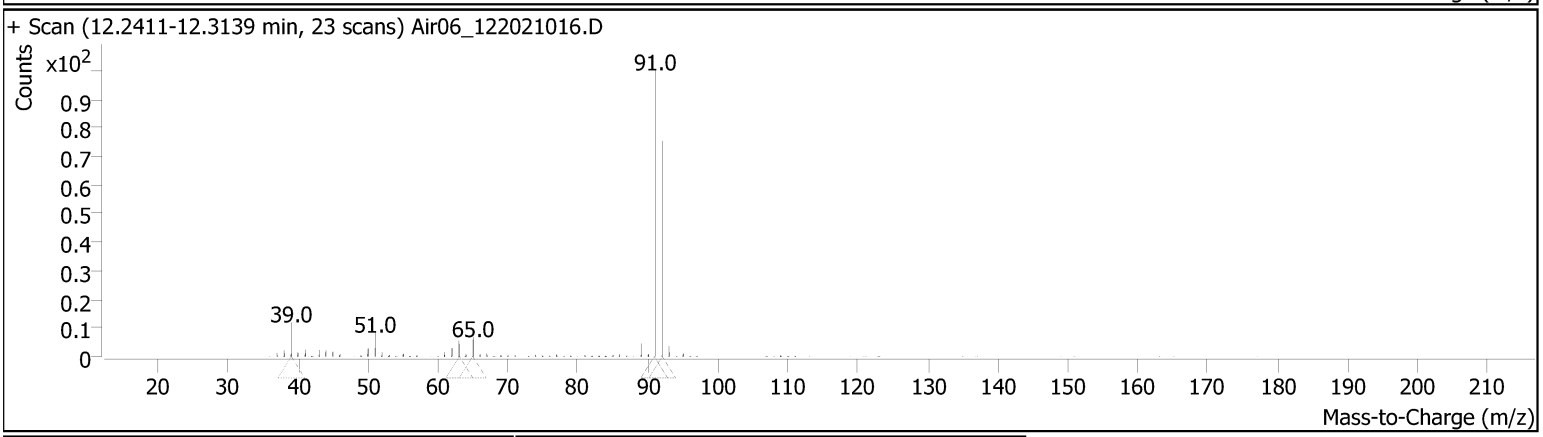


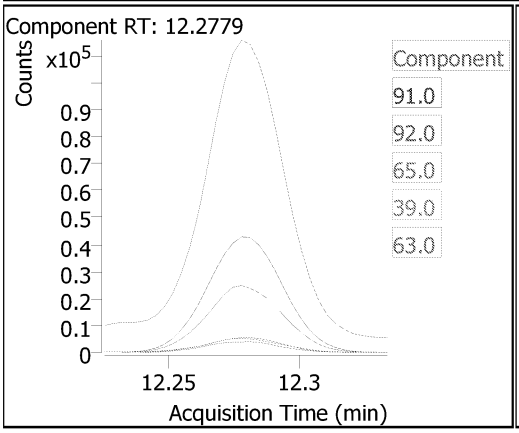


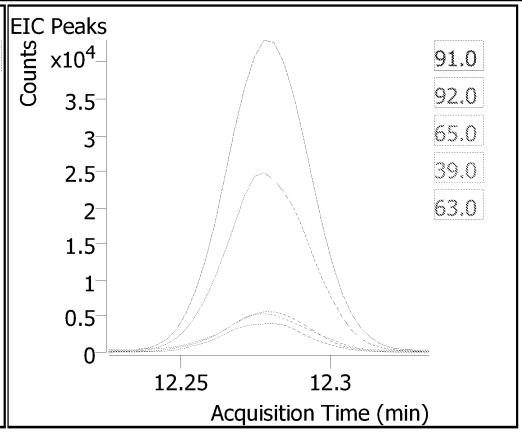
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.2779	Toluene	235149.9	98.5	108-88-3	C7H8	0.5543

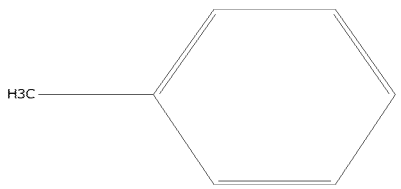




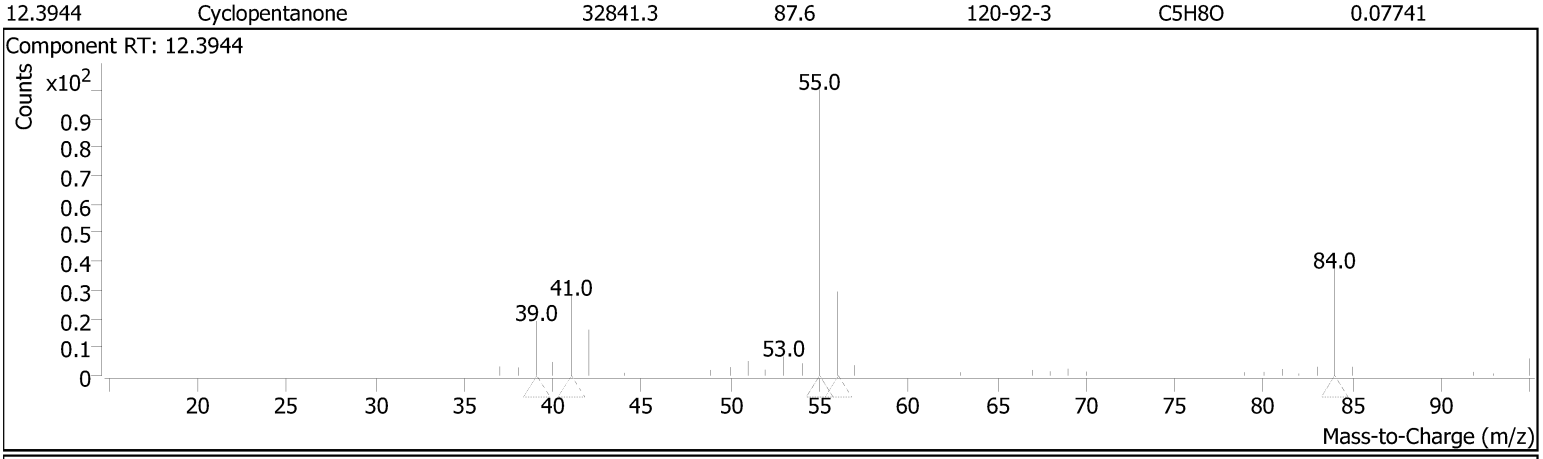


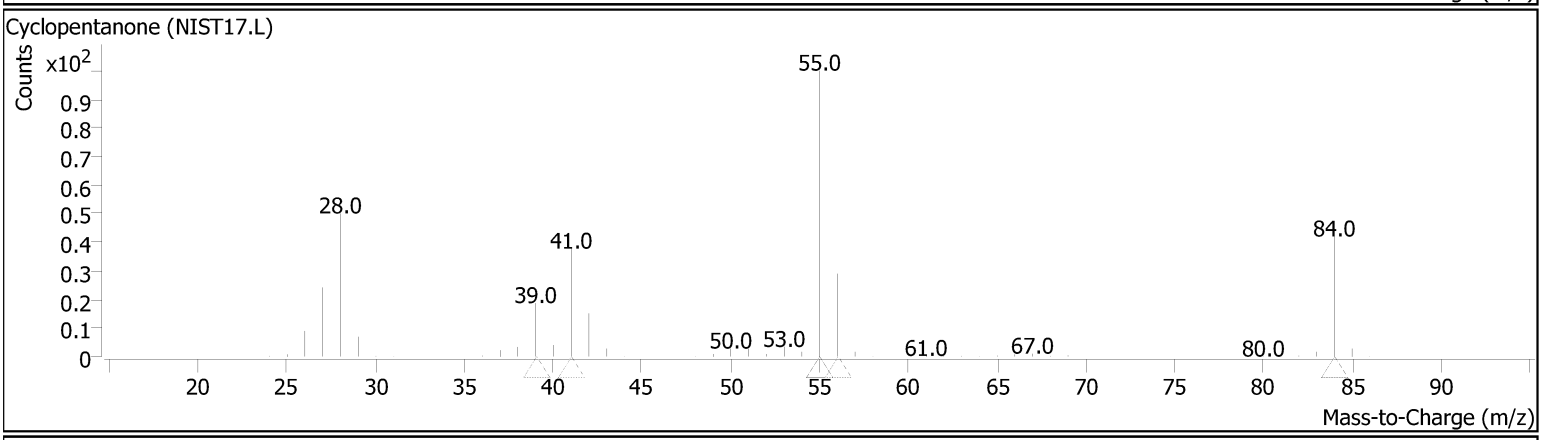


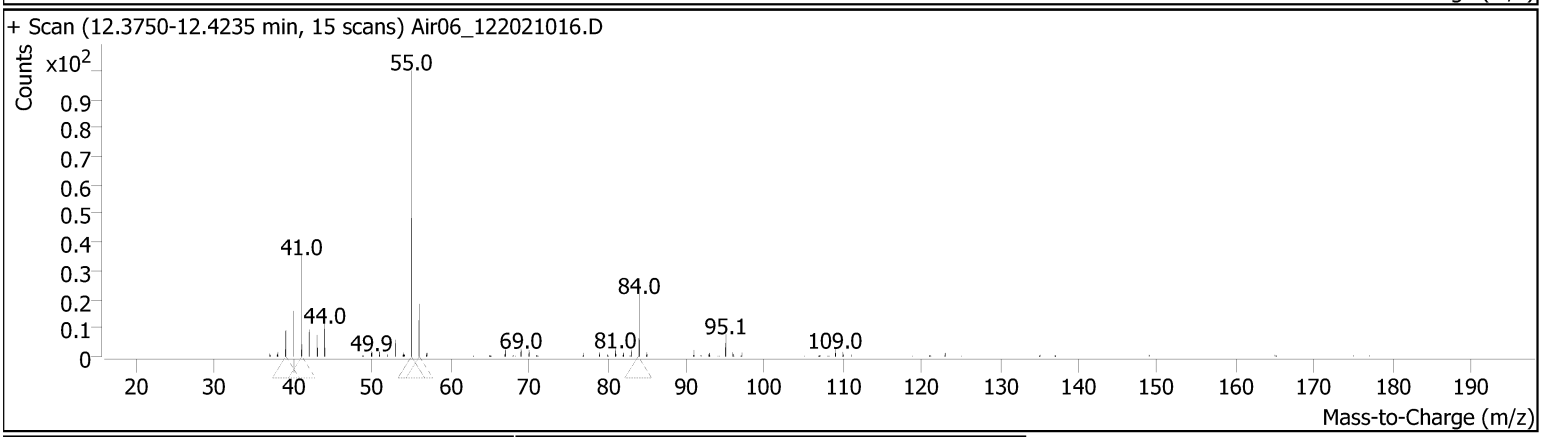


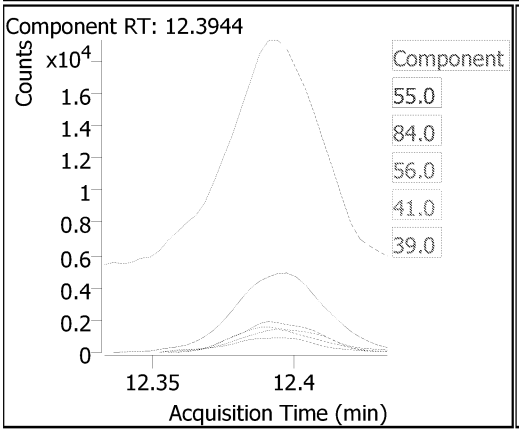


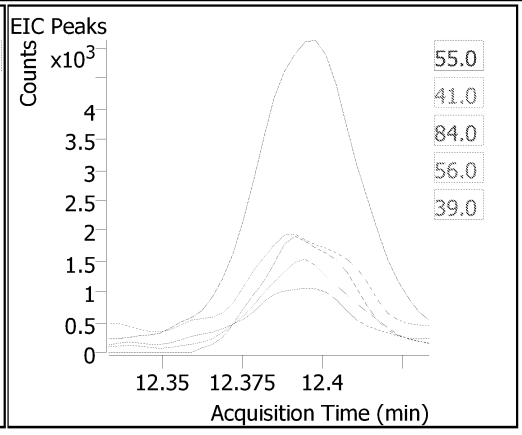
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.3944	Cyclopentanone	32841.3	87.6	120-92-3	C5H8O	0.07741

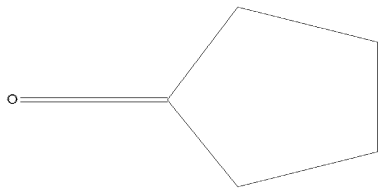




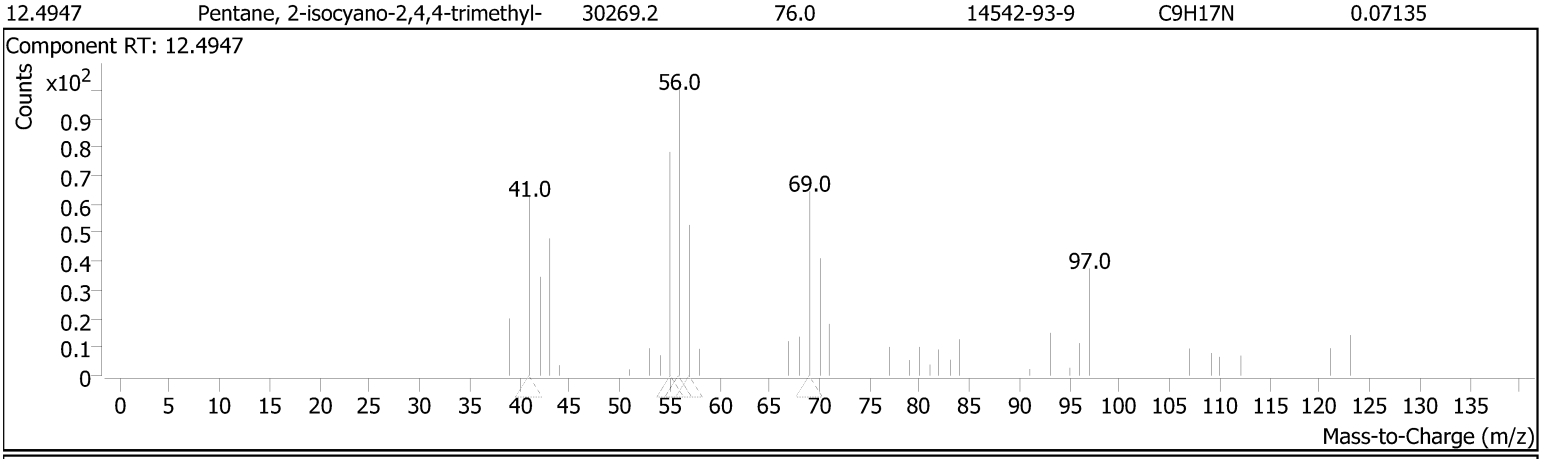


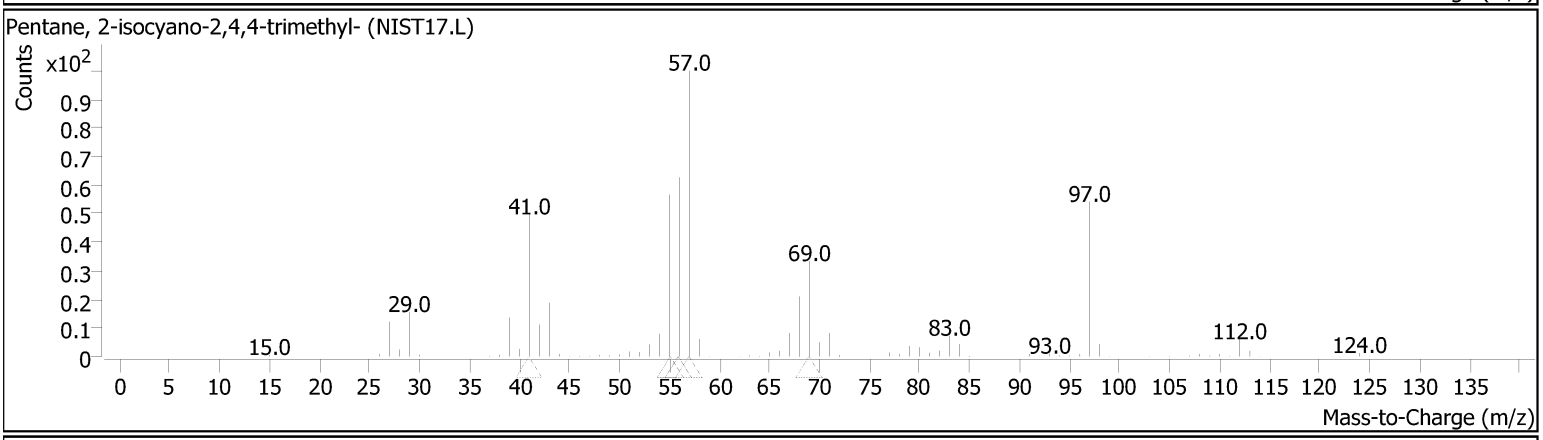


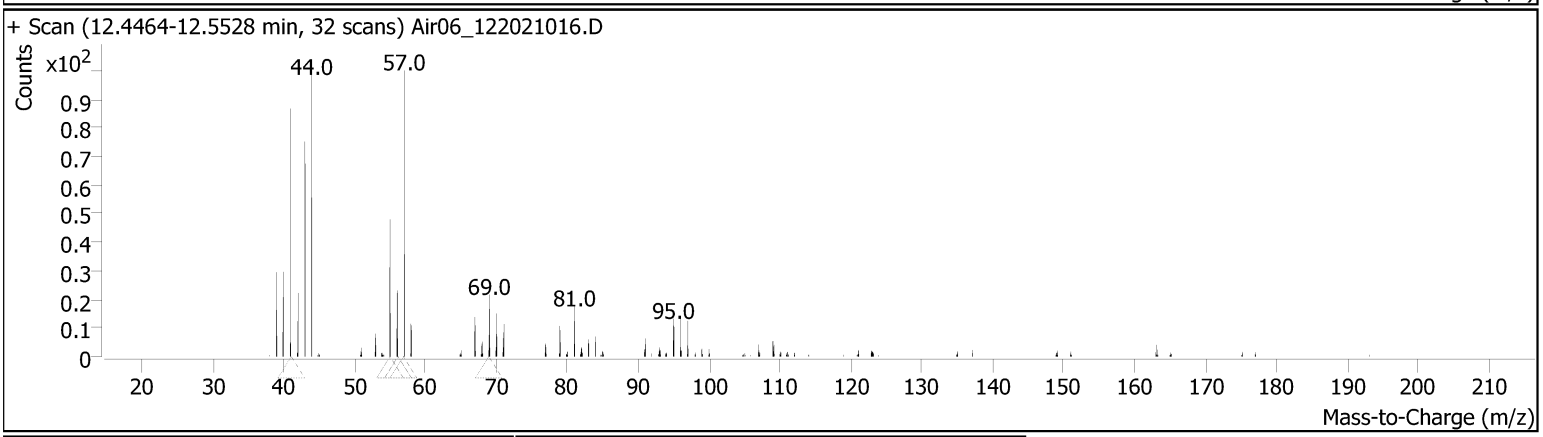


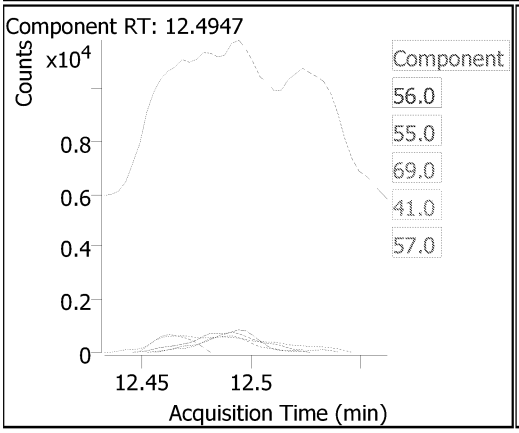


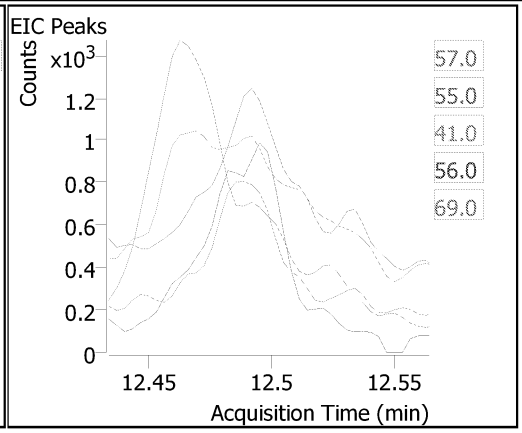
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.4947	Pentane, 2-isocyano-2,4,4-trimethyl-	30269.2	76.0	14542-93-9	C9H17N	0.07135

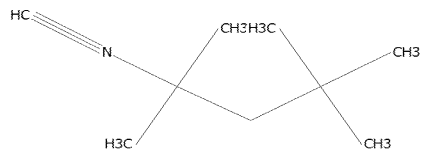




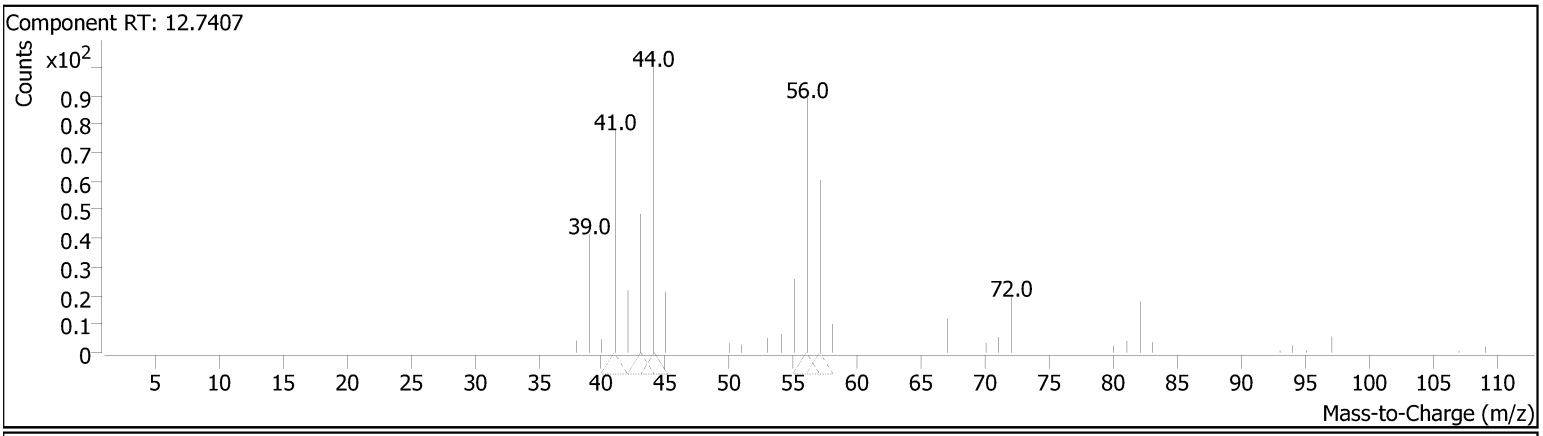


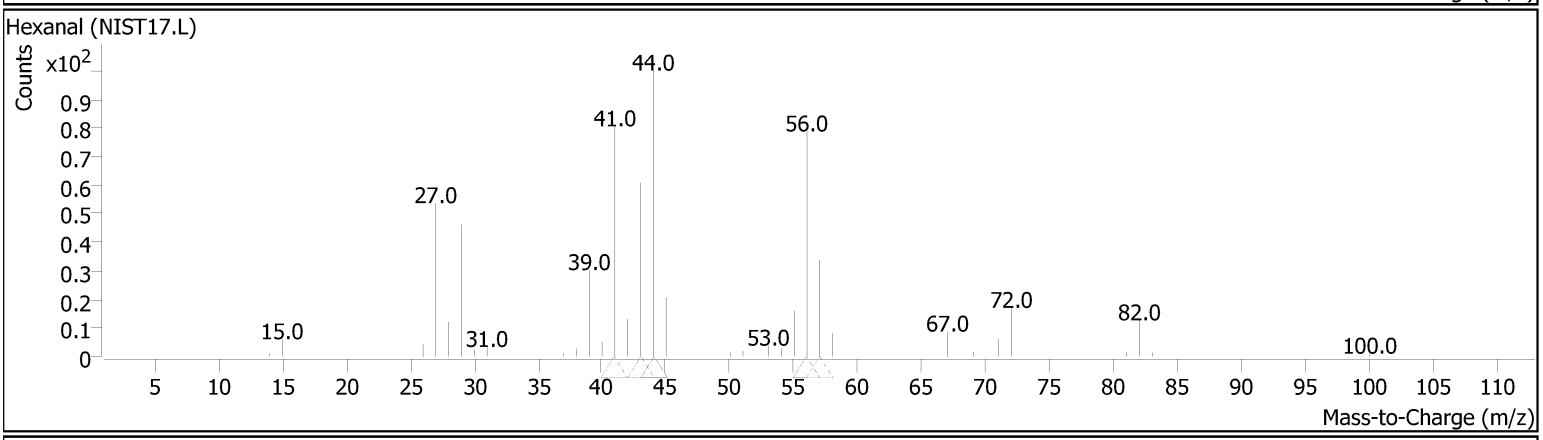


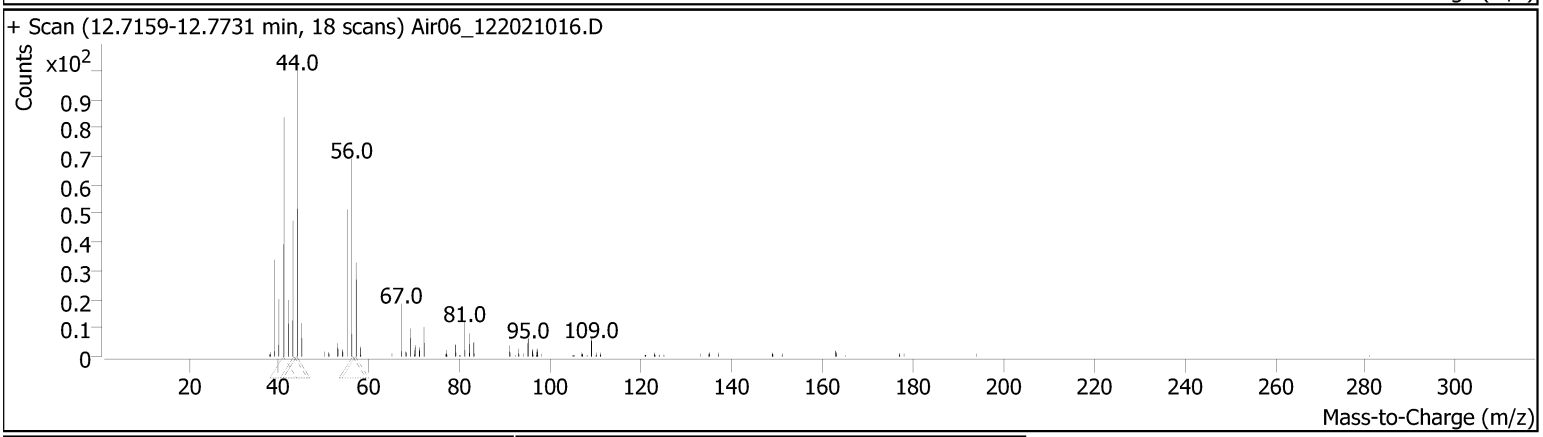


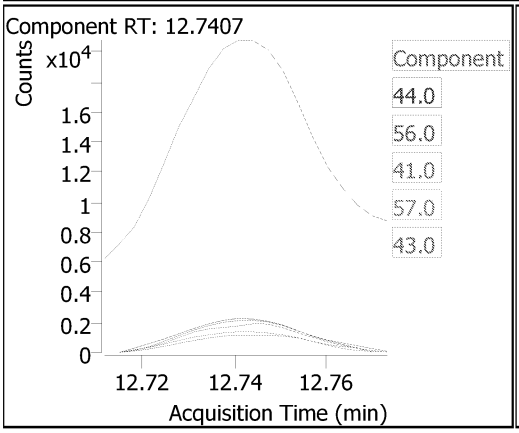


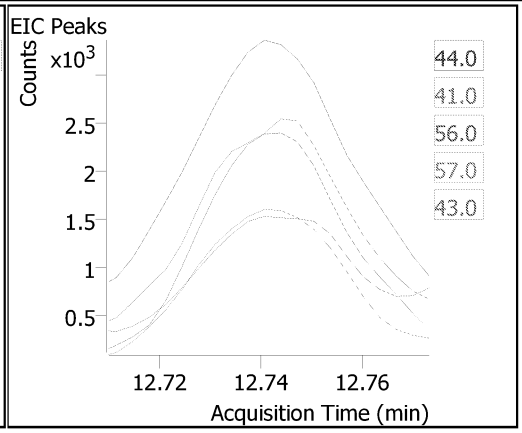
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.7407	Hexanal	29810.0	88.7	66-25-1	C6H12O	0.07027





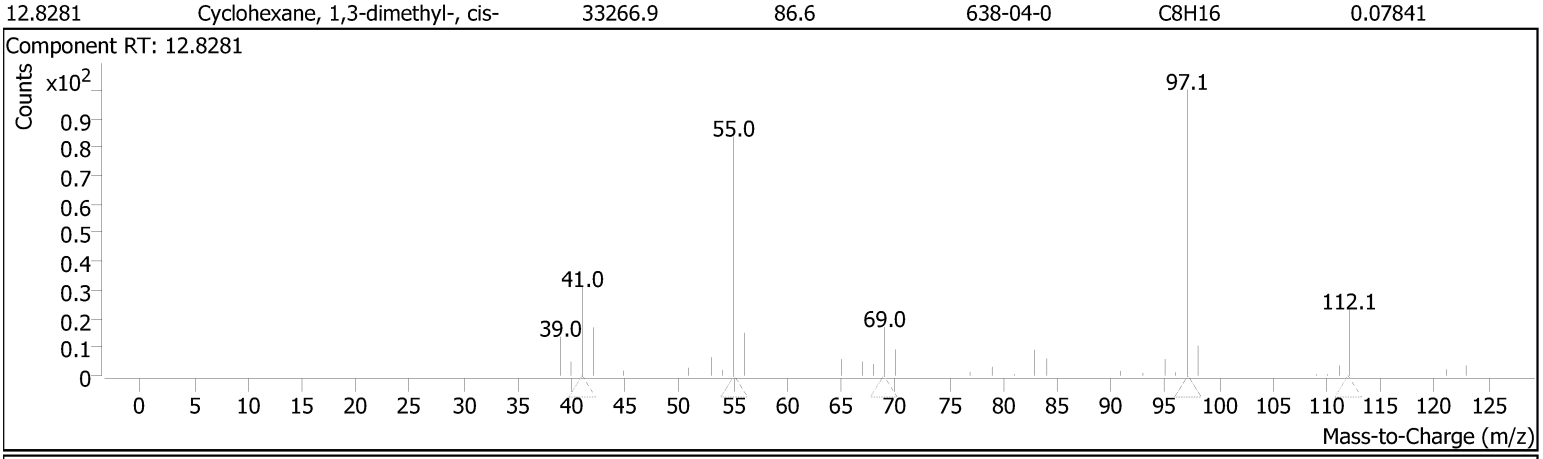


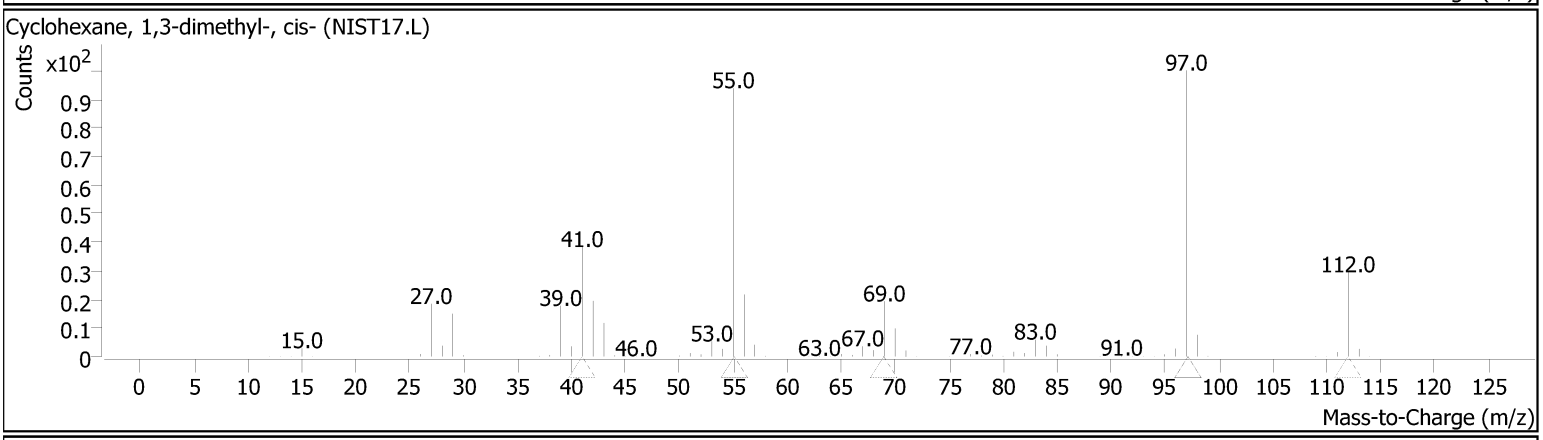


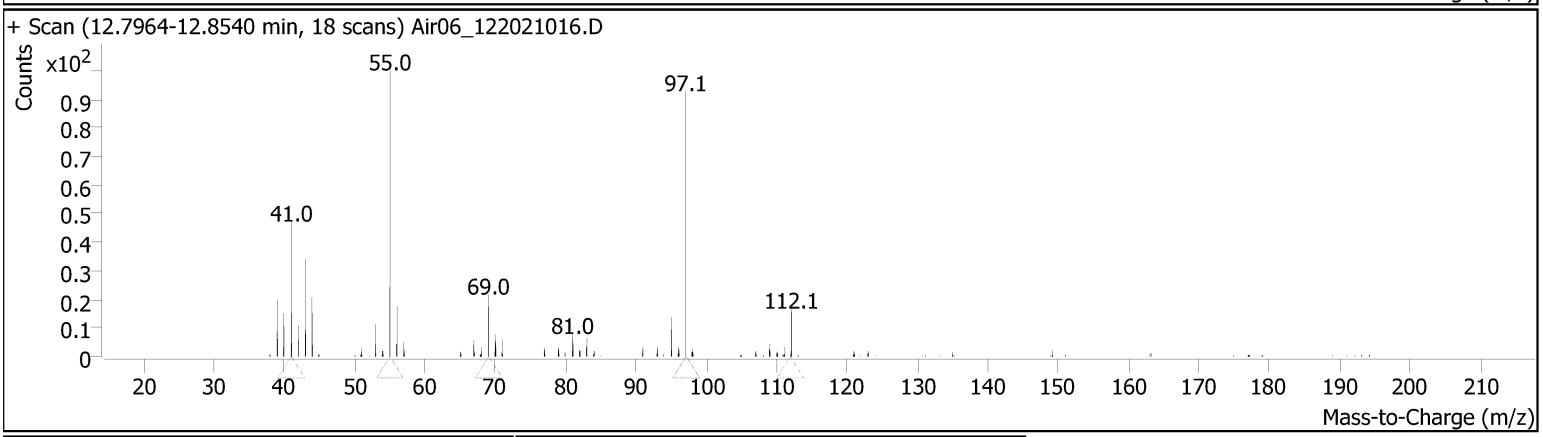


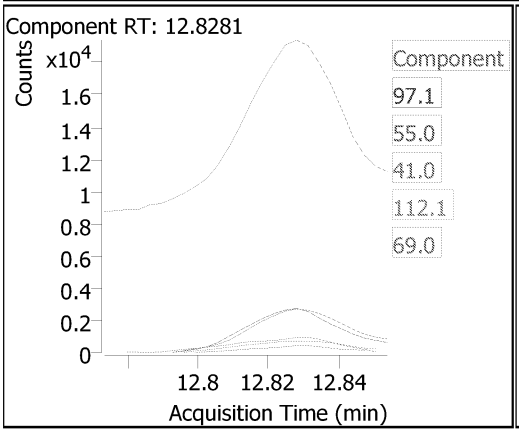


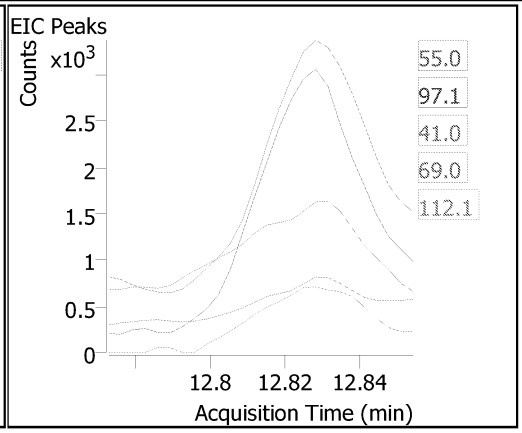
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.8281	Cyclohexane, 1,3-dimethyl-, cis-	33266.9	86.6	638-04-0	C8H16	0.07841

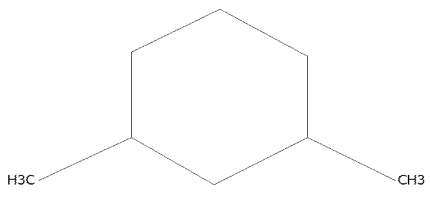




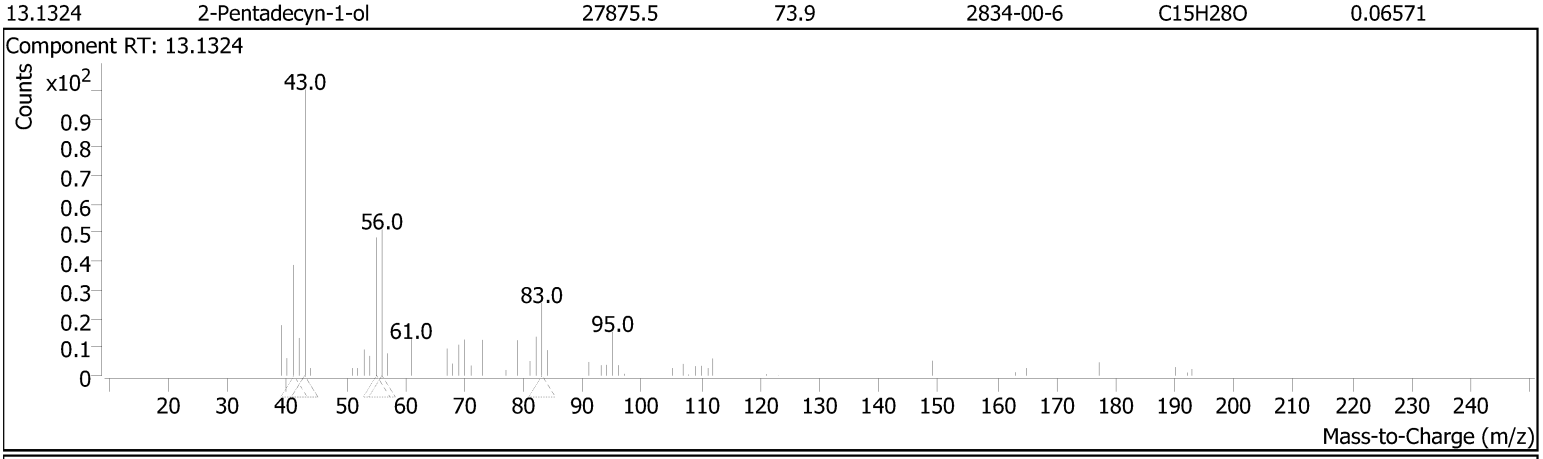


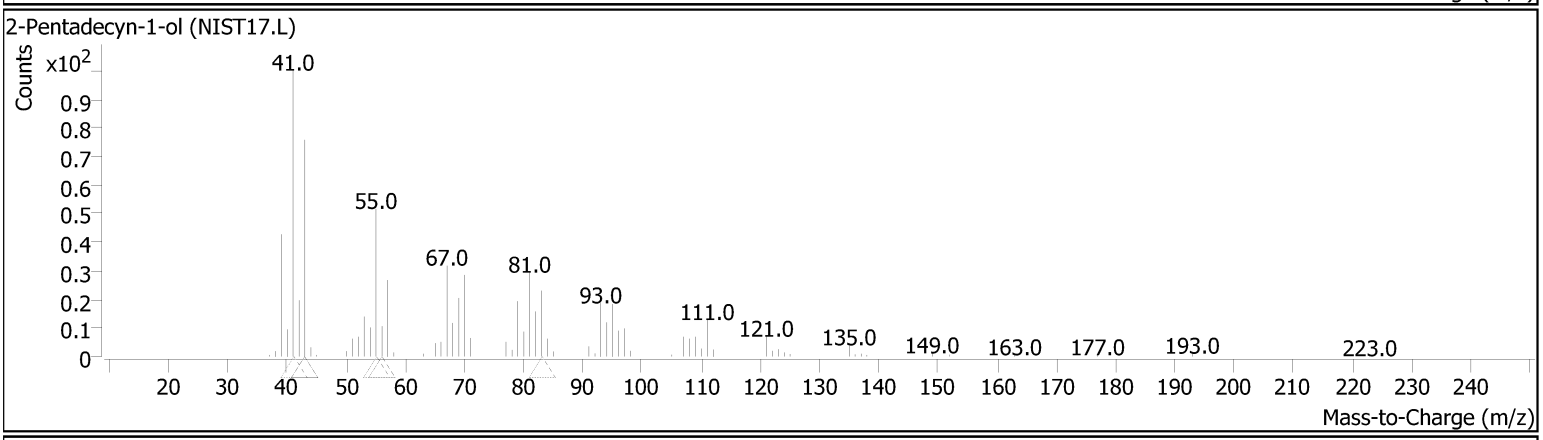


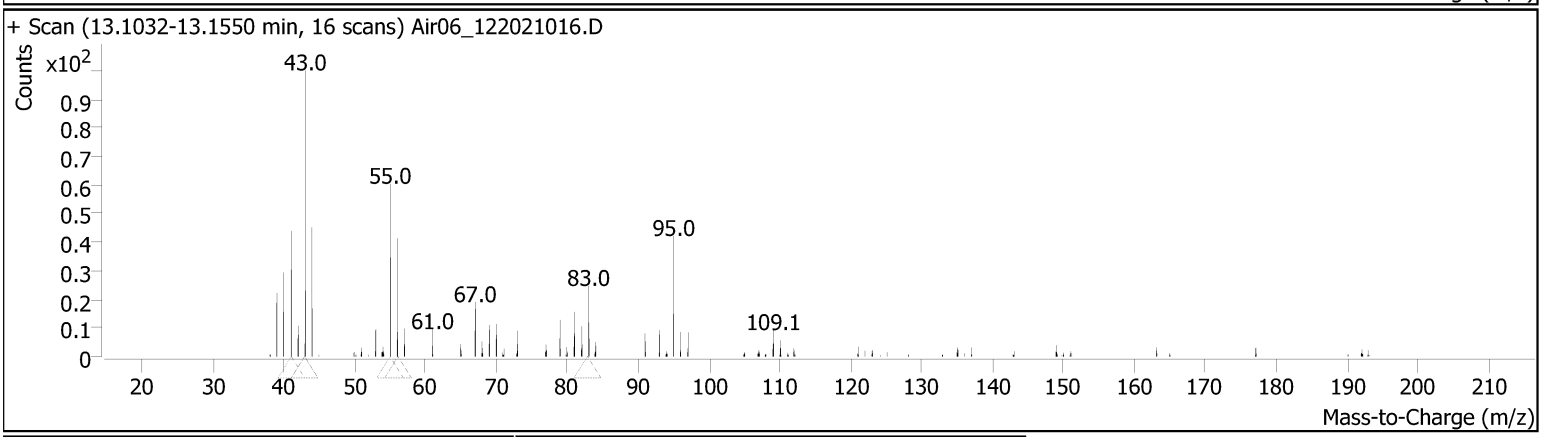


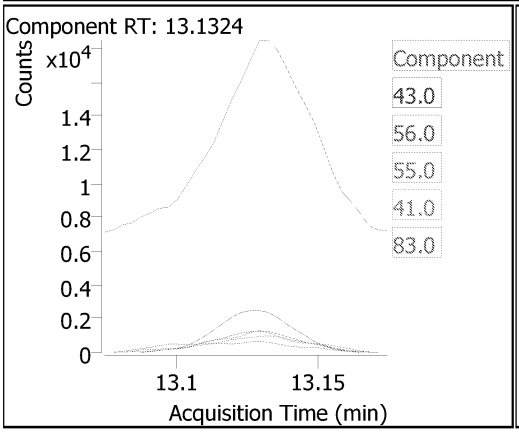


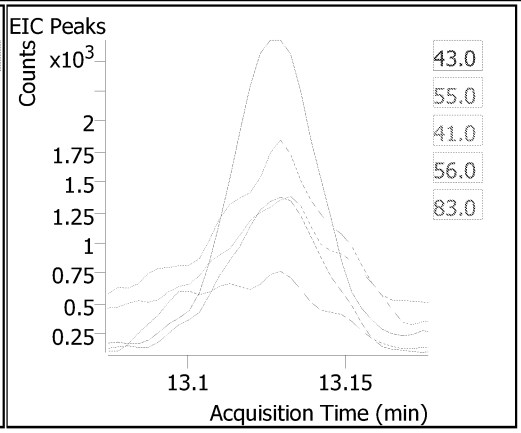
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.1324	2-Pentadecyn-1-ol	27875.5	73.9	2834-00-6	C15H28O	0.06571

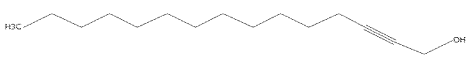




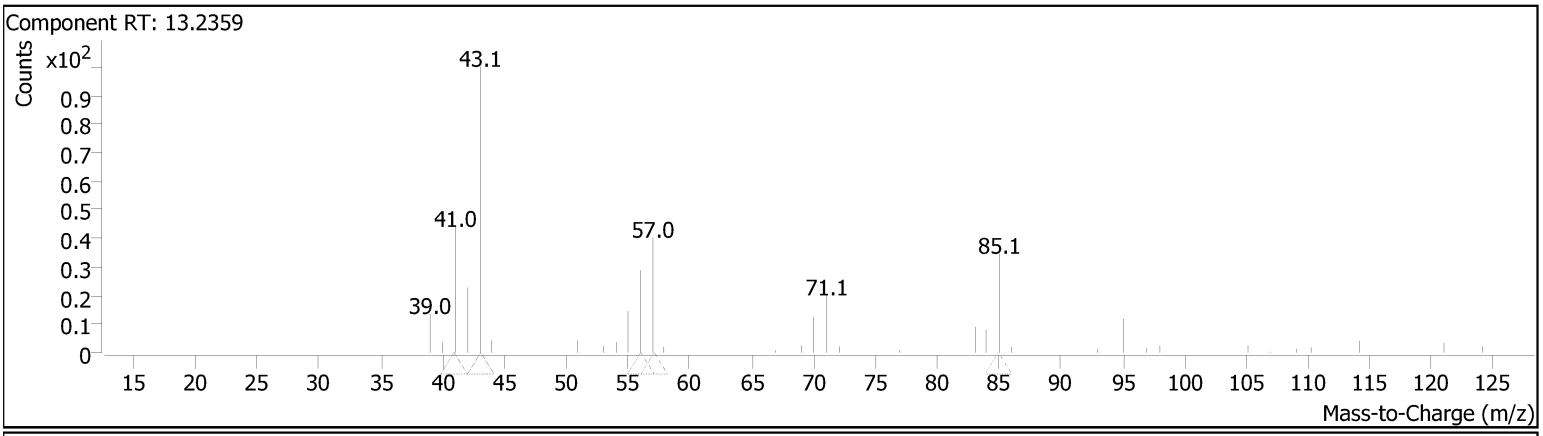


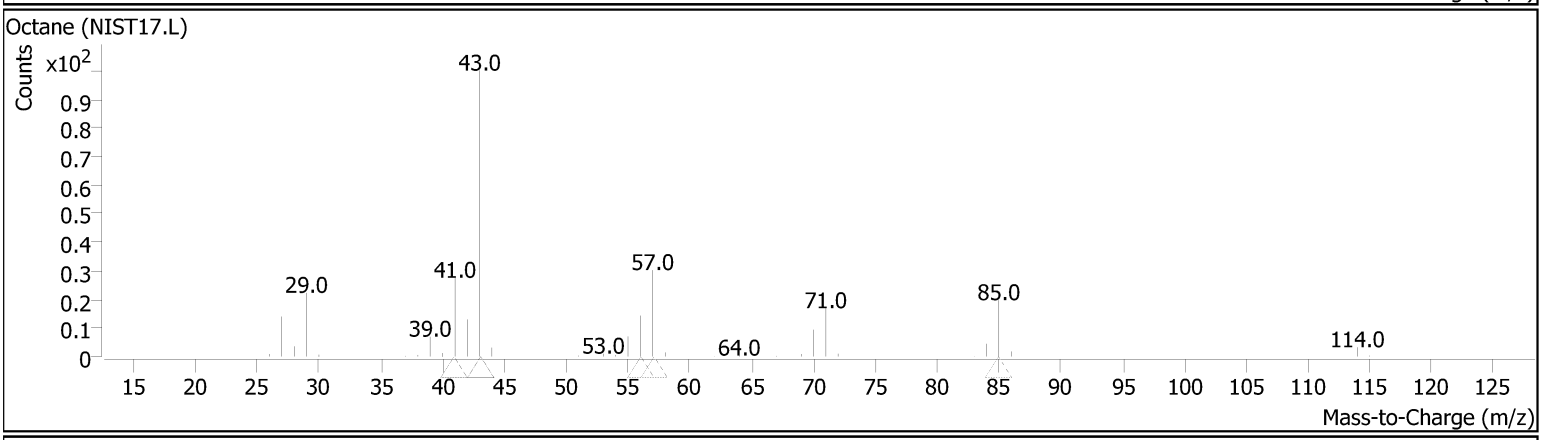


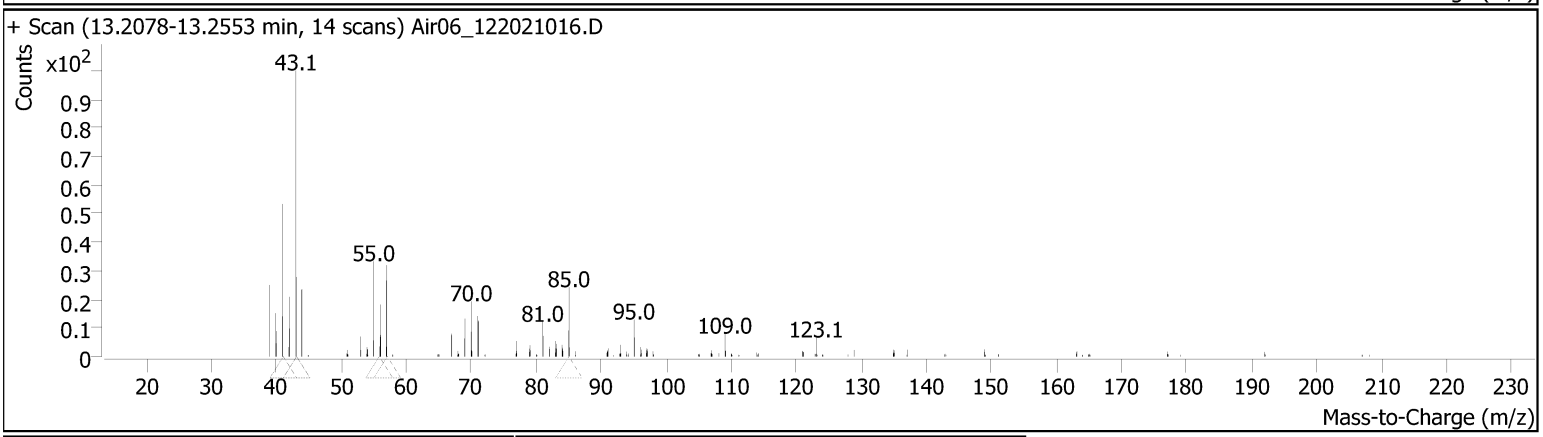


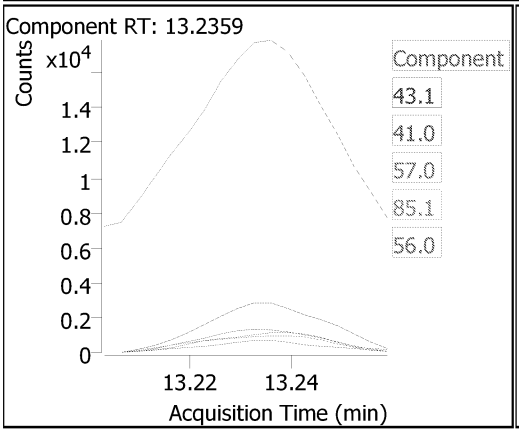


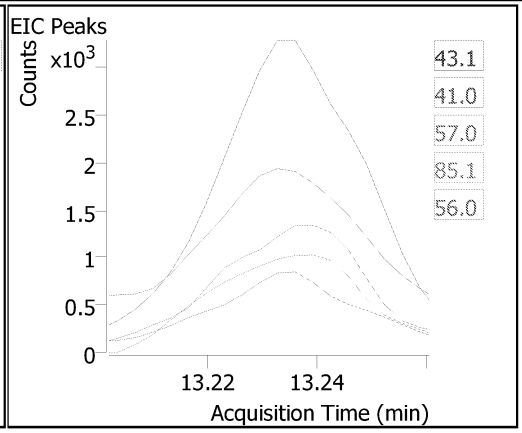
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.2359	Octane	18836.8	82.5	111-65-9	C8H18	0.0444





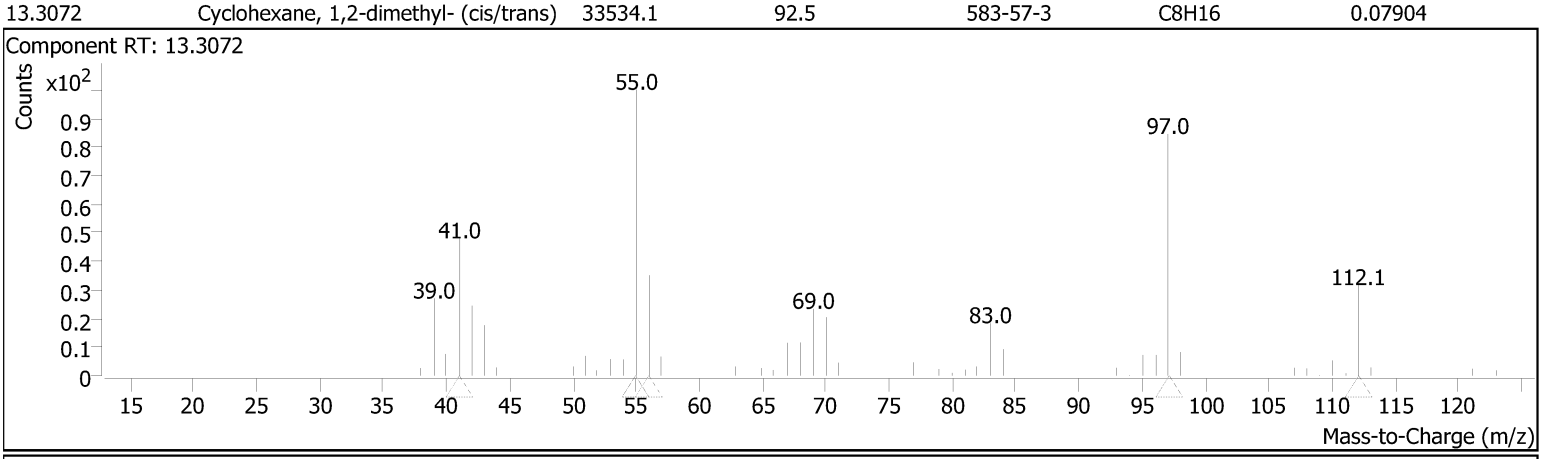


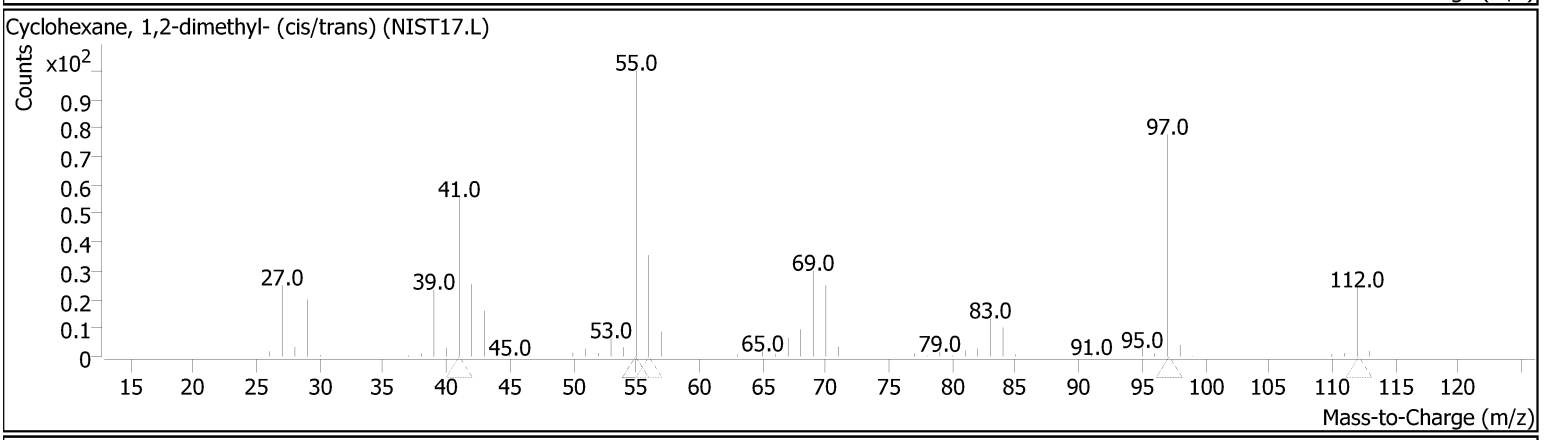


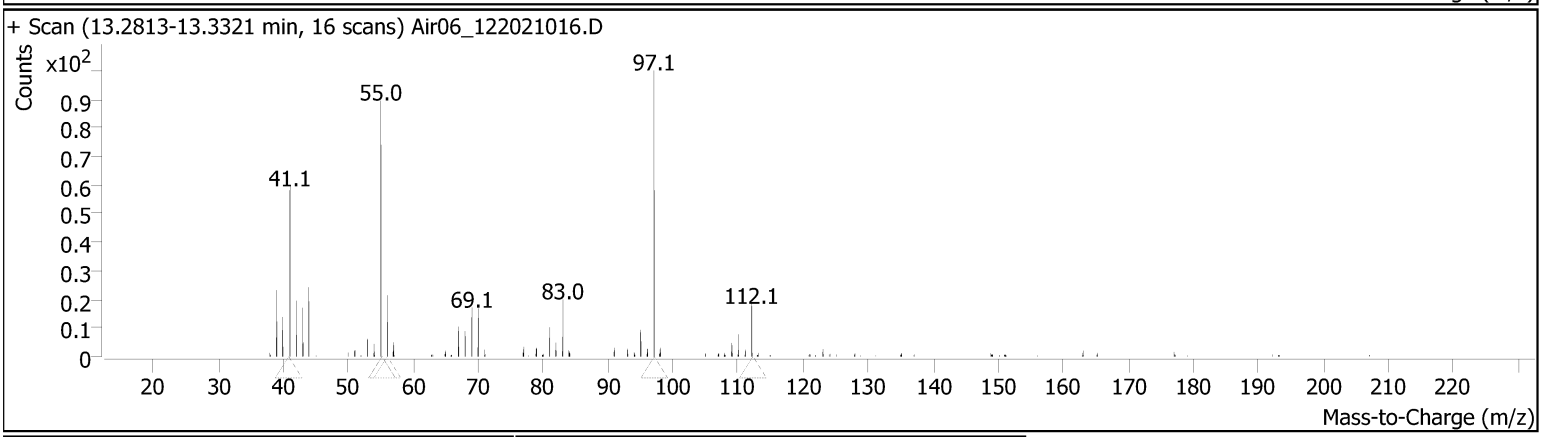


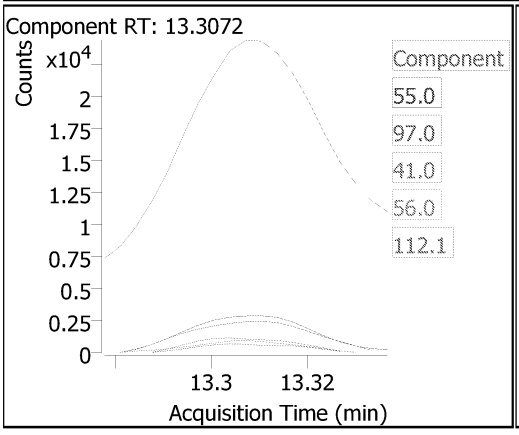


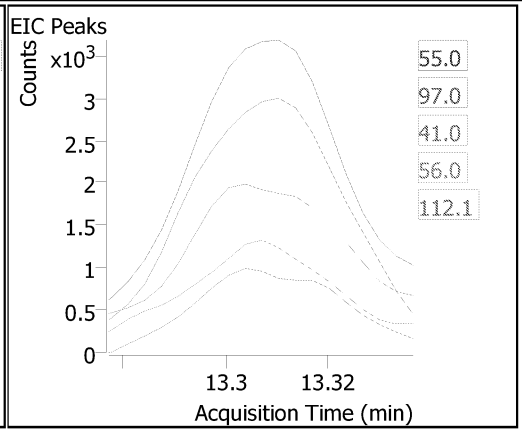
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.3072	Cyclohexane, 1,2-dimethyl- (cis/trans)	33534.1	92.5	583-57-3	C8H16	0.07904

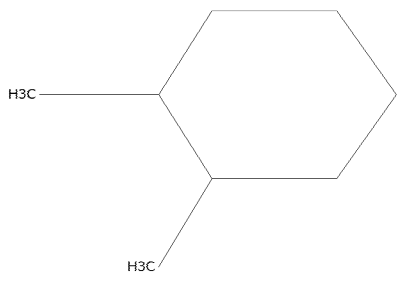




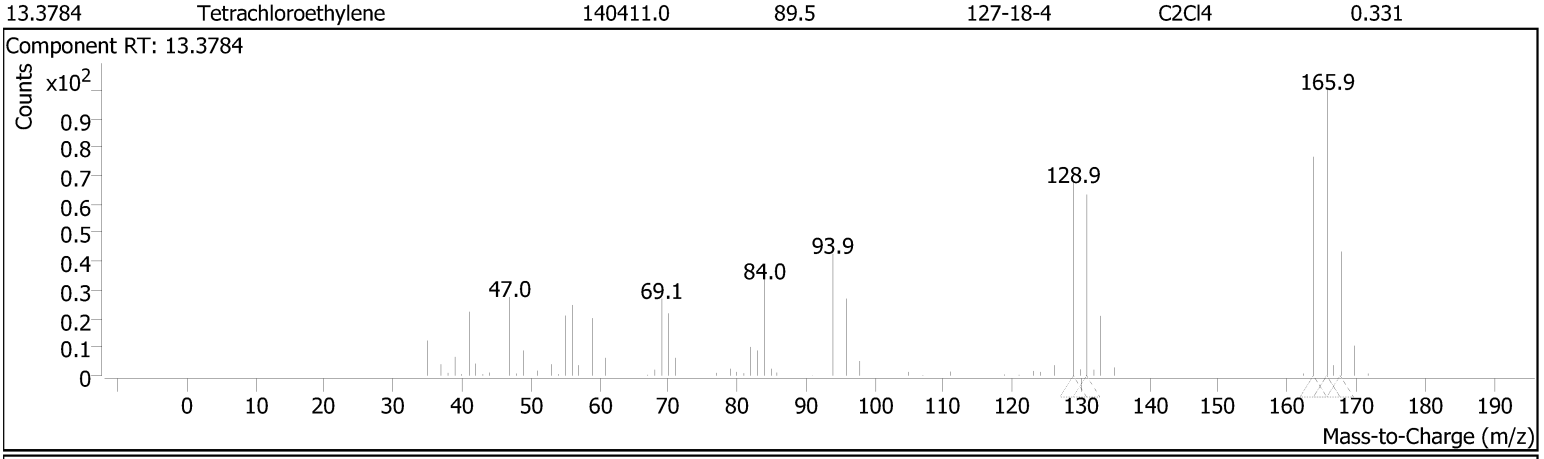


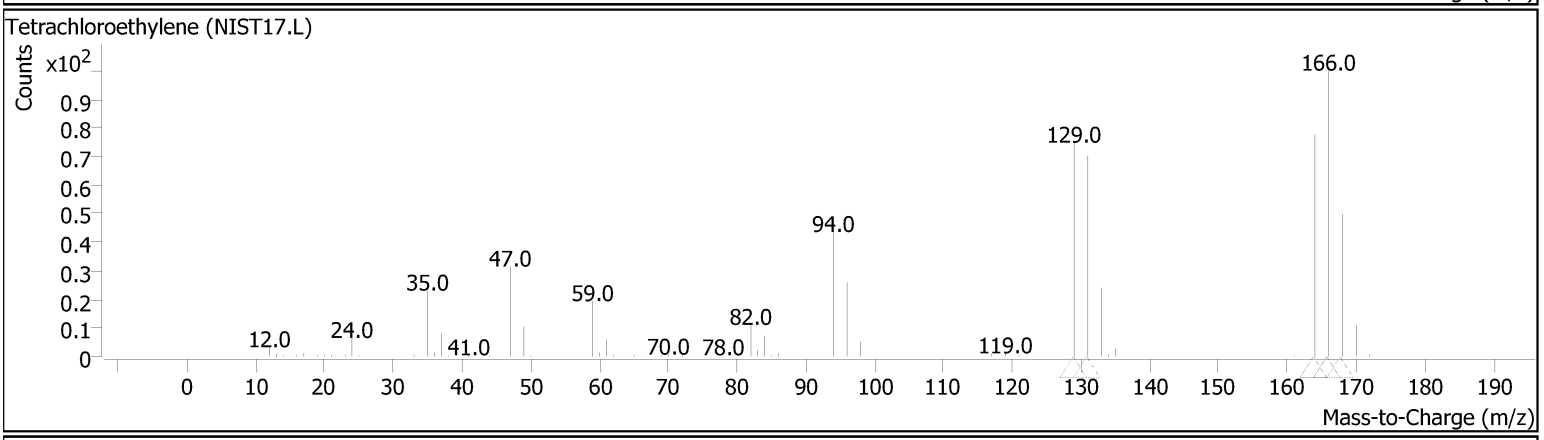


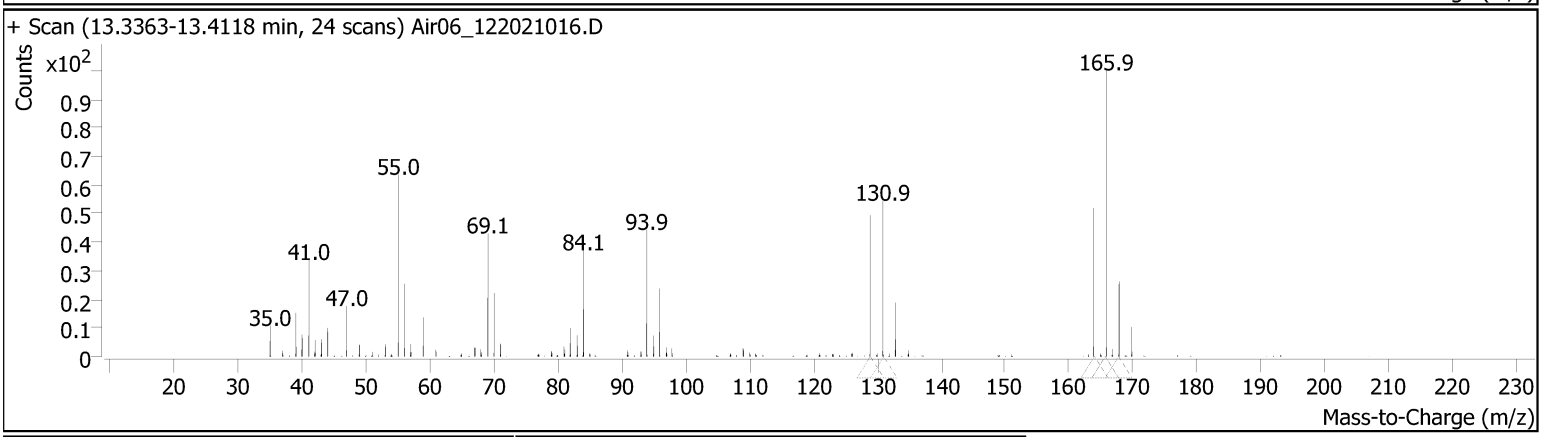


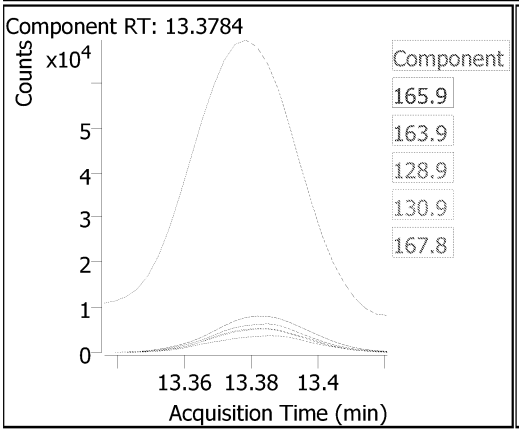


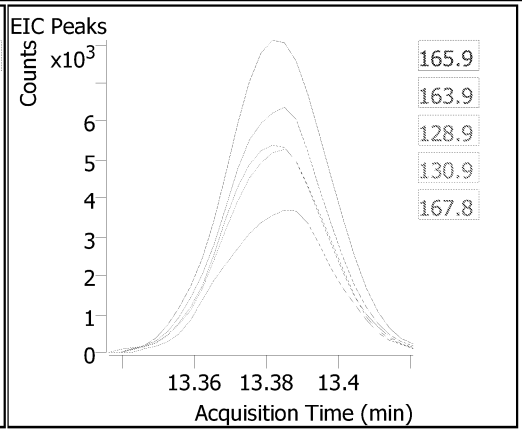
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.3784	Tetrachloroethylene	140411.0	89.5	127-18-4	C2Cl4	0.331

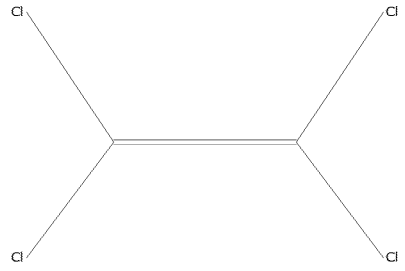




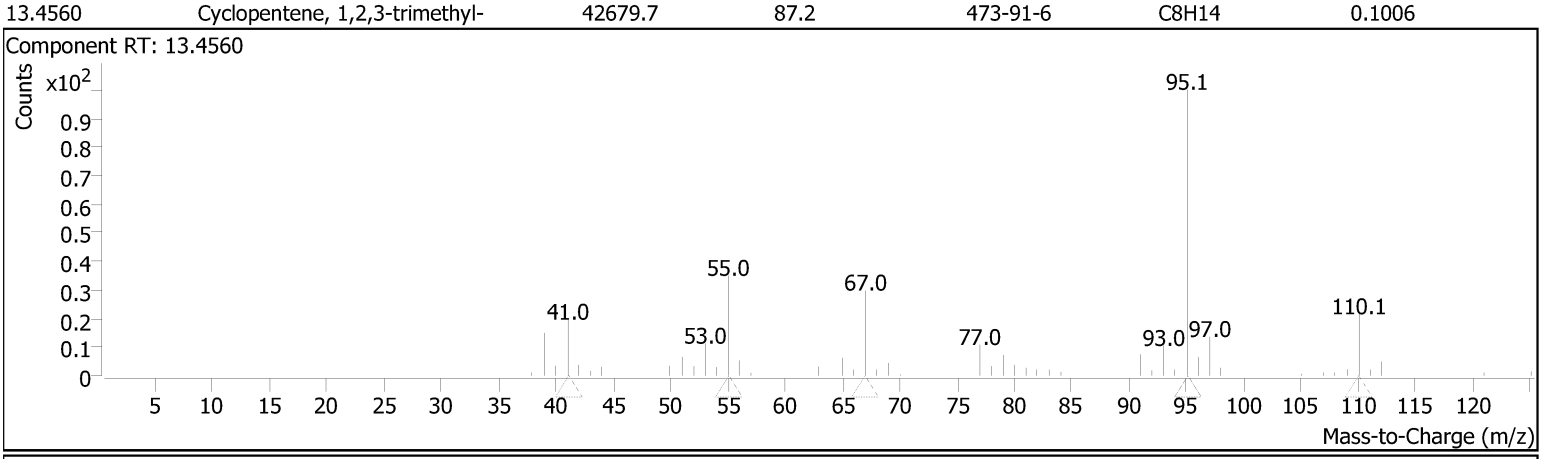


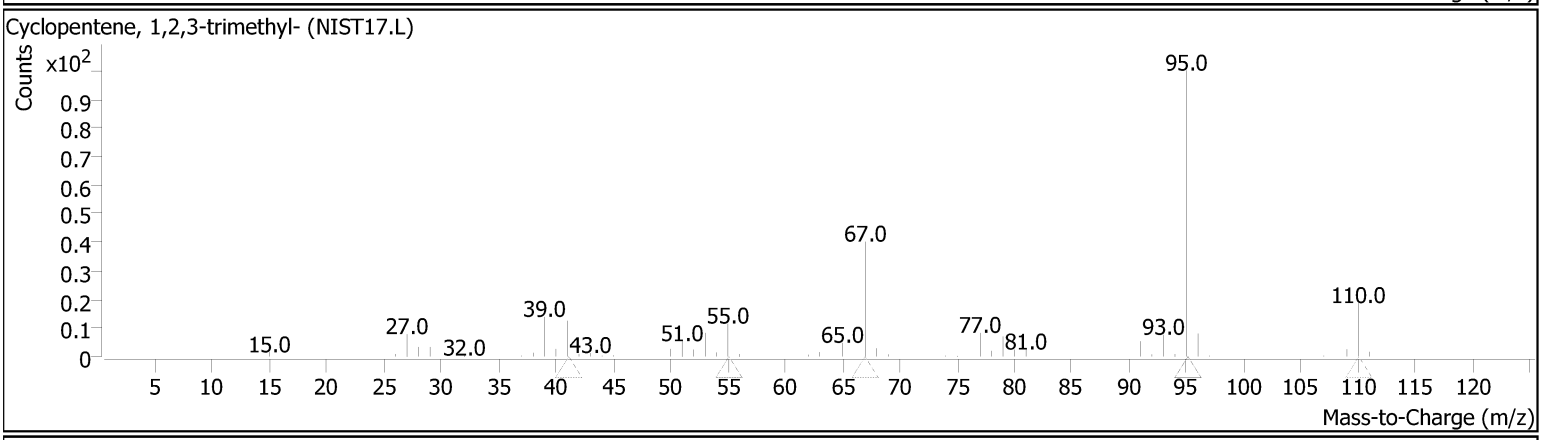


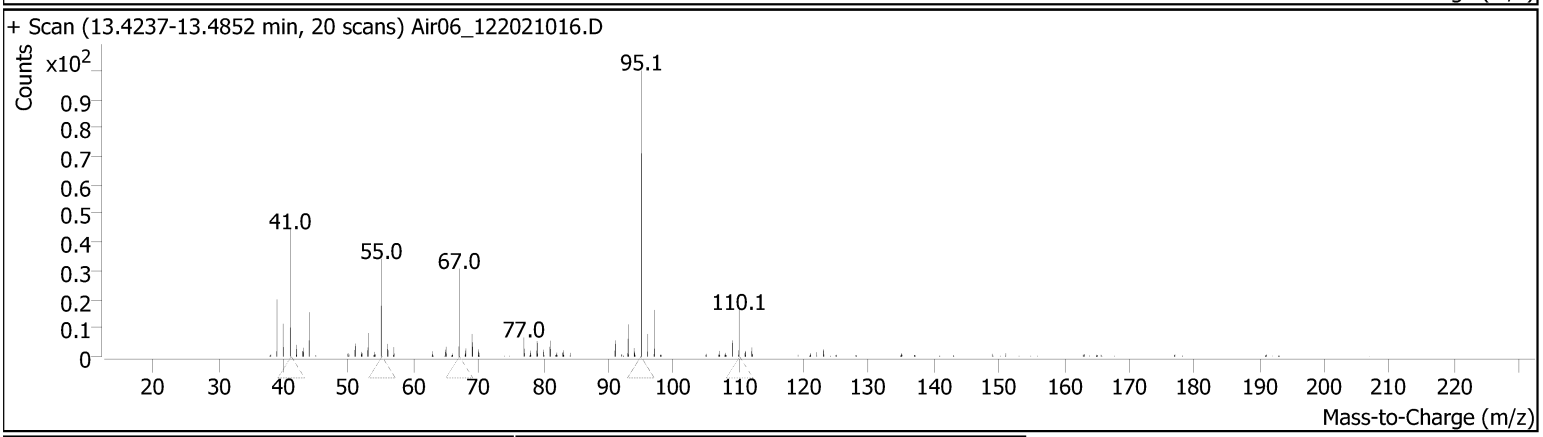


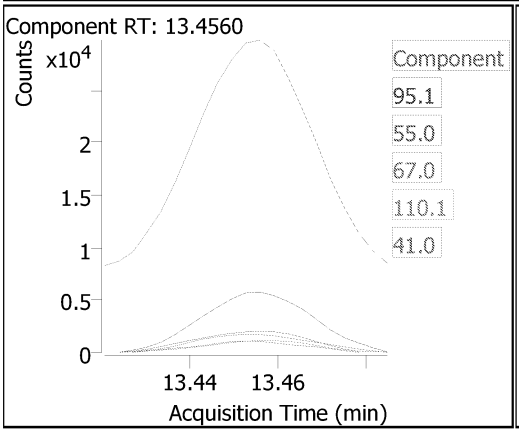


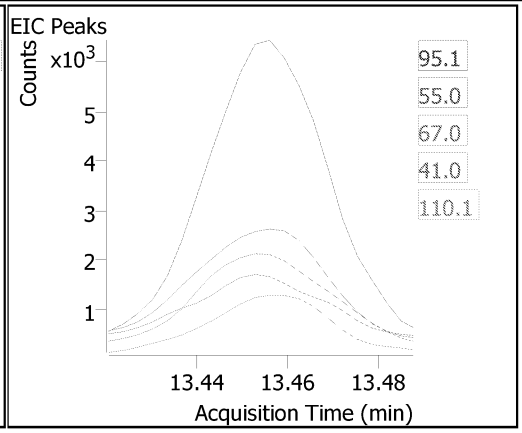
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.4560	Cyclopentene, 1,2,3-trimethyl-	42679.7	87.2	473-91-6	C8H14	0.1006

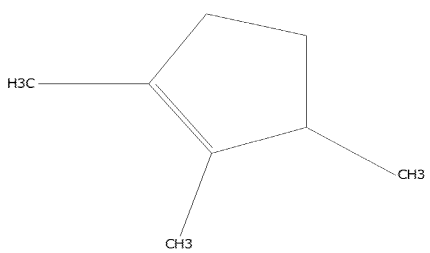












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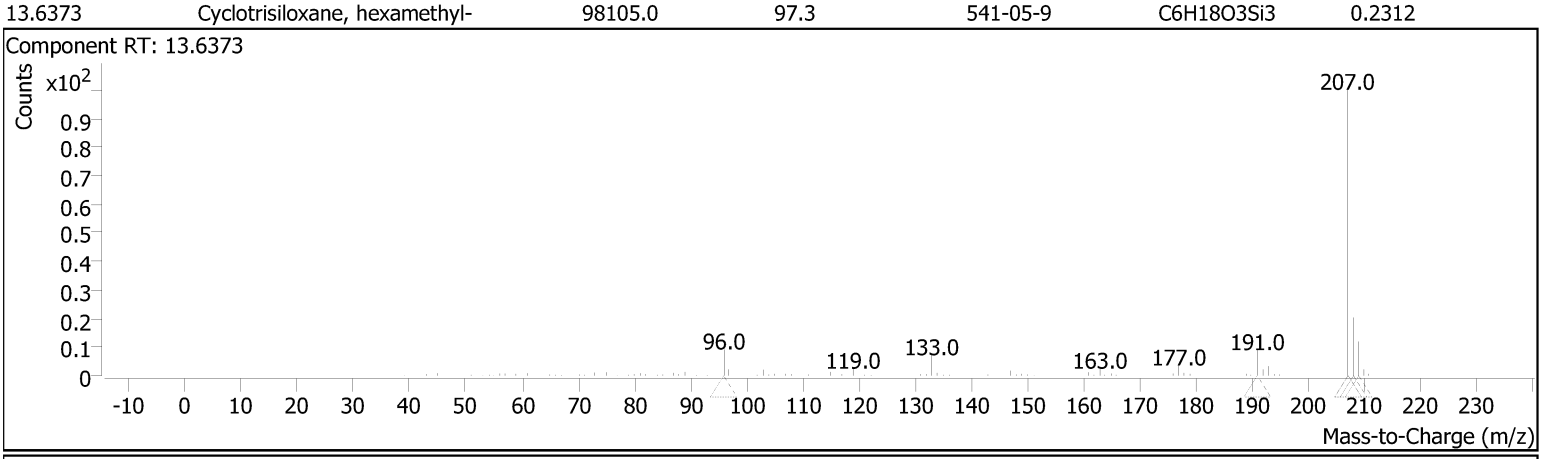
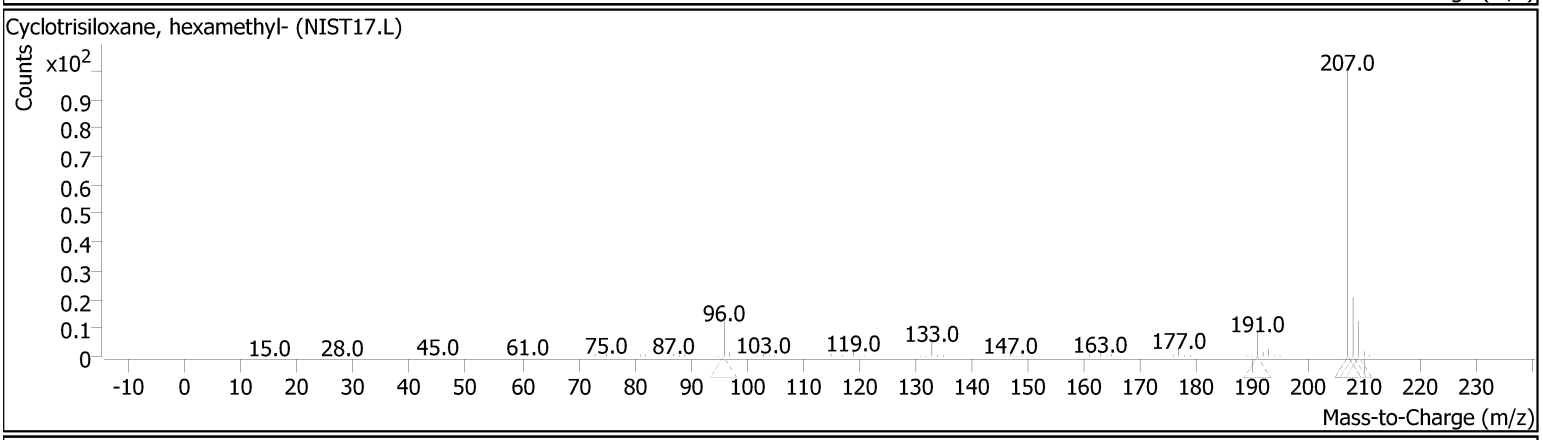
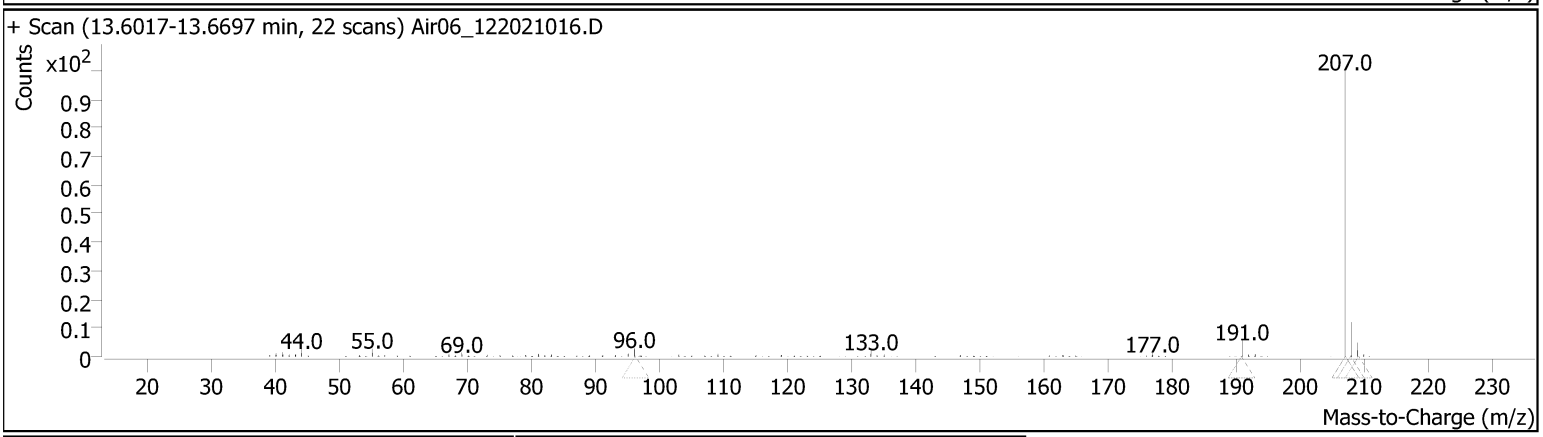
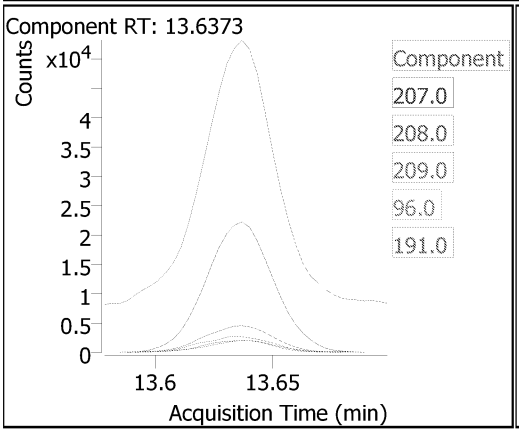
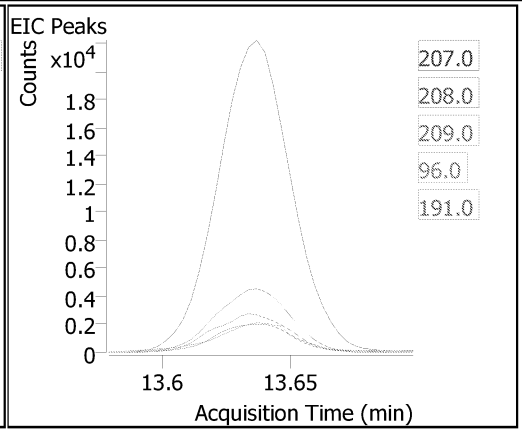
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.6373	Cyclotrisiloxane, hexamethyl-	98105.0	97.3	541-05-9	C6H18O3Si3	0.2312

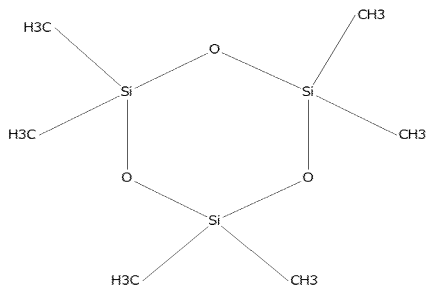




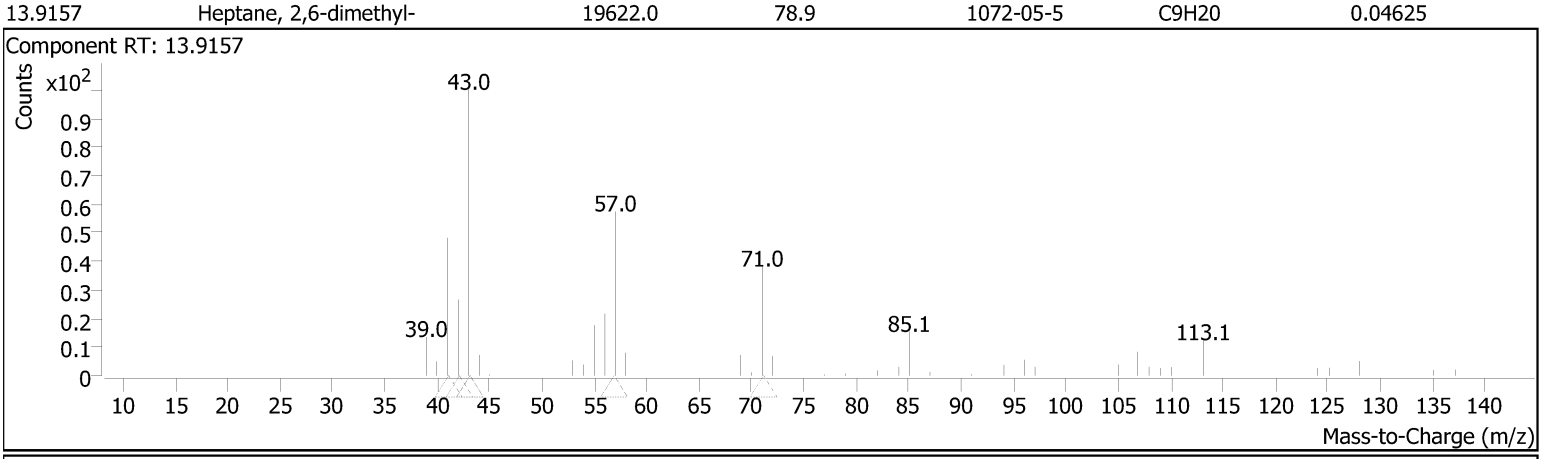


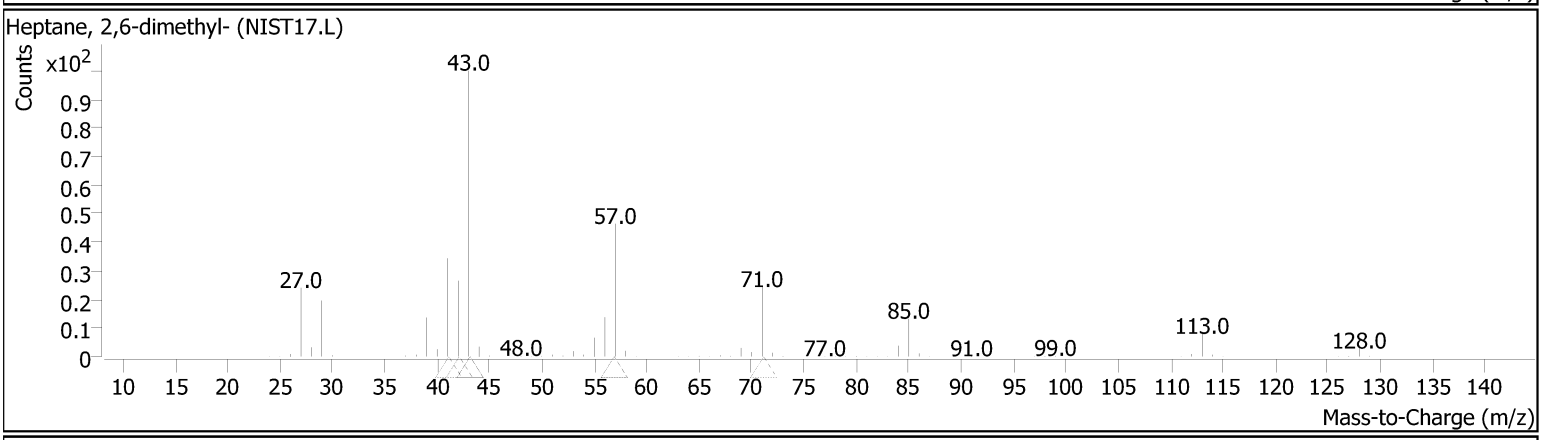


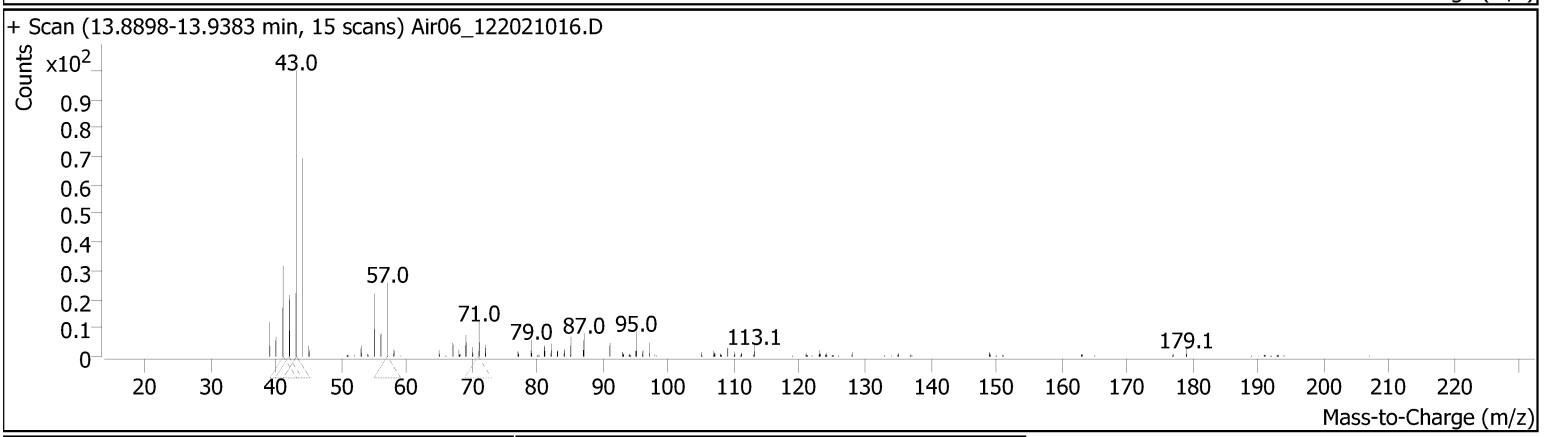


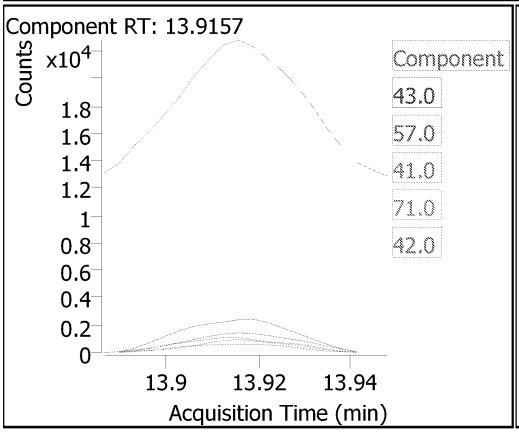


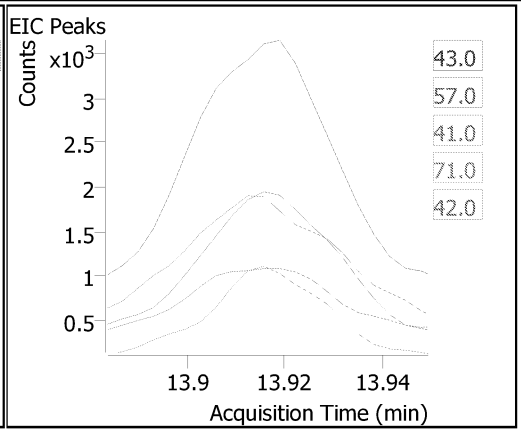
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.9157	Heptane, 2,6-dimethyl-	19622.0	78.9	1072-05-5	C9H20	0.04625

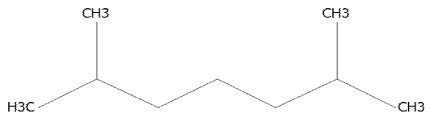




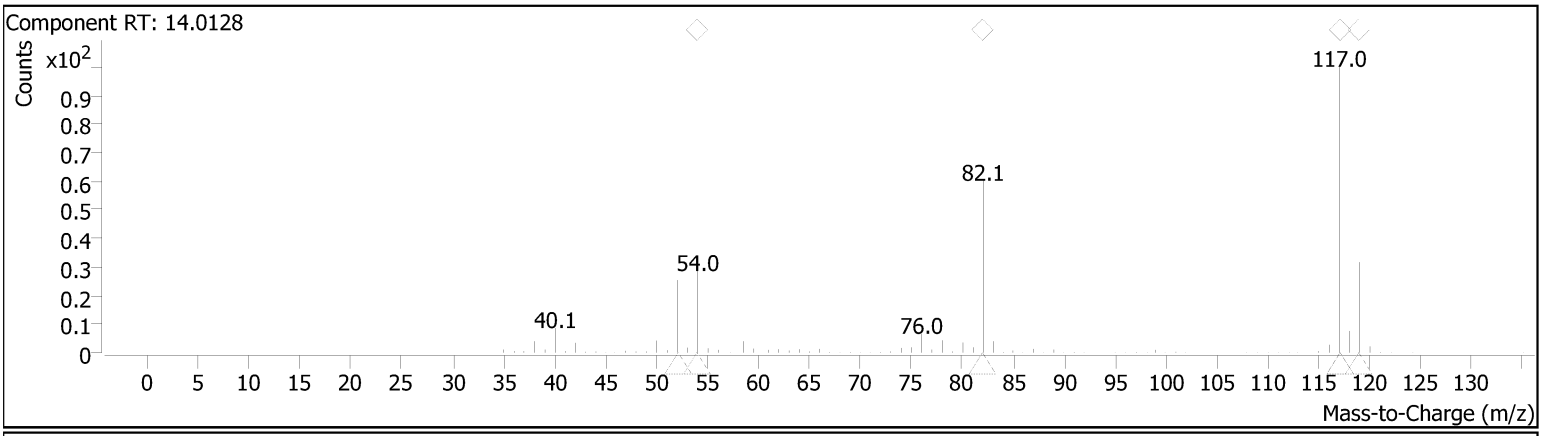


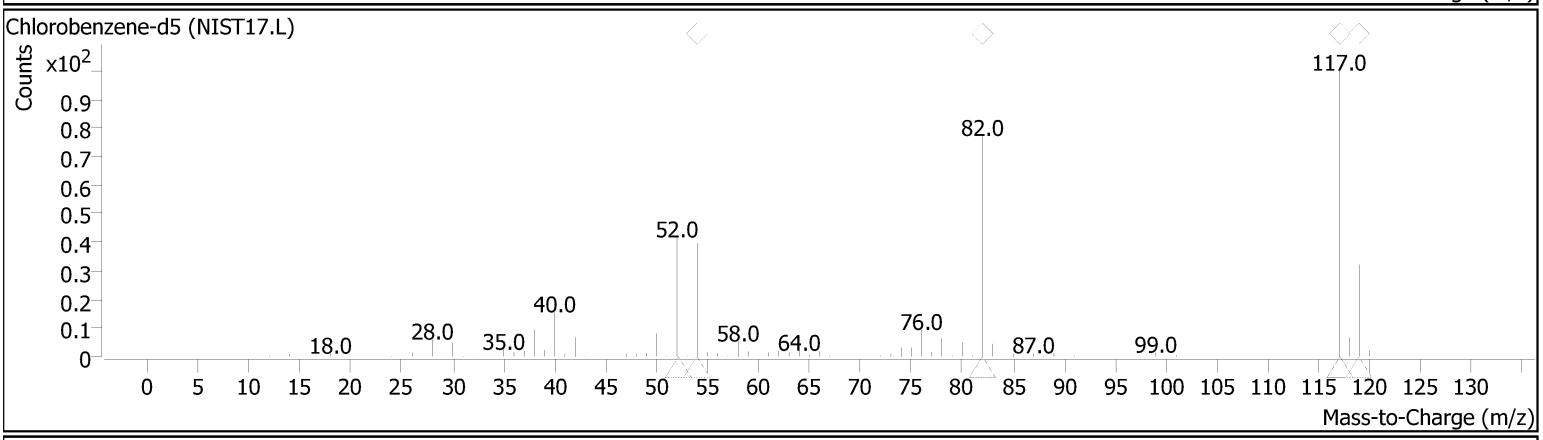


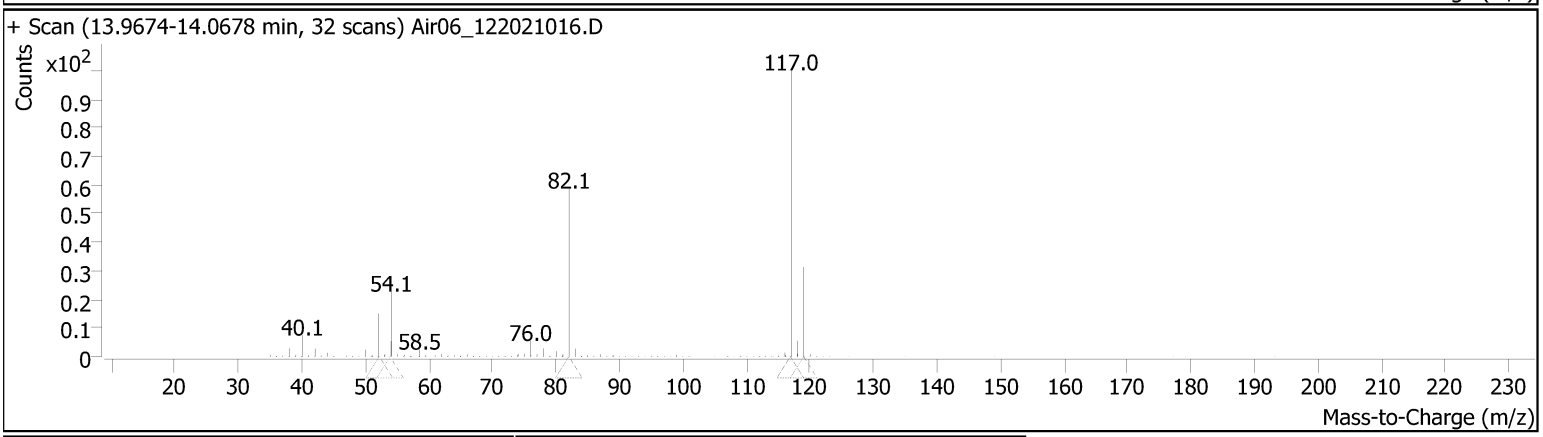


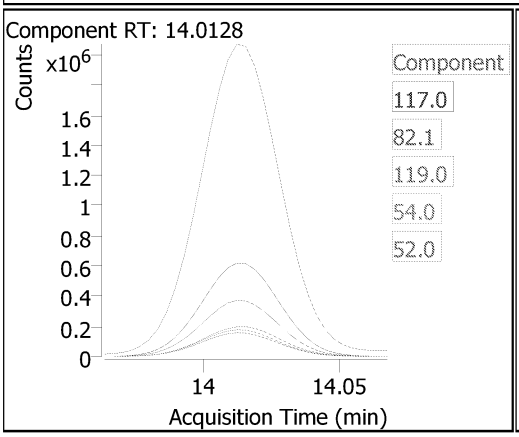


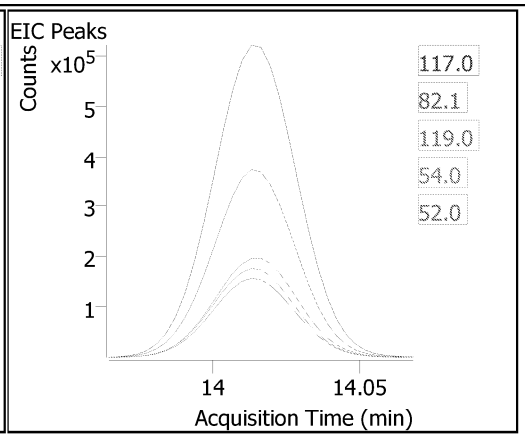
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.0128	Chlorobenzene-d5	4242447.4	95.9	3114-55-4	C6D5Cl	10

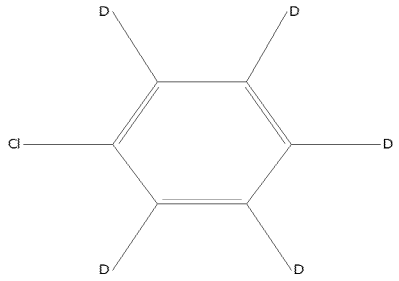




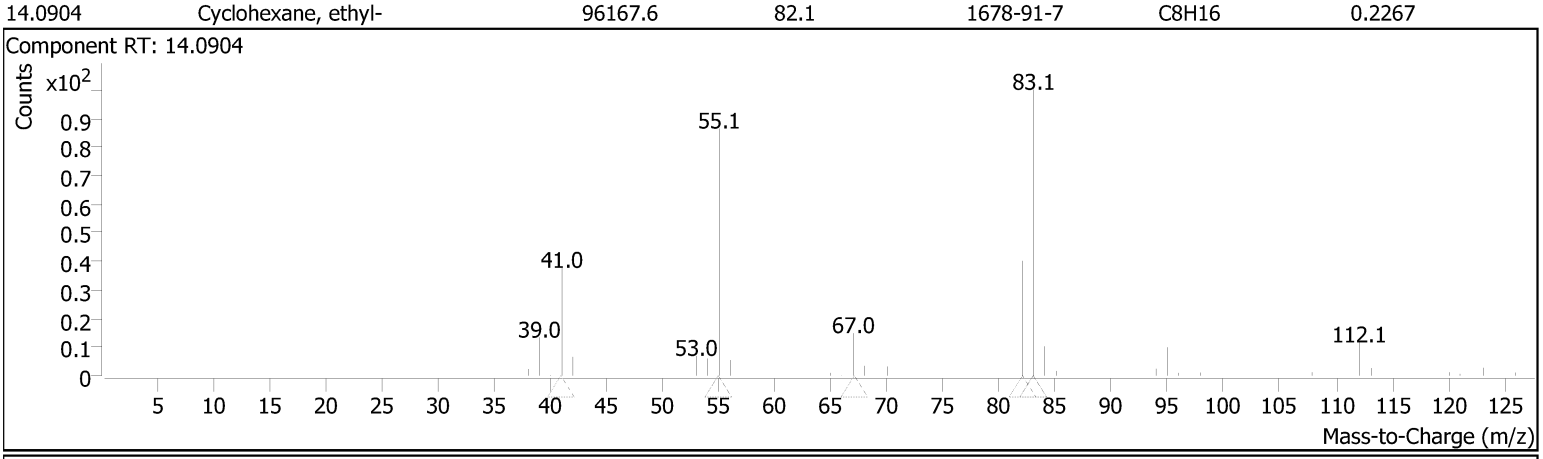


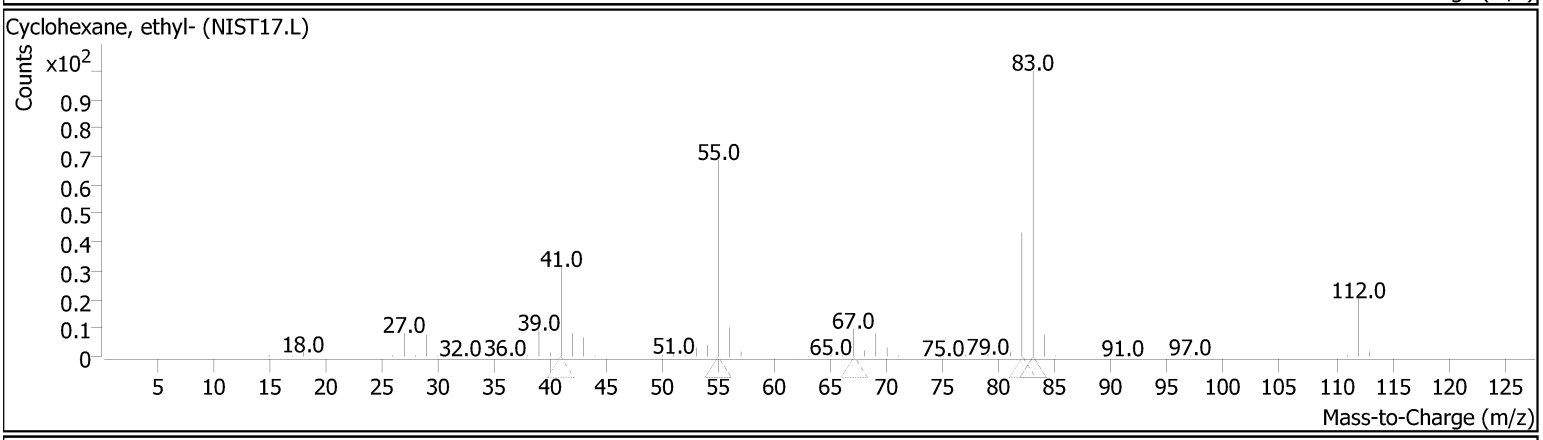


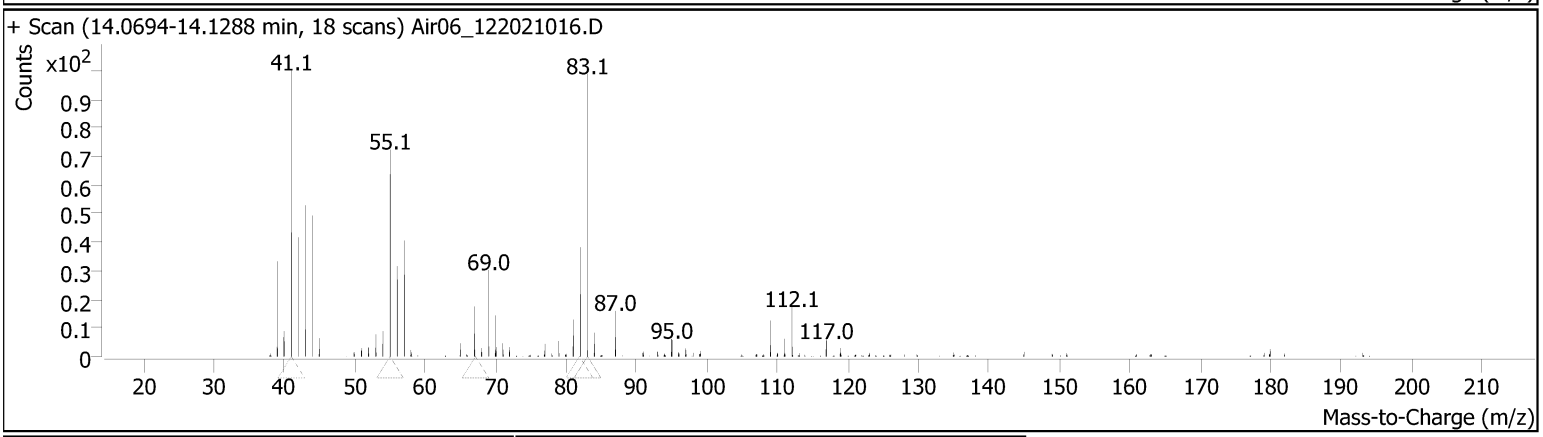


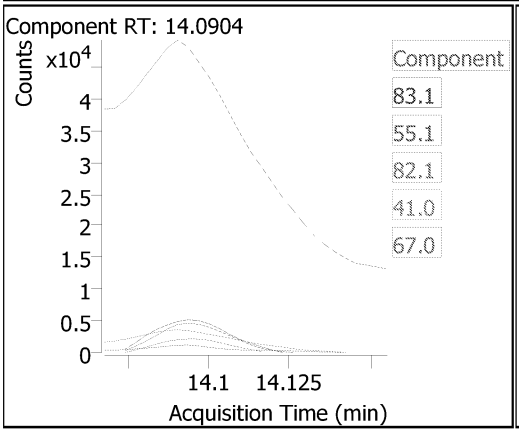


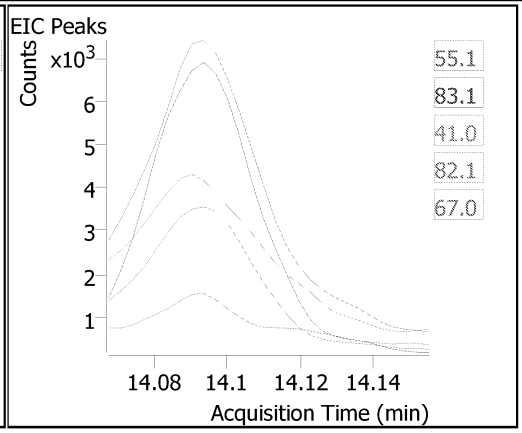
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.0904	Cyclohexane, ethyl-	96167.6	82.1	1678-91-7	C8H16	0.2267

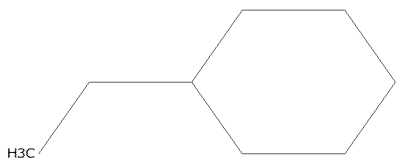




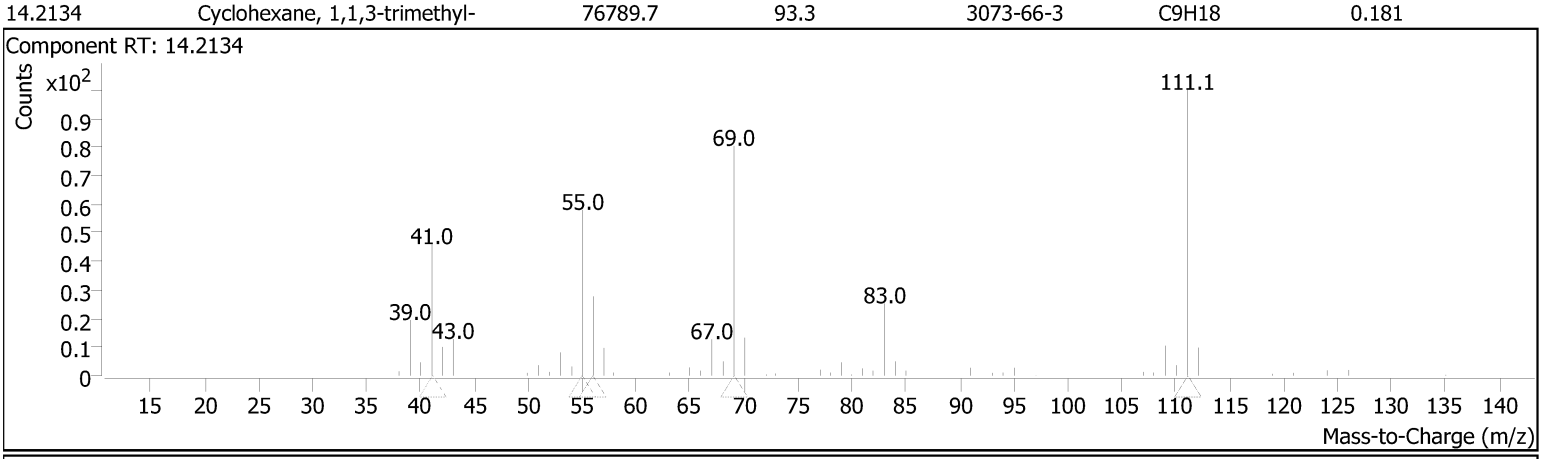


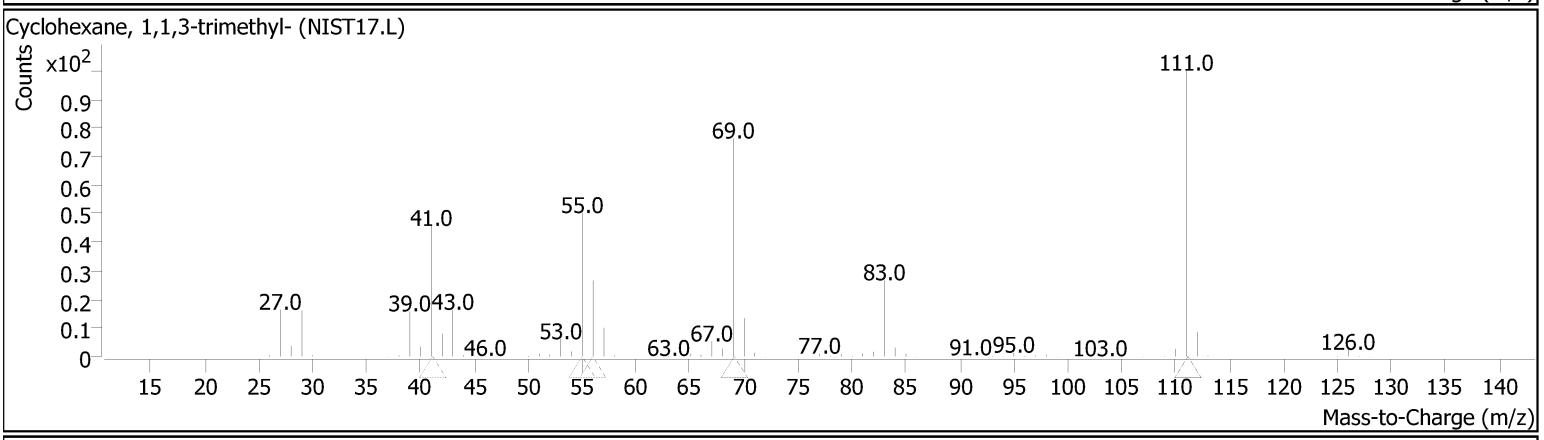


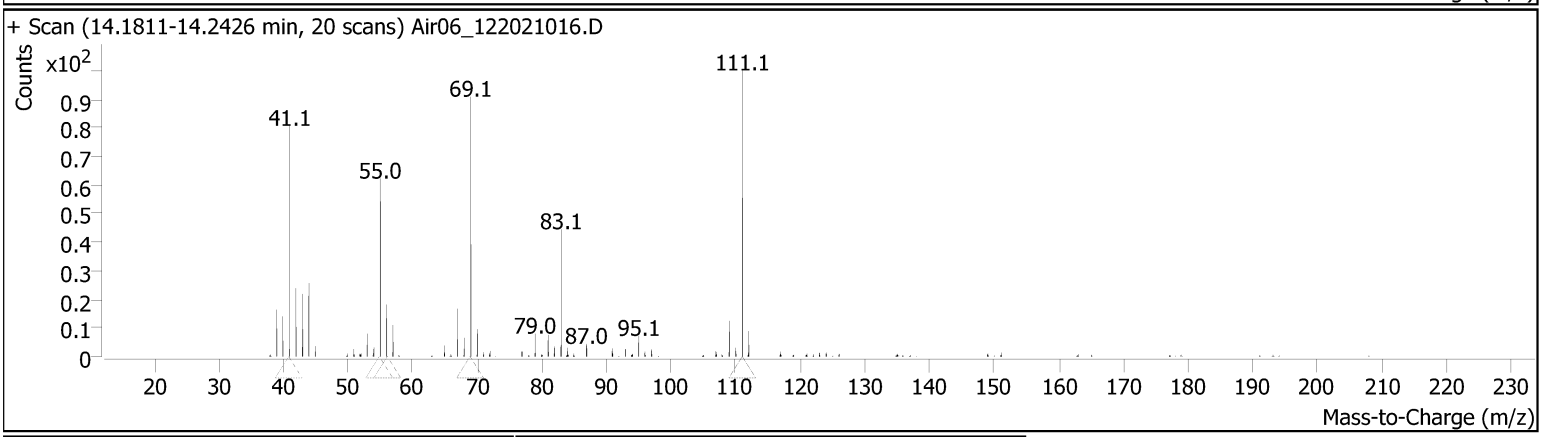


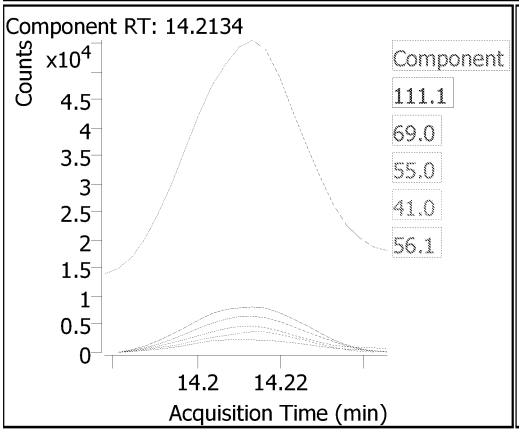


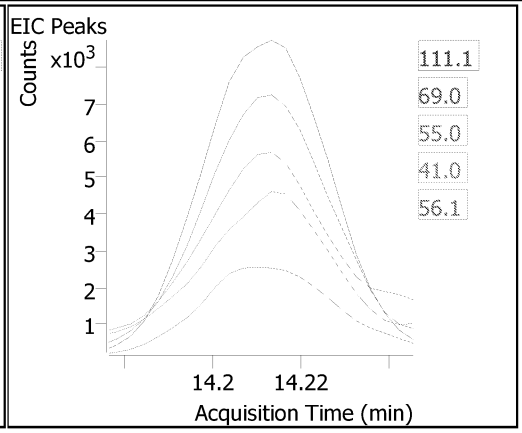
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.2134	Cyclohexane, 1,1,3-trimethyl-	76789.7	93.3	3073-66-3	C9H18	0.181

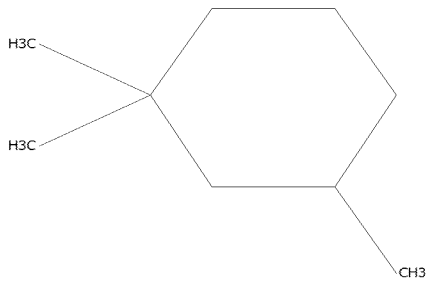




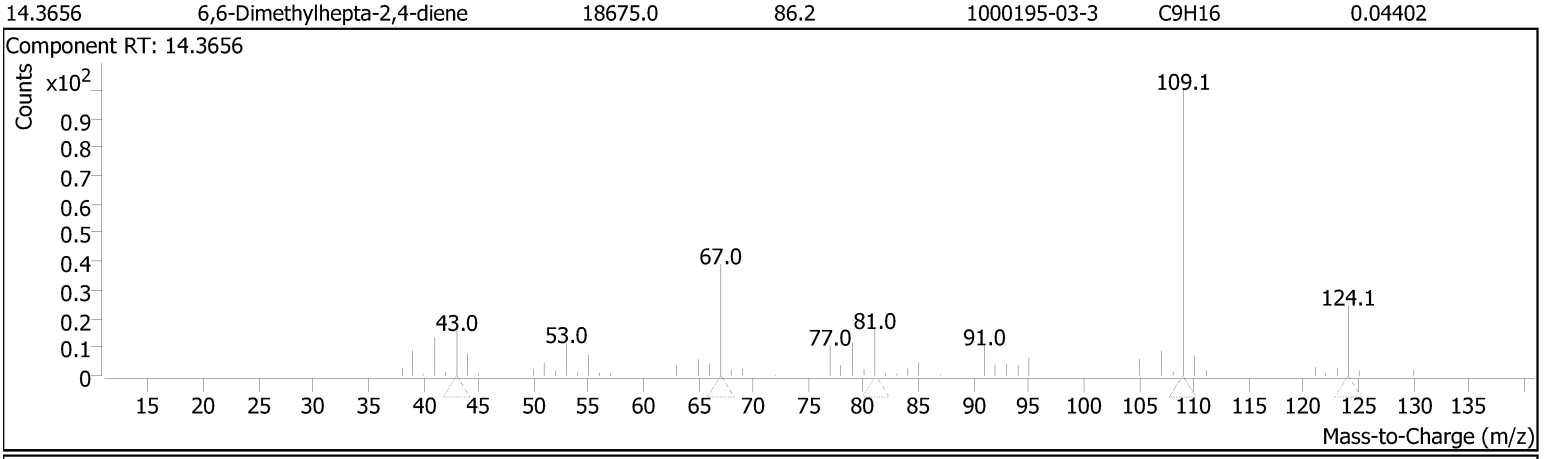


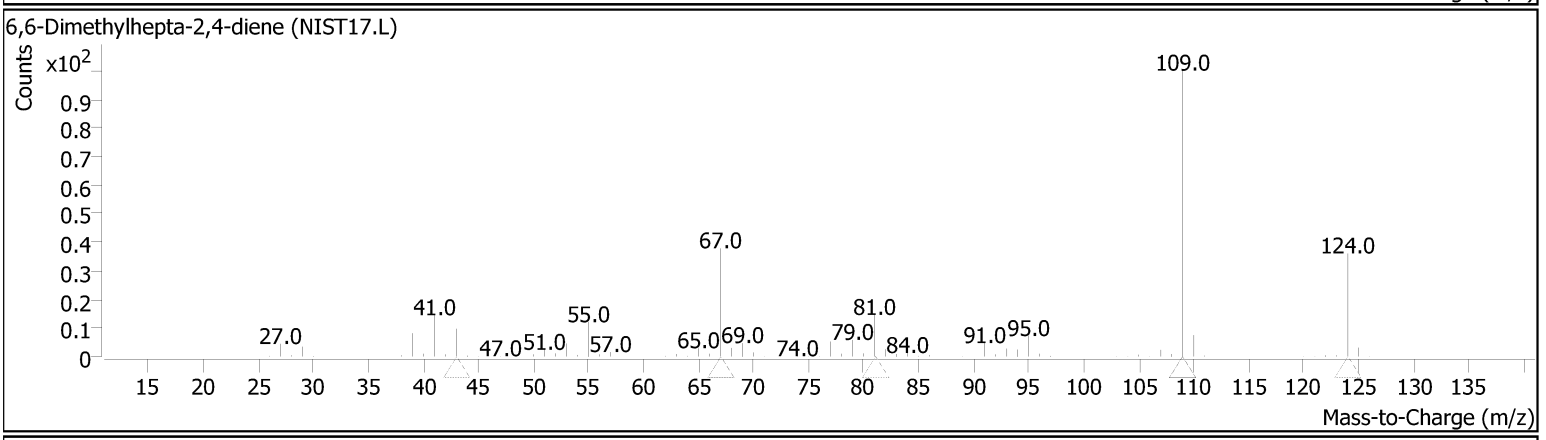


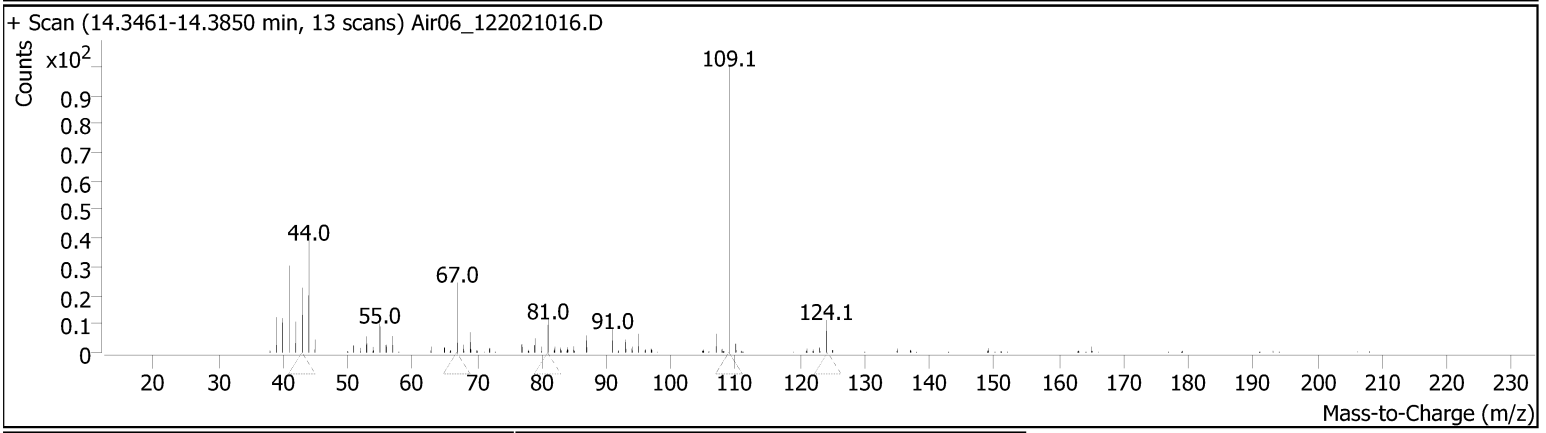


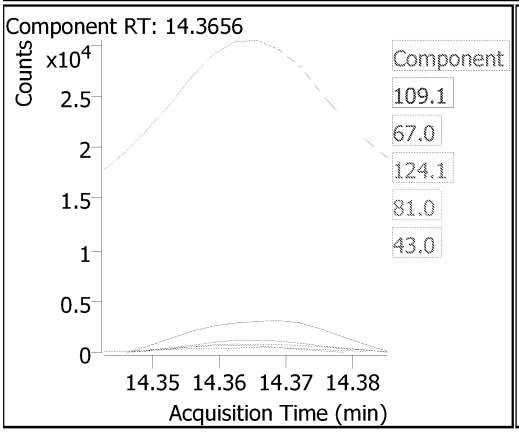


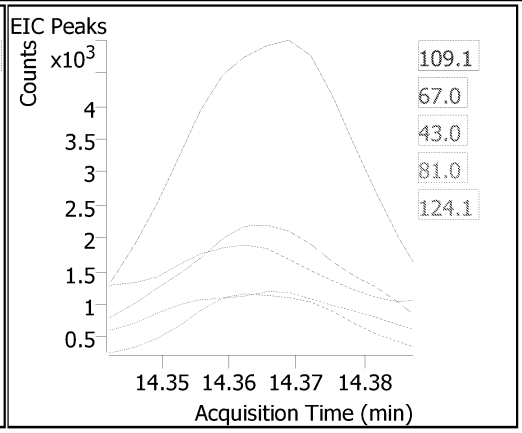
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.3656	6,6-Dimethylhepta-2,4-diene	18675.0	86.2	1000195-03-3	C9H16	0.04402

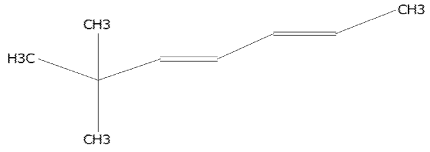




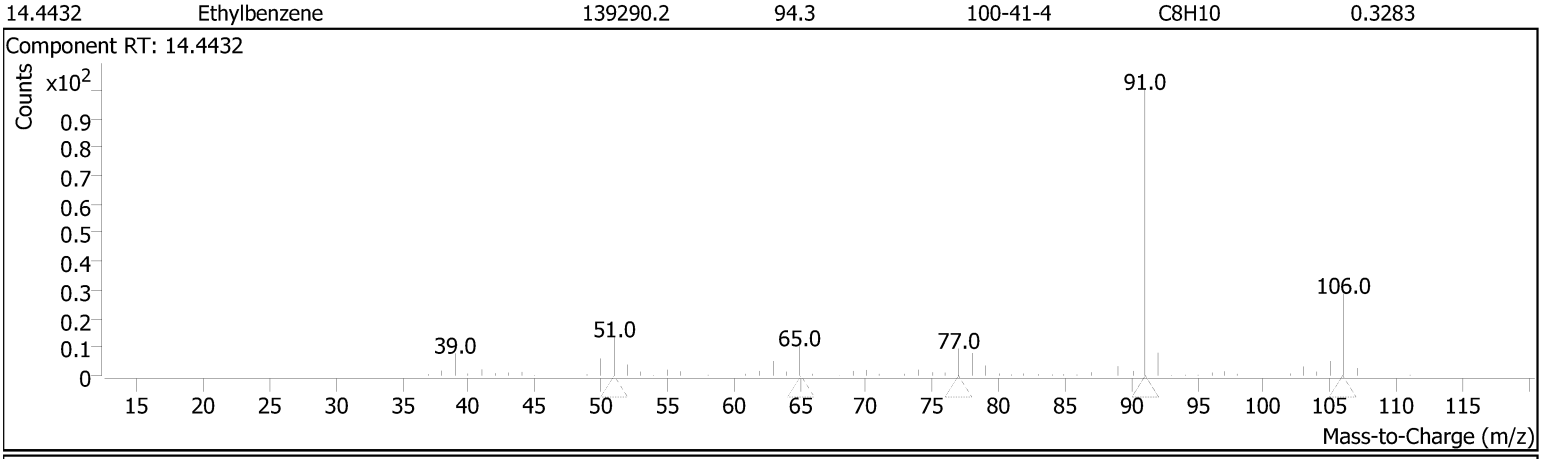


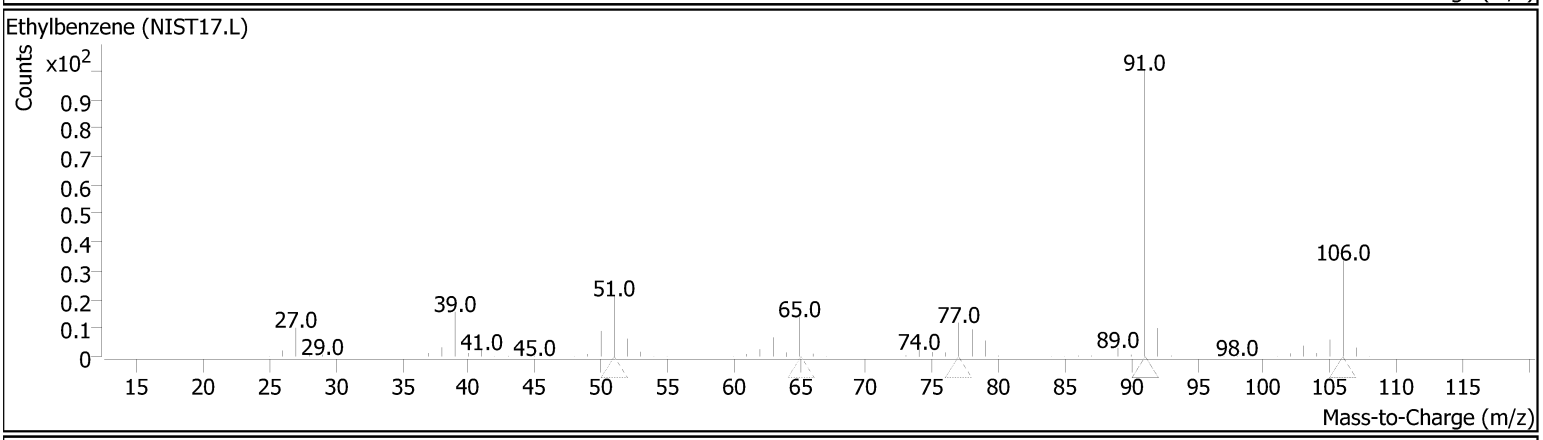


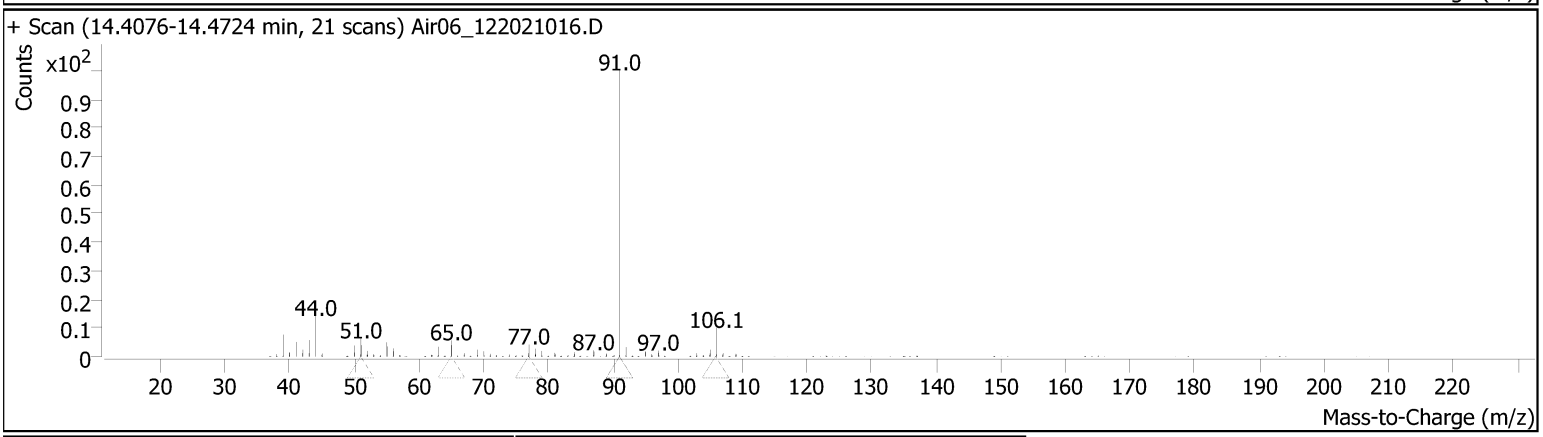


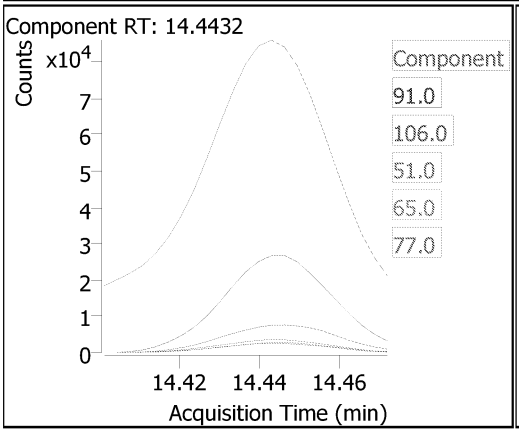


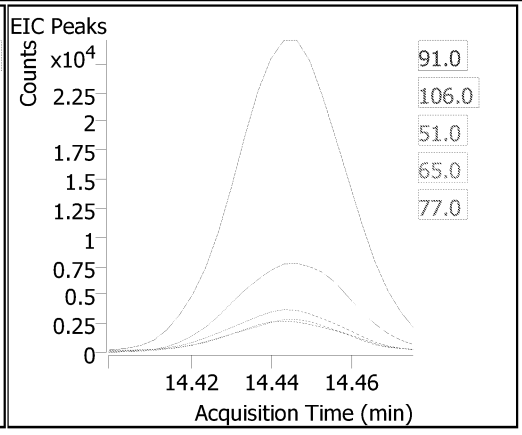
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.4432	Ethylbenzene	139290.2	94.3	100-41-4	C8H10	0.3283

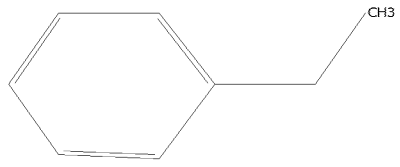




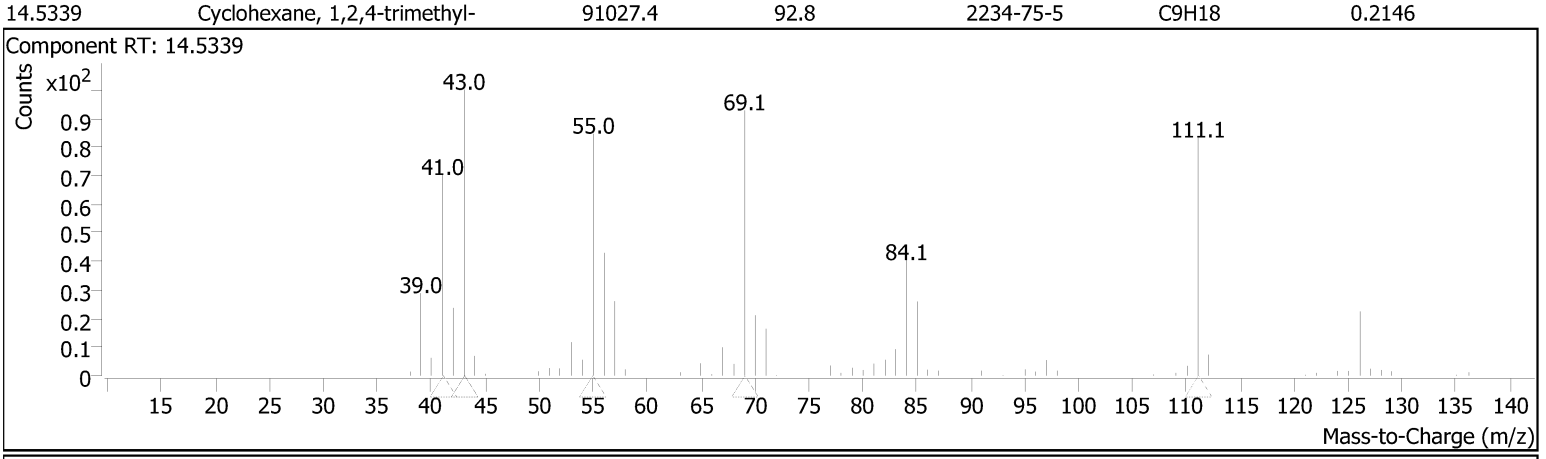


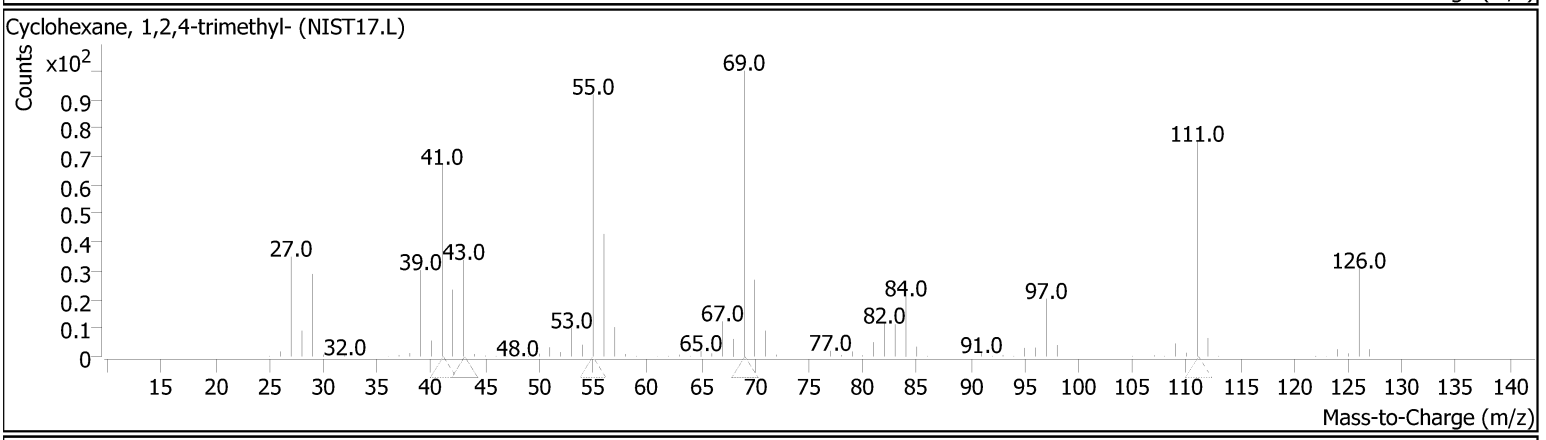


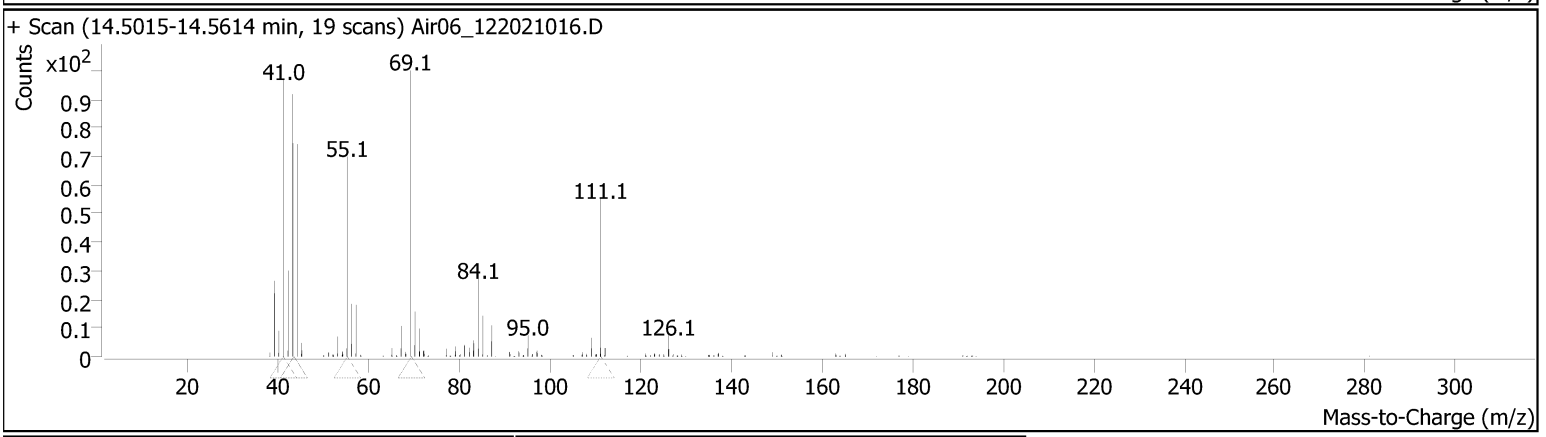


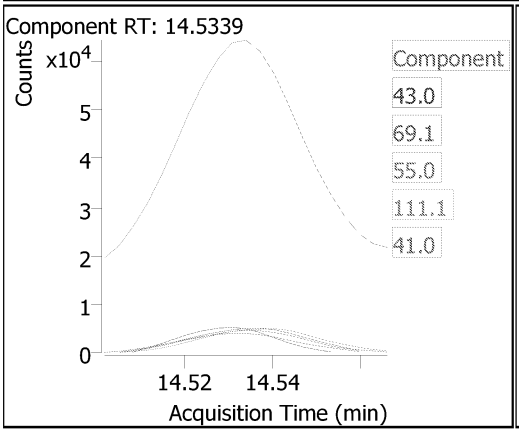


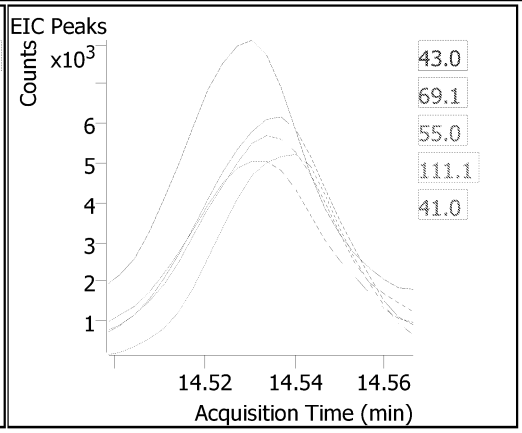
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.5339	Cyclohexane, 1,2,4-trimethyl-	91027.4	92.8	2234-75-5	C9H18	0.2146

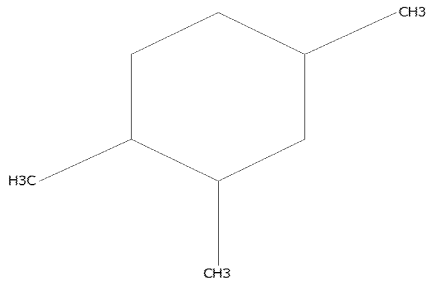




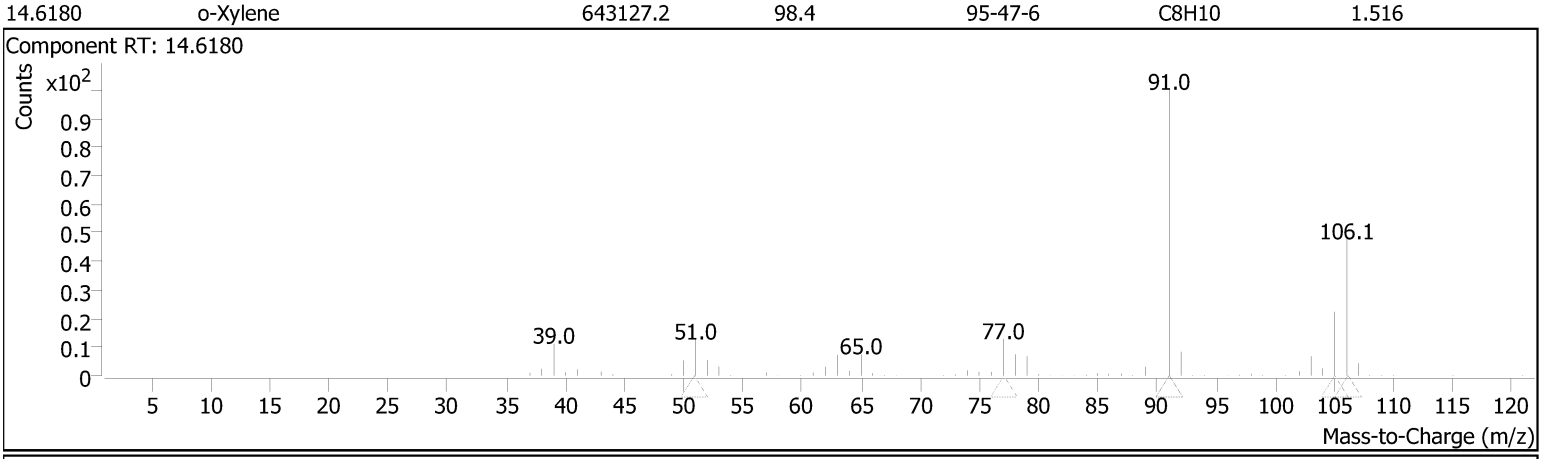


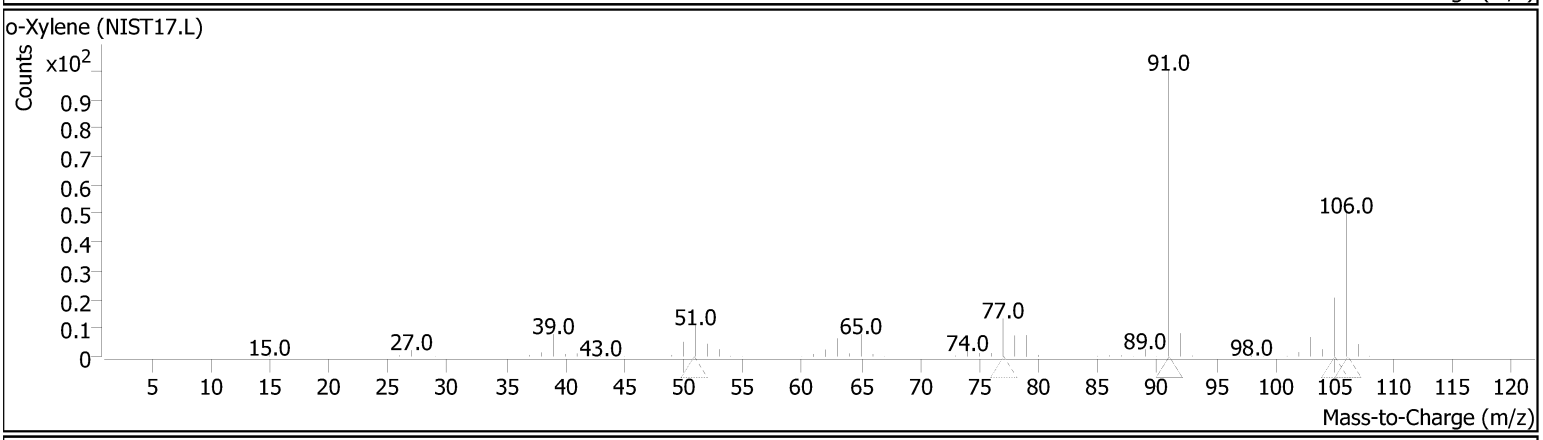


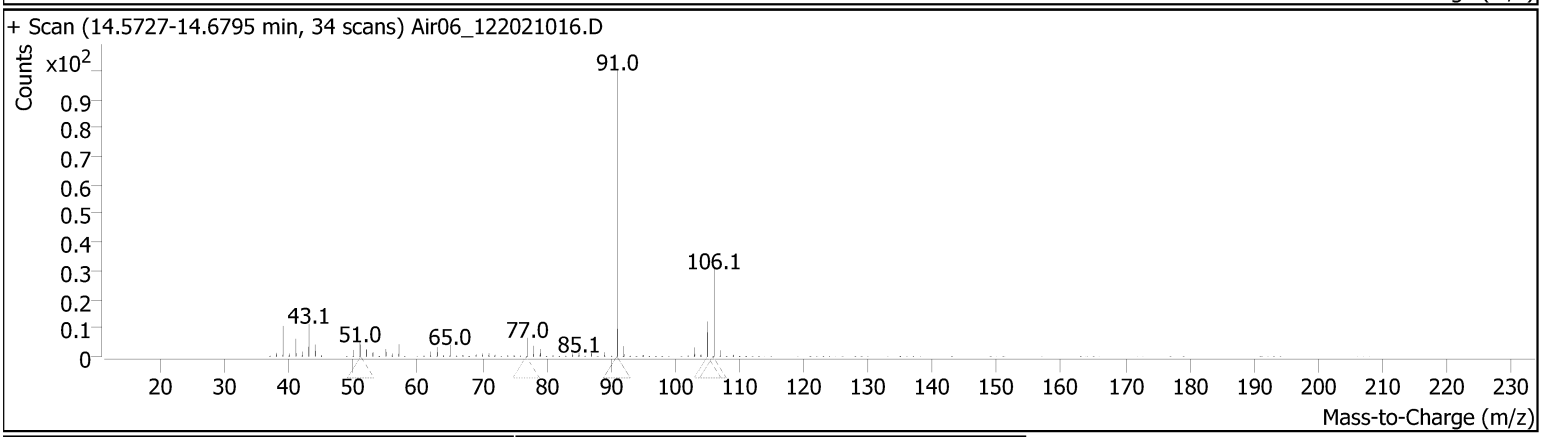


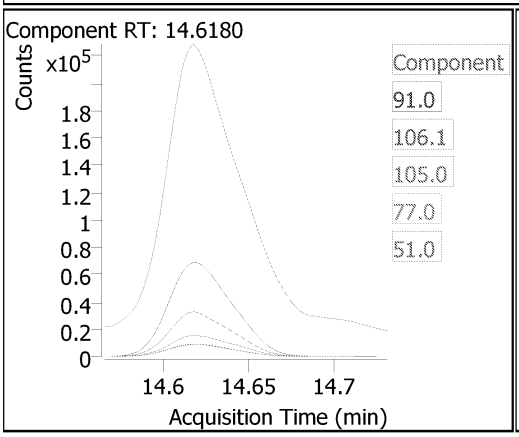


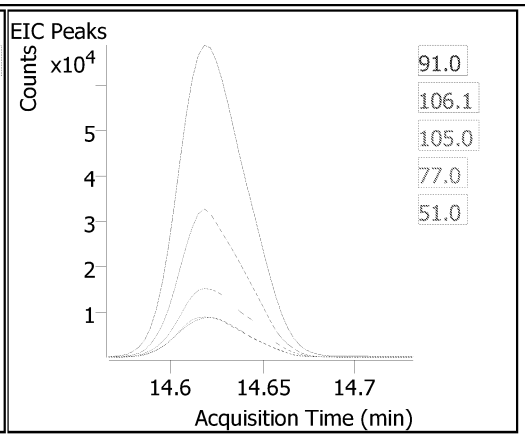
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.6180	o-Xylene	643127.2	98.4	95-47-6	C8H10	1.516

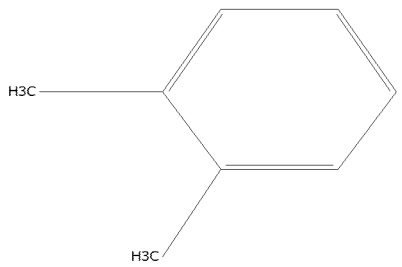




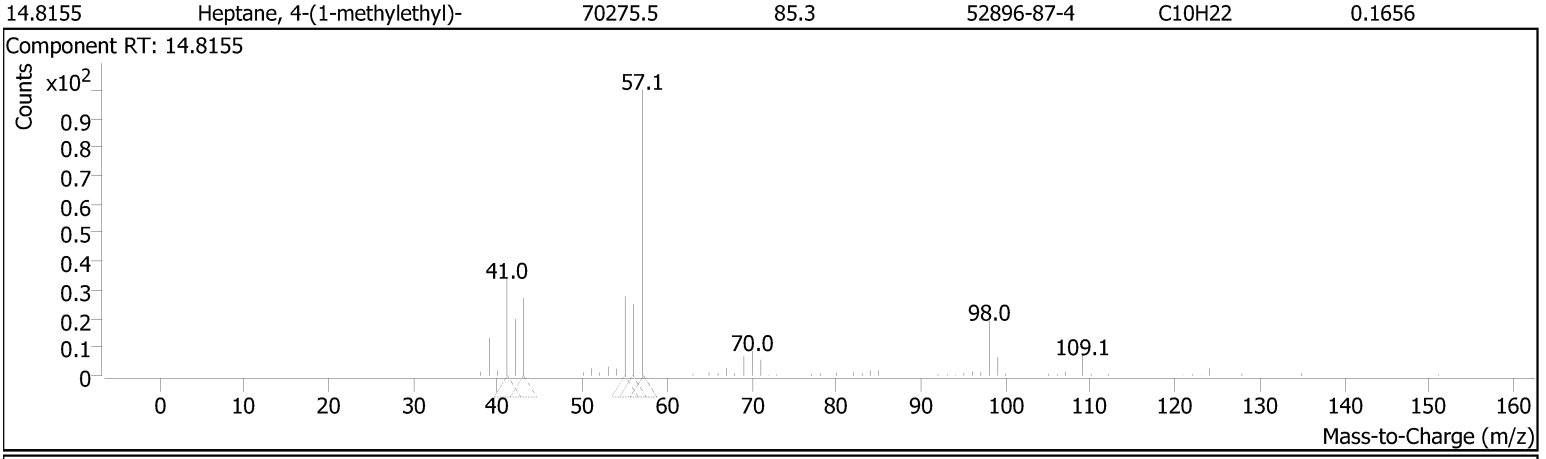


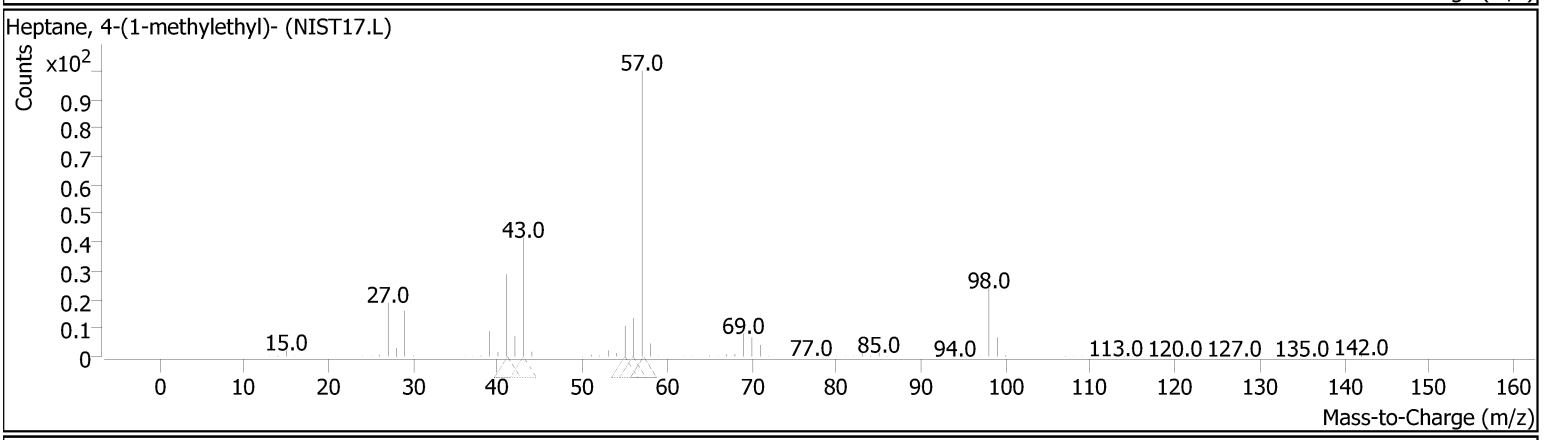


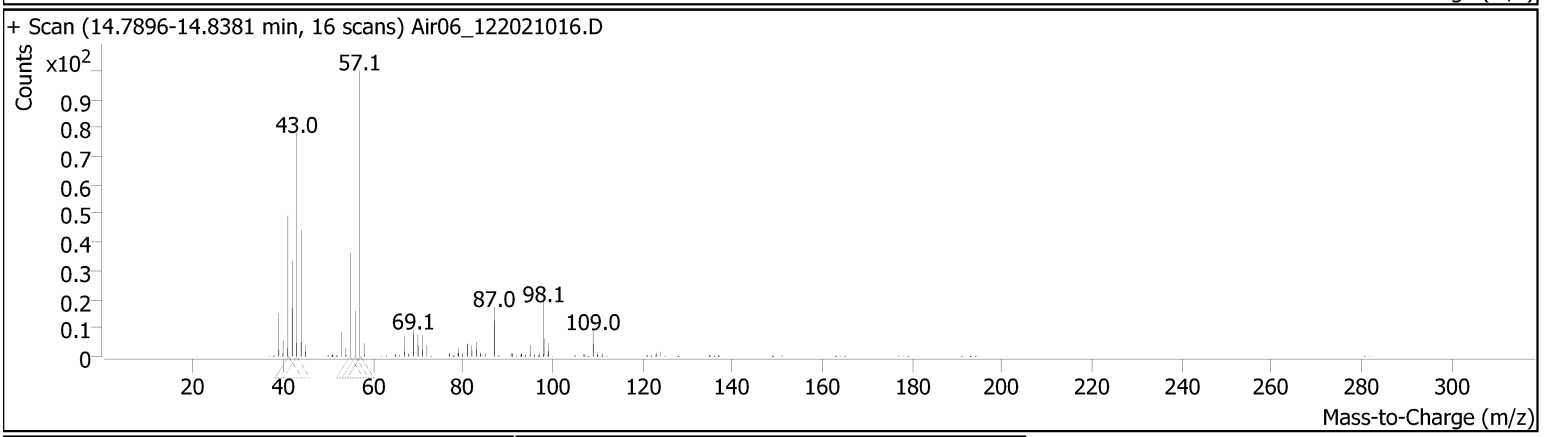


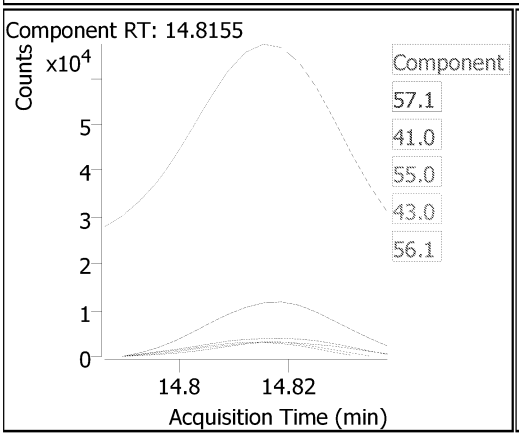


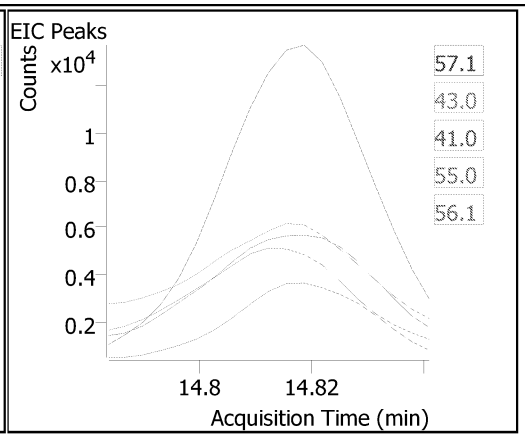
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.8155	Heptane, 4-(1-methylethyl)-	70275.5	85.3	52896-87-4	C10H22	0.1656

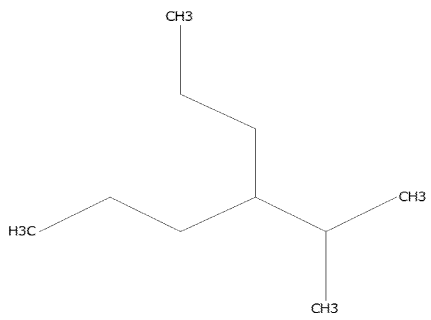




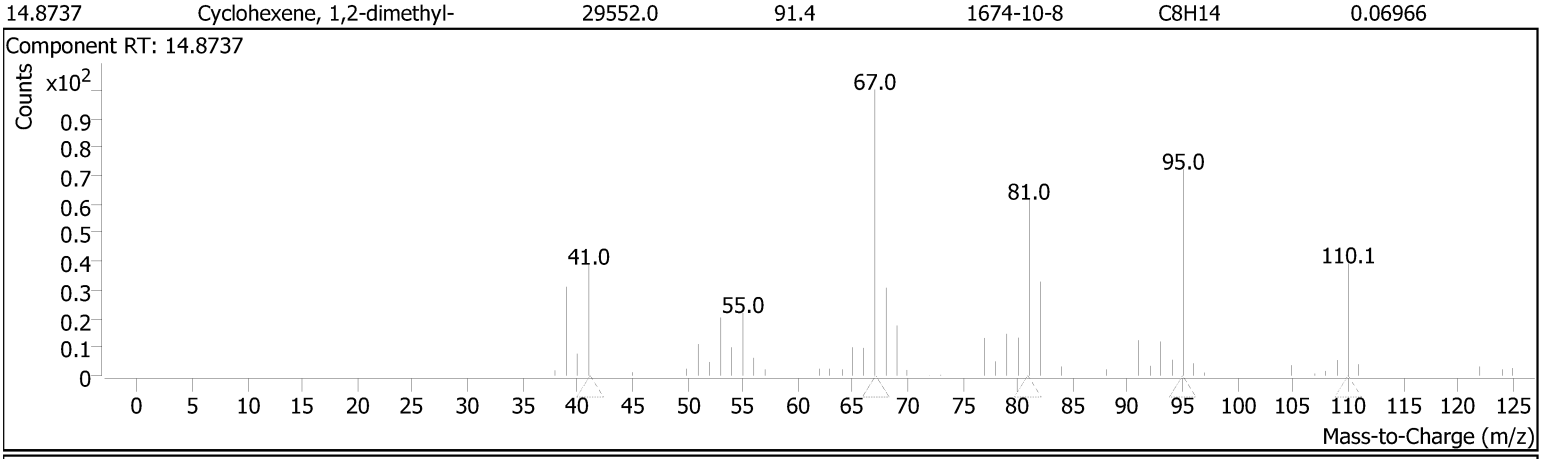


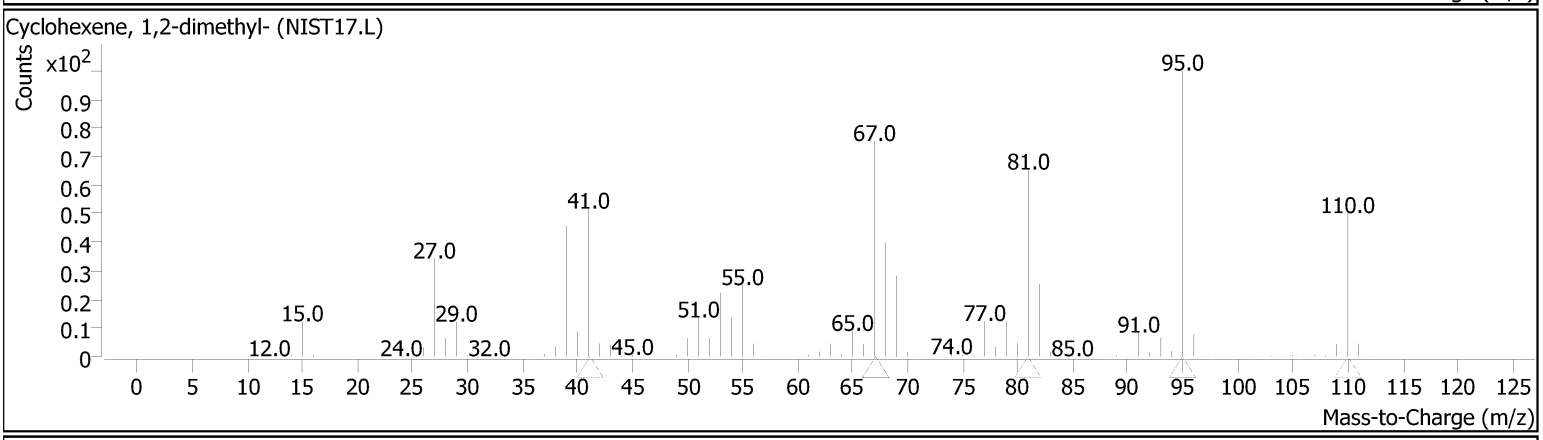


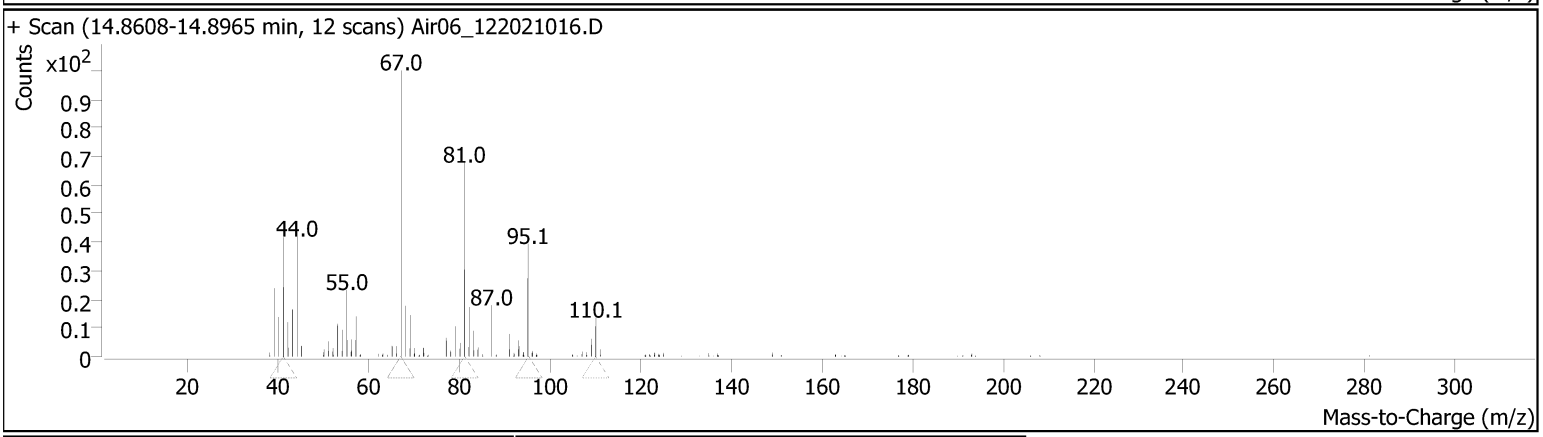


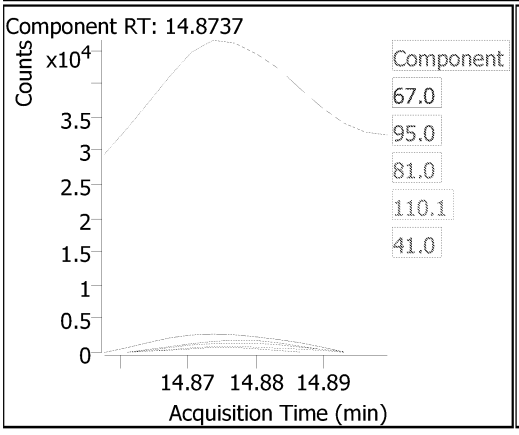


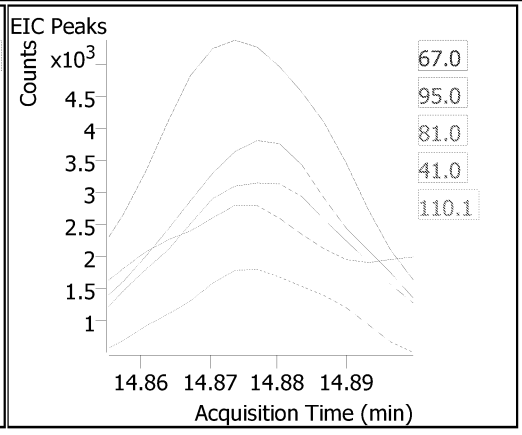
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.8737	Cyclohexene, 1,2-dimethyl-	29552.0	91.4	1674-10-8	C8H14	0.06966

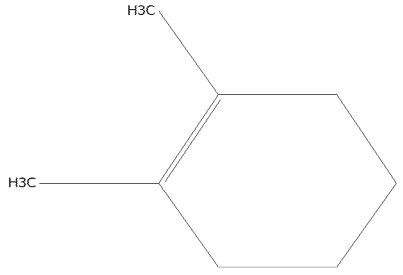




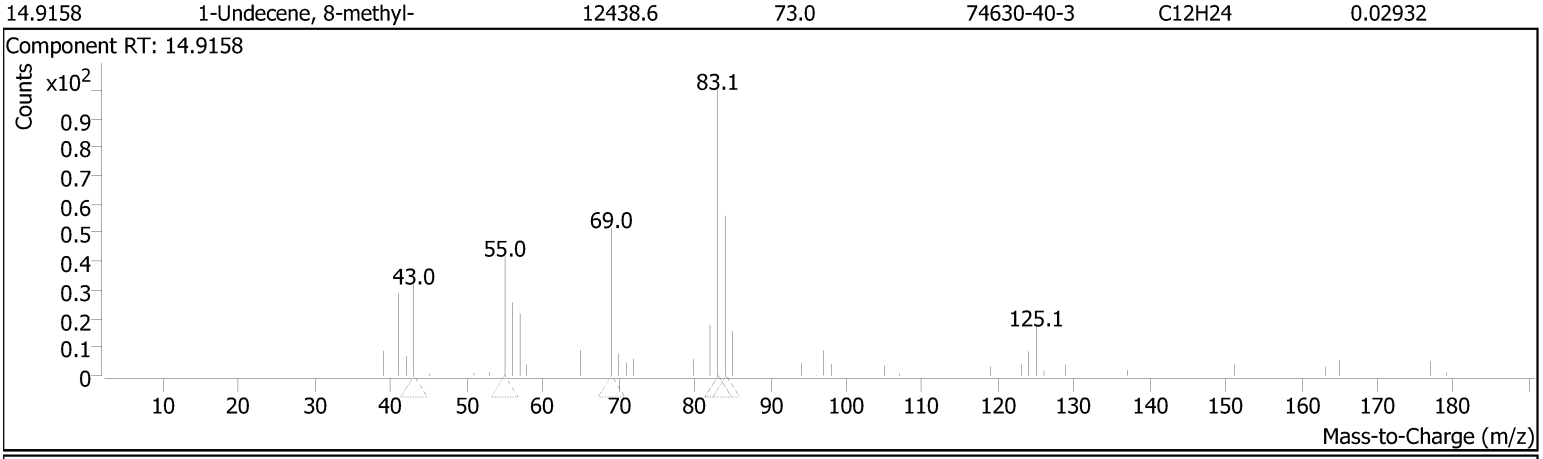


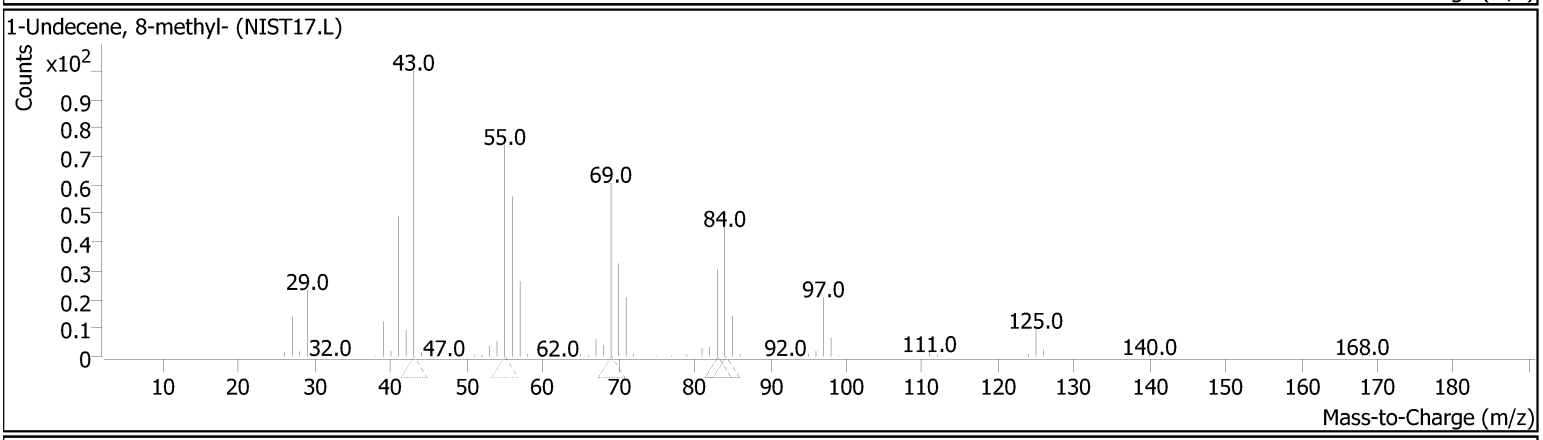


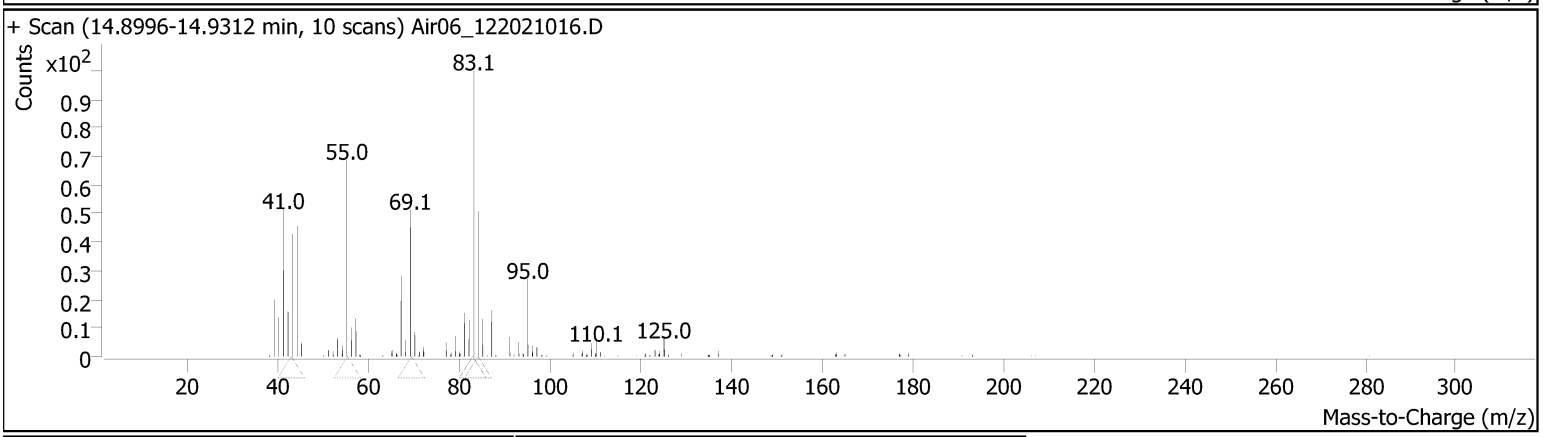


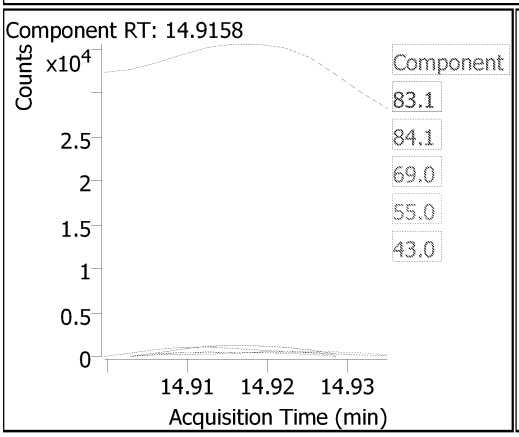


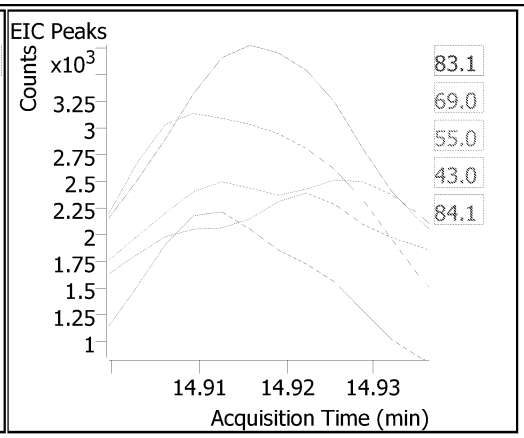
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.9158	1-Undecene, 8-methyl-	12438.6	73.0	74630-40-3	C12H24	0.02932

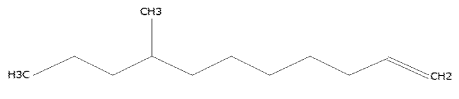




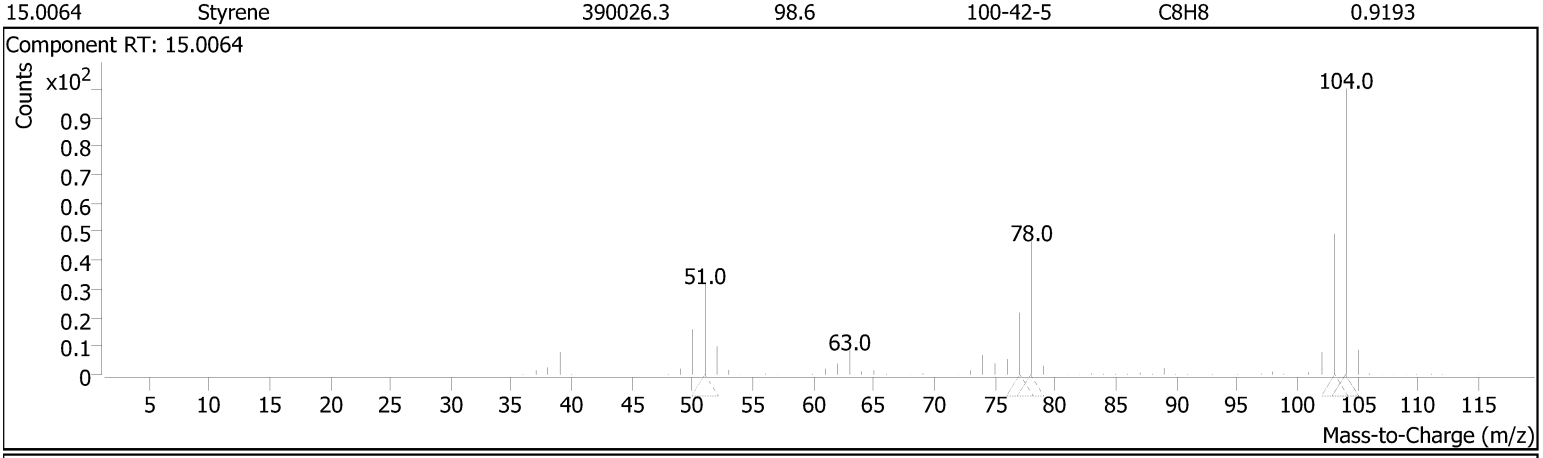


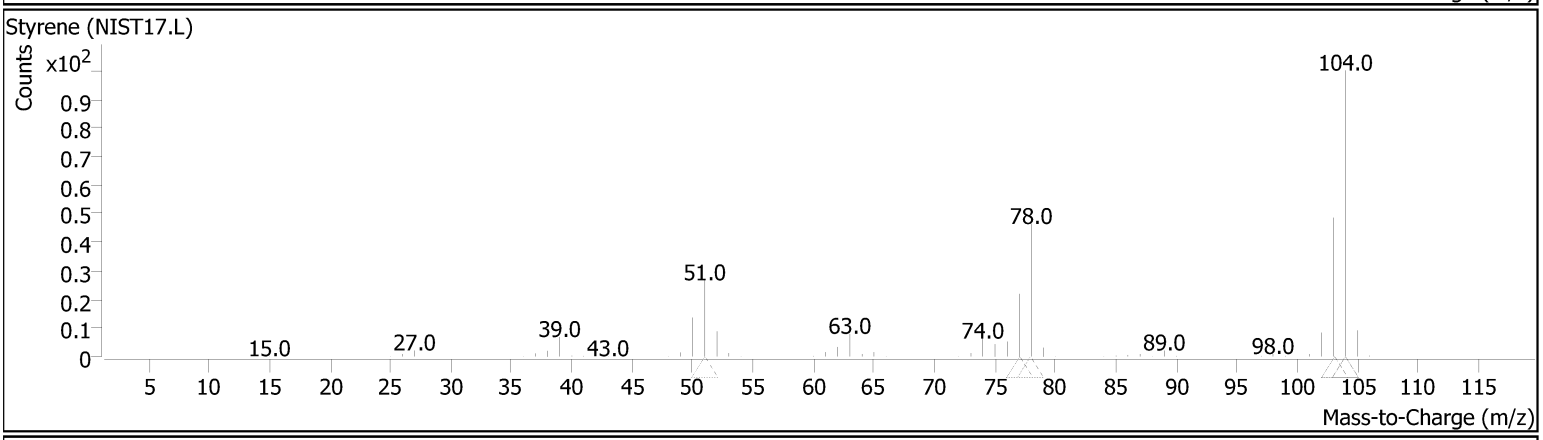


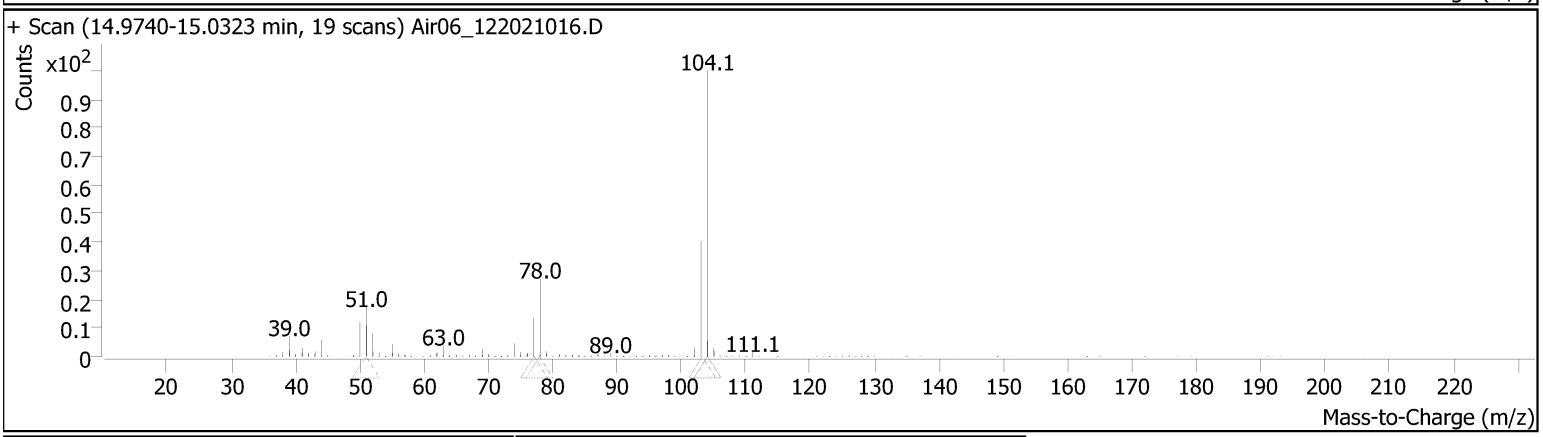


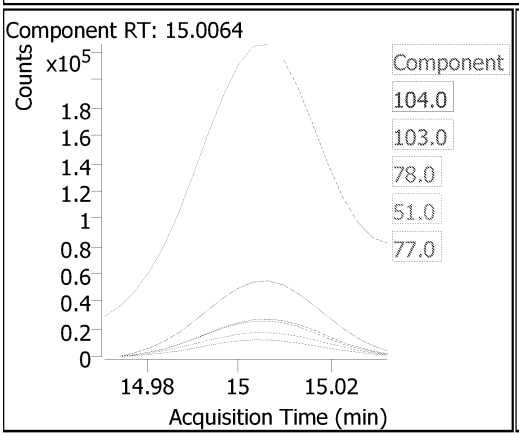


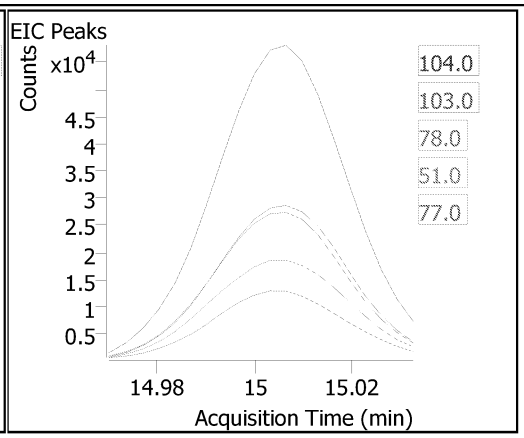
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.0064	Styrene	390026.3	98.6	100-42-5	C8H8	0.9193

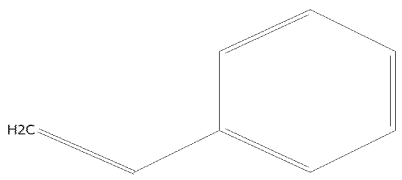




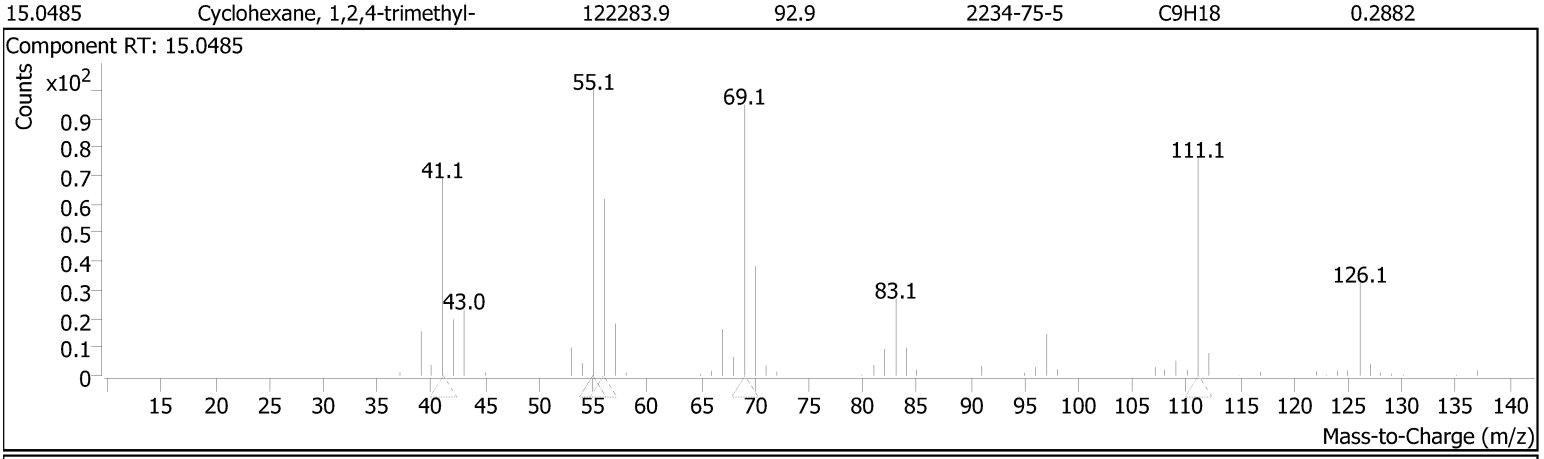


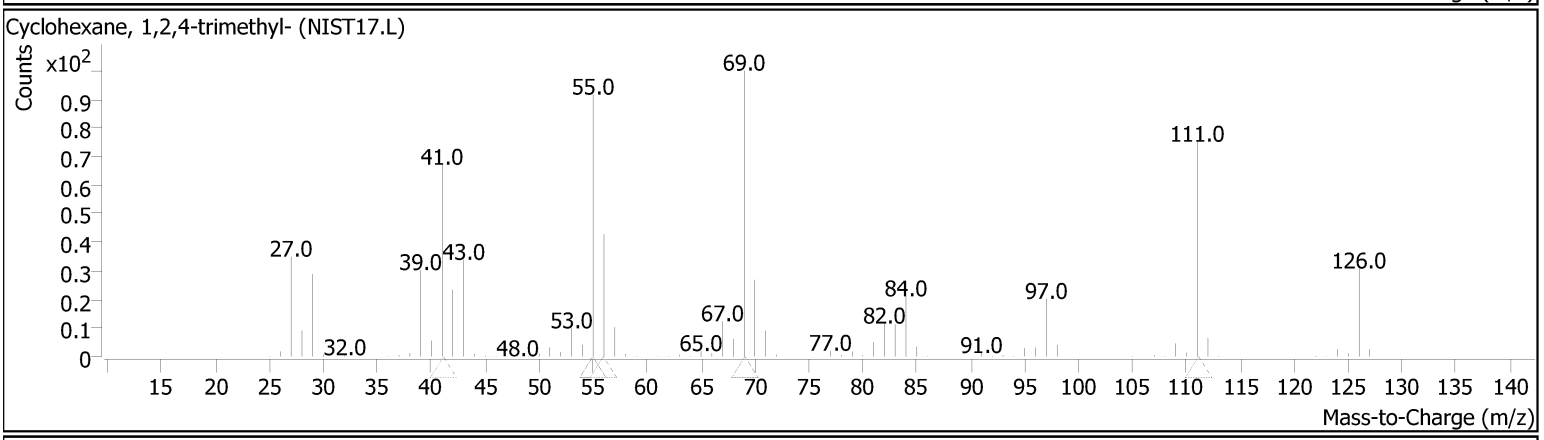


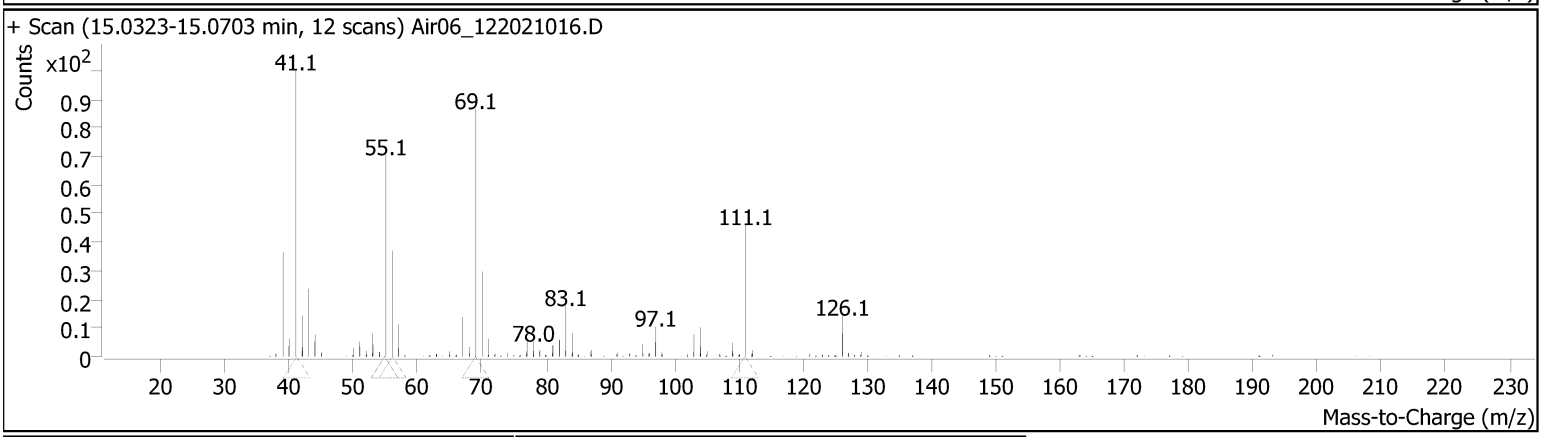


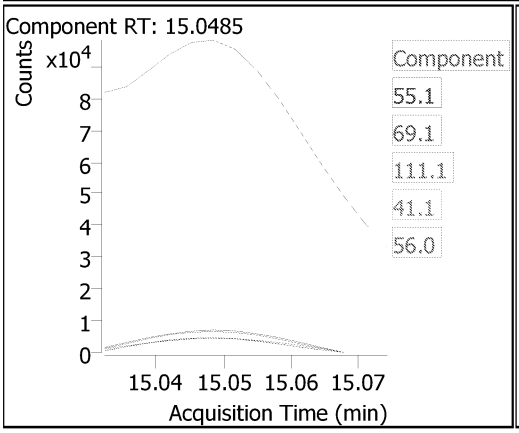


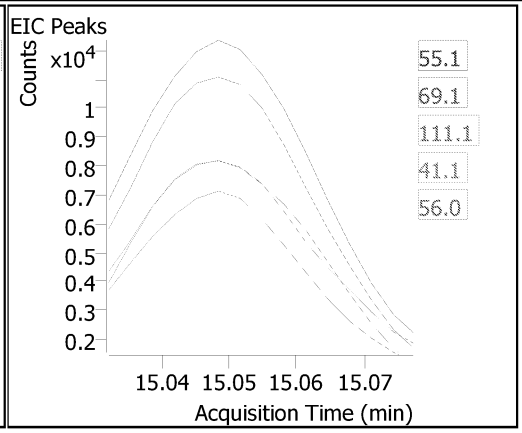
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.0485	Cyclohexane, 1,2,4-trimethyl-	122283.9	92.9	2234-75-5	C9H18	0.2882

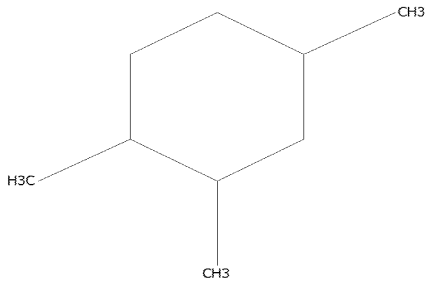




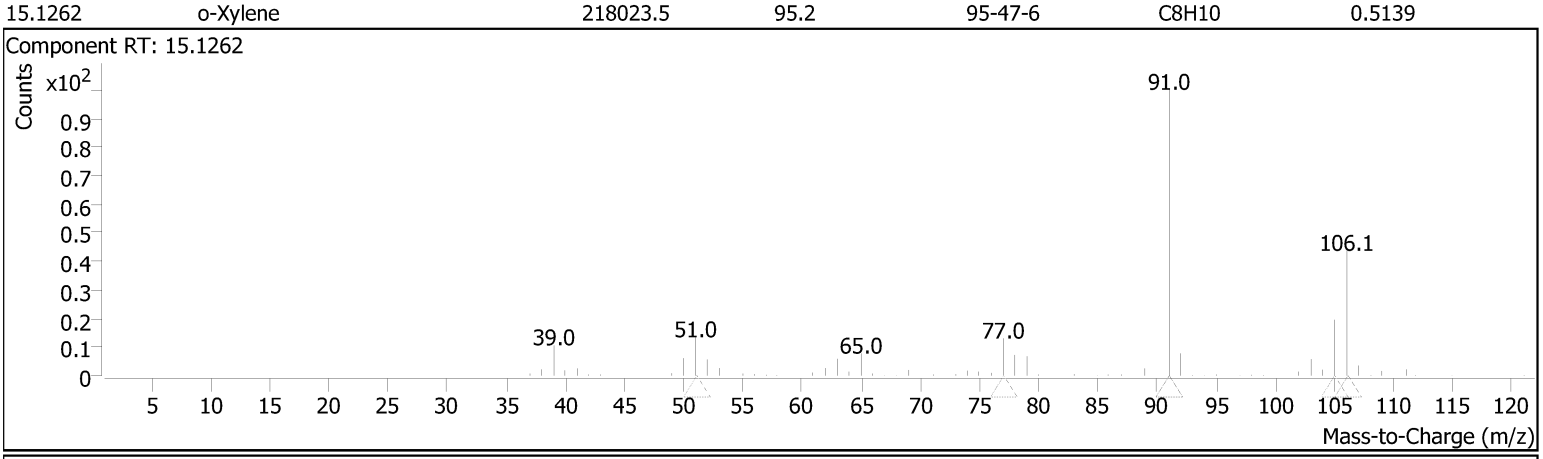


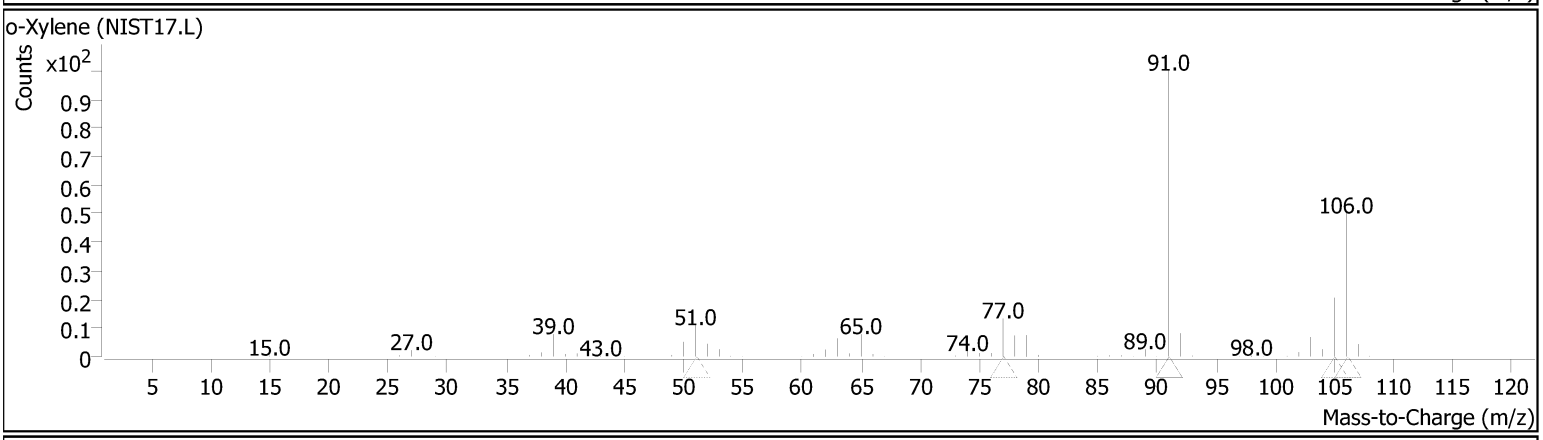


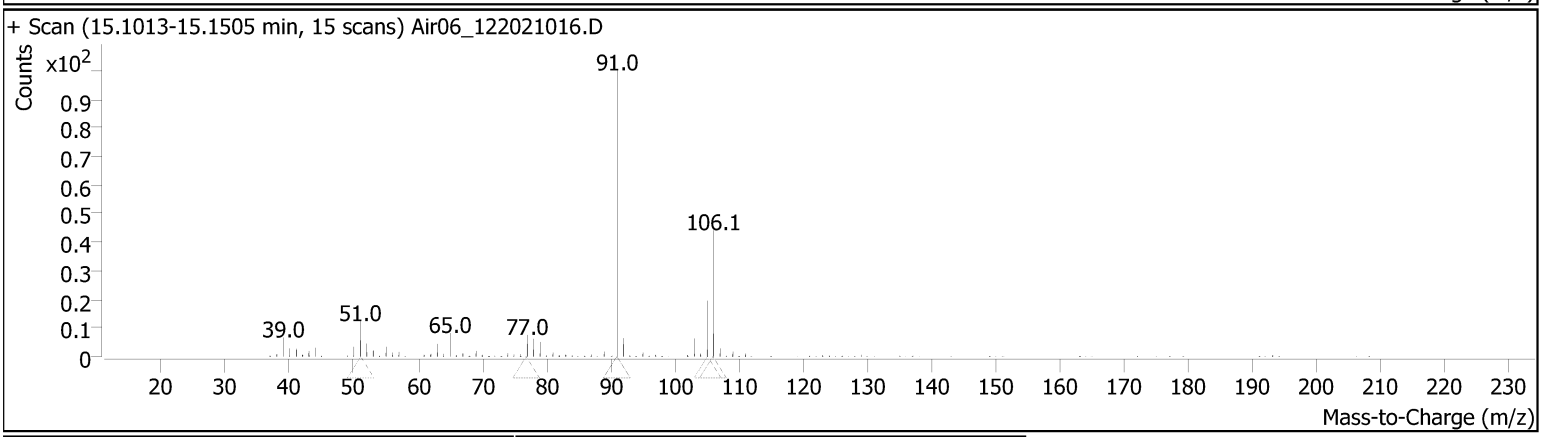


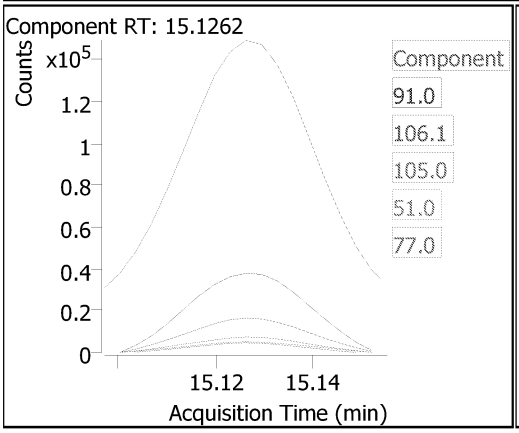


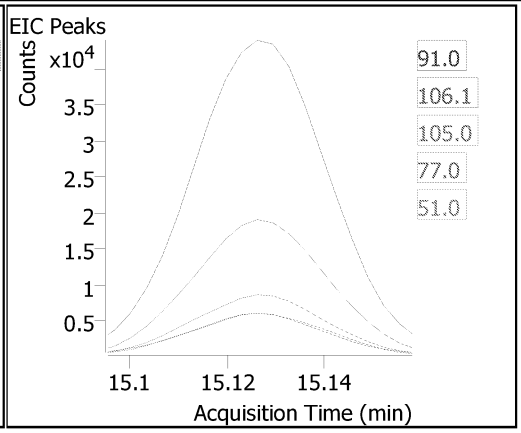
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.1262	o-Xylene	218023.5	95.2	95-47-6	C8H10	0.5139

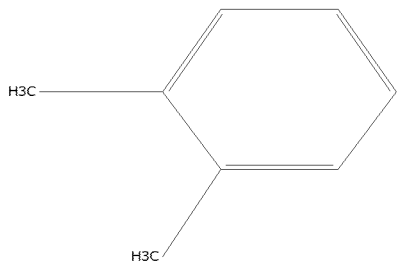




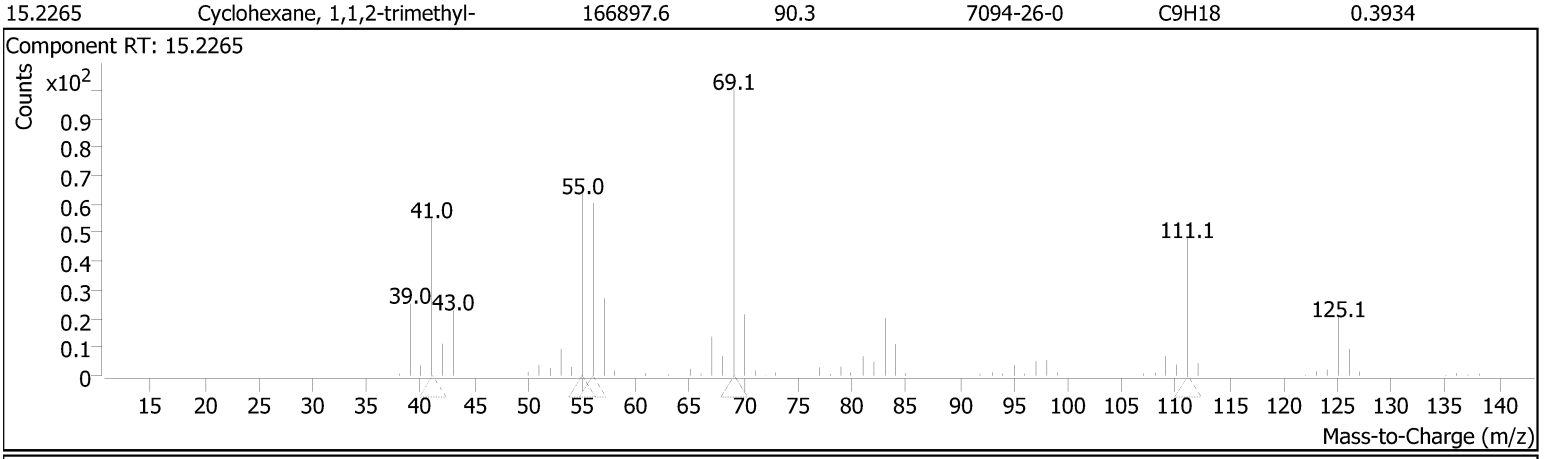


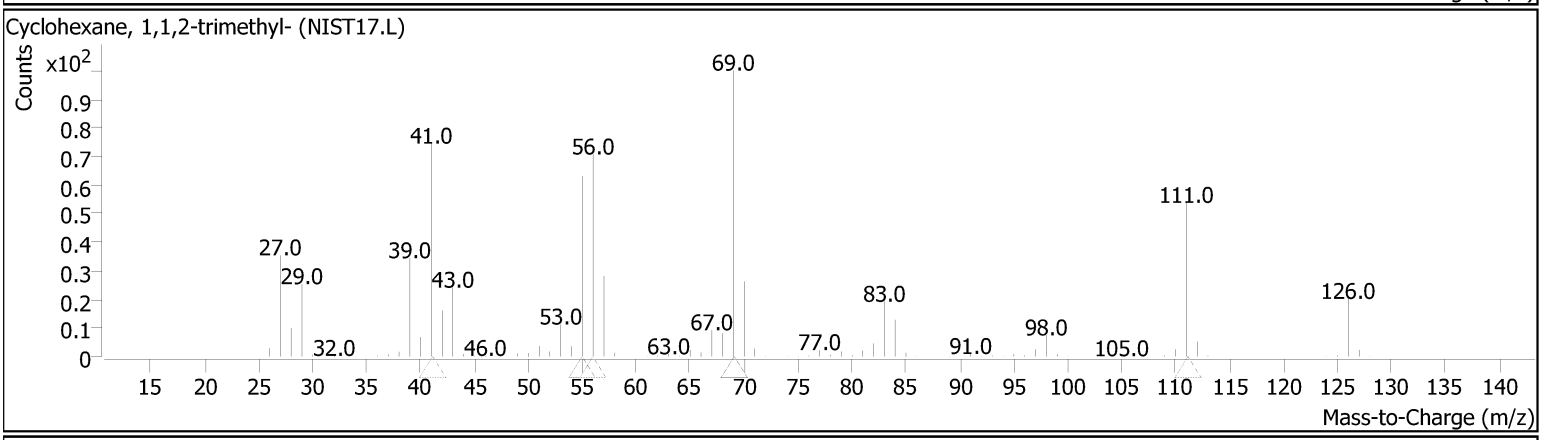


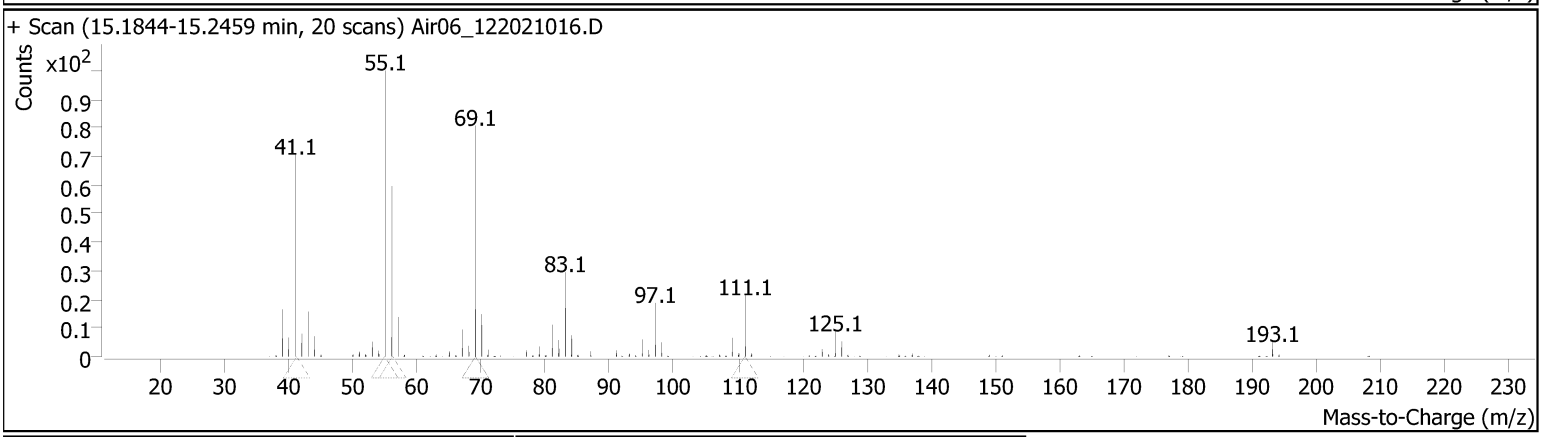


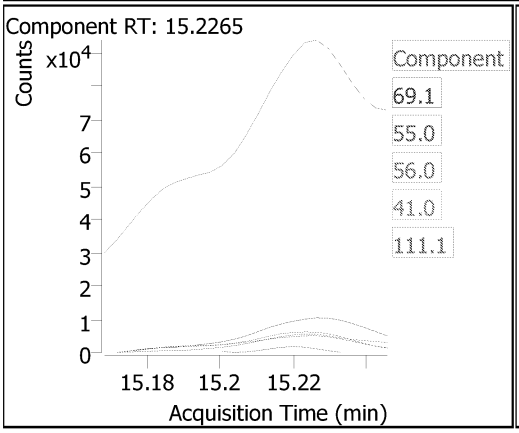


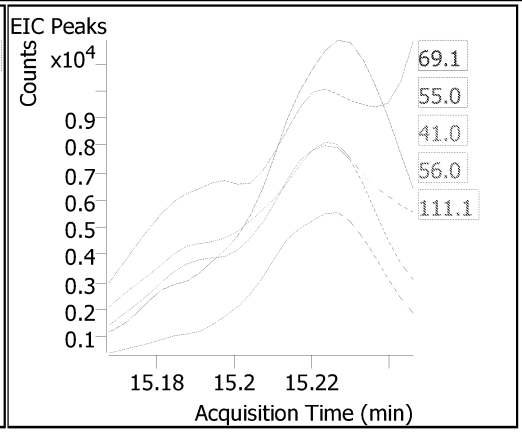
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.2265	Cyclohexane, 1,1,2-trimethyl-	166897.6	90.3	7094-26-0	C9H18	0.3934

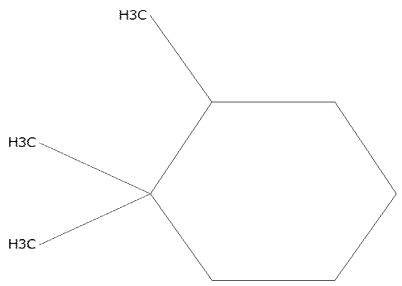




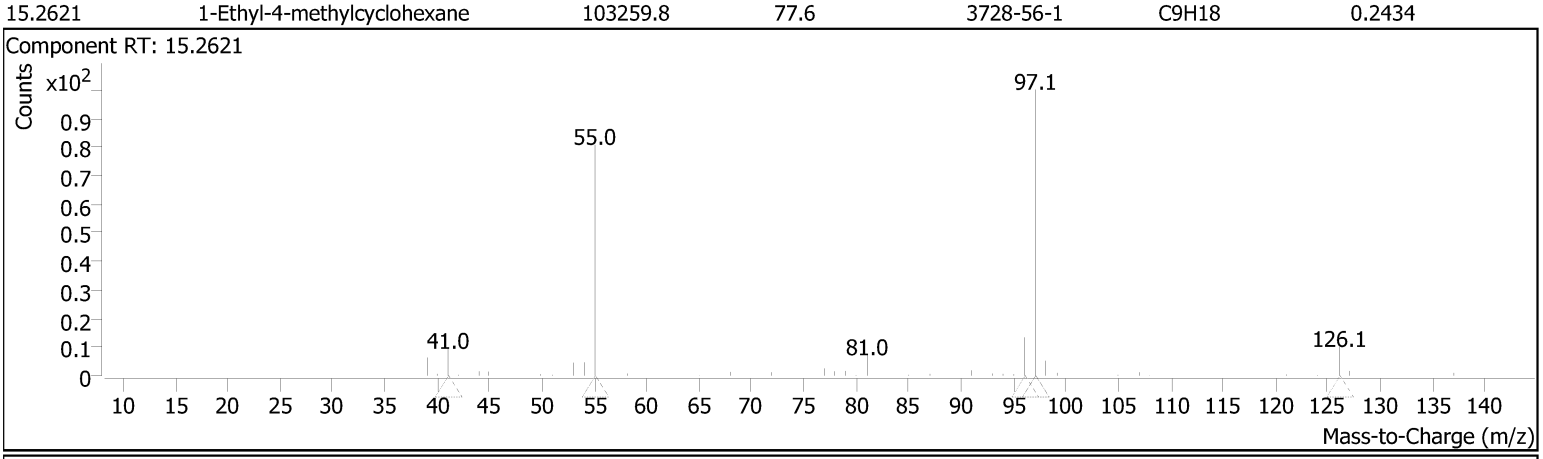


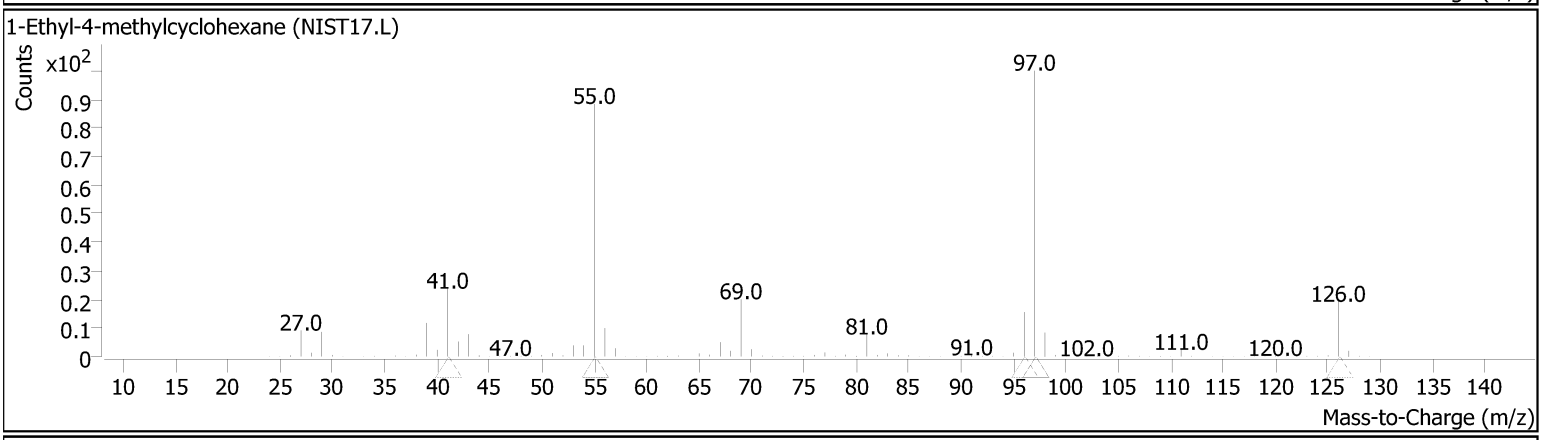


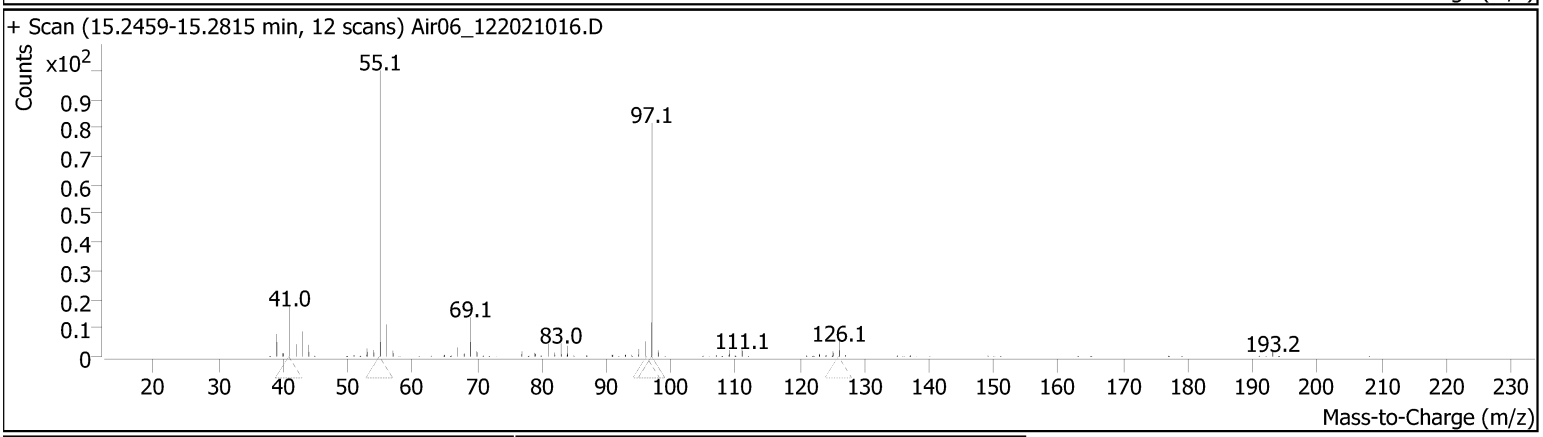


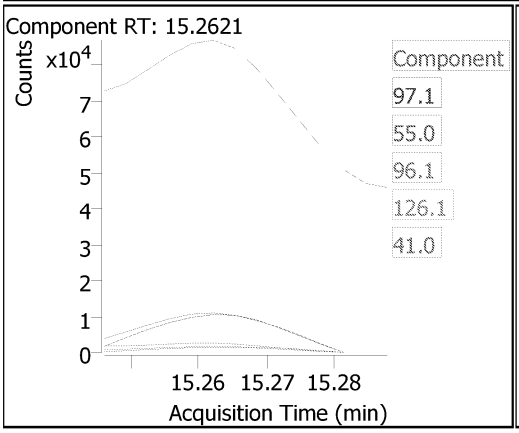


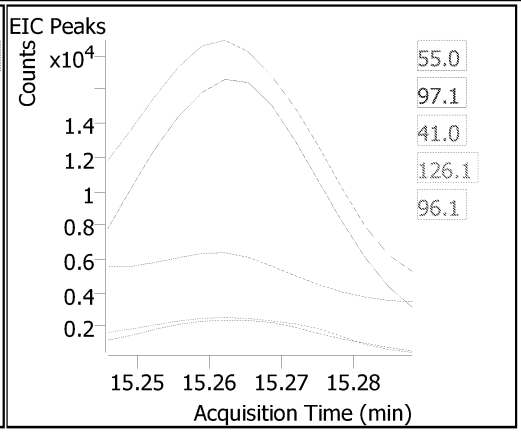
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.2621	1-Ethyl-4-methylcyclohexane	103259.8	77.6	3728-56-1	C9H18	0.2434

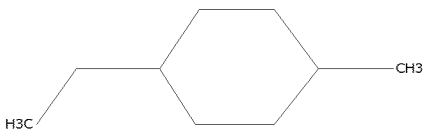




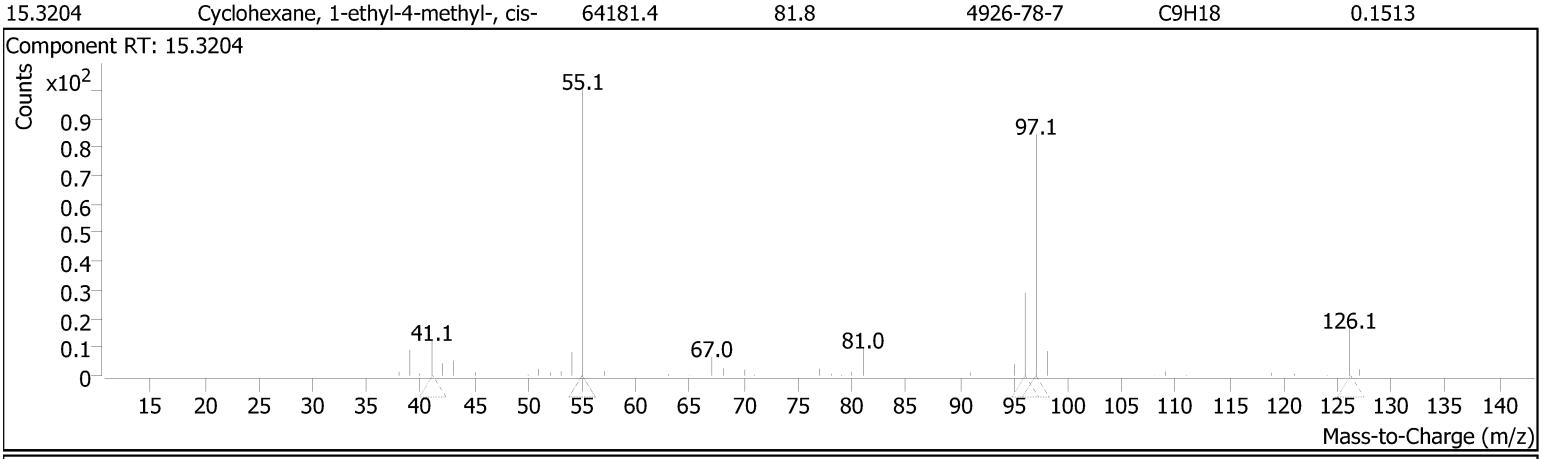


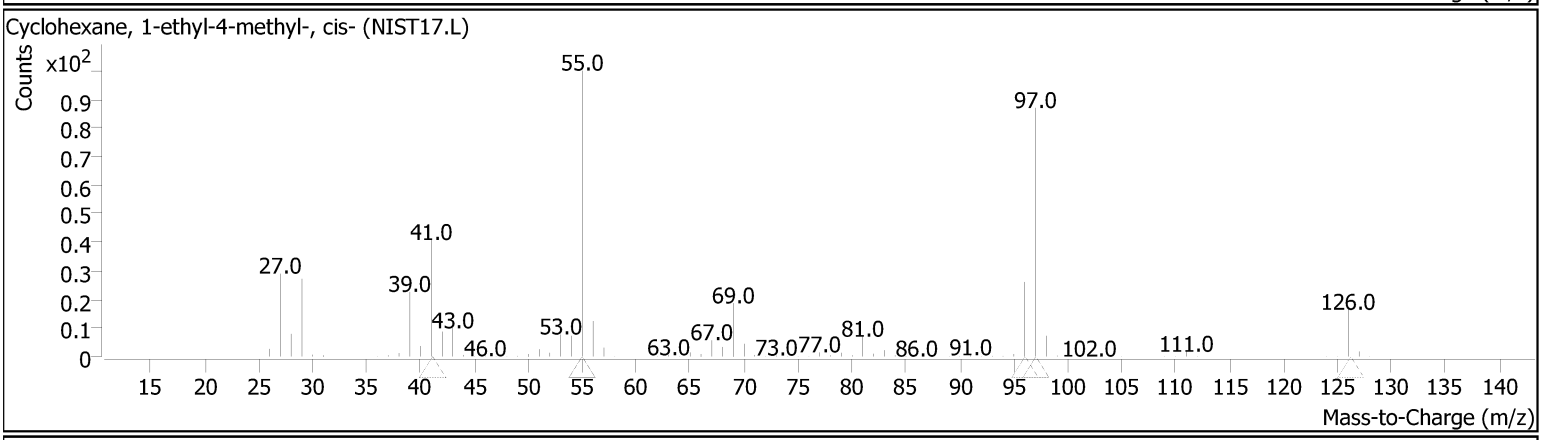


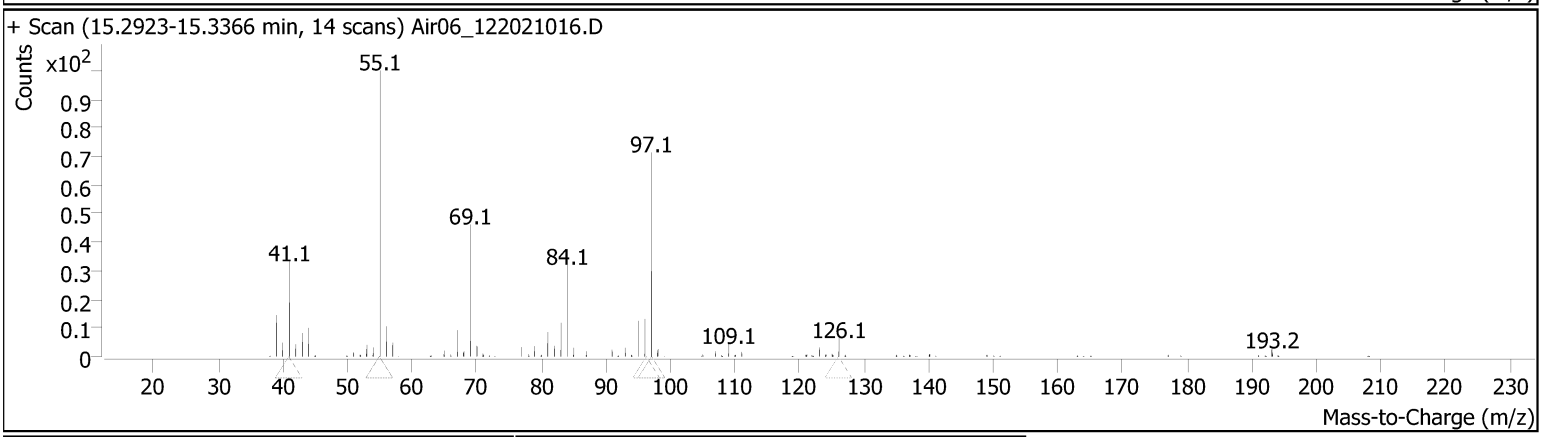


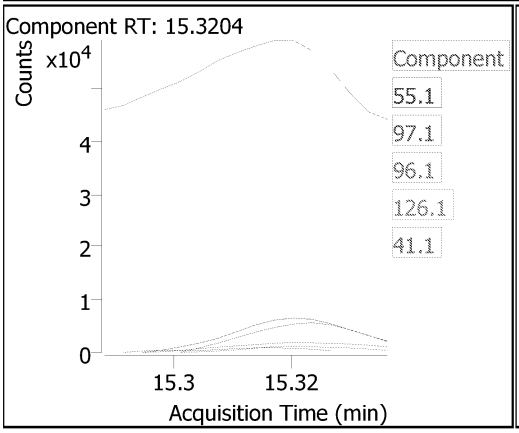


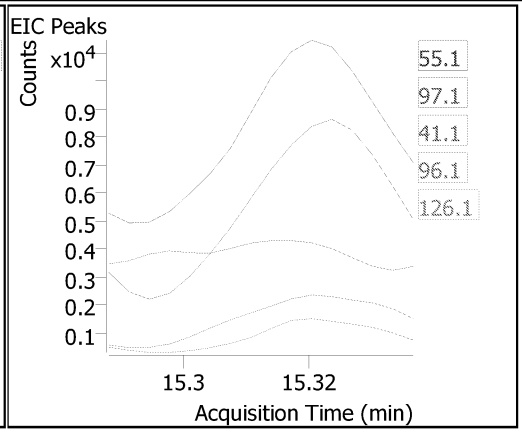
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.3204	Cyclohexane, 1-ethyl-4-methyl-, cis-	64181.4	81.8	4926-78-7	C9H18	0.1513

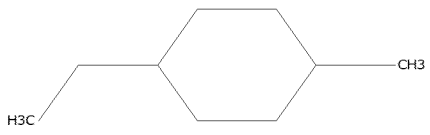




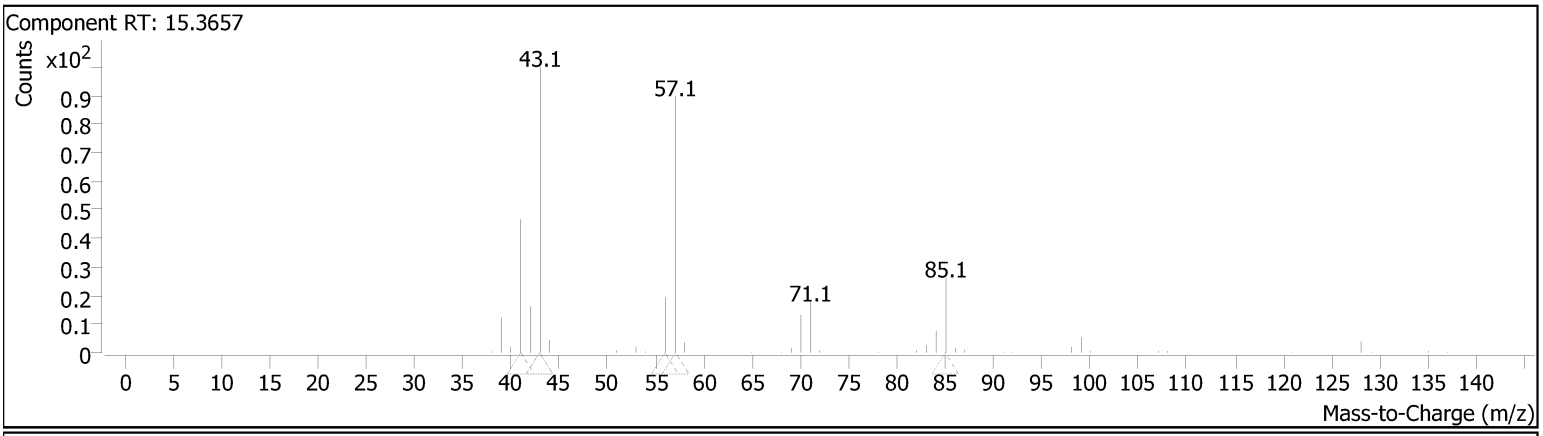


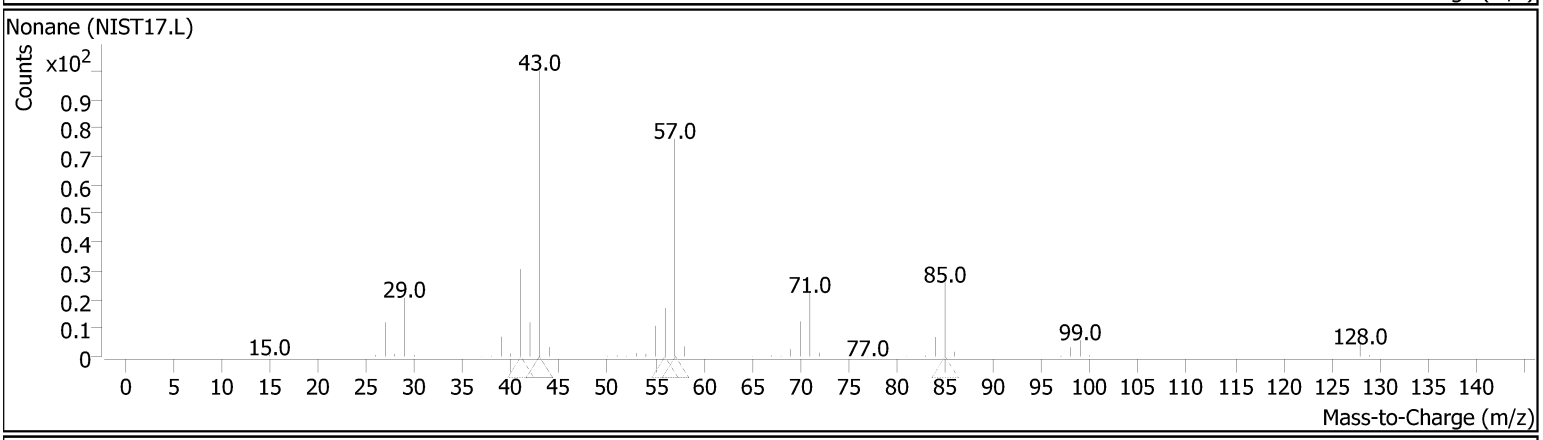


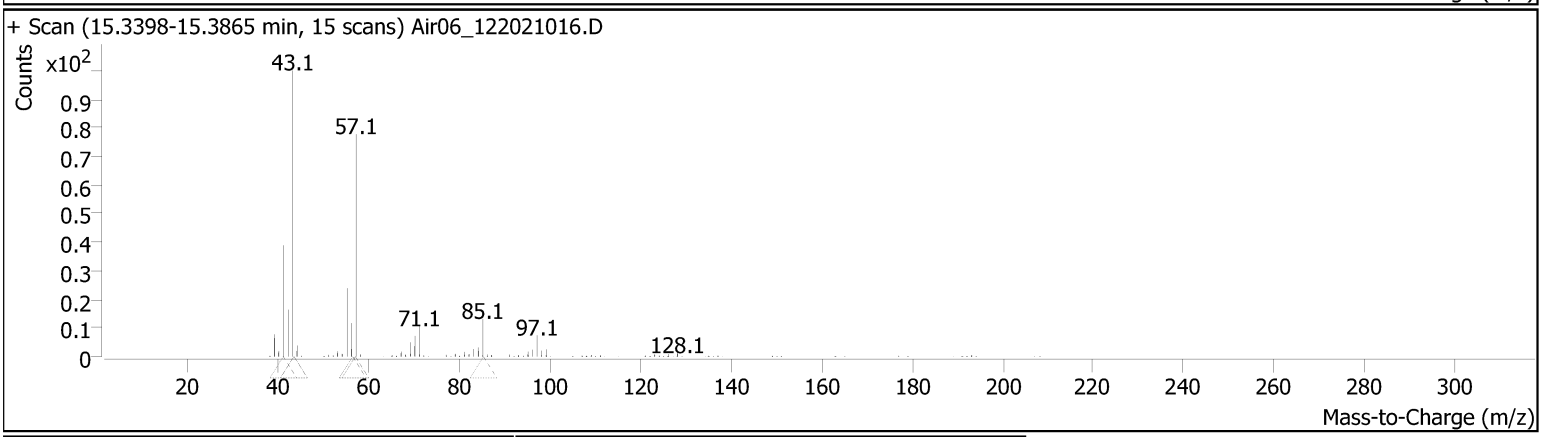


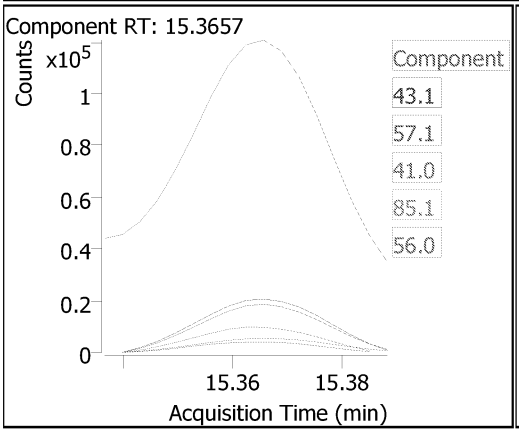


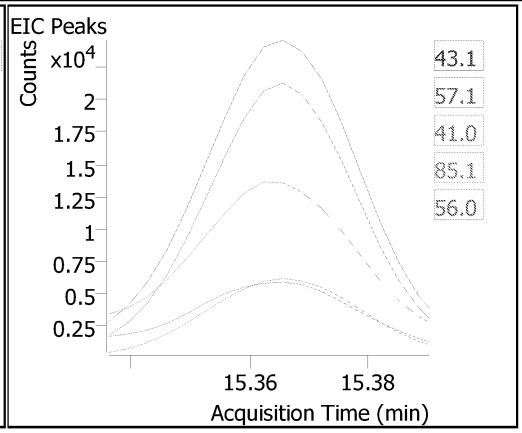
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.3657	Nonane	155275.6	93.5	111-84-2	C9H20	0.366

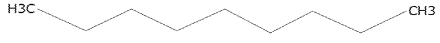




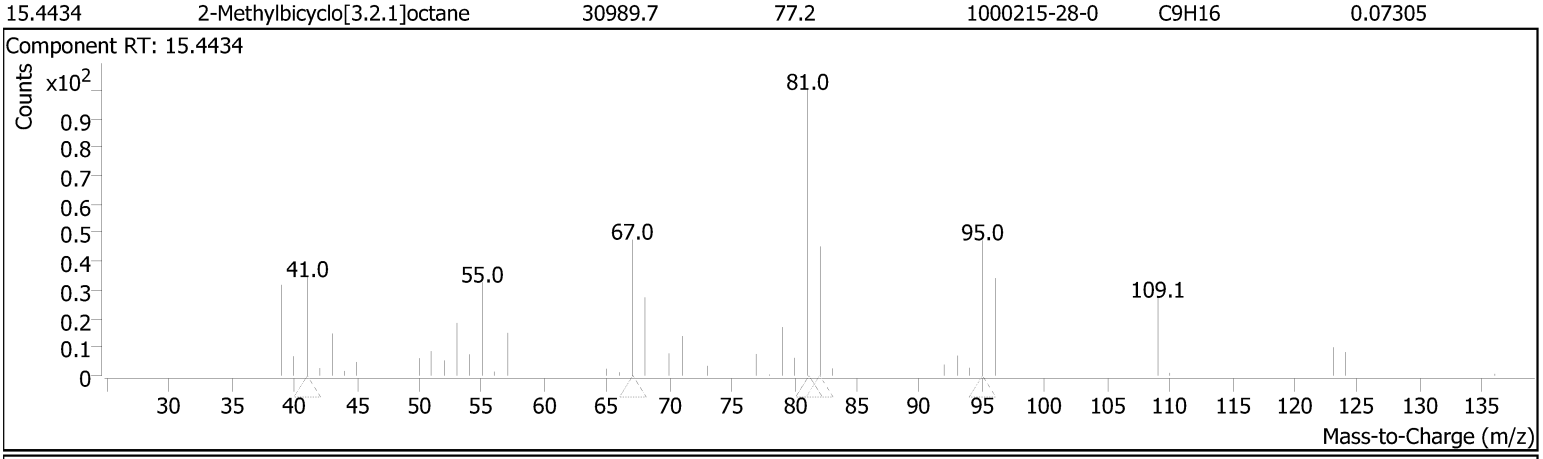


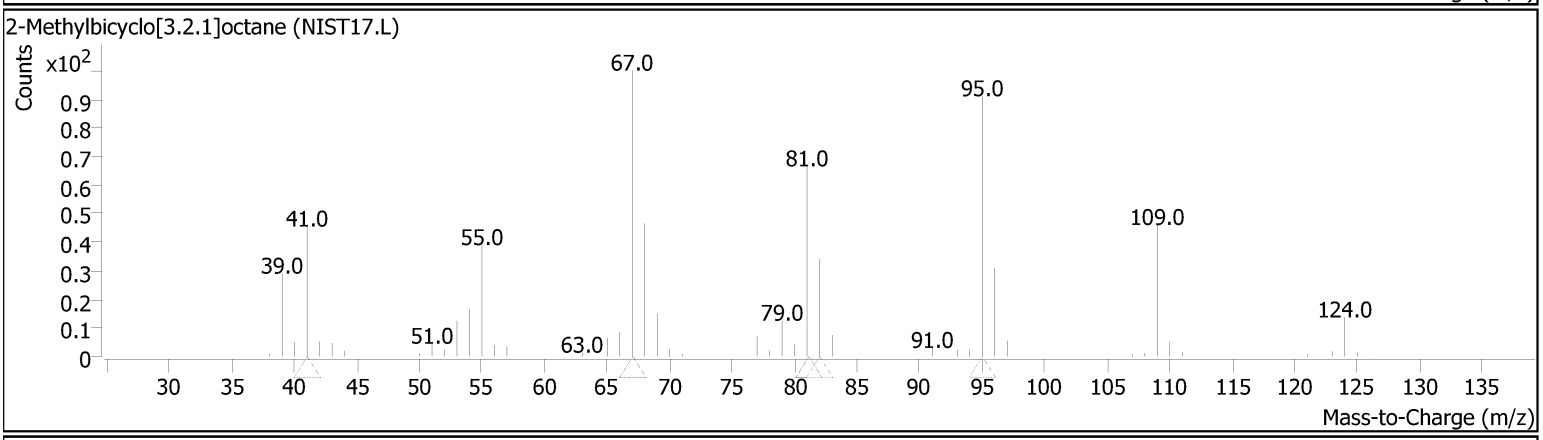


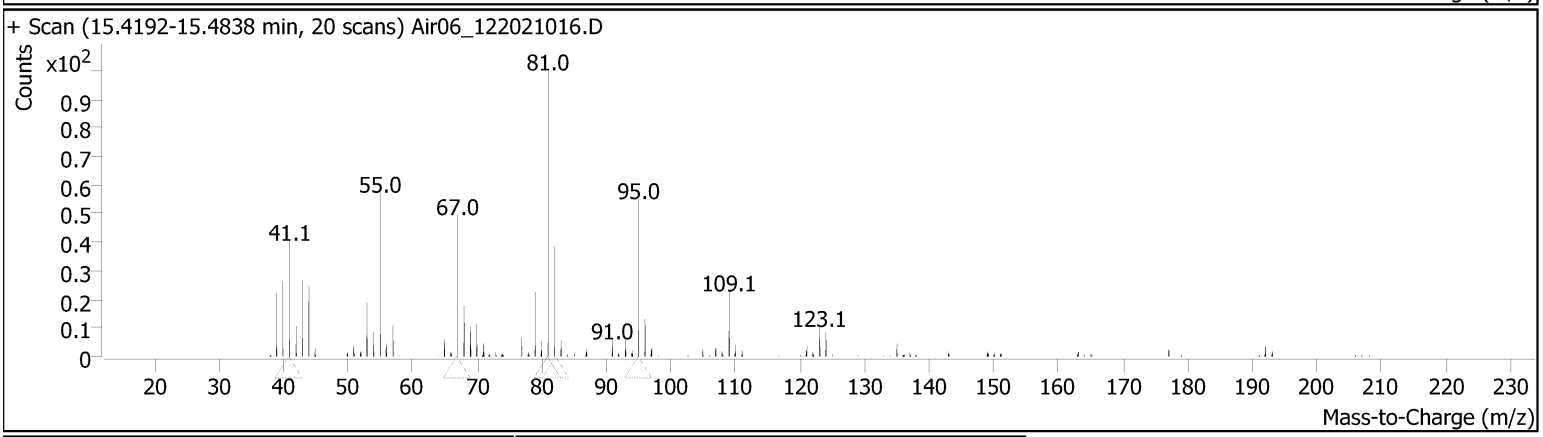


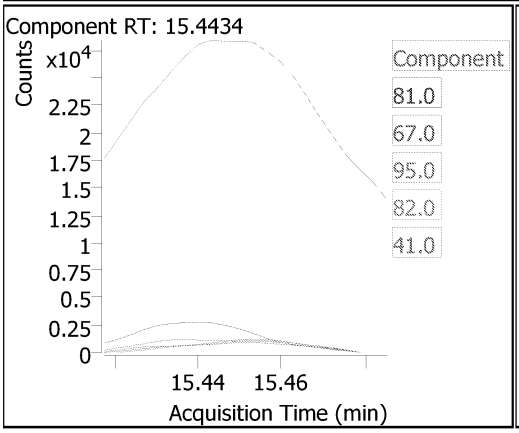


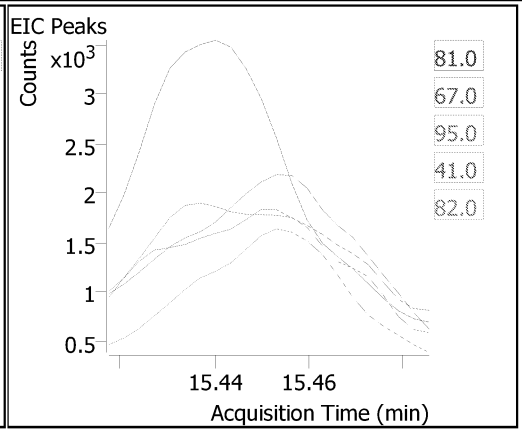
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.4434	2-Methylbicyclo[3.2.1]octane	30989.7	77.2	1000215-28-0	C9H16	0.07305

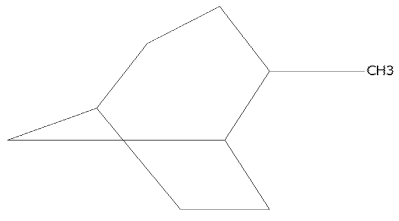




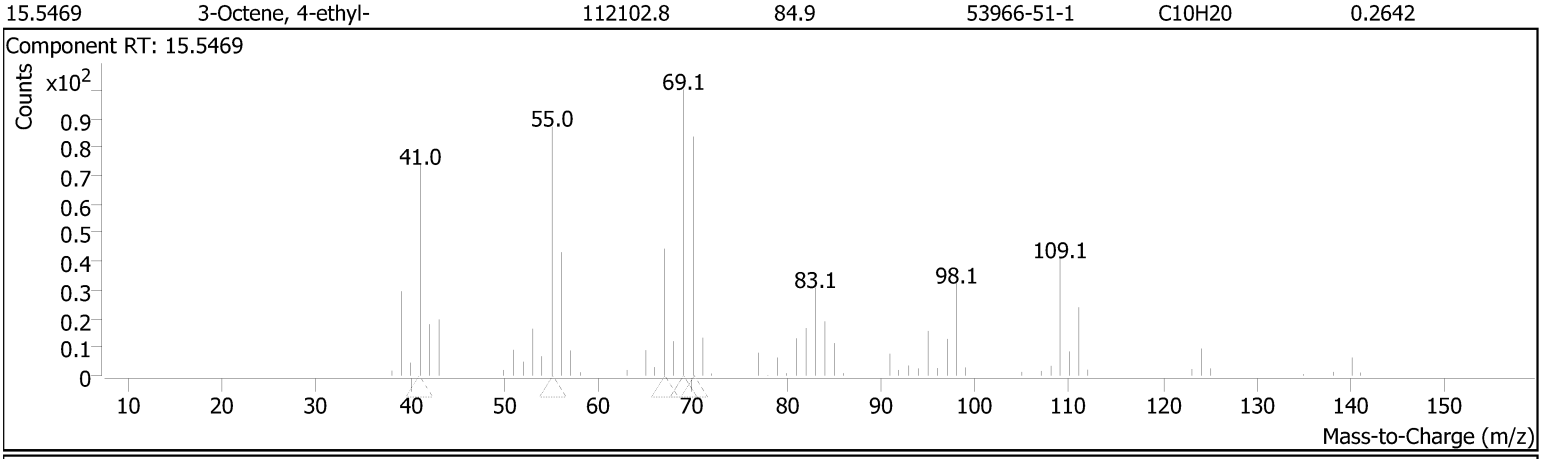


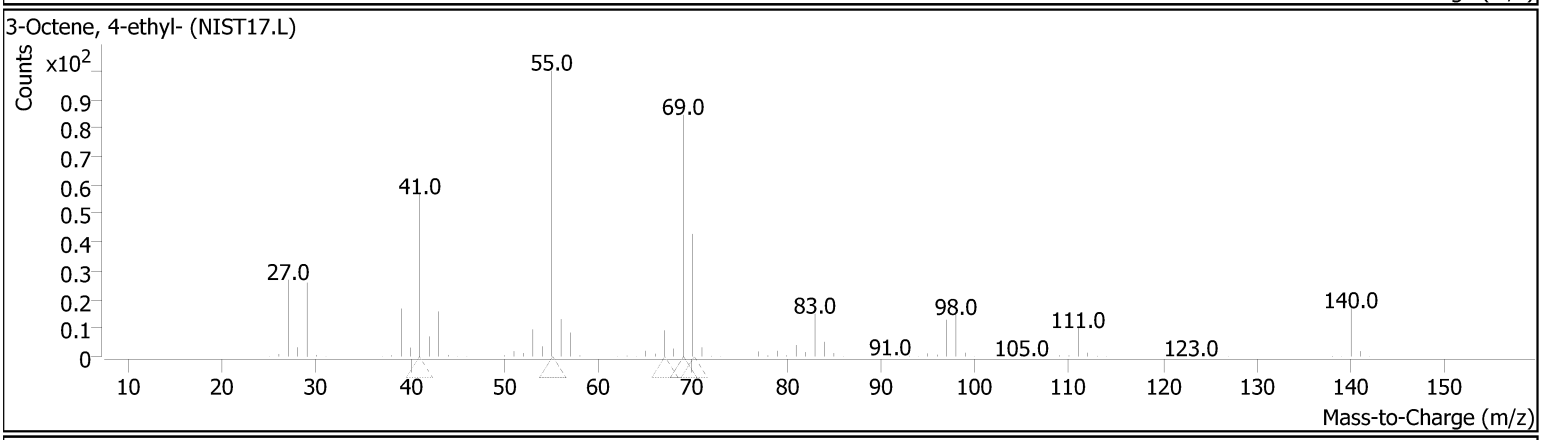


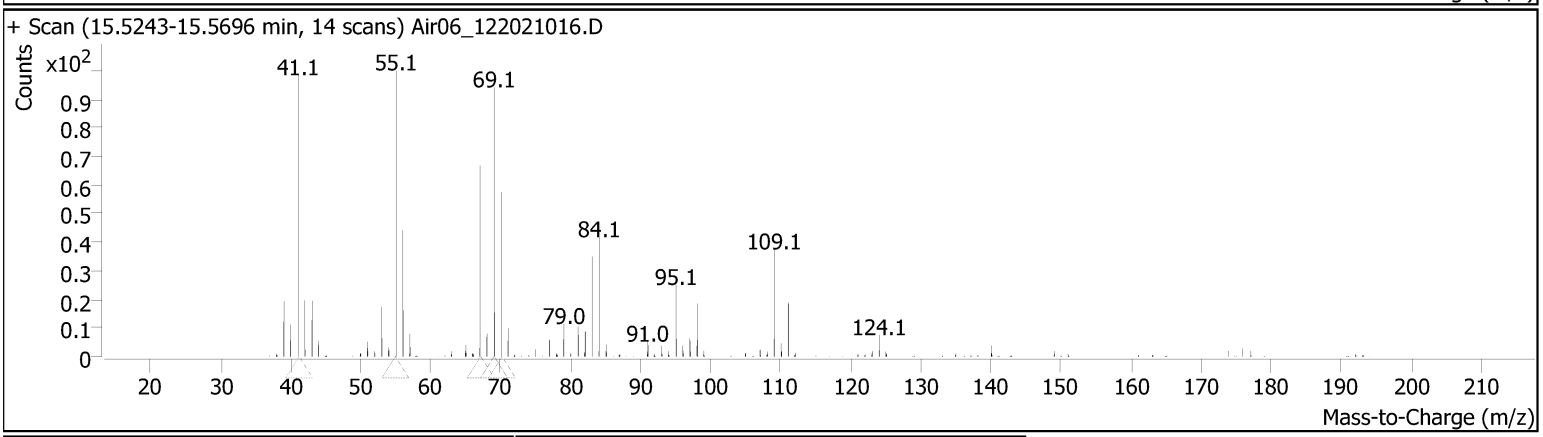


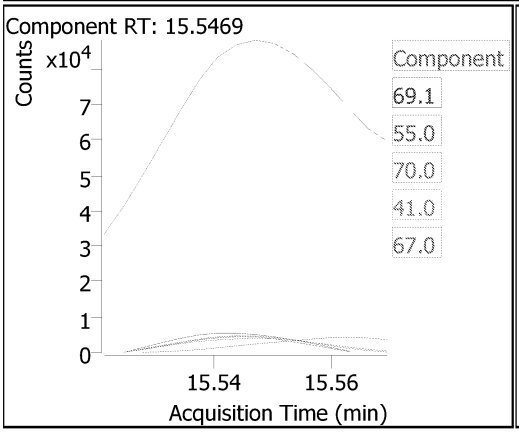


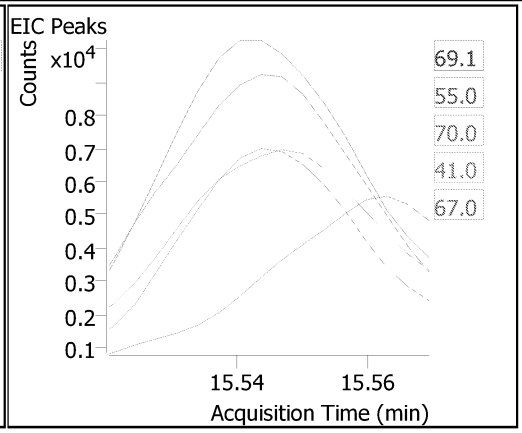
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.5469	3-Octene, 4-ethyl-	112102.8	84.9	53966-51-1	C10H20	0.2642

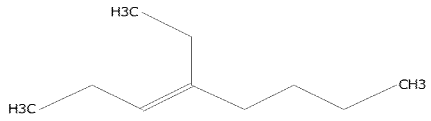




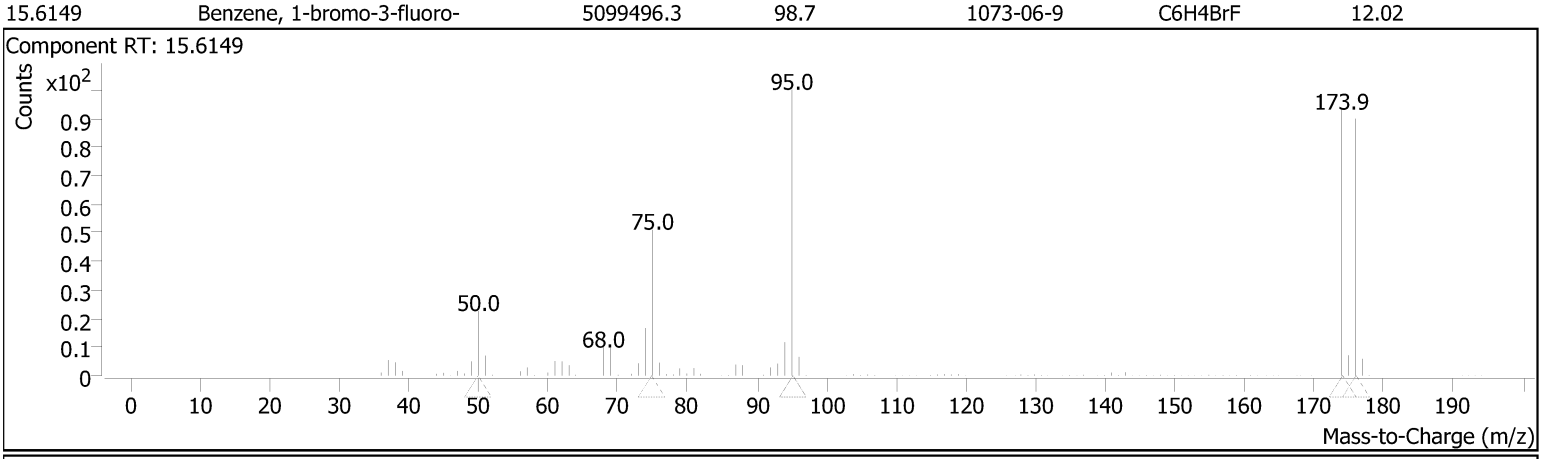


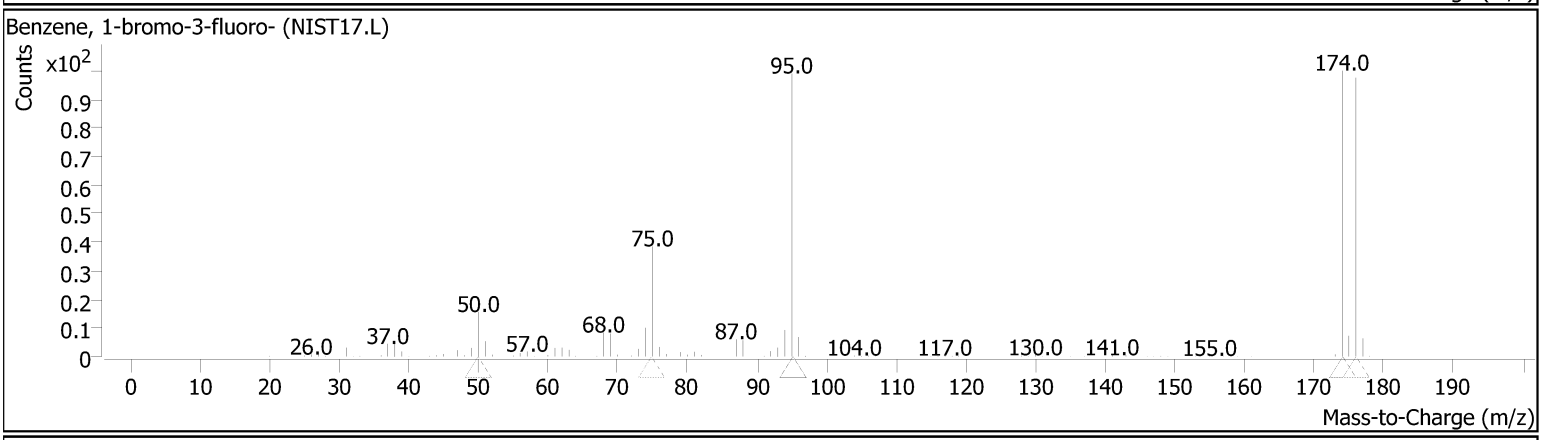


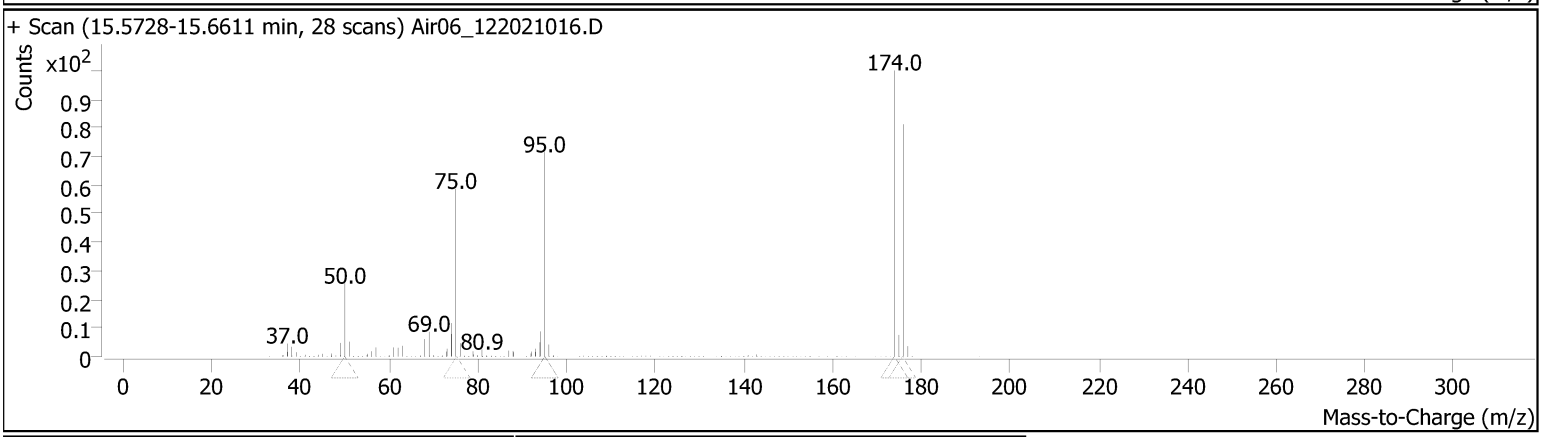


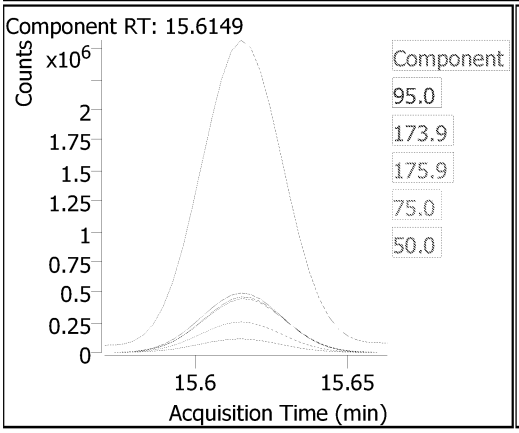


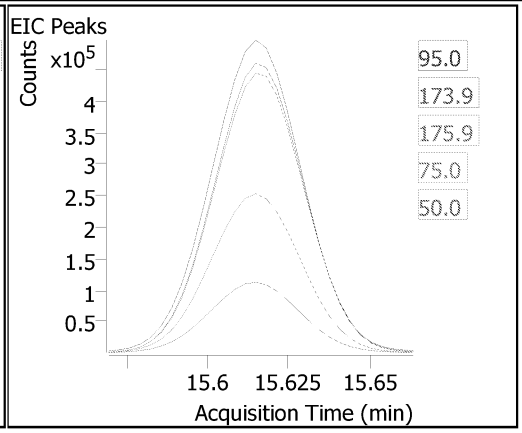
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.6149	Benzene, 1-bromo-3-fluoro-	5099496.3	98.7	1073-06-9	C6H4BrF	12.02

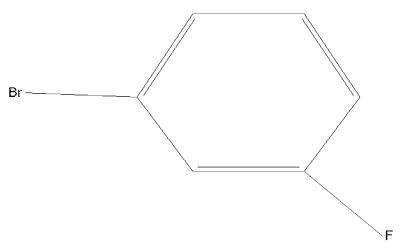




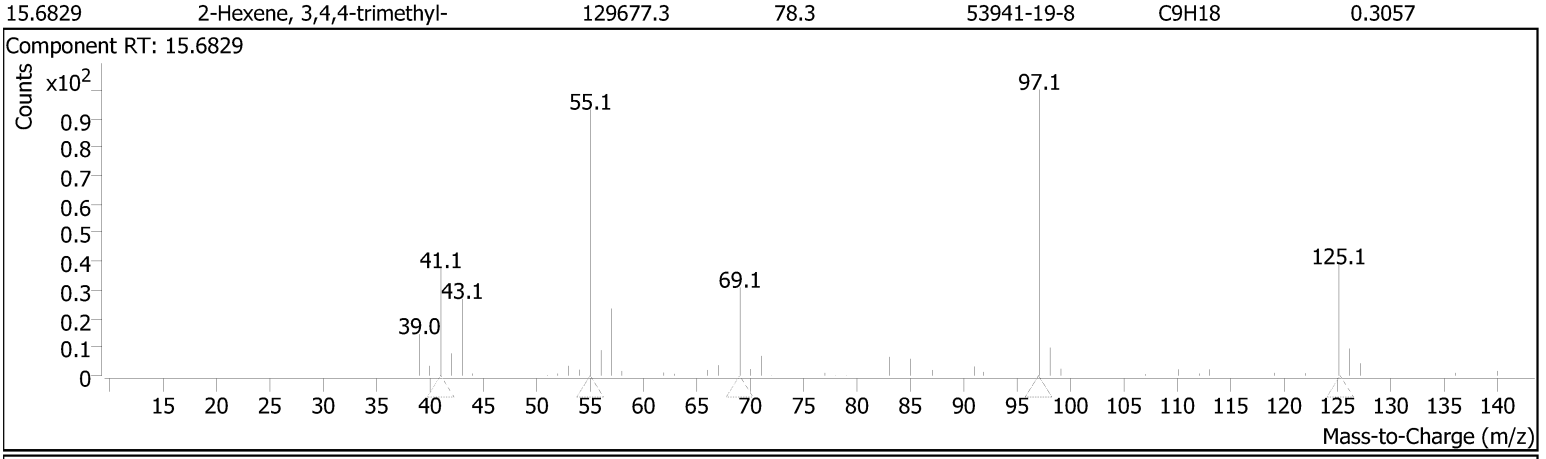


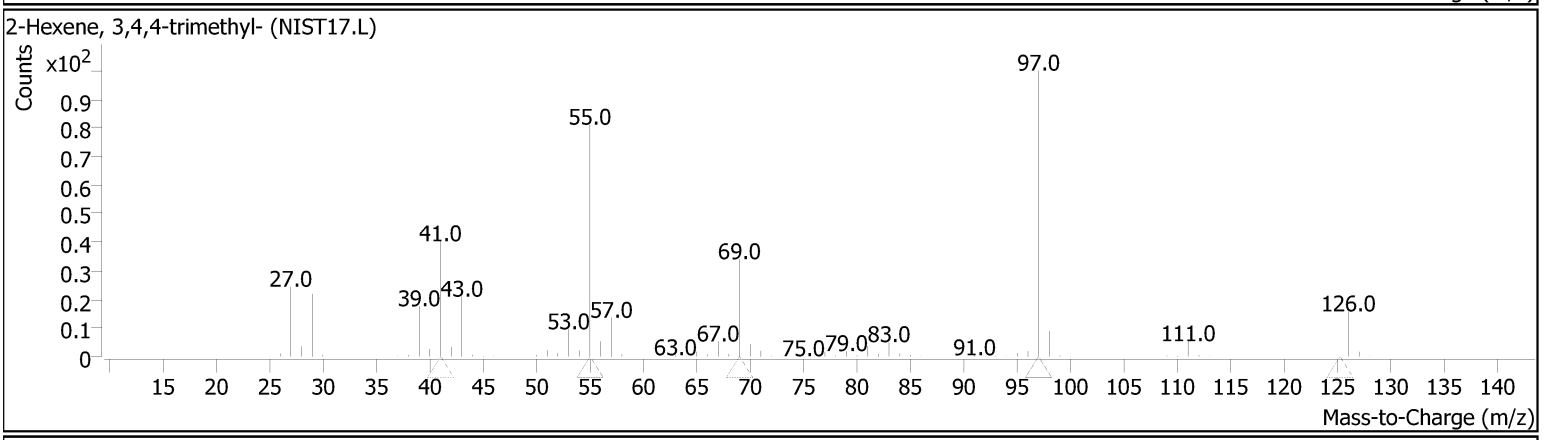


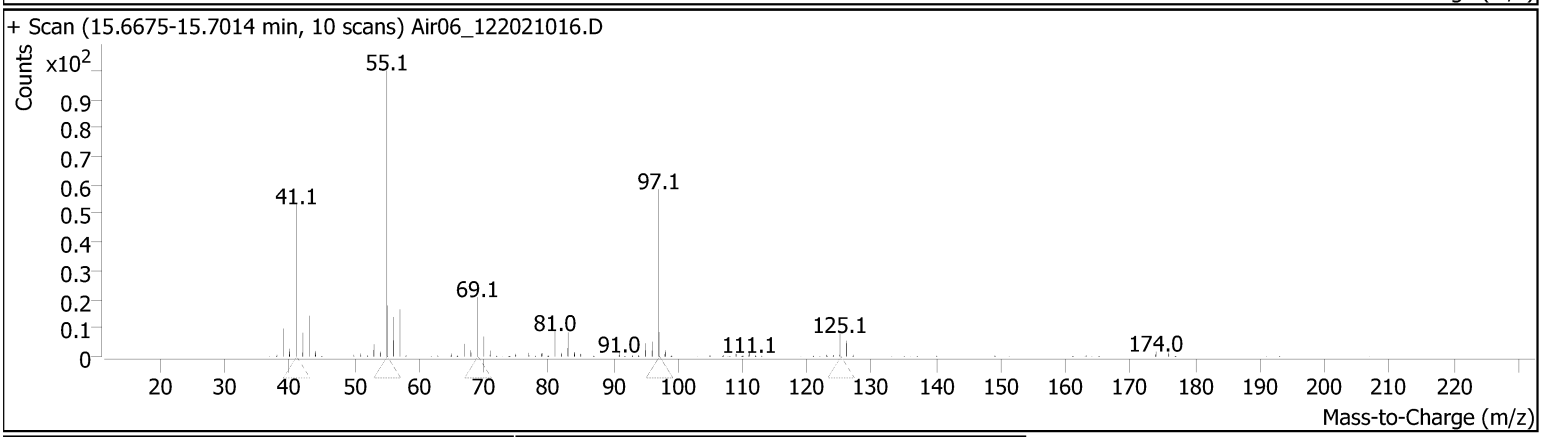


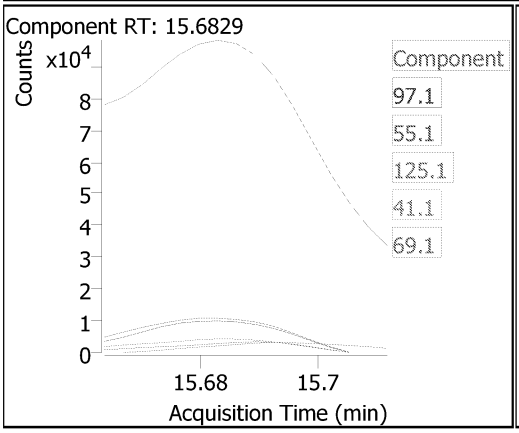


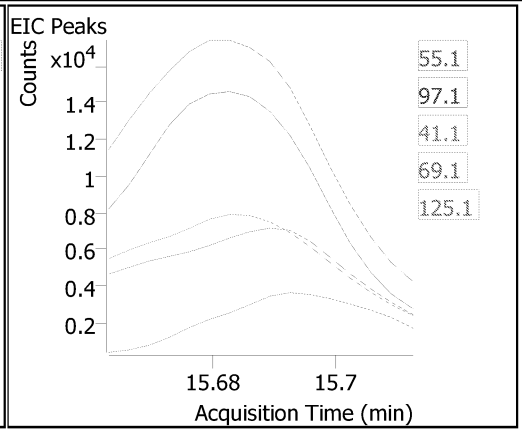
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.6829	2-Hexene, 3,4,4-trimethyl-	129677.3	78.3	53941-19-8	C9H18	0.3057

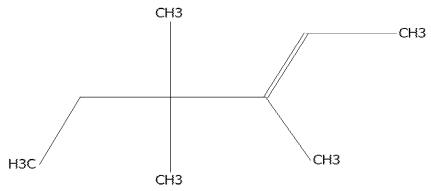




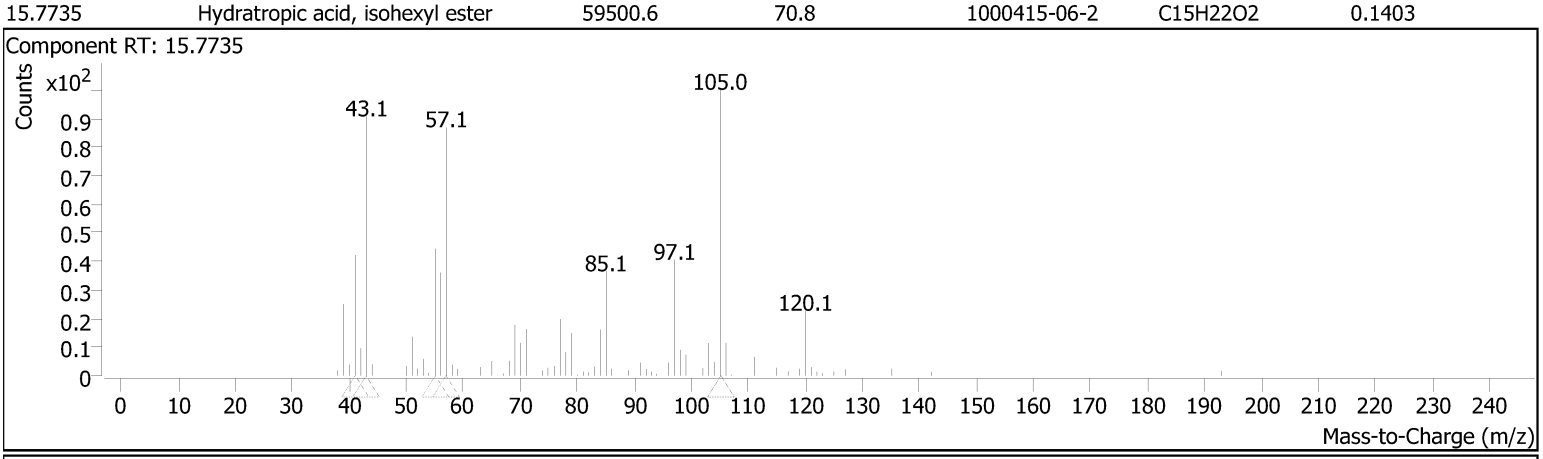


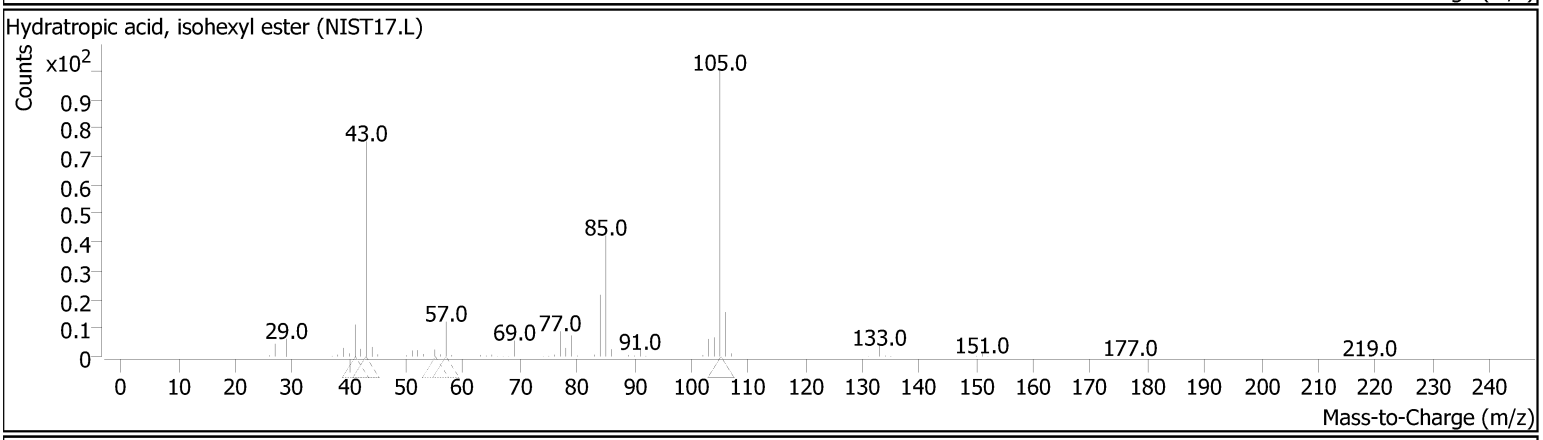


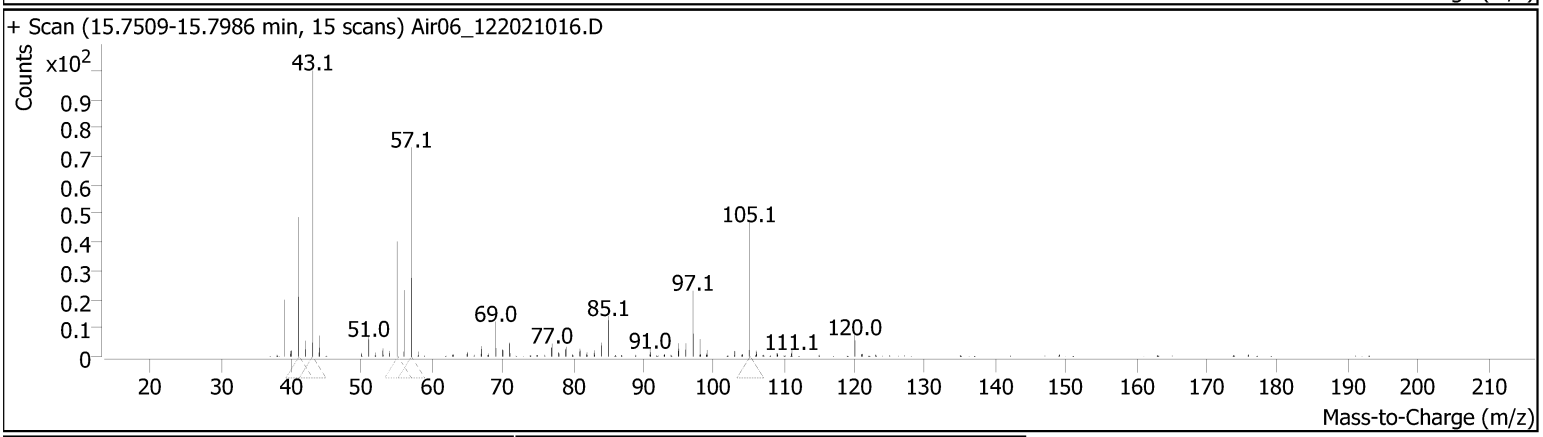


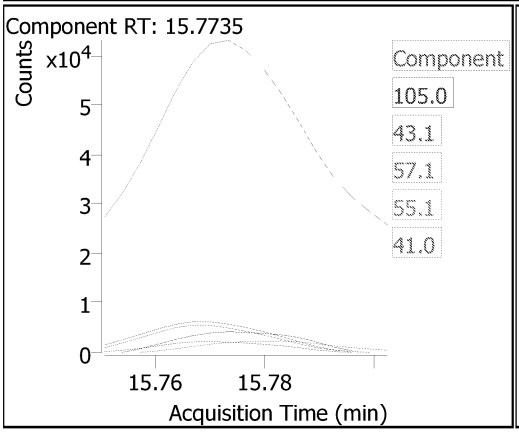


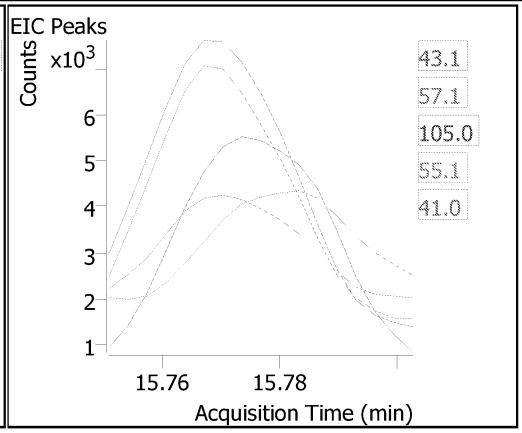
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.7735	Hydratropic acid, isohexyl ester	59500.6	70.8	1000415-06-2	C15H22O2	0.1403

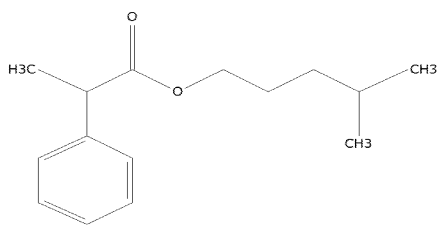




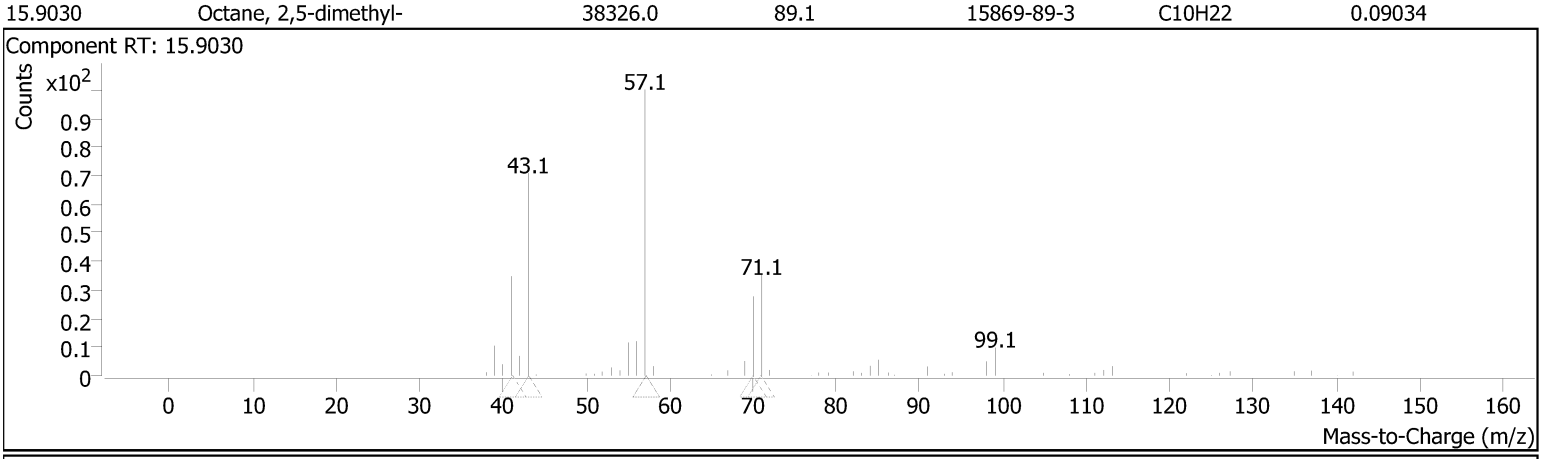


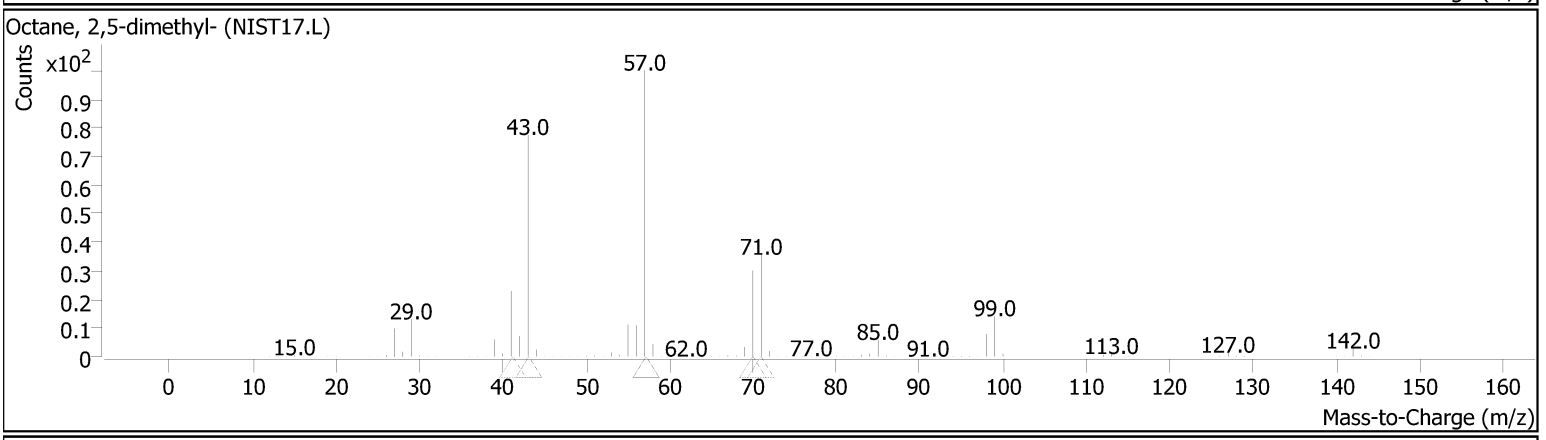


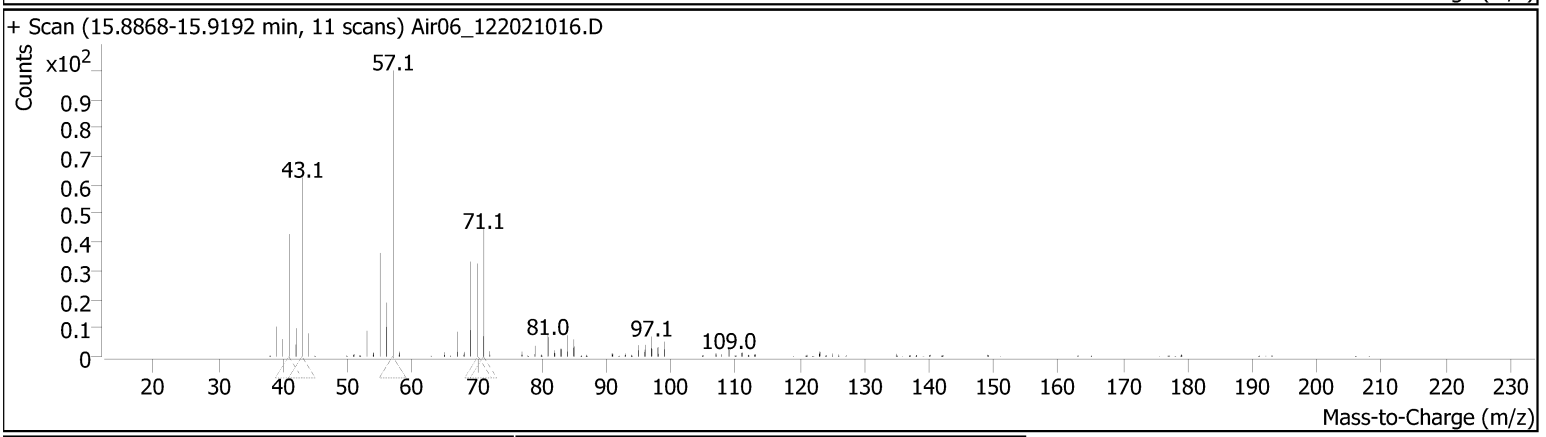


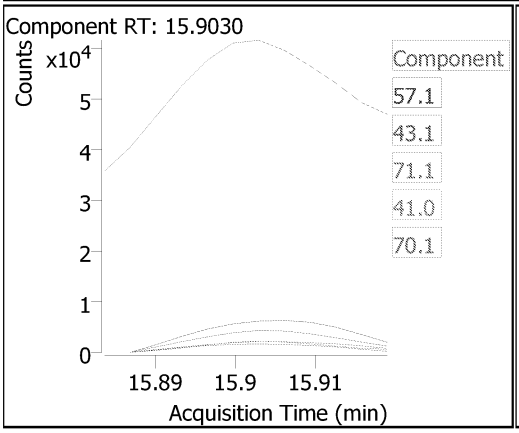


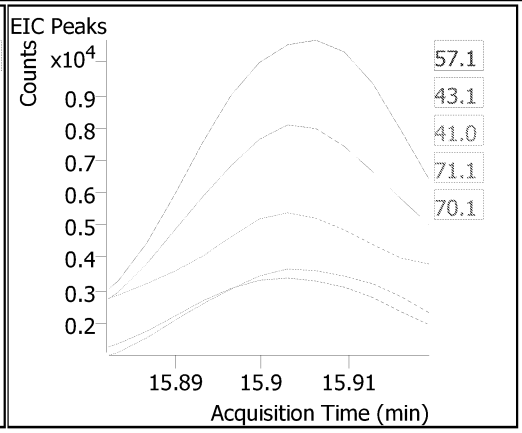
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.9030	Octane, 2,5-dimethyl-	38326.0	89.1	15869-89-3	C10H22	0.09034

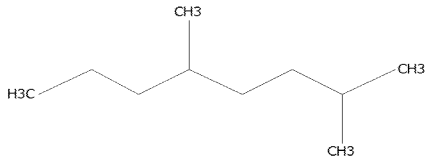




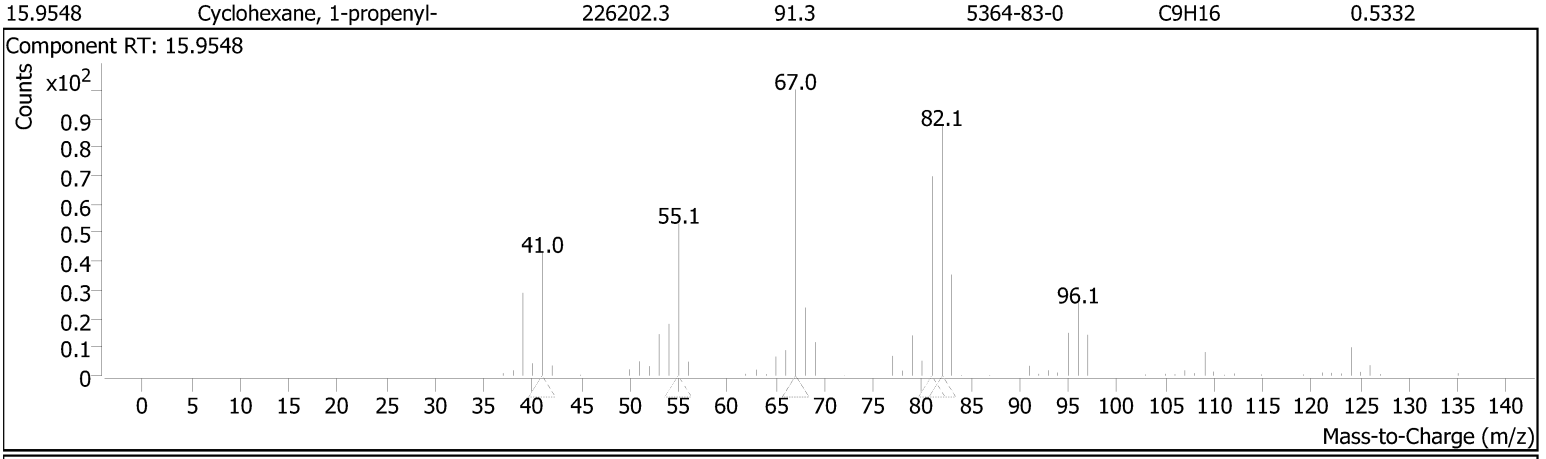


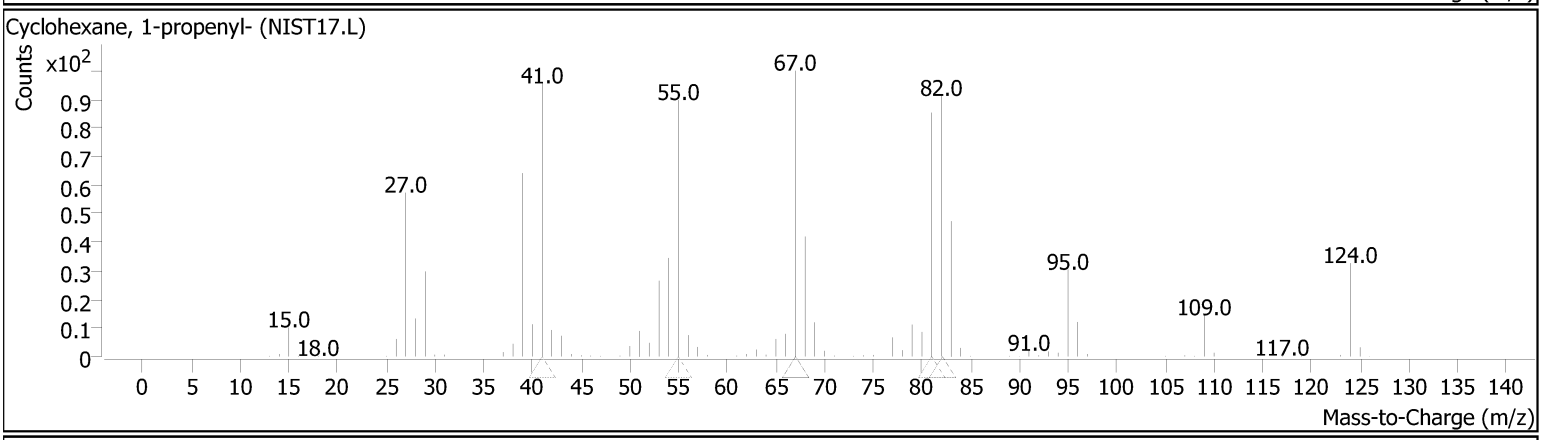


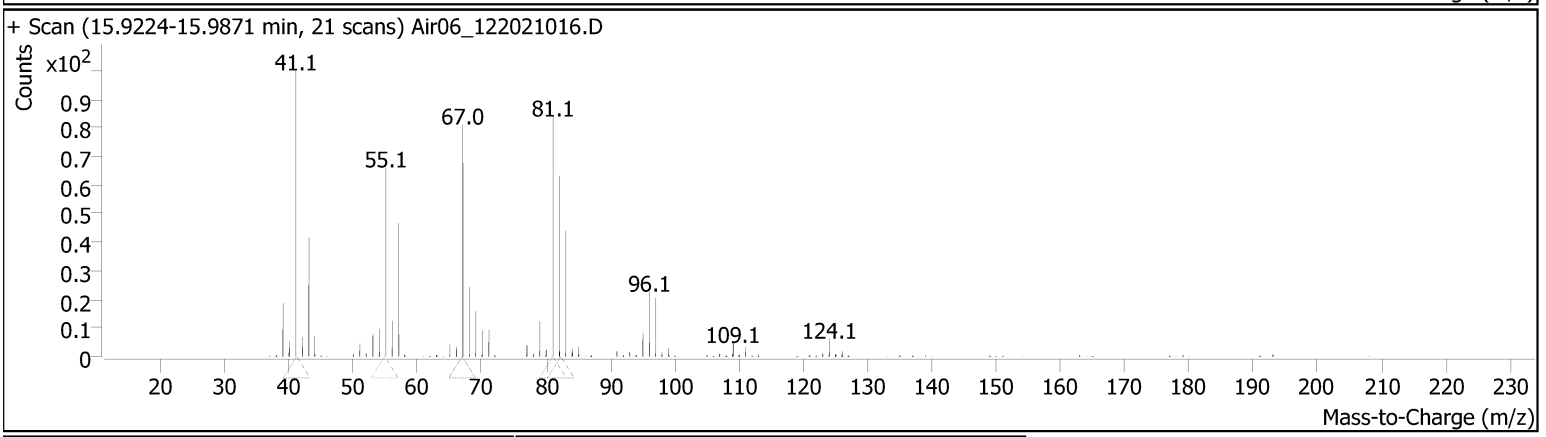


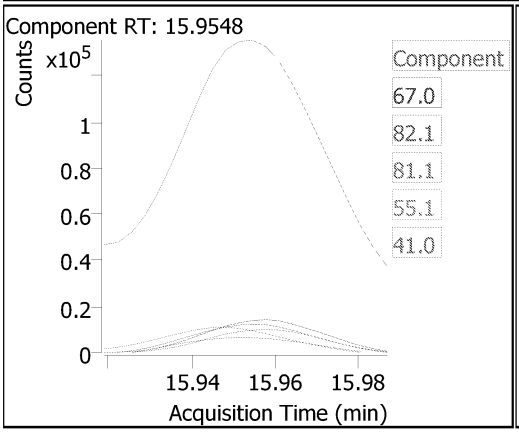


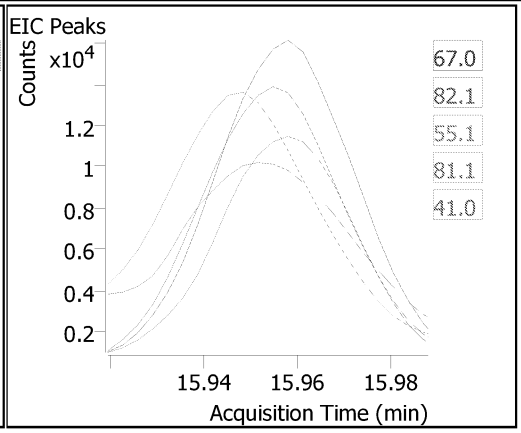
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.9548	Cyclohexane, 1-propenyl-	226202.3	91.3	5364-83-0	C9H16	0.5332

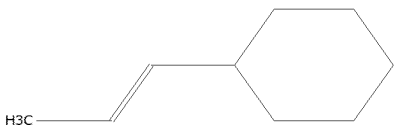




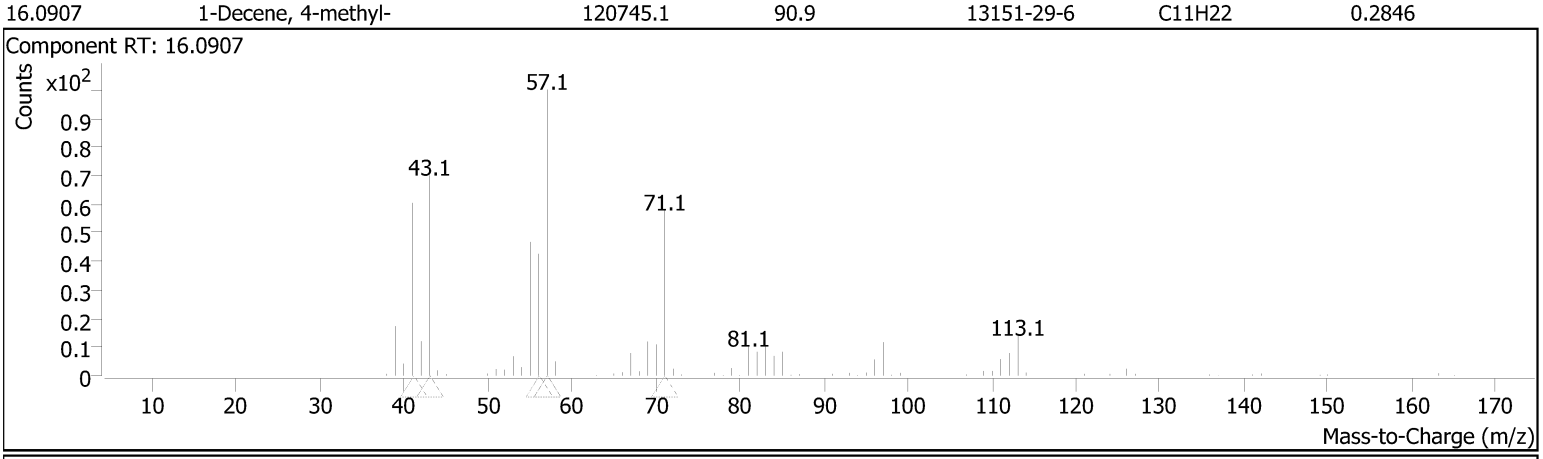


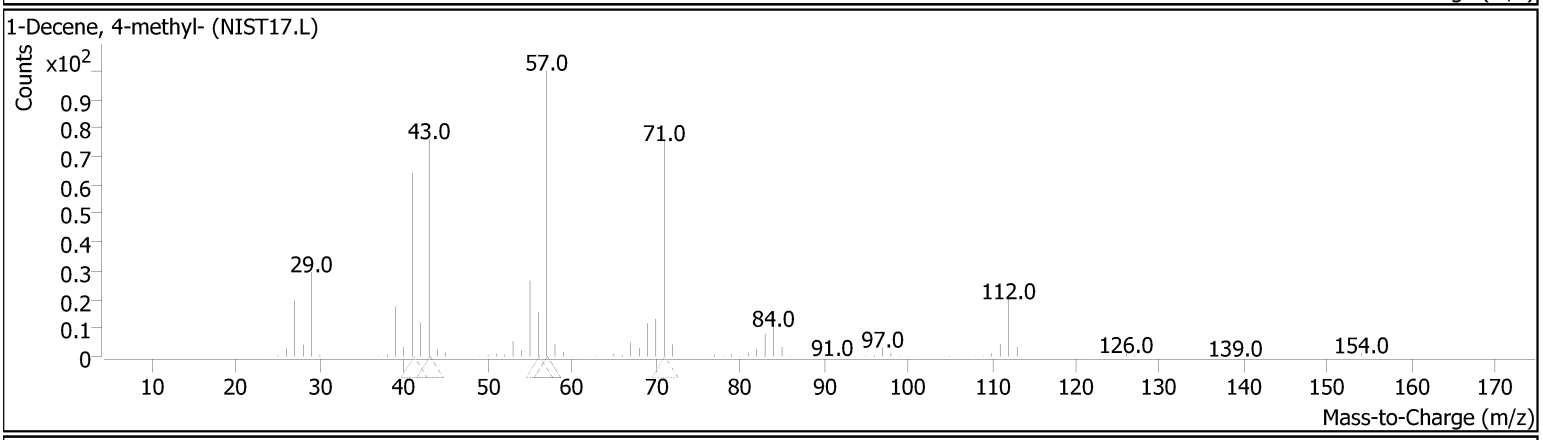


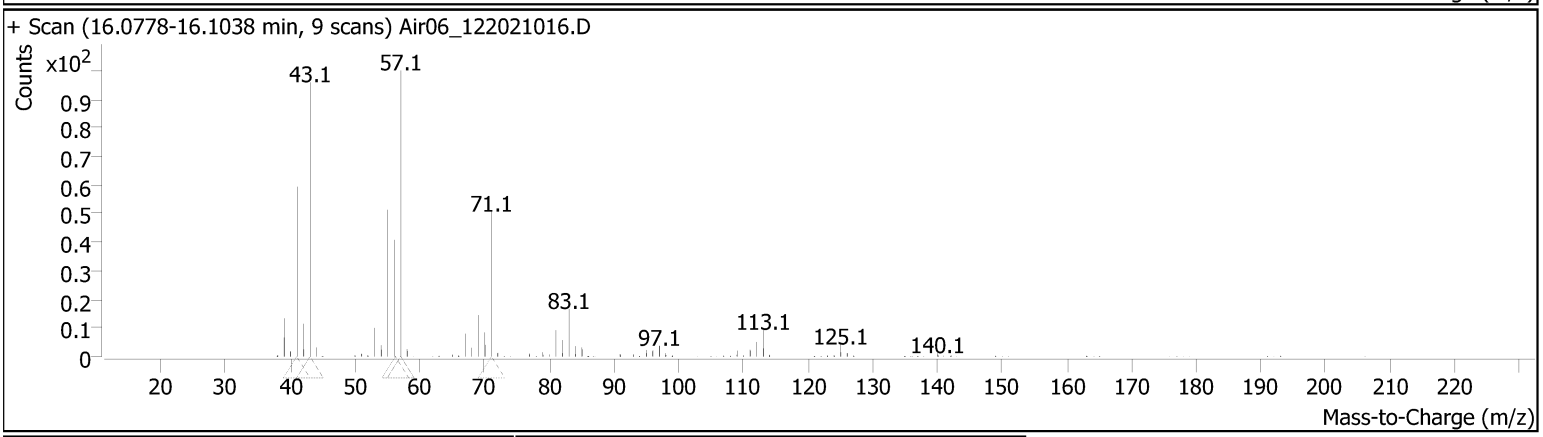


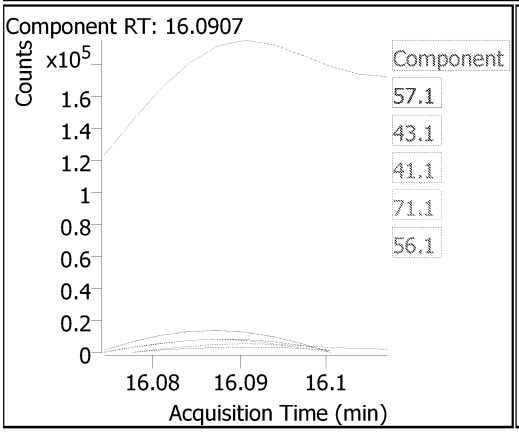


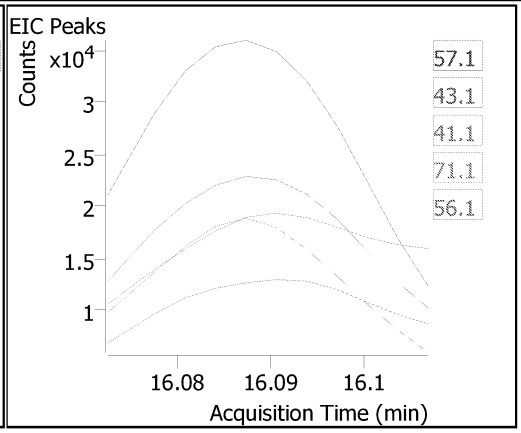
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.0907	1-Decene, 4-methyl-	120745.1	90.9	13151-29-6	C11H22	0.2846

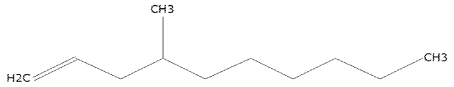




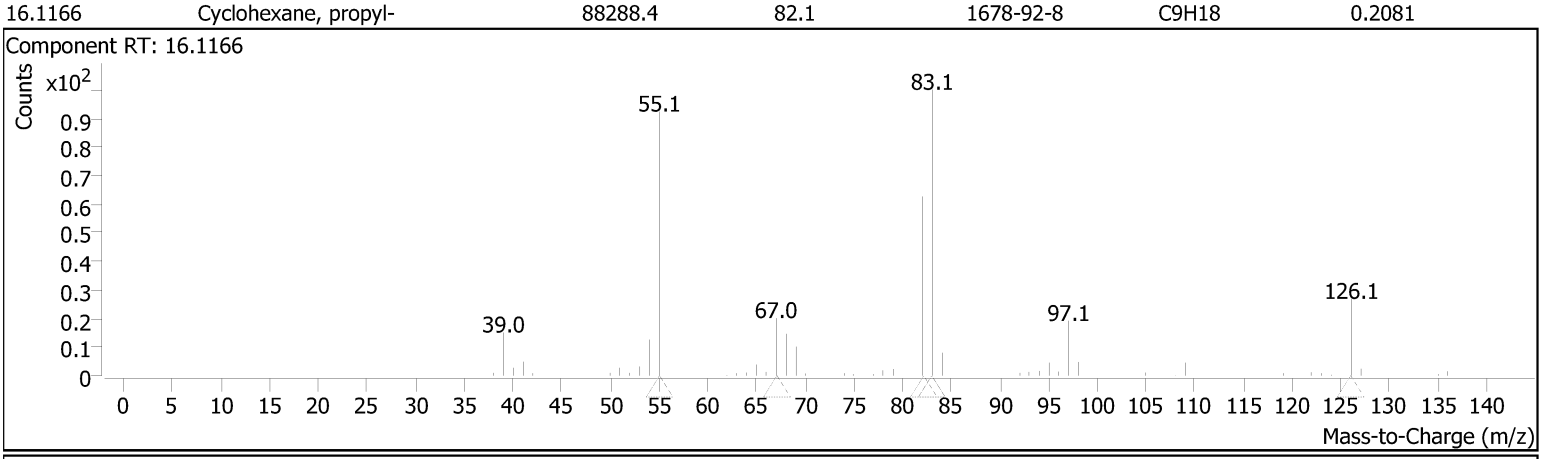


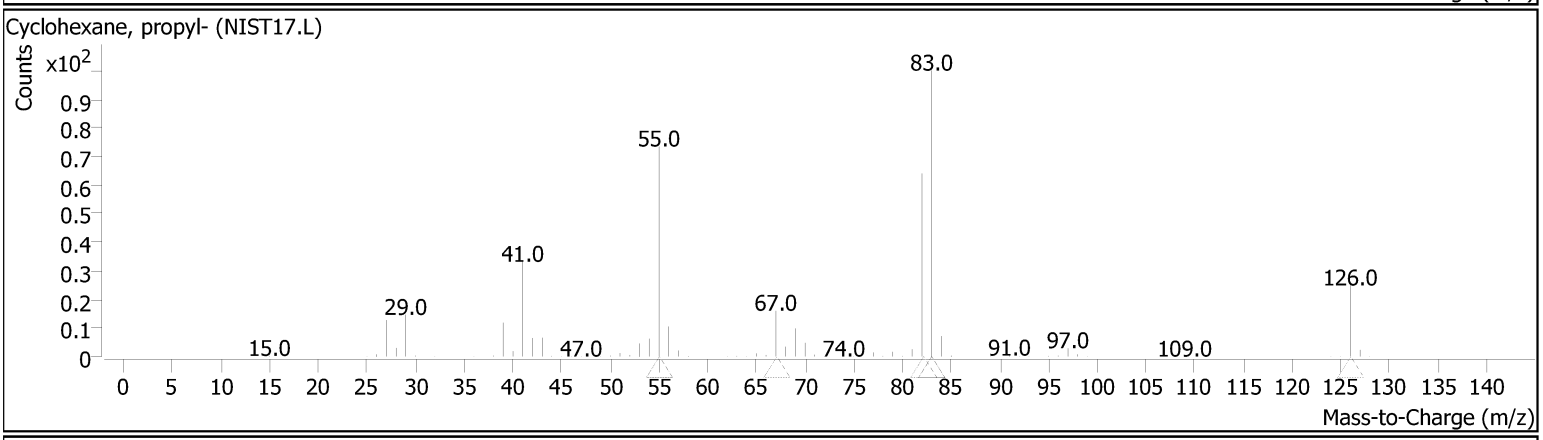


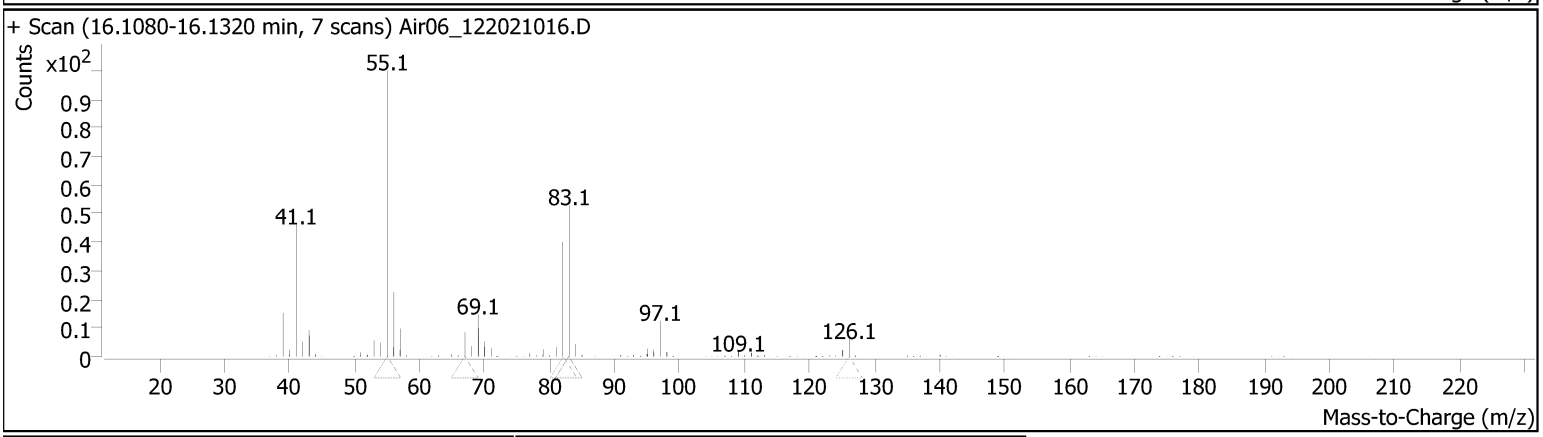


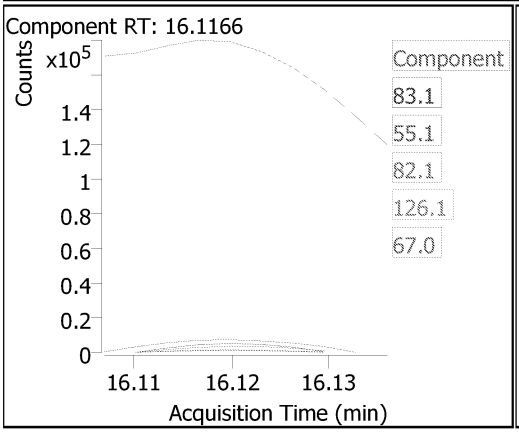


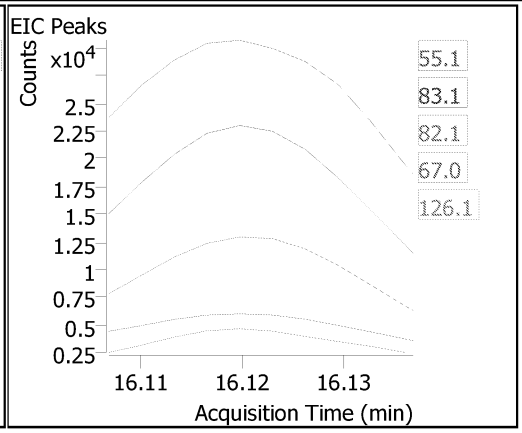
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.1166	Cyclohexane, propyl-	88288.4	82.1	1678-92-8	C9H18	0.2081

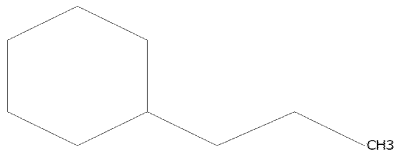




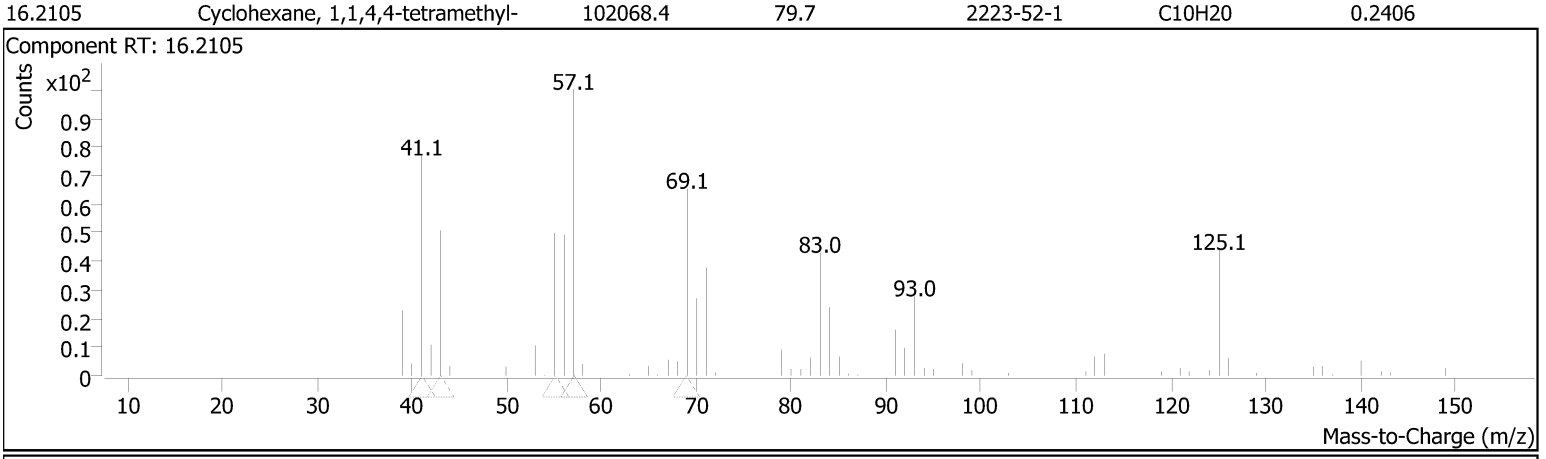


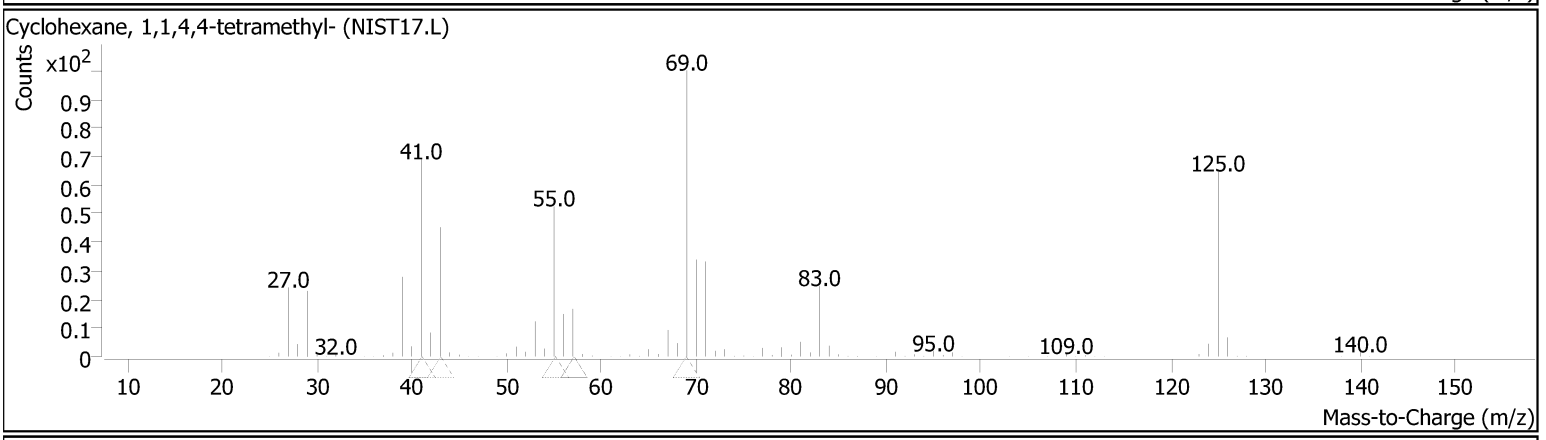


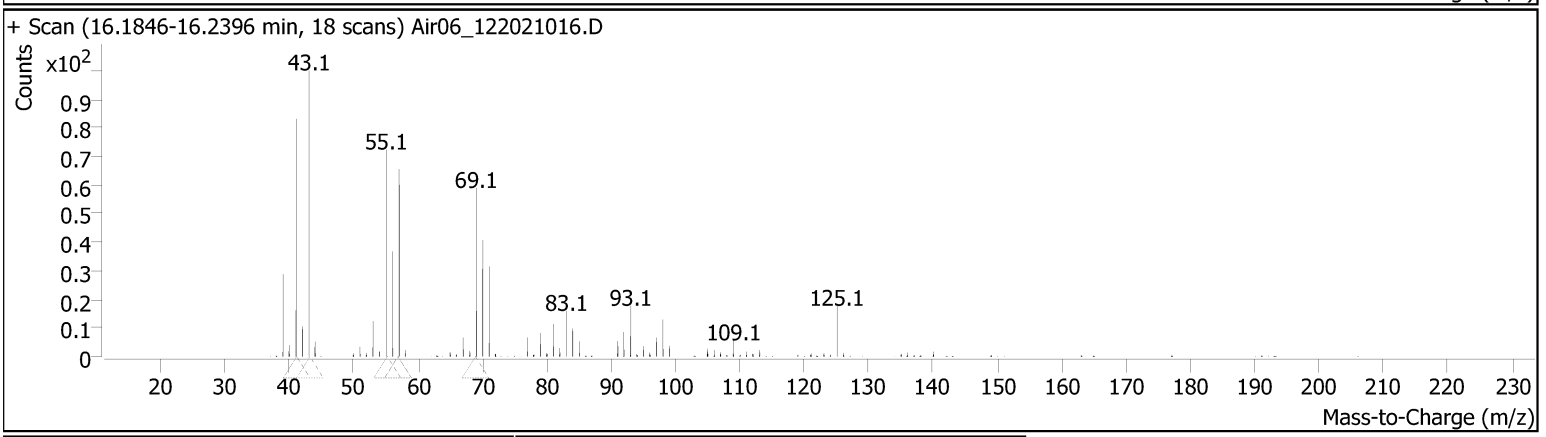


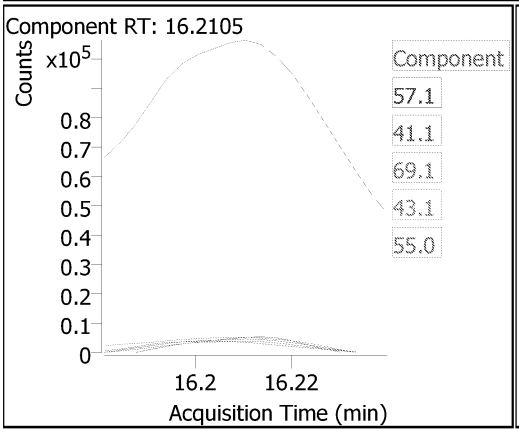


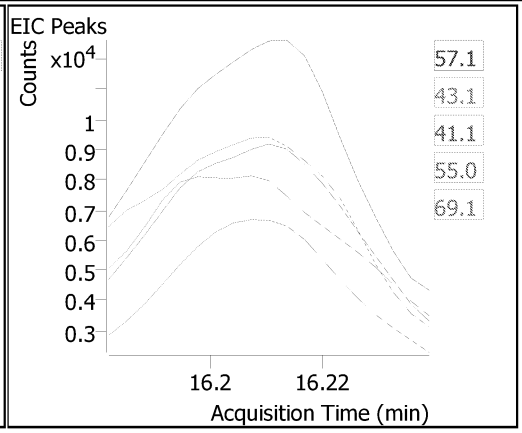
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.2105	Cyclohexane, 1,1,4,4-tetramethyl-	102068.4	79.7	2223-52-1	C10H20	0.2406

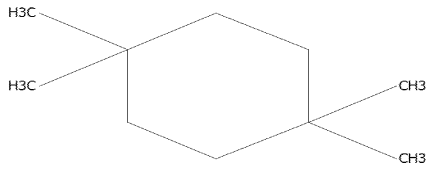




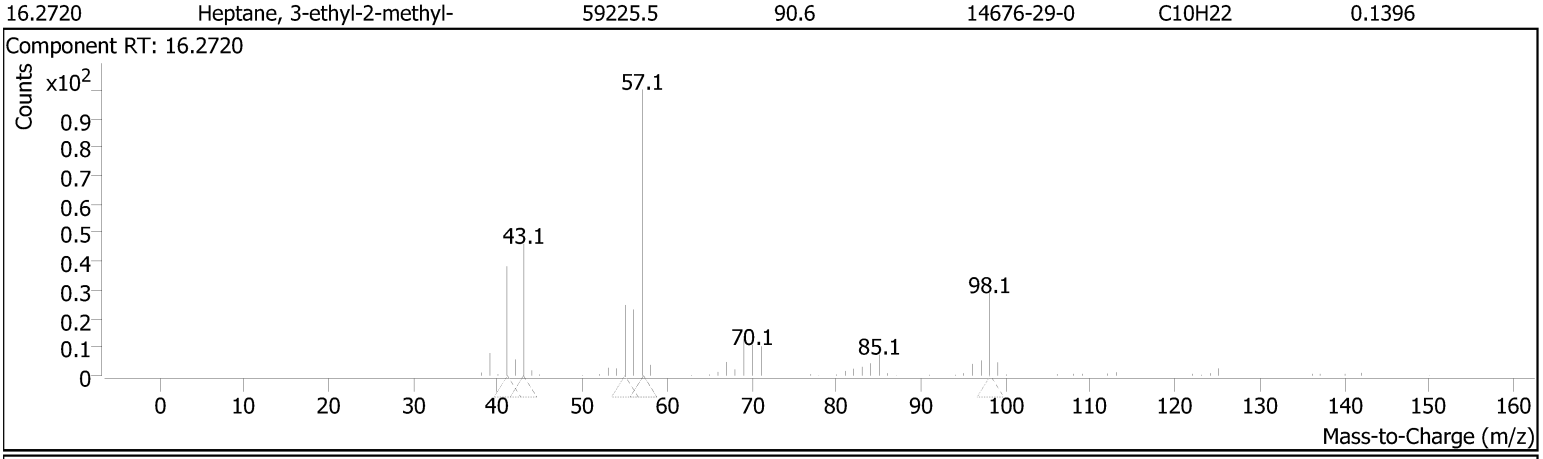


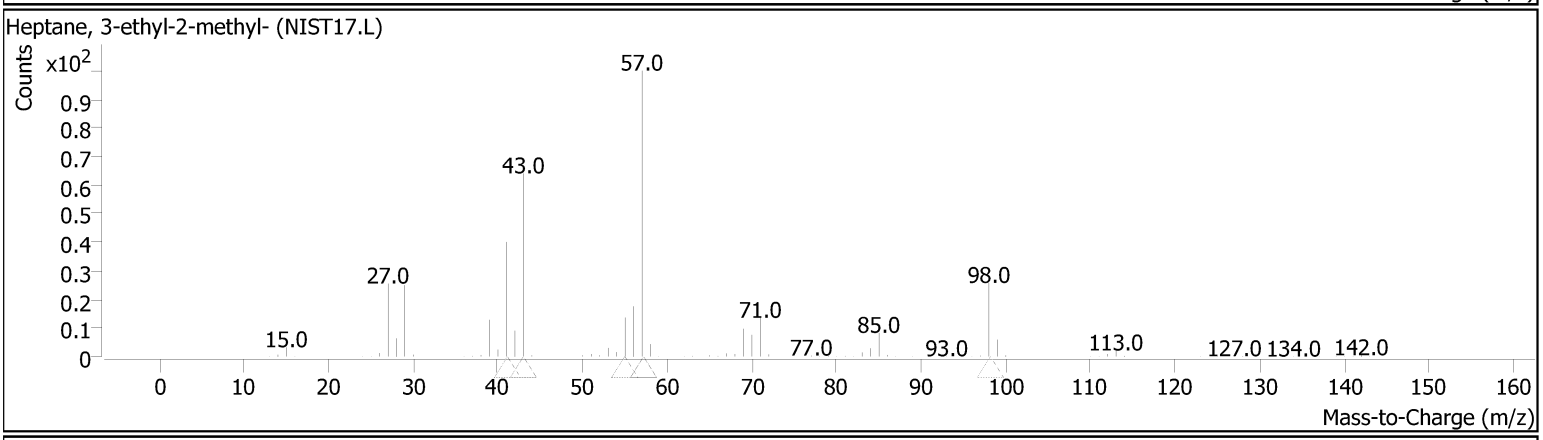


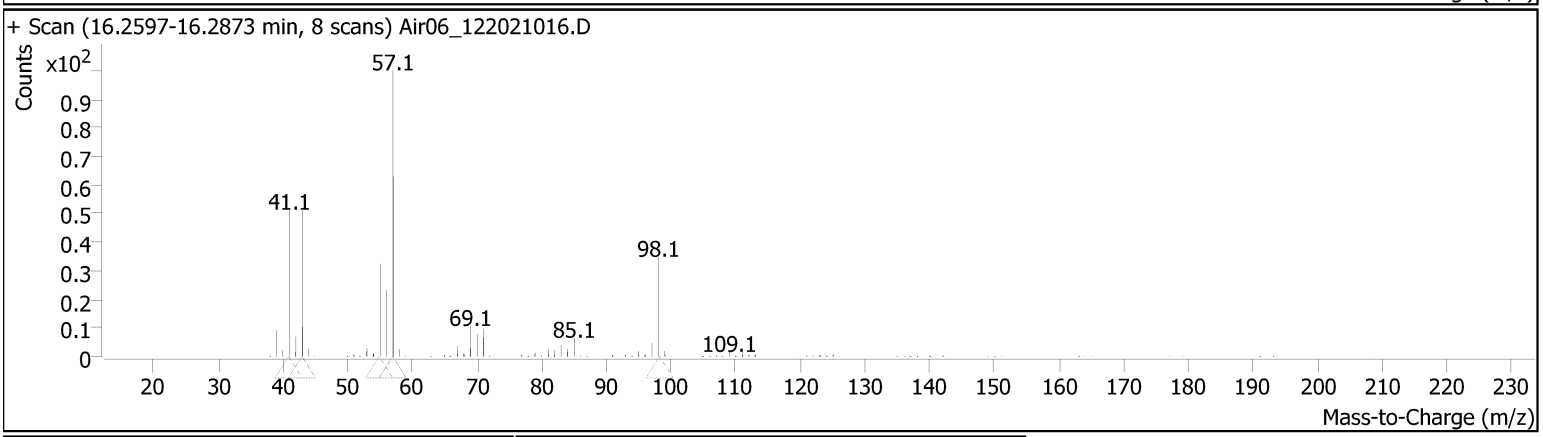


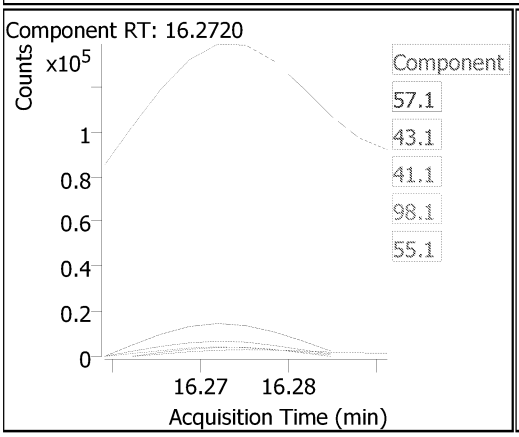


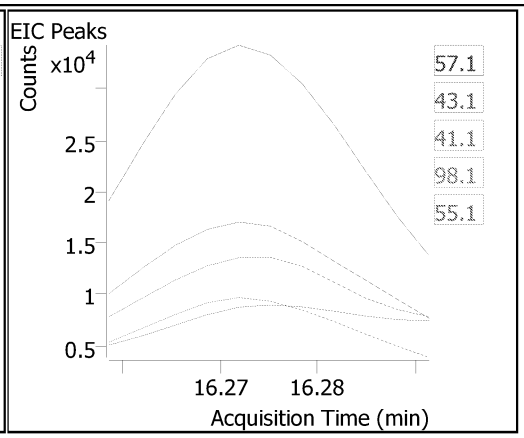
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.2720	Heptane, 3-ethyl-2-methyl-	59225.5	90.6	14676-29-0	C10H22	0.1396

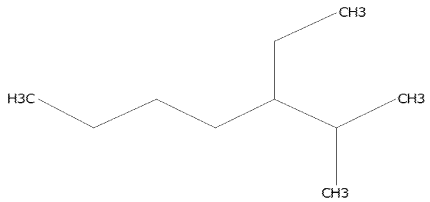




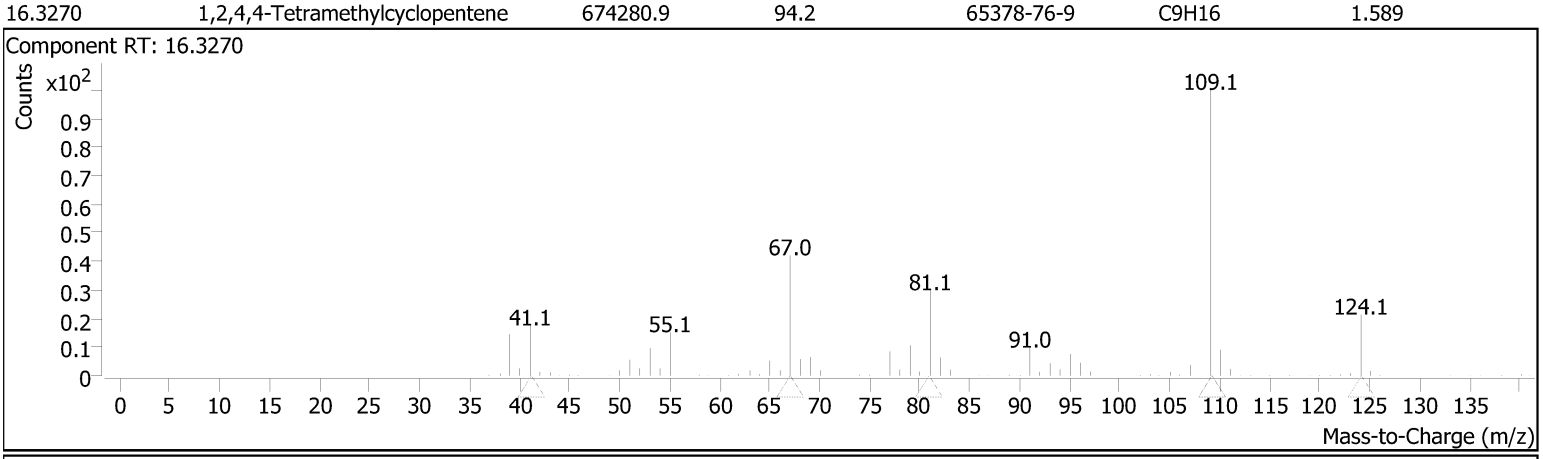


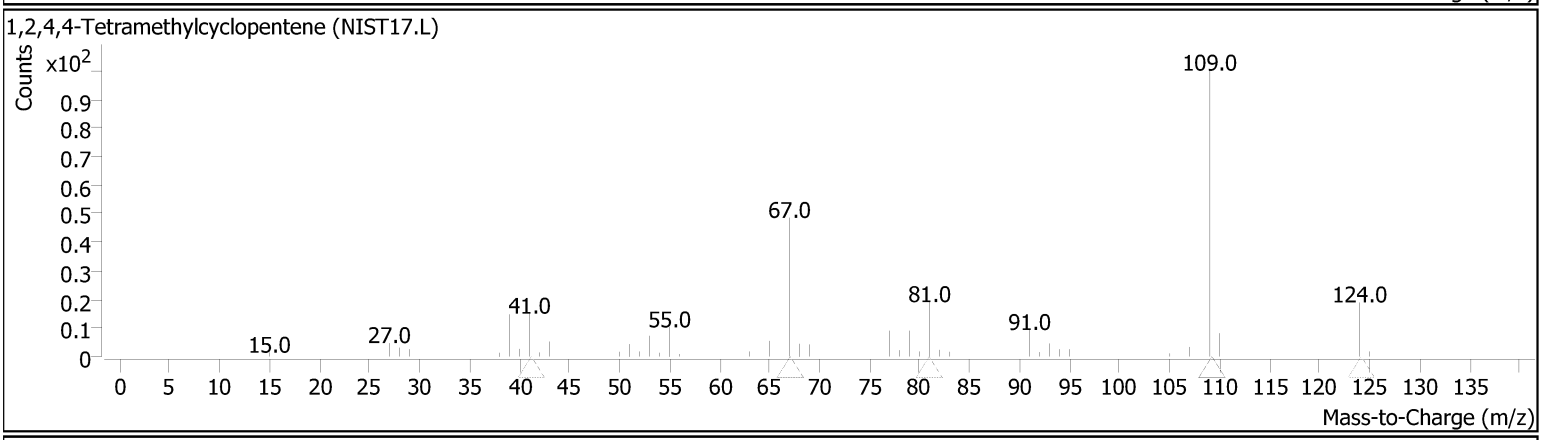


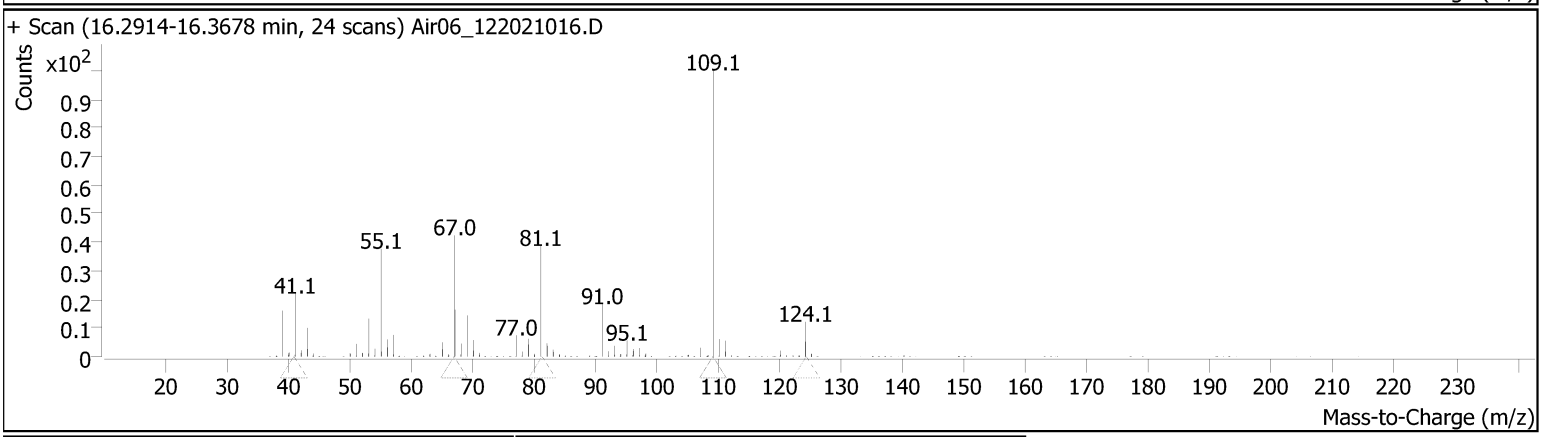


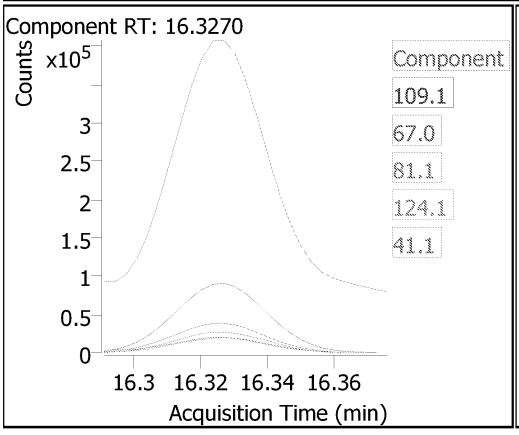


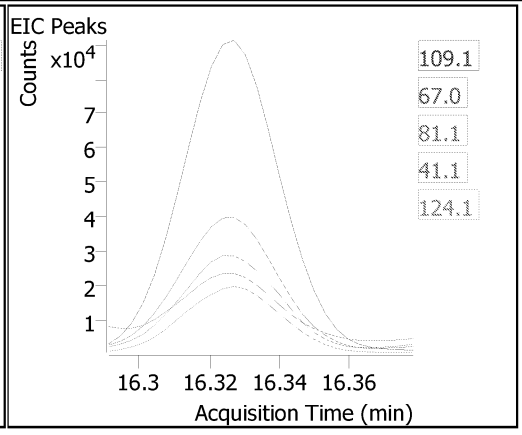
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.3270	1,2,4,4-Tetramethylcyclopentene	674280.9	94.2	65378-76-9	C9H16	1.589

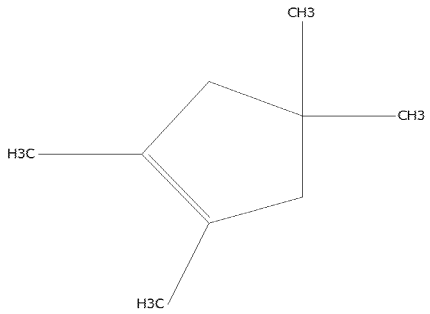




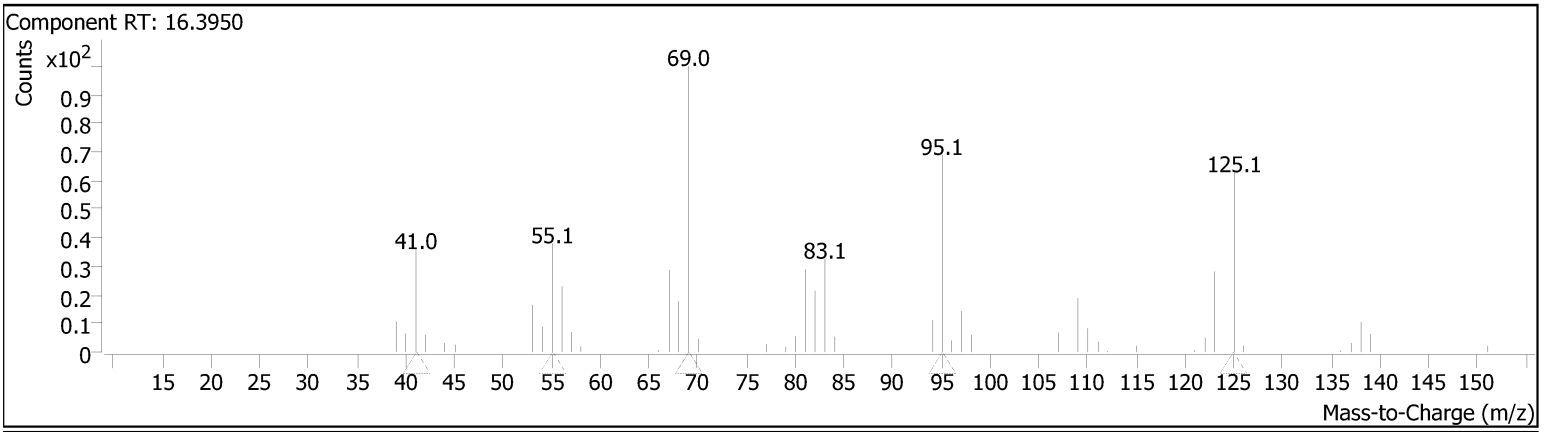


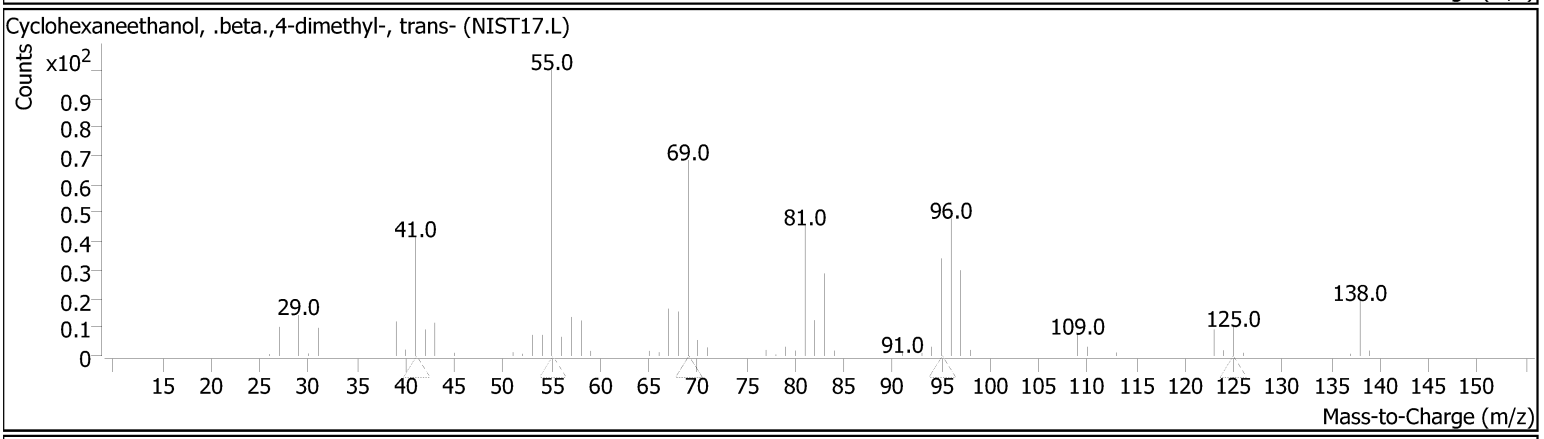


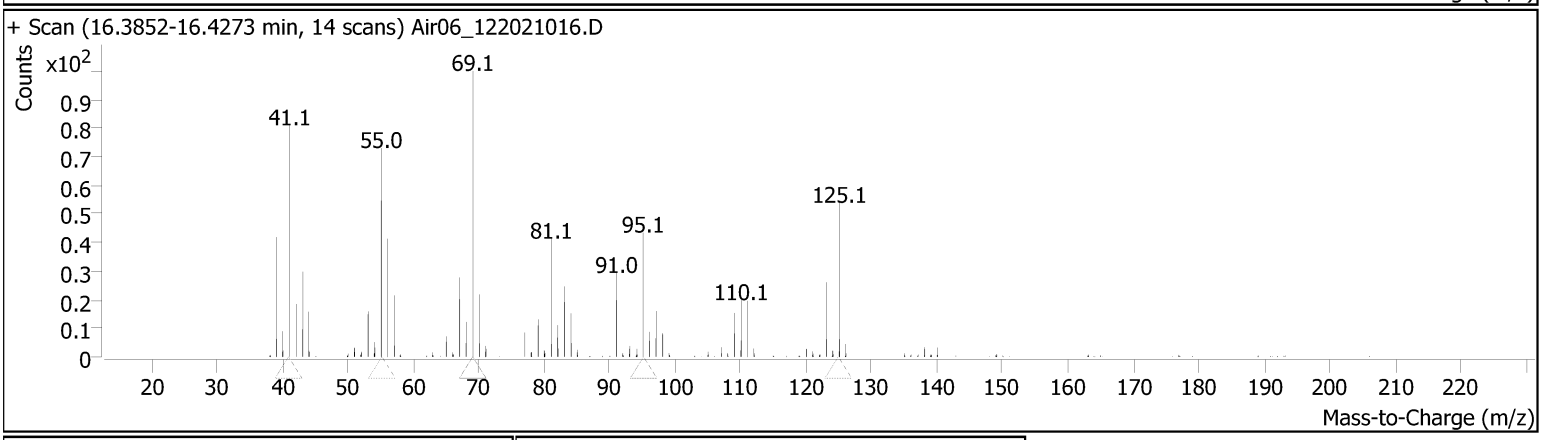


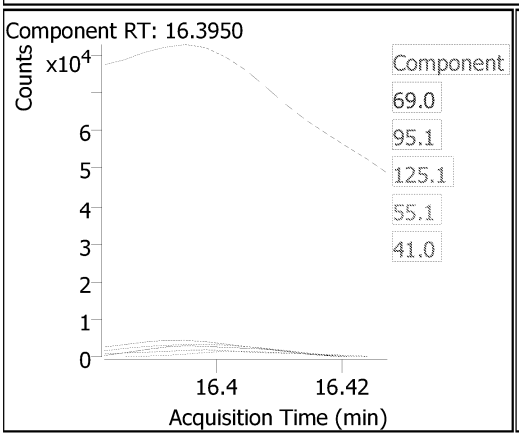


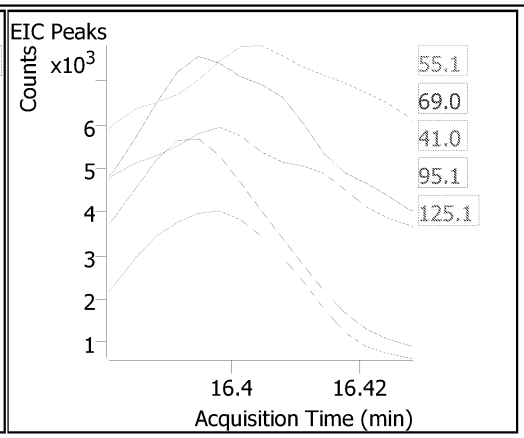
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.3950	Cyclohexaneethanol, .beta.,4-dimethyl-, trans-	22913.0	79.1	5113-94-0	C10H20O	0.05401

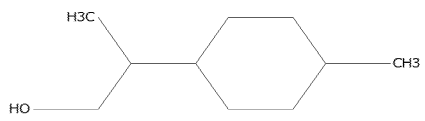




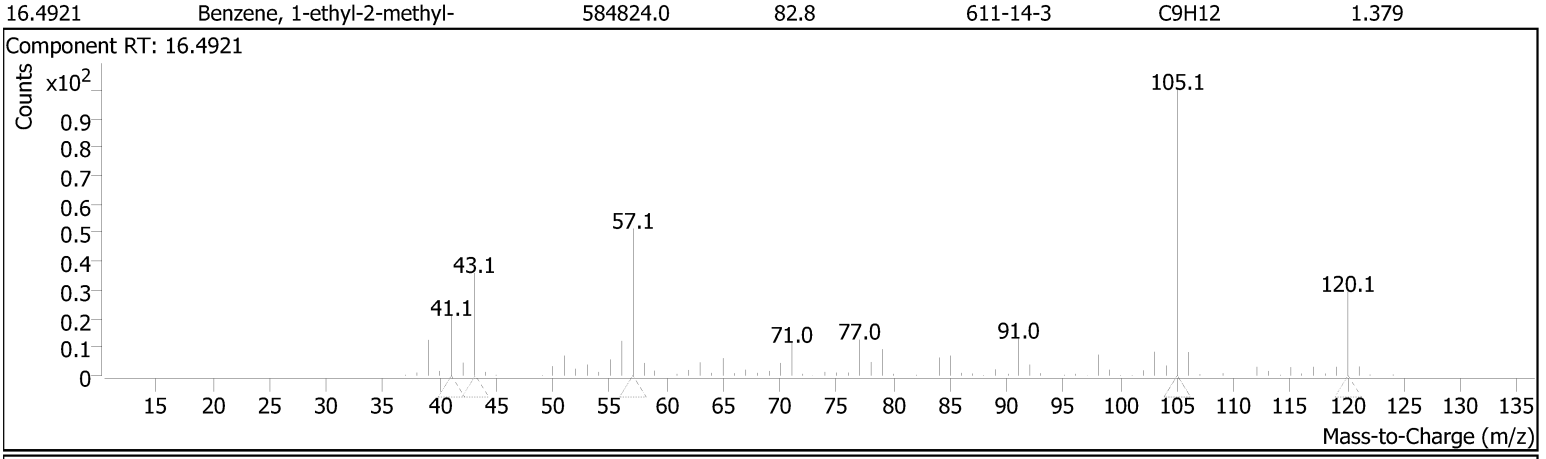


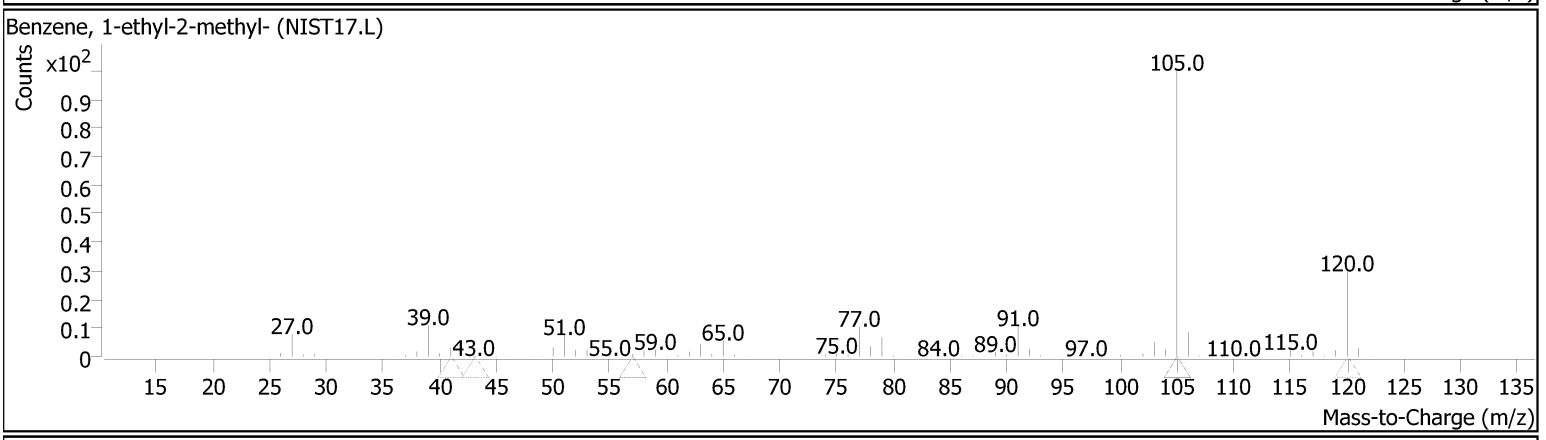


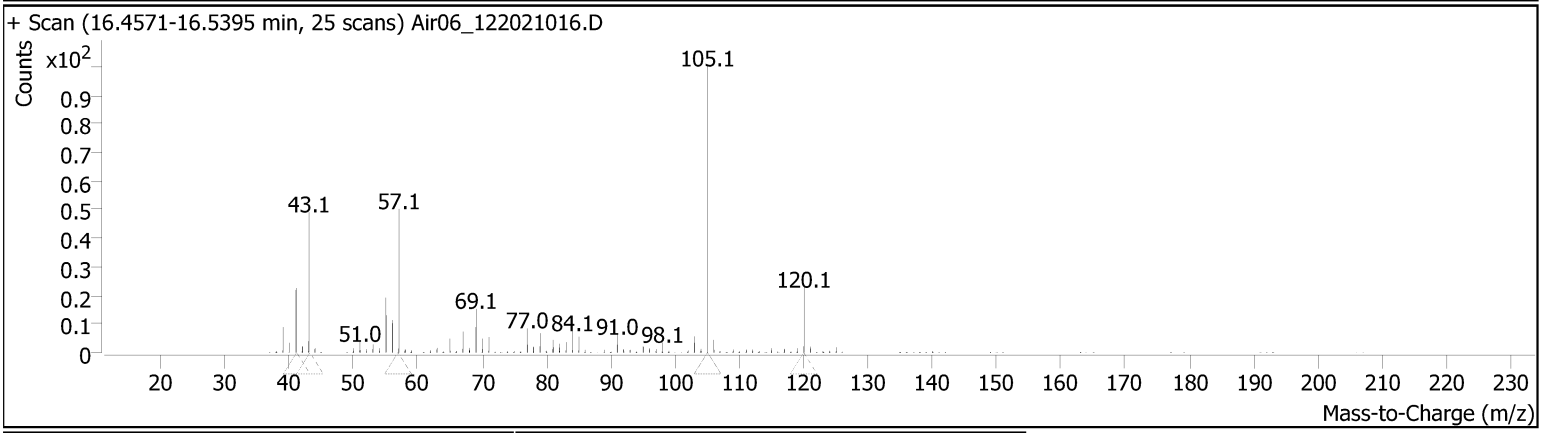


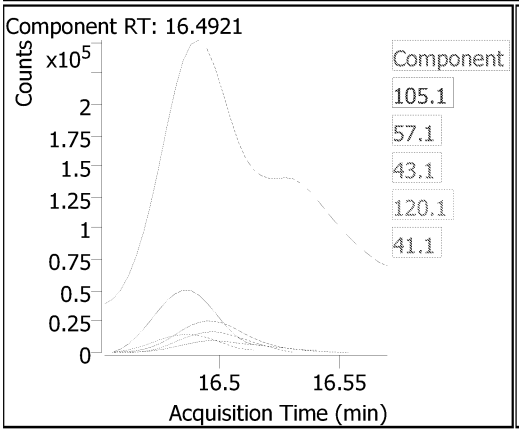


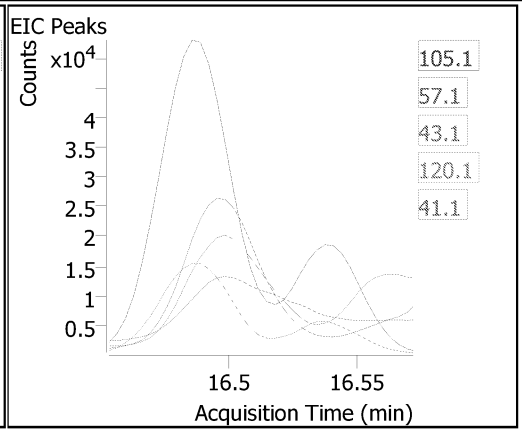
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.4921	Benzene, 1-ethyl-2-methyl-	584824.0	82.8	611-14-3	C9H12	1.379

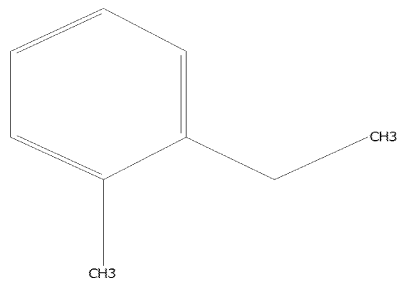




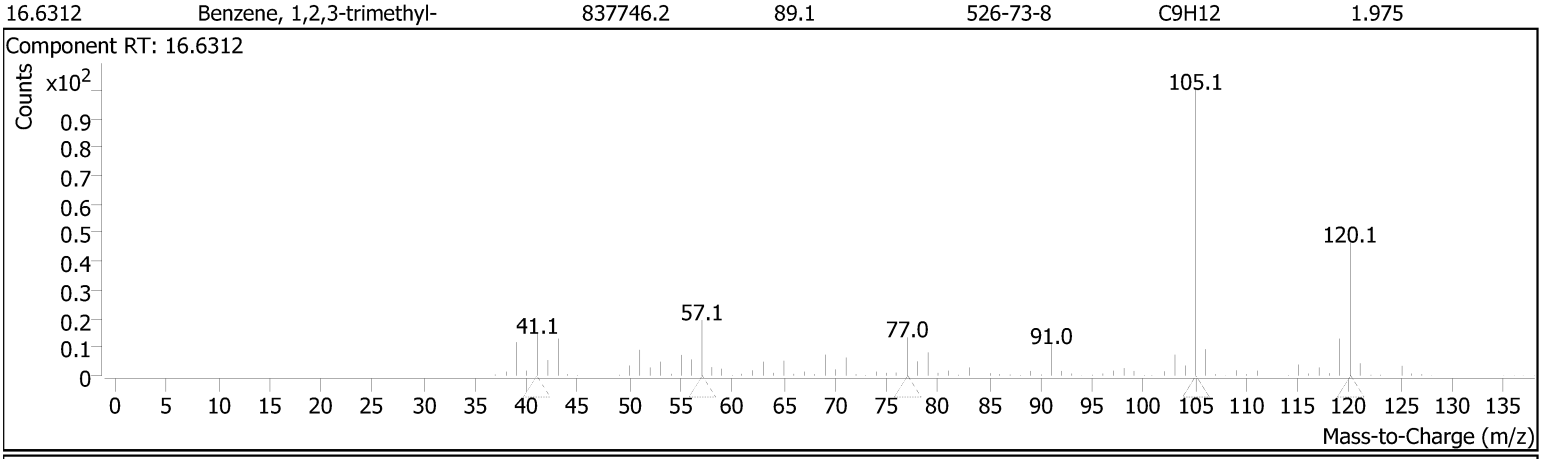


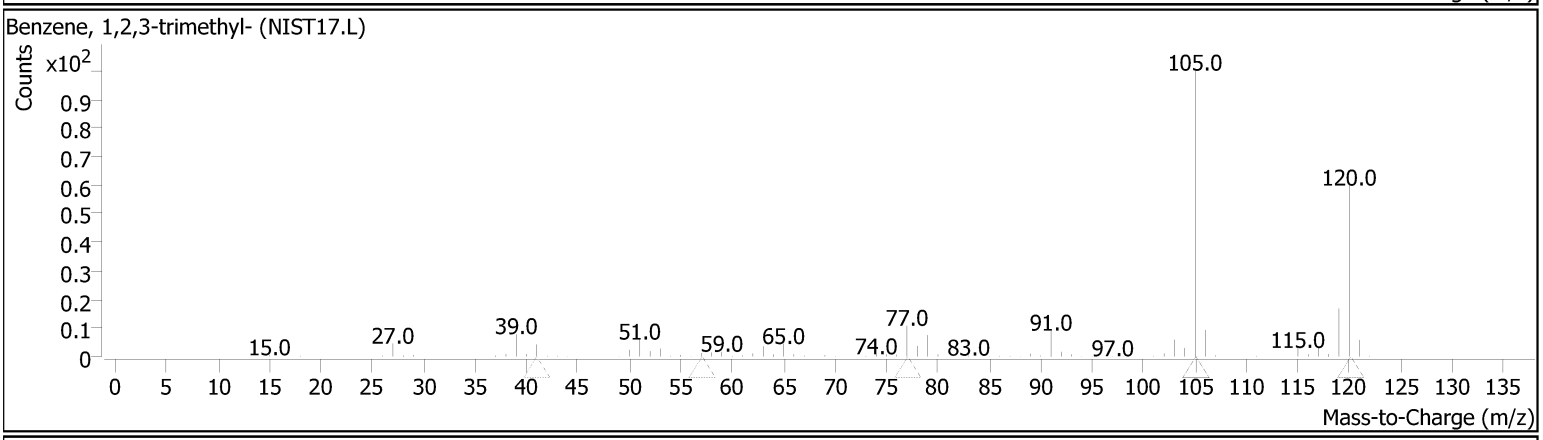


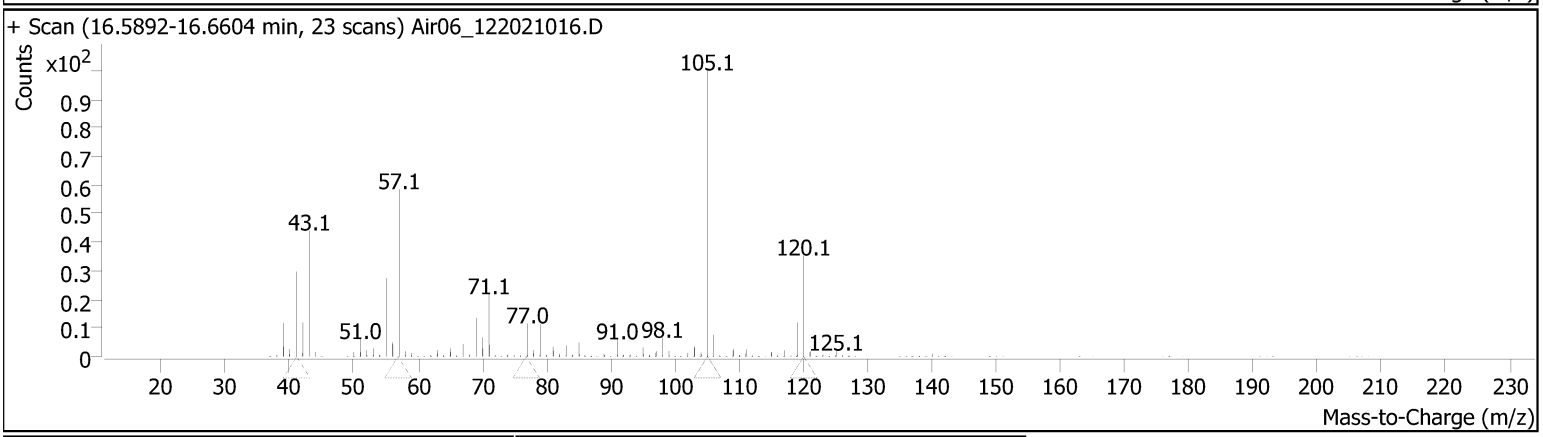


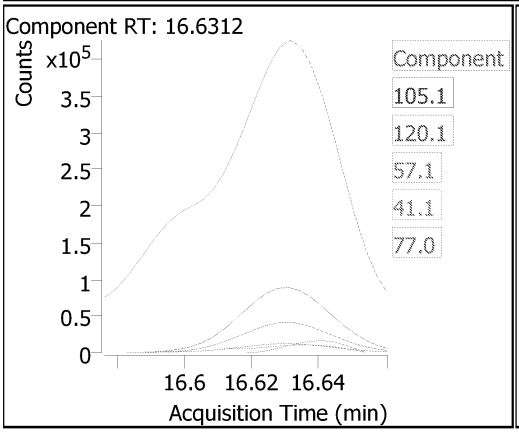


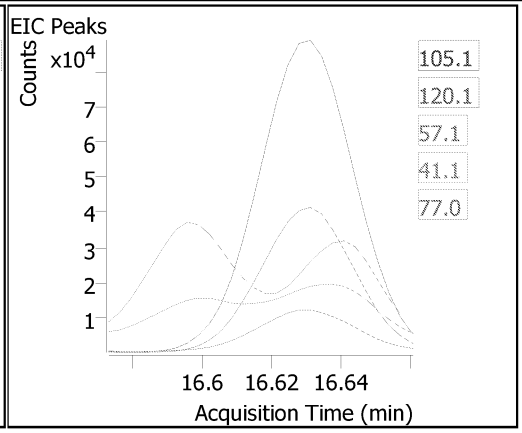
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.6312	Benzene, 1,2,3-trimethyl-	837746.2	89.1	526-73-8	C9H12	1.975

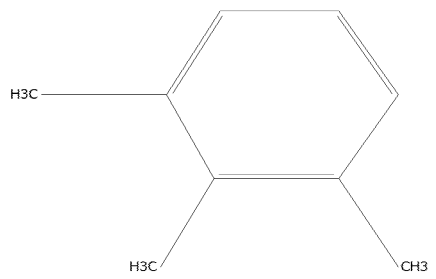




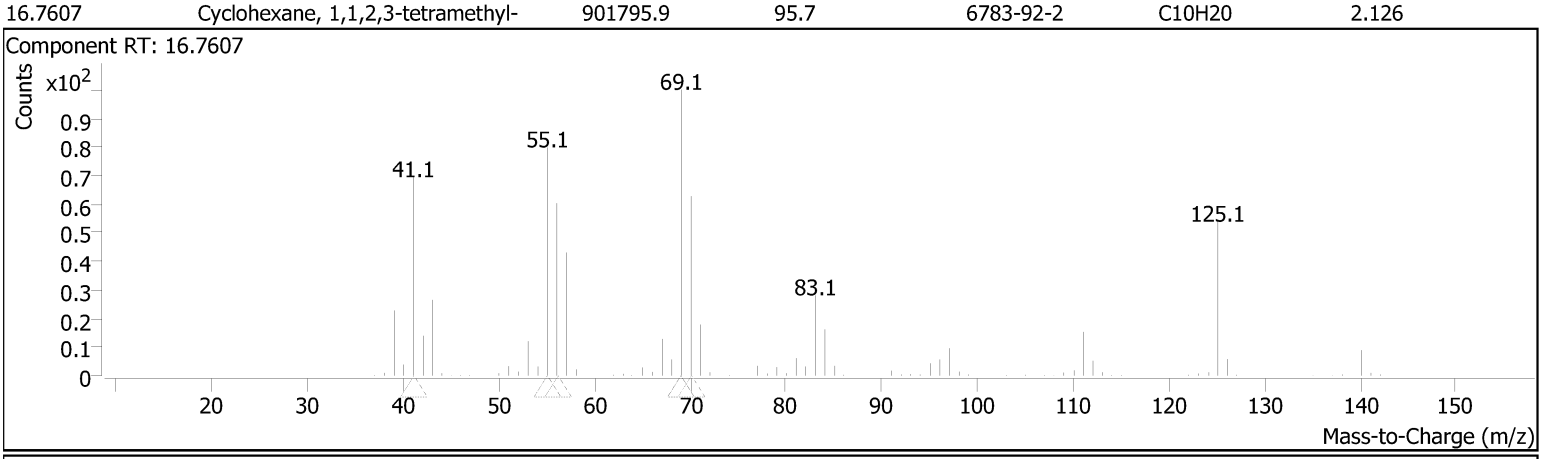


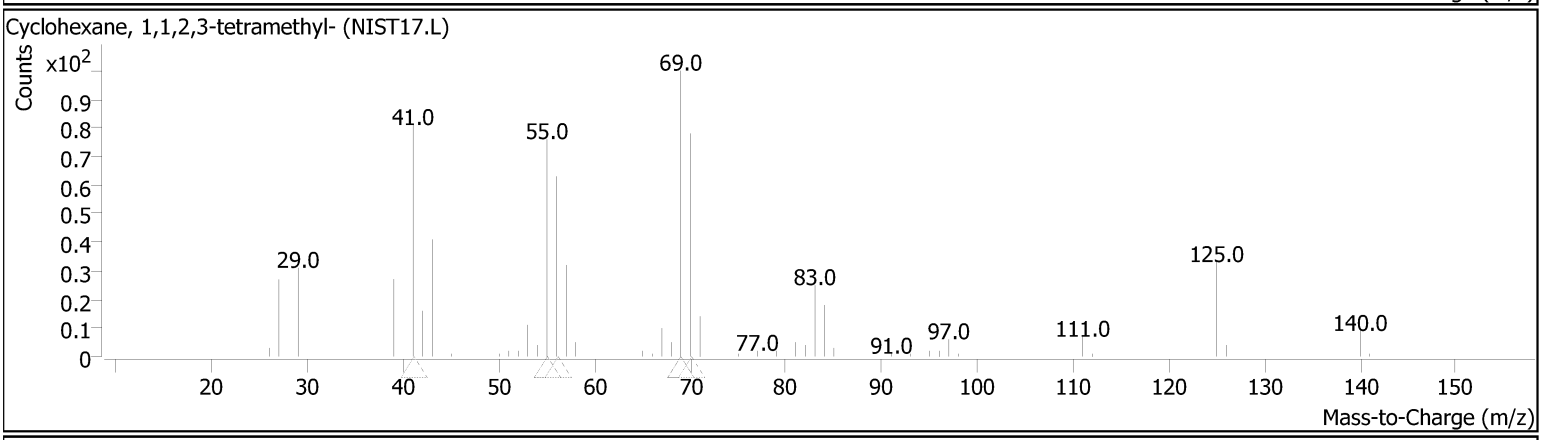


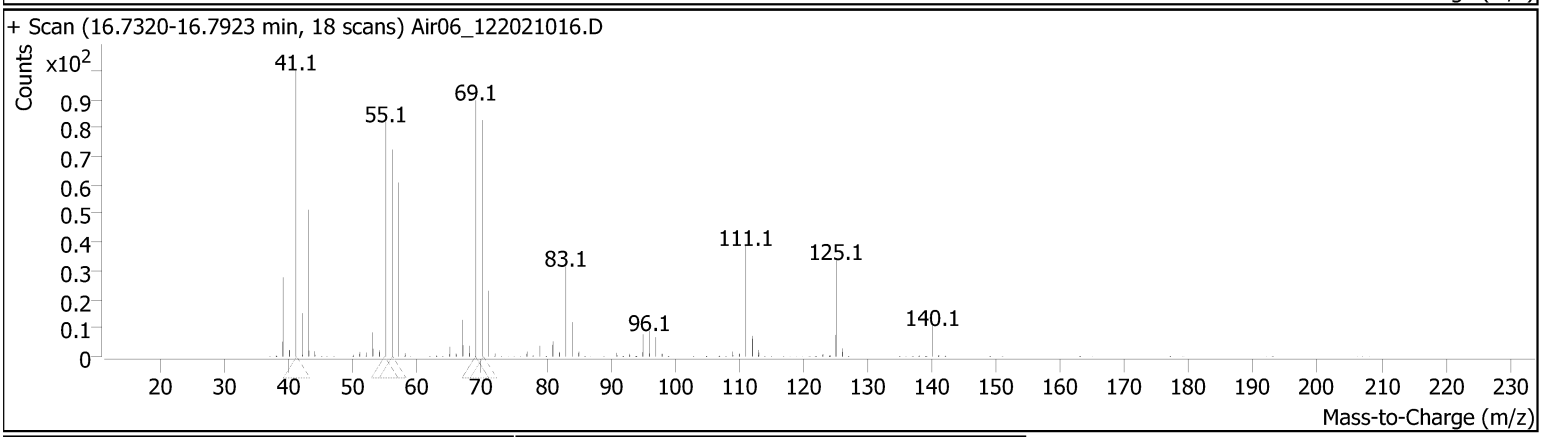


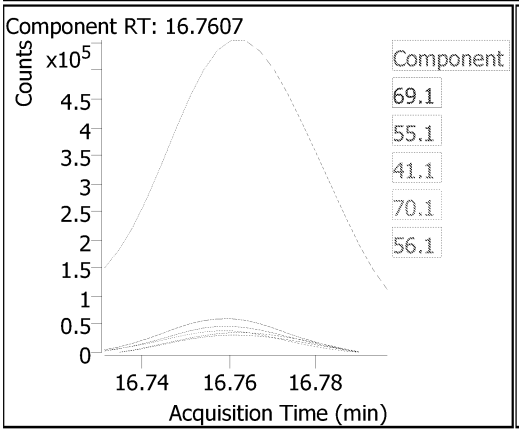


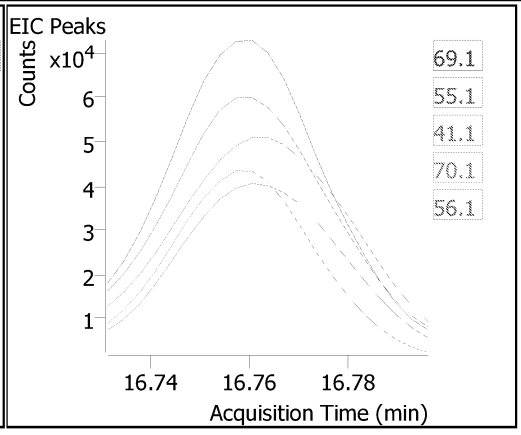
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.7607	Cyclohexane, 1,1,2,3-tetramethyl-	901795.9	95.7	6783-92-2	C10H20	2.126

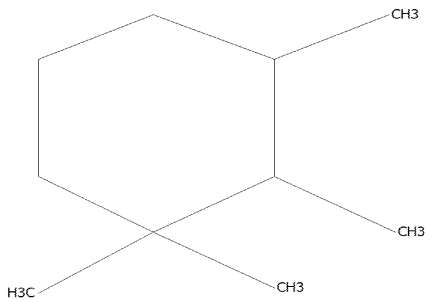




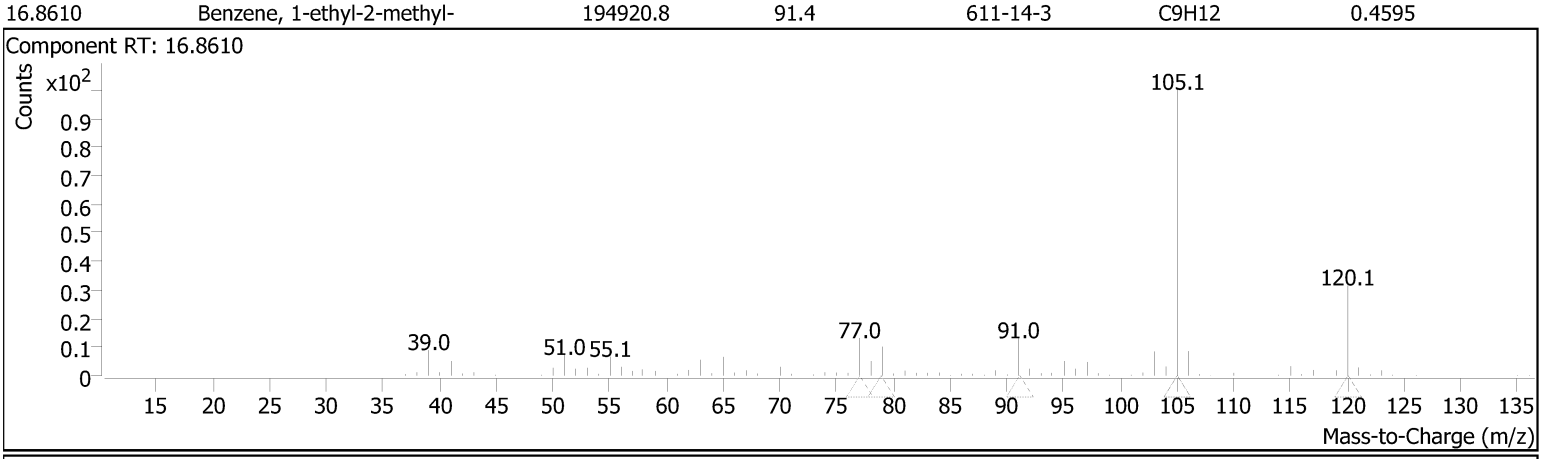


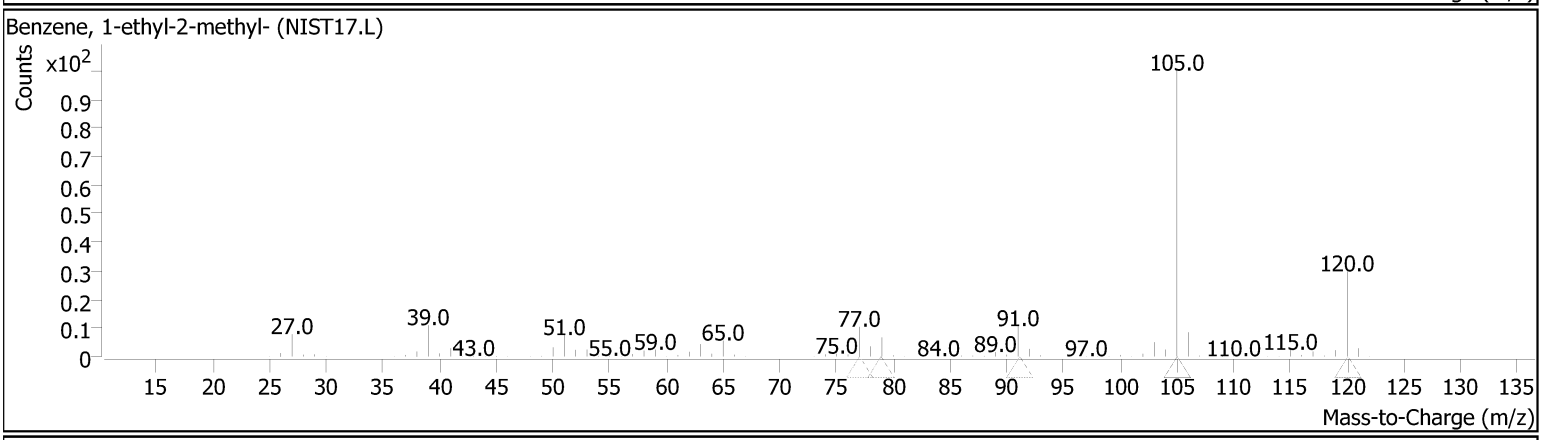


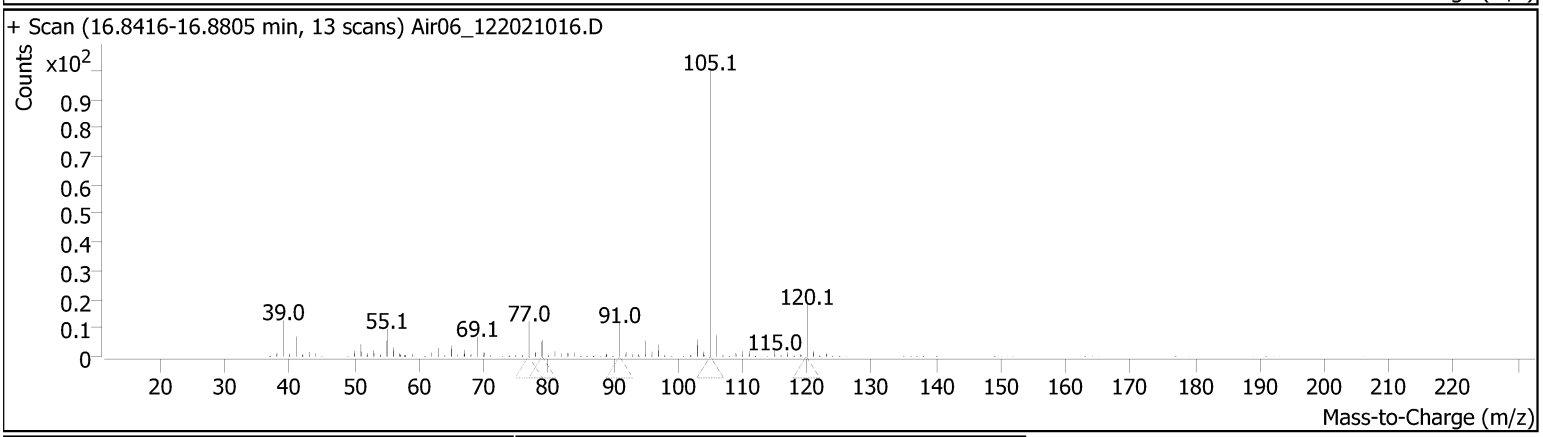


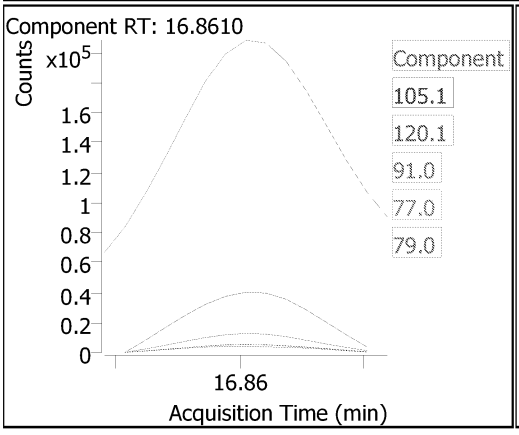


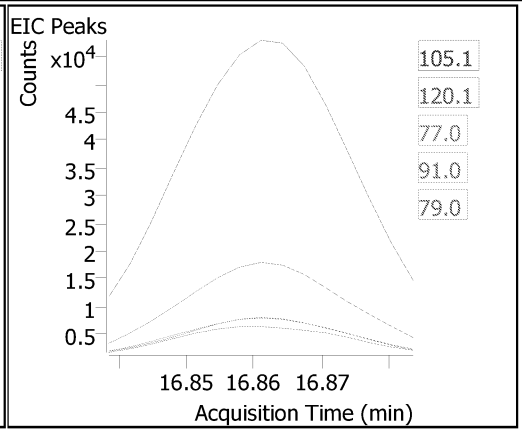
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.8610	Benzene, 1-ethyl-2-methyl-	194920.8	91.4	611-14-3	C9H12	0.4595

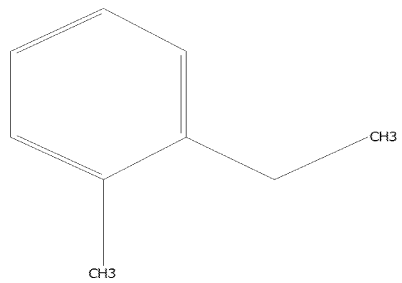




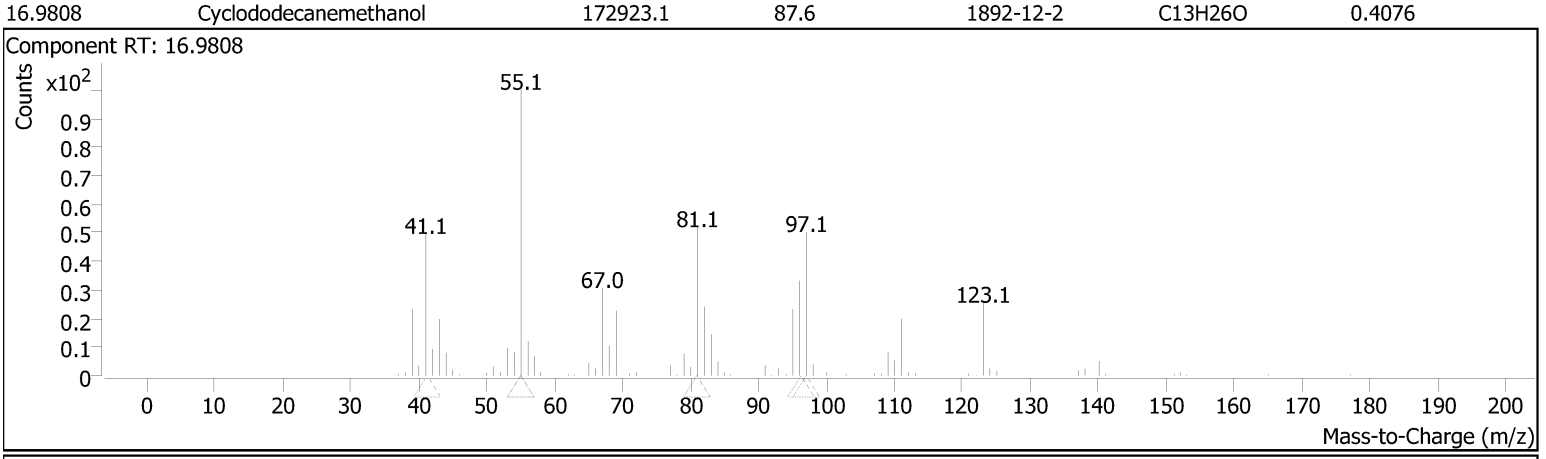


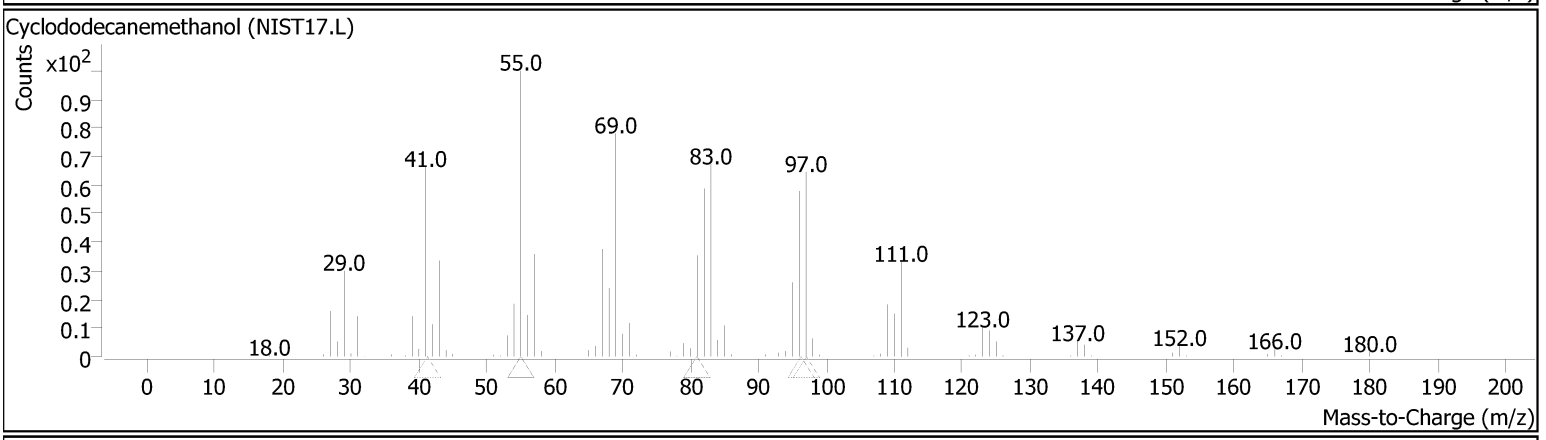


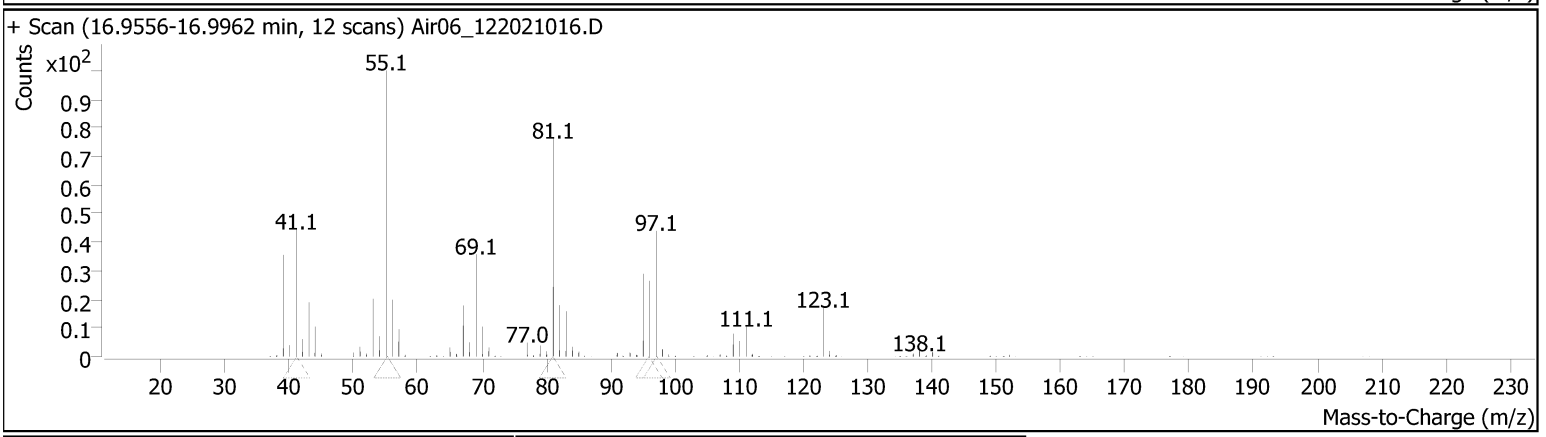


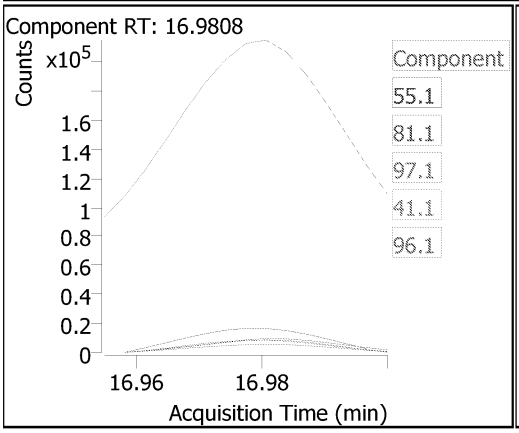


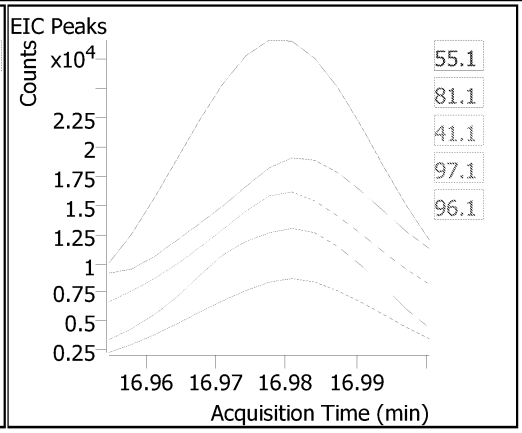
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.9808	Cyclododecanemethanol	172923.1	87.6	1892-12-2	C13H26O	0.4076

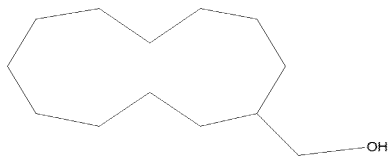




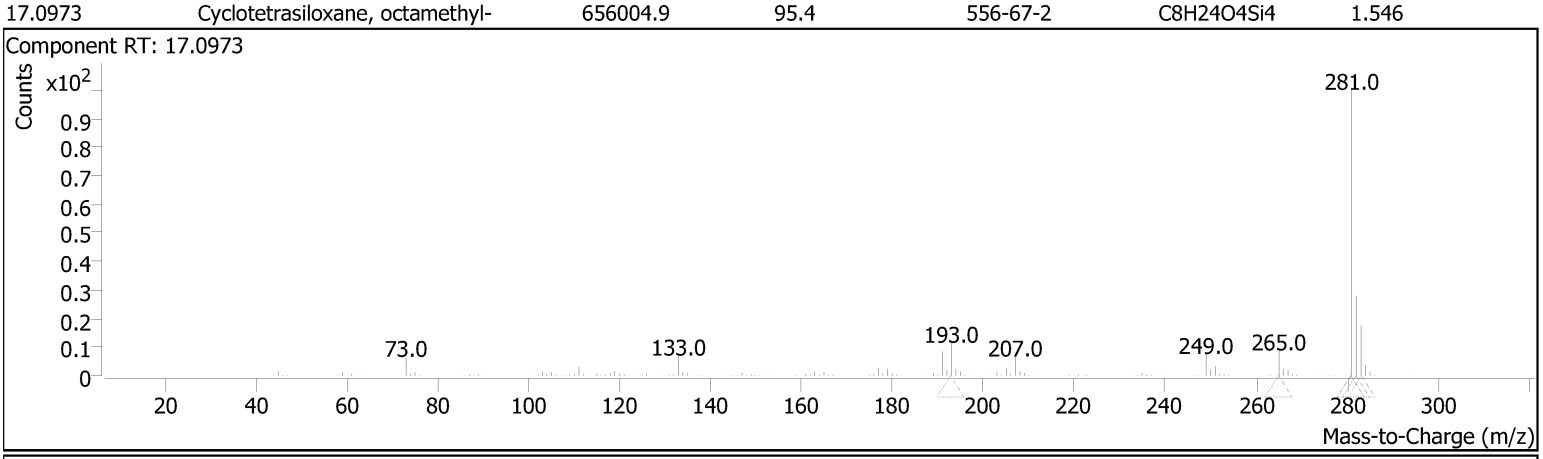


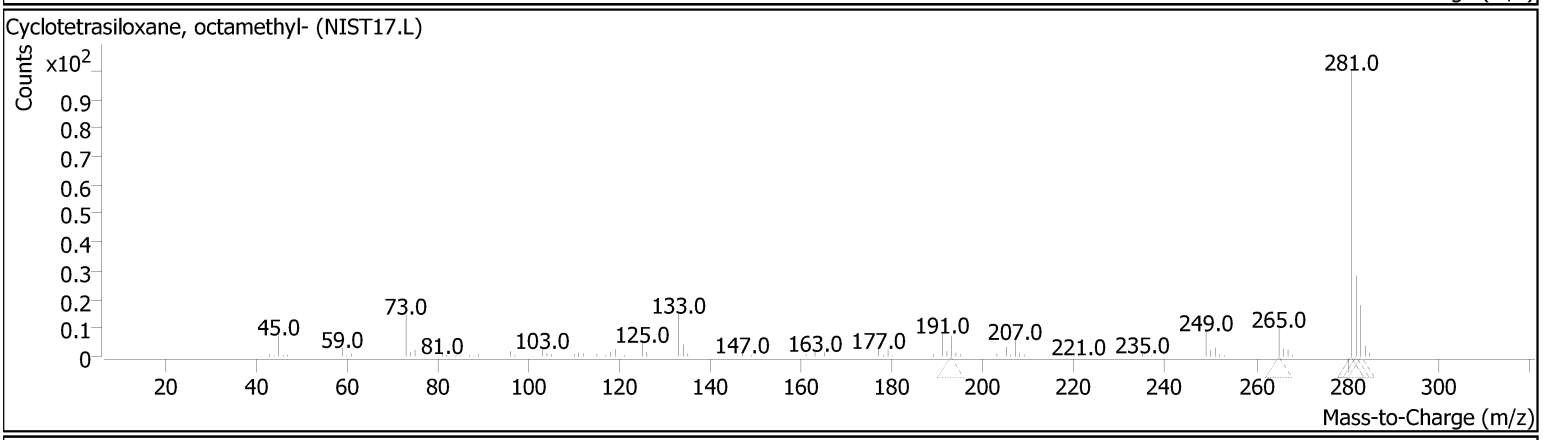


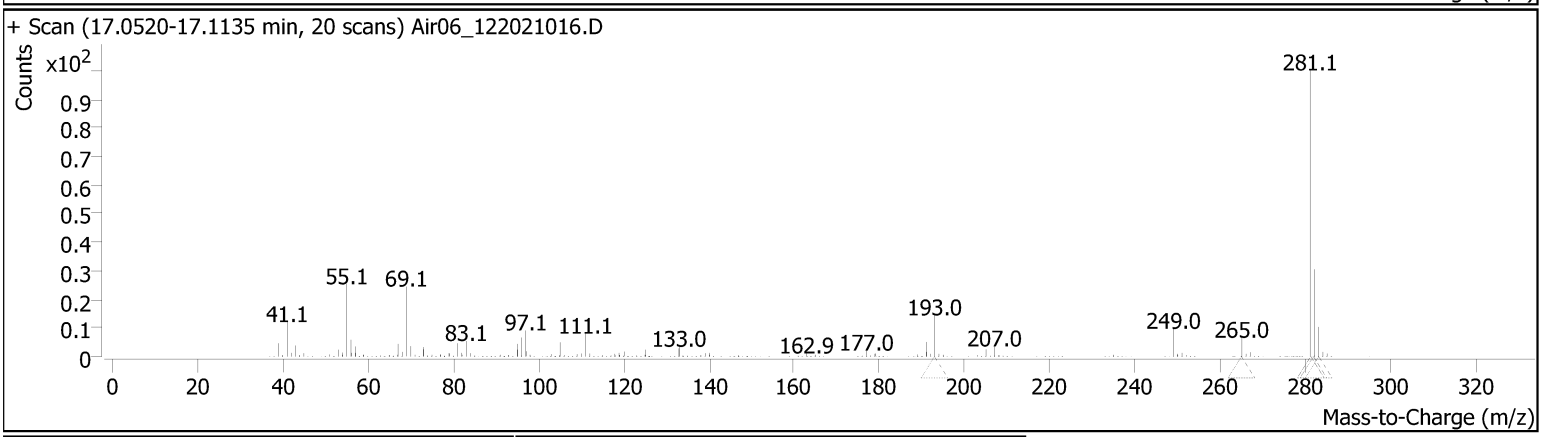


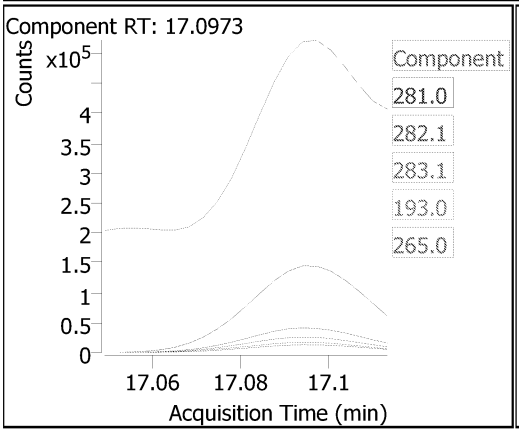


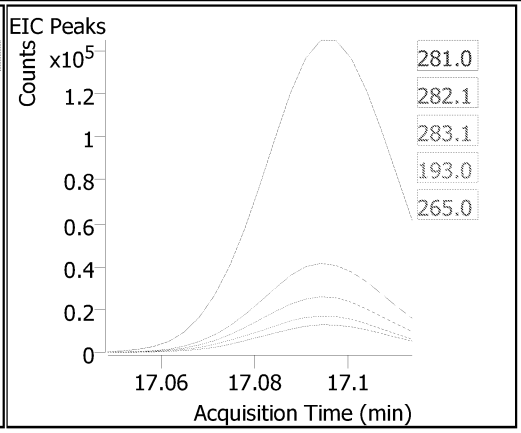
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.0973	Cyclotetrasiloxane, octamethyl-	656004.9	95.4	556-67-2	C8H24O4Si4	1.546

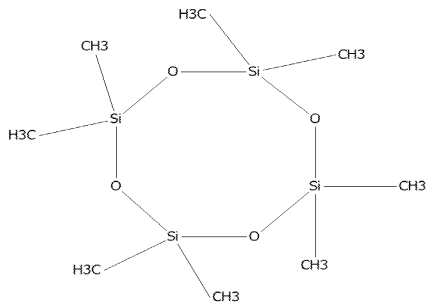




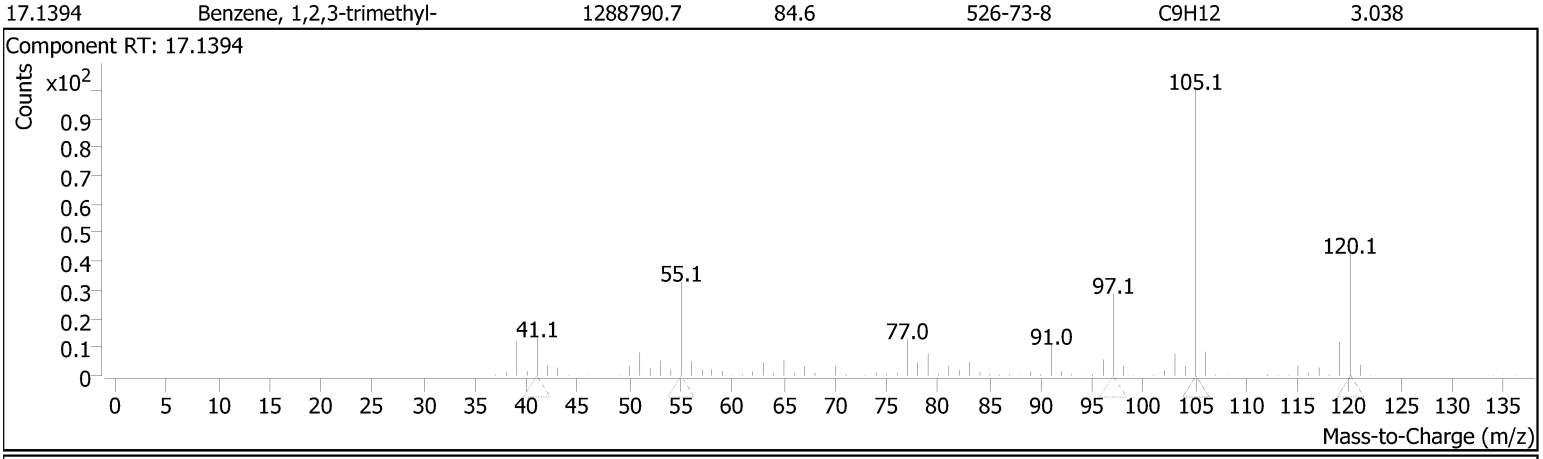


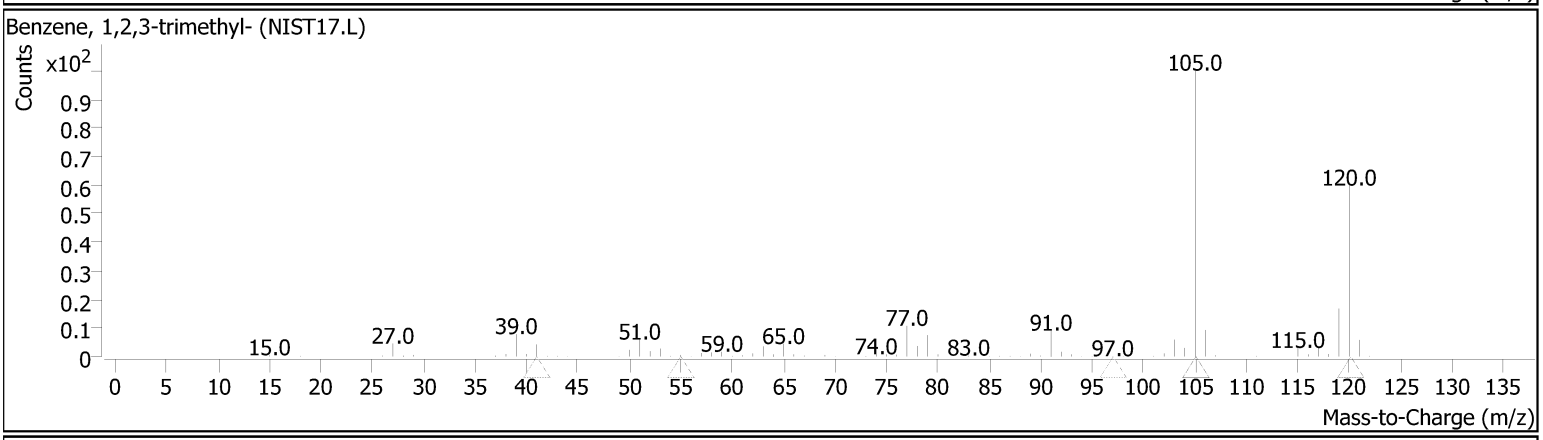


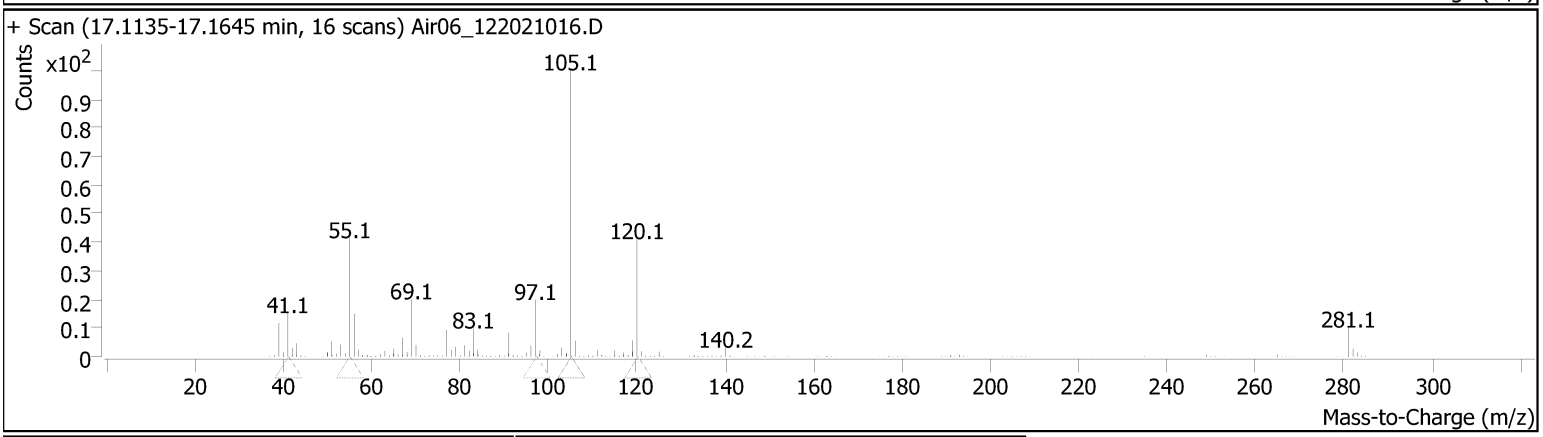


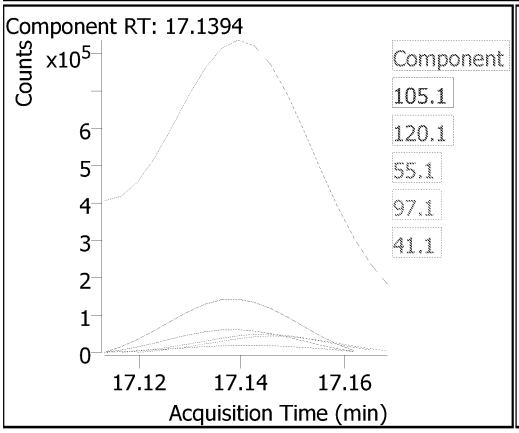


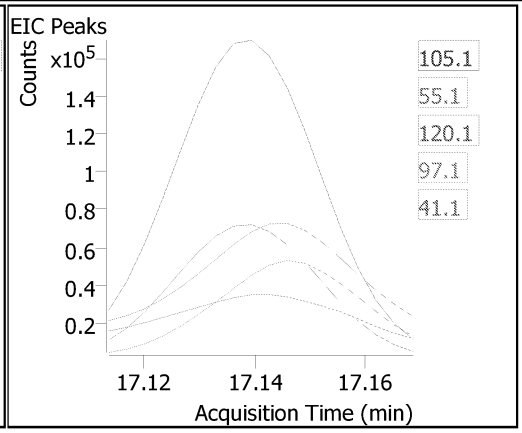
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.1394	Benzene, 1,2,3-trimethyl-	1288790.7	84.6	526-73-8	C9H12	3.038

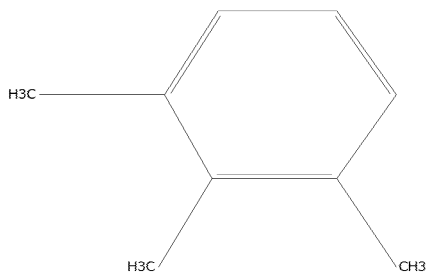




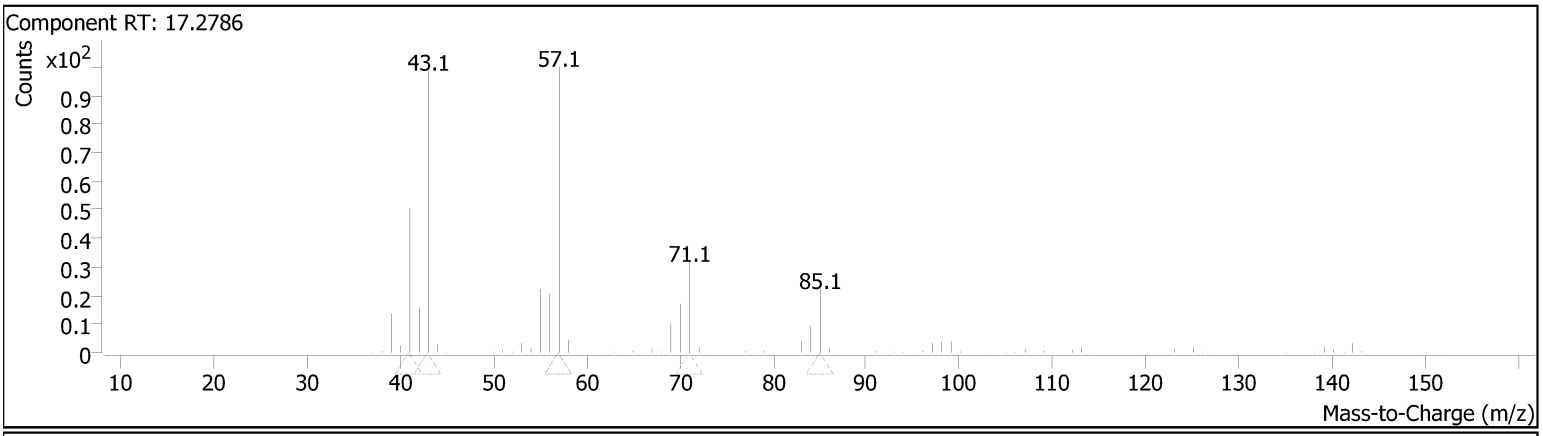


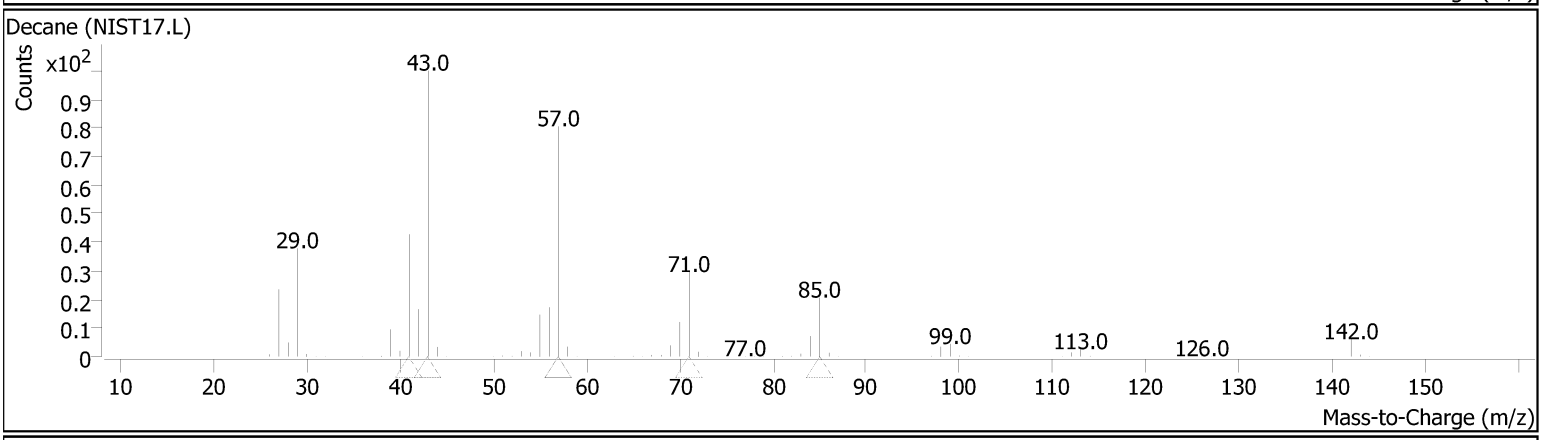


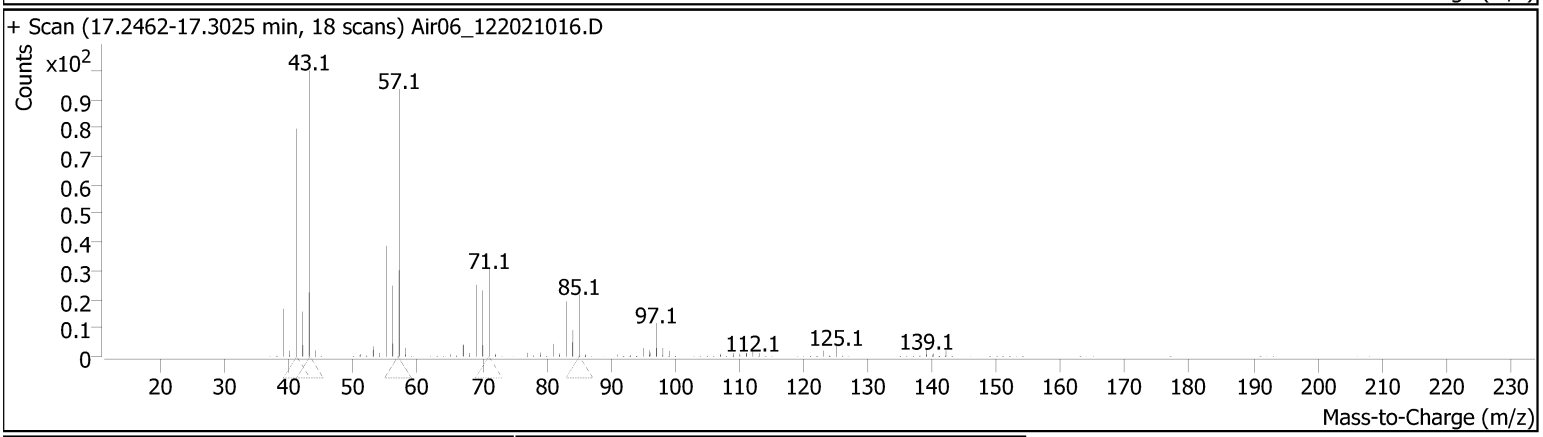


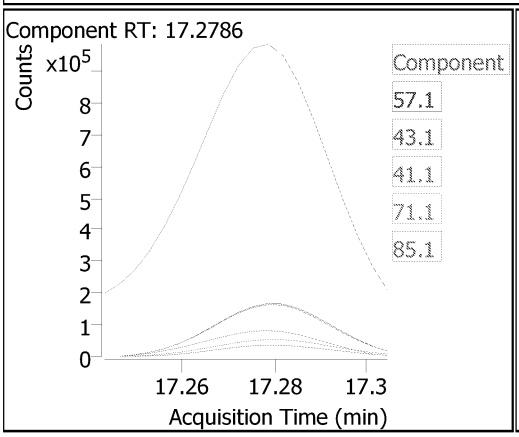


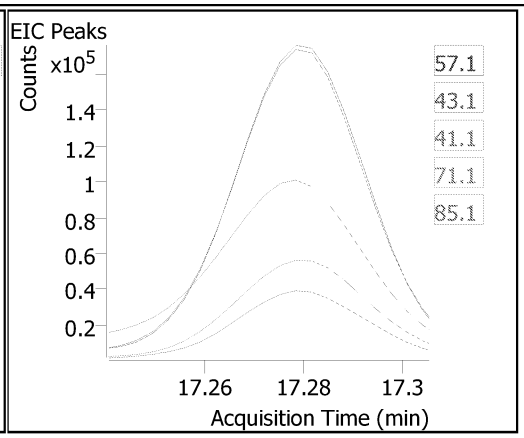
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.2786	Decane	1500908.0	93.7	124-18-5	C10H22	3.538





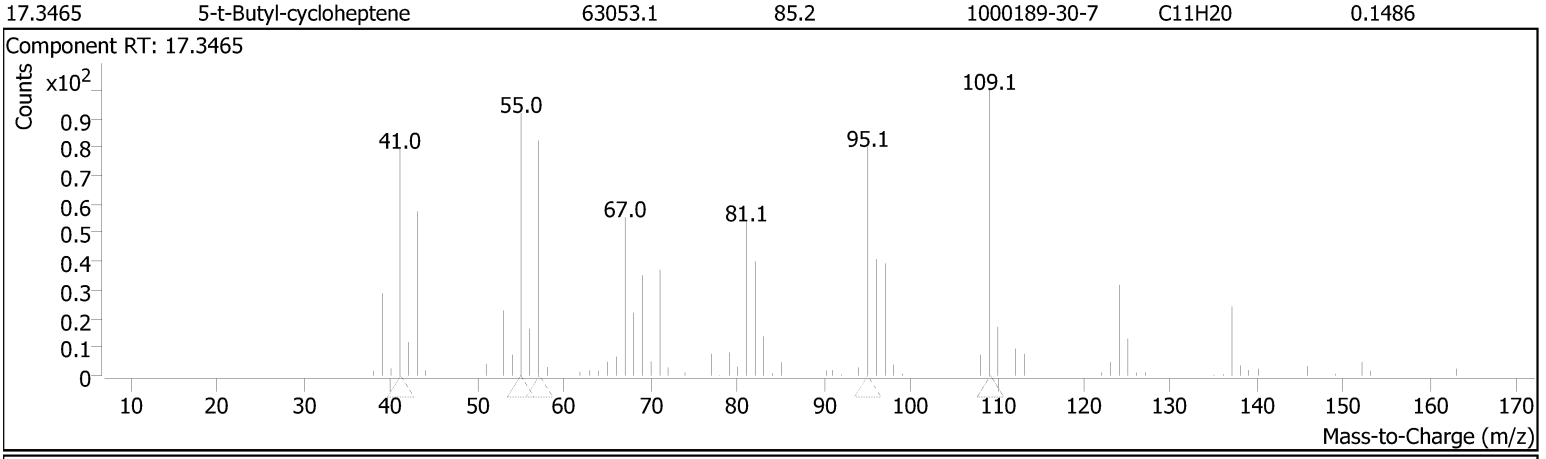


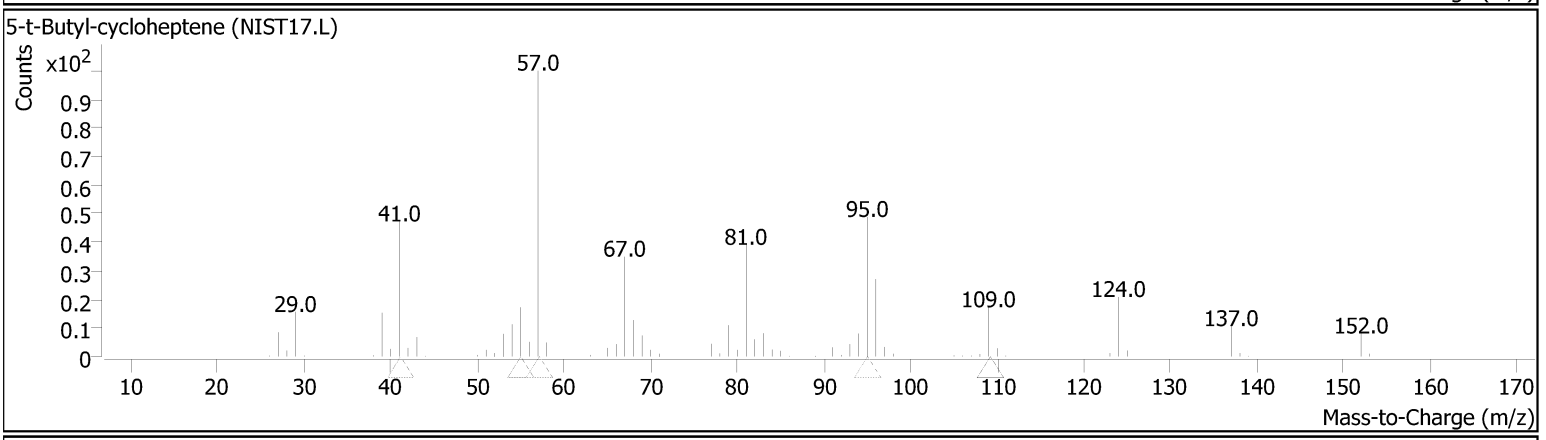


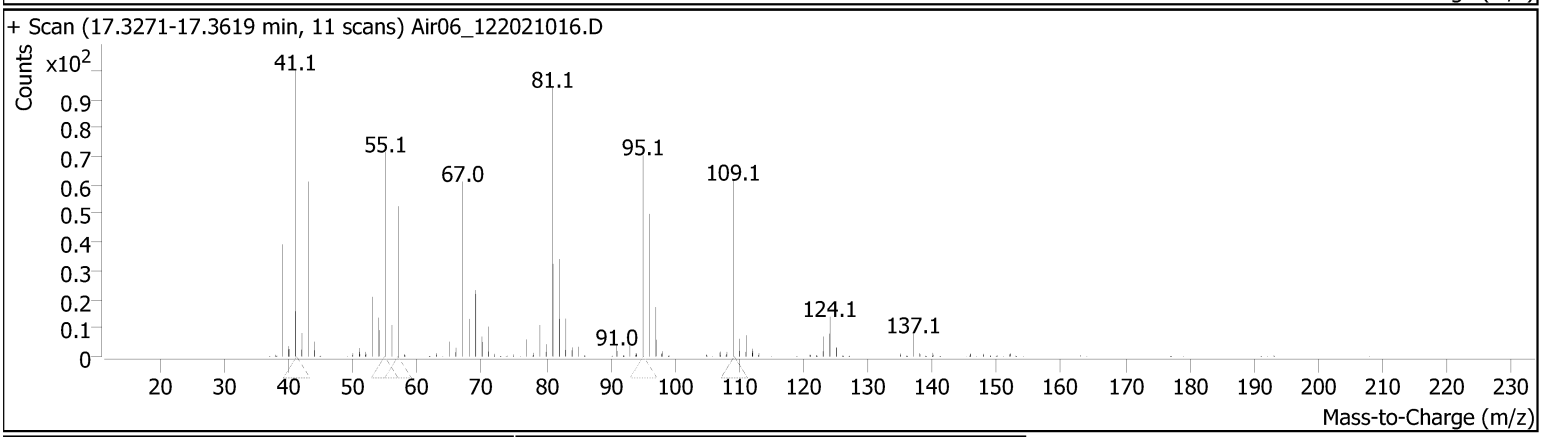


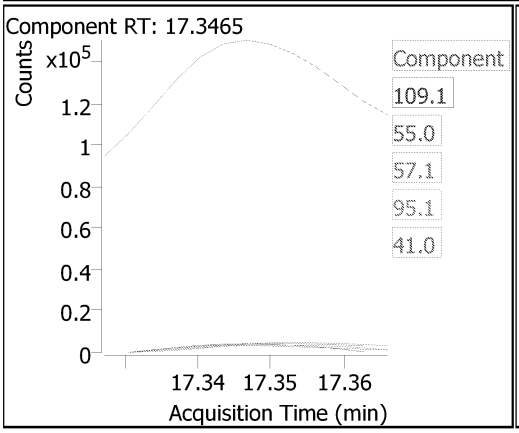


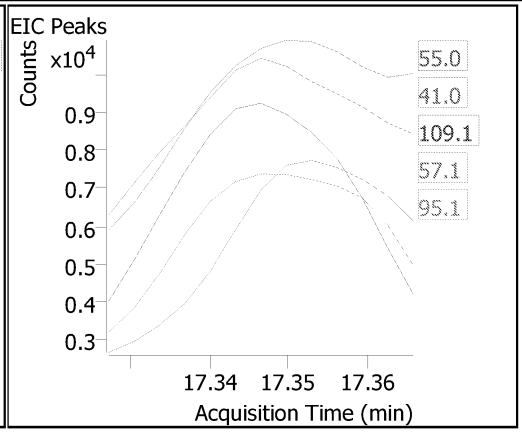
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.3465	5-t-Butyl-cycloheptene	63053.1	85.2	1000189-30-7	C11H20	0.1486

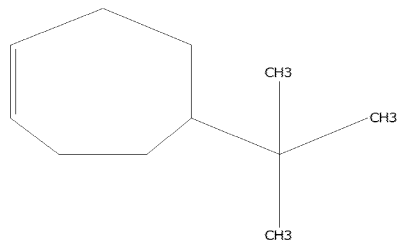




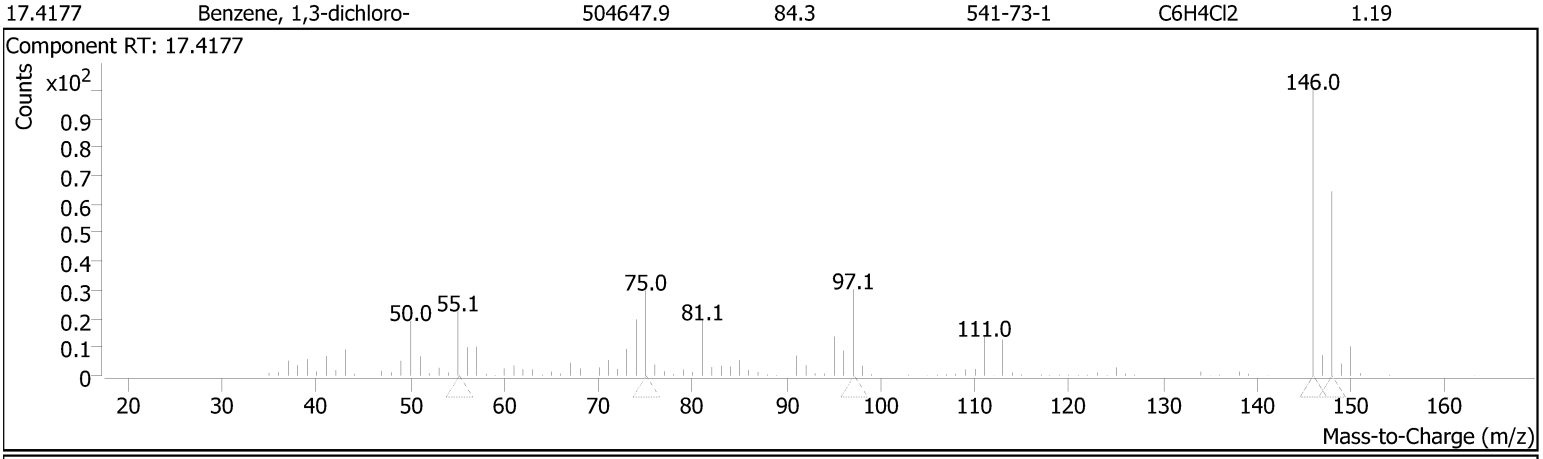


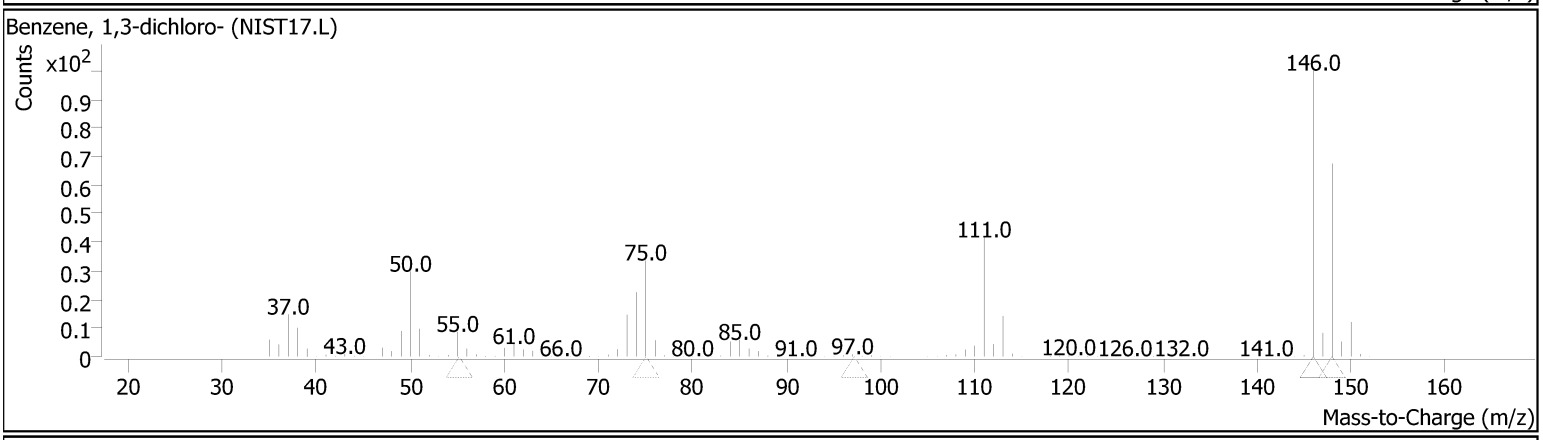


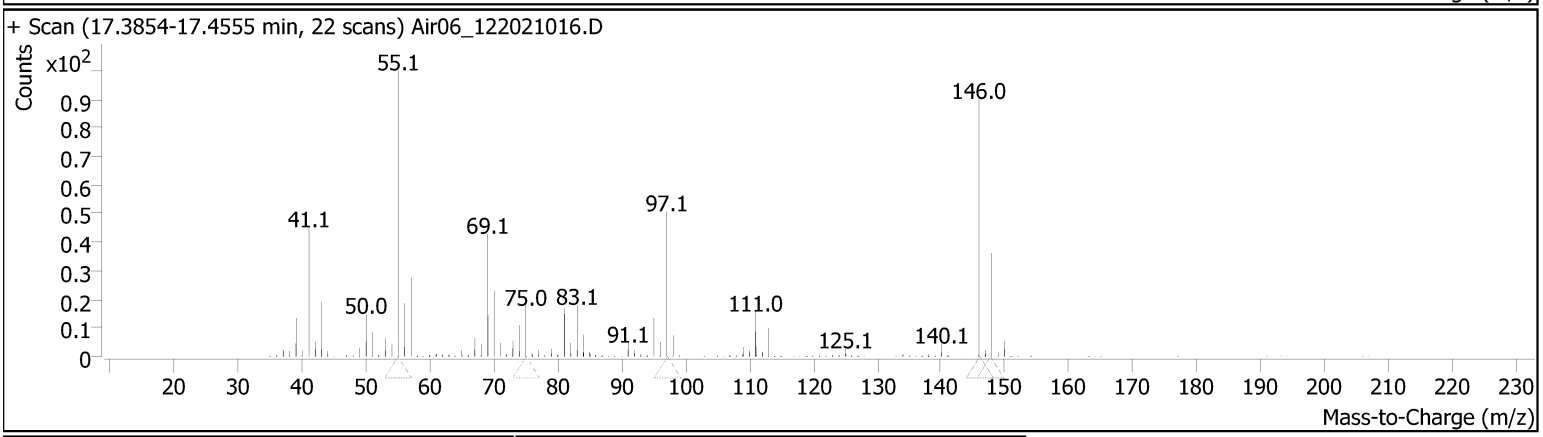


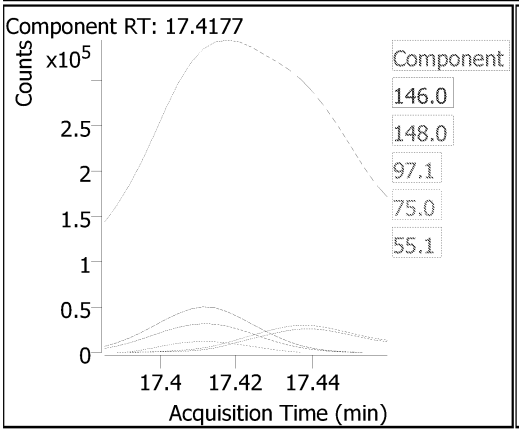


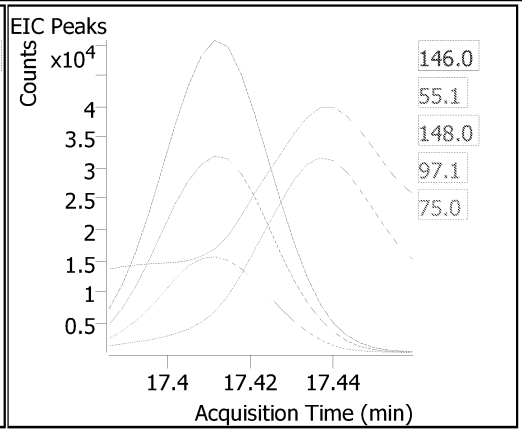
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.4177	Benzene, 1,3-dichloro-	504647.9	84.3	541-73-1	C6H4Cl2	1.19

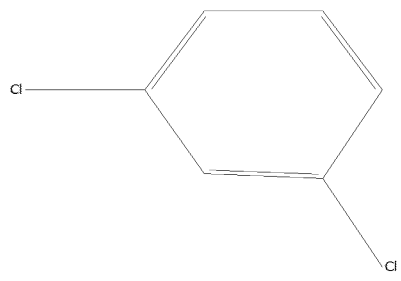




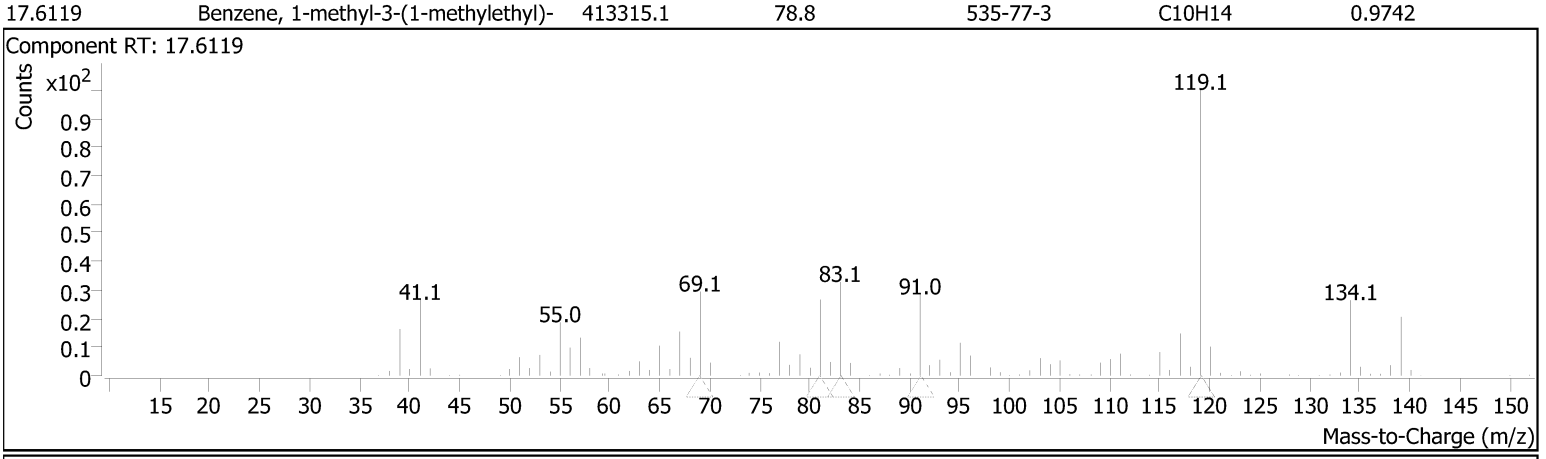


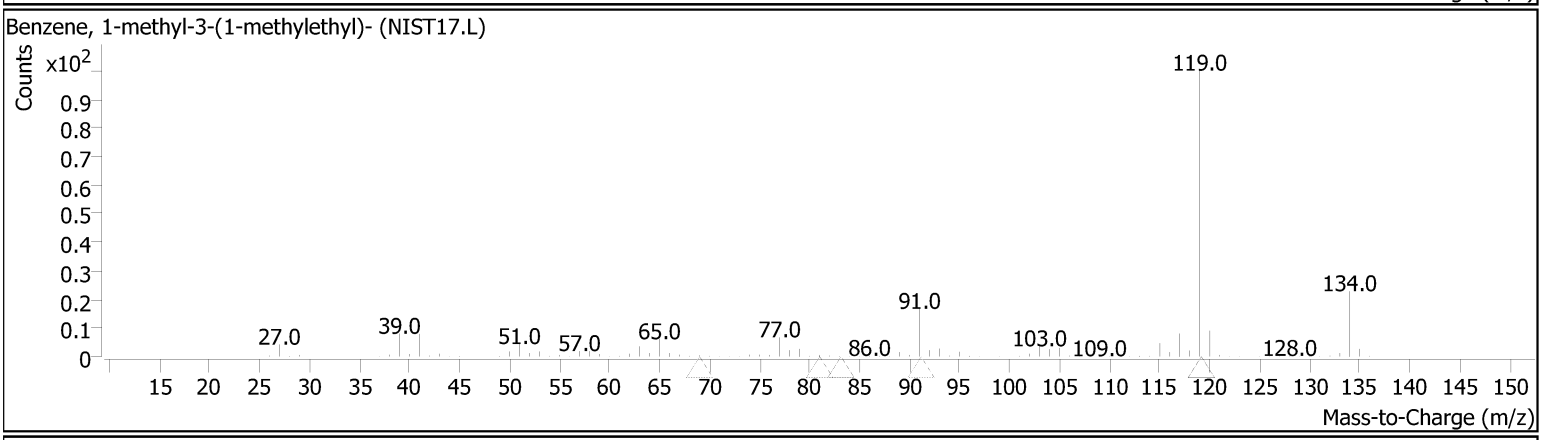


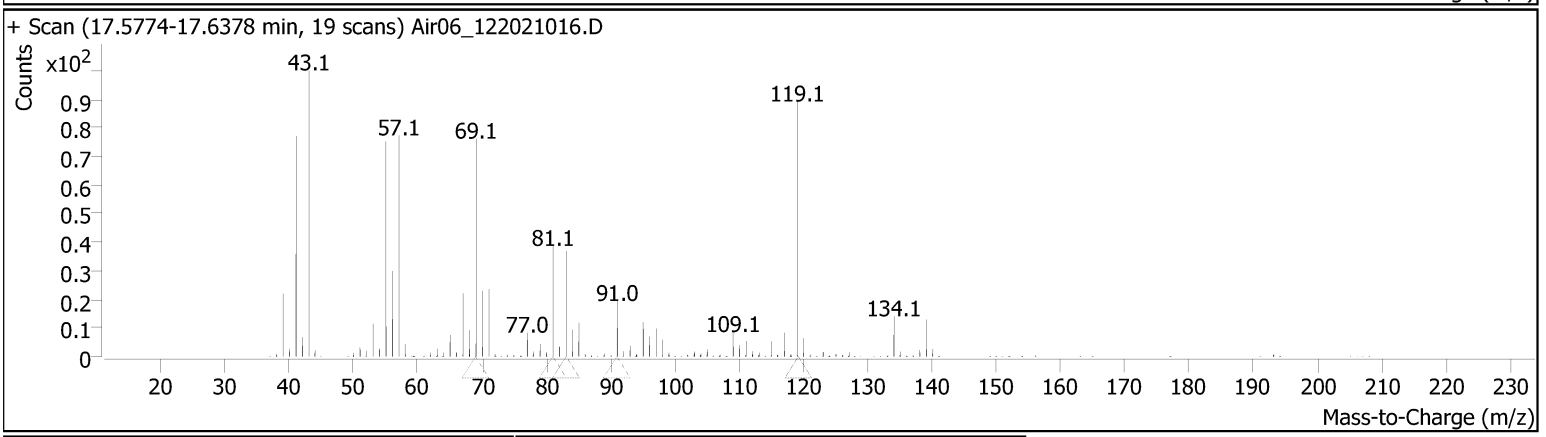


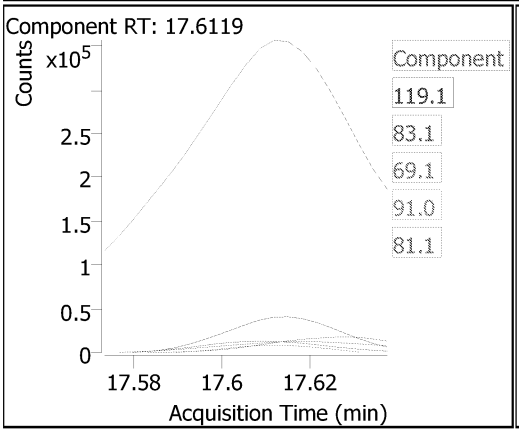


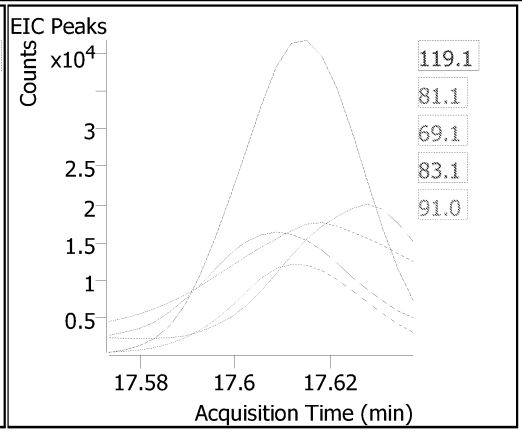
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.6119	Benzene, 1-methyl-3-(1-methylethyl)-	413315.1	78.8	535-77-3	C10H14	0.9742

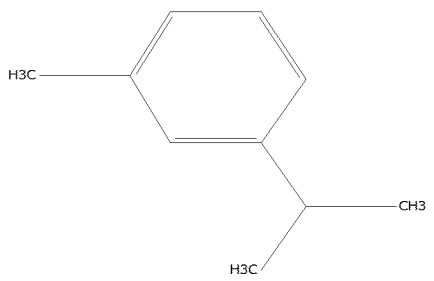




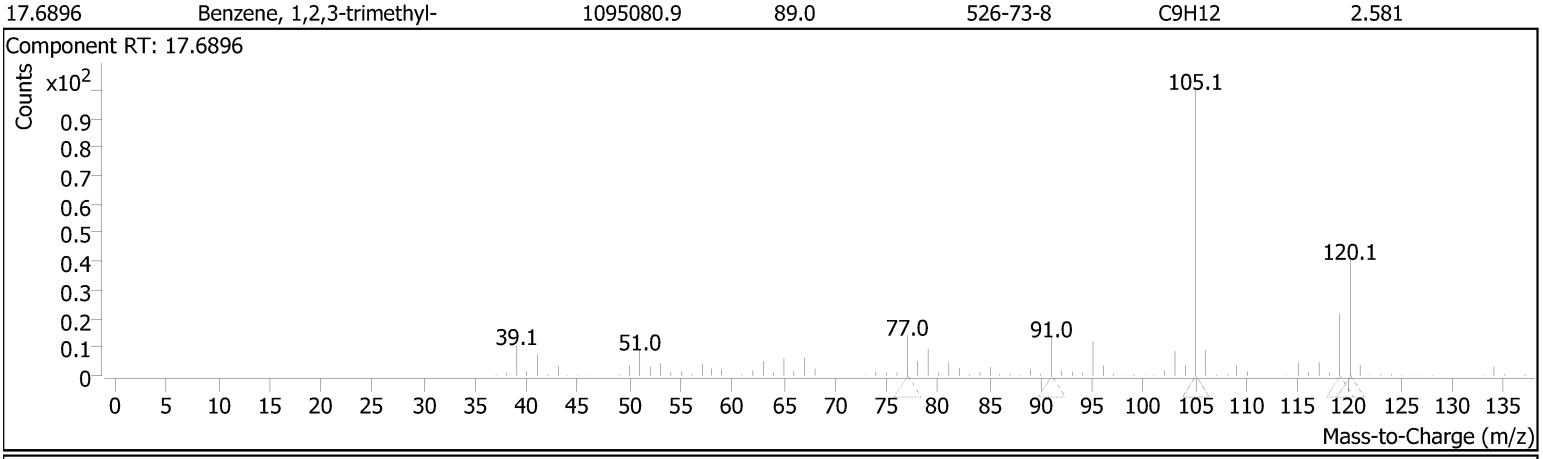


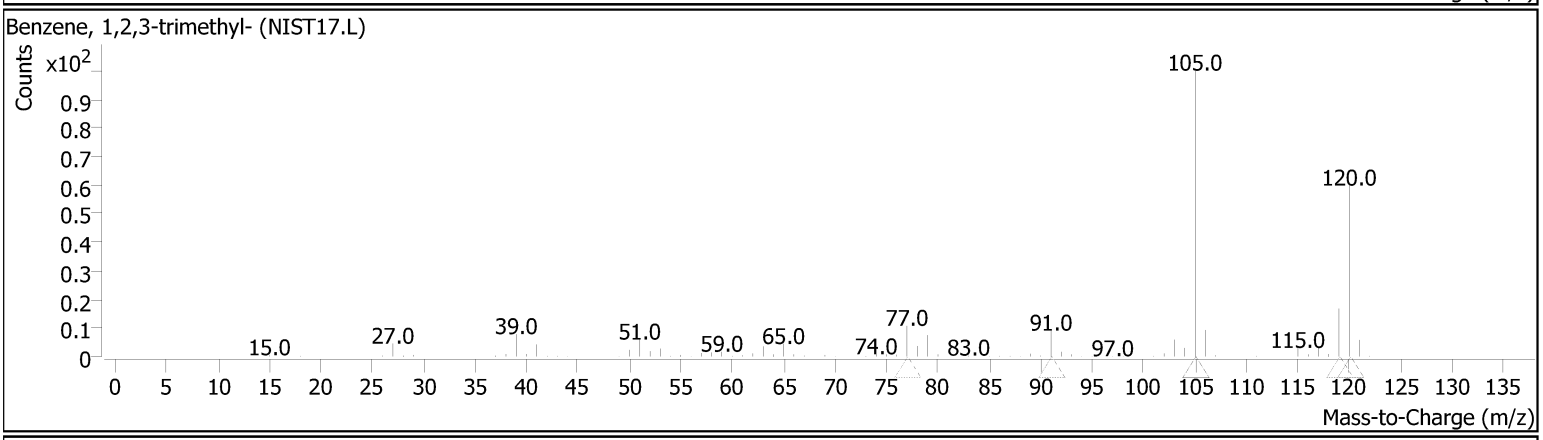


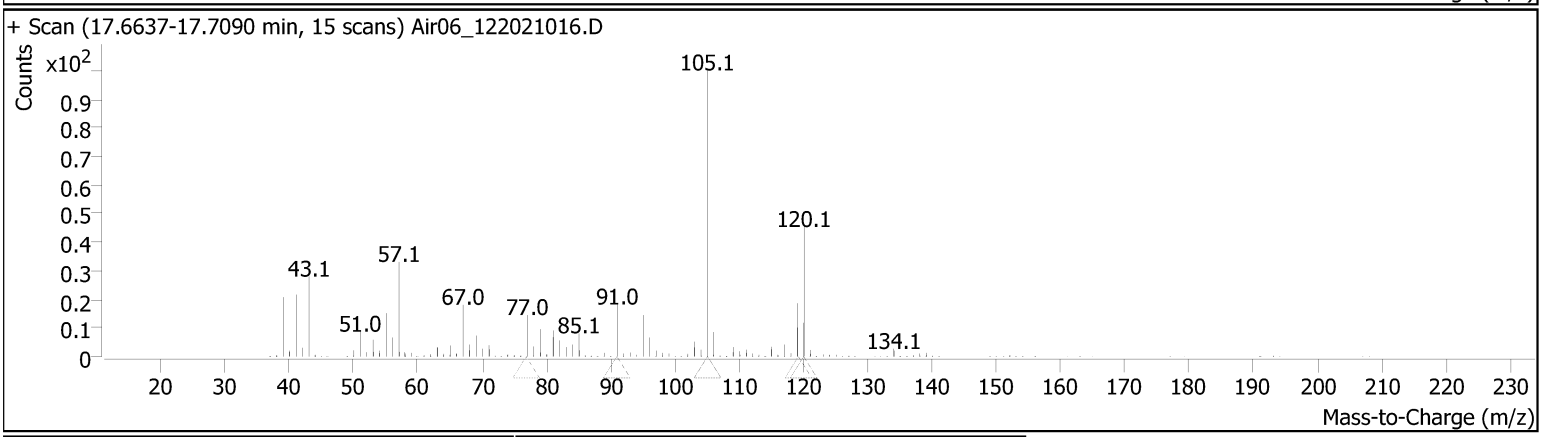


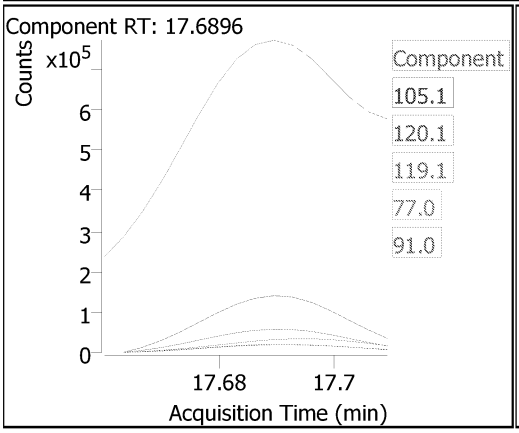


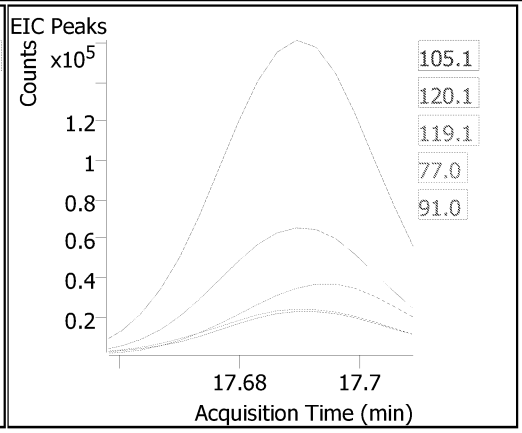
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.6896	Benzene, 1,2,3-trimethyl-	1095080.9	89.0	526-73-8	C9H12	2.581

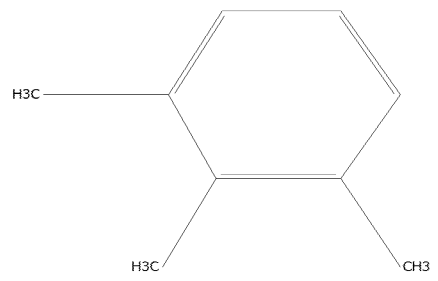




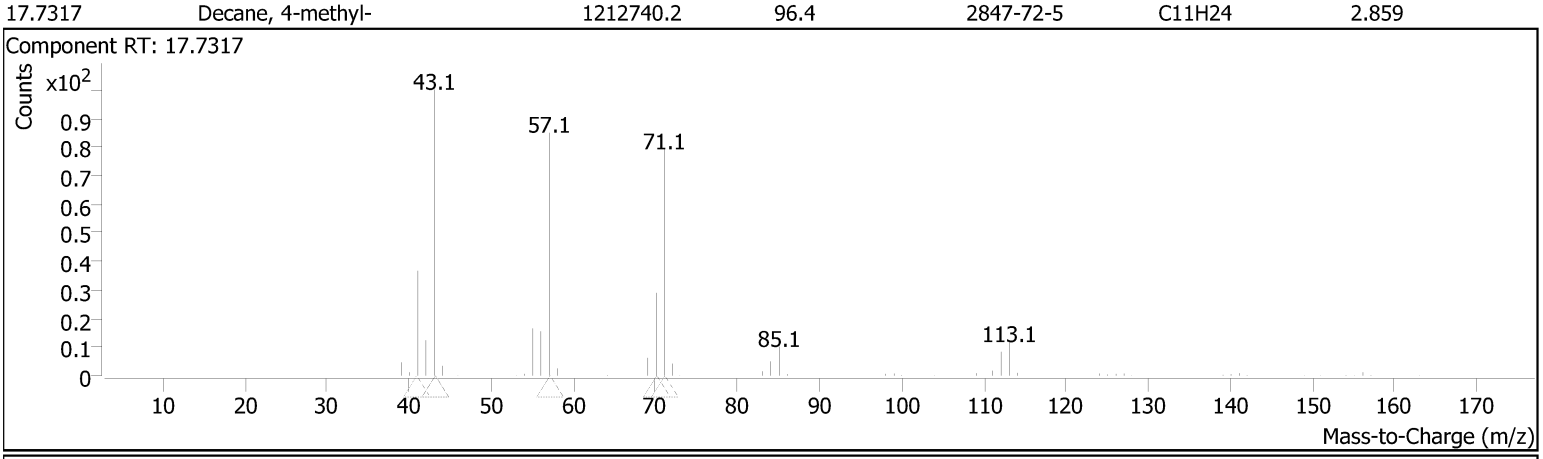


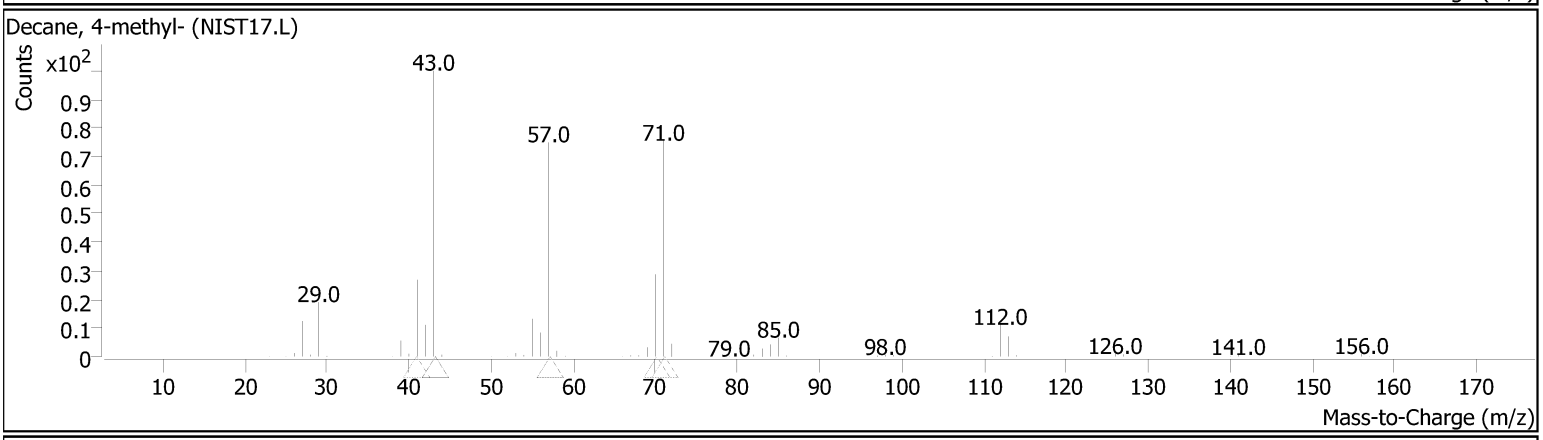


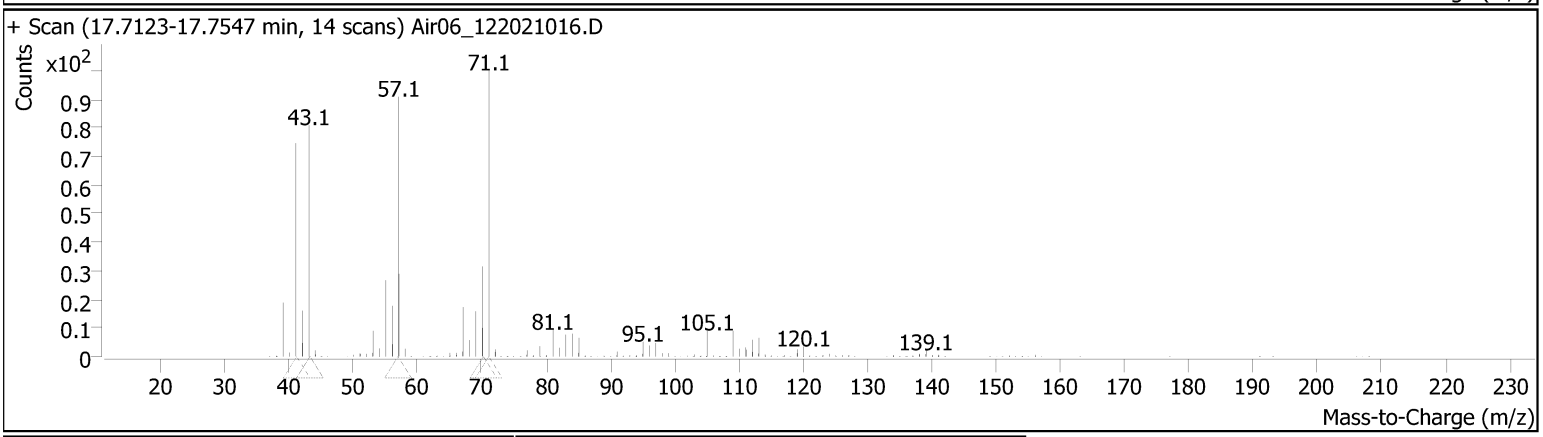


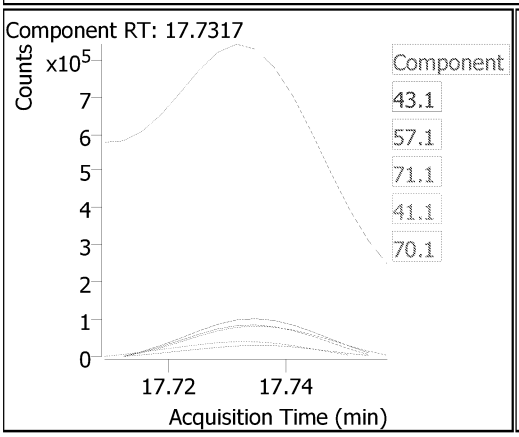


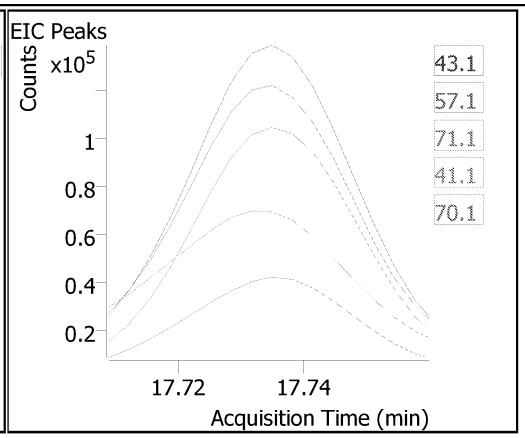
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.7317	Decane, 4-methyl-	1212740.2	96.4	2847-72-5	C11H24	2.859

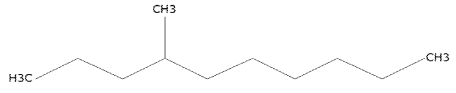




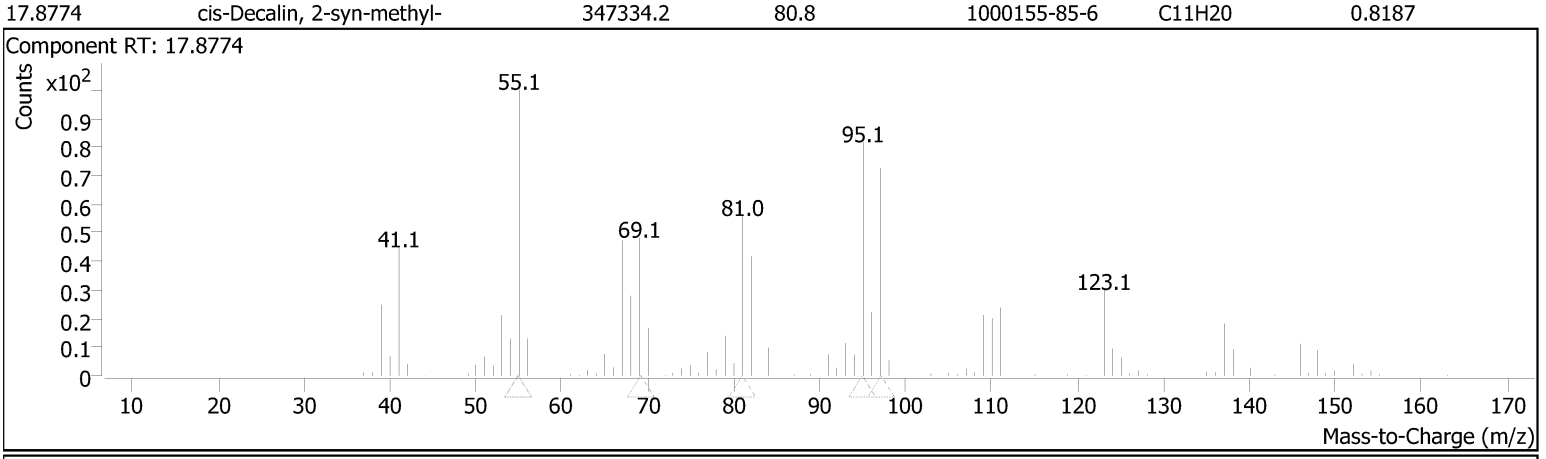


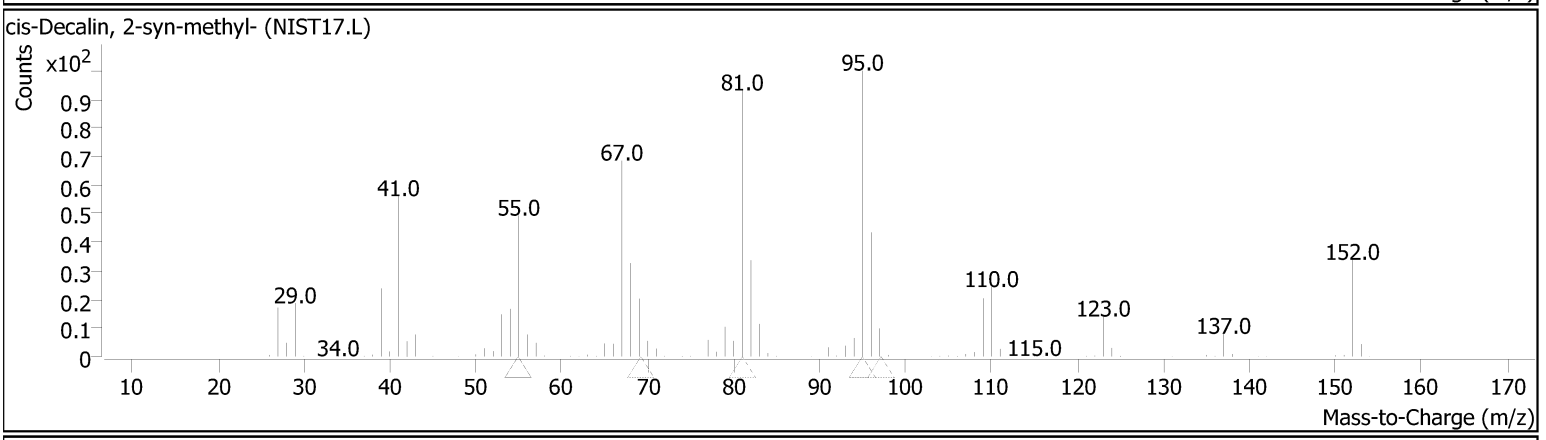


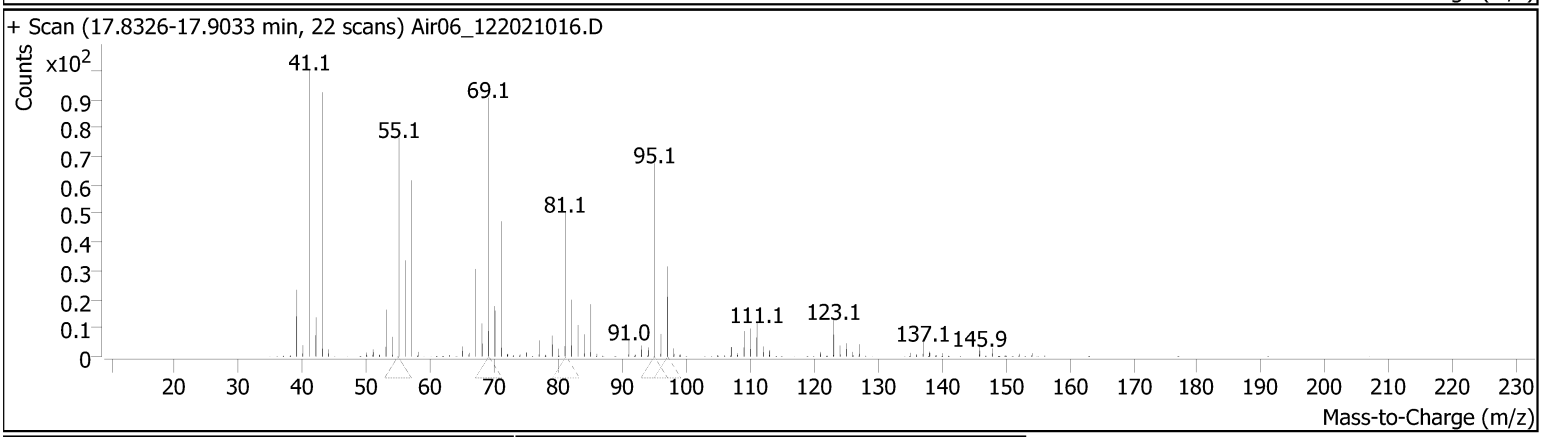


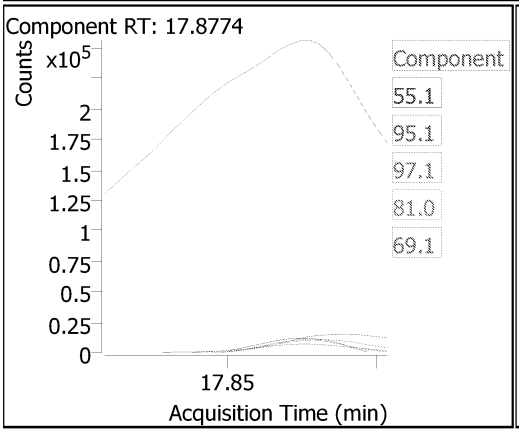


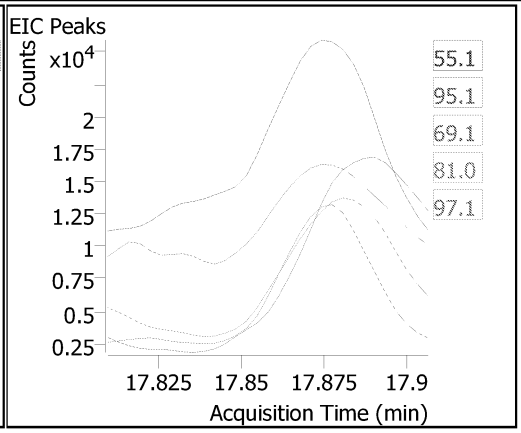
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.8774	cis-Decalin, 2-syn-methyl-	347334.2	80.8	1000155-85-6	C11H20	0.8187

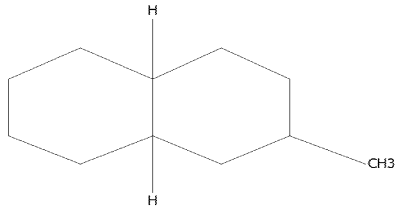




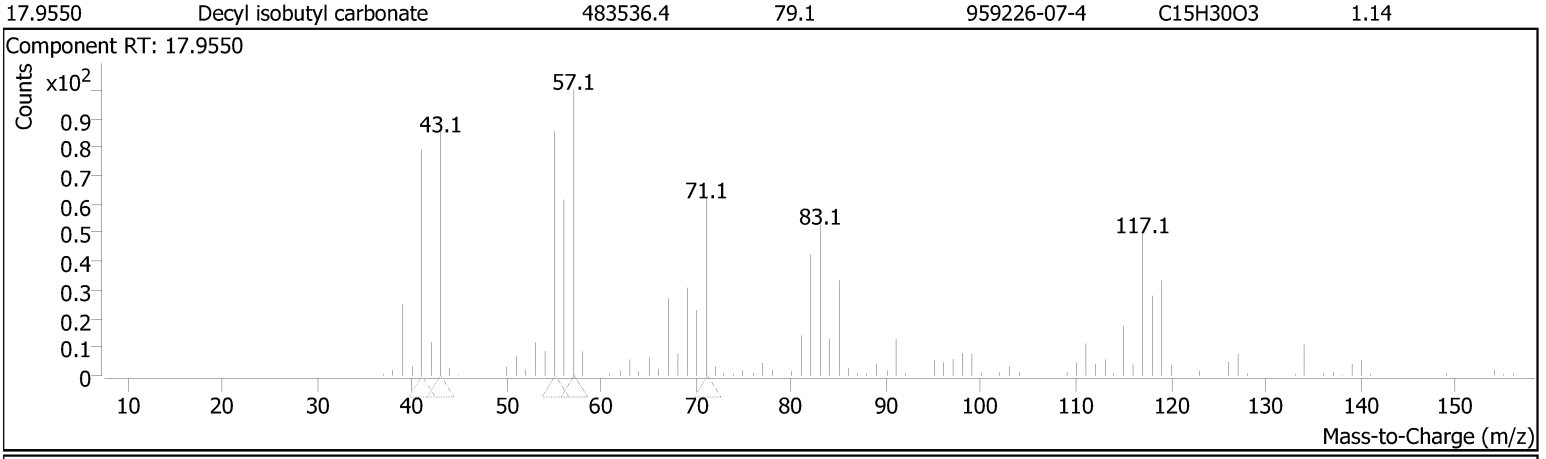


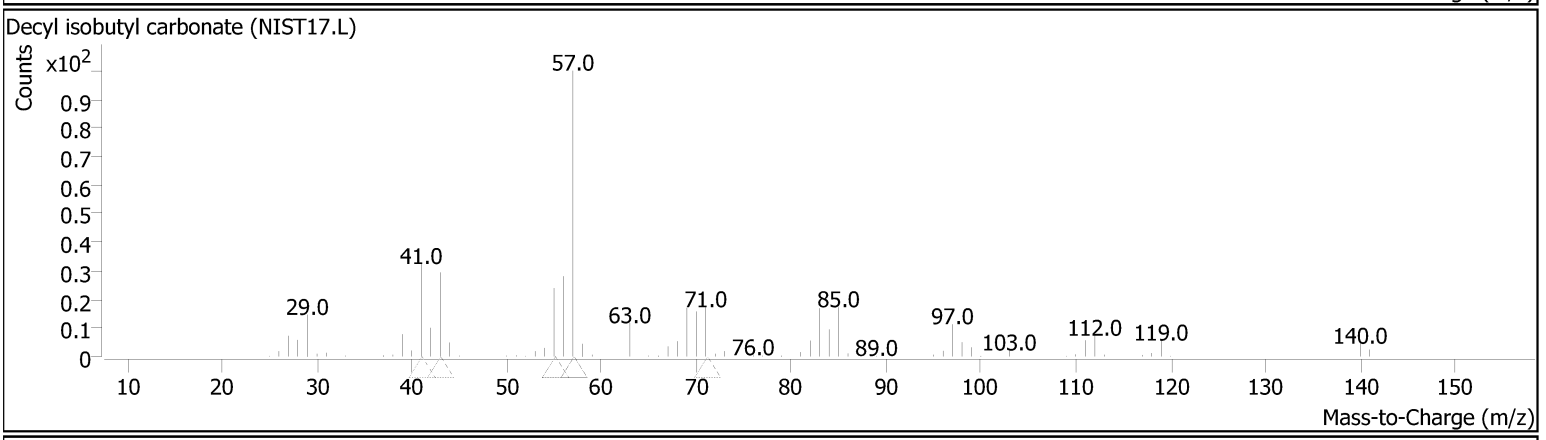


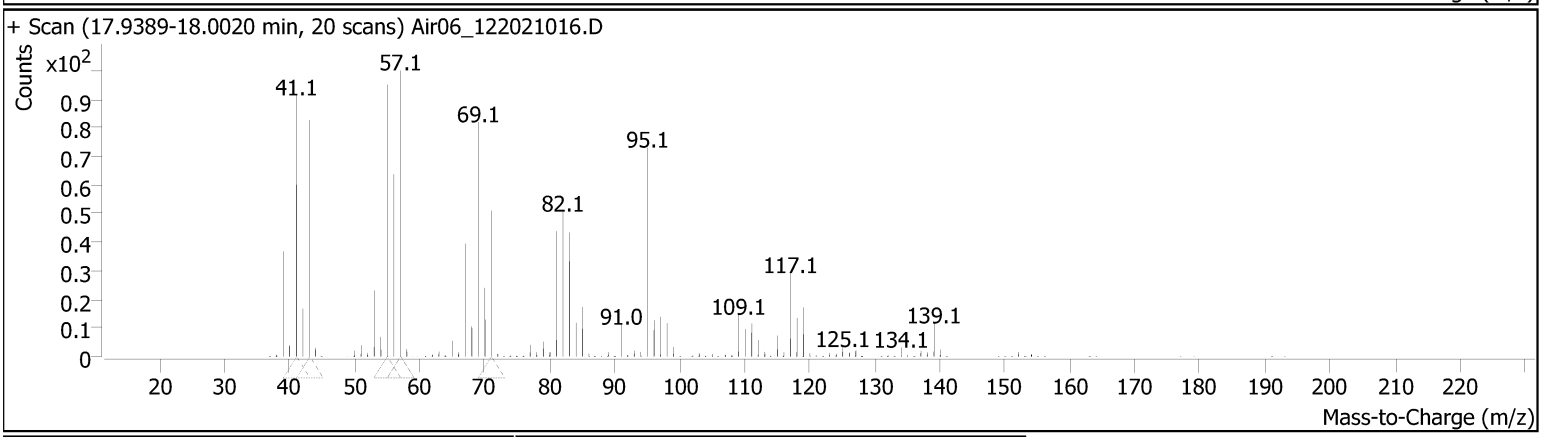


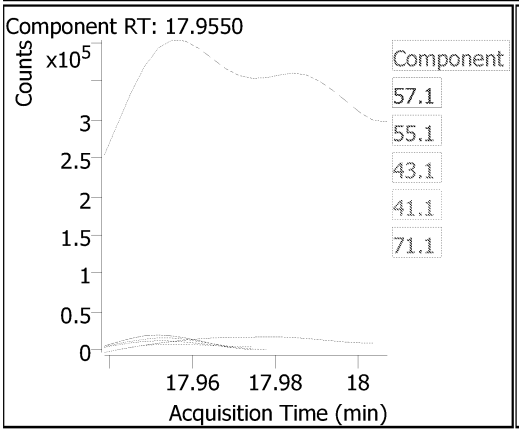


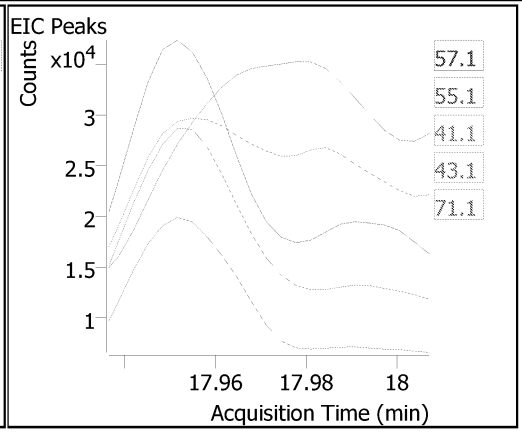
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.9550	Decyl isobutyl carbonate	483536.4	79.1	959226-07-4	C15H30O3	1.14

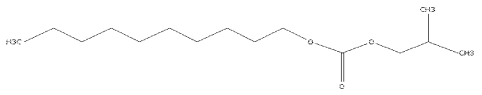




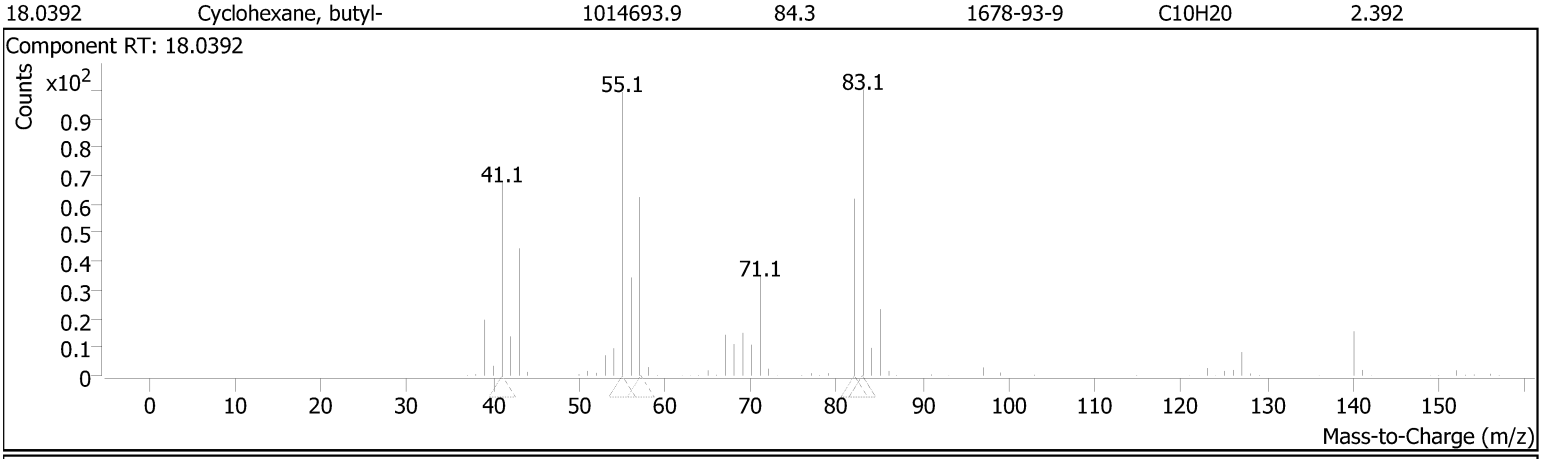


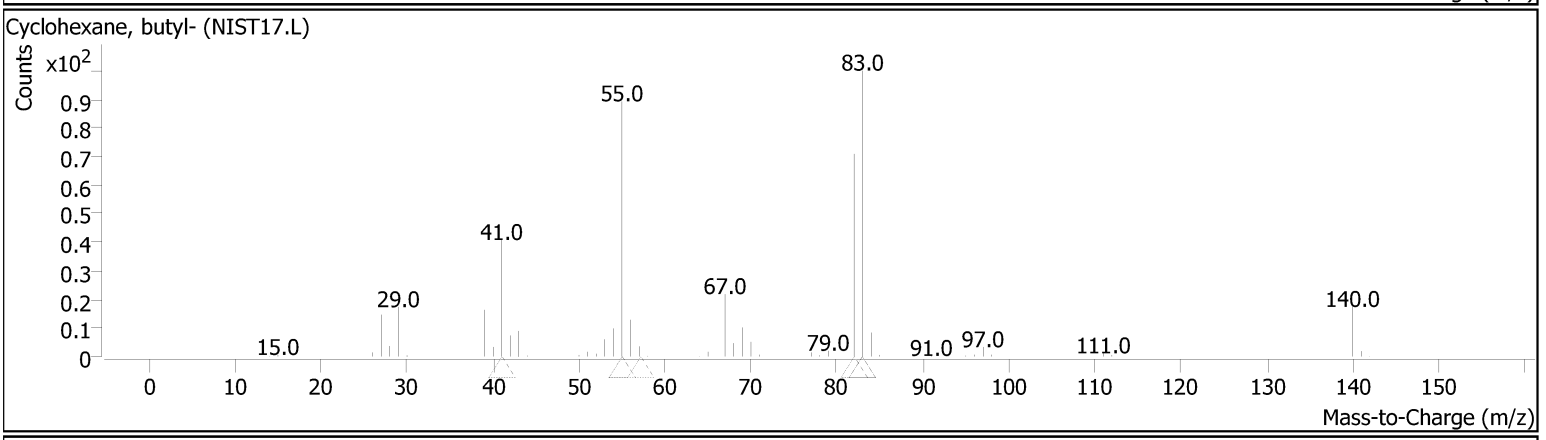


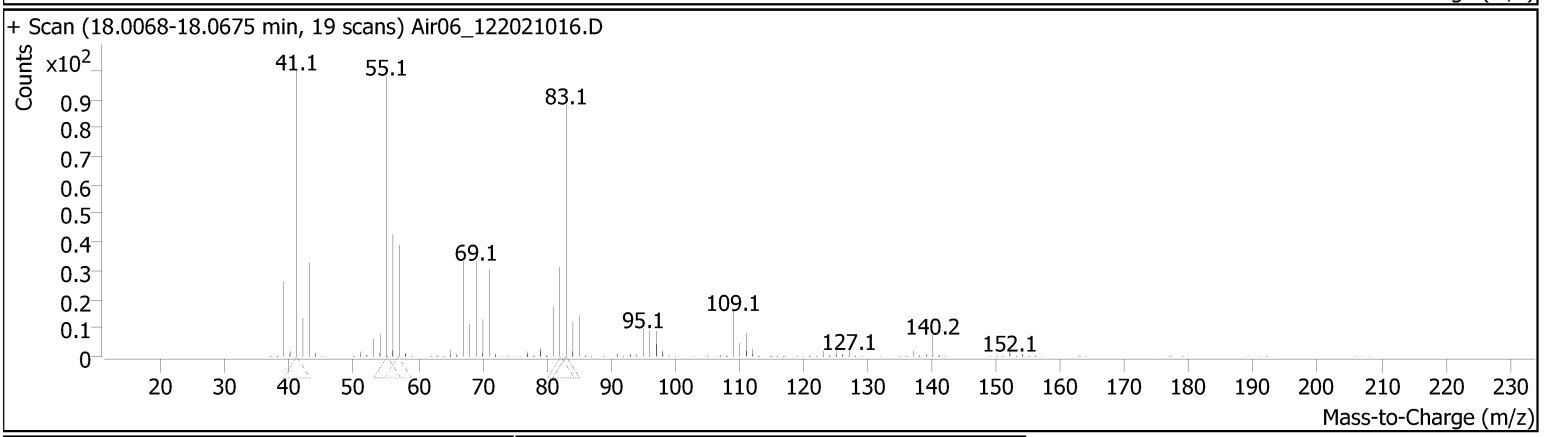


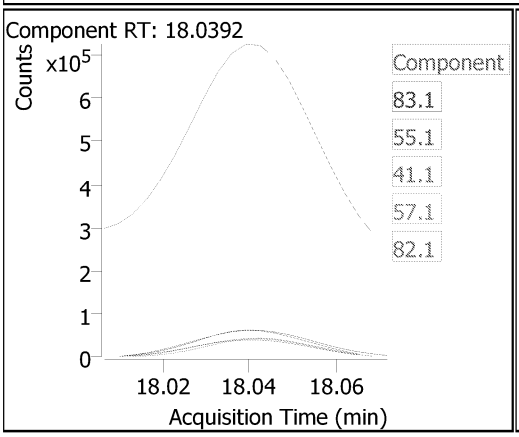


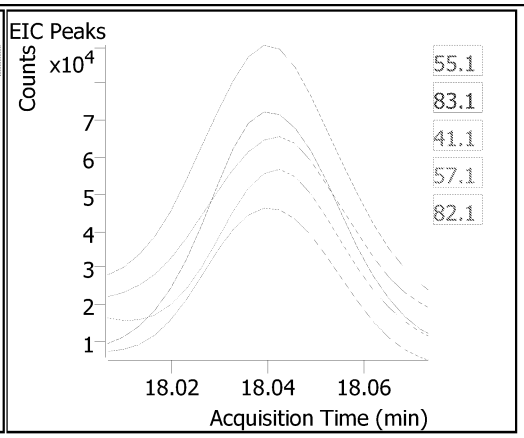
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.0392	Cyclohexane, butyl-	1014693.9	84.3	1678-93-9	C10H20	2.392

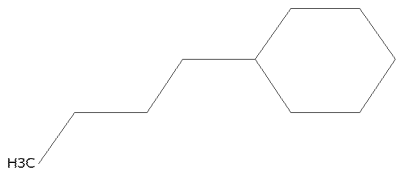




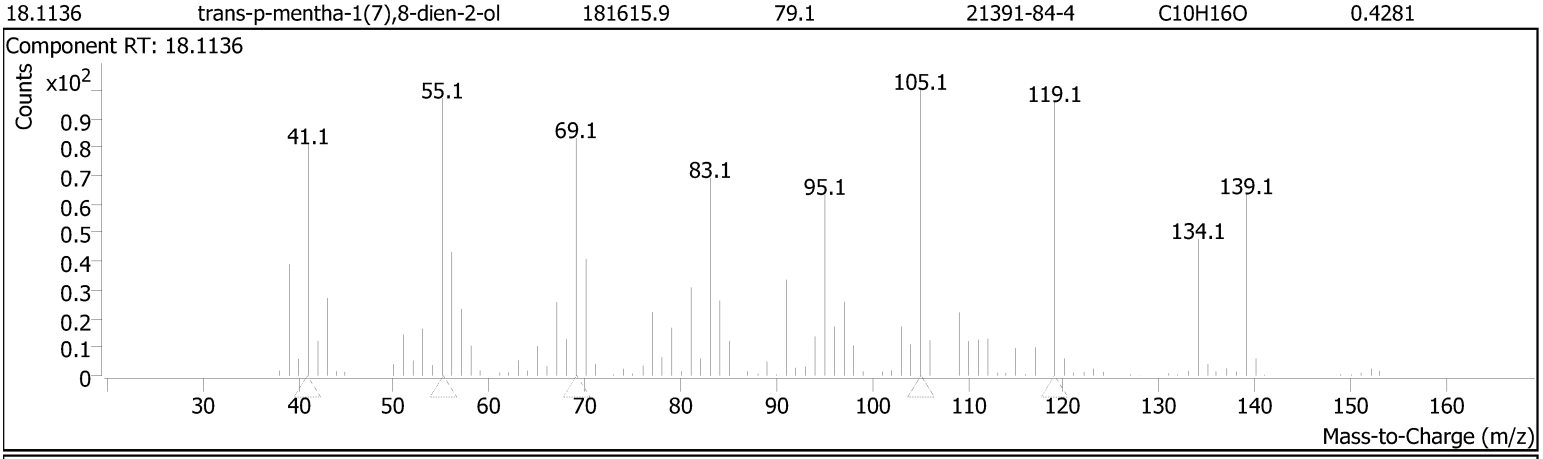


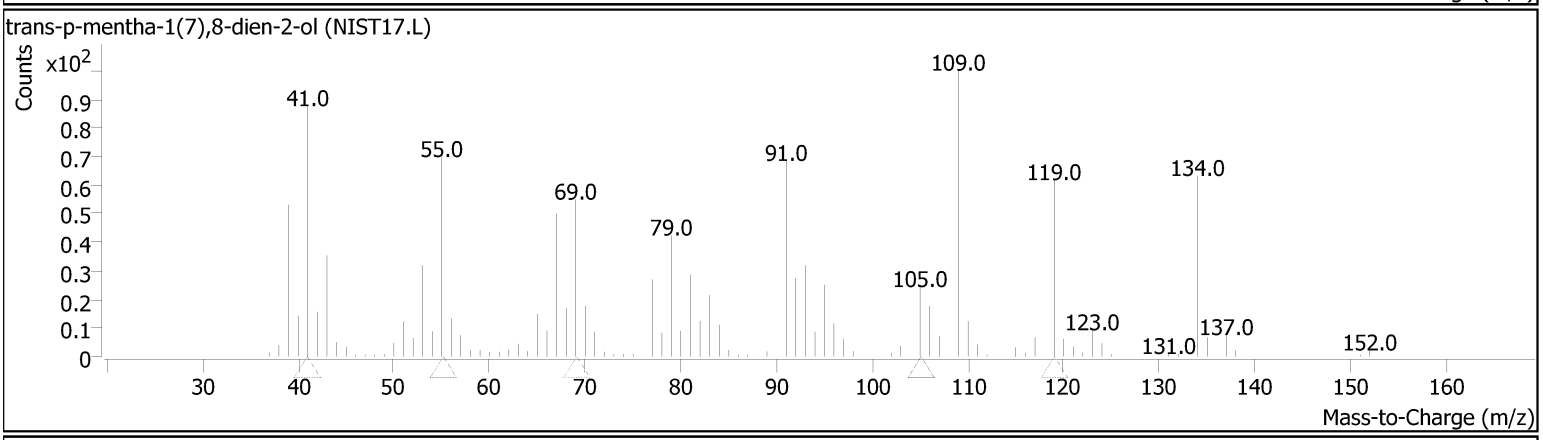


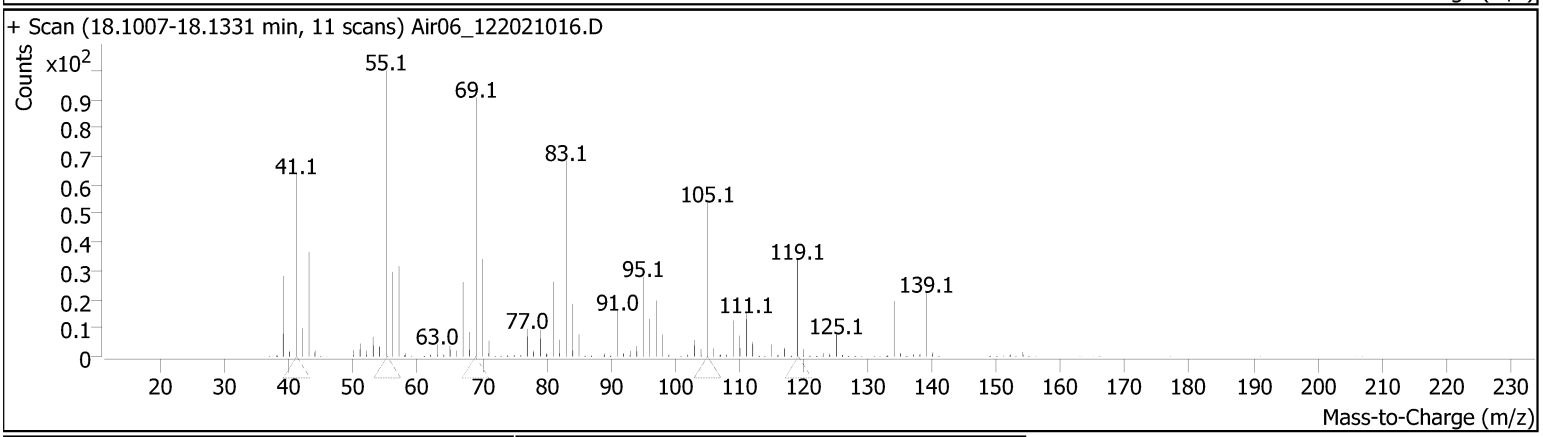


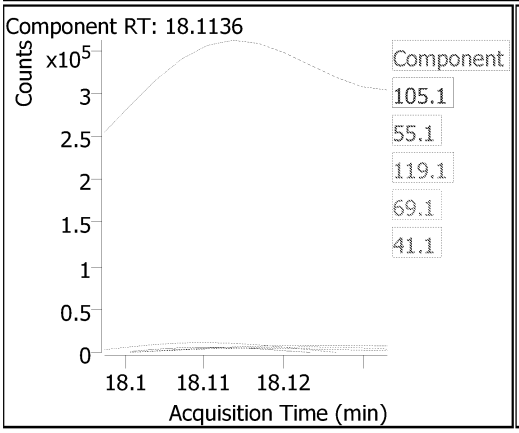


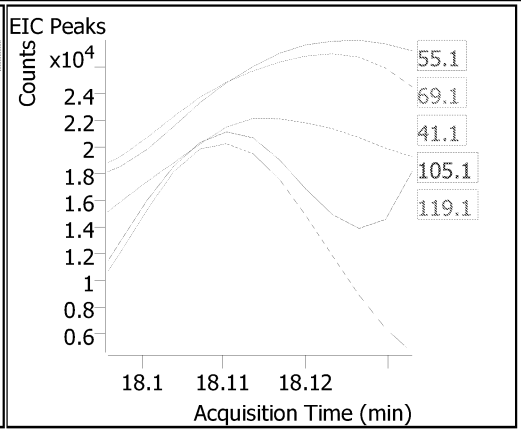
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.1136	trans-p-mentha-1(7),8-dien-2-ol	181615.9	79.1	21391-84-4	C10H16O	0.4281

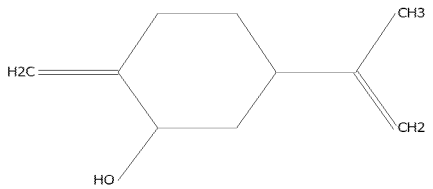




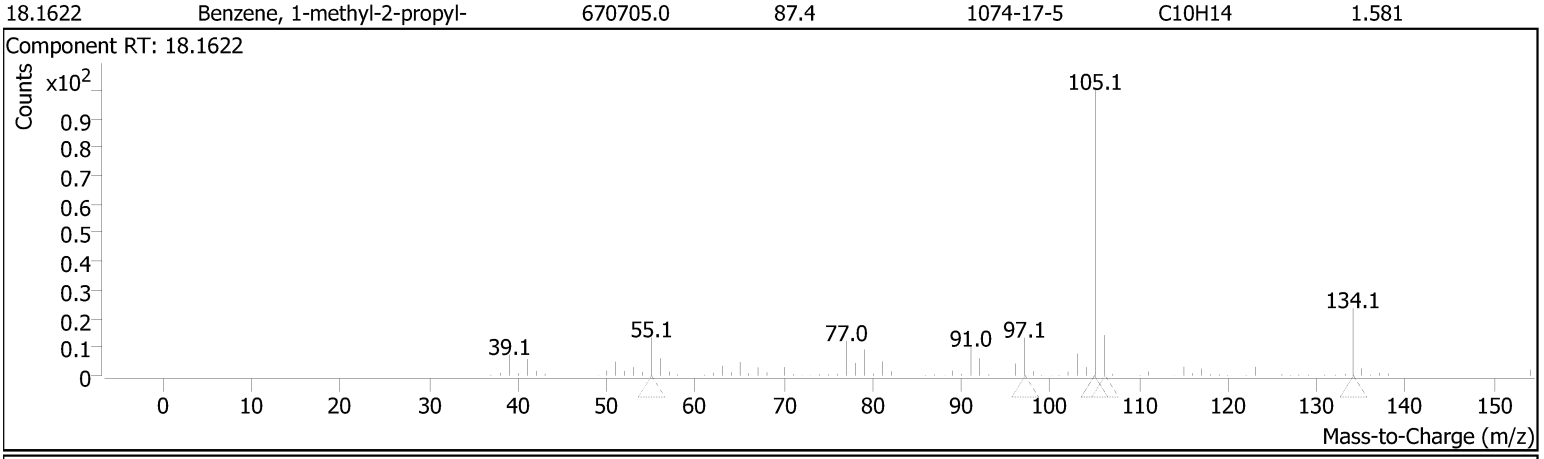


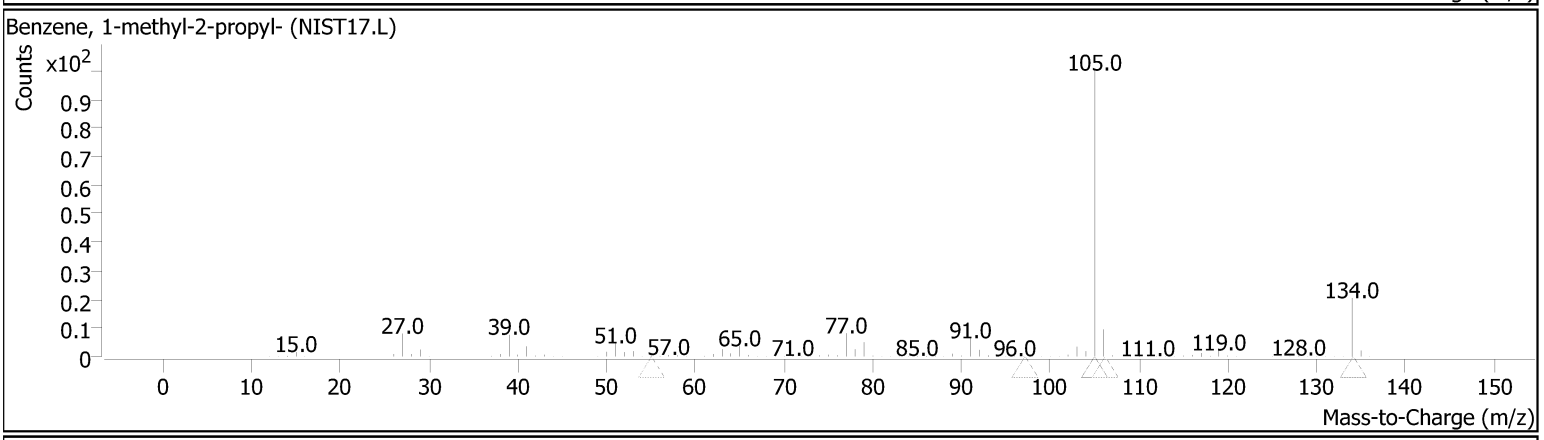


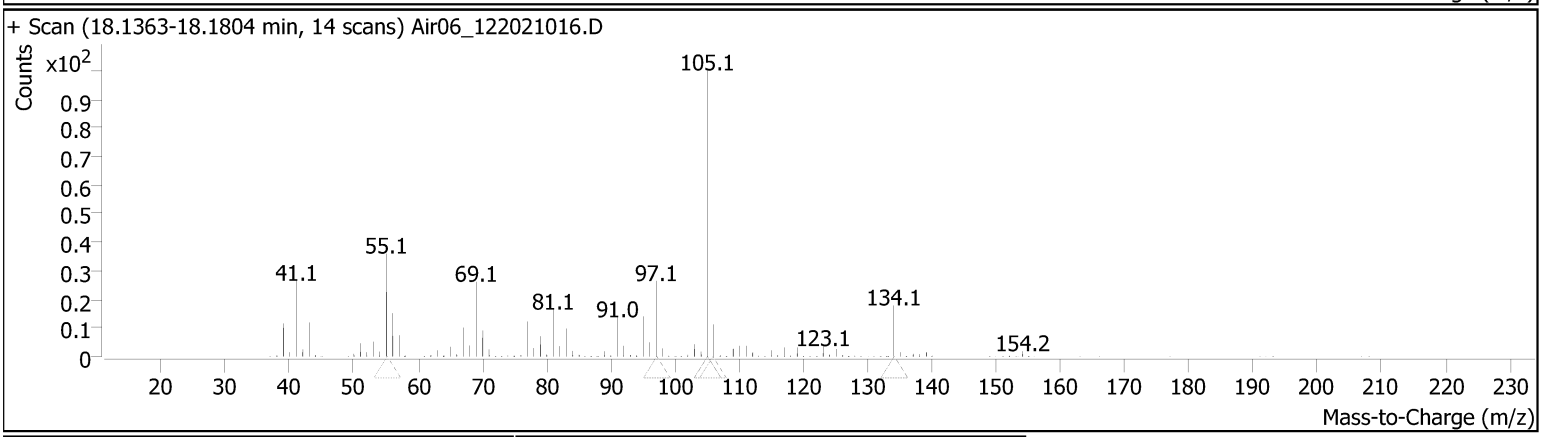


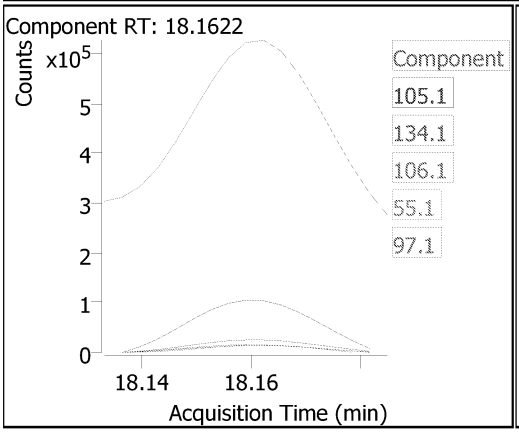


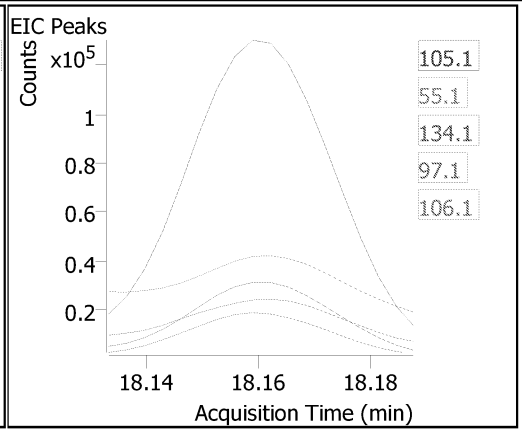
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.1622	Benzene, 1-methyl-2-propyl-	670705.0	87.4	1074-17-5	C10H14	1.581

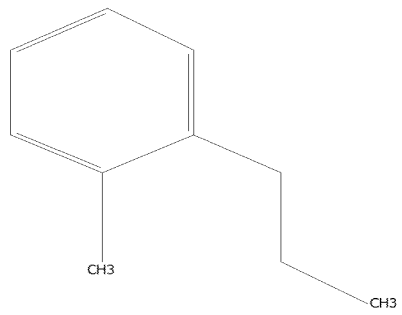




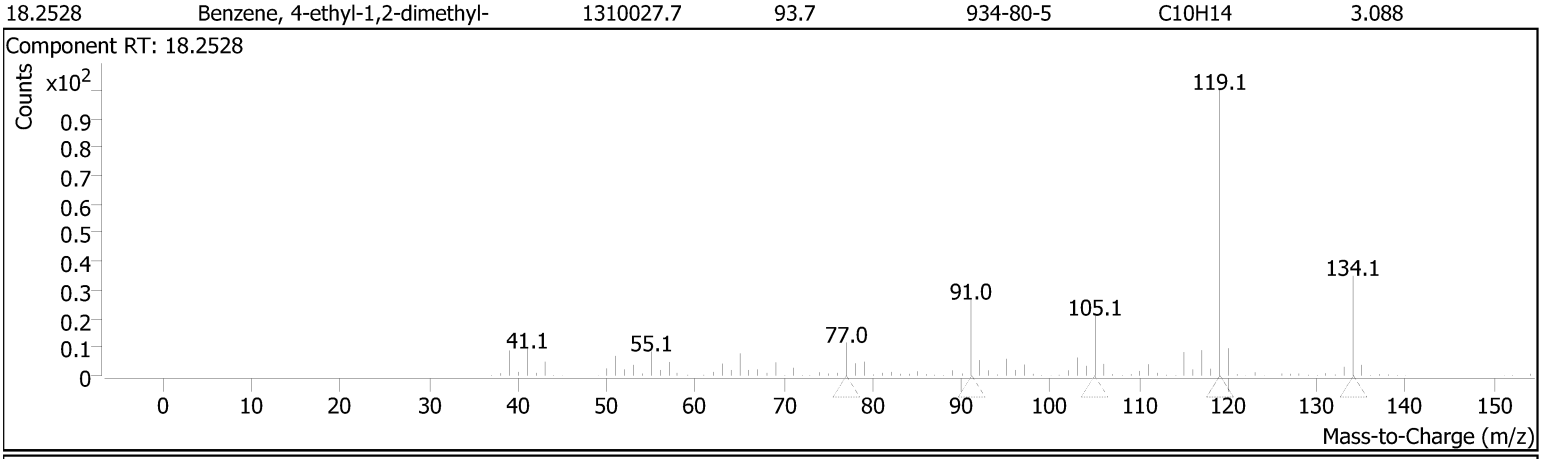


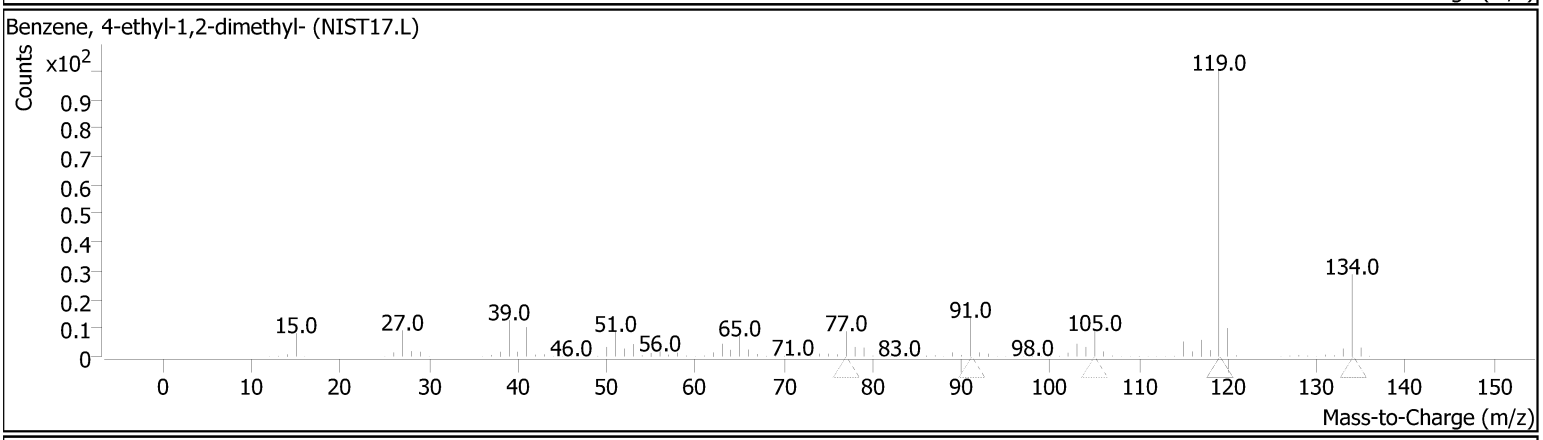


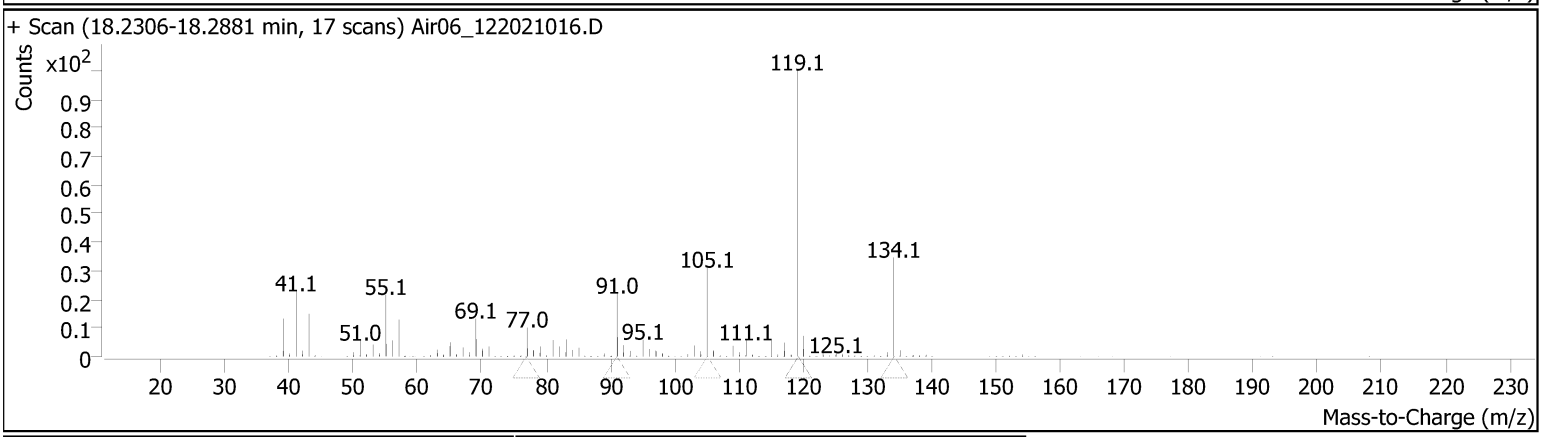


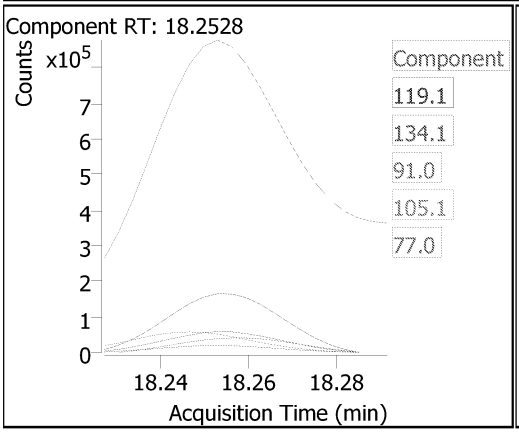


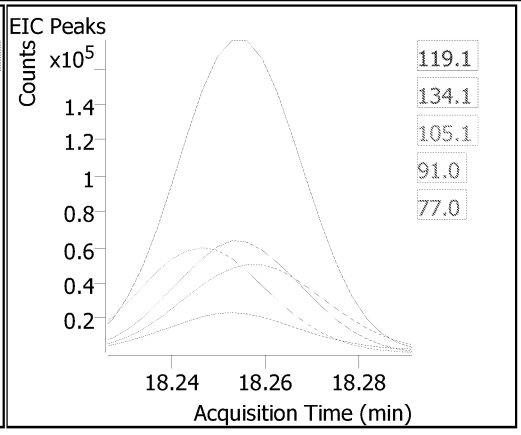
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.2528	Benzene, 4-ethyl-1,2-dimethyl-	1310027.7	93.7	934-80-5	C10H14	3.088

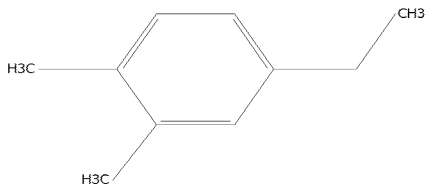




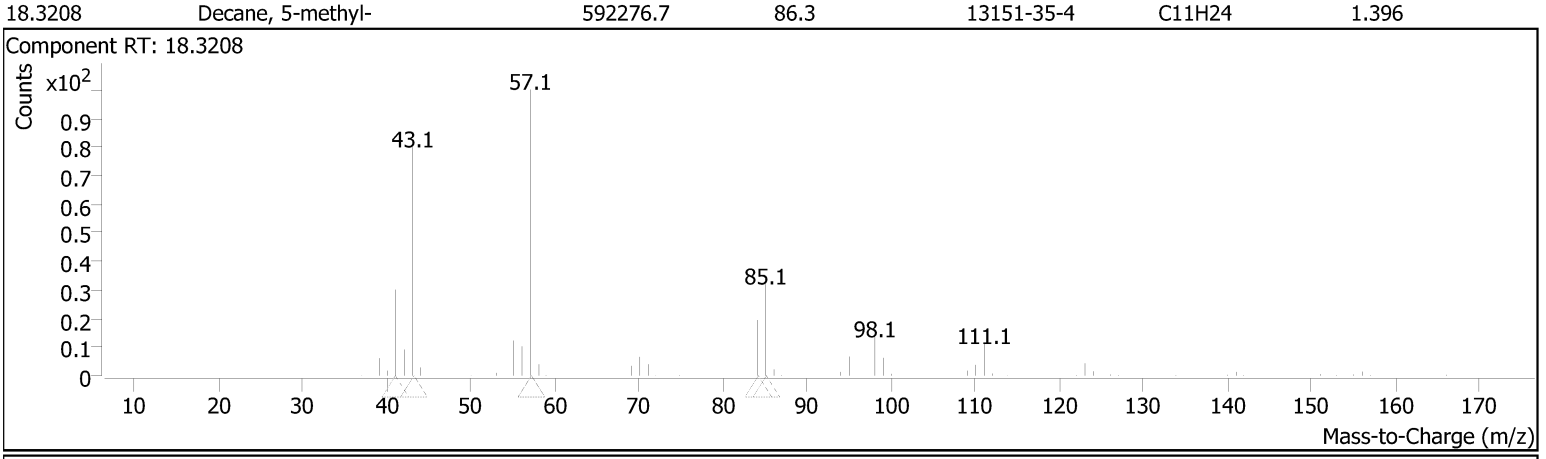


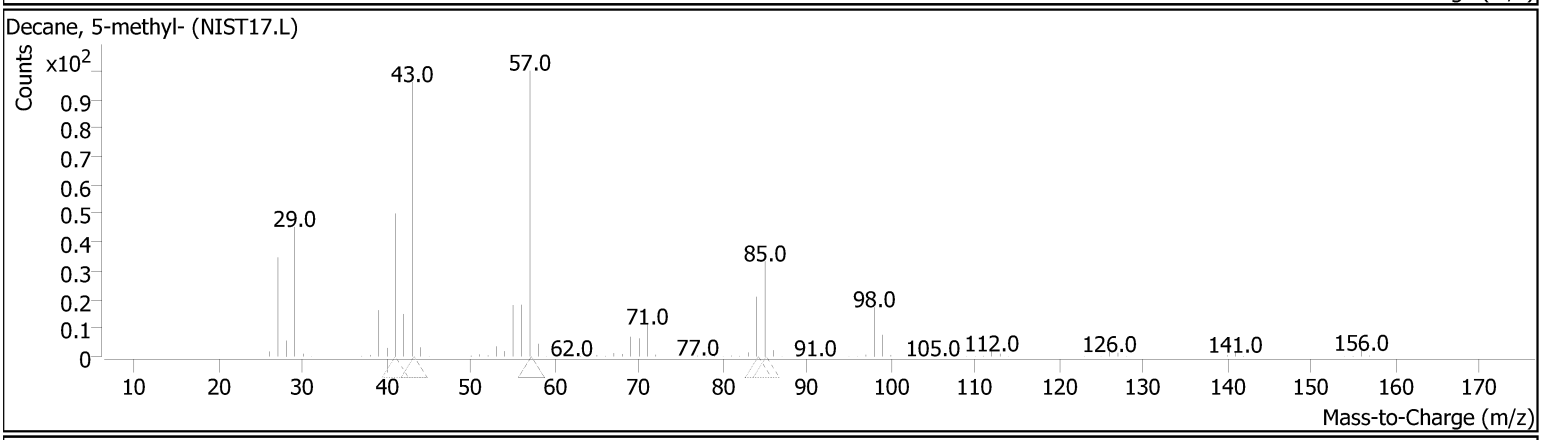


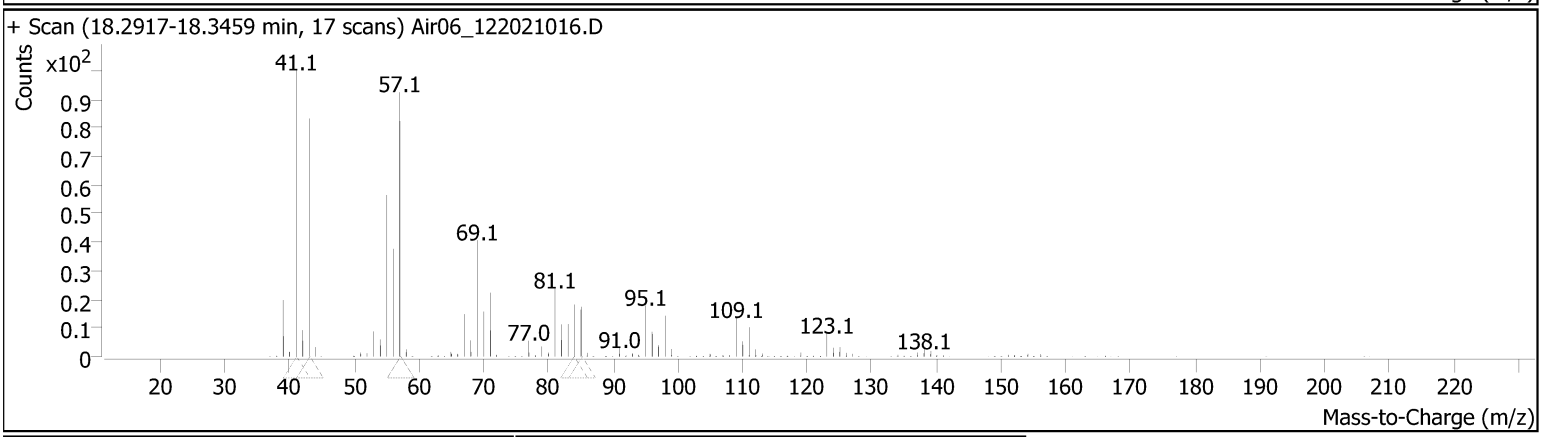


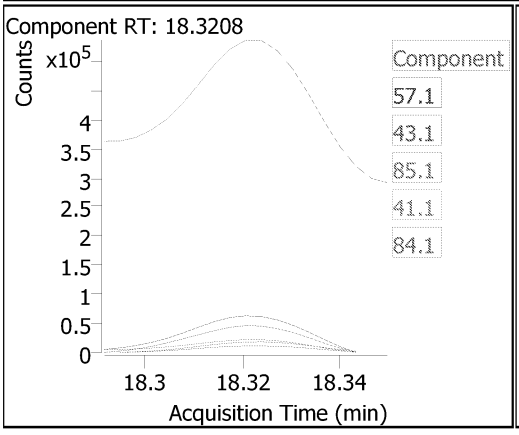


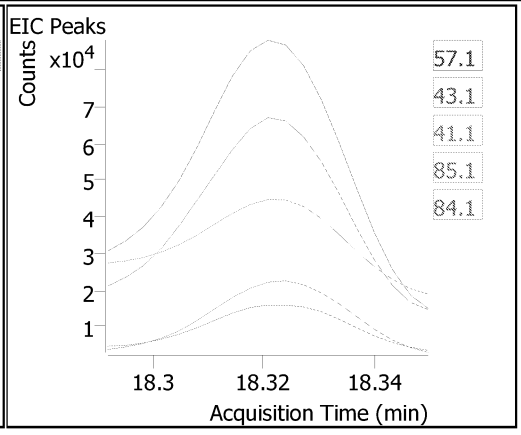
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3208	Decane, 5-methyl-	592276.7	86.3	13151-35-4	C11H24	1.396

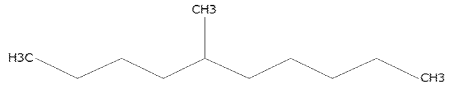




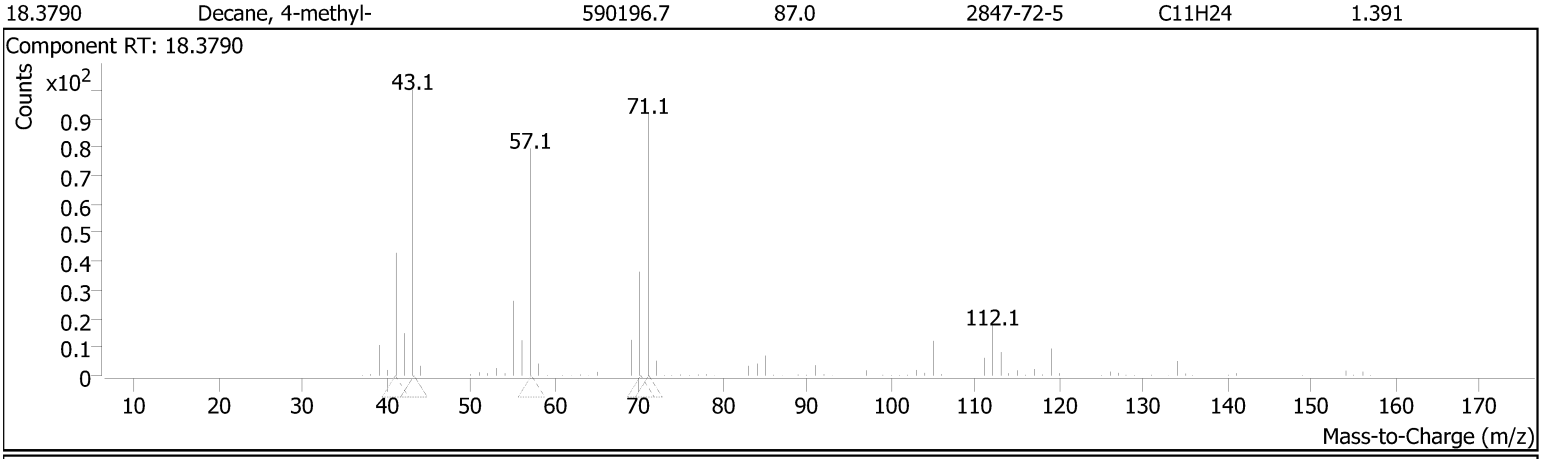


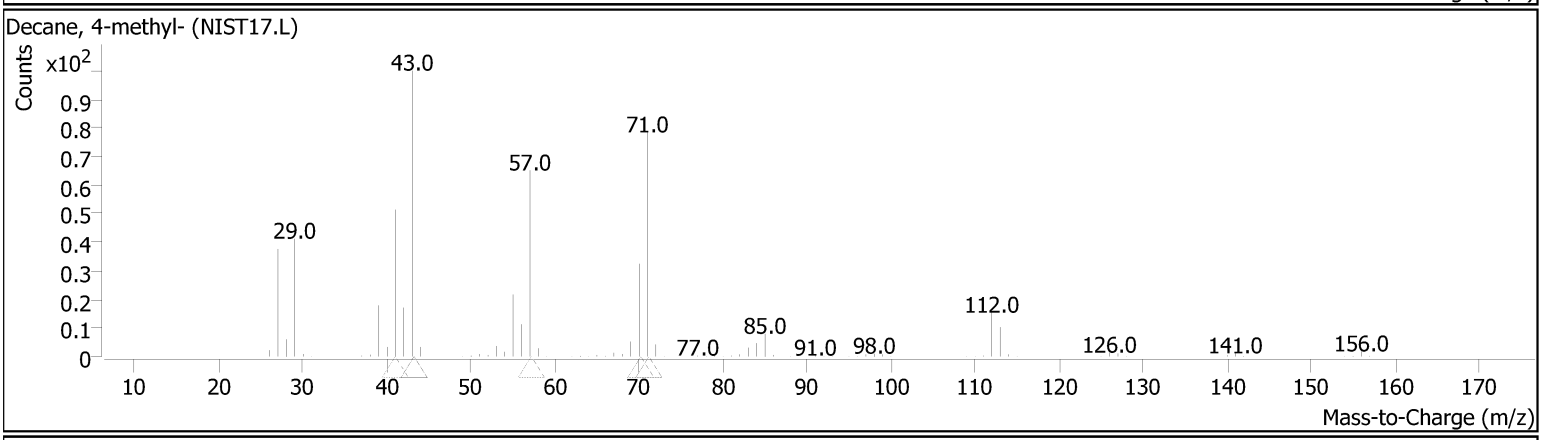


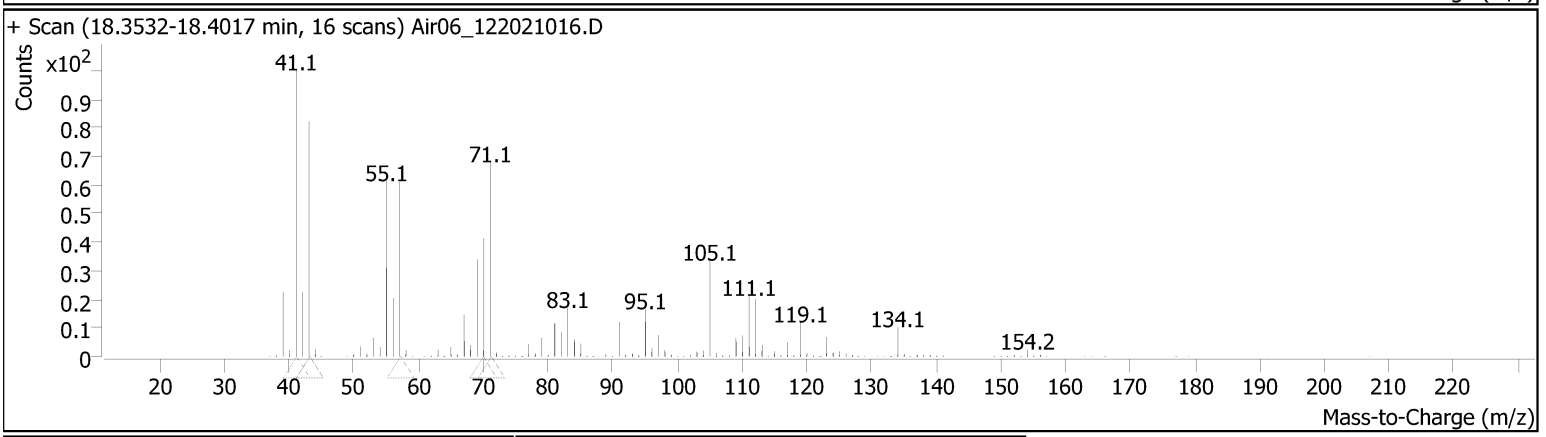


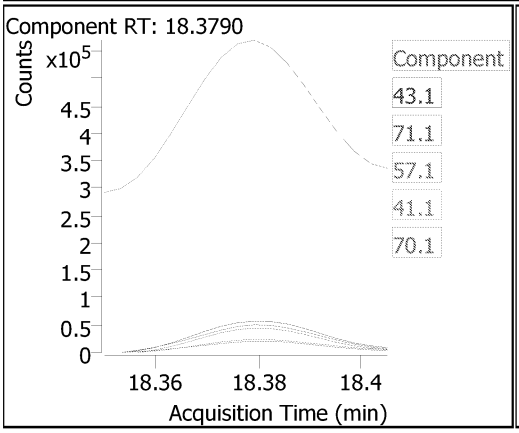


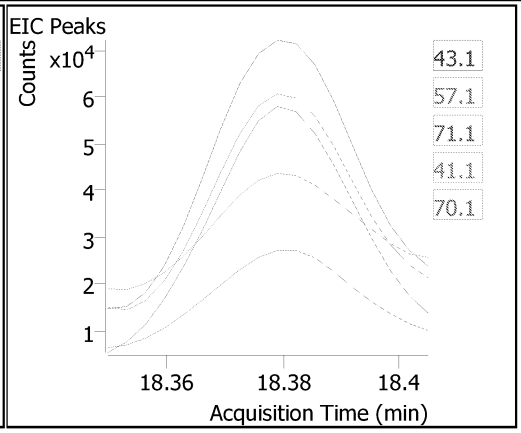
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3790	Decane, 4-methyl-	590196.7	87.0	2847-72-5	C11H24	1.391

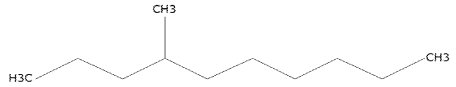




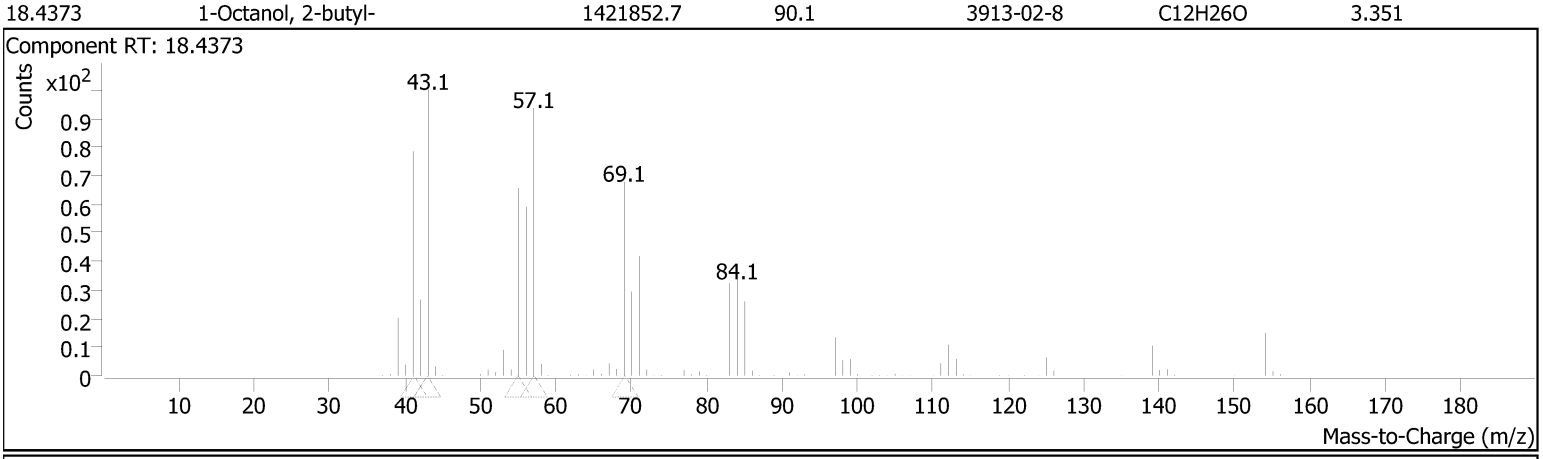


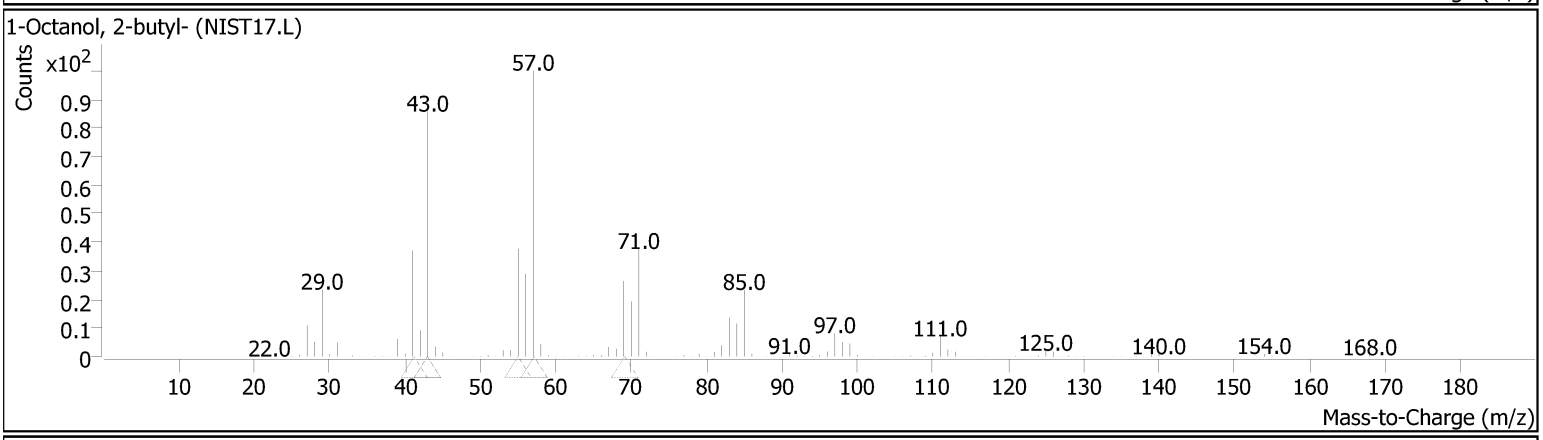


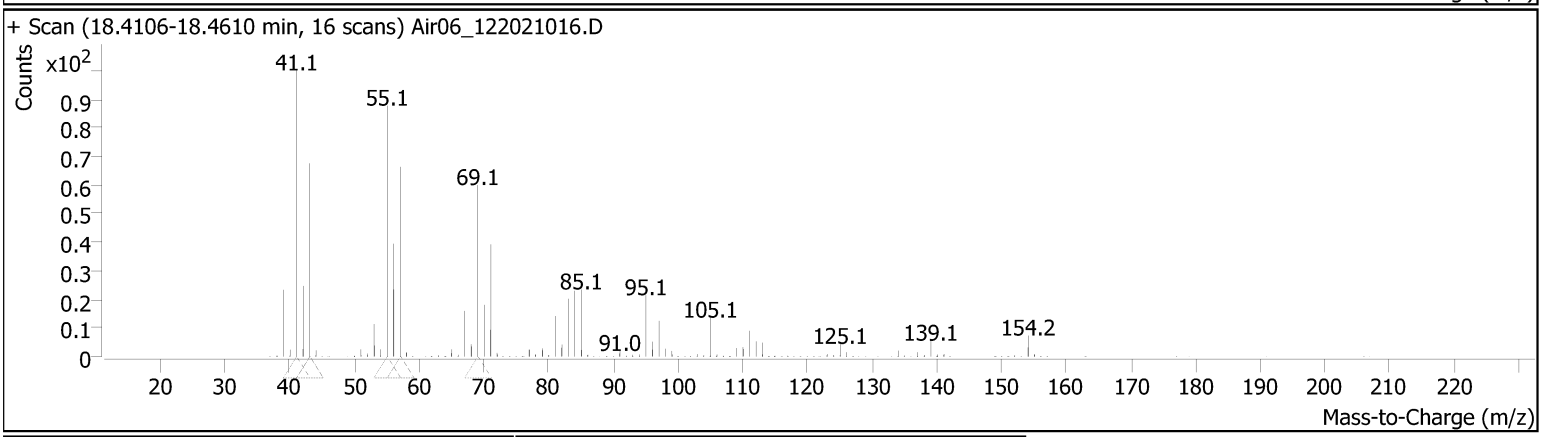


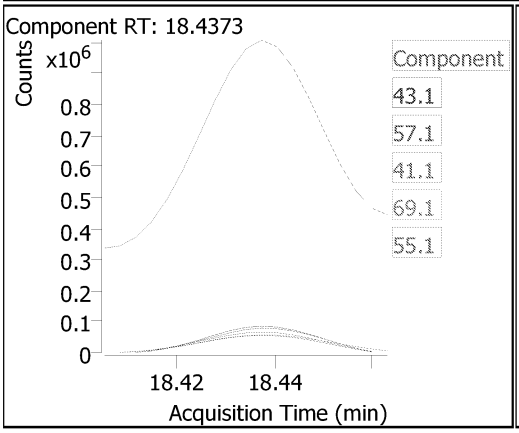


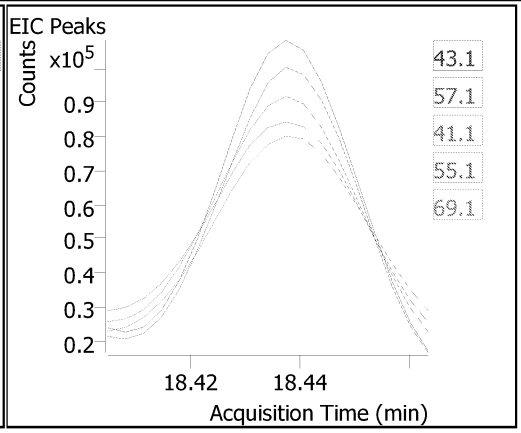
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.4373	1-Octanol, 2-butyl-	1421852.7	90.1	3913-02-8	C12H26O	3.351

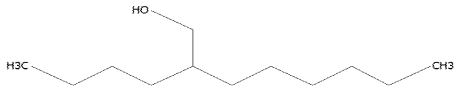




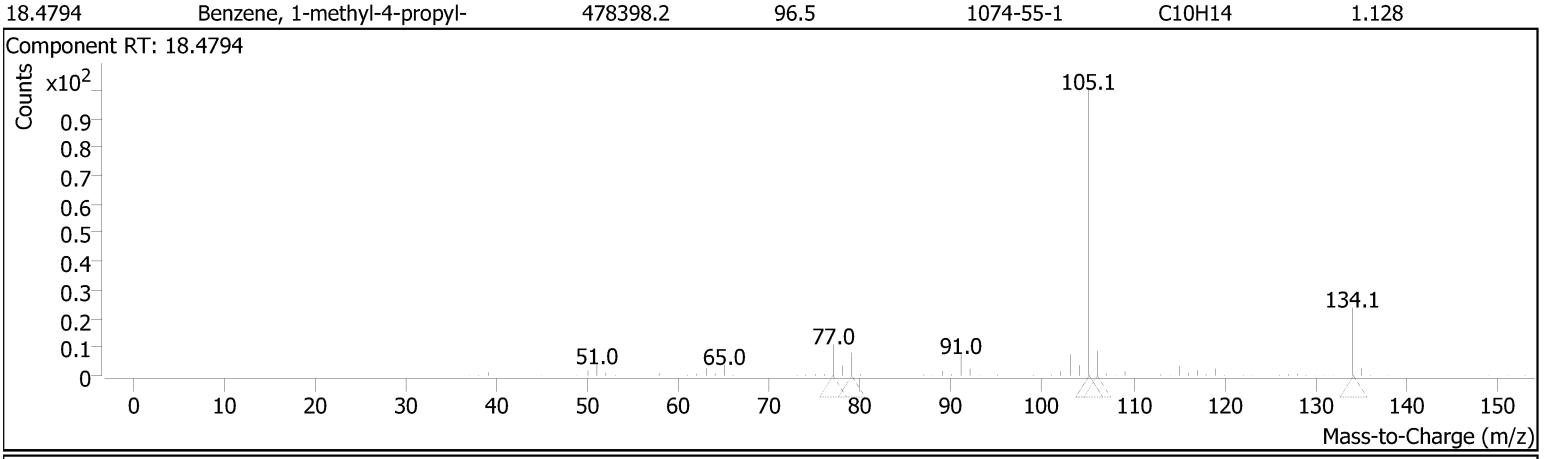


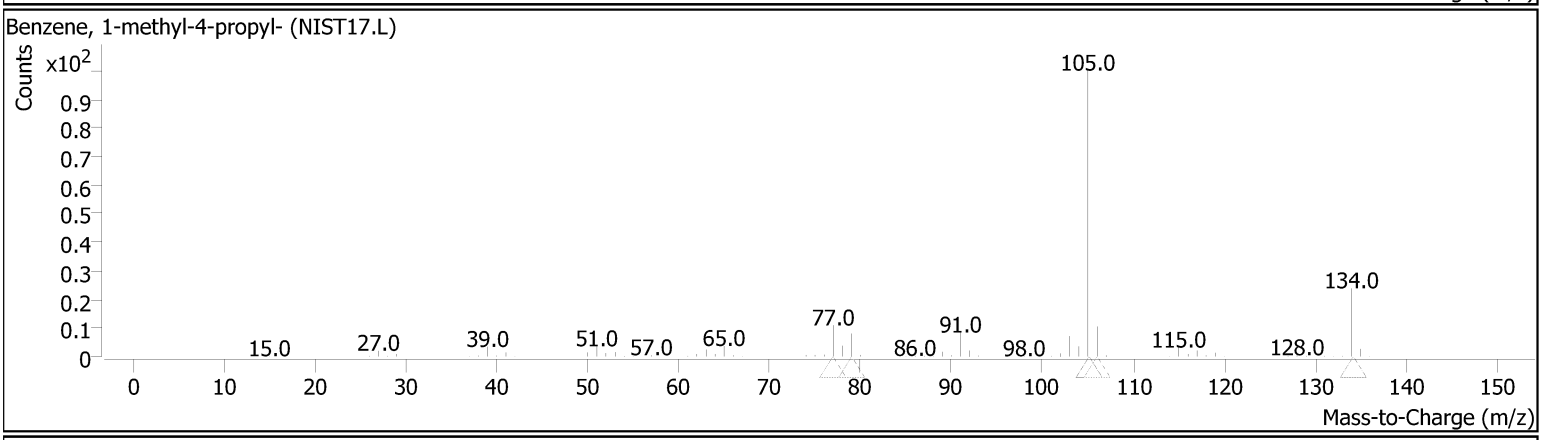


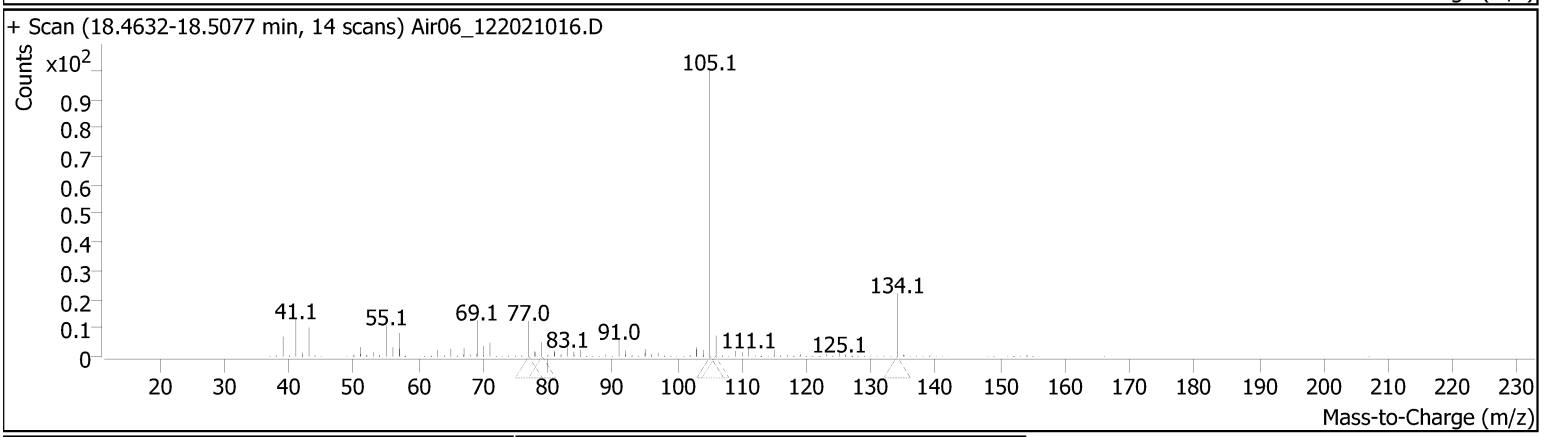


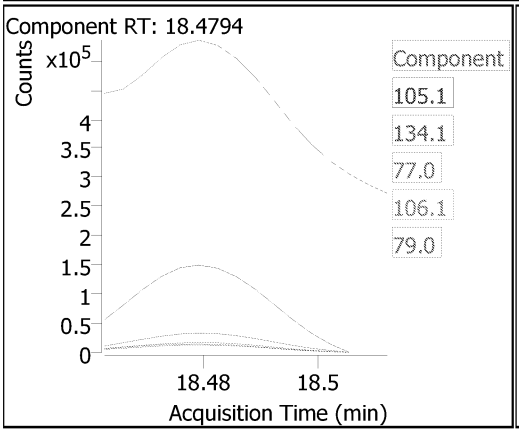


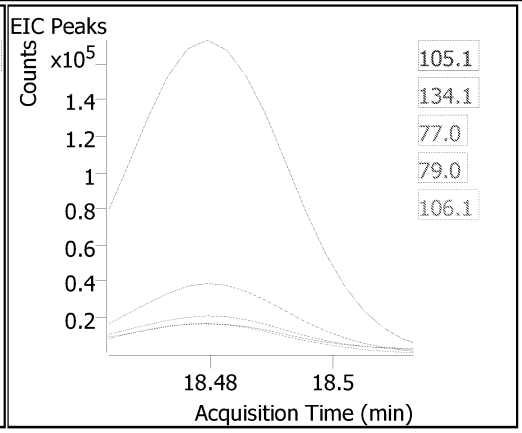
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.4794	Benzene, 1-methyl-4-propyl-	478398.2	96.5	1074-55-1	C10H14	1.128

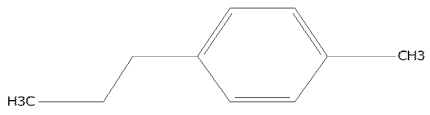




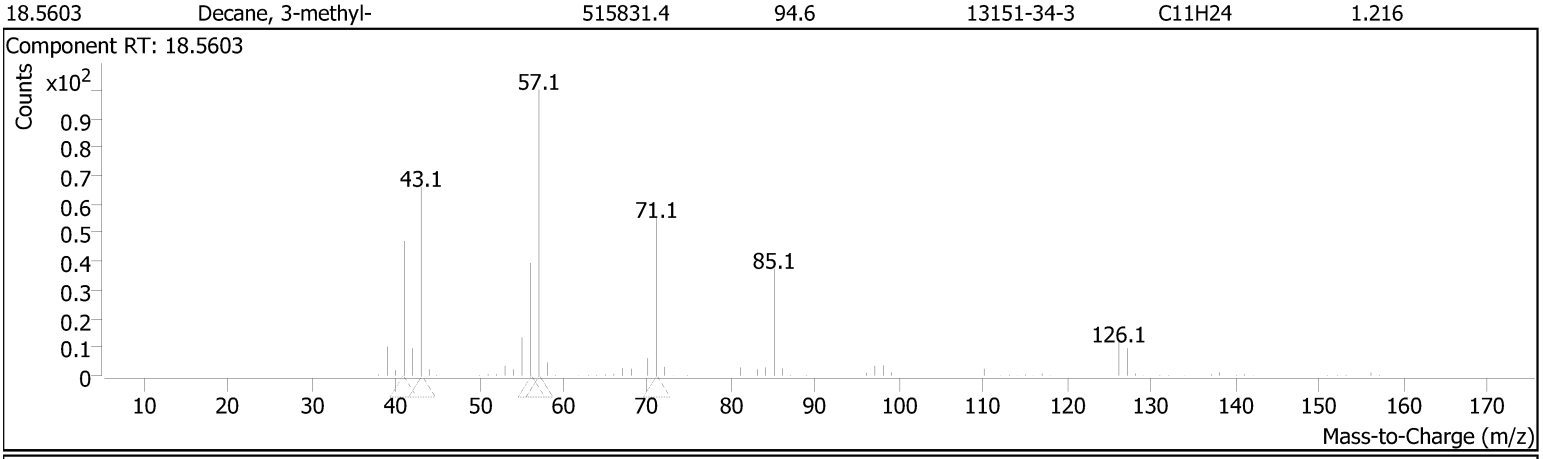


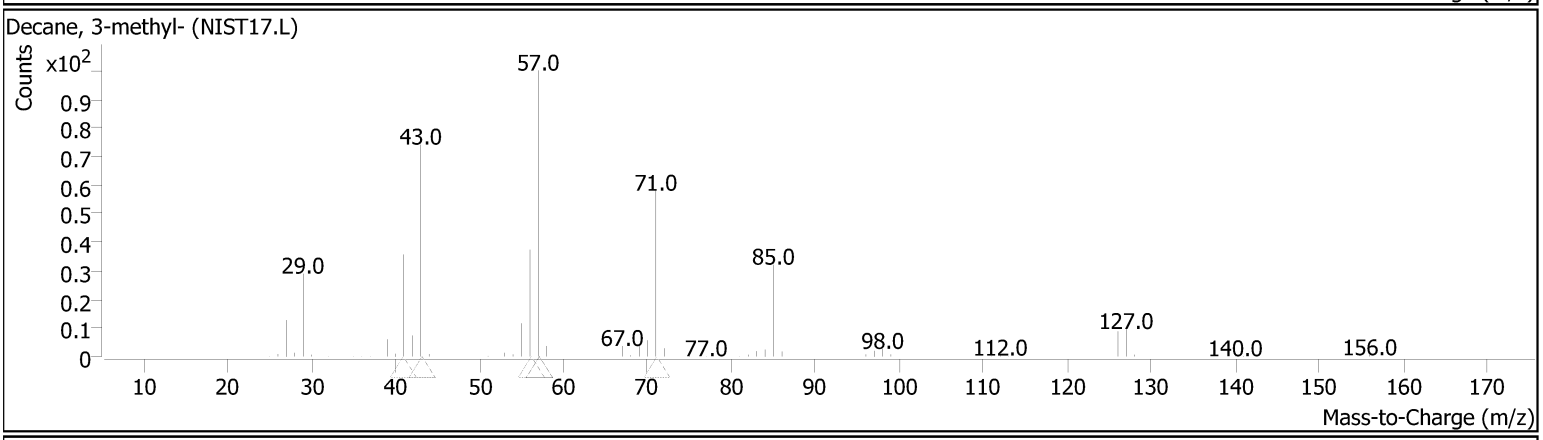


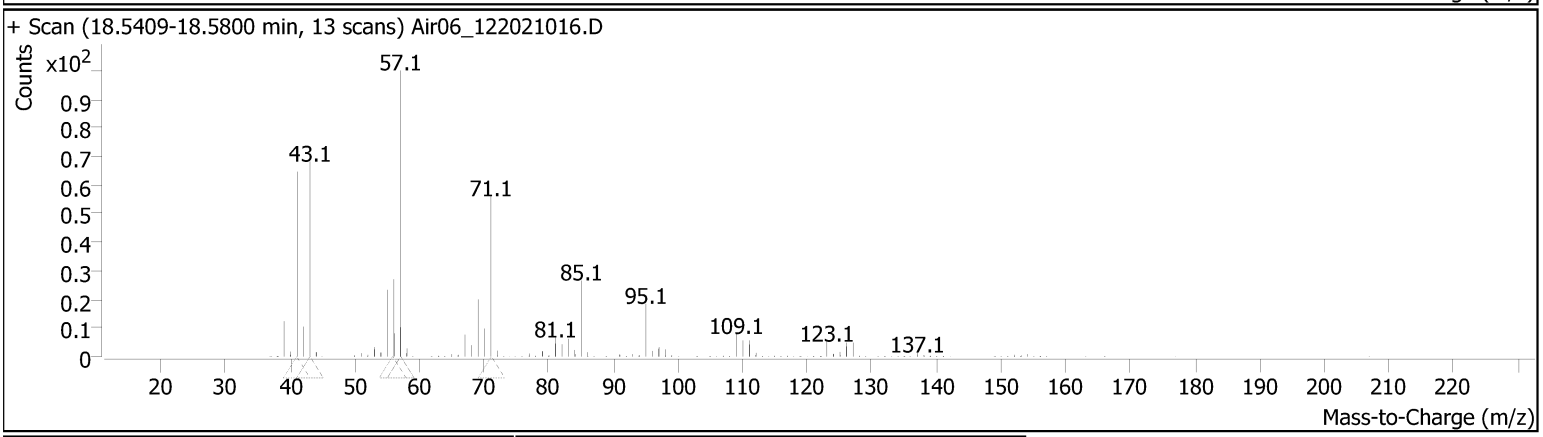


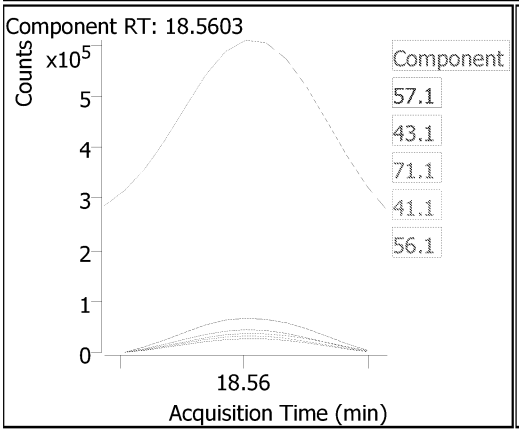


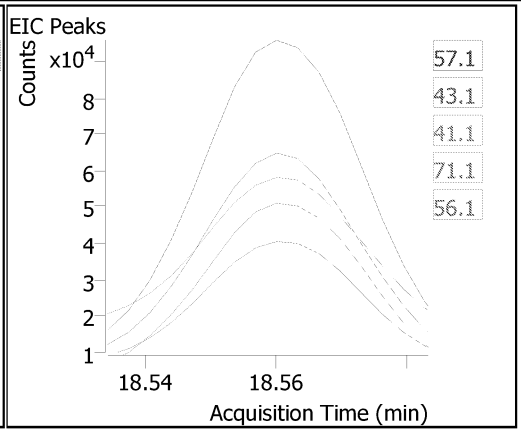
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.5603	Decane, 3-methyl-	515831.4	94.6	13151-34-3	C11H24	1.216

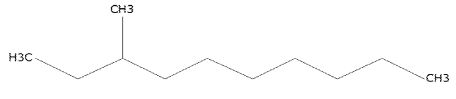








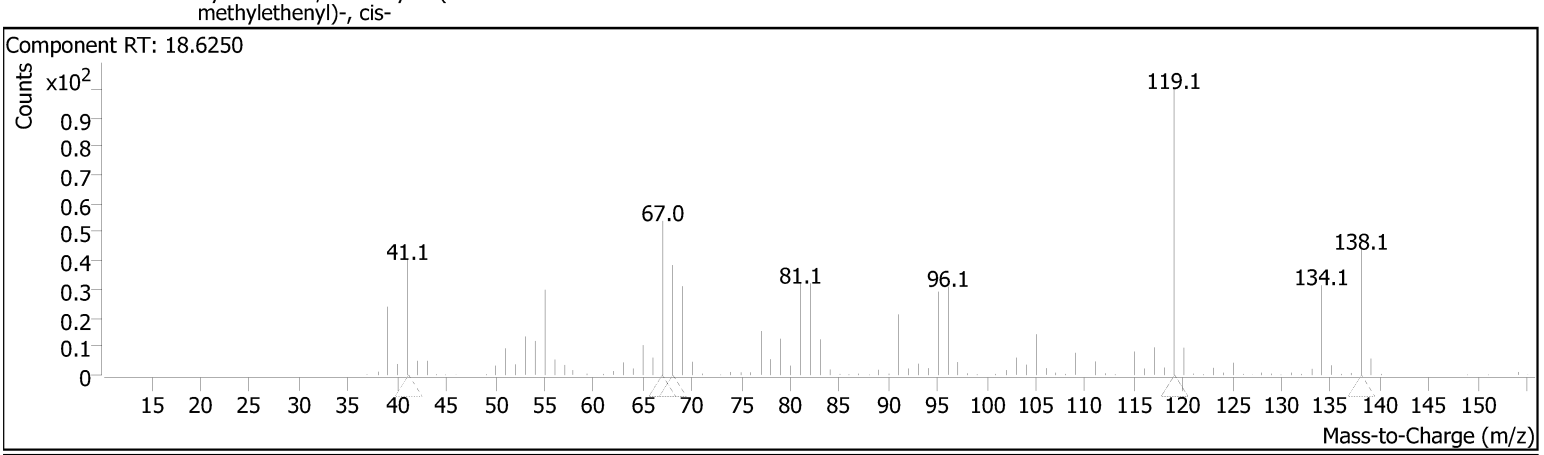


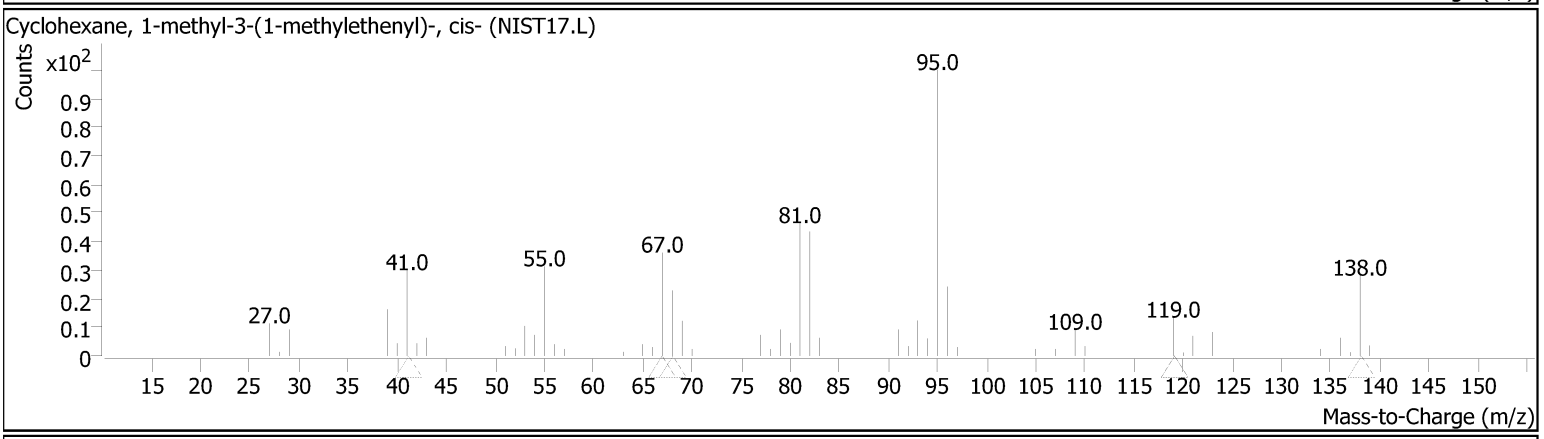


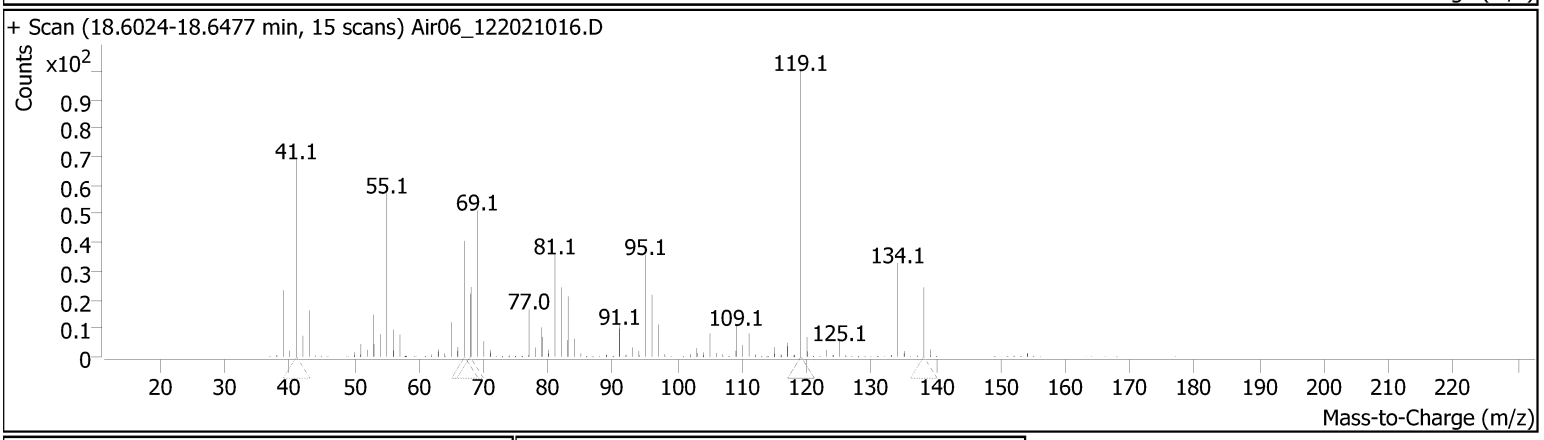
Library Search Results - NonTarget Hits with Details

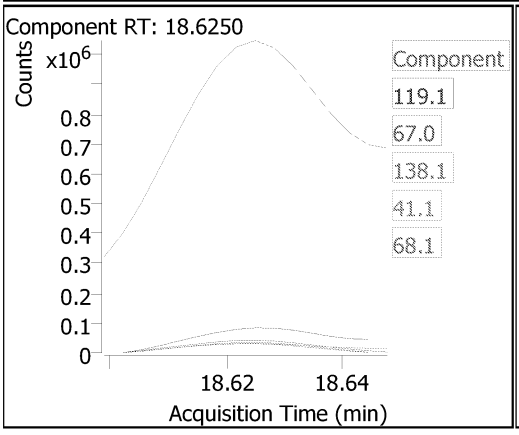
Agilent Technologies

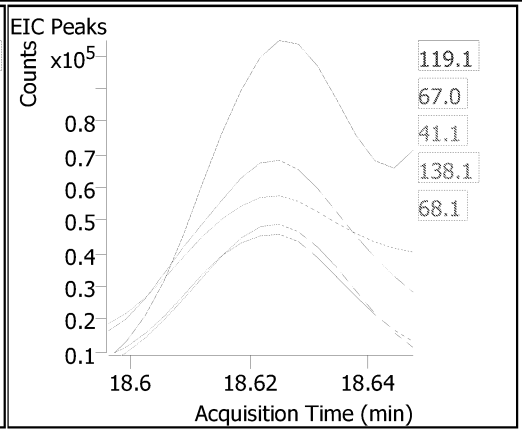
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.6250	Cyclohexane, 1-methyl-3-(1-methylethenyl)-, cis-	1494697.1	76.9	24399-15-3	C10H18	3.523

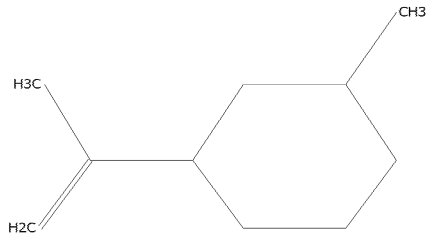




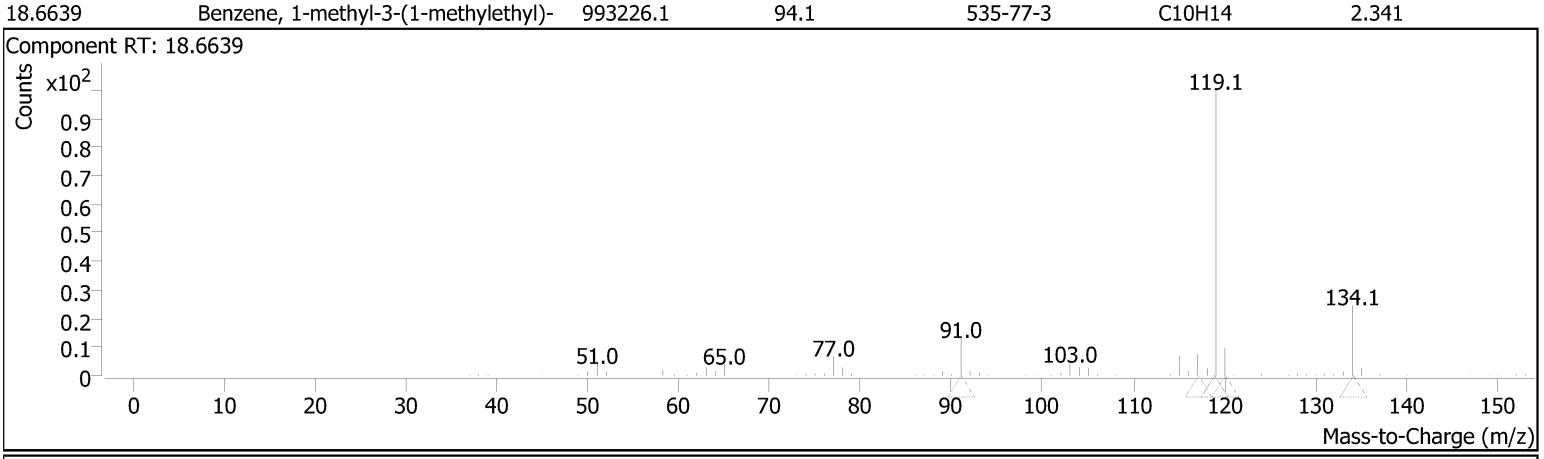


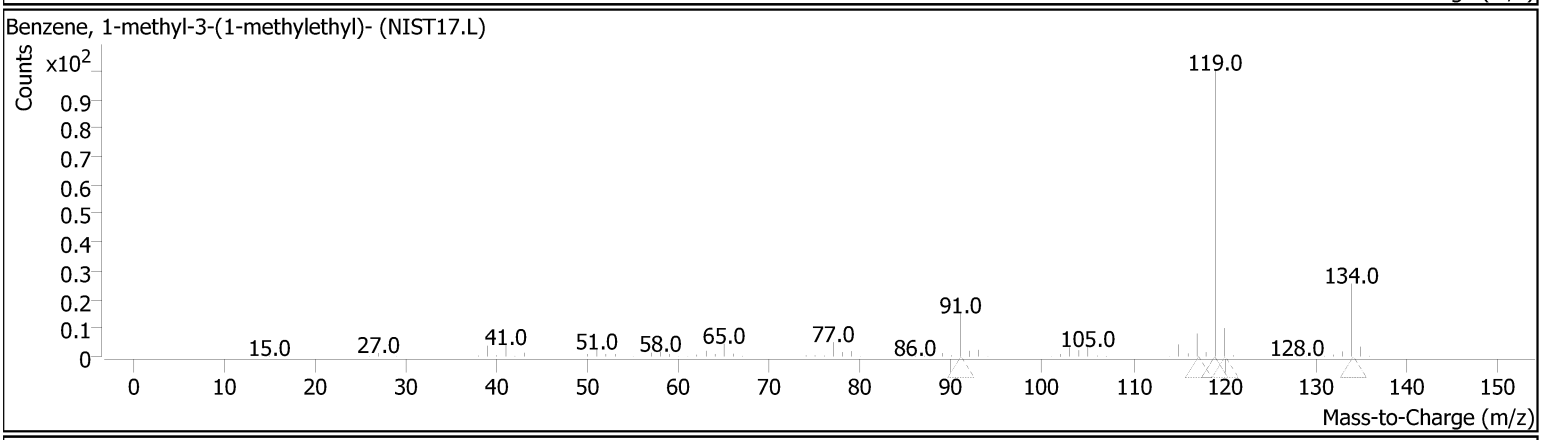


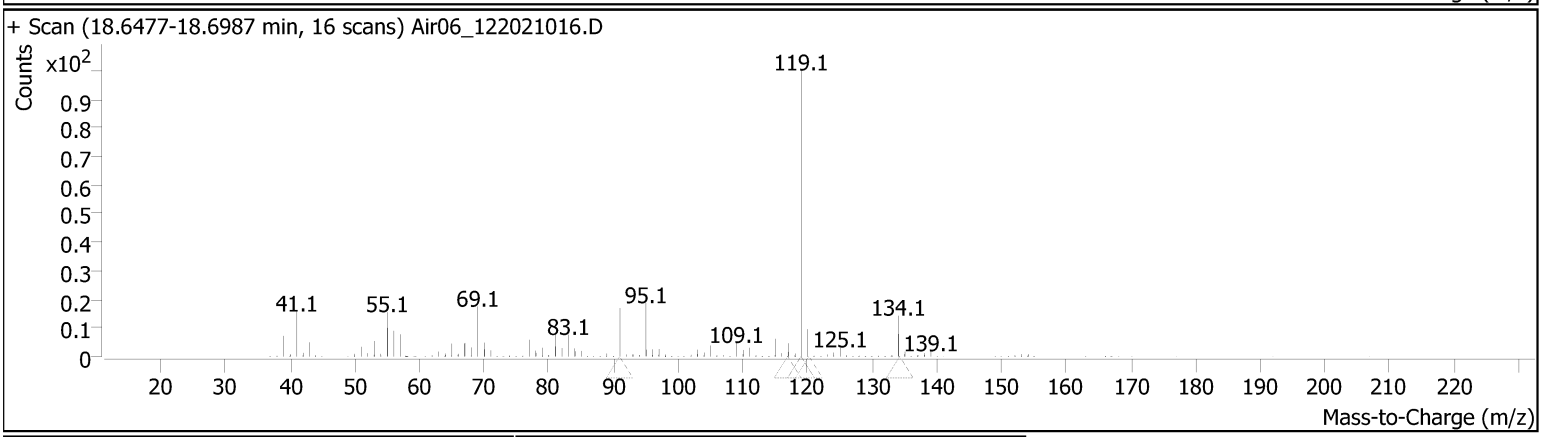


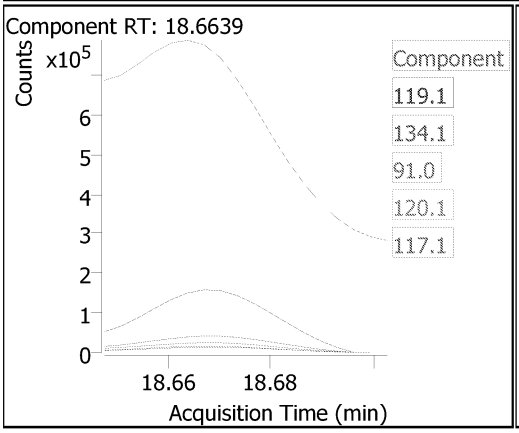


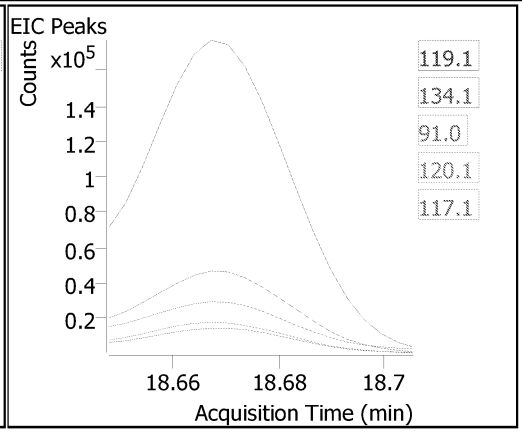
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.6639	Benzene, 1-methyl-3-(1-methylethyl)-	993226.1	94.1	535-77-3	C10H14	2.341

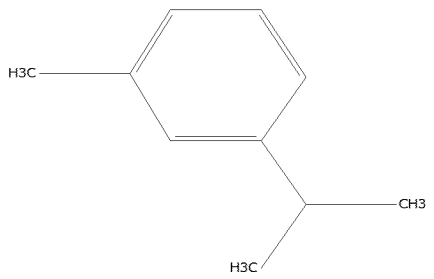




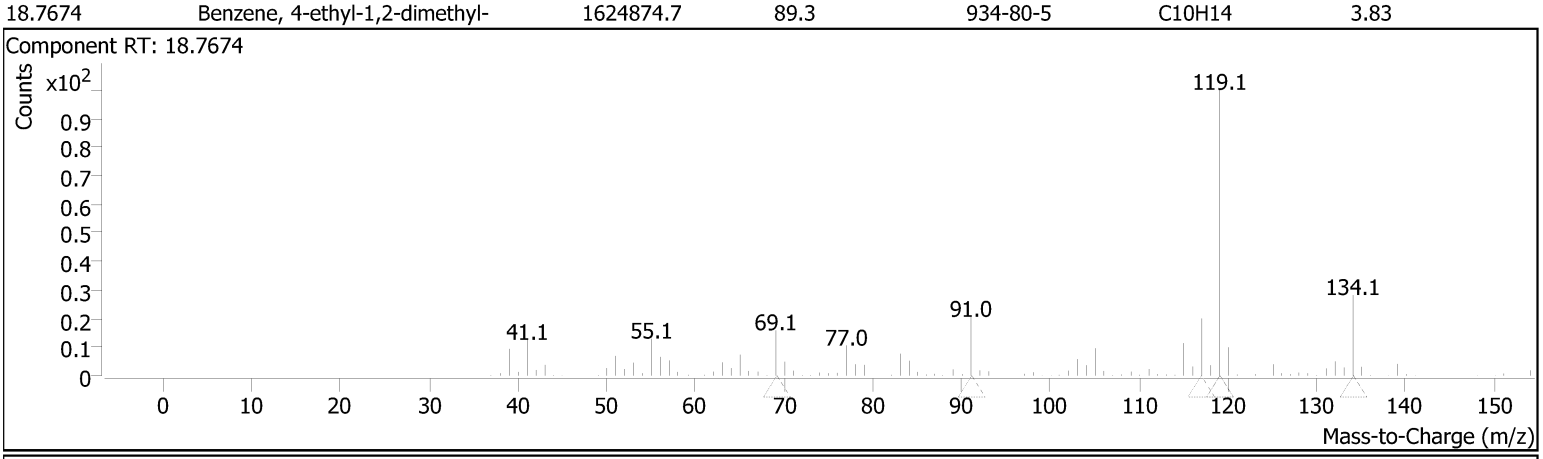


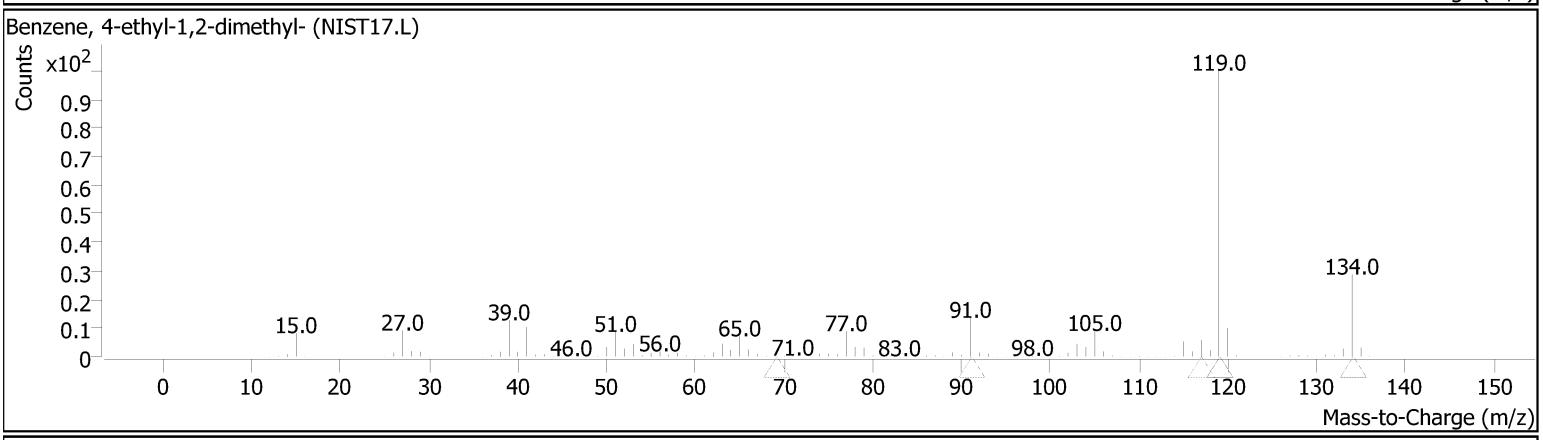


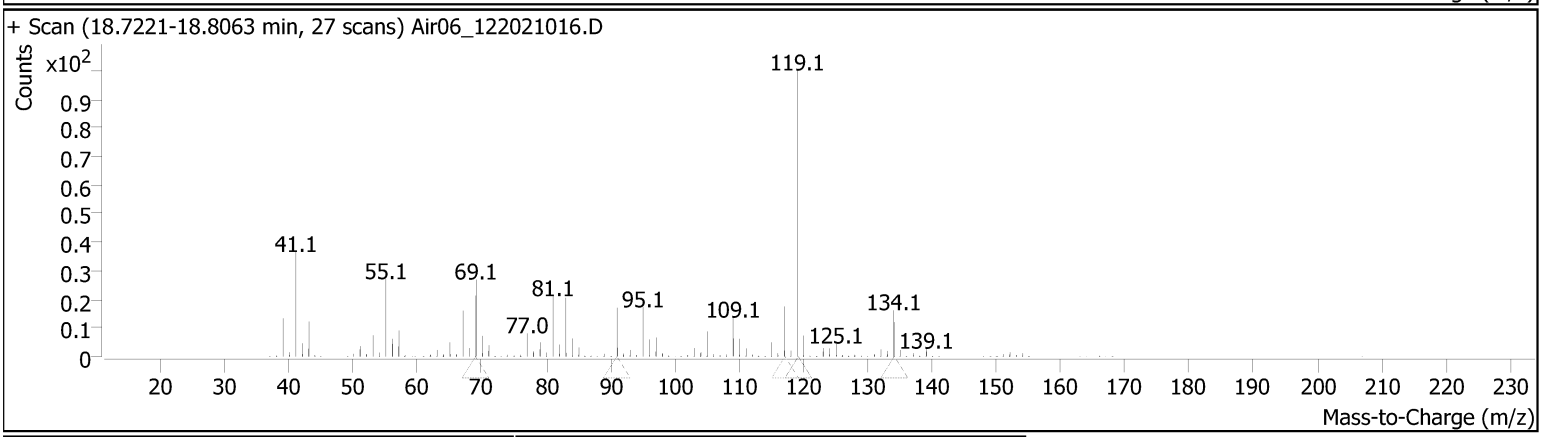


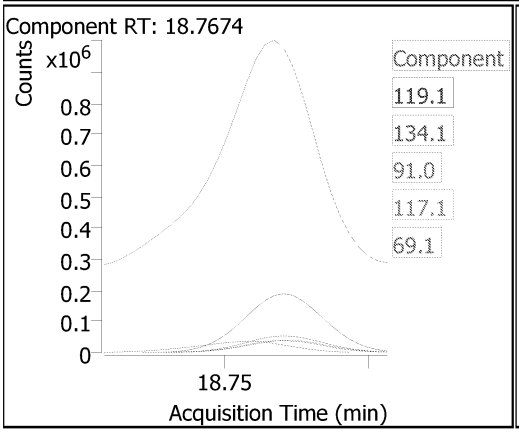


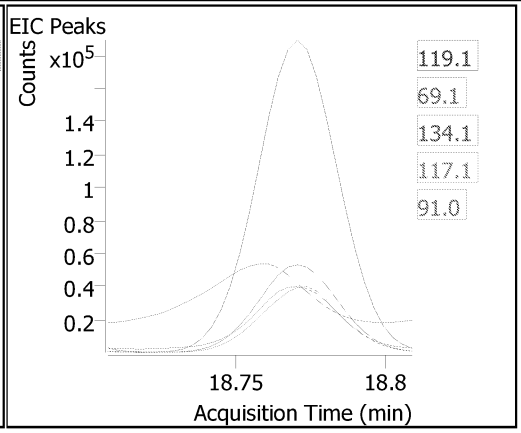
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.7674	Benzene, 4-ethyl-1,2-dimethyl-	1624874.7	89.3	934-80-5	C10H14	3.83

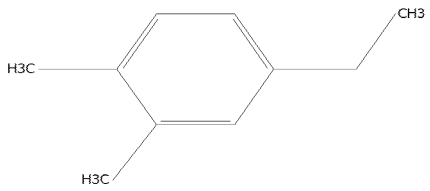




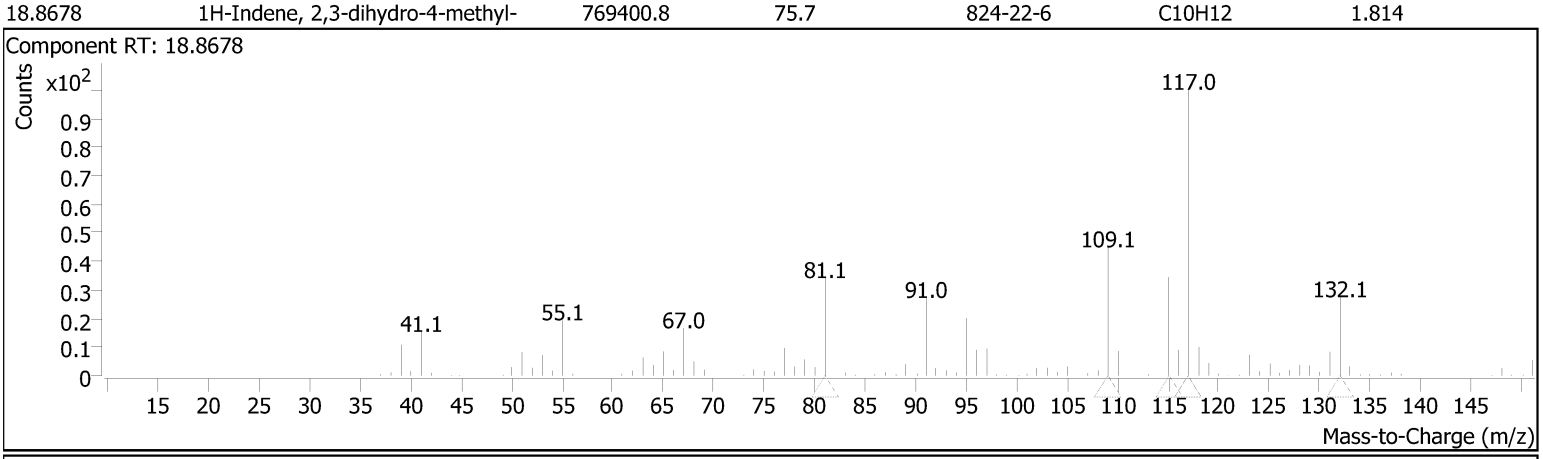


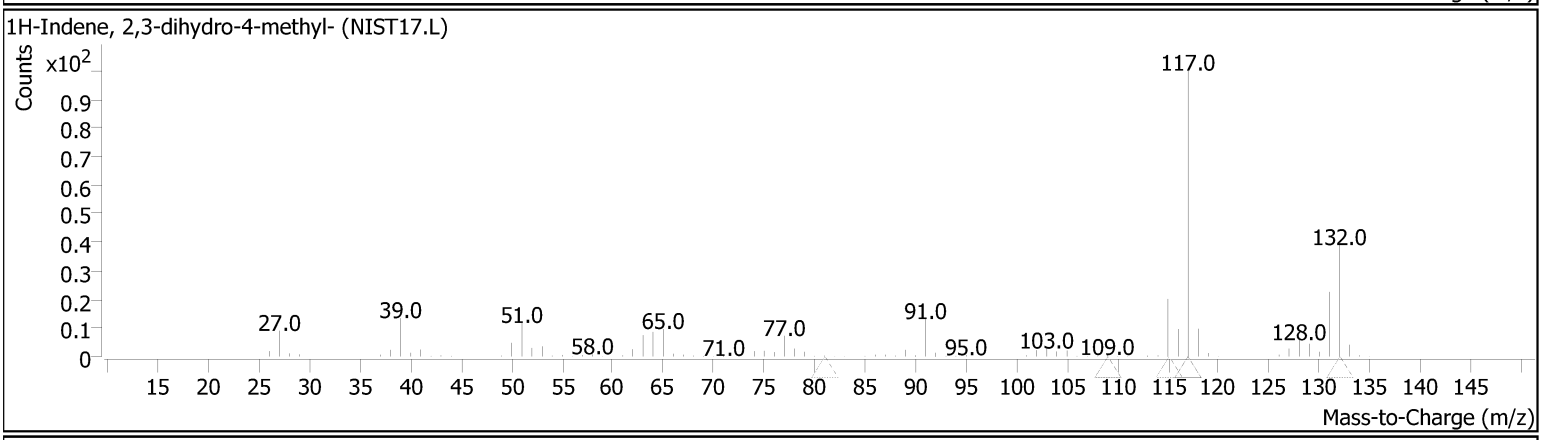


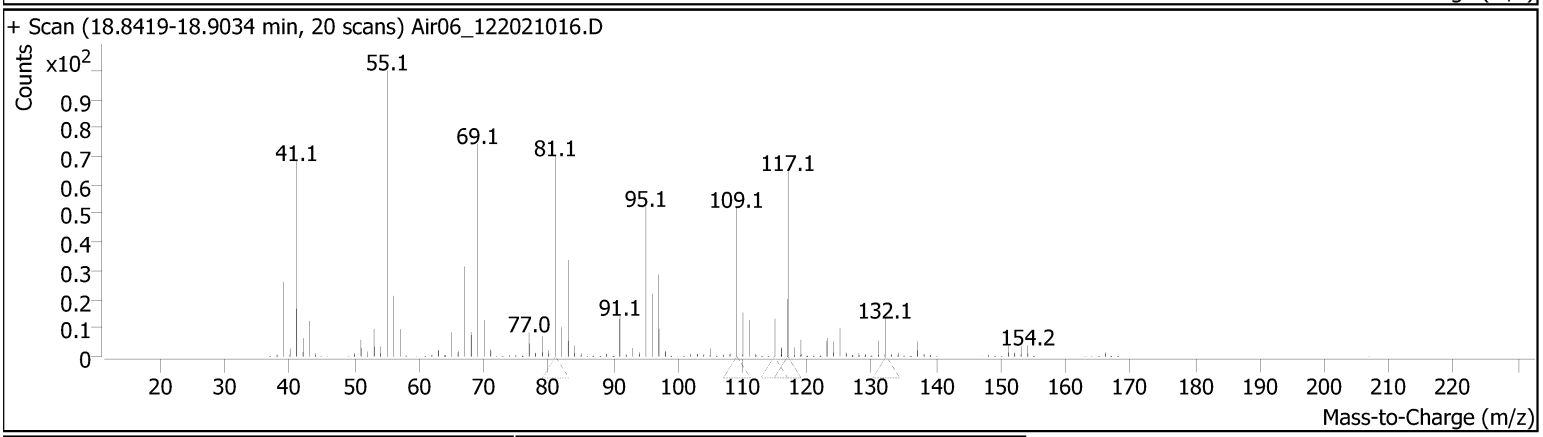


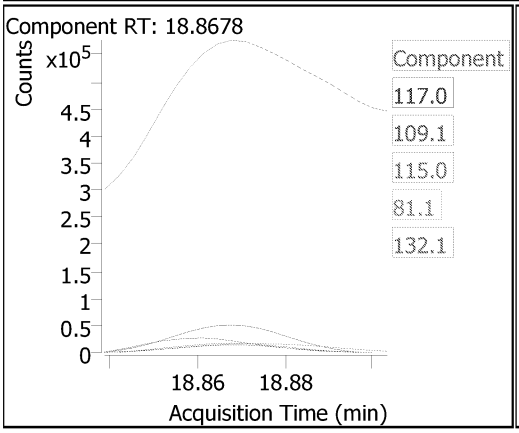


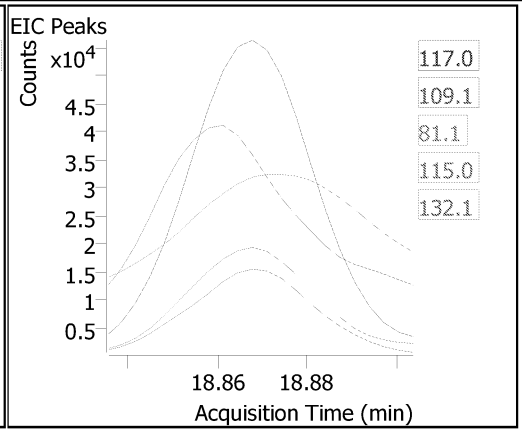
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.8678	1H-Indene, 2,3-dihydro-4-methyl-	769400.8	75.7	824-22-6	C10H12	1.814

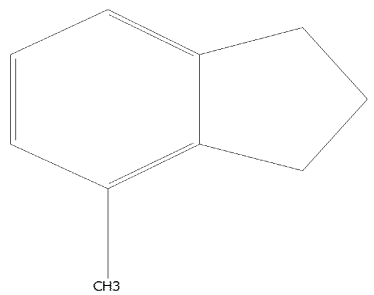




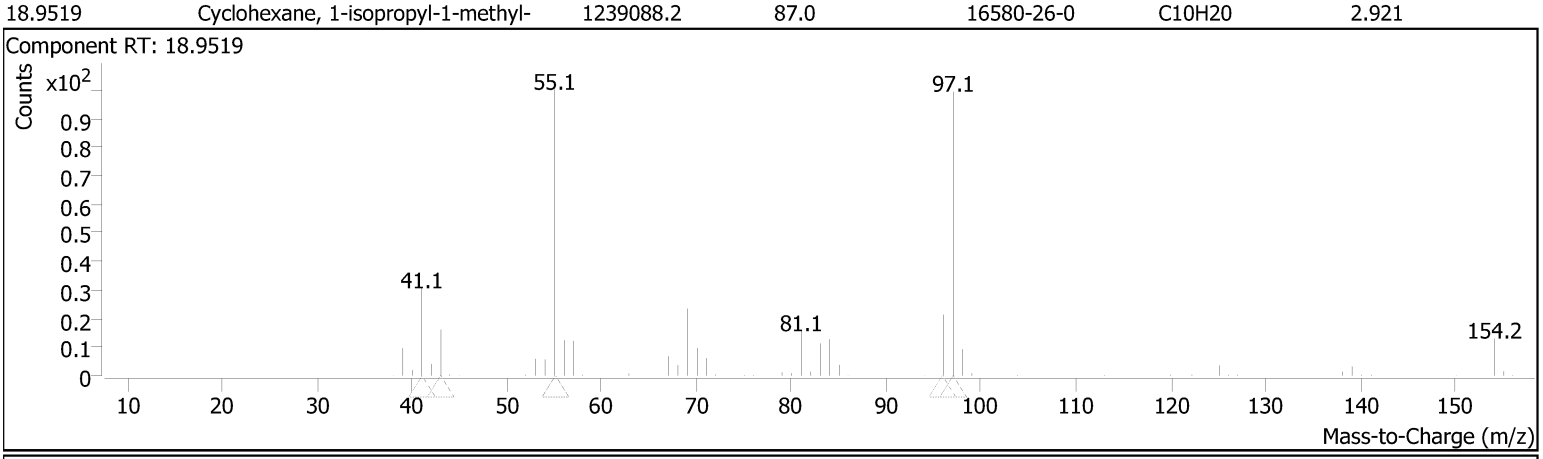


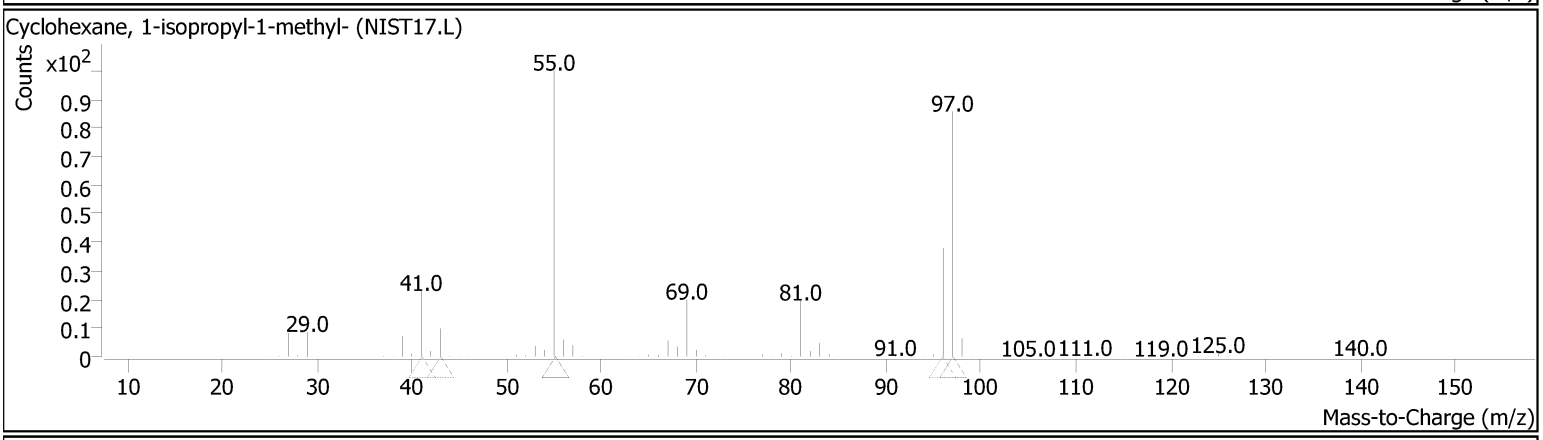


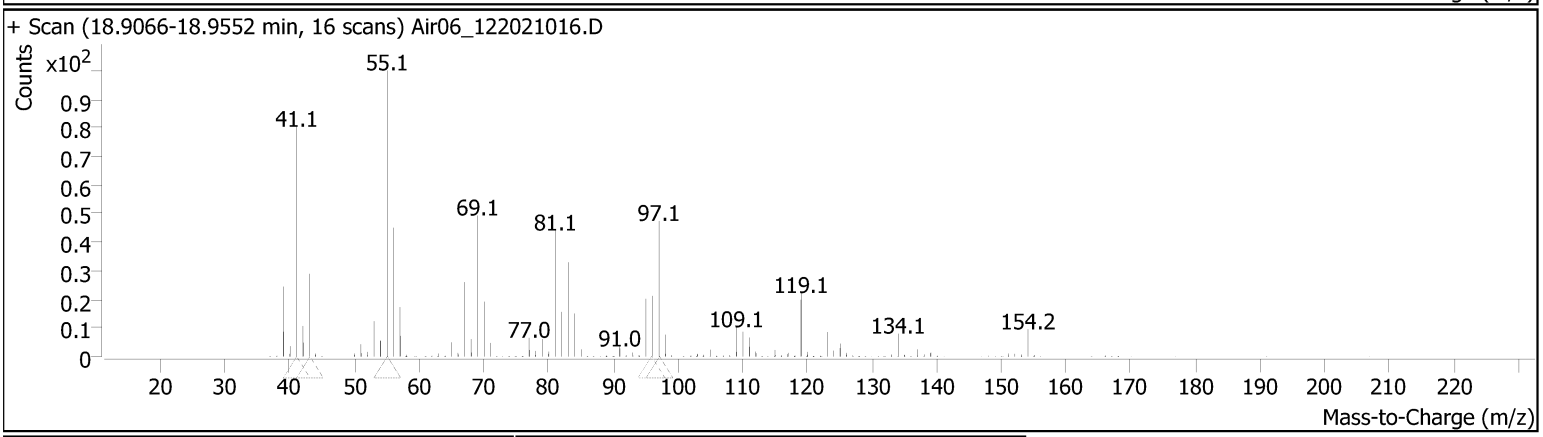


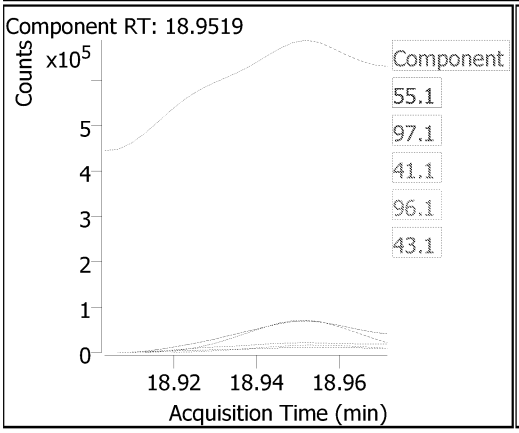


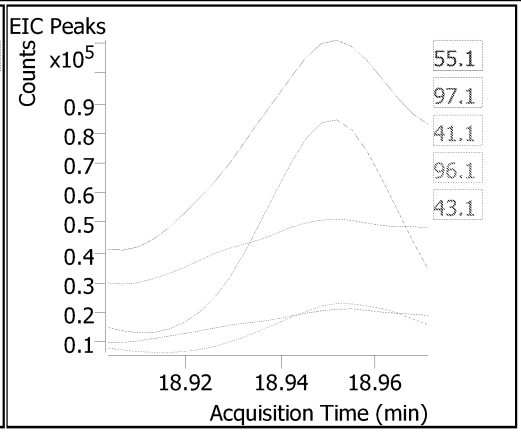
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.9519	Cyclohexane, 1-isopropyl-1-methyl-	1239088.2	87.0	16580-26-0	C10H20	2.921

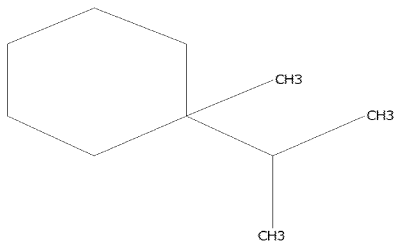




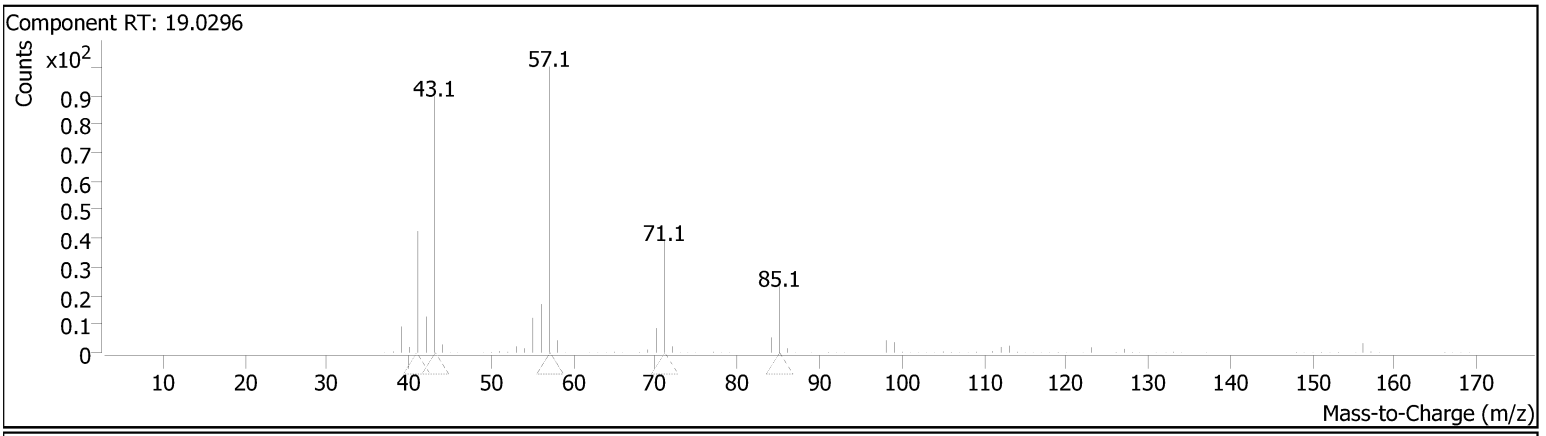


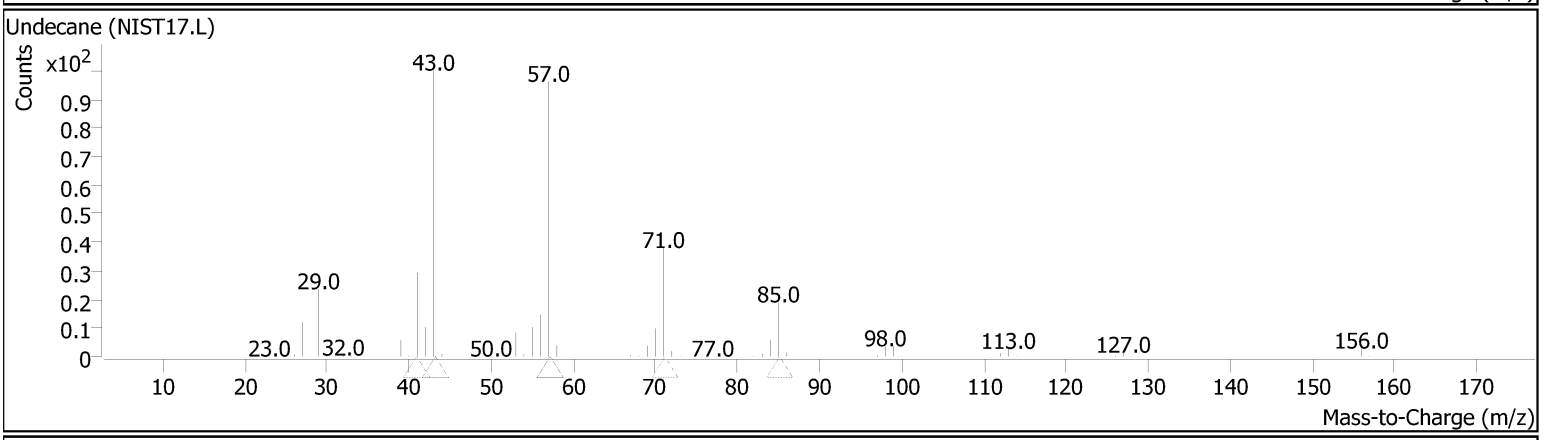


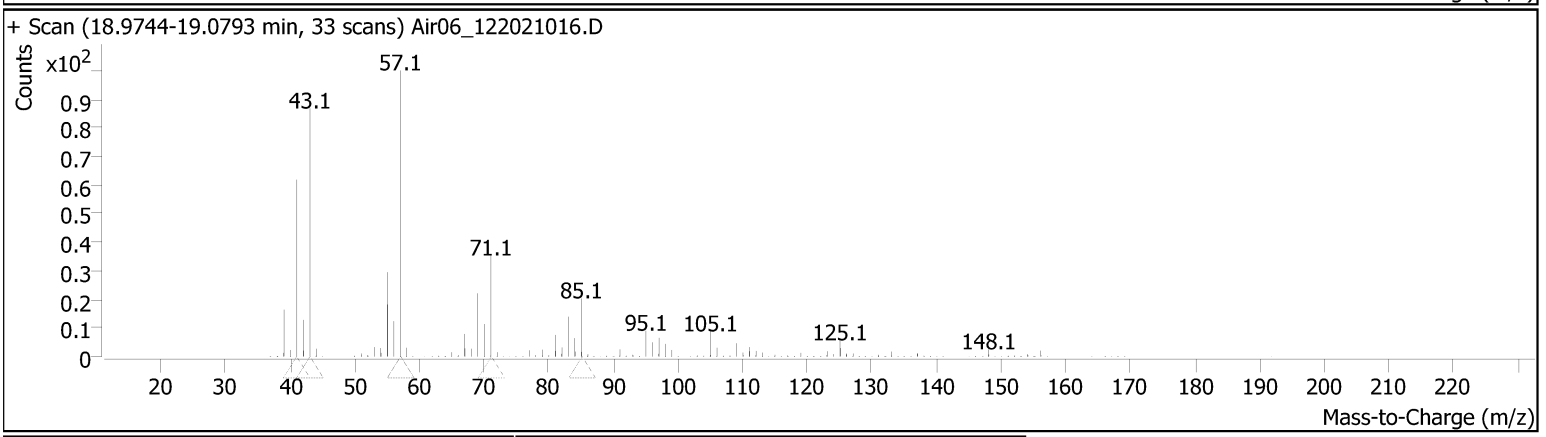


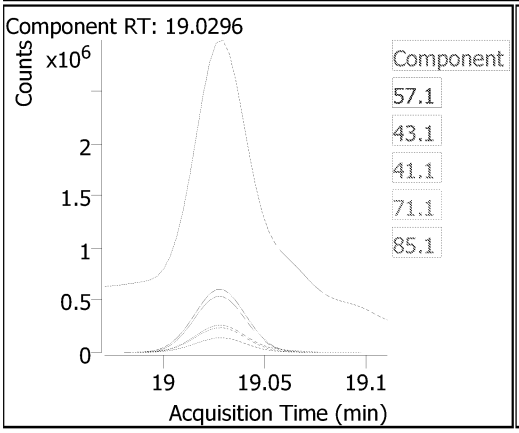


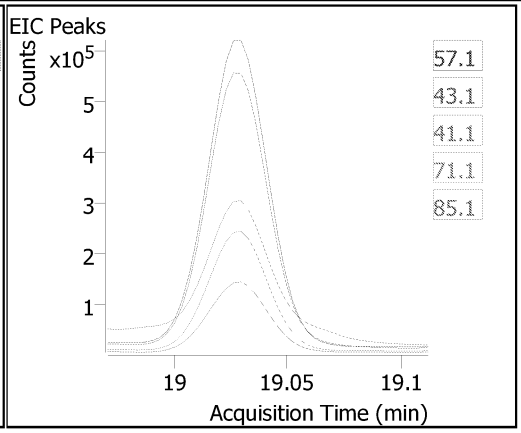
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.0296	Undecane	7023932.1	95.2	1120-21-4	C11H24	16.56





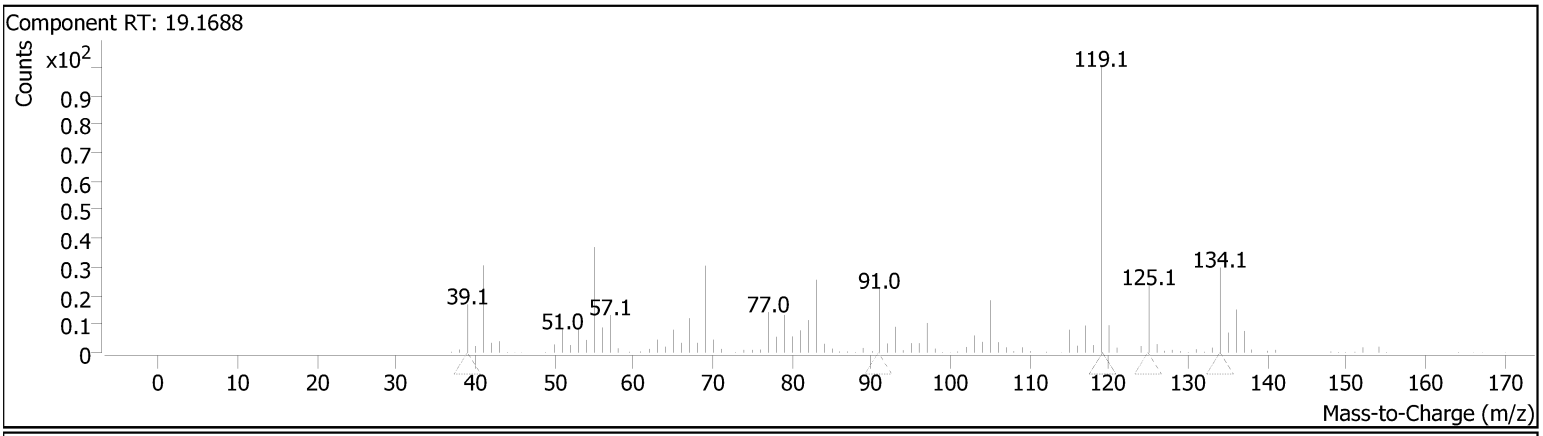


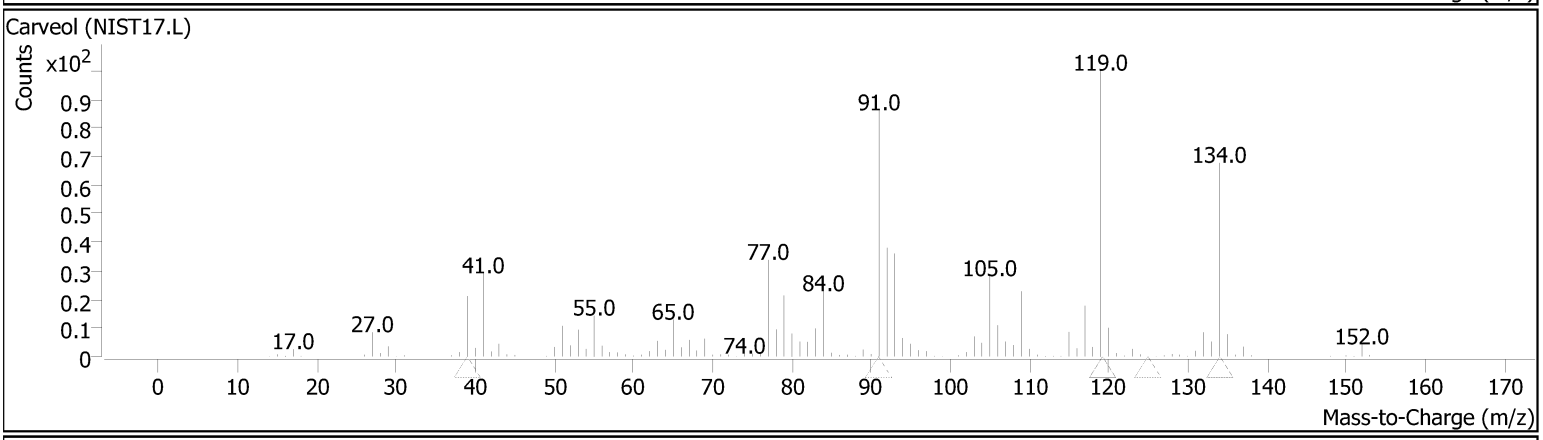


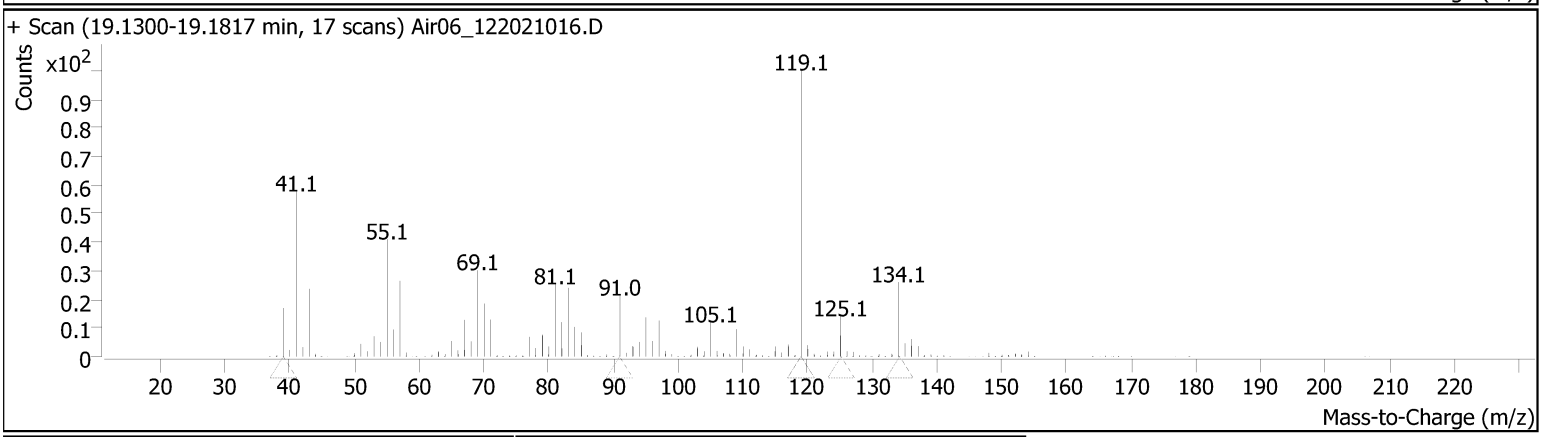


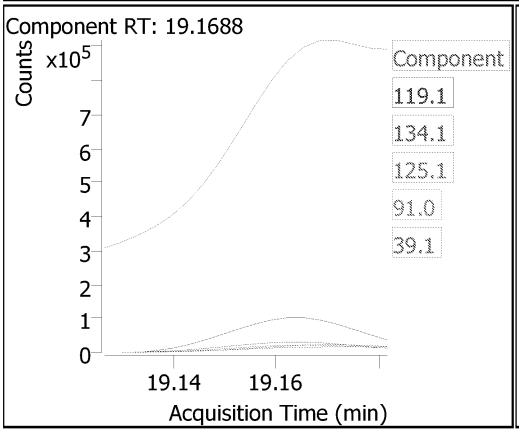


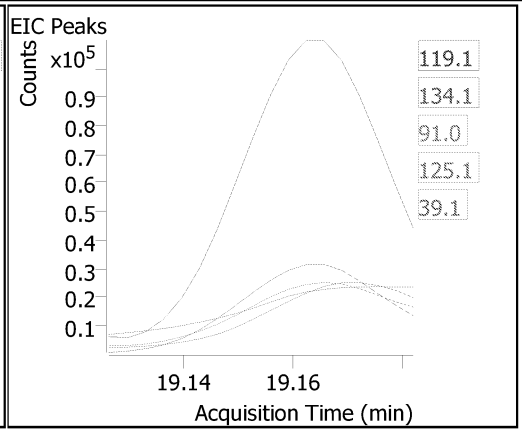
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.1688	Carveol	1138963.6	80.0	99-48-9	C10H16O	2.685

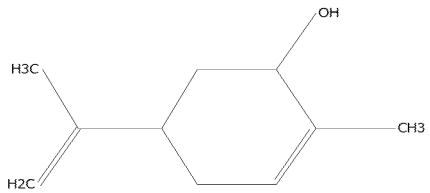




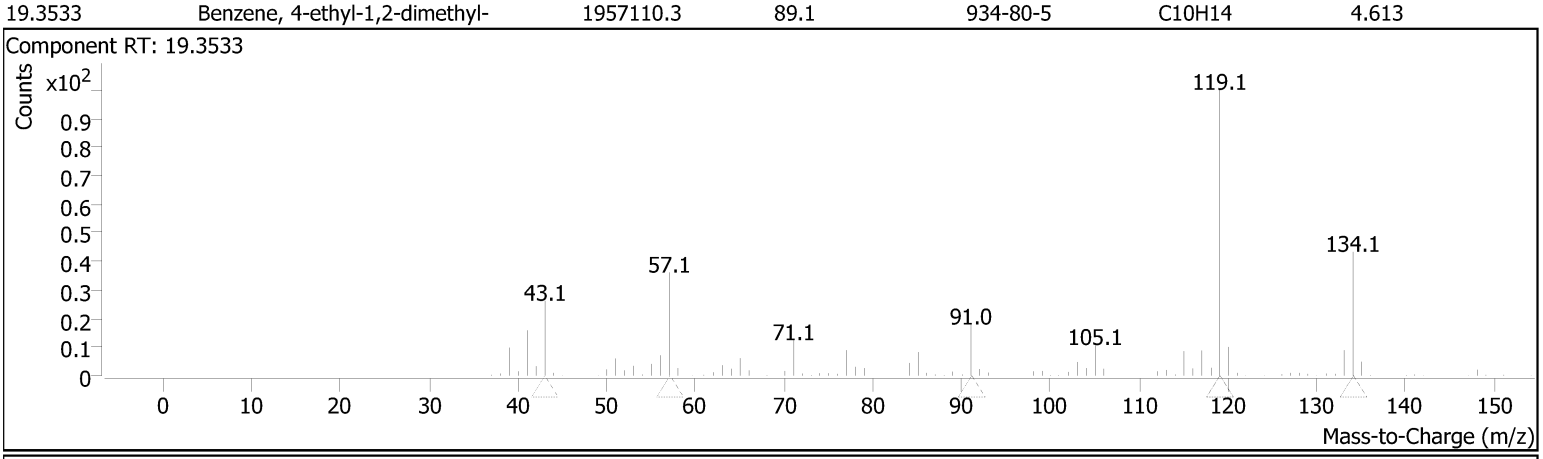


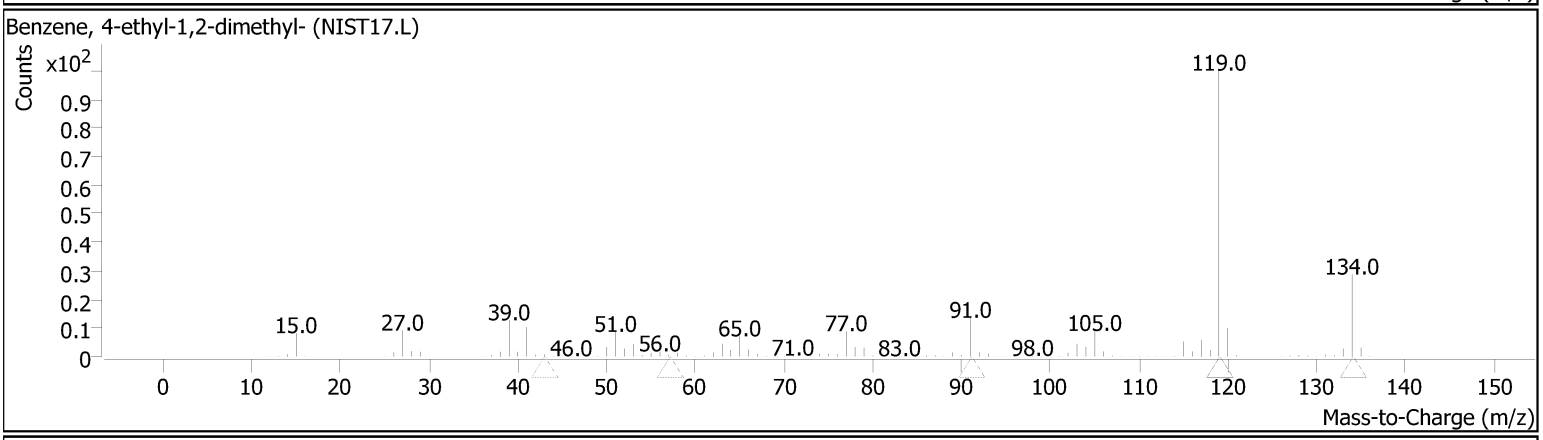


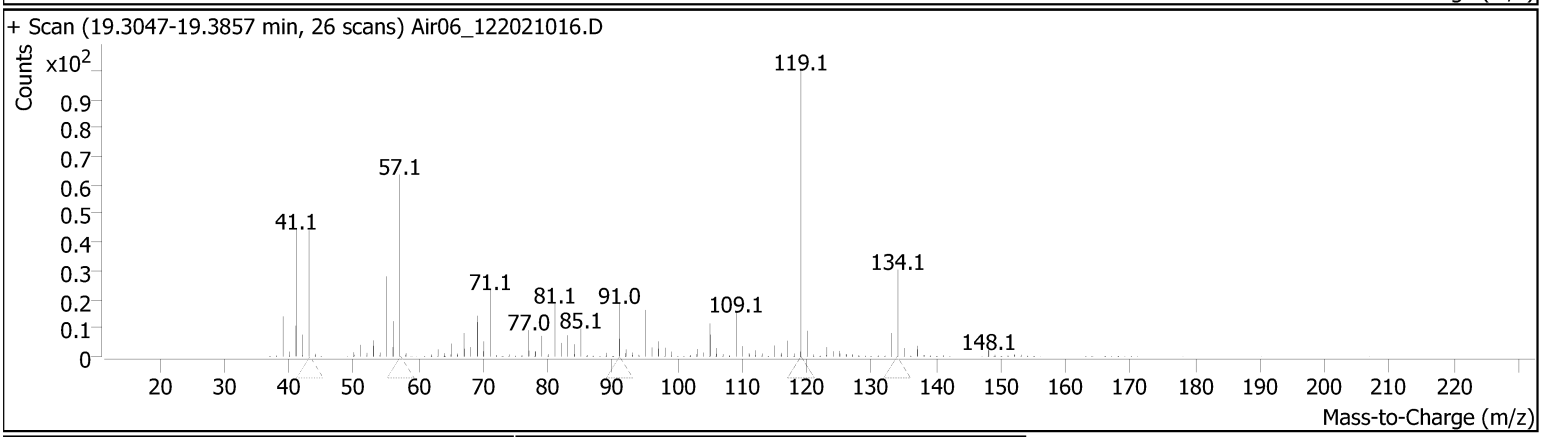


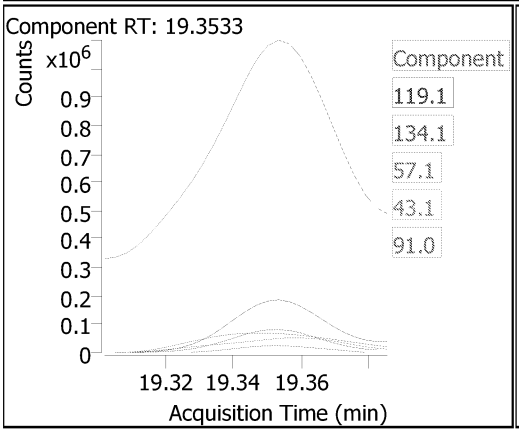


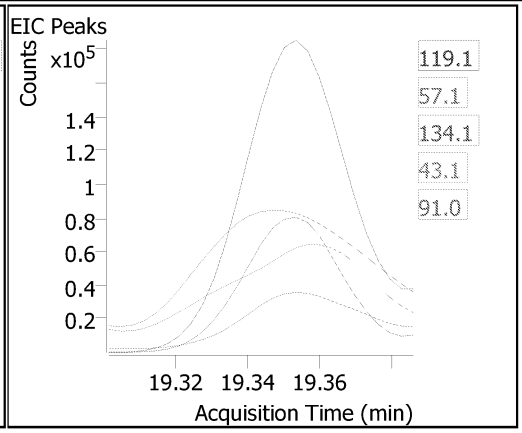
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.3533	Benzene, 4-ethyl-1,2-dimethyl-	1957110.3	89.1	934-80-5	C10H14	4.613

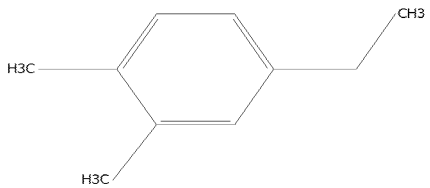




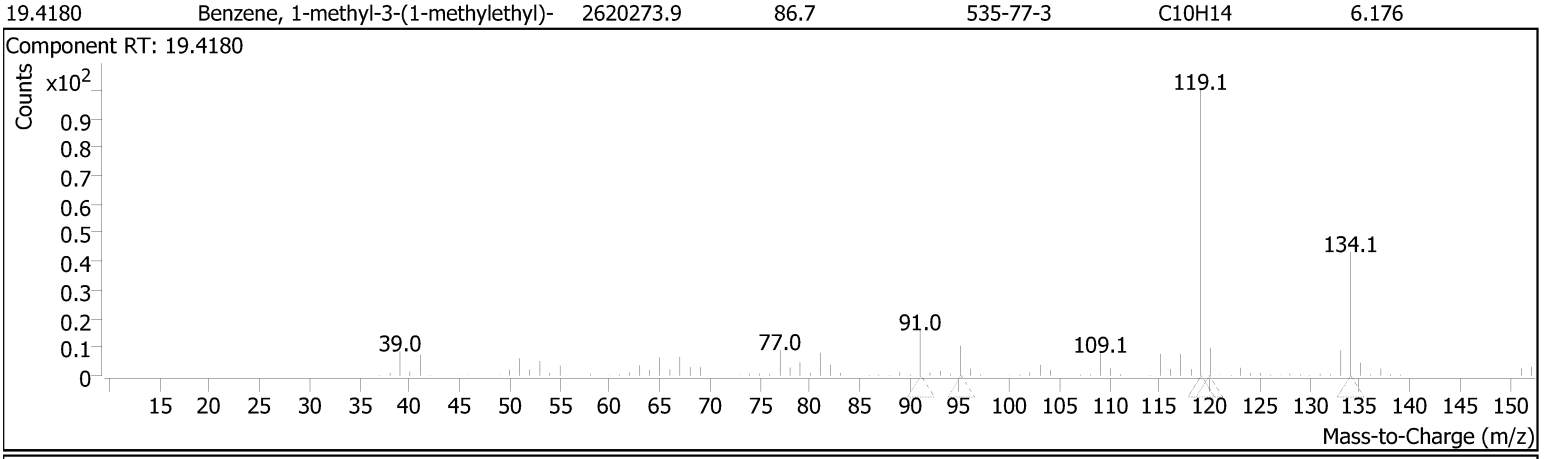


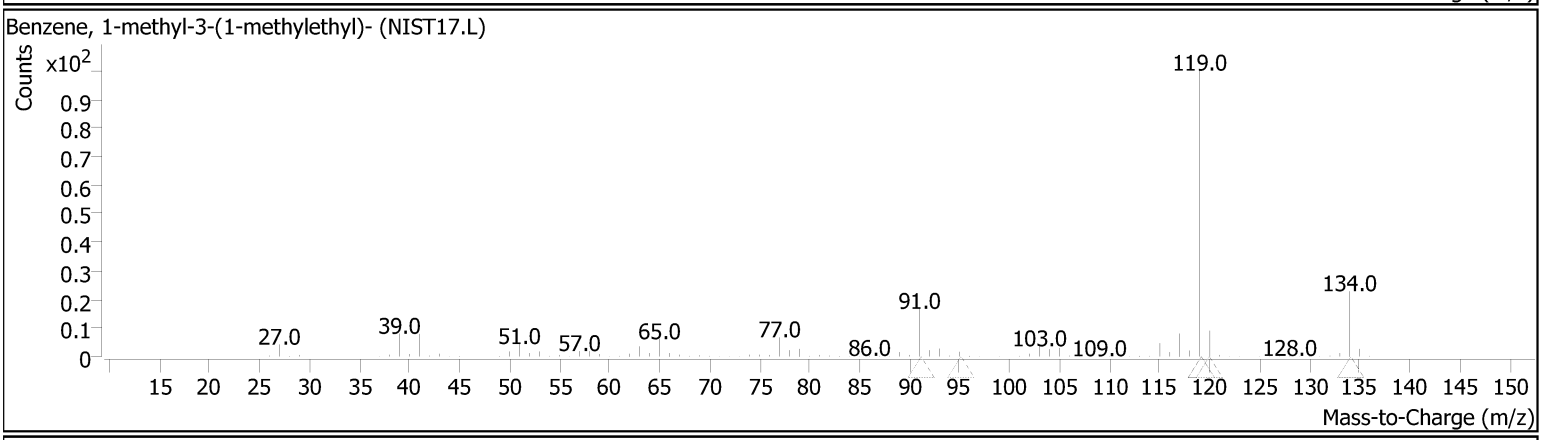


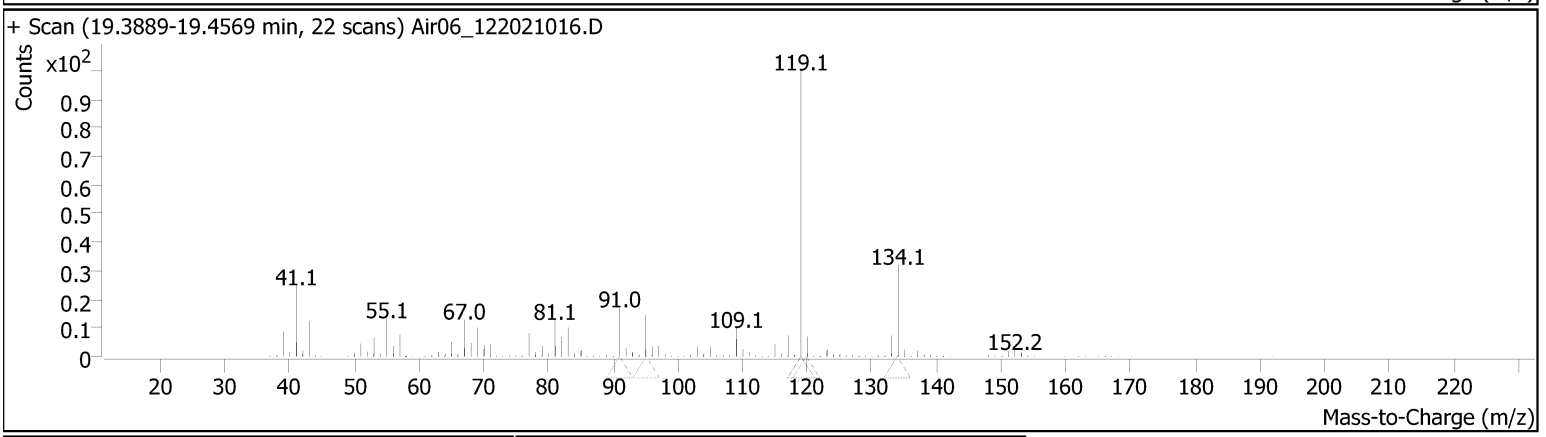


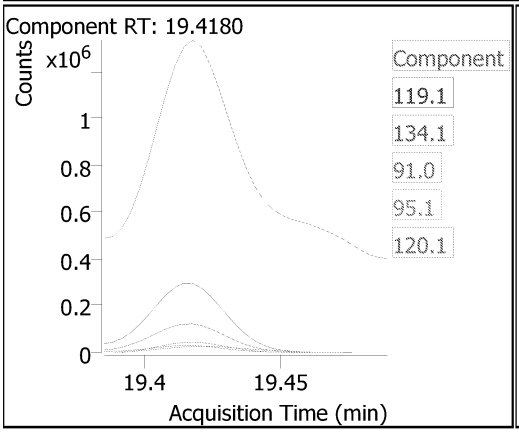


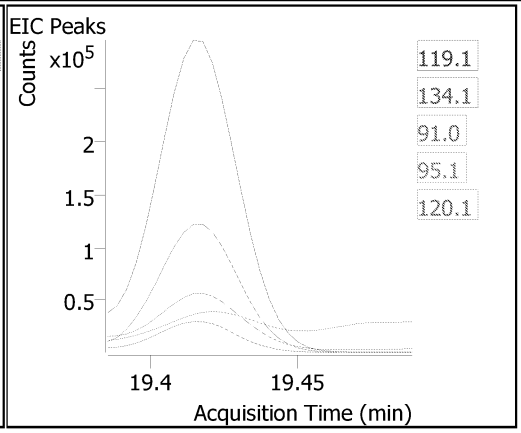
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.4180	Benzene, 1-methyl-3-(1-methylethyl)-	2620273.9	86.7	535-77-3	C10H14	6.176

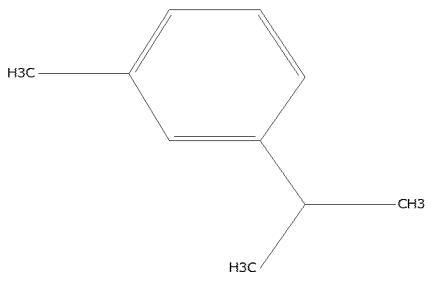




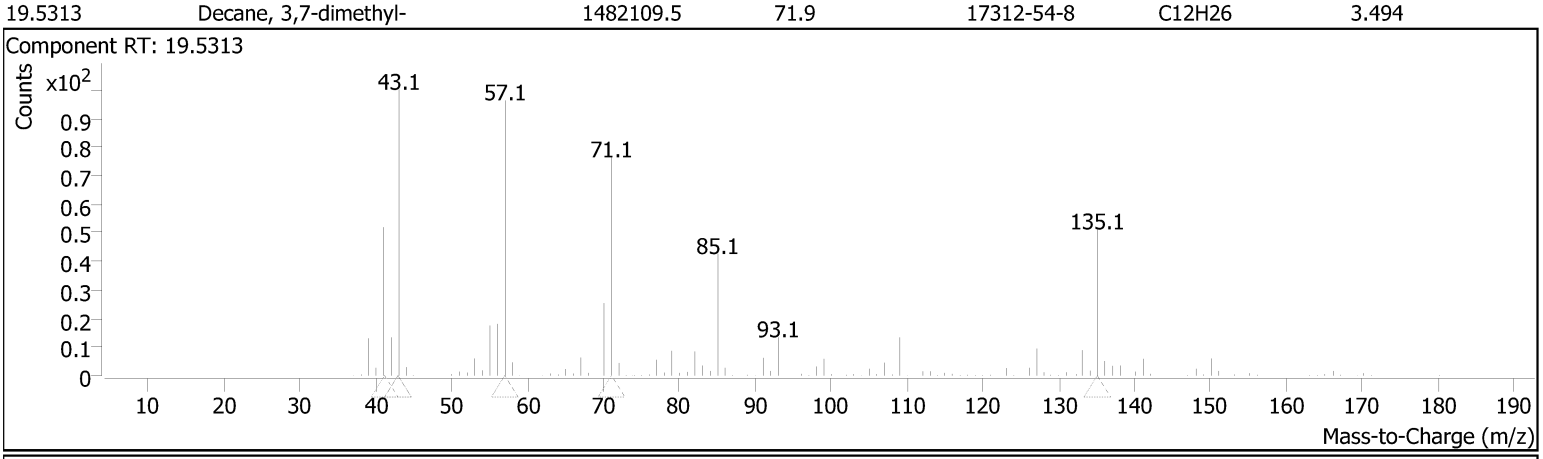


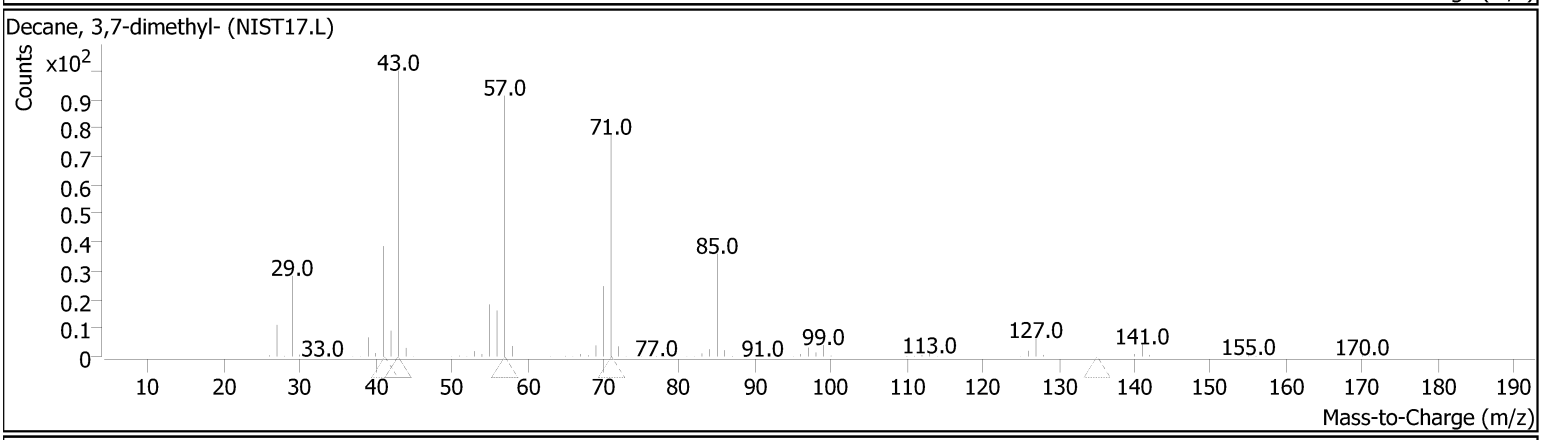


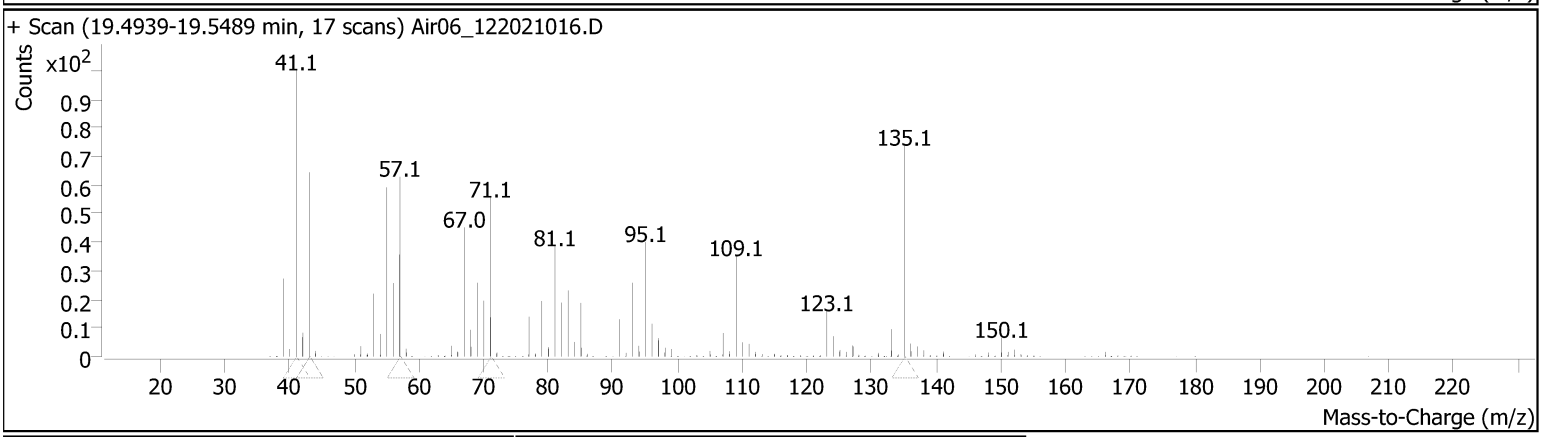


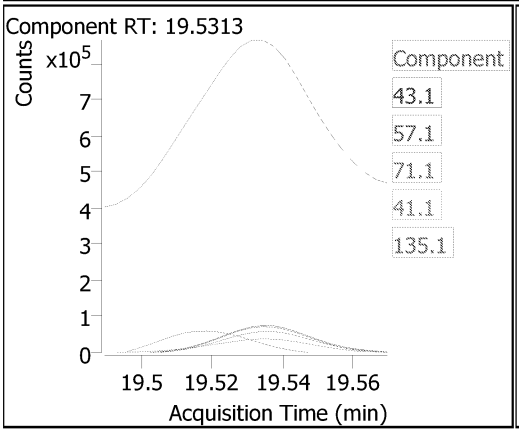


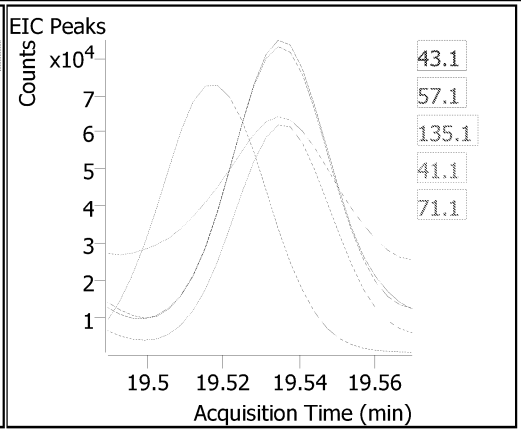
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.5313	Decane, 3,7-dimethyl-	1482109.5	71.9	17312-54-8	C12H26	3.494

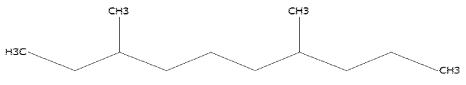








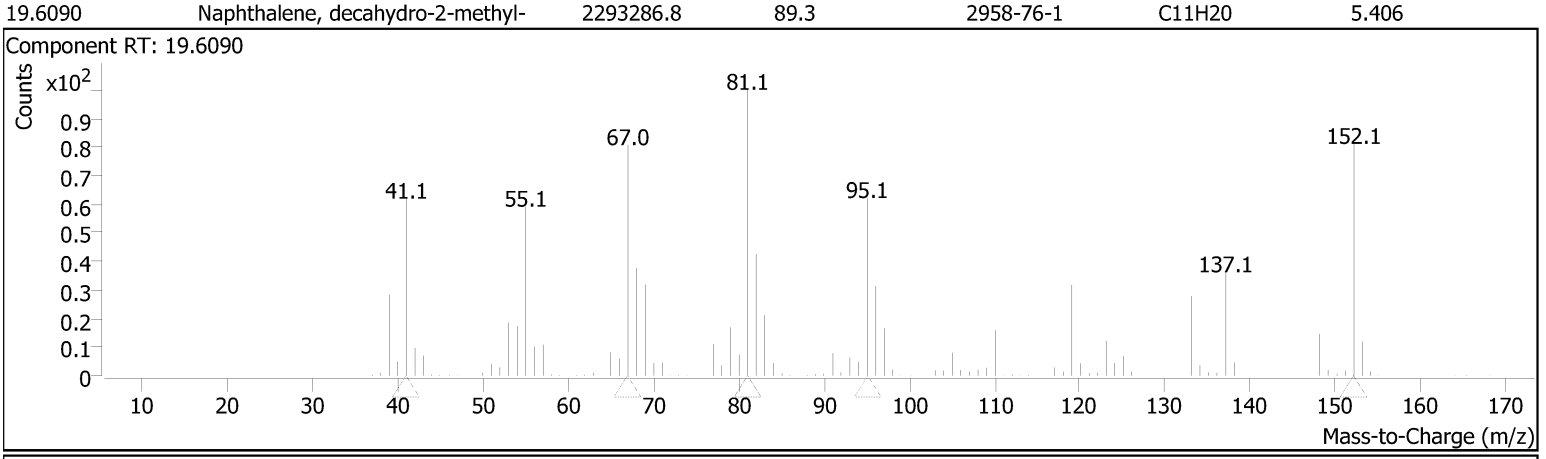


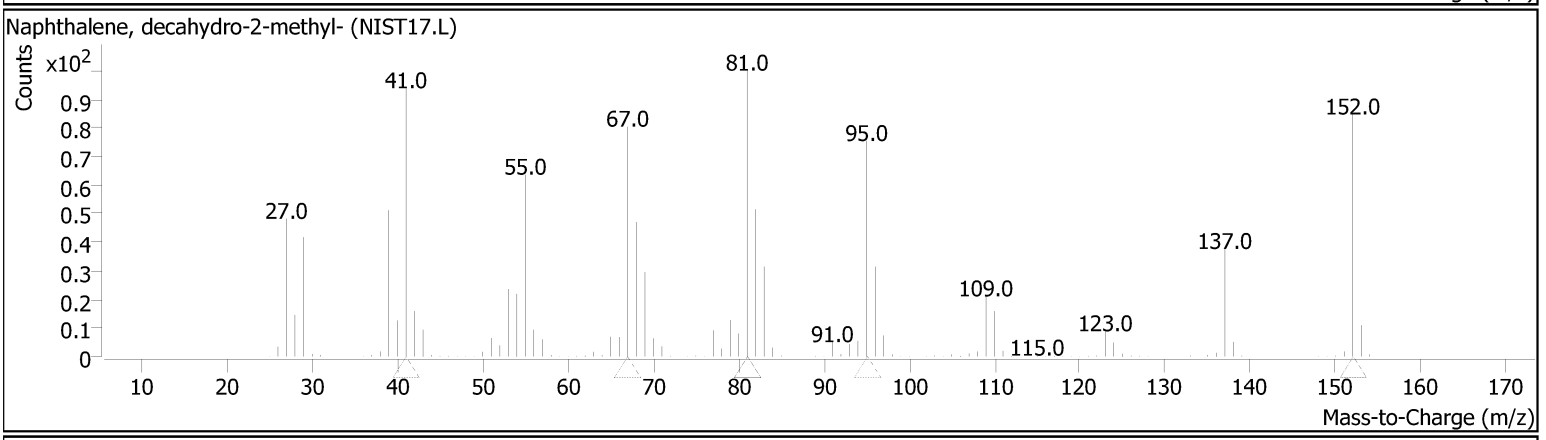


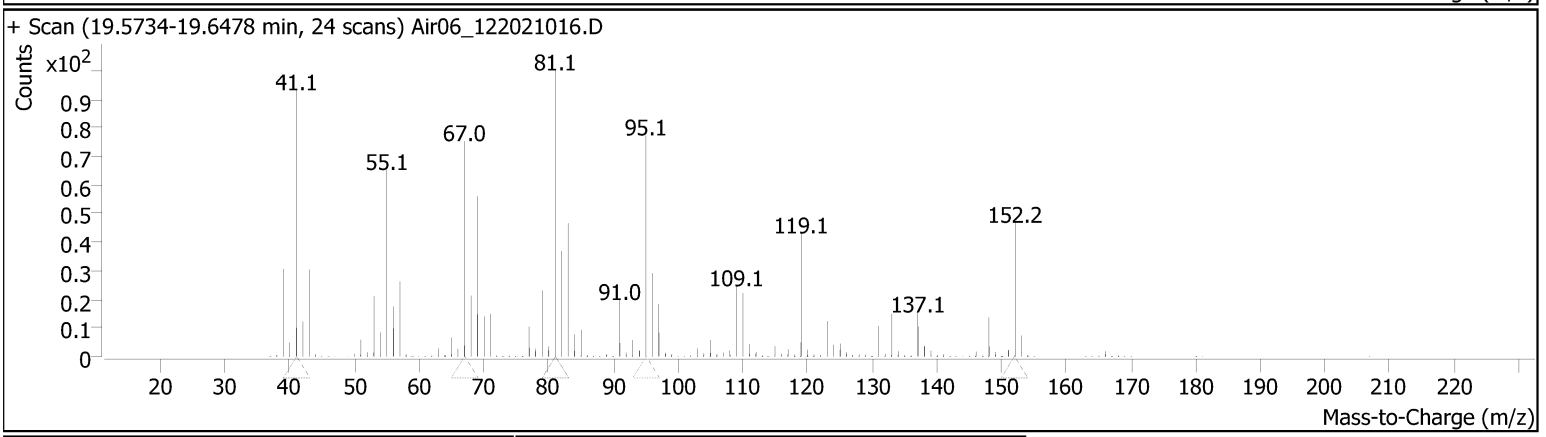
Library Search Results - NonTarget Hits with Details

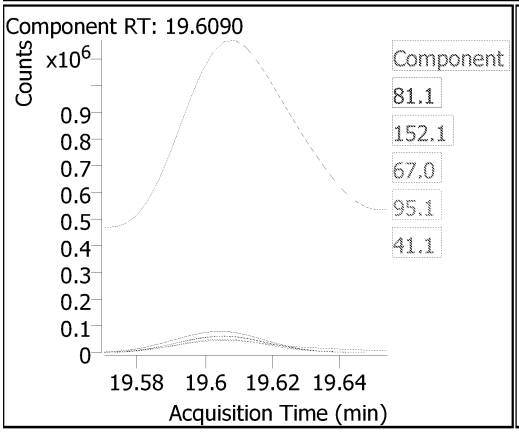
Agilent Technologies

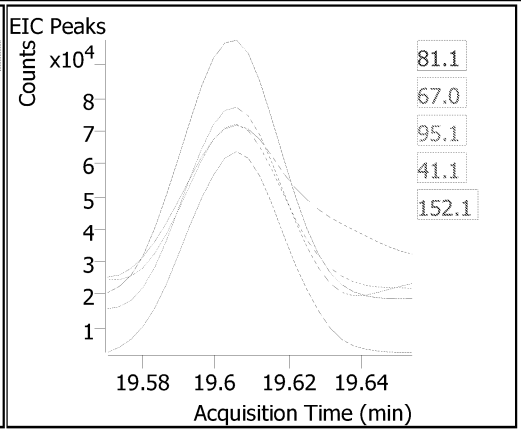
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.6090	Naphthalene, decahydro-2-methyl-	2293286.8	89.3	2958-76-1	C11H20	5.406

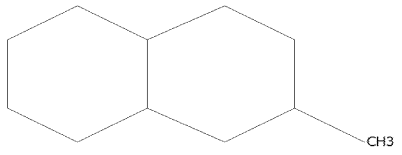




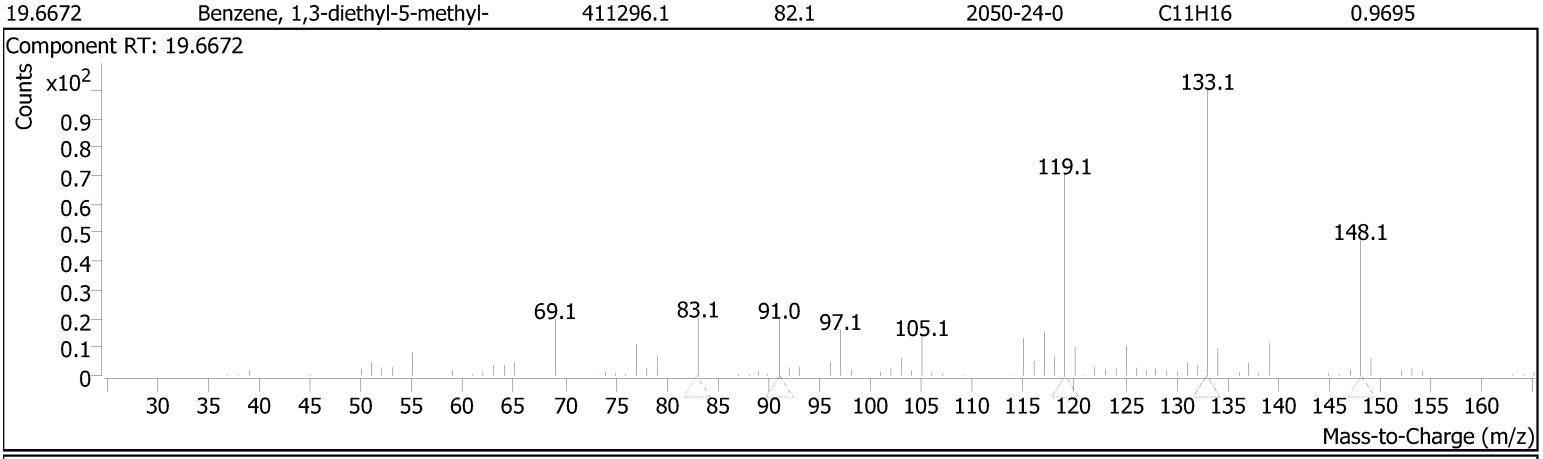


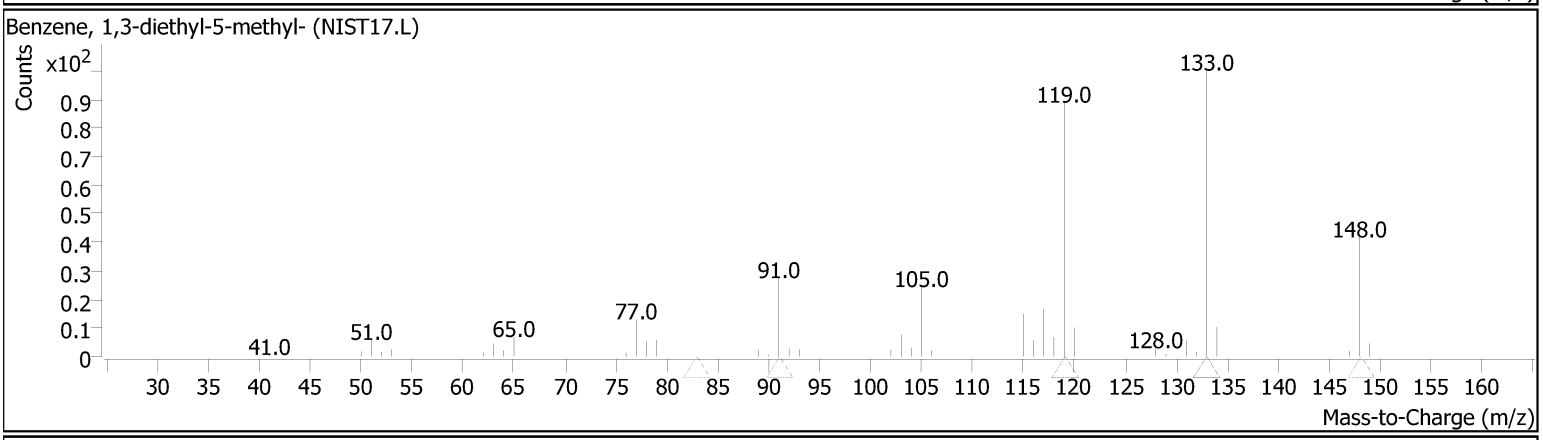


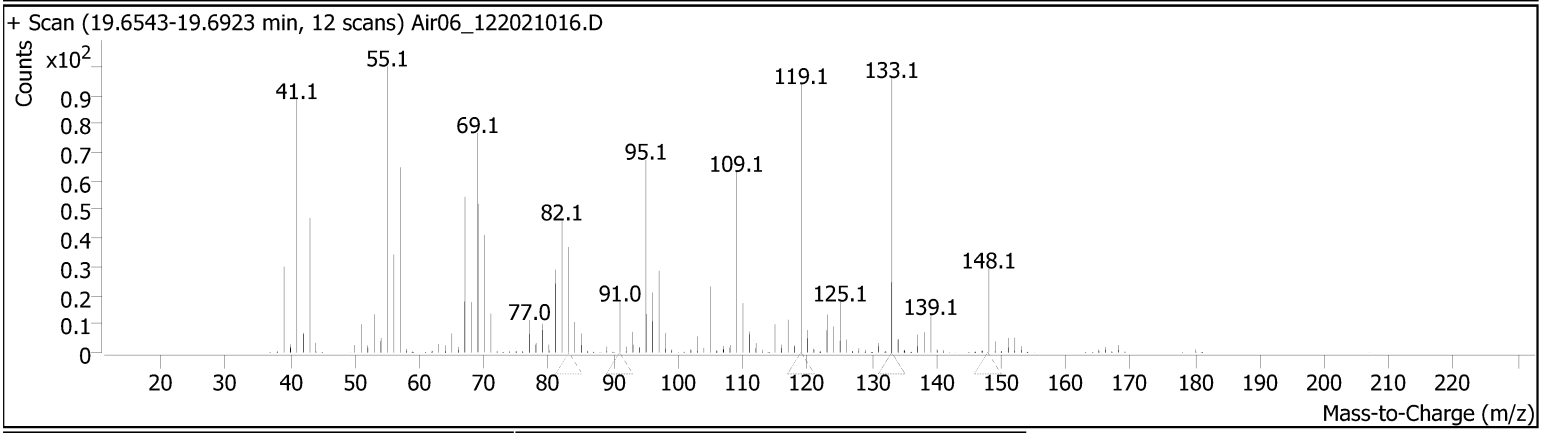


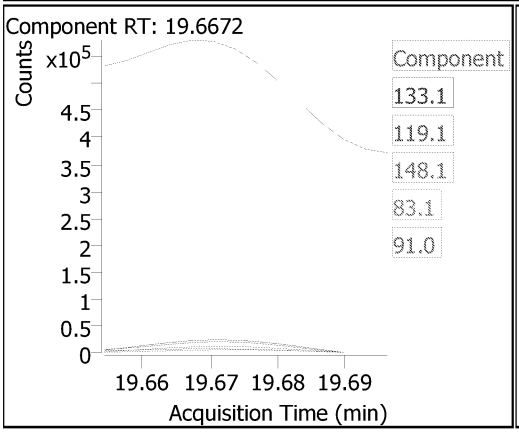


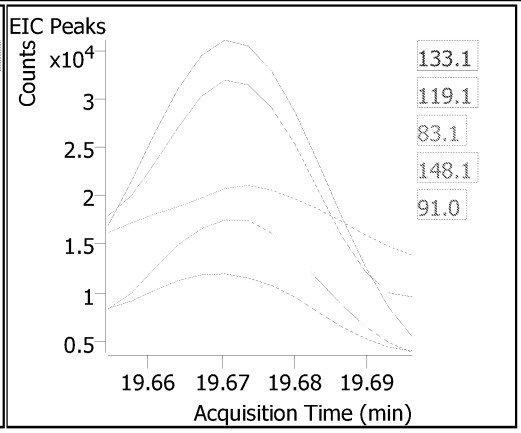
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.6672	Benzene, 1,3-diethyl-5-methyl-	411296.1	82.1	2050-24-0	C11H16	0.9695

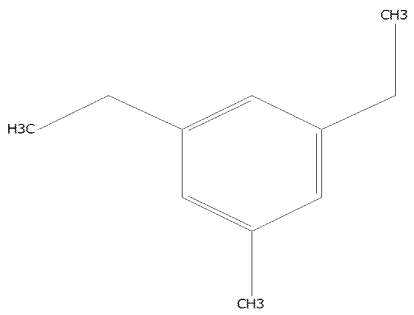




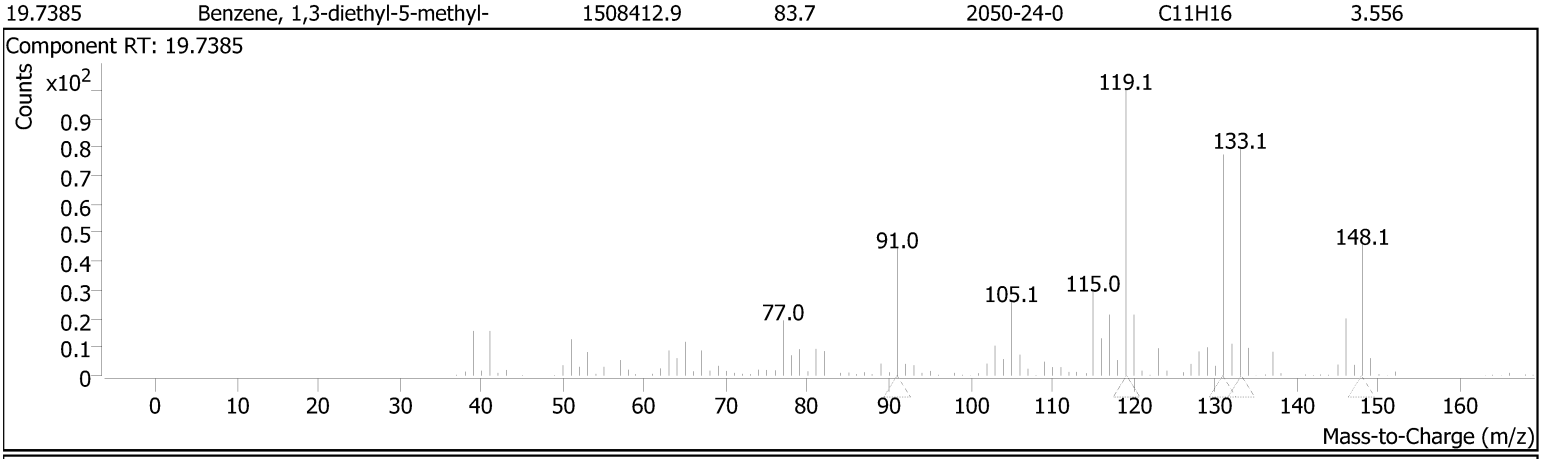


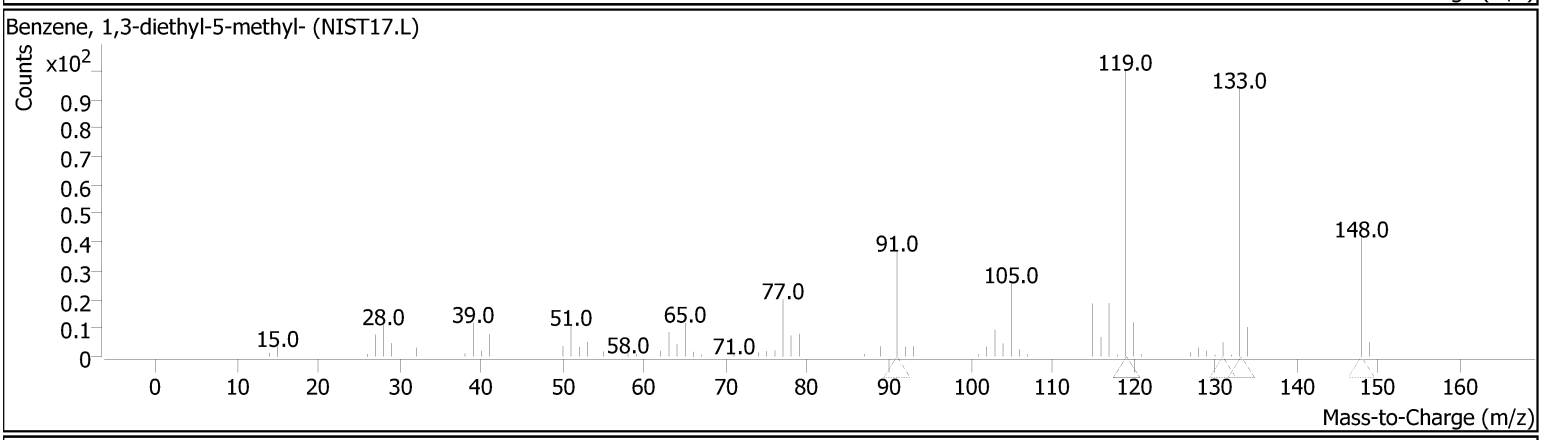


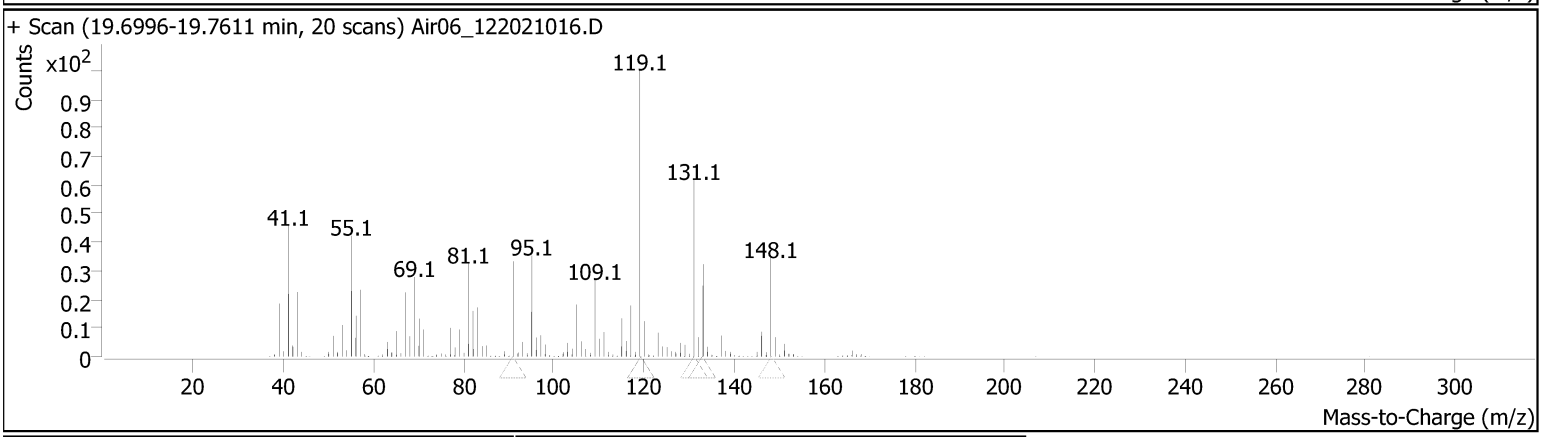


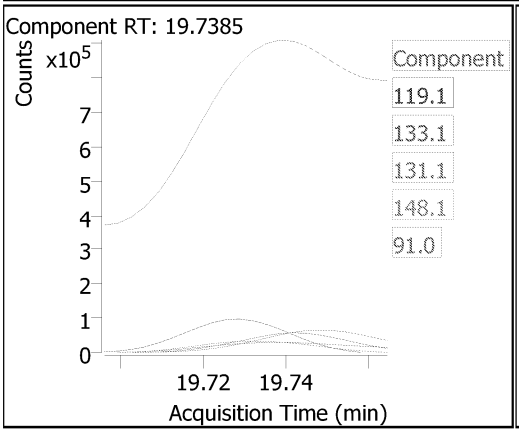


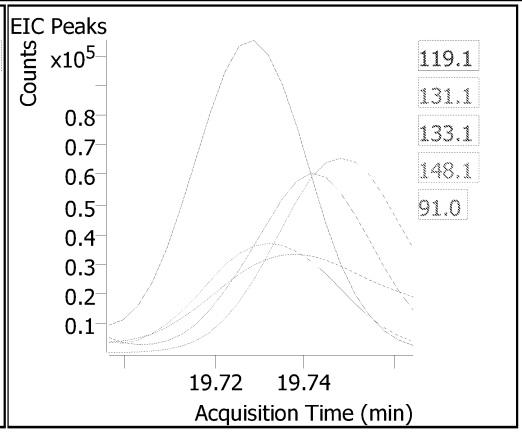
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.7385	Benzene, 1,3-diethyl-5-methyl-	1508412.9	83.7	2050-24-0	C11H16	3.556

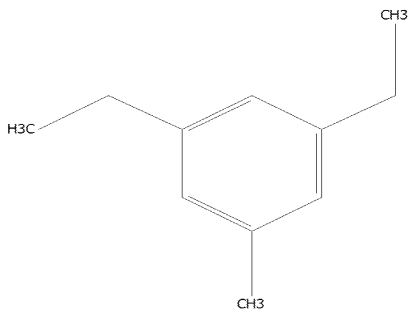




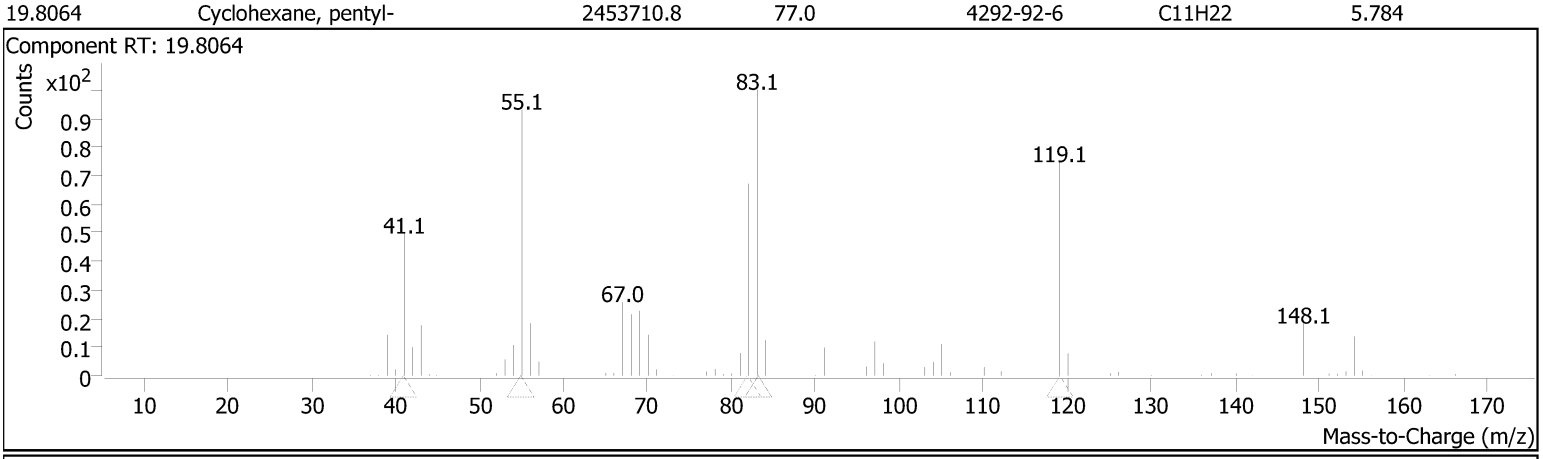


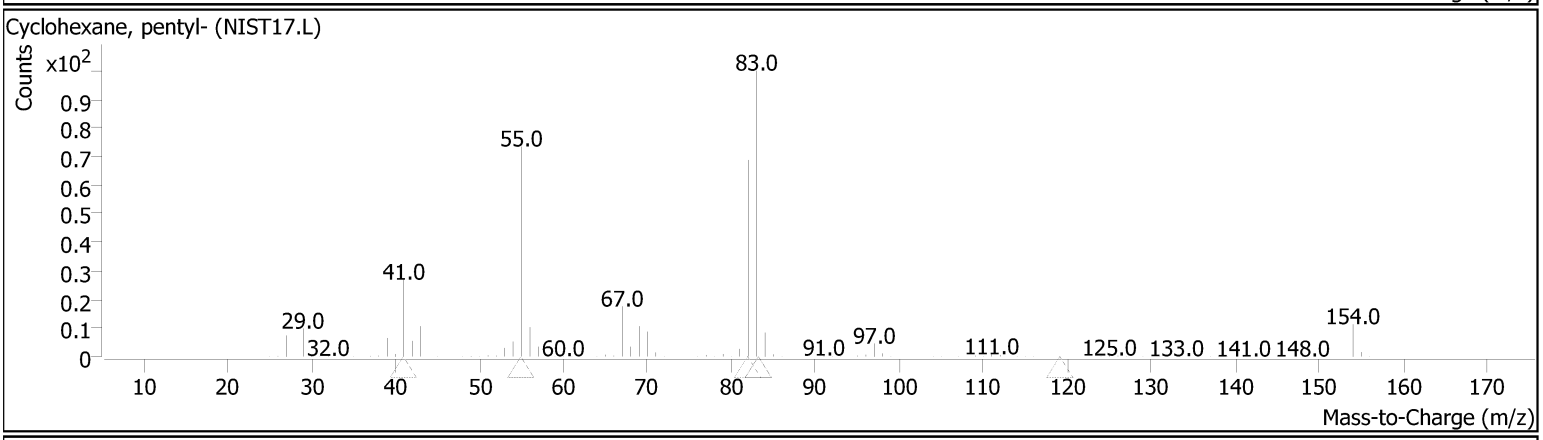


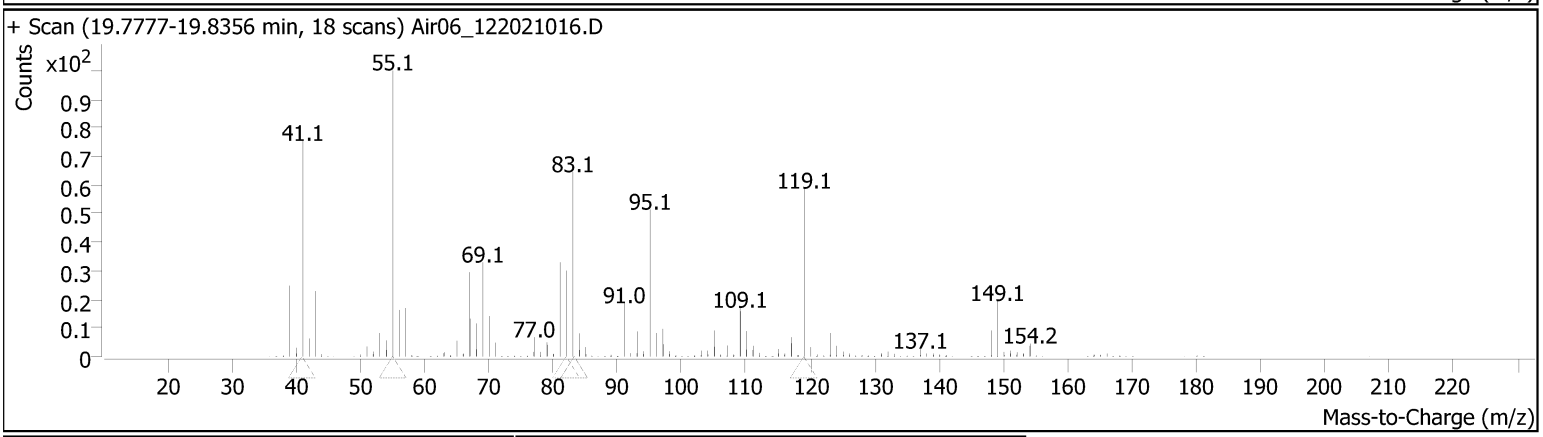


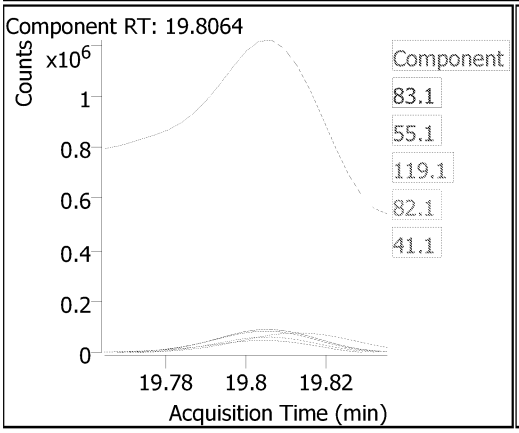


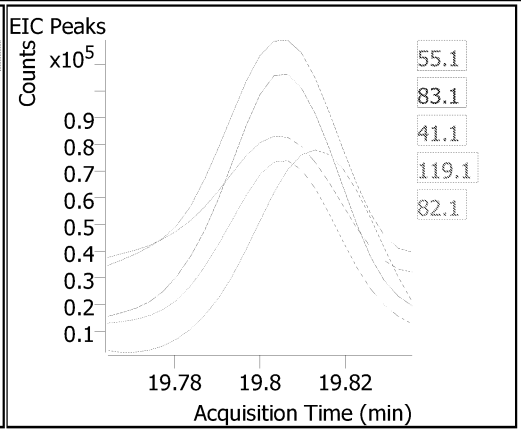
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.8064	Cyclohexane, pentyl-	2453710.8	77.0	4292-92-6	C11H22	5.784

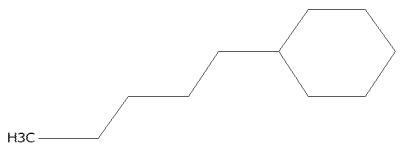








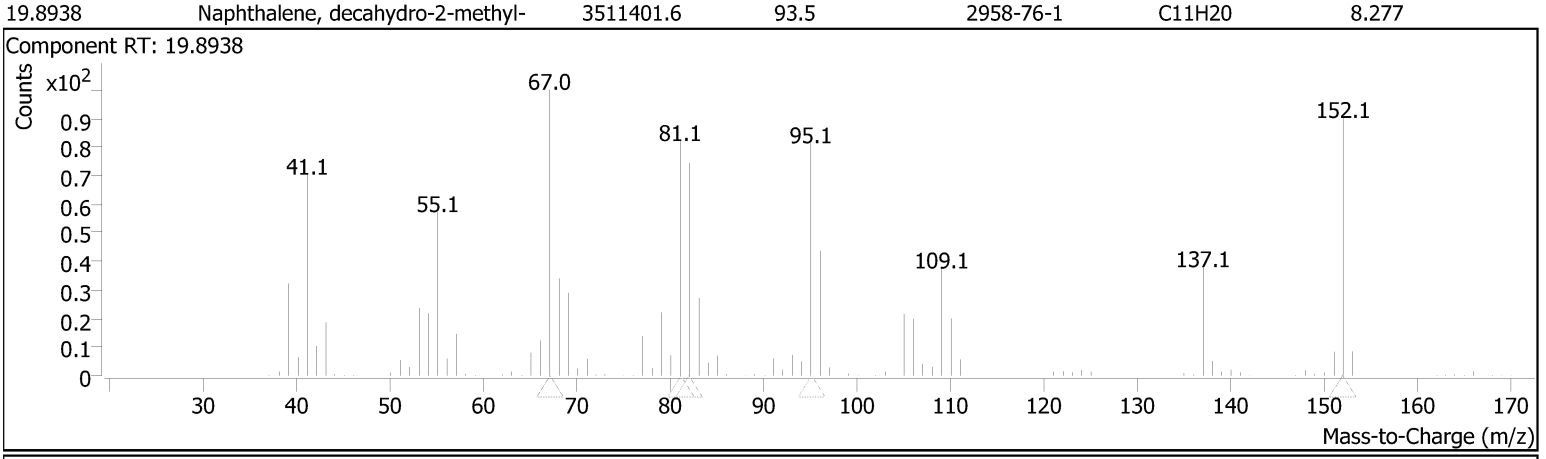


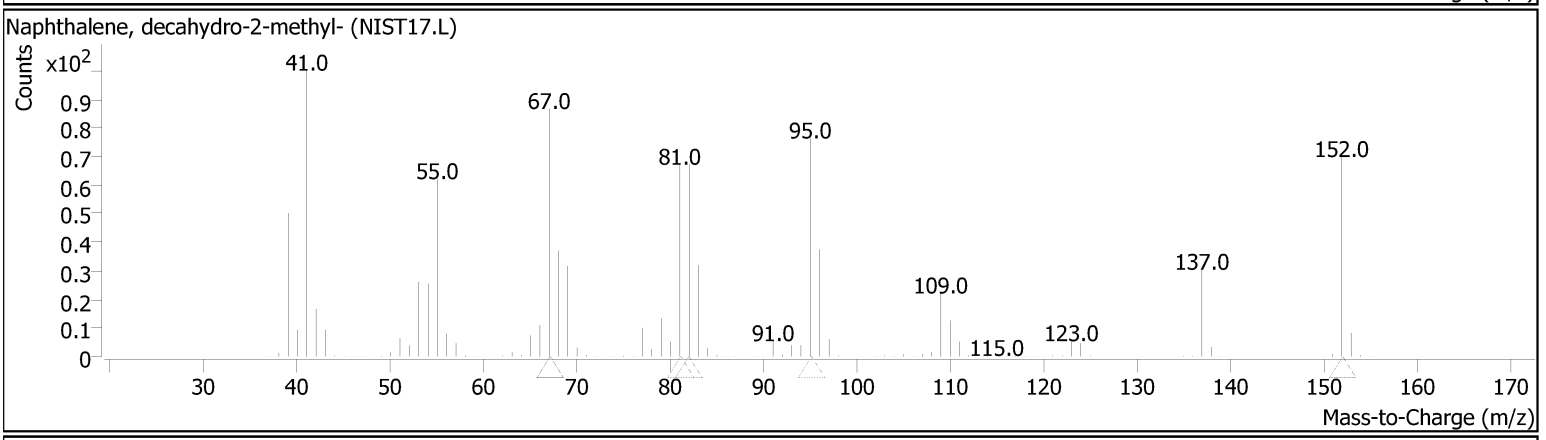


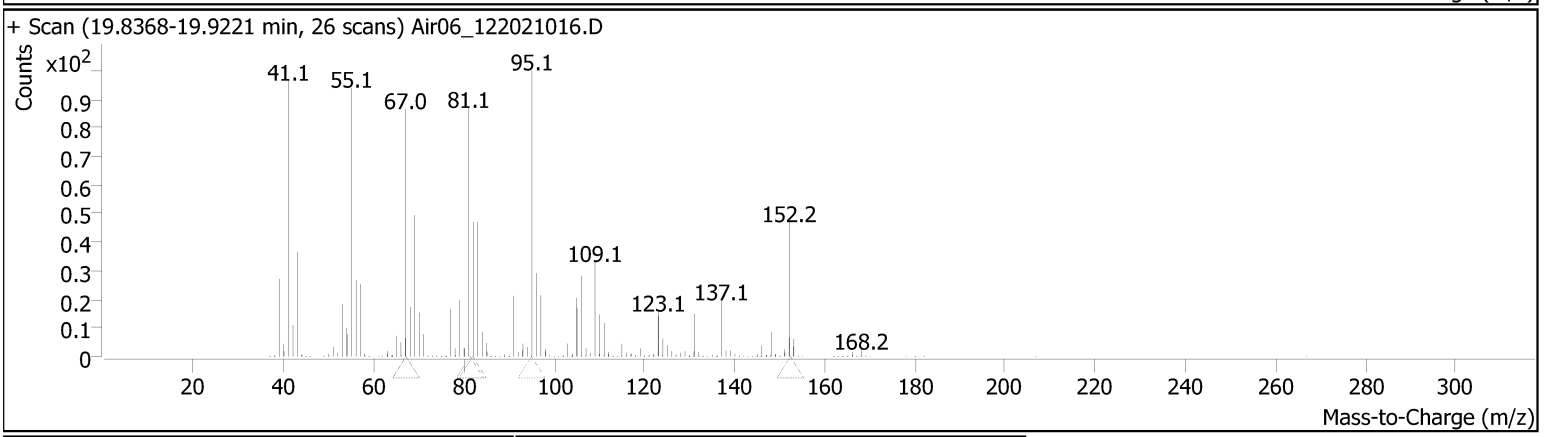
Library Search Results - NonTarget Hits with Details

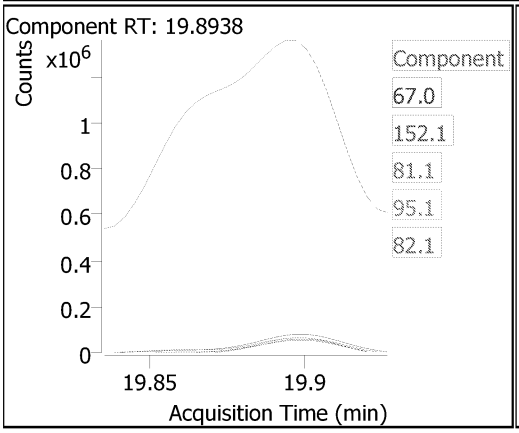
Agilent Technologies

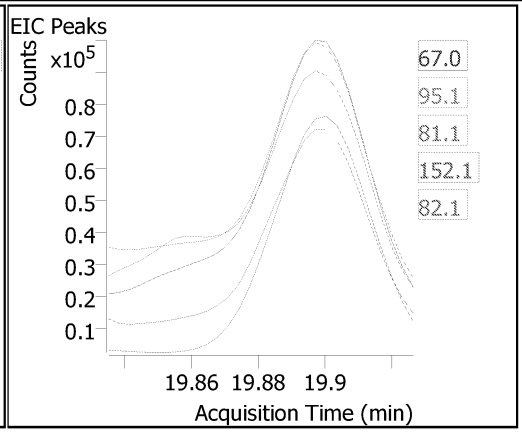
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.8938	Naphthalene, decahydro-2-methyl-	3511401.6	93.5	2958-76-1	C11H20	8.277

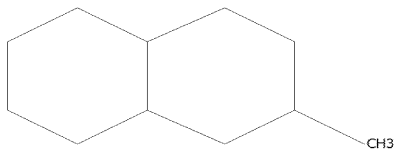




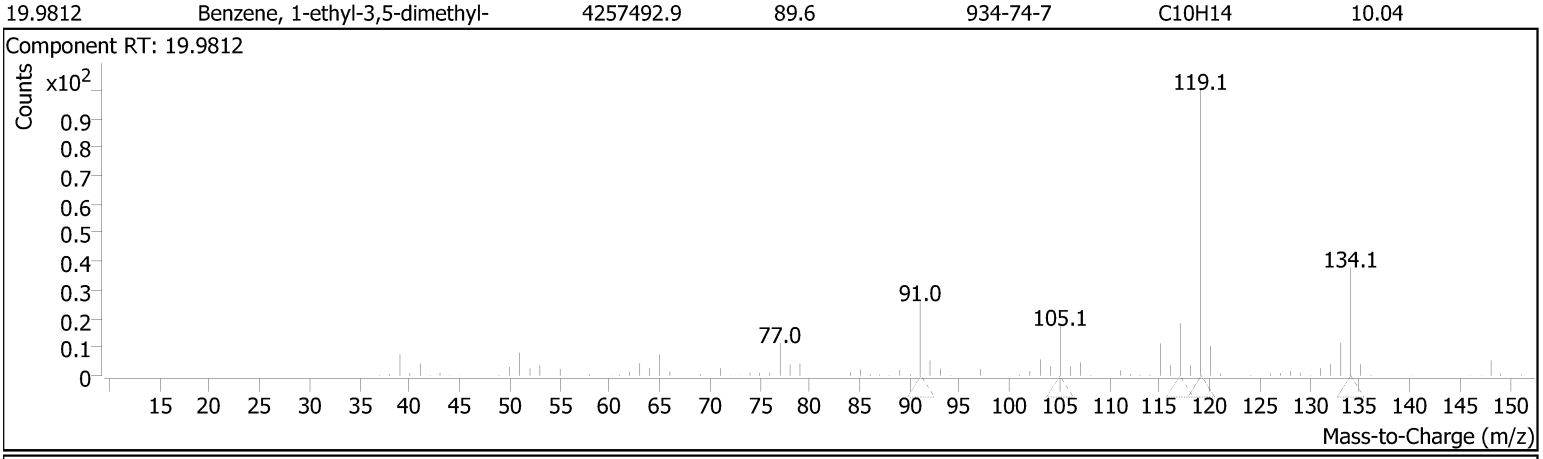


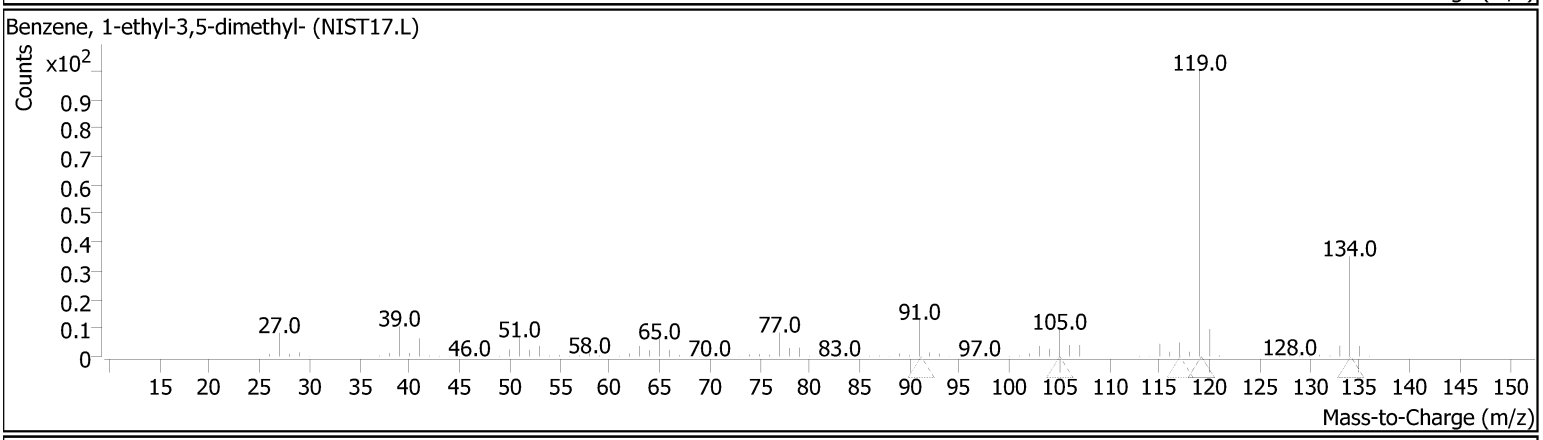


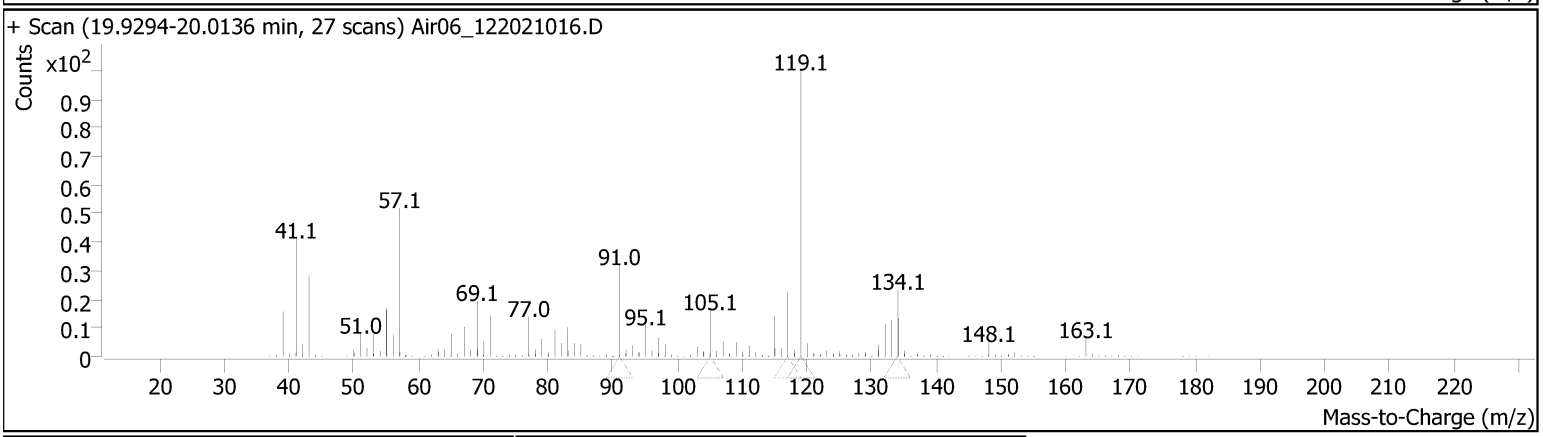


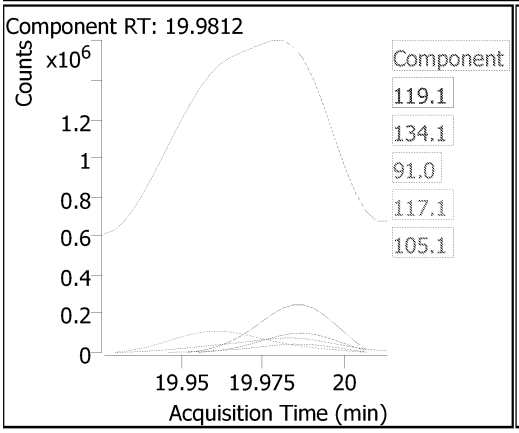


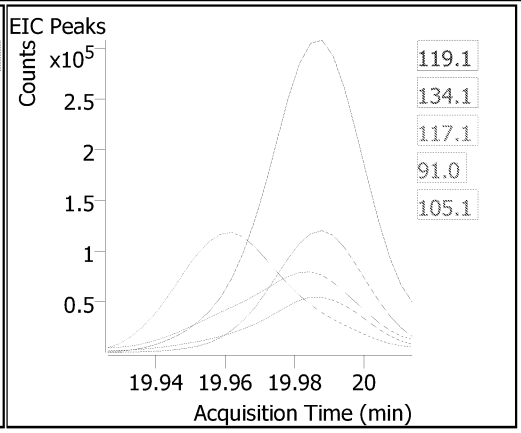
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.9812	Benzene, 1-ethyl-3,5-dimethyl-	4257492.9	89.6	934-74-7	C10H14	10.04

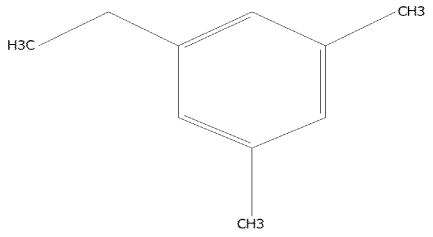




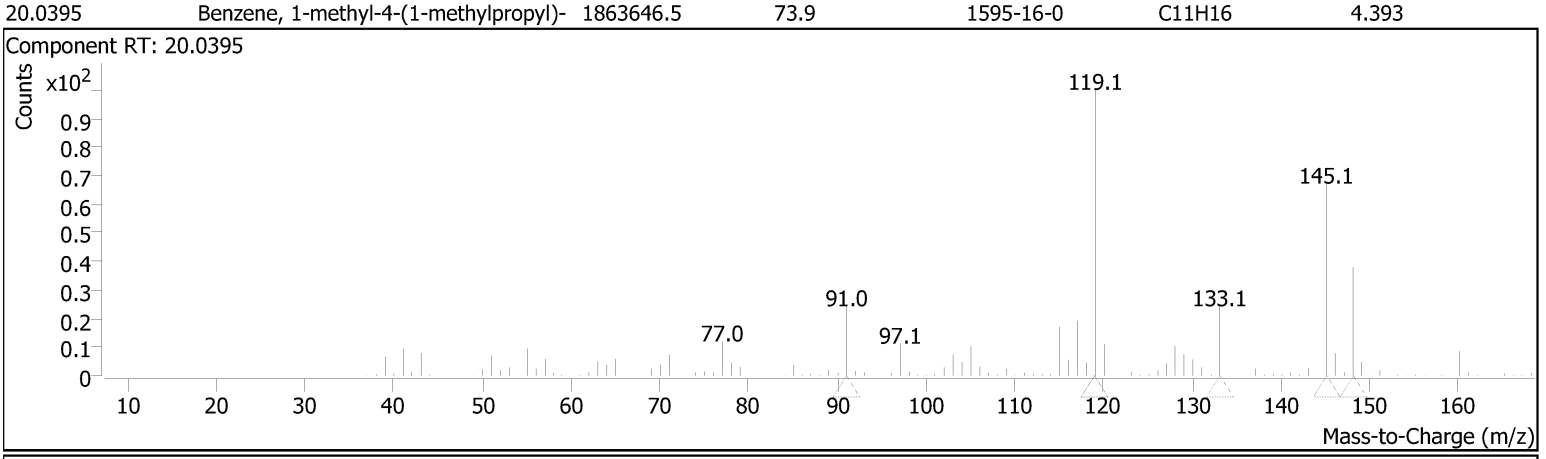


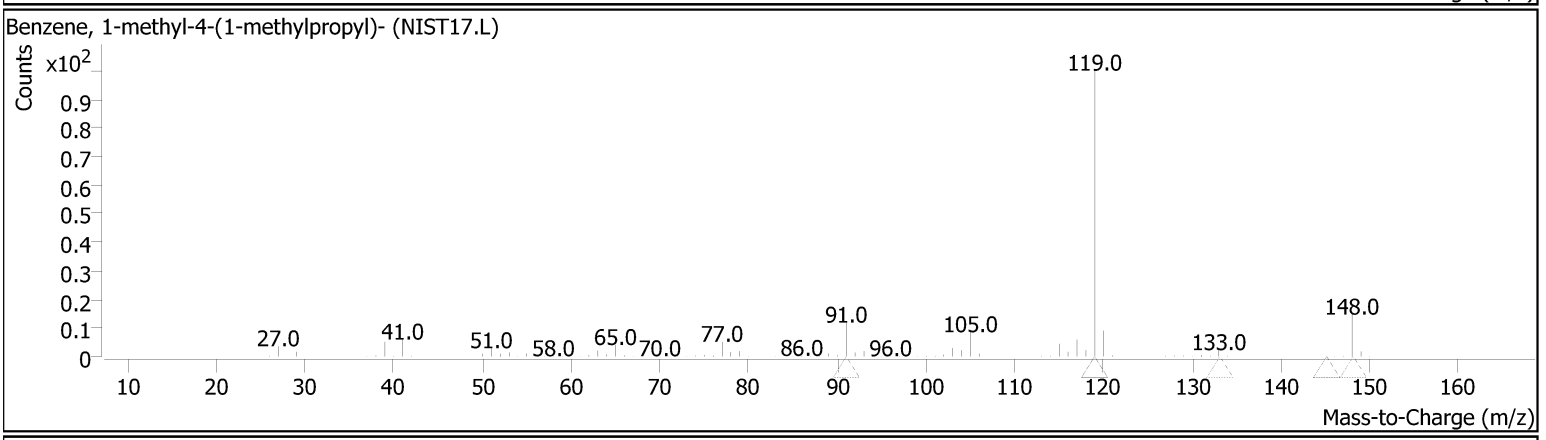


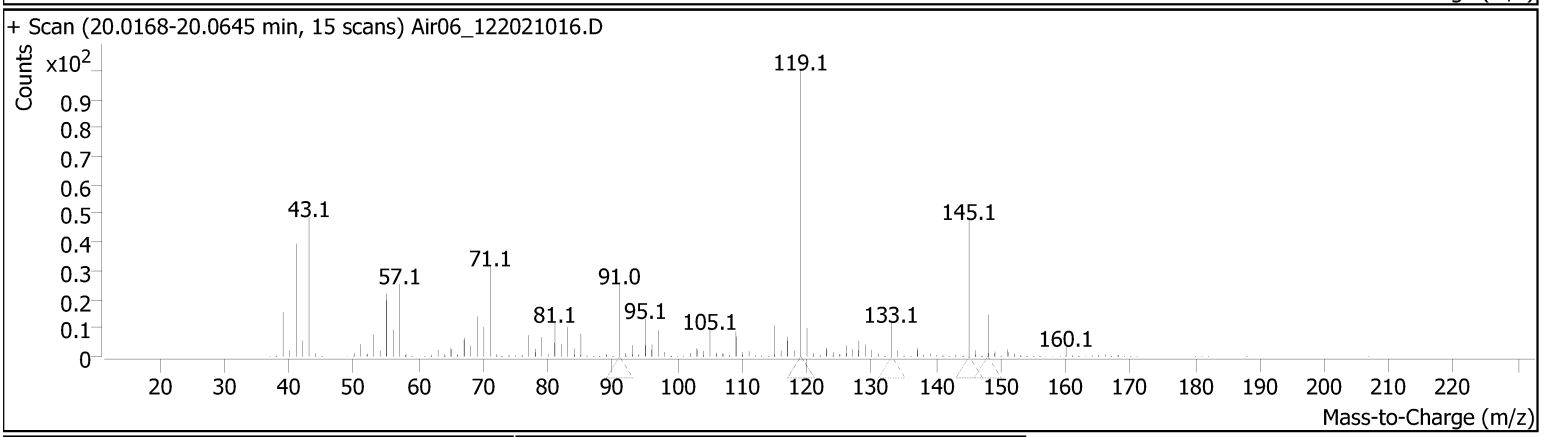


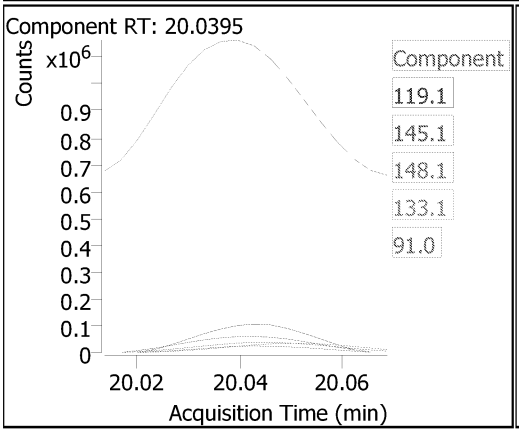


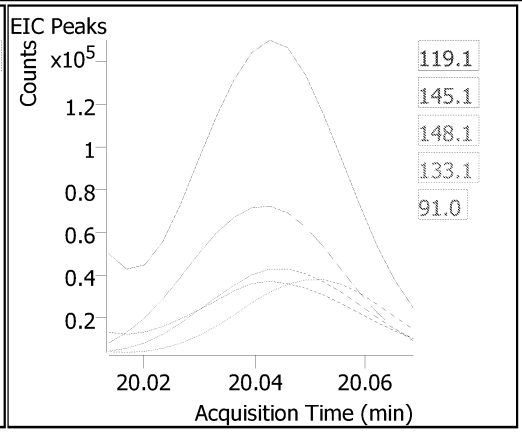
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.0395	Benzene, 1-methyl-4-(1-methylpropyl)-	1863646.5	73.9	1595-16-0	C11H16	4.393

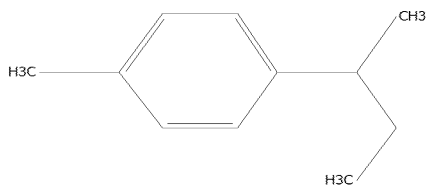




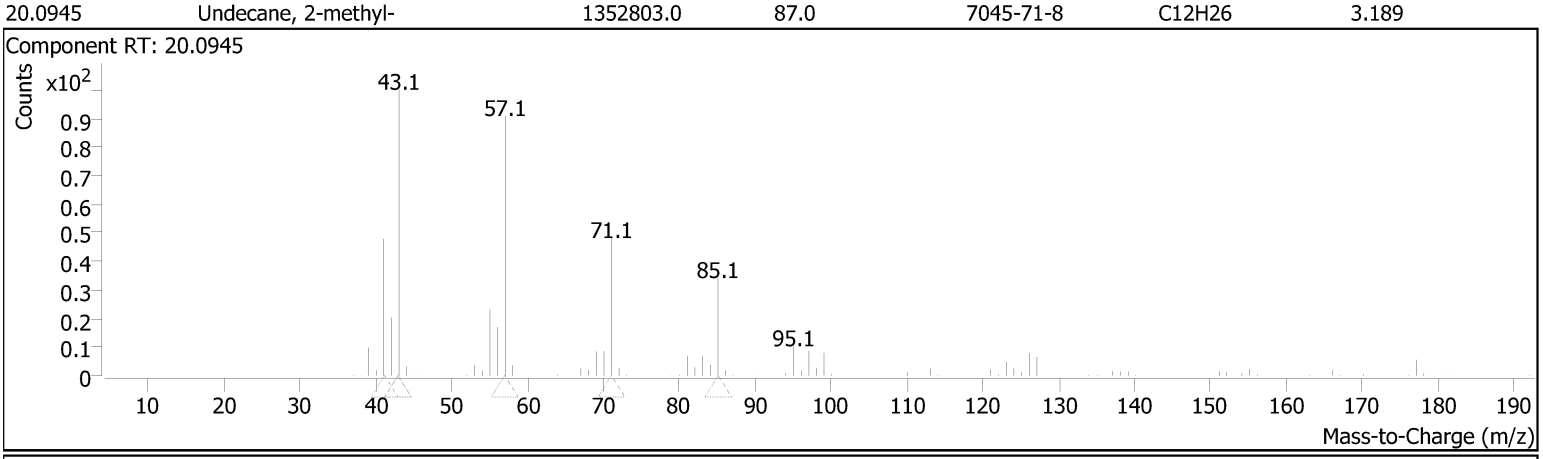


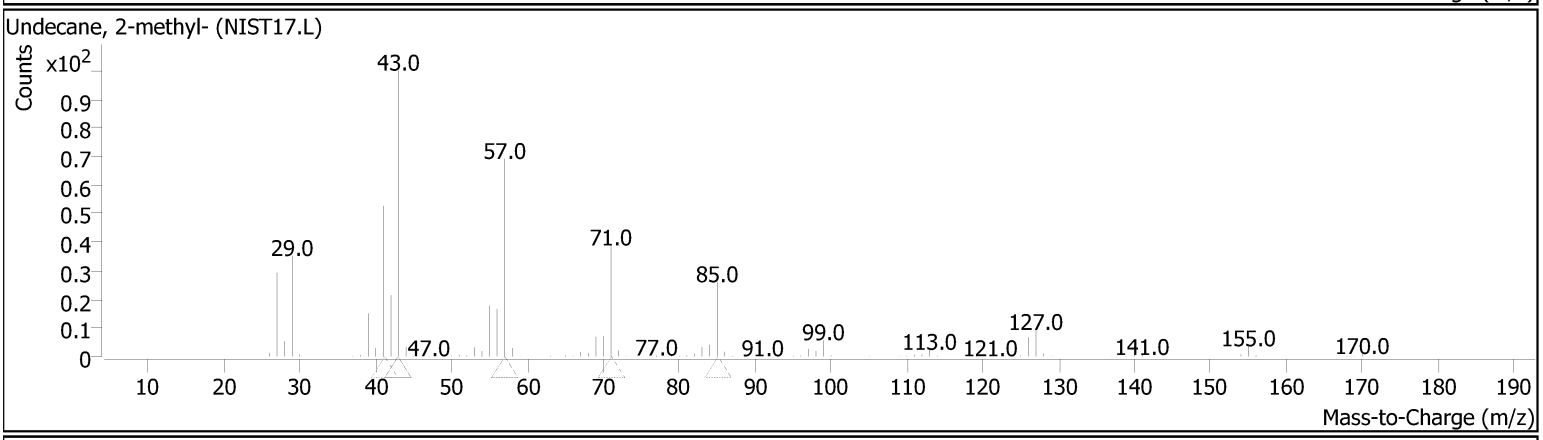


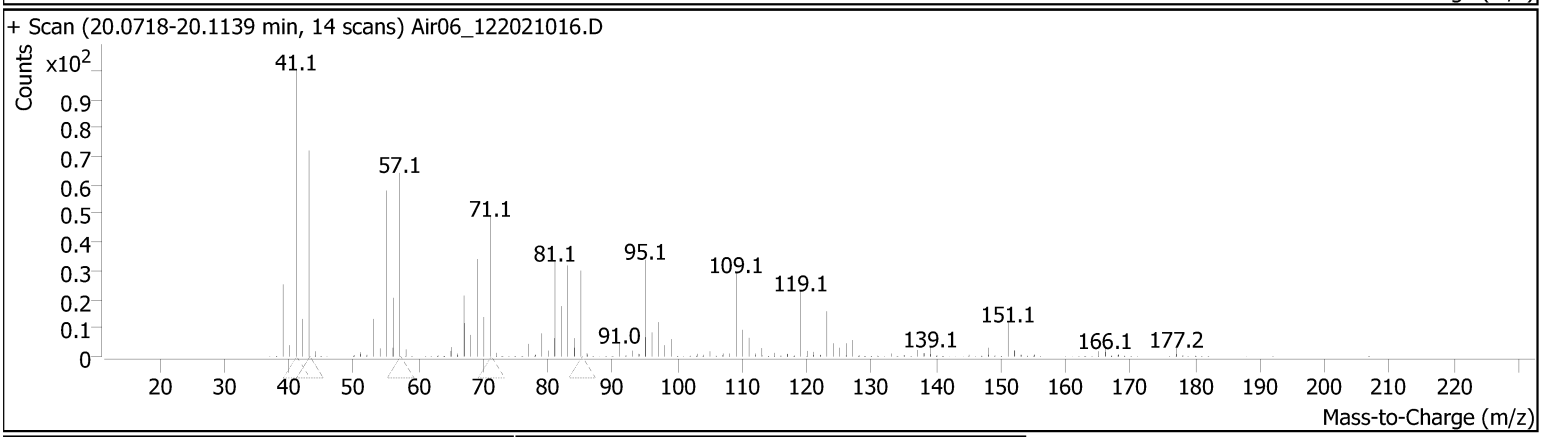


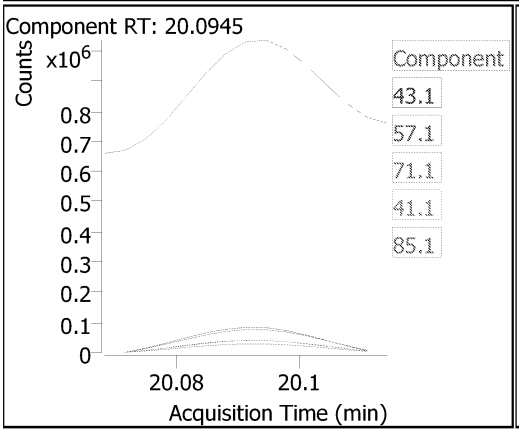


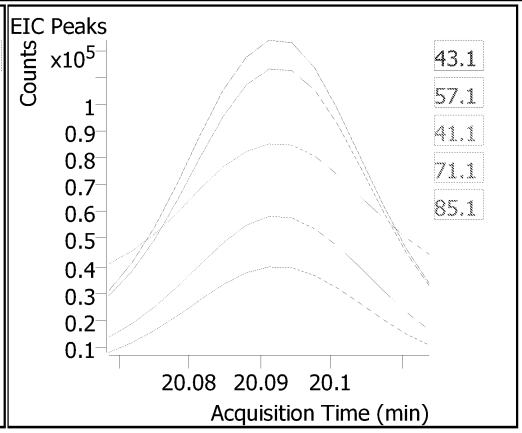
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.0945	Undecane, 2-methyl-	1352803.0	87.0	7045-71-8	C12H26	3.189





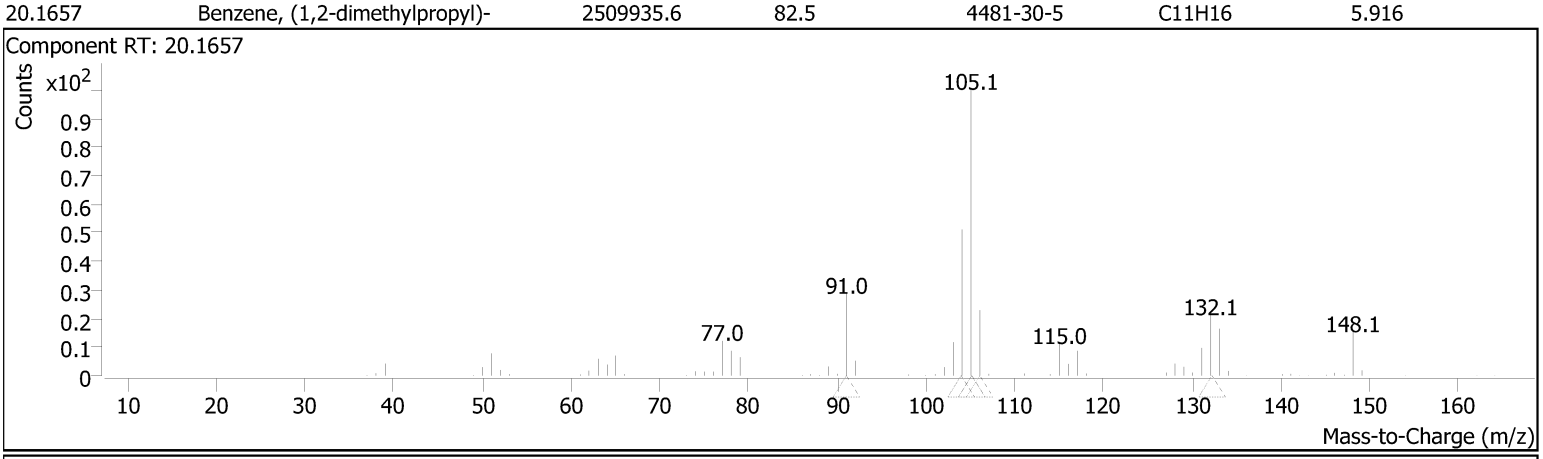


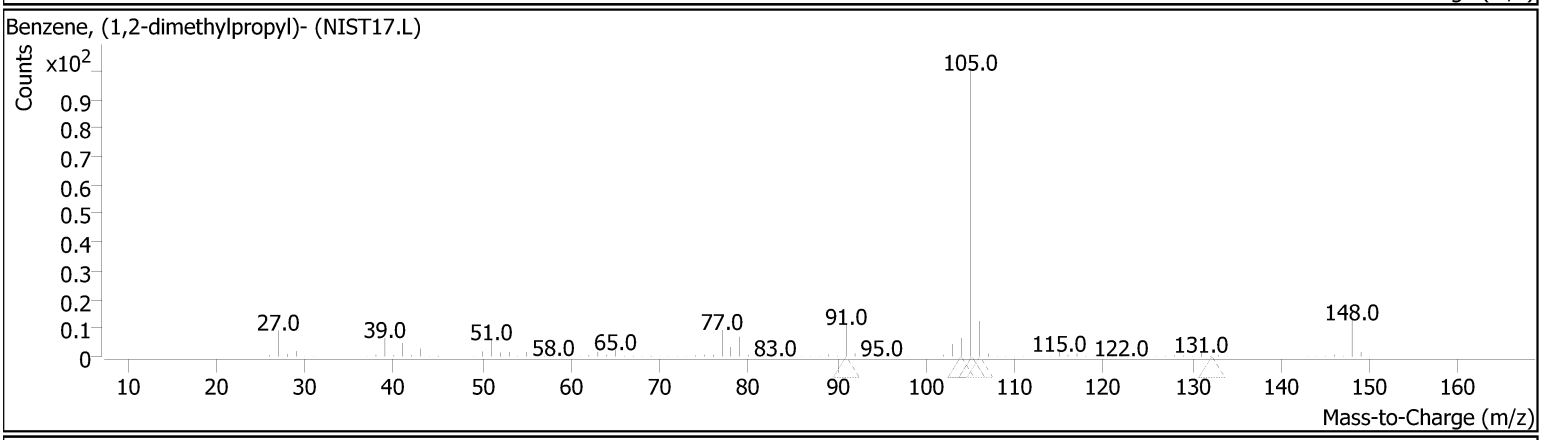


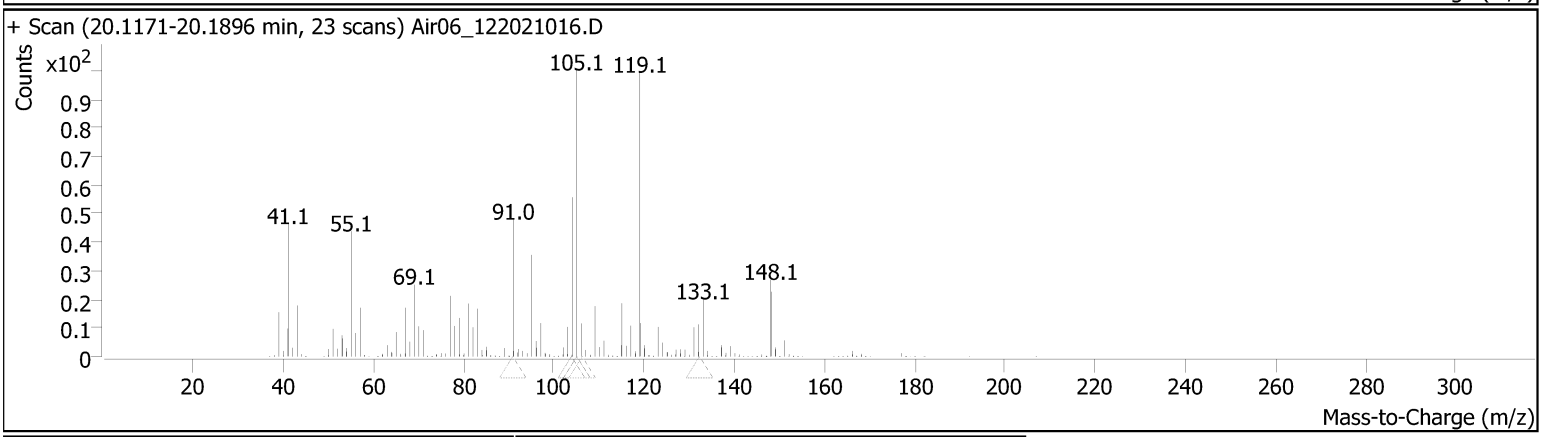


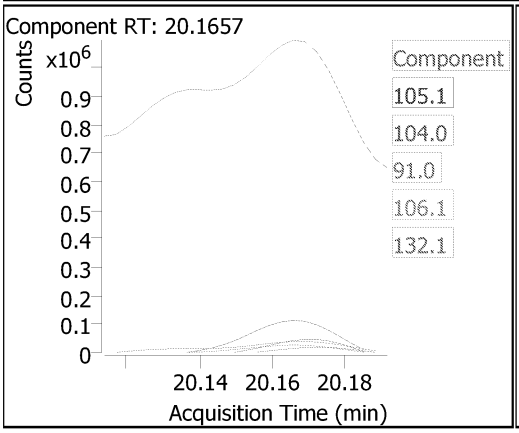


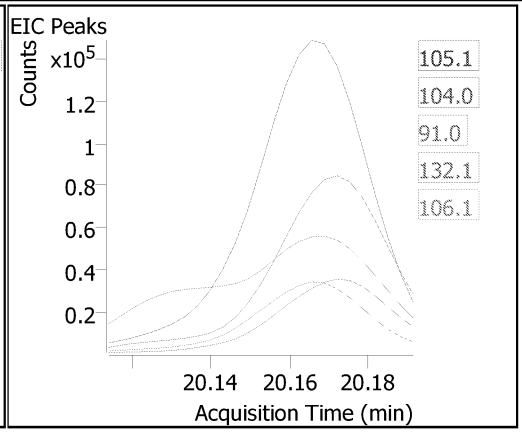
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.1657	Benzene, (1,2-dimethylpropyl)-	2509935.6	82.5	4481-30-5	C11H16	5.916

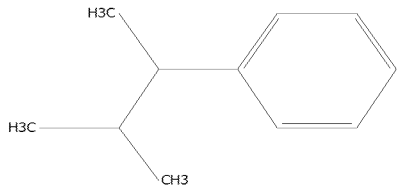




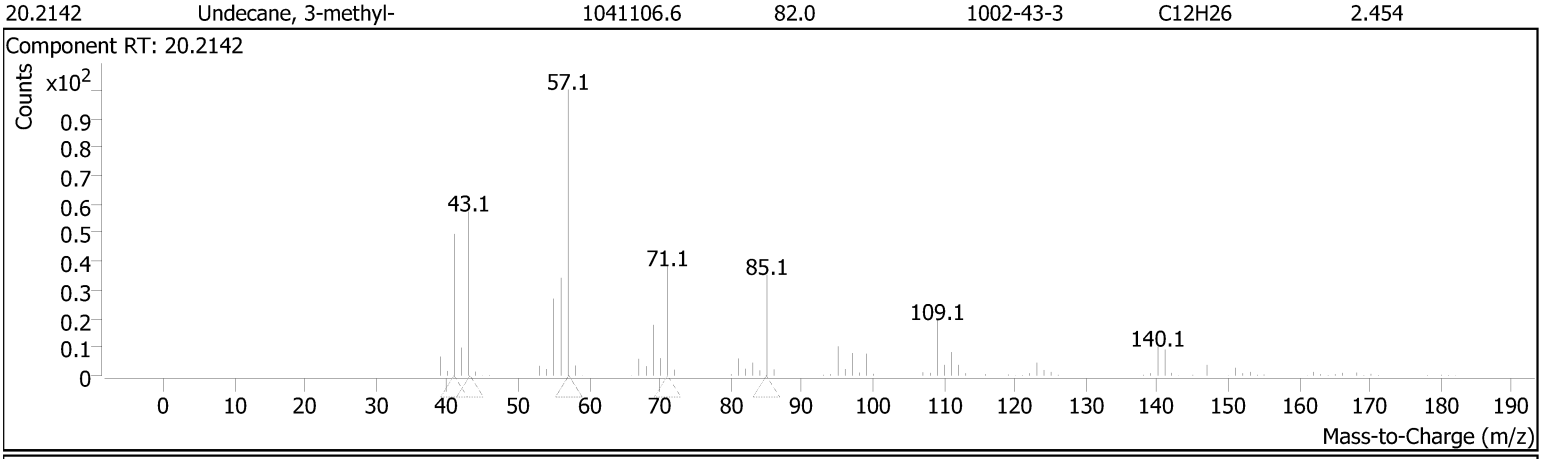


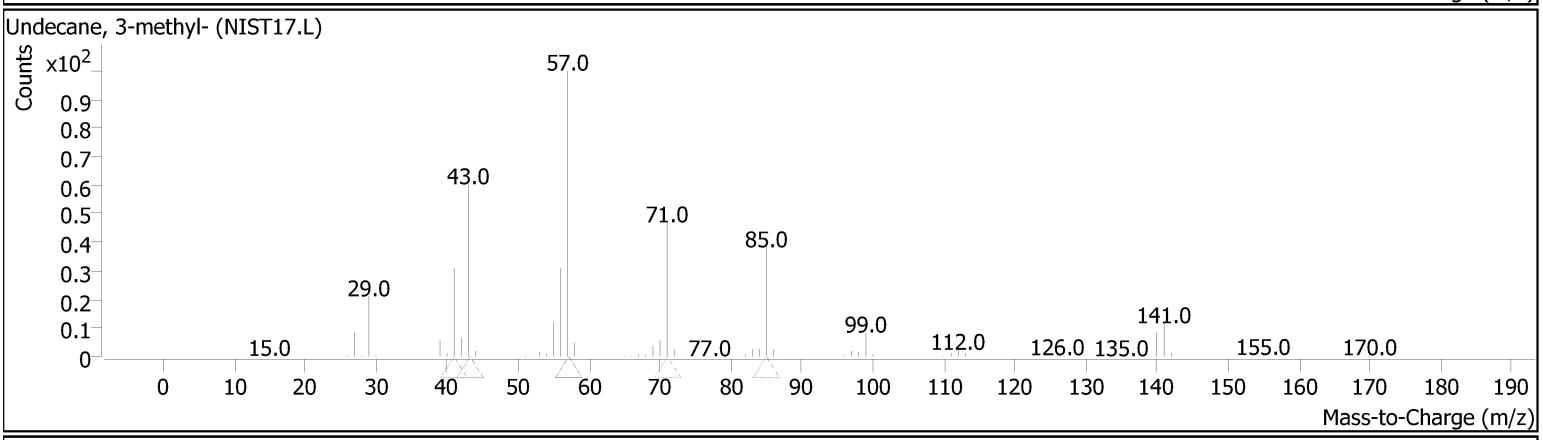


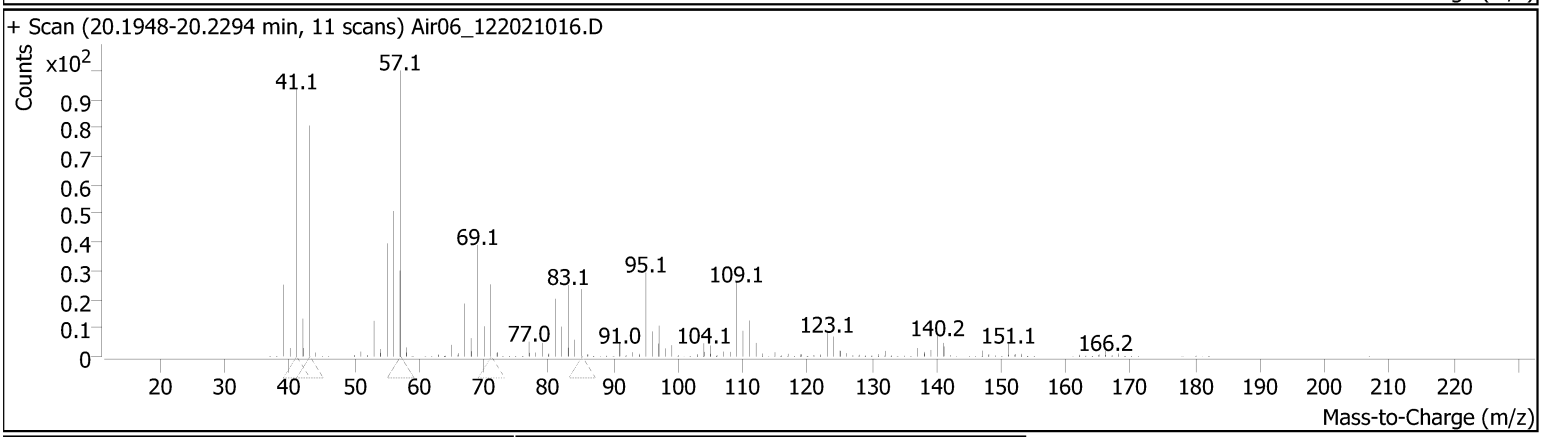


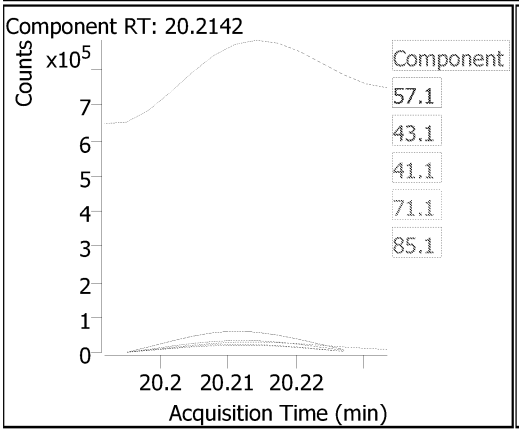


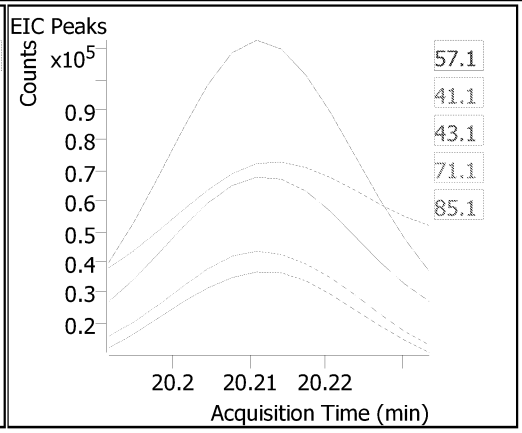
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.2142	Undecane, 3-methyl-	1041106.6	82.0	1002-43-3	C12H26	2.454

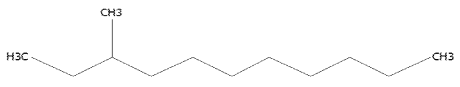




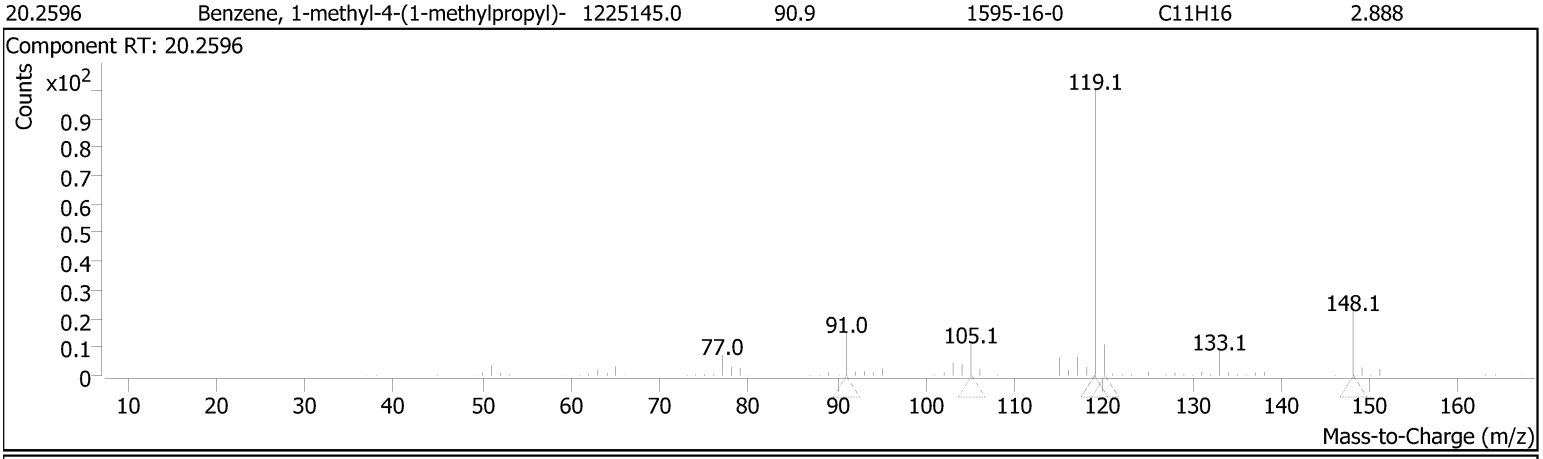


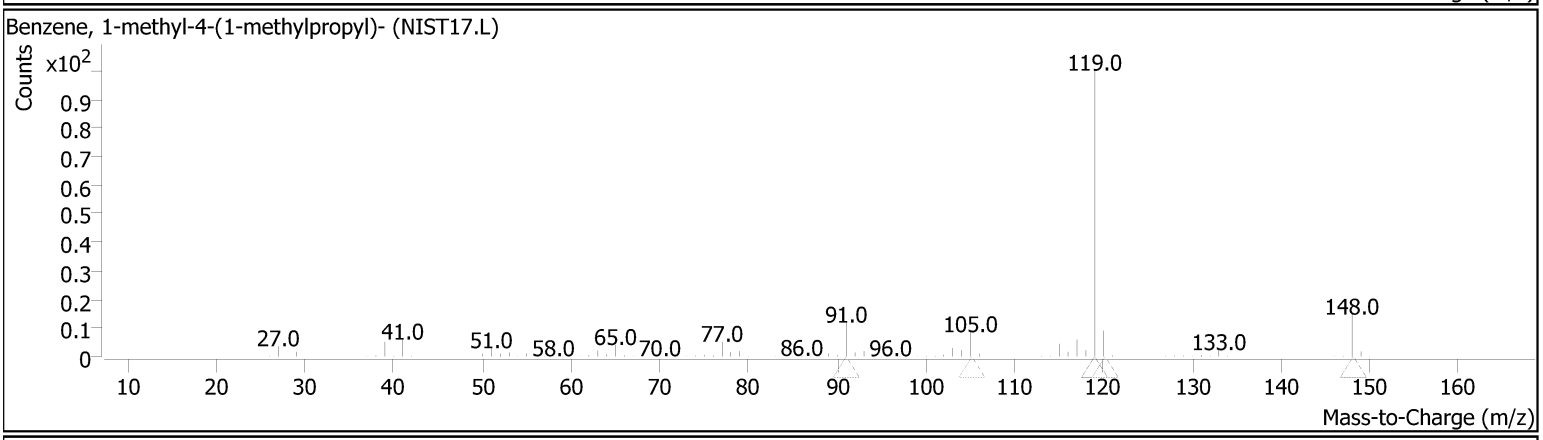


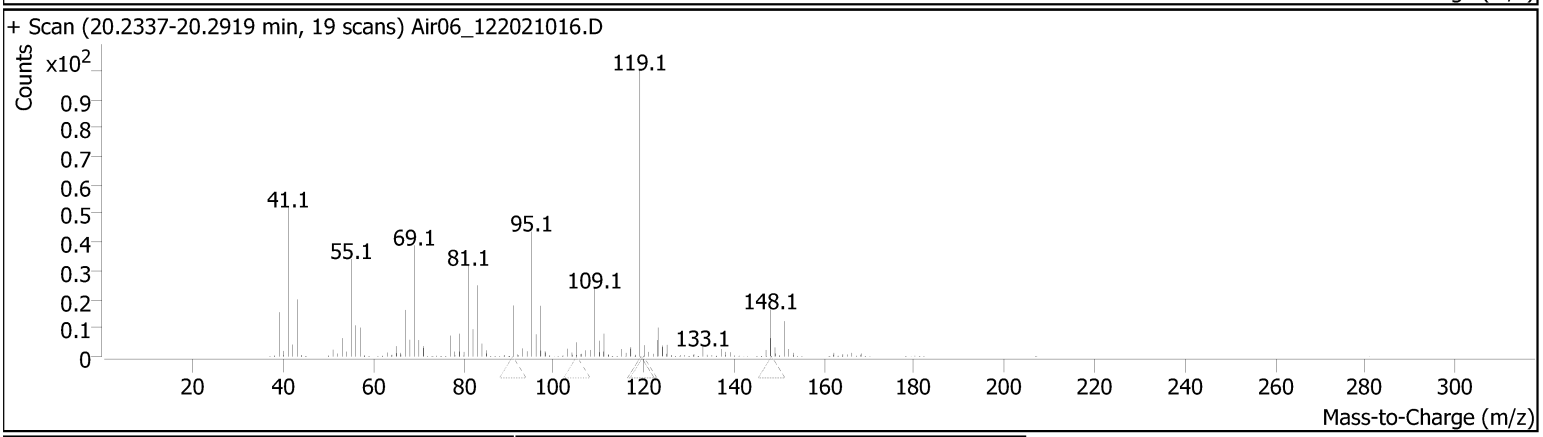


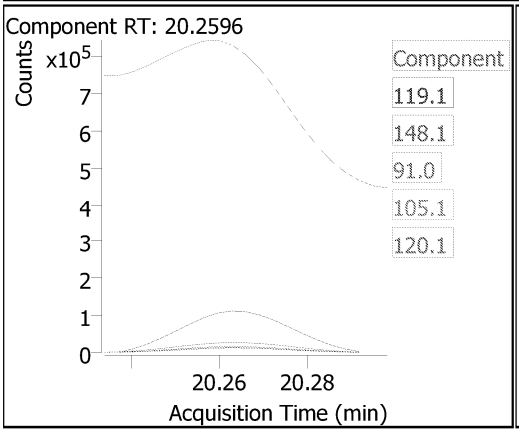


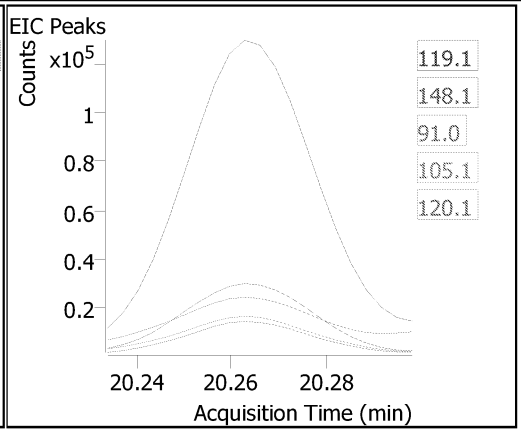
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.2596	Benzene, 1-methyl-4-(1-methylpropyl)-	1225145.0	90.9	1595-16-0	C11H16	2.888

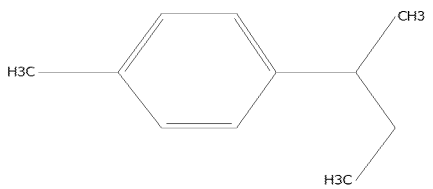




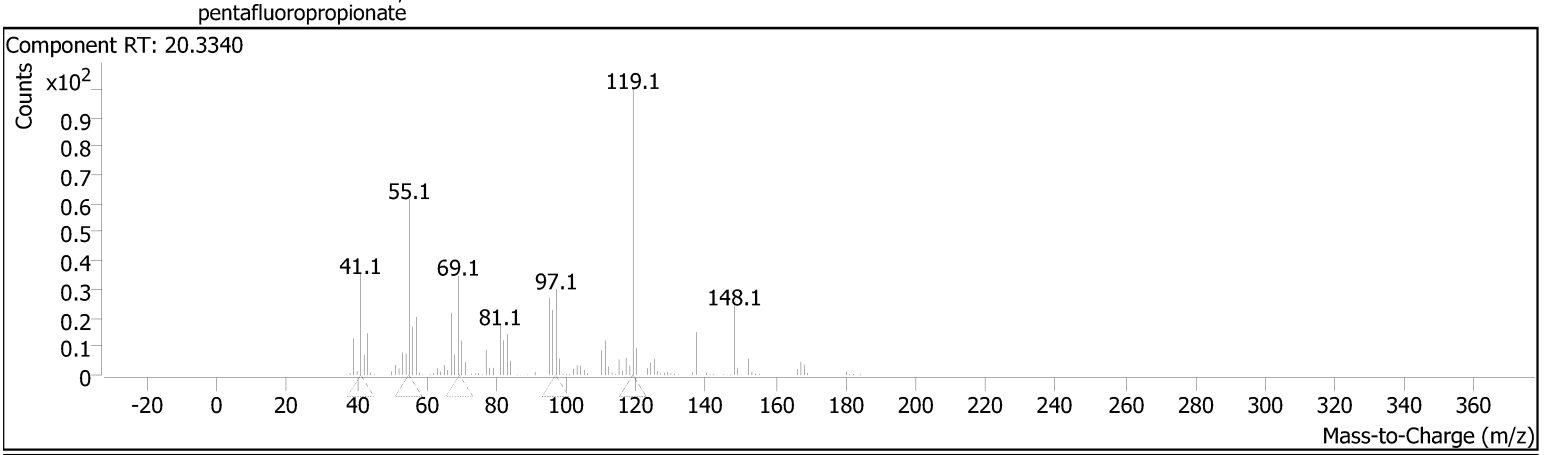


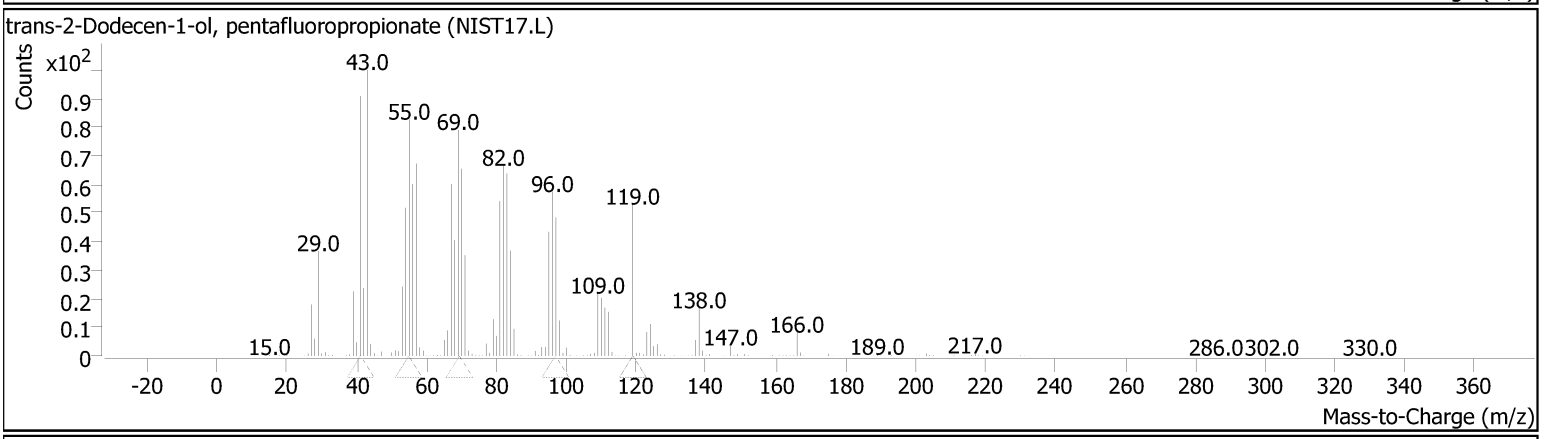


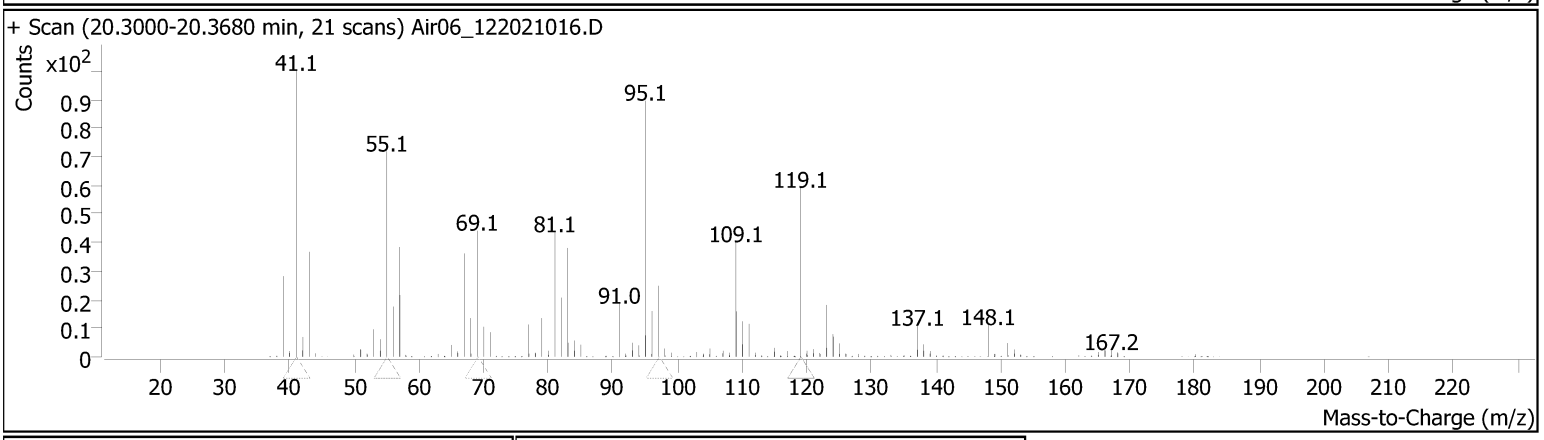


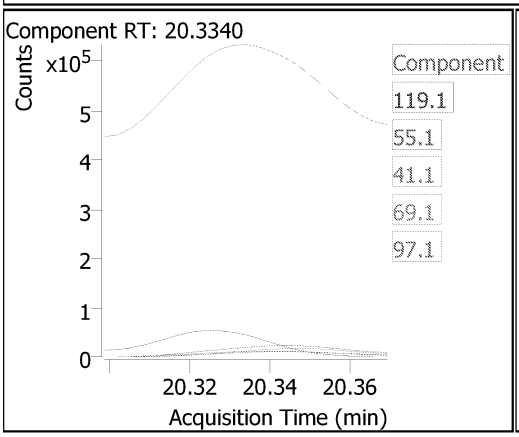


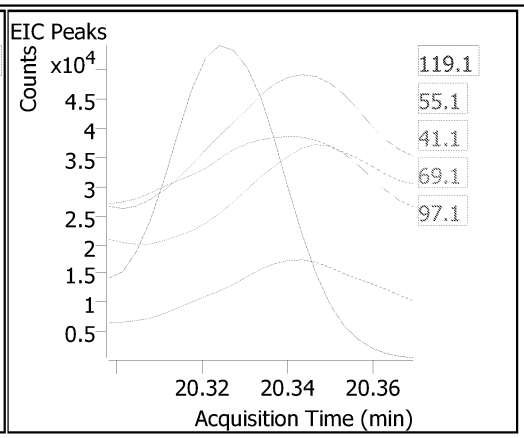
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.3340	trans-2-Dodecen-1-ol, pentafluoropropionate	709056.5	71.5	1000352-26-1	C15H23F5O2	1.671

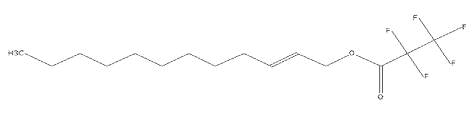








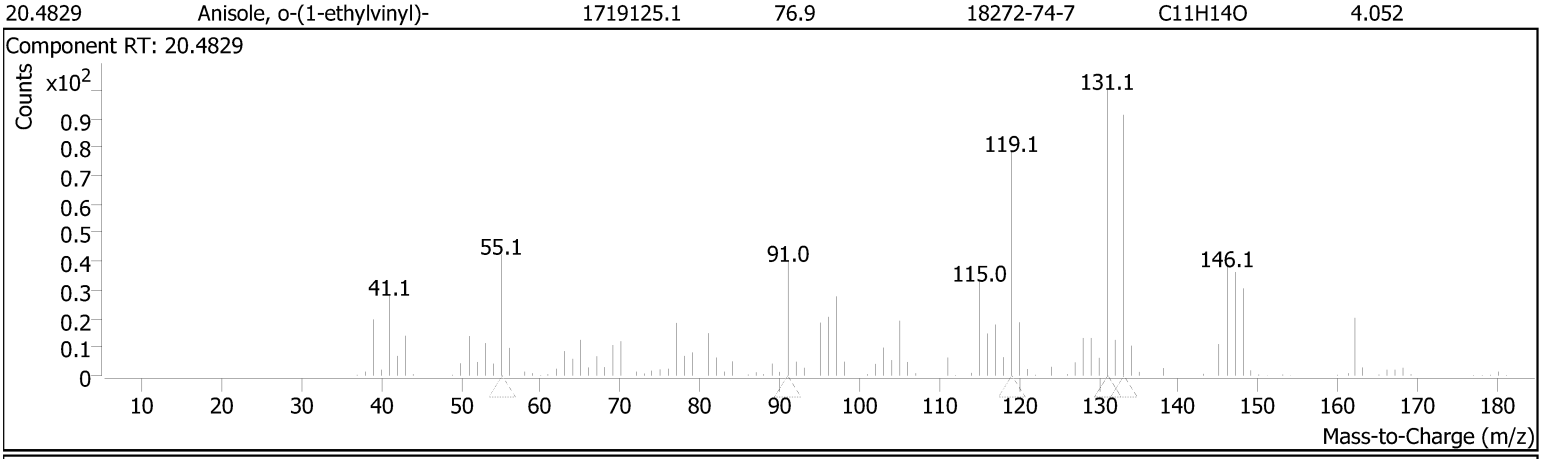


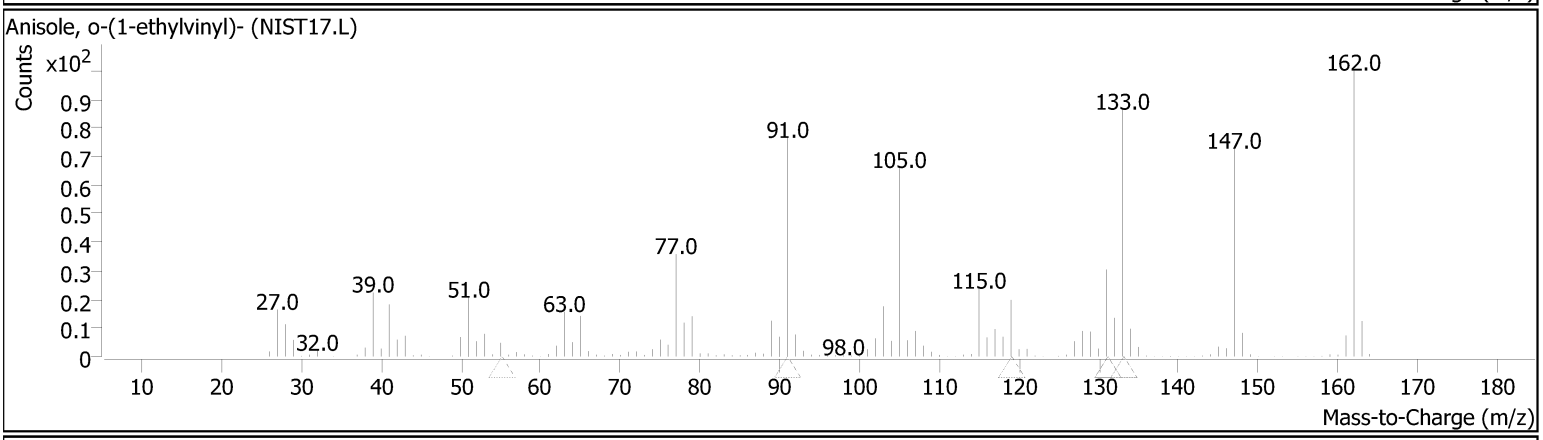


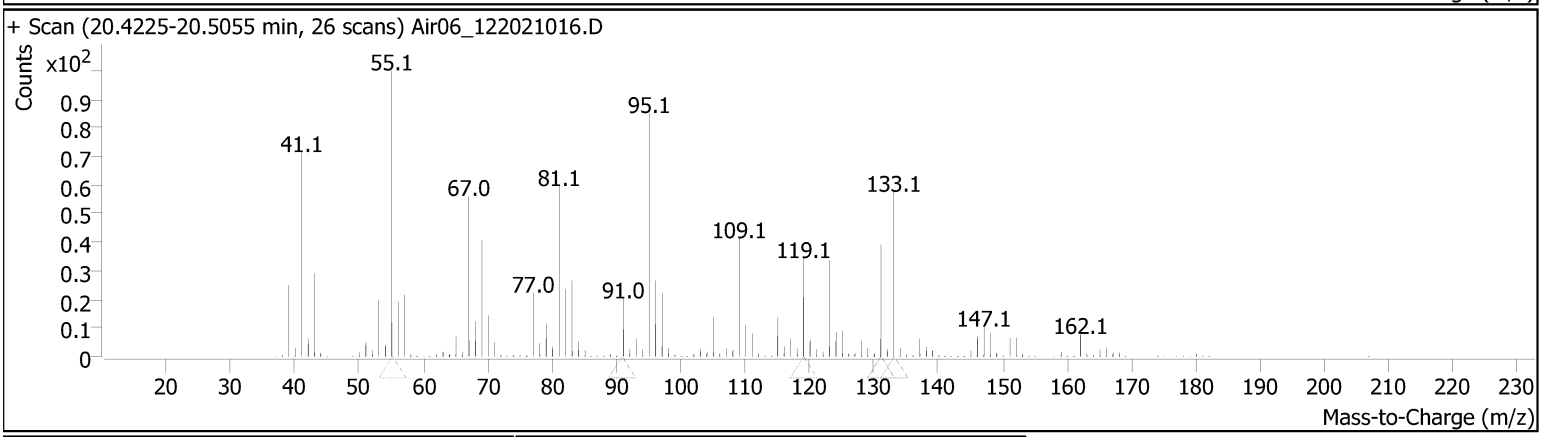
Library Search Results - NonTarget Hits with Details

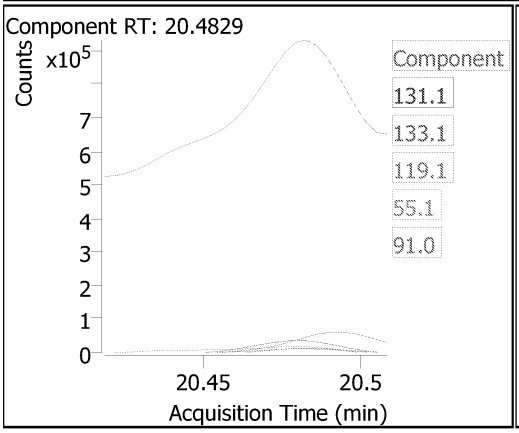
Agilent Technologies

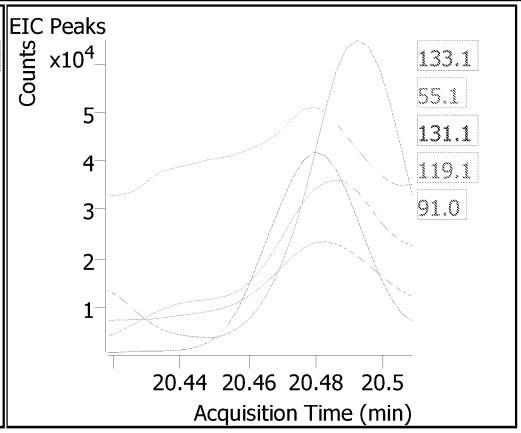
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.4829	Anisole, o-(1-ethylvinyl)-	1719125.1	76.9	18272-74-7	C11H14O	4.052

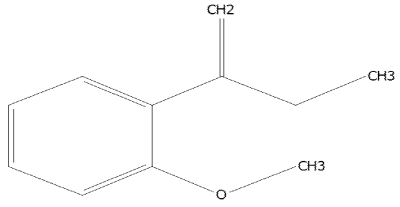




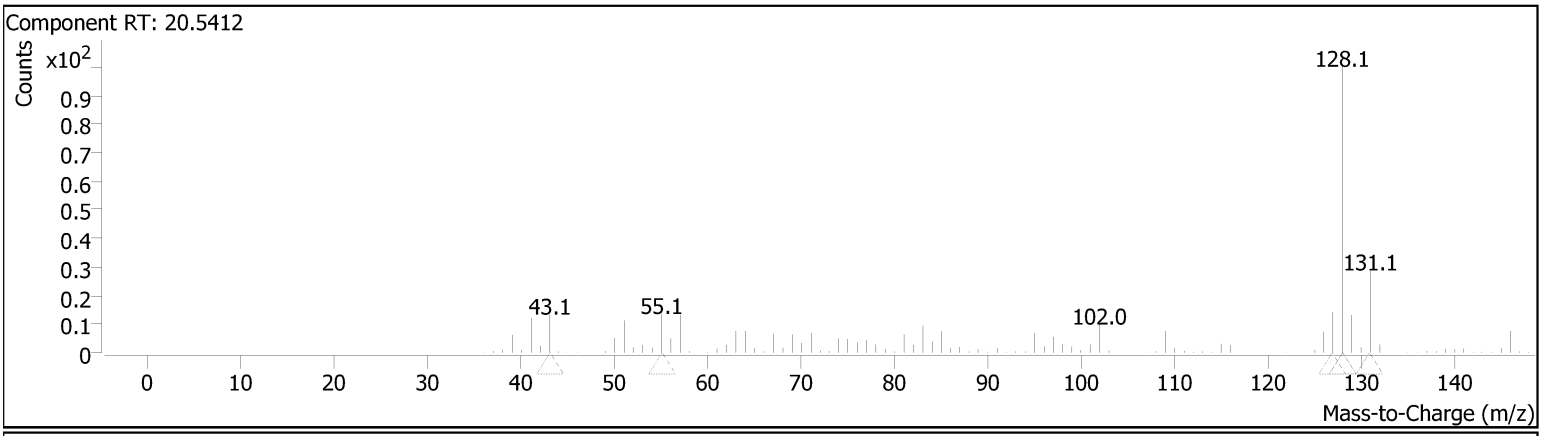


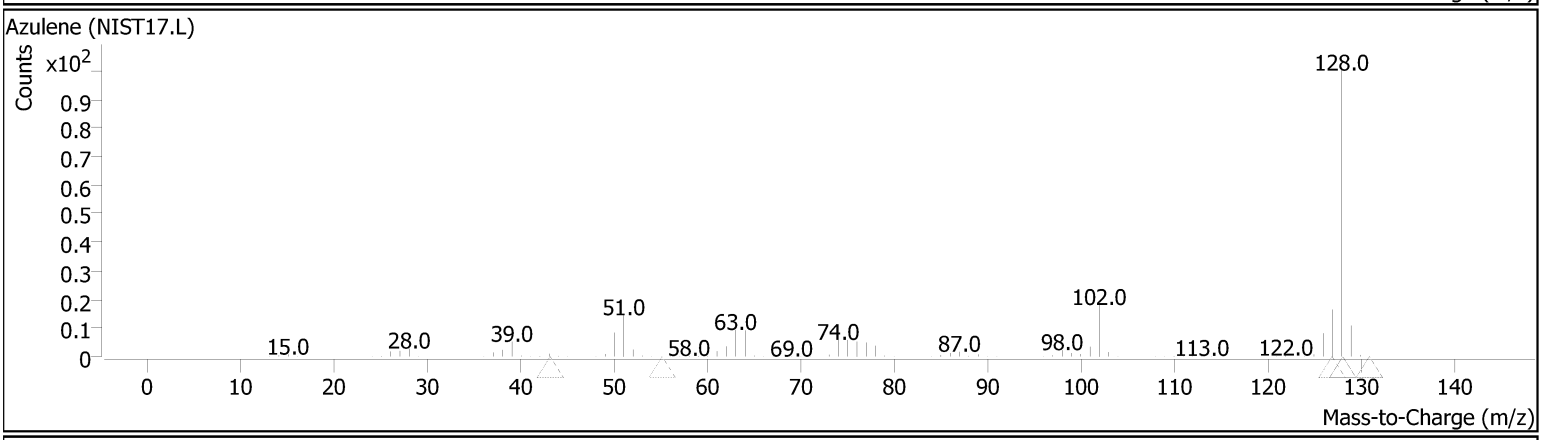


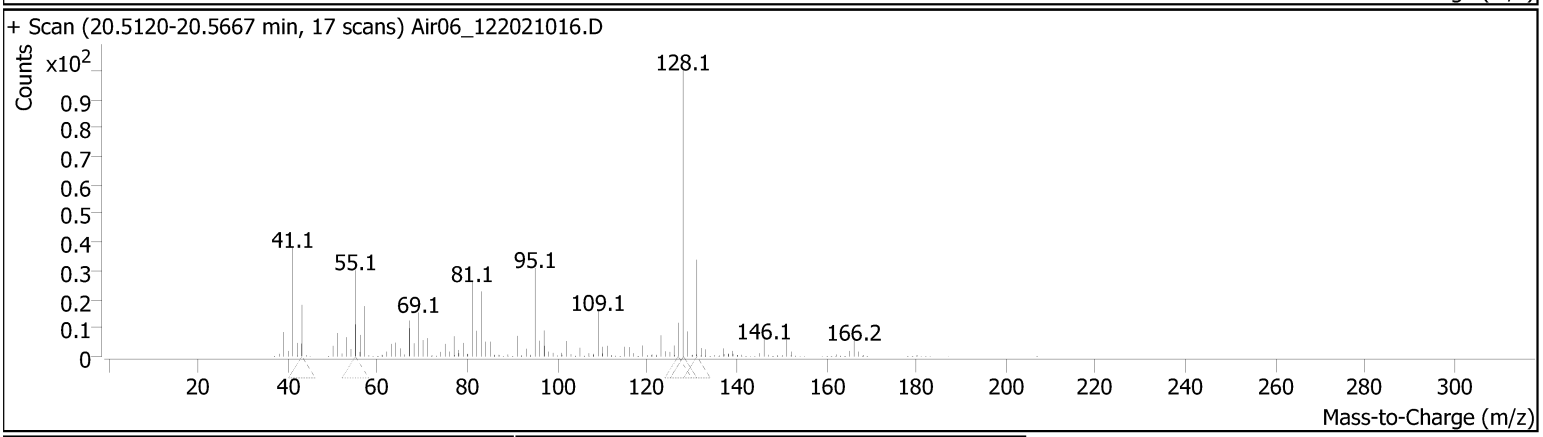


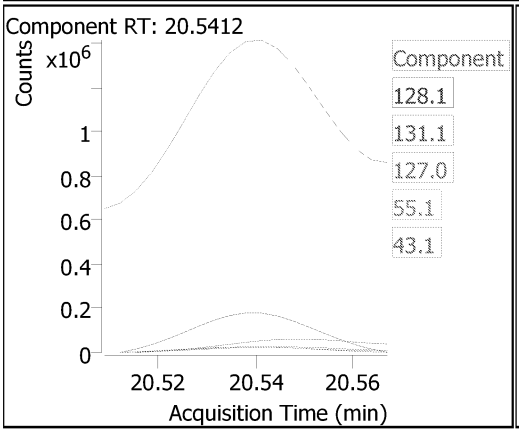


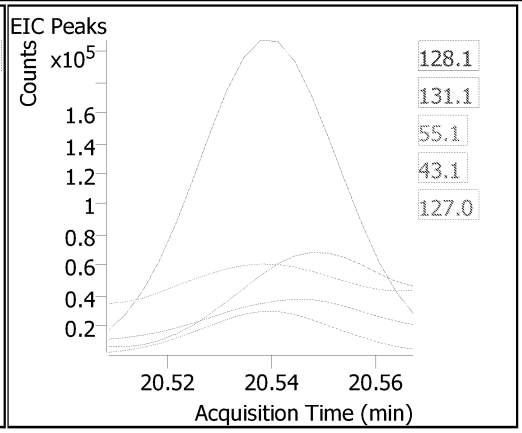
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.5412	Azulene	2370517.9	70.5	275-51-4	C10H8	5.588

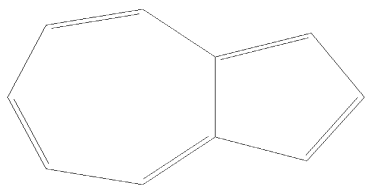




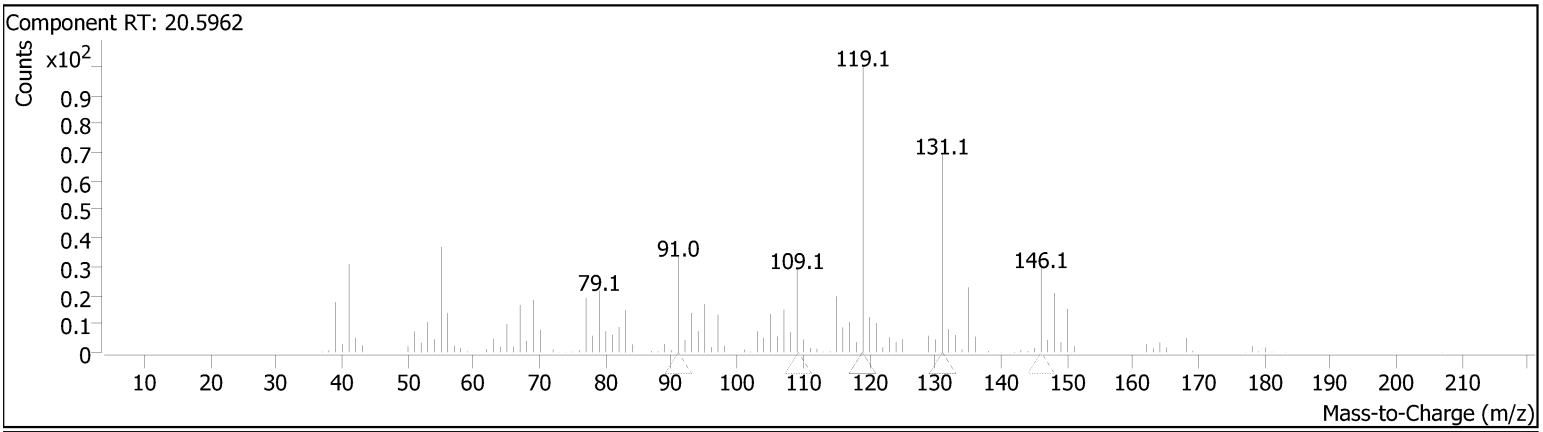


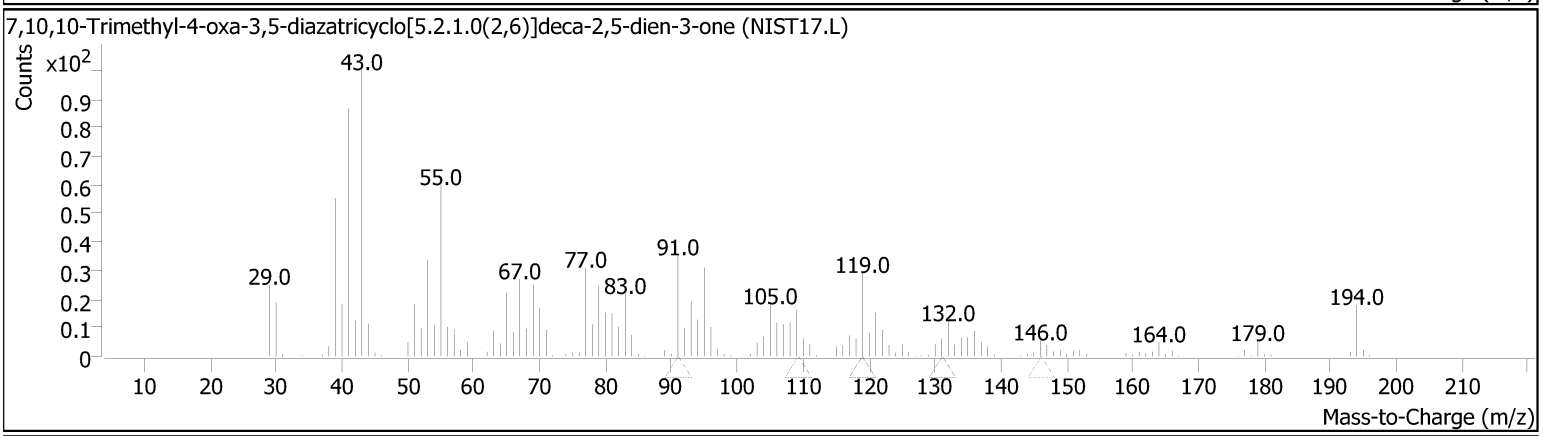


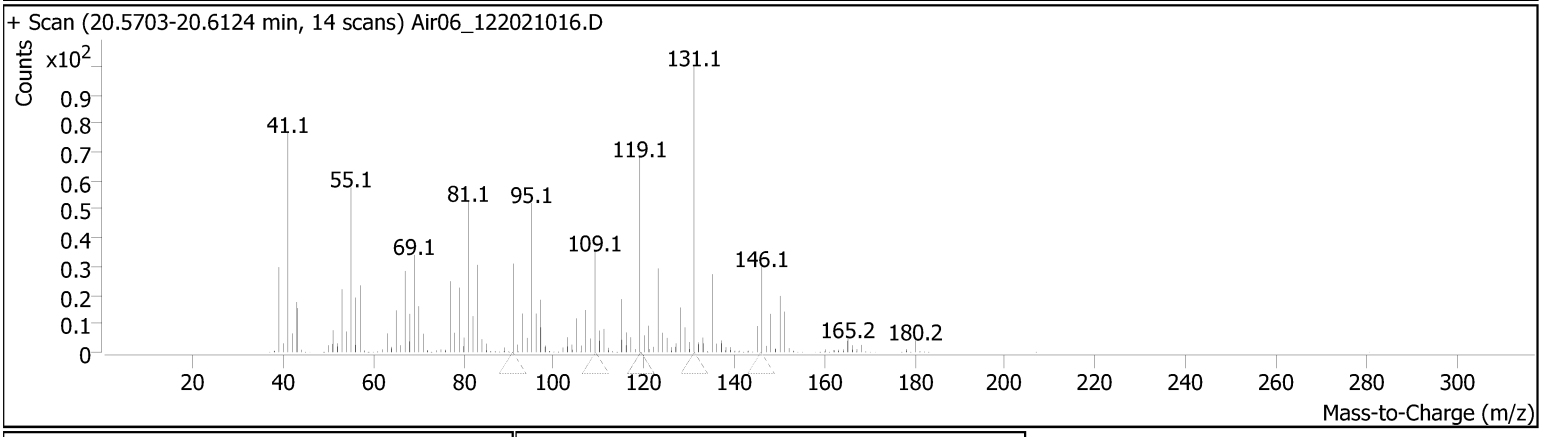


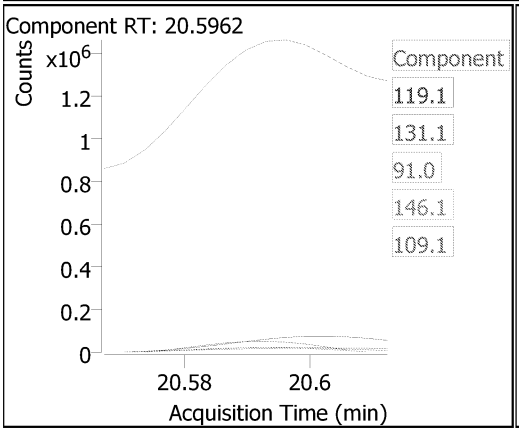


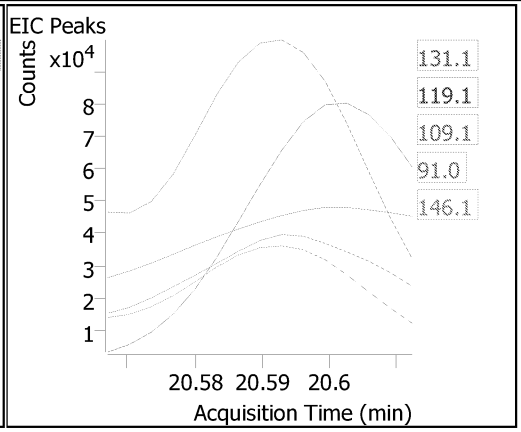
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.5962	7,10,10-Trimethyl-4-oxa-3,5-diazatricyclo[5.2.1.0(2,6)]deca-2,5-dien-3-one	2303407.6	72.3	20653-19-4	C10H14N2O2	5.429

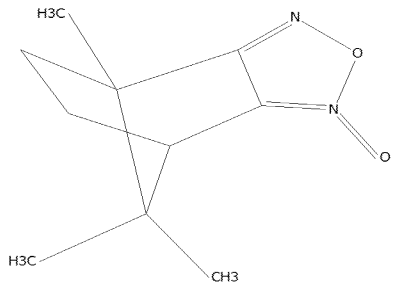




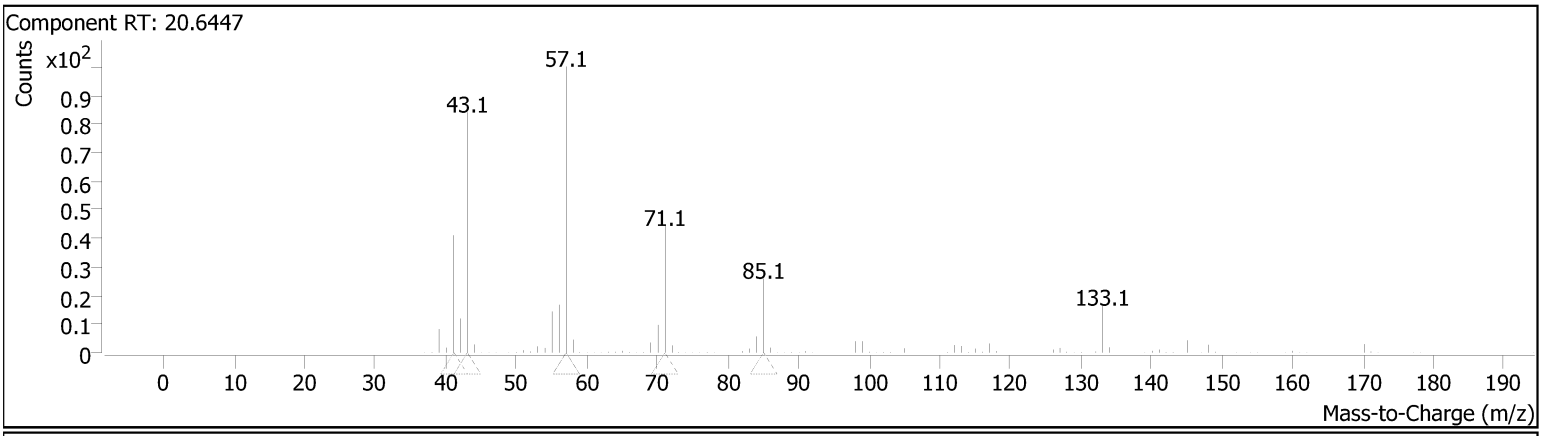


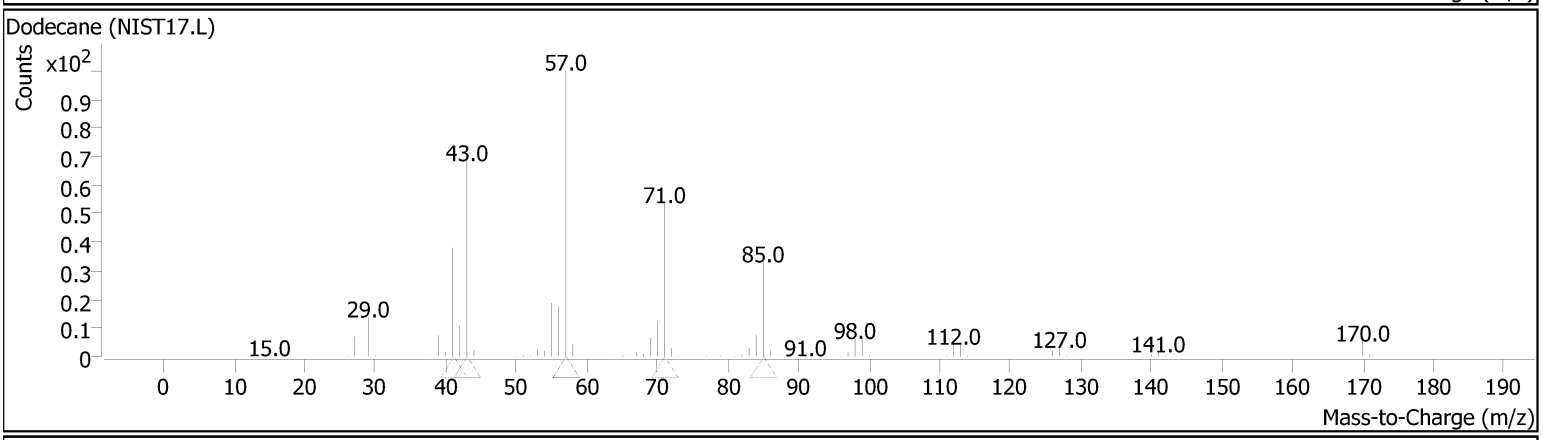


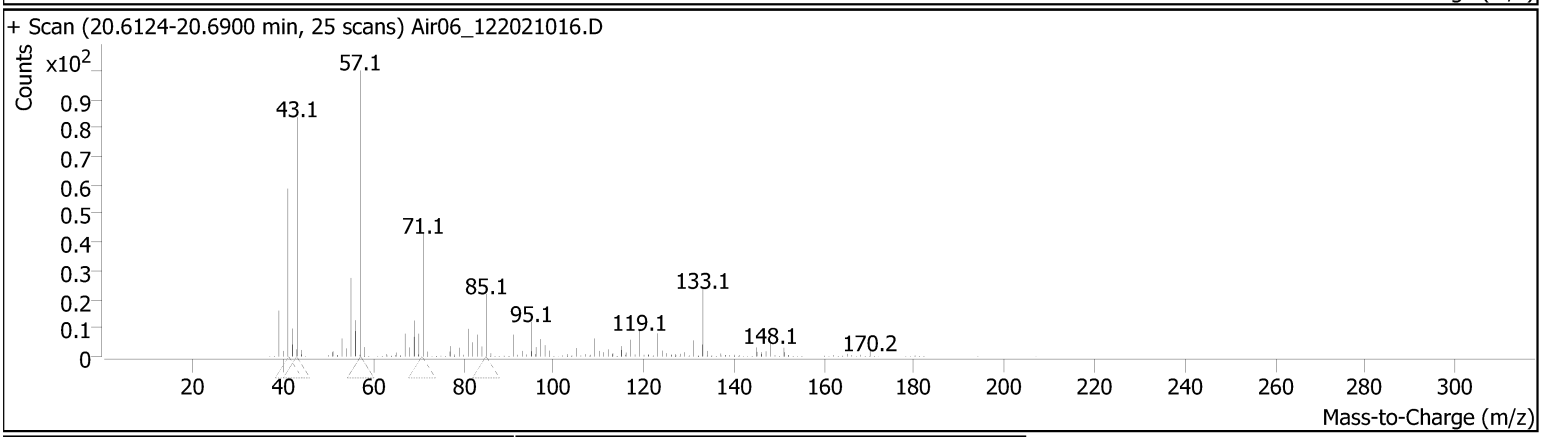


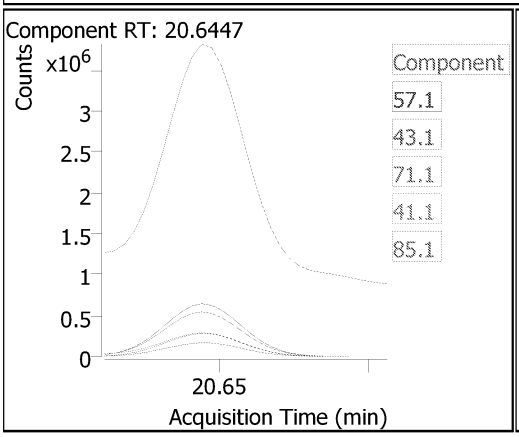


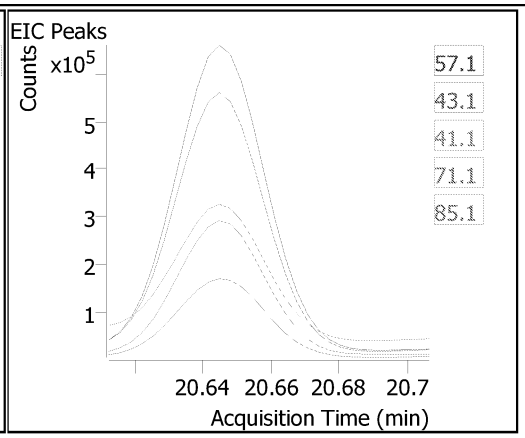
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.6447	Dodecane	8592631.4	86.0	112-40-3	C12H26	20.25





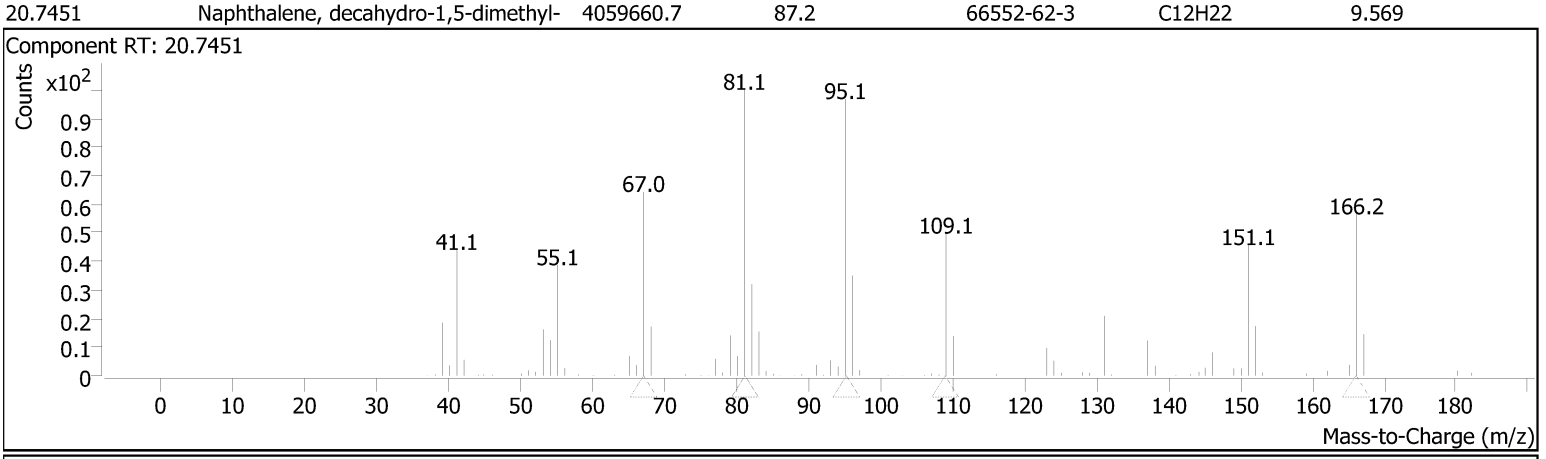


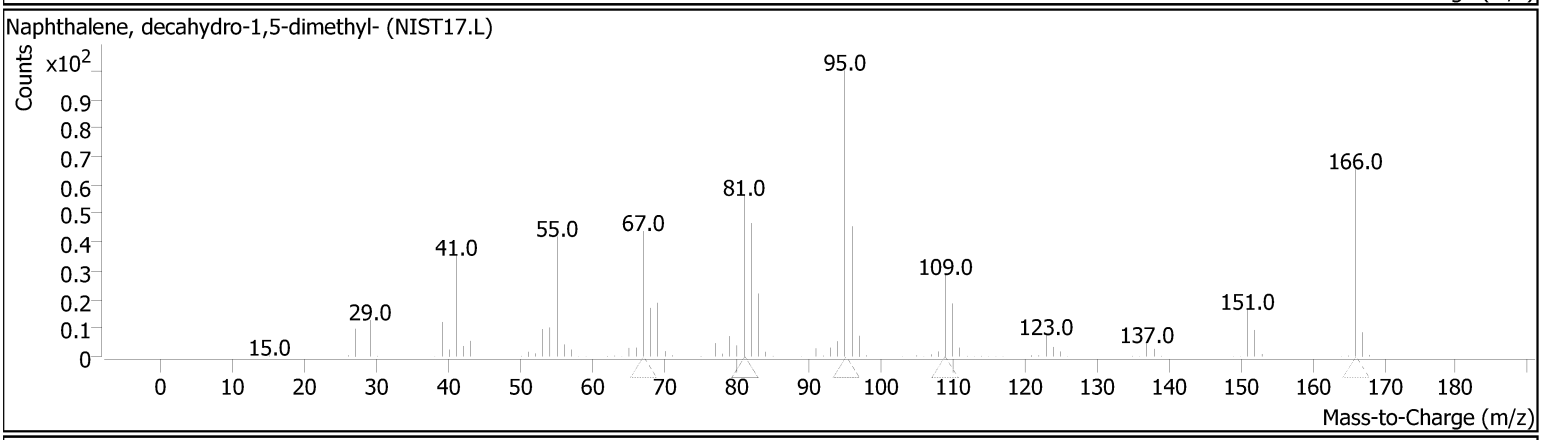


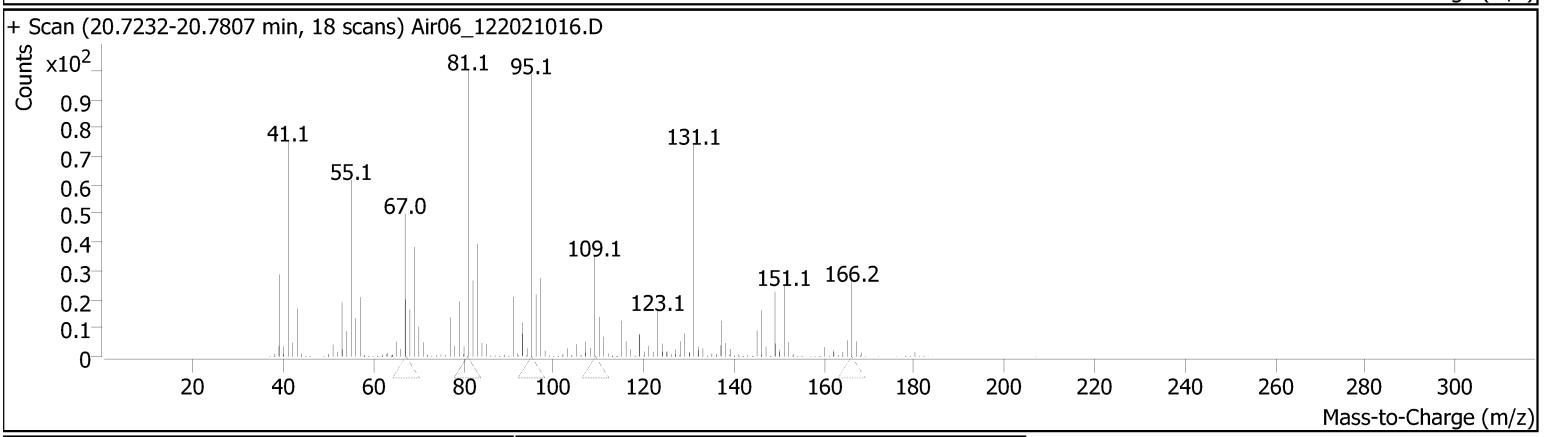


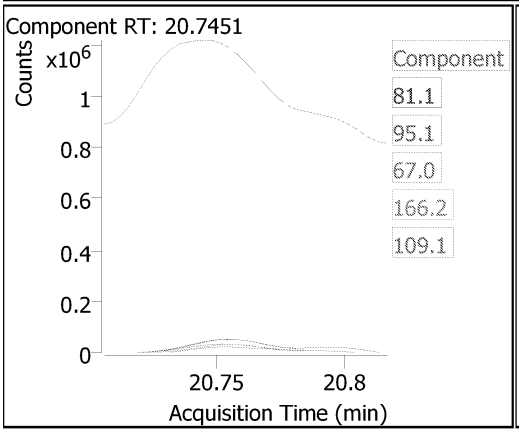


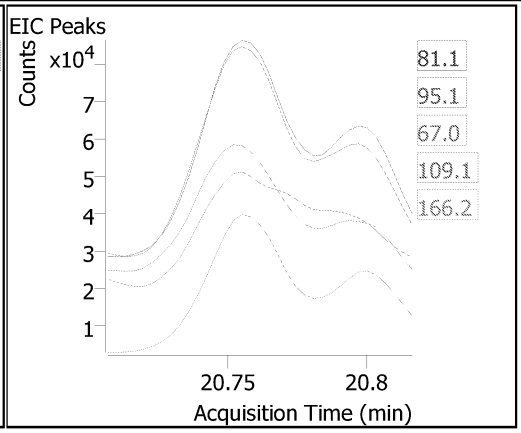
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.7451	Naphthalene, decahydro-1,5-dimethyl-	4059660.7	87.2	66552-62-3	C12H22	9.569

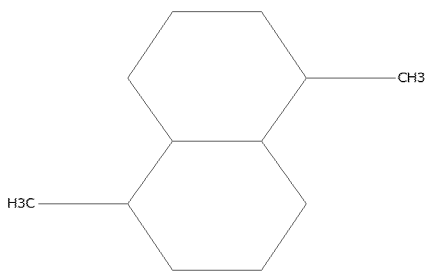




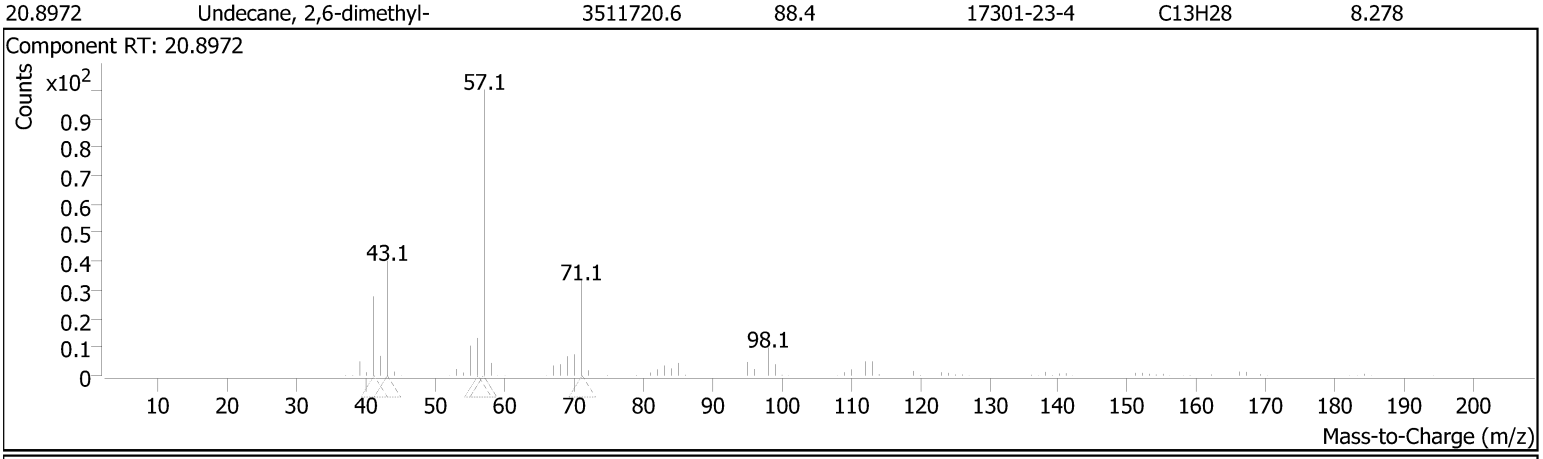


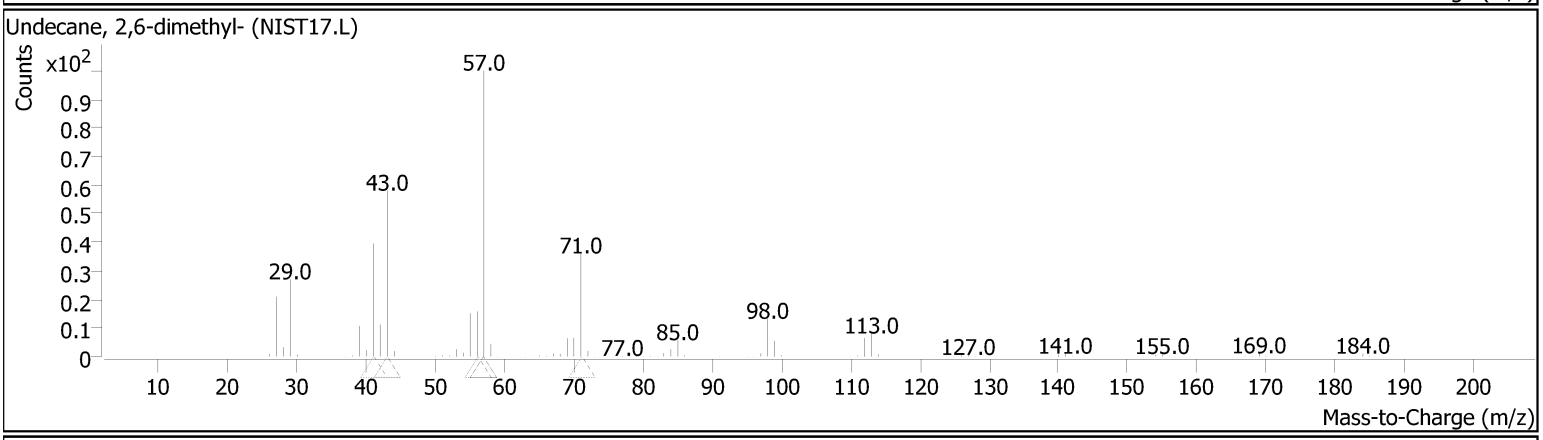


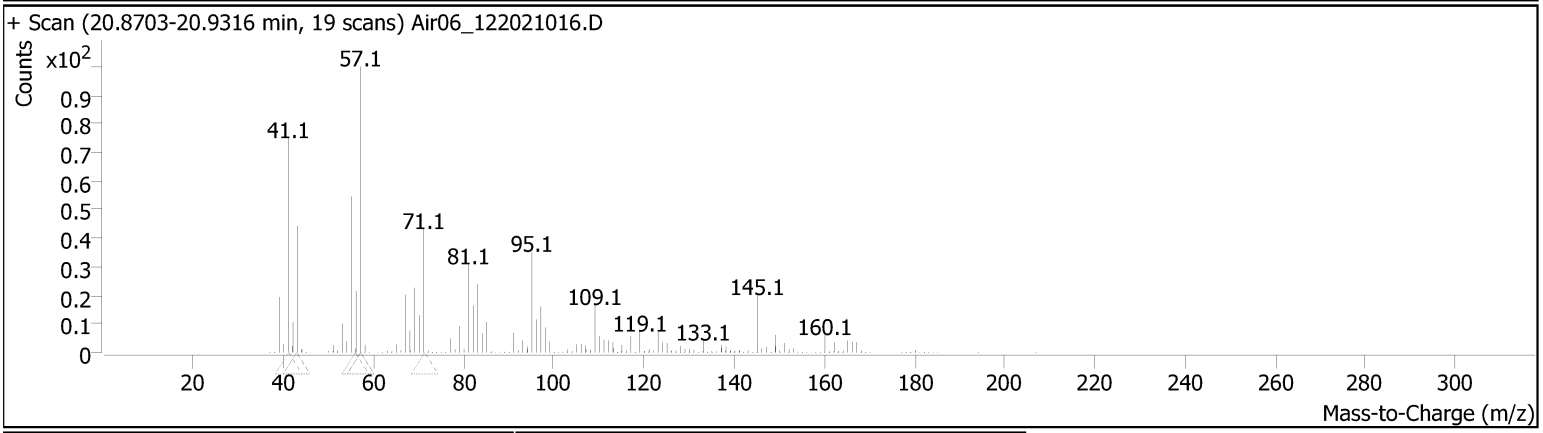


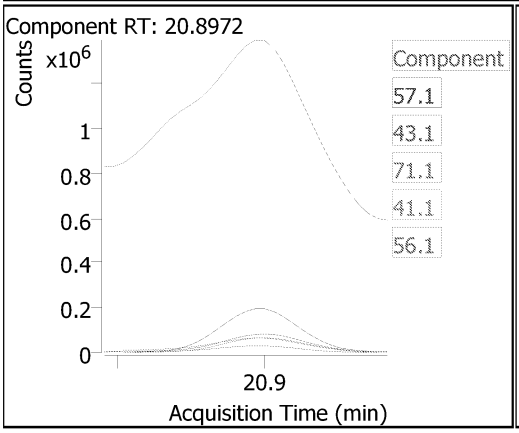


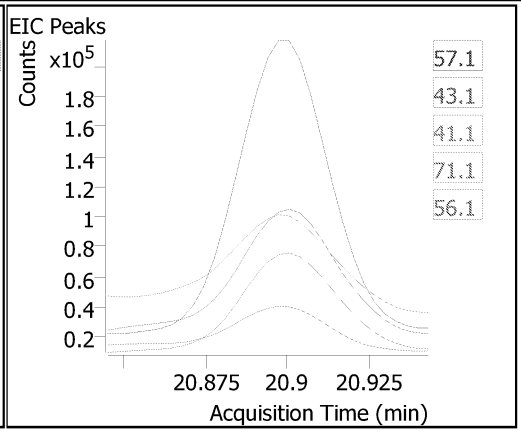
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.8972	Undecane, 2,6-dimethyl-	3511720.6	88.4	17301-23-4	C13H28	8.278

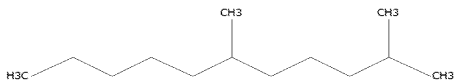




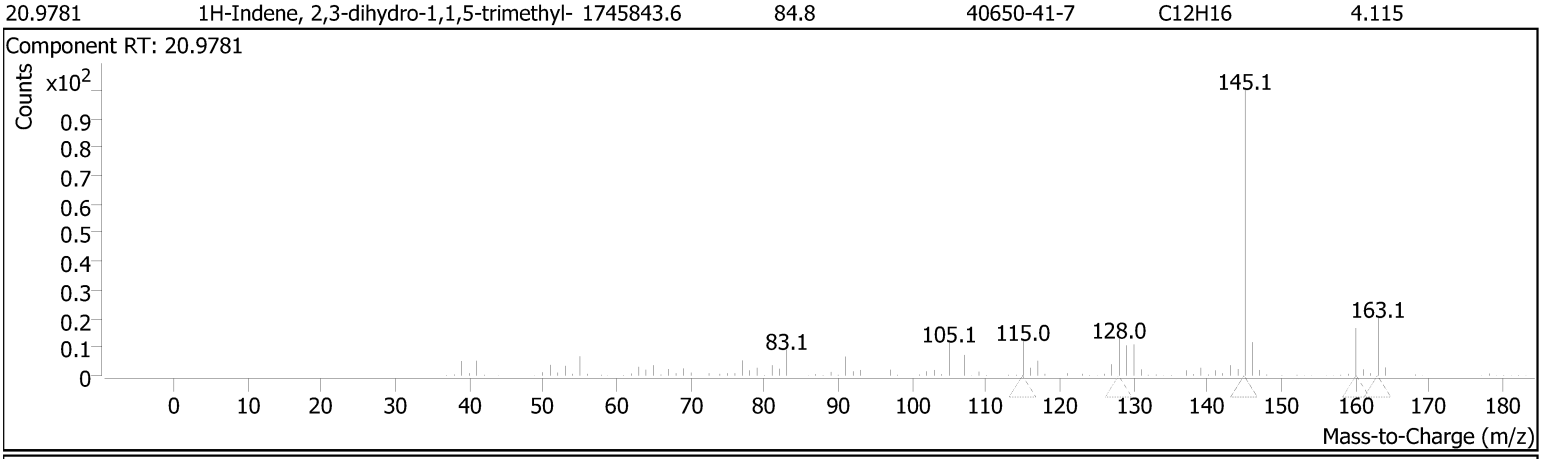


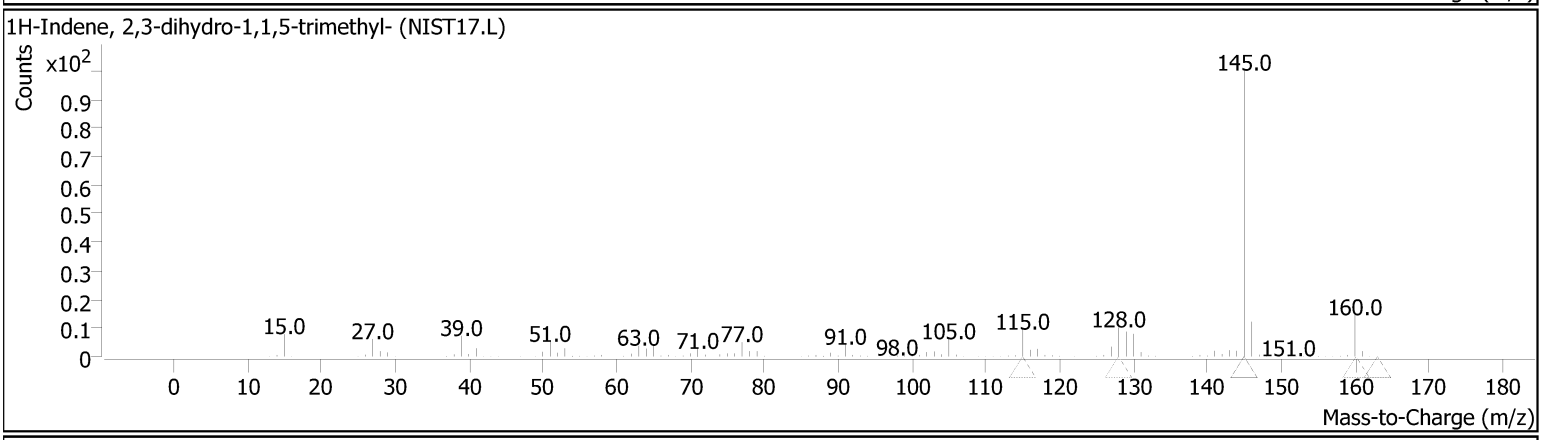


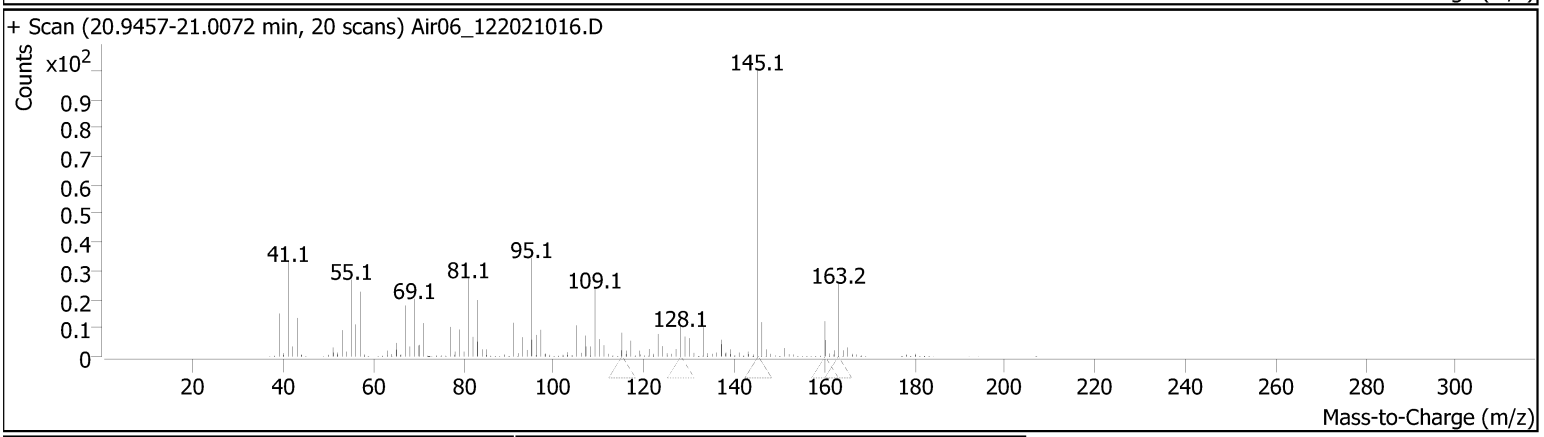


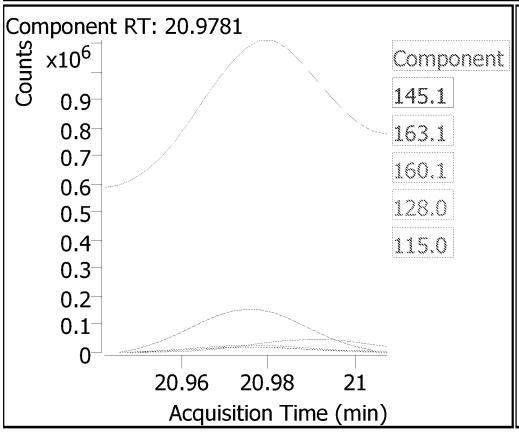


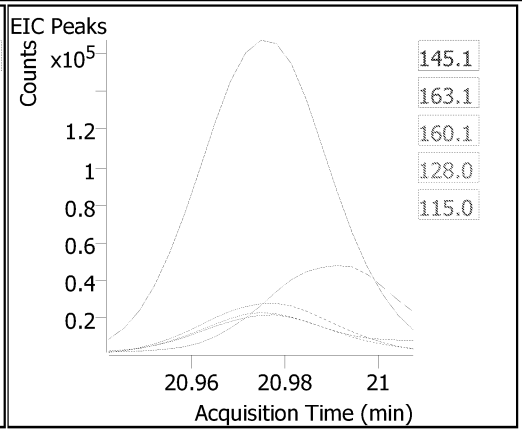
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.9781	1H-Indene, 2,3-dihydro-1,1,5-trimethyl-	1745843.6	84.8	40650-41-7	C12H16	4.115

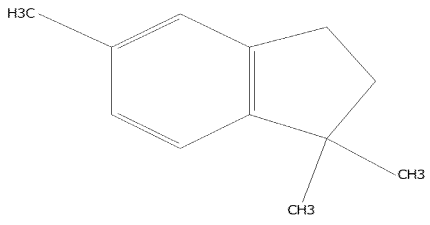




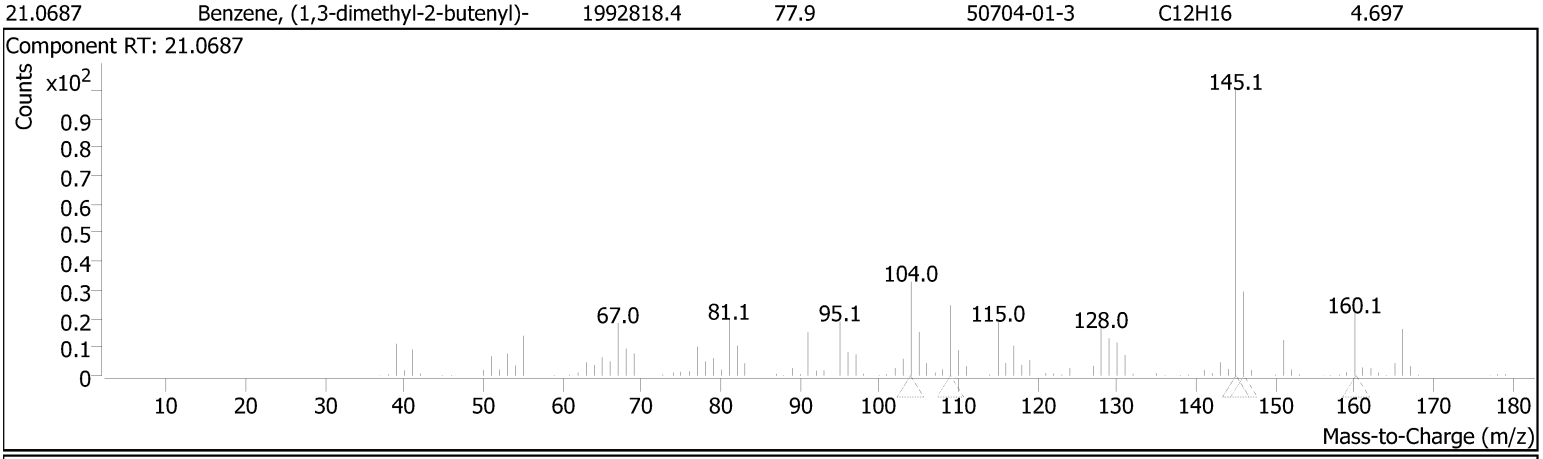


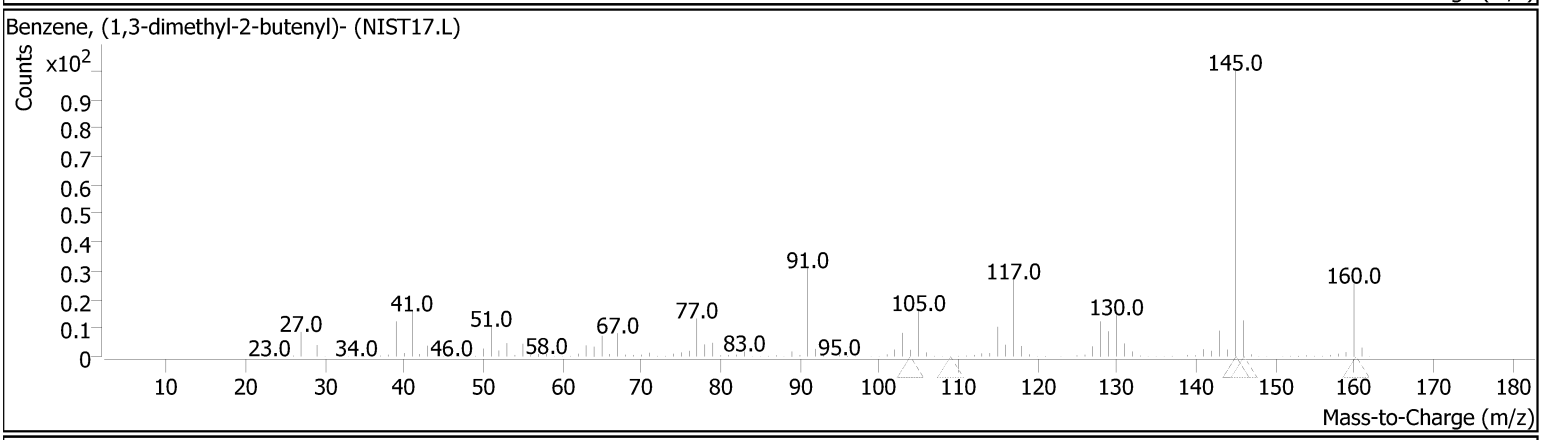


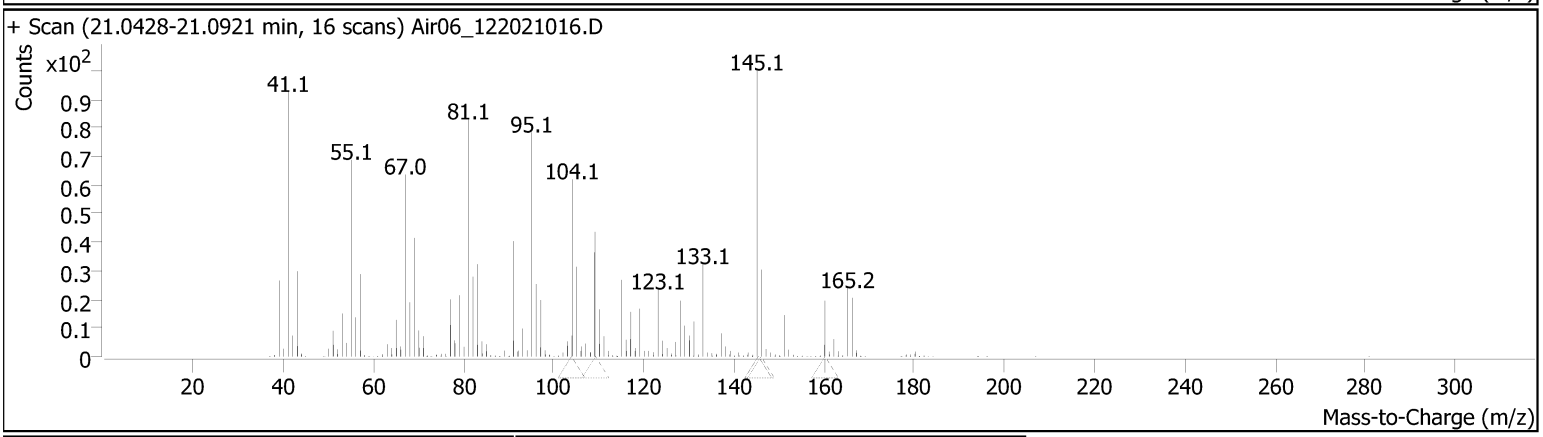


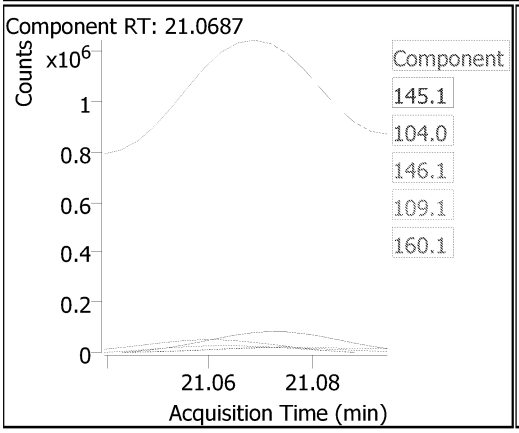


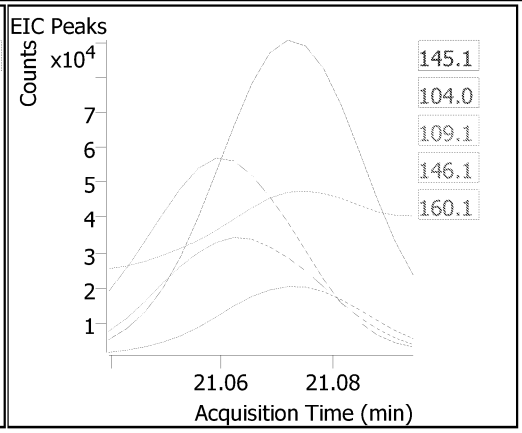
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.0687	Benzene, (1,3-dimethyl-2-butenyl)-	1992818.4	77.9	50704-01-3	C12H16	4.697

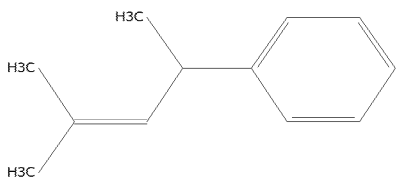








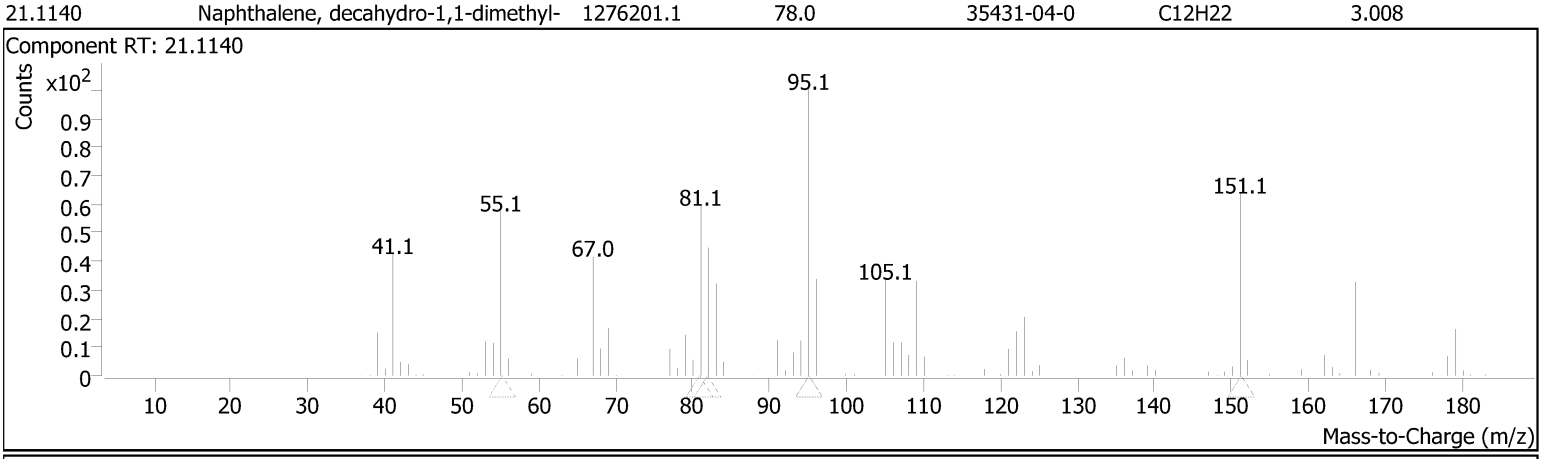


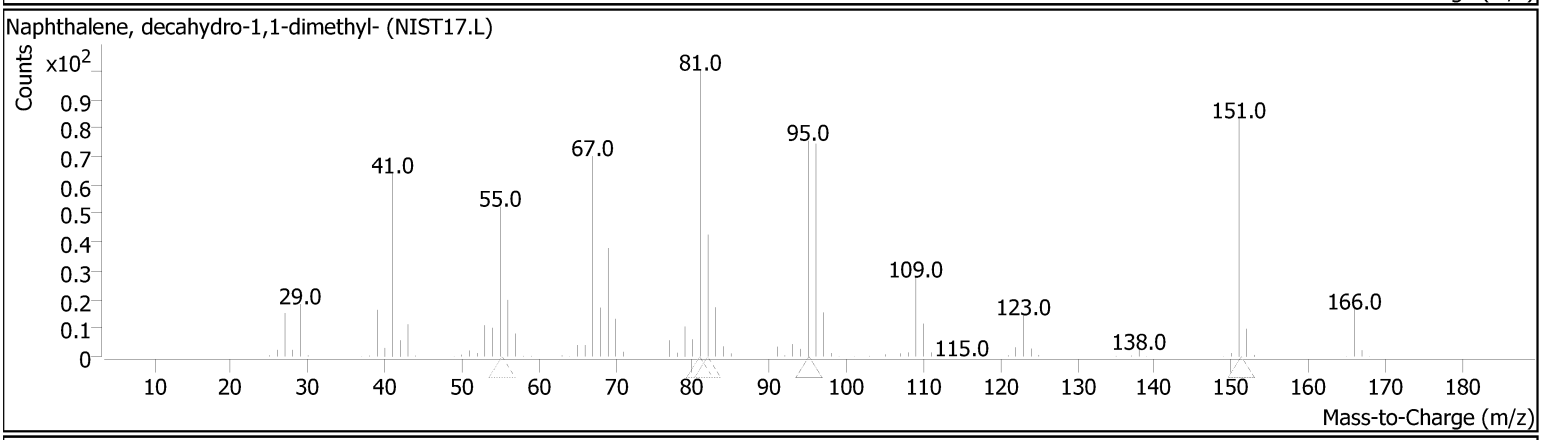


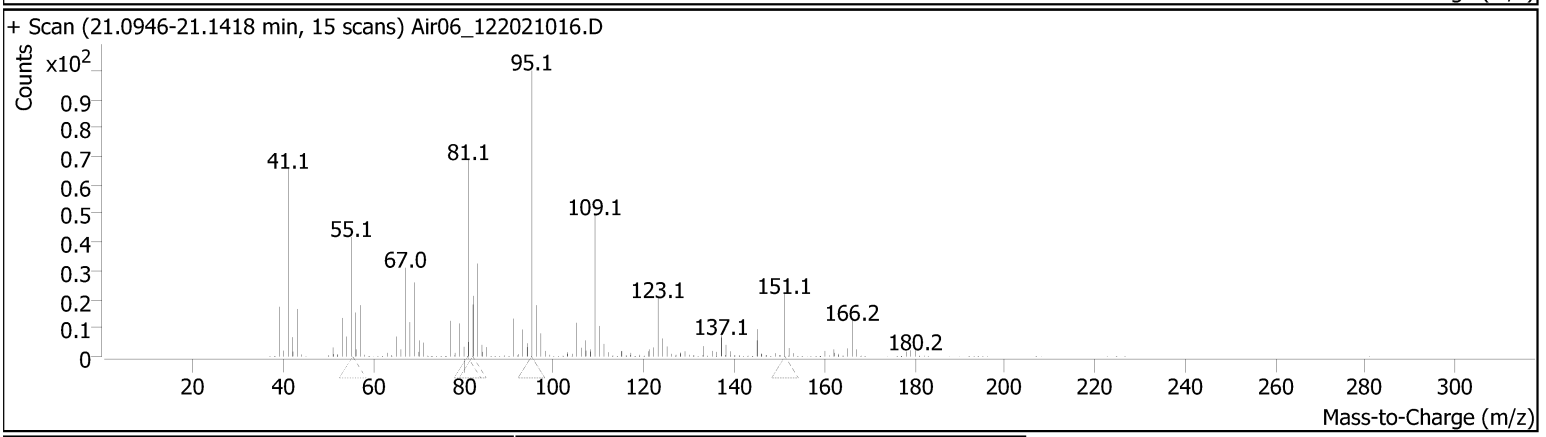
Library Search Results - NonTarget Hits with Details

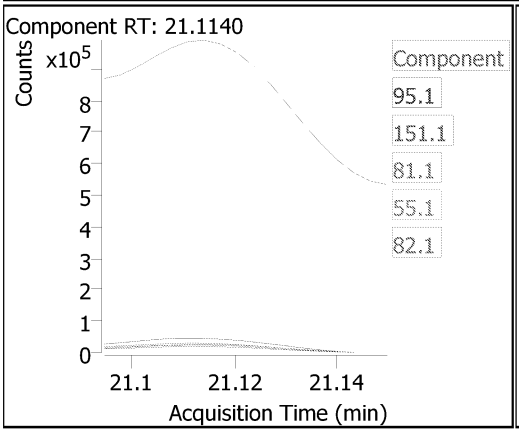
Agilent Technologies

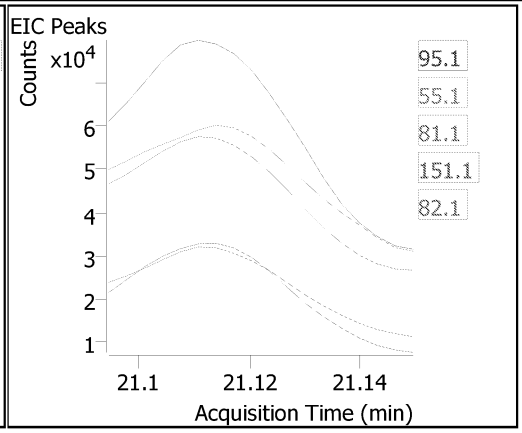
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.1140	Naphthalene, decahydro-1,1-dimethyl-	1276201.1	78.0	35431-04-0	C12H22	3.008

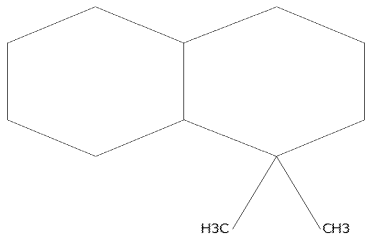




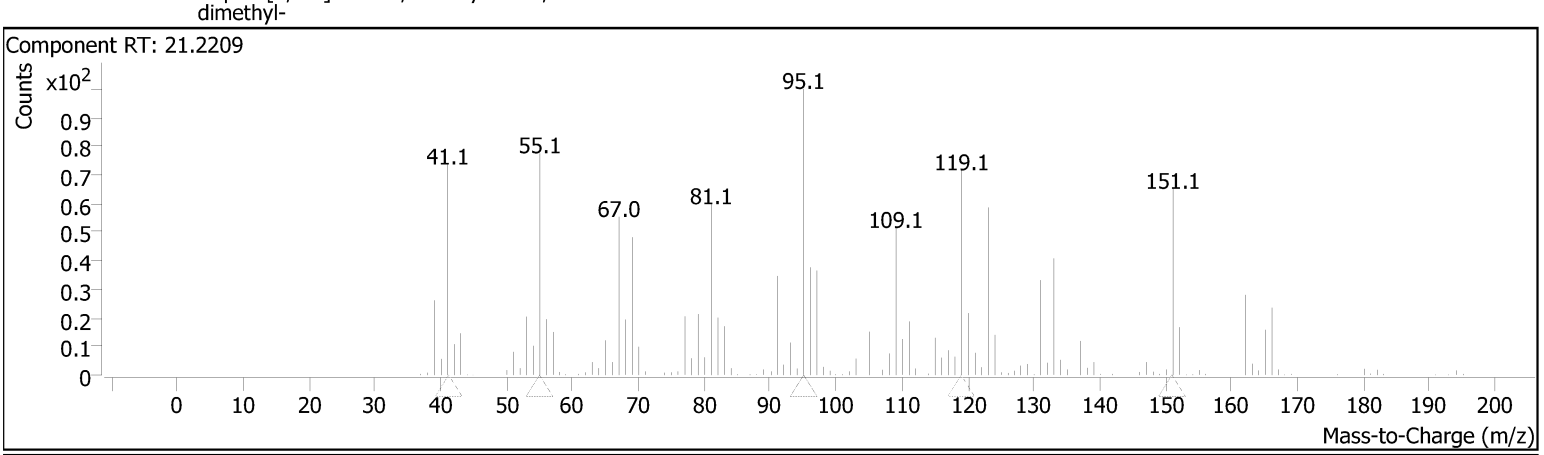


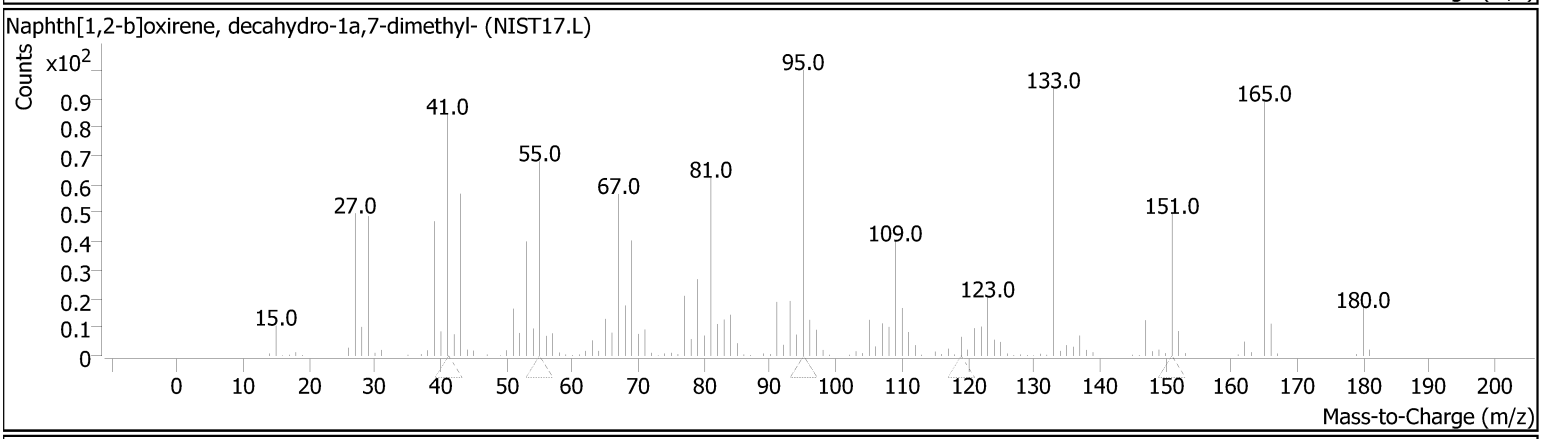


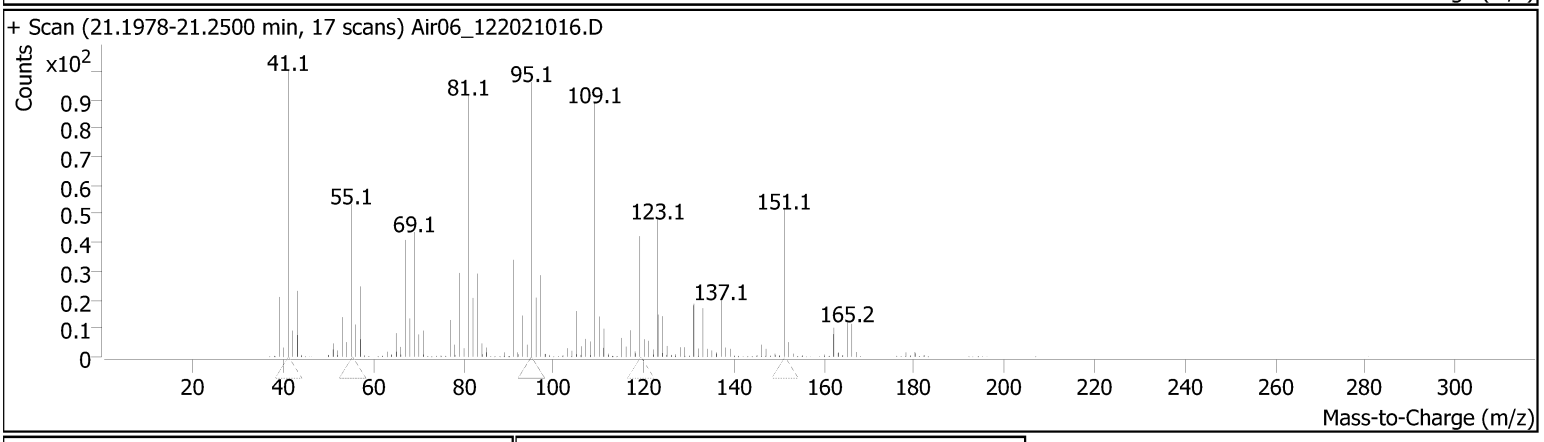


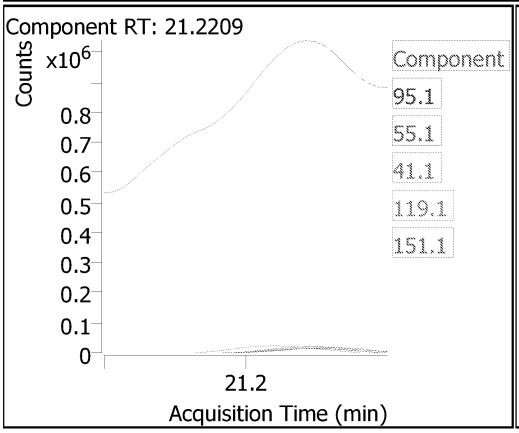


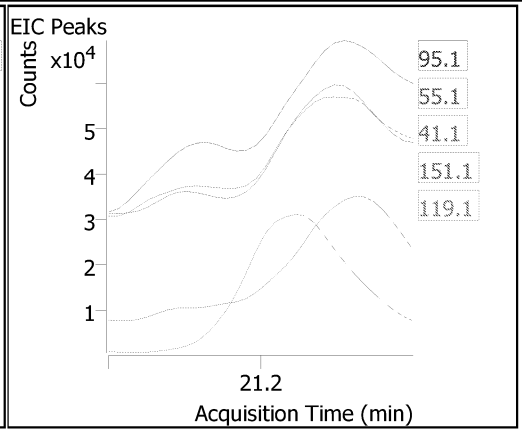
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.2209	Naphth[1,2-b]oxirene, decahydro-1a,7-dimethyl-	2313517.7	81.8	55976-08-4	C12H20O	5.453

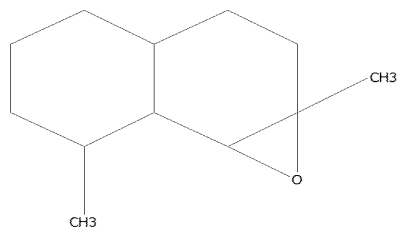




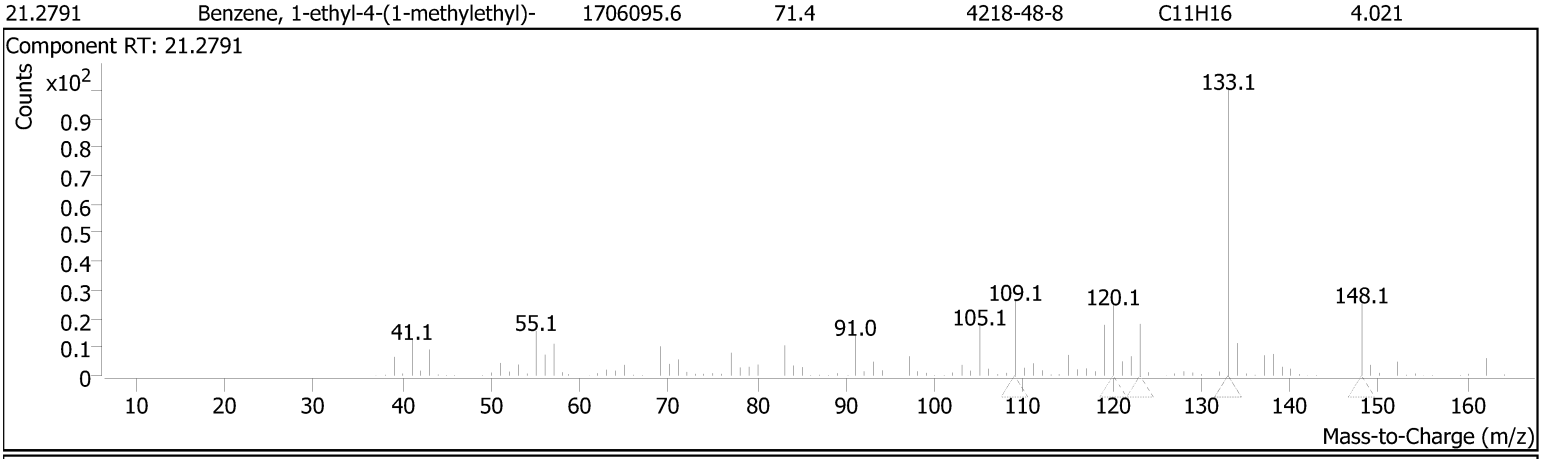


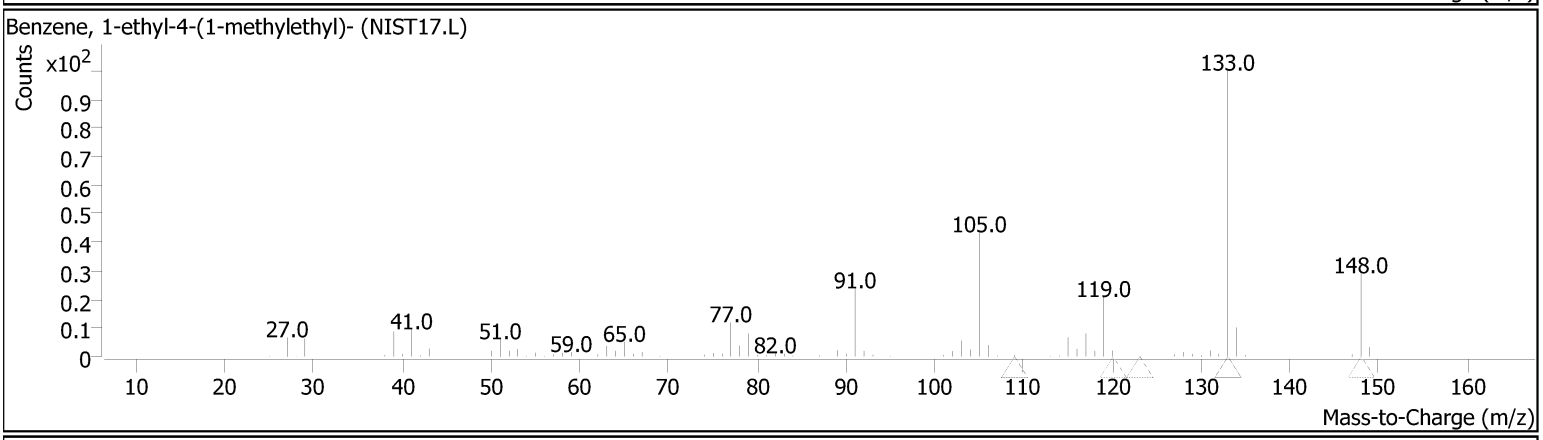


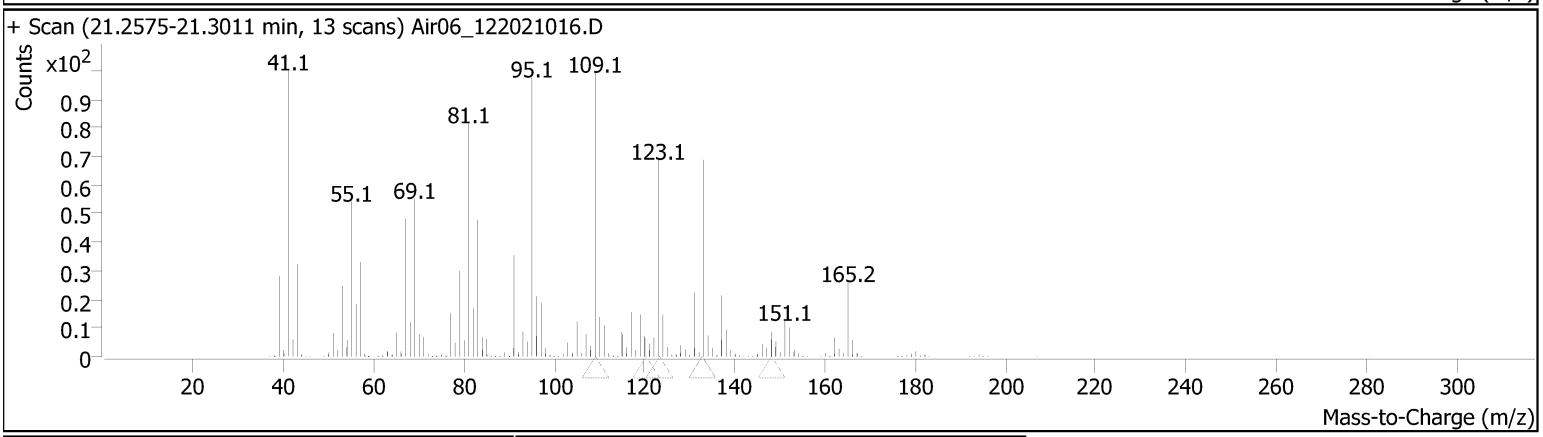


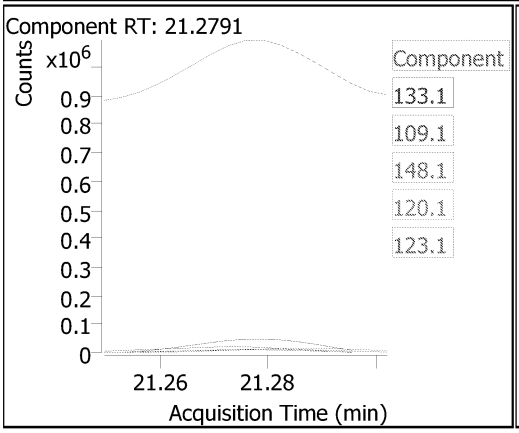


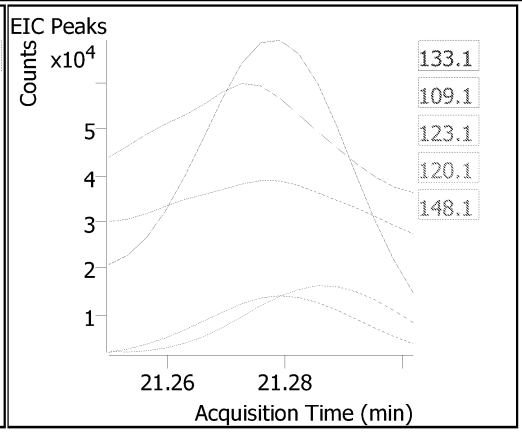
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.2791	Benzene, 1-ethyl-4-(1-methylethyl)-	1706095.6	71.4	4218-48-8	C11H16	4.021

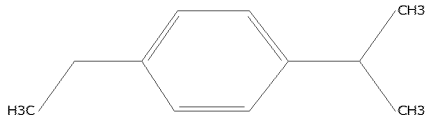




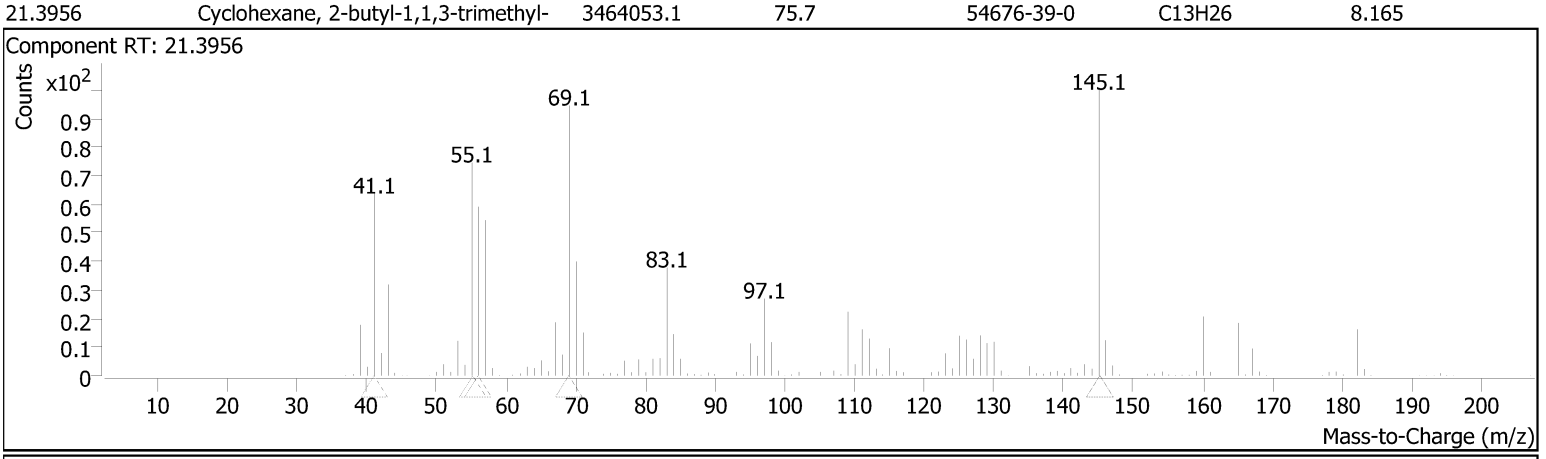


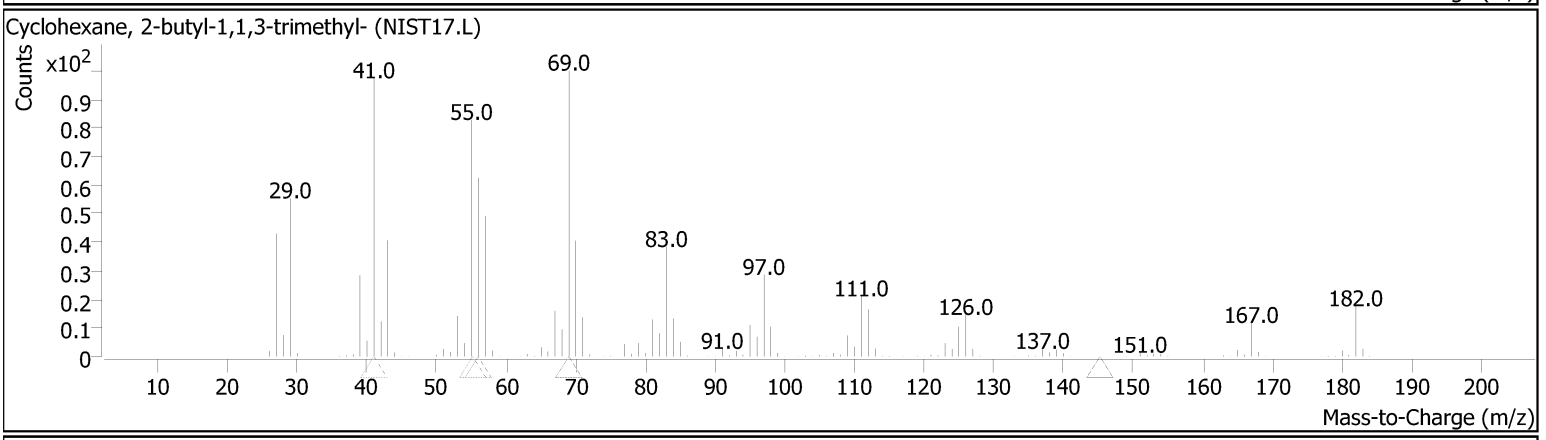


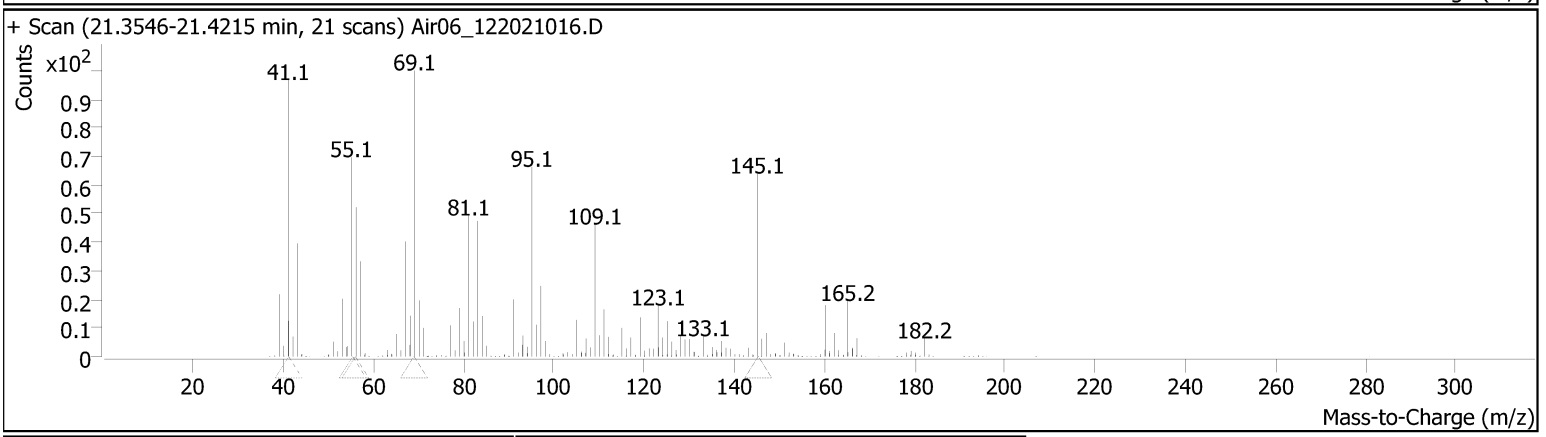


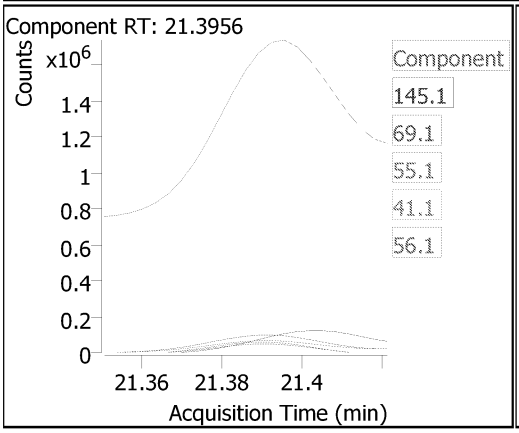


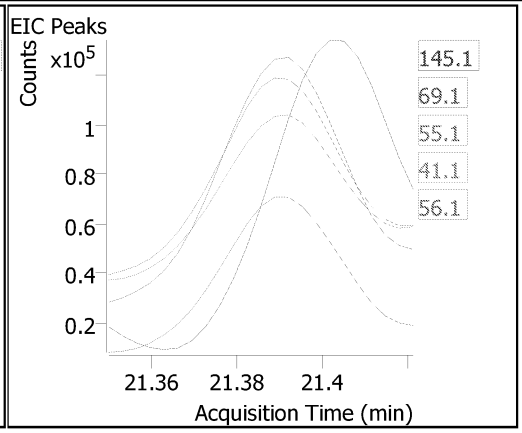
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.3956	Cyclohexane, 2-butyl-1,1,3-trimethyl-	3464053.1	75.7	54676-39-0	C13H26	8.165

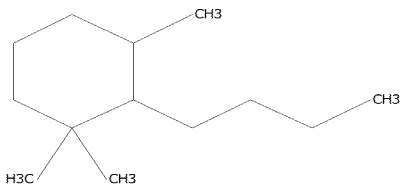




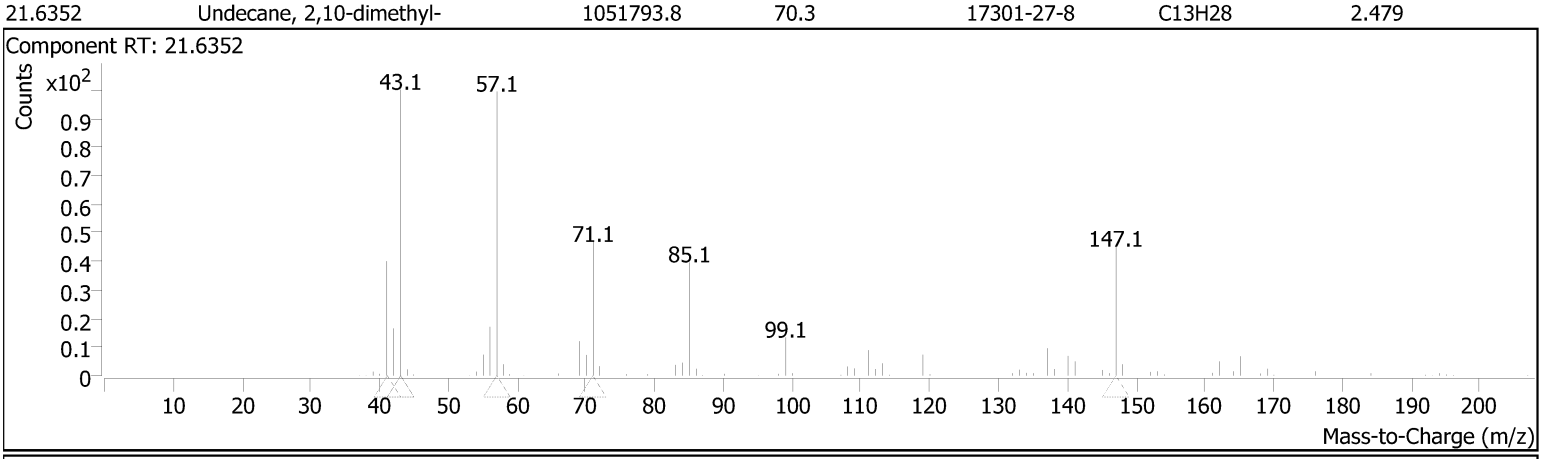


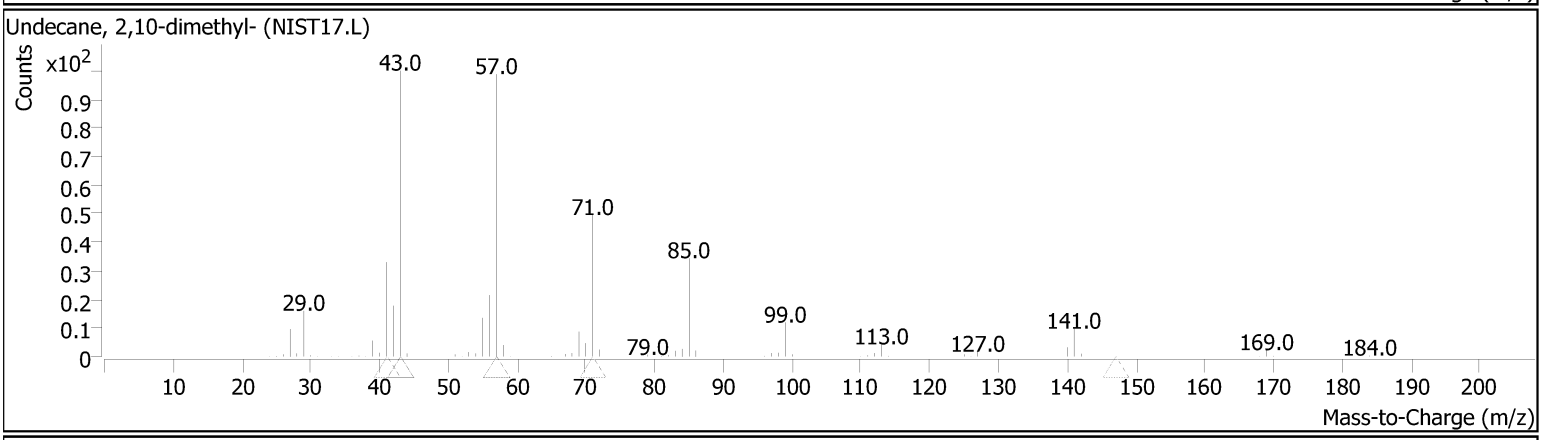


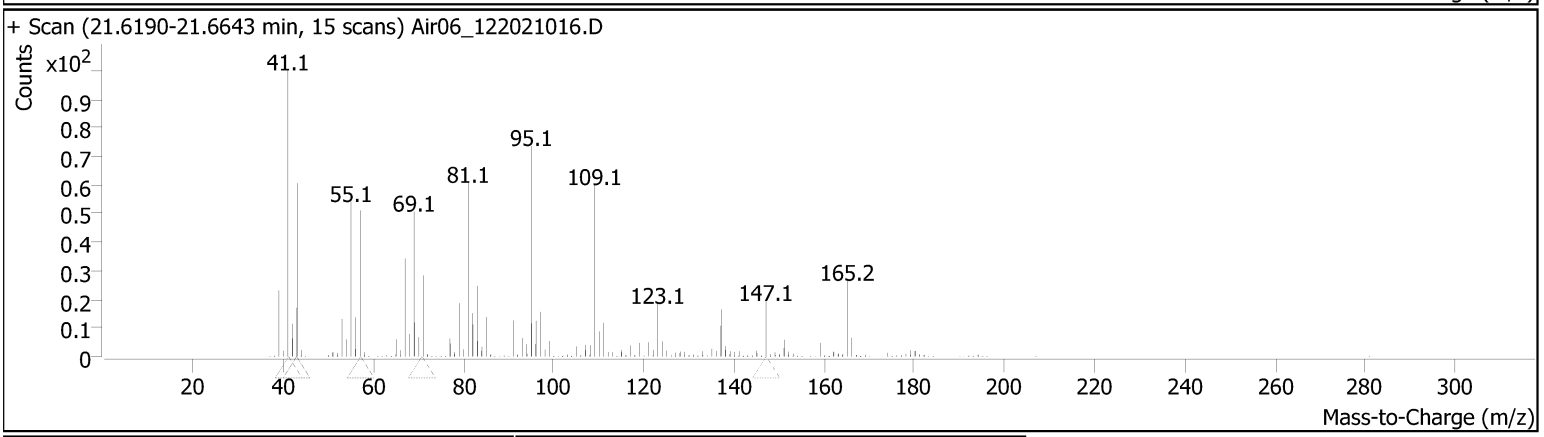


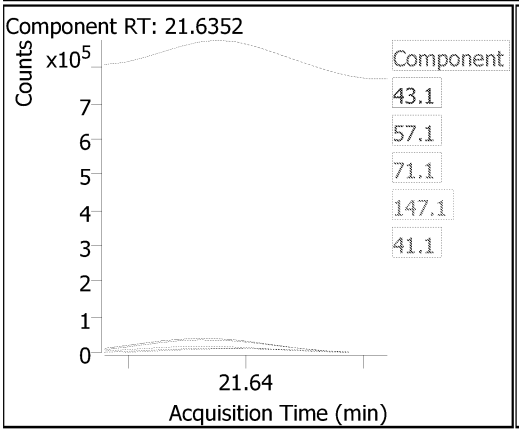


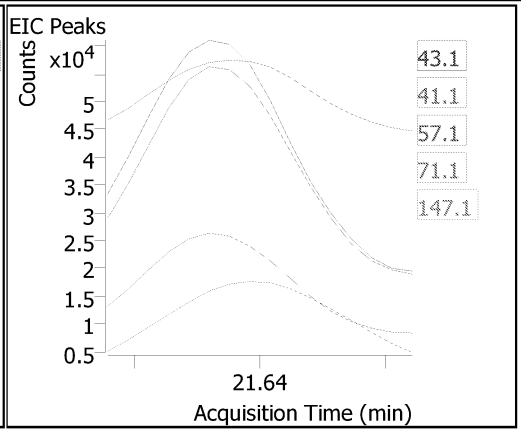
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.6352	Undecane, 2,10-dimethyl-	1051793.8	70.3	17301-27-8	C13H28	2.479

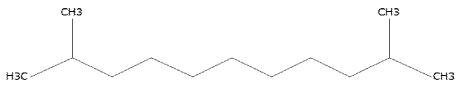




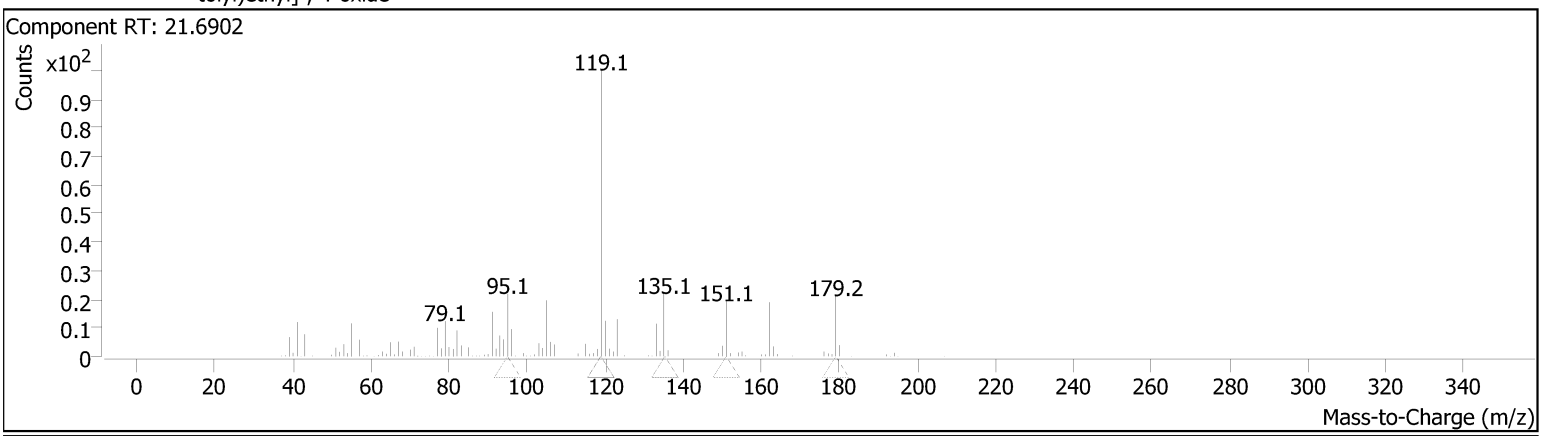


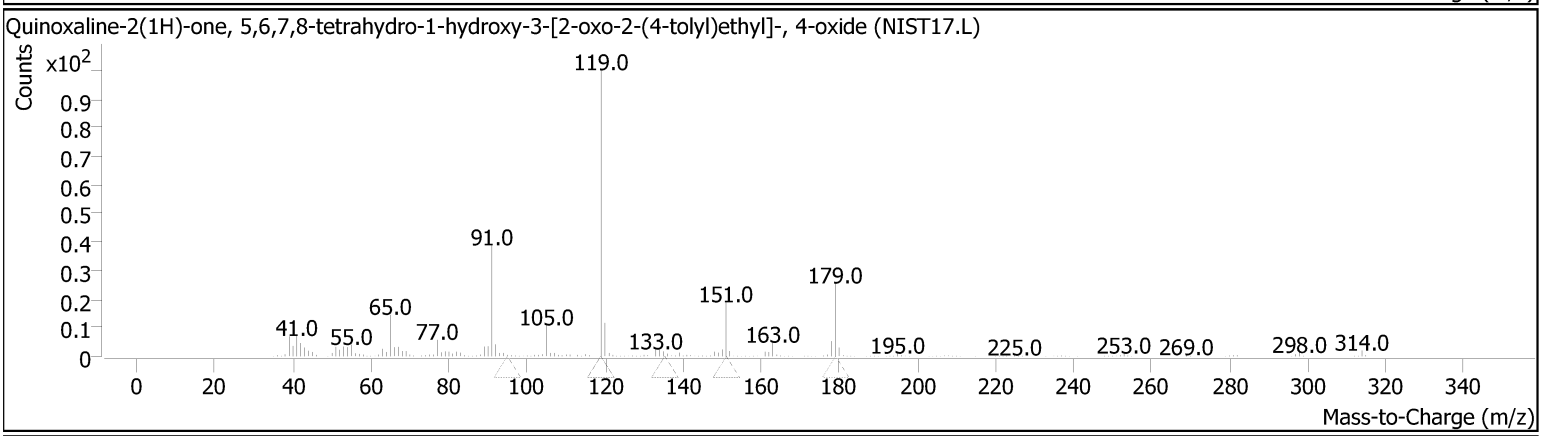


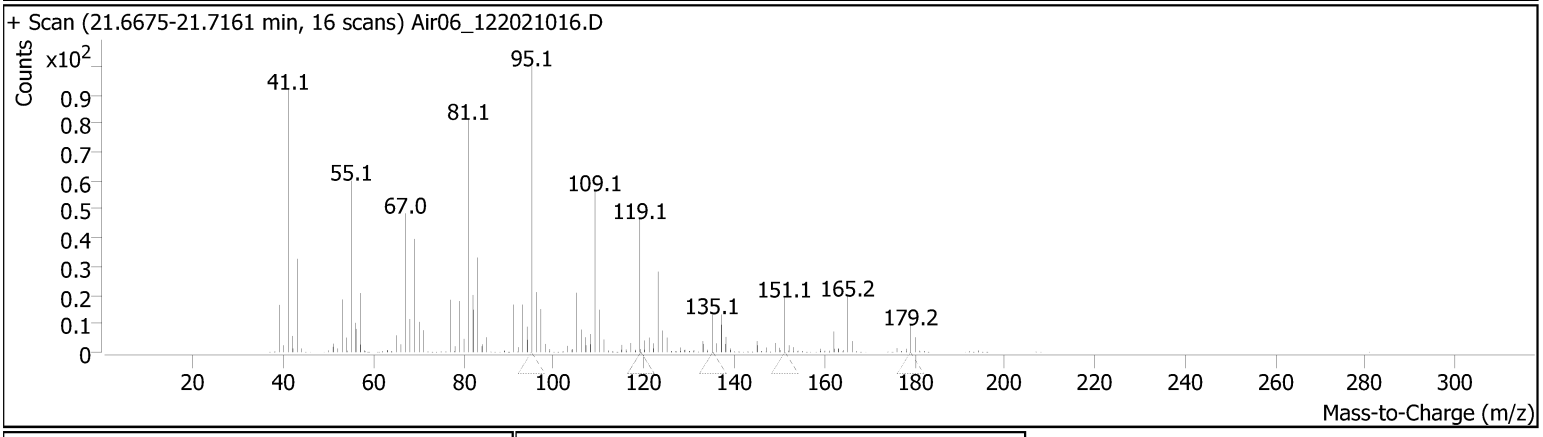


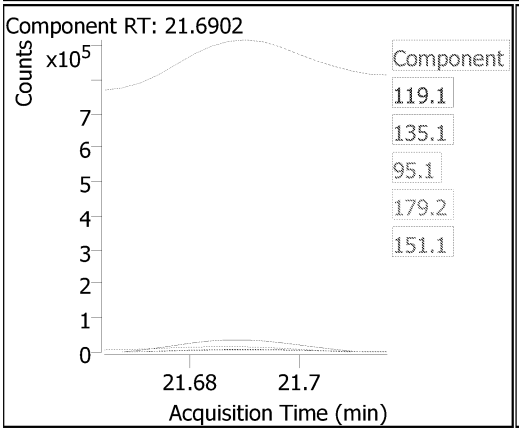


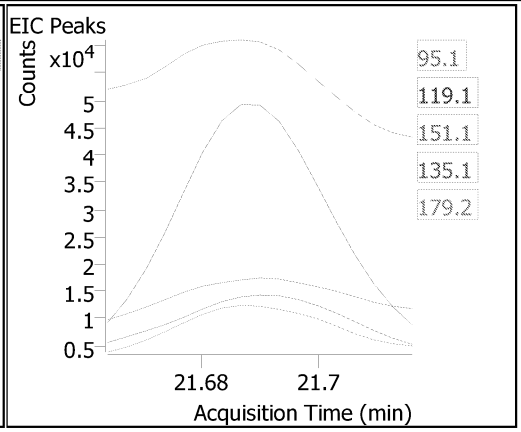
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.6902	Quinoxaline-2(1H)-one, 5,6,7,8-tetrahydro-1-hydroxy-3-[2-oxo-2-(4-tolyl)ethyl]-, 4-oxide	1182464.1	71.6	1000295-63-8	C17H18N2O4	2.787

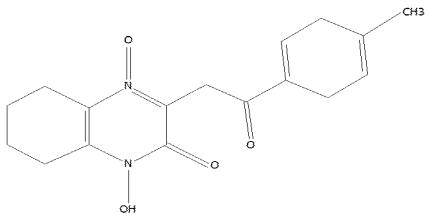








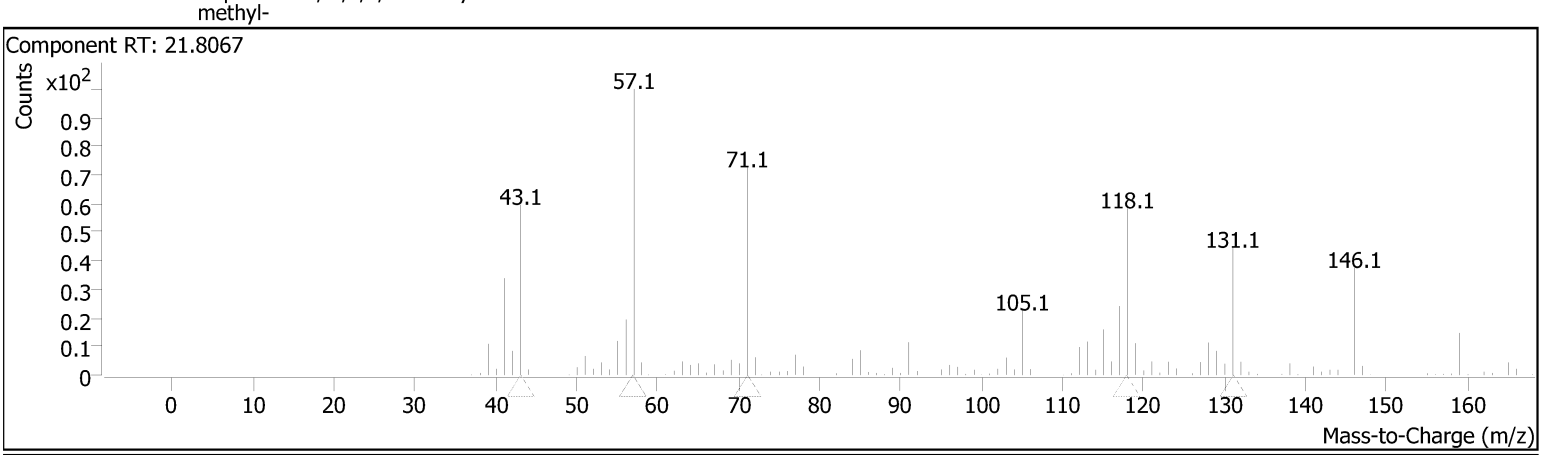


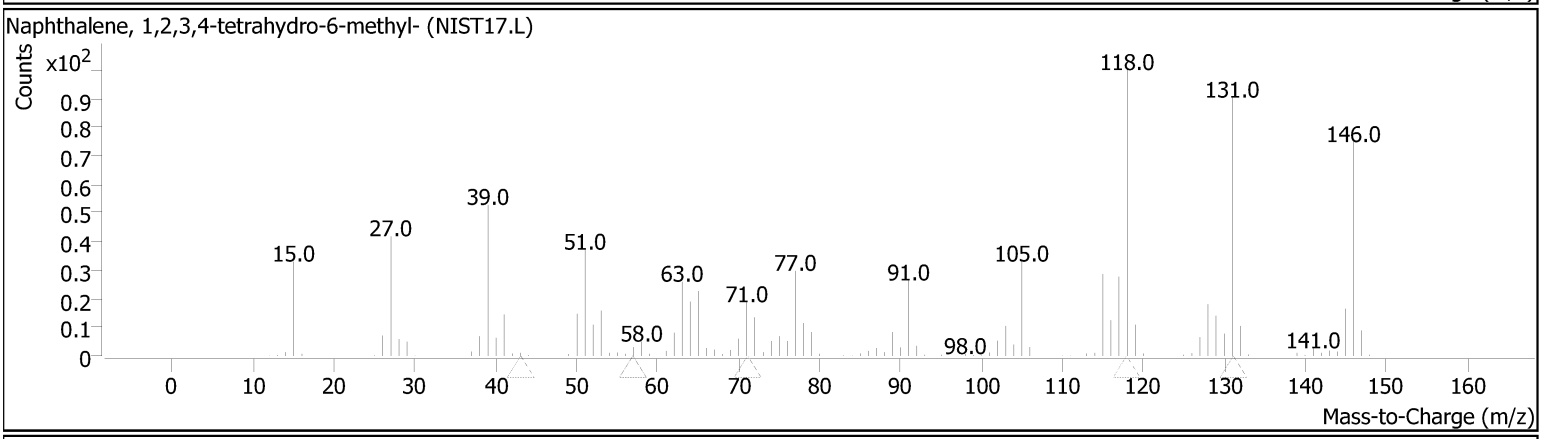


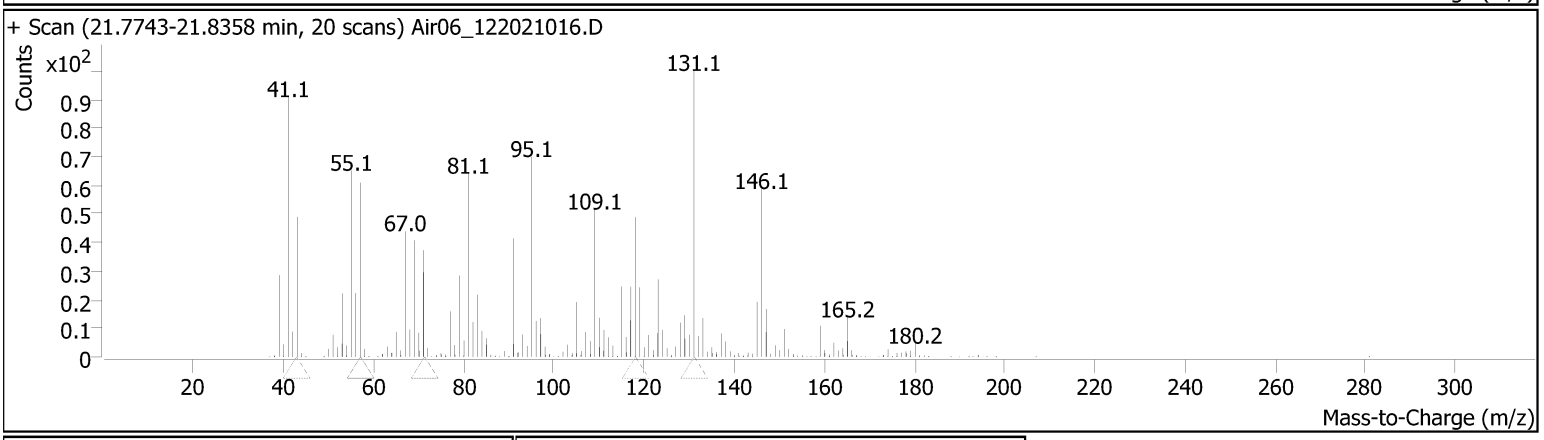
Library Search Results - NonTarget Hits with Details

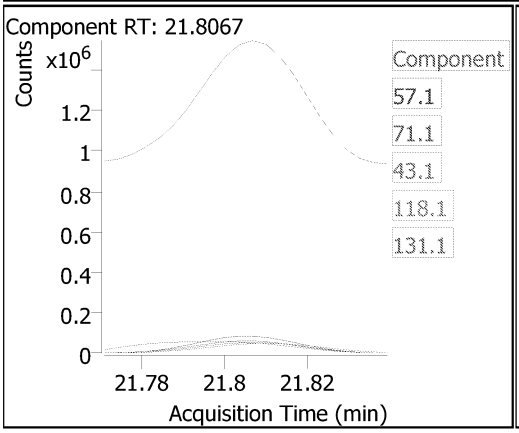
Agilent Technologies

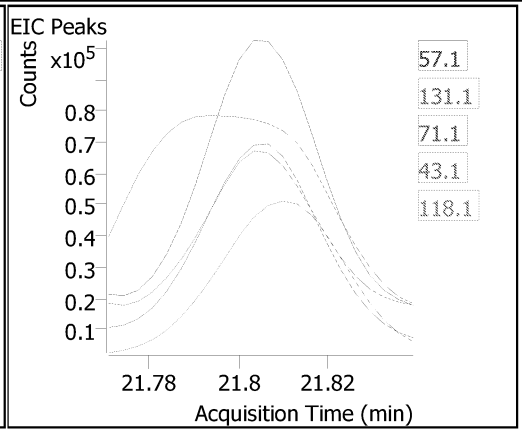
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.8067	Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	2967744.8	71.9	1680-51-9	C11H14	6.995

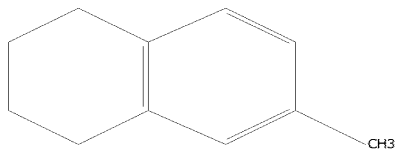




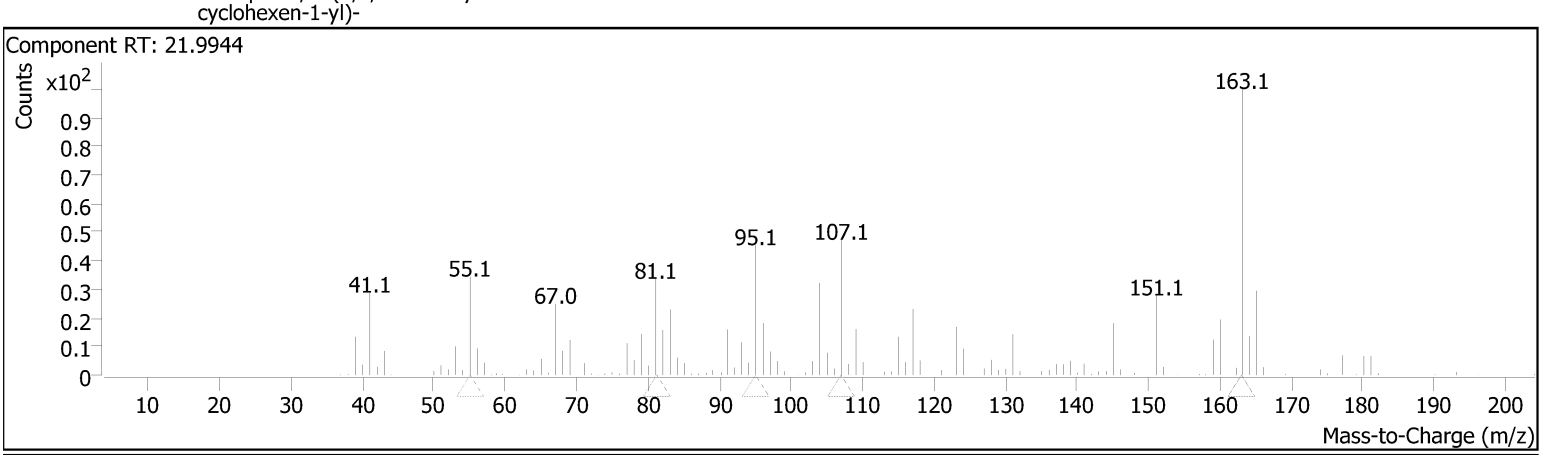


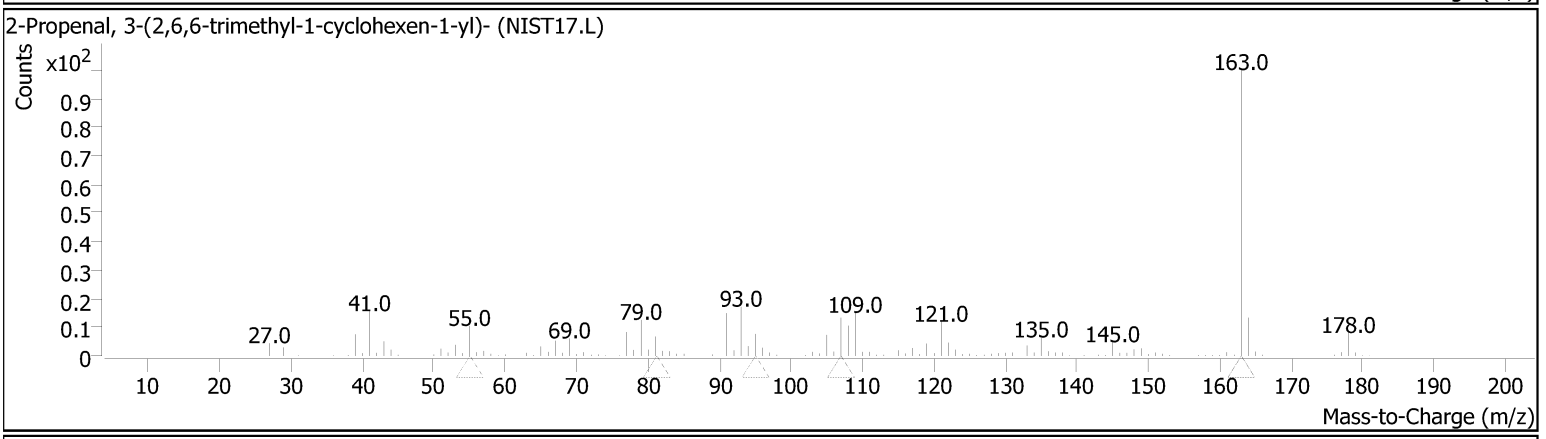


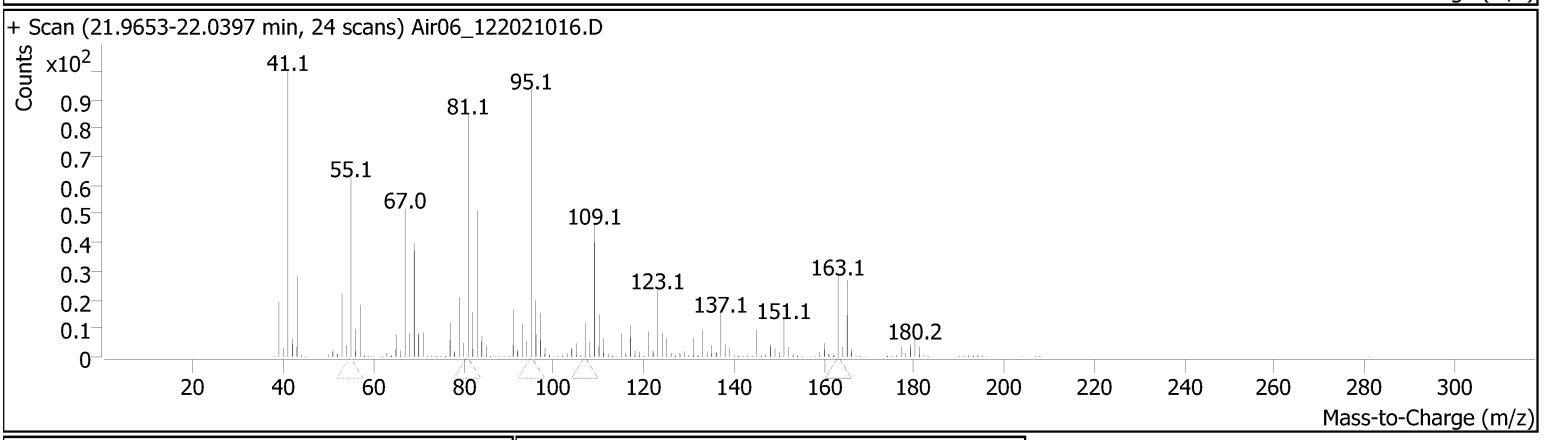


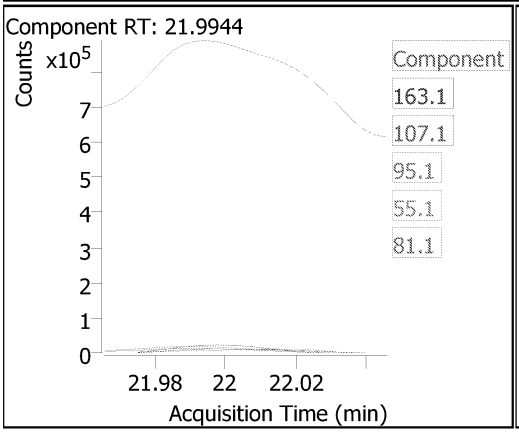


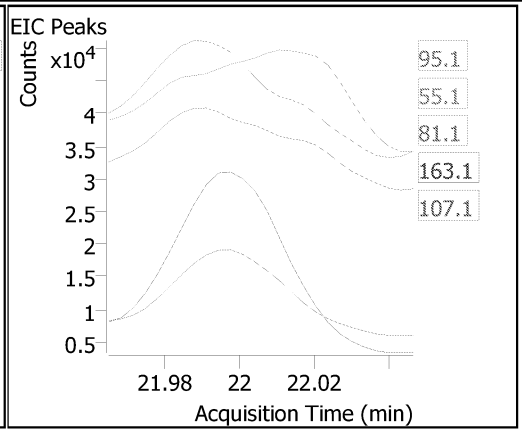
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.9944	2-Propenal, 3-(2,6,6-trimethyl-1-cyclohexen-1-yl)-	1440640.8	70.7	4951-40-0	C12H18O	3.396

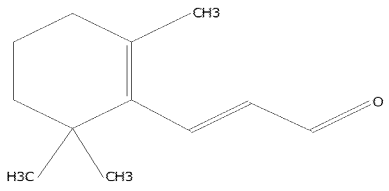




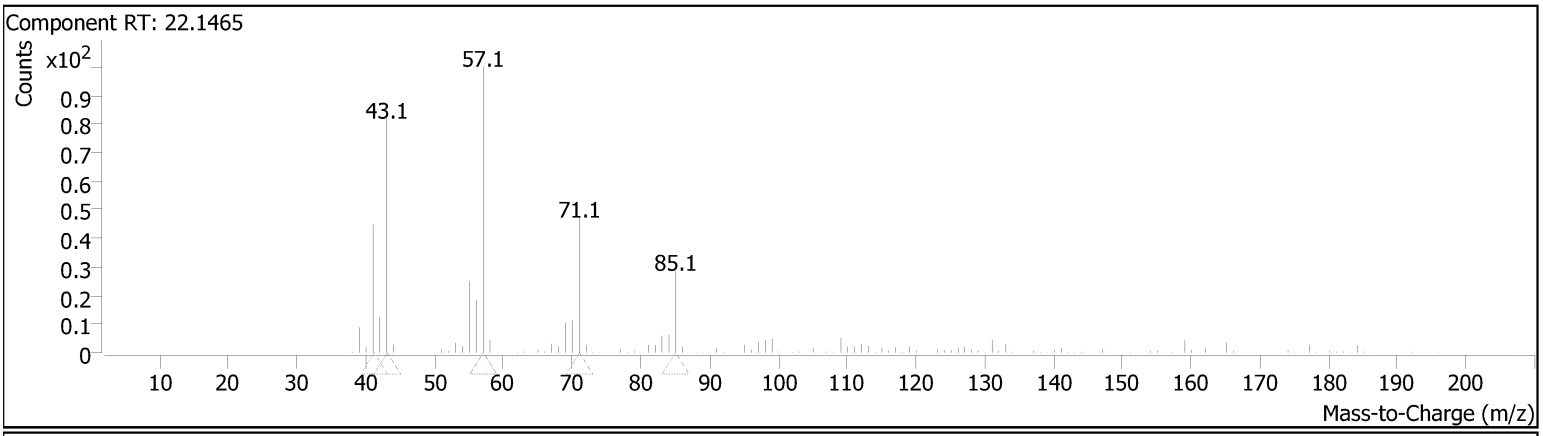


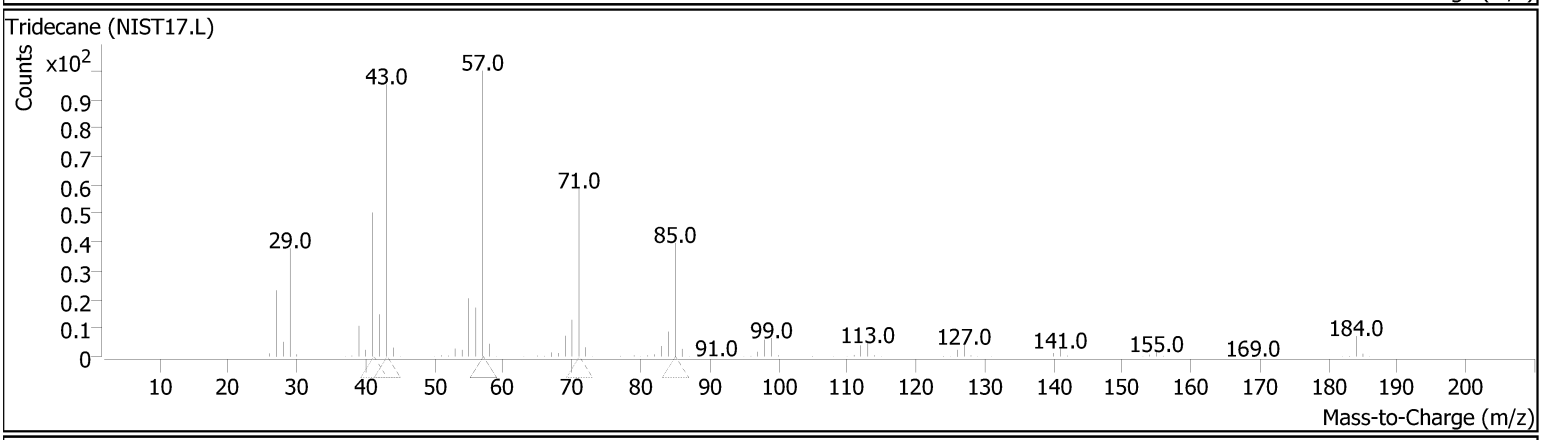


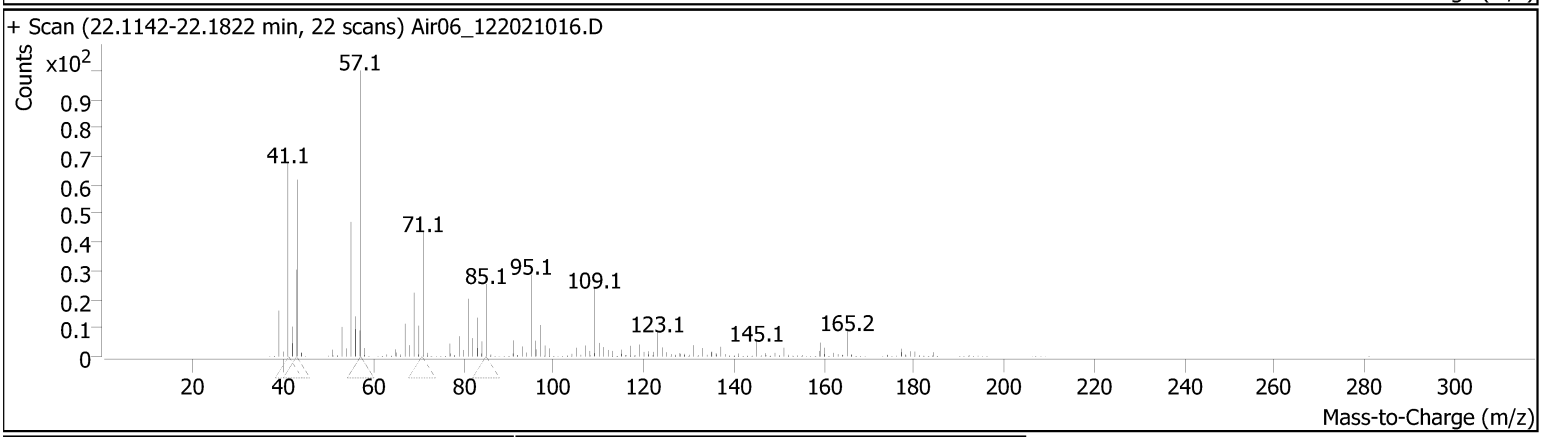


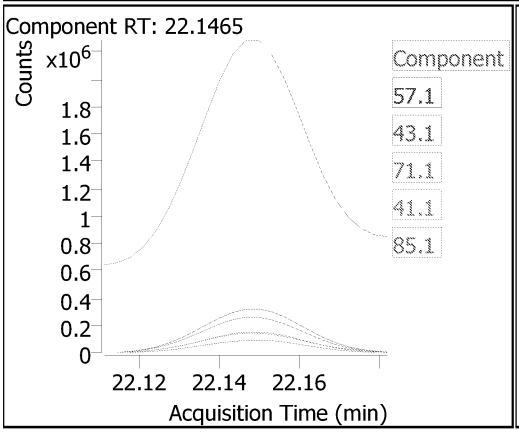


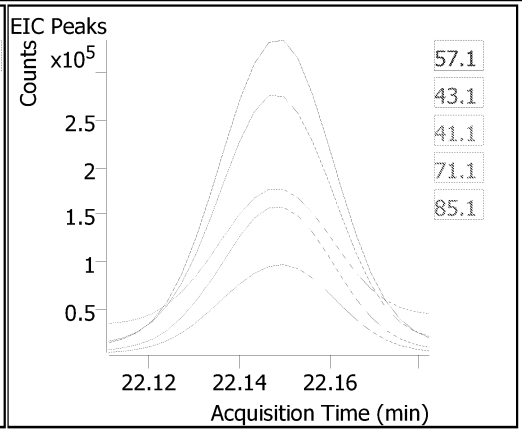
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.1465	Tridecane	3827696.1	84.4	629-50-5	C13H28	9.022

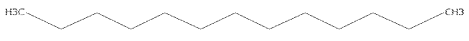




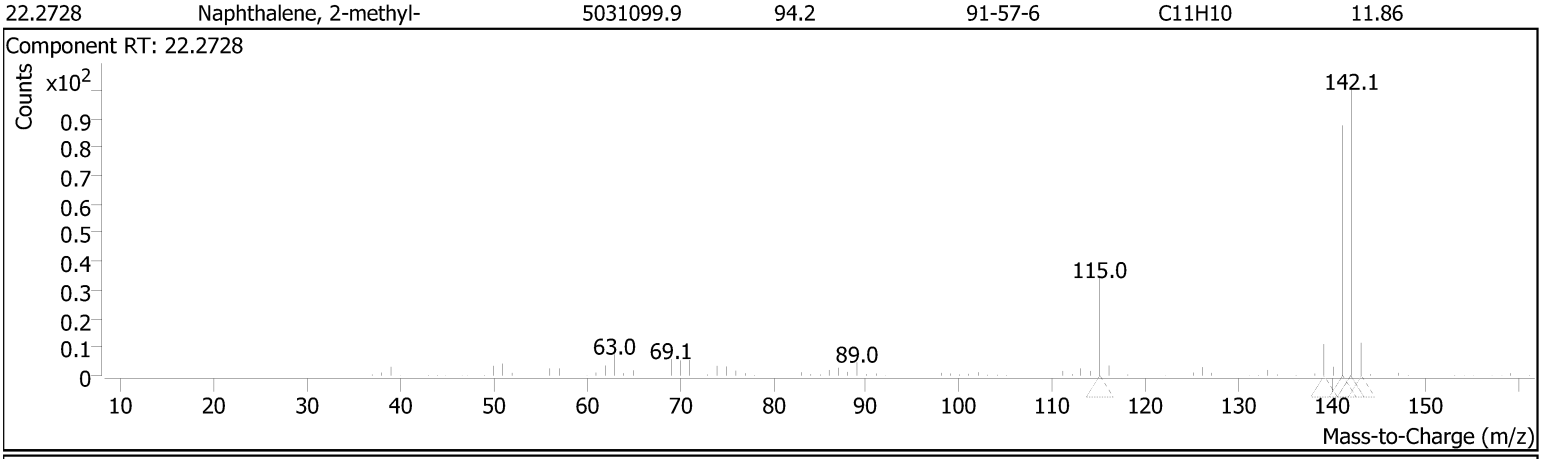


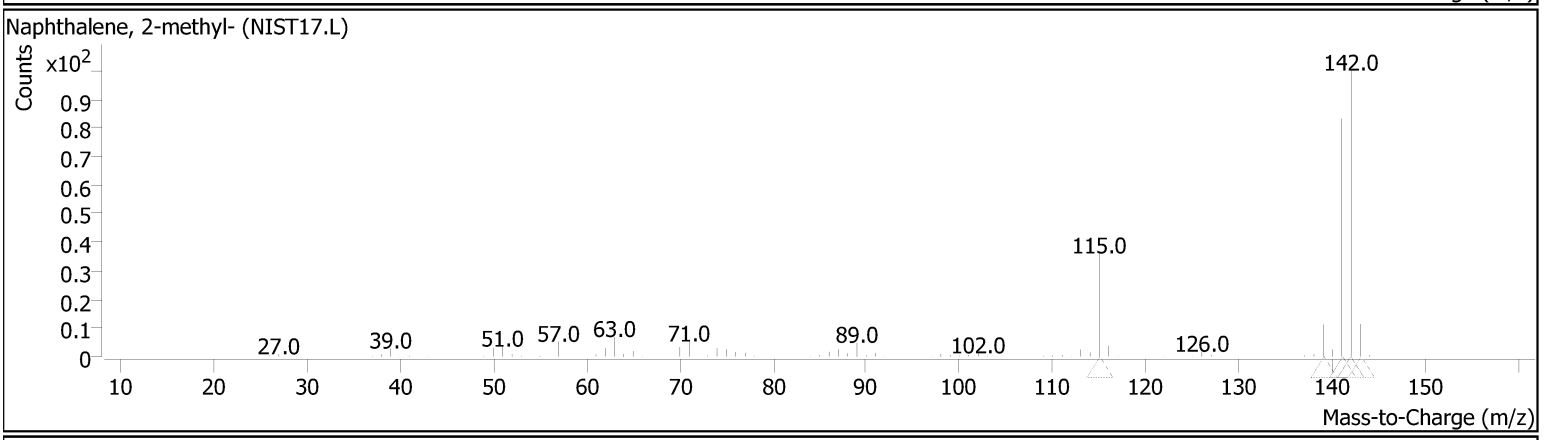


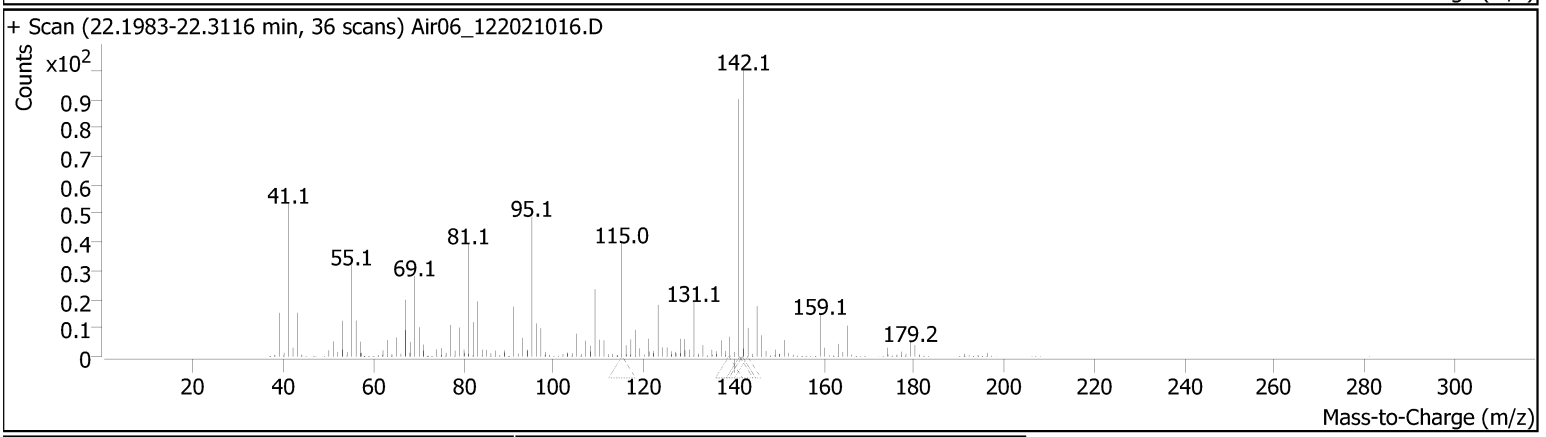


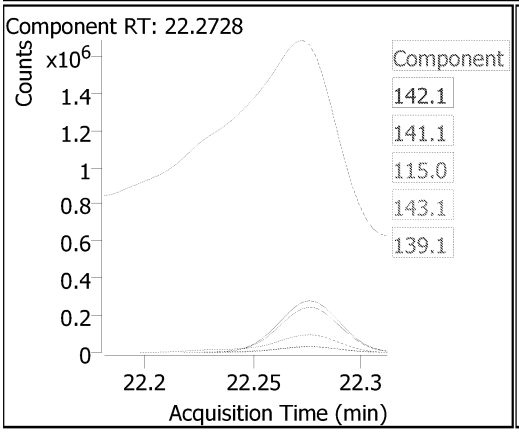


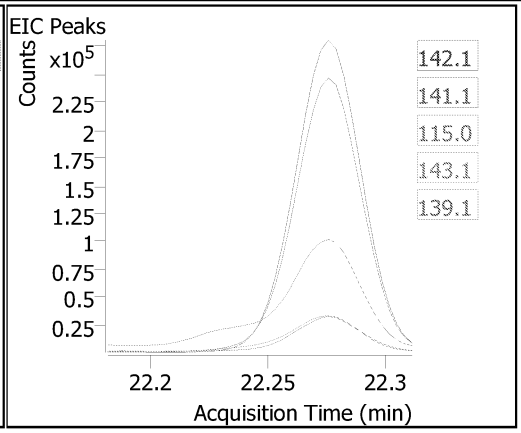
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.2728	Naphthalene, 2-methyl-	5031099.9	94.2	91-57-6	C11H10	11.86

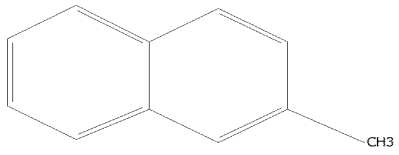








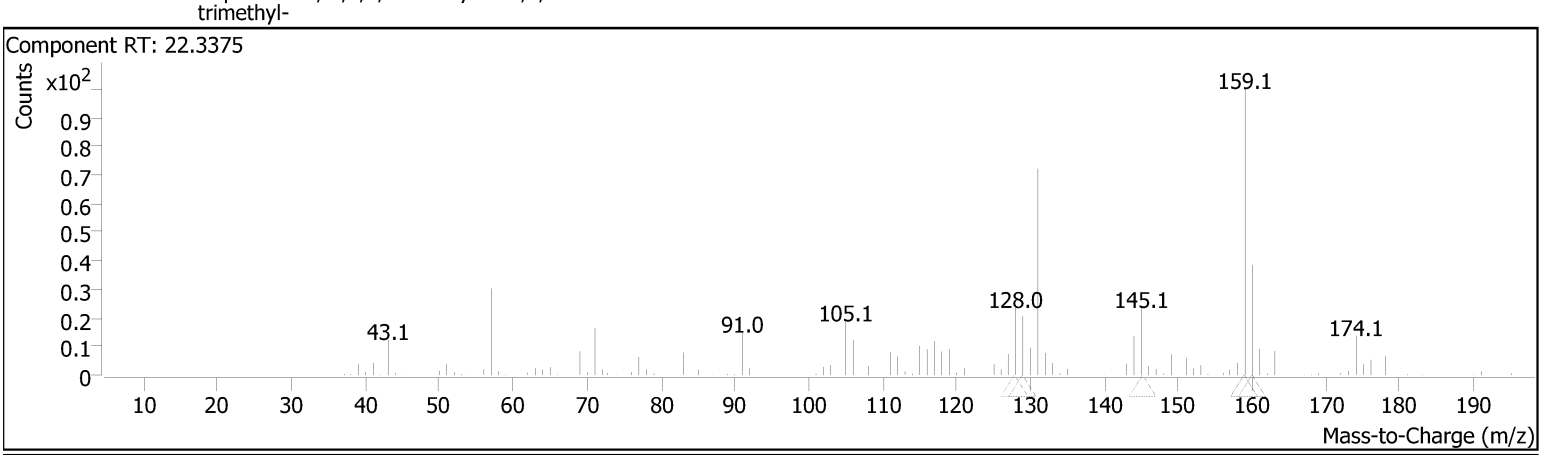


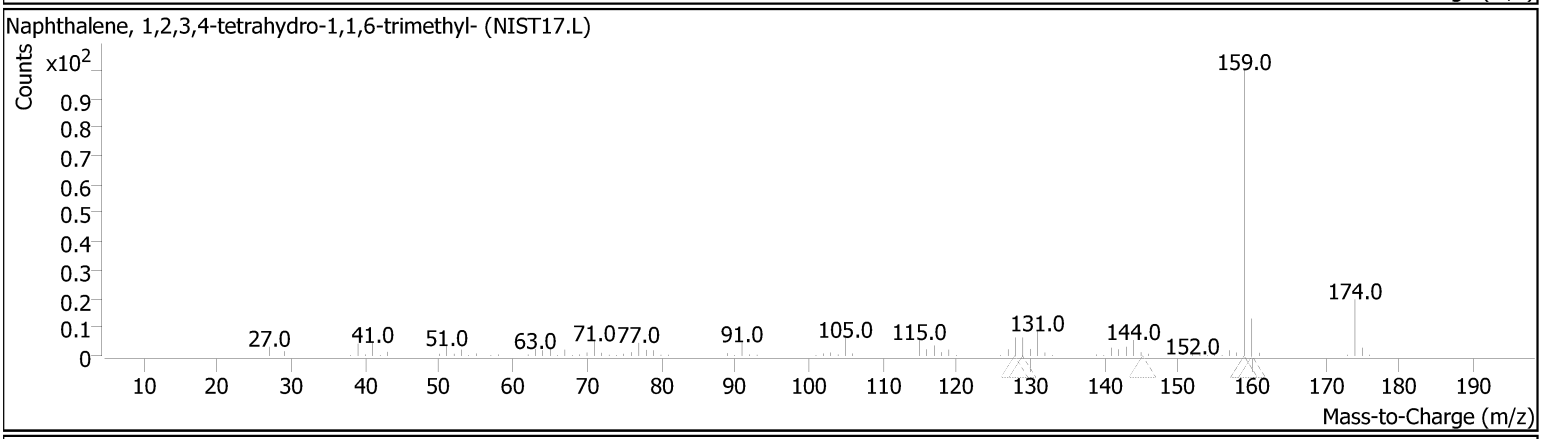


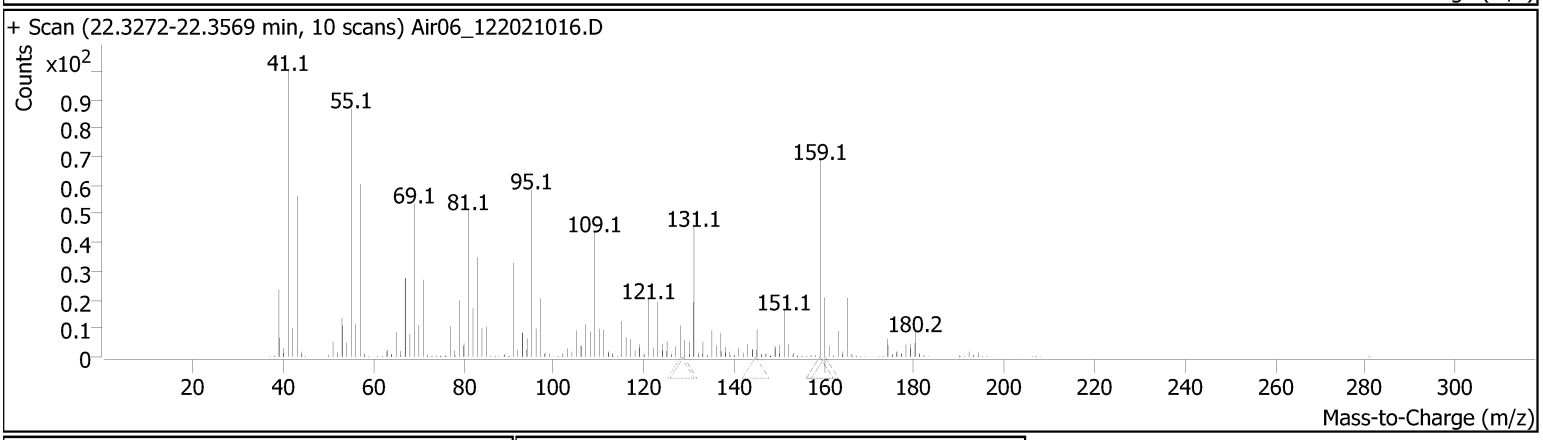
Library Search Results - NonTarget Hits with Details

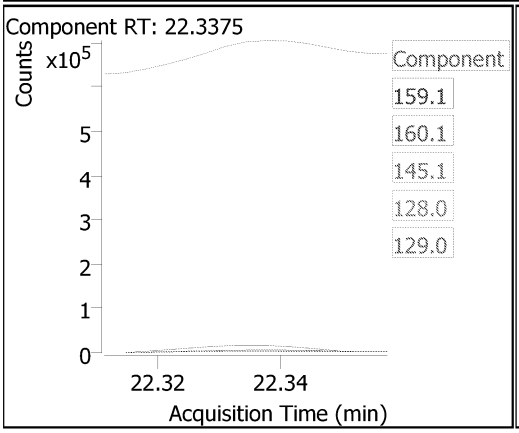
Agilent Technologies

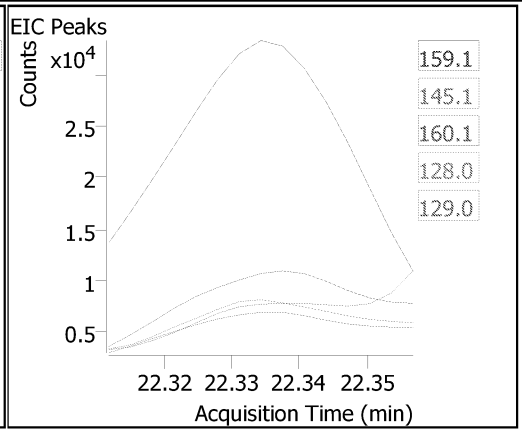
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.3375	Naphthalene, 1,2,3,4-tetrahydro-1,1,6-trimethyl-	444514.9	77.5	475-03-6	C13H18	1.048

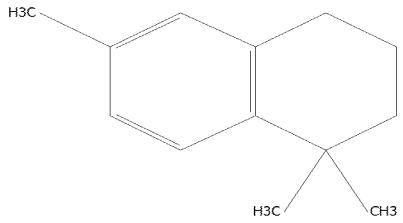




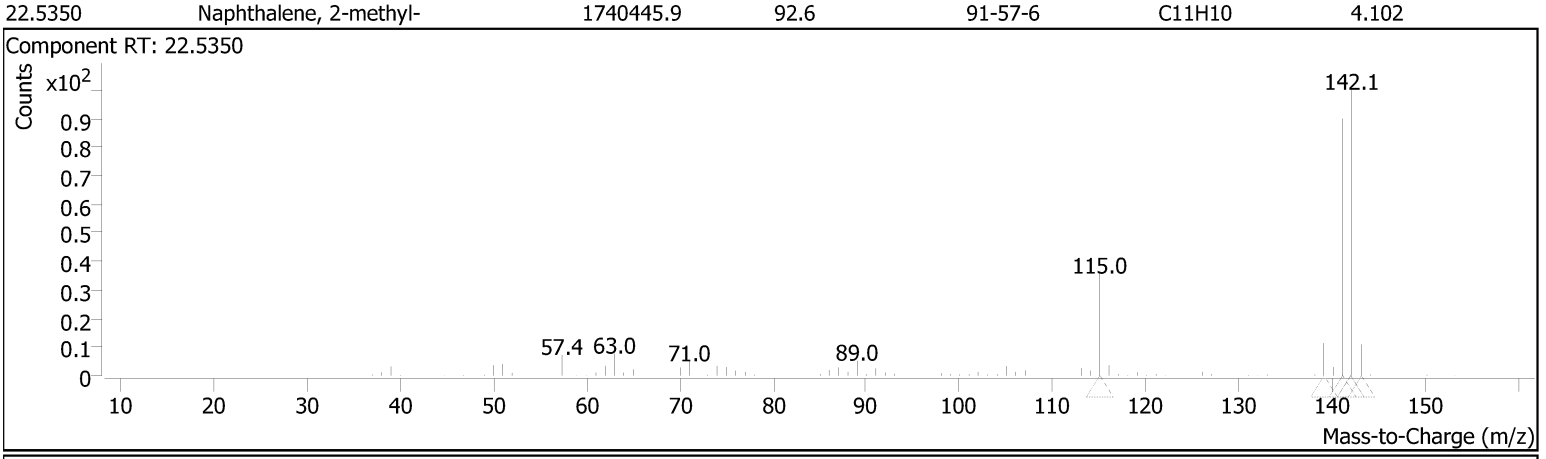


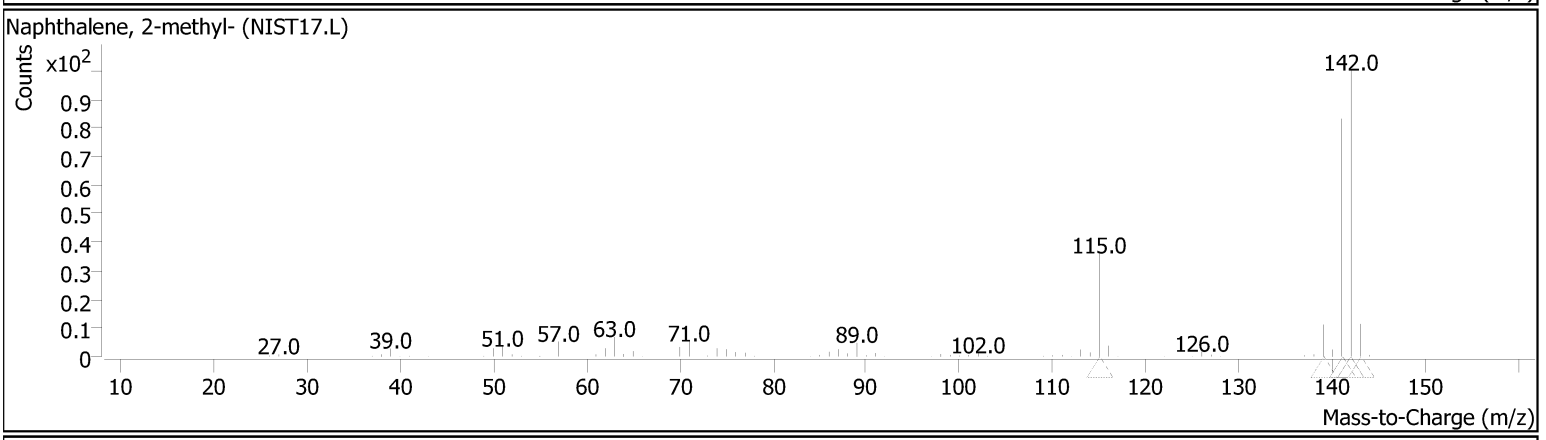


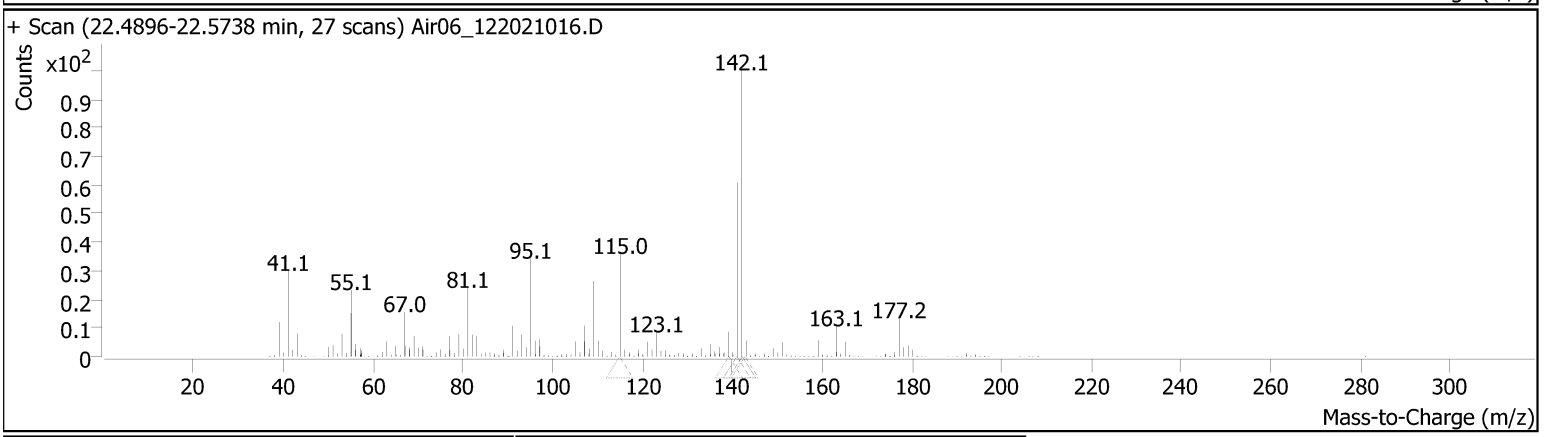


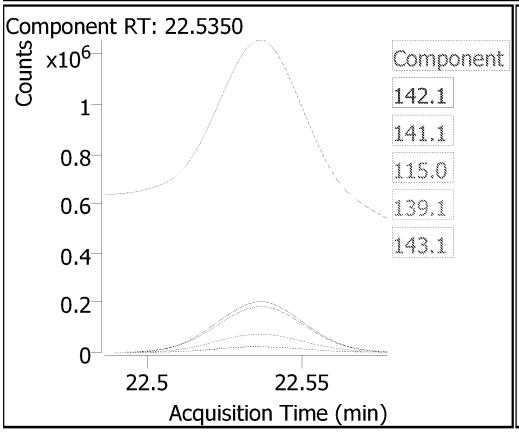


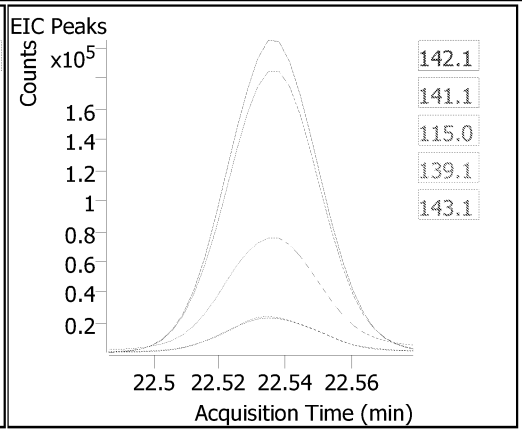
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.5350	Naphthalene, 2-methyl-	1740445.9	92.6	91-57-6	C11H10	4.102

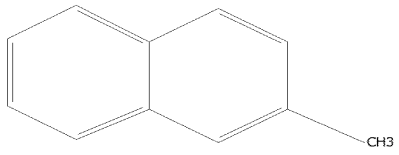








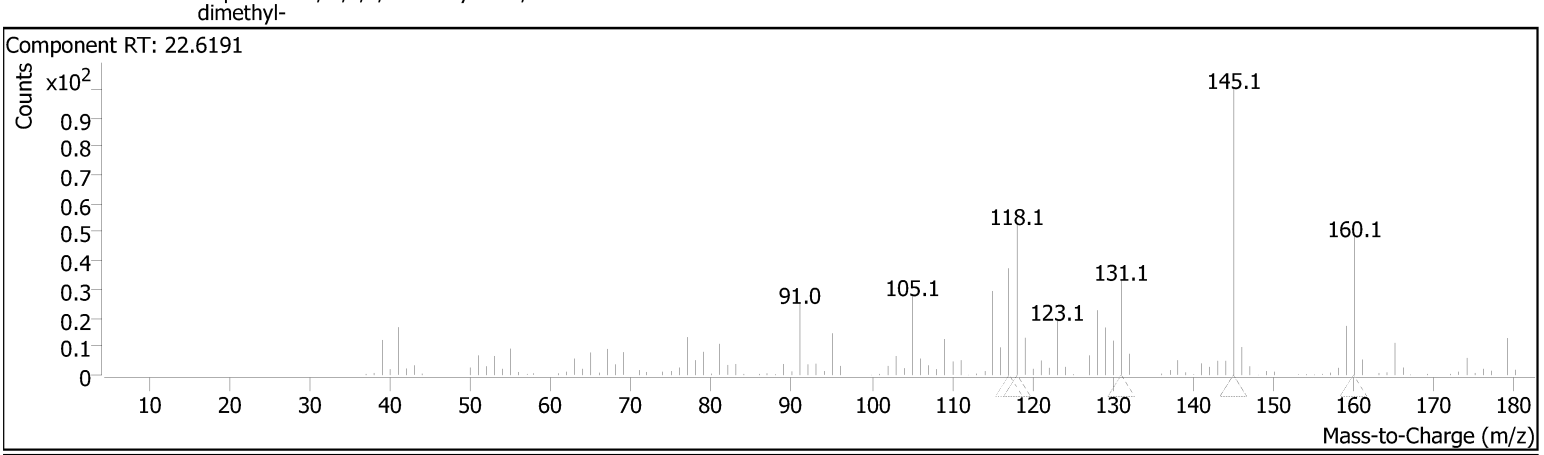


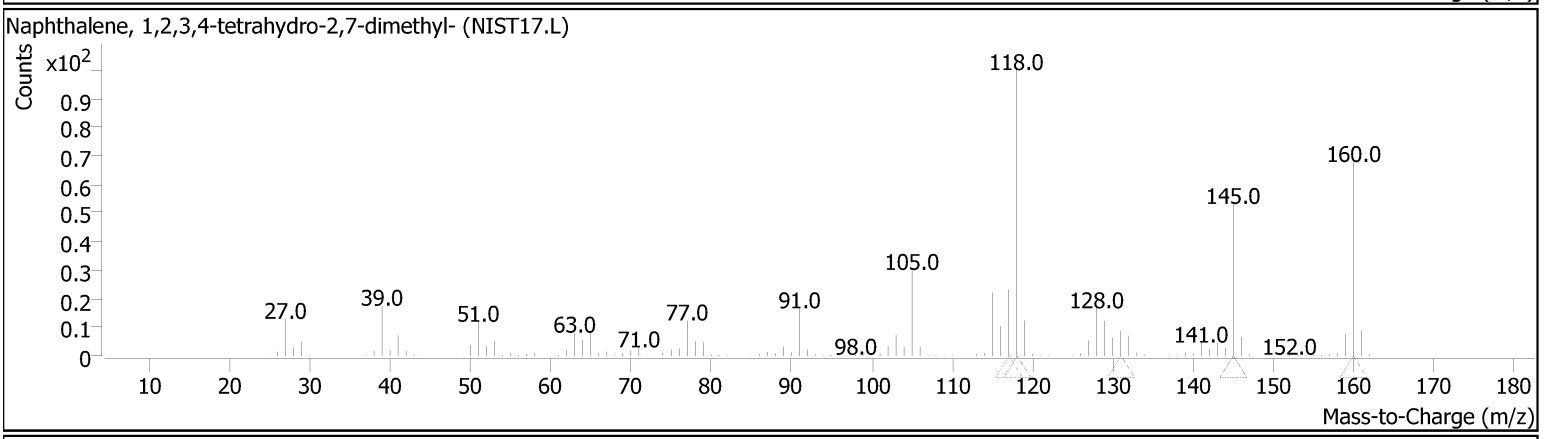


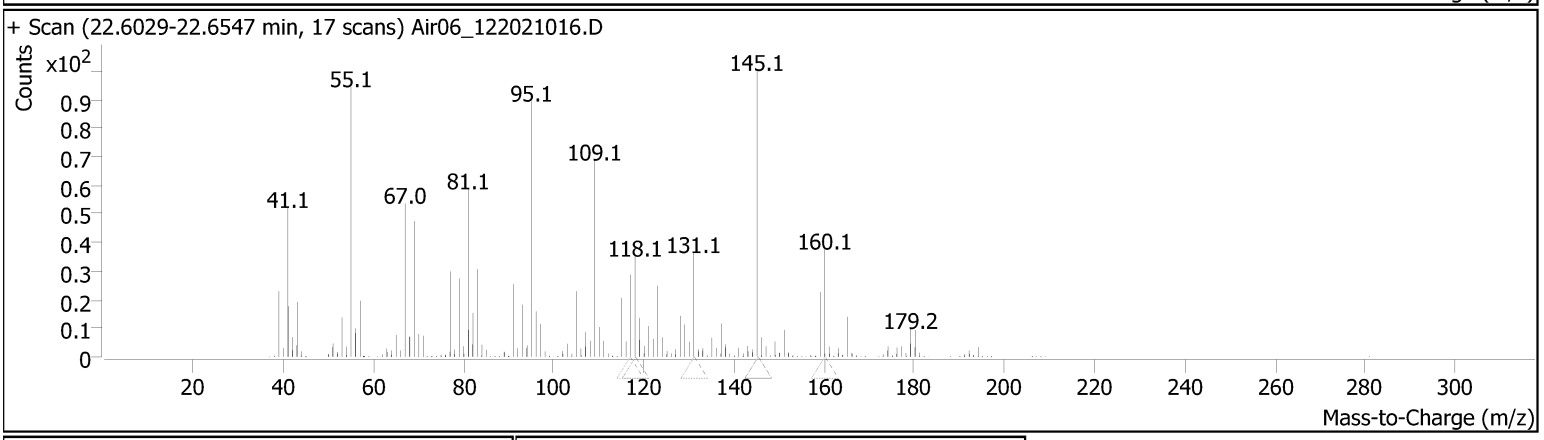
Library Search Results - NonTarget Hits with Details

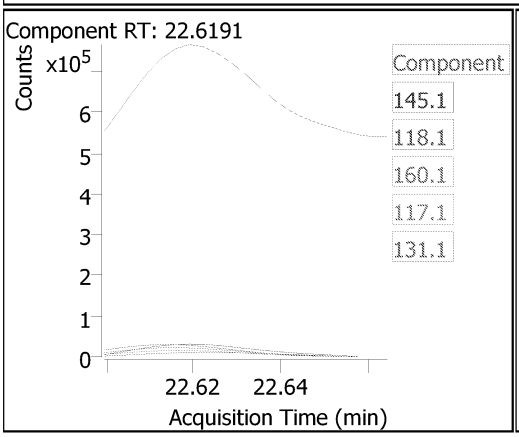
Agilent Technologies

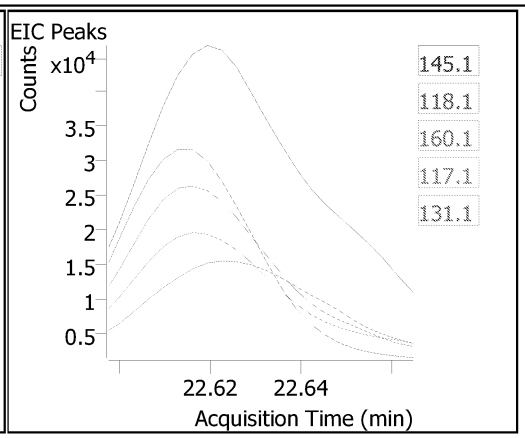
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.6191	Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	451628.0	82.0	13065-07-1	C12H16	1.065

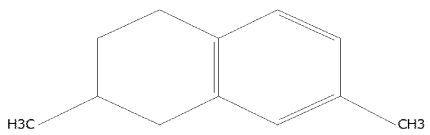




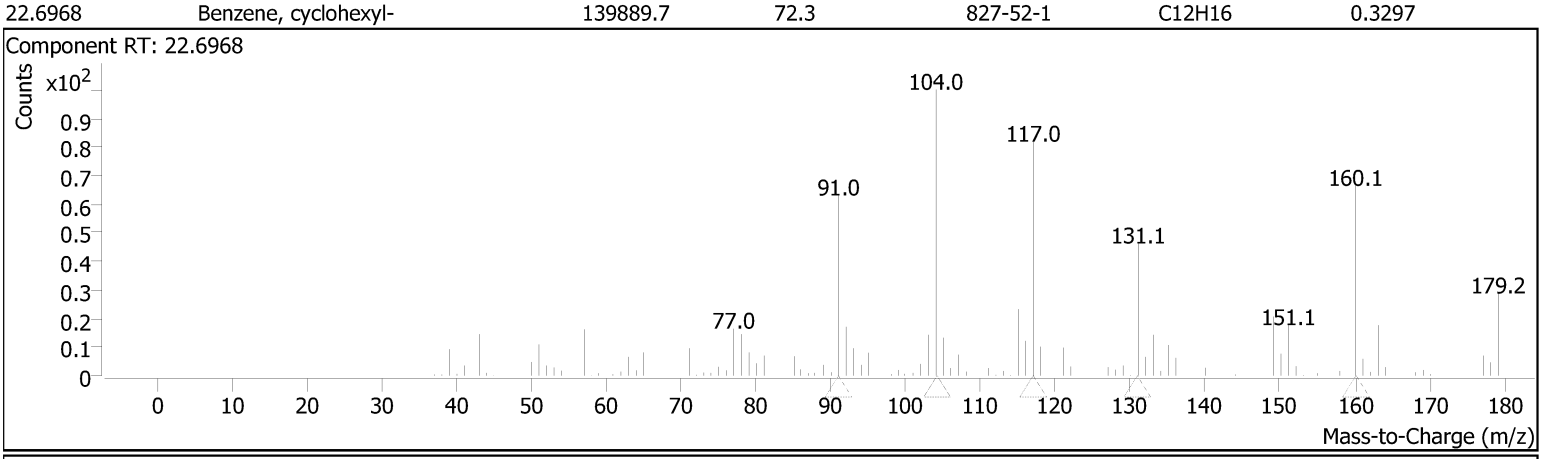


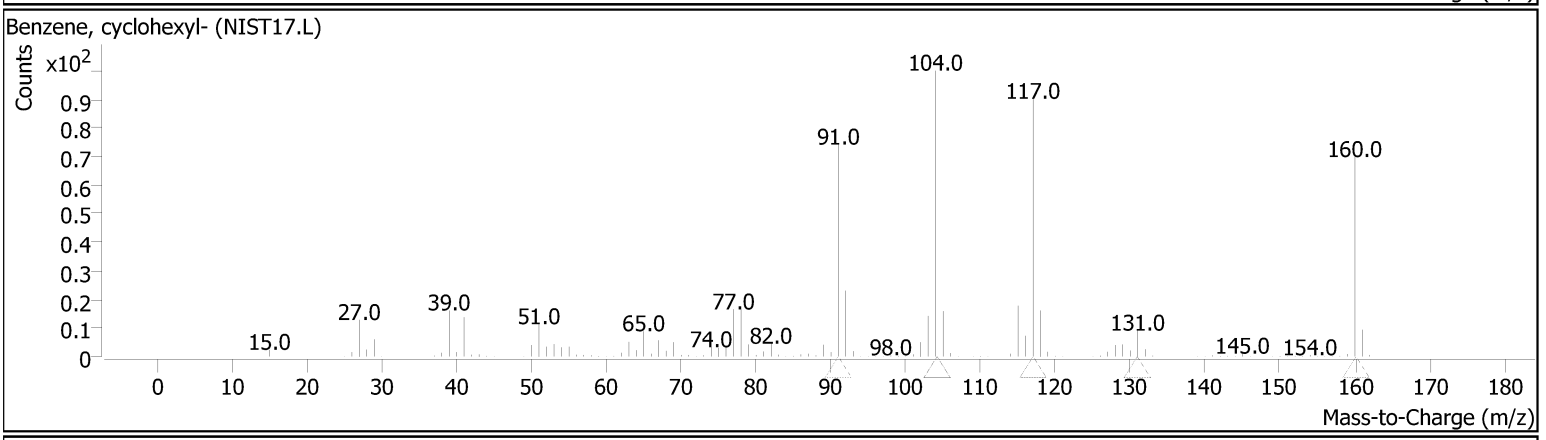


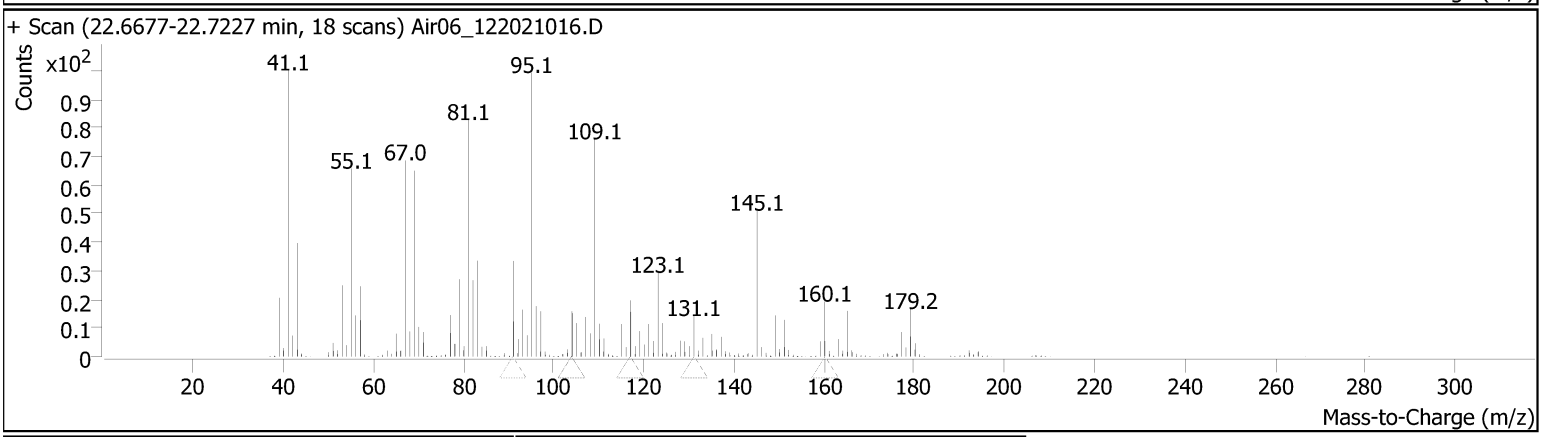


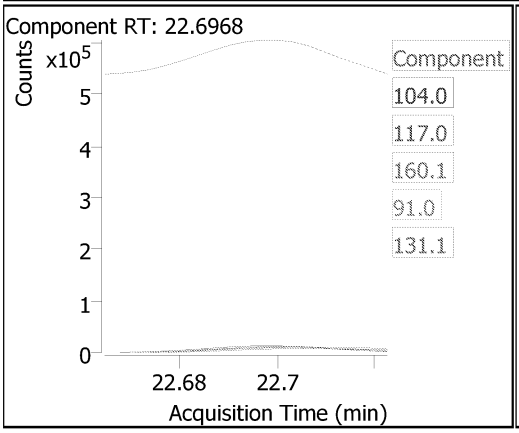


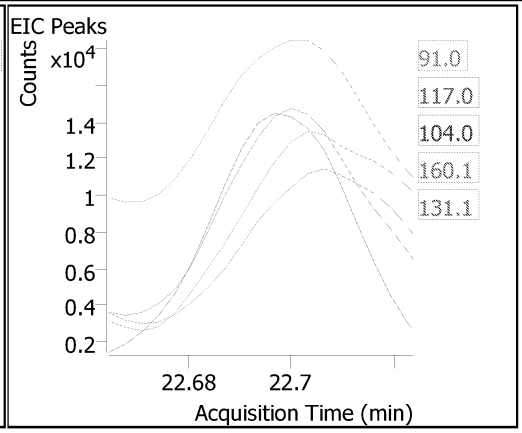
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.6968	Benzene, cyclohexyl-	139889.7	72.3	827-52-1	C12H16	0.3297

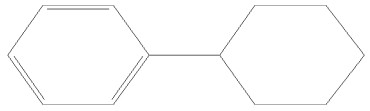




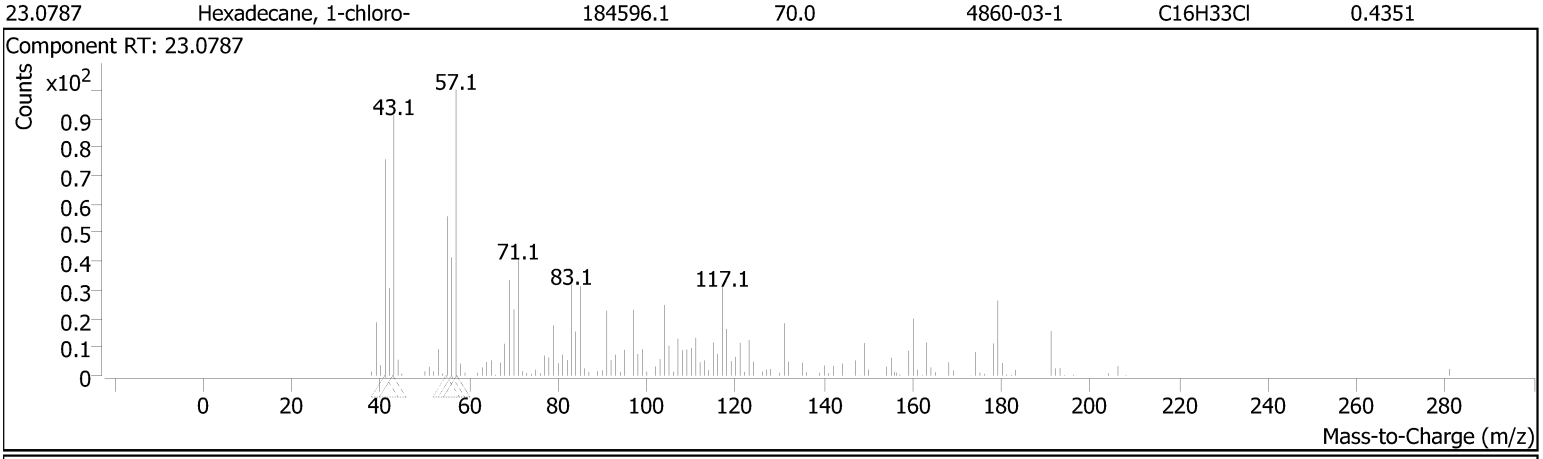


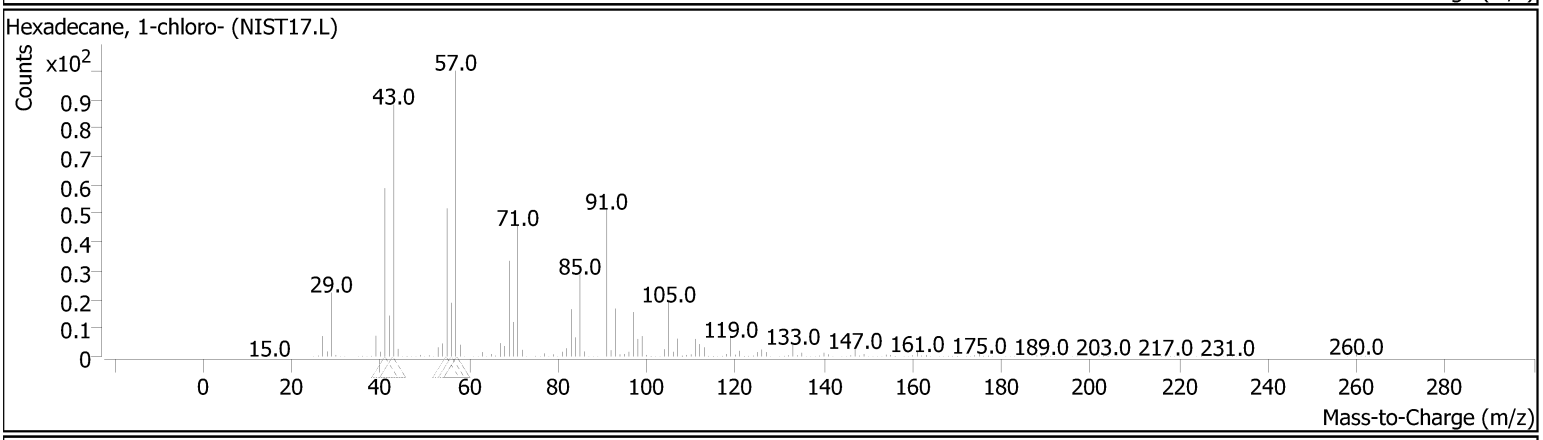


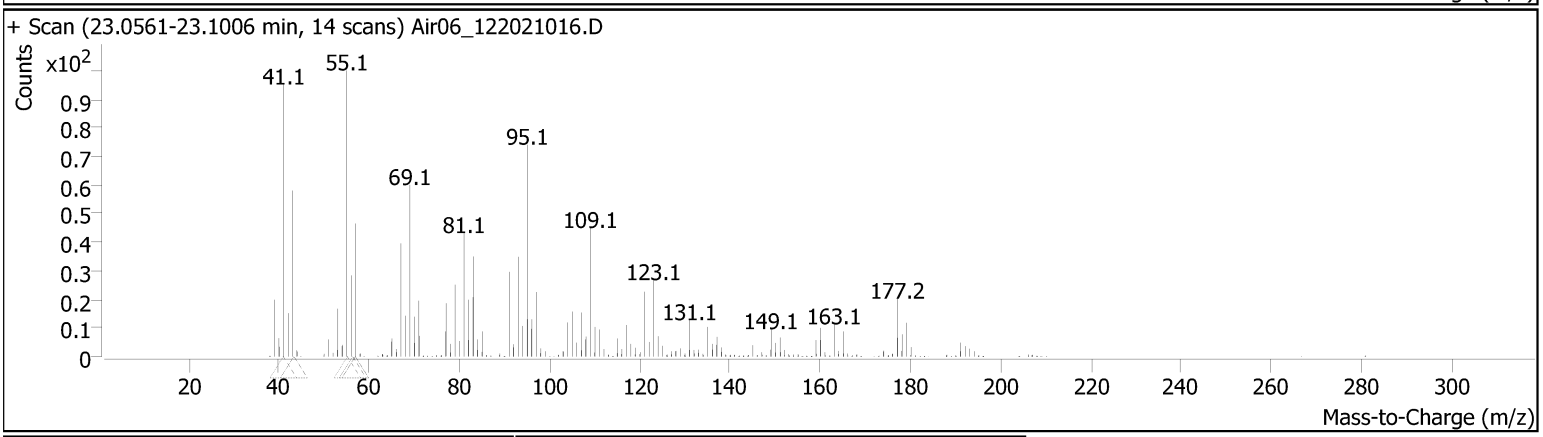


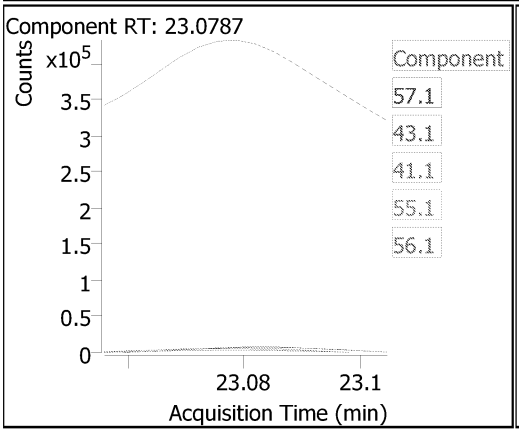


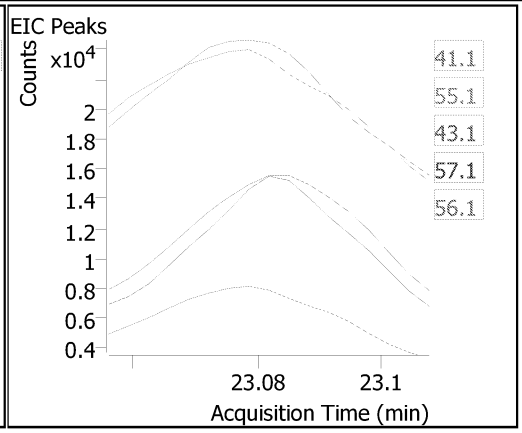
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.0787	Hexadecane, 1-chloro-	184596.1	70.0	4860-03-1	C16H33Cl	0.4351





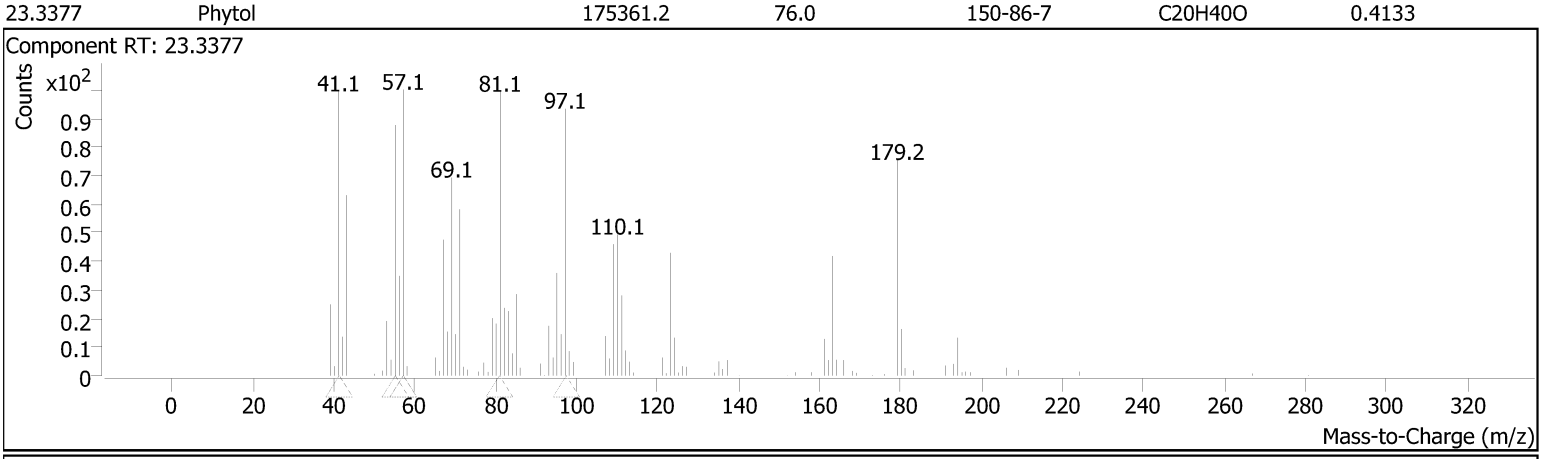


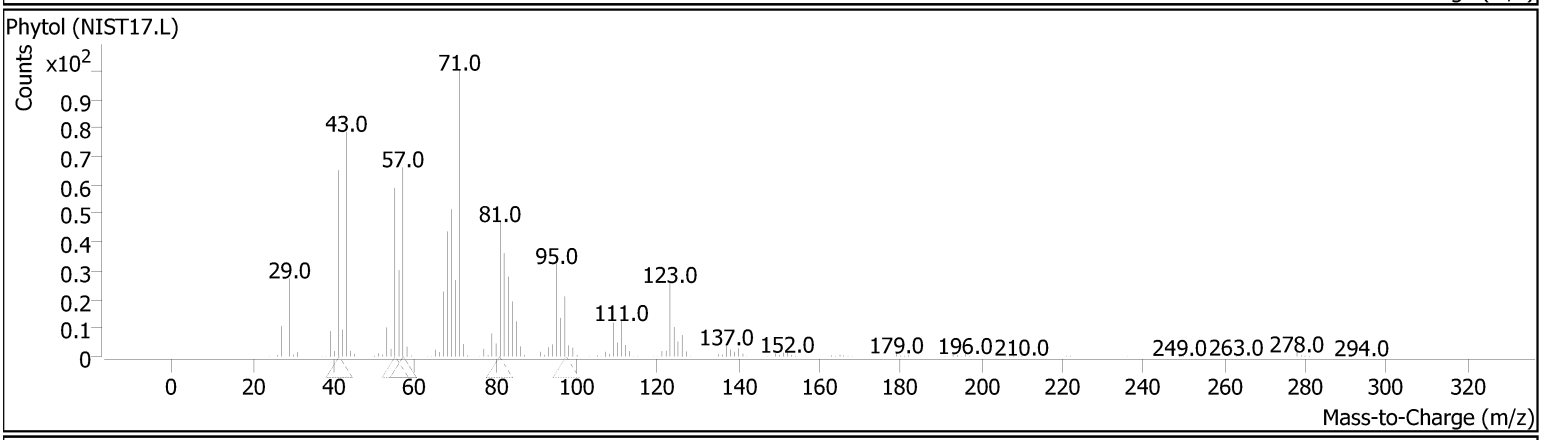


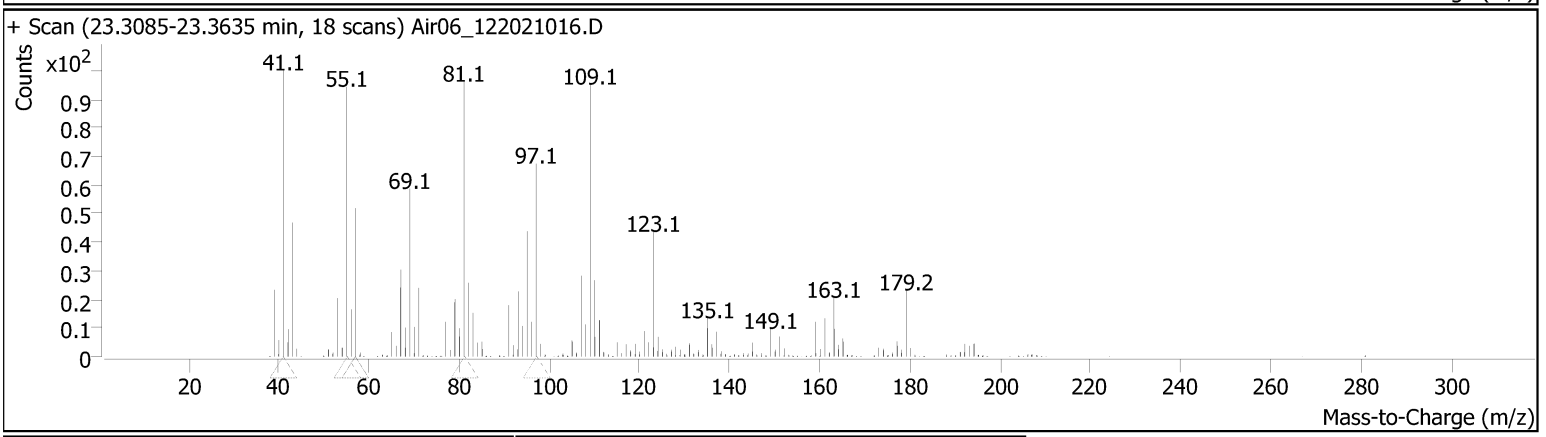


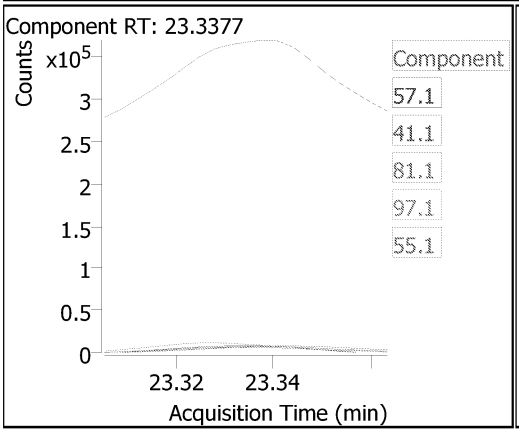


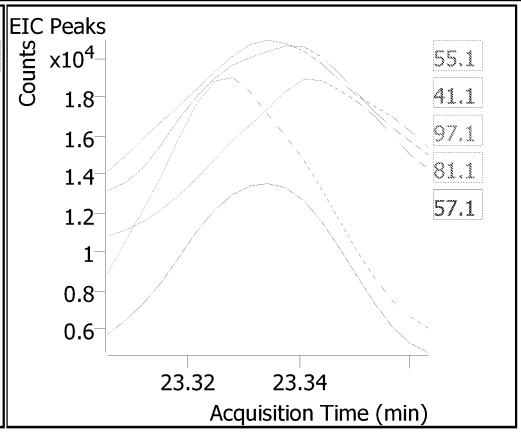
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.3377	Phytol	175361.2	76.0	150-86-7	C20H40O	0.4133

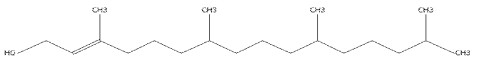








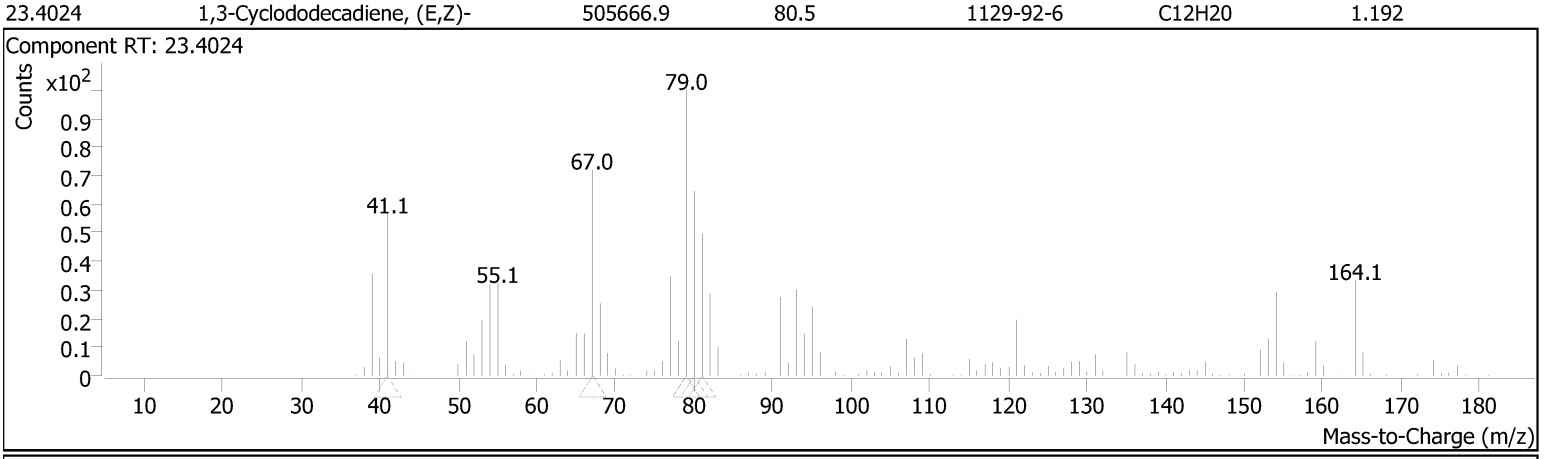


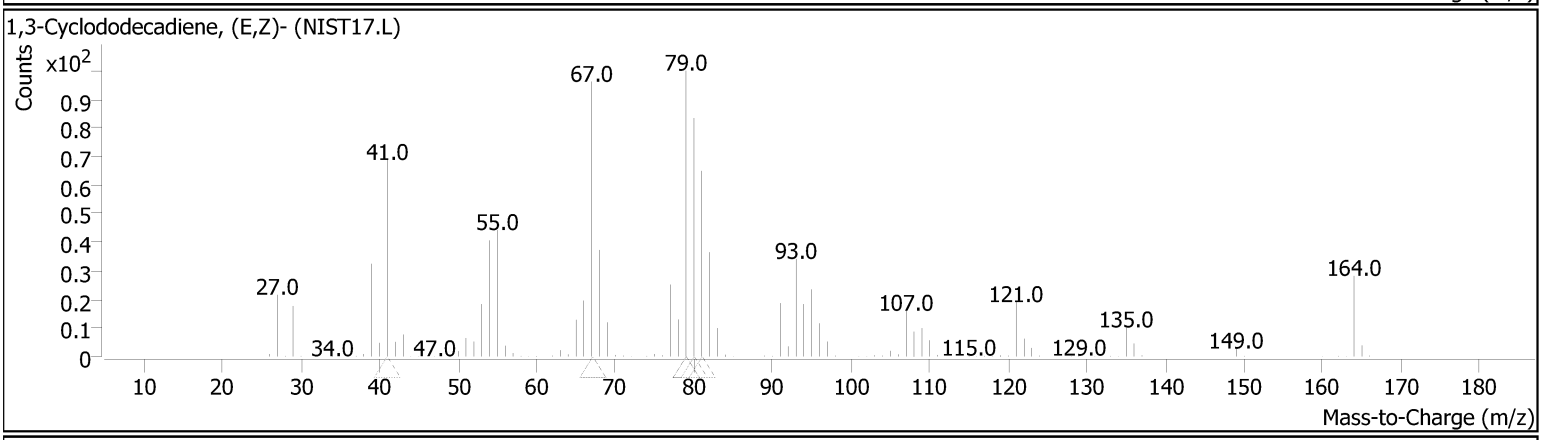


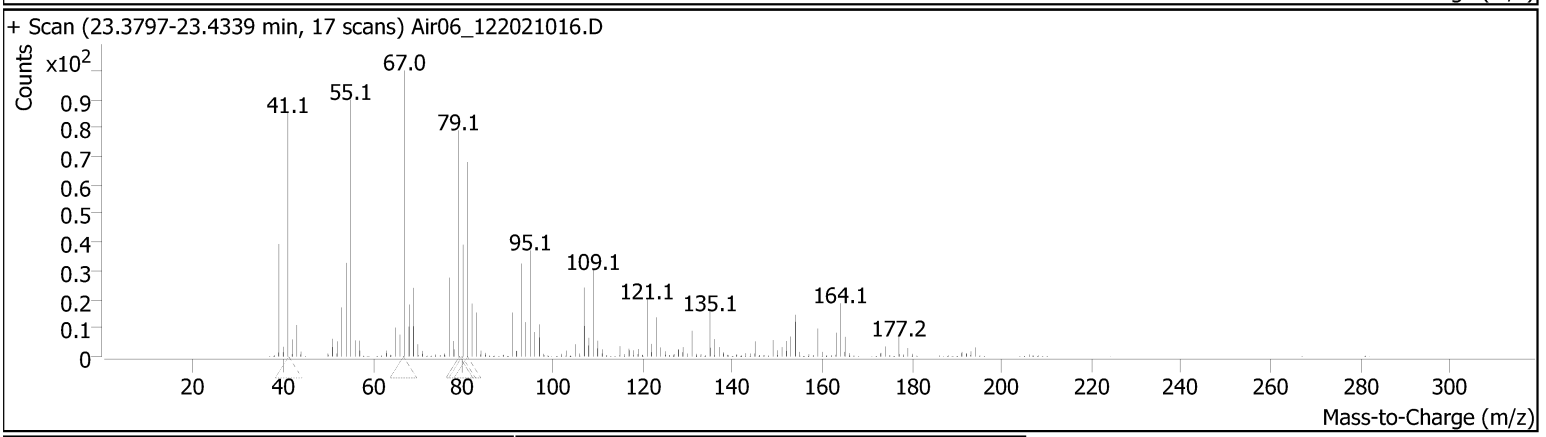
Library Search Results - NonTarget Hits with Details

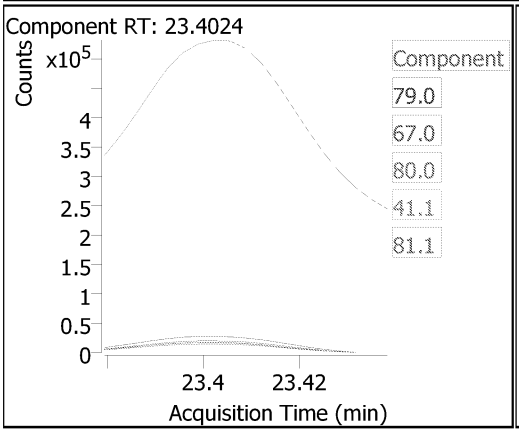
Agilent Technologies

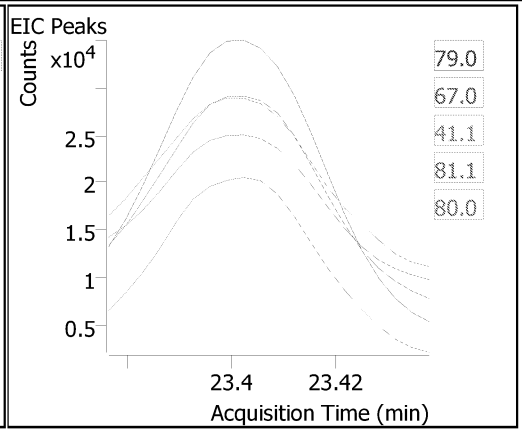
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.4024	1,3-Cyclododecadiene, (E,Z)-	505666.9	80.5	1129-92-6	C12H20	1.192

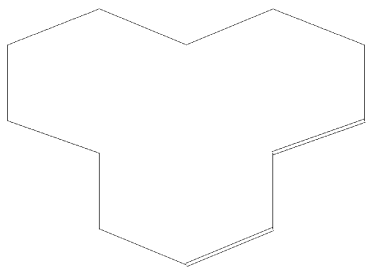








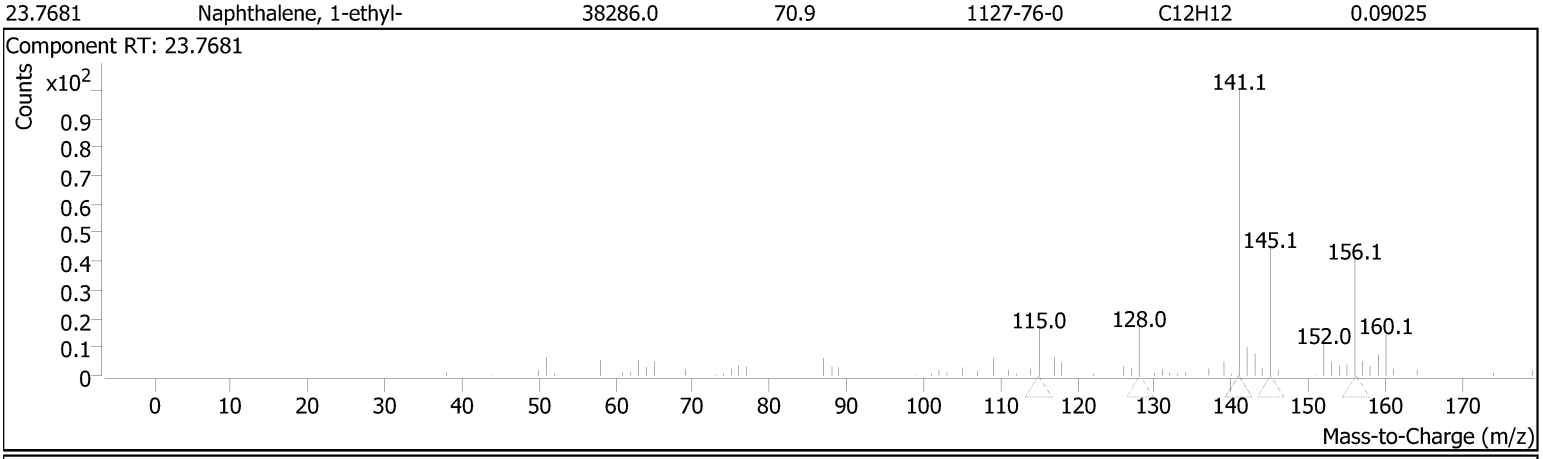


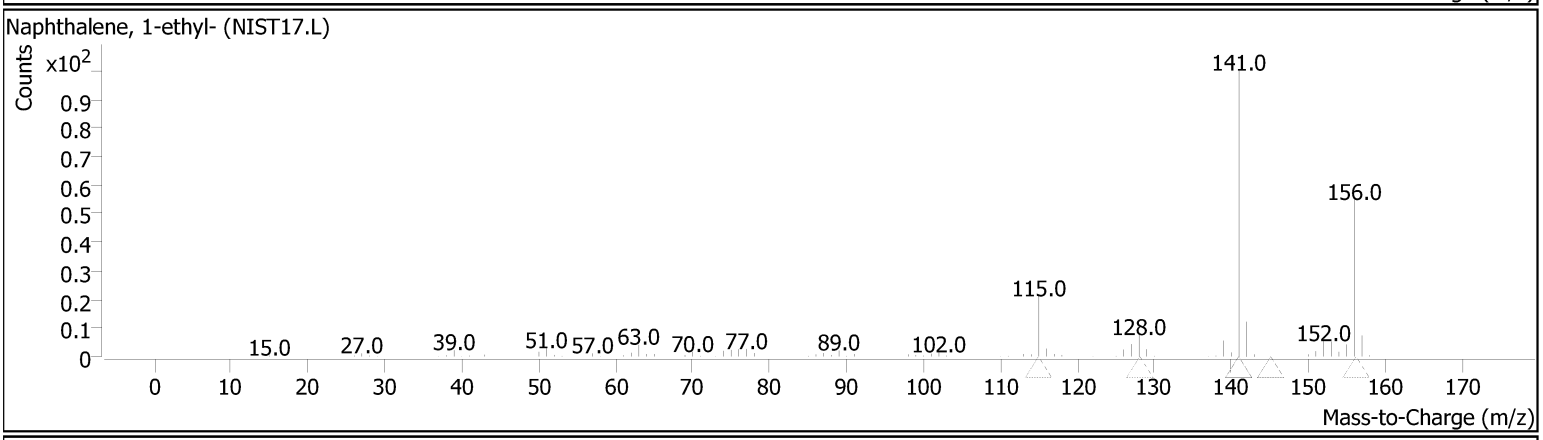


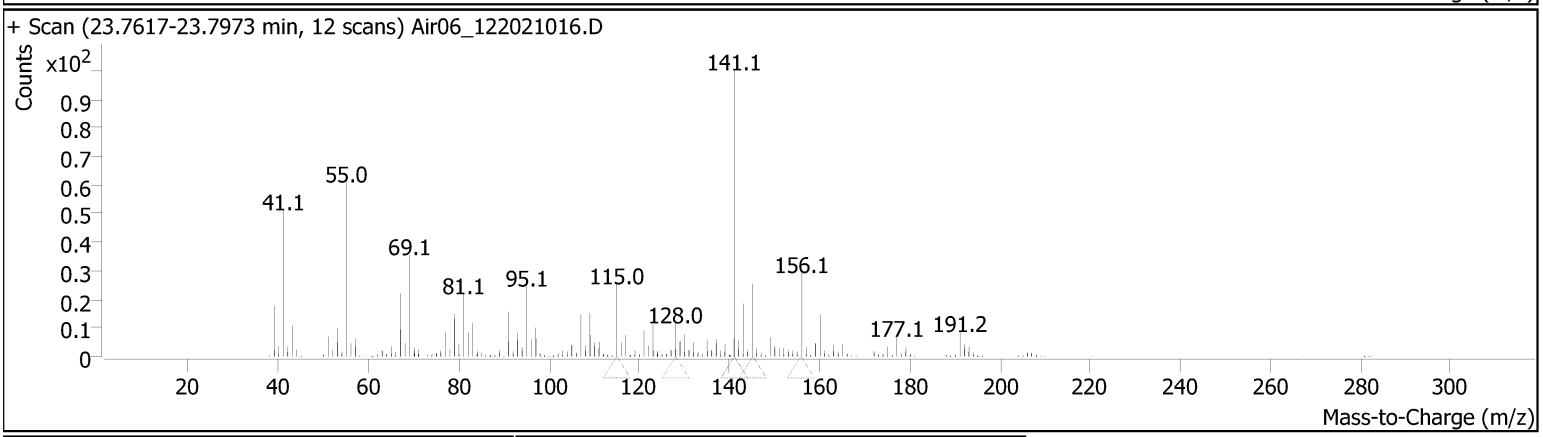
Library Search Results - NonTarget Hits with Details

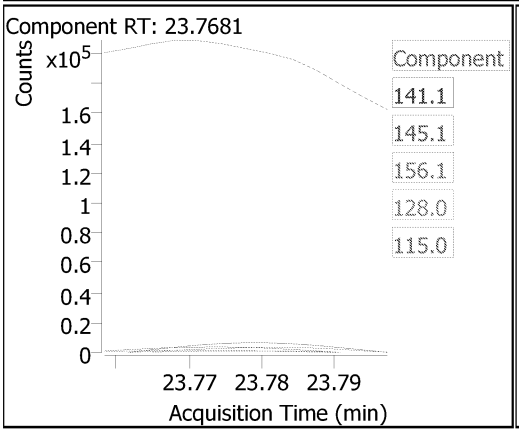
Agilent Technologies

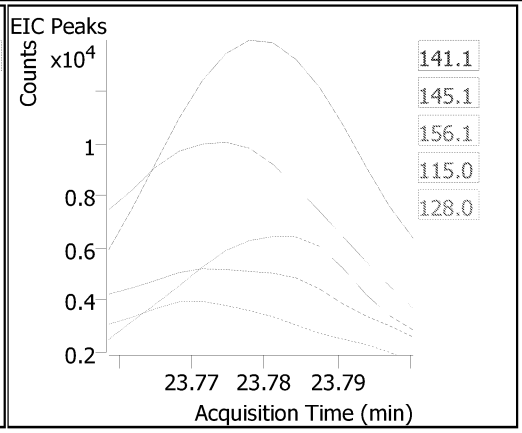
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.7681	Naphthalene, 1-ethyl-	38286.0	70.9	1127-76-0	C12H12	0.09025

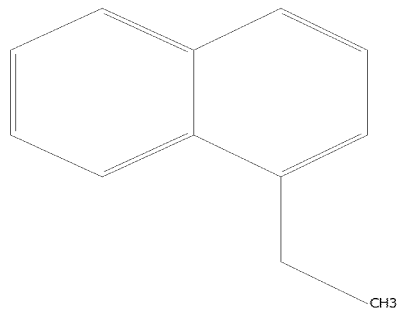




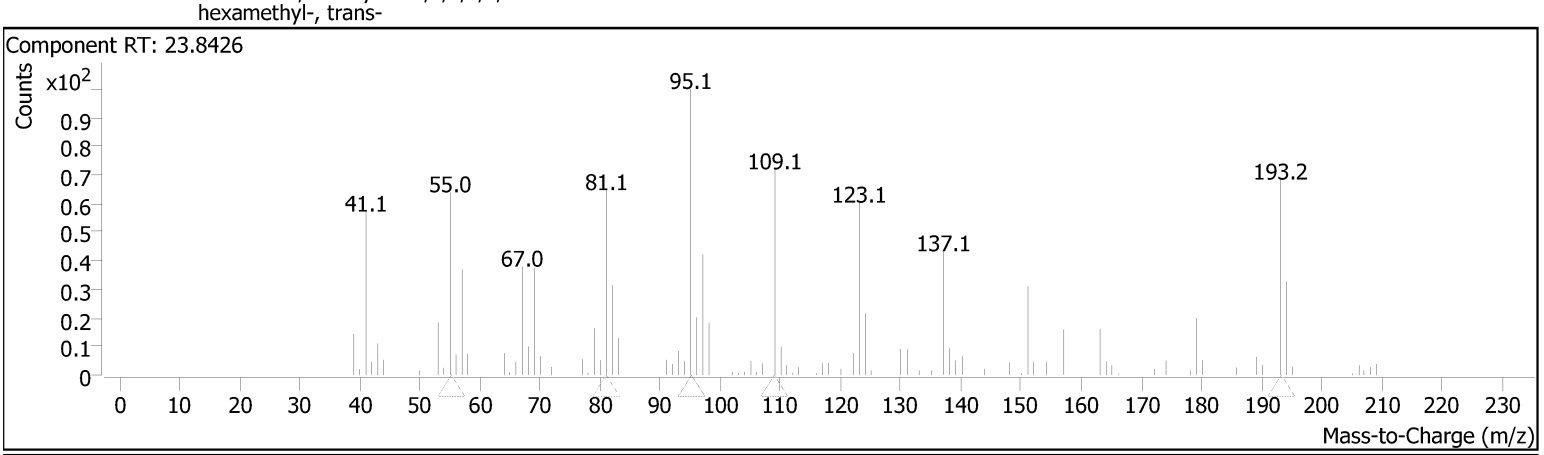


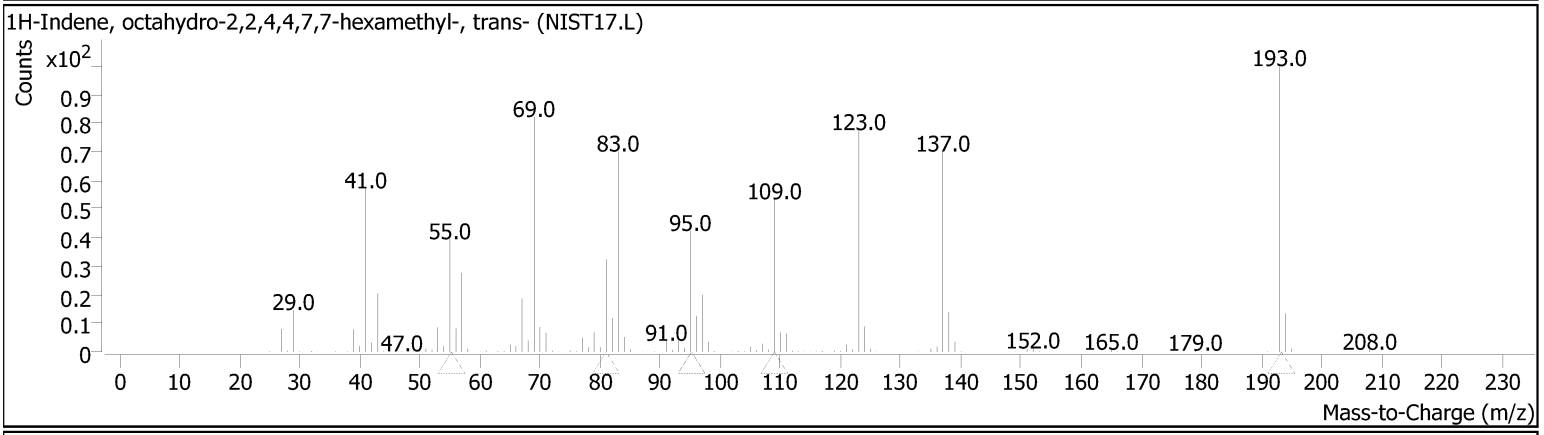


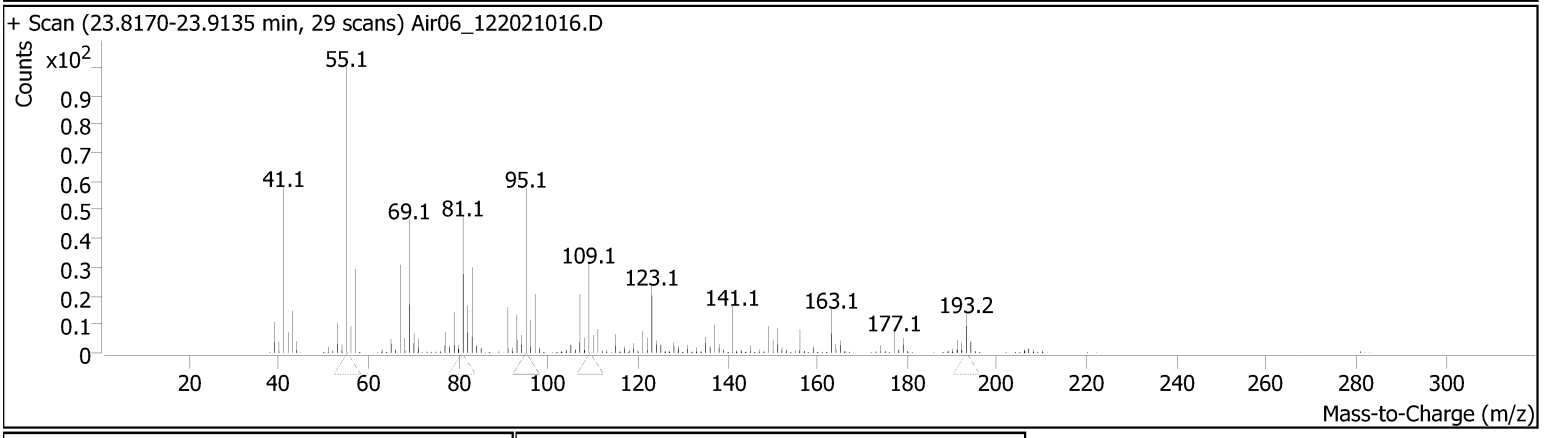


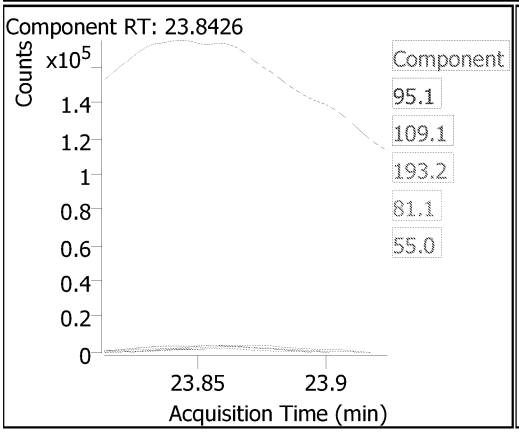


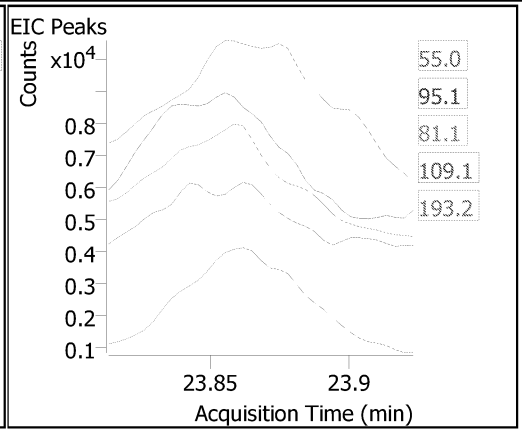
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.8426	1H-Indene, octahydro-2,2,4,4,7,7-hexamethyl-, trans-	146545.4	77.7	54832-83-6	C15H28	0.3454

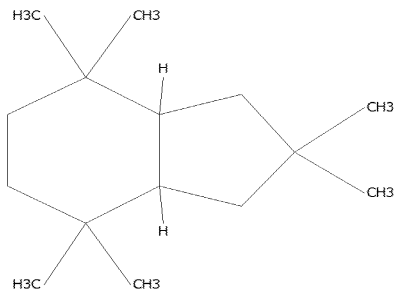




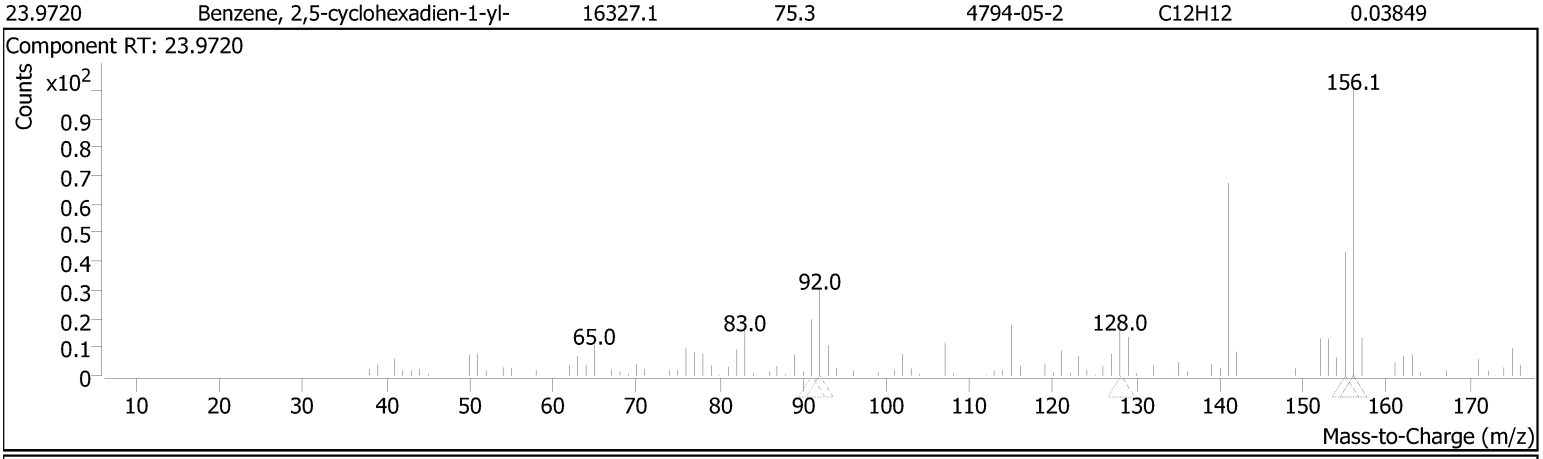


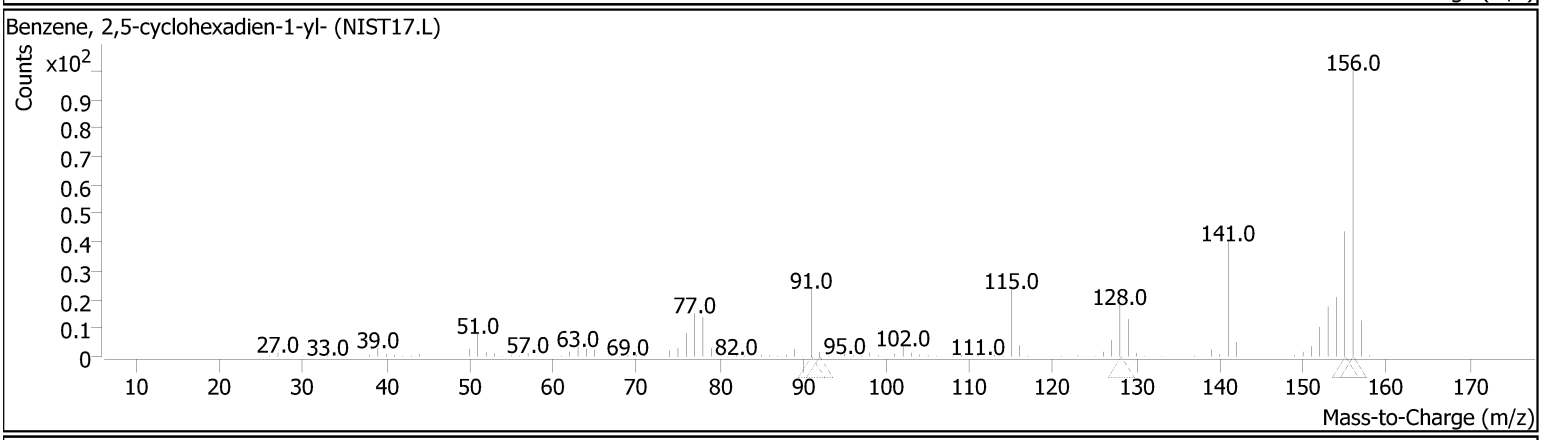


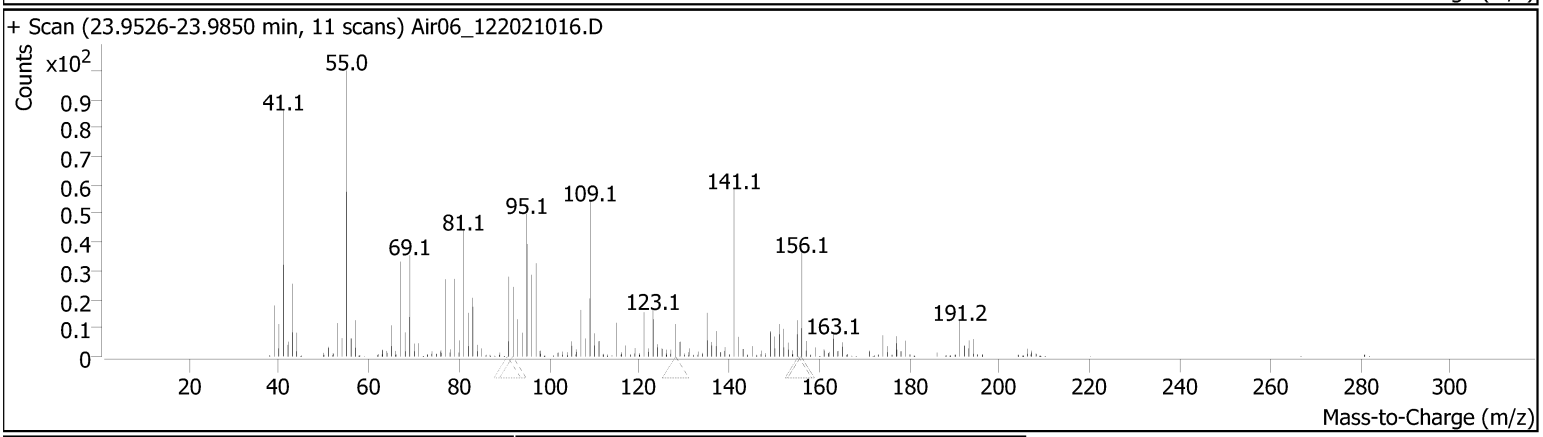


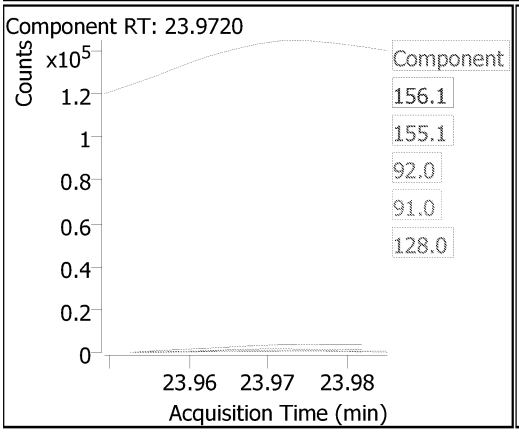


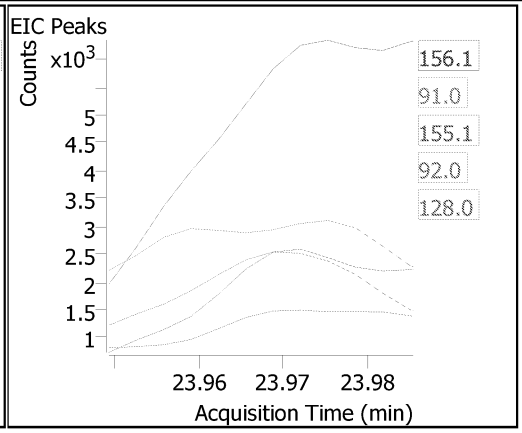
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.9720	Benzene, 2,5-cyclohexadien-1-yl-	16327.1	75.3	4794-05-2	C12H12	0.03849

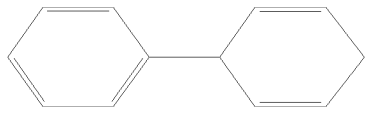












ENTHALPY SAMPLE USER REPORT FOR EPA TO-15

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Cal	: 371497775001	Caldate	: 11-DEC-2021		
IDF	: 2.0	Raw Units	: nL/L	Units	: nL/L
PDF	: 1.0				

Analyte	Raw	Result	RTS	RL	Blank	Flags
Freon 12	0.1674	ND		0.40		u
Freon 114	0.006143	ND		0.40		u
Chloromethane	0.1009	ND		0.40		u
Vinyl Chloride	0.01637	ND		0.40		u
Bromomethane	0	ND		0.40		u
Chloroethane	0.3730	0.75		0.40		u
Trichlorofluoromethane	0.06903	ND		0.40		u
1,1-Dichloroethene	0.0005451	ND		0.40		u
Freon 113	0.02665	ND		0.40		calc u
Acetone	1.539	3.1		2.0	0.13	u
Carbon Disulfide	0.8540	1.7		0.40		u
Isopropanol (IPA)	0.8883	ND		2.0	0.067	u
Methylene Chloride	0.1874	ND		0.40	0.34	u
trans-1,2-Dichloroethene	0.03270	ND		0.40		calc u
MTBE	0.05224	ND		0.40		u
n-Hexane	0.2177	0.44		0.40		u
1,1-Dichloroethane	0.004706	ND		0.40		u
Vinyl Acetate	0.2616	ND		2.0		u
cis-1,2-Dichloroethene	0.6118	1.2	0.200	0.40		u x
2-Butanone	0.3221	ND		2.0		u
Chloroform	0.04514	ND		0.40		u
1,1,1-Trichloroethane	0	ND		0.40		u
Carbon Tetrachloride	0.02102	ND		0.40		u
Benzene	0.1351	ND		0.40		u
1,2-Dichloroethane	0.07624	ND		0.40		u
Trichloroethene	0.01110	ND		0.40		u
1,2-Dichloropropane	0.003436	ND		0.40		u
Bromodichloromethane	0.01860	ND		0.40		u
cis-1,3-Dichloropropene	0	ND		0.40		u
4-Methyl-2-Pentanone	0.02729	ND		0.40		calc u
Toluene	0.5583	1.1		0.40		u
trans-1,3-Dichloropropene	0.003052	ND		0.40		u
1,1,2-Trichloroethane	0.002080	ND		0.40		u
Tetrachloroethene	0.07958	ND		0.40		u
2-Hexanone	0.04508	ND		1.0		u
Dibromochloromethane	0.0001923	ND		0.40		u
1,2-Dibromoethane	0.001300	ND		0.40		u
Chlorobenzene	0.03367	ND		0.40		calc u
Ethylbenzene	0.2942	0.59		0.40		u
m,p-Xylenes	1.267	2.5		0.80		u
o-Xylene	0.6691	1.3		0.40		u
Styrene	1.102	2.2		0.40		u
Bromoform	0.003157	ND		0.40		u
1,1,2,2-Tetrachloroethane	0.08888	ND		0.40		u
1,1,1,2-Tetrachloroethane	0	ND		0.40		u
4-Ethyltoluene	0.1707	ND		0.40		u
1,3,5-Trimethylbenzene	0.8820	1.8		0.40		u
1,2,4-Trimethylbenzene	1.896	3.8		0.40		u

Analyte	Raw	Result	RTS	RL	Blank	Flags
1,3-Dichlorobenzene	0.8391	1.7	0.080	0.40		u x
1,4-Dichlorobenzene	0.8501	1.7		0.40	0.027	u
Benzyl chloride	0.06595	ND		0.40	0.020	u
1,2-Dichlorobenzene	0.06121	ND		0.40	0.034	u
1,2,4-Trichlorobenzene	0.02650	ND		0.40	0.069	calc u v+
Hexachlorobutadiene	0.002500	ND		0.40		u

Tentatively Identified Compound	CAS #	Raw	Units	Result	Units
Azulene	275-51-4	4.2	nL/L	8.4	nL/L
Benzene, (1,2-dimethylpropyl)-	4481-30-5	4.8	nL/L	9.7	nL/L
Benzene, 2-ethyl-1,4-dimethyl	1758-88-9	8.6	nL/L	17	nL/L
Cyclotetrasiloxane, octamethyl-	556-67-2	5.6	nL/L	11	nL/L
Decane	124-18-5	4.7	nL/L	9.3	nL/L
Dodecane	112-40-3	16	nL/L	33	nL/L
Naphthalene, 2-methyl-	91-57-6	5.1	nL/L	10	nL/L
Naphthalene, decahydro-2-methyl	2958-76-1	5.8	nL/L	12	nL/L
Tridecane	629-50-5	6.3	nL/L	13	nL/L
Undecane	1120-21-4	16	nL/L	32	nL/L

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Bromofluorobenzene	10.36	20.00	20.71	104	60-140	u

ISTD (ICAL air06_121121009)	ICAL Area	SAMPLE Area	%Drift	ICAL RT	SAMPLE RT	Drift
Bromochloromethane	329831	362831	10.01	8.18	8.18	0.00
1,4-Difluorobenzene	1230119	1372042	11.54	9.91	9.91	0.00
Chlorobenzene-d5	754830	757501	0.35	14.02	14.01	-0.01

GSG 01/04/22 [Acetone]: Separated from coeluting peak.

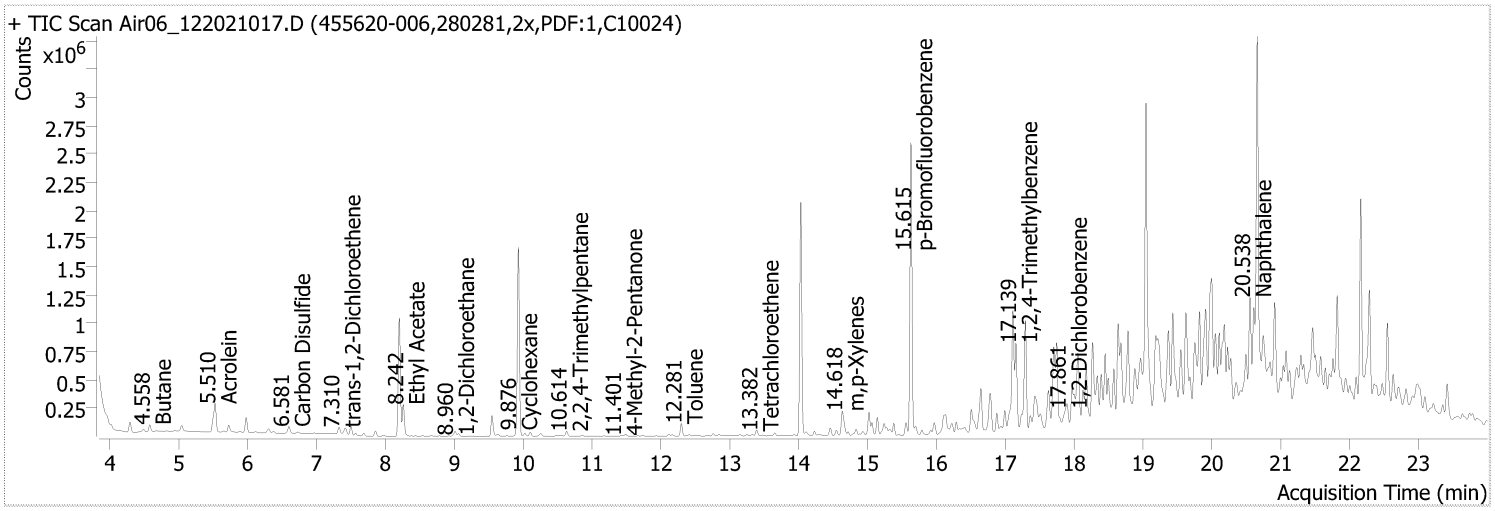
(not in upper half)

Analyst: GSG Date: 01/04/22 * Reviewer: SLL Date: 01/04/22

+=high bias calc=check quantitation u=use v=ICV x=false positive

Quantitation Results Report (Not Reviewed)

Data File	Air06_122021017.D	Operator	ZNZ/DJL/LJB
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	12/21/2021 12:36:20 AM
Sample Name	455620-006,280281,2x,PDF:1,C10024	Instrument	Air-MS-06
Vial	15	Multiplier	1.00
DA Method File	TO15_121121.m	Comment	2x400mL
Tune File	bfb.u	Tune Date	12/14/2021 7:38:43 AM
Batch Name	122021.batch.bin	Last Calib Update	12/13/2021 9:29:07 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



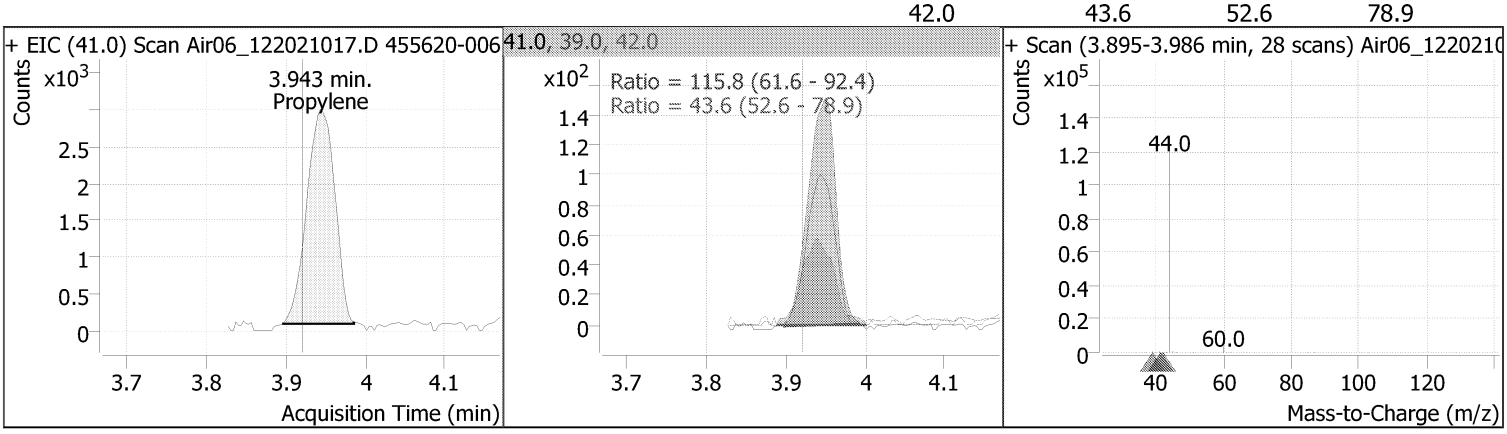
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.184	130.0	362831	10.0000	nL/L		0.003
M 1,4-Difluorobenzene	9.912	114.0	1372042	10.0000	nL/L		0.000
M Chlorobenzene-d5	14.013	82.0	757501	10.0000	nL/L	#	-0.003
System Monitoring Compounds							
S p-Bromofluorobenzene	15.615	95.0	1006874	10.3563	nL/L		-0.003
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 103.56%			
Target Compounds							QValue
T Propylene	3.943	41.0	7225	0.1816	nL/L	#	63
T Freon 12	3.998	85.0	21723	0.1674	nL/L		99
T Chloromethane	4.154	50.0	4582	0.1009	nL/L	#	95
T Freon 114	4.254	135.0	466	0.0061	nL/L		83
T Vinyl Chloride	4.374	62.0	697	0.0164	nL/L	#	84
T 1,3-Butadiene	4.471	54.0	608	0.0166	nL/L	#	1
T Butane	4.558	43.0	61767	0.8447	nL/L		96
T Bromomethane	0.000		0	N.D.			
T Chloroethane	4.918	64.0	7929	0.3730	nL/L		94
T Ethanol	5.025	45.0	60128	2.1122	nL/L		98
T Vinyl bromide	0.000		0	N.D.			
T Acrolein	5.510	56.0	27039	1.4716	nL/L	#	61
T Acetone	5.478	58.0	37812	1.5391	nL/L	#m	52
T Trichloromonofluoromethane	5.633	101.0	10139	0.0690	nL/L		96
T Isopropanol (IPA)	5.704	45.0	85323	0.8884	nL/L		98
T n-Pentane	5.960	43.0	98744	1.0482	nL/L		97
T 1,1-Dichloroethene	6.206	61.0	49	0.0005	nL/L		39
T Tert-butyl alcohol (TBA)	6.280	59.0	29875	0.2947	nL/L	#	94
T Methylene Chloride	6.293	84.0	7302	0.1874	nL/L		85
T 3-Chloropropene	6.581	76.0	92481	5.6407	nL/L	#	59
T Freon 113	6.555	101.0	2476	0.0266	nL/L	#	93
T Carbon Disulfide	6.581	76.0	92573	0.8540	nL/L	#	95

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.310	61.0	2301	0.0327	nL/L	#	42
T 1,1-Dichloroethane	7.316	63.0	415	0.0047	nL/L	#	81
T MTBE	7.403	73.0	6209	0.0522	nL/L	#	1
T Vinyl Acetate	7.403	43.0	38878	0.2616	nL/L	#	1
T 2-Butanone	7.669	43.0	37790	0.3221	nL/L		97
T cis-1,2-Dichloroethene	8.242	61.0	44162	0.6118	nL/L	#	38
T Ethyl Acetate	8.242	61.0	44440	2.7233	nL/L	#	13
T n-Hexane	8.255	57.0	16538	0.2177	nL/L		87
T Chloroform	8.297	83.0	4674	0.0451	nL/L		80
T Tetrahydrofuran	8.695	72.0	410	0.0242	nL/L	#	1
T 1,2-Dichloroethane	8.960	62.0	6345	0.0762	nL/L		95
T 1,1,1-Trichloroethane	0.000		0	N.D.			
T Benzene	9.614	78.0	15558	0.1351	nL/L		95
T Carbon Tetrachloride	9.753	117.0	2464	0.0210	nL/L	#	96
T Cyclohexane	9.876	84.0	6752	0.1417	nL/L	#	1
T 1,2-Dichloropropane	10.365	63.0	182	0.0034	nL/L		24
T Methane, bromodichloro-	10.537	83.0	2010	0.0186	nL/L	#	42
T 1,4-Dioxane	10.585	88.0	102	0.0040	nL/L	#	1
T Trichloroethene	10.562	132.0	589	0.0111	nL/L	#	87
T 2,2,4-Trimethylpentane	10.614	57.0	36646	0.1470	nL/L	#	90
T Methyl methacrylate	10.718	69.0	299	0.0070	nL/L		1
T n-Heptane	10.844	71.0	2106	0.0542	nL/L	#	73
T cis-1,3-Dichloropropene	0.000		0	N.D.			
T 4-Methyl-2-Pentanone	11.401	58.0	1255	0.0273	nL/L	#	69
T trans-1,3-Dichloropropene	11.818	110.0	49	0.0031	nL/L		1
T 1,1,2-Trichloroethane	12.126	97.0	107	0.0021	nL/L		13
T Toluene	12.281	91.0	82874	0.5583	nL/L		99
T TPH Gasoline (C3 to C12)	12.396	165.0	150795278	14.0250	nL/L		100
T 2-Hexanone	12.527	58.0	2591	0.0451	nL/L	#	85
T Dibromochloromethane	12.670	129.0	20	0.0002	nL/L	#	1
T 1,2-Dibromoethane	12.938	108.9	103	0.0013	nL/L	#	1
T Tetrachloroethene	13.382	166.0	6935	0.0796	nL/L		96
T 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
T Benzene, chloro-	14.090	112.0	3635	0.0337	nL/L		29
T Ethylbenzene	14.447	91.0	51241	0.2942	nL/L		96
T TPH Gasoline (C6 to C12)	14.521	165.0	140307611	17.5318	nL/L		100
T m,p-Xylenes	14.618	91.0	186133	1.2667	nL/L		97
T Bromoform	14.709	173.0	366	0.0032	nL/L	#	1
T Styrene	15.006	104.0	108521	1.1024	nL/L		95
T 1,1,2,2-Tetrachloroethane	15.049	83.0	9374	0.0889	nL/L	#	32
T o-Xylene	15.126	91.0	102056	0.6691	nL/L		97
T n-Nonane	15.366	85.0	11473	0.3688	nL/L		88
T Isopropylbenzene	15.777	105.0	9670	0.0467	nL/L	#	92
T 2-Chlorotoluene	16.398	126.0	812	0.0176	nL/L	#	1
T n-Propylbenzene	16.363	120.0	7014	0.1345	nL/L		98
T 4-Ethyltoluene	16.541	105.1	33556	0.1707	nL/L		98
T 1,3,5-Trimethylbenzene	16.631	105.0	157869	0.8820	nL/L		97
T 1,2,4-Trimethylbenzene	17.139	105.0	317392	1.8959	nL/L		98
T Benzyl chloride	17.434	91.0	9517	0.0659	nL/L	#	68
T 1,3-Dichlorobenzene	17.411	146.0	97165	0.8391	nL/L	#	93
T 1,4-Dichlorobenzene	17.411	146.0	97165	0.8502	nL/L	#	92
T 1,2-Dichlorobenzene	17.861	146.0	6828	0.0612	nL/L	#	63
T 1,2,4-Trichlorobenzene	20.383	179.9	2102	0.0265	nL/L	#	1
T Naphthalene	20.538	128.0	404349	3.2802	nL/L	#	95
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.130	225.0	325	0.0025	nL/L	#	84

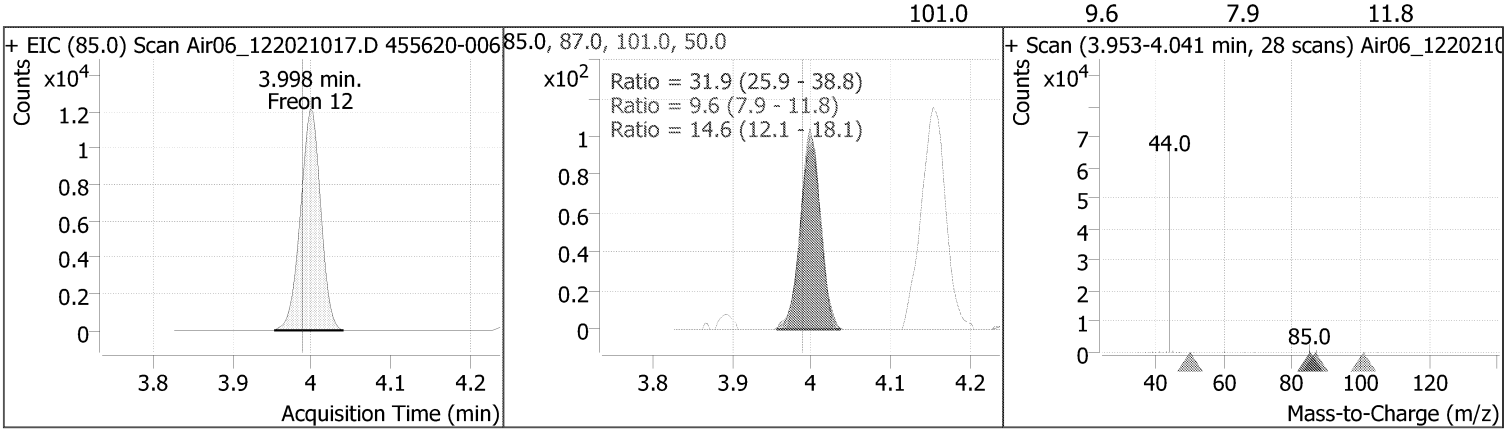
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

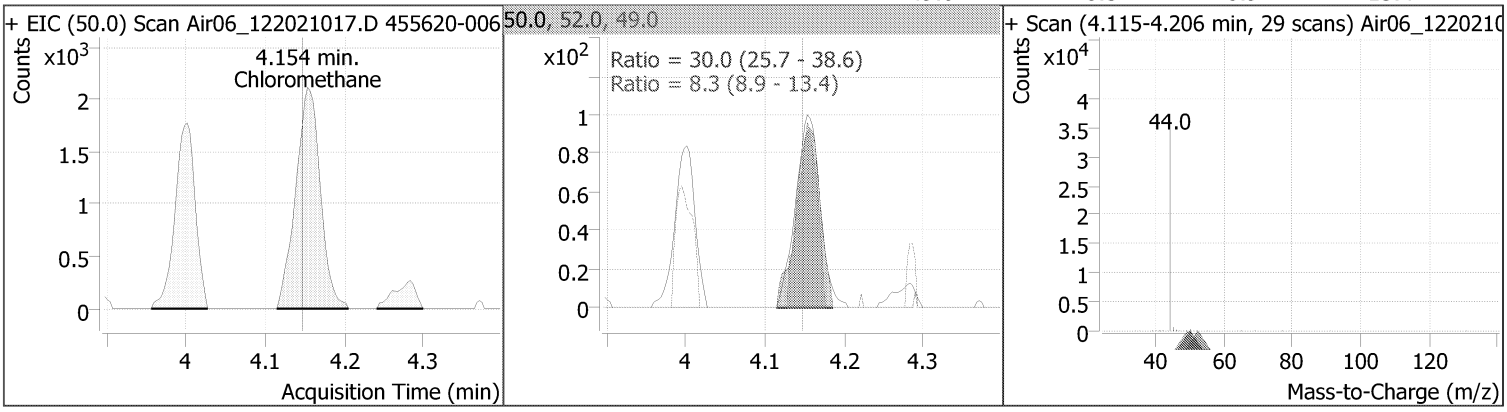
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.1816	3.94	0.03	7225	39.0	115.8	61.6	92.4
					42.0	43.6	52.6	78.9



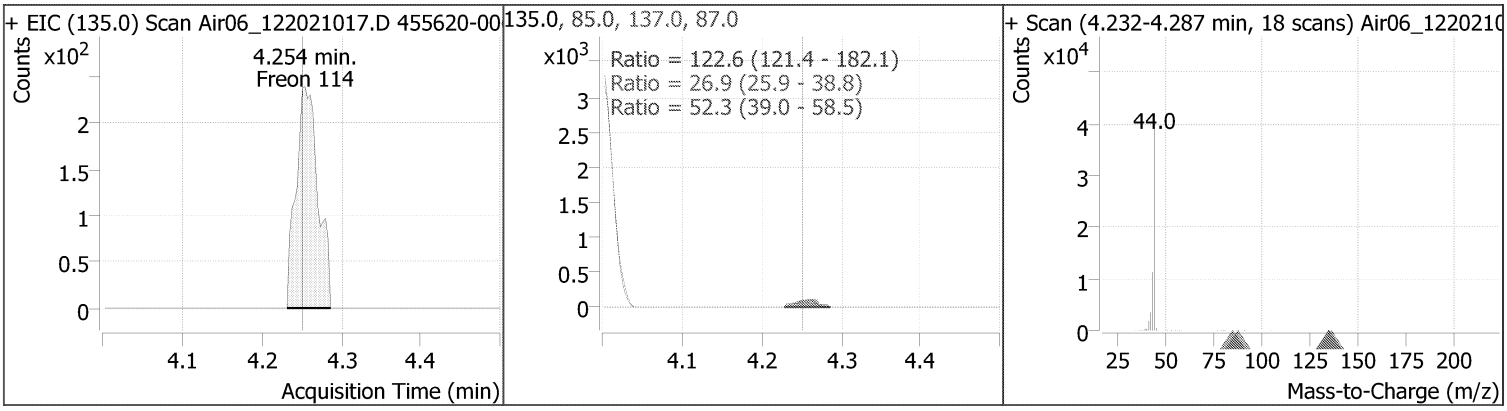
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	0.1674	4.00	0.01	21723	87.0	31.9	25.9	38.8
					50.0	14.6	12.1	18.1
					101.0	9.6	7.9	11.8



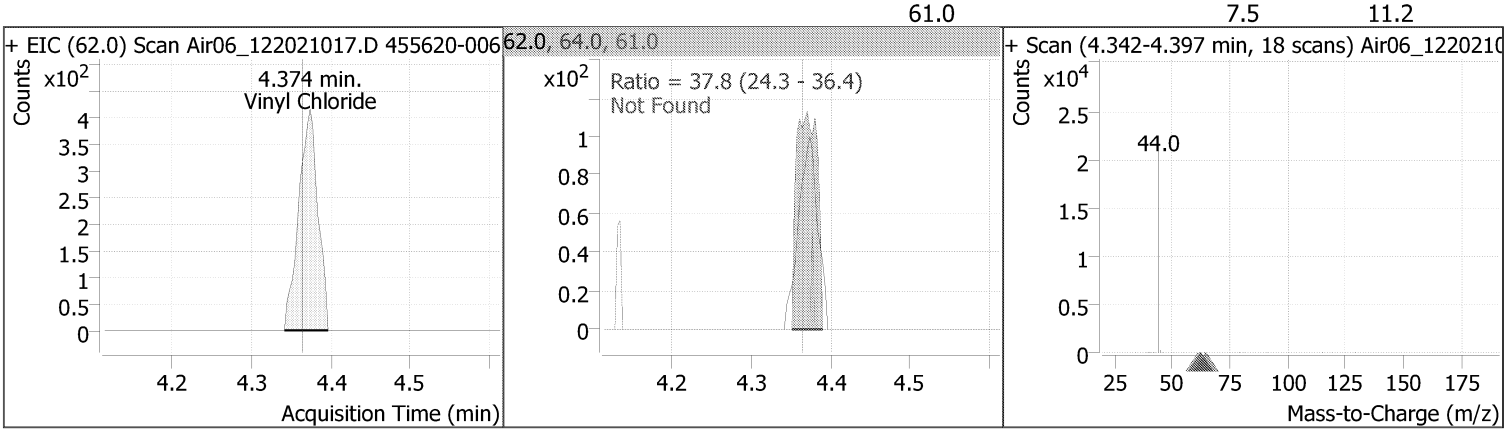
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	0.1009	4.15	0.01	4582	52.0	30.0	25.7	38.6
					49.0	8.3	8.9	13.4



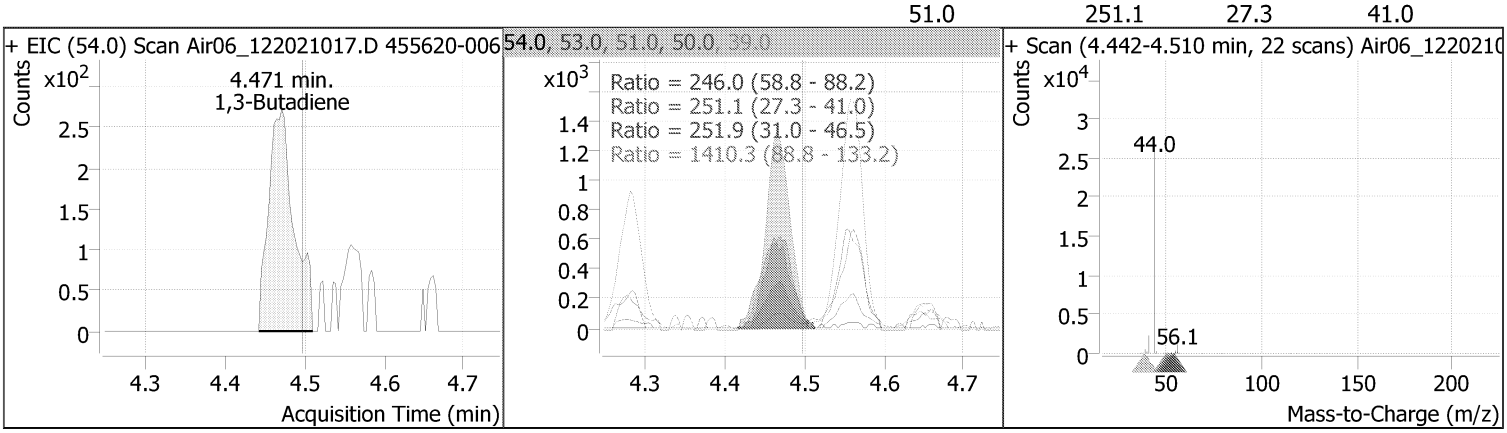
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	0.0061	4.25	0.01	466	85.0	122.6	121.4	182.1
					87.0	52.3	39.0	58.5
					137.0	26.9	25.9	38.8



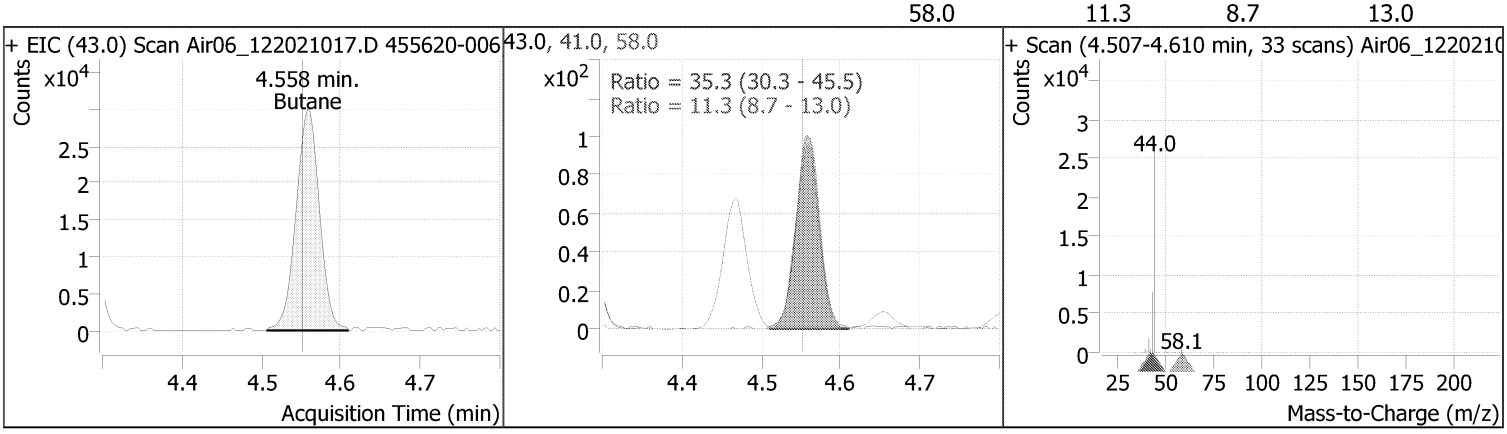
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	0.0164	4.37	0.01	697	64.0	37.8	24.3	36.4
					61.0		7.5	11.2



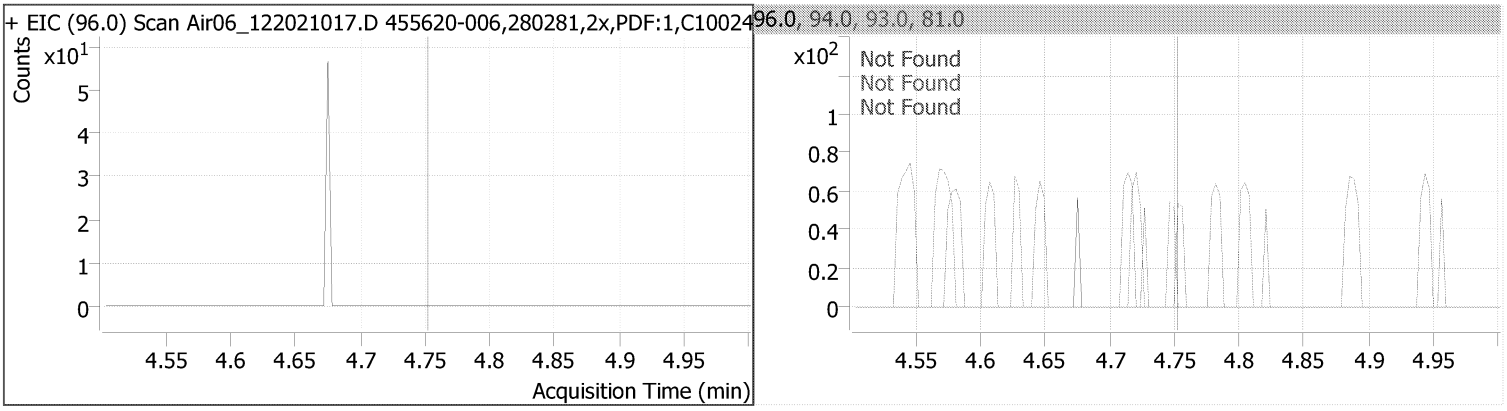
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	0.0166	4.47	-0.02	608	39.0	1410.3	88.8	133.2
					53.0	246.0	58.8	88.2
					50.0	251.9	31.0	46.5
					51.0	251.1	27.3	41.0



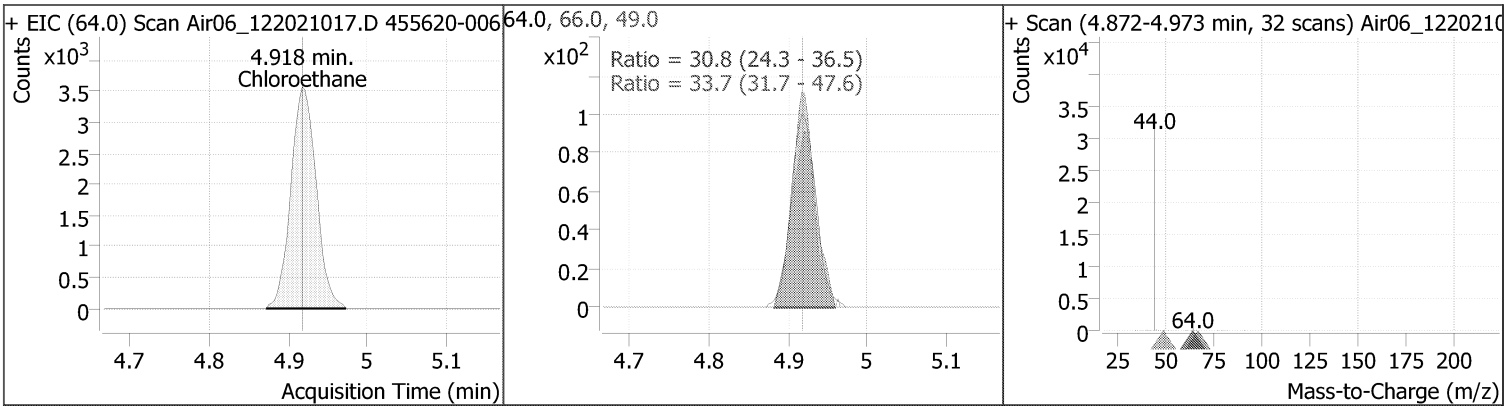
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	0.8447	4.56	0.01	61767	41.0	35.3	30.3	45.5
					58.0	11.3	8.7	13.0



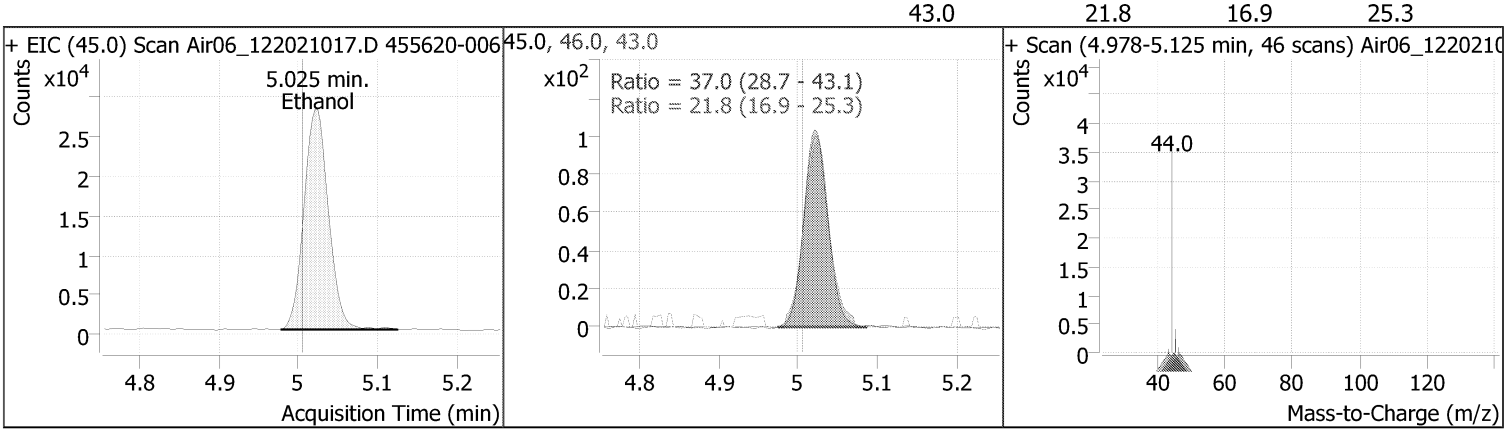
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Bromomethane	N.D.	4.75	94.0	107.8	93.0	23.9	81.0	23.8



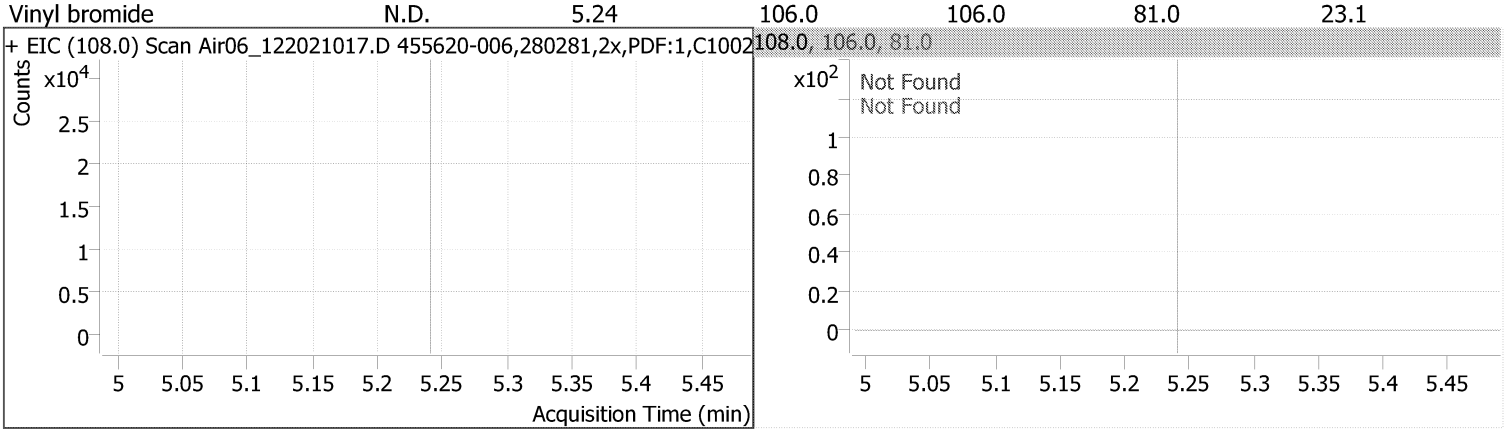
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	0.3730	4.92	0.00	7929	49.0	33.7	31.7	47.6
					66.0	30.8	24.3	36.5



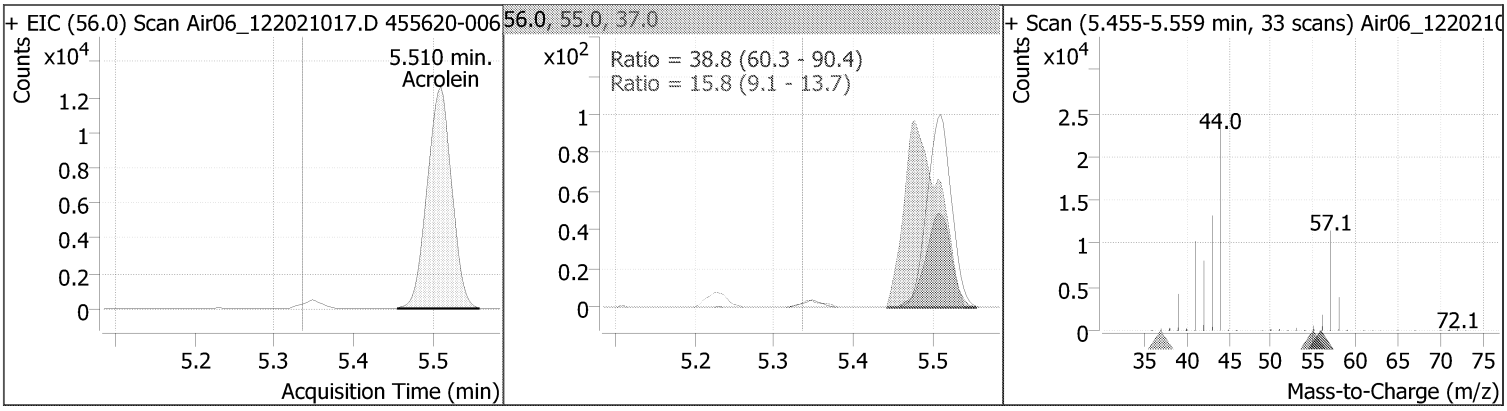
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	2.1122	5.02	0.02	60128	46.0	37.0	28.7	43.1
					43.0	21.8	16.9	25.3



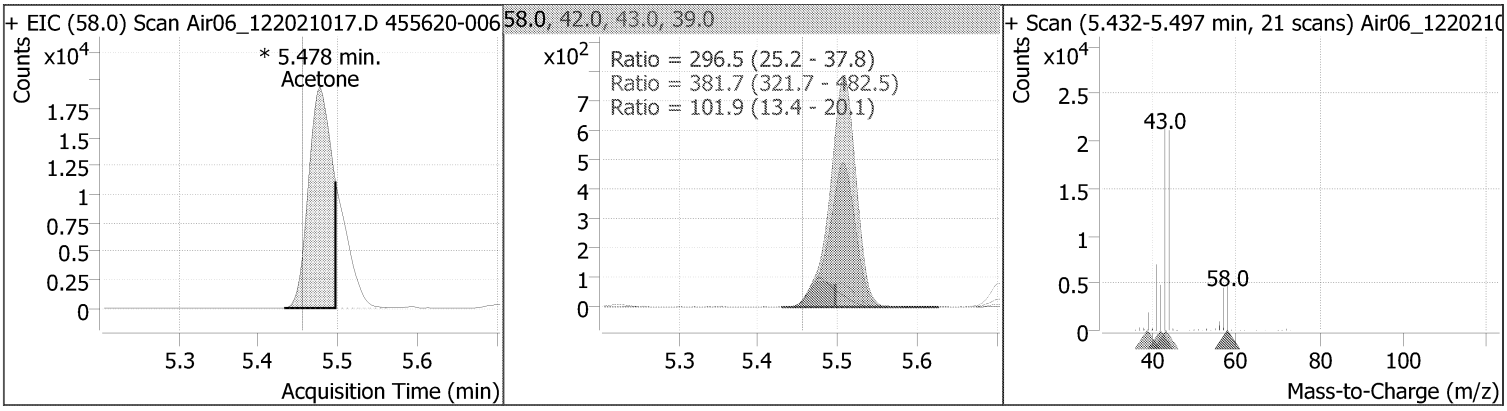
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl bromide	N.D.	5.24	106.0	106.0	81.0	23.1



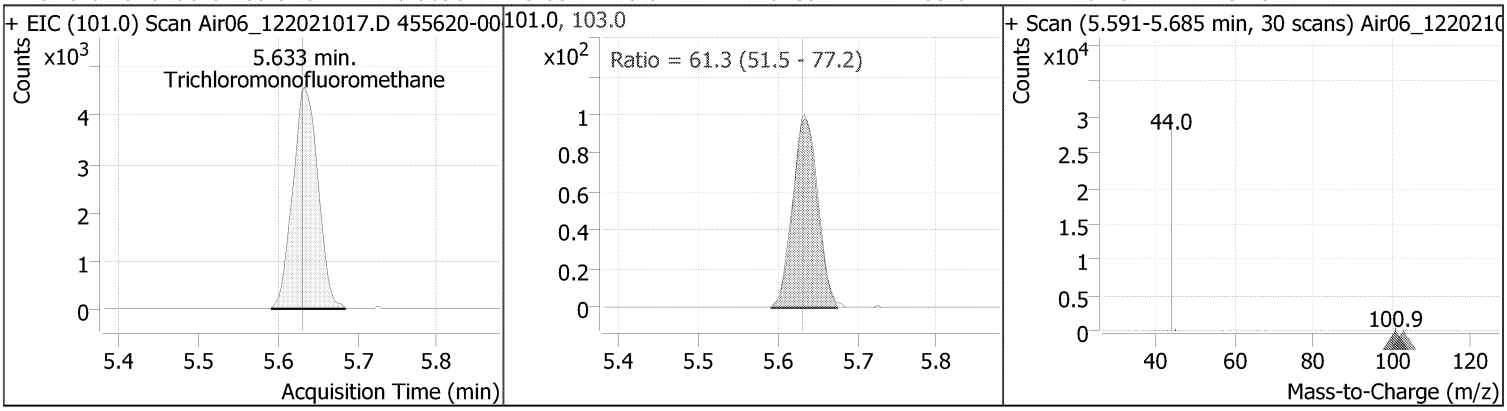
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	1.4716	5.51	0.18	27039	55.0	38.8	60.3	90.4
					37.0	15.8	9.1	13.7



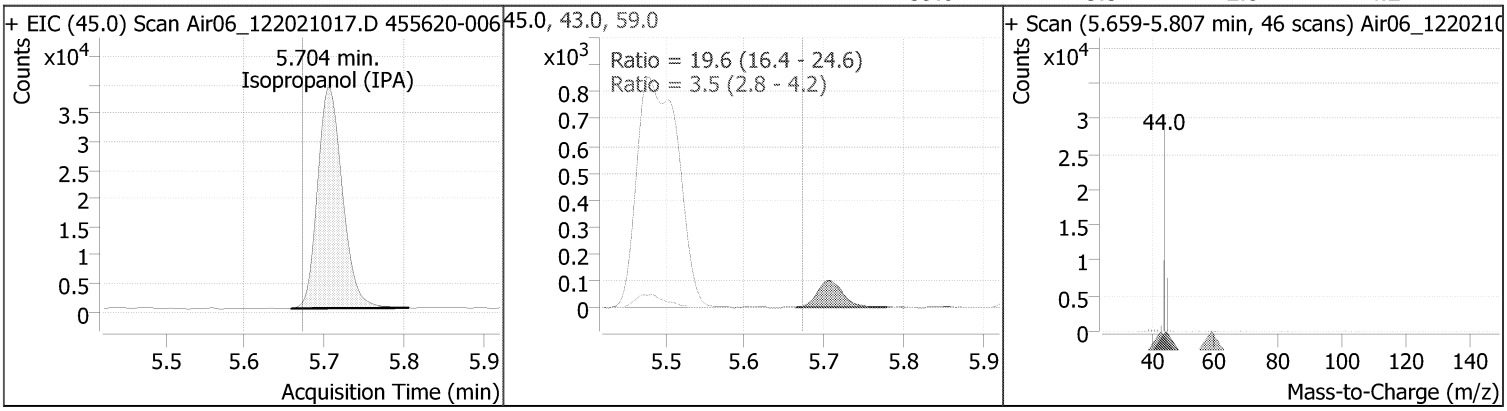
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	1.5391	5.48	0.03	37812 (m)	43.0	381.7	321.7	482.5
					42.0	296.5	25.2	37.8
					39.0	101.9	13.4	20.1



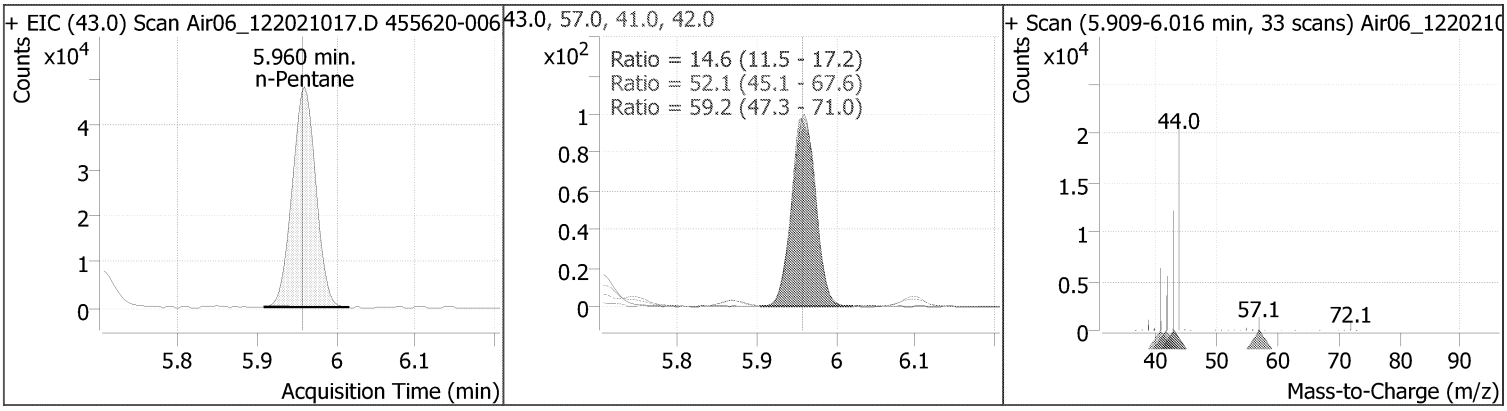
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	0.0690	5.63	0.01	10139	103.0	61.3	51.5	77.2



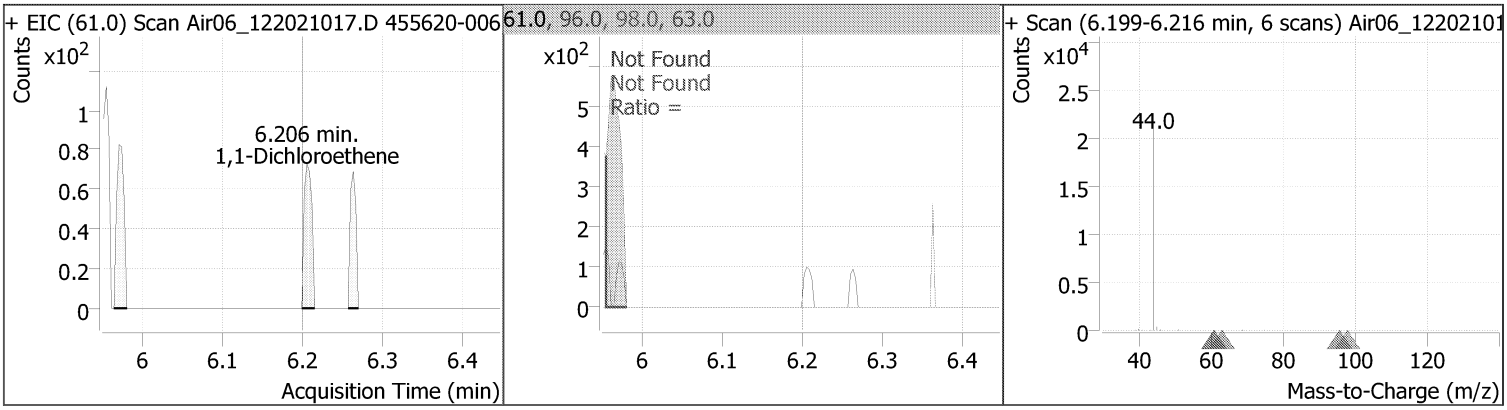
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.8884	5.70	0.04	85323	43.0	19.6	16.4	24.6
					59.0	3.5	2.8	4.2



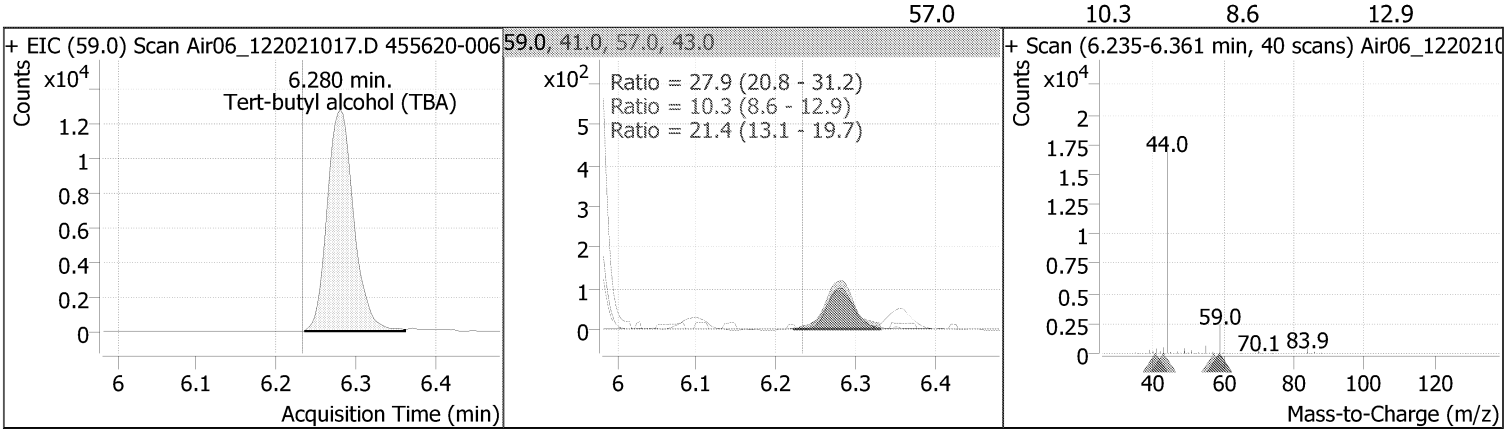
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	1.0482	5.96	0.01	98744	42.0	59.2	47.3	71.0
					41.0	52.1	45.1	67.6
					57.0	14.6	11.5	17.2



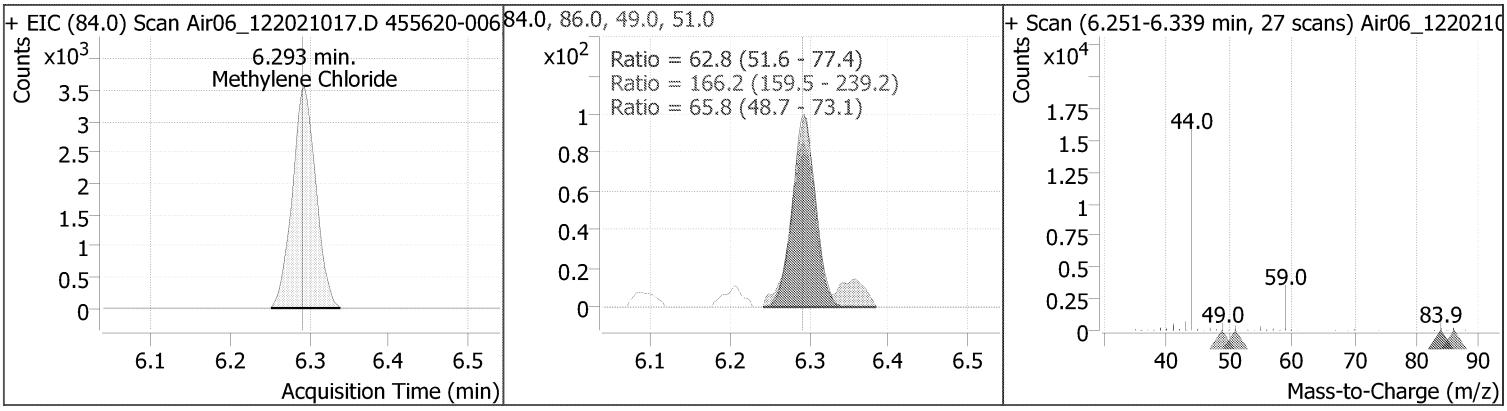
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	0.0005	6.21	0.01	49	96.0		35.3	53.0
					63.0		24.7	37.1
					98.0		22.7	34.0



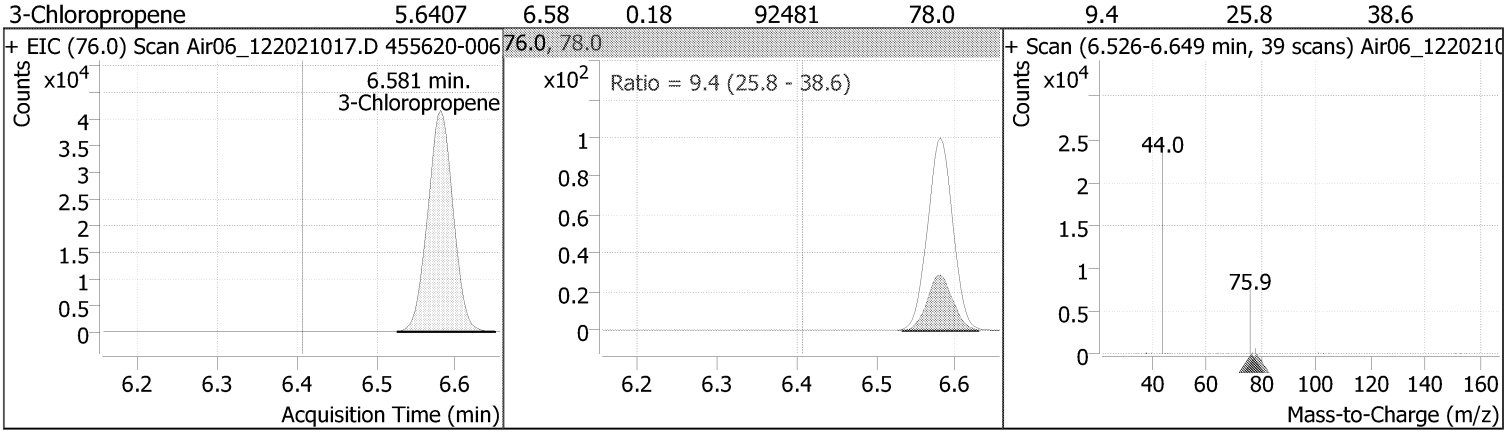
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.2947	6.28	0.05	29875	41.0	27.9	20.8	31.2
					43.0	21.4	13.1	19.7
					57.0	10.3	8.6	12.9



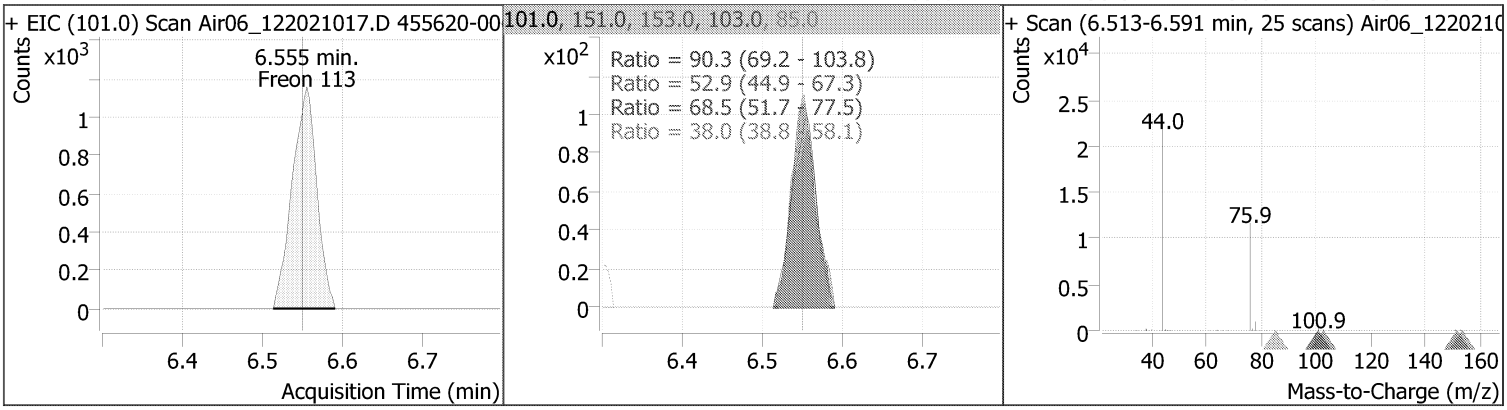
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.1874	6.29	0.01	7302	49.0	166.2	159.5	239.2
					86.0	62.8	51.6	77.4
					51.0	65.8	48.7	73.1



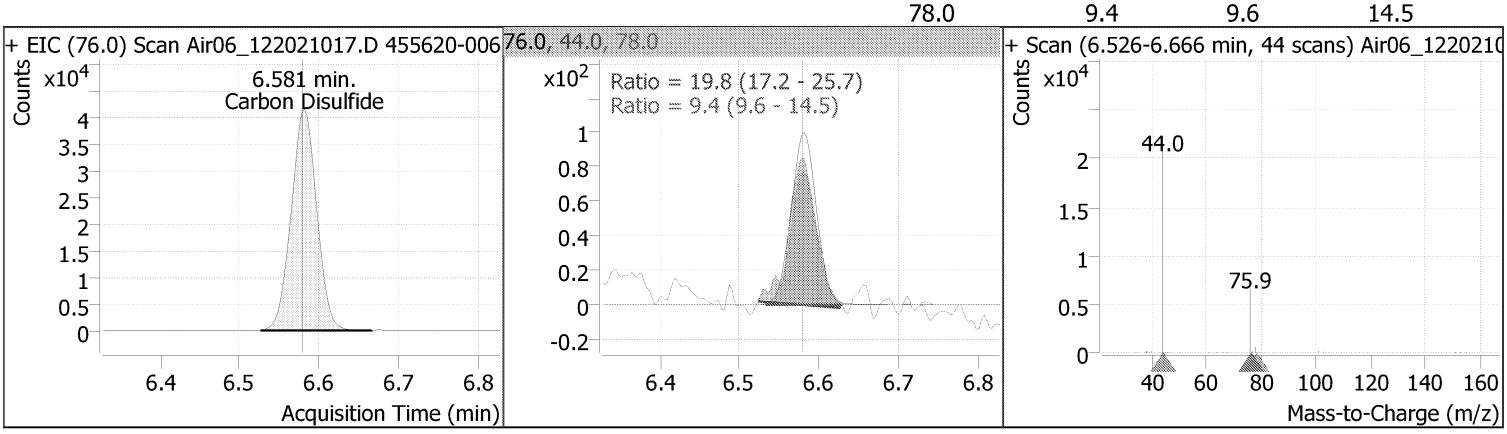
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	5.6407	6.58	0.18	92481	78.0	9.4	25.8	38.6



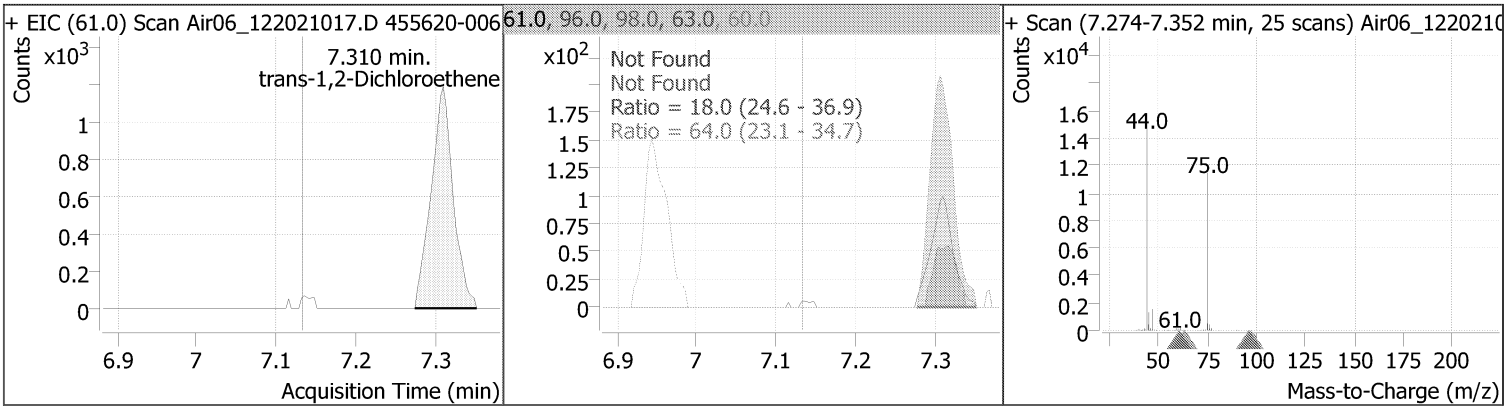
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	0.0266	6.56	0.01	2476	151.0	90.3	69.2	103.8
					103.0	68.5	51.7	77.5
					153.0	52.9	44.9	67.3
					85.0	38.0	38.8	58.1



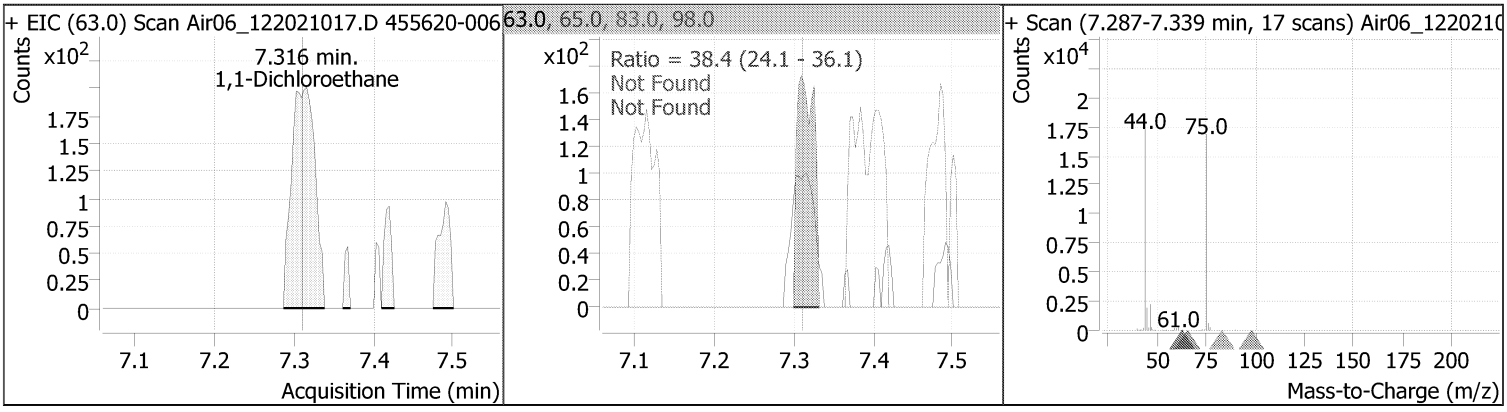
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.8540	6.58	0.01	92573	44.0	19.8	17.2	25.7
					78.0	9.4	9.6	14.5



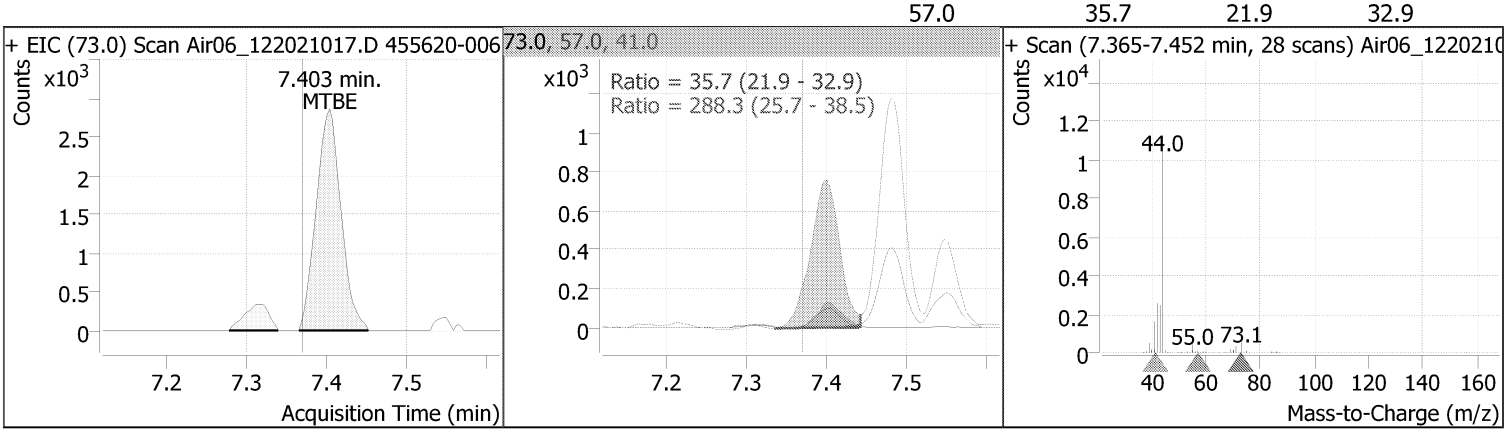
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.0327	7.31	0.18	2301	96.0		41.3	61.9
					98.0		26.5	39.8
					63.0	18.0	24.6	36.9
					60.0	64.0	23.1	34.7



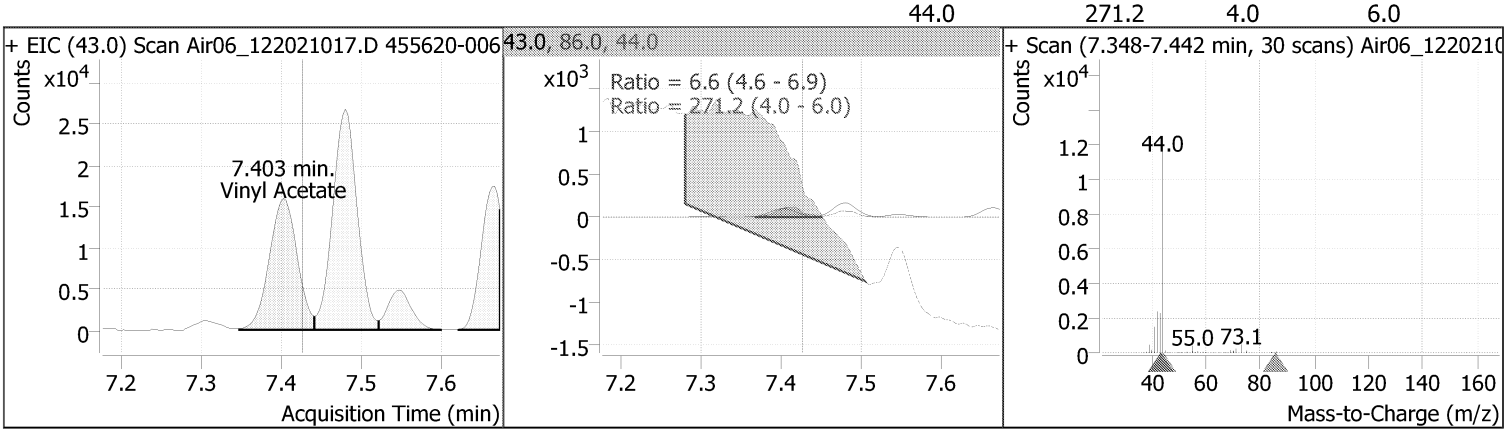
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	0.0047	7.32	0.01	415	65.0	38.4	24.1	36.1
					83.0		9.9	14.8
					98.0		3.6	5.5



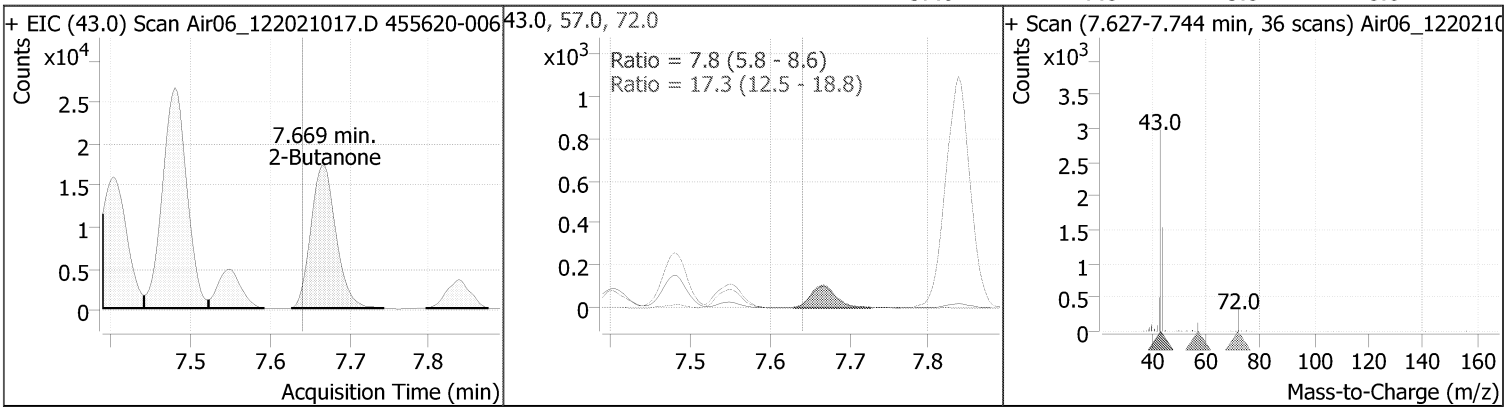
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	0.0522	7.40	0.04	6209	41.0	288.3	25.7	38.5
					57.0	35.7	21.9	32.9



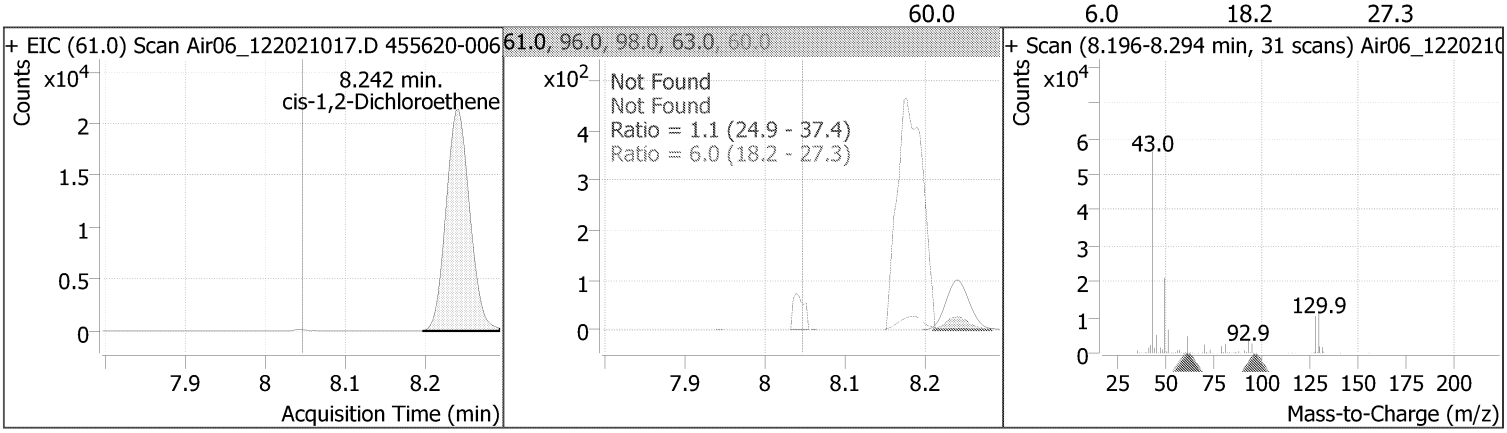
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.2616	7.40	-0.02	38878	86.0	6.6	4.6	6.9
					44.0	271.2	4.0	6.0



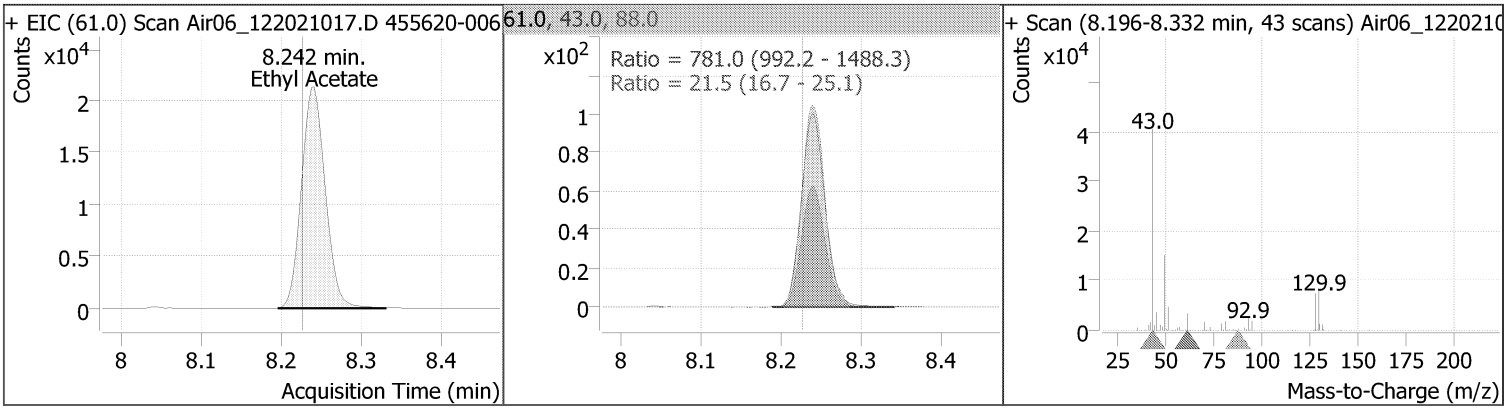
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.3221	7.67	0.03	37790	72.0	17.3	12.5	18.8
					57.0	7.8	5.8	8.6



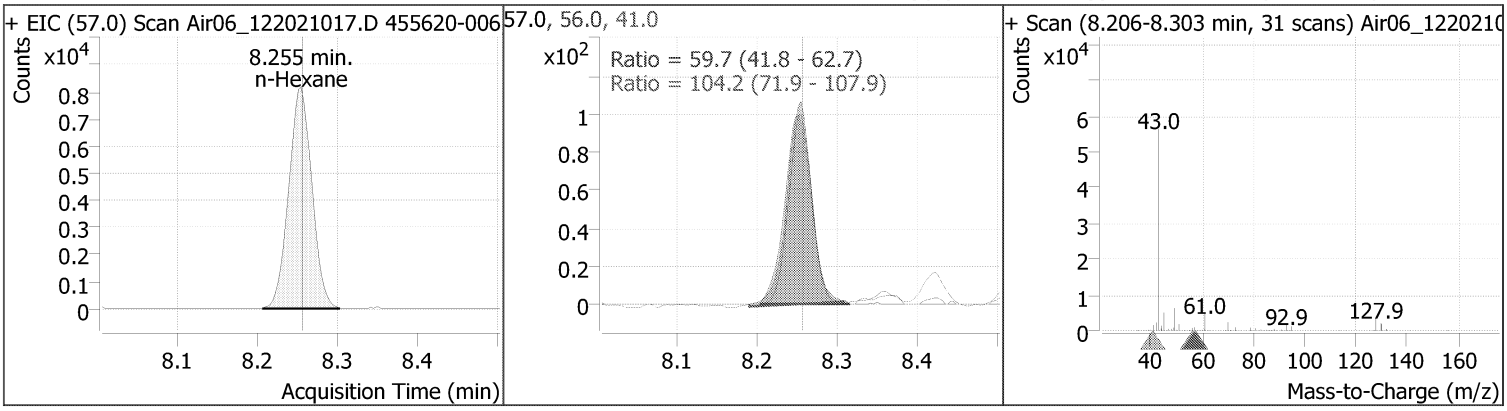
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.6118	8.24	0.20	44162	96.0		45.8	68.7
					98.0		29.3	43.9
					63.0	1.1	24.9	37.4
					60.0	6.0	18.2	27.3



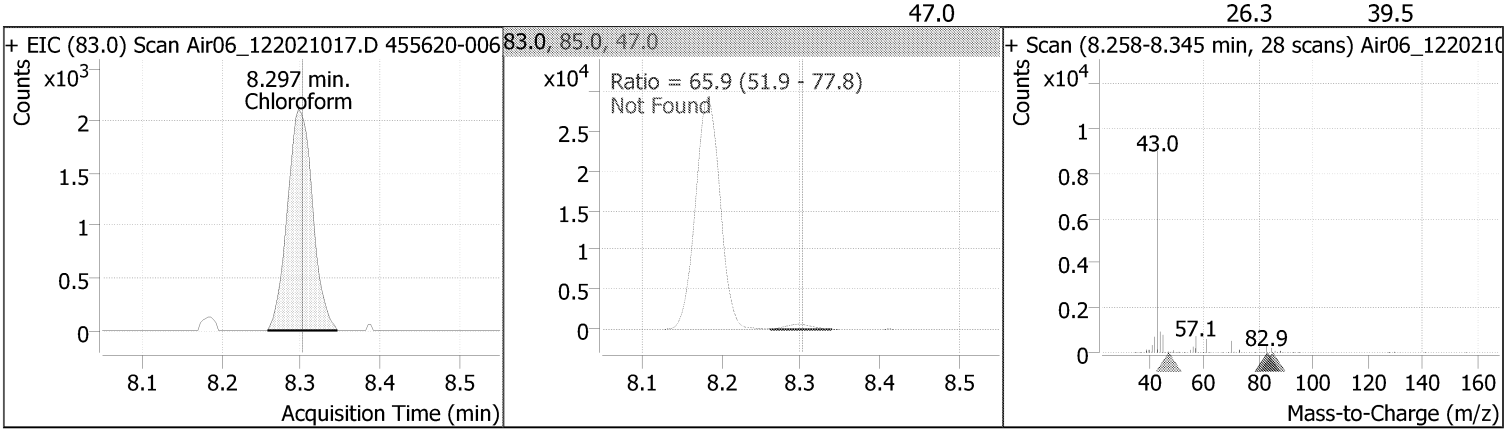
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	2.7233	8.24	0.02	44440	43.0	781.0	992.2	1488.3
					88.0	21.5	16.7	25.1



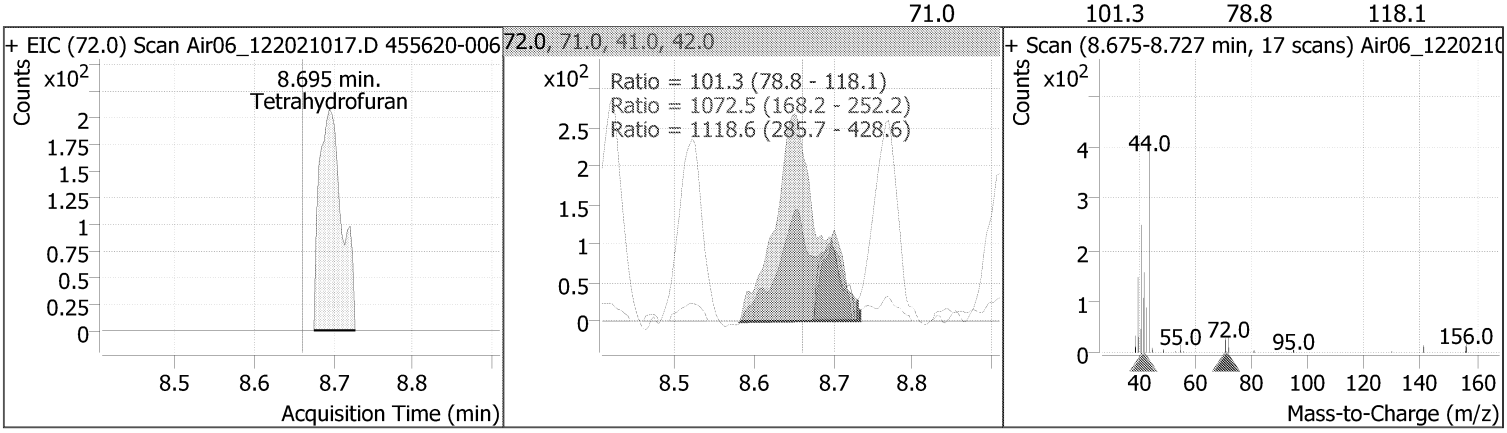
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.2177	8.25	0.00	16538	41.0	104.2	71.9	107.9
					56.0	59.7	41.8	62.7



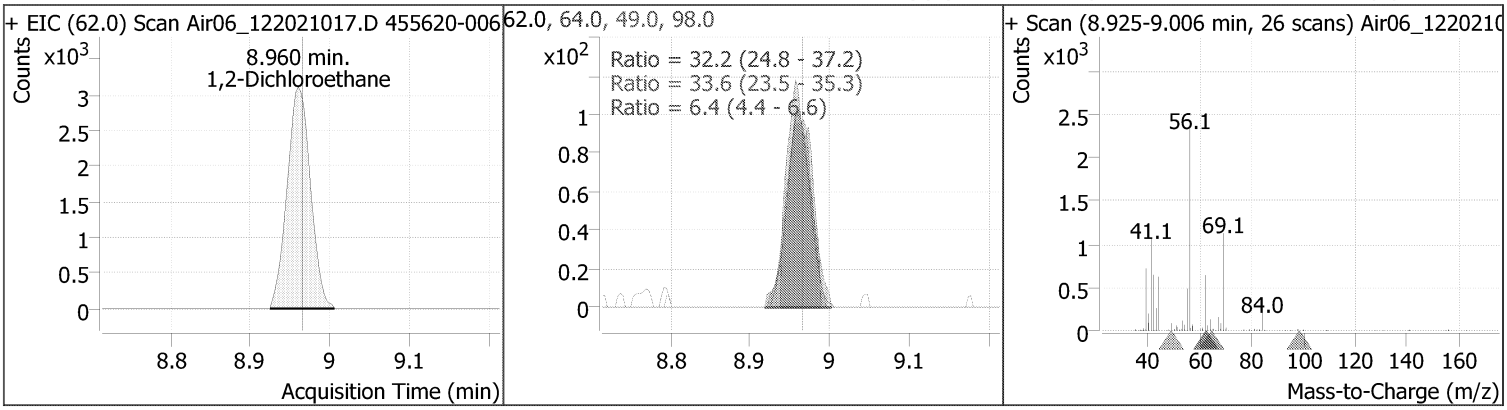
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.0451	8.30	0.00	4674	85.0	65.9	51.9	77.8
					47.0		26.3	39.5



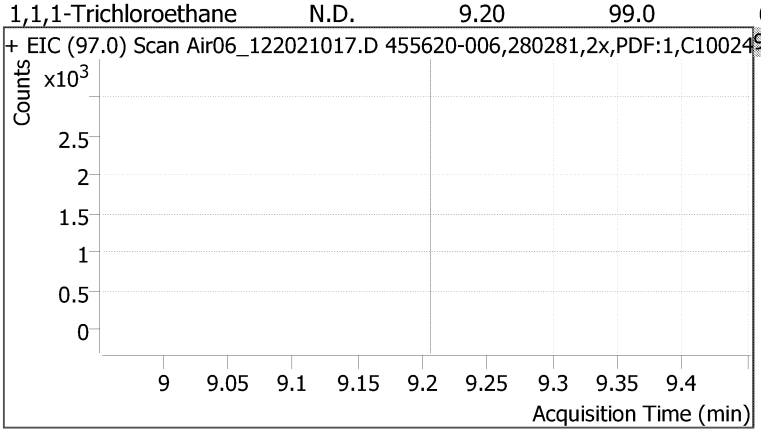
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	0.0242	8.69	0.04	410	42.0	1118.6	285.7	428.6
					41.0	1072.5	168.2	252.2
					71.0	101.3	78.8	118.1

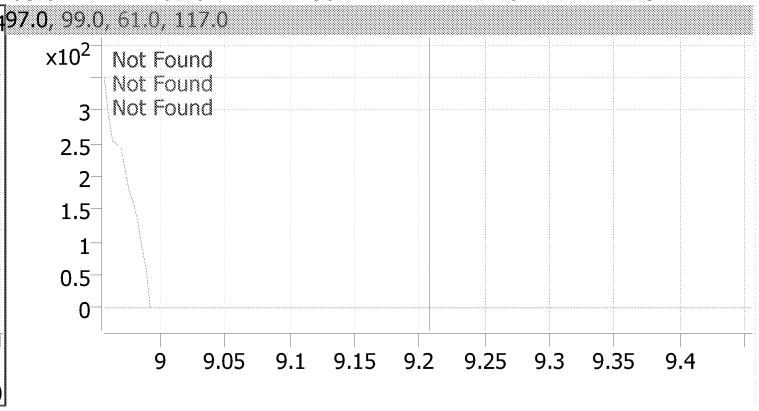


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	0.0762	8.96	0.00	6345	64.0	32.2	24.8	37.2
					49.0	33.6	23.5	35.3
					98.0	6.4	4.4	6.6

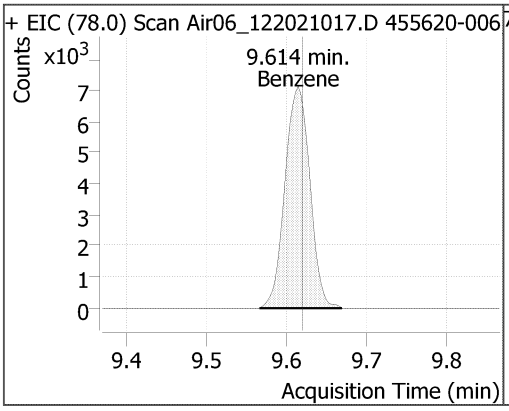


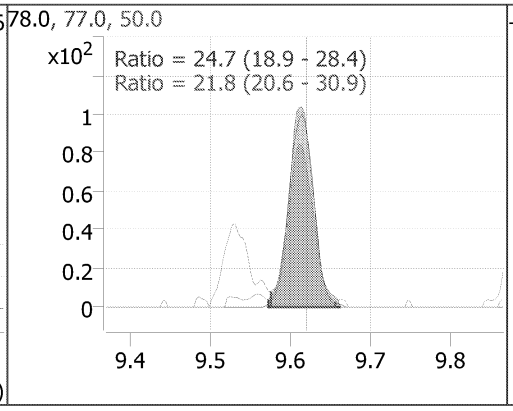
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1-Trichloroethane	N.D.	9.20	99.0	65.0	61.0	50.4	117.0	11.3

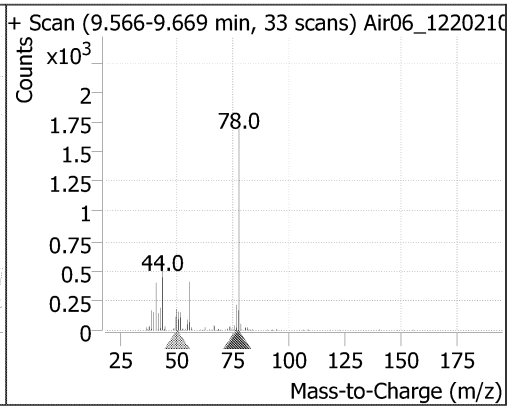




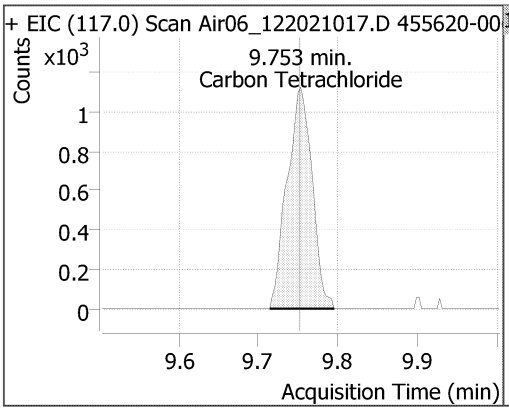
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.1351	9.61	0.00	15558	50.0	21.8	20.6	30.9
					77.0	24.7	18.9	28.4

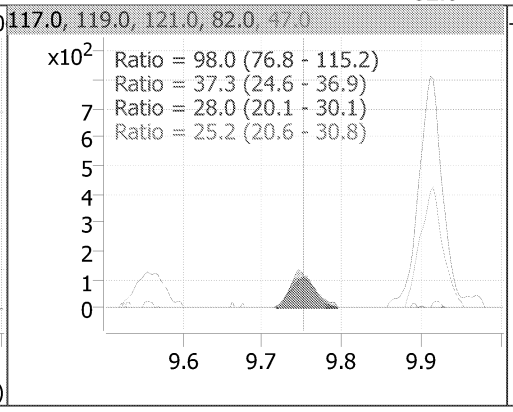


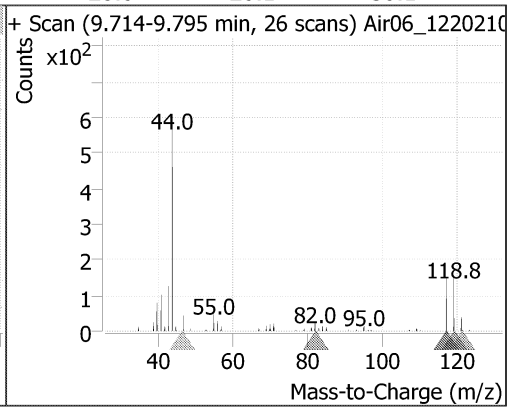




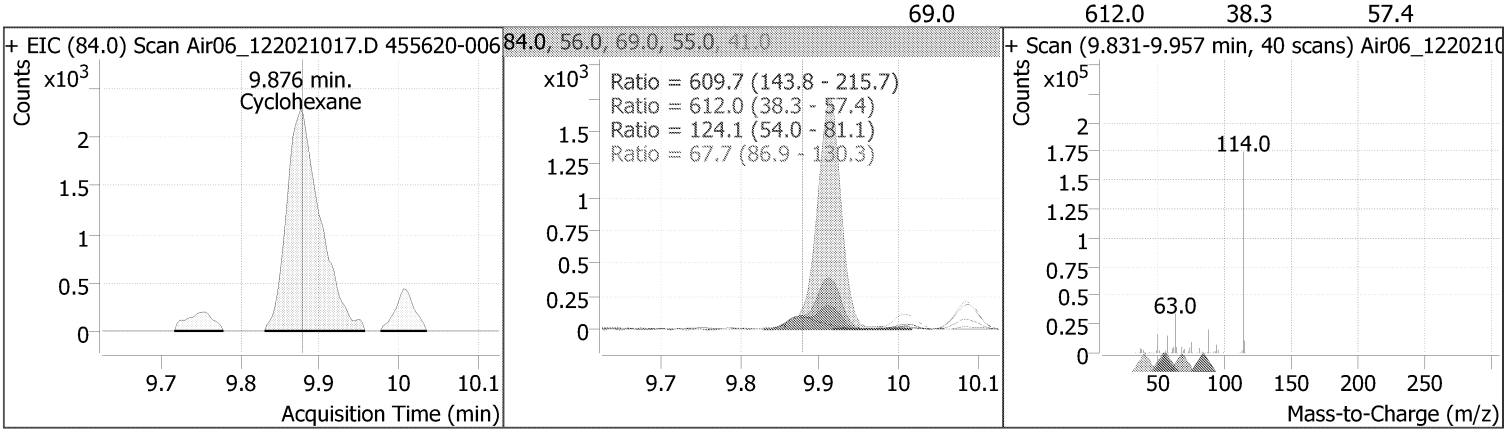
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	0.0210	9.75	0.00	2464	119.0	98.0	76.8	115.2
					121.0	37.3	24.6	36.9
					47.0	25.2	20.6	30.8
					82.0	28.0	20.1	30.1



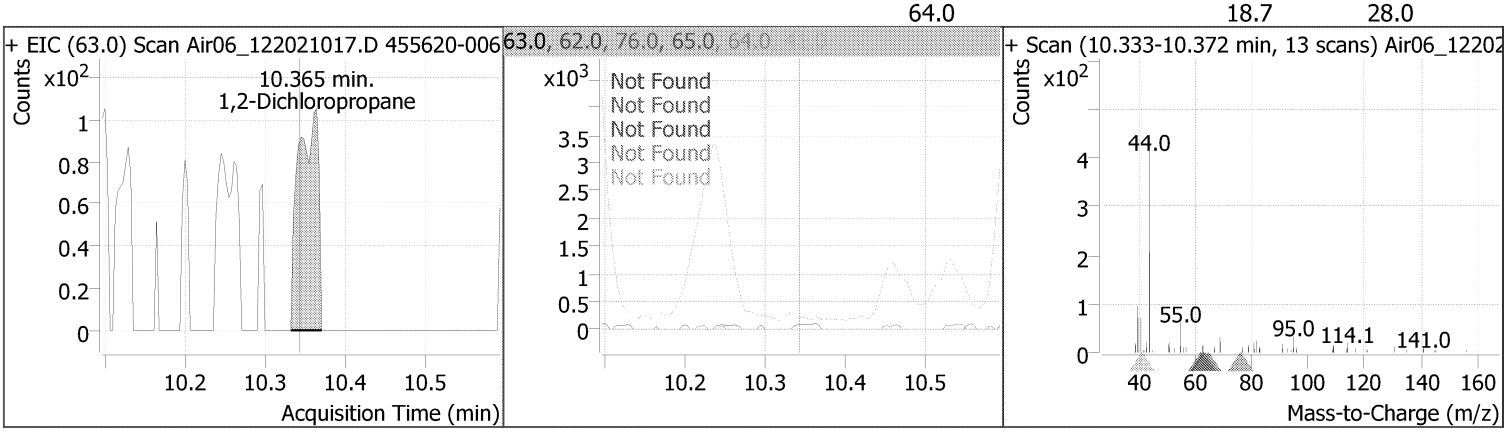




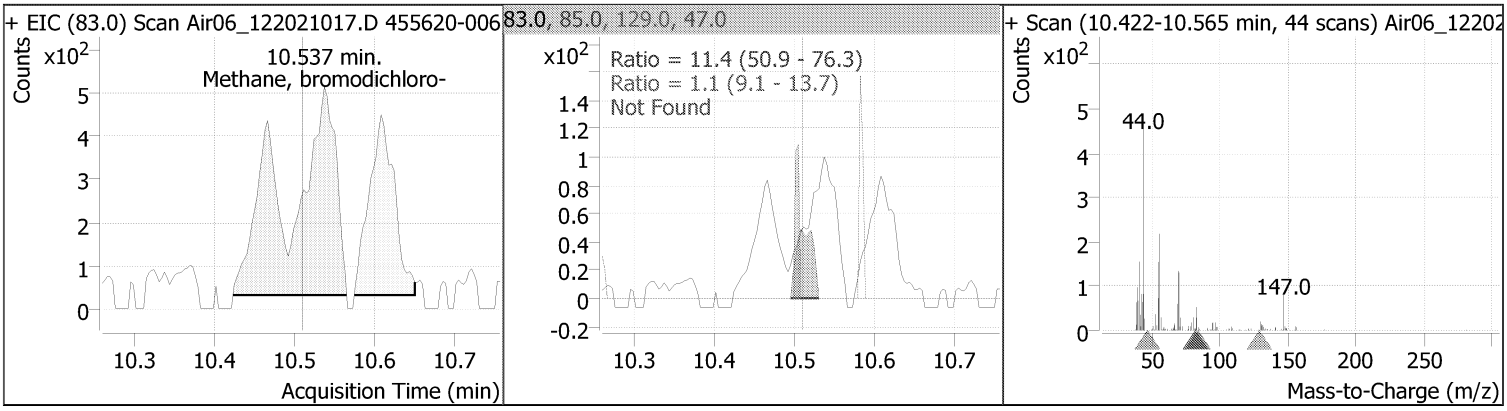
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.1417	9.88	0.00	6752	56.0	609.7	143.8	215.7
					41.0	67.7	86.9	130.3
					55.0	124.1	54.0	81.1
					69.0	612.0	38.3	57.4



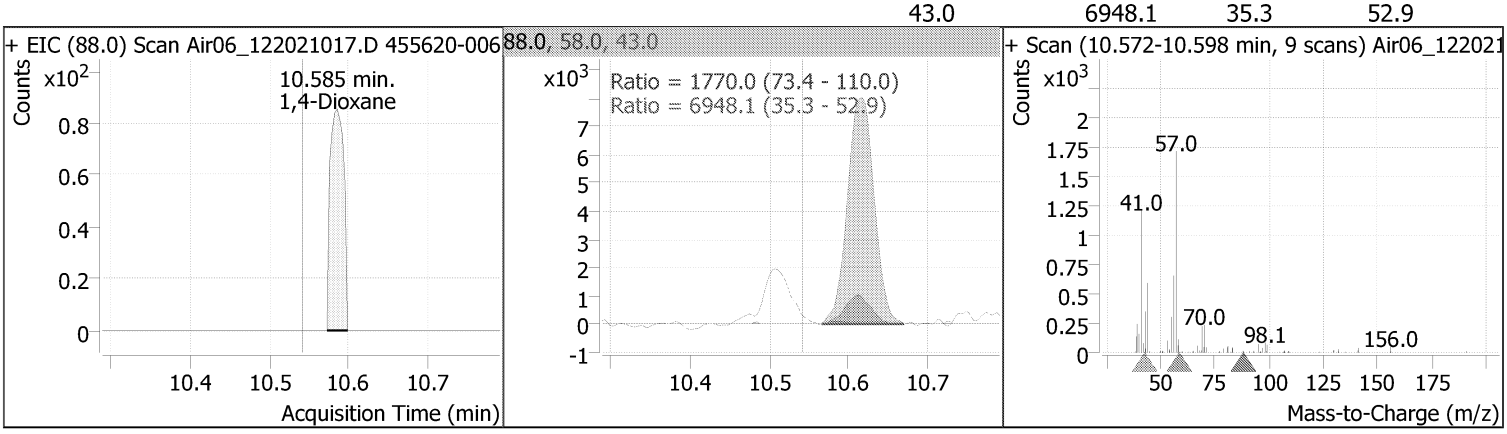
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.0034	10.37	0.02	182	41.0		60.7	91.1
					62.0		55.7	83.6
					76.0		35.7	53.6
					65.0		23.3	35.0
					64.0		18.7	28.0



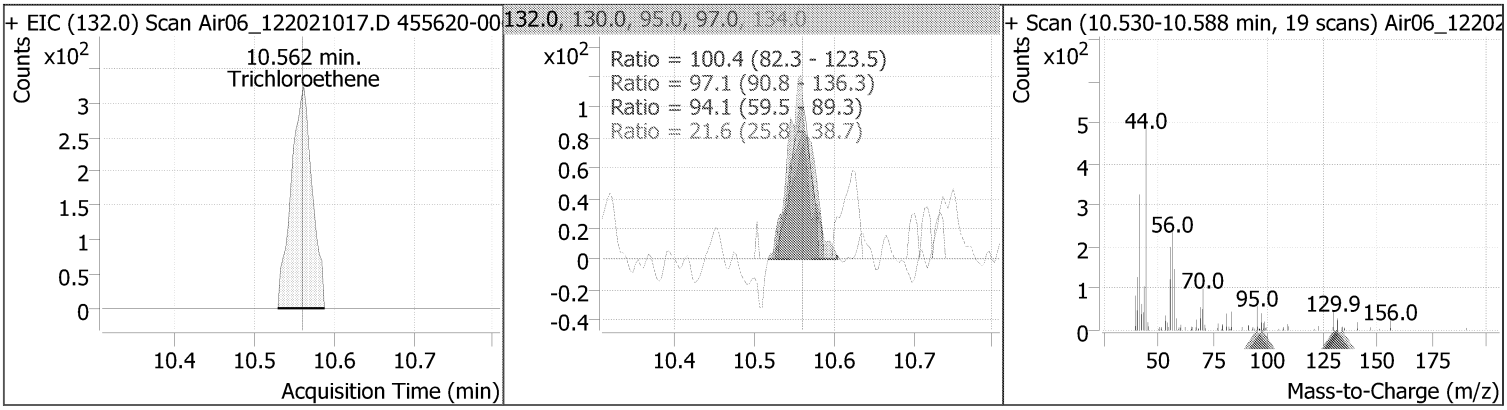
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	0.0186	10.54	0.03	2010	85.0	11.4	50.9	76.3
					47.0		19.9	29.9
					129.0	1.1	9.1	13.7



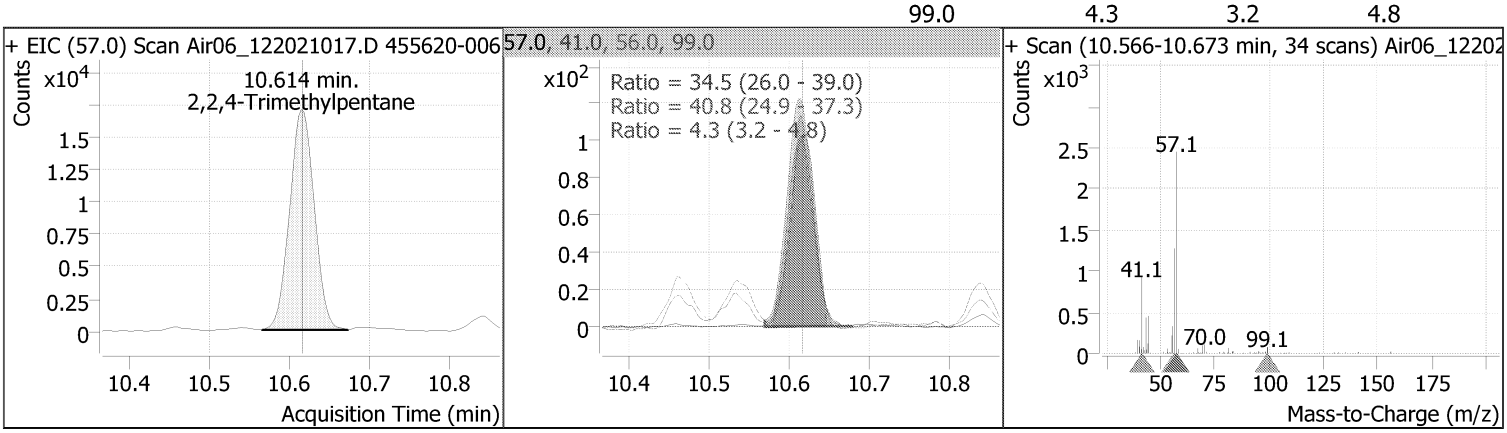
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.0040	10.59	0.05	102	58.0	1770.0	73.4	110.0
					43.0	6948.1	35.3	52.9



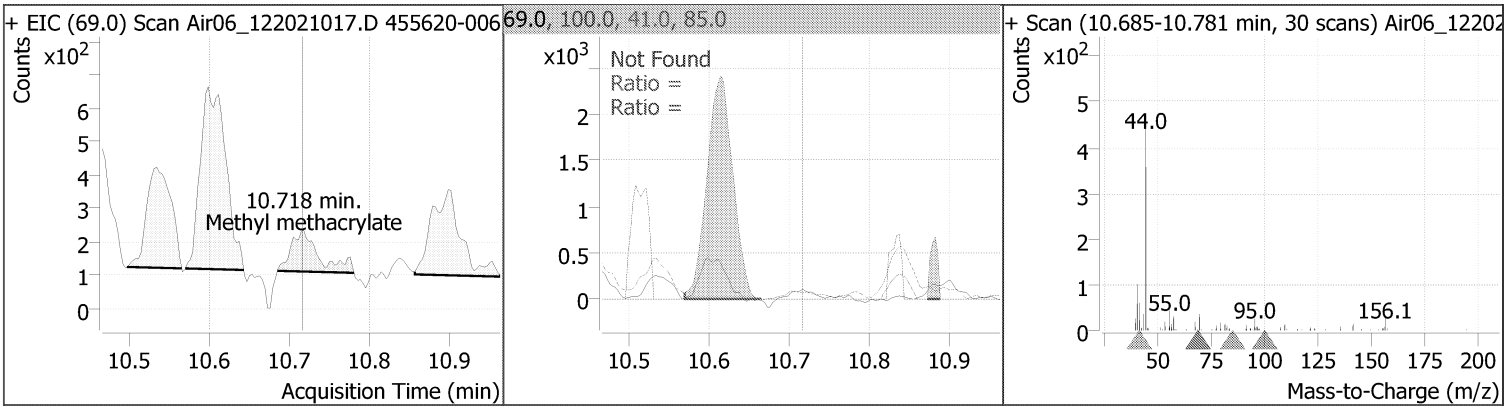
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.0111	10.56	0.00	589	95.0	97.1	90.8	136.3
					130.0	100.4	82.3	123.5
					97.0	94.1	59.5	89.3
					134.0	21.6	25.8	38.7



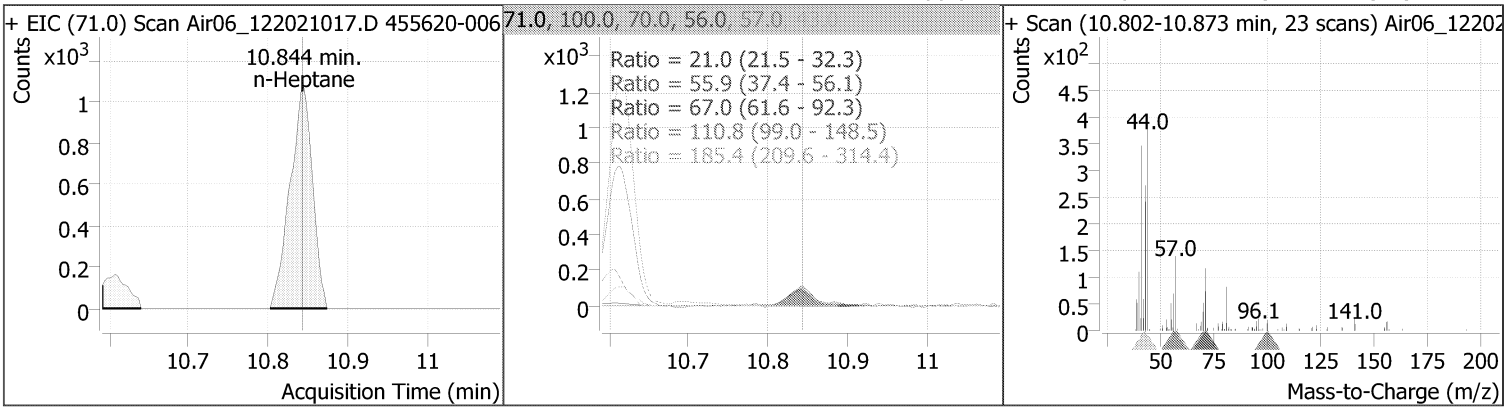
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.1470	10.61	0.00	36646	41.0	34.5	26.0	39.0
					56.0	40.8	24.9	37.3
					99.0	4.3	3.2	4.8



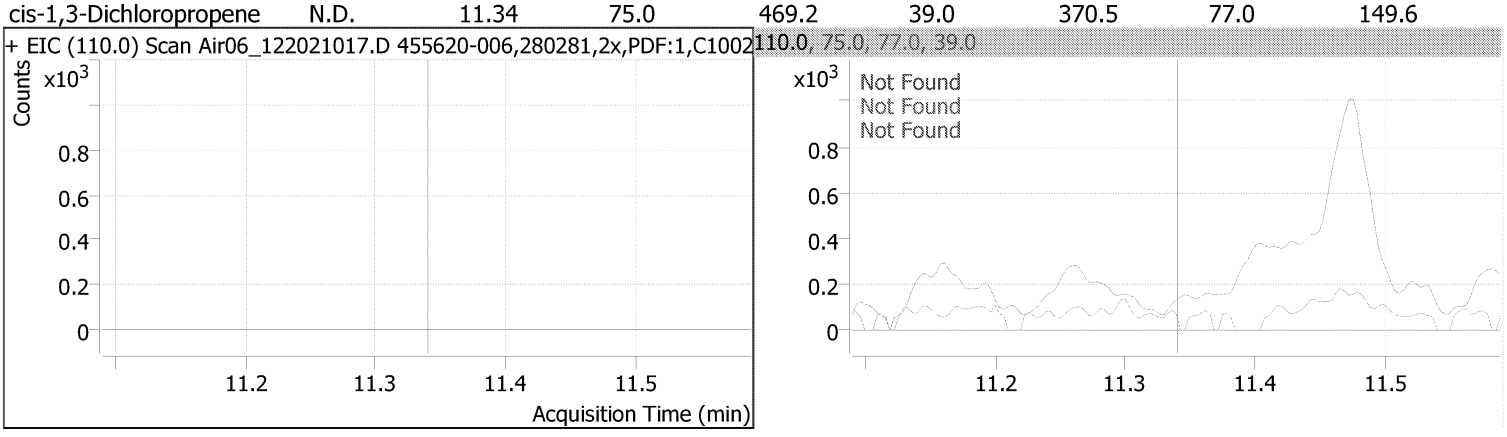
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	0.0070	10.72	0.00	299	41.0		152.7	229.1
					100.0		29.1	43.6
					85.0		7.9	11.8



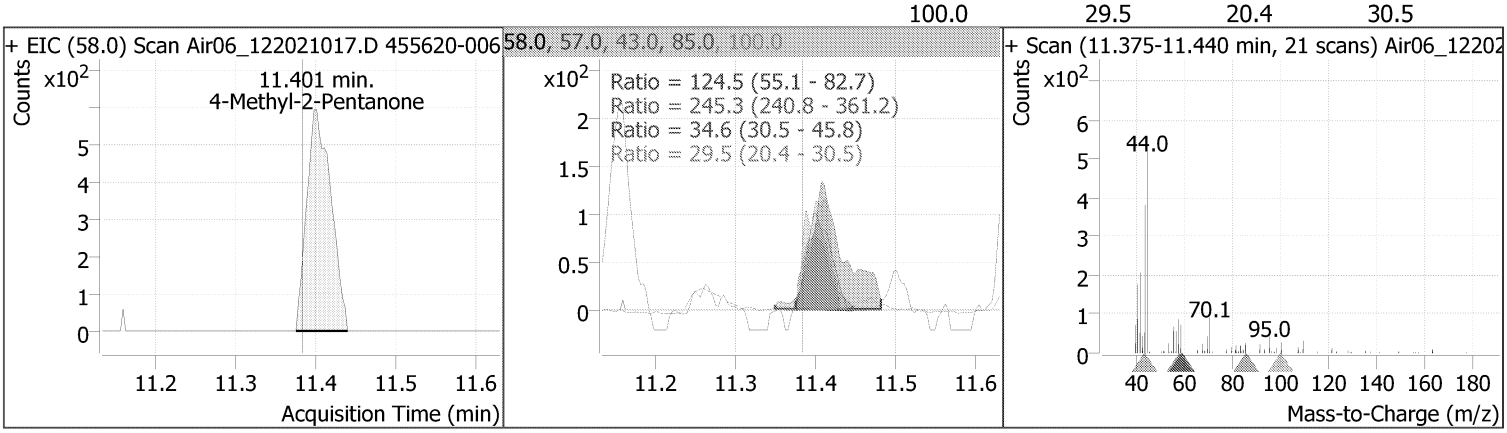
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	0.0542	10.84	0.00	2106	43.0	185.4	209.6	314.4
					57.0	110.8	99.0	148.5
					56.0	67.0	61.6	92.3
					70.0	55.9	37.4	56.1
					100.0	21.0	21.5	32.3



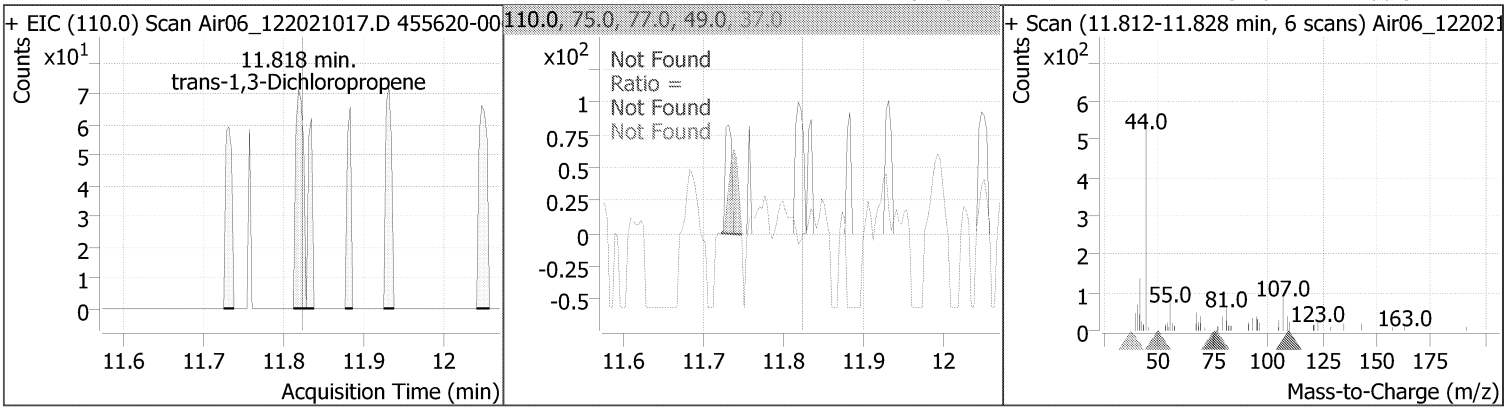
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
cis-1,3-Dichloropropene	N.D.	11.34	75.0	469.2	39.0	370.5	77.0	149.6



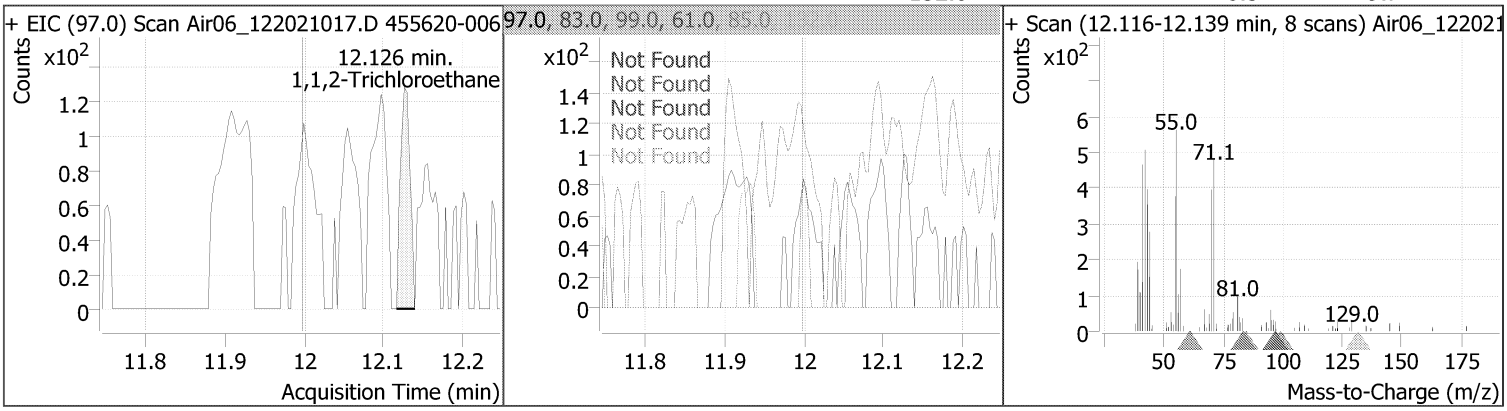
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.0273	11.40	0.02	1255	43.0	245.3	240.8	361.2
					57.0	124.5	55.1	82.7
					85.0	34.6	30.5	45.8
					100.0	29.5	20.4	30.5



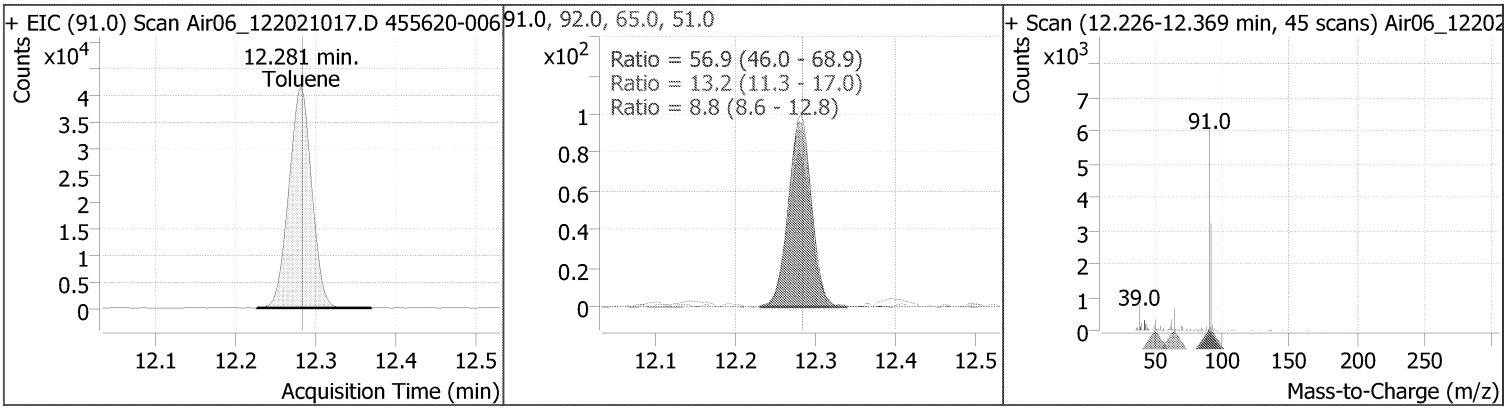
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	0.0031	11.82	0.00	49	75.0		378.9	568.4
					77.0		118.6	177.9
					49.0		106.8	160.1
					37.0		57.6	86.5



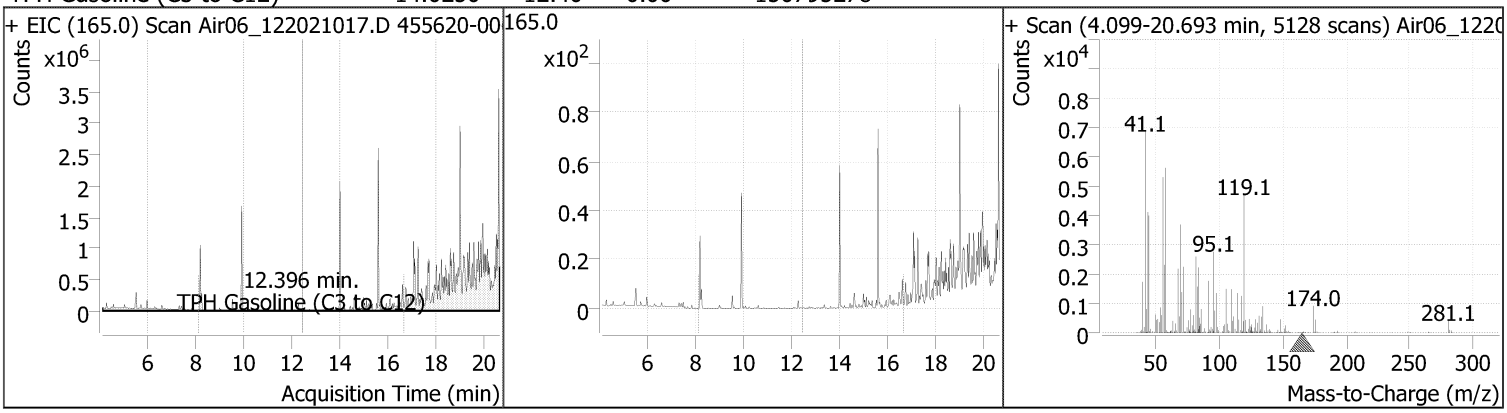
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	0.0021	12.13	0.13	107	83.0		71.0	106.6
					61.0		69.2	103.9
					99.0		49.9	74.9
					85.0		46.4	69.6
					132.0		6.5	9.7



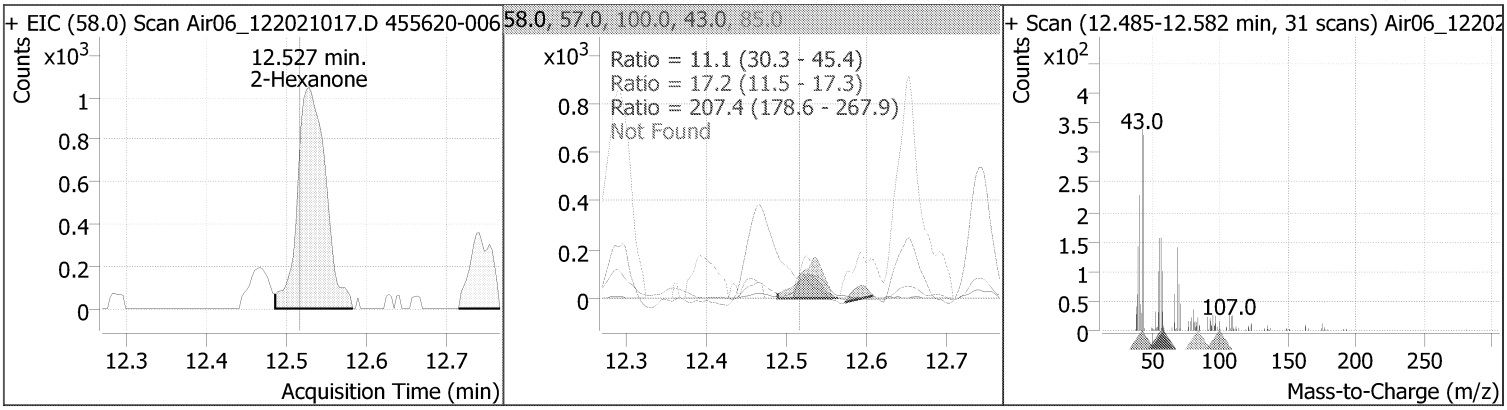
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.5583	12.28	0.00	82874	92.0	56.9	46.0	68.9
					65.0	13.2	11.3	17.0
					51.0	8.8	8.6	12.8



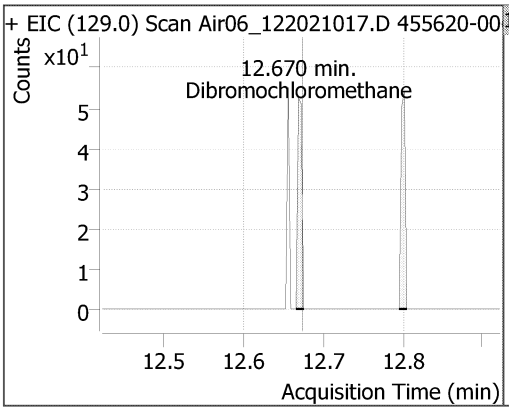
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	14.0250	12.40	0.00	150795278				

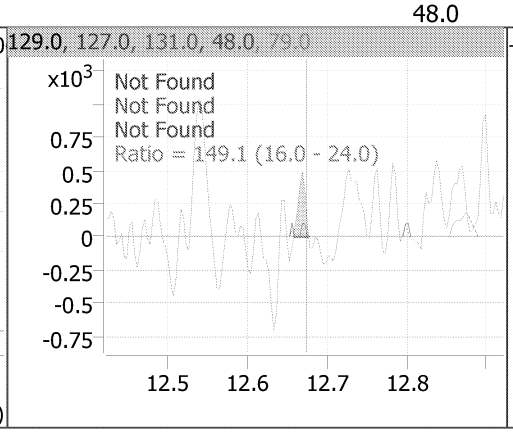


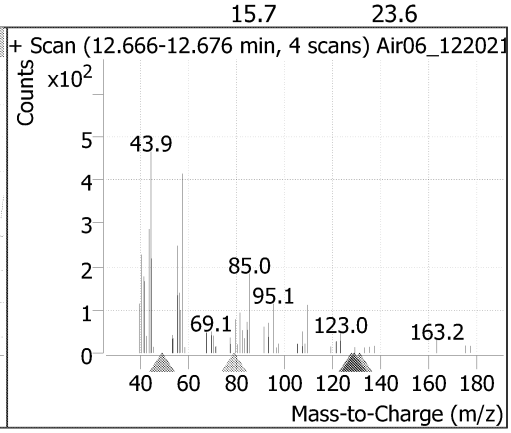
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.0451	12.53	0.01	2591	43.0	207.4	178.6	267.9
					57.0	11.1	30.3	45.4
					100.0	17.2	11.5	17.3
					85.0		10.6	15.9



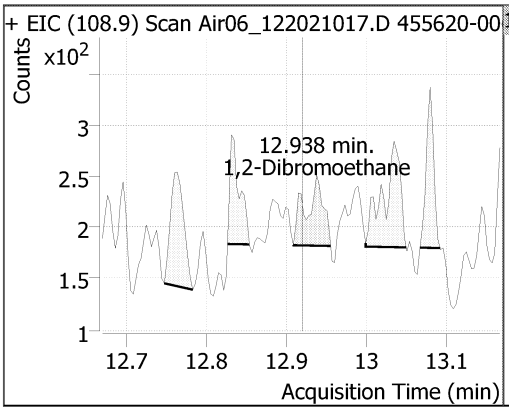
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.0002	12.67	0.00	20	127.0		61.8	92.7
					131.0		19.2	28.8
					79.0	149.1	16.0	24.0
					48.0		15.7	23.6

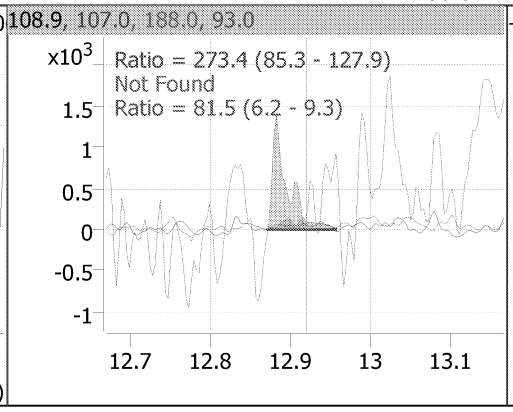


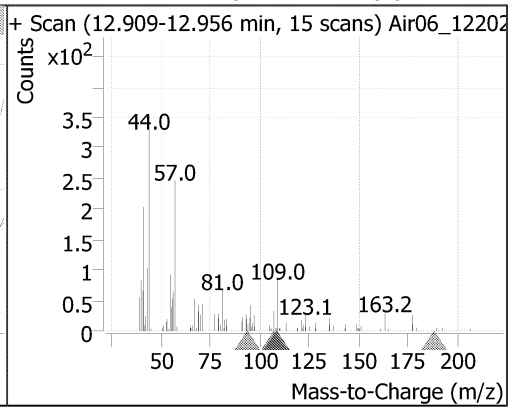




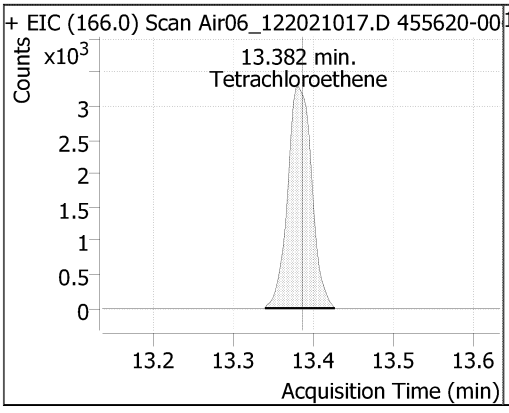
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.0013	12.94	0.02	103	107.0	273.4	85.3	127.9
					93.0	81.5	6.2	9.3
					188.0		3.7	5.5

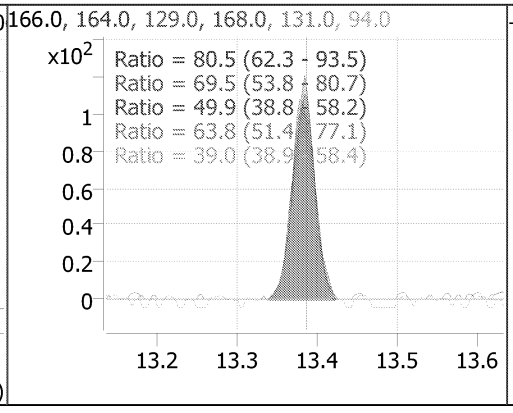


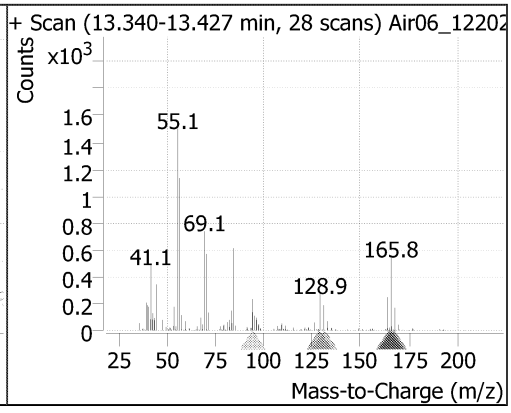




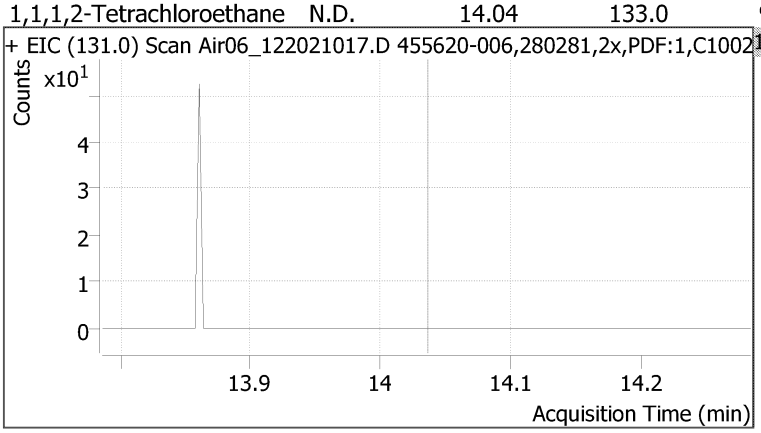
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.0796	13.38	0.00	6935	164.0	80.5	62.3	93.5
					129.0	69.5	53.8	80.7
					131.0	63.8	51.4	77.1
					94.0	39.0	38.9	58.4
					168.0	49.9	38.8	58.2

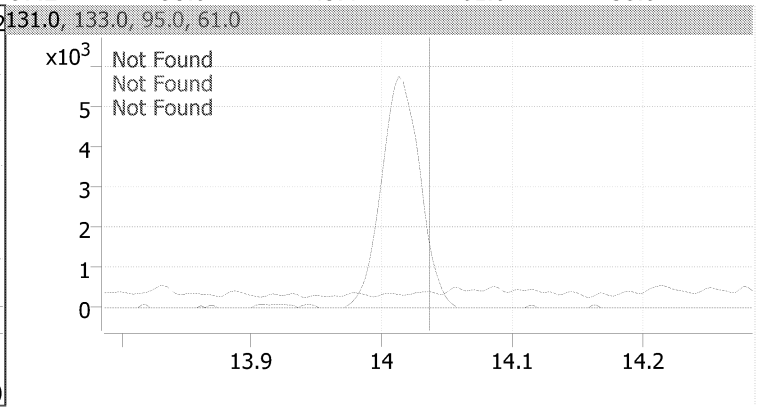




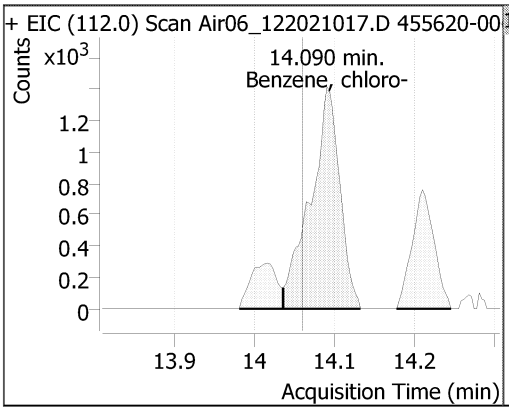


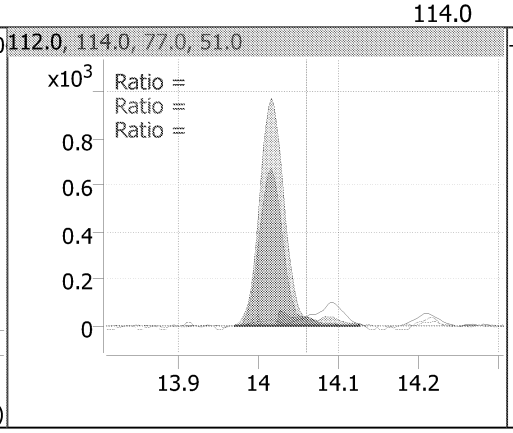
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1,2-Tetrachloroethane	N.D.	14.04	133.0	97.2	95.0	45.4	61.0	38.0

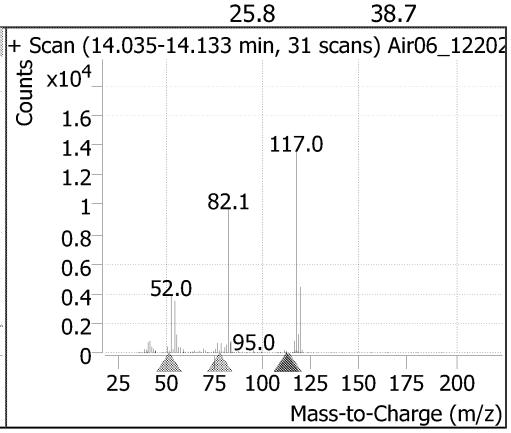




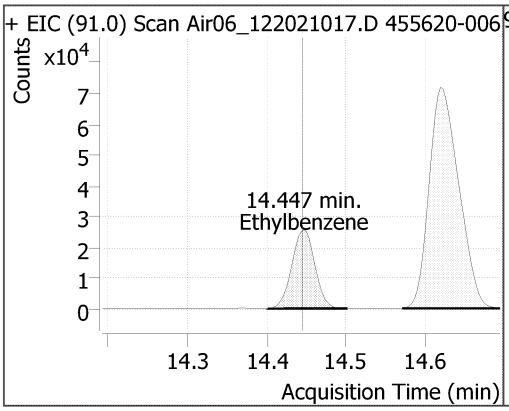
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0337	14.09	0.03	3635	77.0		53.0	79.5
					51.0		28.8	43.2
					114.0		25.8	38.7

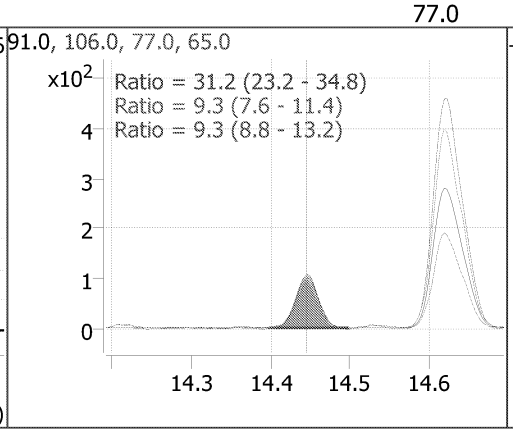


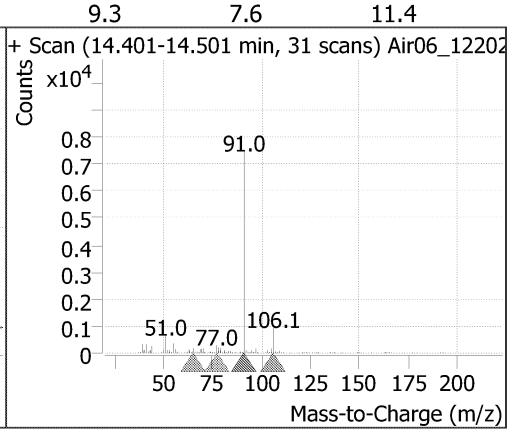




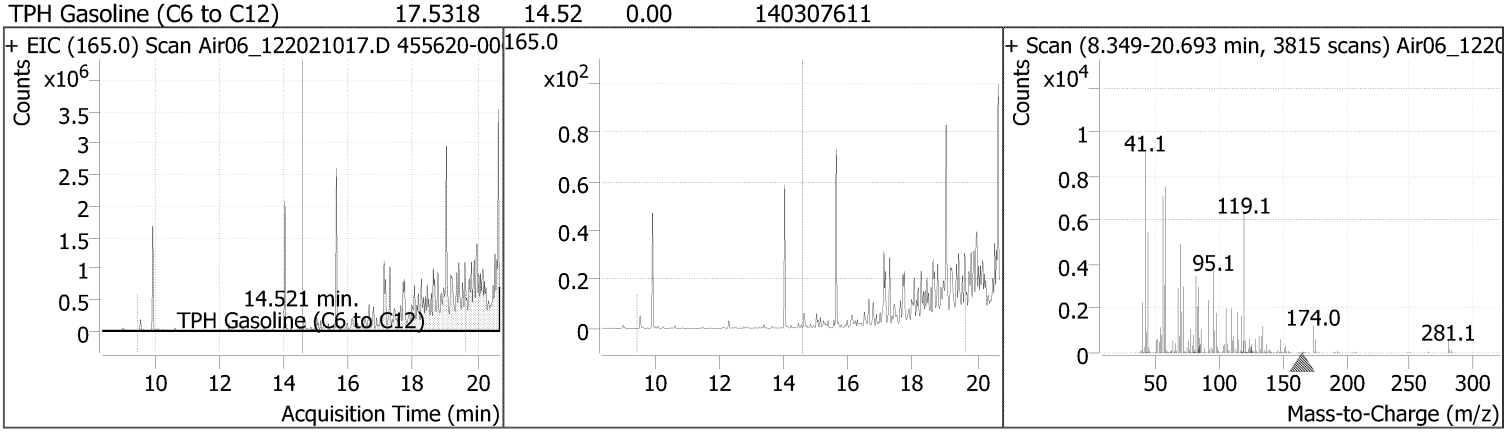
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.2942	14.45	0.00	51241	106.0	31.2	23.2	34.8
					65.0	9.3	8.8	13.2
					77.0	9.3	7.6	11.4



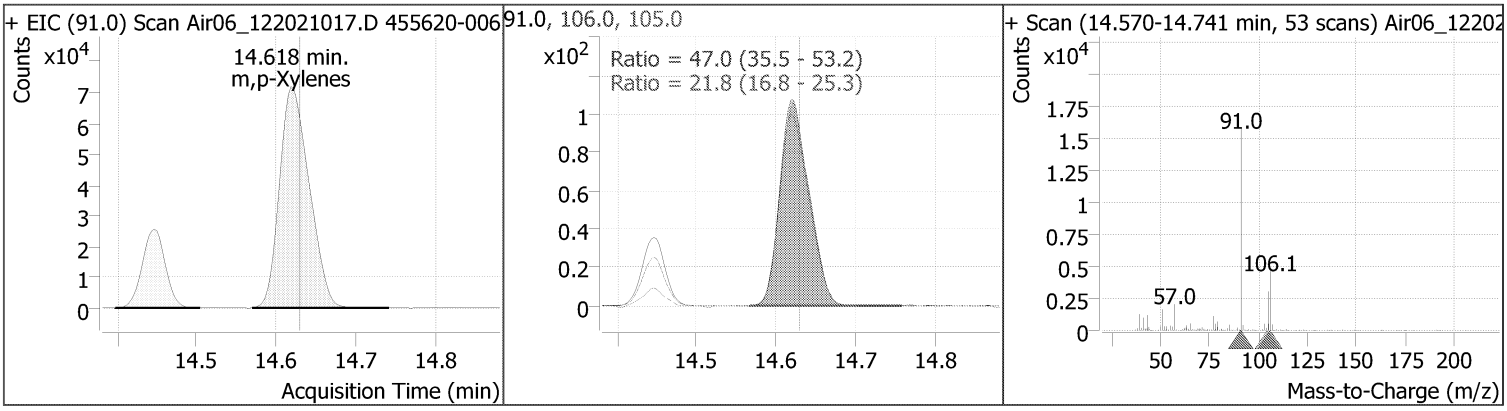




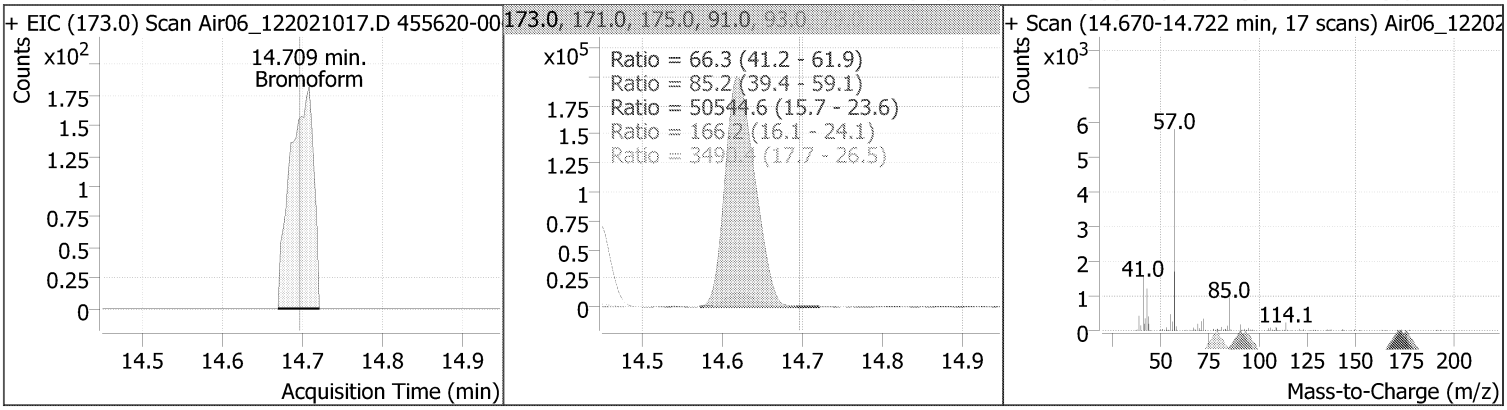
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	17.5318	14.52	0.00	140307611				



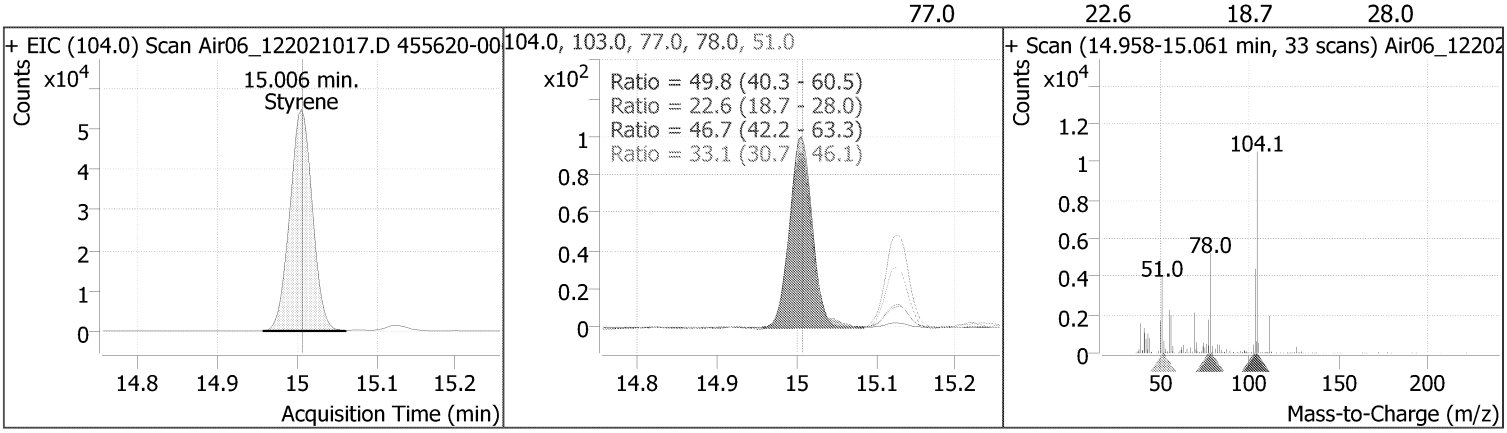
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	1.2667	14.62	-0.02	186133	106.0	47.0	35.5	53.2
					105.0	21.8	16.8	25.3



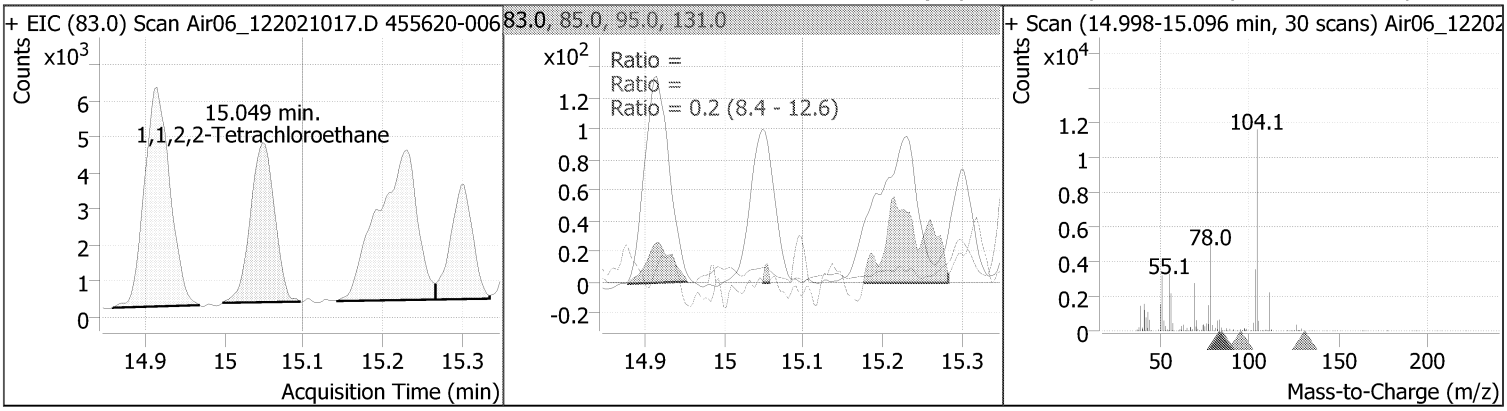
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.0032	14.71	0.01	366	171.0	66.3	41.2	61.9
					175.0	85.2	39.4	59.1
					79.0	3490.4	17.7	26.5
					93.0	166.2	16.1	24.1
					91.0	50544.6	15.7	23.6



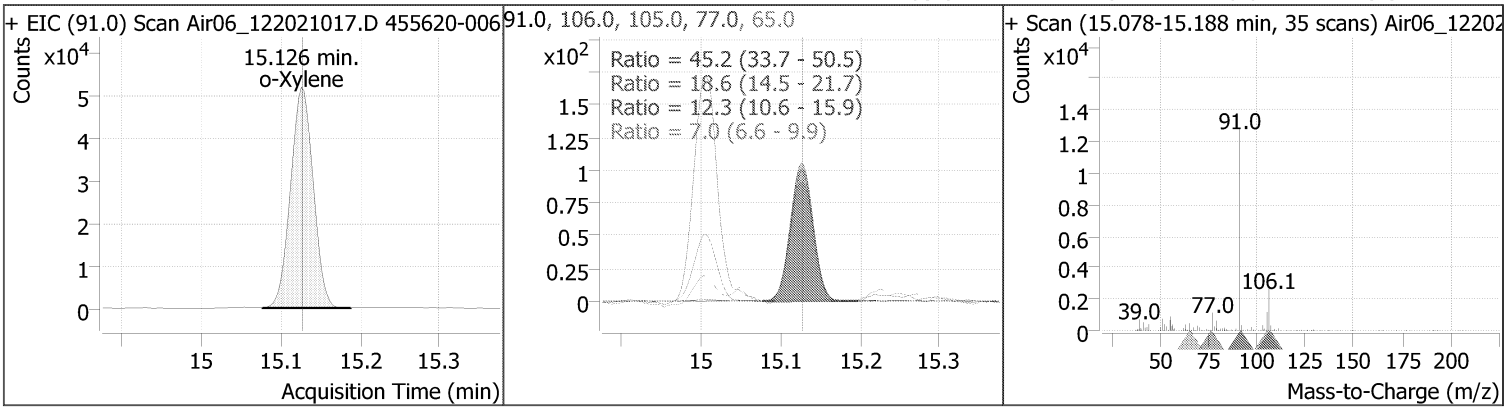
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	1.1024	15.01	0.00	108521	78.0	46.7	42.2	63.3
					103.0	49.8	40.3	60.5
					51.0	33.1	30.7	46.1
					77.0	22.6	18.7	28.0



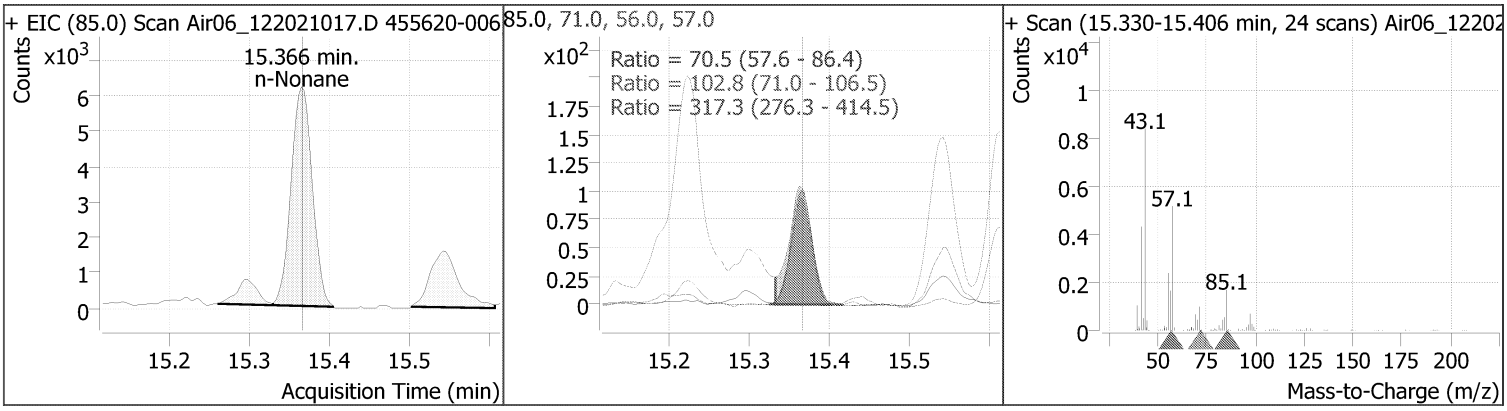
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.0889	15.05	-0.05	9374	85.0		52.0	78.0
					95.0		16.0	24.0
					131.0	0.2	8.4	12.6



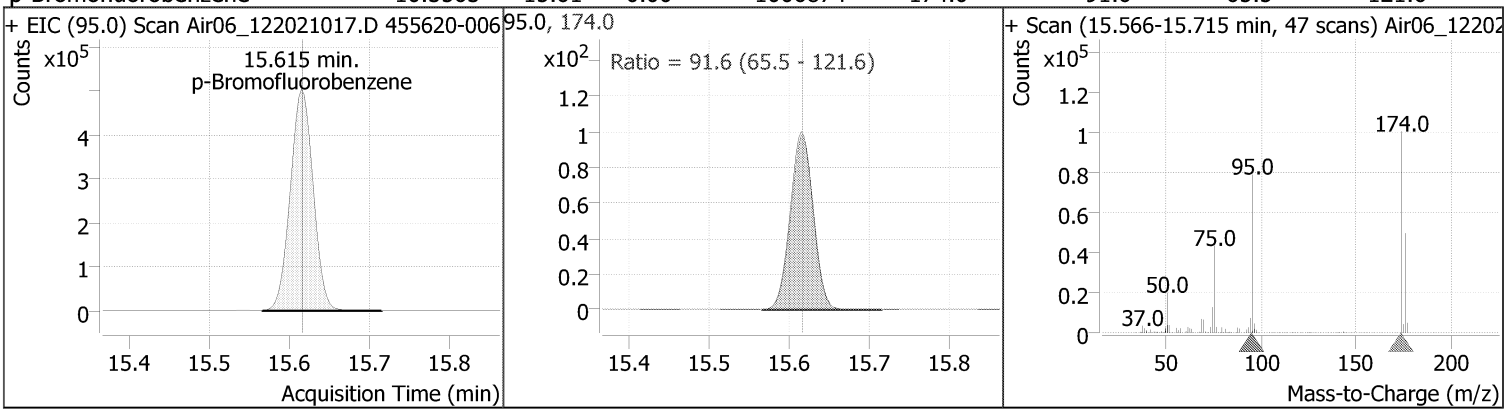
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.6691	15.13	0.00	102056	106.0	45.2	33.7	50.5
					105.0	18.6	14.5	21.7
					77.0	12.3	10.6	15.9
					65.0	7.0	6.6	9.9



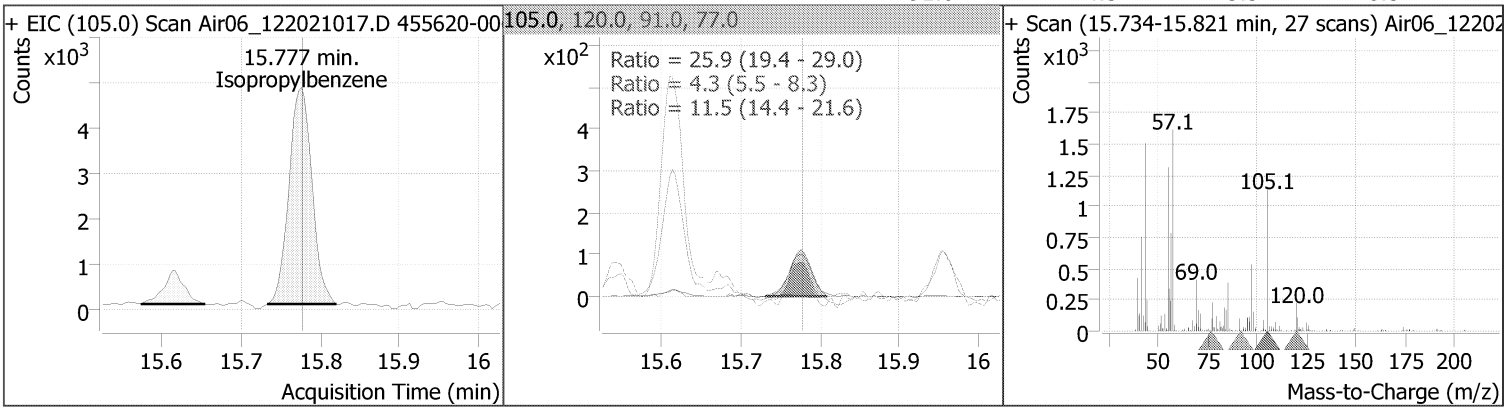
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	0.3688	15.37	0.00	11473	57.0	317.3	276.3	414.5
					56.0	102.8	71.0	106.5
					71.0	70.5	57.6	86.4



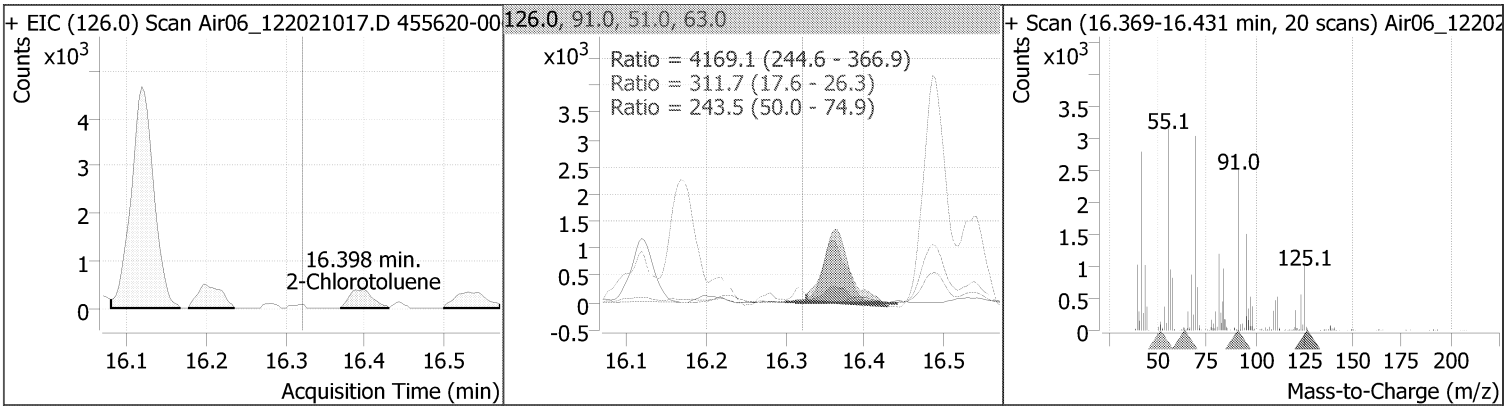
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.3563	15.61	0.00	1006874	174.0	91.6	65.5	121.6



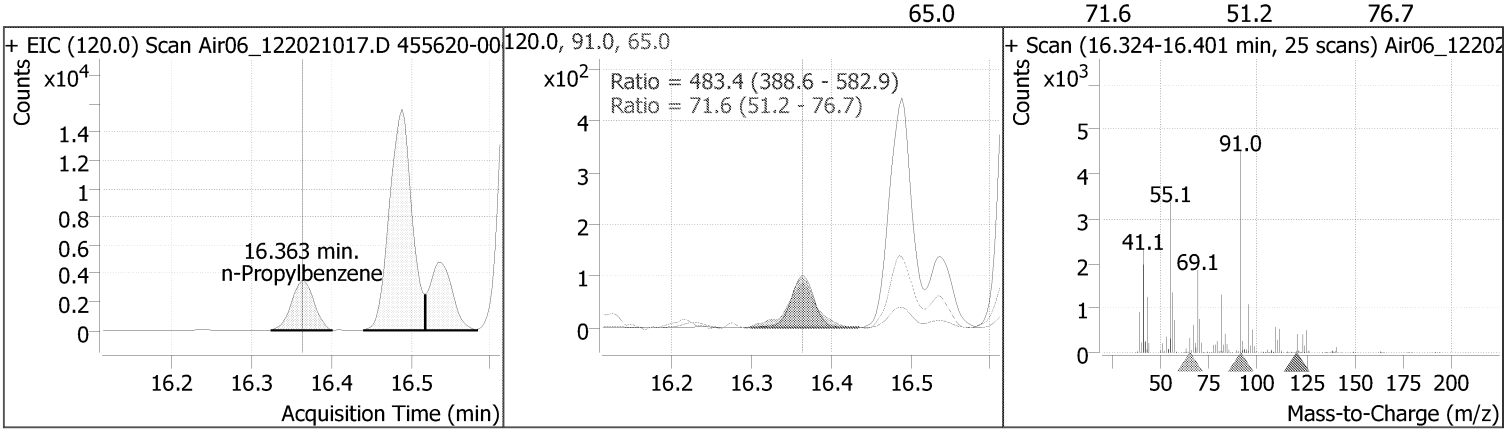
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.0467	15.78	0.00	9670	120.0	25.9	19.4	29.0
					77.0	11.5	14.4	21.6
					91.0	4.3	5.5	8.3



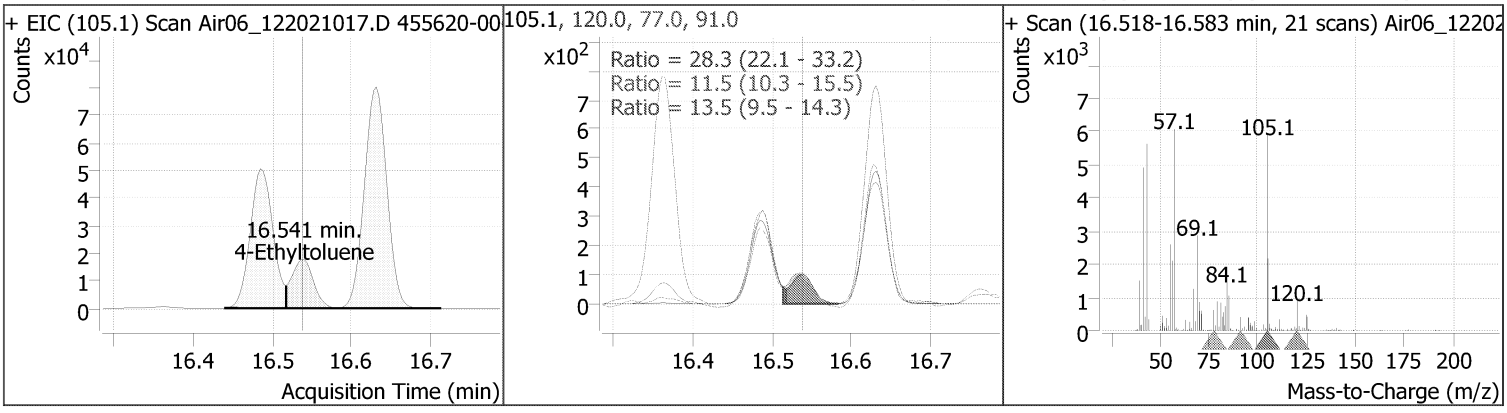
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	0.0176	16.40	0.07	812	91.0	4169.1	244.6	366.9
					63.0	243.5	50.0	74.9
					51.0	311.7	17.6	26.3



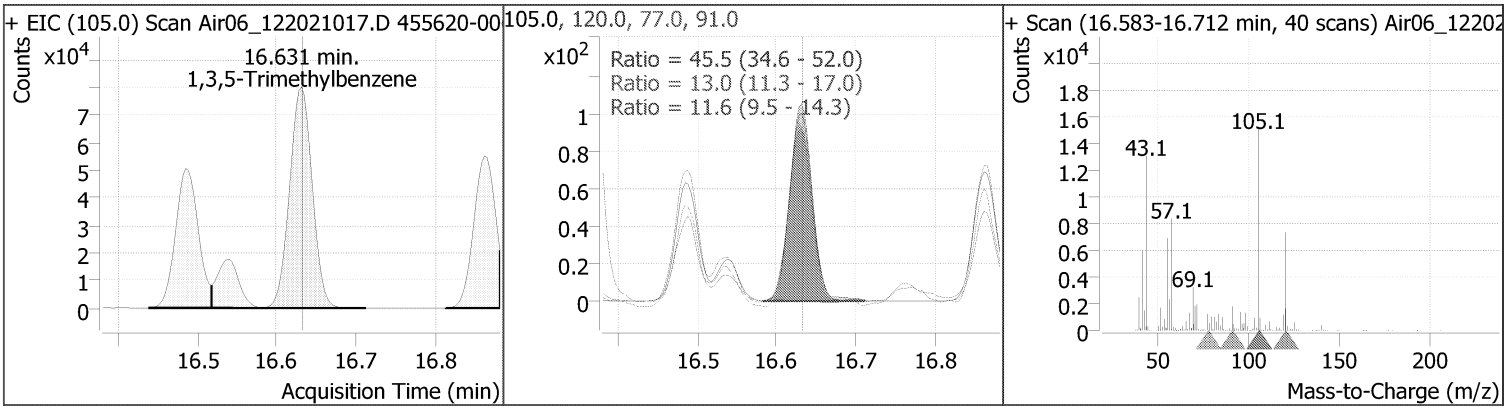
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.1345	16.36	0.00	7014	91.0	483.4	388.6	582.9
					65.0	71.6	51.2	76.7



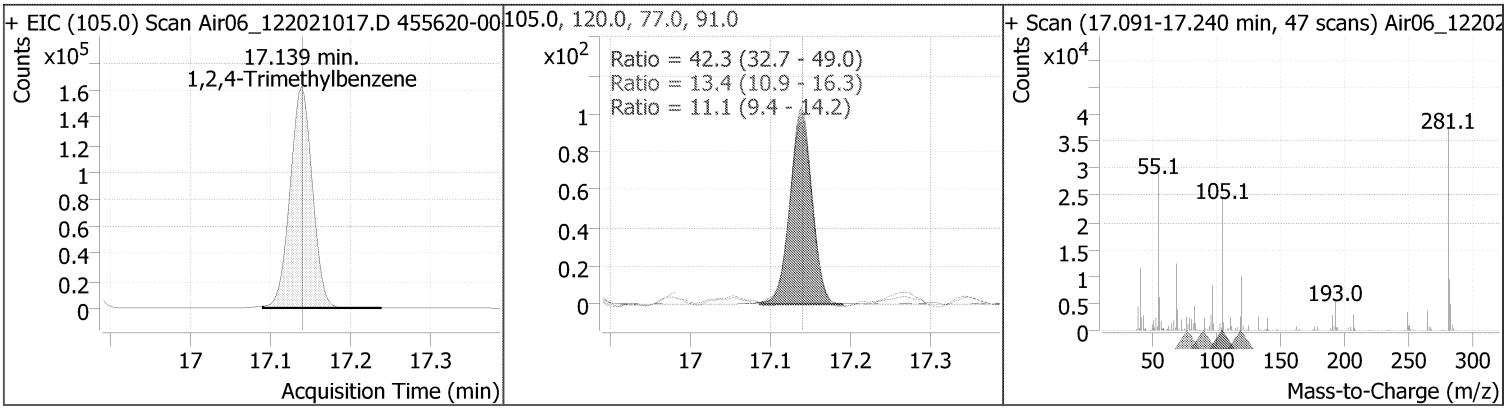
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.1707	16.54	0.00	33556	120.0	28.3	22.1	33.2
					77.0	11.5	10.3	15.5
					91.0	13.5	9.5	14.3



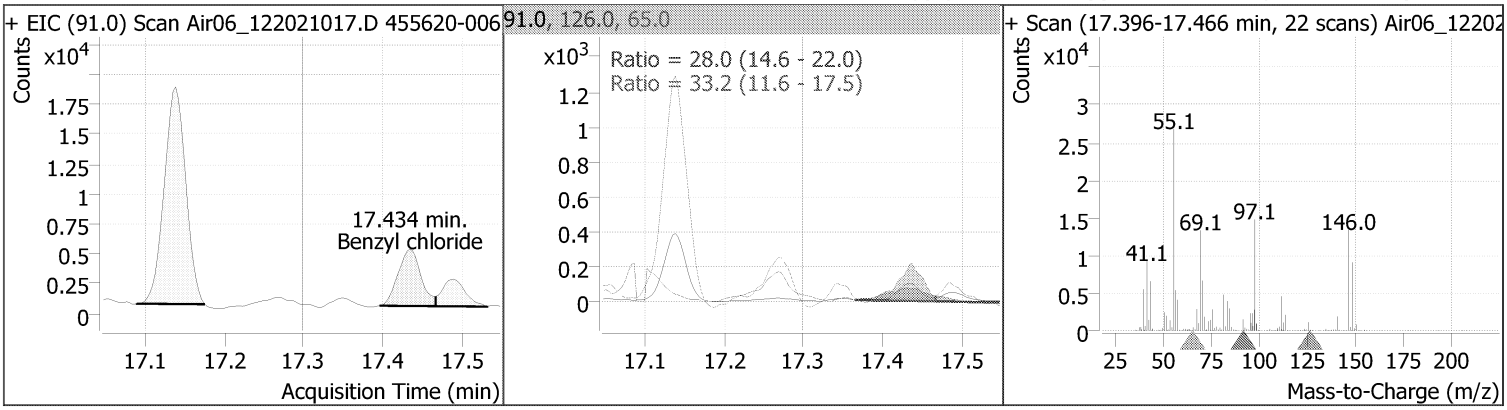
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.8820	16.63	0.00	157869	120.0	45.5	34.6	52.0
					77.0	13.0	11.3	17.0
					91.0	11.6	9.5	14.3



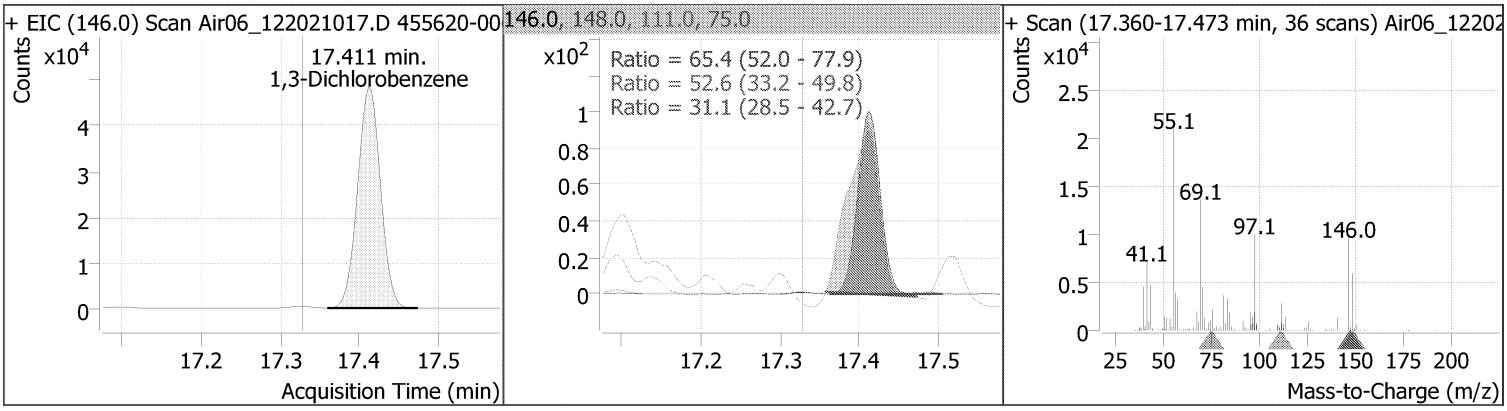
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	1.8959	17.14	0.00	317392	120.0	42.3	32.7	49.0
					77.0	13.4	10.9	16.3
					91.0	11.1	9.4	14.2



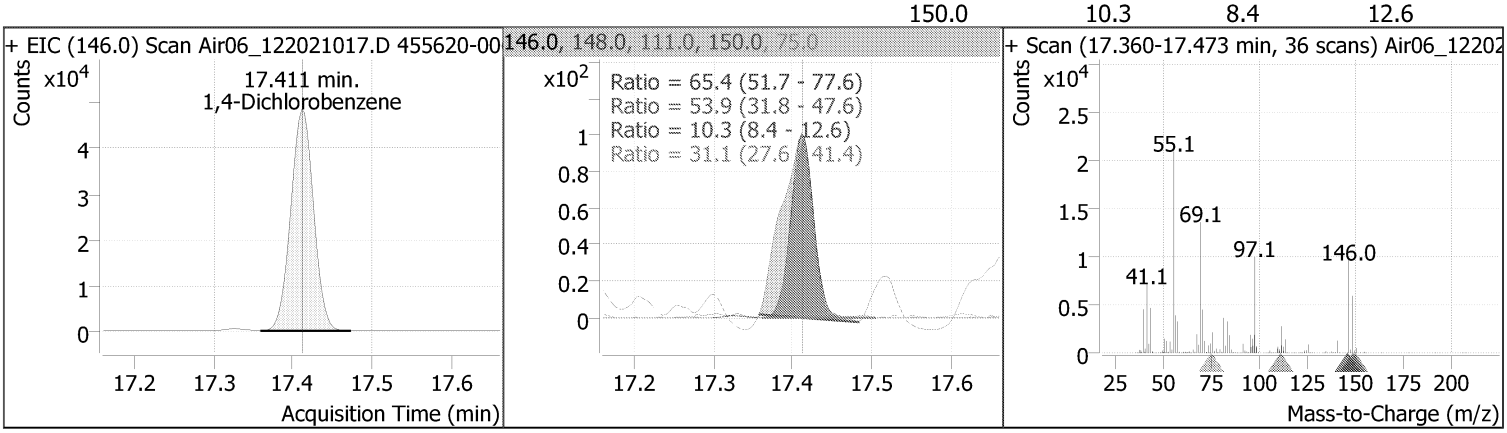
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.0659	17.43	0.13	9517	126.0	28.0	14.6	22.0
					65.0	33.2	11.6	17.5



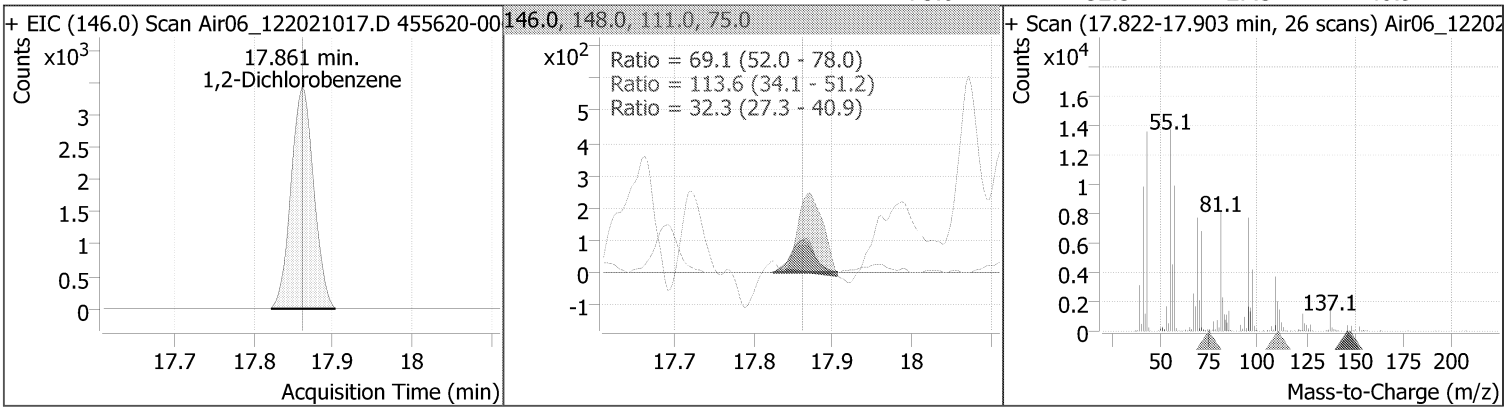
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.8391	17.41	0.08	97165	148.0	65.4	52.0	77.9
					111.0	52.6	33.2	49.8
					75.0	31.1	28.5	42.7



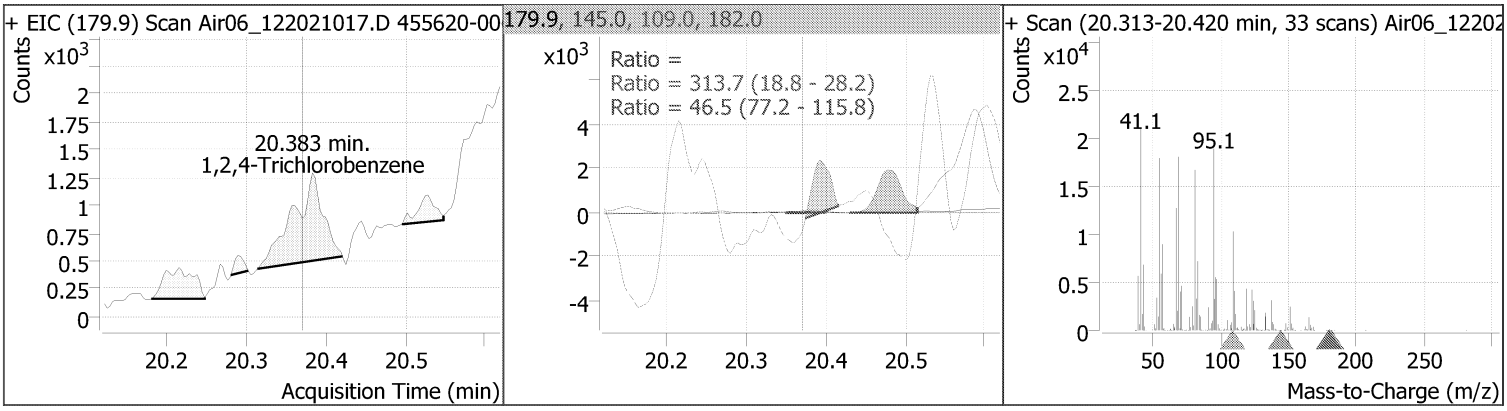
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.8502	17.41	0.00	97165	148.0	65.4	51.7	77.6
					111.0	53.9	31.8	47.6
					75.0	31.1	27.6	41.4
					150.0	10.3	8.4	12.6



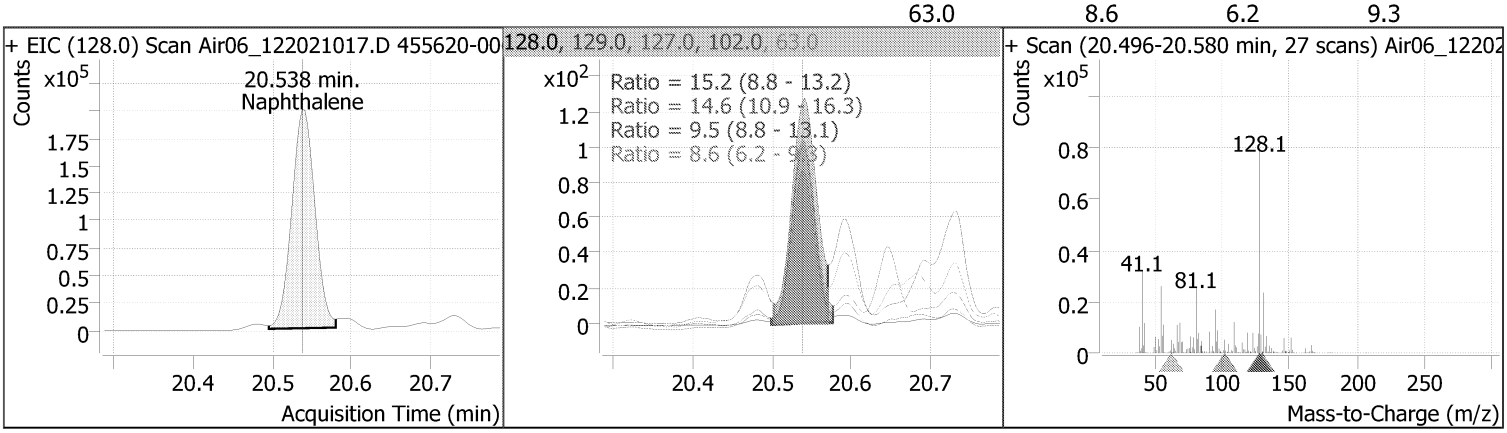
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.0612	17.86	0.00	6828	148.0	69.1	52.0	78.0
					111.0	113.6	34.1	51.2
					75.0	32.3	27.3	40.9



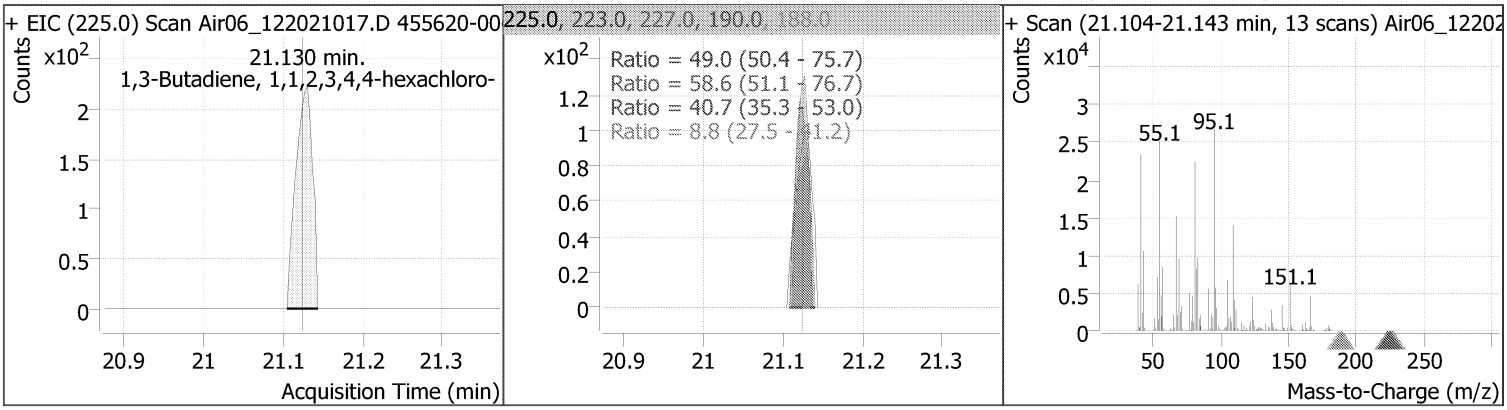
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.0265	20.38	0.01	2102	182.0	46.5	77.2	115.8
					145.0		22.3	33.5
					109.0	313.7	18.8	28.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	3.2802	20.54	0.00	404349	127.0	14.6	10.9	16.3
					129.0	15.2	8.8	13.2
					102.0	9.5	8.8	13.1
					63.0	8.6	6.2	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.0025	21.13	0.00	325	227.0	58.6	51.1	76.7
					223.0	49.0	50.4	75.7
					190.0	40.7	35.3	53.0
					188.0	8.8	27.5	41.2



Library Search Results - NonTarget Hits with Details

Agilent Technologies

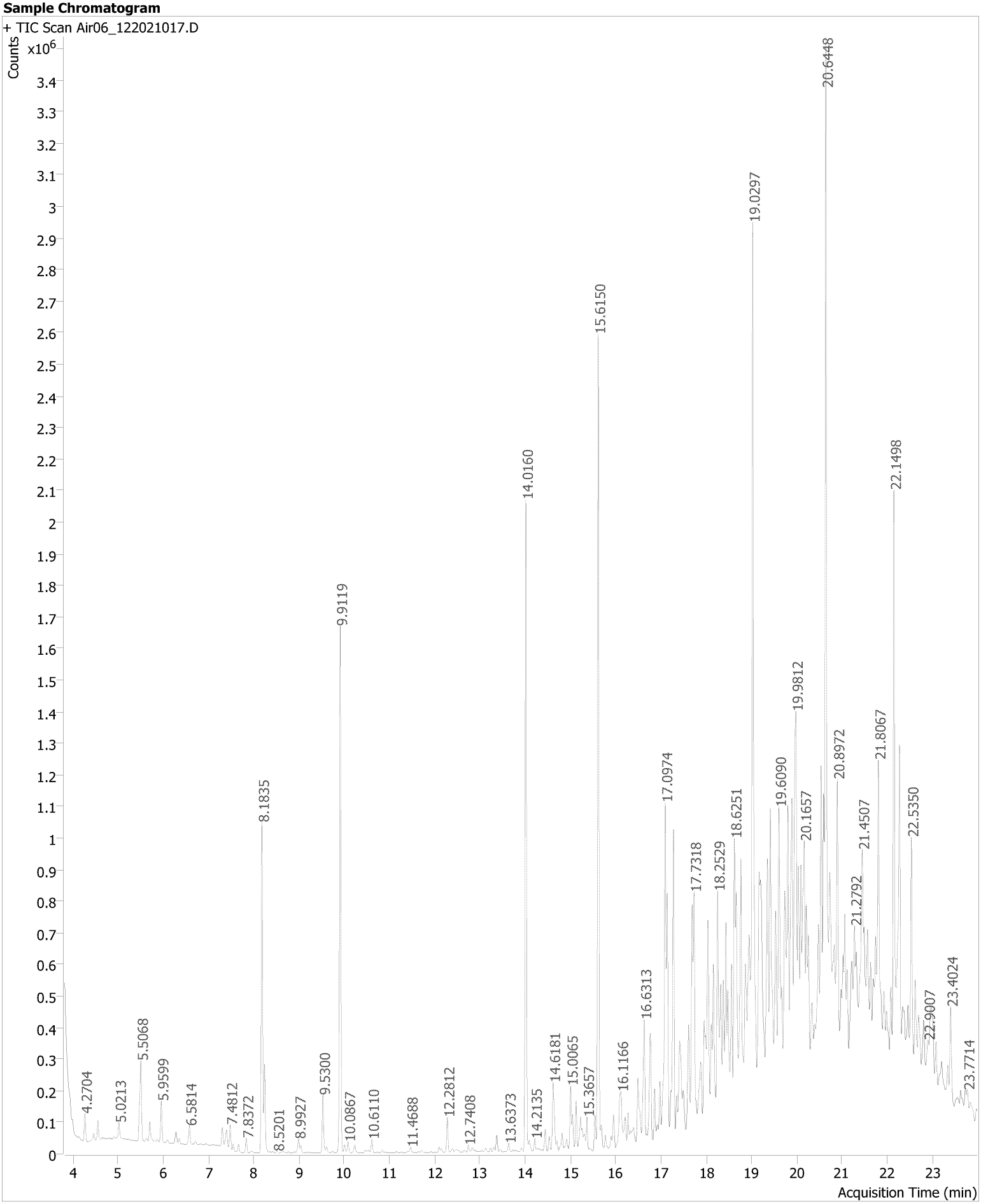
Batch Path	D:\MassHunter\GCMS\1\data\2021\122021		
Analysis File Name	122021_1.uaf		
Analyst Name	003AIRMS06	**Analysis Time**	1/4/2022 11:18:48 AM
File Name	Air06_122021017.D	**Path Name**	D:\MassHunter\GCMS\1\data\2021\122021
Sample Name	455620-006,280281,2x,PDF:1,C10024	**Type**	Sample
Acq. Method File	TO15_Acq_013120_1	**Acq. Method Path**	D:\MassHunter\GCMS\1\methods\
Acq. Date-Time	12/21/2021 12:36:20 AM	**Acq. Operator**	ZNZ/DJL/LJB
Instrument Name	Air-MS-06	**Dil.**	1

Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
4.2704	Cyclobutanol	2919-23-5	C4H8O	168458.1	89.2	0.7487
4.4678	2-Butene	107-01-7	C4H8	80038.6	87.4	0.3557
4.5584	Butane	106-97-8	C4H10	119745.5	98.0	0.5322
4.9242	Ethyl Chloride	75-00-3	C2H5Cl	11391.3	90.4	0.05063
5.0213	Dimethyl ether	115-10-6	C2H6O	137054.7	87.4	0.6091
5.5068	Butane, 2-methyl-	78-78-4	C5H12	714374.7	96.8	3.175
5.6330	Trichloromonofluoromethane	75-69-4	CCl3F	21510.5	96.7	0.0956
5.7042	Isopropyl Alcohol	67-63-0	C3H8O	152471.6	98.3	0.6776
5.8693	Cyclopropane, 1,1-dimethyl-	1630-94-0	C5H10	21386.9	94.8	0.09505
5.9599	Pentane	109-66-0	C5H12	272088.6	98.9	1.209
6.0991	Cyclopropane, 1,1-dimethyl-	1630-94-0	C5H10	17148.8	96.8	0.07621
6.3548	Cyclopropane, 1,1-dimethyl-	1630-94-0	C5H10	26521.0	96.3	0.1179
6.5814	Carbon disulfide	75-15-0	CS2	133634.1	97.6	0.5939
6.7108	Butane, 2,2-dimethyl-	75-83-2	C6H14	23659.5	85.5	0.1051
7.3064	Silanol, trimethyl-	1066-40-6	C3H10OSi	121580.9	98.3	0.5403
7.4002	Butane, 2,3-dimethyl-	79-29-8	C6H14	129042.8	83.3	0.5735
7.4812	Pentane, 2-methyl-	107-83-5	C6H14	167354.7	97.2	0.7438
7.5491	Butanal	123-72-8	C4H8O	41349.8	97.7	0.1838
7.6657	2-Butanone	78-93-3	C4H8O	52603.0	95.9	0.2338
7.8372	Pentane, 3-methyl-	96-14-0	C6H14	95624.4	98.3	0.425
7.9472	1-Pentene, 2-methyl-	763-29-1	C6H12	14089.6	93.4	0.06262
8.1835	Methane, bromochloro-	74-97-5	CH2BrCl	2250118.1	98.9	10
8.2418	Ethyl Acetate	141-78-6	C4H8O2	612605.1	92.6	2.723
8.5201	2-Pentene, 3-methyl-, (Z)-	922-62-3	C6H12	11847.7	73.4	0.05265
8.6464	1-Propanol, 2-methyl-	78-83-1	C4H10O	20496.2	88.6	0.09109
8.9927	Cyclopentane, methyl-	96-37-7	C6H12	111757.7	97.0	0.4967
9.0445	Acetyl valeryl	96-04-8	C7H12O2	47954.1	84.4	0.2131
9.5300	1-Butanol	71-36-3	C4H10O	395933.1	98.8	1.151
9.6141	Benzene	71-43-2	C6H6	48560.8	96.5	0.1411
9.9119	Benzene, 1,4-difluoro-	540-36-3	C6H4F2	3441030.2	99.6	10
10.0058	Hexane, 2-methyl-	591-76-4	C7H16	56685.9	94.2	0.1647
10.0867	Pentane, 2,3-dimethyl-	565-59-3	C7H16	77780.1	97.1	0.226
10.2356	Hexane, 3-methyl-	589-34-4	C7H16	63547.9	95.8	0.1847
10.4622	Cyclopentane, 1,3-dimethyl-	2453-00-1	C7H14	15338.1	90.0	0.04457
10.5334	Cyclopentane, 1,3-dimethyl-, cis-	2532-58-3	C7H14	26901.9	82.7	0.07818
10.6110	Pentane, 2,2,4-trimethyl-	540-84-1	C8H18	96884.1	92.1	0.2816
10.8408	Heptane	142-82-5	C7H16	19493.9	86.3	0.05665
11.4688	Cyclohexane, methyl-	108-87-2	C7H14	51856.7	91.5	0.1507
11.7180	2,4,6,8-Tetramethyl-1-undecene	59920-26-2	C15H30	16027.3	83.5	0.04658
12.0967	1-Pentanol	71-41-0	C5H12O	34199.4	89.8	0.08083
12.1485	Pentane, 2,3,4-trimethyl-	565-75-3	C8H18	29026.1	70.0	0.0686
12.2812	1,3,5-Cycloheptatriene	544-25-2	C7H8	226893.3	96.1	0.5363
12.3945	Cyclopentanone	120-92-3	C5H8O	32558.4	86.2	0.07695
12.4657	Heptane, 3-bromo-	1974-05-6	C7H15Br	36916.4	79.7	0.08725
12.6502	Heptane, 3,4,5-trimethyl-	20278-89-1	C10H22	8487.6	79.2	0.02006
12.7408	Hexanal	66-25-1	C6H12O	42185.7	90.2	0.0997
12.8282	Cyclohexane, 1,3-dimethyl-, cis-	638-04-0	C8H16	28122.9	84.2	0.06647
13.1292	Acetic acid, hexyl ester	142-92-7	C8H16O2	24532.9	72.4	0.05798
13.2360	Octane	111-65-9	C8H18	20070.8	90.4	0.04744
13.3104	Cyclohexane, 1,2-dimethyl- (cis/trans)	583-57-3	C8H16	27789.5	89.2	0.06568
13.4561	Cyclohexanemethanol, 2-methyl-	2105-40-0	C8H16O	13195.0	74.8	0.03119
13.6373	Cyclotrisiloxane, hexamethyl-	541-05-9	C6H18O3Si3	57078.4	95.2	0.1349
13.9157	Heptane, 2,6-dimethyl-	1072-05-5	C9H20	24851.2	80.6	0.05874
14.0160	Chlorobenzene-d5	3114-55-4	C6D5Cl	4231056.8	95.8	10
14.0905	Cyclohexane, ethyl-	1678-91-7	C8H16	92317.8	84.3	0.2182
14.2135	Cyclohexane, 1,1,3-trimethyl-	3073-66-3	C9H18	73892.4	94.5	0.1746
14.4433	Ethylbenzene	100-41-4	C8H10	123256.5	94.3	0.2913
14.5307	Cyclohexane, 1,2,4-trimethyl-	2234-75-5	C9H18	71375.4	91.0	0.1687
14.6181	Benzene, 1,3-dimethyl-	108-38-3	C8H10	579039.7	98.9	1.369

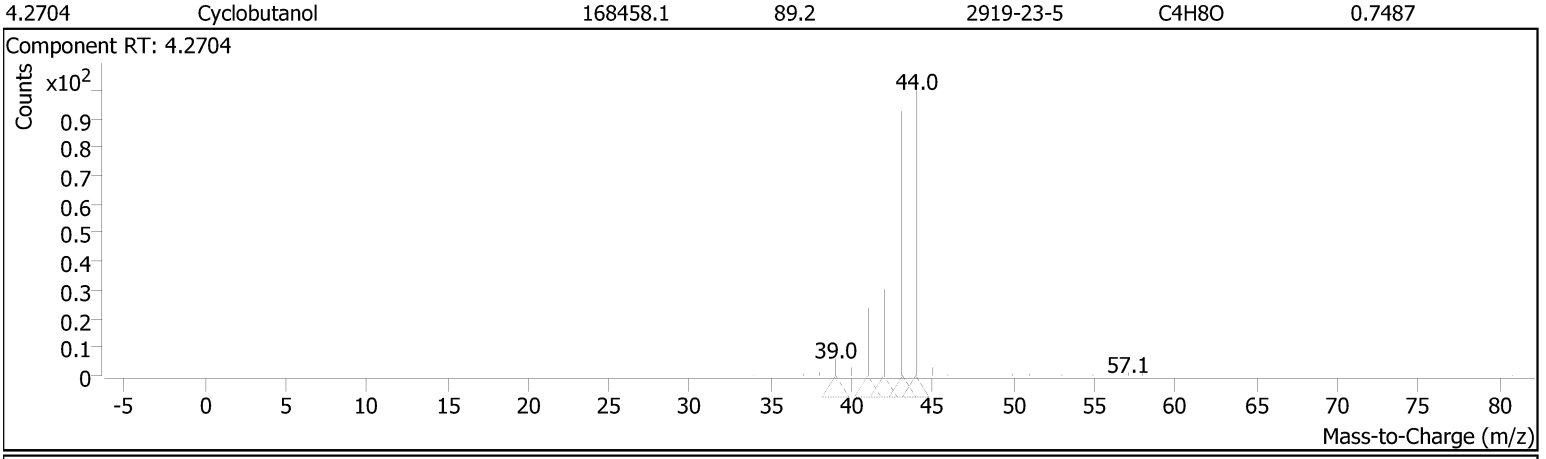
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
14.7022	3-Heptanone	106-35-4	C7H14O	33402.2	80.0	0.07895
14.8187	Heptane, 4-(1-methylethyl)-	52896-87-4	C10H22	85811.7	82.8	0.2028
14.9158	Cyclopentane, 1,2,3,4,5-pentamethyl-	1000152-79-7	C10H20	37066.8	81.4	0.08761
15.0065	Styrene	100-42-5	C8H8	383569.7	98.0	0.9066
15.0485	Cyclohexane, 1,2,3-trimethyl-, (1.alpha.,2.beta.,3.alpha.)-	1678-81-5	C9H18	171329.0	93.7	0.4049
15.1262	o-Xylene	95-47-6	C8H10	255416.6	97.1	0.6037
15.2266	Cyclohexane, 1,1,2-trimethyl-	7094-26-0	C9H18	206239.0	93.5	0.4874
15.2622	1-Ethyl-4-methylcyclohexane	3728-56-1	C9H18	84898.7	74.9	0.2007
15.3010	Cyclopentane, 1,2,3,4,5-pentamethyl-	1000152-79-7	C10H20	76473.5	80.3	0.1807
15.3657	Nonane	111-84-2	C9H20	137932.7	93.0	0.326
15.4337	9,12-Tetradecadien-1-ol, acetate, (Z,E)-	31654-77-0	C16H28O2	9559.1	72.3	0.02259
15.5438	3-Octene, 4-ethyl-	53966-51-1	C10H20	152701.2	91.9	0.3609
15.6150	Benzene, 1-bromo-3-fluoro-	1073-06-9	C6H4BrF	4965399.1	98.7	11.74
15.6829	2-Hexene, 3,4,4-trimethyl-	53941-19-8	C9H18	16382.6	76.1	0.03872
15.7736	Hydratropic acid, isohexyl ester	1000415-06-2	C15H22O2	62897.7	71.7	0.1487
15.9030	Octane, 2,5-dimethyl-	15869-89-3	C10H22	72473.2	87.3	0.1713
15.9548	1H-Indene, octahydro-, cis-	4551-51-3	C9H16	143311.9	91.1	0.3387
16.1166	Cyclohexane, (2-methylpropyl)-	1678-98-4	C10H20	717076.5	90.8	1.695
16.2105	Cyclohexane, 1,1,4,4-tetramethyl-	2223-52-1	C10H20	206361.1	84.4	0.4877
16.2720	Heptane, 3-ethyl-2-methyl-	14676-29-0	C10H22	146317.2	94.0	0.3458
16.3238	6,6-Dimethylhepta-2,4-diene	1000195-03-3	C9H16	51832.9	78.8	0.1225
16.3950	Cyclohexanemethanol, 4-(1-methylethyl)-, cis-	13828-37-0	C10H20O	84697.9	72.5	0.2002
16.4921	Benzene, 1-ethyl-2-methyl-	611-14-3	C9H12	497895.1	80.8	1.177
16.6313	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	860841.5	85.3	2.035
16.7640	Cyclohexane, 1,1,2,3-tetramethyl-	6783-92-2	C10H20	729391.3	93.9	1.724
16.8643	Benzene, 1-ethyl-2-methyl-	611-14-3	C9H12	193955.6	89.4	0.4584
16.9776	9-Octadecyne	35365-59-4	C18H34	197372.6	85.1	0.4665
17.0974	Cyclotetrasiloxane, octamethyl-	556-67-2	C8H24O4Si4	2364980.7	94.7	5.59
17.1394	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	1433622.0	84.6	3.388
17.2786	Decane	124-18-5	C10H22	1970284.8	92.7	4.657
17.3498	5-t-Butyl-cycloheptene	1000189-30-7	C11H20	62396.2	79.3	0.1475
17.4146	Benzene, 1,3-dichloro-	541-73-1	C6H4Cl2	696270.2	88.0	1.646
17.6120	p-Cymene	99-87-6	C10H14	515236.6	75.1	1.218
17.6897	Mesitylene	108-67-8	C9H12	1389616.2	85.6	3.284
17.7318	Nonane, 2,6-dimethyl-	17302-28-2	C11H24	1297727.8	97.2	3.067
17.8806	cis-Decalin, 2-syn-methyl-	1000155-85-6	C11H20	439040.3	86.2	1.038
17.9551	Decyl isobutyl carbonate	959226-07-4	C15H30O3	724916.8	78.8	1.713
18.0392	Cyclohexane, butyl-	1678-93-9	C10H20	1326890.6	83.0	3.136
18.1137	trans-p-mentha-1(7),8-dien-2-ol	21391-84-4	C10H16O	407633.4	78.6	0.9634
18.1622	Benzene, 1-methyl-2-propyl-	1074-17-5	C10H14	770299.9	87.9	1.821
18.2529	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	1399567.7	93.5	3.308
18.3208	Decane, 5-methyl-	13151-35-4	C11H24	740639.0	84.8	1.75
18.3791	Decane, 4-methyl-	2847-72-5	C11H24	669942.3	86.8	1.583
18.4373	Decane, 2-methyl-	6975-98-0	C11H24	977913.4	90.7	2.311
18.4794	Benzene, 1-methyl-4-propyl-	1074-55-1	C10H14	591316.5	96.9	1.398
18.5603	Decane, 3-methyl-	13151-34-3	C11H24	653568.2	94.0	1.545
18.6251	Cyclohexane, 1-methyl-3-(1-methylethenyl)-, cis-	24399-15-3	C10H18	1549736.9	75.9	3.663
18.6639	Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	C10H14	1239525.5	94.2	2.93
18.7675	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	1772050.9	90.2	4.188
18.8678	1H-Indene, 2,3-dihydro-4-methyl-	824-22-6	C10H12	935484.0	73.4	2.211
18.9520	Cyclopentane, 1,2-dimethyl-3-(1-methylethyl)-	489-20-3	C10H20	1403075.1	86.7	3.316
19.0297	Undecane	1120-21-4	C11H24	6745077.3	95.7	15.94
19.1721	6-Octen-1-yn-3-ol, 3,7-dimethyl-	29171-20-8	C10H16O	1354147.5	79.1	3.2
19.3533	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	1675086.9	86.4	3.959
19.4181	Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	C10H14	2102793.2	88.1	4.97
19.5346	Decane, 3,7-dimethyl-	17312-54-8	C12H26	1059025.7	84.2	2.503
19.6090	Naphthalene, decahydro-2-methyl-	2958-76-1	C11H20	2016138.5	90.0	4.765
19.6673	Benzene, 1,3-diethyl-5-methyl-	2050-24-0	C11H16	323159.4	83.3	0.7638
19.7385	Benzene, 1,3-diethyl-5-methyl-	2050-24-0	C11H16	1416995.1	84.2	3.349
19.8065	Cyclohexane, pentyl-	4292-92-6	C11H22	1758927.7	76.9	4.157
19.8971	Naphthalene, decahydro-2-methyl-	2958-76-1	C11H20	2460848.6	93.1	5.816
19.9812	Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	C10H14	3630724.4	91.5	8.581
20.0363	Benzene, 1-methyl-4-(1-methylpropyl)-	1595-16-0	C11H16	1287751.9	79.1	3.044
20.0913	Undecane, 2-methyl-	7045-71-8	C12H26	1060250.2	93.2	2.506
20.1657	Benzene, (1,2-dimethylpropyl)-	4481-30-5	C11H16	2050721.4	83.2	4.847
20.2143	Undecane, 3-methyl-	1002-43-3	C12H26	833548.1	85.3	1.97
20.2596	Benzene, 1-methyl-4-(1-methylpropyl)-	1595-16-0	C11H16	639572.5	92.5	1.512
20.3405	Cyclohexane, 1-methyl-4-(1-methylbutyl)-	54411-00-6	C12H24	263725.0	81.3	0.6233
20.4053	Benzene, 2,4-dimethyl-1-(1-methylpropyl)-	1483-60-9	C12H18	23938.6	75.6	0.05658

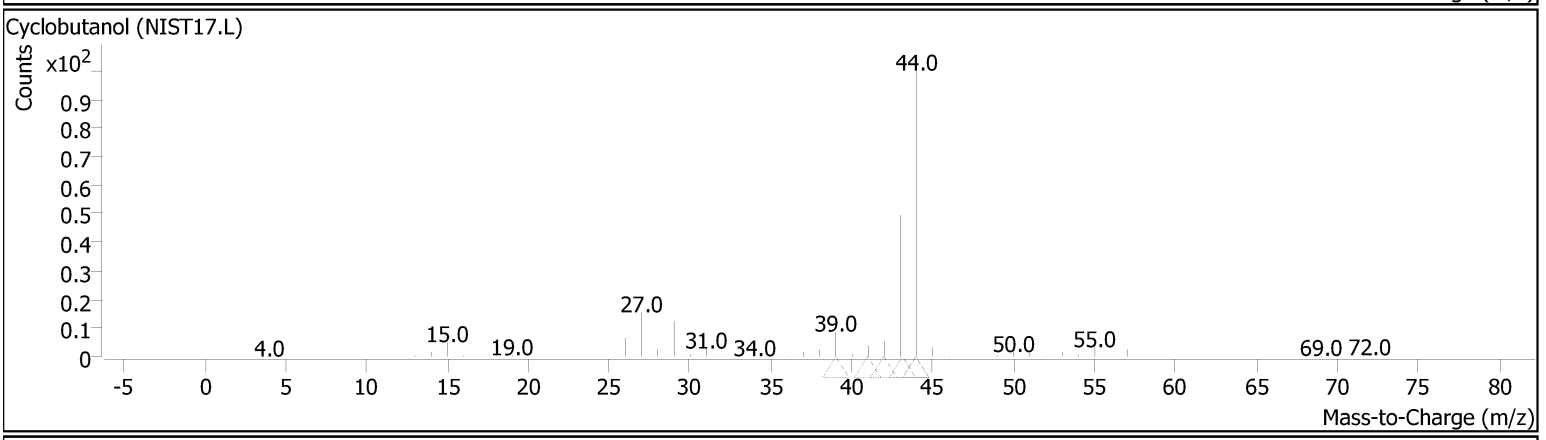
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
20.4797	Benzene, 1-methyl-3-(1-methyl-2-propenyl)-	52161-57-6	C11H14	766483.7	76.6	1.812
20.5380	Azulene	275-51-4	C10H8	1770710.9	72.5	4.185
20.6448	Dodecane	112-40-3	C12H26	6964377.7	91.5	16.46
20.7322	1H-Indene, 2,3-dihydro-1,6-dimethyl-	17059-48-2	C11H14	1527424.6	75.9	3.61
20.8325	Benzene, 1,4-dimethyl-2-(1-methylethyl)-	4132-72-3	C11H16	818175.2	70.1	1.934
20.8972	Undecane, 2,6-dimethyl-	17301-23-4	C13H28	1715256.4	88.7	4.054
21.0235	Benzene, 2,4-dimethyl-1-(1-methylethyl)-	4706-89-2	C11H16	331100.9	76.4	0.7825
21.0623	Naphthalene, 1,2,3,4-tetrahydro-2-methyl-	3877-19-8	C11H14	609595.4	73.1	1.441
21.1141	7,9-Dimethyl-8-nitrobicyclo[4.3.1]decan-10-one	129967-66-4	C12H19NO3	225492.2	71.3	0.5329
21.2792	Benzene, 1-ethyl-4-(1-methylethyl)-	4218-48-8	C11H16	551405.7	78.1	1.303
21.4507	Octanoic acid, cyclohexyl ester	1551-42-4	C14H26O2	1457744.4	70.6	3.445
21.5672	Butyric acid, 2-phenyl-, dec-2-yl ester	1000406-86-4	C20H32O2	430274.8	70.5	1.017
21.6352	Undecane, 2,10-dimethyl-	17301-27-8	C13H28	186219.5	79.1	0.4401
21.7452	Undecane, 3,9-dimethyl-	17301-31-4	C13H28	318814.4	75.7	0.7535
21.8067	Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	1680-51-9	C11H14	1512109.8	75.9	3.574
21.9297	Benzene, 2,4-dimethyl-1-(1-methylpropyl)-	1483-60-9	C12H18	218953.0	78.8	0.5175
21.9880	9-Methyltricyclo[4.2.1.1(2,5)]deca-3,7-diene-9,10-diol	78323-73-6	C11H14O2	63290.1	71.8	0.1496
22.0819	9-Methyltricyclo[4.2.1.1(2,5)]deca-3,7-diene-9,10-diol	78323-73-6	C11H14O2	237585.8	74.6	0.5615
22.1498	Tridecane	629-50-5	C13H28	2684304.5	92.9	6.344
22.2728	Naphthalene, 2-methyl-	91-57-6	C11H10	2171267.6	96.8	5.132
22.5350	Naphthalene, 2-methyl-	91-57-6	C11H10	1287443.4	95.1	3.043
22.6192	Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	13065-07-1	C12H16	439061.2	89.5	1.038
22.6968	Benzene, cyclohexyl-	827-52-1	C12H16	308053.2	79.1	0.7281
22.9007	1H-Indene, 2,3-dihydro-1,1,4,5-tetramethyl-	16204-57-2	C13H18	182636.6	71.6	0.4317
23.0820	Hexadecane, 1-chloro-	4860-03-1	C16H33Cl	203157.2	73.4	0.4802
23.3409	Phytol	150-86-7	C20H40O	146917.7	78.5	0.3472
23.4024	1,3-Cyclododecadiene, (E,Z)-	1129-92-6	C12H20	551818.0	80.2	1.304
23.7714	Naphthalene, 2-ethyl-	939-27-5	C12H12	45920.4	74.9	0.1085
23.8361	2-Pentanone, 4-cyclohexylidene-3,3-diethyl-	313253-65-5	C15H26O	115608.7	71.2	0.2732
23.9786	Naphthalene, 2,7-dimethyl-	582-16-1	C12H12	16183.5	77.3	0.03825

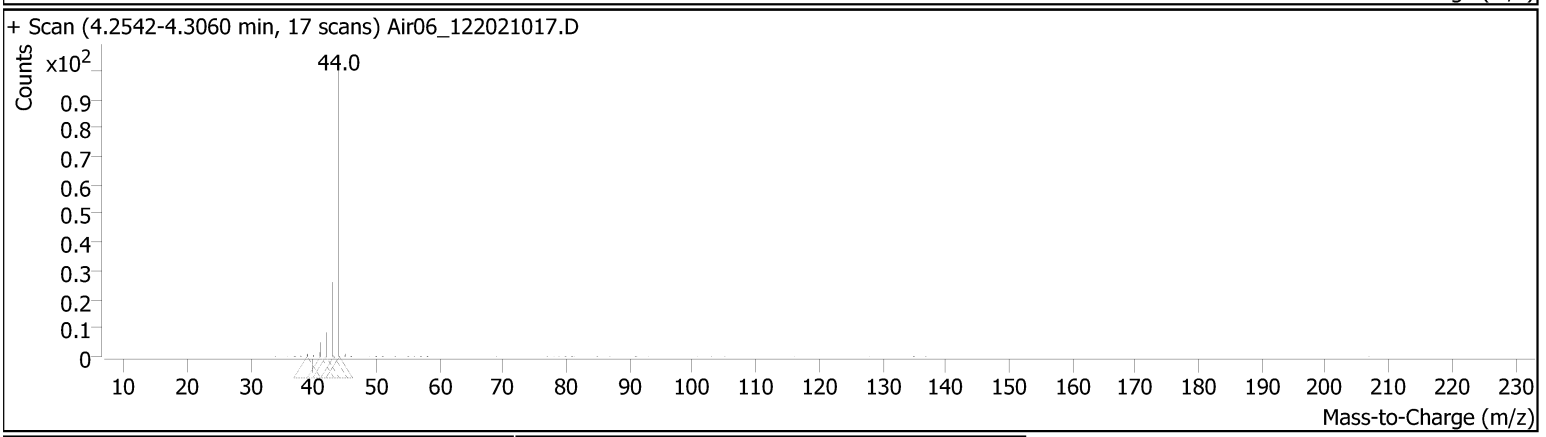
Sample Chromatogram

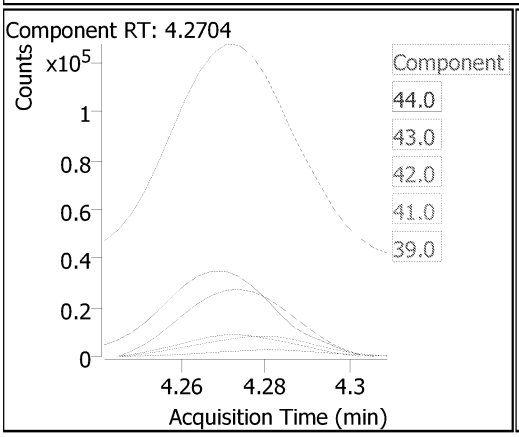


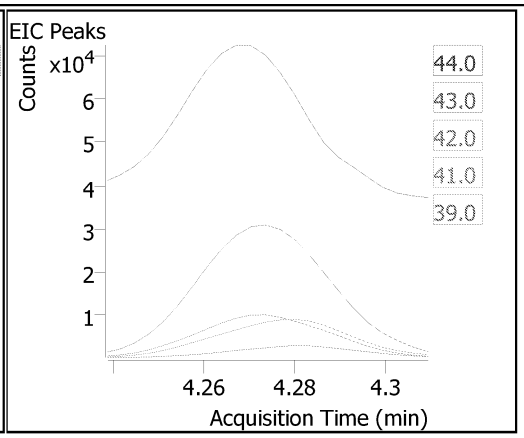
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.2704	Cyclobutanol	168458.1	89.2	2919-23-5	C4H8O	0.7487

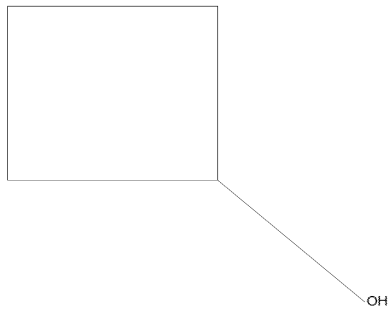




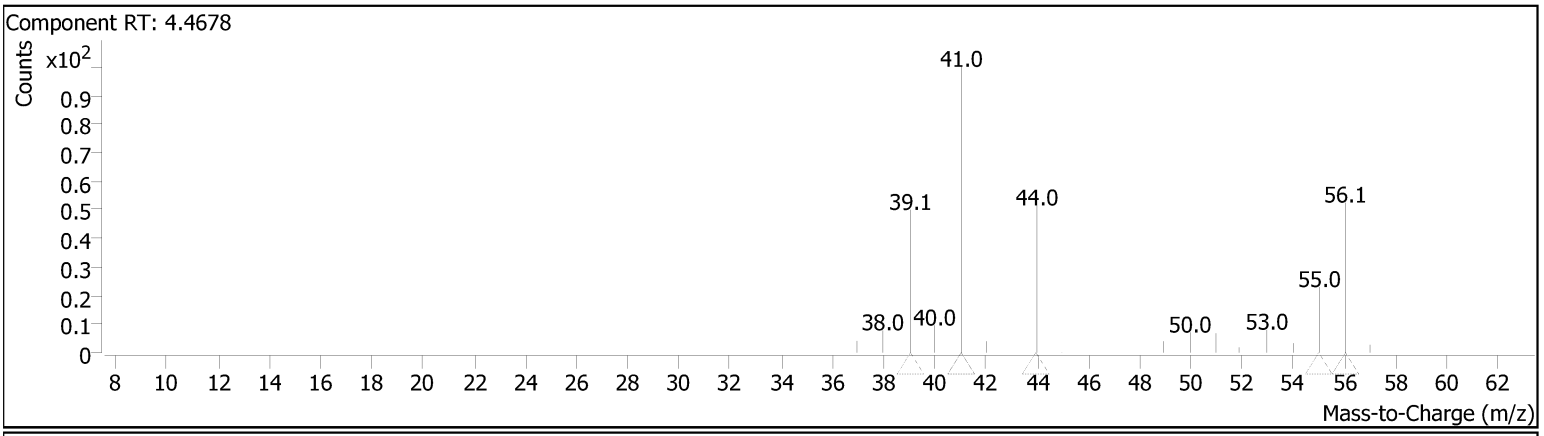


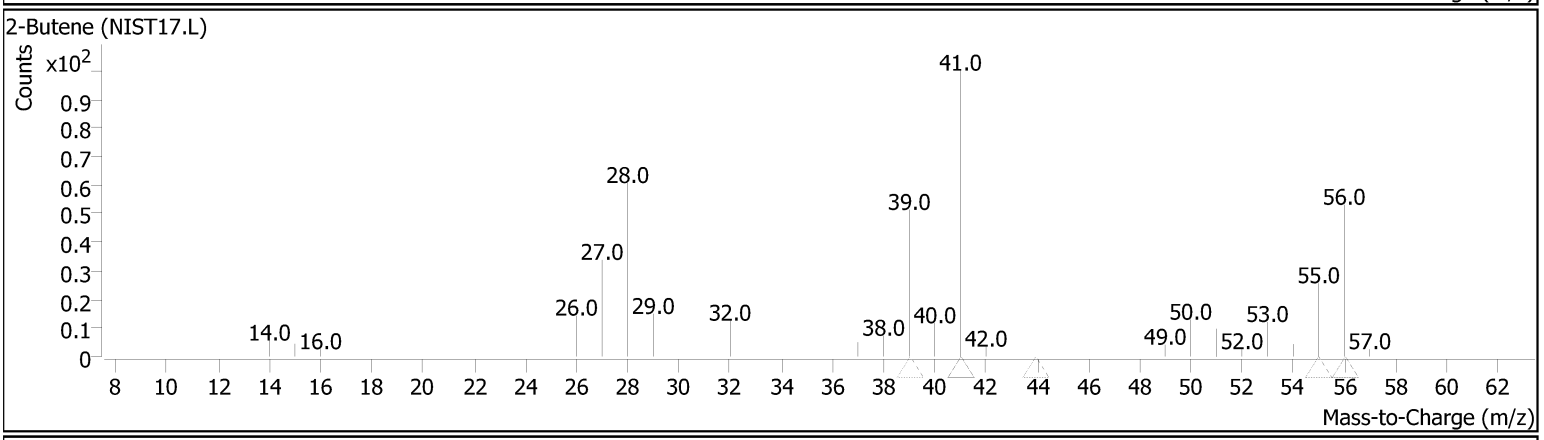


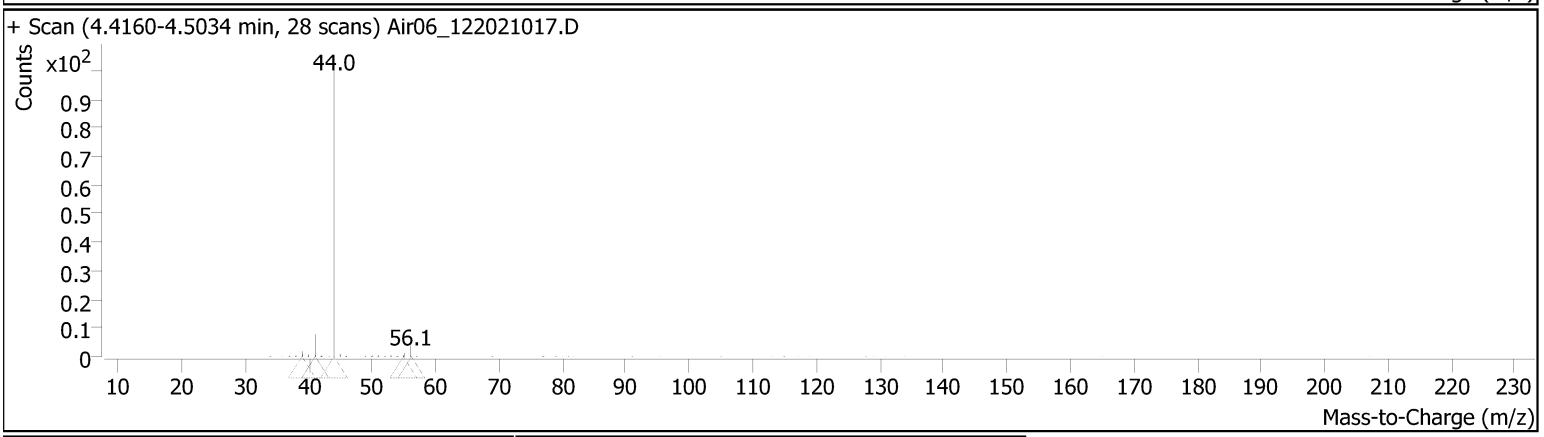


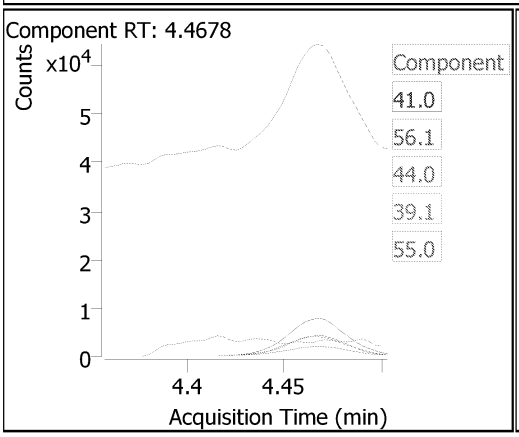


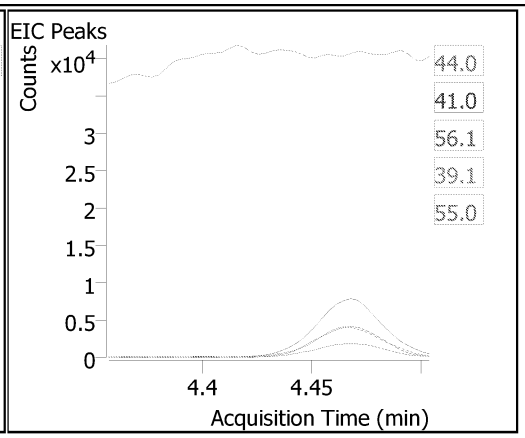
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.4678	2-Butene	80038.6	87.4	107-01-7	C4H8	0.3557





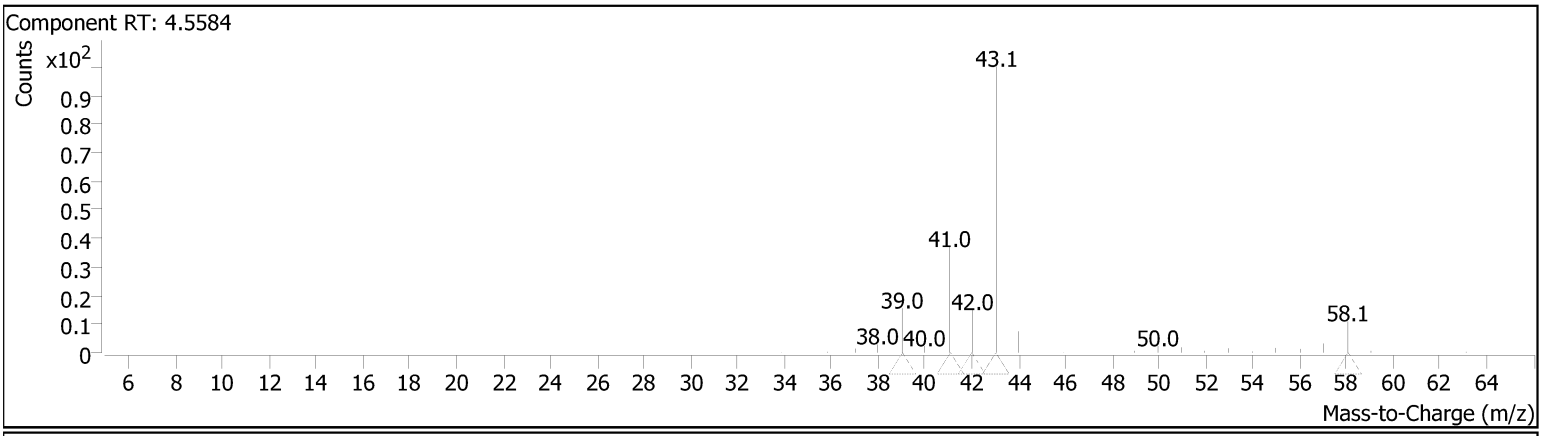


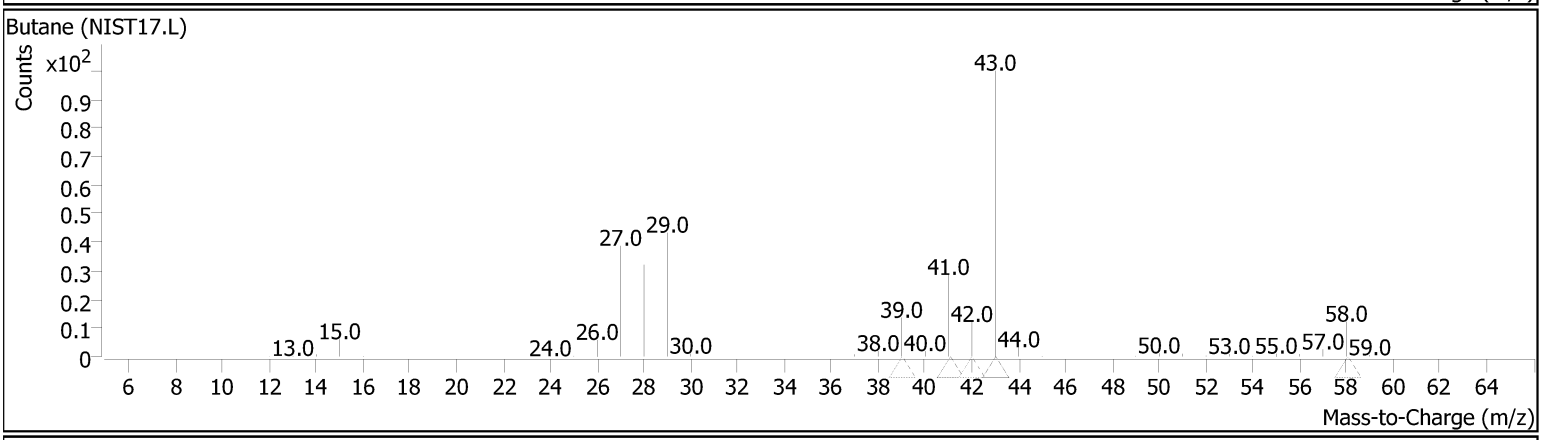


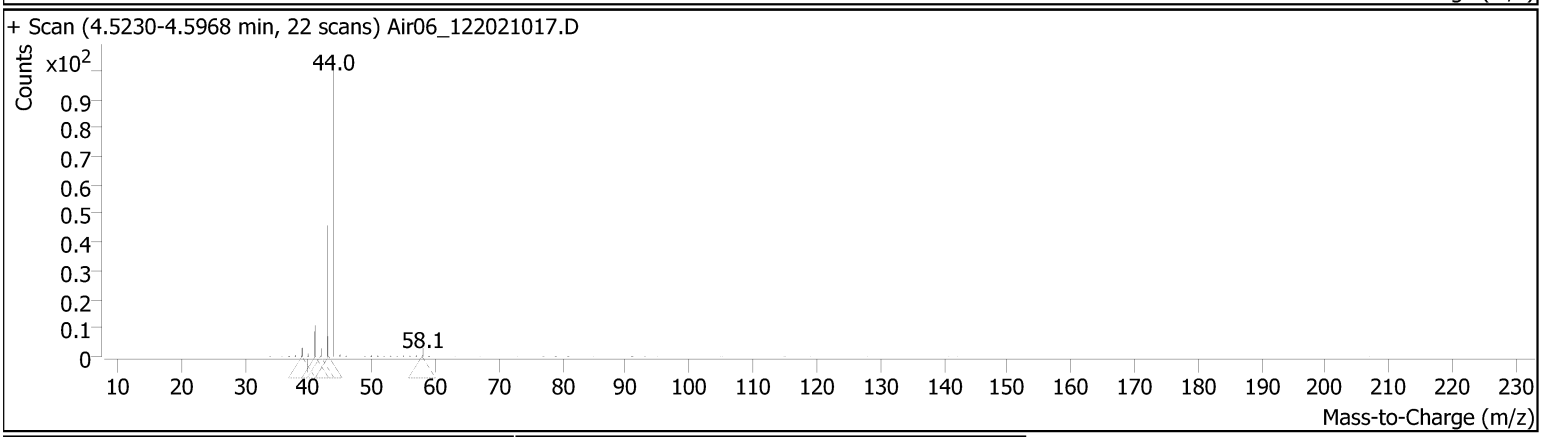


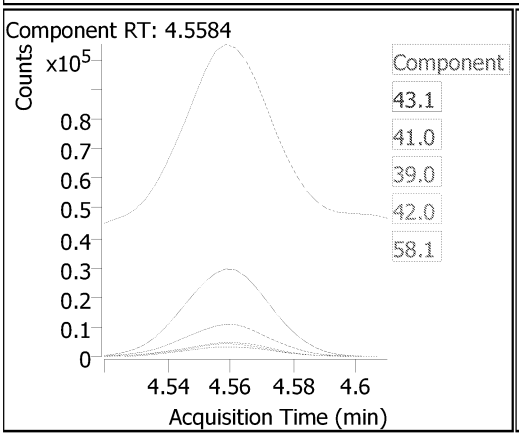


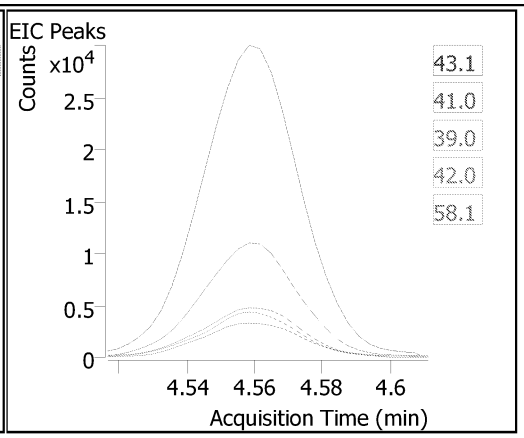
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.5584	Butane	119745.5	98.0	106-97-8	C4H10	0.5322

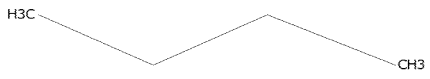




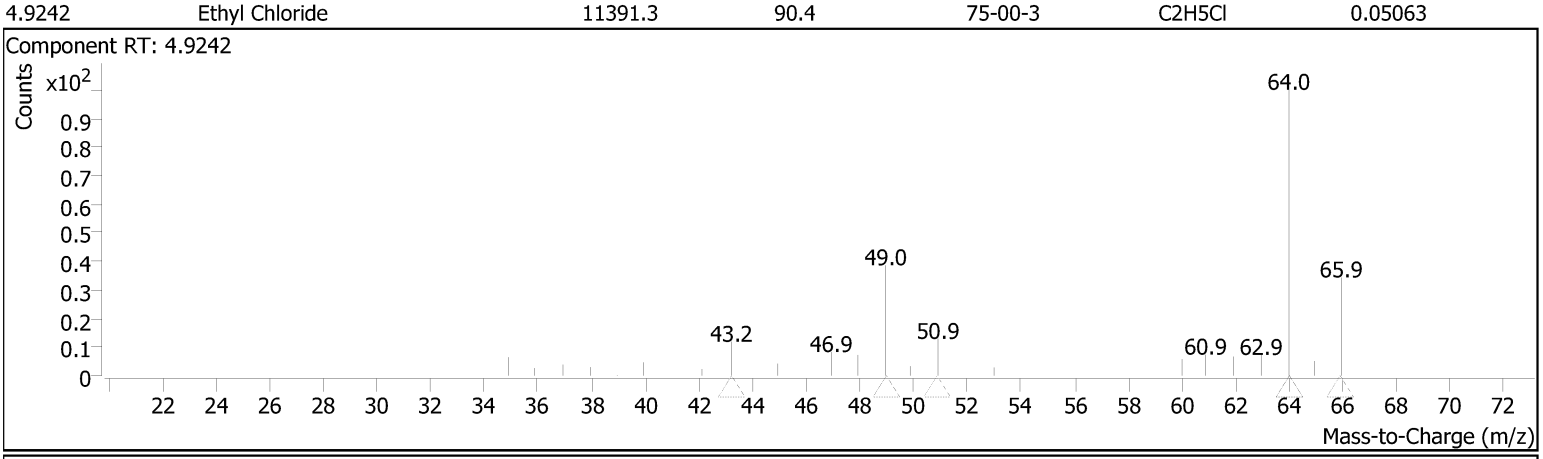


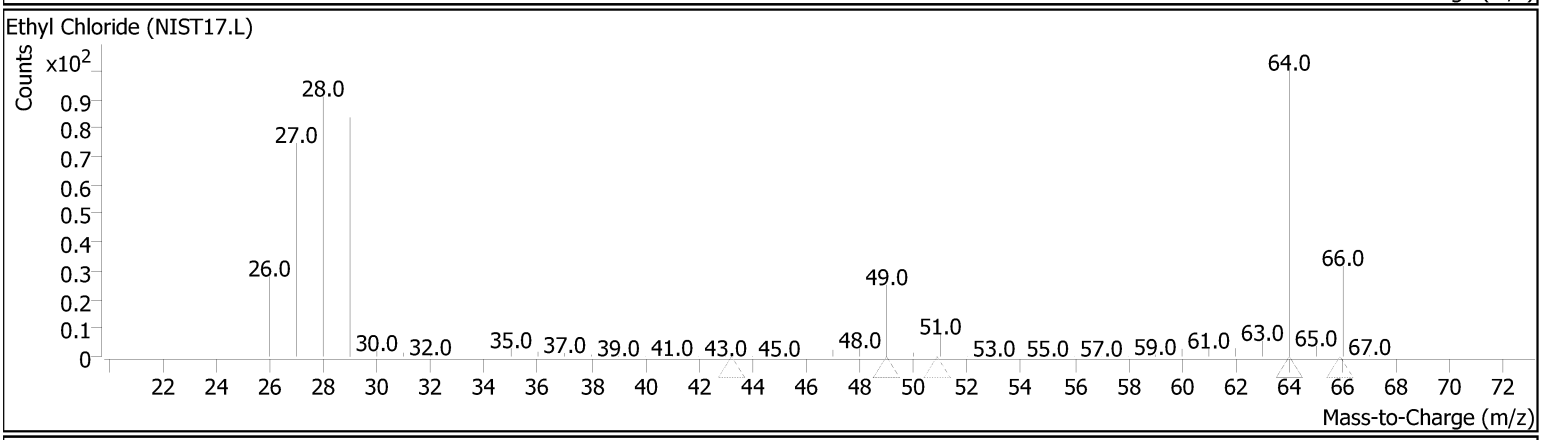


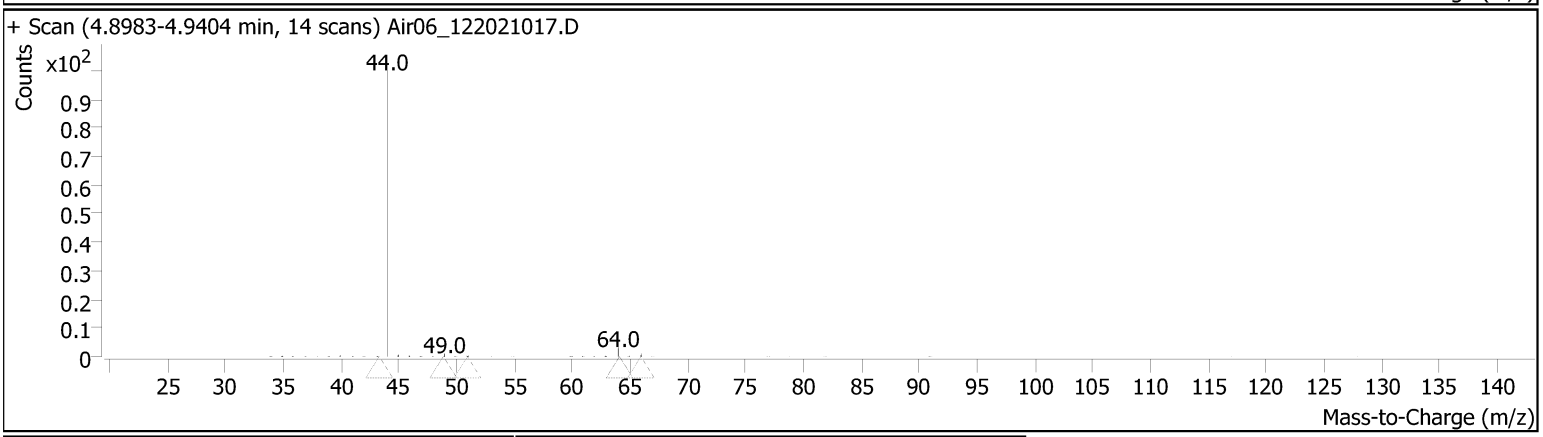


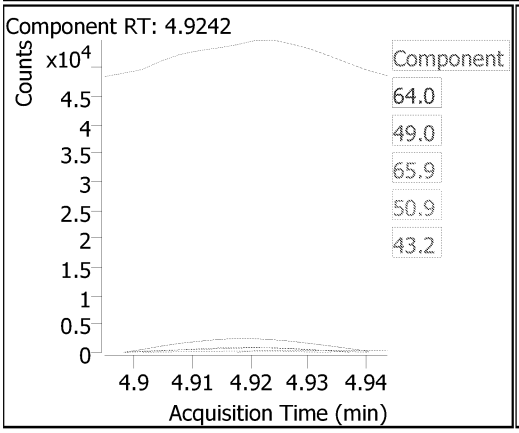


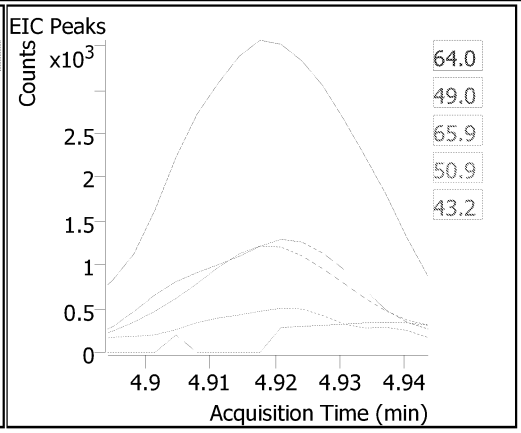
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.9242	Ethyl Chloride	11391.3	90.4	75-00-3	C2H5Cl	0.05063





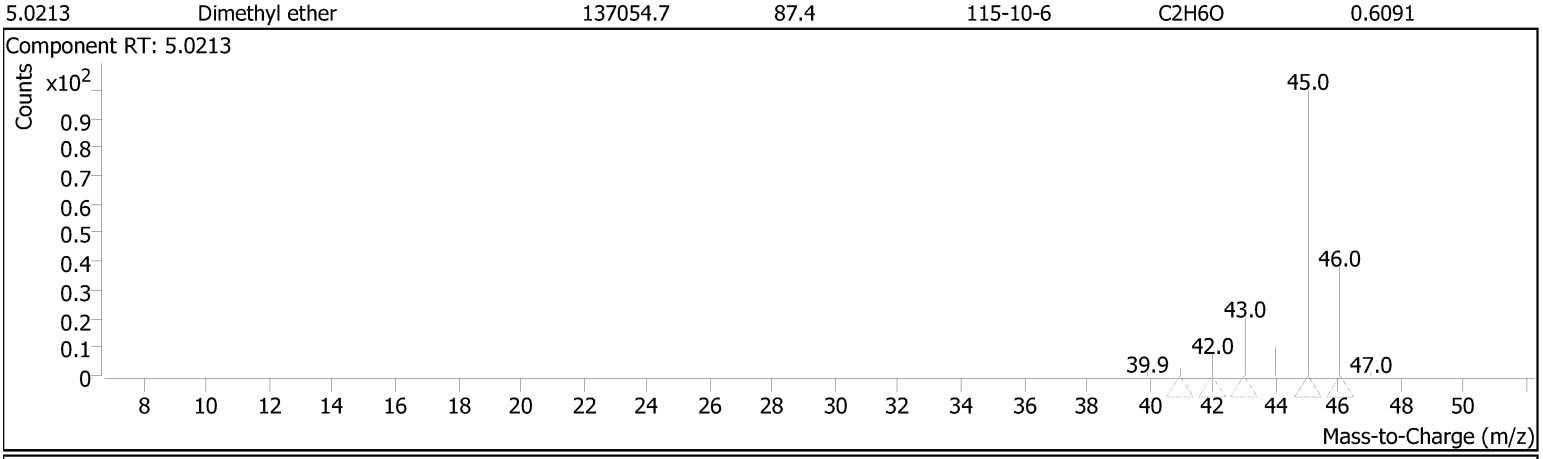


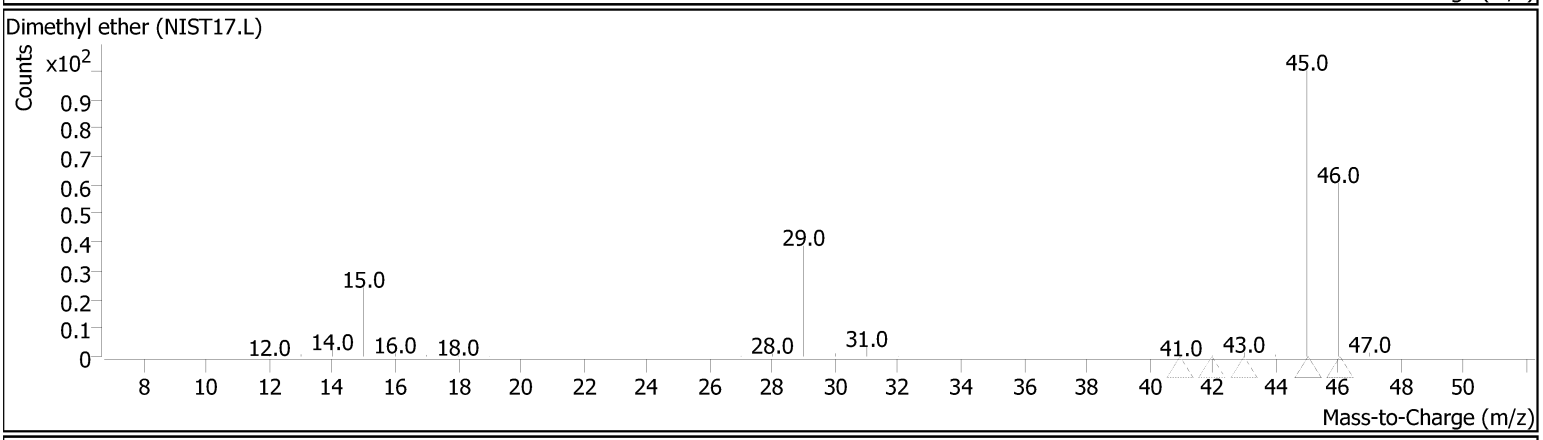


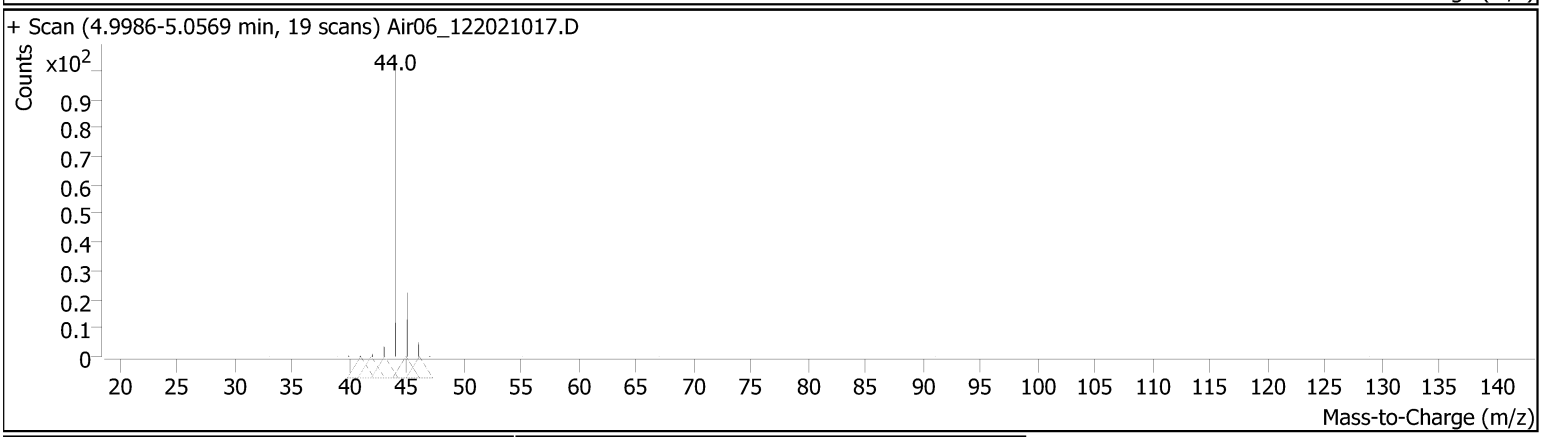


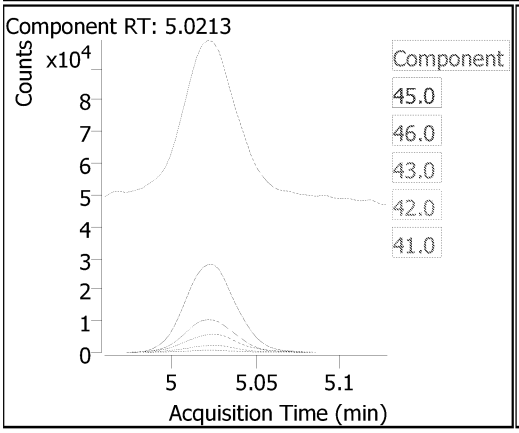


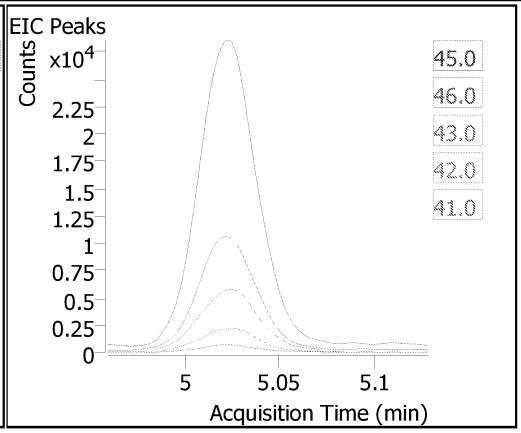
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.0213	Dimethyl ether	137054.7	87.4	115-10-6	C2H6O	0.6091

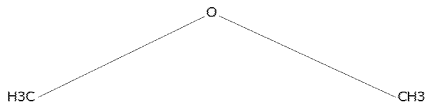




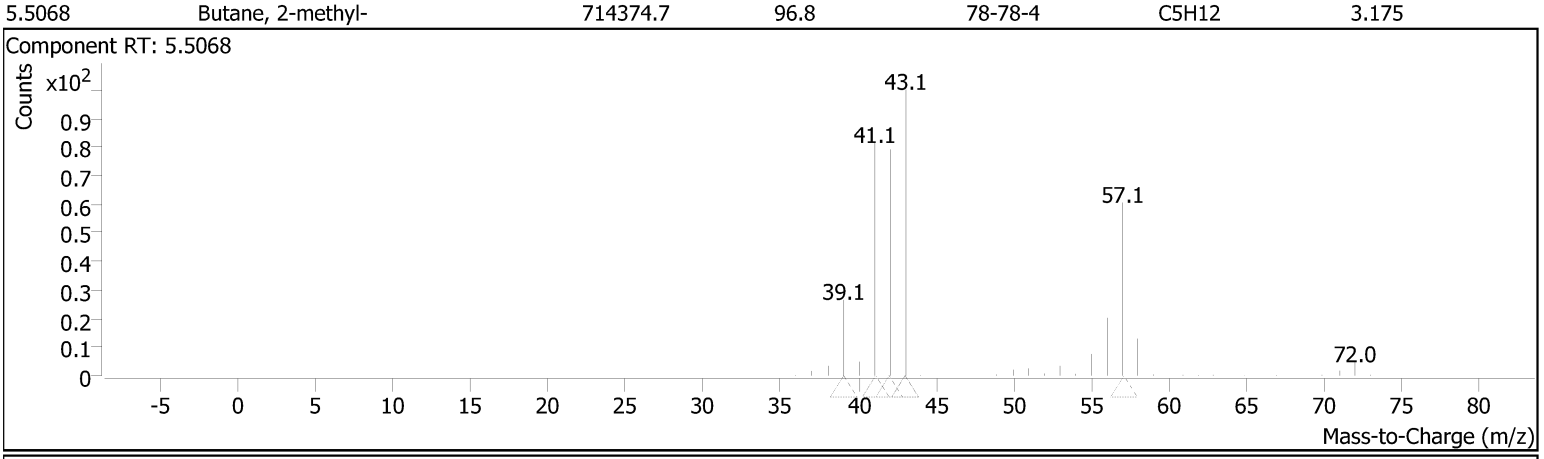


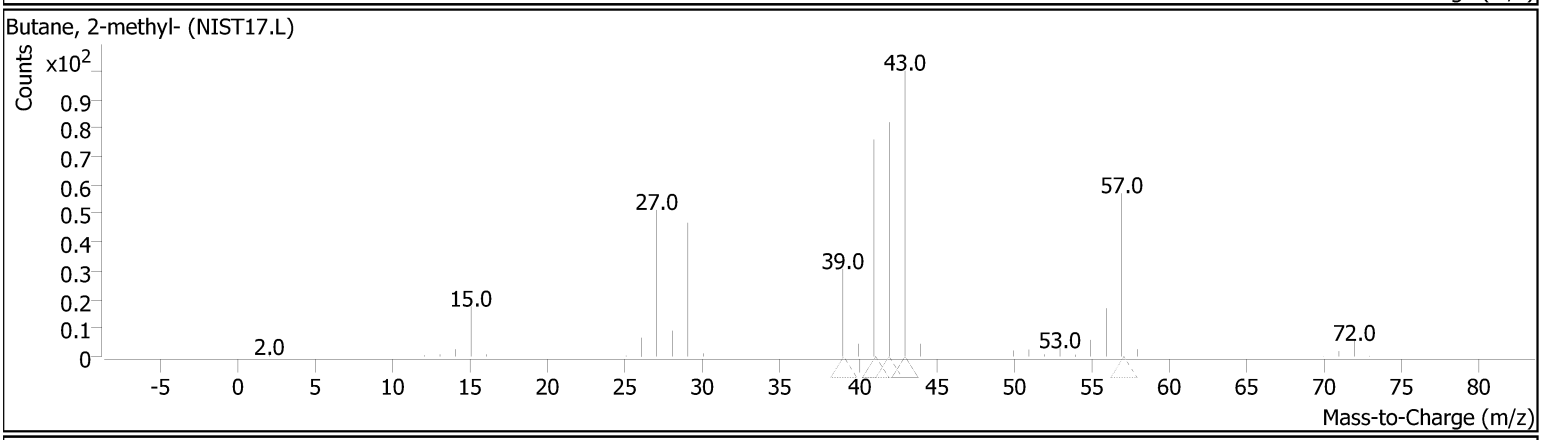


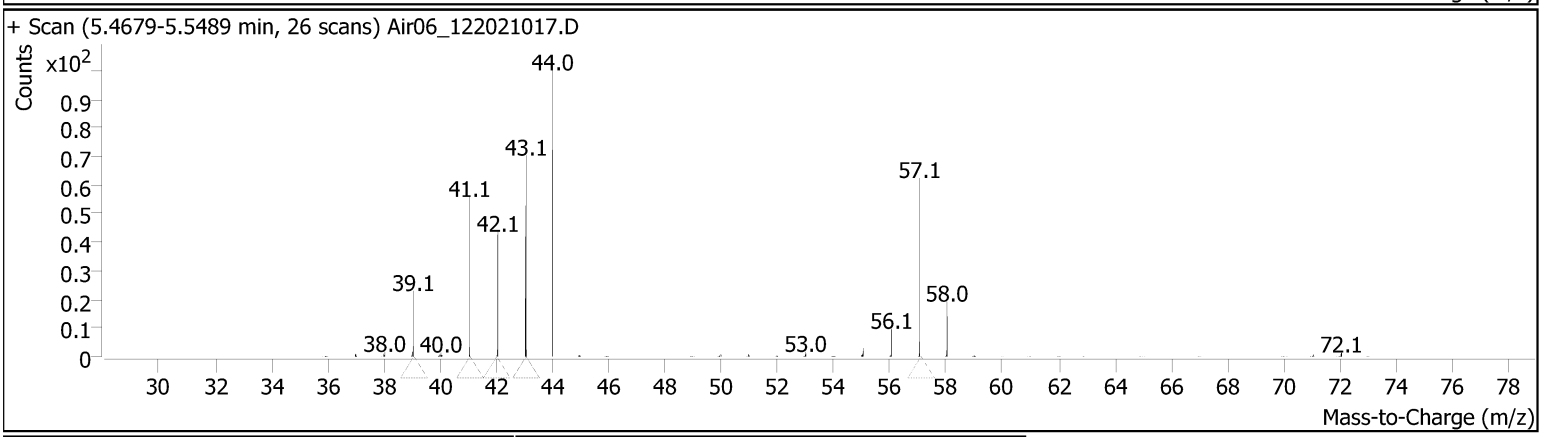


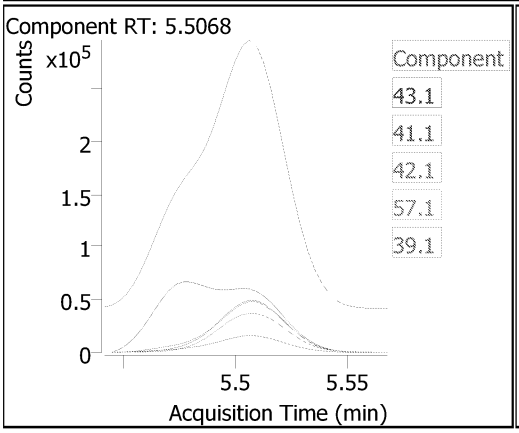


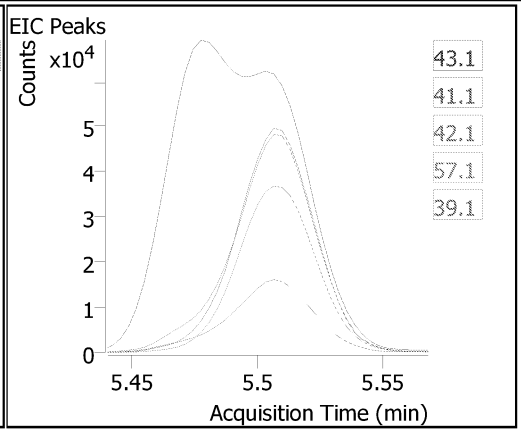
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.5068	Butane, 2-methyl-	714374.7	96.8	78-78-4	C5H12	3.175

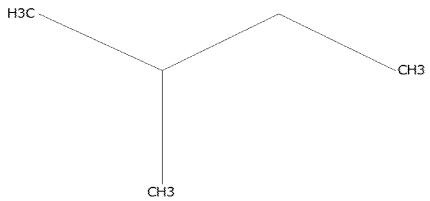




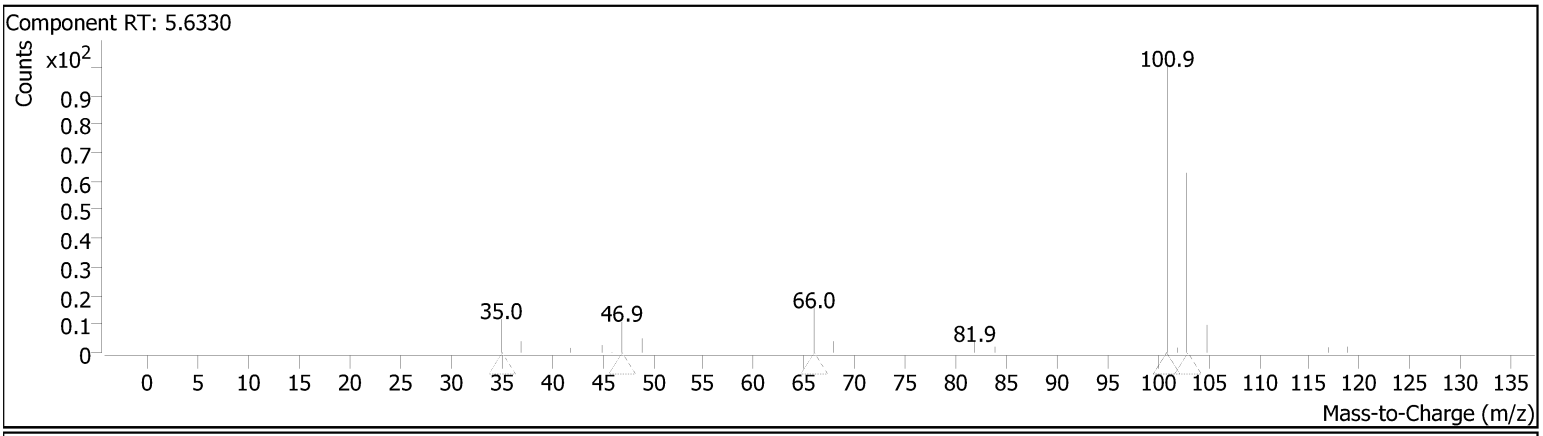


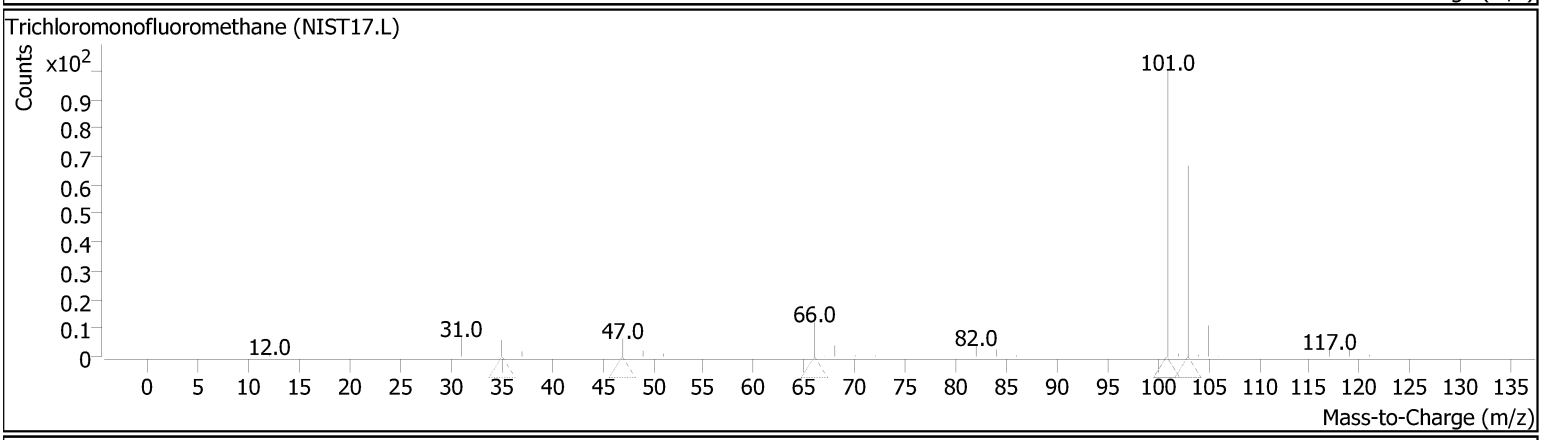


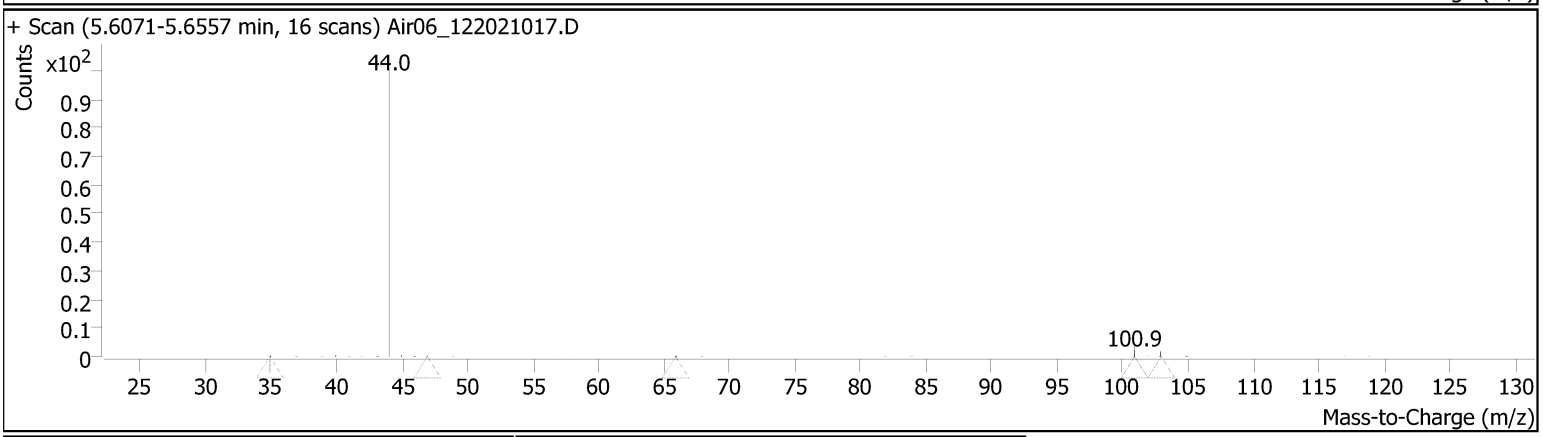


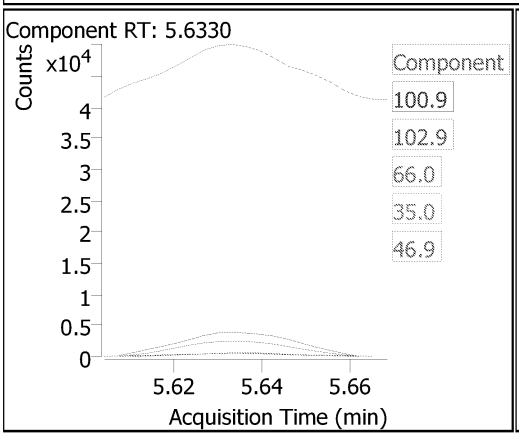


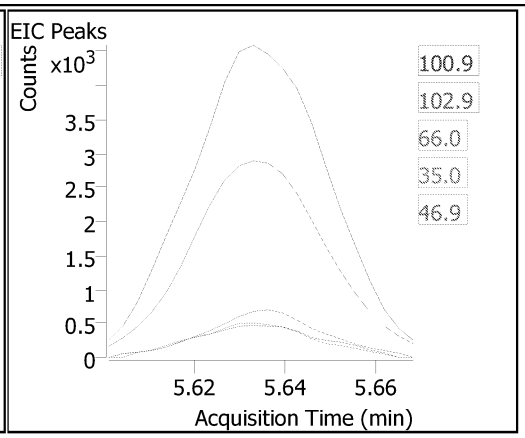
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.6330	Trichloromonofluoromethane	21510.5	96.7	75-69-4	CCl3F	0.0956

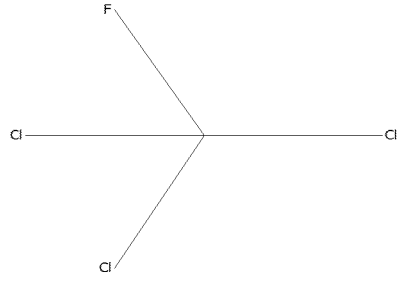




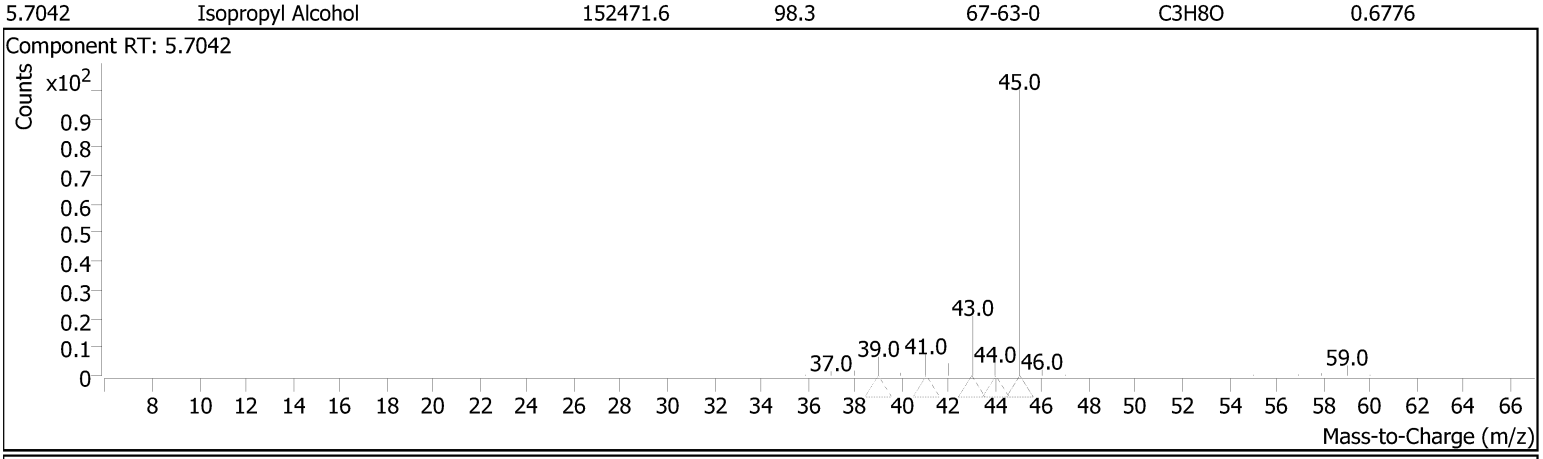


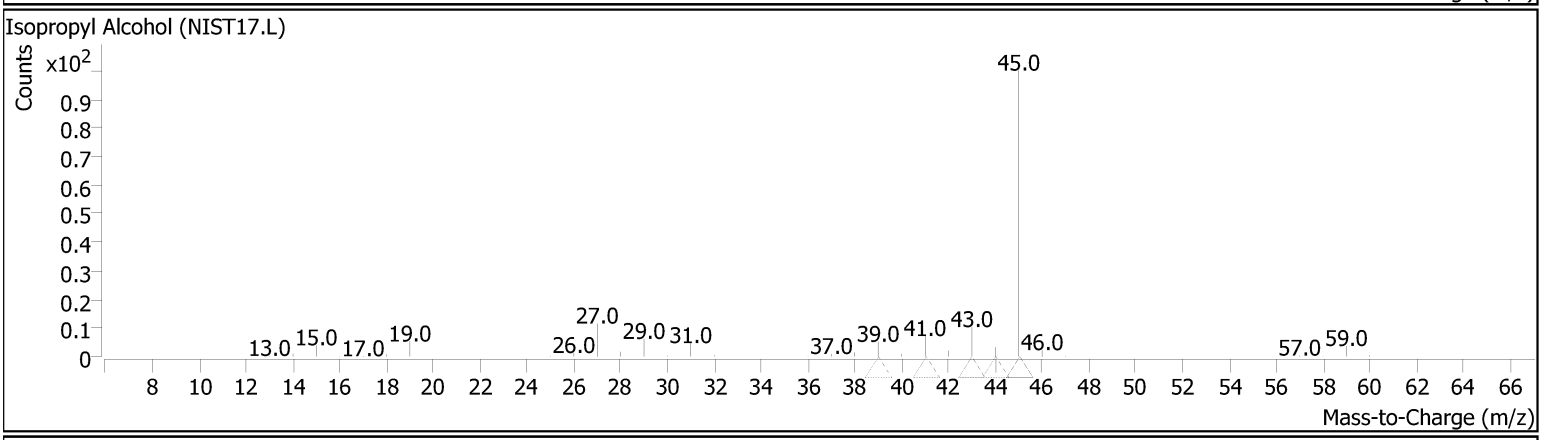


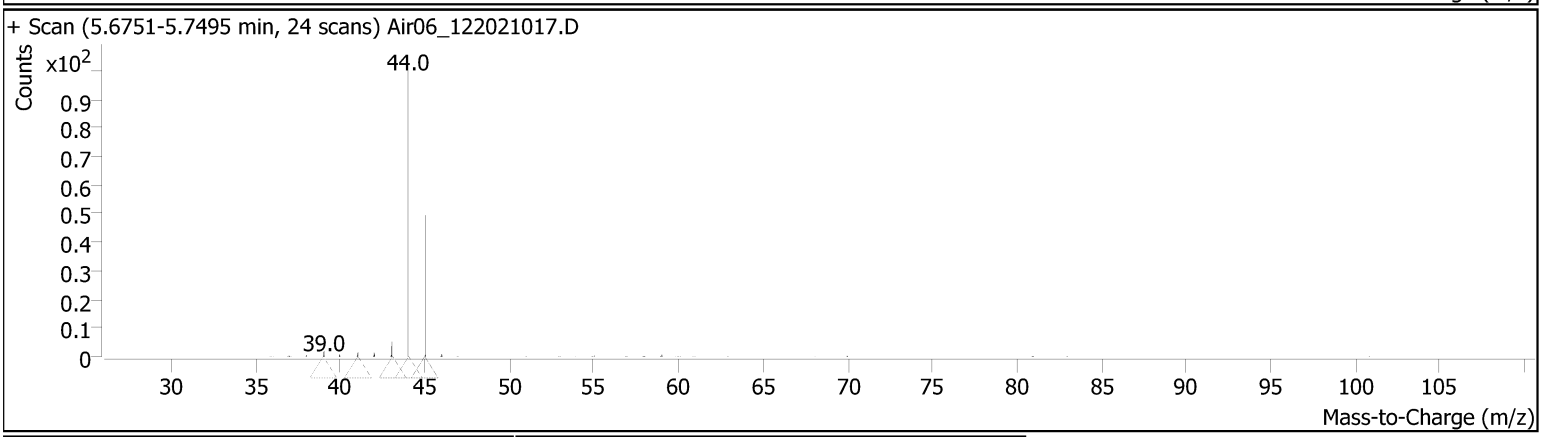


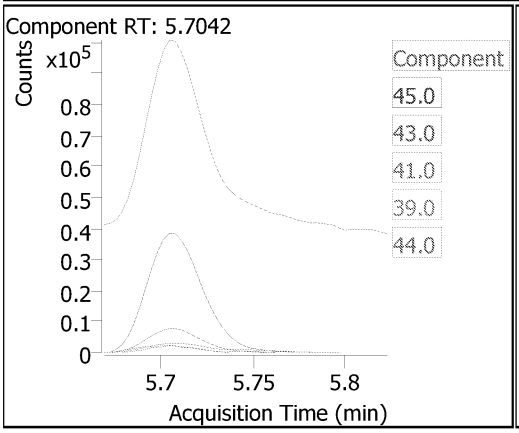


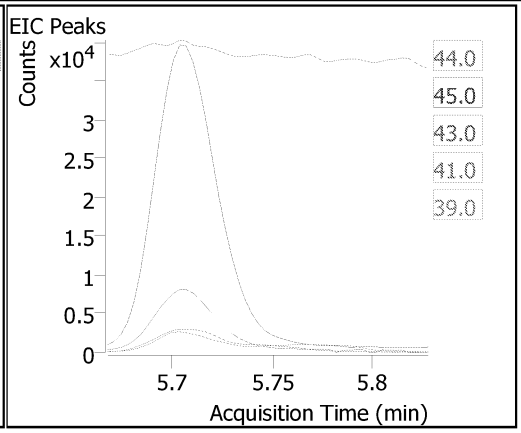
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.7042	Isopropyl Alcohol	152471.6	98.3	67-63-0	C3H8O	0.6776

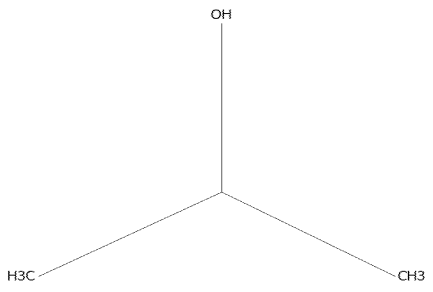




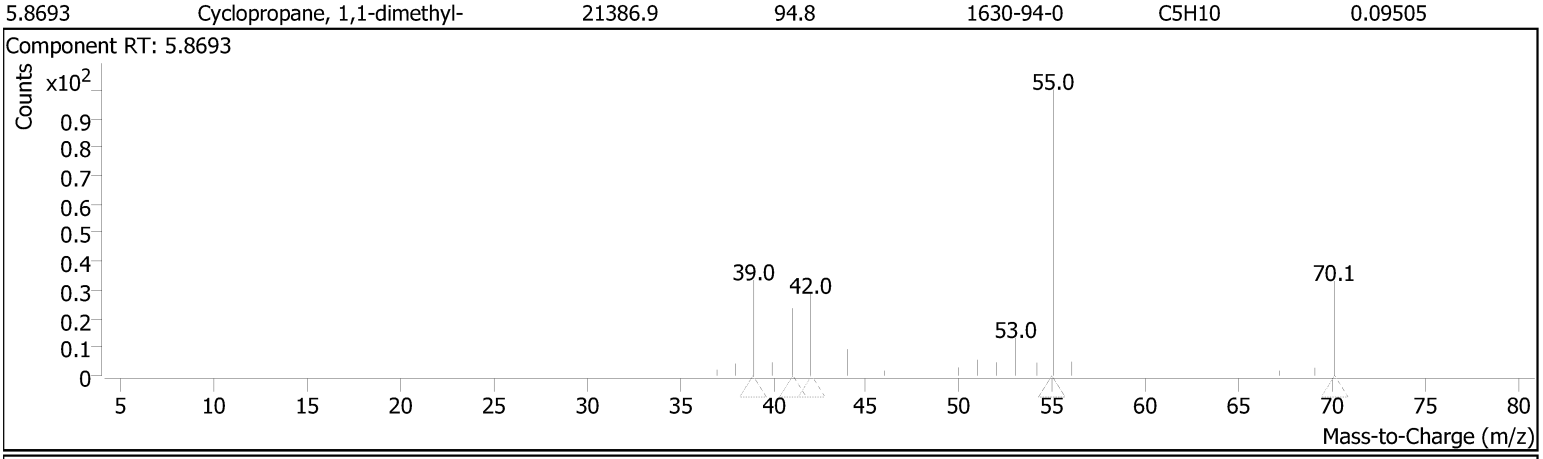


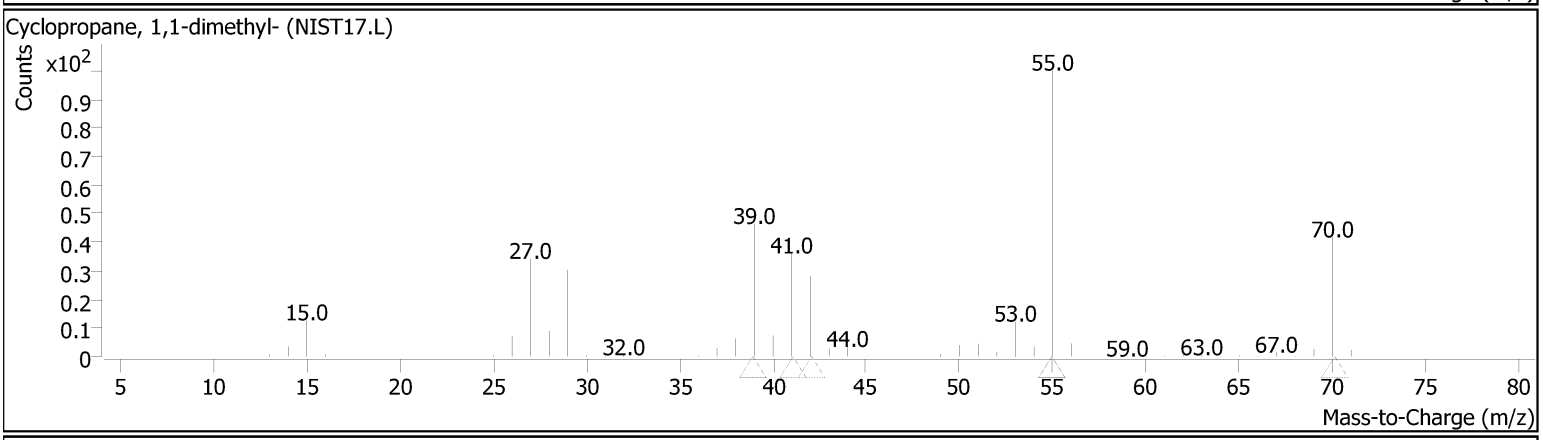


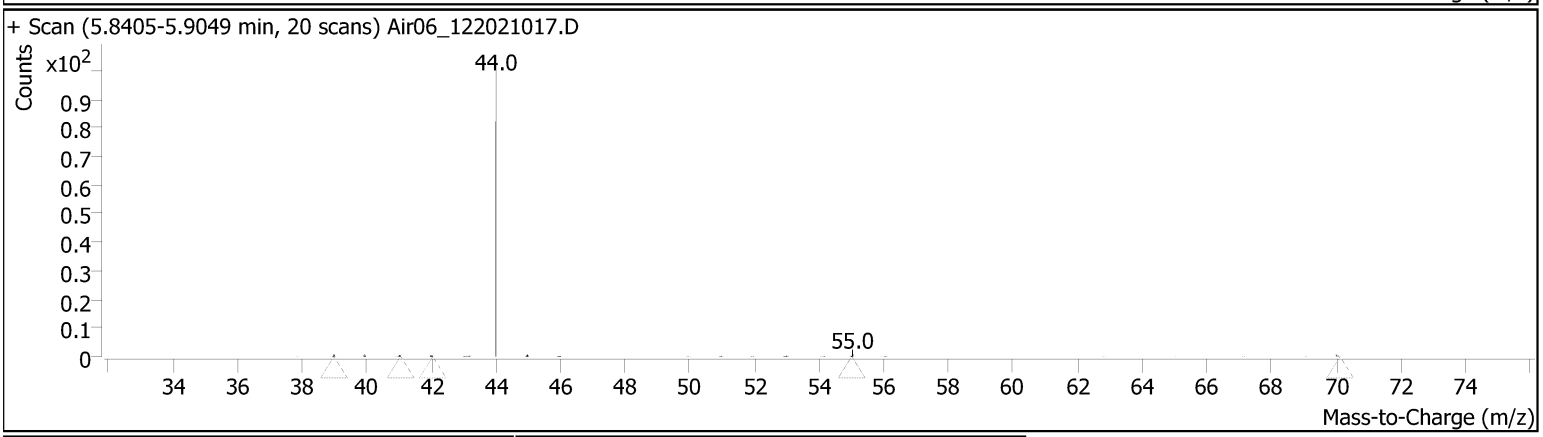


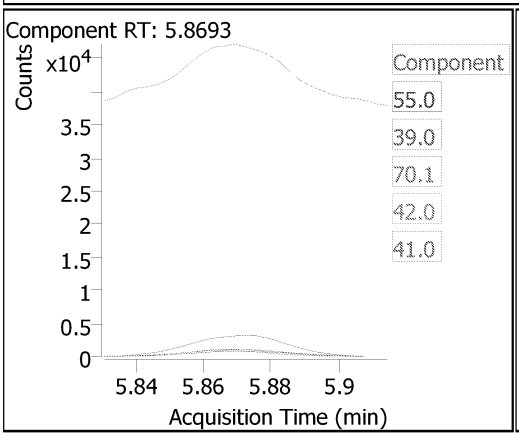


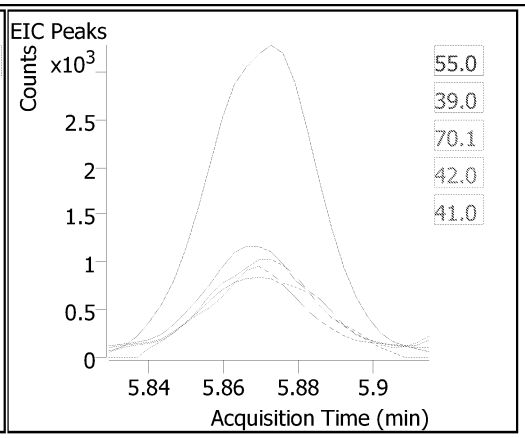
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.8693	Cyclopropane, 1,1-dimethyl-	21386.9	94.8	1630-94-0	C5H10	0.09505

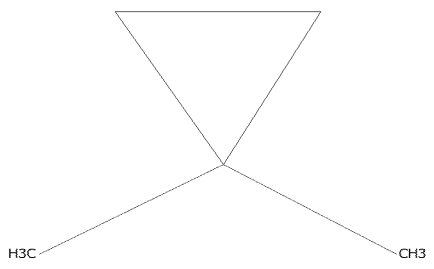




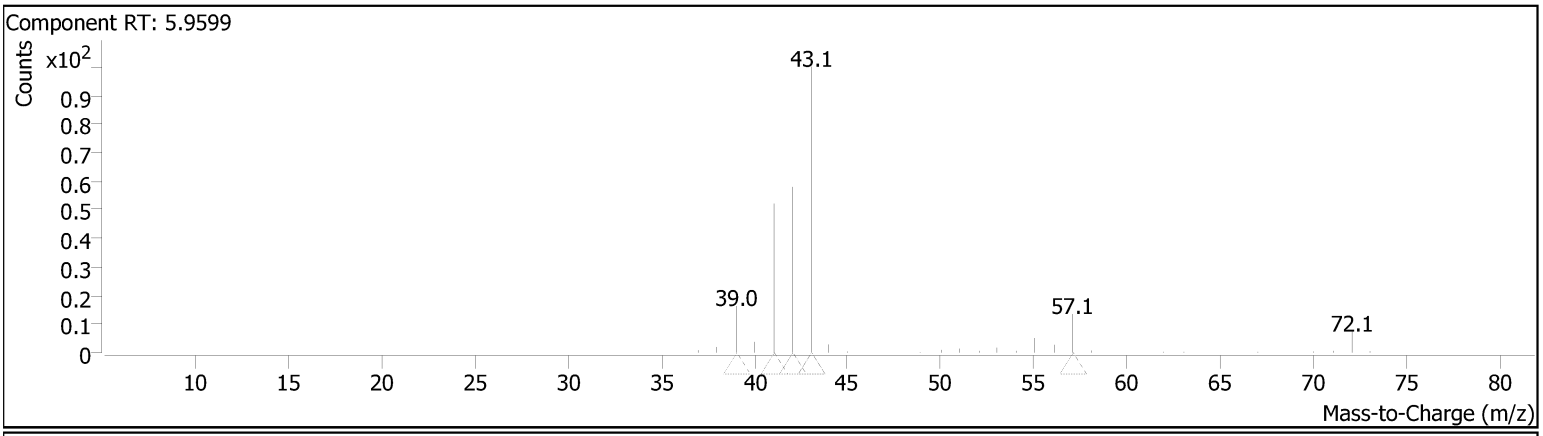


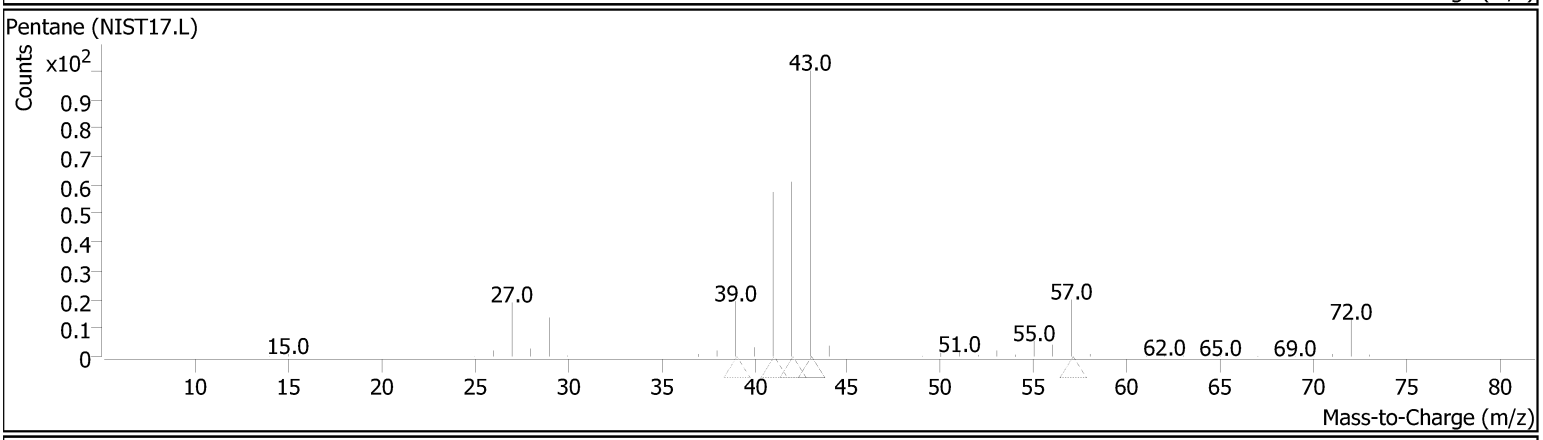


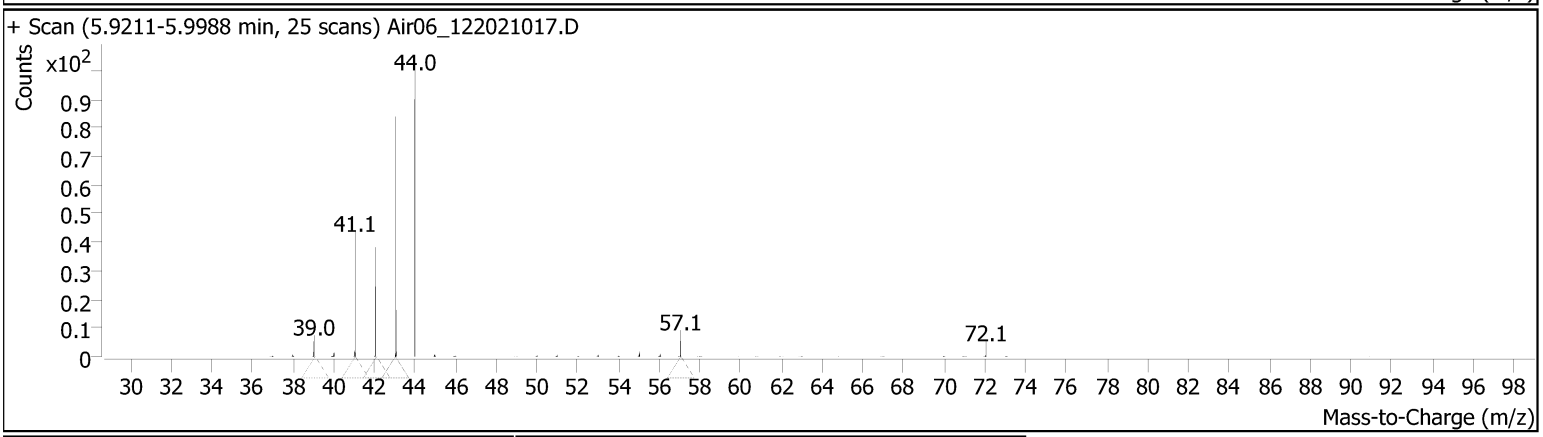


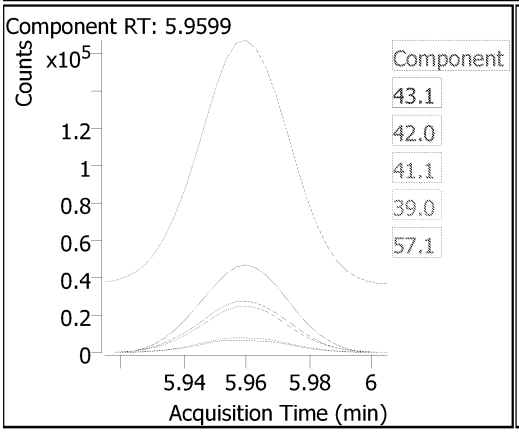


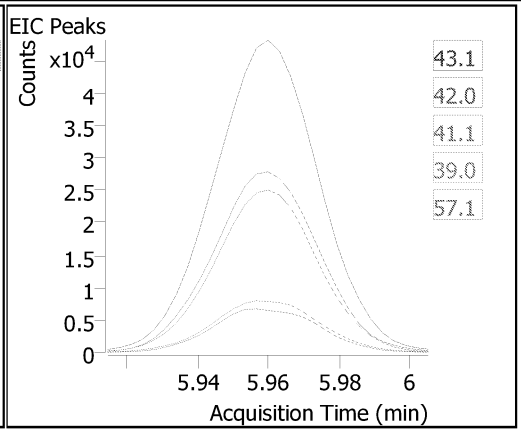
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.9599	Pentane	272088.6	98.9	109-66-0	C5H12	1.209

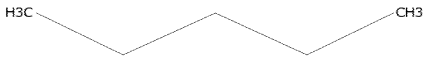




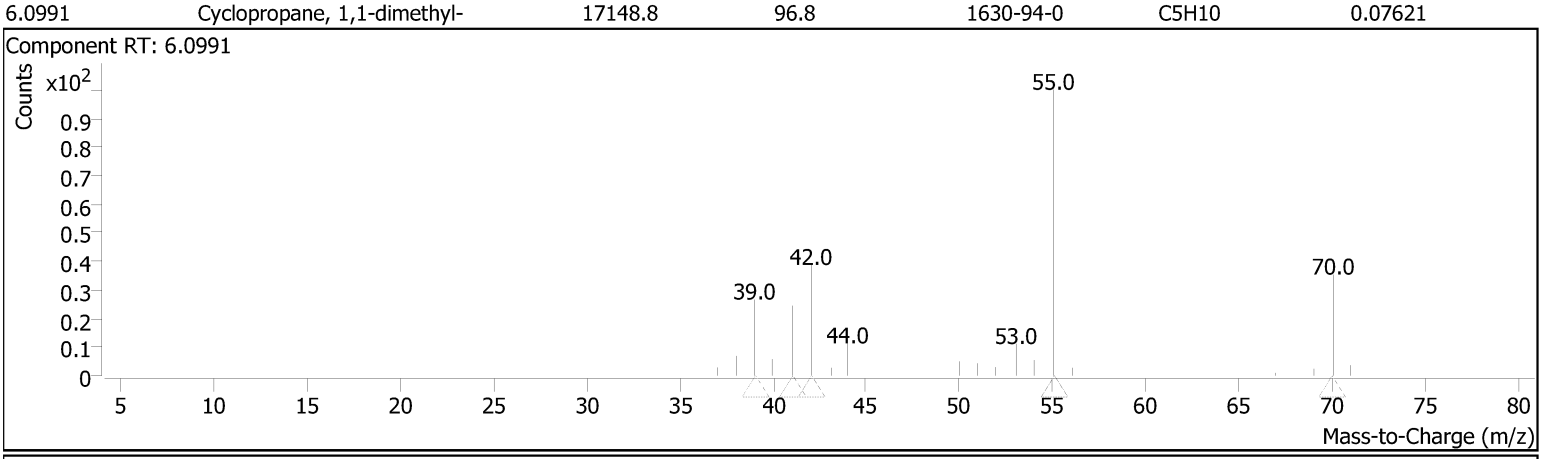


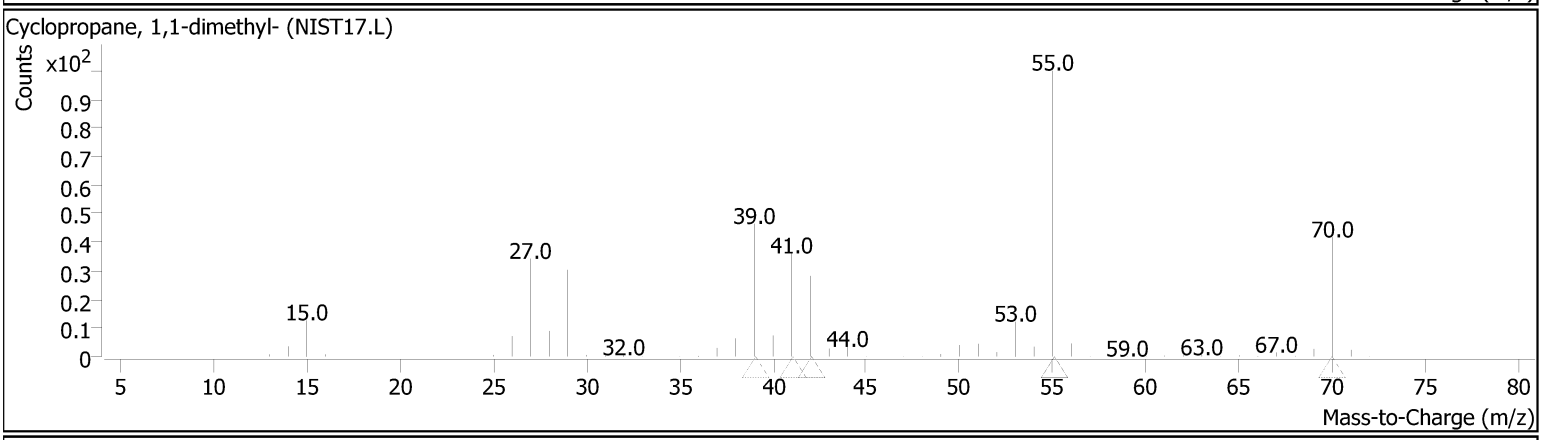


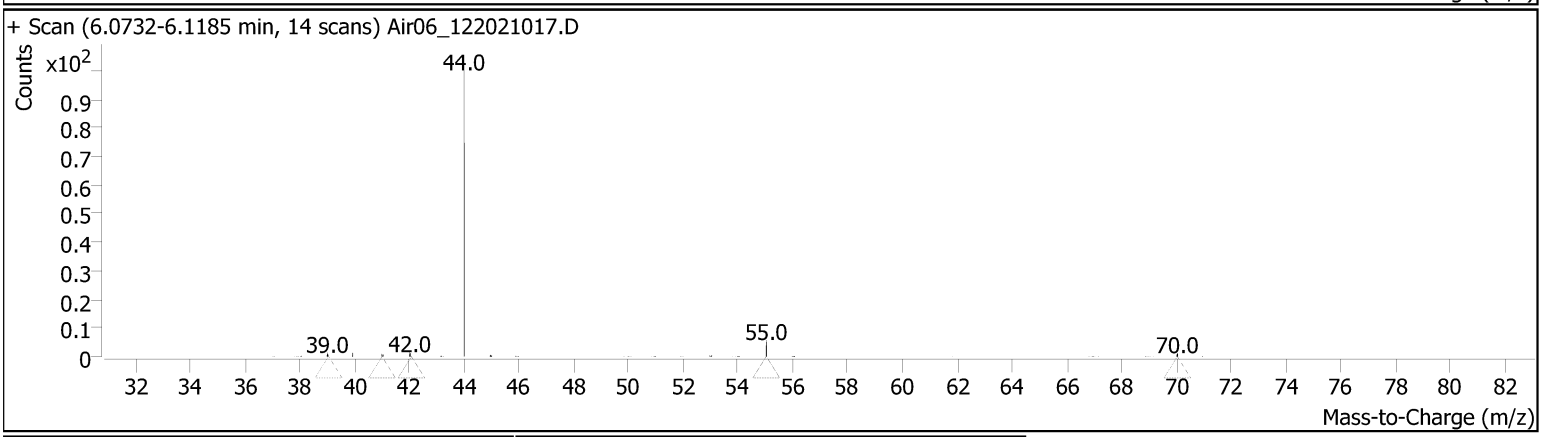


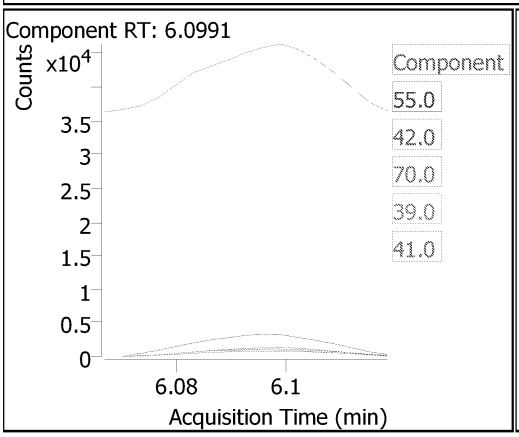


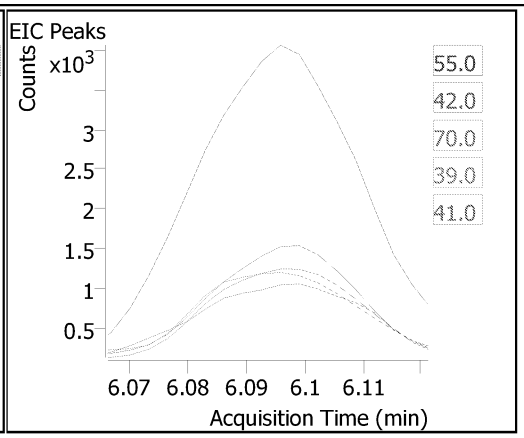
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.0991	Cyclopropane, 1,1-dimethyl-	17148.8	96.8	1630-94-0	C5H10	0.07621

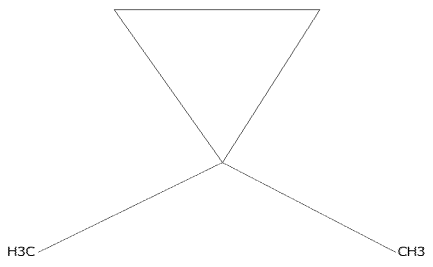




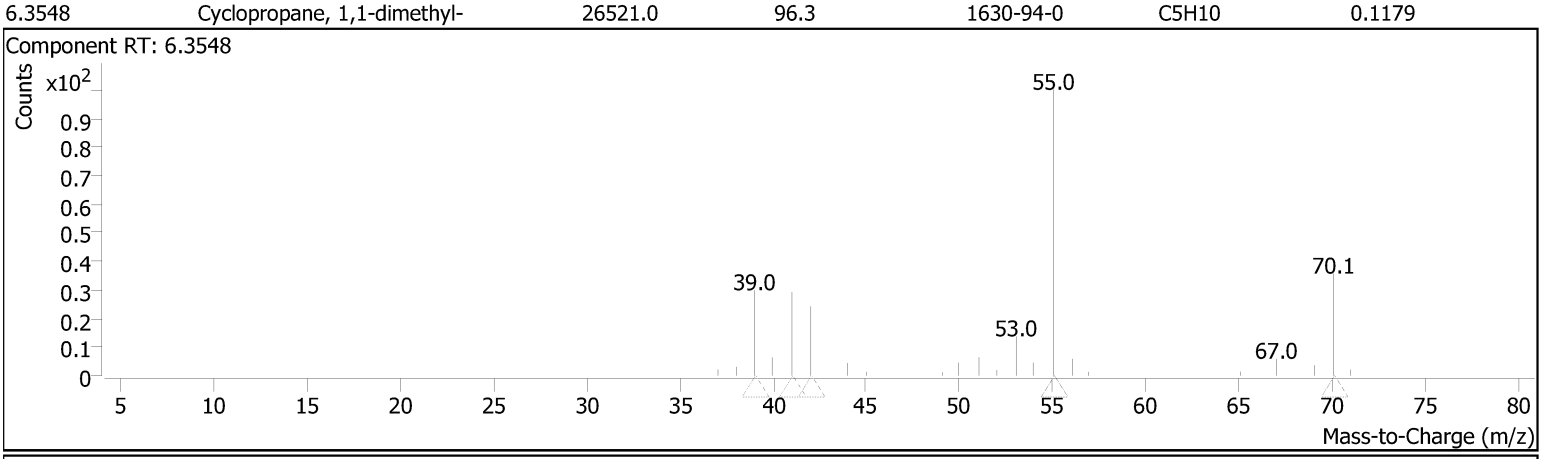


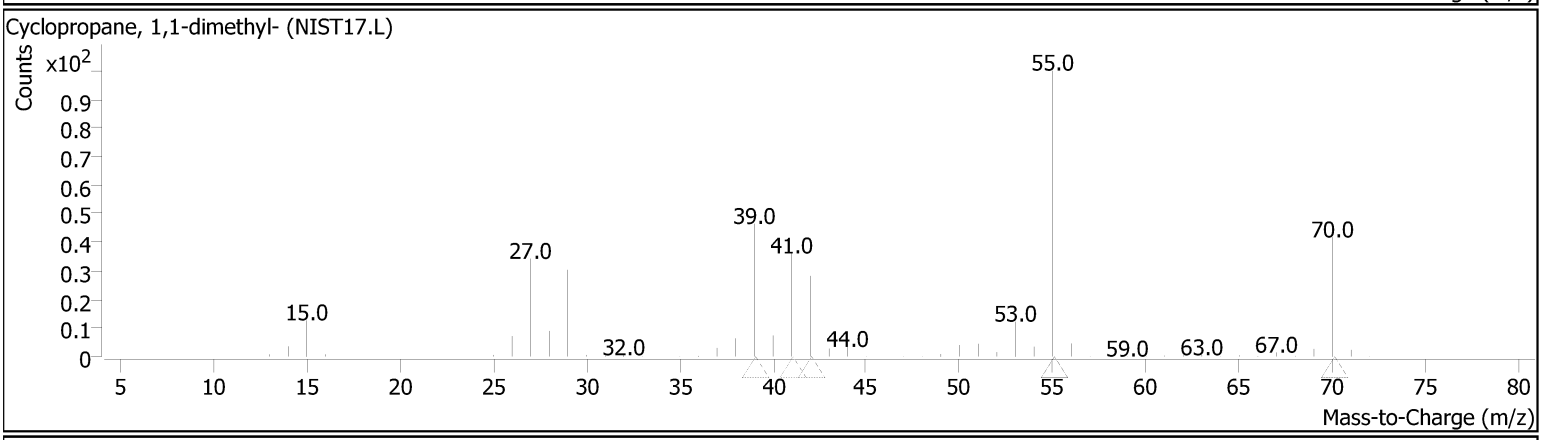


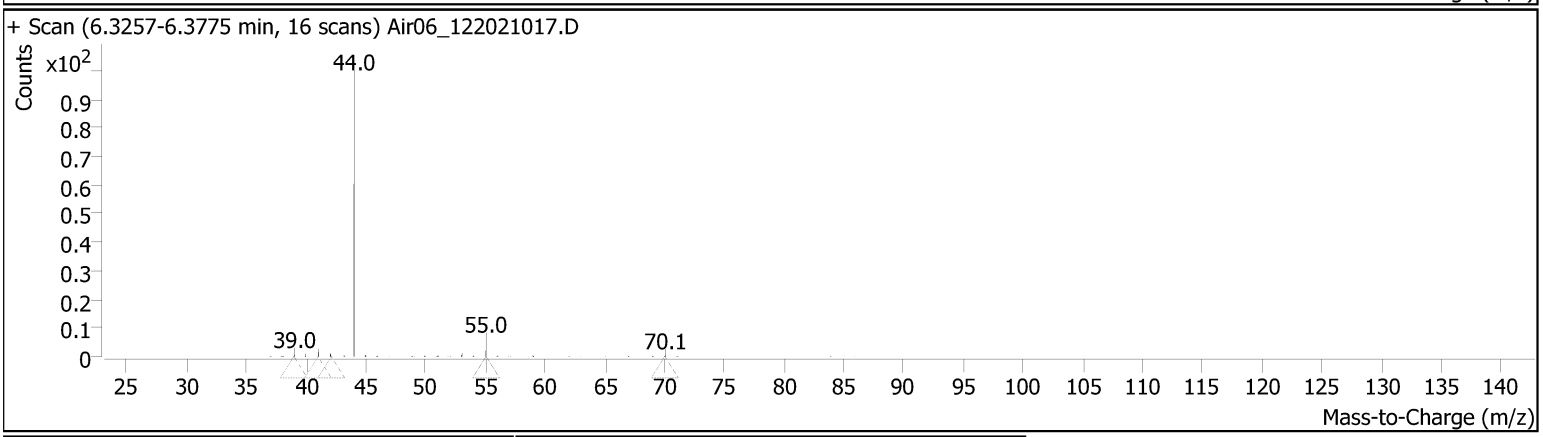


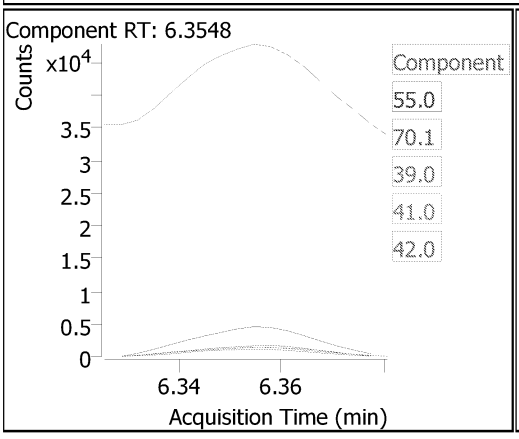


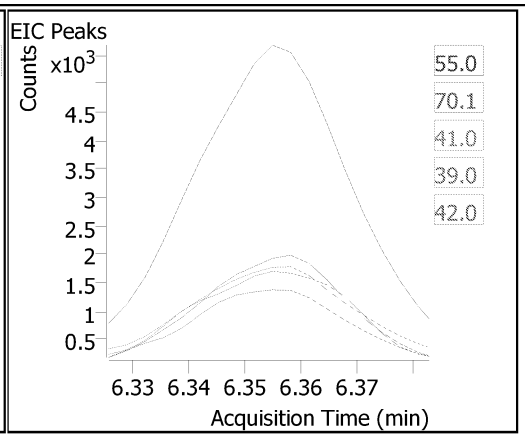
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.3548	Cyclopropane, 1,1-dimethyl-	26521.0	96.3	1630-94-0	C5H10	0.1179

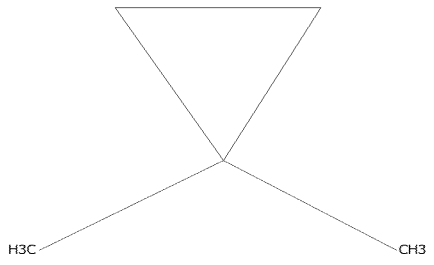




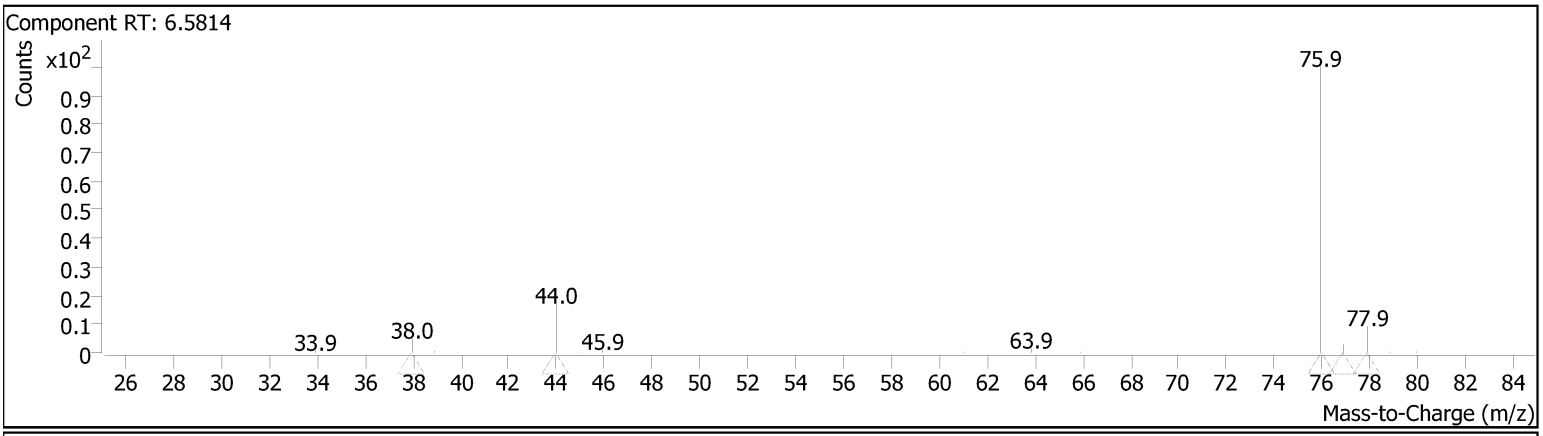


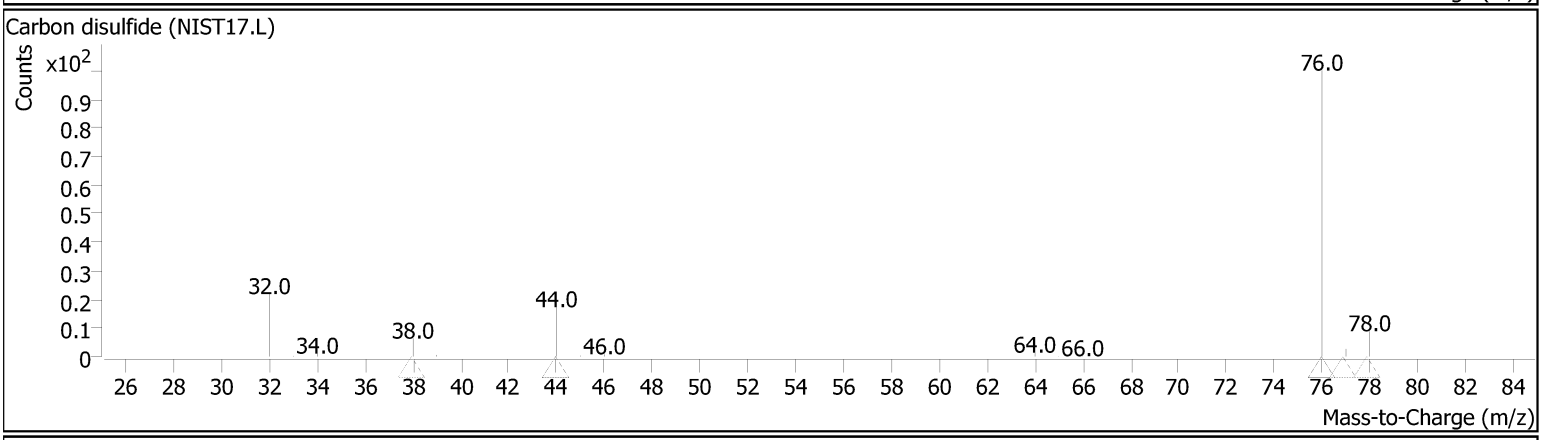


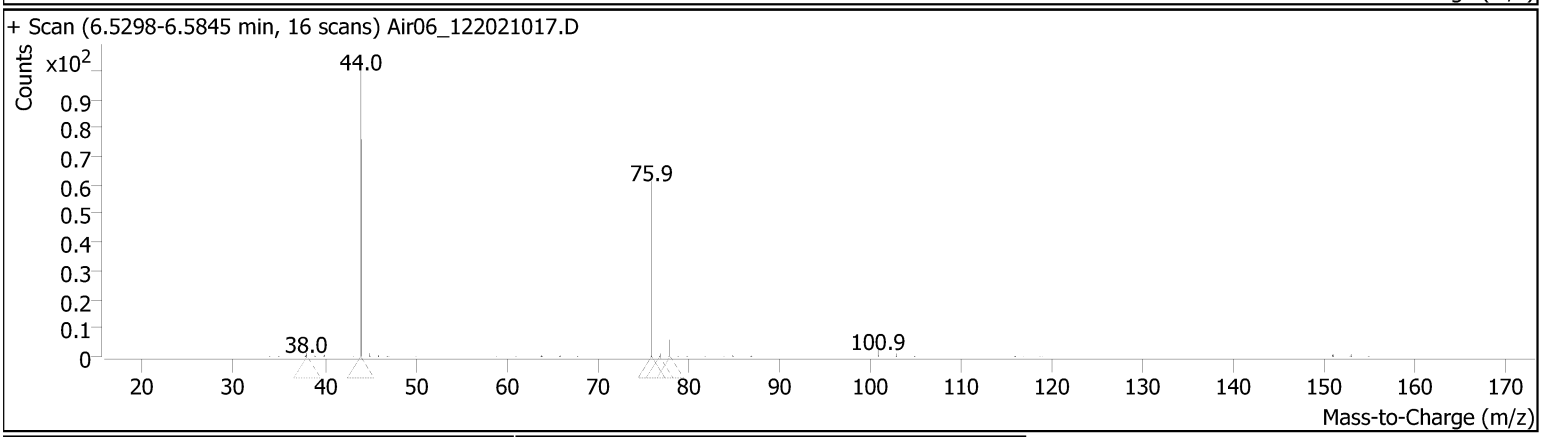


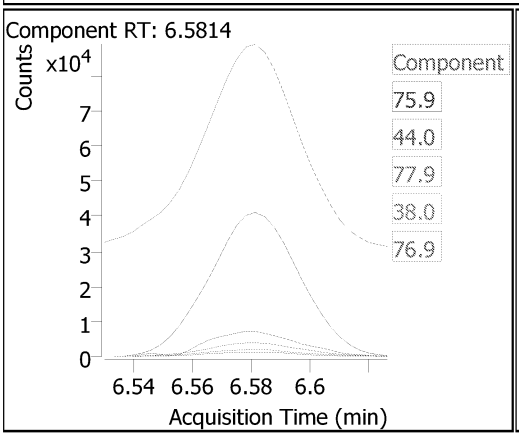


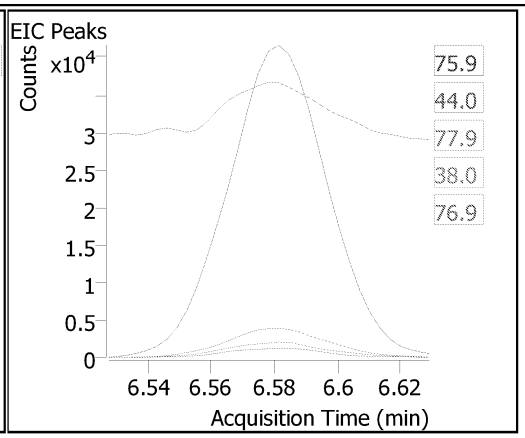
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.5814	Carbon disulfide	133634.1	97.6	75-15-0	CS2	0.5939



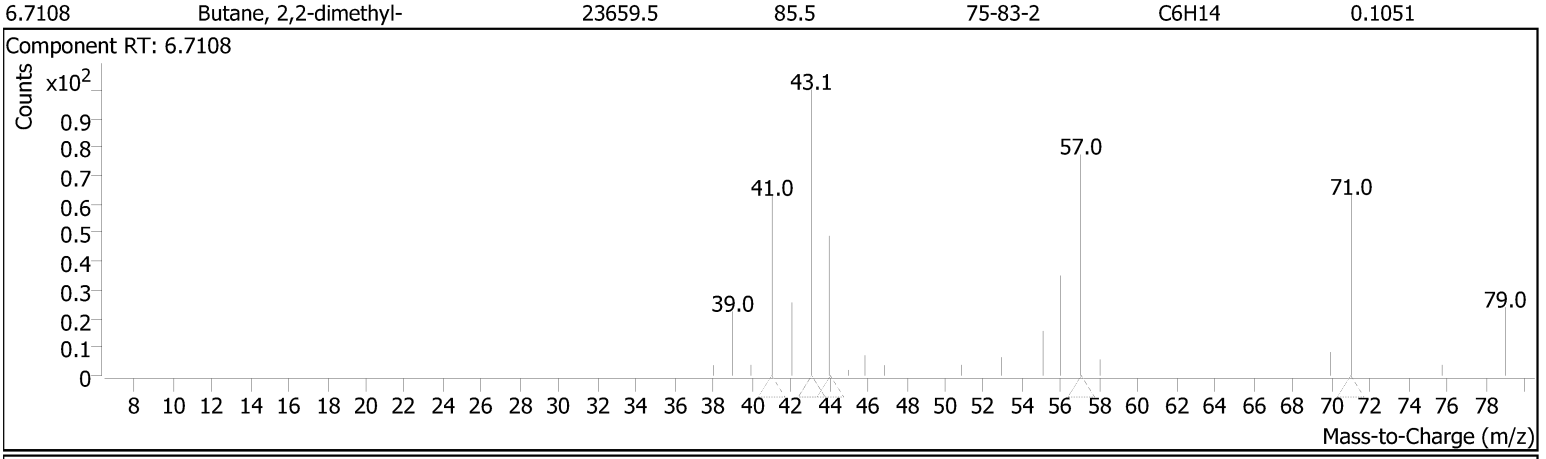


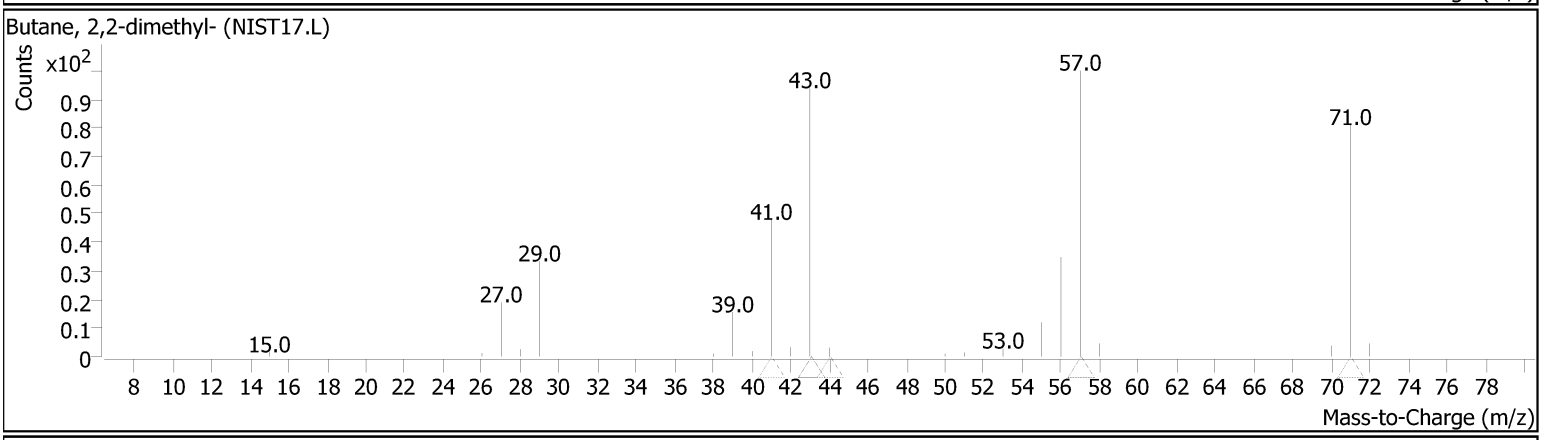


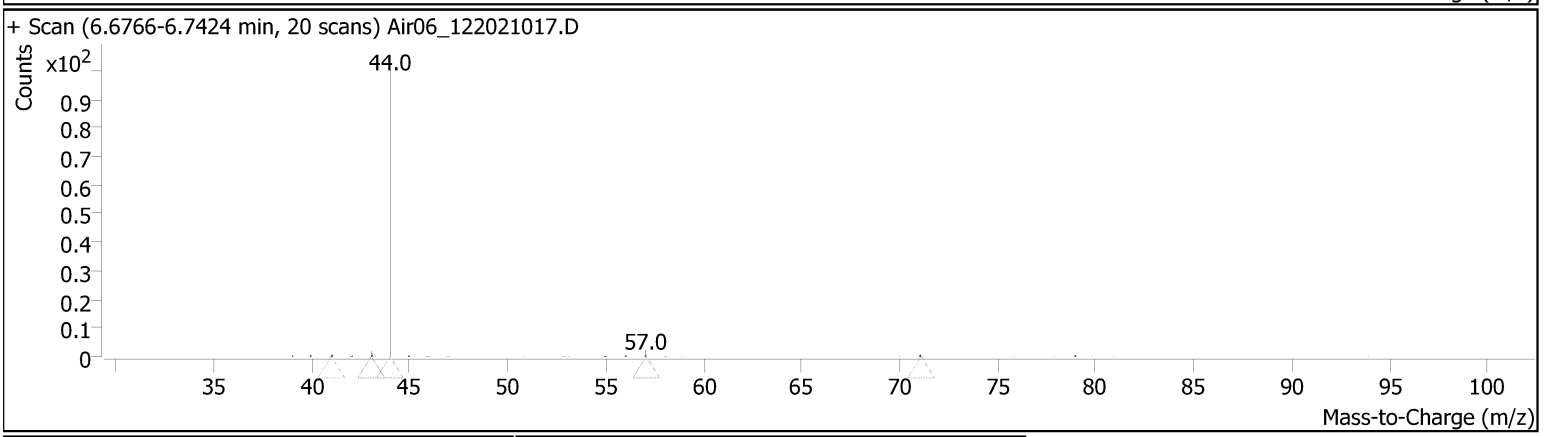


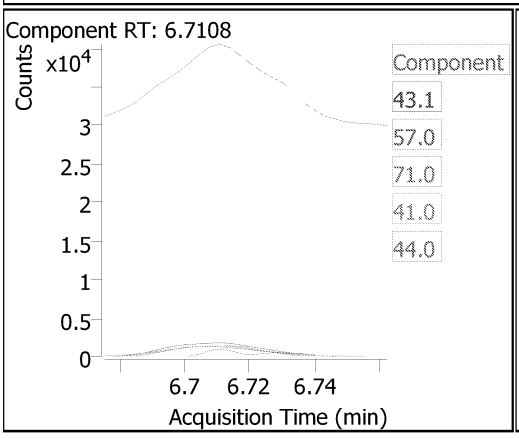


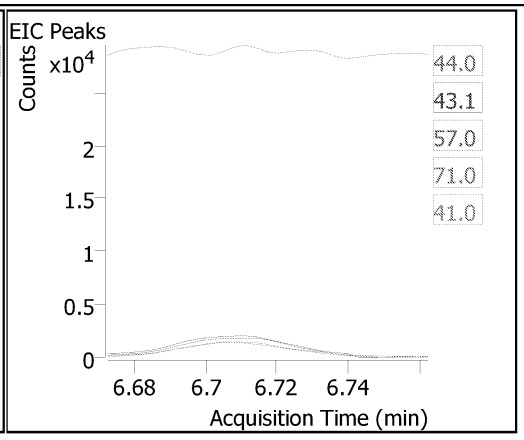
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.7108	Butane, 2,2-dimethyl-	23659.5	85.5	75-83-2	C6H14	0.1051

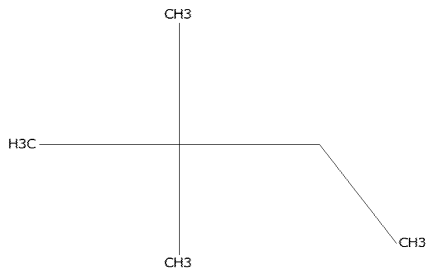




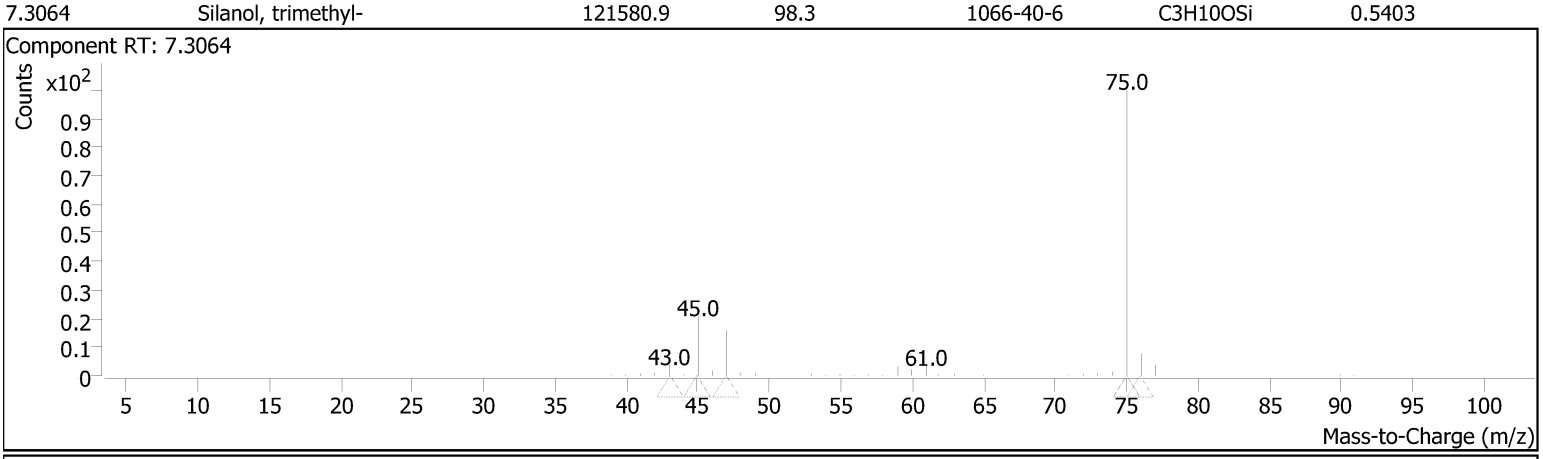


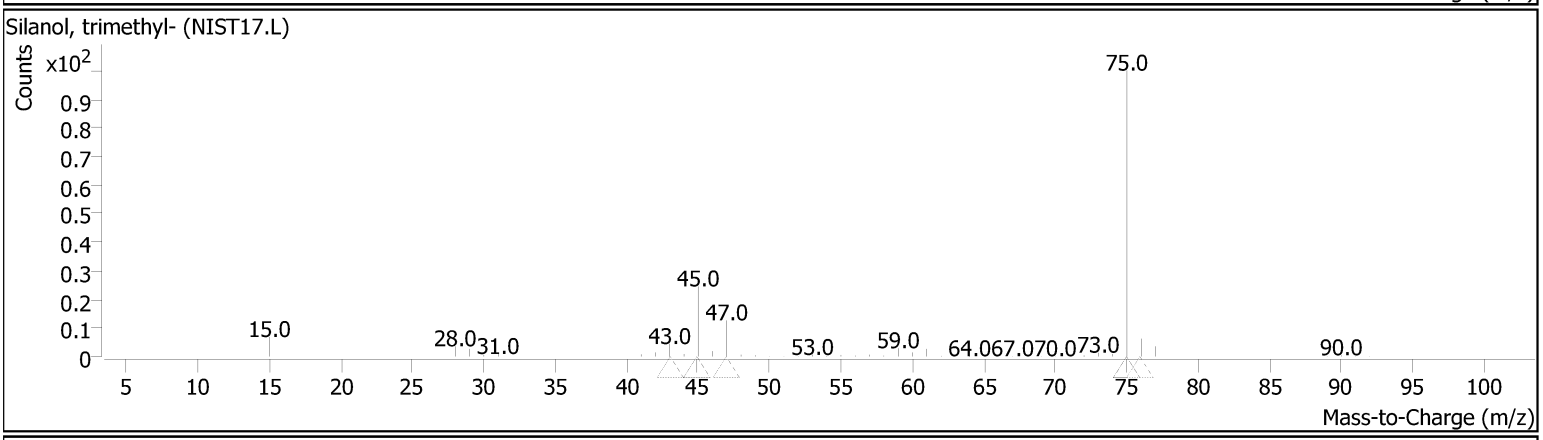


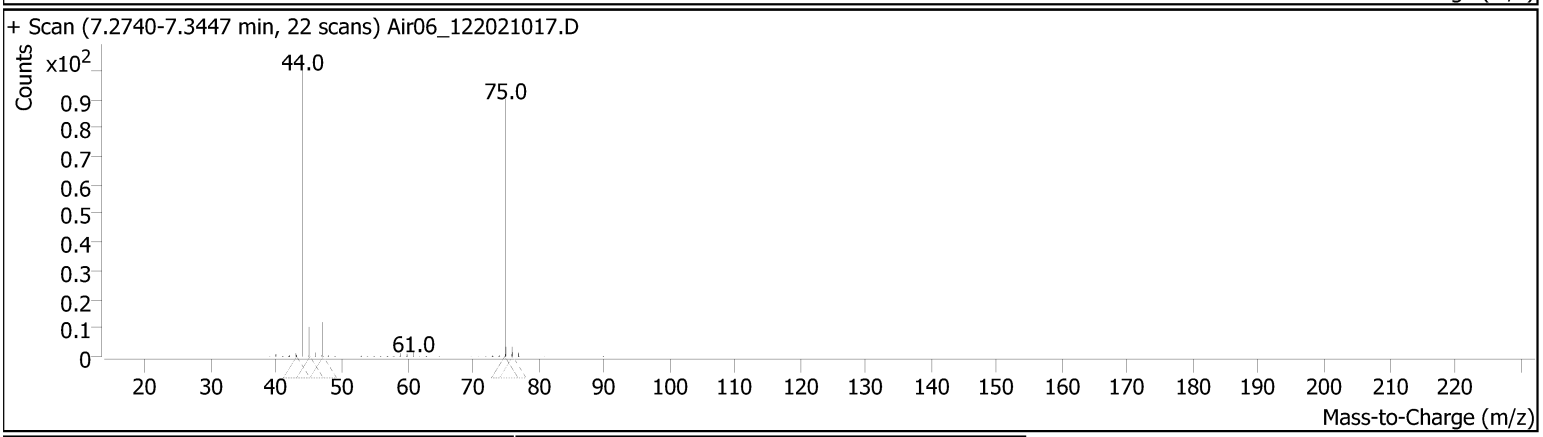


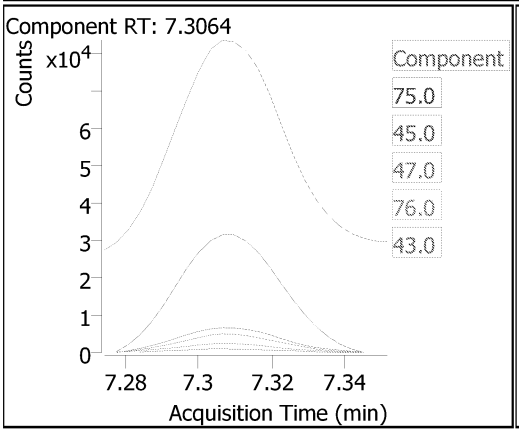


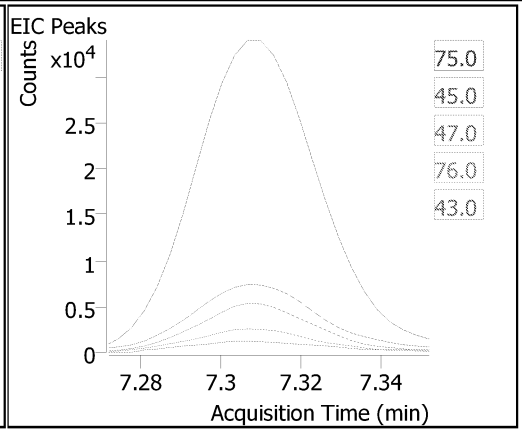
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.3064	Silanol, trimethyl-	121580.9	98.3	1066-40-6	C3H10OSi	0.5403

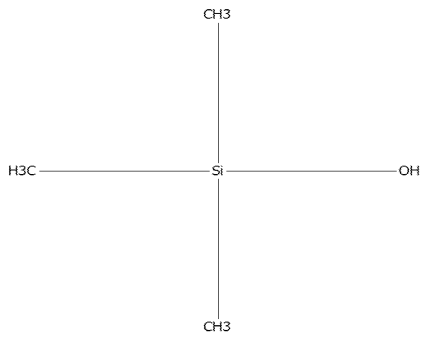




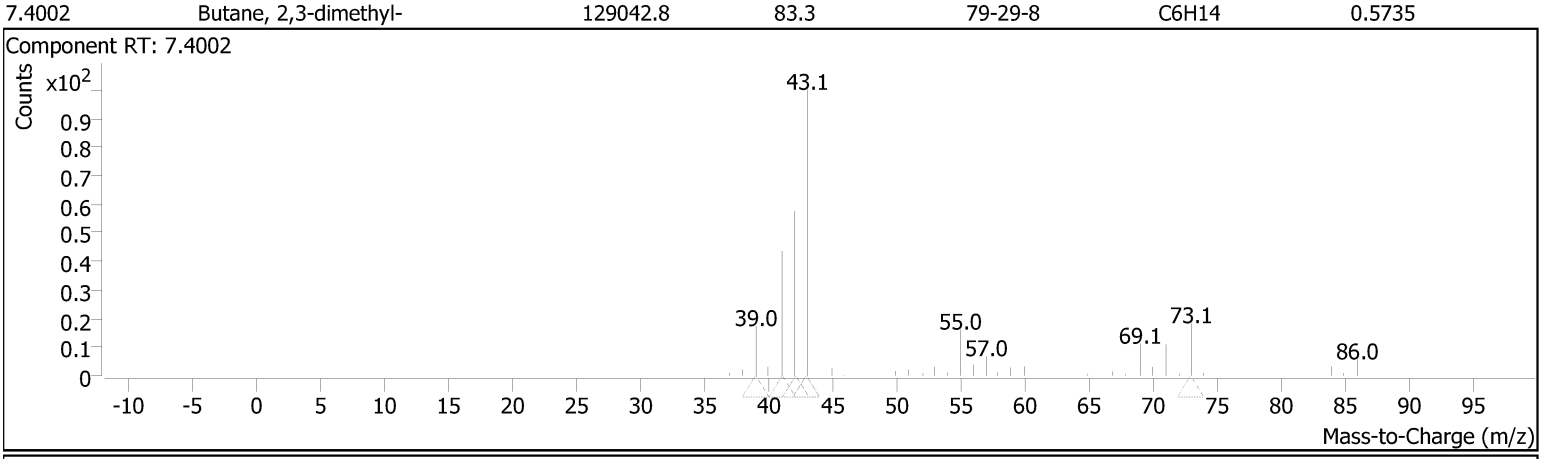


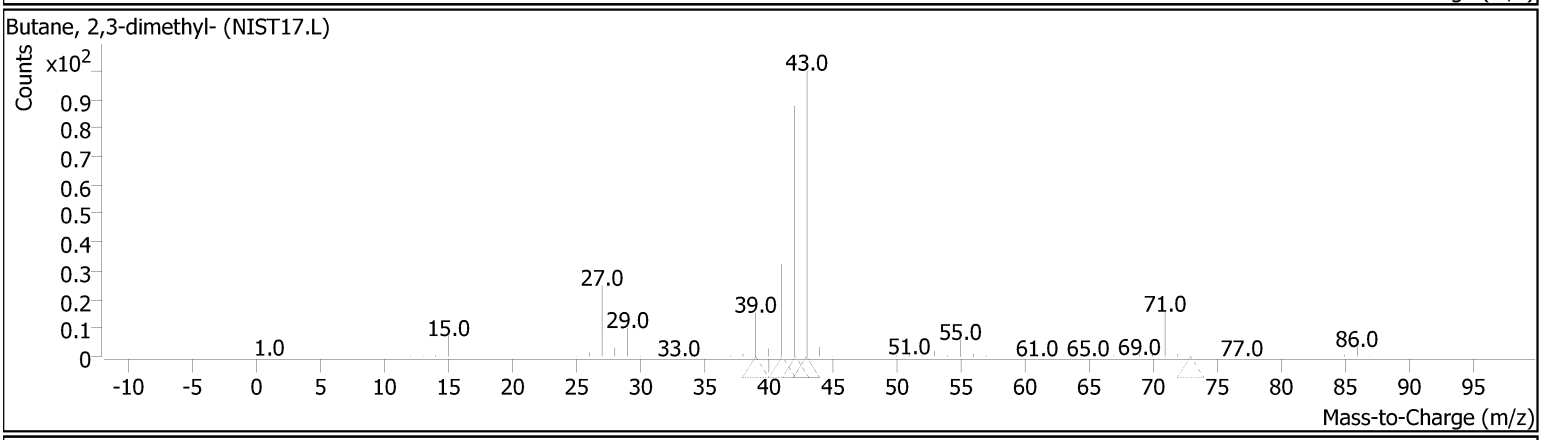


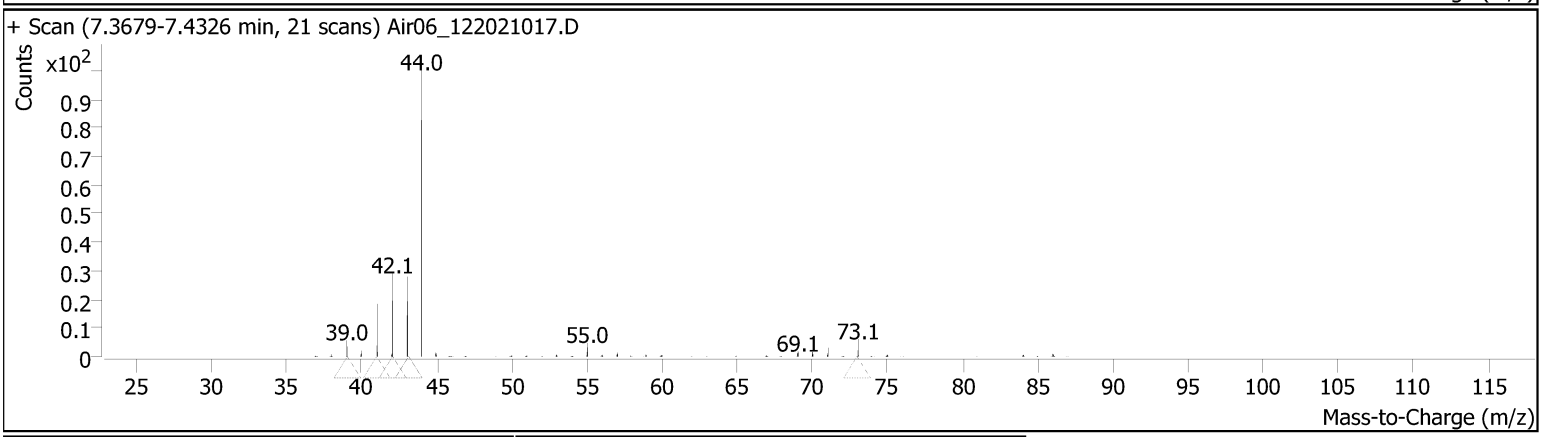


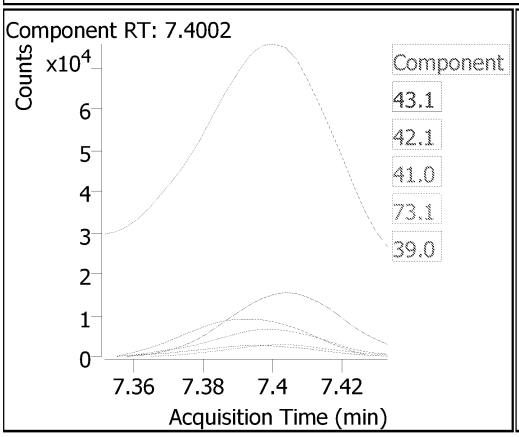


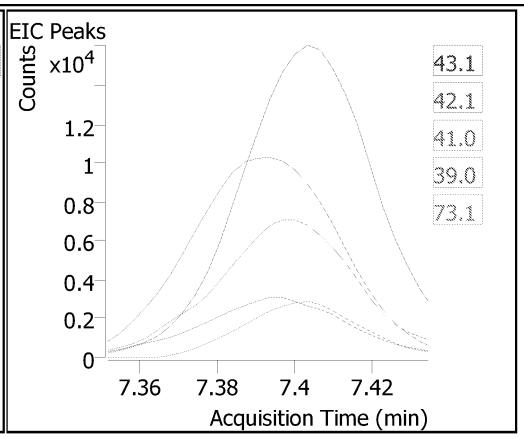
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.4002	Butane, 2,3-dimethyl-	129042.8	83.3	79-29-8	C6H14	0.5735

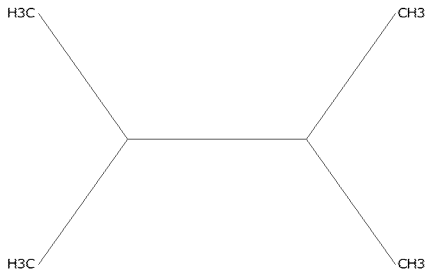




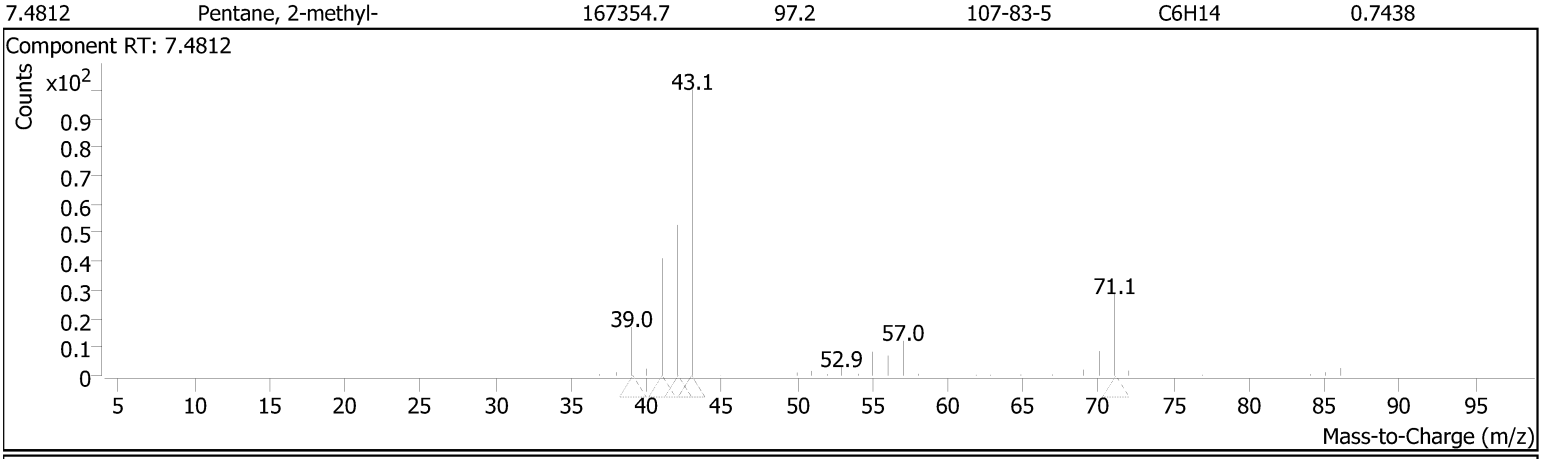


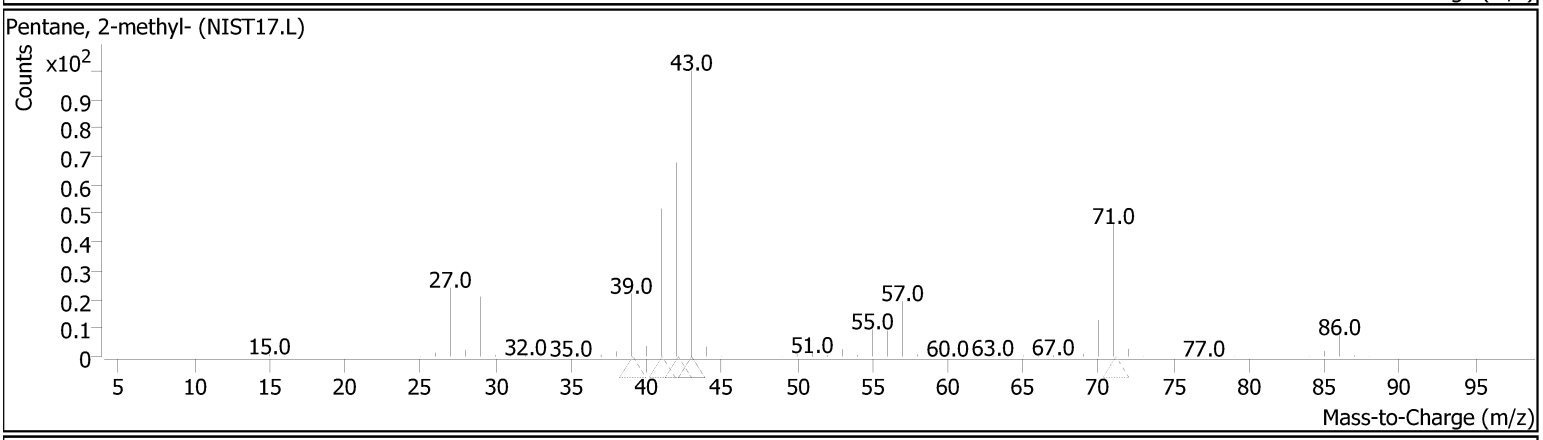


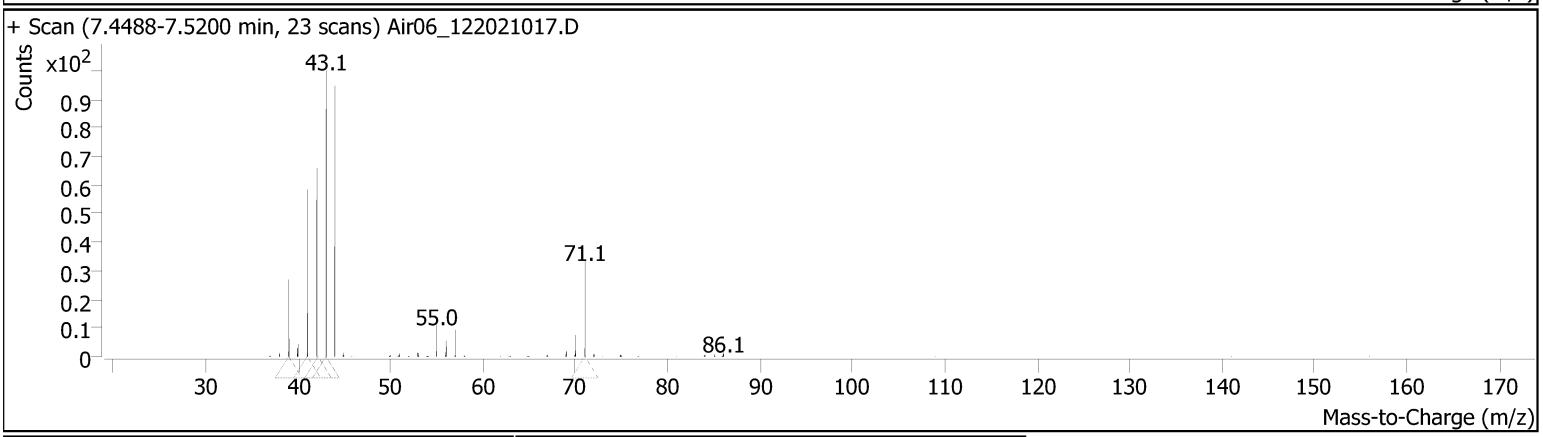


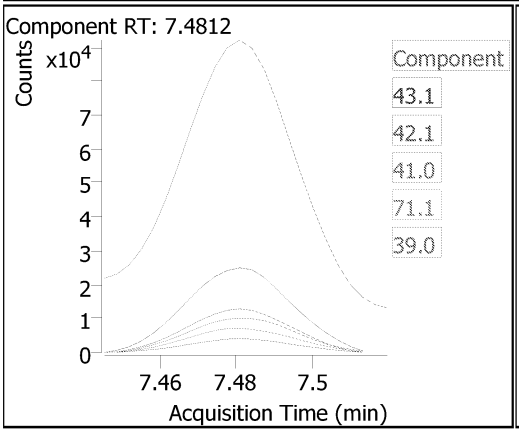


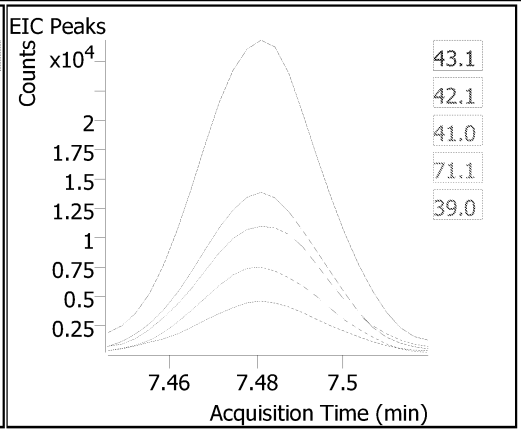
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.4812	Pentane, 2-methyl-	167354.7	97.2	107-83-5	C6H14	0.7438

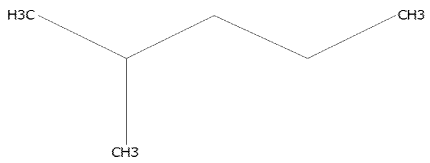




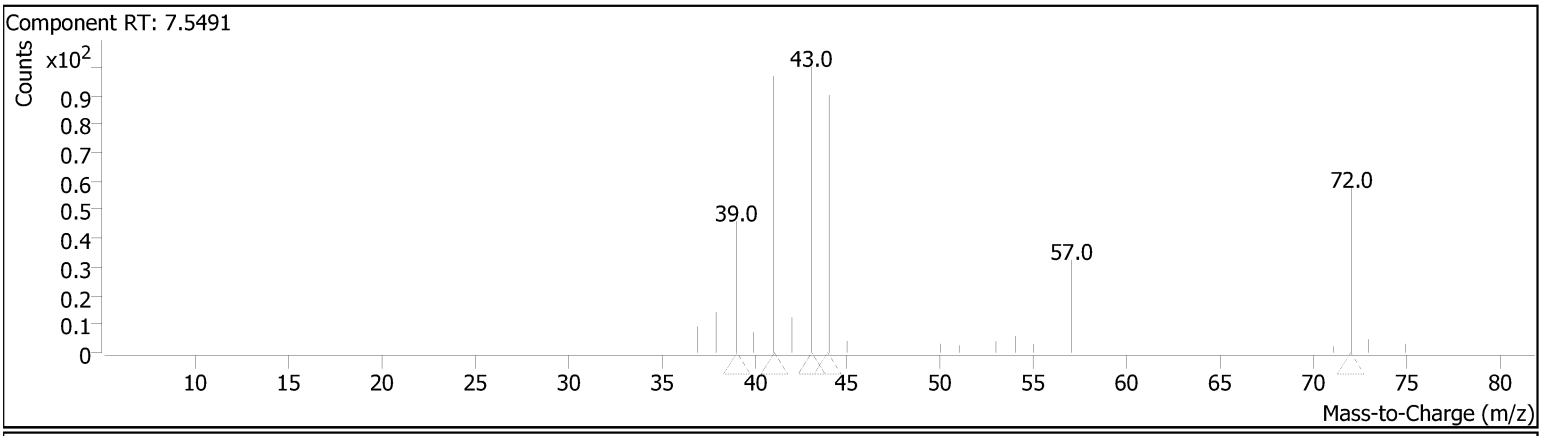


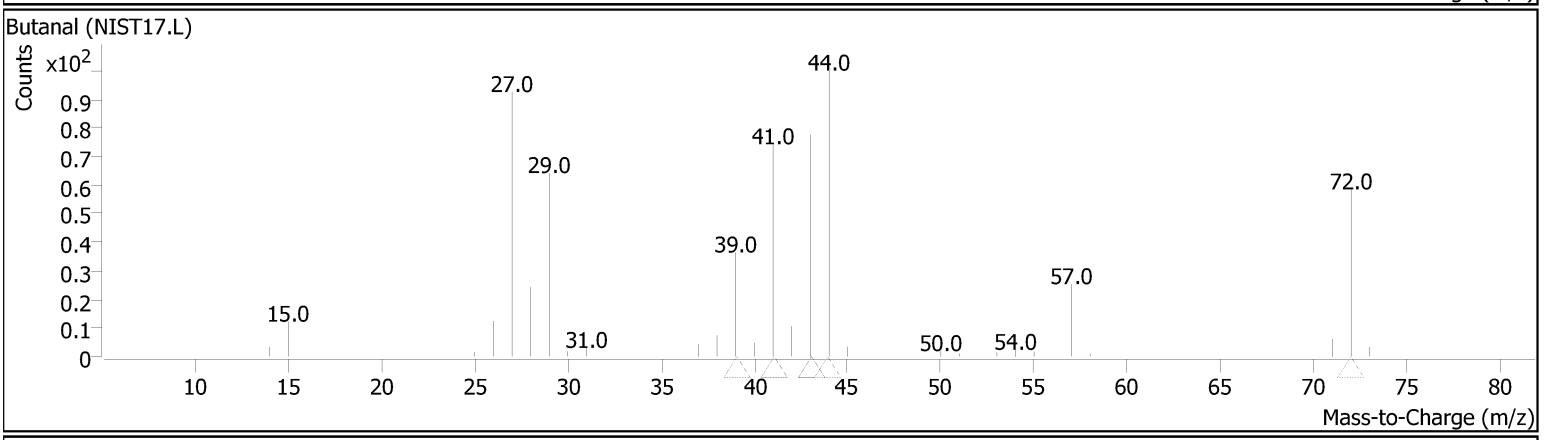


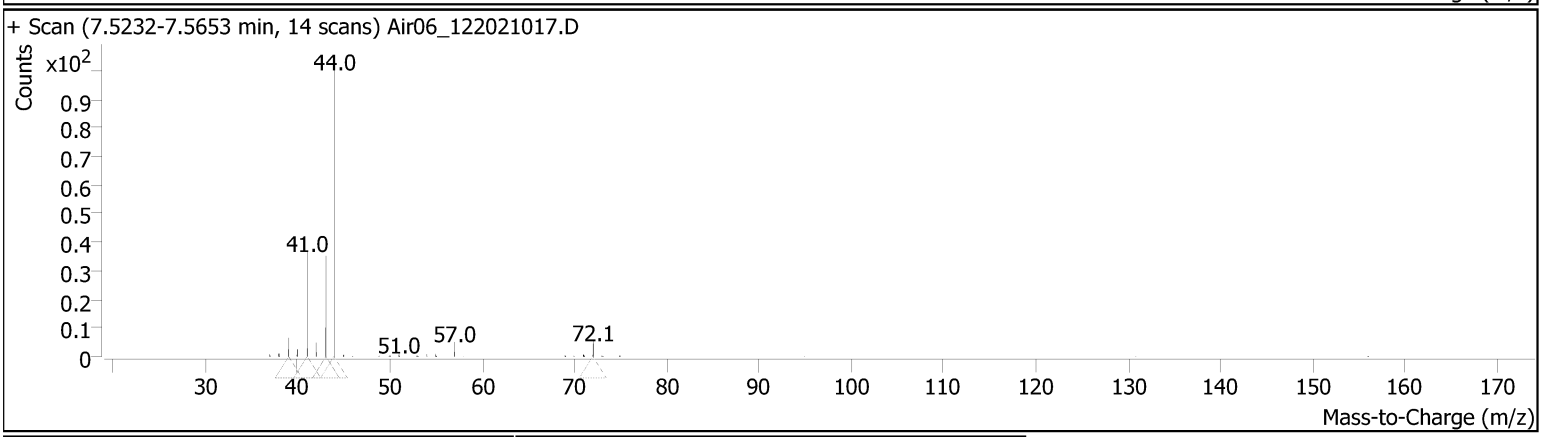


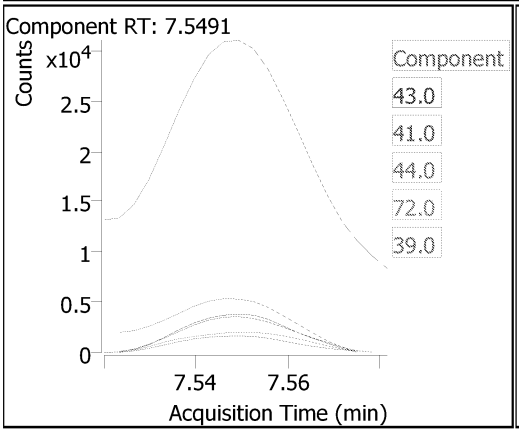


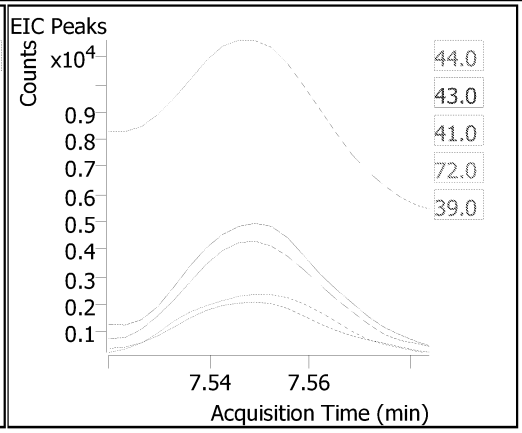
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.5491	Butanal	41349.8	97.7	123-72-8	C4H8O	0.1838

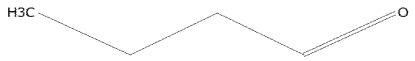




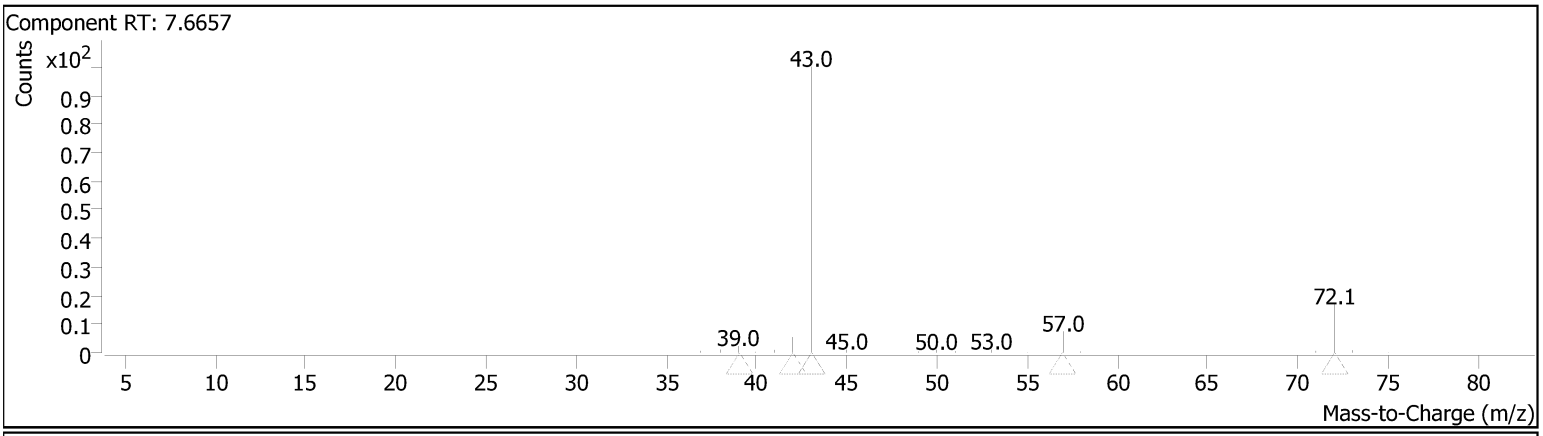


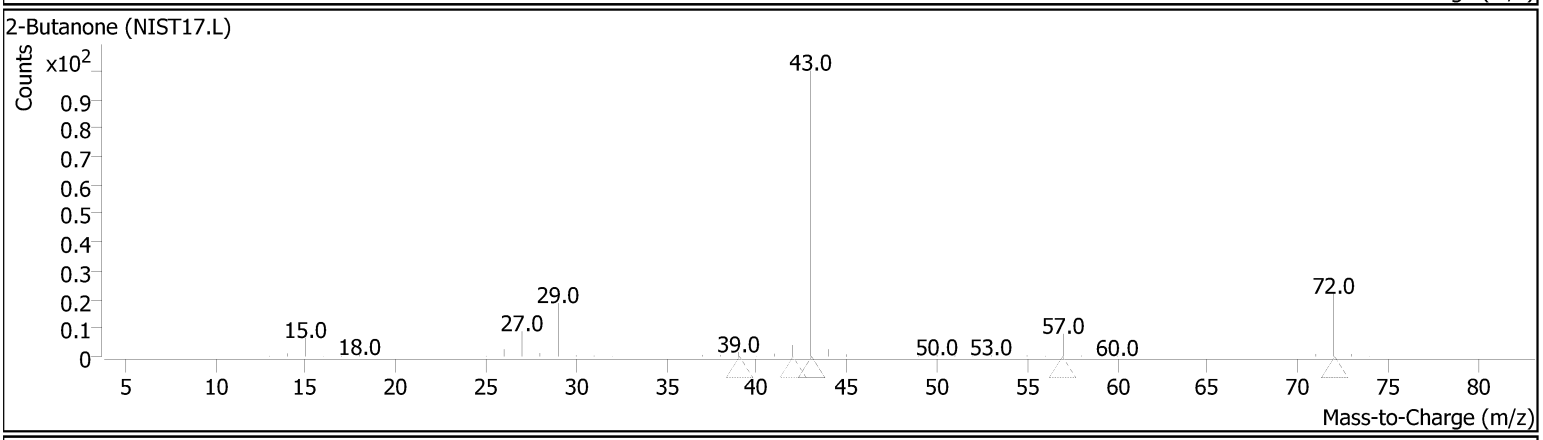


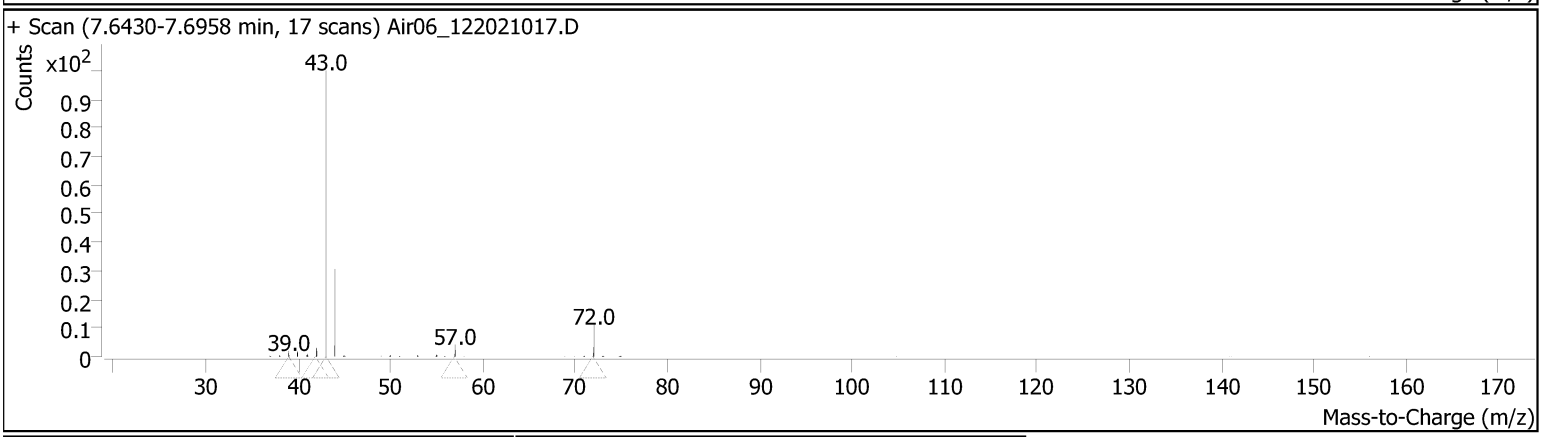


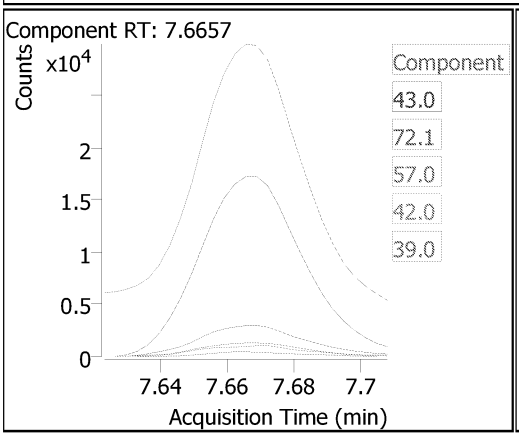


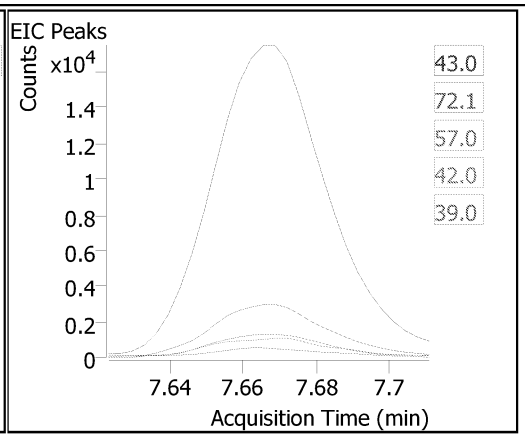
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.6657	2-Butanone	52603.0	95.9	78-93-3	C4H8O	0.2338

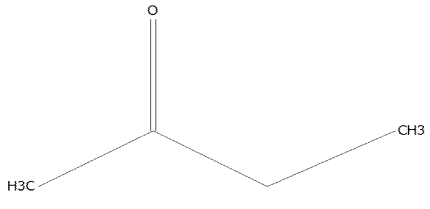




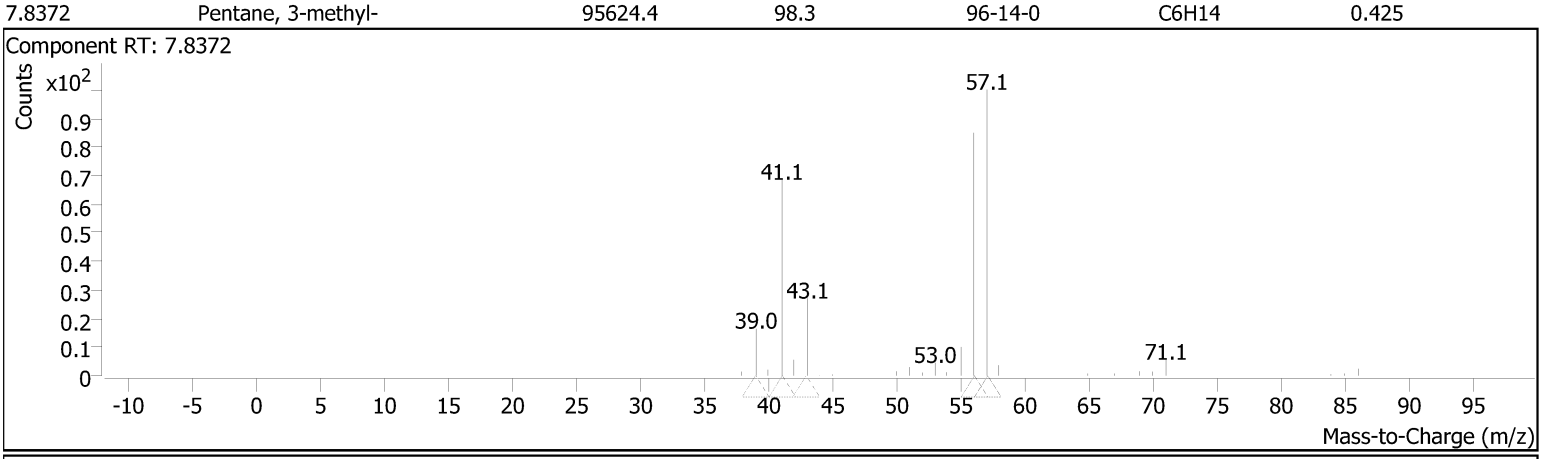


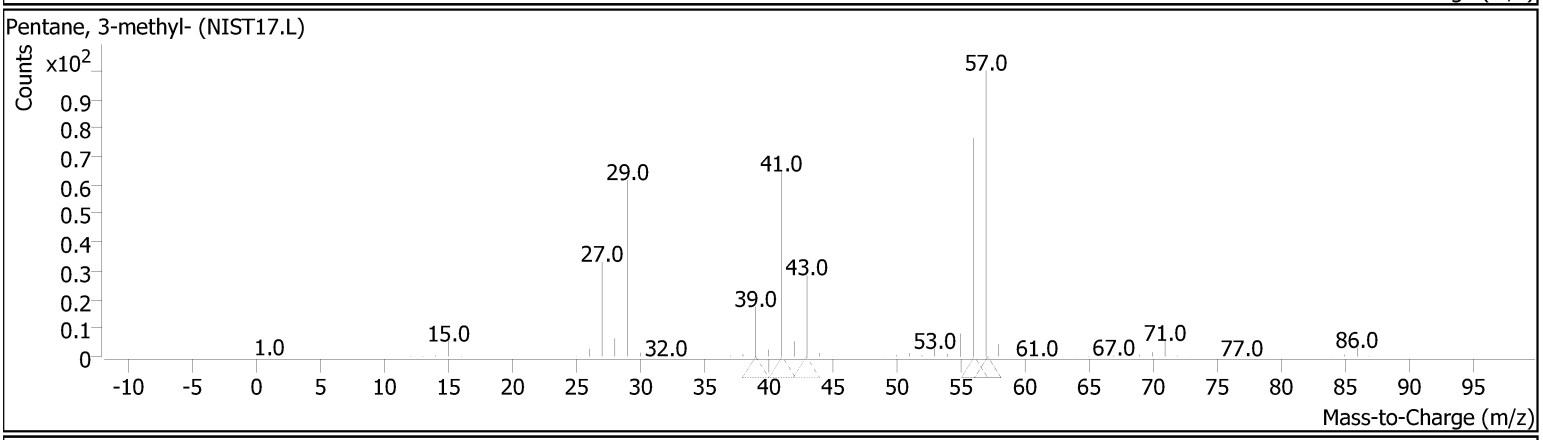


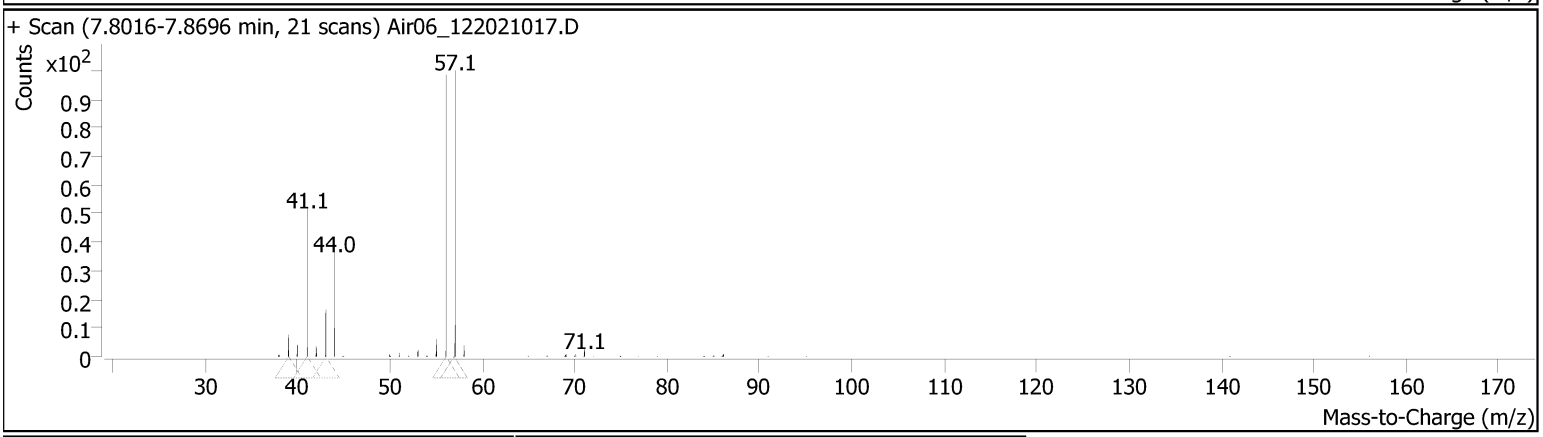


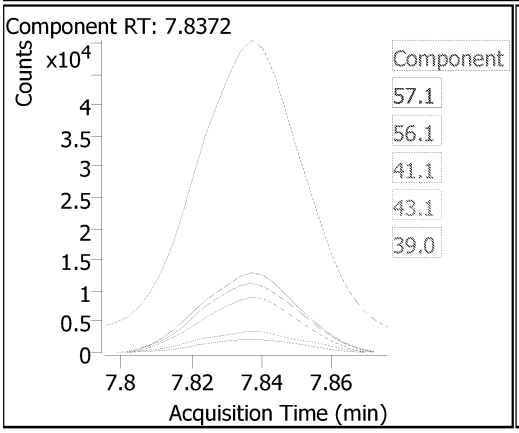


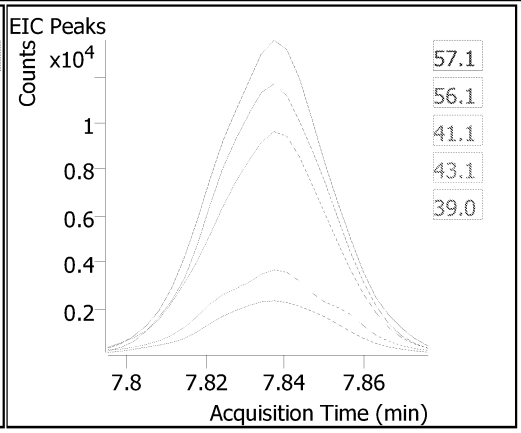
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.8372	Pentane, 3-methyl-	95624.4	98.3	96-14-0	C6H14	0.425

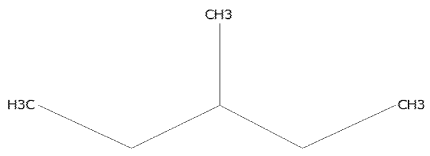




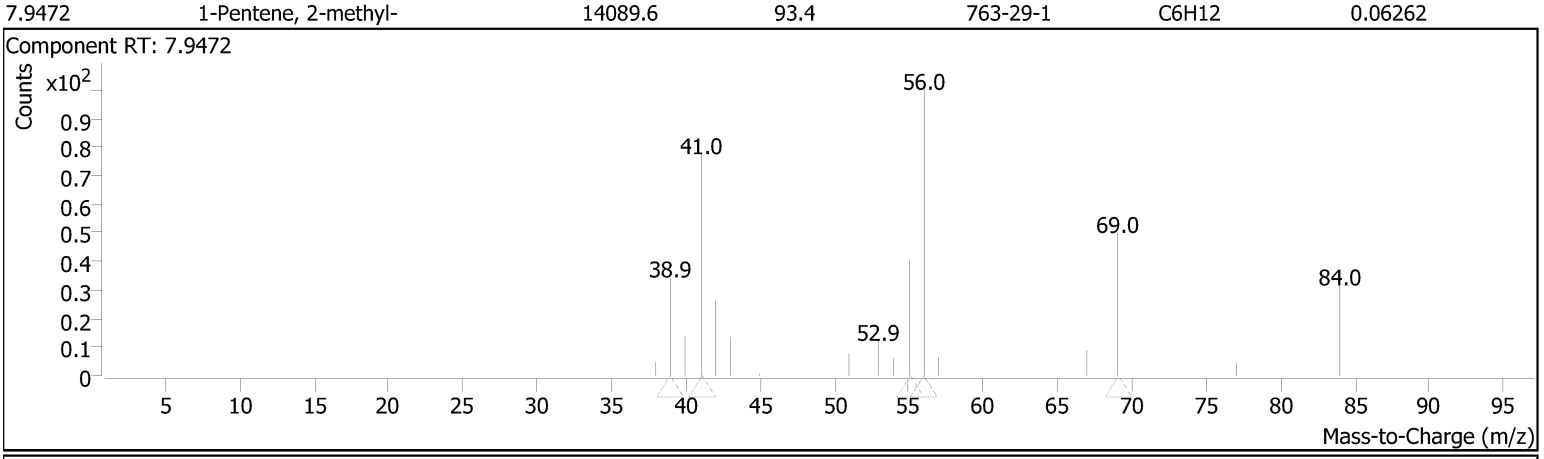


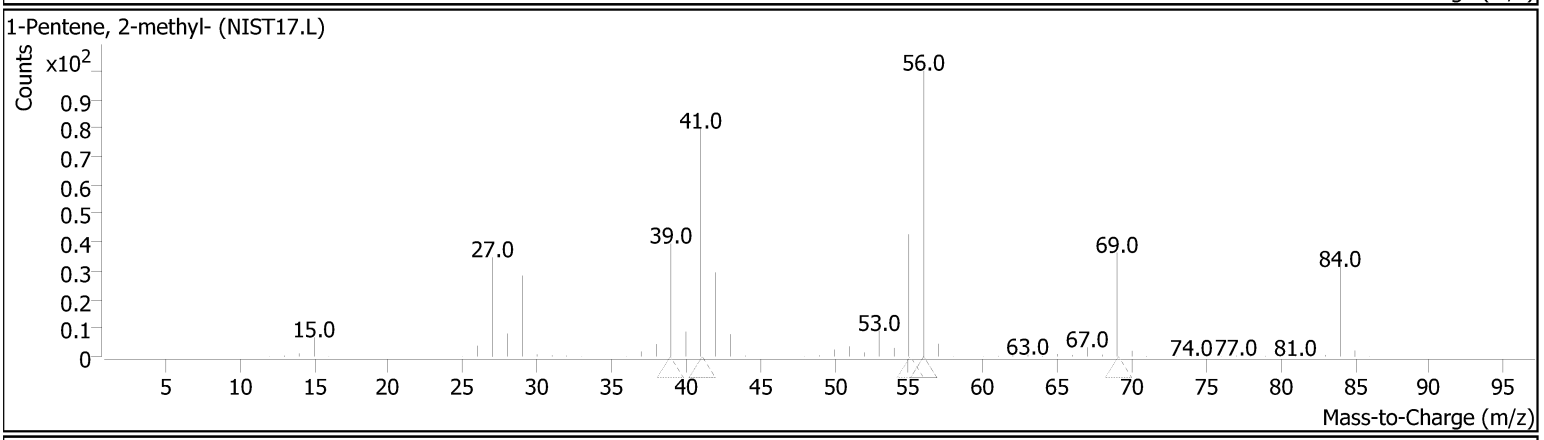


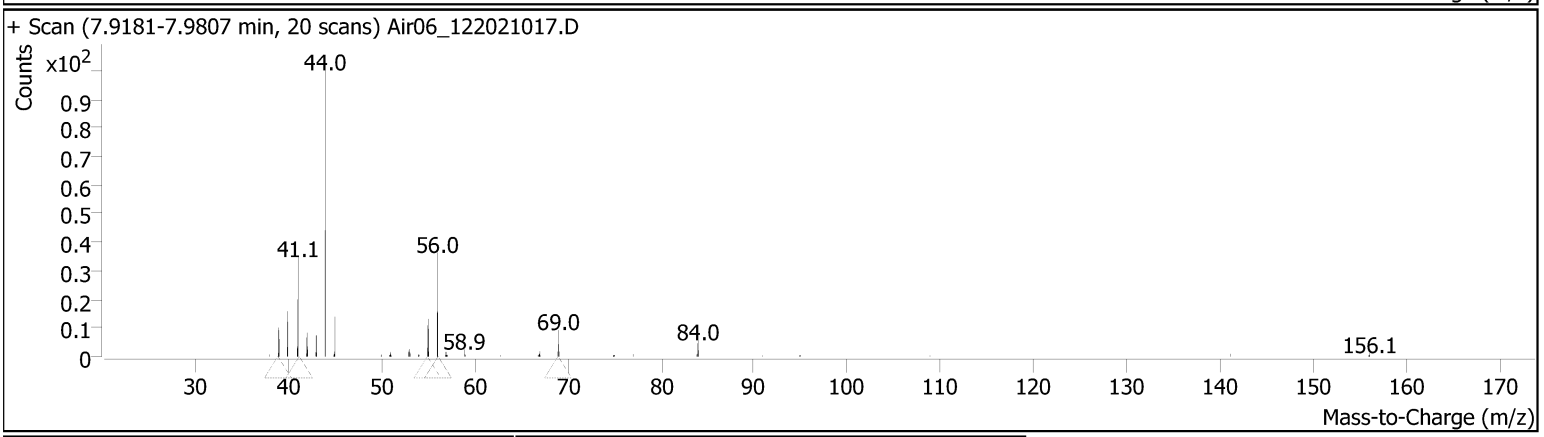


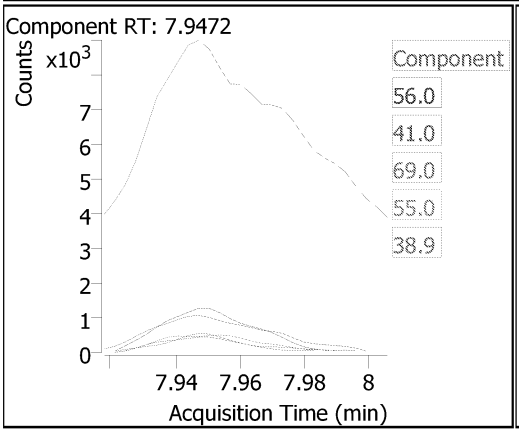


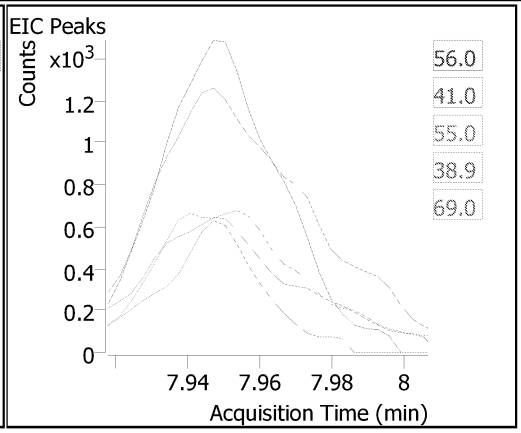
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.9472	1-Pentene, 2-methyl-	14089.6	93.4	763-29-1	C6H12	0.06262

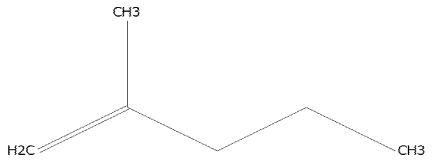




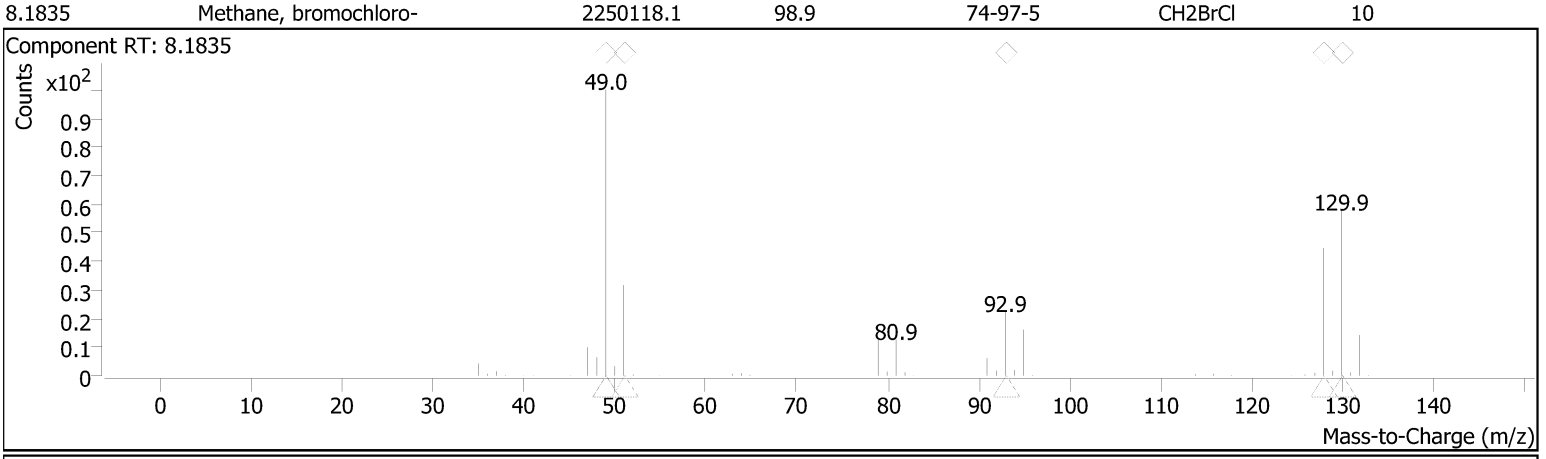


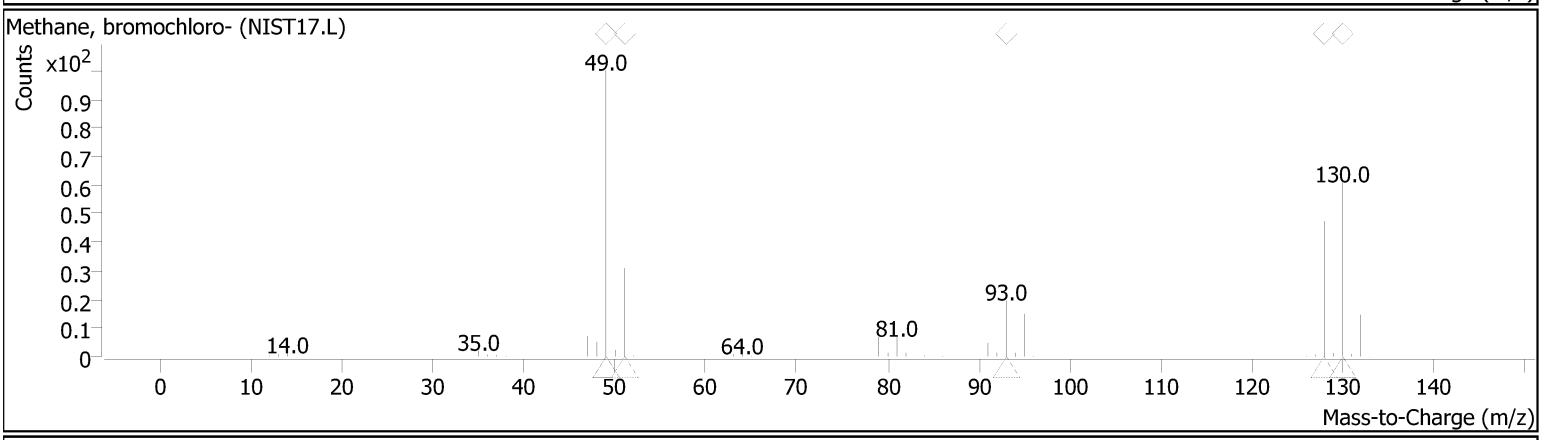


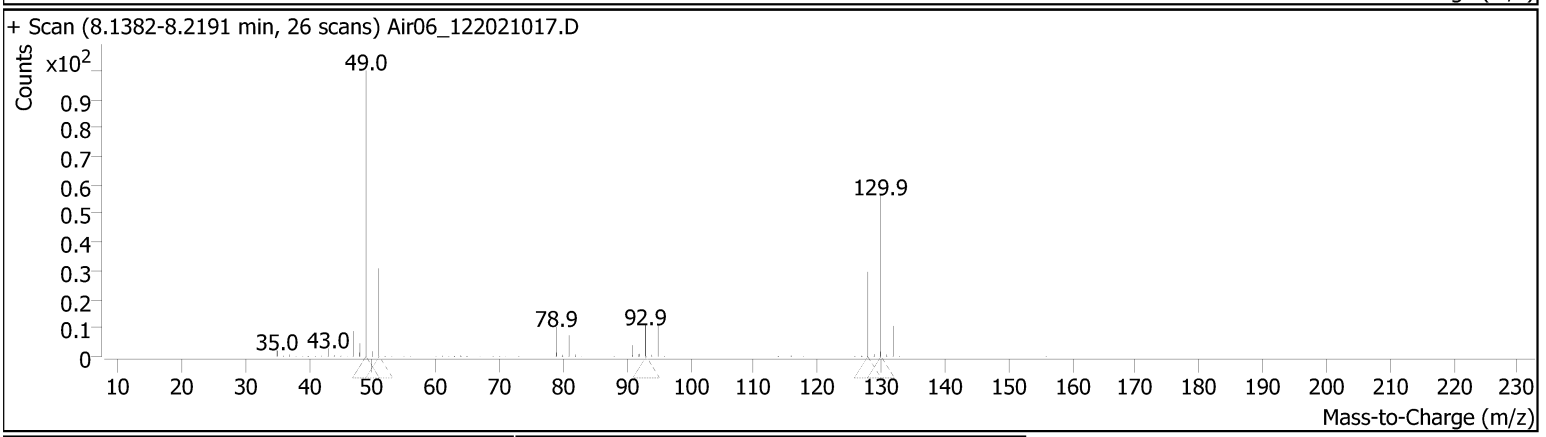


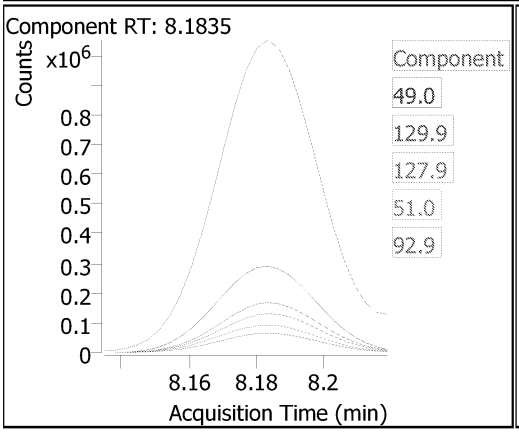


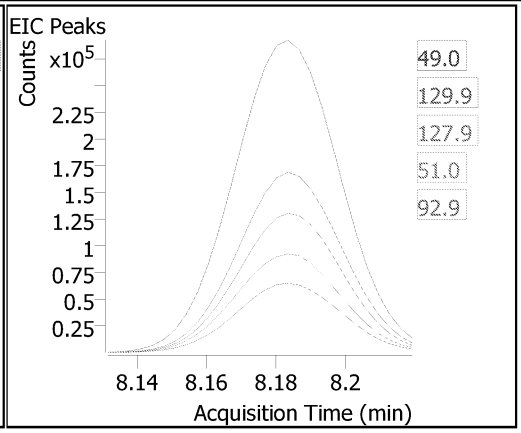
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.1835	Methane, bromochloro-	2250118.1	98.9	74-97-5	CH2BrCl	10

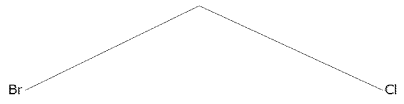




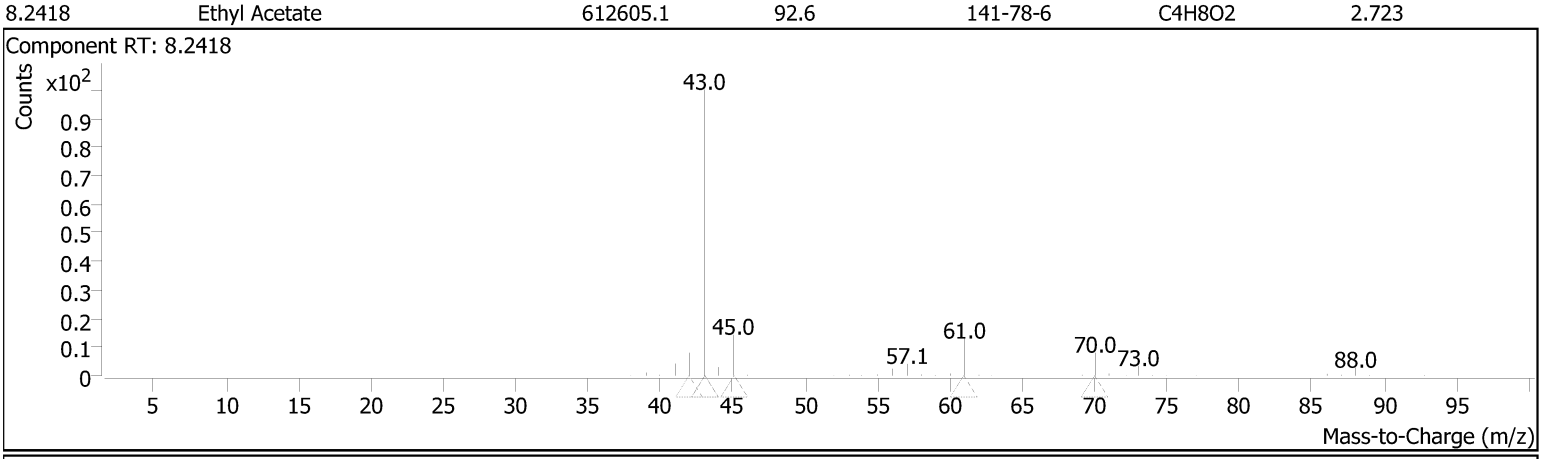


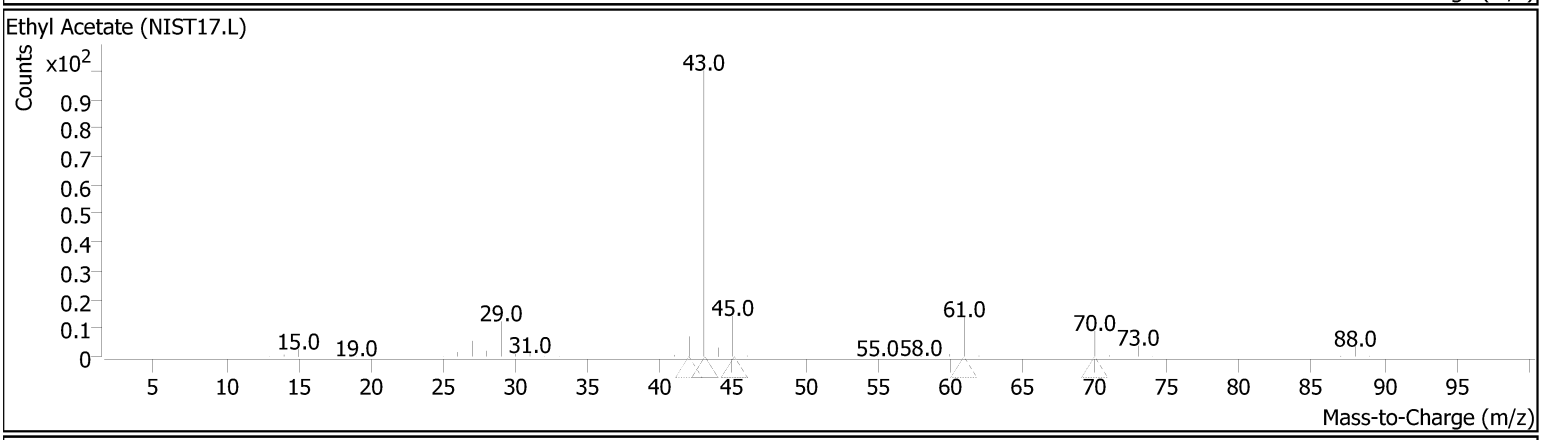


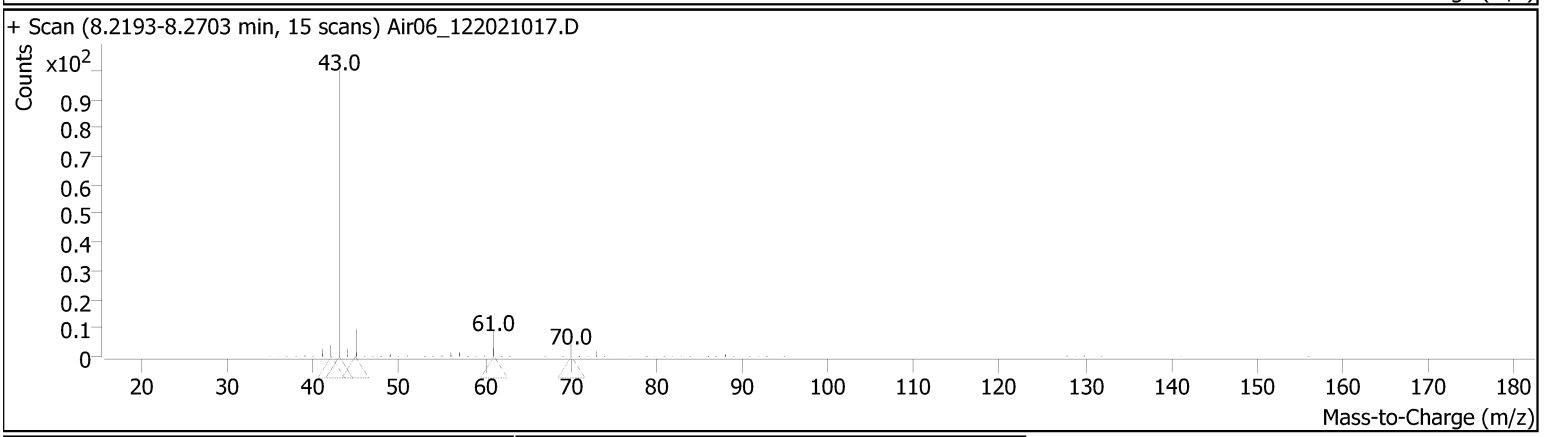


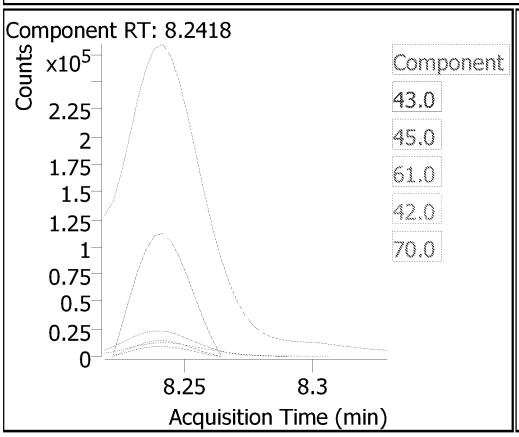


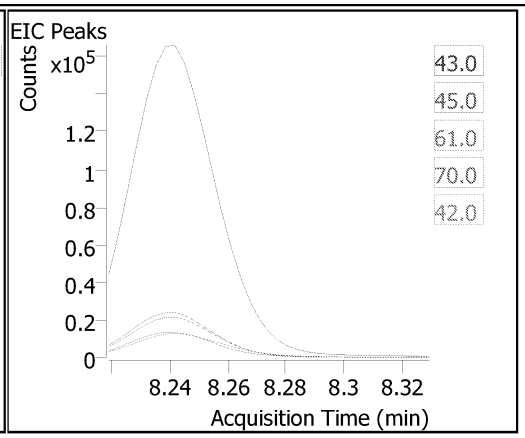
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.2418	Ethyl Acetate	612605.1	92.6	141-78-6	C4H8O2	2.723

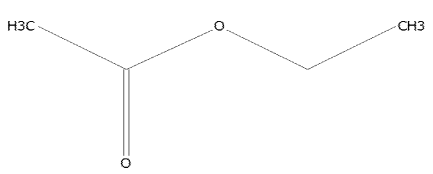








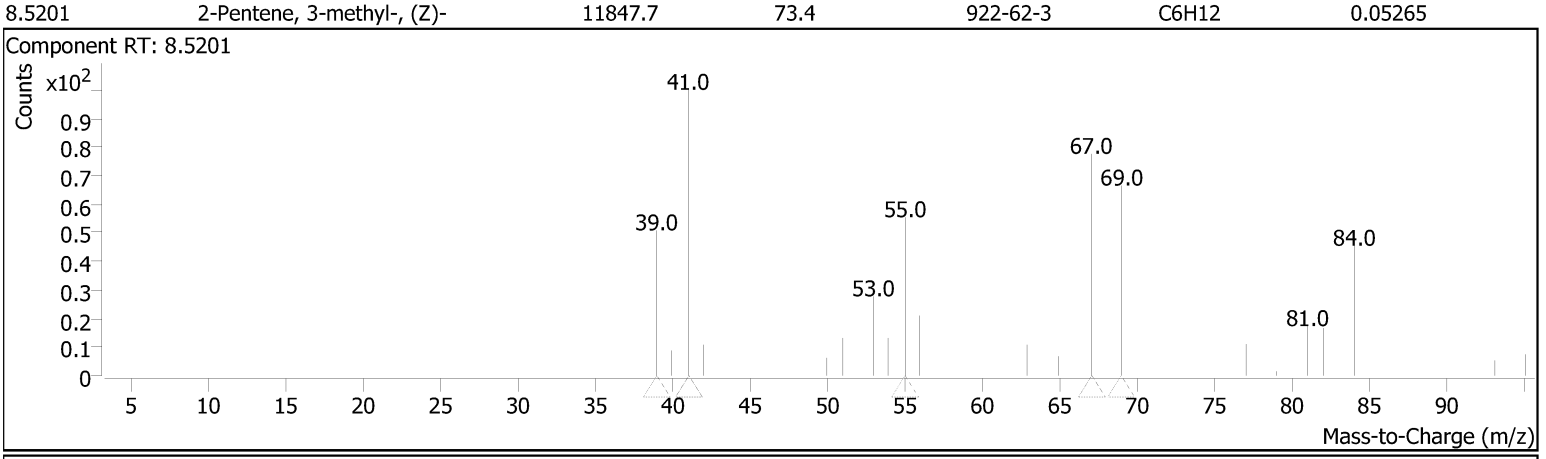


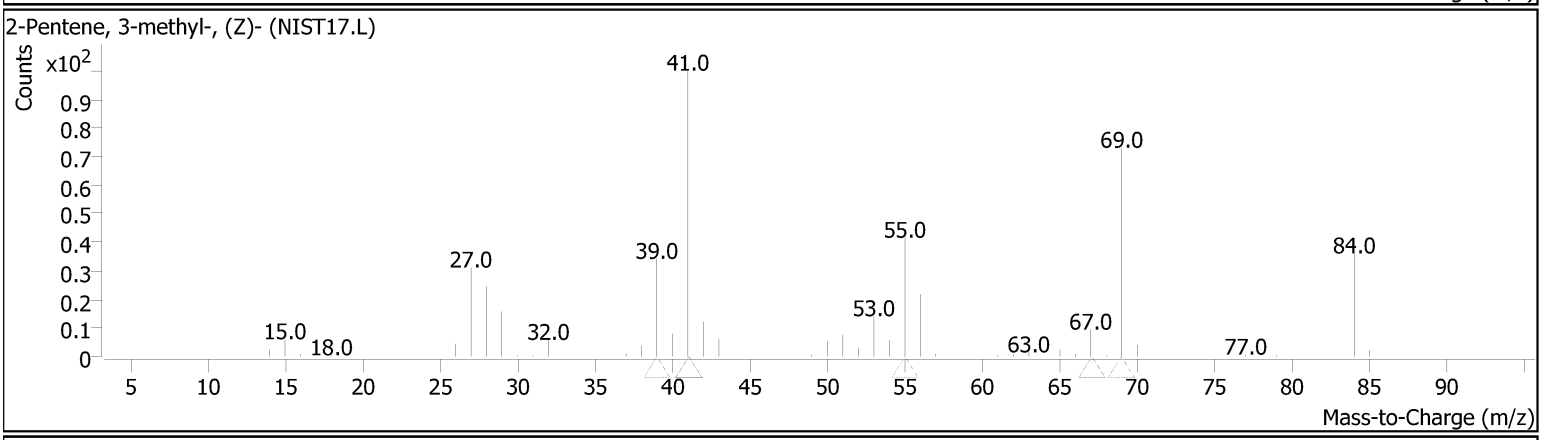


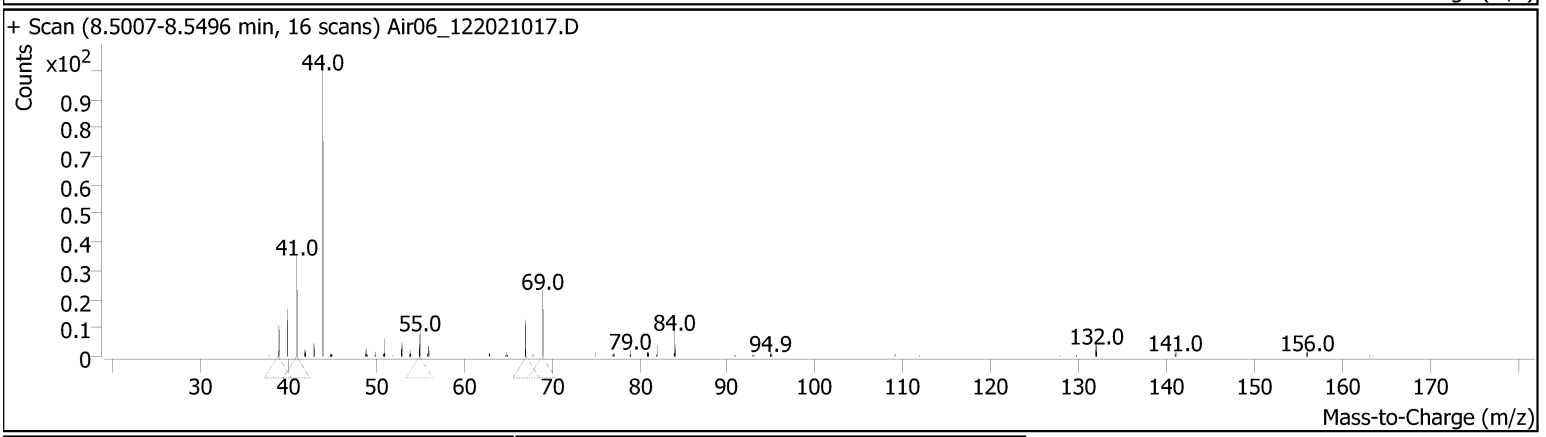
Library Search Results - NonTarget Hits with Details

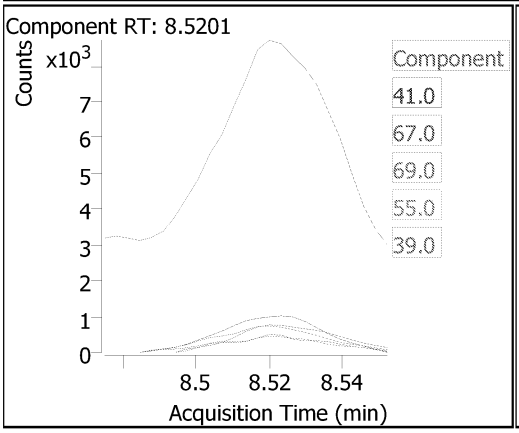
Agilent Technologies

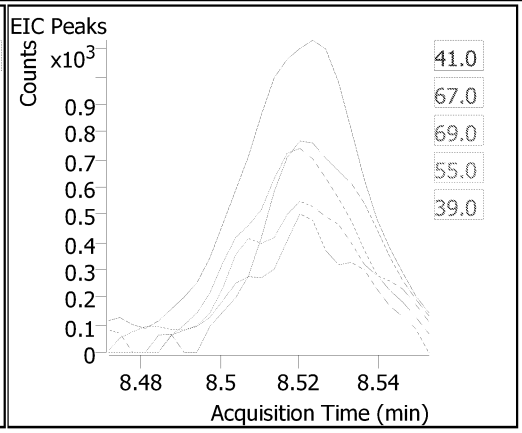
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.5201	2-Pentene, 3-methyl-, (Z)-	11847.7	73.4	922-62-3	C6H12	0.05265

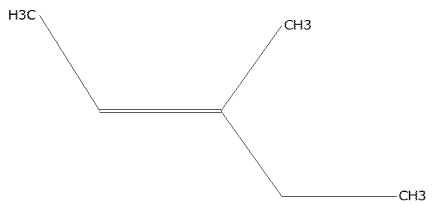




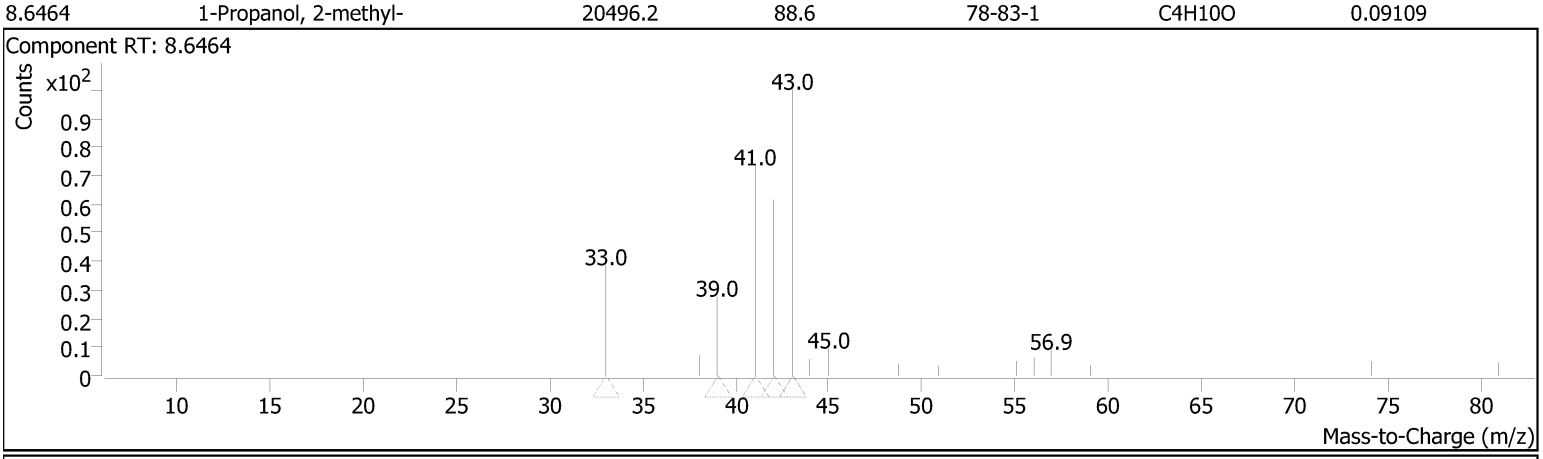


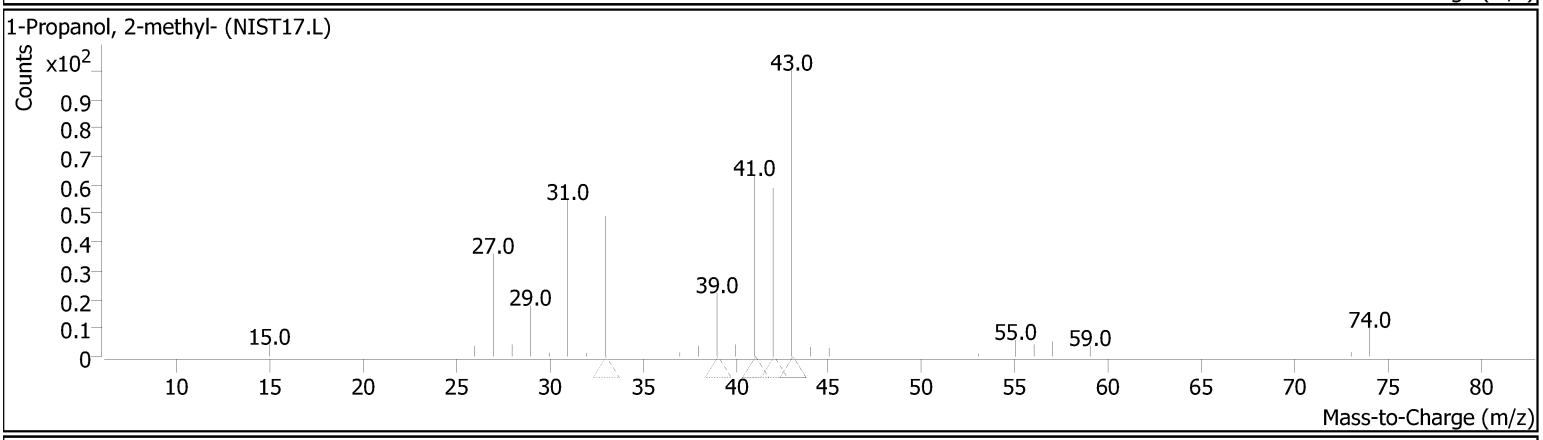


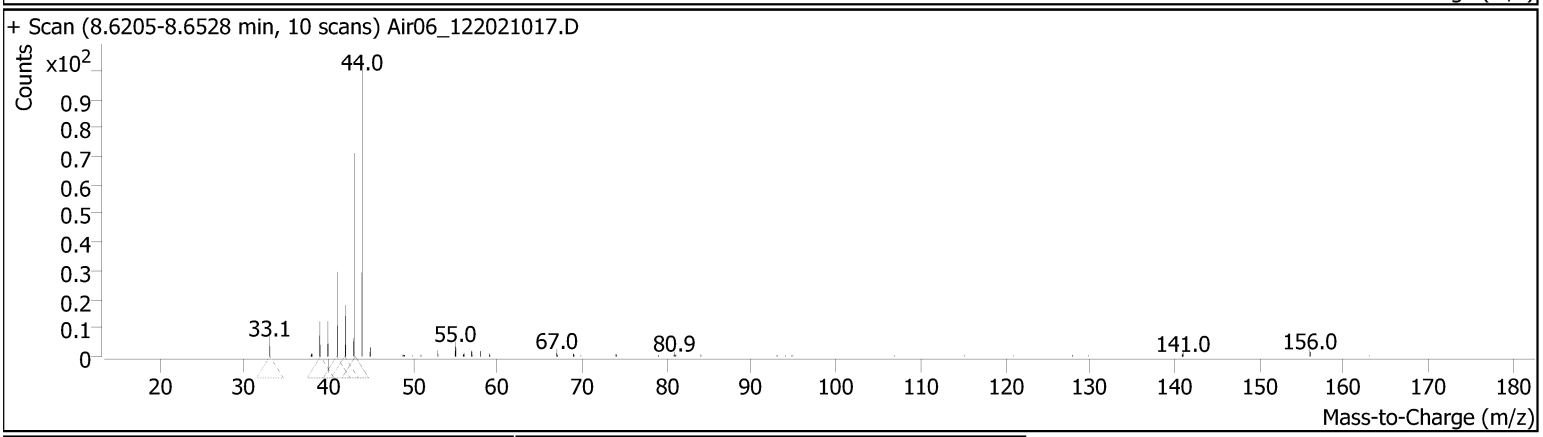


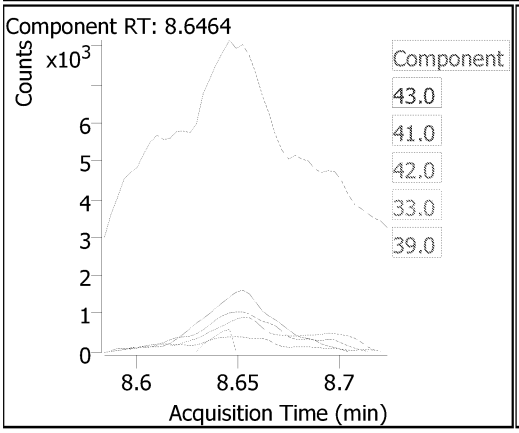


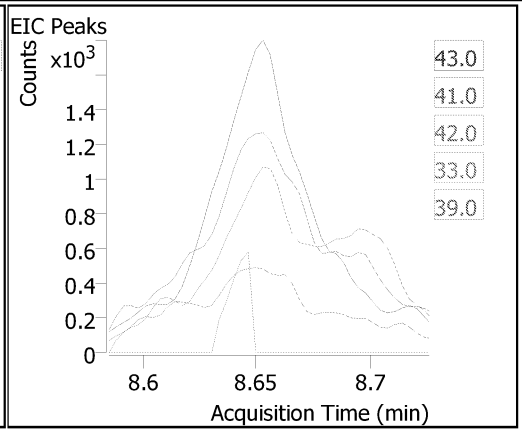
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.6464	1-Propanol, 2-methyl-	20496.2	88.6	78-83-1	C4H10O	0.09109

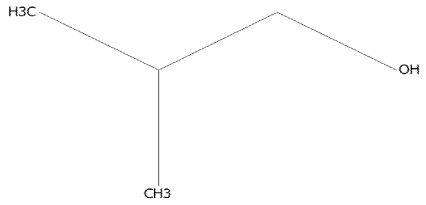




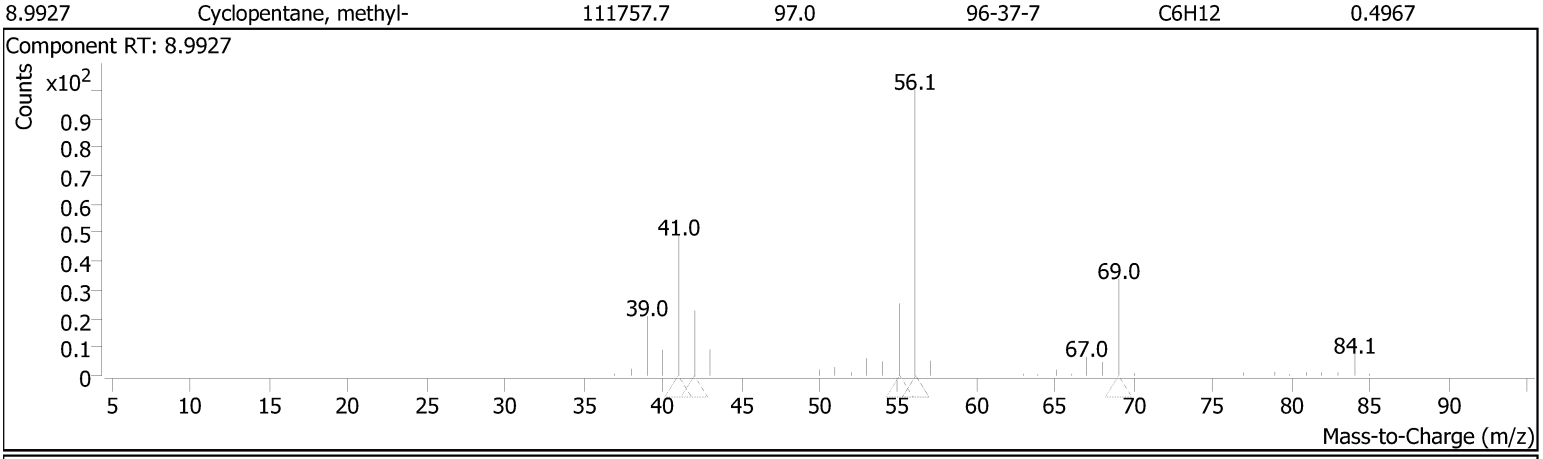


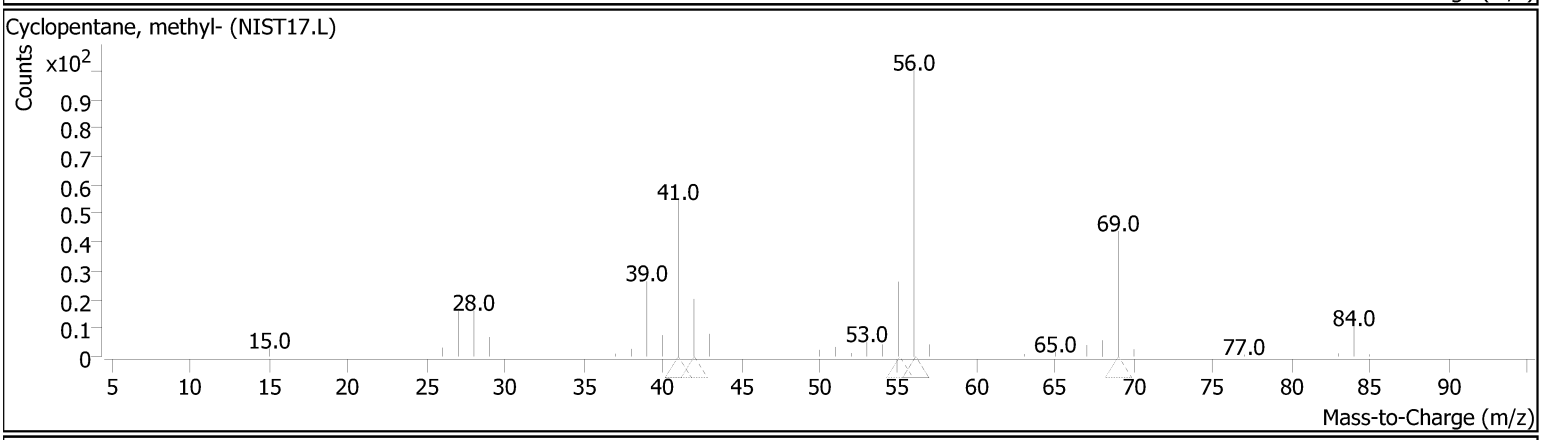


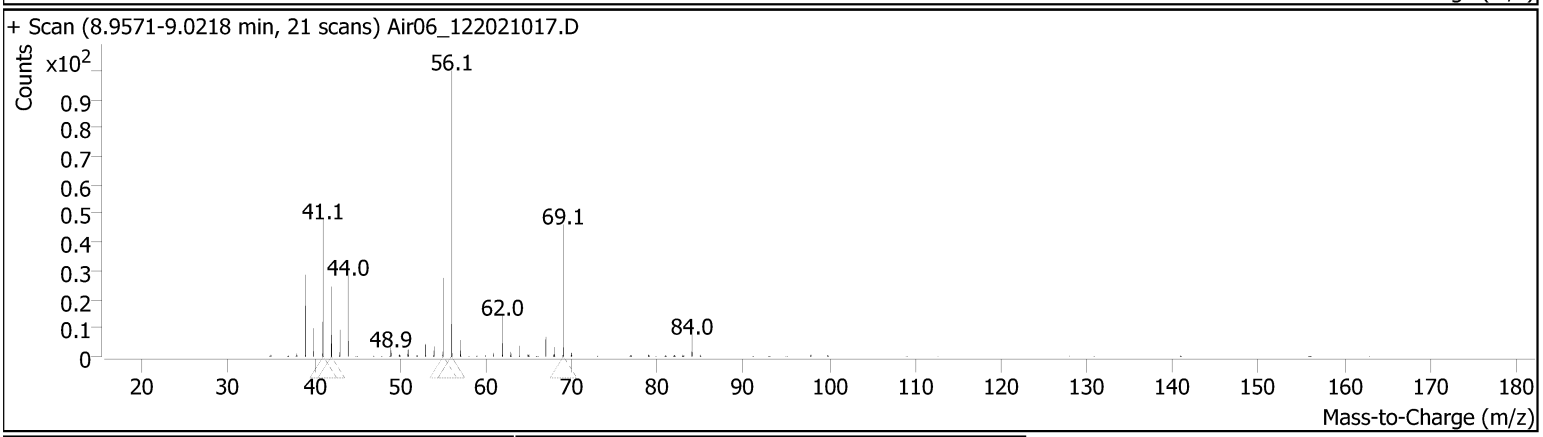


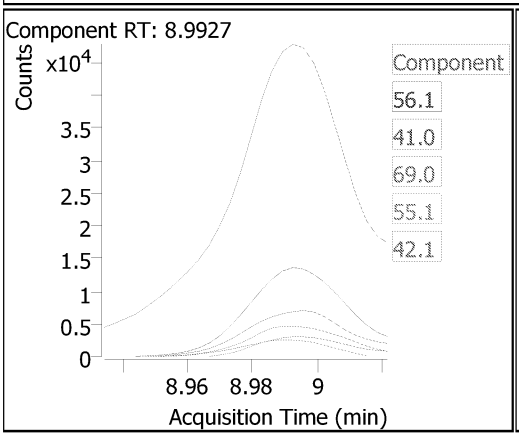


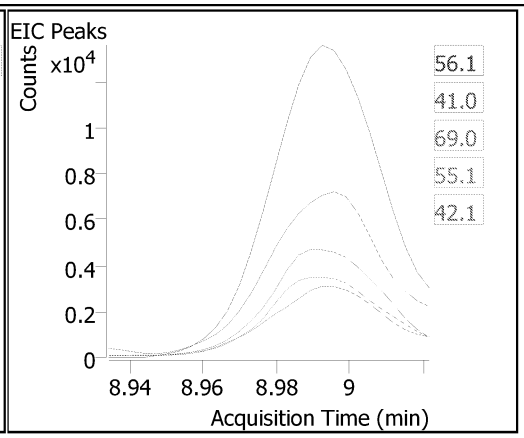
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.9927	Cyclopentane, methyl-	111757.7	97.0	96-37-7	C6H12	0.4967

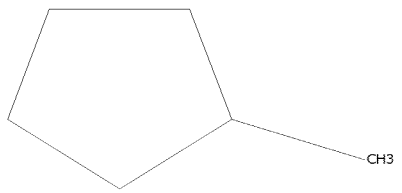




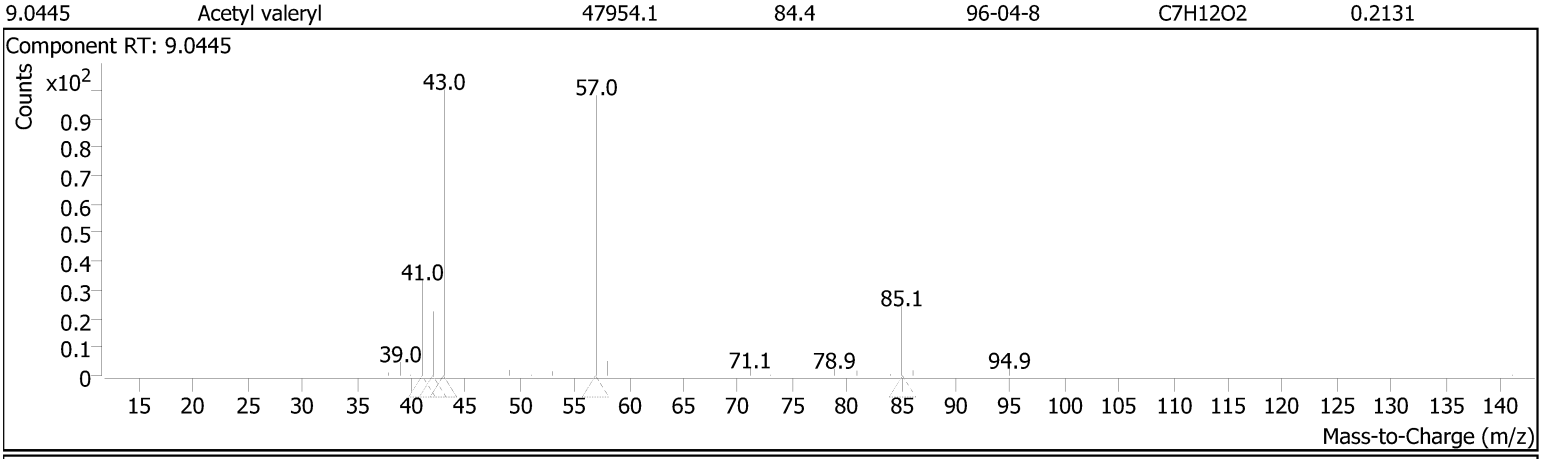


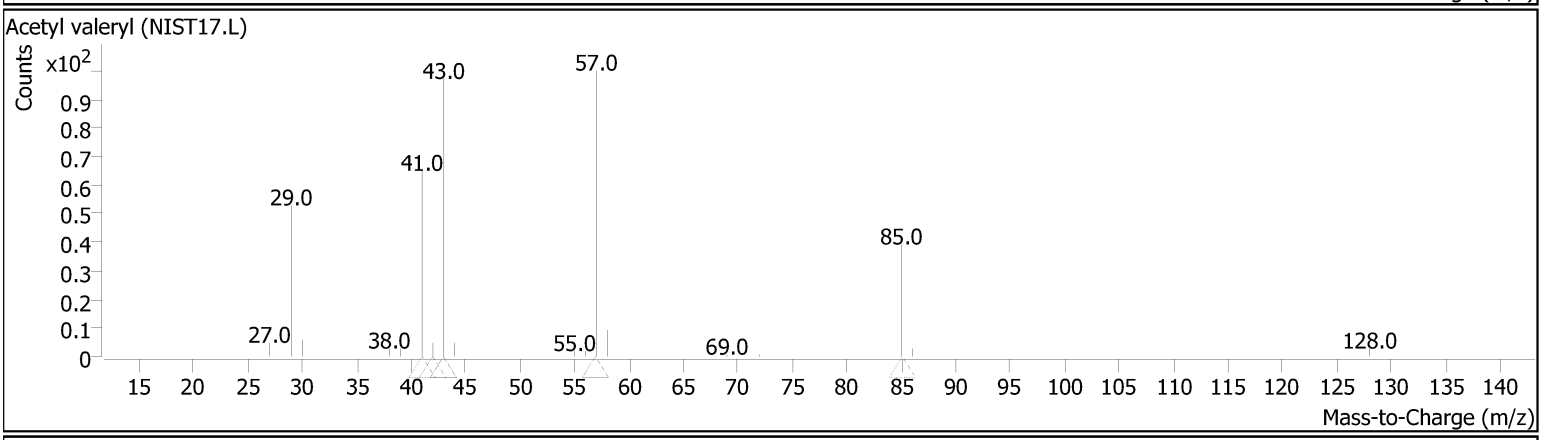


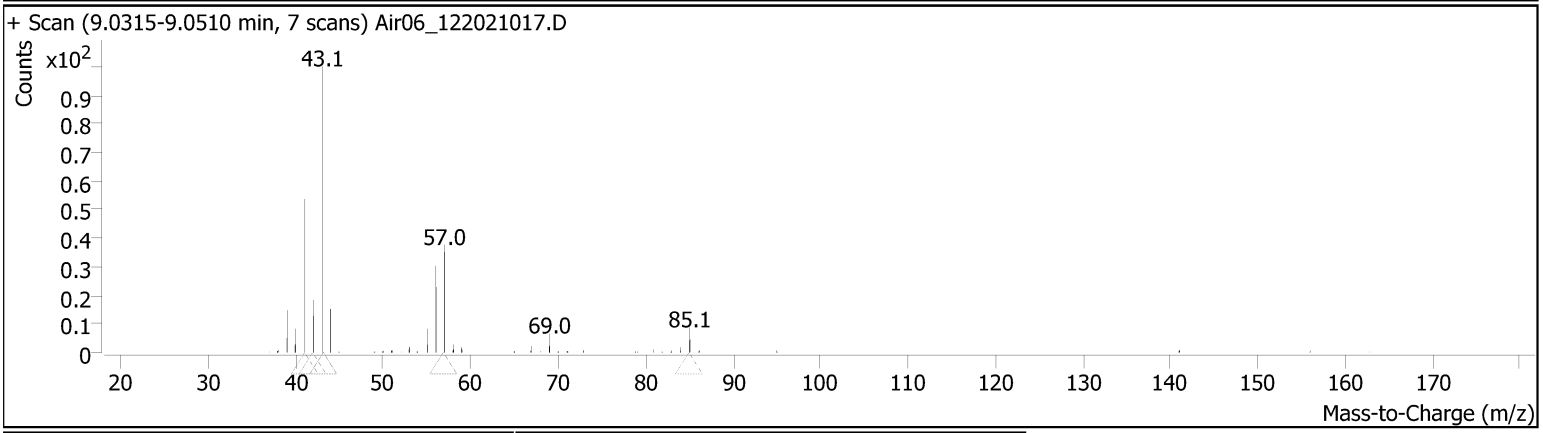


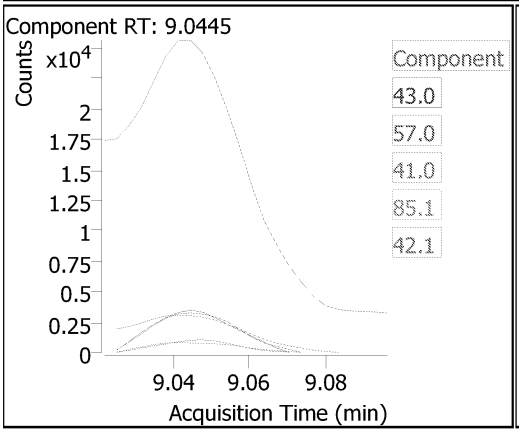


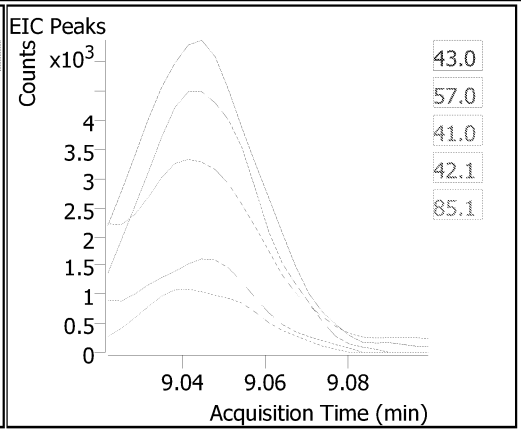
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.0445	Acetyl valeryl	47954.1	84.4	96-04-8	C7H12O2	0.2131

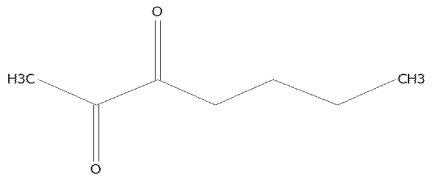




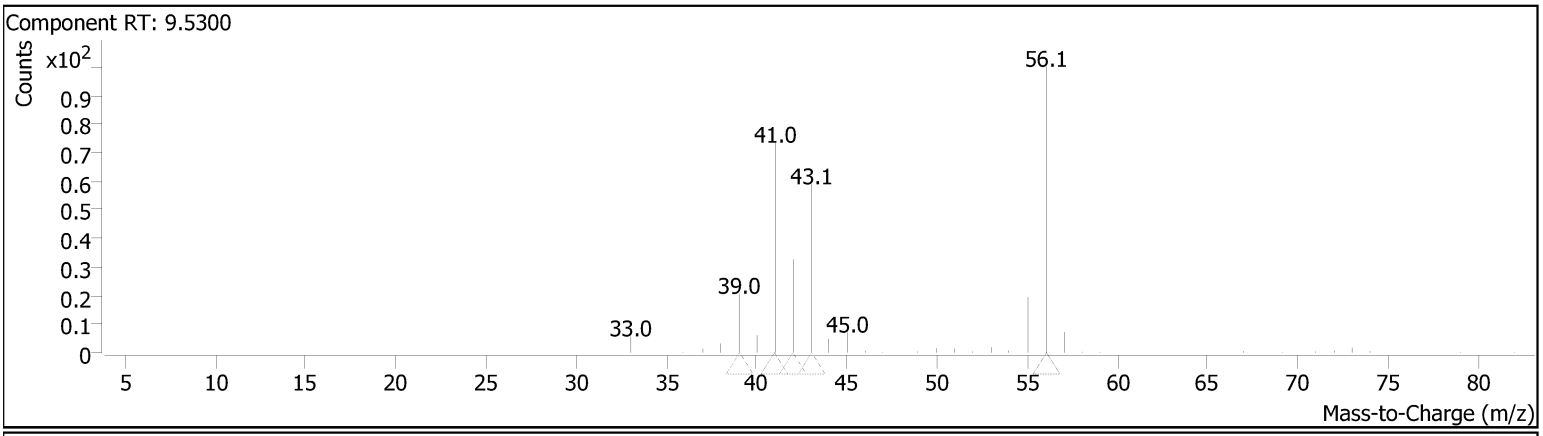


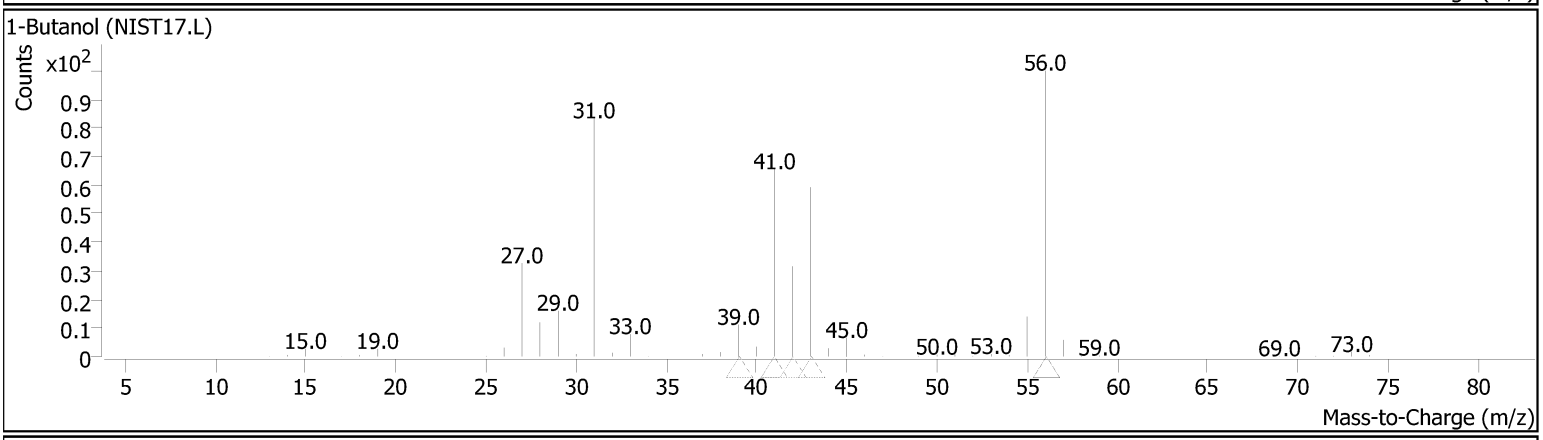


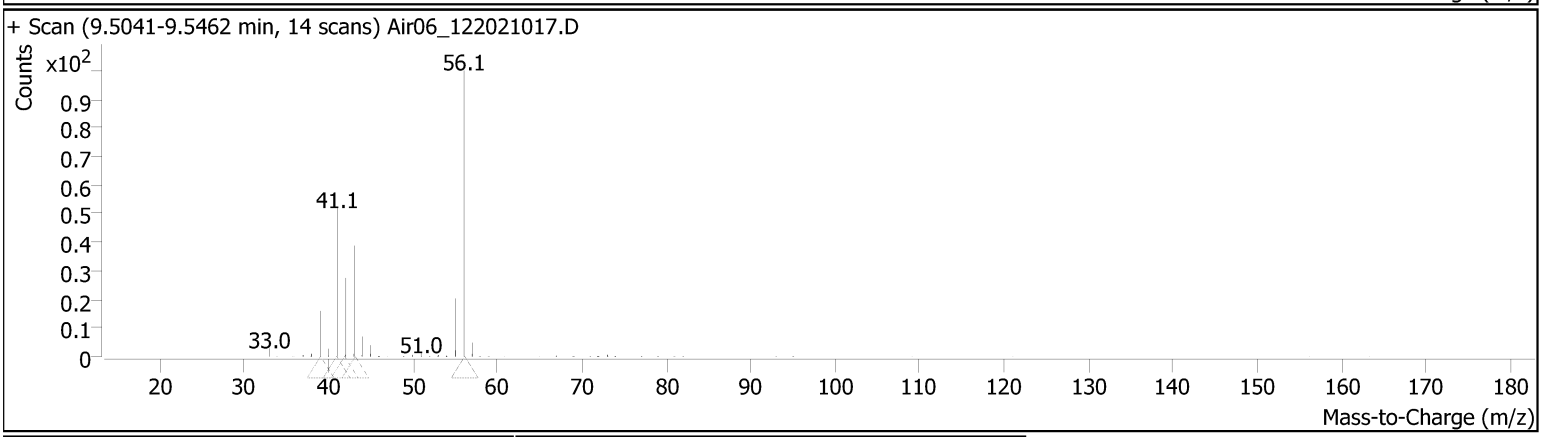


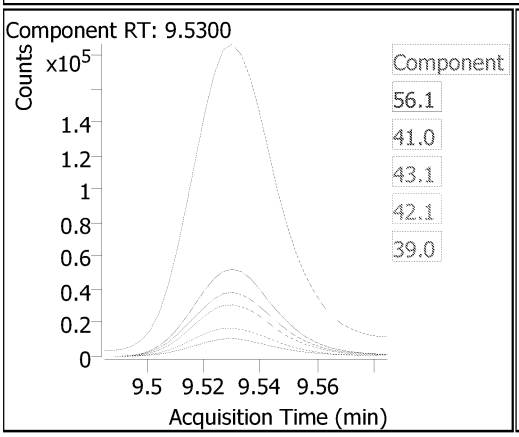


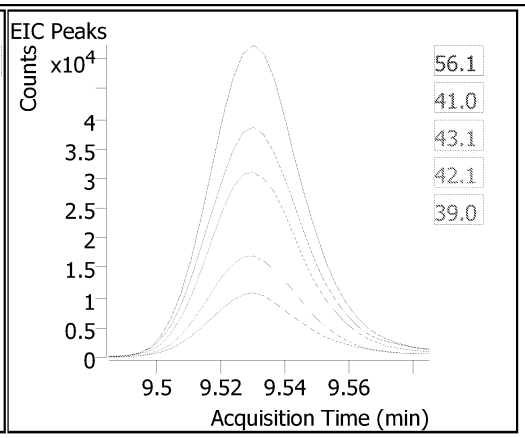
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.5300	1-Butanol	395933.1	98.8	71-36-3	C4H10O	1.151

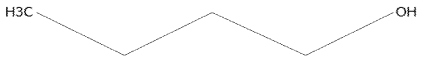




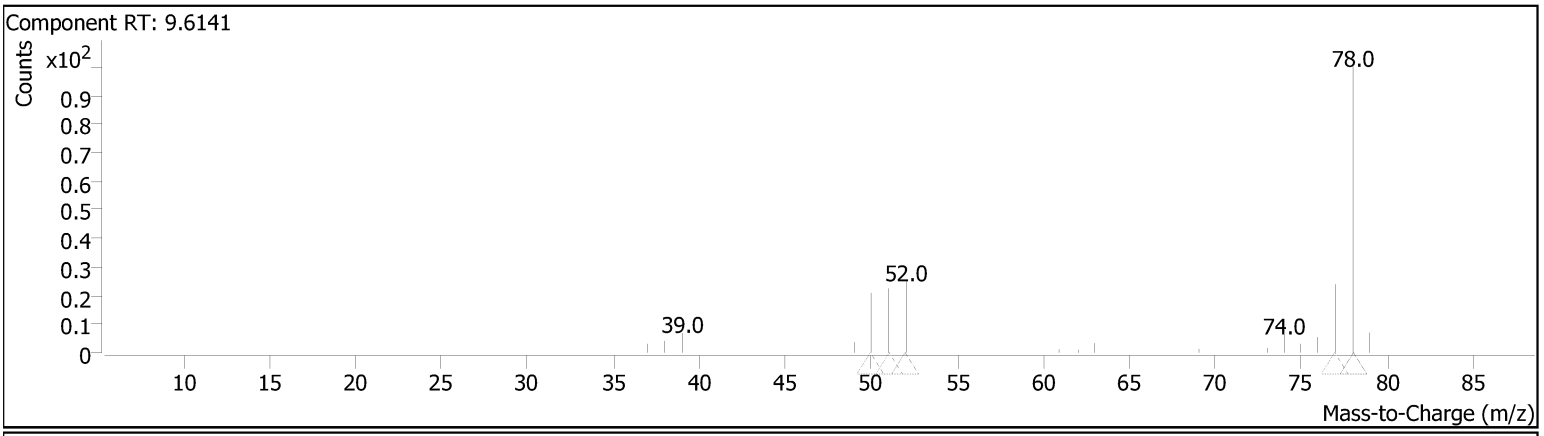


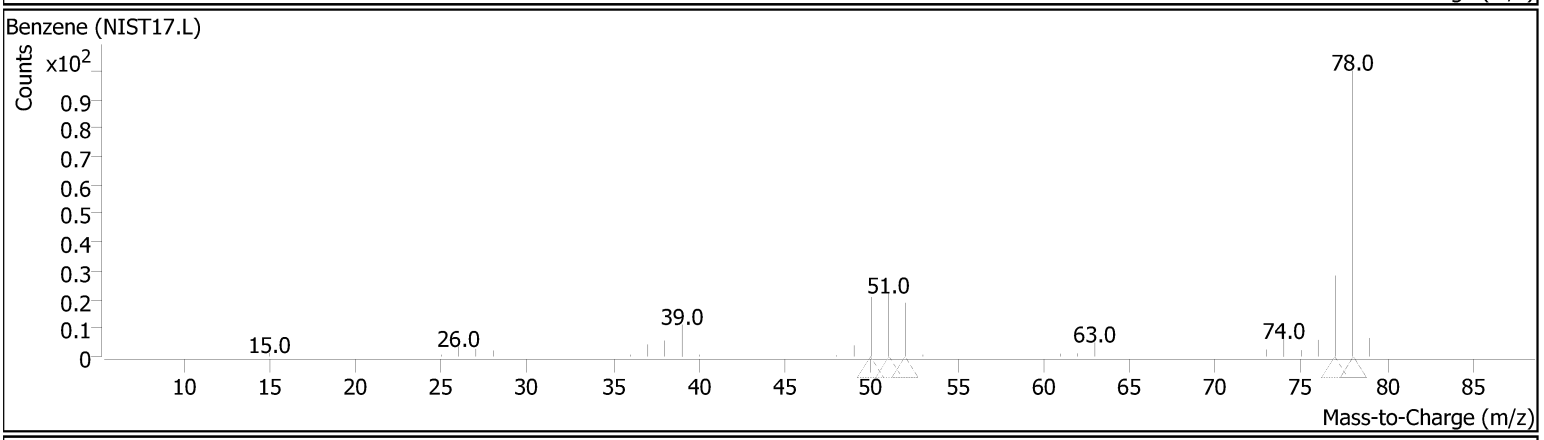


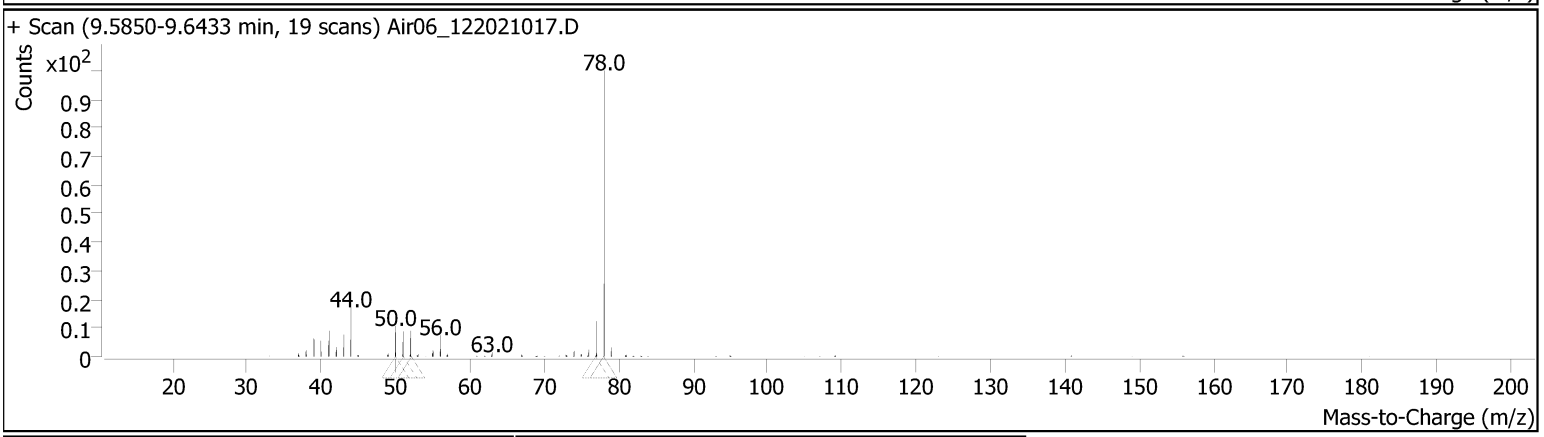


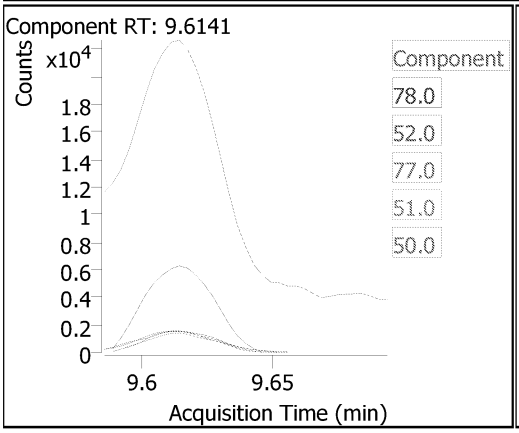


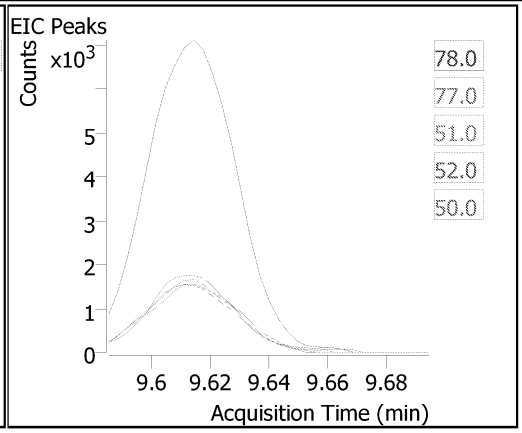
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.6141	Benzene	48560.8	96.5	71-43-2	C6H6	0.1411

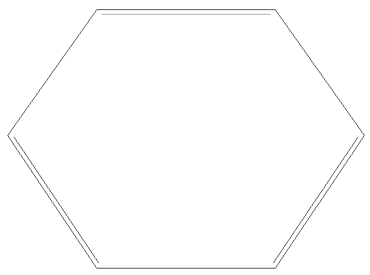




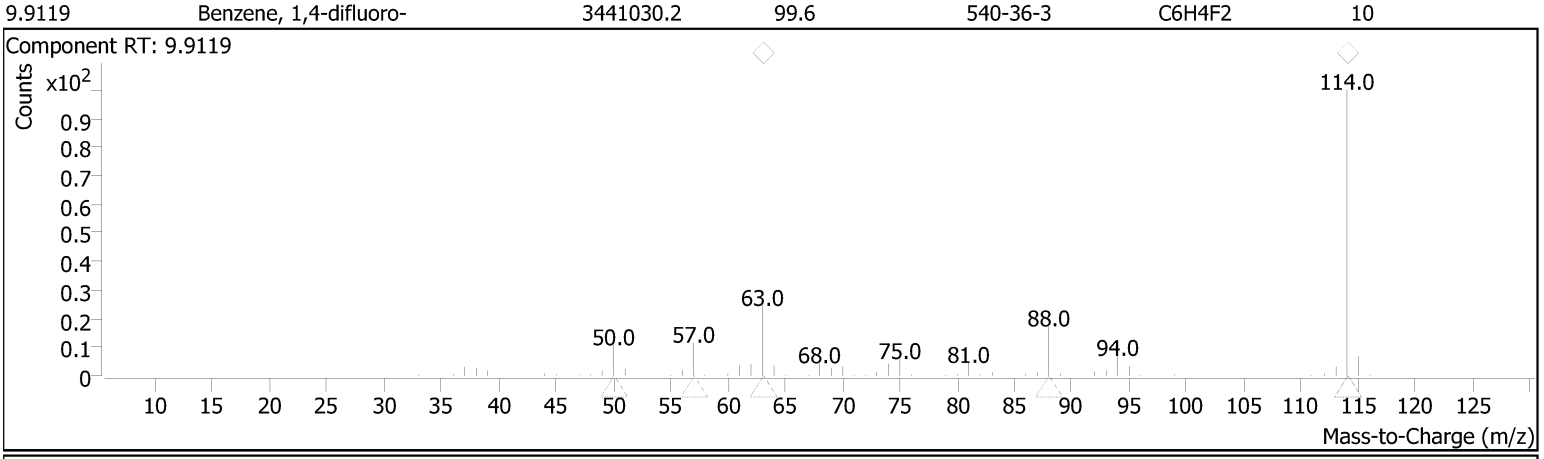


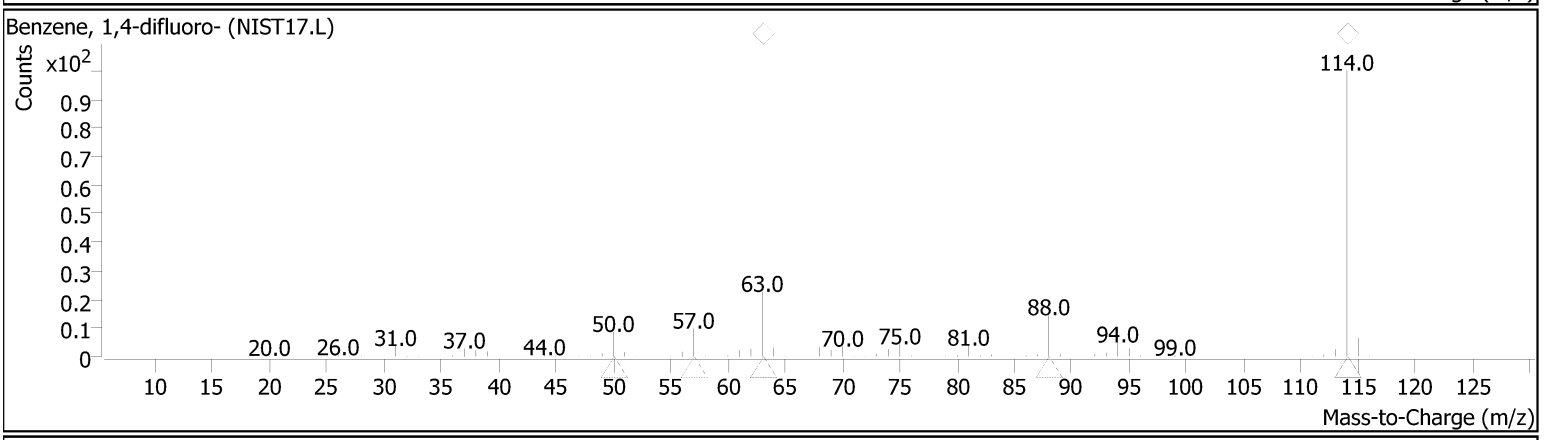


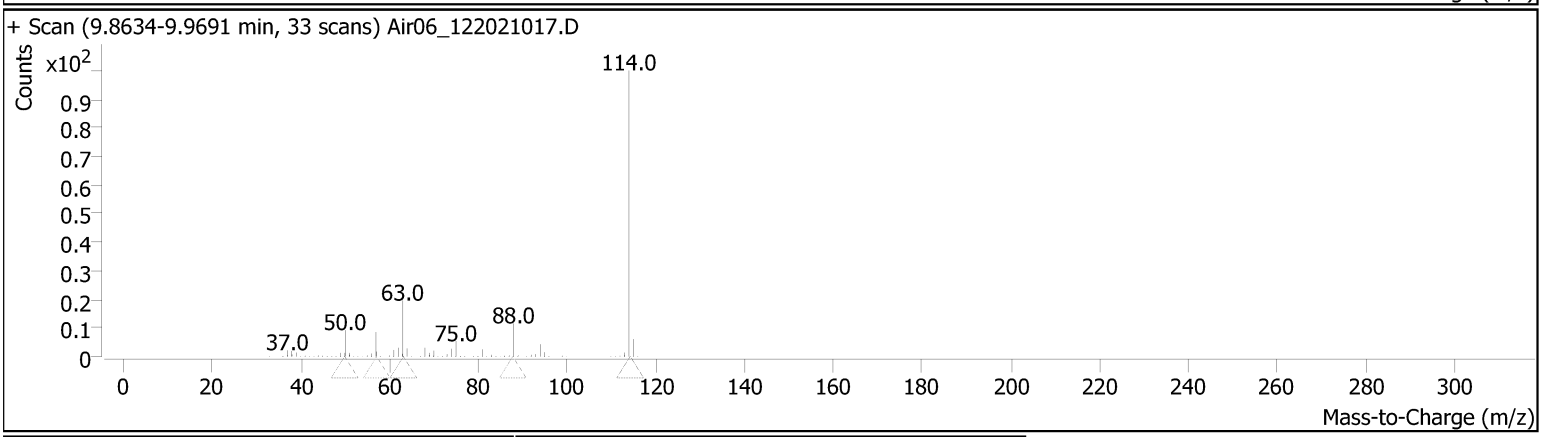


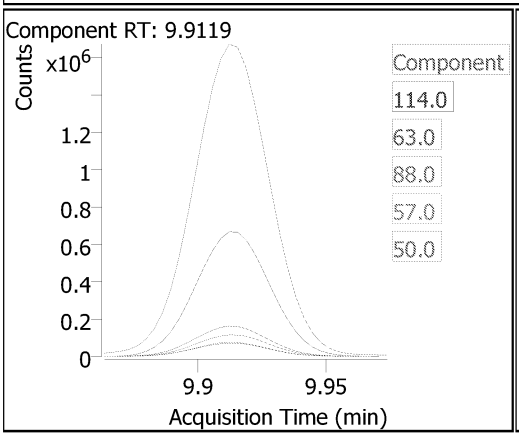


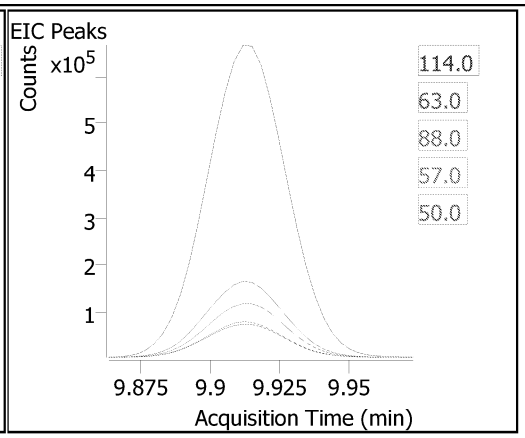
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.9119	Benzene, 1,4-difluoro-	3441030.2	99.6	540-36-3	C6H4F2	10

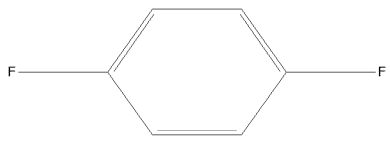




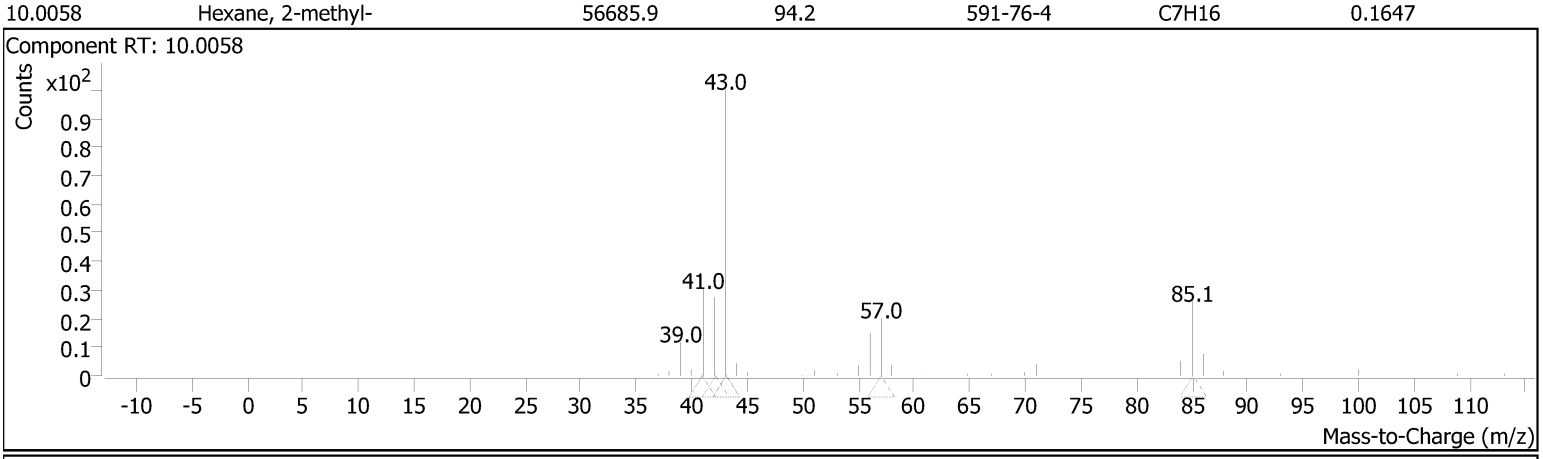


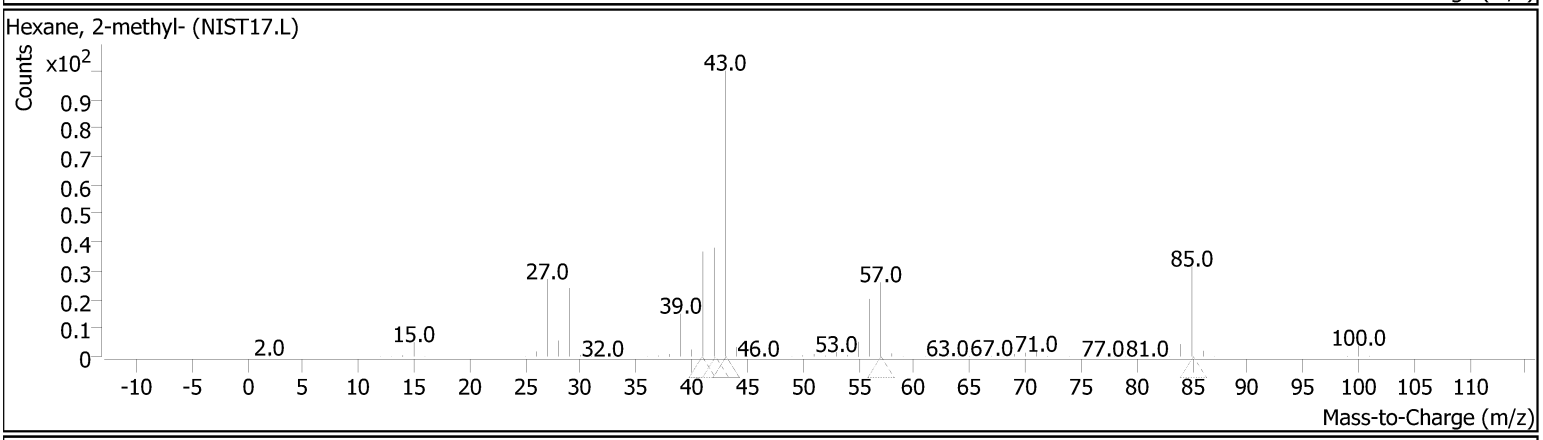


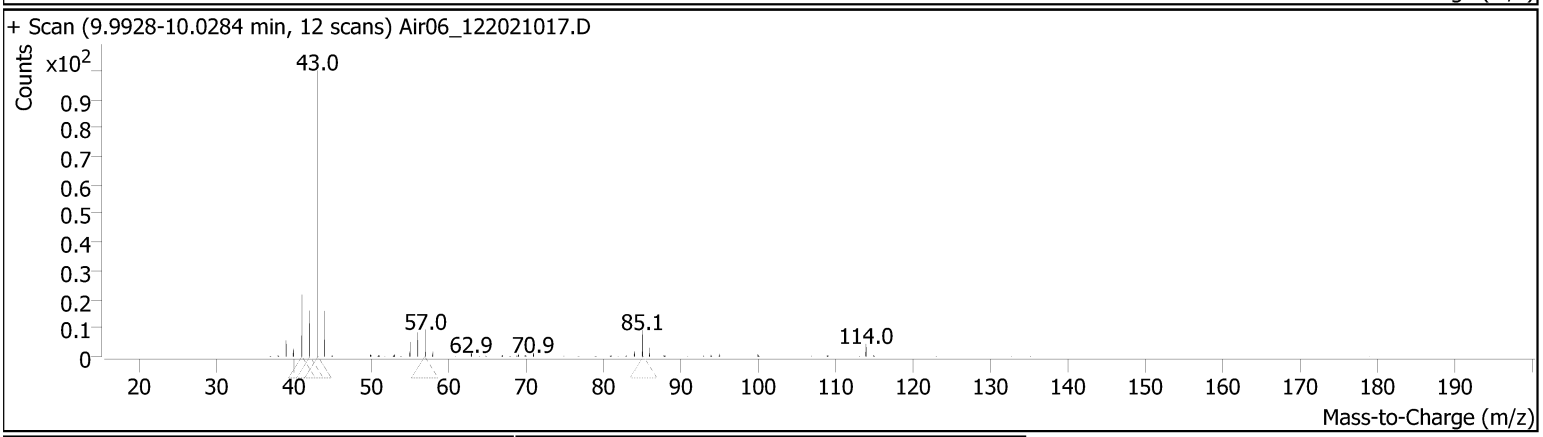


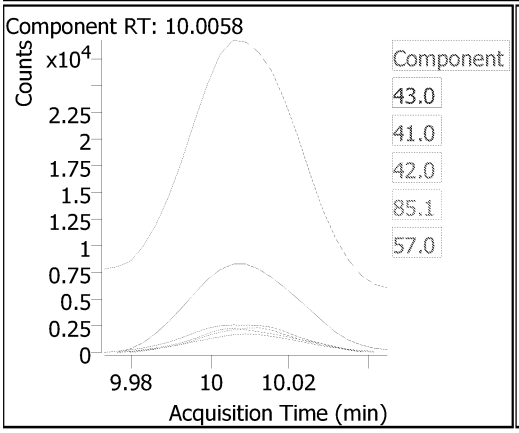


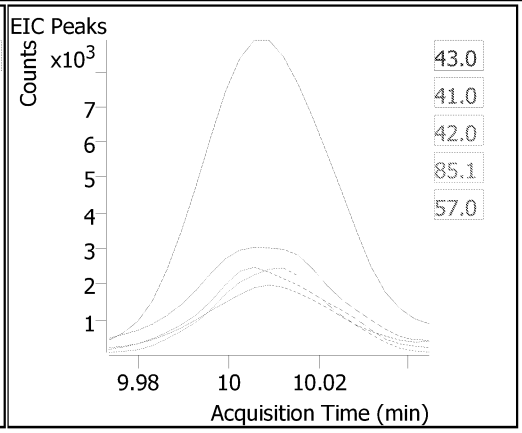
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.0058	Hexane, 2-methyl-	56685.9	94.2	591-76-4	C7H16	0.1647

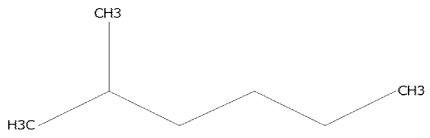




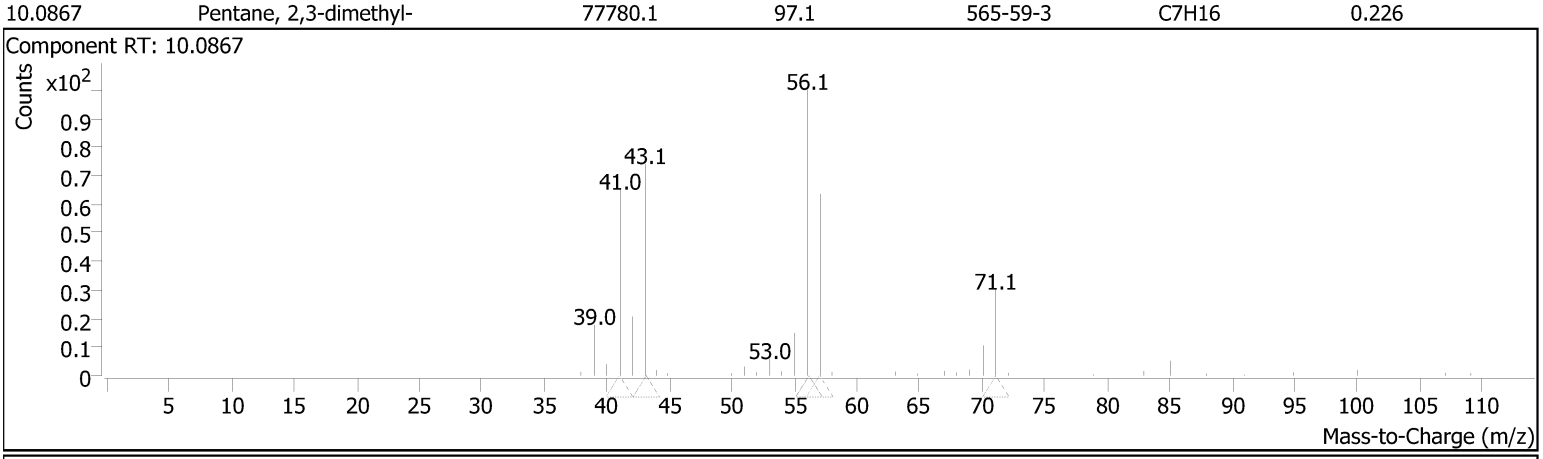


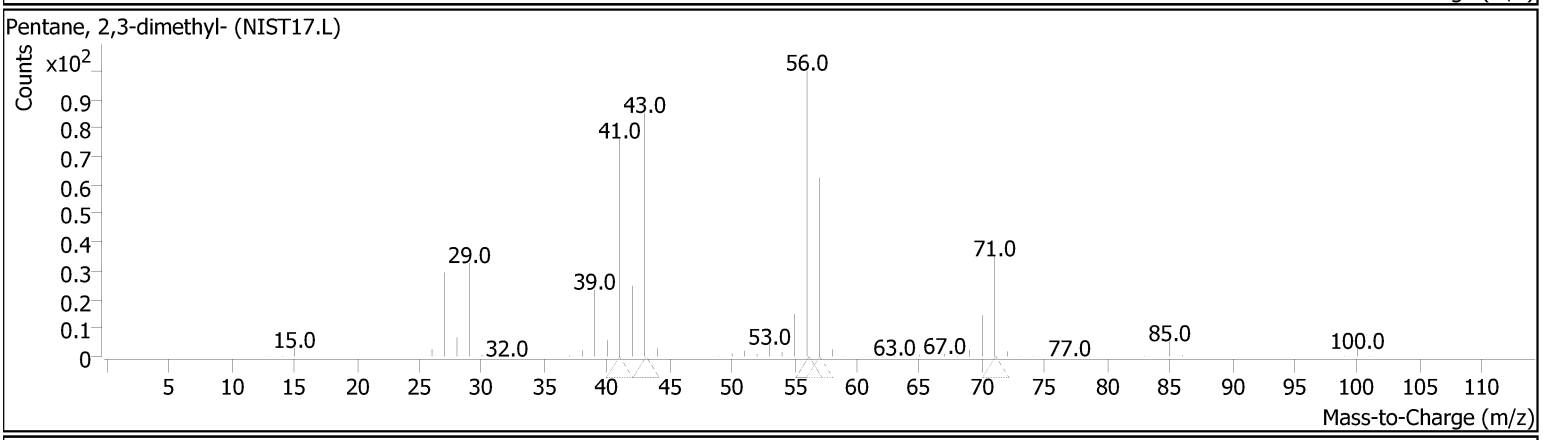


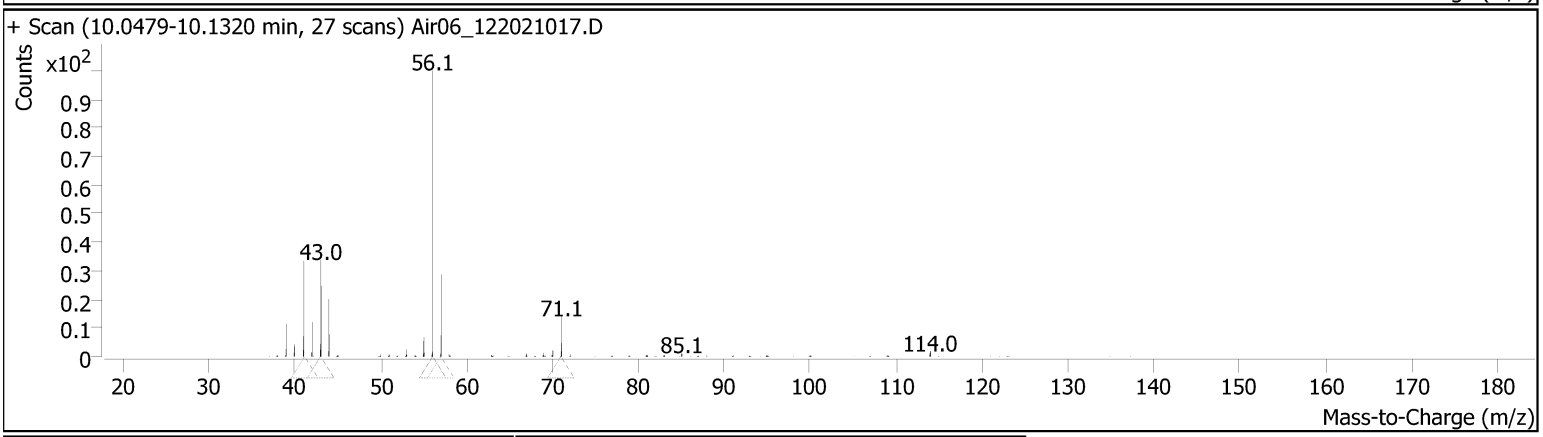


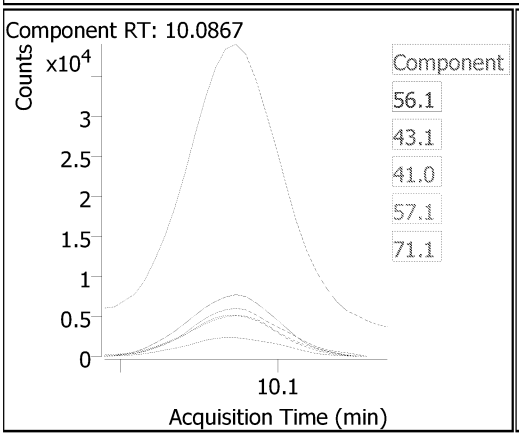


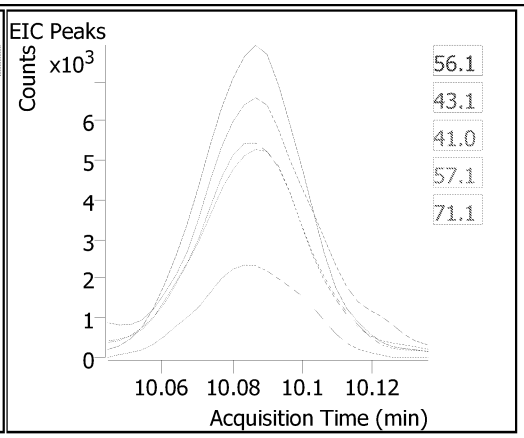
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.0867	Pentane, 2,3-dimethyl-	77780.1	97.1	565-59-3	C7H16	0.226

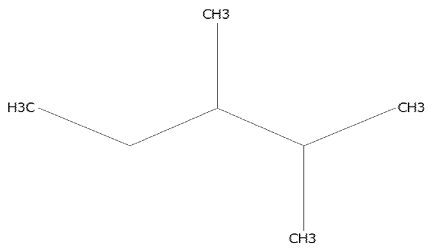




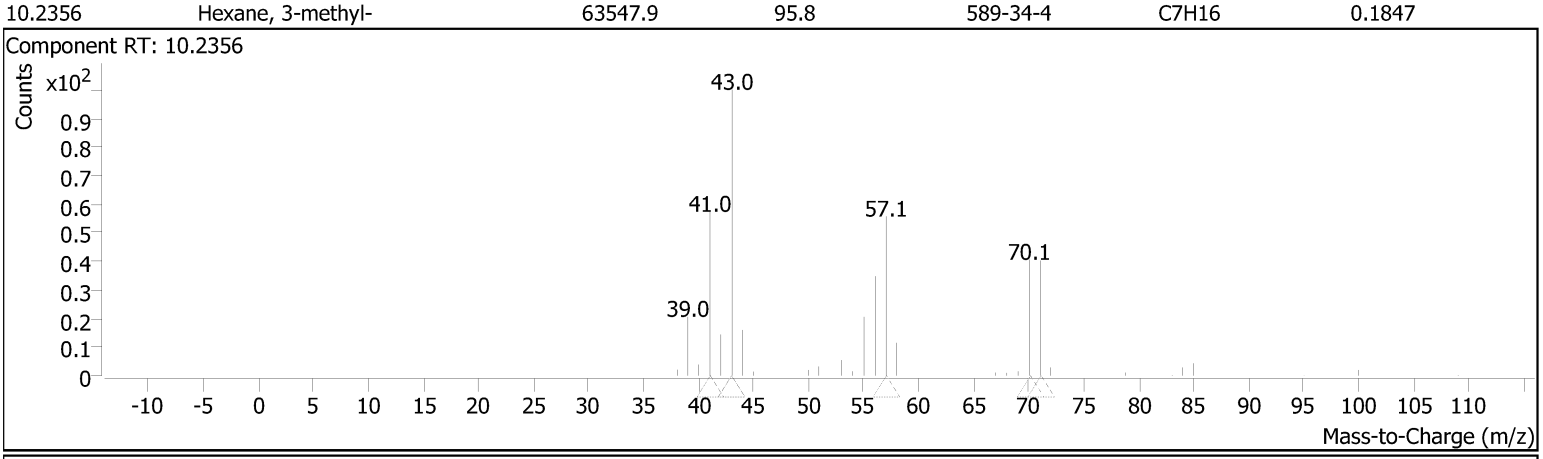


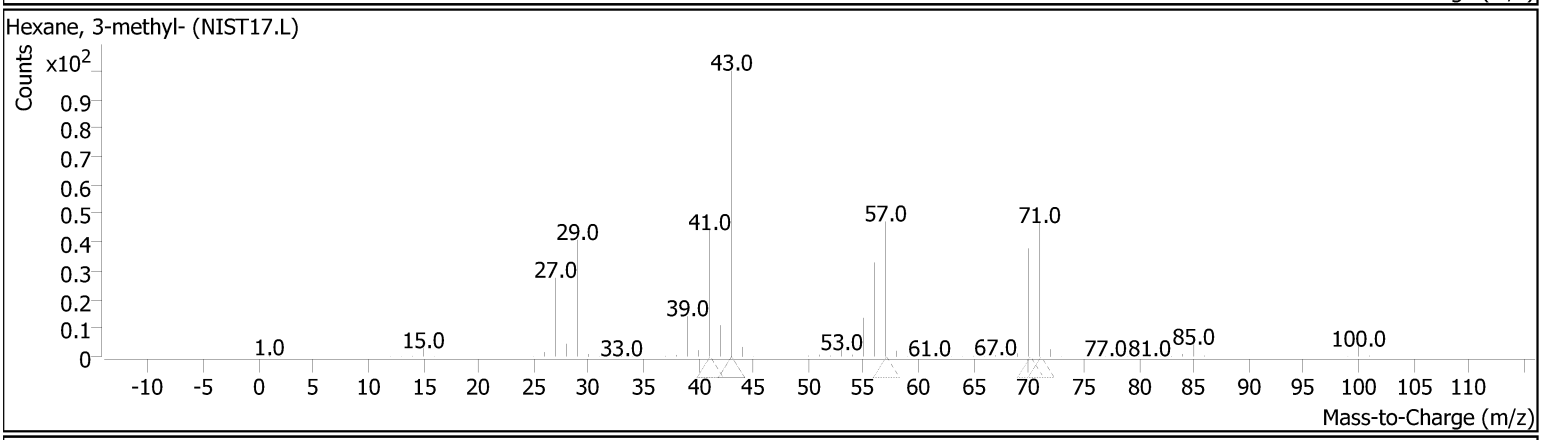


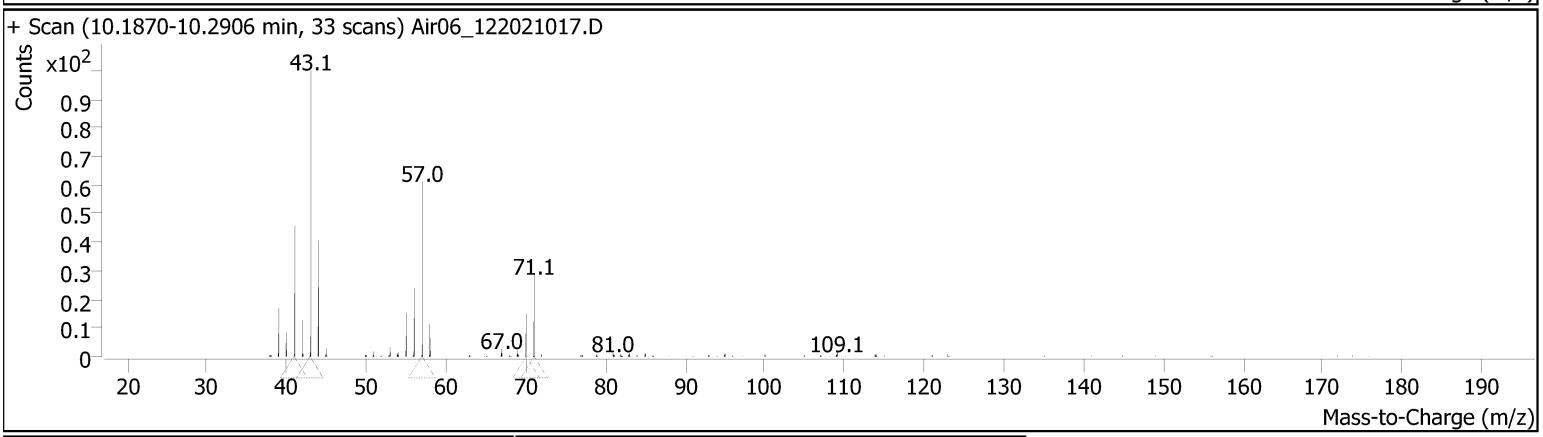


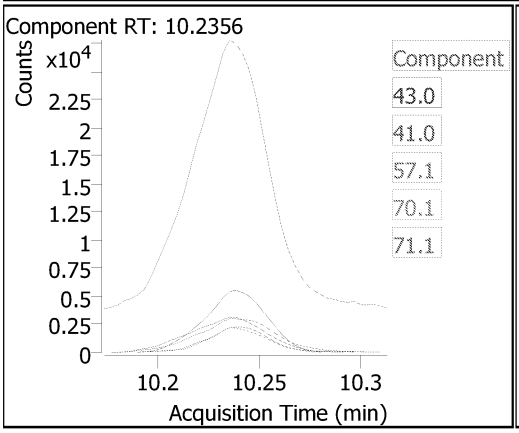


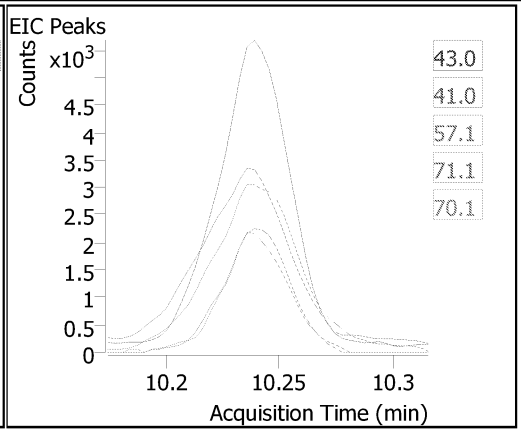
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.2356	Hexane, 3-methyl-	63547.9	95.8	589-34-4	C7H16	0.1847

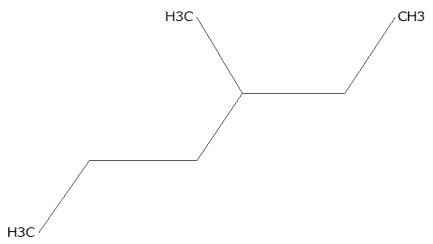




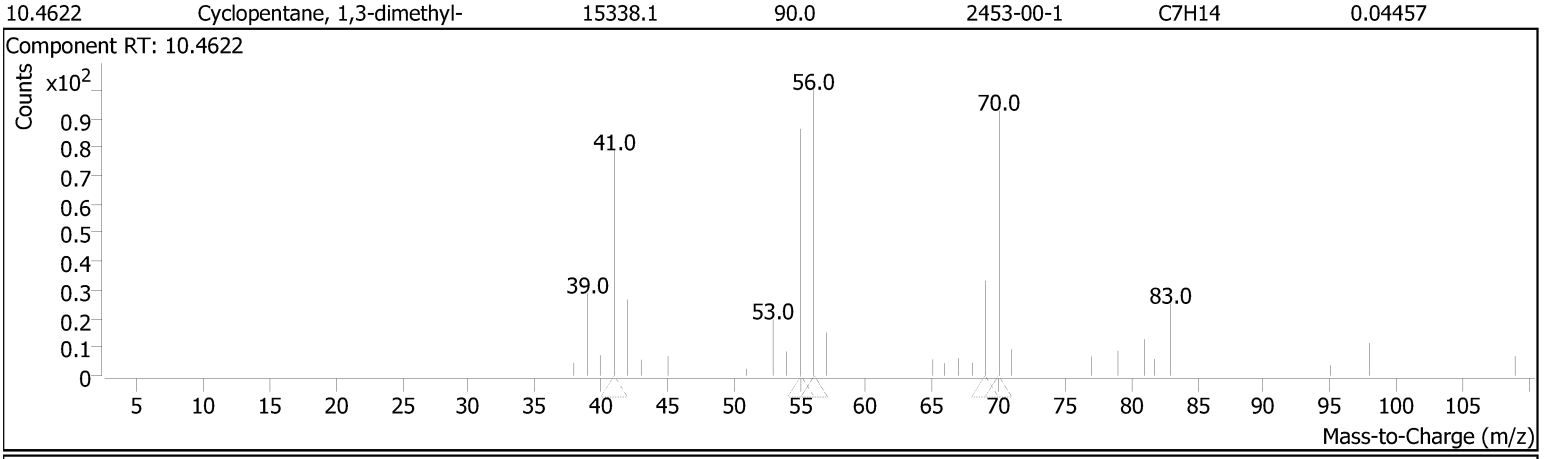


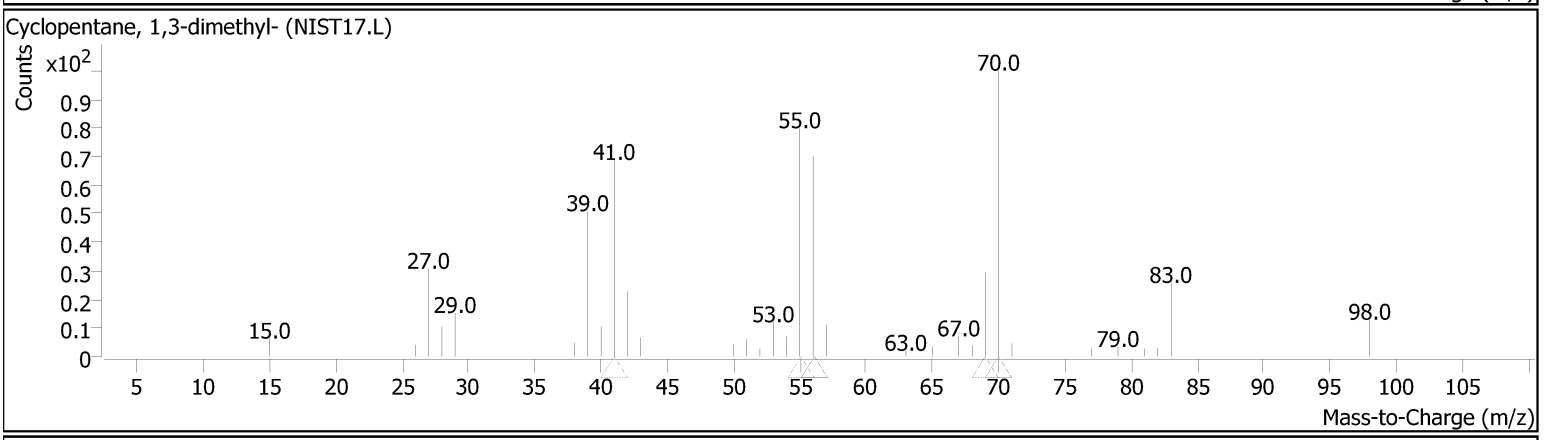


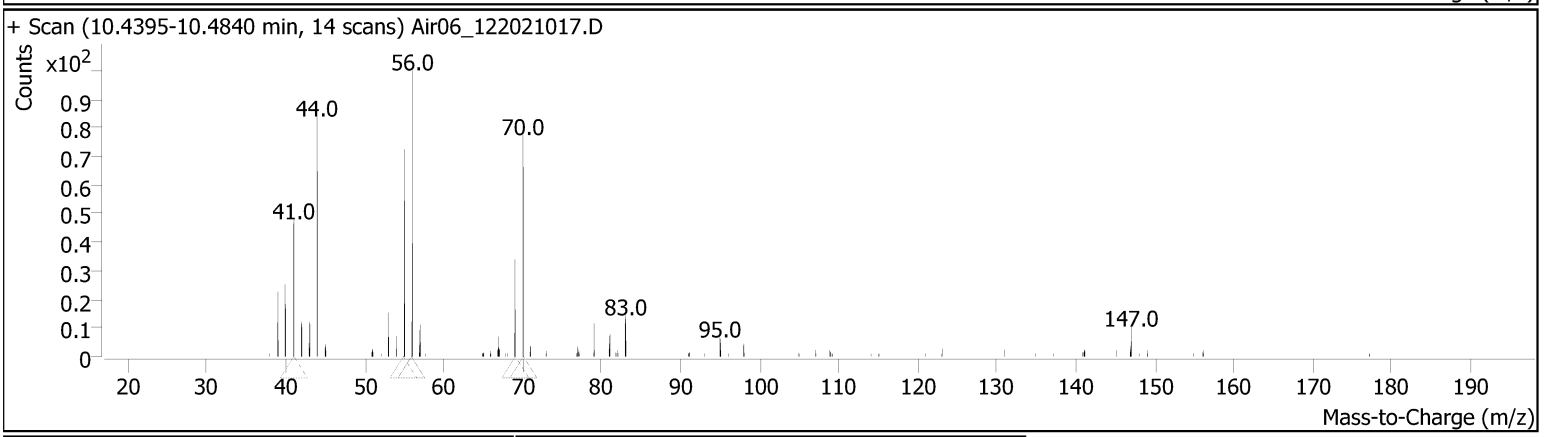


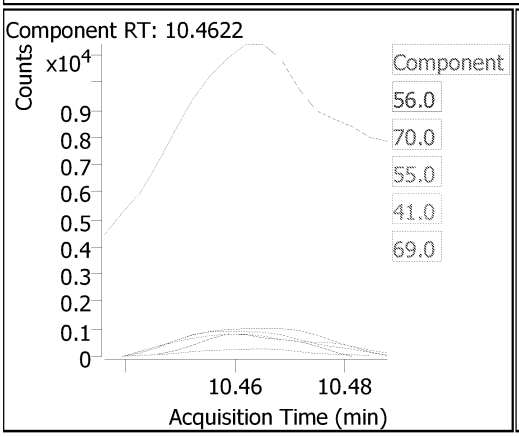


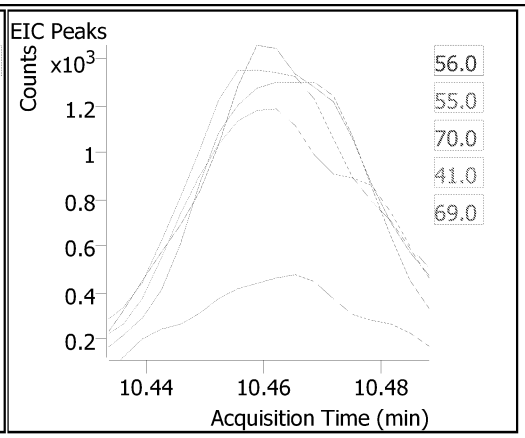
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.4622	Cyclopentane, 1,3-dimethyl-	15338.1	90.0	2453-00-1	C7H14	0.04457

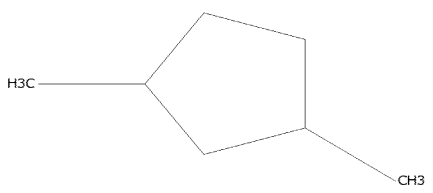




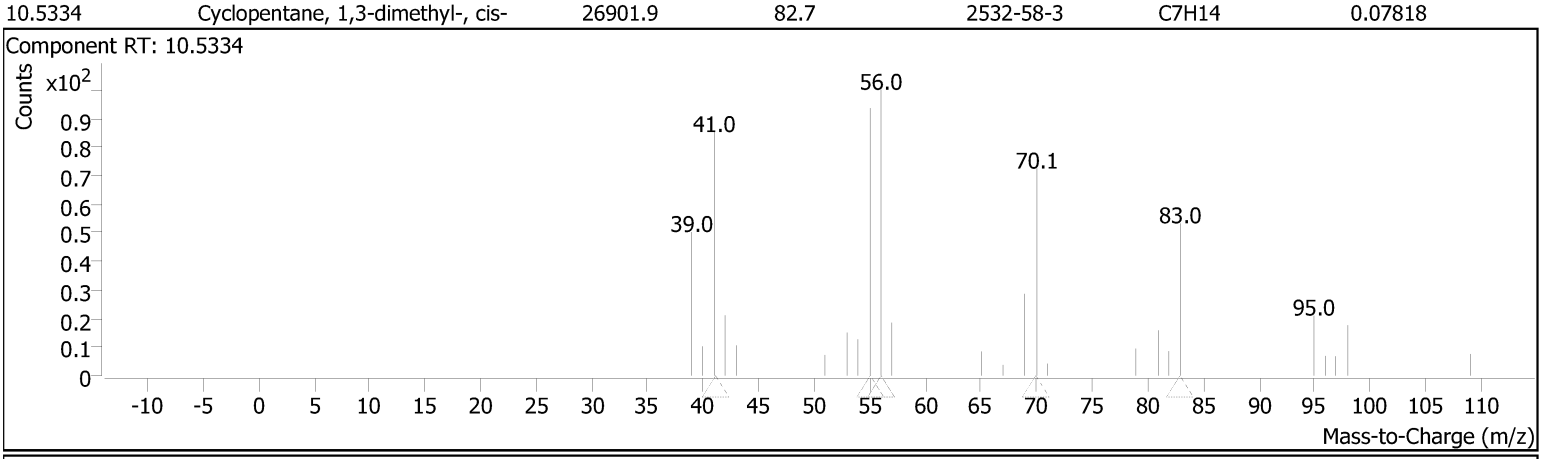


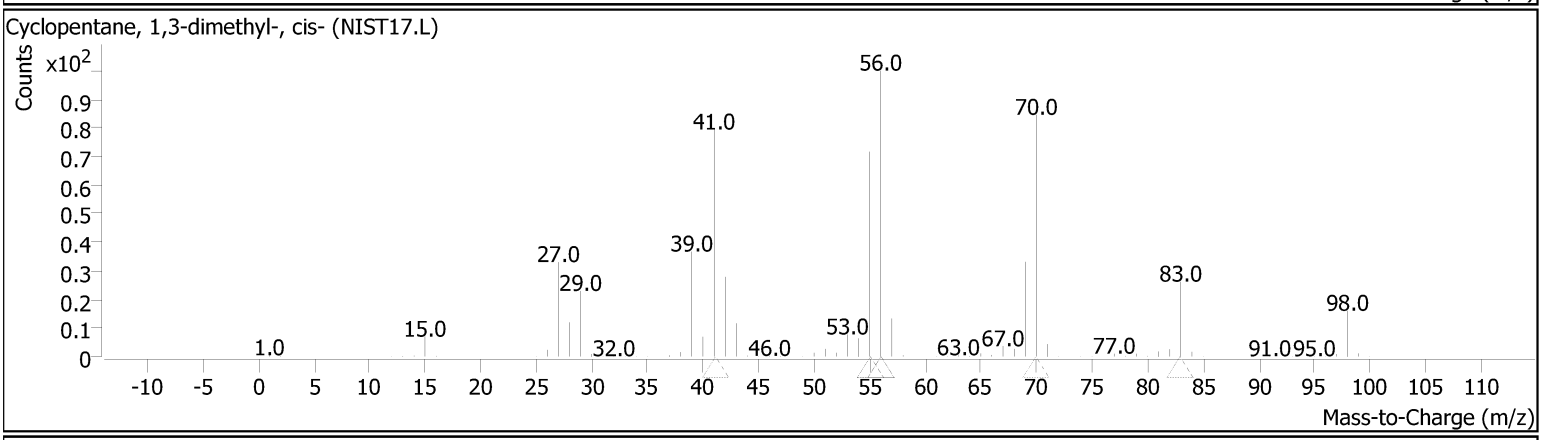


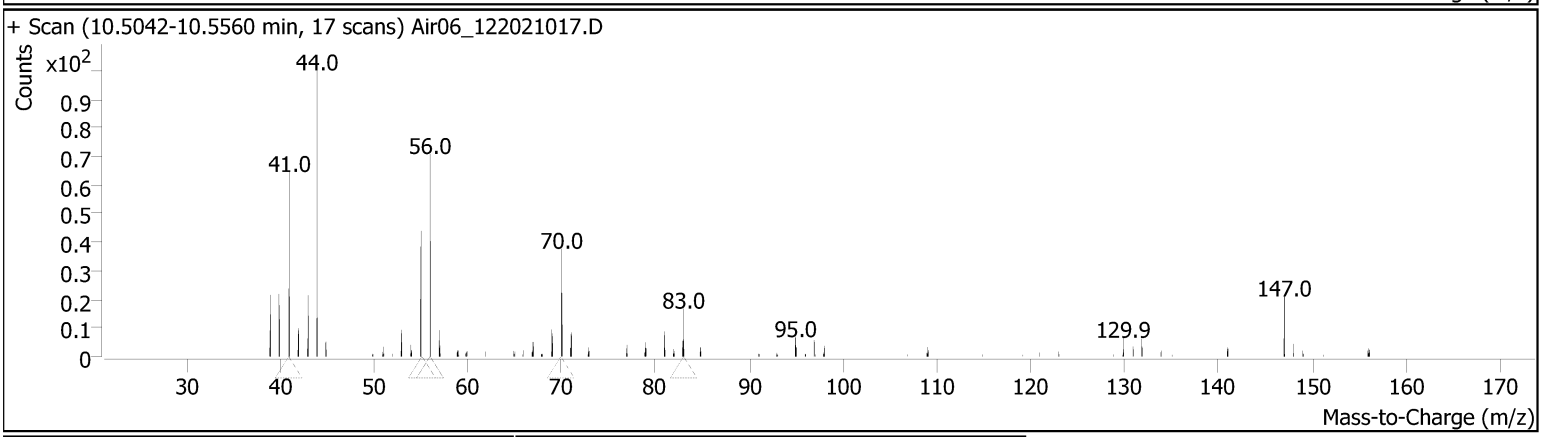


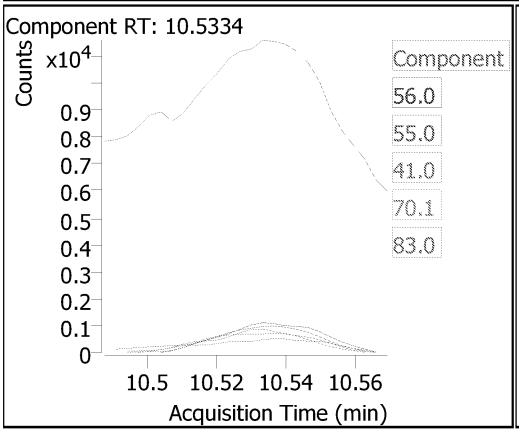


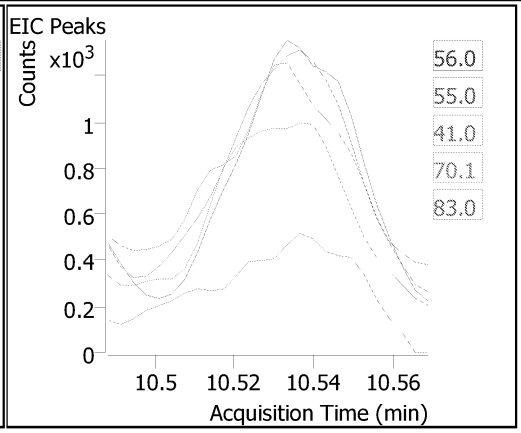
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.5334	Cyclopentane, 1,3-dimethyl-, cis-	26901.9	82.7	2532-58-3	C7H14	0.07818

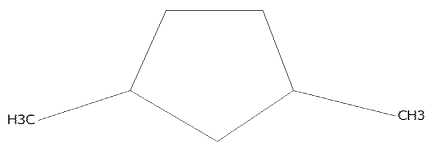




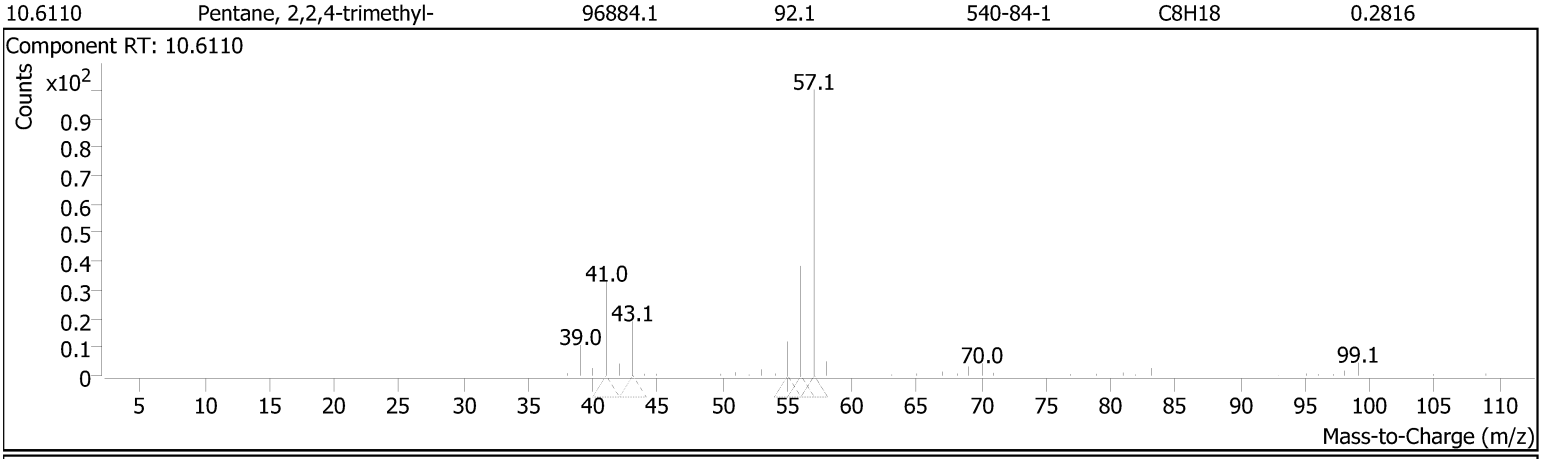


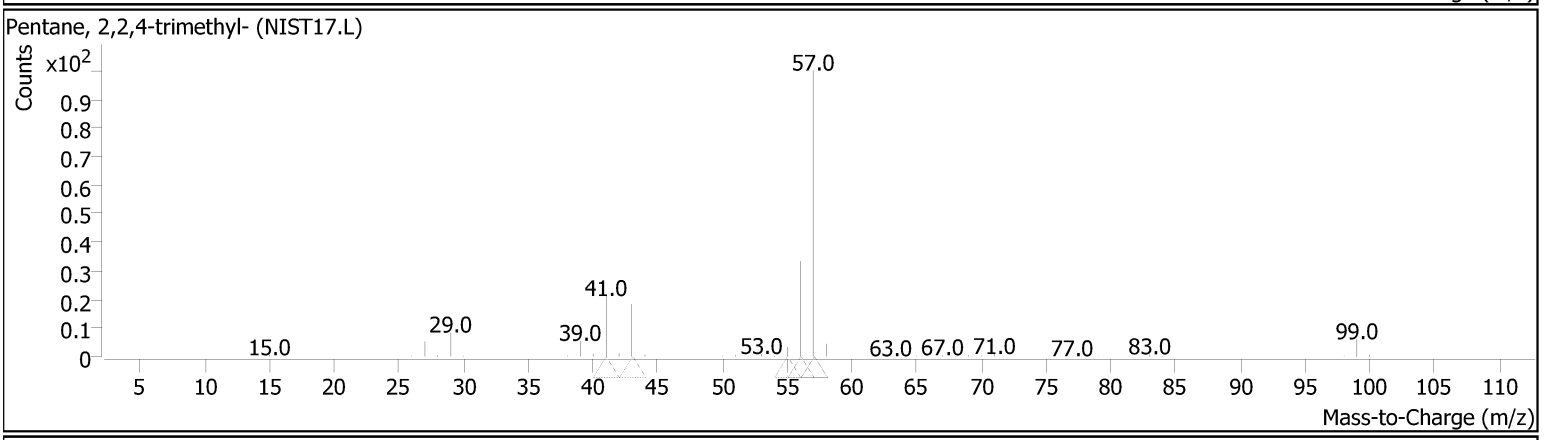


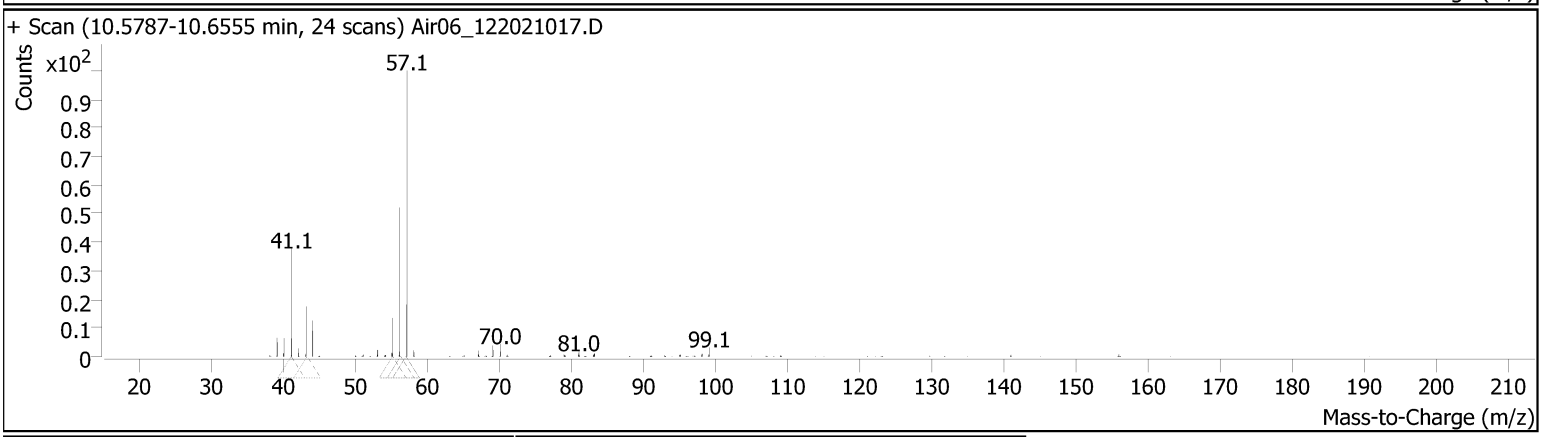


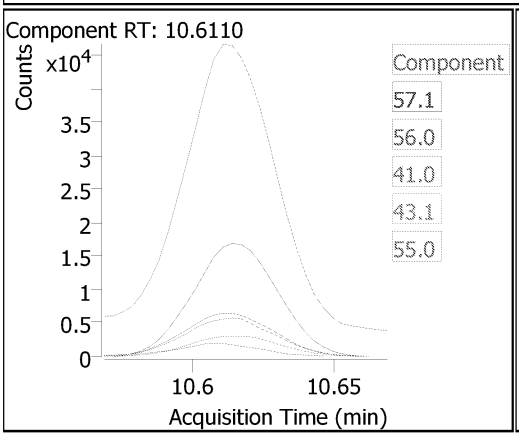


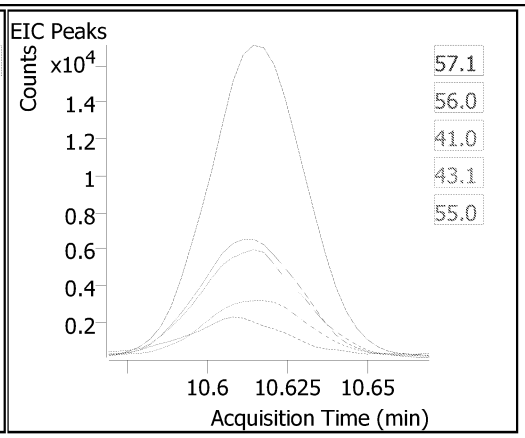
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.6110	Pentane, 2,2,4-trimethyl-	96884.1	92.1	540-84-1	C8H18	0.2816

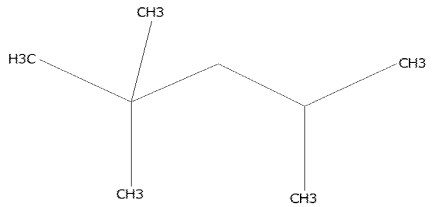




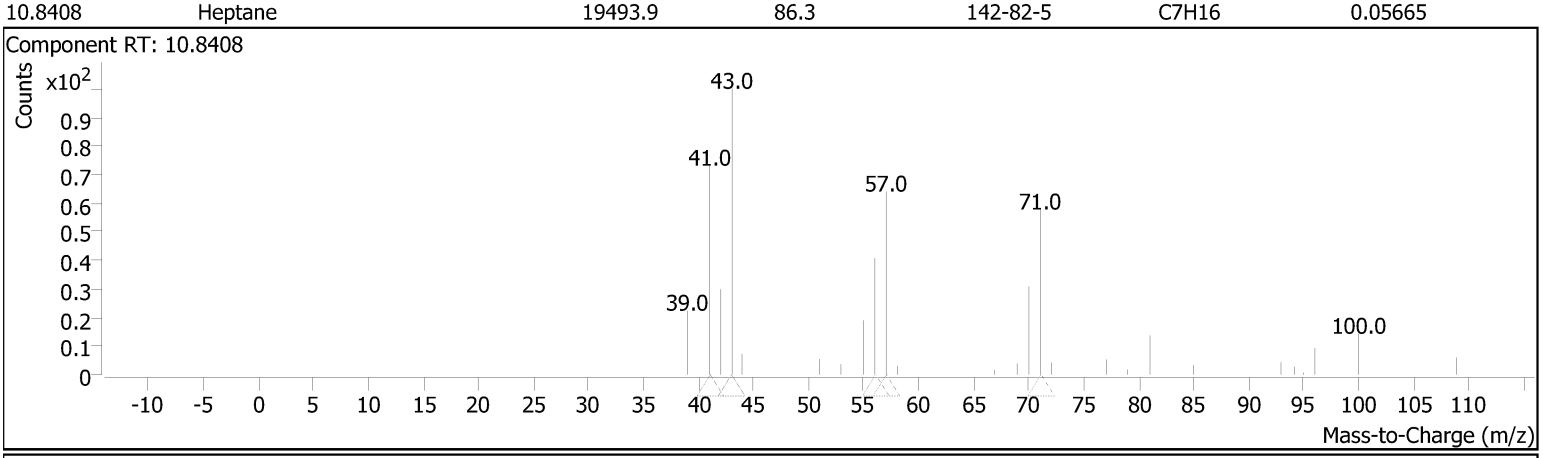


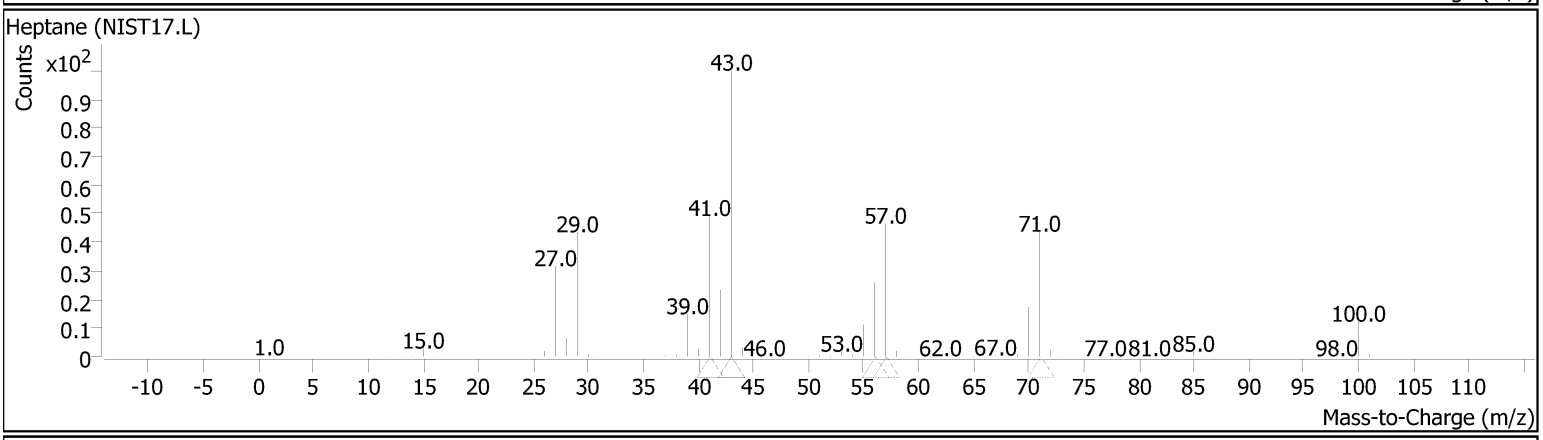


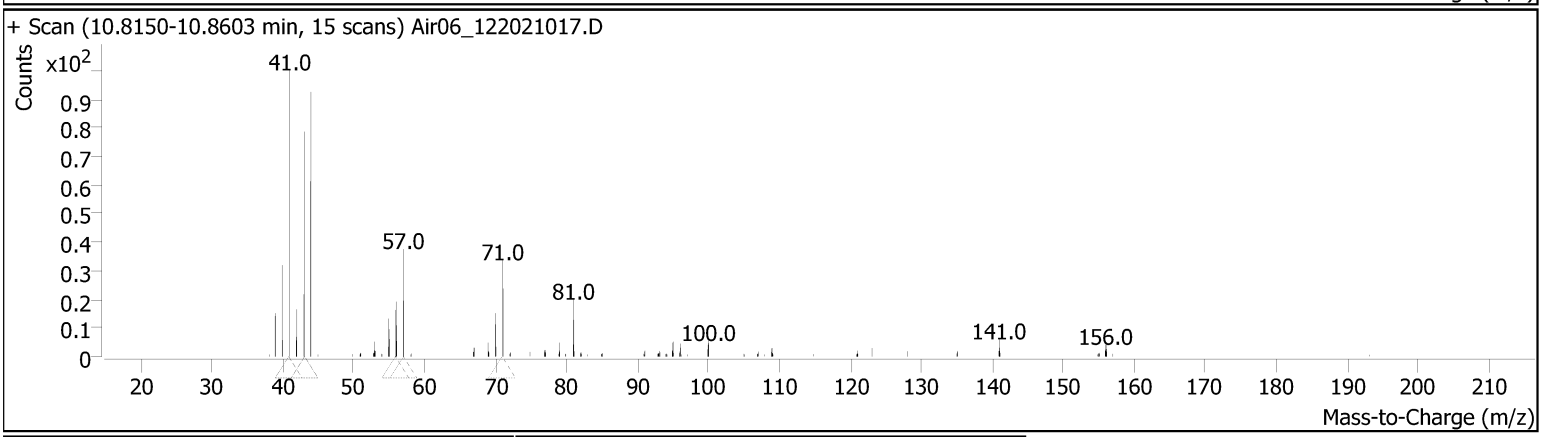


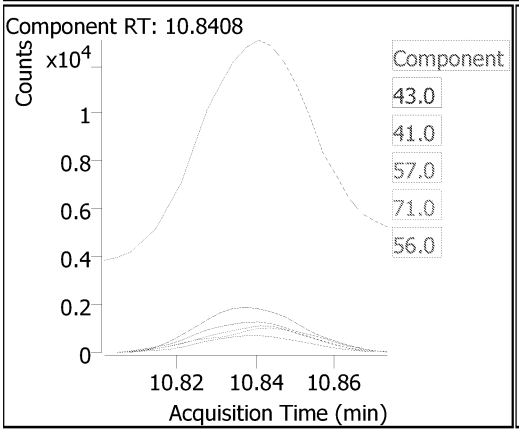


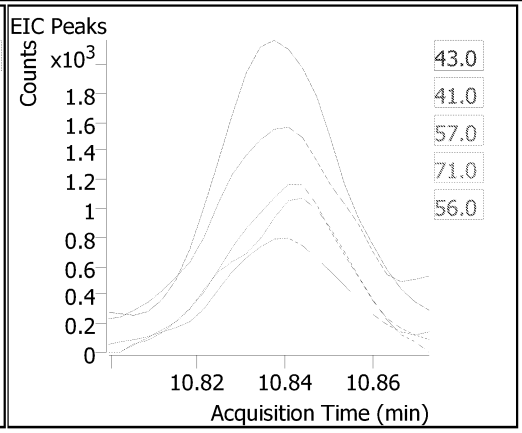
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.8408	Heptane	19493.9	86.3	142-82-5	C7H16	0.05665





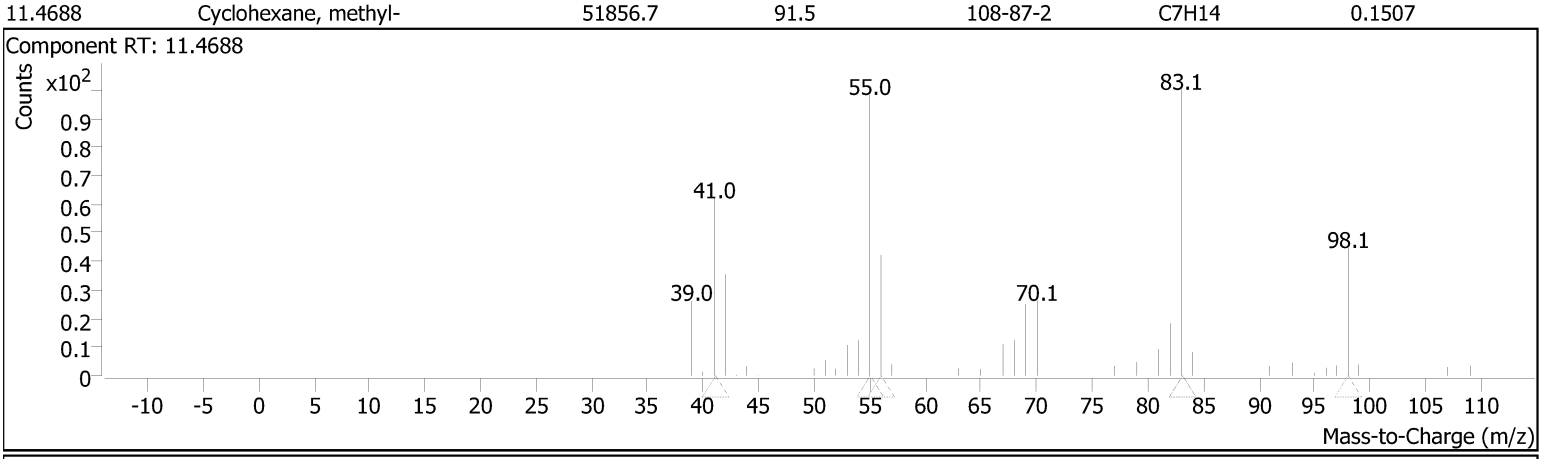


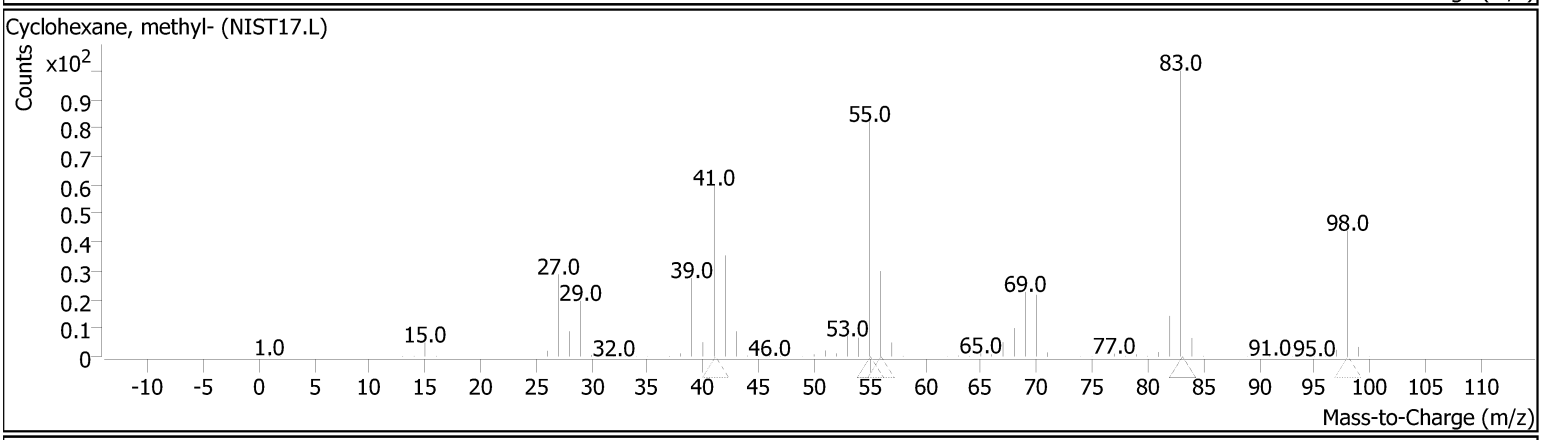


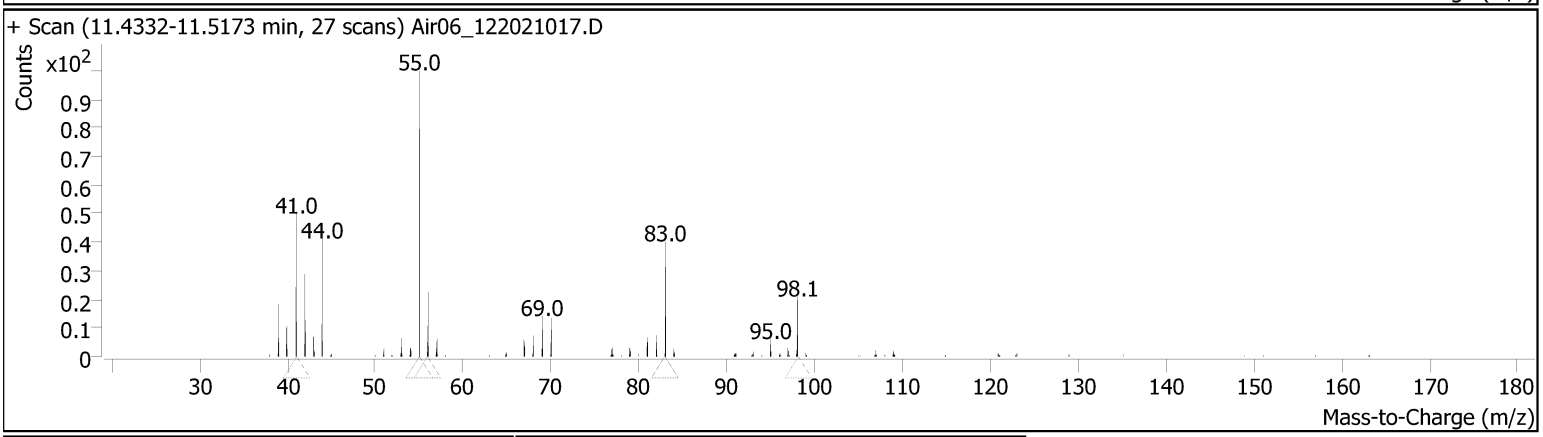


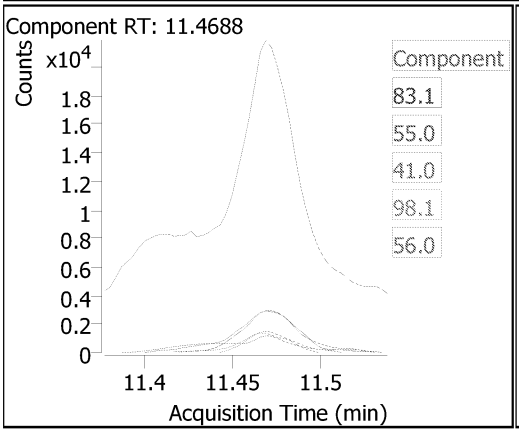


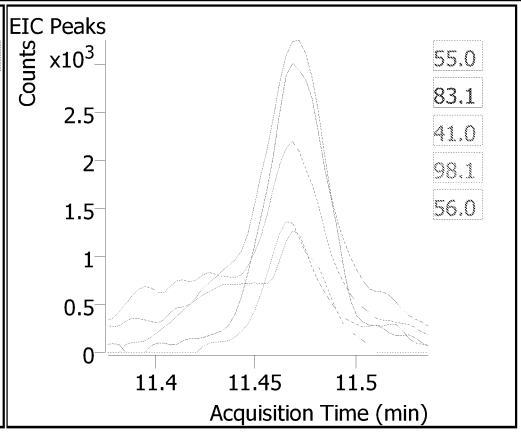
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.4688	Cyclohexane, methyl-	51856.7	91.5	108-87-2	C7H14	0.1507

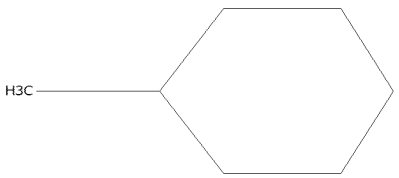




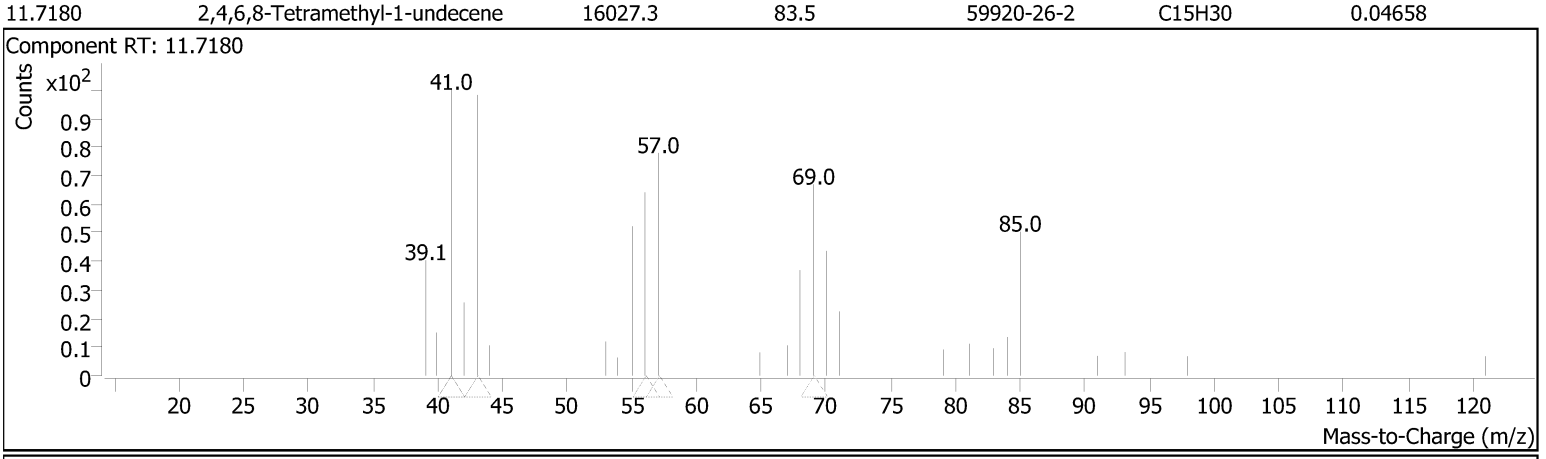


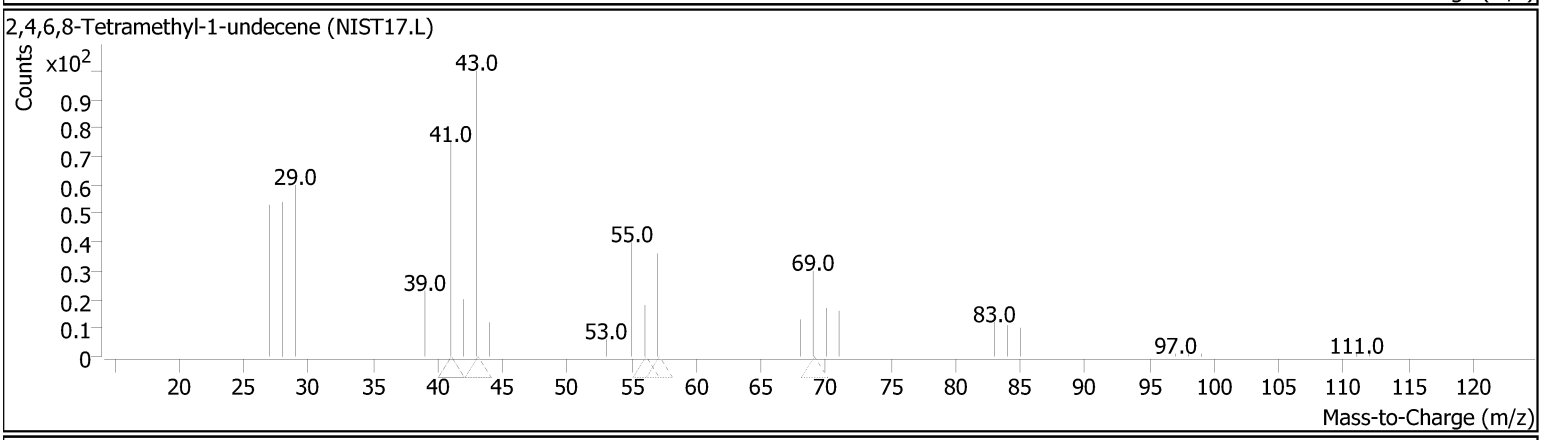


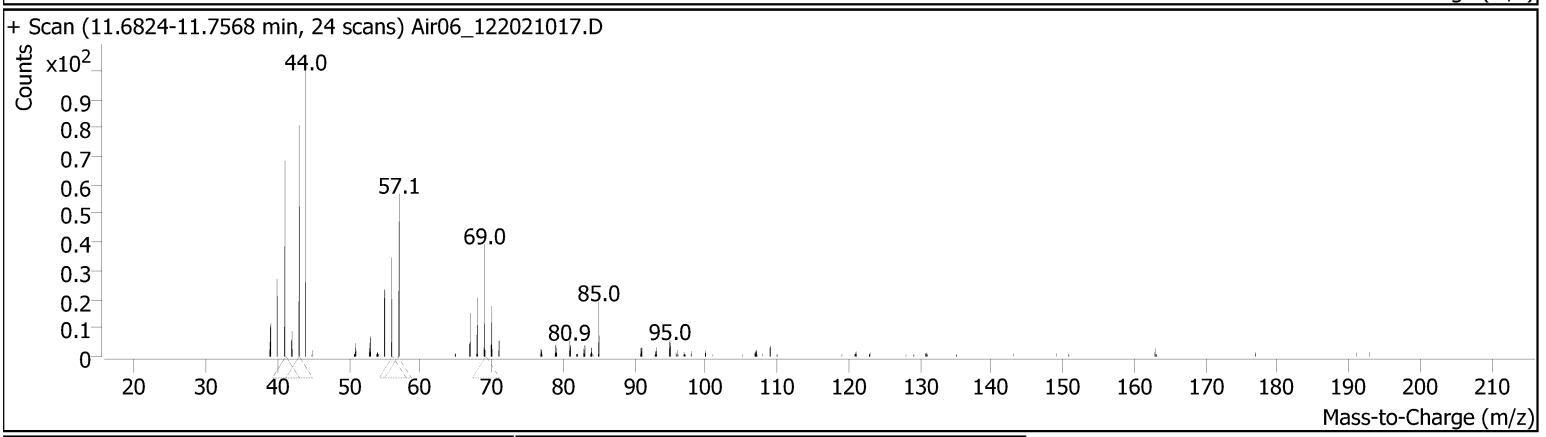


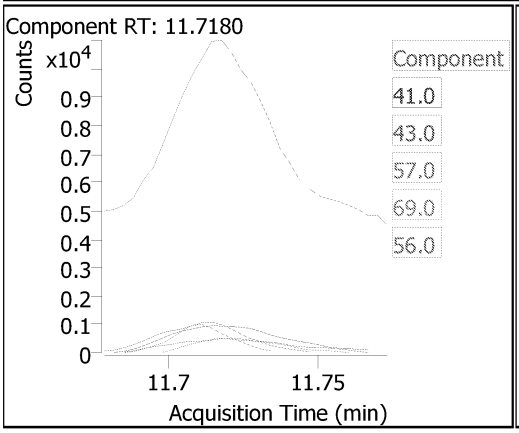


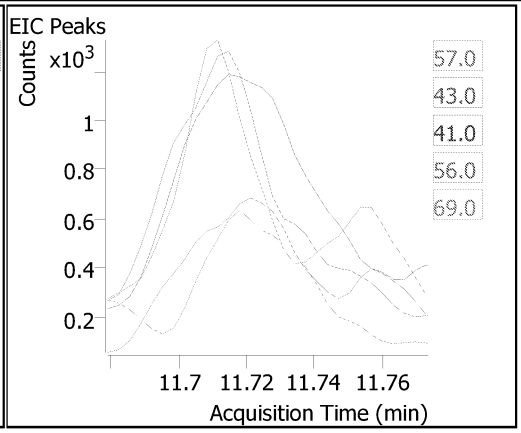
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.7180	2,4,6,8-Tetramethyl-1-undecene	16027.3	83.5	59920-26-2	C15H30	0.04658

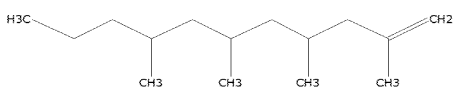




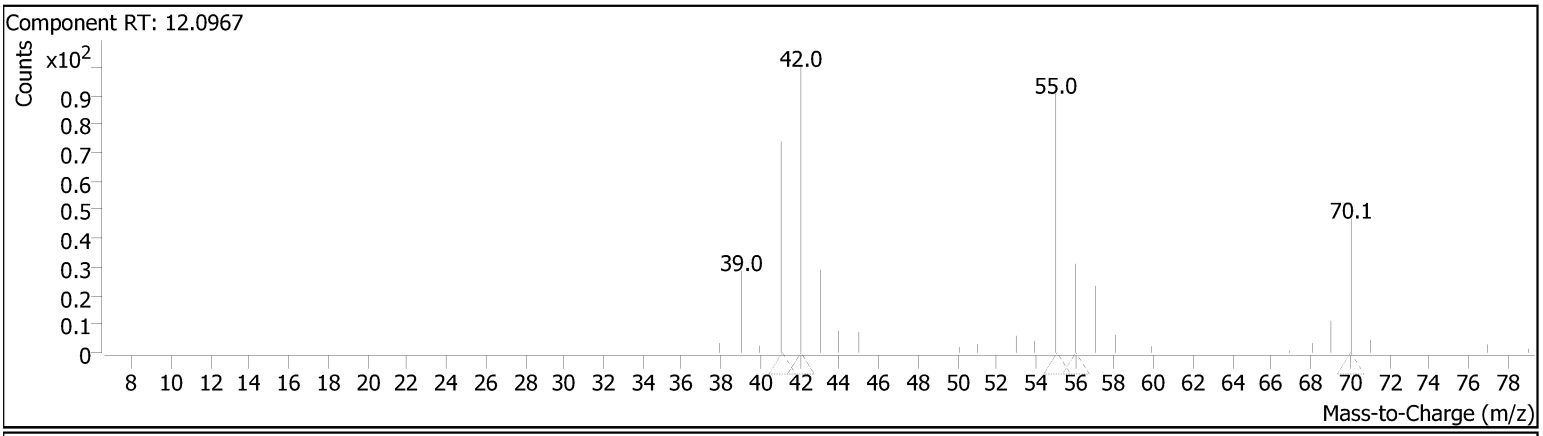


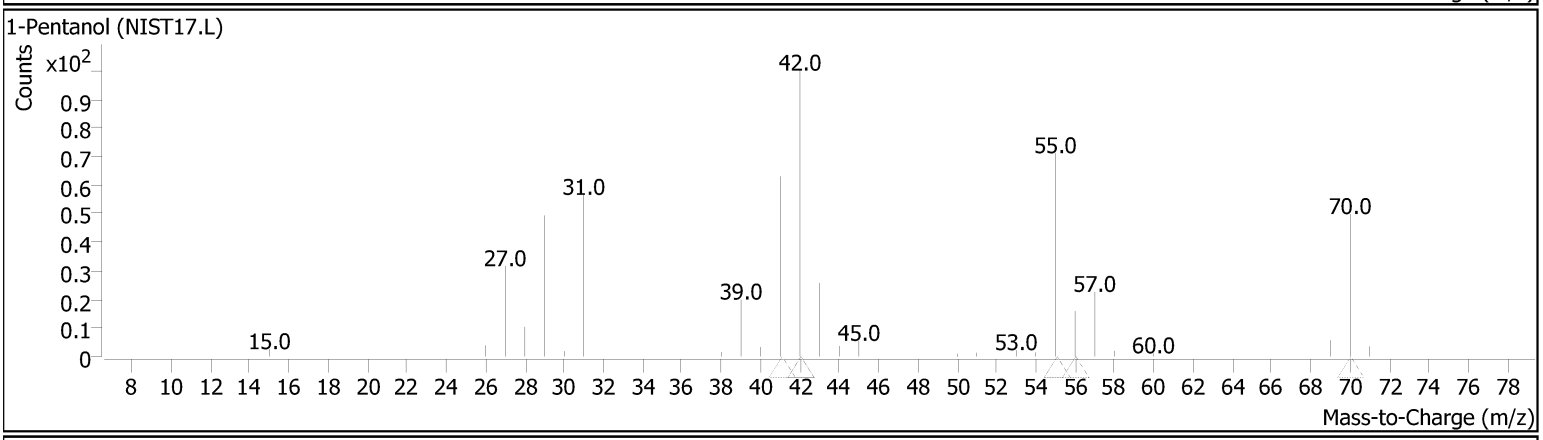


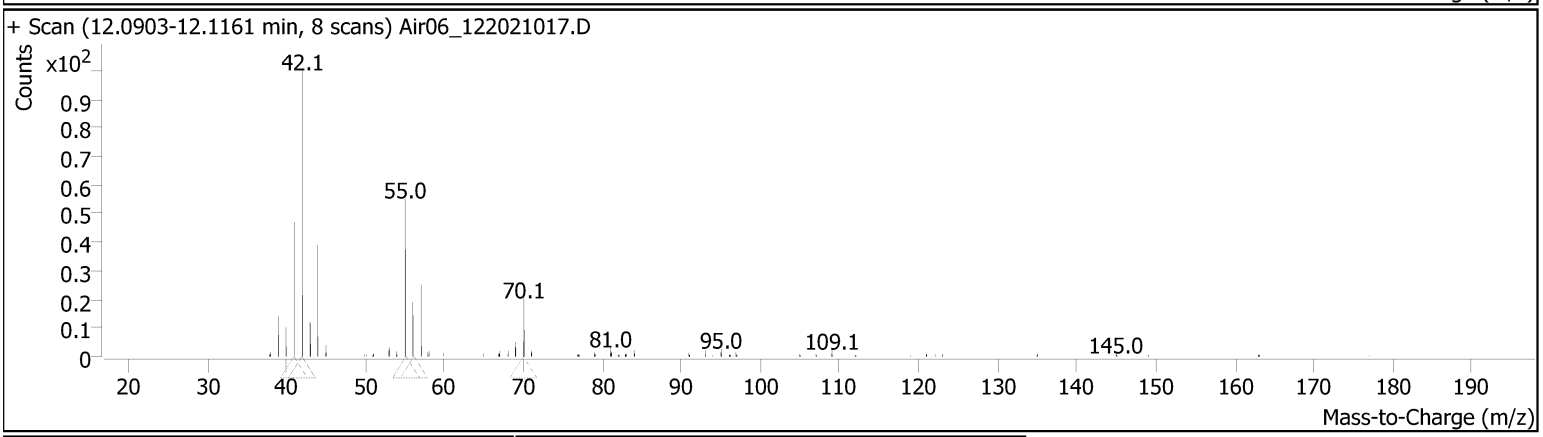


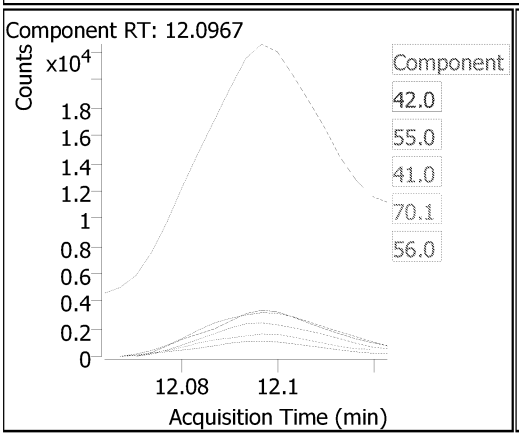


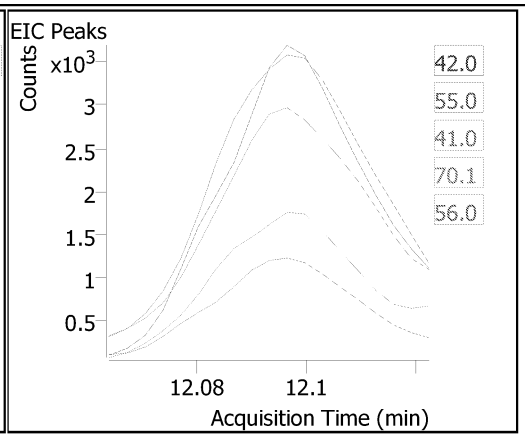
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.0967	1-Pentanol	34199.4	89.8	71-41-0	C5H12O	0.08083





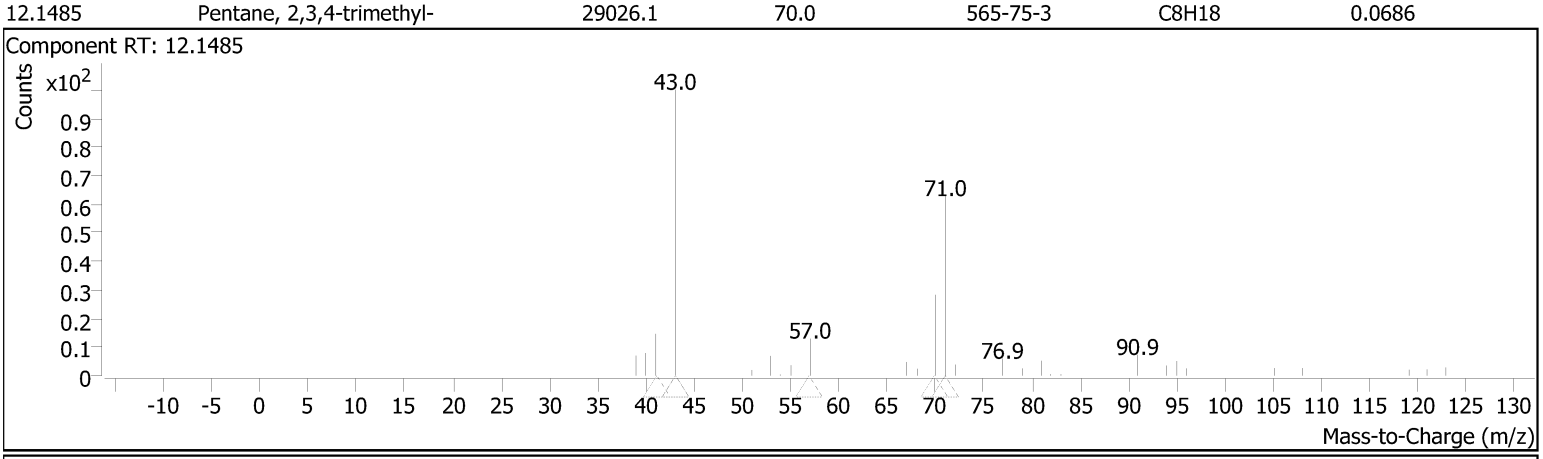


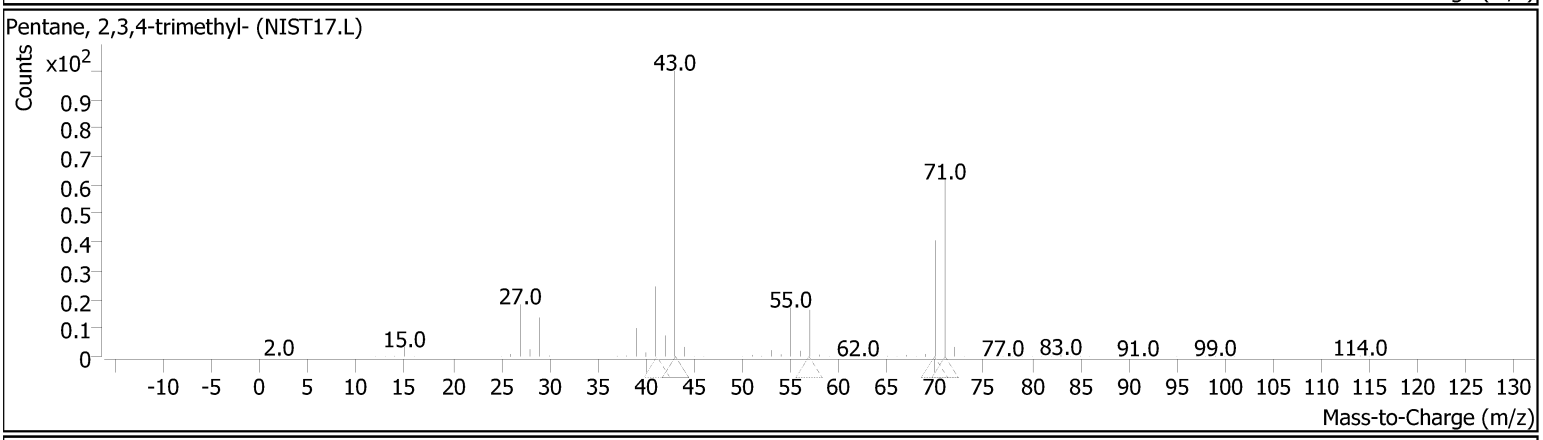


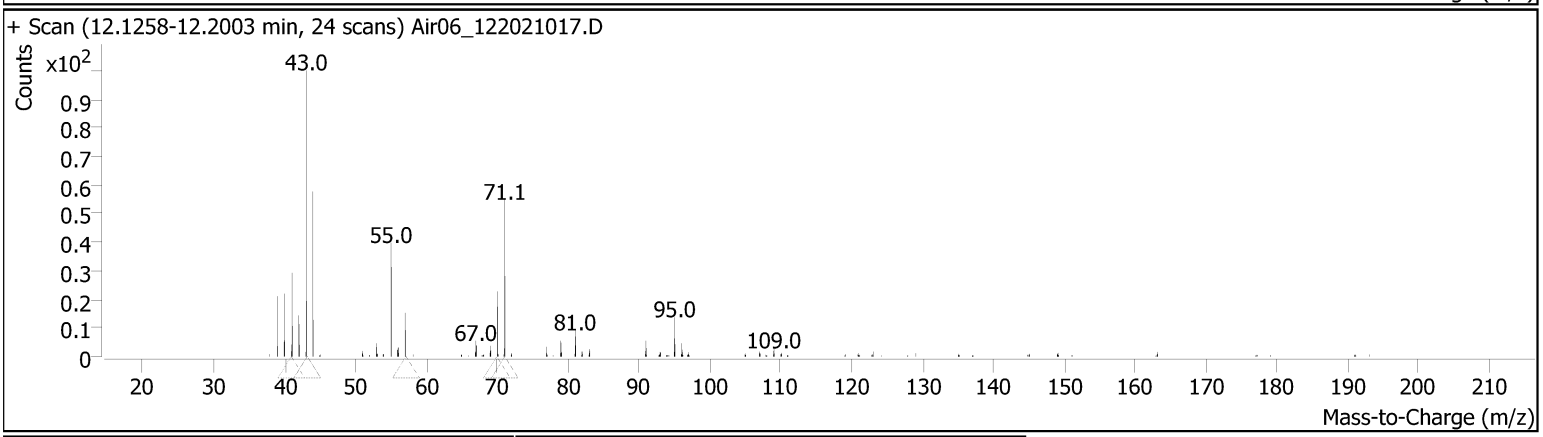


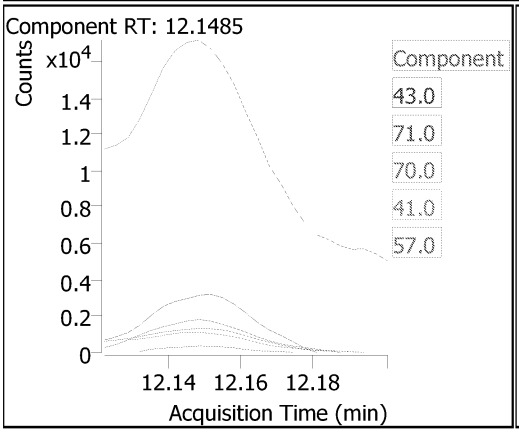


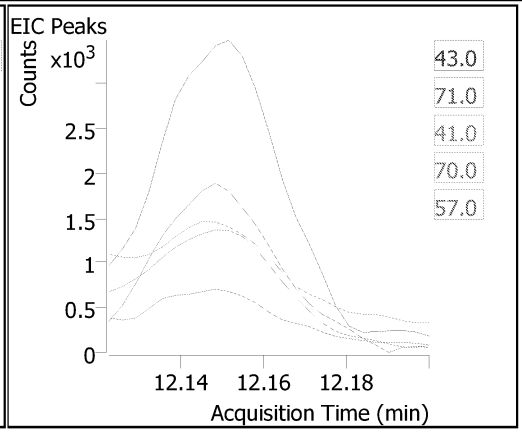
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.1485	Pentane, 2,3,4-trimethyl-	29026.1	70.0	565-75-3	C8H18	0.0686

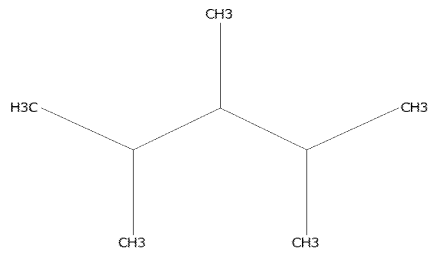




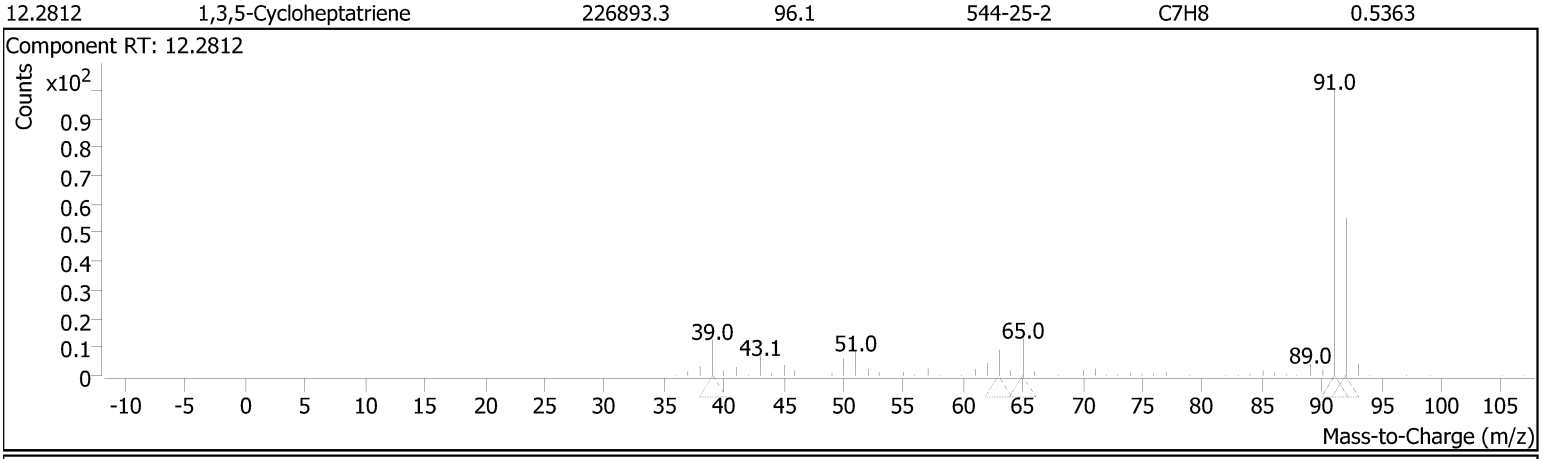


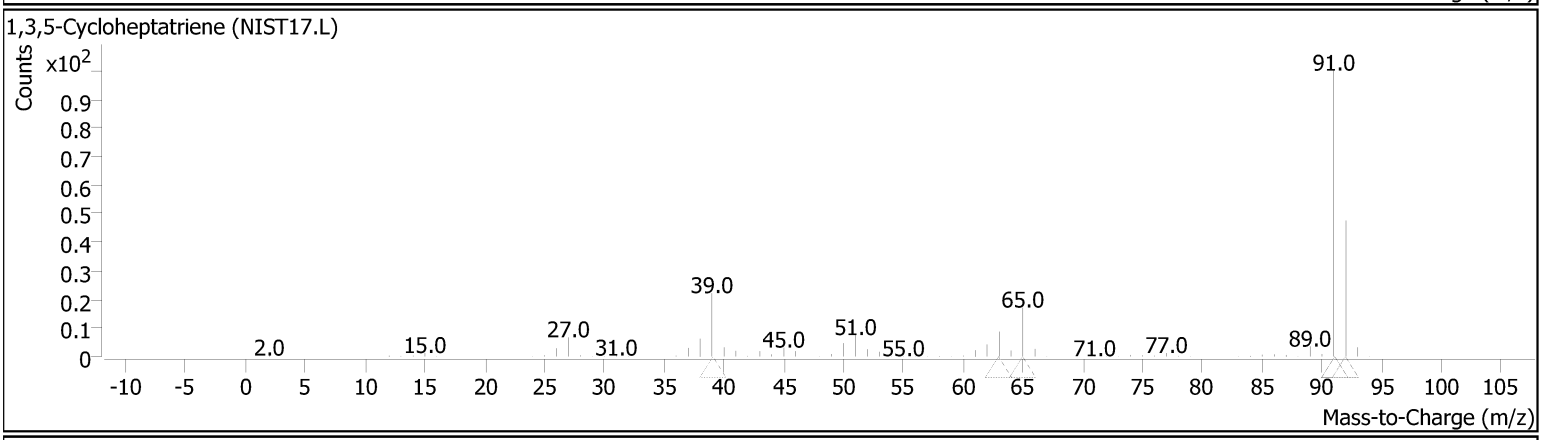


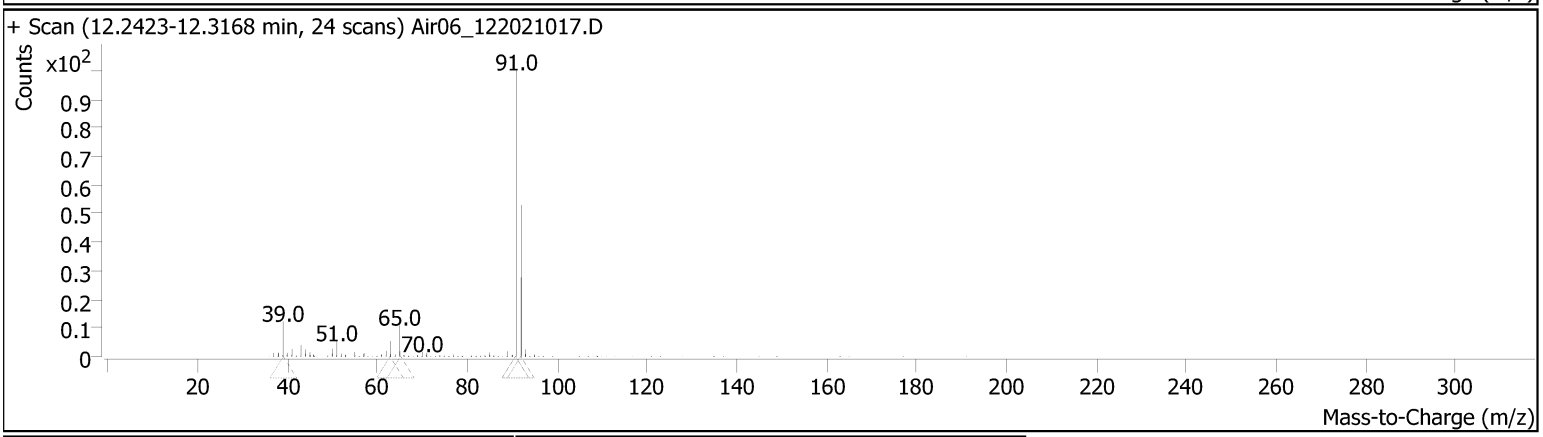


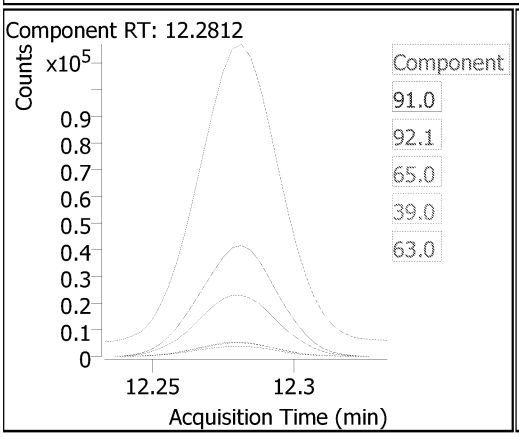


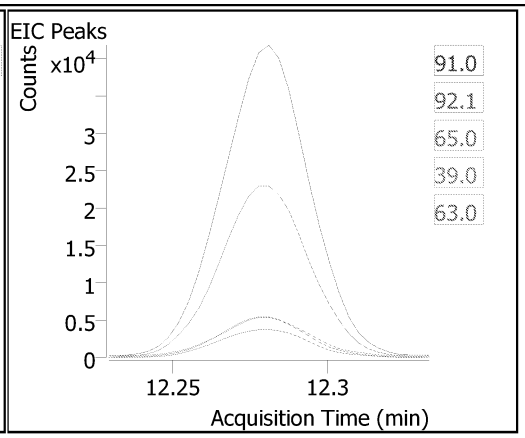
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.2812	1,3,5-Cycloheptatriene	226893.3	96.1	544-25-2	C7H8	0.5363

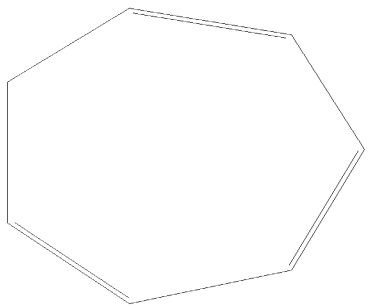




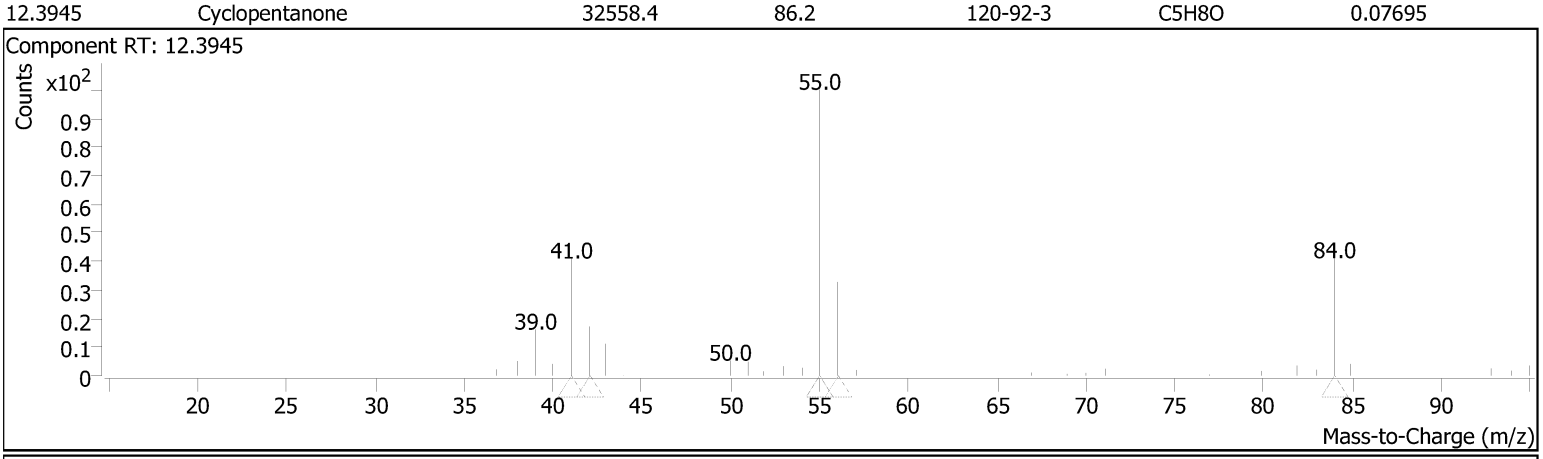


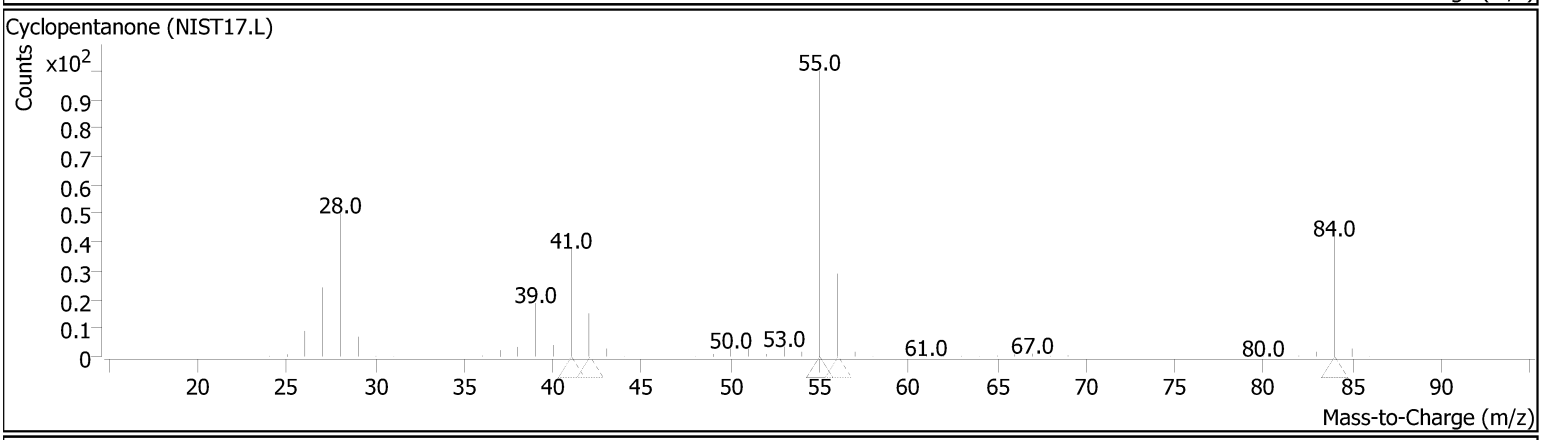


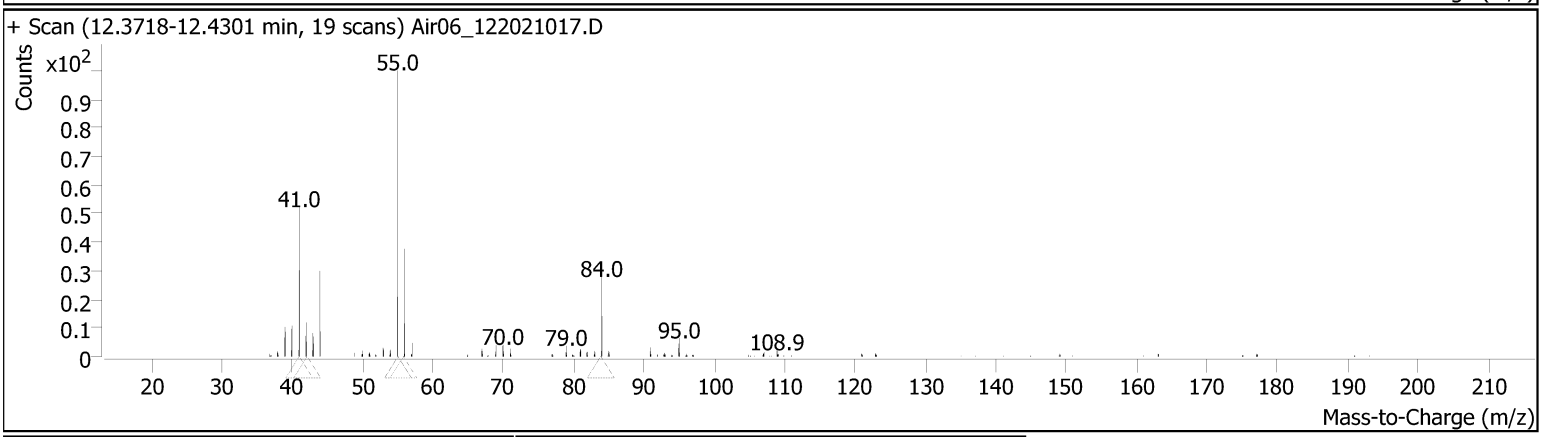


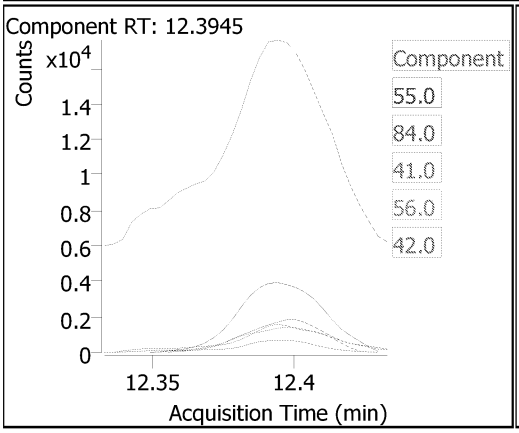


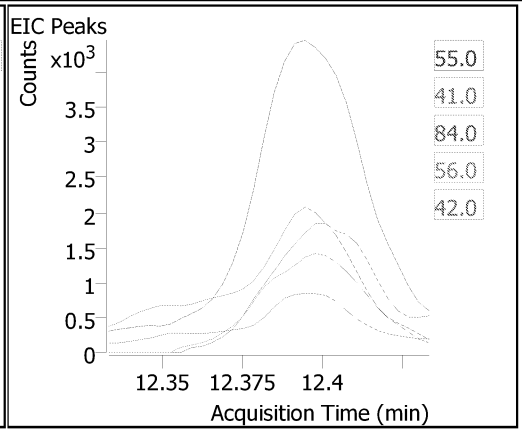
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.3945	Cyclopentanone	32558.4	86.2	120-92-3	C5H8O	0.07695

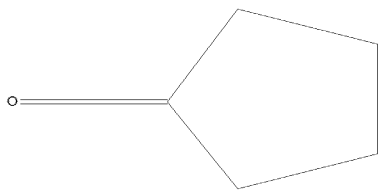




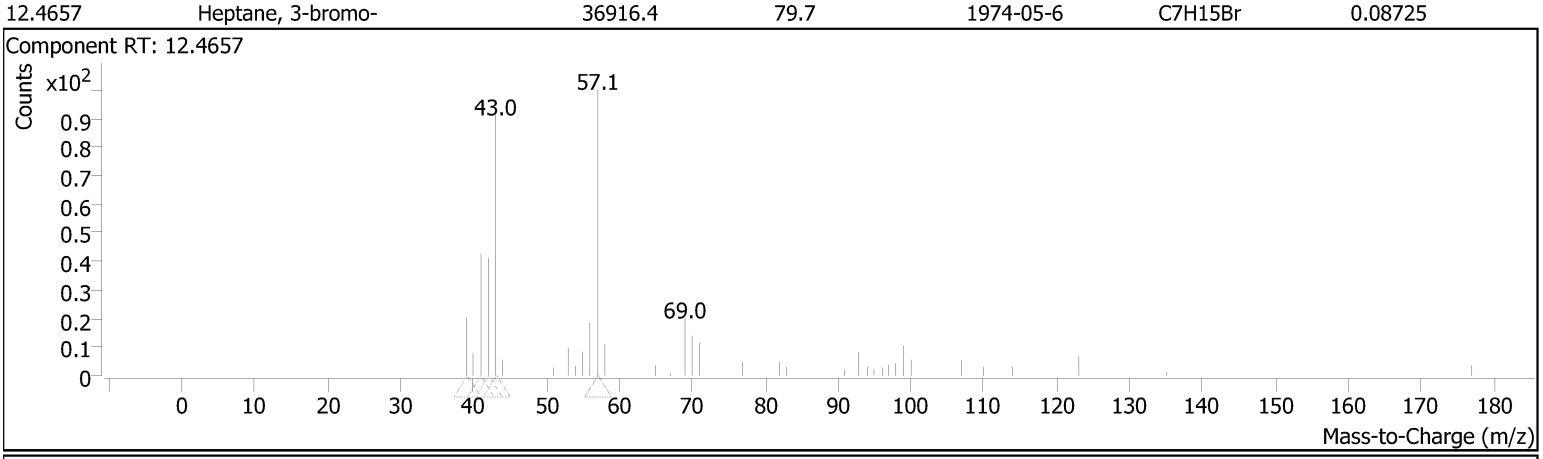


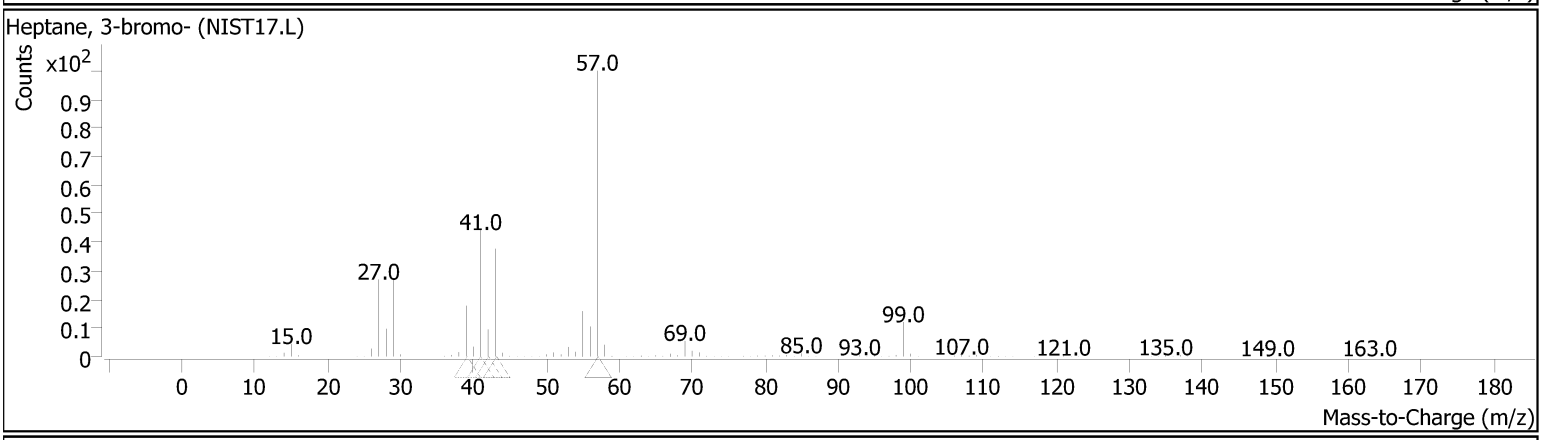


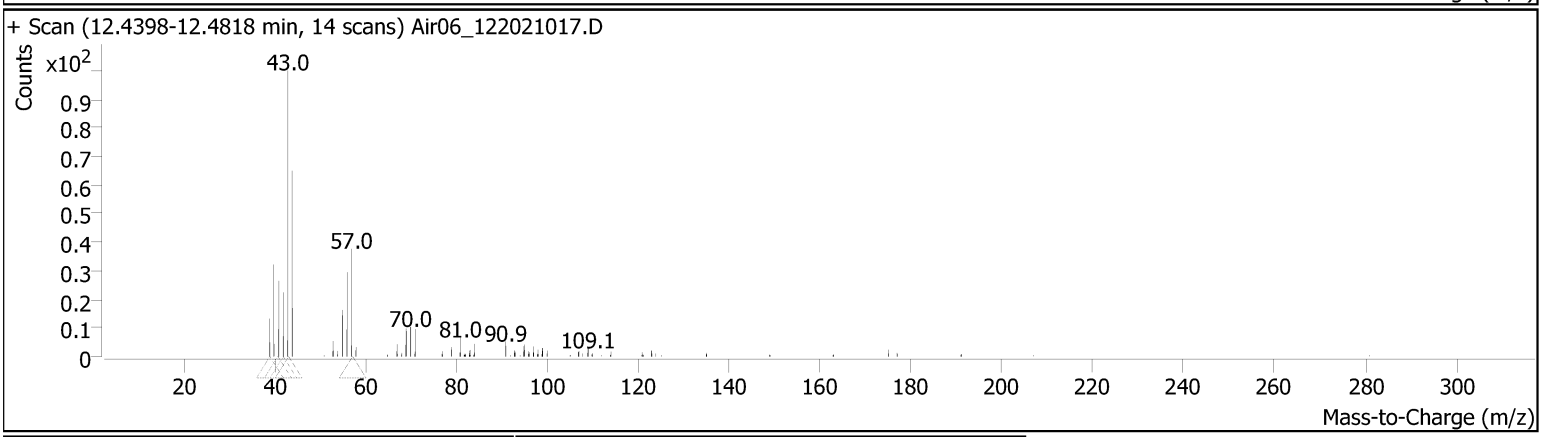


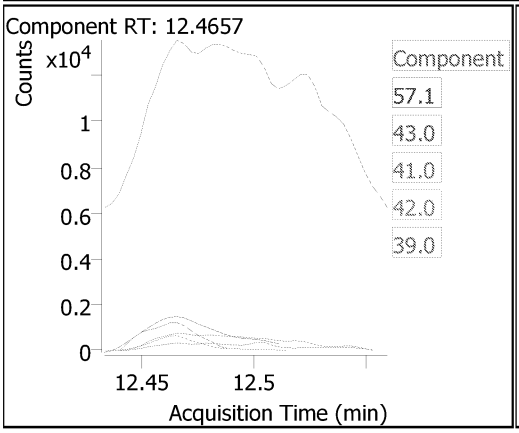


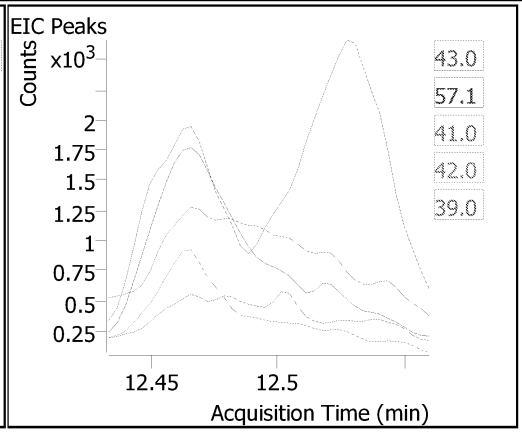
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.4657	Heptane, 3-bromo-	36916.4	79.7	1974-05-6	C7H15Br	0.08725

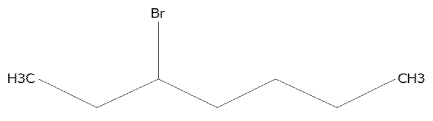




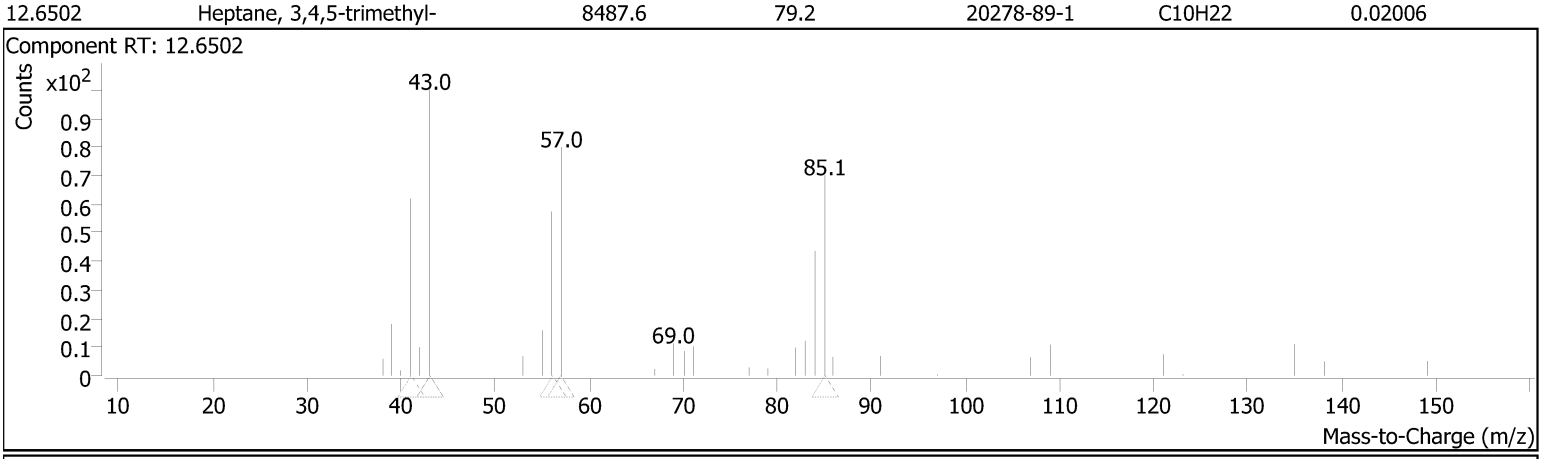


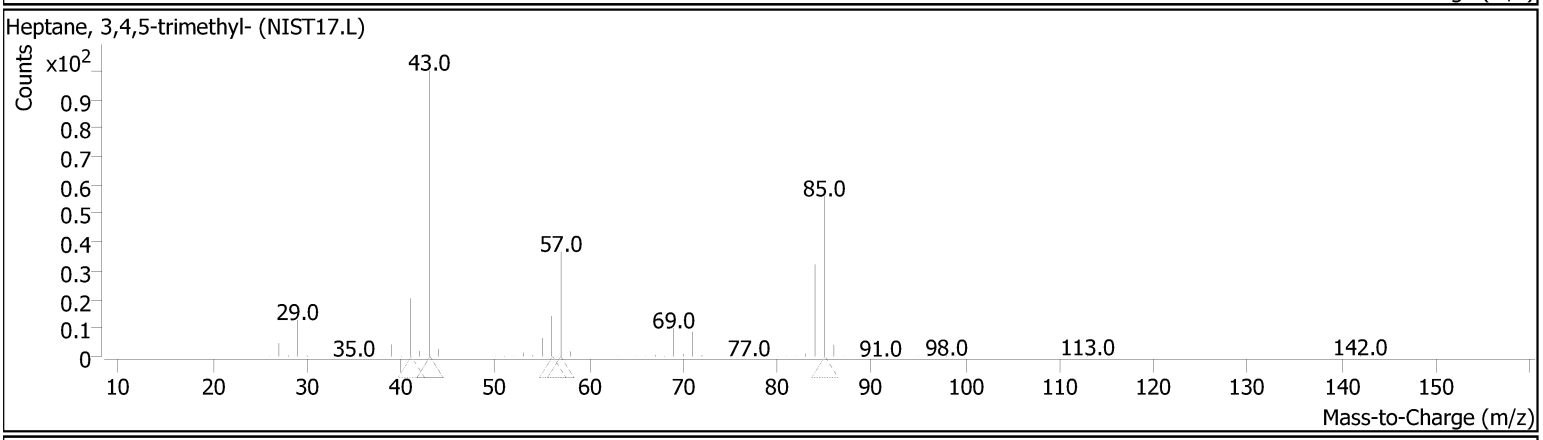


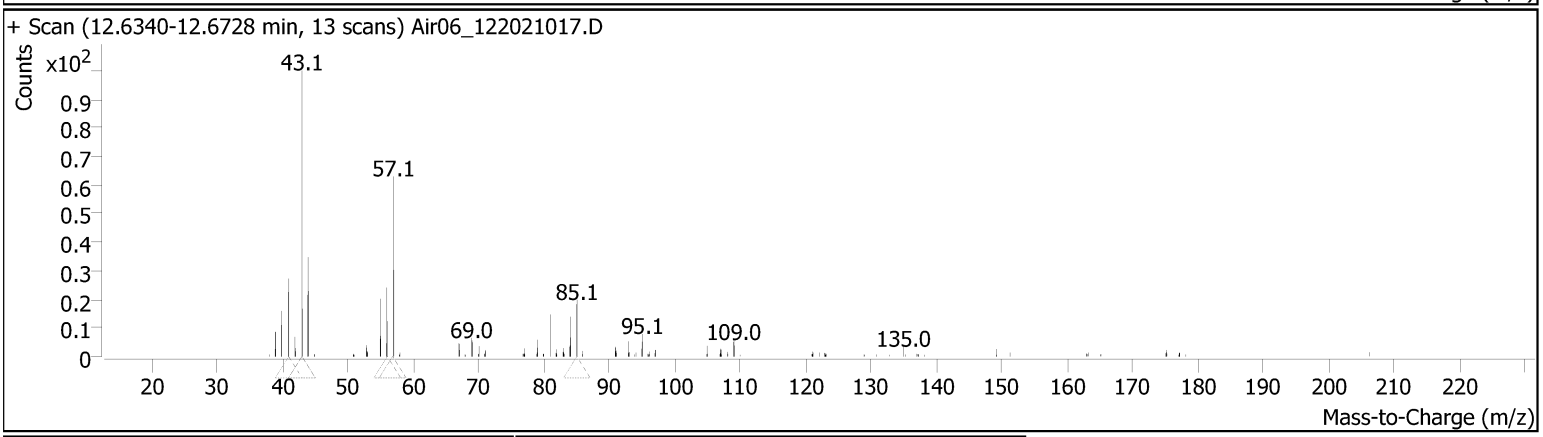


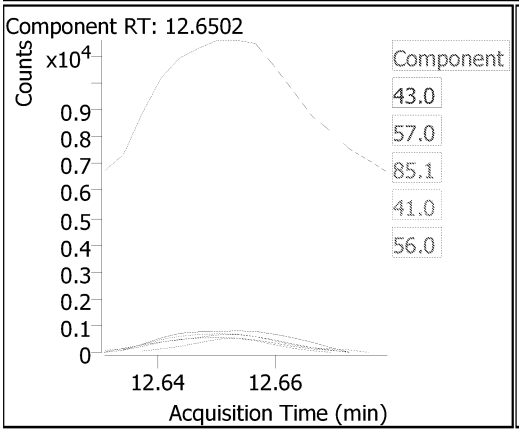


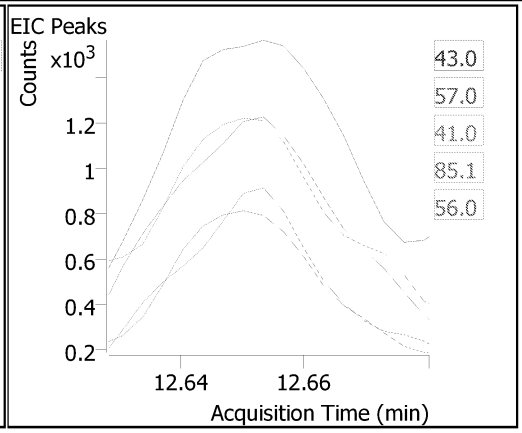
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.6502	Heptane, 3,4,5-trimethyl-	8487.6	79.2	20278-89-1	C10H22	0.02006

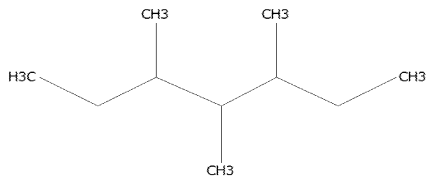




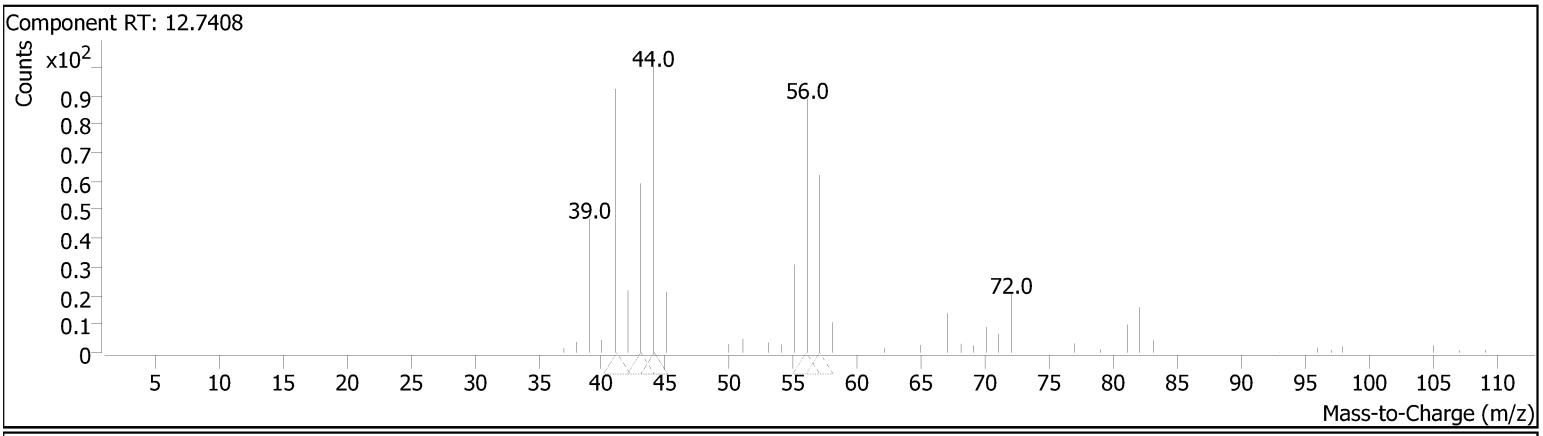


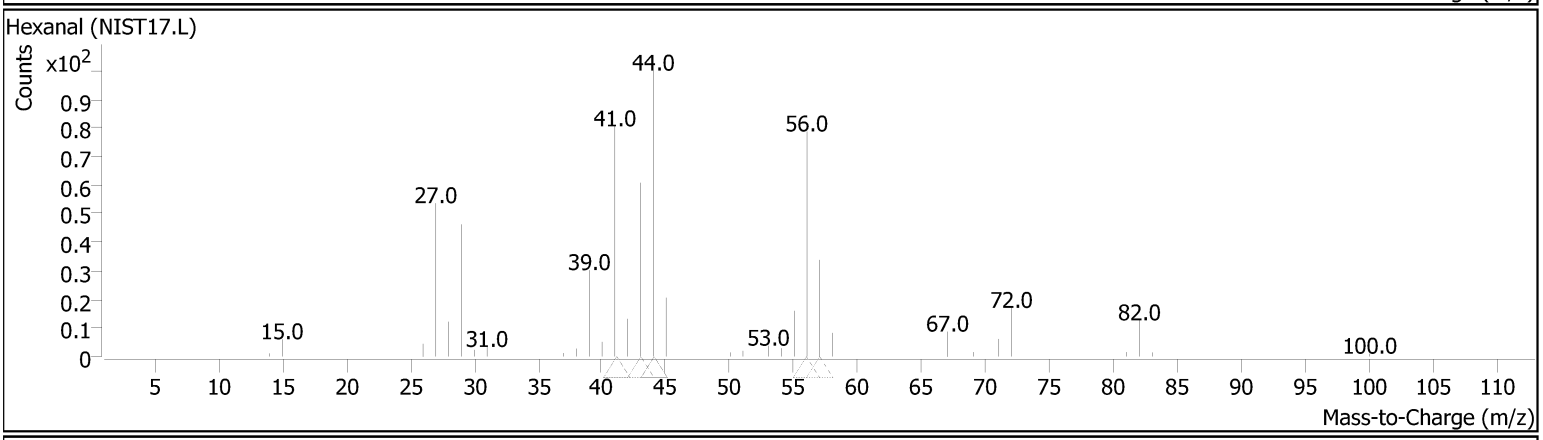


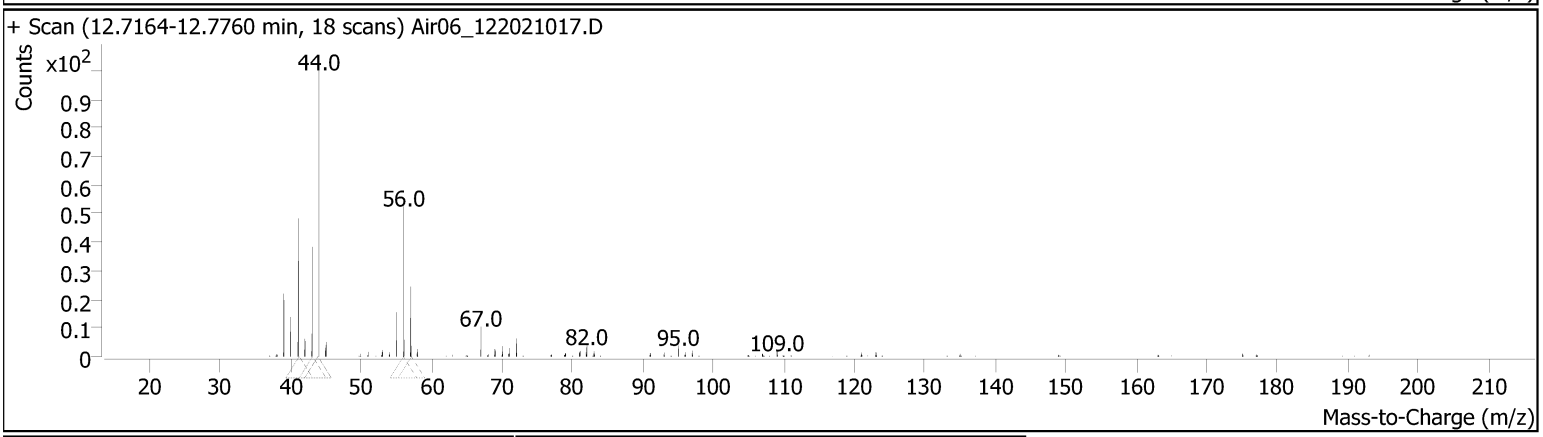


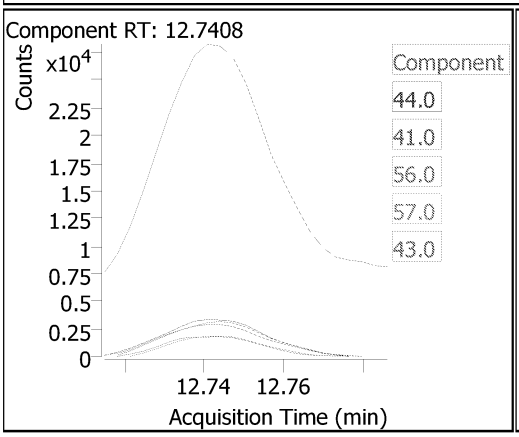


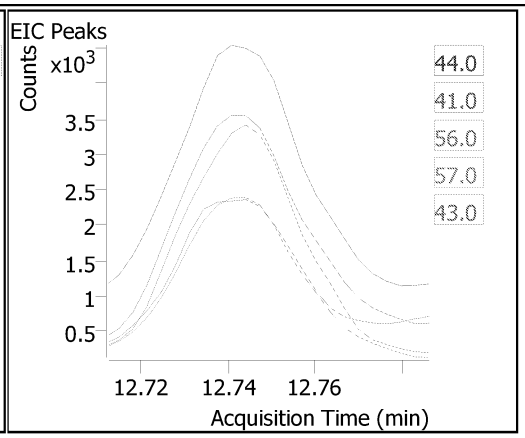
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.7408	Hexanal	42185.7	90.2	66-25-1	C6H12O	0.0997





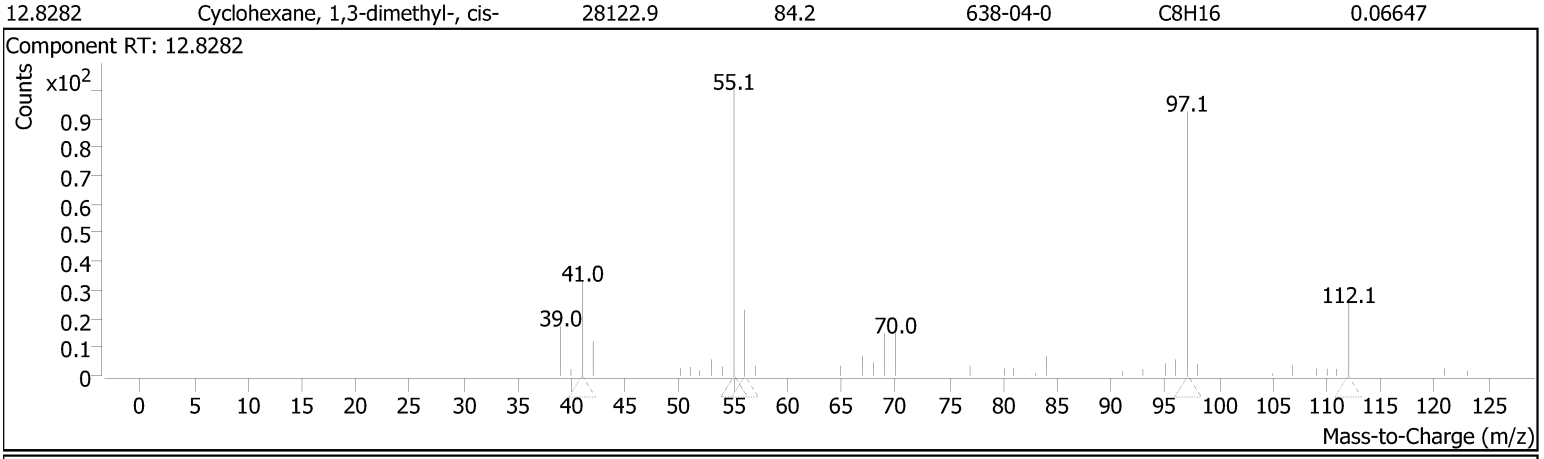


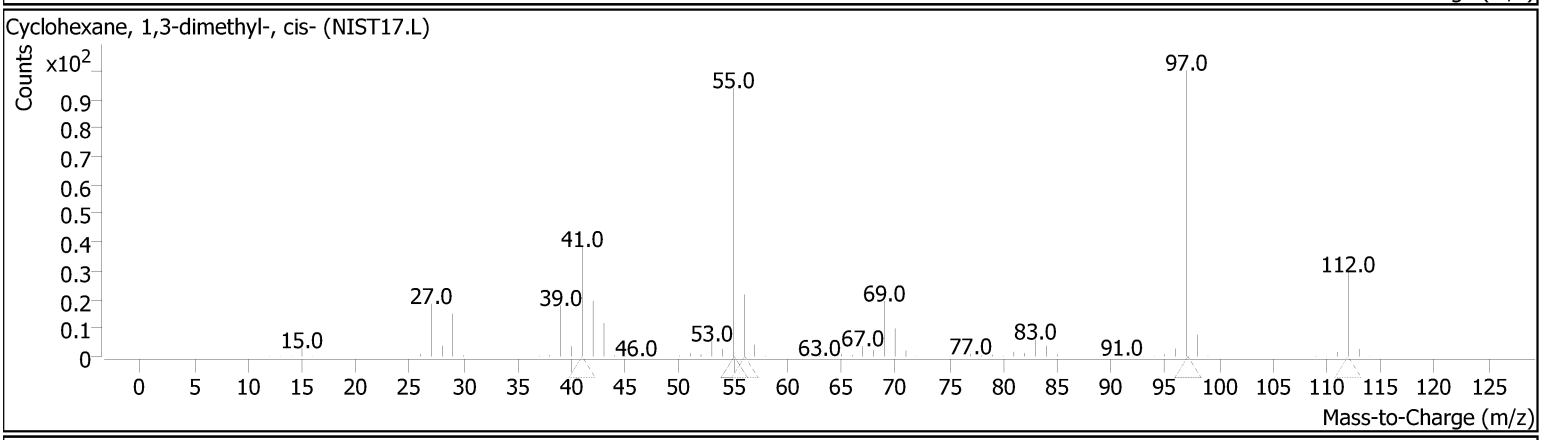


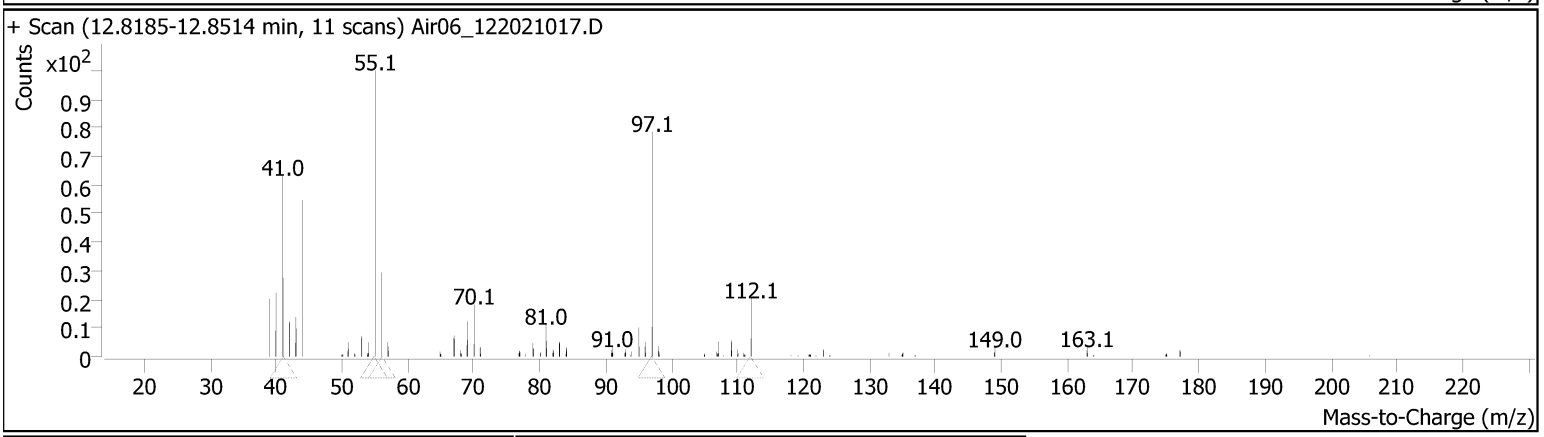


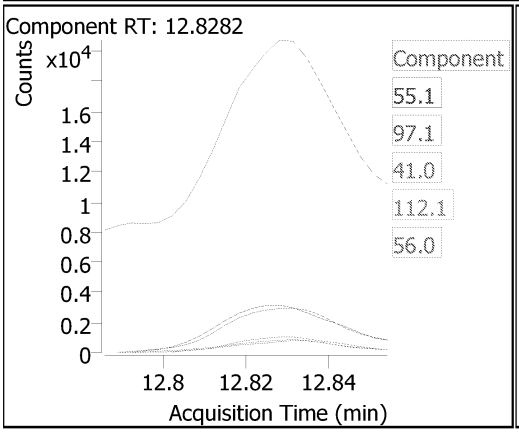


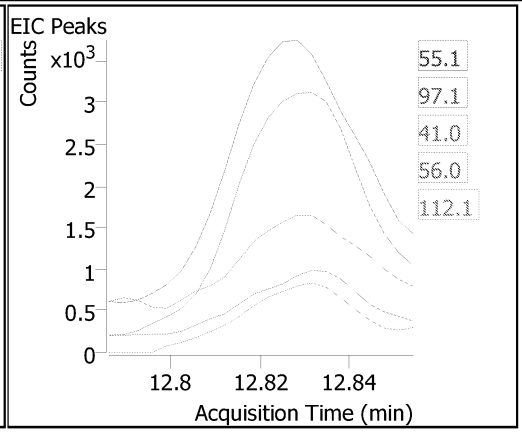
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.8282	Cyclohexane, 1,3-dimethyl-, cis-	28122.9	84.2	638-04-0	C8H16	0.06647

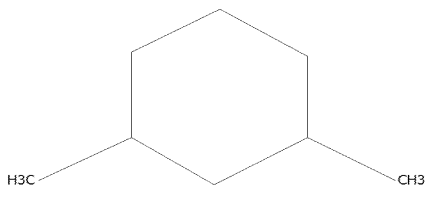




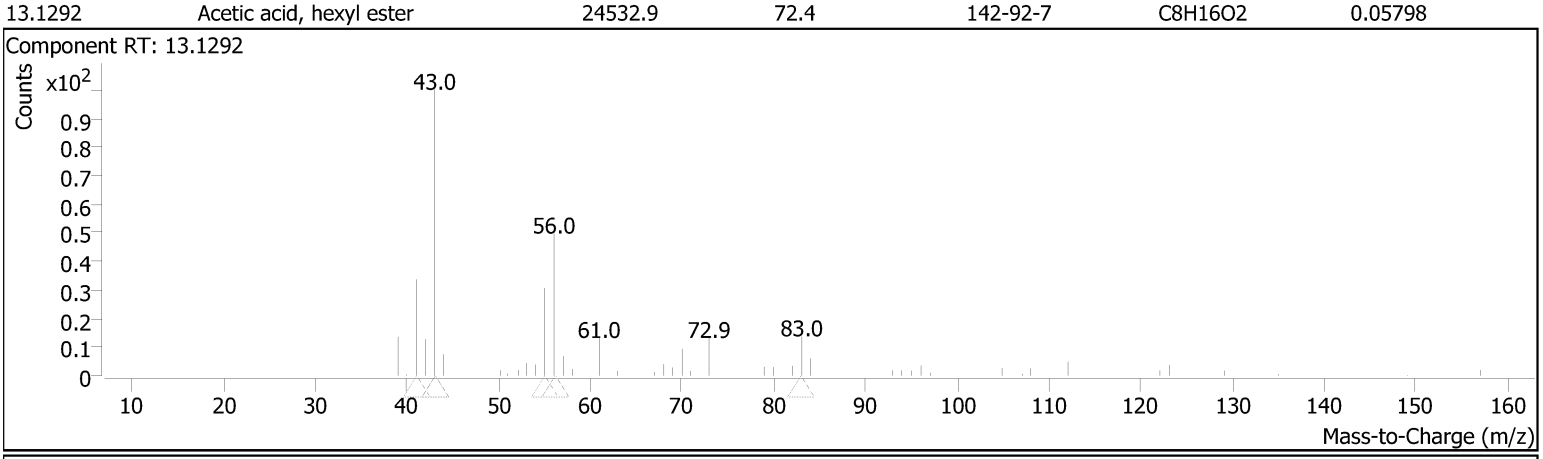


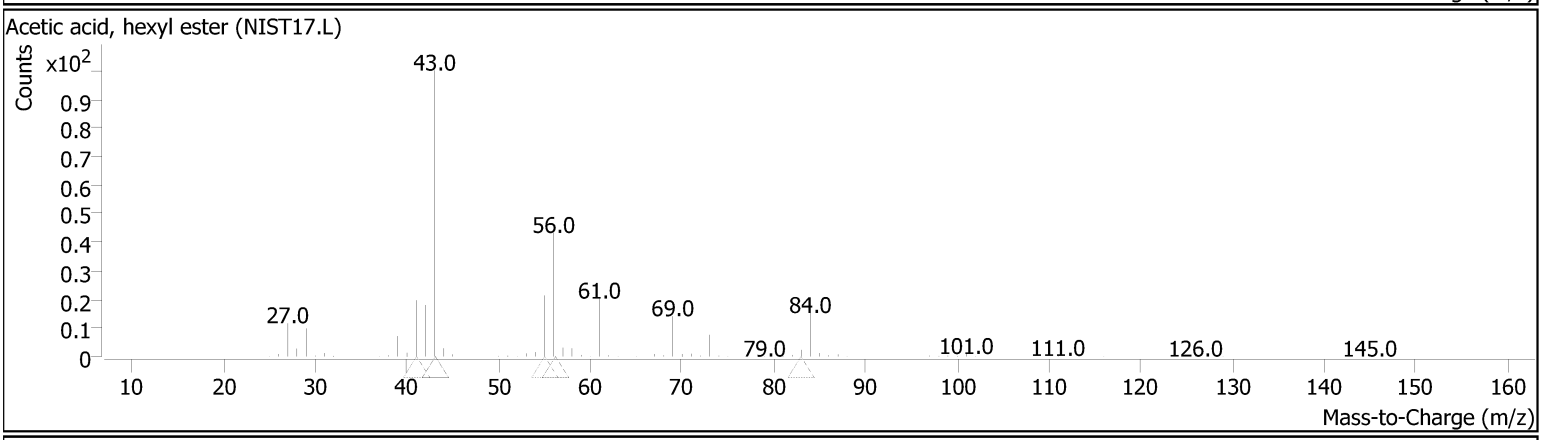


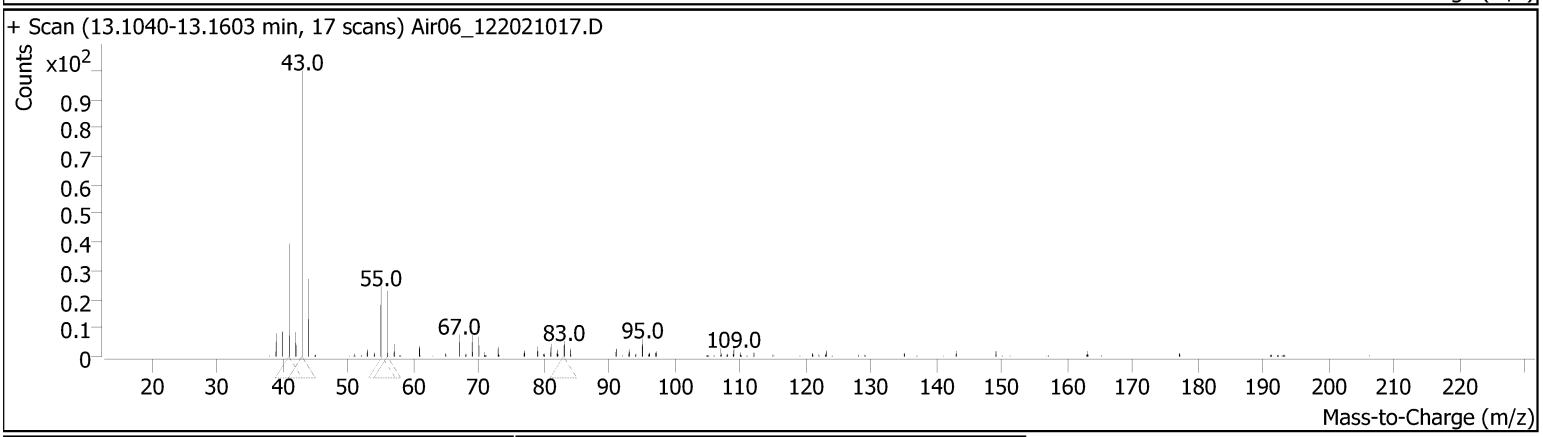


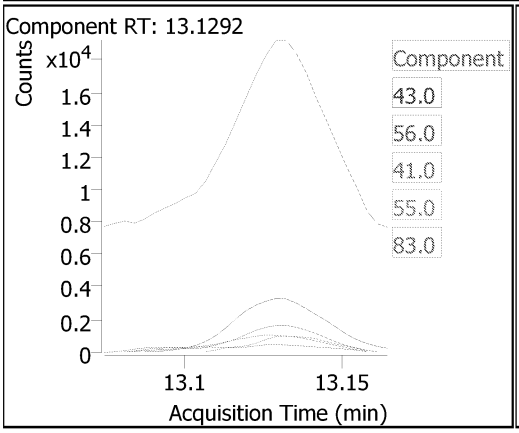


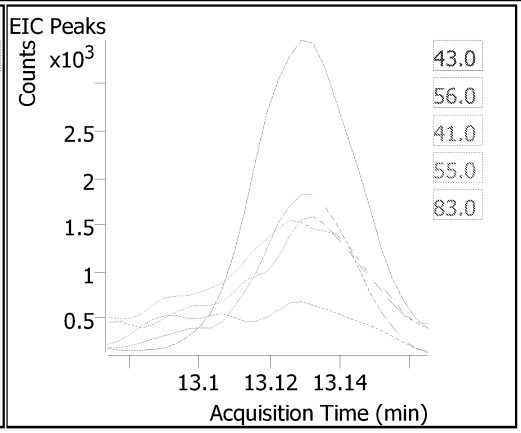
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.1292	Acetic acid, hexyl ester	24532.9	72.4	142-92-7	C8H16O2	0.05798

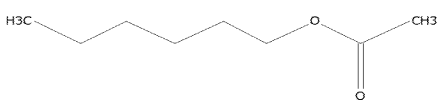




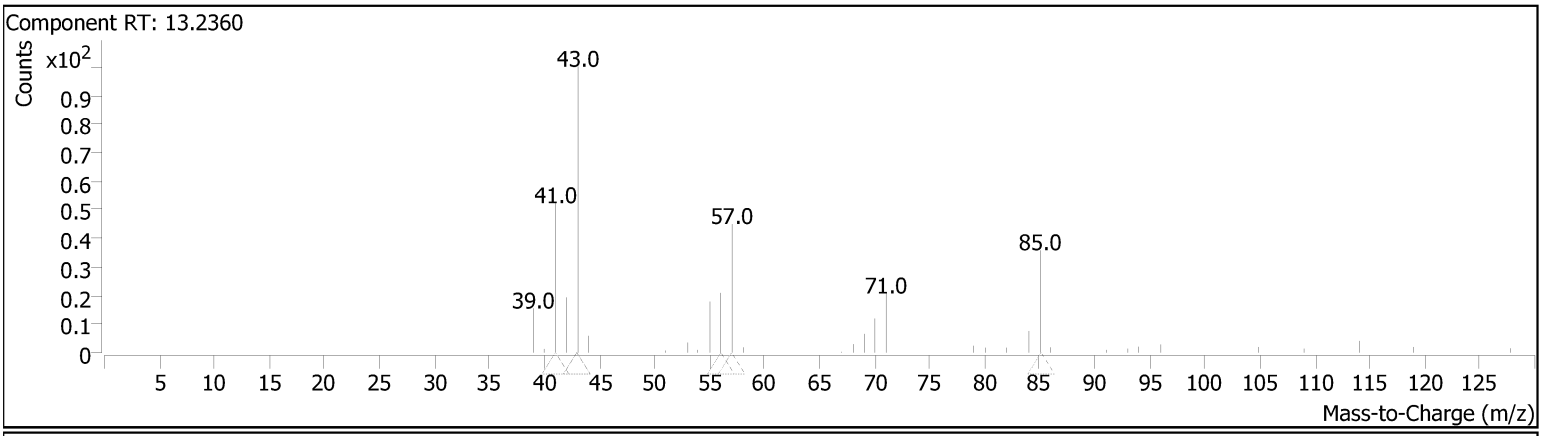


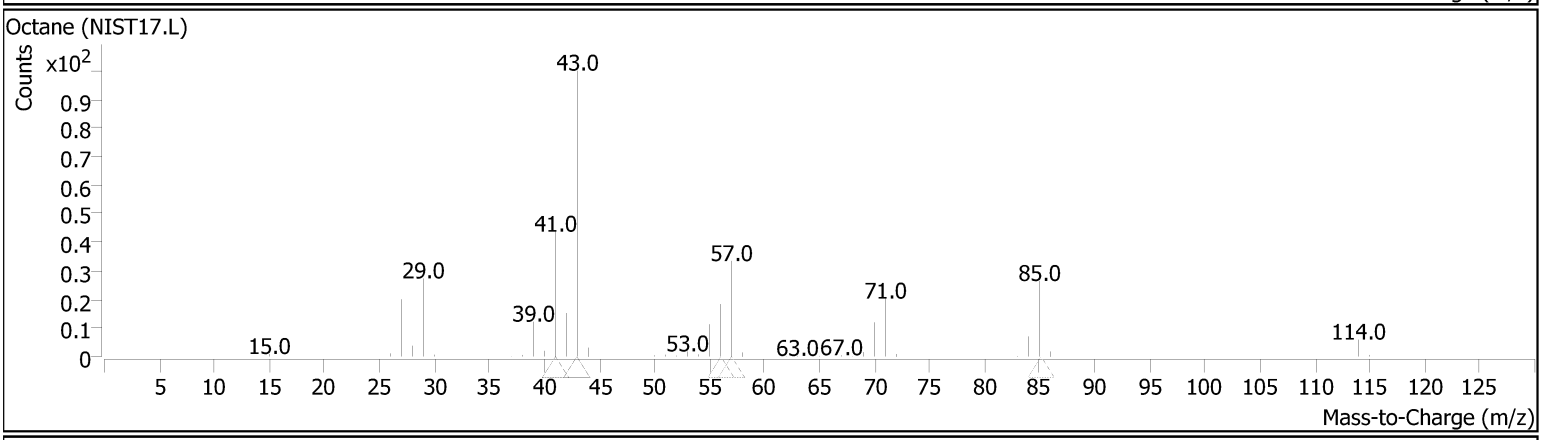


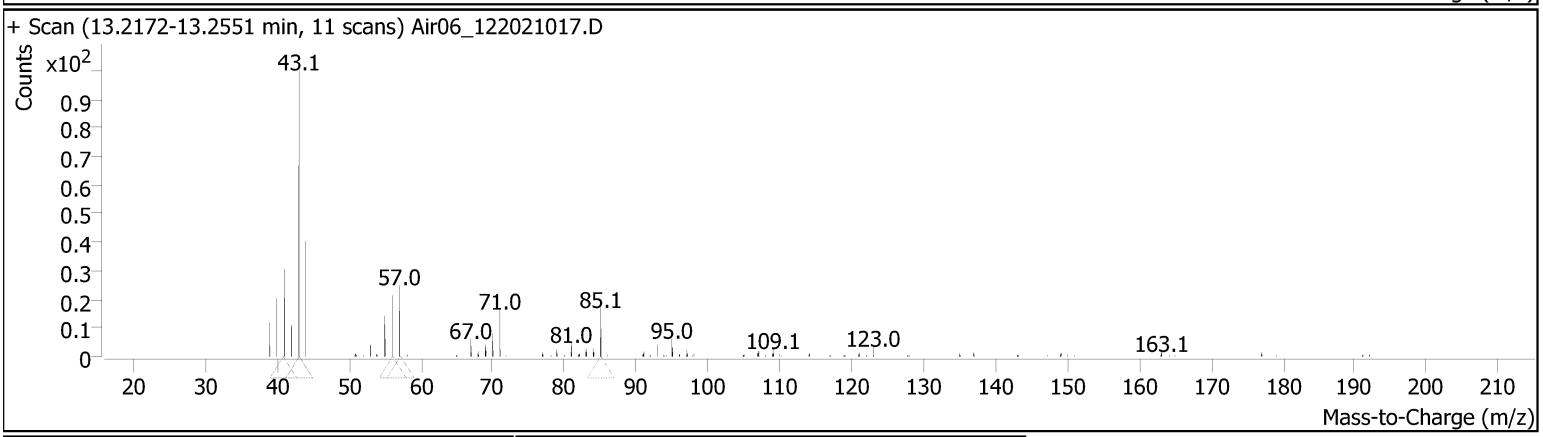


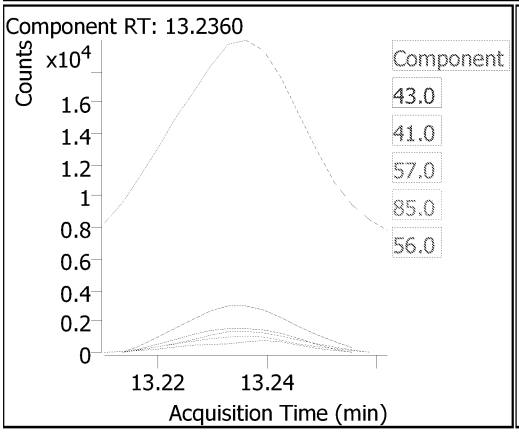


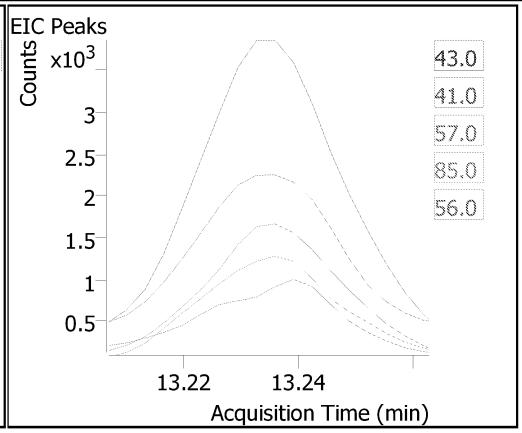
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.2360	Octane	20070.8	90.4	111-65-9	C8H18	0.04744





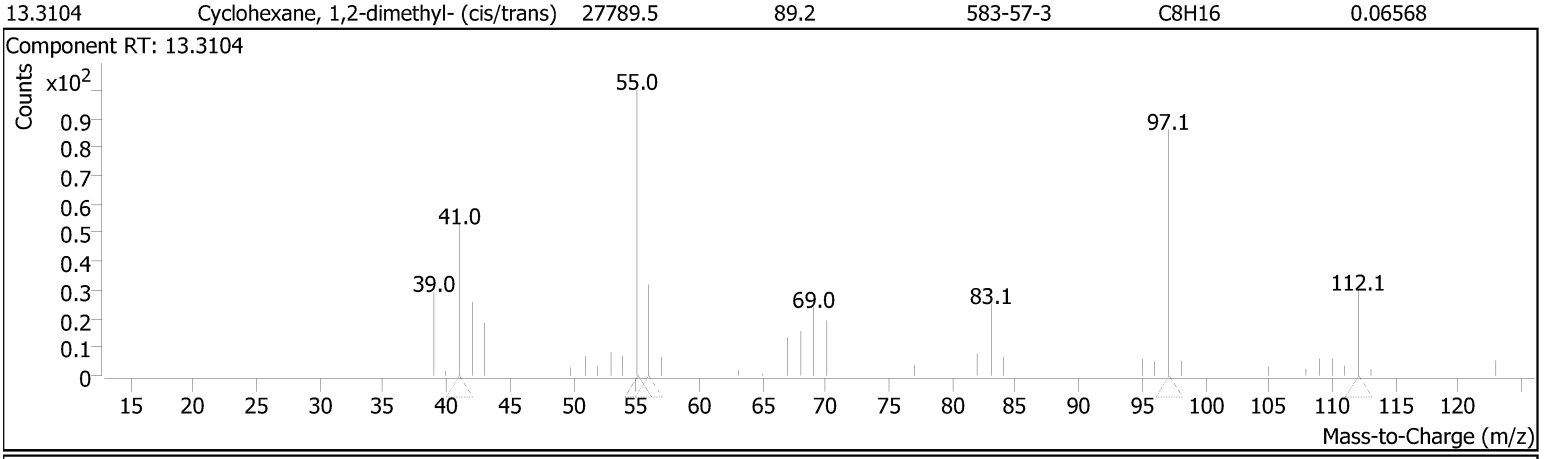


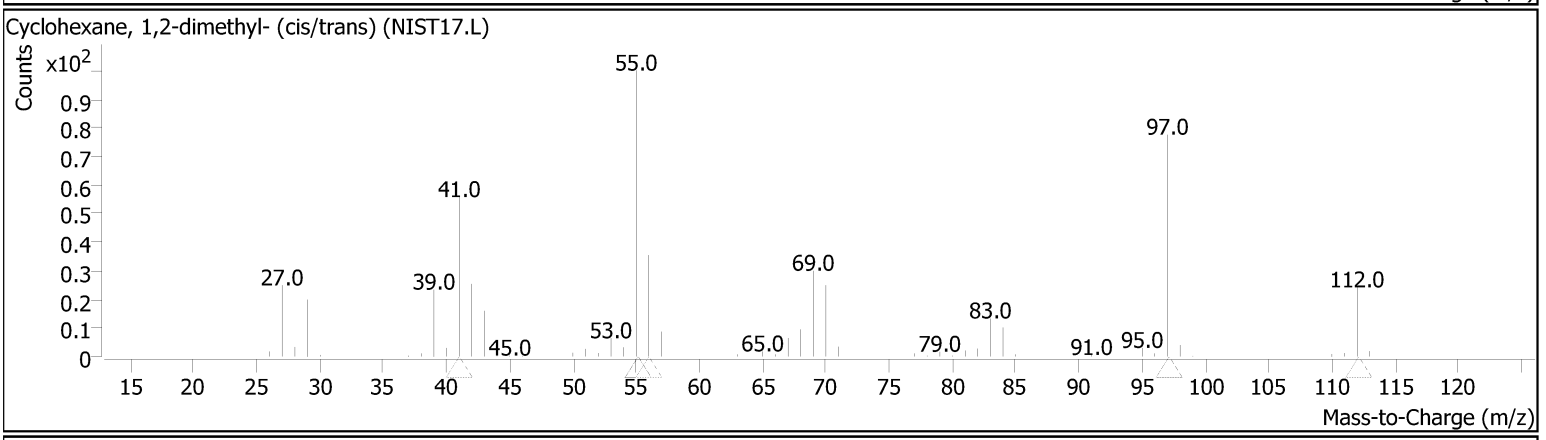


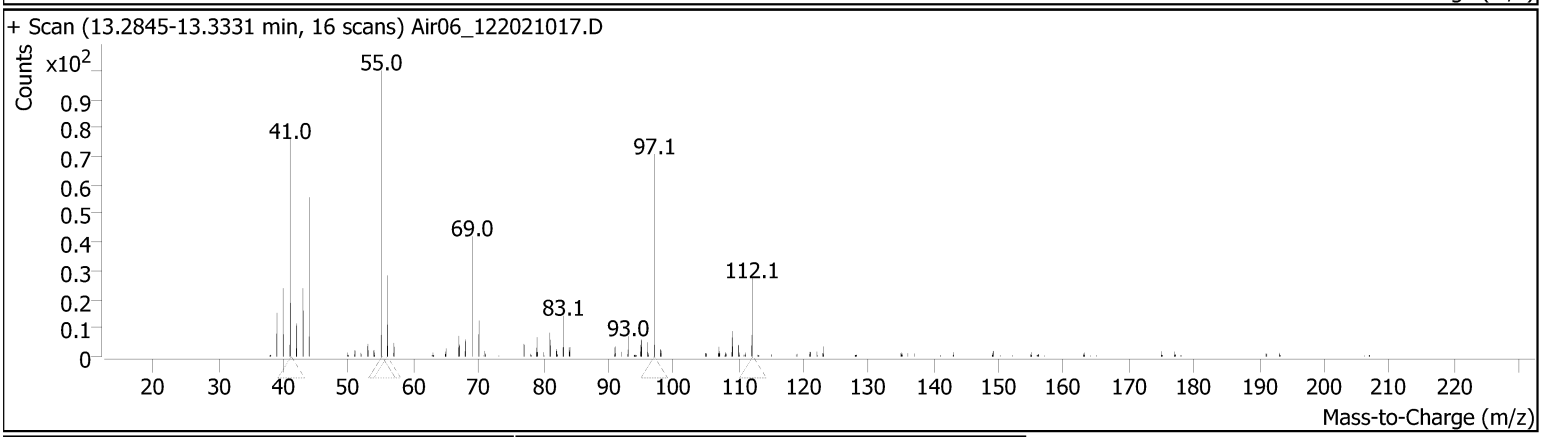


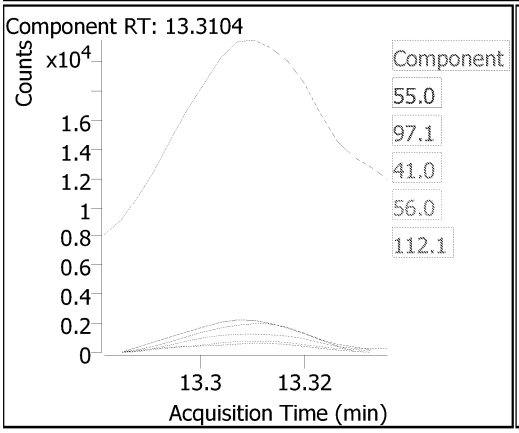


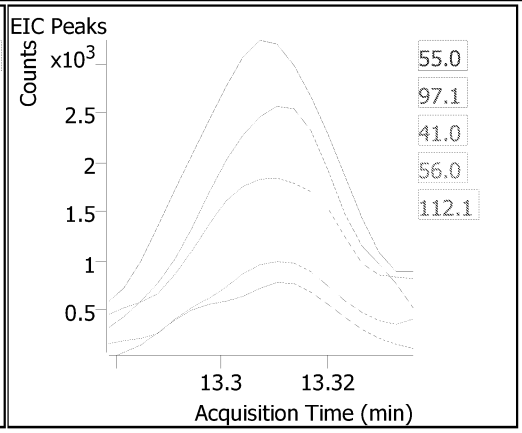
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.3104	Cyclohexane, 1,2-dimethyl- (cis/trans)	27789.5	89.2	583-57-3	C8H16	0.06568

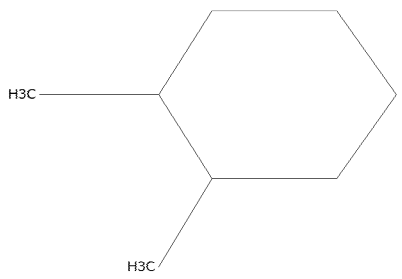




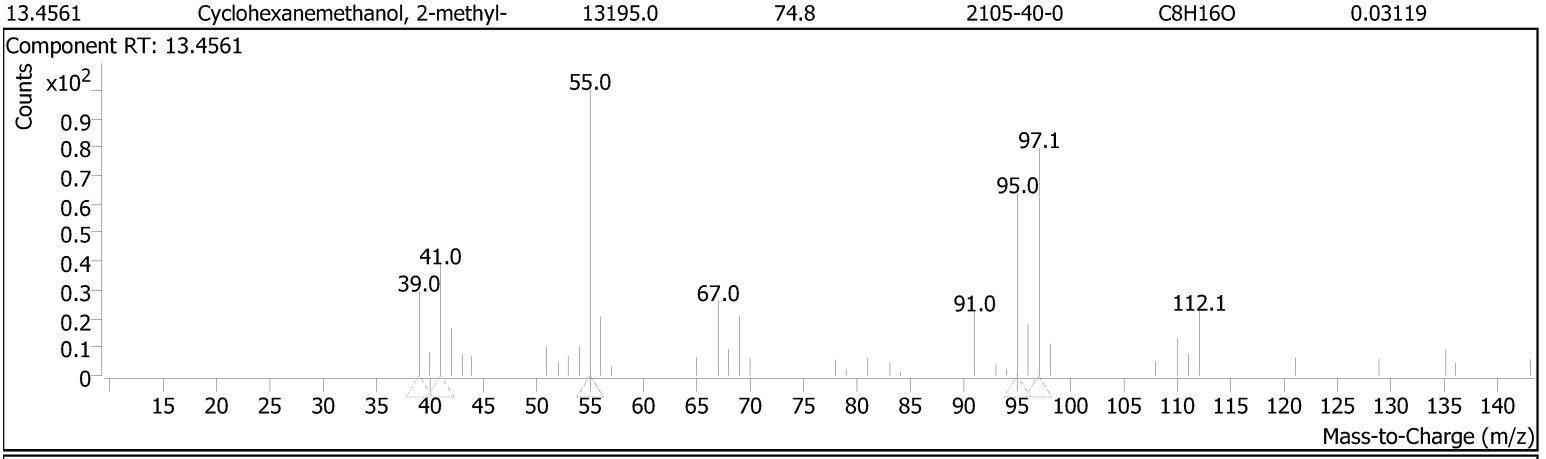


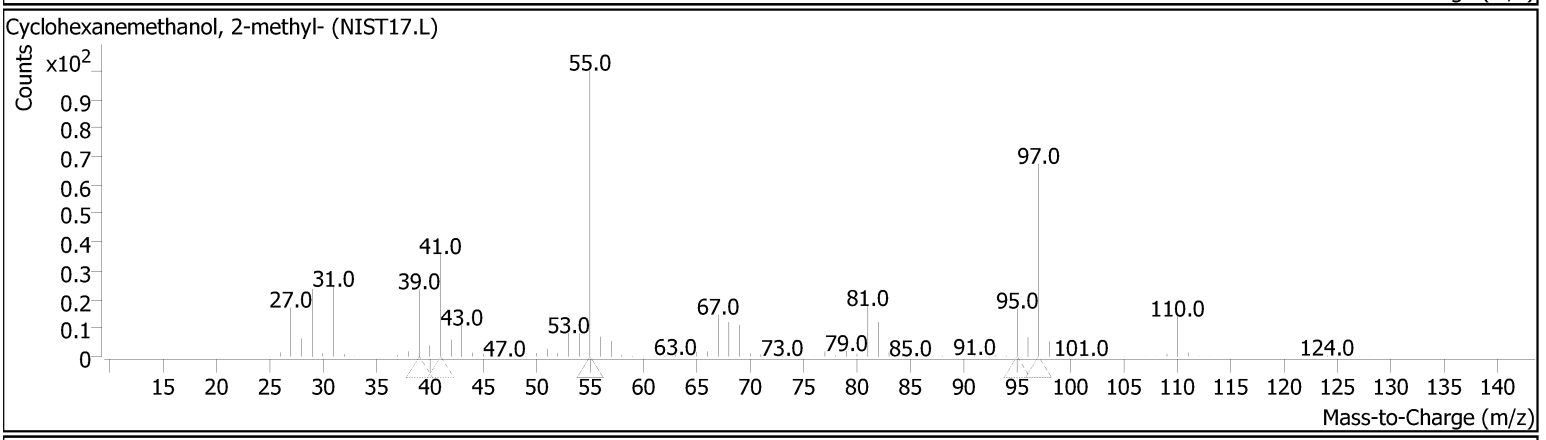


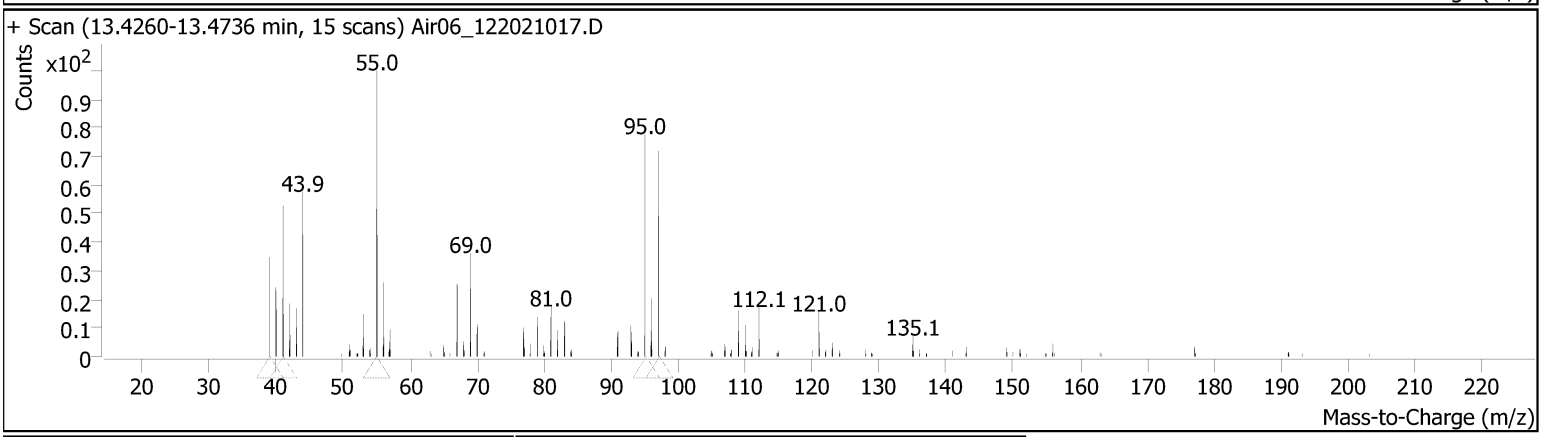


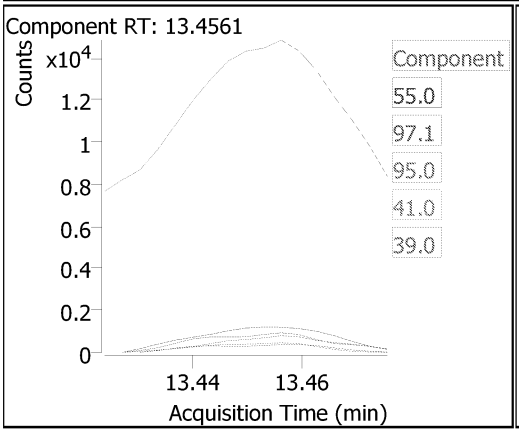


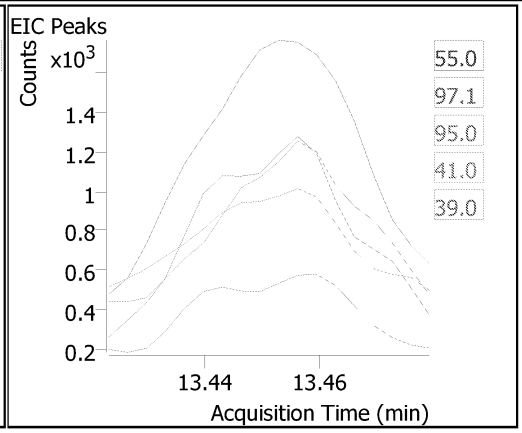
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.4561	Cyclohexanemethanol, 2-methyl-	13195.0	74.8	2105-40-0	C8H16O	0.03119

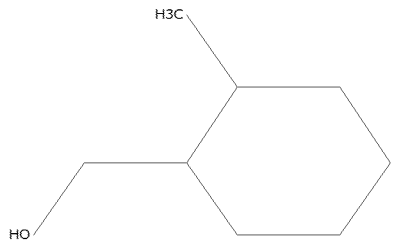












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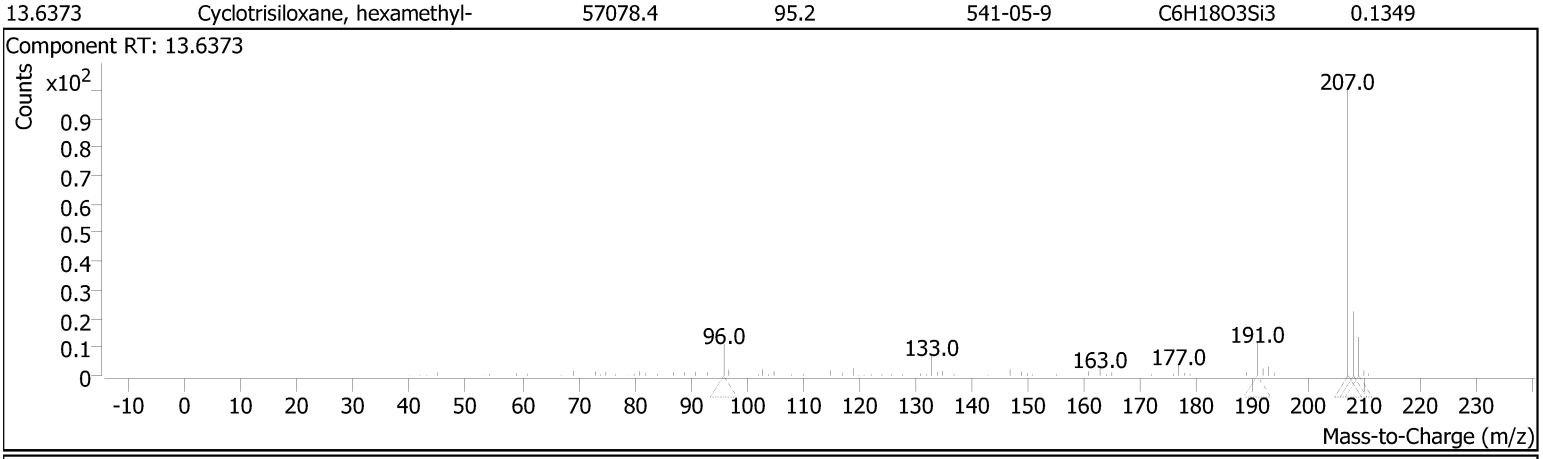
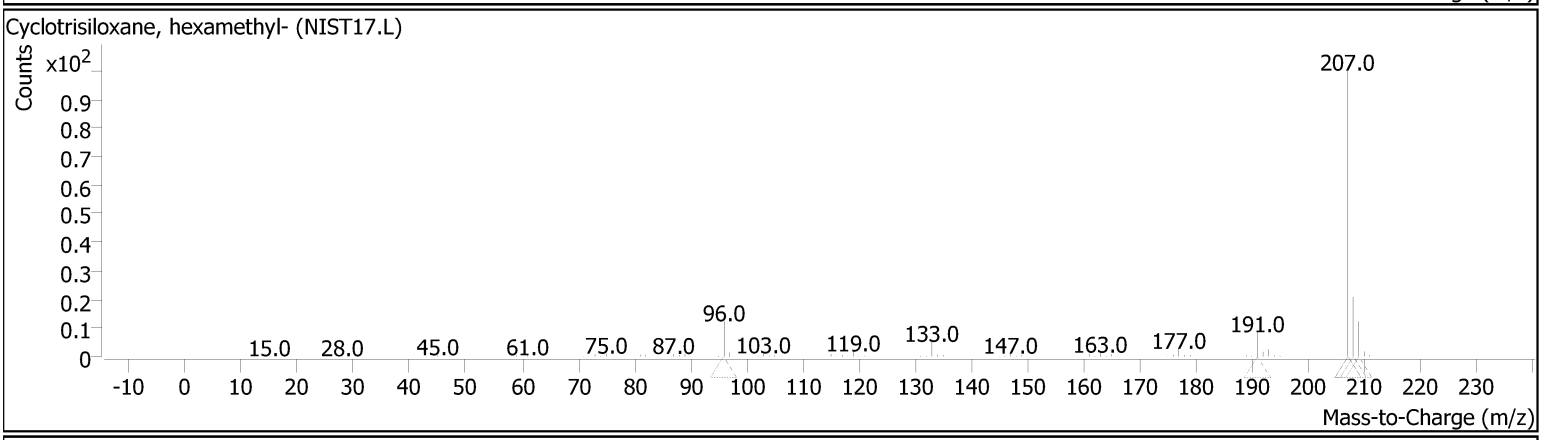
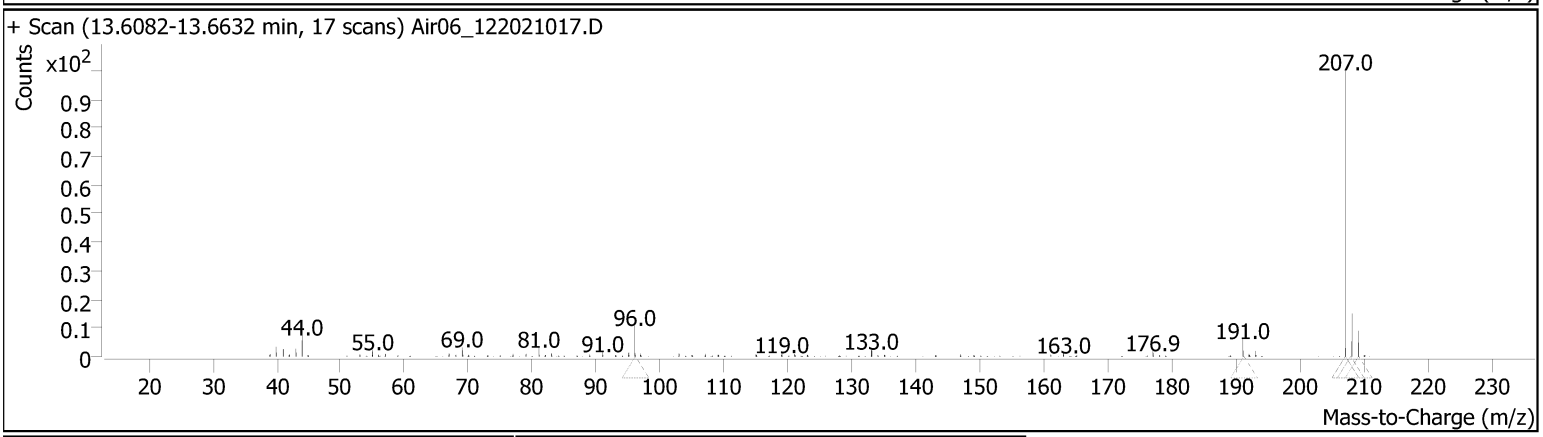
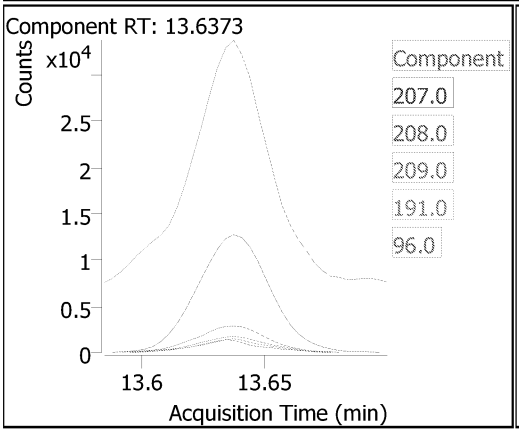
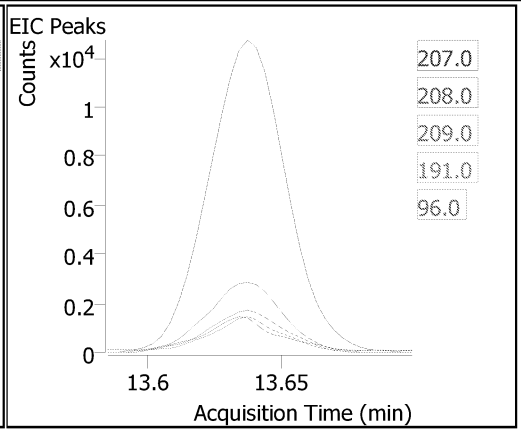
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.6373	Cyclotrisiloxane, hexamethyl-	57078.4	95.2	541-05-9	C6H18O3Si3	0.1349

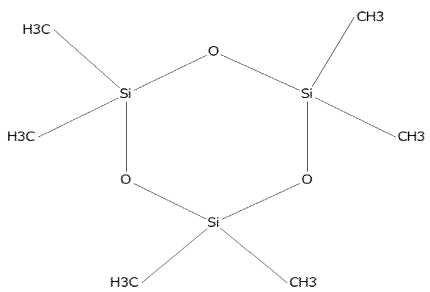




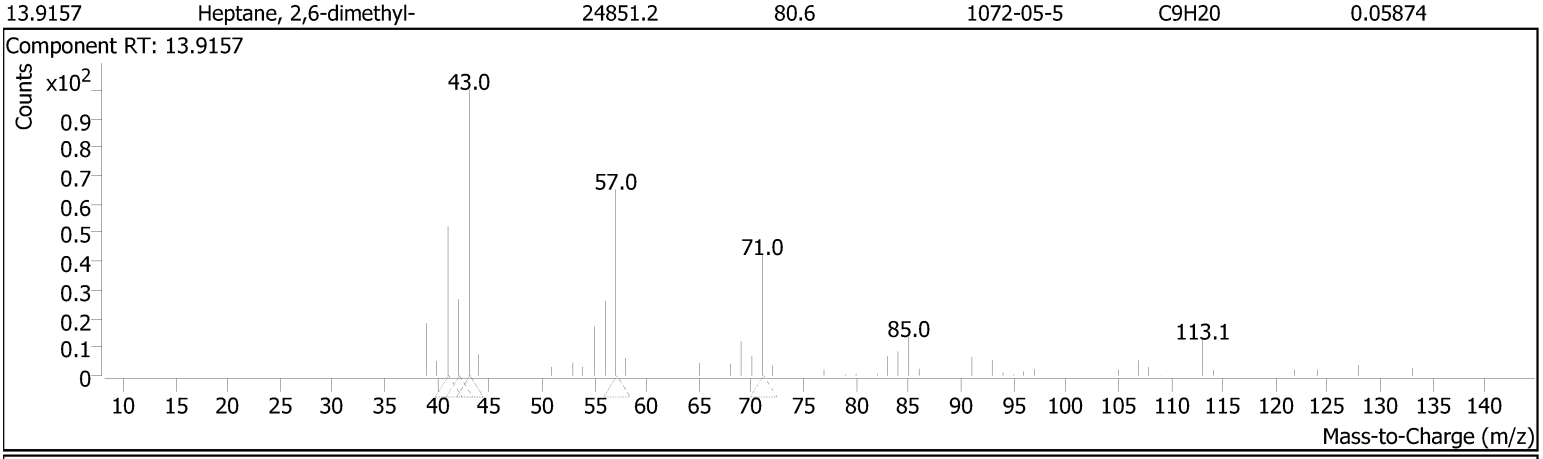


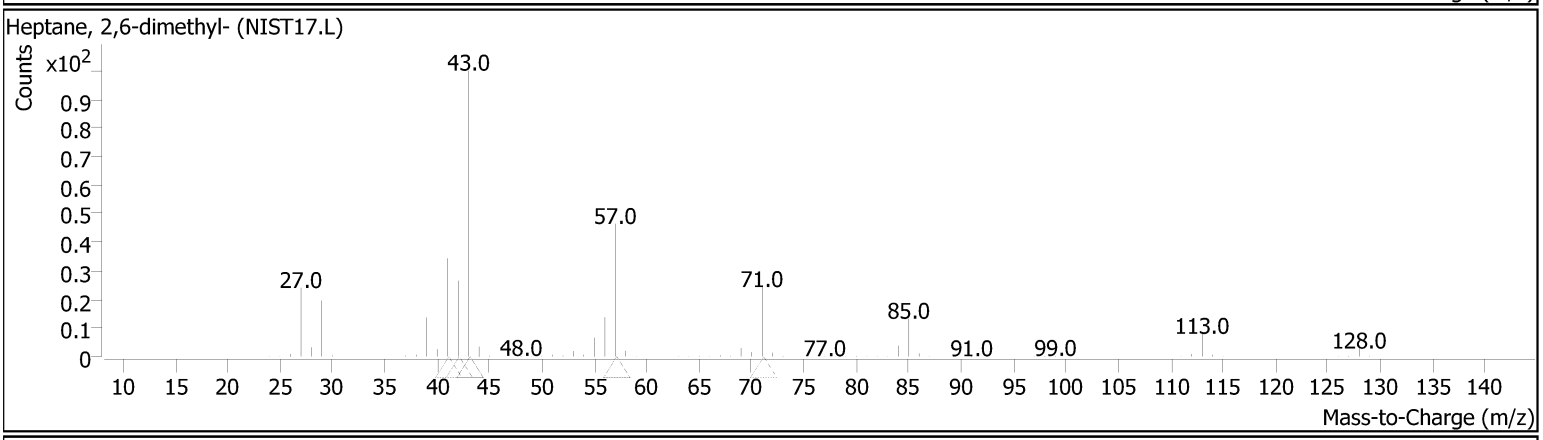


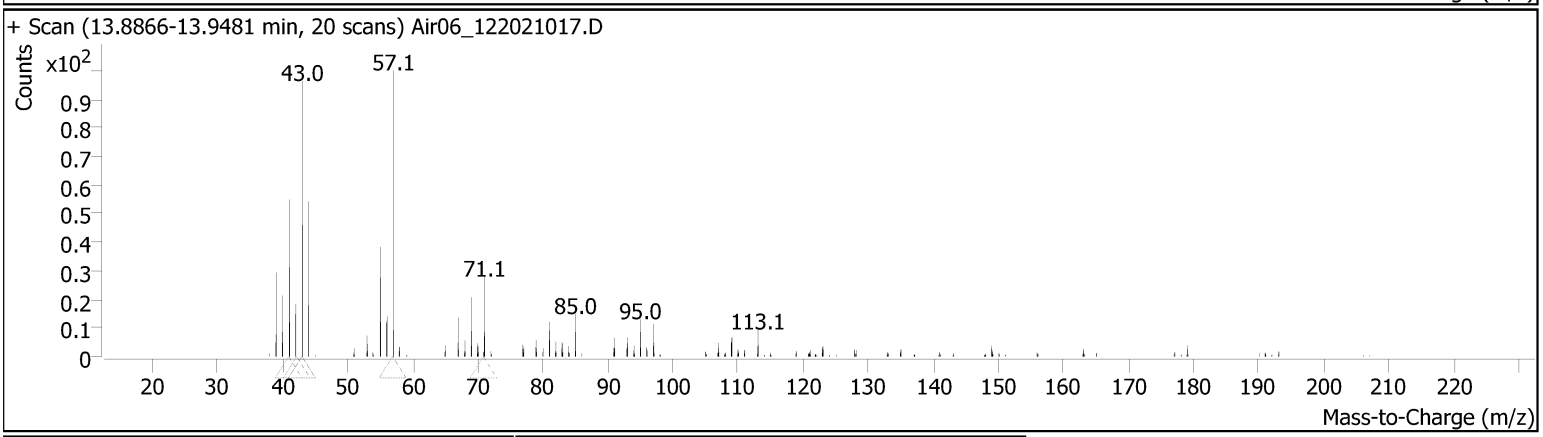


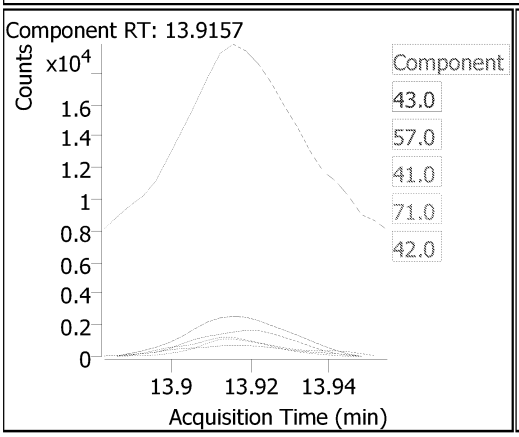


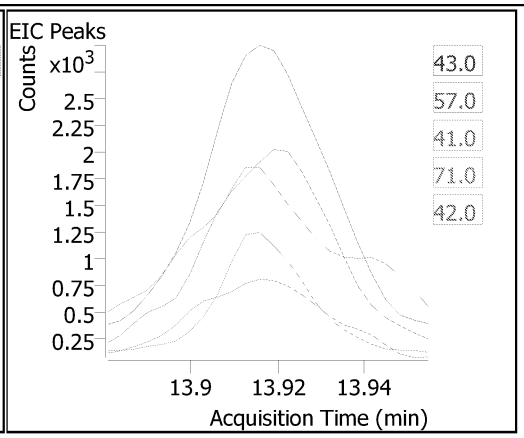
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.9157	Heptane, 2,6-dimethyl-	24851.2	80.6	1072-05-5	C9H20	0.05874

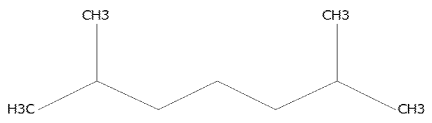




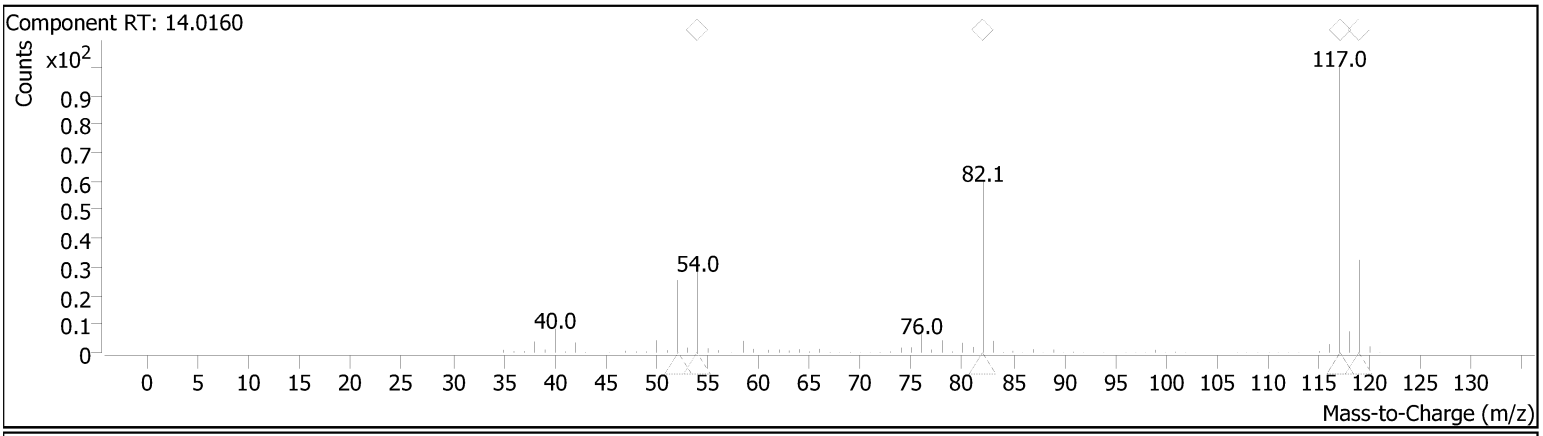


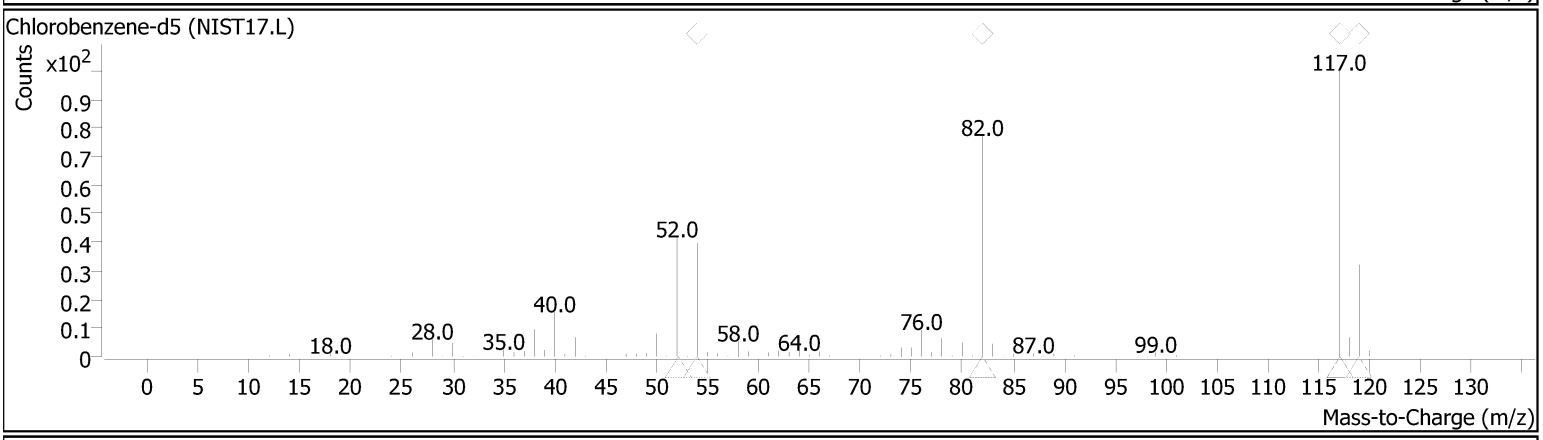


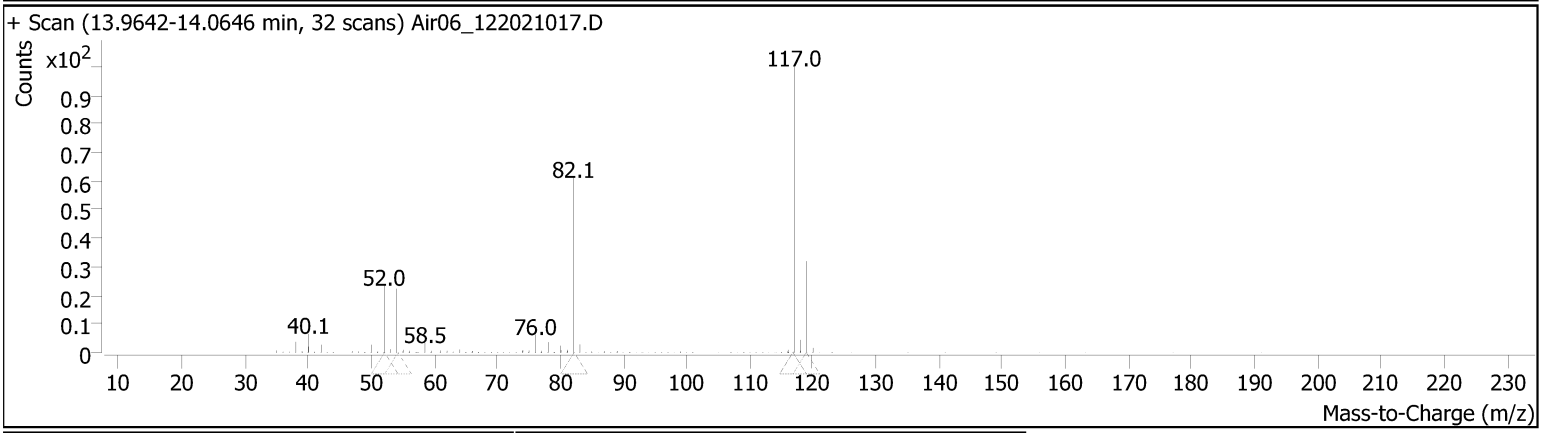


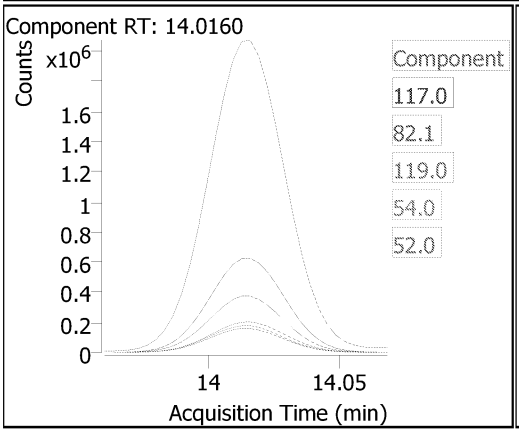


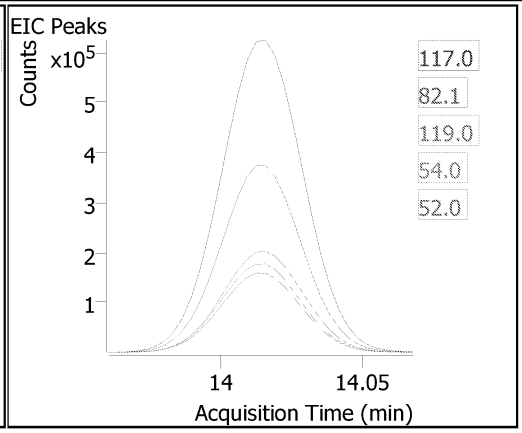
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.0160	Chlorobenzene-d5	4231056.8	95.8	3114-55-4	C6D5Cl	10

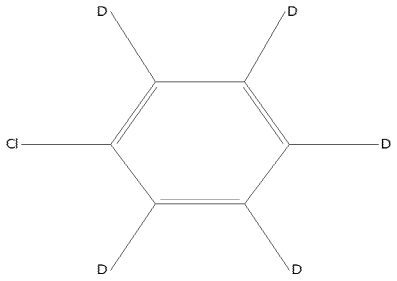




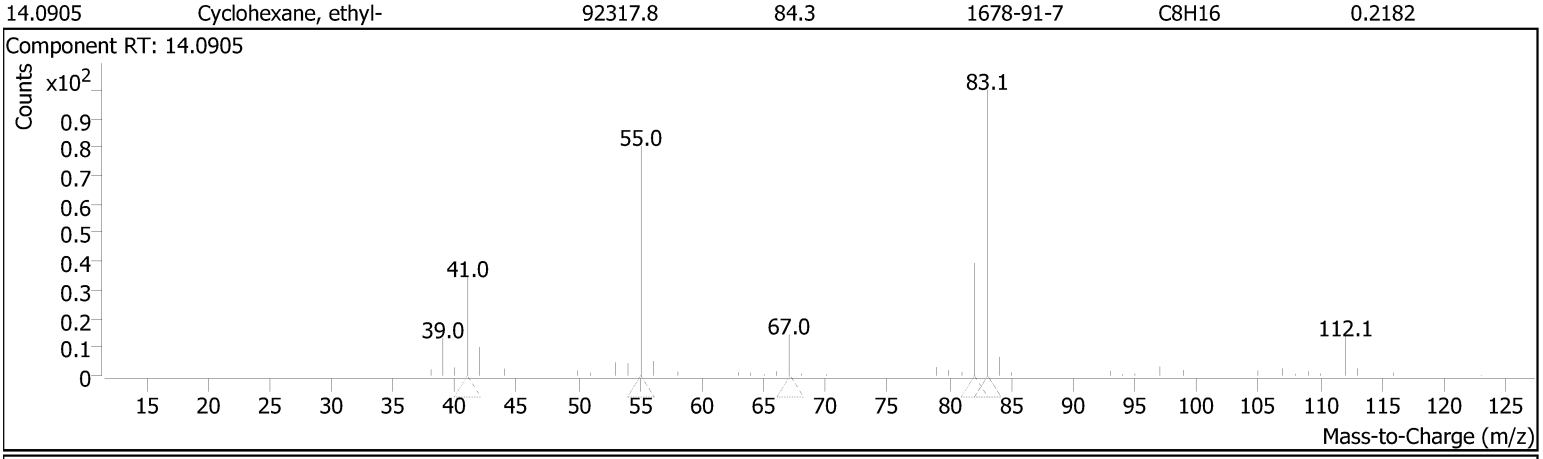


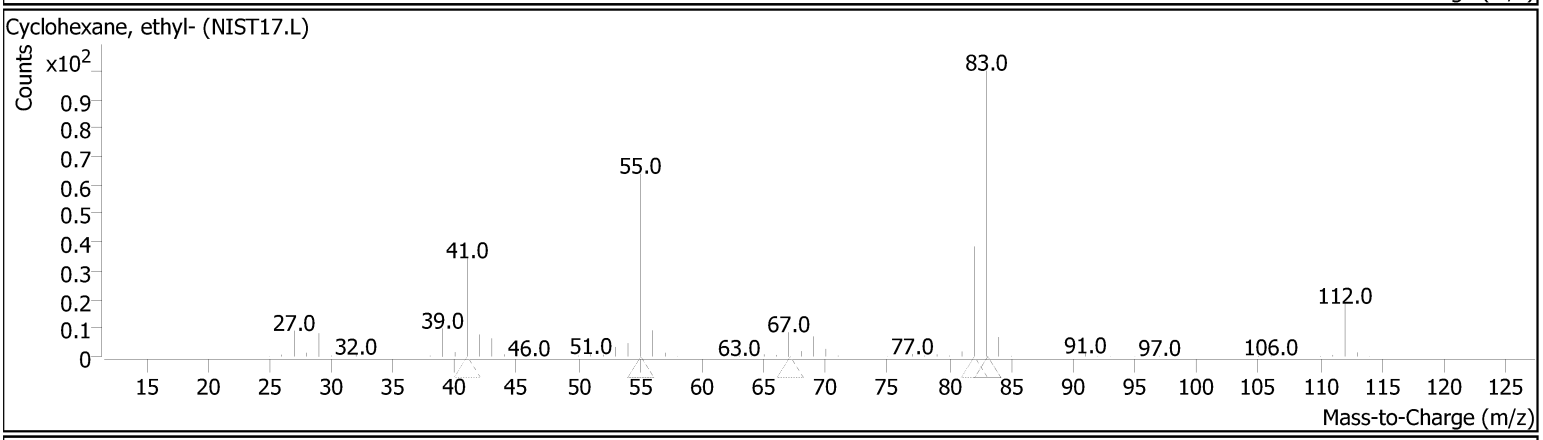


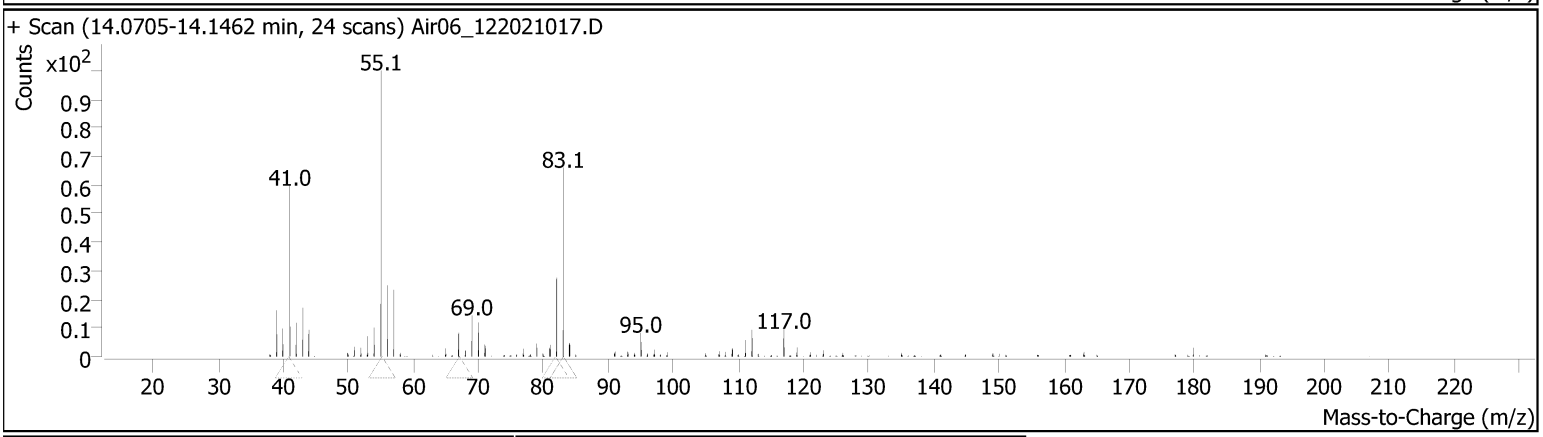


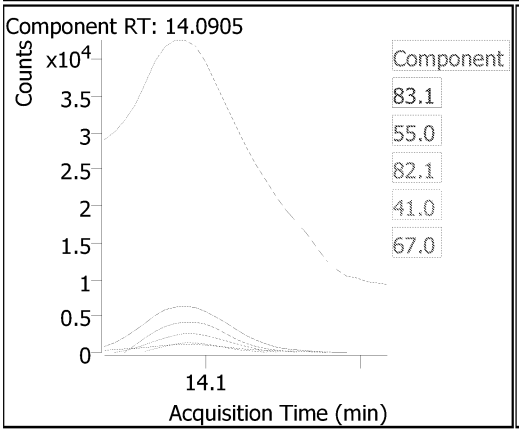


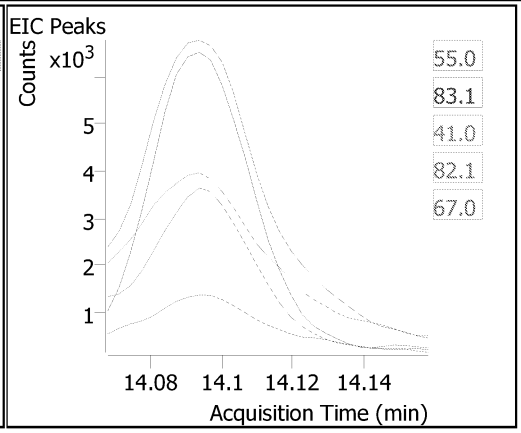
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.0905	Cyclohexane, ethyl-	92317.8	84.3	1678-91-7	C8H16	0.2182

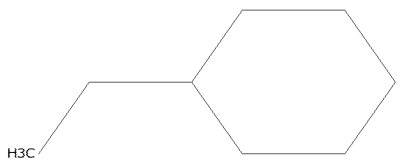




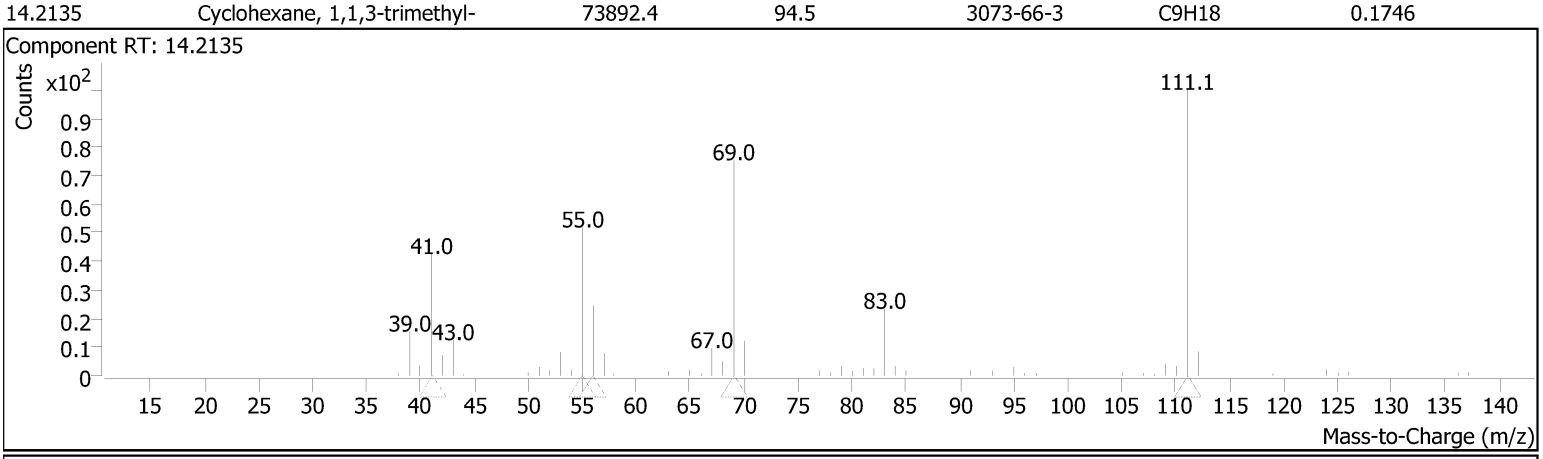


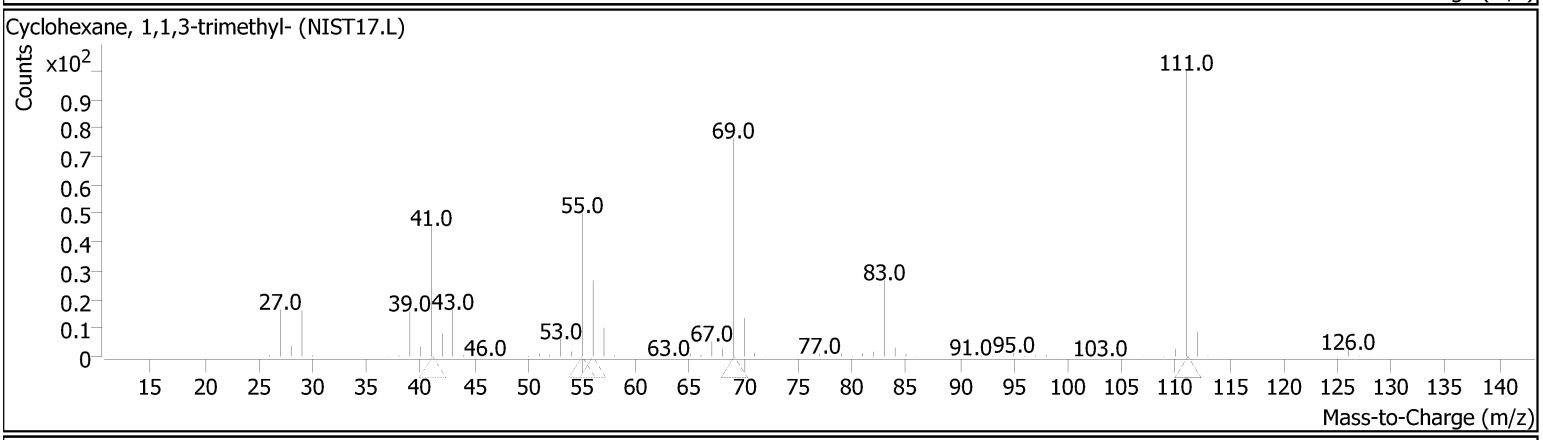


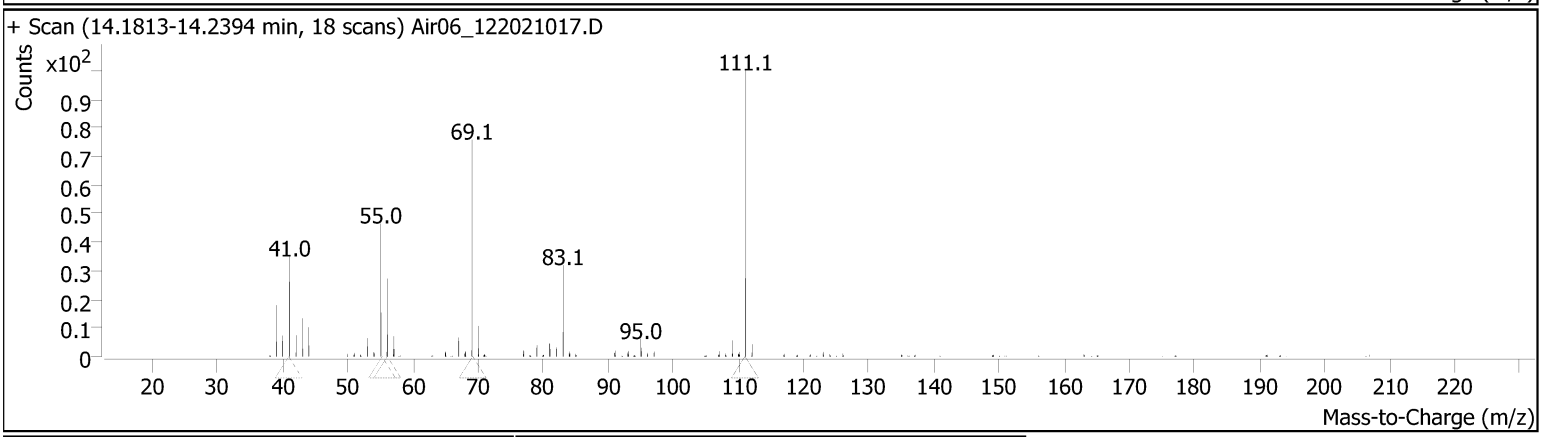


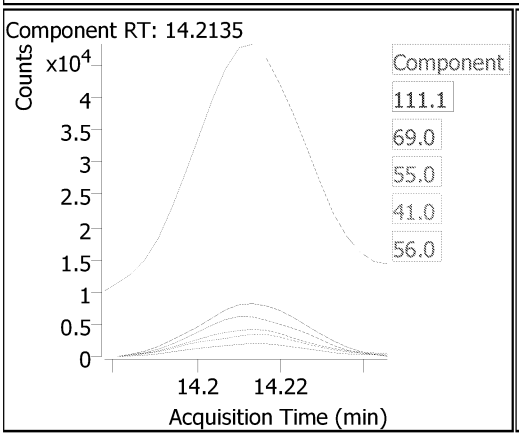


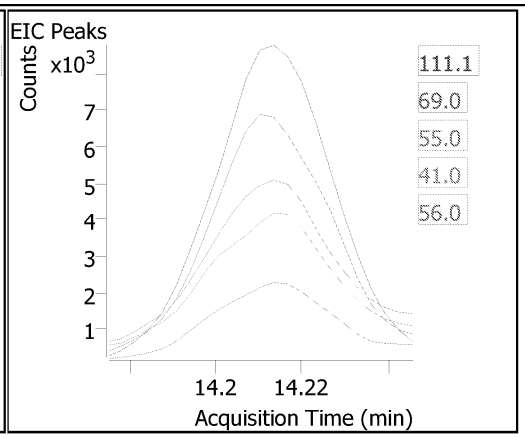
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.2135	Cyclohexane, 1,1,3-trimethyl-	73892.4	94.5	3073-66-3	C9H18	0.1746

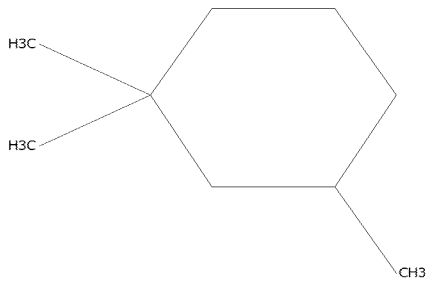




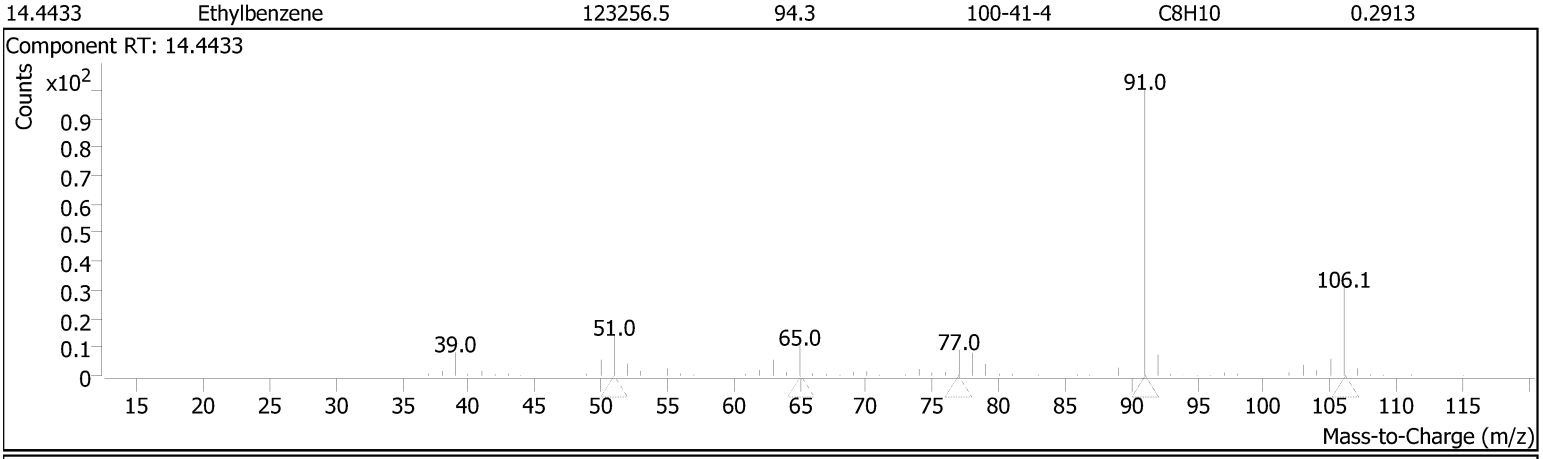


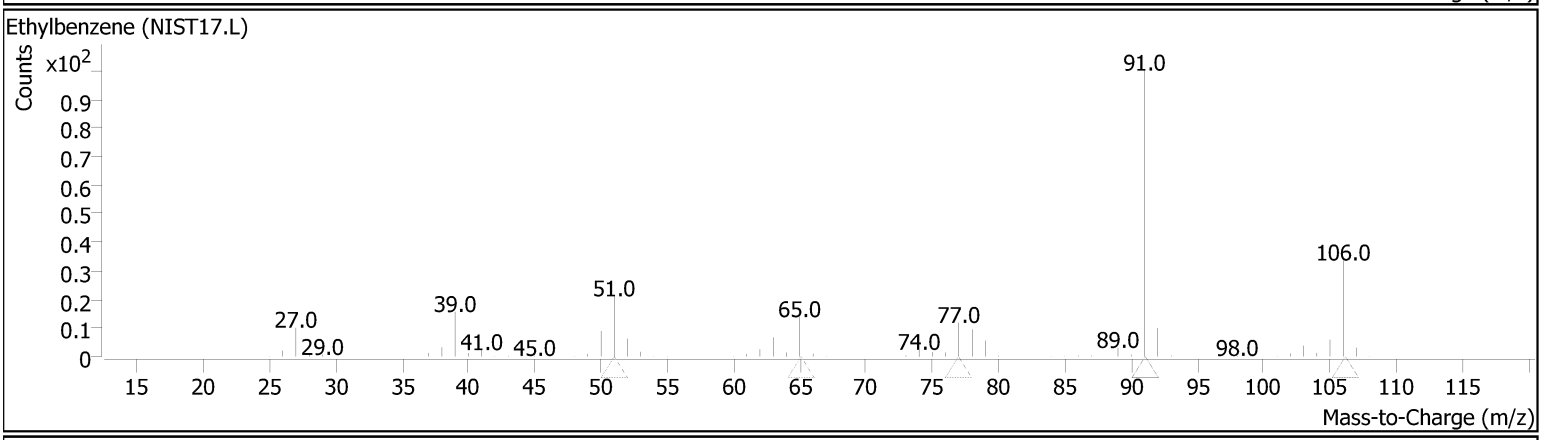


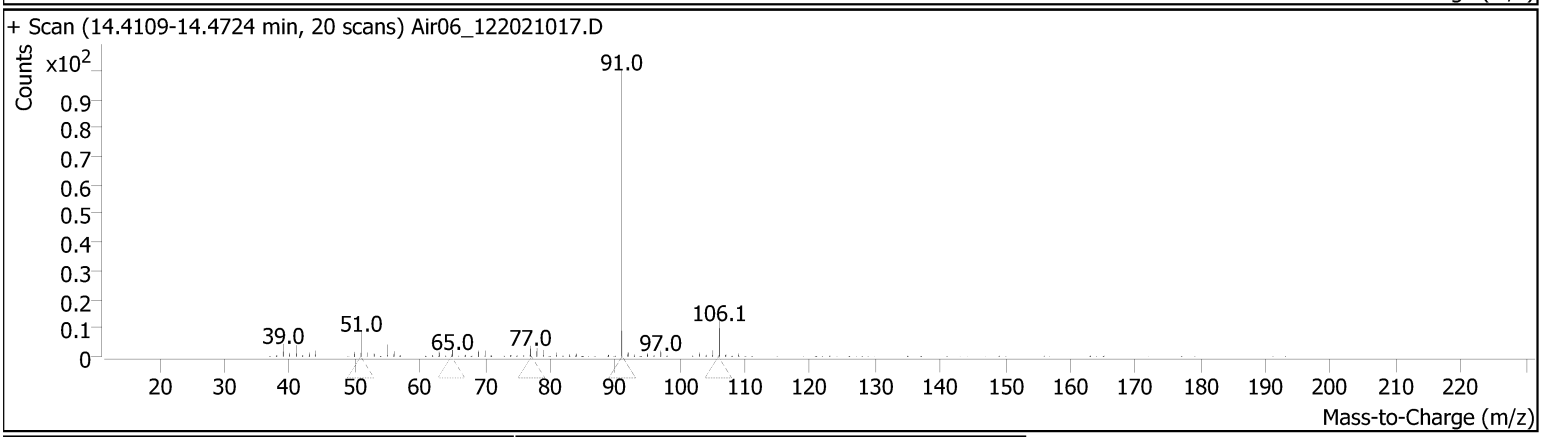


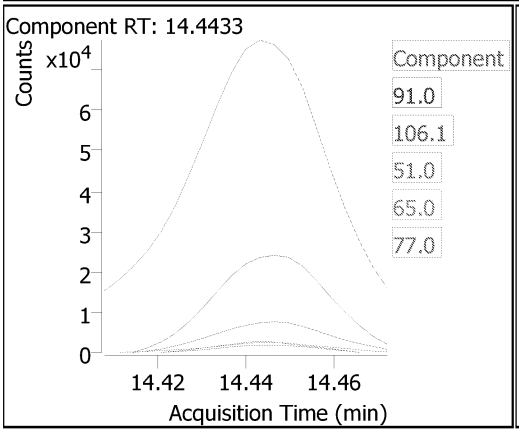


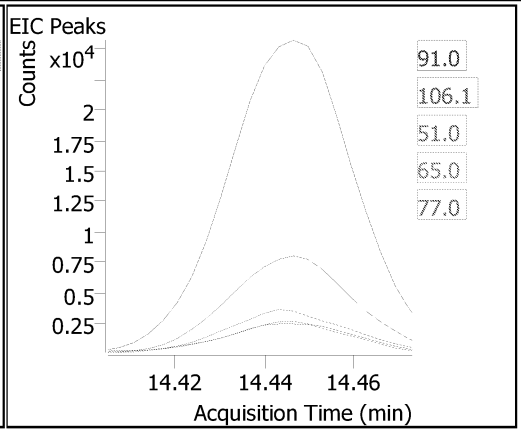
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.4433	Ethylbenzene	123256.5	94.3	100-41-4	C8H10	0.2913

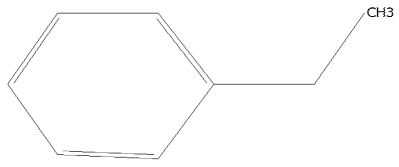




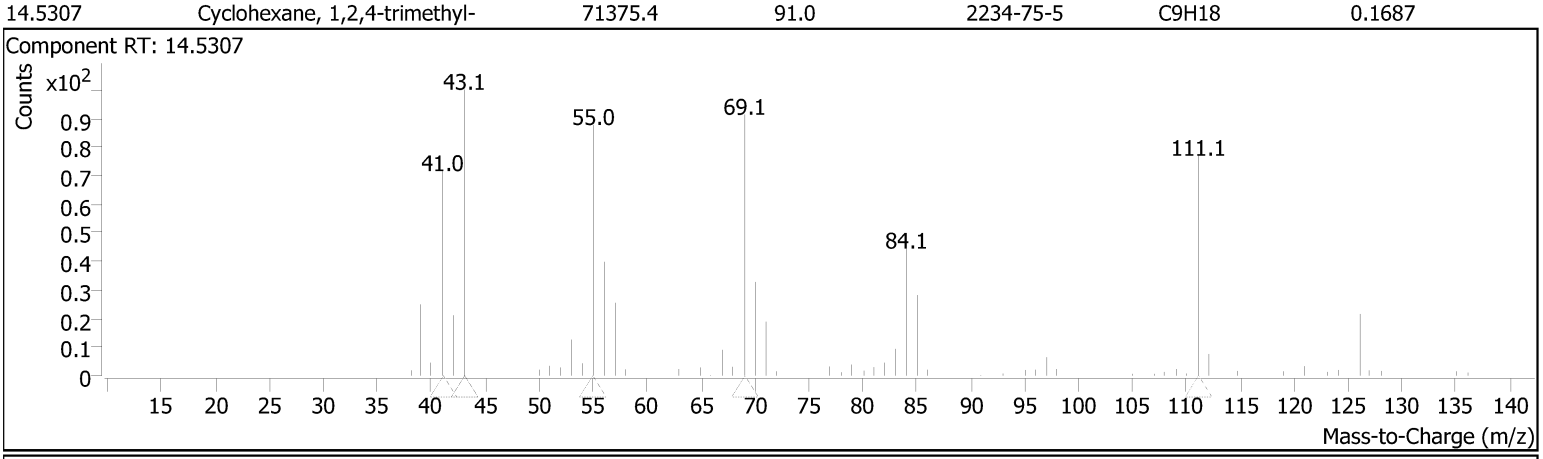


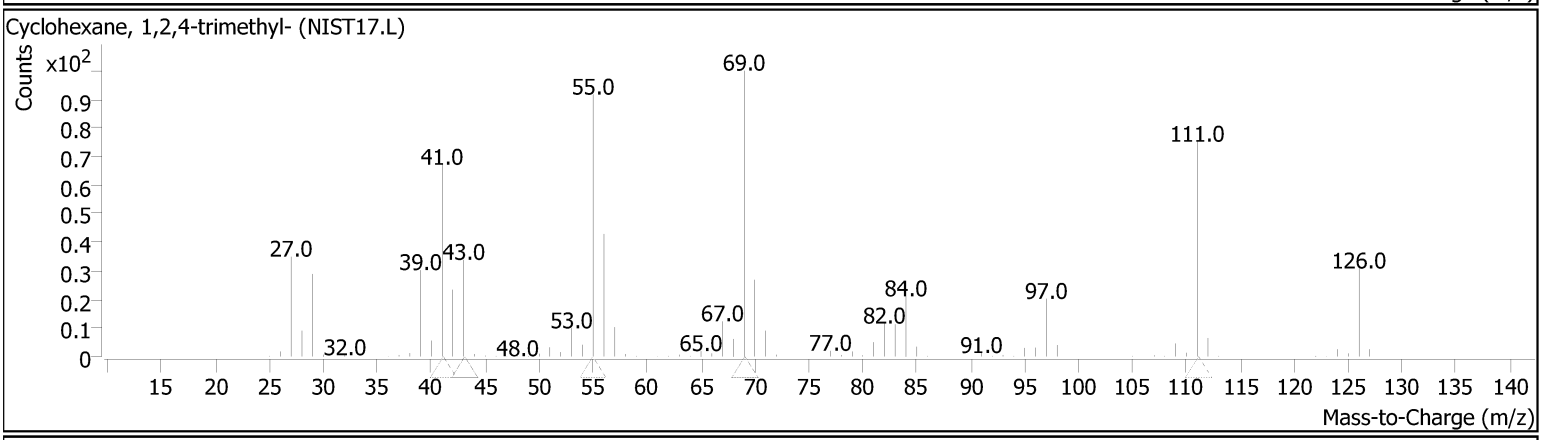


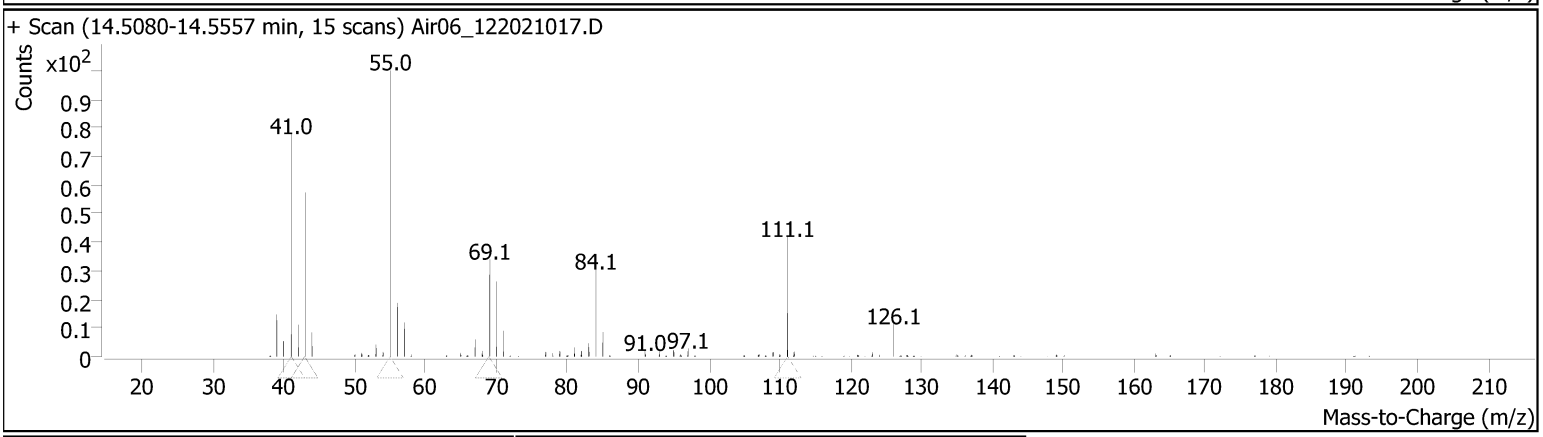


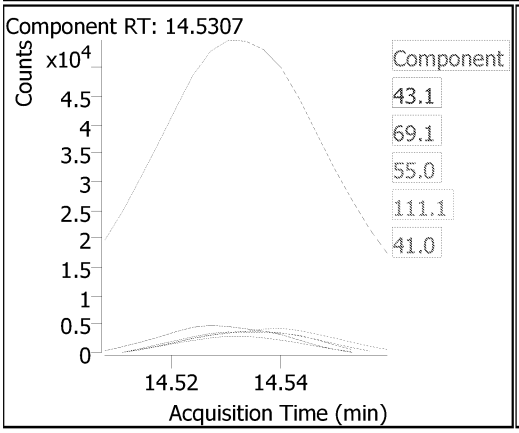


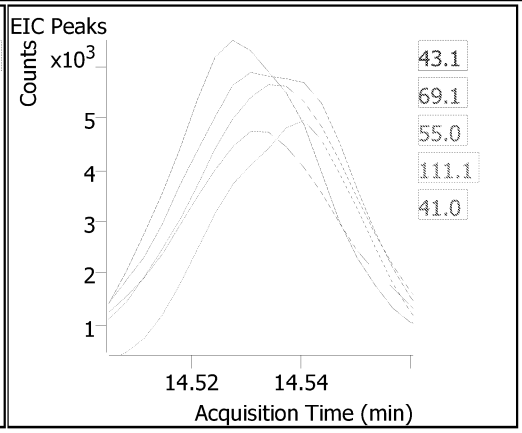
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.5307	Cyclohexane, 1,2,4-trimethyl-	71375.4	91.0	2234-75-5	C9H18	0.1687

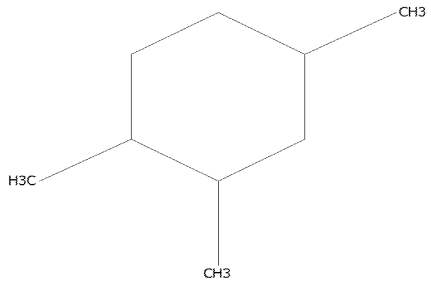












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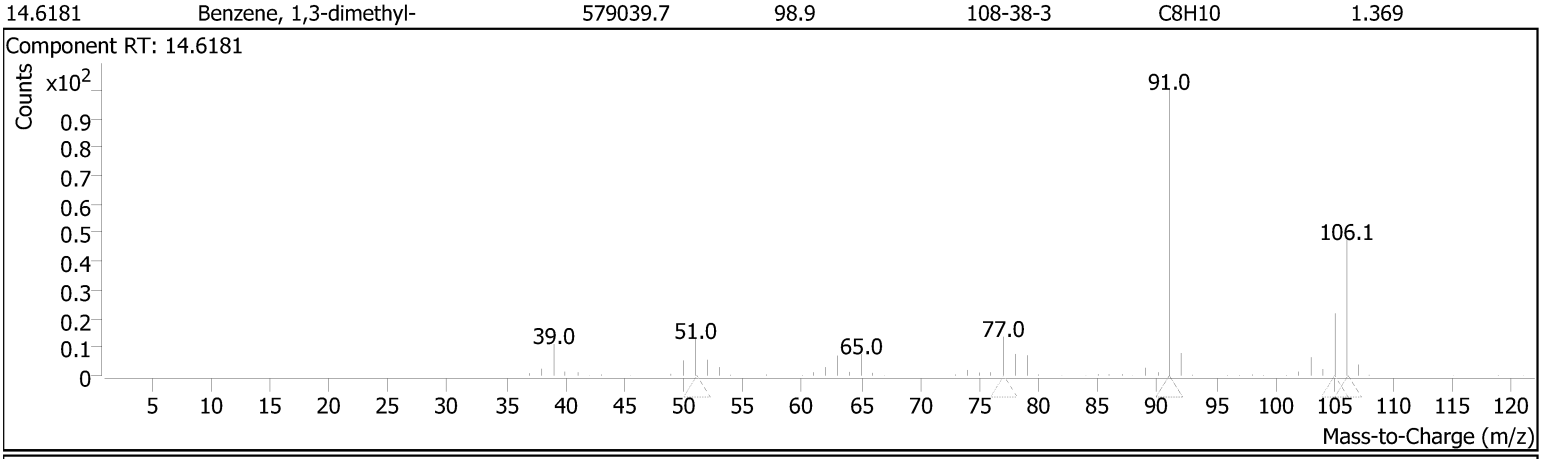
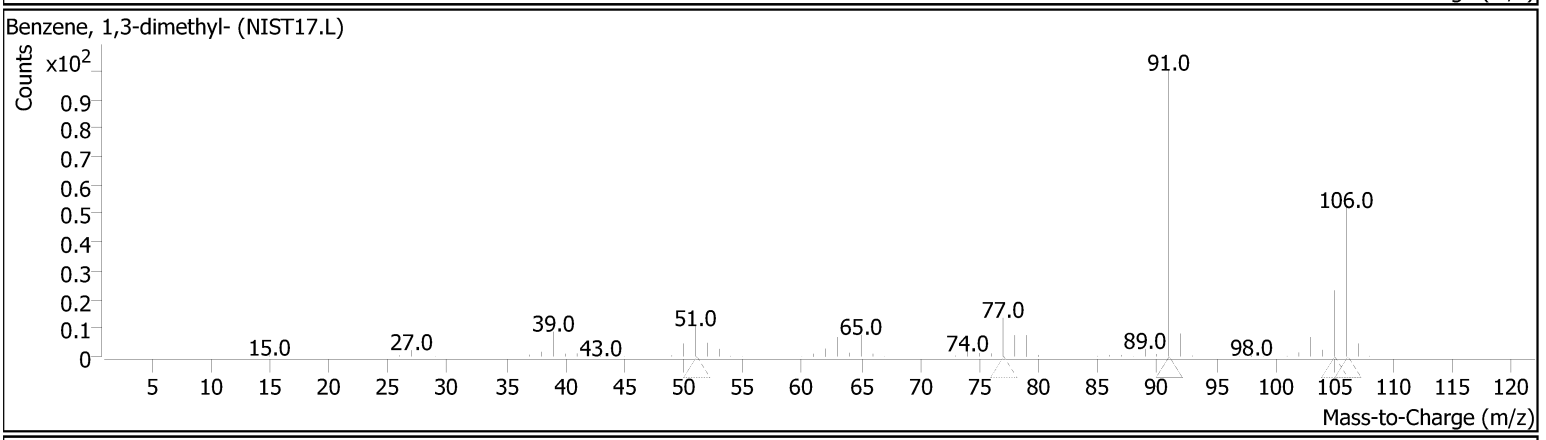
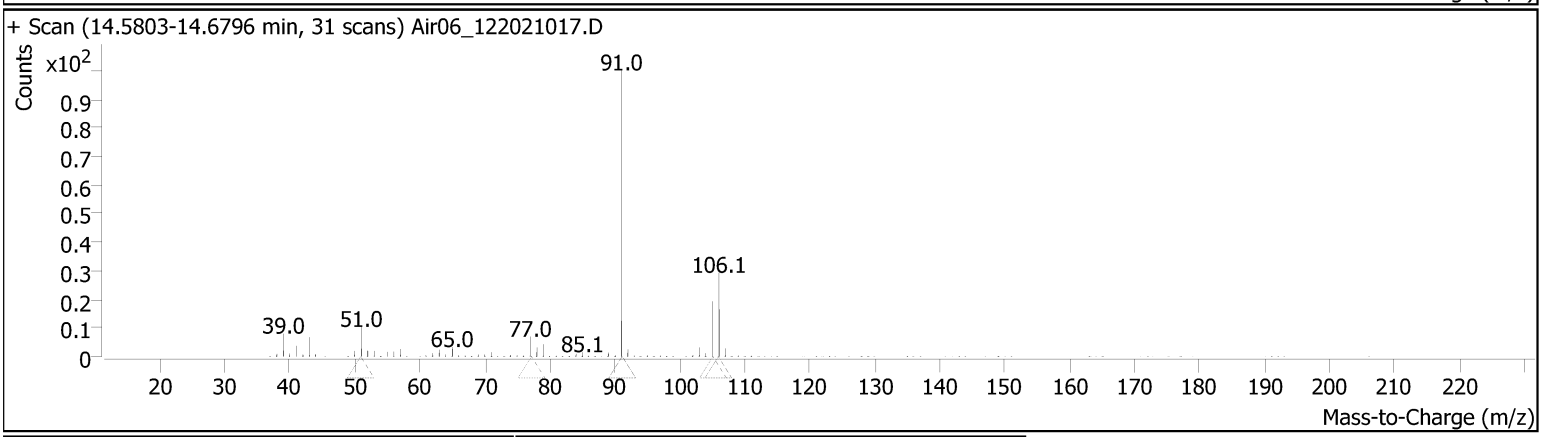
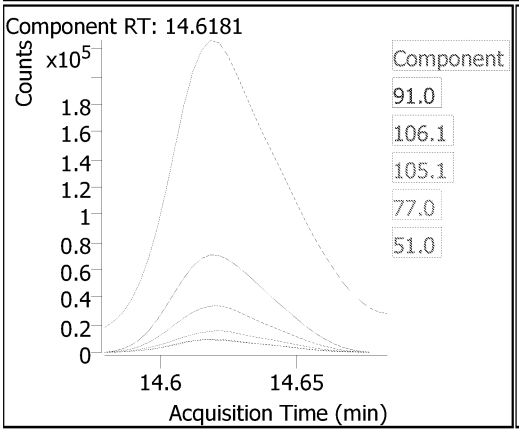
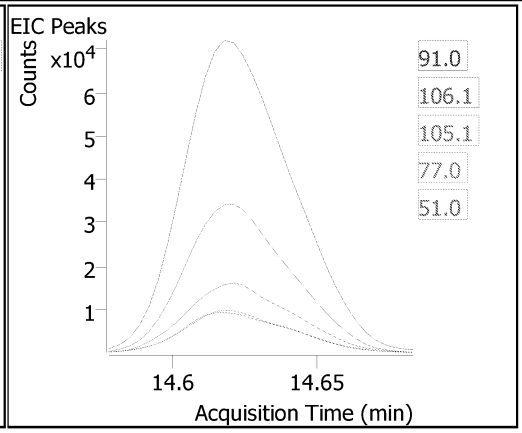
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.6181	Benzene, 1,3-dimethyl-	579039.7	98.9	108-38-3	C8H10	1.369

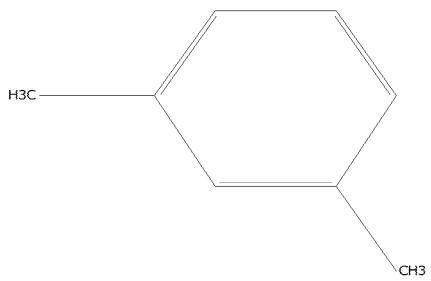




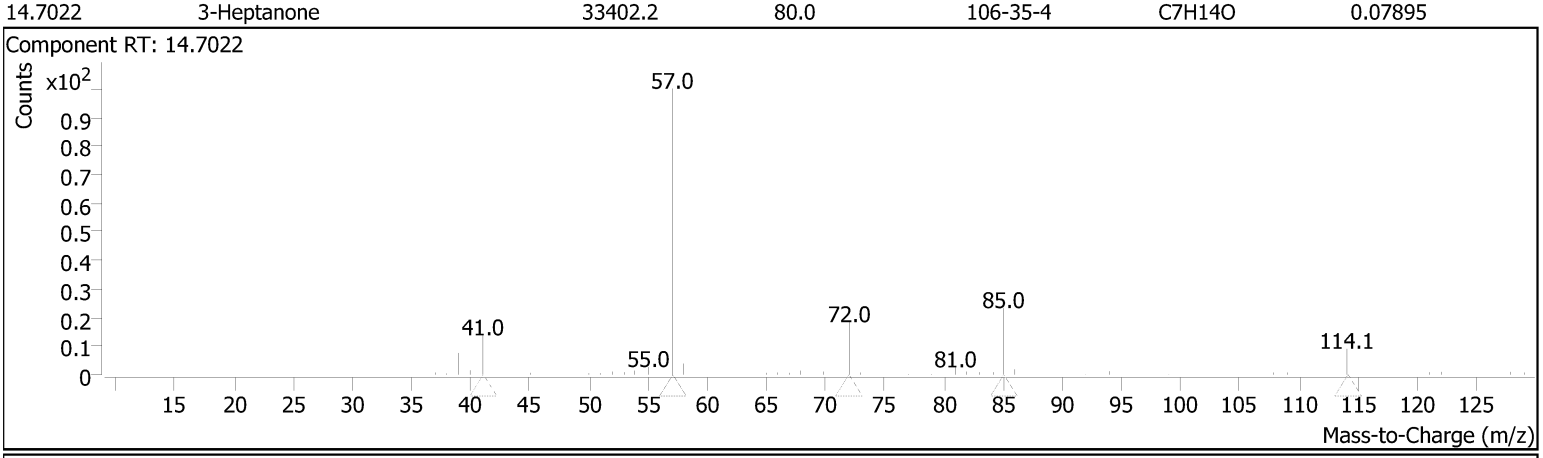


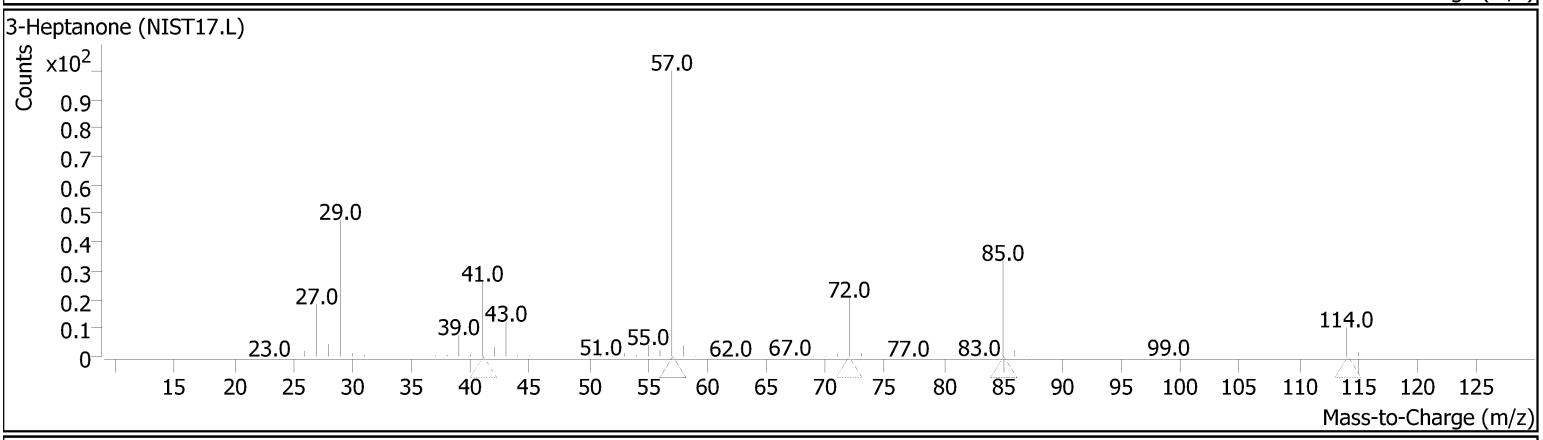


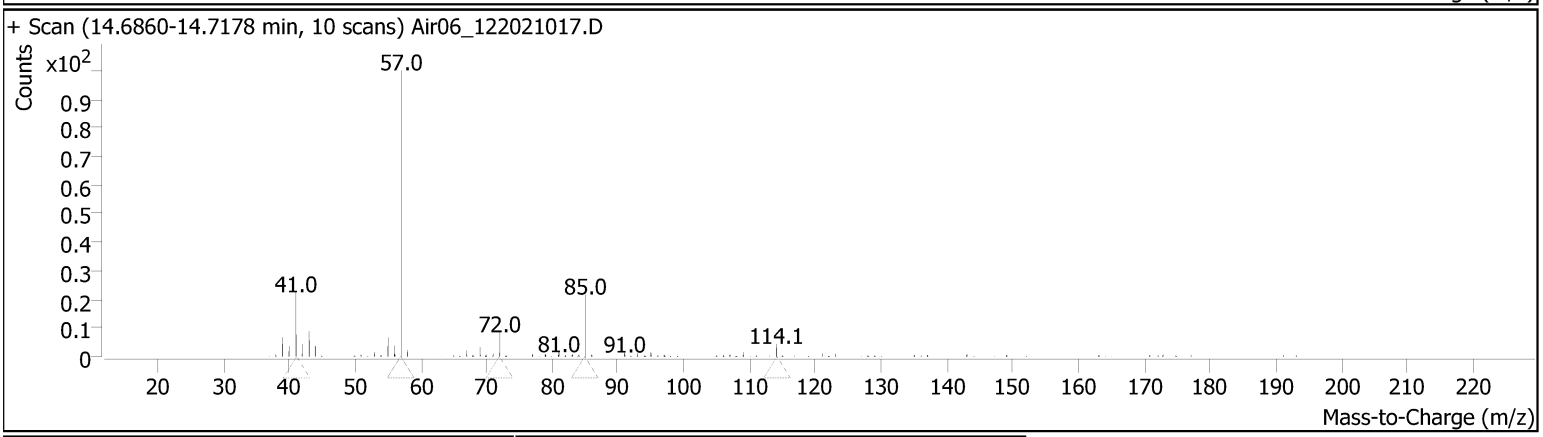


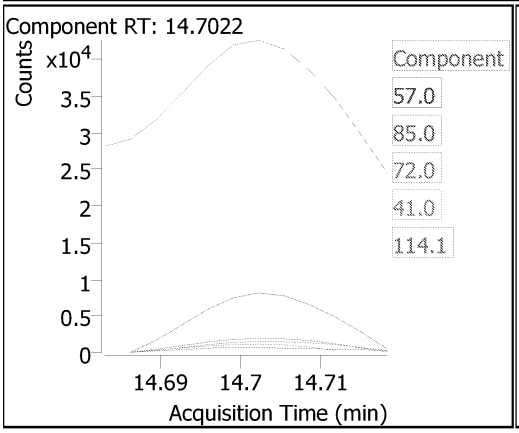


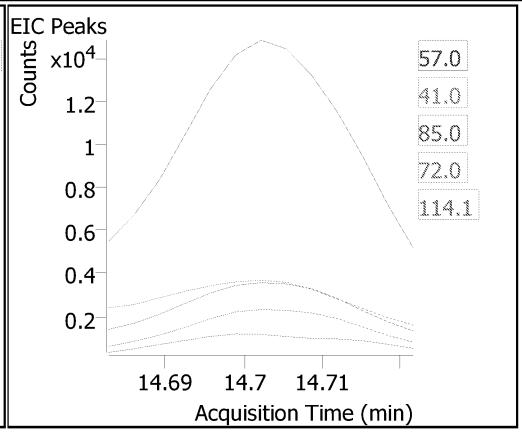
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.7022	3-Heptanone	33402.2	80.0	106-35-4	C7H14O	0.07895

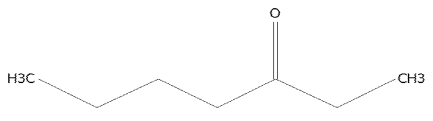




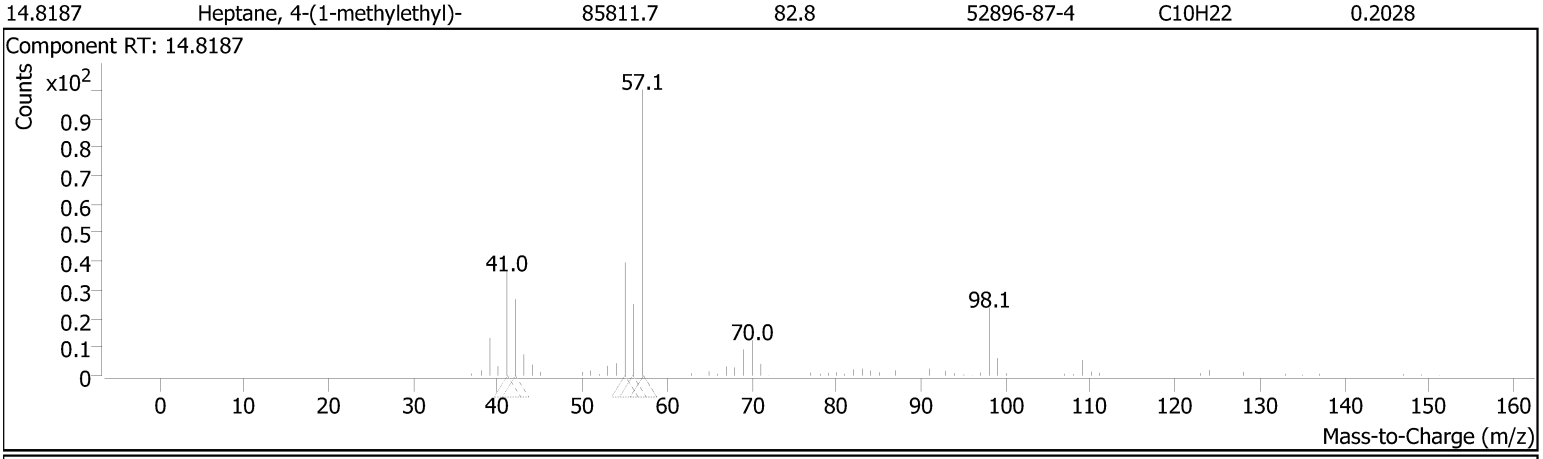


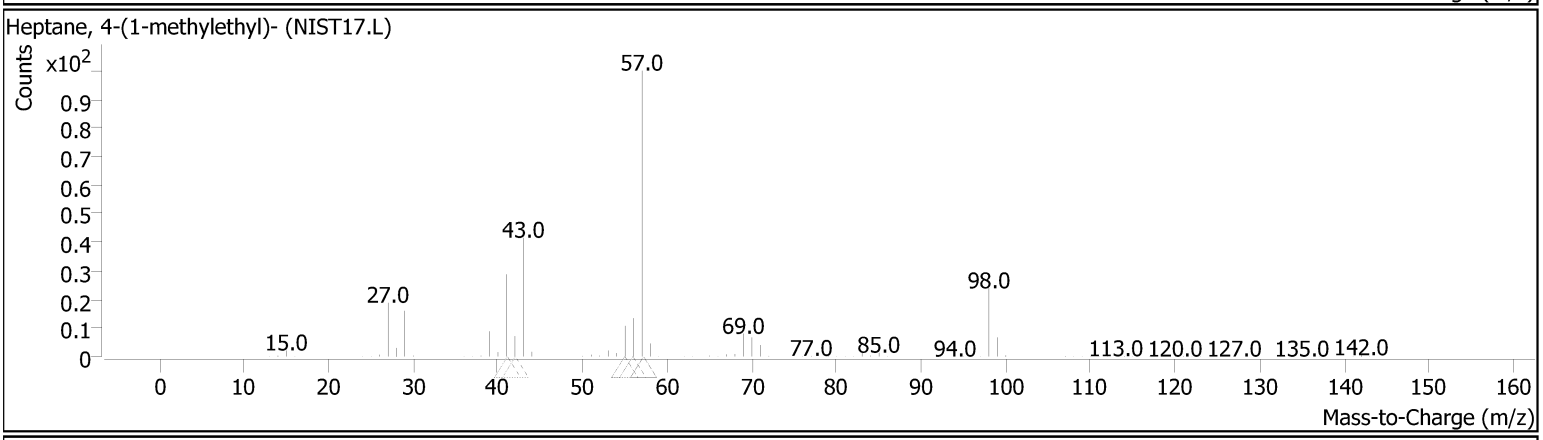


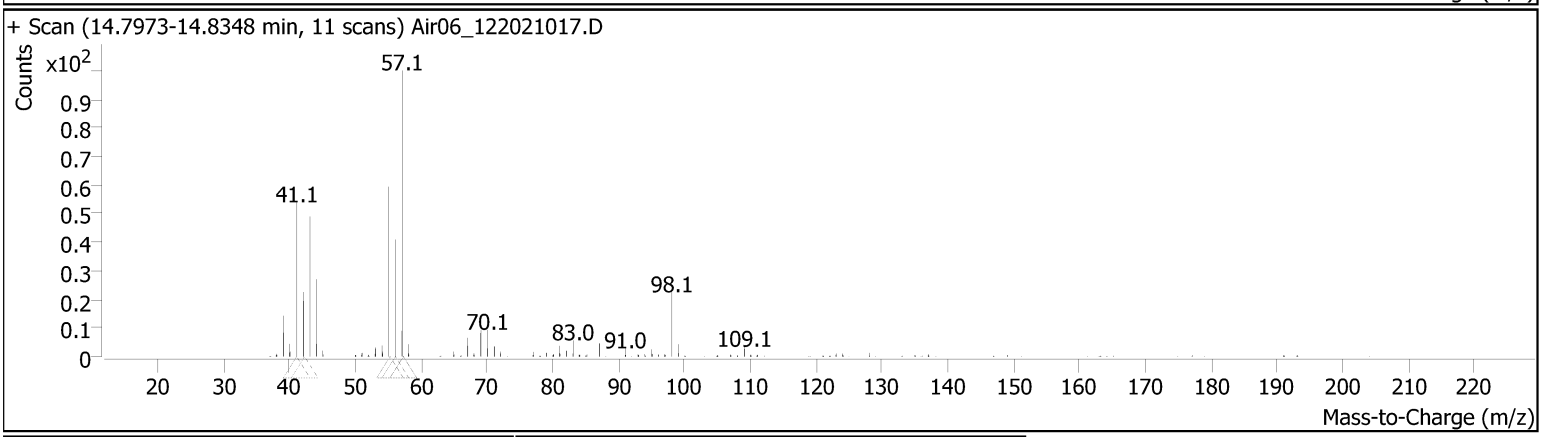


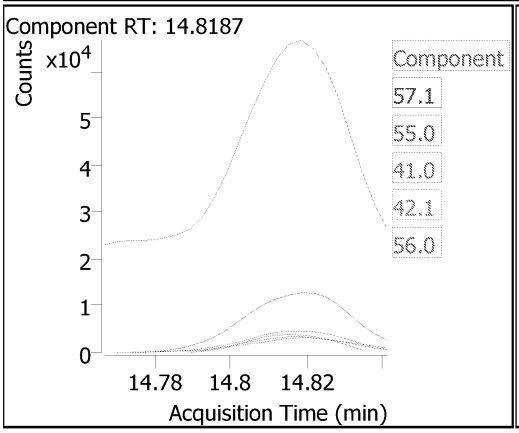


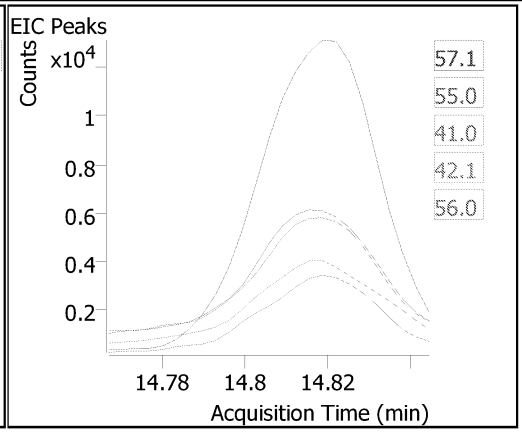
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.8187	Heptane, 4-(1-methylethyl)-	85811.7	82.8	52896-87-4	C10H22	0.2028

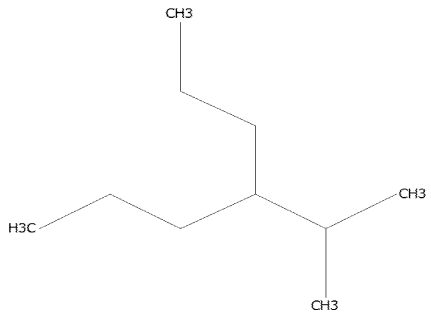




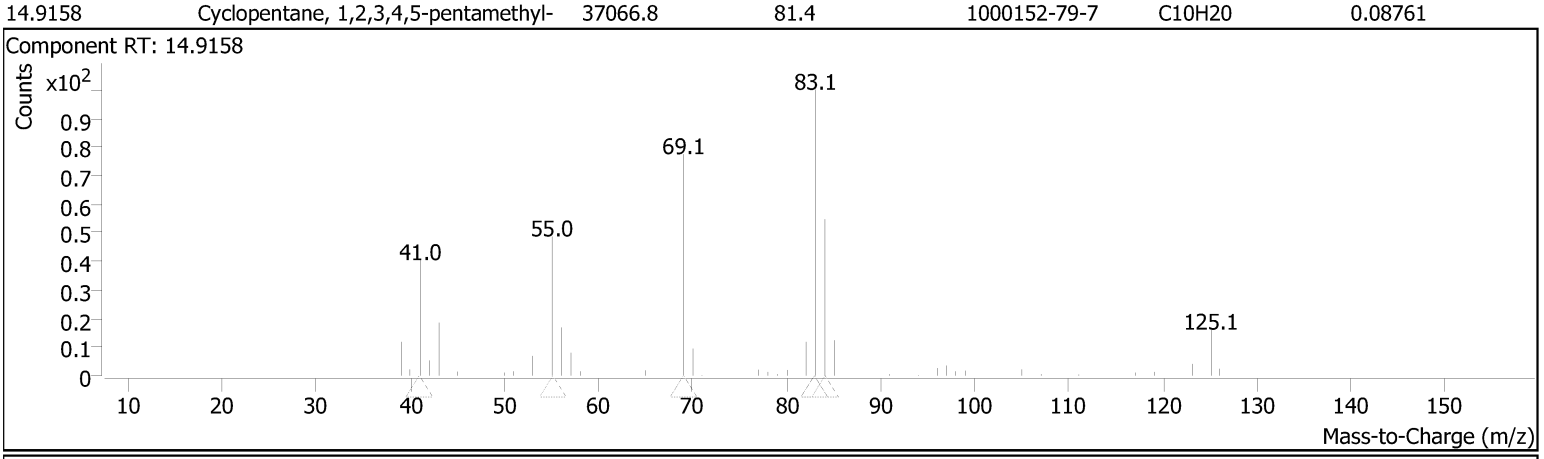


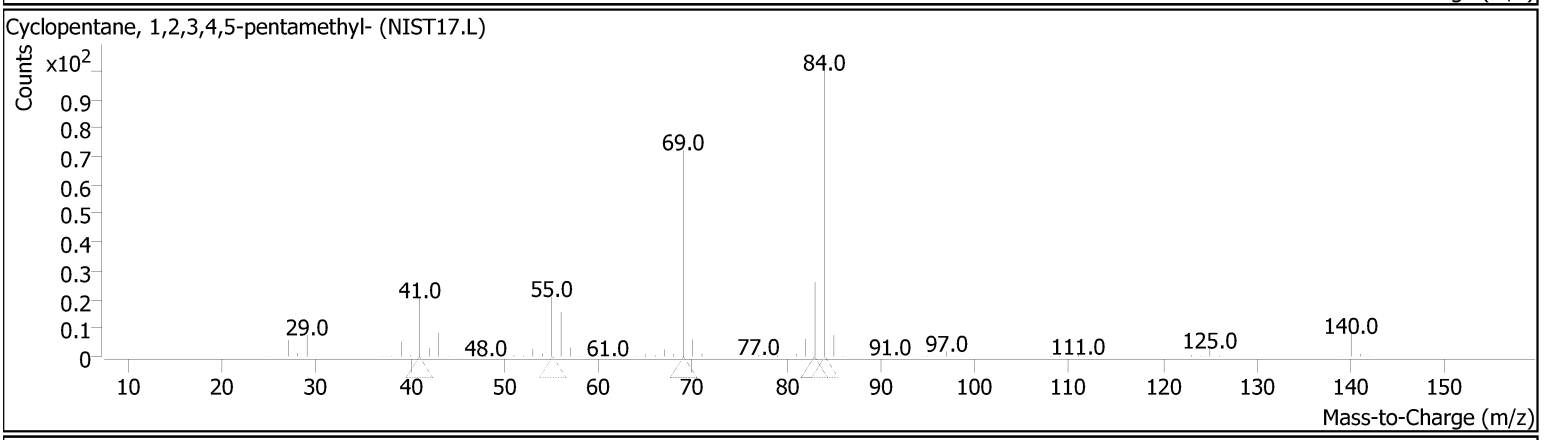


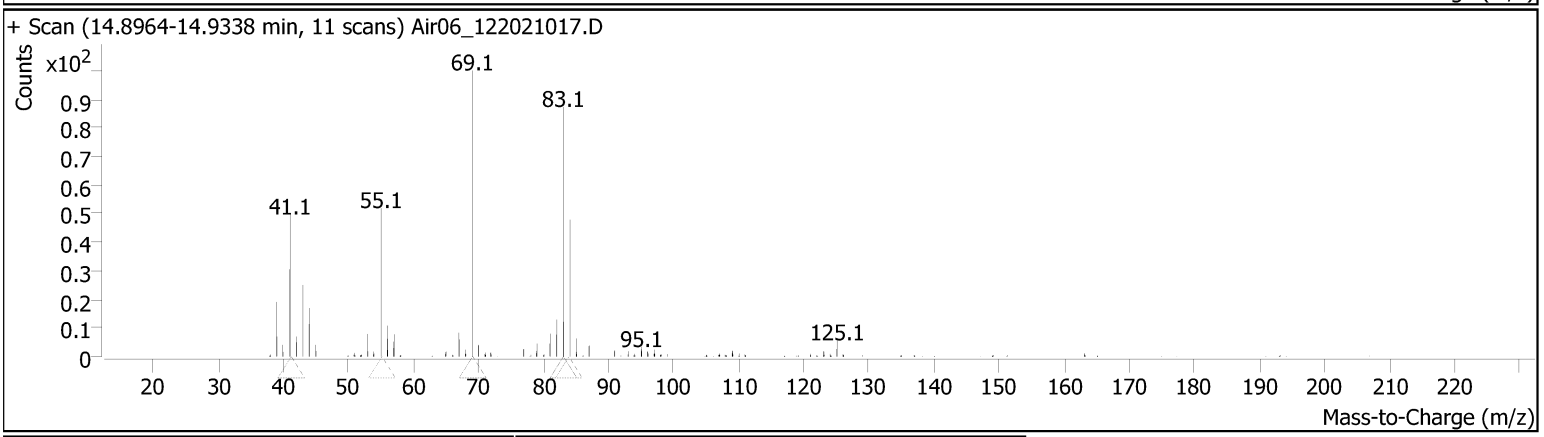


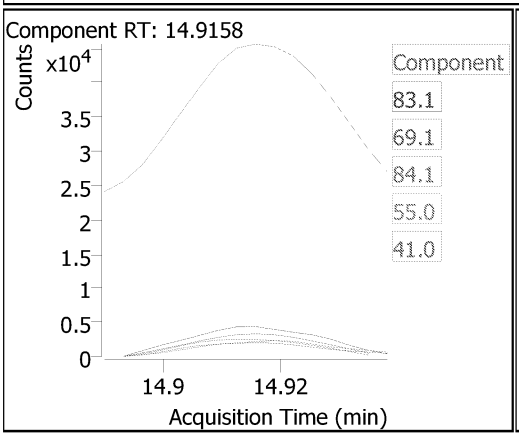


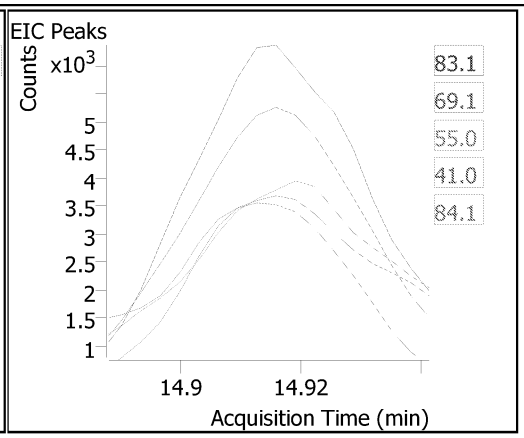
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.9158	Cyclopentane, 1,2,3,4,5-pentamethyl-	37066.8	81.4	1000152-79-7	C10H20	0.08761

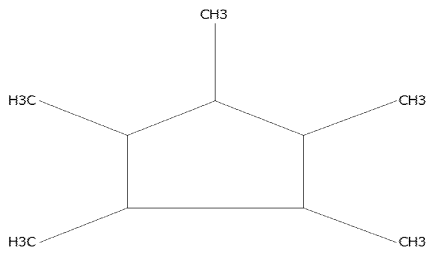




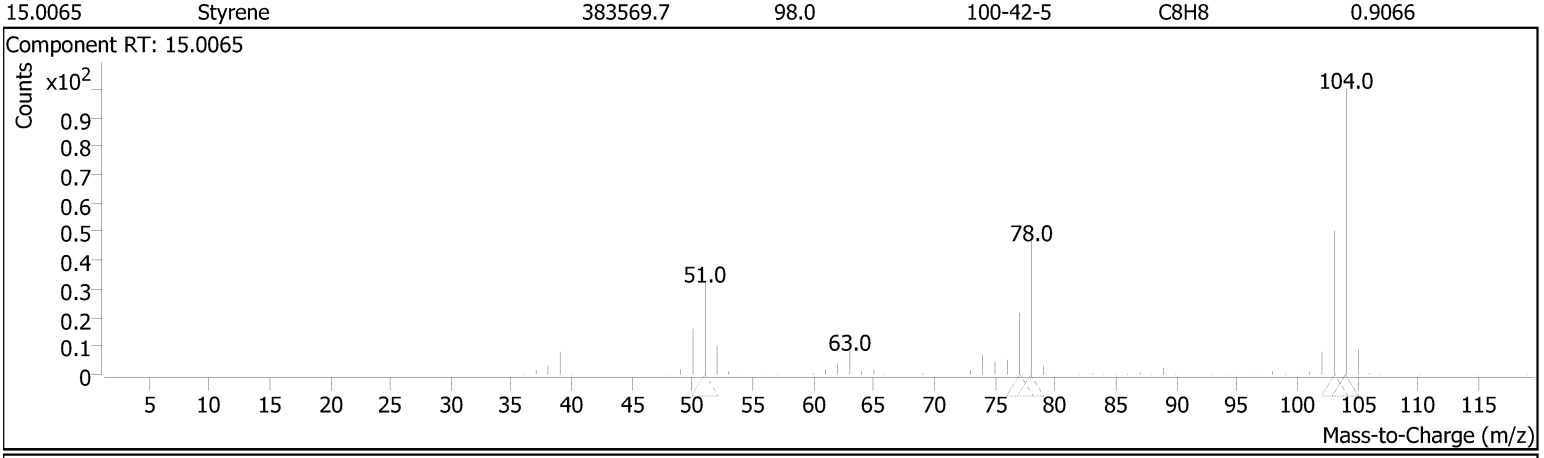


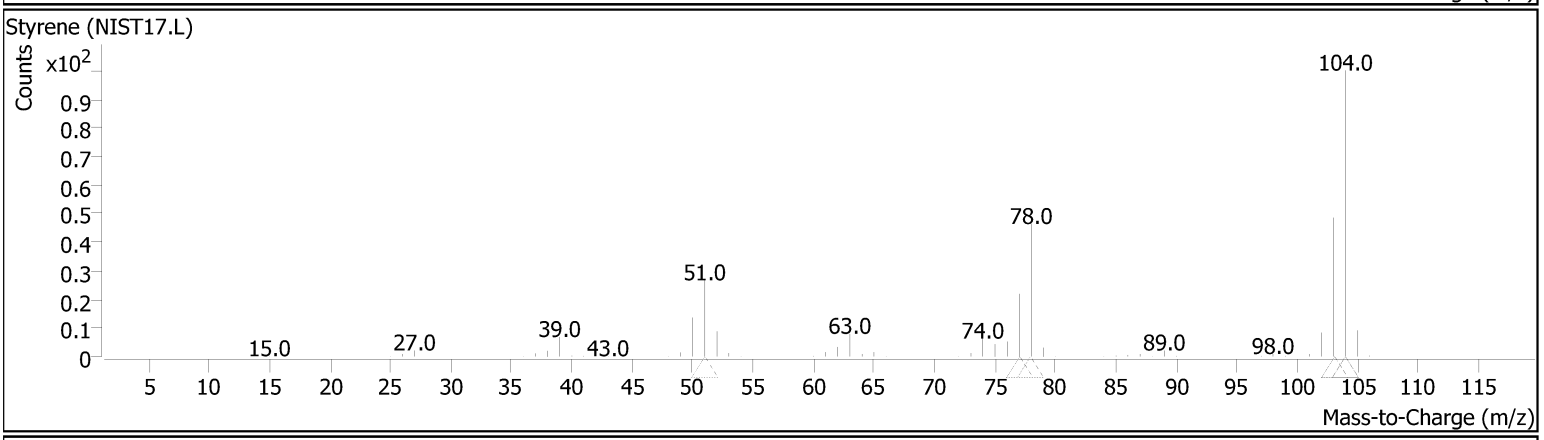


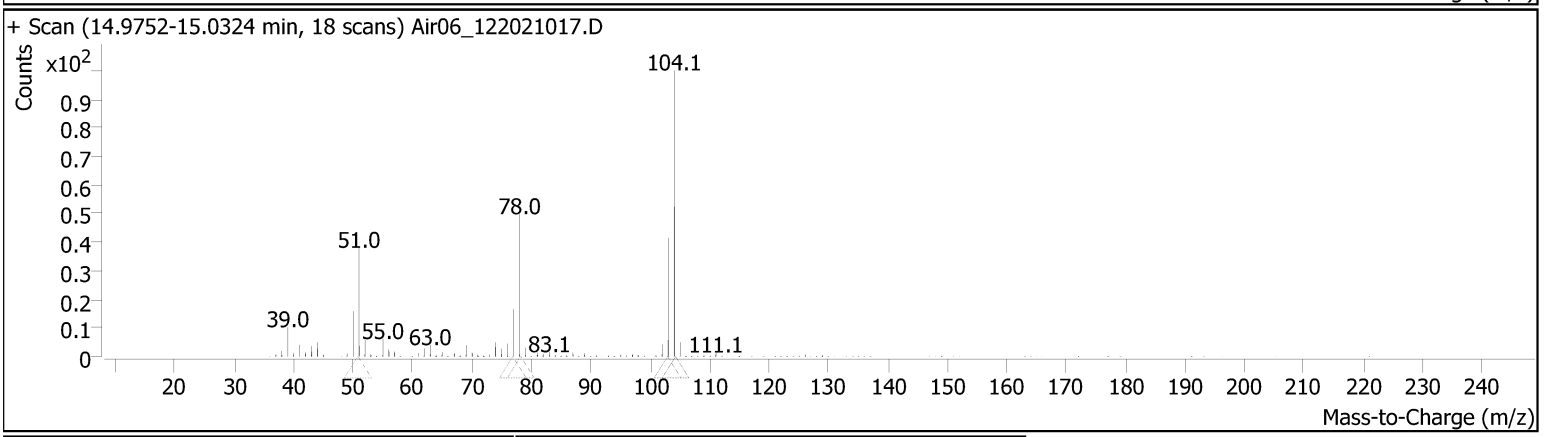


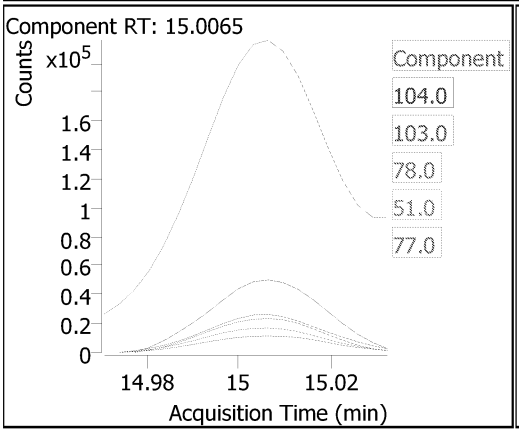


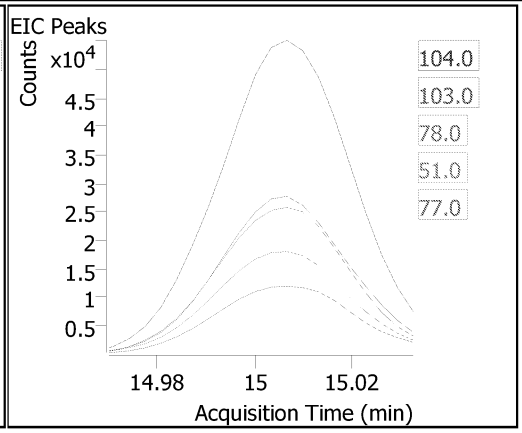
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.0065	Styrene	383569.7	98.0	100-42-5	C8H8	0.9066

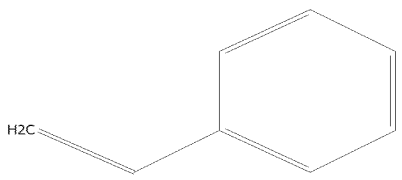




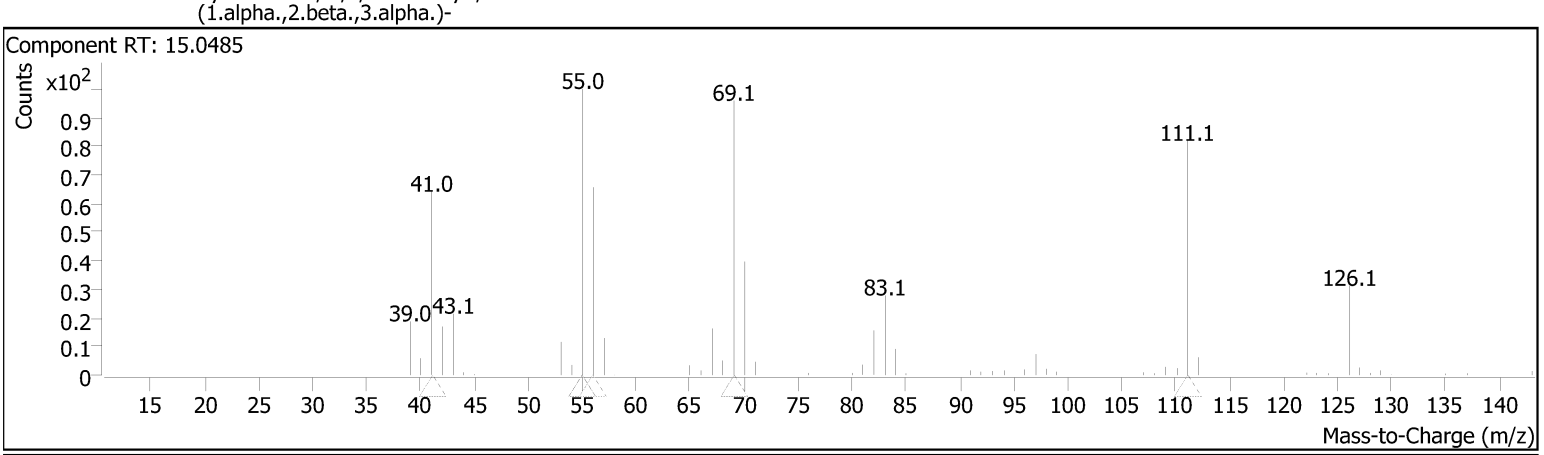


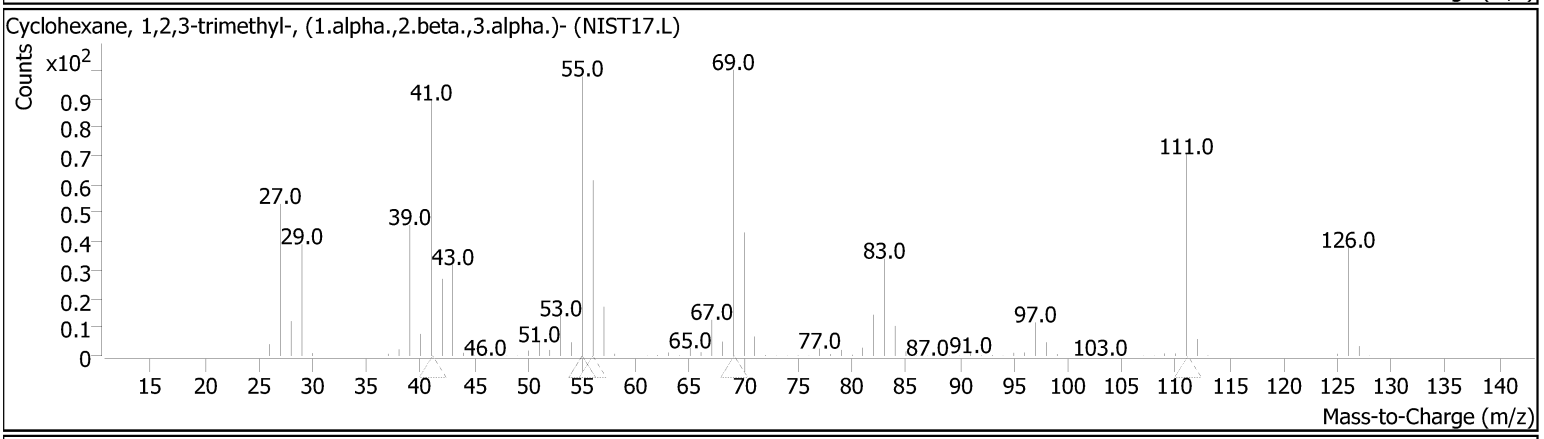


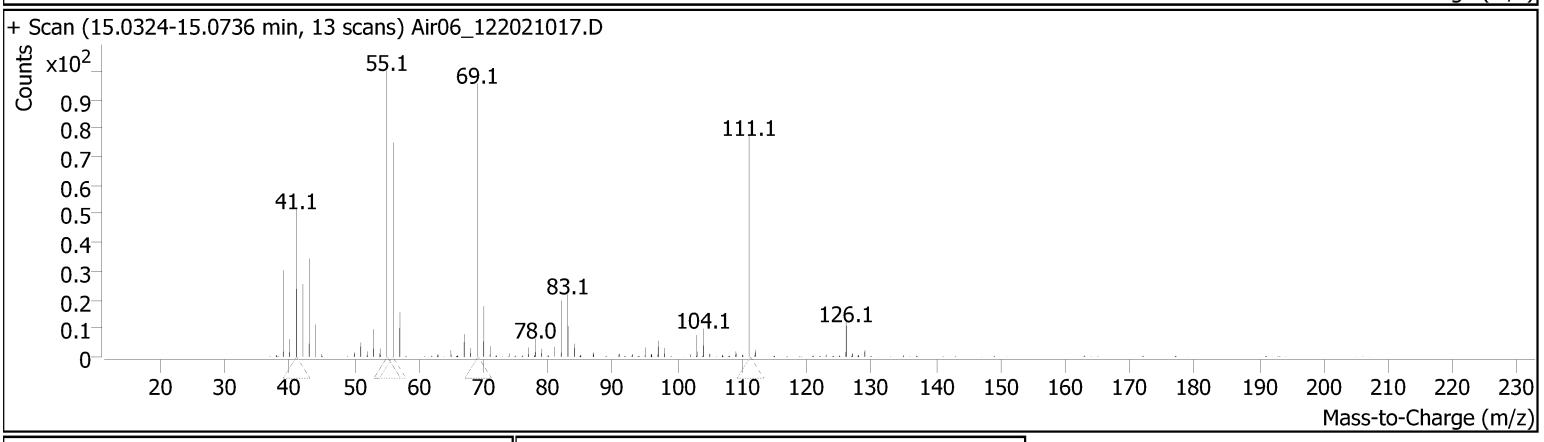


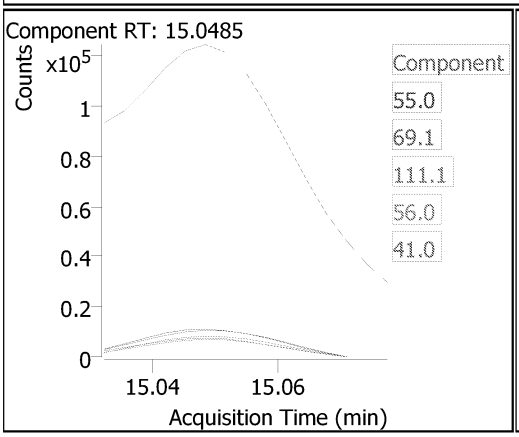


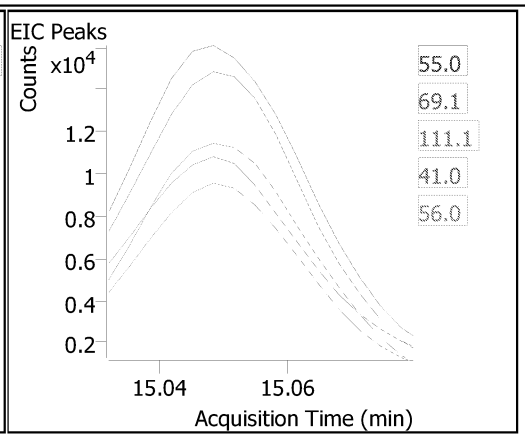
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.0485	Cyclohexane, 1,2,3-trimethyl-, (1.alpha.,2.beta.,3.alpha.)-	171329.0	93.7	1678-81-5	C9H18	0.4049

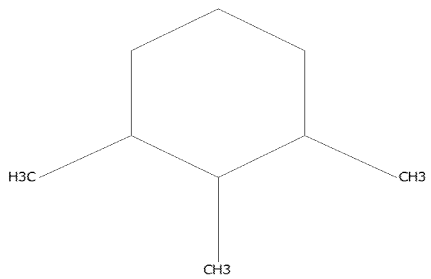




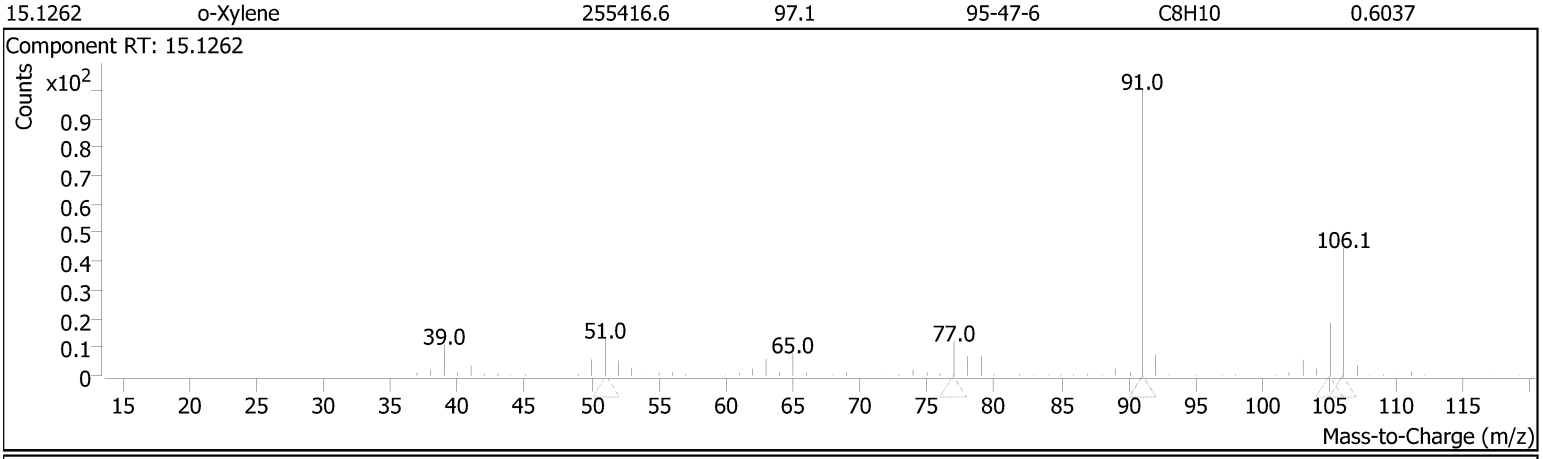


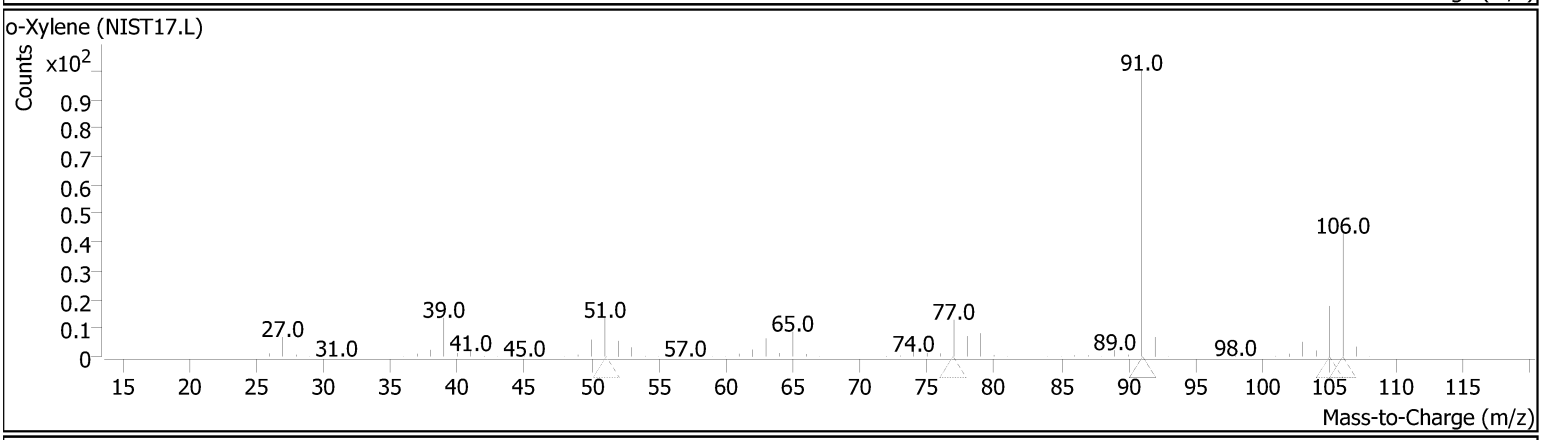


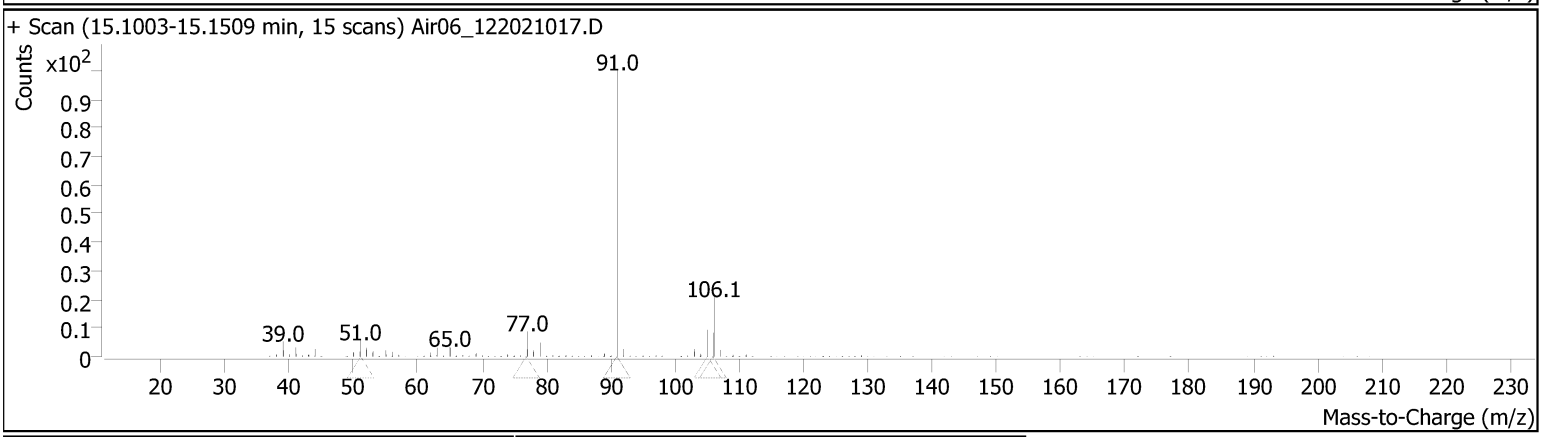


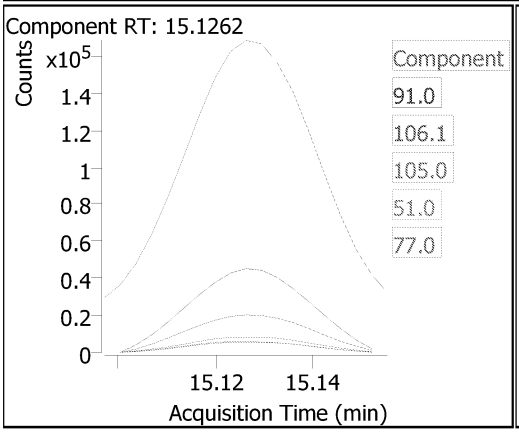


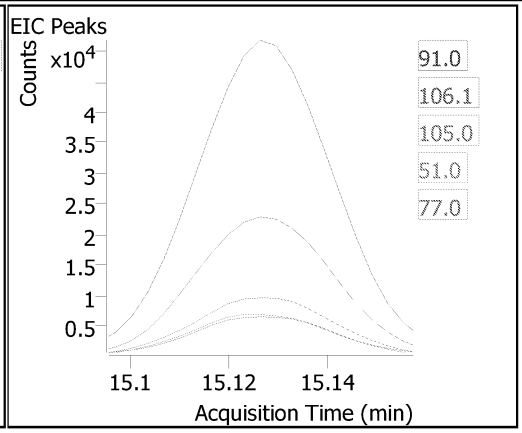
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.1262	o-Xylene	255416.6	97.1	95-47-6	C8H10	0.6037

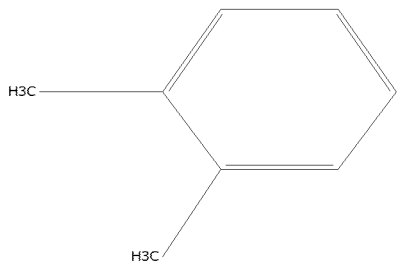




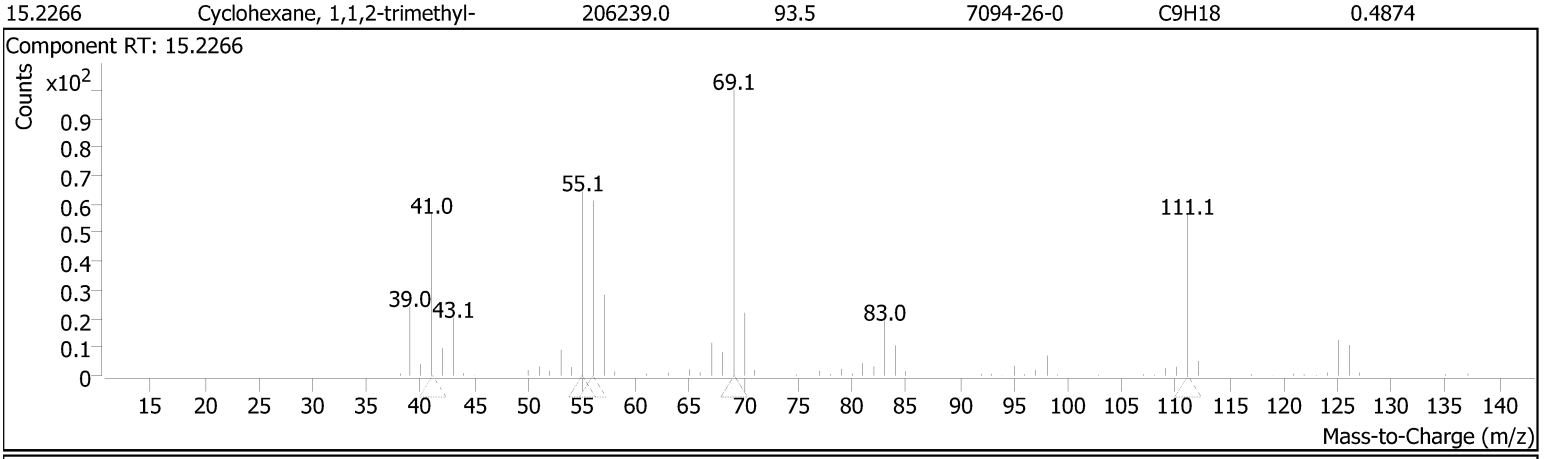


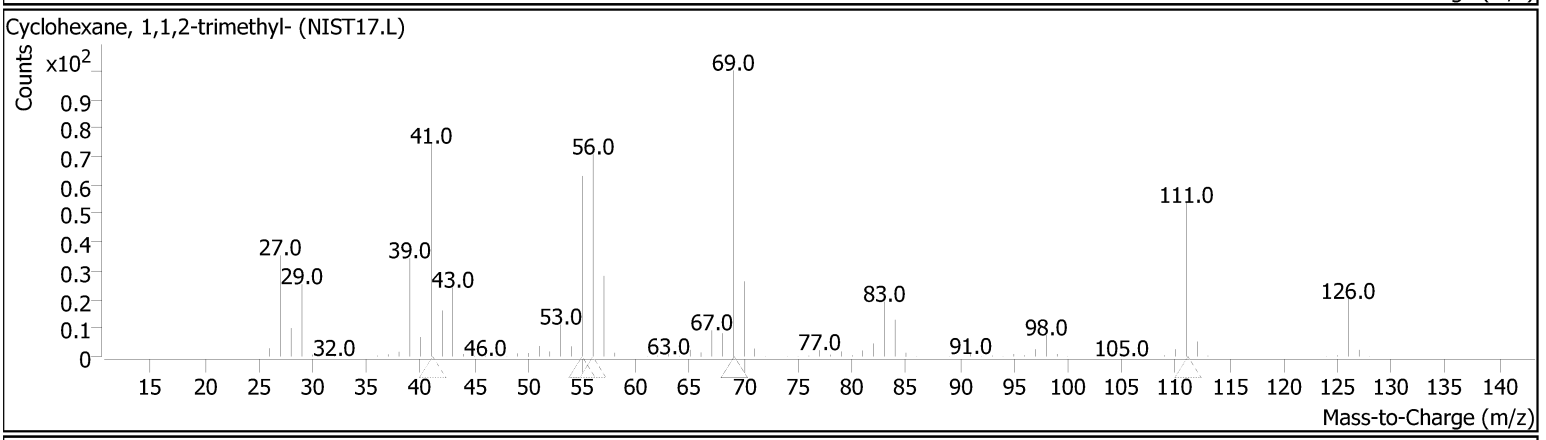


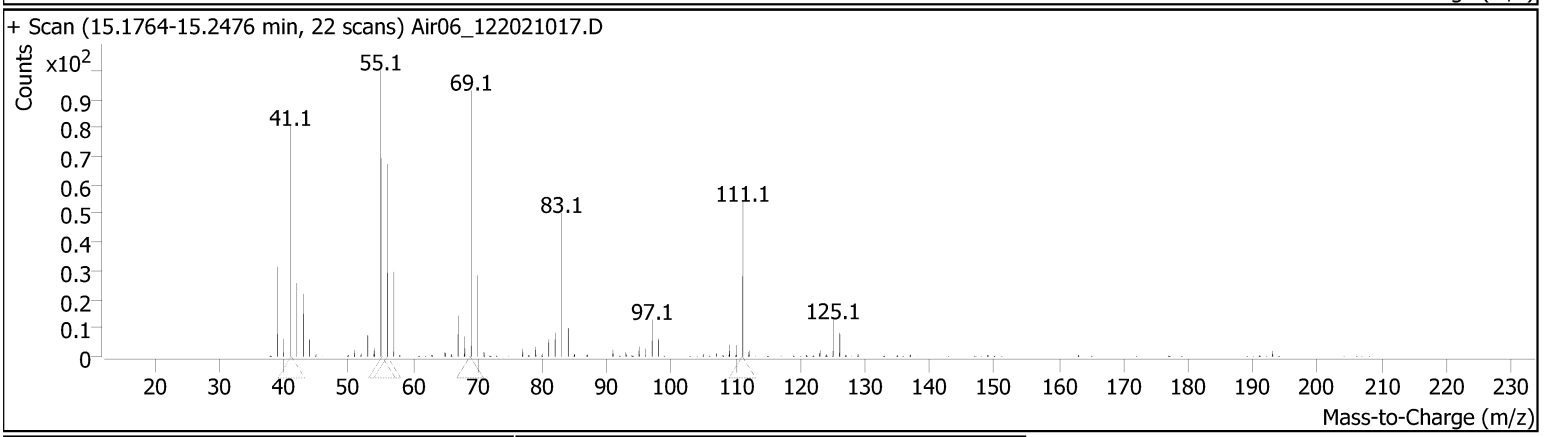


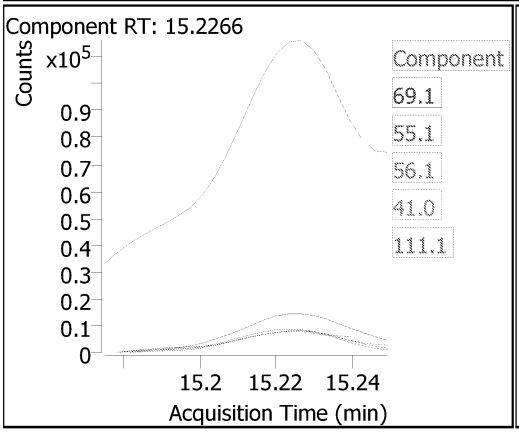


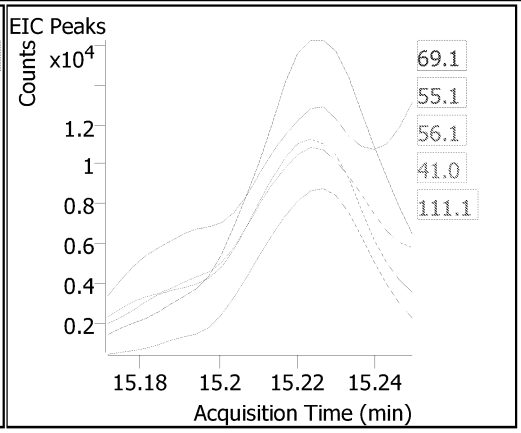
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.2266	Cyclohexane, 1,1,2-trimethyl-	206239.0	93.5	7094-26-0	C9H18	0.4874

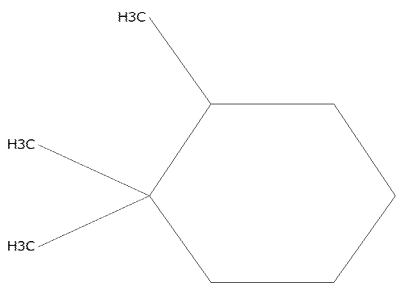




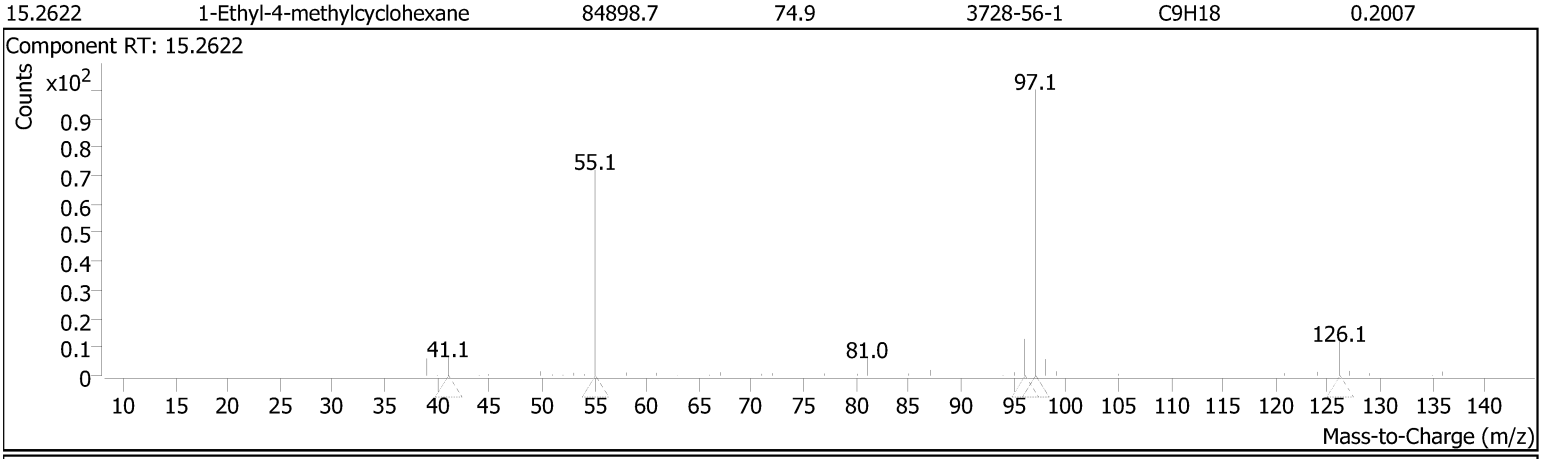


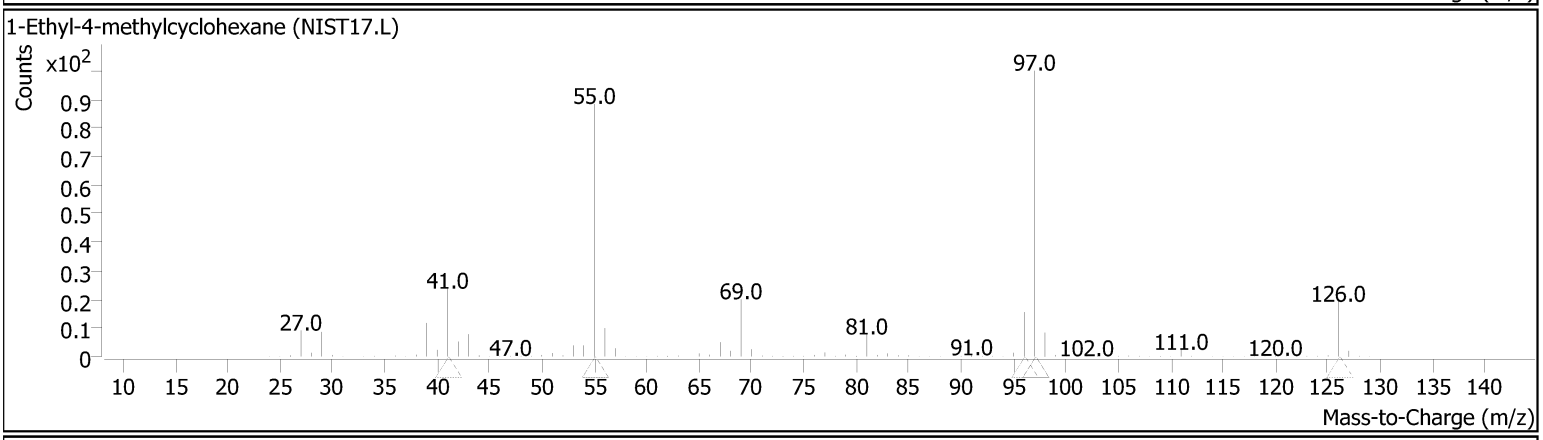


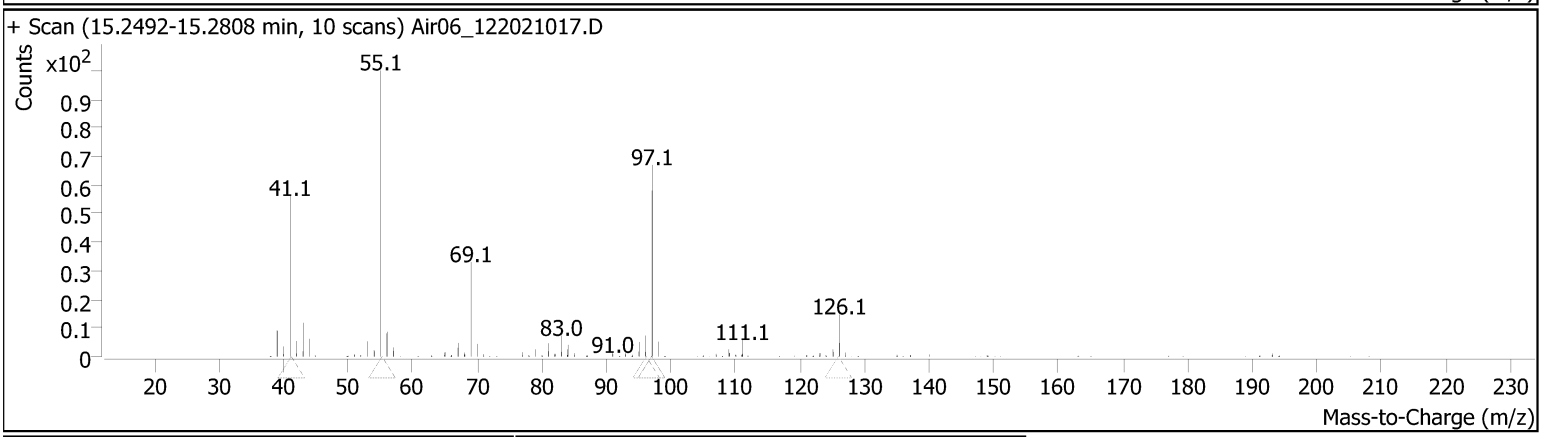


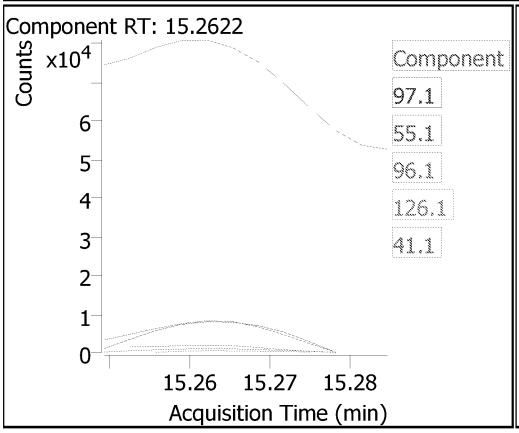


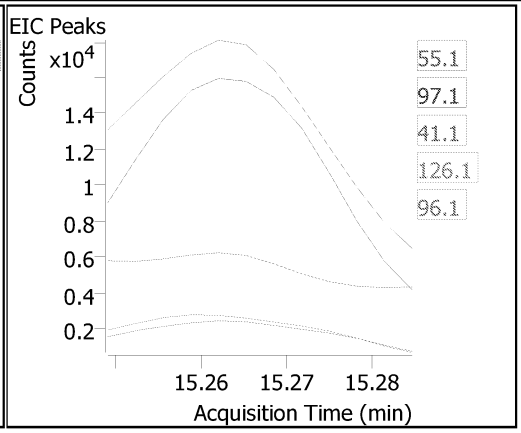
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.2622	1-Ethyl-4-methylcyclohexane	84898.7	74.9	3728-56-1	C9H18	0.2007

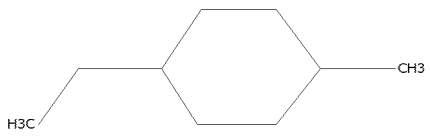




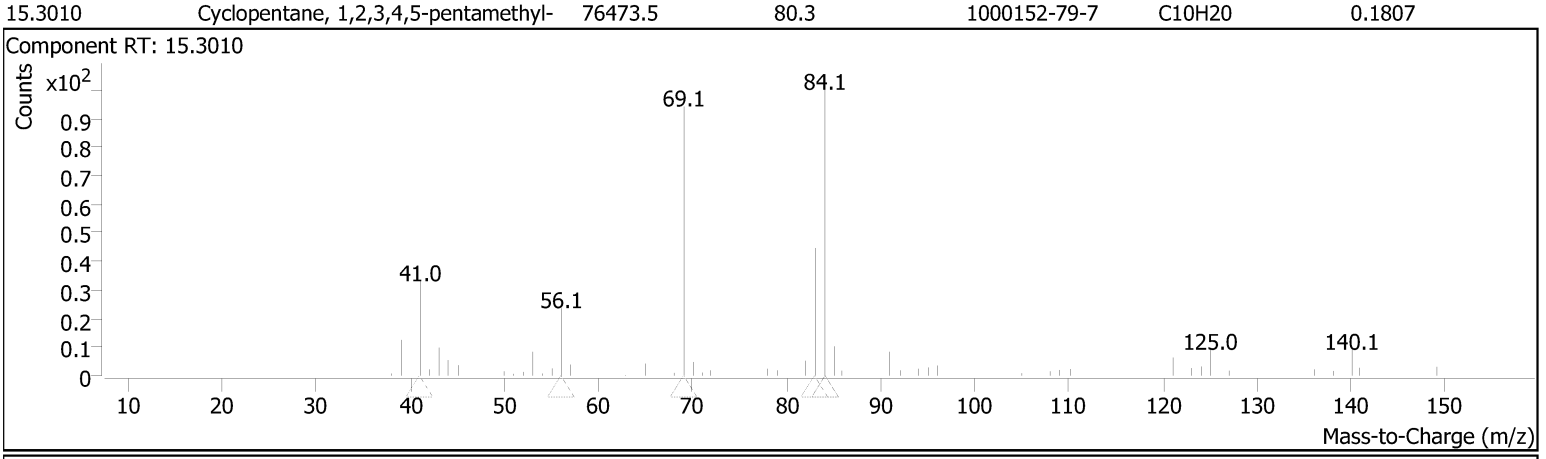


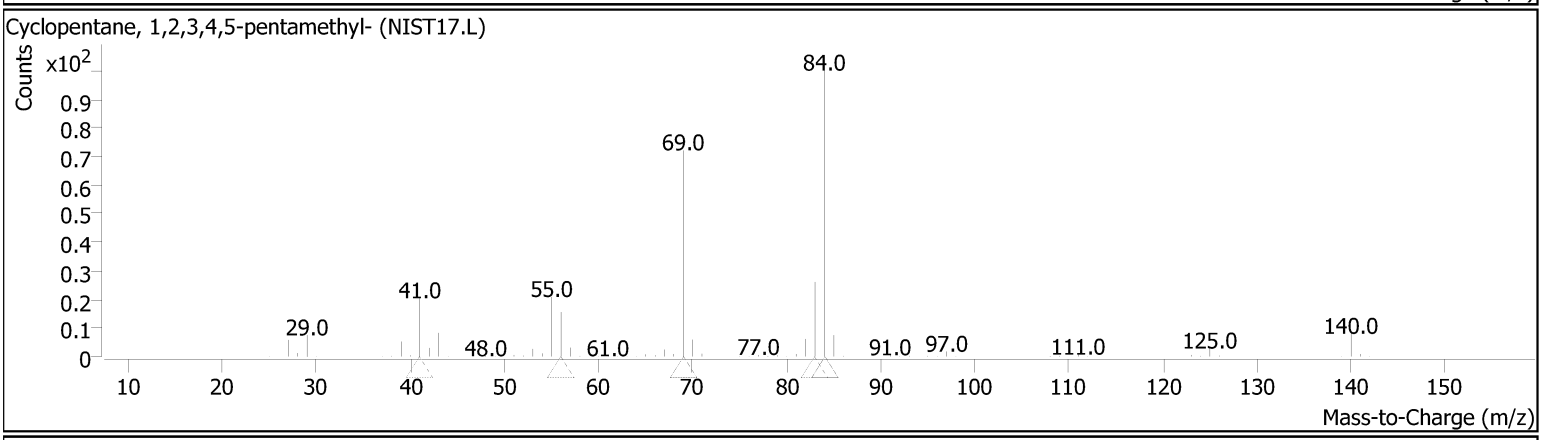


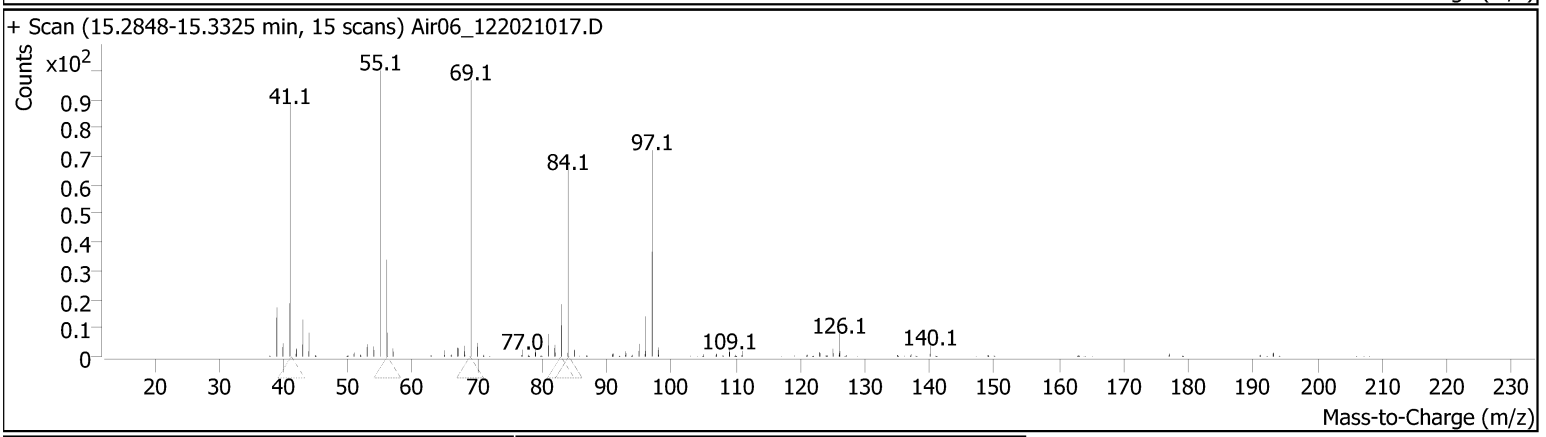


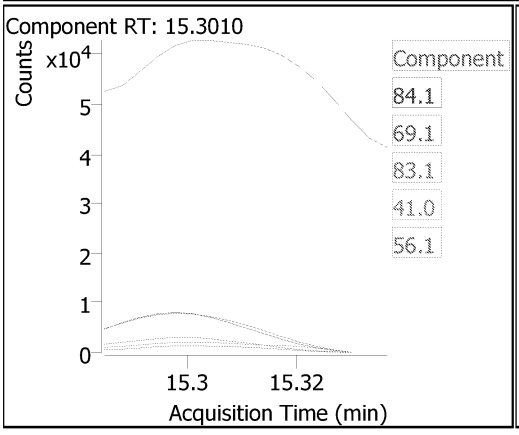


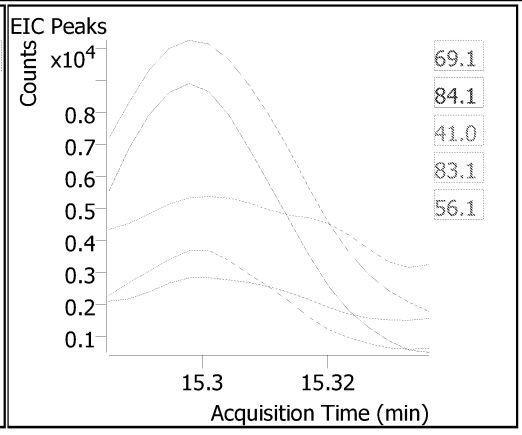
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.3010	Cyclopentane, 1,2,3,4,5-pentamethyl-	76473.5	80.3	1000152-79-7	C10H20	0.1807

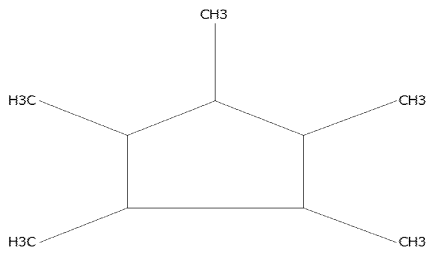




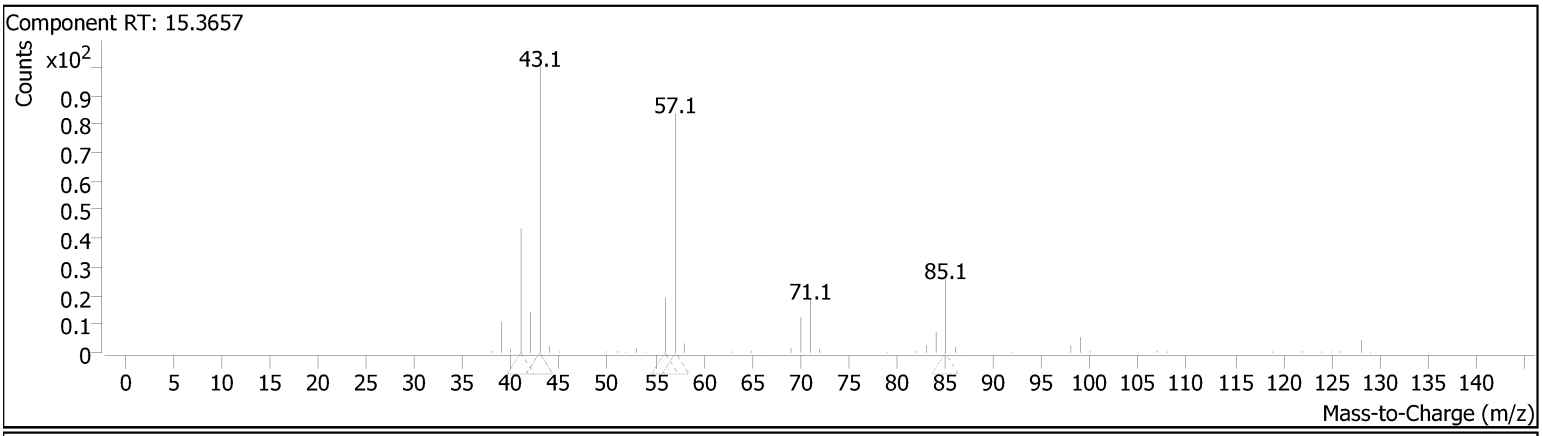


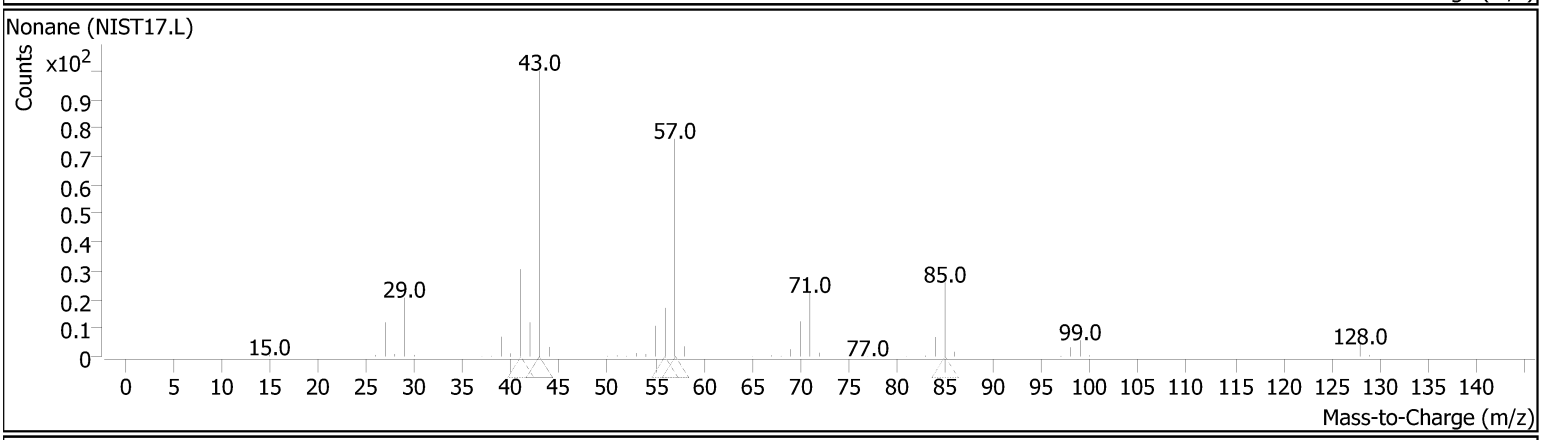


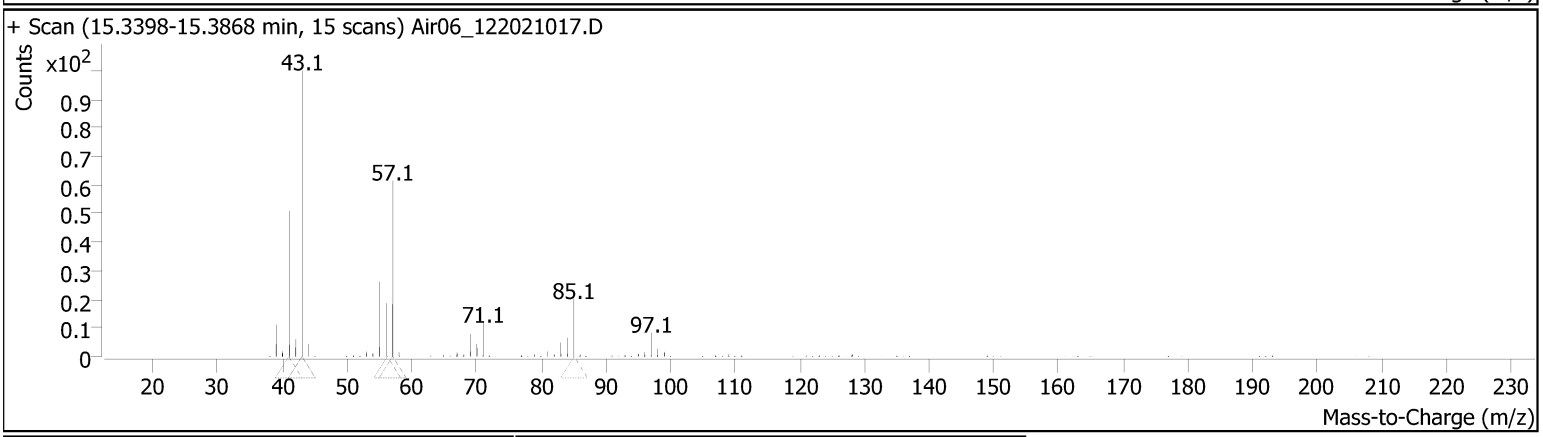


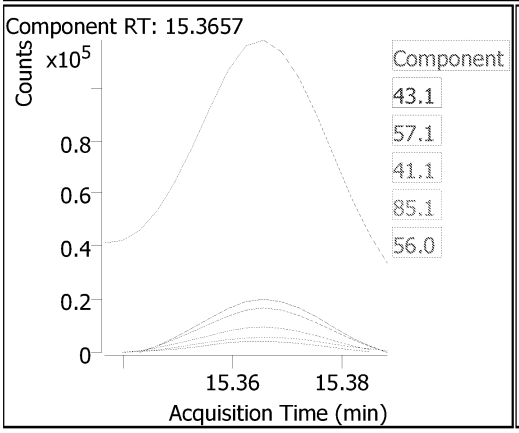


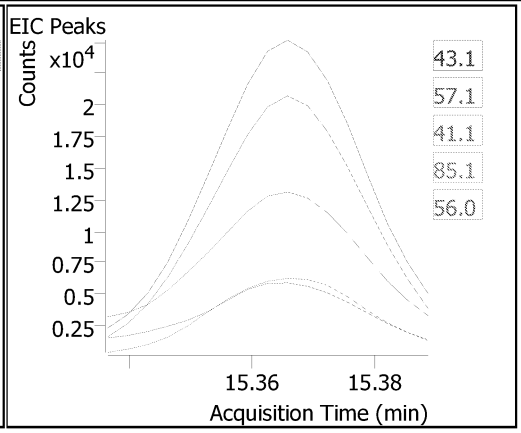
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.3657	Nonane	137932.7	93.0	111-84-2	C9H20	0.326





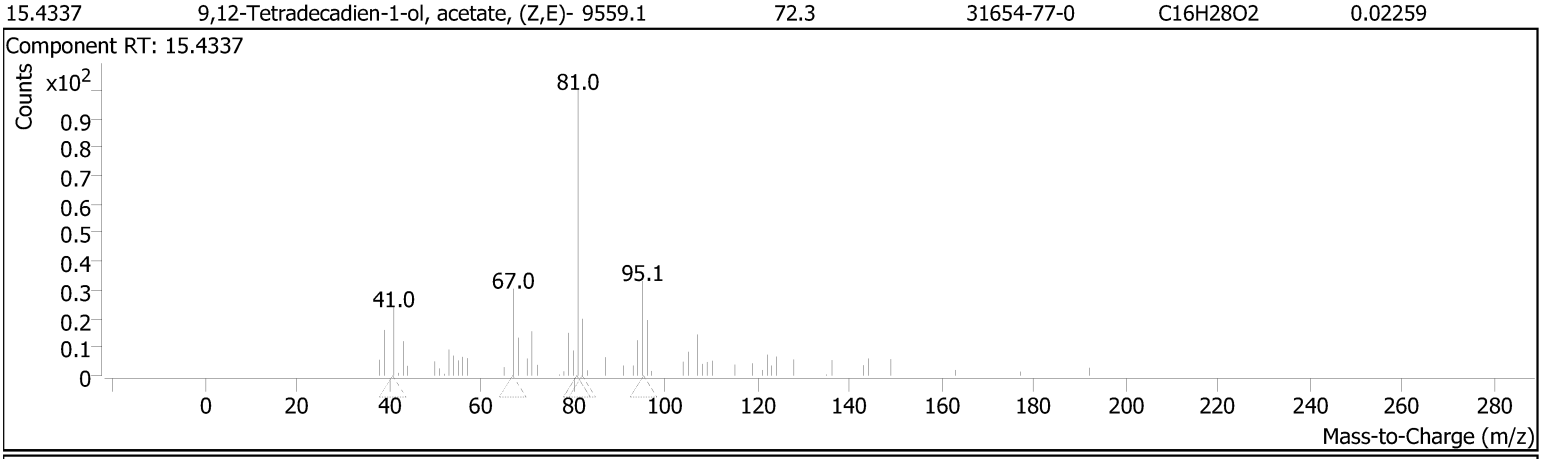


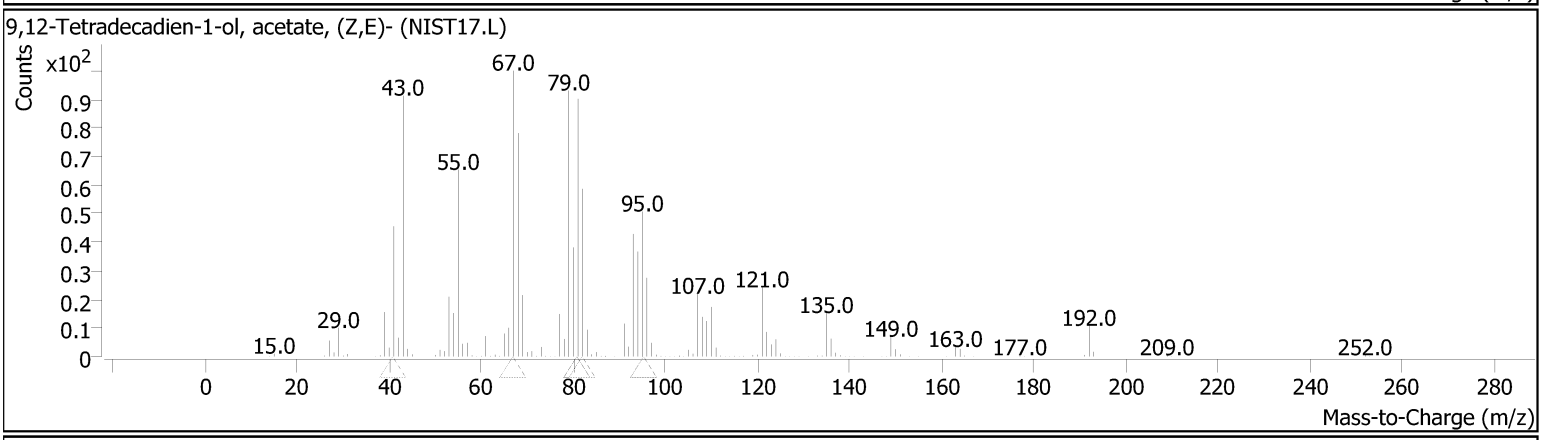


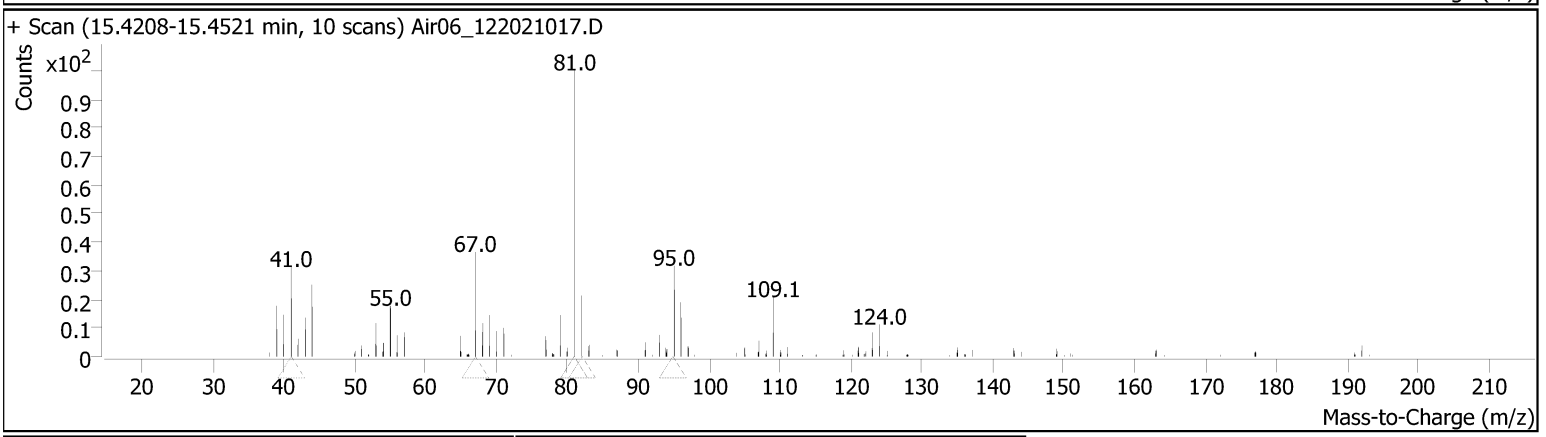


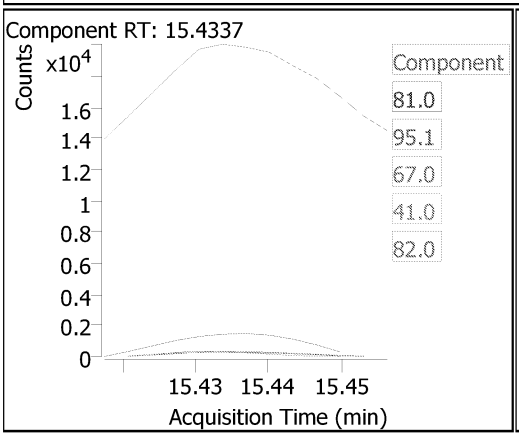


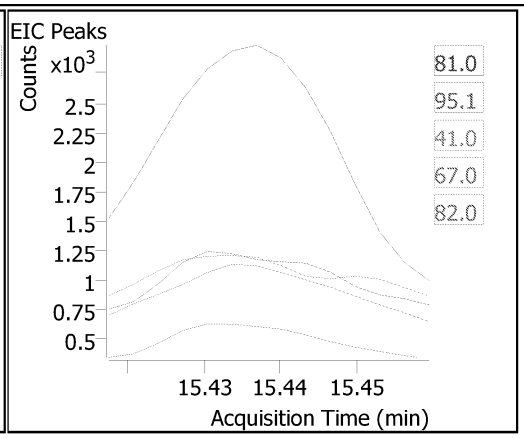
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.4337	9,12-Tetradecadien-1-ol, acetate, (Z,E)-	9559.1	72.3	31654-77-0	C16H28O2	0.02259

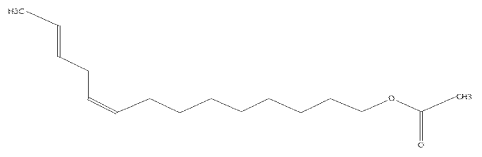




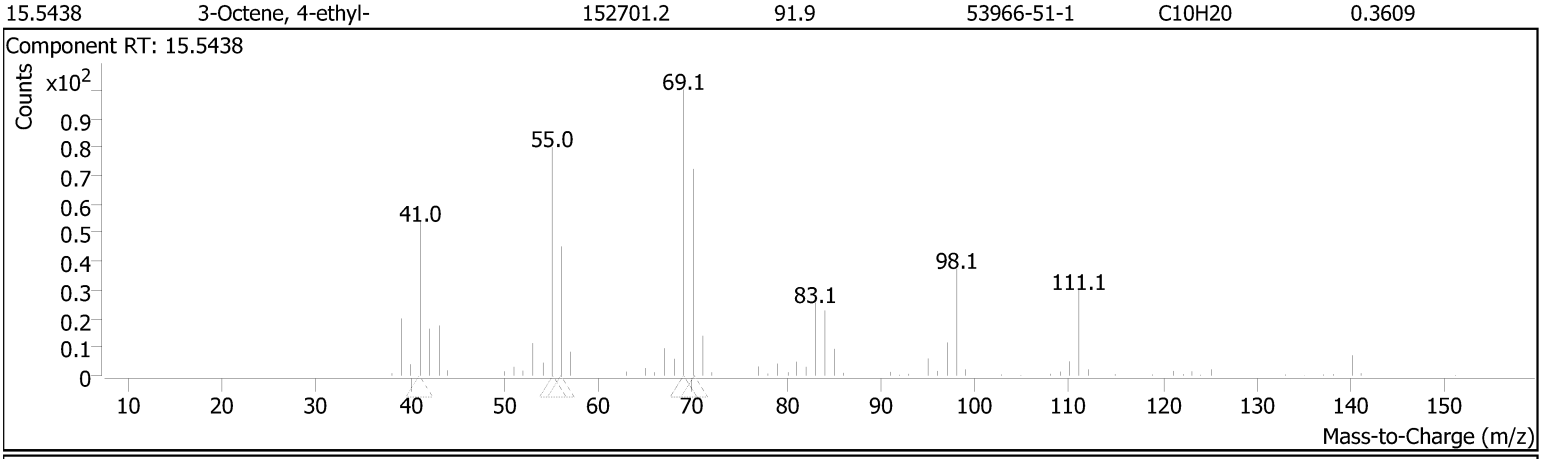


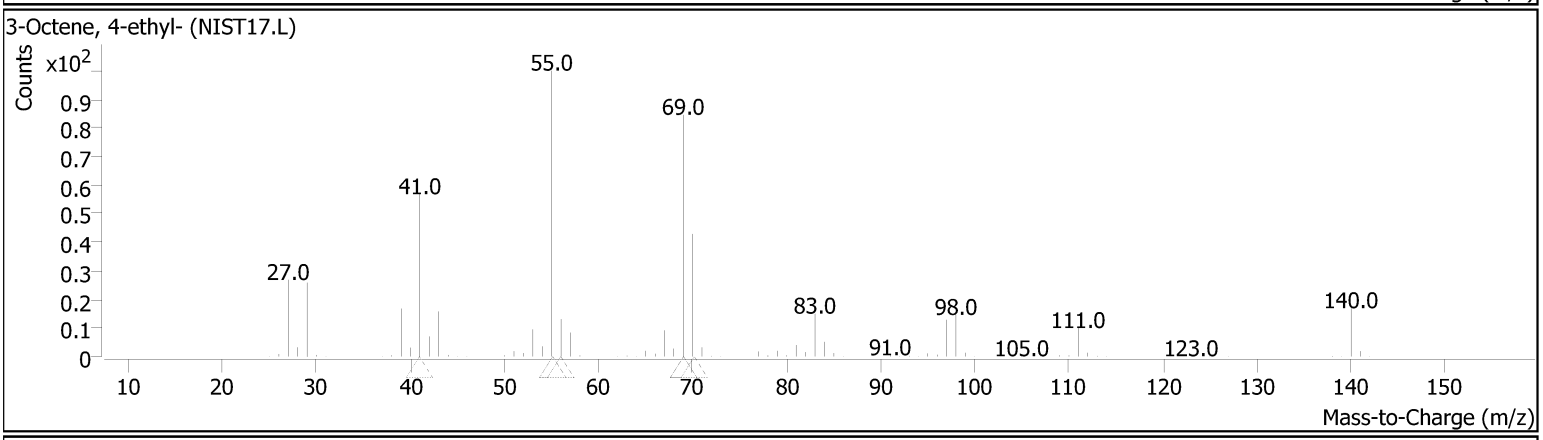


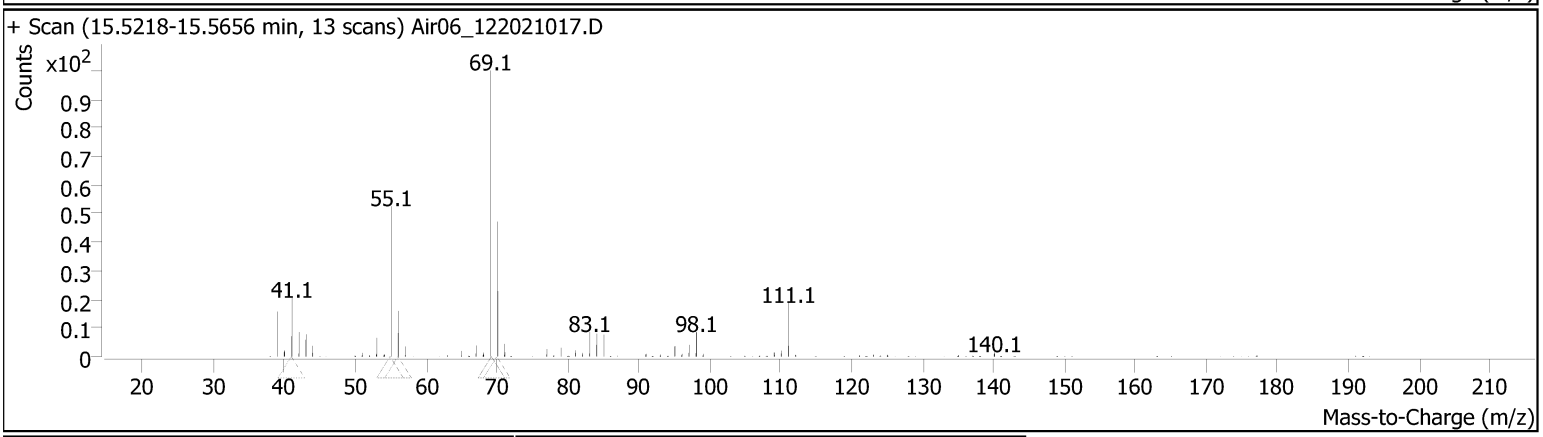


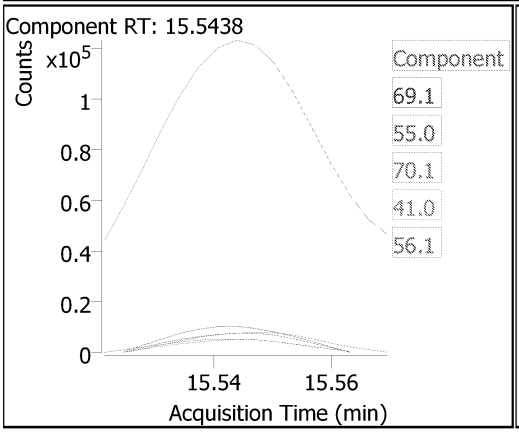


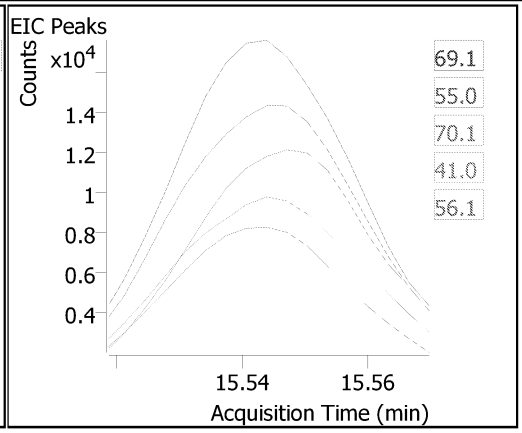
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.5438	3-Octene, 4-ethyl-	152701.2	91.9	53966-51-1	C10H20	0.3609

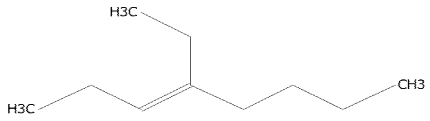




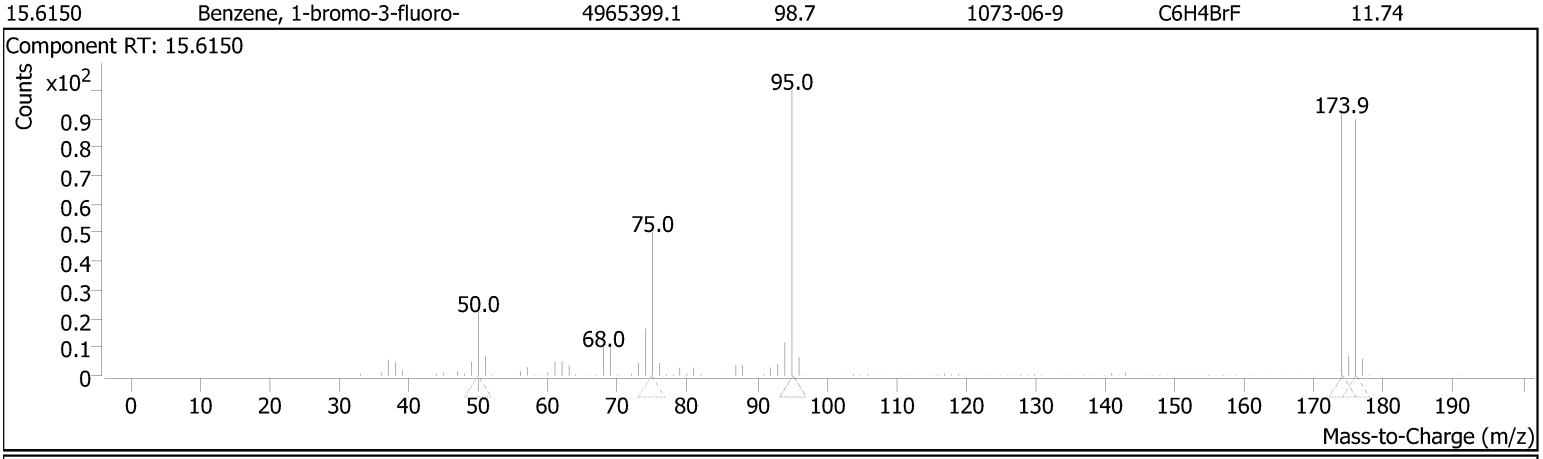


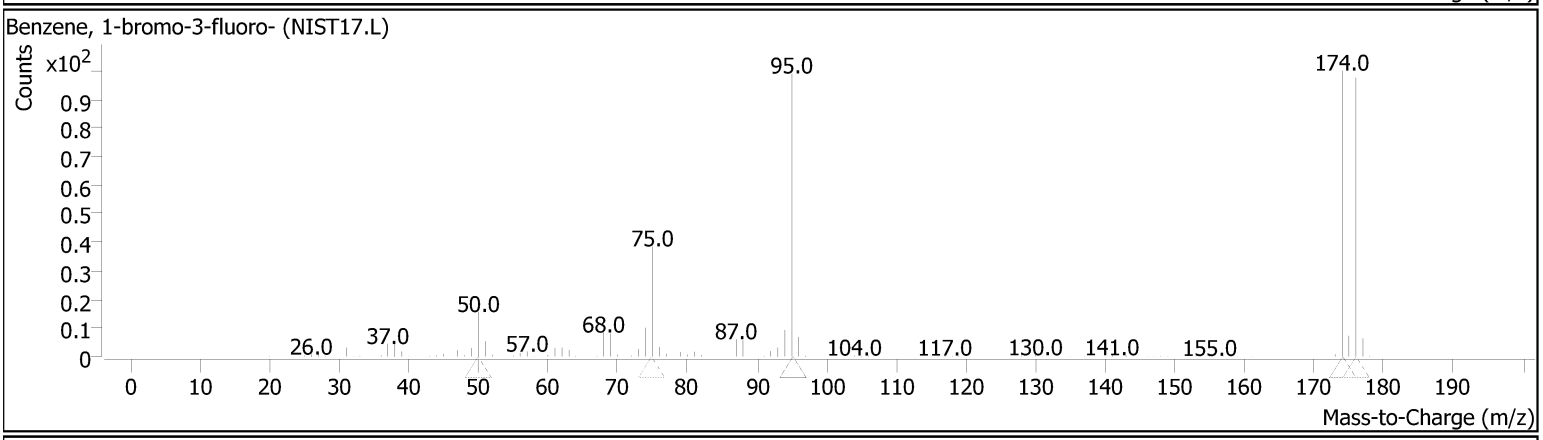


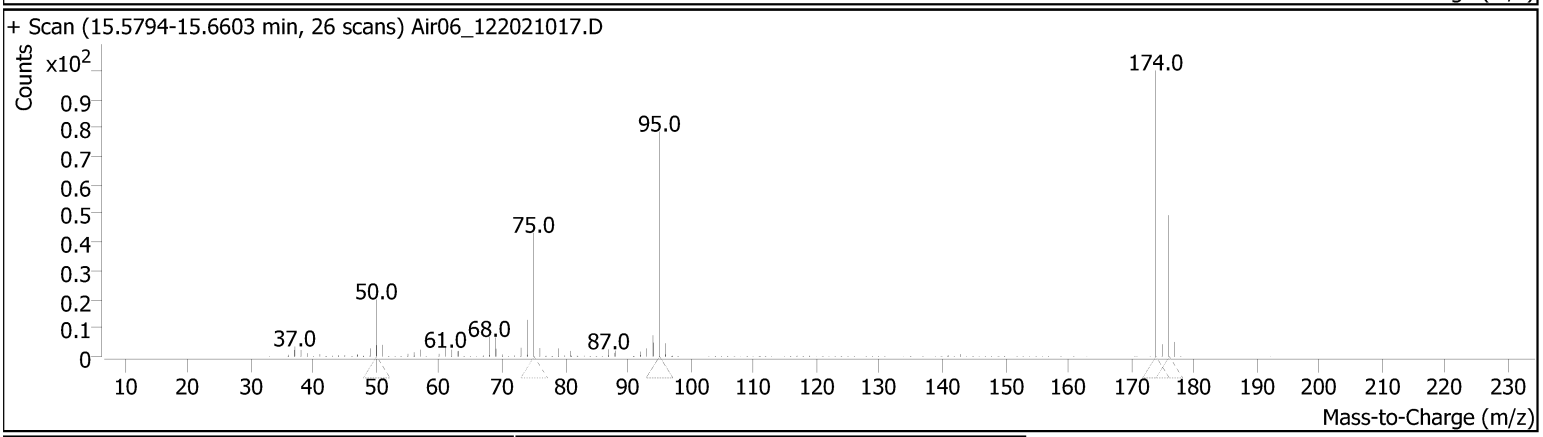


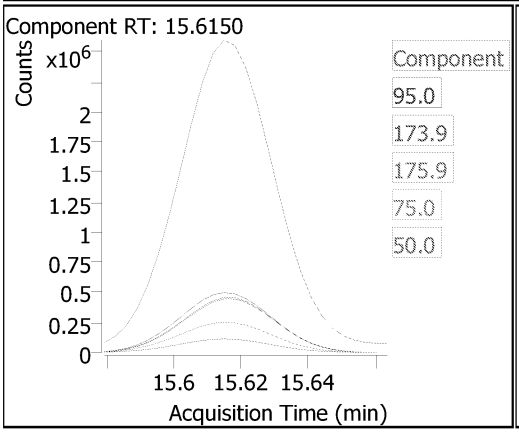


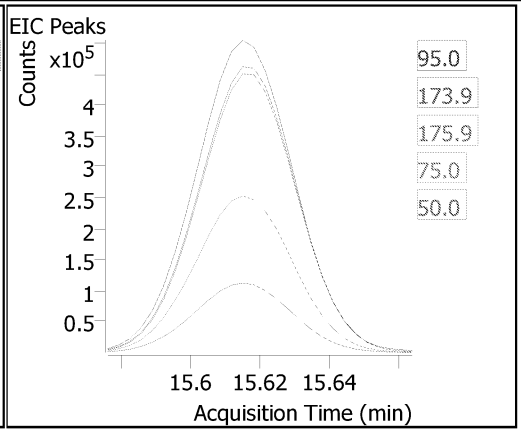
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.6150	Benzene, 1-bromo-3-fluoro-	4965399.1	98.7	1073-06-9	C6H4BrF	11.74

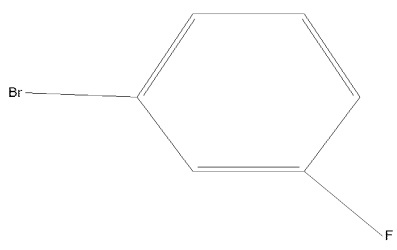




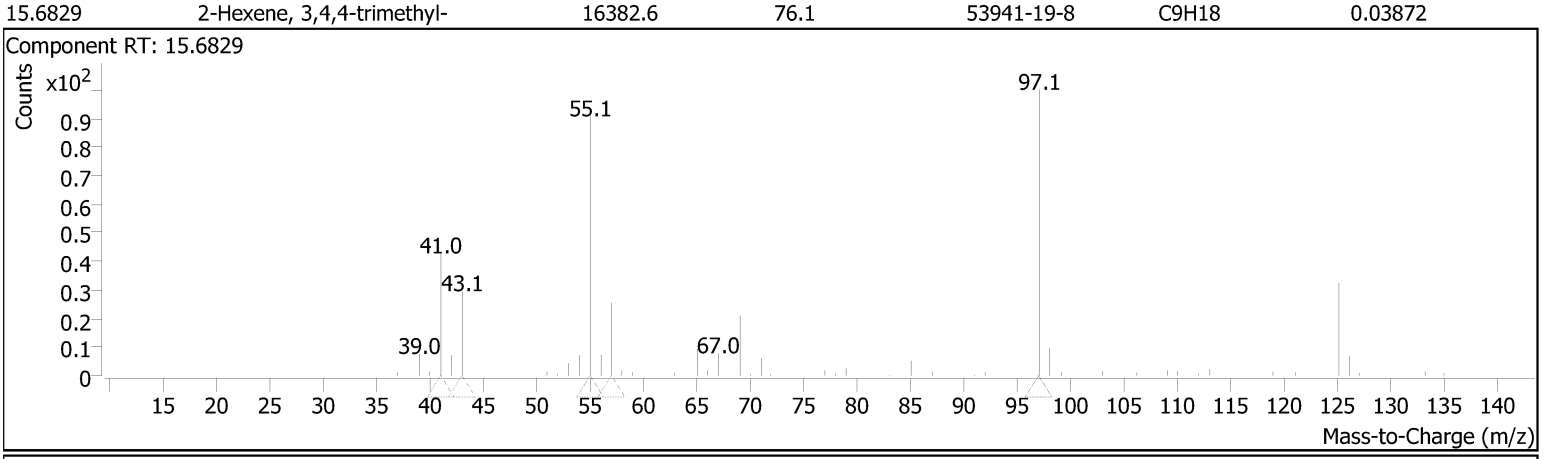


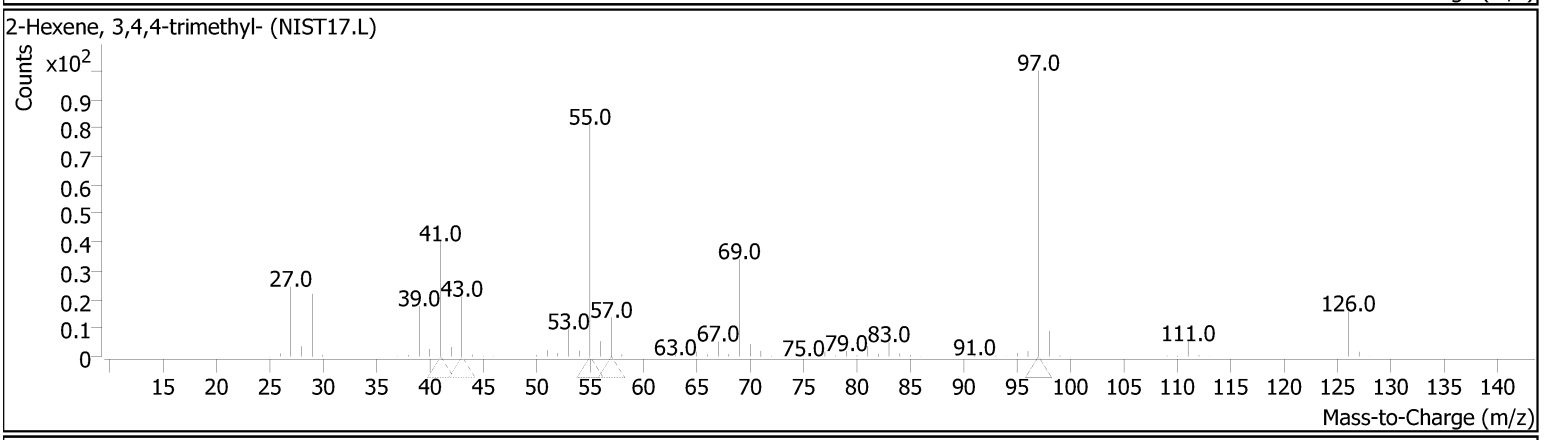


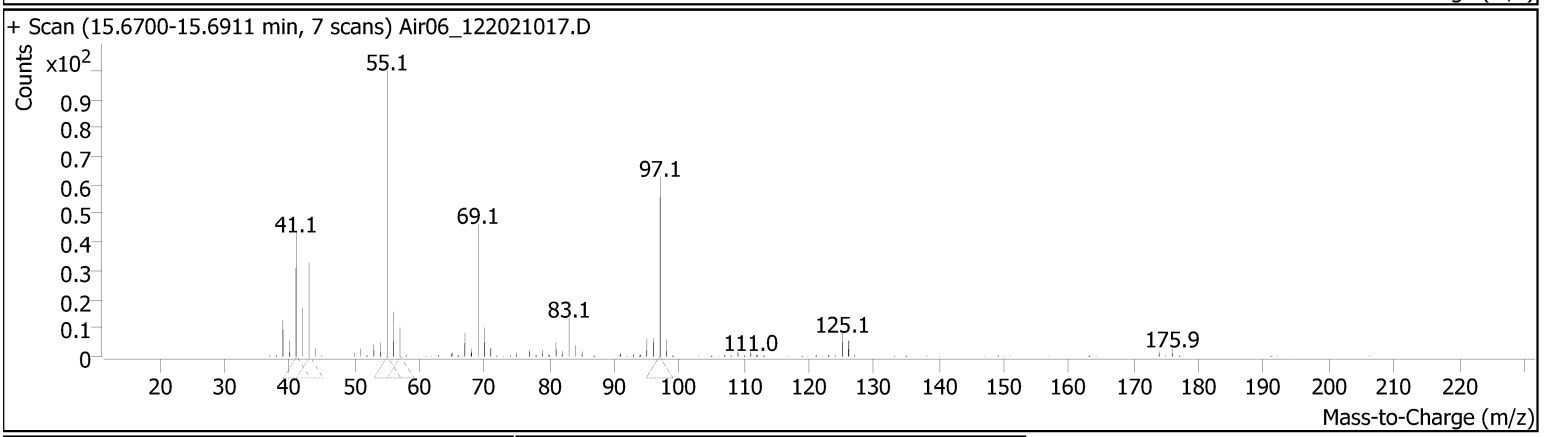


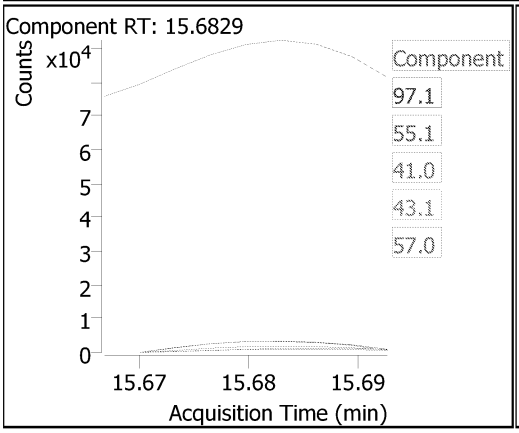


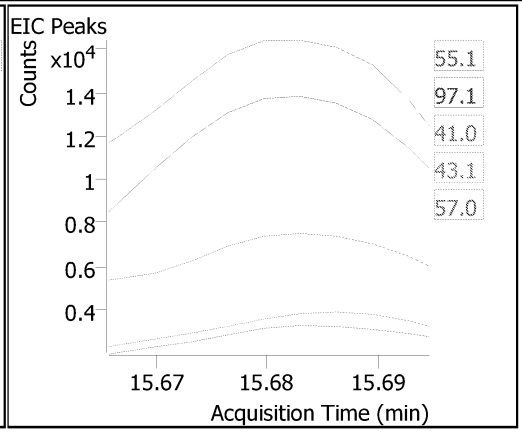
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.6829	2-Hexene, 3,4,4-trimethyl-	16382.6	76.1	53941-19-8	C9H18	0.03872

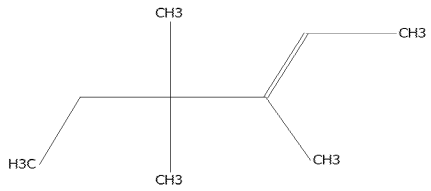




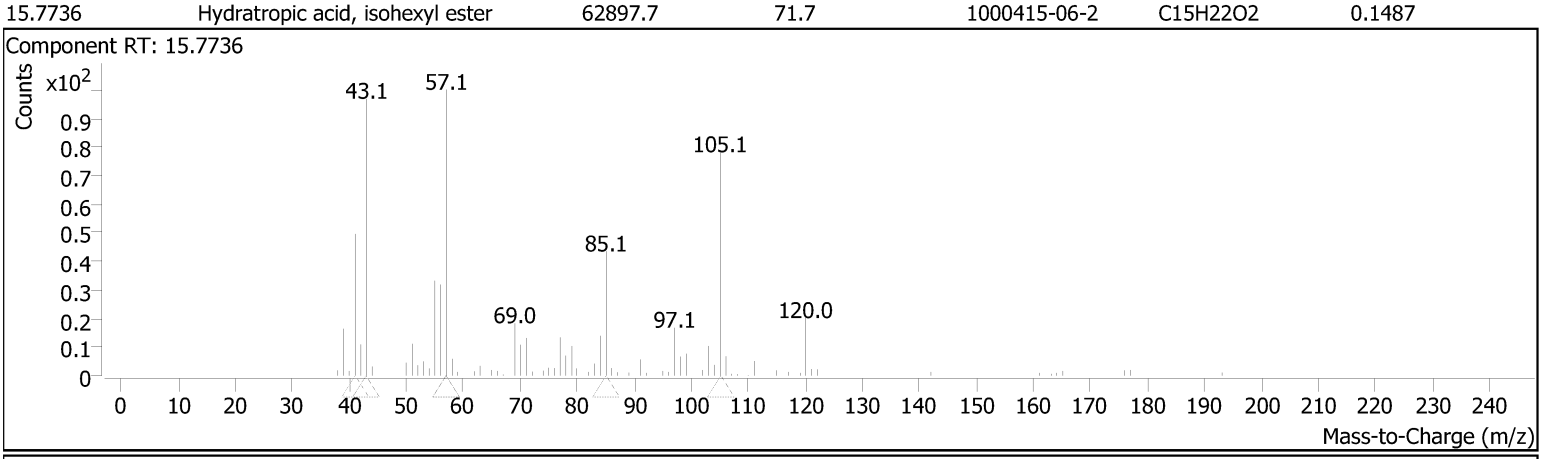


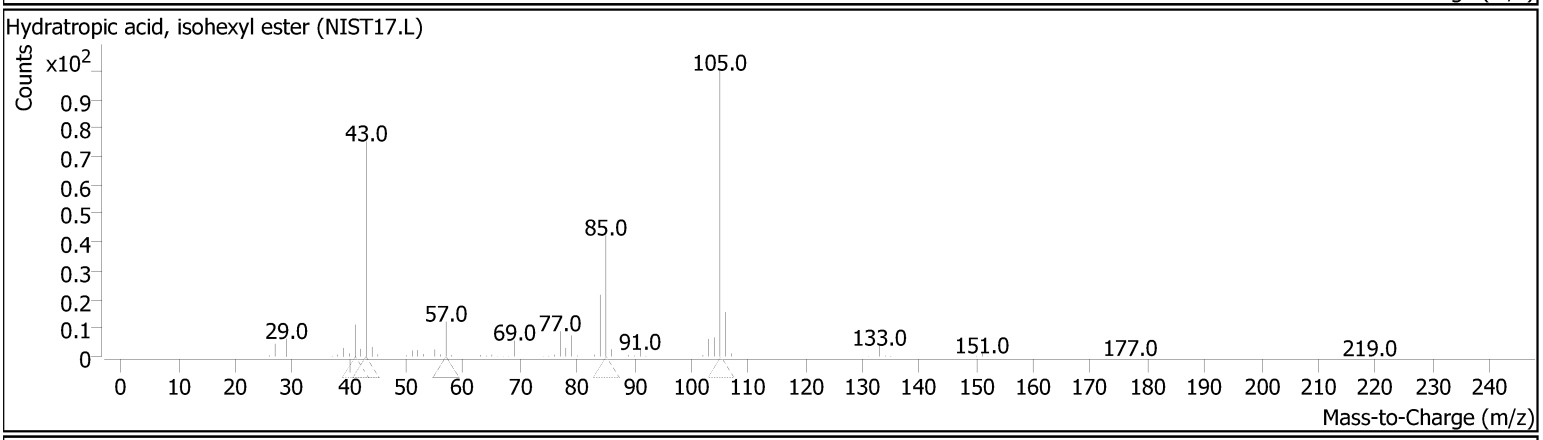


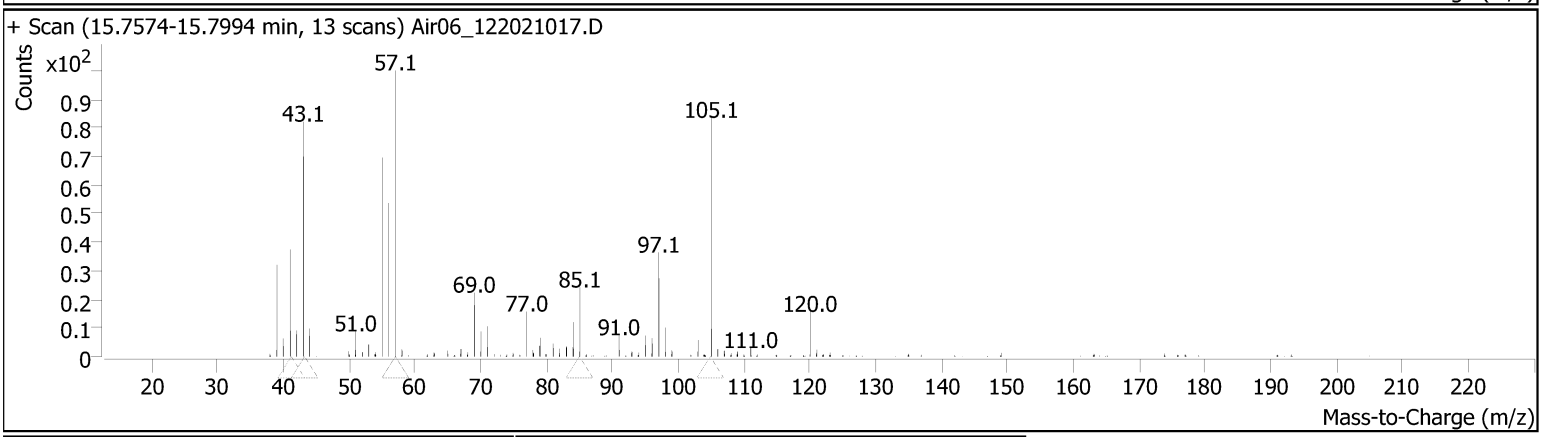


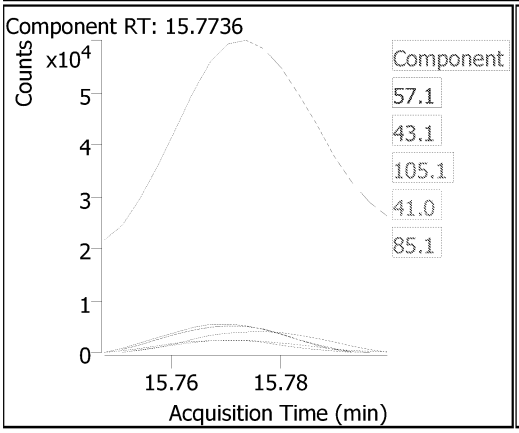


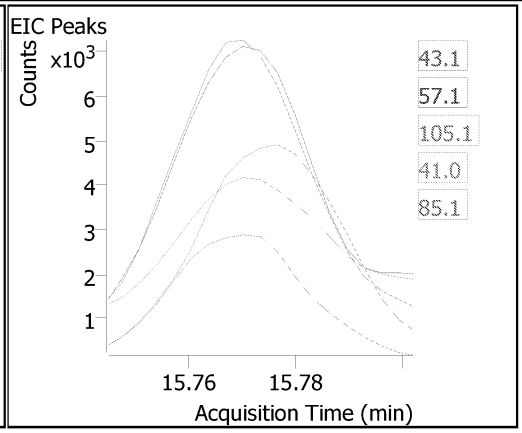
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.7736	Hydratropic acid, isohexyl ester	62897.7	71.7	1000415-06-2	C15H22O2	0.1487

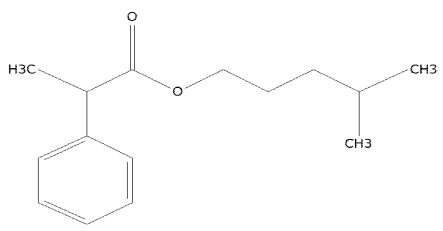




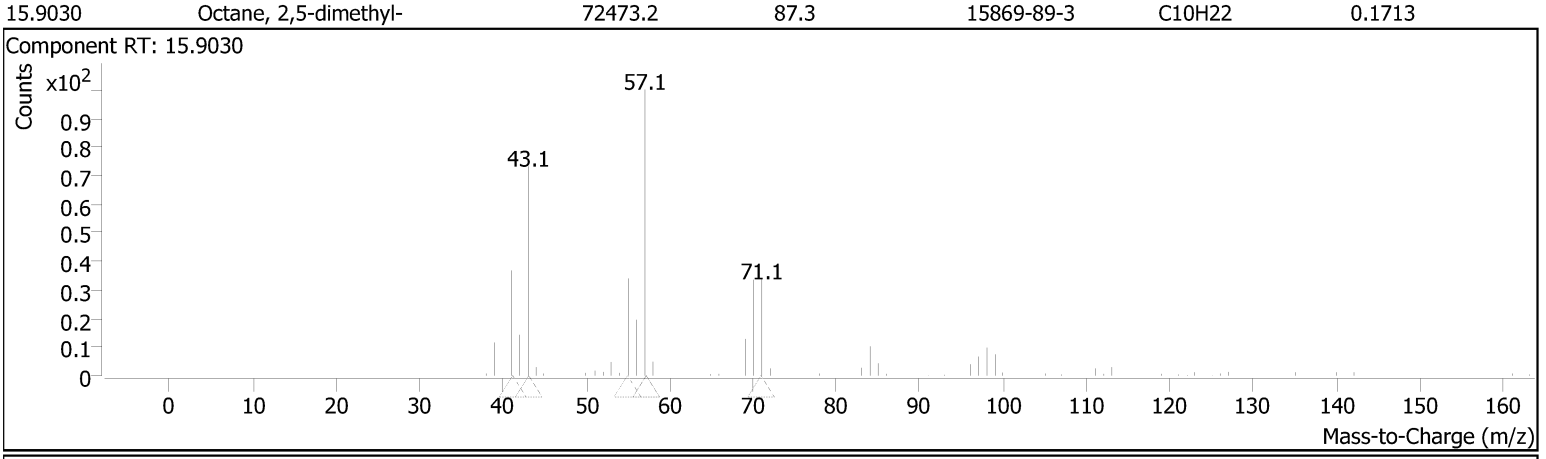


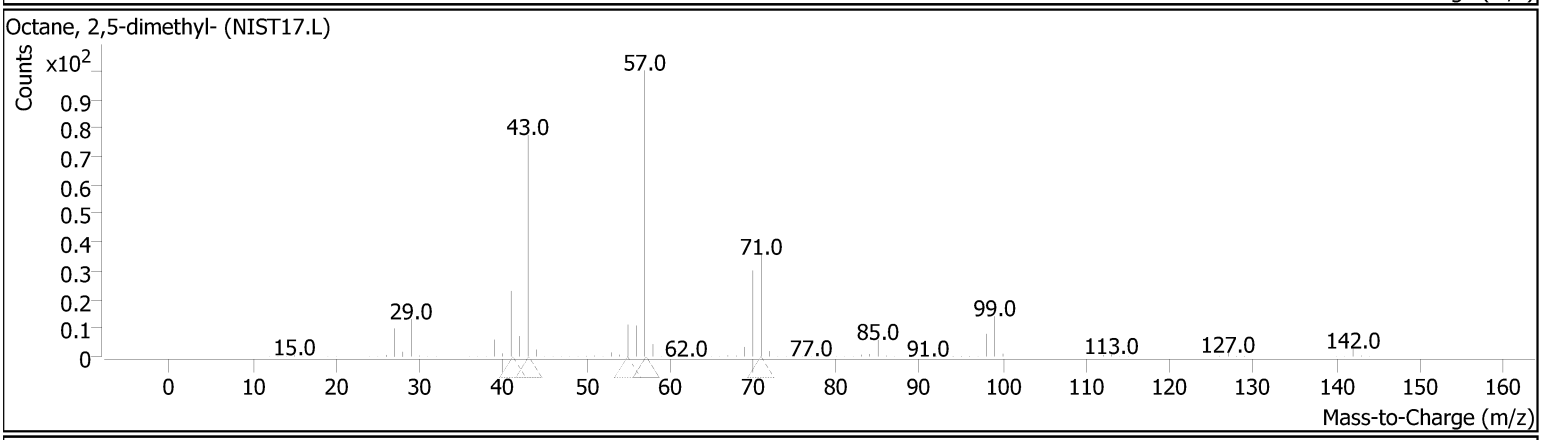


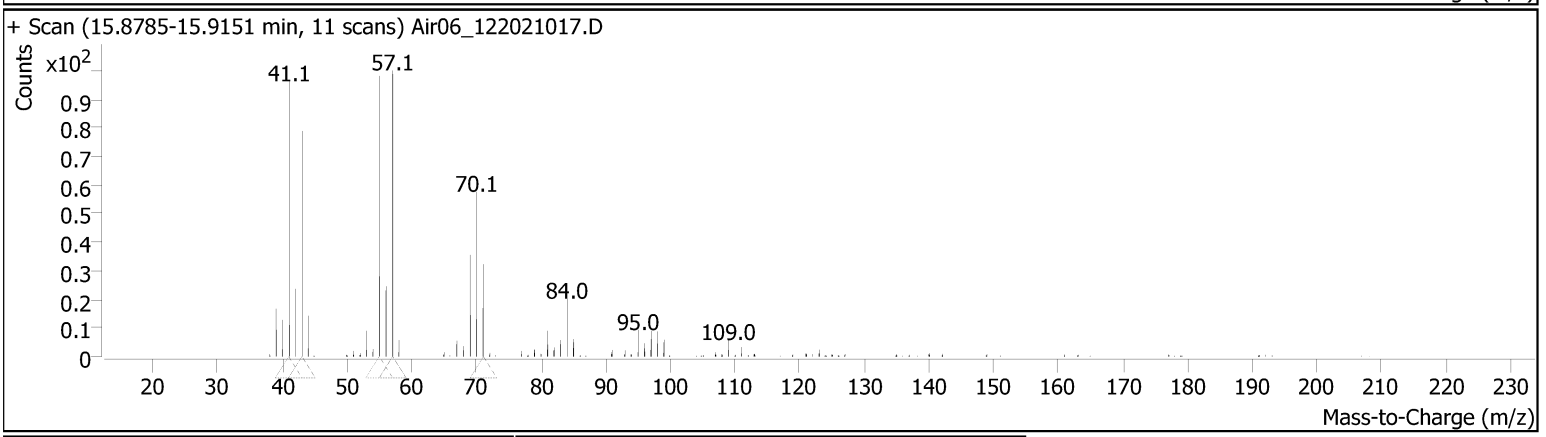


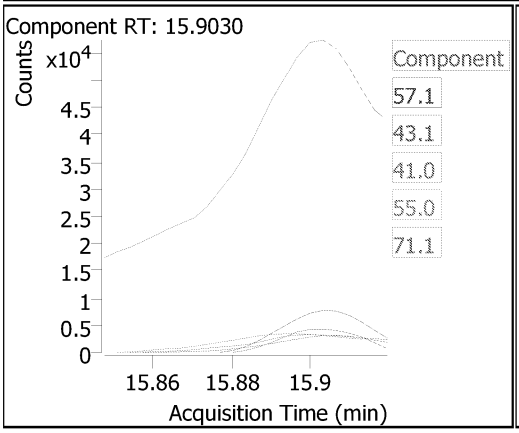


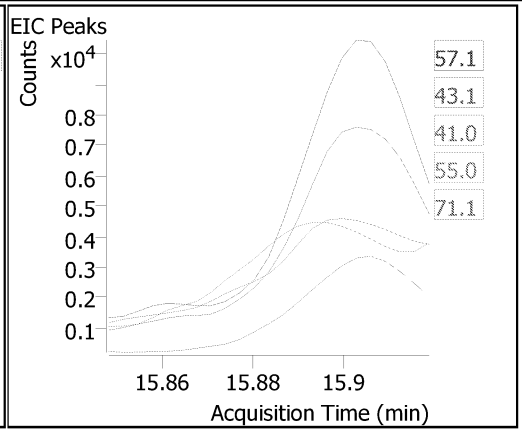
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.9030	Octane, 2,5-dimethyl-	72473.2	87.3	15869-89-3	C10H22	0.1713

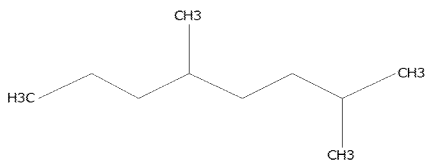




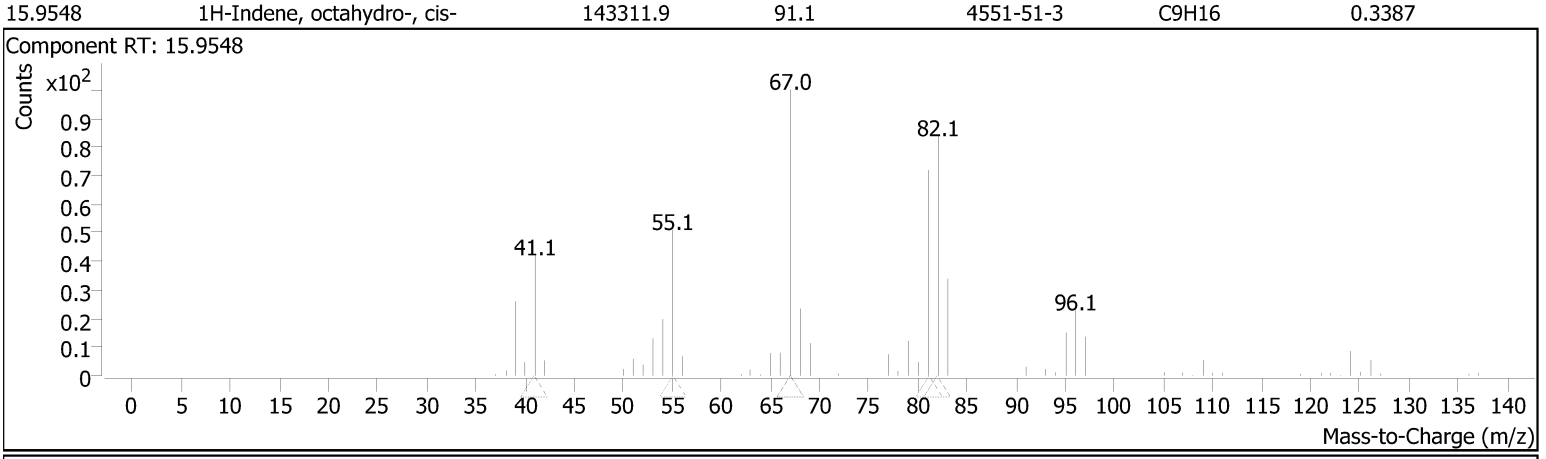


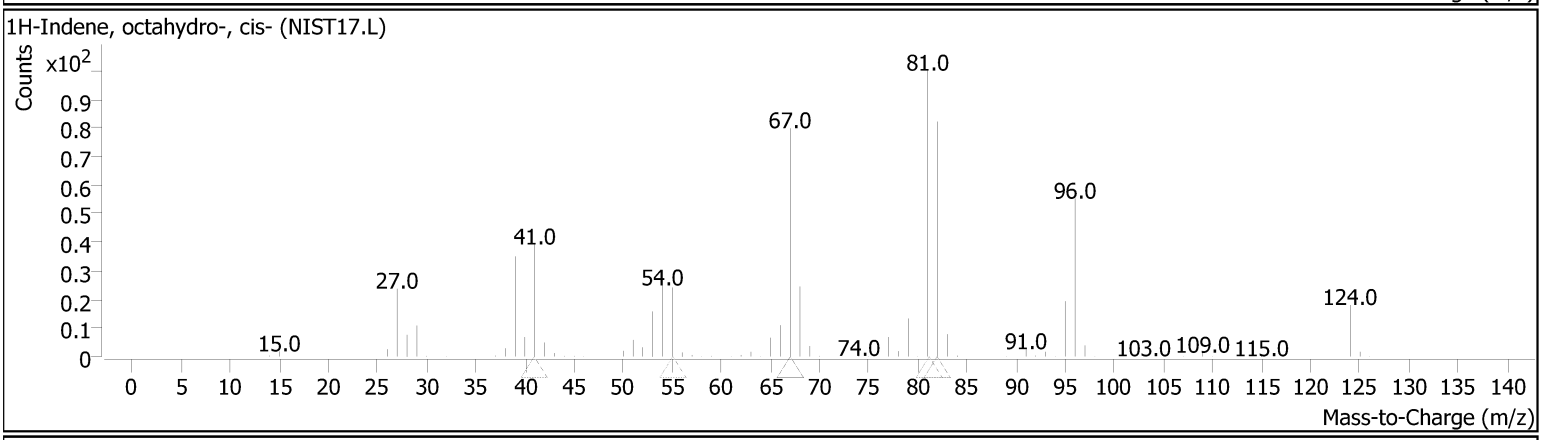


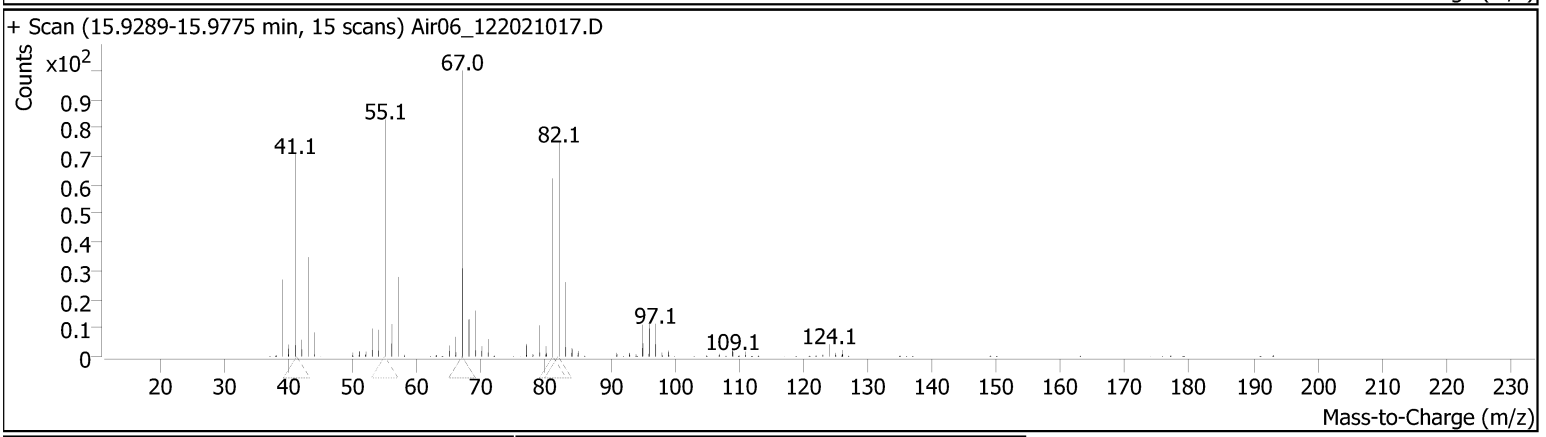


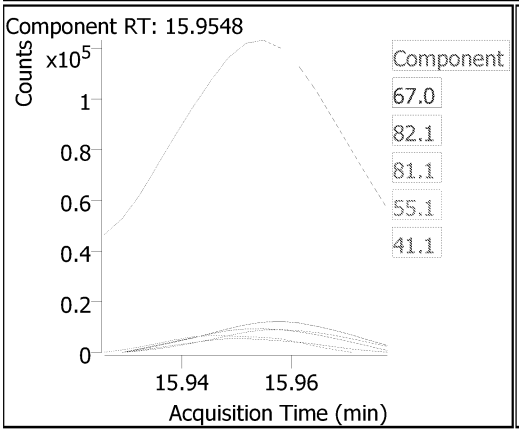


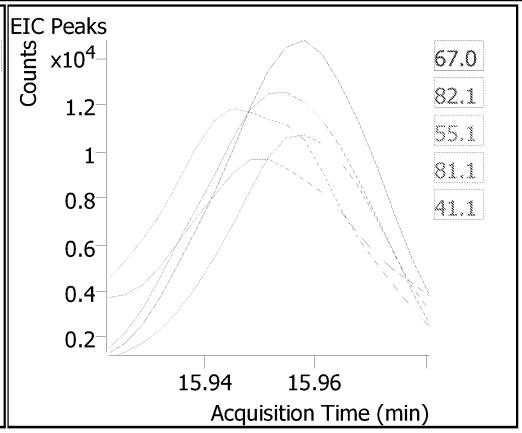
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.9548	1H-Indene, octahydro-, cis-	143311.9	91.1	4551-51-3	C9H16	0.3387



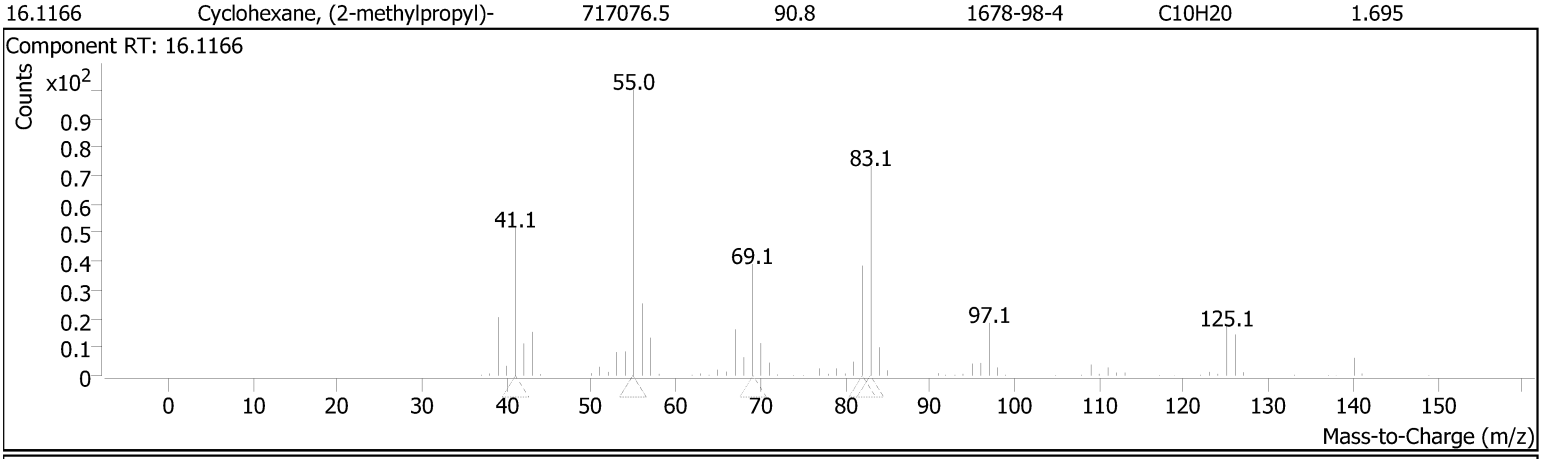


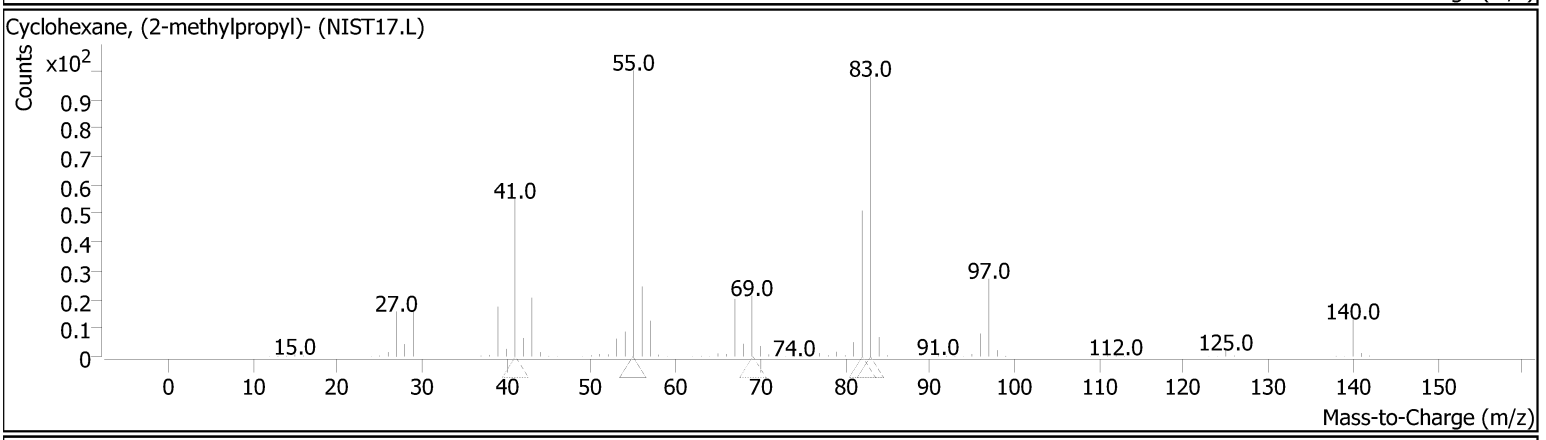


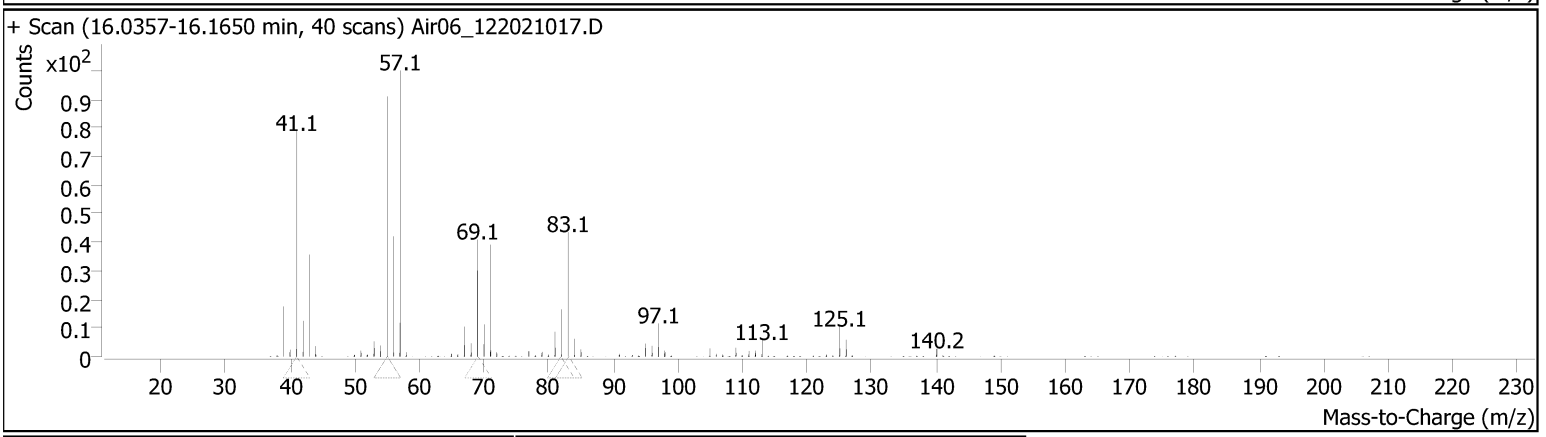


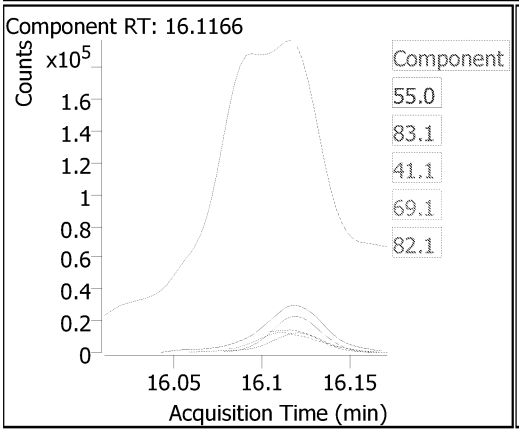


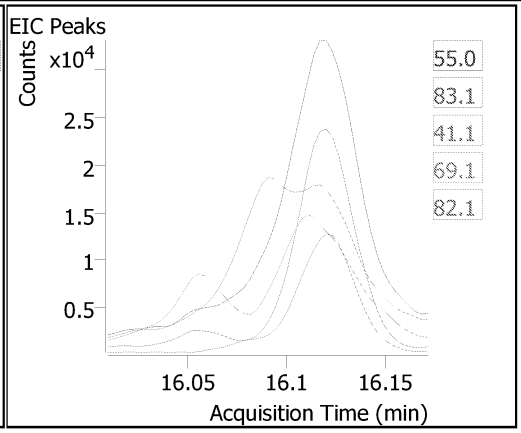
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.1166	Cyclohexane, (2-methylpropyl)-	717076.5	90.8	1678-98-4	C10H20	1.695

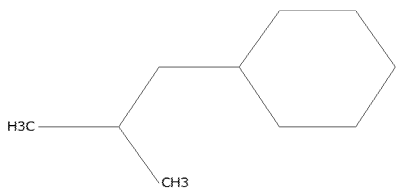








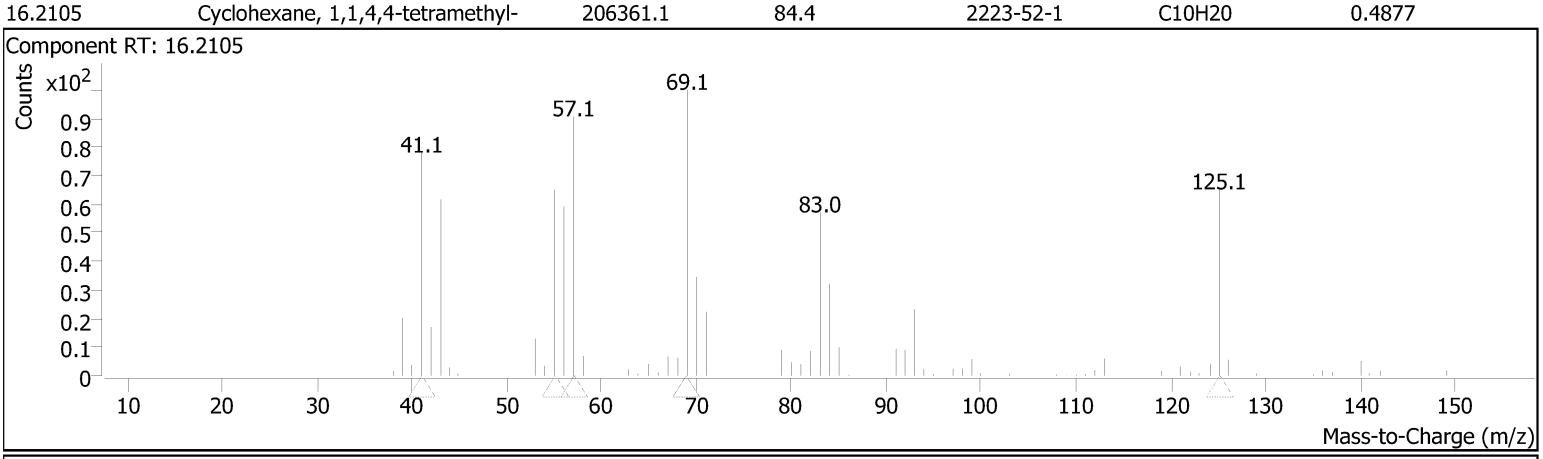


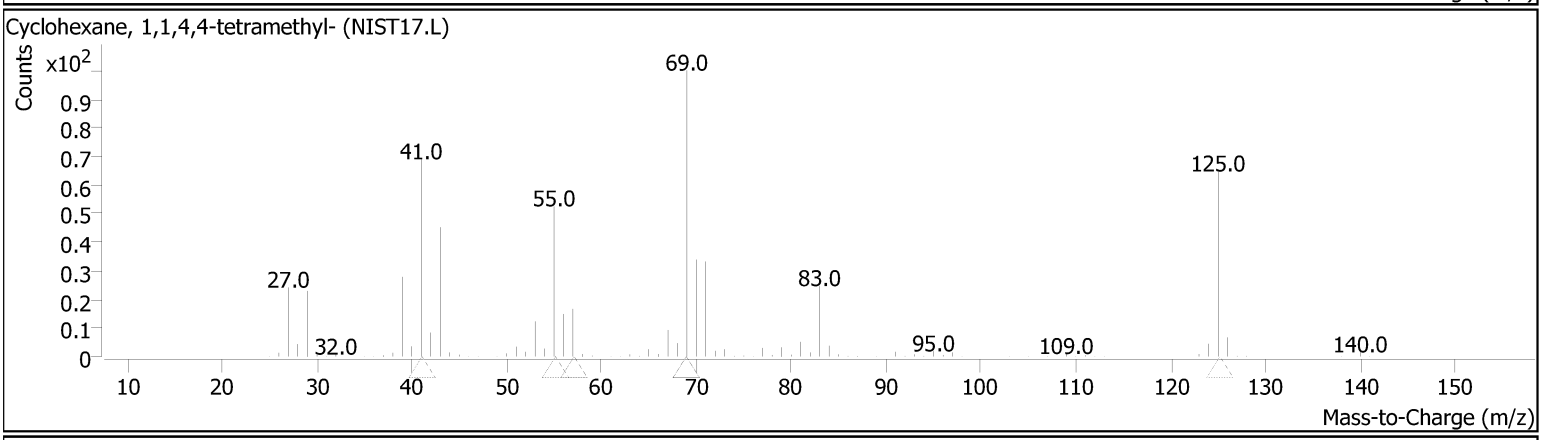


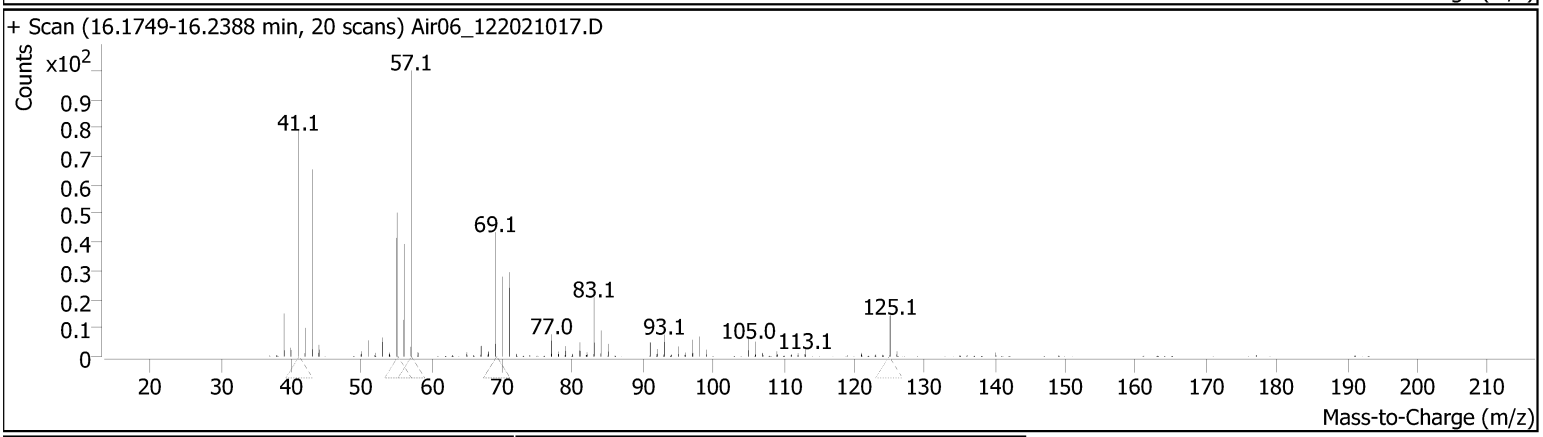
Library Search Results - NonTarget Hits with Details

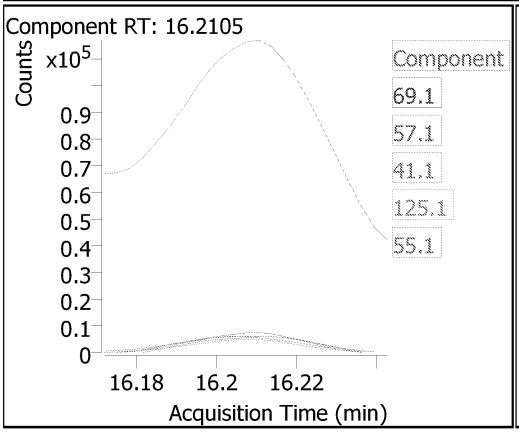
Agilent Technologies

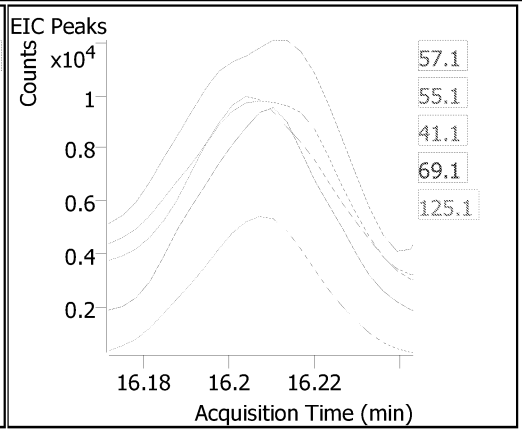
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.2105	Cyclohexane, 1,1,4,4-tetramethyl-	206361.1	84.4	2223-52-1	C10H20	0.4877

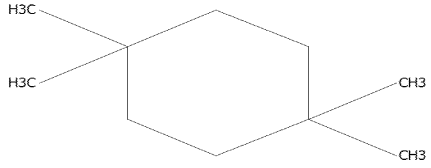




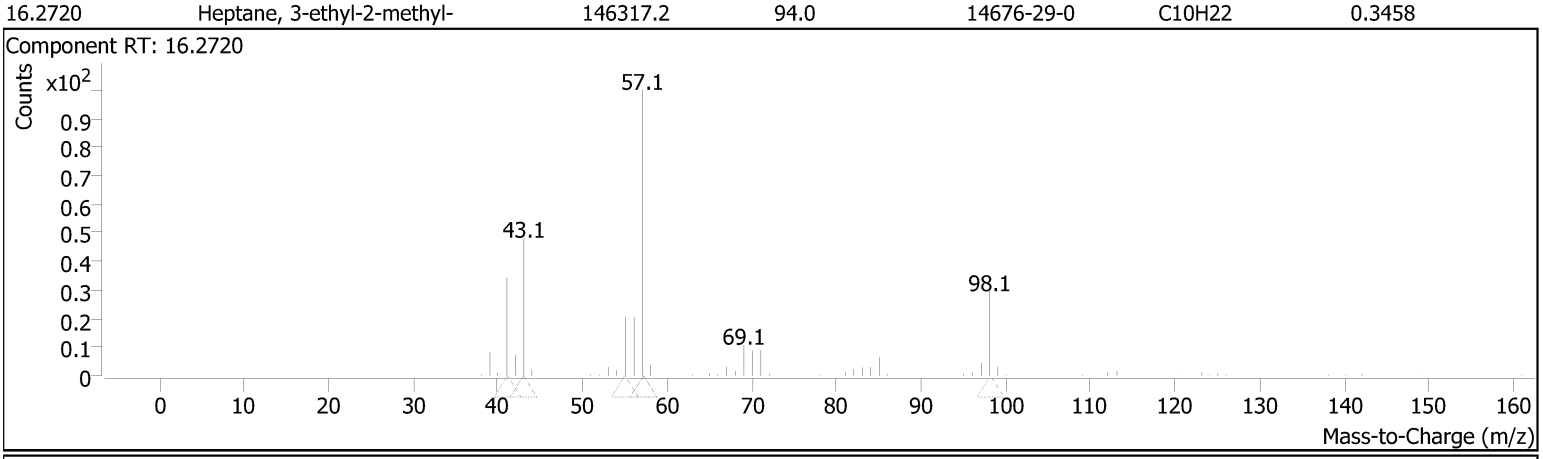


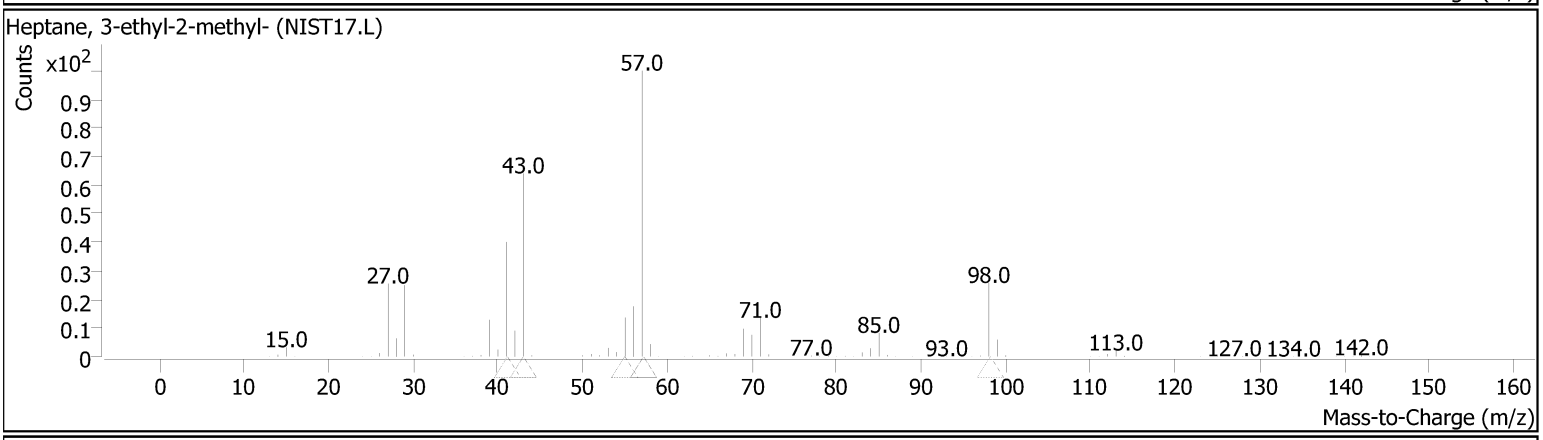


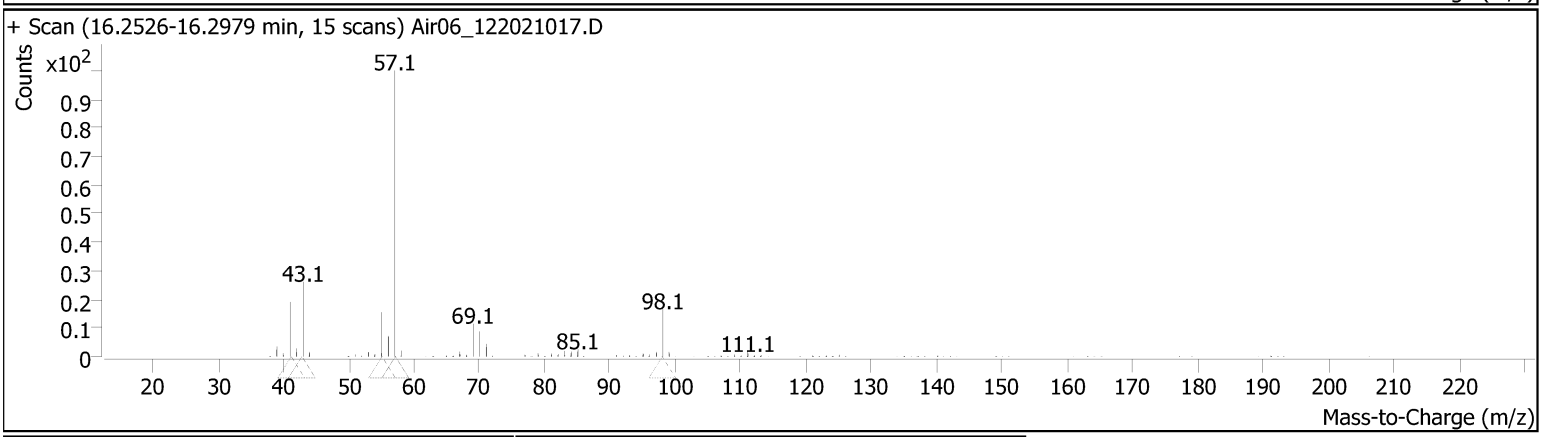


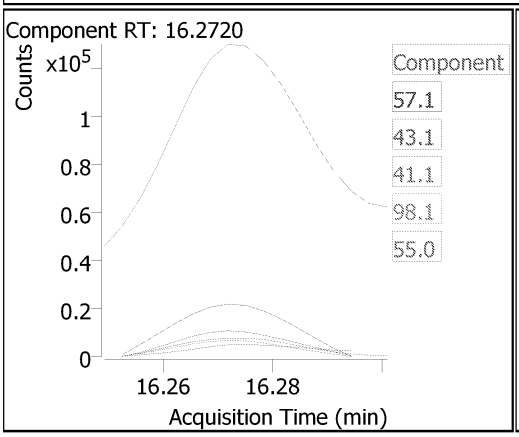


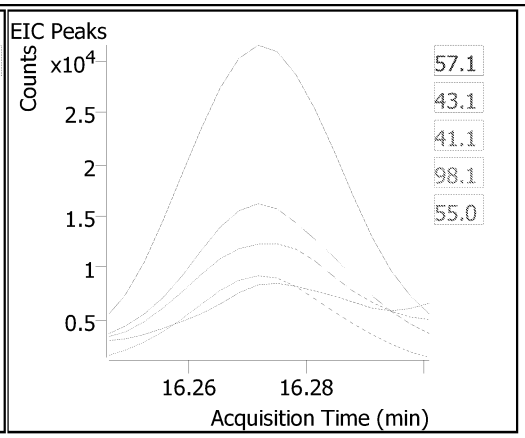
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.2720	Heptane, 3-ethyl-2-methyl-	146317.2	94.0	14676-29-0	C10H22	0.3458

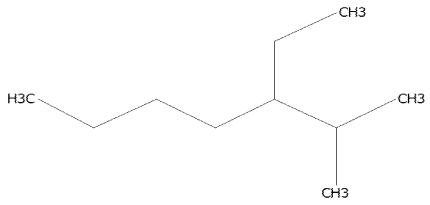




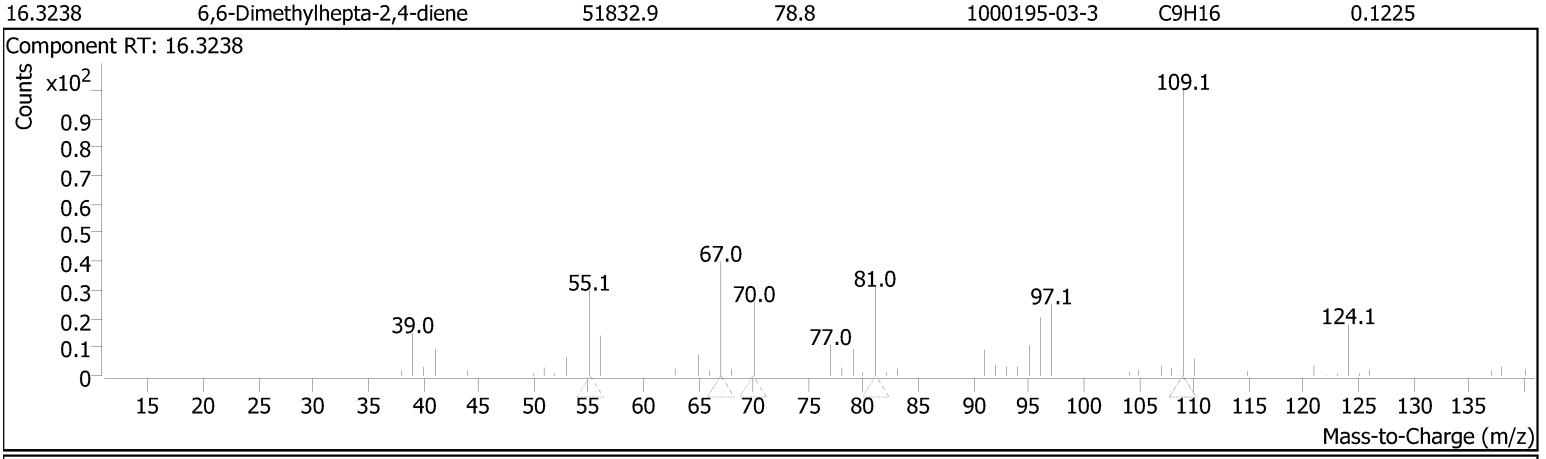


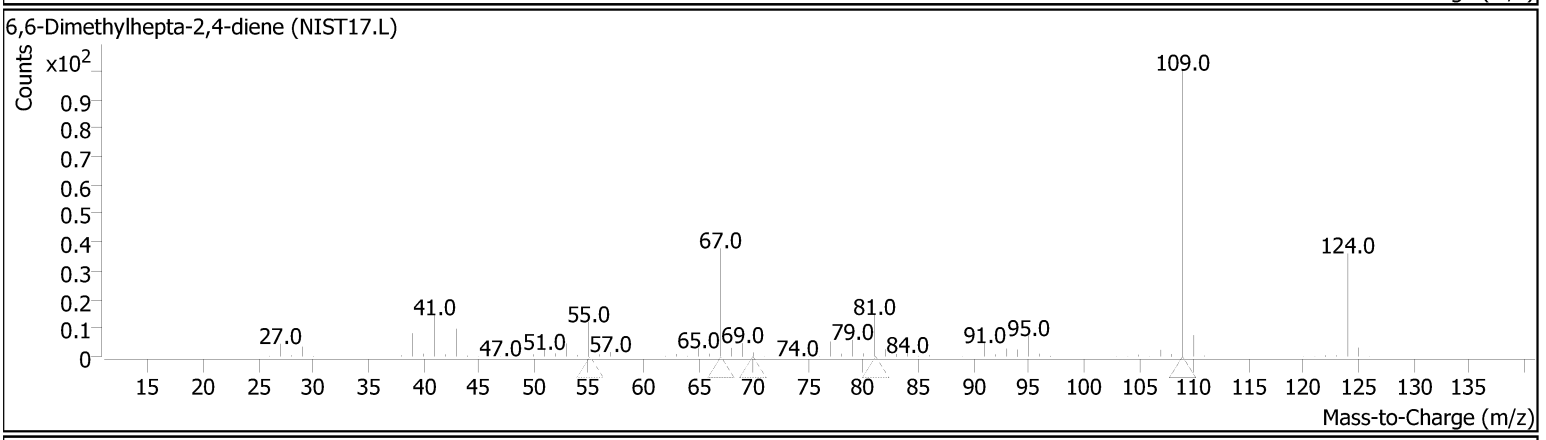


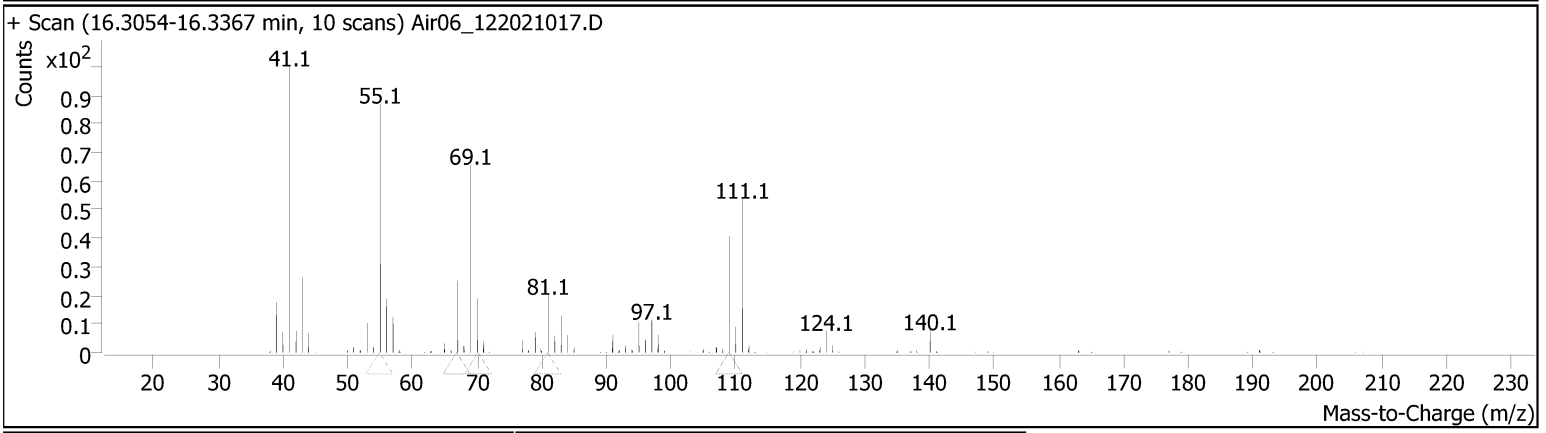


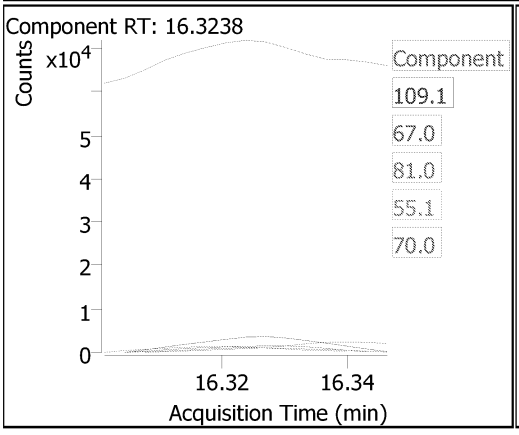


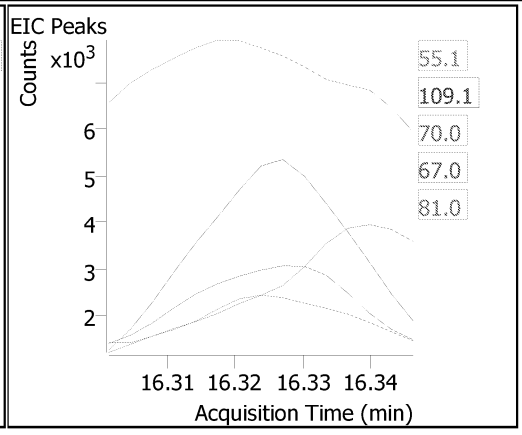
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.3238	6,6-Dimethylhepta-2,4-diene	51832.9	78.8	1000195-03-3	C9H16	0.1225

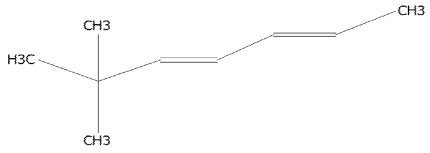




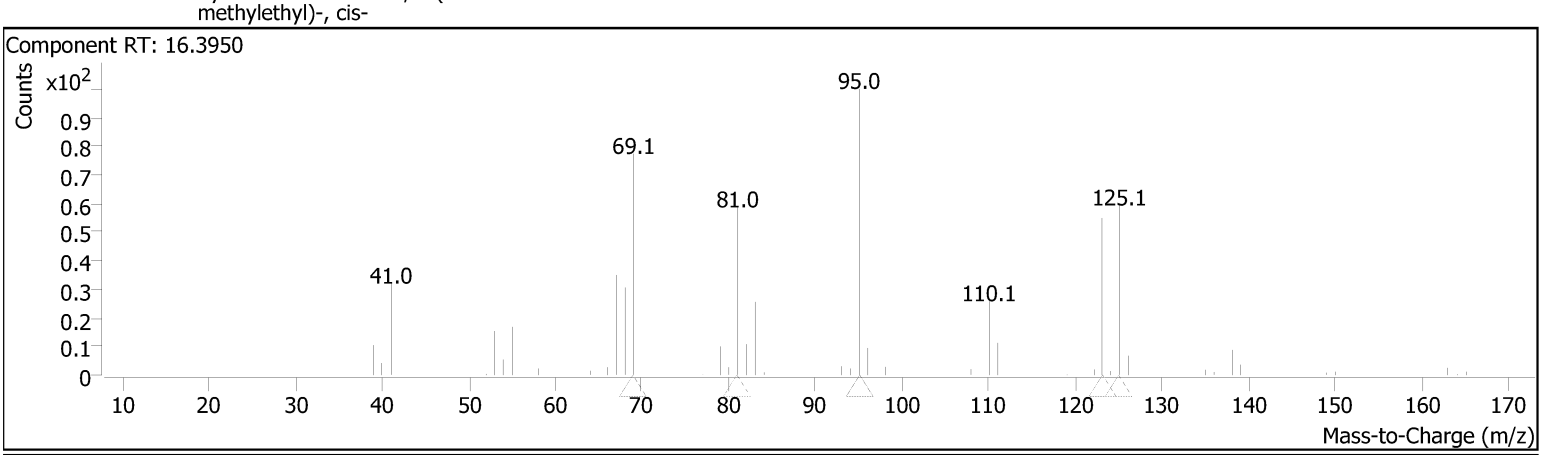


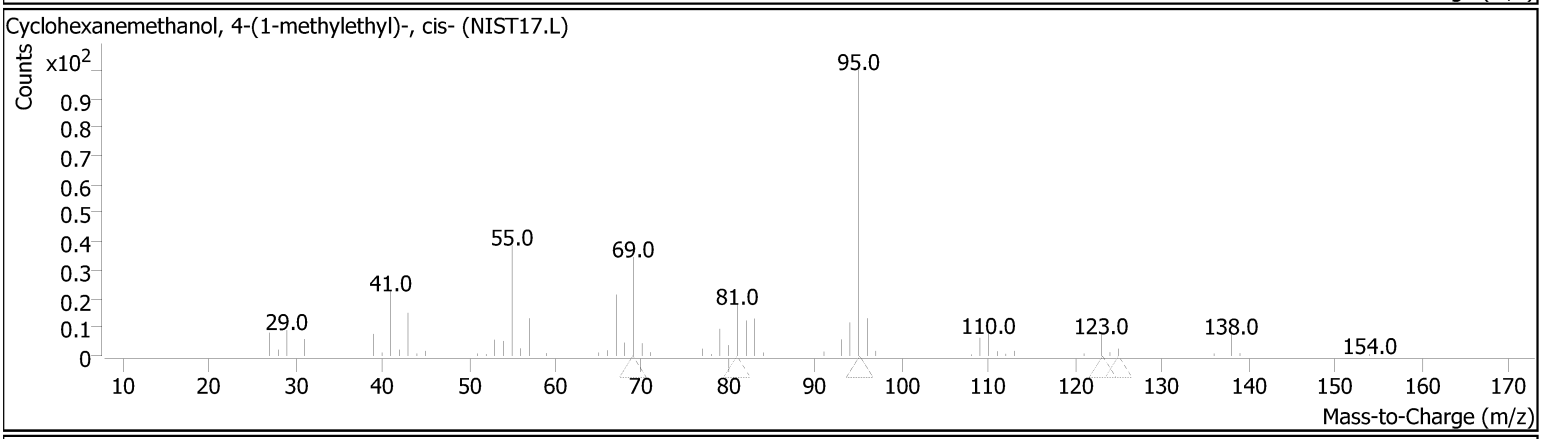


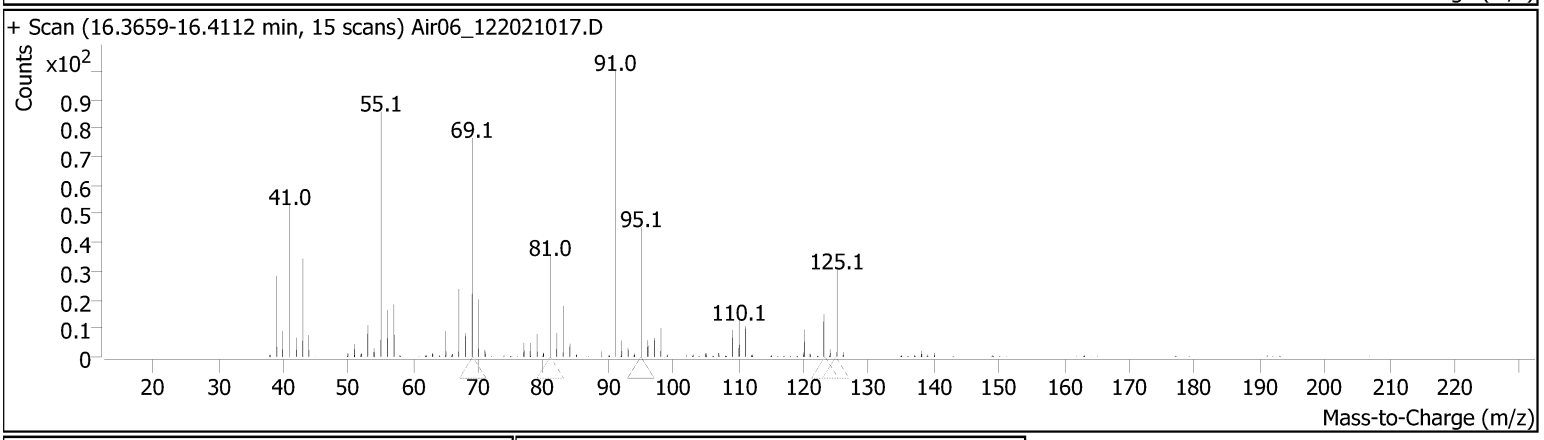


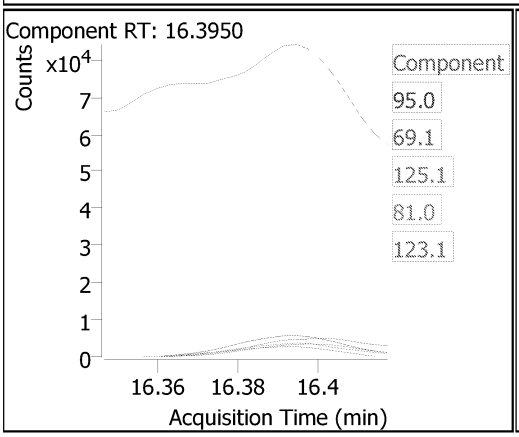


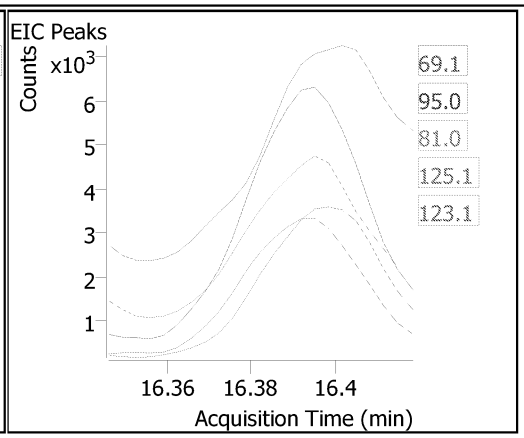
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.3950	Cyclohexanemethanol, 4-(1-methylethyl)-, cis-	84697.9	72.5	13828-37-0	C10H20O	0.2002

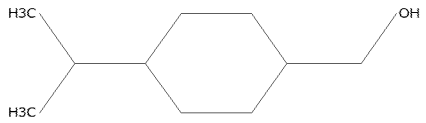




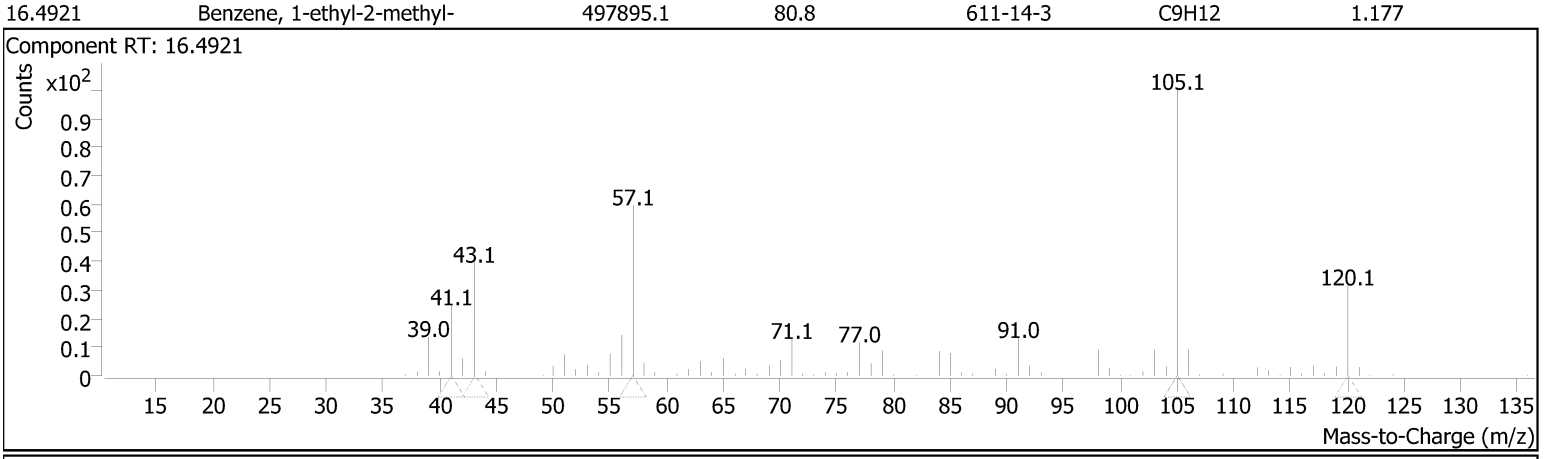


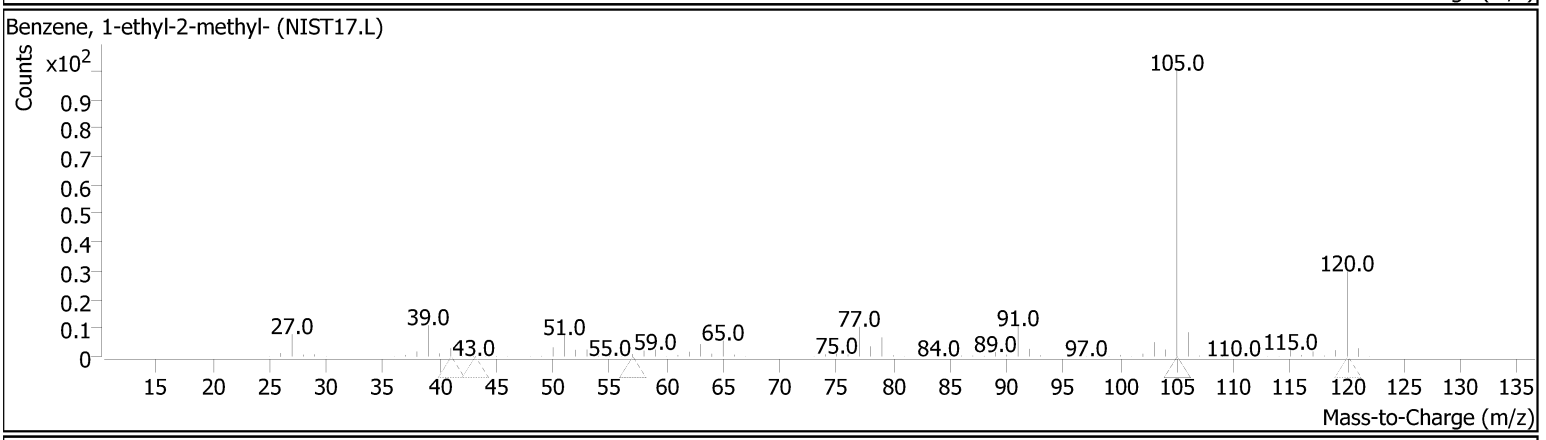


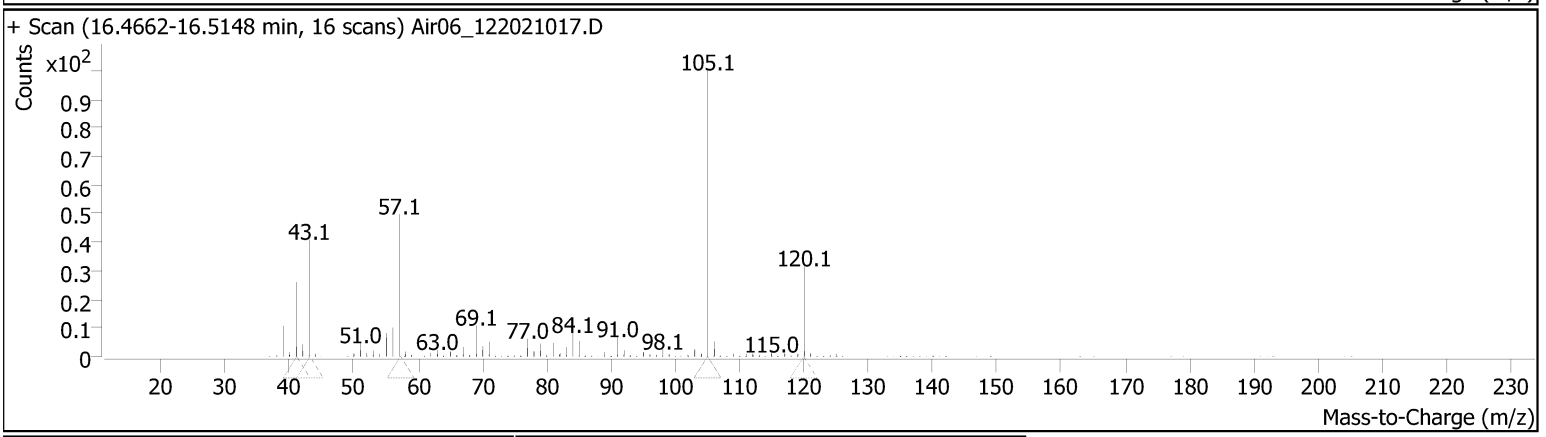


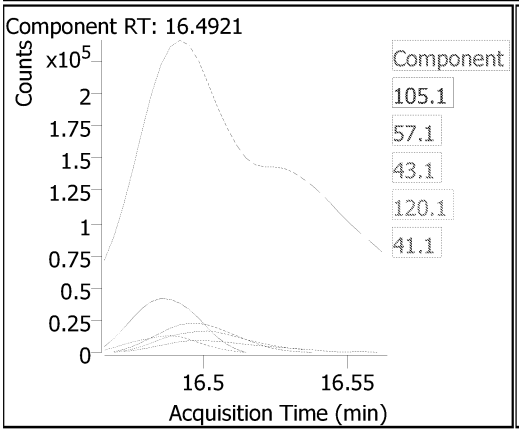


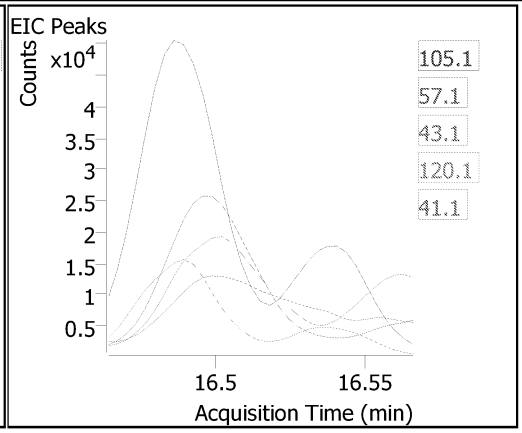
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.4921	Benzene, 1-ethyl-2-methyl-	497895.1	80.8	611-14-3	C9H12	1.177

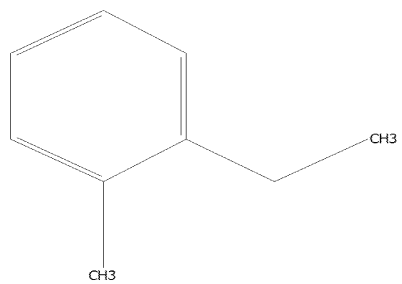




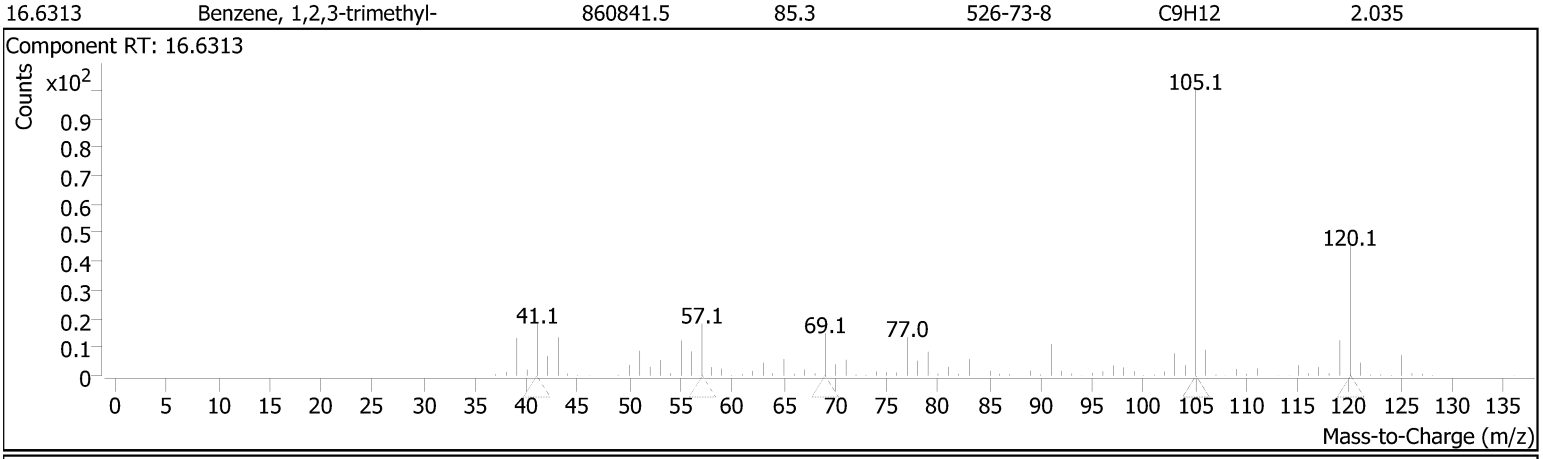


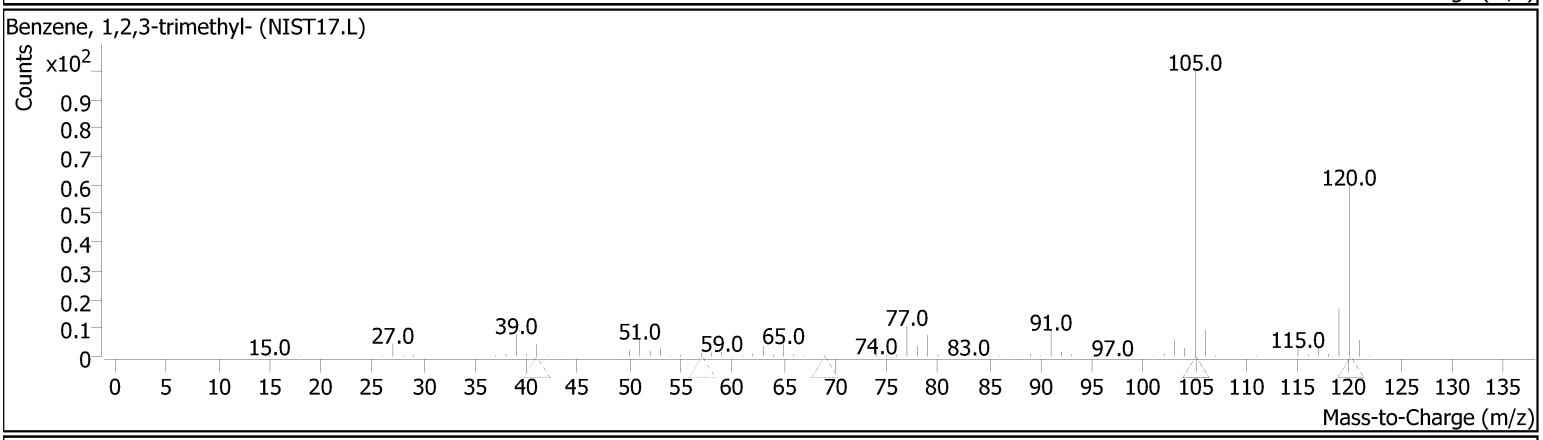


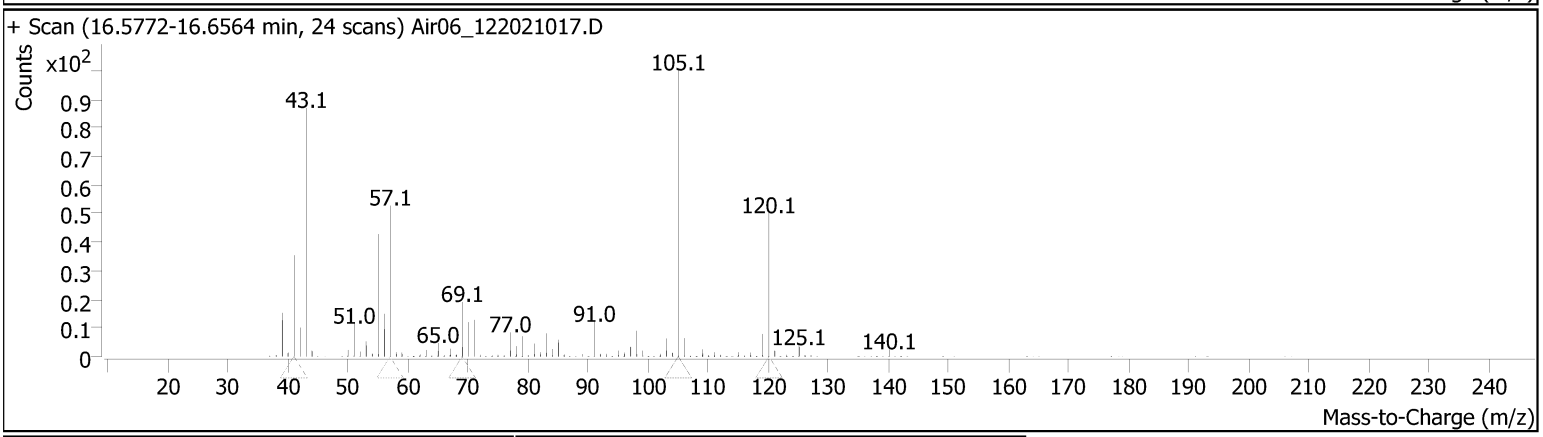


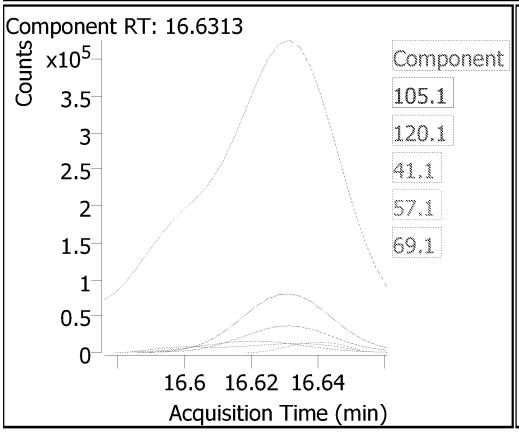


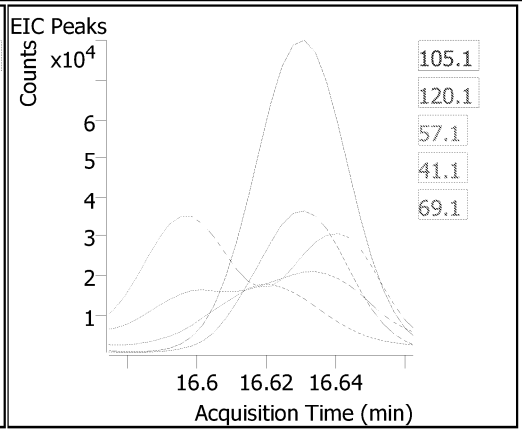
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.6313	Benzene, 1,2,3-trimethyl-	860841.5	85.3	526-73-8	C9H12	2.035

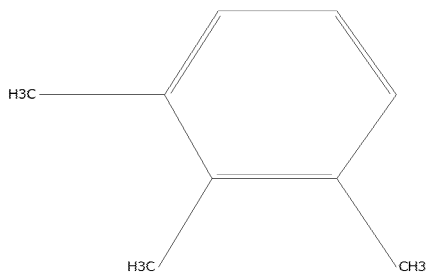




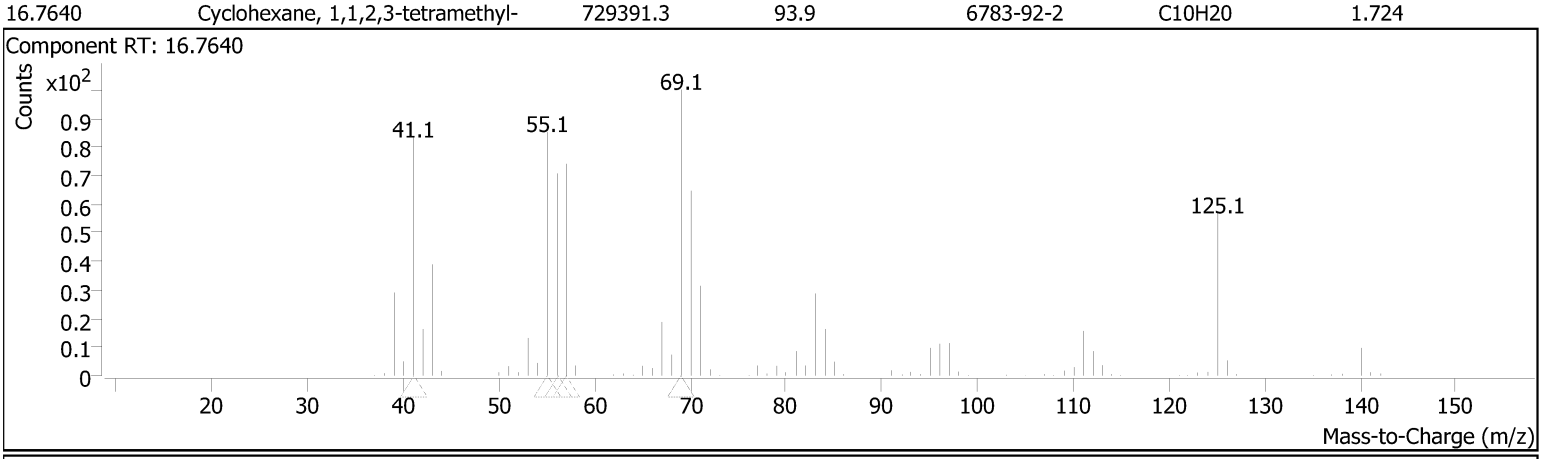


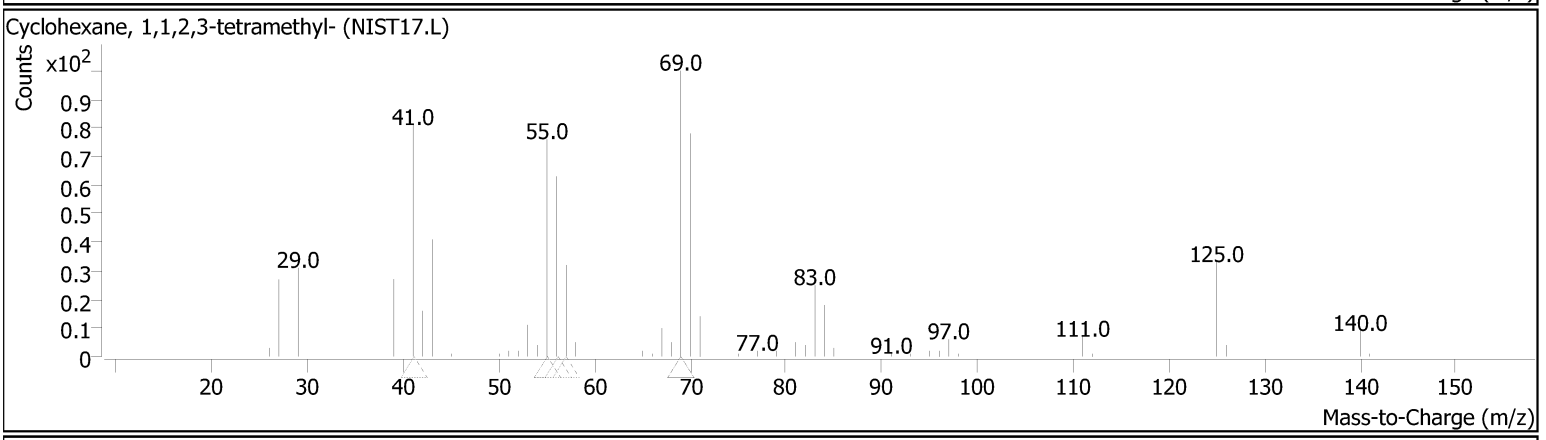


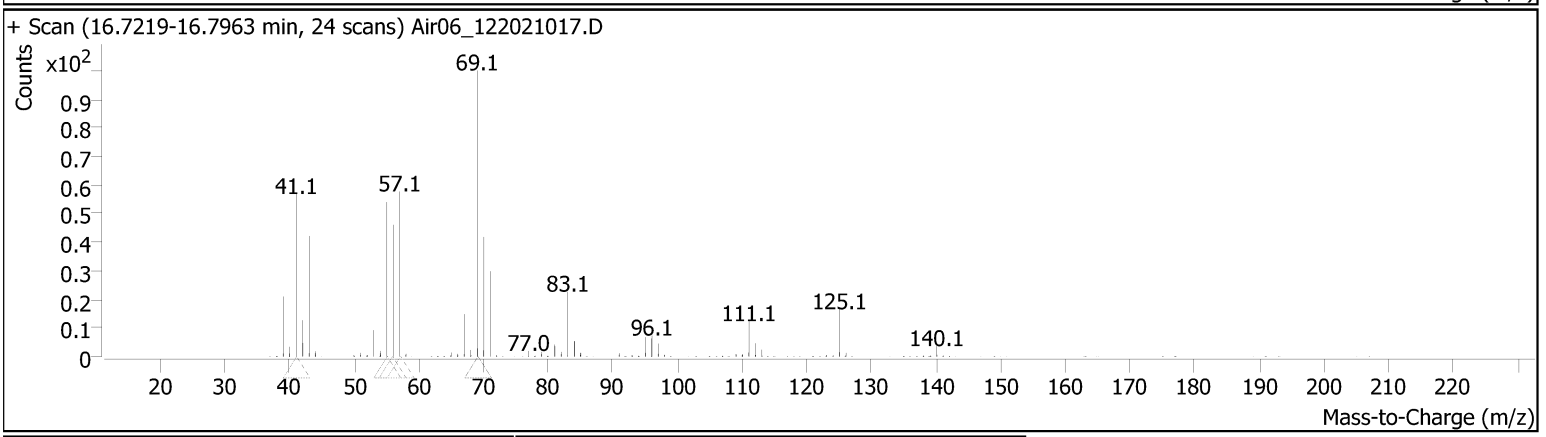


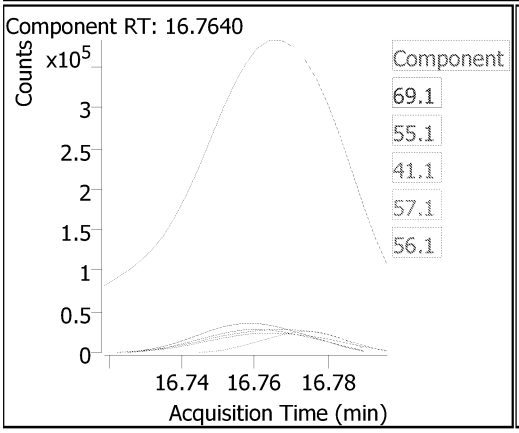


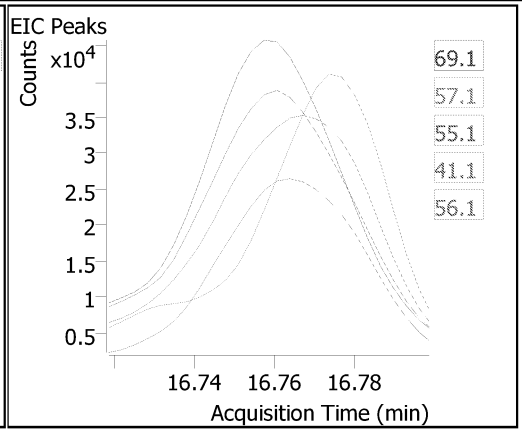
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.7640	Cyclohexane, 1,1,2,3-tetramethyl-	729391.3	93.9	6783-92-2	C10H20	1.724

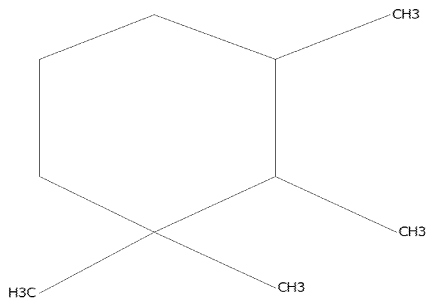




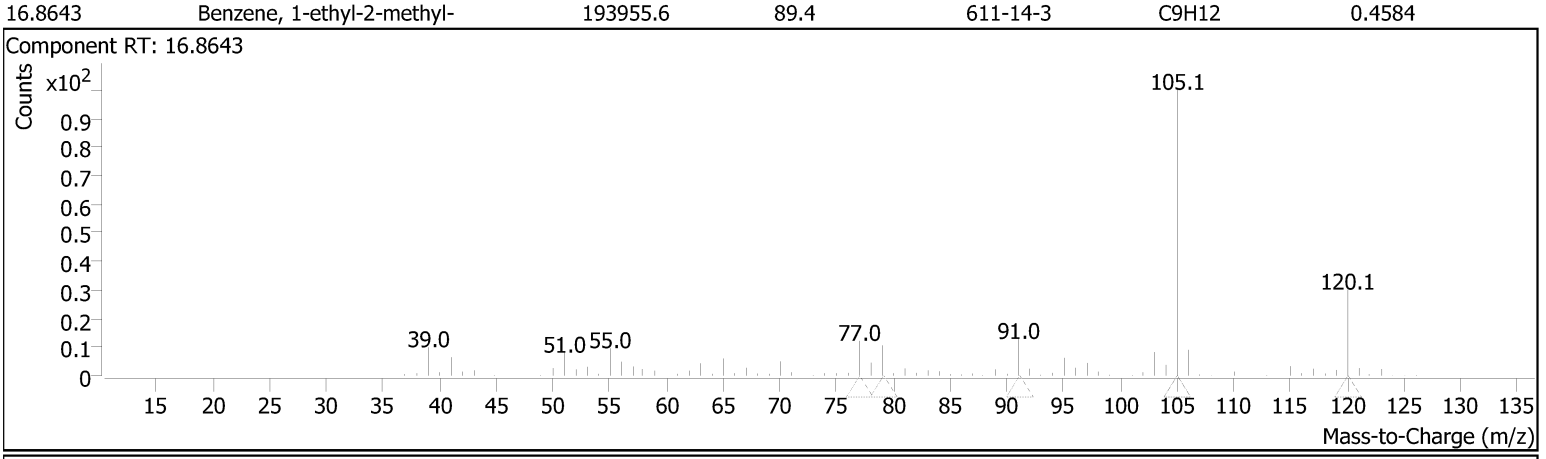


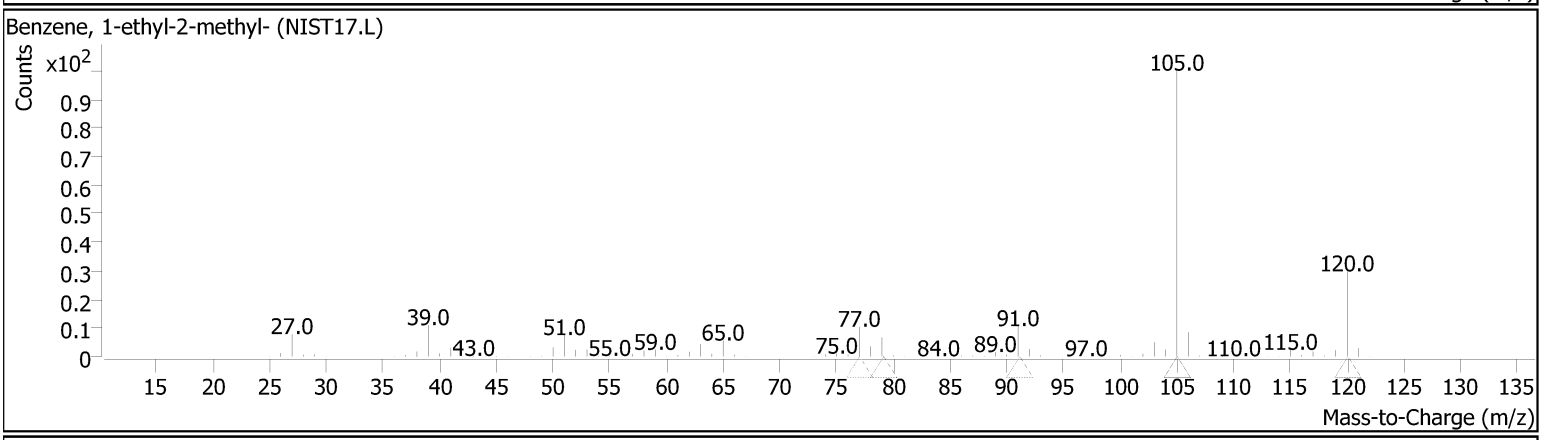


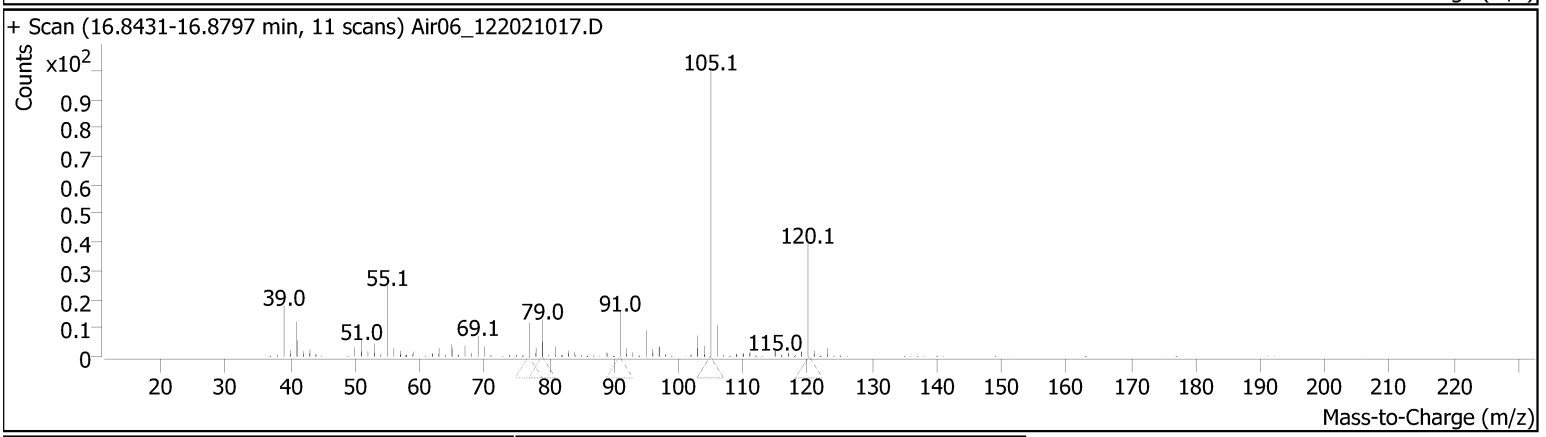


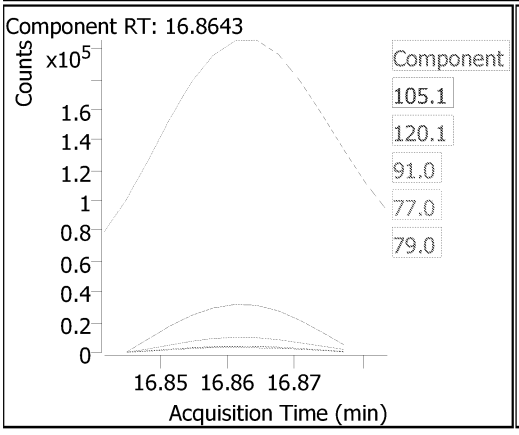


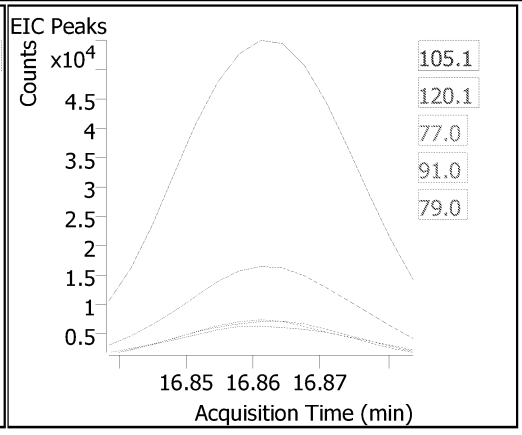
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.8643	Benzene, 1-ethyl-2-methyl-	193955.6	89.4	611-14-3	C9H12	0.4584

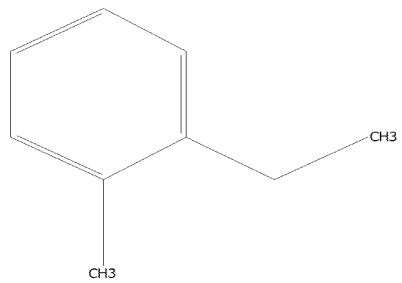




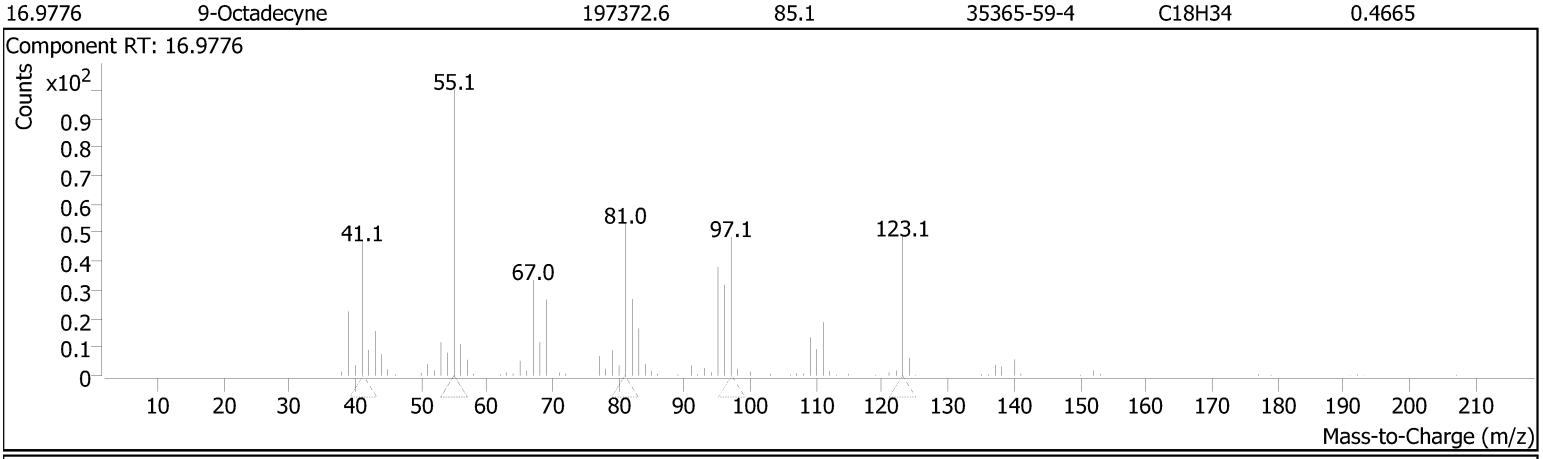


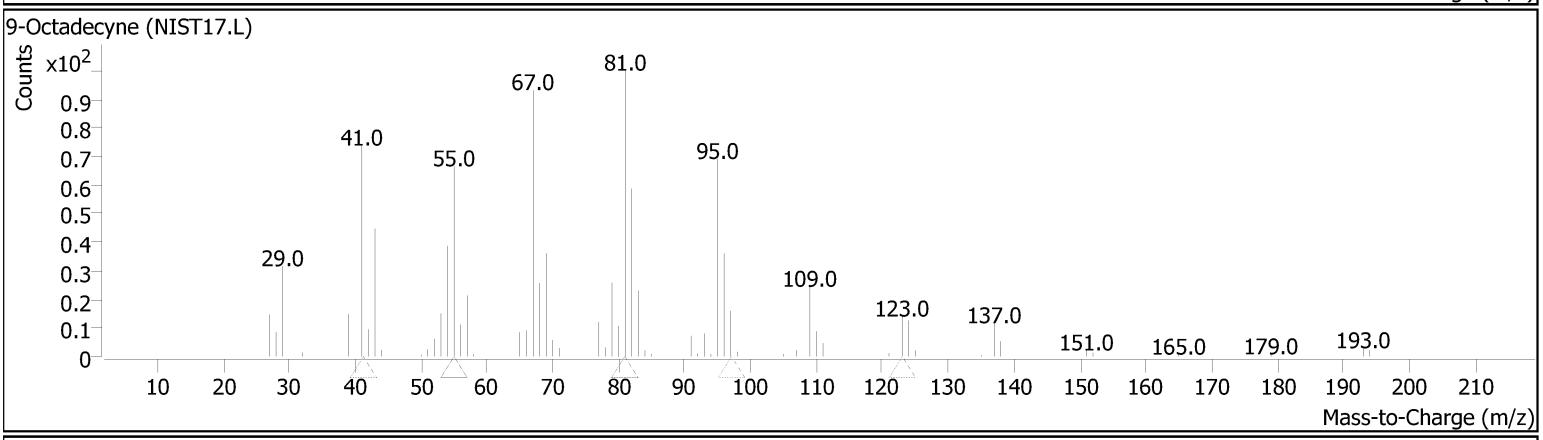


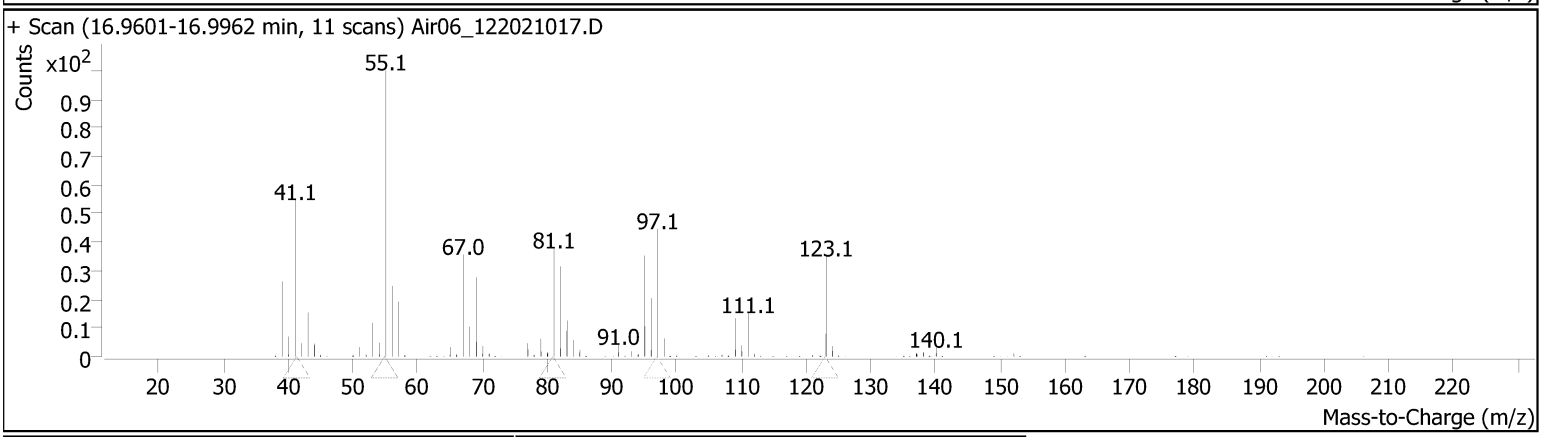


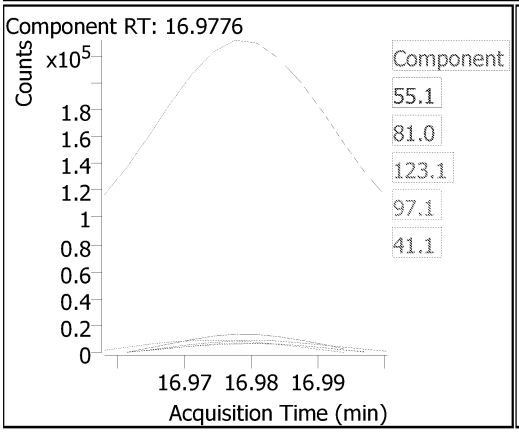


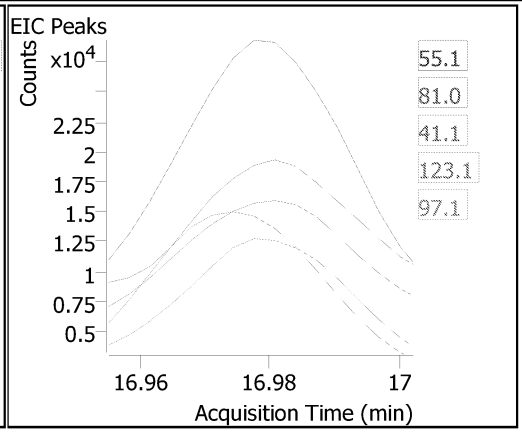
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.9776	9-Octadecyne	197372.6	85.1	35365-59-4	C18H34	0.4665





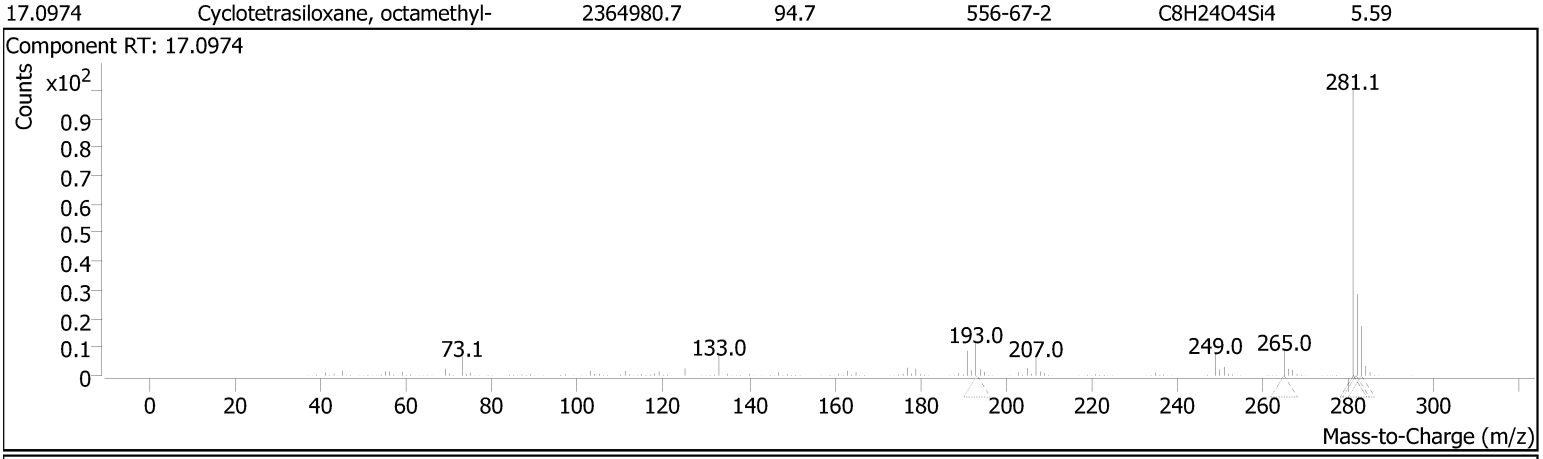


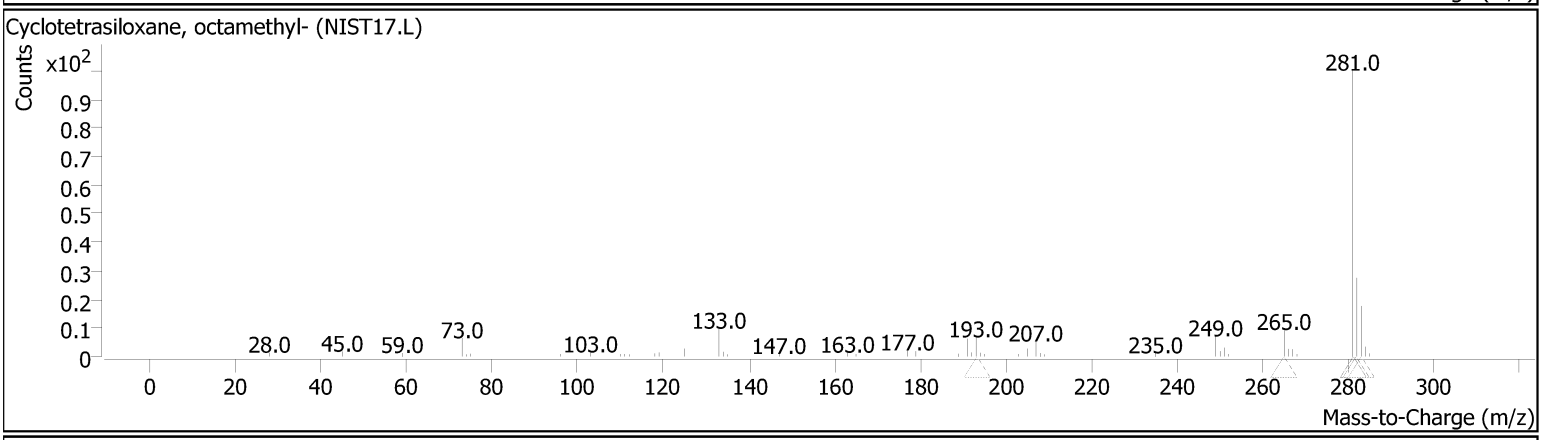


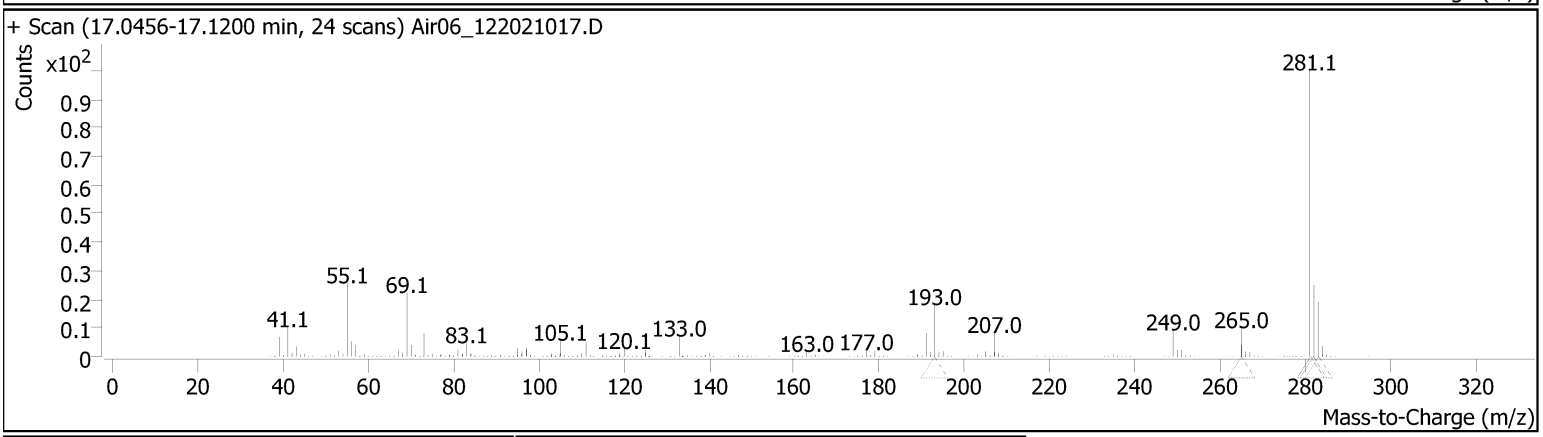


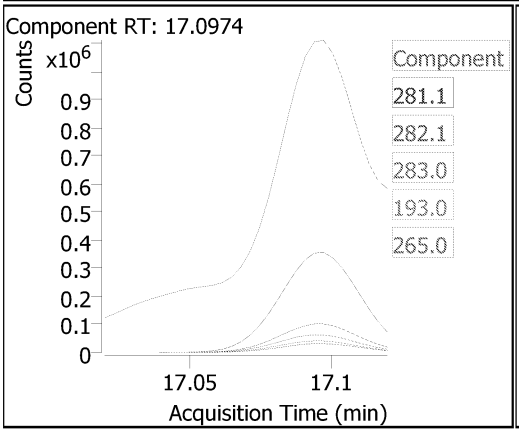


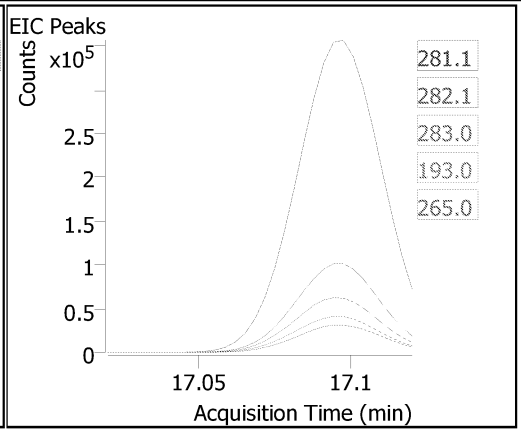
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.0974	Cyclotetrasiloxane, octamethyl-	2364980.7	94.7	556-67-2	C8H24O4Si4	5.59

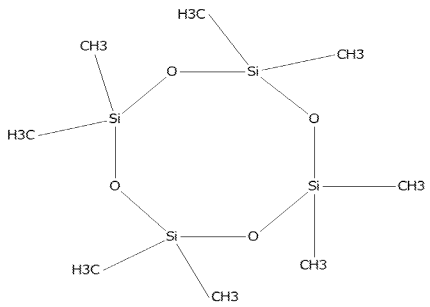




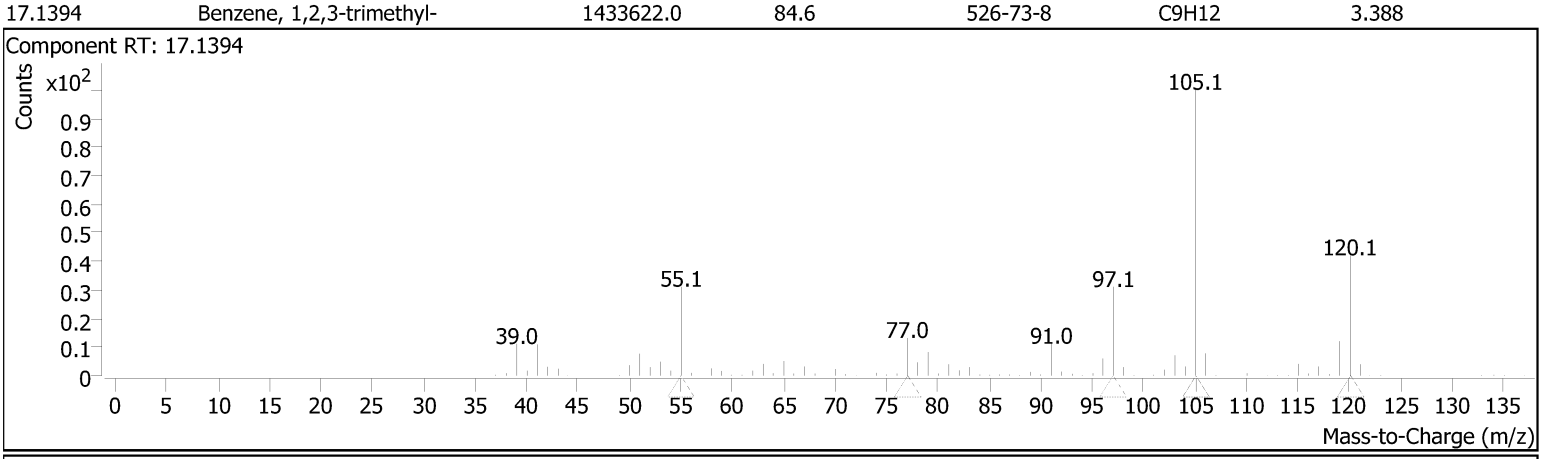


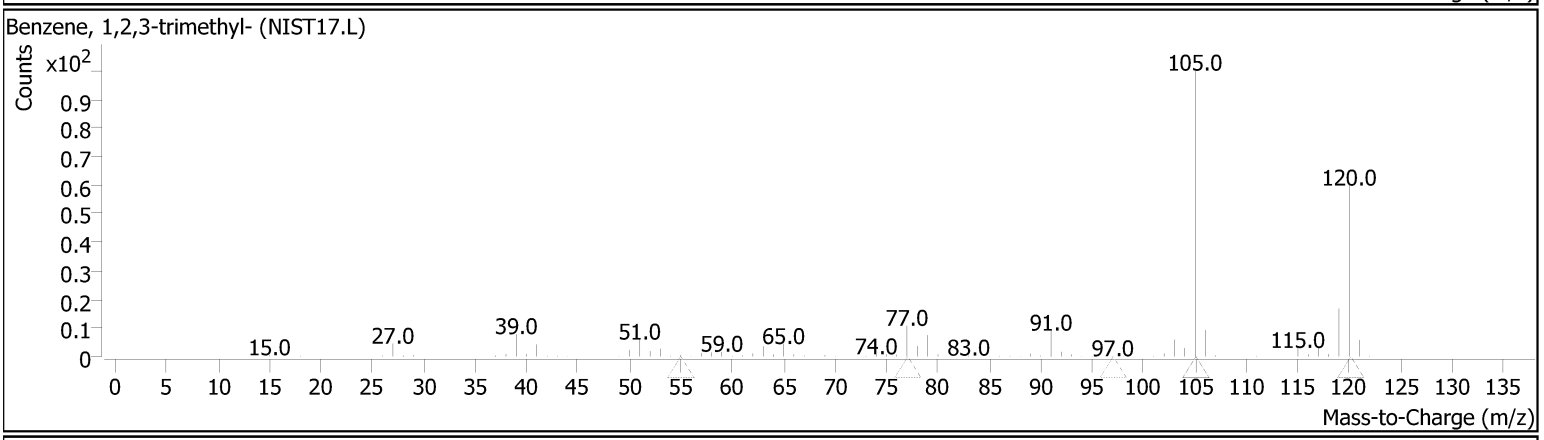


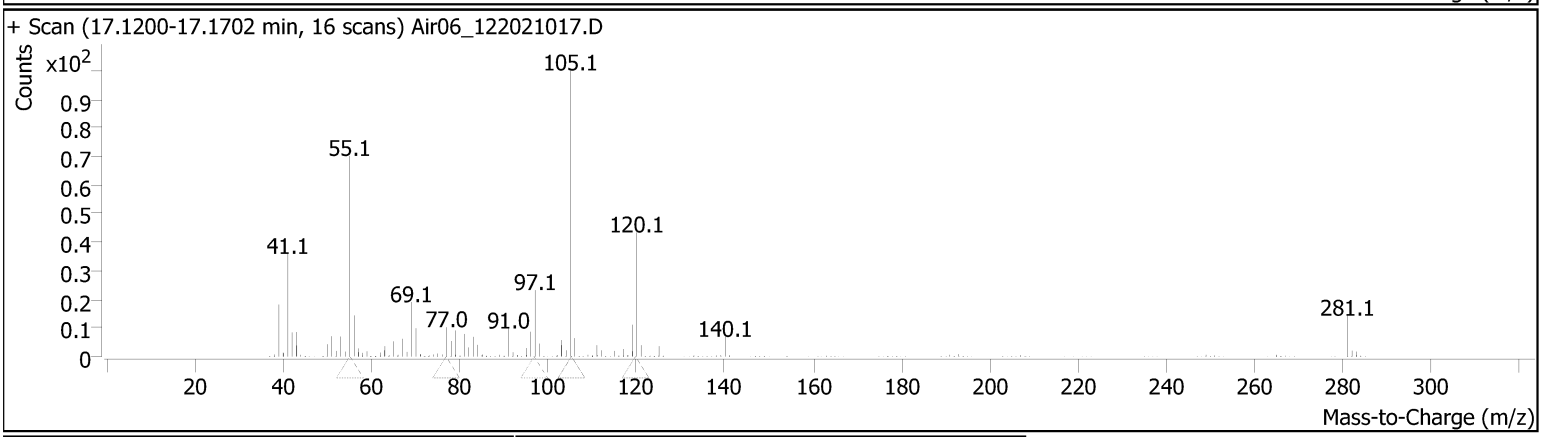


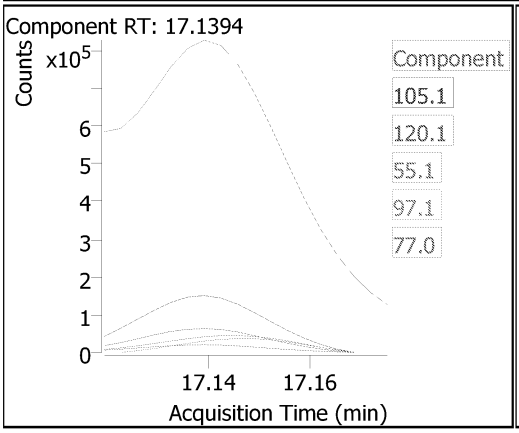


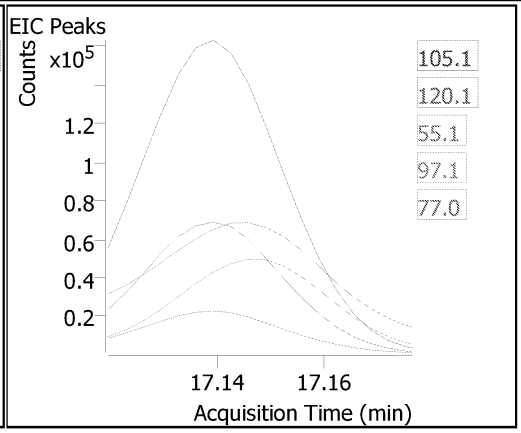
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.1394	Benzene, 1,2,3-trimethyl-	1433622.0	84.6	526-73-8	C9H12	3.388

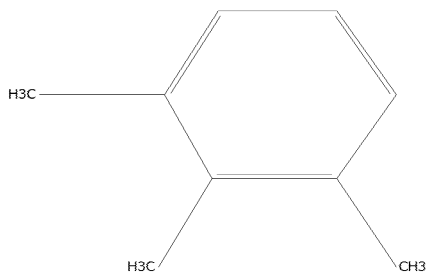




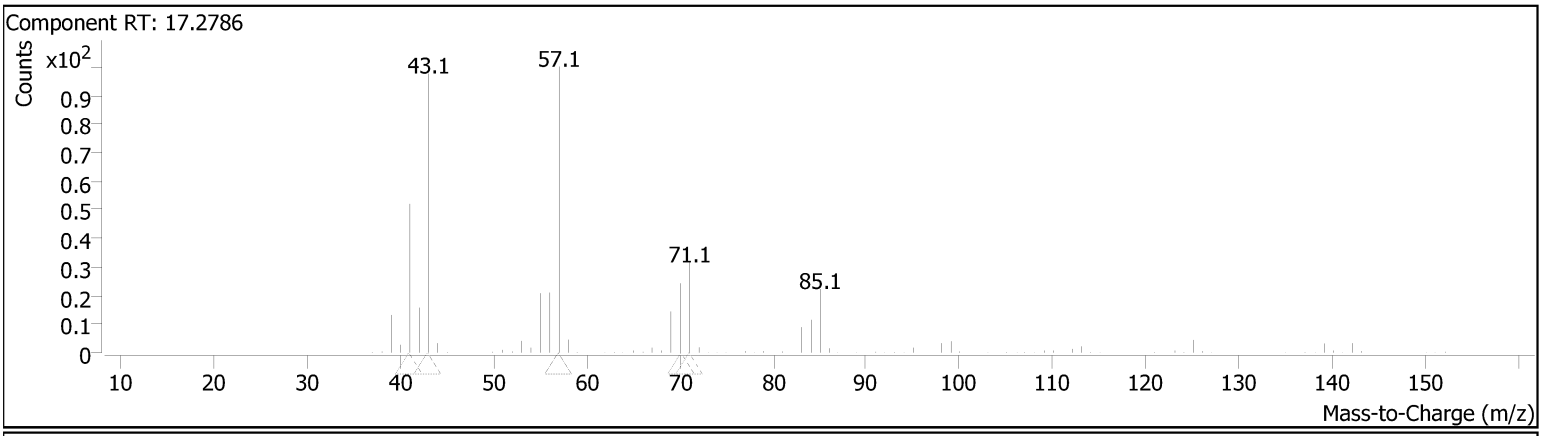


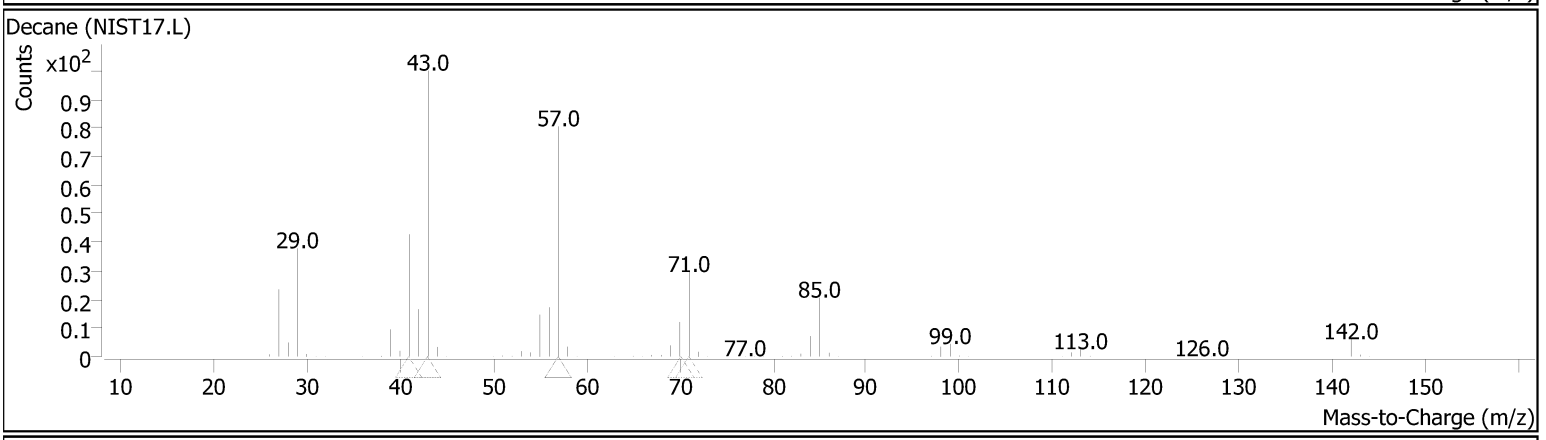


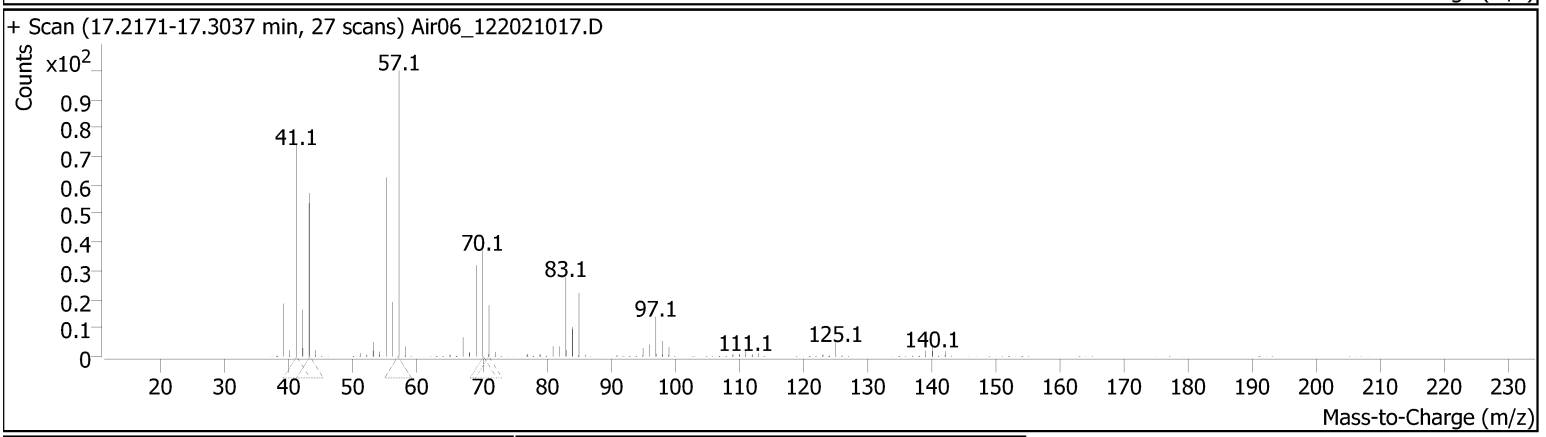


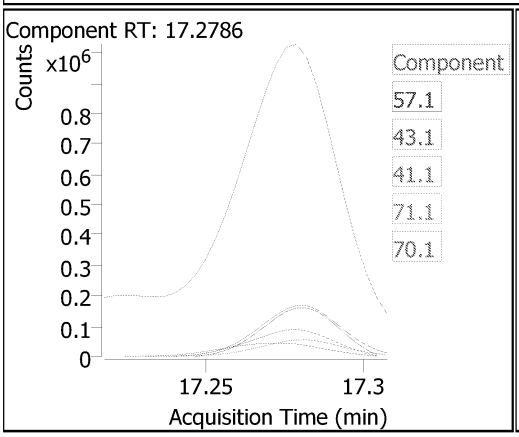


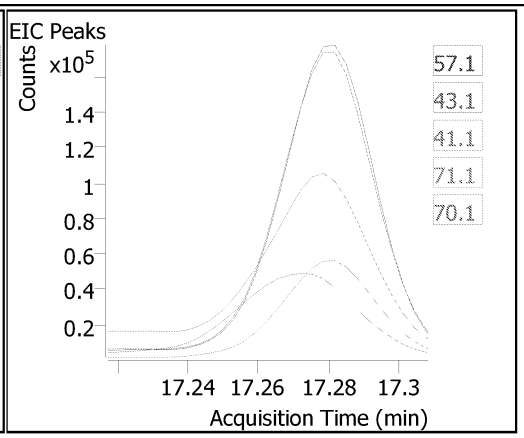
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.2786	Decane	1970284.8	92.7	124-18-5	C10H22	4.657





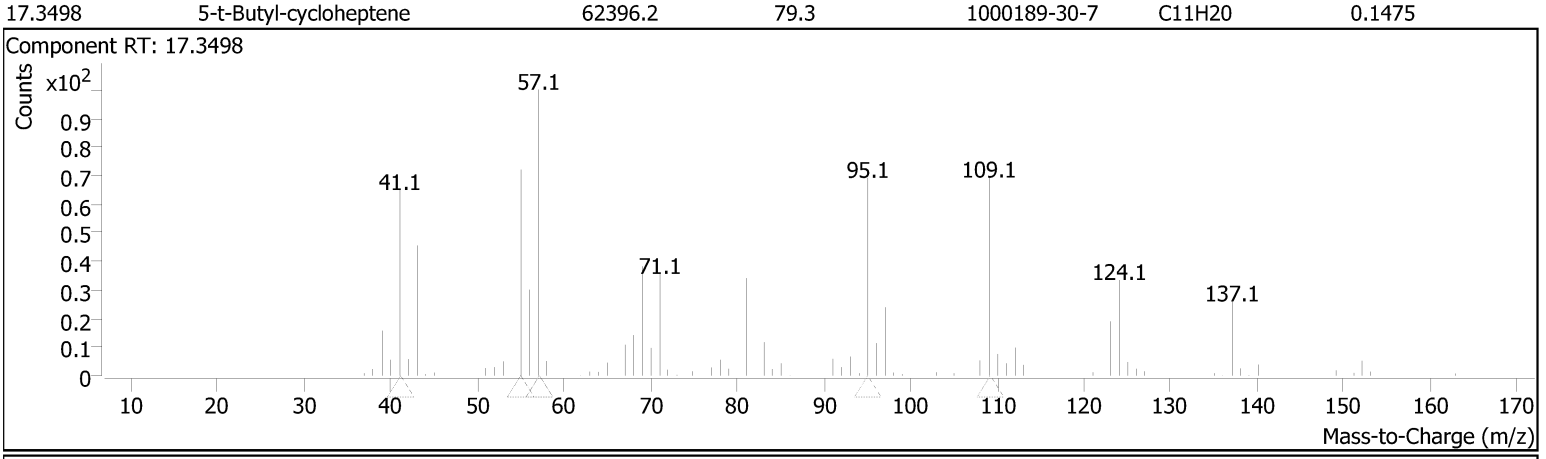


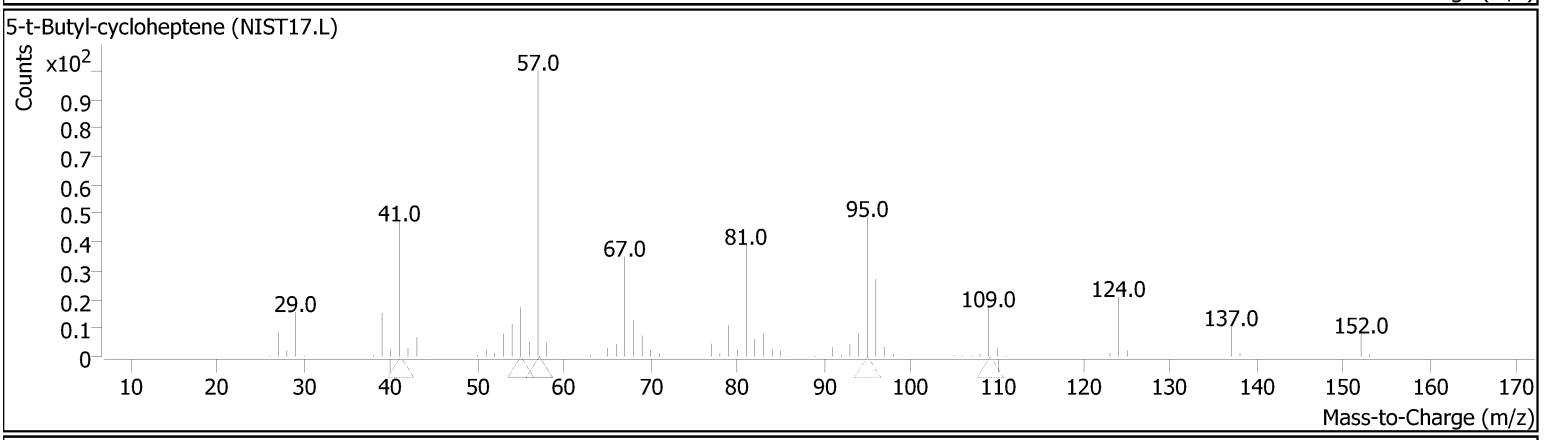


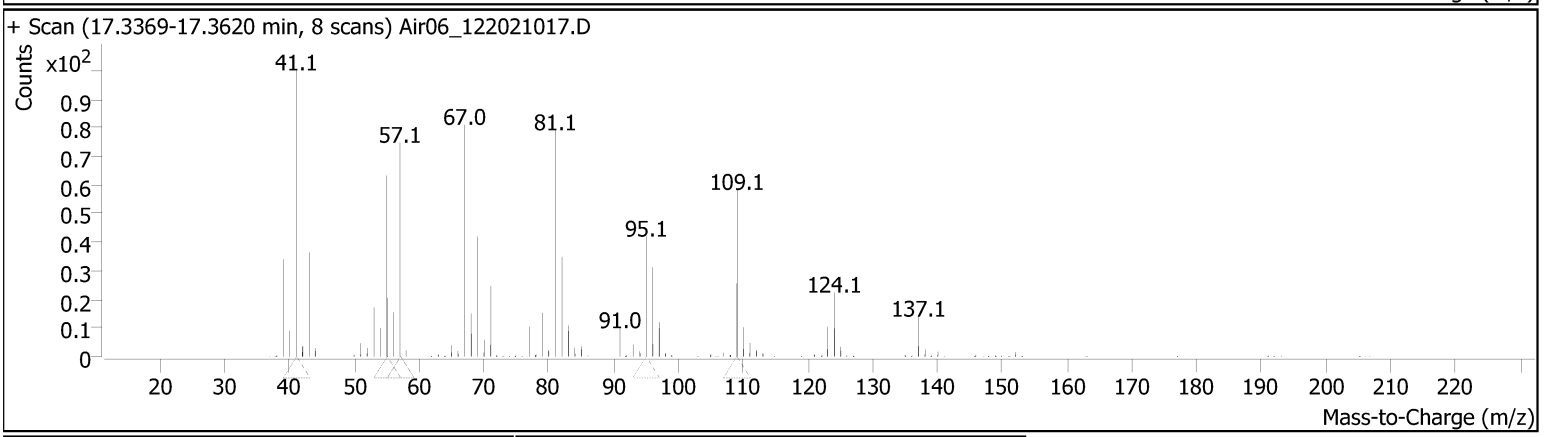


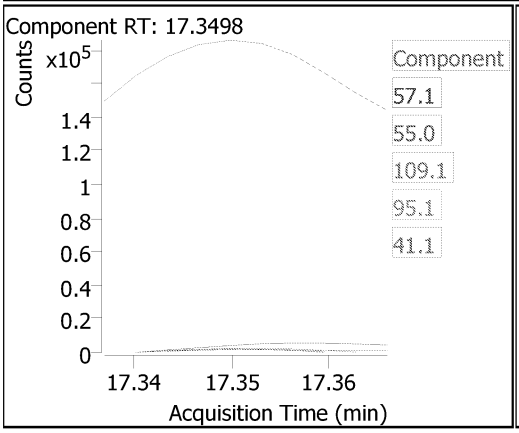


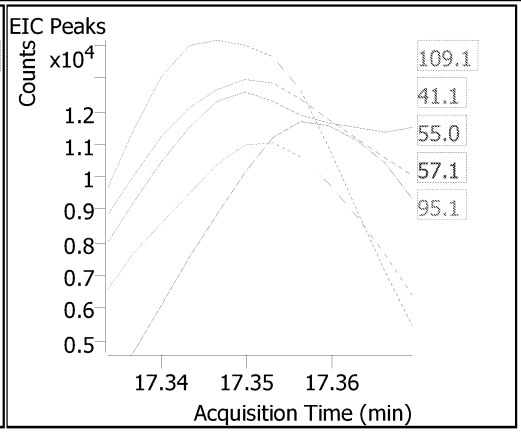
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.3498	5-t-Butyl-cycloheptene	62396.2	79.3	1000189-30-7	C11H20	0.1475

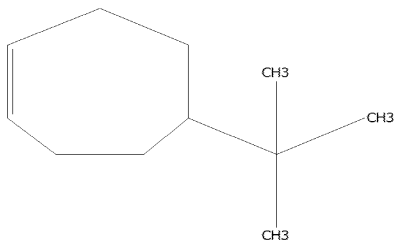




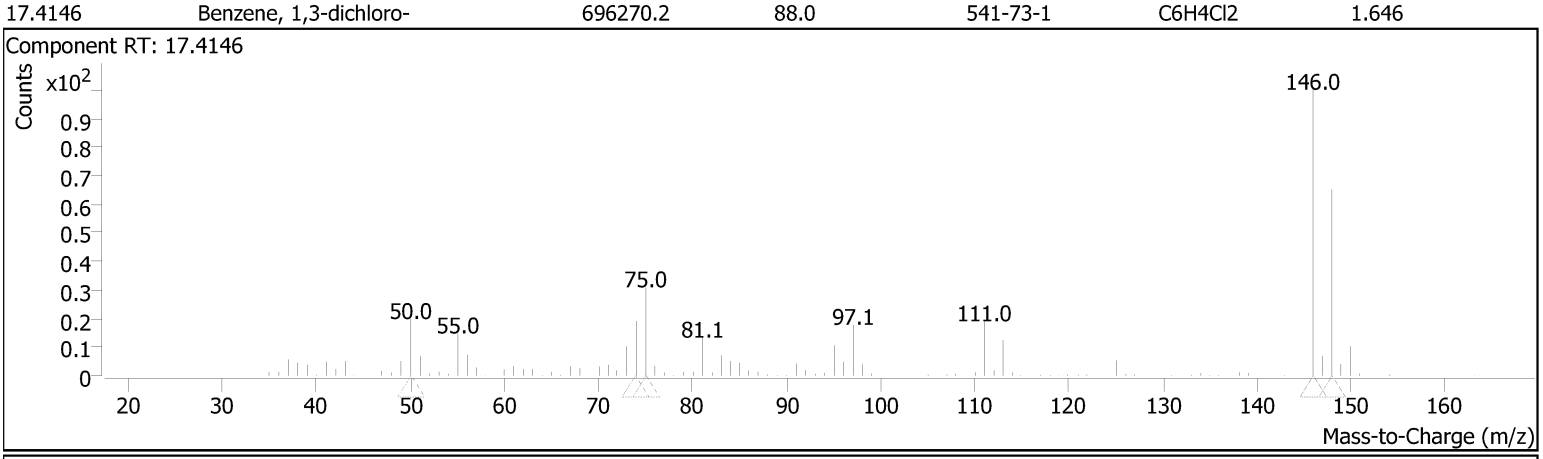


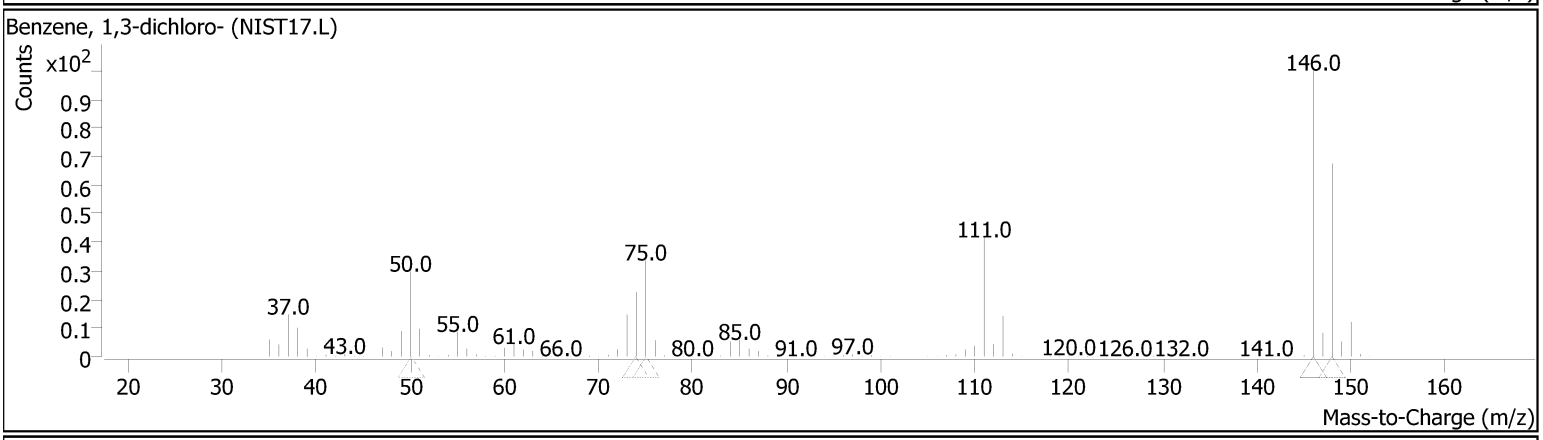


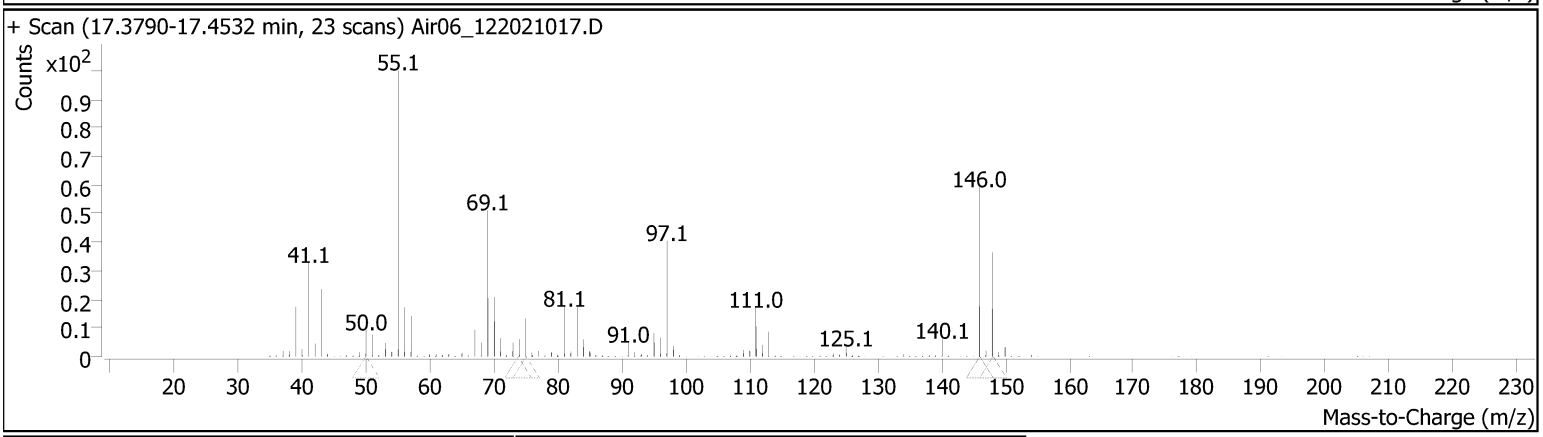


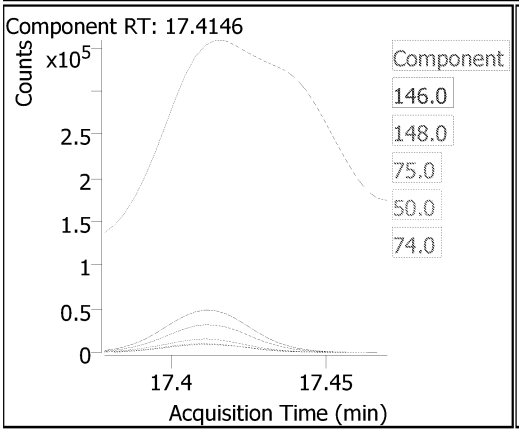


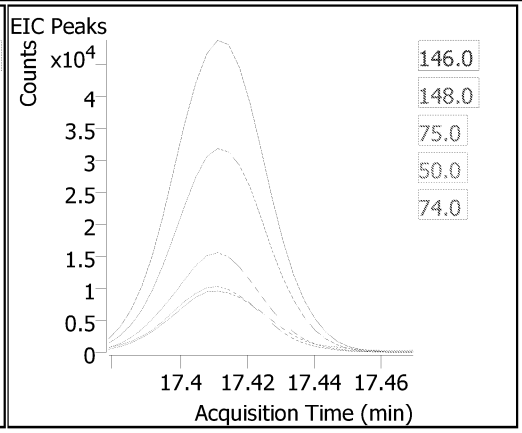
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.4146	Benzene, 1,3-dichloro-	696270.2	88.0	541-73-1	C6H4Cl2	1.646

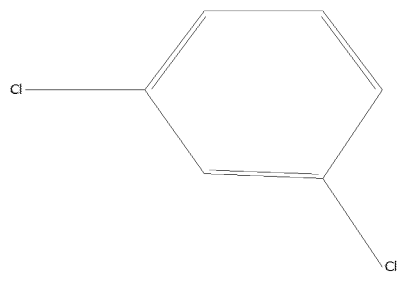




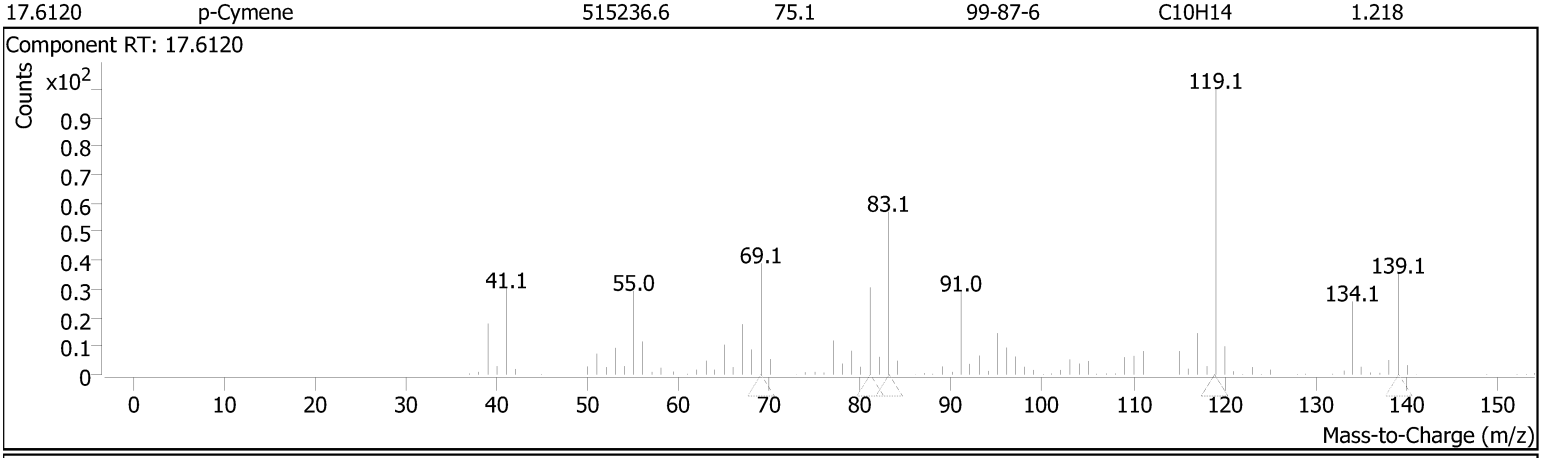


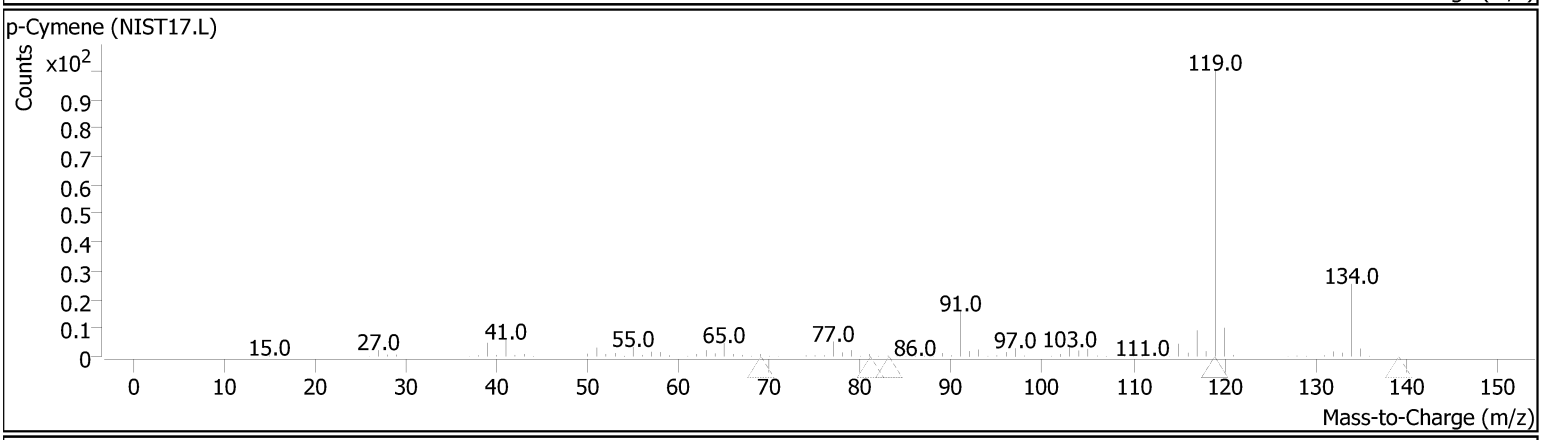


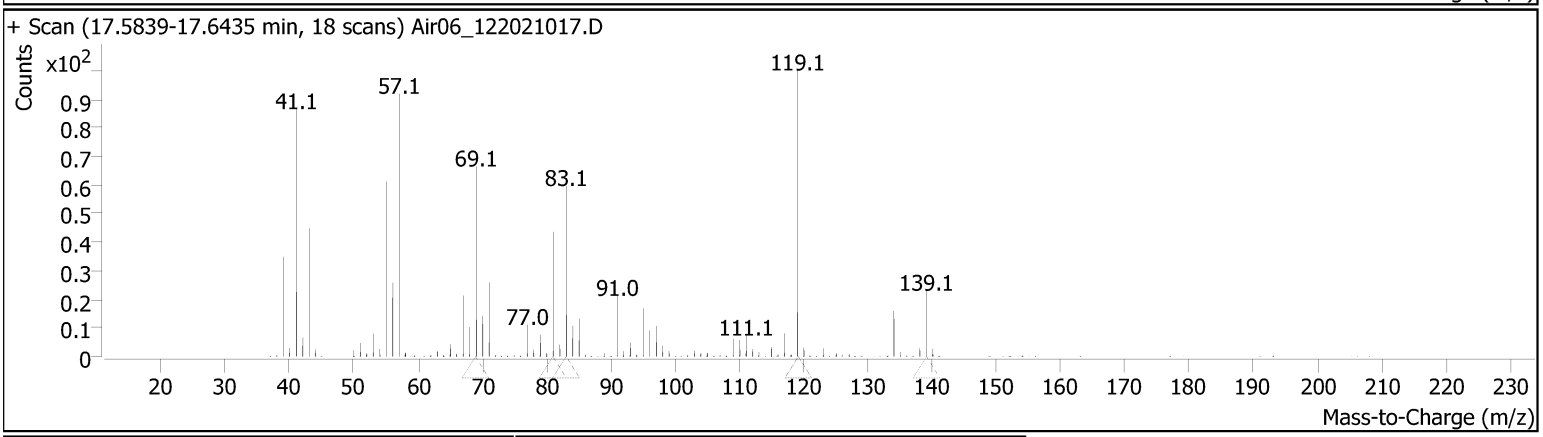


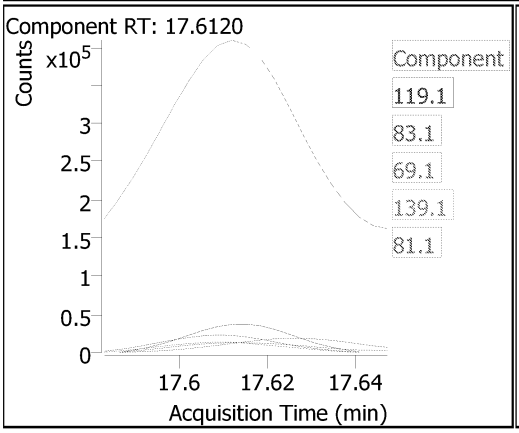


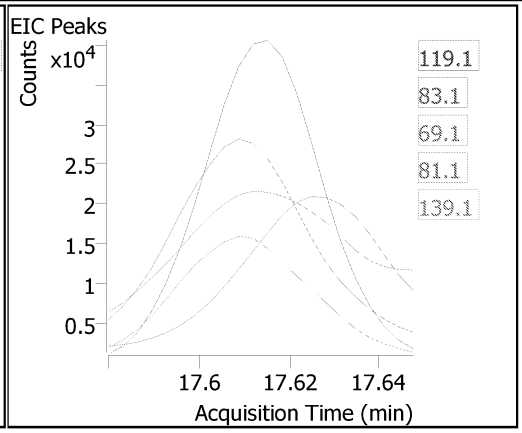
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.6120	p-Cymene	515236.6	75.1	99-87-6	C10H14	1.218

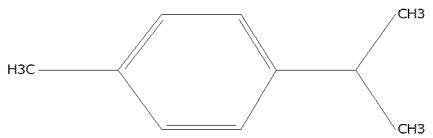




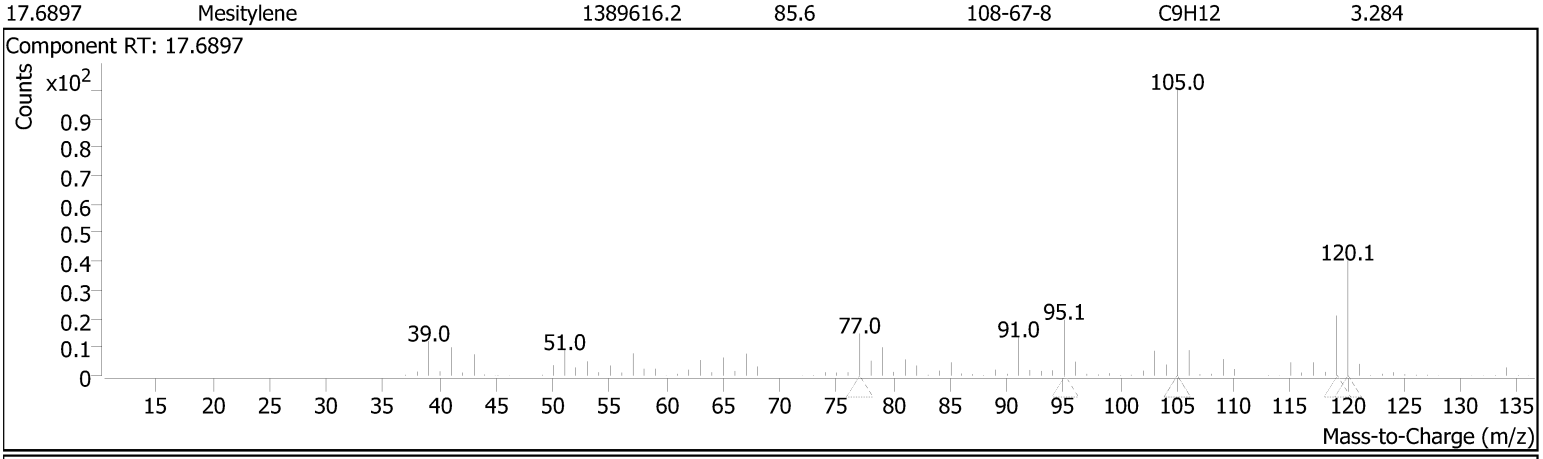


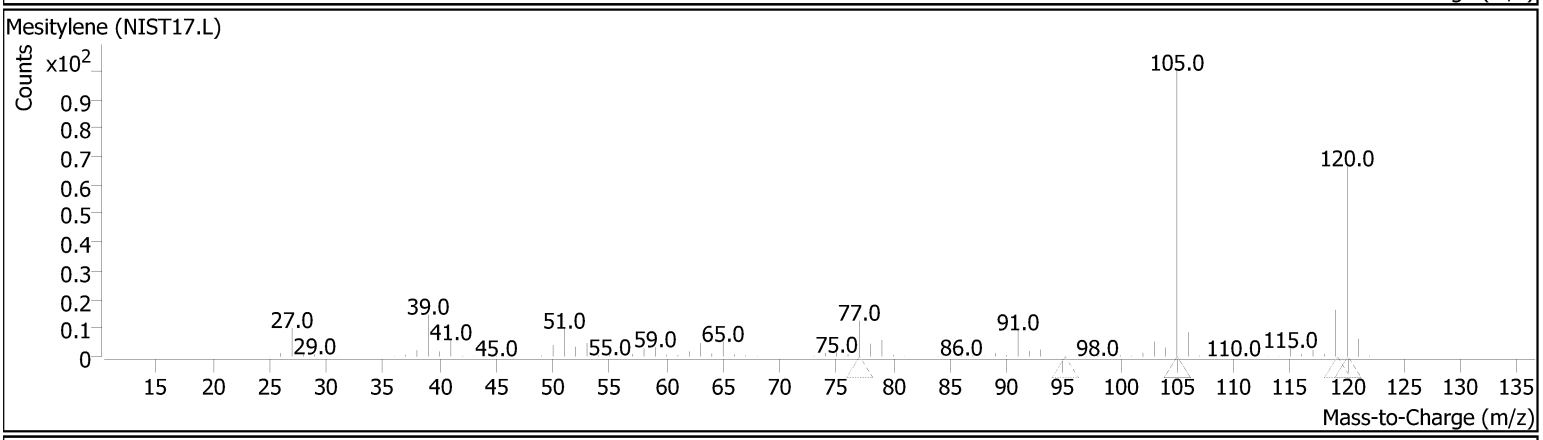


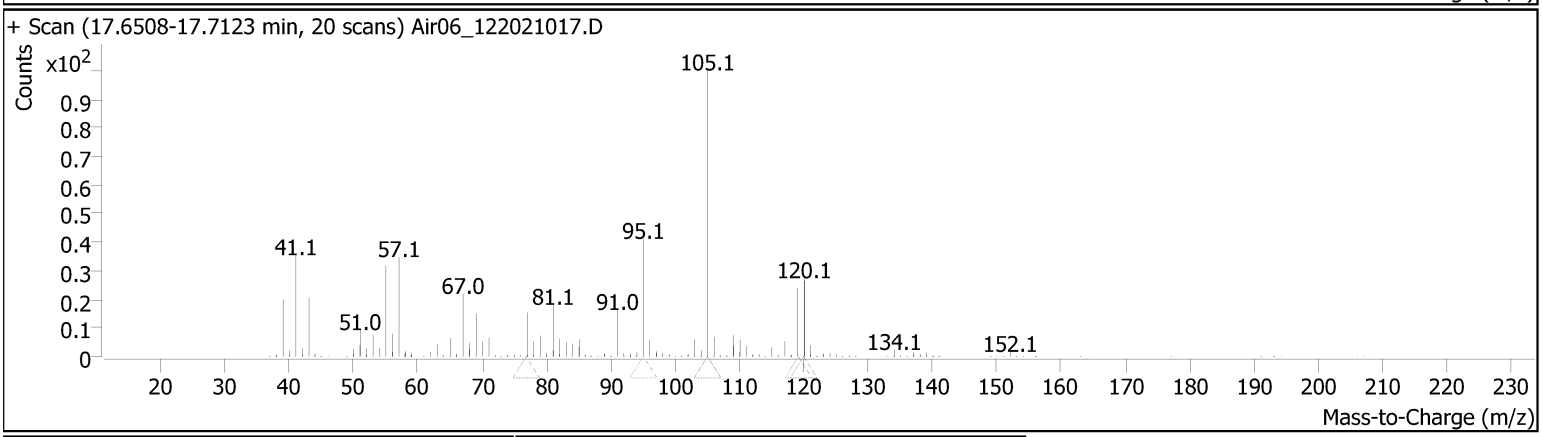


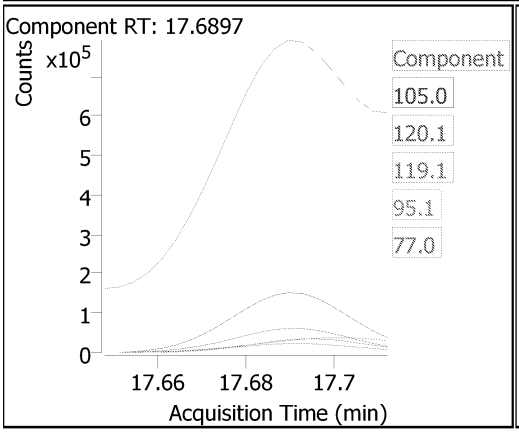


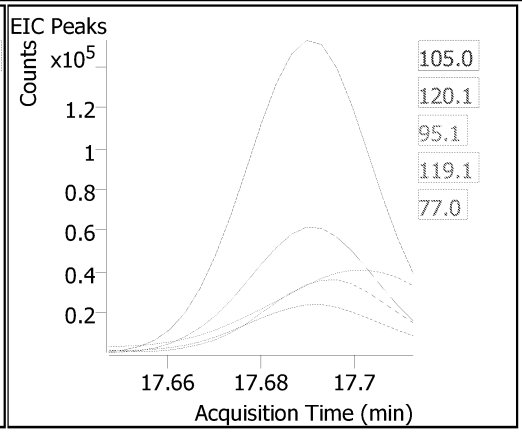
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.6897	Mesitylene	1389616.2	85.6	108-67-8	C9H12	3.284

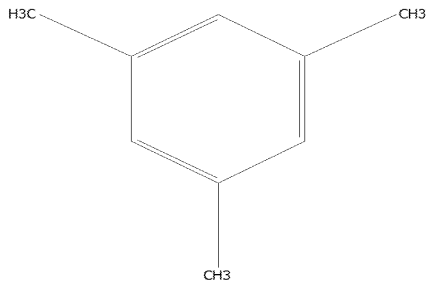




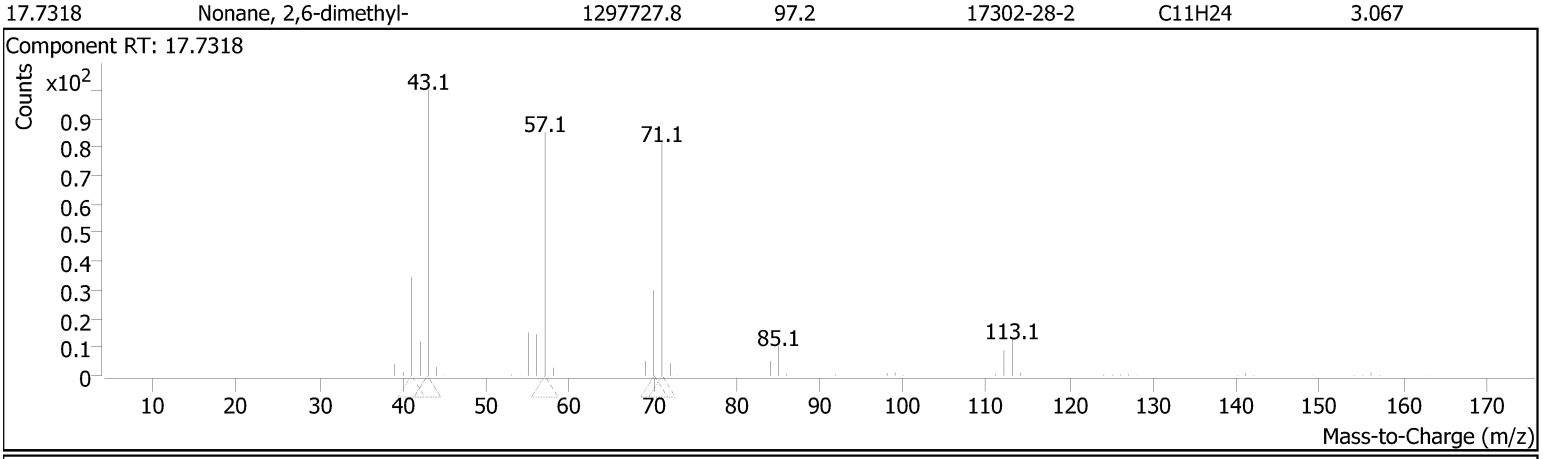


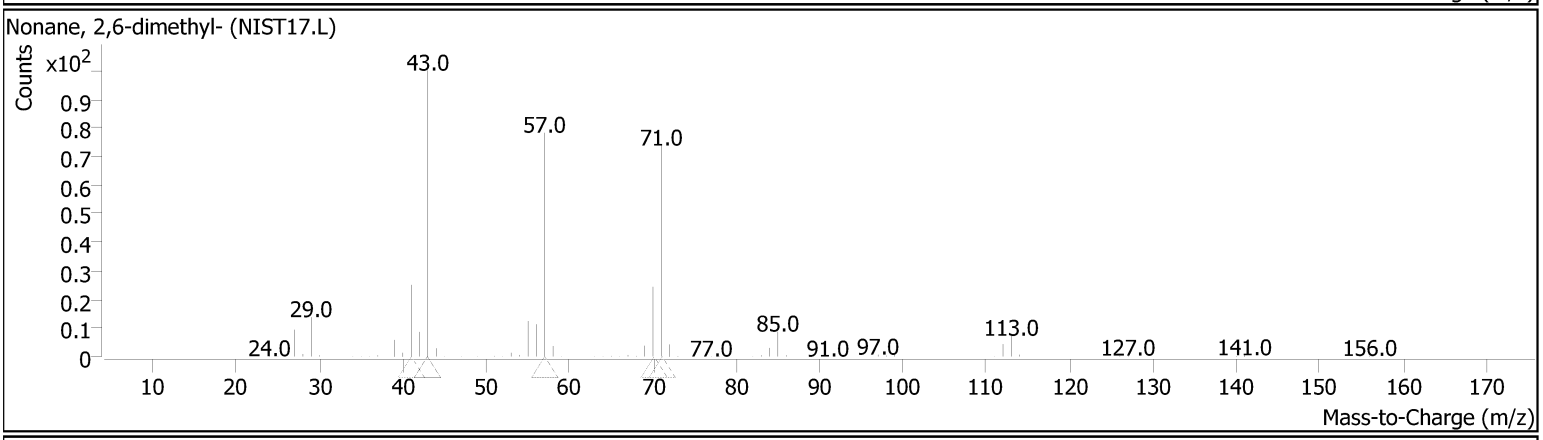


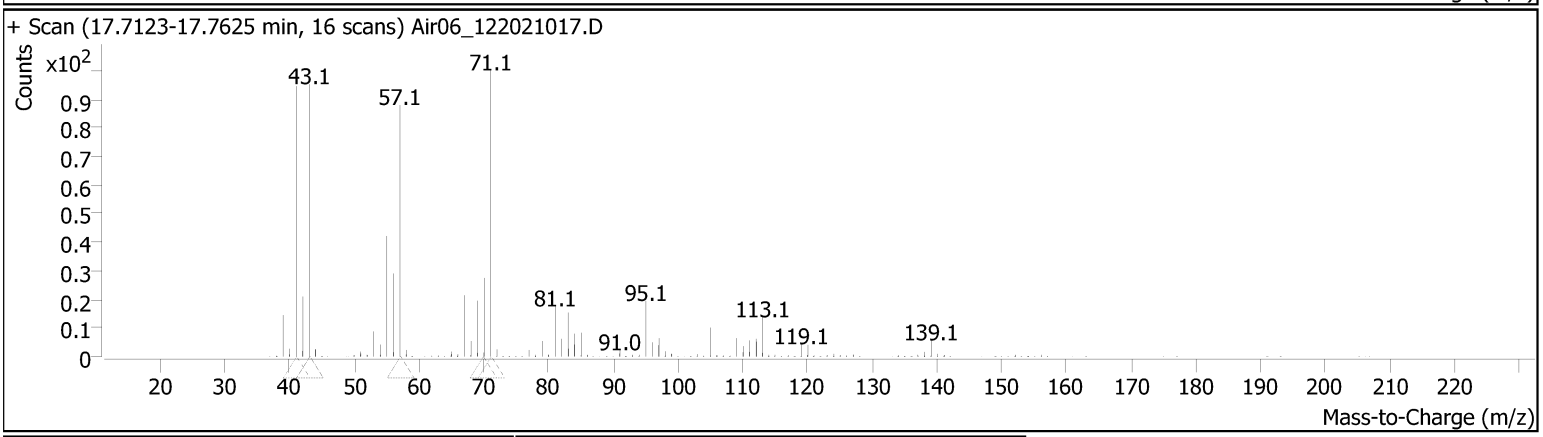


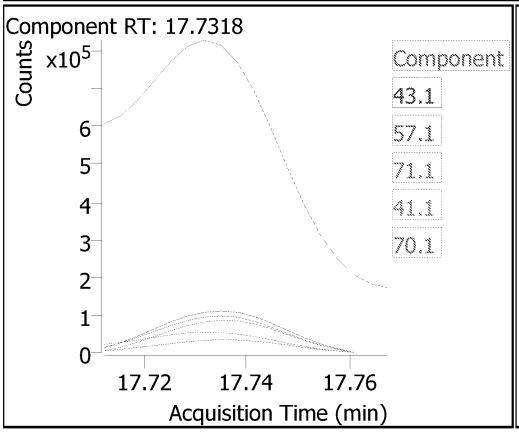


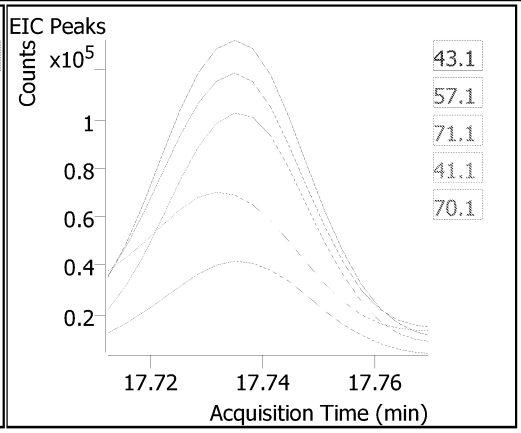
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.7318	Nonane, 2,6-dimethyl-	1297727.8	97.2	17302-28-2	C11H24	3.067

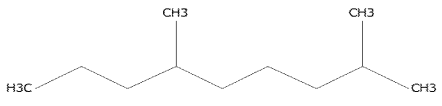




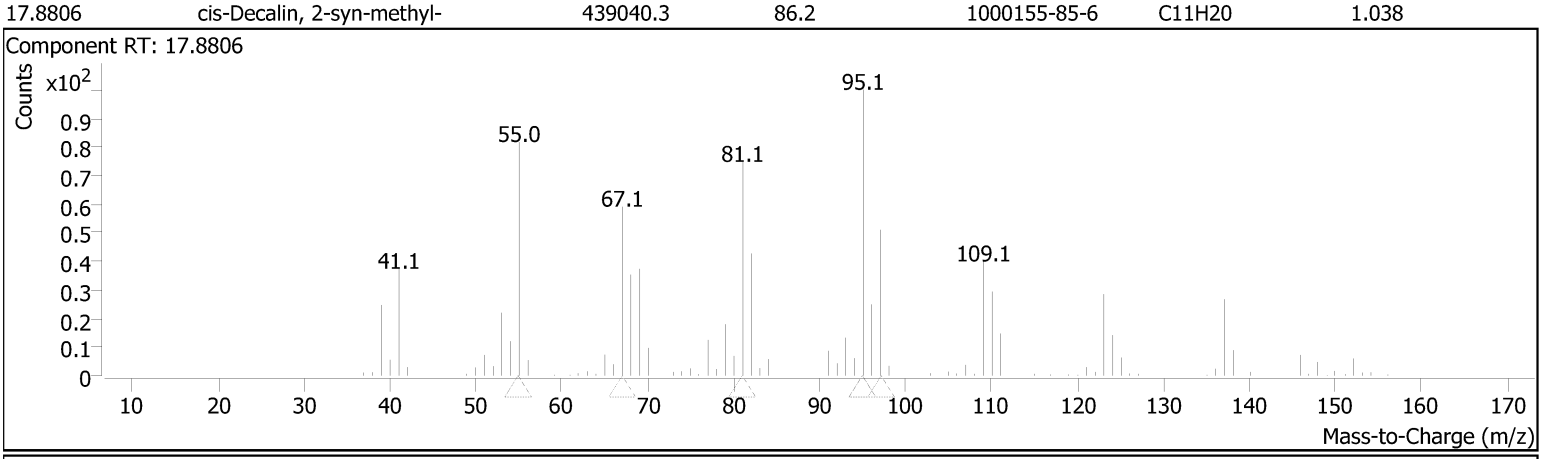


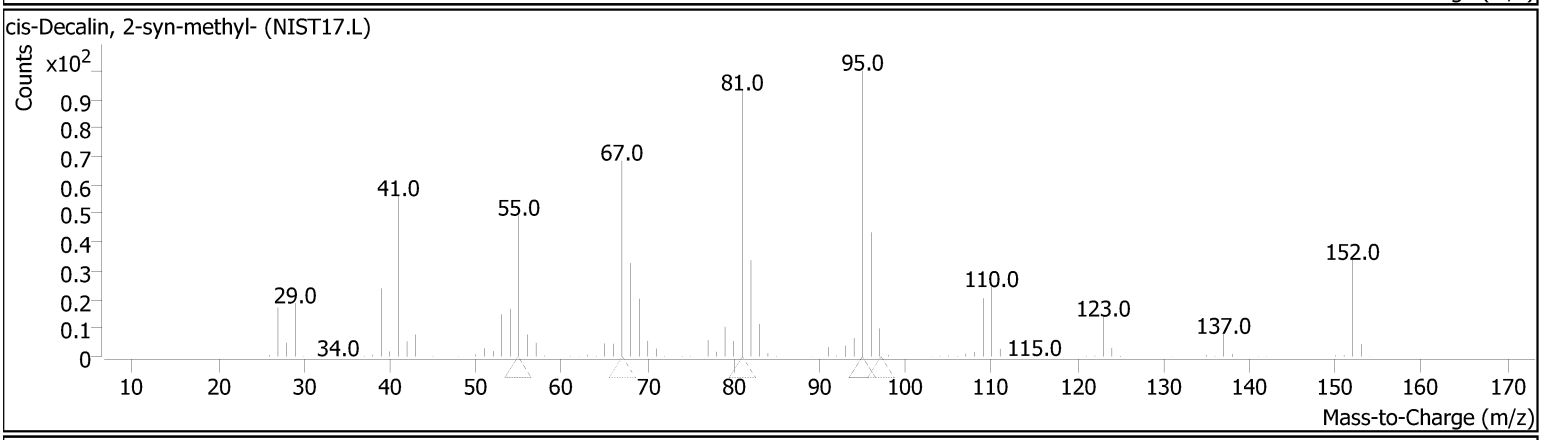


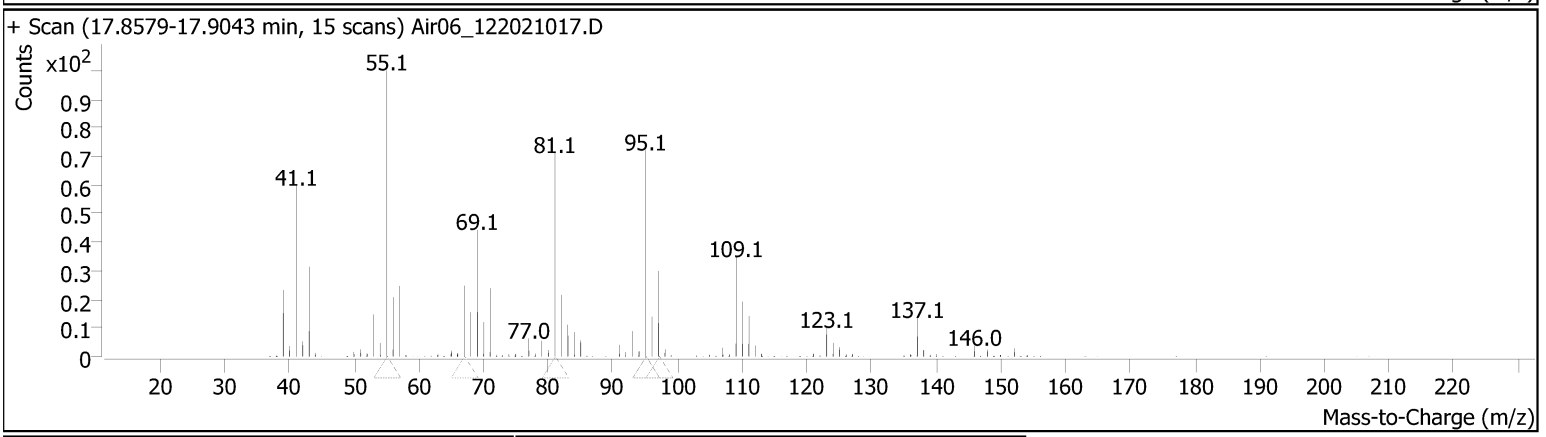


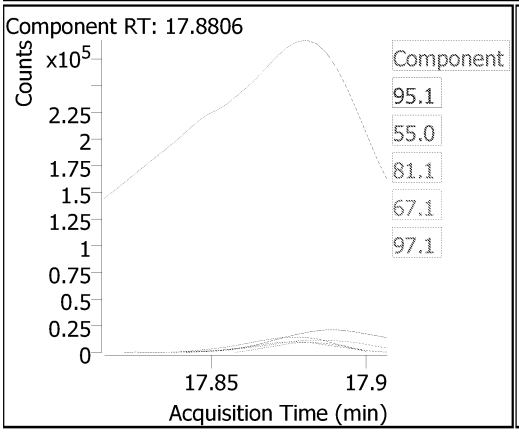


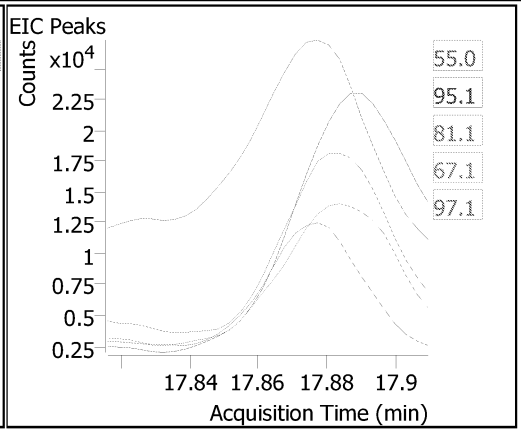
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.8806	cis-Decalin, 2-syn-methyl-	439040.3	86.2	1000155-85-6	C11H20	1.038

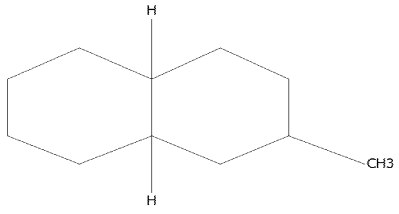




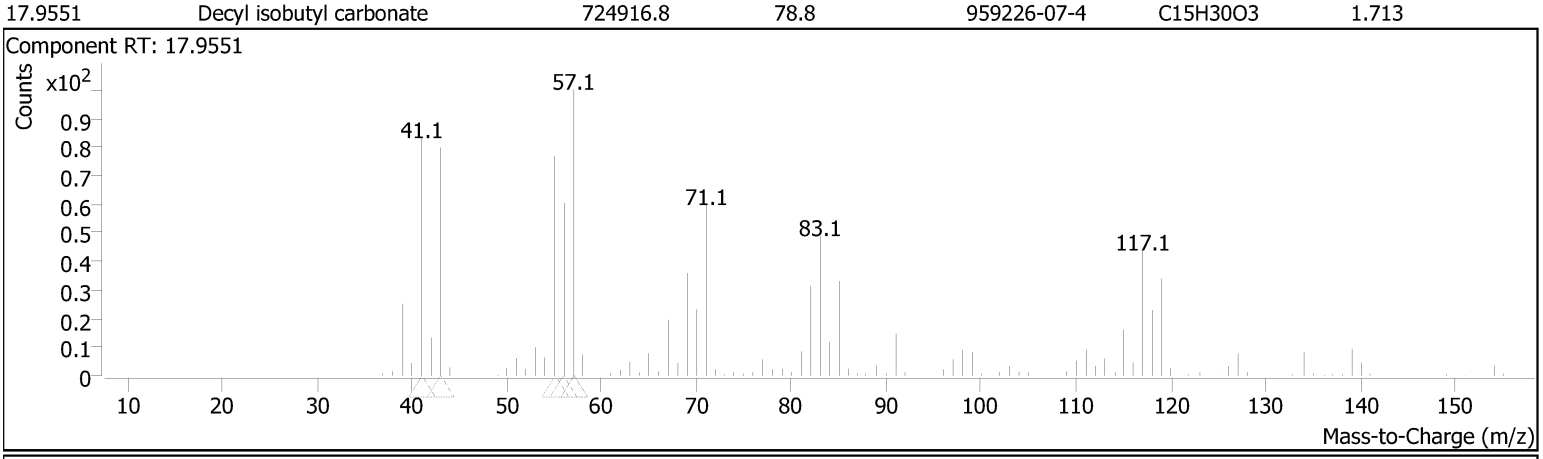


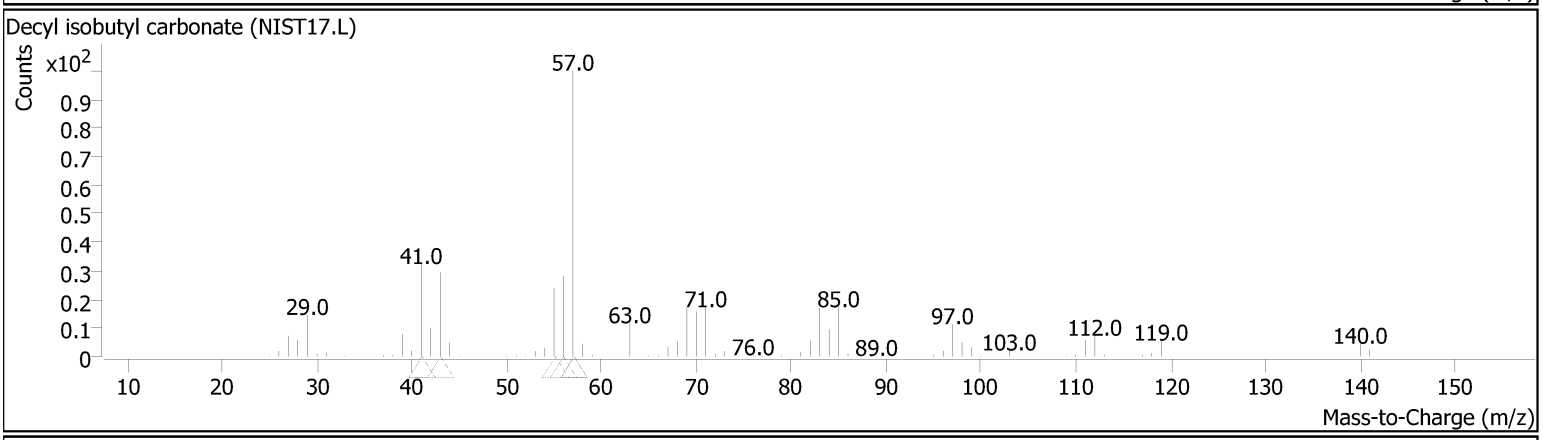


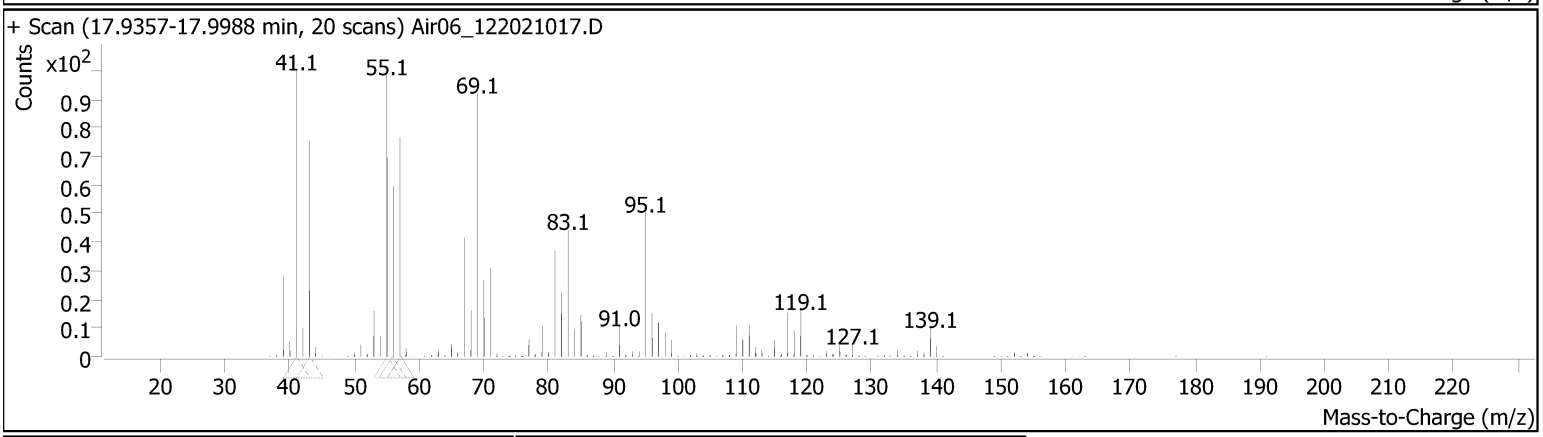


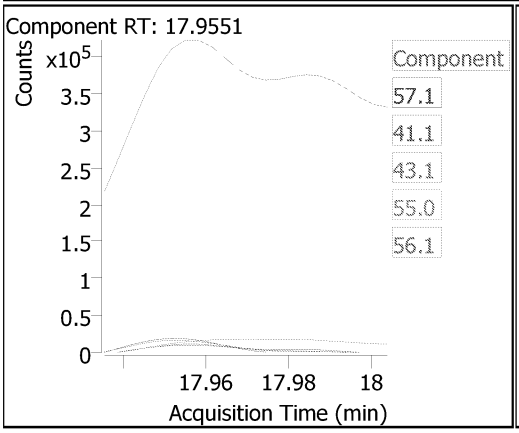


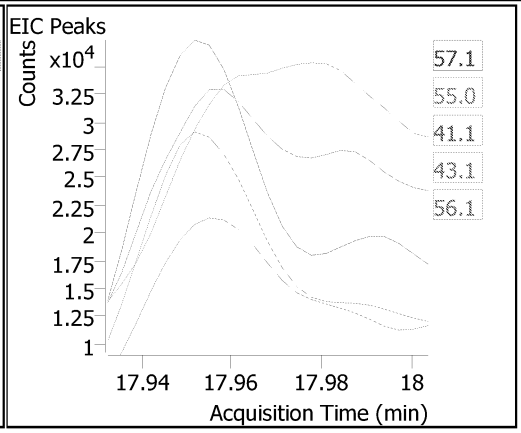
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.9551	Decyl isobutyl carbonate	724916.8	78.8	959226-07-4	C15H30O3	1.713

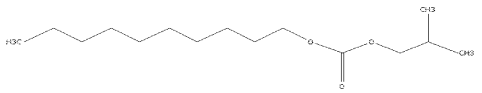




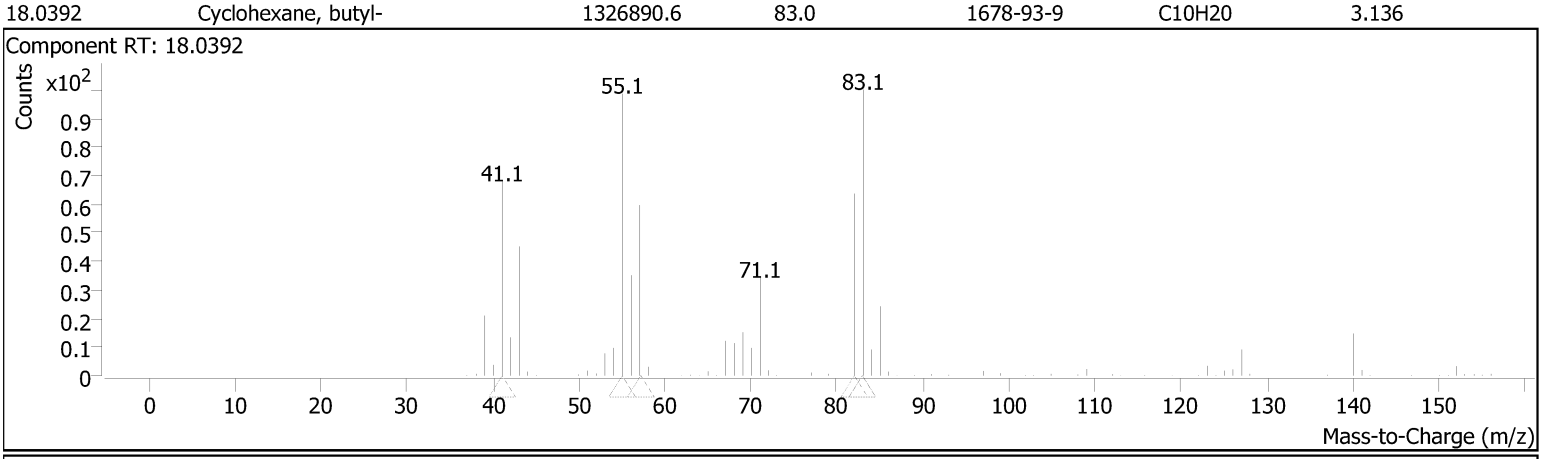


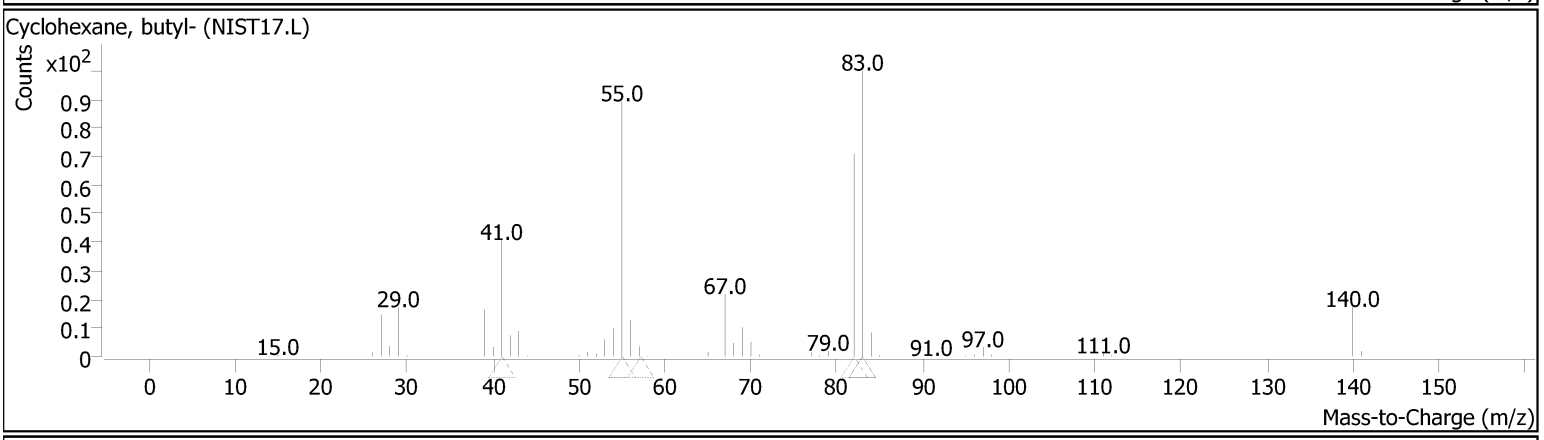


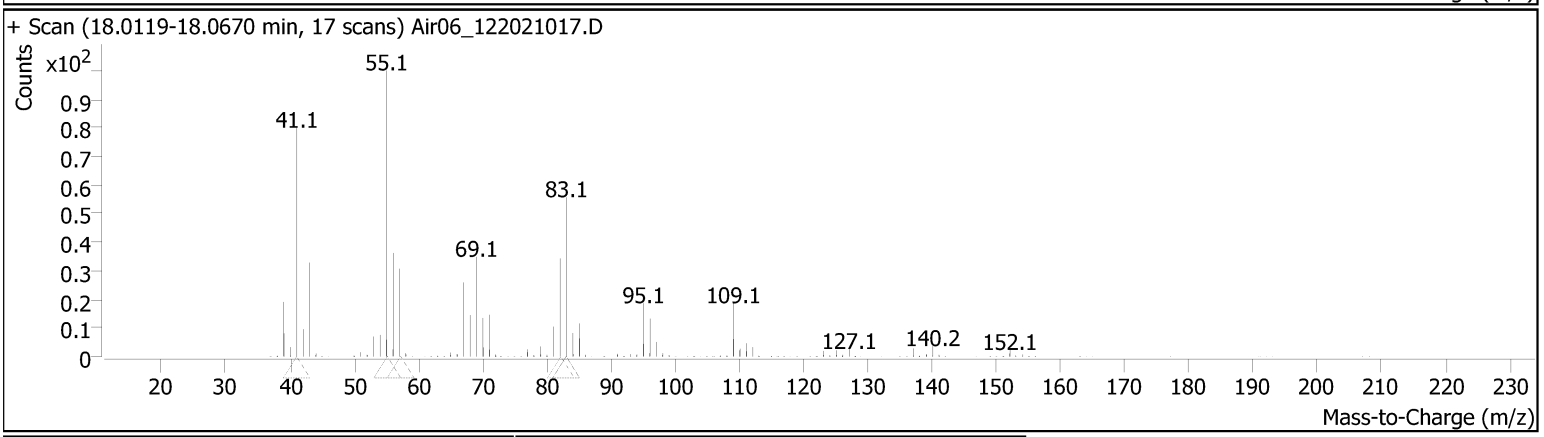


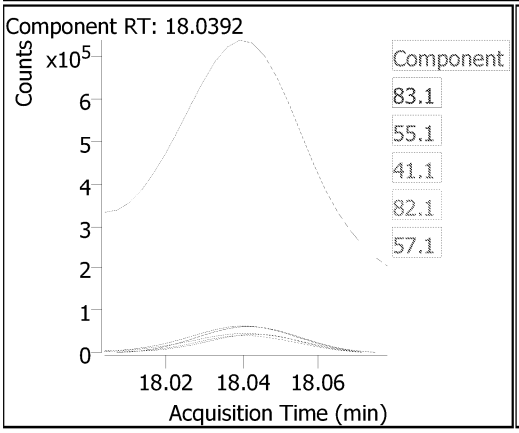


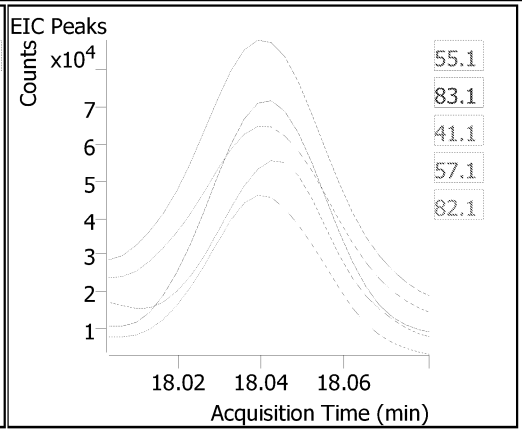
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.0392	Cyclohexane, butyl-	1326890.6	83.0	1678-93-9	C10H20	3.136

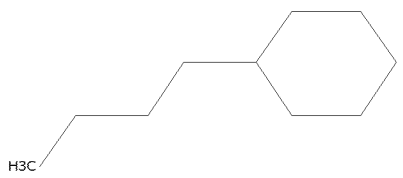




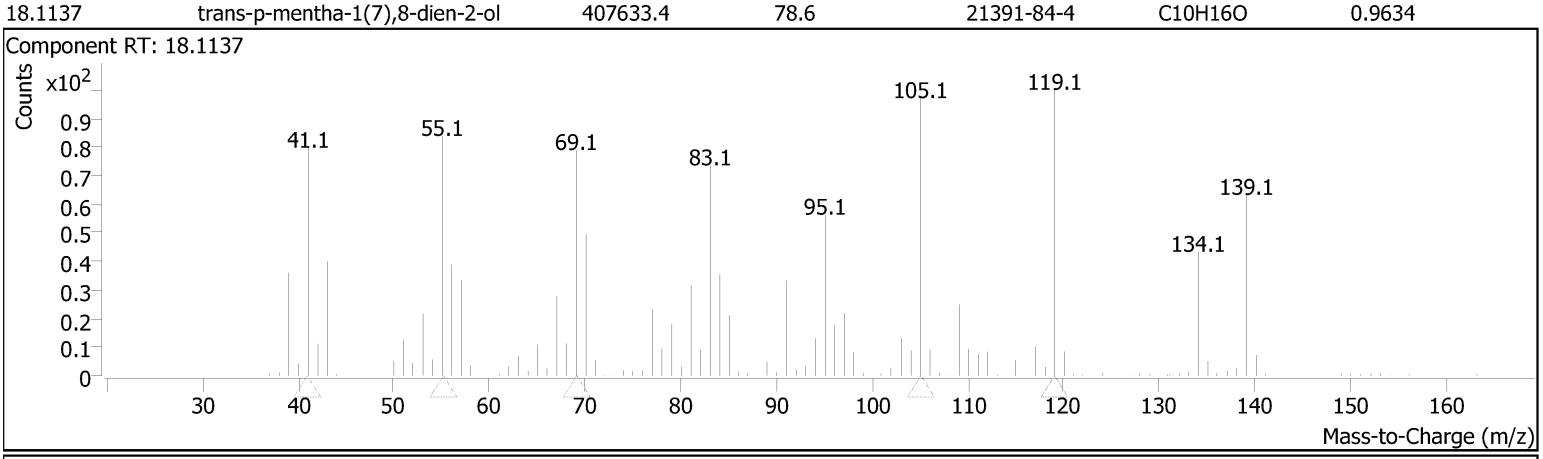


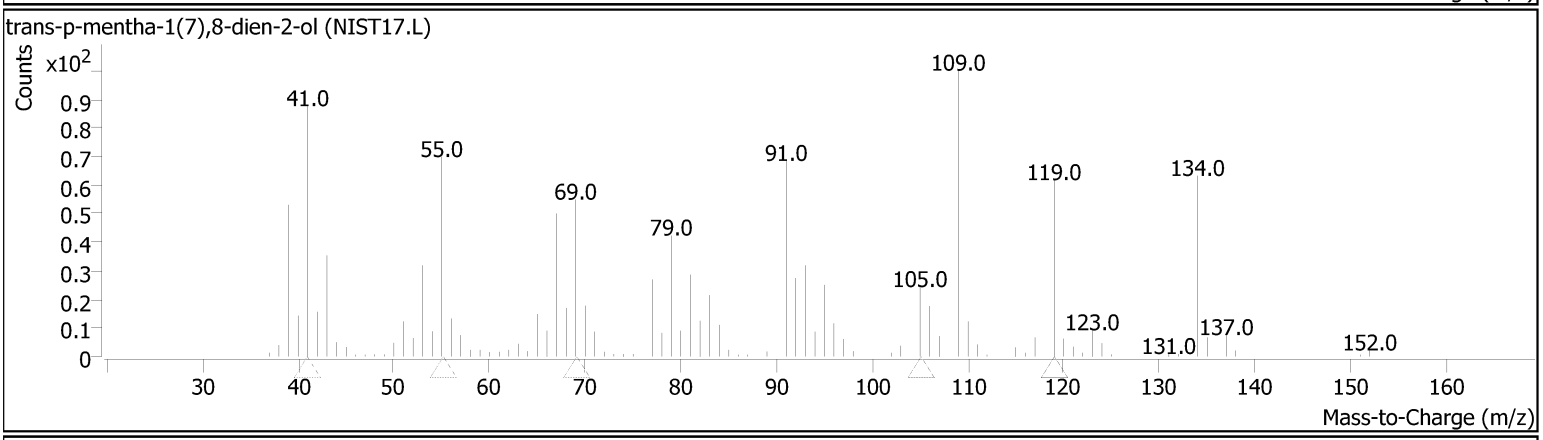


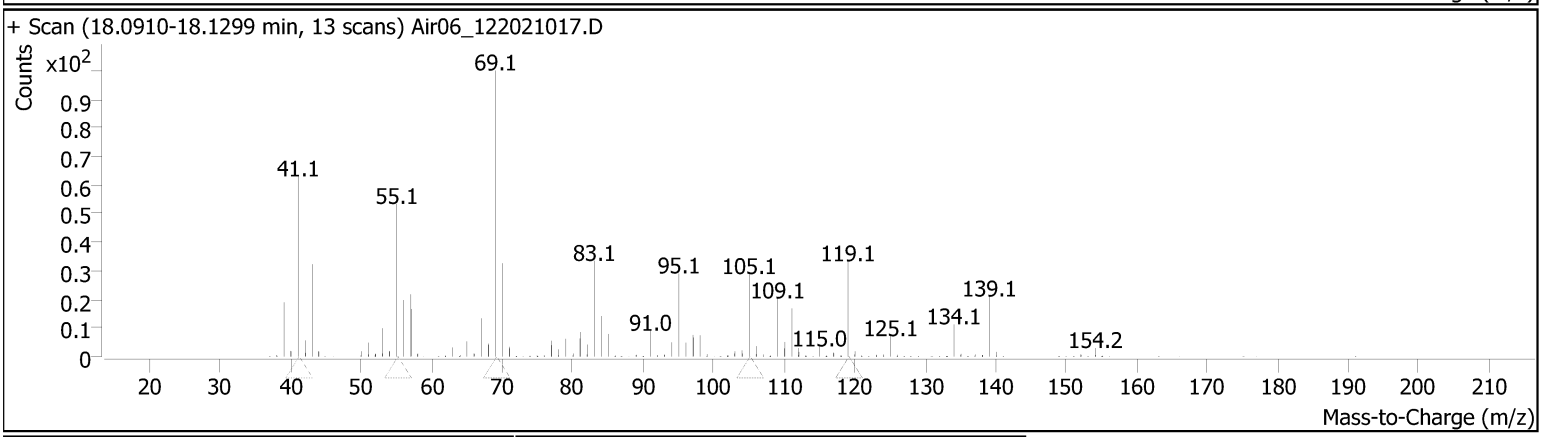


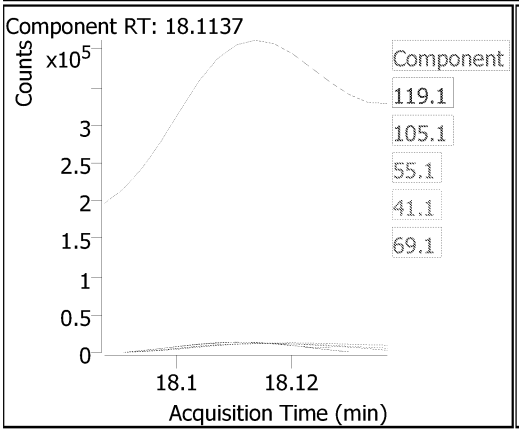


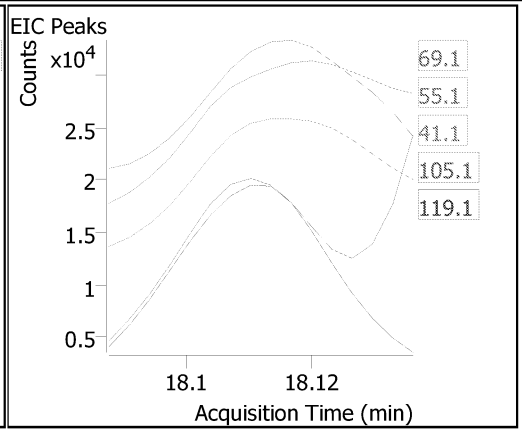
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.1137	trans-p-mentha-1(7),8-dien-2-ol	407633.4	78.6	21391-84-4	C10H16O	0.9634

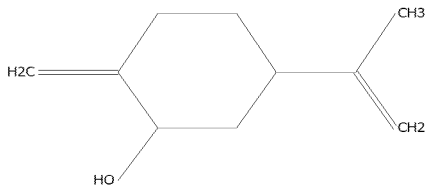




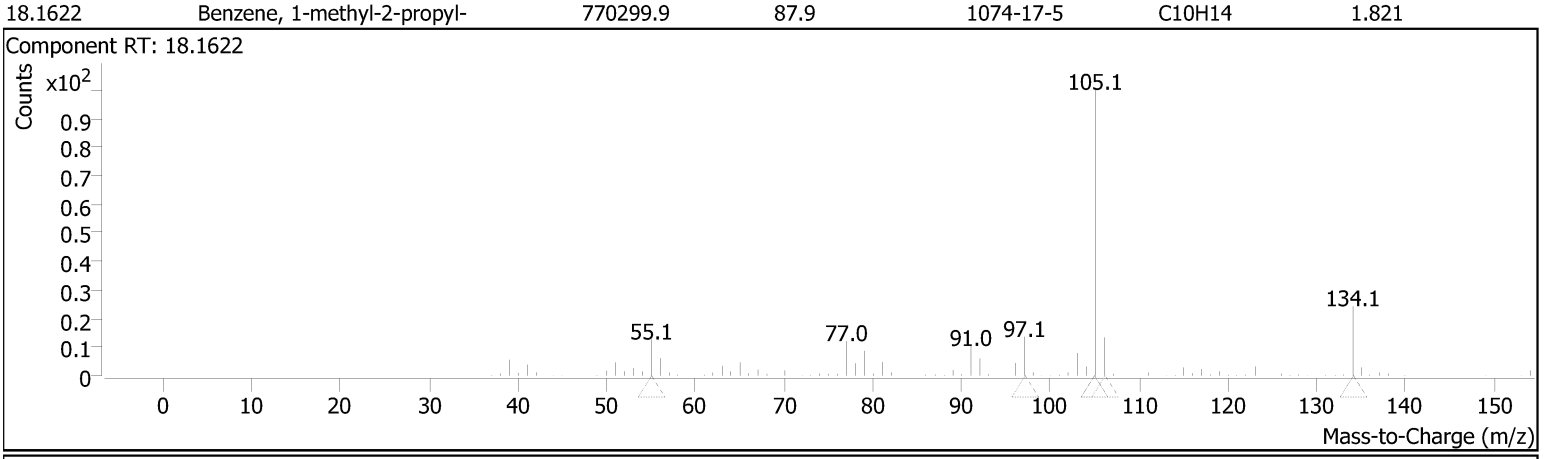


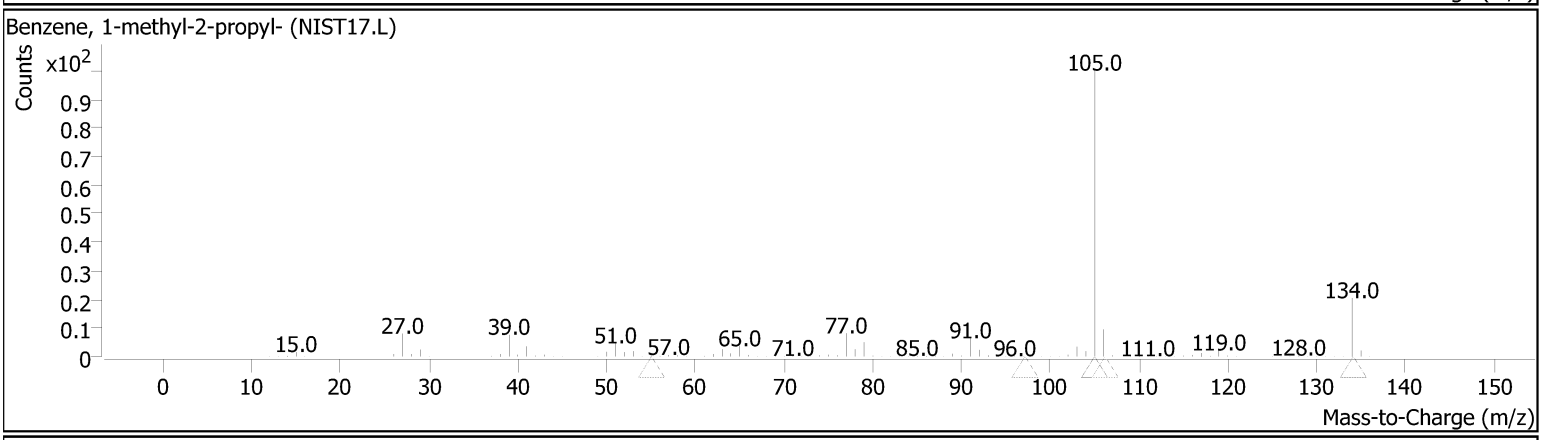


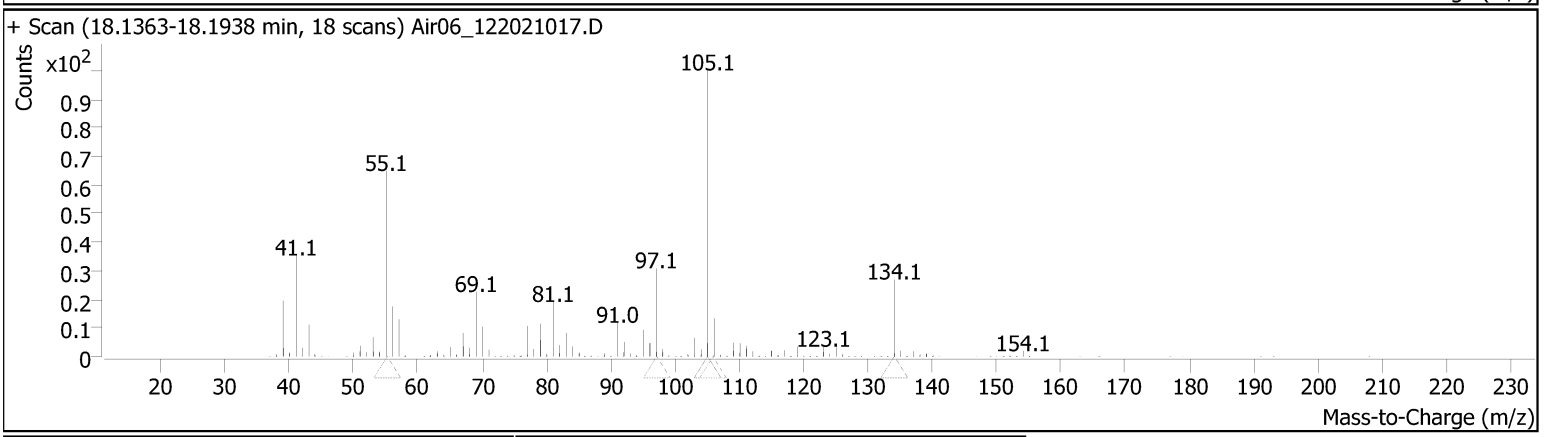


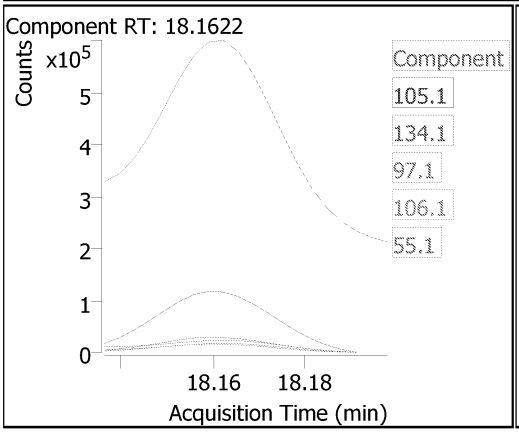


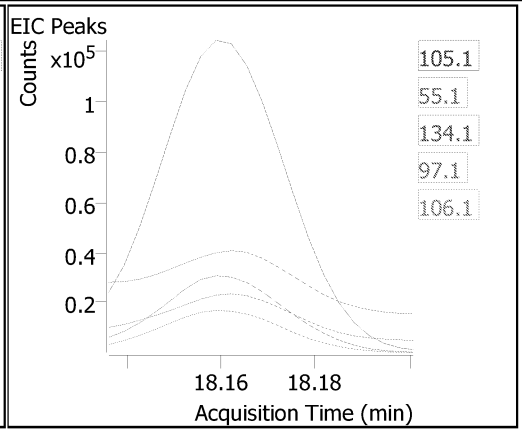
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.1622	Benzene, 1-methyl-2-propyl-	770299.9	87.9	1074-17-5	C10H14	1.821

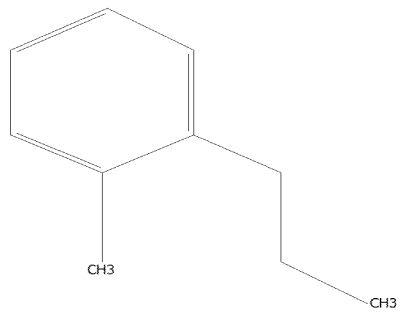




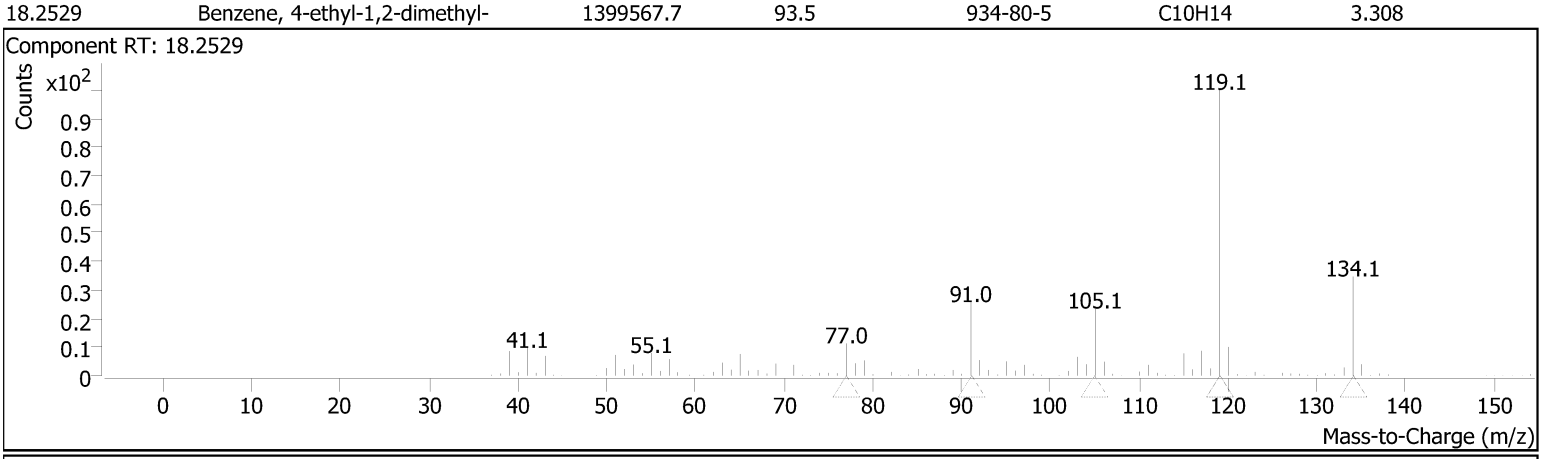


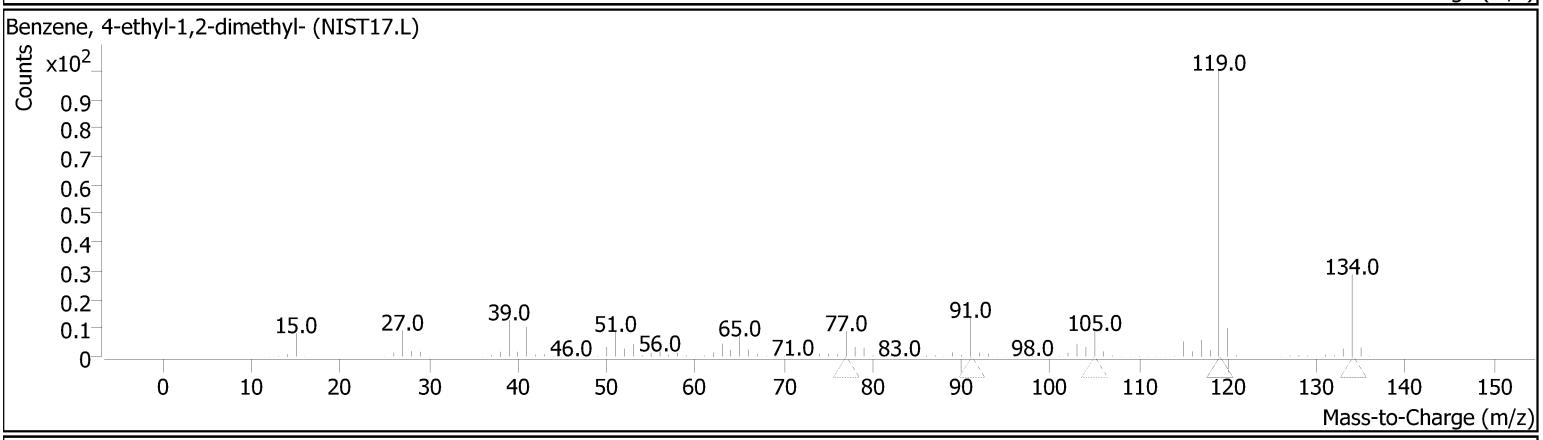


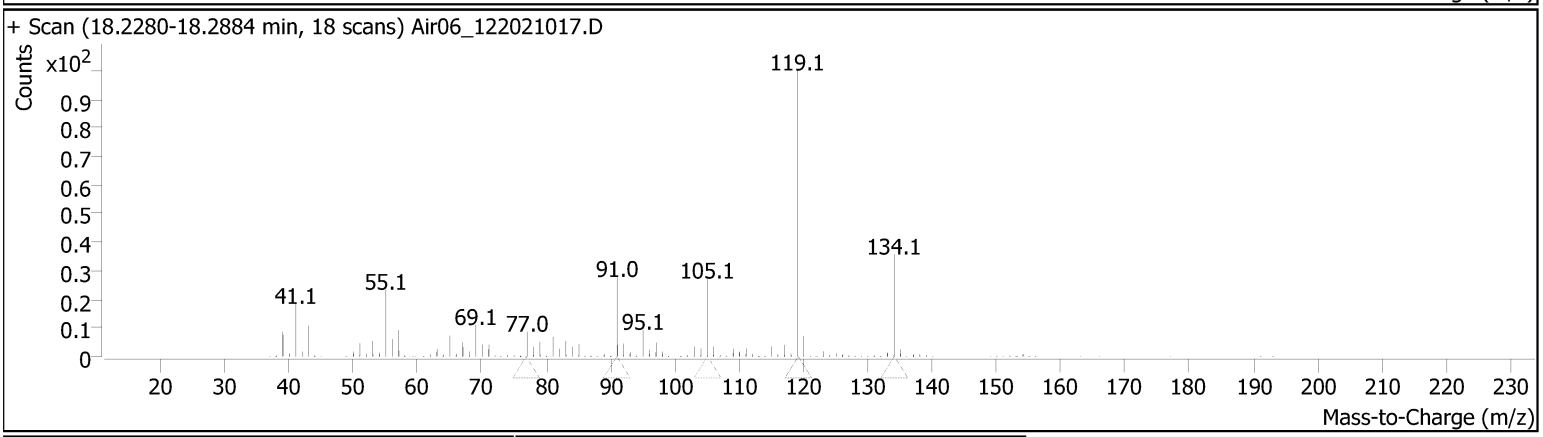


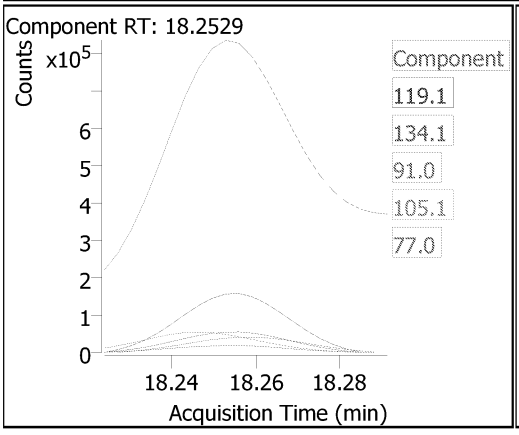


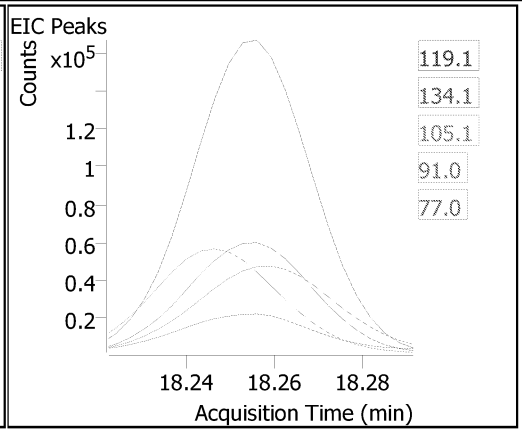
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.2529	Benzene, 4-ethyl-1,2-dimethyl-	1399567.7	93.5	934-80-5	C10H14	3.308

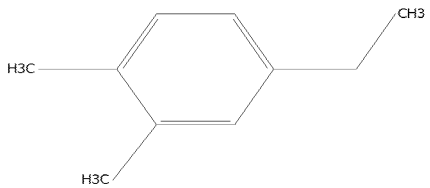




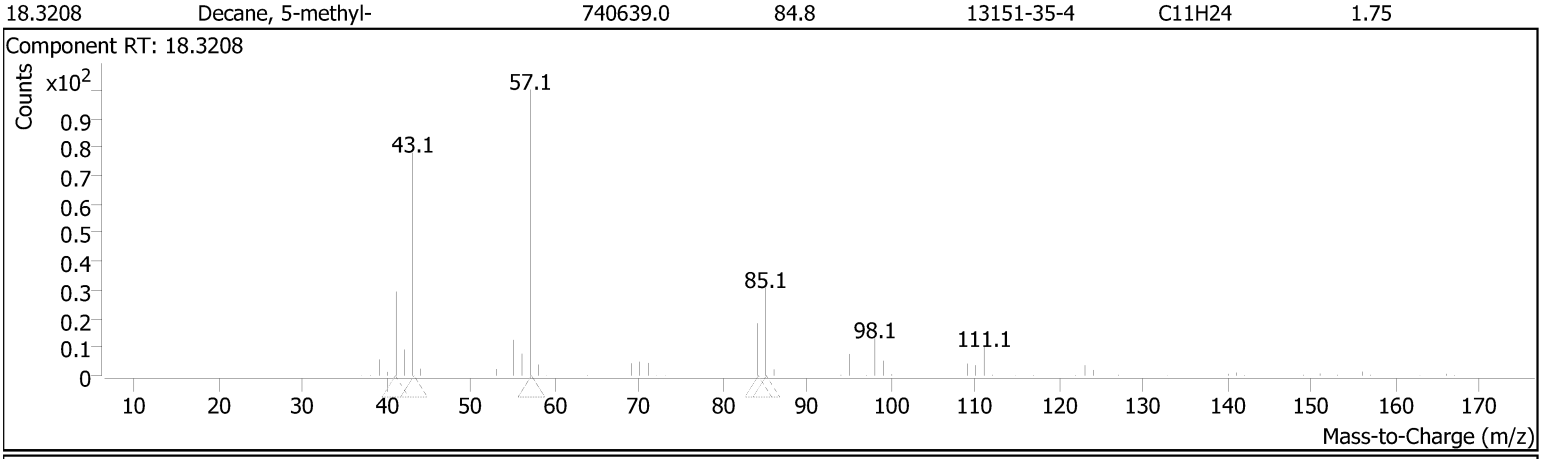


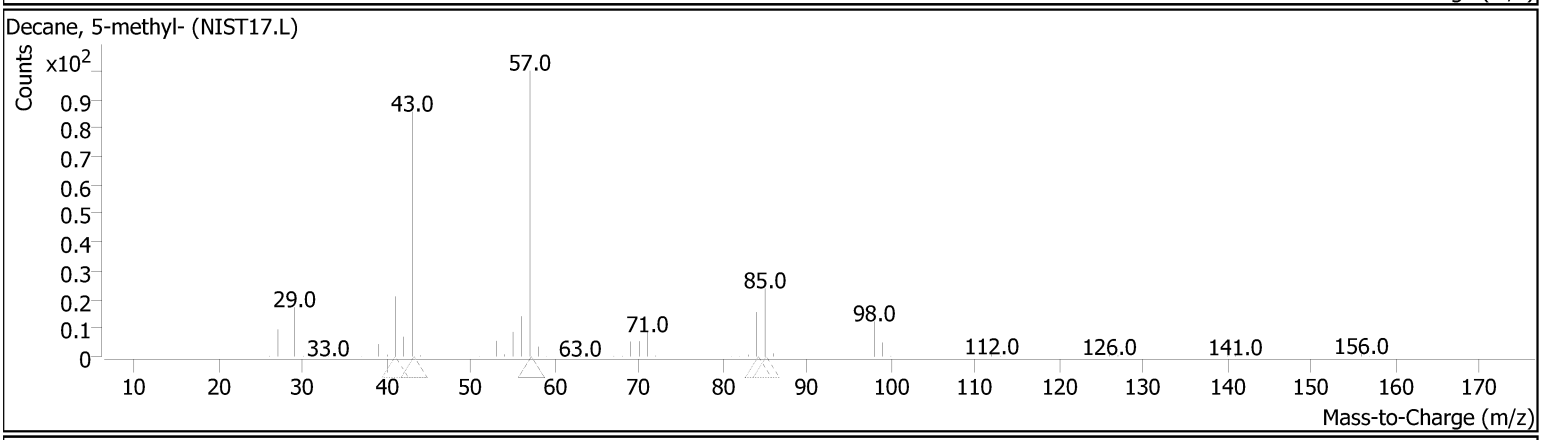


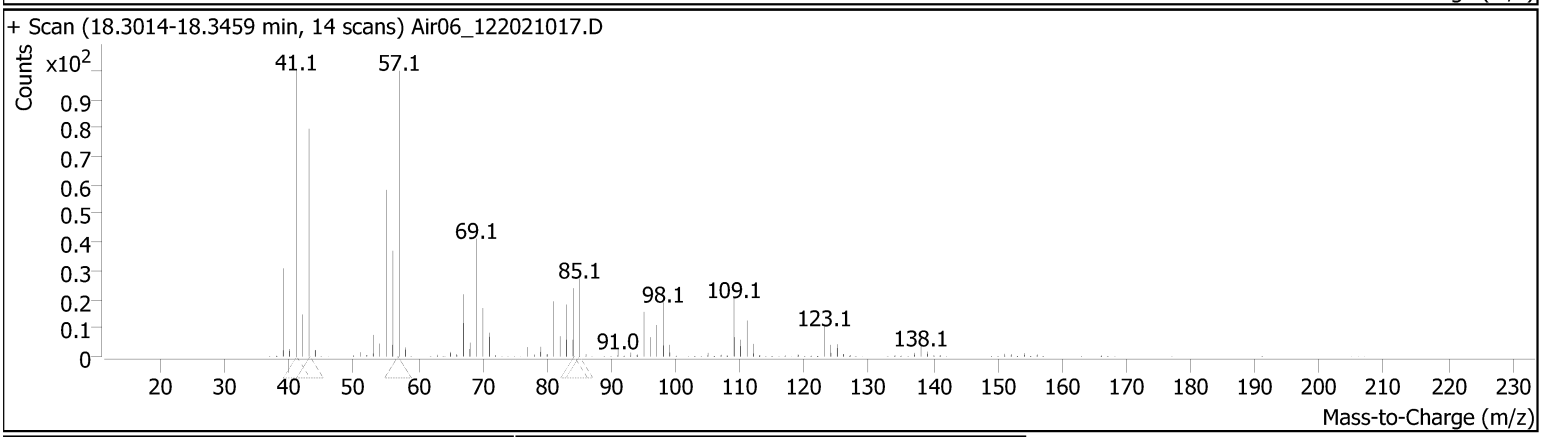


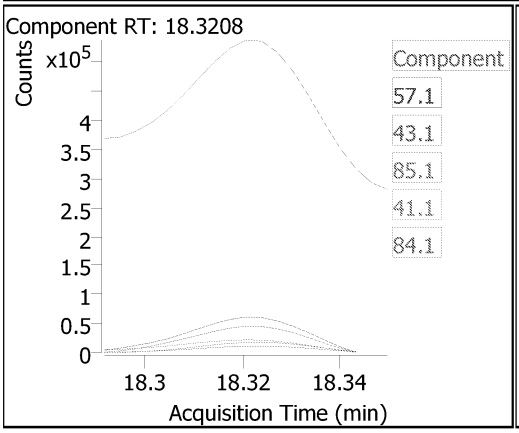


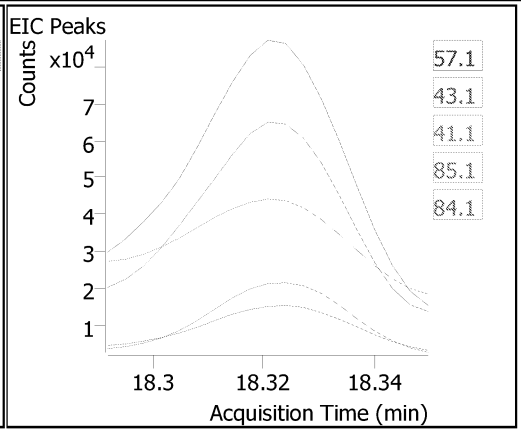
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3208	Decane, 5-methyl-	740639.0	84.8	13151-35-4	C11H24	1.75

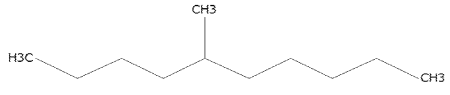




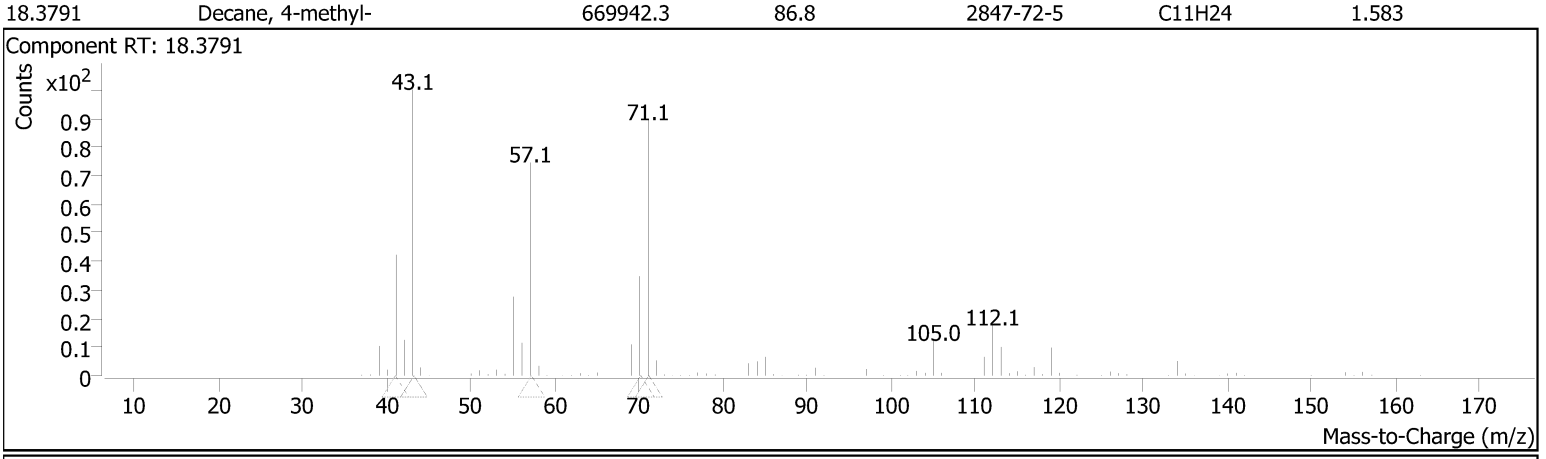


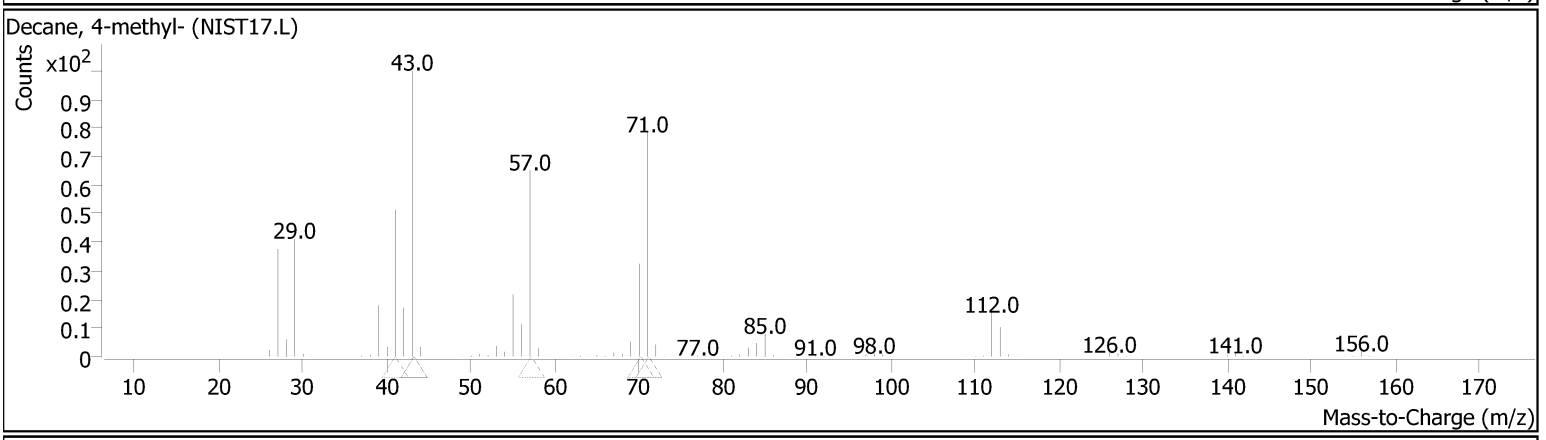


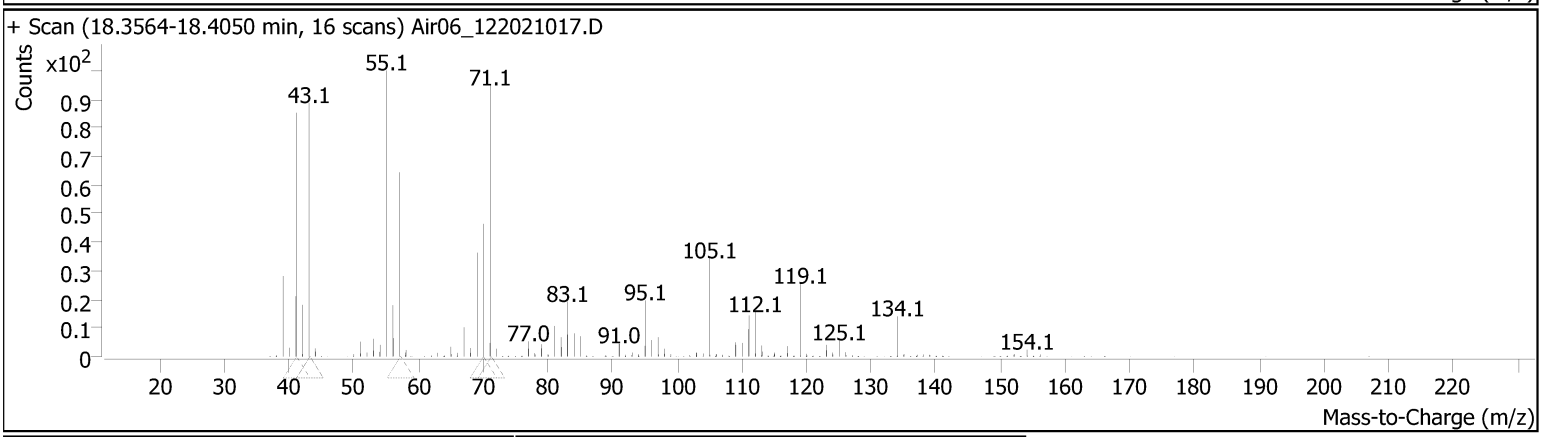


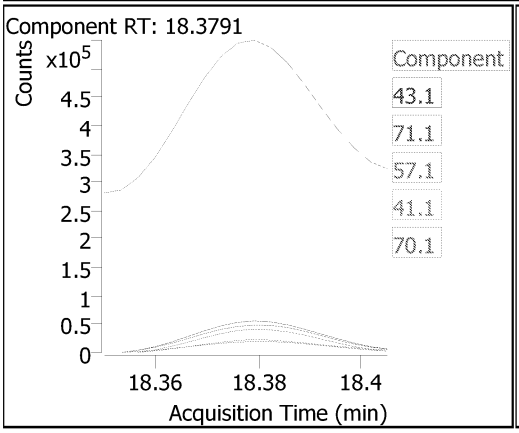


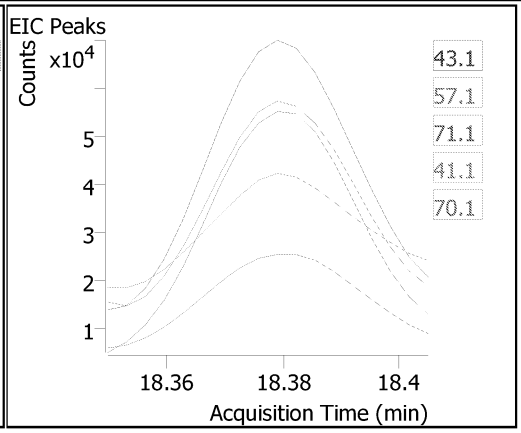
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3791	Decane, 4-methyl-	669942.3	86.8	2847-72-5	C11H24	1.583

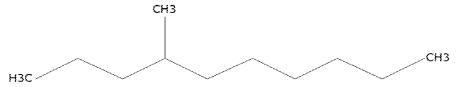




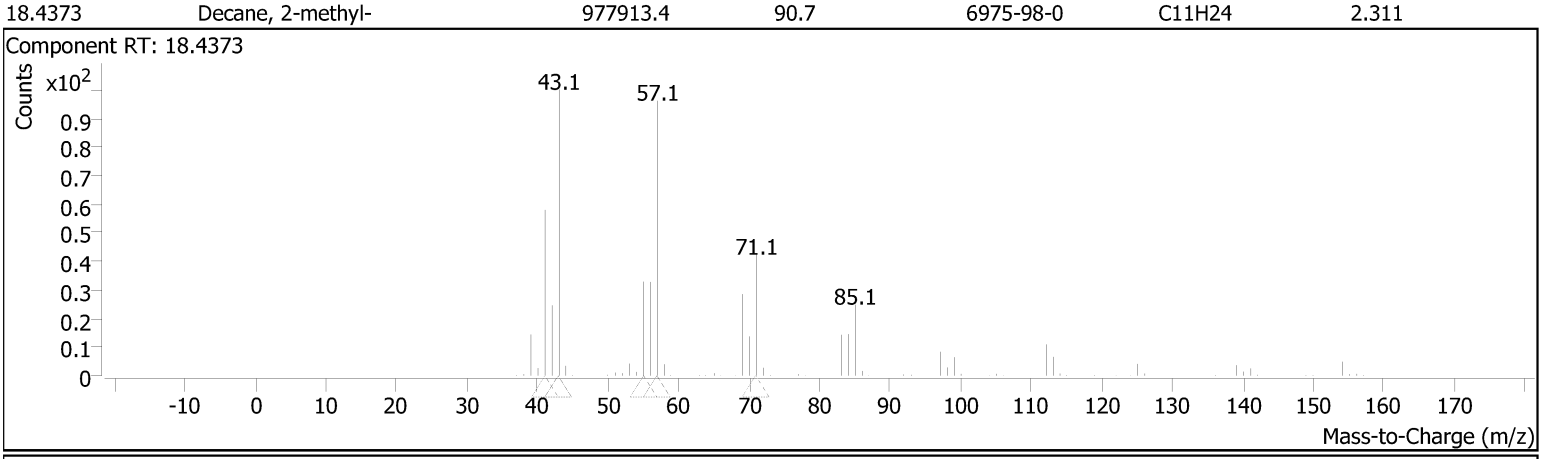


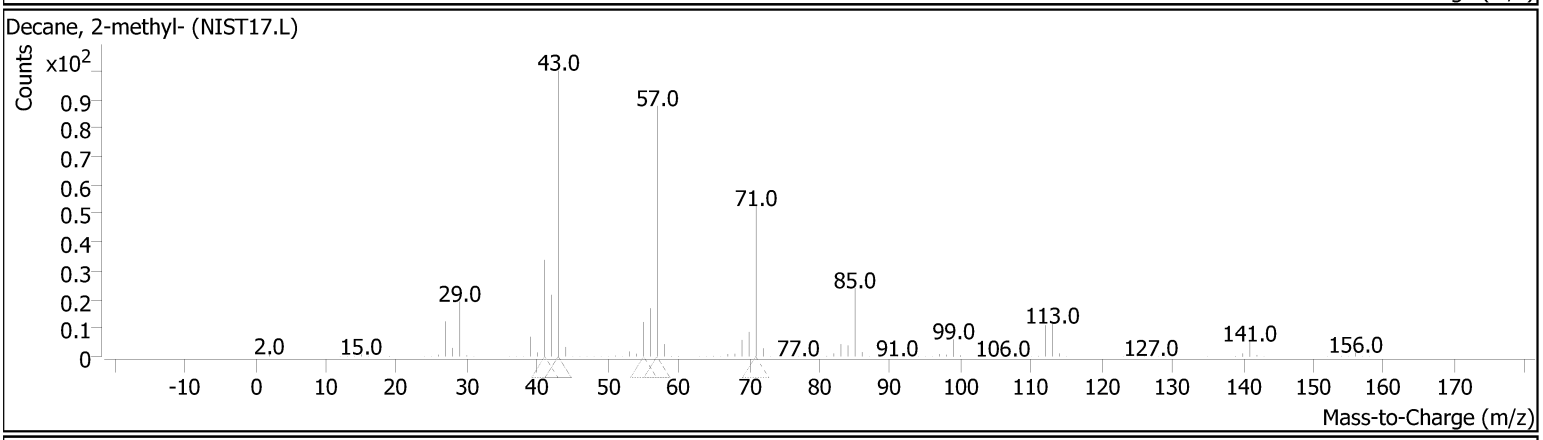


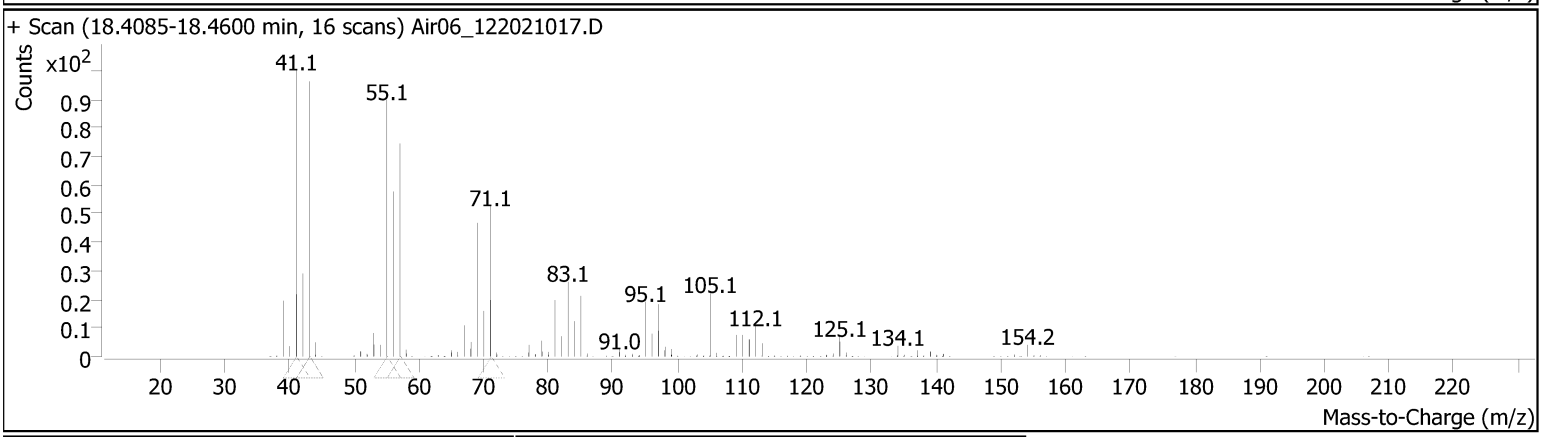


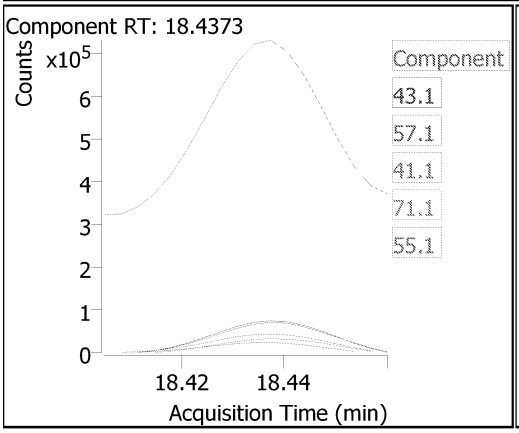


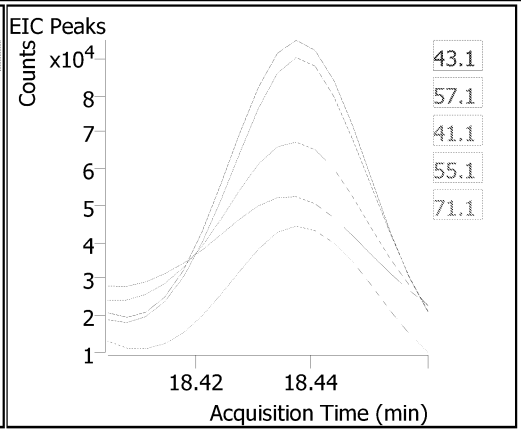
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.4373	Decane, 2-methyl-	977913.4	90.7	6975-98-0	C11H24	2.311

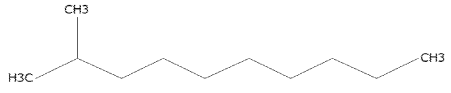




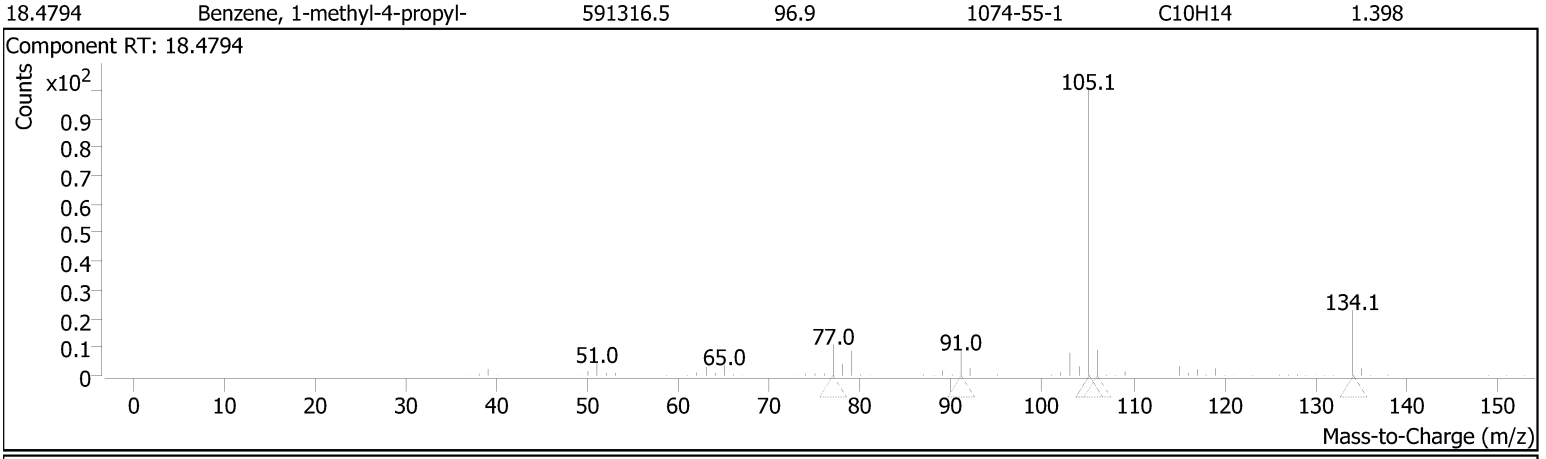


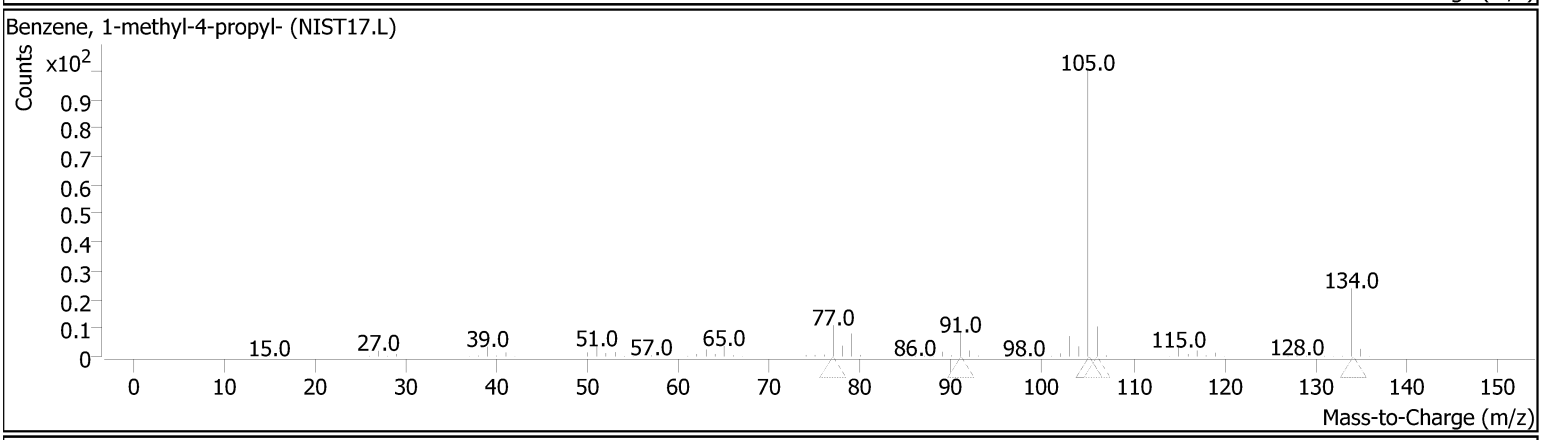


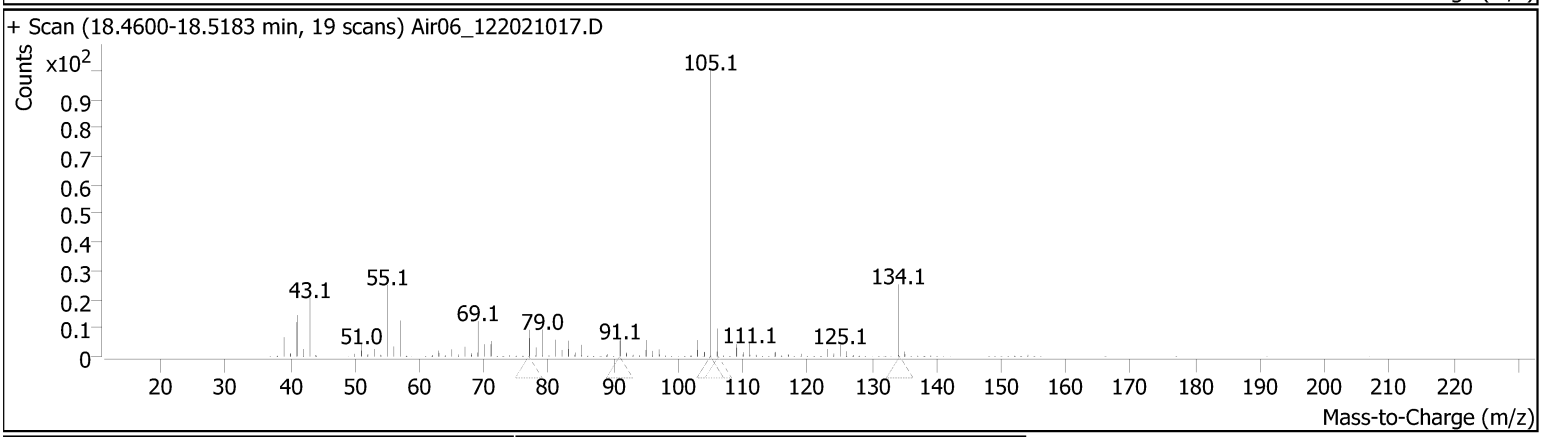


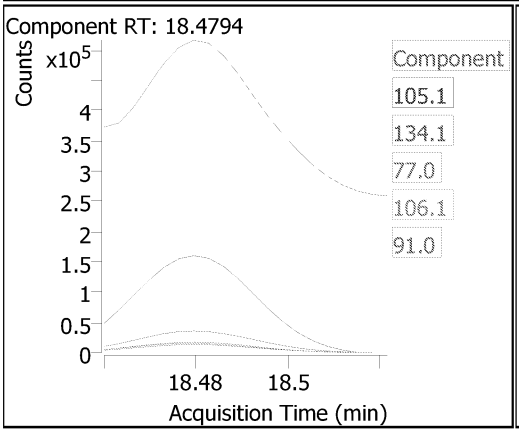


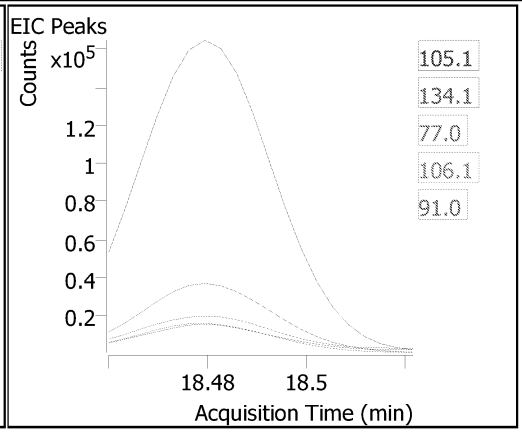
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.4794	Benzene, 1-methyl-4-propyl-	591316.5	96.9	1074-55-1	C10H14	1.398

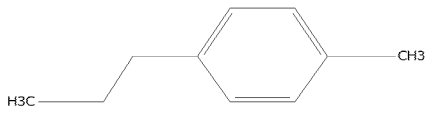




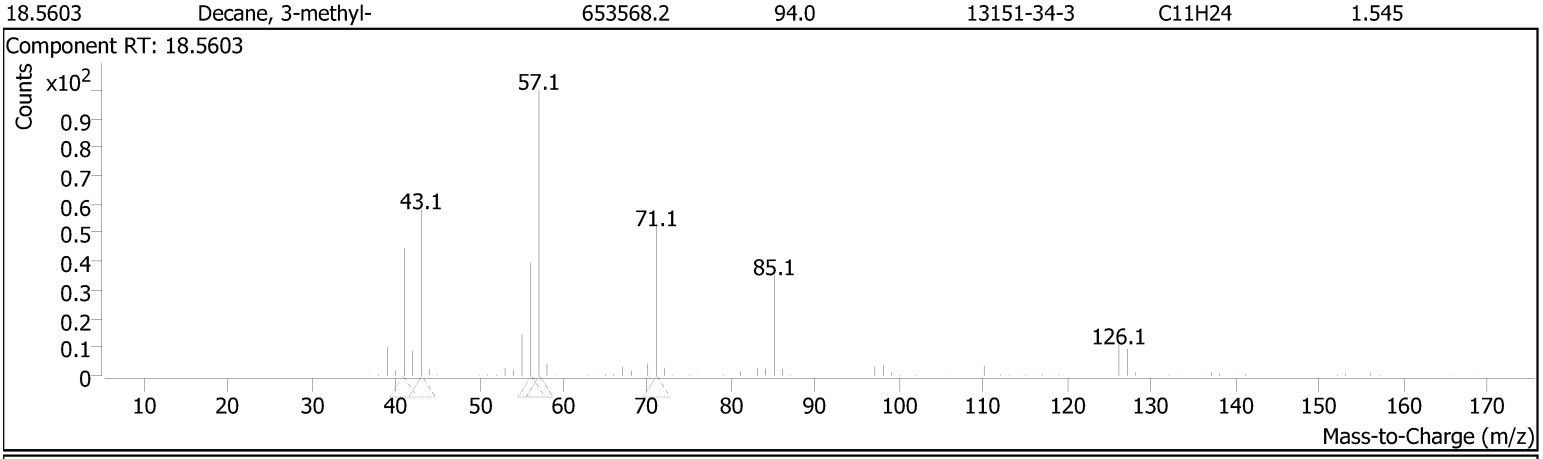


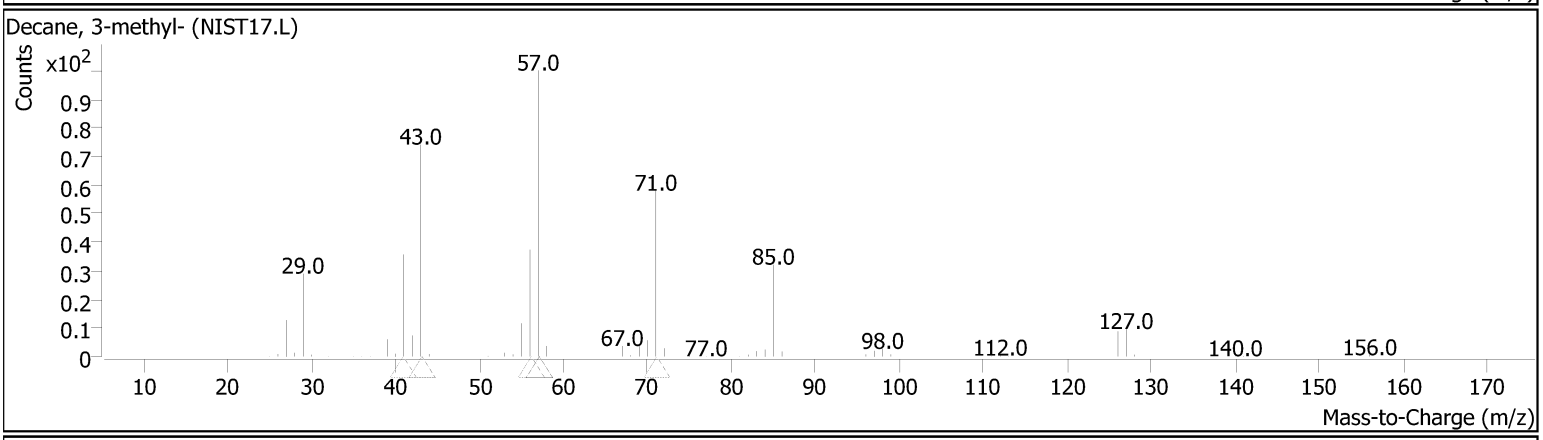


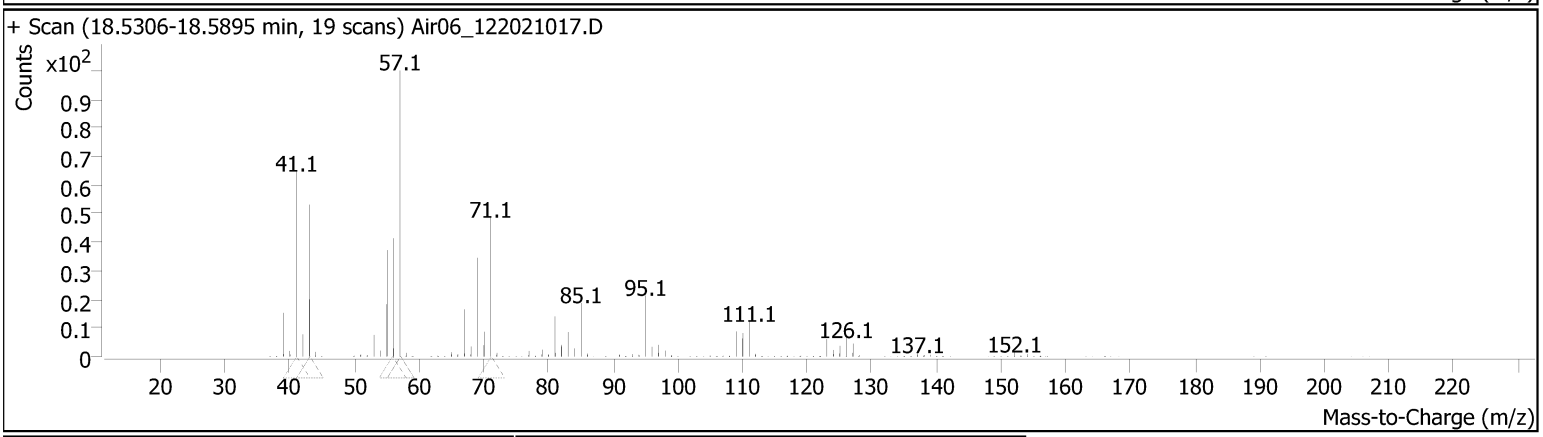


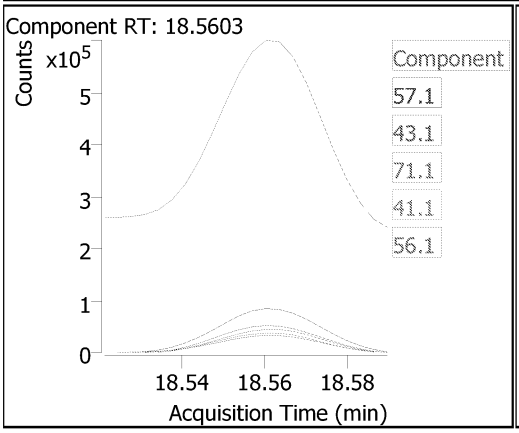


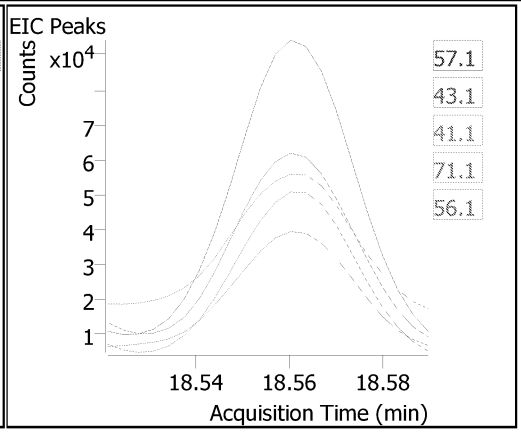
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.5603	Decane, 3-methyl-	653568.2	94.0	13151-34-3	C11H24	1.545

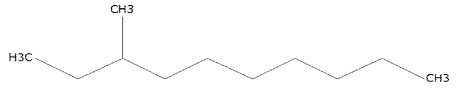




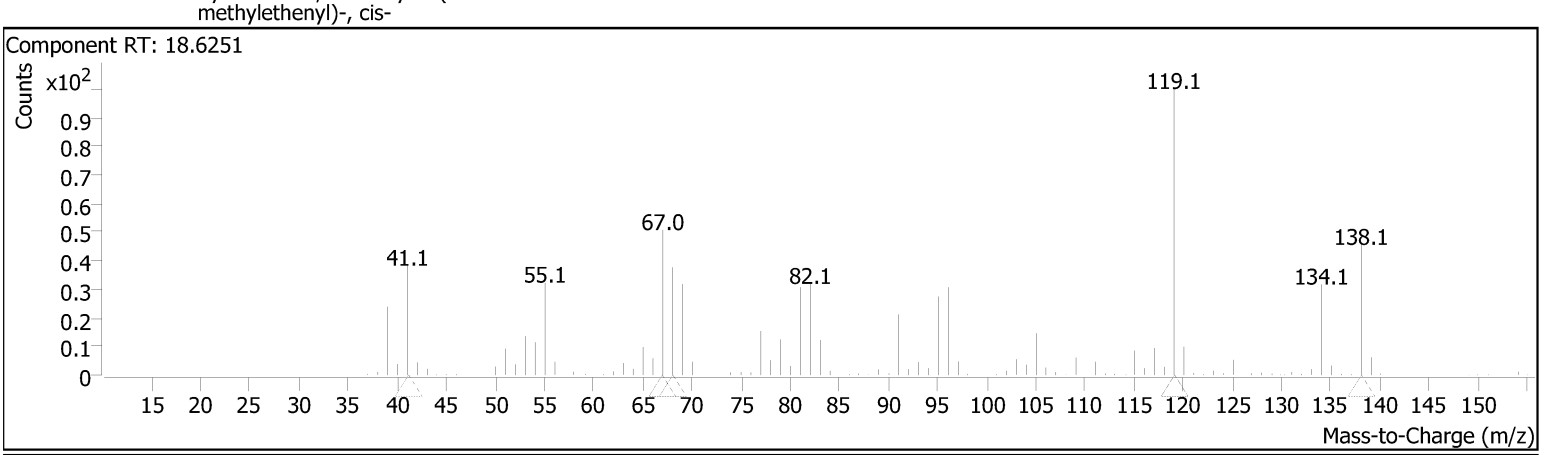


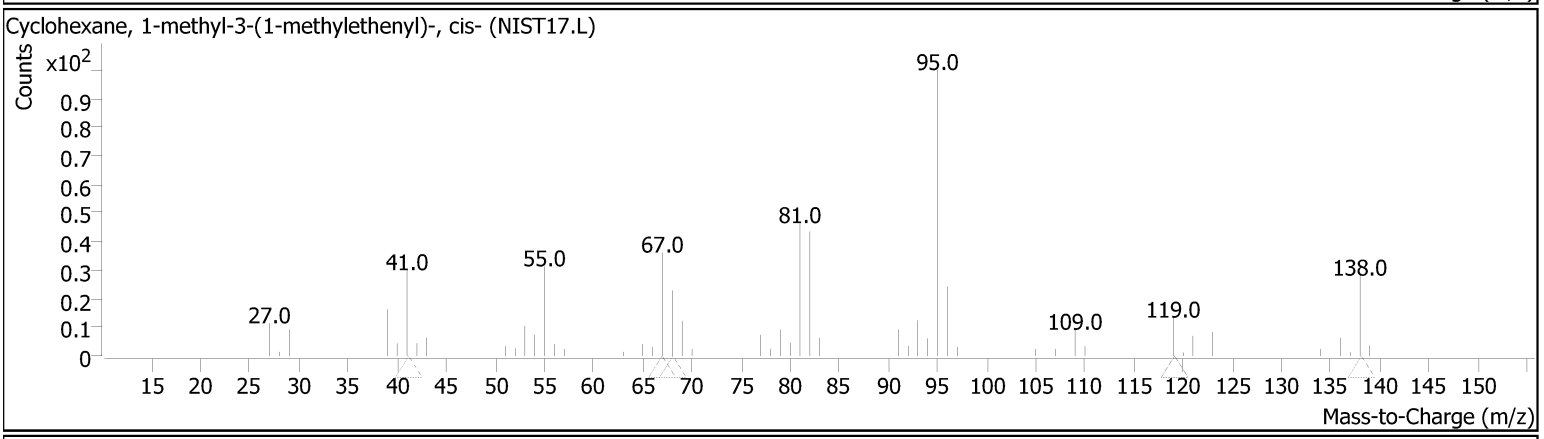


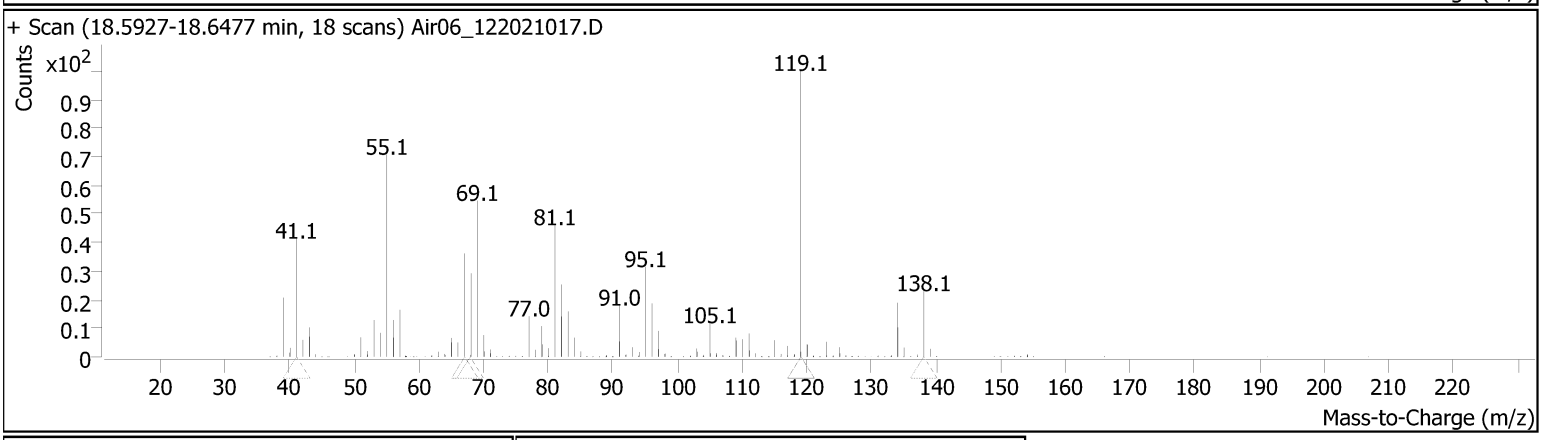


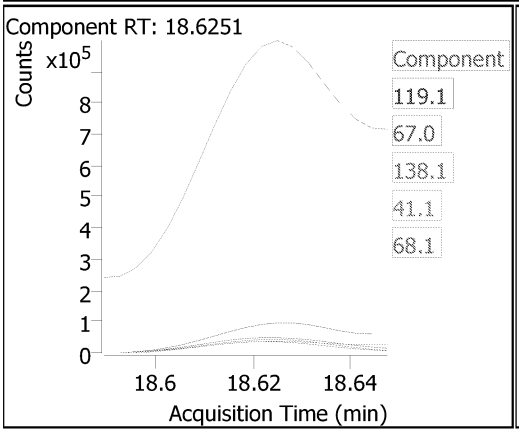


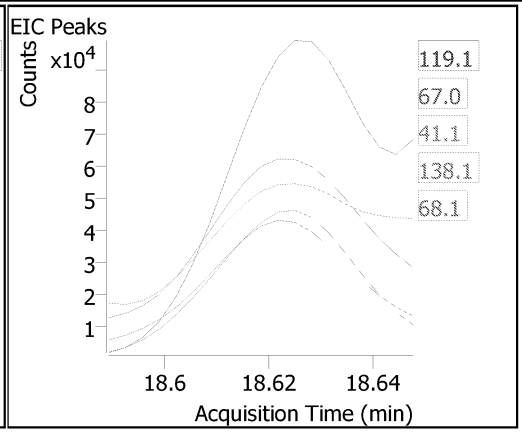
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.6251	Cyclohexane, 1-methyl-3-(1-methylethenyl)-, cis-	1549736.9	75.9	24399-15-3	C10H18	3.663

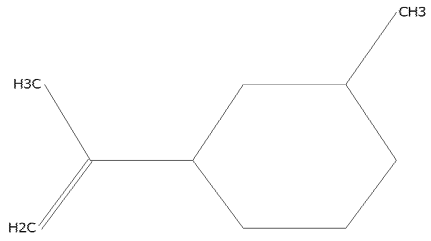




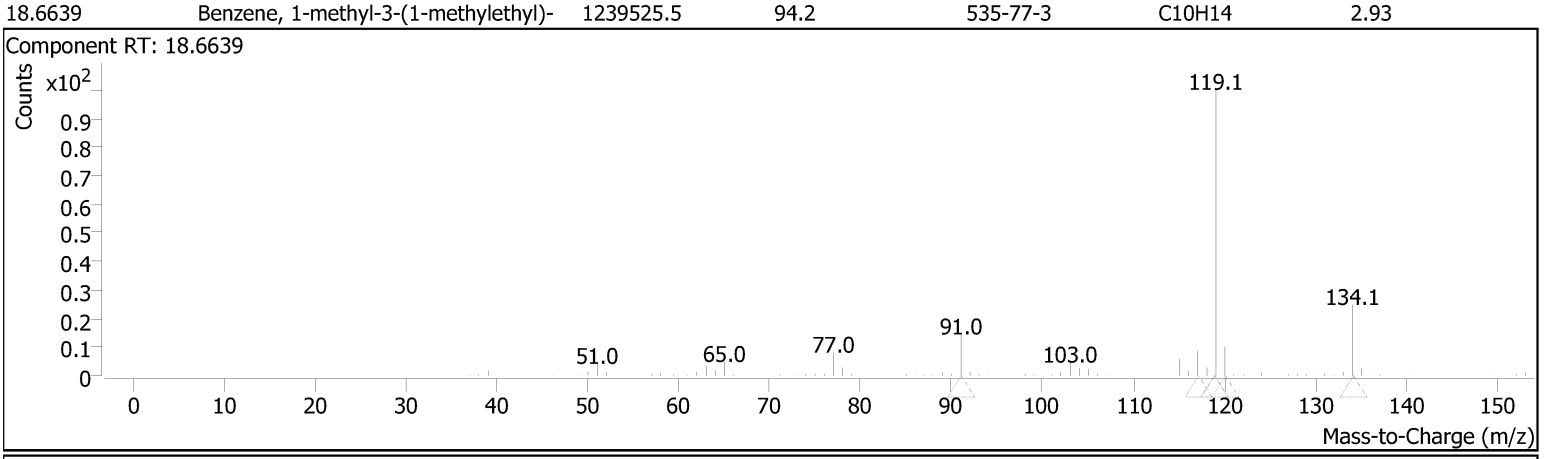


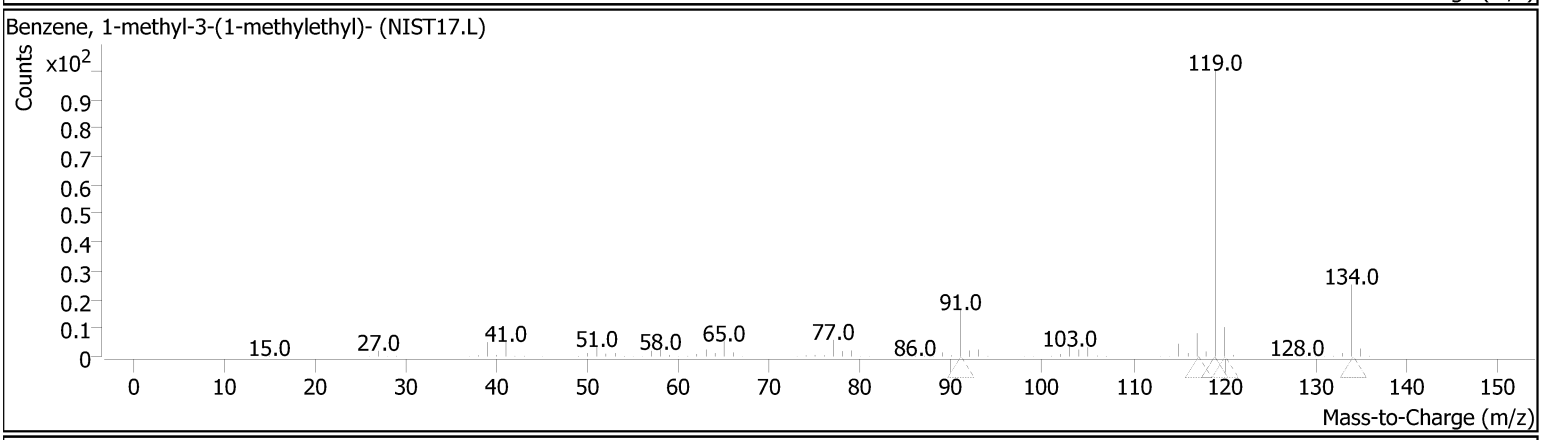


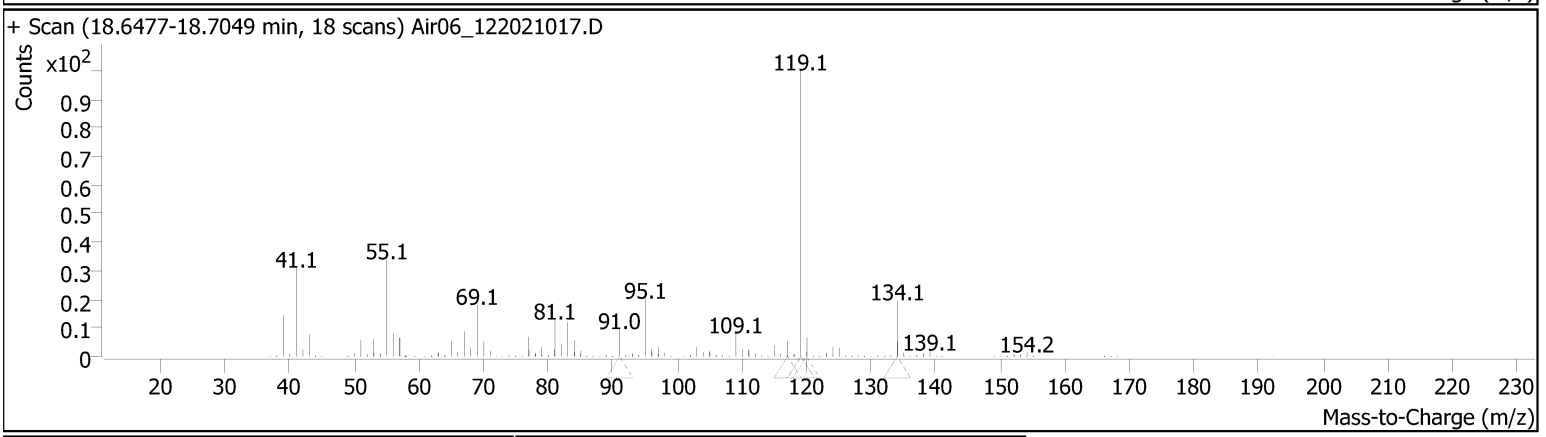


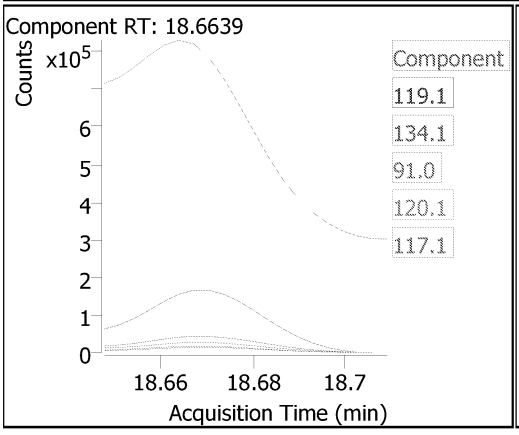


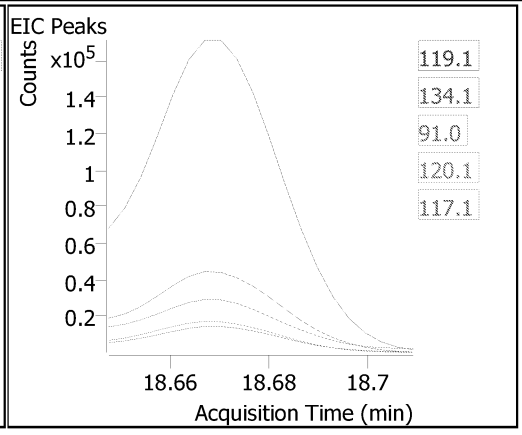
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.6639	Benzene, 1-methyl-3-(1-methylethyl)-	1239525.5	94.2	535-77-3	C10H14	2.93

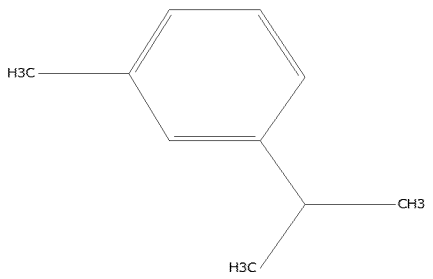




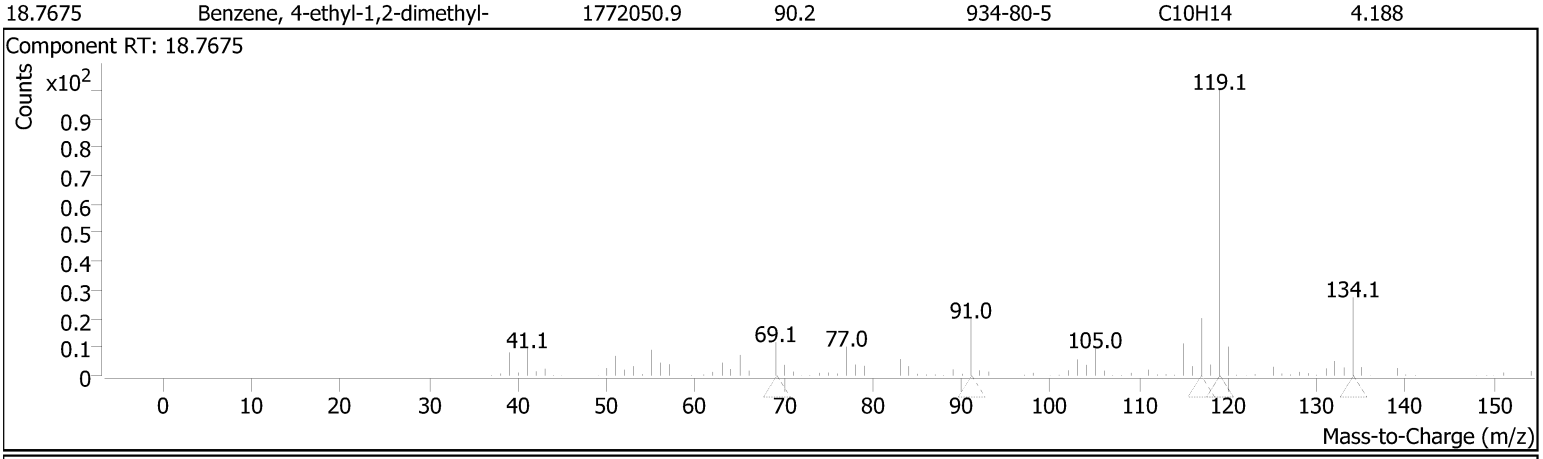


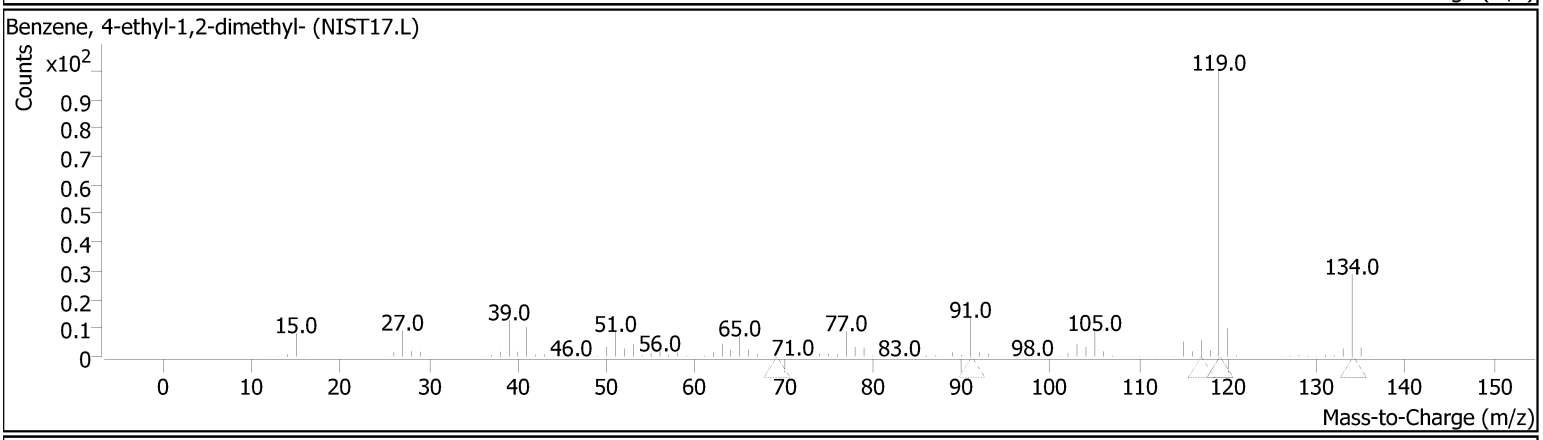


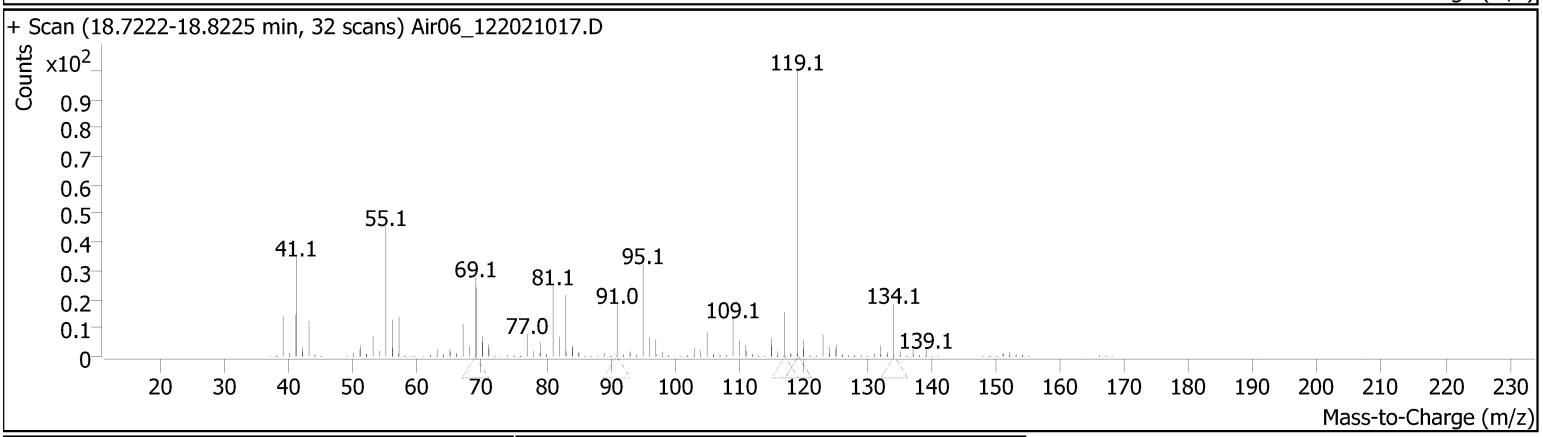


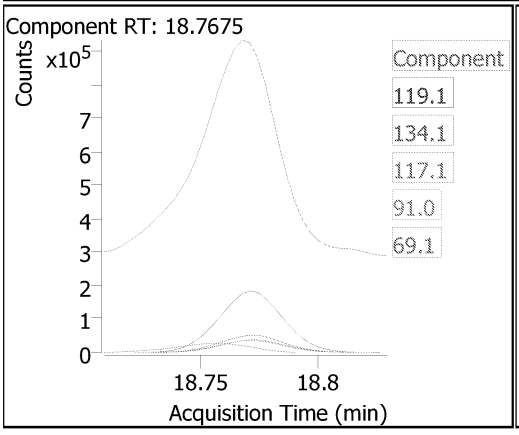


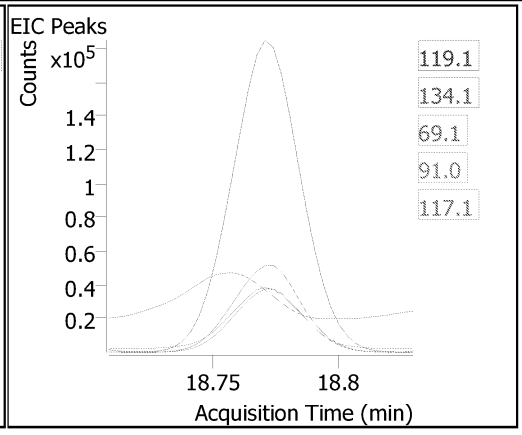
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.7675	Benzene, 4-ethyl-1,2-dimethyl-	1772050.9	90.2	934-80-5	C10H14	4.188

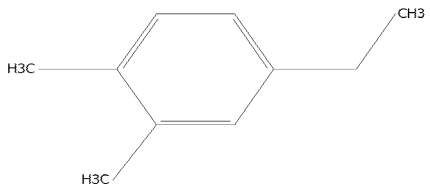




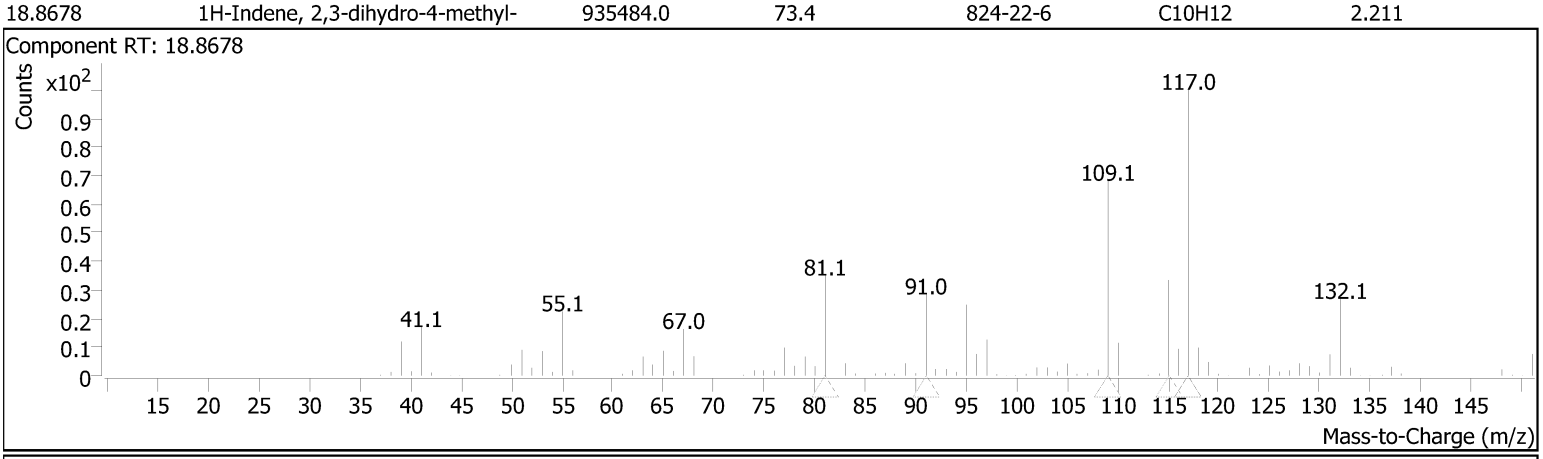


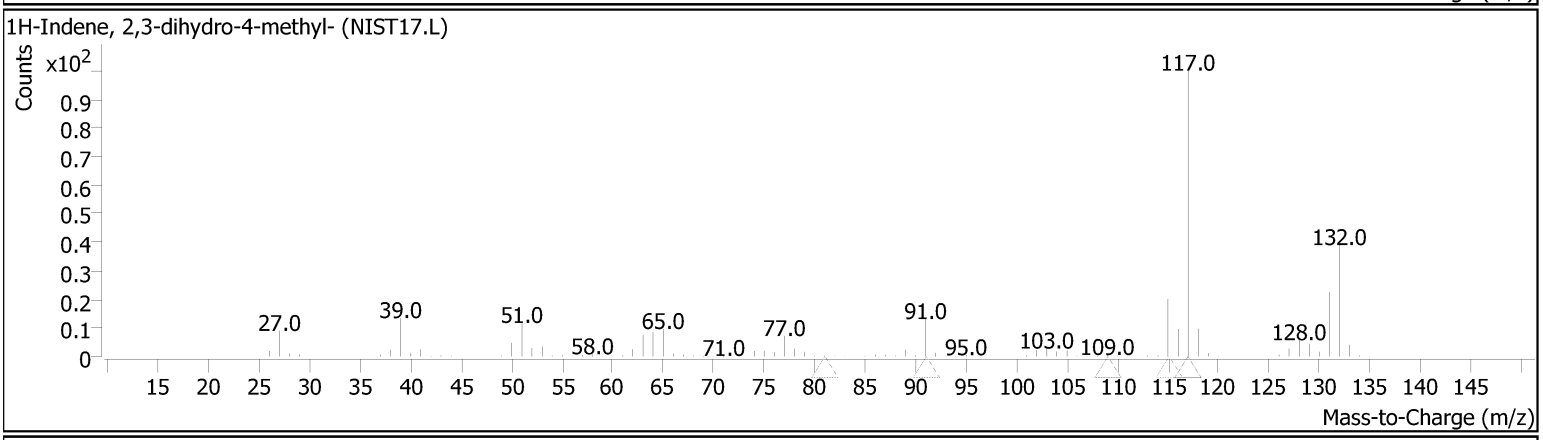


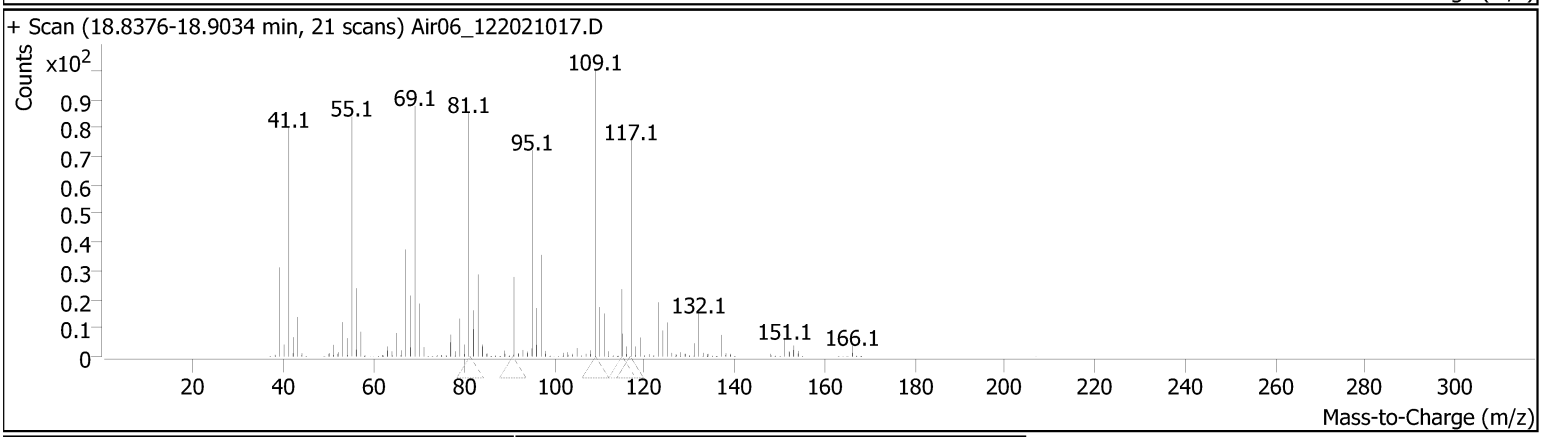


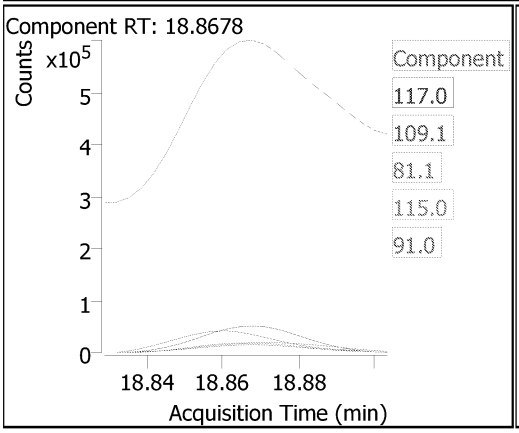


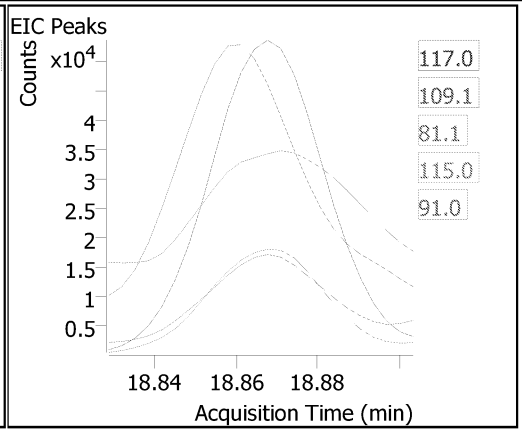
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.8678	1H-Indene, 2,3-dihydro-4-methyl-	935484.0	73.4	824-22-6	C10H12	2.211

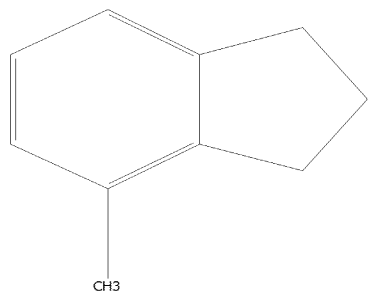




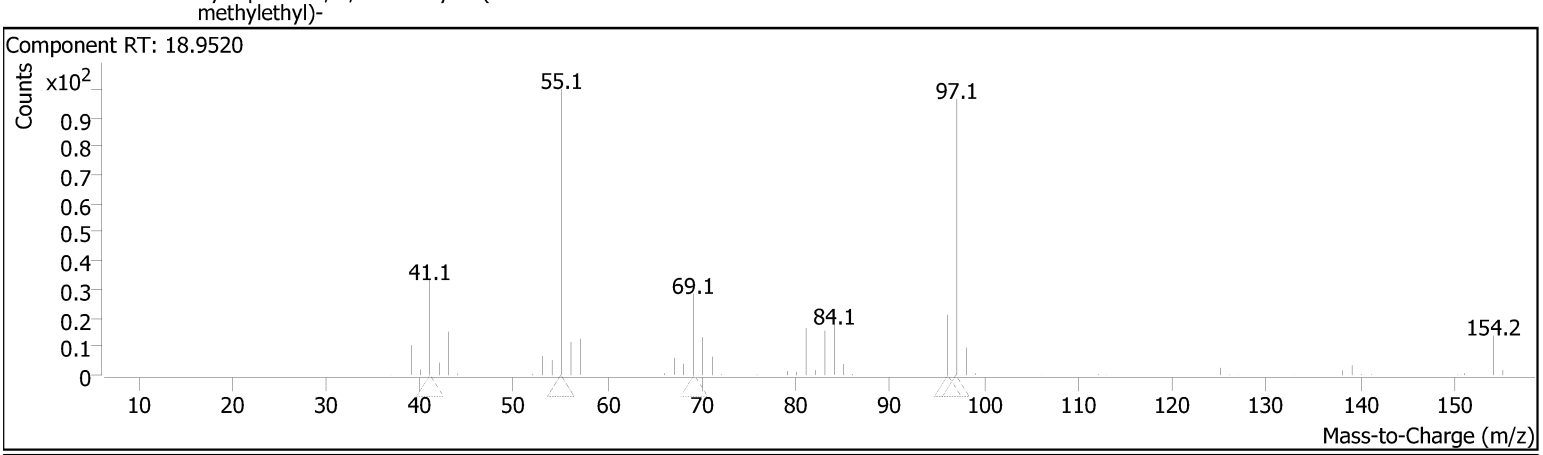


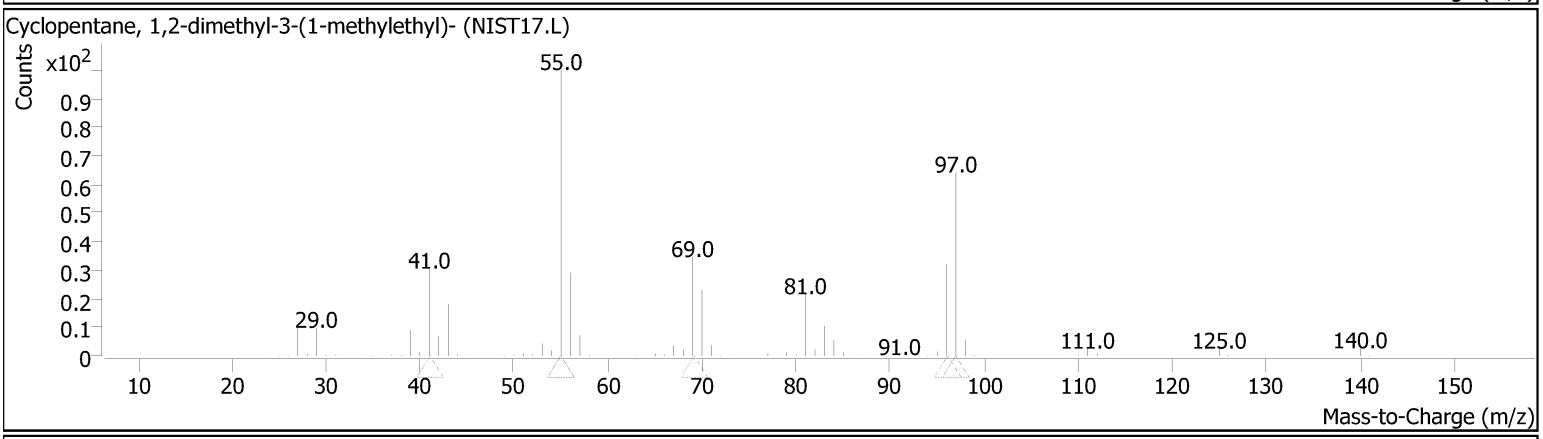


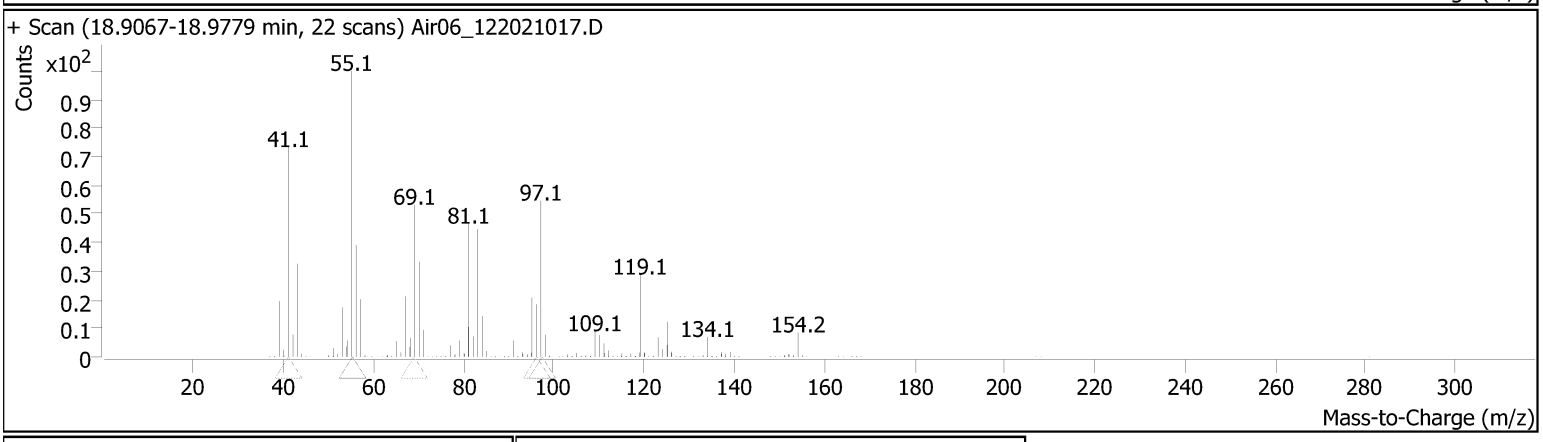


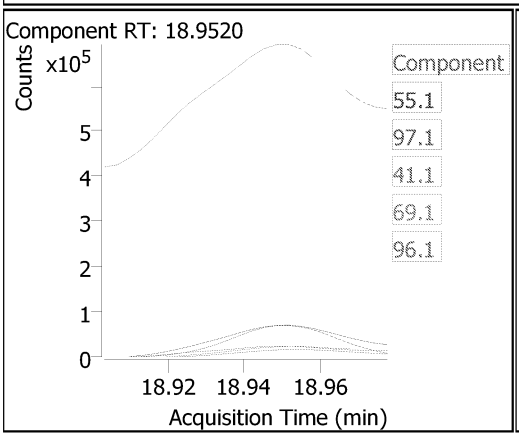


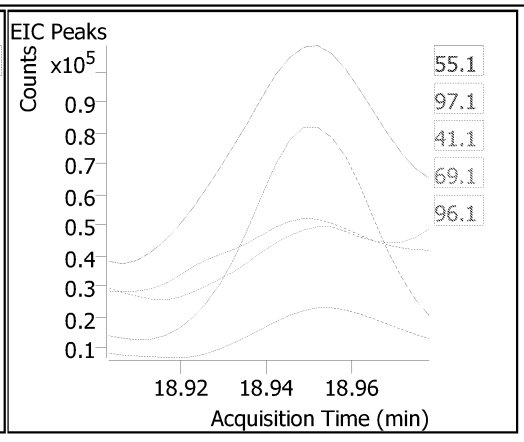
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.9520	Cyclopentane, 1,2-dimethyl-3-(1-methylethyl)-	1403075.1	86.7	489-20-3	C10H20	3.316

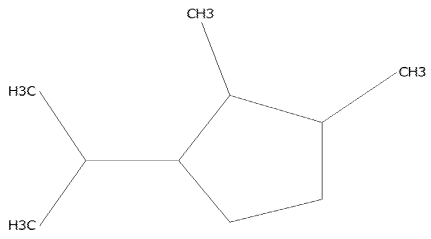




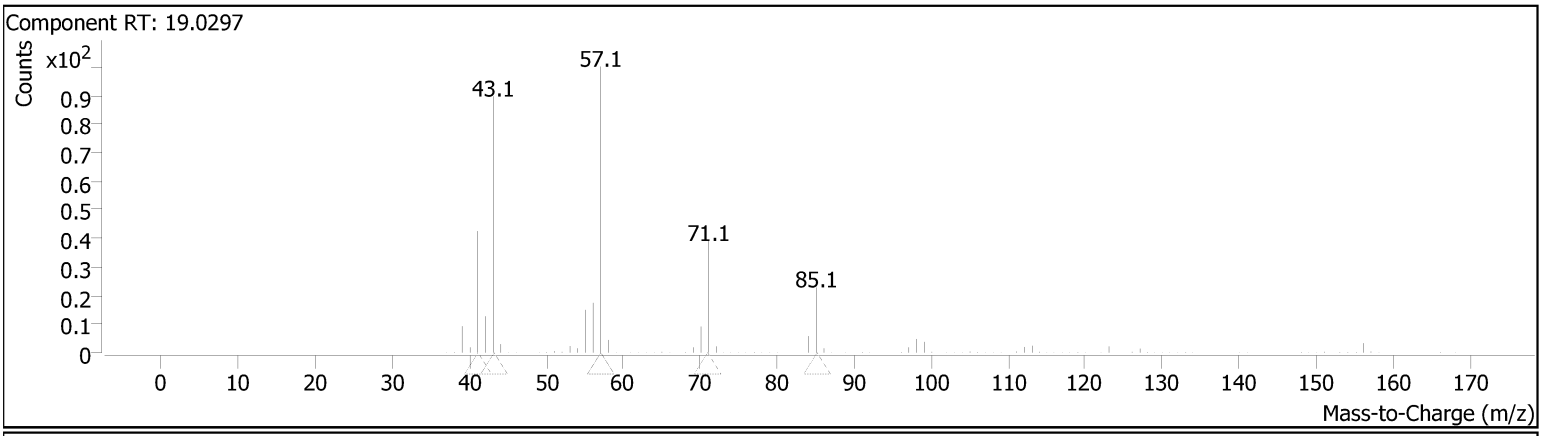


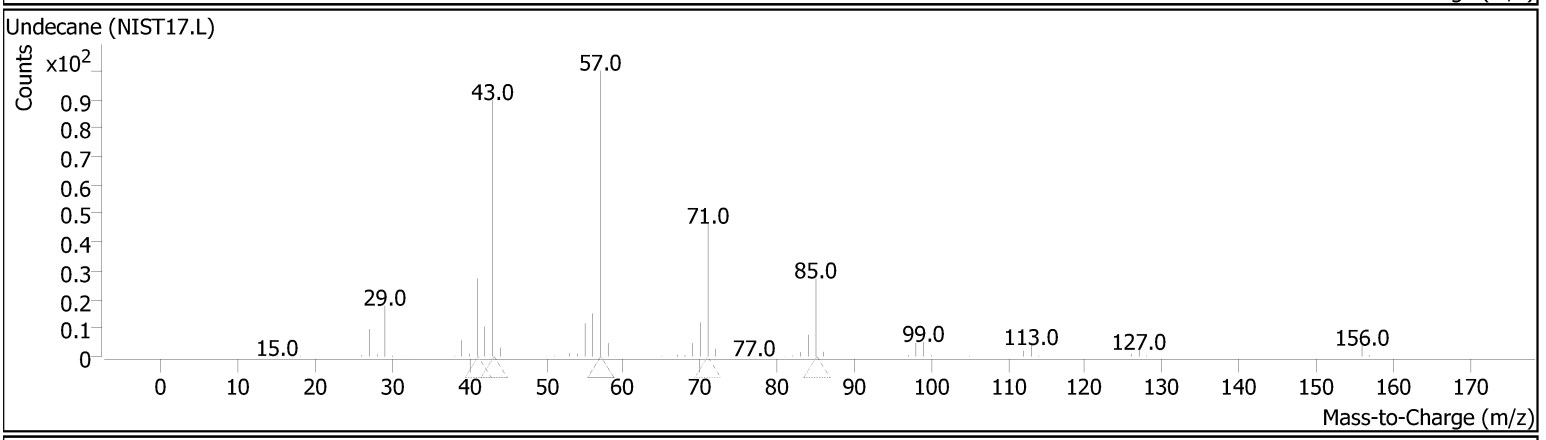


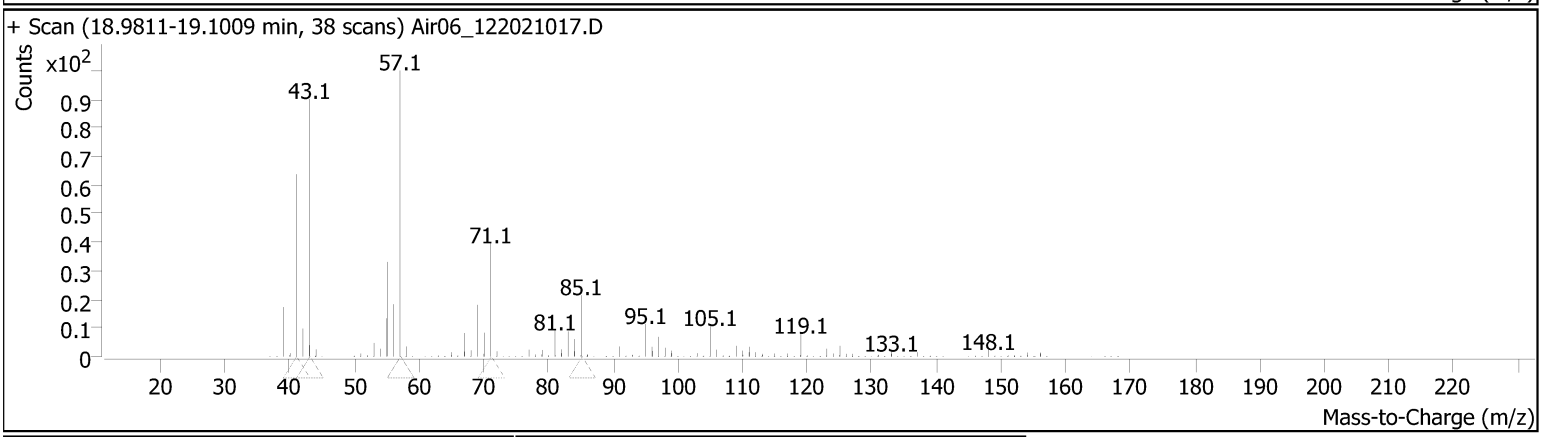


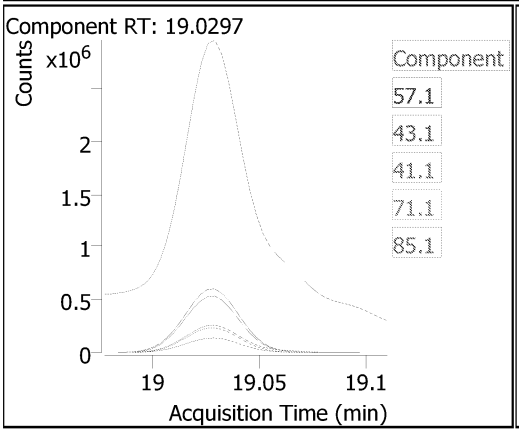


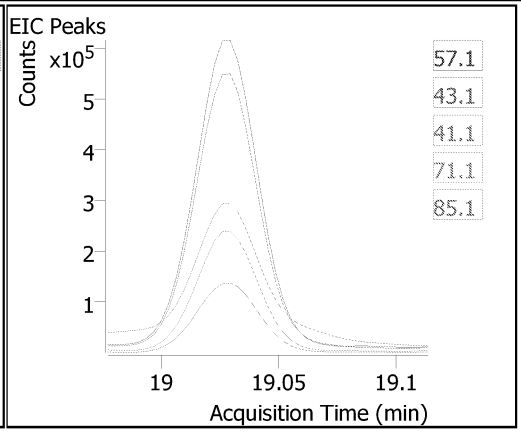
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.0297	Undecane	6745077.3	95.7	1120-21-4	C11H24	15.94





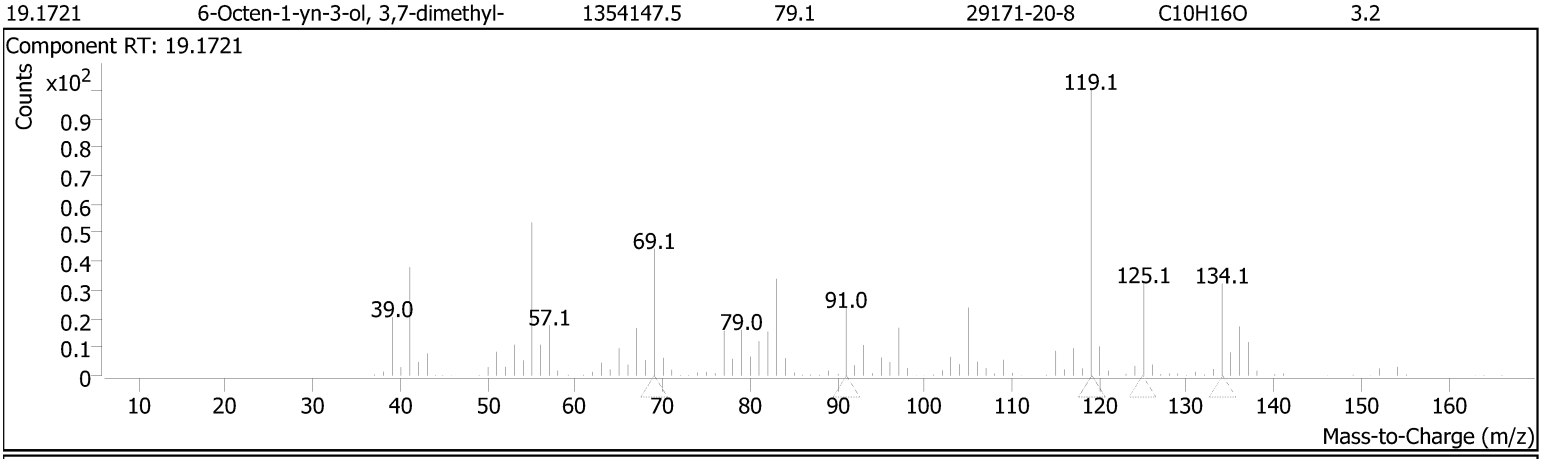


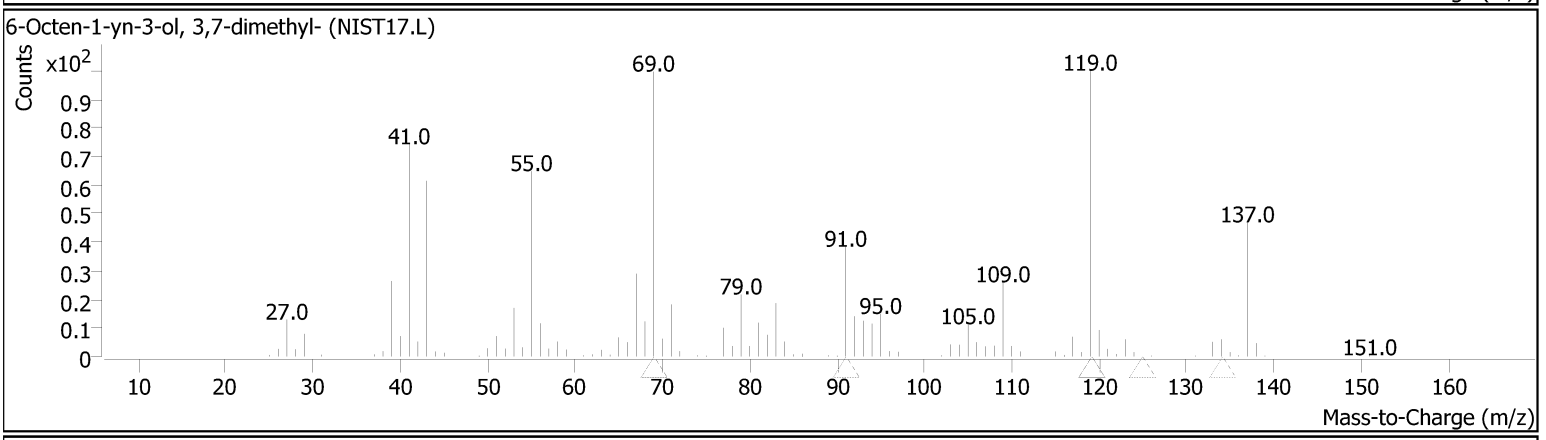


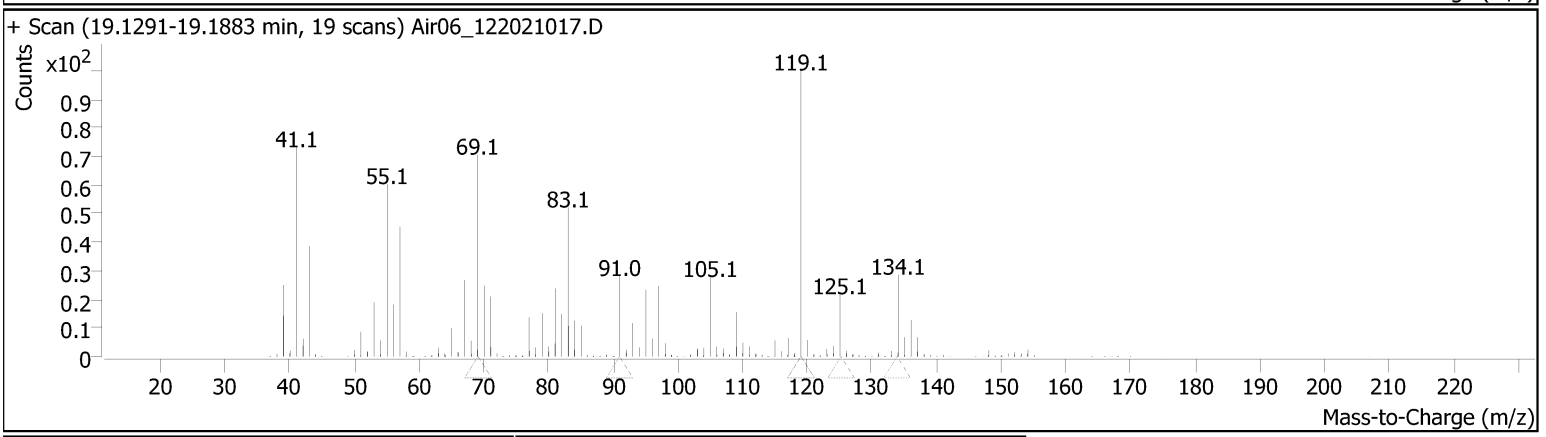


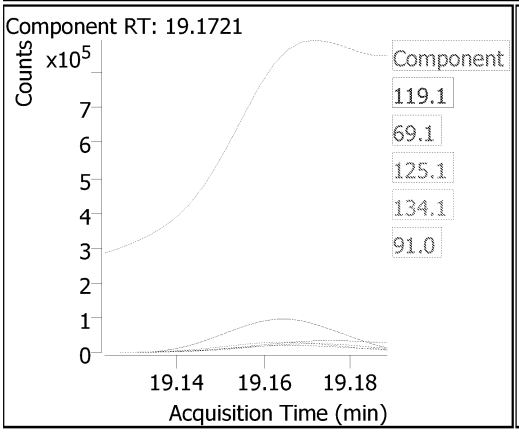


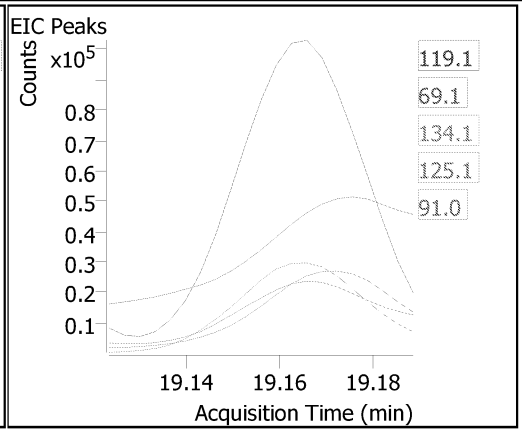
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.1721	6-Octen-1-yn-3-ol, 3,7-dimethyl-	1354147.5	79.1	29171-20-8	C10H16O	3.2

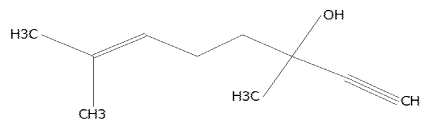




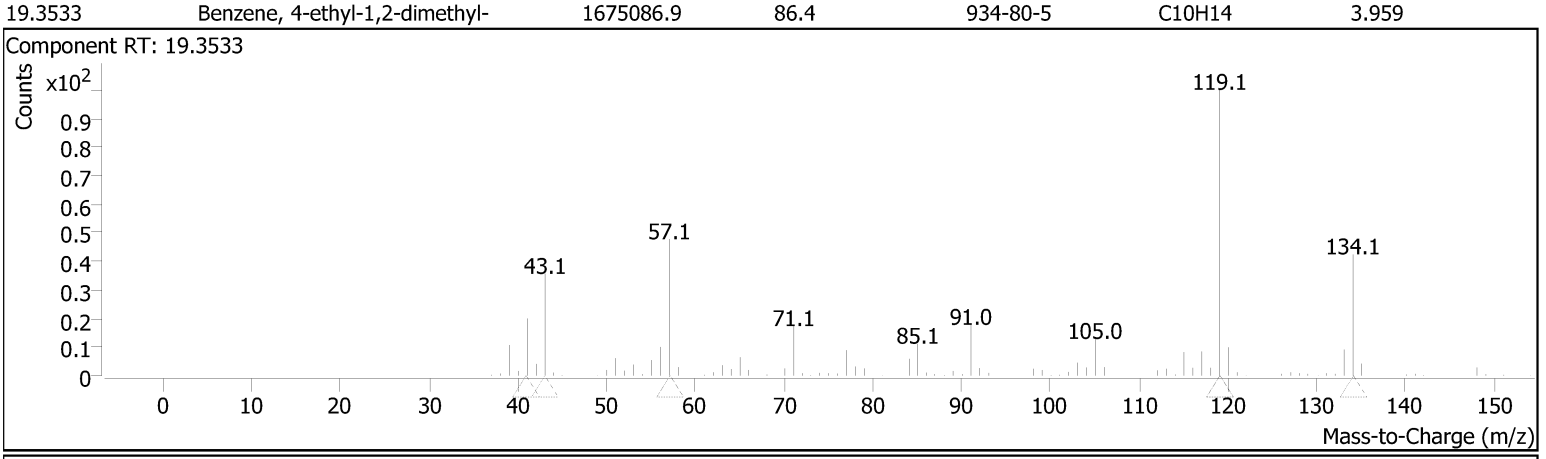


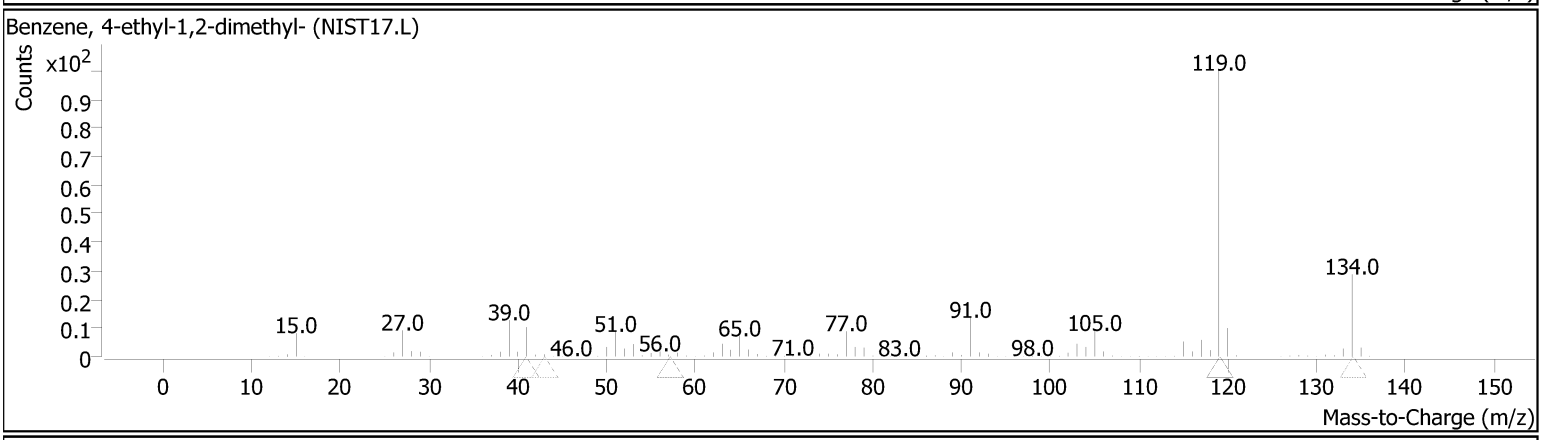


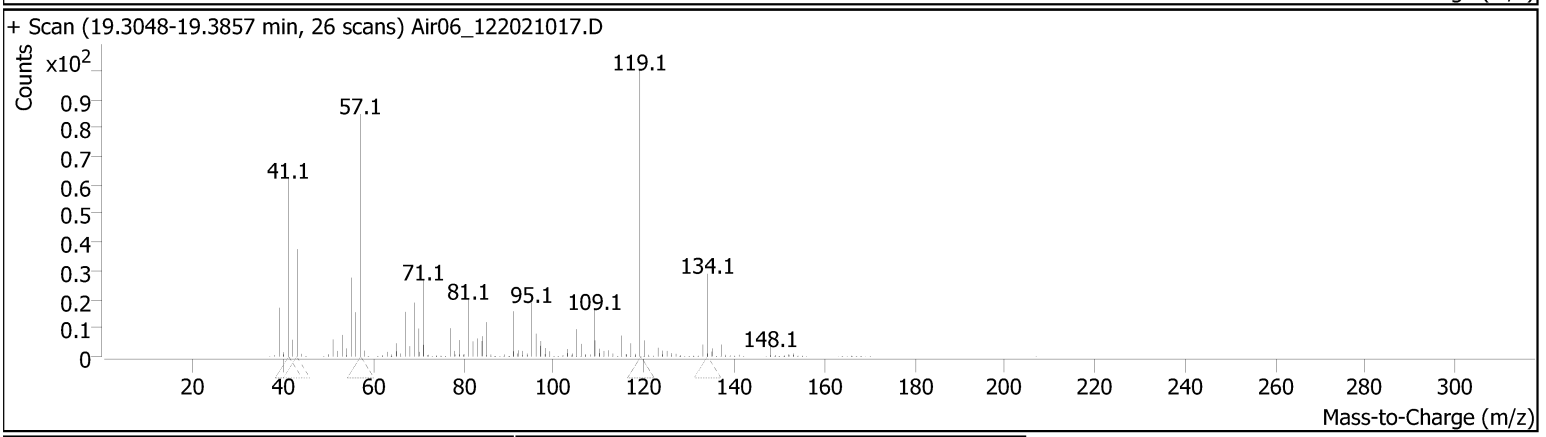


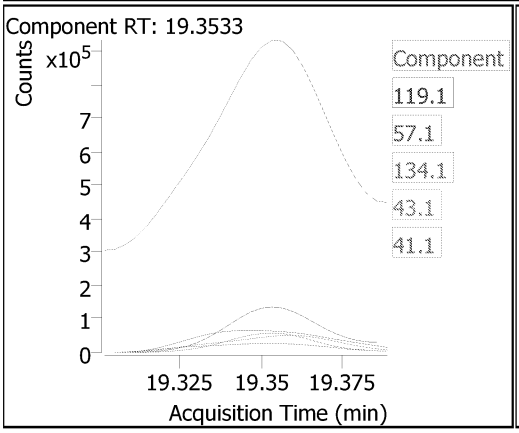


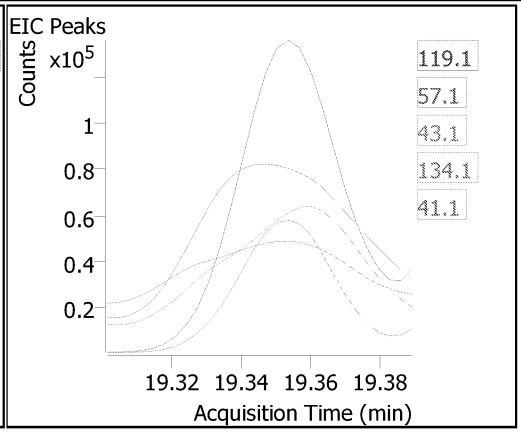
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.3533	Benzene, 4-ethyl-1,2-dimethyl-	1675086.9	86.4	934-80-5	C10H14	3.959

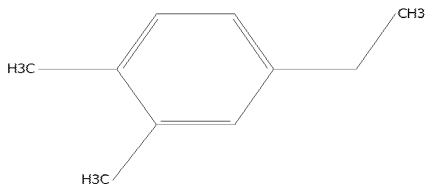




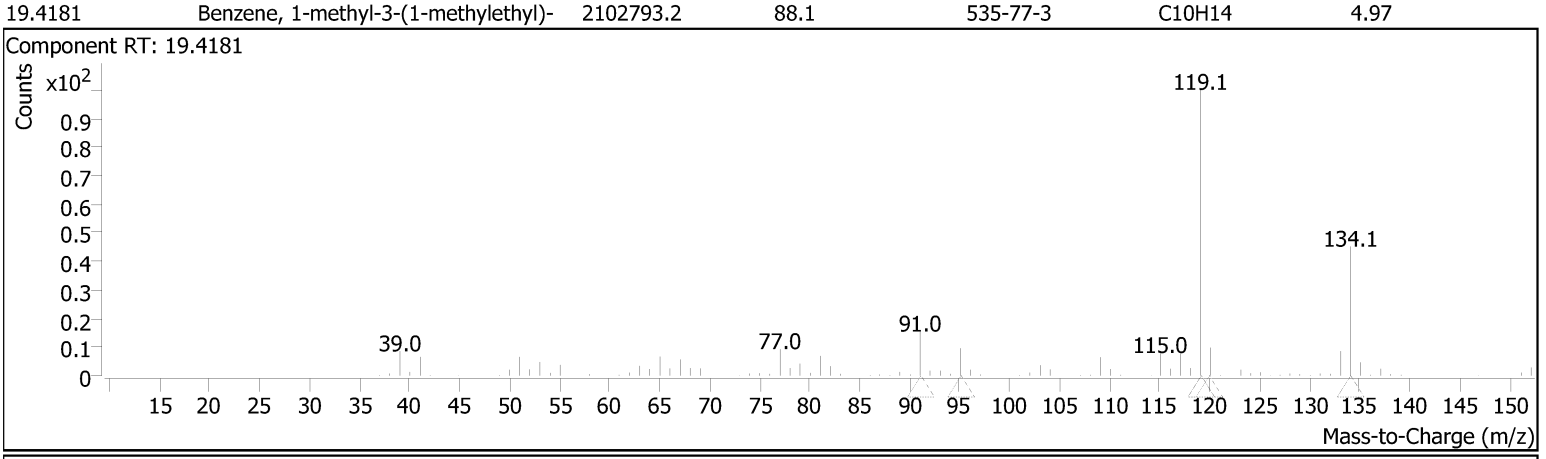


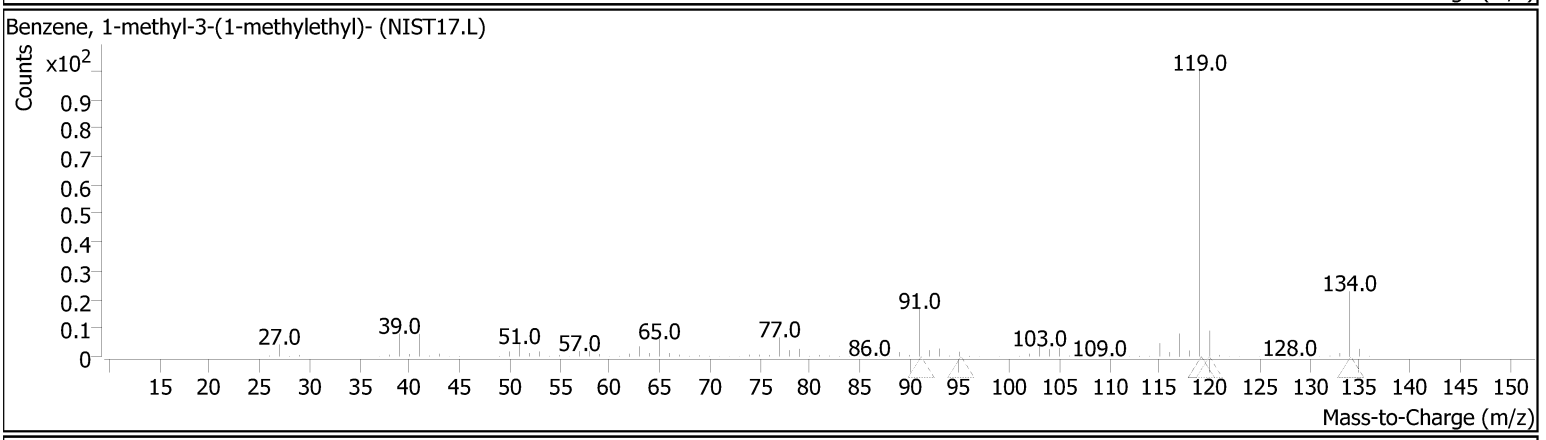


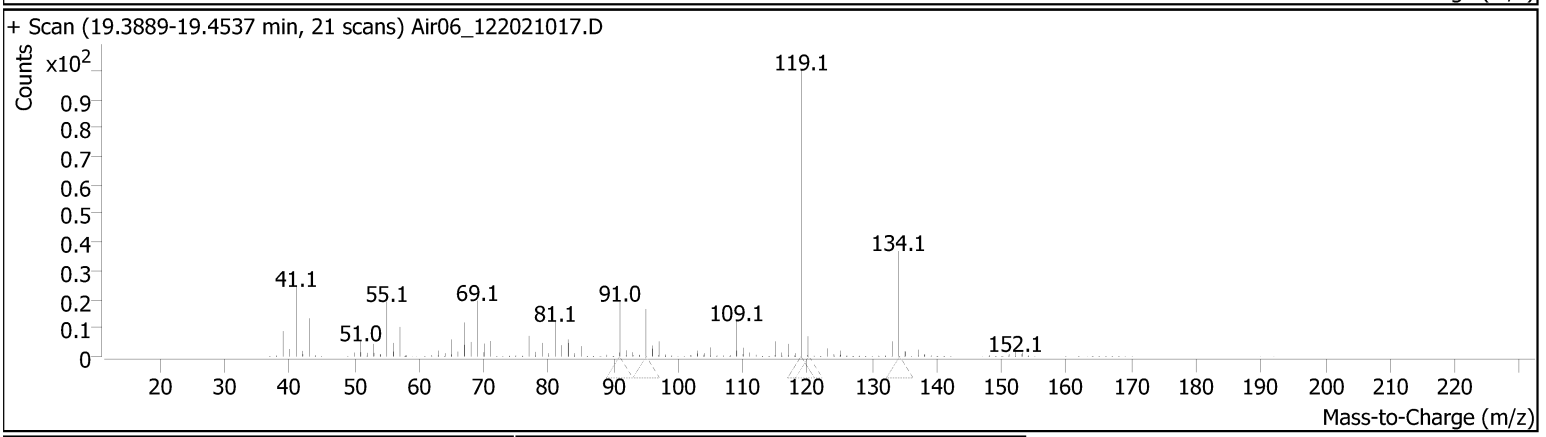


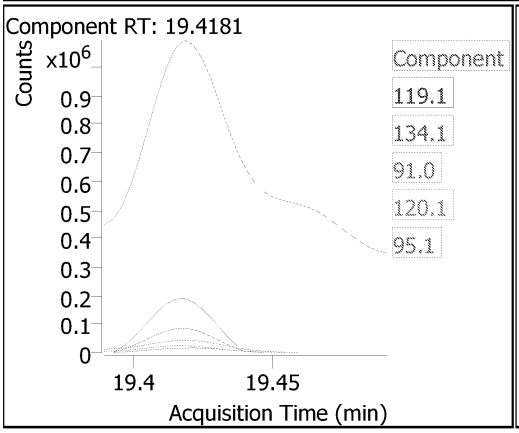


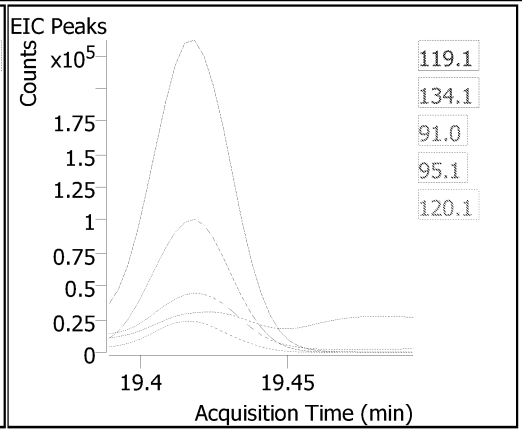
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.4181	Benzene, 1-methyl-3-(1-methylethyl)-	2102793.2	88.1	535-77-3	C10H14	4.97

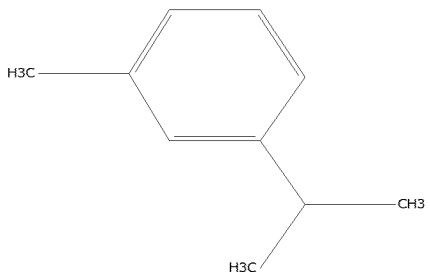




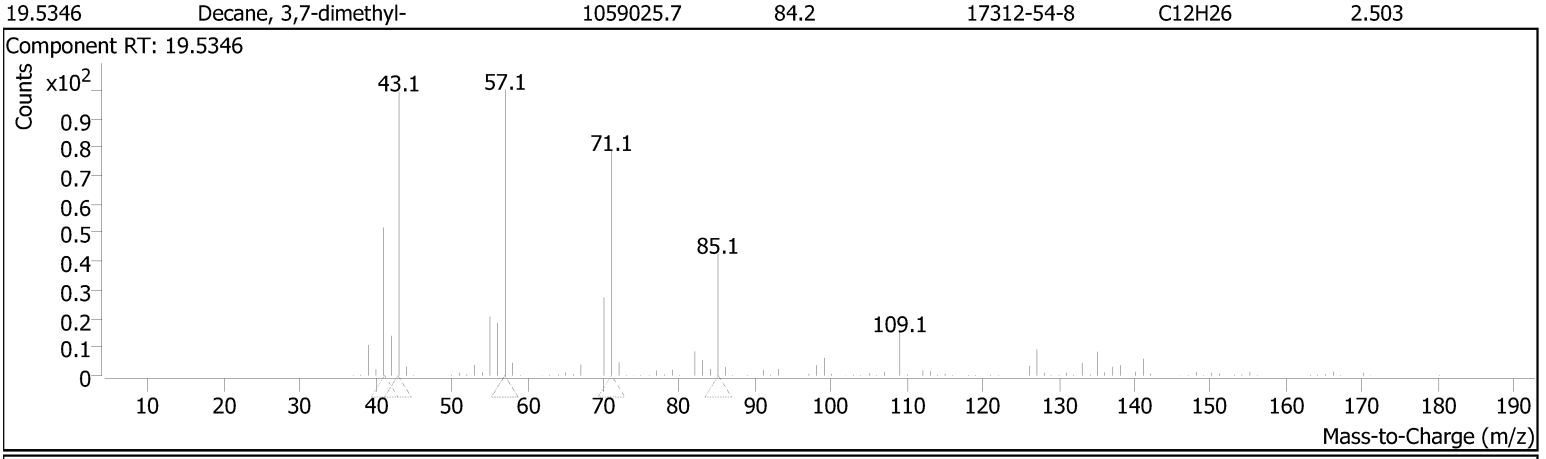


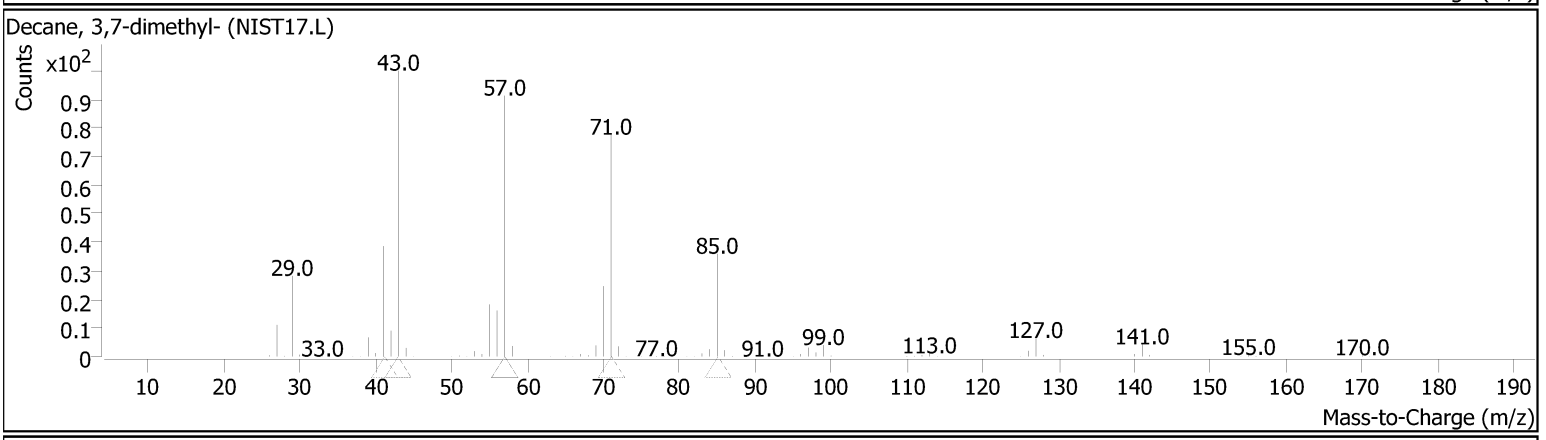


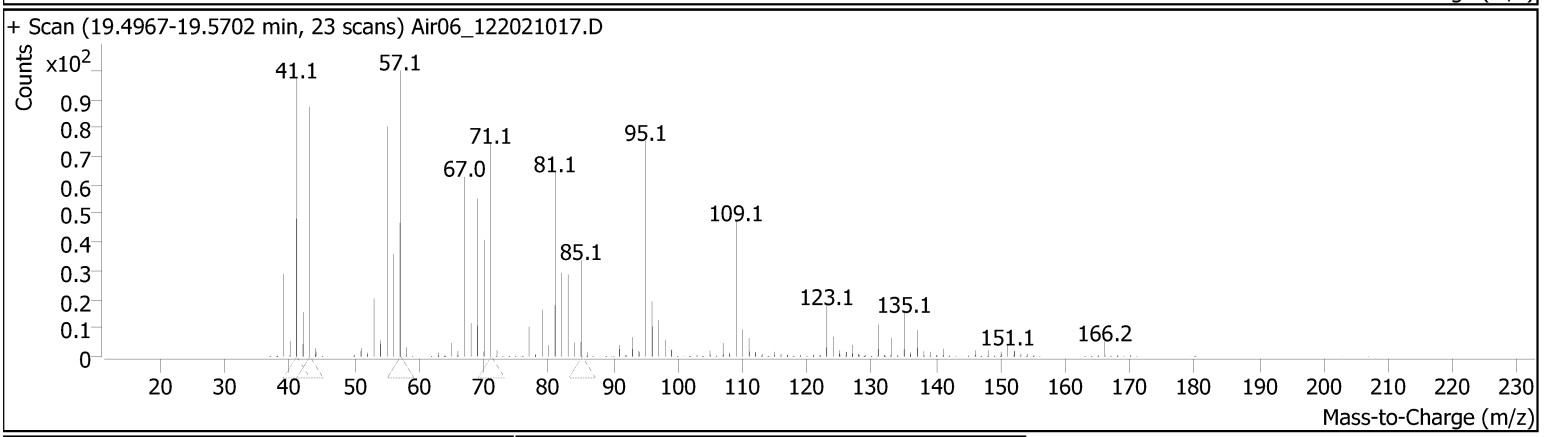


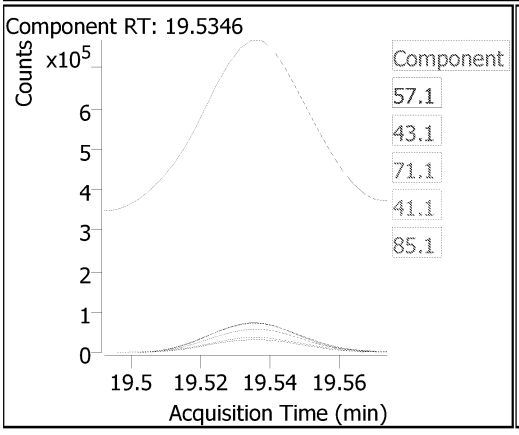


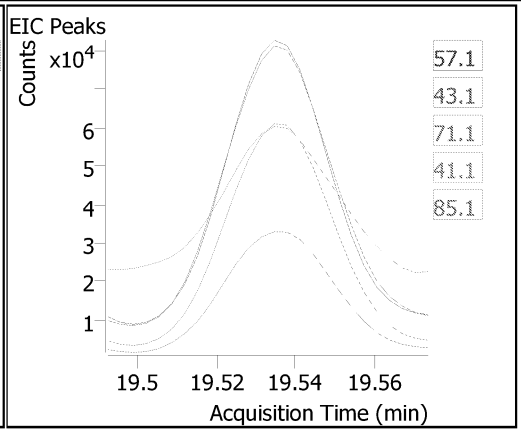
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.5346	Decane, 3,7-dimethyl-	1059025.7	84.2	17312-54-8	C12H26	2.503

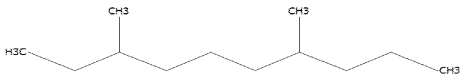








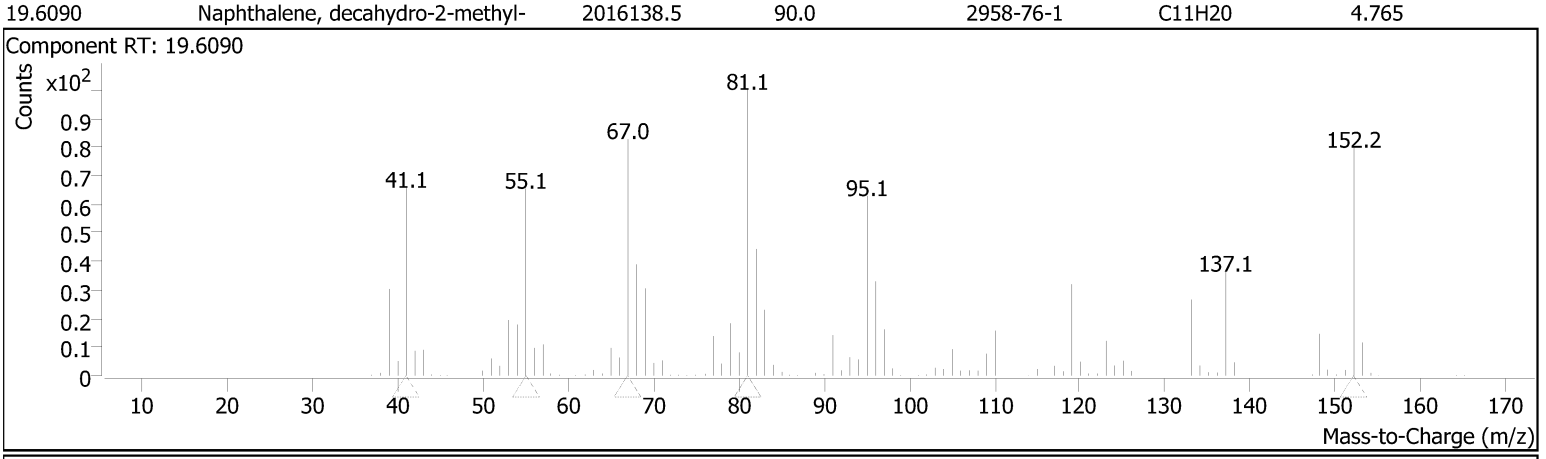


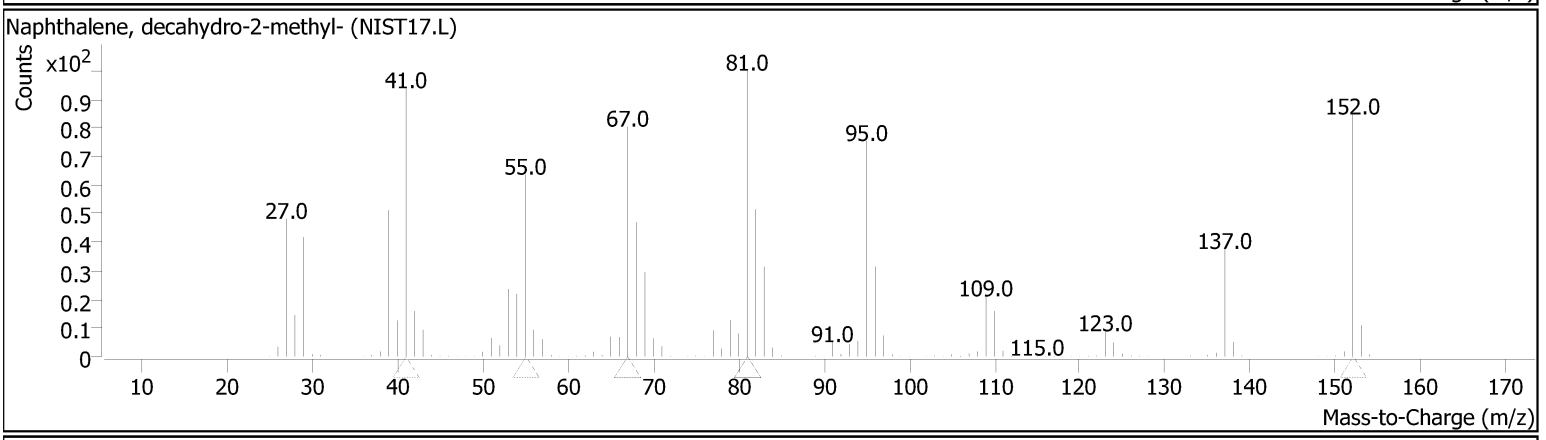


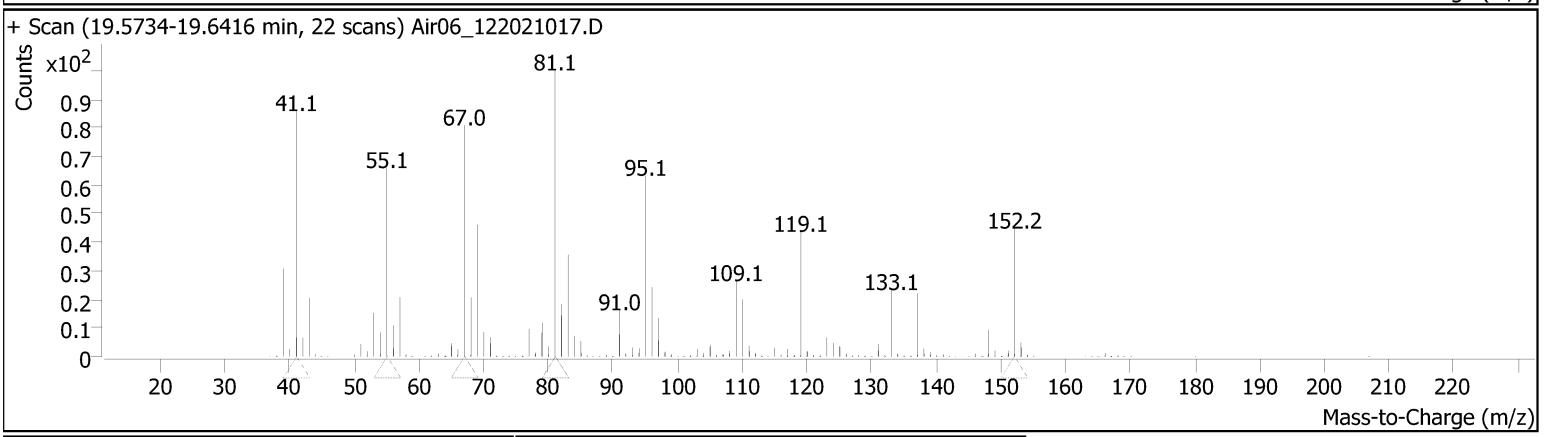
Library Search Results - NonTarget Hits with Details

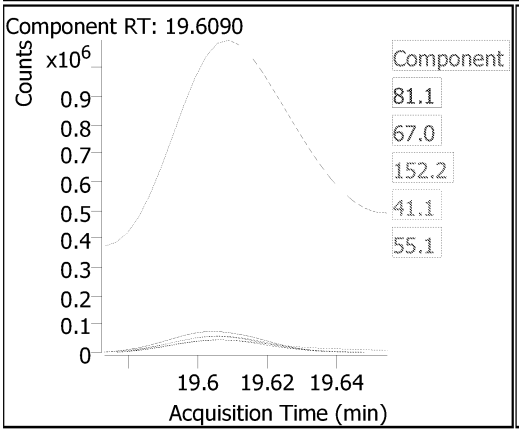
Agilent Technologies

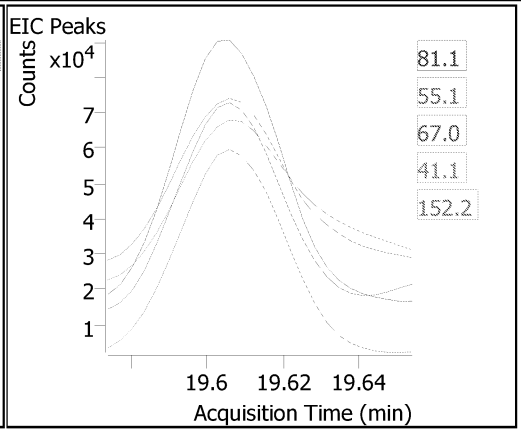
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.6090	Naphthalene, decahydro-2-methyl-	2016138.5	90.0	2958-76-1	C11H20	4.765

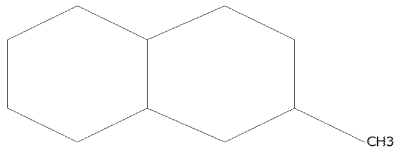




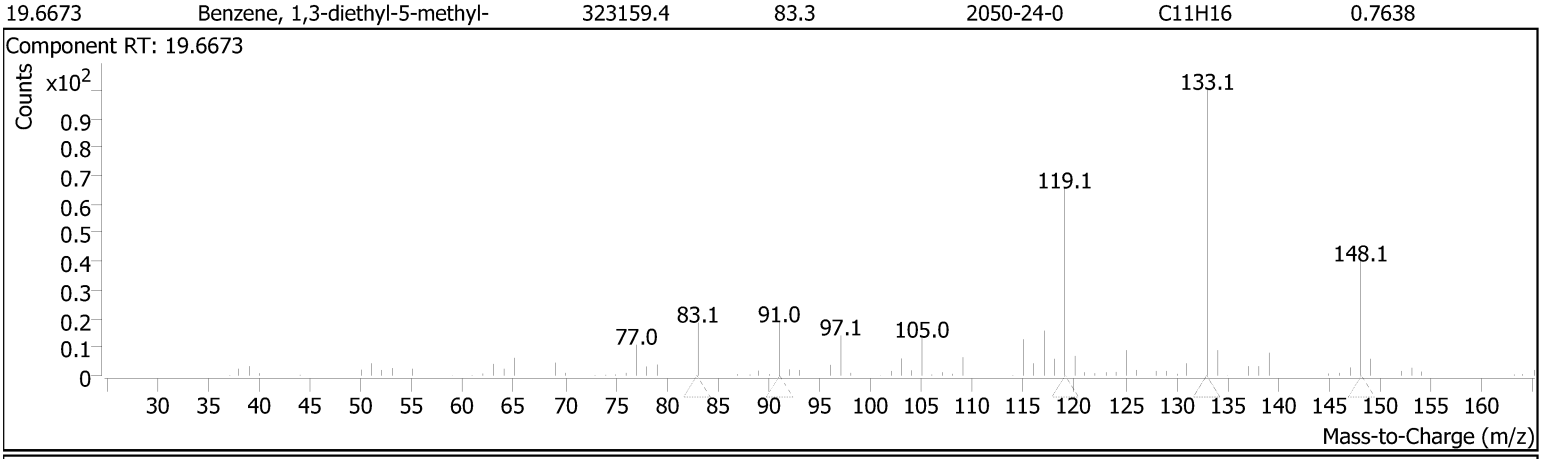


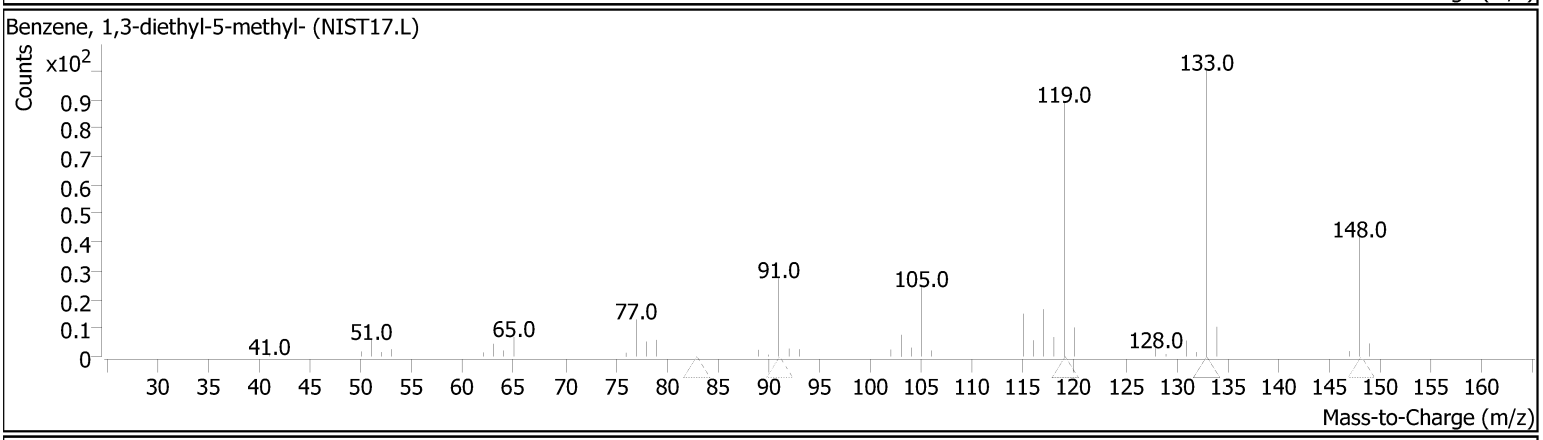


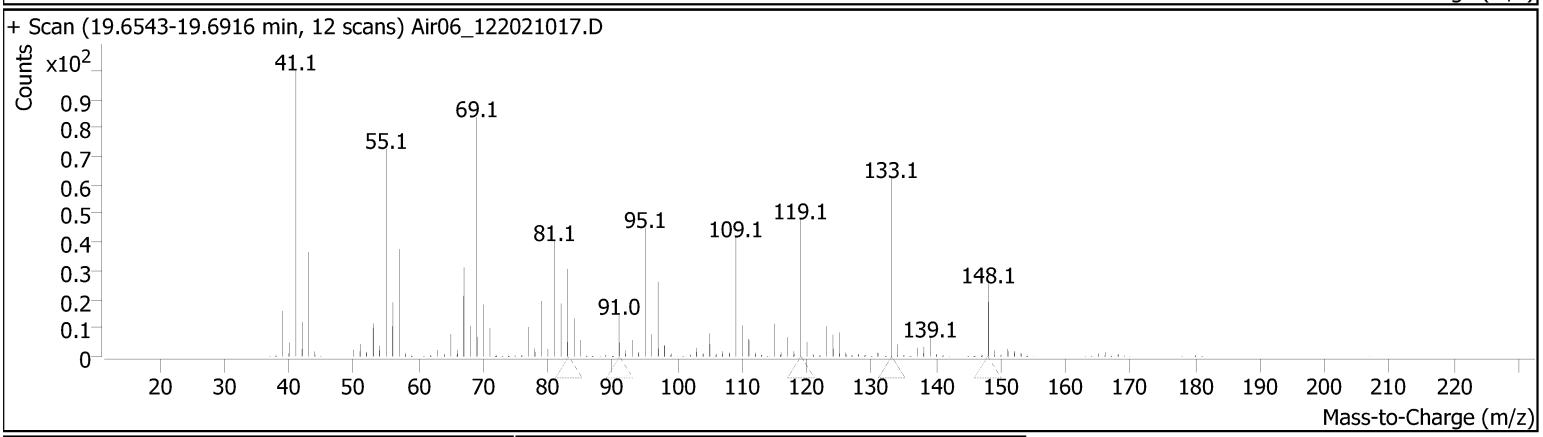


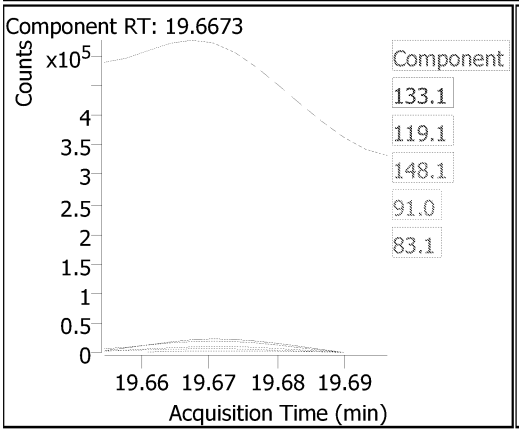


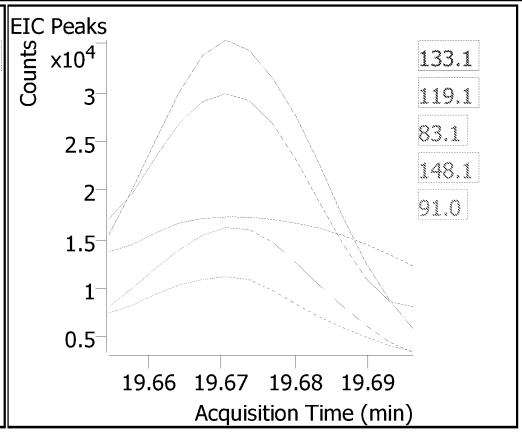
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.6673	Benzene, 1,3-diethyl-5-methyl-	323159.4	83.3	2050-24-0	C11H16	0.7638

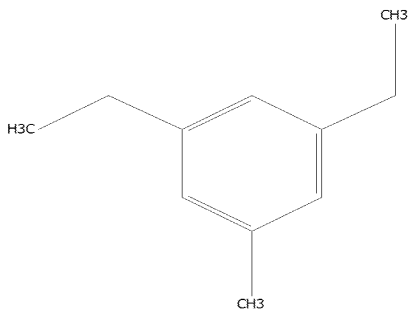




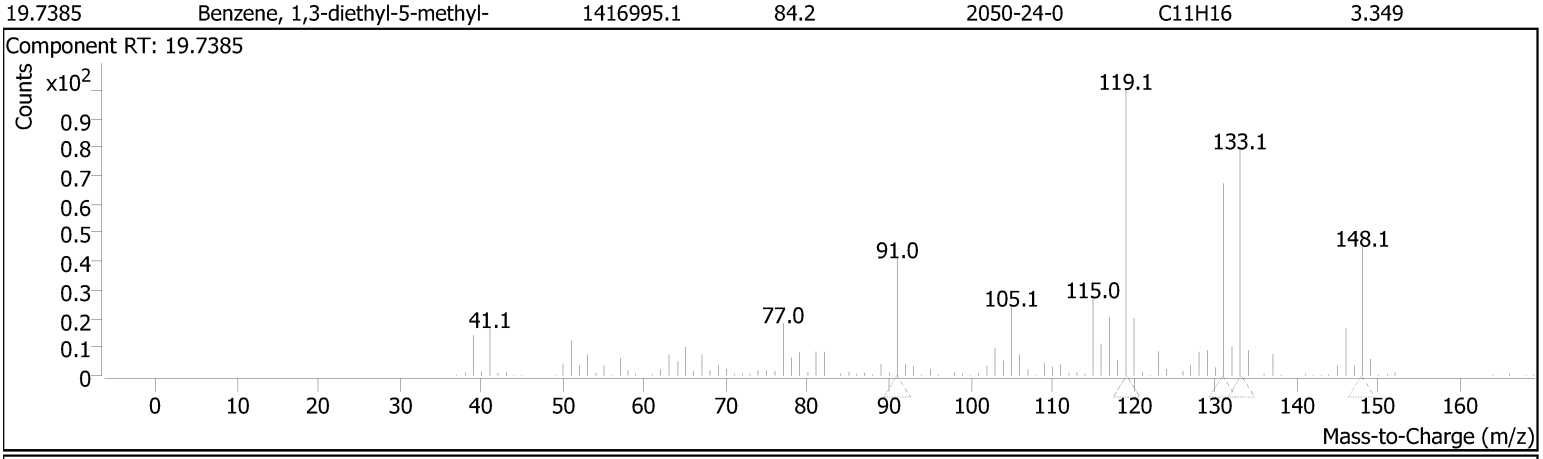


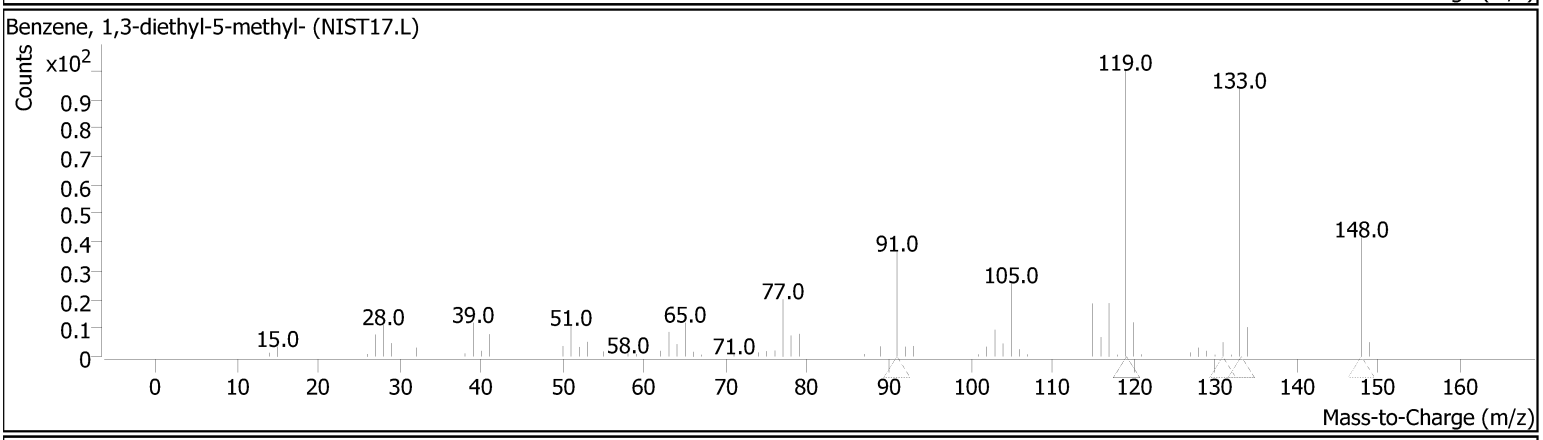


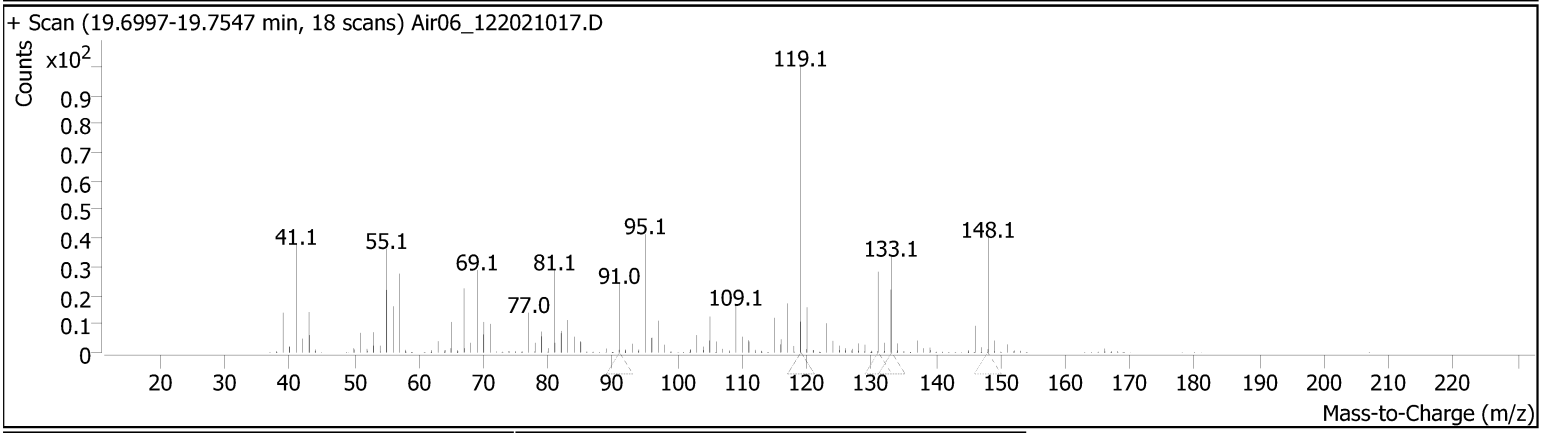


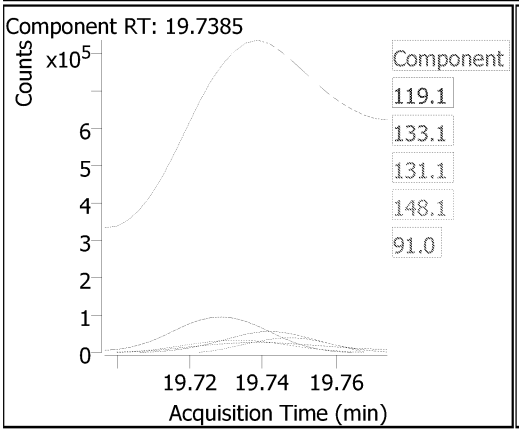


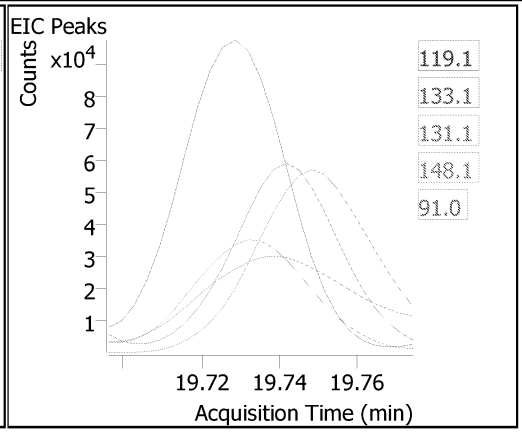
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.7385	Benzene, 1,3-diethyl-5-methyl-	1416995.1	84.2	2050-24-0	C11H16	3.349

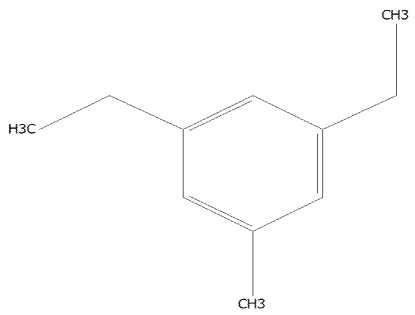




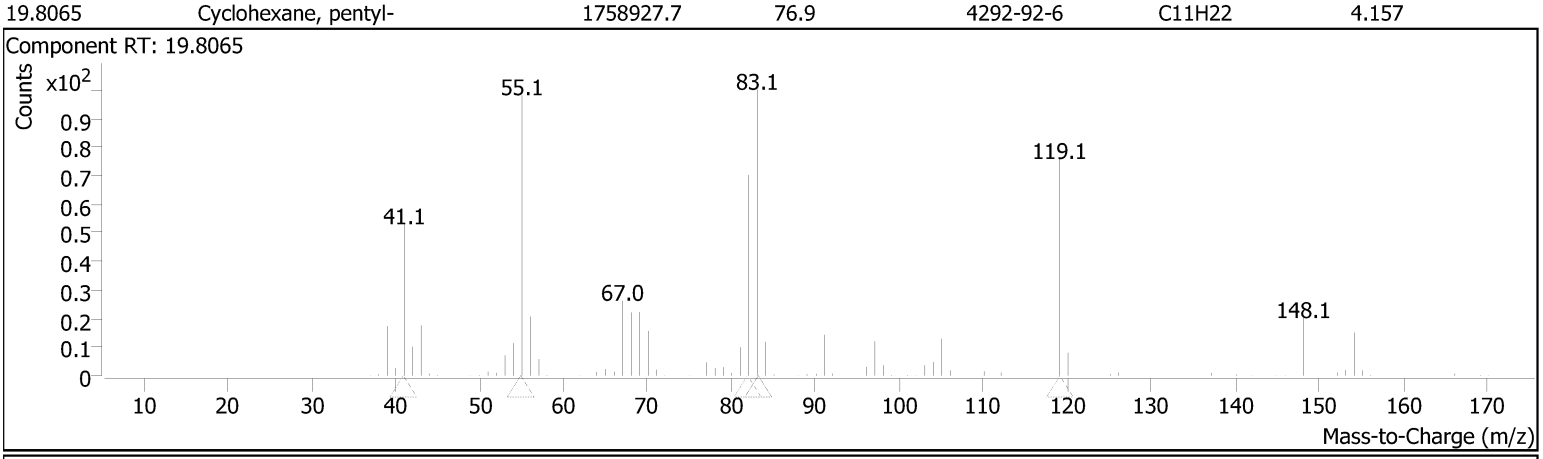


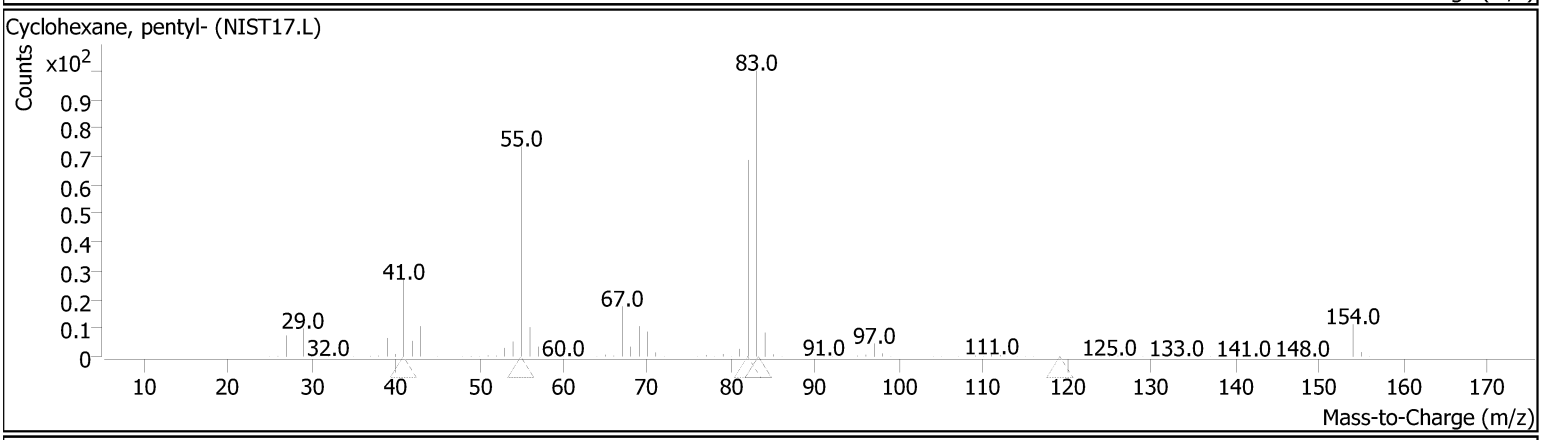


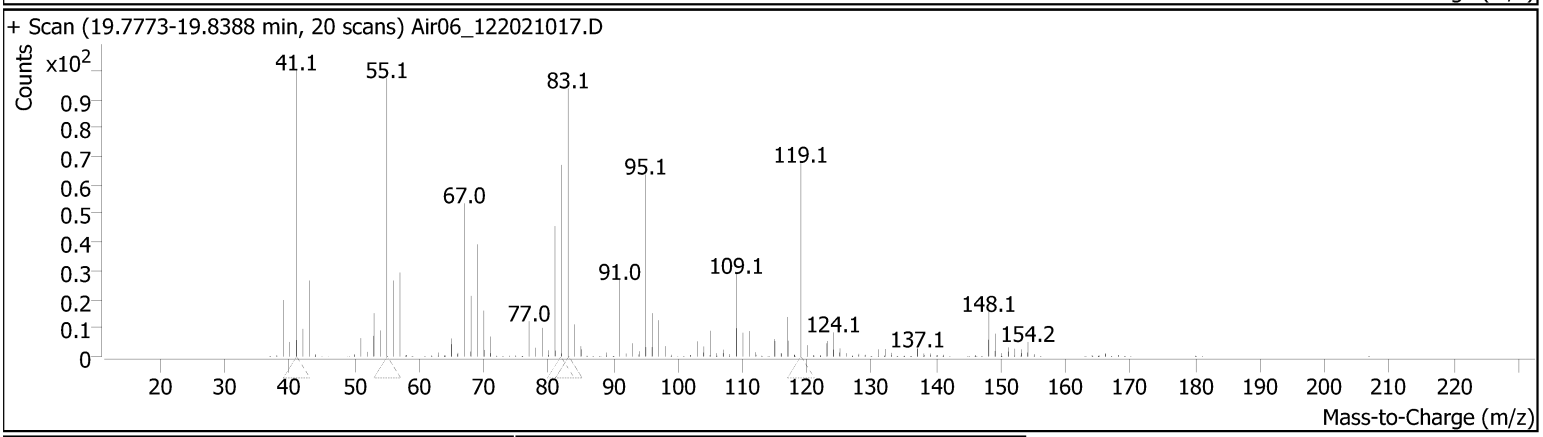


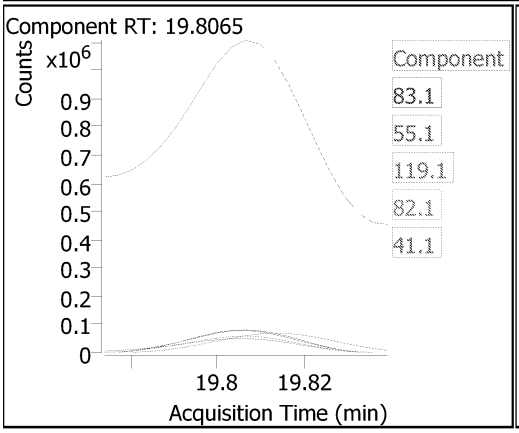


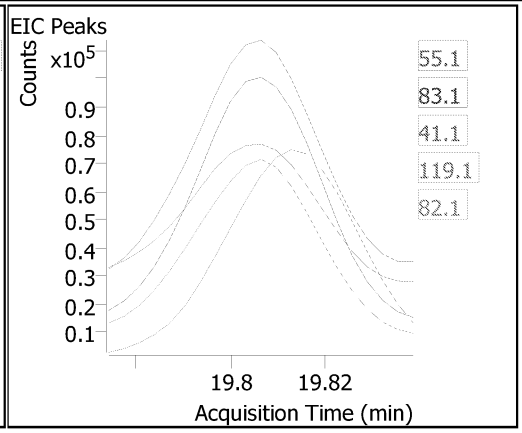
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.8065	Cyclohexane, pentyl-	1758927.7	76.9	4292-92-6	C11H22	4.157

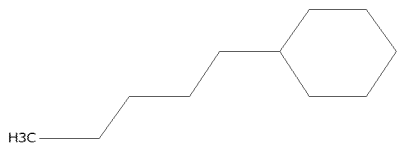




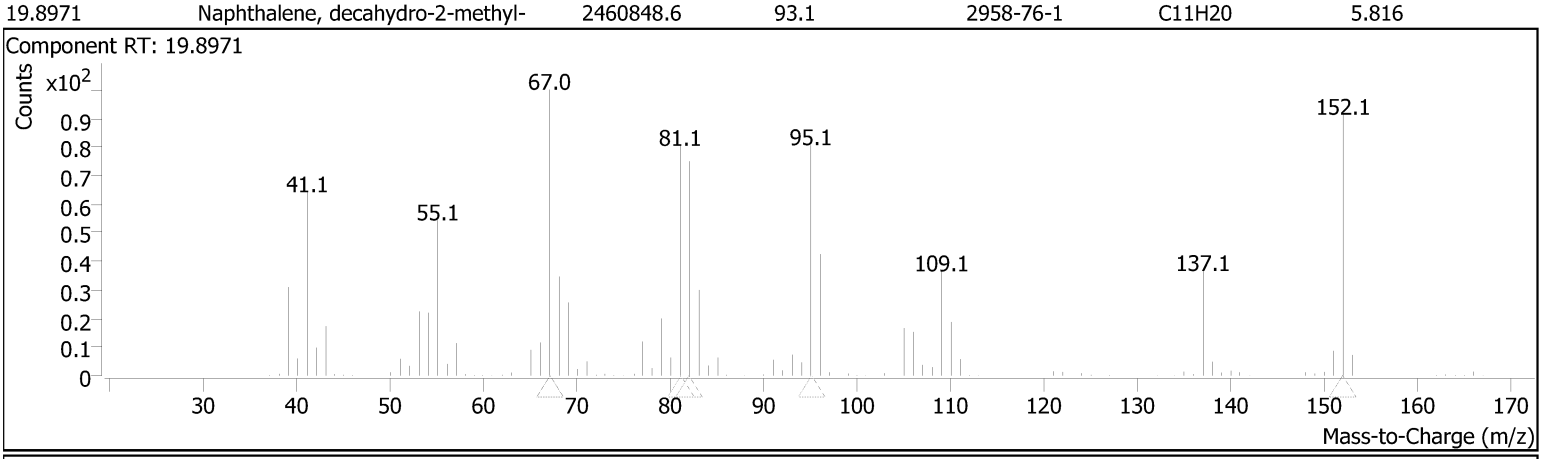


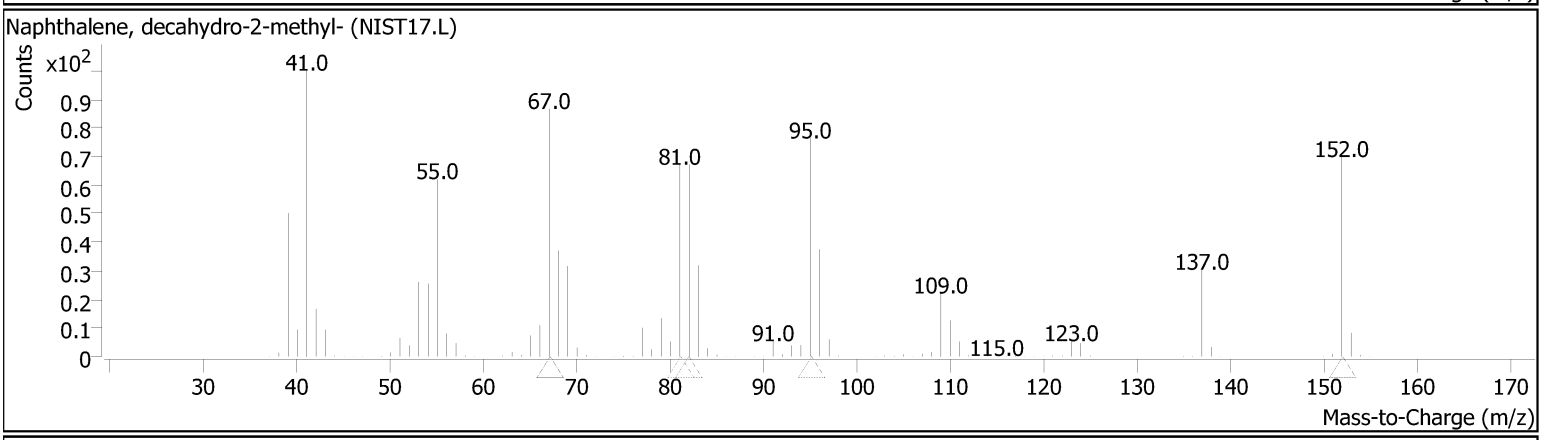


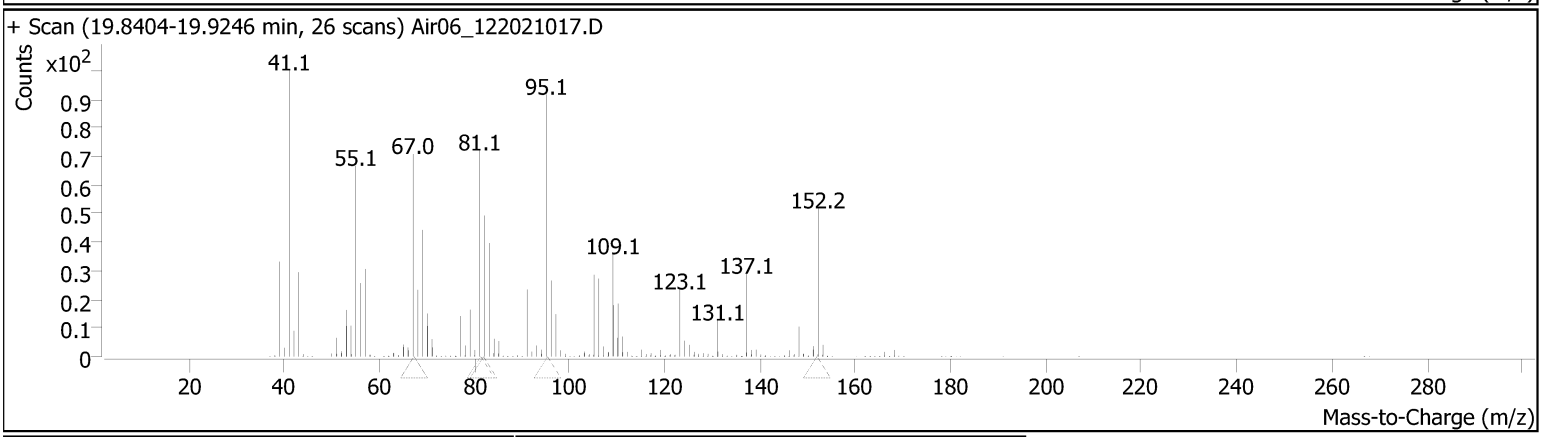


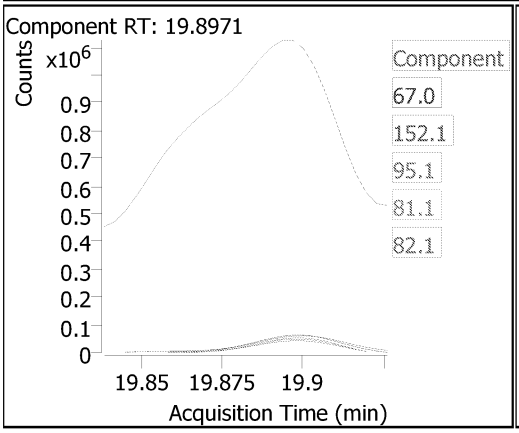


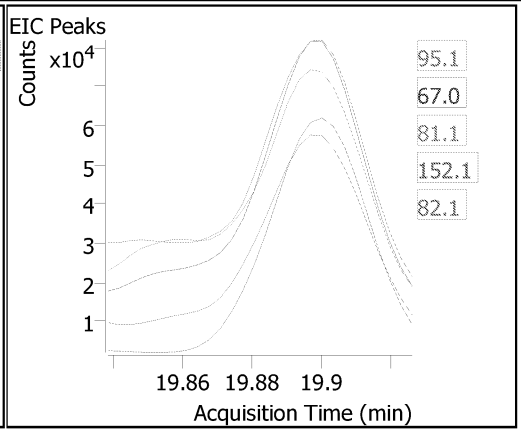
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.8971	Naphthalene, decahydro-2-methyl-	2460848.6	93.1	2958-76-1	C11H20	5.816

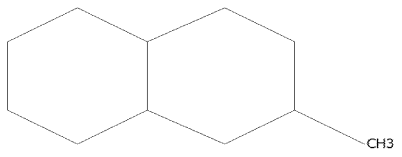




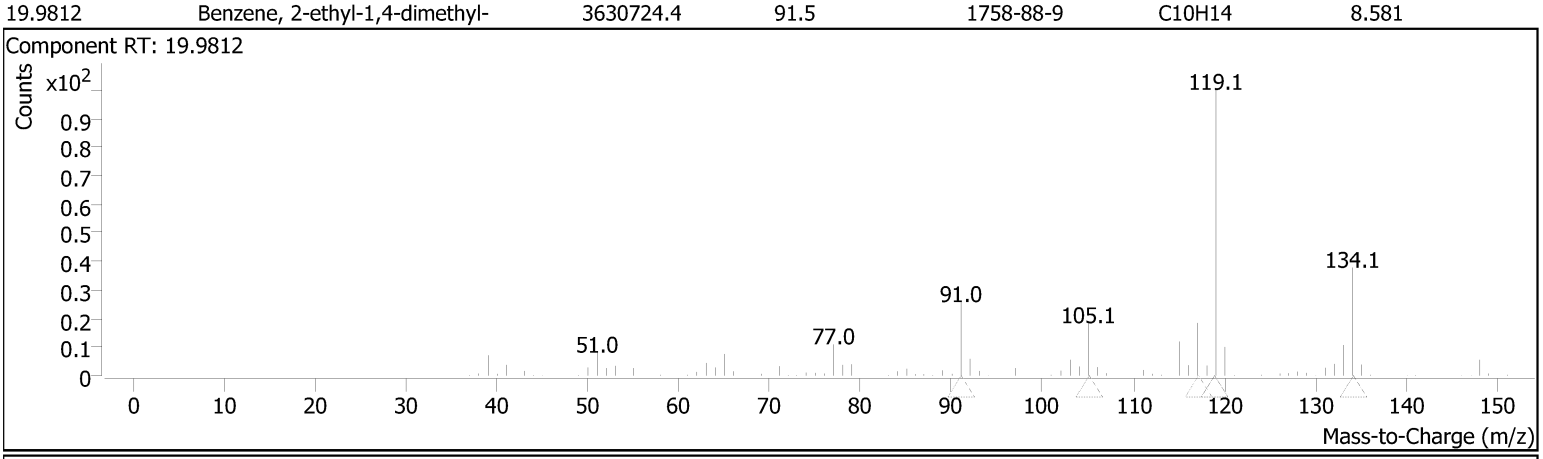


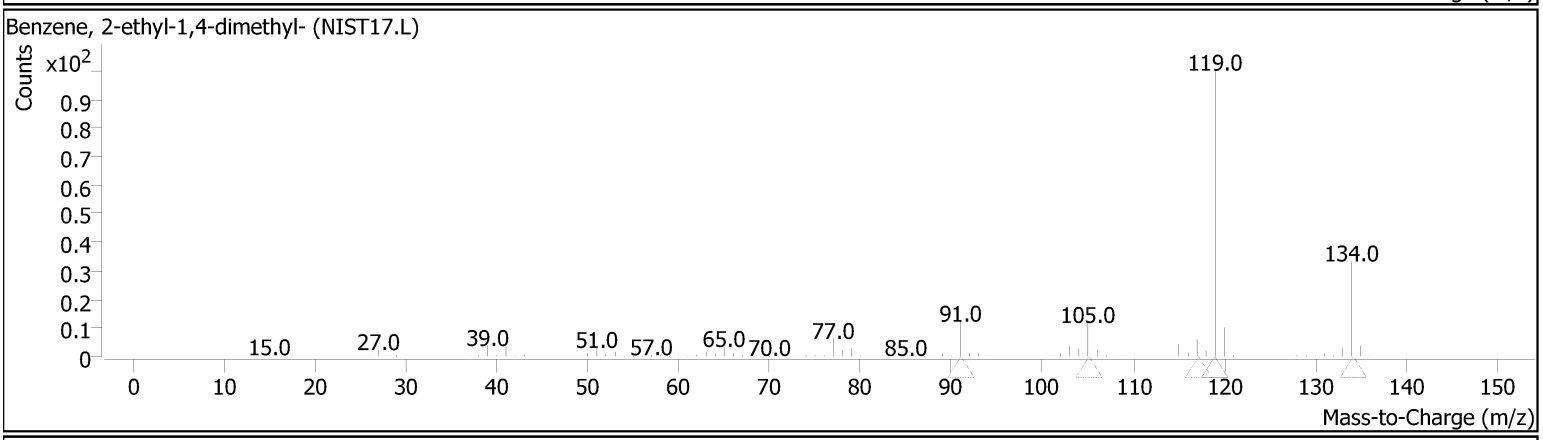


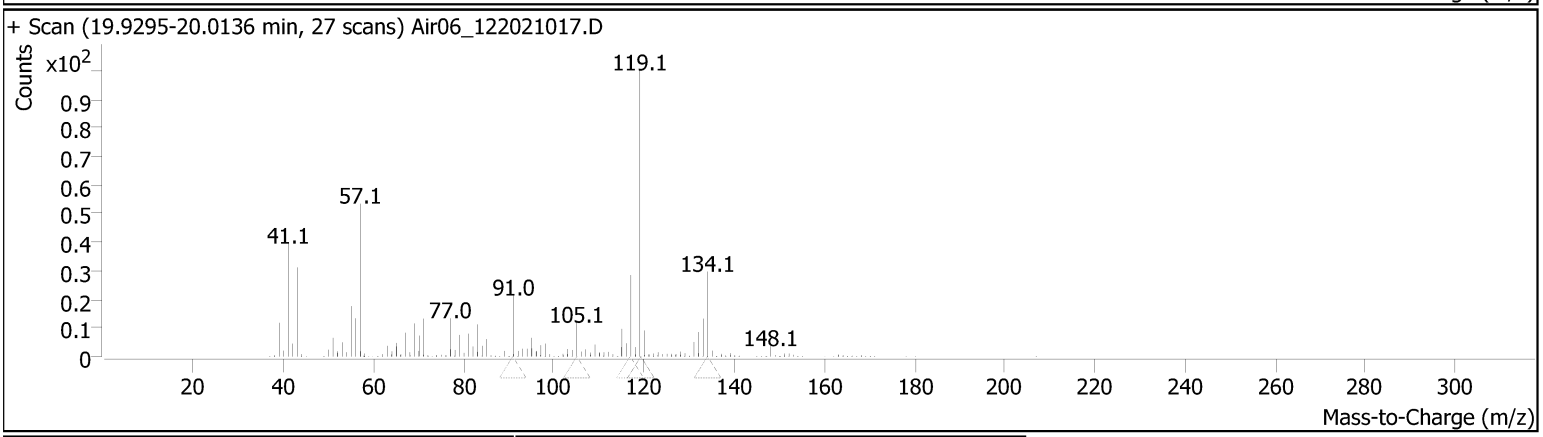


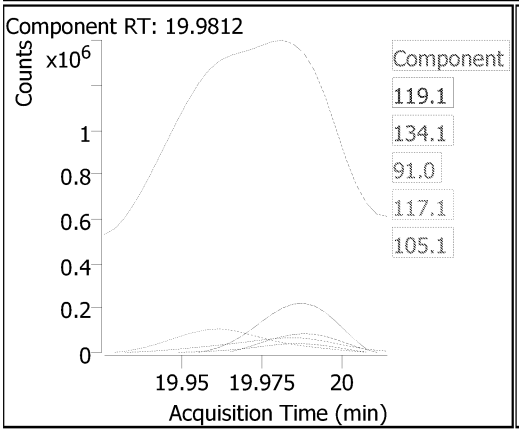


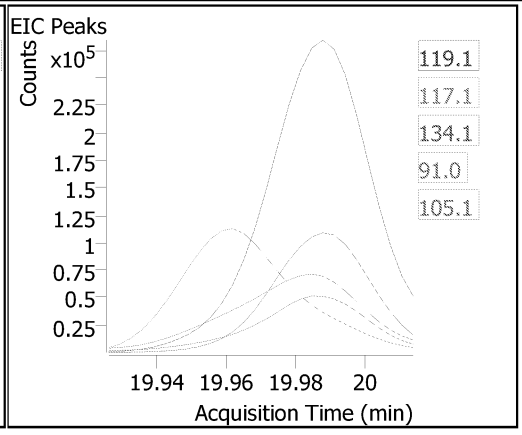
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.9812	Benzene, 2-ethyl-1,4-dimethyl-	3630724.4	91.5	1758-88-9	C10H14	8.581

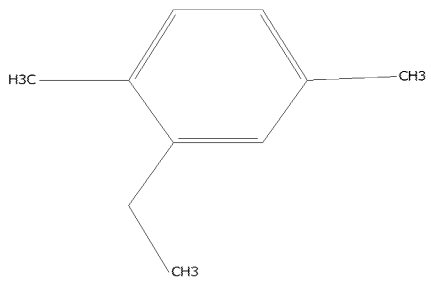




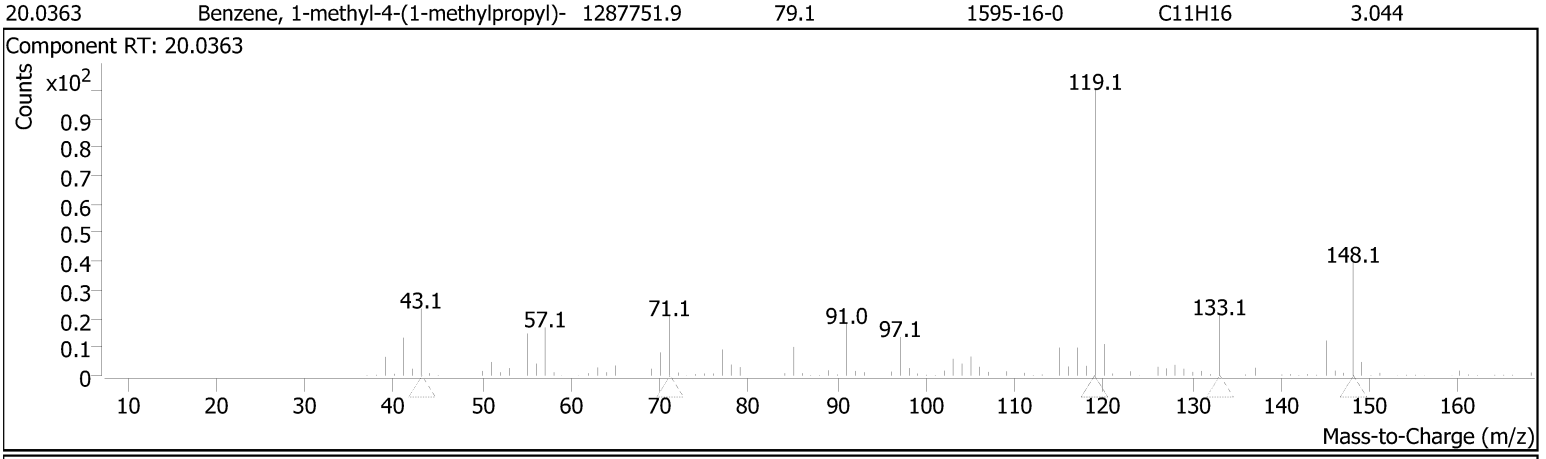


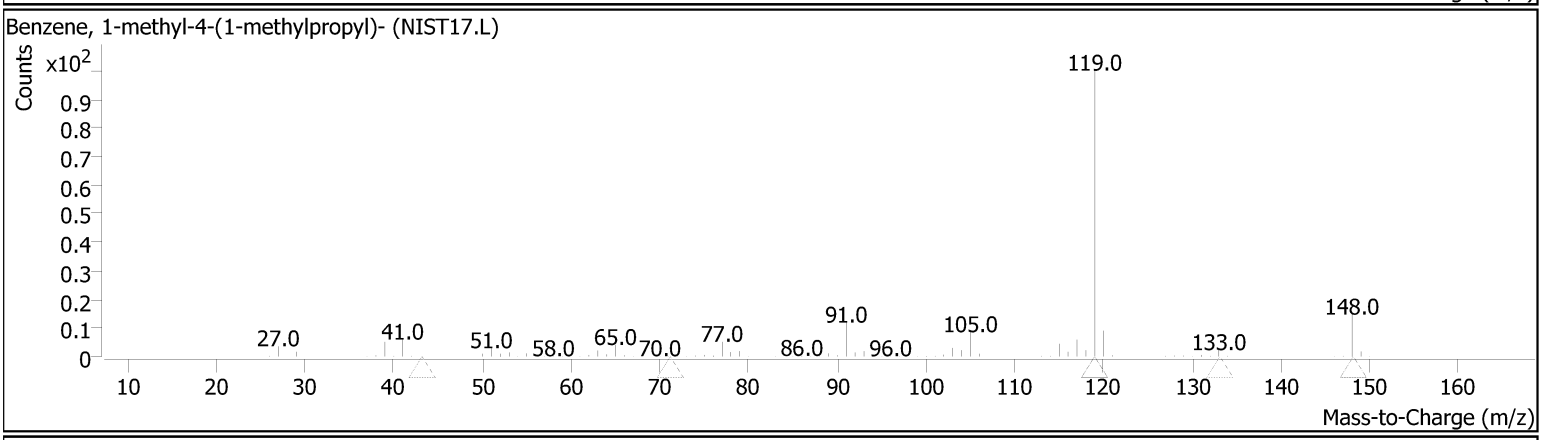


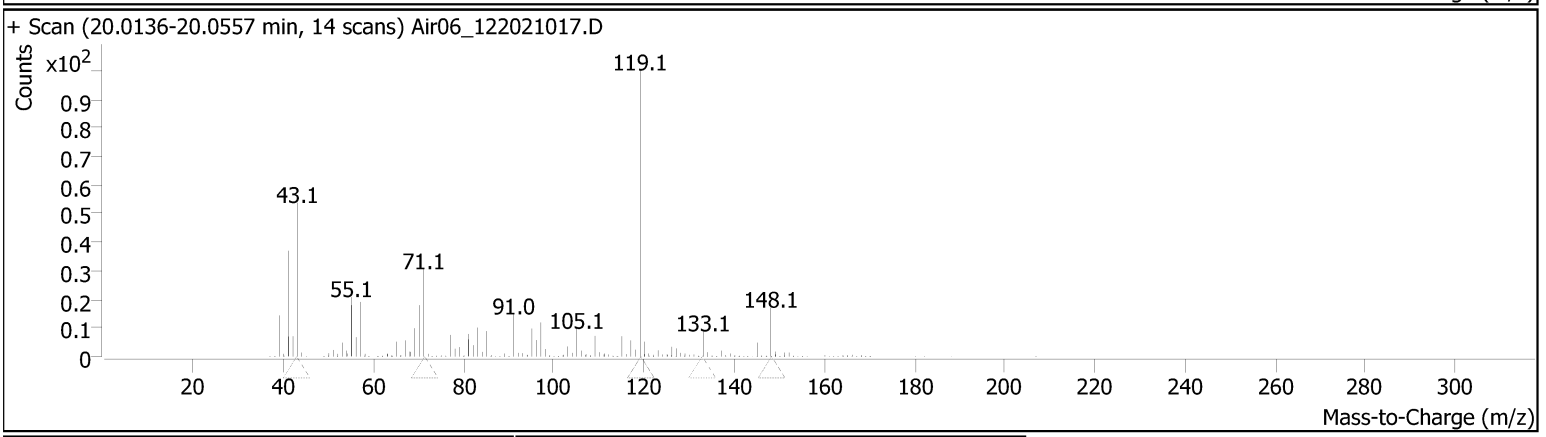


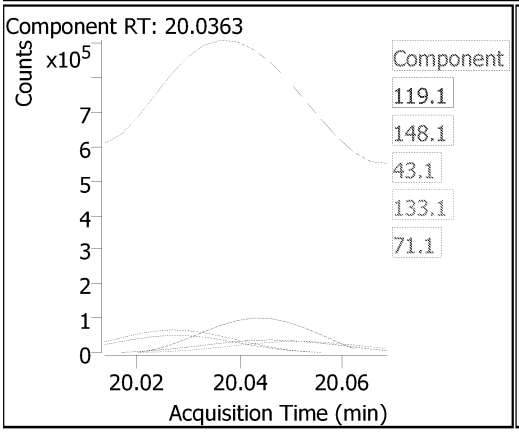


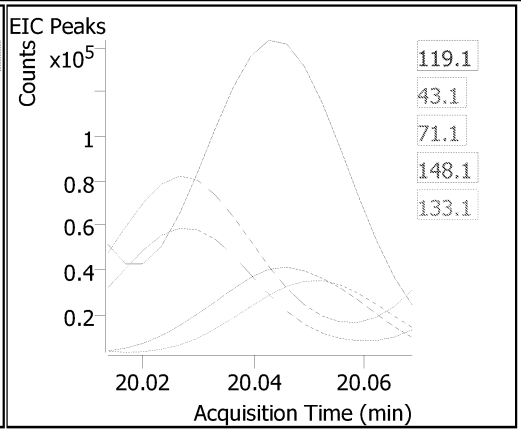
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.0363	Benzene, 1-methyl-4-(1-methylpropyl)-	1287751.9	79.1	1595-16-0	C11H16	3.044

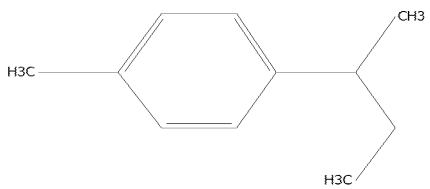




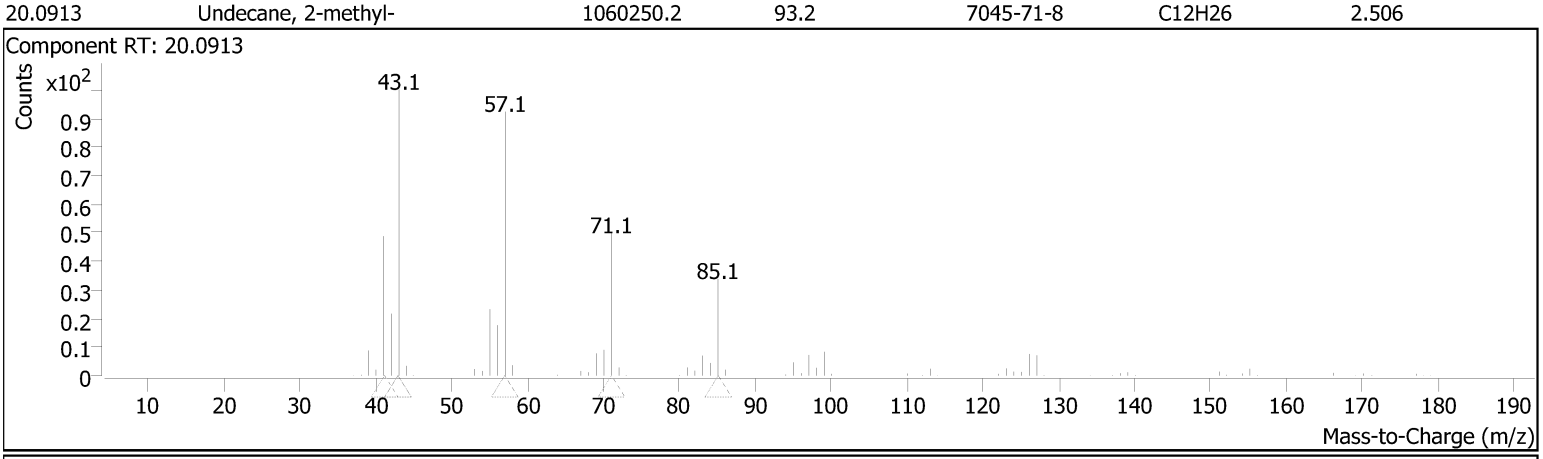


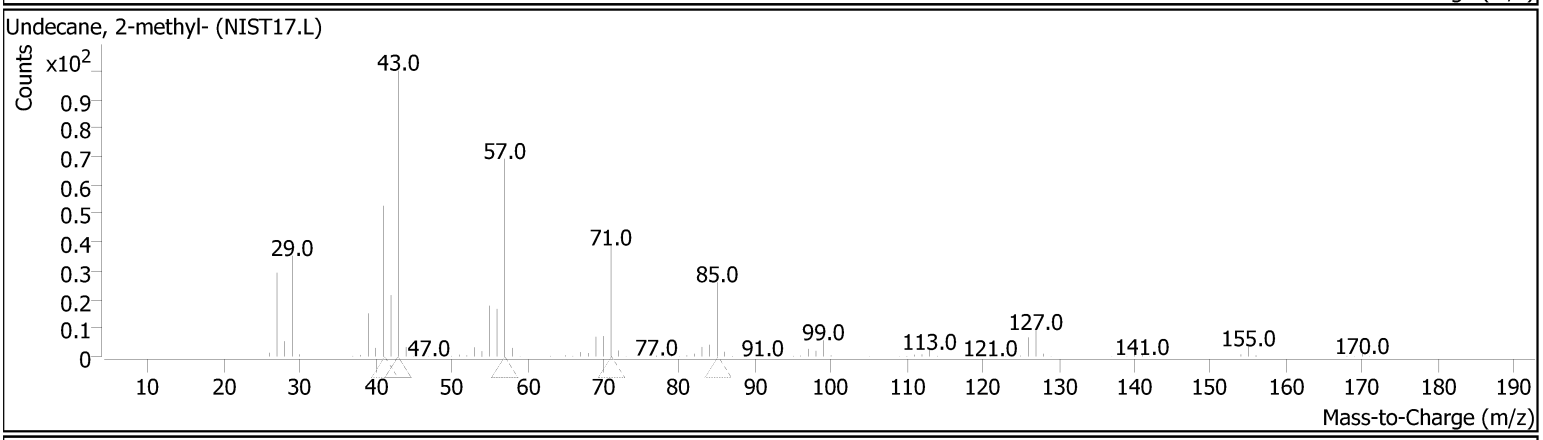


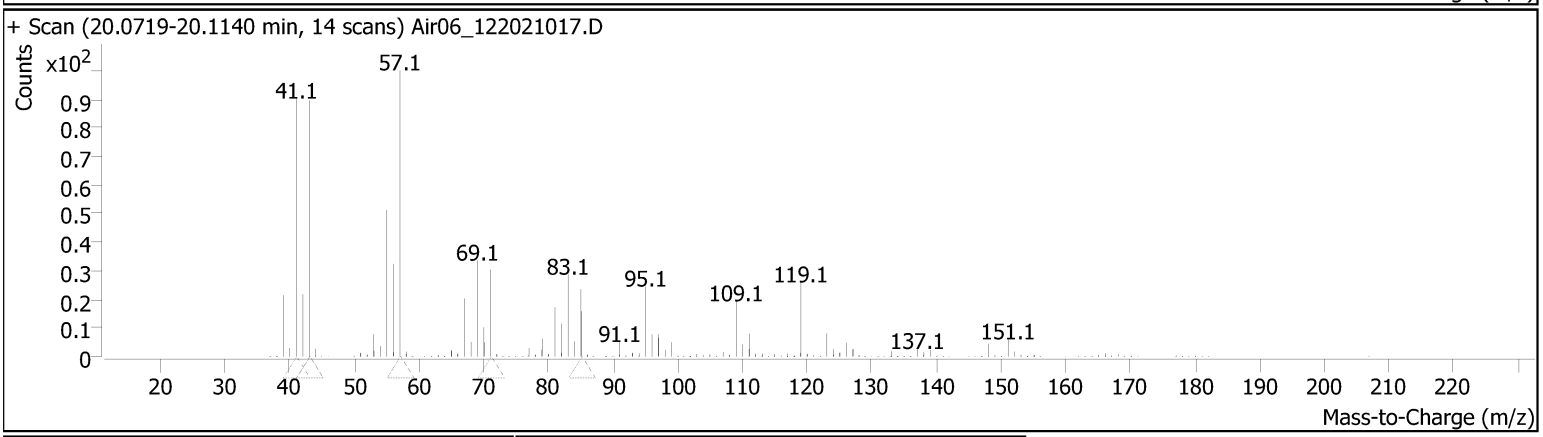


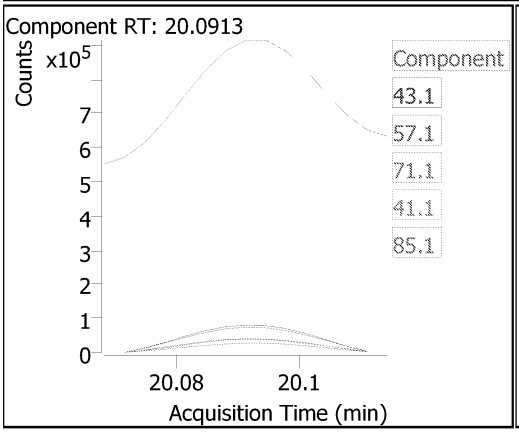


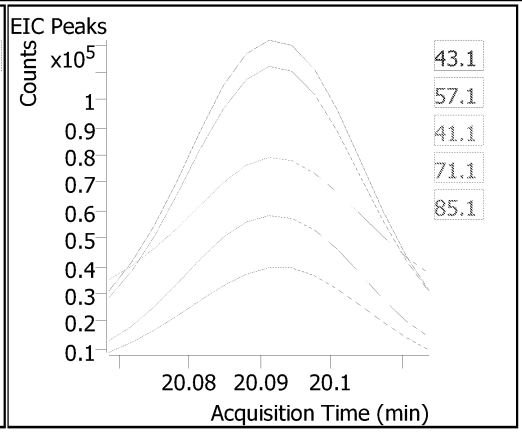
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.0913	Undecane, 2-methyl-	1060250.2	93.2	7045-71-8	C12H26	2.506





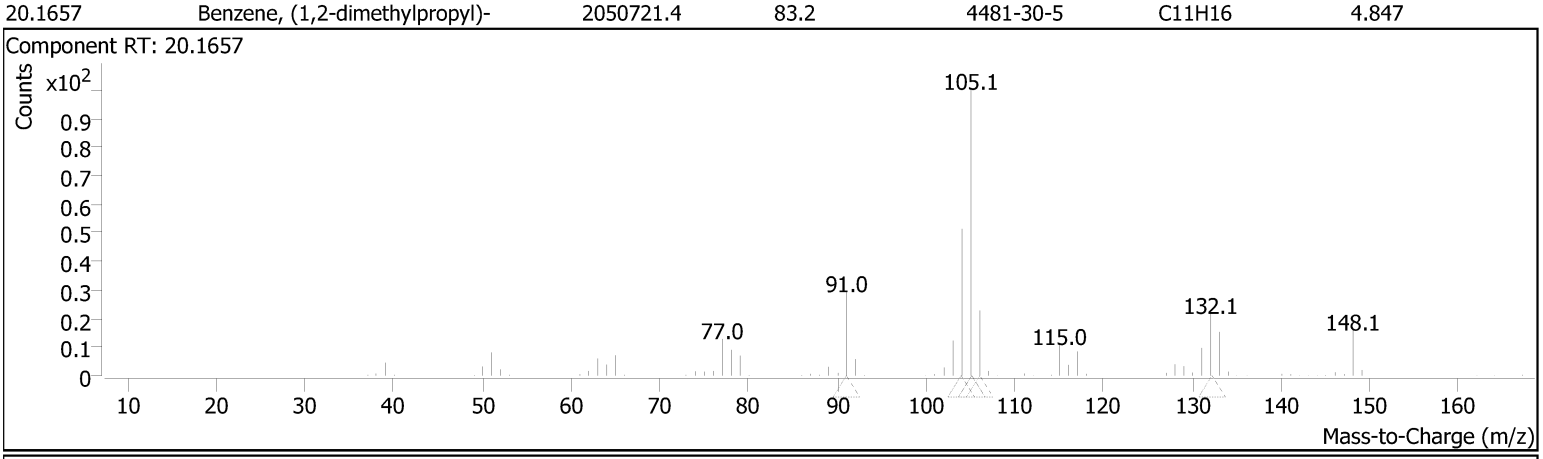


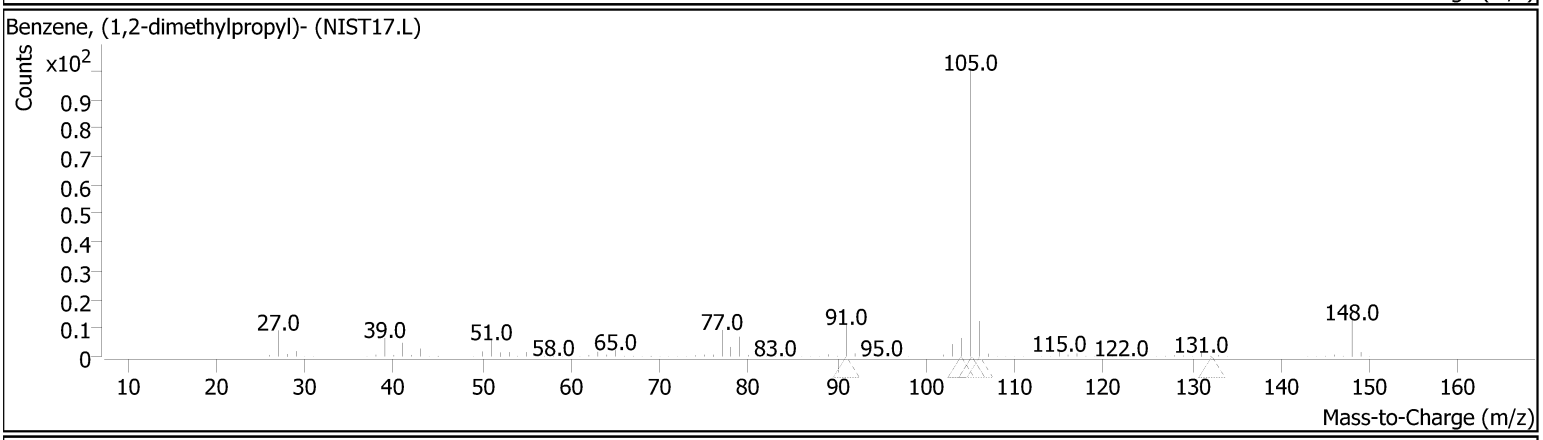


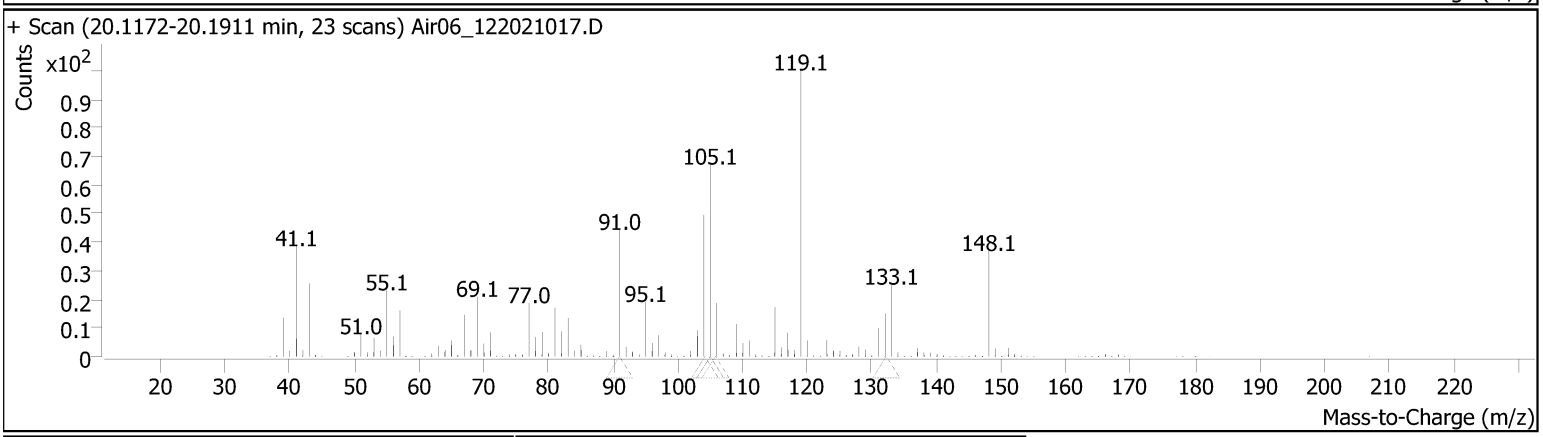


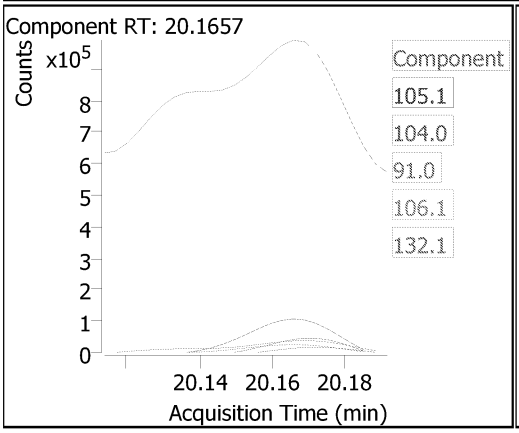


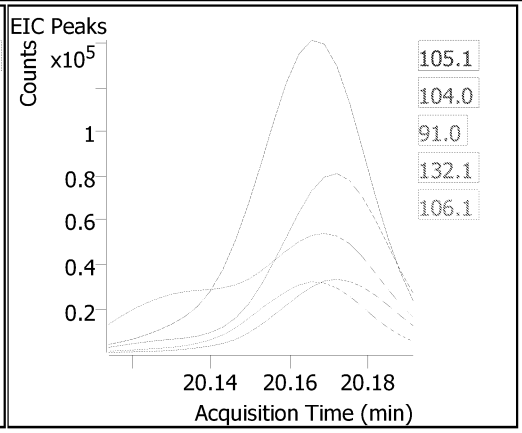
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.1657	Benzene, (1,2-dimethylpropyl)-	2050721.4	83.2	4481-30-5	C11H16	4.847

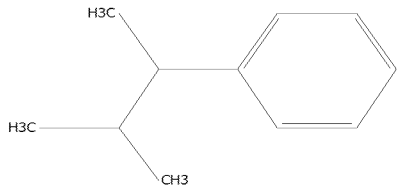




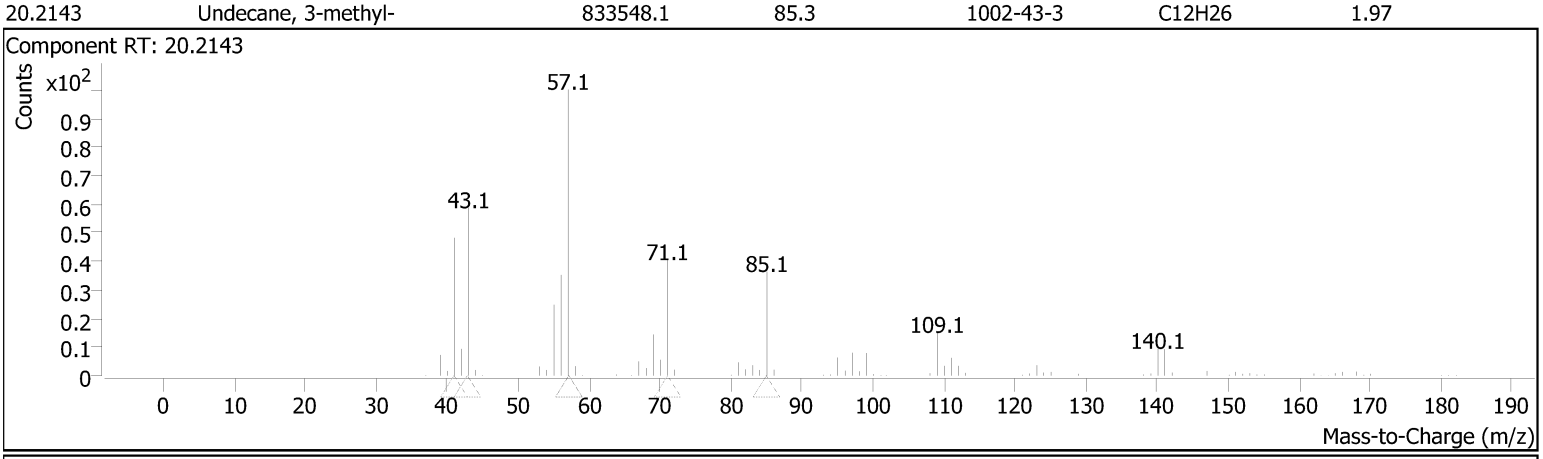


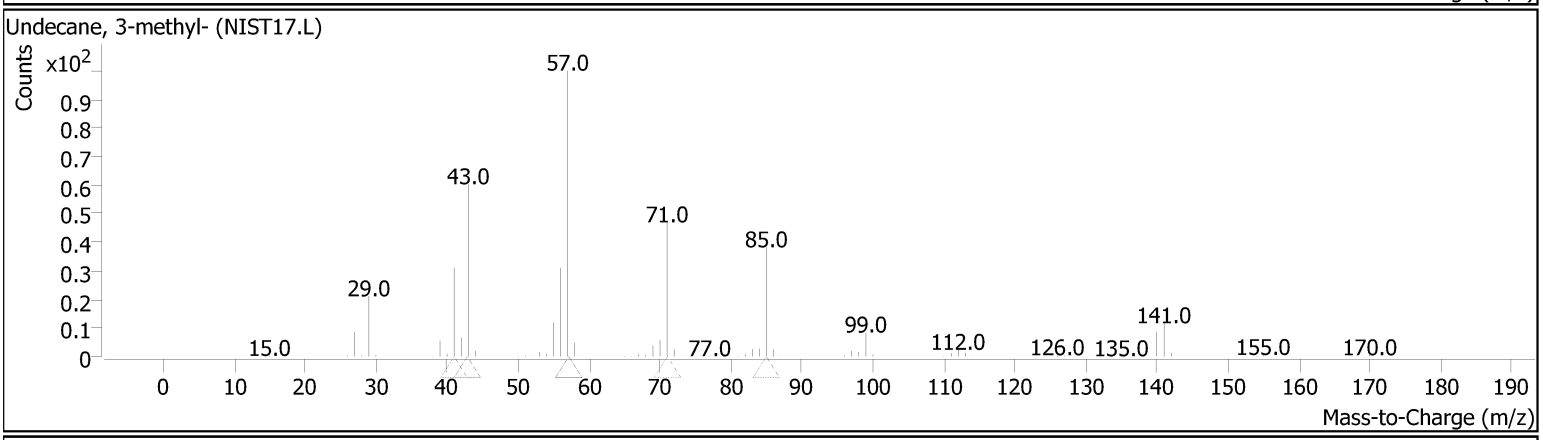


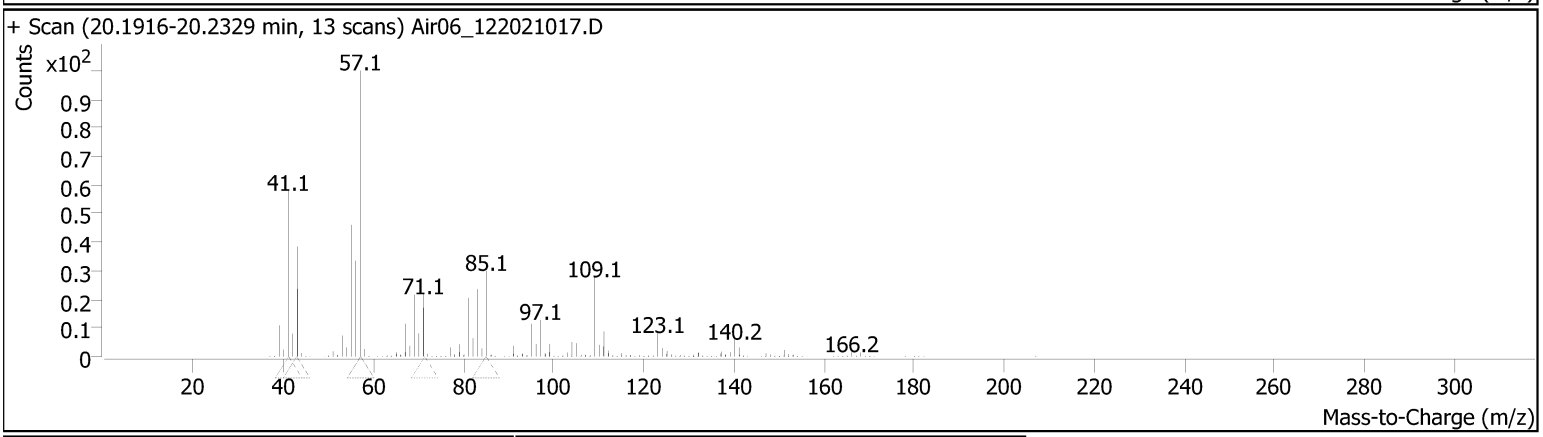


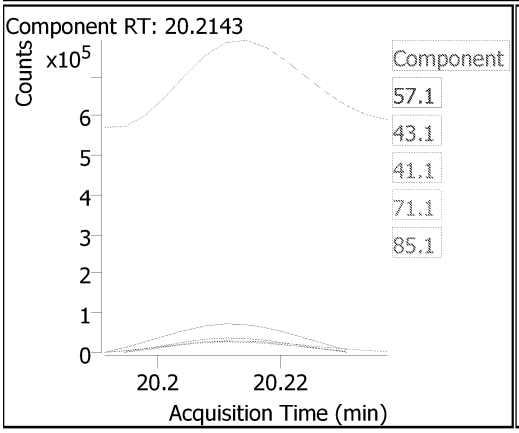


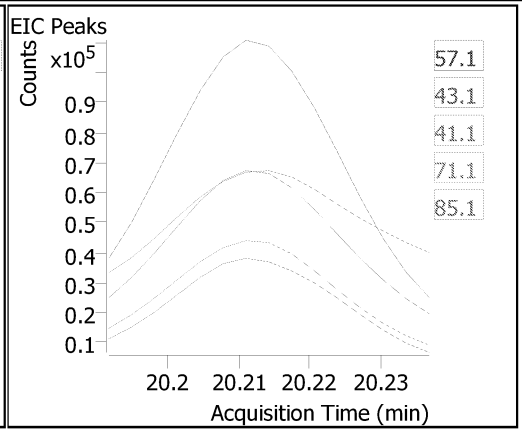
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.2143	Undecane, 3-methyl-	833548.1	85.3	1002-43-3	C12H26	1.97

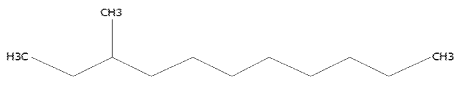




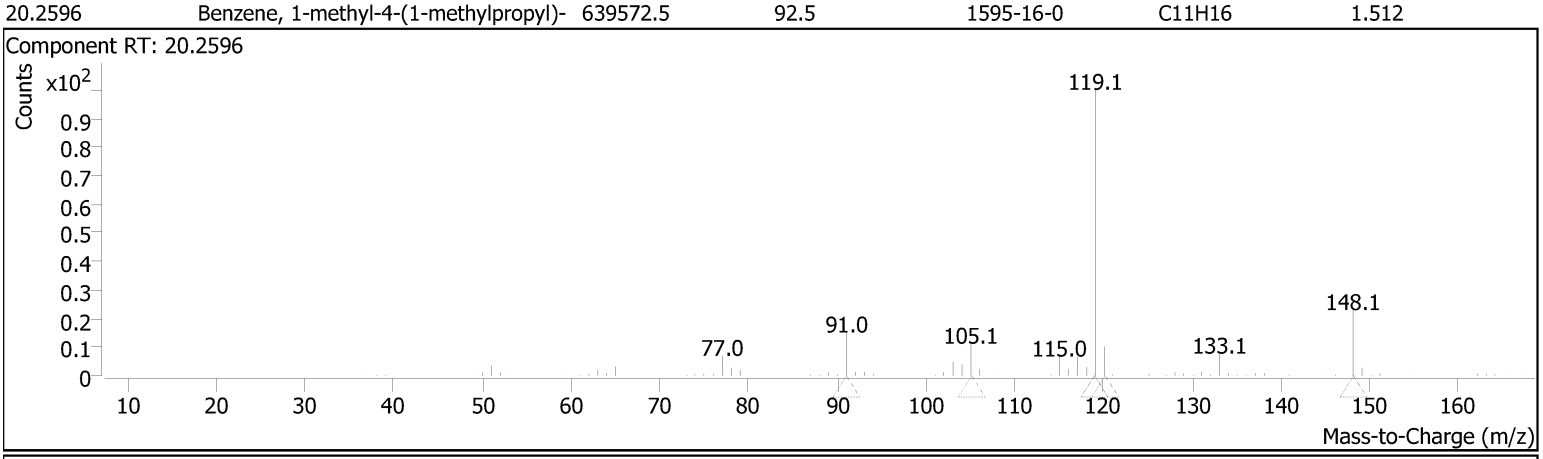


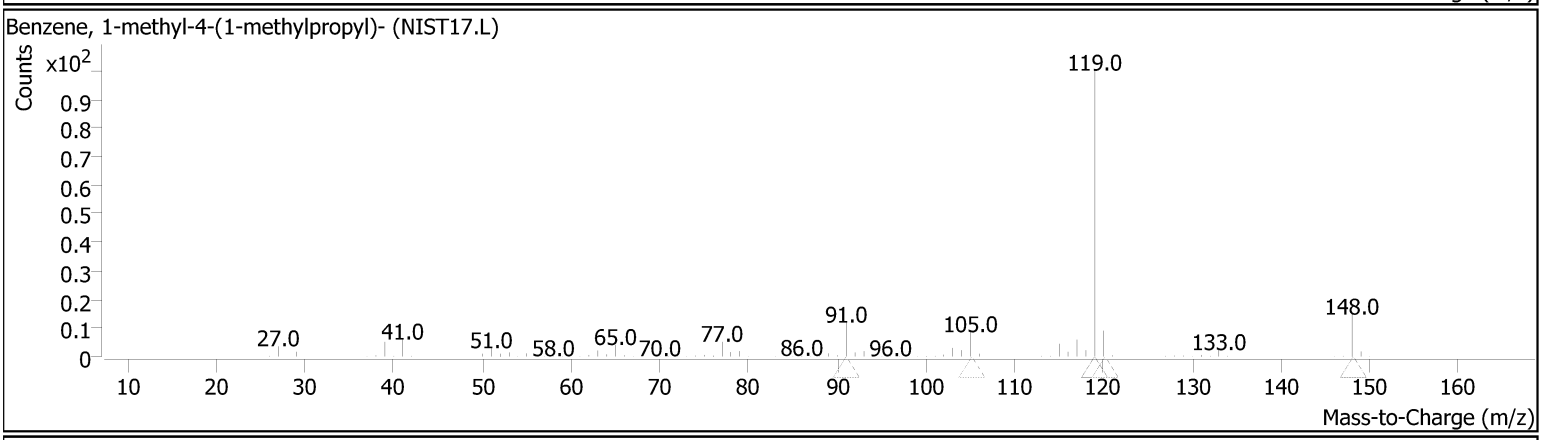


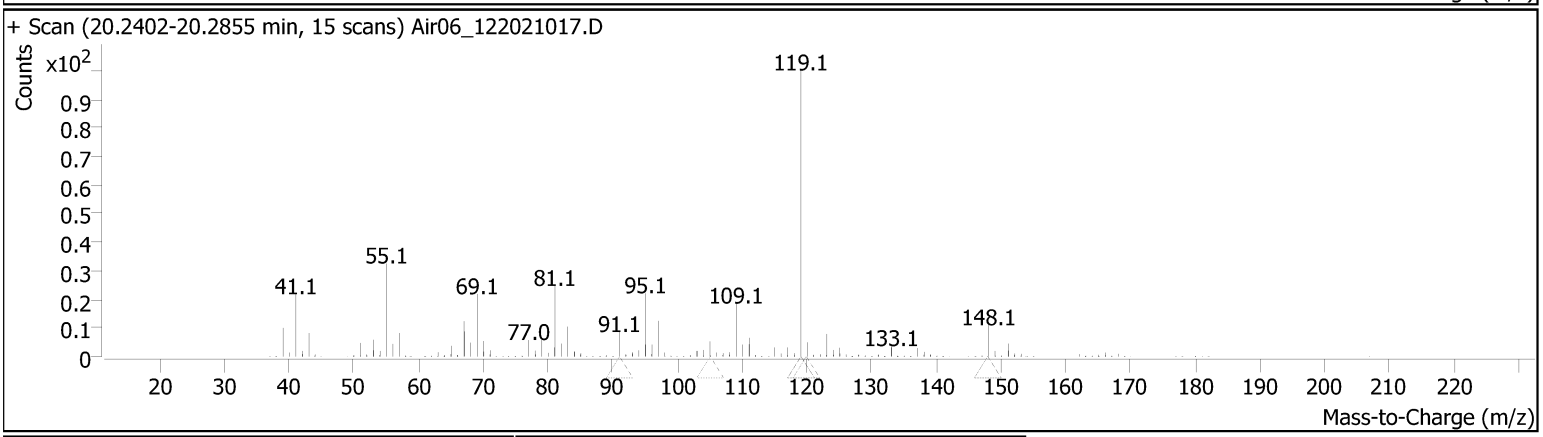


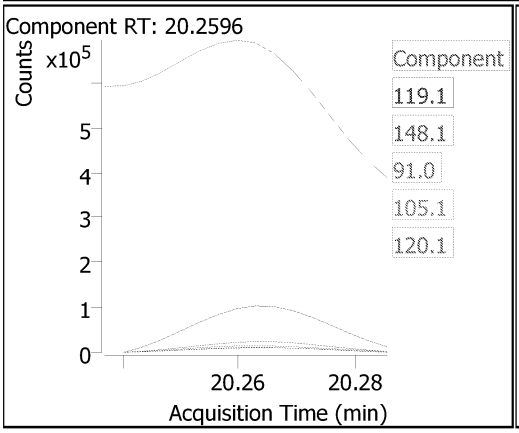


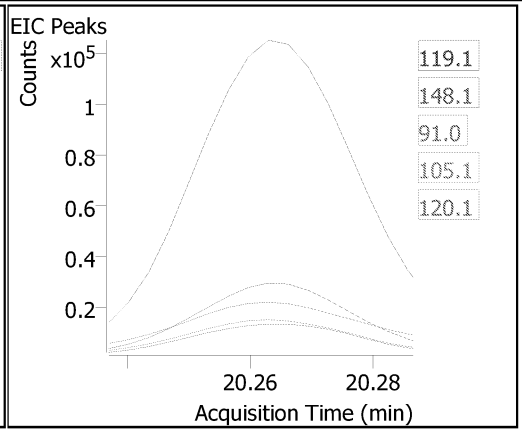
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.2596	Benzene, 1-methyl-4-(1-methylpropyl)-	639572.5	92.5	1595-16-0	C11H16	1.512

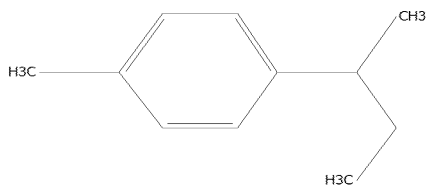




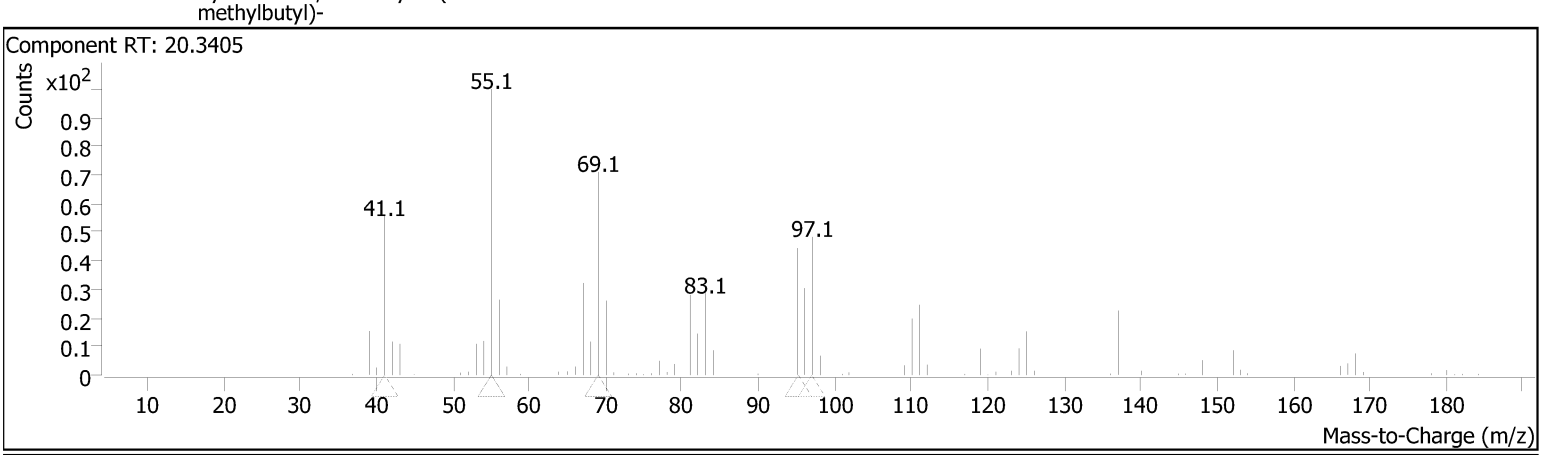


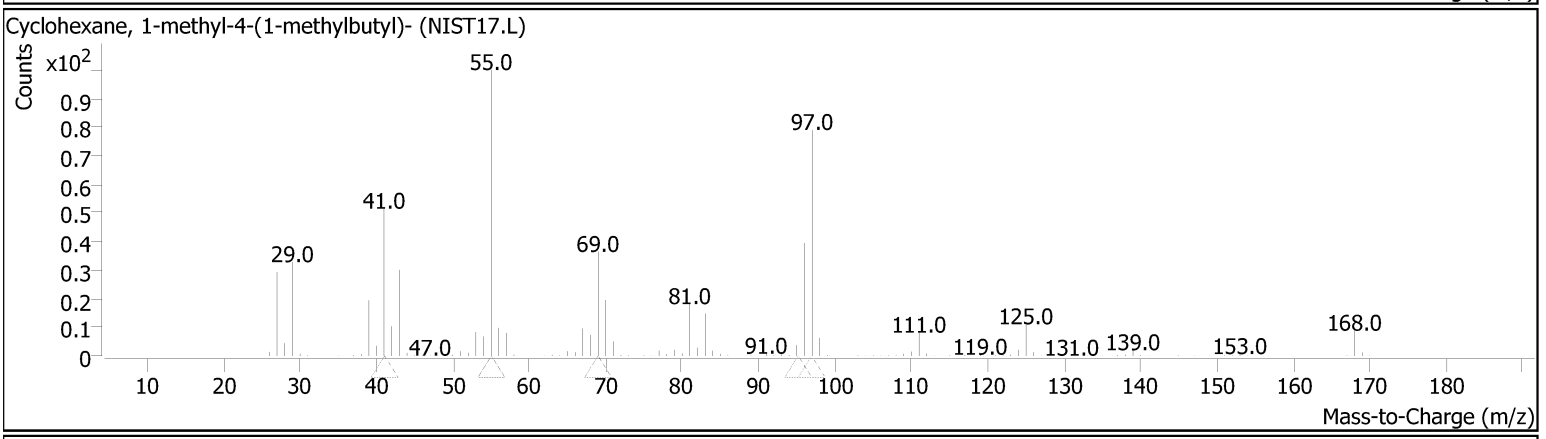


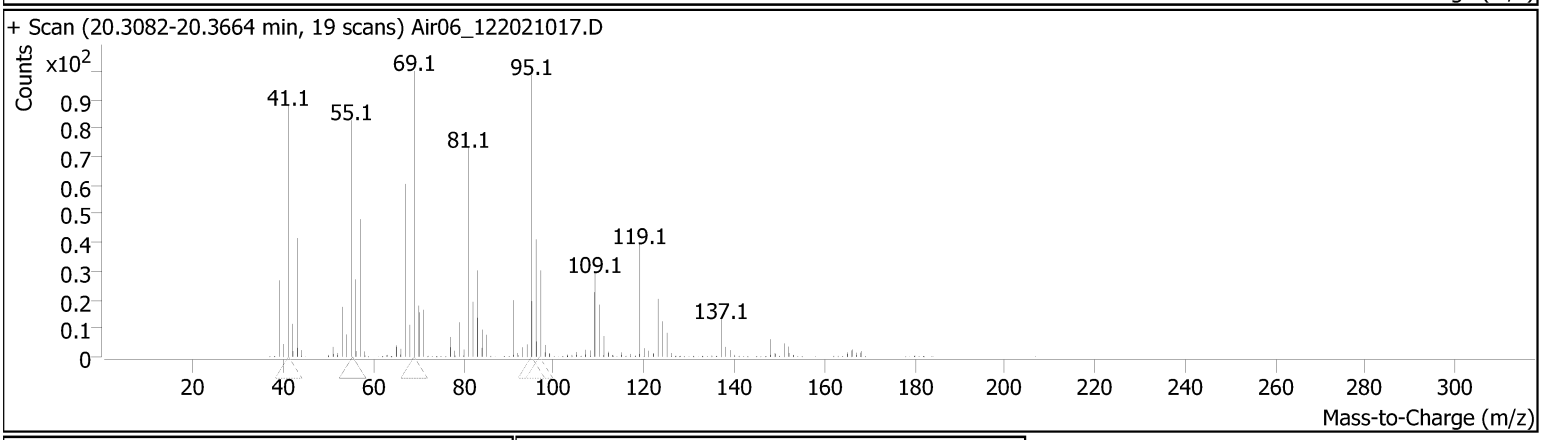


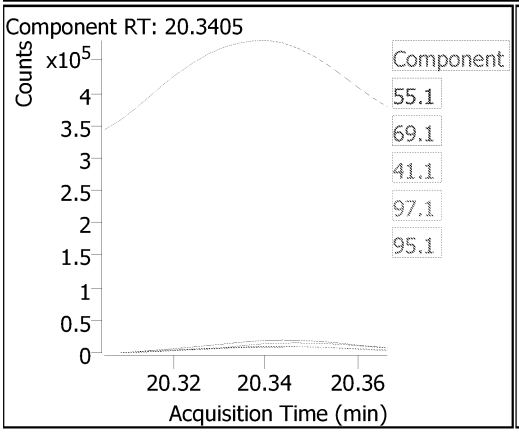


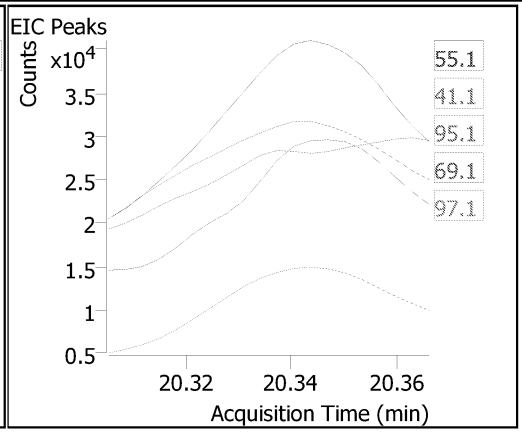
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.3405	Cyclohexane, 1-methyl-4-(1-methylbutyl)-	263725.0	81.3	54411-00-6	C12H24	0.6233

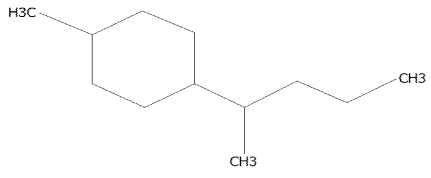




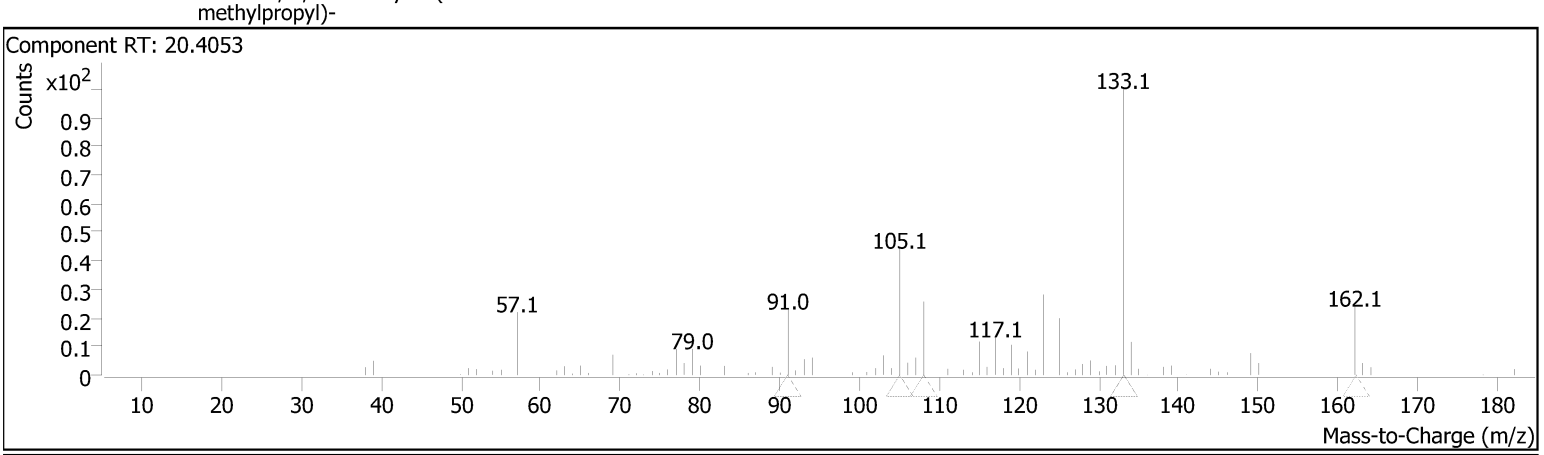


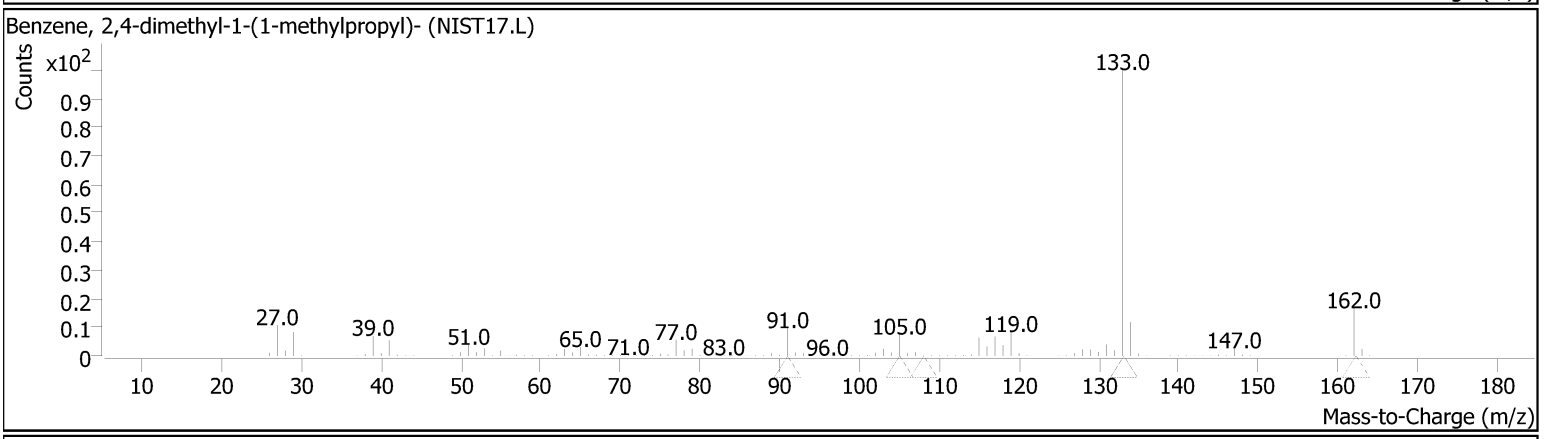


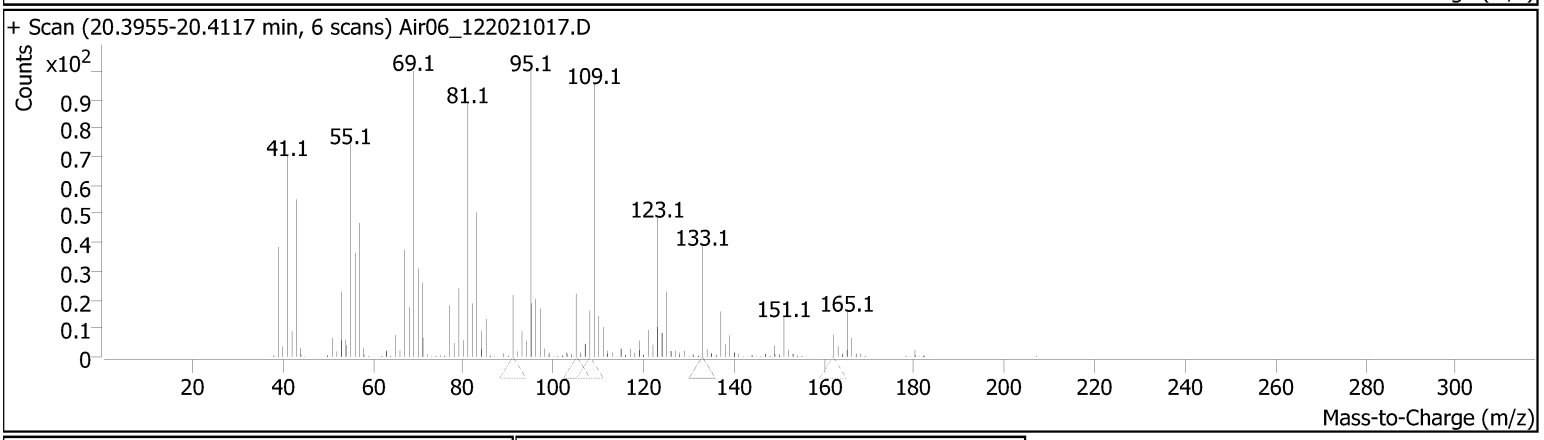


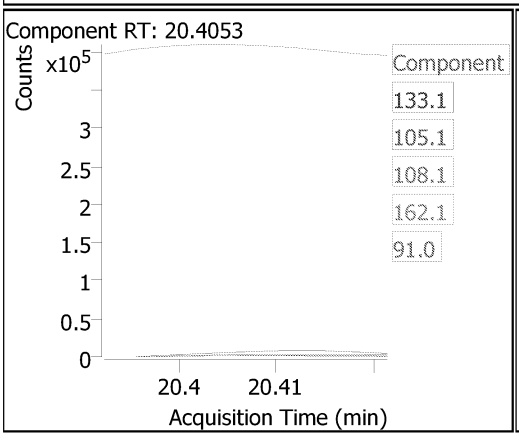


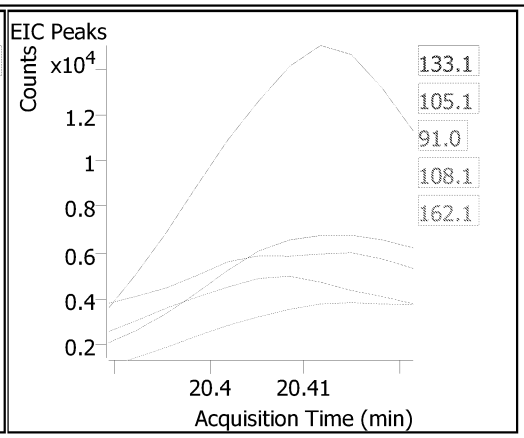
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.4053	Benzene, 2,4-dimethyl-1-(1-methylpropyl)-	23938.6	75.6	1483-60-9	C12H18	0.05658

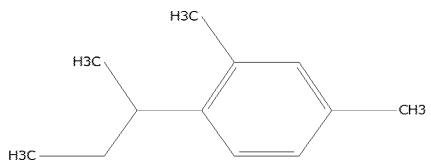




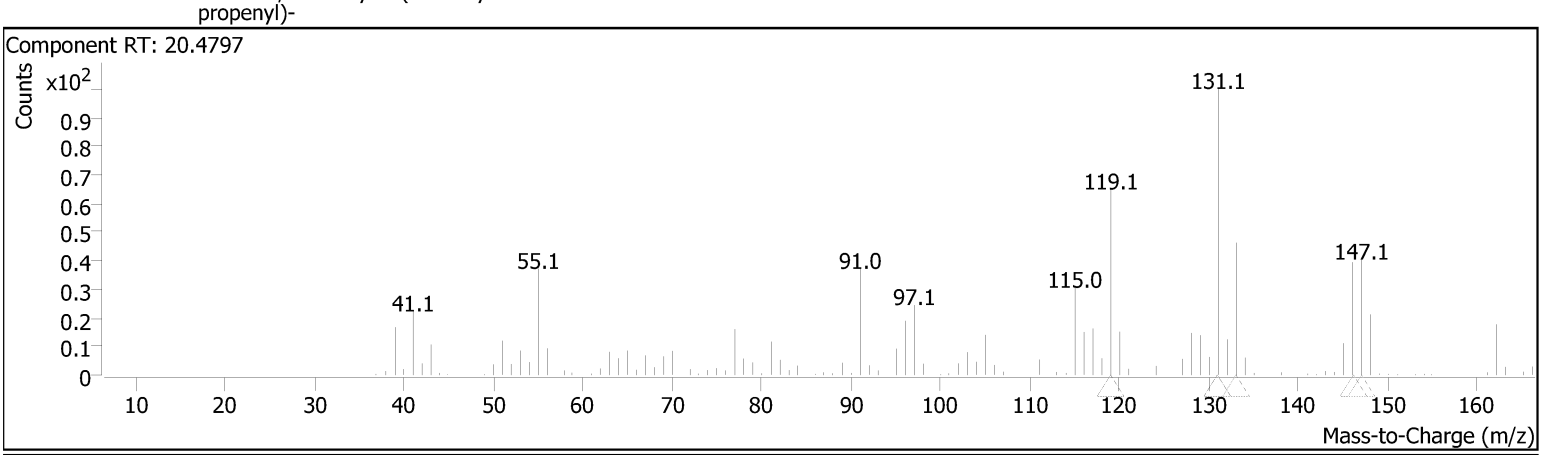


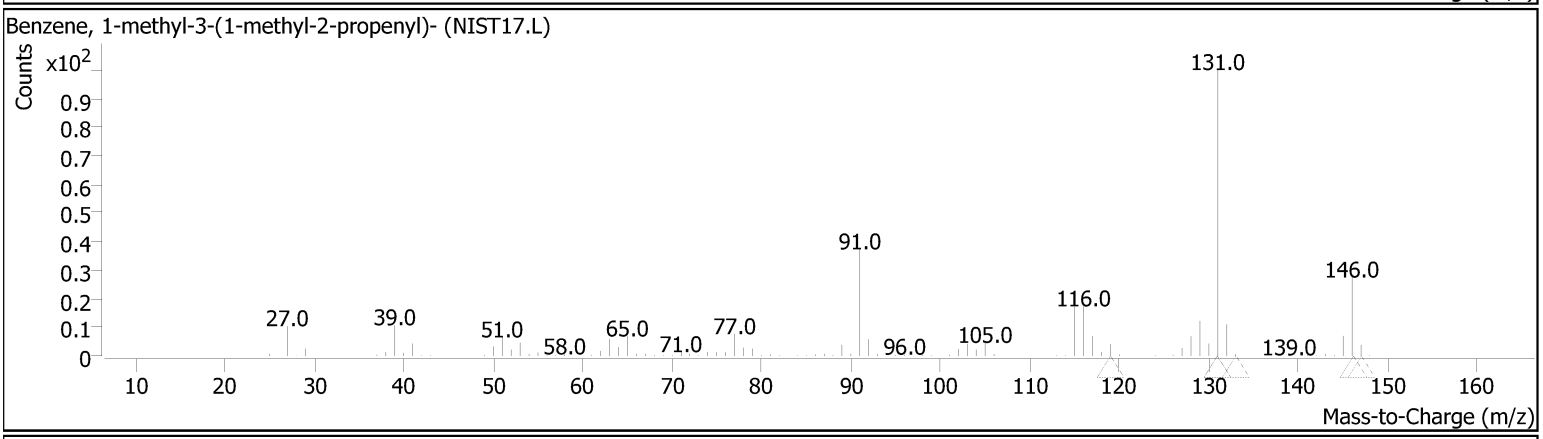


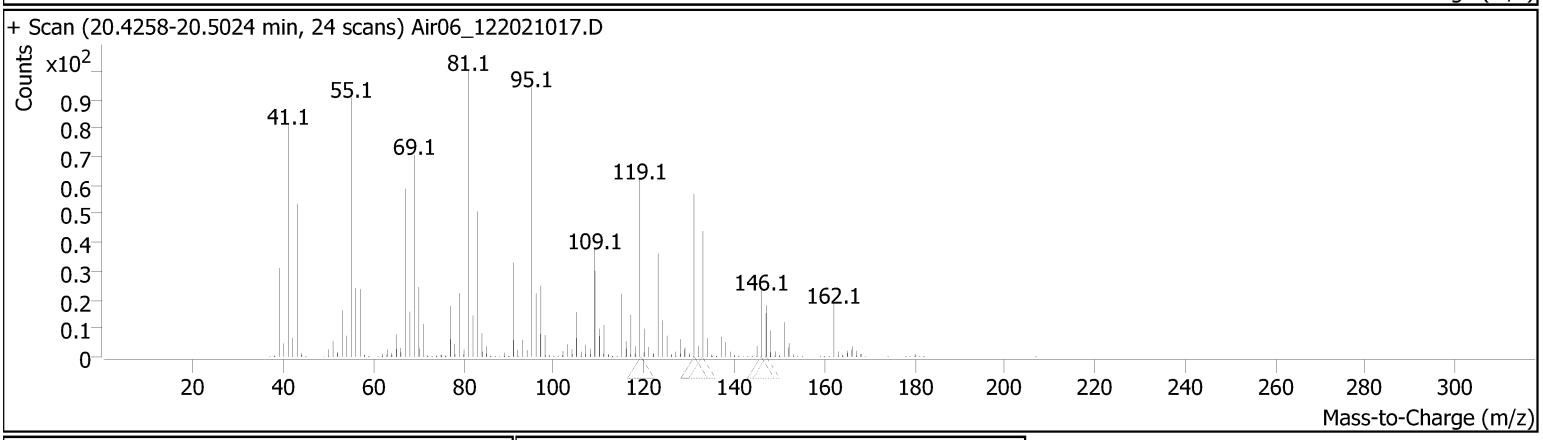


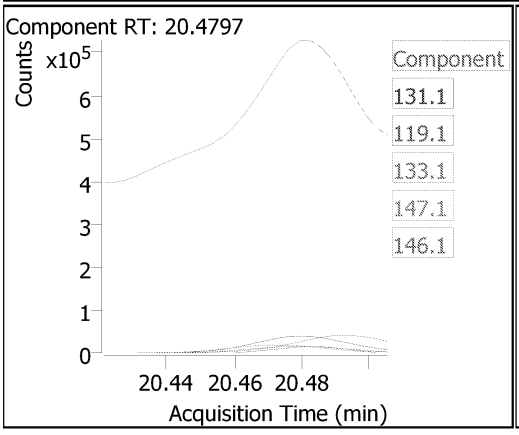


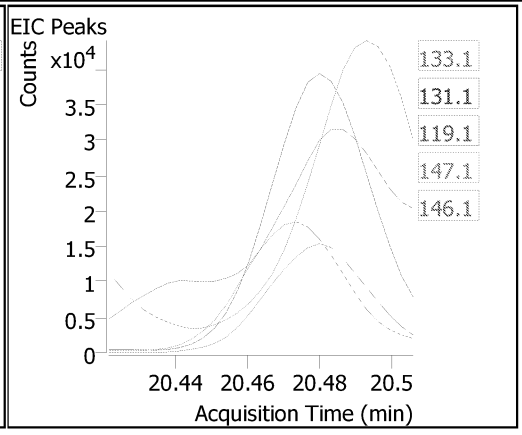
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.4797	Benzene, 1-methyl-3-(1-methyl-2-propenyl)-	766483.7	76.6	52161-57-6	C11H14	1.812

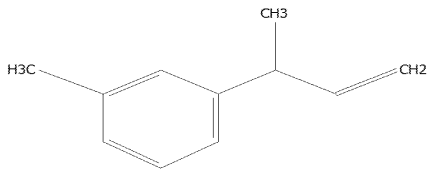




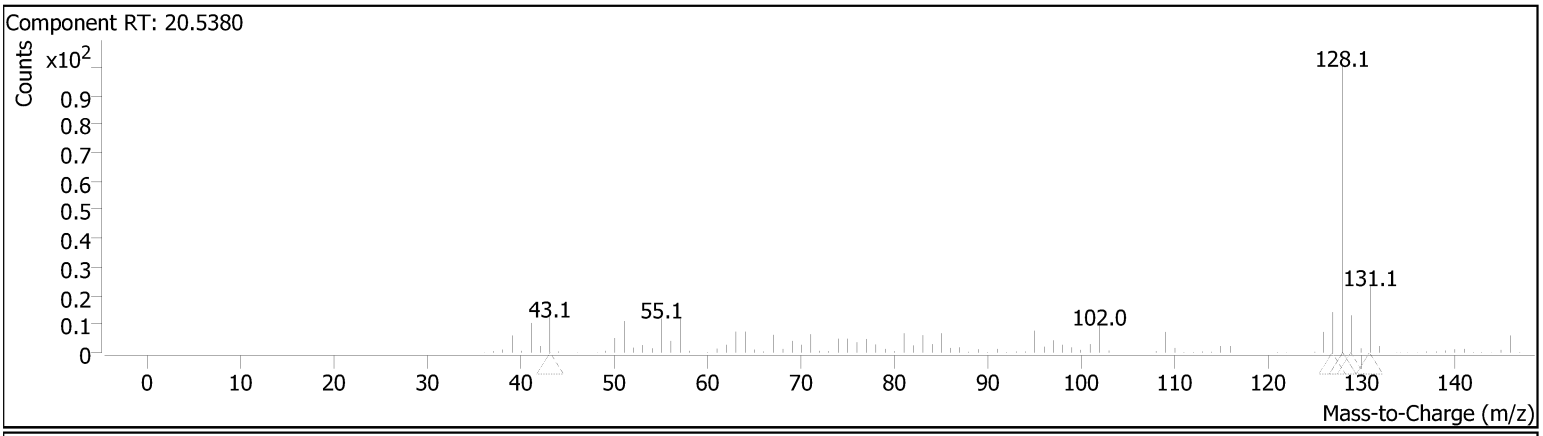


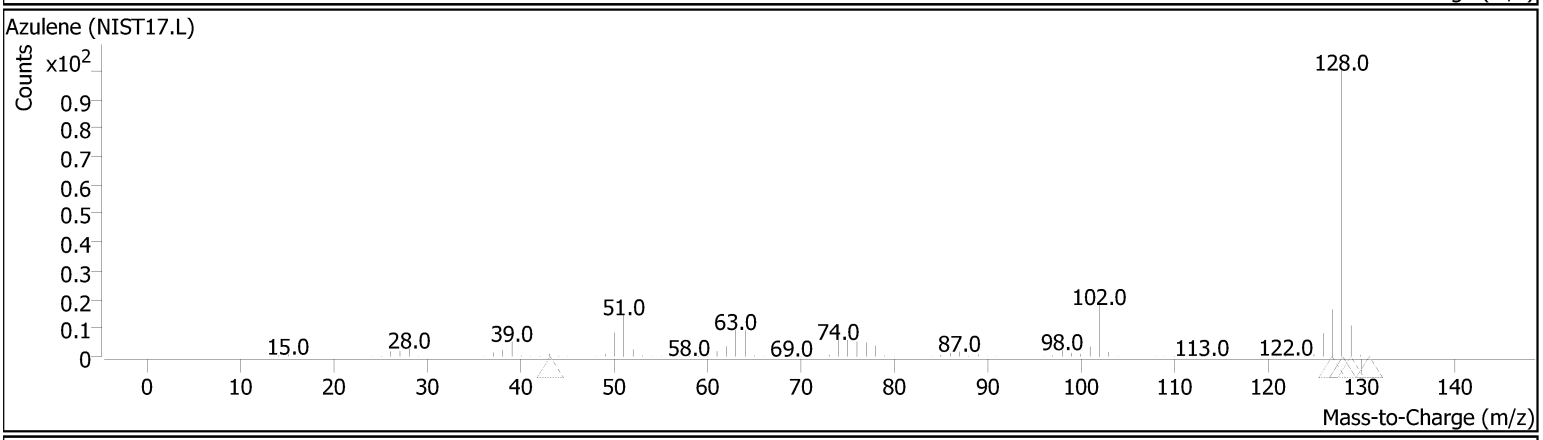


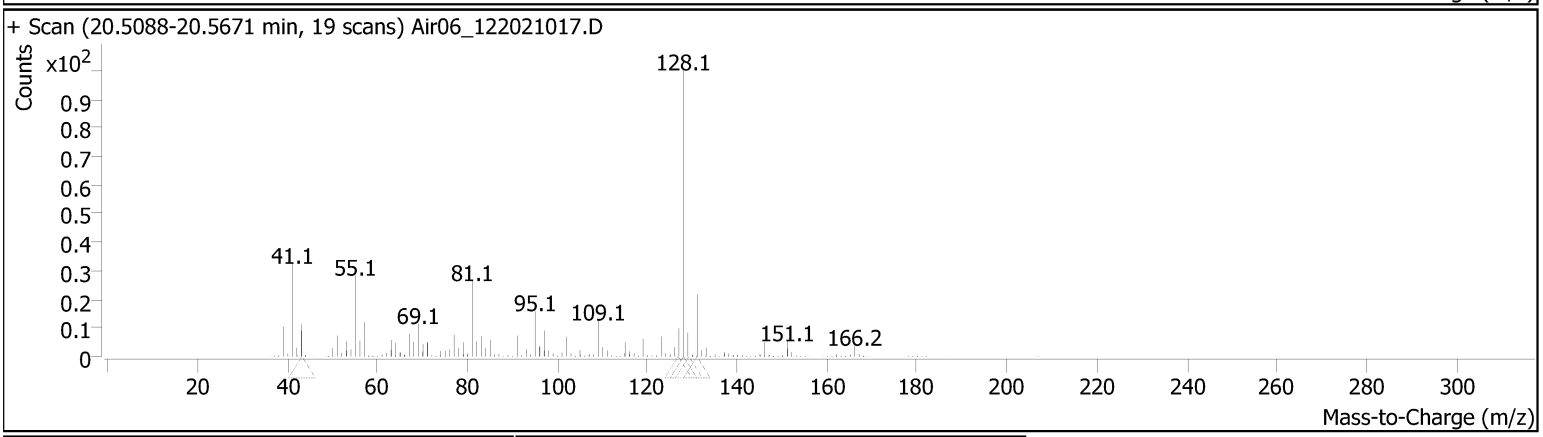


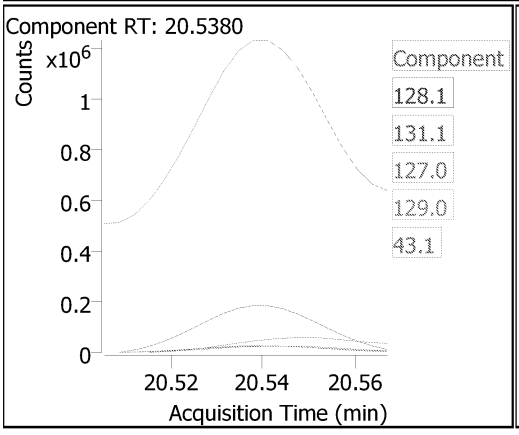


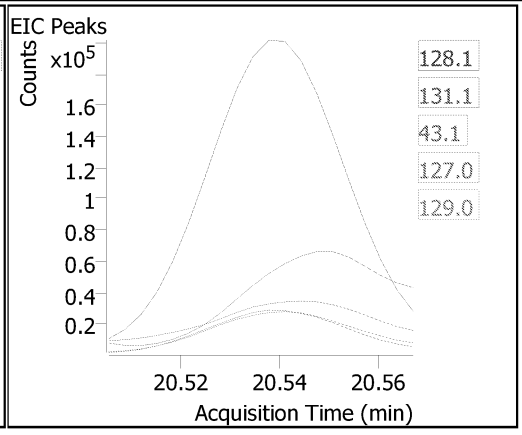
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.5380	Azulene	1770710.9	72.5	275-51-4	C10H8	4.185

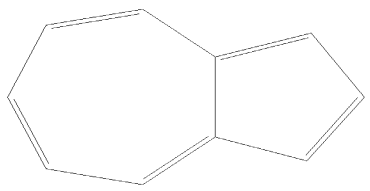




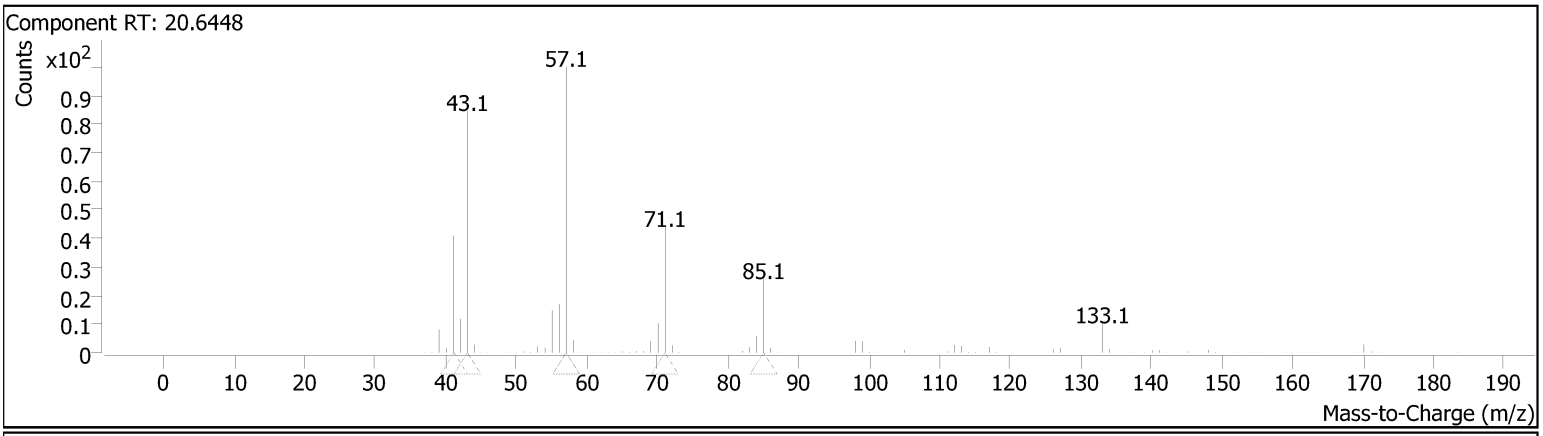


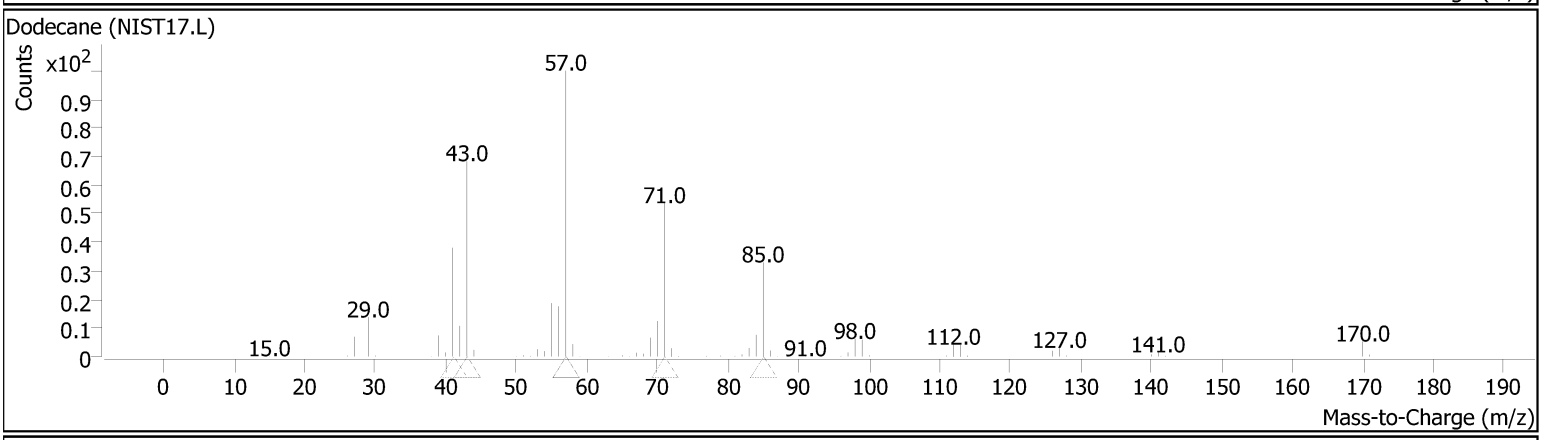


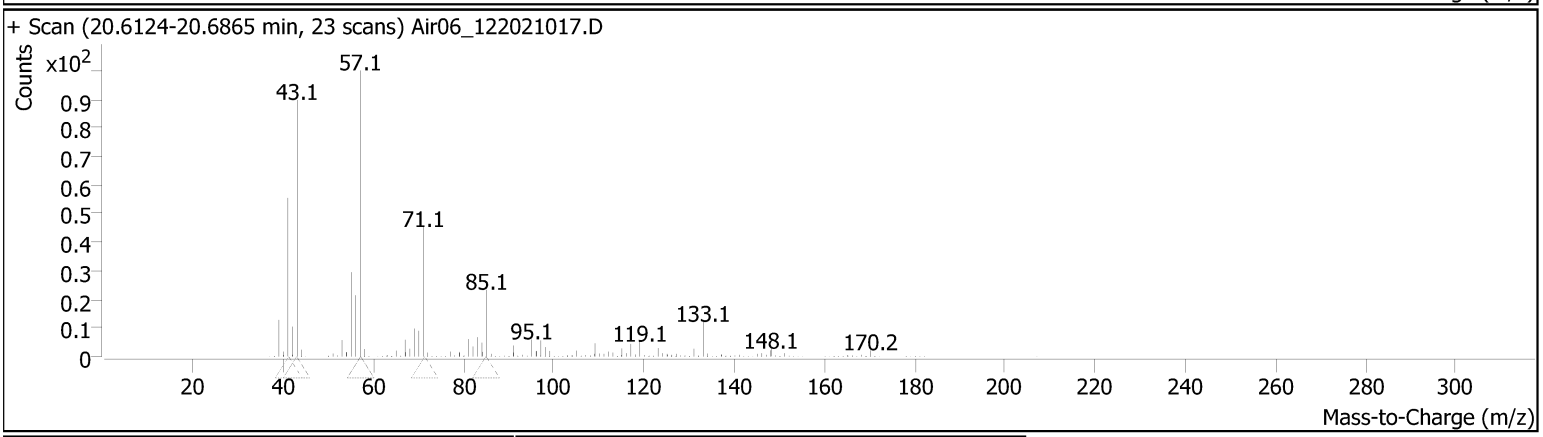


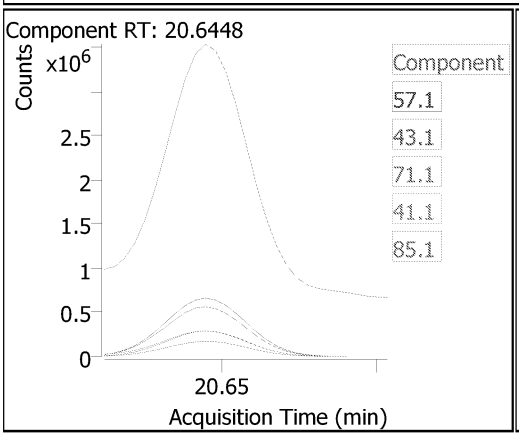


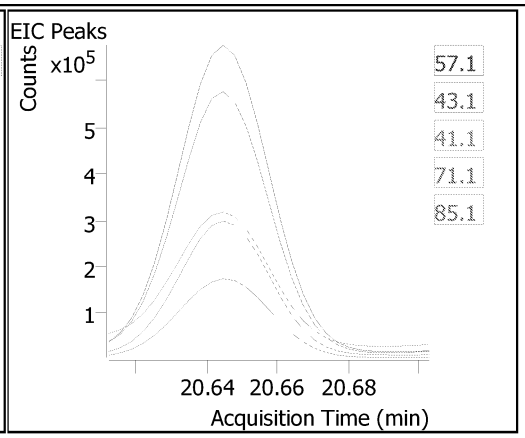
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.6448	Dodecane	6964377.7	91.5	112-40-3	C12H26	16.46





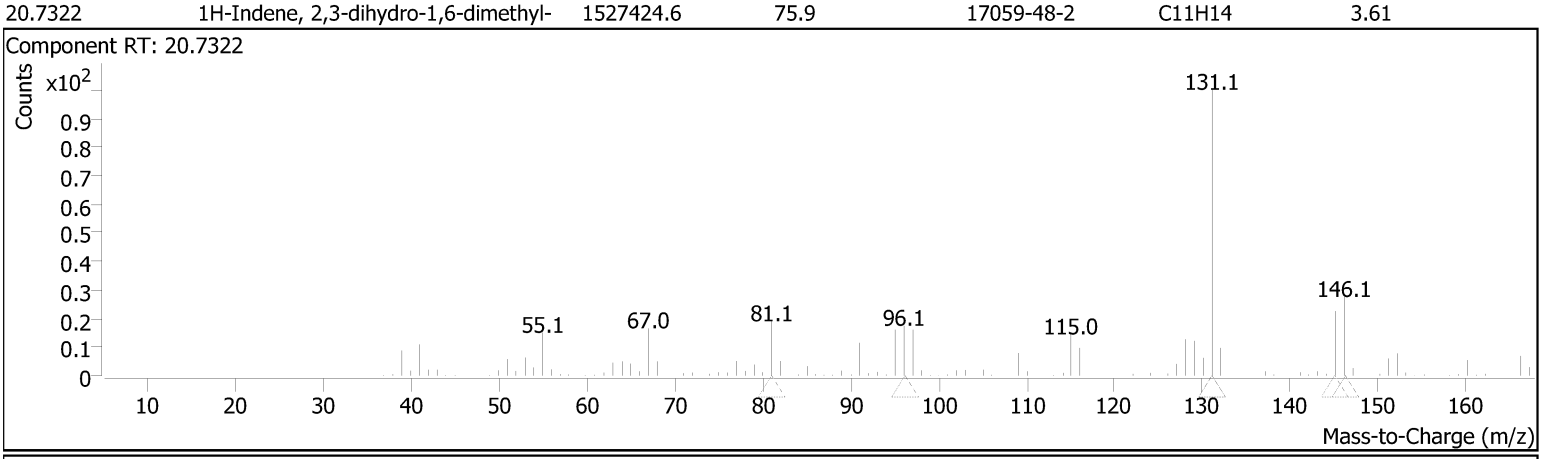


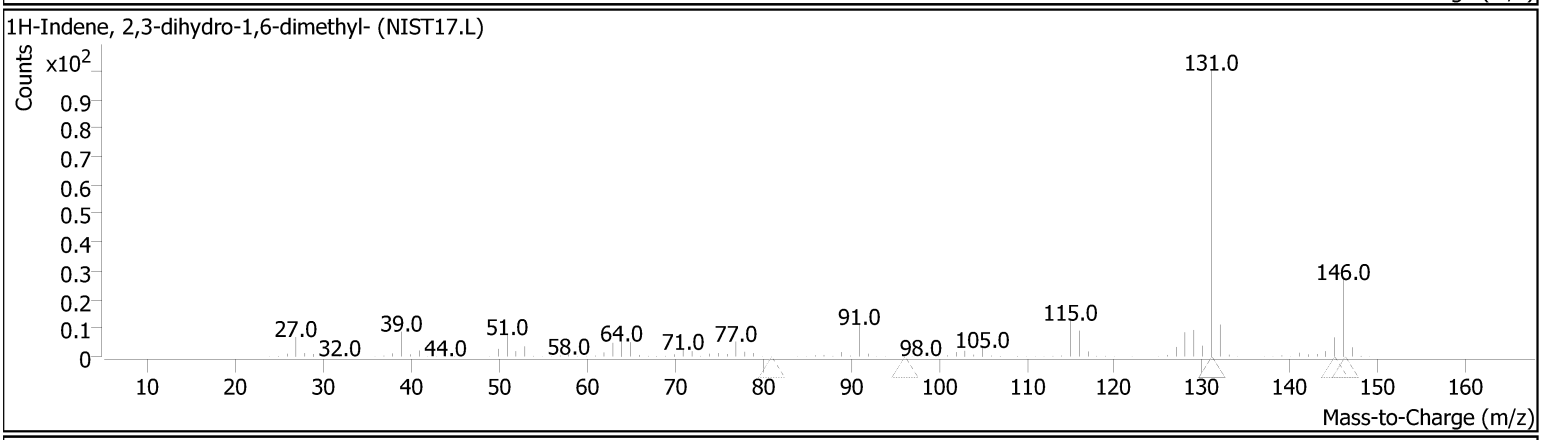


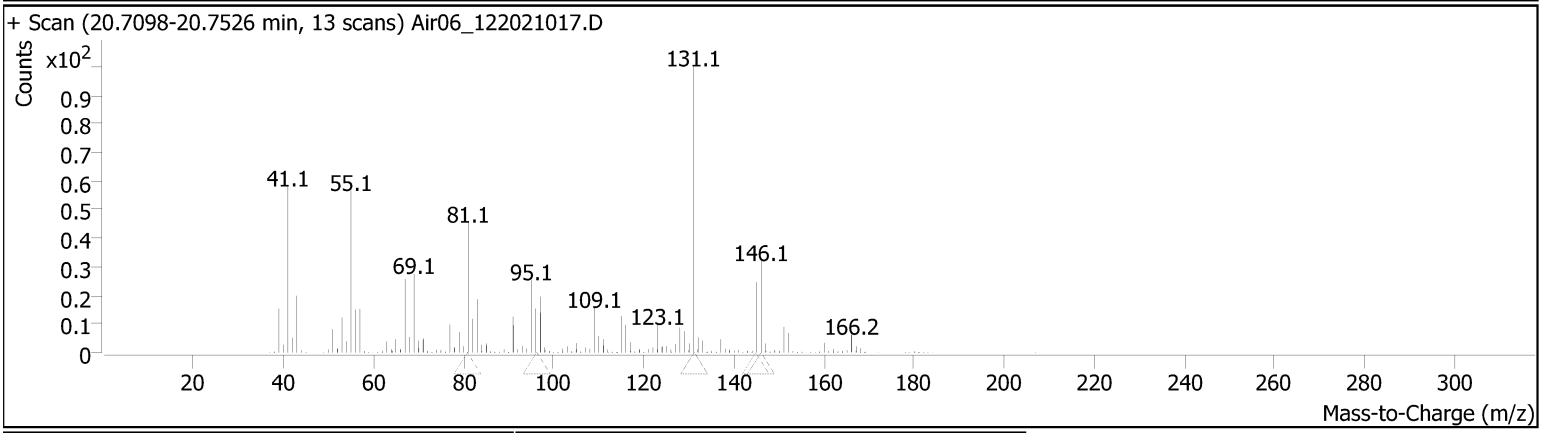


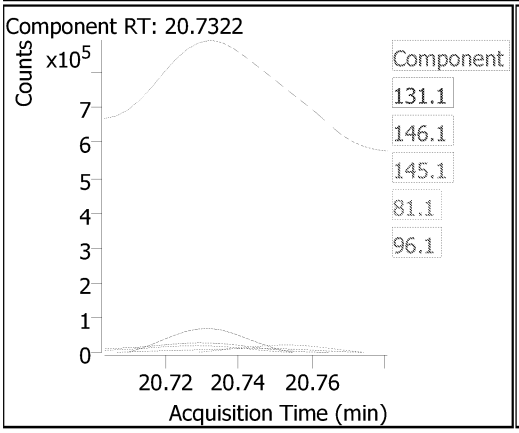


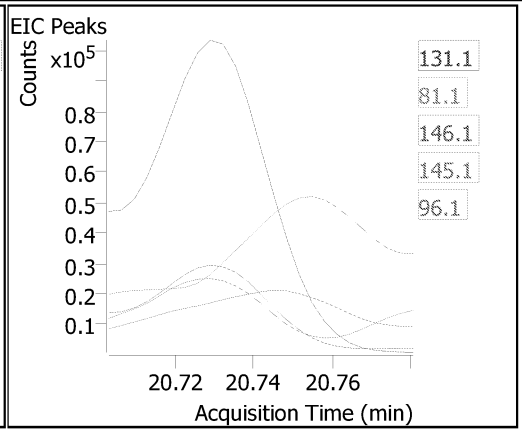
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.7322	1H-Indene, 2,3-dihydro-1,6-dimethyl-	1527424.6	75.9	17059-48-2	C11H14	3.61

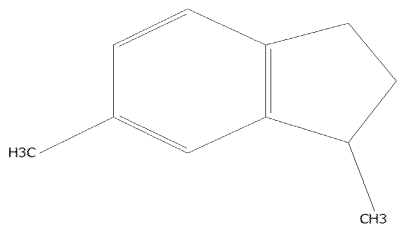




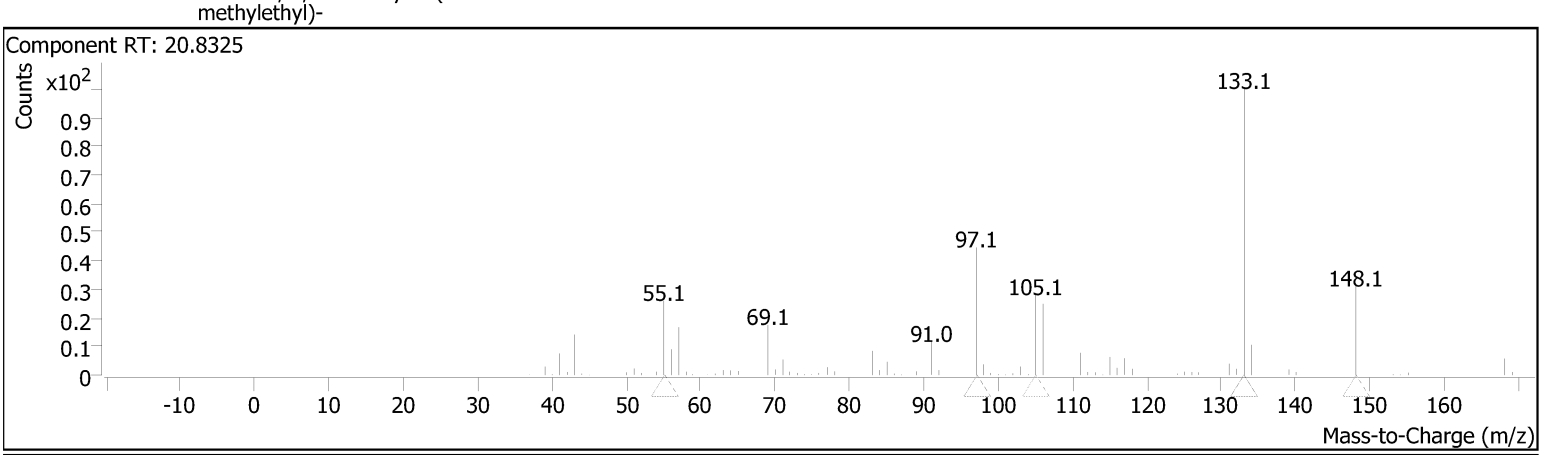


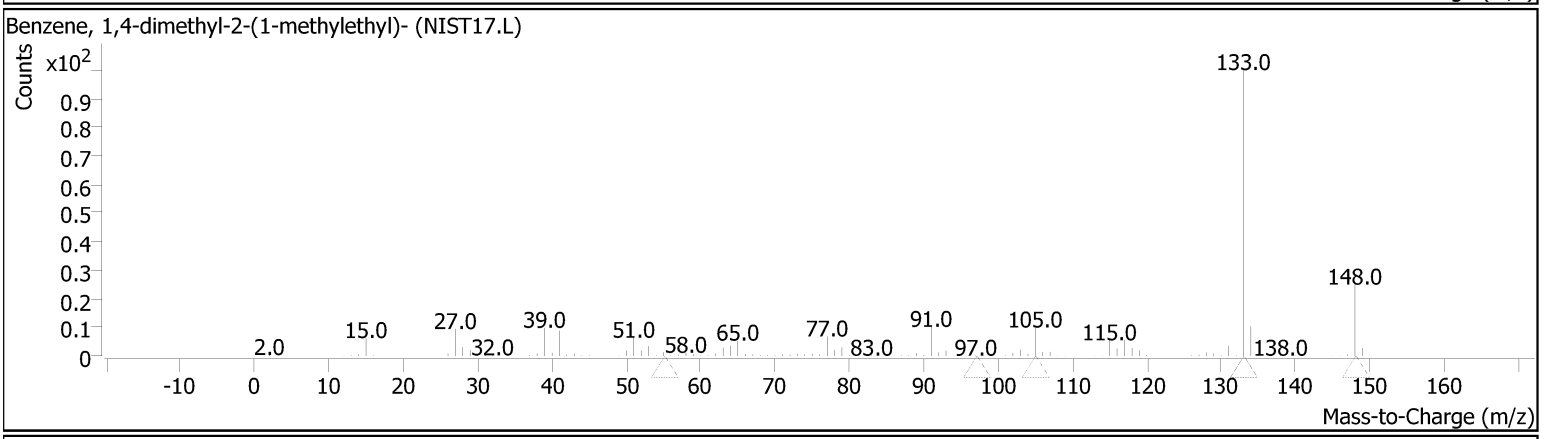


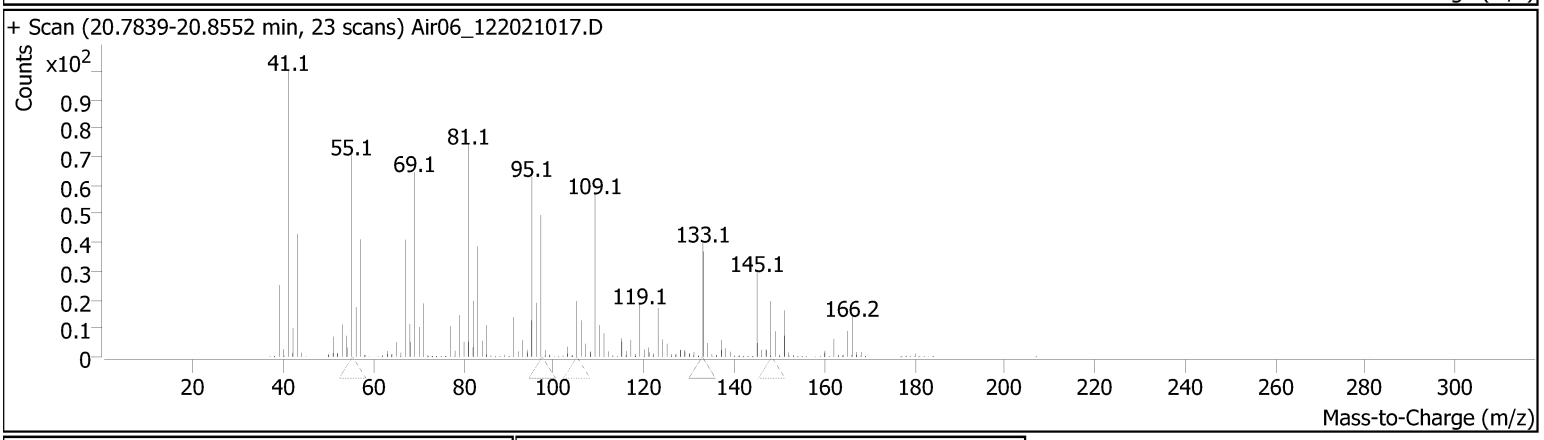


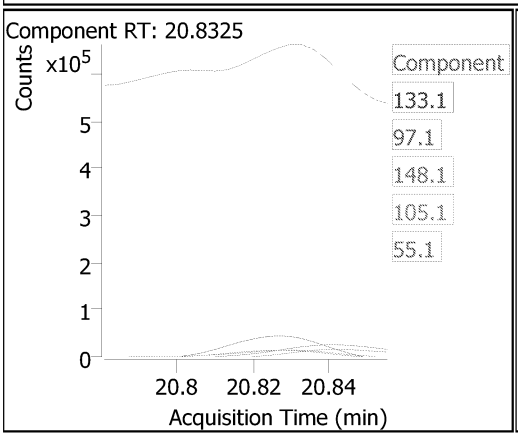


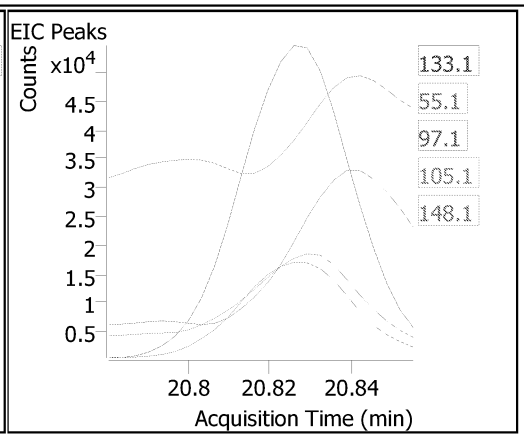
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.8325	Benzene, 1,4-dimethyl-2-(1-methylethyl)-	818175.2	70.1	4132-72-3	C11H16	1.934

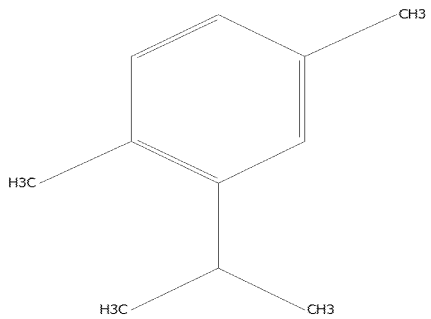




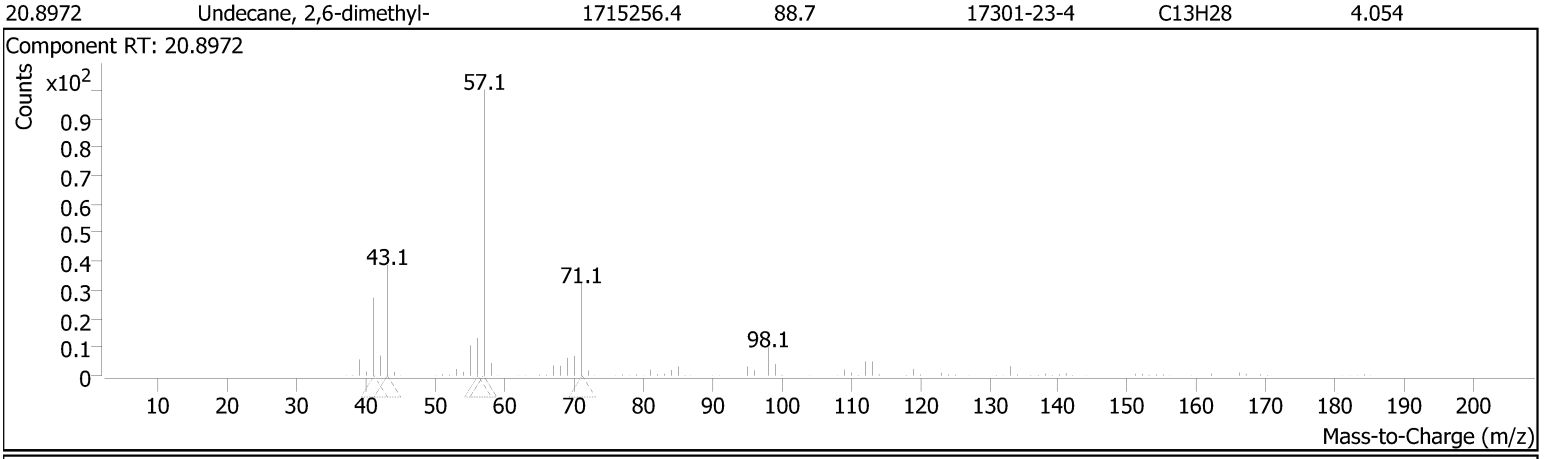


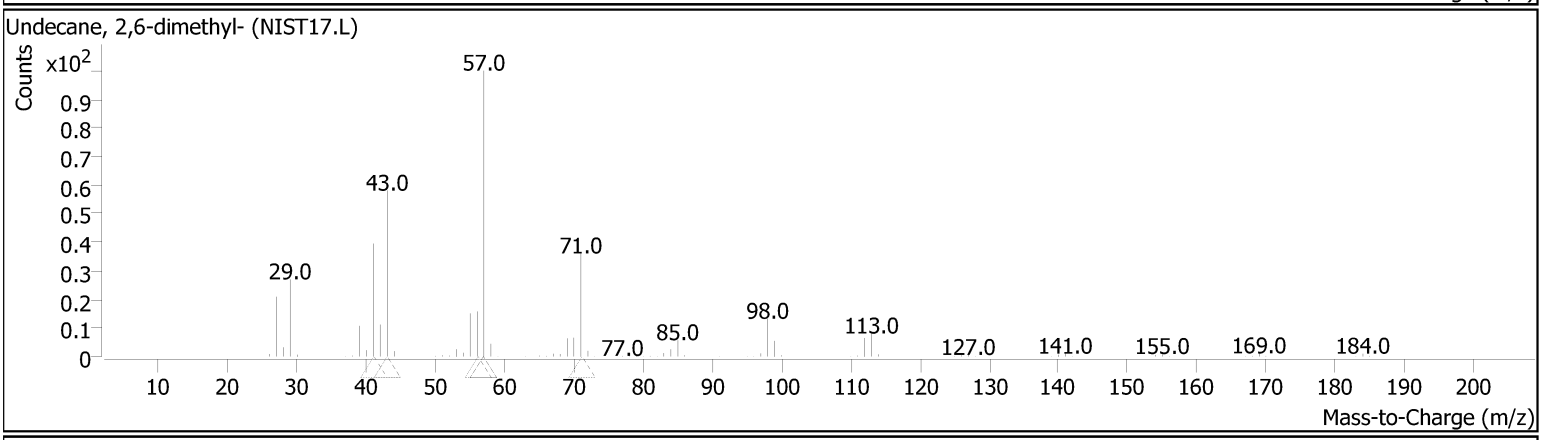


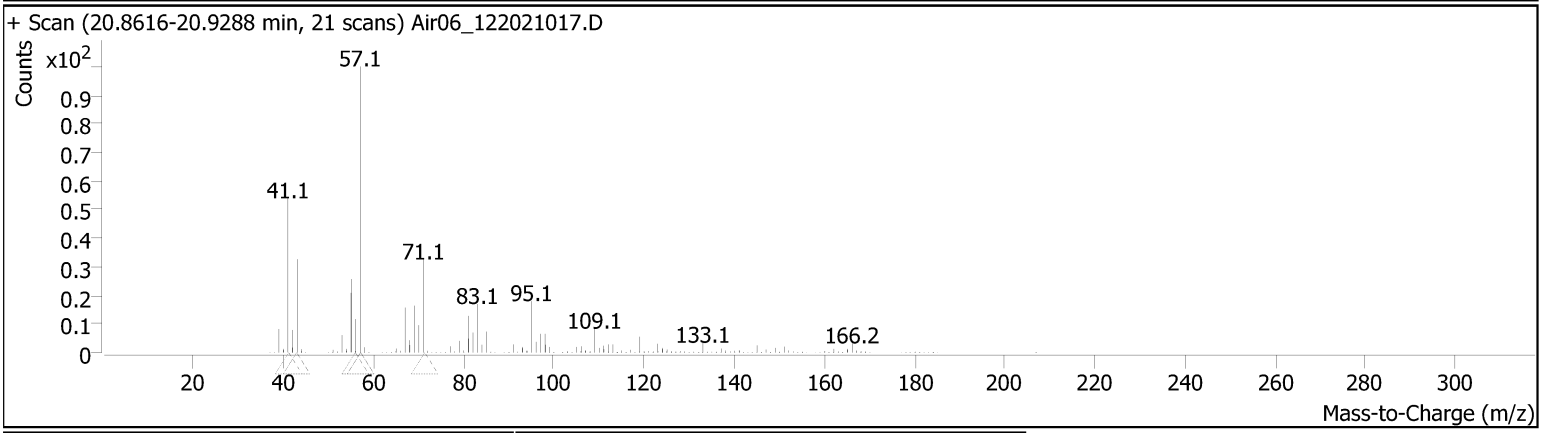


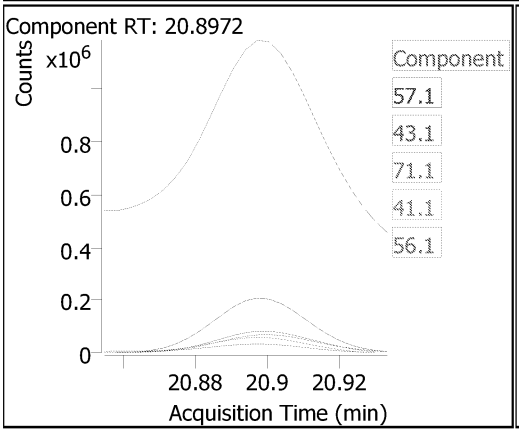


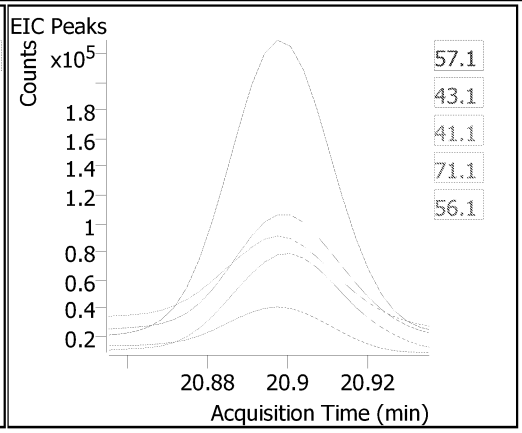
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.8972	Undecane, 2,6-dimethyl-	1715256.4	88.7	17301-23-4	C13H28	4.054

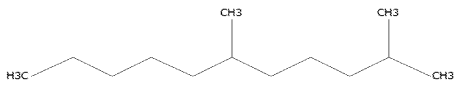




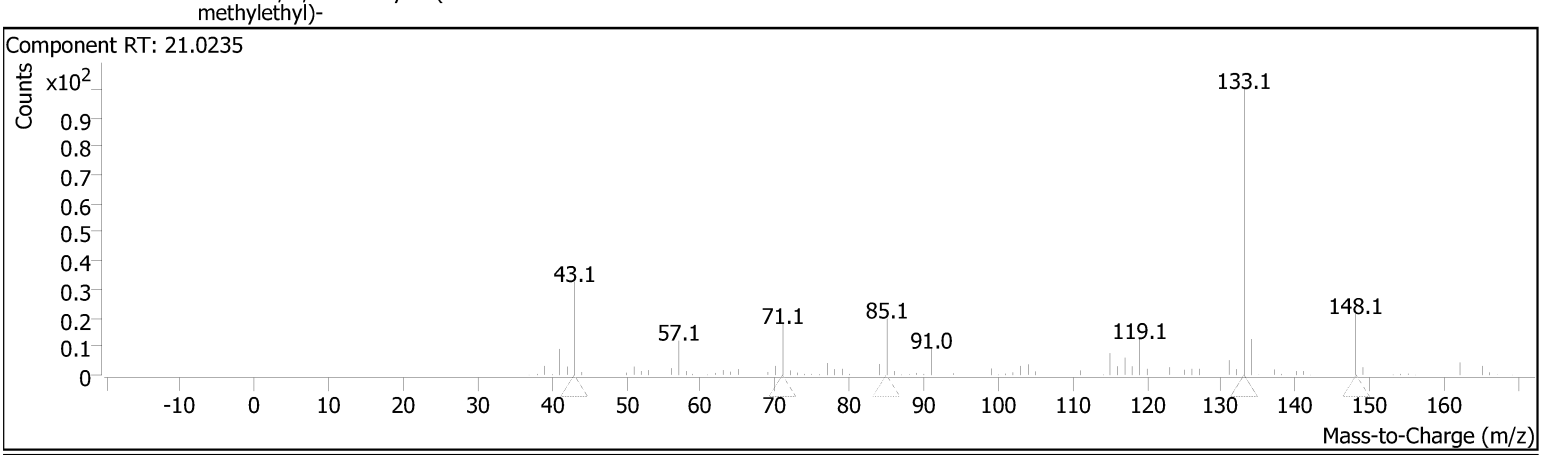


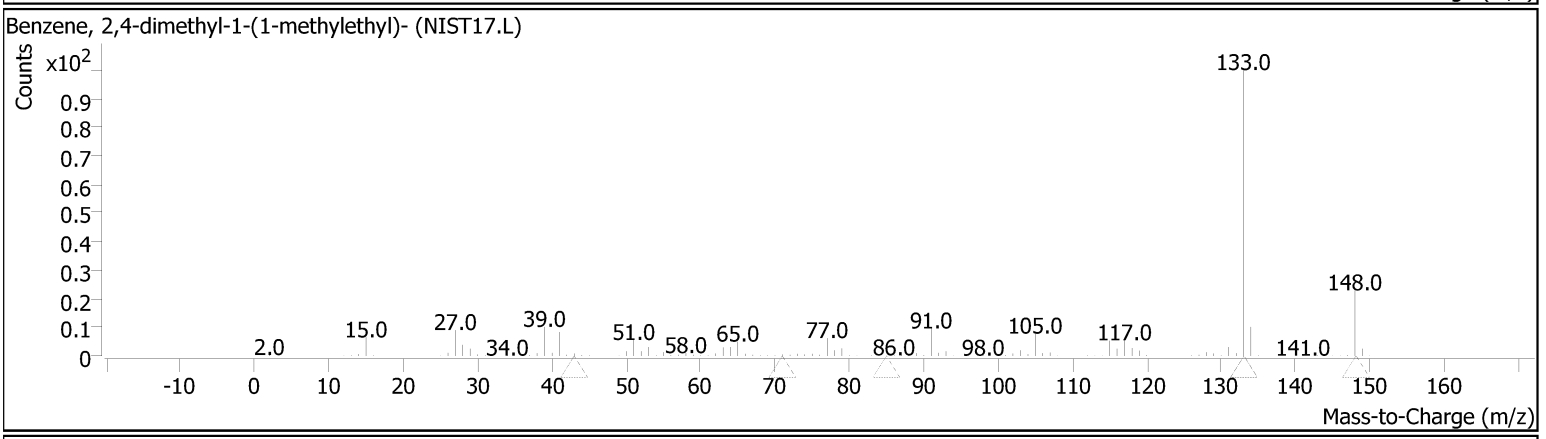


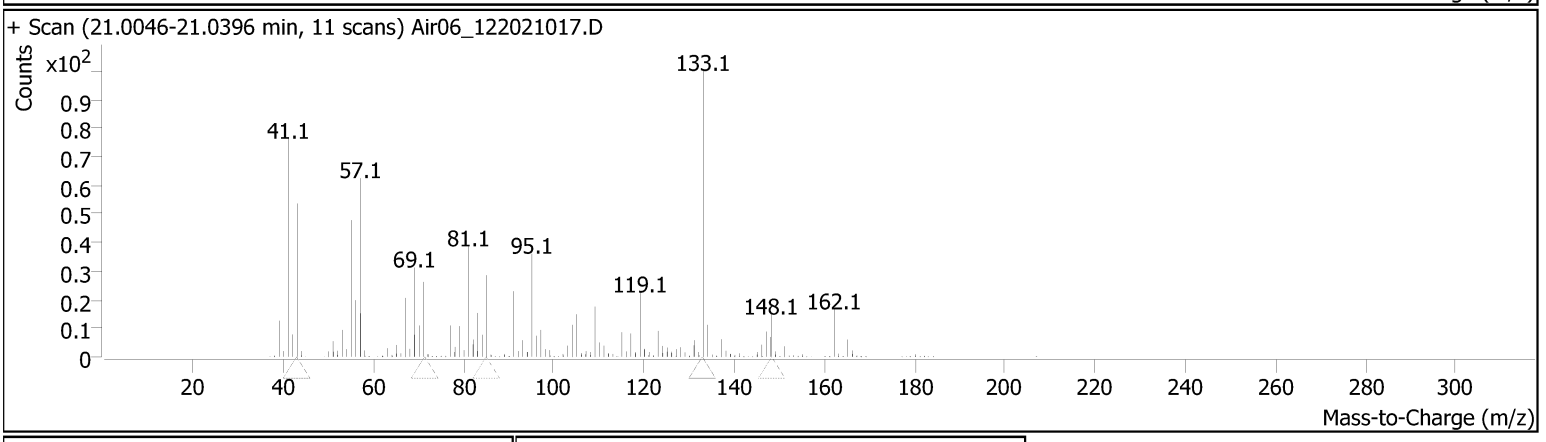


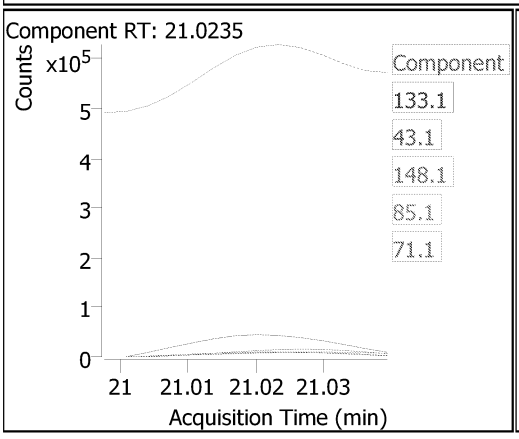


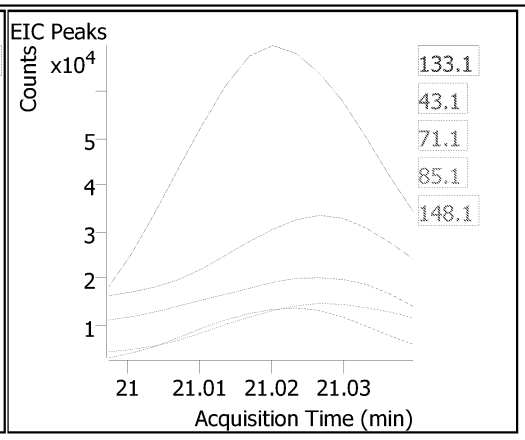
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.0235	Benzene, 2,4-dimethyl-1-(1-methylethyl)-	331100.9	76.4	4706-89-2	C11H16	0.7825

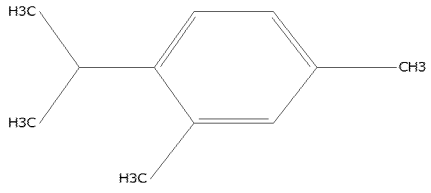




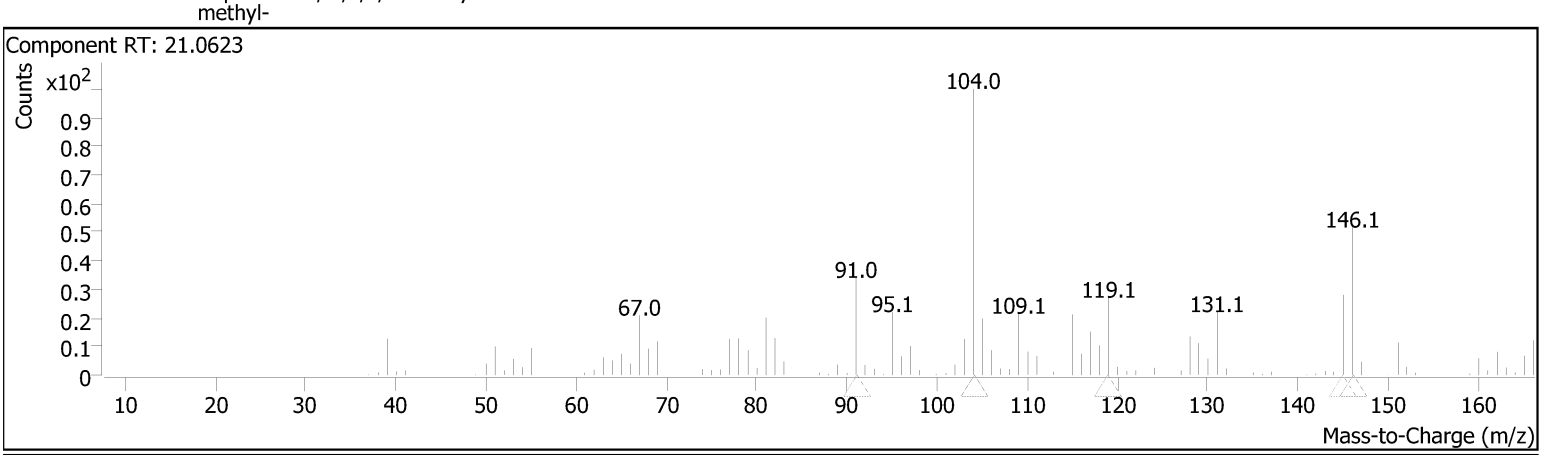


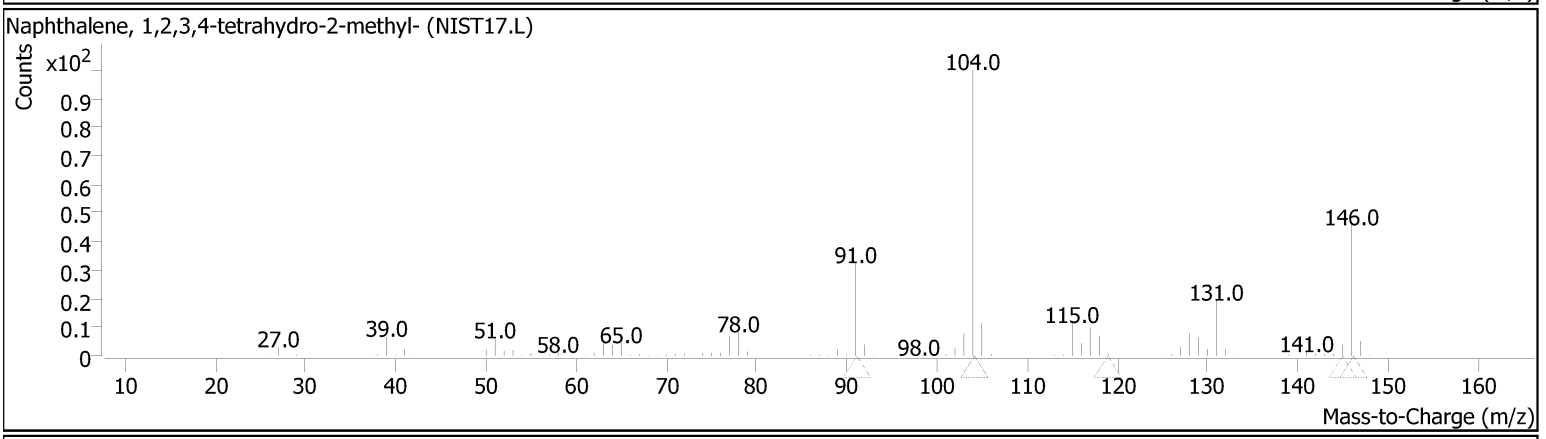


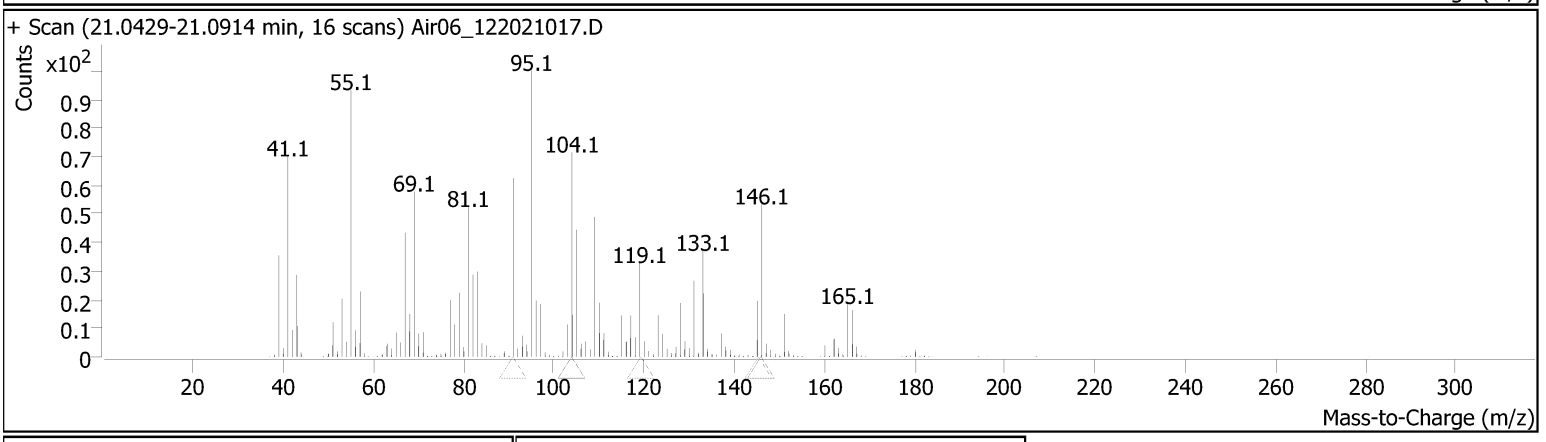


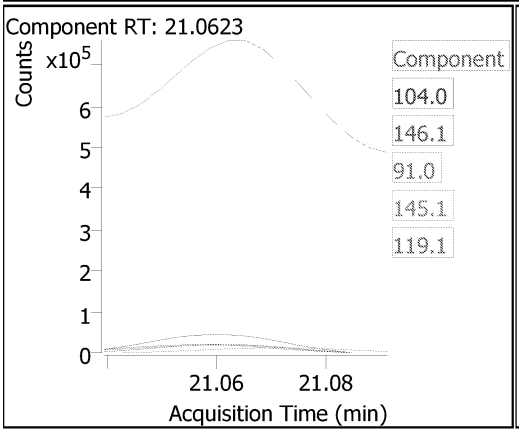


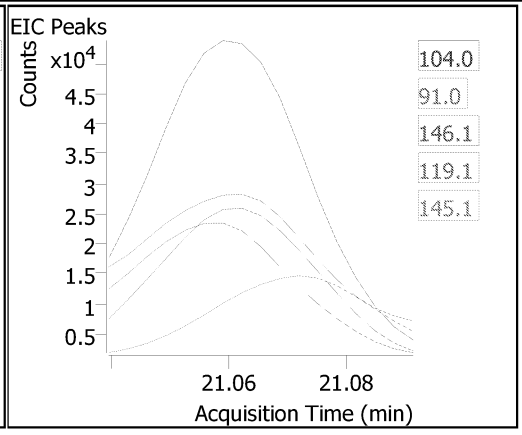
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.0623	Naphthalene, 1,2,3,4-tetrahydro-2-methyl-	609595.4	73.1	3877-19-8	C11H14	1.441

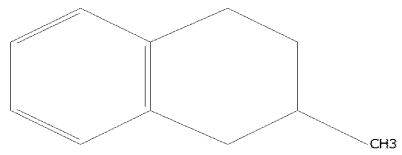












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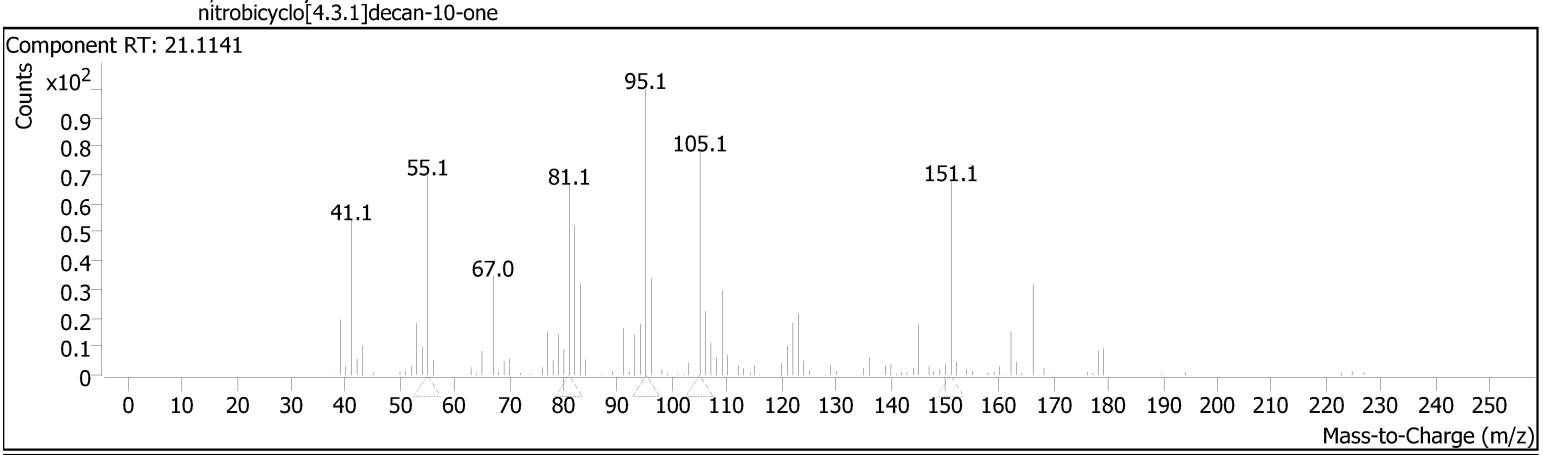
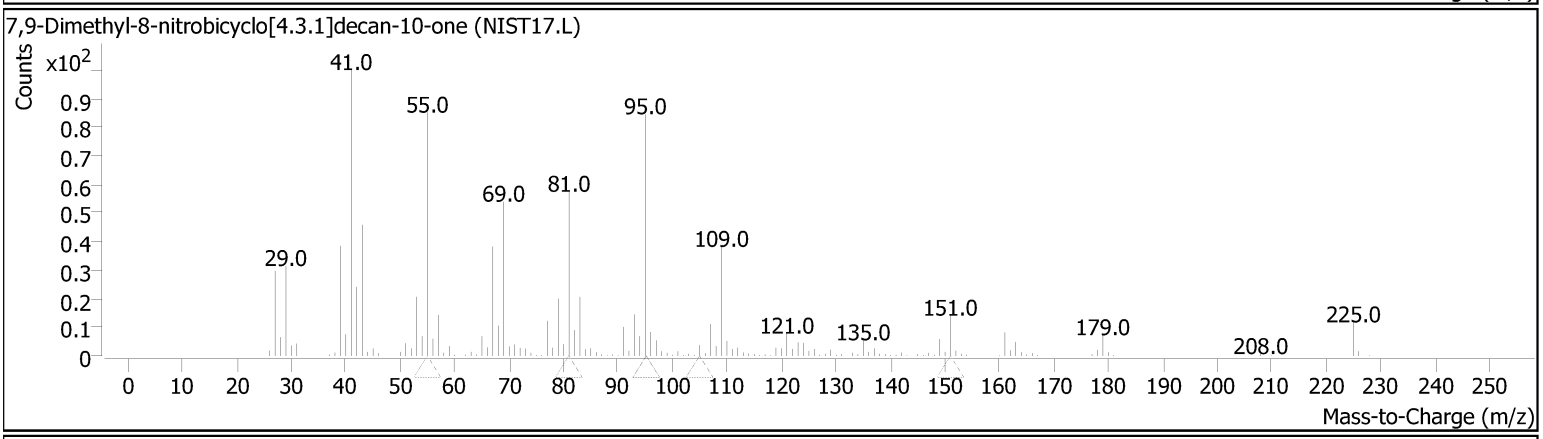
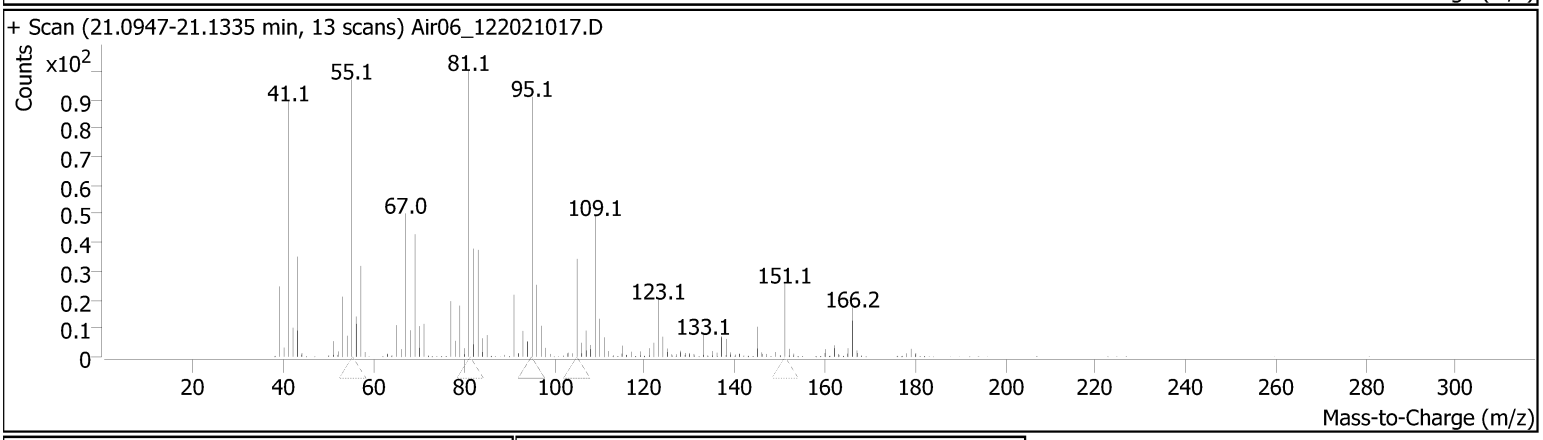
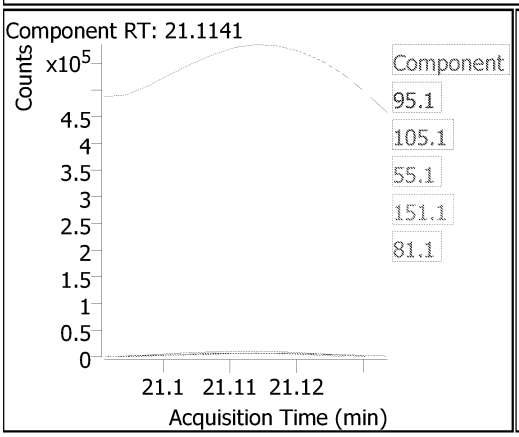
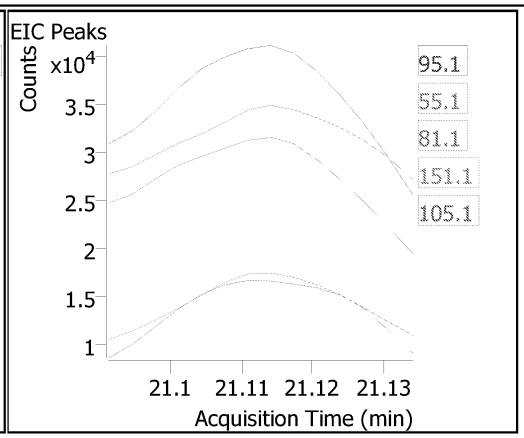
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.1141	7,9-Dimethyl-8-nitrobicyclo[4.3.1]decan-10-one	225492.2	71.3	129967-66-4	C12H19NO3	0.5329

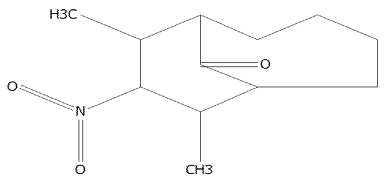




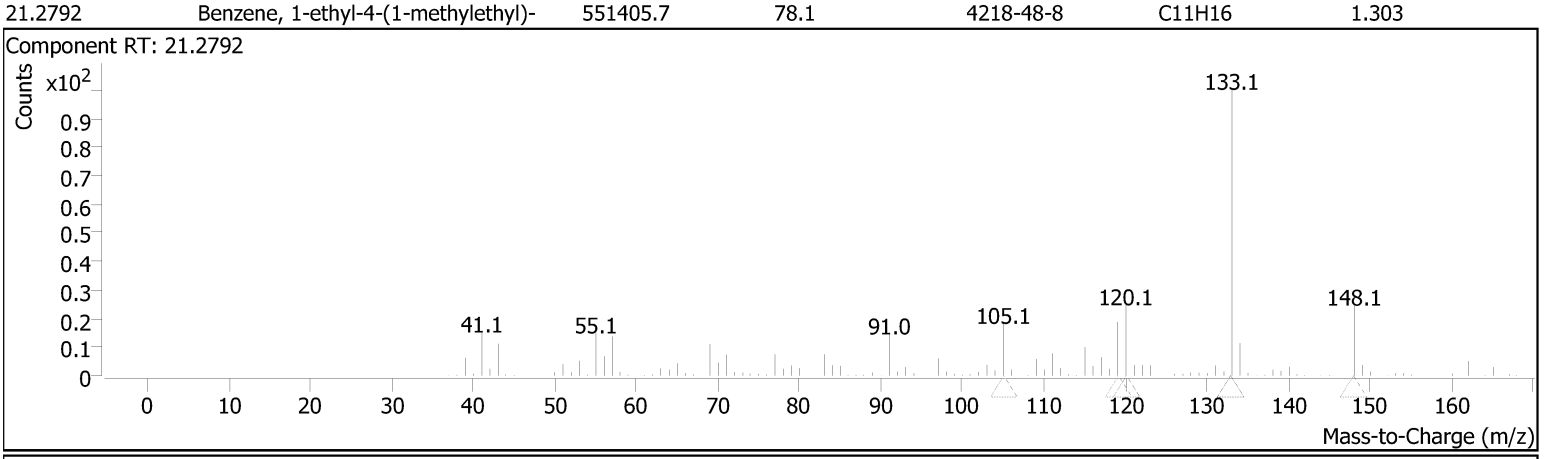


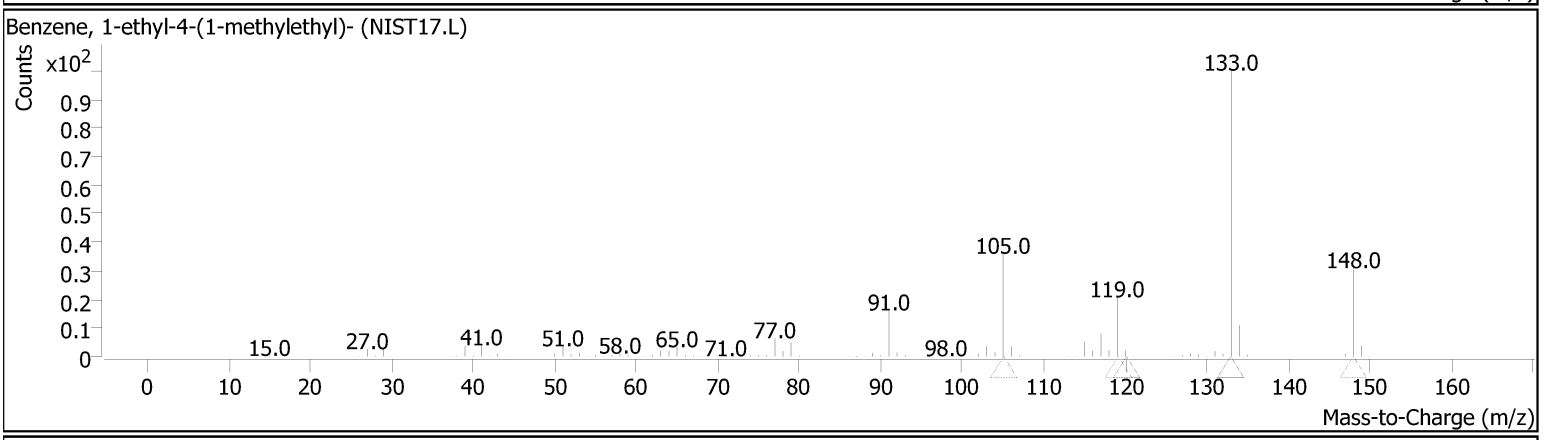


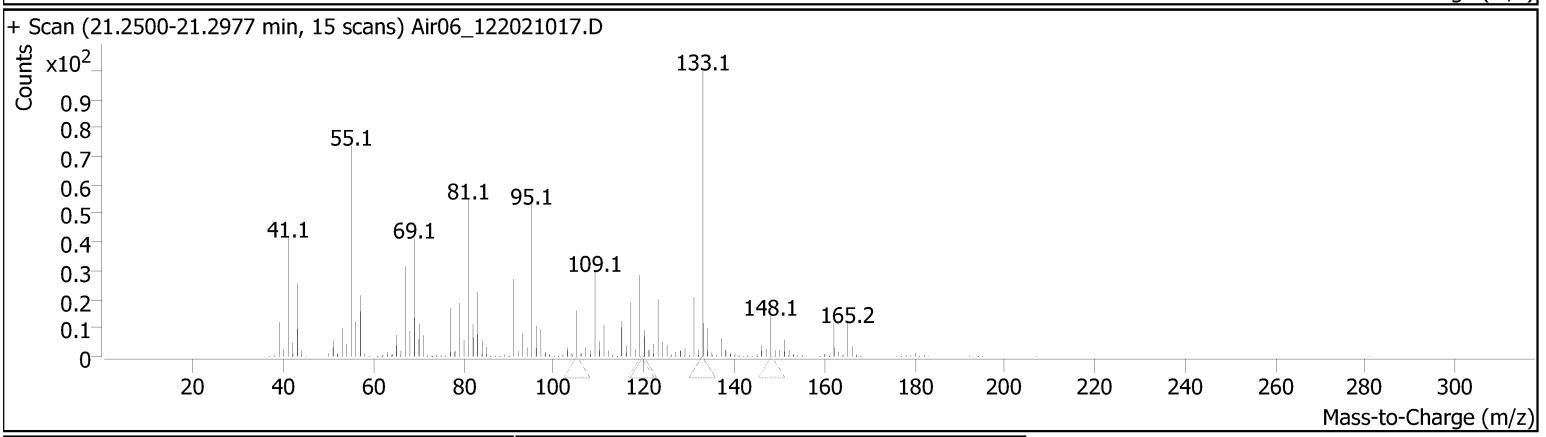


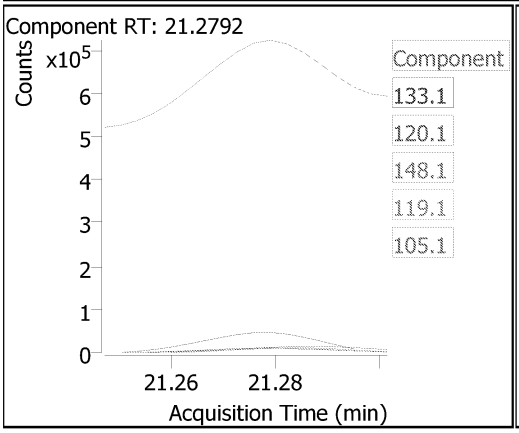


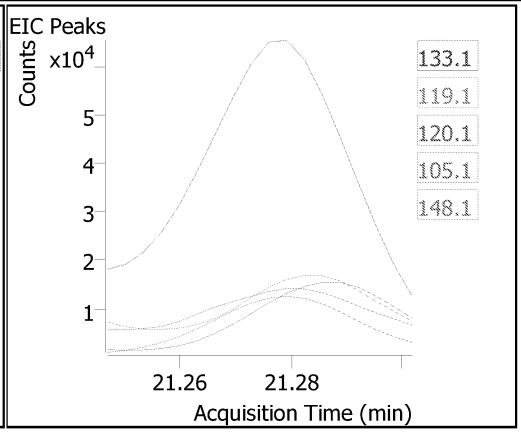
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.2792	Benzene, 1-ethyl-4-(1-methylethyl)-	551405.7	78.1	4218-48-8	C11H16	1.303

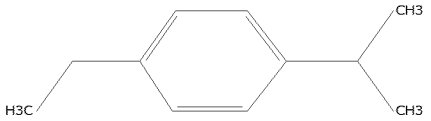




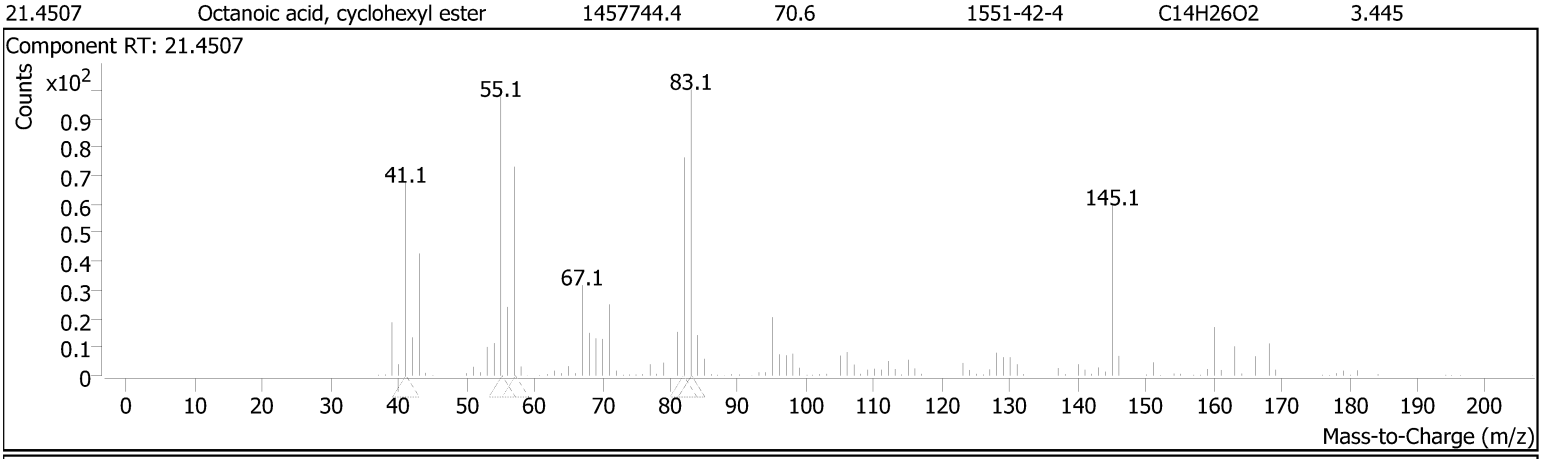


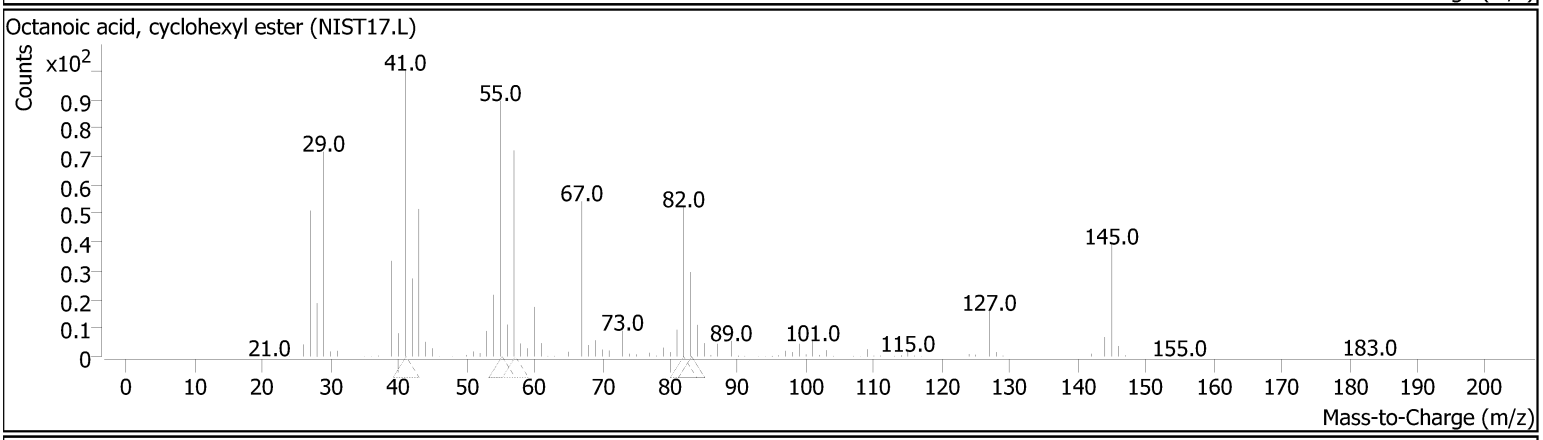


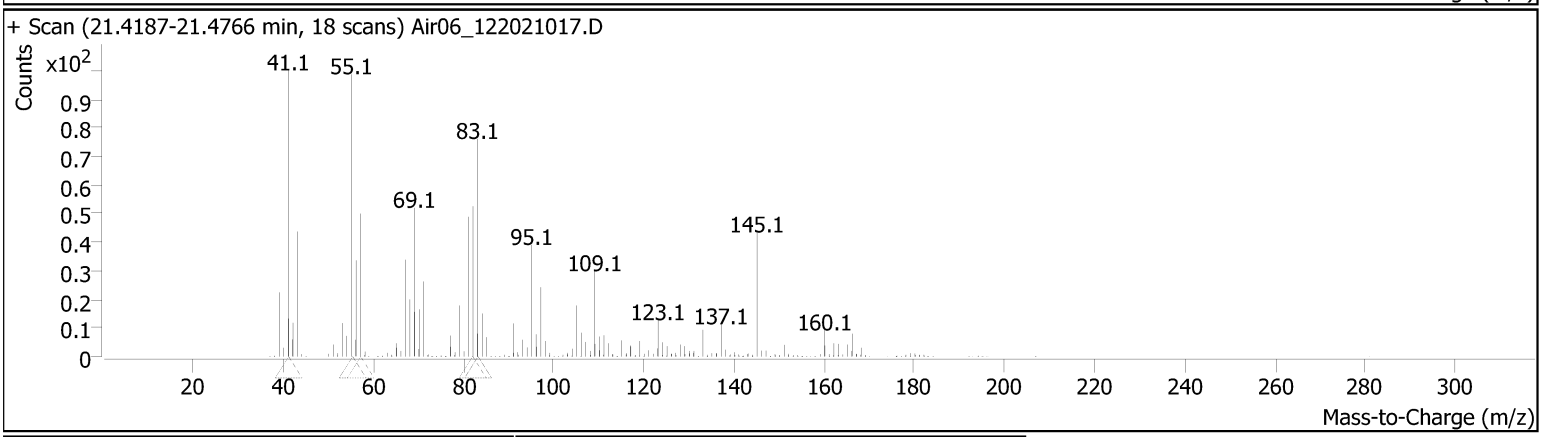


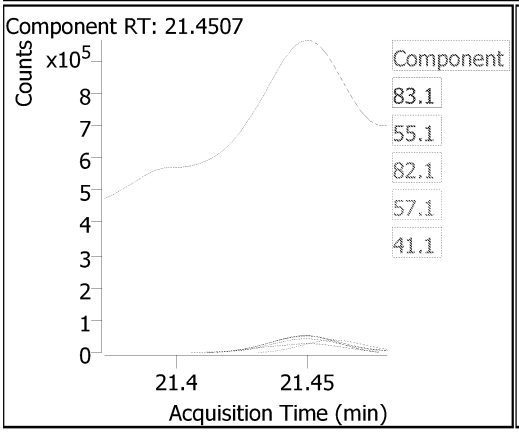


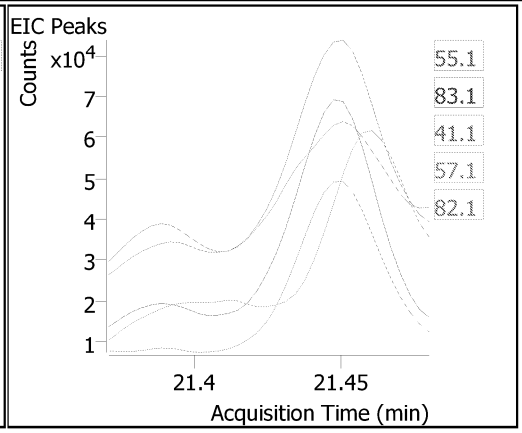
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.4507	Octanoic acid, cyclohexyl ester	1457744.4	70.6	1551-42-4	C14H26O2	3.445





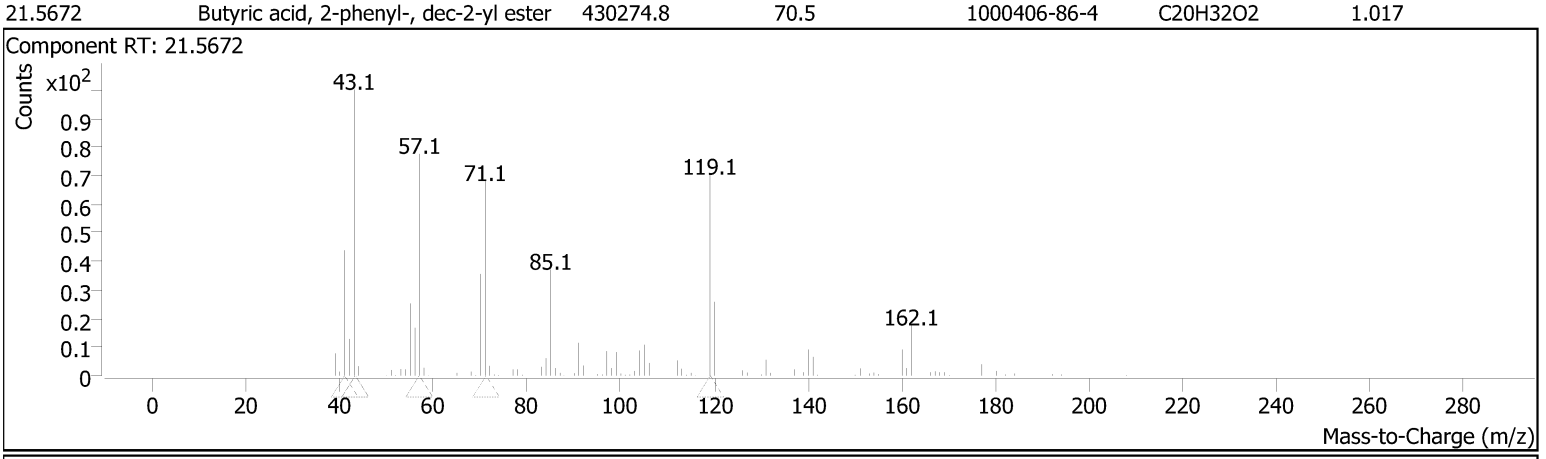


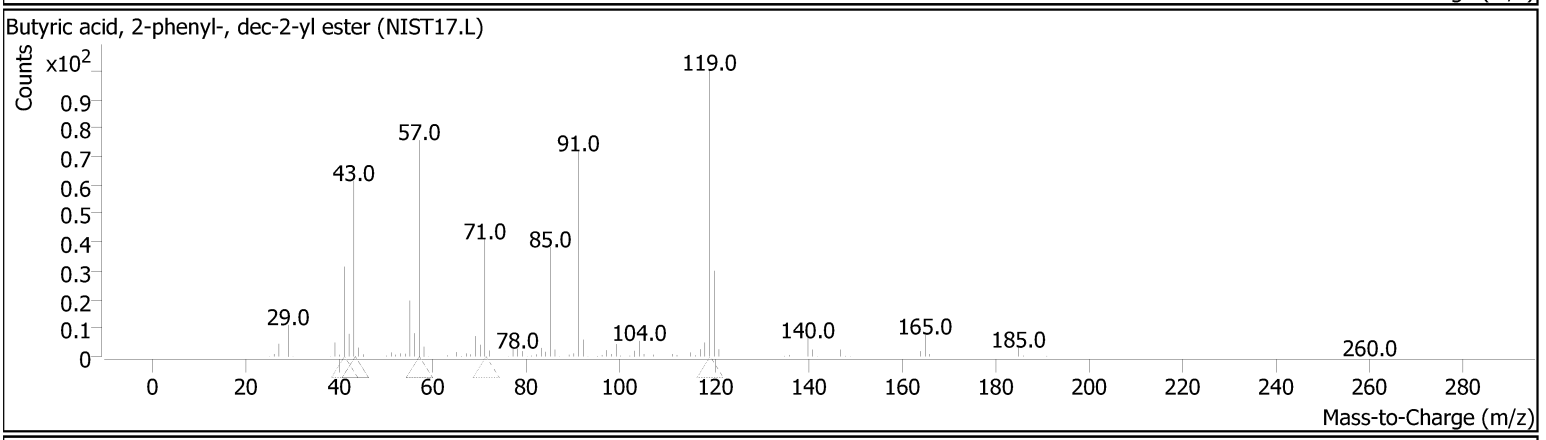


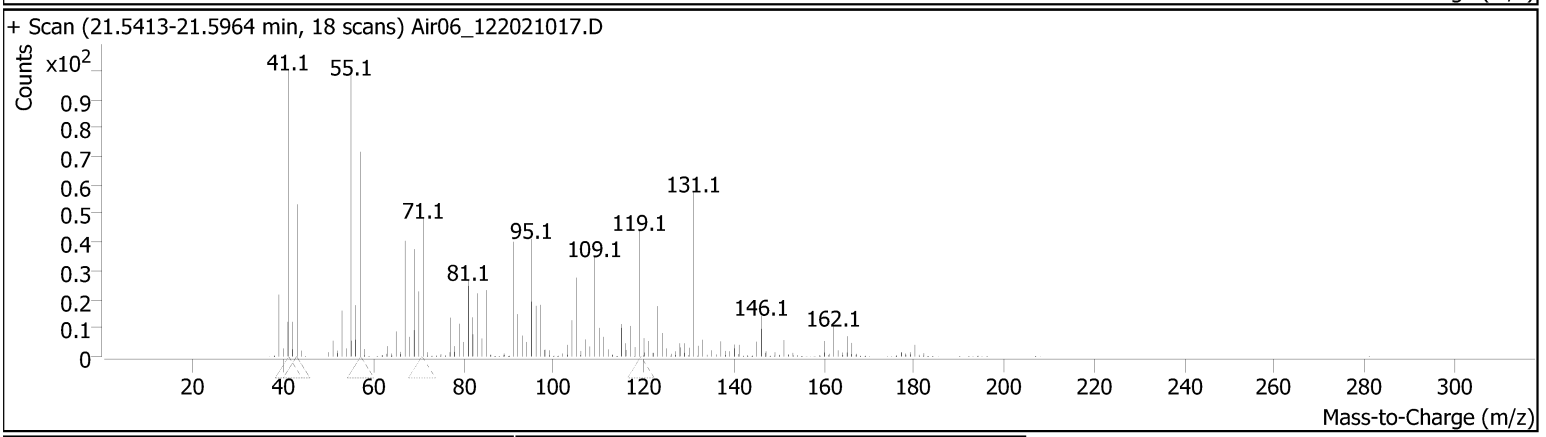


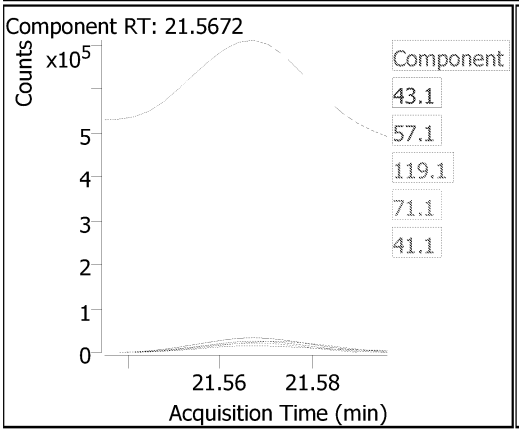


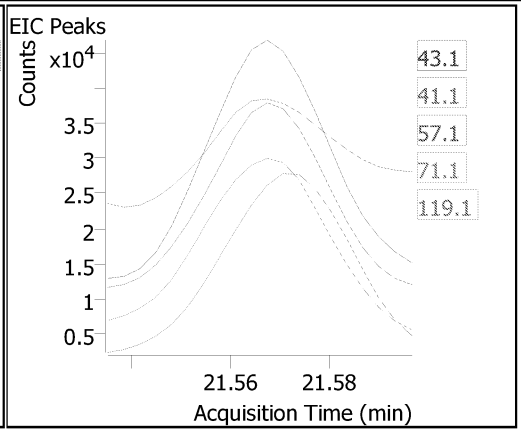
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.5672	Butyric acid, 2-phenyl-, dec-2-yl ester	430274.8	70.5	1000406-86-4	C20H32O2	1.017

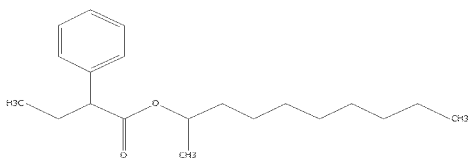




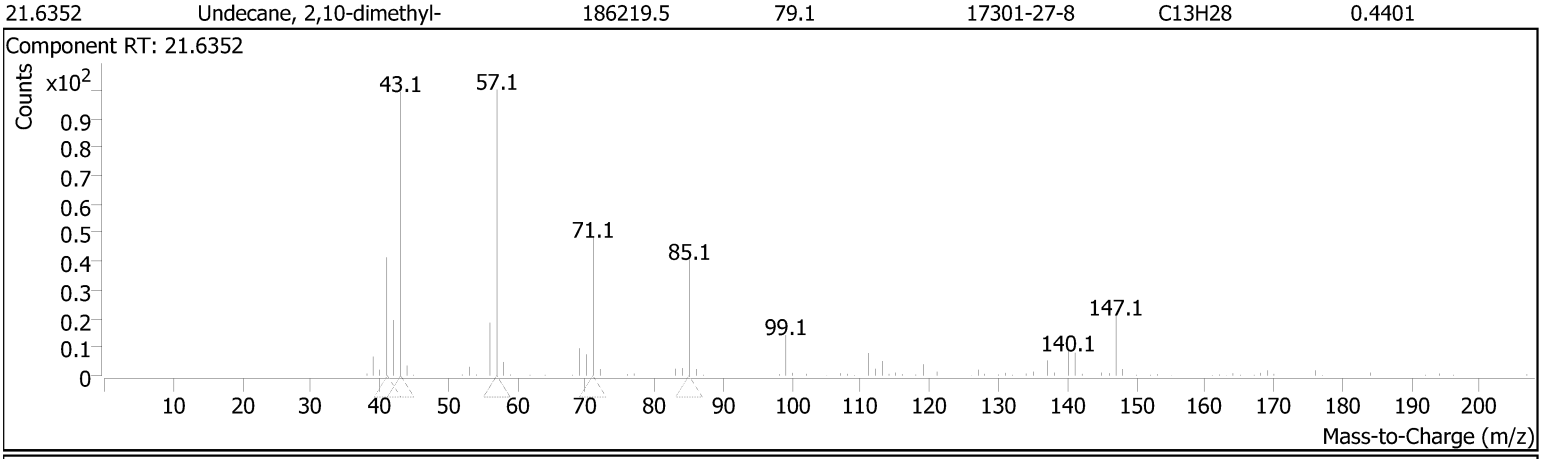


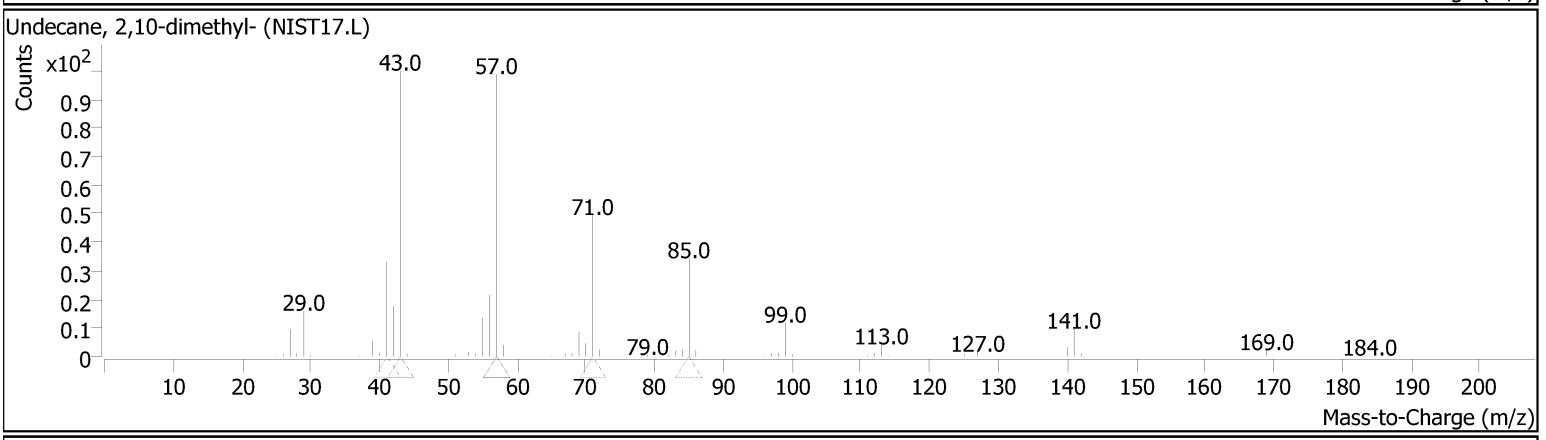


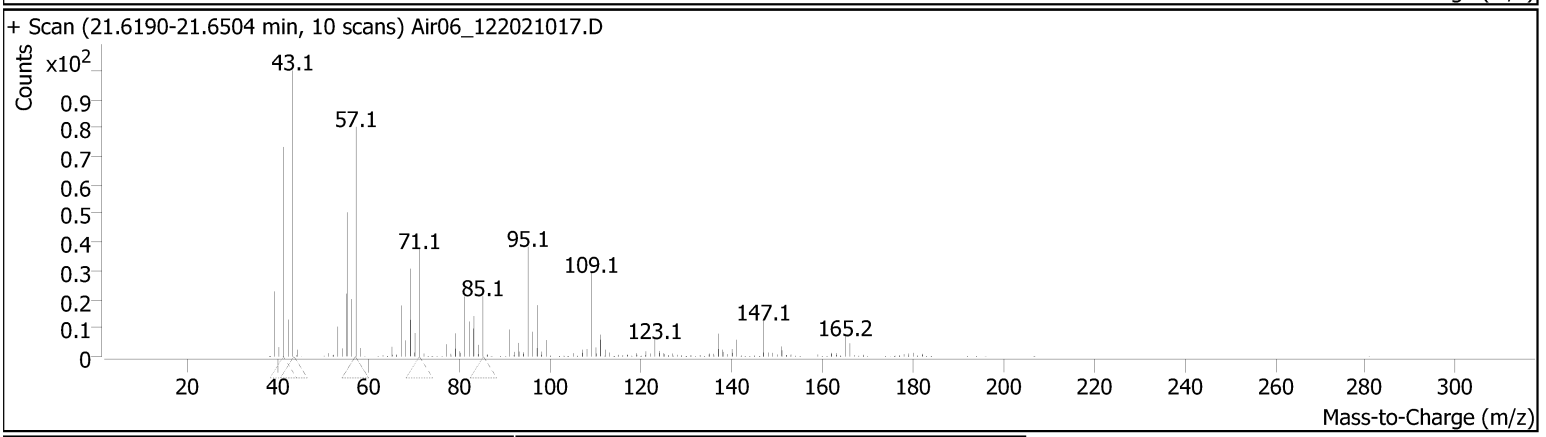


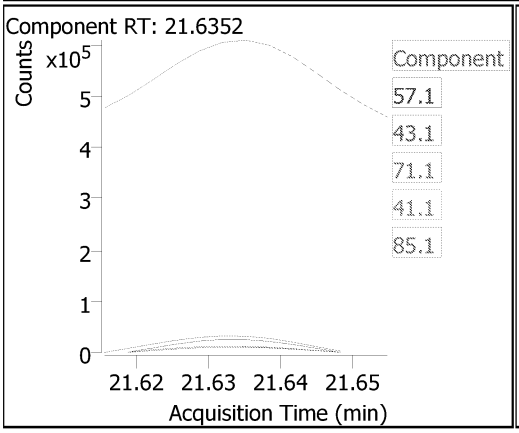


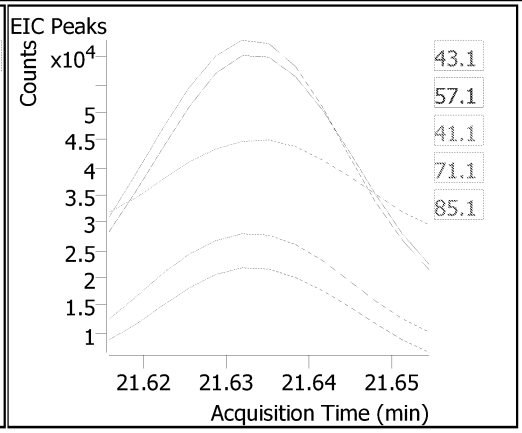
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.6352	Undecane, 2,10-dimethyl-	186219.5	79.1	17301-27-8	C13H28	0.4401

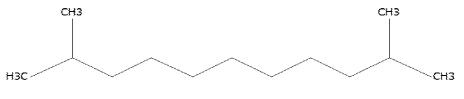




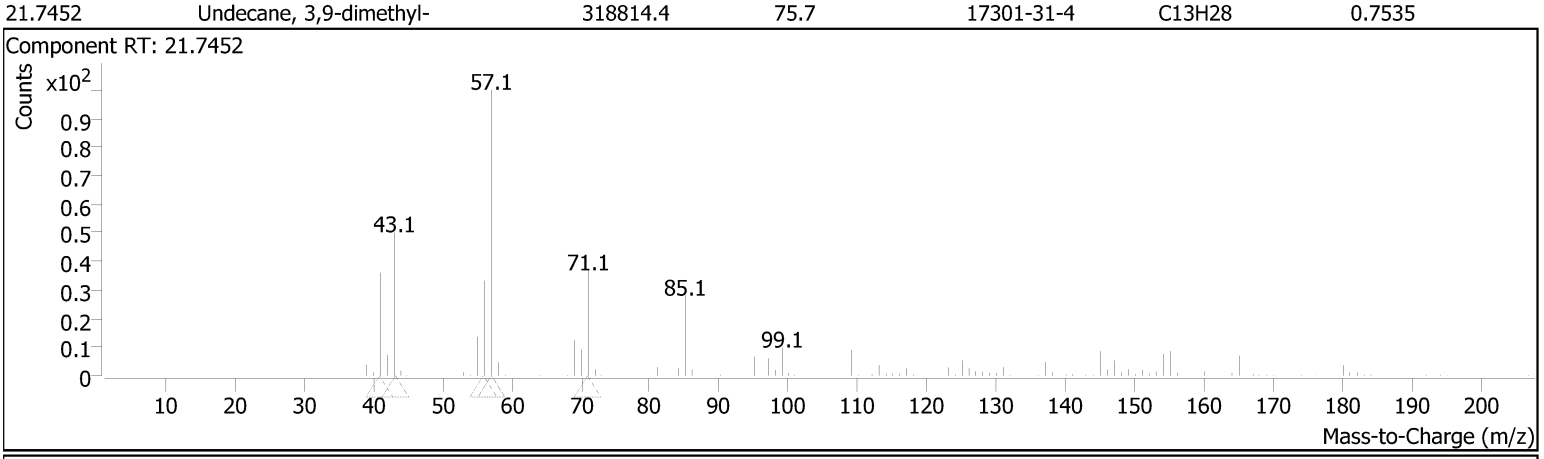


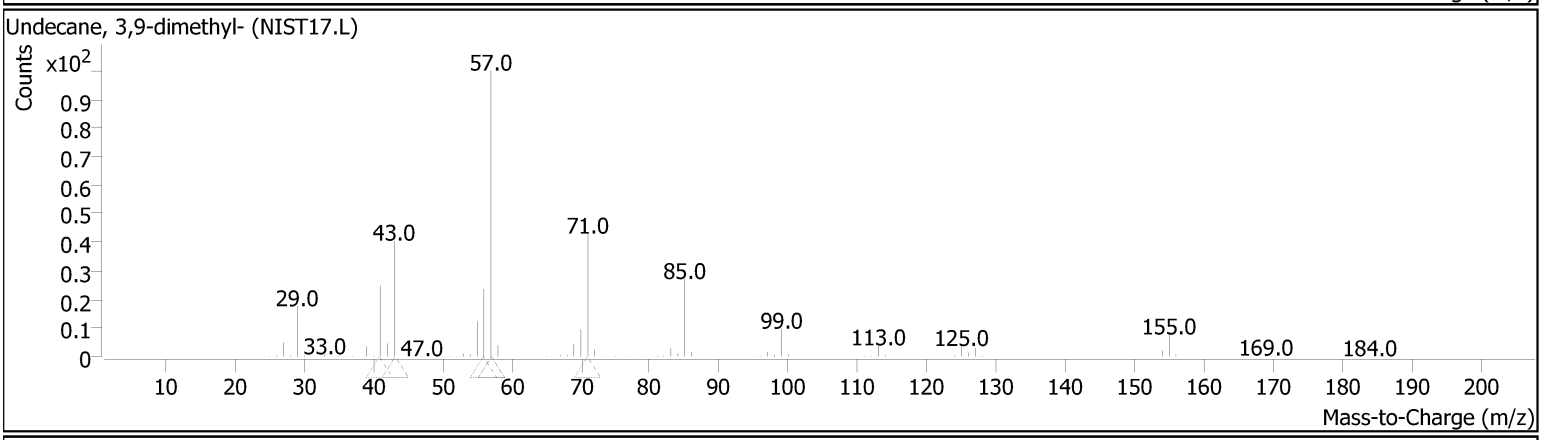


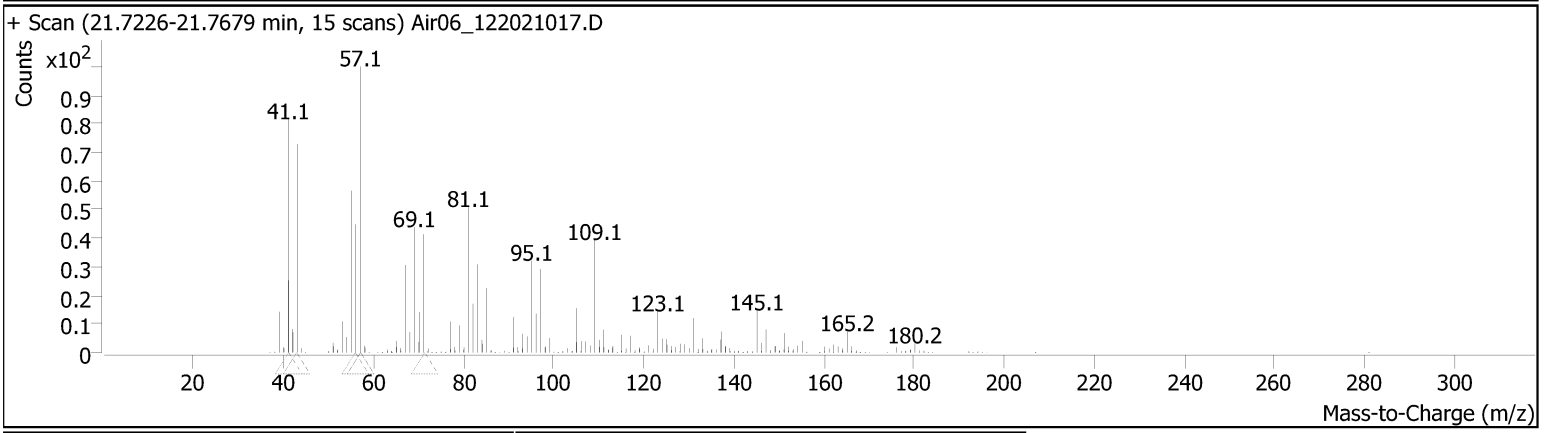


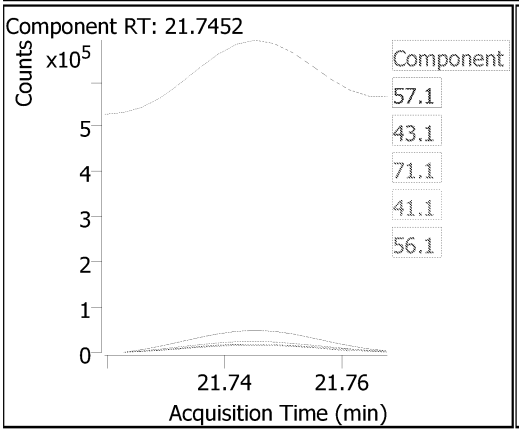


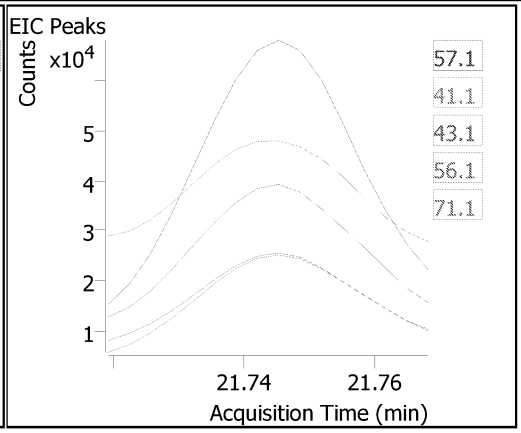
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.7452	Undecane, 3,9-dimethyl-	318814.4	75.7	17301-31-4	C13H28	0.7535





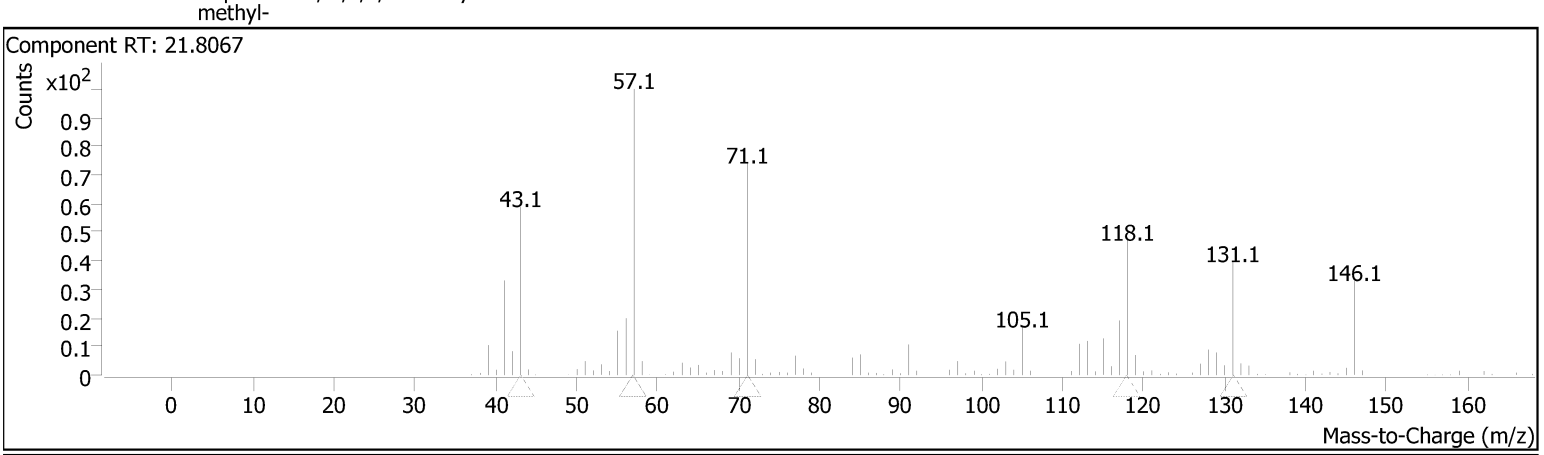


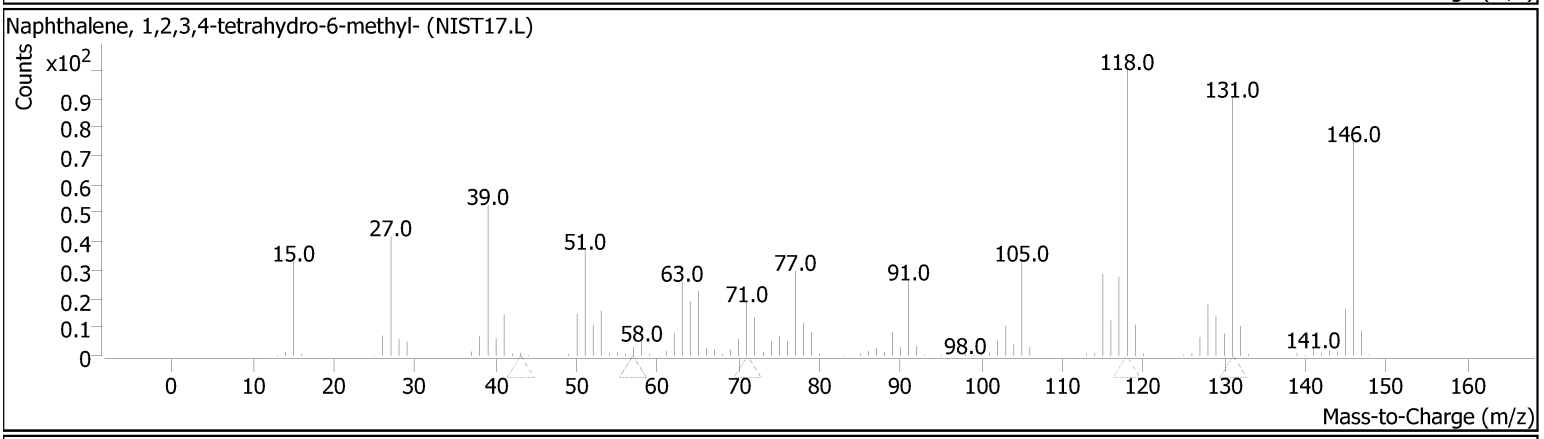


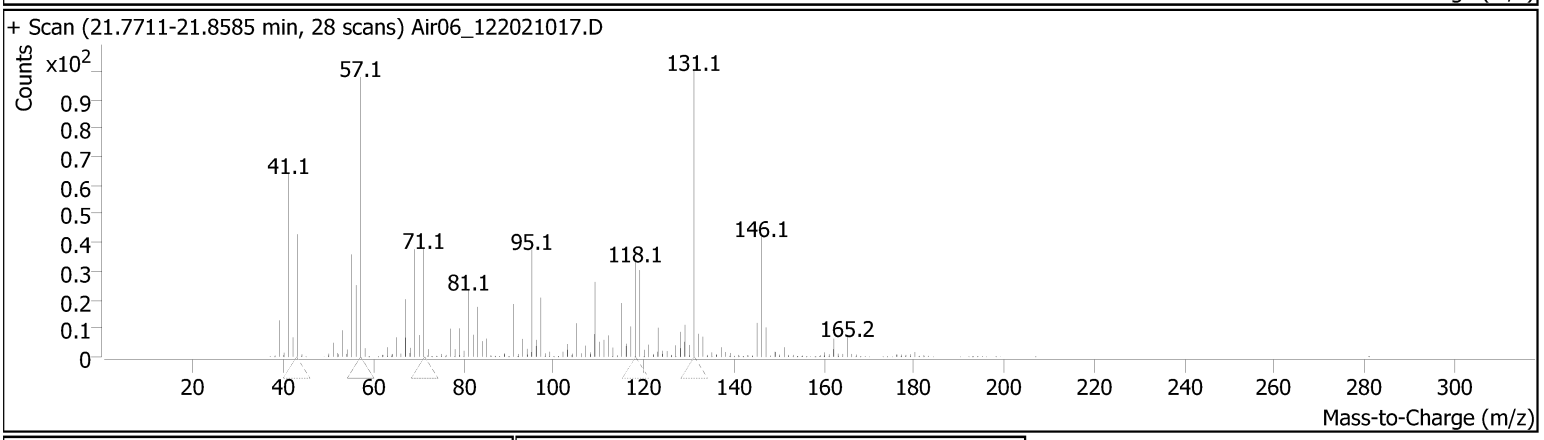


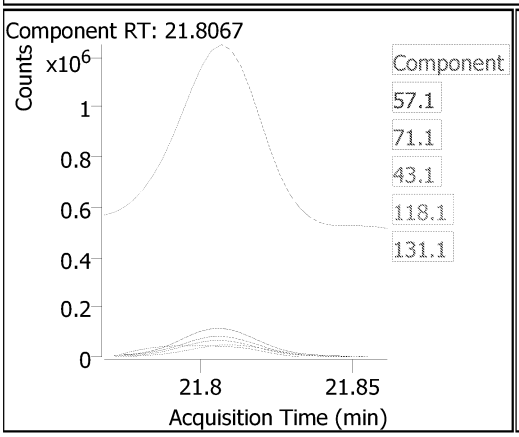


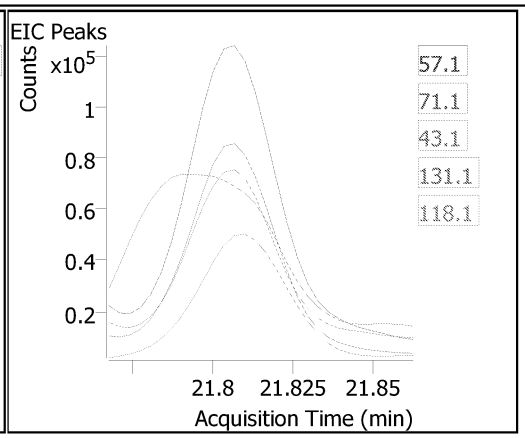
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.8067	Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	1512109.8	75.9	1680-51-9	C11H14	3.574

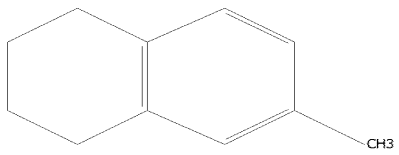




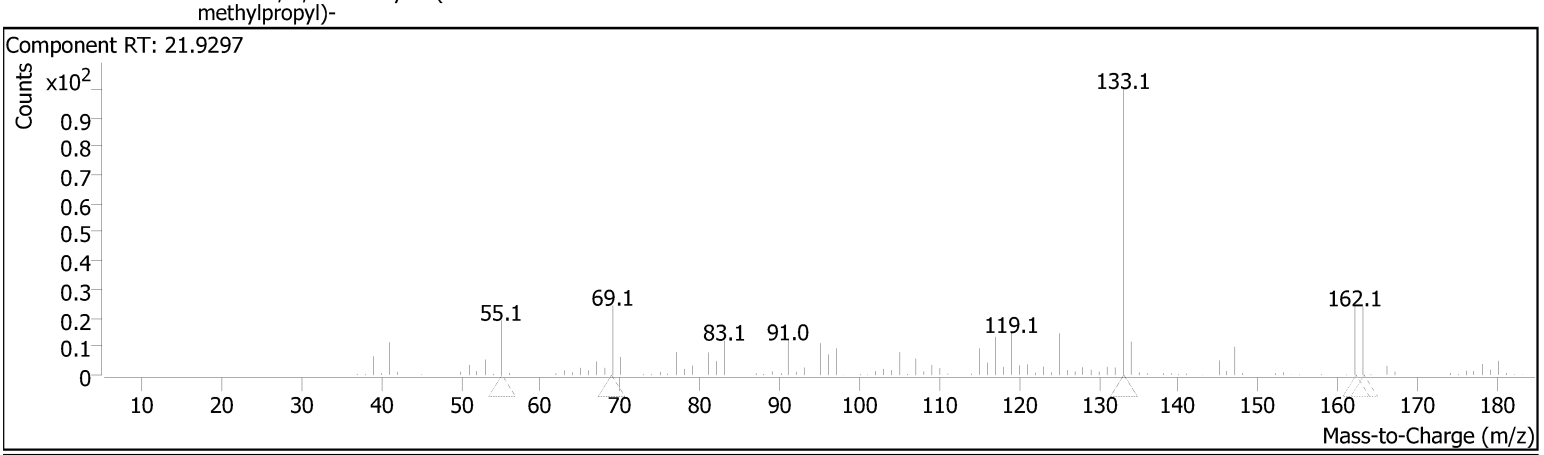


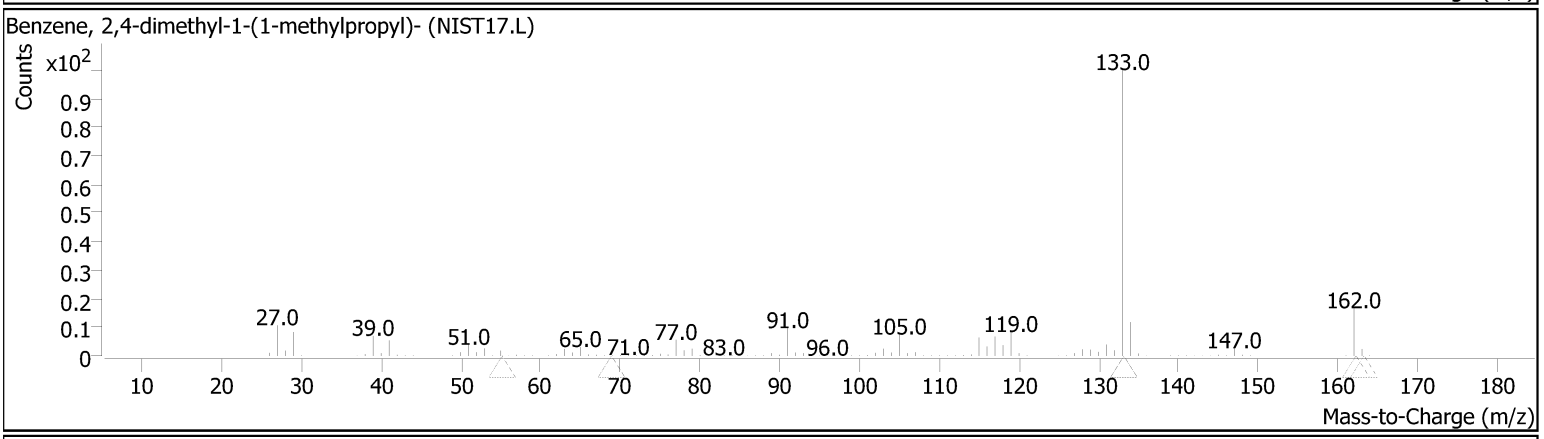


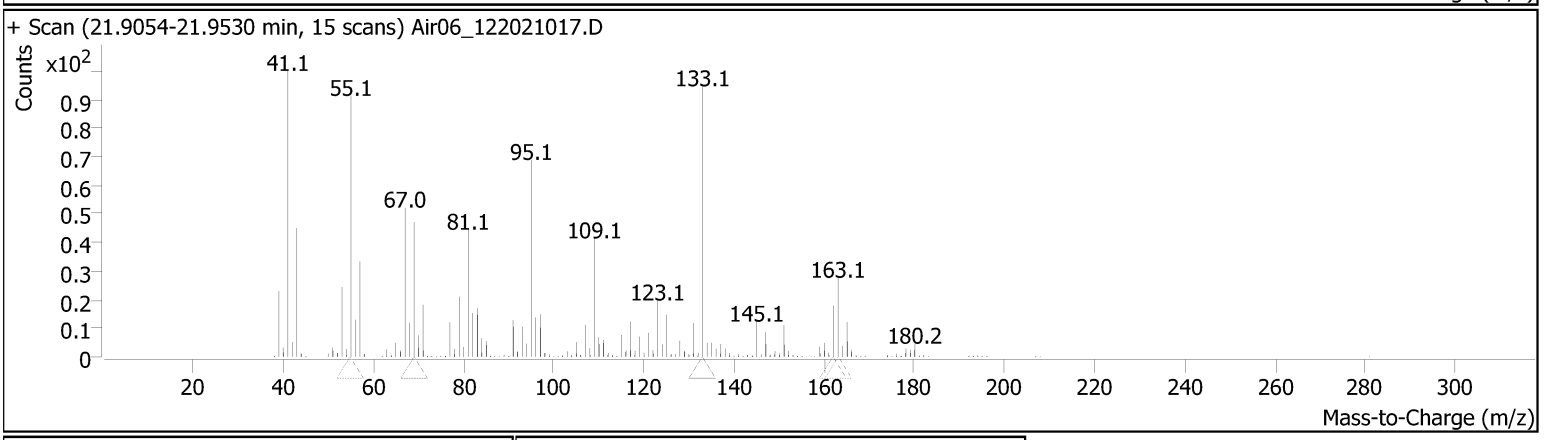


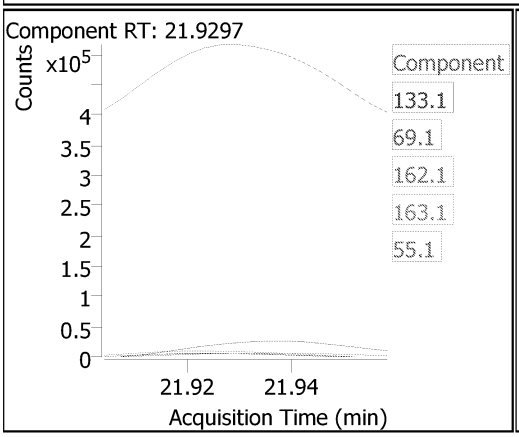


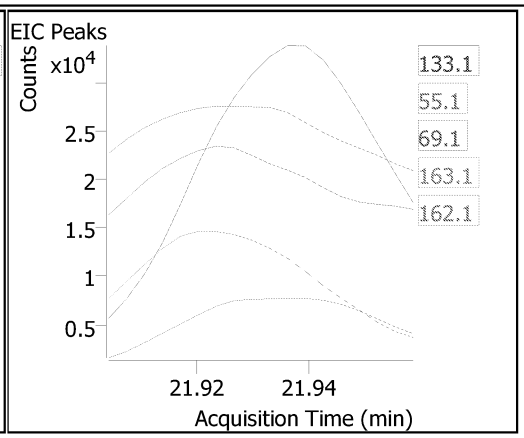
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.9297	Benzene, 2,4-dimethyl-1-(1-methylpropyl)-	218953.0	78.8	1483-60-9	C12H18	0.5175

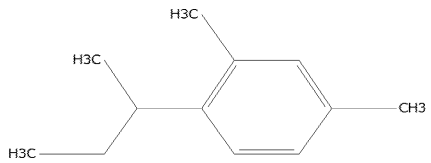




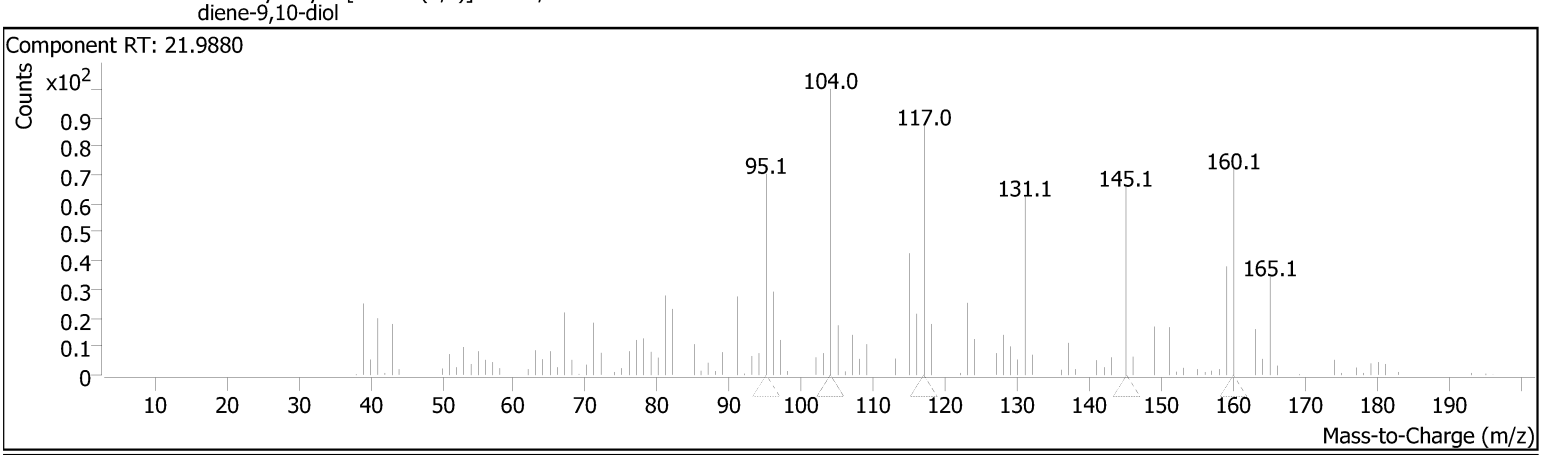


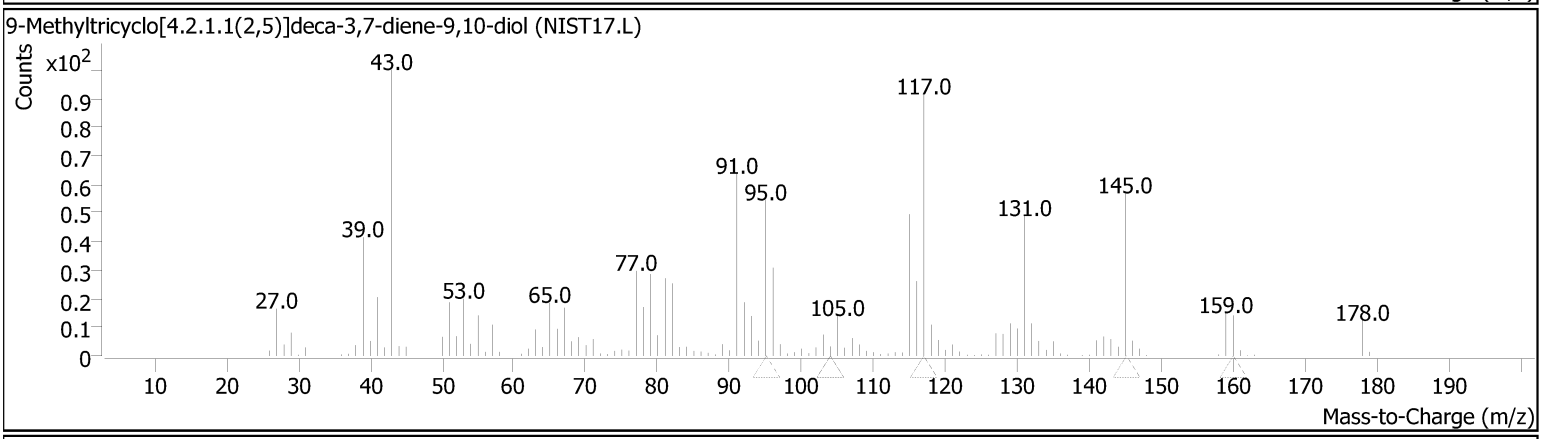


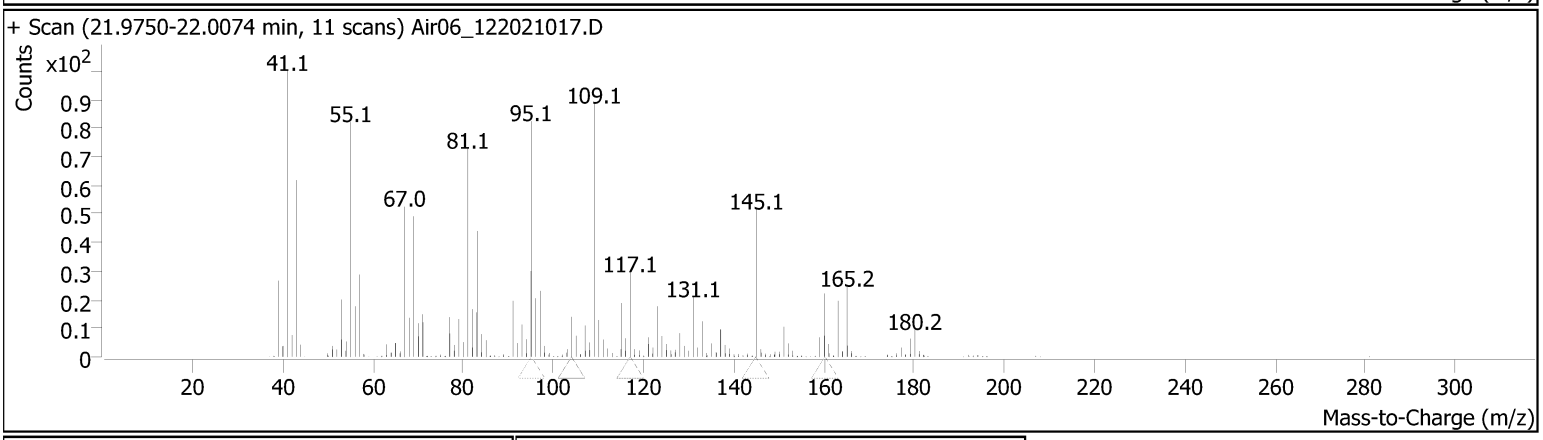


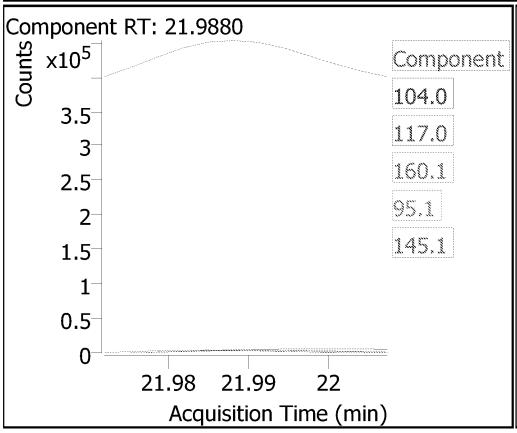


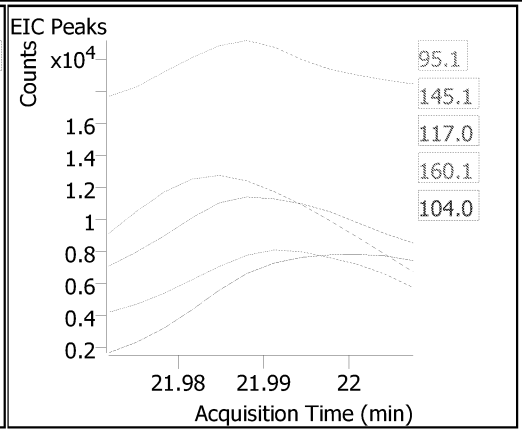
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.9880	9-Methyltricyclo[4.2.1.1(2,5)]deca-3,7-diene-9,10-diol	63290.1	71.8	78323-73-6	C11H14O2	0.1496

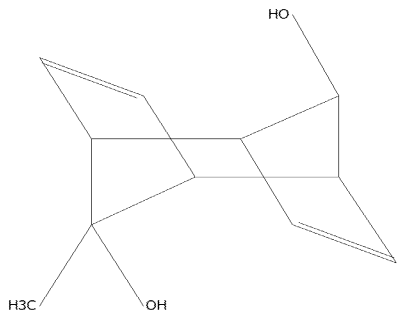




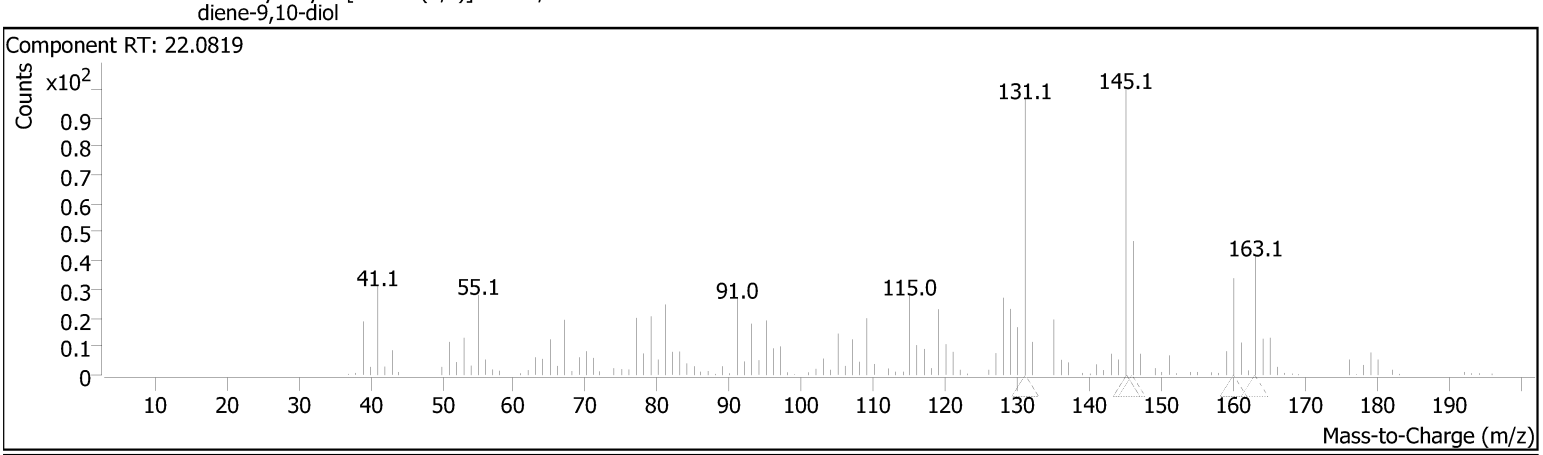


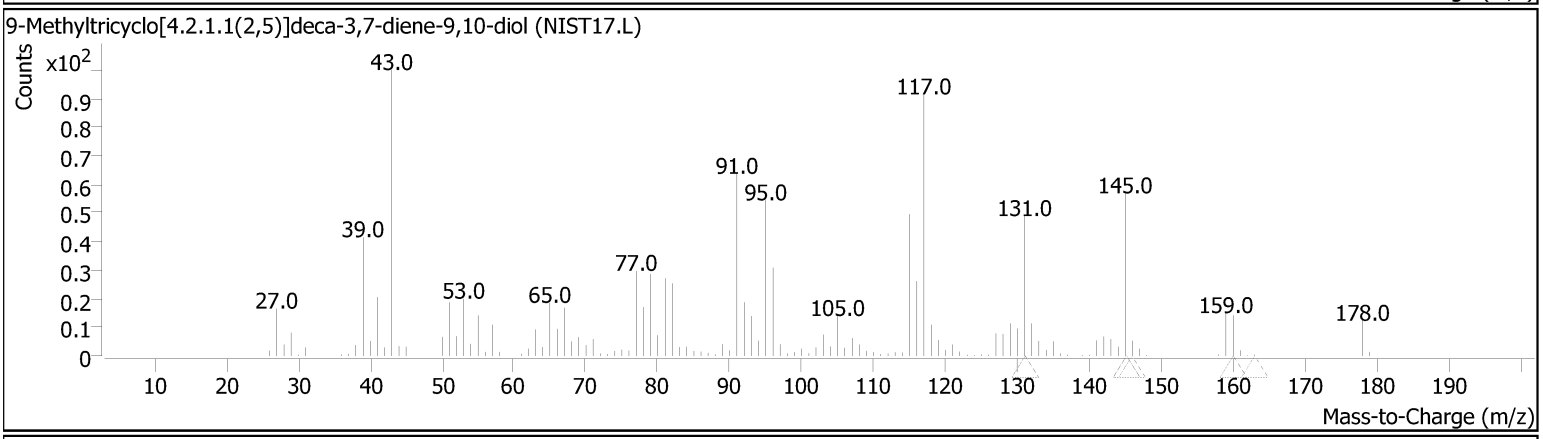


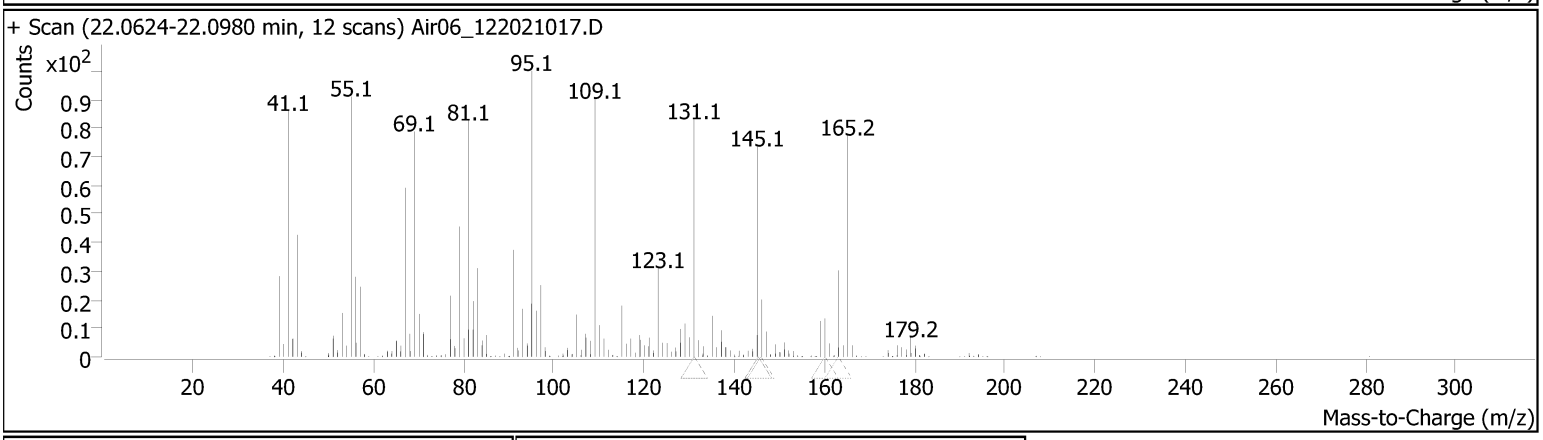


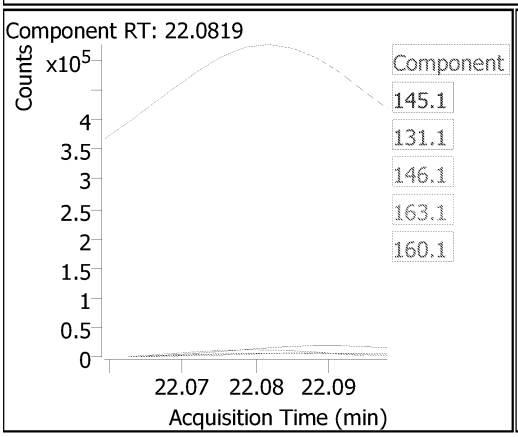


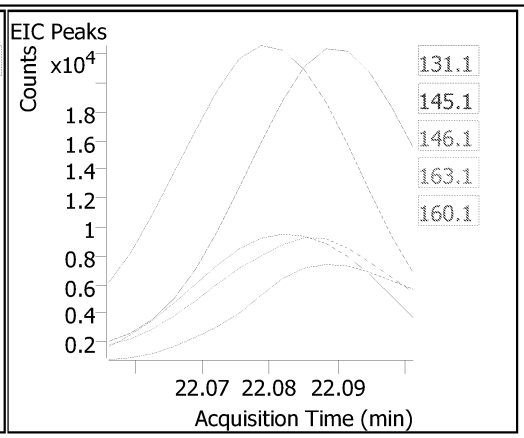
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.0819	9-Methyltricyclo[4.2.1.1(2,5)]deca-3,7-diene-9,10-diol	237585.8	74.6	78323-73-6	C11H14O2	0.5615

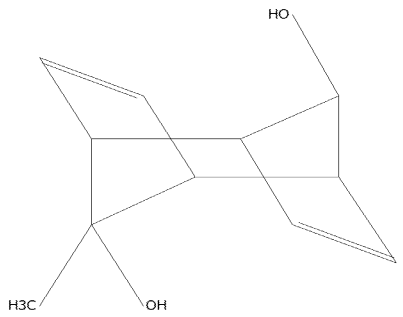




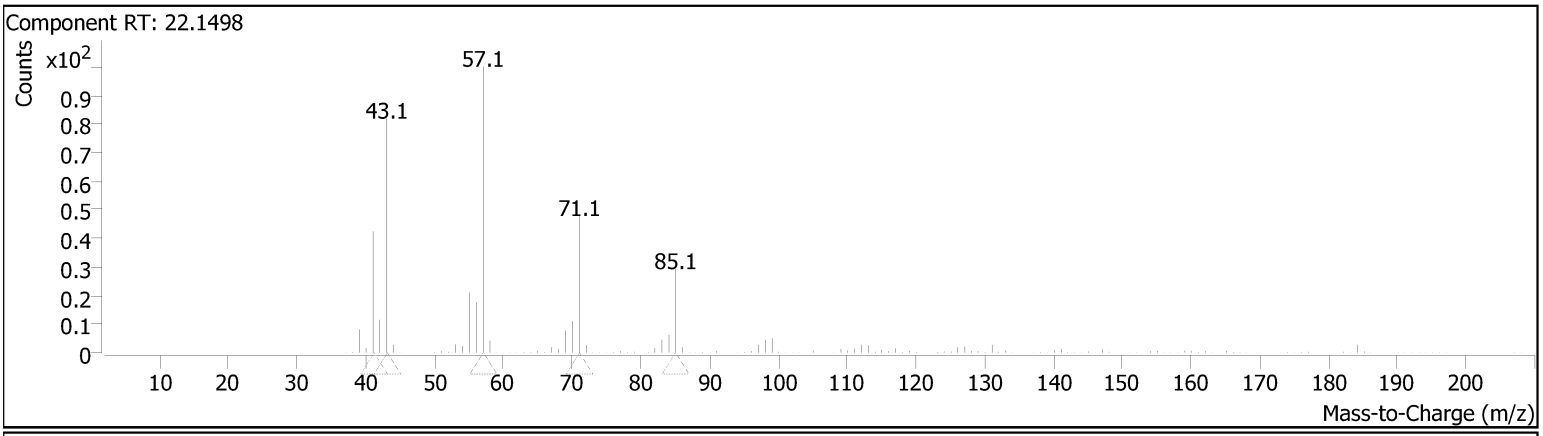


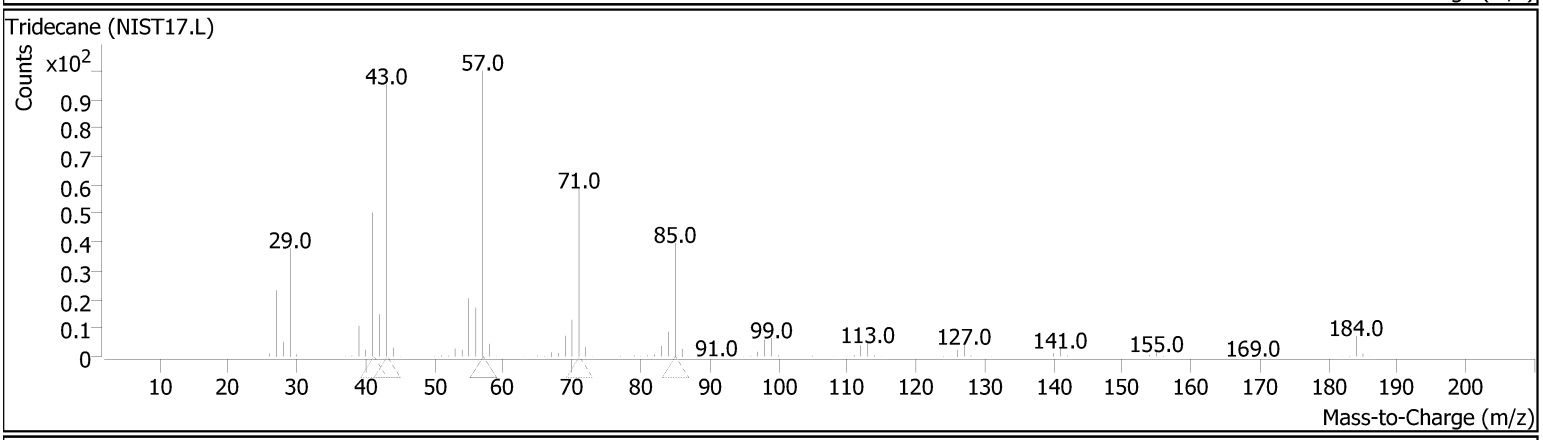


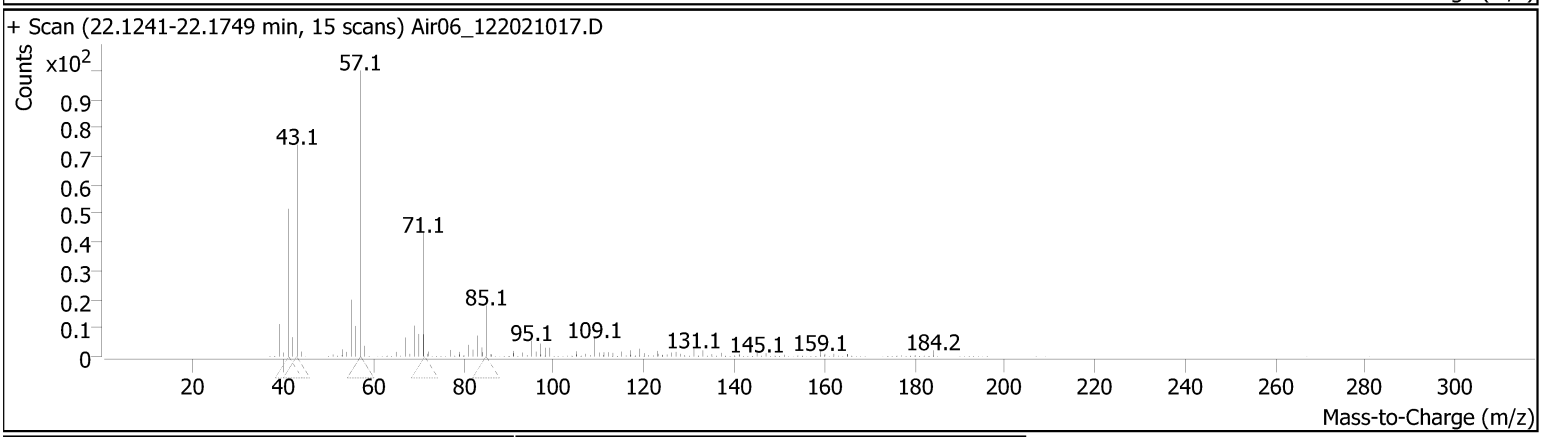


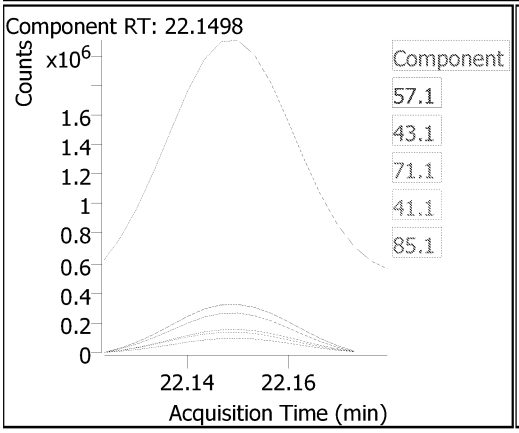


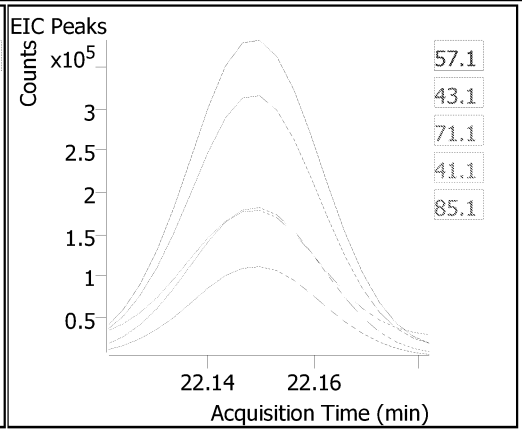
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.1498	Tridecane	2684304.5	92.9	629-50-5	C13H28	6.344

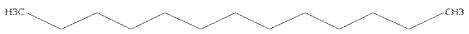




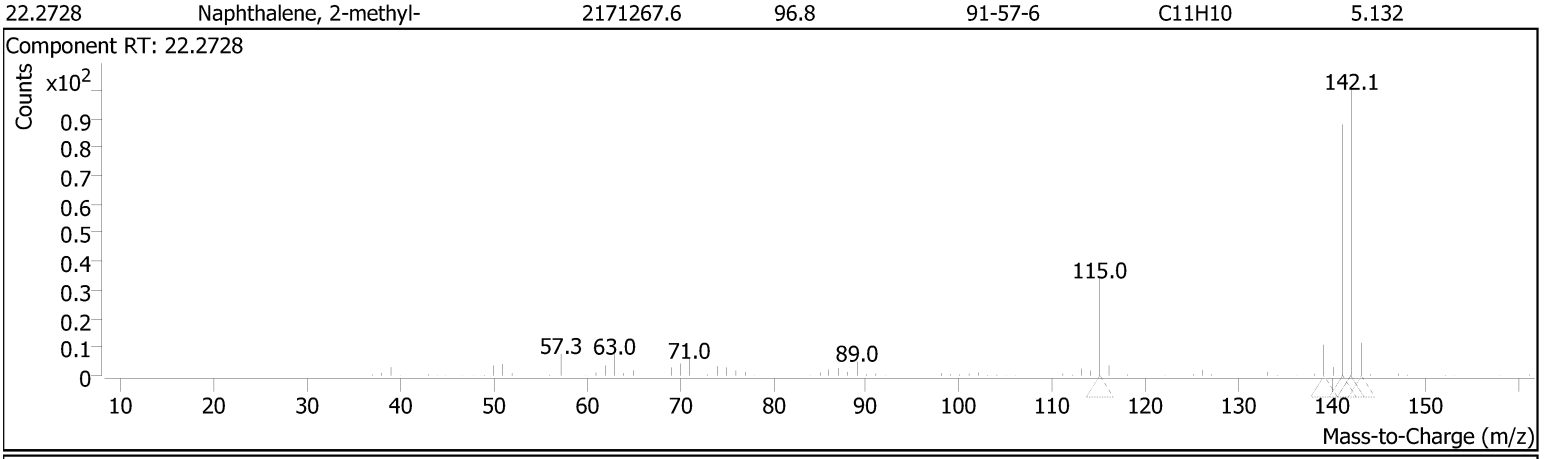


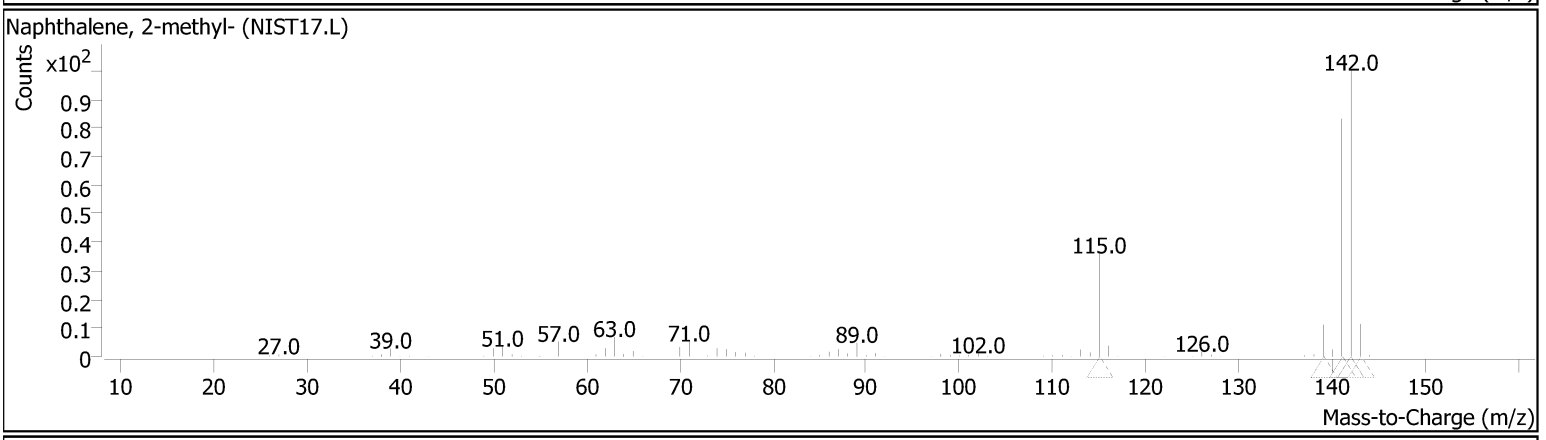


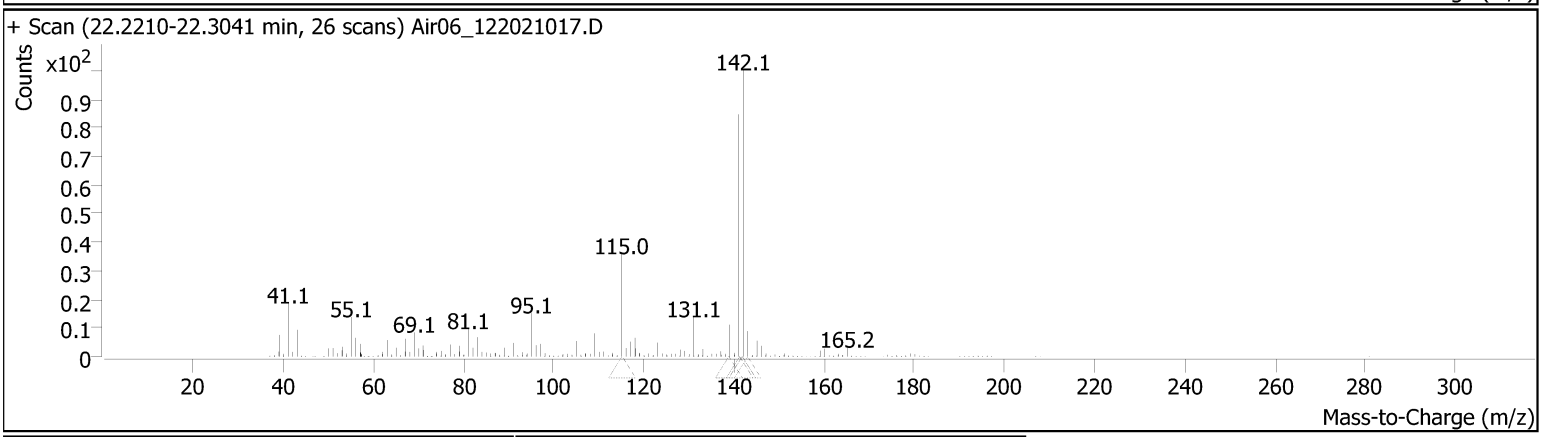


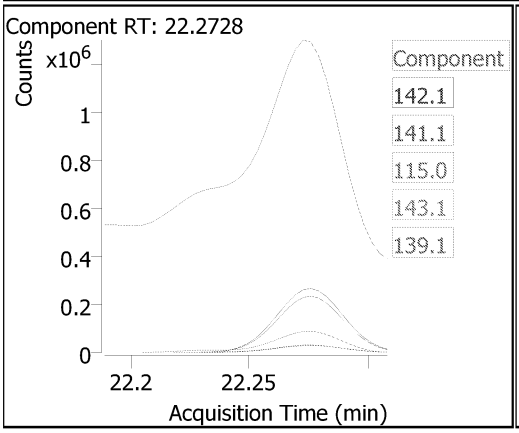


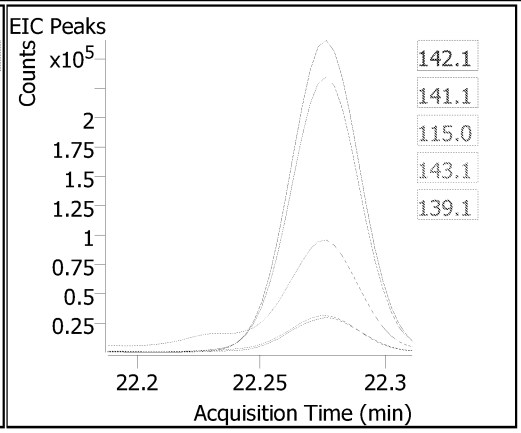
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.2728	Naphthalene, 2-methyl-	2171267.6	96.8	91-57-6	C11H10	5.132

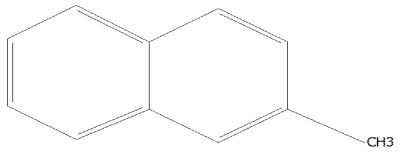




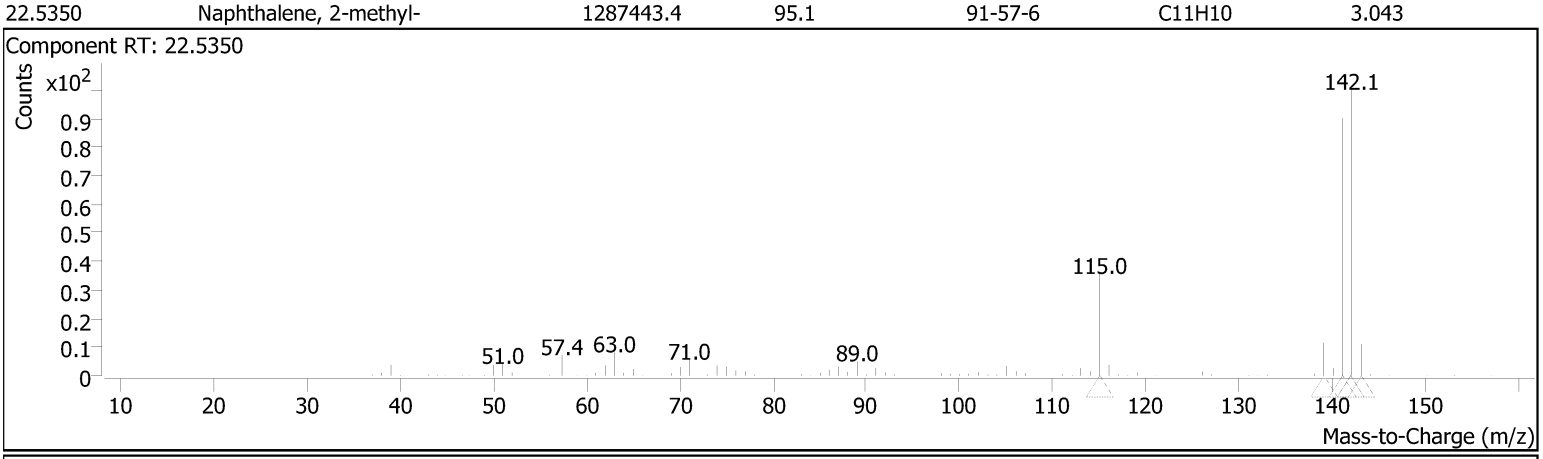


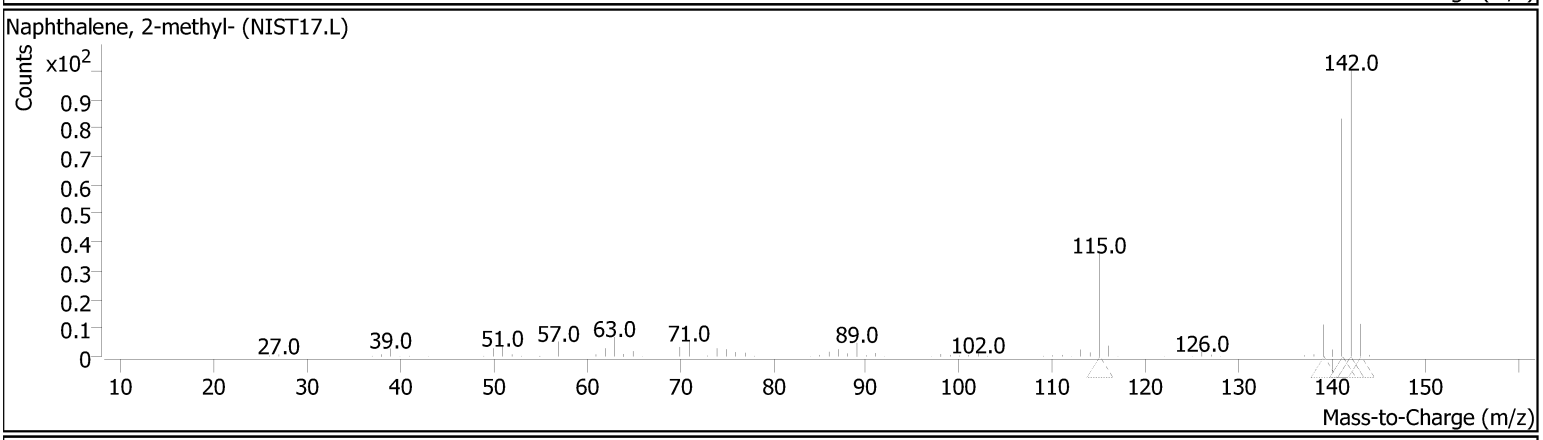


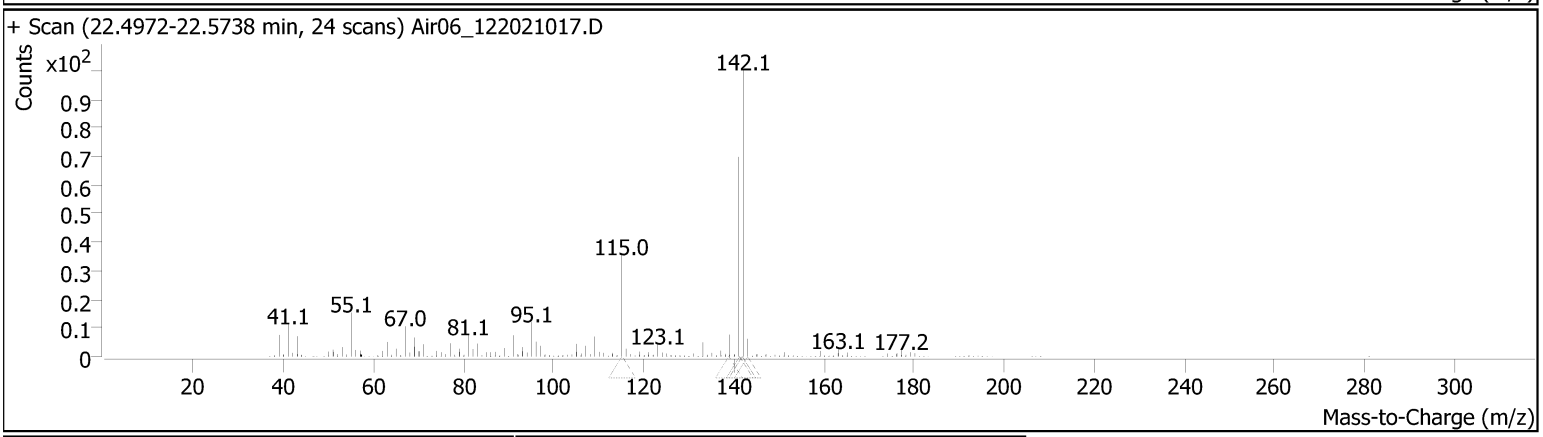


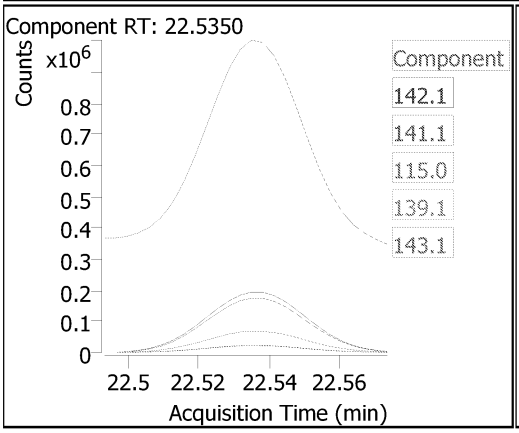


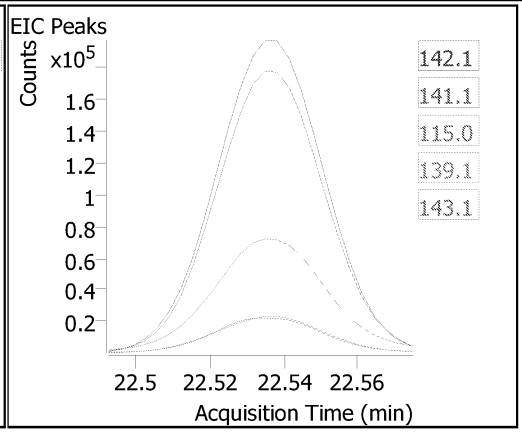
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.5350	Naphthalene, 2-methyl-	1287443.4	95.1	91-57-6	C11H10	3.043

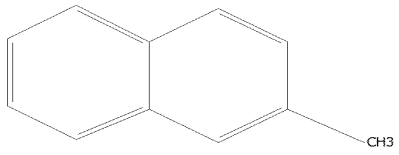




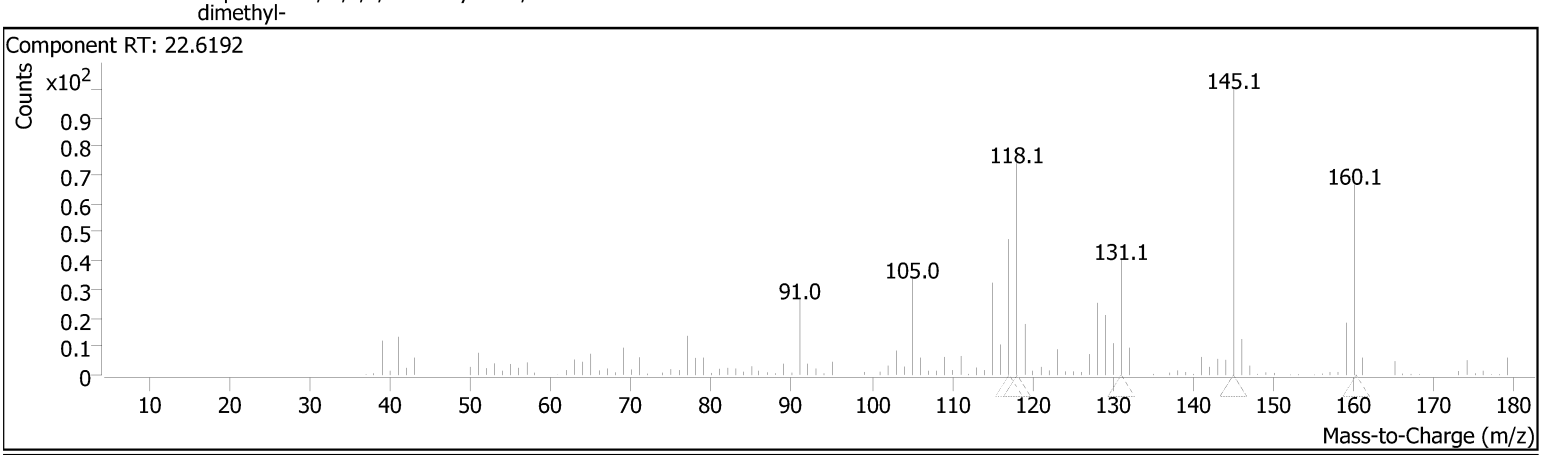


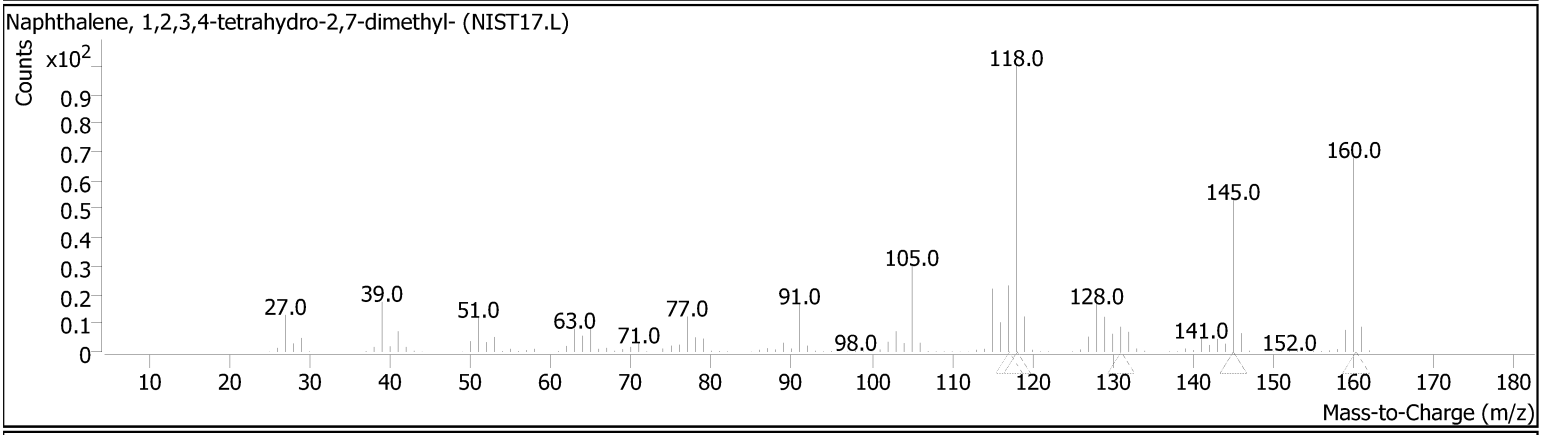


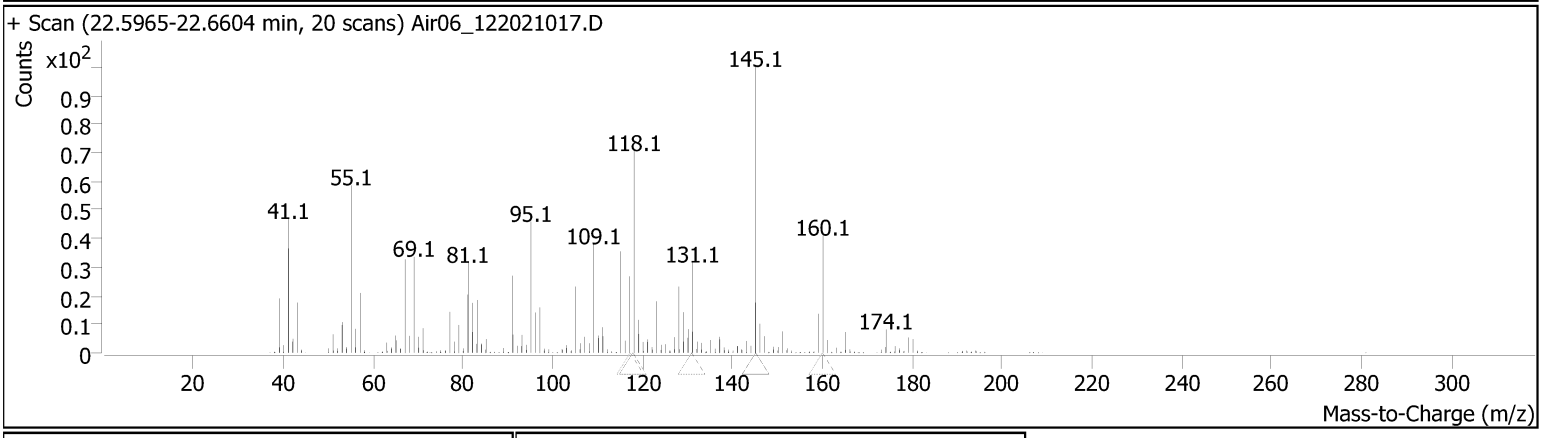


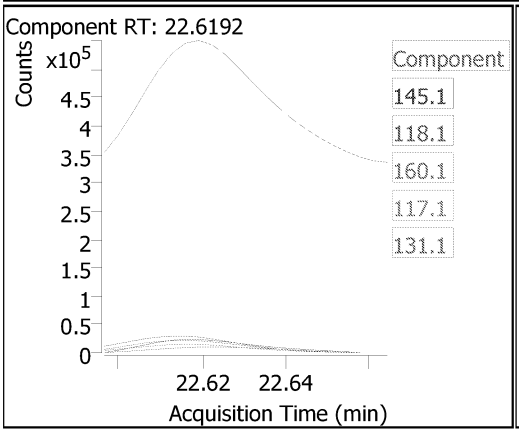


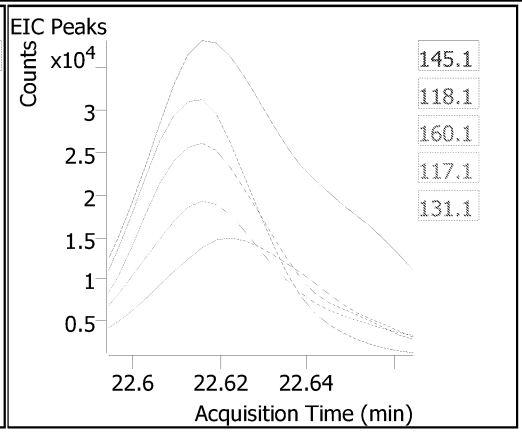
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.6192	Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	439061.2	89.5	13065-07-1	C12H16	1.038

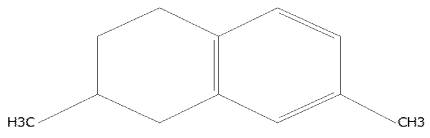




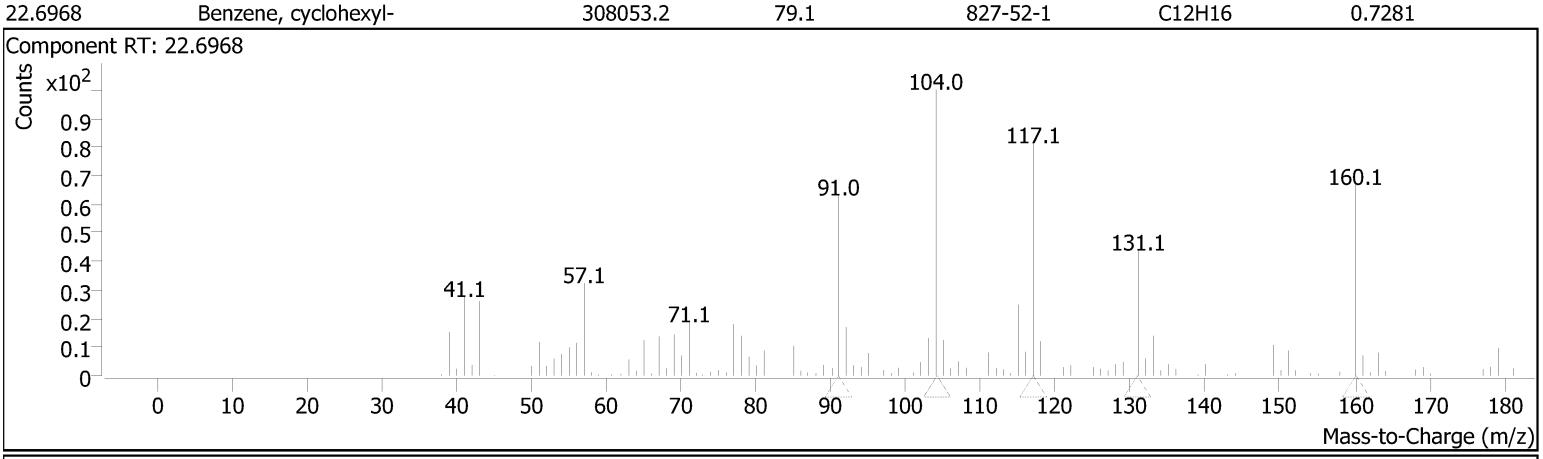


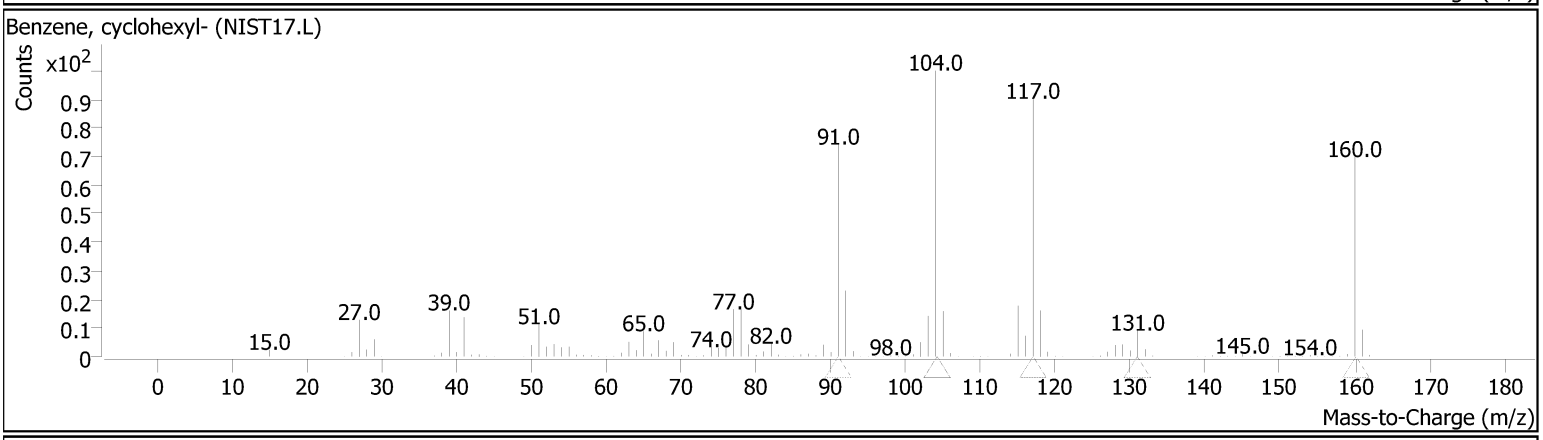


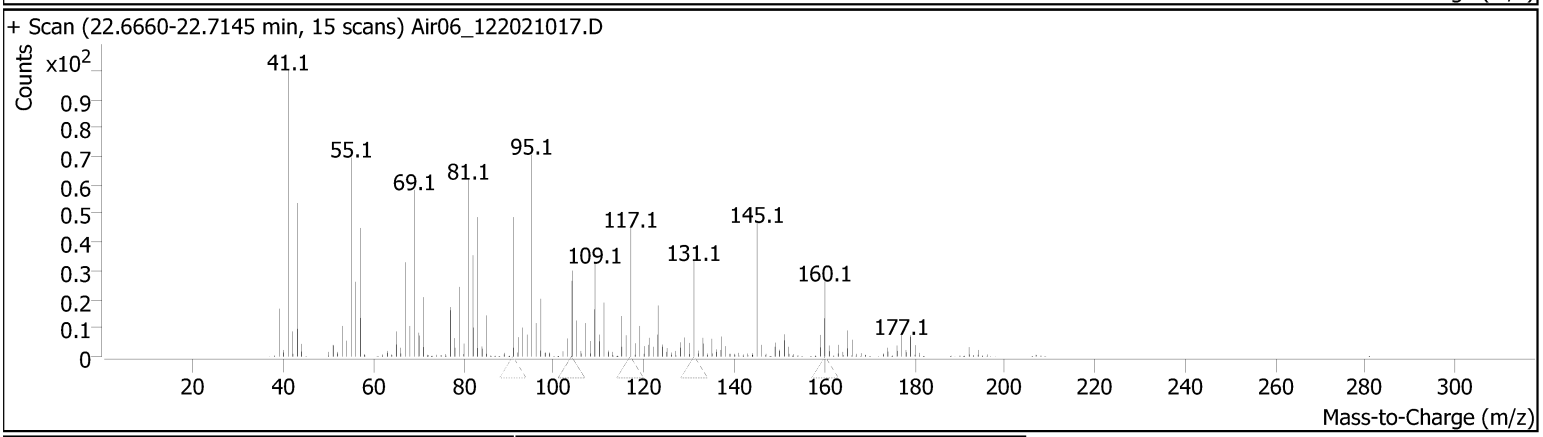


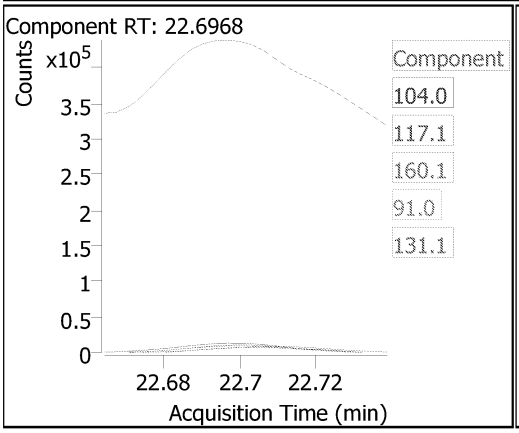


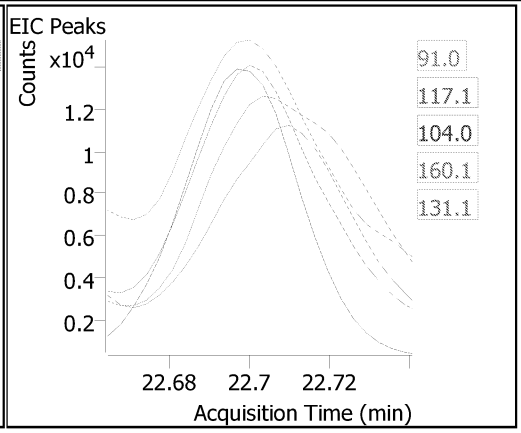
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.6968	Benzene, cyclohexyl-	308053.2	79.1	827-52-1	C12H16	0.7281

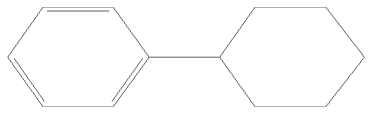




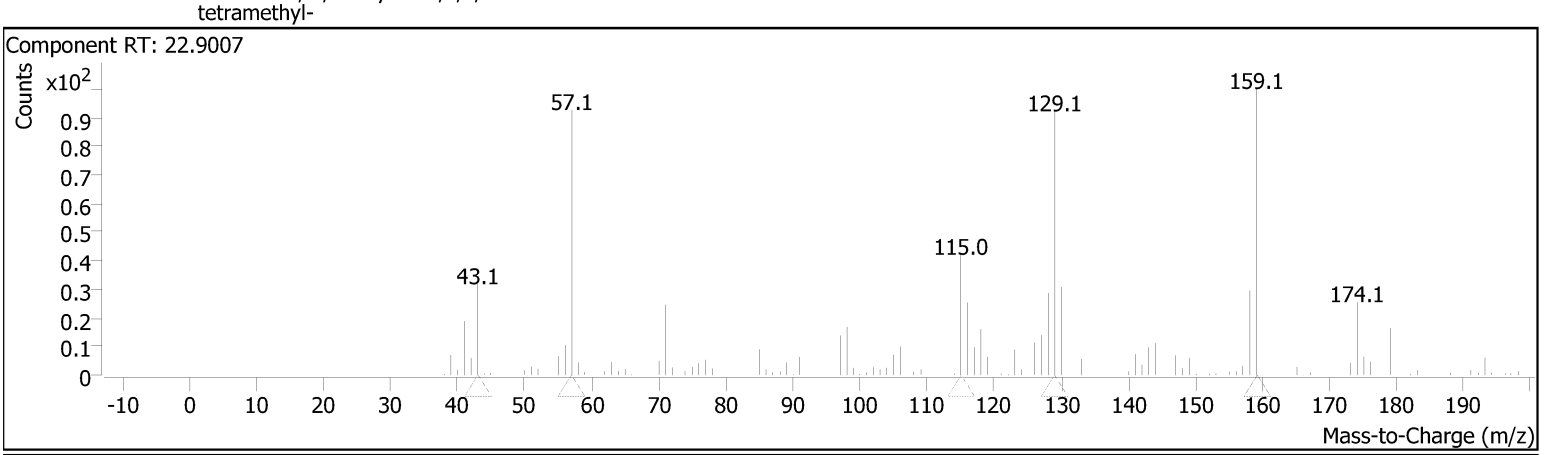


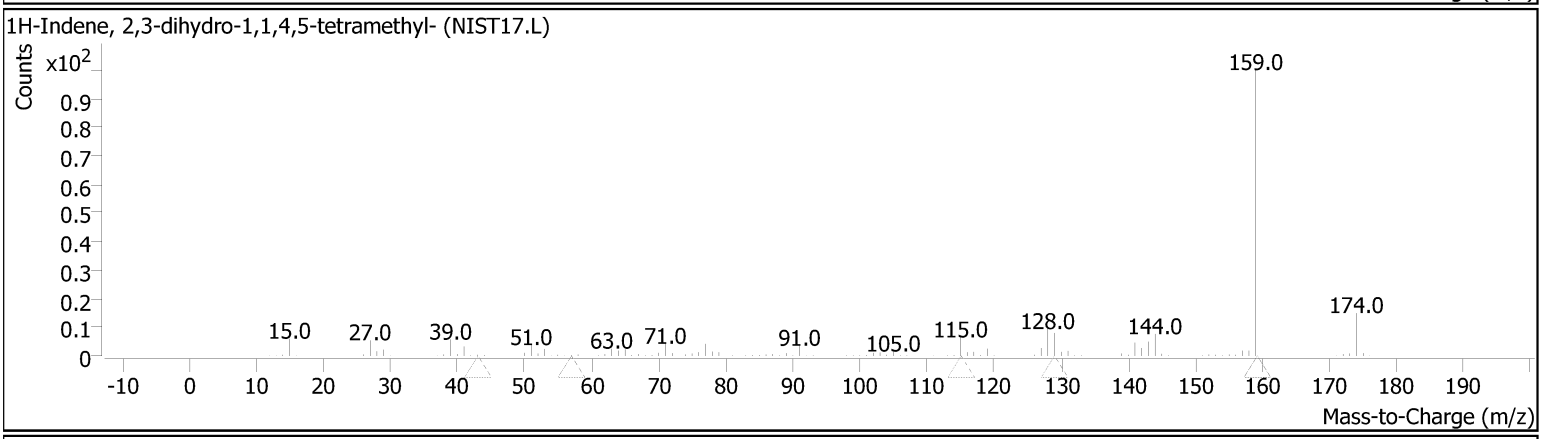


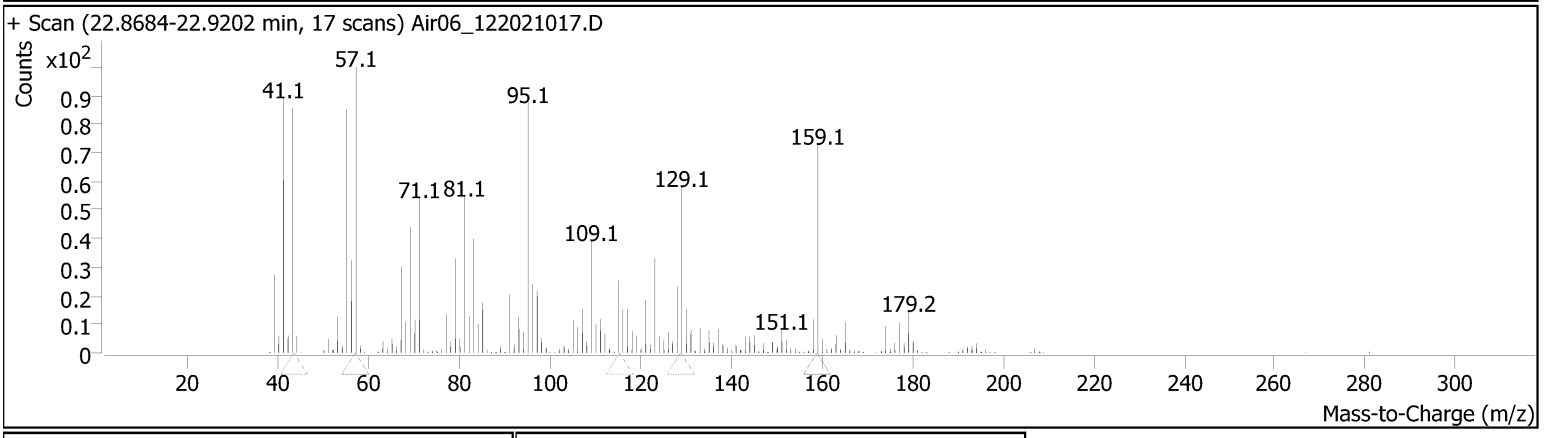


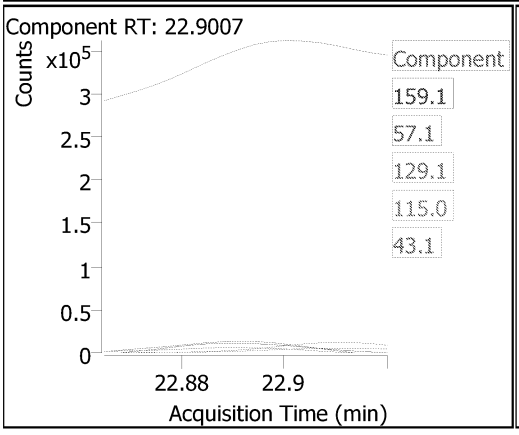


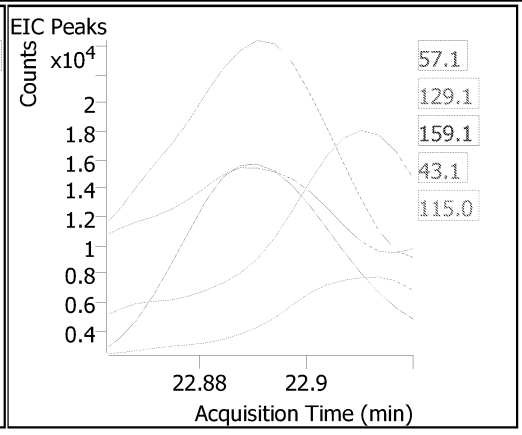
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.9007	1H-Indene, 2,3-dihydro-1,1,4,5-tetramethyl-	182636.6	71.6	16204-57-2	C13H18	0.4317

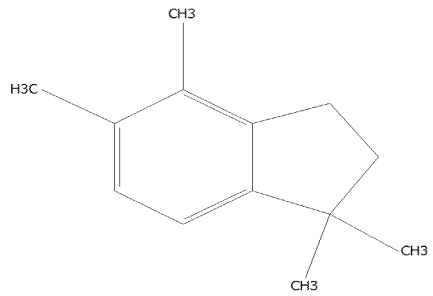




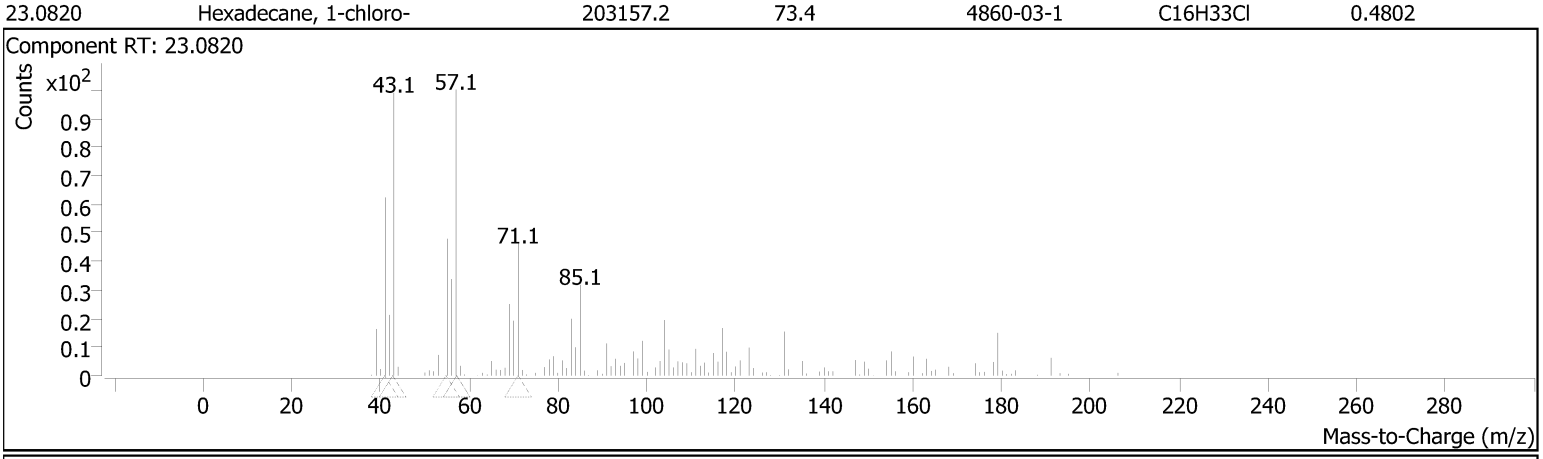


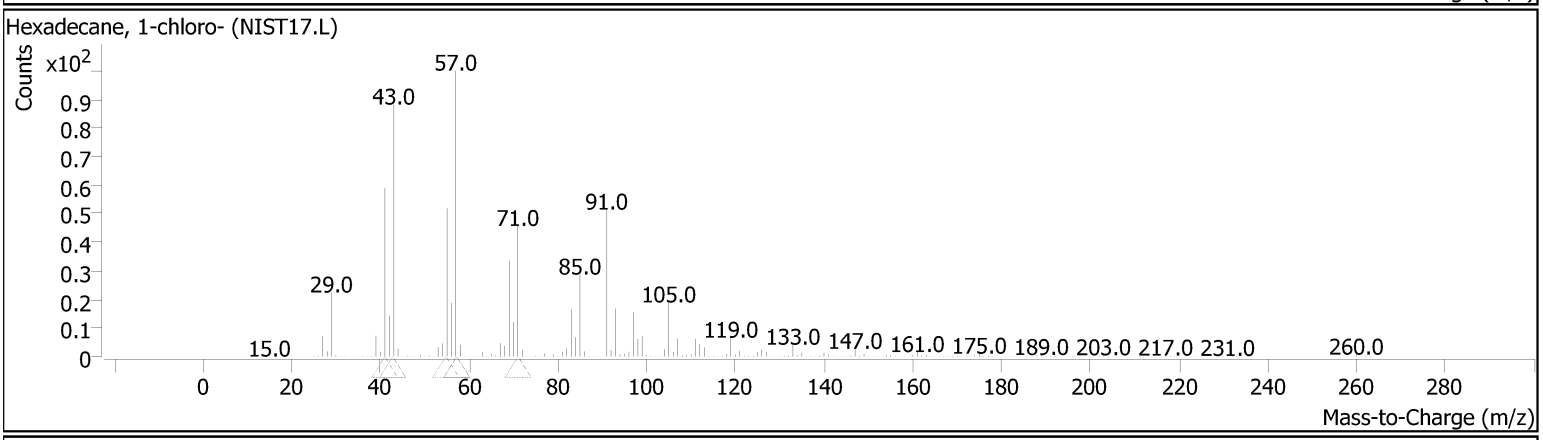


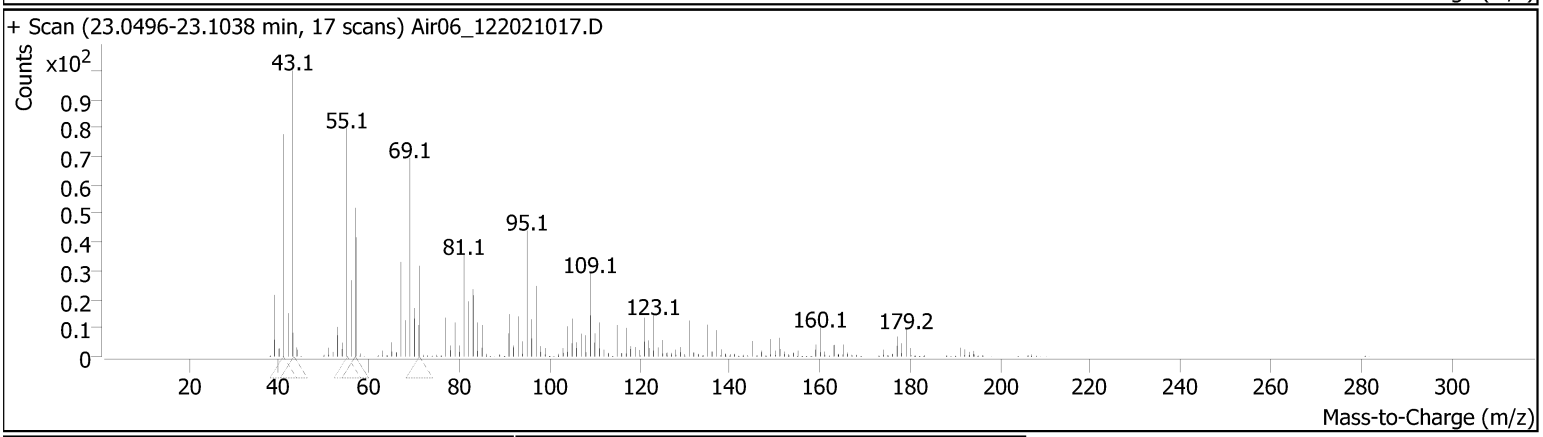


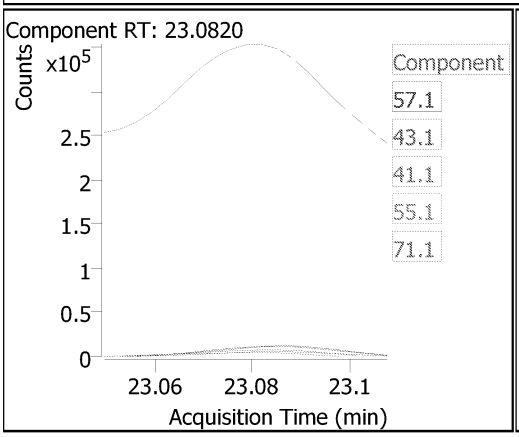


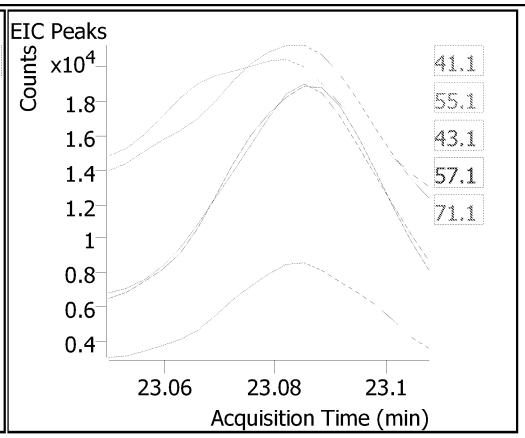
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.0820	Hexadecane, 1-chloro-	203157.2	73.4	4860-03-1	C16H33Cl	0.4802





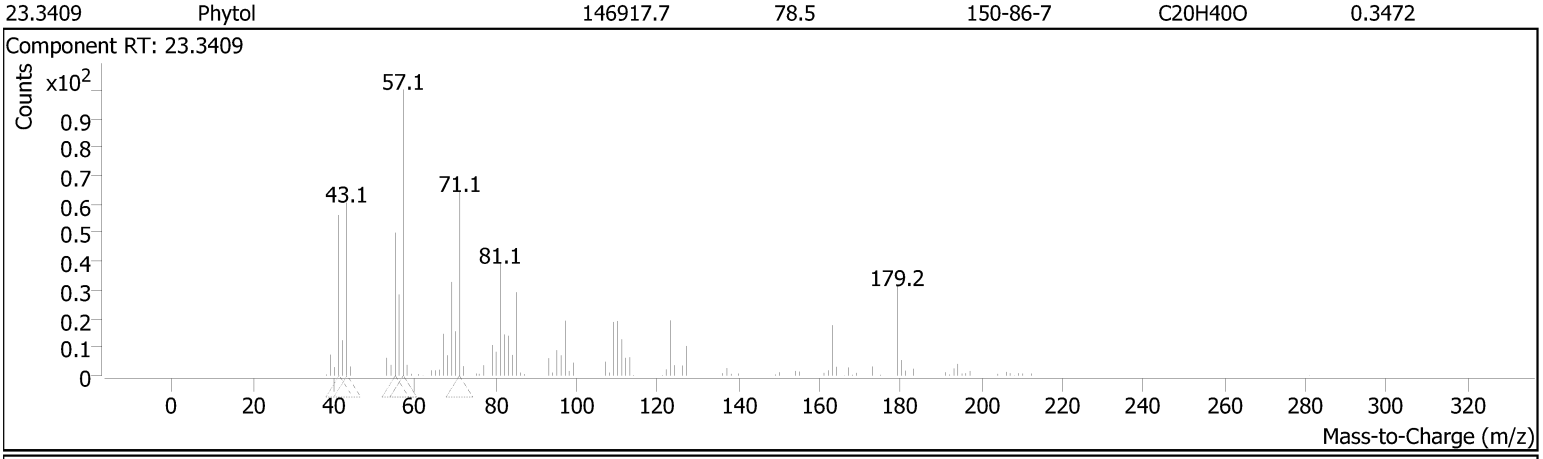


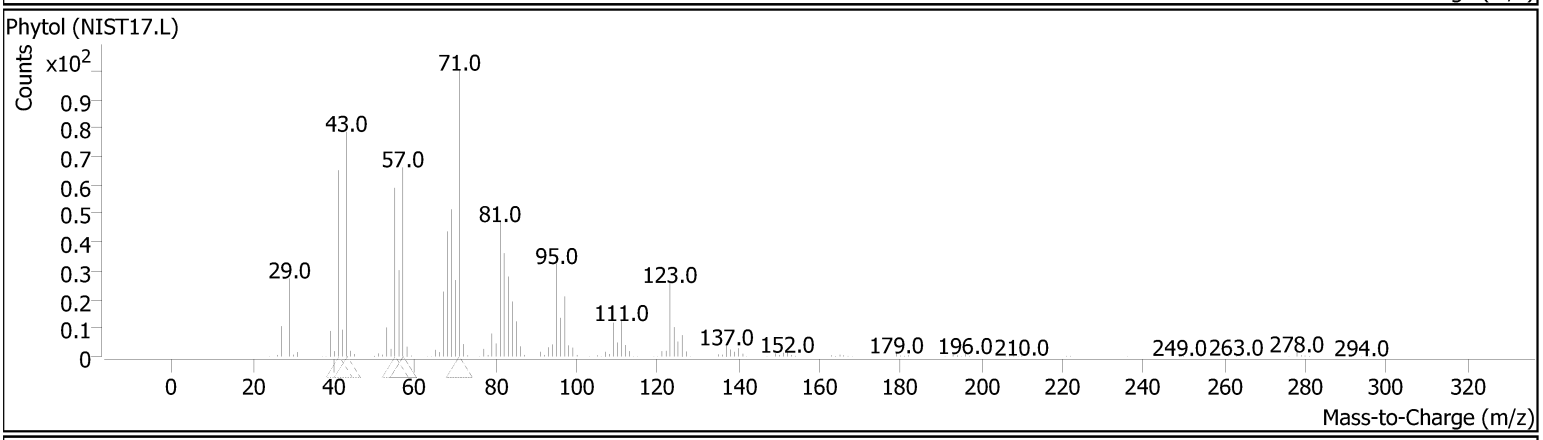


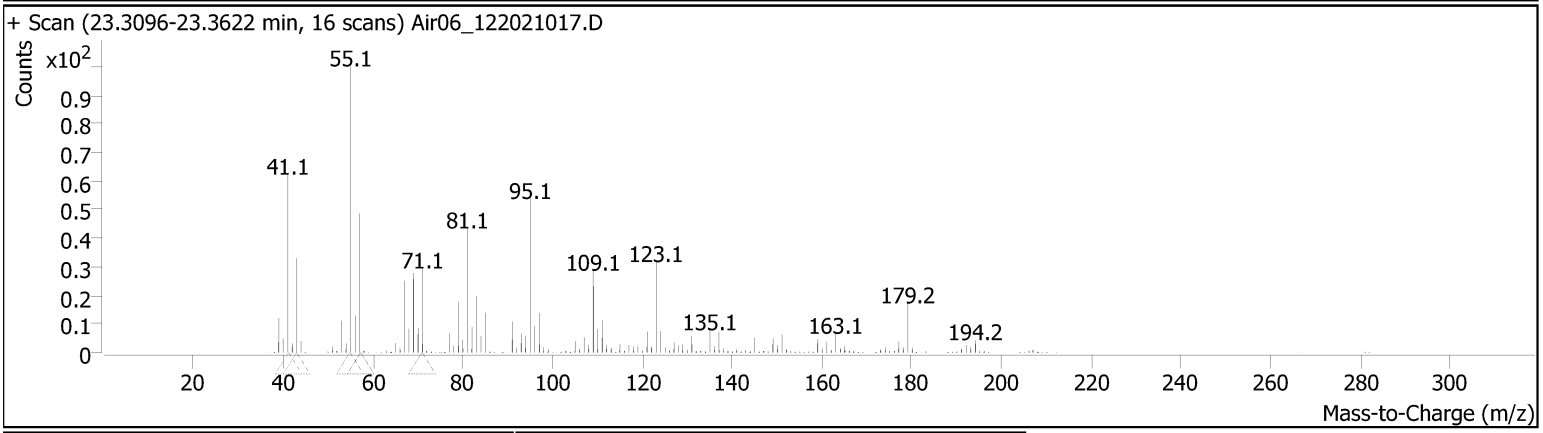


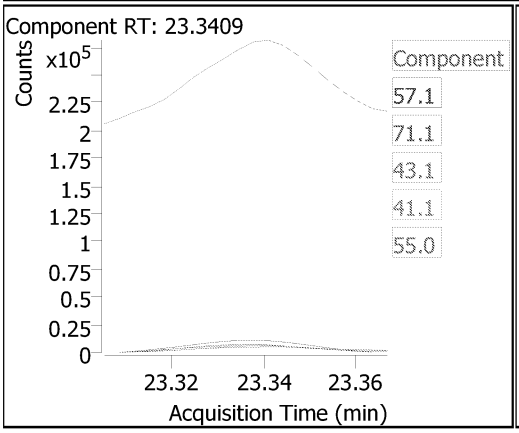


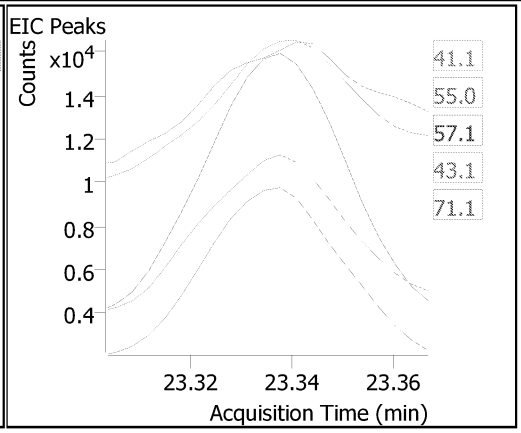
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.3409	Phytol	146917.7	78.5	150-86-7	C20H40O	0.3472

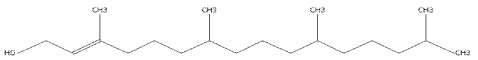








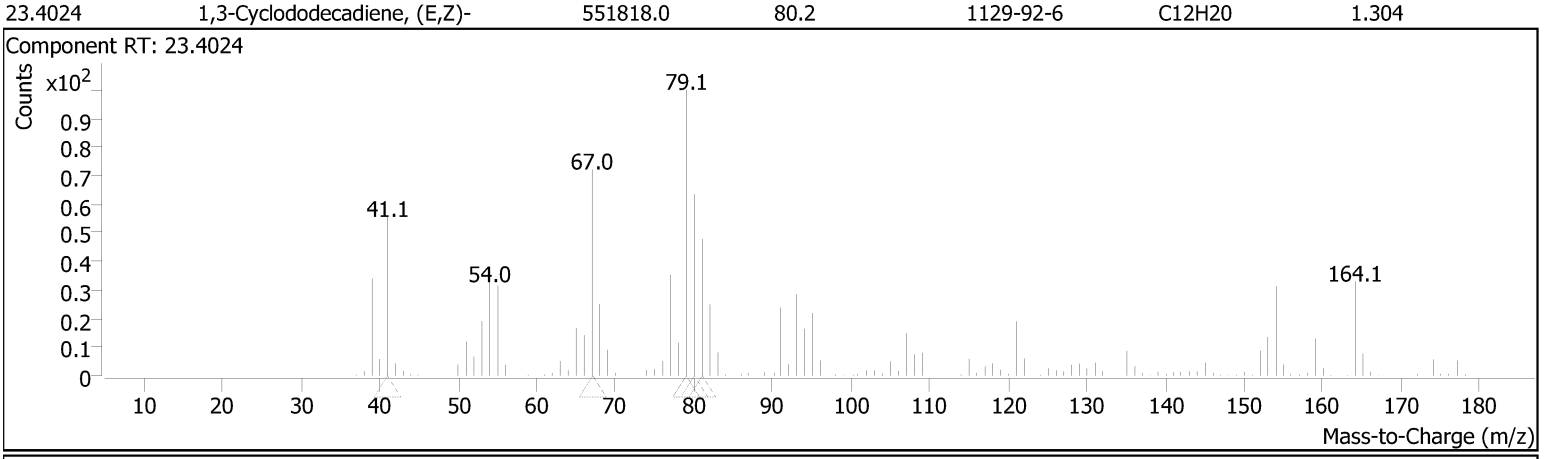


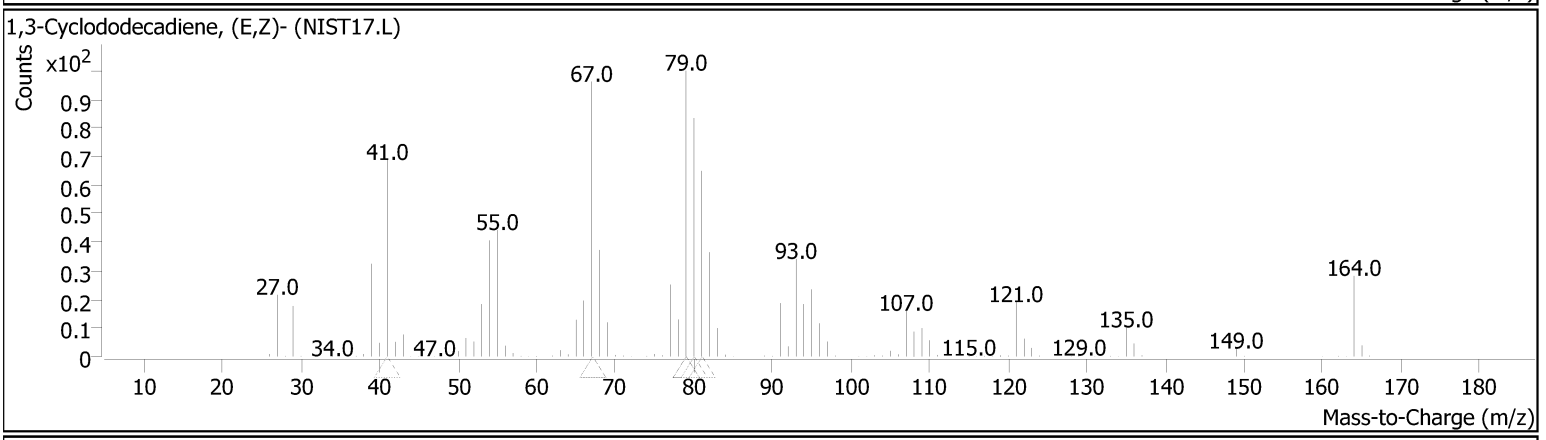


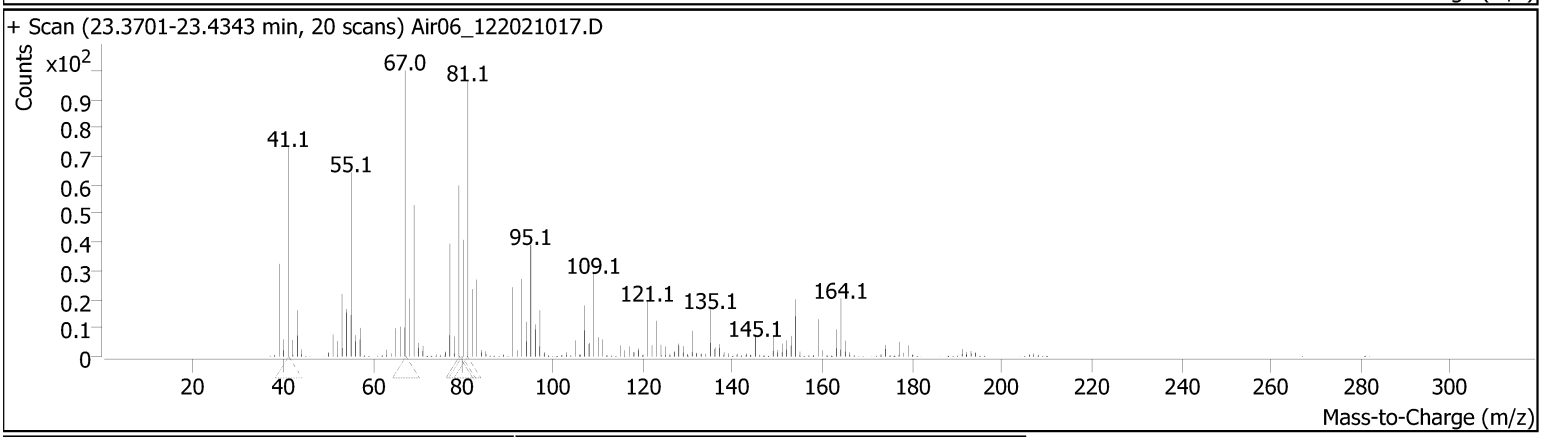
Library Search Results - NonTarget Hits with Details

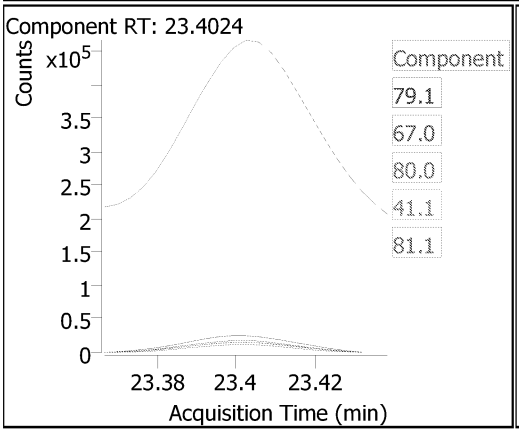
Agilent Technologies

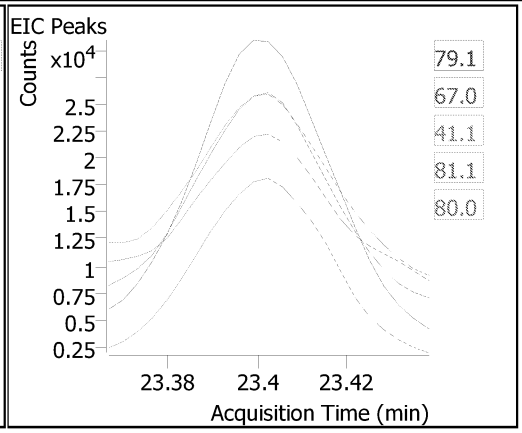
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.4024	1,3-Cyclododecadiene, (E,Z)-	551818.0	80.2	1129-92-6	C12H20	1.304

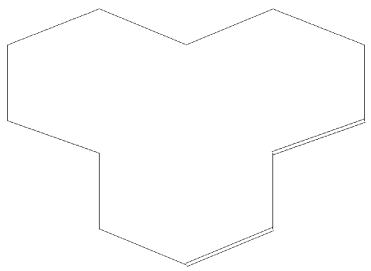




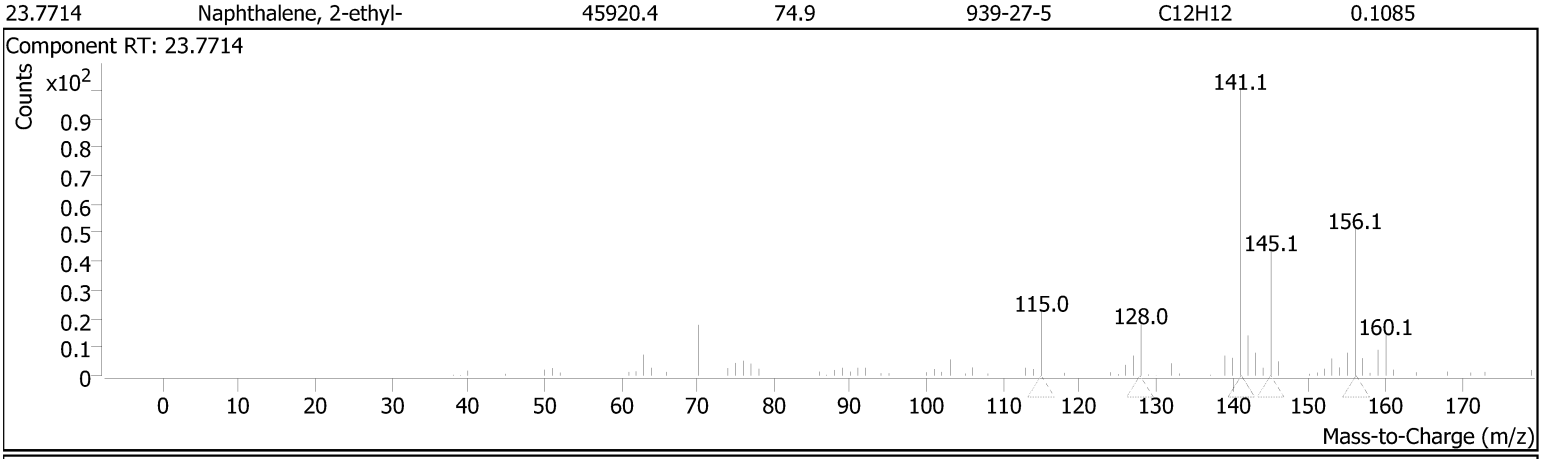


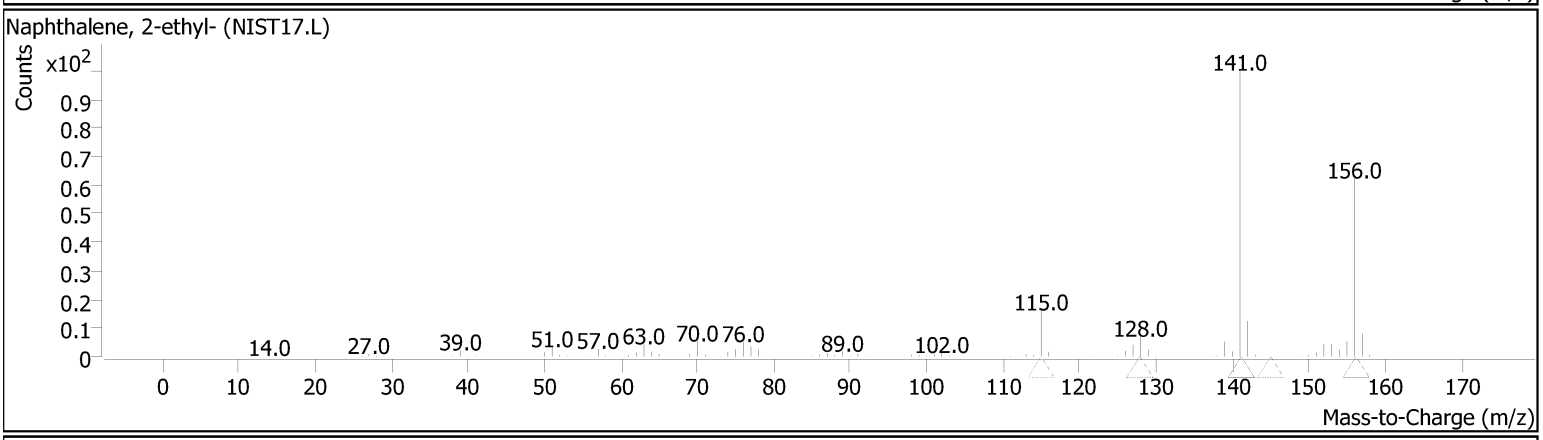


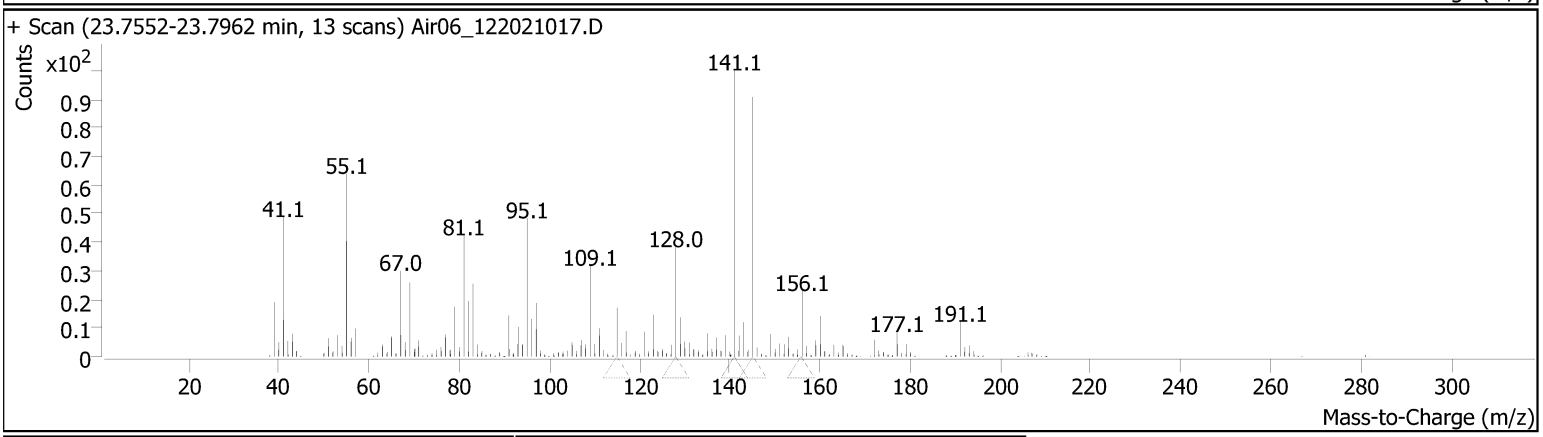


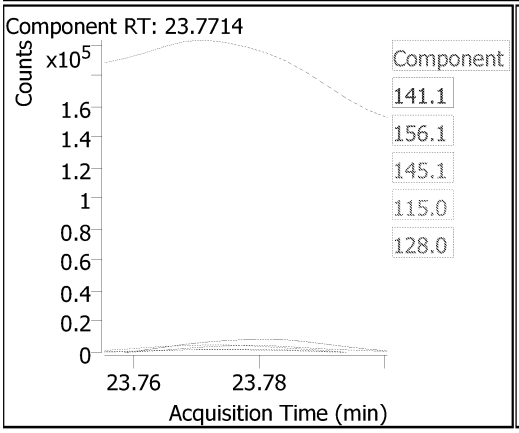


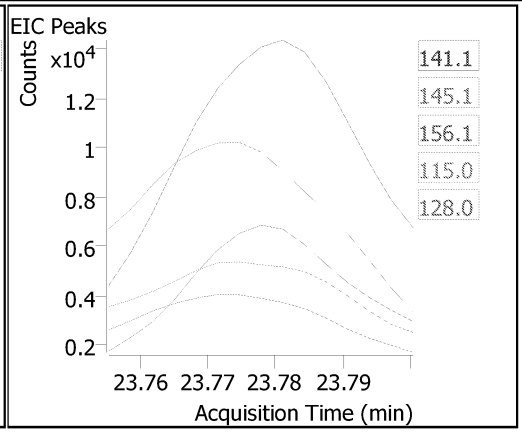
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.7714	Naphthalene, 2-ethyl-	45920.4	74.9	939-27-5	C12H12	0.1085

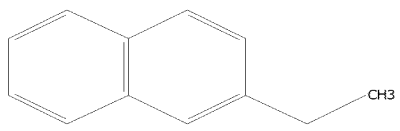








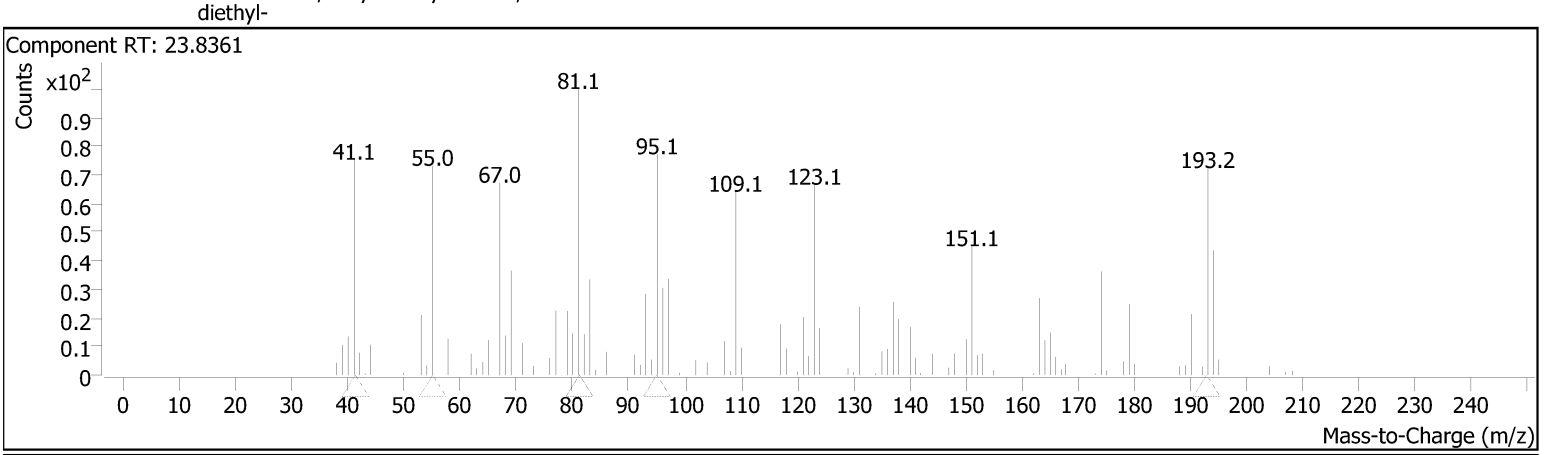


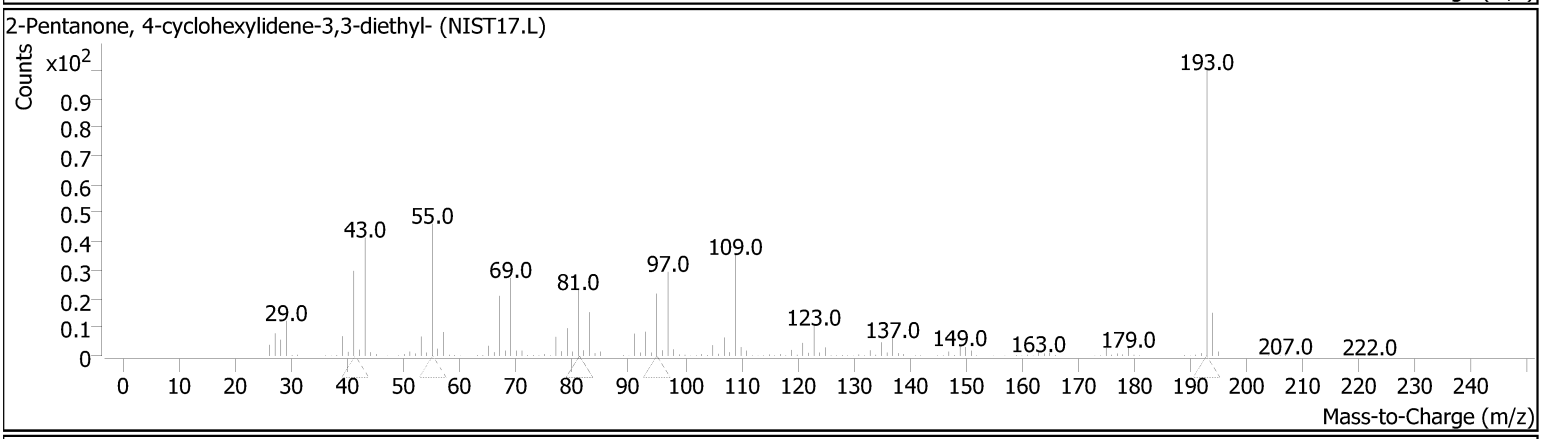


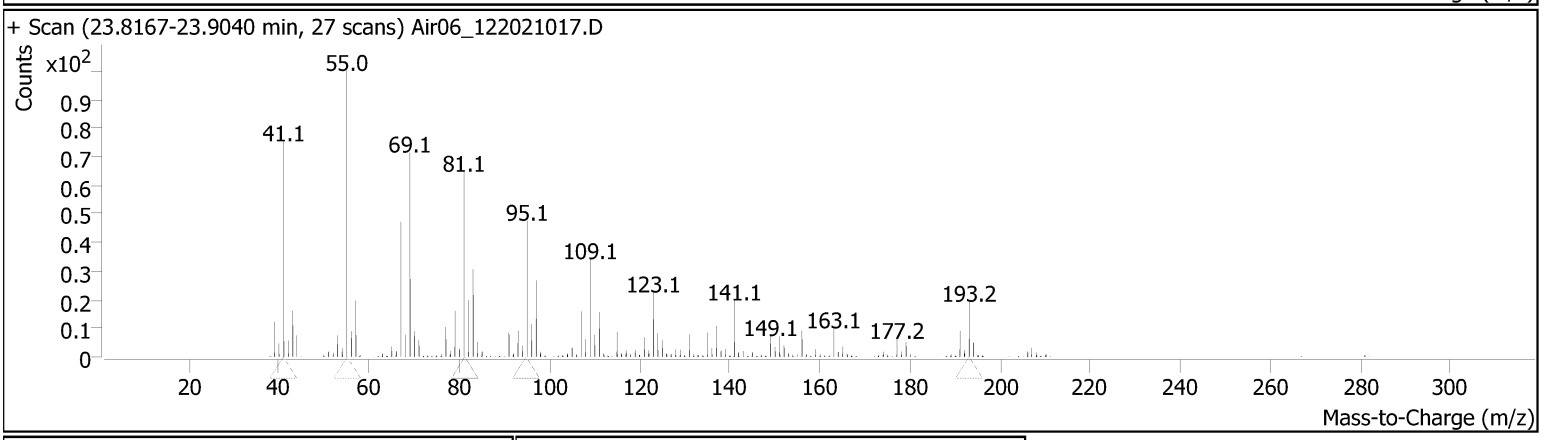
Library Search Results - NonTarget Hits with Details

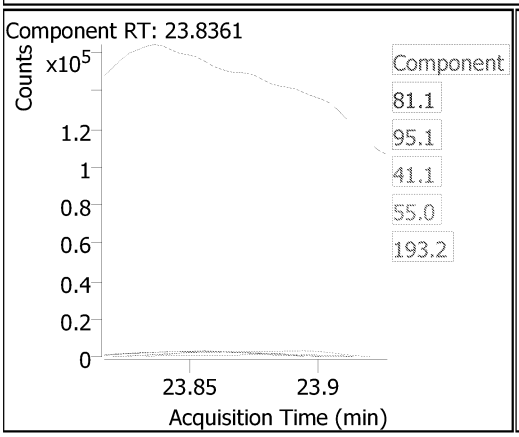
Agilent Technologies

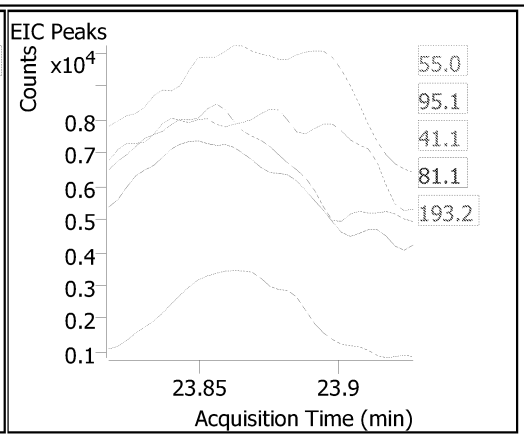
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.8361	2-Pentanone, 4-cyclohexylidene-3,3-diethyl-	115608.7	71.2	313253-65-5	C15H26O	0.2732

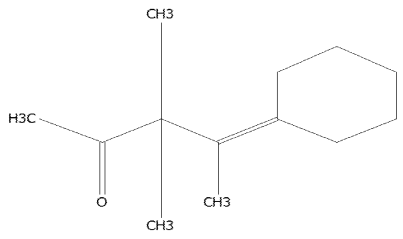




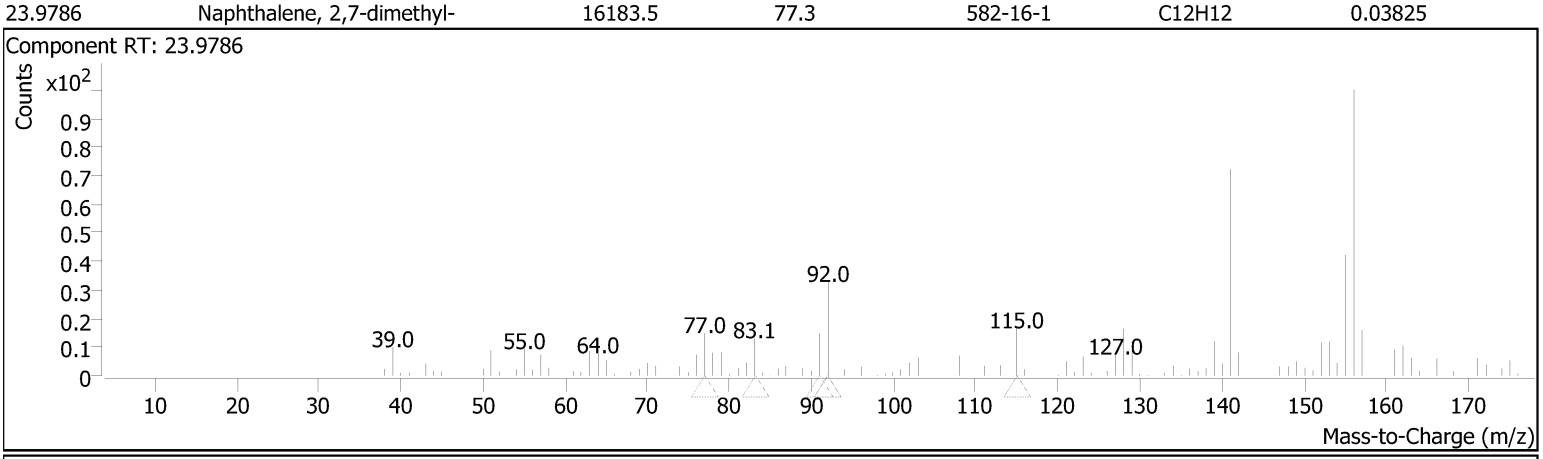


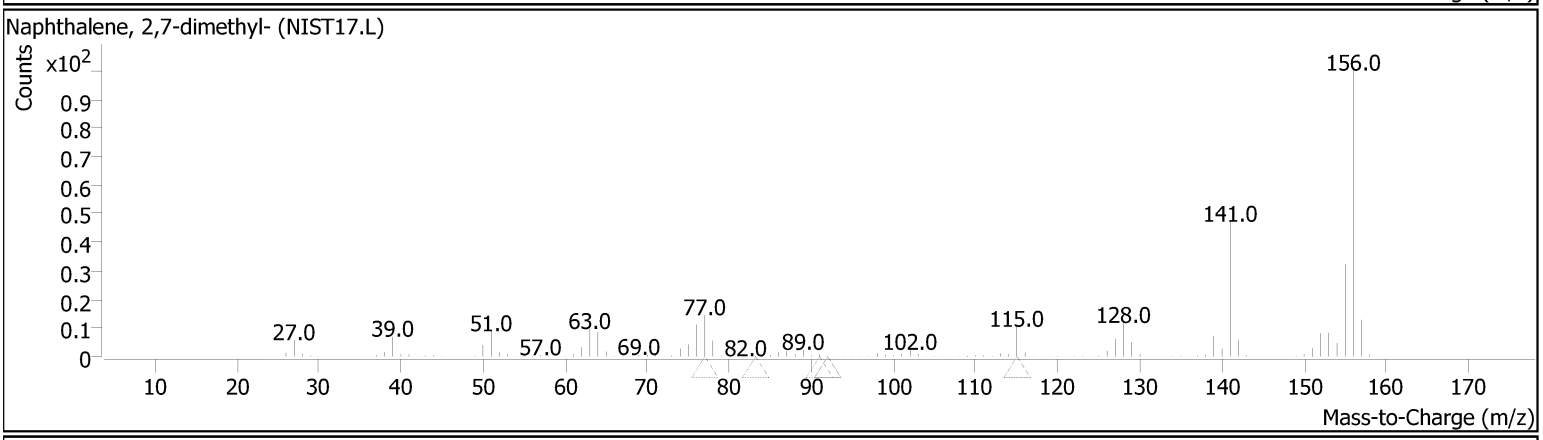


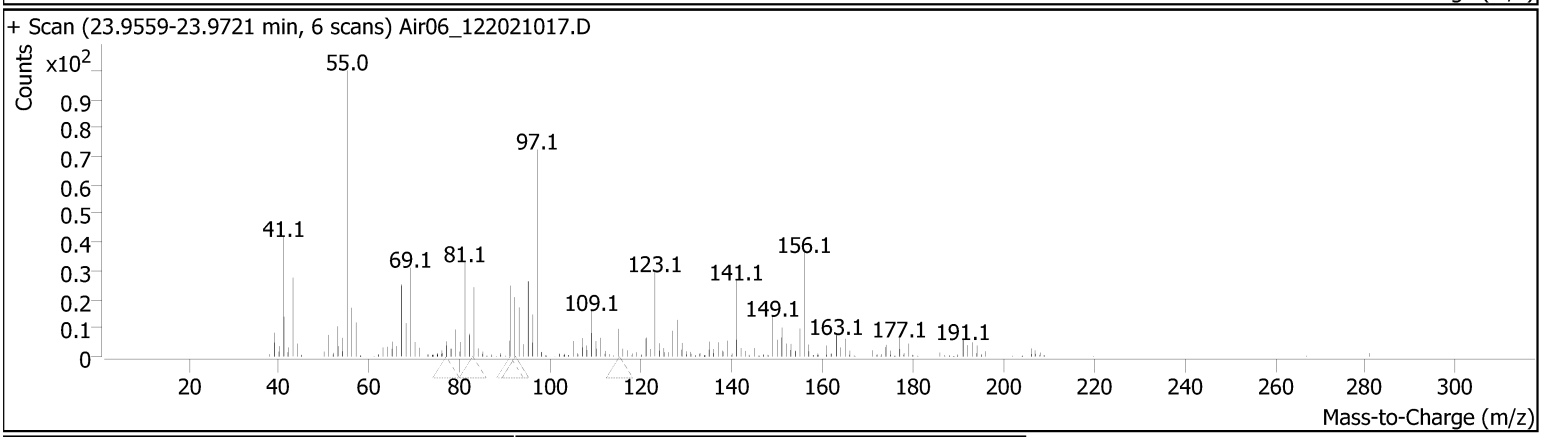


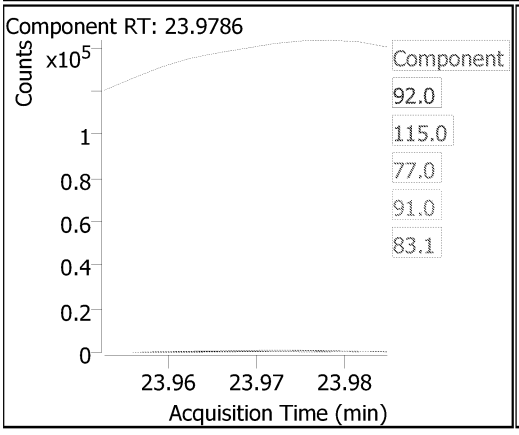


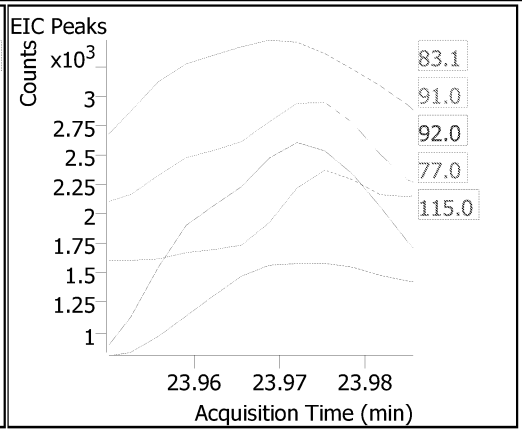
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.9786	Naphthalene, 2,7-dimethyl-	16183.5	77.3	582-16-1	C12H12	0.03825

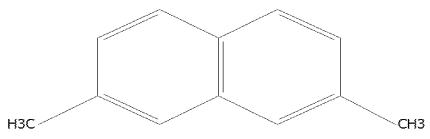












ENTHALPY SAMPLE USER REPORT FOR EPA TO-15

Inst	: AIR-MS-06	Lab ID	: 455620-007 C10177	Client ID	: SVMP-20M
Seqnum	: 371510273018	Matrix	: Air	Acct	: ELEMENT (JG)
File	: air06_122021018	Batch	: 280281	Time	: 21-DEC-2021 01:27
Cal	: 371497775001	Caldate	: 11-DEC-2021		
IDF	: 2.0	Raw Units	: nL/L	Units	: nL/L
PDF	: 1.0				

Analyte	Raw	Result	RTS	RL	Blank	Flags
Freon 12	0.1806	ND		0.40		u
Freon 114	0.006709	ND		0.40		u
Chloromethane	0.01672	ND		0.40		u
Vinyl Chloride	0	ND		0.40		u
Bromomethane	0	ND		0.40		u
Chloroethane	0.001800	ND		0.40		u
Trichlorofluoromethane	0.07220	ND		0.40		u
1,1-Dichloroethene	0	ND		0.40		u
Freon 113	0.02931	ND		0.40		calc u
Acetone	0.8571	ND		2.0	0.13	u
Carbon Disulfide	0.03262	ND		0.40		calc u
Isopropanol (IPA)	0.9014	ND		2.0	0.067	u
Methylene Chloride	0.5067	1.0		0.40	0.34	u
trans-1,2-Dichloroethene	0.003531	ND		0.40		u
MTBE	0.02306	ND		0.40		u
n-Hexane	0.1534	ND		0.40		u
1,1-Dichloroethane	0.0005561	ND		0.40		u
Vinyl Acetate	0.09866	ND		2.0		u
cis-1,2-Dichloroethene	0.4838	0.97	0.200	0.40		u x
2-Butanone	0.09207	ND		2.0		u
Chloroform	0.03380	ND		0.40		u
1,1,1-Trichloroethane	0.0002281	ND		0.40		u
Carbon Tetrachloride	0.02215	ND		0.40		u
Benzene	0.04928	ND		0.40		u
1,2-Dichloroethane	0	ND		0.40		u
Trichloroethene	0.01255	ND		0.40		u
1,2-Dichloropropane	0.001060	ND		0.40		u
Bromodichloromethane	0.02020	ND		0.40		calc u
cis-1,3-Dichloropropene	0.002404	ND		0.40		u
4-Methyl-2-Pentanone	0.01034	ND		0.40		u
Toluene	0.1836	ND		0.40		u
trans-1,3-Dichloropropene	0.001505	ND		0.40		u
1,1,2-Trichloroethane	0.003063	ND		0.40		u
Tetrachloroethene	0.02925	ND		0.40		calc u
2-Hexanone	0.009611	ND		1.0		u
Dibromochloromethane	0.0002589	ND		0.40		u
1,2-Dibromoethane	0.004273	ND		0.40		u
Chlorobenzene	0.005473	ND		0.40		u
Ethylbenzene	0.08527	ND		0.40		u
m,p-Xylenes	0.3450	ND		0.80		u
o-Xylene	0.1933	ND		0.40		u
Styrene	0.1498	ND		0.40		u
Bromoform	0.001227	ND		0.40		u
1,1,2,2-Tetrachloroethane	0.01269	ND		0.40		u
1,1,1,2-Tetrachloroethane	0.0003548	ND		0.40		u
4-Ethyltoluene	0.06530	ND		0.40		u
1,3,5-Trimethylbenzene	0.1184	ND		0.40		u
1,2,4-Trimethylbenzene	0.4768	0.95		0.40		u

Analyte	Raw	Result	RTS	RL	Blank	Flags
1,3-Dichlorobenzene	0.1680	ND		0.40		u
1,4-Dichlorobenzene	0.1702	ND		0.40	0.027	u
Benzyl chloride	0.01765	ND		0.40	0.020	u
1,2-Dichlorobenzene	0.01763	ND		0.40	0.034	u
1,2,4-Trichlorobenzene	0.01073	ND		0.40	0.069	u v+
Hexachlorobutadiene	0.0008581	ND		0.40		u

Tentatively Identified Compound	CAS #	Raw	Units	Result	Units
Butane, 2-methyl-	78-78-4	1.4	nL/L	2.8	nL/L
Cyclotetrasiloxane, octamethyl-	556-67-2	2.1	nL/L	4.3	nL/L
Dodecane	112-40-3	2.1	nL/L	4.2	nL/L
Naphthalene, 2-methyl-	91-57-6	1.1	nL/L	2.2	nL/L
Tridecane	629-50-5	2.1	nL/L	4.3	nL/L
Undecane	1120-21-4	1.0	nL/L	2.0	nL/L
n-Nonadecanol-1	1454-84-8	1.1	nL/L	2.2	nL/L

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Bromofluorobenzene	10.25	20.00	20.49	102	60-140	u

ISTD (ICAL air06_121121009)	ICAL Area	SAMPLE Area	%Drift	ICAL RT	SAMPLE RT	Drift
Bromochloromethane	329831	364194	10.42	8.18	8.18	0.00
1,4-Difluorobenzene	1230119	1368680	11.26	9.91	9.91	0.00
Chlorobenzene-d5	754830	760165	0.71	14.02	14.01	-0.01

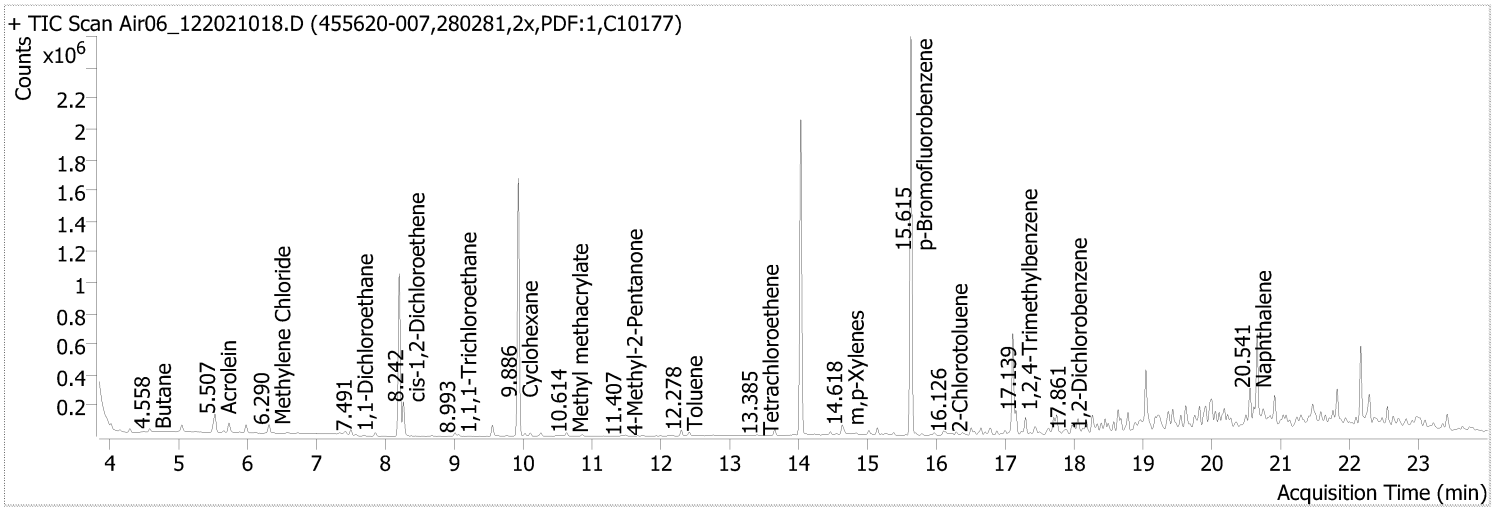
(not in upper half)

Analyst: GSG Date: 01/04/22 Reviewer: SLL Date: 01/04/22

+=high bias calc=check quantitation u=use v=ICV x=false positive

Quantitation Results Report (Not Reviewed)

Data File	Air06_122021018.D	Operator	ZNZ/DJL/LJB
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	12/21/2021 1:27:17 AM
Sample Name	455620-007,280281,2x,PDF:1,C10177	Instrument	Air-MS-06
Vial	16	Multiplier	1.00
DA Method File	TO15_121121.m	Comment	2x400mL
Tune File	bfb.u	Tune Date	12/14/2021 7:38:43 AM
Batch Name	2021 Dec 20 1433 TO15_121121.m.batch.bin	Last Calib Update	12/13/2021 9:29:07 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



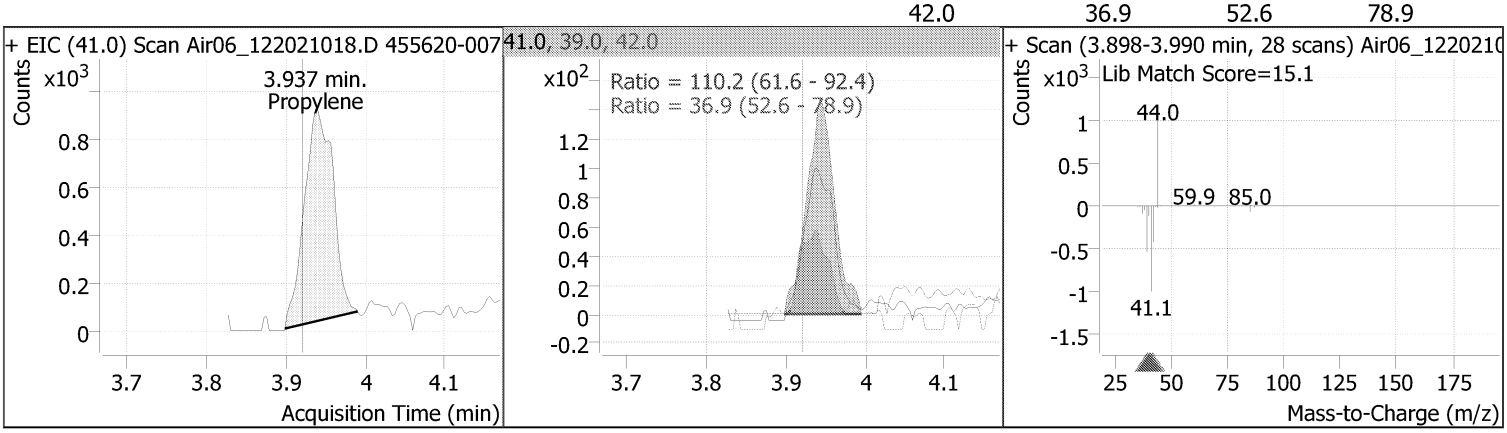
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.183	130.0	364194	10.0000	nL/L		0.003
M 1,4-Difluorobenzene	9.912	114.0	1368680	10.0000	nL/L		0.000
M Chlorobenzene-d5	14.013	82.0	760165	10.0000	nL/L	#	-0.003
System Monitoring Compounds							
S p-Bromofluorobenzene	15.615	95.0	999785	10.2474	nL/L		-0.003
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 102.47%			
Target Compounds							QValue
T Propylene	3.937	41.0	2226	0.0557	nL/L	#	63
T Freon 12	3.998	85.0	23524	0.1806	nL/L		99
T Chloromethane	4.164	50.0	762	0.0167	nL/L		91
T Freon 114	4.257	135.0	511	0.0067	nL/L	#	82
T Vinyl Chloride	0.000		0	N.D.			
T 1,3-Butadiene	4.552	54.0	22	0.0006	nL/L	#	1
T Butane	4.558	43.0	20868	0.2843	nL/L		93
T Bromomethane	0.000		0	N.D.			
T Chloroethane	4.840	64.0	38	0.0018	nL/L		39
T Ethanol	5.024	45.0	49632	1.7370	nL/L		98
T Vinyl bromide	0.000		0	N.D.			
T Acrolein	5.507	56.0	12067	0.6543	nL/L	#	65
T Acetone	5.481	58.0	21139	0.8572	nL/L	#	24
T Trichloromonofluoromethane	5.636	101.0	10643	0.0722	nL/L		99
T Isopropanol (IPA)	5.707	45.0	86900	0.9014	nL/L		100
T n-Pentane	5.957	43.0	38775	0.4101	nL/L		99
T 1,1-Dichloroethene	0.000		0	N.D.			
T Tert-butyl alcohol (TBA)	6.290	59.0	12751	0.1253	nL/L	#	89
T Methylene Chloride	6.290	84.0	19813	0.5067	nL/L		85
T 3-Chloropropene	6.578	76.0	3549	0.2157	nL/L	#	57
T Freon 113	6.552	101.0	2734	0.0293	nL/L		94
T Carbon Disulfide	6.578	76.0	3549	0.0326	nL/L	#	1

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.303	61.0	249	0.0035	nL/L	#	40
T 1,1-Dichloroethane	7.491	63.0	49	0.0006	nL/L		55
T MTBE	7.407	73.0	2752	0.0231	nL/L	#	1
T Vinyl Acetate	7.400	43.0	14716	0.0987	nL/L	#	1
T 2-Butanone	7.672	43.0	10844	0.0921	nL/L		96
T cis-1,2-Dichloroethene	8.242	61.0	35058	0.4839	nL/L	#	43
T Ethyl Acetate	8.242	61.0	35239	2.1514	nL/L	#	12
T n-Hexane	8.255	57.0	11697	0.1534	nL/L		92
T Chloroform	8.300	83.0	3513	0.0338	nL/L		79
T Tetrahydrofuran	8.695	72.0	75	0.0044	nL/L	#	1
T 1,2-Dichloroethane	0.000		0	N.D.			
T 1,1,1-Trichloroethane	8.993	97.0	25	0.0002	nL/L		26
T Benzene	9.614	78.0	5697	0.0493	nL/L	#	92
T Carbon Tetrachloride	9.753	117.0	2606	0.0221	nL/L	#	92
T Cyclohexane	9.886	84.0	3580	0.0749	nL/L	#	1
T 1,2-Dichloropropane	10.242	63.0	56	0.0011	nL/L	#	1
T Methane, bromodichloro-	10.530	83.0	2178	0.0202	nL/L	#	34
T 1,4-Dioxane	10.588	88.0	46	0.0018	nL/L	#	1
T Trichloroethene	10.556	132.0	664	0.0126	nL/L	#	85
T 2,2,4-Trimethylpentane	10.617	57.0	18664	0.0750	nL/L	#	91
T Methyl methacrylate	10.614	69.0	508	0.0119	nL/L	#	1
T n-Heptane	10.841	71.0	1894	0.0489	nL/L	#	80
T cis-1,3-Dichloropropene	11.281	110.0	37	0.0024	nL/L		1
T 4-Methyl-2-Pentanone	11.407	58.0	474	0.0103	nL/L	#	7
T trans-1,3-Dichloropropene	11.673	110.0	24	0.0015	nL/L		1
T 1,1,2-Trichloroethane	12.116	97.0	158	0.0031	nL/L	#	28
T Toluene	12.278	91.0	27184	0.1836	nL/L		98
T TPH Gasoline (C3 to C12)	12.396	165.0	33804814	3.1331	nL/L		100
T 2-Hexanone	12.534	58.0	551	0.0096	nL/L	#	55
T Dibromochloromethane	12.660	129.0	27	0.0003	nL/L	#	1
T 1,2-Dibromoethane	12.938	108.9	338	0.0043	nL/L	#	5
T Tetrachloroethene	13.385	166.0	2543	0.0293	nL/L	#	92
T 1,1,1,2-Tetrachloroethane	13.851	131.0	22	0.0004	nL/L	#	1
T Benzene, chloro-	14.094	112.0	593	0.0055	nL/L		29
T Ethylbenzene	14.446	91.0	14905	0.0853	nL/L		98
T TPH Gasoline (C6 to C12)	14.521	165.0	27114795	3.3762	nL/L		100
T m,p-Xylenes	14.618	91.0	50868	0.3450	nL/L		95
T Bromoform	14.702	173.0	143	0.0012	nL/L	#	41
T Styrene	15.006	104.0	14798	0.1498	nL/L	#	92
T 1,1,2,2-Tetrachloroethane	15.188	83.0	1343	0.0127	nL/L	#	42
T o-Xylene	15.126	91.0	29583	0.1933	nL/L		97
T n-Nonane	15.366	85.0	1977	0.0633	nL/L	#	79
T Isopropylbenzene	15.777	105.0	3252	0.0157	nL/L	#	85
T 2-Chlorotoluene	16.126	126.0	1191	0.0257	nL/L	#	1
T n-Propylbenzene	16.359	120.0	2753	0.0526	nL/L	#	92
T 4-Ethyltoluene	16.537	105.1	12883	0.0653	nL/L		98
T 1,3,5-Trimethylbenzene	16.631	105.0	21263	0.1184	nL/L		96
T 1,2,4-Trimethylbenzene	17.139	105.0	80094	0.4768	nL/L		97
T Benzyl chloride	17.431	91.0	2555	0.0176	nL/L	#	68
T 1,3-Dichlorobenzene	17.411	146.0	19520	0.1680	nL/L		95
T 1,4-Dichlorobenzene	17.411	146.0	19520	0.1702	nL/L		94
T 1,2-Dichlorobenzene	17.861	146.0	1973	0.0176	nL/L	#	82
T 1,2,4-Trichlorobenzene	20.373	179.9	854	0.0107	nL/L	#	43
T Naphthalene	20.541	128.0	130914	1.0583	nL/L	#	95
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.127	225.0	112	0.0009	nL/L	#	55

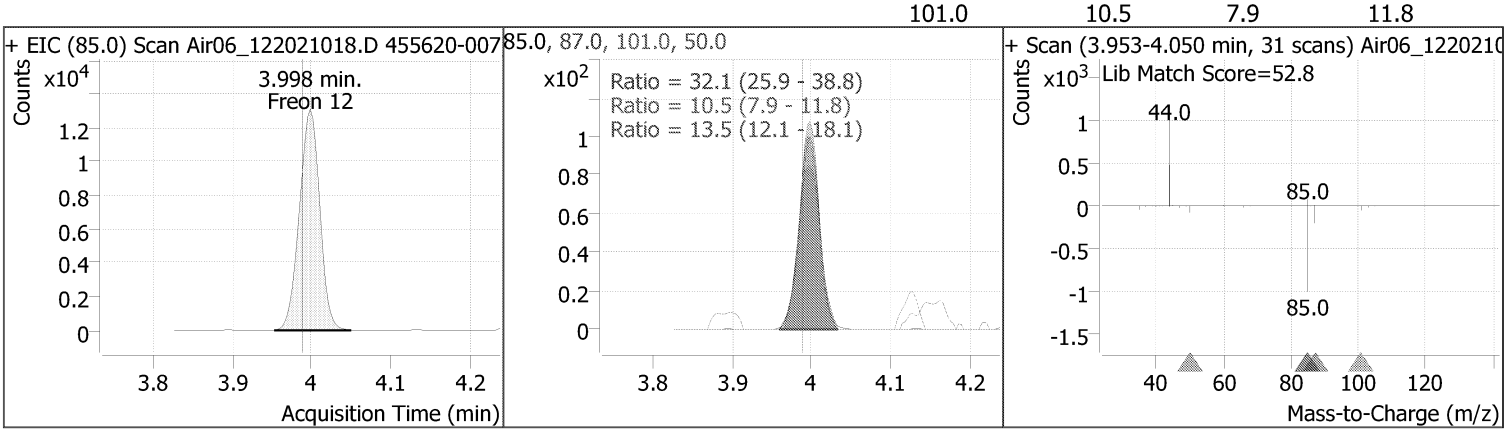
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

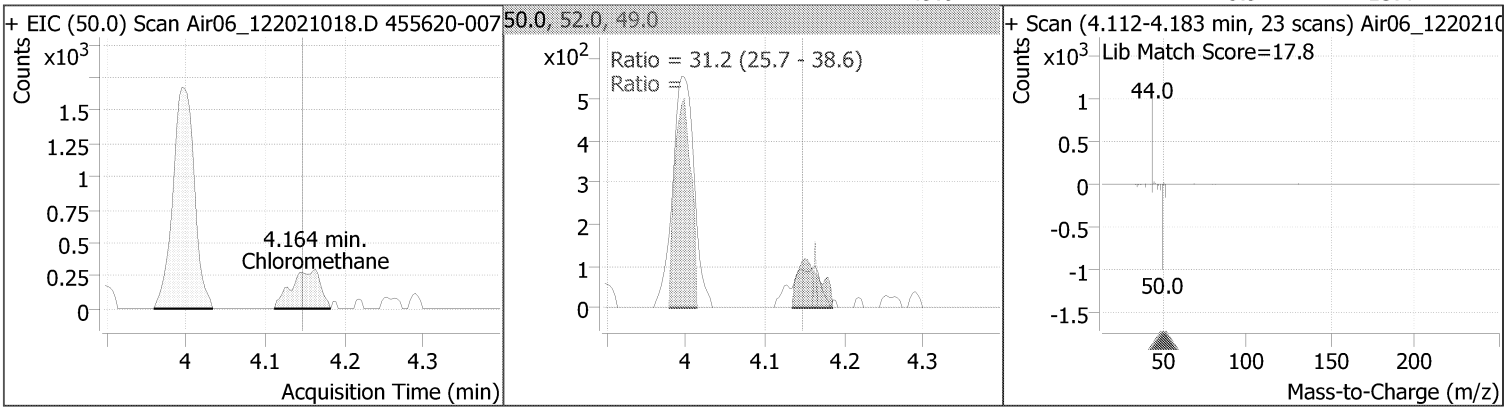
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.0557	3.94	0.02	2226	39.0	110.2	61.6	92.4
					42.0	36.9	52.6	78.9



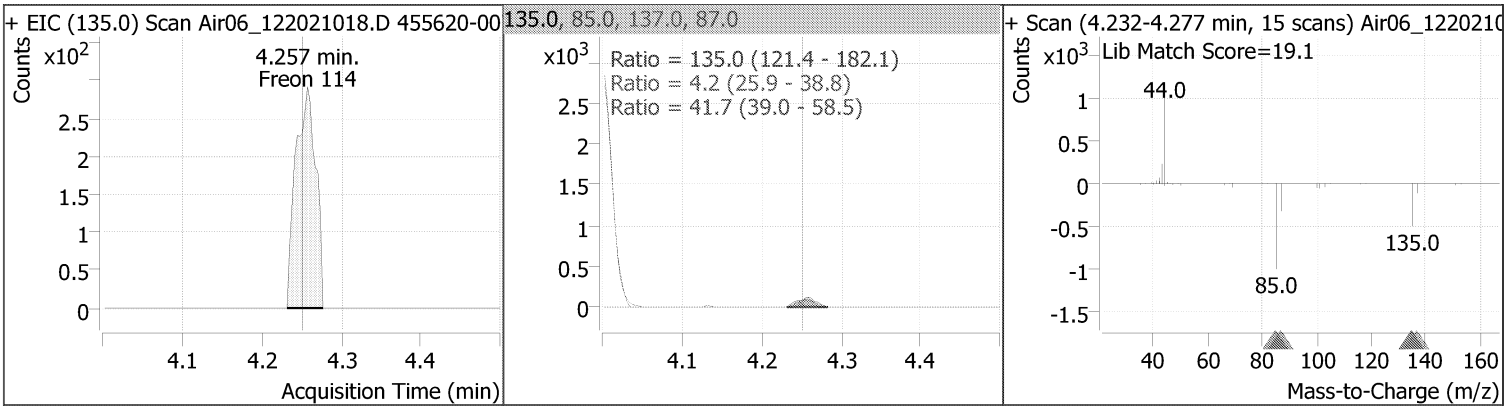
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	0.1806	4.00	0.01	23524	87.0	32.1	25.9	38.8
					50.0	13.5	12.1	18.1
					101.0	10.5	7.9	11.8



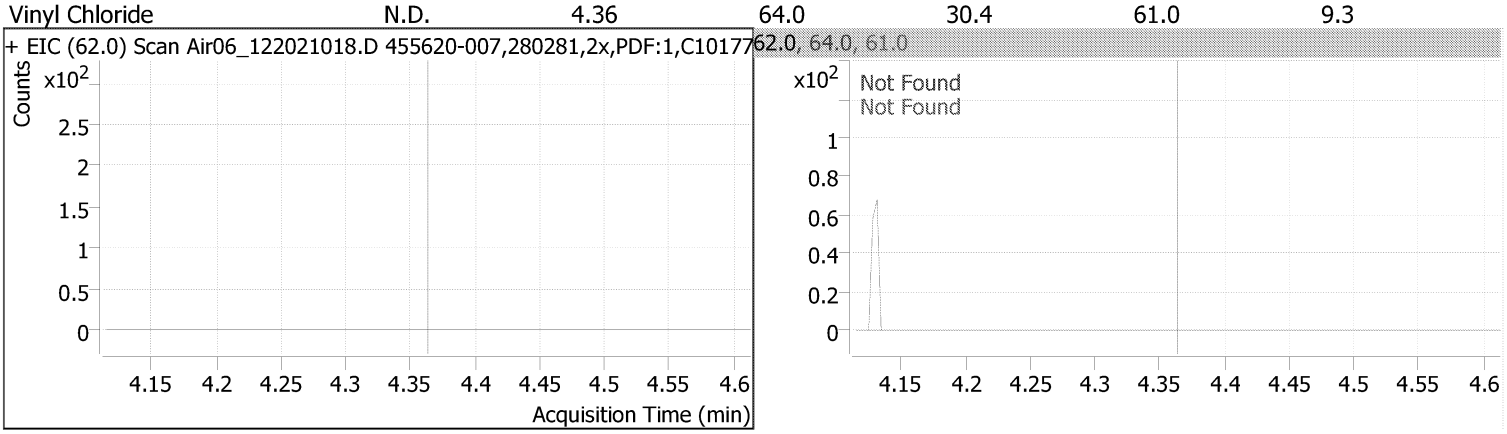
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	0.0167	4.16	0.02	762	52.0	31.2	25.7	38.6
					49.0		8.9	13.4



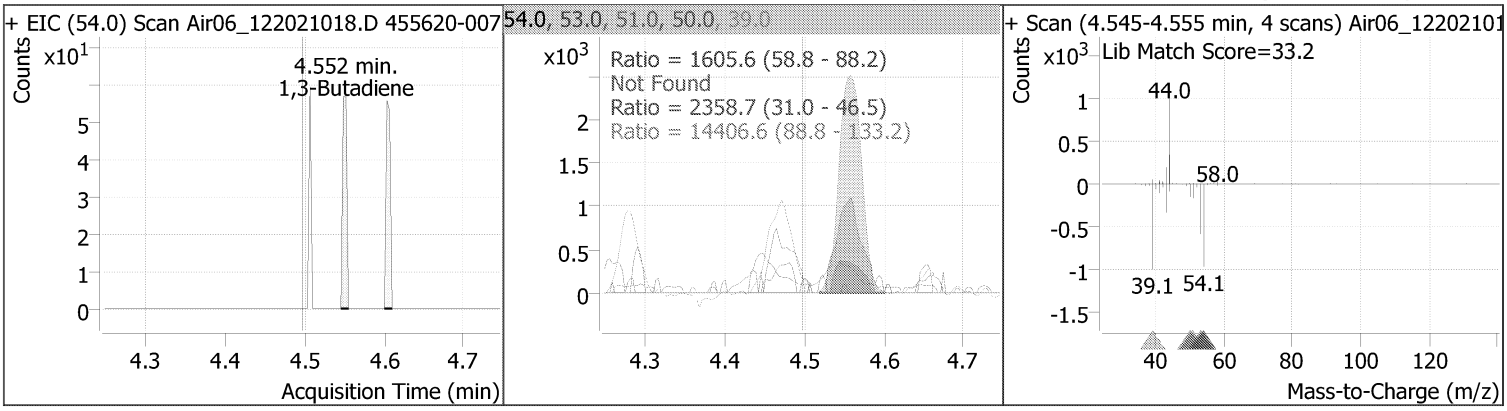
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	0.0067	4.26	0.01	511	85.0	135.0	121.4	182.1
					87.0	41.7	39.0	58.5
					137.0	4.2	25.9	38.8



Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl Chloride	N.D.	4.36	64.0	30.4	61.0	9.3

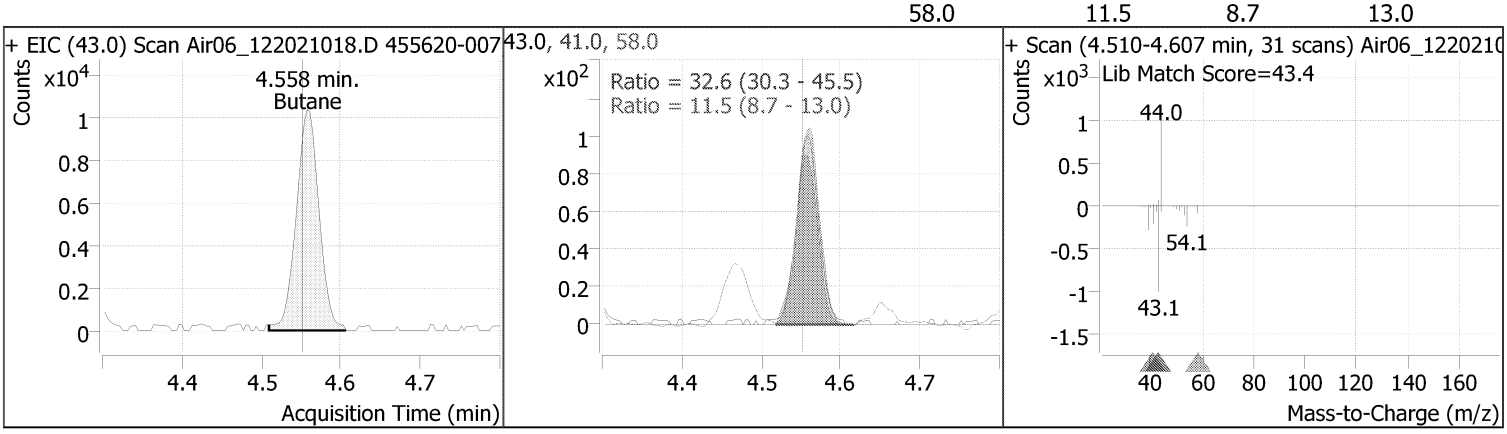


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	0.0006	4.55	0.06	22	39.0	14406.6	88.8	133.2
					53.0	1605.6	58.8	88.2
					50.0	2358.7	31.0	46.5
					51.0		27.3	41.0

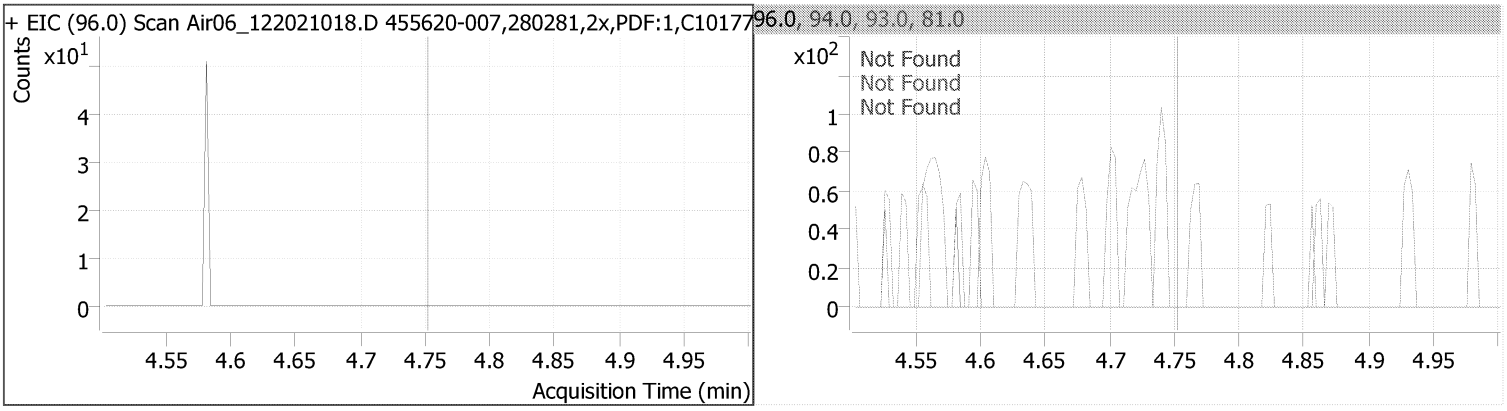


Quantitation Results Report (Not Reviewed)

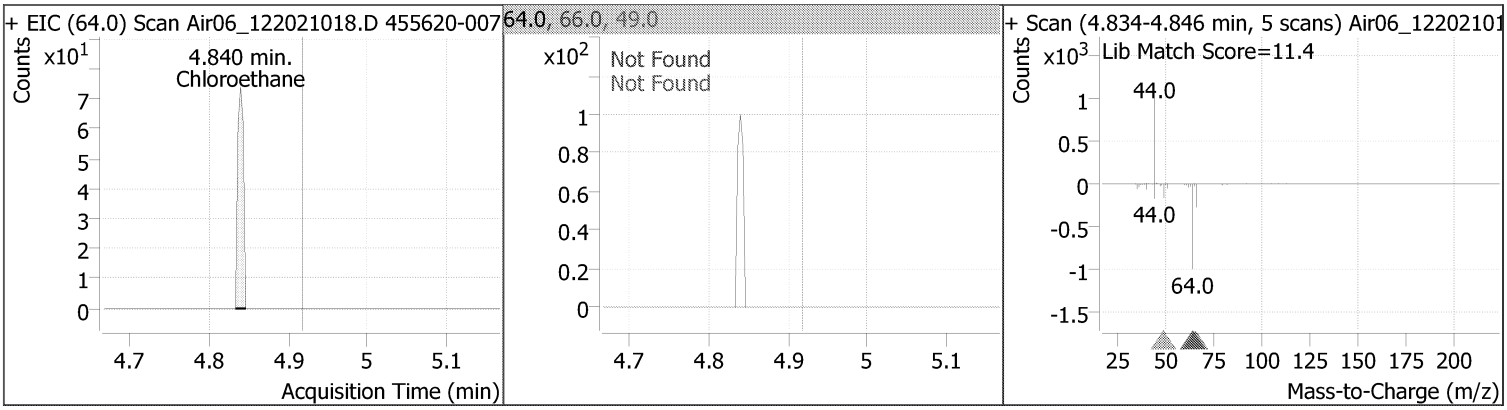
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	0.2843	4.56	0.01	20868	41.0	32.6	30.3	45.5
					58.0	11.5	8.7	13.0



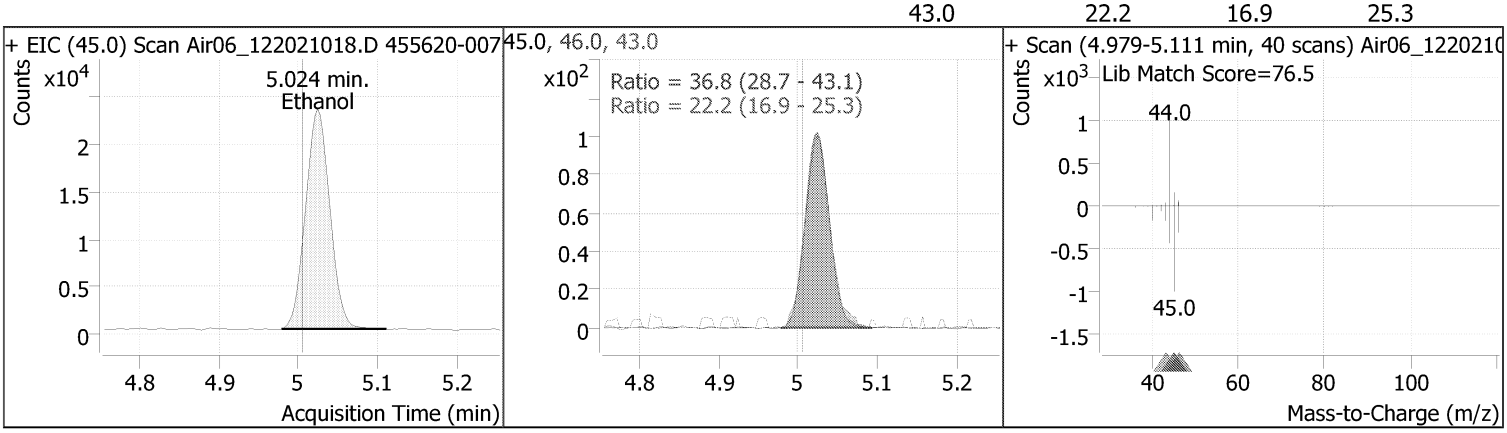
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Bromomethane	N.D.	4.75	94.0	107.8	93.0	23.9	81.0	23.8



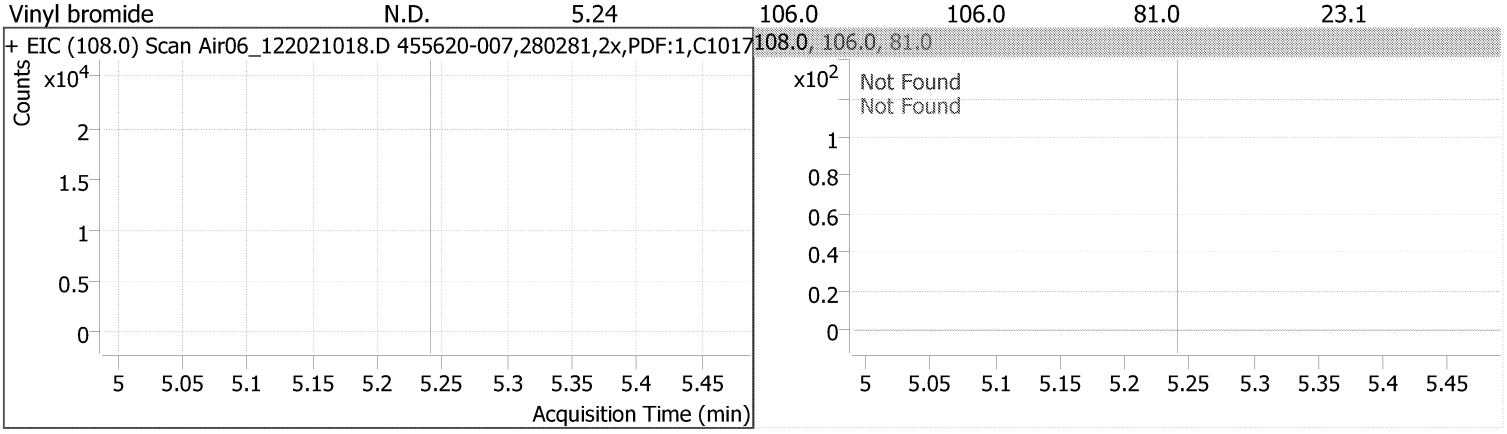
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	0.0018	4.84	-0.07	38	49.0		31.7	47.6
					66.0		24.3	36.5



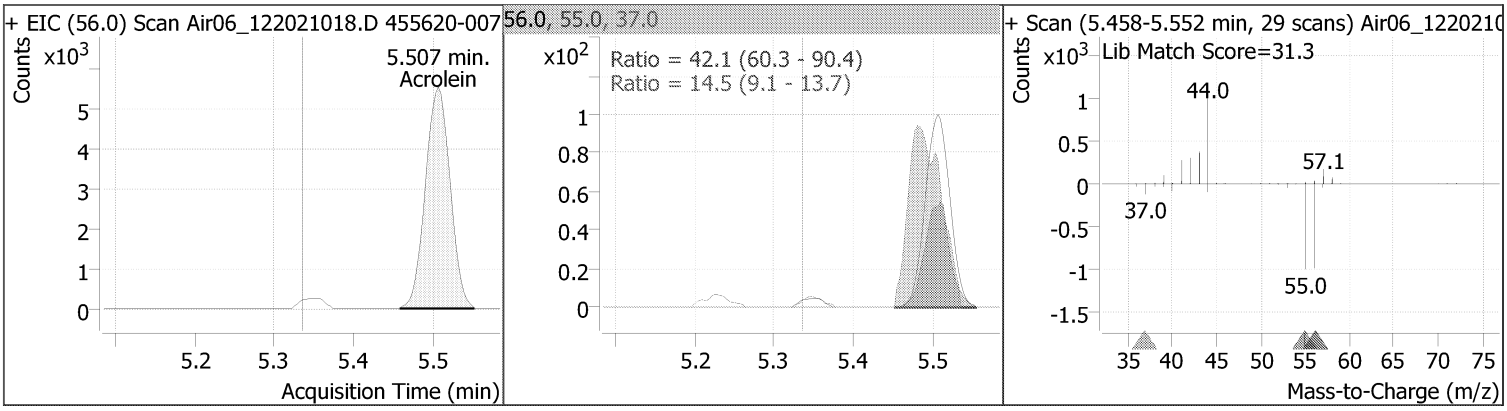
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	1.7370	5.02	0.02	49632	46.0	36.8	28.7	43.1
					43.0	22.2	16.9	25.3



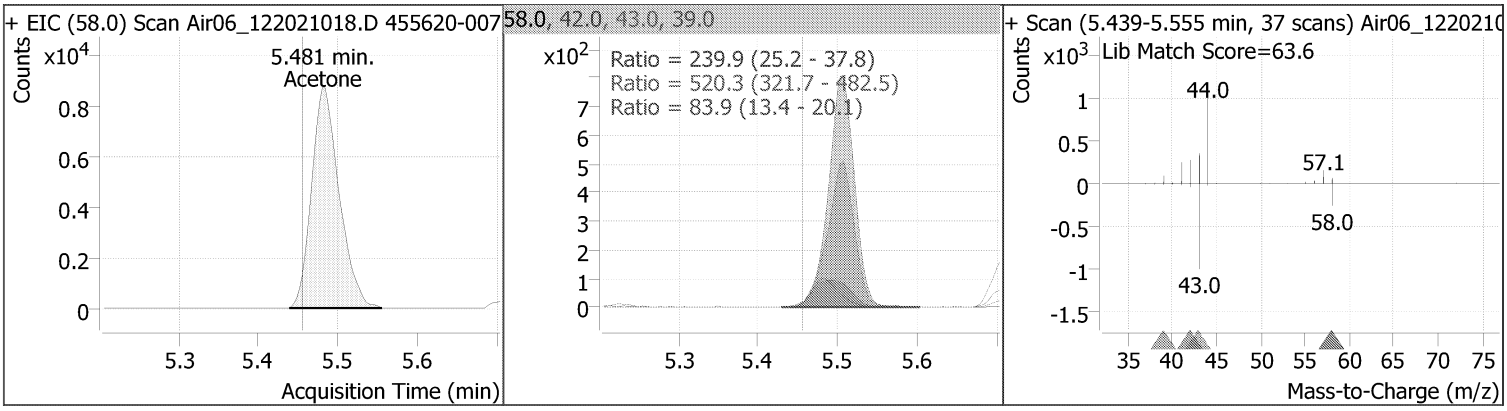
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl bromide	N.D.	5.24	106.0	106.0	81.0	23.1



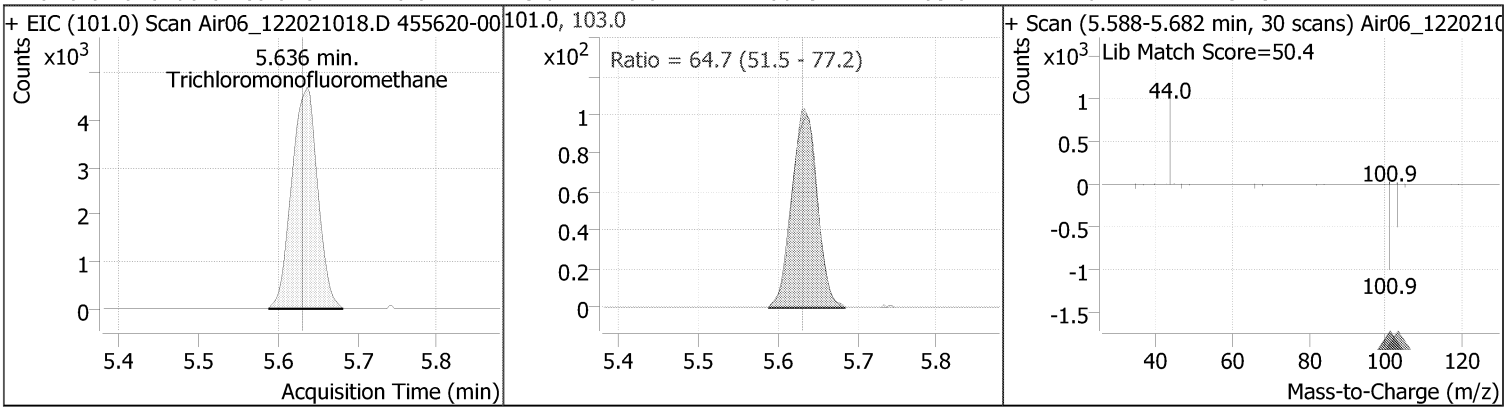
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	0.6543	5.51	0.17	12067	55.0	42.1	60.3	90.4
					37.0	14.5	9.1	13.7



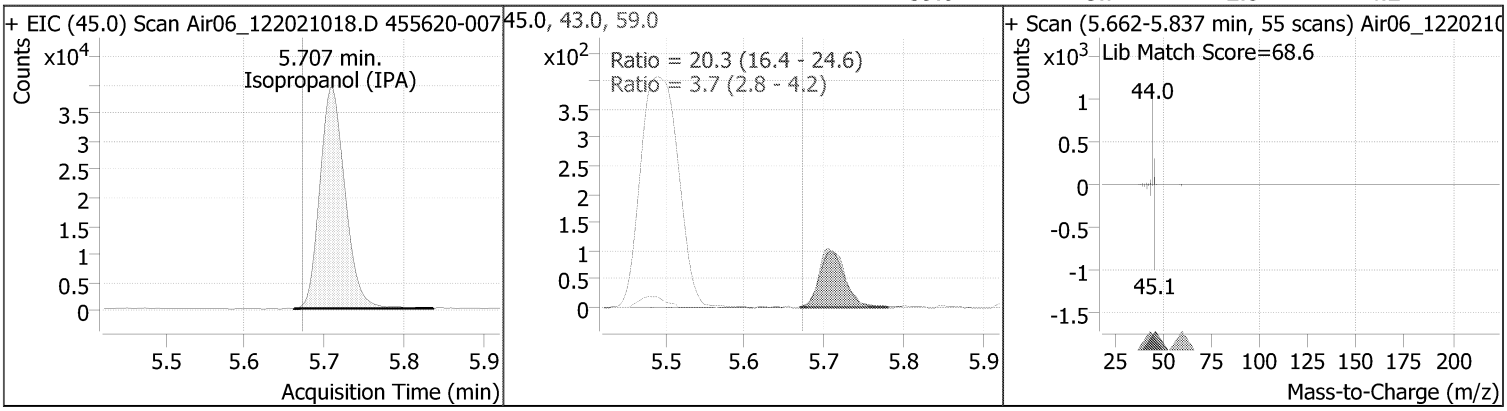
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	0.8572	5.48	0.03	21139	43.0	520.3	321.7	482.5
					42.0	239.9	25.2	37.8
					39.0	83.9	13.4	20.1



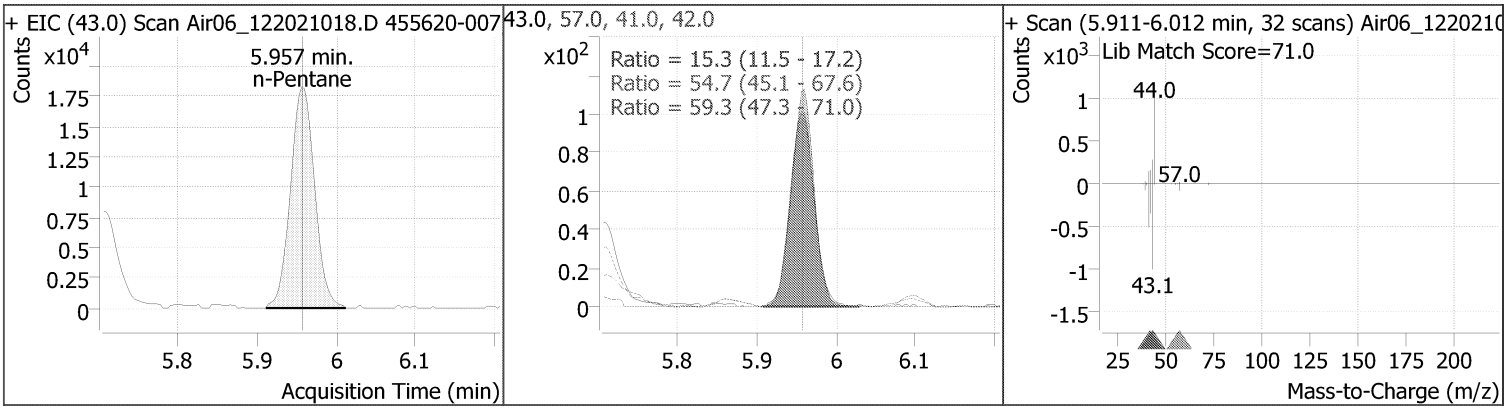
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	0.0722	5.64	0.01	10643	103.0	64.7	51.5	77.2



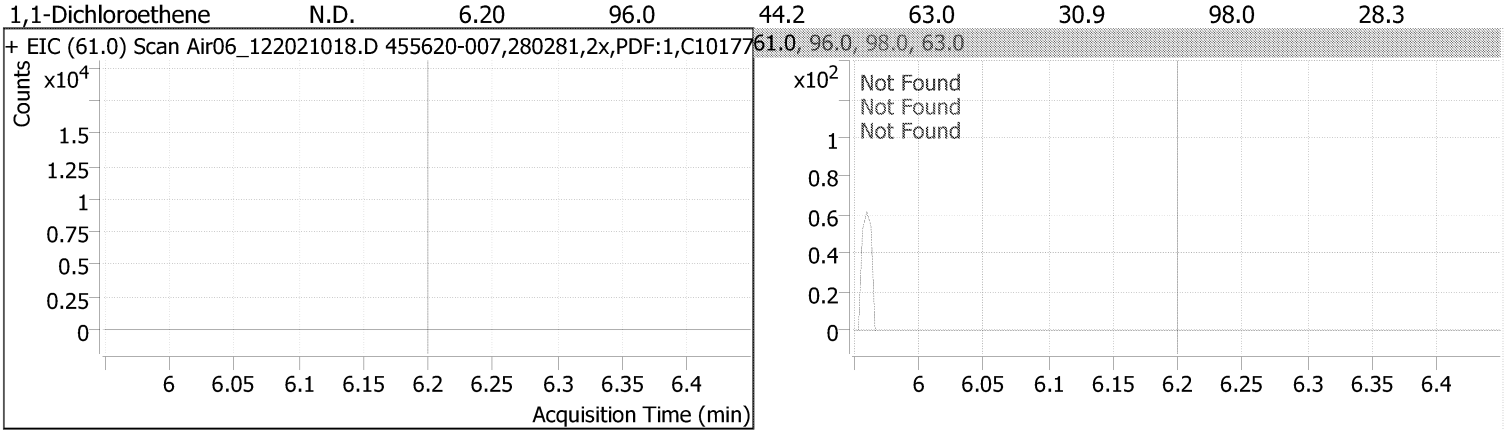
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.9014	5.71	0.04	86900	43.0	20.3	16.4	24.6
					59.0	3.7	2.8	4.2



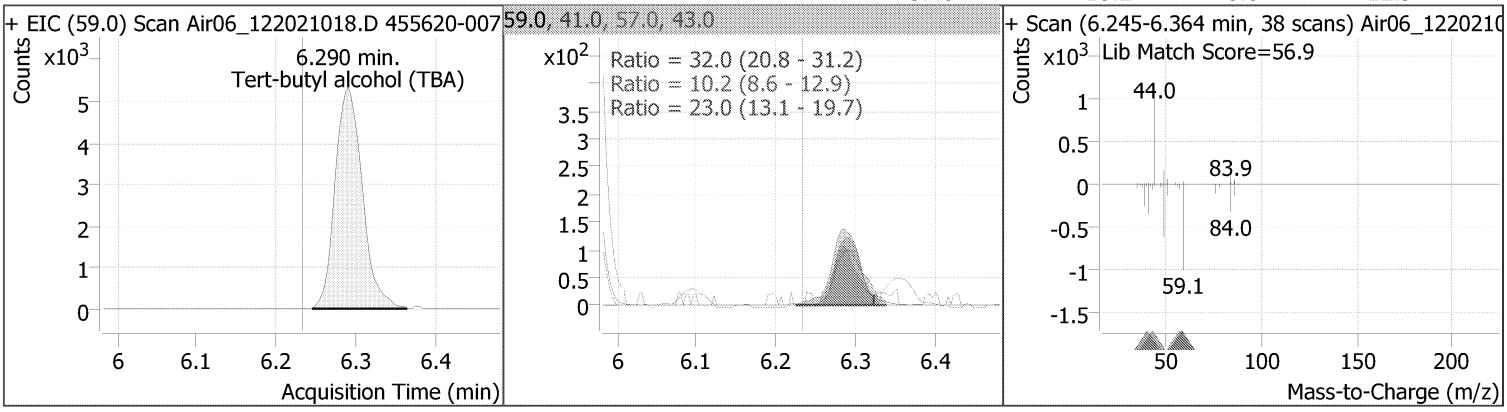
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.4101	5.96	0.00	38775	42.0	59.3	47.3	71.0
					41.0	54.7	45.1	67.6
					57.0	15.3	11.5	17.2



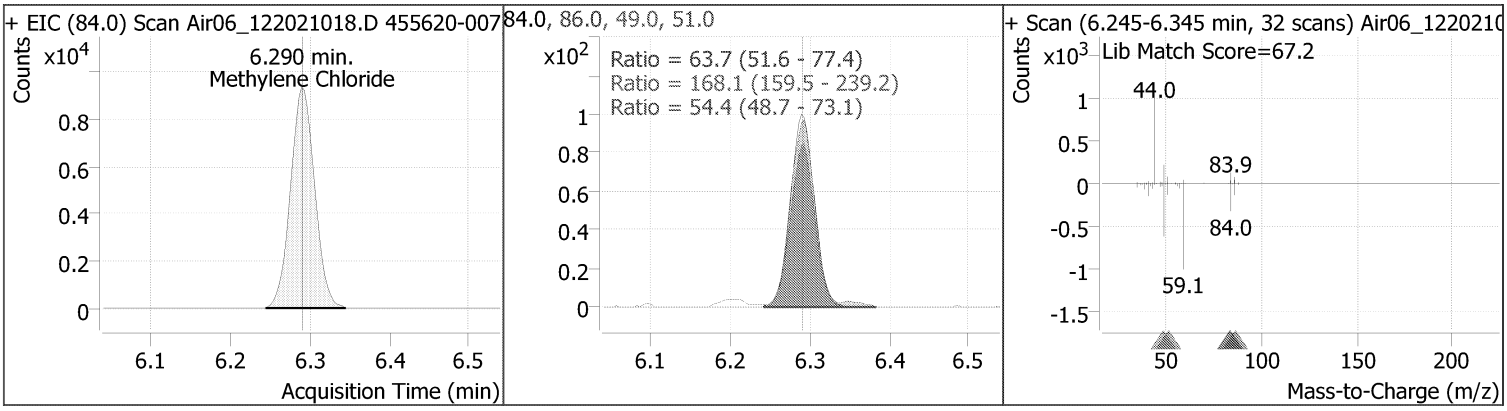
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethene	N.D.	6.20	96.0	44.2	63.0	30.9	98.0	28.3



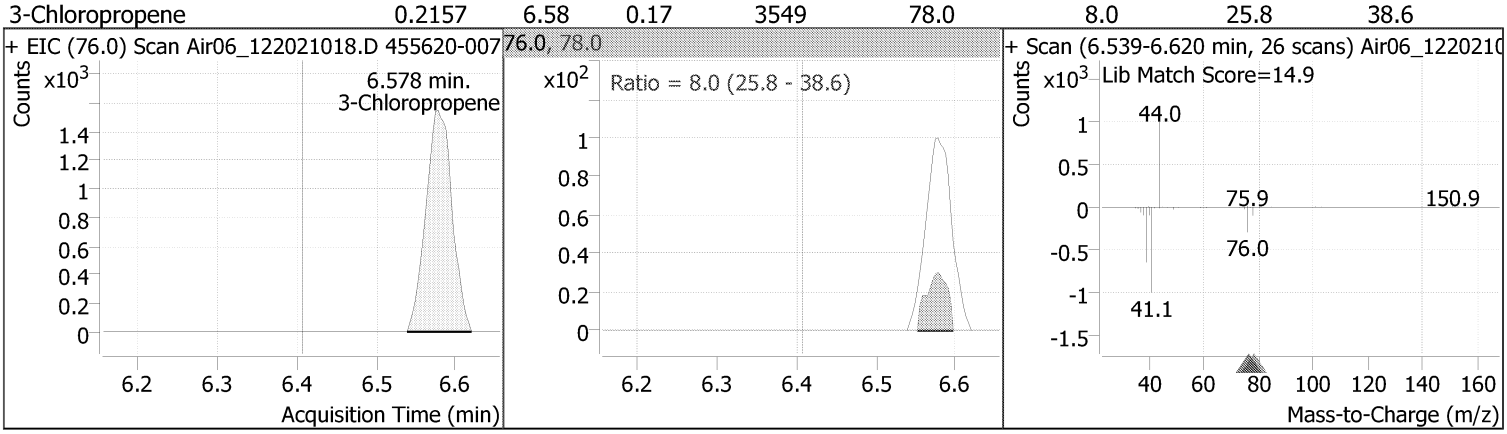
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.1253	6.29	0.06	12751	41.0	32.0	20.8	31.2
					43.0	23.0	13.1	19.7
					57.0	10.2	8.6	12.9



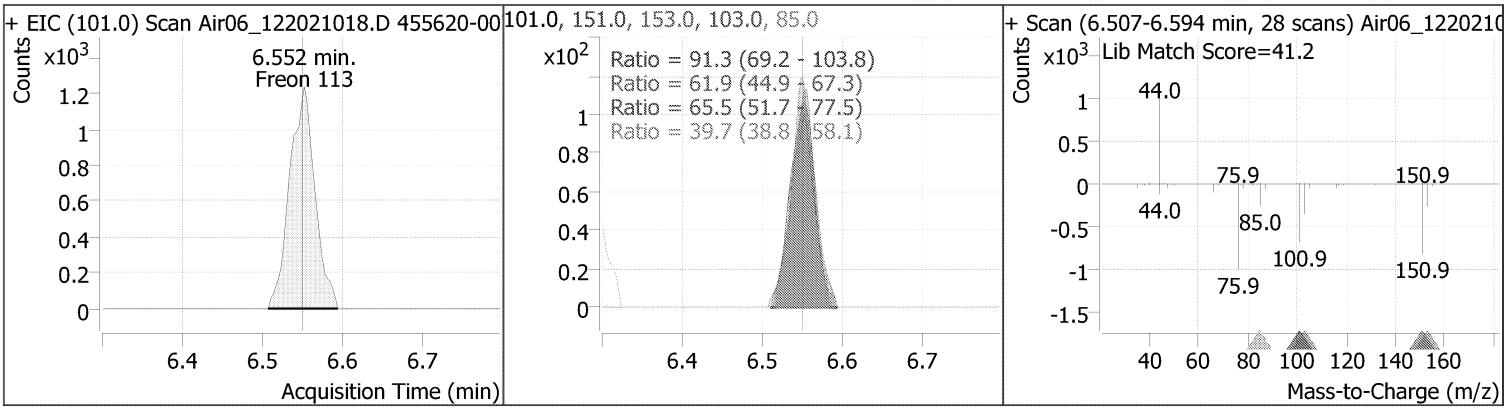
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.5067	6.29	0.00	19813	49.0	168.1	159.5	239.2
					86.0	63.7	51.6	77.4
					51.0	54.4	48.7	73.1



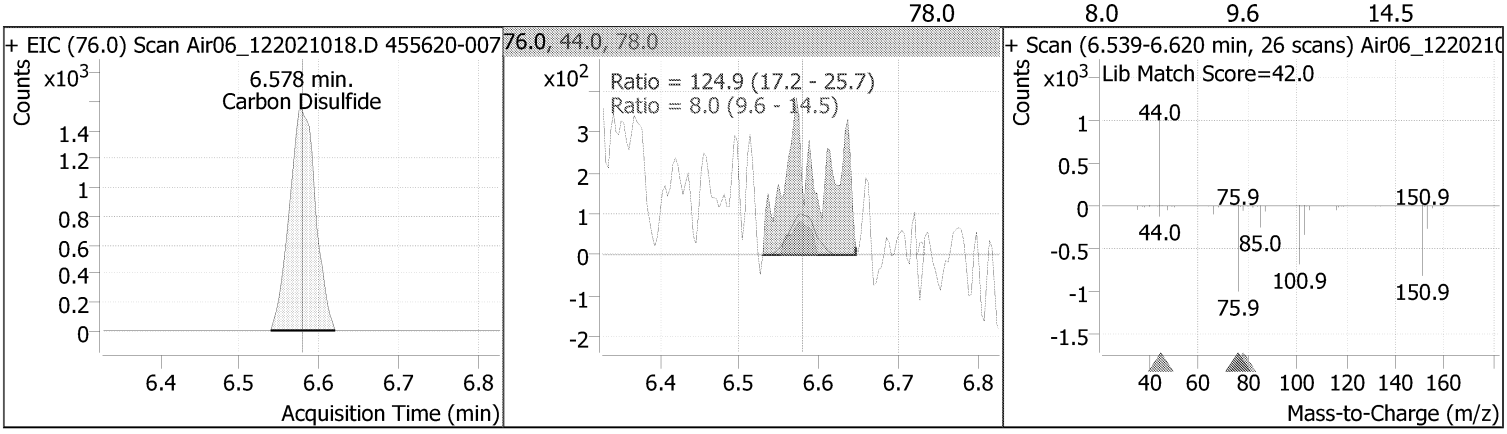
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	0.2157	6.58	0.17	3549	78.0	8.0	25.8	38.6



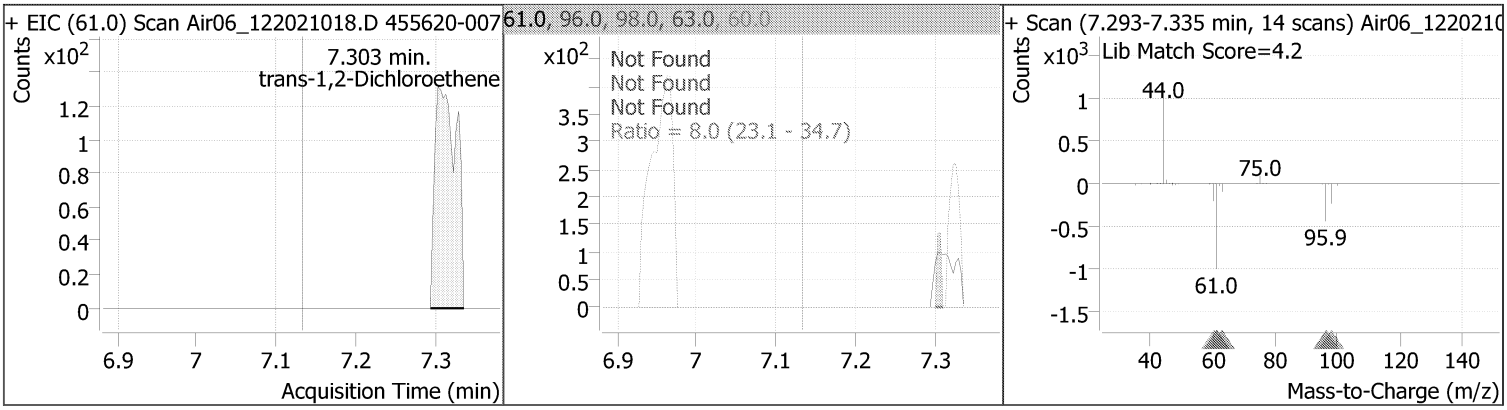
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	0.0293	6.55	0.01	2734	151.0	91.3	69.2	103.8
					103.0	65.5	51.7	77.5
					153.0	61.9	44.9	67.3
					85.0	39.7	38.8	58.1



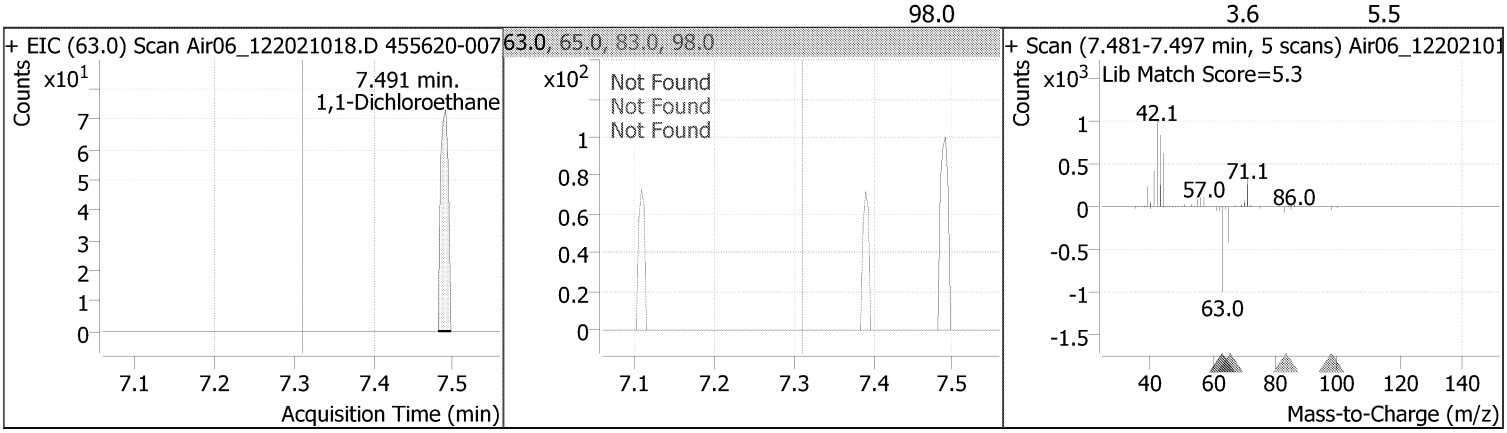
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.0326	6.58	0.00	3549	44.0		124.9	17.2	25.7
					78.0		8.0	9.6	14.5



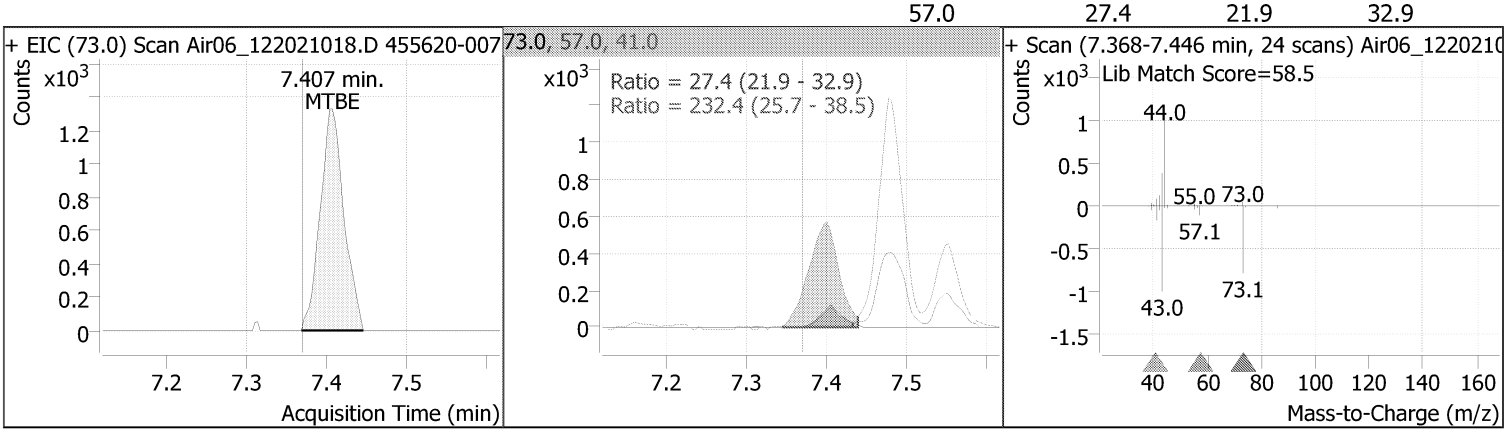
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.0035	7.30	0.17	249	96.0		41.3	61.9
					98.0		26.5	39.8
					63.0		24.6	36.9
					60.0	8.0	23.1	34.7



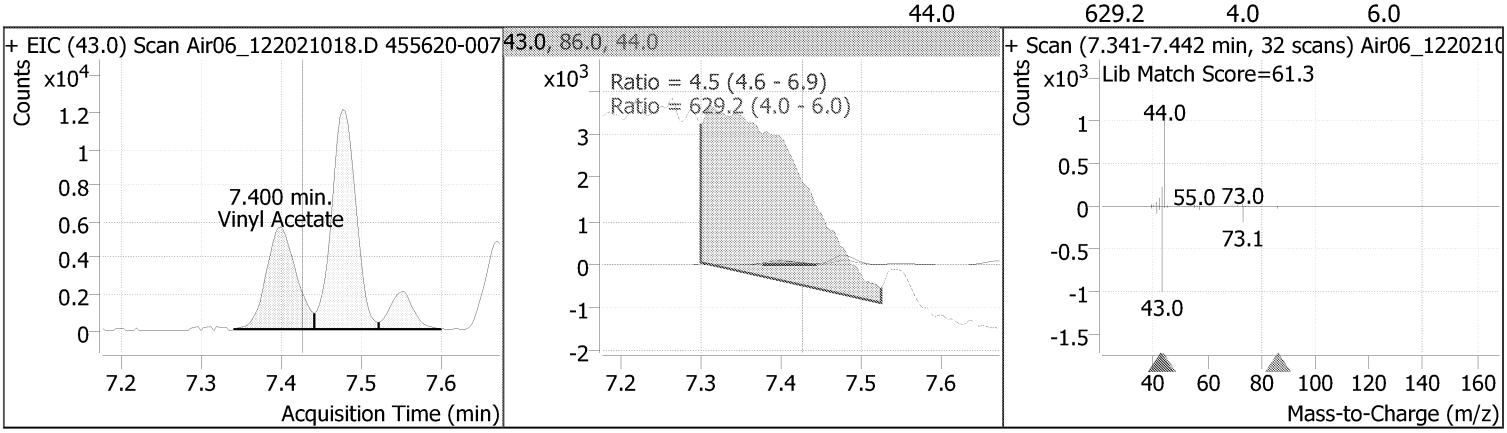
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	0.0006	7.49	0.18	49	65.0		24.1	36.1
					83.0		9.9	14.8
					98.0		3.6	5.5



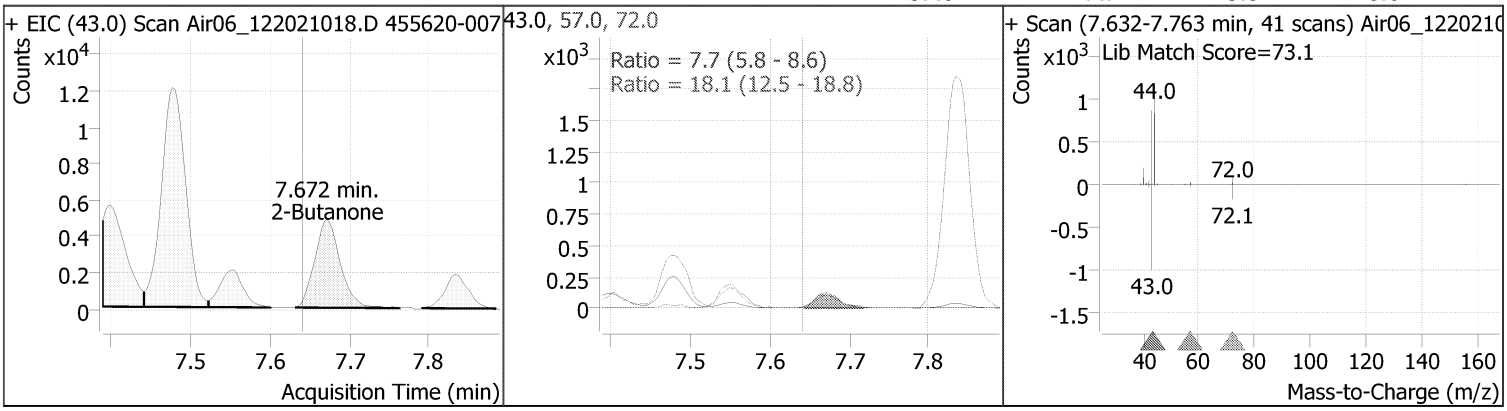
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	0.0231	7.41	0.04	2752	41.0	232.4	25.7	38.5
					57.0	27.4	21.9	32.9



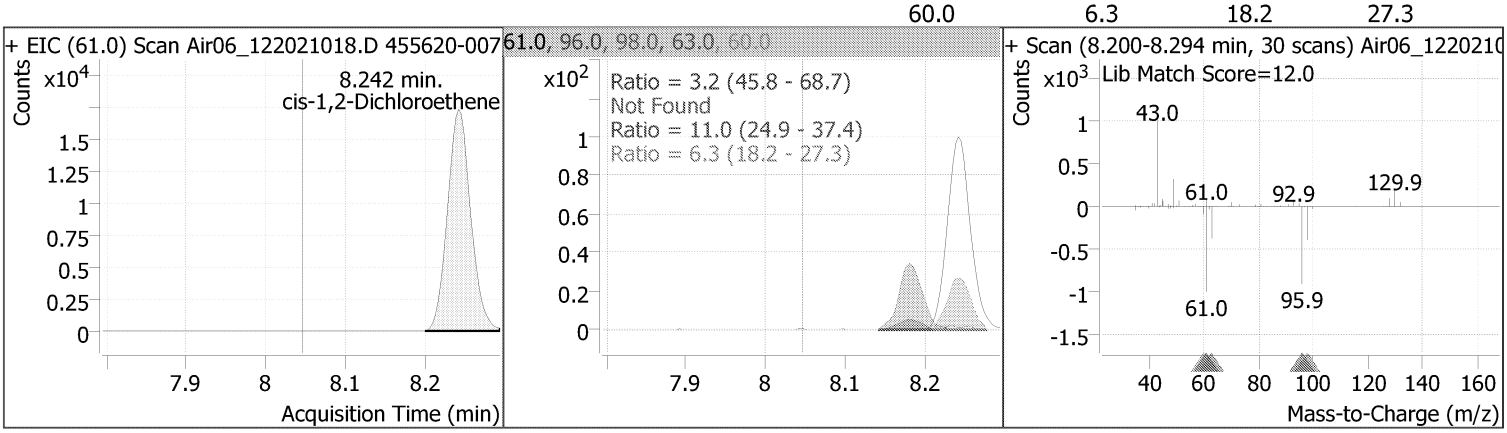
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.0987	7.40	-0.02	14716	86.0	4.5	4.6	6.9
					44.0	629.2	4.0	6.0



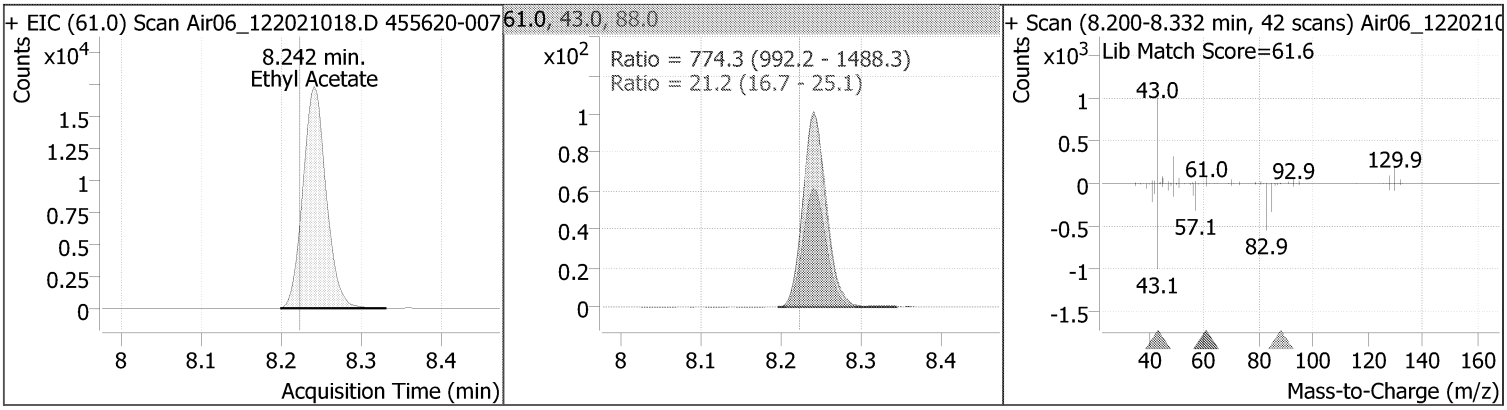
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.0921	7.67	0.04	10844	72.0	18.1	12.5	18.8
					57.0	7.7	5.8	8.6



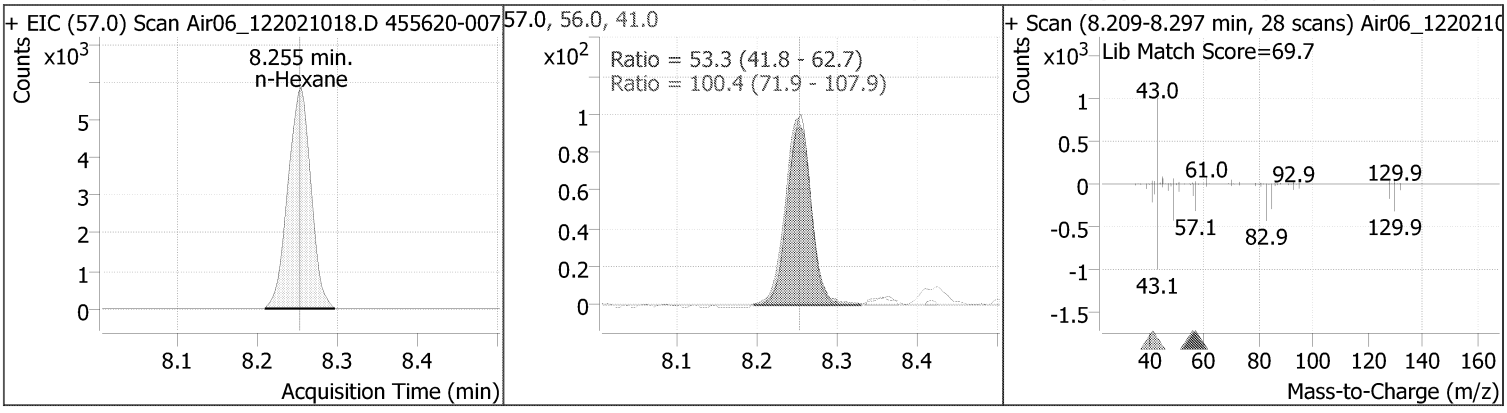
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.4839	8.24	0.20	35058	96.0	3.2	45.8	68.7
					98.0		29.3	43.9
					63.0	11.0	24.9	37.4
					60.0	6.3	18.2	27.3



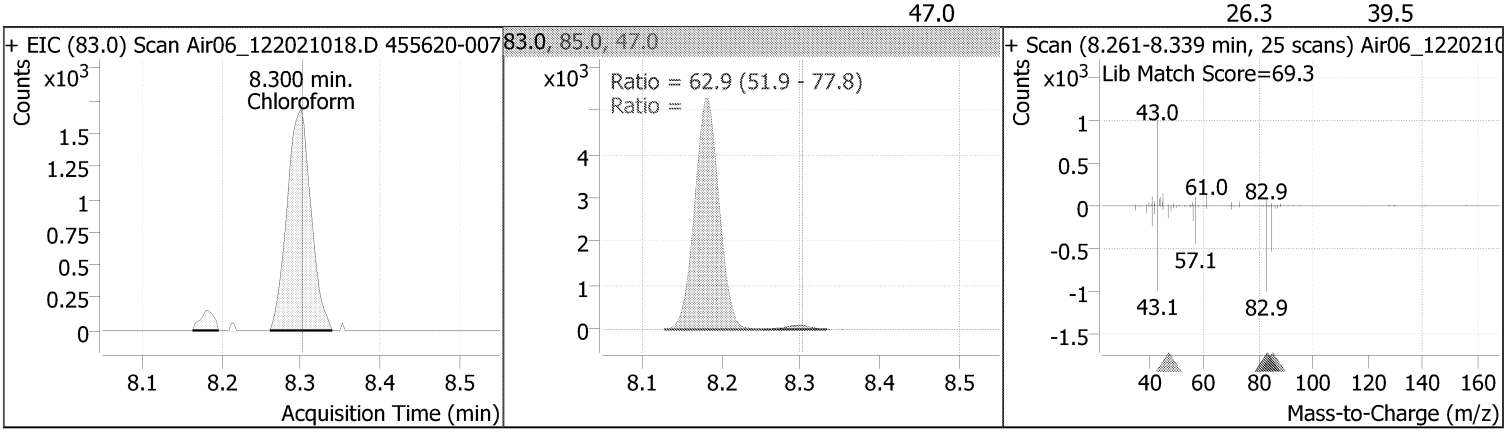
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	2.1514	8.24	0.02	35239	43.0	774.3	992.2	1488.3
					88.0	21.2	16.7	25.1



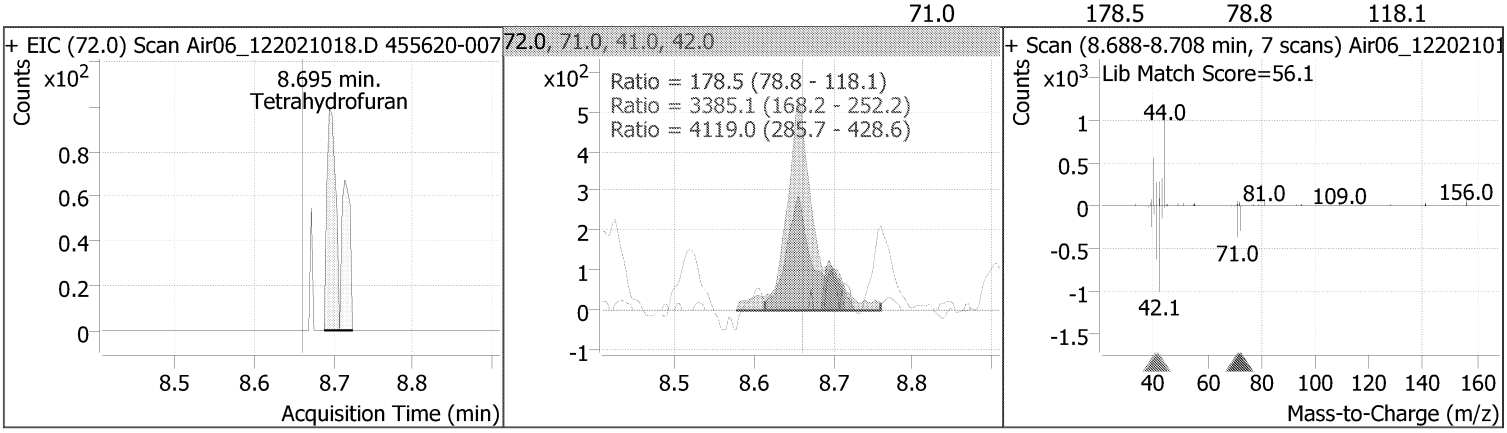
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.1534	8.25	0.00	11697	41.0	100.4	71.9	107.9
					56.0	53.3	41.8	62.7



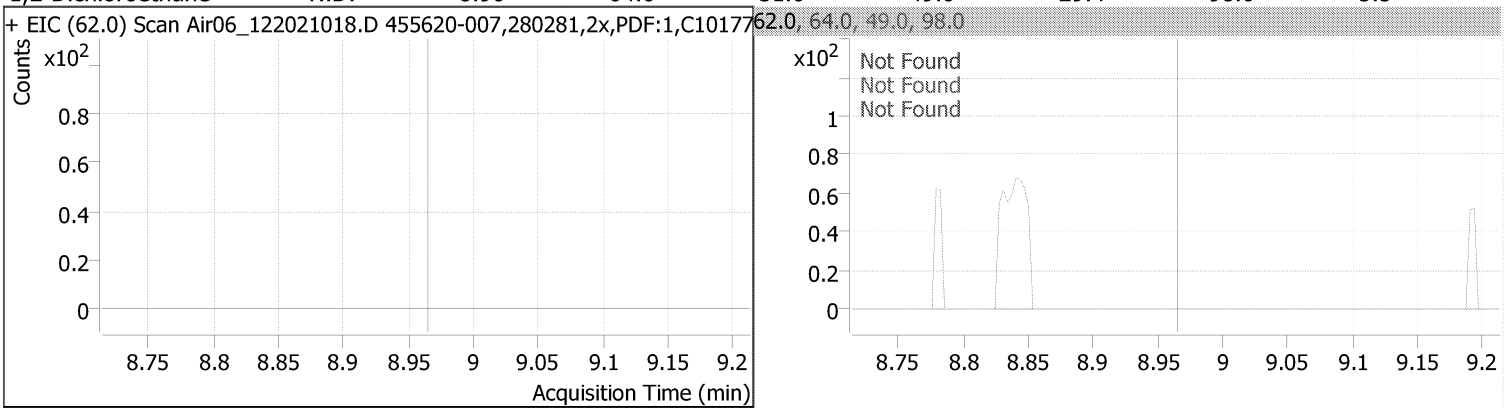
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.0338	8.30	0.00	3513	85.0	62.9	51.9	77.8
					47.0		26.3	39.5



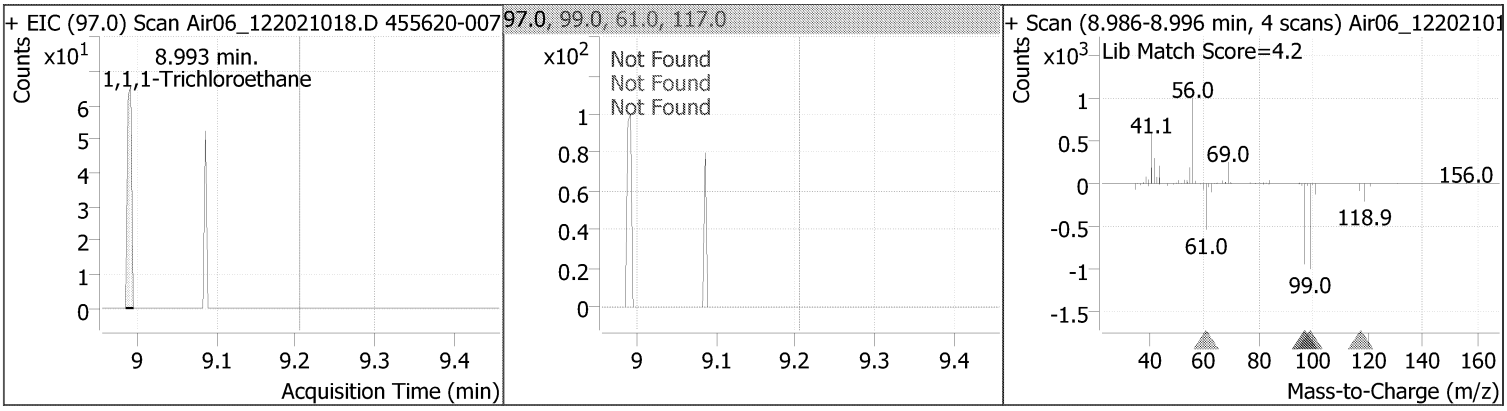
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	0.0044	8.69	0.04	75	42.0	4119.0	285.7	428.6
					41.0	3385.1	168.2	252.2
					71.0	178.5	78.8	118.1



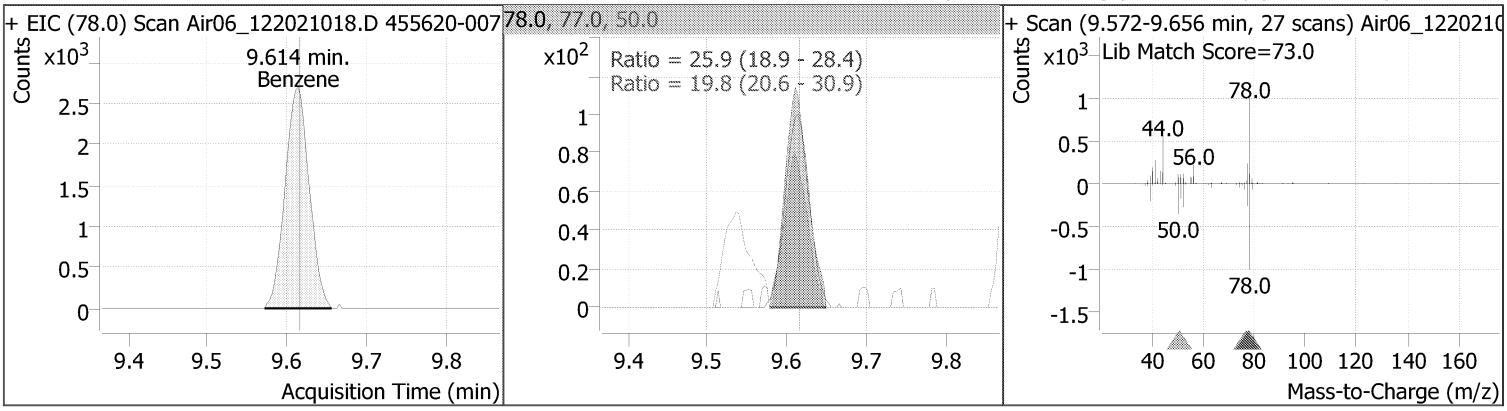
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,2-Dichloroethane	N.D.	8.96	64.0	31.0	49.0	29.4	98.0	5.5



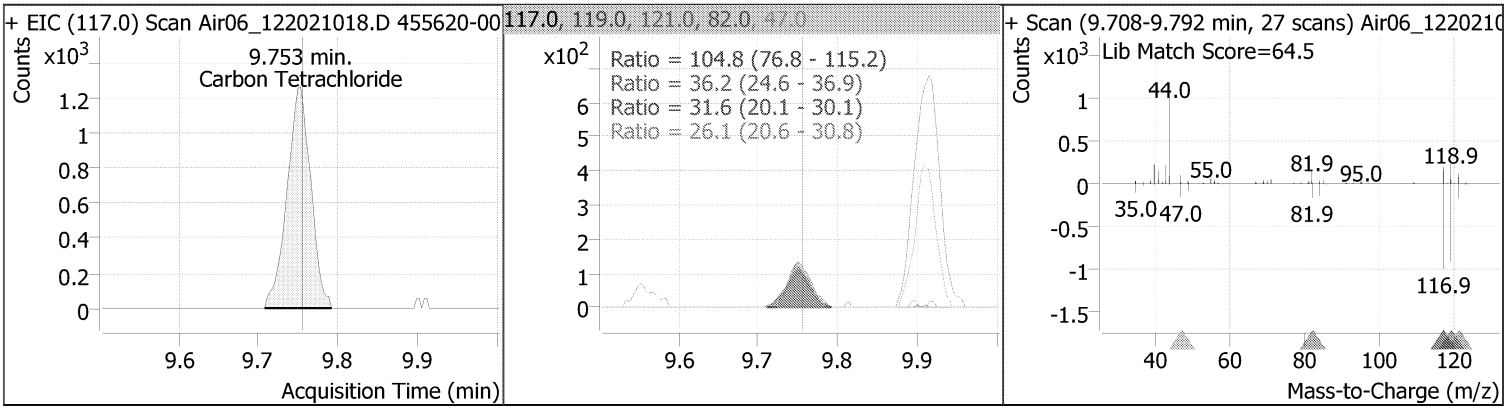
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	0.0002	8.99	-0.21	25	99.0		52.0	78.0
					61.0		40.4	60.5
					117.0		9.1	13.6



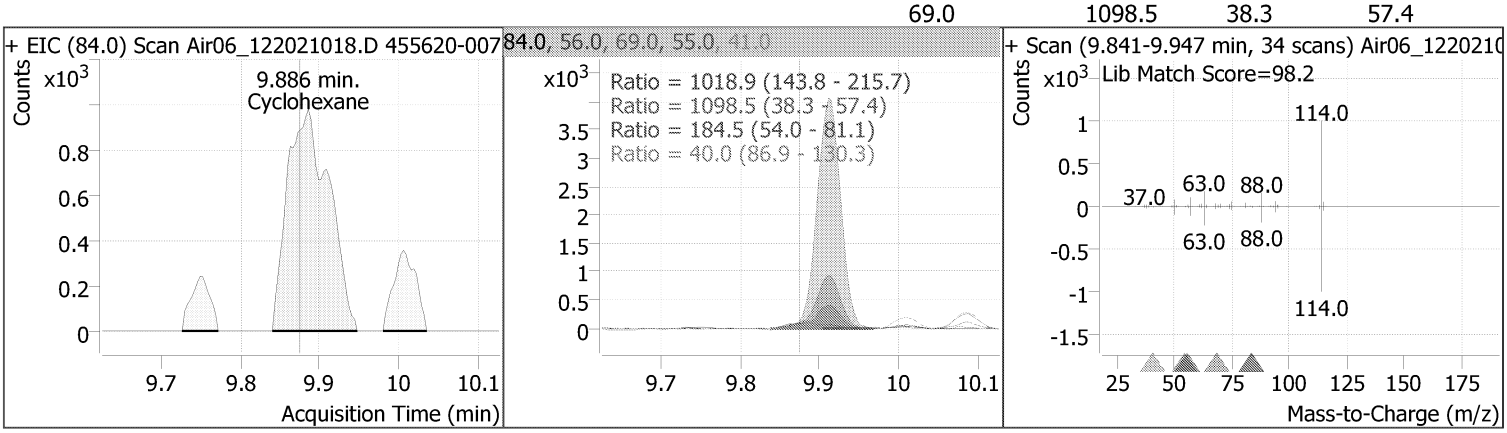
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.0493	9.61	0.00	5697	50.0	19.8	20.6	30.9
					77.0	25.9	18.9	28.4



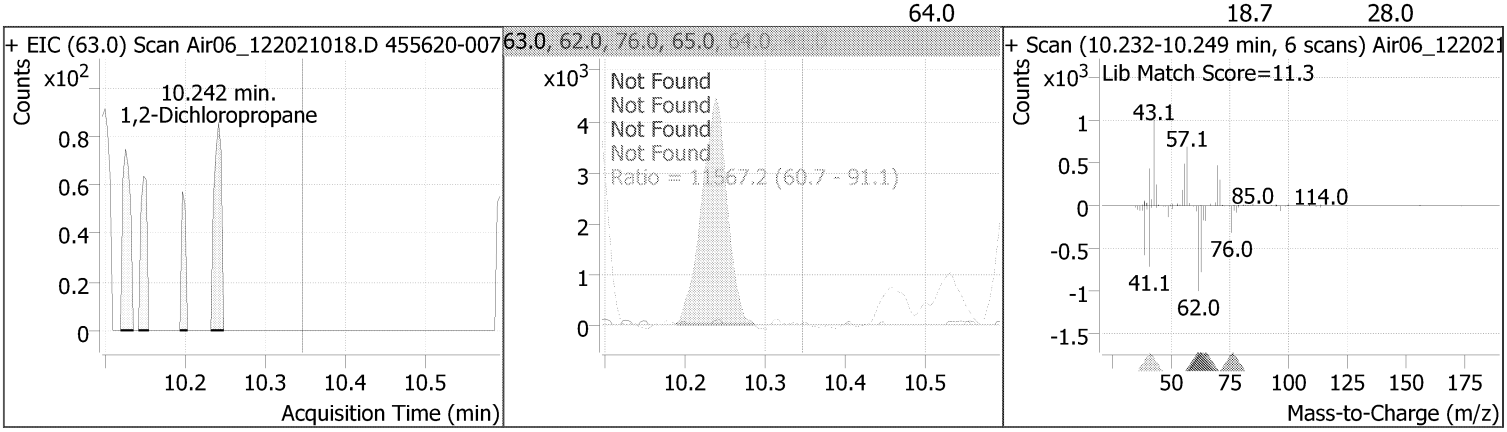
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	0.0221	9.75	0.00	2606	119.0	104.8	76.8	115.2
					121.0	36.2	24.6	36.9
					47.0	26.1	20.6	30.8
					82.0	31.6	20.1	30.1



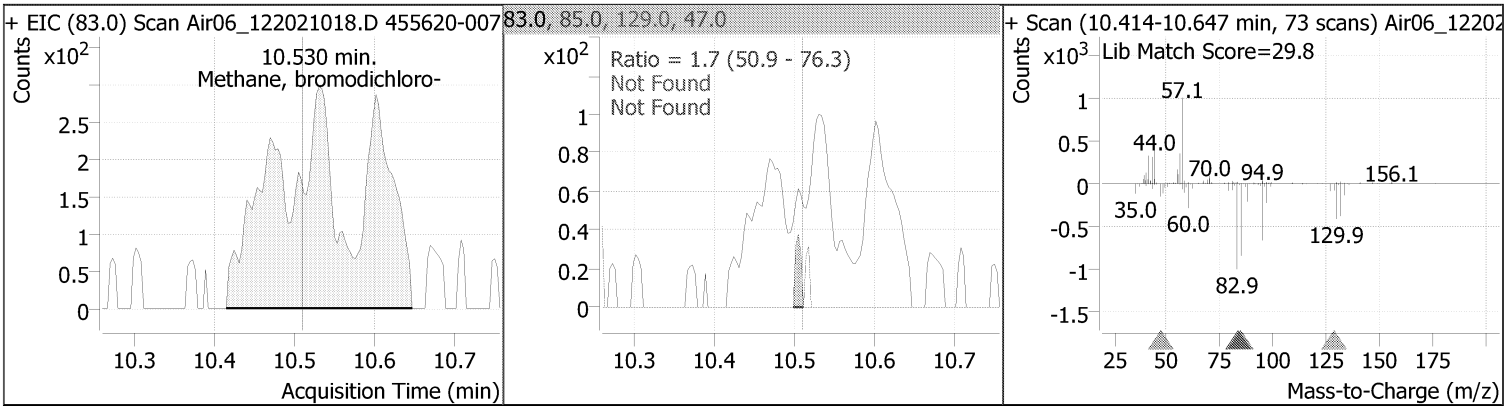
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.0749	9.89	0.01	3580	56.0	1018.9	143.8	215.7
					41.0	40.0	86.9	130.3
					55.0	184.5	54.0	81.1
					69.0	1098.5	38.3	57.4



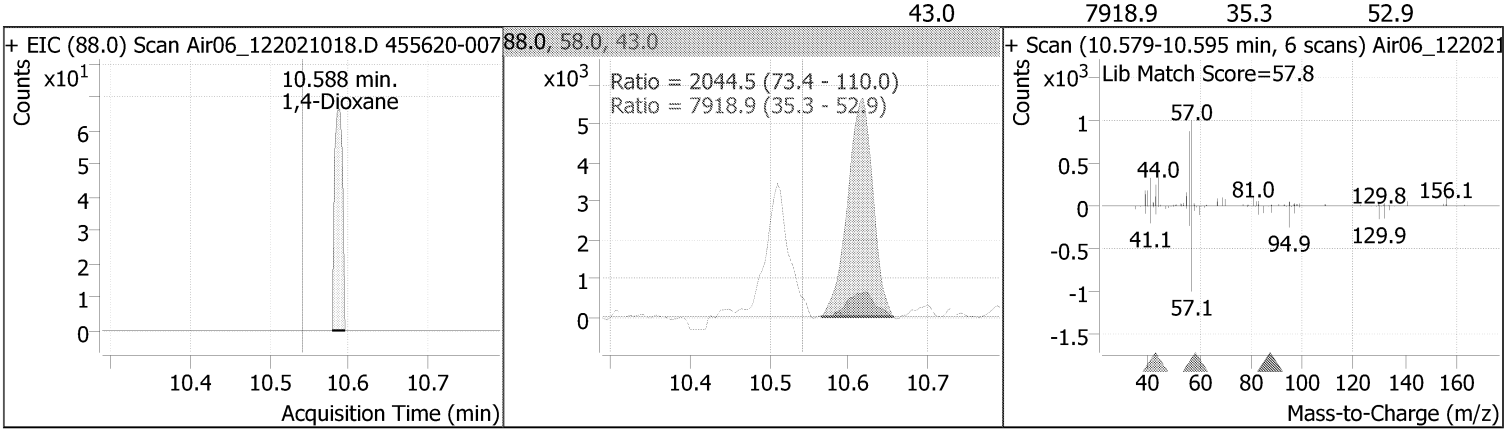
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.0011	10.24	-0.10	56	41.0	11567.2	60.7	91.1
					62.0		55.7	83.6
					76.0		35.7	53.6
					65.0		23.3	35.0
					64.0		18.7	28.0



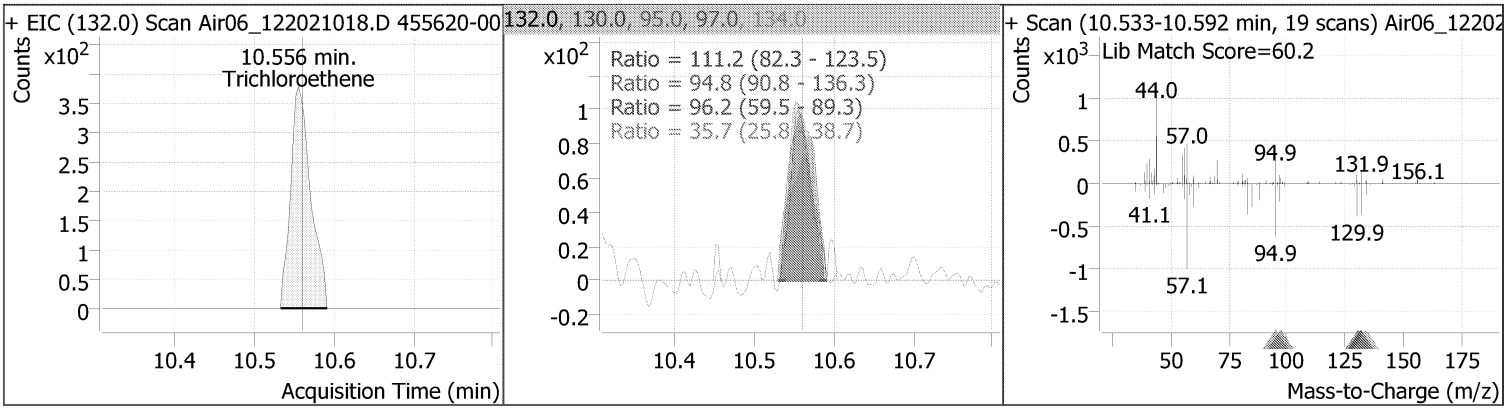
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	0.0202	10.53	0.02	2178	85.0	1.7	50.9	76.3
					47.0		19.9	29.9
					129.0		9.1	13.7



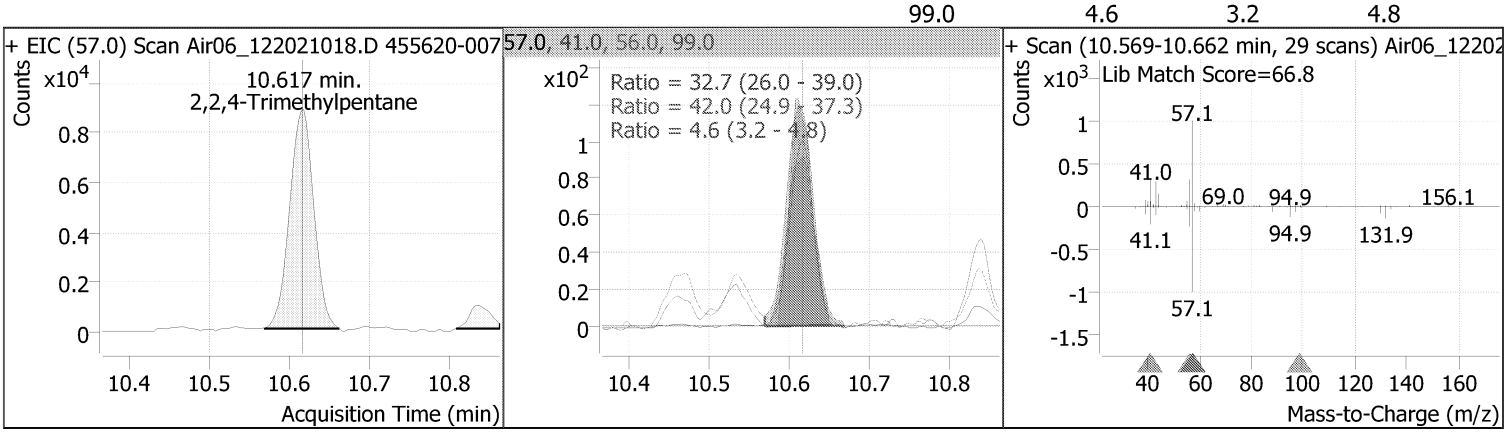
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.0018	10.59	0.05	46	58.0	2044.5	73.4	110.0
					43.0	7918.9	35.3	52.9



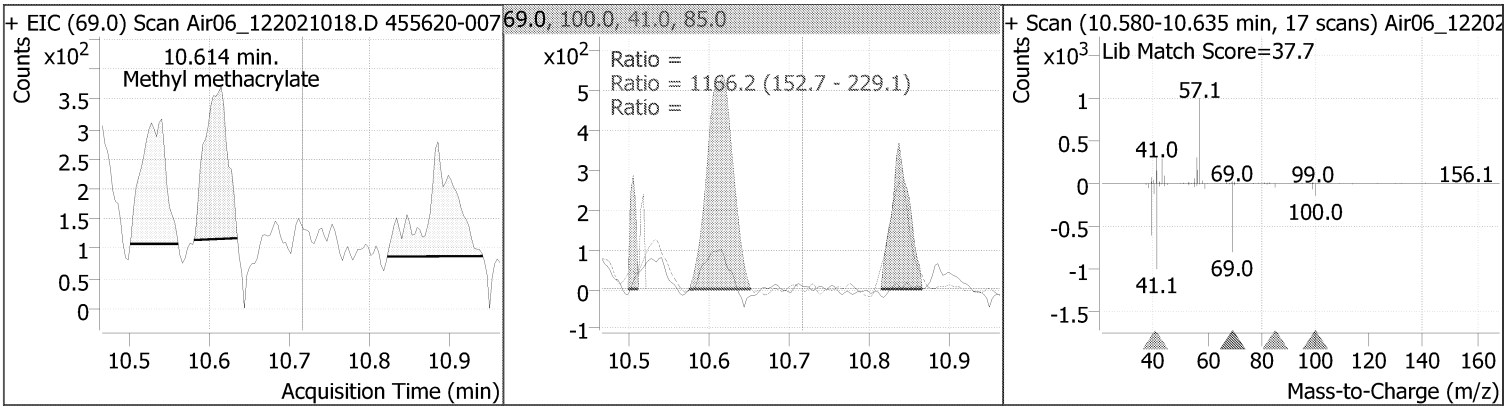
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.0126	10.56	0.00	664	95.0	94.8	90.8	136.3
					130.0	111.2	82.3	123.5
					97.0	96.2	59.5	89.3
					134.0	35.7	25.8	38.7



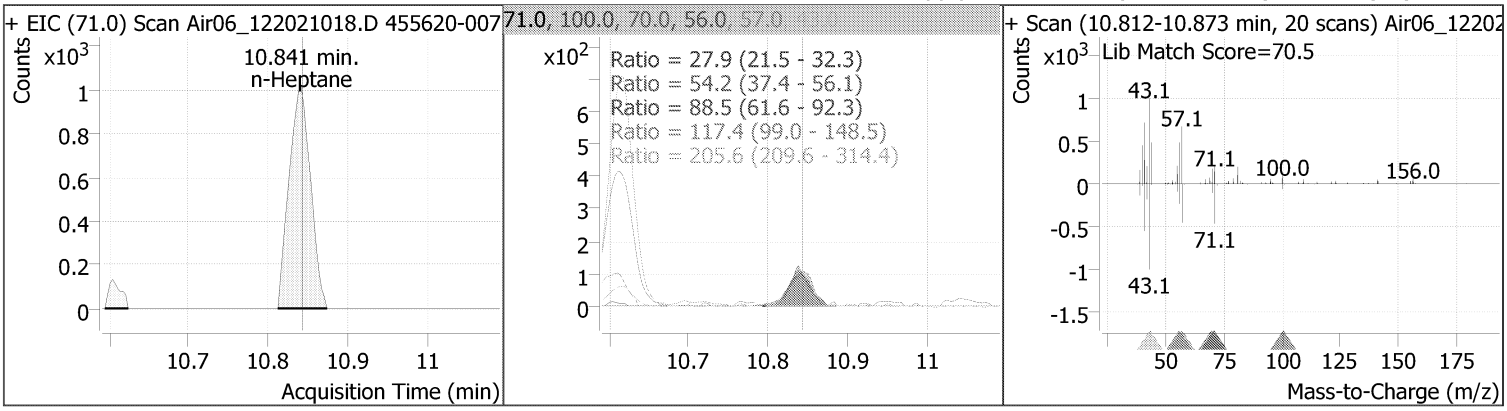
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.0750	10.62	0.00	18664	41.0	32.7	26.0	39.0
					56.0	42.0	24.9	37.3
					99.0	4.6	3.2	4.8



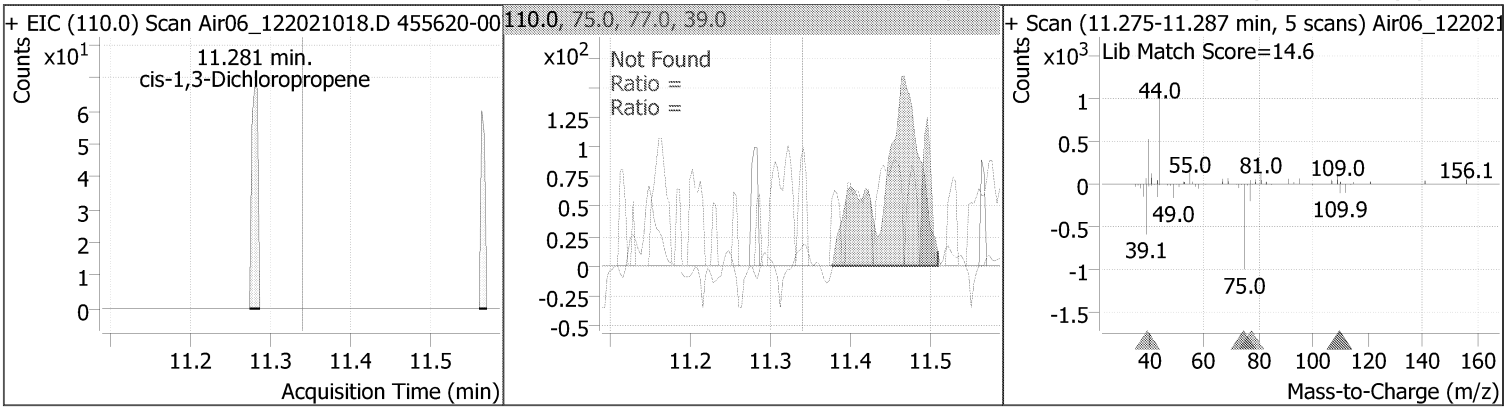
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	0.0119	10.61	-0.10	508	41.0	1166.2	152.7	229.1
					100.0		29.1	43.6
					85.0		7.9	11.8



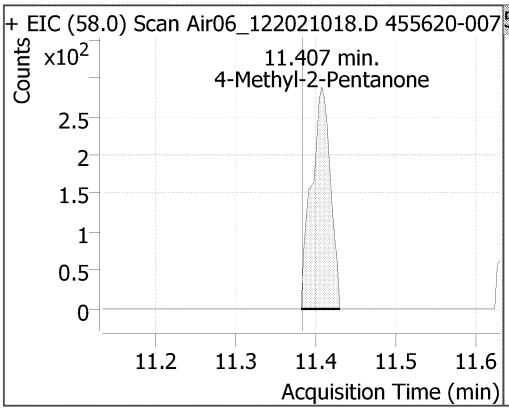
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	0.0489	10.84	0.00	1894	43.0	205.6	209.6	314.4
					57.0	117.4	99.0	148.5
					56.0	88.5	61.6	92.3
					70.0	54.2	37.4	56.1
					100.0	27.9	21.5	32.3

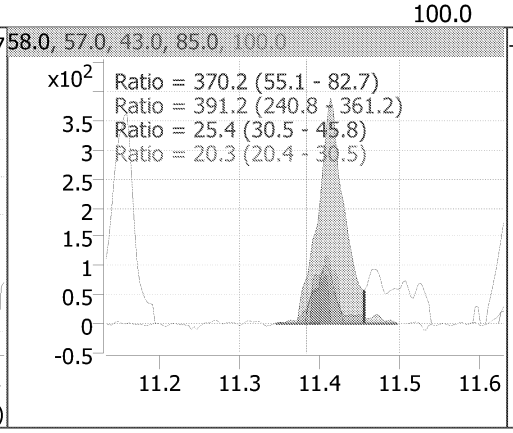


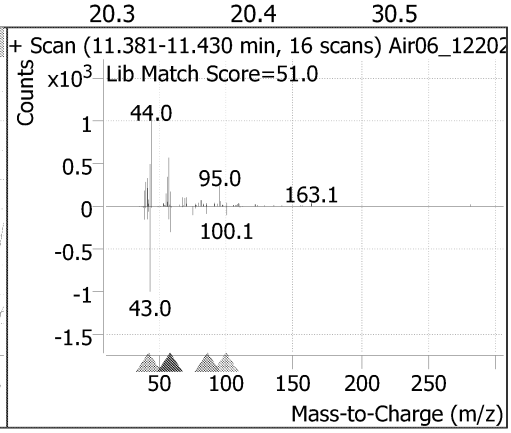
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	0.0024	11.28	-0.06	37	75.0		375.4	563.1
					39.0		296.4	444.6
					77.0		119.7	179.5



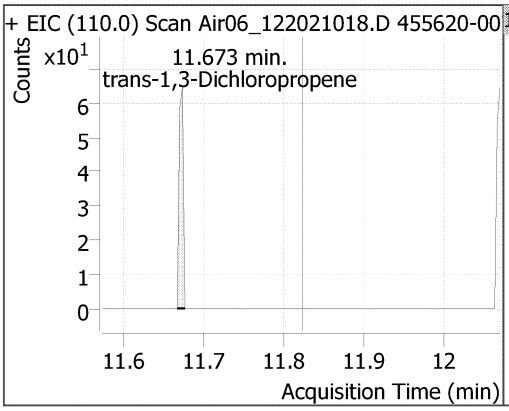
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.0103	11.41	0.03	474	43.0	391.2	240.8	361.2
					57.0	370.2	55.1	82.7
					85.0	25.4	30.5	45.8
					100.0	20.3	20.4	30.5

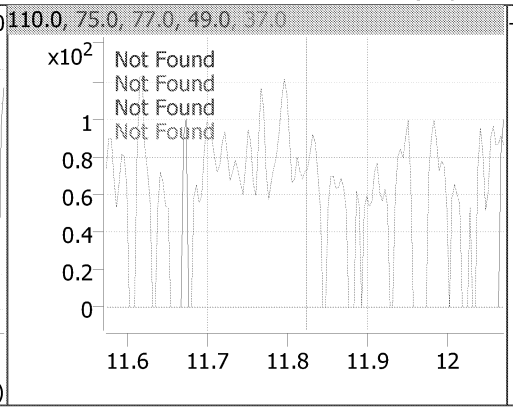


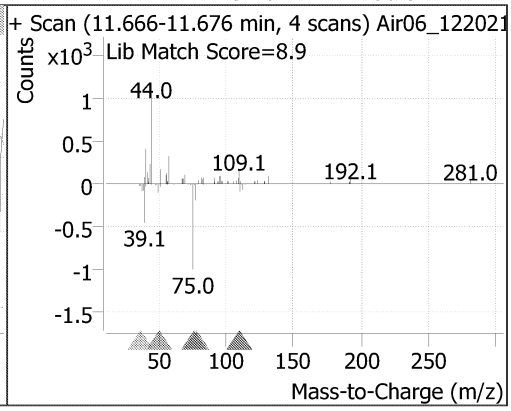




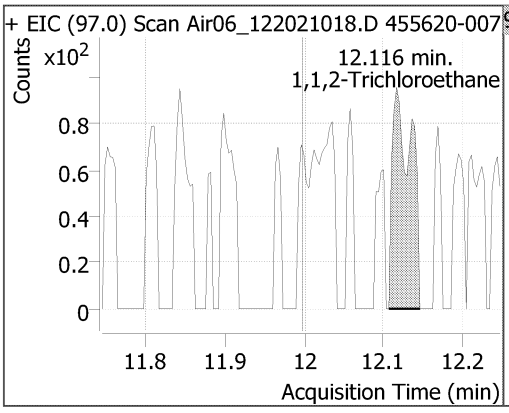
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	0.0015	11.67	-0.15	24	75.0		378.9	568.4
					77.0		118.6	177.9
					49.0		106.8	160.1
					37.0		57.6	86.5

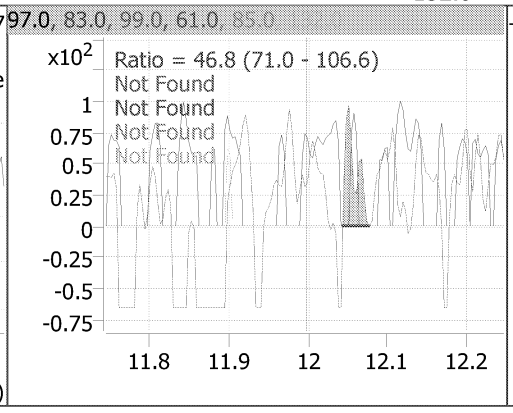


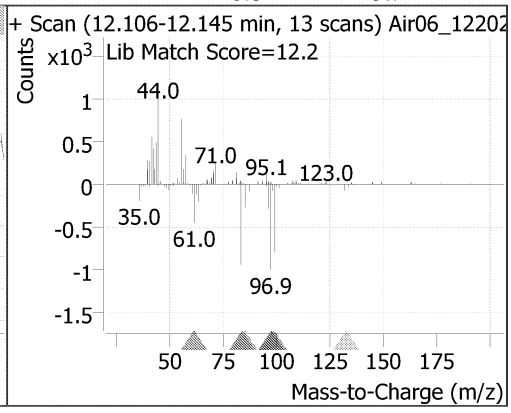




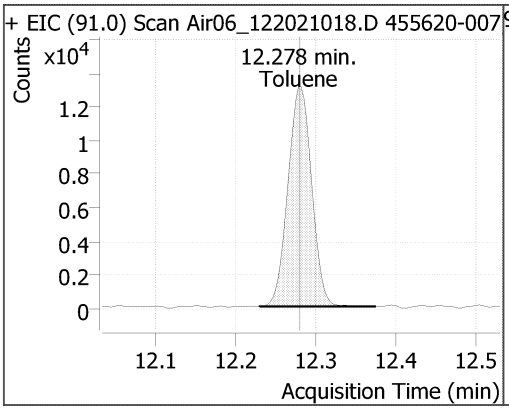
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	0.0031	12.12	0.12	158	83.0	46.8	71.0	106.6
					61.0		69.2	103.9
					99.0		49.9	74.9
					85.0		46.4	69.6
					132.0		6.5	9.7

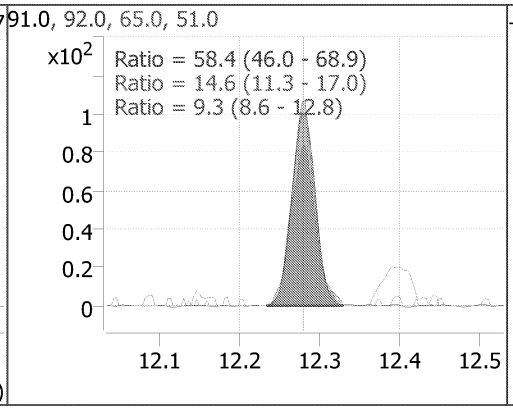


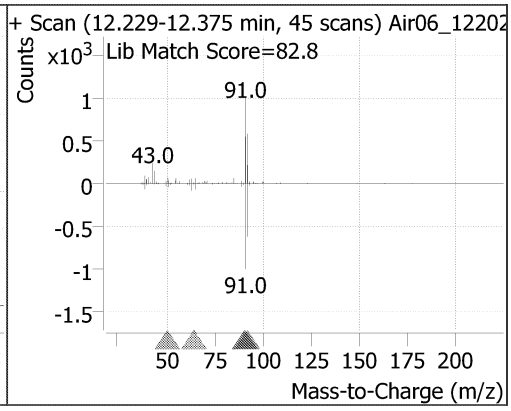




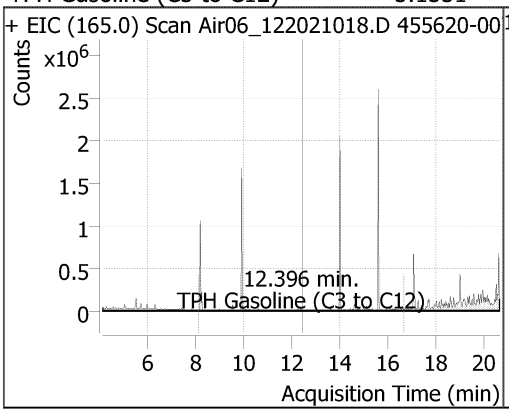
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.1836	12.28	0.00	27184	92.0	58.4	46.0	68.9
					65.0	14.6	11.3	17.0
					51.0	9.3	8.6	12.8

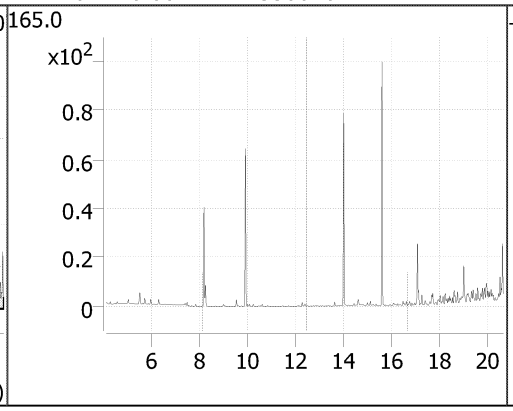


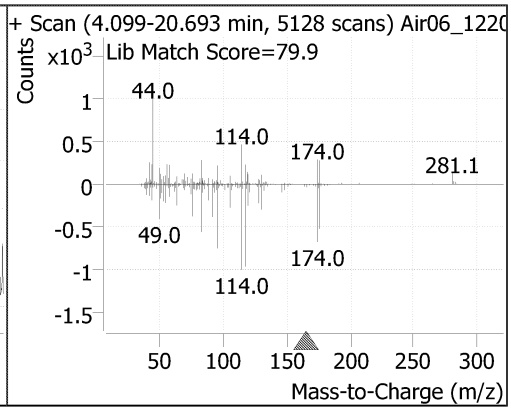




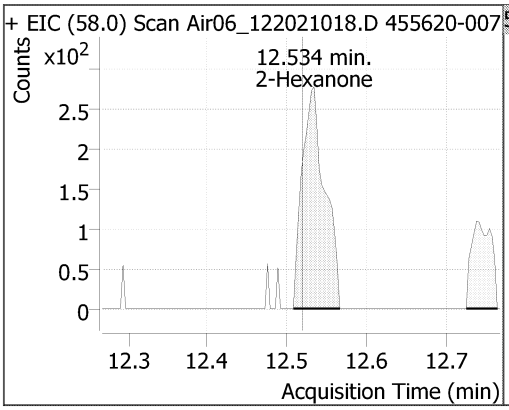
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	3.1331	12.40	0.00	33804814				

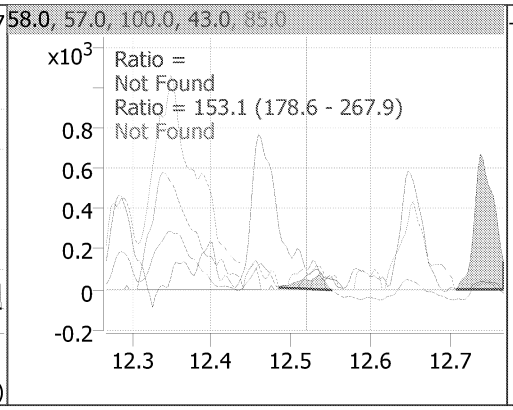


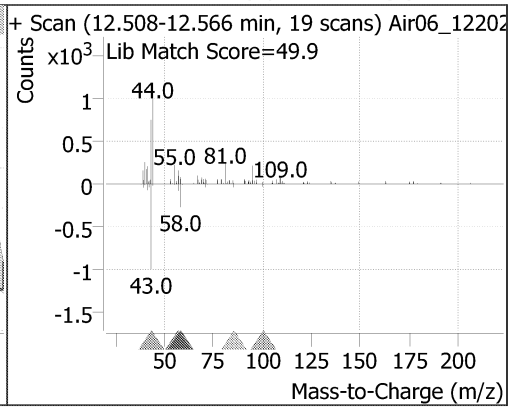




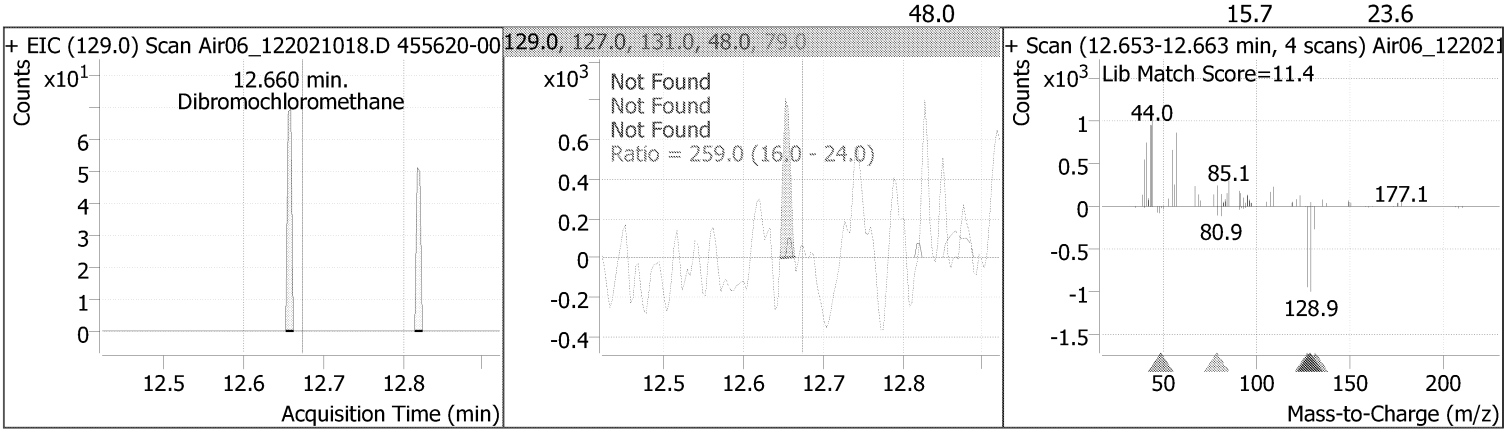
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.0096	12.53	0.02	551	43.0	153.1	178.6	267.9
					57.0		30.3	45.4
					100.0		11.5	17.3
					85.0		10.6	15.9



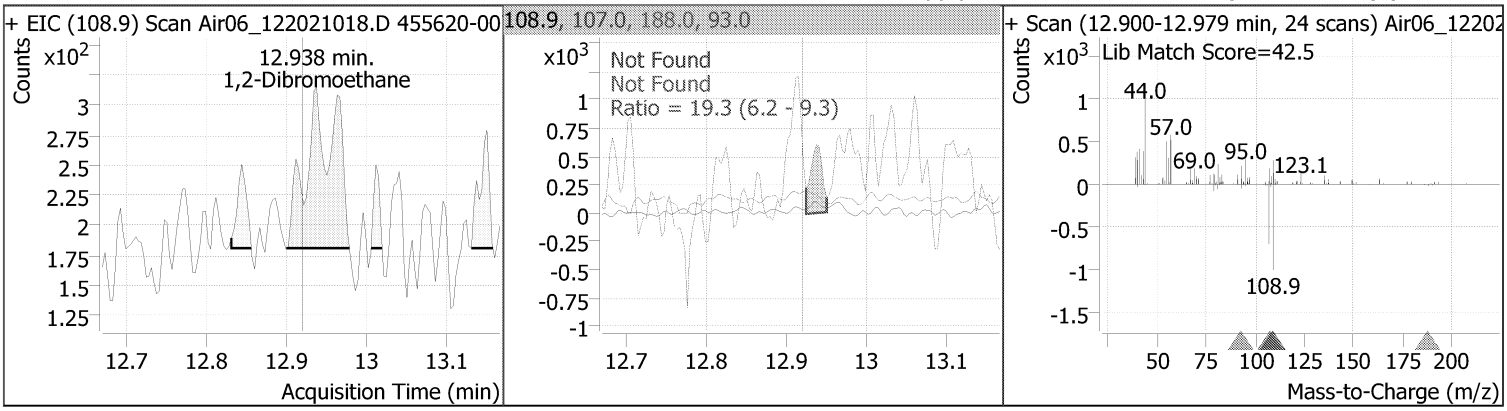




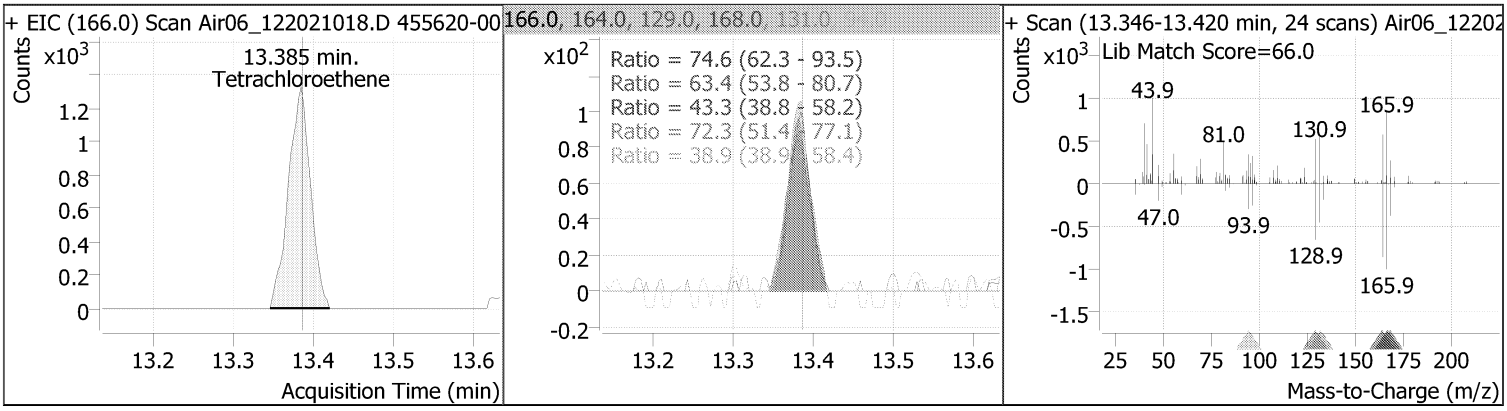
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.0003	12.66	-0.01	27	127.0		61.8	92.7
					131.0		19.2	28.8
					79.0	259.0	16.0	24.0
					48.0		15.7	23.6



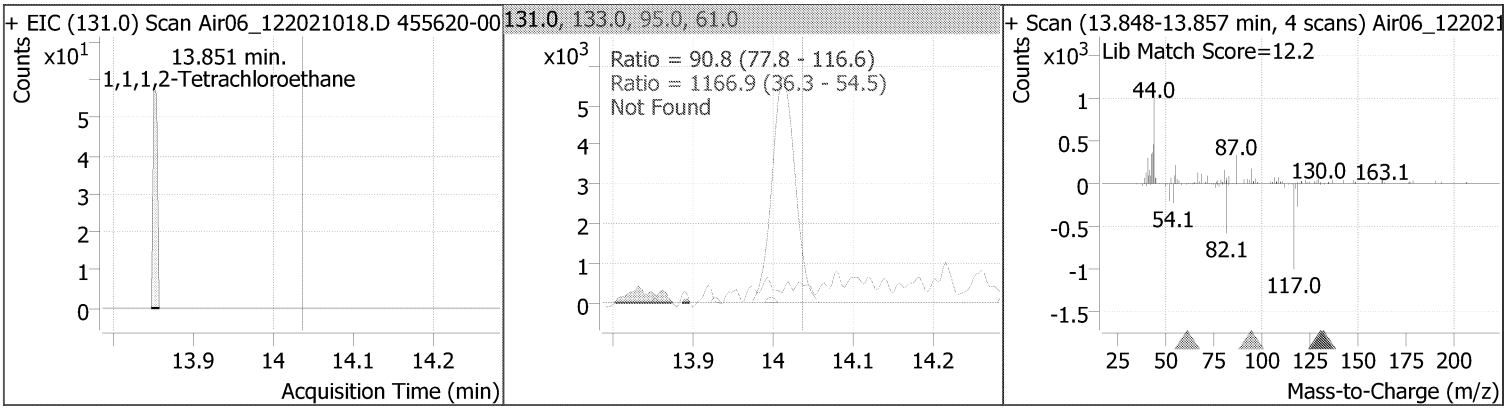
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.0043	12.94	0.02	338	107.0		85.3	127.9
					93.0	19.3	6.2	9.3
					188.0		3.7	5.5



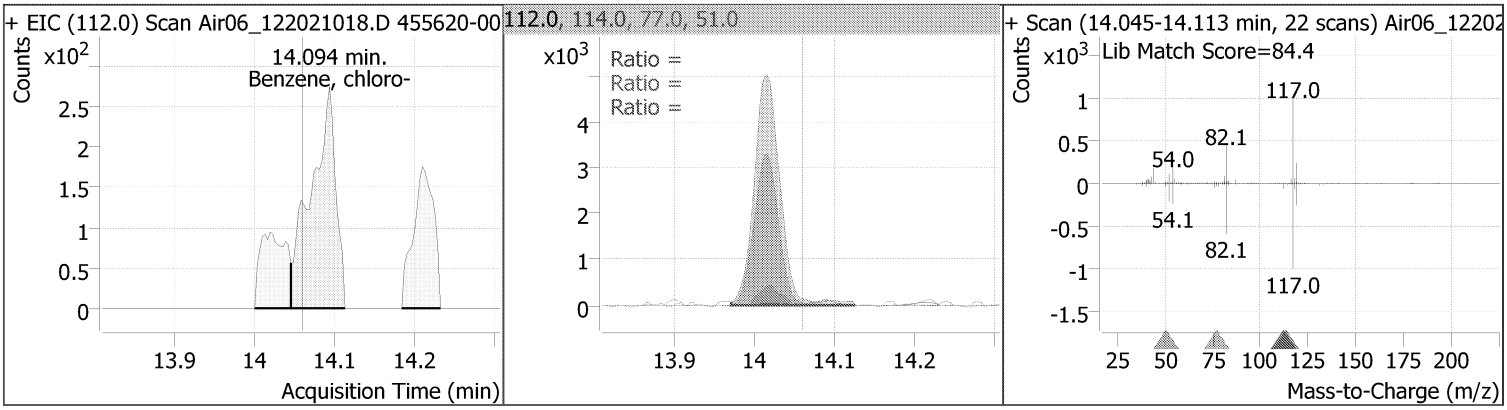
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.0293	13.38	0.00	2543	164.0	74.6	62.3	93.5
					129.0	63.4	53.8	80.7
					131.0	72.3	51.4	77.1
					94.0	38.9	38.9	58.4
					168.0	43.3	38.8	58.2



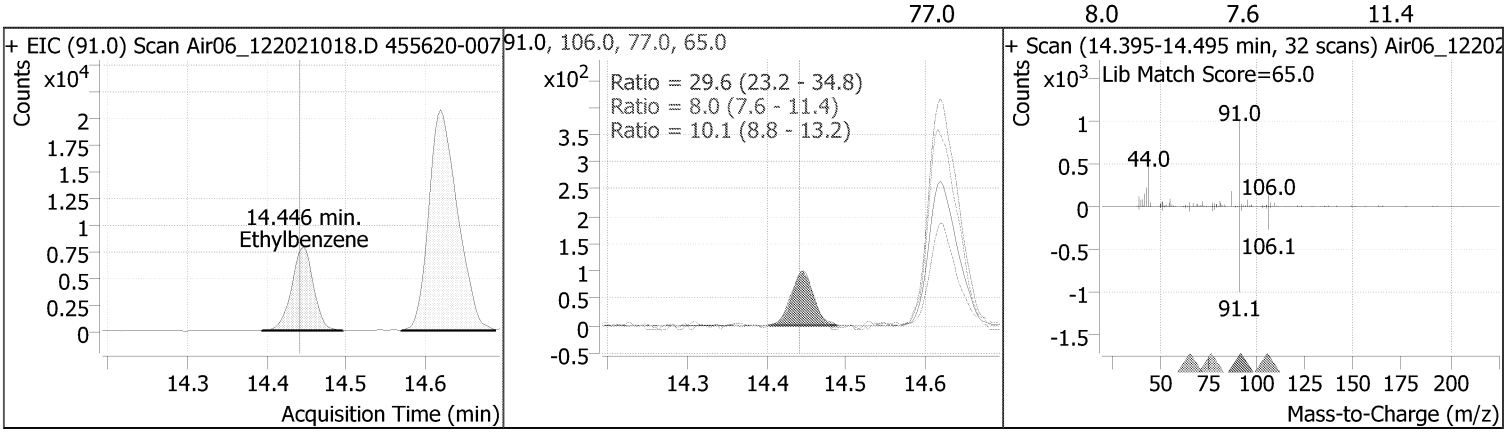
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	0.0004	13.85	-0.19	22	133.0	90.8	77.8	116.6
					95.0	1166.9	36.3	54.5
					61.0		30.4	45.6



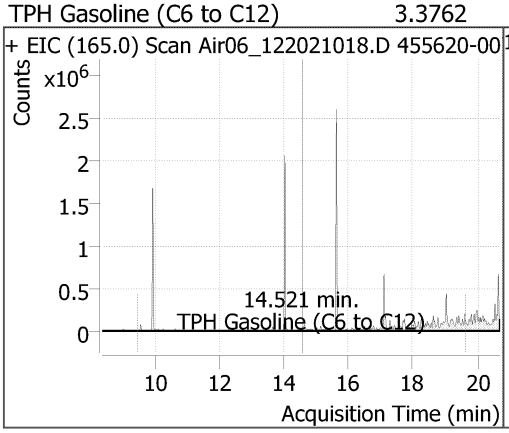
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0055	14.09	0.03	593	77.0		53.0	79.5
					51.0		28.8	43.2
					114.0		25.8	38.7

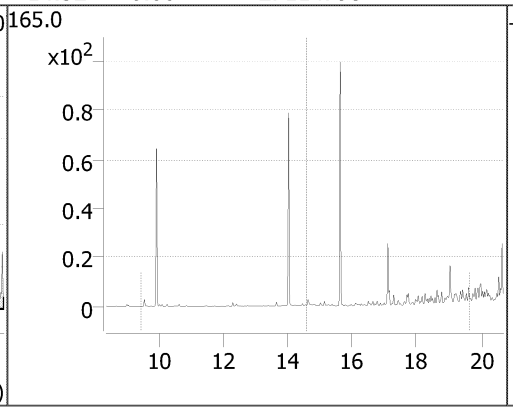


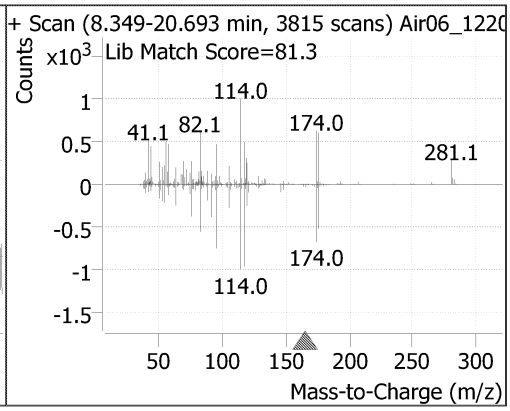
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.0853	14.45	0.00	14905	106.0	29.6	23.2	34.8
					65.0	10.1	8.8	13.2
					77.0	8.0	7.6	11.4



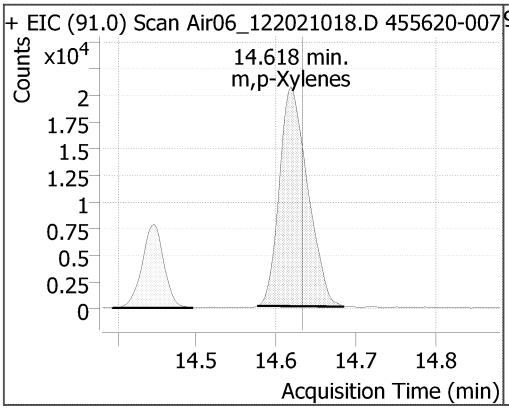
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	3.3762	14.52	0.00	27114795				

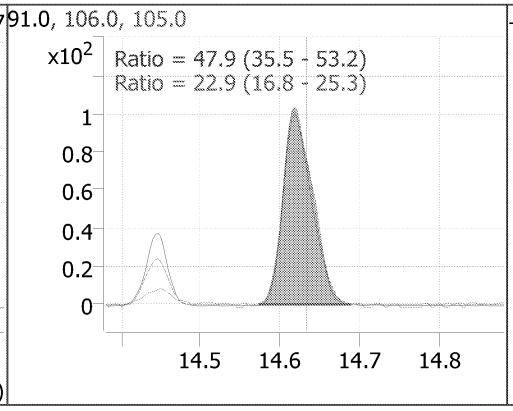


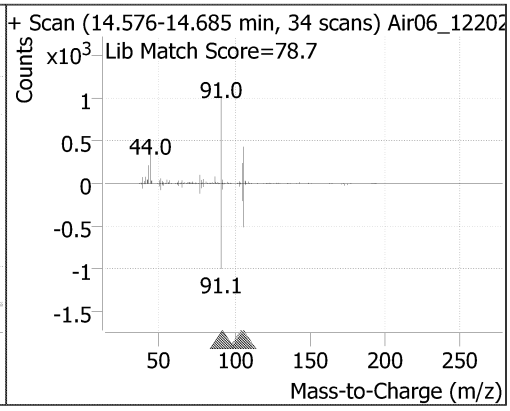




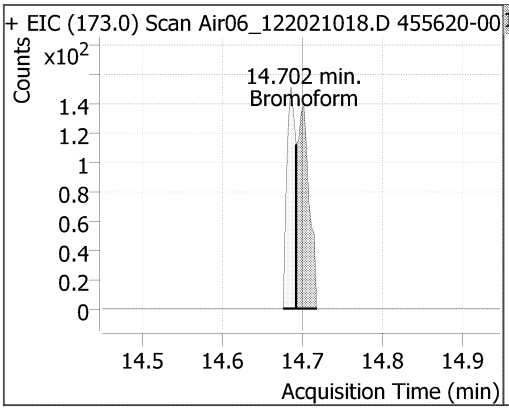
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	0.3450	14.62	-0.02	50868	106.0	47.9	35.5	53.2
					105.0	22.9	16.8	25.3

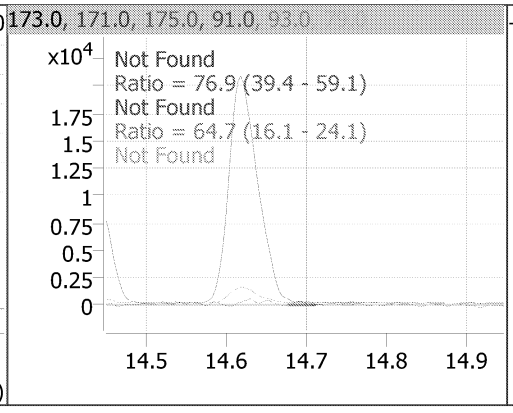


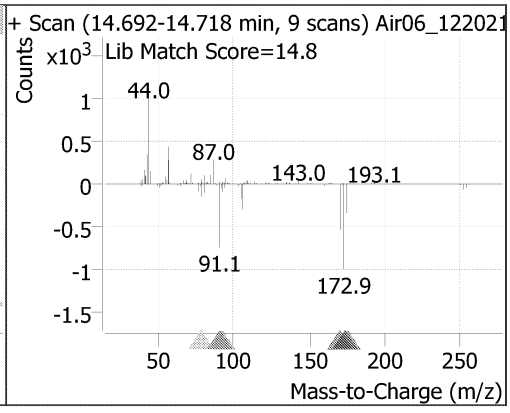




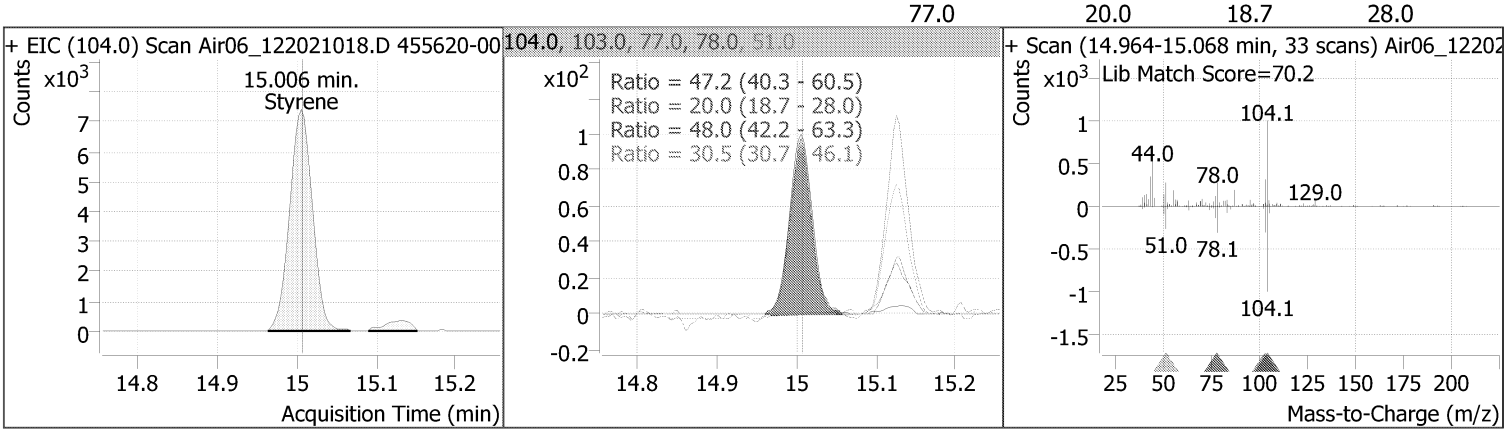
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.0012	14.70	0.00	143	171.0		41.2	61.9
					175.0	76.9	39.4	59.1
					79.0		17.7	26.5
					93.0	64.7	16.1	24.1
					91.0		15.7	23.6



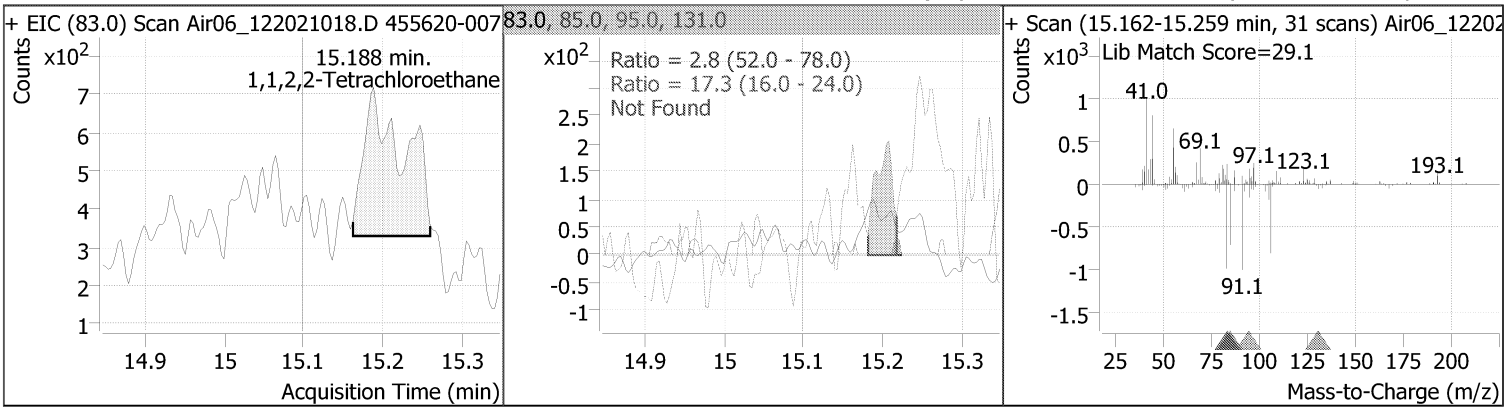




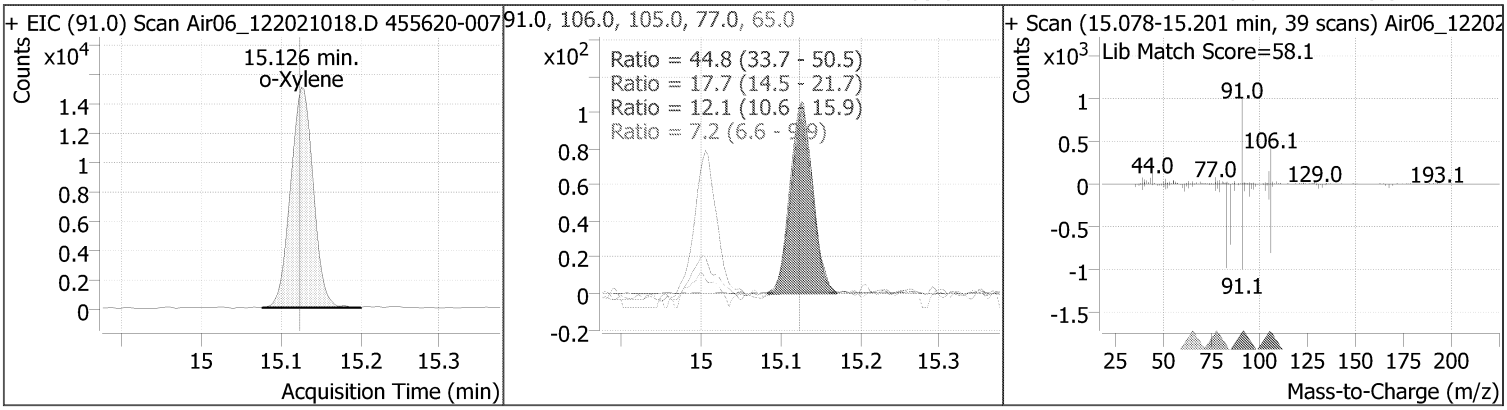
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	0.1498	15.01	0.00	14798	78.0	48.0	42.2	63.3
					103.0	47.2	40.3	60.5
					51.0	30.5	30.7	46.1
					77.0	20.0	18.7	28.0



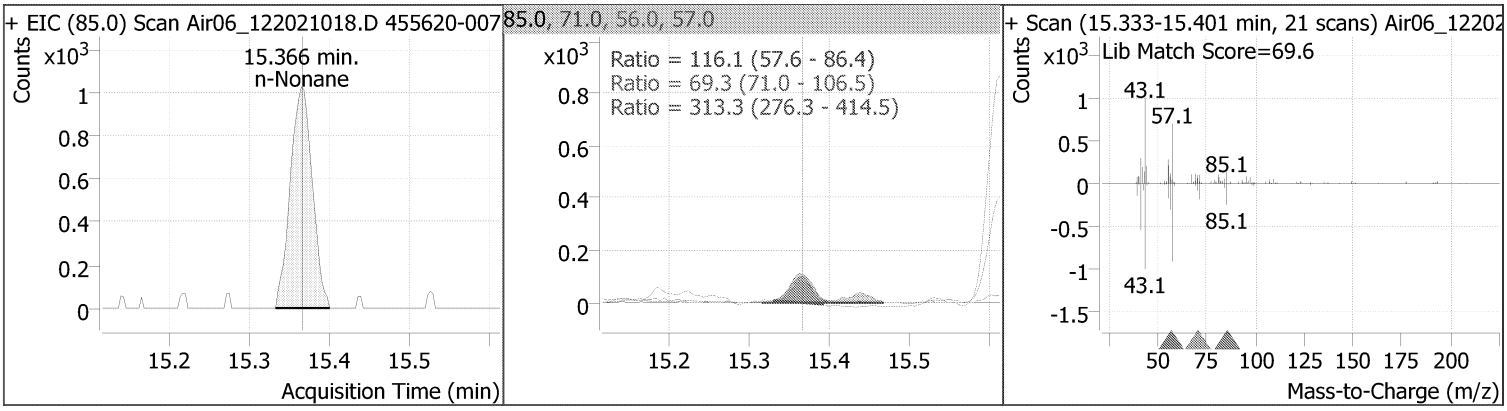
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.0127	15.19	0.09	1343	85.0	2.8	52.0	78.0
					95.0	17.3	16.0	24.0
					131.0		8.4	12.6



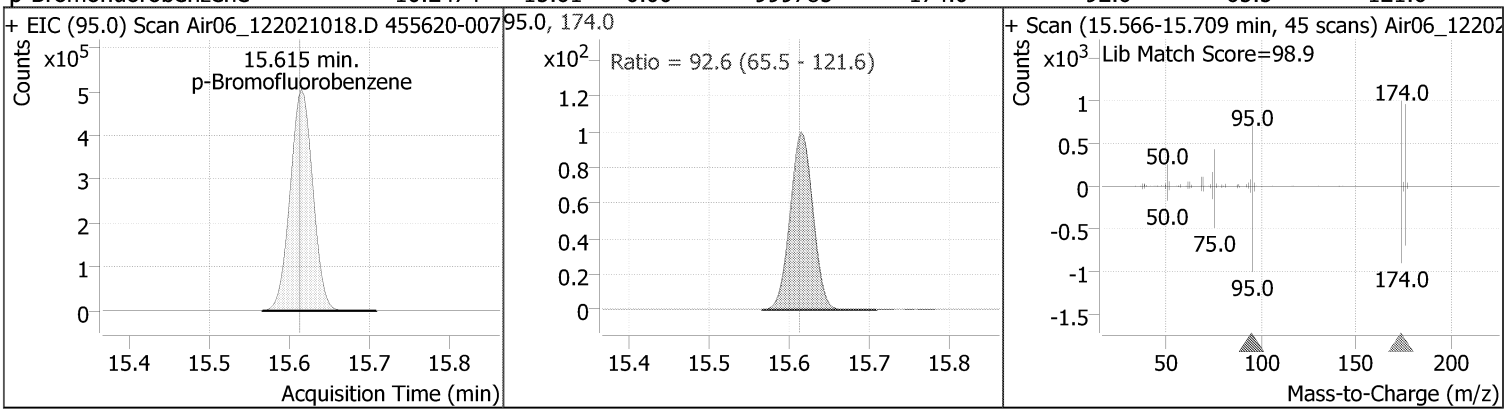
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.1933	15.13	0.00	29583	106.0	44.8	33.7	50.5
					105.0	17.7	14.5	21.7
					77.0	12.1	10.6	15.9
					65.0	7.2	6.6	9.9



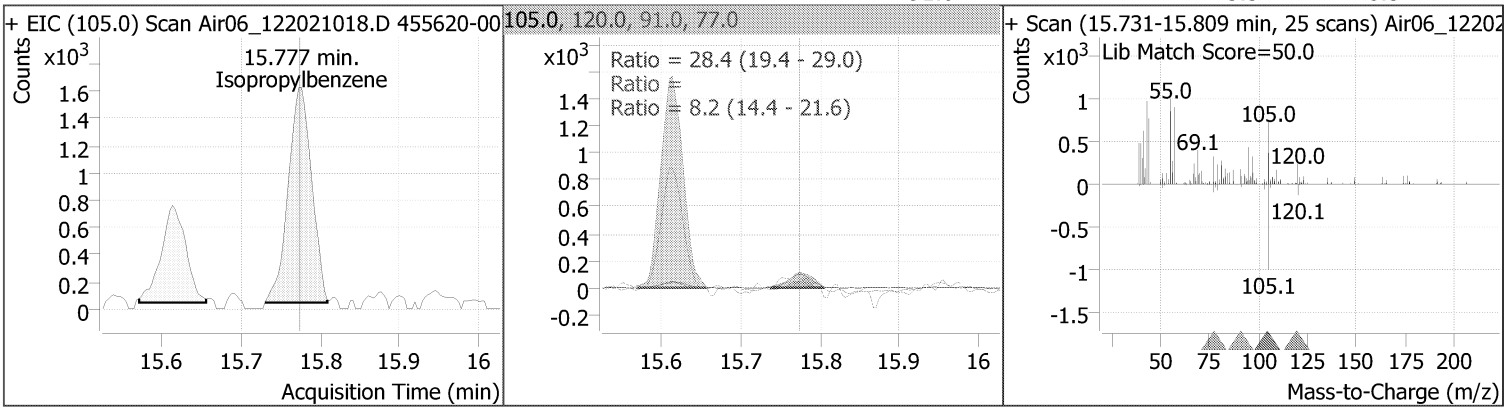
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	0.0633	15.37	0.00	1977	57.0	313.3	276.3	414.5
					56.0	69.3	71.0	106.5
					71.0	116.1	57.6	86.4



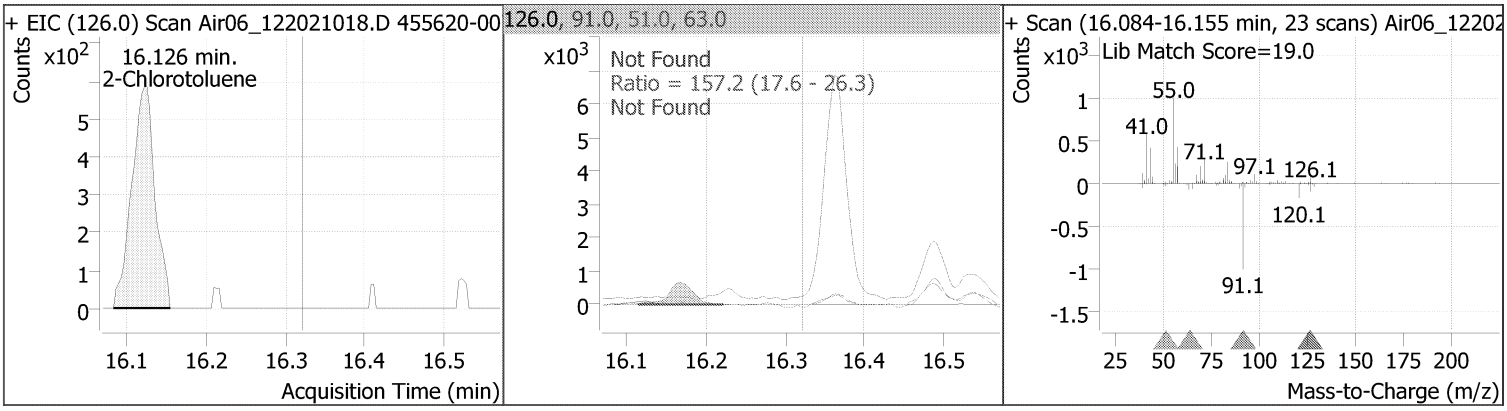
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.2474	15.61	0.00	999785	174.0	92.6	65.5	121.6



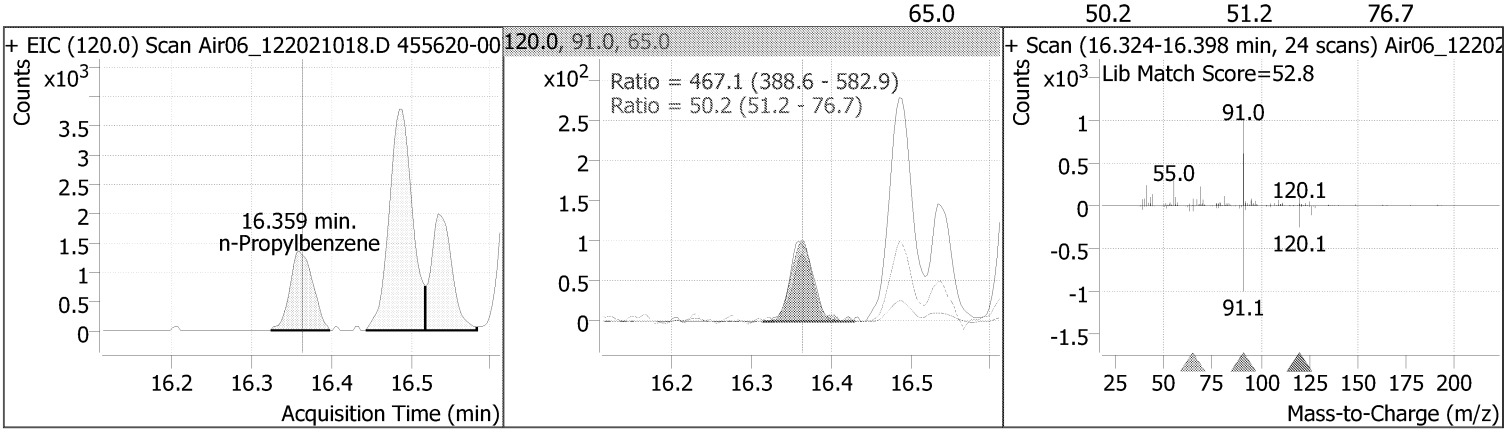
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.0157	15.78	0.00	3252	120.0	28.4	19.4	29.0
					77.0	8.2	14.4	21.6
					91.0		5.5	8.3



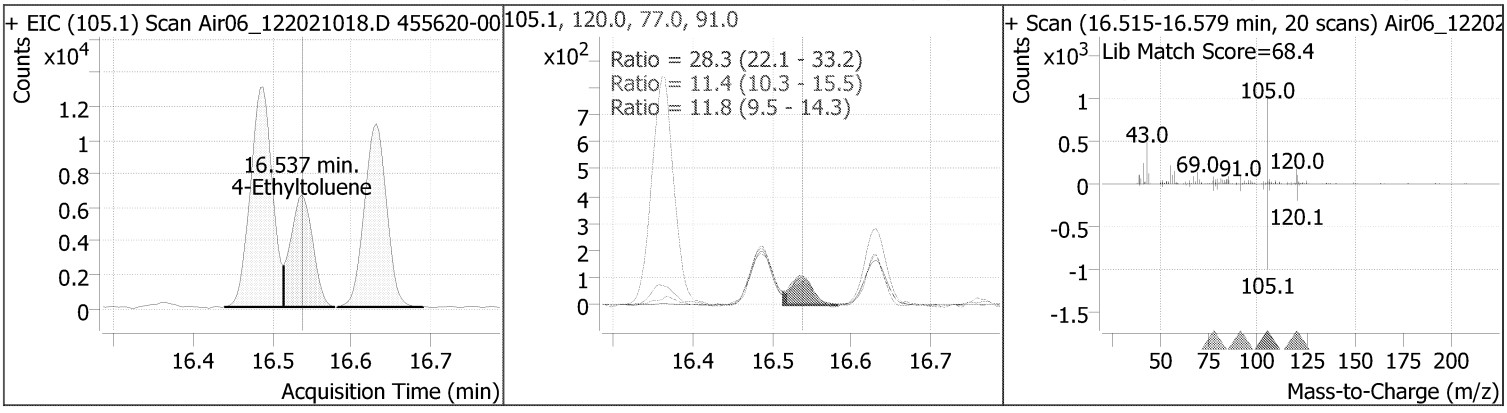
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	0.0257	16.13	-0.20	1191	91.0		244.6	366.9
					63.0		50.0	74.9
					51.0	157.2	17.6	26.3



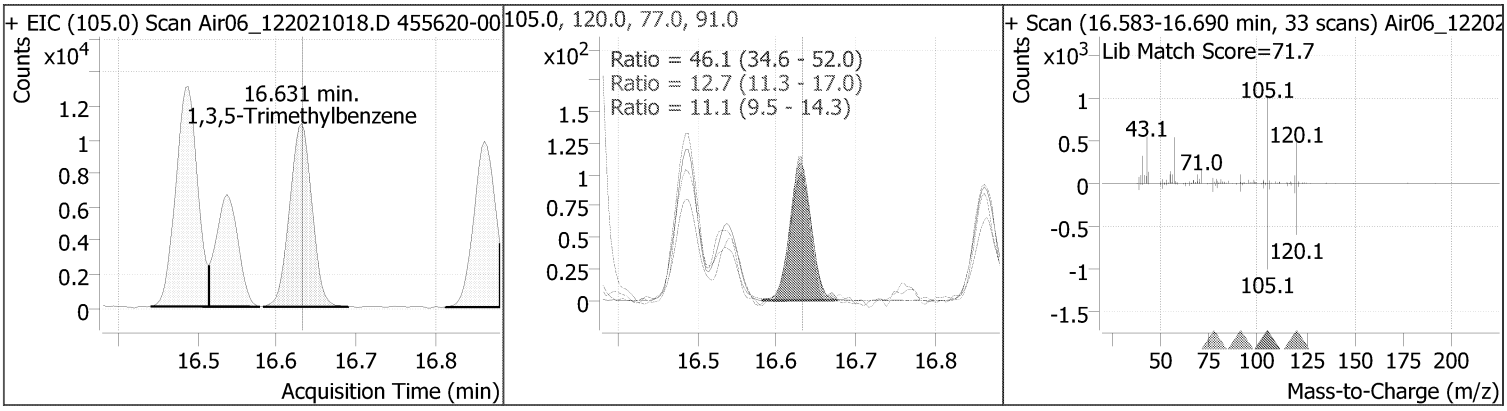
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.0526	16.36	-0.01	2753	91.0	467.1	388.6	582.9
					65.0	50.2	51.2	76.7



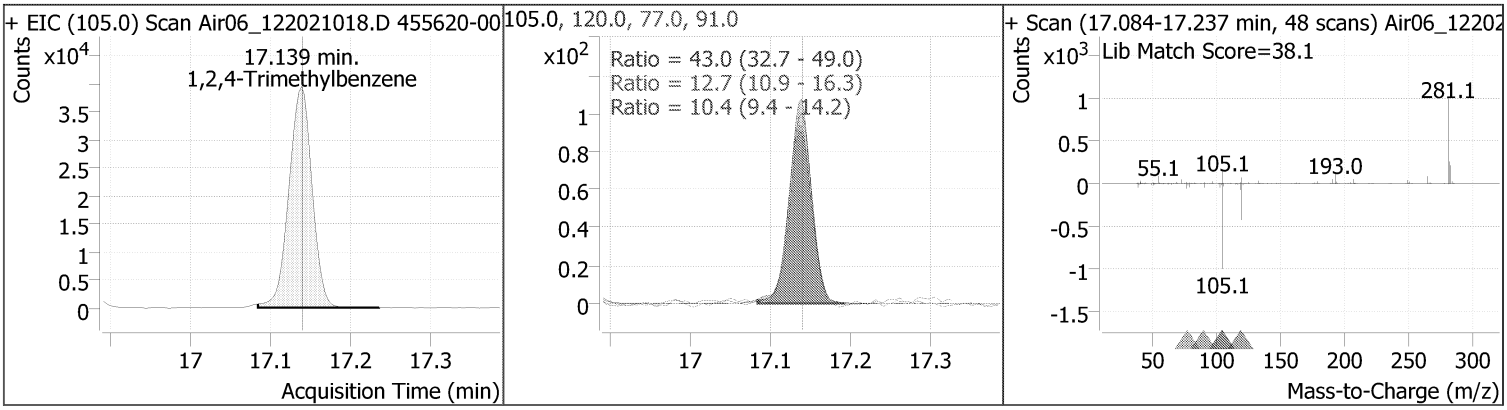
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.0653	16.54	0.00	12883	120.0	28.3	22.1	33.2
					77.0	11.4	10.3	15.5
					91.0	11.8	9.5	14.3



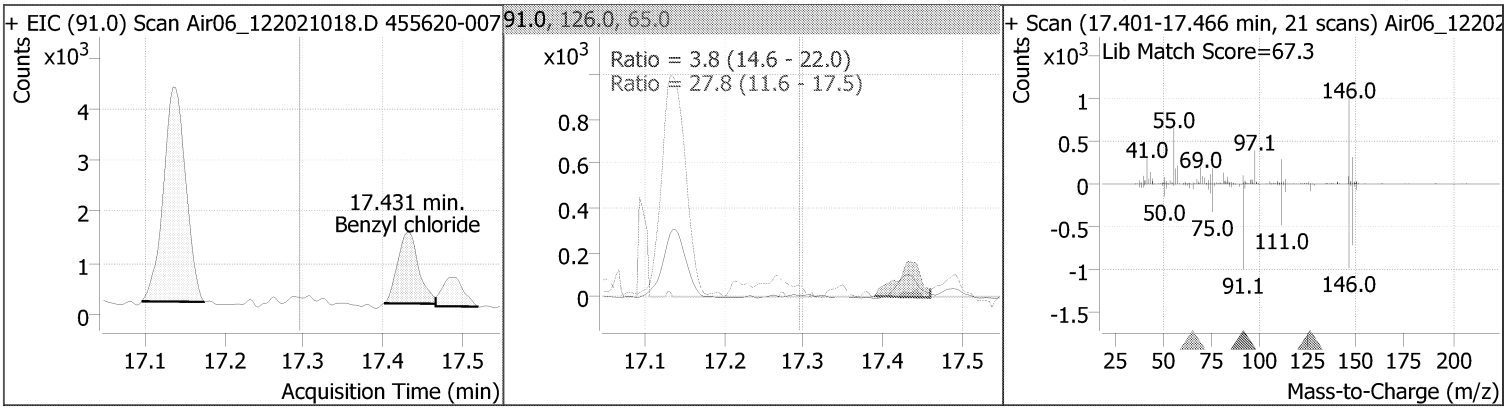
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.1184	16.63	0.00	21263	120.0	46.1	34.6	52.0
					77.0	12.7	11.3	17.0
					91.0	11.1	9.5	14.3



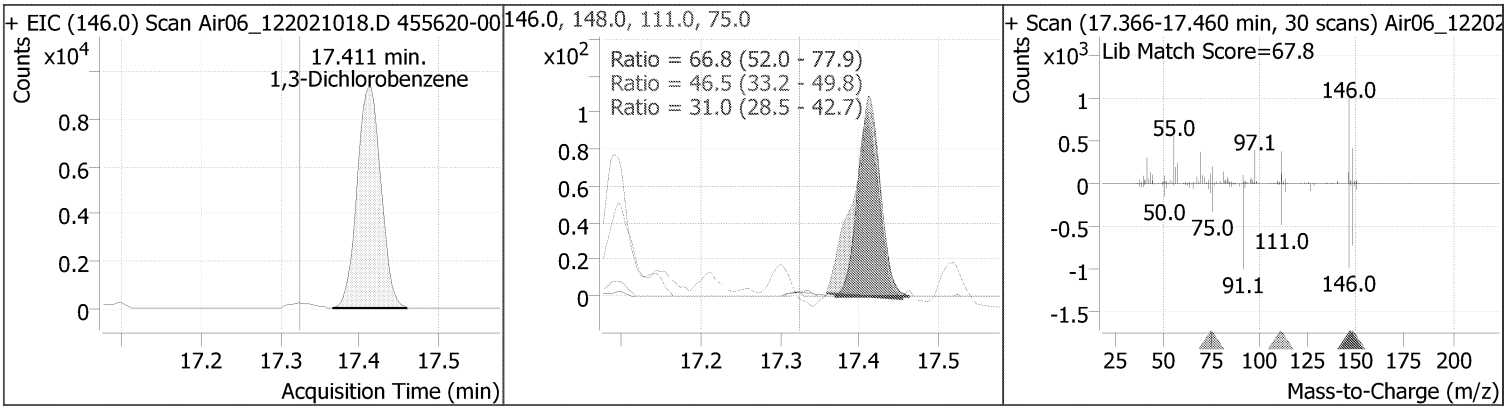
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	0.4768	17.14	0.00	80094	120.0	43.0	32.7	49.0
					77.0	12.7	10.9	16.3
					91.0	10.4	9.4	14.2



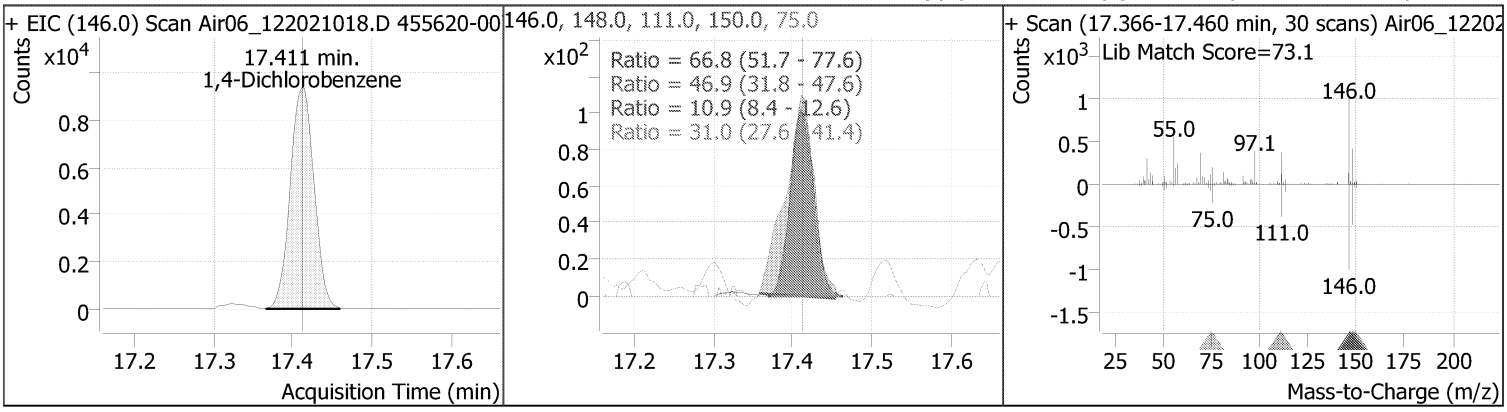
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.0176	17.43	0.13	2555	126.0	3.8	14.6	22.0
					65.0	27.8	11.6	17.5



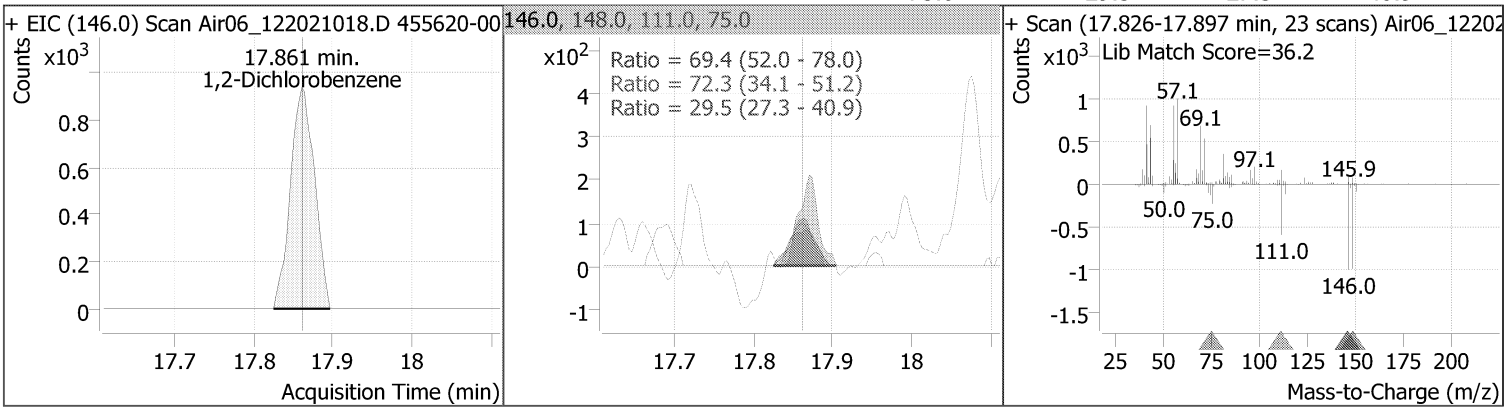
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.1680	17.41	0.08	19520	148.0	66.8	52.0	77.9
					111.0	46.5	33.2	49.8
					75.0	31.0	28.5	42.7



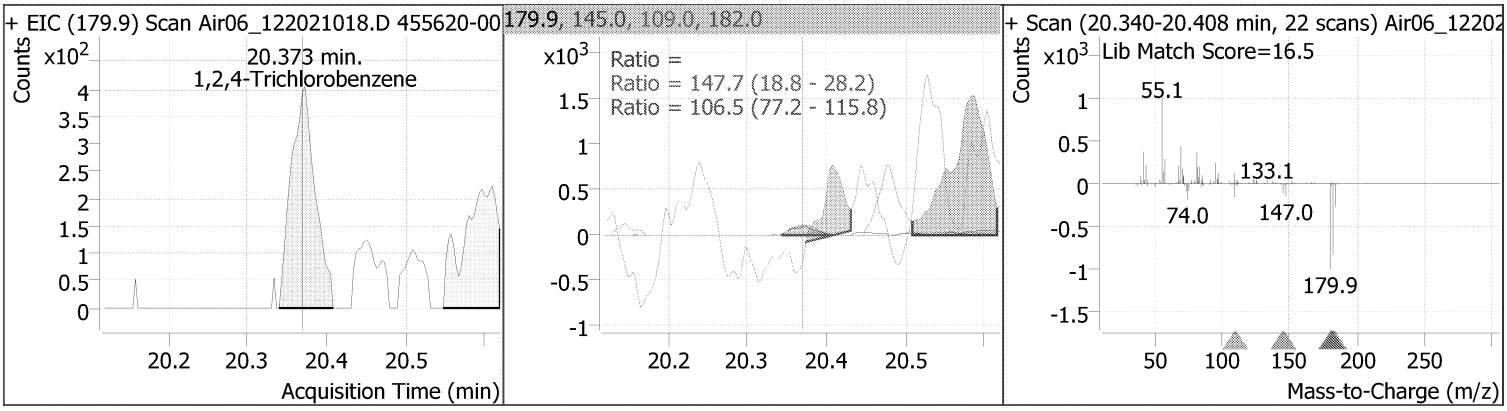
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.1702	17.41	0.00	19520	148.0	66.8	51.7	77.6
					111.0	46.9	31.8	47.6
					75.0	31.0	27.6	41.4
					150.0	10.9	8.4	12.6



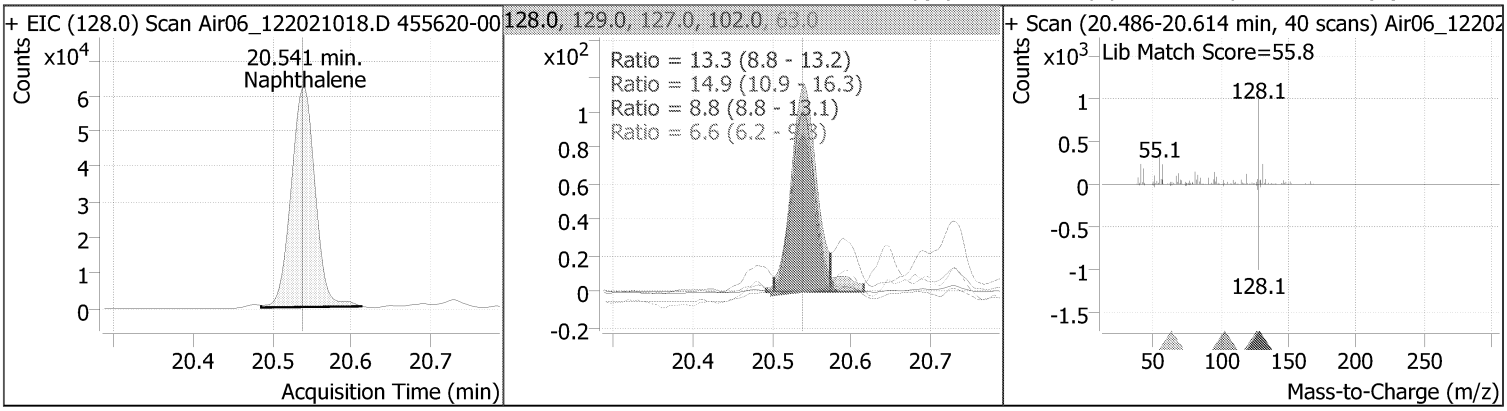
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.0176	17.86	0.00	1973	148.0	69.4	52.0	78.0
					111.0	72.3	34.1	51.2
					75.0	29.5	27.3	40.9



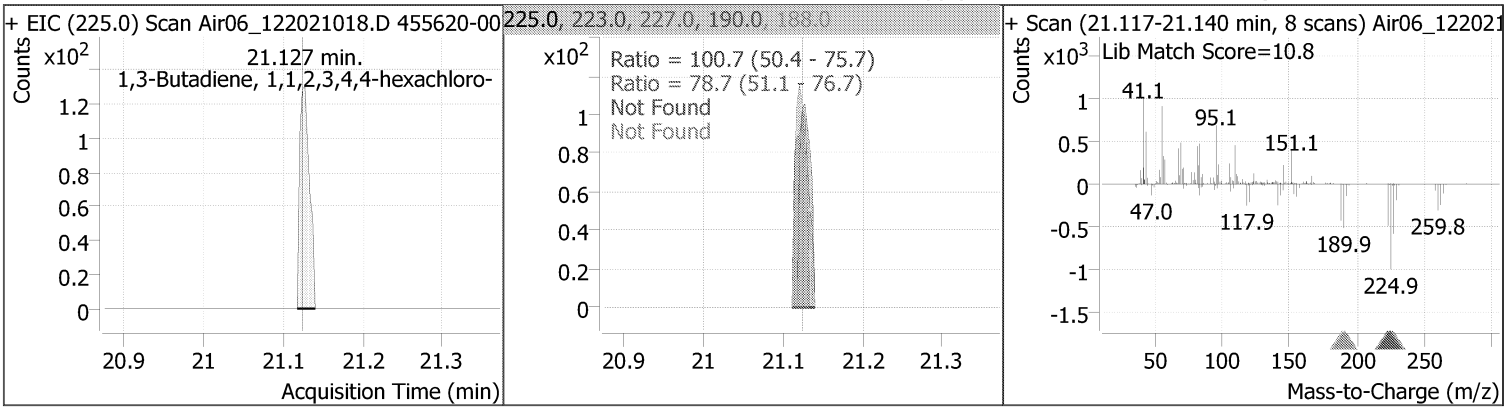
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.0107	20.37	0.00	854	182.0	106.5	77.2	115.8
					145.0		22.3	33.5
					109.0	147.7	18.8	28.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	1.0583	20.54	0.00	130914	127.0	14.9	10.9	16.3
					129.0	13.3	8.8	13.2
					102.0	8.8	8.8	13.1
					63.0	6.6	6.2	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.0009	21.13	0.00	112	227.0	78.7	51.1	76.7
					223.0	100.7	50.4	75.7
					190.0		35.3	53.0
					188.0		27.5	41.2



Library Search Results - NonTarget Hits with Details

Agilent Technologies

Batch Path	D:\MassHunter\GCMS\1\data\2021\122021		
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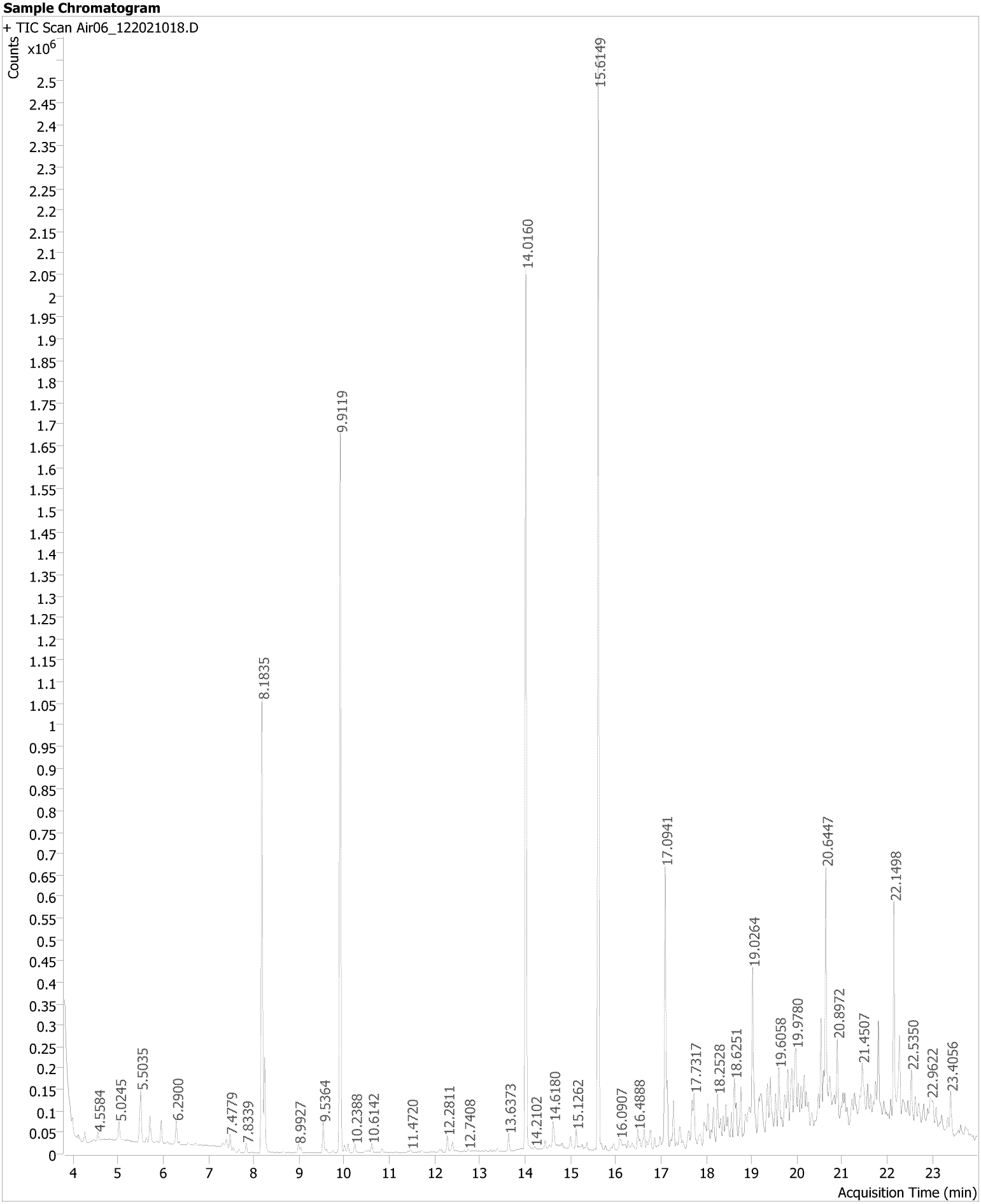
Analyst Name	003AIRMS06	**Analysis Time**	1/4/2022 11:18:48 AM
File Name	Air06_122021018.D	**Path Name**	D:\MassHunter\GCMS\1\data\2021\122021
Sample Name	455620-007,280281,2x,PDF:1,C10177	**Type**	Sample
Acq. Method File	TO15_Acq_013120_1	**Acq. Method Path**	D:\MassHunter\GCMS\1\methods\
Acq. Date-Time	12/21/2021 1:27:17 AM	**Acq. Operator**	ZNZ/DJL/LJB
Instrument Name	Air-MS-06	**Dil.**	1

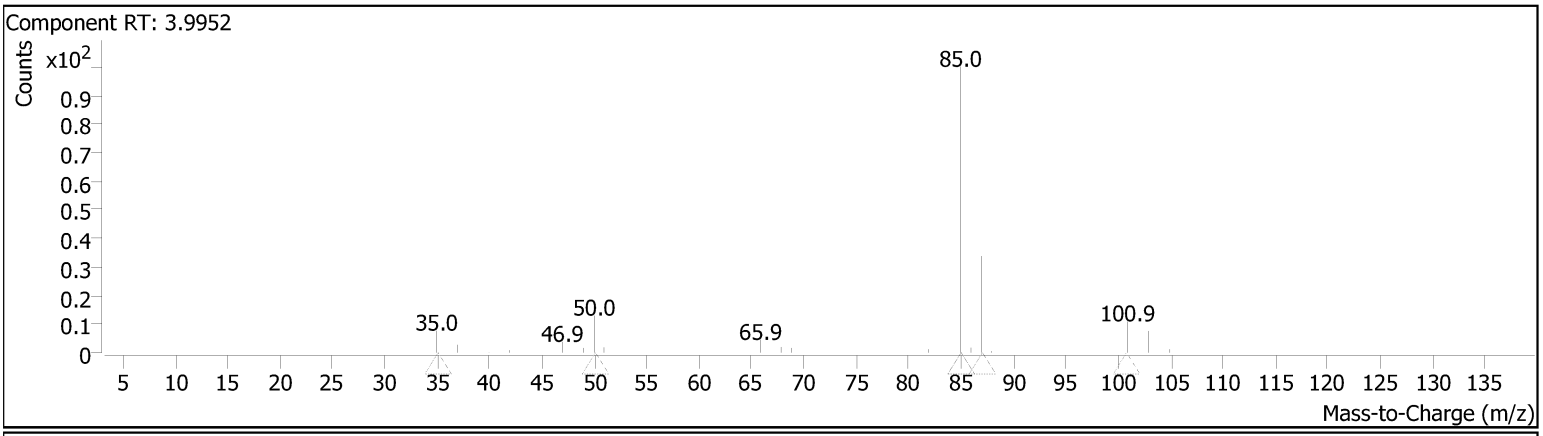
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
3.9952	Dichlorodifluoromethane	75-71-8	CCl2F2	100940.0	97.3	0.4503
4.2703	Cyclobutanol	2919-23-5	C4H8O	47609.4	85.6	0.2124
4.4678	1-Butene	106-98-9	C4H8	11147.3	75.7	0.04973
4.5584	Butane	106-97-8	C4H10	45091.7	92.6	0.2011
5.0245	Dimethyl ether	115-10-6	C2H6O	107096.0	86.4	0.4777
5.5035	Butane, 2-methyl-	78-78-4	C5H12	317532.6	97.4	1.416
5.6362	Trichloromonofluoromethane	75-69-4	CCl3F	21168.8	97.2	0.09443
5.7107	Isopropyl Alcohol	67-63-0	C3H8O	142352.3	98.1	0.635
5.8725	2-Methyl-1-butene	563-46-2	C5H10	10418.7	91.9	0.04648
5.9567	Pentane	109-66-0	C5H12	109152.1	99.0	0.4869
6.0958	1-Butene, 3-methyl-	563-45-1	C5H10	8017.1	95.7	0.03576
6.2900	Methylene chloride	75-09-2	CH2Cl2	121661.8	90.3	0.5427
6.3515	Cyclopropane, 1,1-dimethyl-	1630-94-0	C5H10	10751.9	90.2	0.04796
6.5522	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	76-13-1	C2Cl3F3	15968.3	85.9	0.07123
6.7043	Butane, 2,2-dimethyl-	75-83-2	C6H14	13948.0	88.8	0.06222
7.3161	Silanol, trimethyl-	1066-40-6	C3H10OSi	16362.6	87.9	0.07299
7.4002	Butane, 2,3-dimethyl-	79-29-8	C6H14	53205.3	83.8	0.2373
7.4779	Pentane, 2-methyl-	107-83-5	C6H14	74977.0	96.1	0.3345
7.5523	Butanal	123-72-8	C4H8O	19203.5	92.5	0.08566
7.6721	2-Butanone	78-93-3	C4H8O	16067.7	90.0	0.07168
7.8339	Pentane, 3-methyl-	96-14-0	C6H14	46945.9	96.2	0.2094
8.1835	Methane, bromochloro-	74-97-5	CH2BrCl	2241716.4	99.0	10
8.2418	Ethyl Acetate	141-78-6	C4H8O2	486328.1	94.0	2.169
8.6528	Propane, 1-nitro-	108-03-2	C3H7NO2	10099.2	74.3	0.04505
8.9927	Cyclopentane, methyl-	96-37-7	C6H12	47622.0	95.4	0.2124
9.0412	Acetyl valeryl	96-04-8	C7H12O2	24252.8	78.2	0.1082
9.5364	1-Butanol	71-36-3	C4H10O	153805.3	97.7	0.45
9.6141	Benzene	71-43-2	C6H6	18681.1	89.7	0.05466
9.7501	Carbon Tetrachloride	56-23-5	CCl4	11409.8	87.2	0.03338
9.9119	Benzene, 1,4-difluoro-	540-36-3	C6H4F2	3417827.2	99.5	10
10.0090	Hexane, 2-methyl-	591-76-4	C7H16	39352.7	91.9	0.1151
10.0834	Pentane, 2,3-dimethyl-	565-59-3	C7H16	45852.4	94.6	0.1342
10.2388	Hexane, 3-methyl-	589-34-4	C7H16	49893.6	94.7	0.146
10.4621	Cyclopentane, 1,2-dimethyl-	2452-99-5	C7H14	7979.8	78.9	0.02335
10.5333	Cyclopentane, 1,3-dimethyl-, cis-	2532-58-3	C7H14	15449.9	79.4	0.0452
10.6142	Pentane, 2,2,4-trimethyl-	540-84-1	C8H18	48145.8	90.2	0.1409
10.8408	Heptane	142-82-5	C7H16	17252.7	83.6	0.05048
11.4720	Cyclohexane, methyl-	108-87-2	C7H14	15611.5	81.1	0.04568
11.7180	2,4,6,8-Tetramethyl-1-undecene	59920-26-2	C15H30	10797.1	76.5	0.03159
12.0999	1-Pentanol	71-41-0	C5H12O	10308.3	78.8	0.02418
12.2811	Toluene	108-88-3	C7H8	70581.4	92.4	0.1656
12.3944	Cyclopentanone	120-92-3	C5H8O	43061.7	91.2	0.101
12.7408	Hexanal	66-25-1	C6H12O	10771.0	81.9	0.02527
13.2360	Hexane, 2,3,4-trimethyl-	921-47-1	C9H20	7273.9	71.4	0.01706
13.3849	Tetrachloroethylene	127-18-4	C2Cl4	12218.5	88.6	0.02866
13.6373	Cyclotrisiloxane, hexamethyl-	541-05-9	C6H18O3Si3	80715.9	97.4	0.1894
14.0160	Chlorobenzene-d5	3114-55-4	C6D5Cl	4262632.3	95.7	10
14.2102	Cyclohexane, 1,1,3-trimethyl-	3073-66-3	C9H18	10903.7	72.7	0.02558
14.4465	Ethylbenzene	100-41-4	C8H10	38497.4	89.2	0.09031
14.5371	Cyclohexane, 1,2,4-trimethyl-	2234-75-5	C9H18	21303.9	72.9	0.04998
14.6180	p-Xylene	106-42-3	C8H10	186484.5	97.4	0.4375
15.0064	Styrene	100-42-5	C8H8	65515.7	91.2	0.1537
15.1262	o-Xylene	95-47-6	C8H10	70504.4	93.9	0.1654
15.3657	Nonane	111-84-2	C9H20	22201.1	84.6	0.05208
15.6149	Benzene, 1-bromo-3-fluoro-	1073-06-9	C6H4BrF	5145548.0	98.7	12.07
15.9062	Heptane, 2,3,6-trimethyl-	4032-93-3	C10H22	10270.7	73.9	0.02409
15.9548	Cyclohexane, 1-propenyl-	5364-83-0	C9H16	37830.4	81.8	0.08875
16.0907	Octane, 2,6-dimethyl-	2051-30-1	C10H22	97891.0	85.6	0.2296
16.2720	Heptane, 3-ethyl-2-methyl-	14676-29-0	C10H22	51284.9	89.5	0.1203

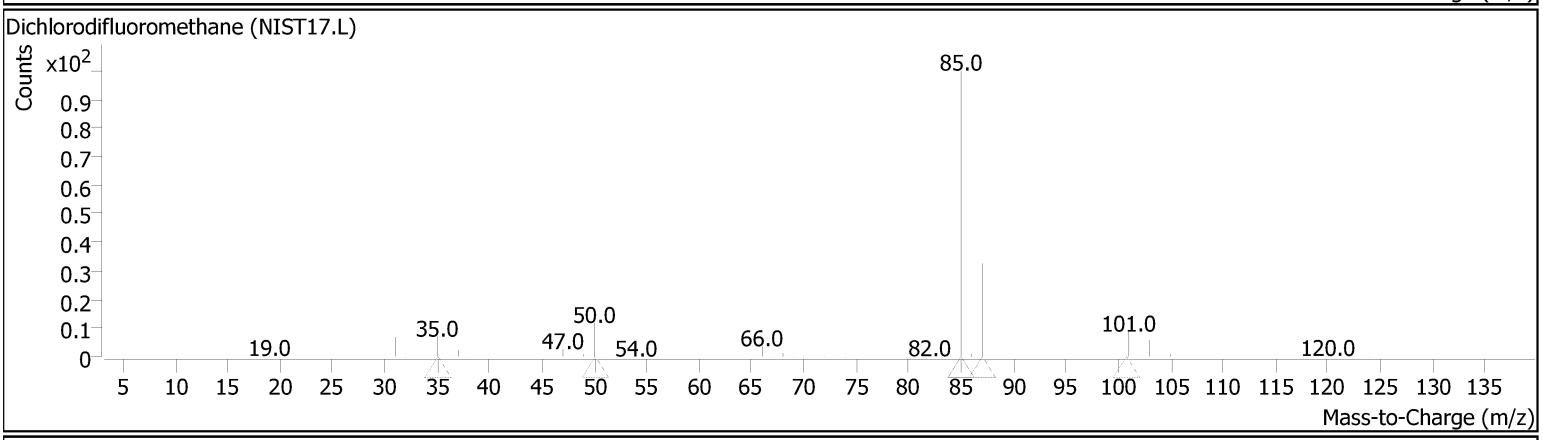
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
16.3658	Benzene, propyl-	103-65-1	C9H12	51499.0	87.0	0.1208
16.4888	Benzene, 1-ethyl-2-methyl-	611-14-3	C9H12	95931.5	86.7	0.2251
16.5342	Benzene, 1-ethyl-4-methyl-	622-96-8	C9H12	46255.0	83.4	0.1085
16.6313	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	113666.6	88.6	0.2667
16.6927	Octane, 2,2,6-trimethyl-	62016-28-8	C11H24	34864.9	78.5	0.08179
16.7672	Cyclohexane, 1,1,2,3-tetramethyl-	6783-92-2	C10H20	122275.7	90.0	0.2869
16.8611	Benzene, 1-ethyl-2-methyl-	611-14-3	C9H12	36824.2	92.8	0.08639
16.9808	Cyclododecanemethanol	1892-12-2	C13H26O	34752.5	81.7	0.08153
17.0941	Cyclotetrasiloxane, octamethyl-	556-67-2	C8H24O4Si4	912394.0	95.5	2.14
17.1394	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	14572.6	81.4	0.03419
17.2786	Decane	124-18-5	C10H22	128232.6	96.2	0.3008
17.3466	trans-2-Dodecen-1-ol	69064-37-5	C12H24O	9527.8	75.2	0.02235
17.4145	Benzene, 1,3-dichloro-	541-73-1	C6H4Cl2	83925.2	87.7	0.1969
17.4825	Benzene, (1-methylpropyl)-	135-98-8	C10H14	16662.3	73.4	0.03909
17.6152	(+)-cis-Verbenol, trimethylacetate	1000462-96-9	C15H24O2	58571.3	76.7	0.1374
17.6896	Benzene, 1,2,4-trimethyl-	95-63-6	C9H12	64021.8	90.2	0.1502
17.7317	Nonane, 2,6-dimethyl-	17302-28-2	C11H24	85416.3	93.3	0.2004
17.8709	9-Tetradecenal, (Z)-	53939-27-8	C14H26O	95490.6	72.3	0.224
17.9551	Hexanoic acid, pentadecyl ester	1000279-26-8	C21H42O2	36952.4	71.3	0.08669
18.0424	1-Nonene, 4,6,8-trimethyl-	54410-98-9	C12H24	97824.6	78.6	0.2295
18.1622	Benzene, 1-methyl-2-propyl-	1074-17-5	C10H14	82730.6	83.1	0.1941
18.2528	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	139108.0	90.9	0.3263
18.3208	Decane, 5-methyl-	13151-35-4	C11H24	31350.3	79.0	0.07355
18.3791	Decane, 4-methyl-	2847-72-5	C11H24	52178.7	90.4	0.1224
18.4373	1-Octanol, 2-butyl-	3913-02-8	C12H26O	64619.4	87.0	0.1516
18.4794	Benzene, 1-methyl-4-propyl-	1074-55-1	C10H14	29316.8	91.0	0.06878
18.5603	Decane, 3-methyl-	13151-34-3	C11H24	69786.2	90.1	0.1637
18.6251	trans-p-mentha-1(7),8-dien-2-ol	21391-84-4	C10H16O	119760.5	77.5	0.281
18.7675	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	140785.6	92.0	0.3303
18.8710	1H-Indene, 2,3-dihydro-4-methyl-	824-22-6	C10H12	35780.3	75.3	0.08394
18.9520	Sulfurous acid, cyclohexylmethyl undecyl ester	1000309-21-9	C18H36O3S	38472.8	88.1	0.09026
19.0264	Undecane	1120-21-4	C11H24	426741.5	94.4	1.001
19.1656	p-Cymene	99-87-6	C10H14	29225.7	83.4	0.06856
19.3533	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	169326.8	84.1	0.3972
19.4180	Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	C10H14	125720.4	88.5	0.2949
19.5346	Decane, 3,7-dimethyl-	17312-54-8	C12H26	86299.9	93.0	0.2025
19.6058	Naphthalene, decahydro-2-methyl-	2958-76-1	C11H20	194470.6	90.7	0.4562
19.7385	Benzene, 1,4-diethyl-2-methyl-	13632-94-5	C11H16	76892.1	84.6	0.1804
19.8064	Cyclohexane, pentyl-	4292-92-6	C11H22	136757.4	71.4	0.3208
19.8938	Naphthalene, decahydro-2-methyl-	2958-76-1	C11H20	246558.6	89.0	0.5784
19.9780	Benzene, 1-ethyl-2,3-dimethyl-	933-98-2	C10H14	362915.1	87.8	0.8514
20.0362	Benzene, 1-methyl-4-(1-methylpropyl)-	1595-16-0	C11H16	88816.5	82.4	0.2084
20.0913	Undecane, 2-methyl-	7045-71-8	C12H26	52819.7	90.0	0.1239
20.1657	Naphthalene, 1,2,3,4-tetrahydro-	119-64-2	C10H12	56597.1	82.4	0.1328
20.2143	Undecane, 2,3-dimethyl-	17312-77-5	C13H28	32158.3	84.8	0.07544
20.2596	Benzene, 1-methyl-4-(1-methylpropyl)-	1595-16-0	C11H16	31345.5	88.4	0.07354
20.3373	Cyclohexane, 1-methyl-4-(1-methylbutyl)-	54411-00-6	C12H24	64519.2	78.0	0.1514
20.4797	Benzene, 3-ethyl-1,2,4,5-tetramethyl-	31365-98-7	C12H18	66510.8	76.1	0.156
20.5412	Azulene	275-51-4	C10H8	291697.8	75.9	0.6843
20.6447	Dodecane	112-40-3	C12H26	901453.2	91.8	2.115
20.7321	1H-Indene, 2,3-dihydro-4,7-dimethyl-	6682-71-9	C11H14	90507.6	74.0	0.2123
20.8972	Undecane, 2,6-dimethyl-	17301-23-4	C13H28	228804.6	87.6	0.5368
21.2209	Tridecanedial	63521-76-6	C13H24O2	64170.3	71.3	0.1505
21.4507	n-Nonadecanol-1	1454-84-8	C19H40O	466883.2	75.3	1.095
21.6352	Undecane, 2,10-dimethyl-	17301-27-8	C13H28	40643.9	76.1	0.09535
21.6934	2-Amino-3a,4,5,6,7,7a-hexahydro-3H-indene-1-carbonitrile	1000185-29-8	C10H14N2	13404.3	70.3	0.03145
21.7452	Undecane, 3,9-dimethyl-	17301-31-4	C13H28	88474.1	75.0	0.2076
22.1498	Tridecane	629-50-5	C13H28	910663.7	92.5	2.136
22.2728	Naphthalene, 2-methyl-	91-57-6	C11H10	461602.9	95.5	1.083
22.5350	Naphthalene, 2-methyl-	91-57-6	C11H10	180490.2	95.2	0.4234
22.6191	Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	13065-07-1	C12H16	79094.8	83.3	0.1856
22.6936	Benzene, cyclohexyl-	827-52-1	C12H16	67511.3	70.8	0.1584
22.9622	1,12-Tridecadiene	21964-48-7	C13H24	264309.8	70.0	0.6201
23.0820	Hexadecane, 1-chloro-	4860-03-1	C16H33Cl	56953.1	70.1	0.1336
23.3409	Phytol	150-86-7	C20H40O	83001.5	82.4	0.1947
23.4056	1,3-Cyclododecadiene, (E,Z)-	1129-92-6	C12H20	230901.8	80.1	0.5417
23.7293	Naphthalene, 1,2,3,4-tetrahydro-5,7-dimethyl-	21693-54-9	C12H16	97366.2	70.7	0.2284

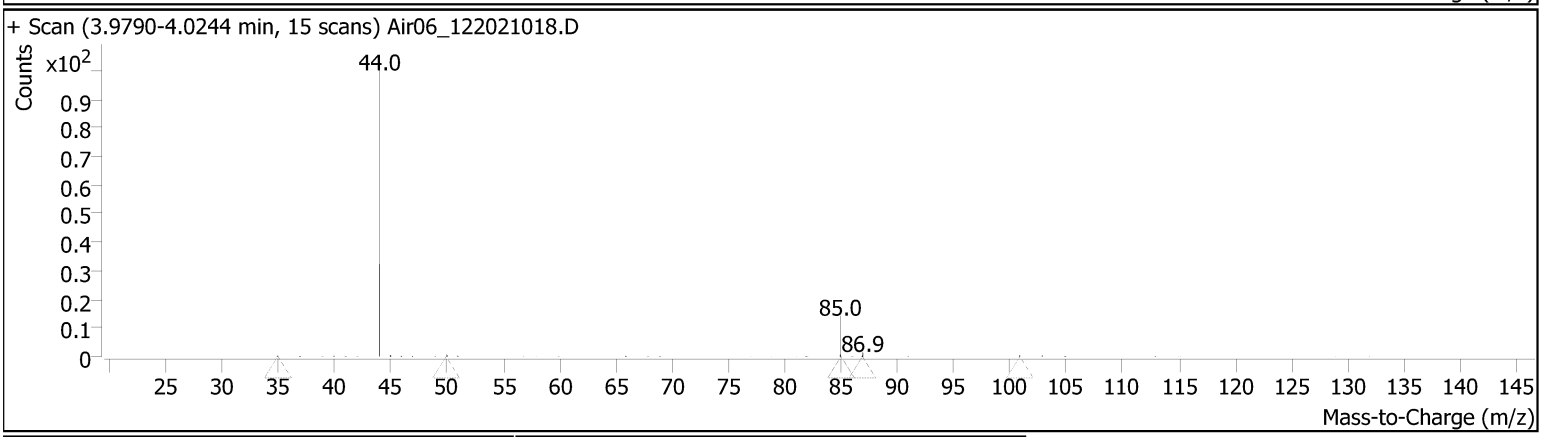
Sample Chromatogram

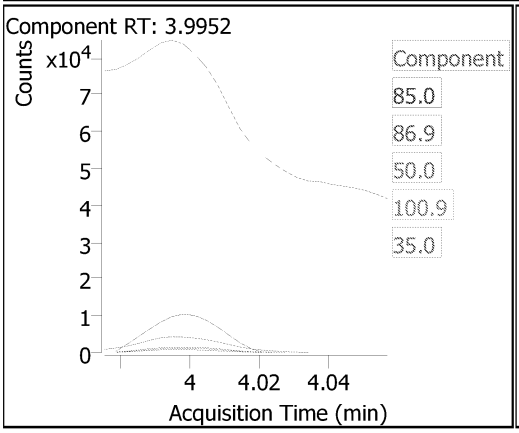


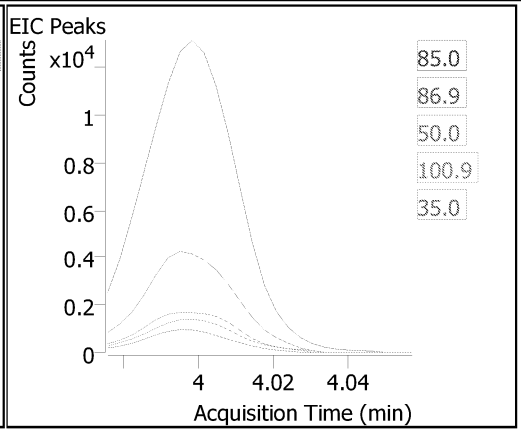
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
3.9952	Dichlorodifluoromethane	100940.0	97.3	75-71-8	CCl2F2	0.4503

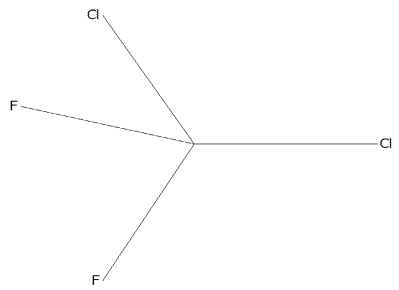




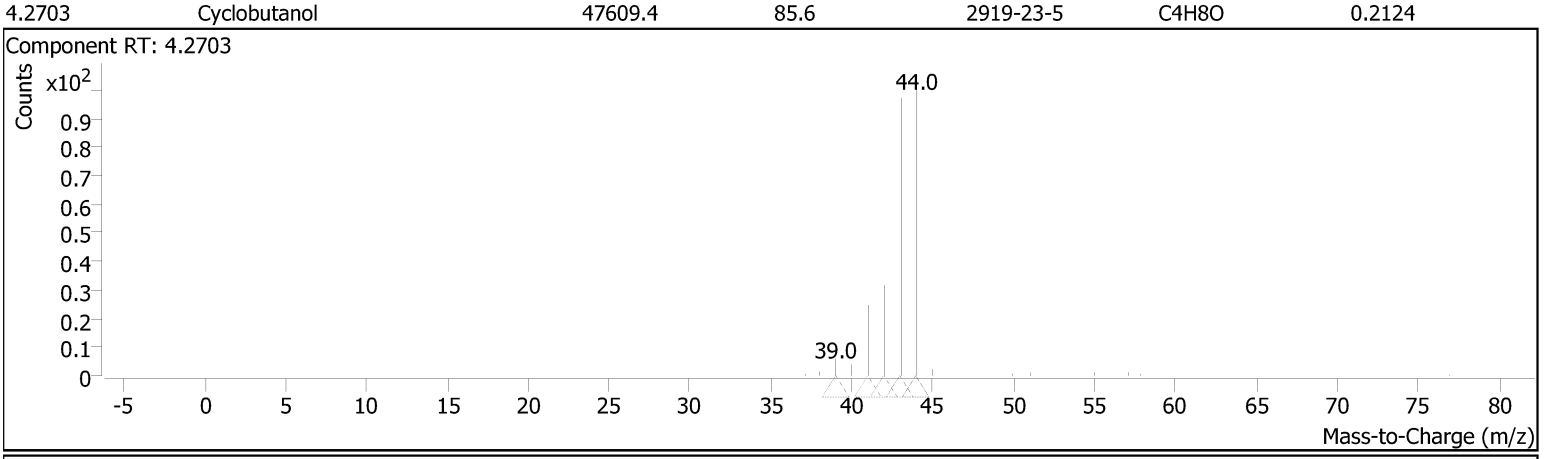


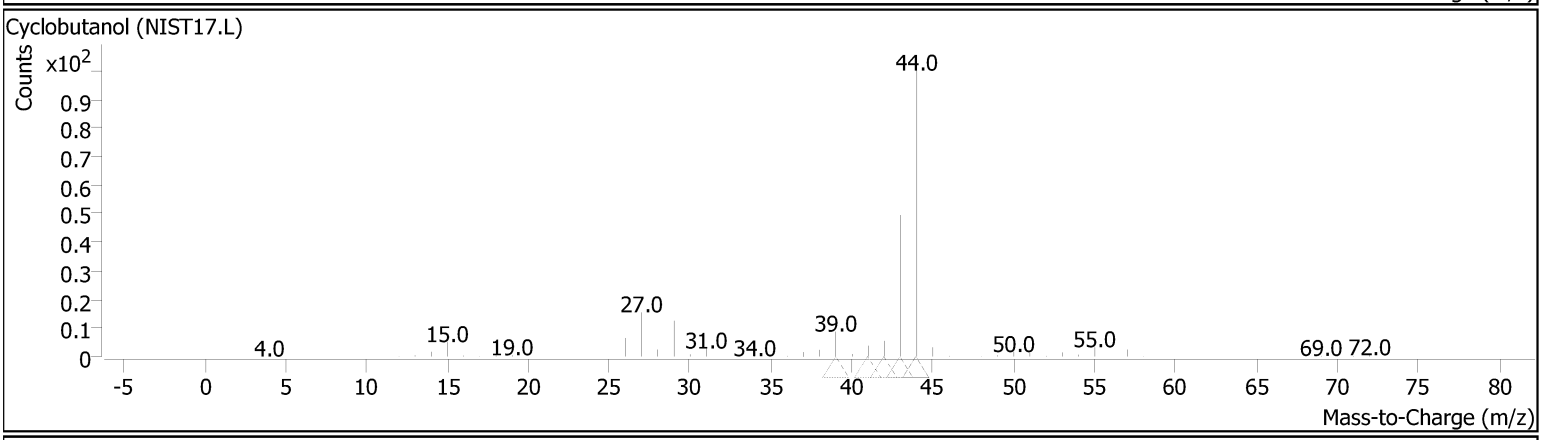


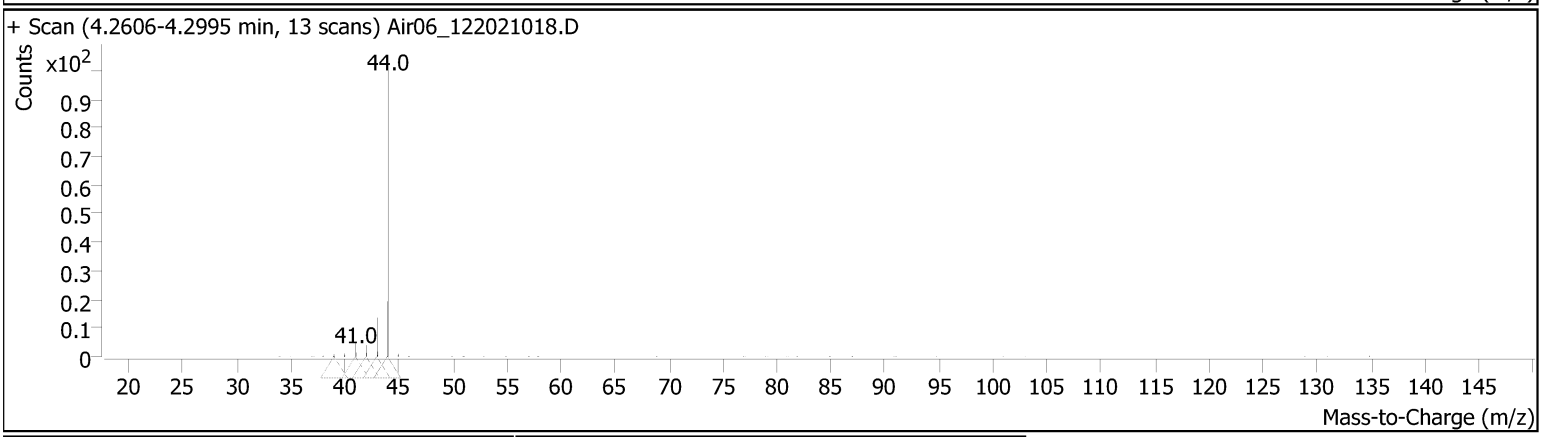


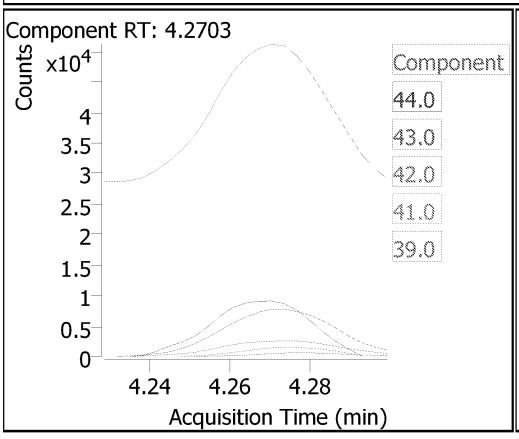


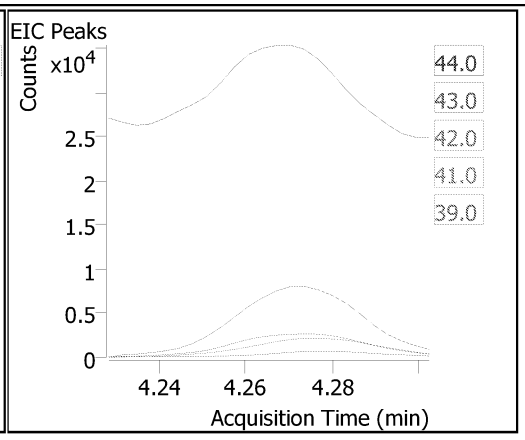
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.2703	Cyclobutanol	47609.4	85.6	2919-23-5	C4H8O	0.2124

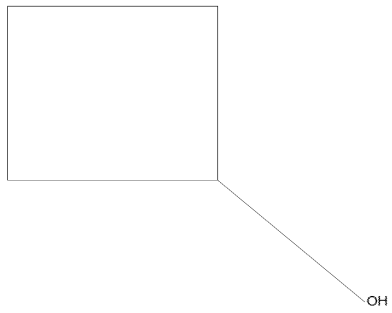




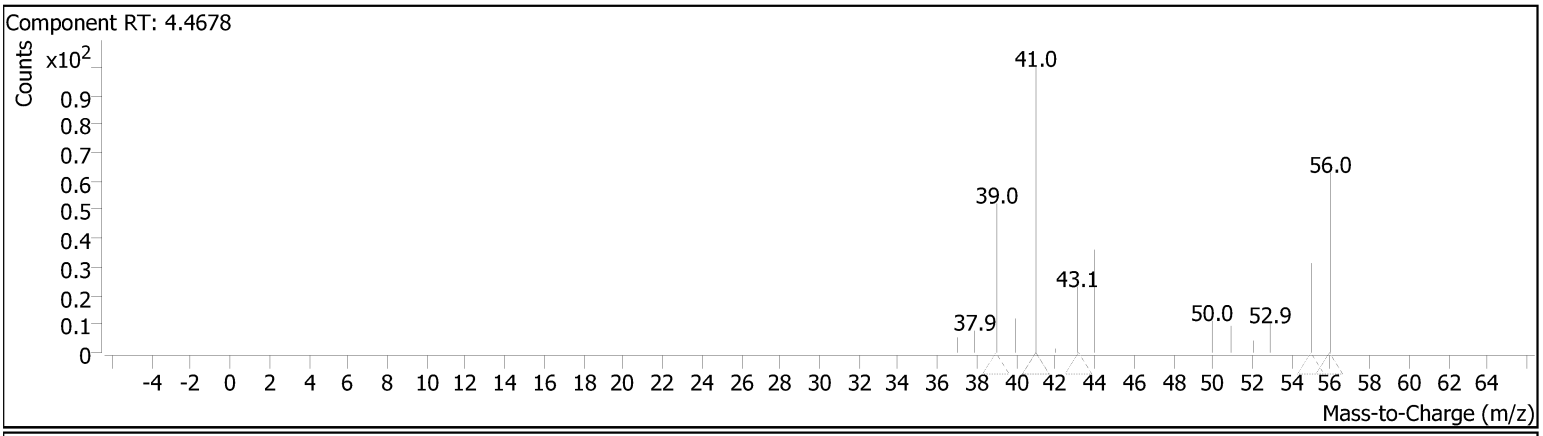


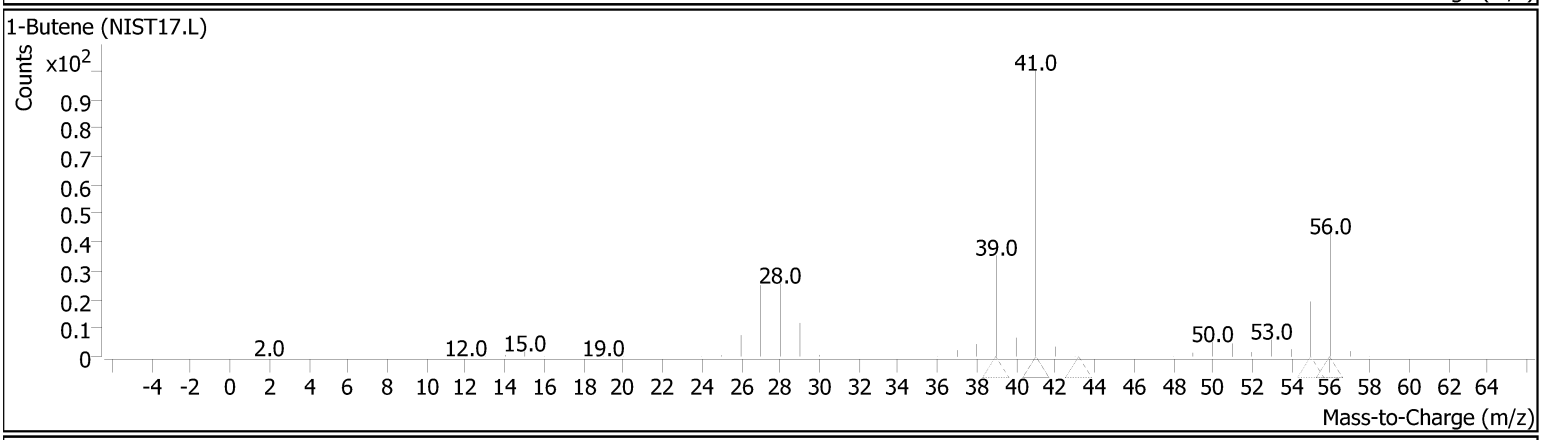


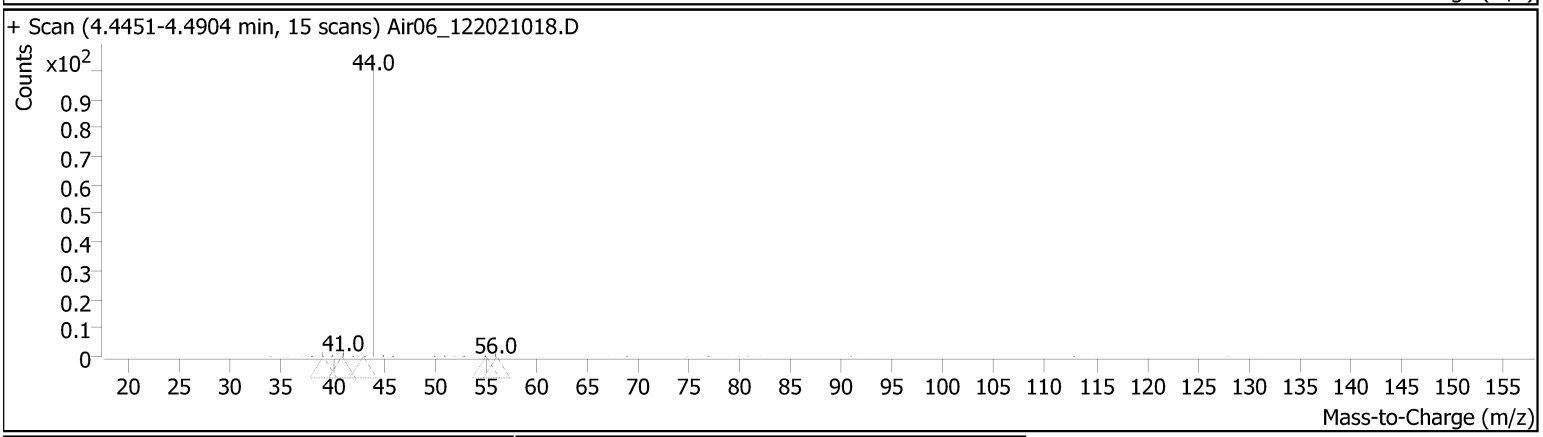


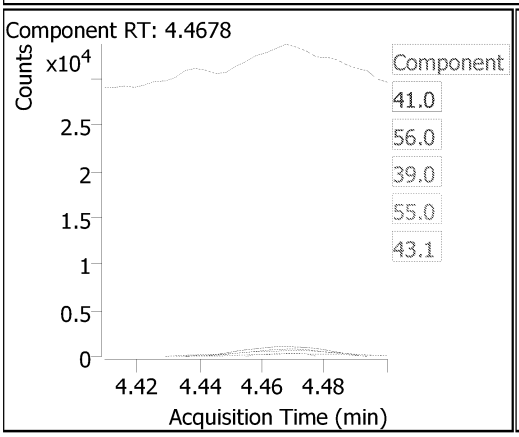


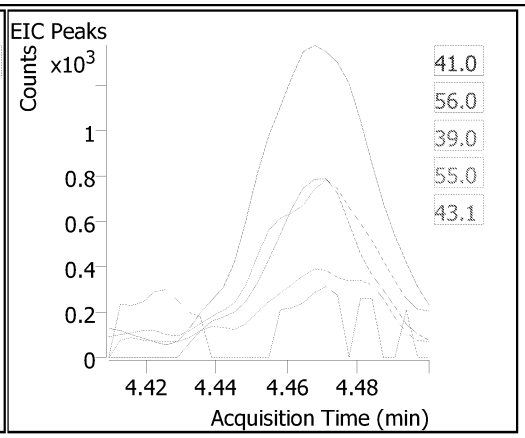
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.4678	1-Butene	11147.3	75.7	106-98-9	C4H8	0.04973

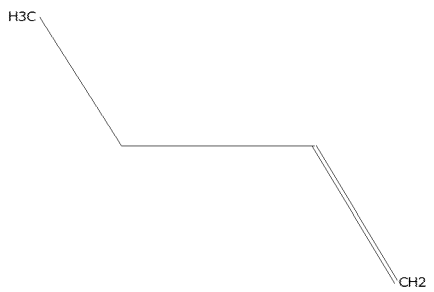




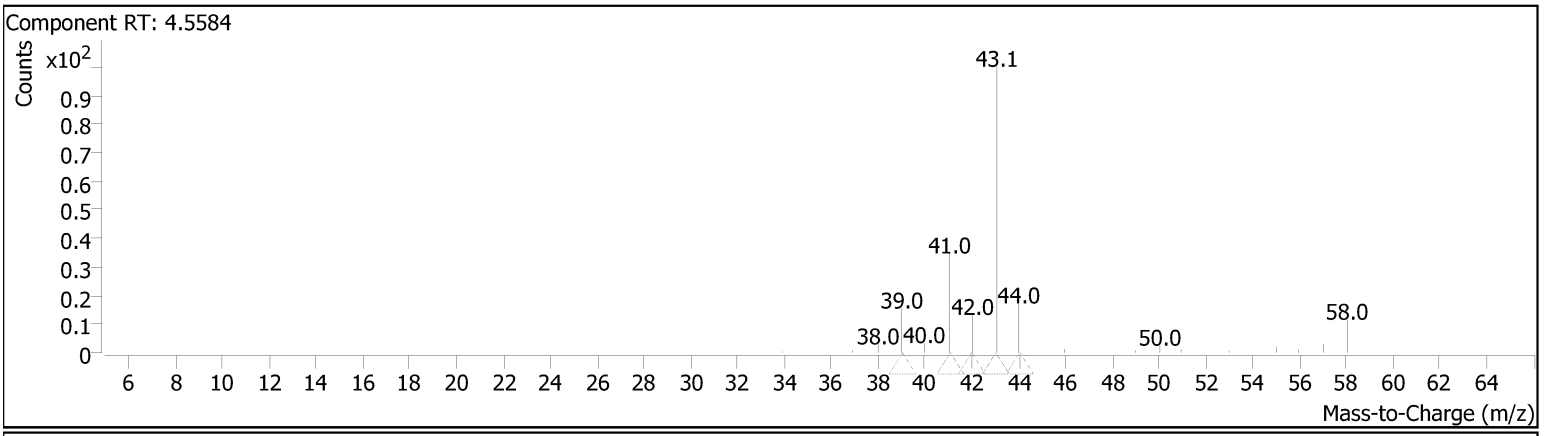


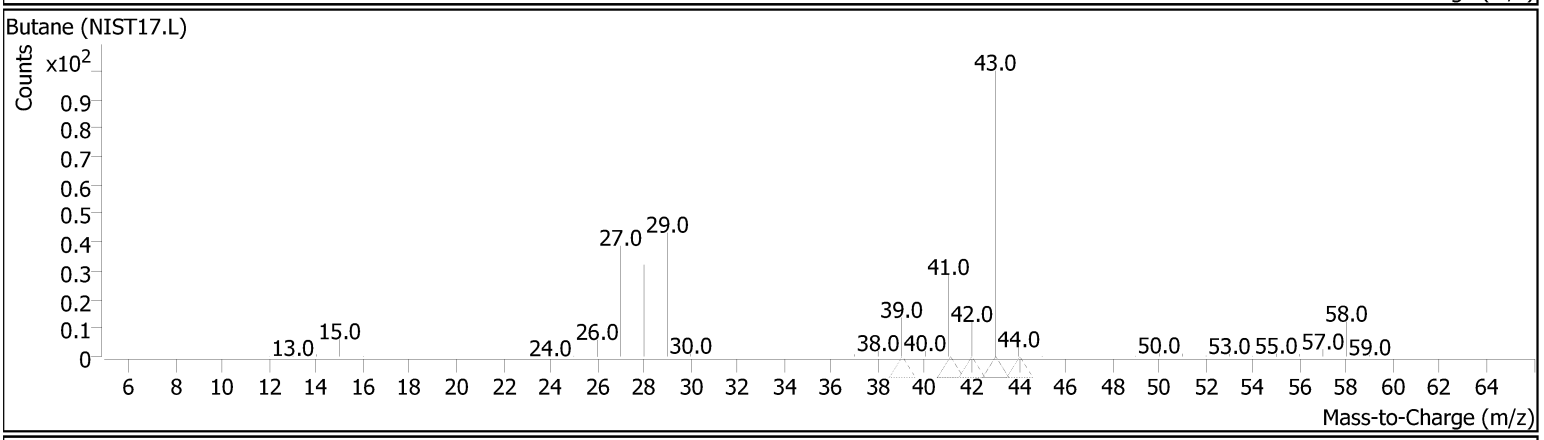


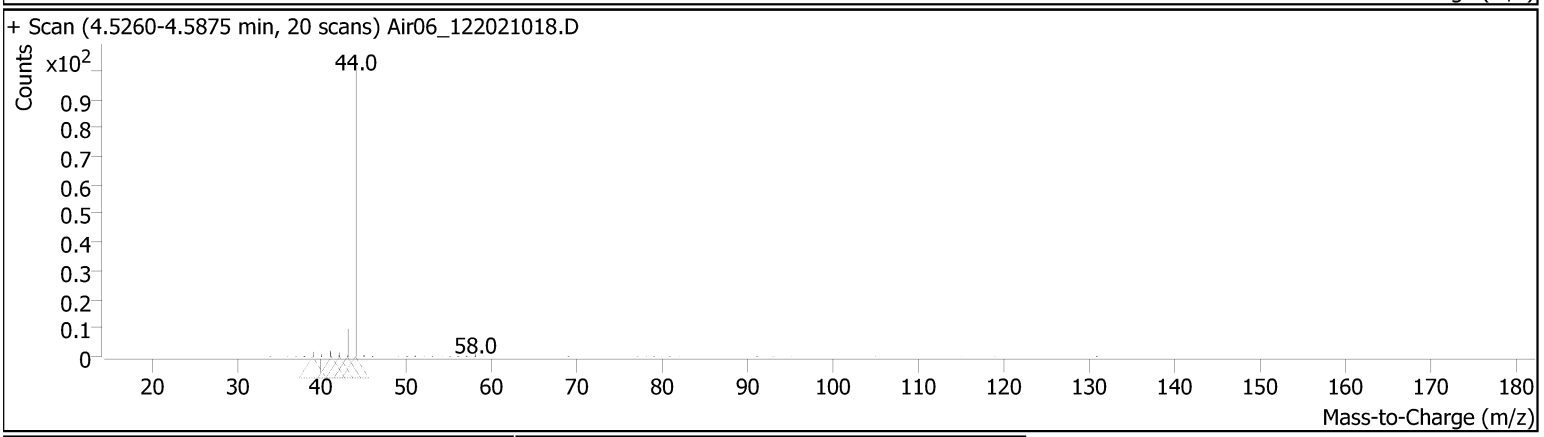


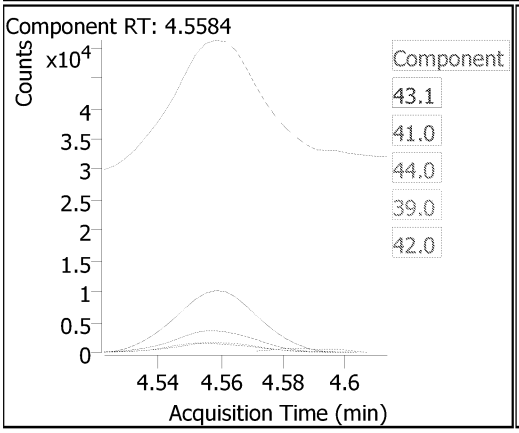


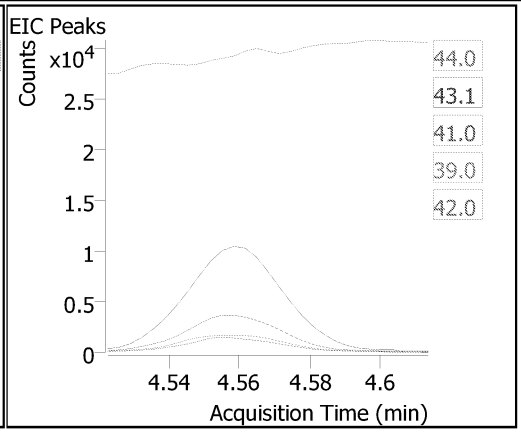
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.5584	Butane	45091.7	92.6	106-97-8	C4H10	0.2011





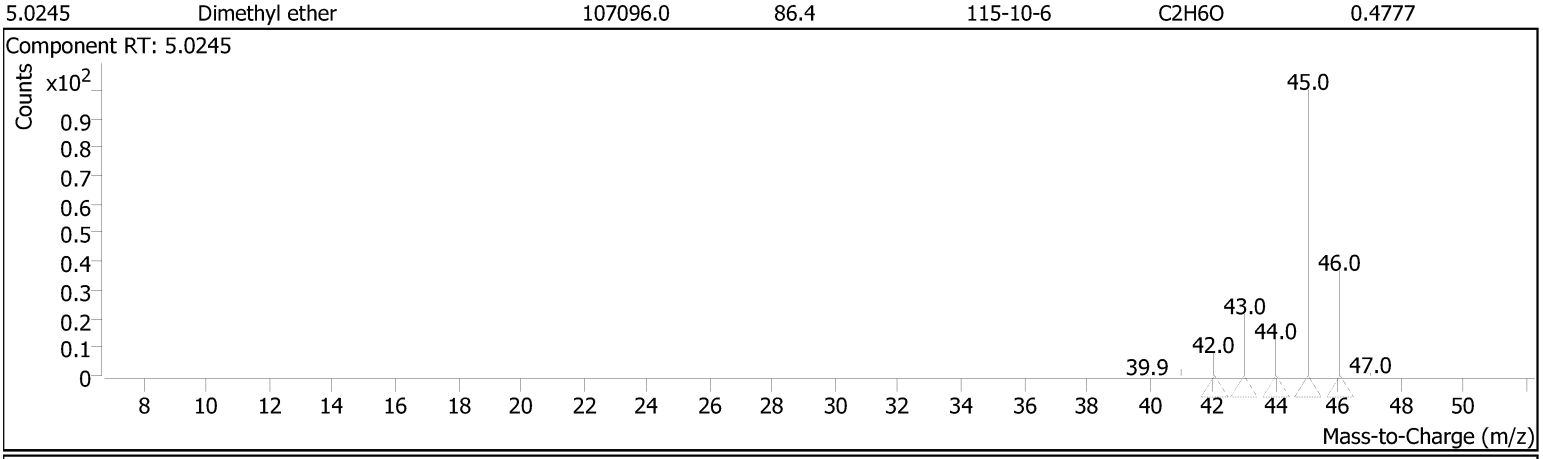


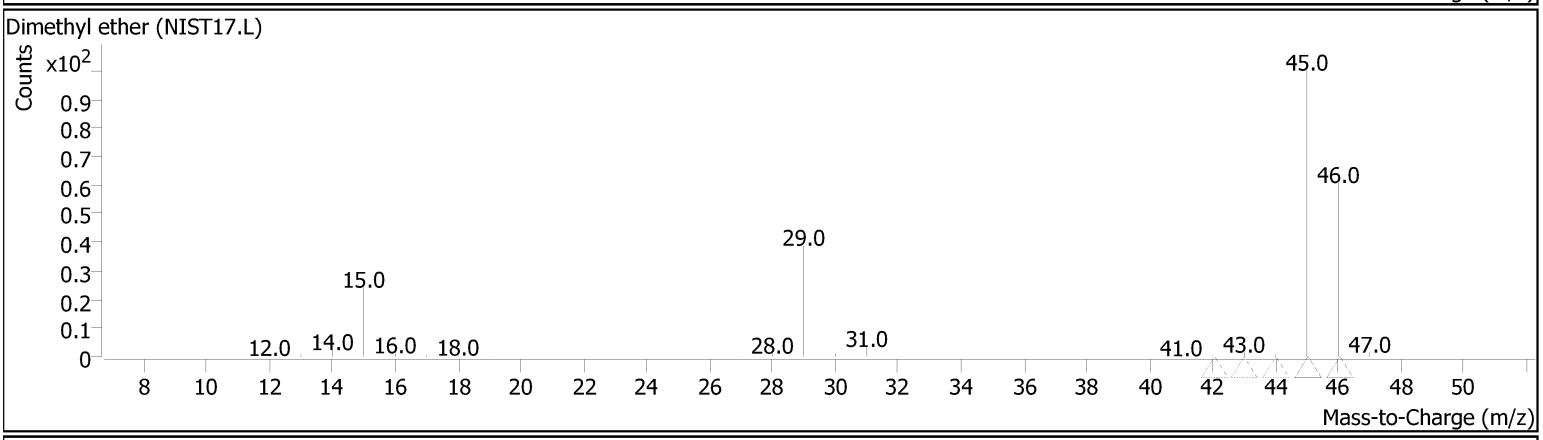


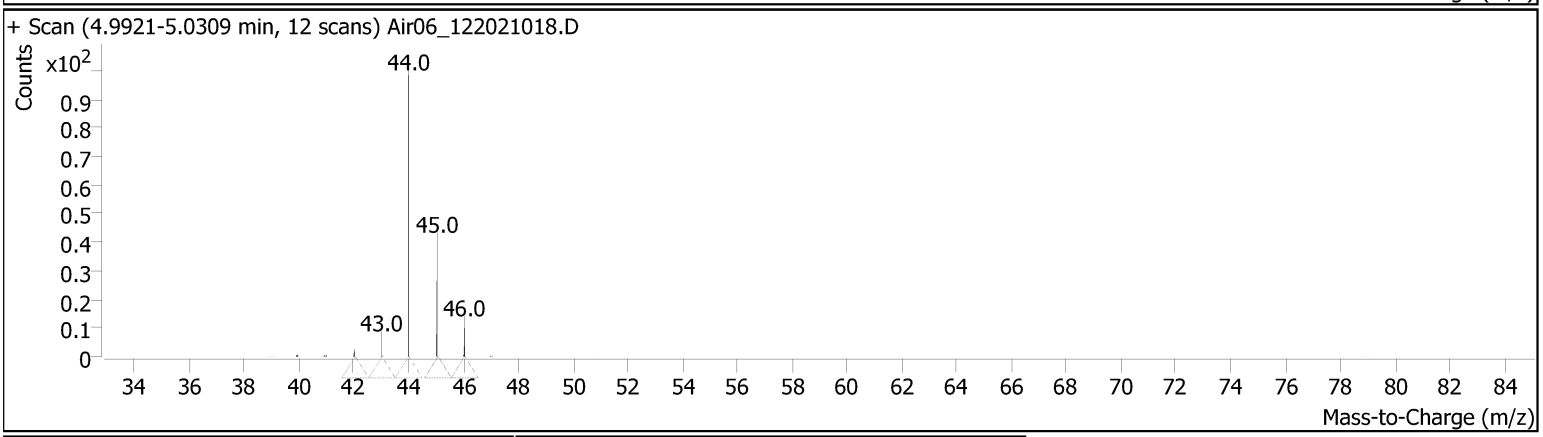


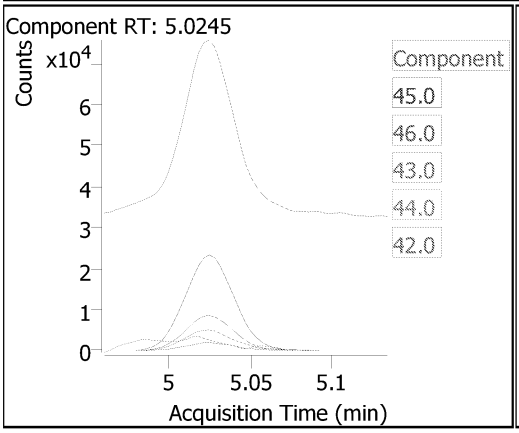


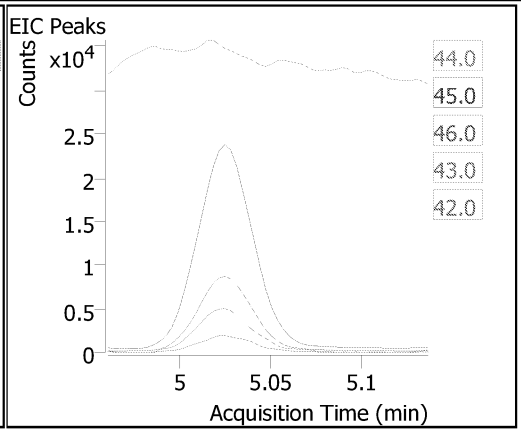
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.0245	Dimethyl ether	107096.0	86.4	115-10-6	C2H6O	0.4777

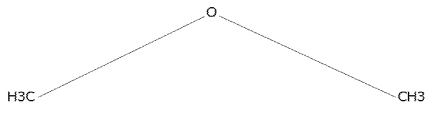




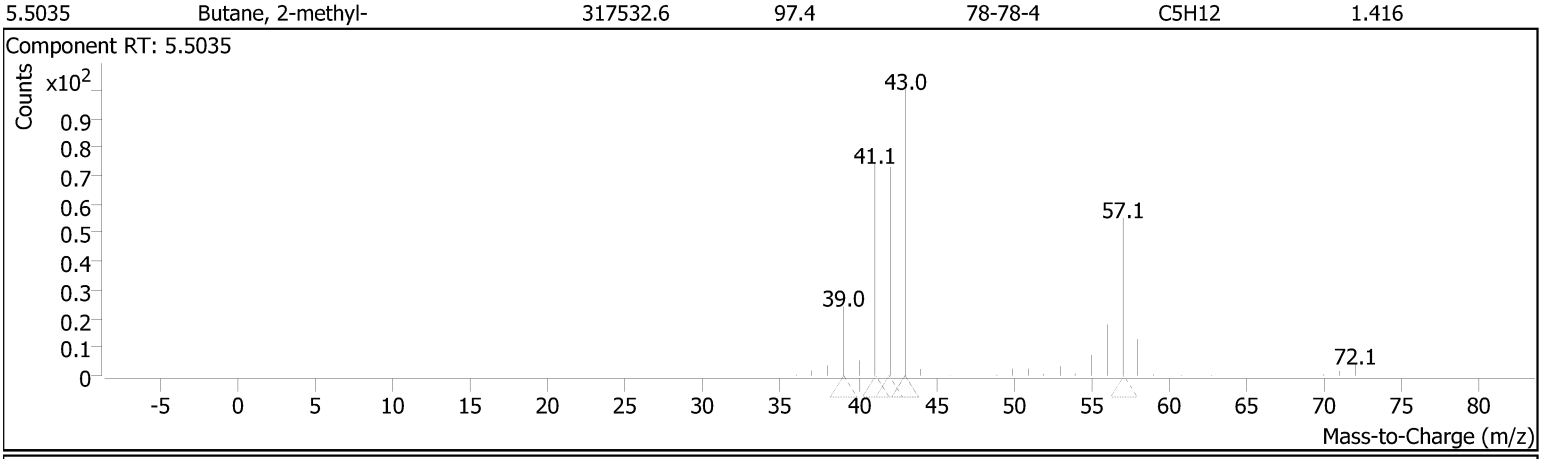


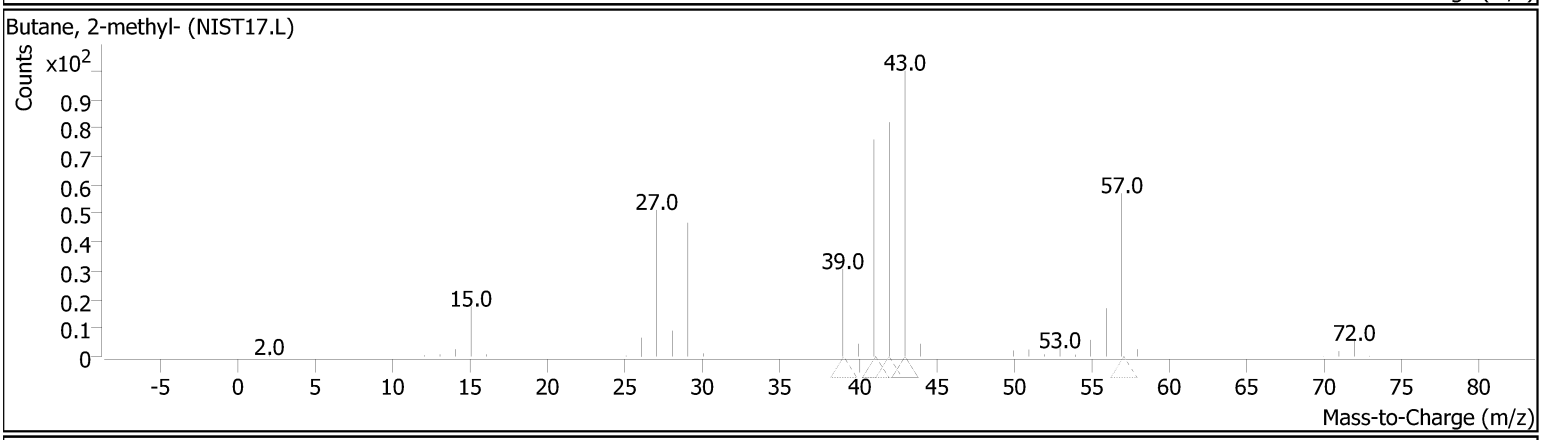


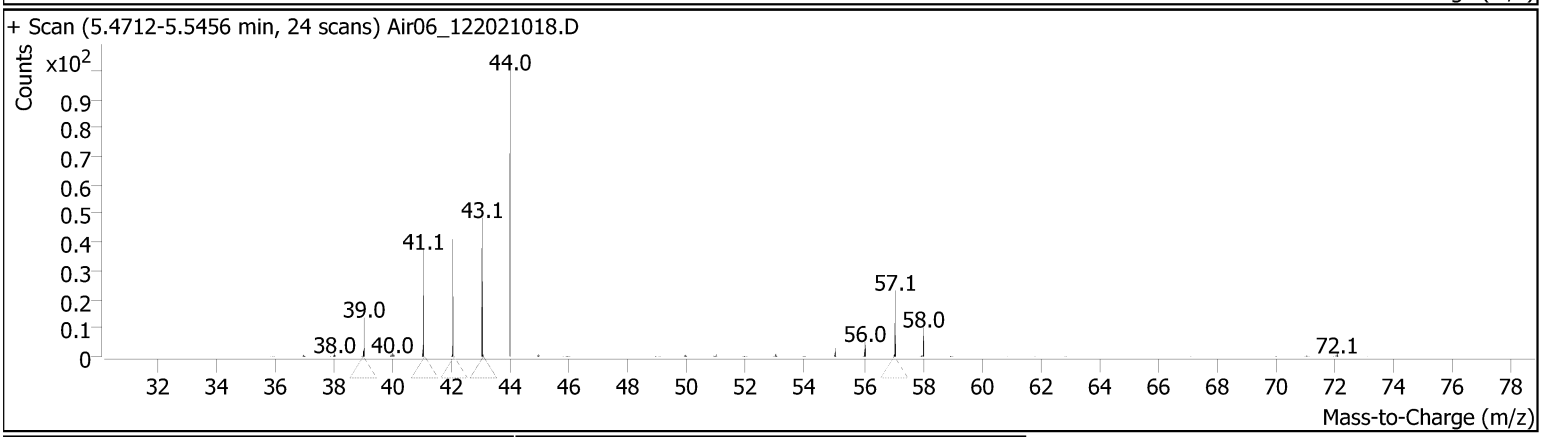


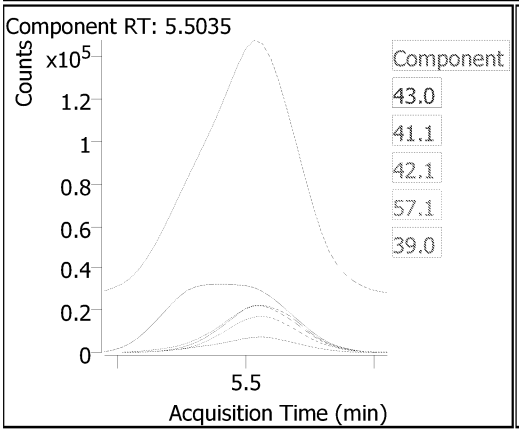


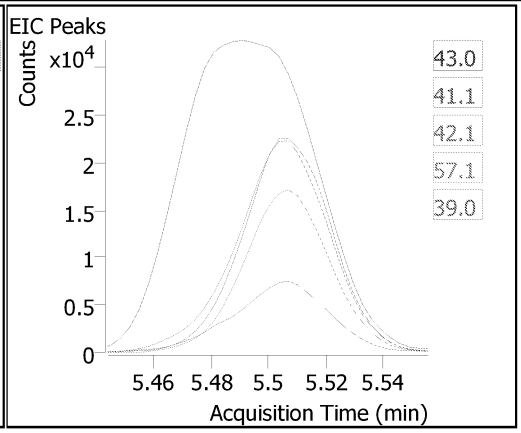
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.5035	Butane, 2-methyl-	317532.6	97.4	78-78-4	C5H12	1.416

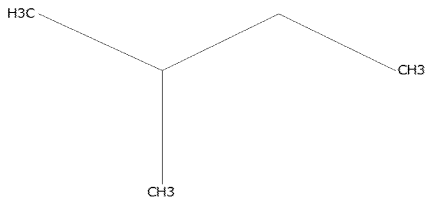




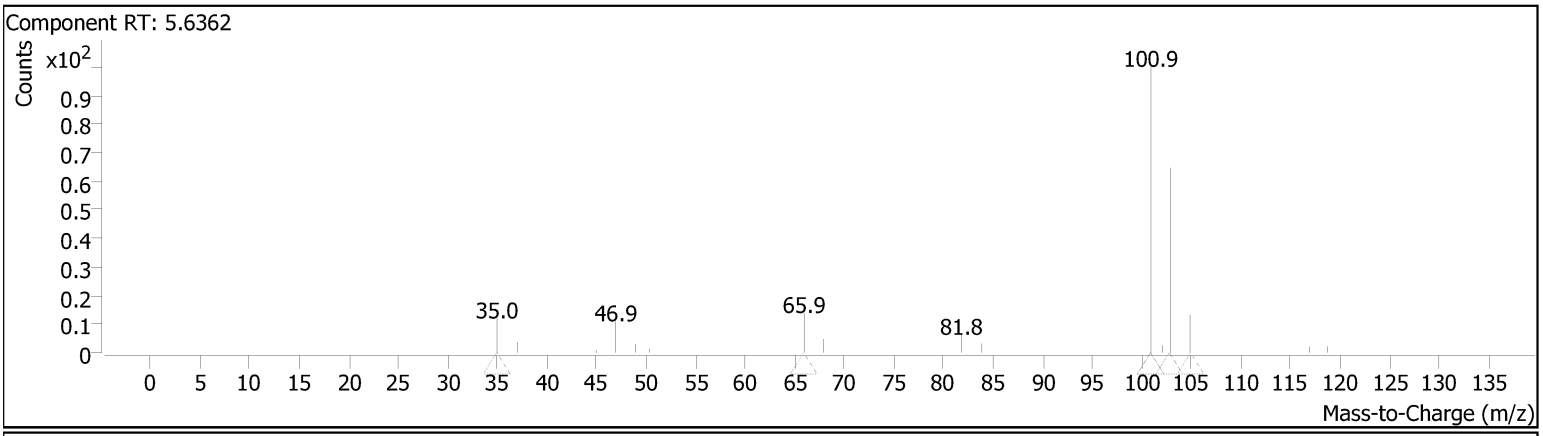


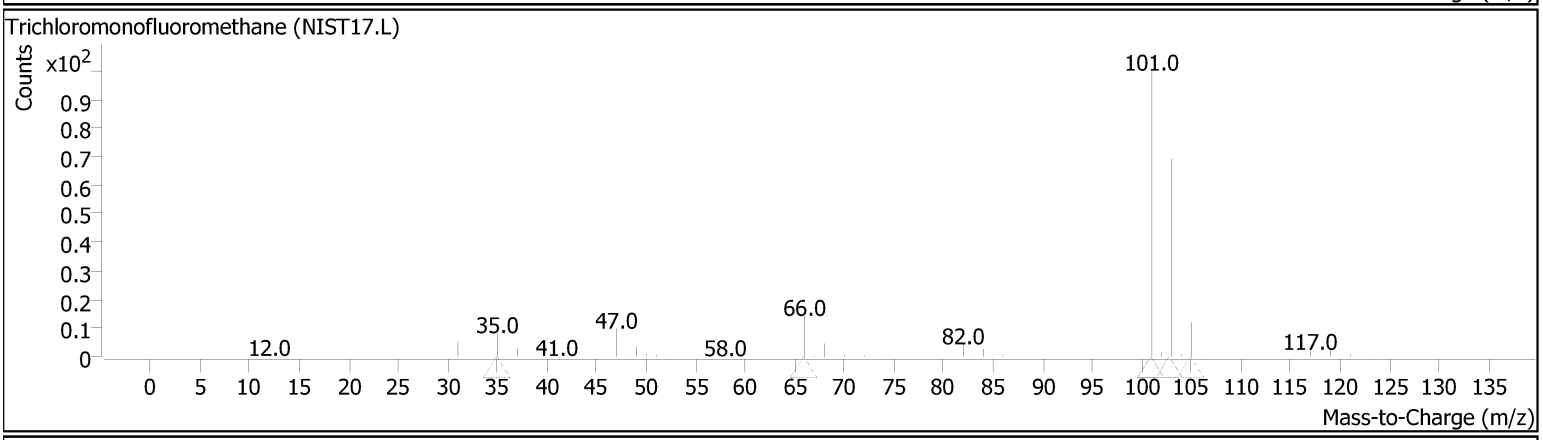


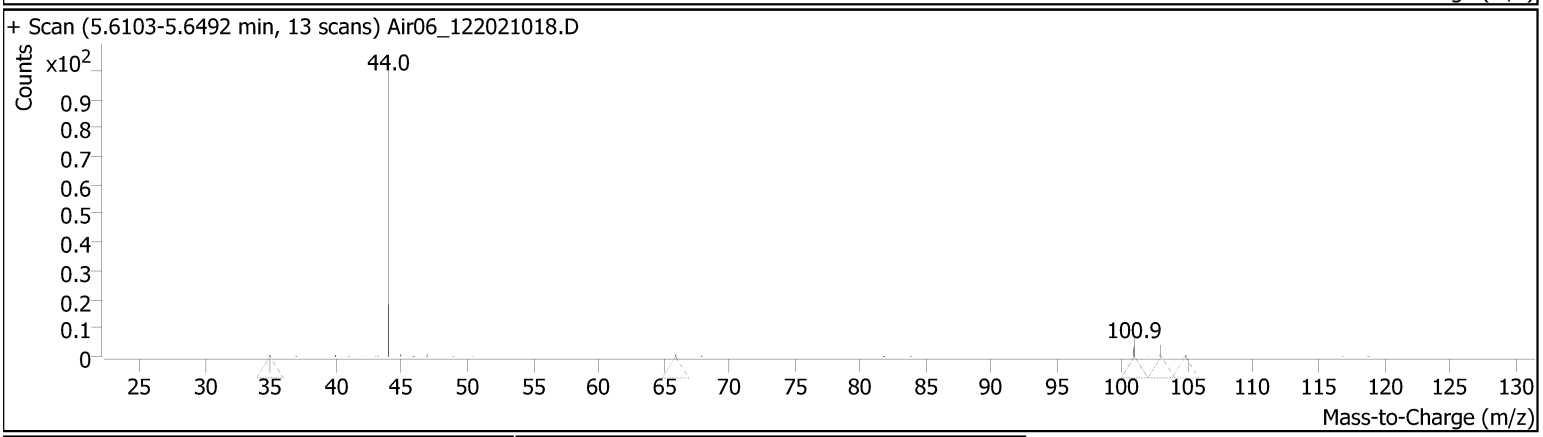


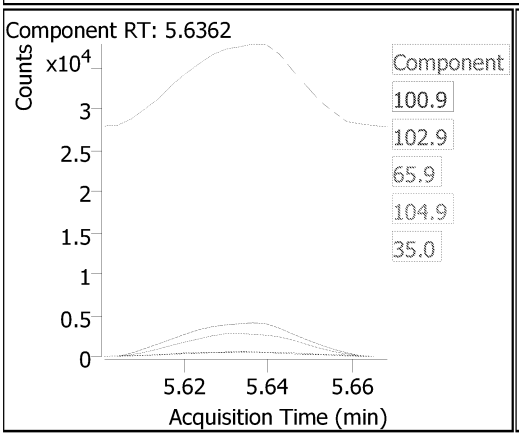


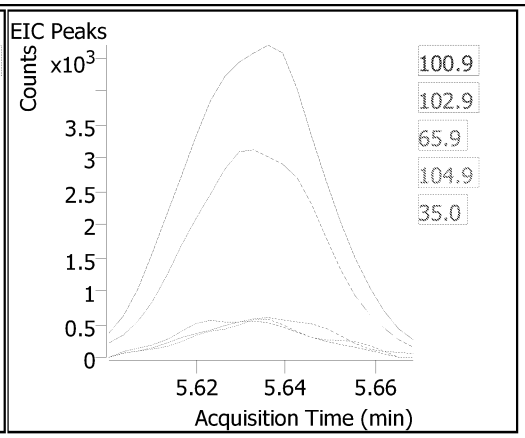
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.6362	Trichloromonofluoromethane	21168.8	97.2	75-69-4	CCl3F	0.09443

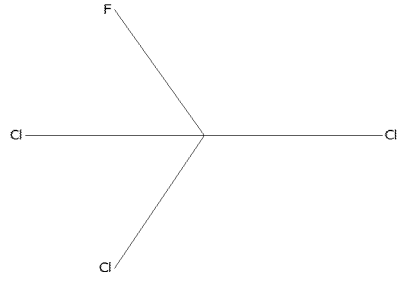




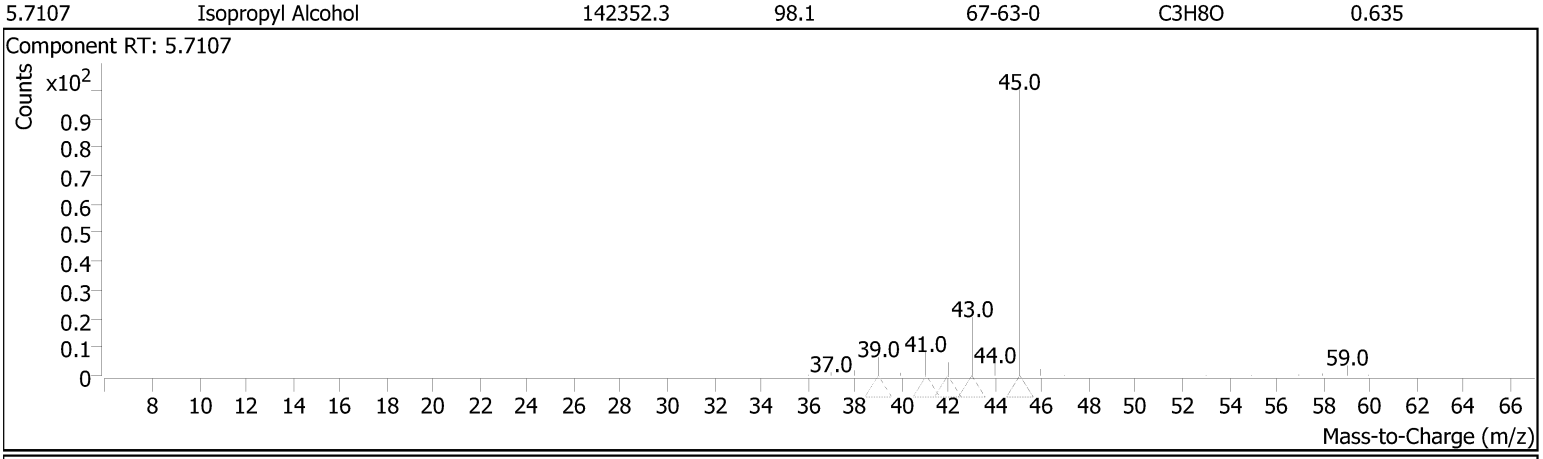


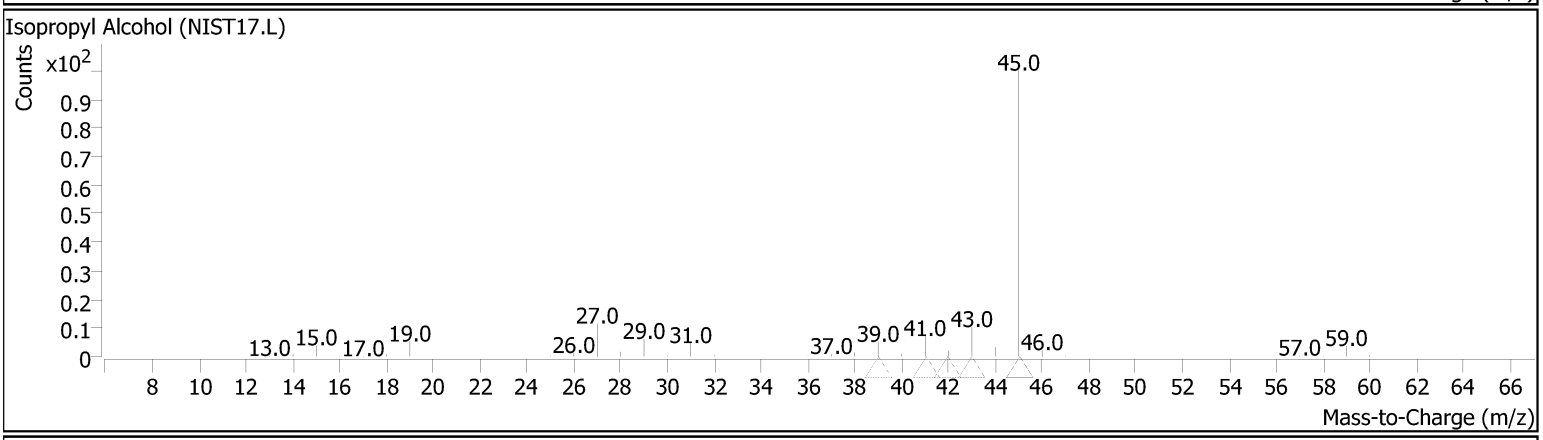


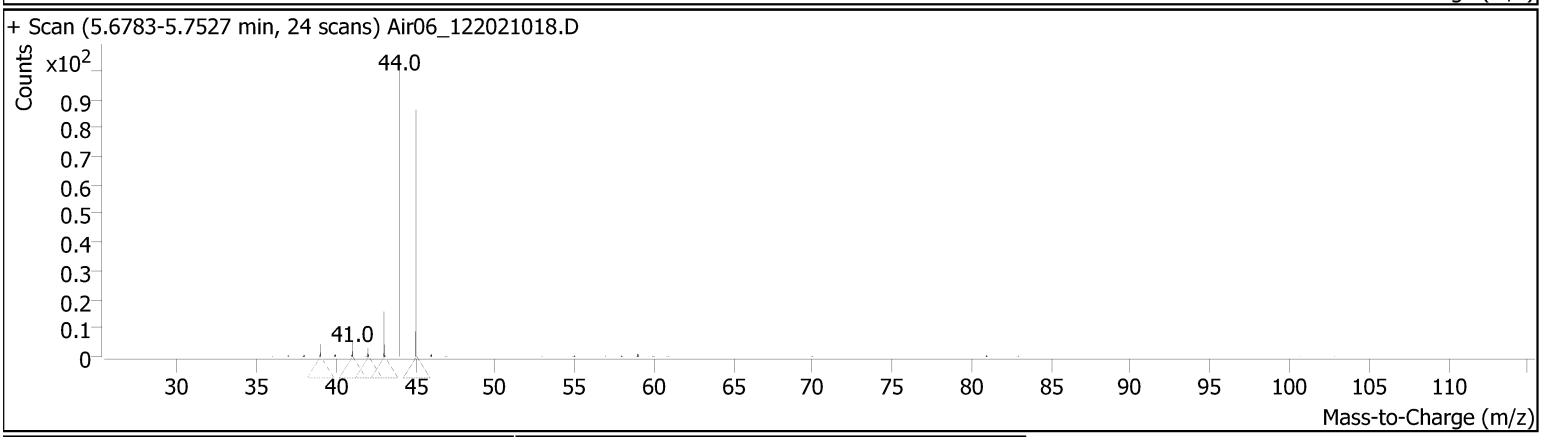


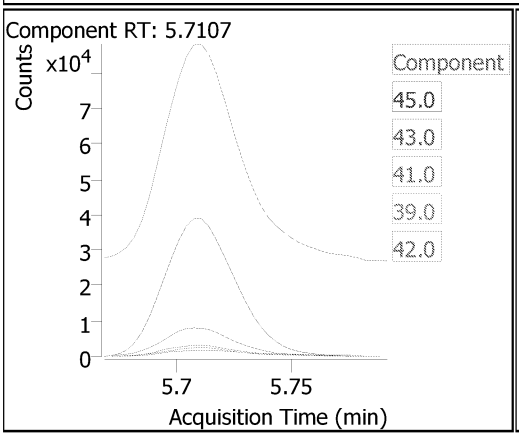


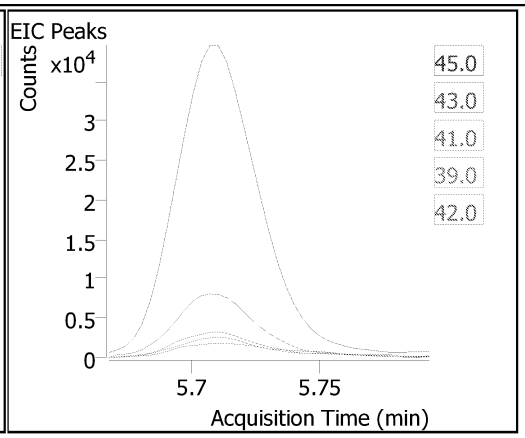
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.7107	Isopropyl Alcohol	142352.3	98.1	67-63-0	C3H8O	0.635

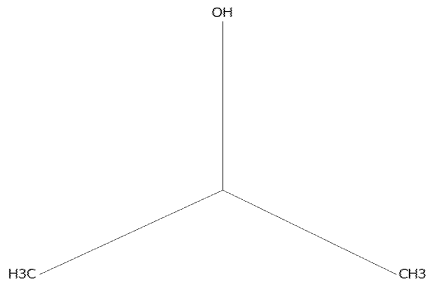




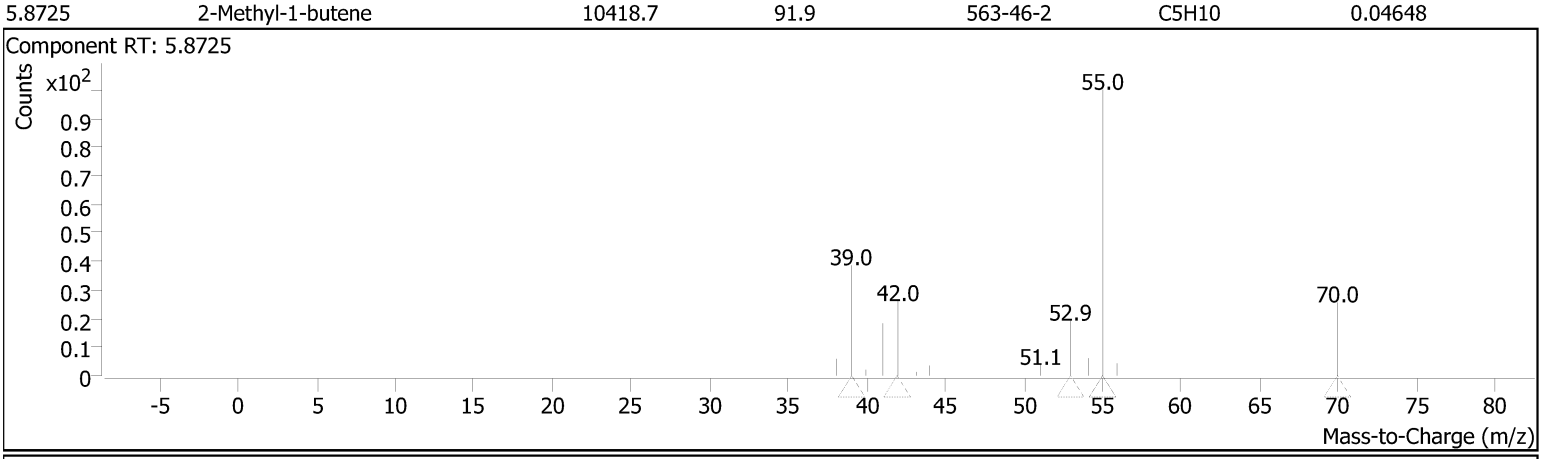


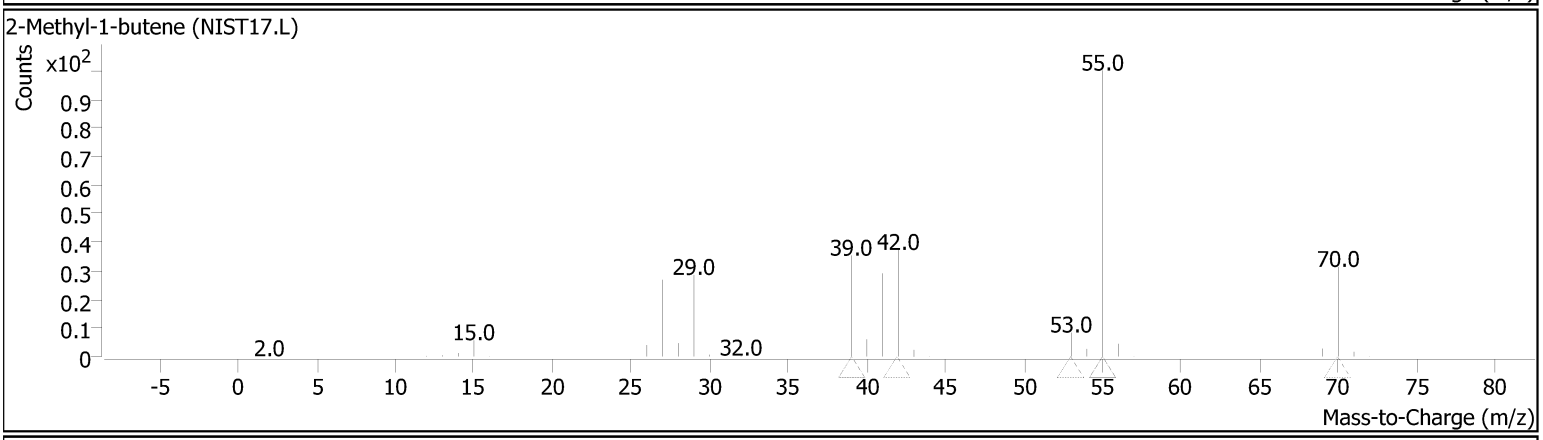


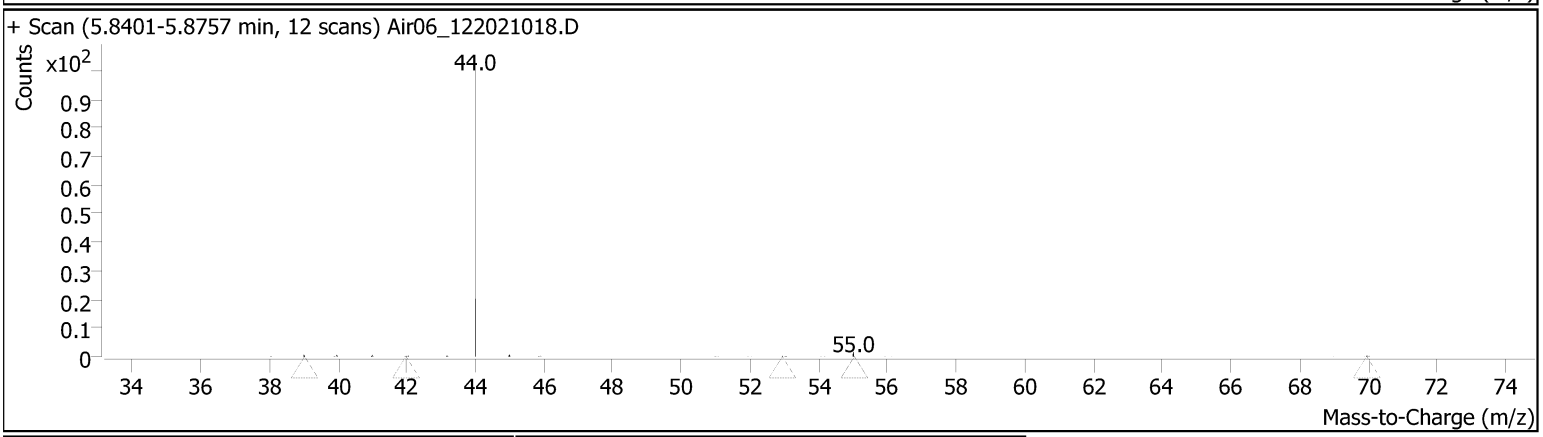


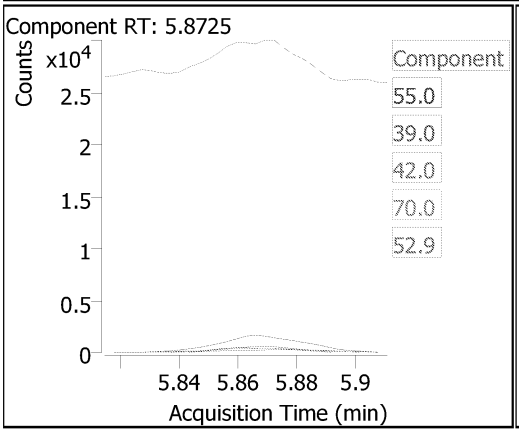


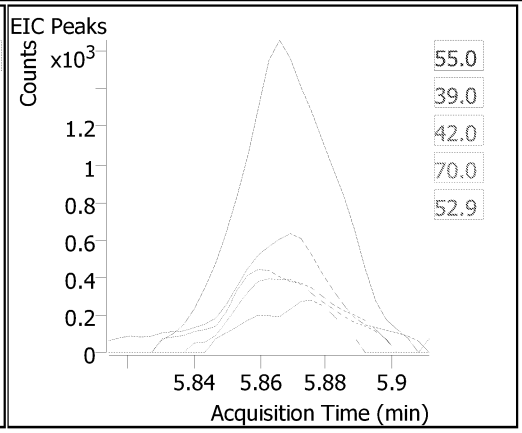
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.8725	2-Methyl-1-butene	10418.7	91.9	563-46-2	C5H10	0.04648

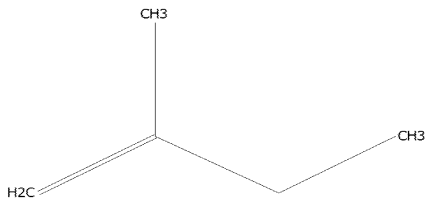




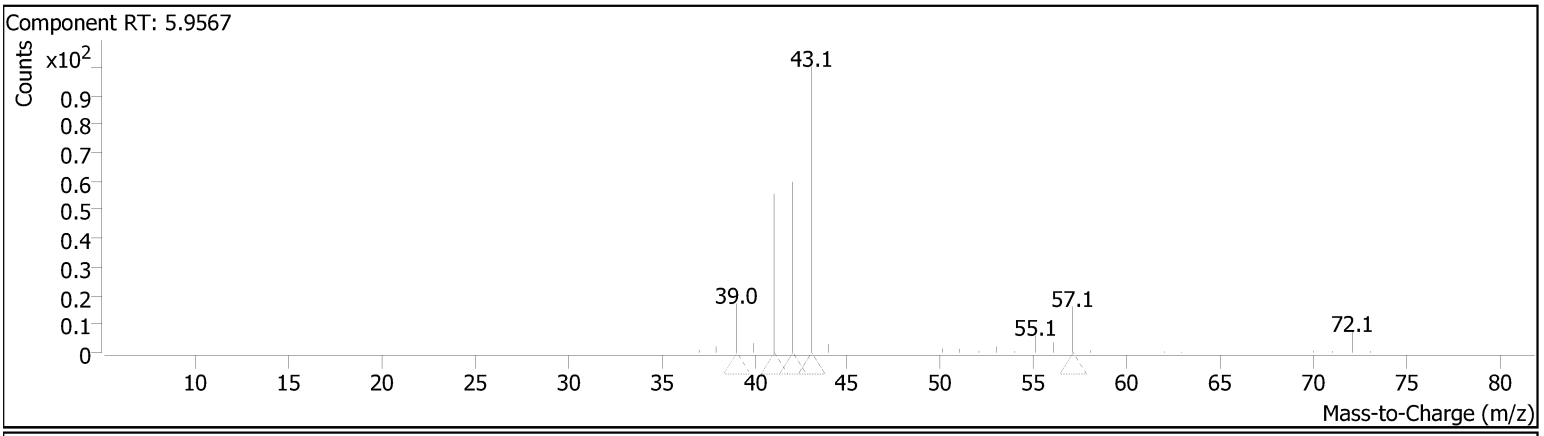


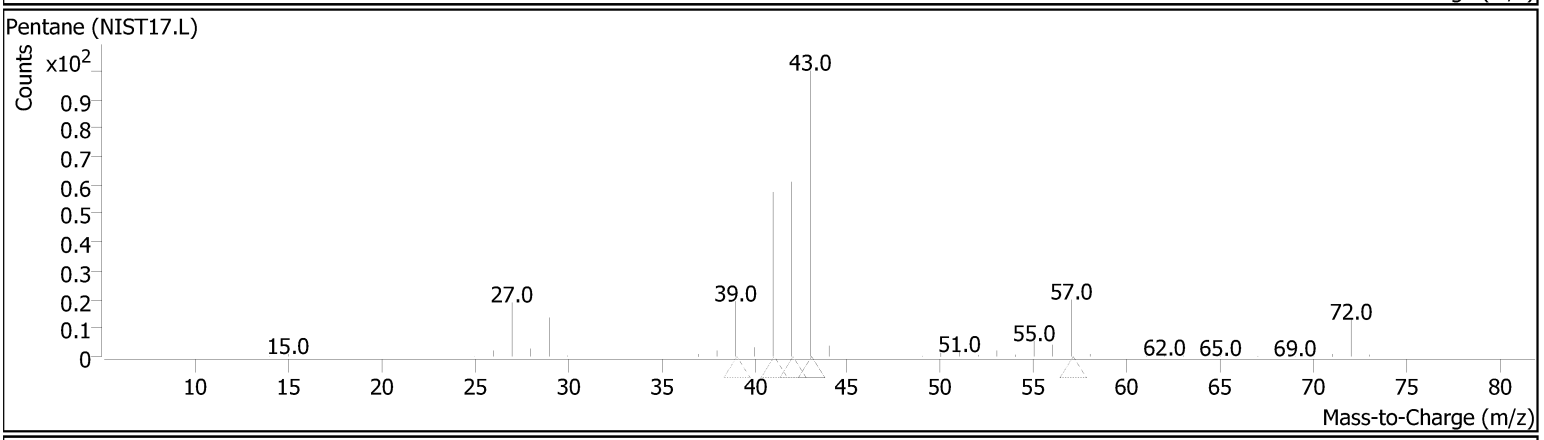


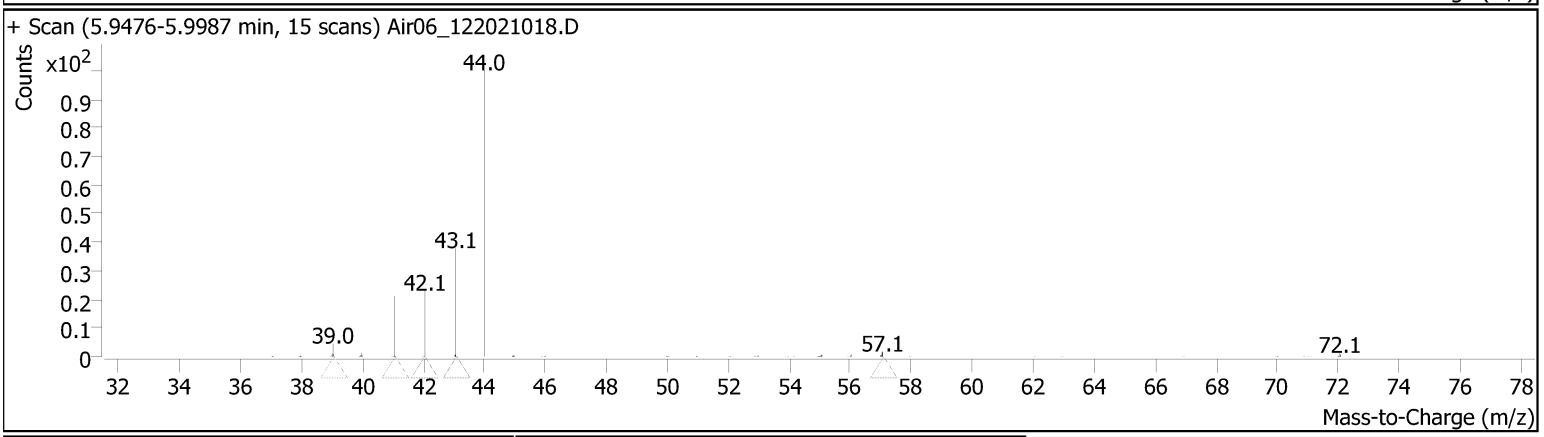


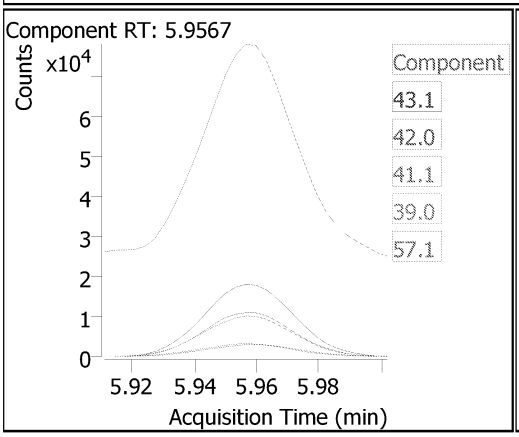


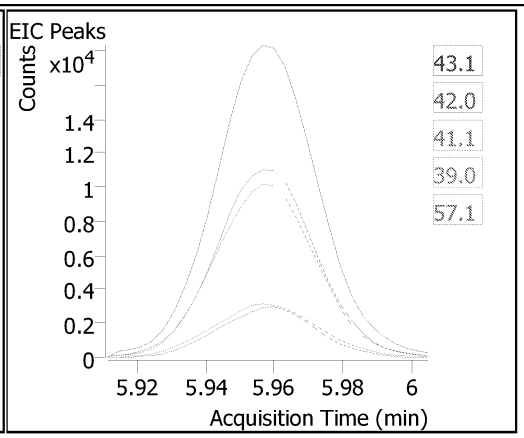
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.9567	Pentane	109152.1	99.0	109-66-0	C5H12	0.4869

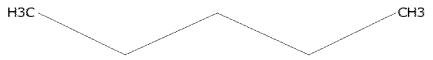




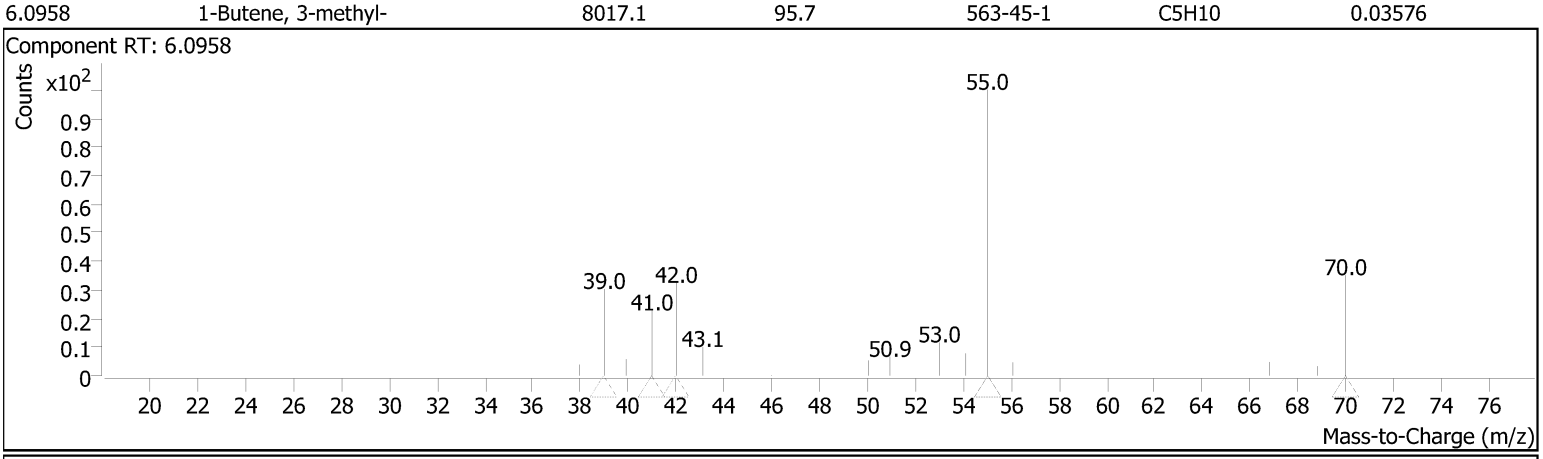


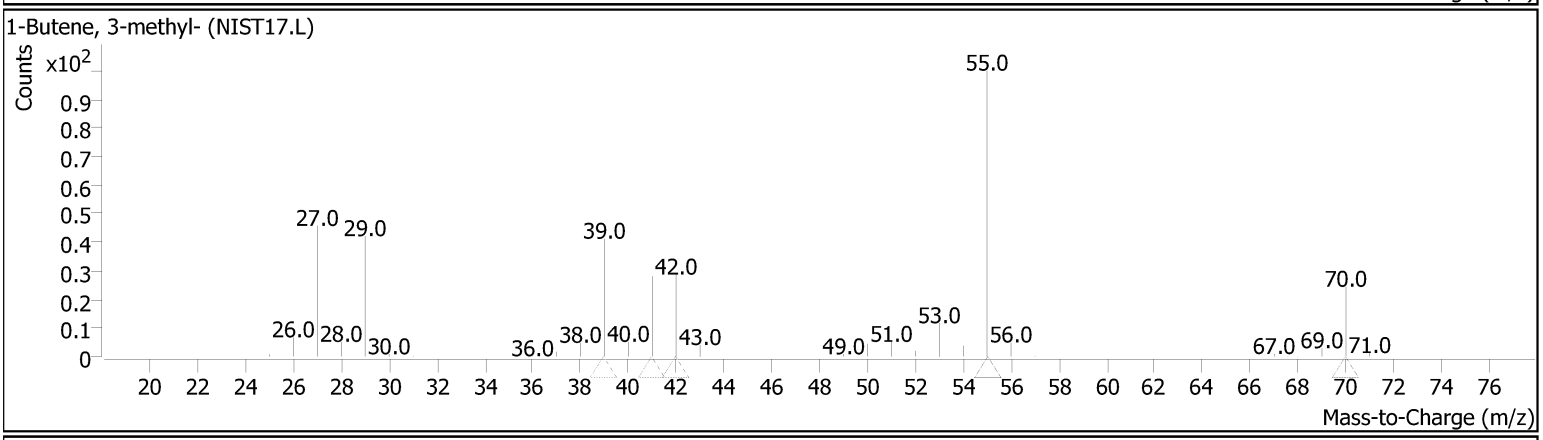


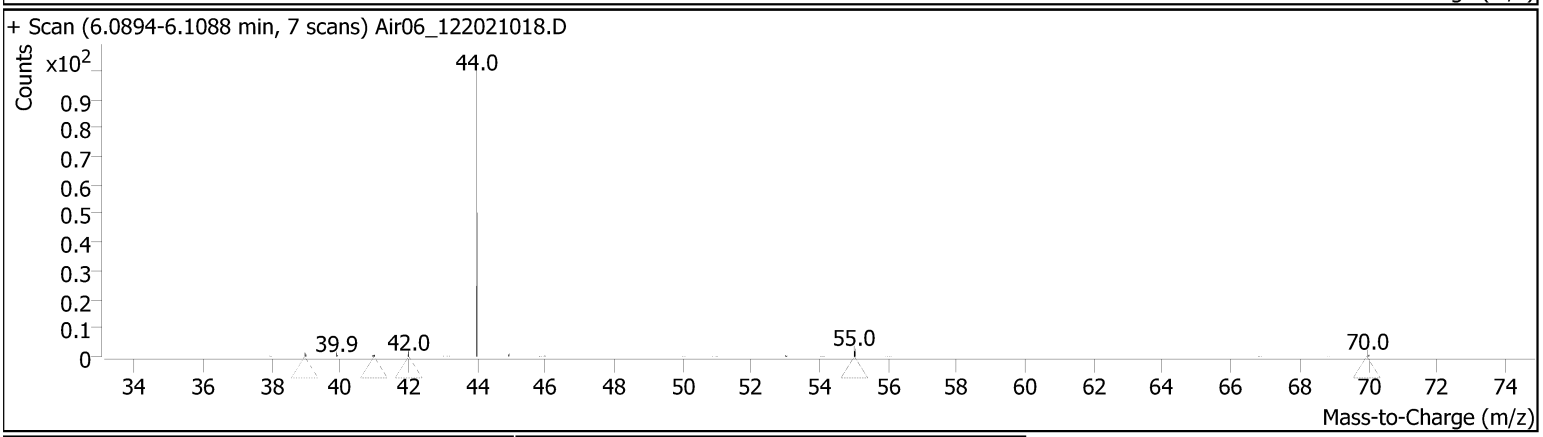


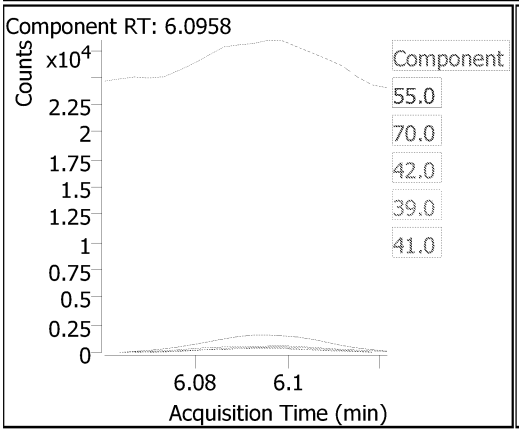


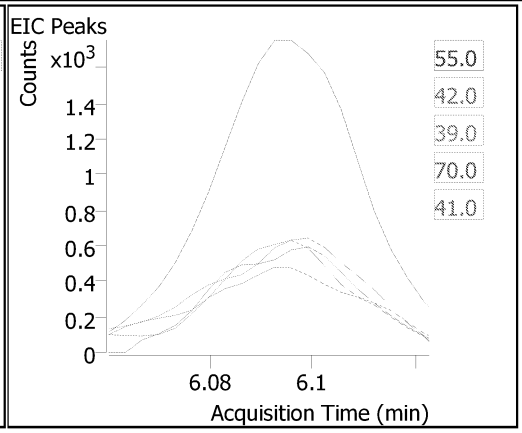
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.0958	1-Butene, 3-methyl-	8017.1	95.7	563-45-1	C5H10	0.03576

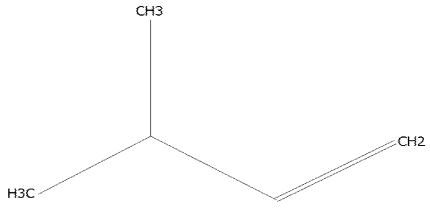




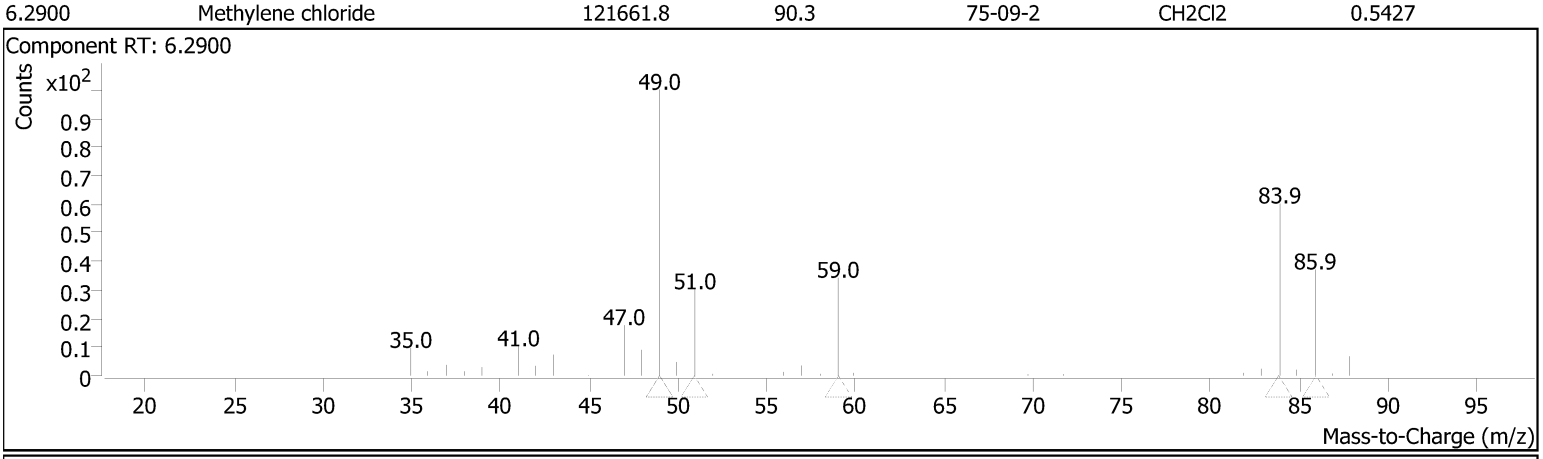


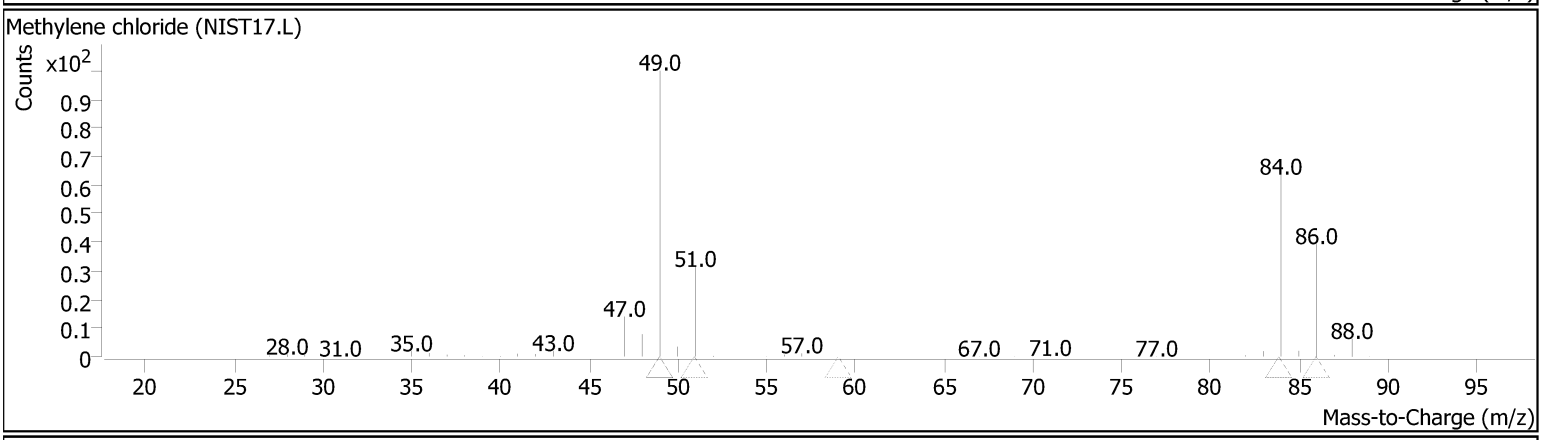


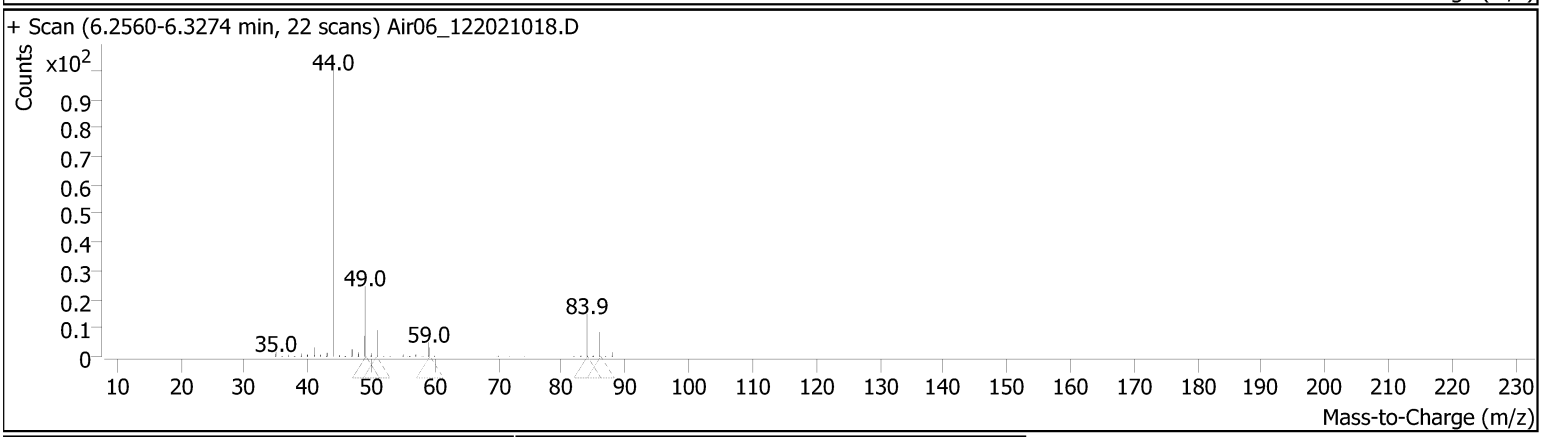


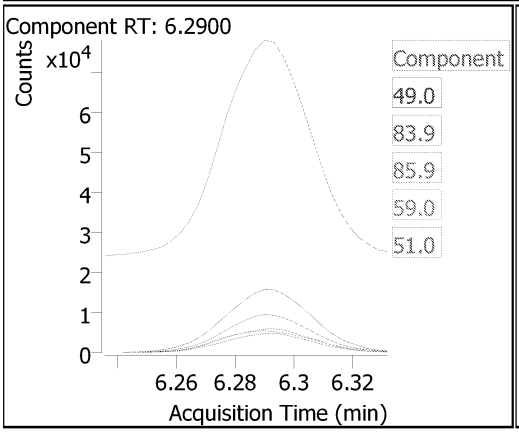


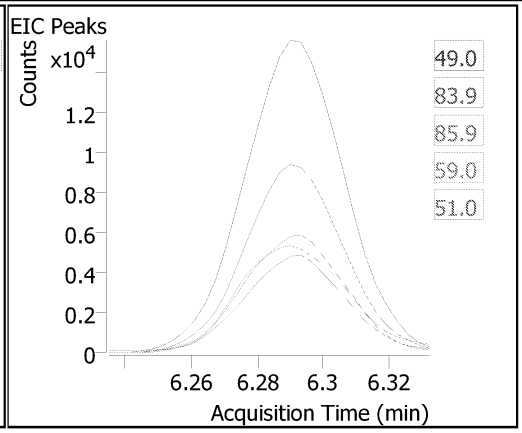
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.2900	Methylene chloride	121661.8	90.3	75-09-2	CH2Cl2	0.5427

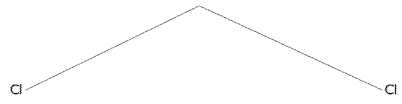




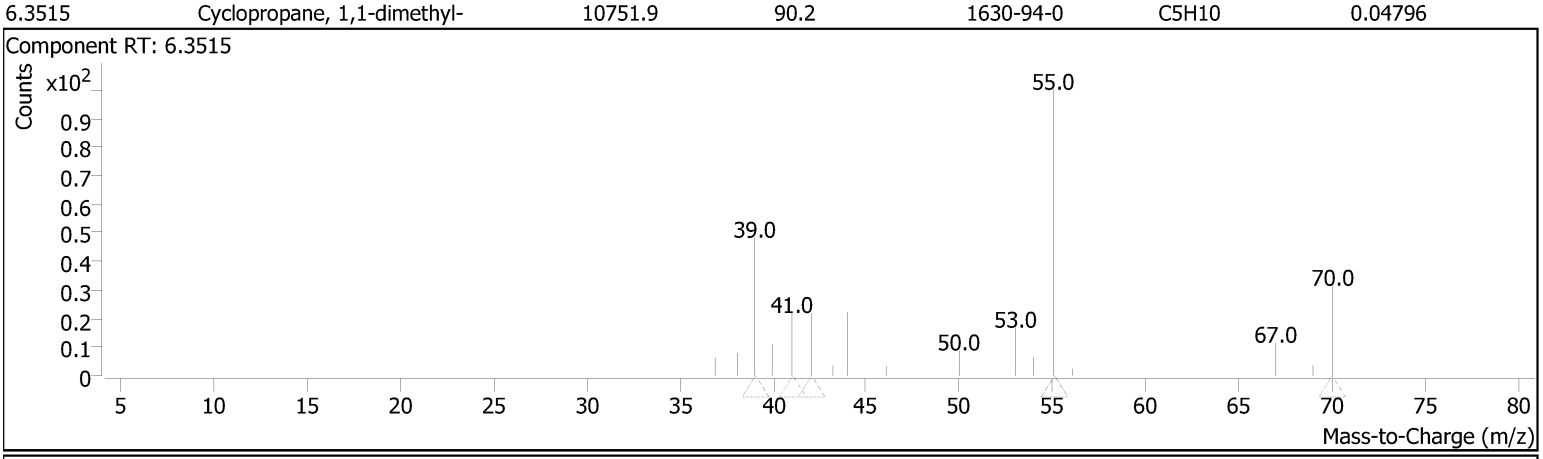


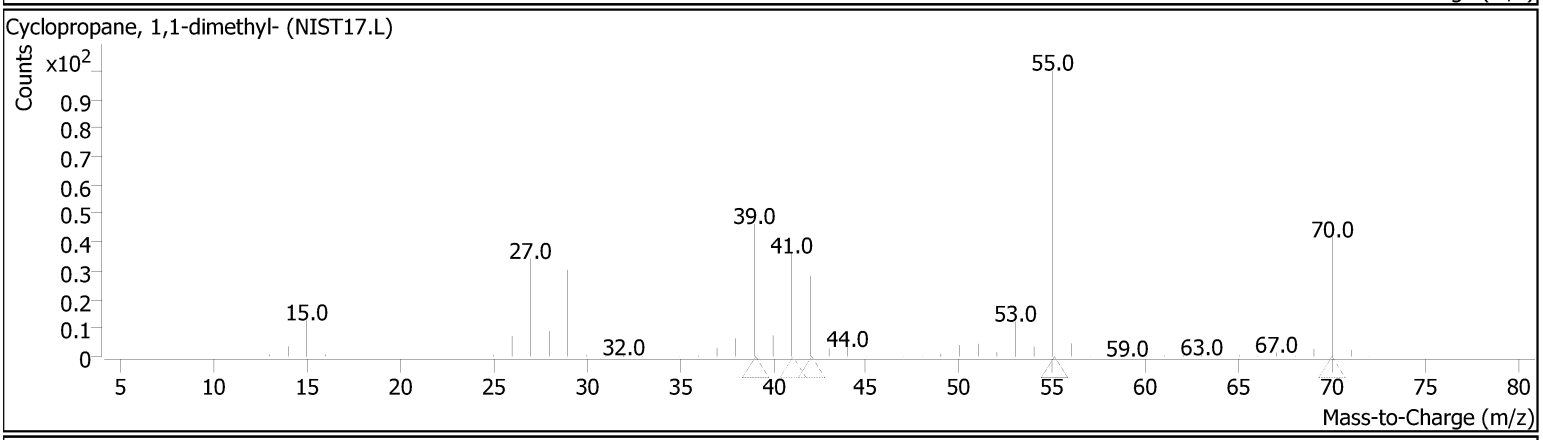


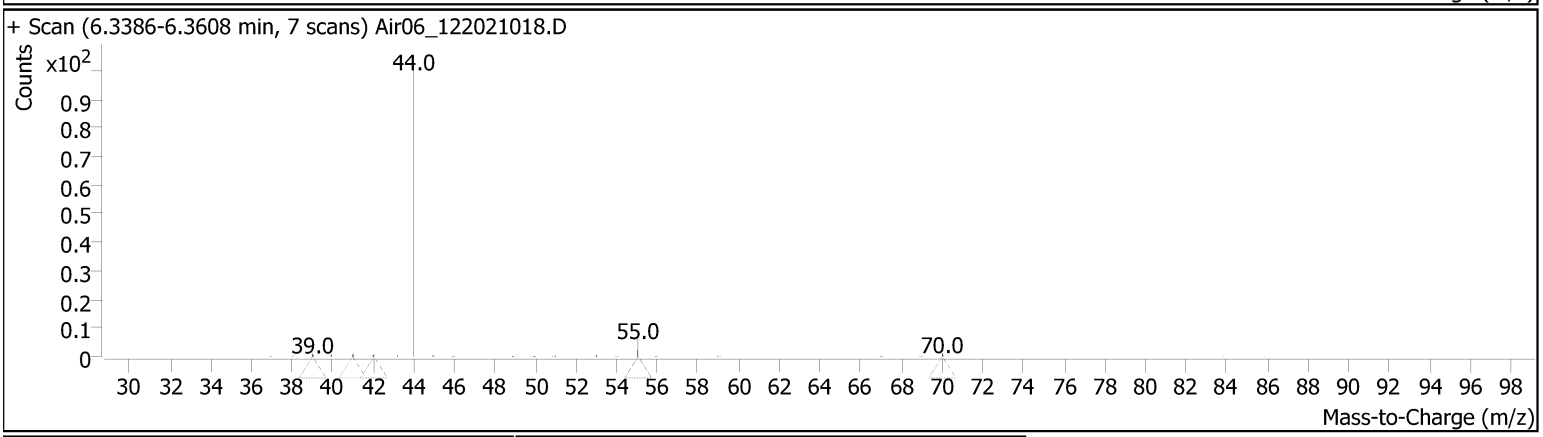


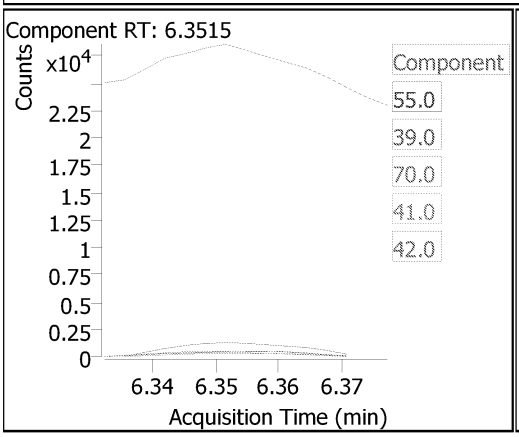


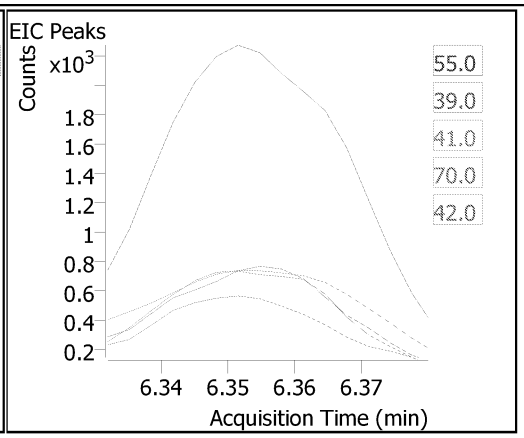
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.3515	Cyclopropane, 1,1-dimethyl-	10751.9	90.2	1630-94-0	C5H10	0.04796

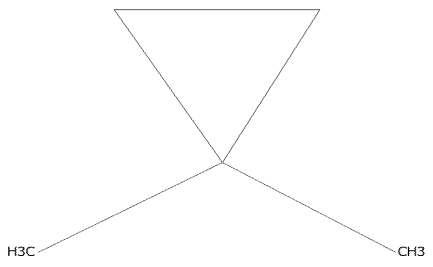




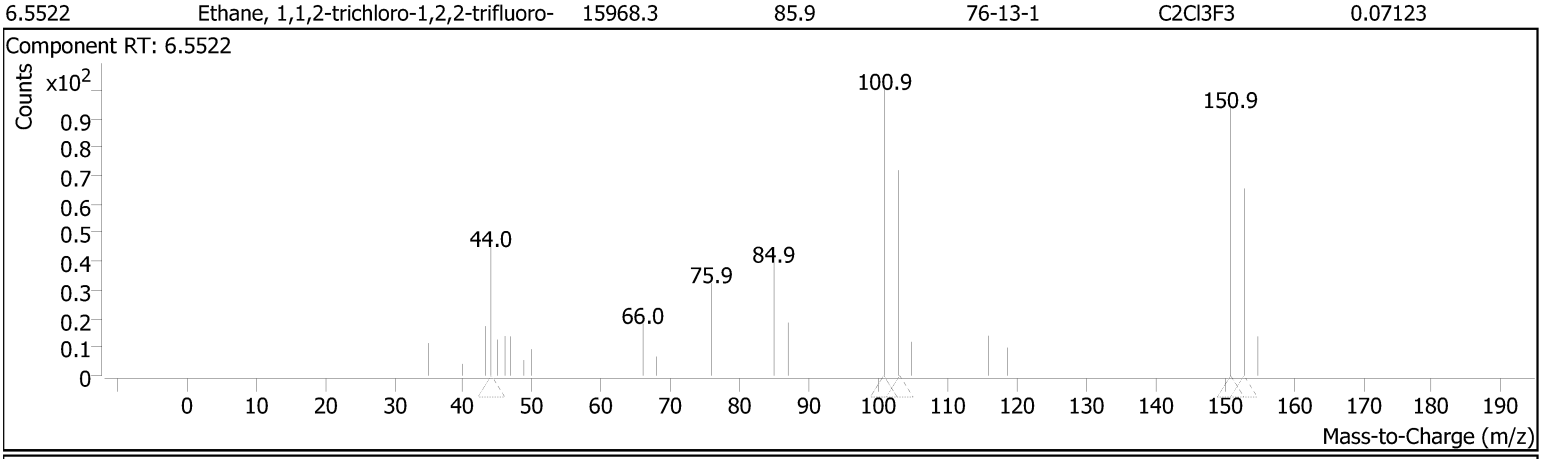


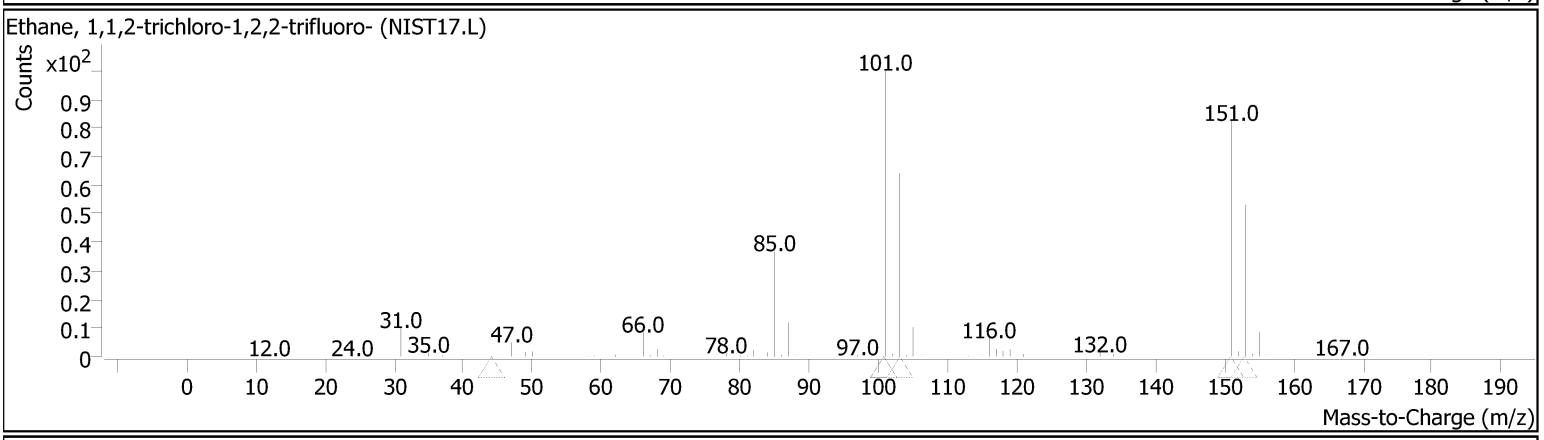


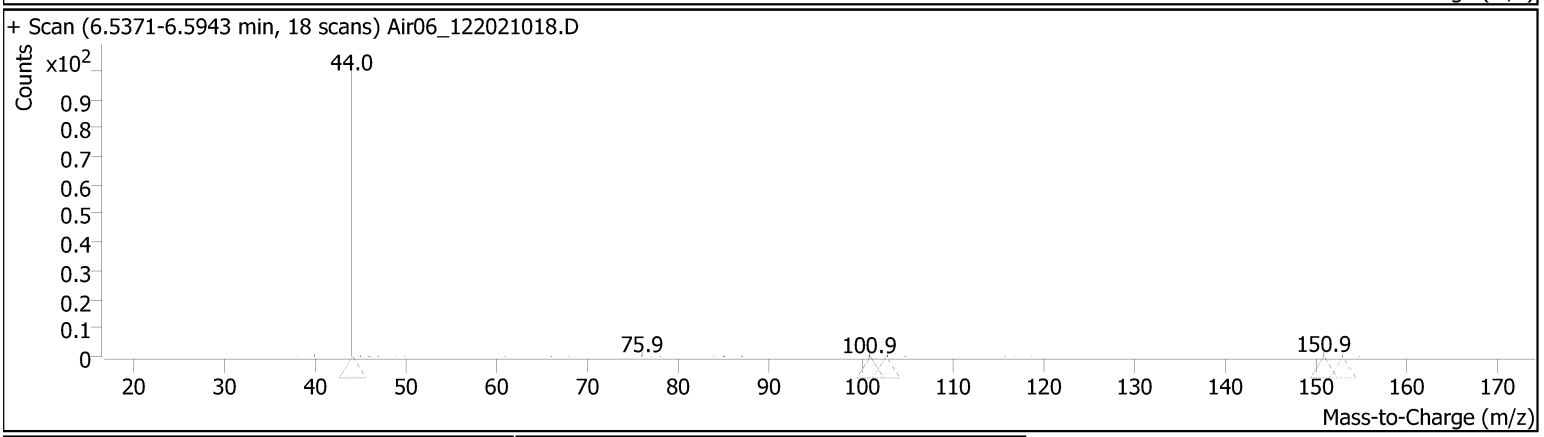


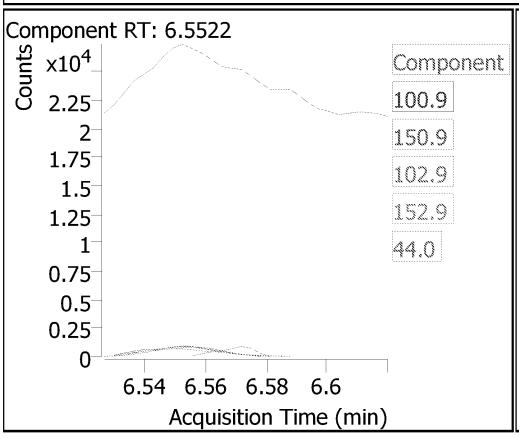


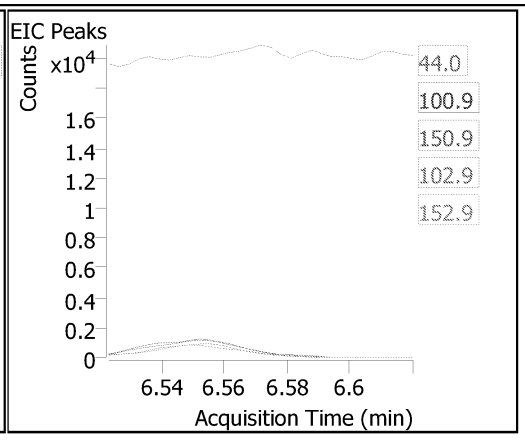
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.5522	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	15968.3	85.9	76-13-1	C2Cl3F3	0.07123

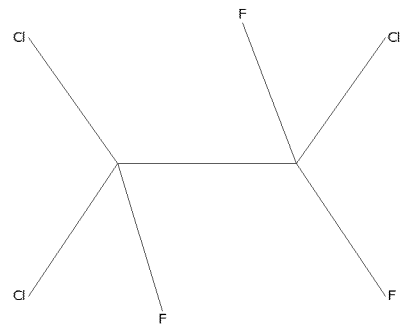




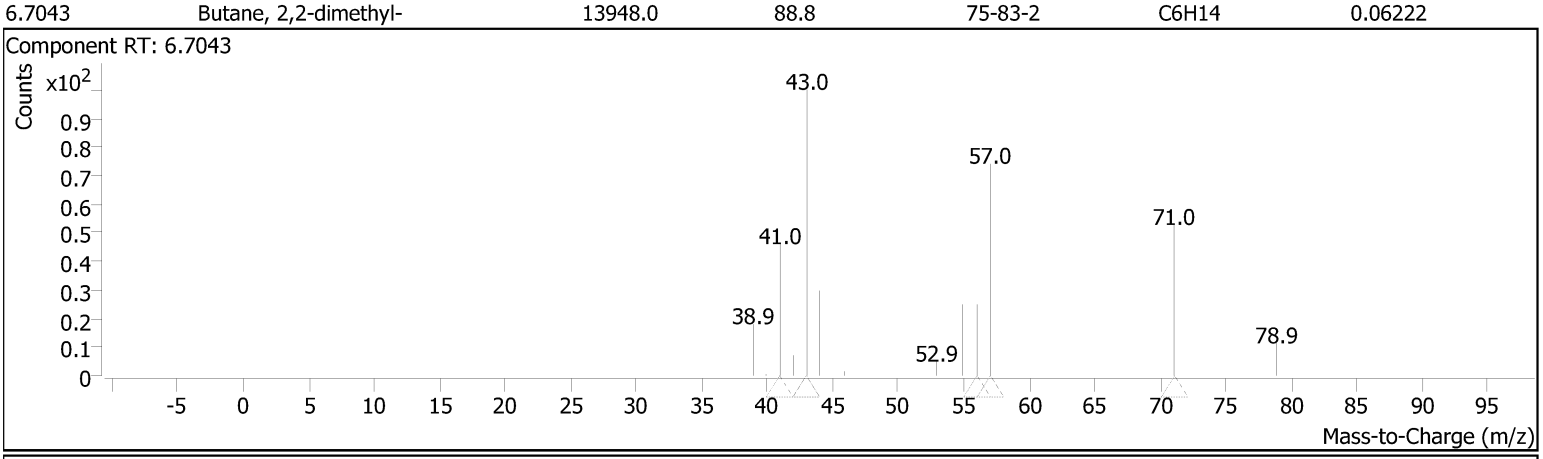


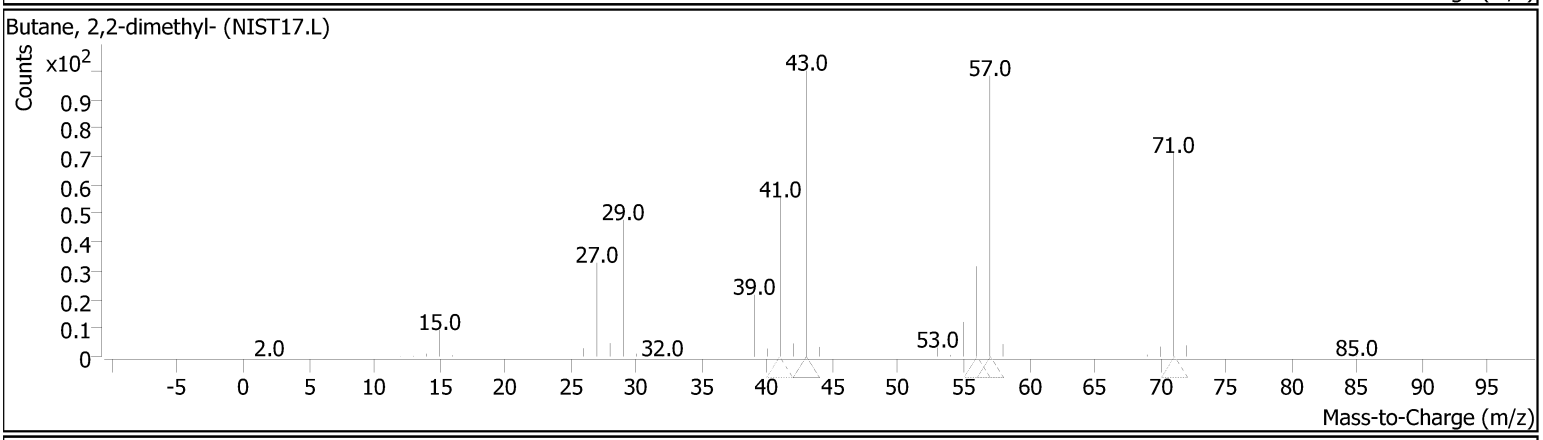


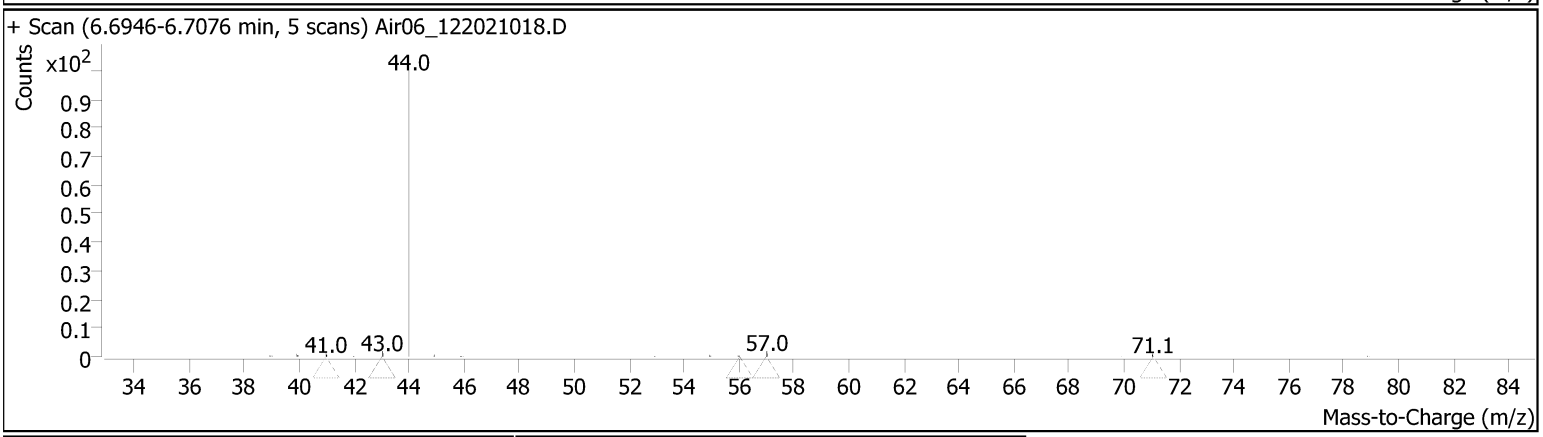


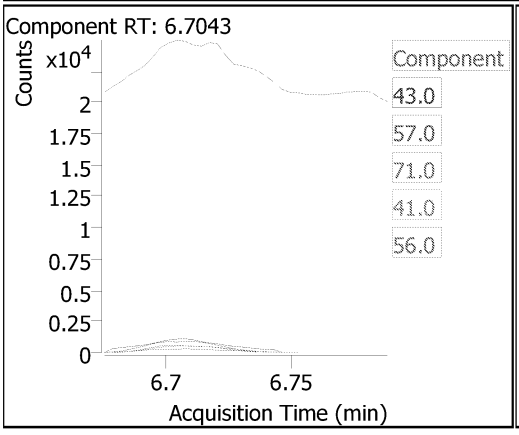


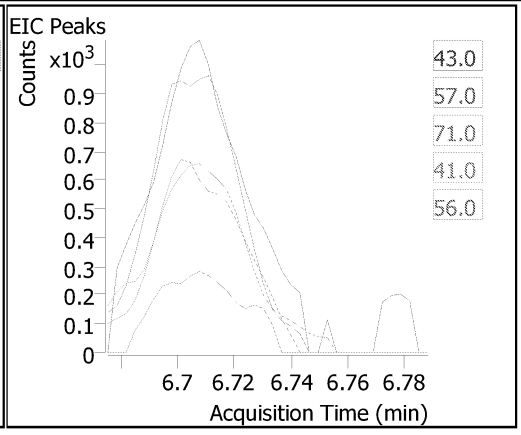
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.7043	Butane, 2,2-dimethyl-	13948.0	88.8	75-83-2	C6H14	0.06222

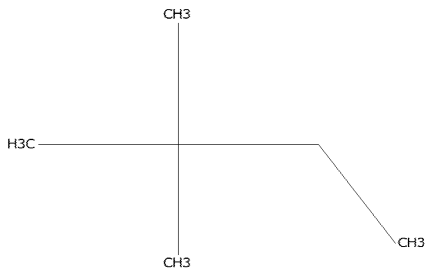




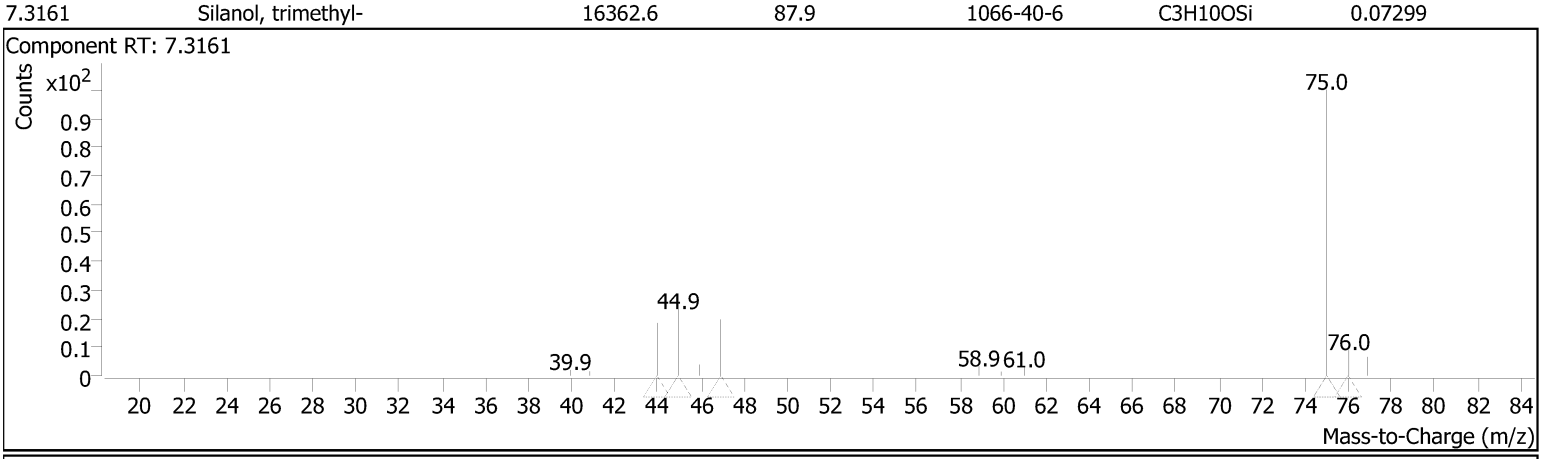


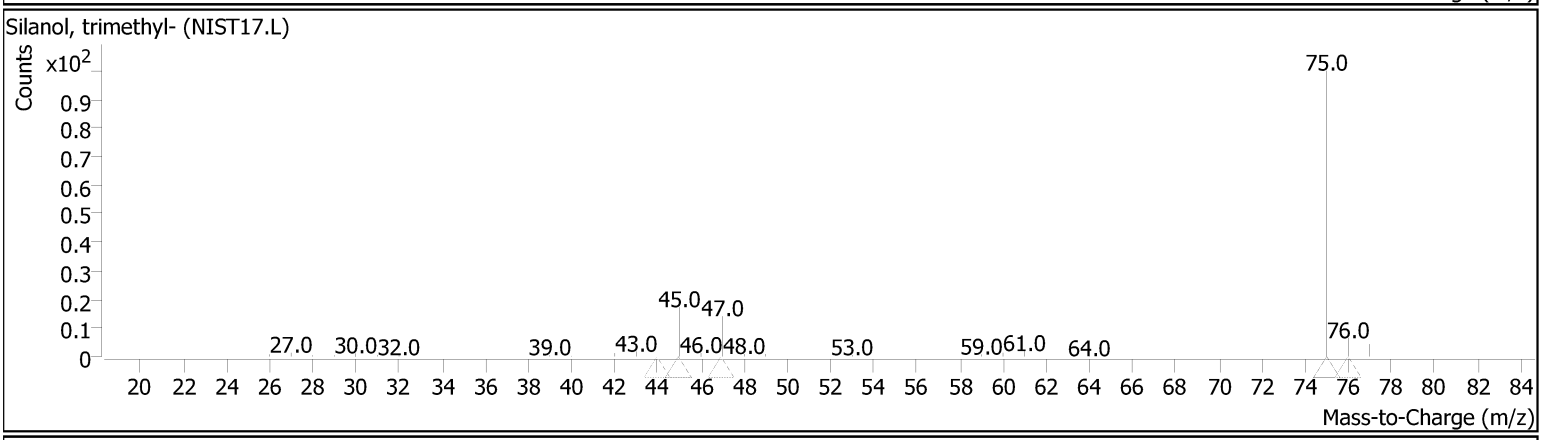


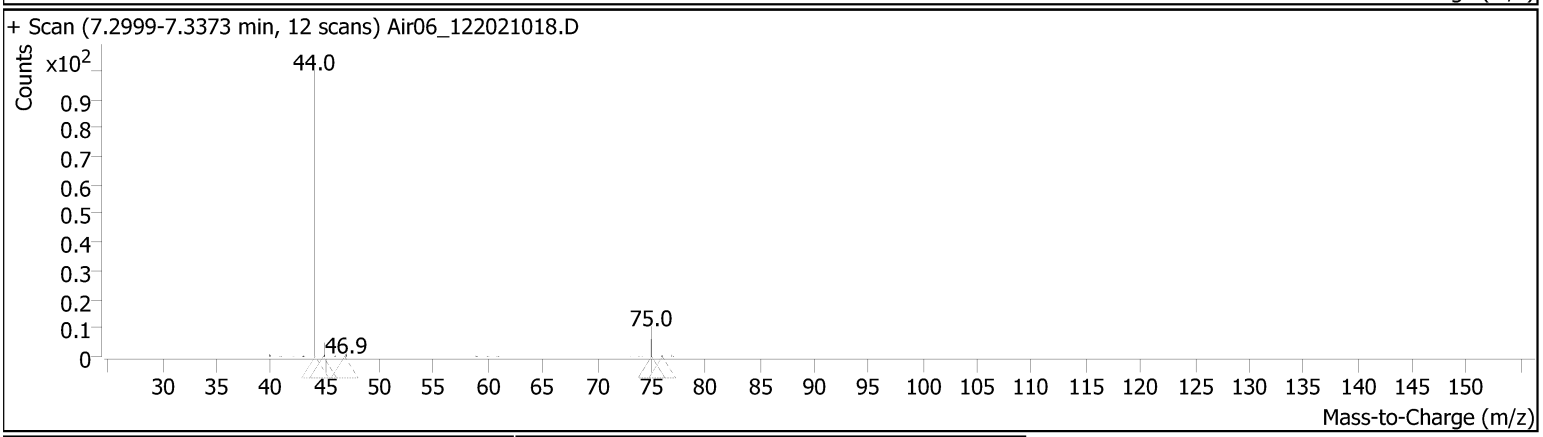


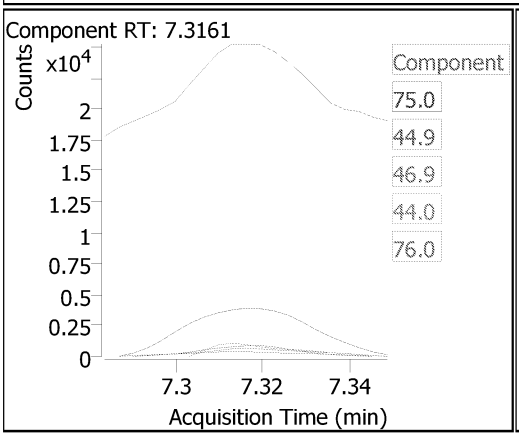


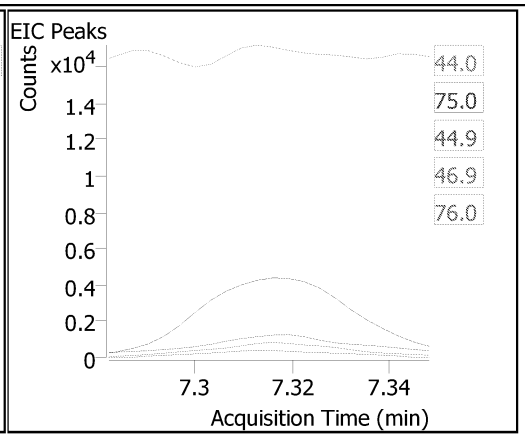
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.3161	Silanol, trimethyl-	16362.6	87.9	1066-40-6	C3H10OSi	0.07299

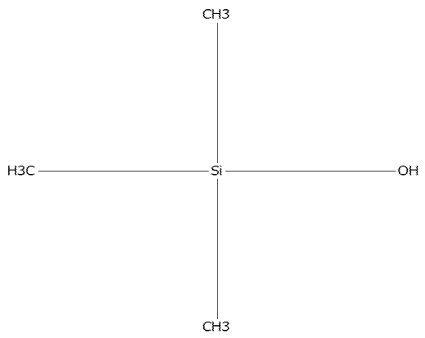




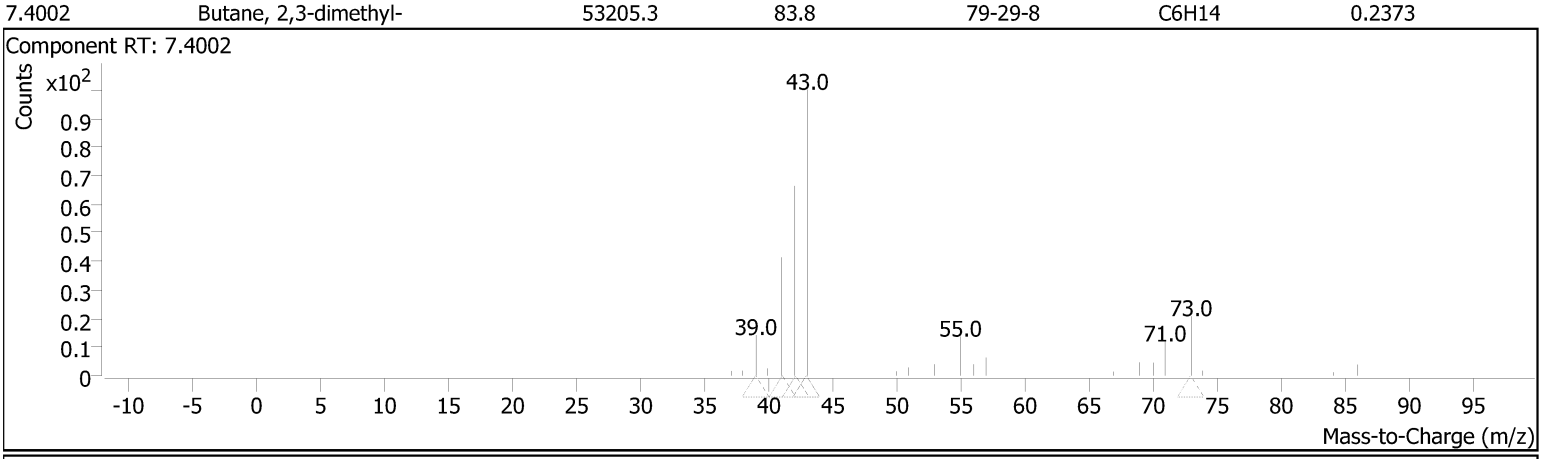


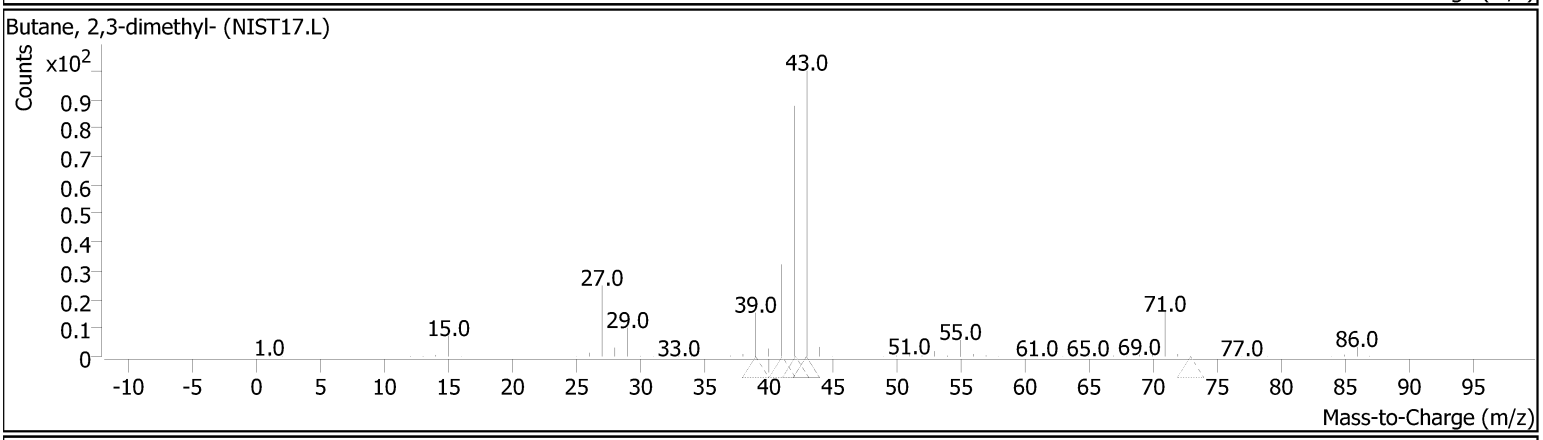


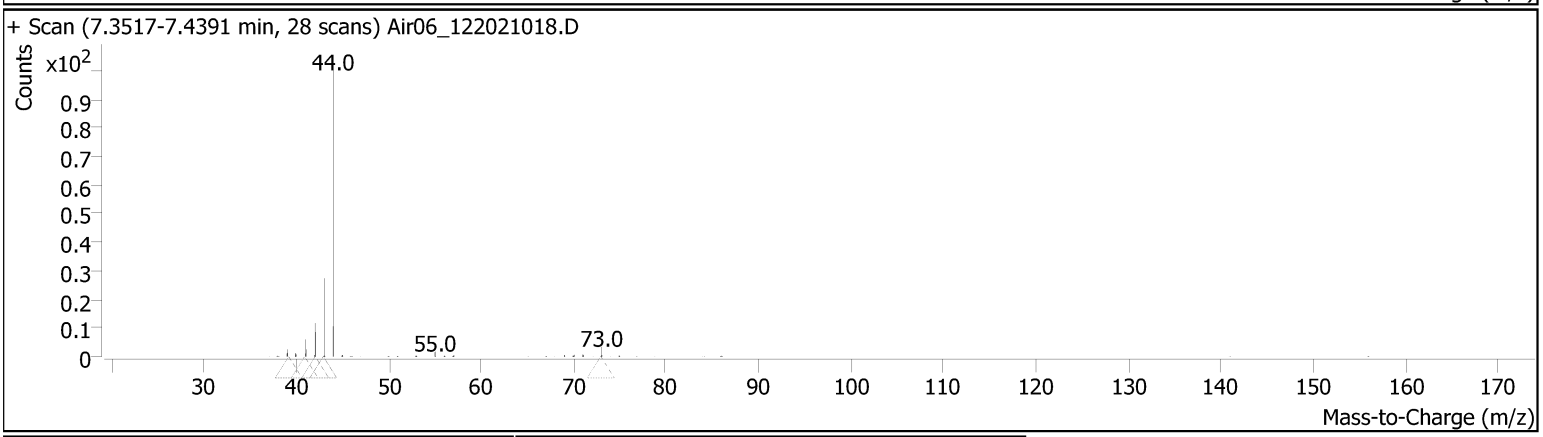


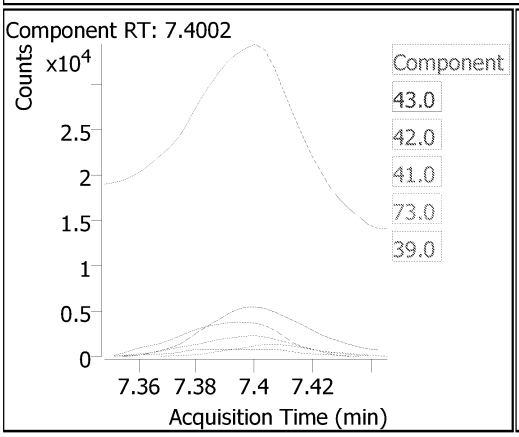


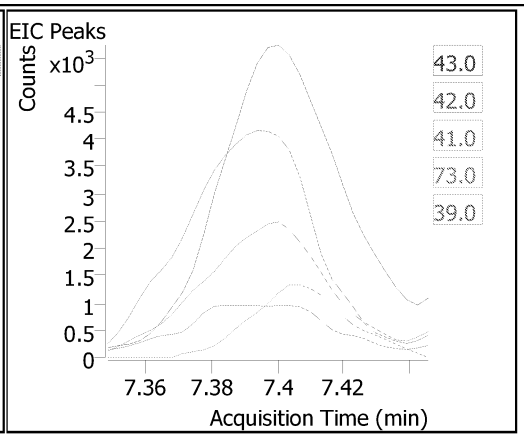
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.4002	Butane, 2,3-dimethyl-	53205.3	83.8	79-29-8	C6H14	0.2373

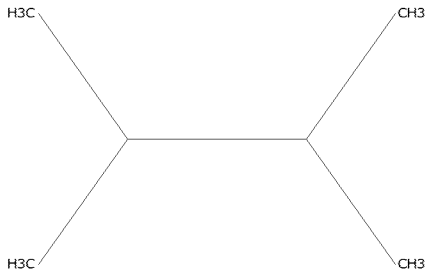




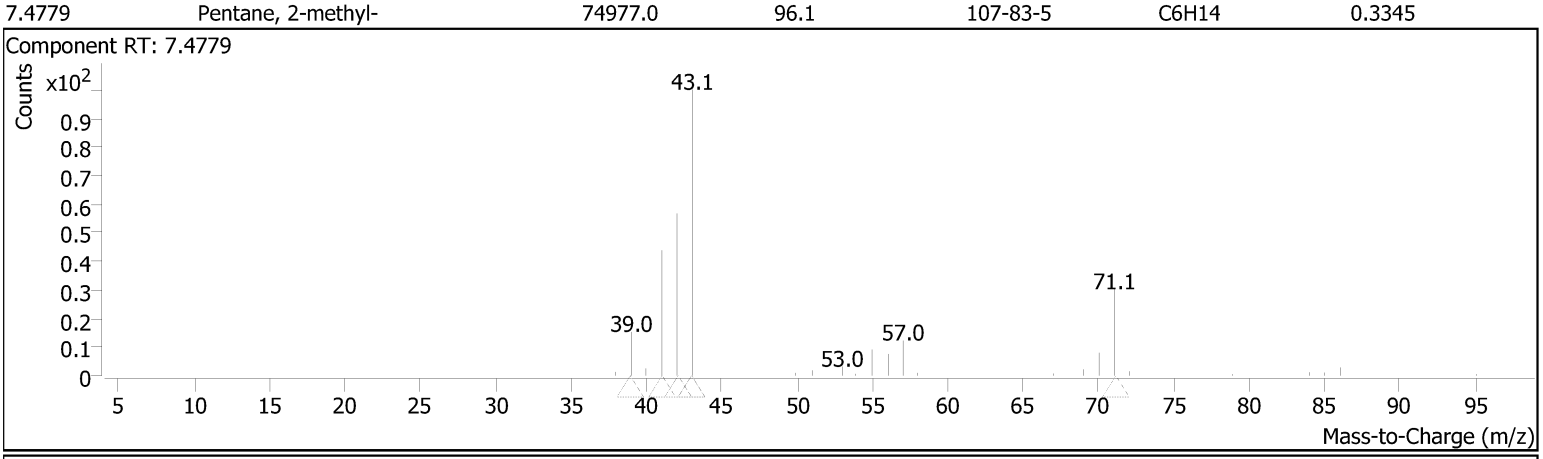


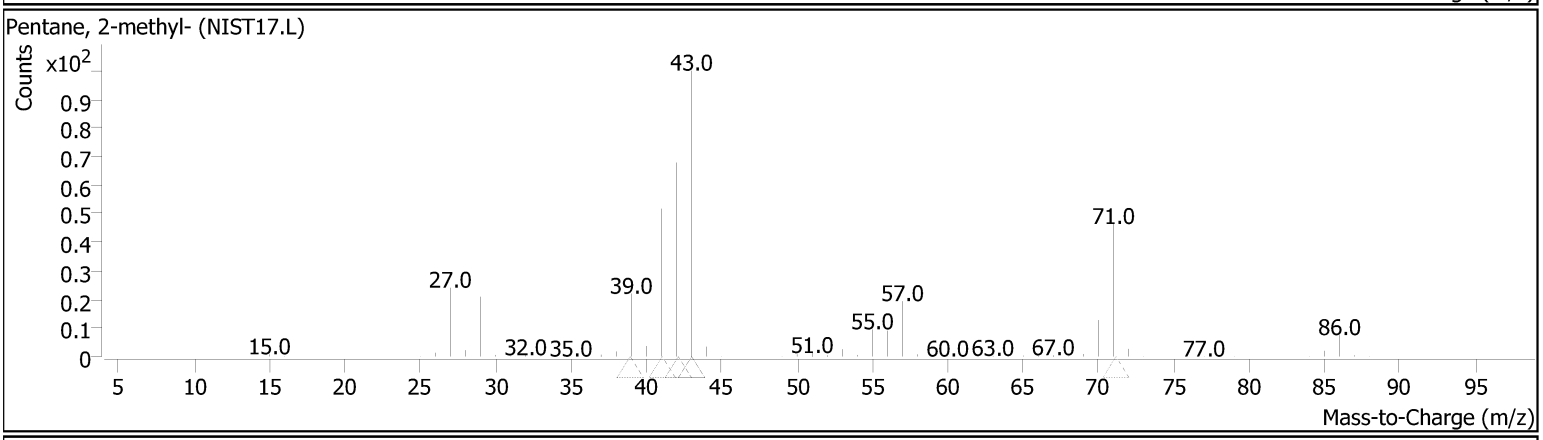


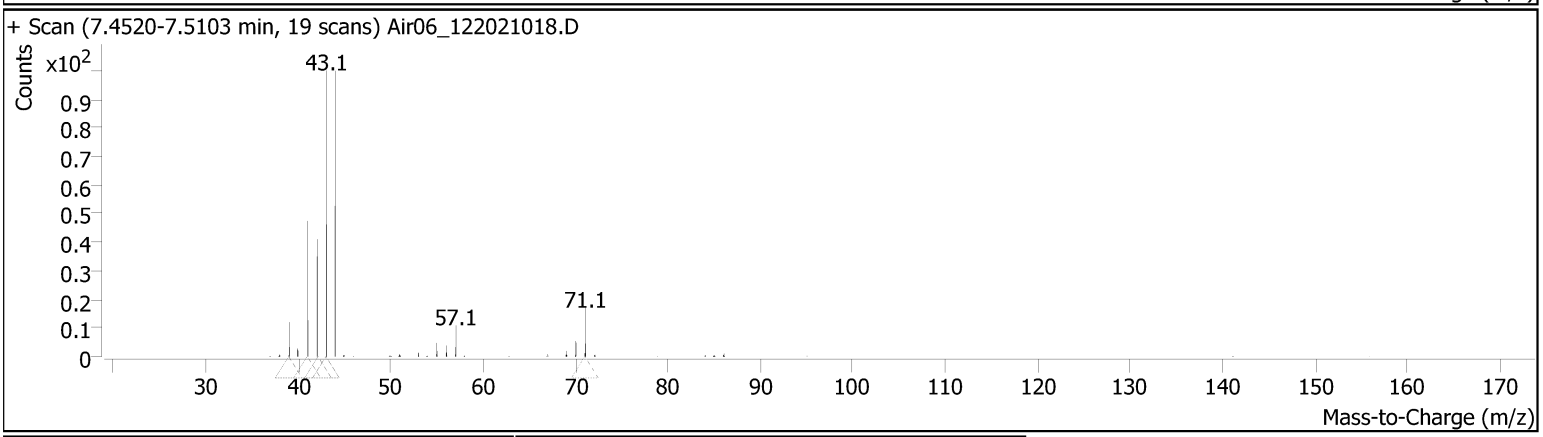


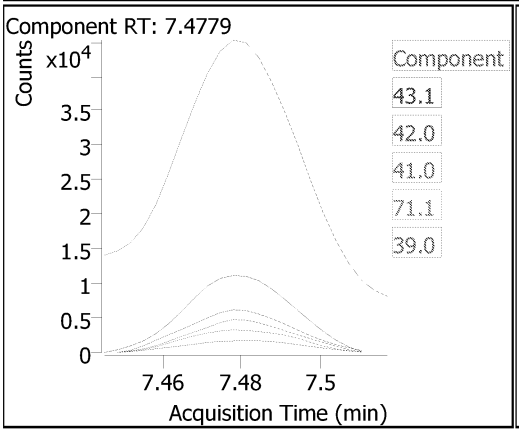


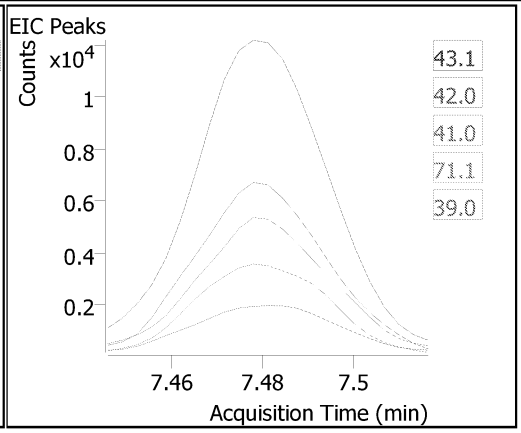
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.4779	Pentane, 2-methyl-	74977.0	96.1	107-83-5	C6H14	0.3345

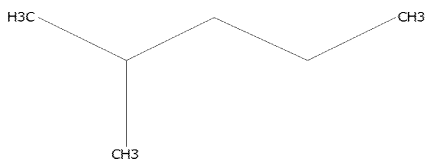




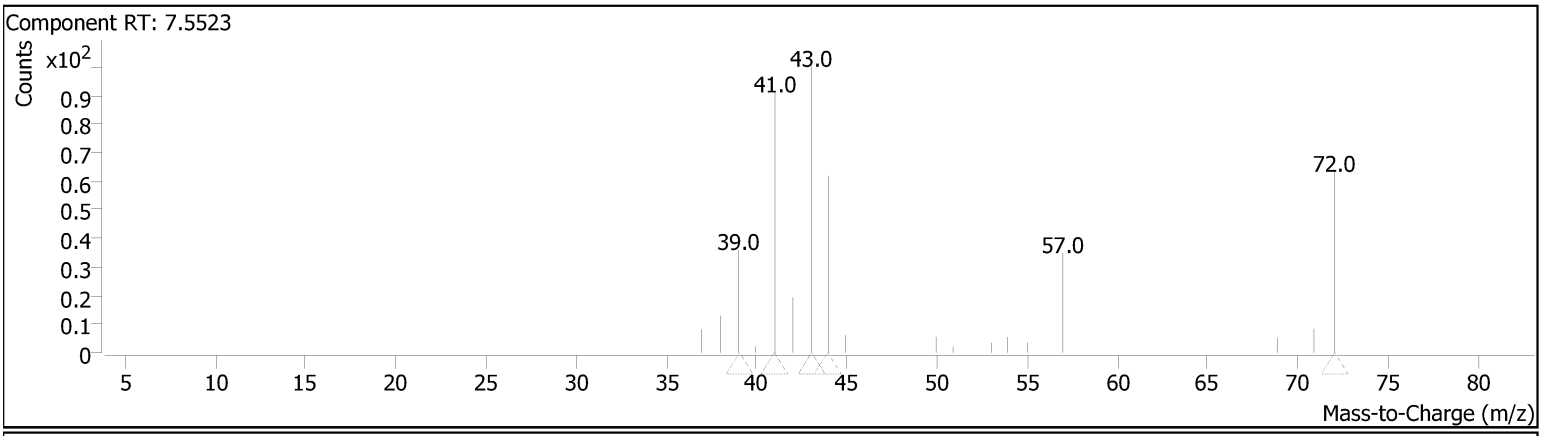


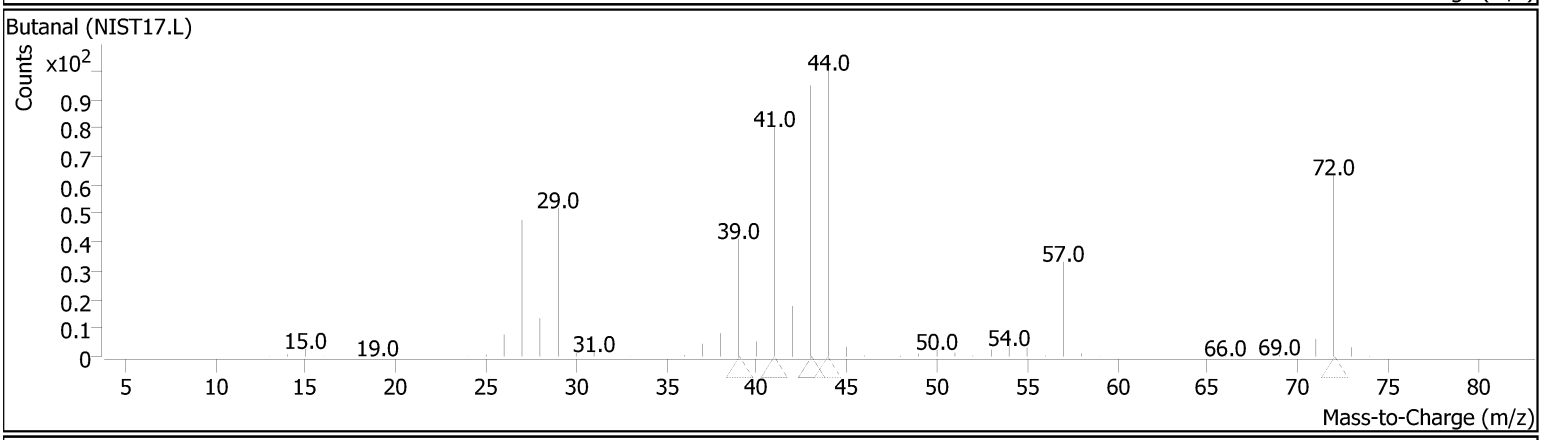


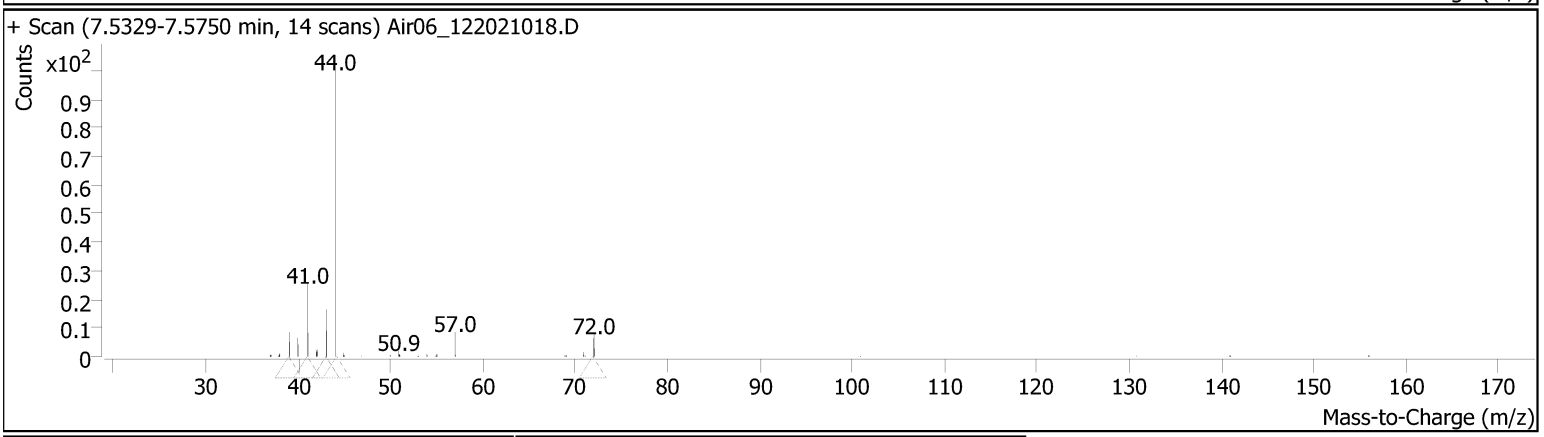


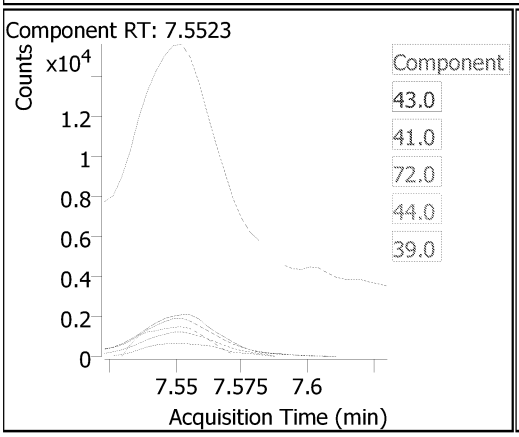


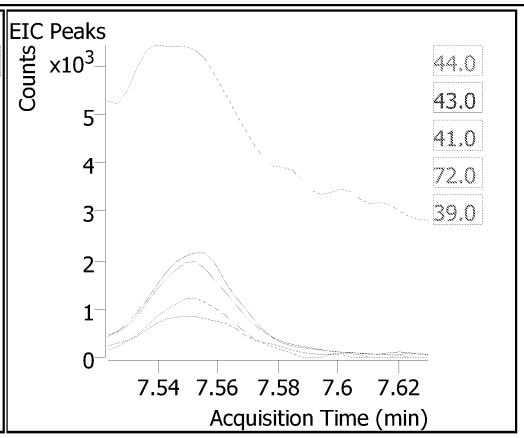
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.5523	Butanal	19203.5	92.5	123-72-8	C4H8O	0.08566

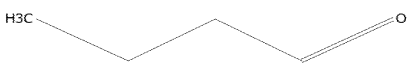




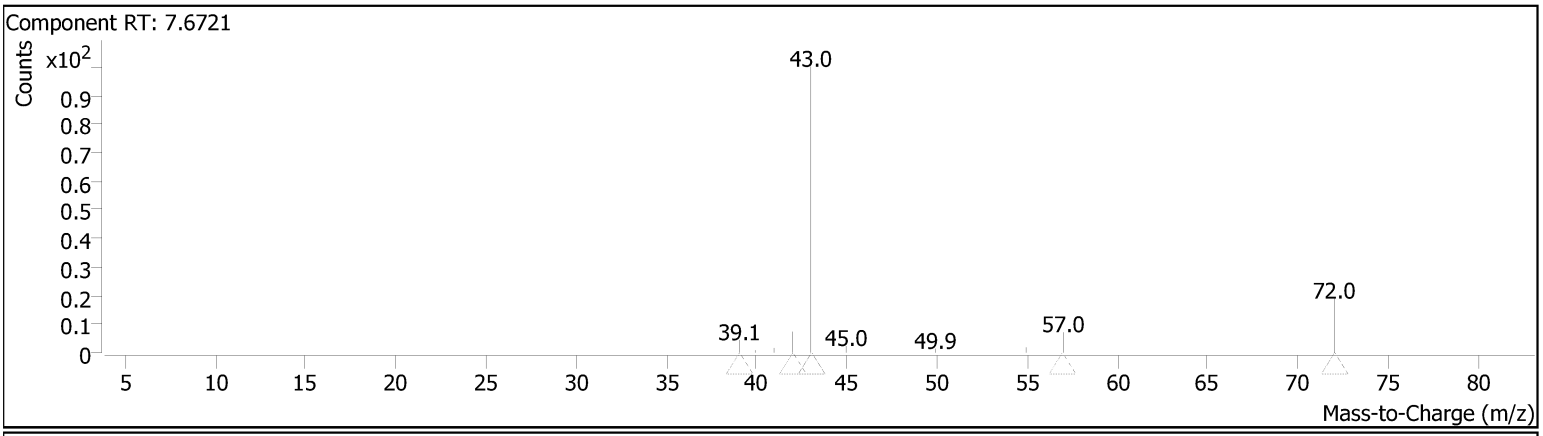


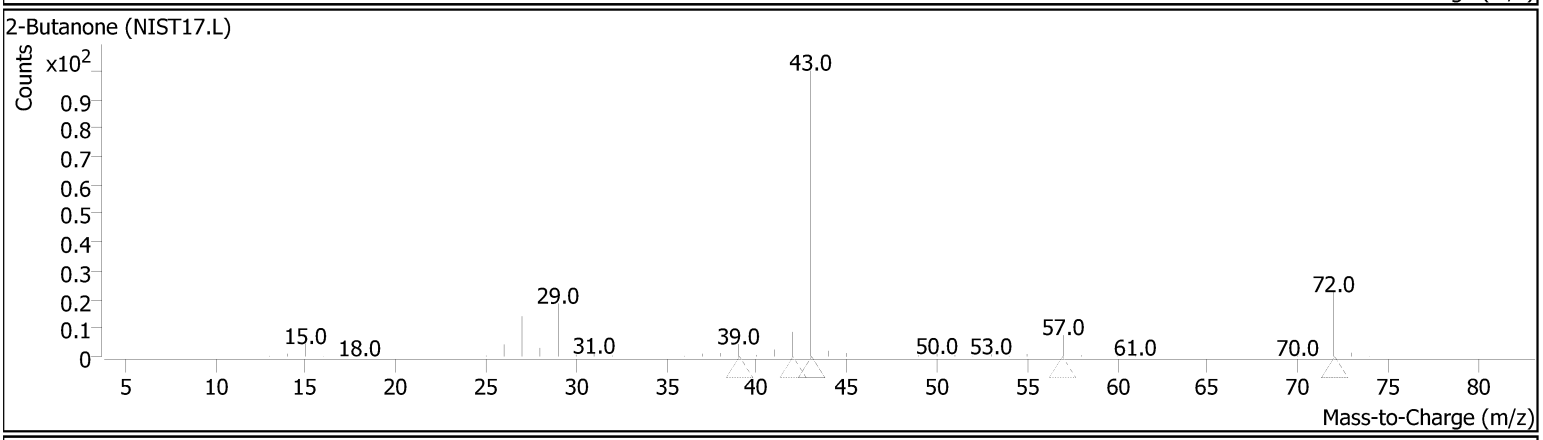


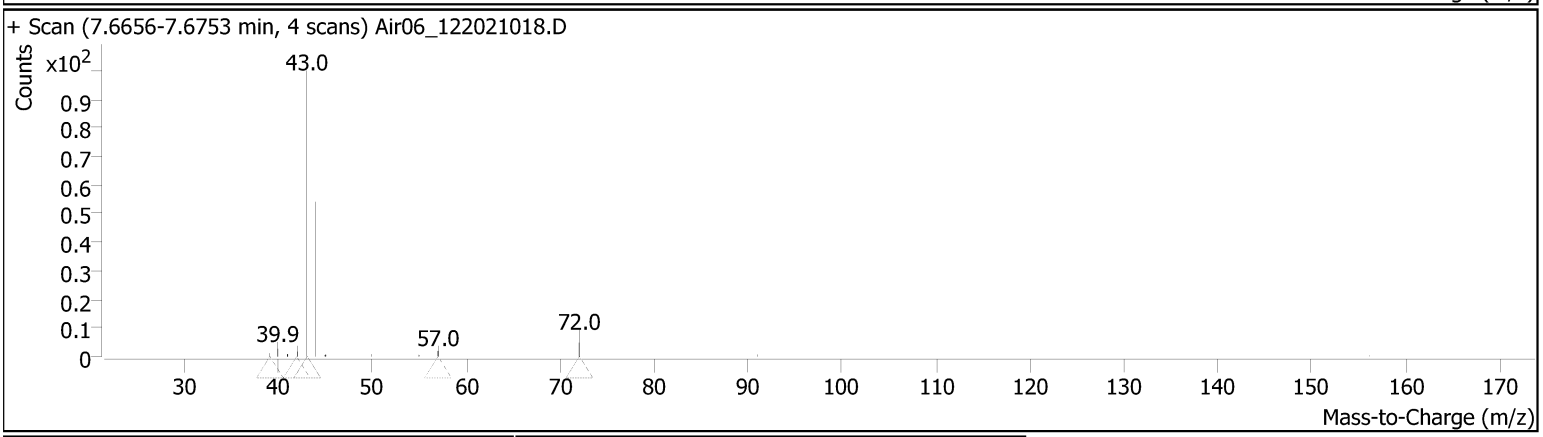


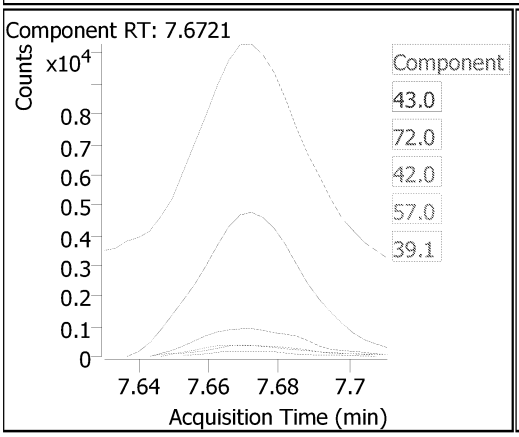


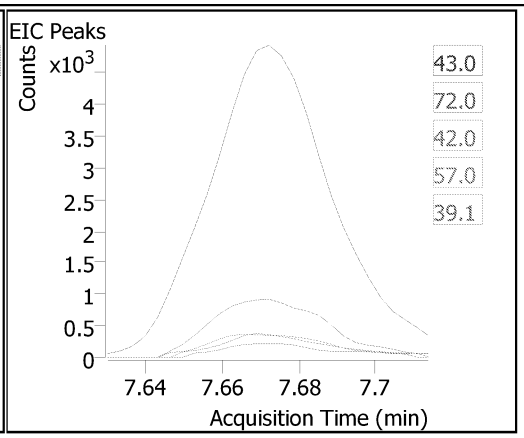
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.6721	2-Butanone	16067.7	90.0	78-93-3	C4H8O	0.07168

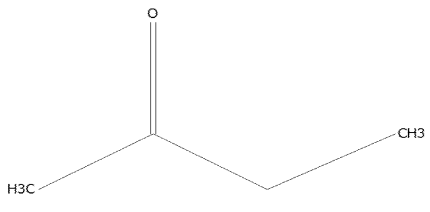




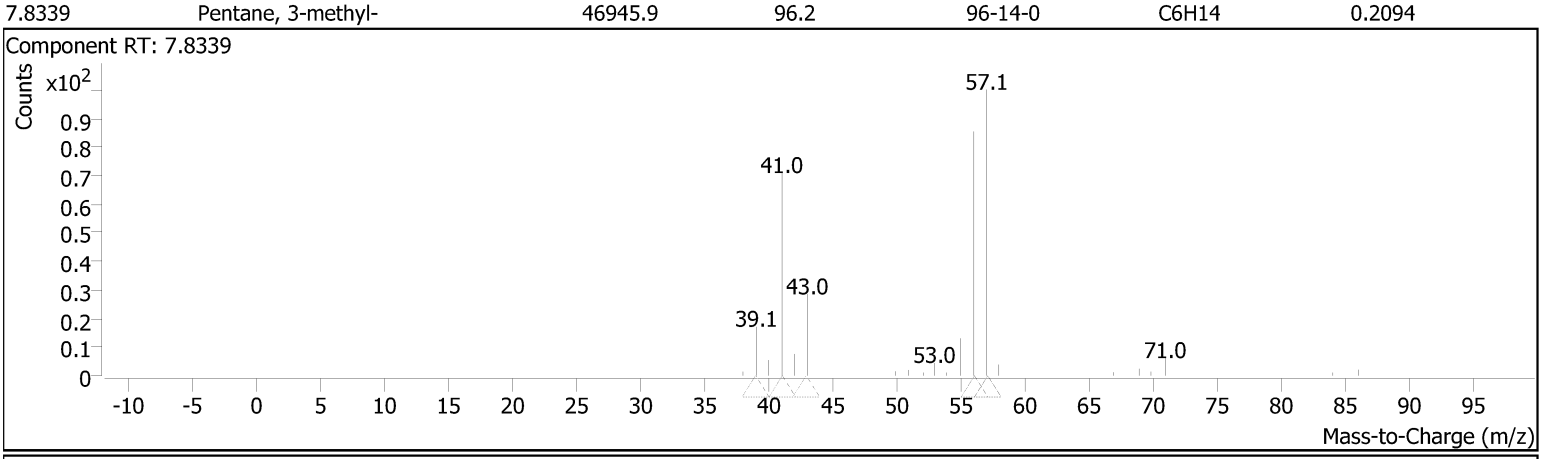


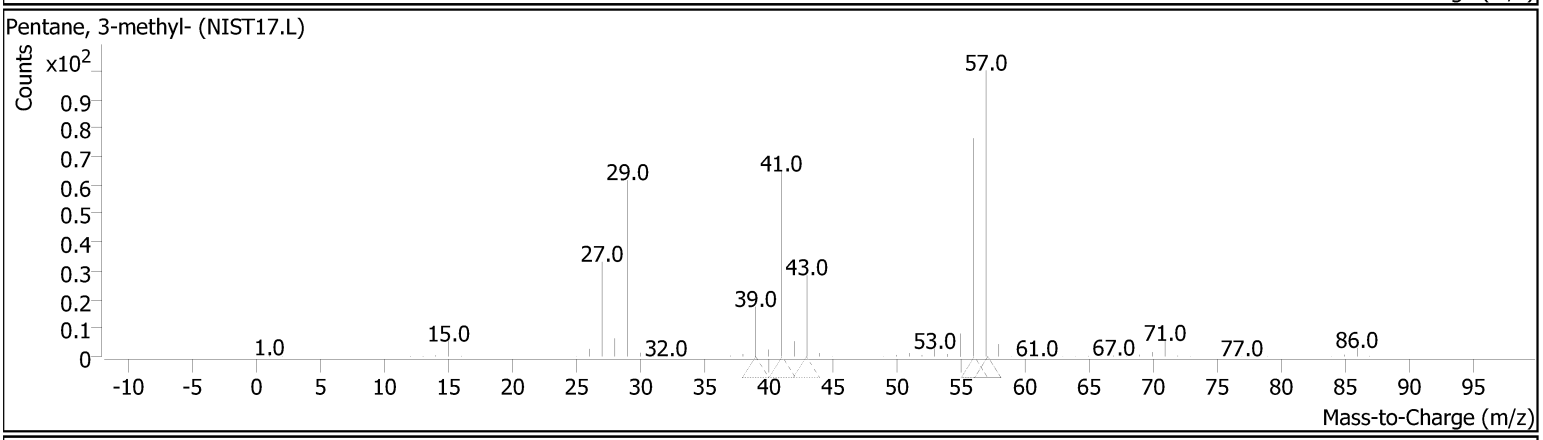


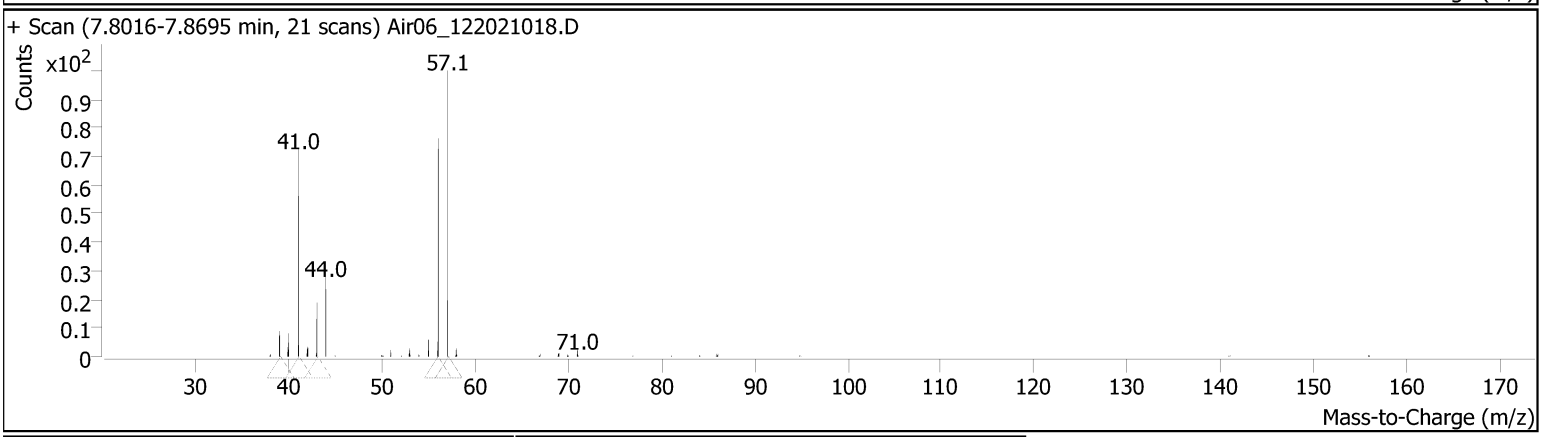


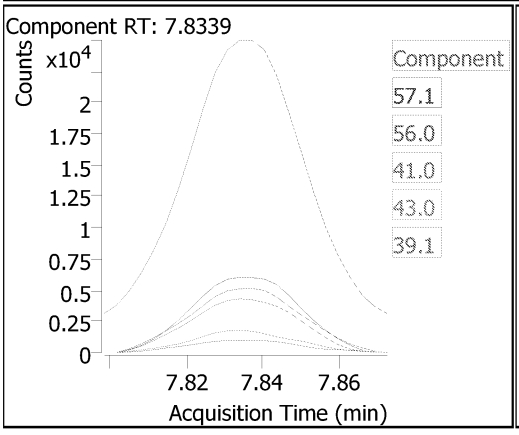


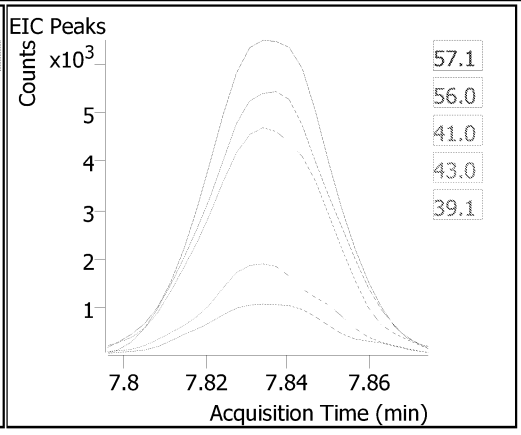
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.8339	Pentane, 3-methyl-	46945.9	96.2	96-14-0	C6H14	0.2094

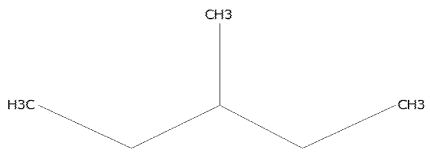




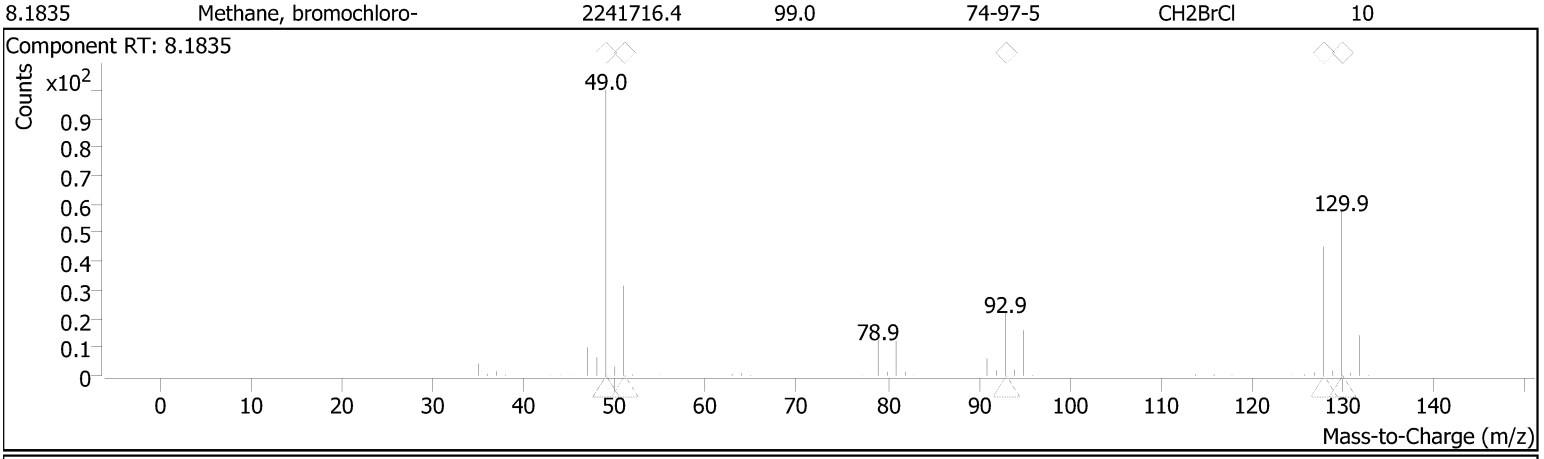


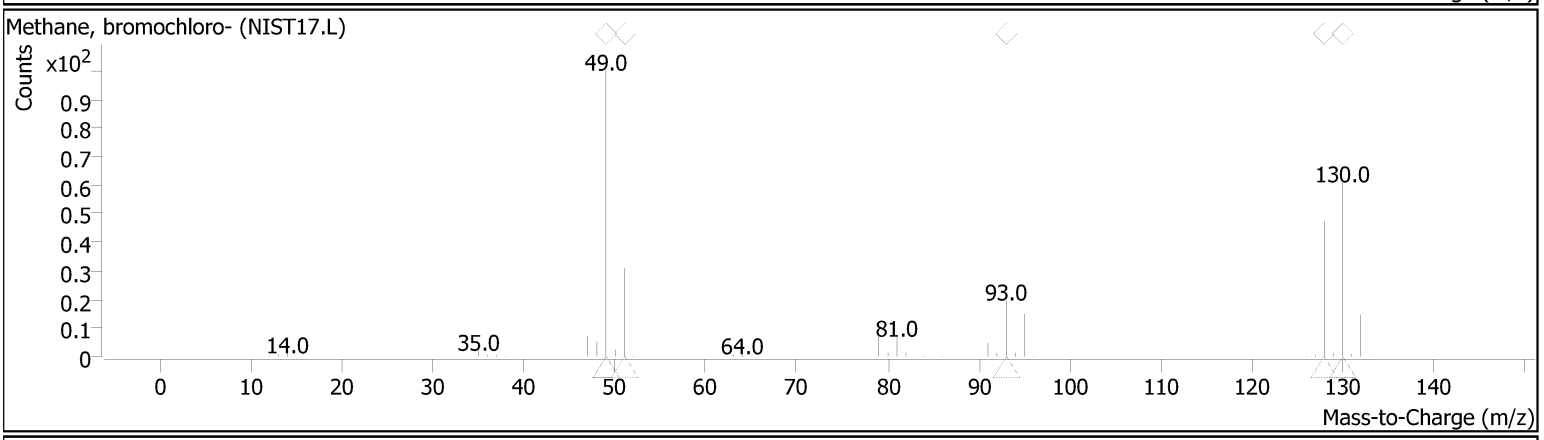


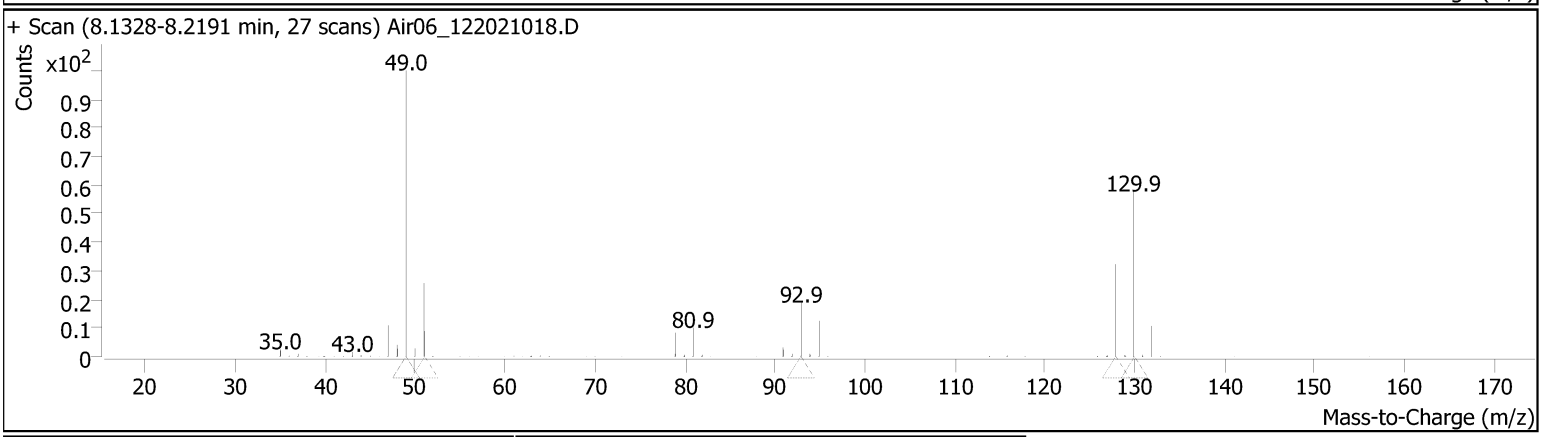


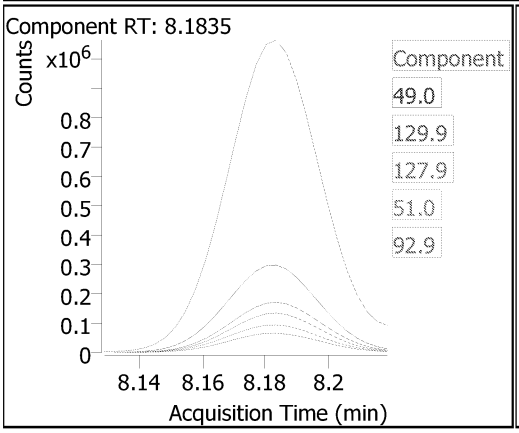


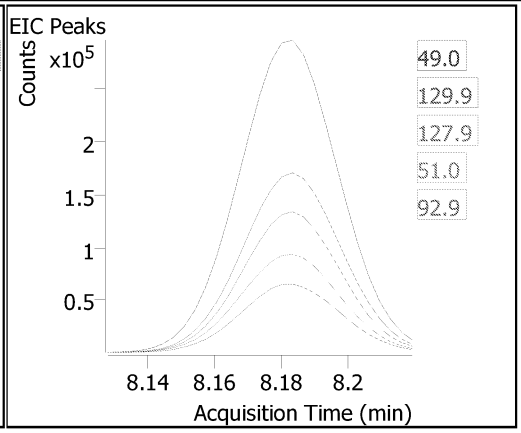
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.1835	Methane, bromochloro-	2241716.4	99.0	74-97-5	CH2BrCl	10

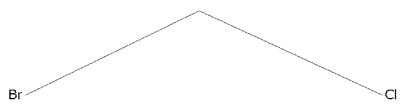




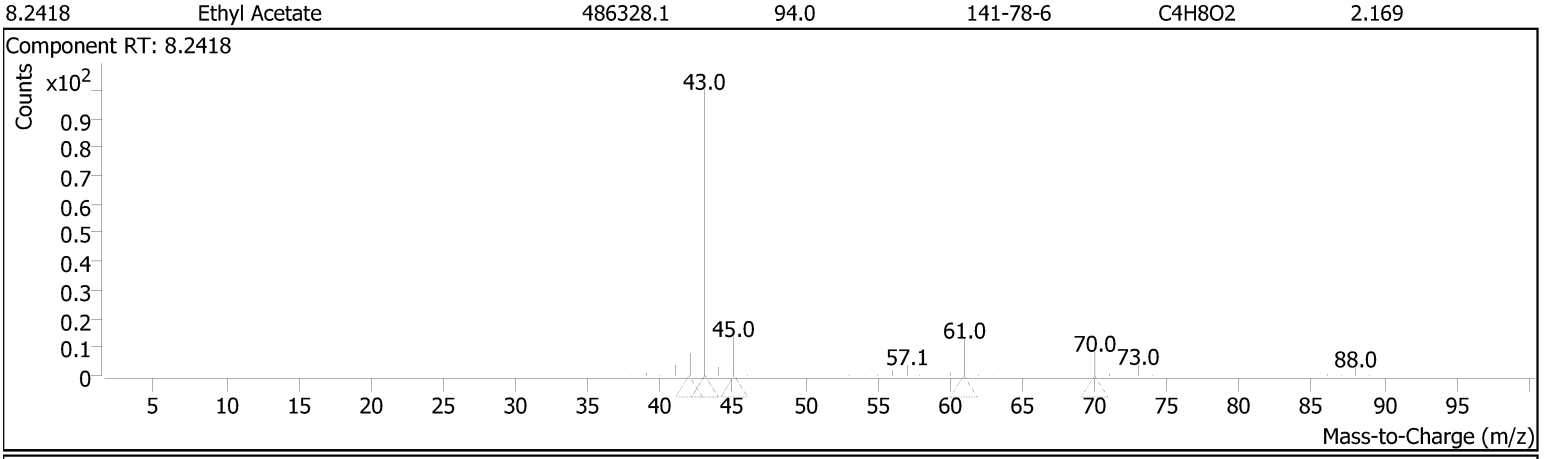


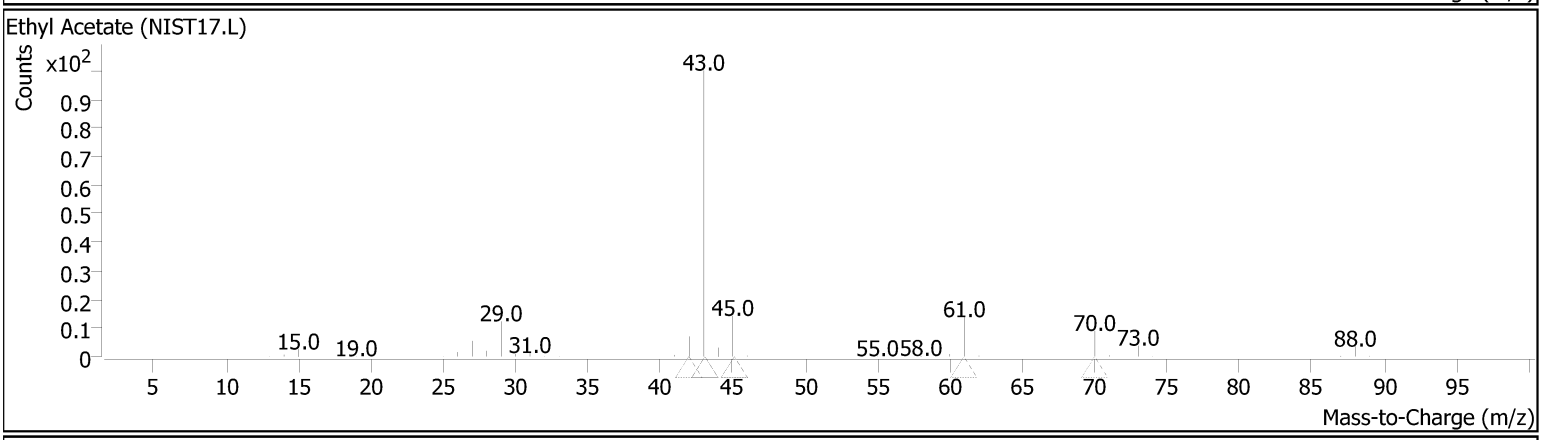


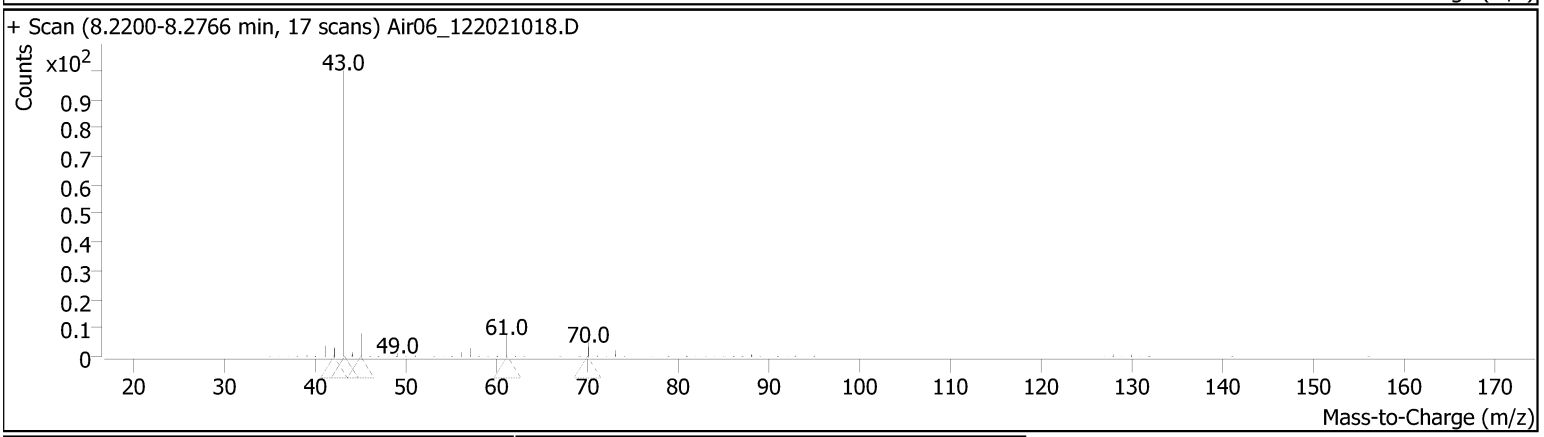


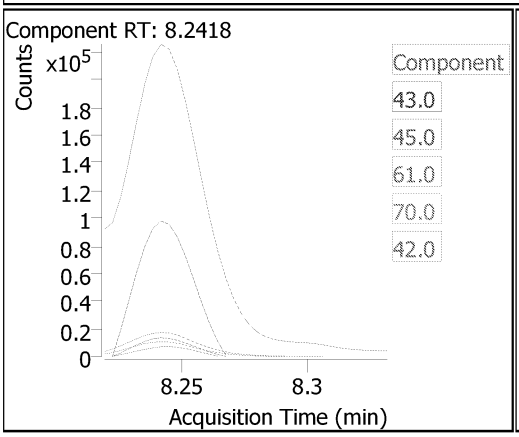


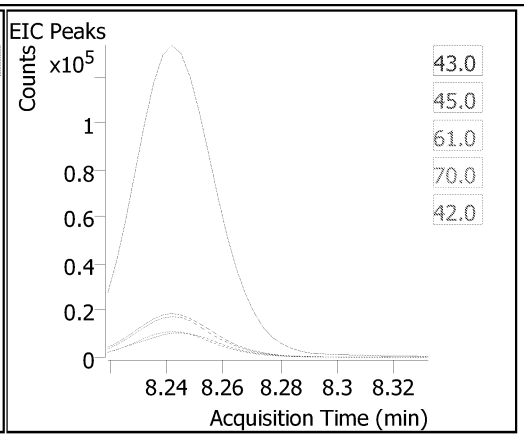
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.2418	Ethyl Acetate	486328.1	94.0	141-78-6	C4H8O2	2.169

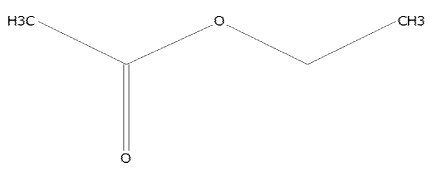




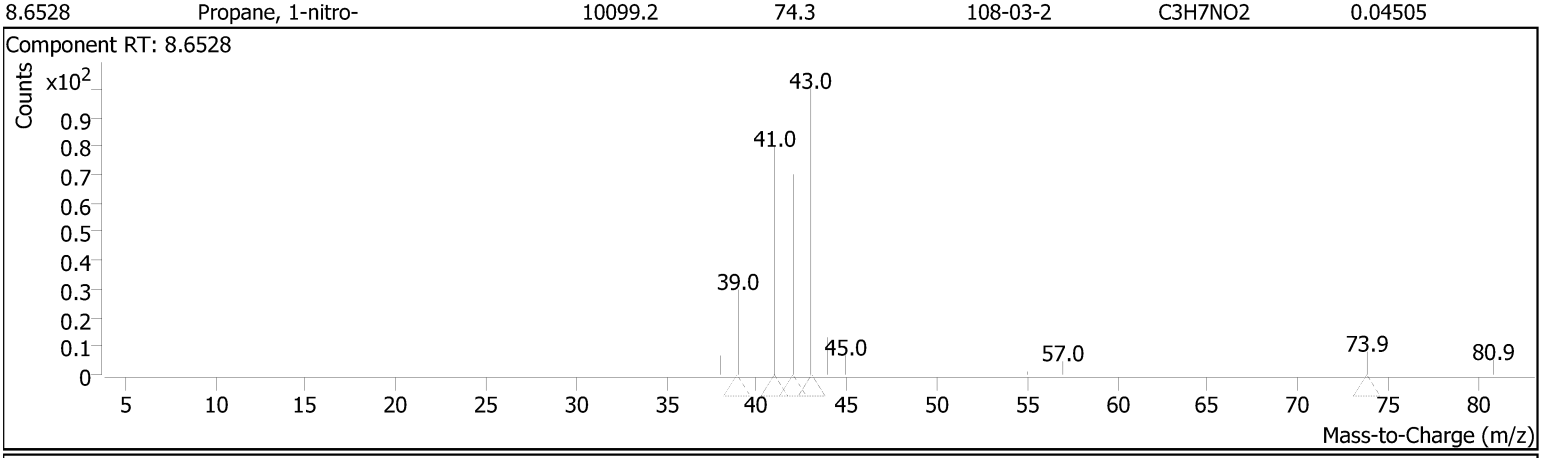


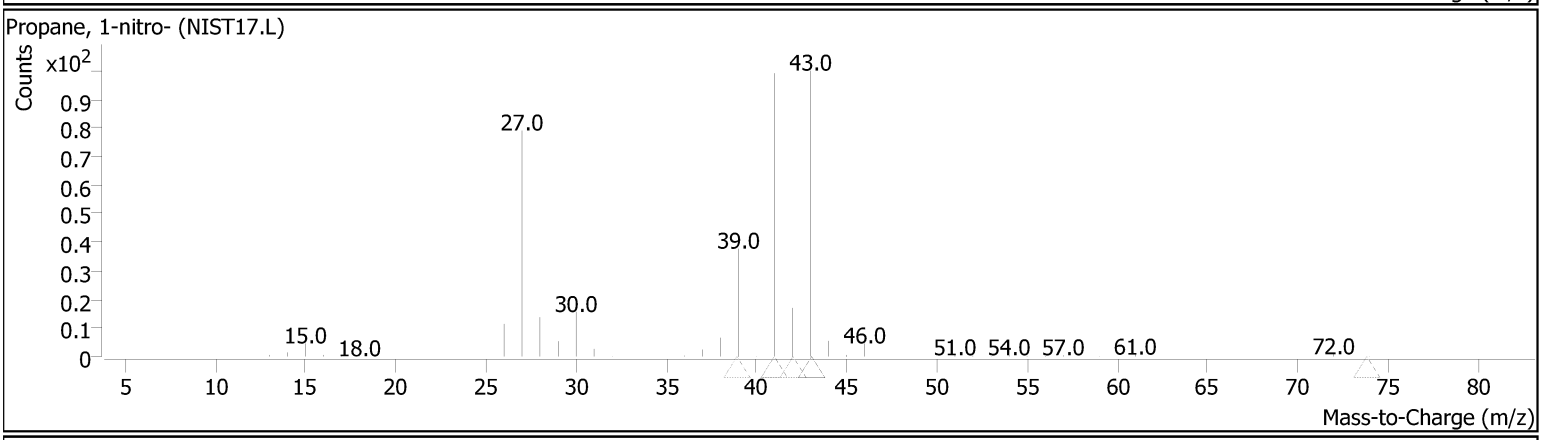


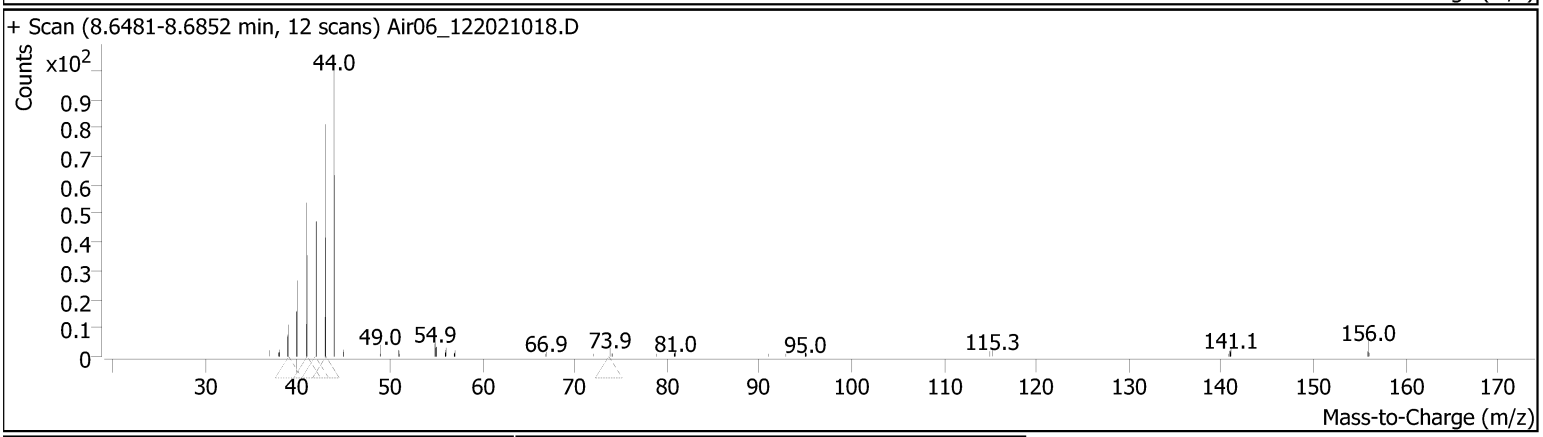


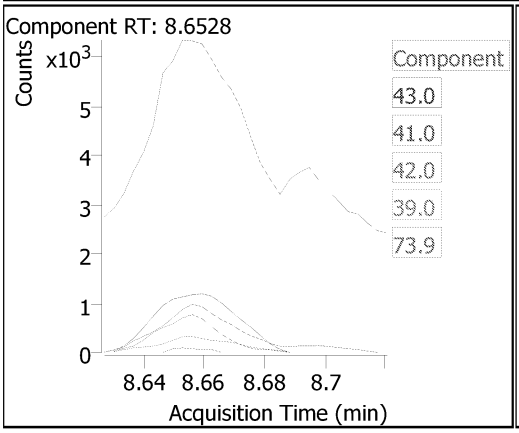


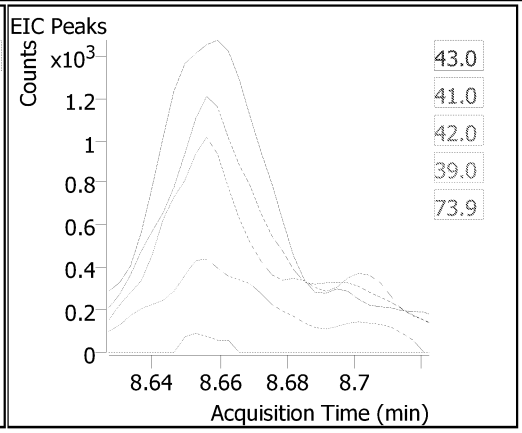
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.6528	Propane, 1-nitro-	10099.2	74.3	108-03-2	C3H7NO2	0.04505

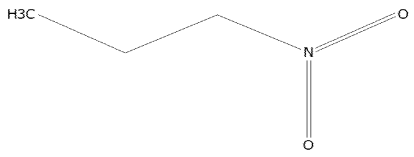




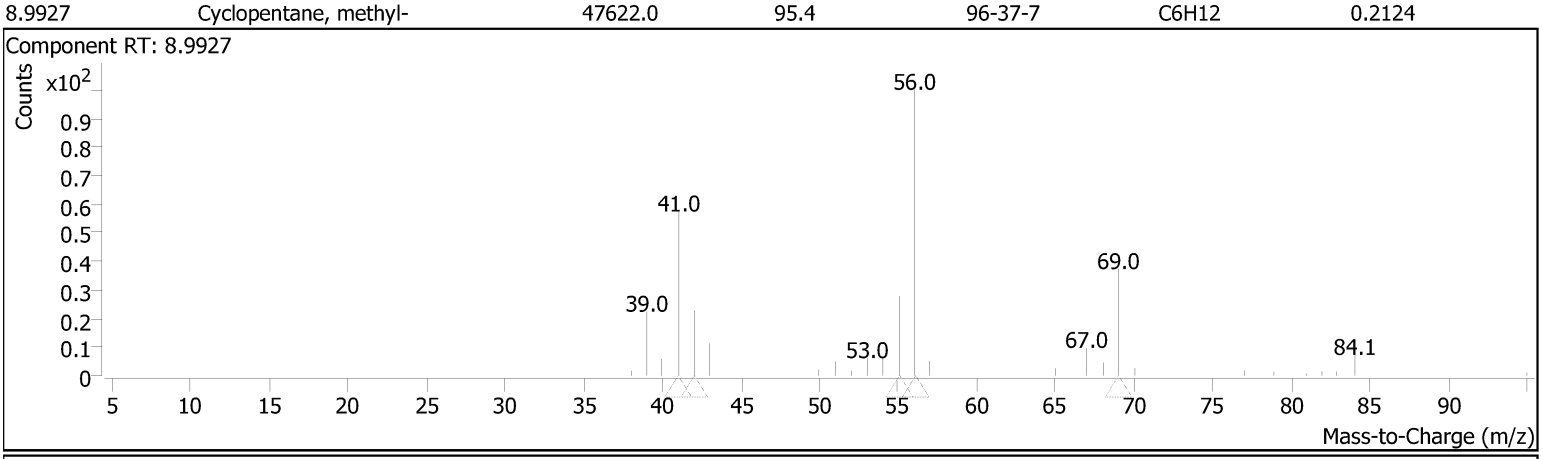


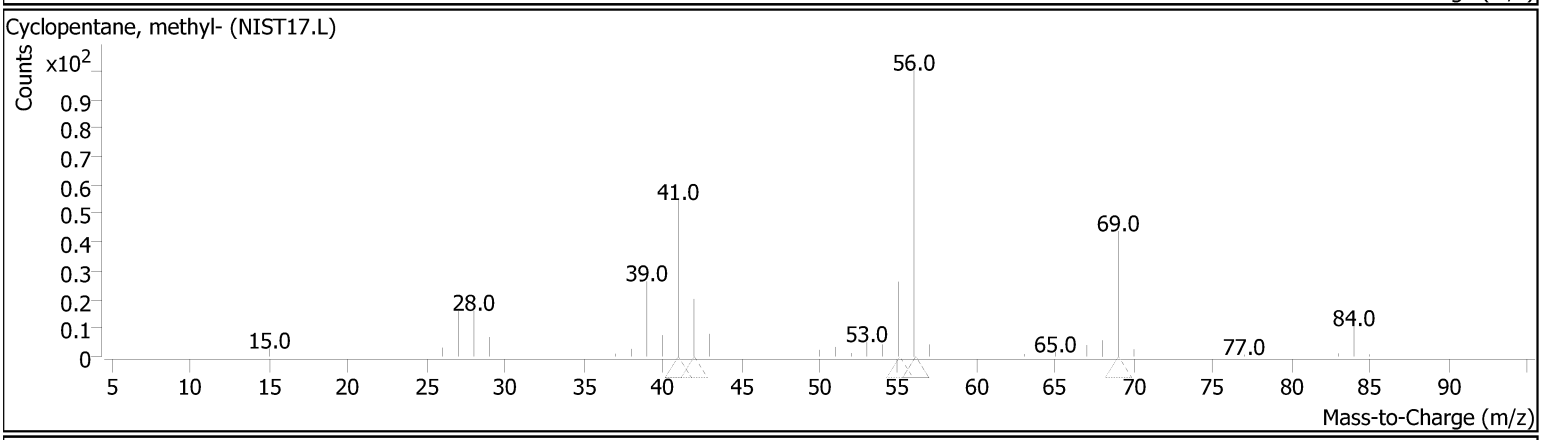


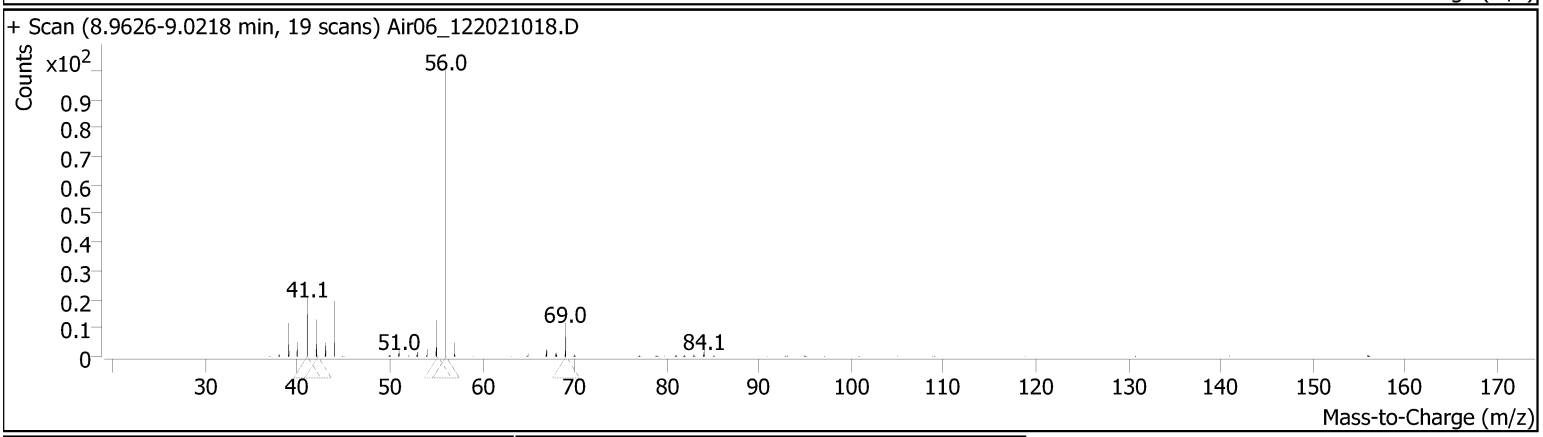


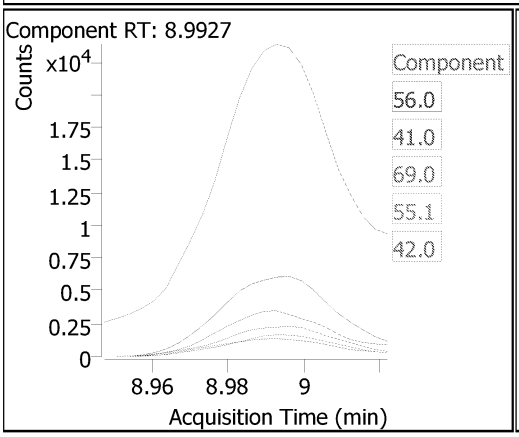


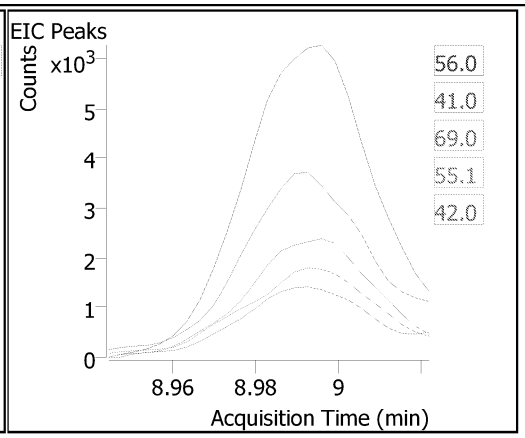
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.9927	Cyclopentane, methyl-	47622.0	95.4	96-37-7	C6H12	0.2124

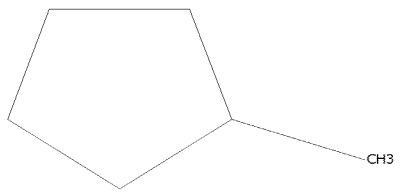




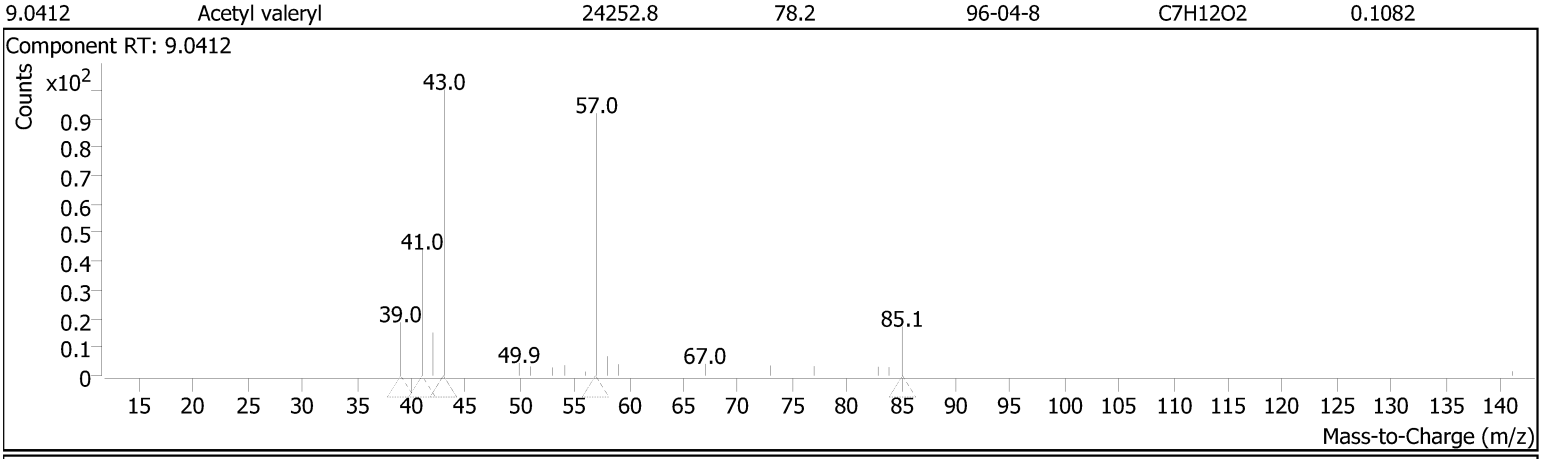


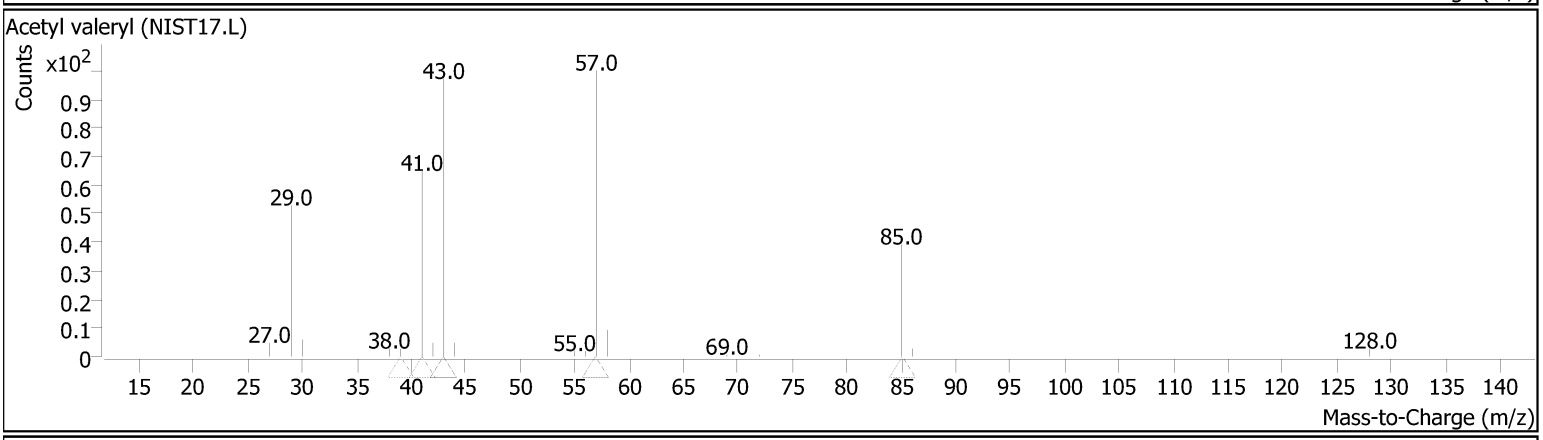


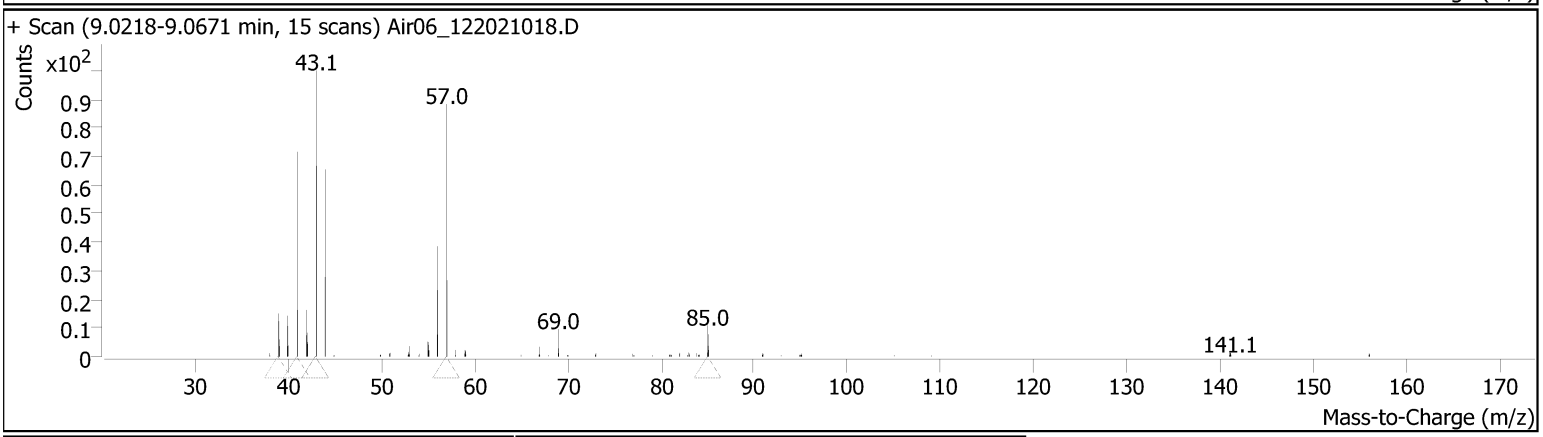


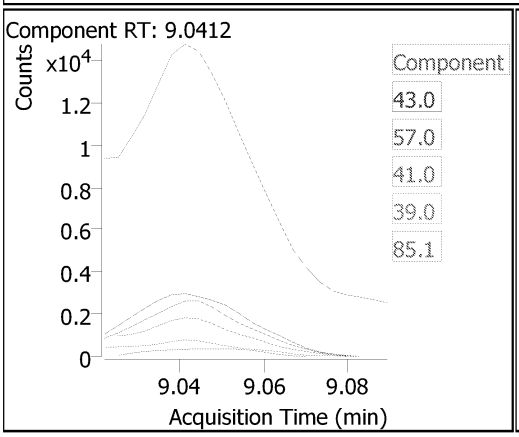


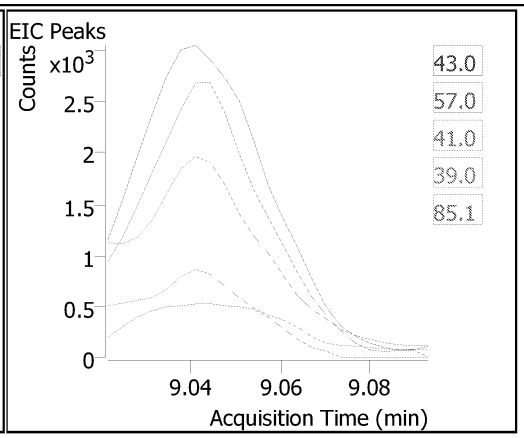
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.0412	Acetyl valeryl	24252.8	78.2	96-04-8	C7H12O2	0.1082

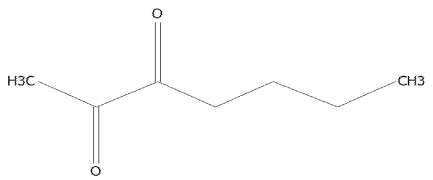




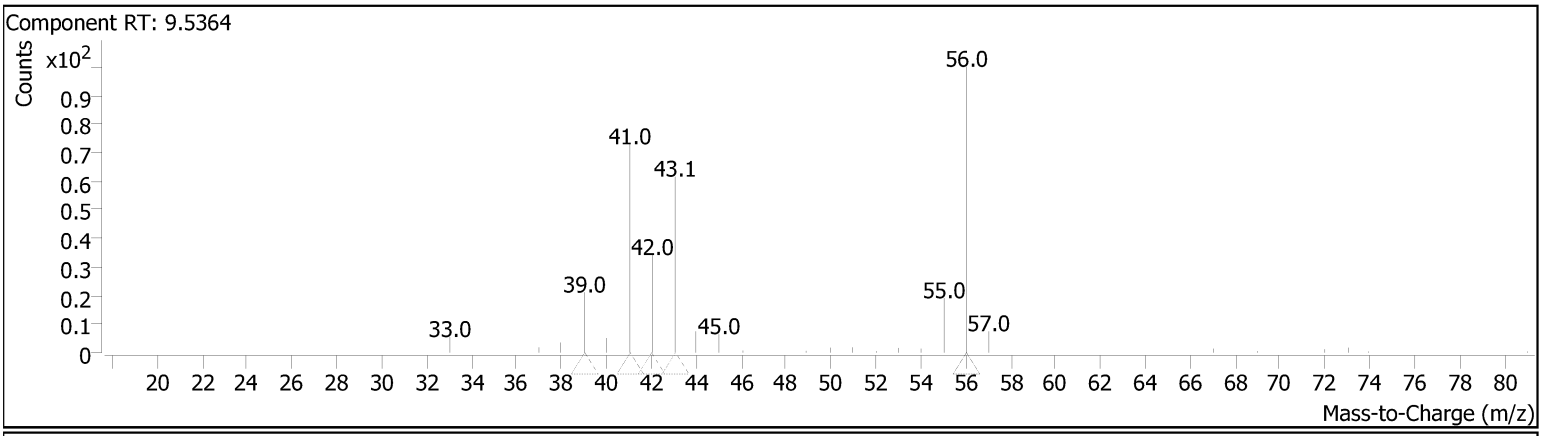


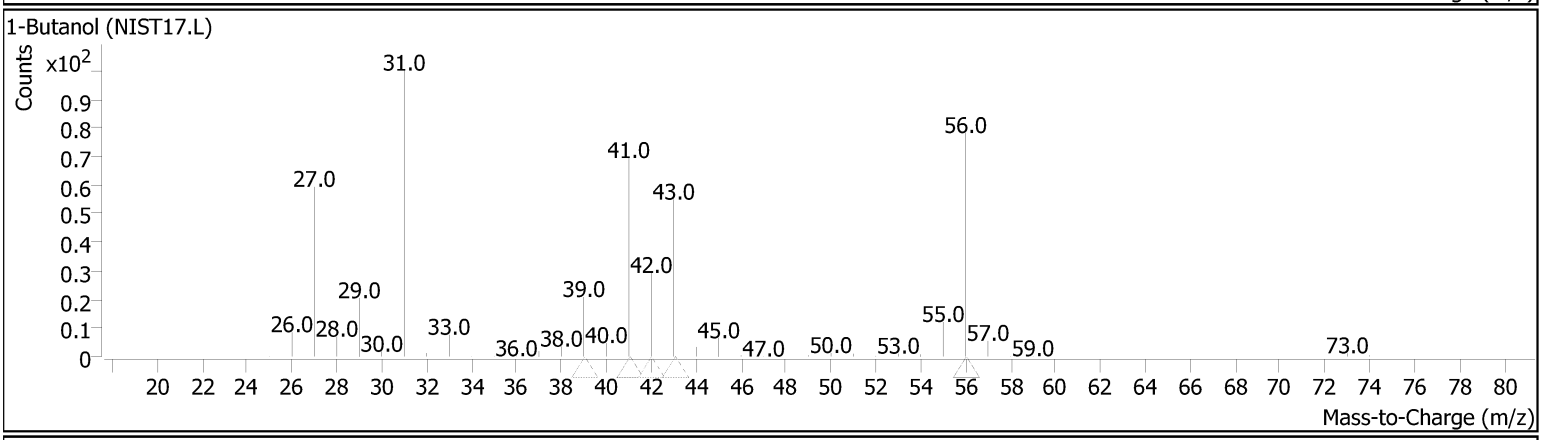


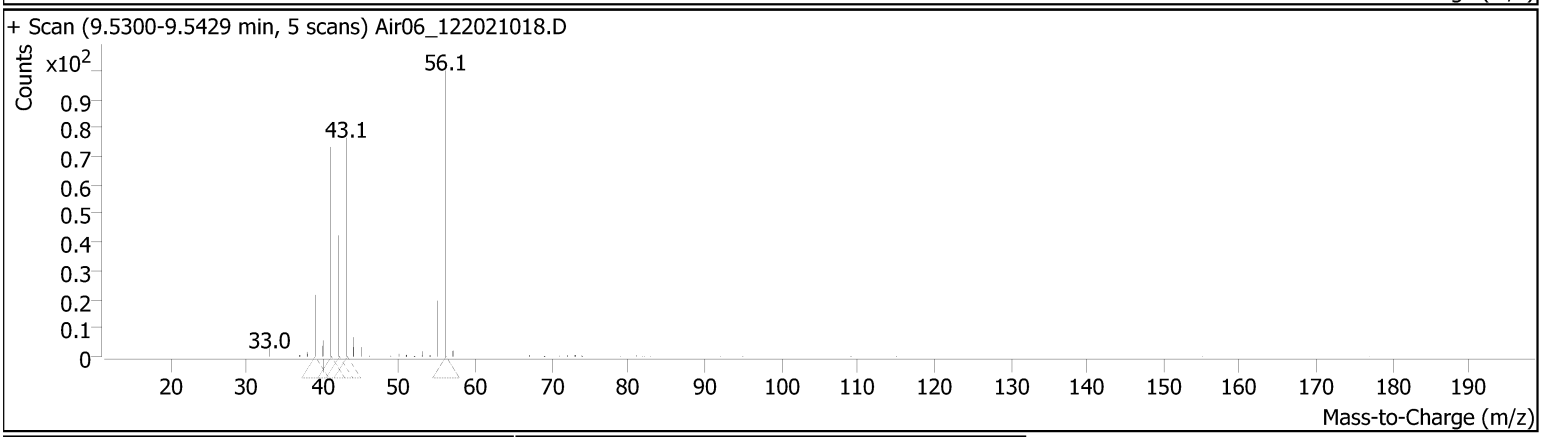


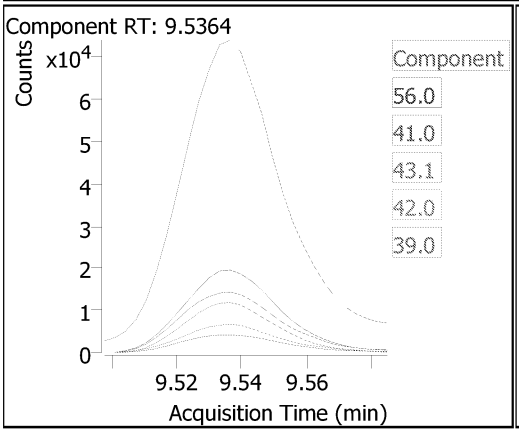


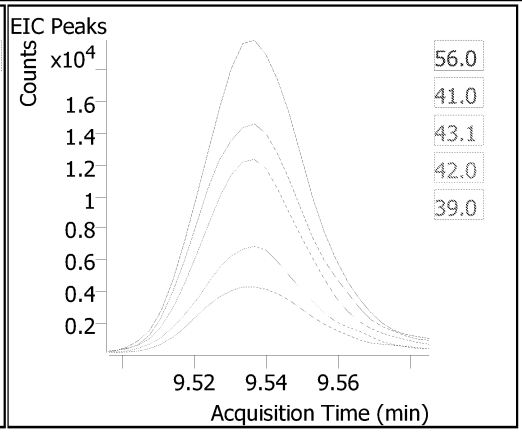
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.5364	1-Butanol	153805.3	97.7	71-36-3	C4H10O	0.45

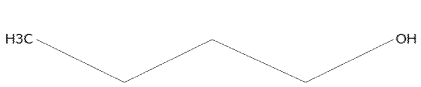




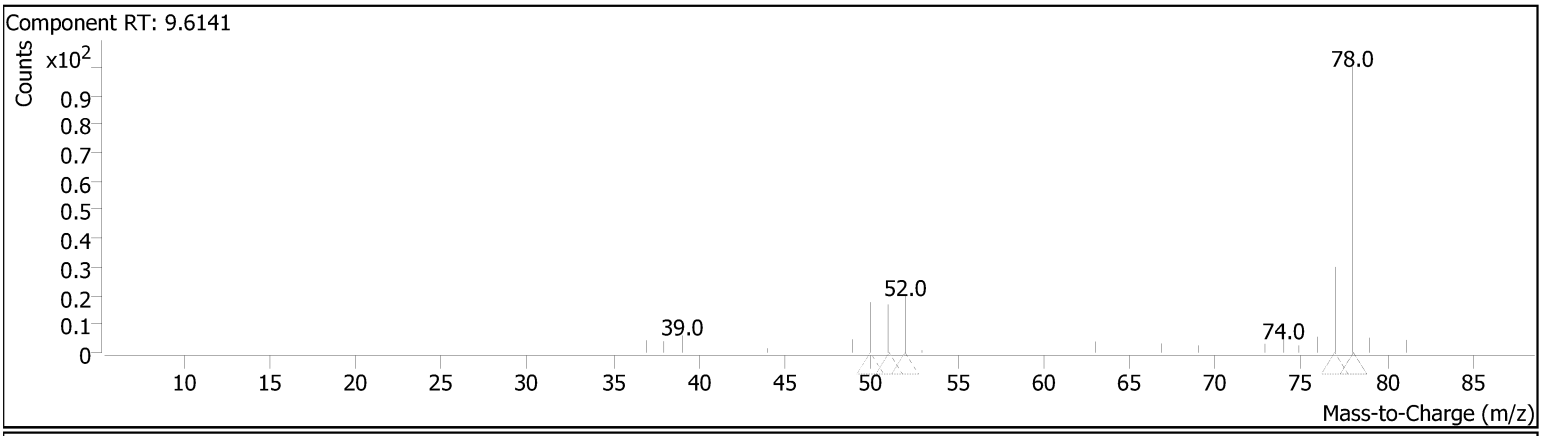


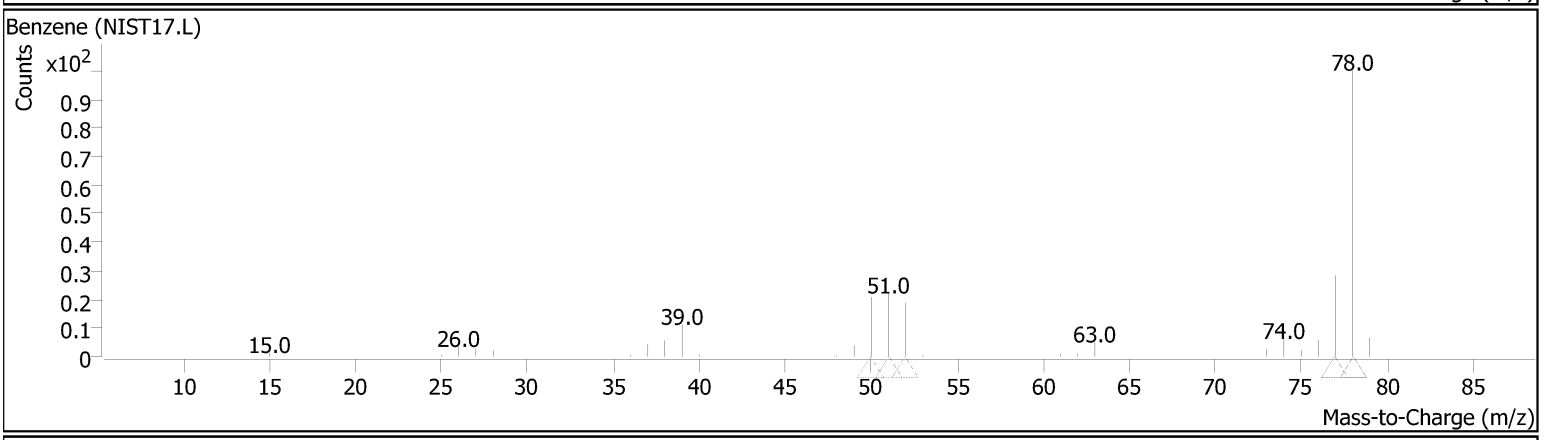


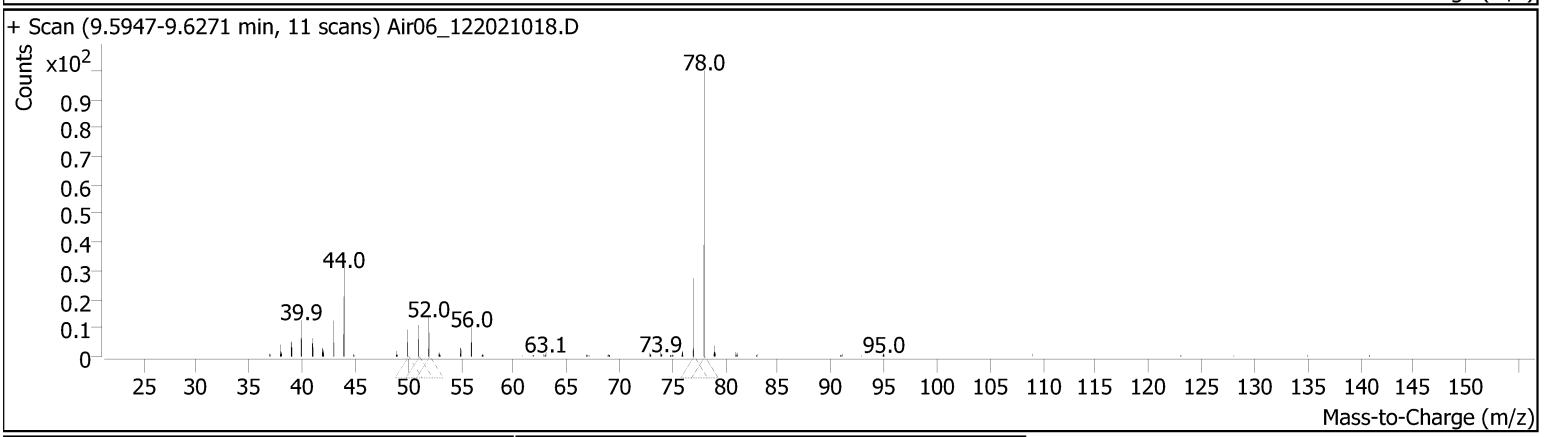


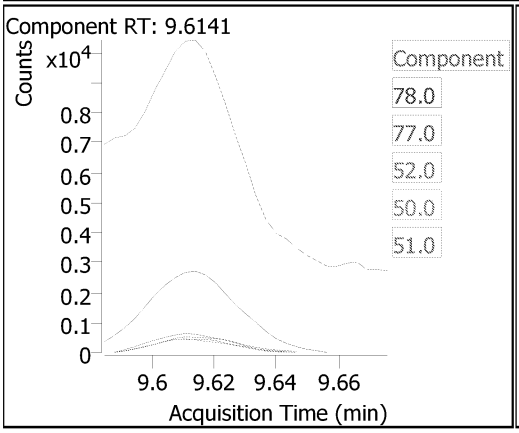


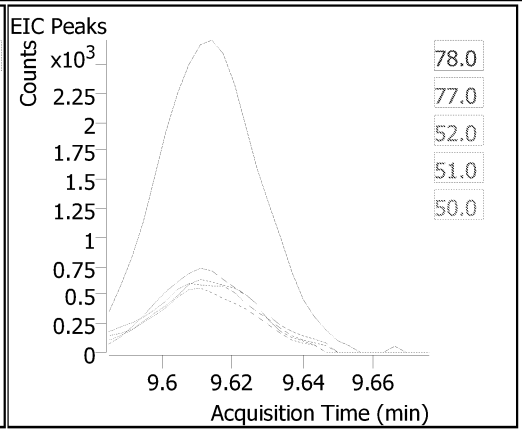
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.6141	Benzene	18681.1	89.7	71-43-2	C6H6	0.05466

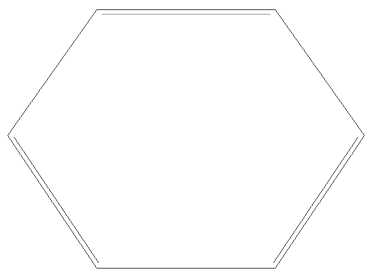




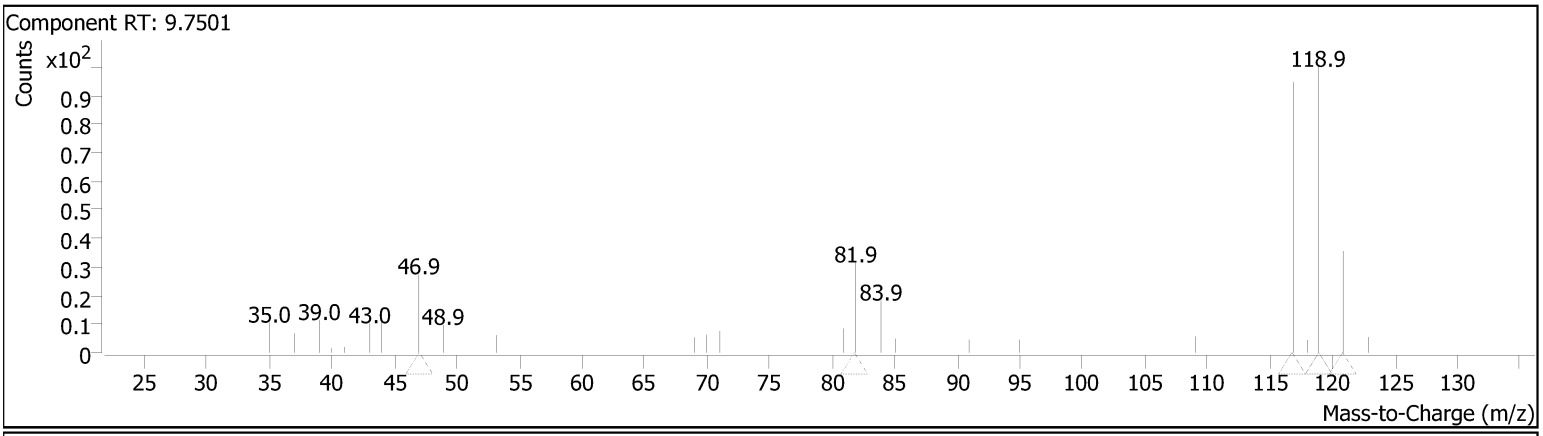


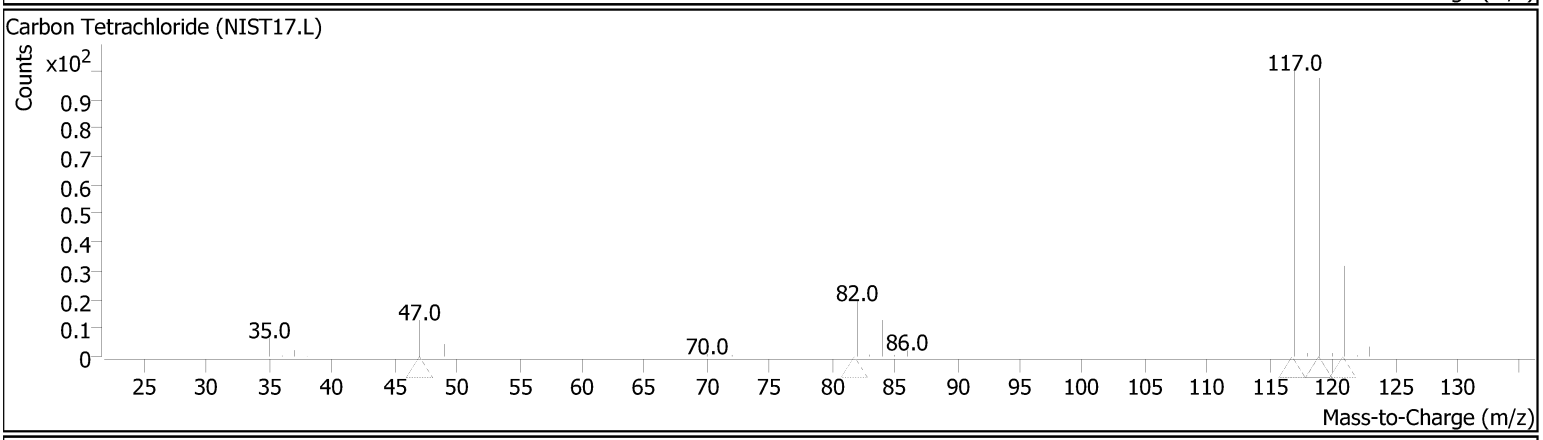


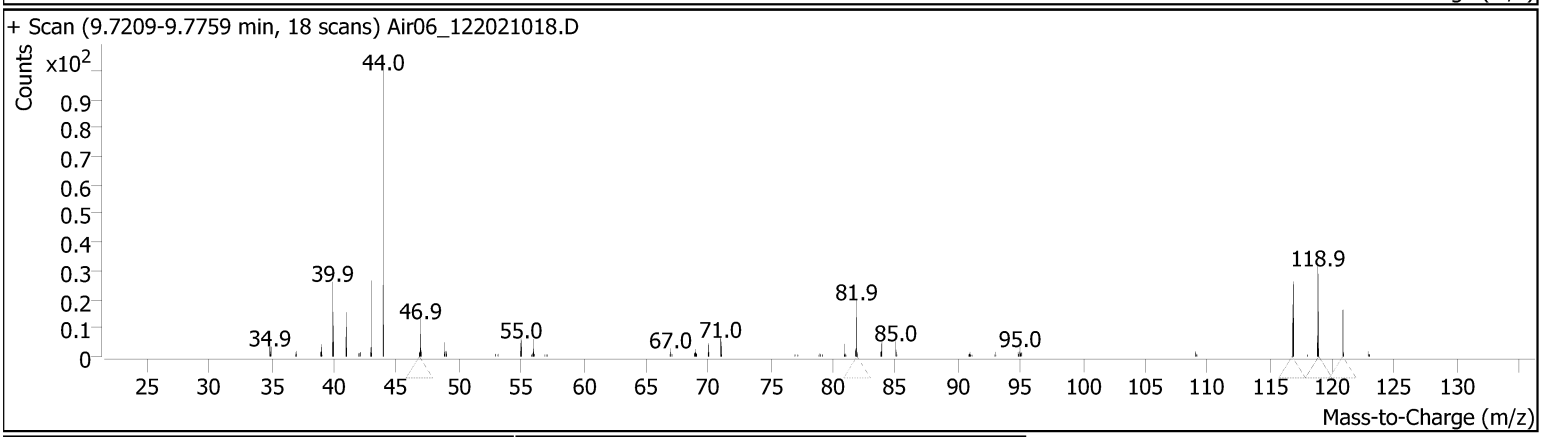


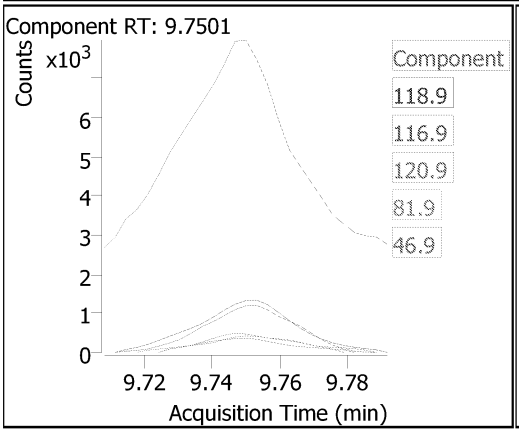


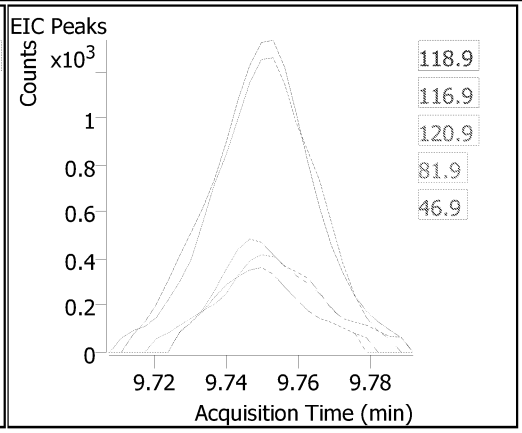
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.7501	Carbon Tetrachloride	11409.8	87.2	56-23-5	CCl4	0.03338

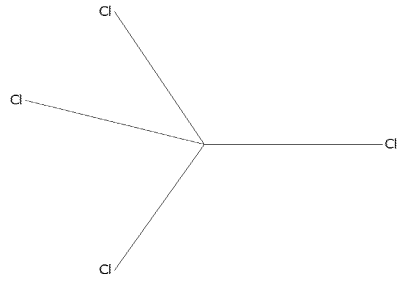




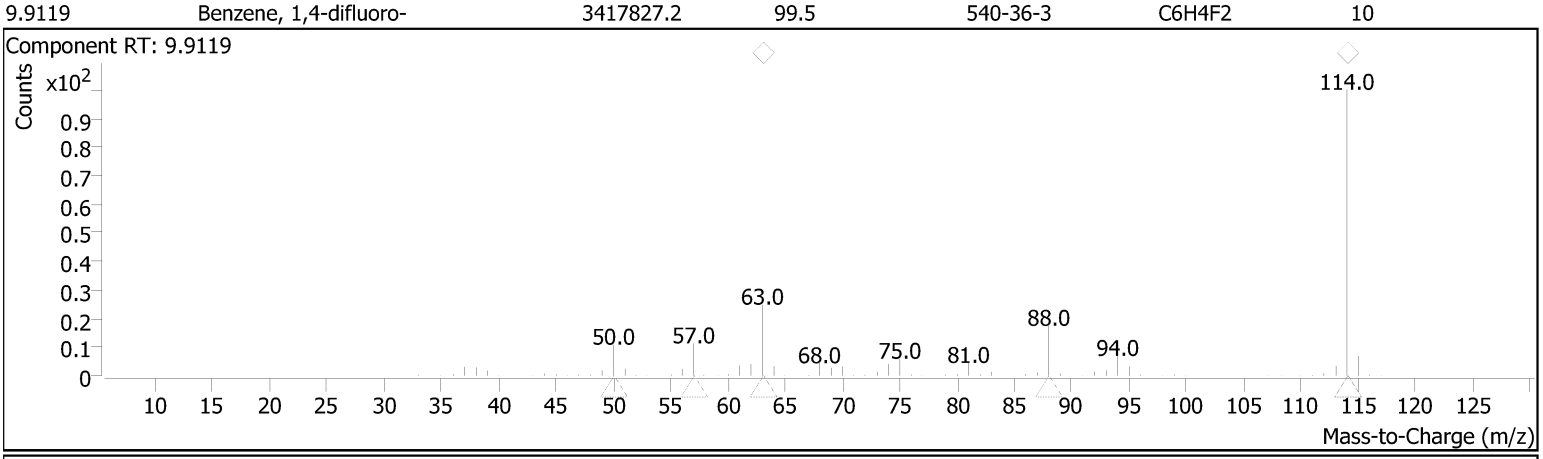


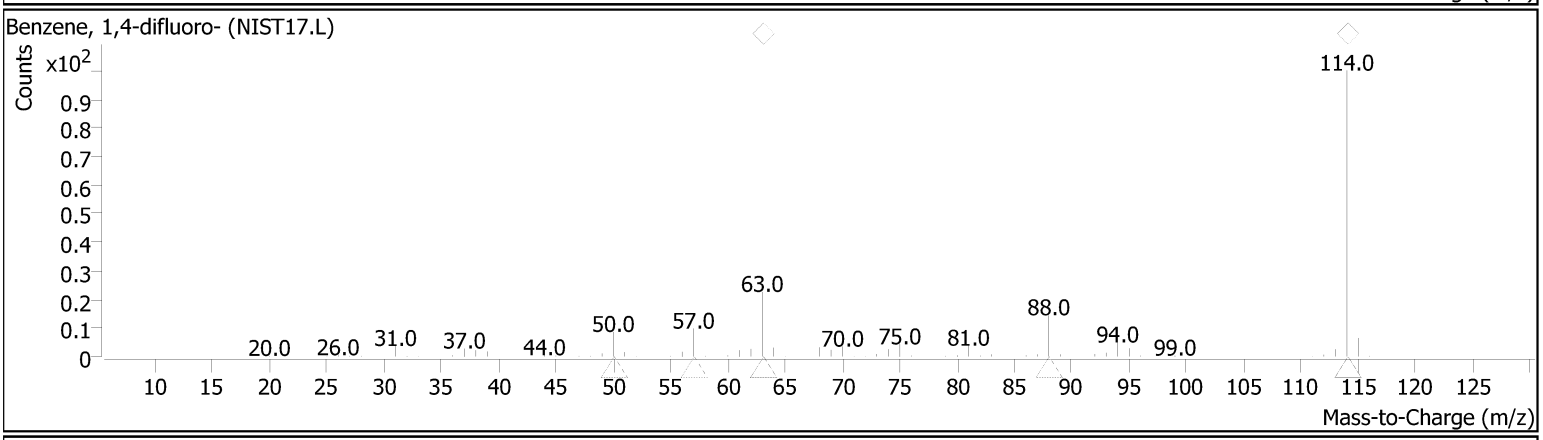


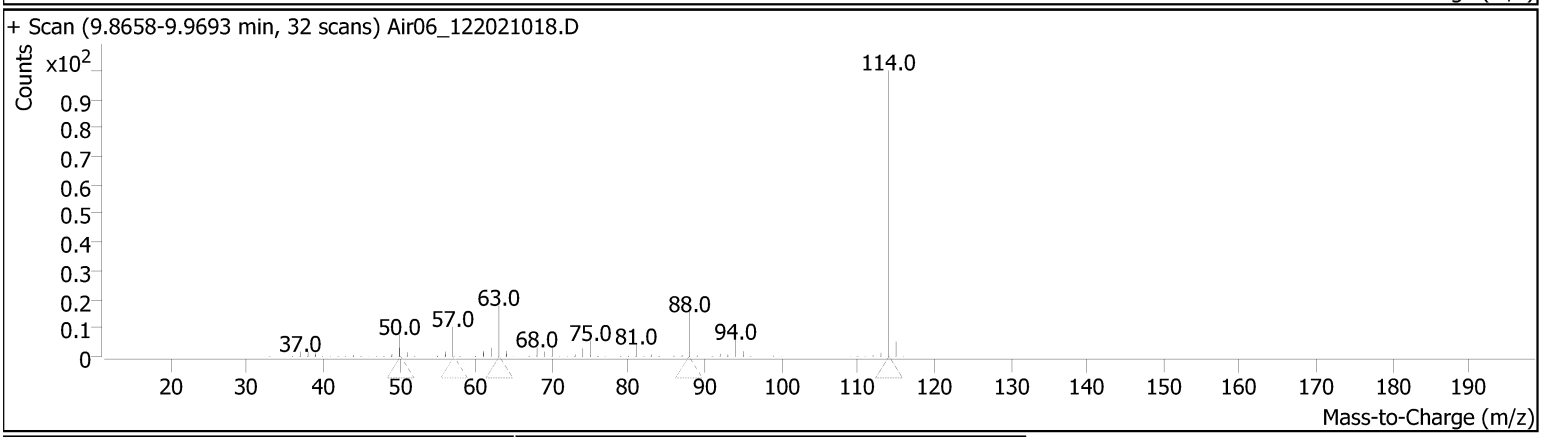


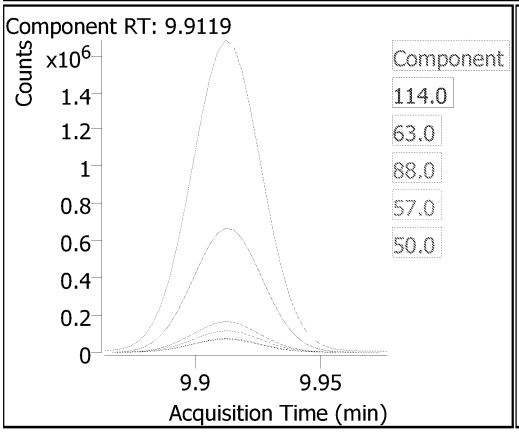


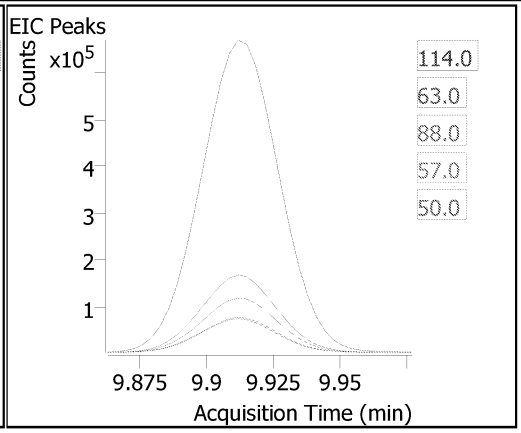
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.9119	Benzene, 1,4-difluoro-	3417827.2	99.5	540-36-3	C6H4F2	10

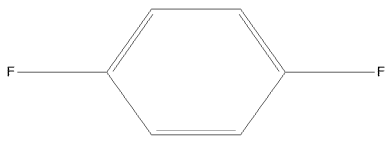




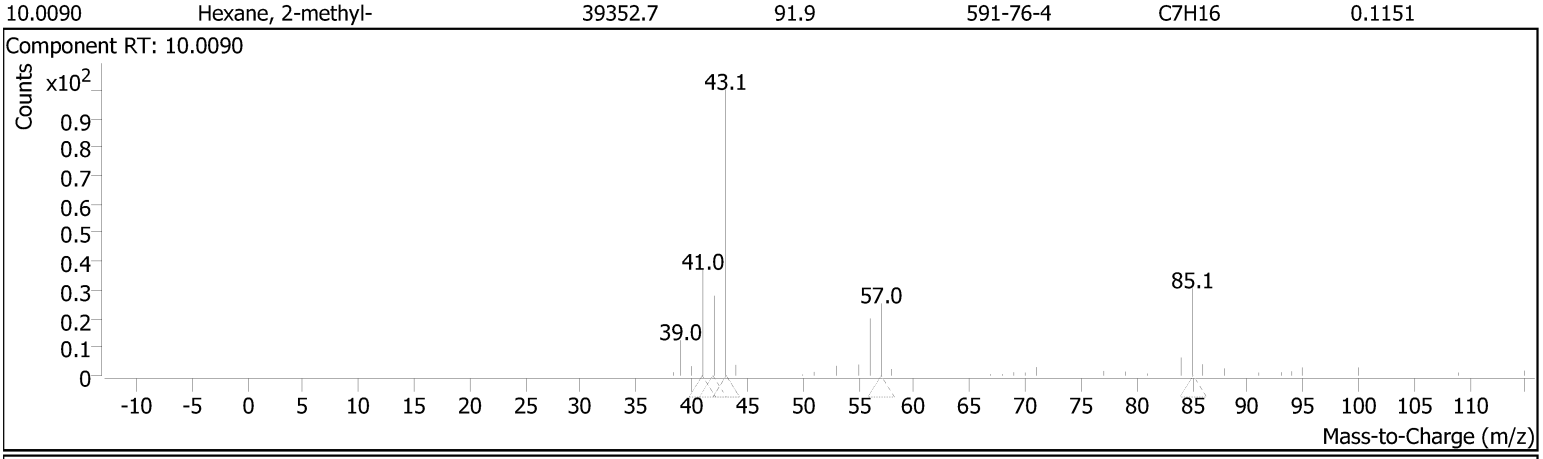


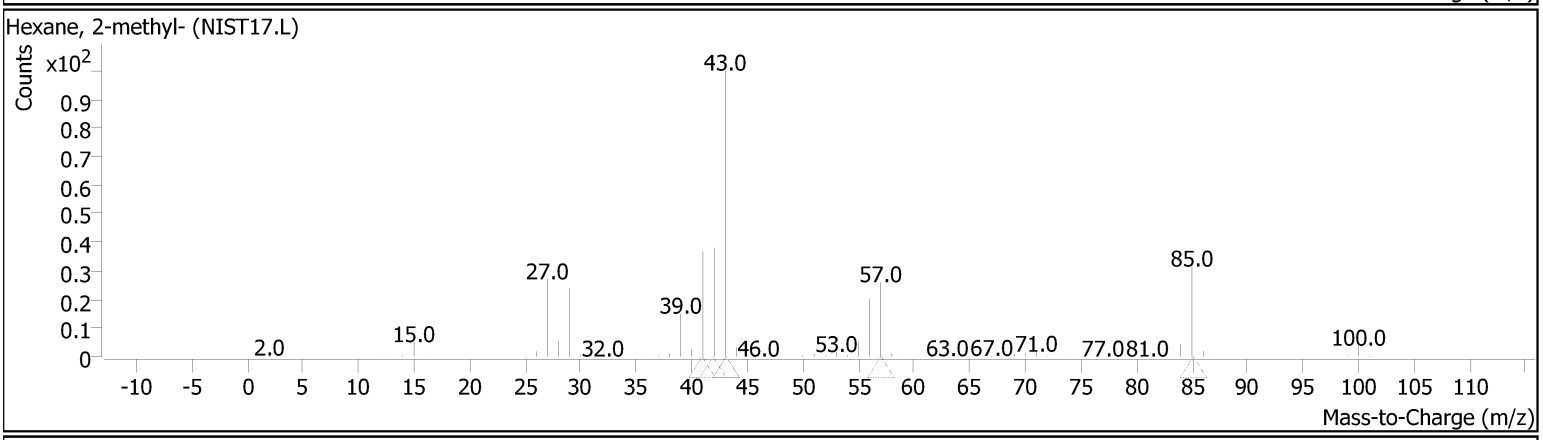


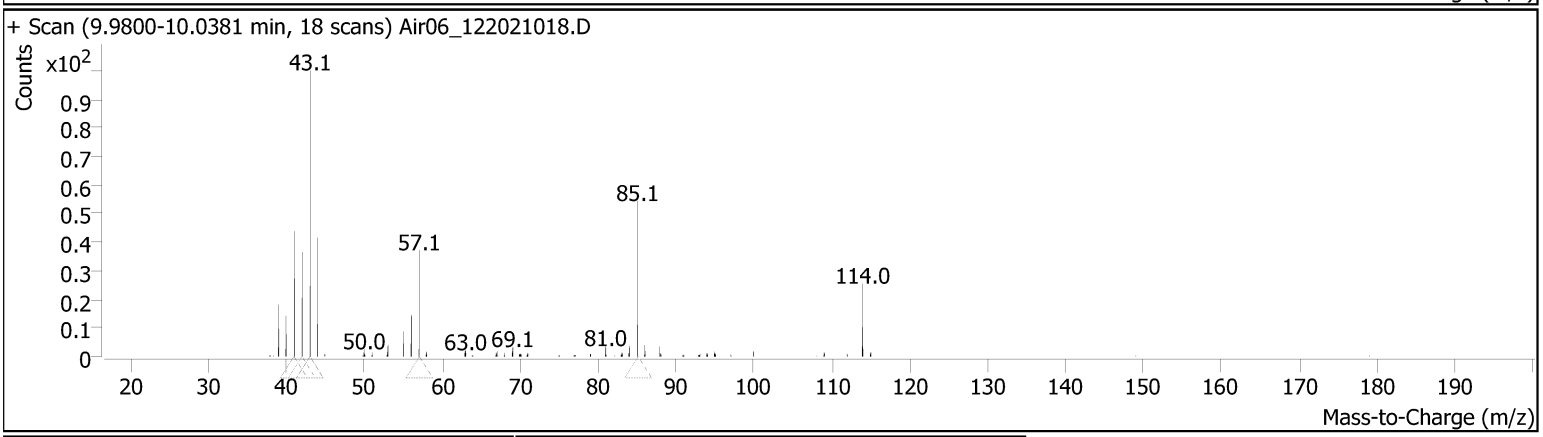


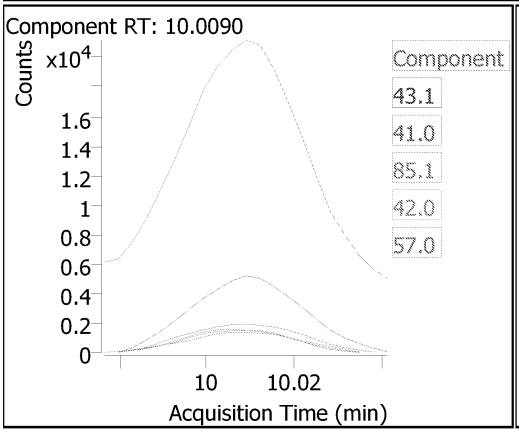


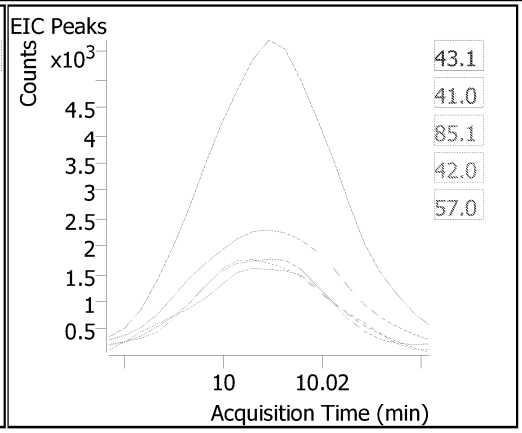
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.0090	Hexane, 2-methyl-	39352.7	91.9	591-76-4	C7H16	0.1151

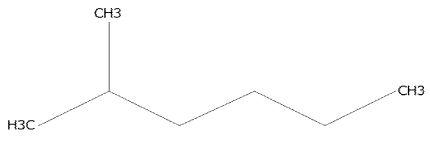




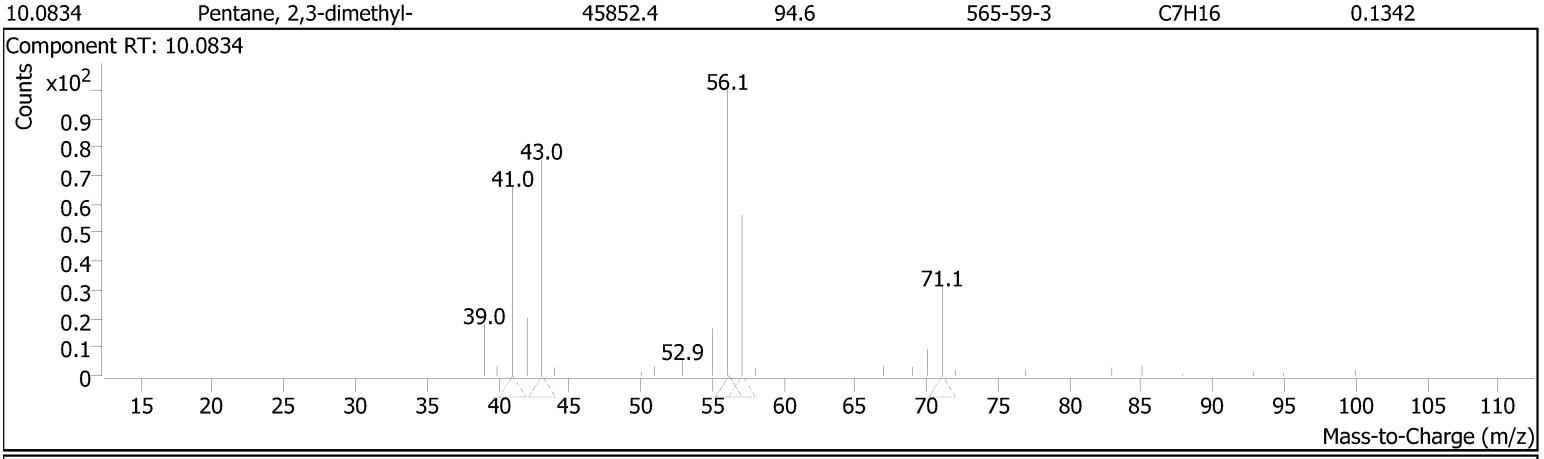


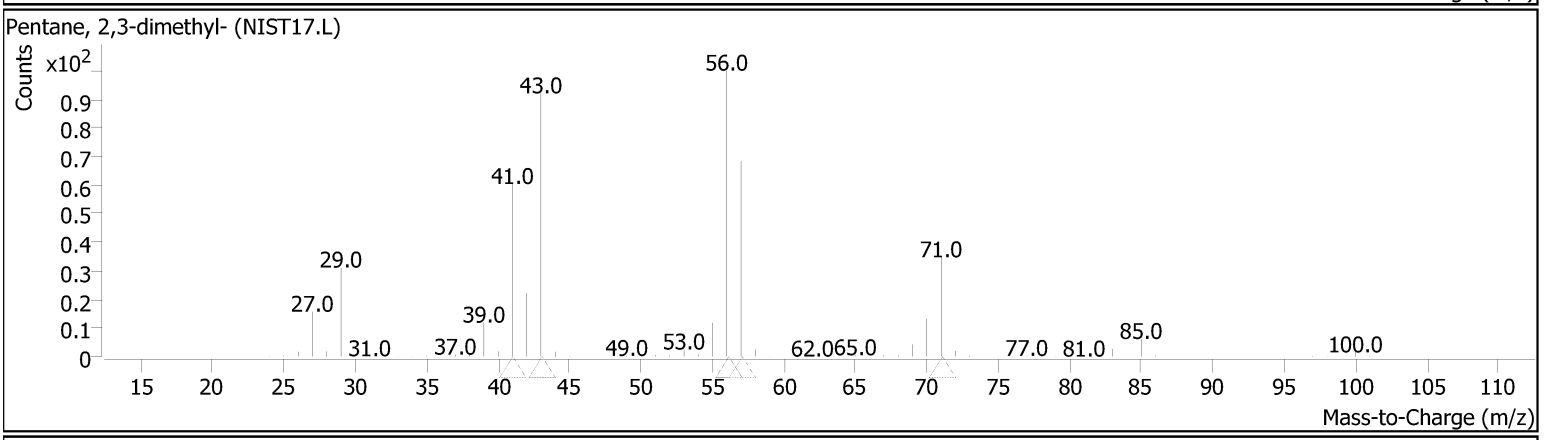


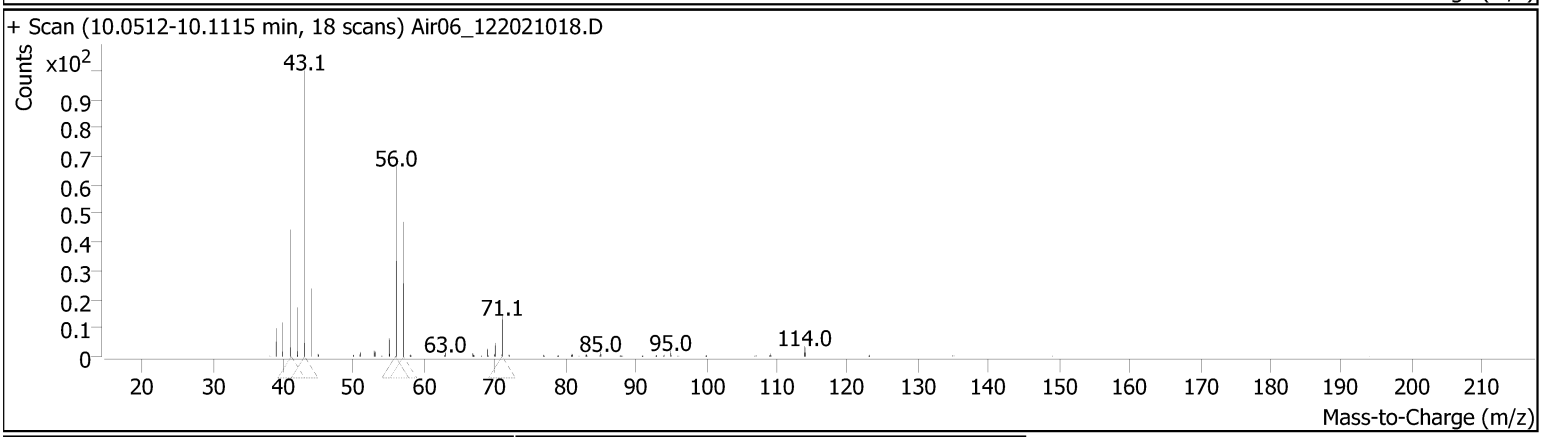


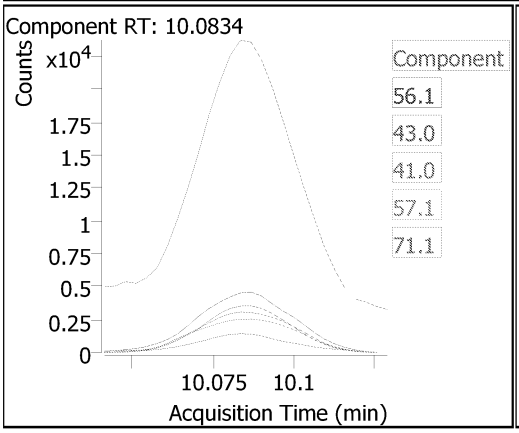


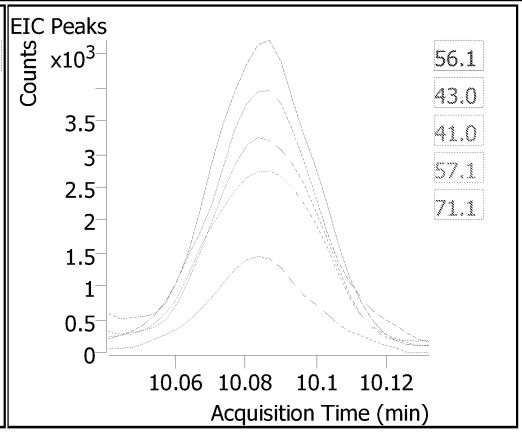
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.0834	Pentane, 2,3-dimethyl-	45852.4	94.6	565-59-3	C7H16	0.1342

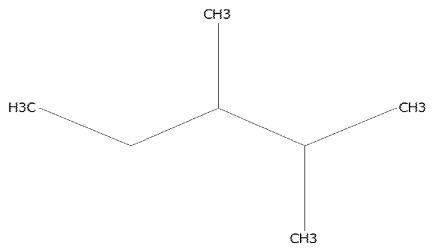




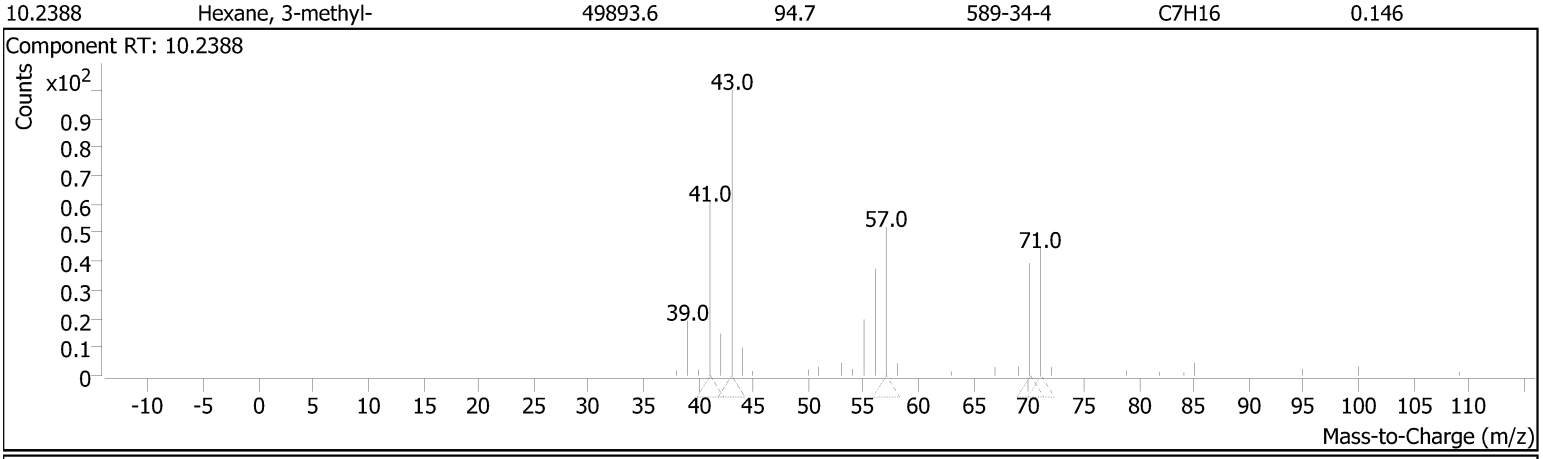


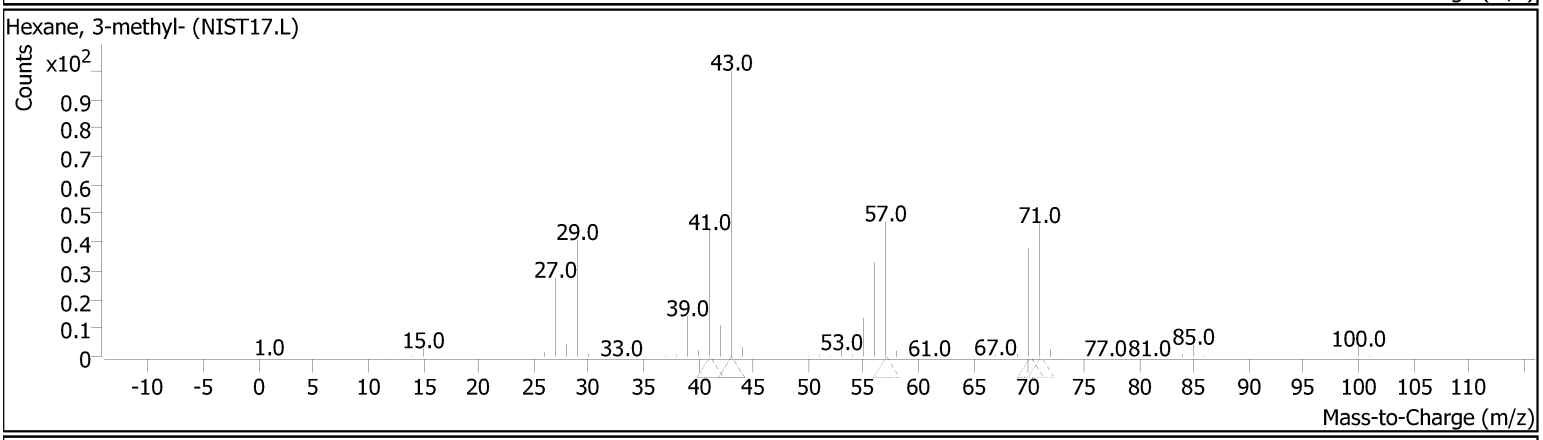


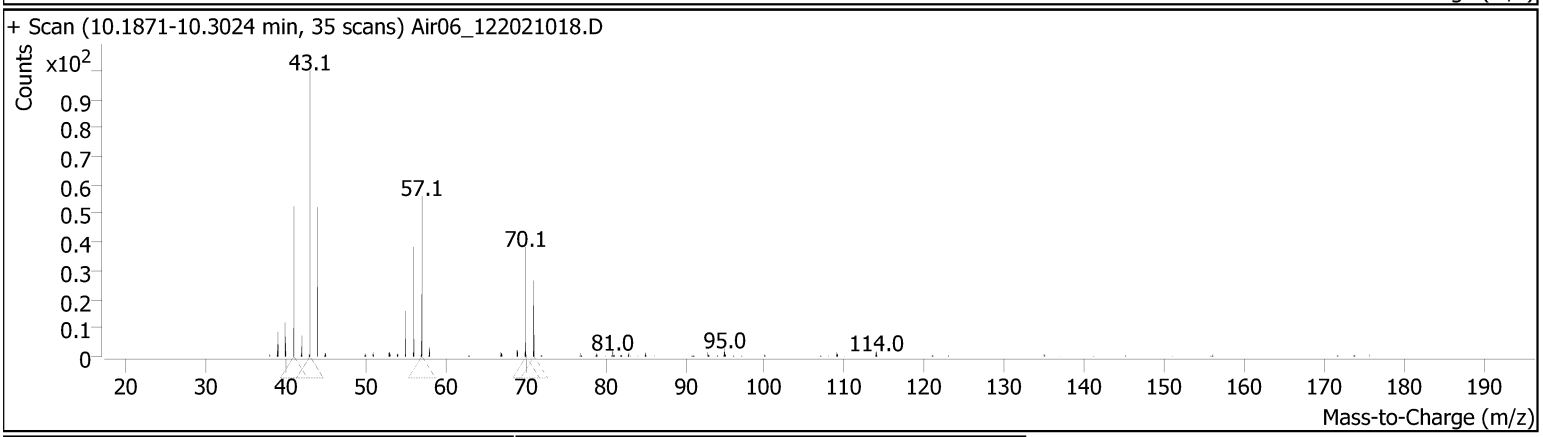


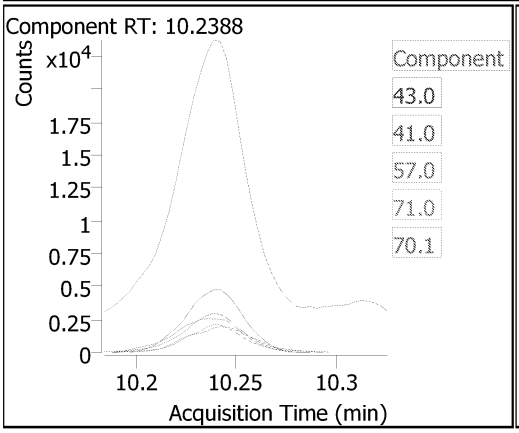


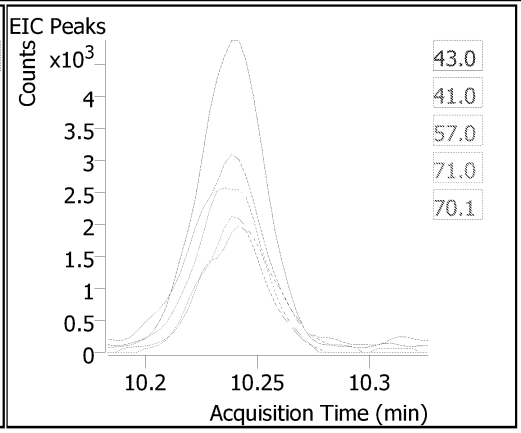
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.2388	Hexane, 3-methyl-	49893.6	94.7	589-34-4	C7H16	0.146

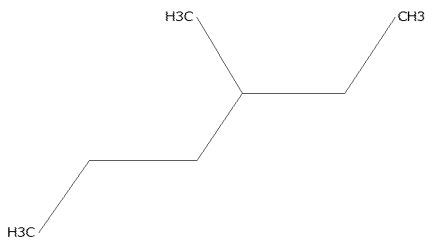




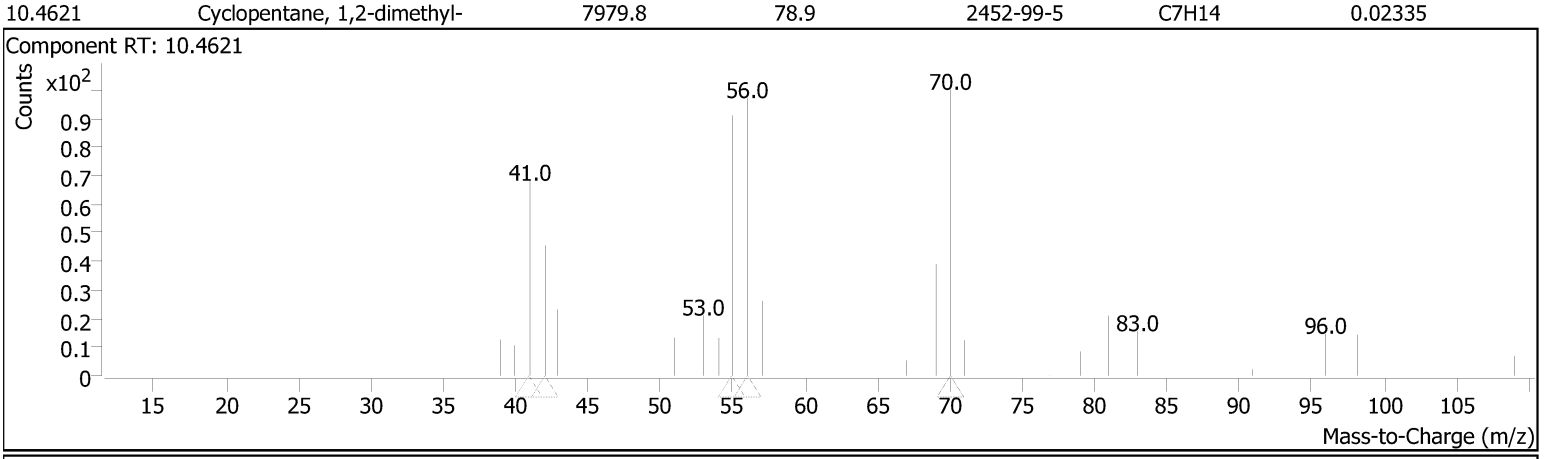


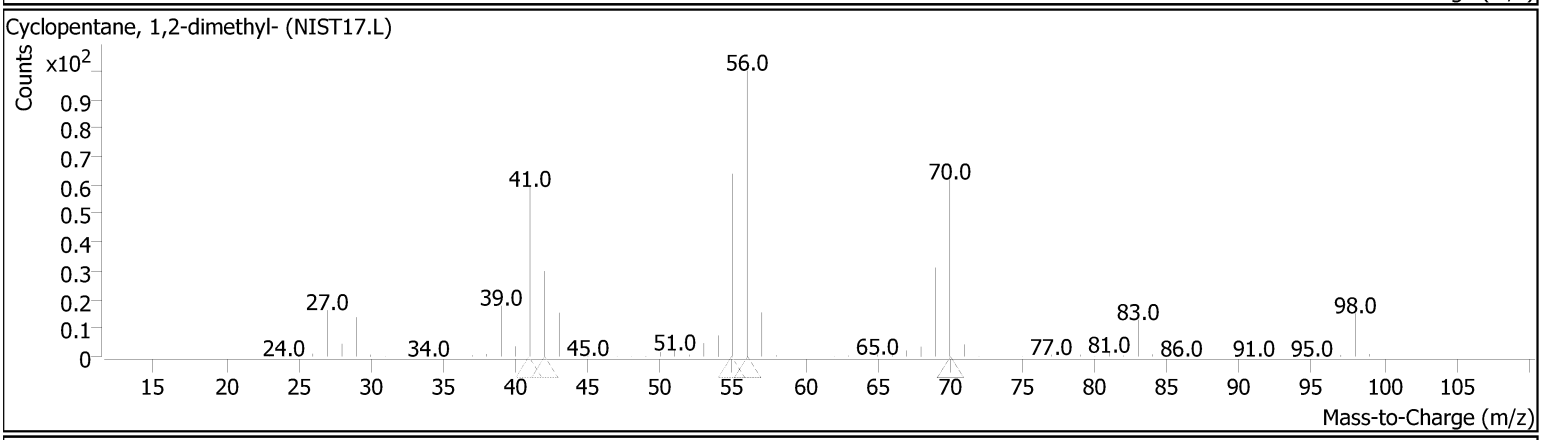


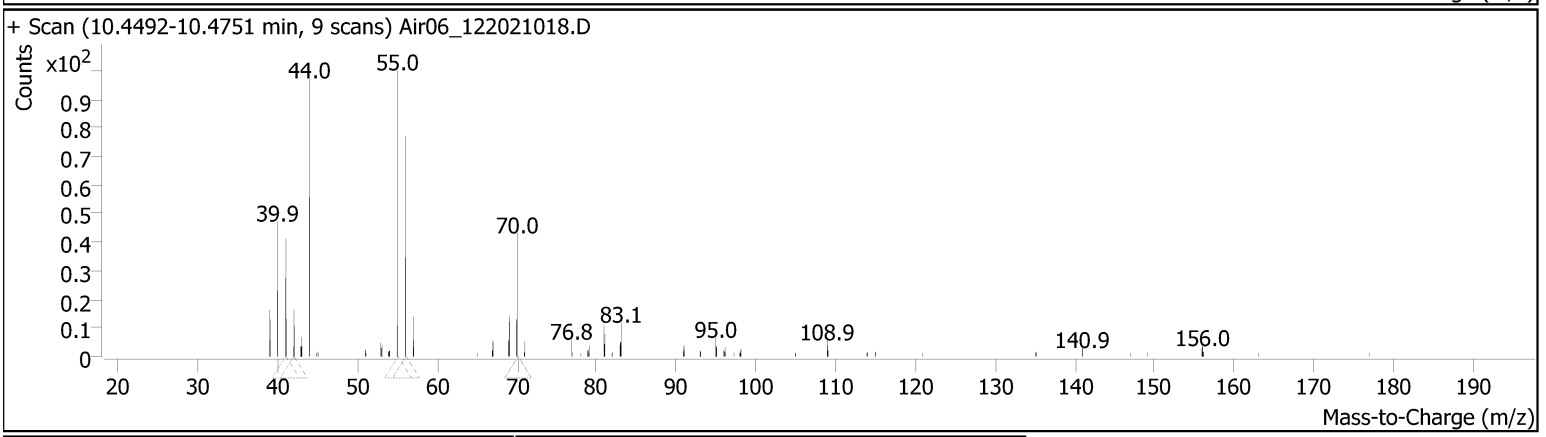


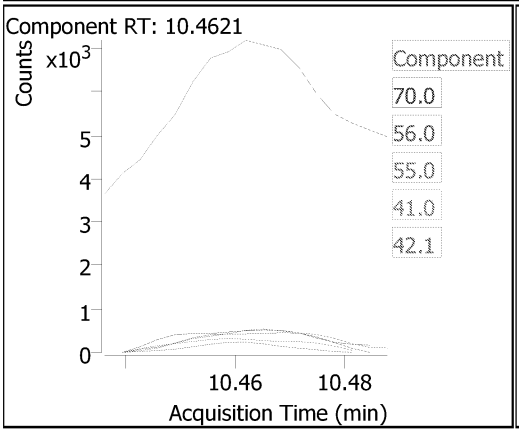


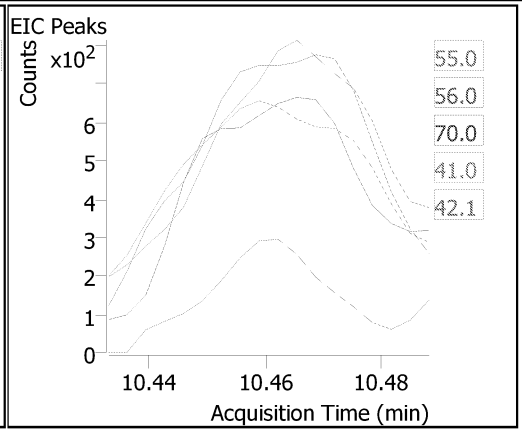
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.4621	Cyclopentane, 1,2-dimethyl-	7979.8	78.9	2452-99-5	C7H14	0.02335

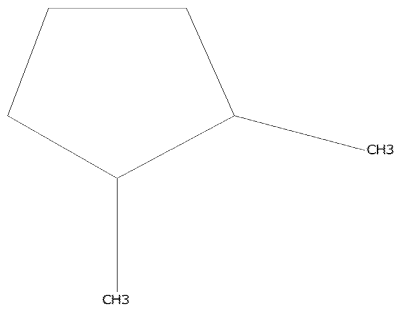




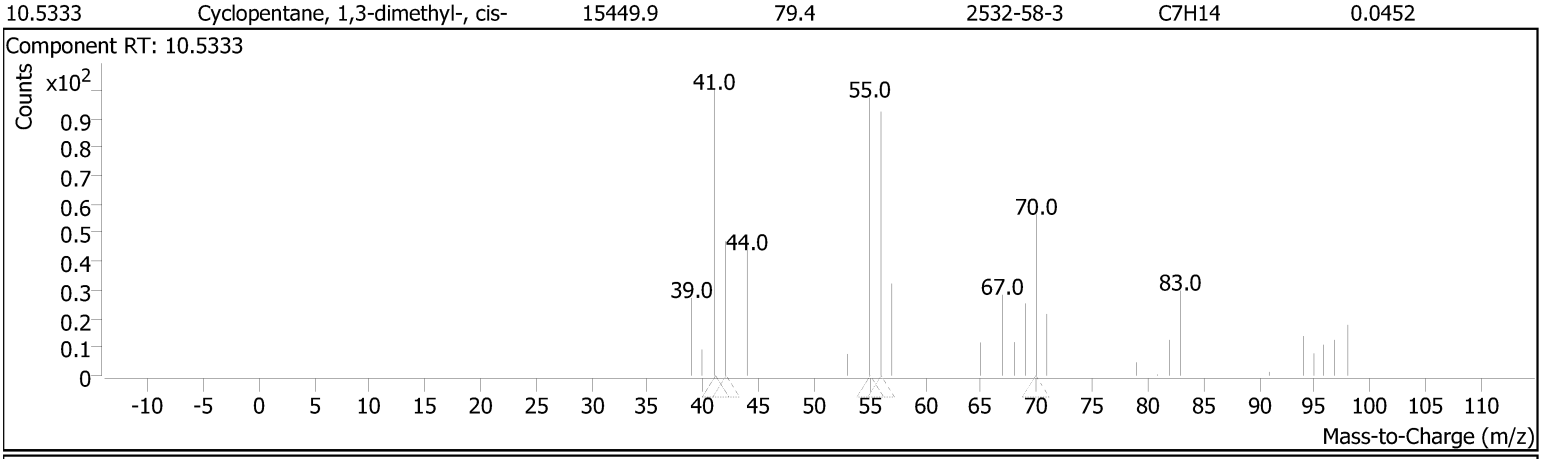


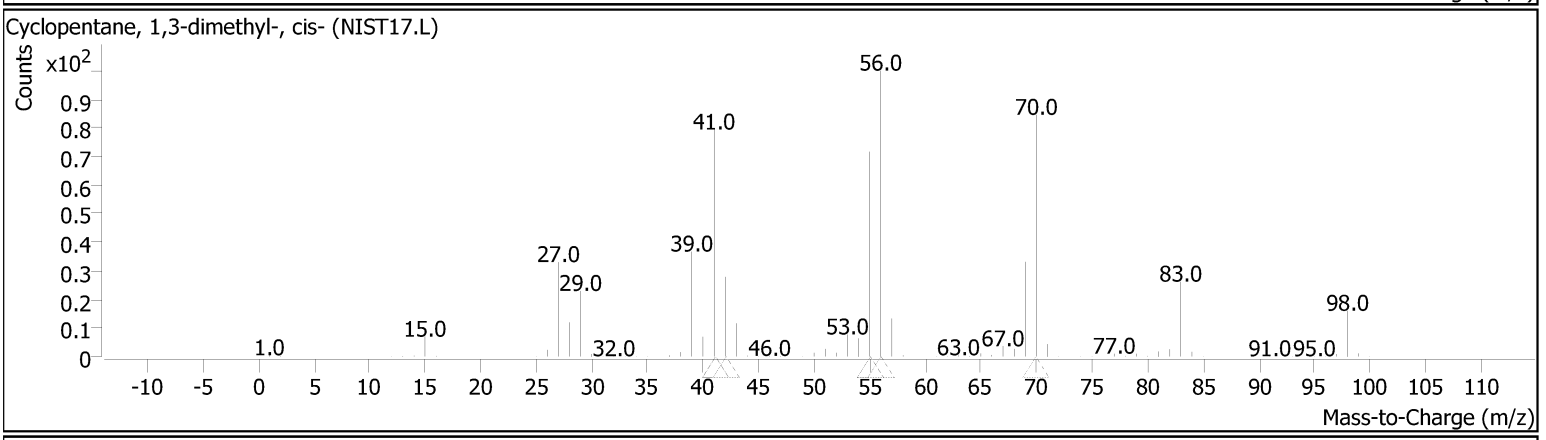


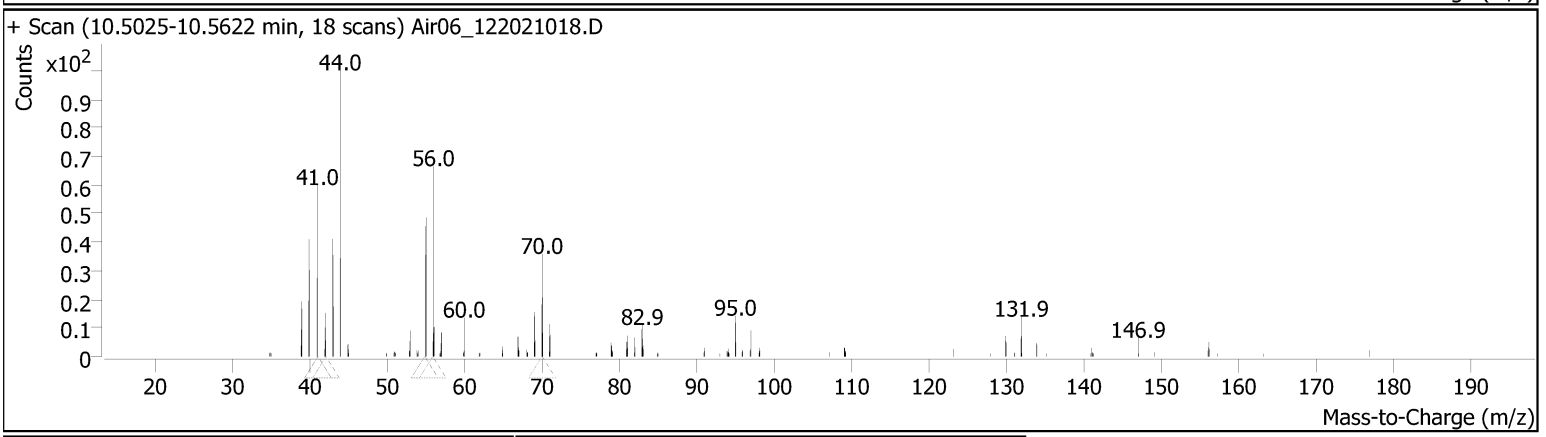


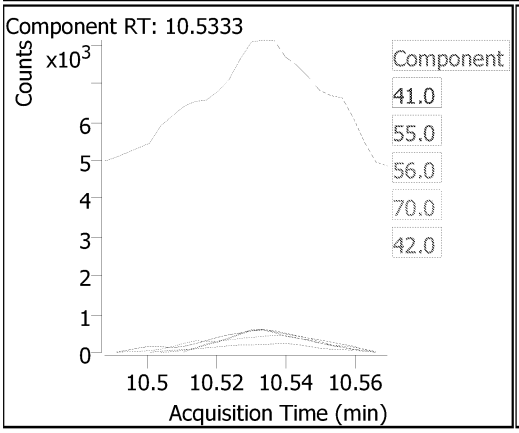


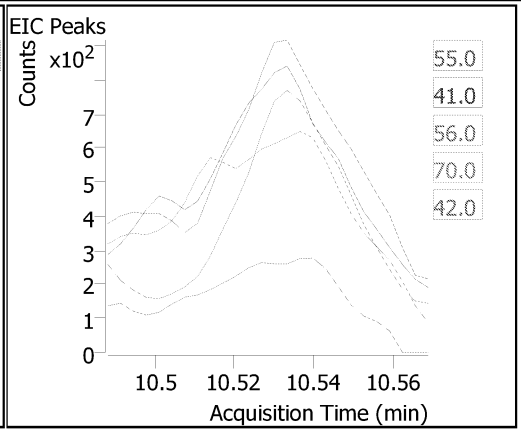
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.5333	Cyclopentane, 1,3-dimethyl-, cis-	15449.9	79.4	2532-58-3	C7H14	0.0452

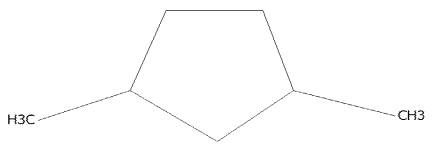




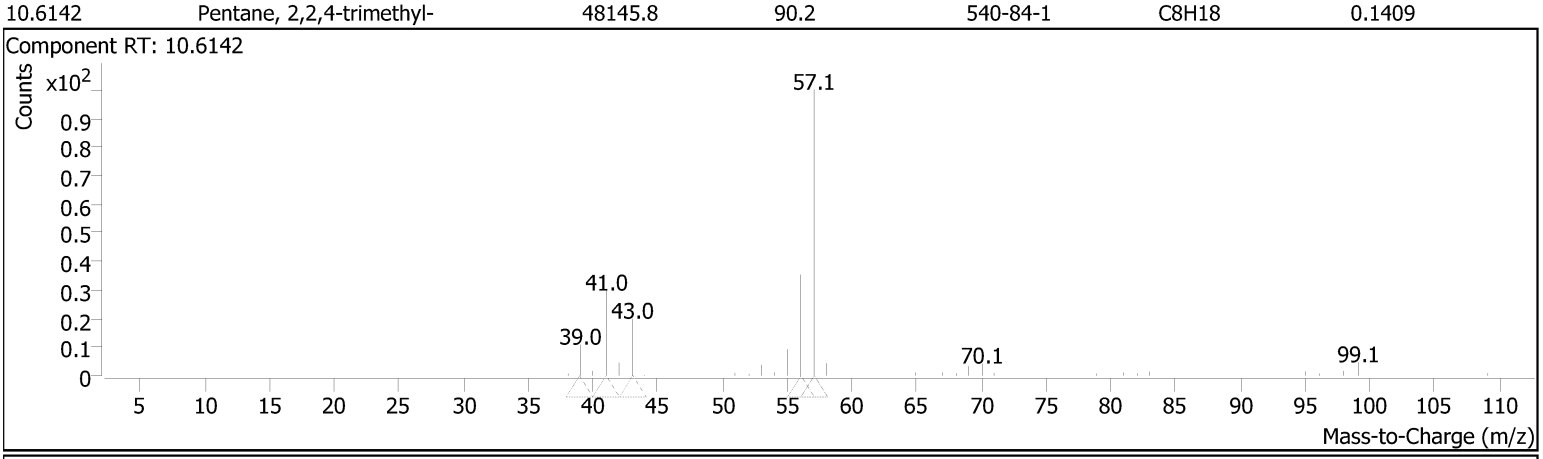


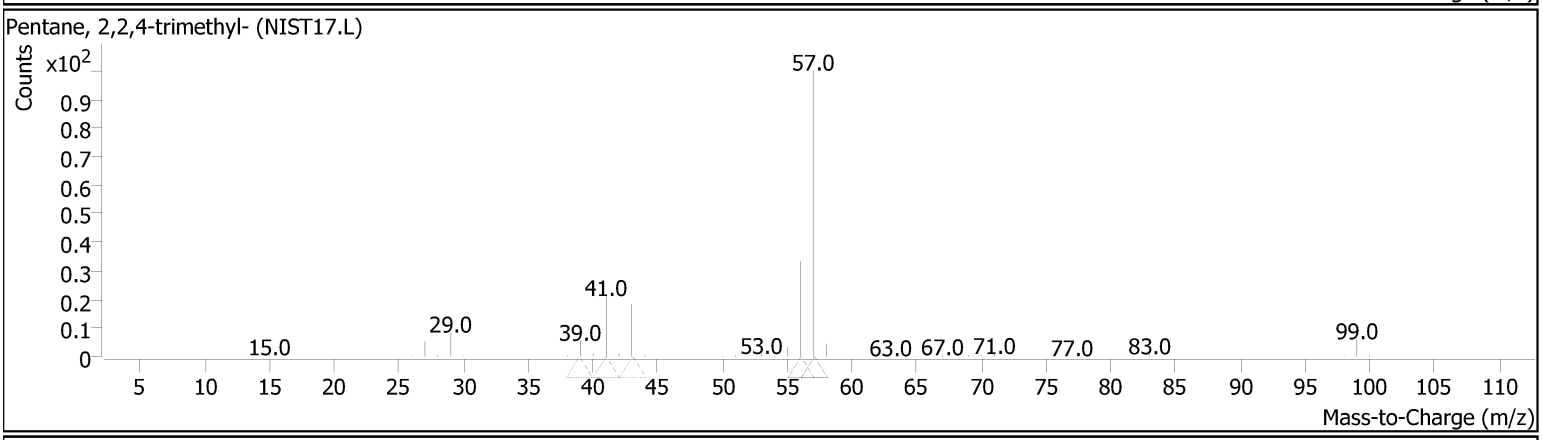


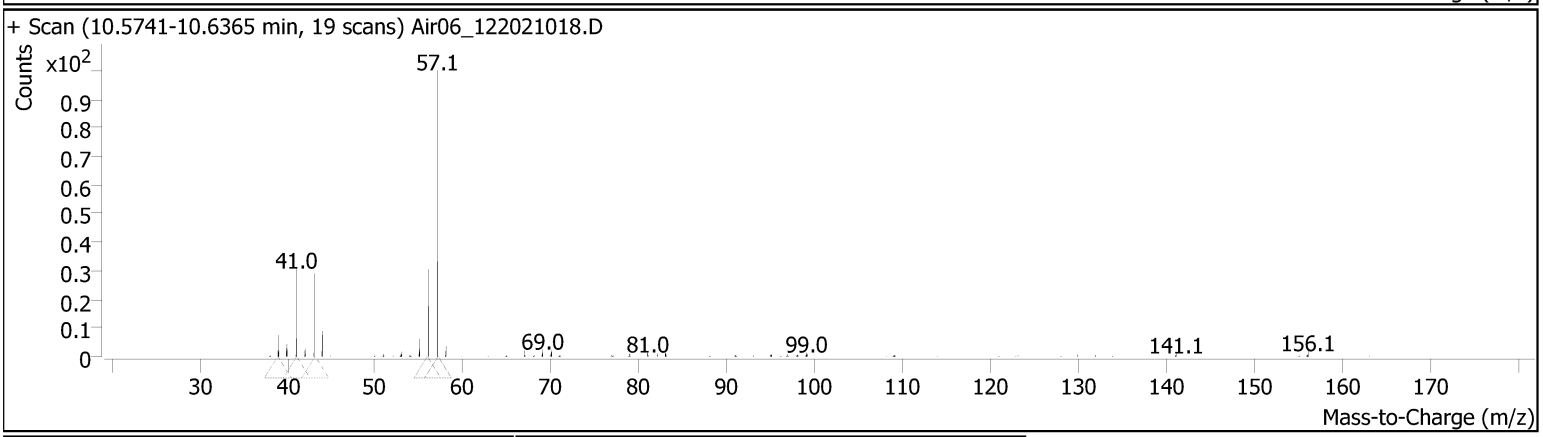


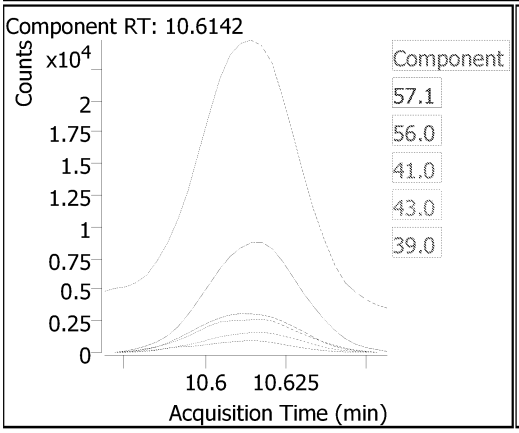


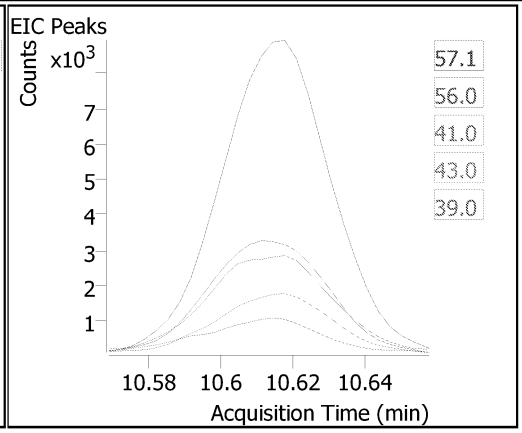
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.6142	Pentane, 2,2,4-trimethyl-	48145.8	90.2	540-84-1	C8H18	0.1409

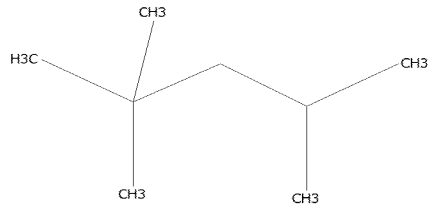




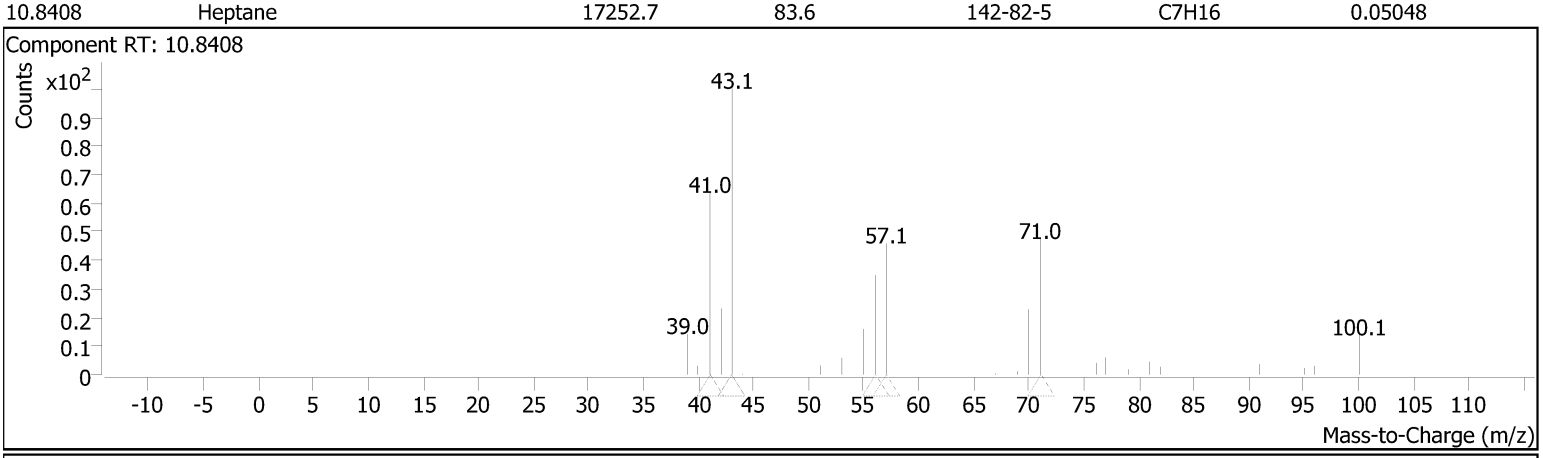


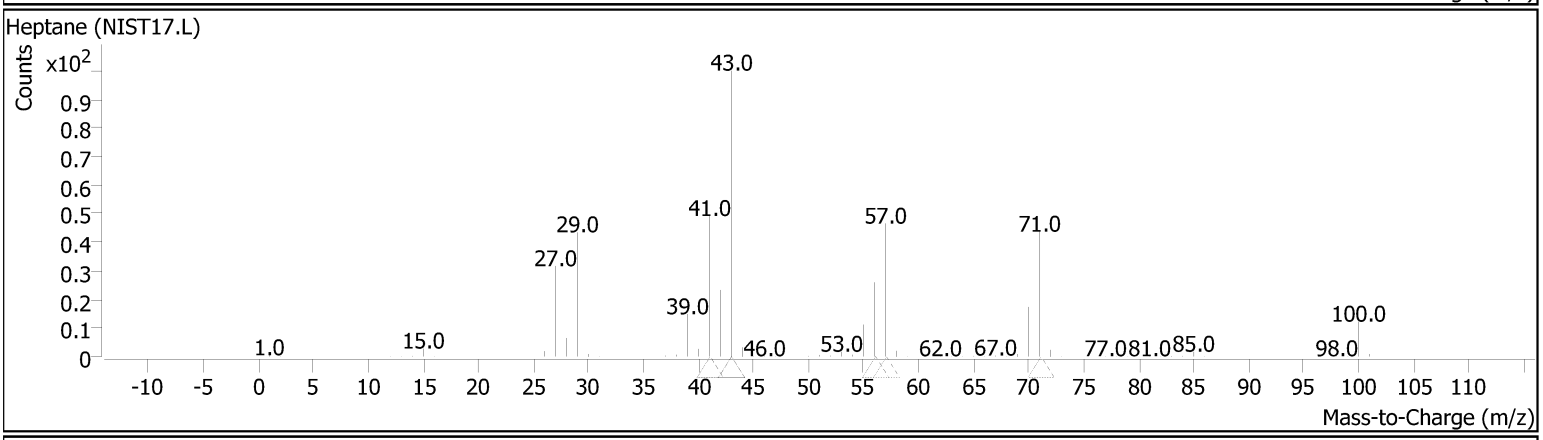


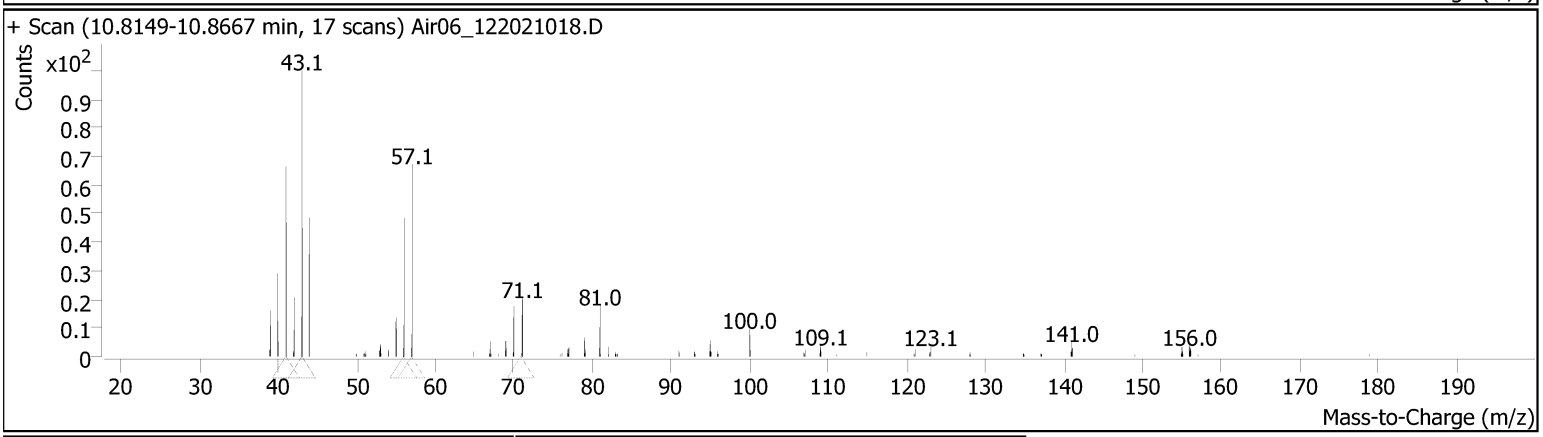


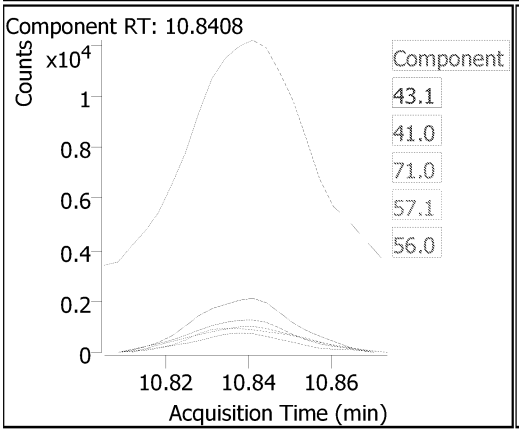


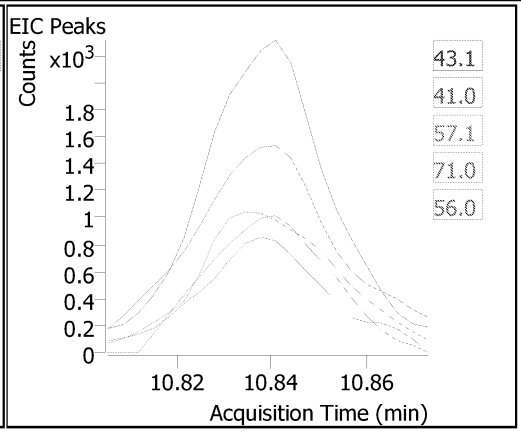
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.8408	Heptane	17252.7	83.6	142-82-5	C7H16	0.05048





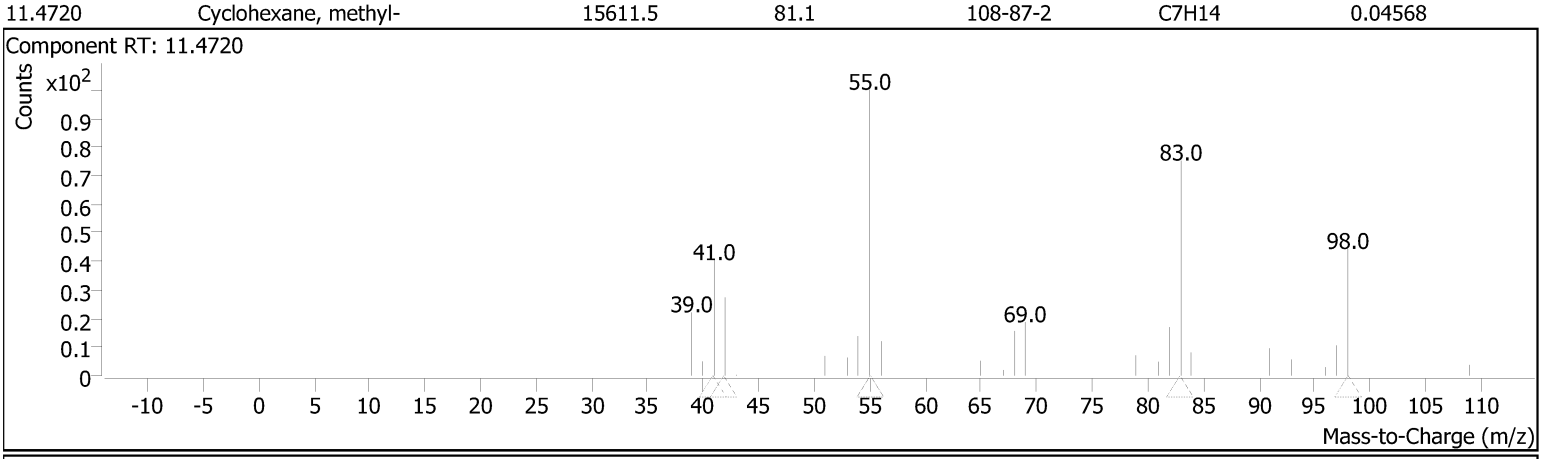


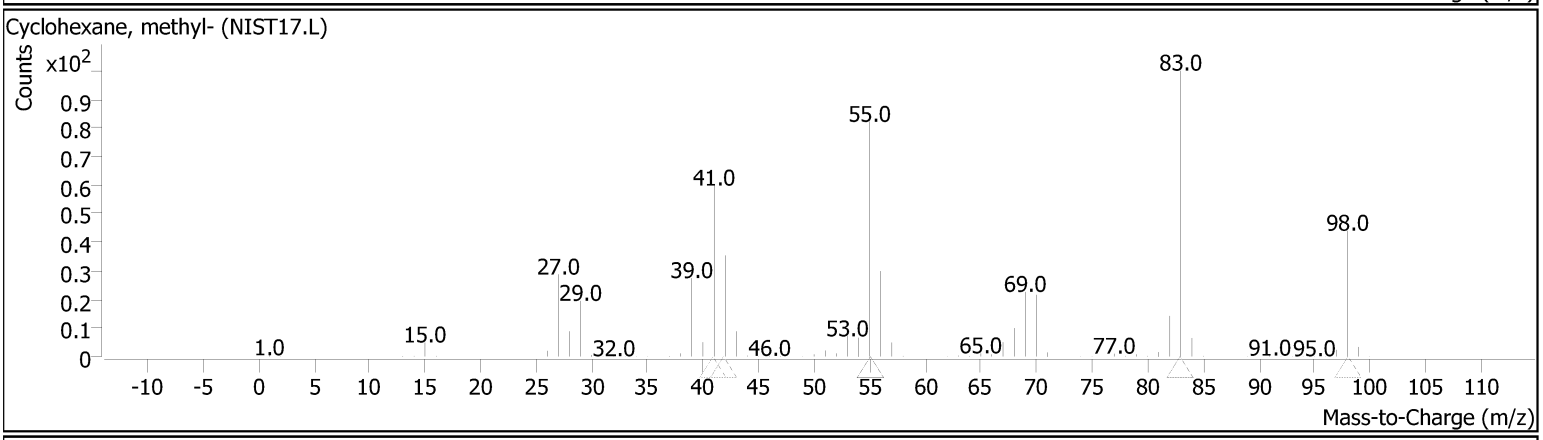


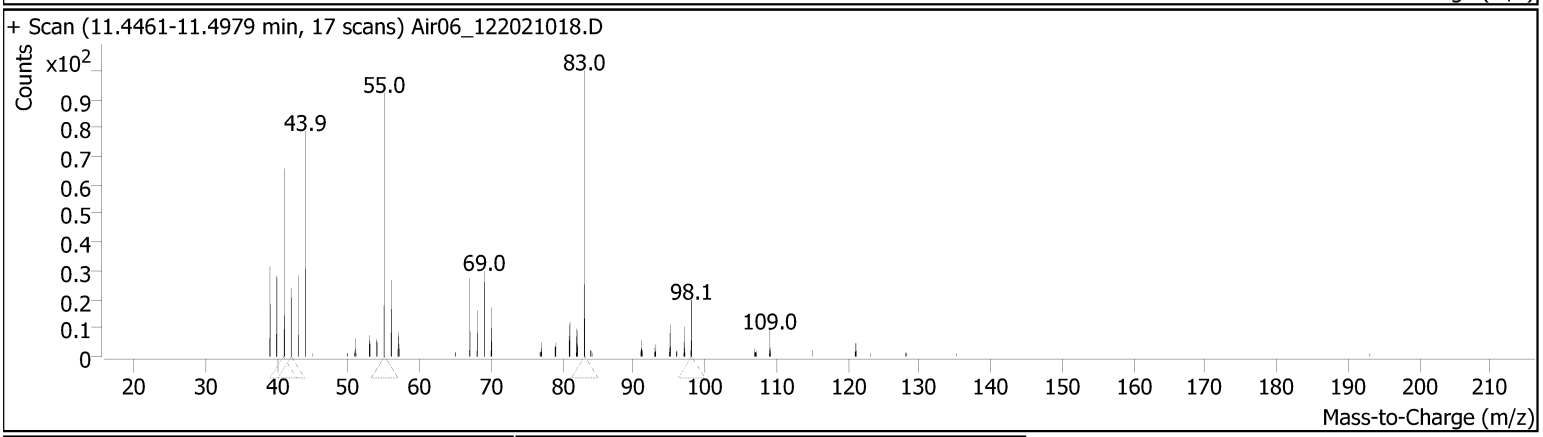


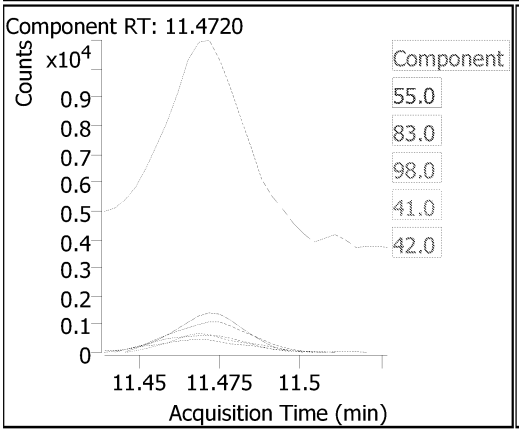


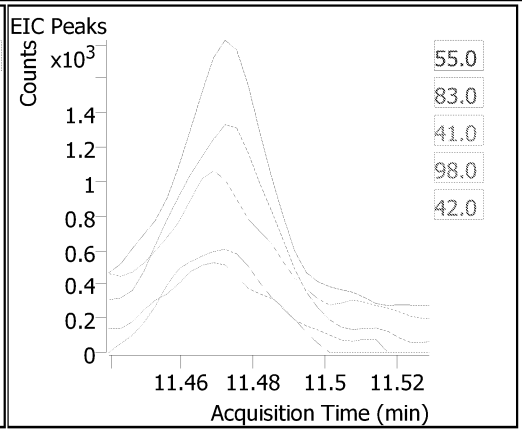
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.4720	Cyclohexane, methyl-	15611.5	81.1	108-87-2	C7H14	0.04568

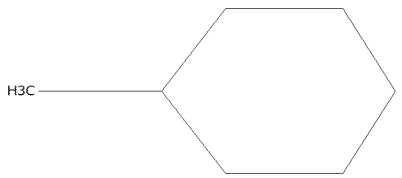








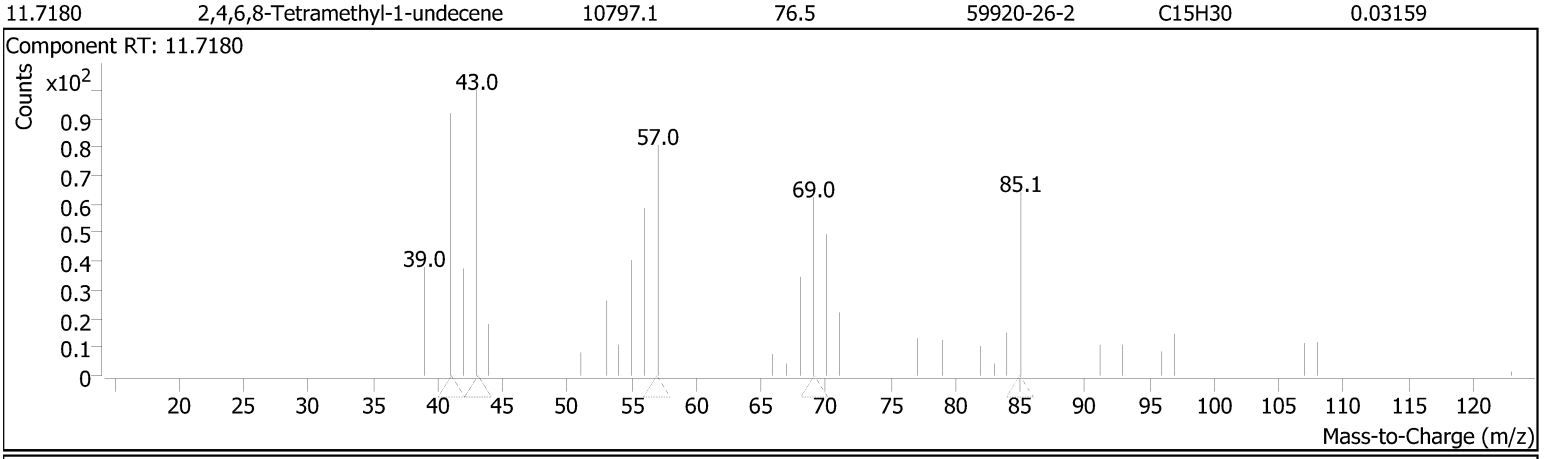


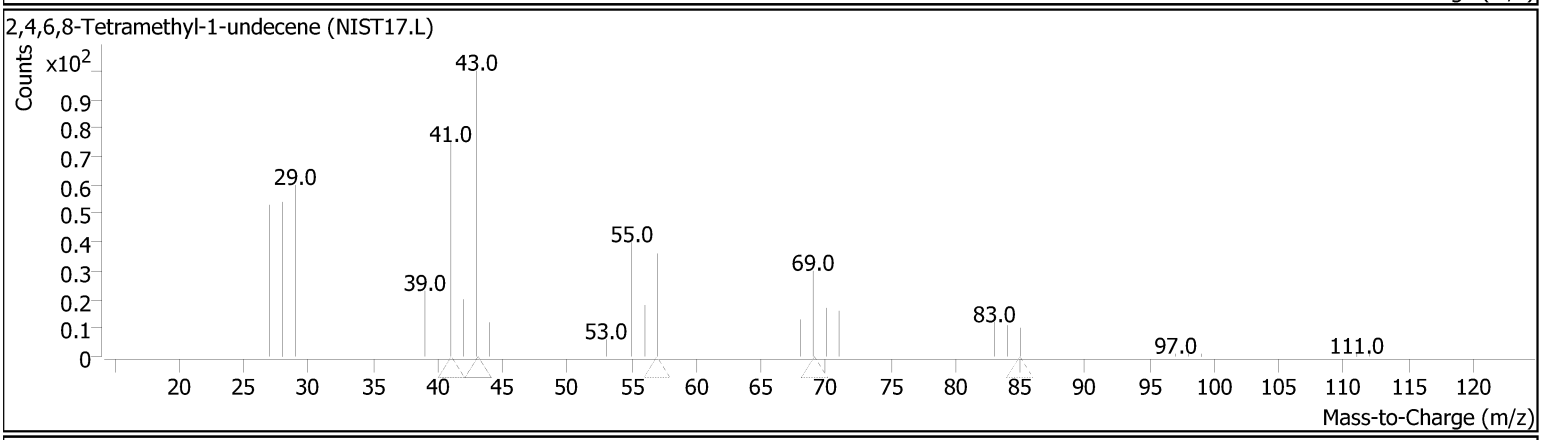


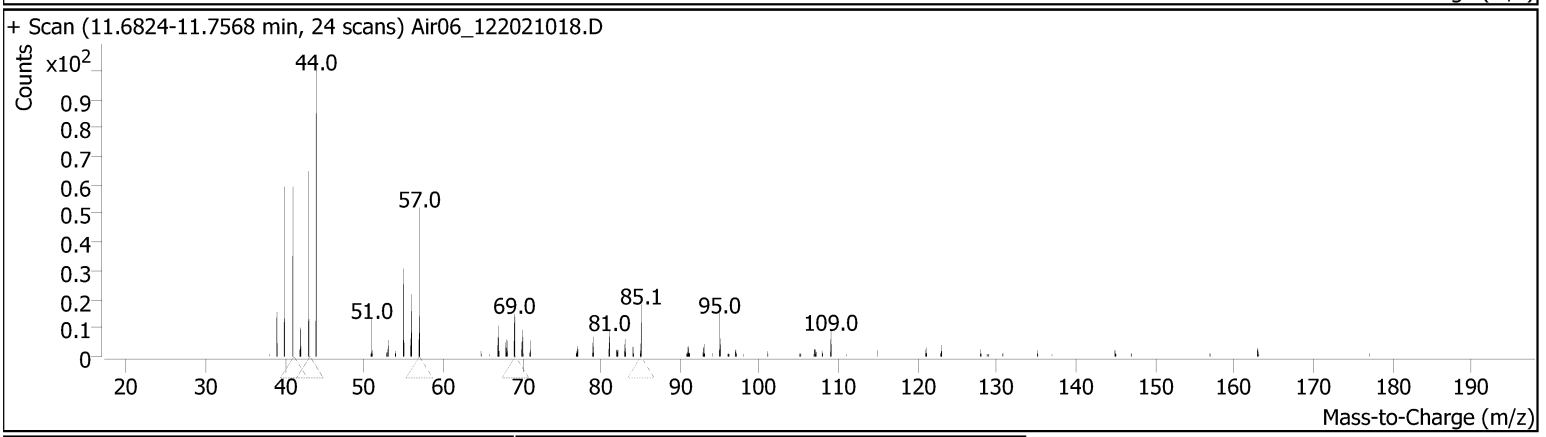
Library Search Results - NonTarget Hits with Details

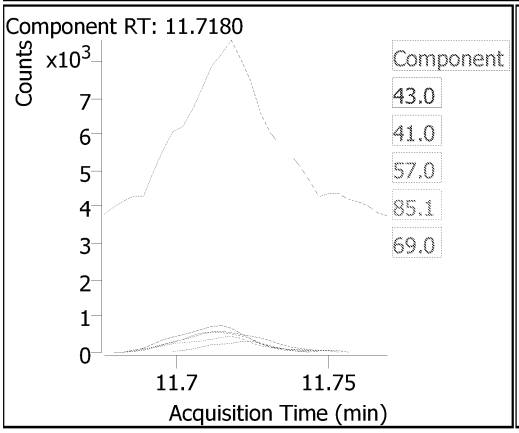
Agilent Technologies

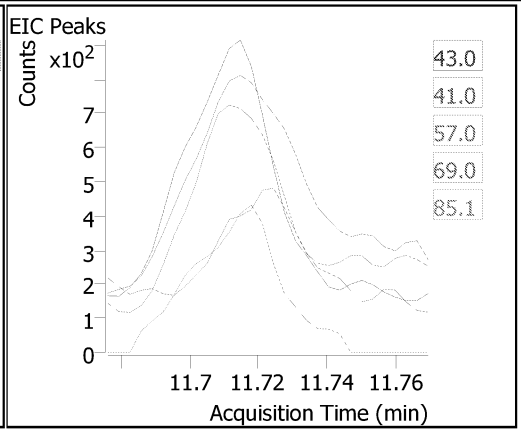
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.7180	2,4,6,8-Tetramethyl-1-undecene	10797.1	76.5	59920-26-2	C15H30	0.03159

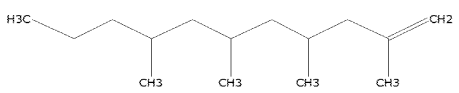




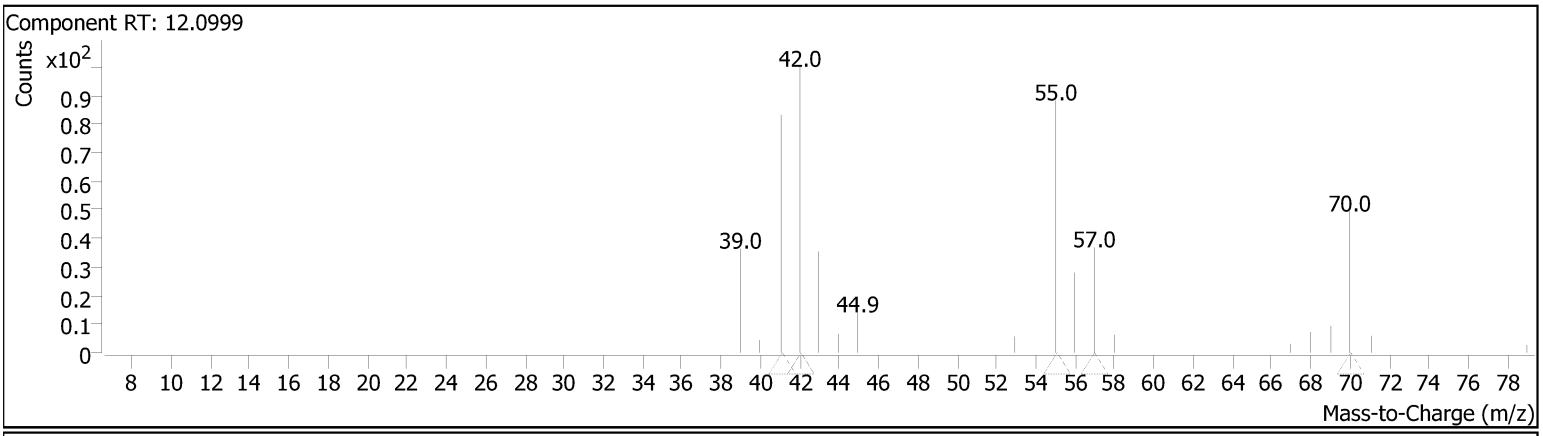


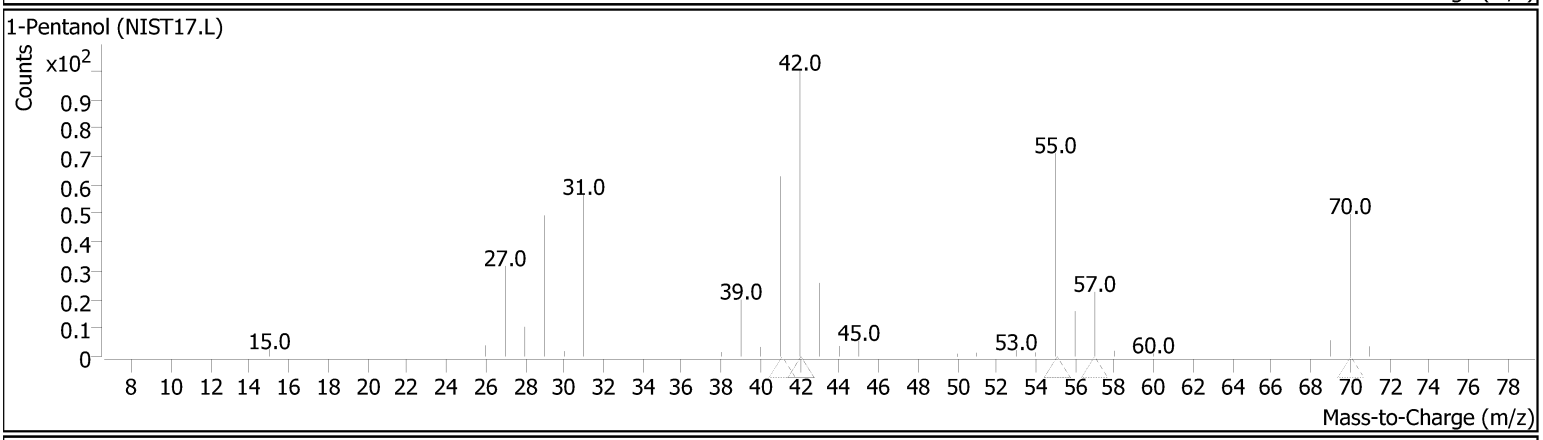


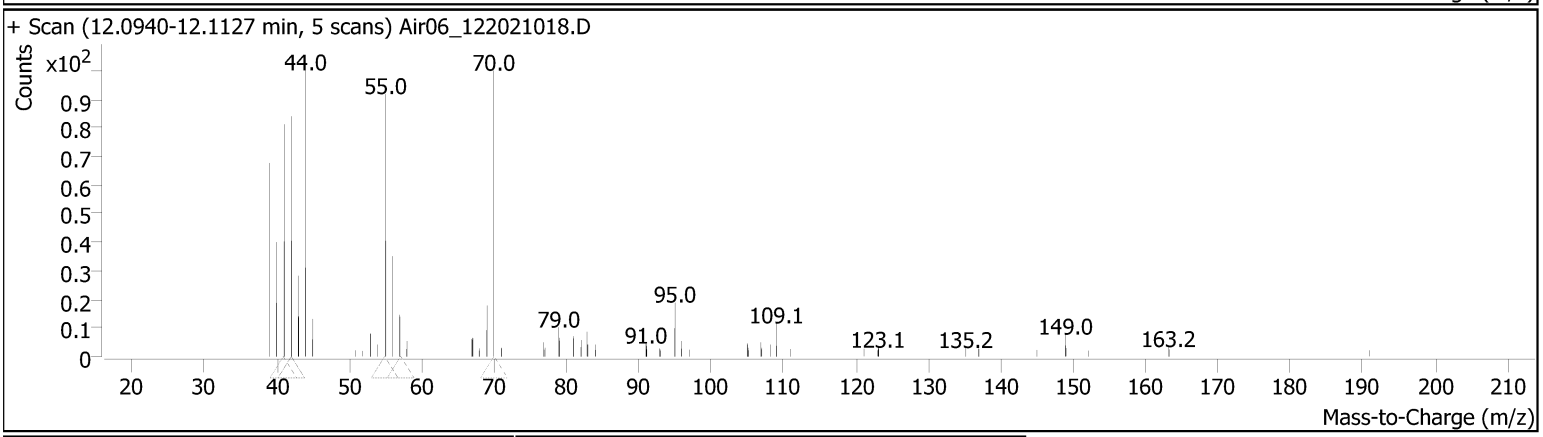


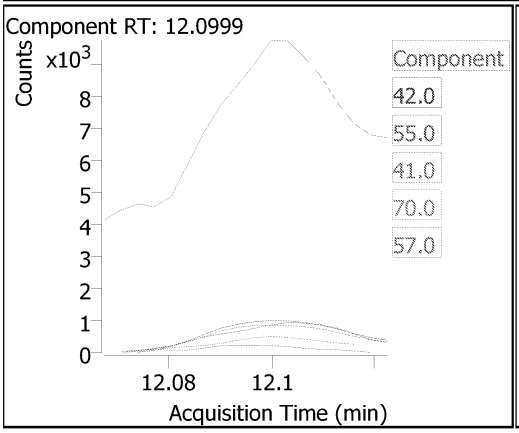


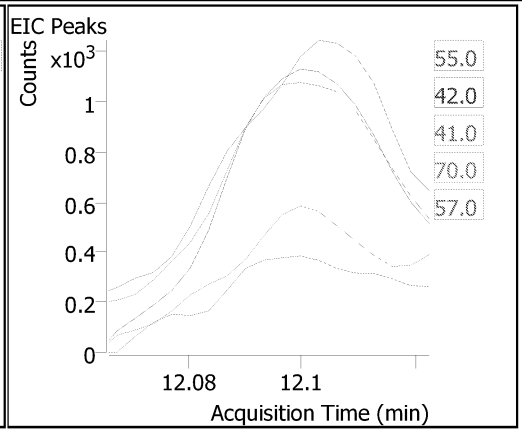
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.0999	1-Pentanol	10308.3	78.8	71-41-0	C5H12O	0.02418





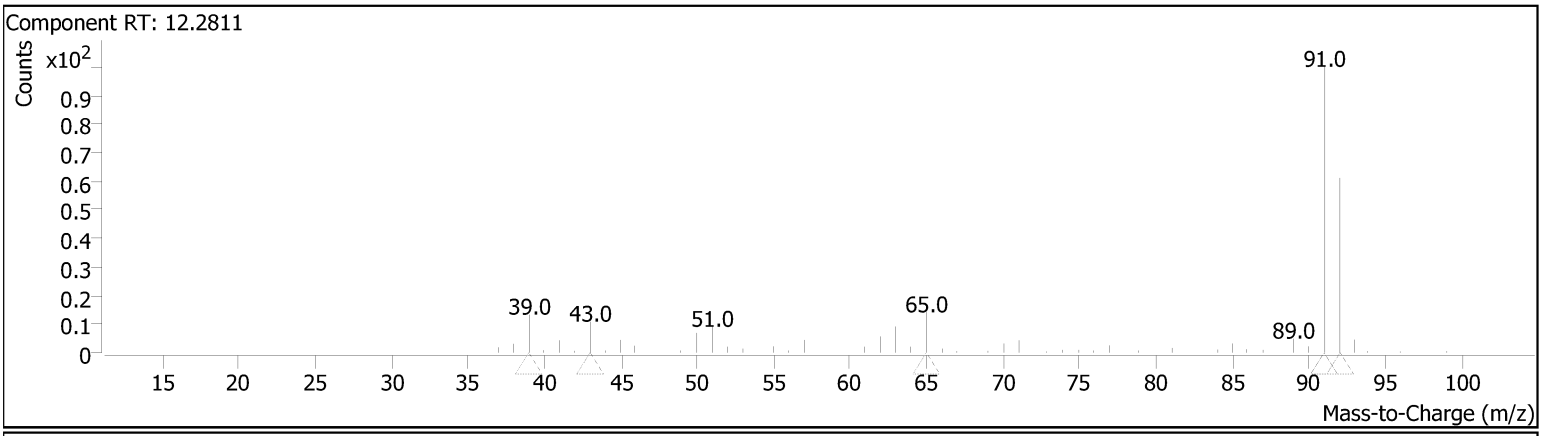


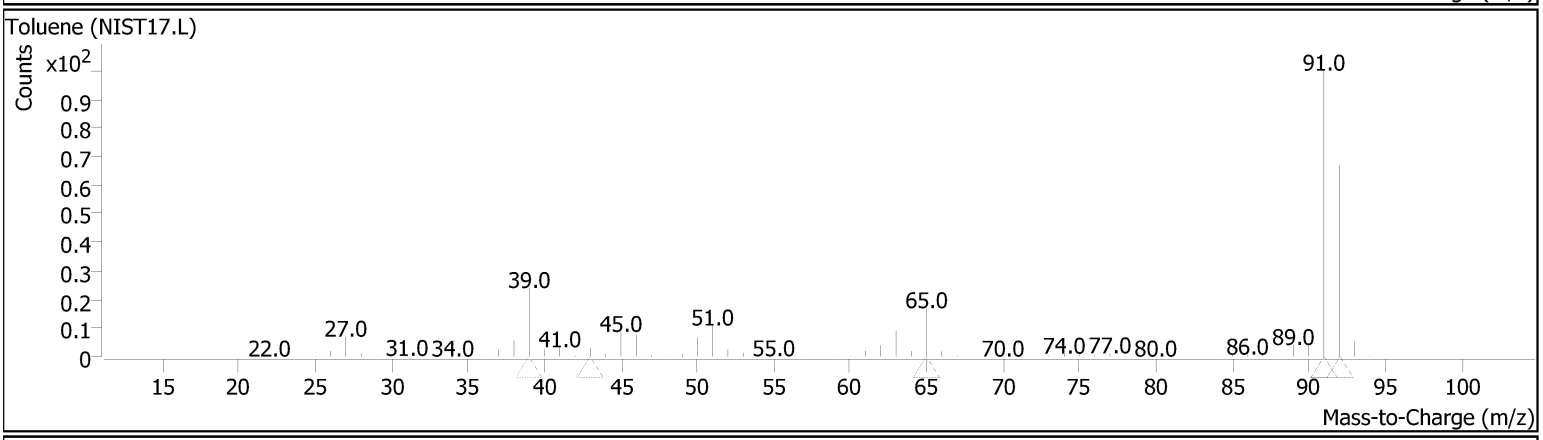


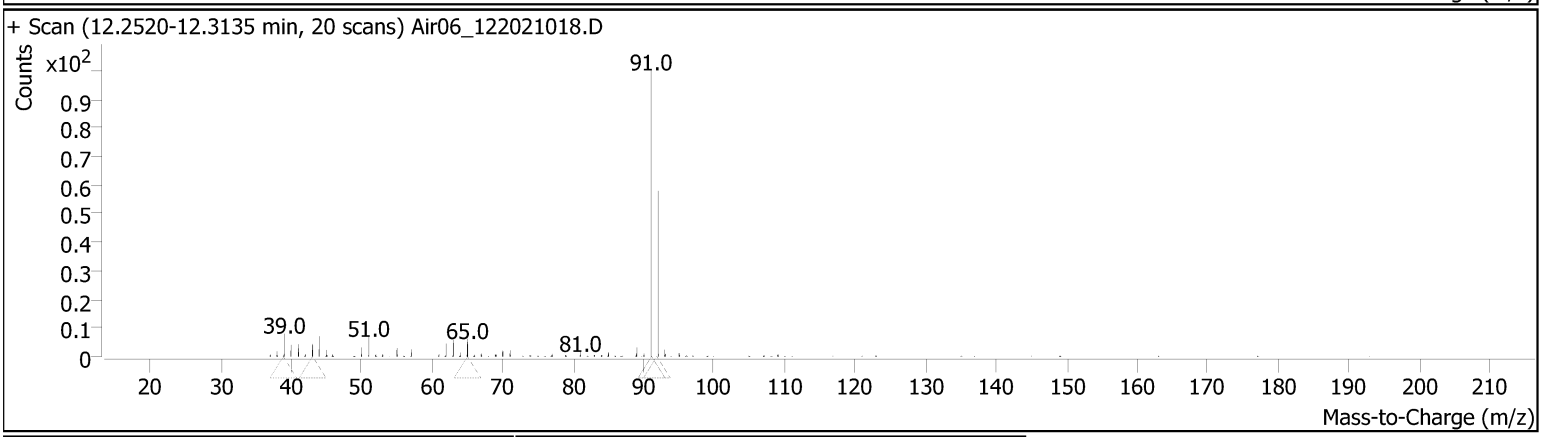


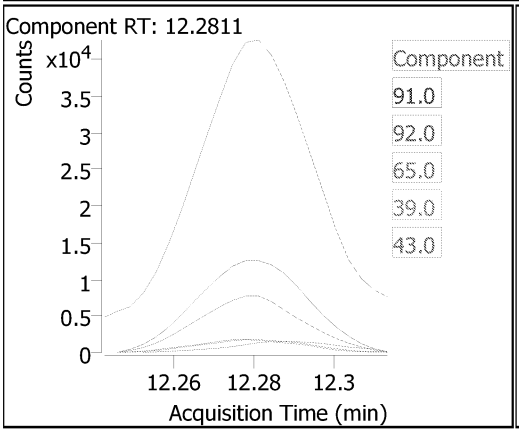


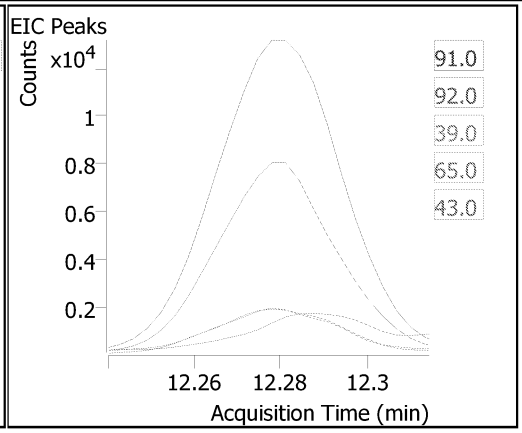
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.2811	Toluene	70581.4	92.4	108-88-3	C7H8	0.1656

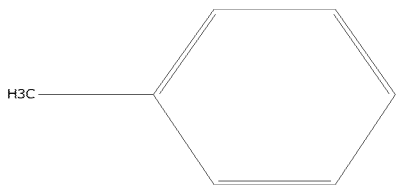




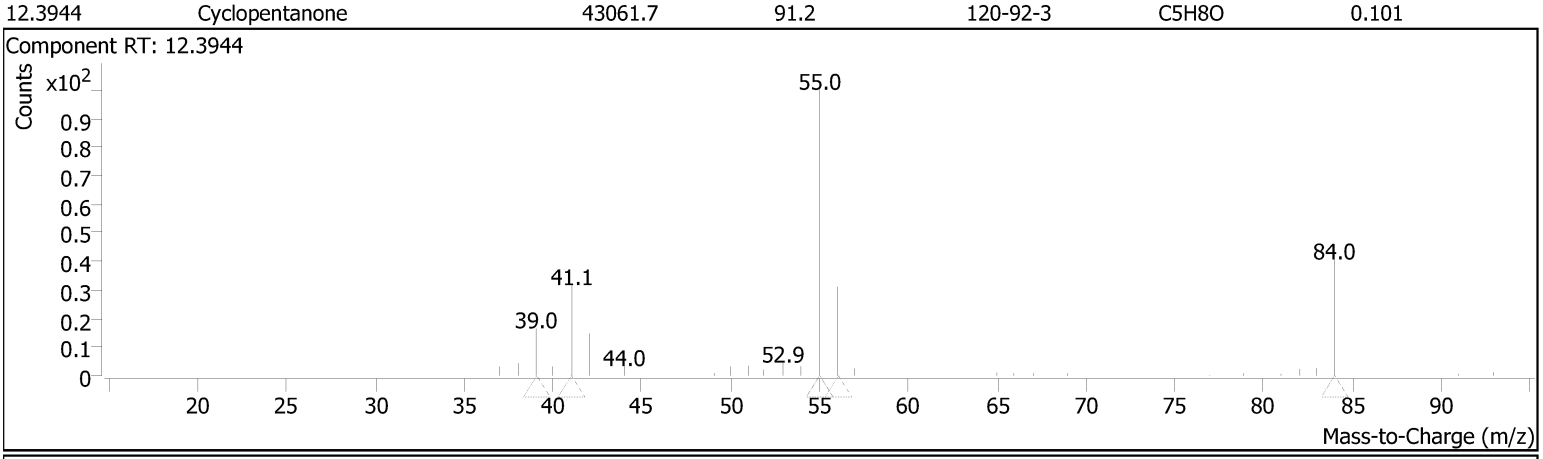


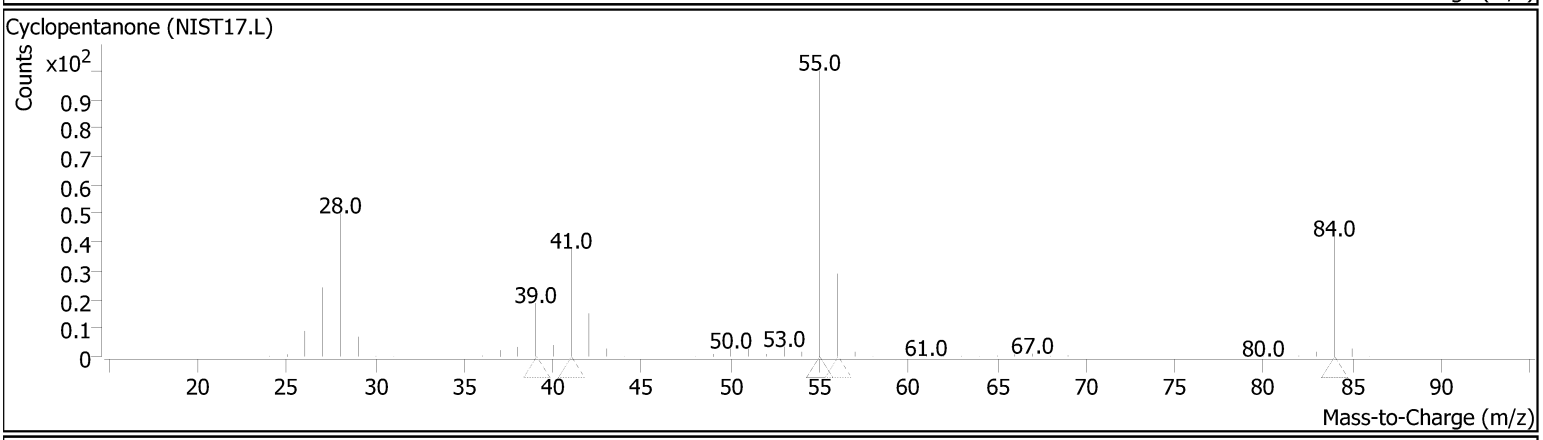


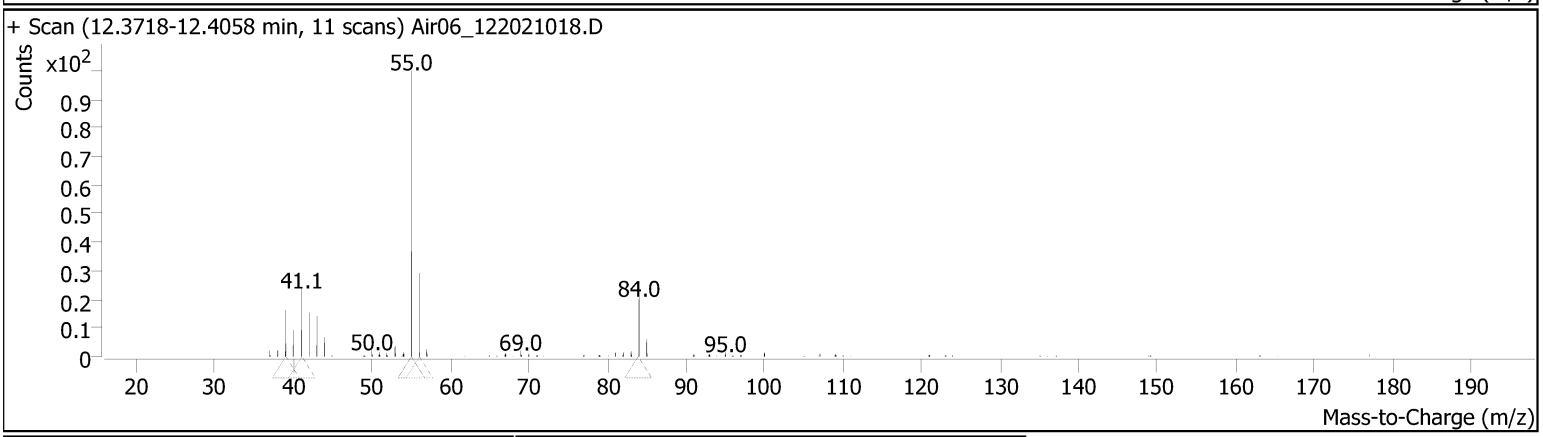


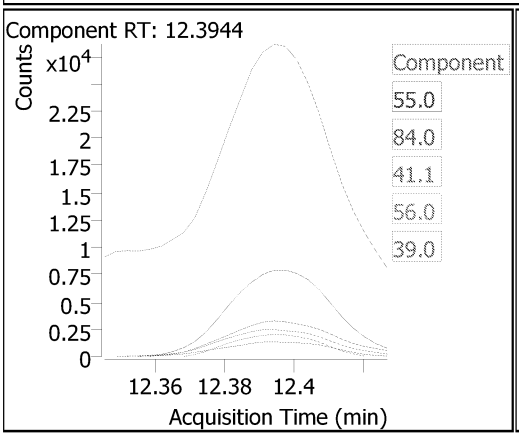


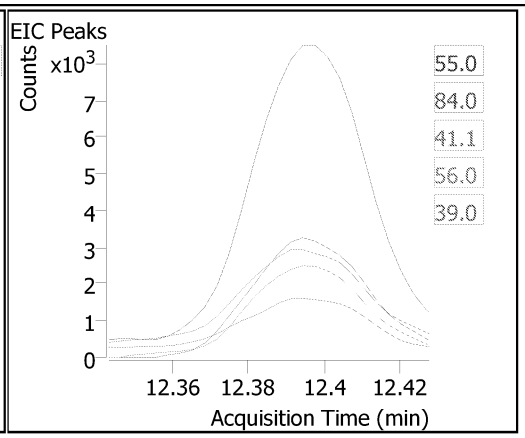
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.3944	Cyclopentanone	43061.7	91.2	120-92-3	C5H8O	0.101

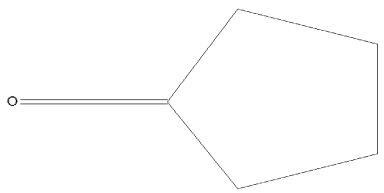




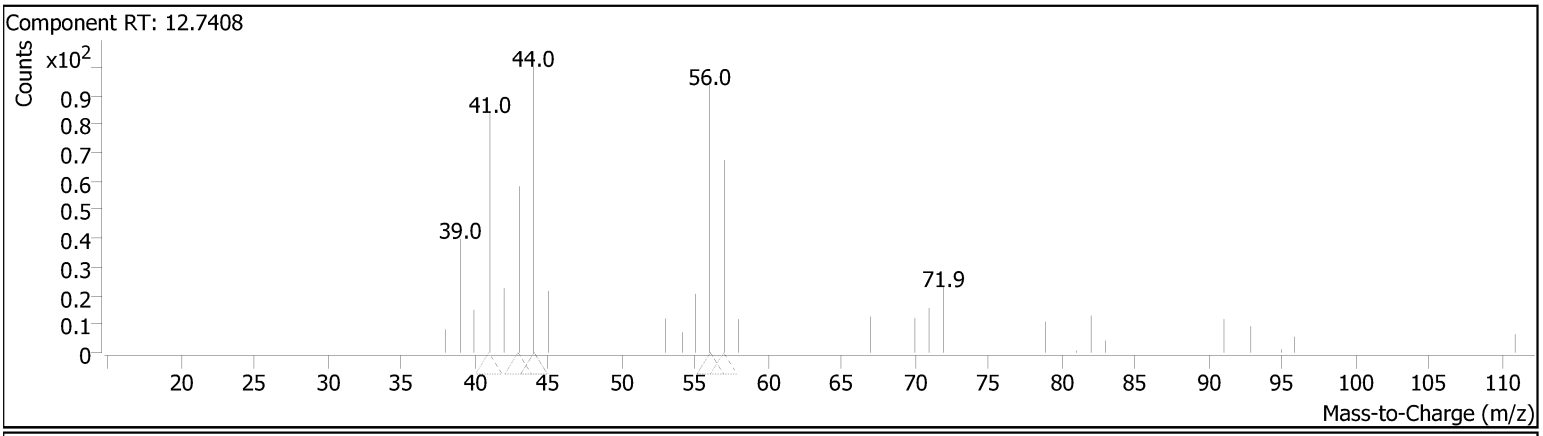


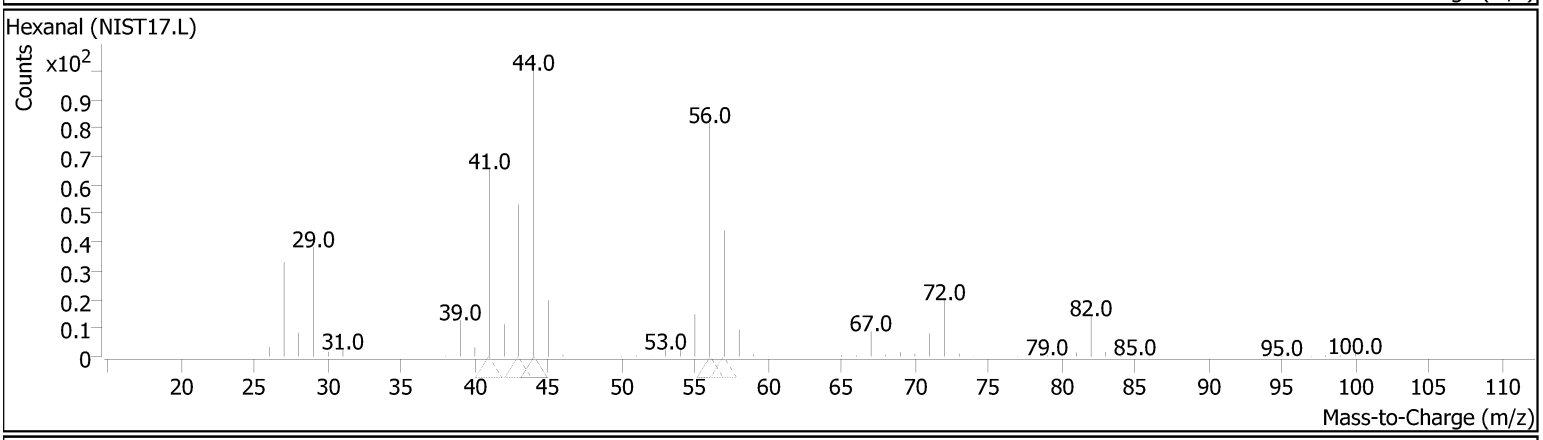


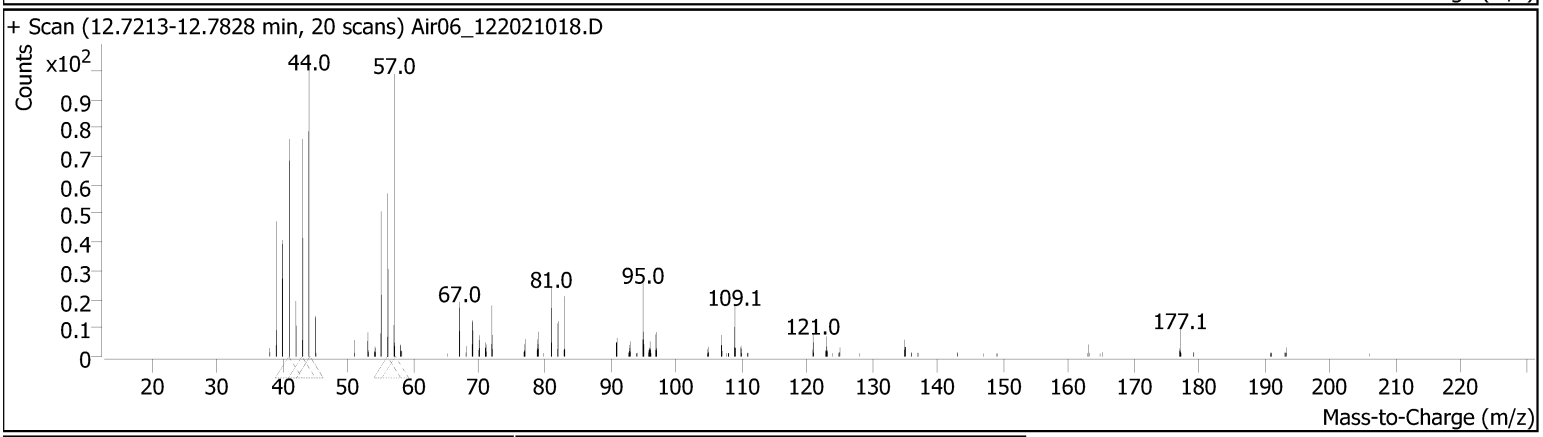


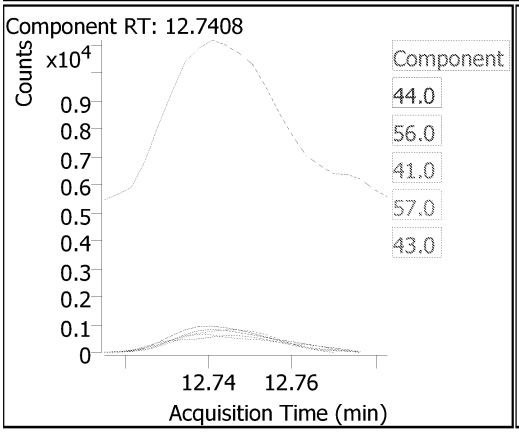


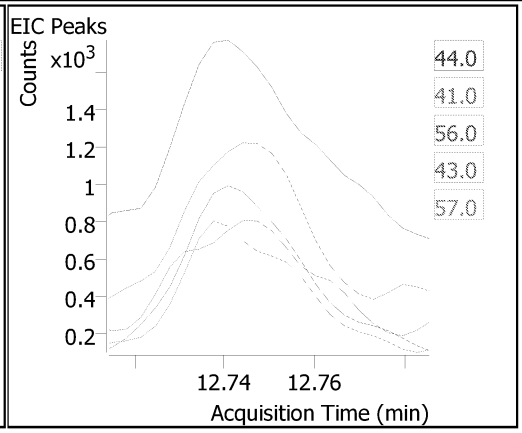
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.7408	Hexanal	10771.0	81.9	66-25-1	C6H12O	0.02527





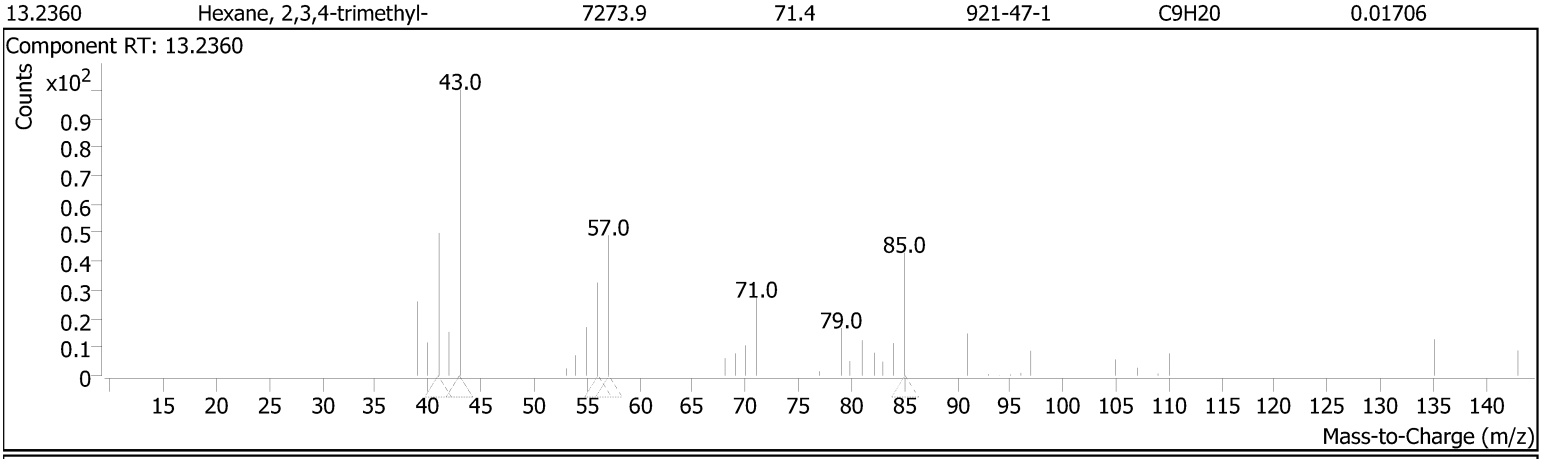


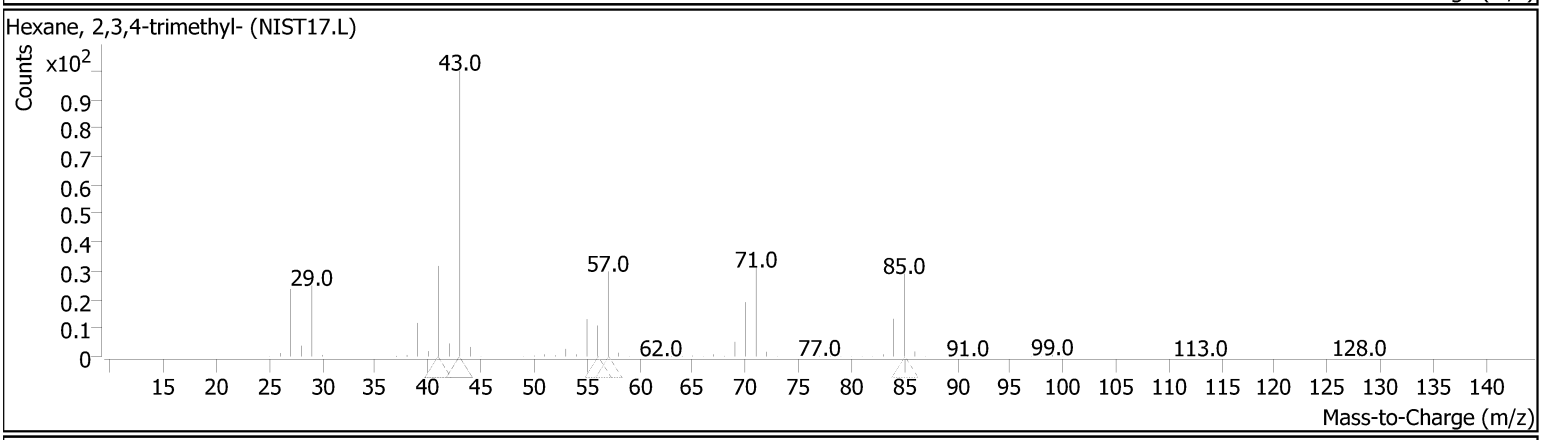


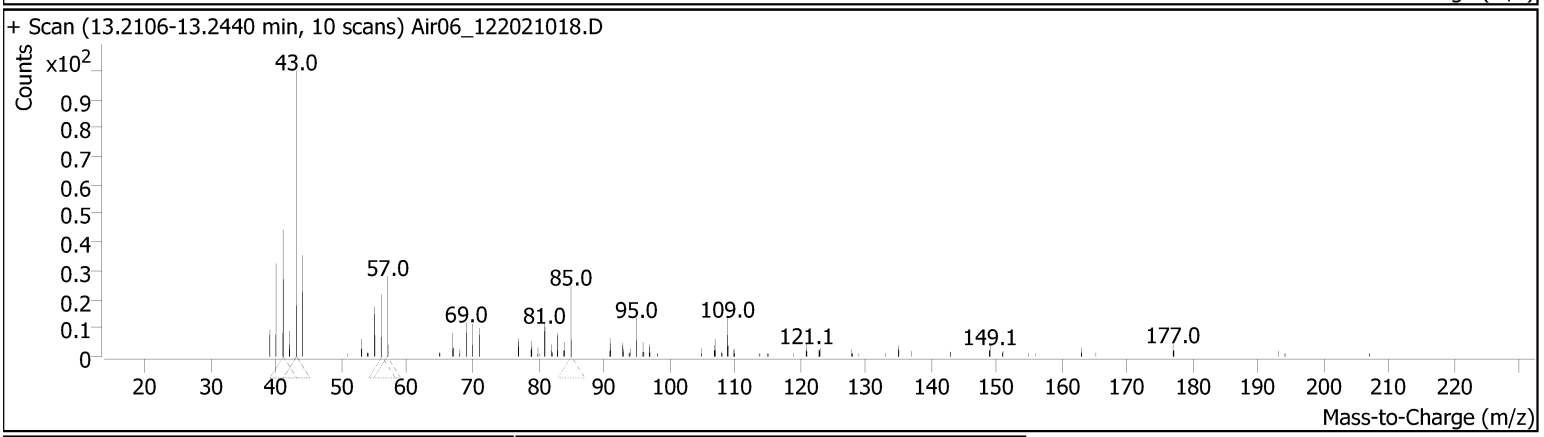


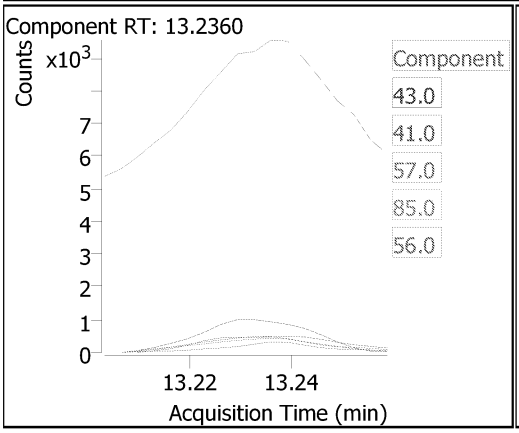


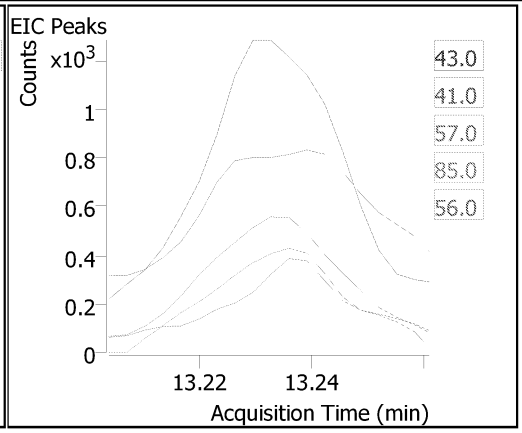
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.2360	Hexane, 2,3,4-trimethyl-	7273.9	71.4	921-47-1	C9H20	0.01706

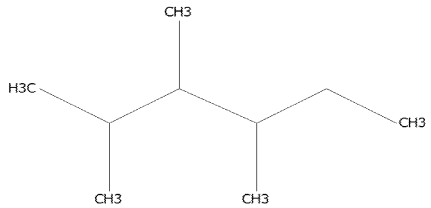




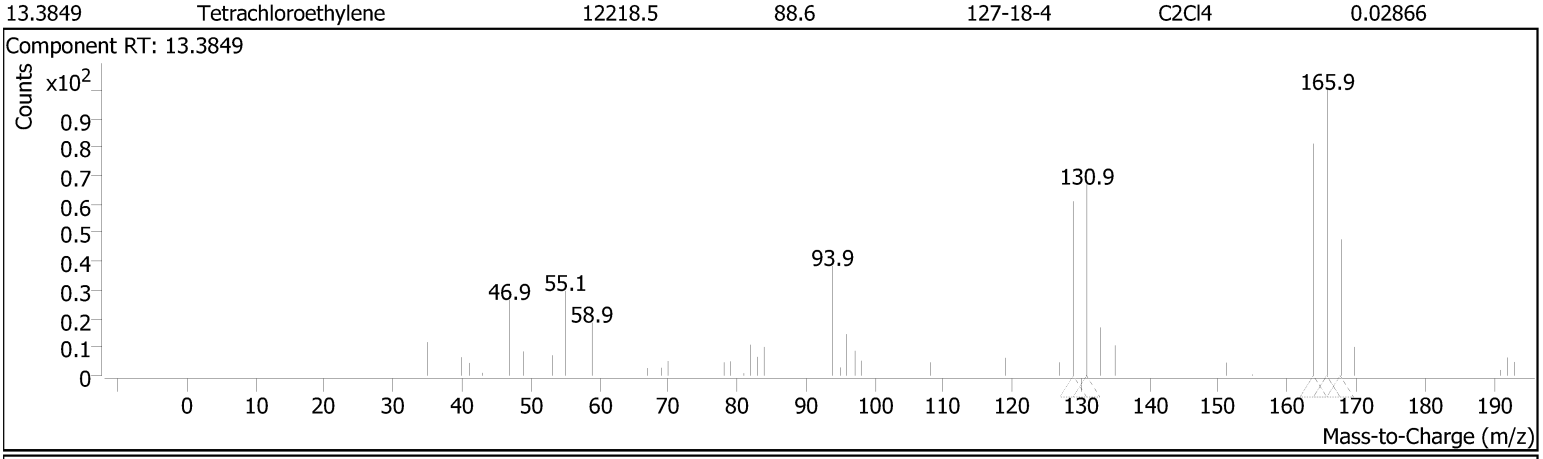


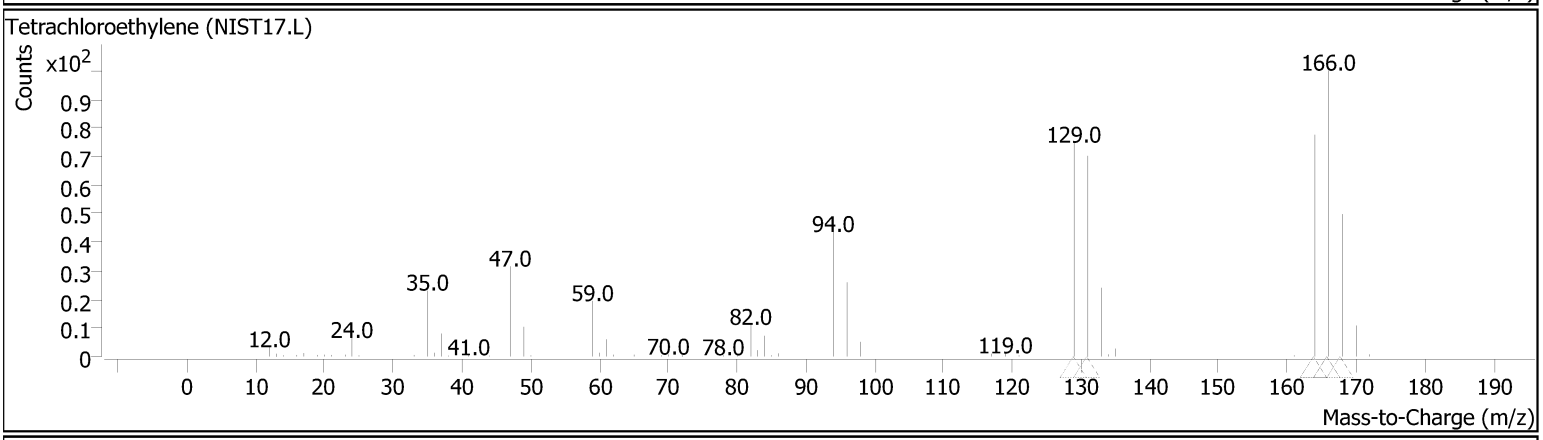


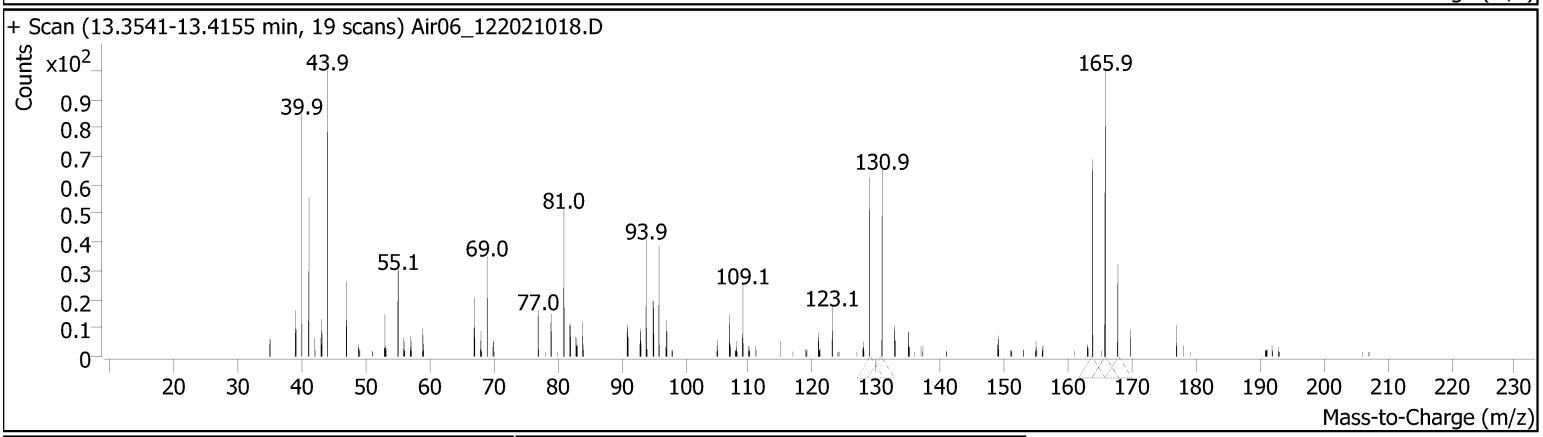


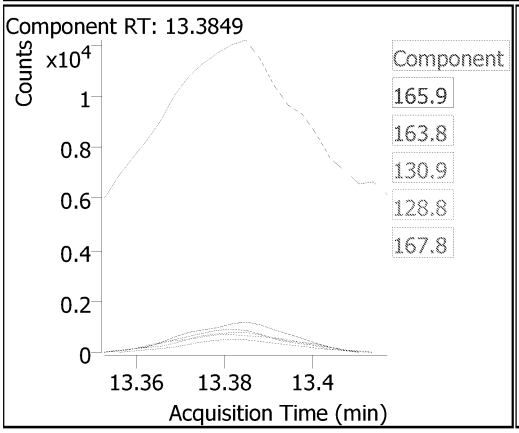


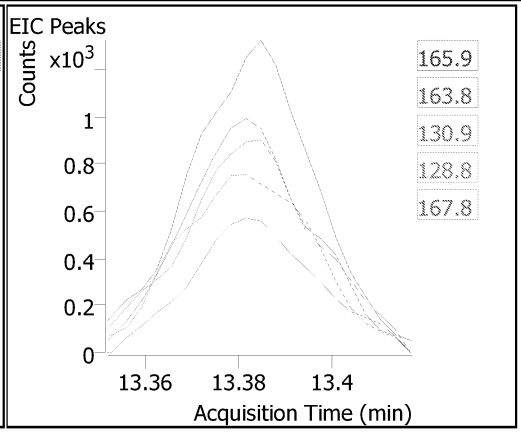
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.3849	Tetrachloroethylene	12218.5	88.6	127-18-4	C2Cl4	0.02866

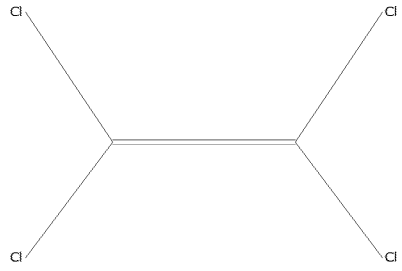




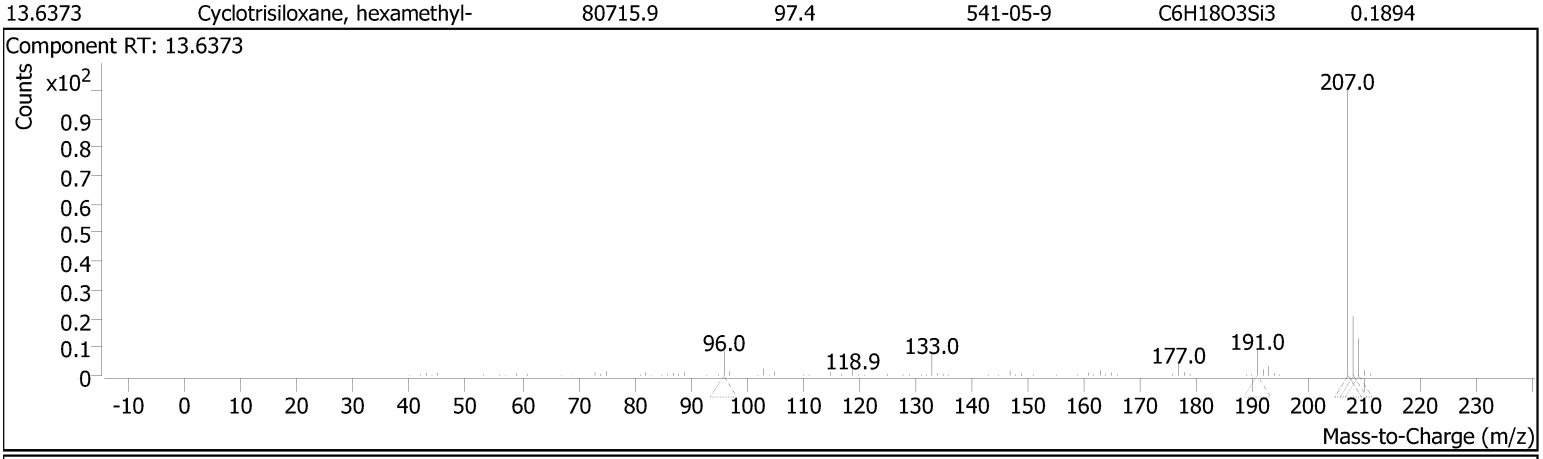


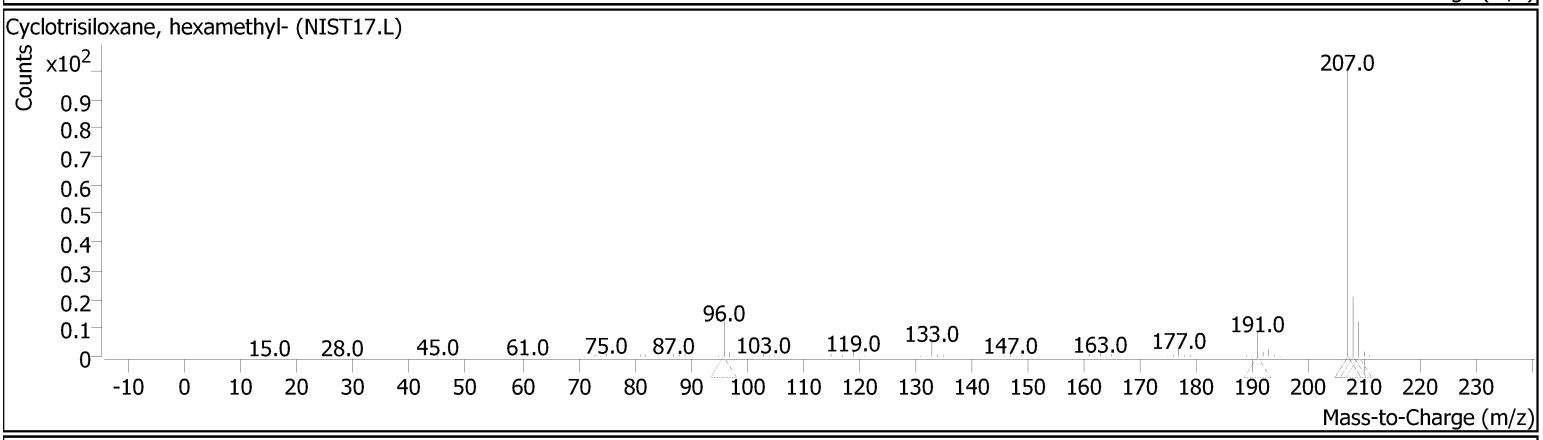


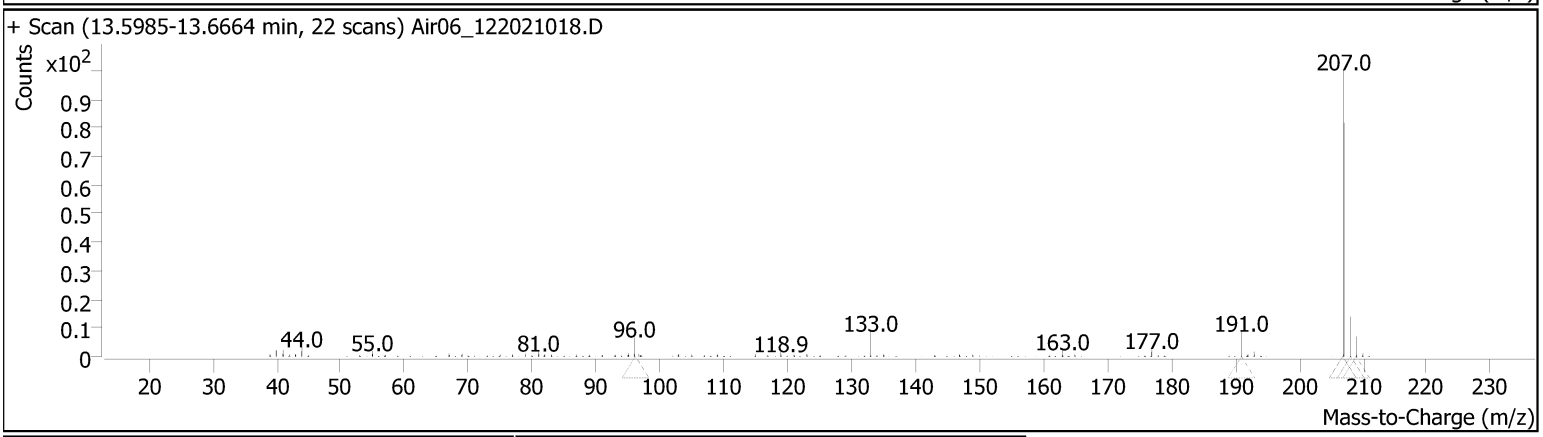


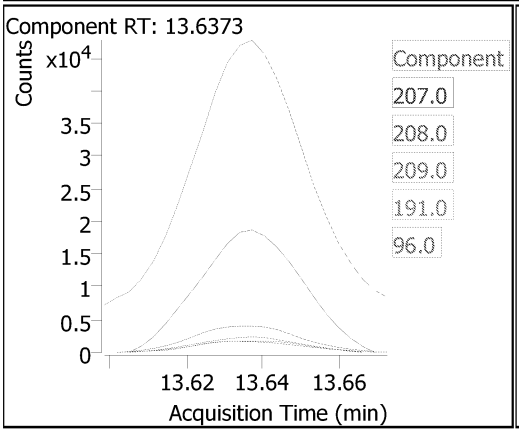


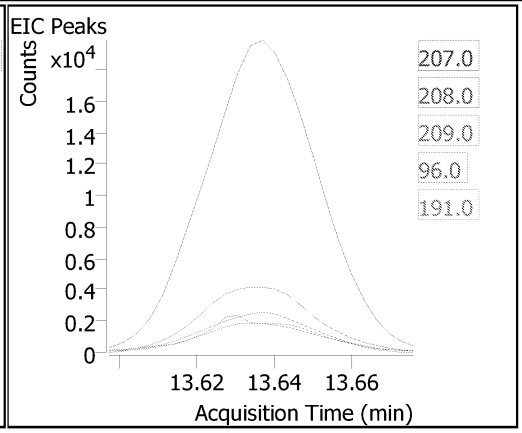
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.6373	Cyclotrisiloxane, hexamethyl-	80715.9	97.4	541-05-9	C6H18O3Si3	0.1894

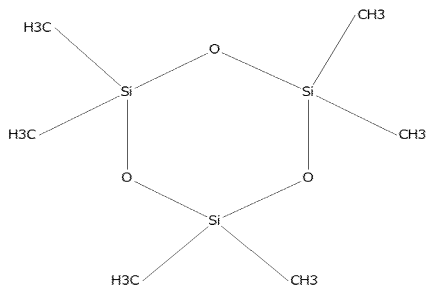




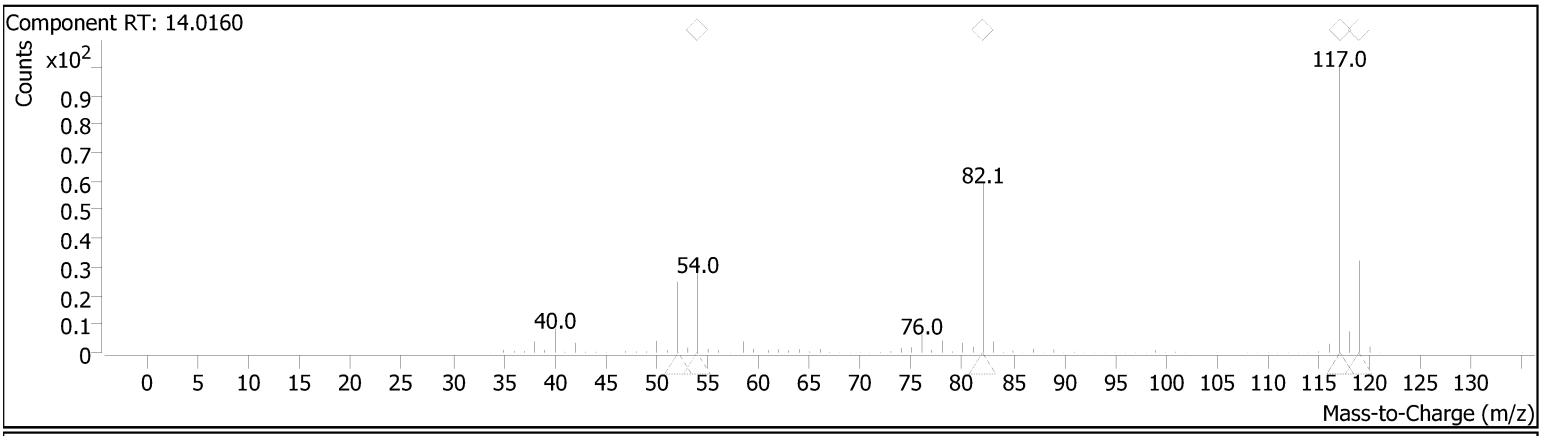


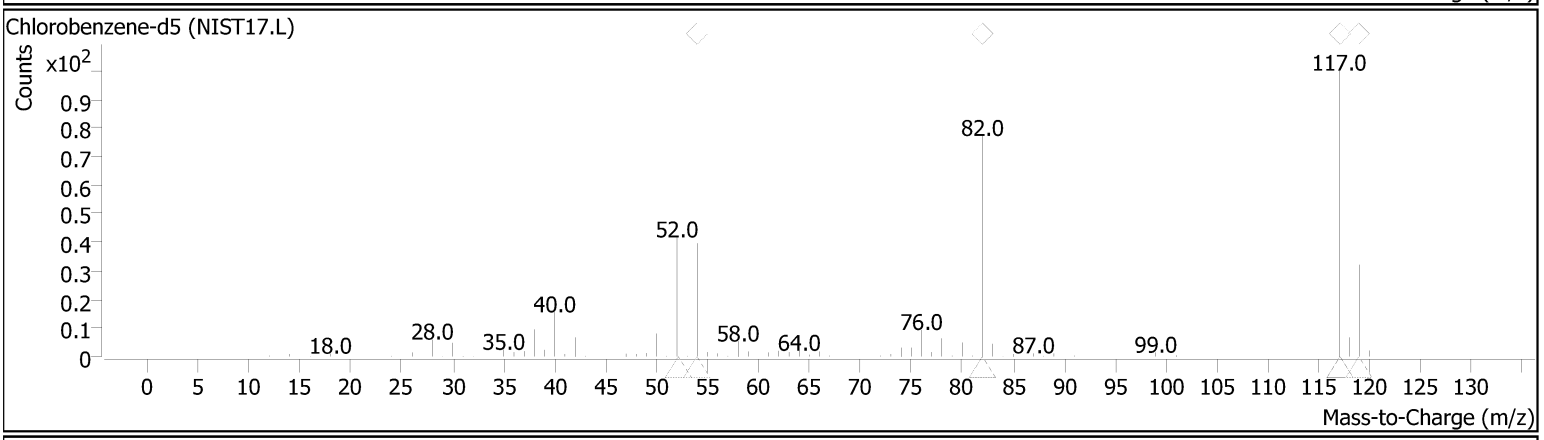


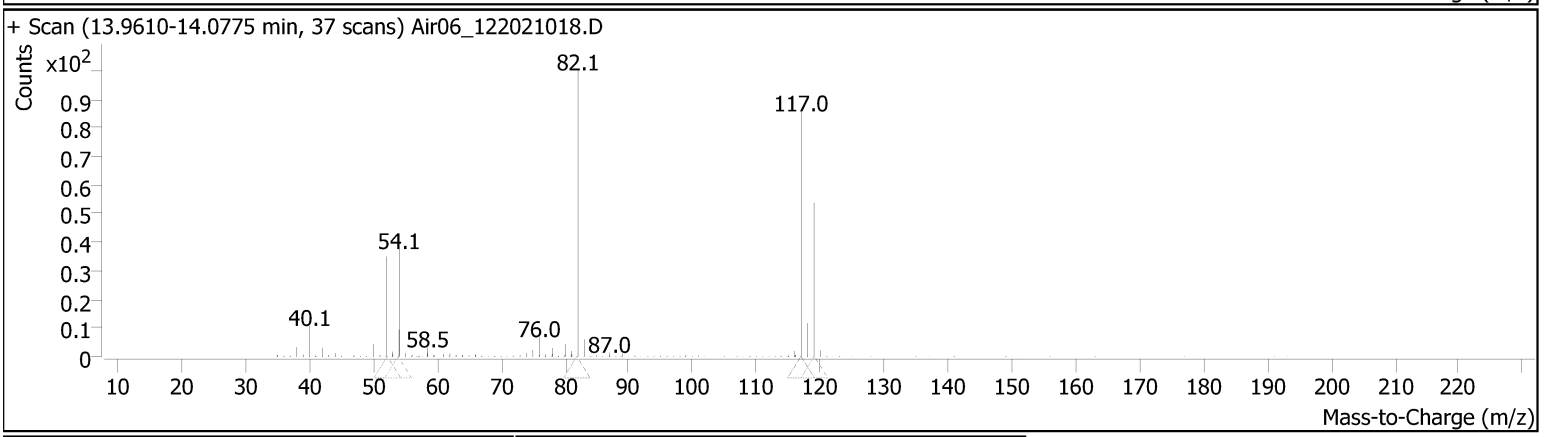


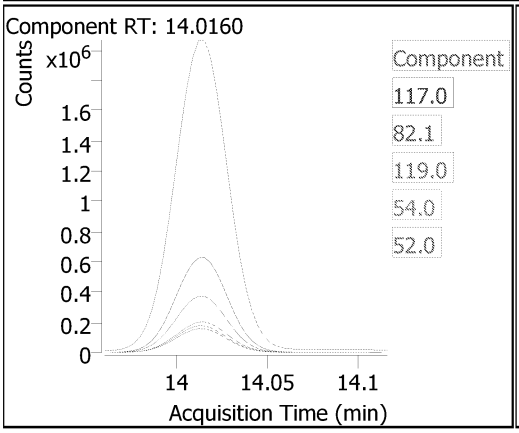


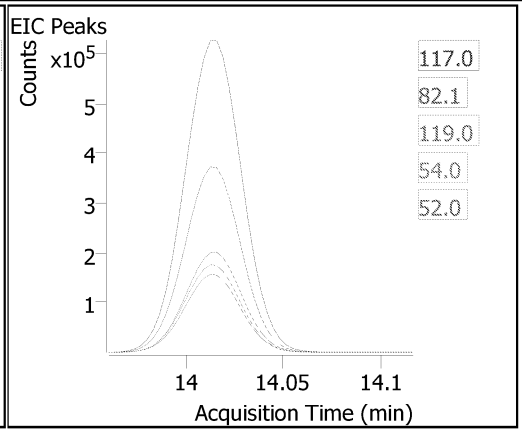
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.0160	Chlorobenzene-d5	4262632.3	95.7	3114-55-4	C6D5Cl	10

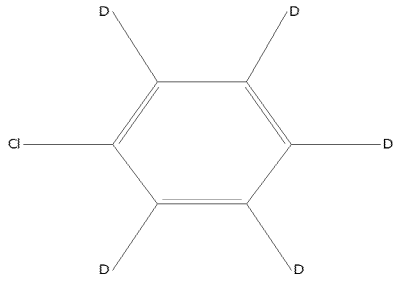




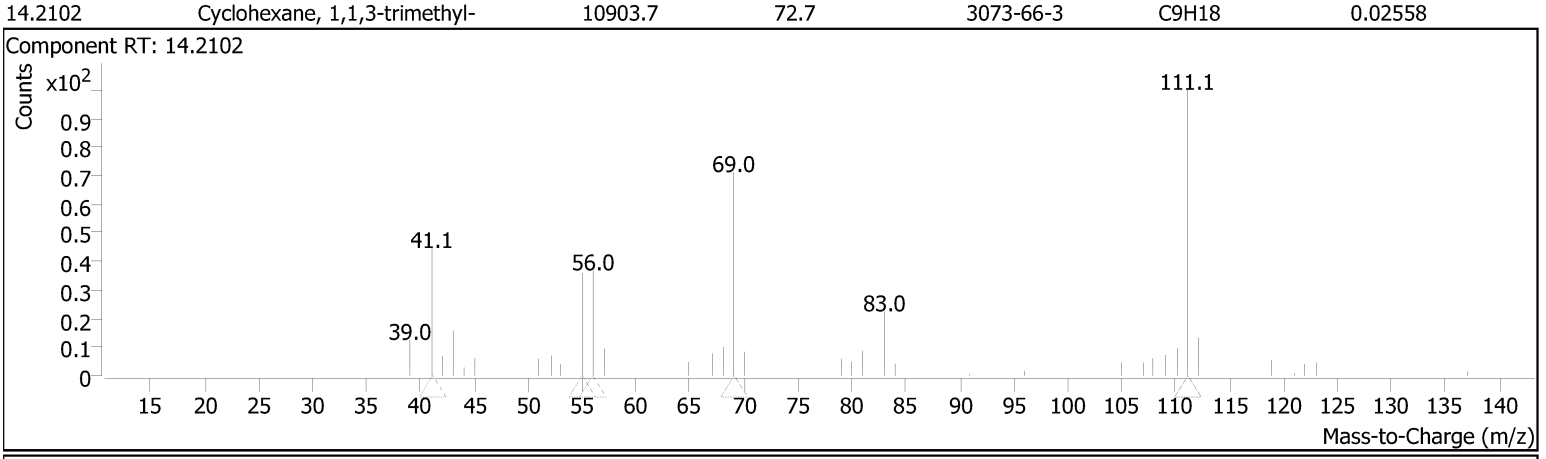


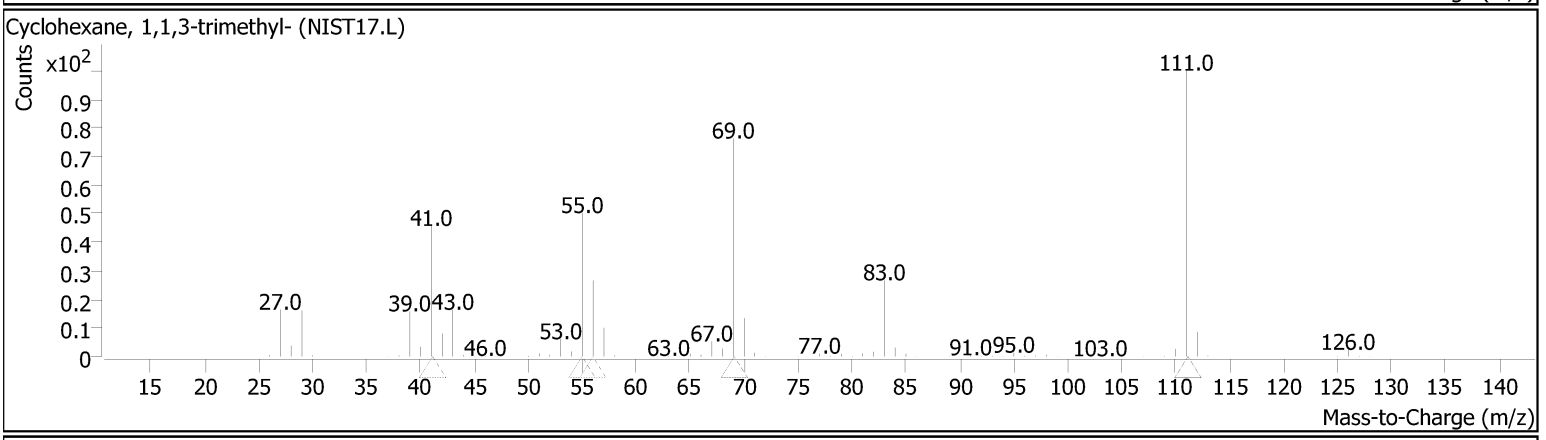


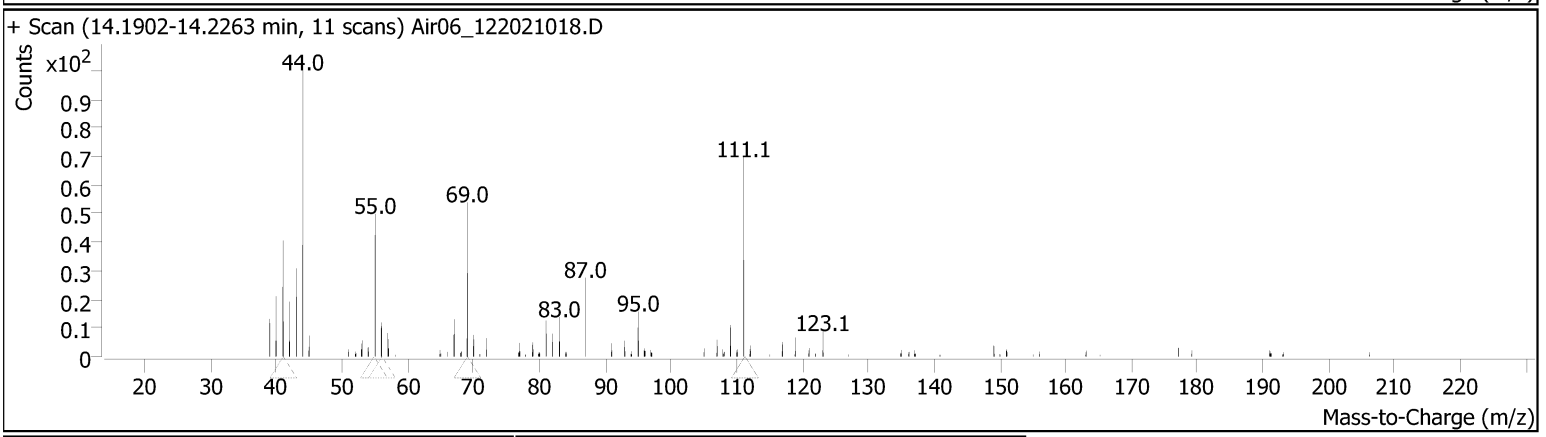


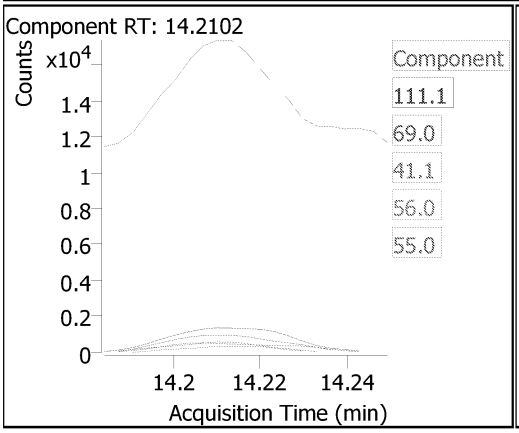


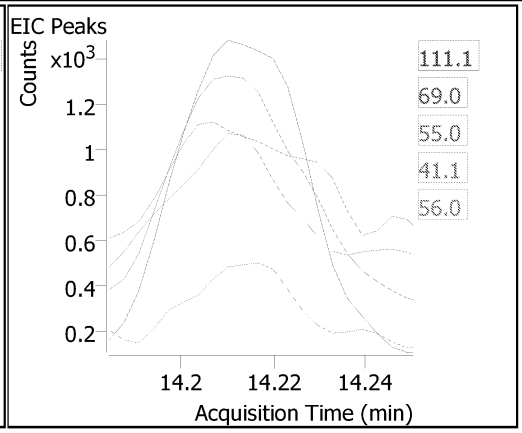
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.2102	Cyclohexane, 1,1,3-trimethyl-	10903.7	72.7	3073-66-3	C9H18	0.02558

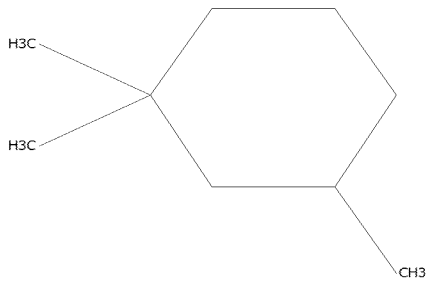




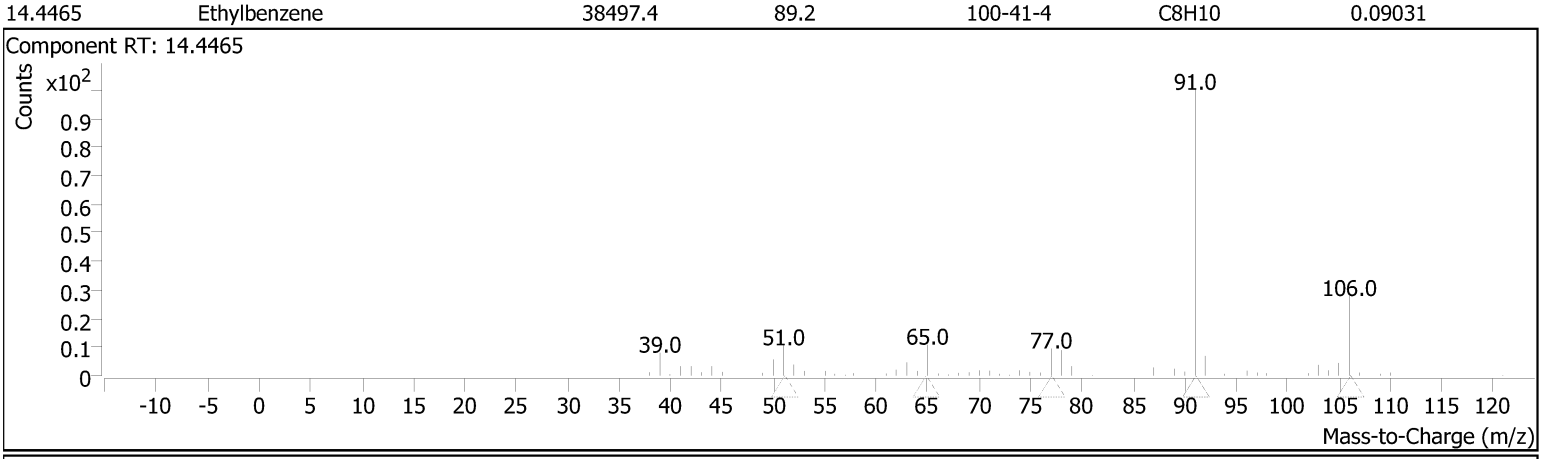


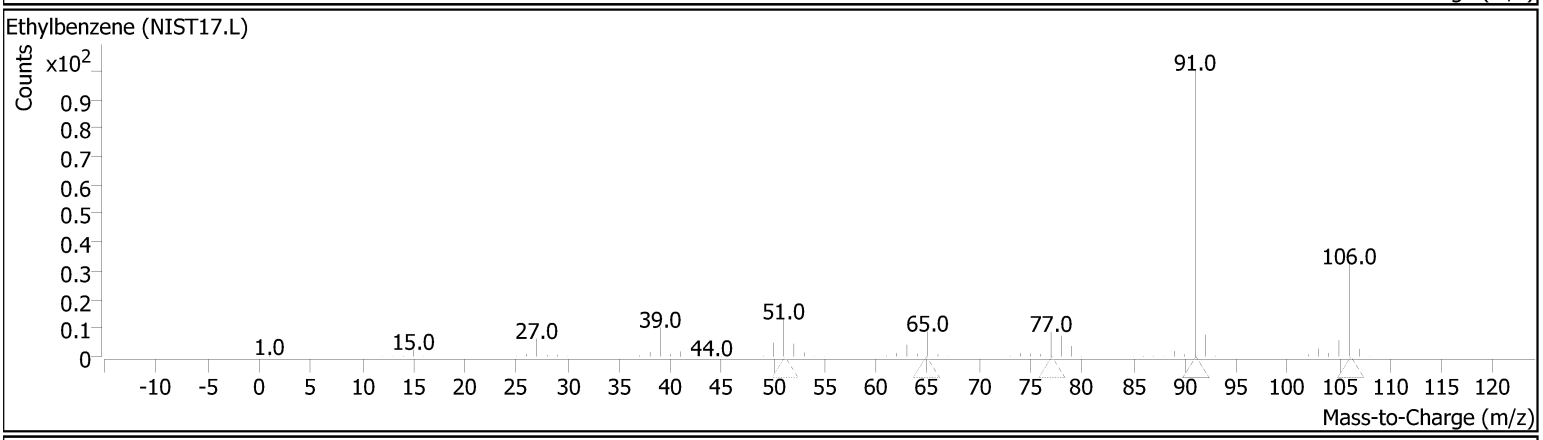


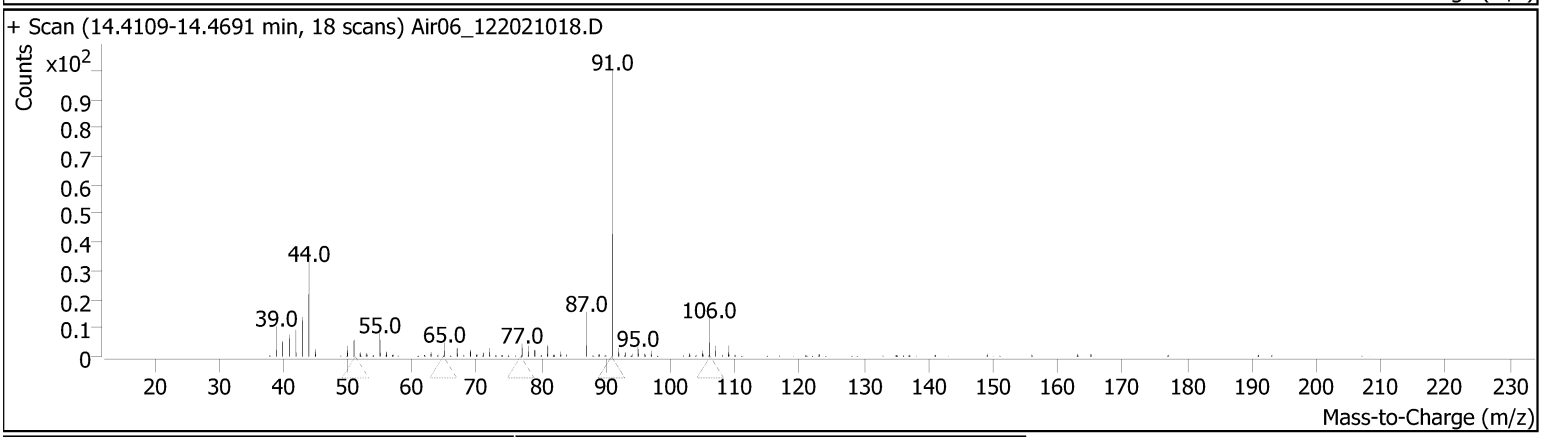


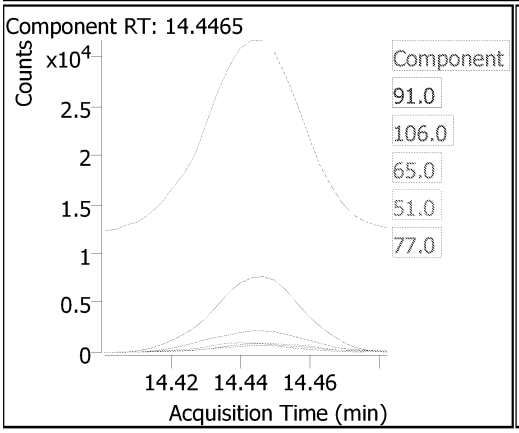


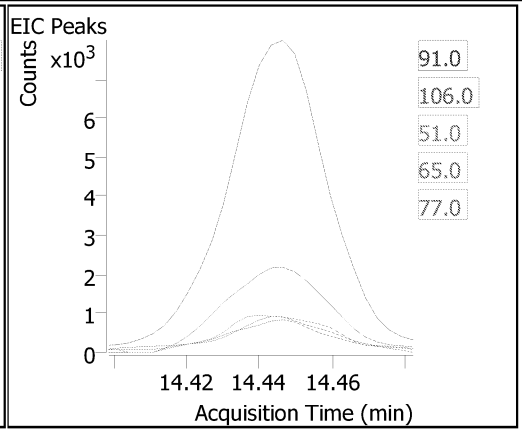
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.4465	Ethylbenzene	38497.4	89.2	100-41-4	C8H10	0.09031

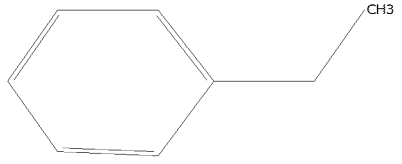




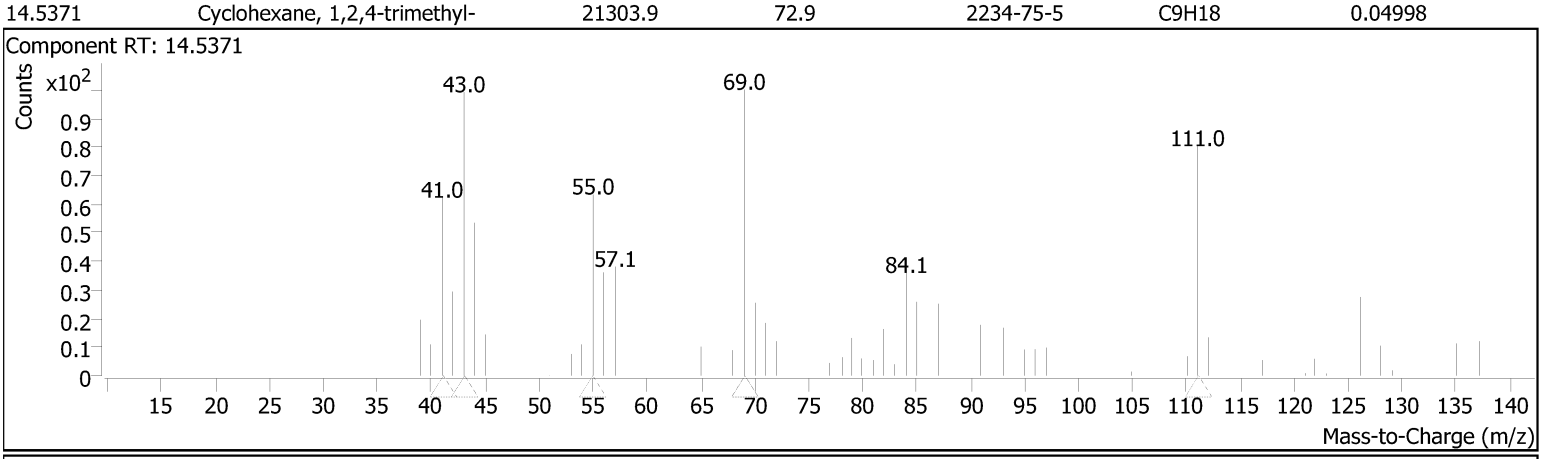


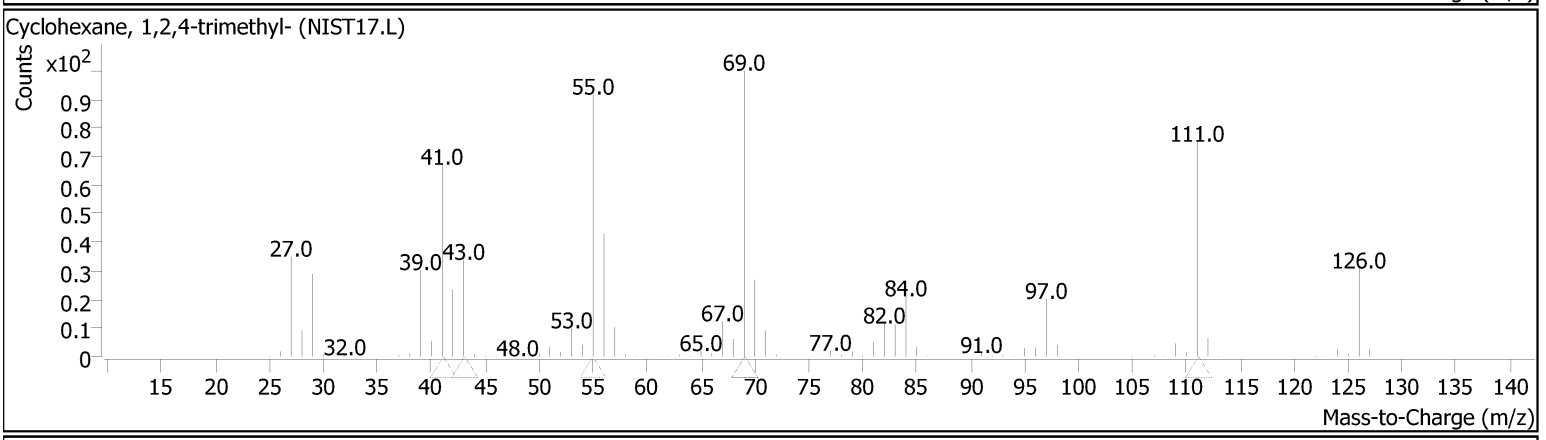


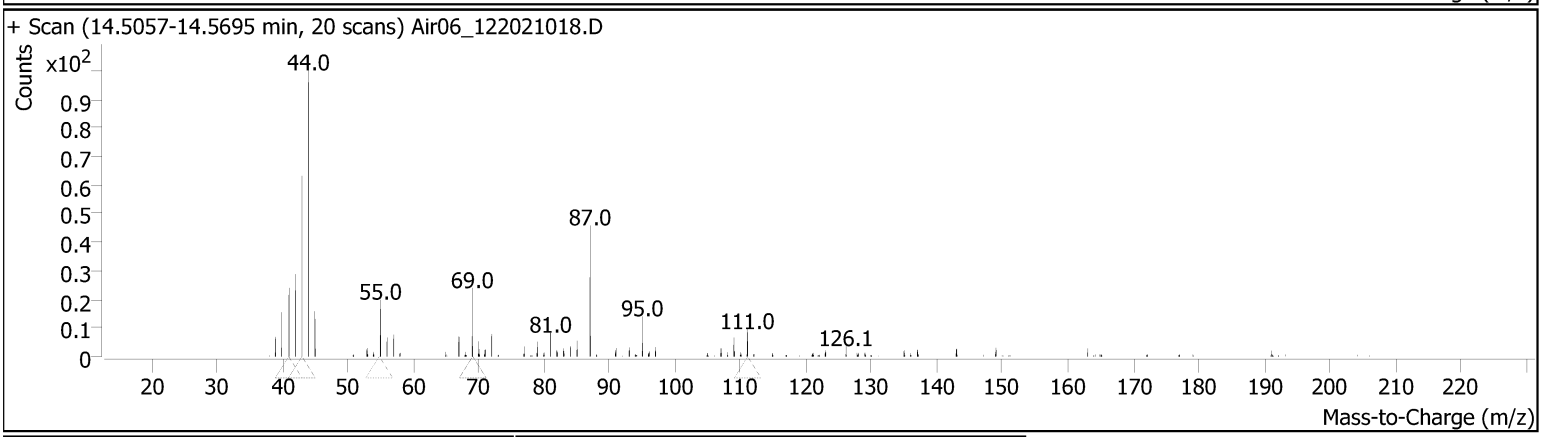


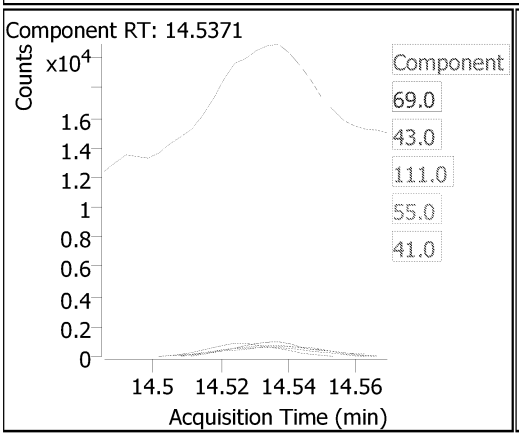


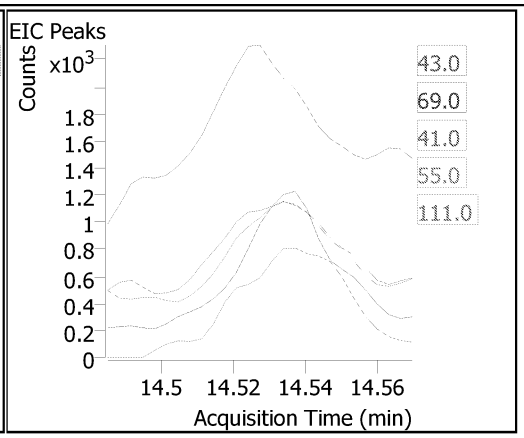
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.5371	Cyclohexane, 1,2,4-trimethyl-	21303.9	72.9	2234-75-5	C9H18	0.04998

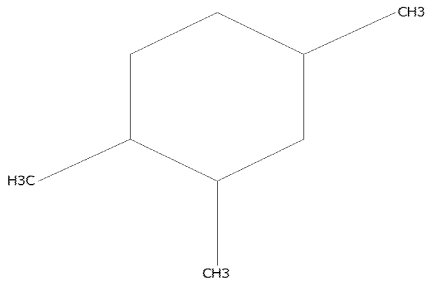




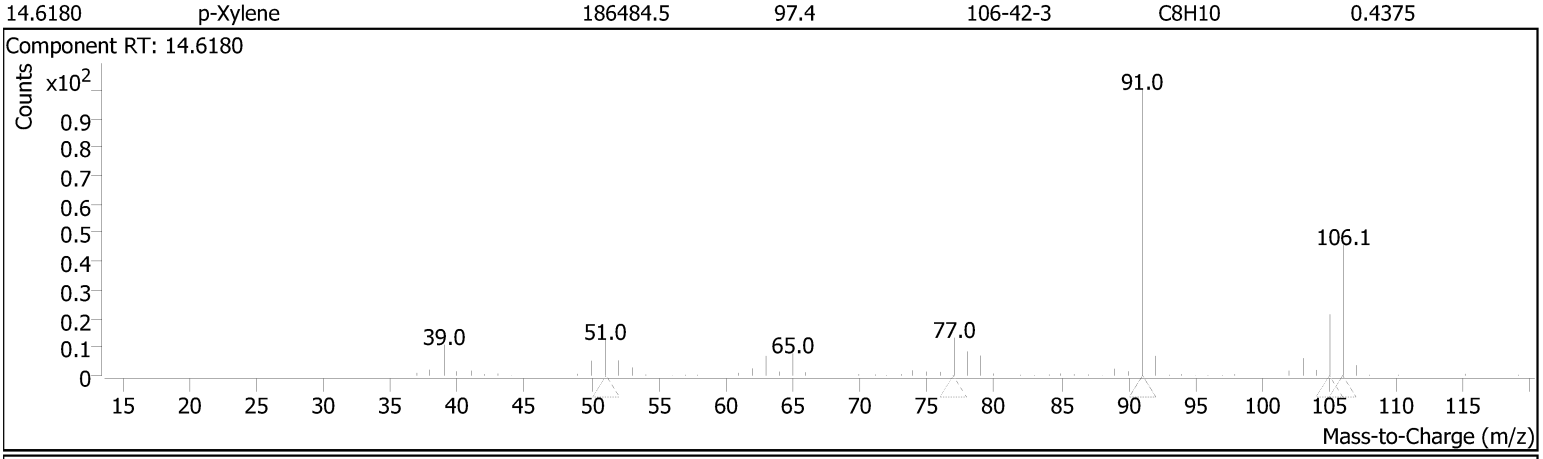


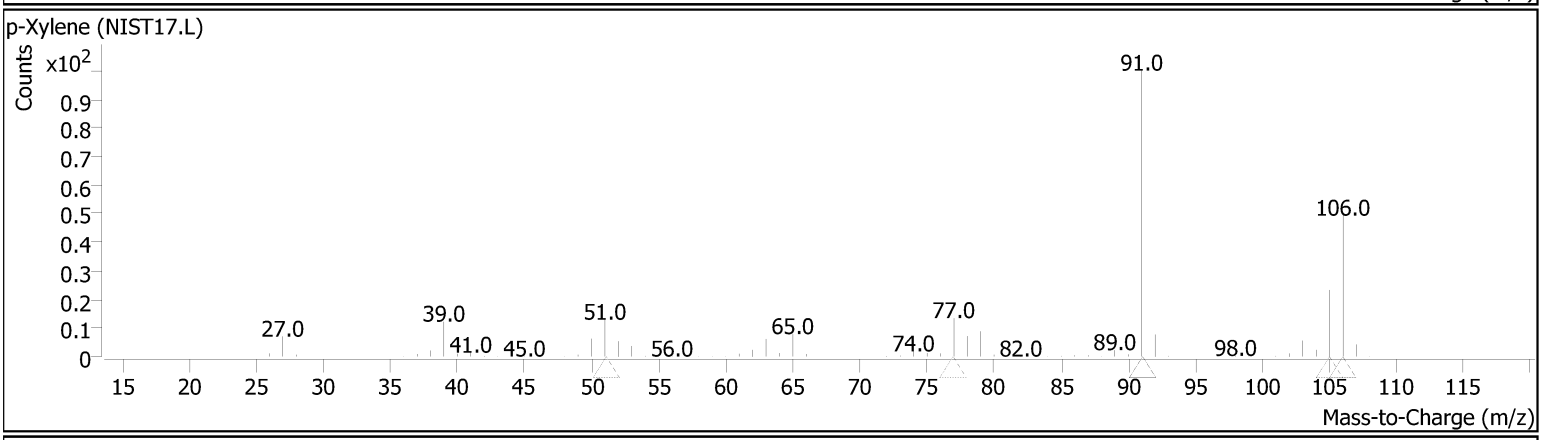


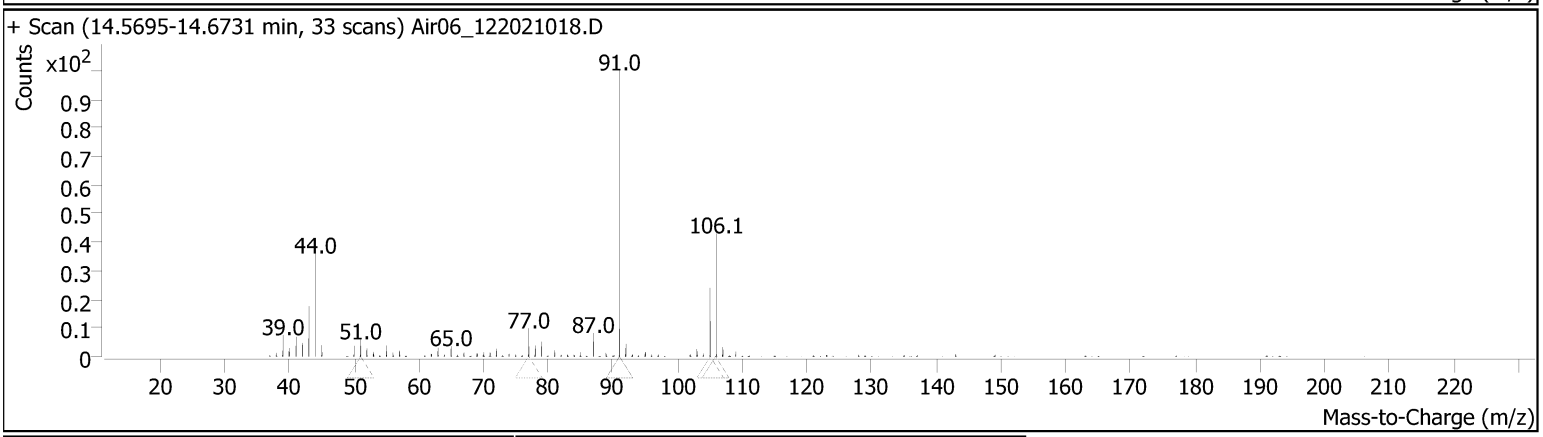


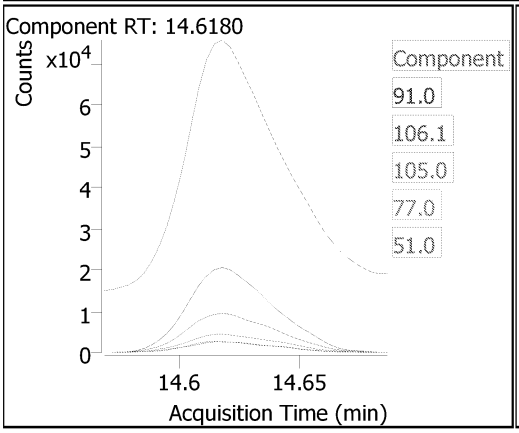


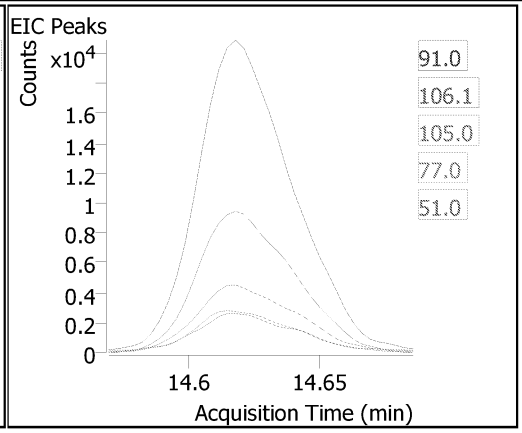
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.6180	p-Xylene	186484.5	97.4	106-42-3	C8H10	0.4375

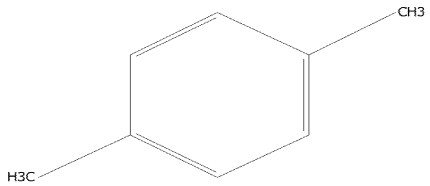




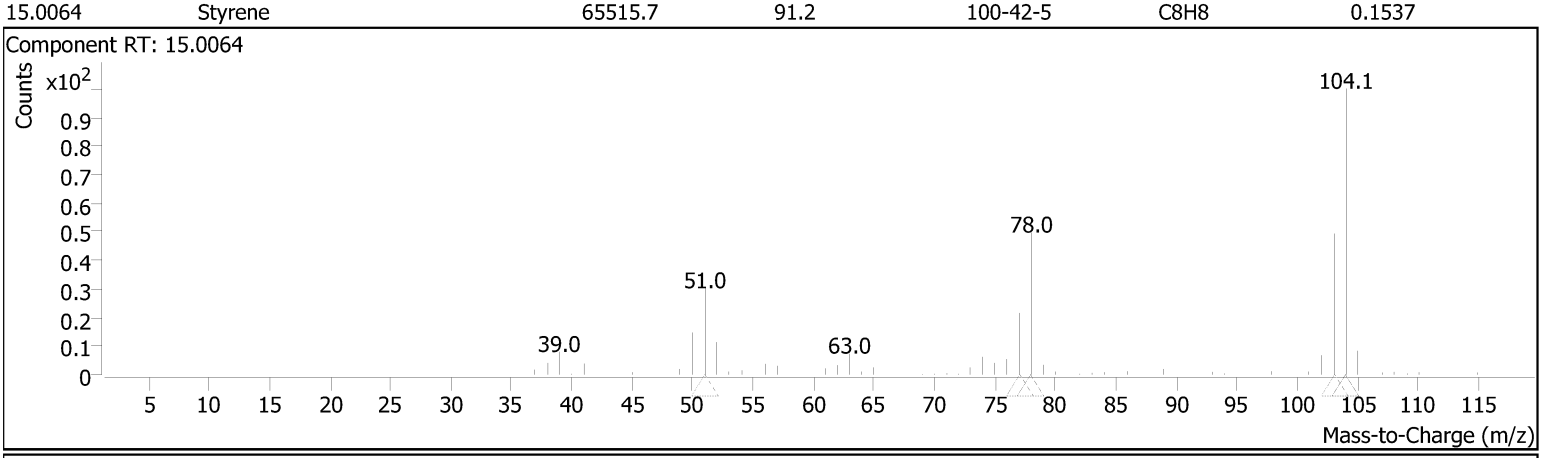


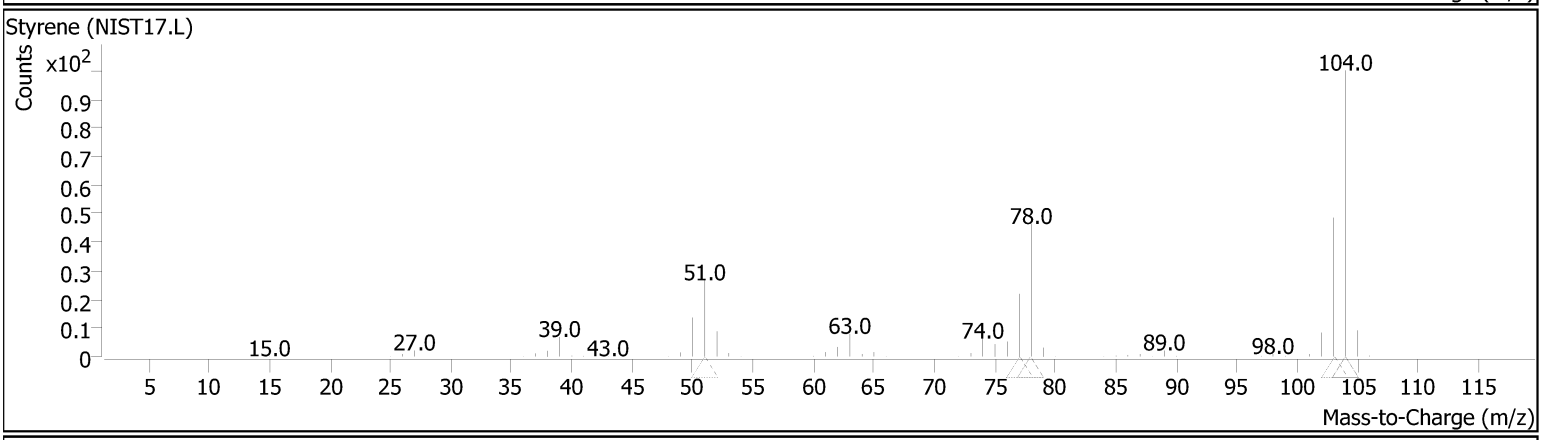


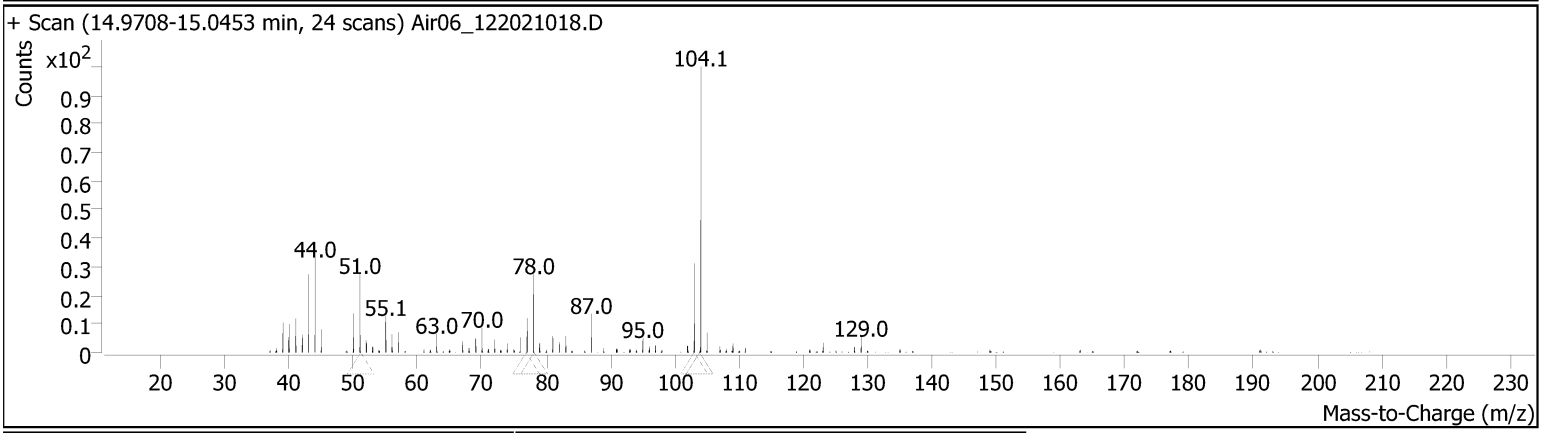


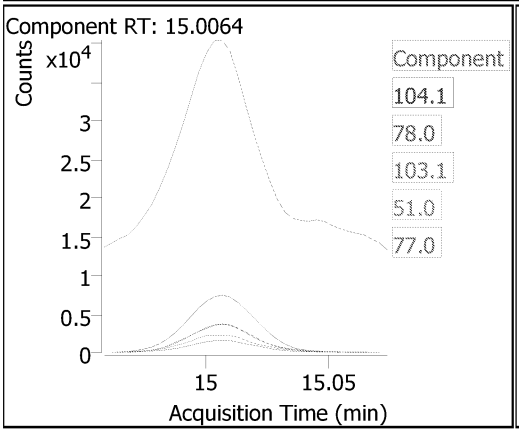


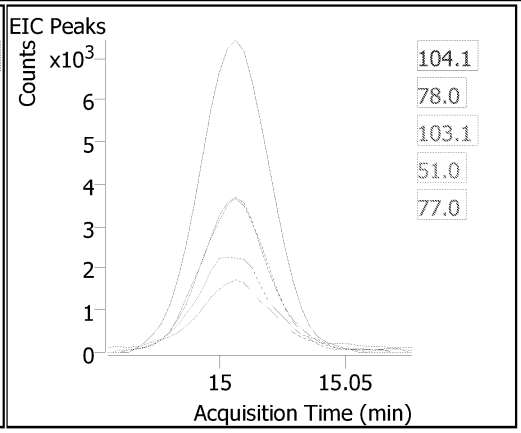
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.0064	Styrene	65515.7	91.2	100-42-5	C8H8	0.1537

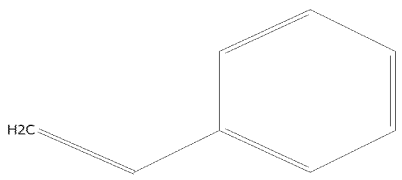




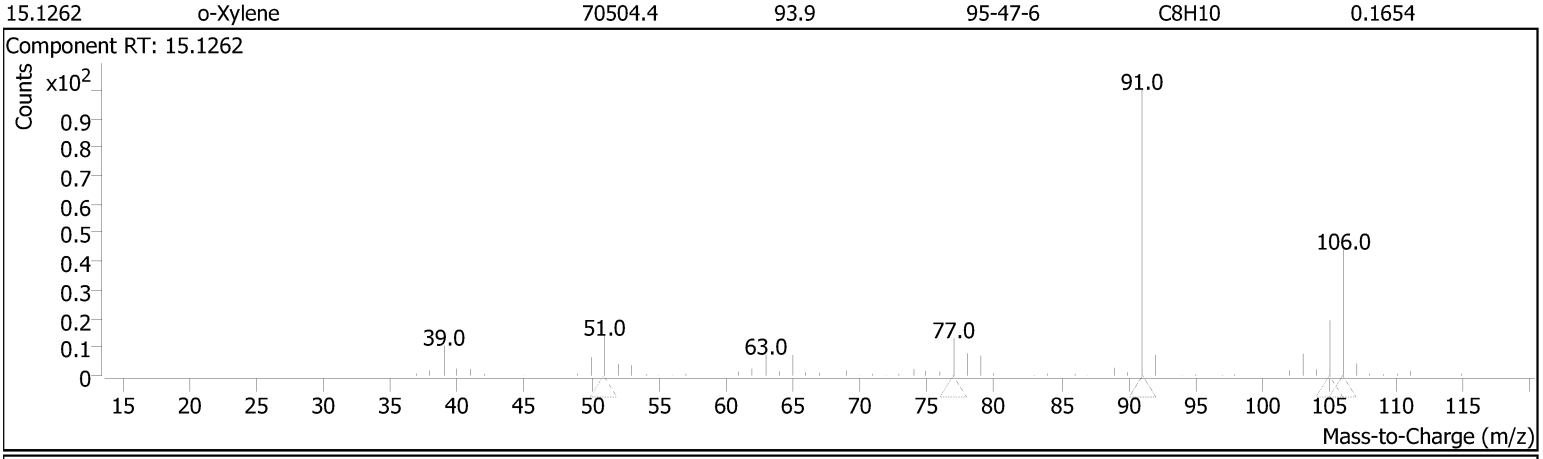


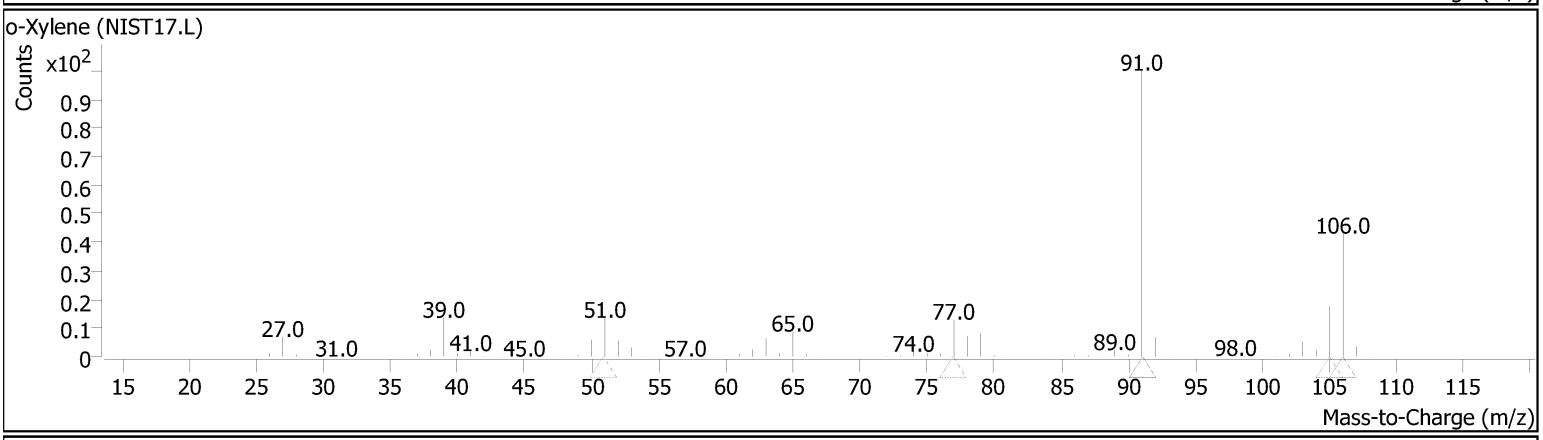


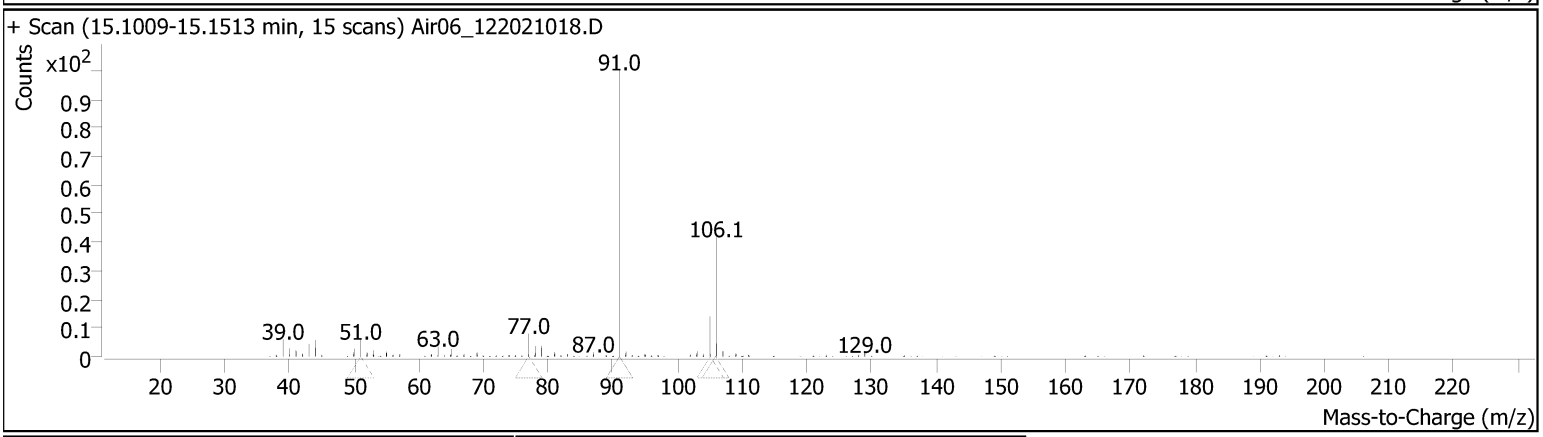


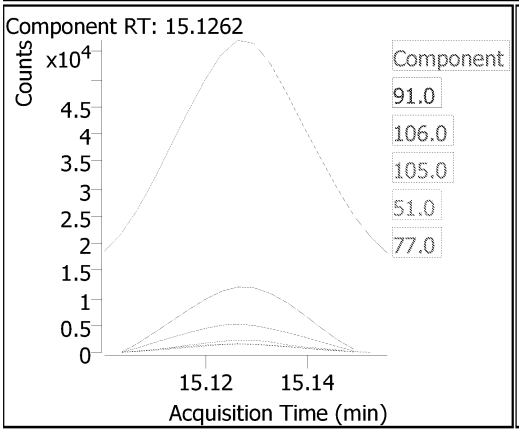


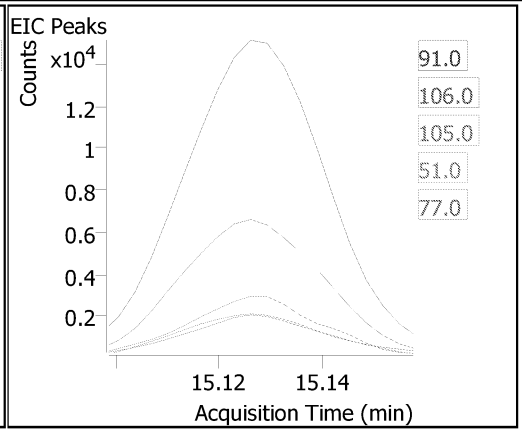
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.1262	o-Xylene	70504.4	93.9	95-47-6	C8H10	0.1654

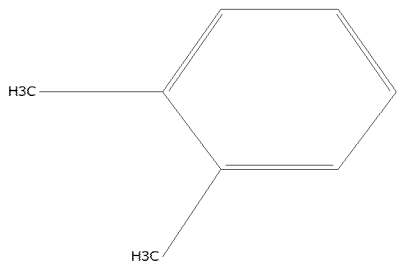




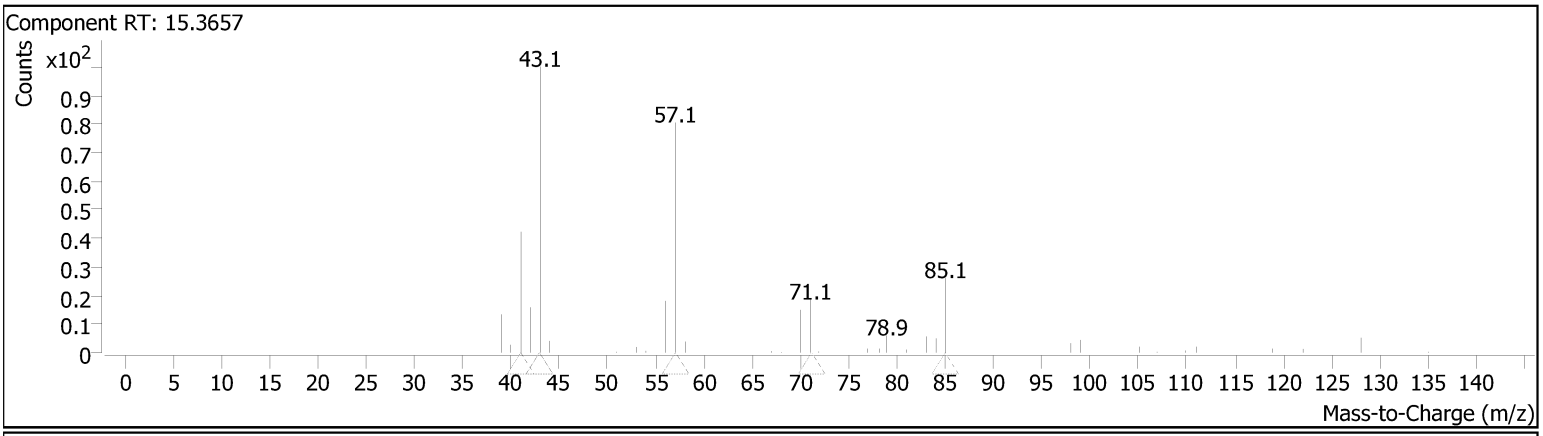


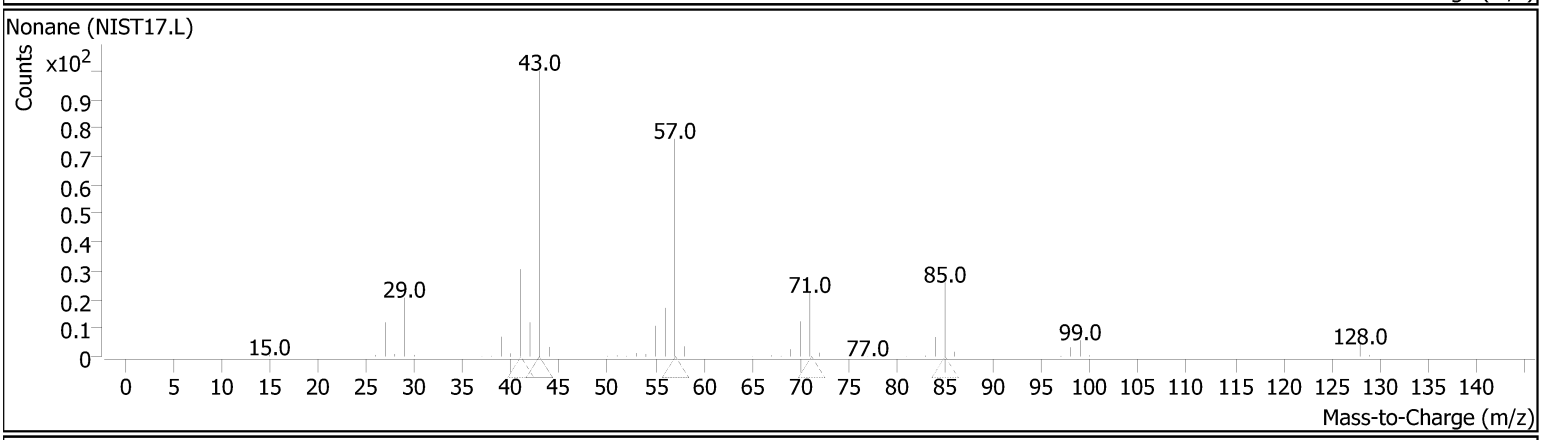


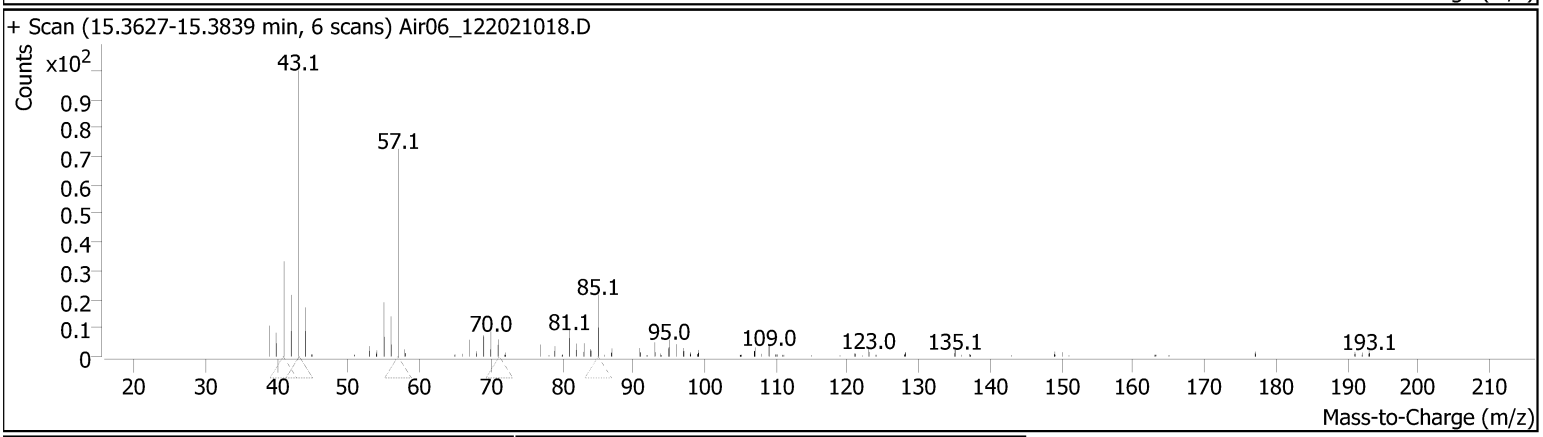


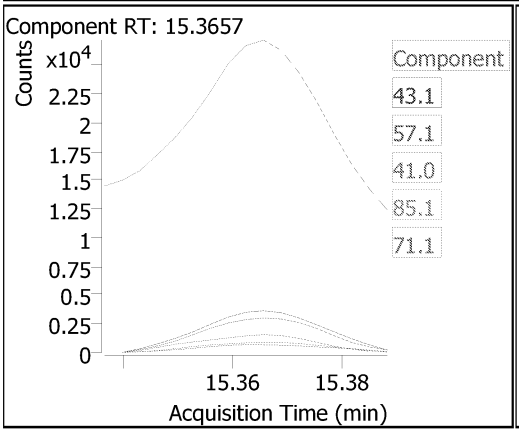


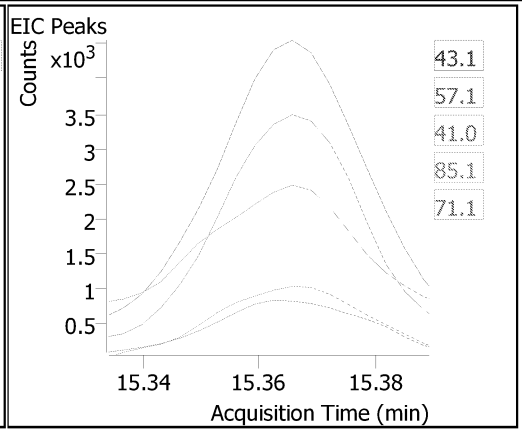
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.3657	Nonane	22201.1	84.6	111-84-2	C9H20	0.05208

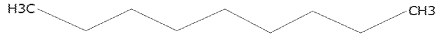




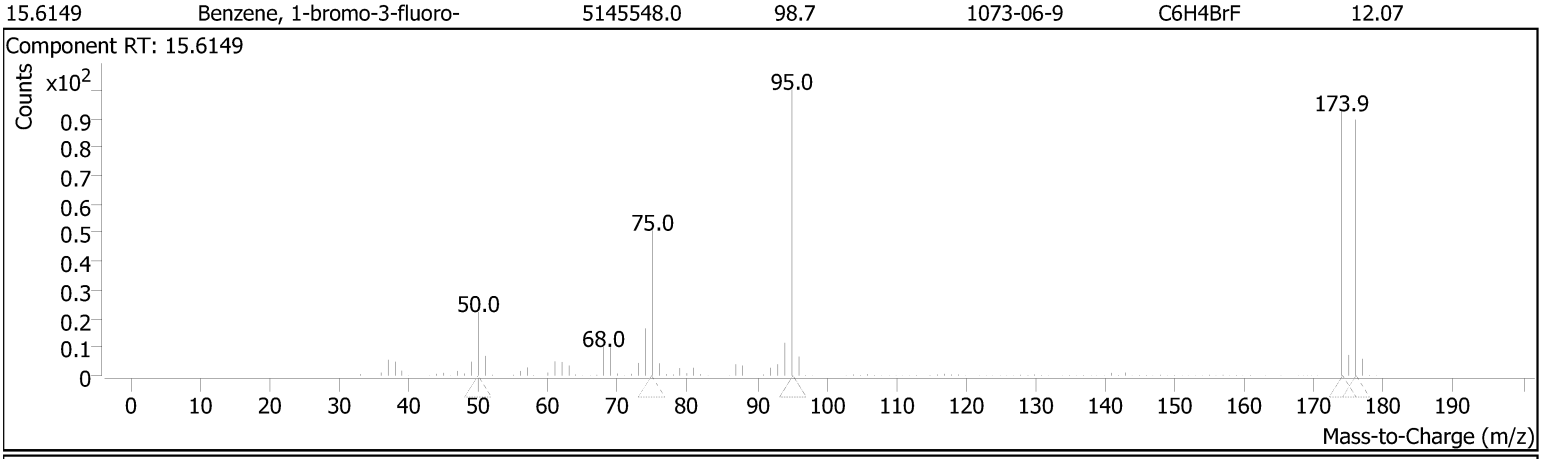


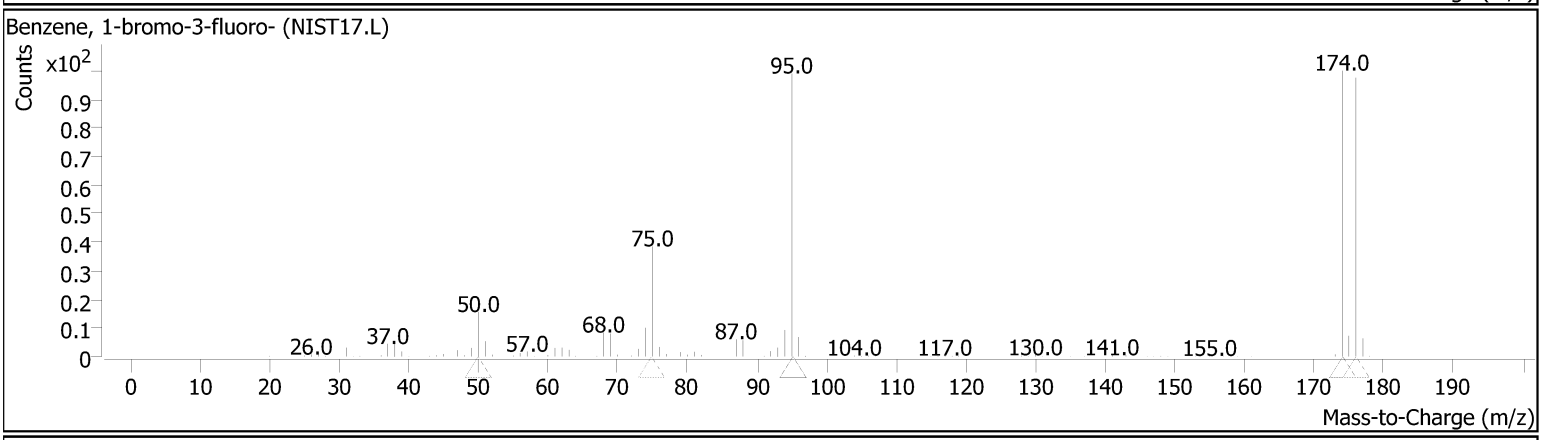


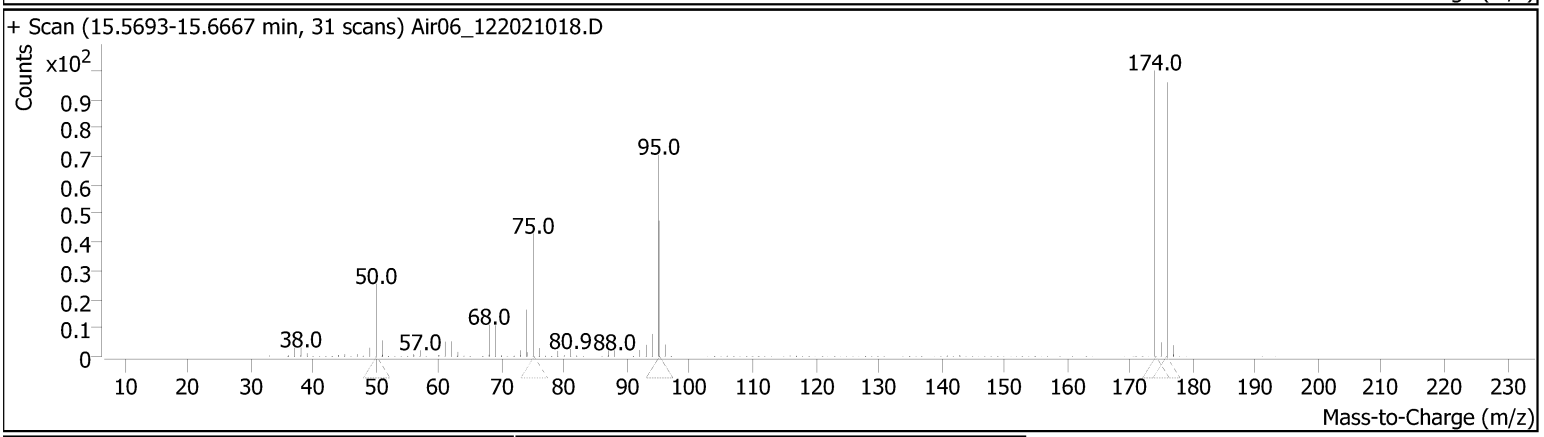


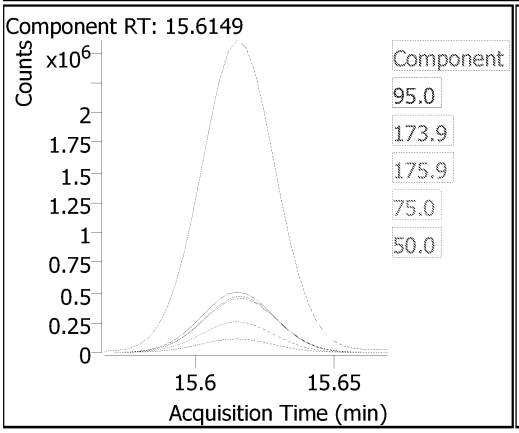


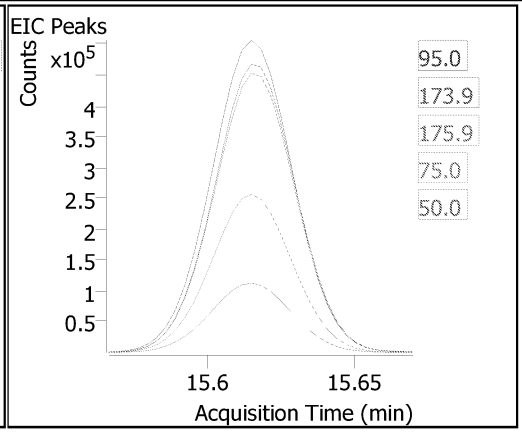
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.6149	Benzene, 1-bromo-3-fluoro-	5145548.0	98.7	1073-06-9	C6H4BrF	12.07

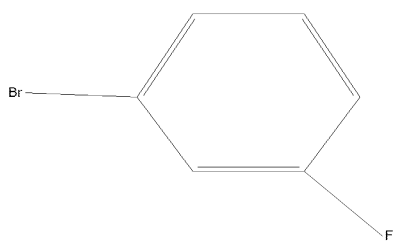




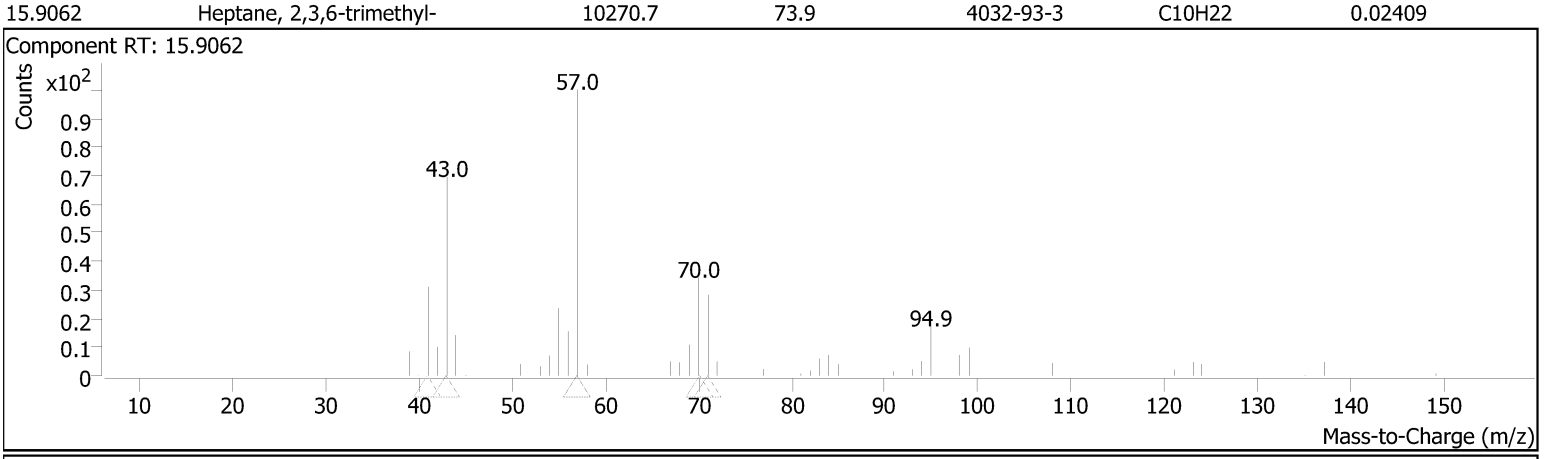


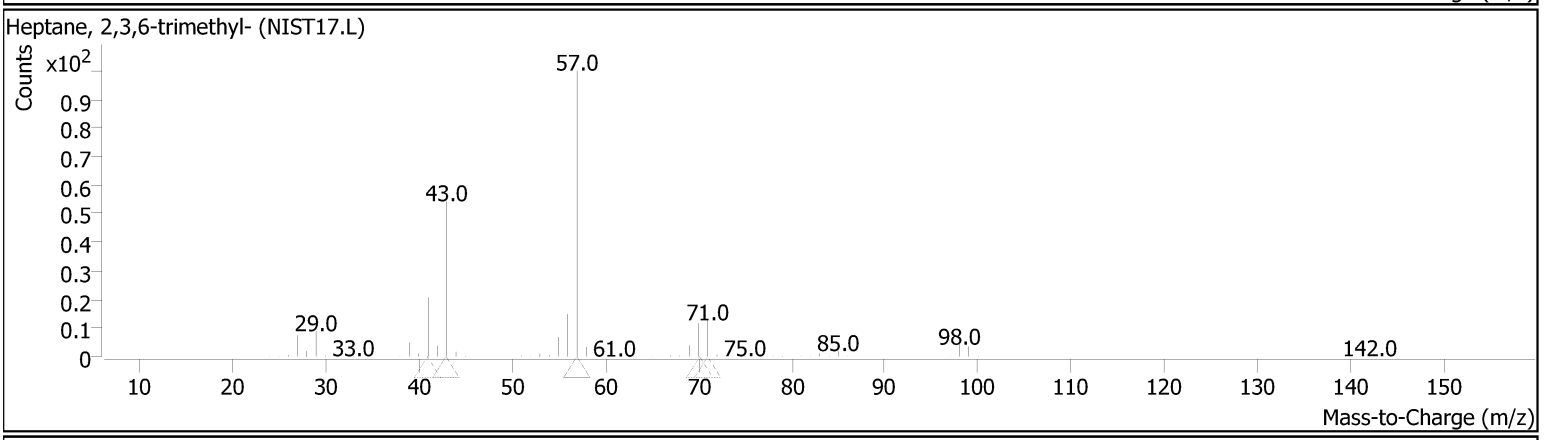


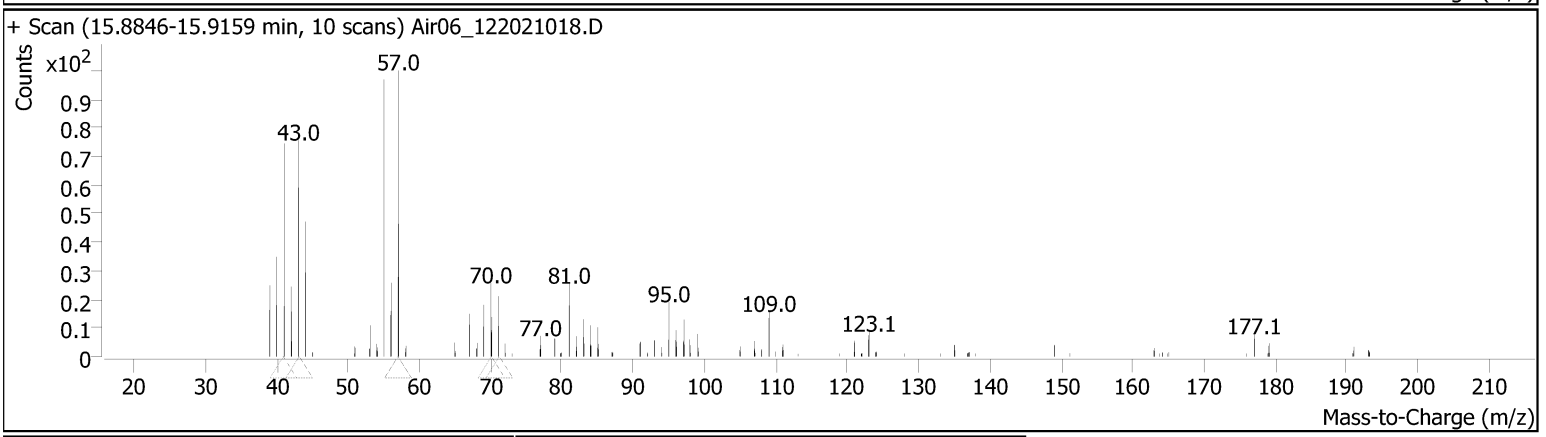


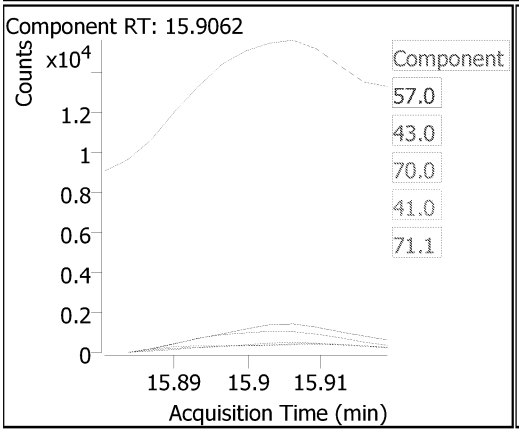


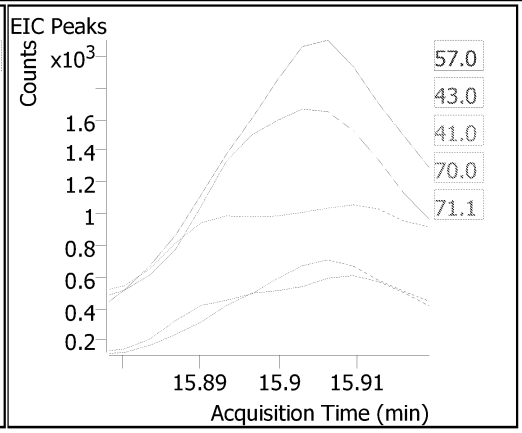
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.9062	Heptane, 2,3,6-trimethyl-	10270.7	73.9	4032-93-3	C10H22	0.02409

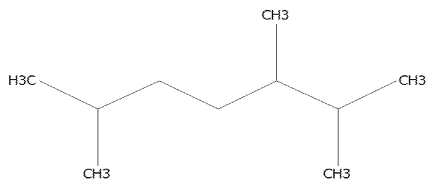




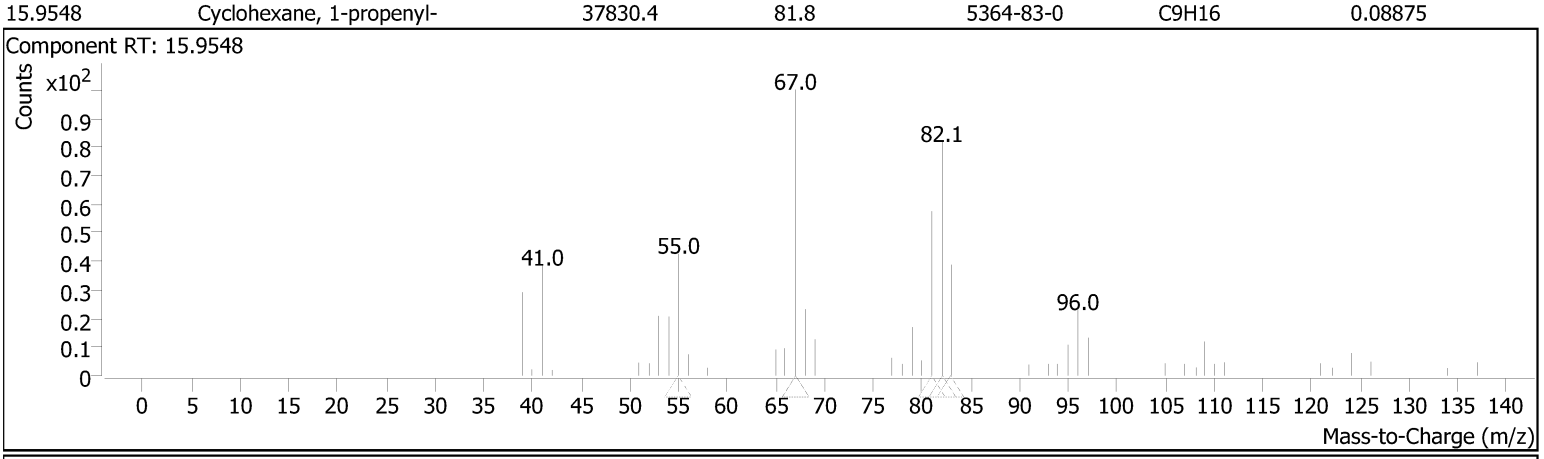


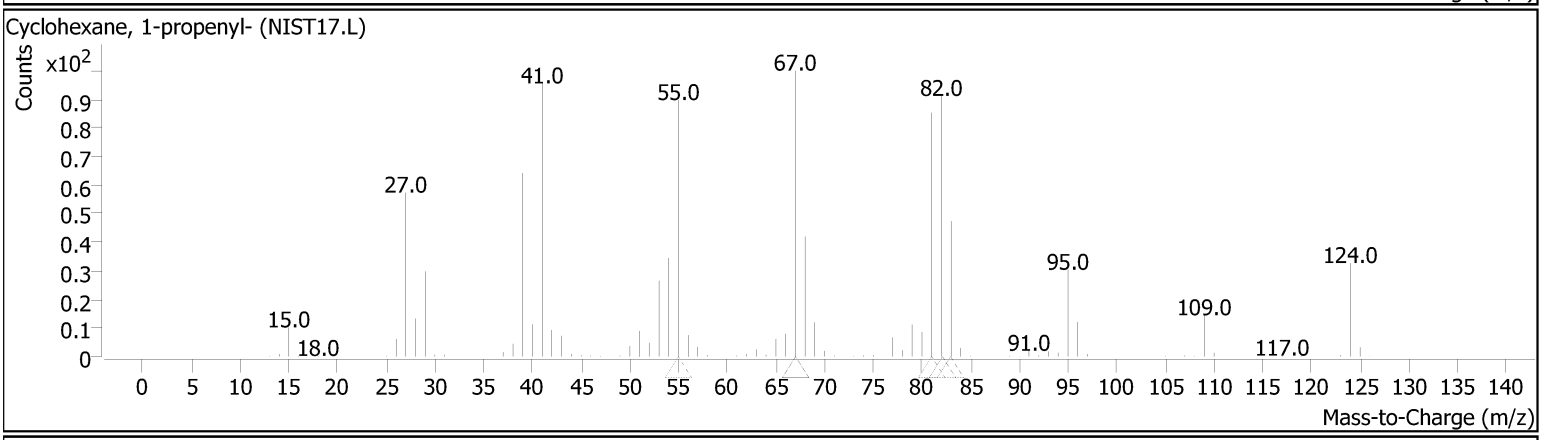


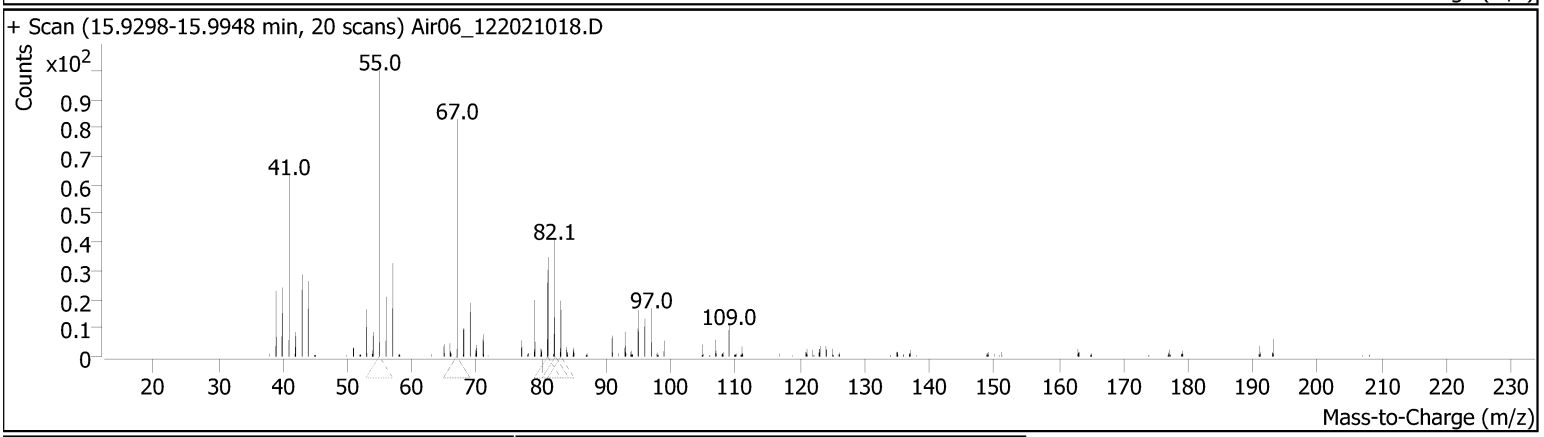


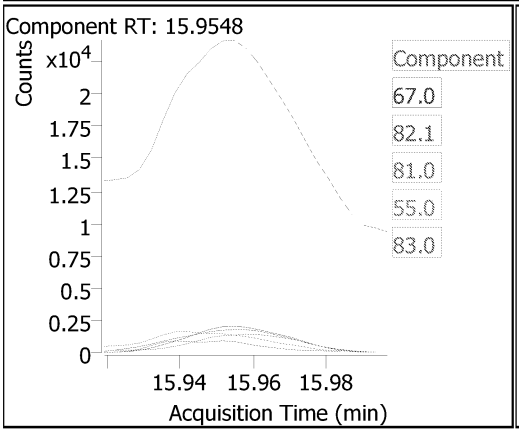


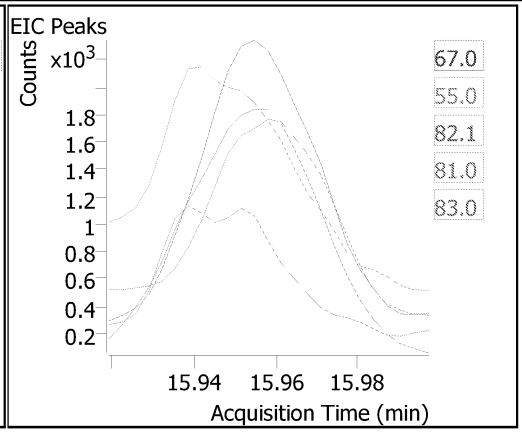
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.9548	Cyclohexane, 1-propenyl-	37830.4	81.8	5364-83-0	C9H16	0.08875

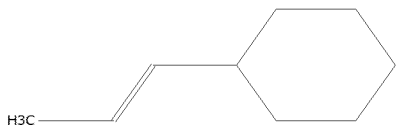




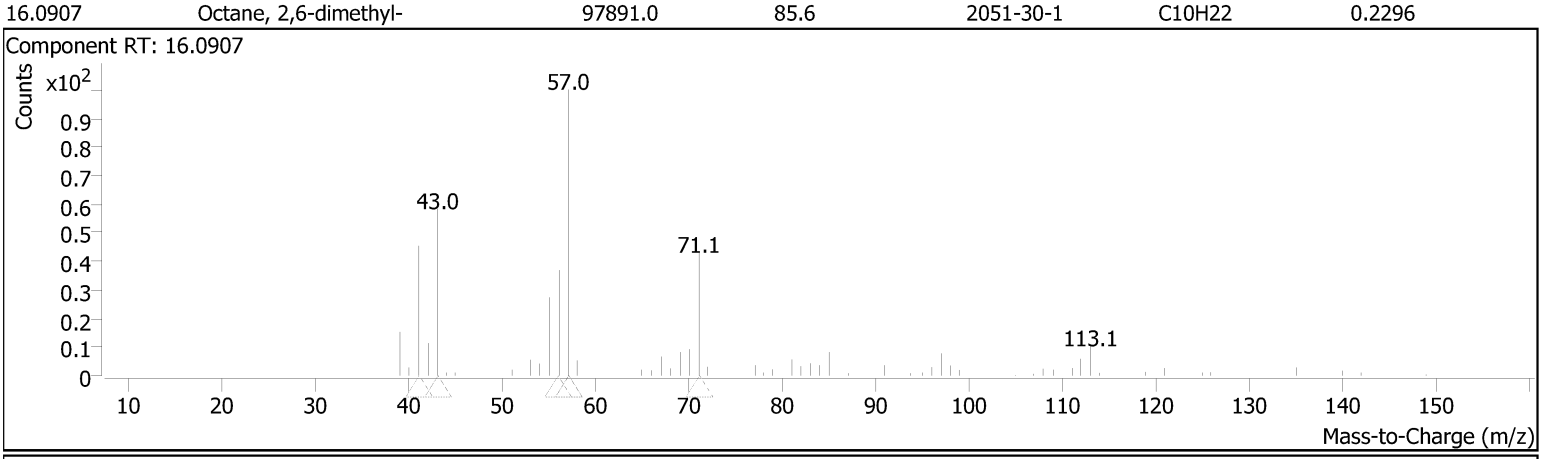


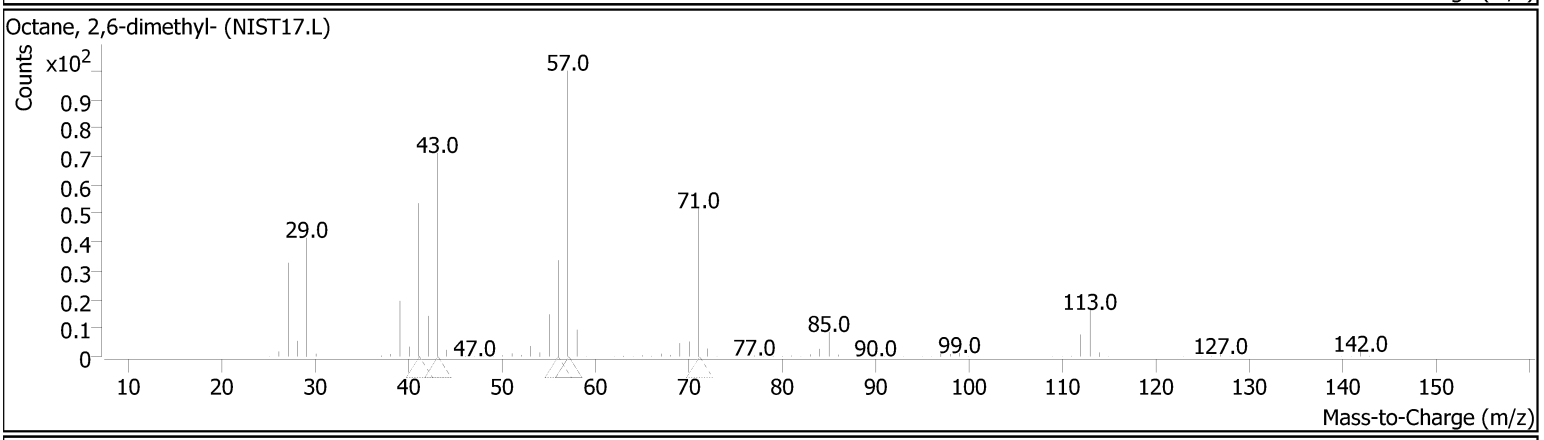


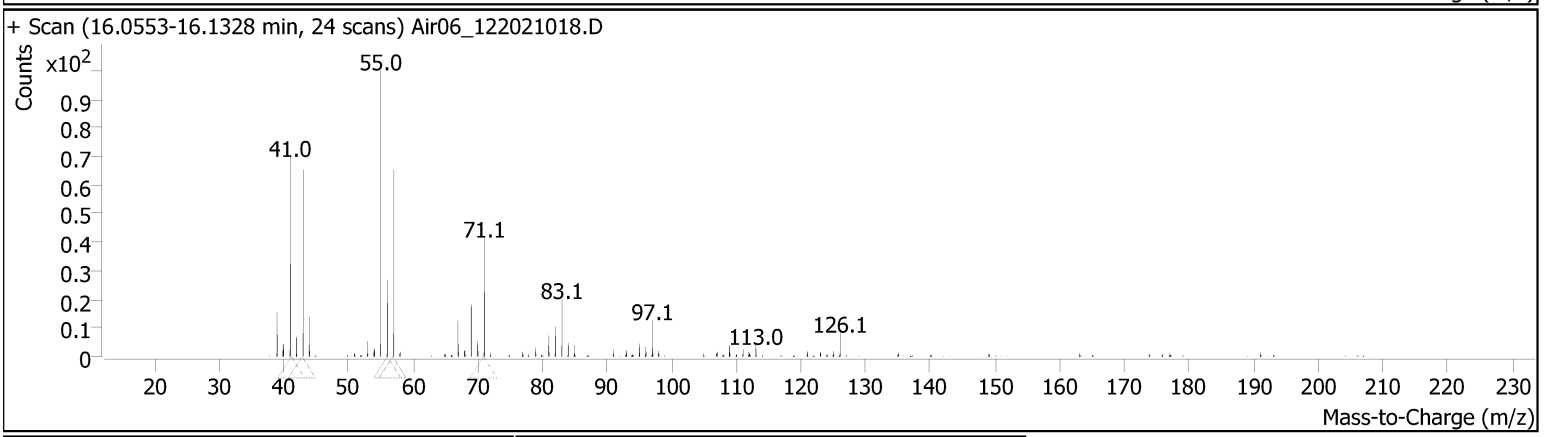


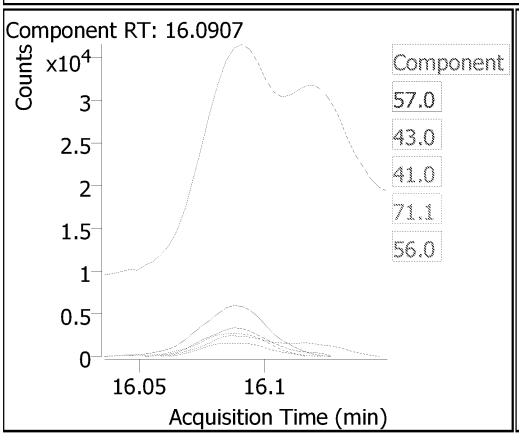


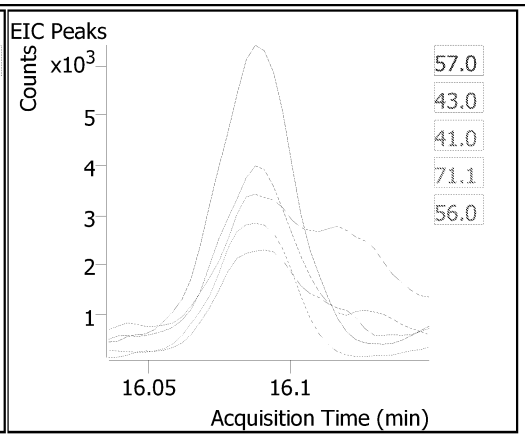
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.0907	Octane, 2,6-dimethyl-	97891.0	85.6	2051-30-1	C10H22	0.2296

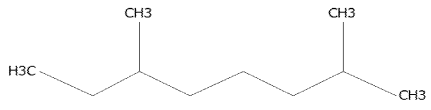




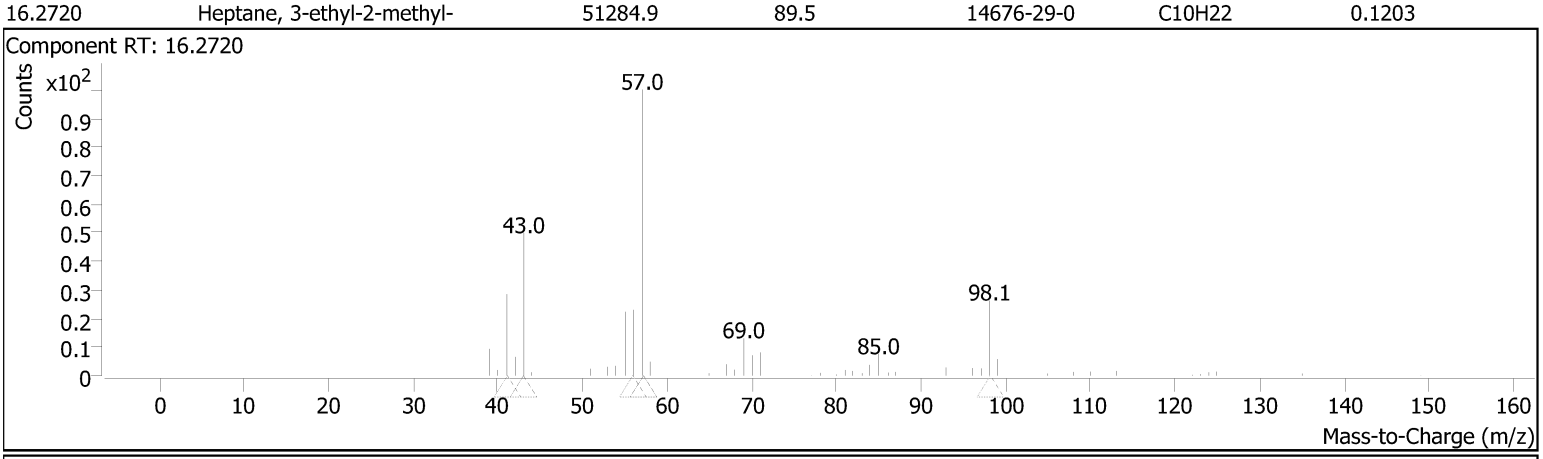


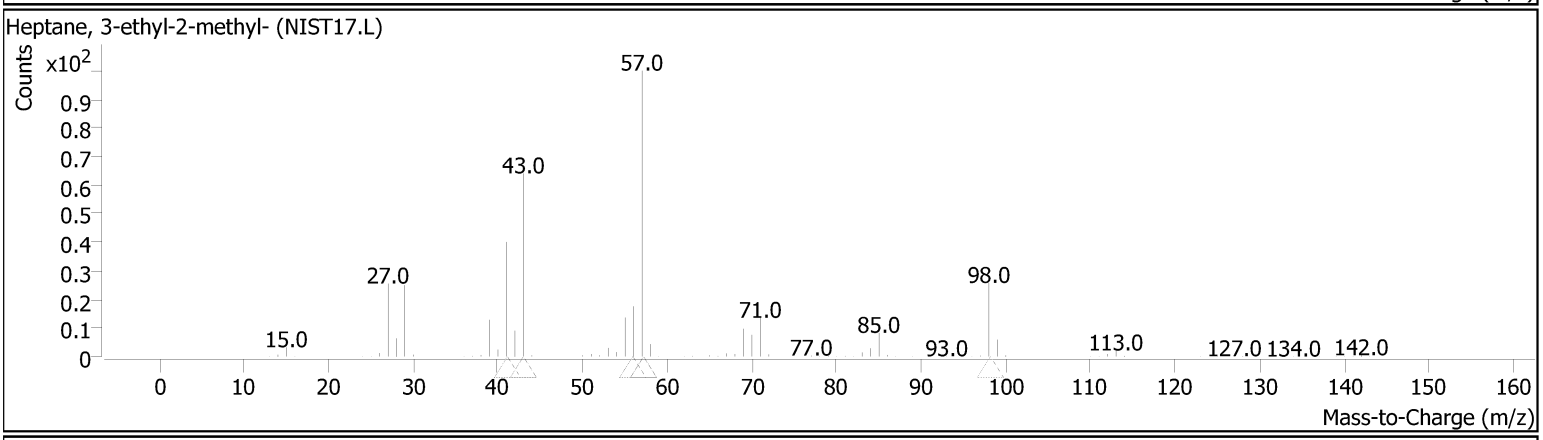


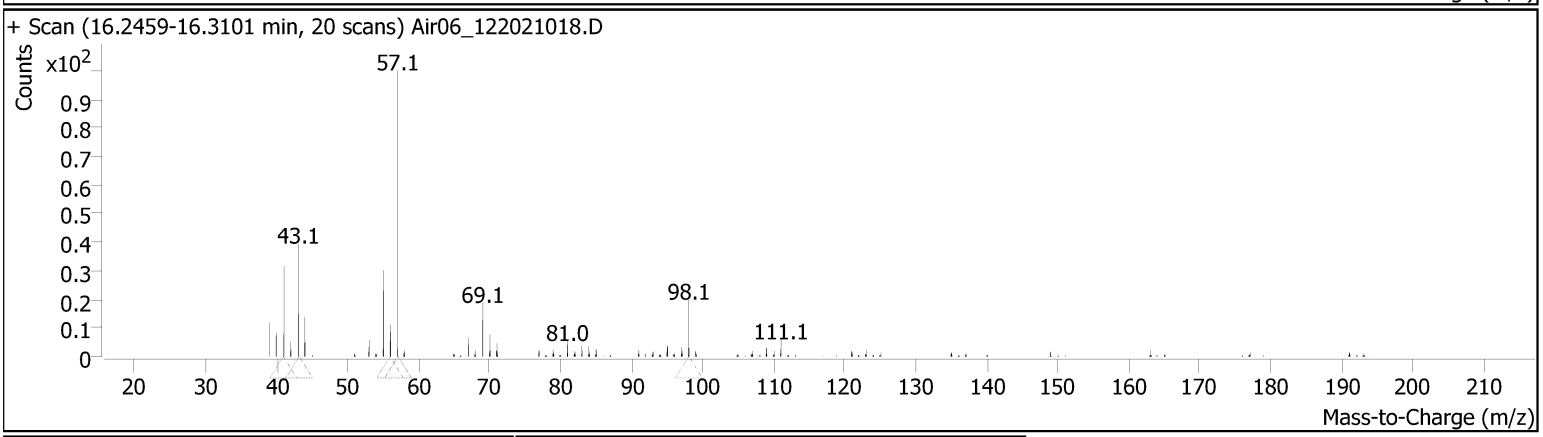


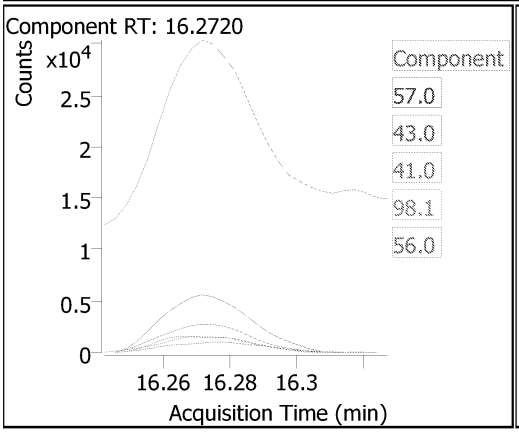


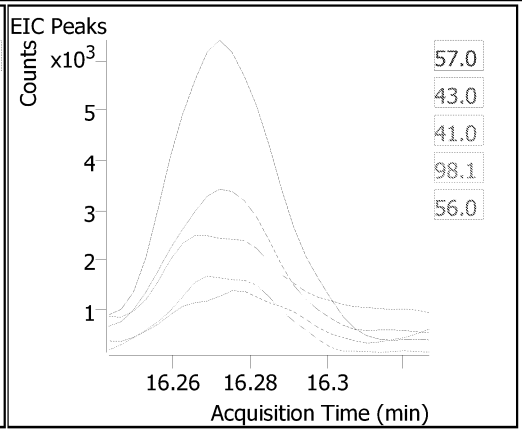
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.2720	Heptane, 3-ethyl-2-methyl-	51284.9	89.5	14676-29-0	C10H22	0.1203

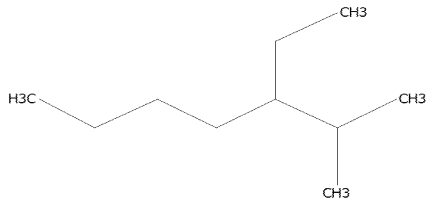




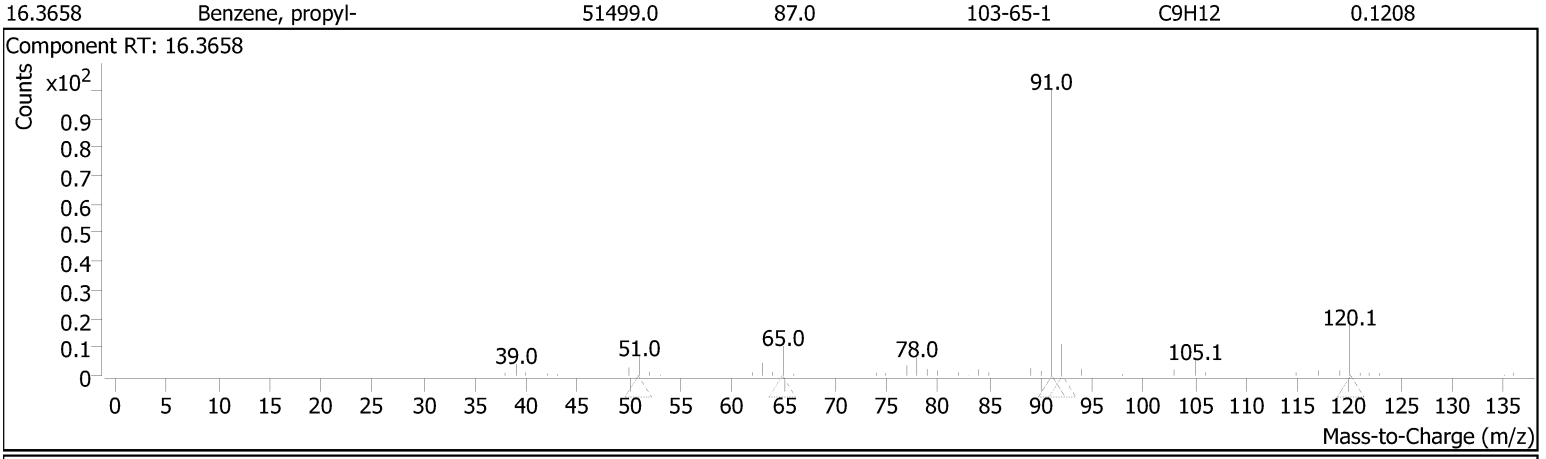


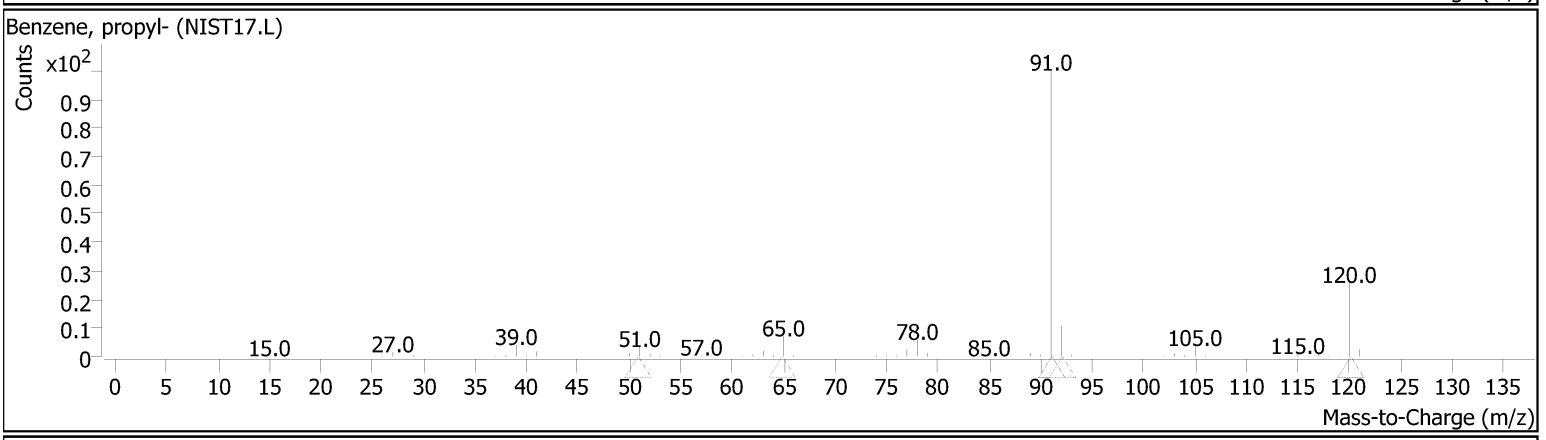


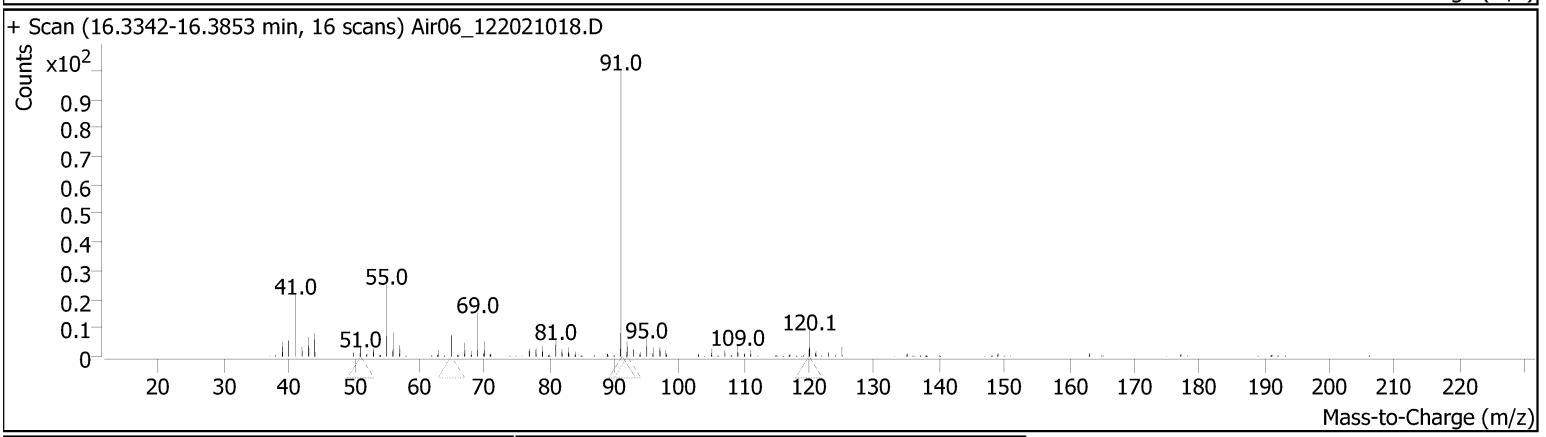


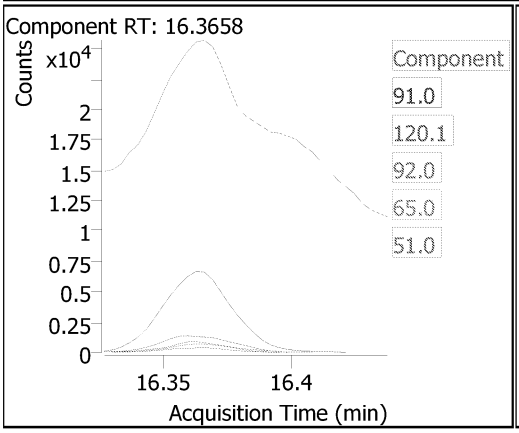


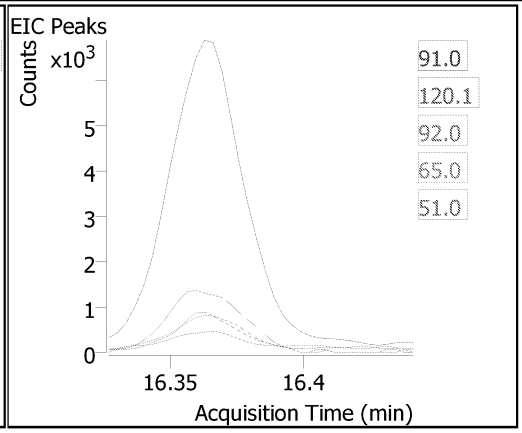
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.3658	Benzene, propyl-	51499.0	87.0	103-65-1	C9H12	0.1208

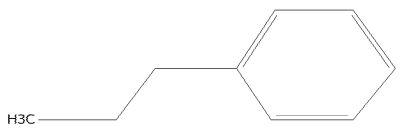




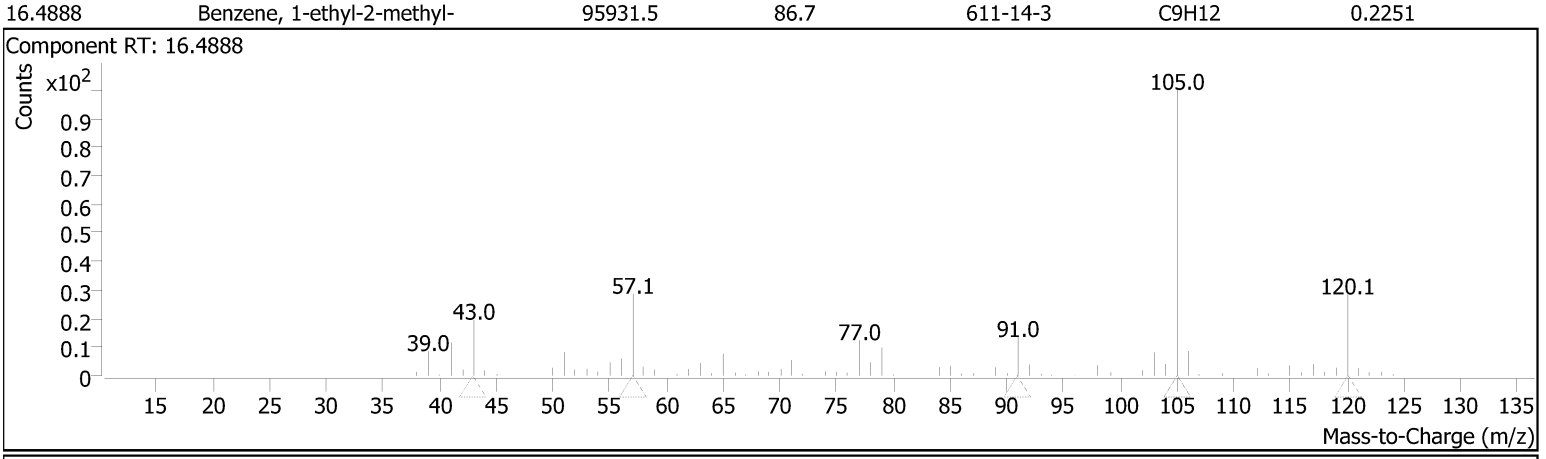


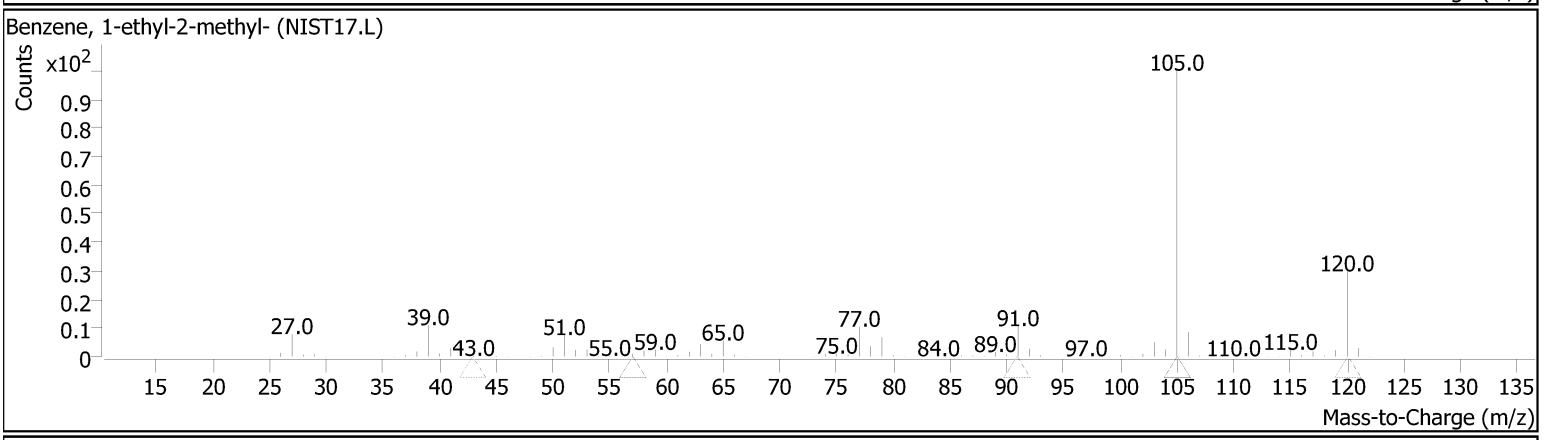


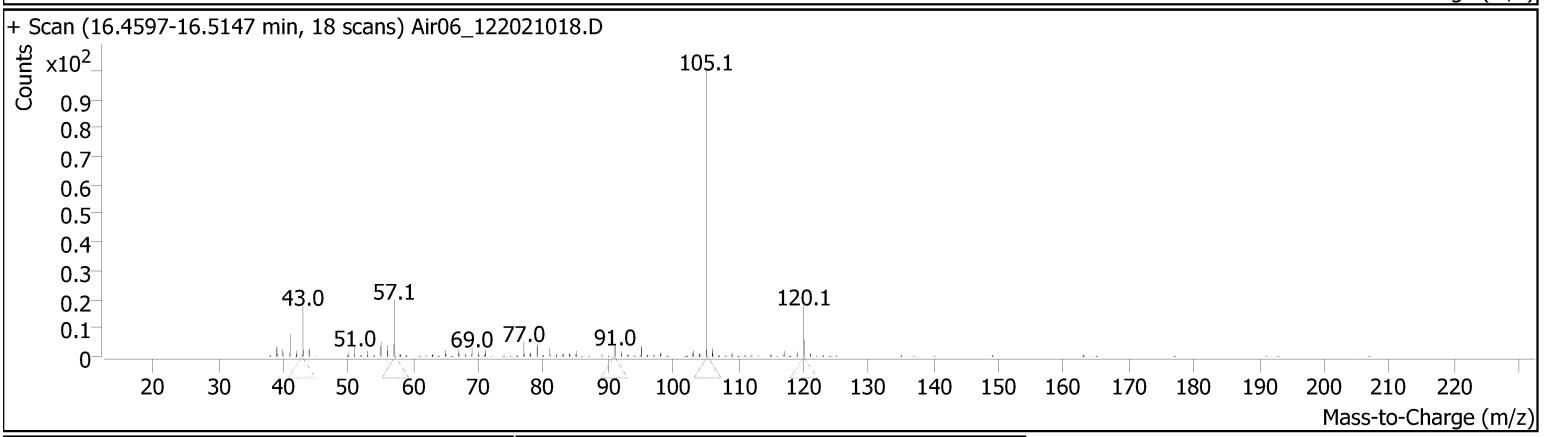


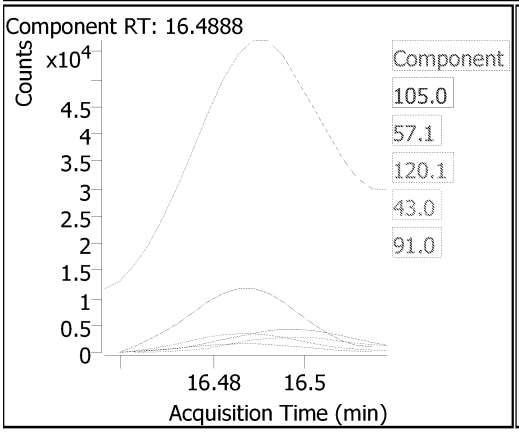


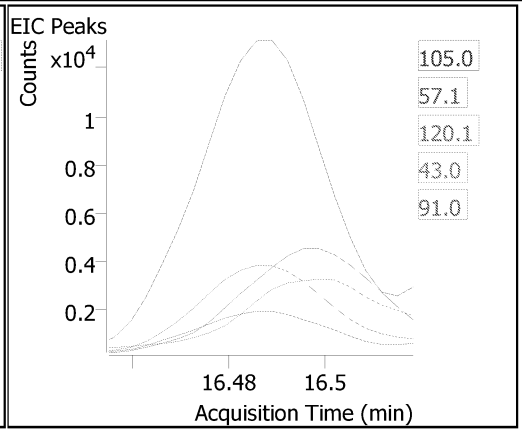
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.4888	Benzene, 1-ethyl-2-methyl-	95931.5	86.7	611-14-3	C9H12	0.2251

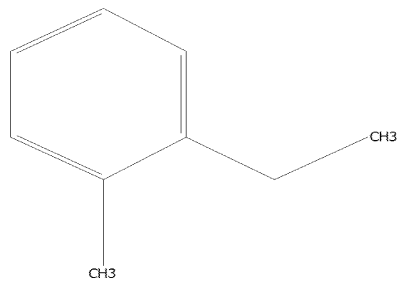




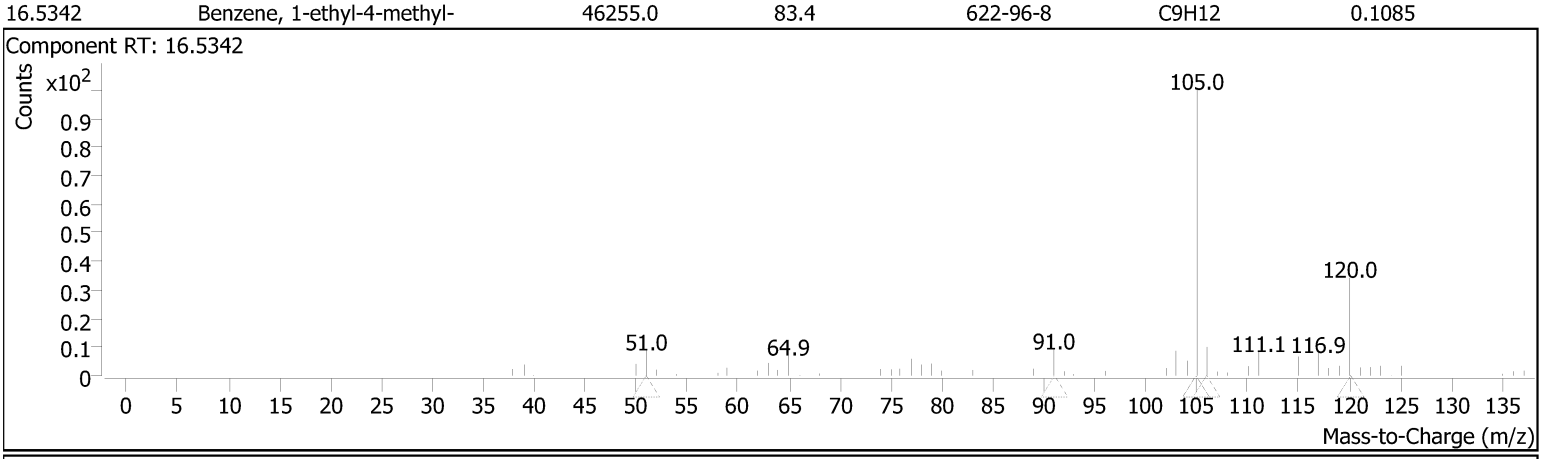


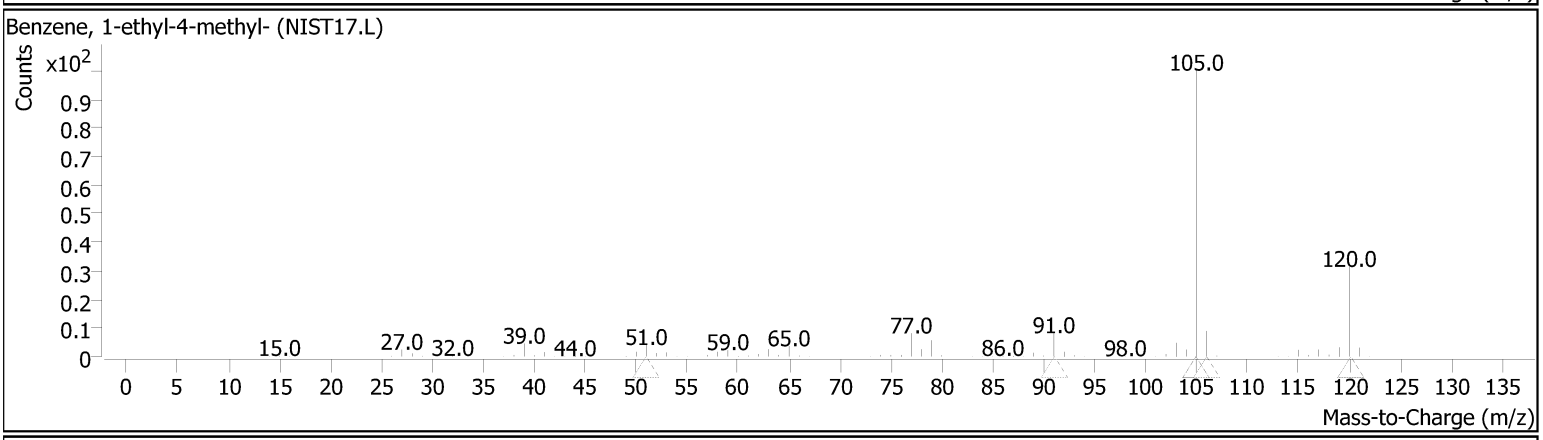


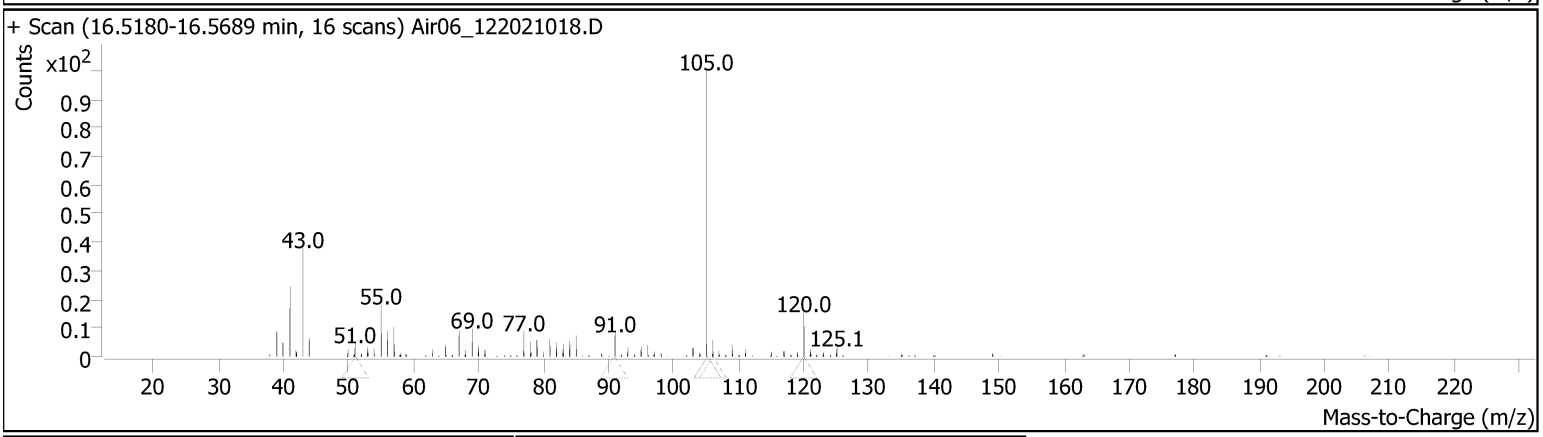


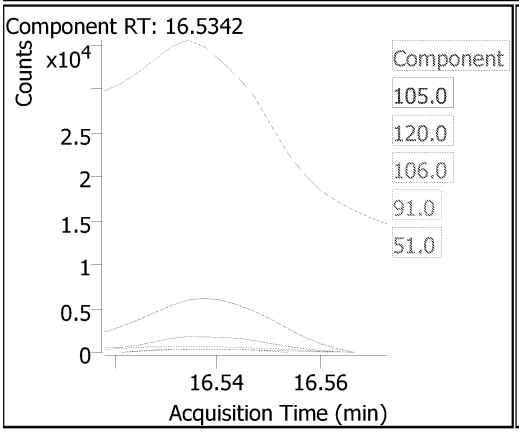


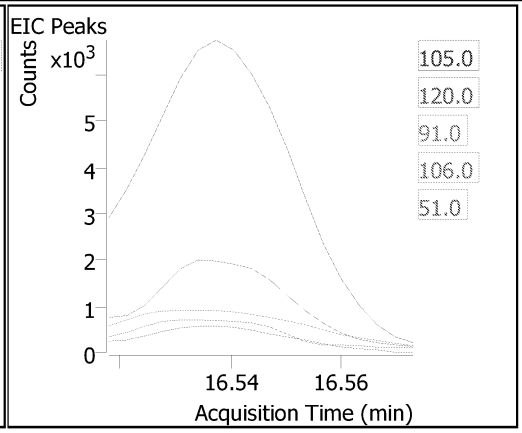
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.5342	Benzene, 1-ethyl-4-methyl-	46255.0	83.4	622-96-8	C9H12	0.1085

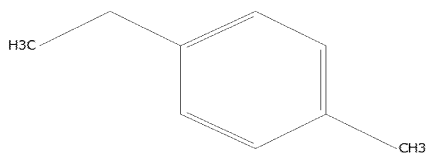




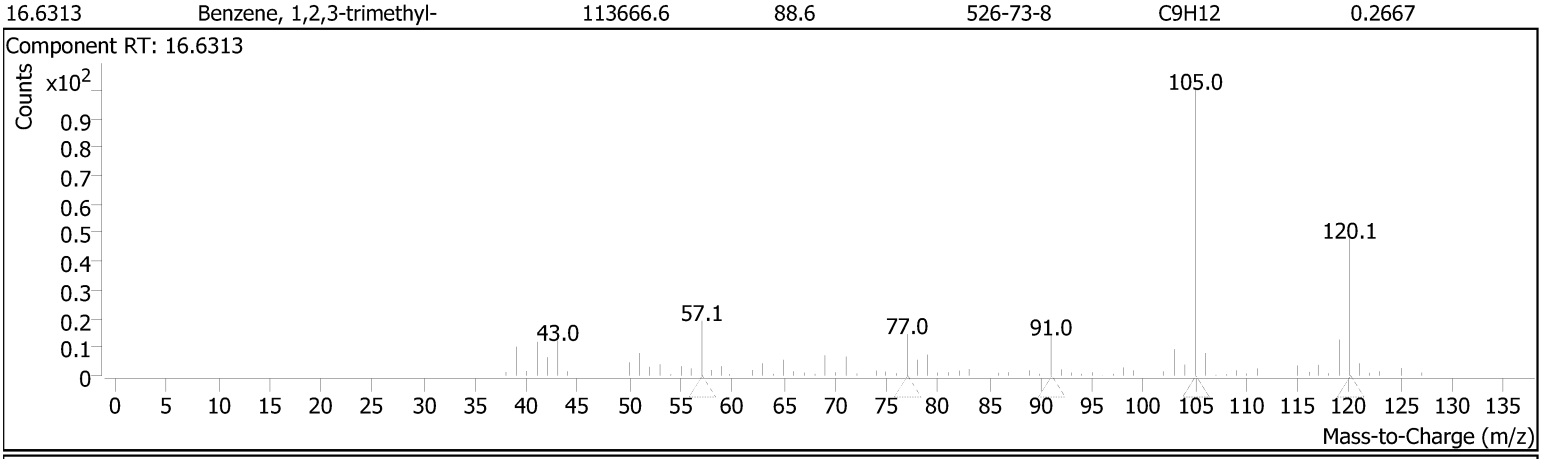


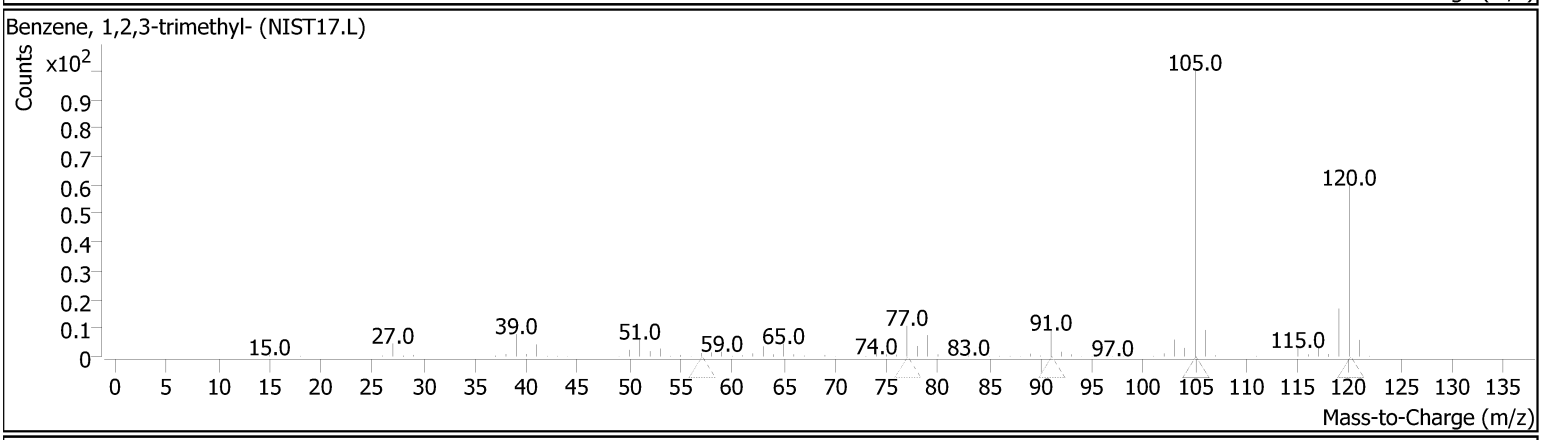


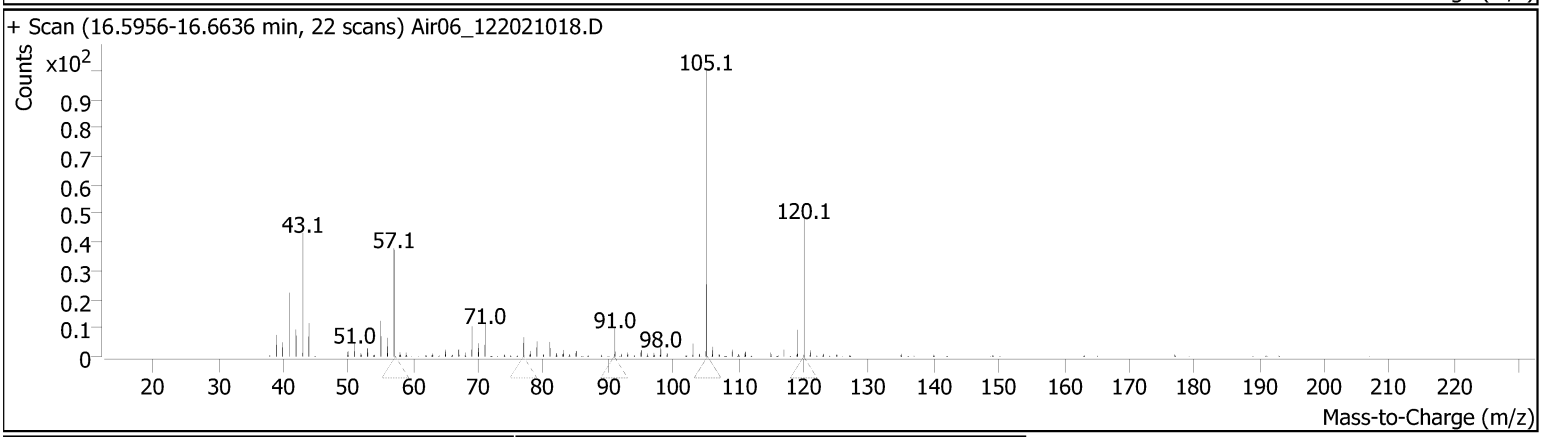


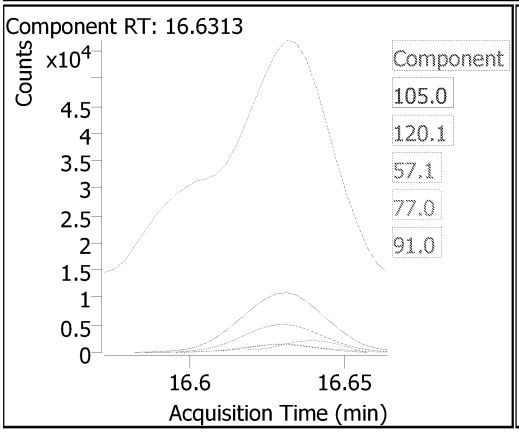


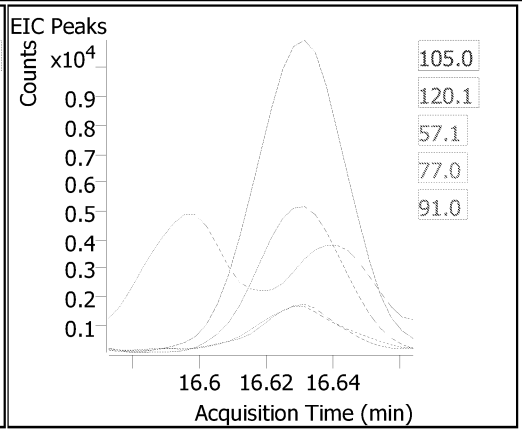
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.6313	Benzene, 1,2,3-trimethyl-	113666.6	88.6	526-73-8	C9H12	0.2667

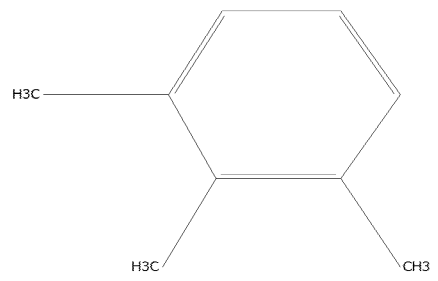




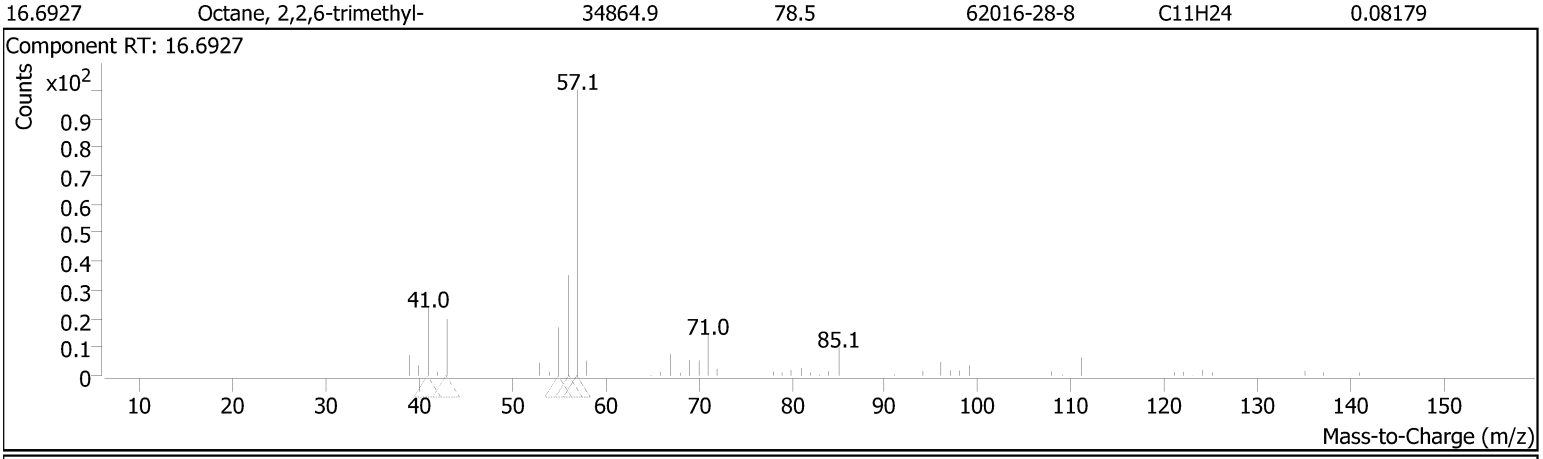


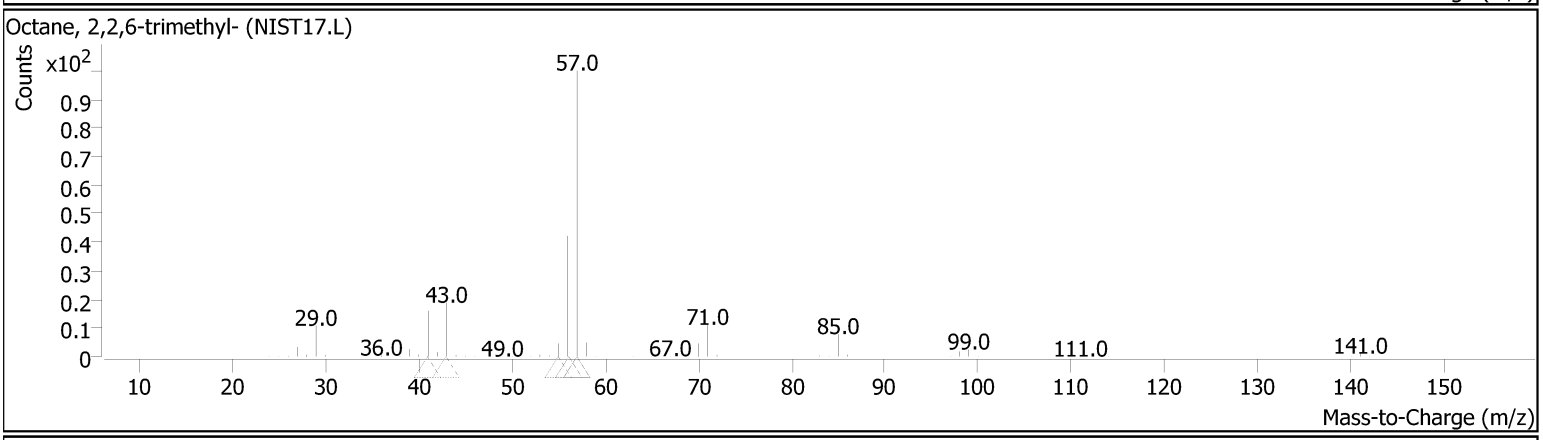


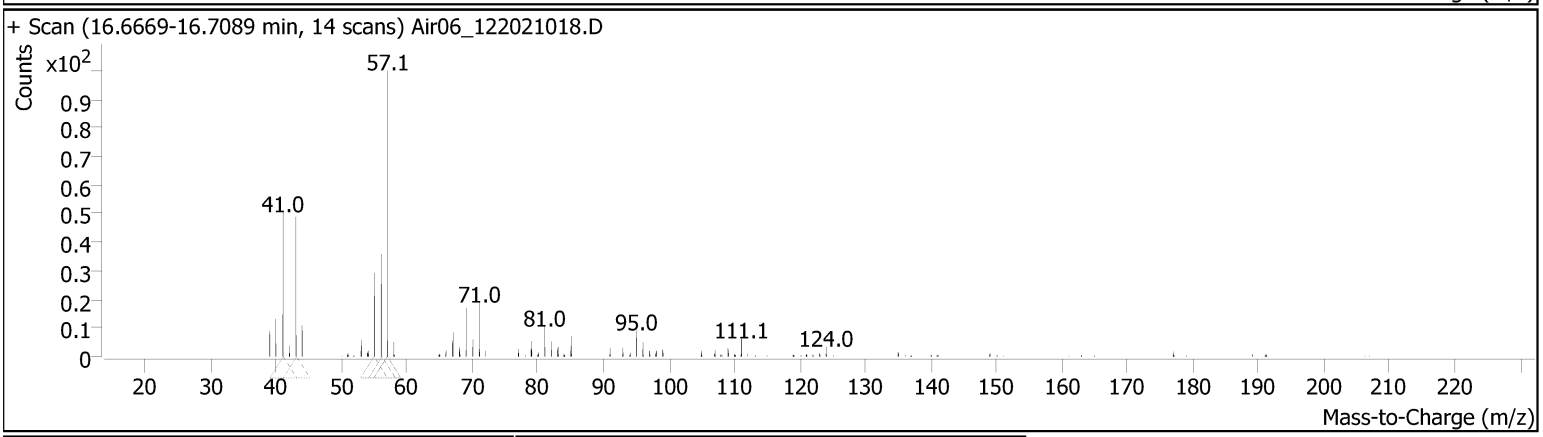


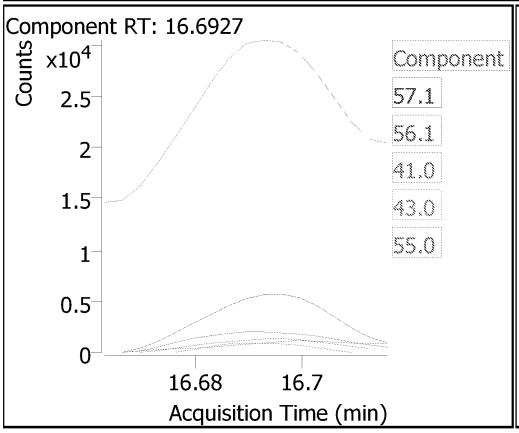


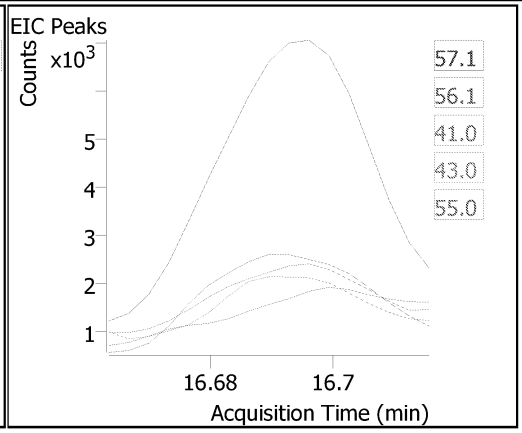
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.6927	Octane, 2,2,6-trimethyl-	34864.9	78.5	62016-28-8	C11H24	0.08179

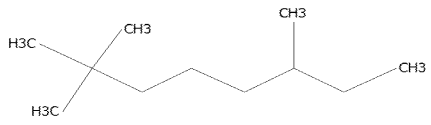




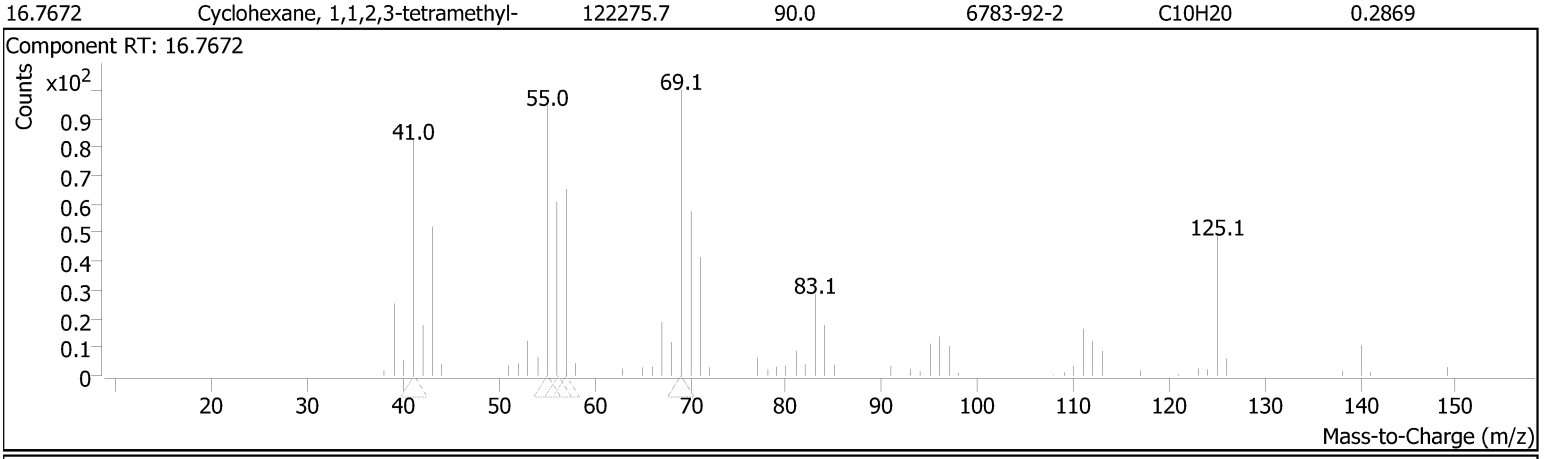


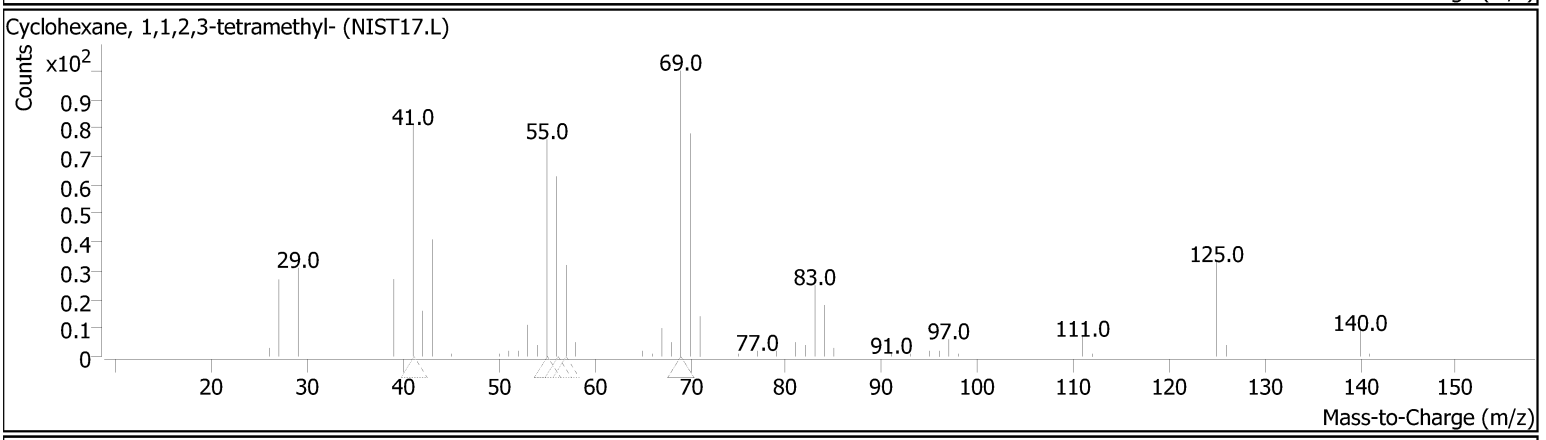


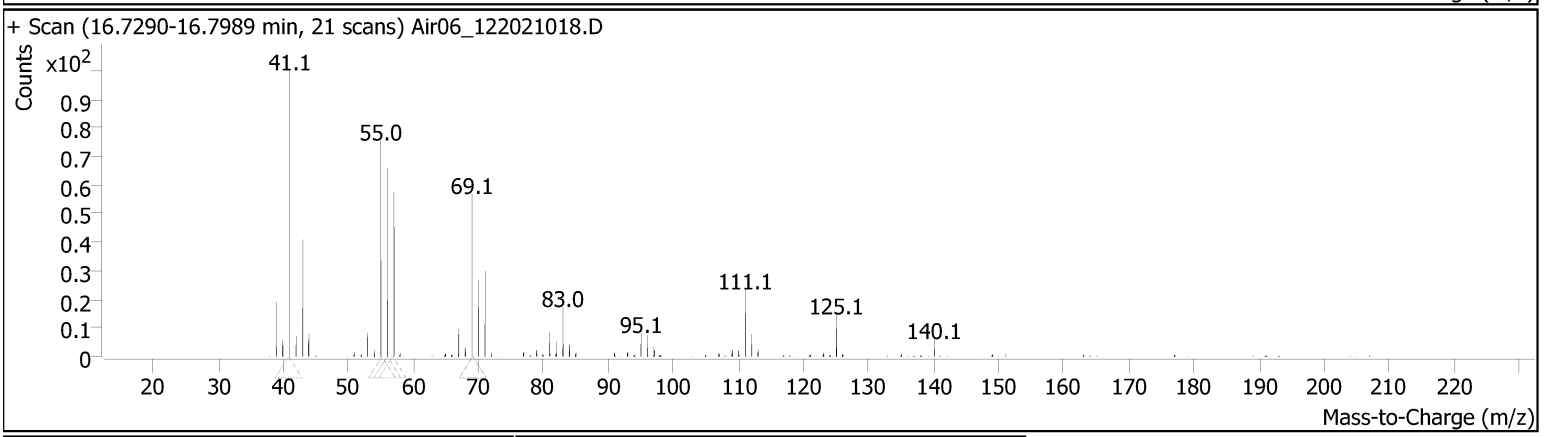


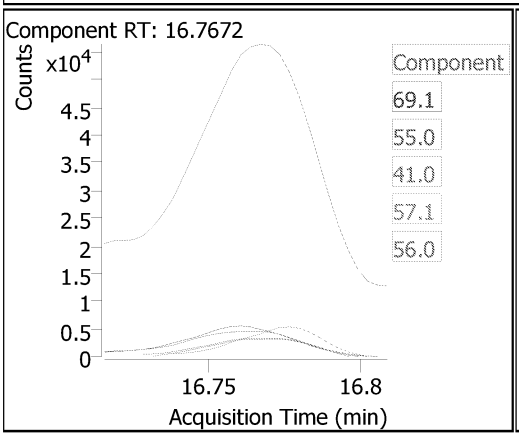


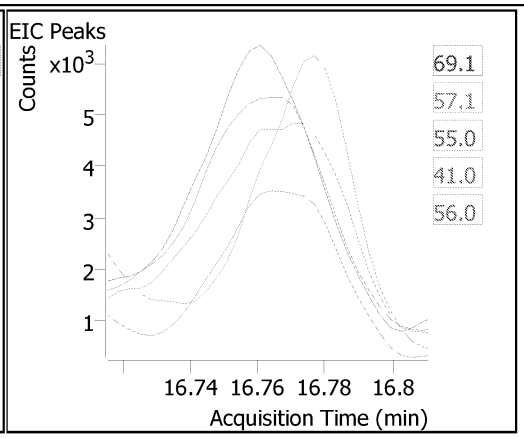
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.7672	Cyclohexane, 1,1,2,3-tetramethyl-	122275.7	90.0	6783-92-2	C10H20	0.2869

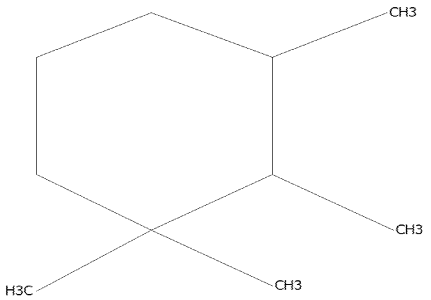




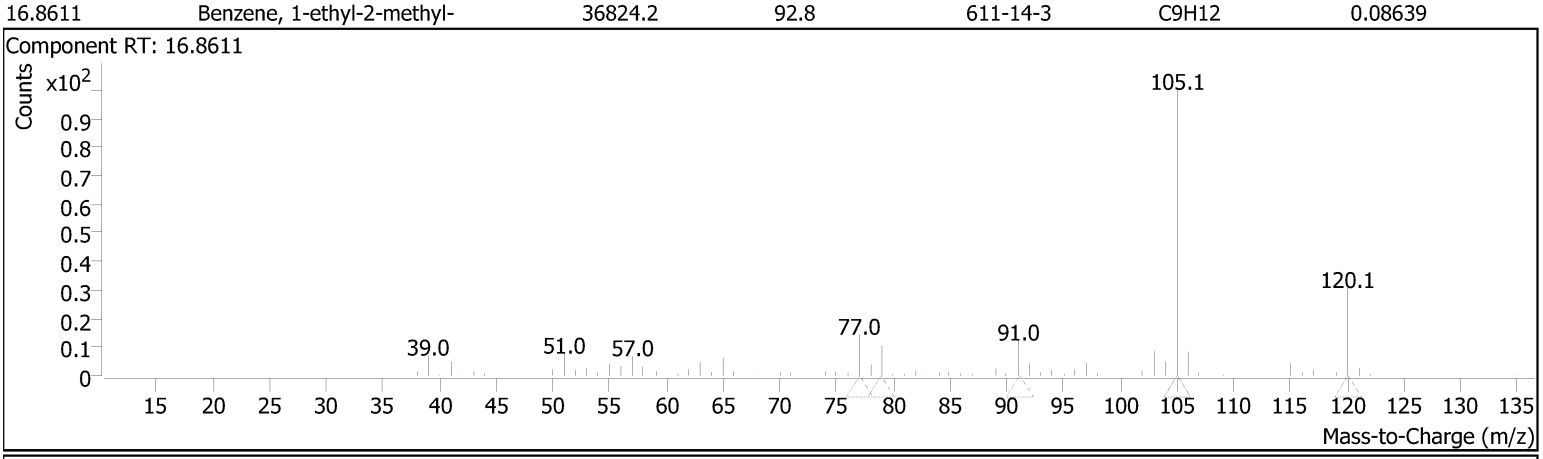


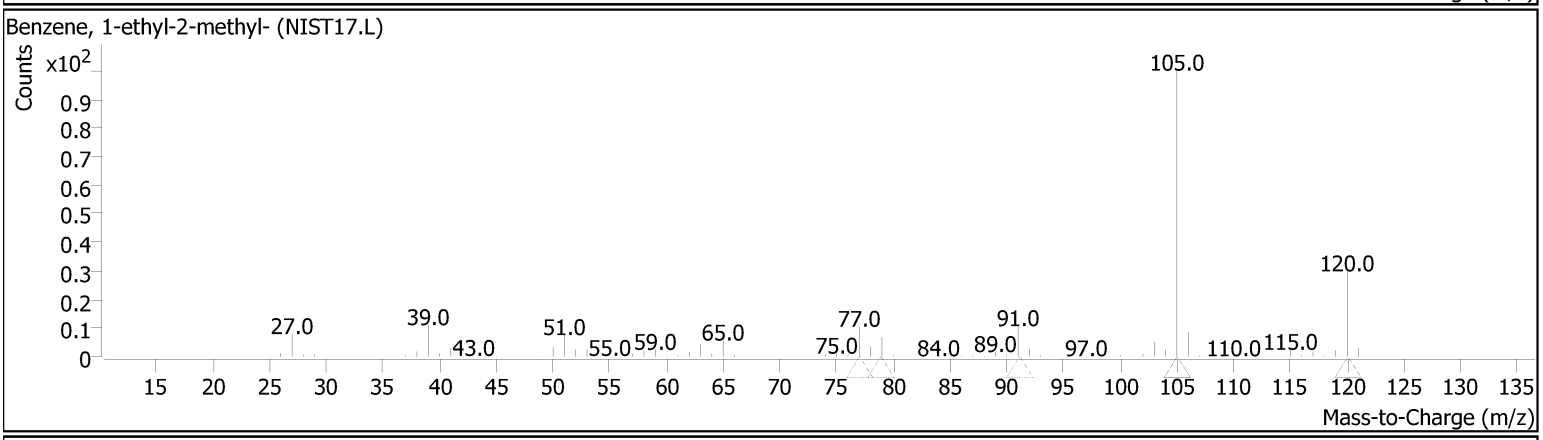


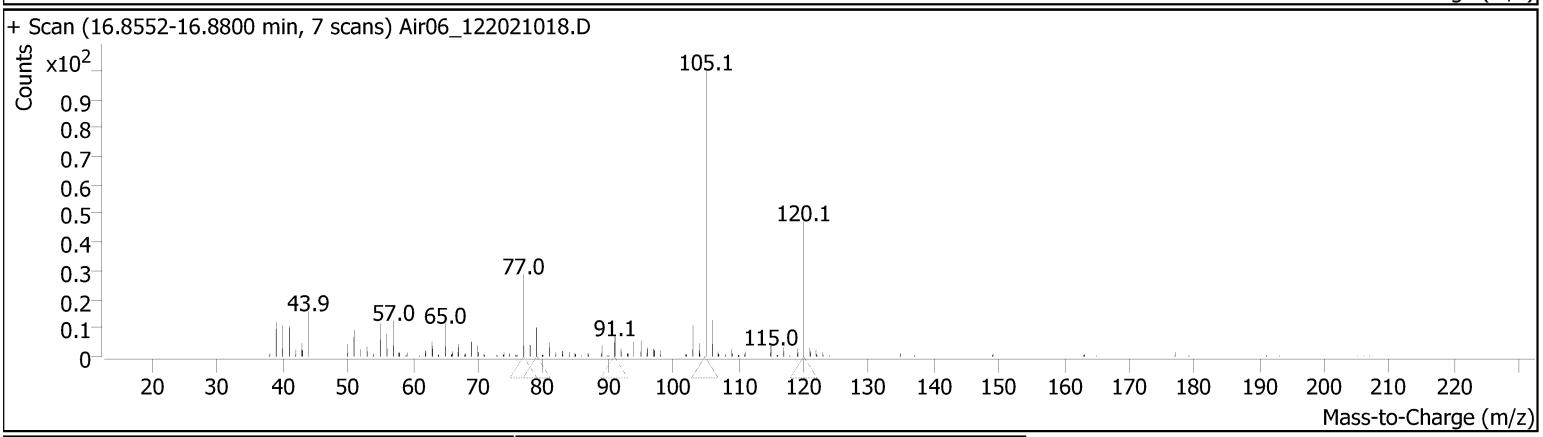


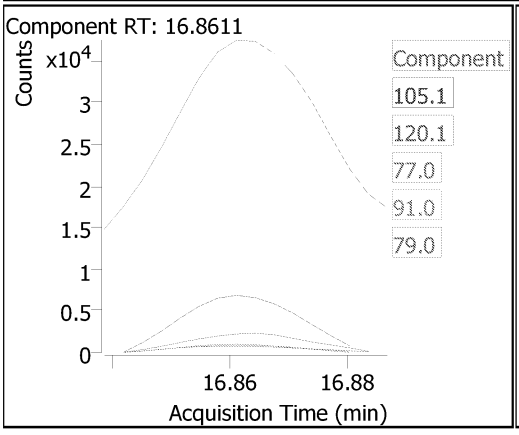


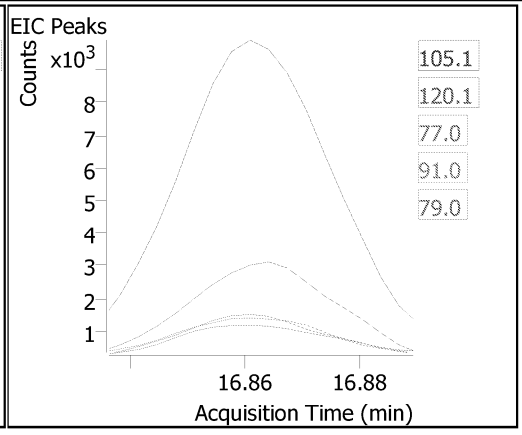
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.8611	Benzene, 1-ethyl-2-methyl-	36824.2	92.8	611-14-3	C9H12	0.08639

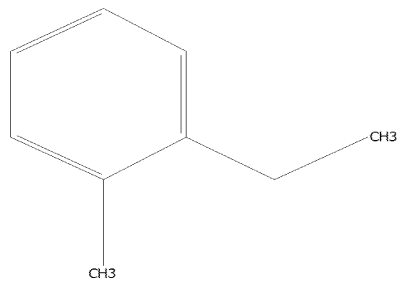




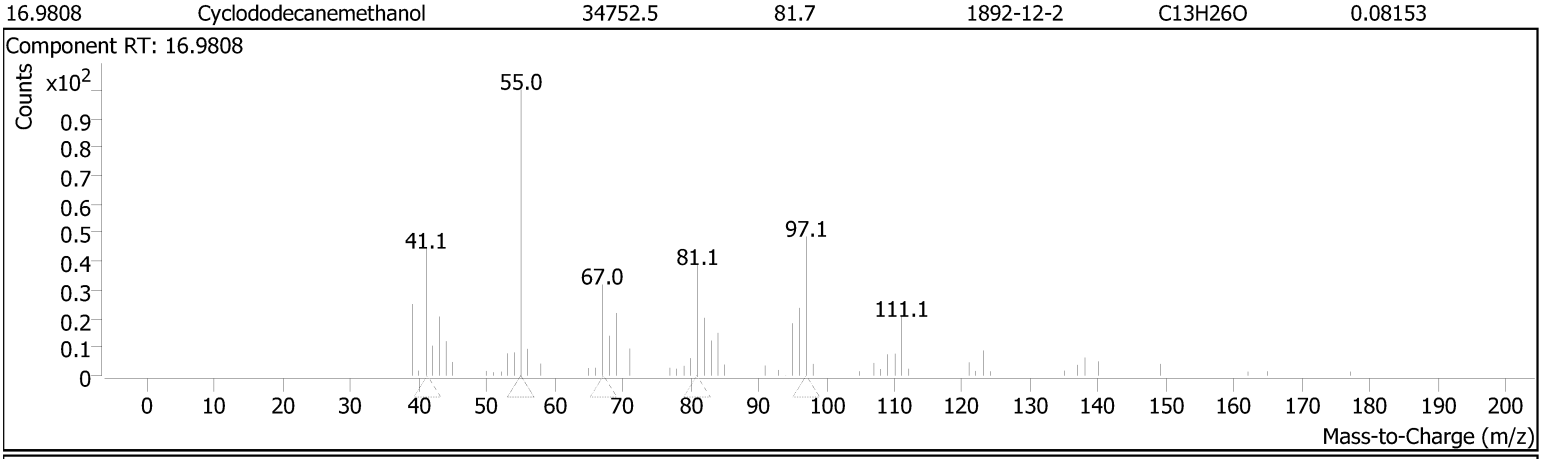


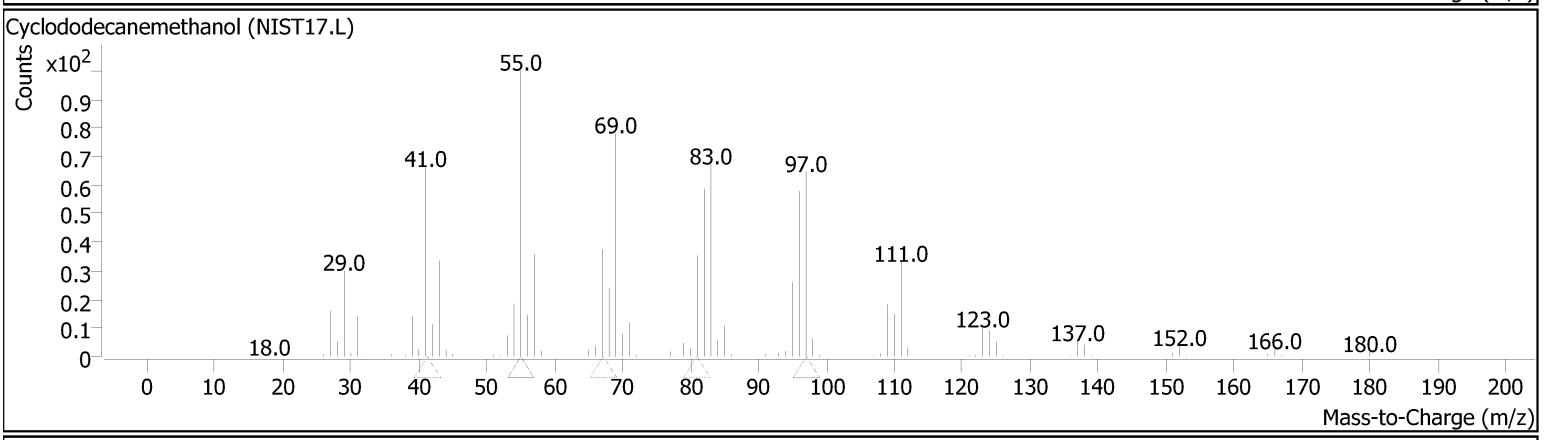


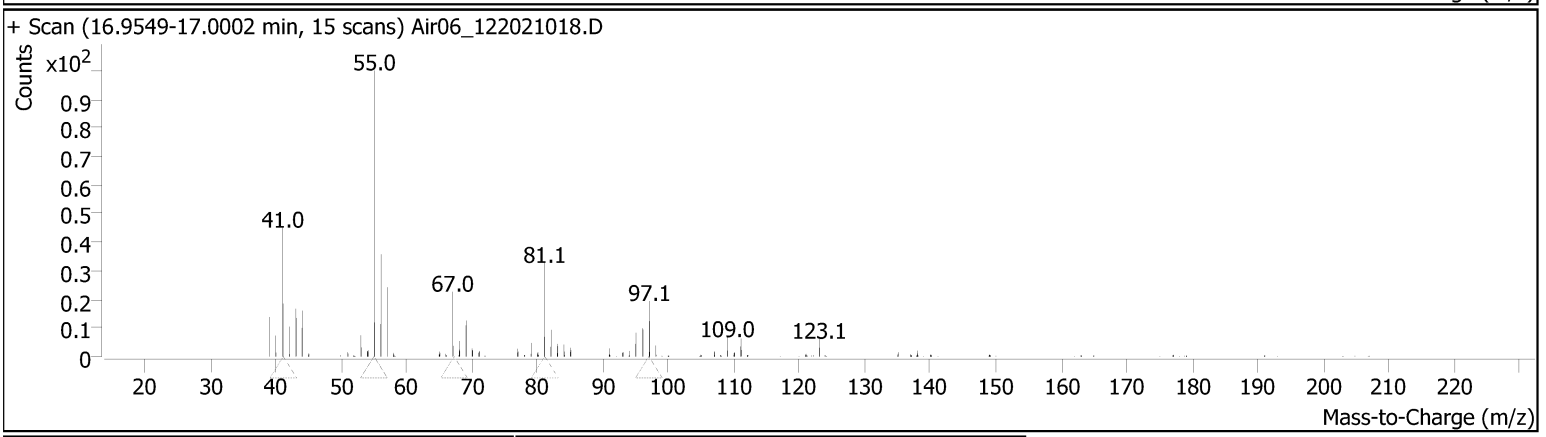


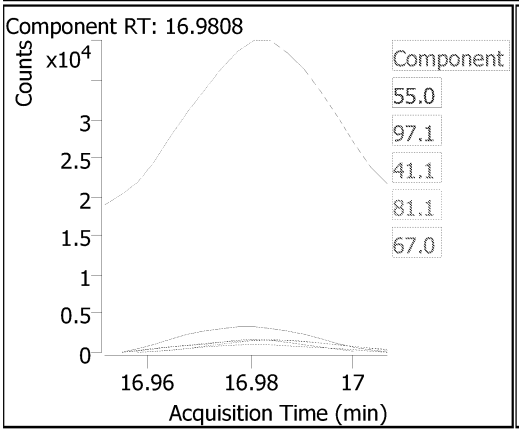


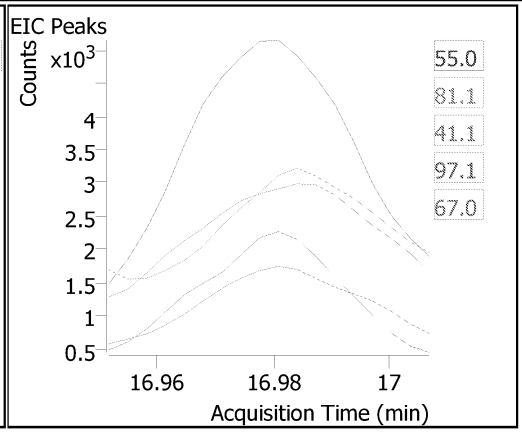
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.9808	Cyclododecanemethanol	34752.5	81.7	1892-12-2	C13H26O	0.08153

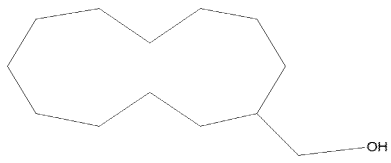




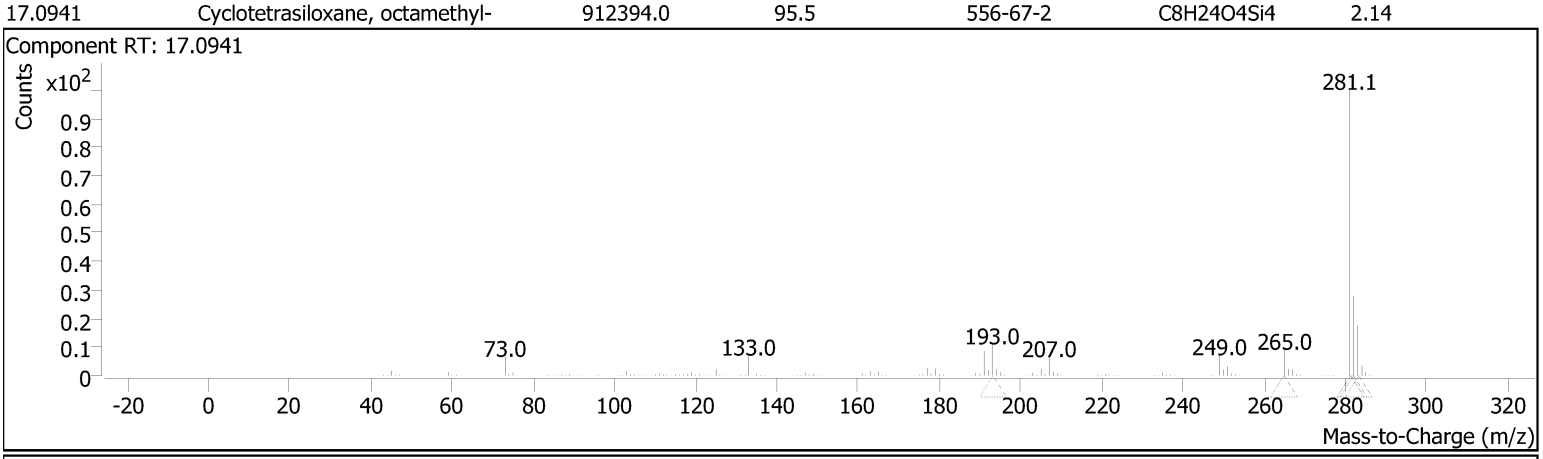


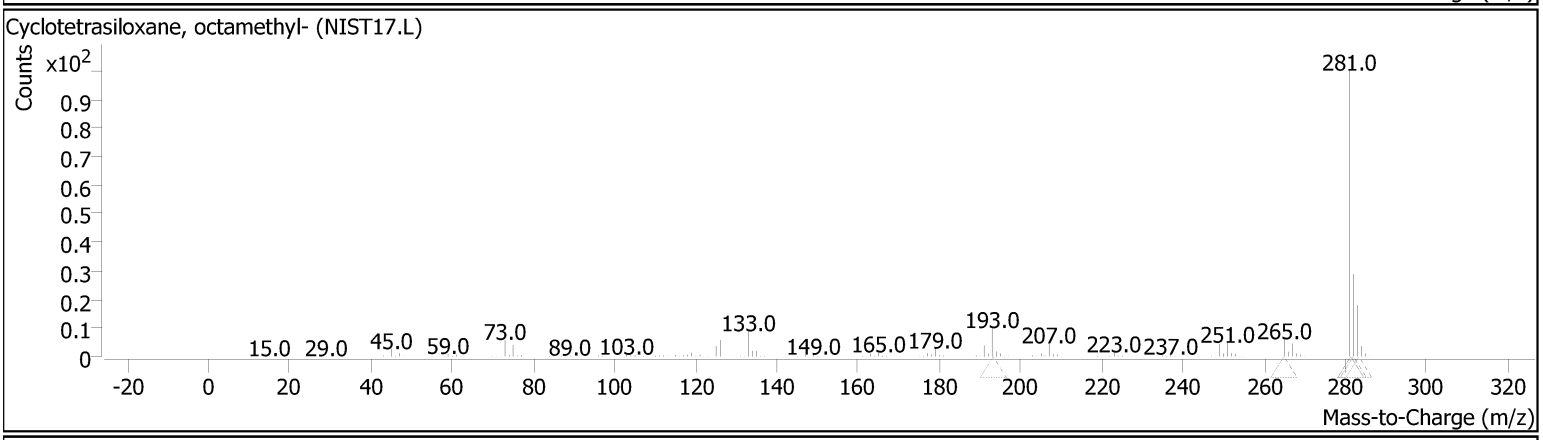


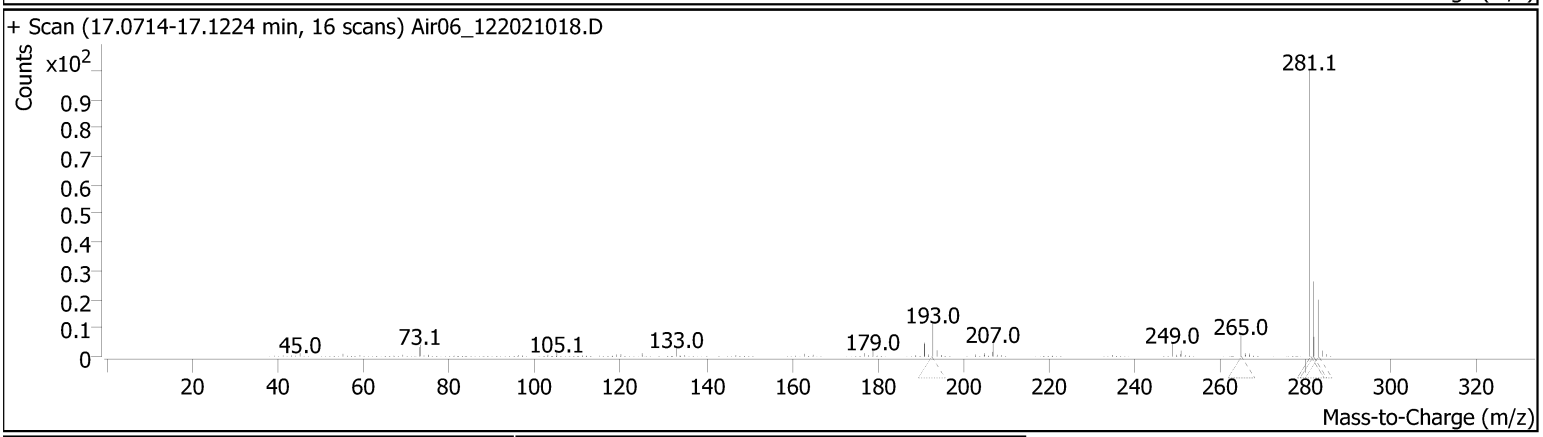


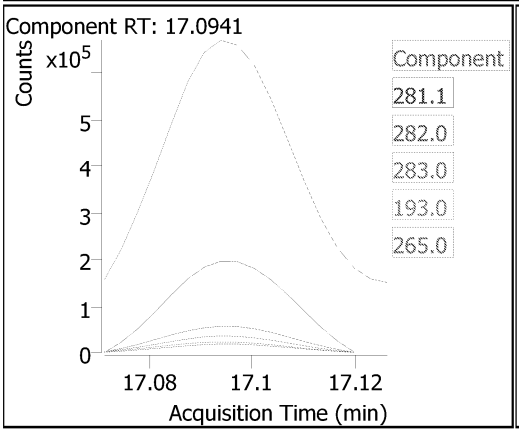


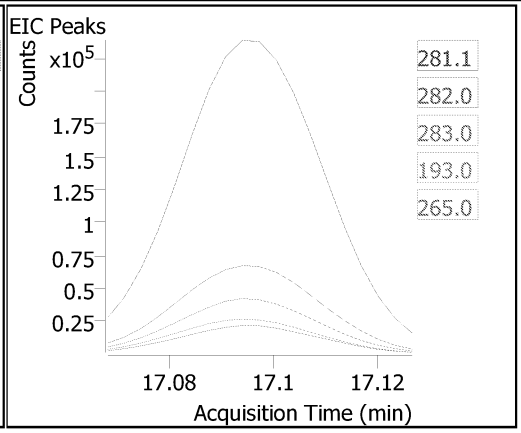
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.0941	Cyclotetrasiloxane, octamethyl-	912394.0	95.5	556-67-2	C8H24O4Si4	2.14

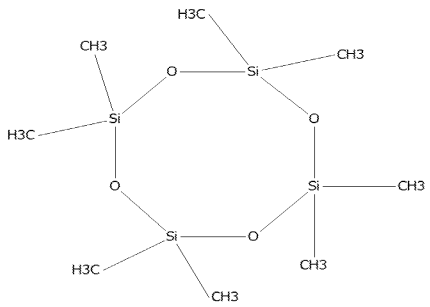




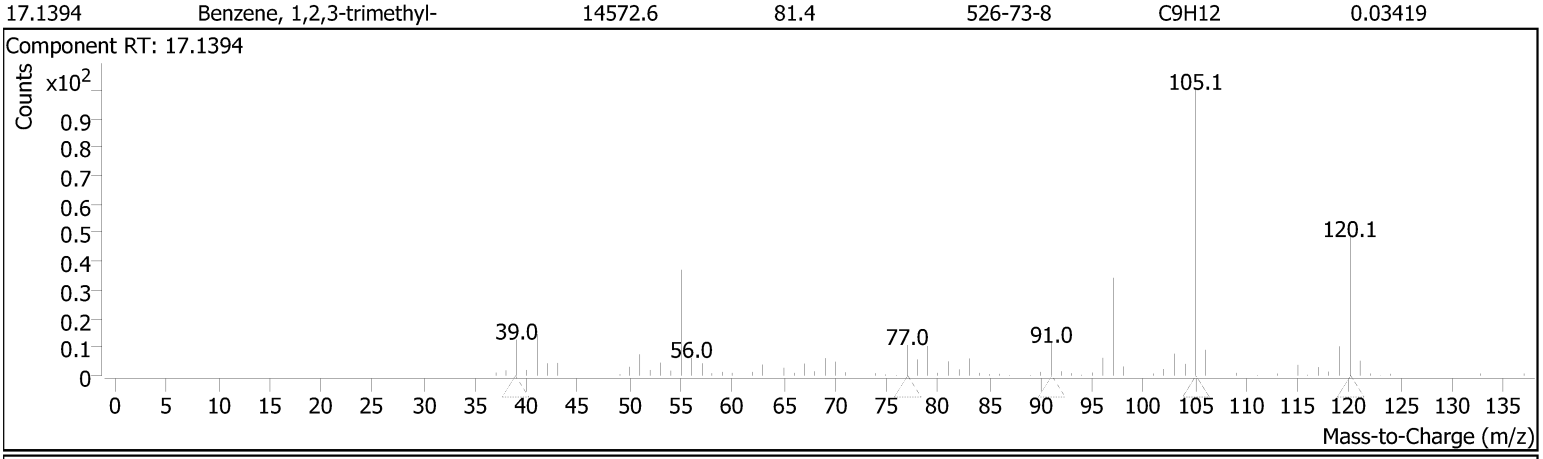


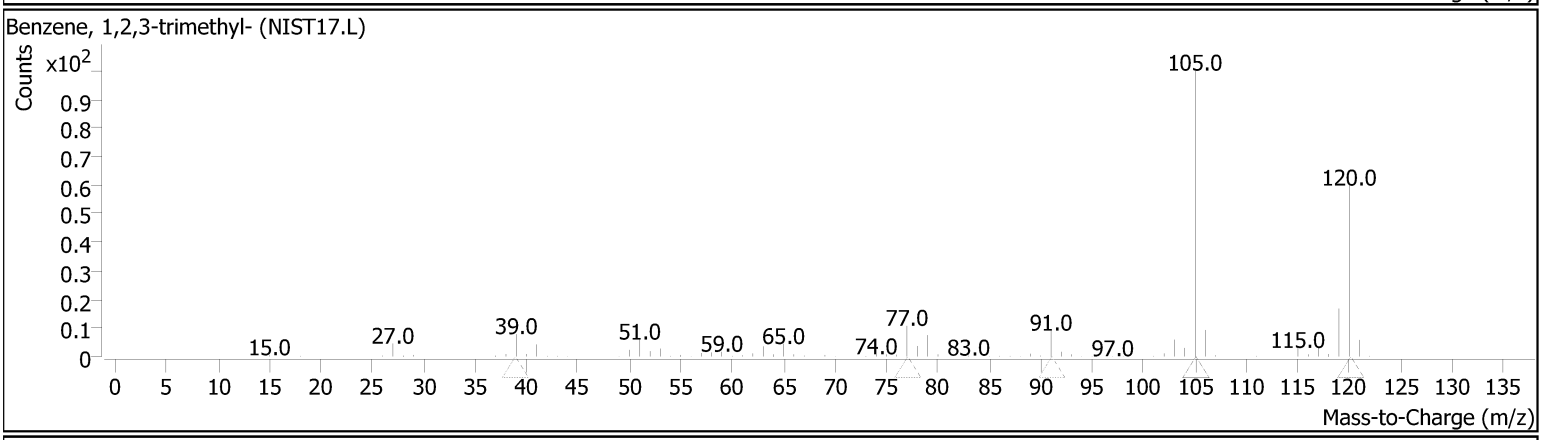


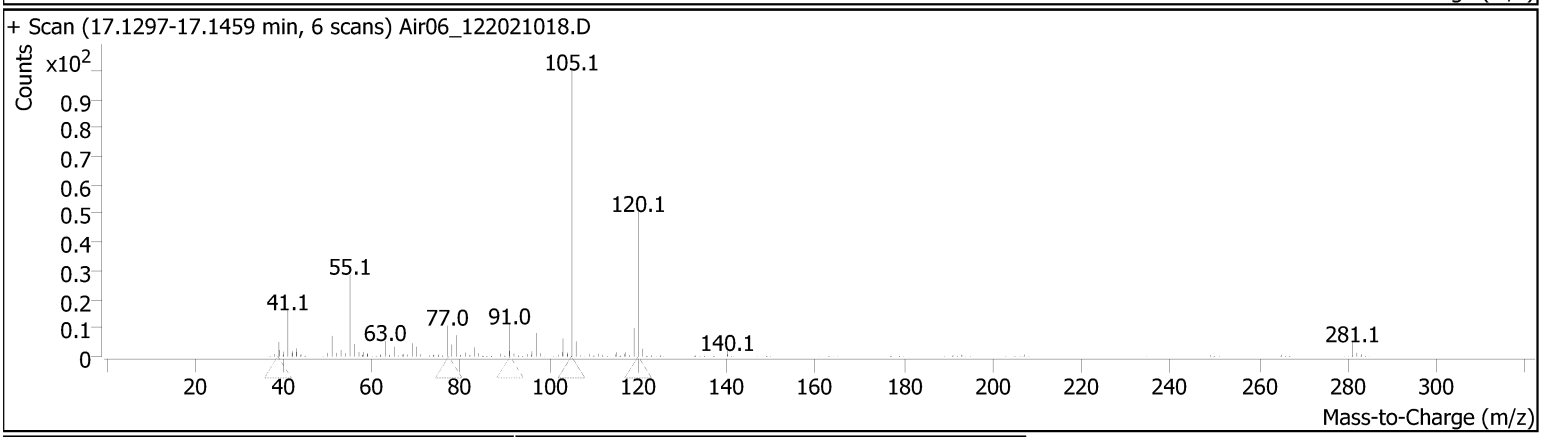


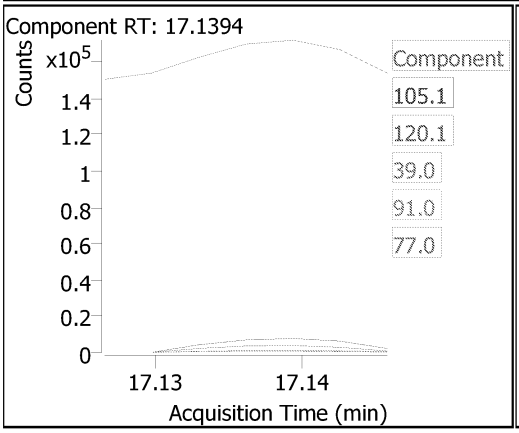


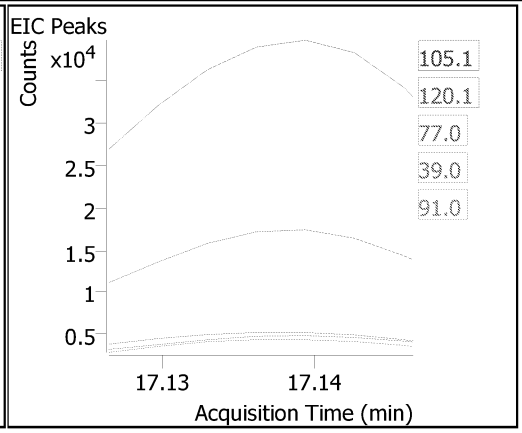
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.1394	Benzene, 1,2,3-trimethyl-	14572.6	81.4	526-73-8	C9H12	0.03419

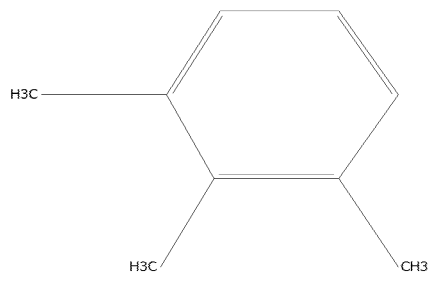




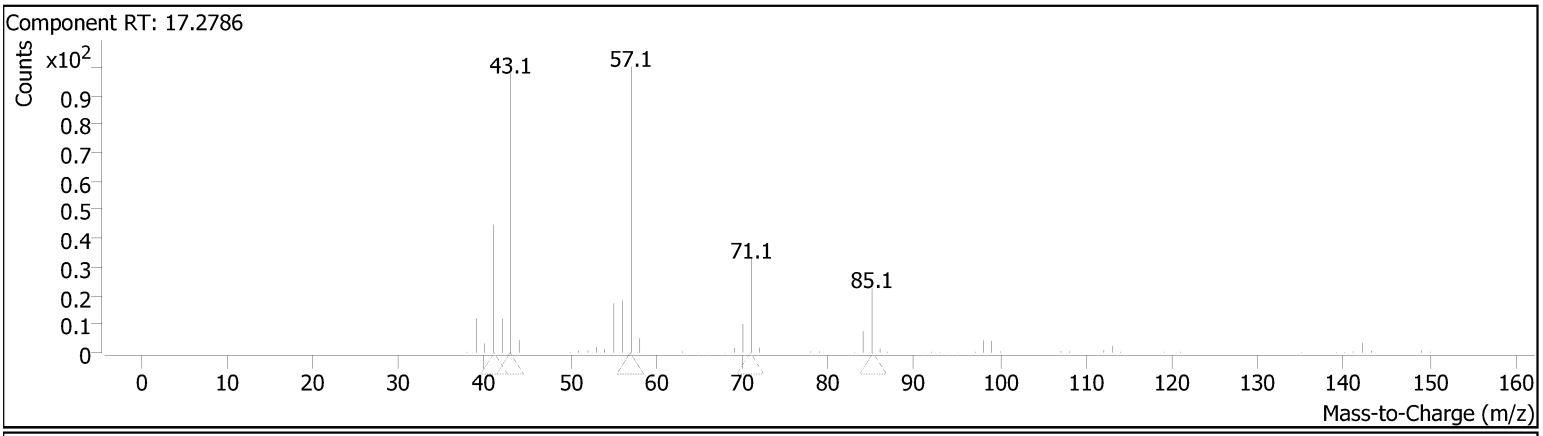


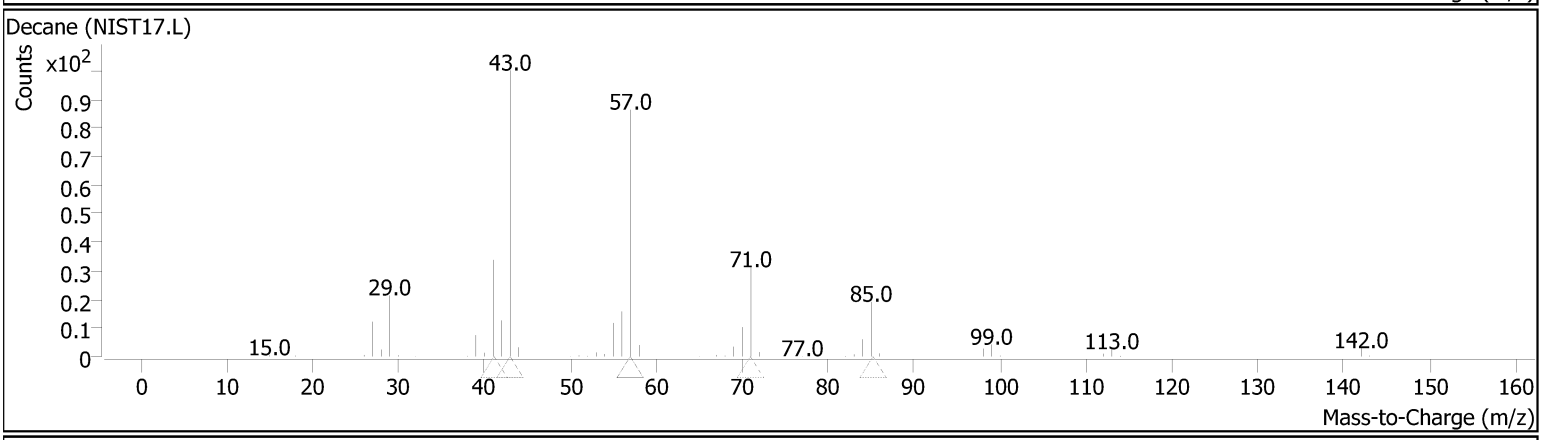


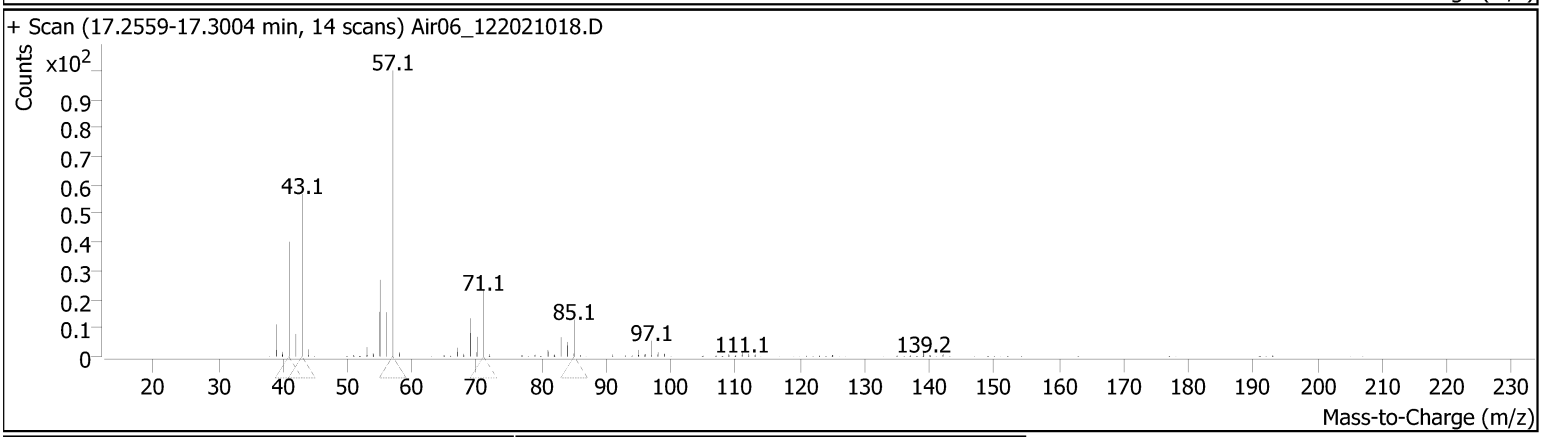


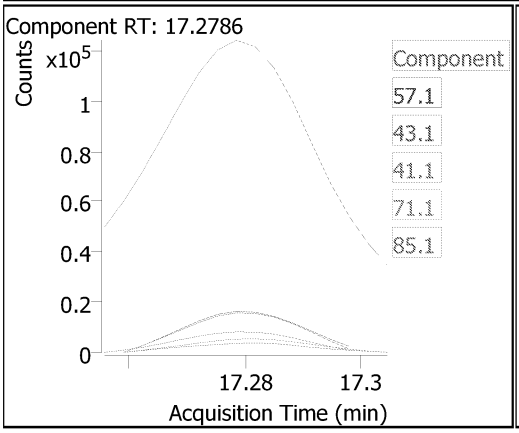


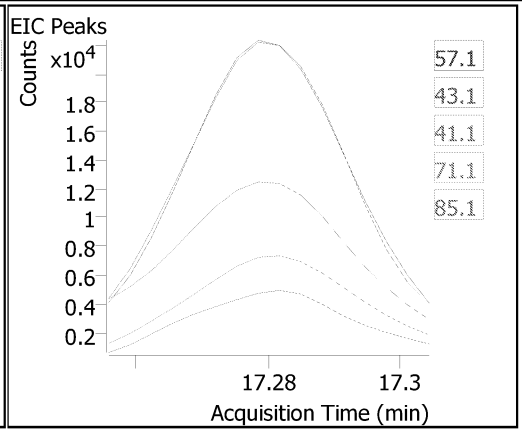
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.2786	Decane	128232.6	96.2	124-18-5	C10H22	0.3008





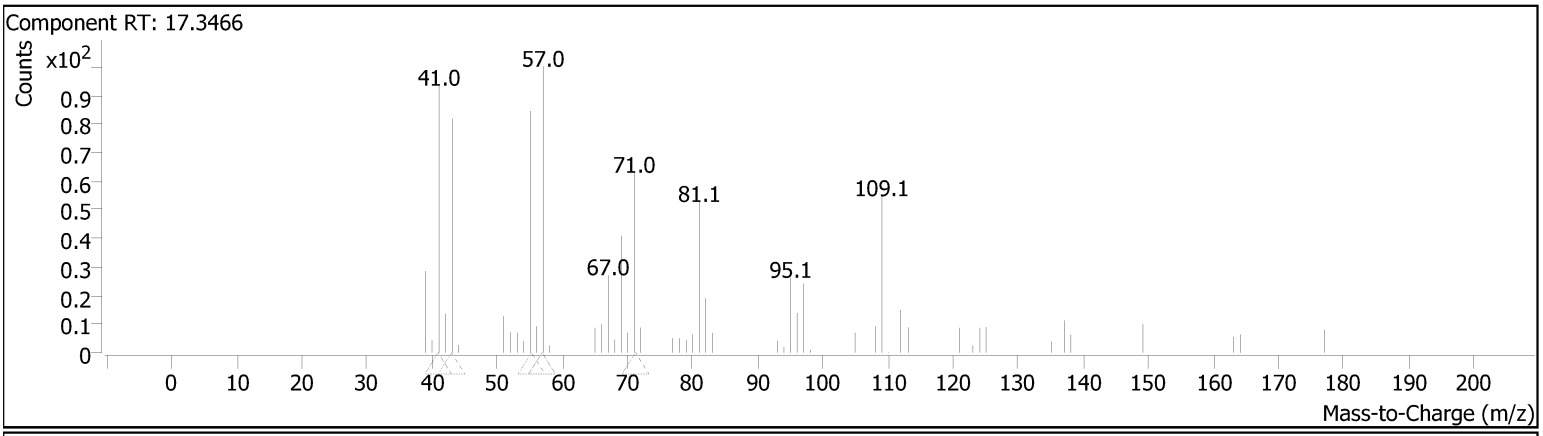


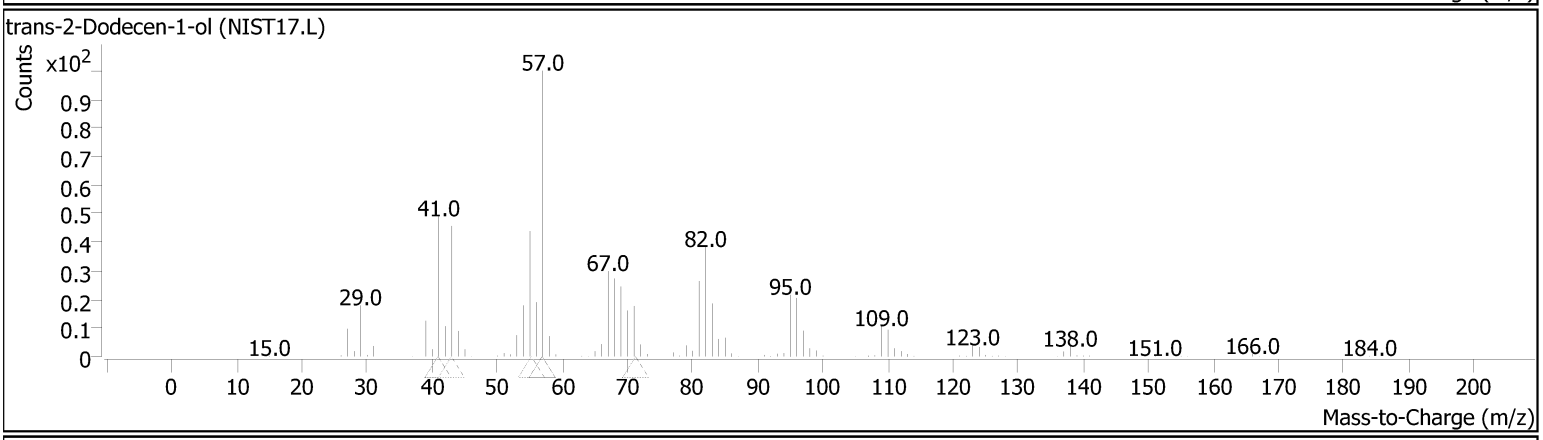


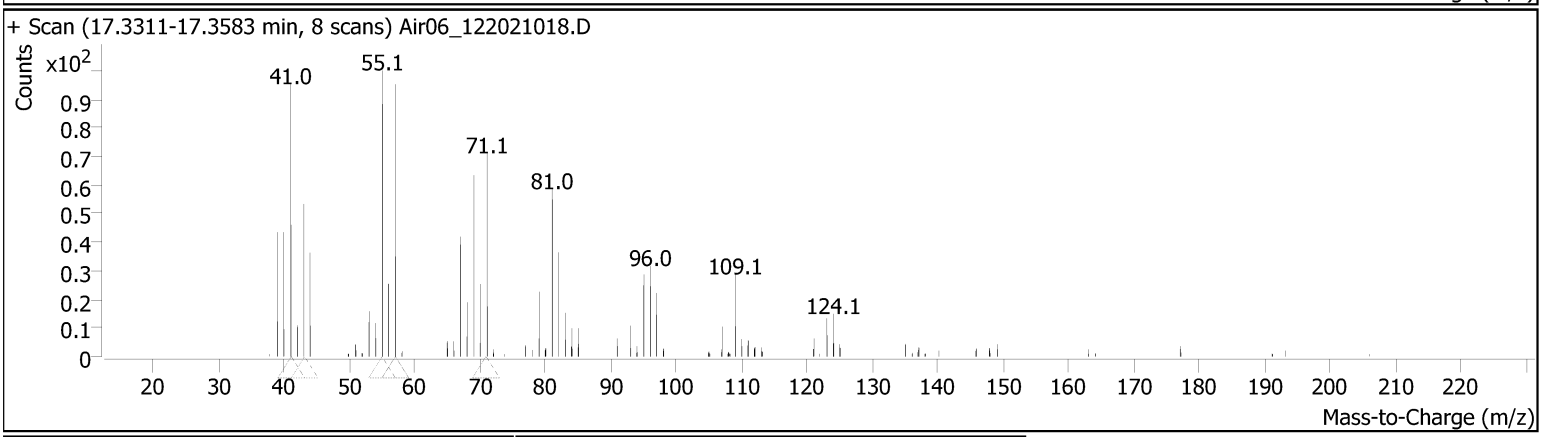


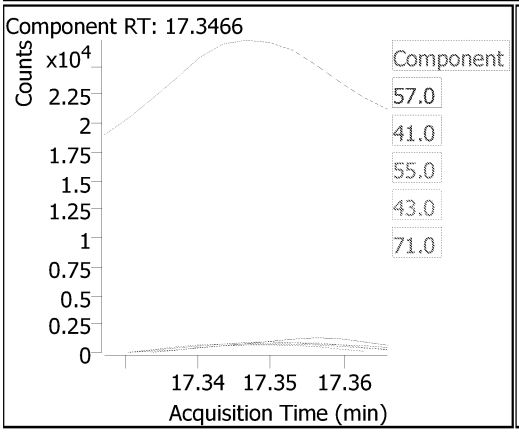


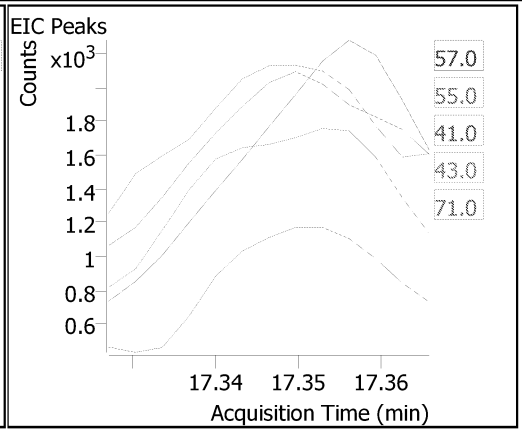
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.3466	trans-2-Dodecen-1-ol	9527.8	75.2	69064-37-5	C12H24O	0.02235

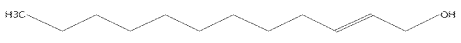




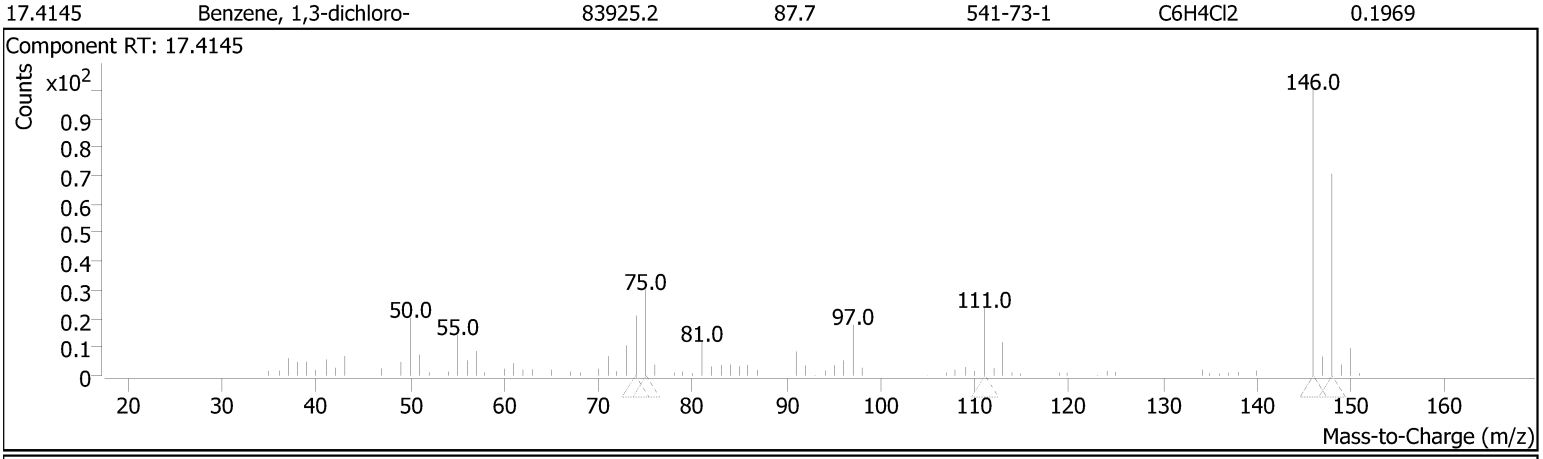


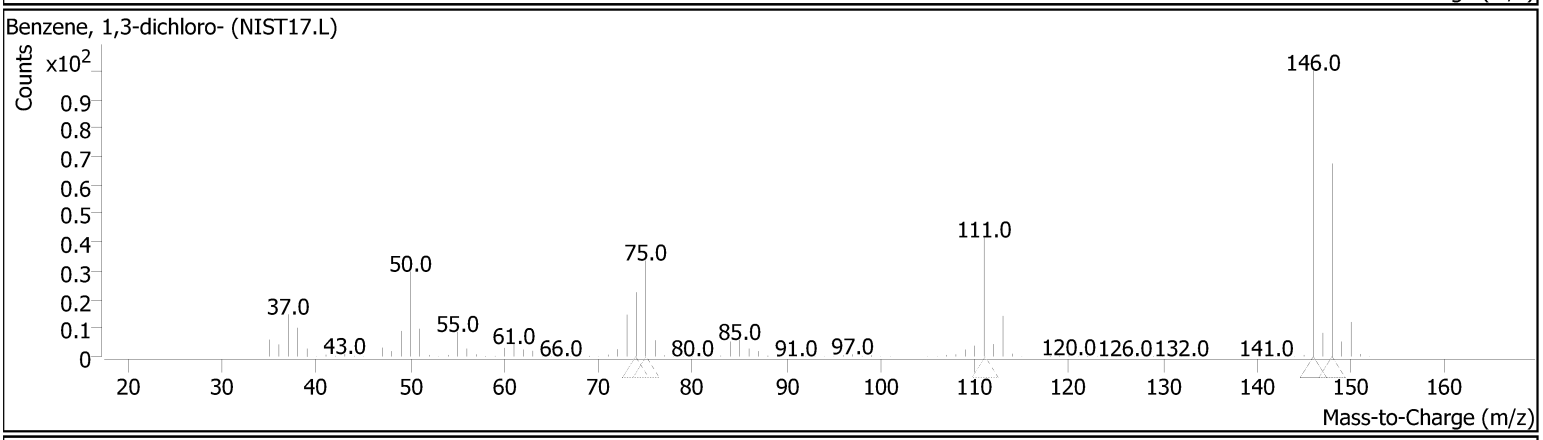


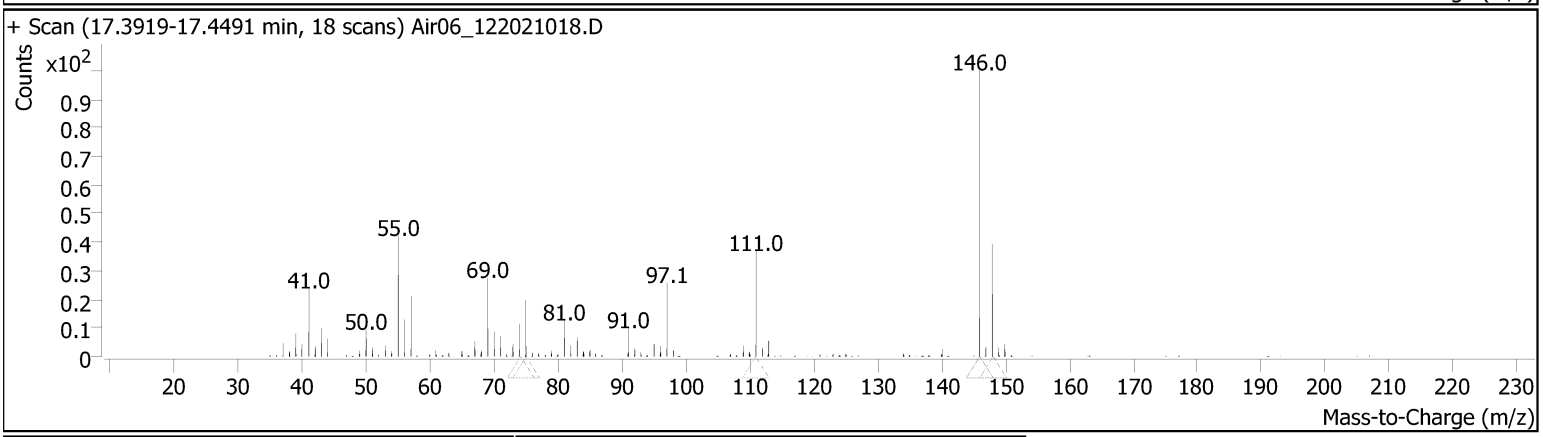


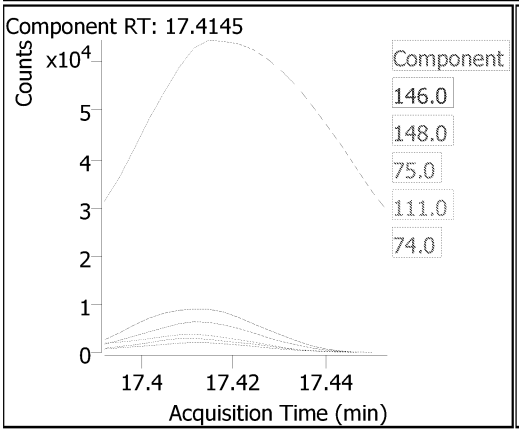


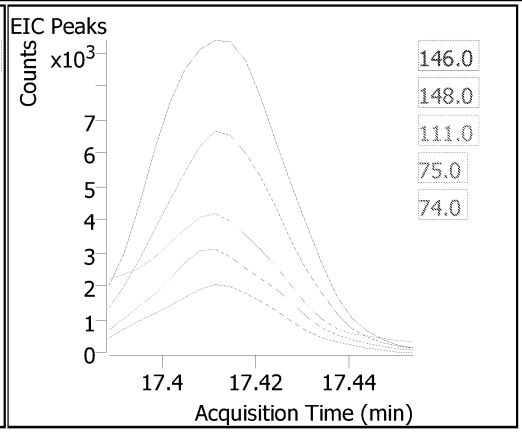
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.4145	Benzene, 1,3-dichloro-	83925.2	87.7	541-73-1	C6H4Cl2	0.1969

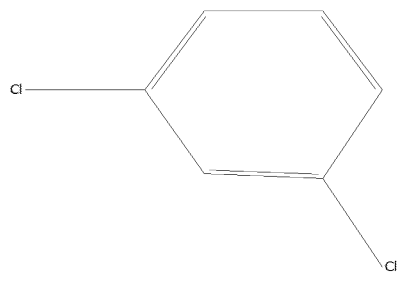




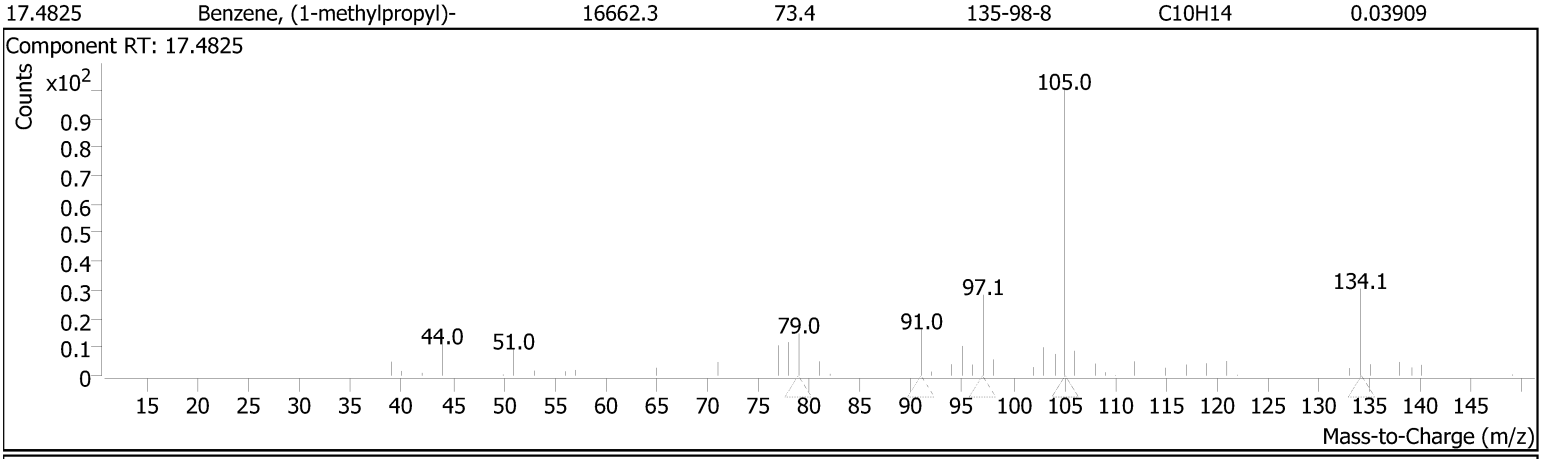


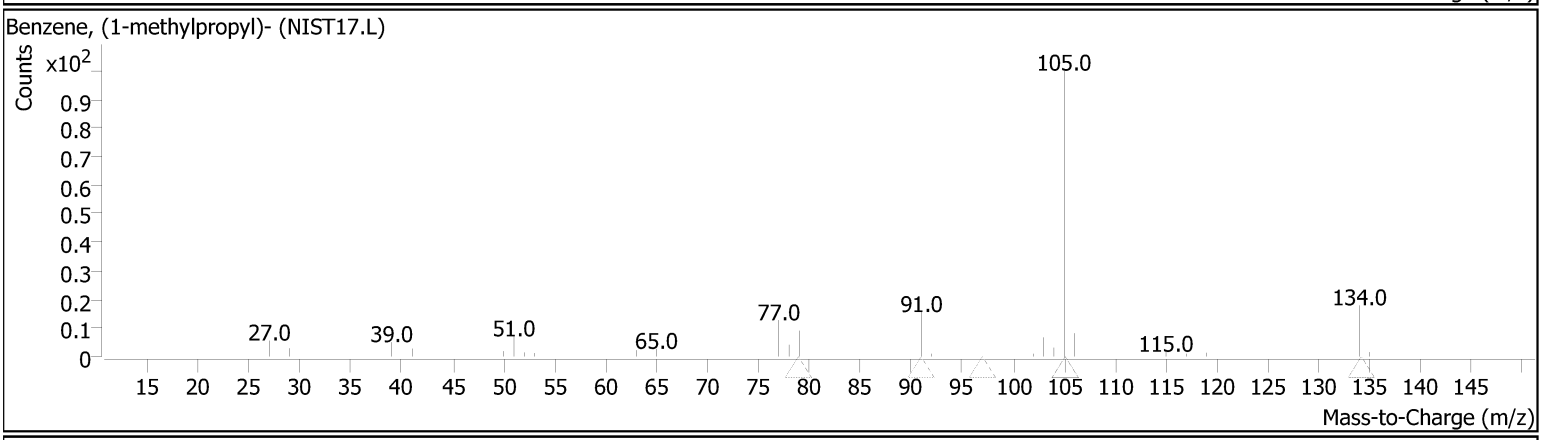


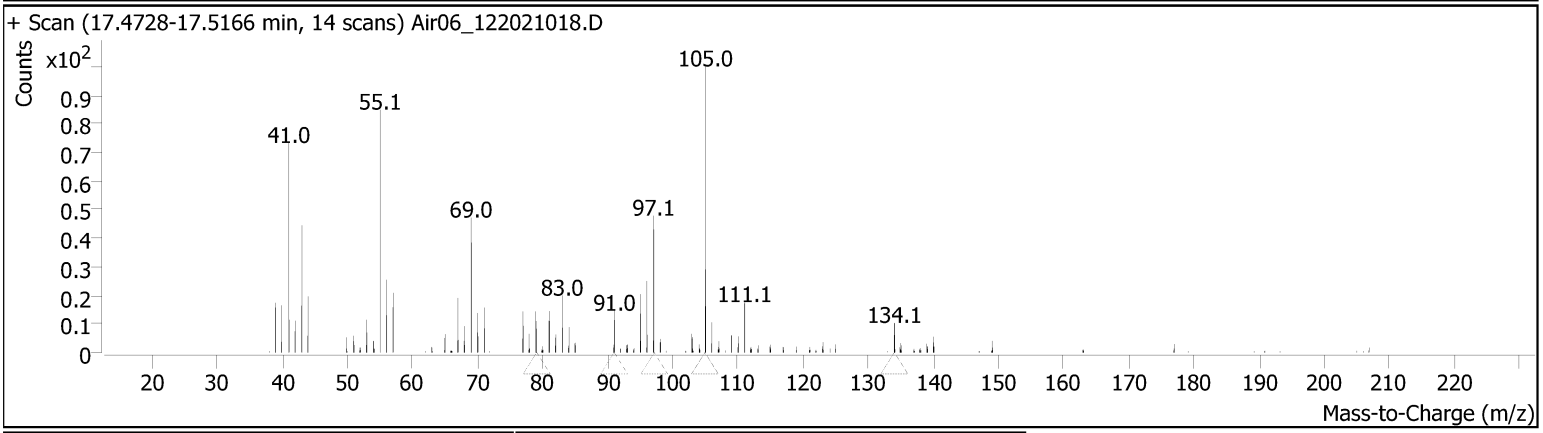


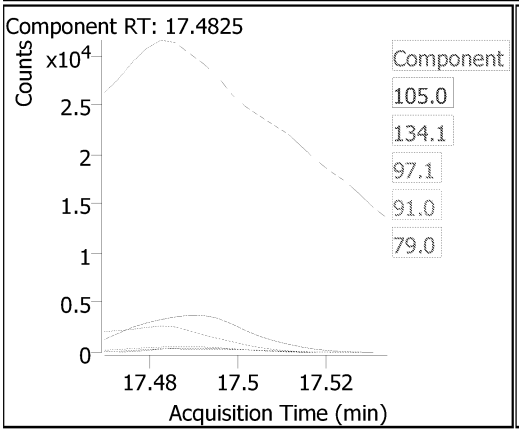


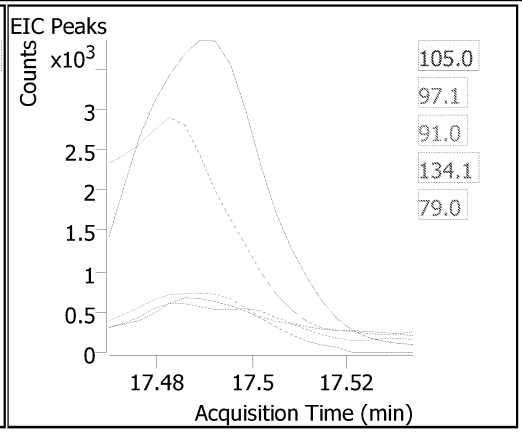
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.4825	Benzene, (1-methylpropyl)-	16662.3	73.4	135-98-8	C10H14	0.03909

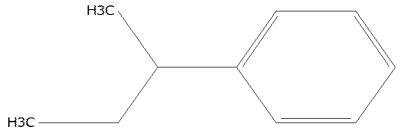




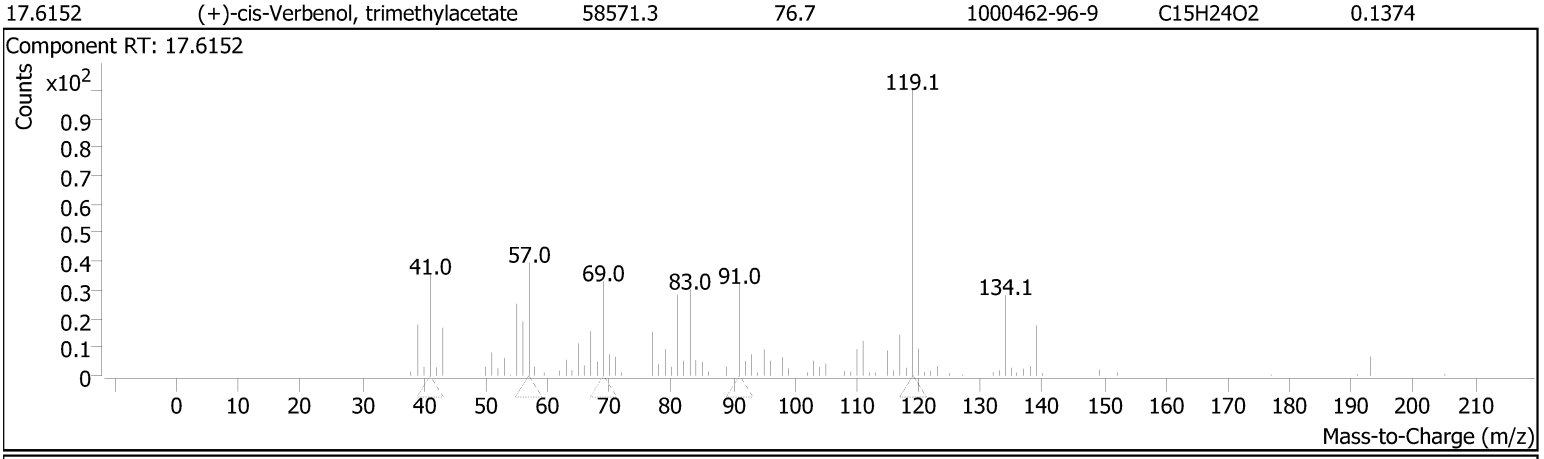


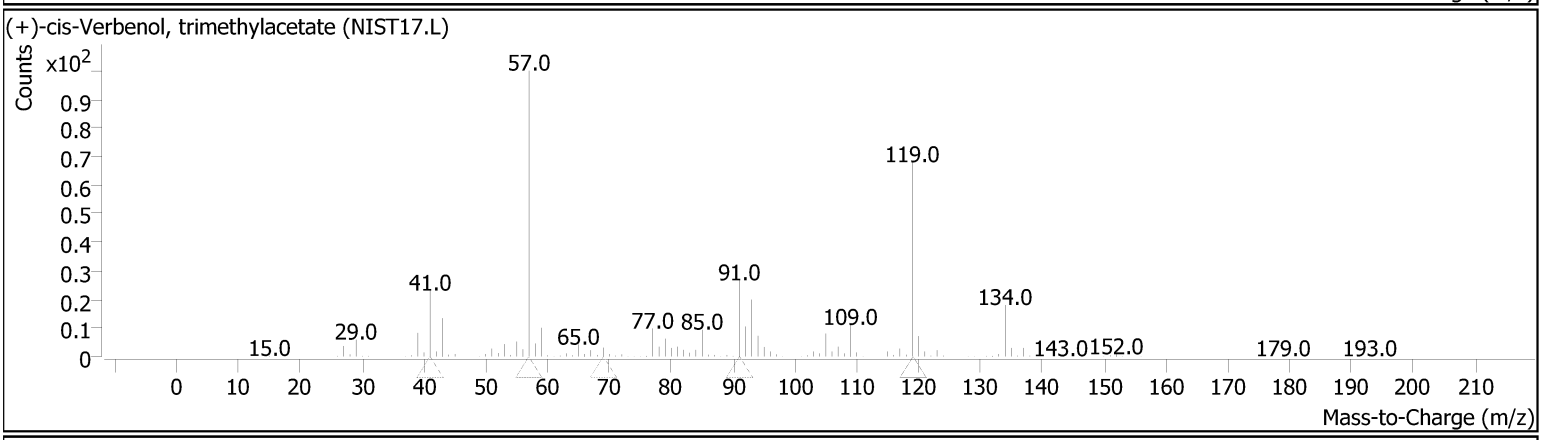


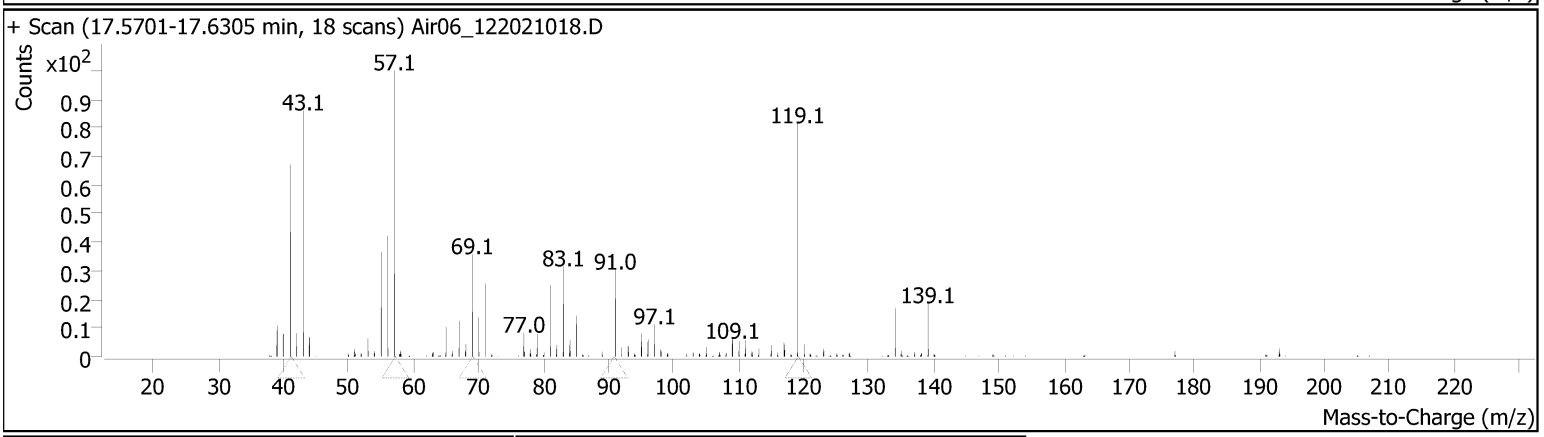


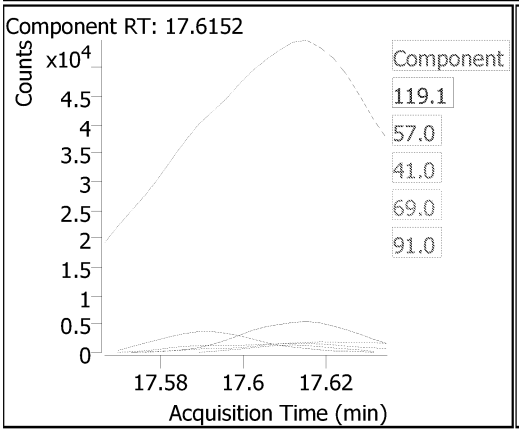


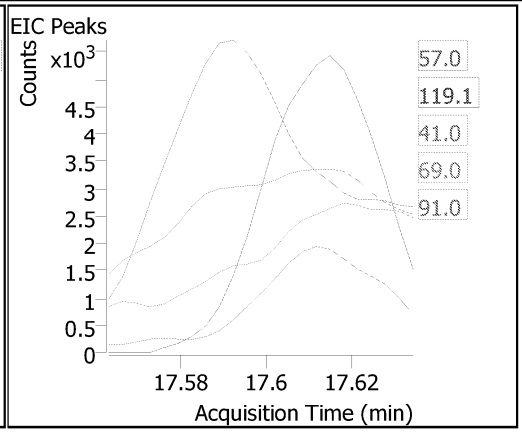
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.6152	(+)-cis-Verbenol, trimethylacetate	58571.3	76.7	1000462-96-9	C15H24O2	0.1374

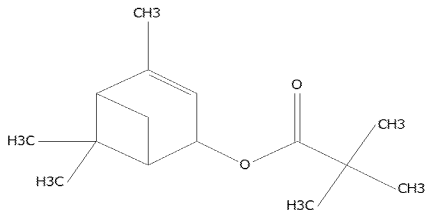




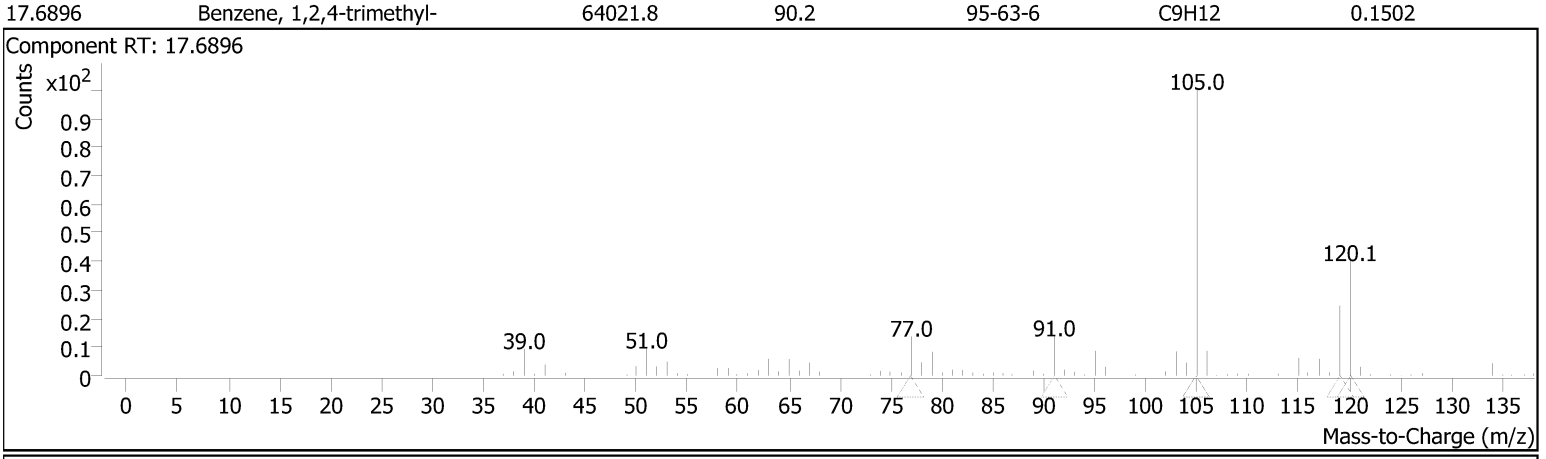


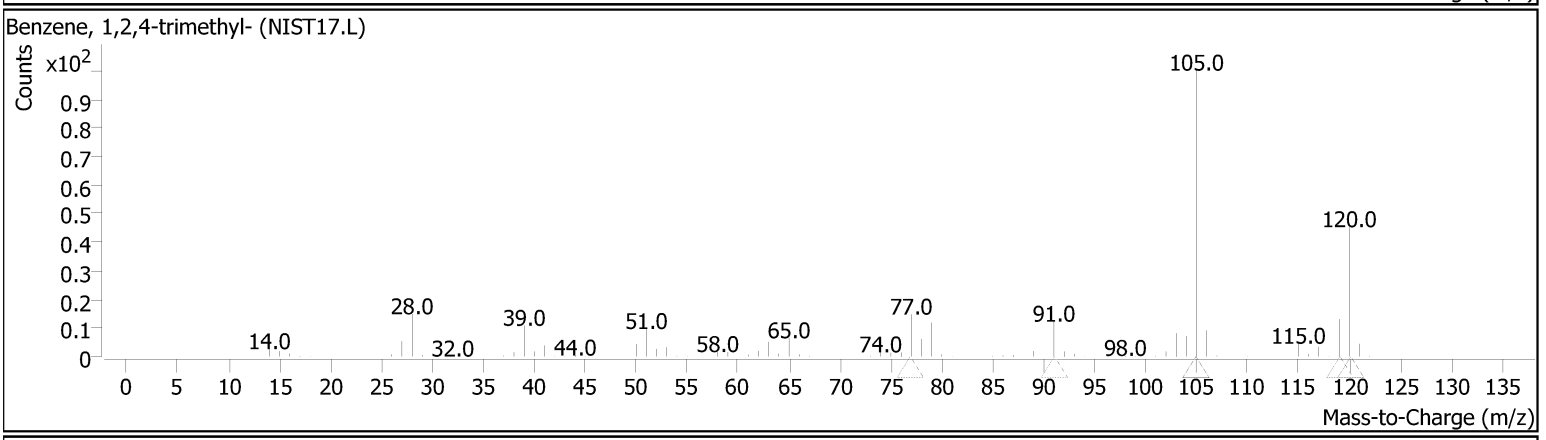


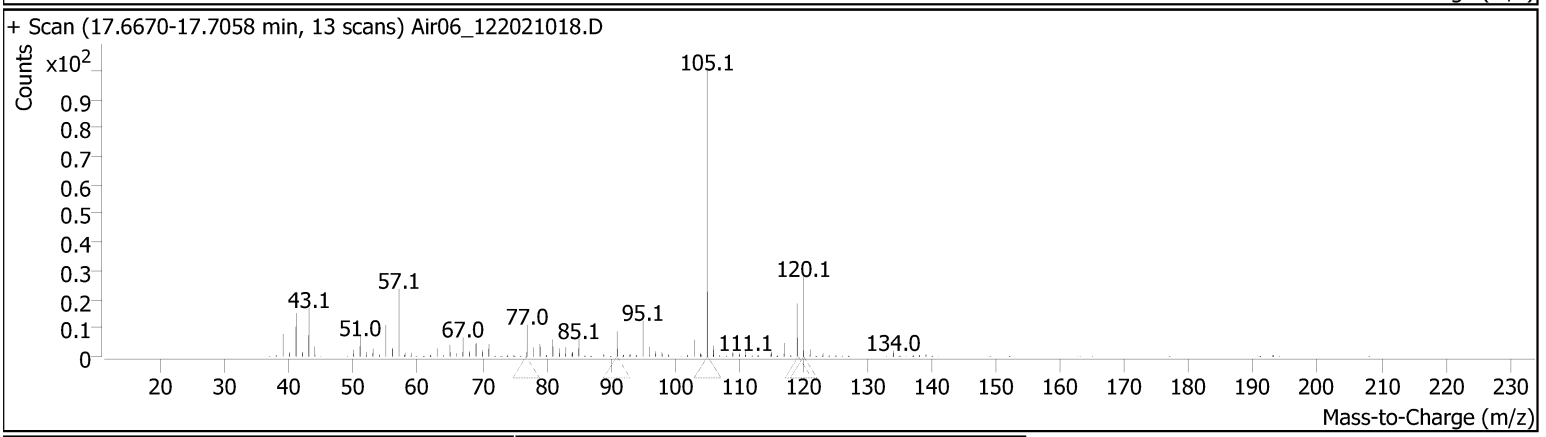


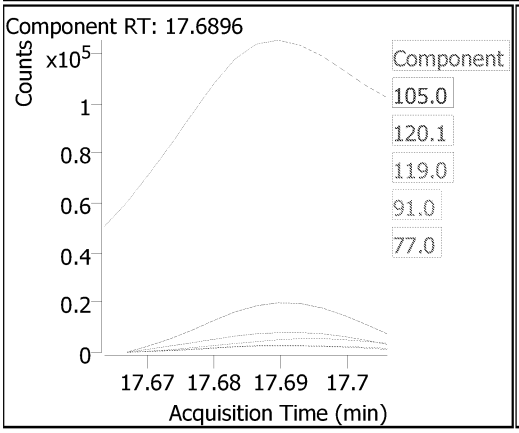


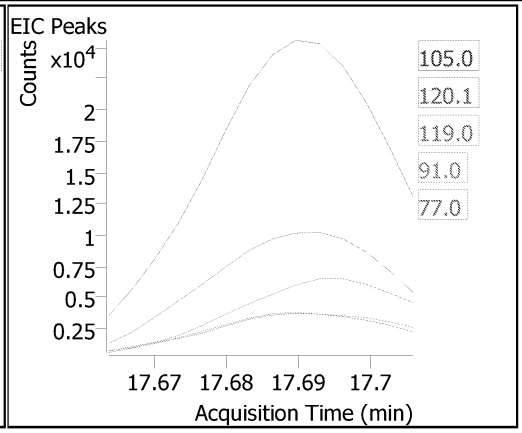
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.6896	Benzene, 1,2,4-trimethyl-	64021.8	90.2	95-63-6	C9H12	0.1502

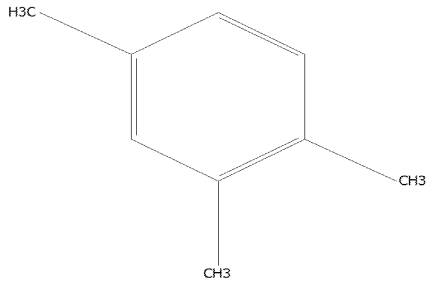




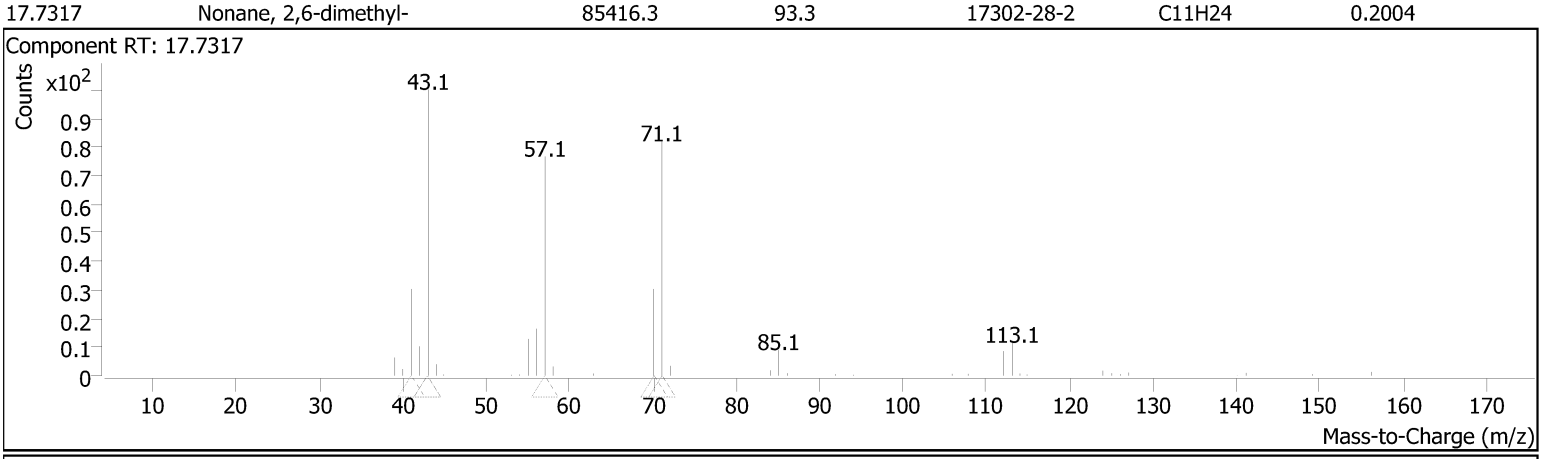


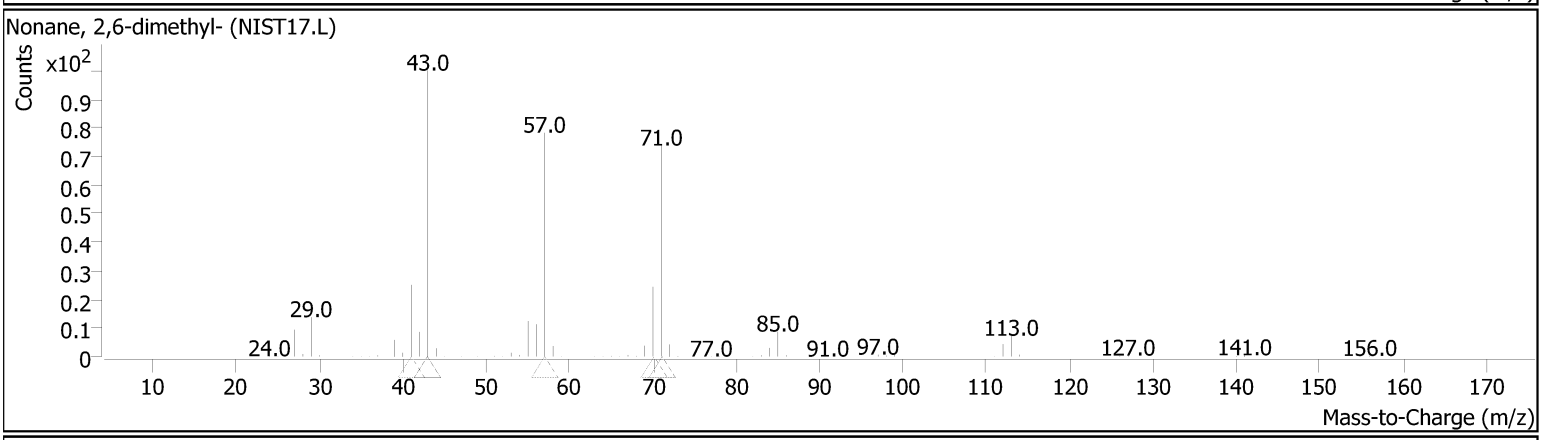


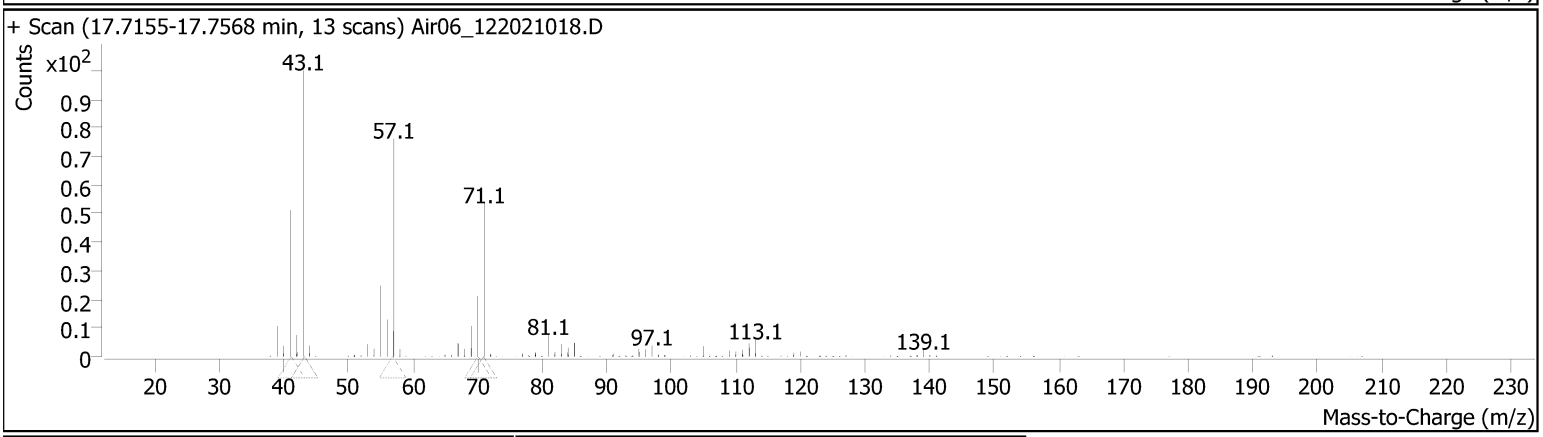


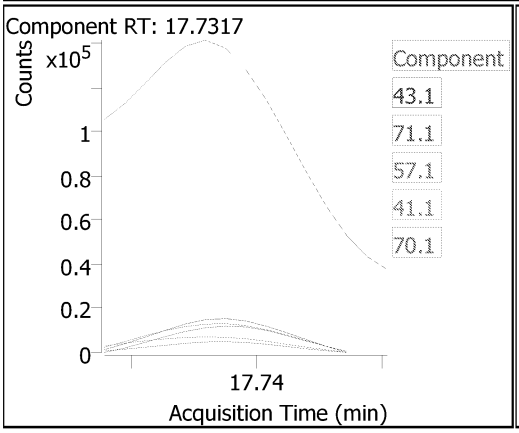


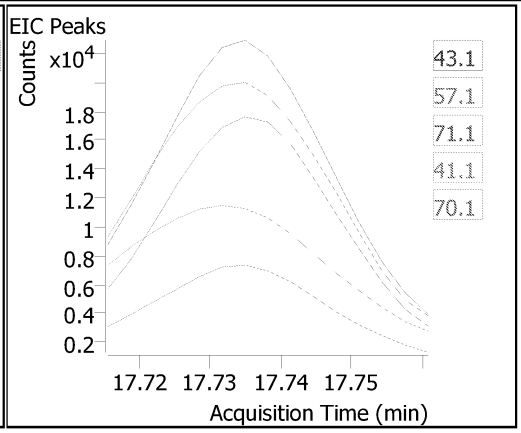
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.7317	Nonane, 2,6-dimethyl-	85416.3	93.3	17302-28-2	C11H24	0.2004

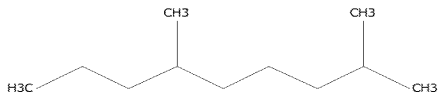




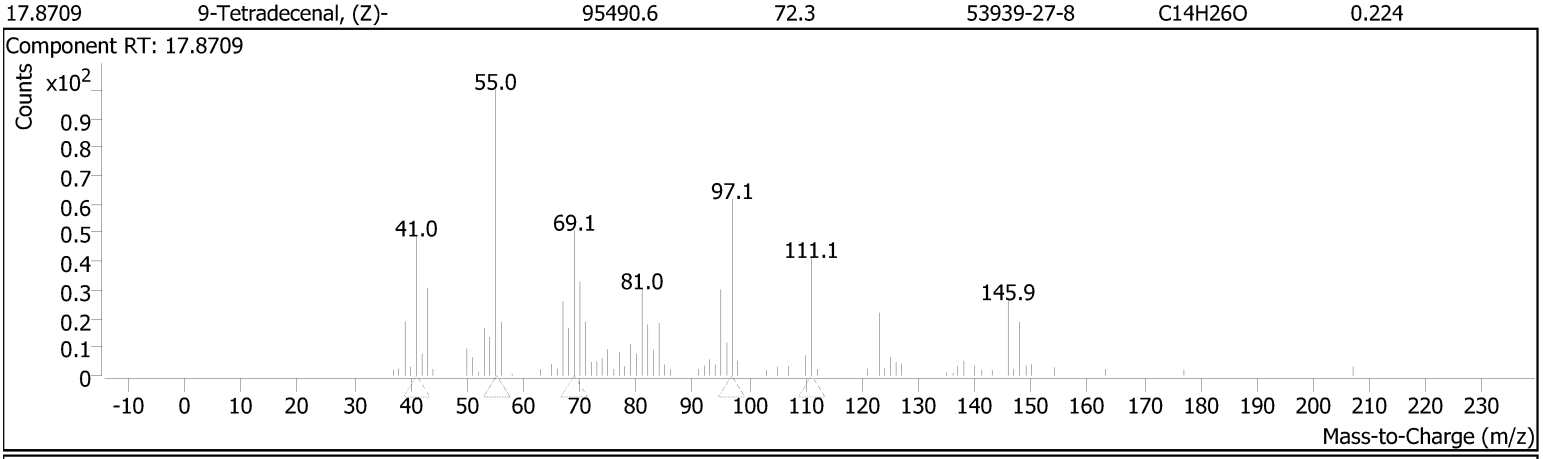


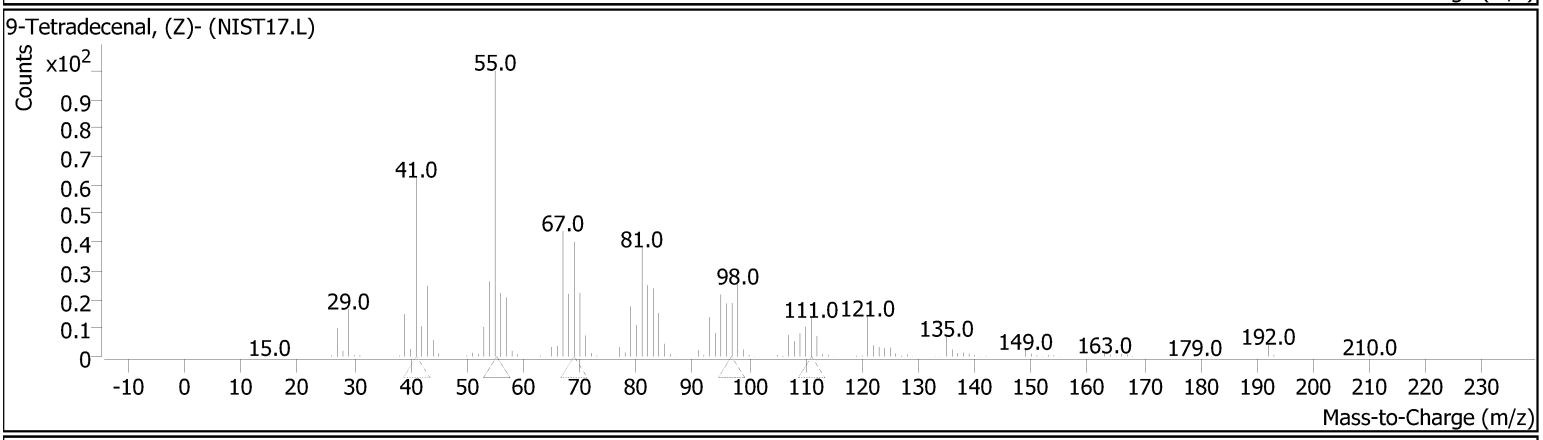


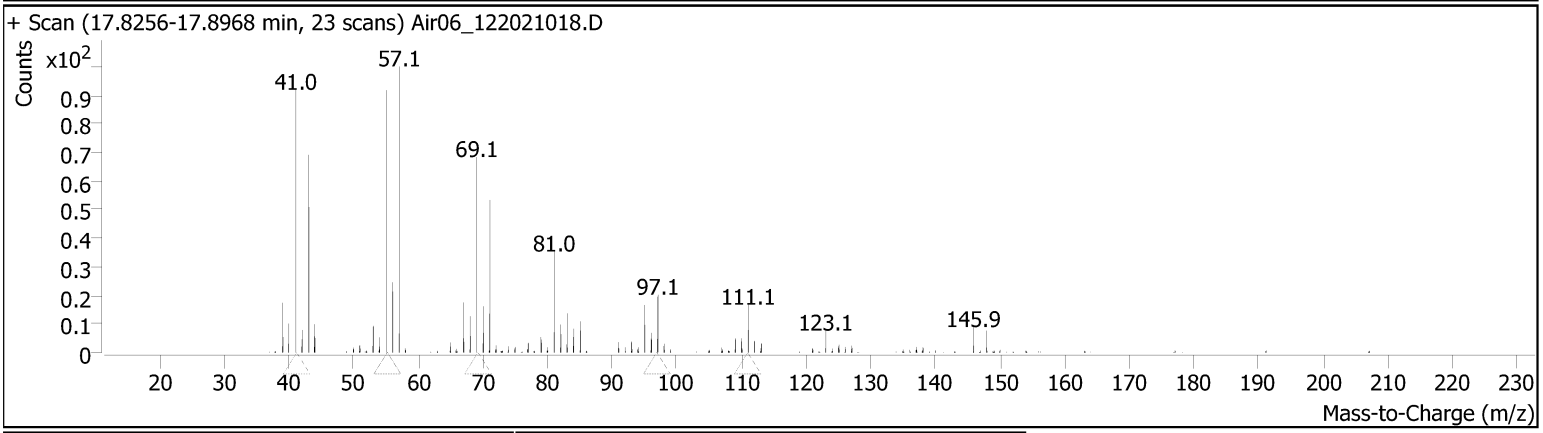


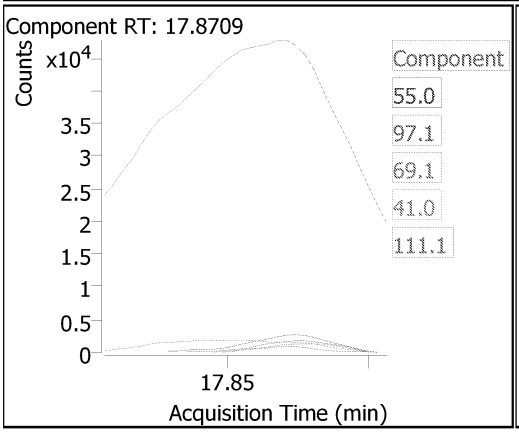


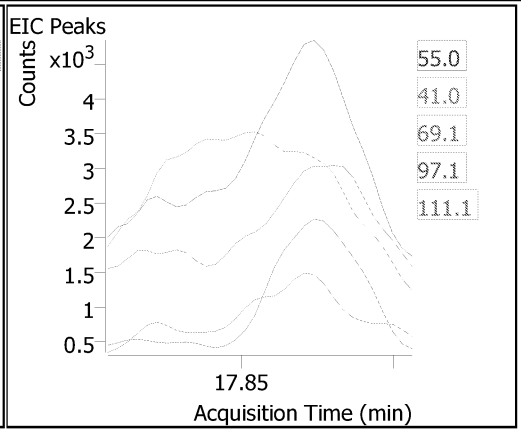
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.8709	9-Tetradecenal, (Z)-	95490.6	72.3	53939-27-8	C14H26O	0.224

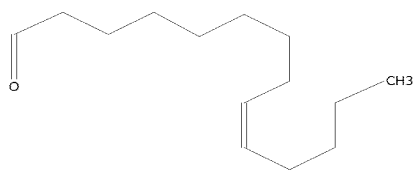




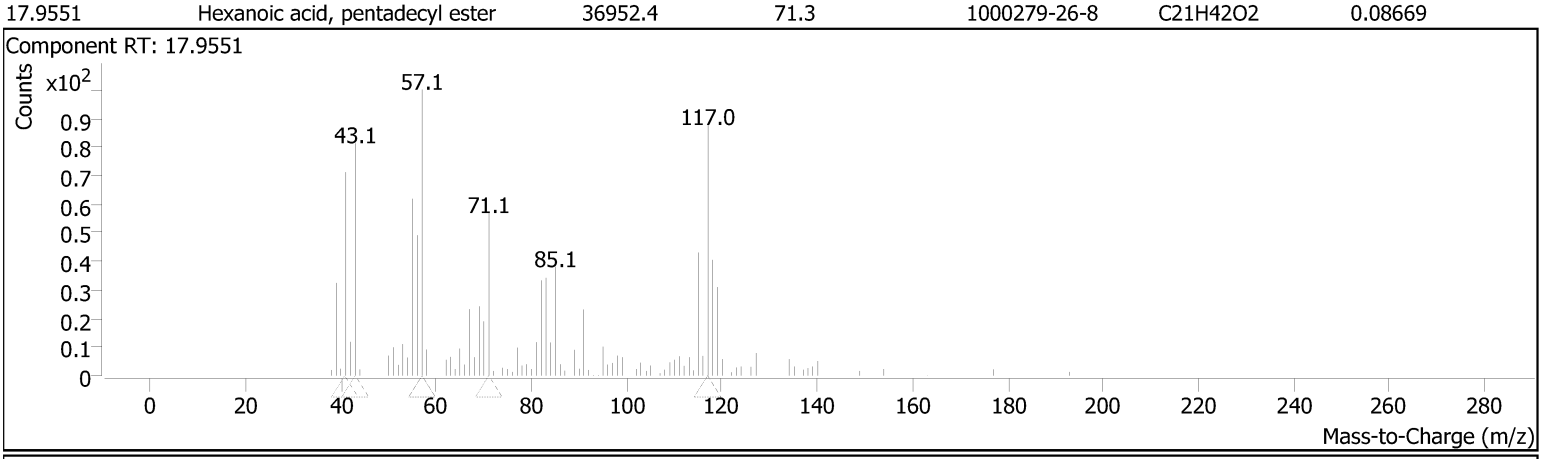


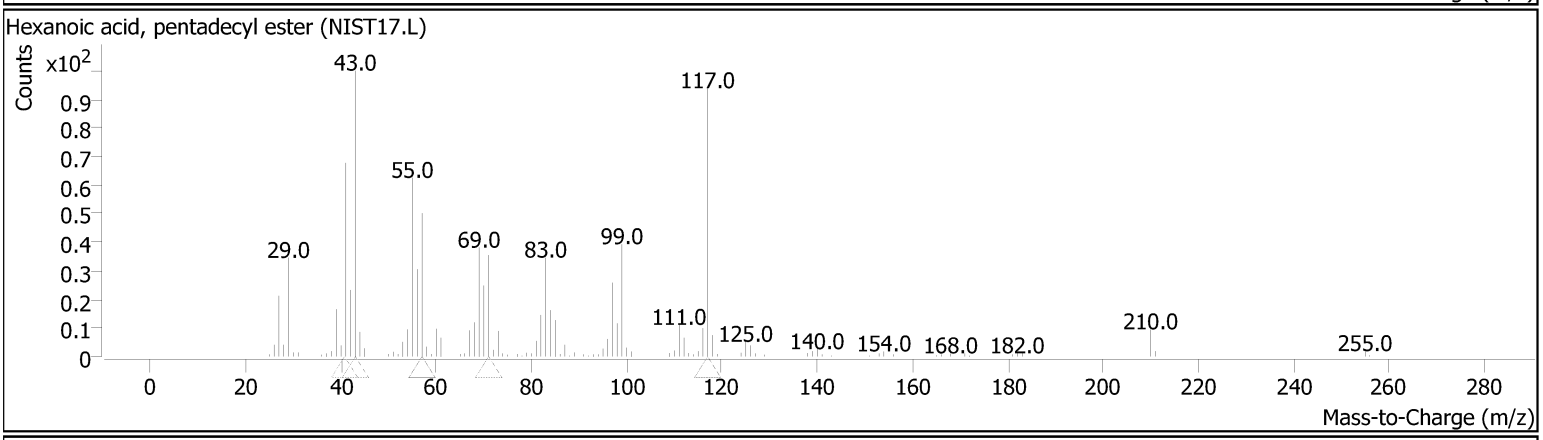


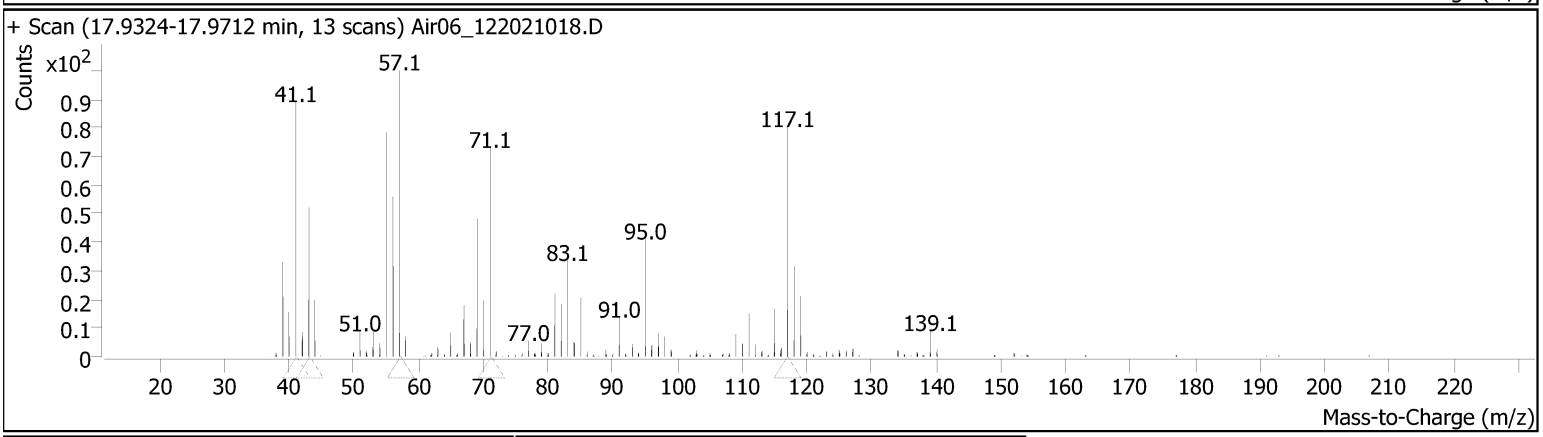


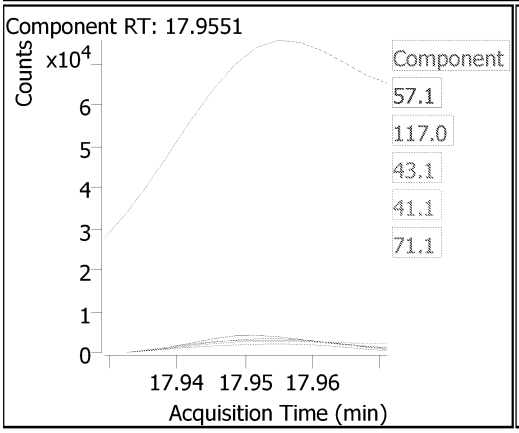


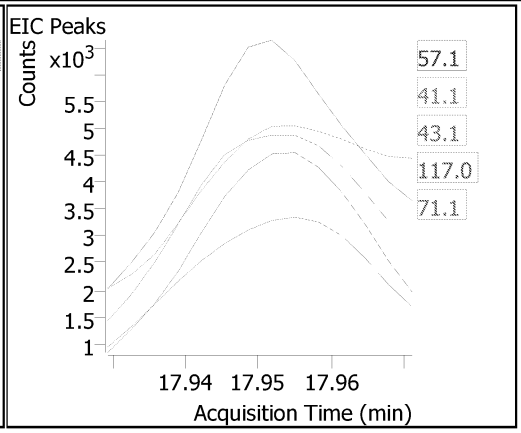
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.9551	Hexanoic acid, pentadecyl ester	36952.4	71.3	1000279-26-8	C21H42O2	0.08669

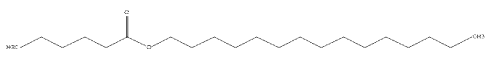




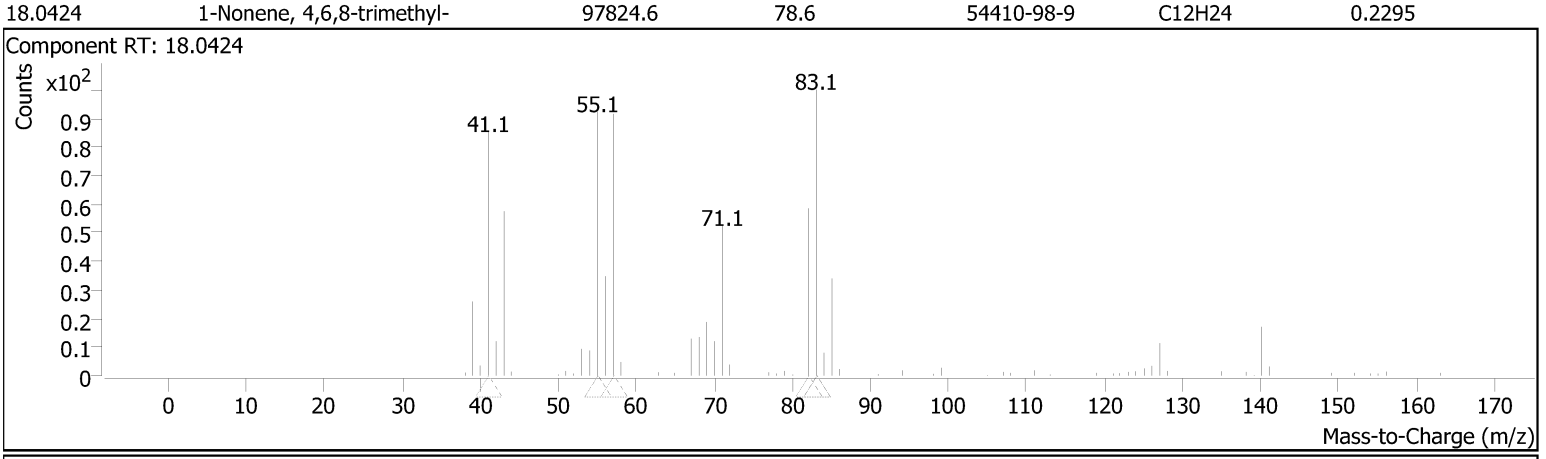


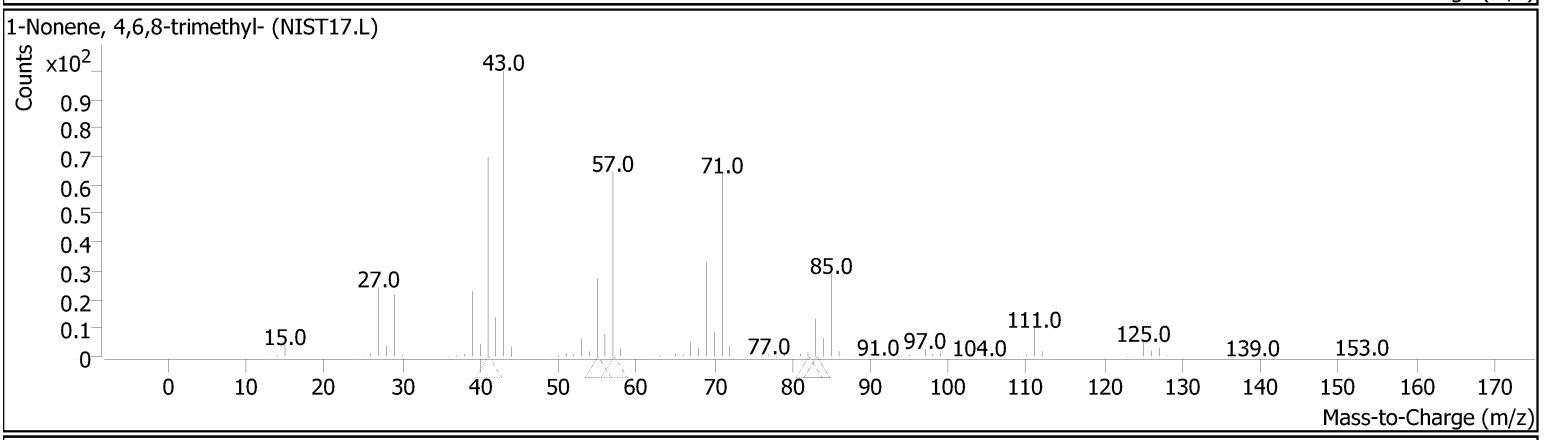


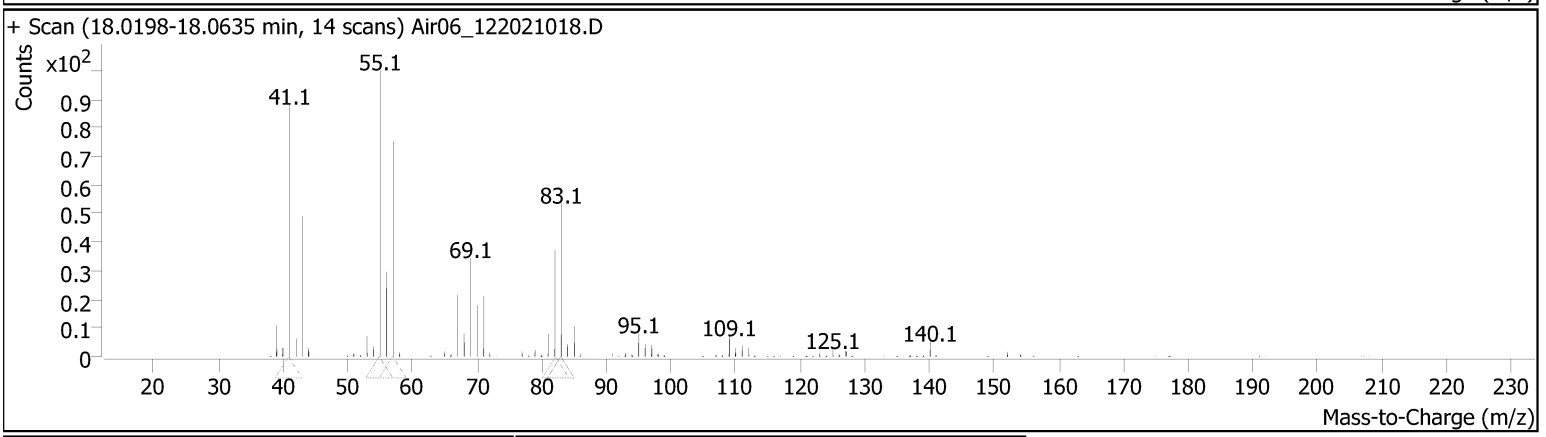


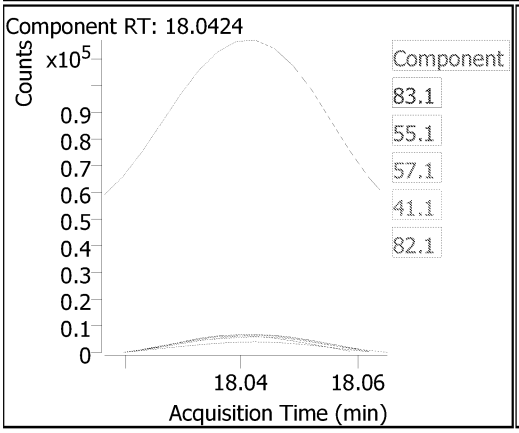


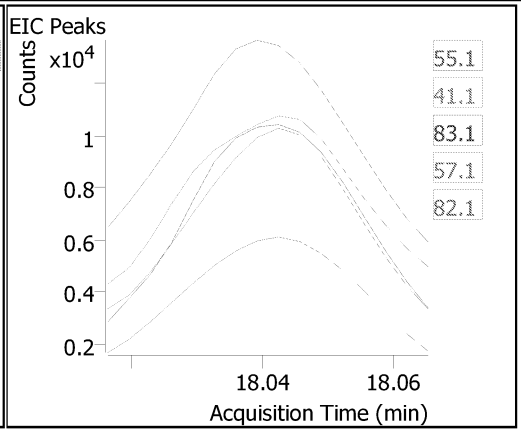
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.0424	1-Nonene, 4,6,8-trimethyl-	97824.6	78.6	54410-98-9	C12H24	0.2295

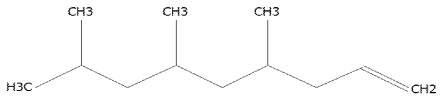




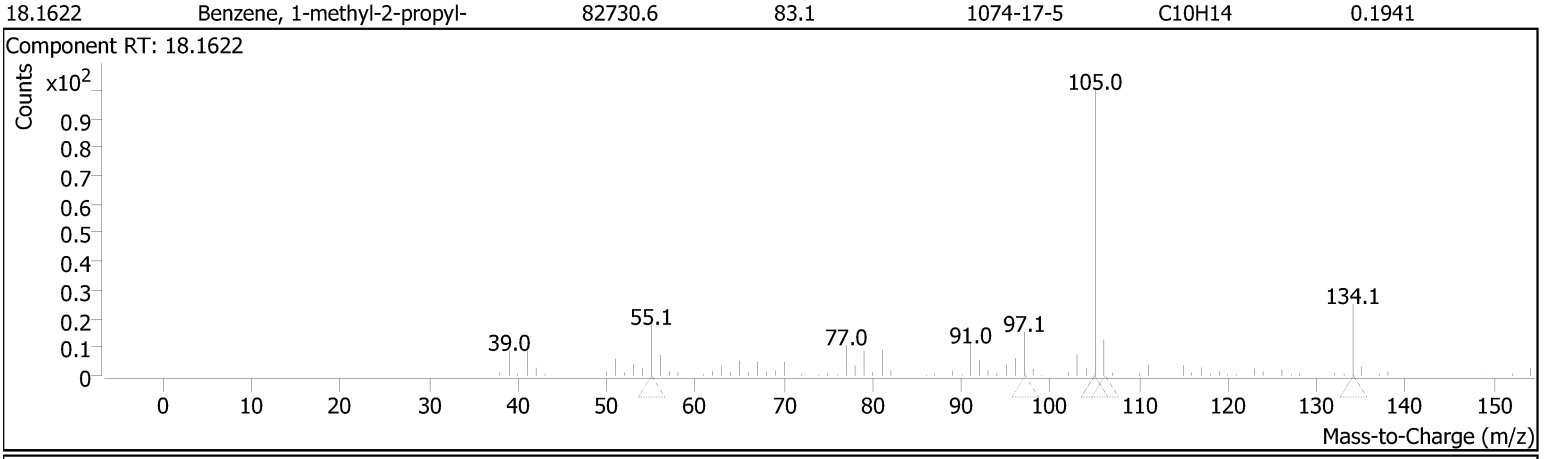


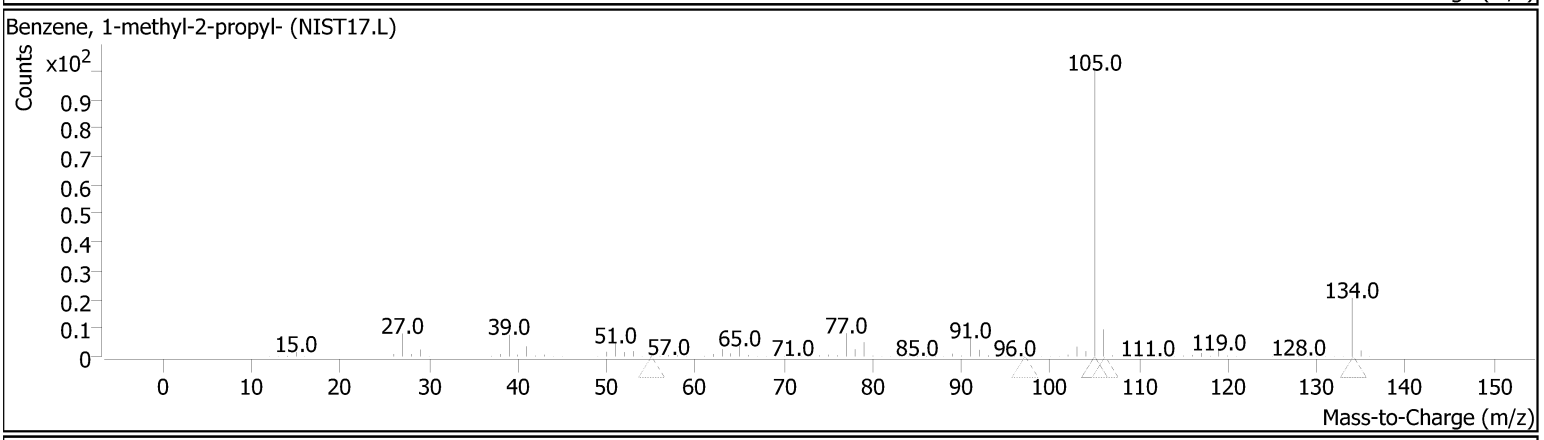


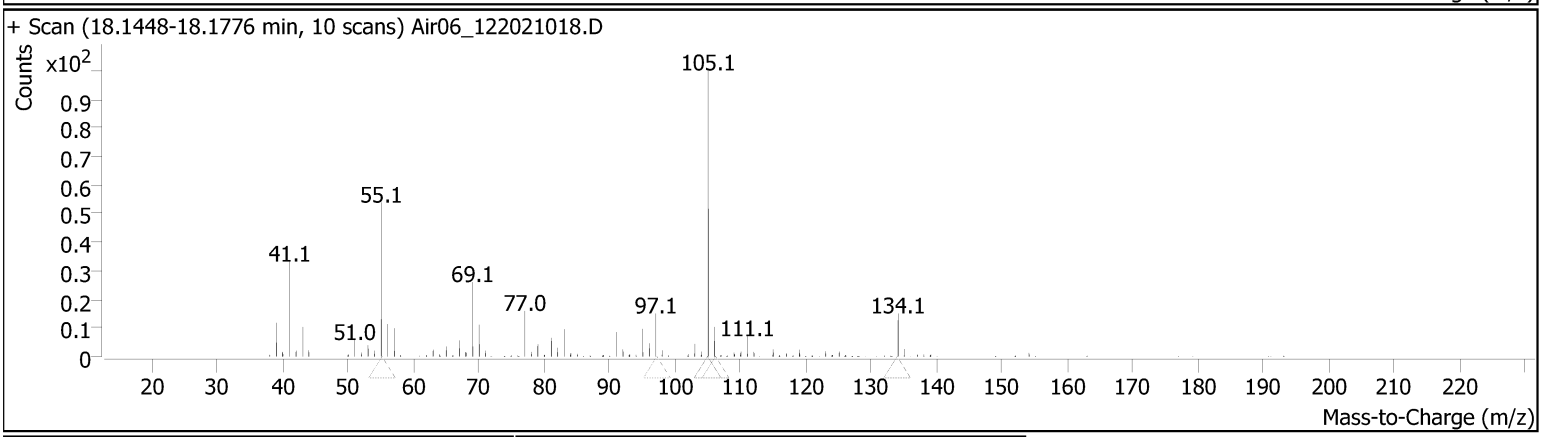


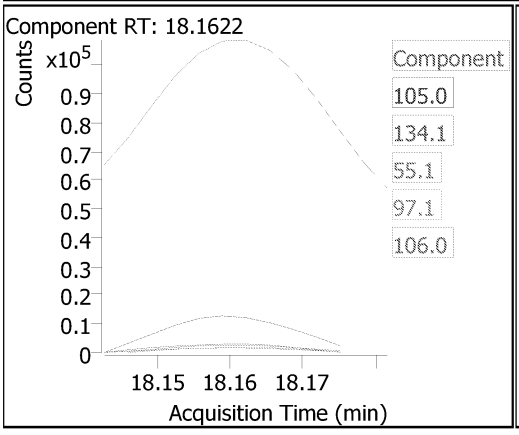


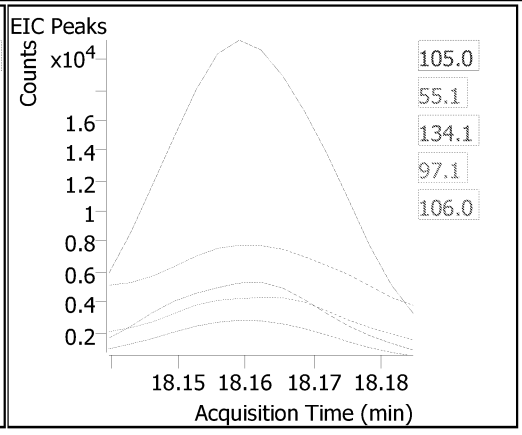
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.1622	Benzene, 1-methyl-2-propyl-	82730.6	83.1	1074-17-5	C10H14	0.1941

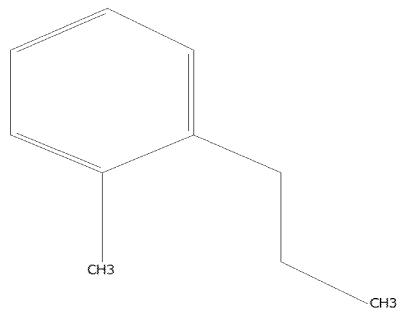




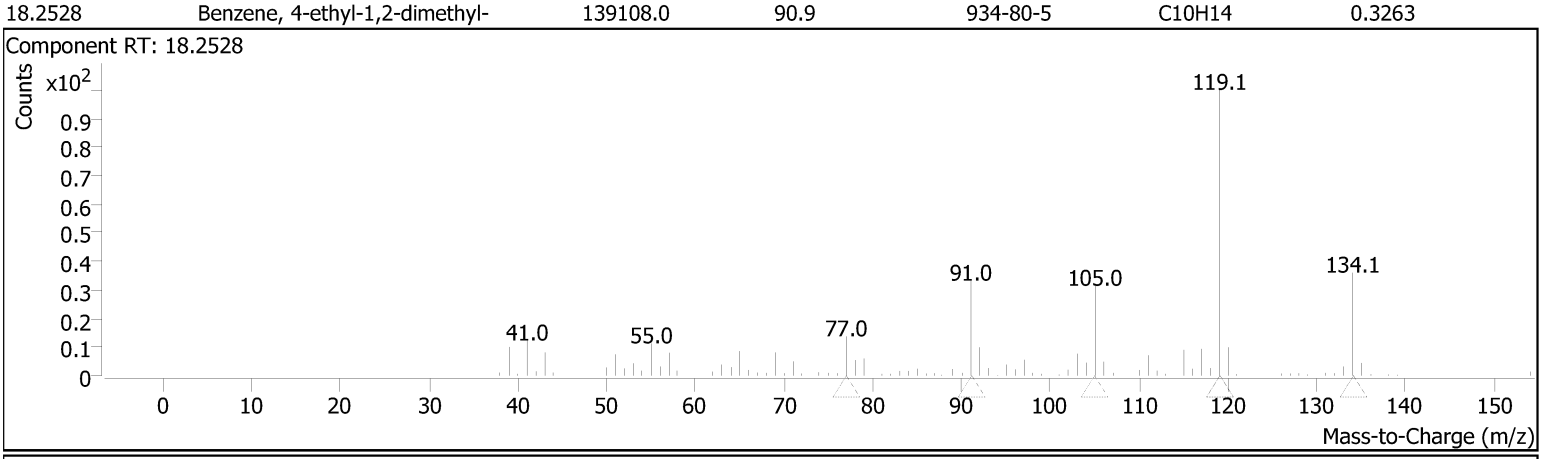


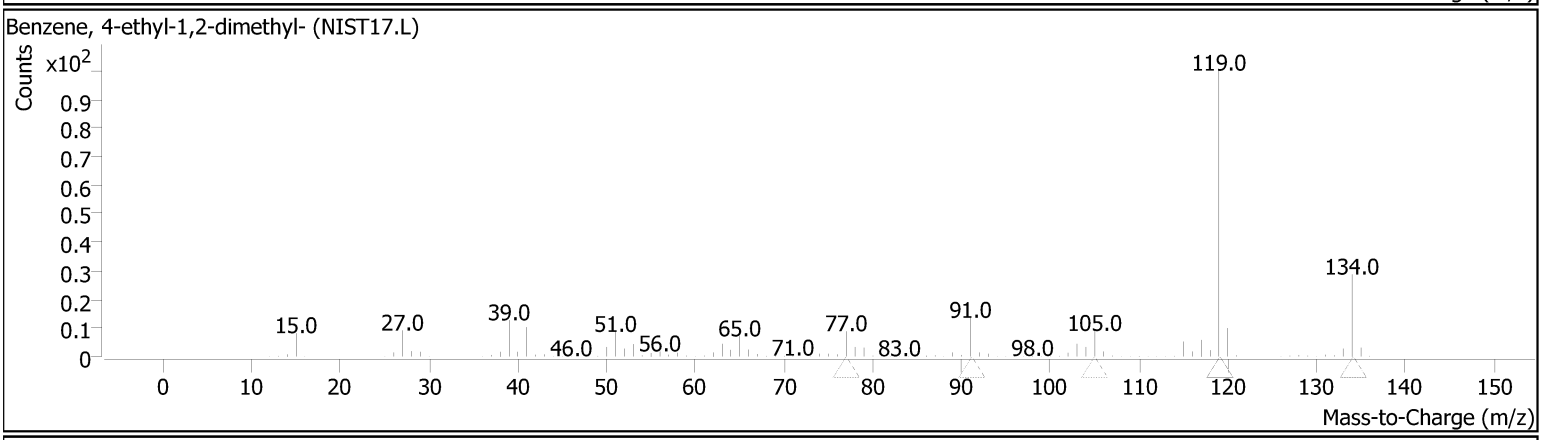


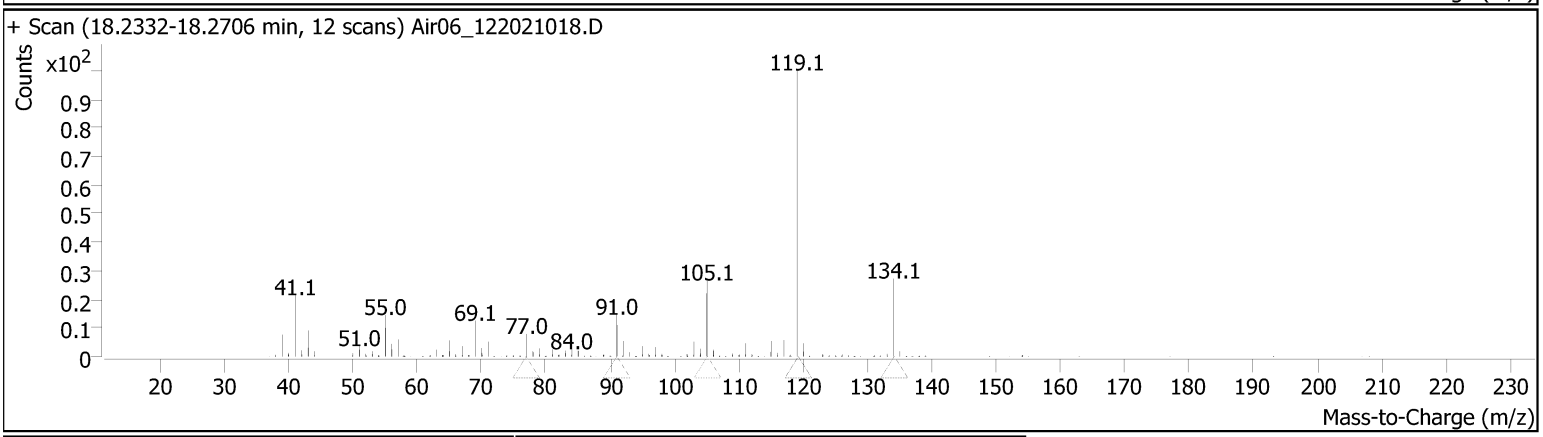


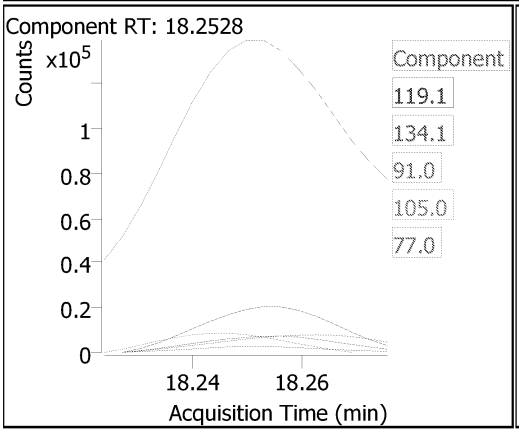


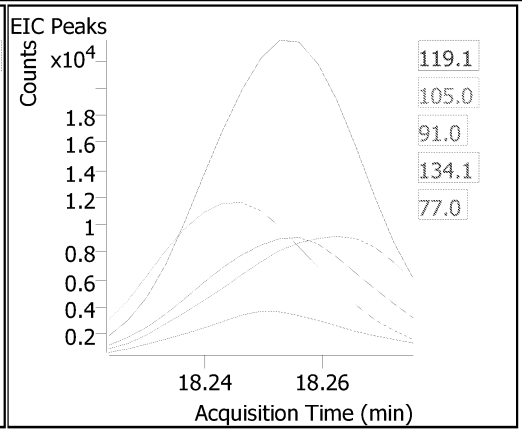
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.2528	Benzene, 4-ethyl-1,2-dimethyl-	139108.0	90.9	934-80-5	C10H14	0.3263

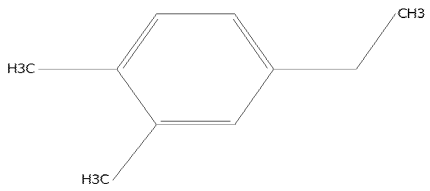




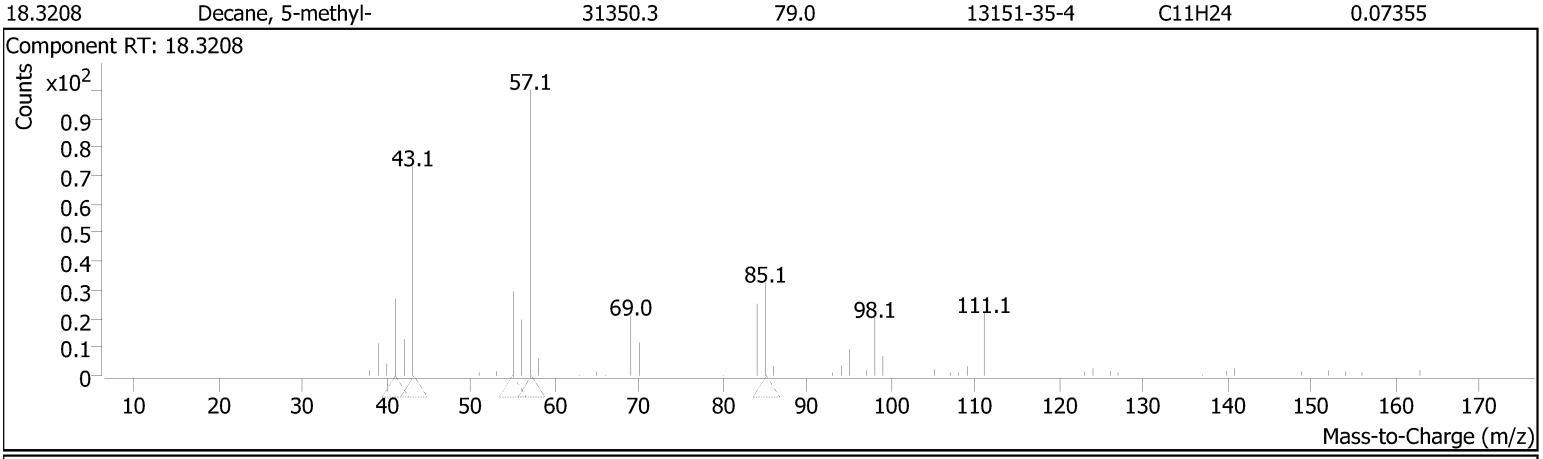


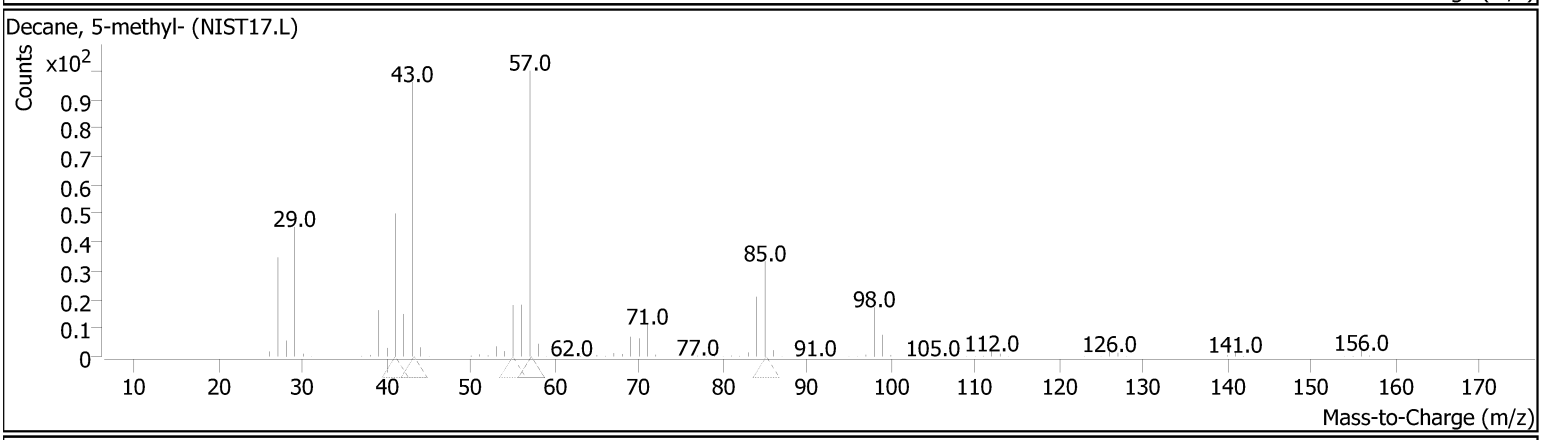


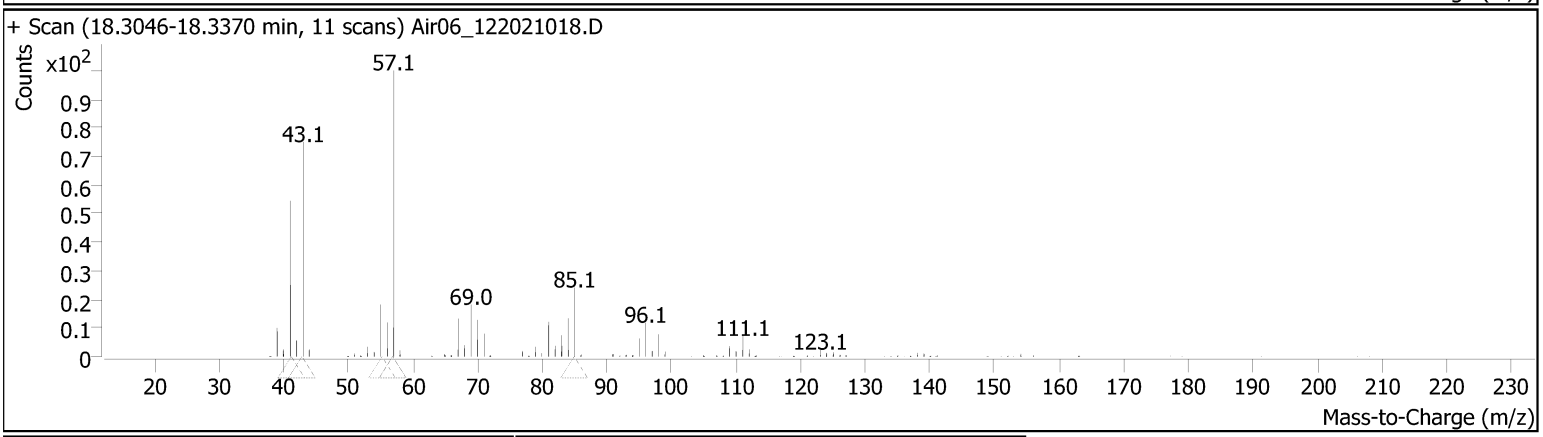


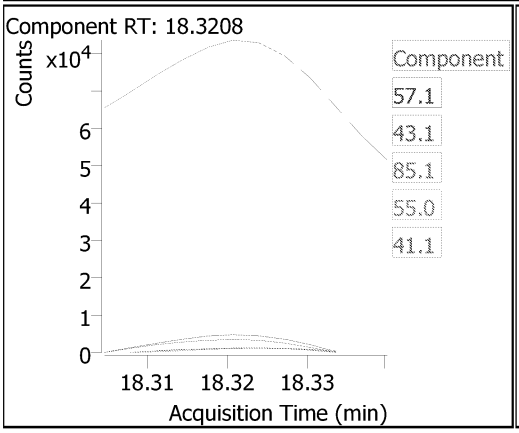


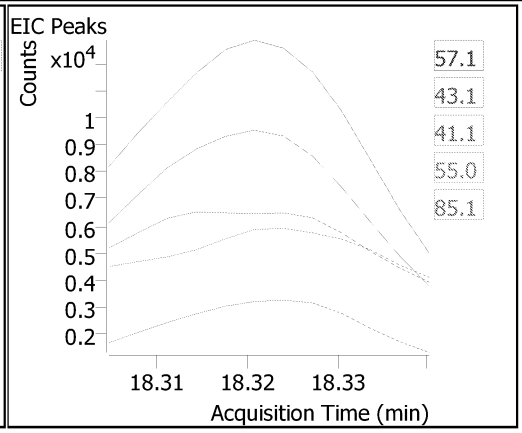
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3208	Decane, 5-methyl-	31350.3	79.0	13151-35-4	C11H24	0.07355

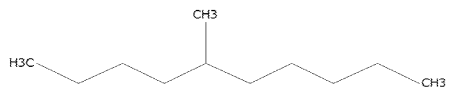




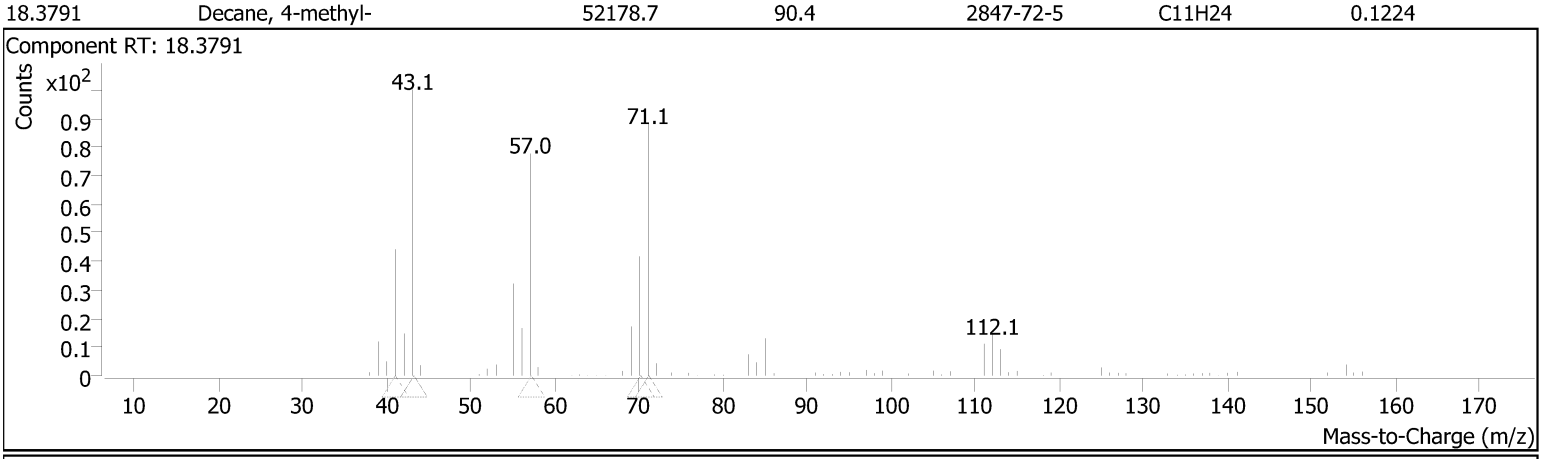


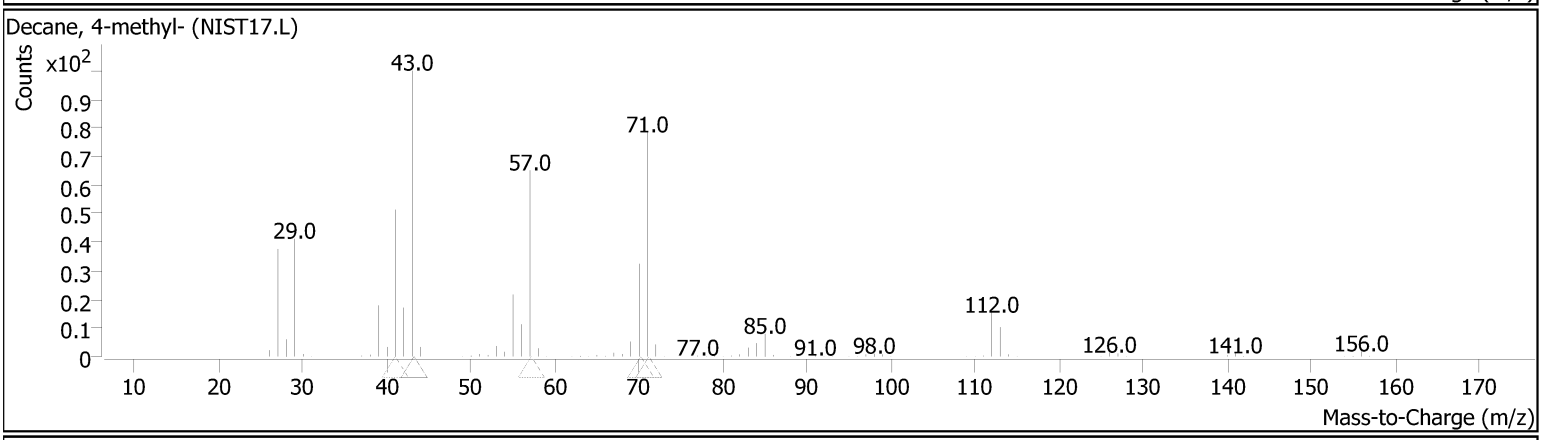


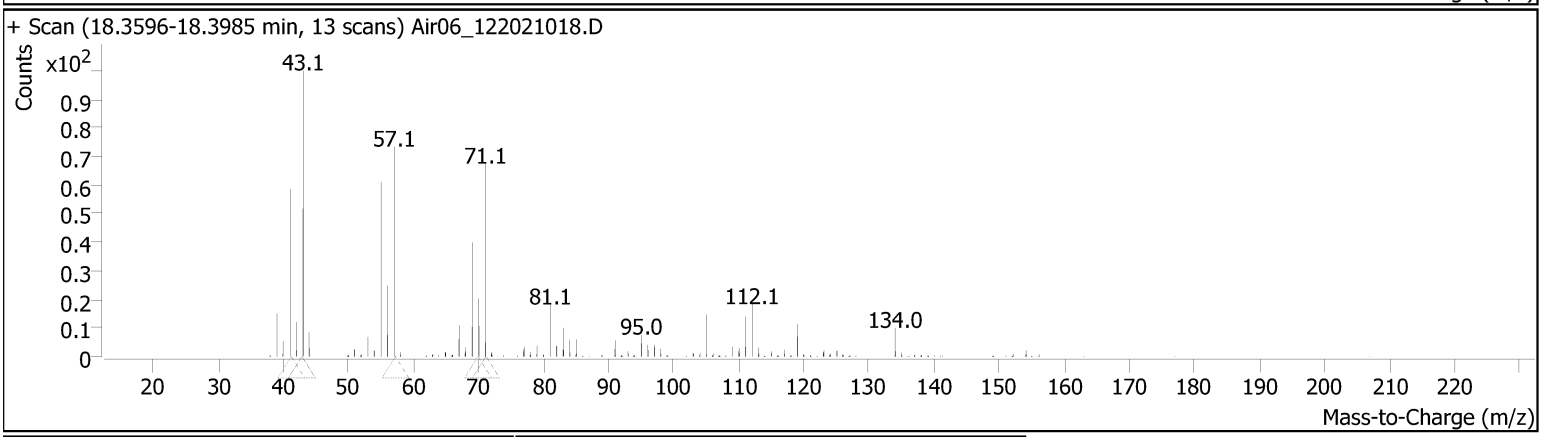


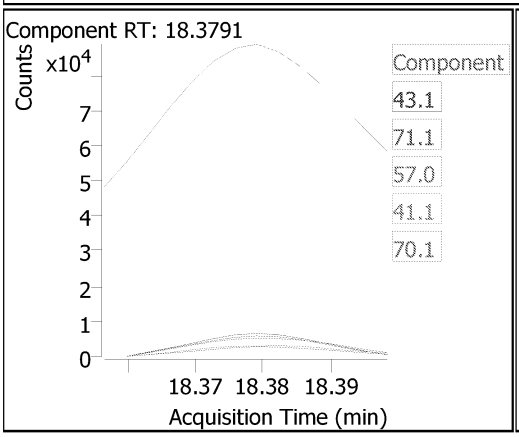


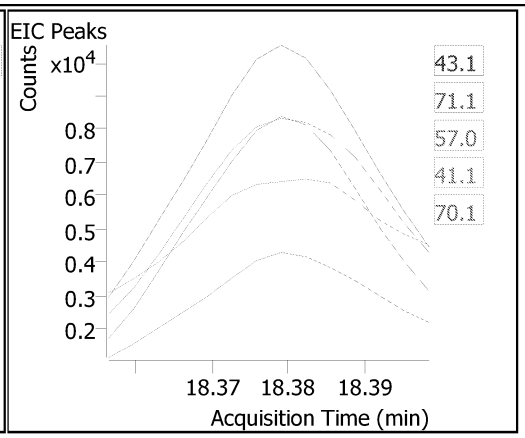
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3791	Decane, 4-methyl-	52178.7	90.4	2847-72-5	C11H24	0.1224

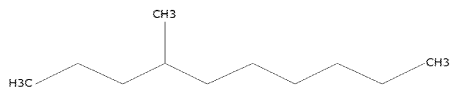




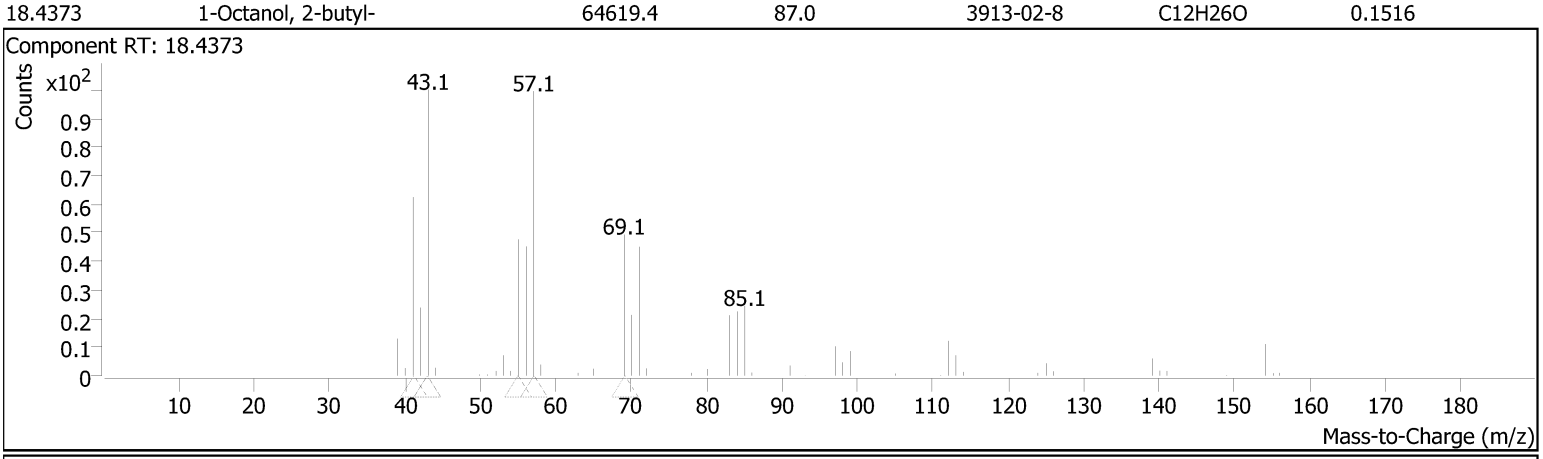


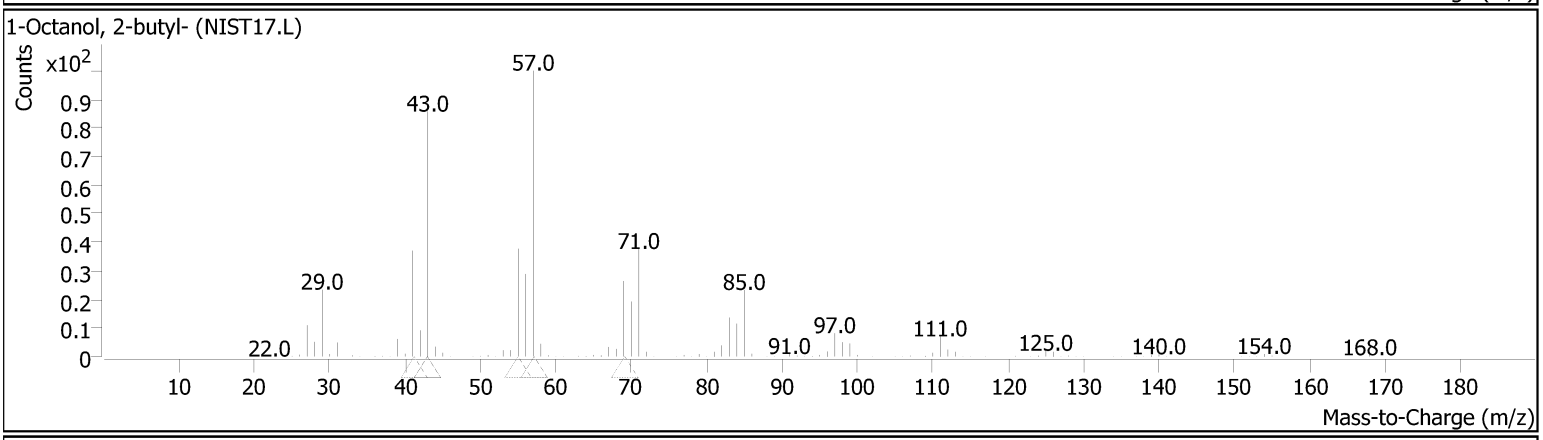


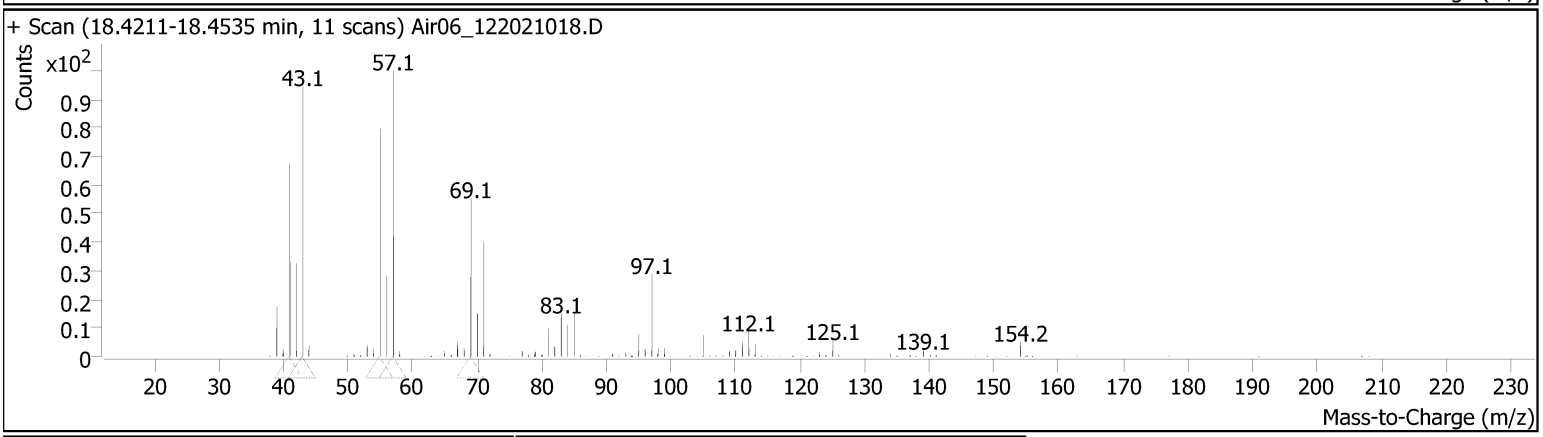


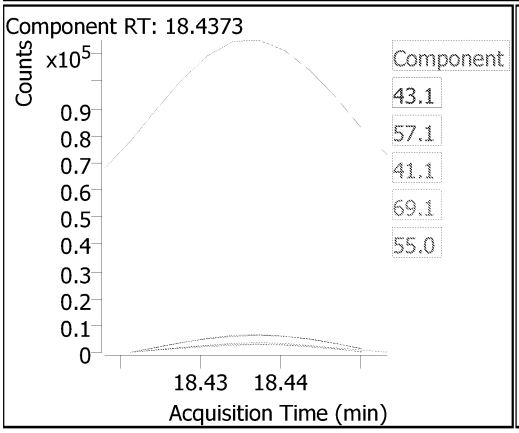


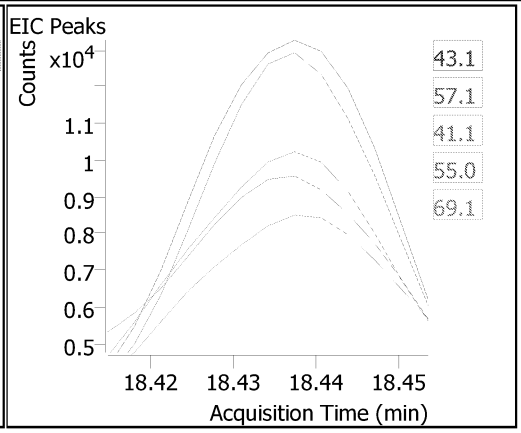
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.4373	1-Octanol, 2-butyl-	64619.4	87.0	3913-02-8	C12H26O	0.1516

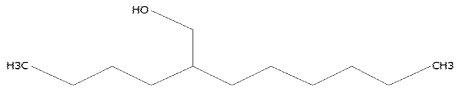




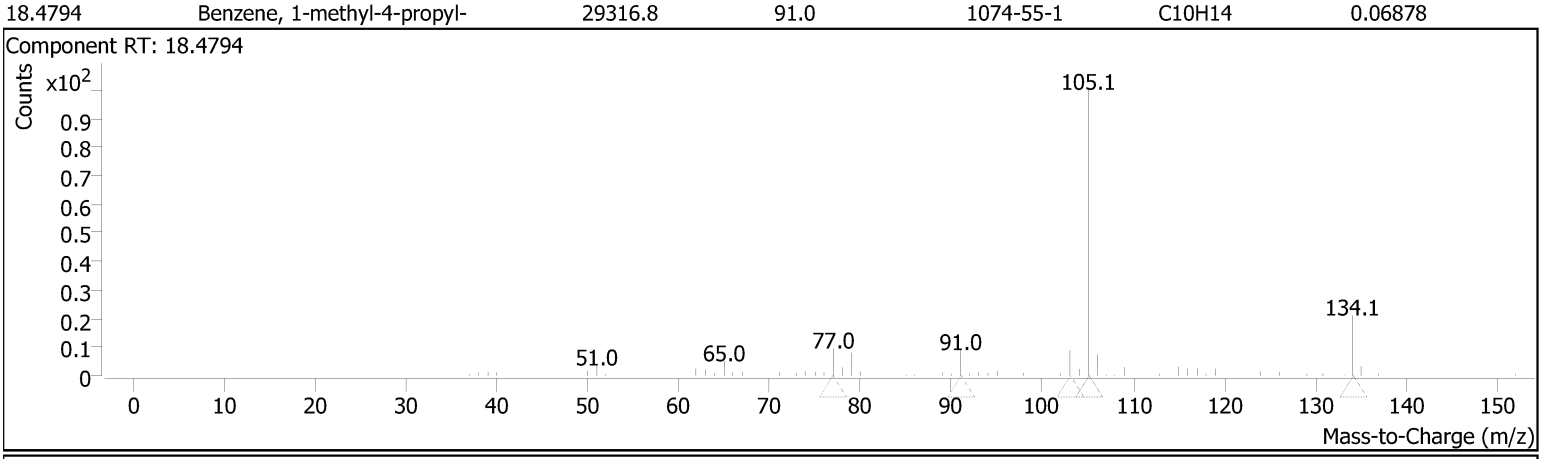


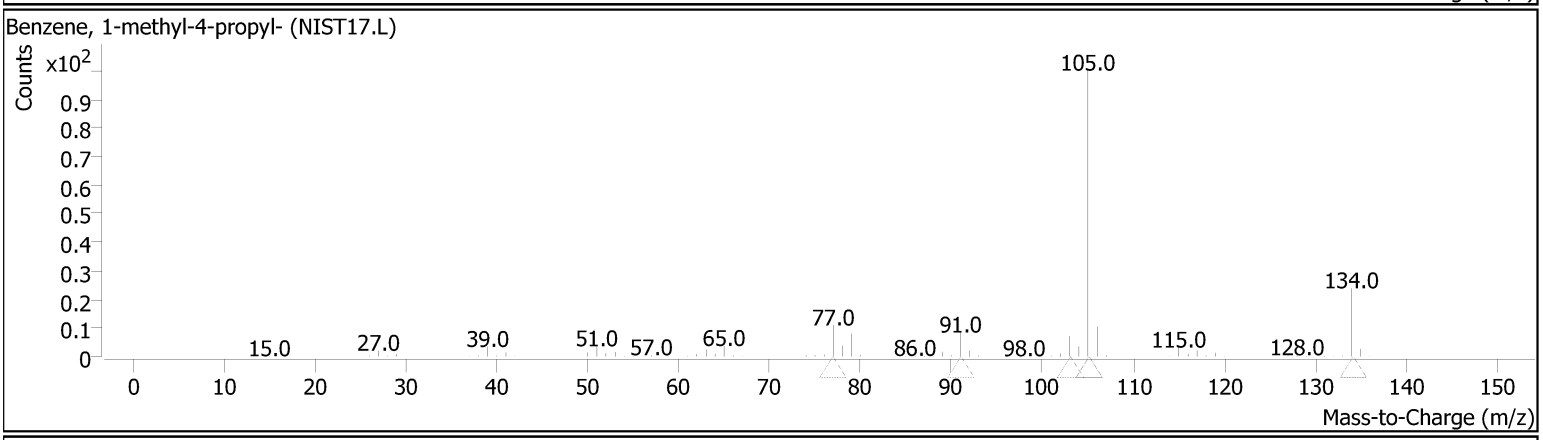


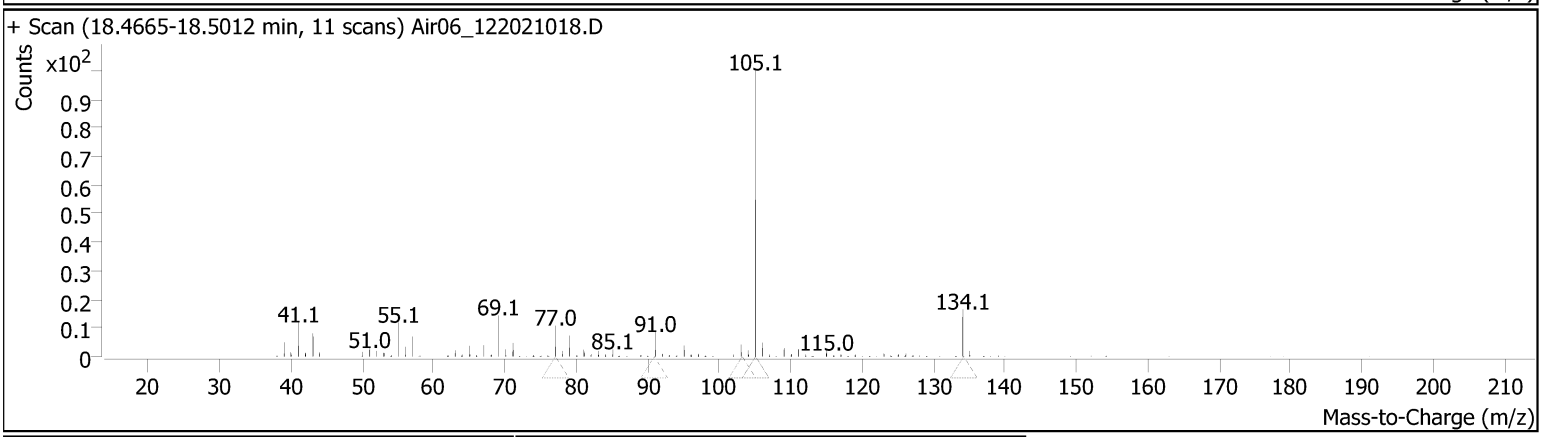


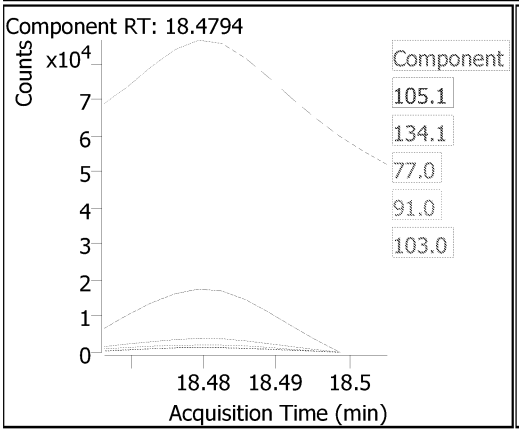


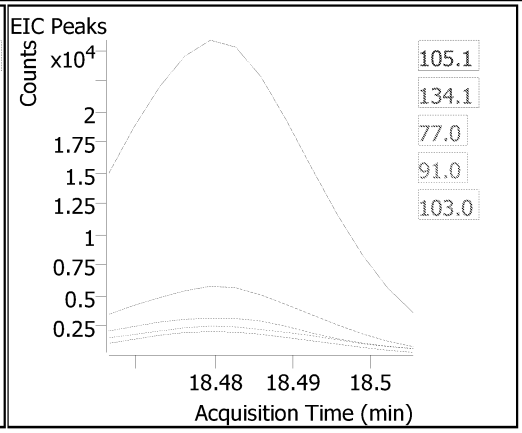
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.4794	Benzene, 1-methyl-4-propyl-	29316.8	91.0	1074-55-1	C10H14	0.06878

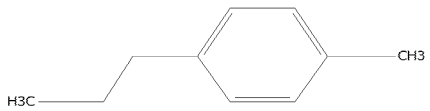




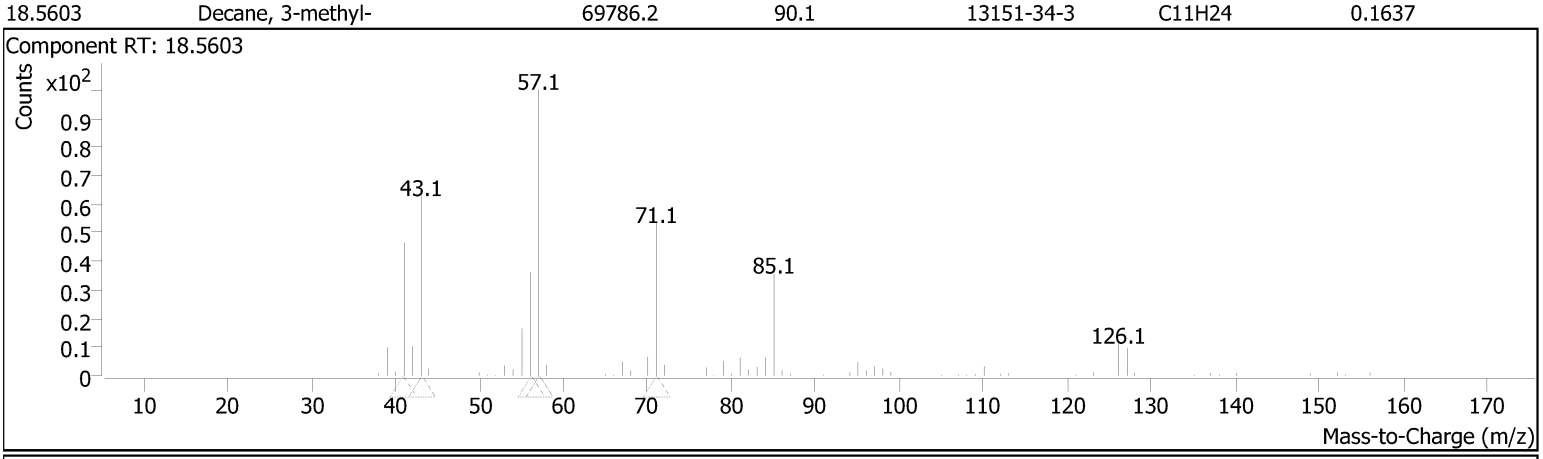


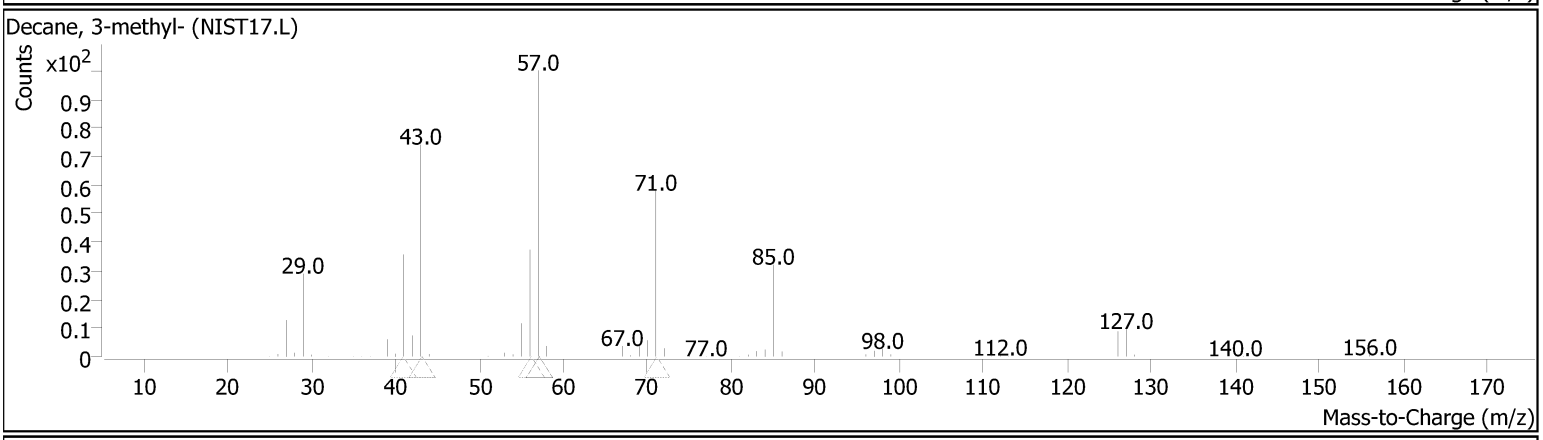


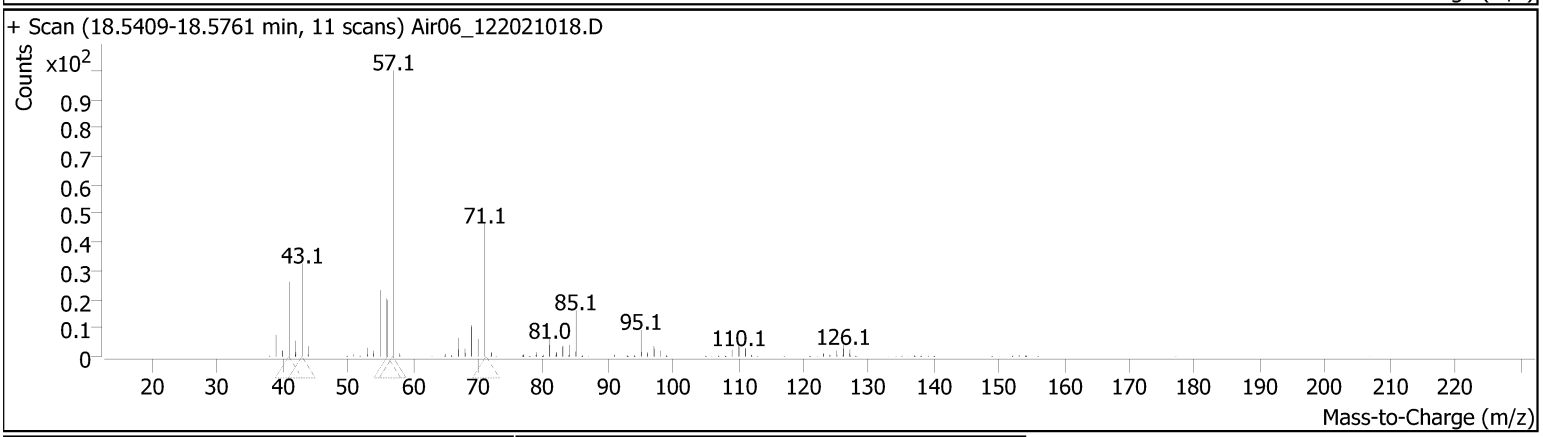


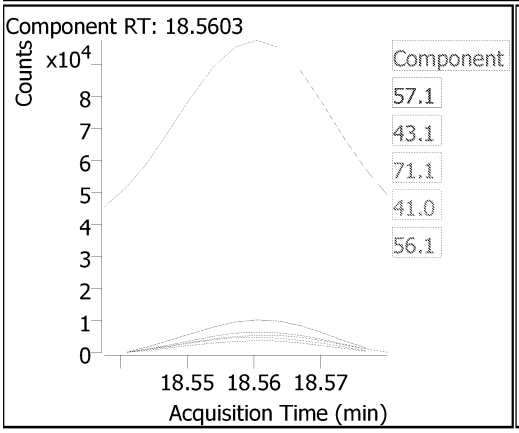


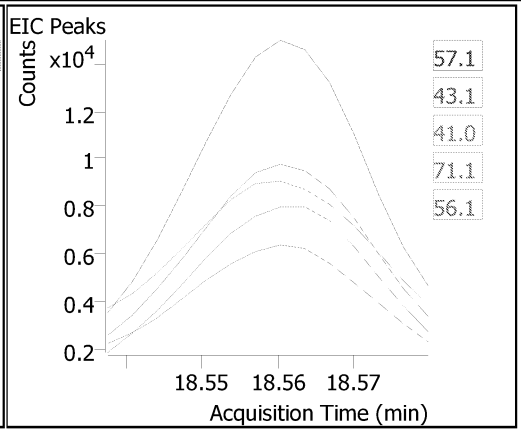
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.5603	Decane, 3-methyl-	69786.2	90.1	13151-34-3	C11H24	0.1637

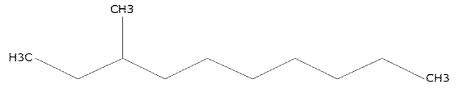








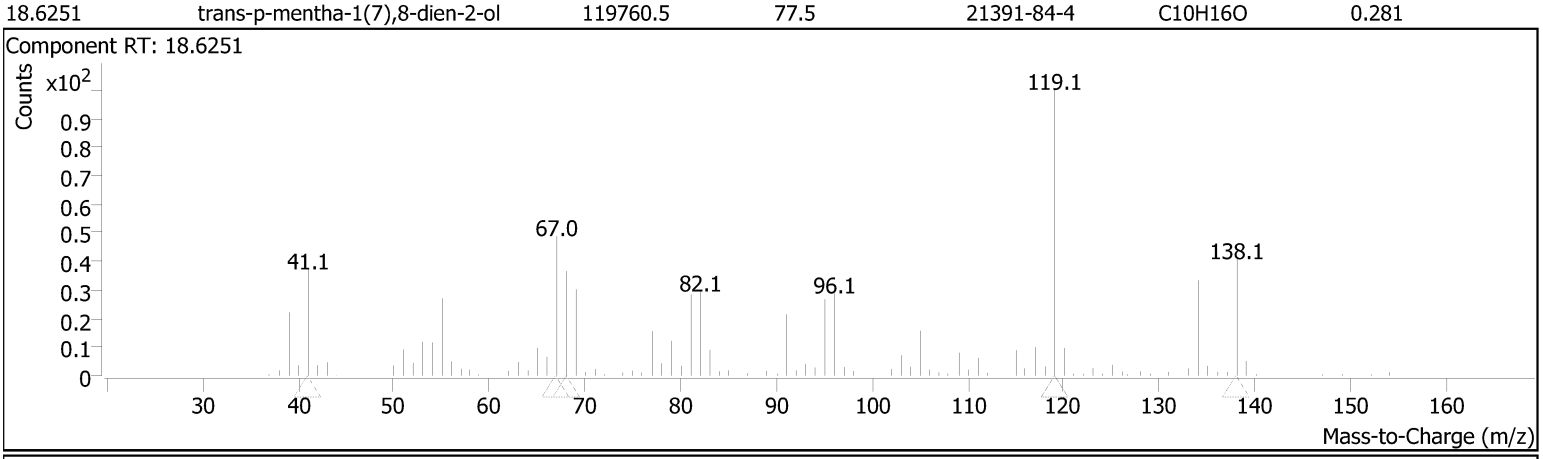


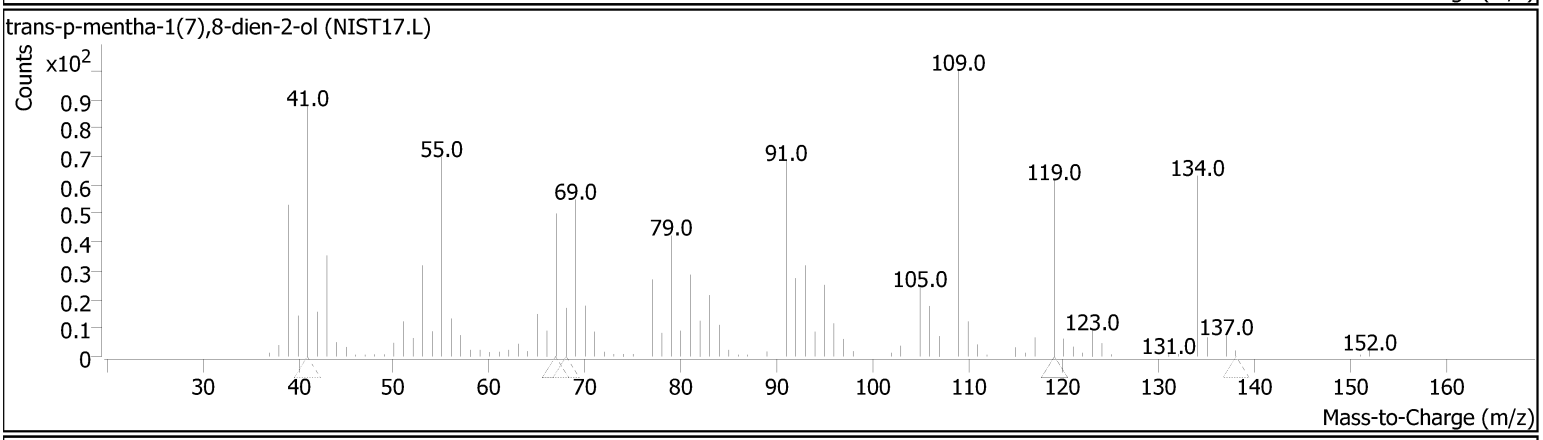


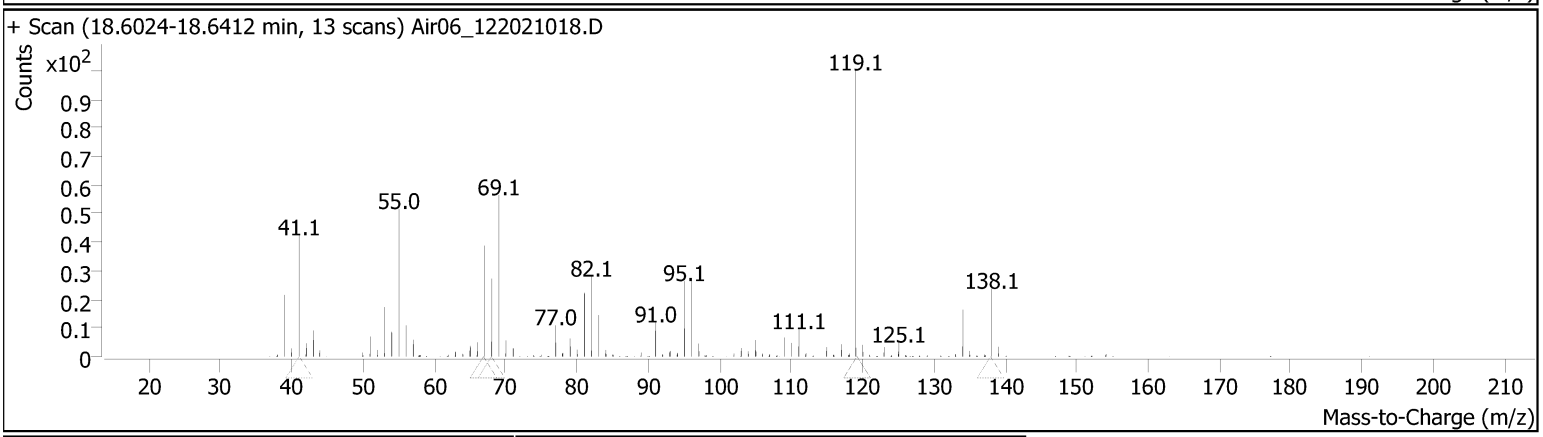
Library Search Results - NonTarget Hits with Details

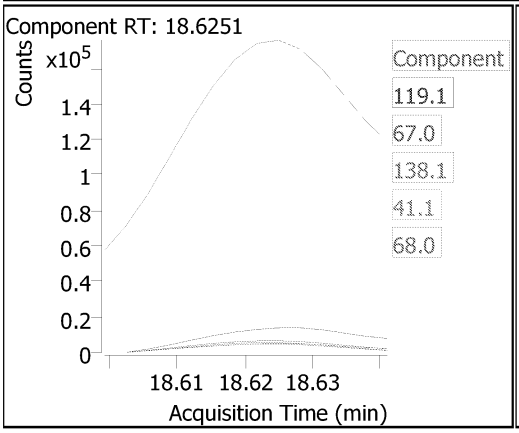
Agilent Technologies

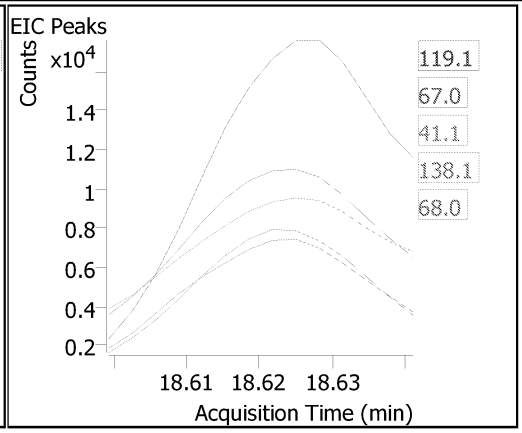
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.6251	trans-p-mentha-1(7),8-dien-2-ol	119760.5	77.5	21391-84-4	C10H16O	0.281

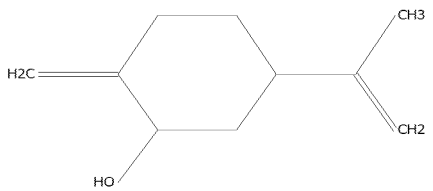




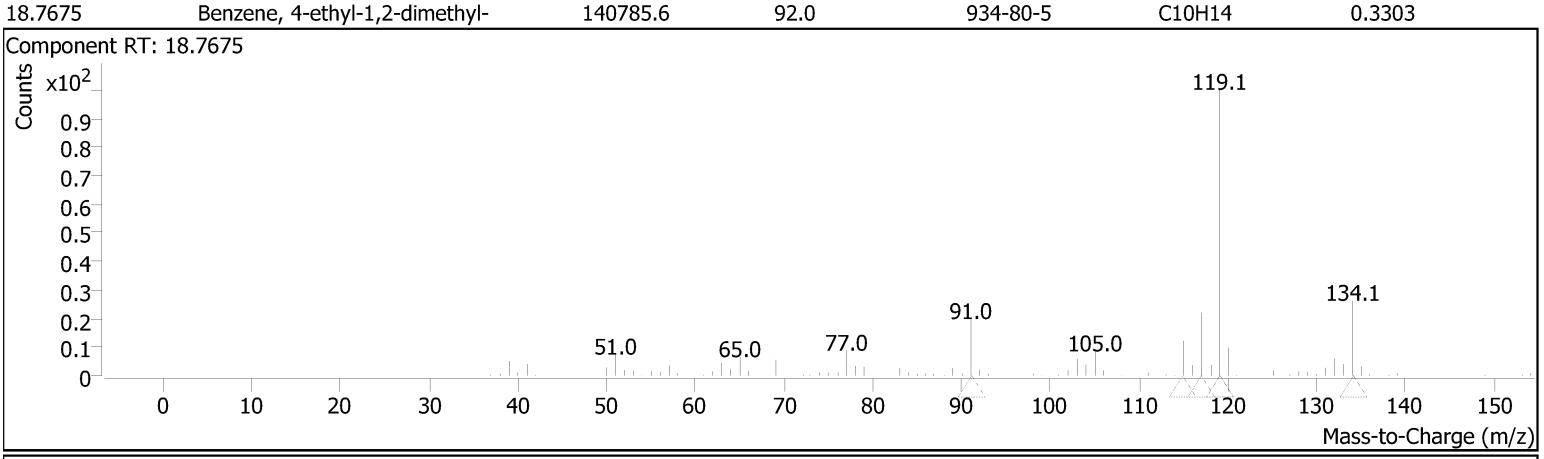


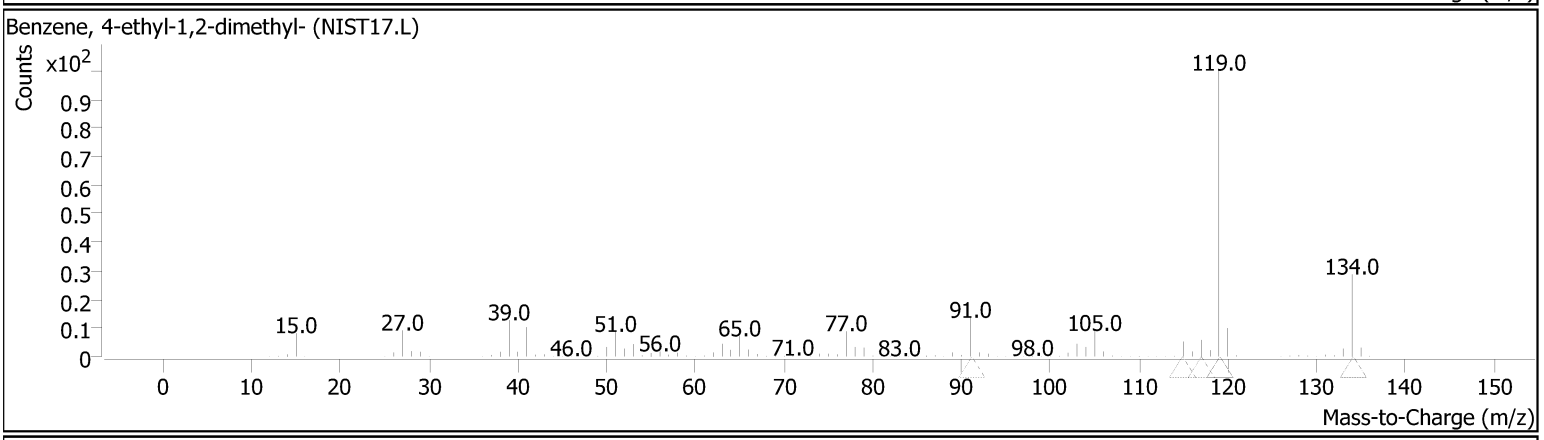


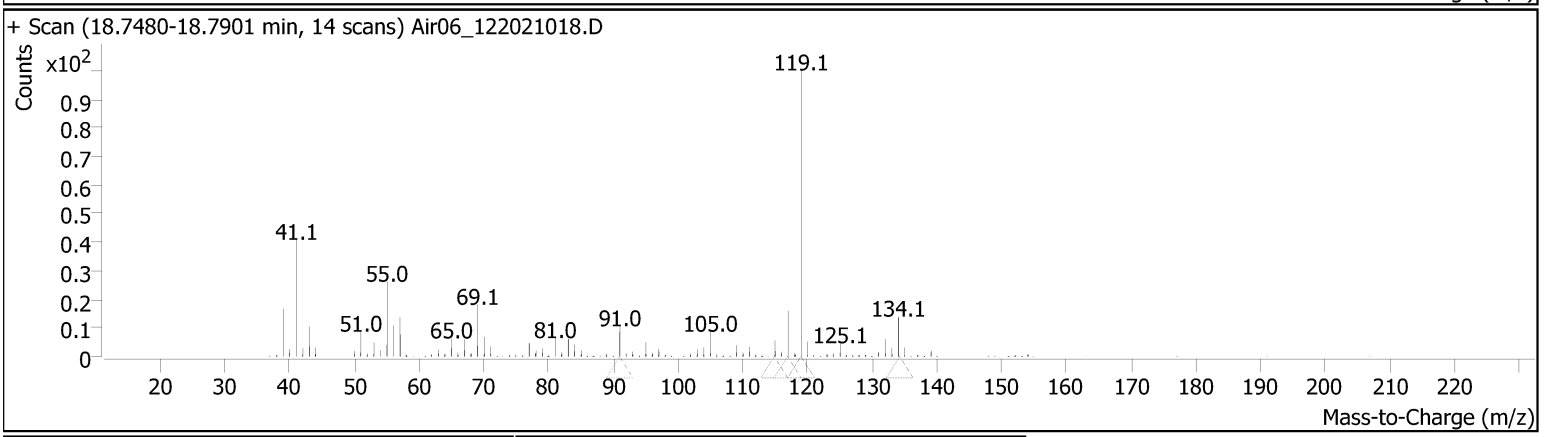


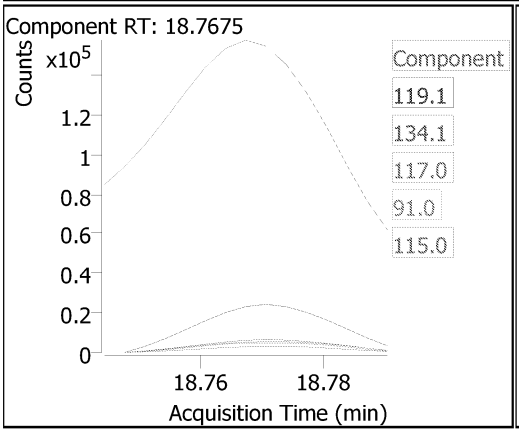


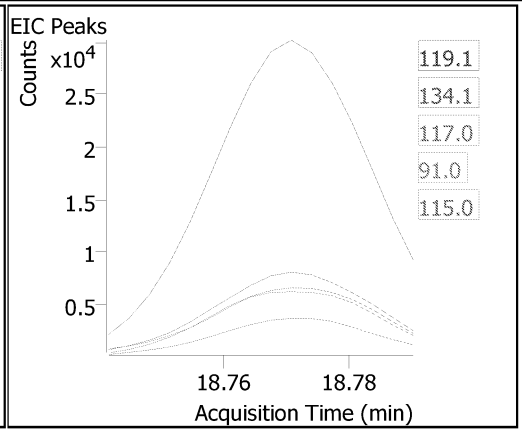
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.7675	Benzene, 4-ethyl-1,2-dimethyl-	140785.6	92.0	934-80-5	C10H14	0.3303

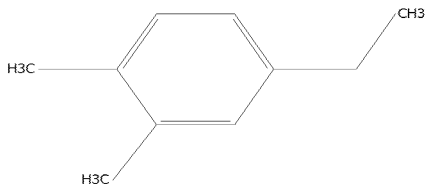




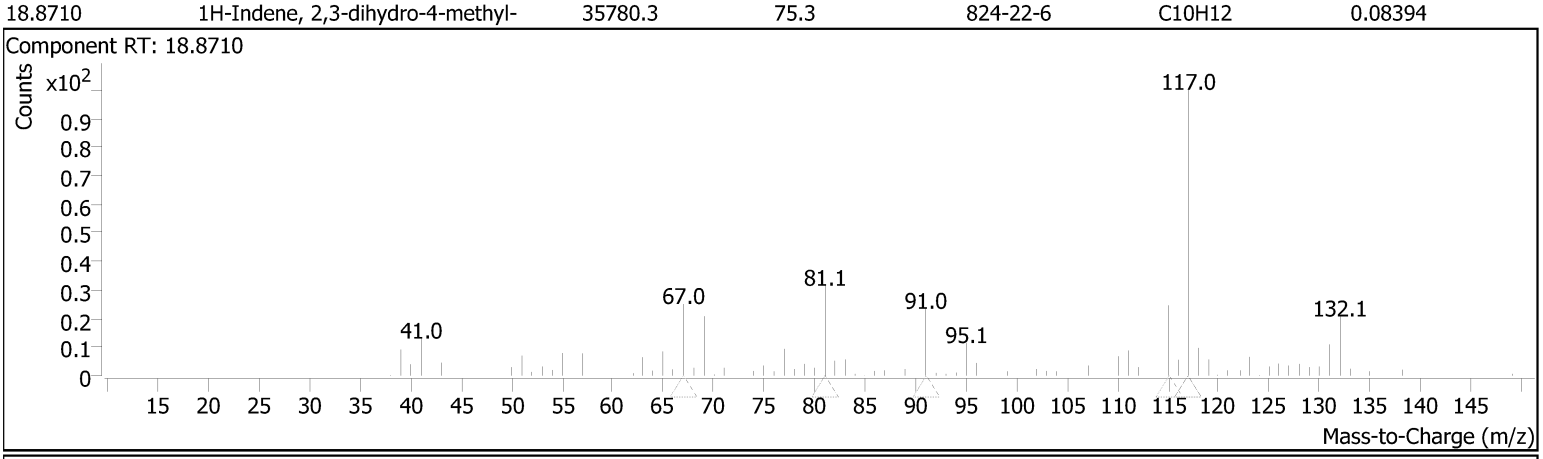


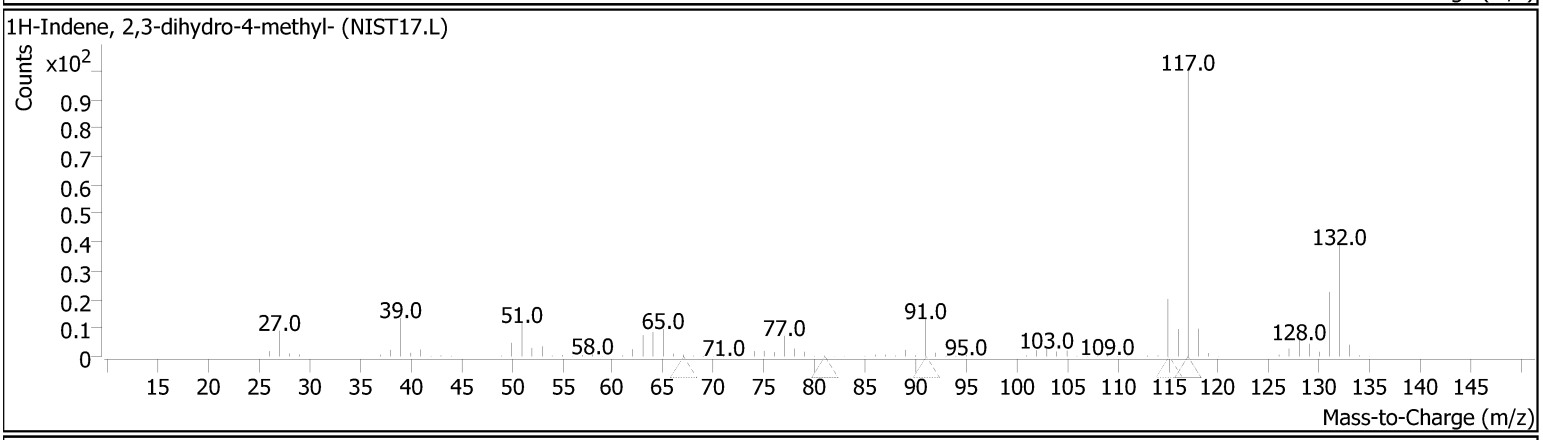


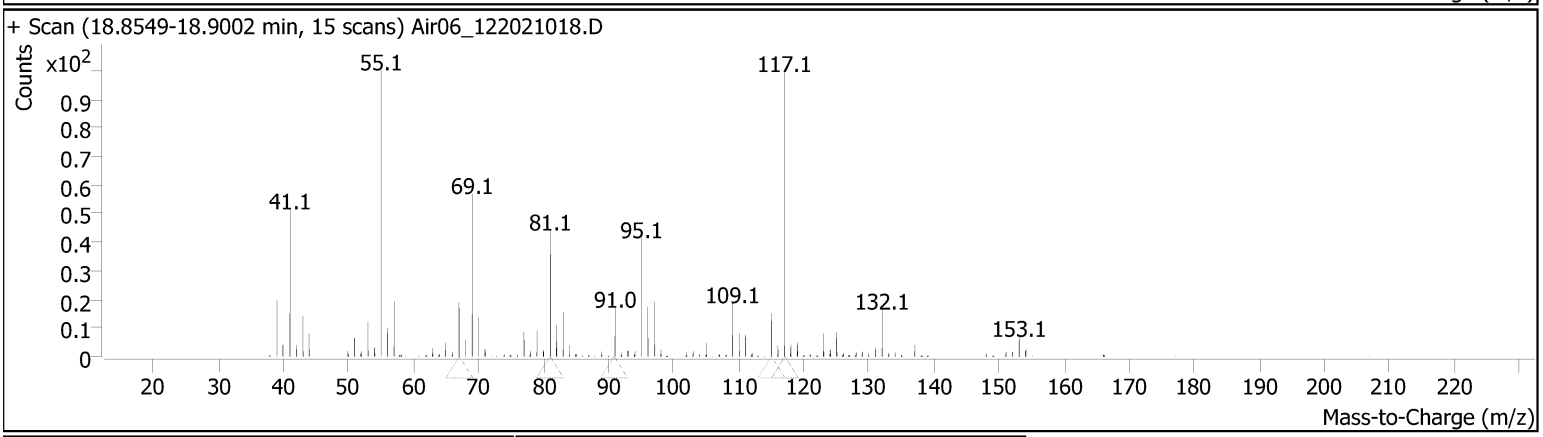


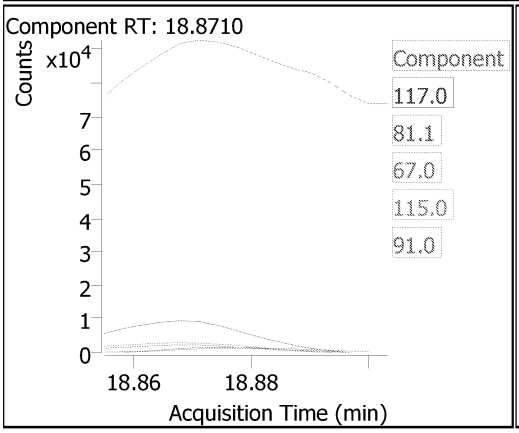


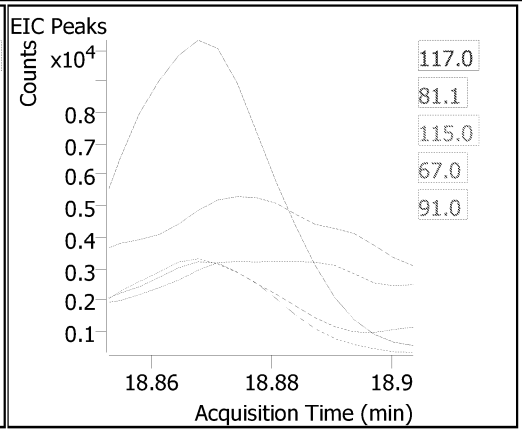
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.8710	1H-Indene, 2,3-dihydro-4-methyl-	35780.3	75.3	824-22-6	C10H12	0.08394

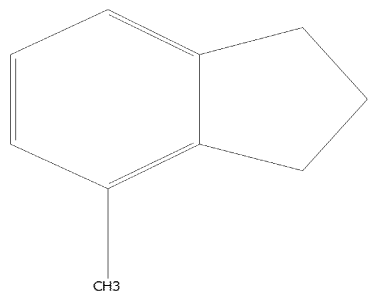




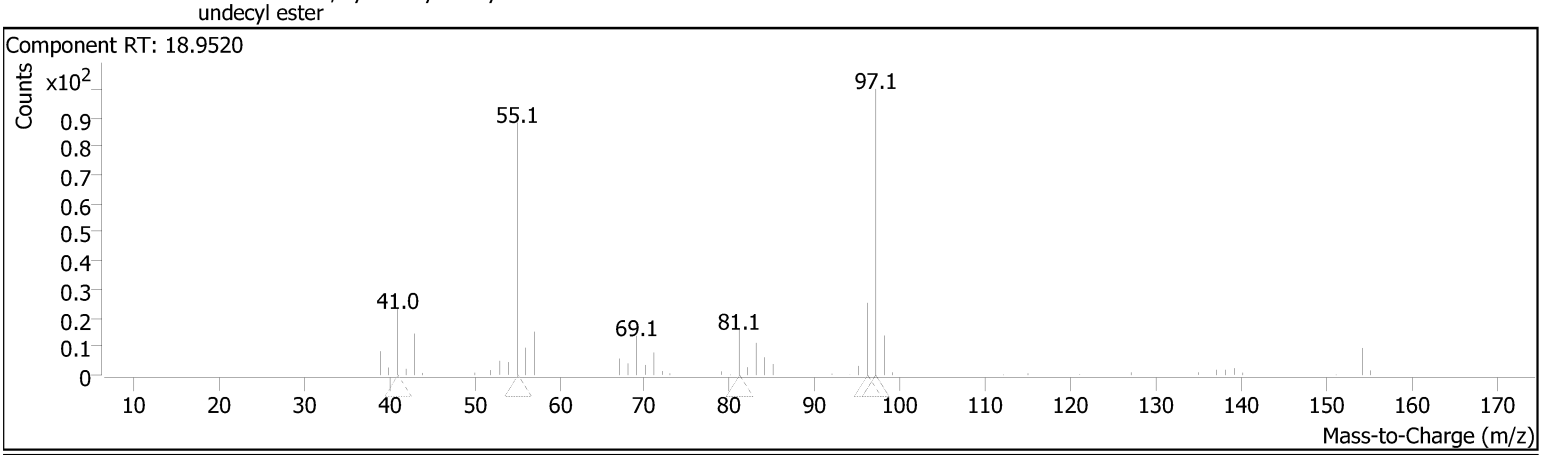


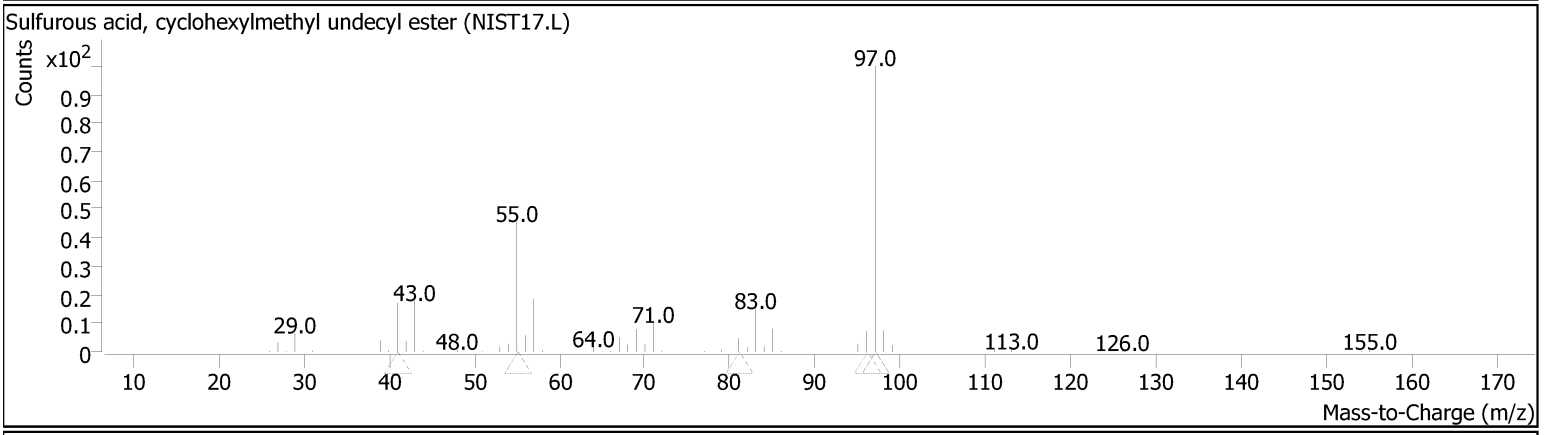


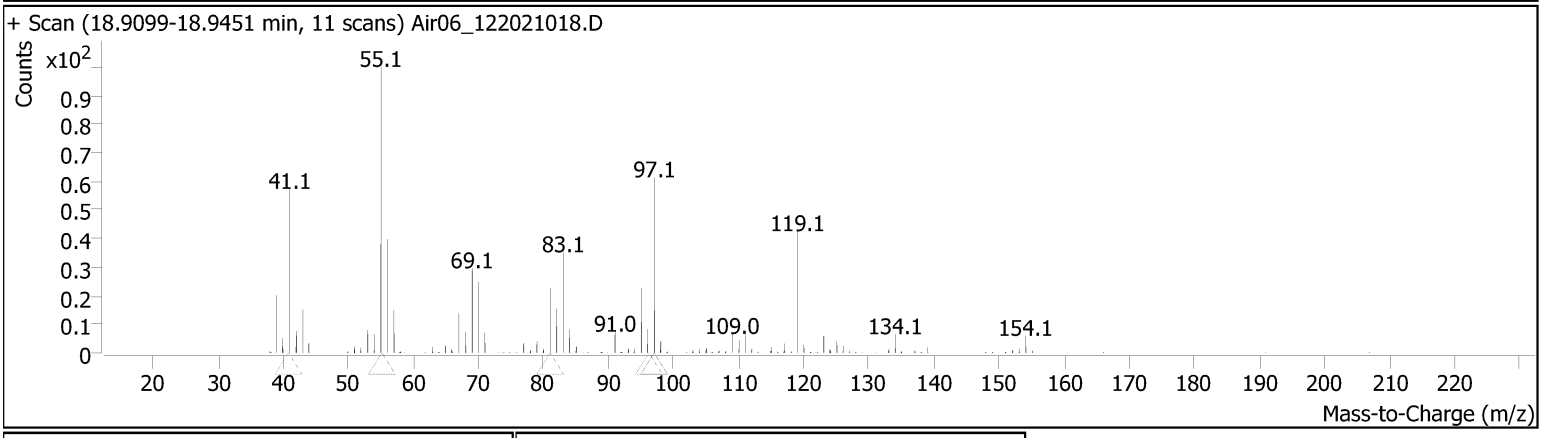


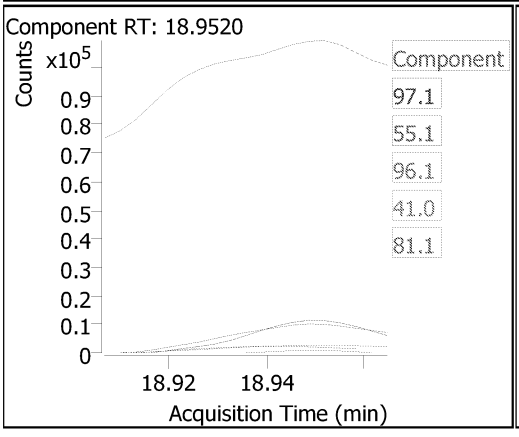


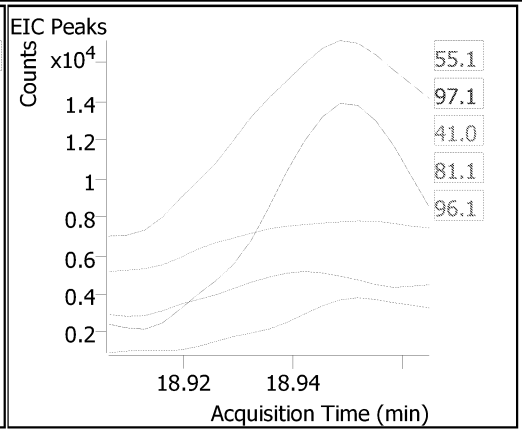
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.9520	Sulfurous acid, cyclohexylmethyl undecyl ester	38472.8	88.1	1000309-21-9	C18H36O3S	0.09026

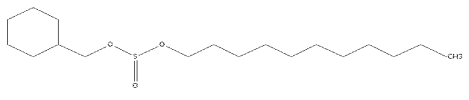




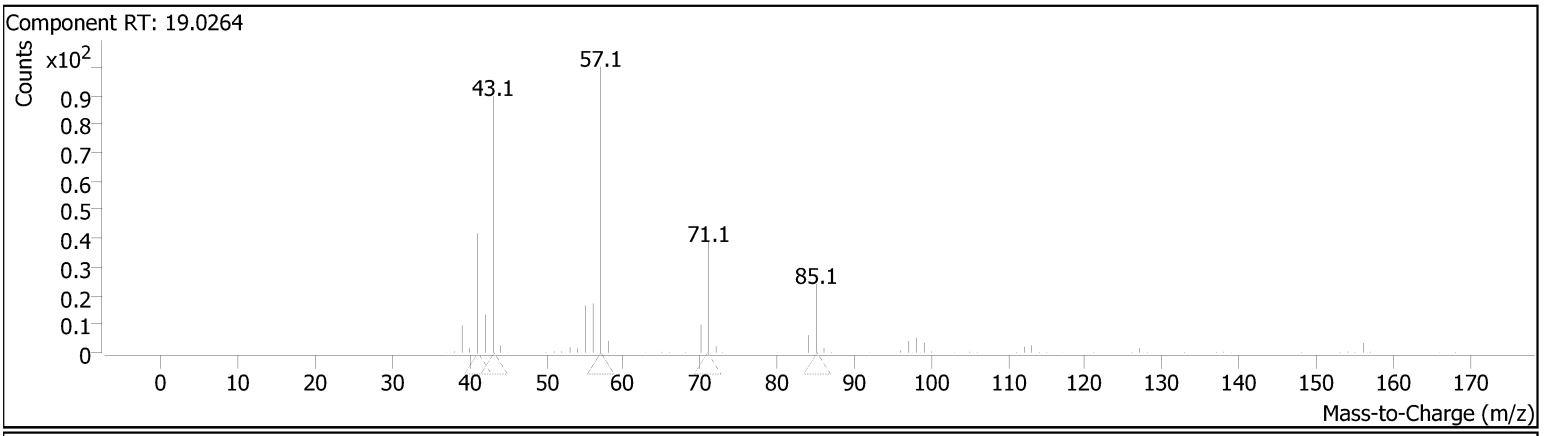


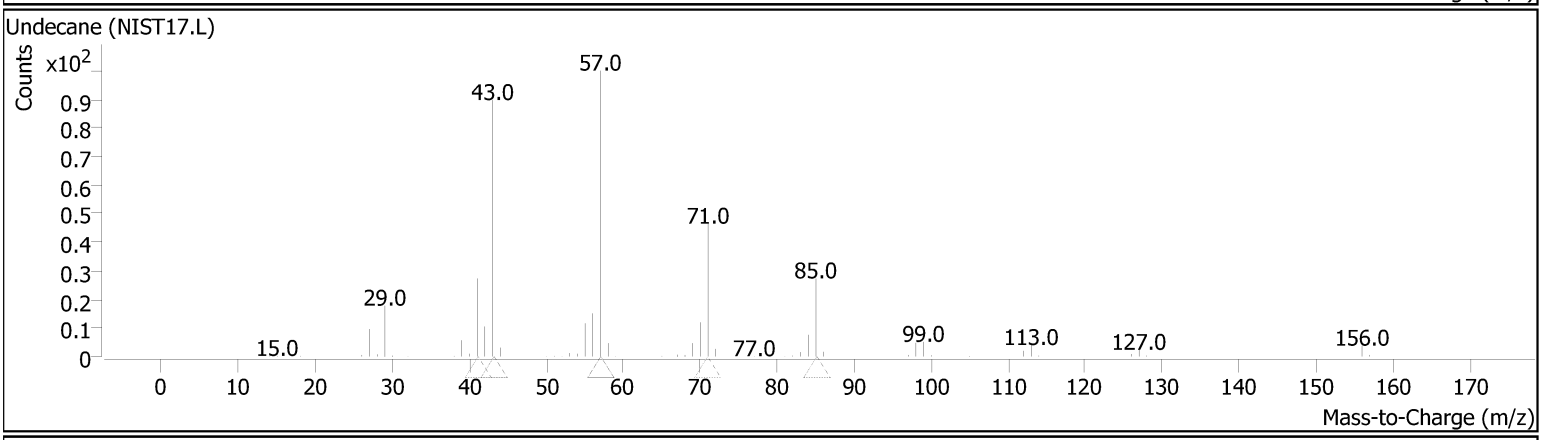


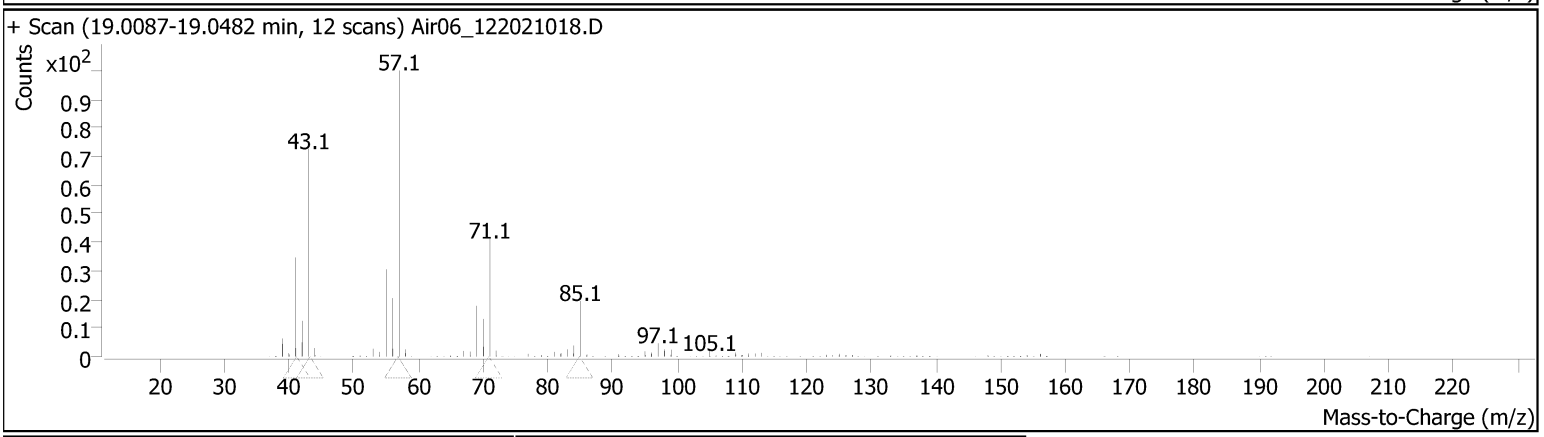


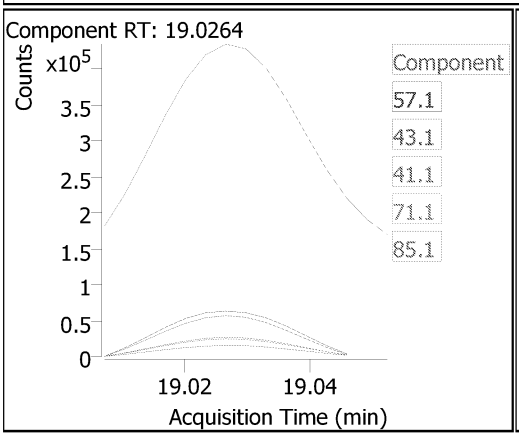


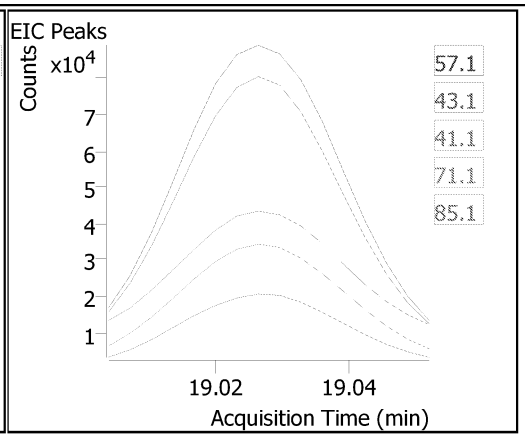
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.0264	Undecane	426741.5	94.4	1120-21-4	C11H24	1.001





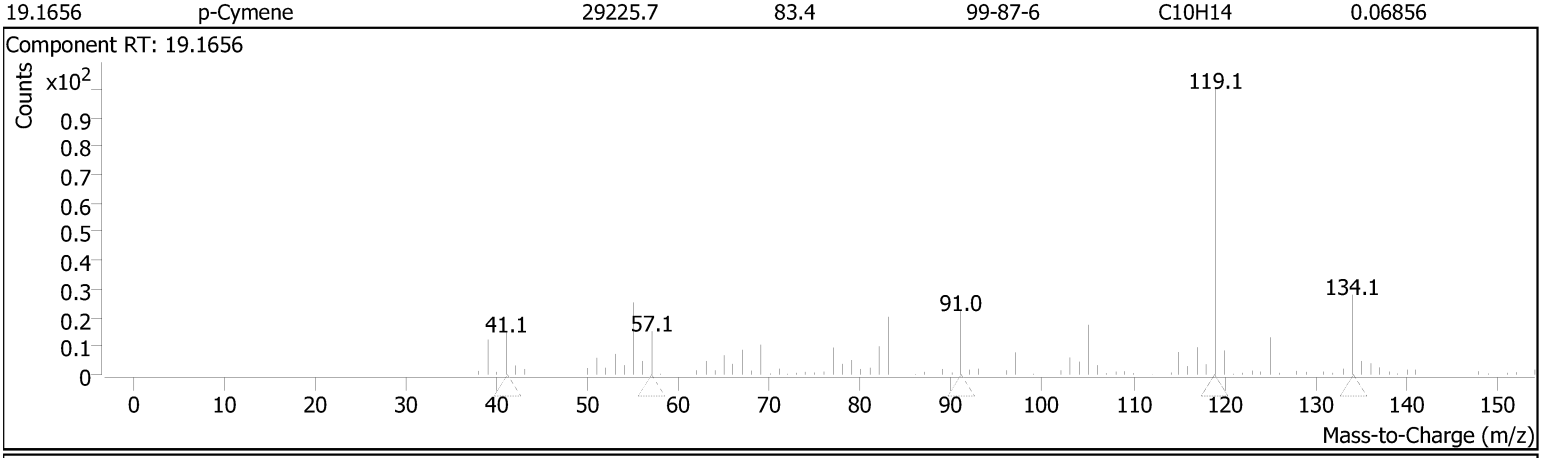


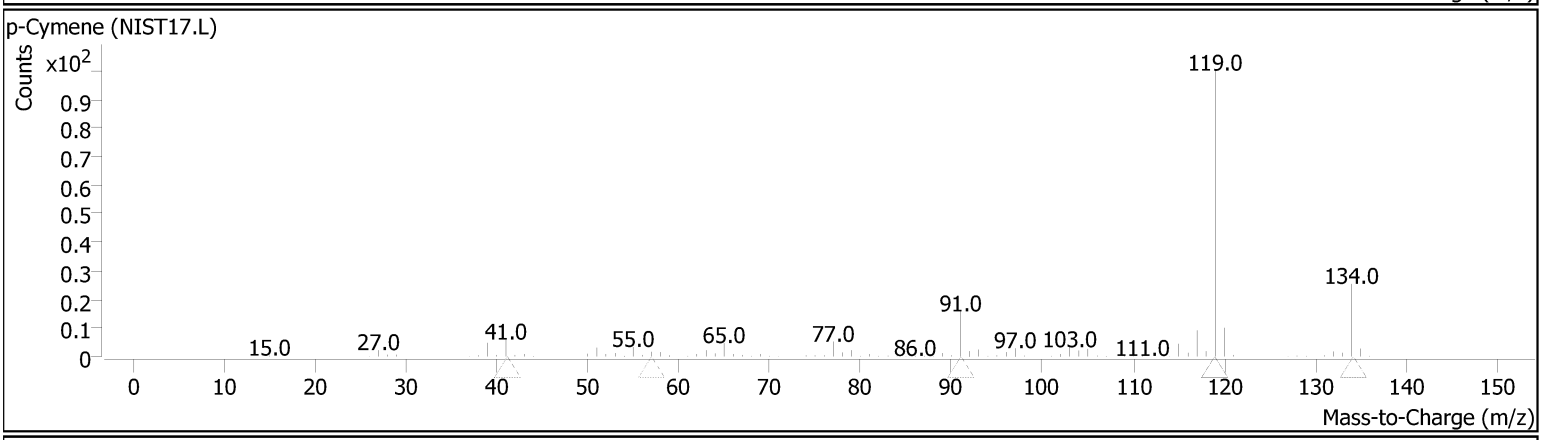


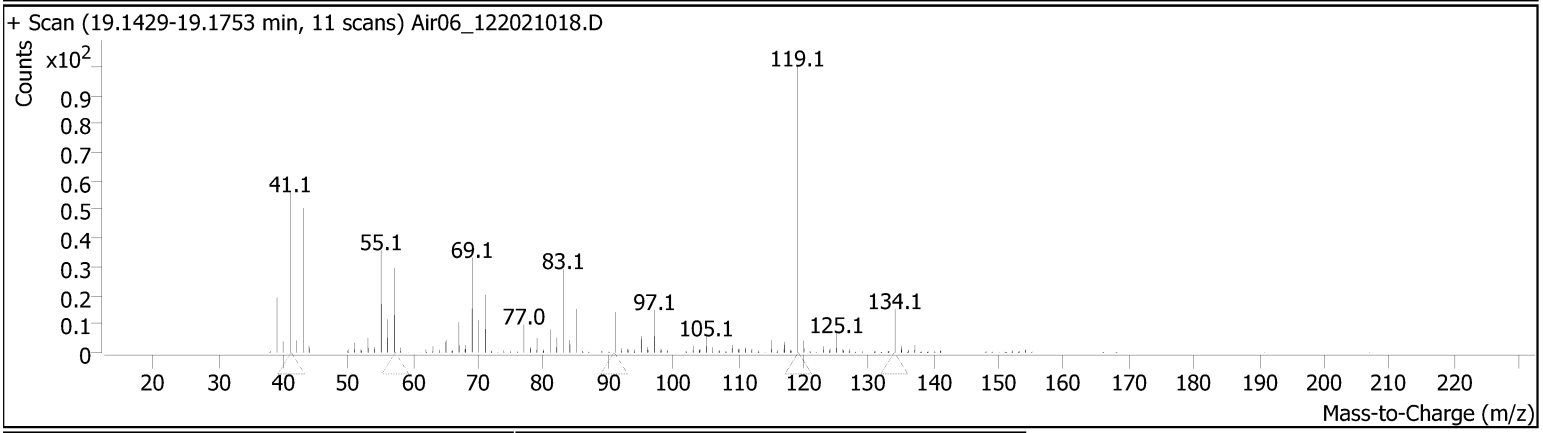


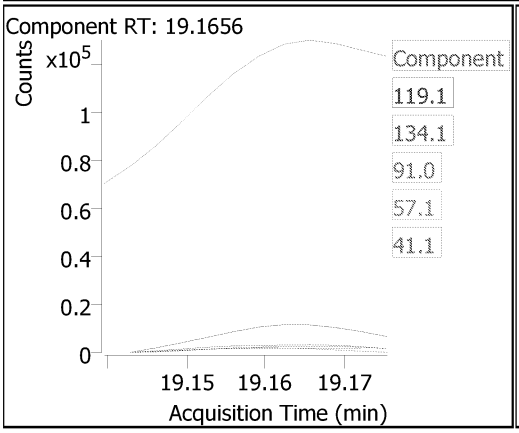


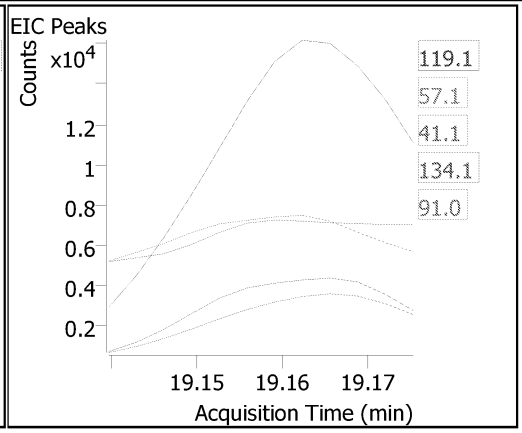
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.1656	p-Cymene	29225.7	83.4	99-87-6	C10H14	0.06856

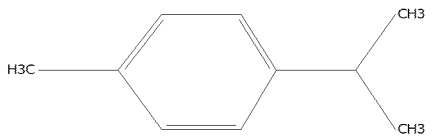








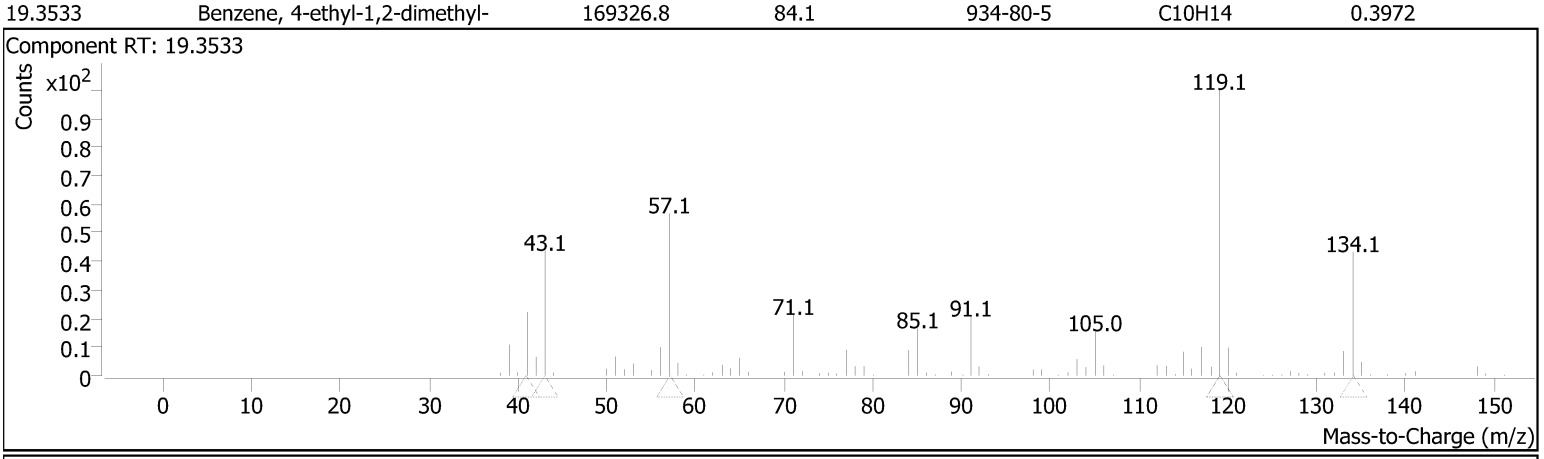


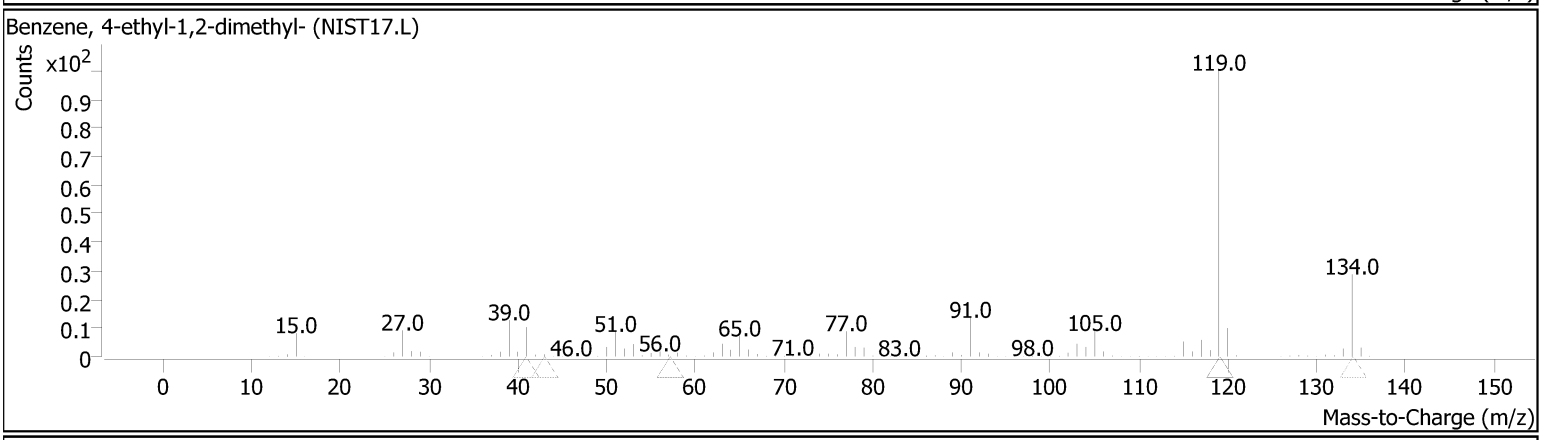


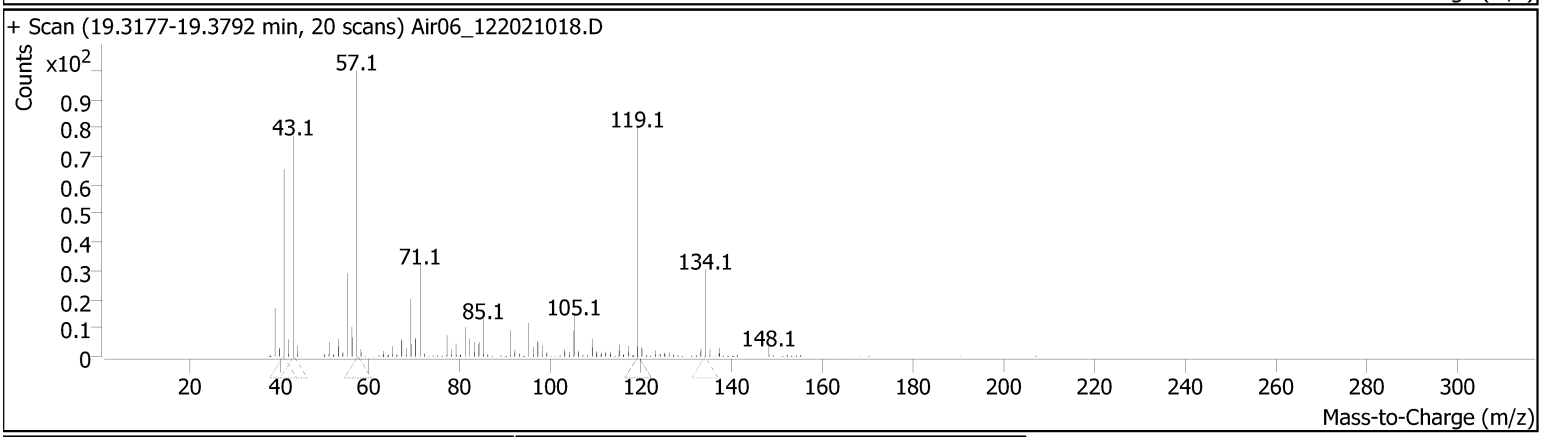
Library Search Results - NonTarget Hits with Details

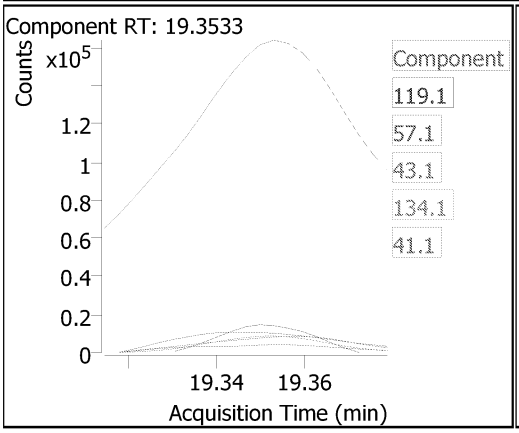
Agilent Technologies

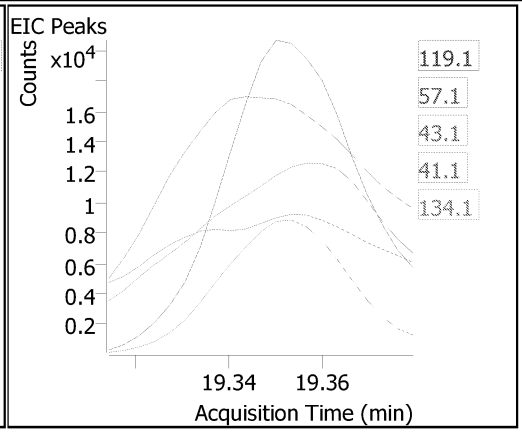
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.3533	Benzene, 4-ethyl-1,2-dimethyl-	169326.8	84.1	934-80-5	C10H14	0.3972

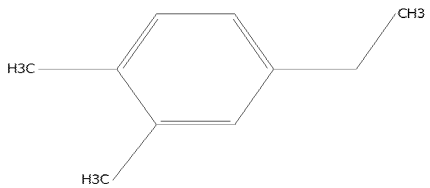




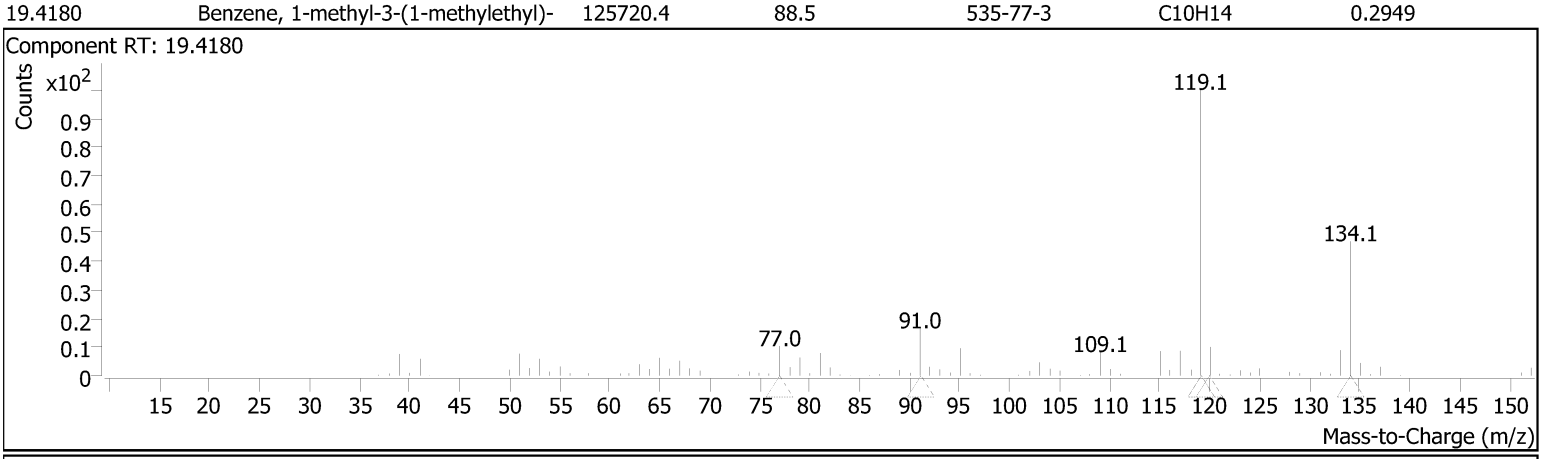


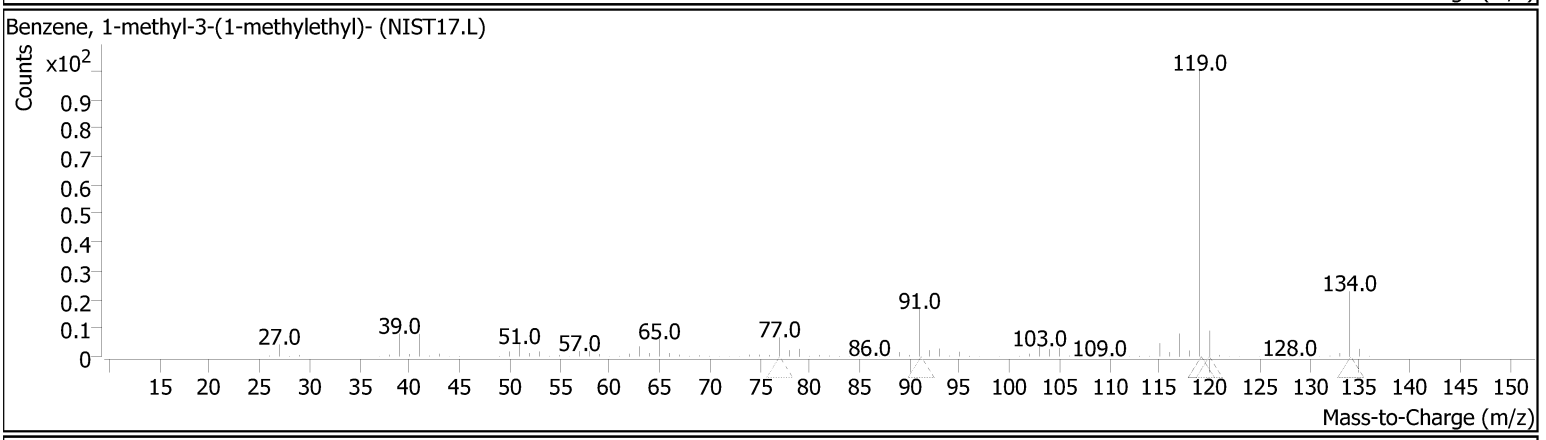


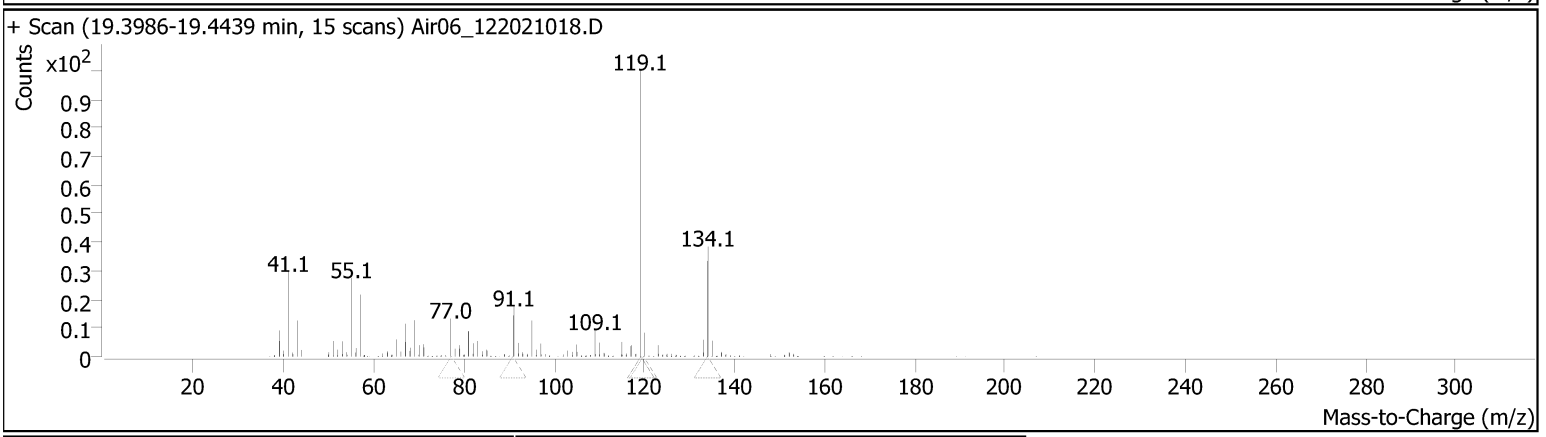


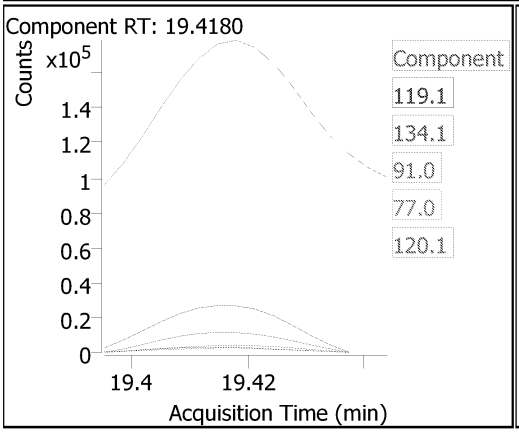


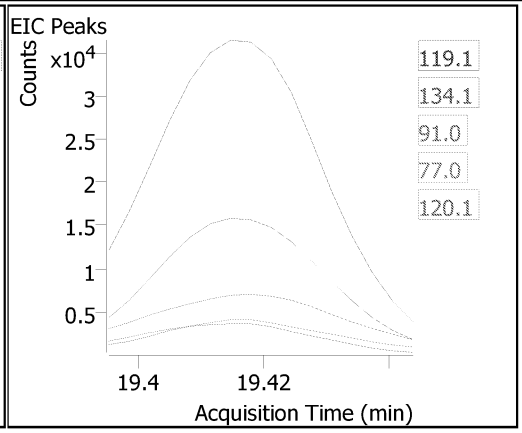
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.4180	Benzene, 1-methyl-3-(1-methylethyl)-	125720.4	88.5	535-77-3	C10H14	0.2949

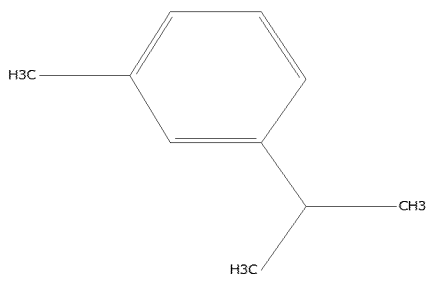




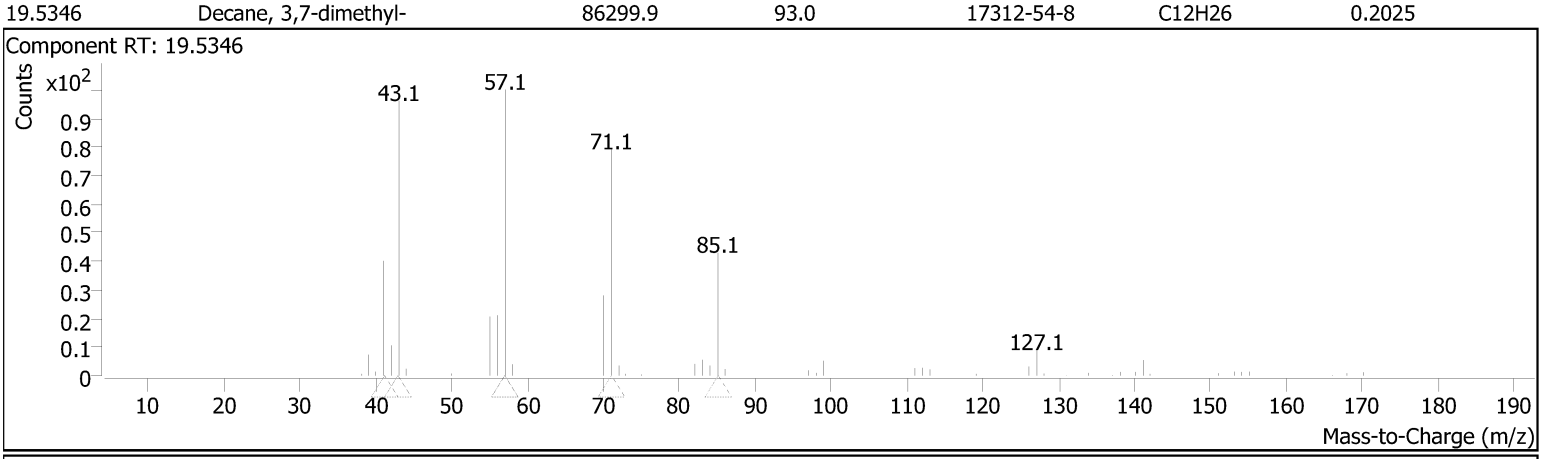


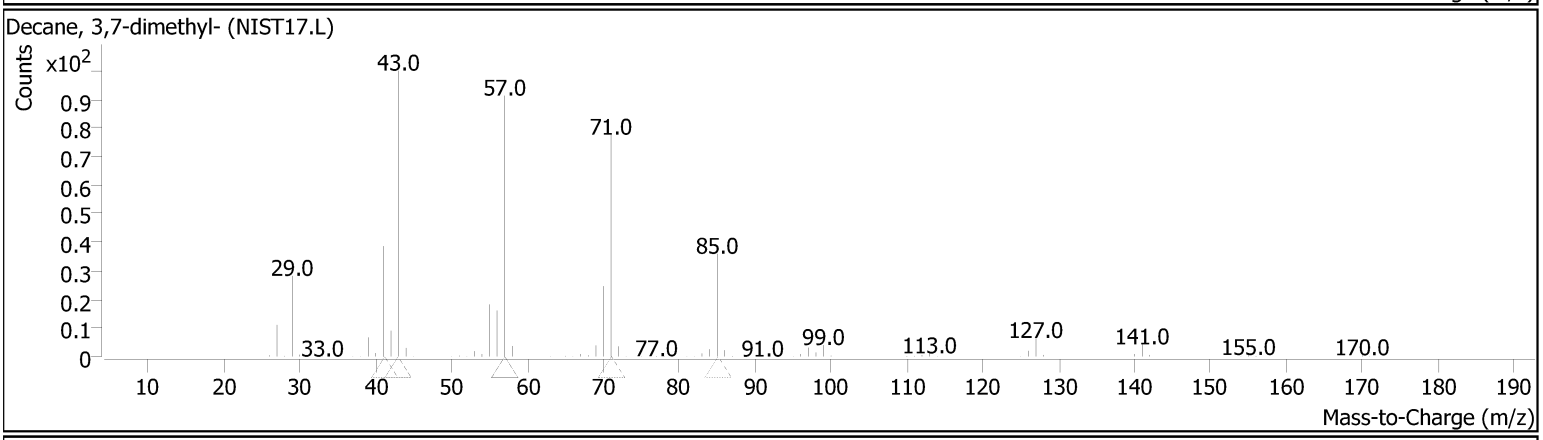


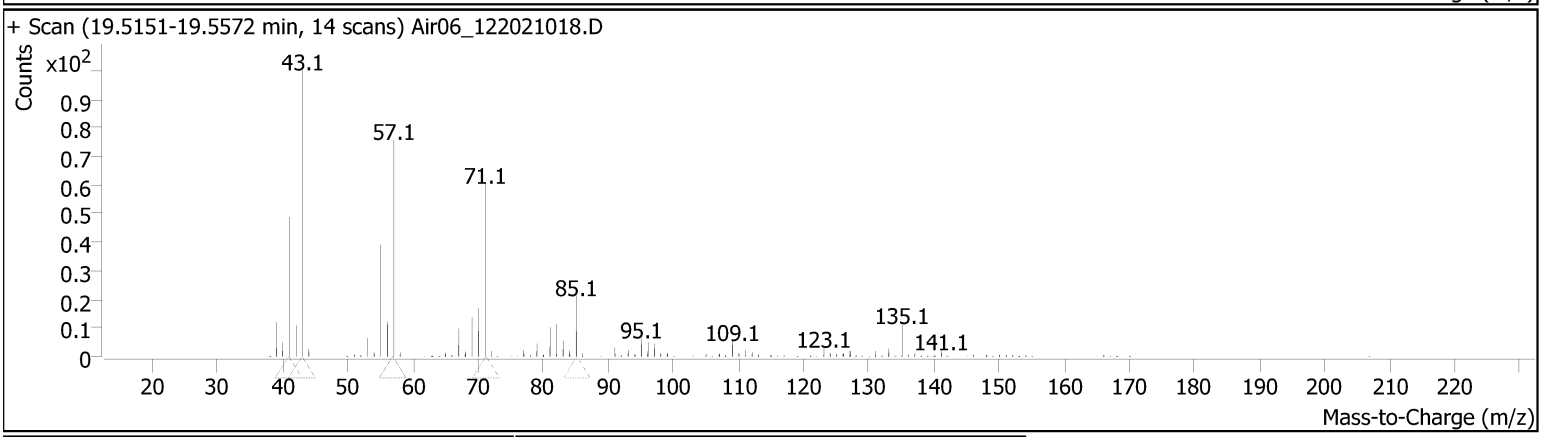


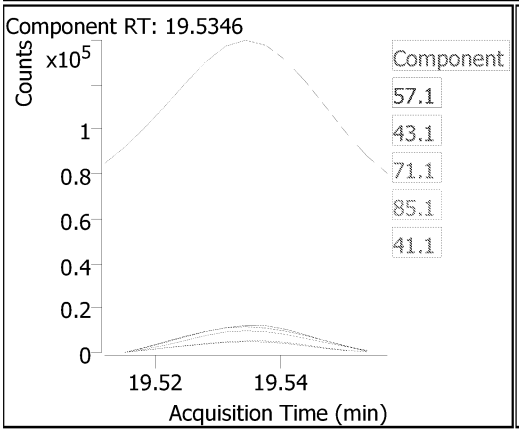


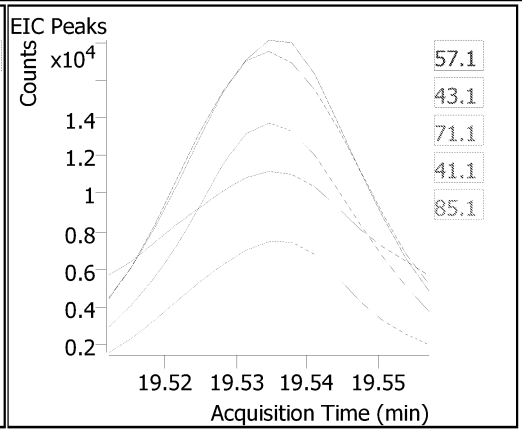
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.5346	Decane, 3,7-dimethyl-	86299.9	93.0	17312-54-8	C12H26	0.2025

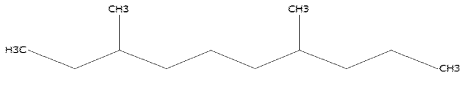








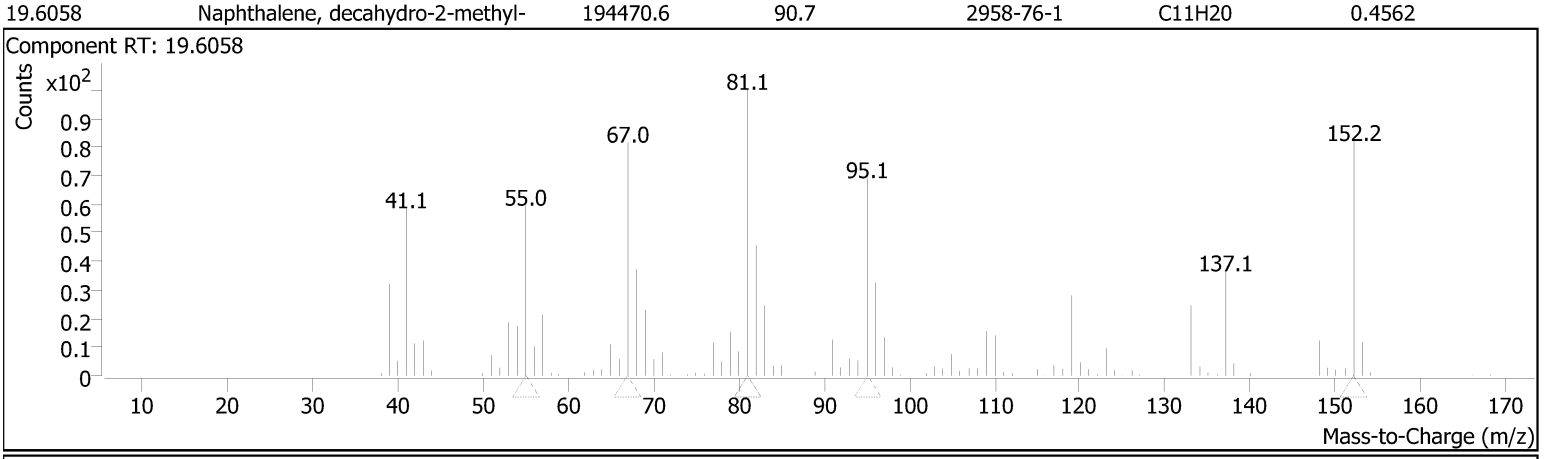


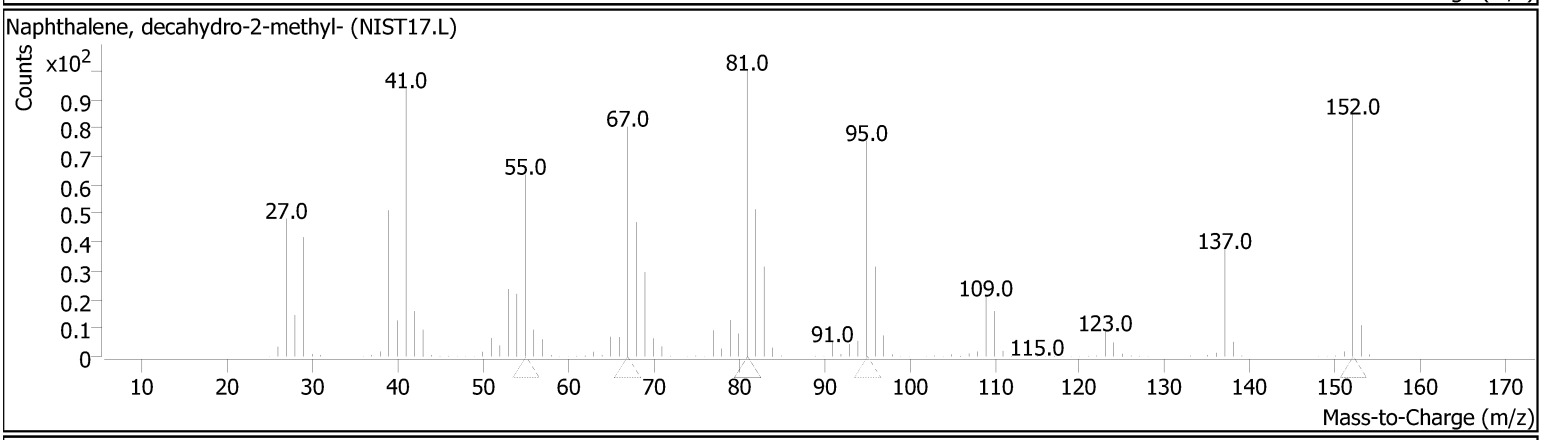


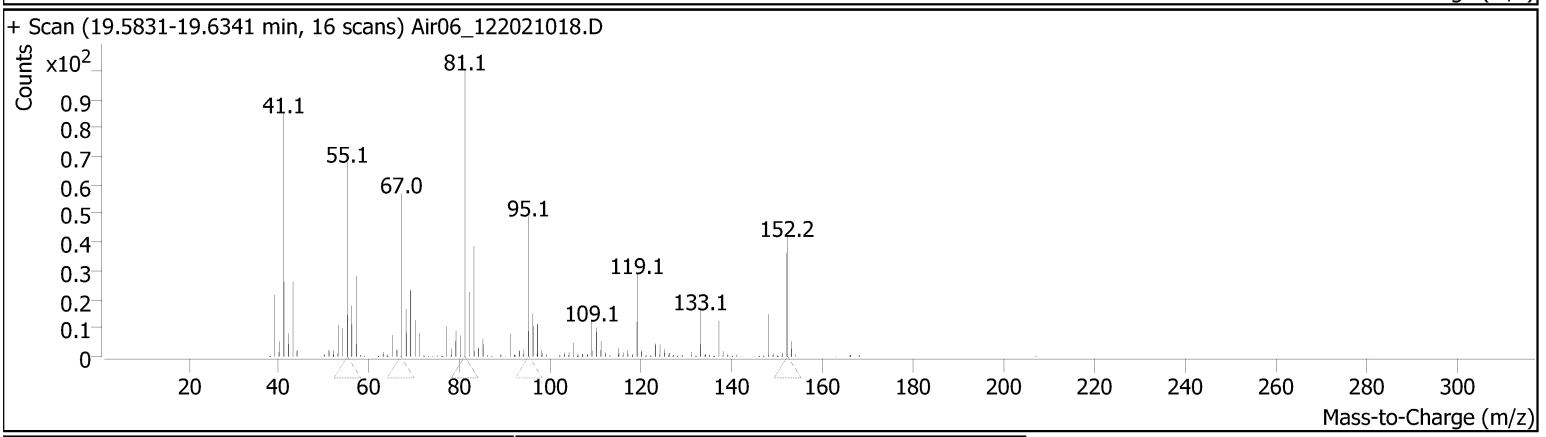
Library Search Results - NonTarget Hits with Details

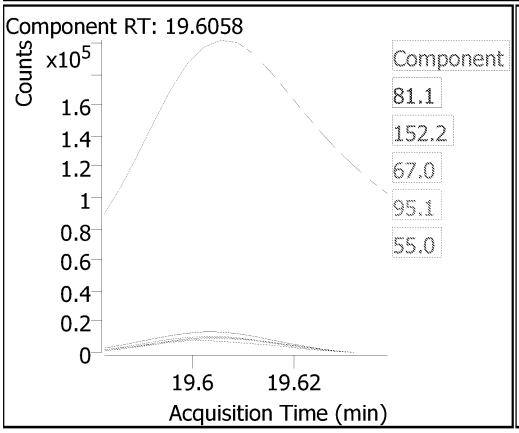
Agilent Technologies

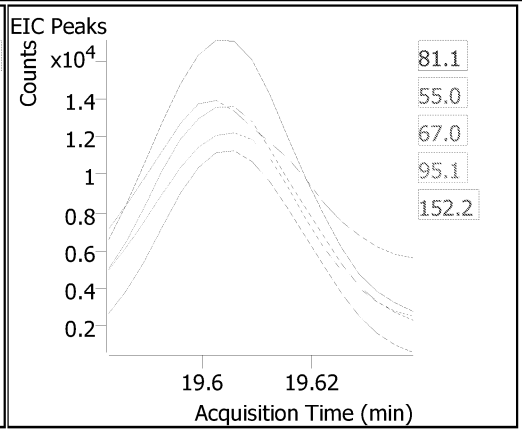
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.6058	Naphthalene, decahydro-2-methyl-	194470.6	90.7	2958-76-1	C11H20	0.4562

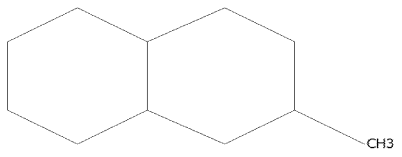




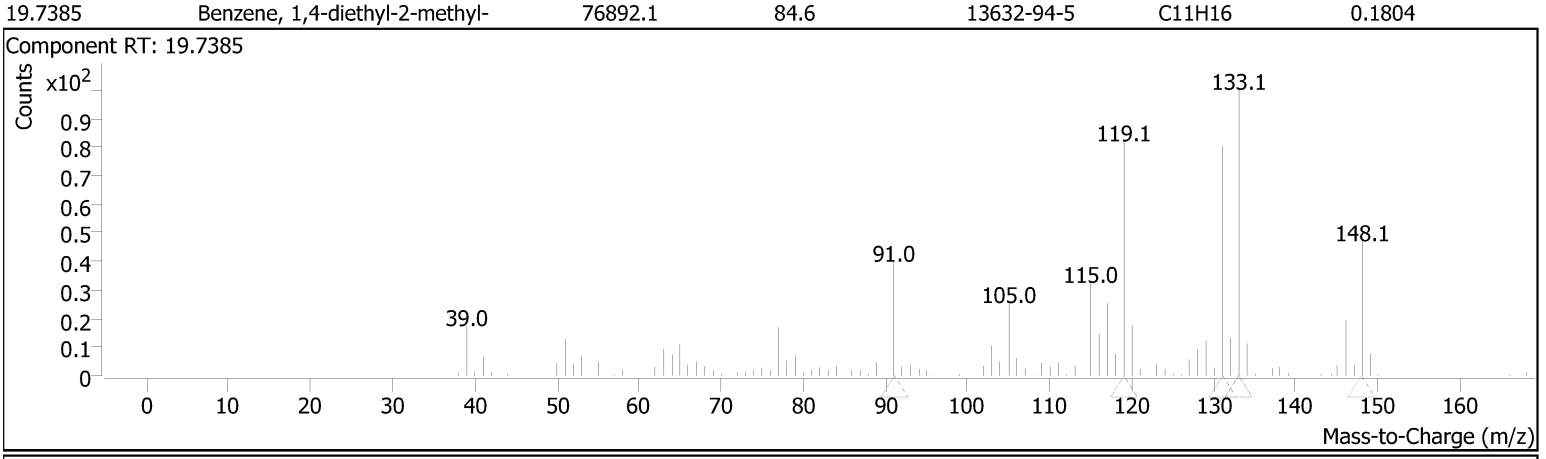


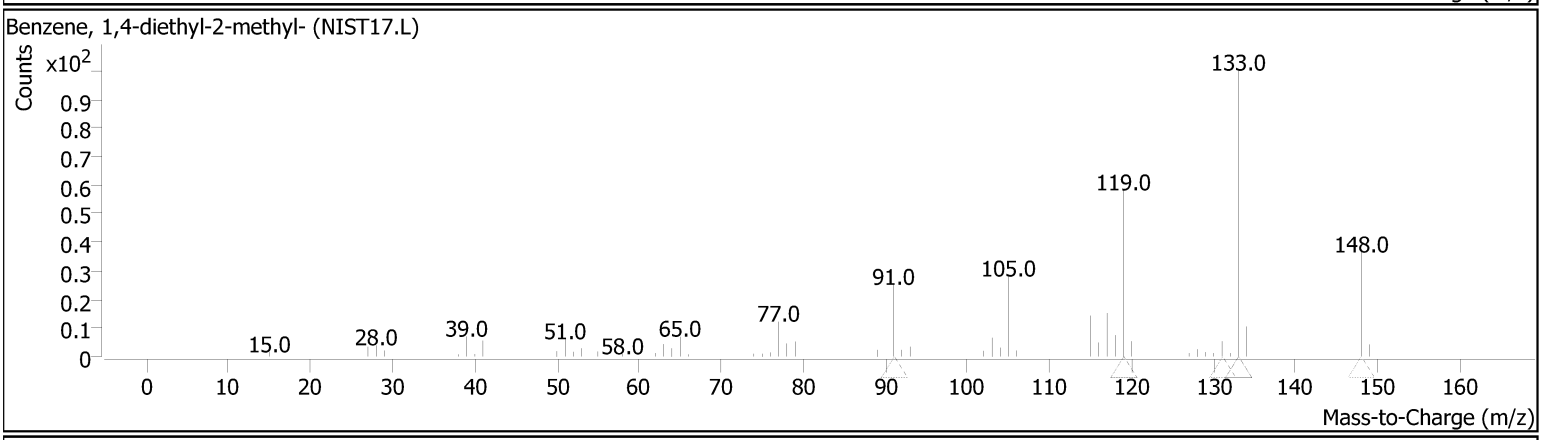


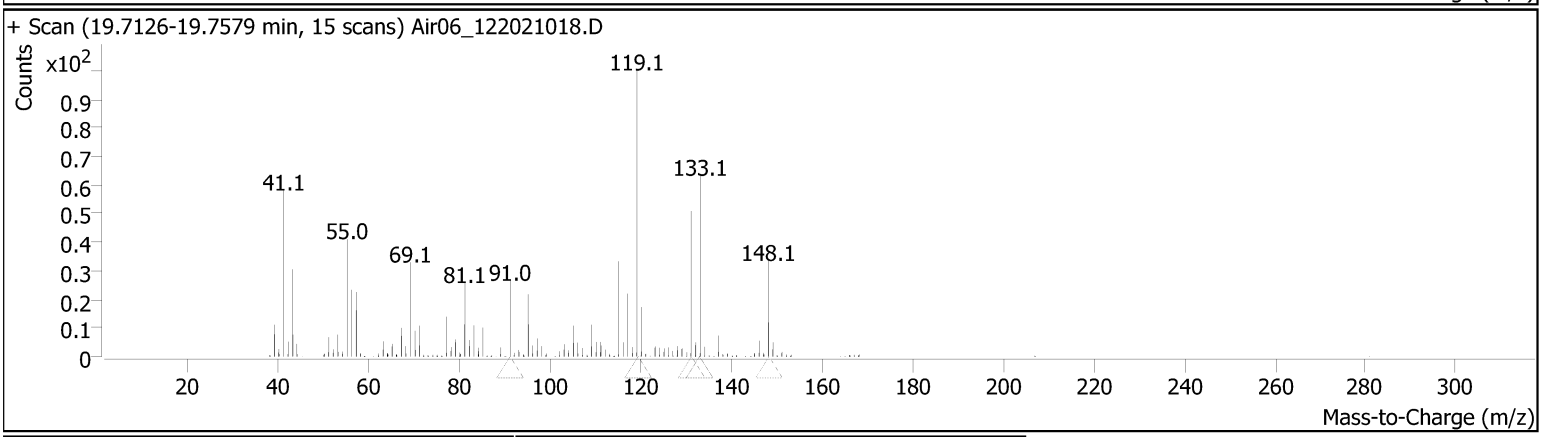


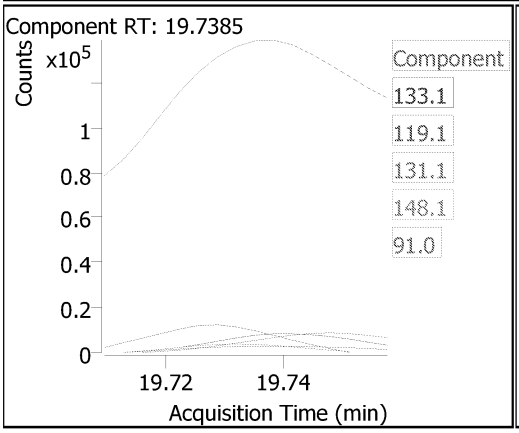


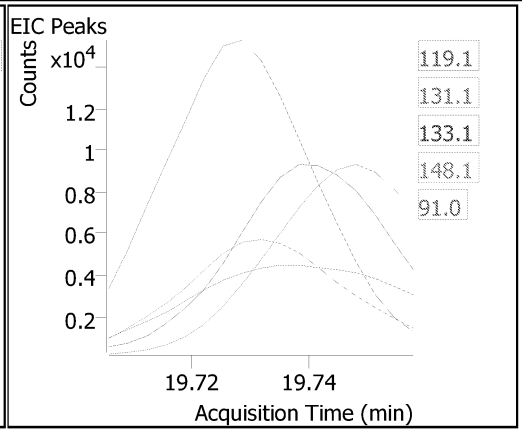
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.7385	Benzene, 1,4-diethyl-2-methyl-	76892.1	84.6	13632-94-5	C11H16	0.1804

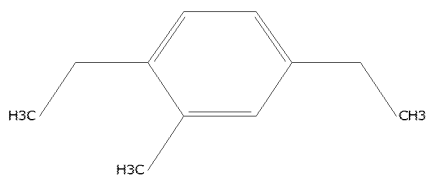




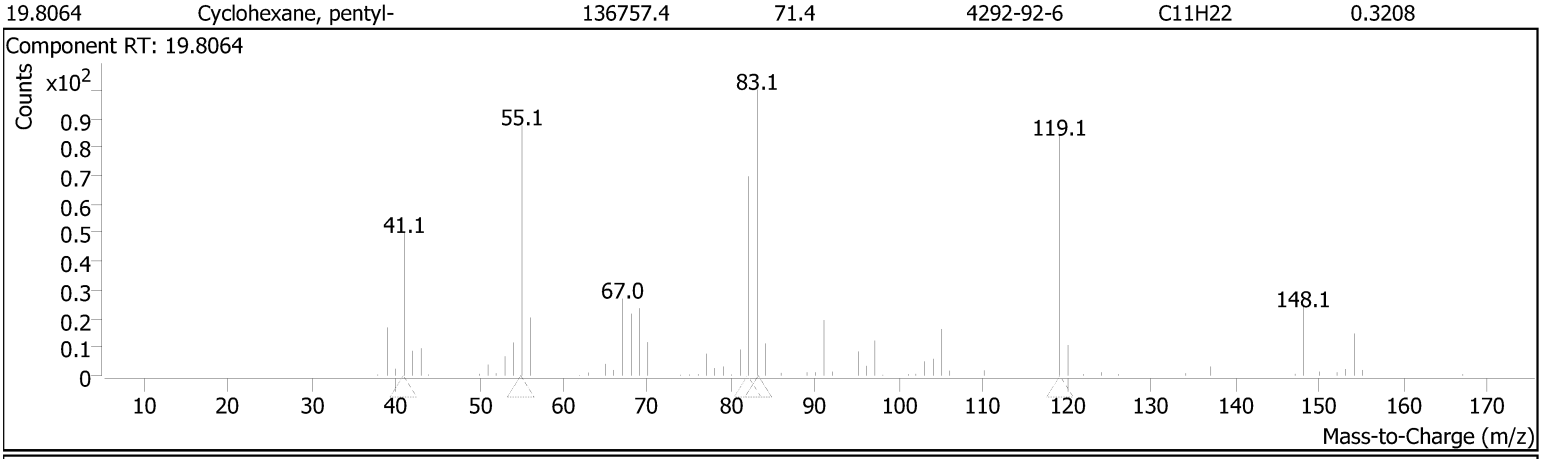


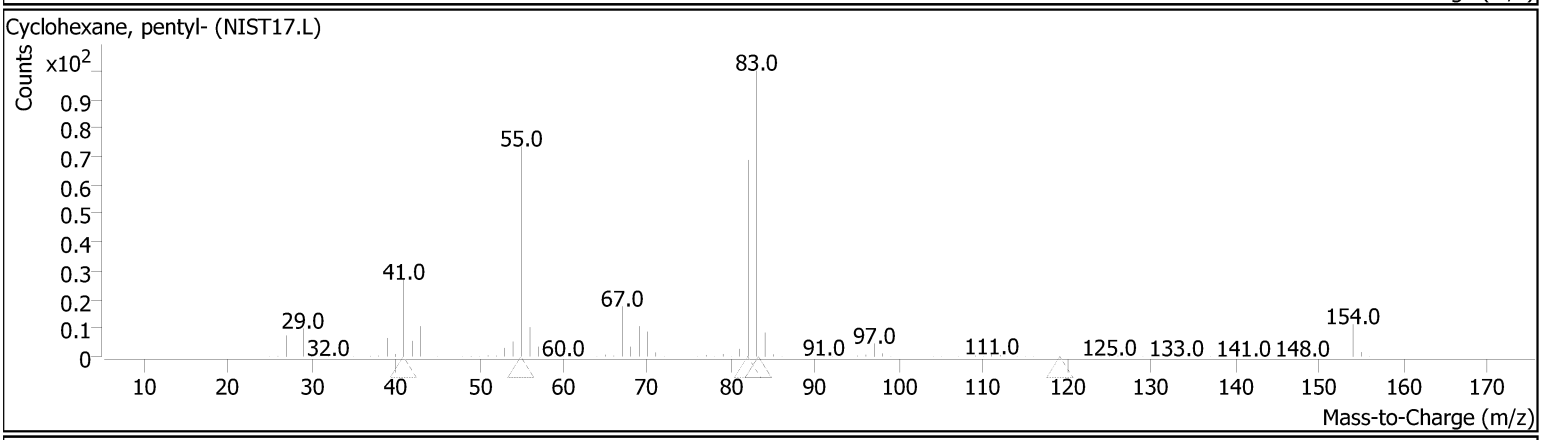


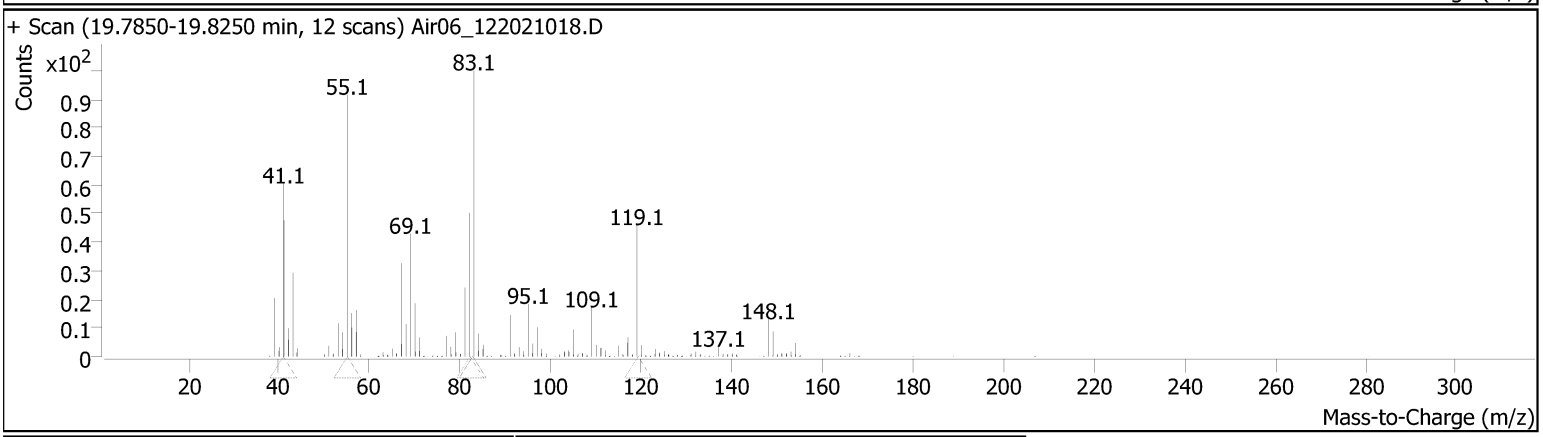


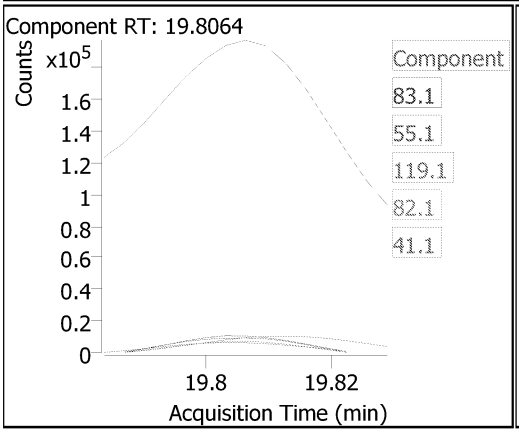


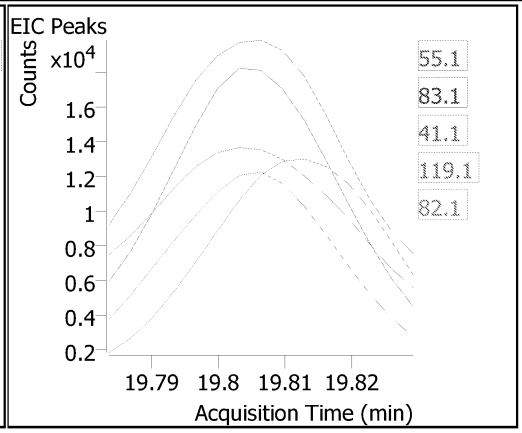
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.8064	Cyclohexane, pentyl-	136757.4	71.4	4292-92-6	C11H22	0.3208

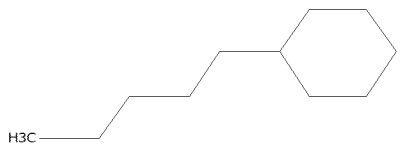




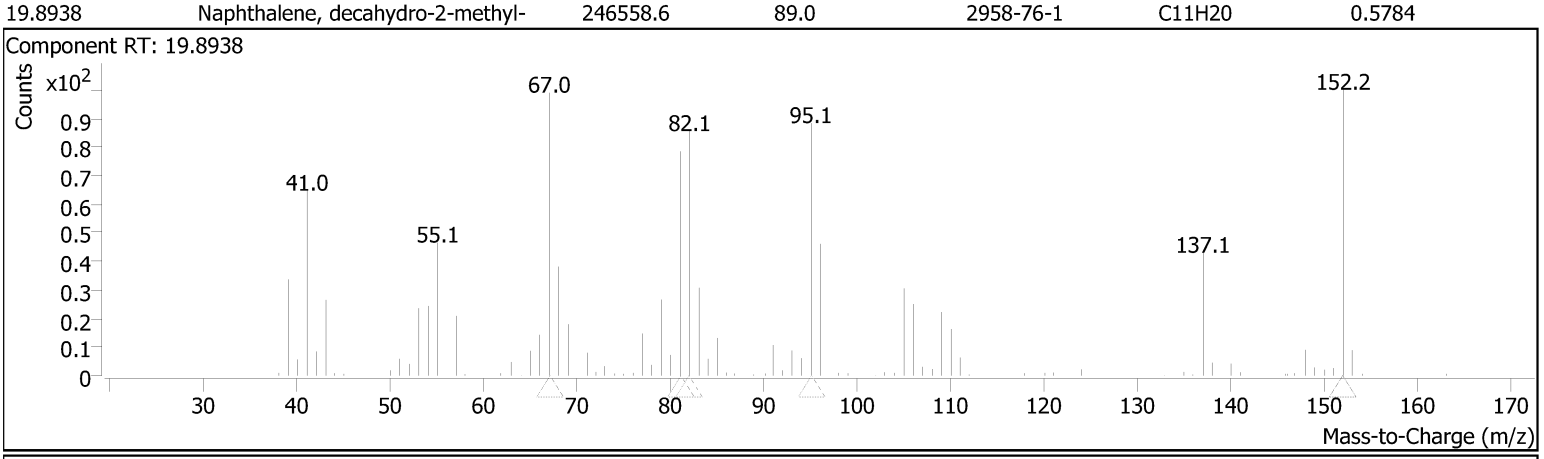


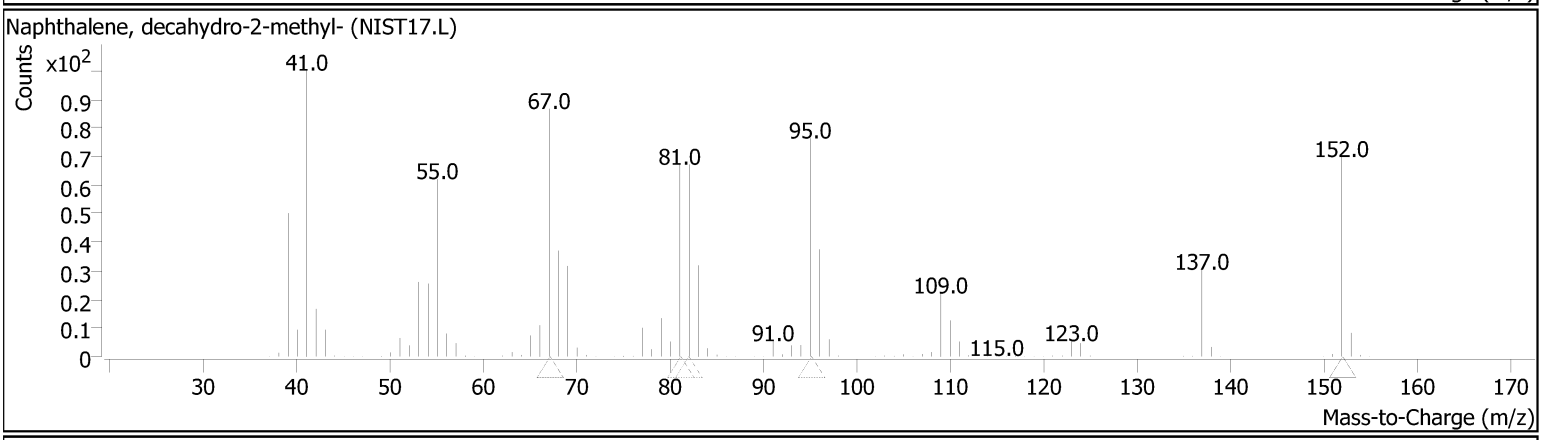


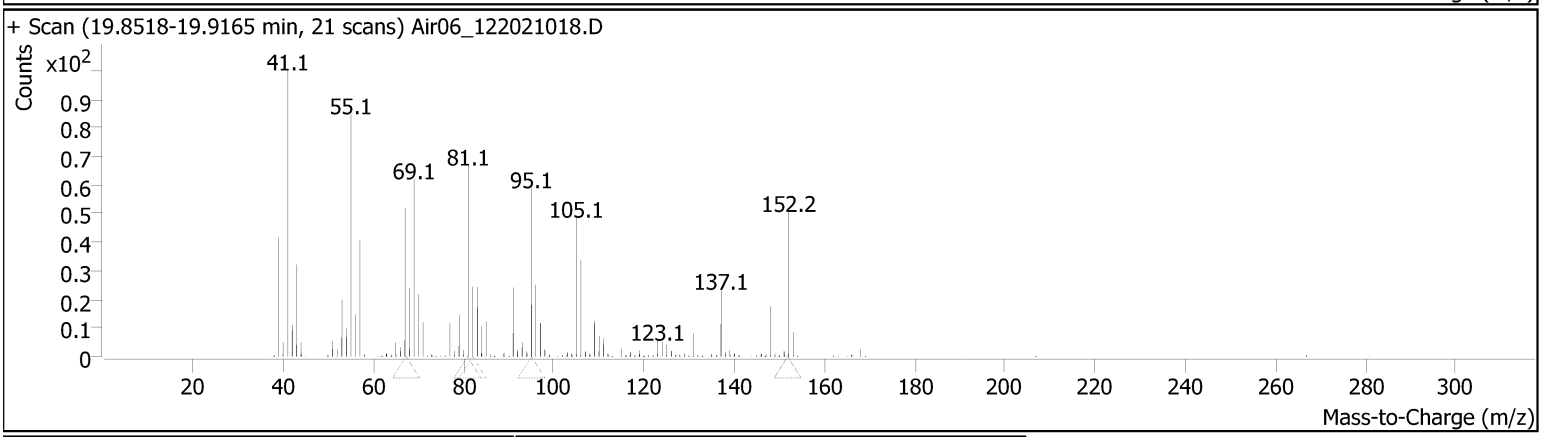


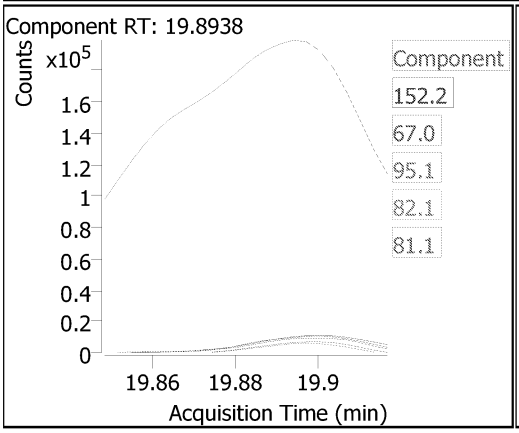


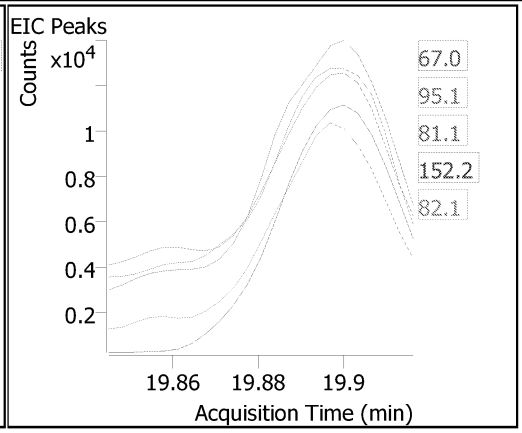
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.8938	Naphthalene, decahydro-2-methyl-	246558.6	89.0	2958-76-1	C11H20	0.5784

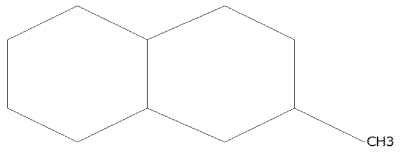




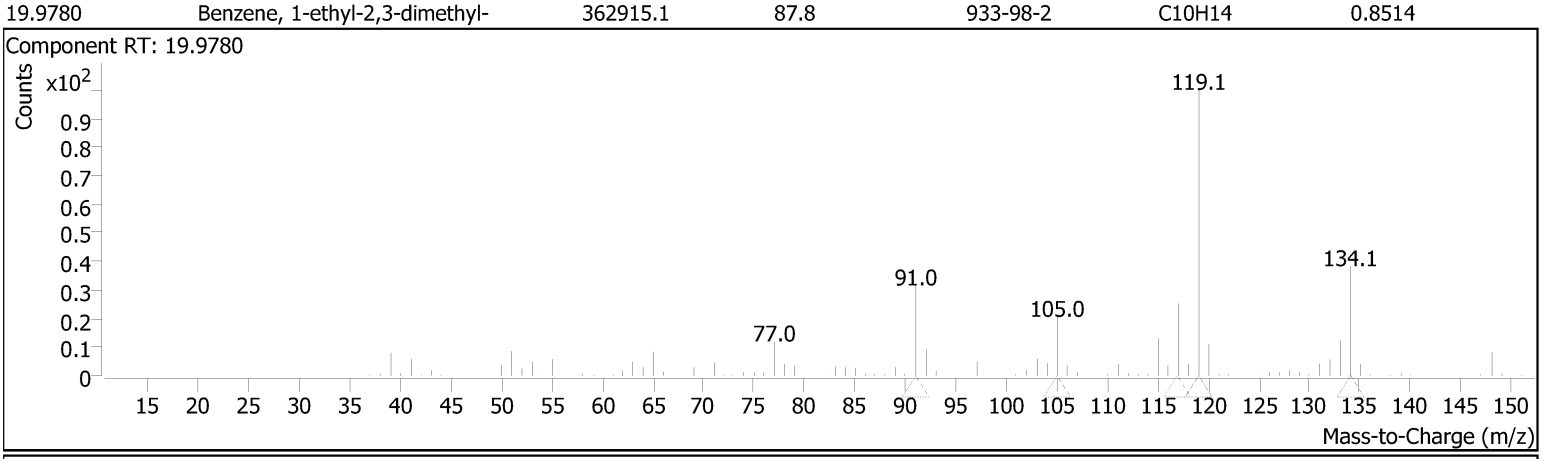


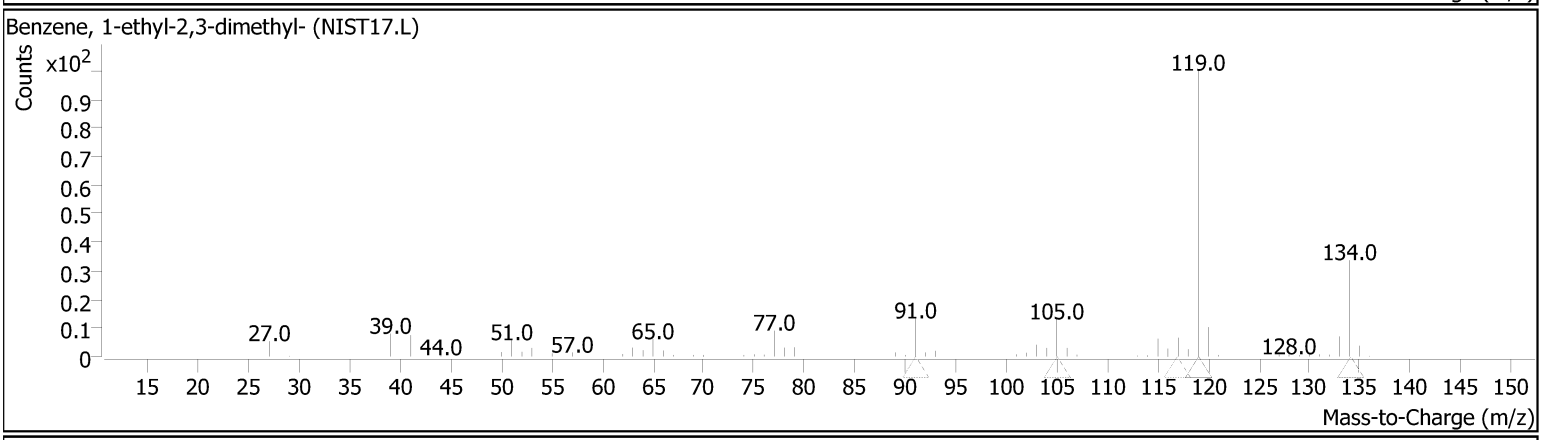


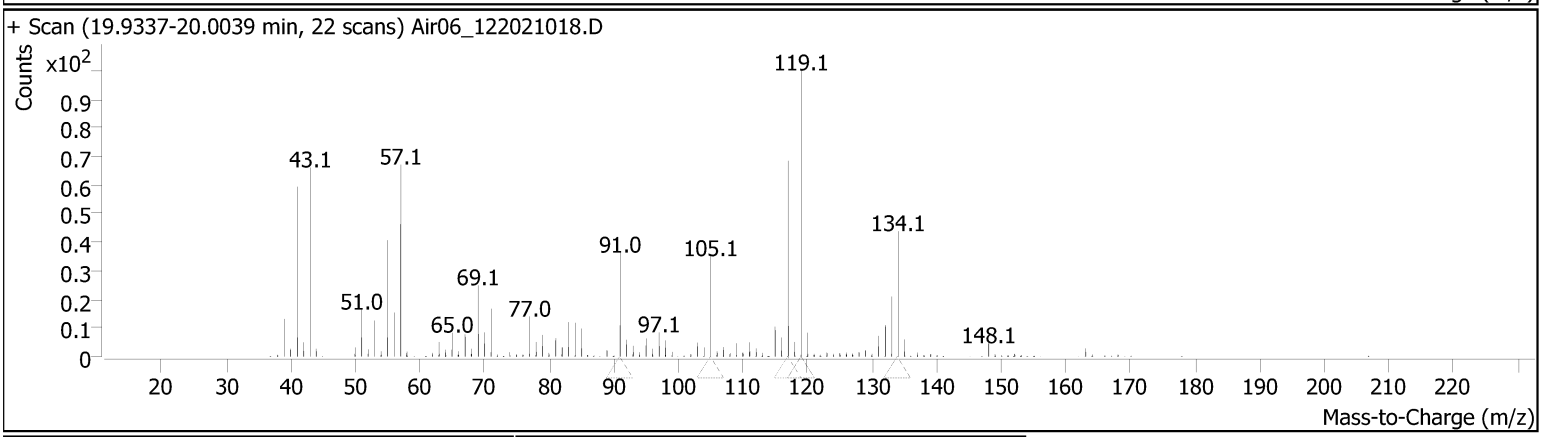


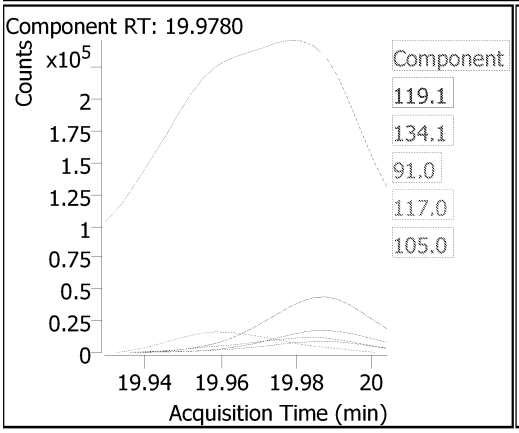


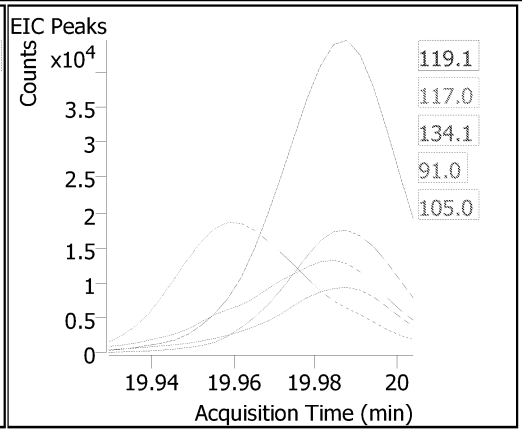
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.9780	Benzene, 1-ethyl-2,3-dimethyl-	362915.1	87.8	933-98-2	C10H14	0.8514

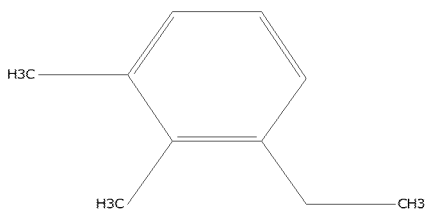




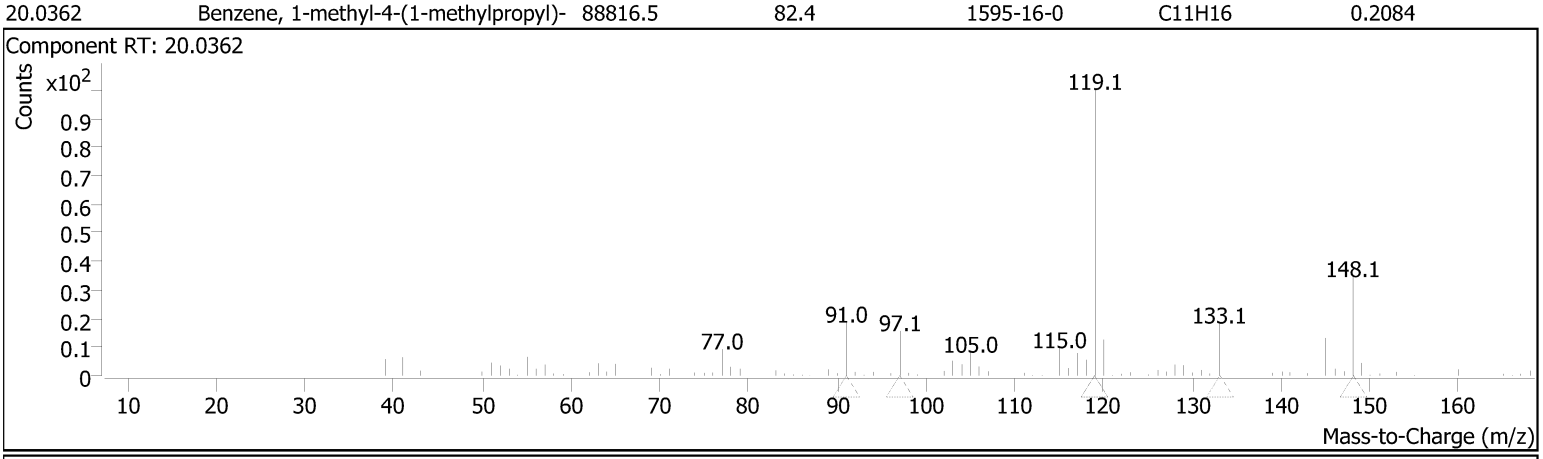


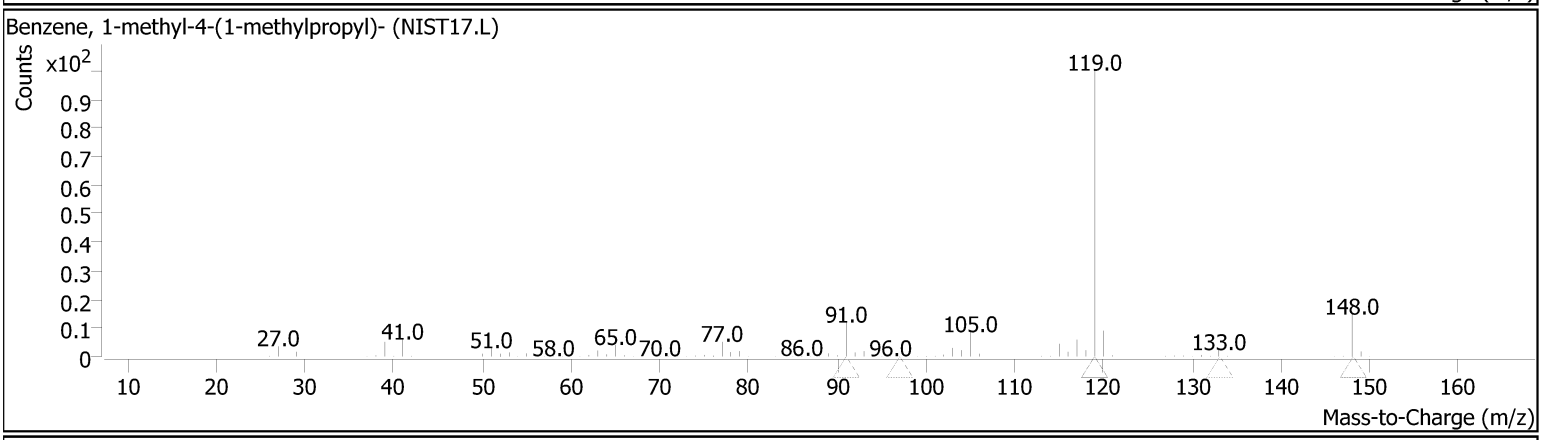


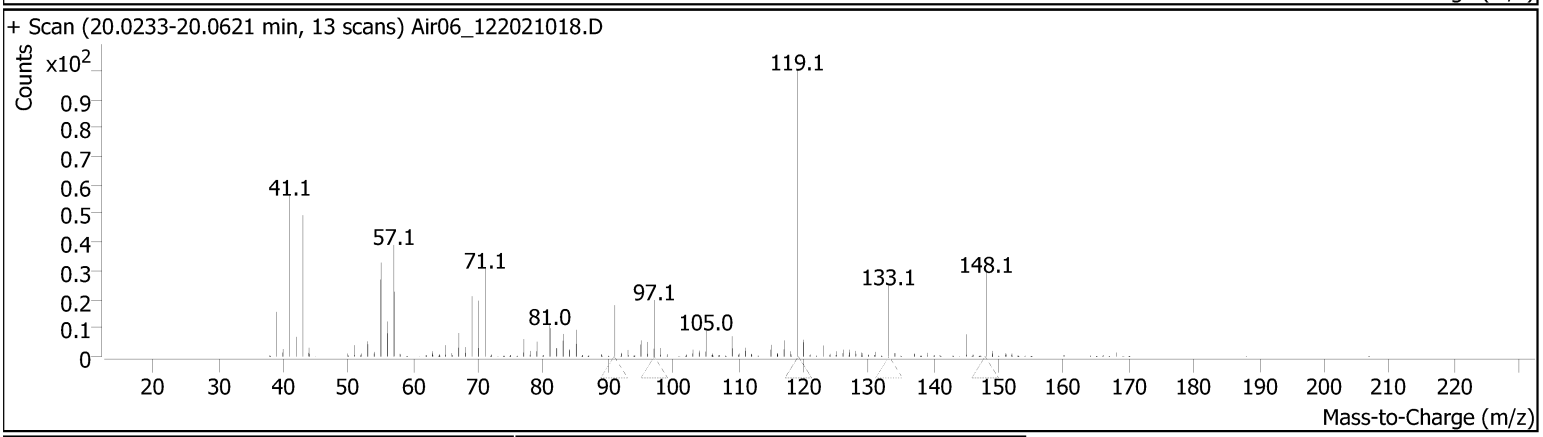


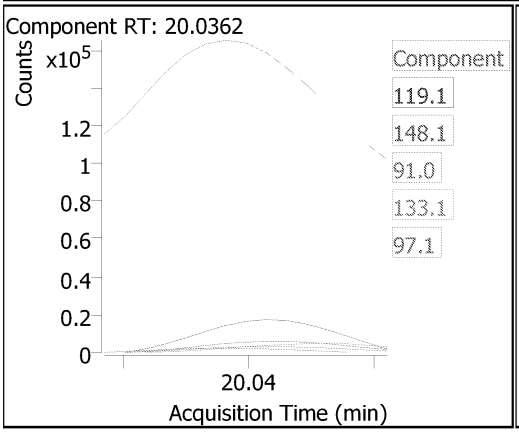


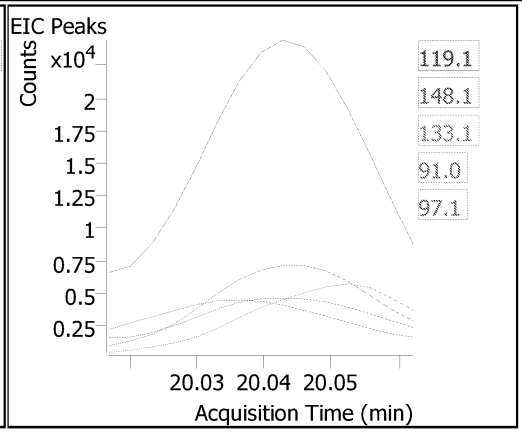
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.0362	Benzene, 1-methyl-4-(1-methylpropyl)-	88816.5	82.4	1595-16-0	C11H16	0.2084

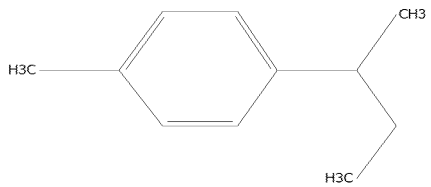




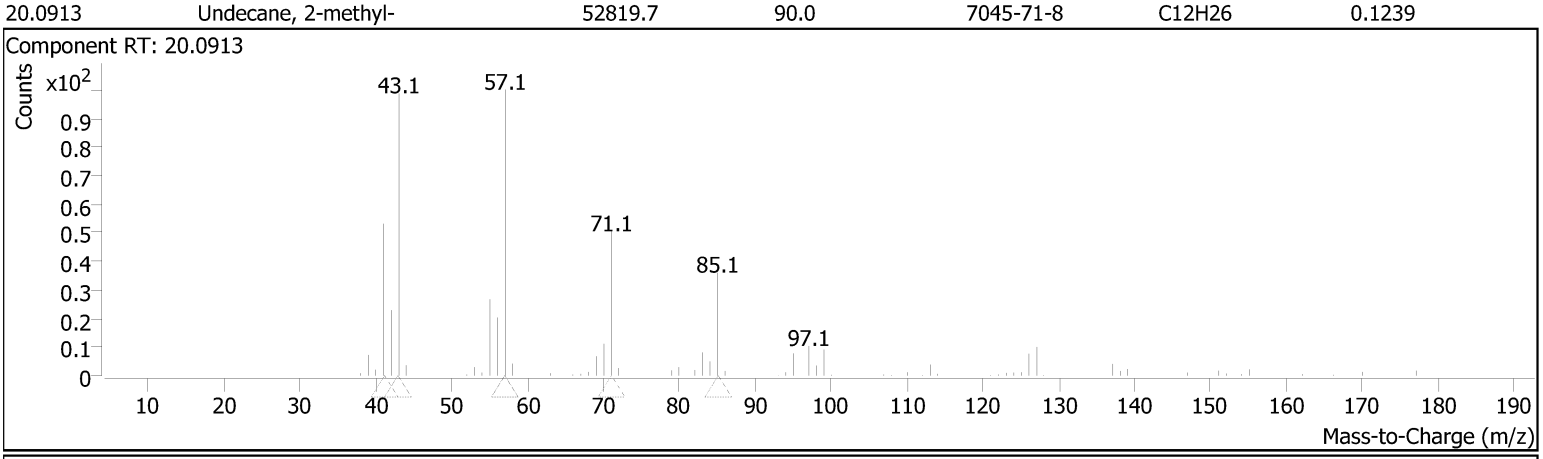


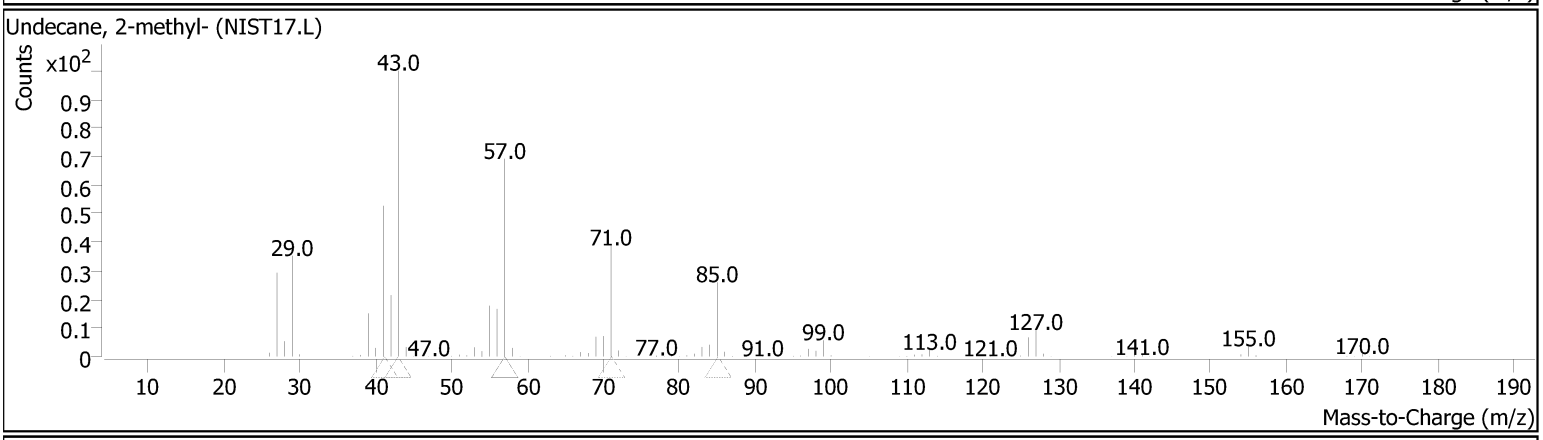


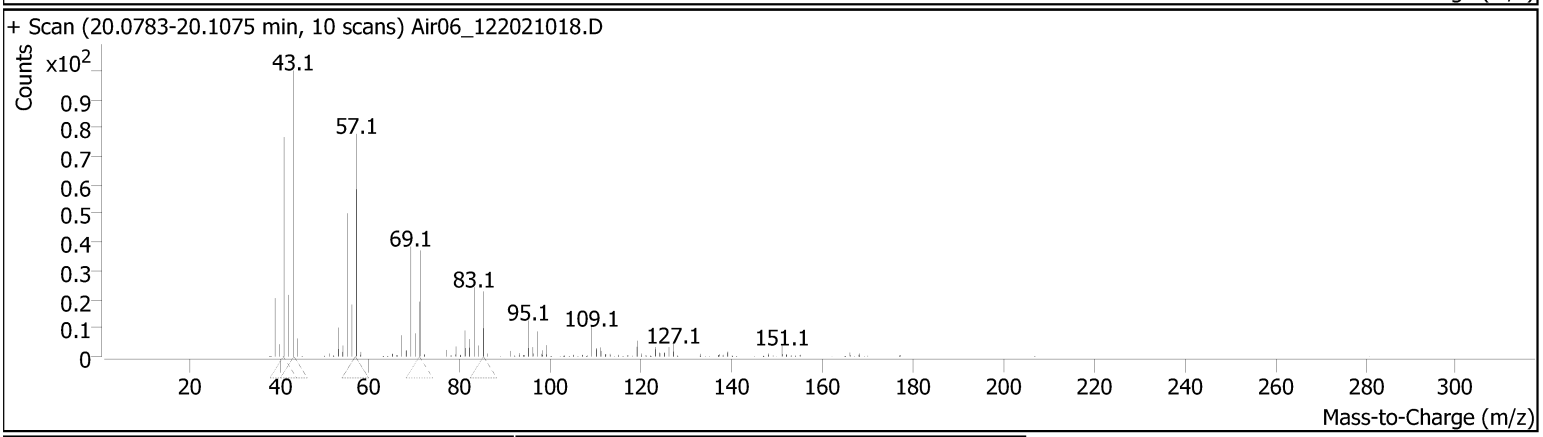


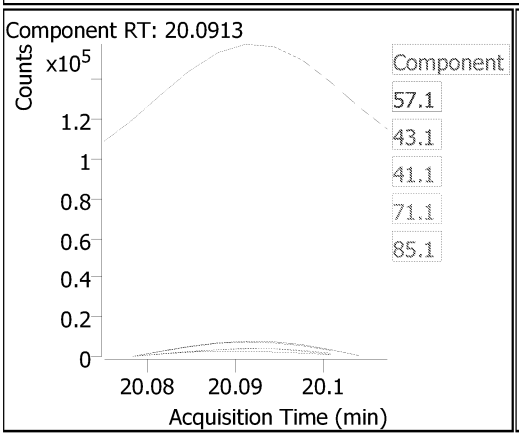


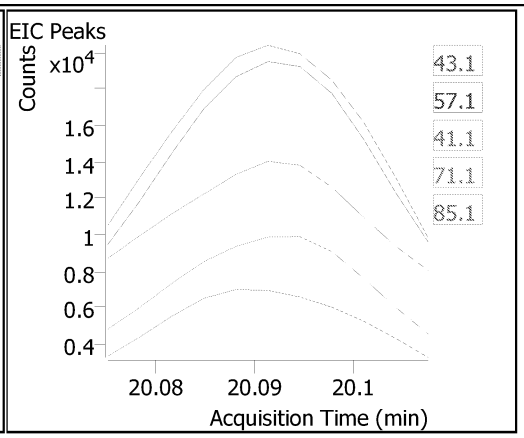
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.0913	Undecane, 2-methyl-	52819.7	90.0	7045-71-8	C12H26	0.1239





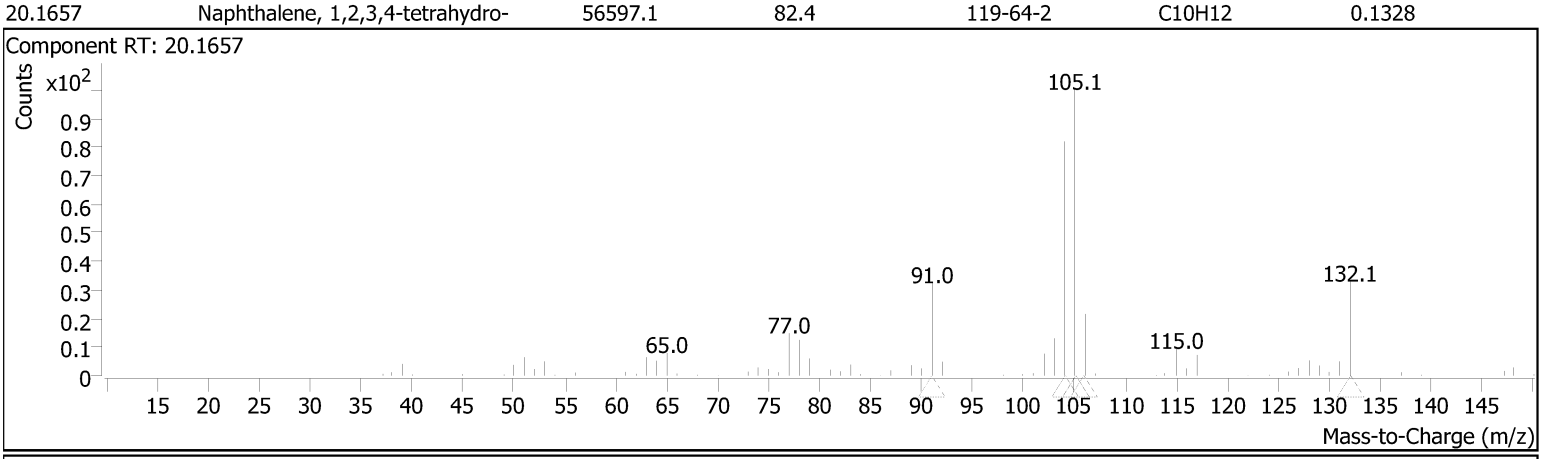


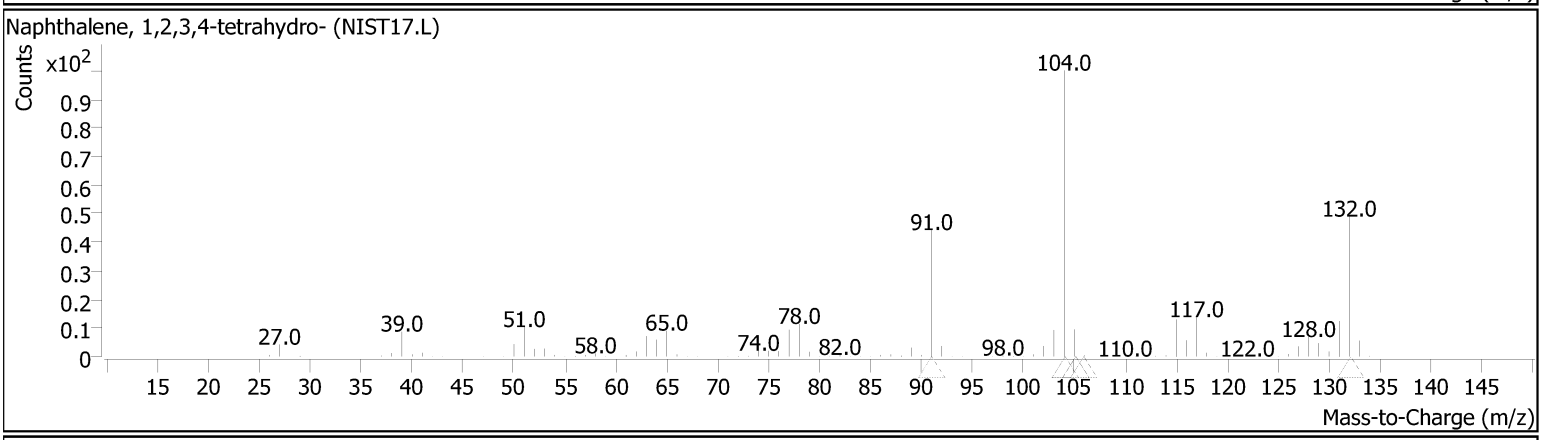


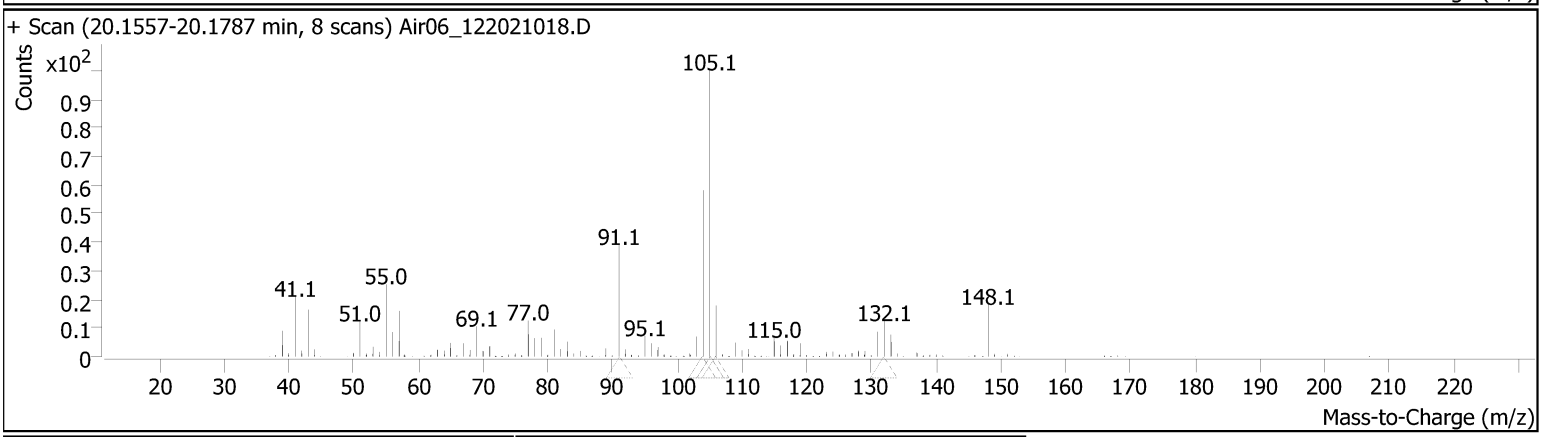


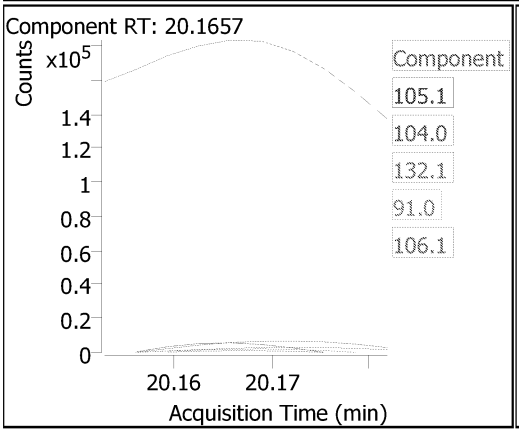


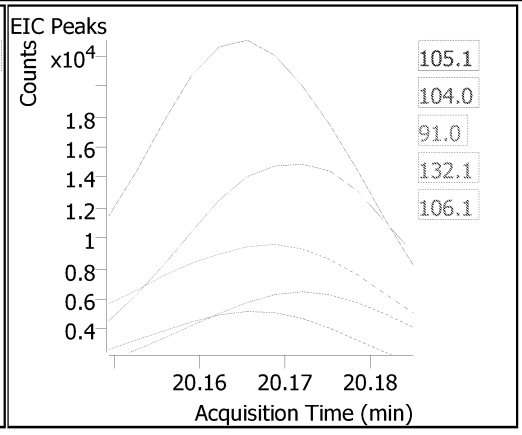
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.1657	Naphthalene, 1,2,3,4-tetrahydro-	56597.1	82.4	119-64-2	C10H12	0.1328

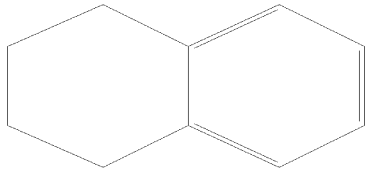




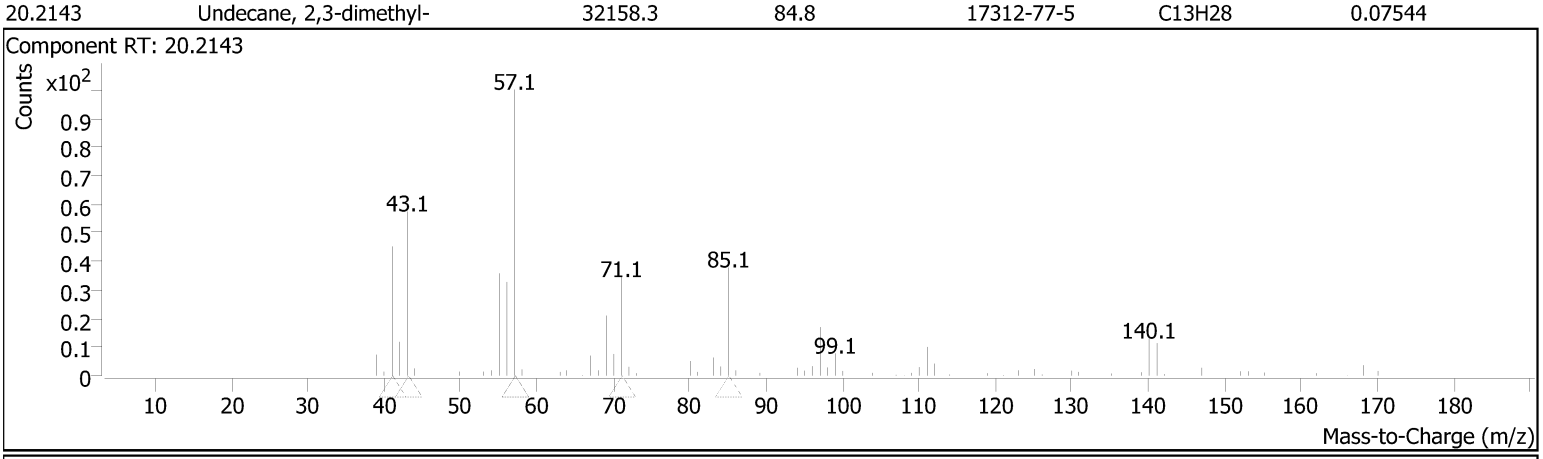


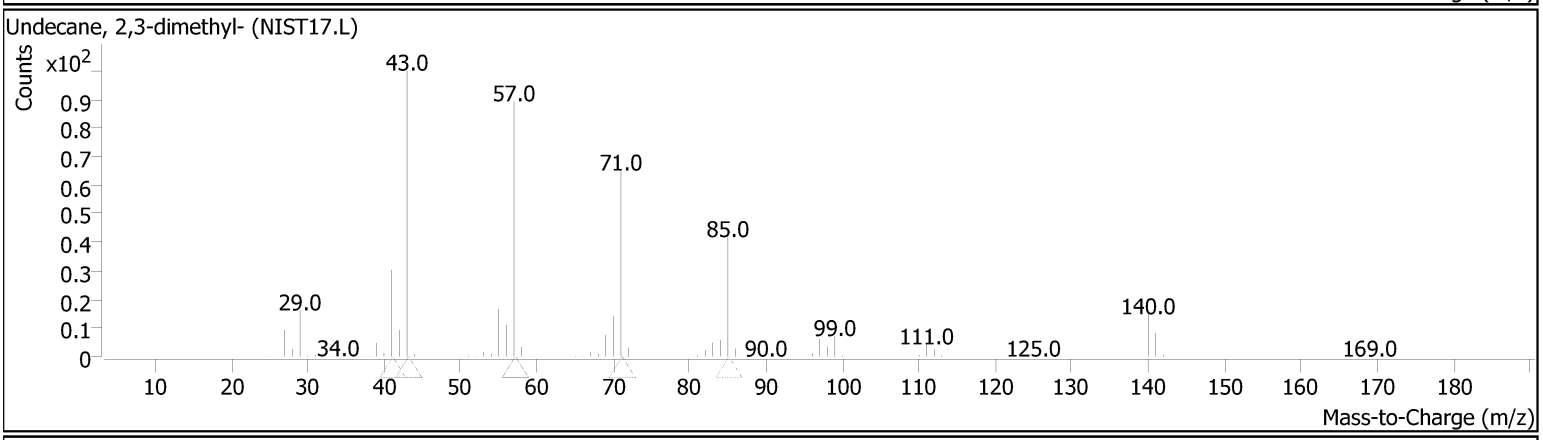


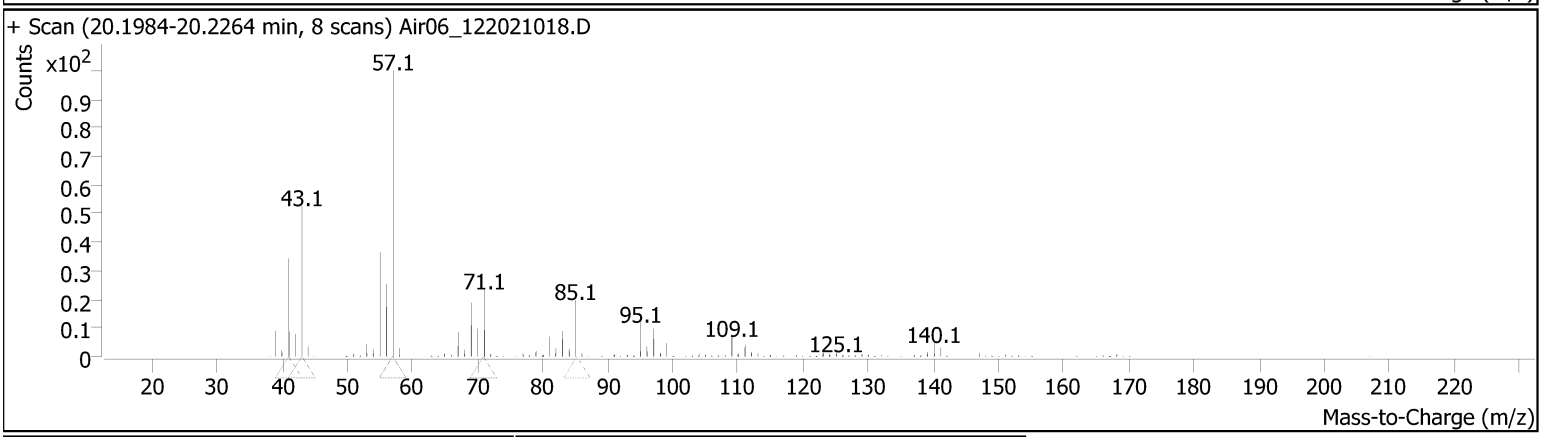


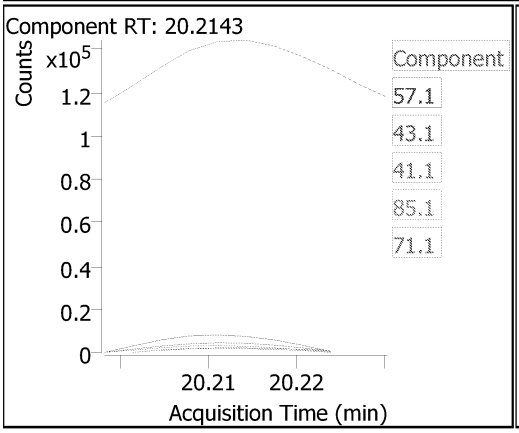


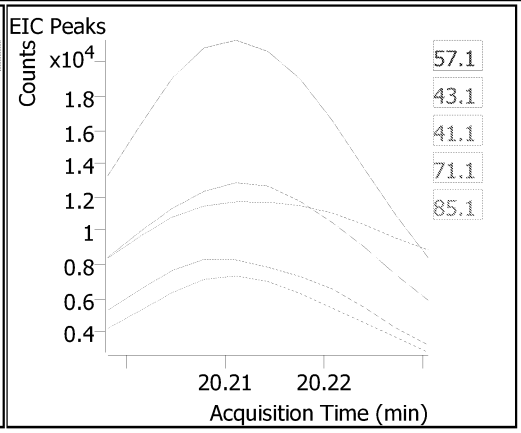
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.2143	Undecane, 2,3-dimethyl-	32158.3	84.8	17312-77-5	C13H28	0.07544

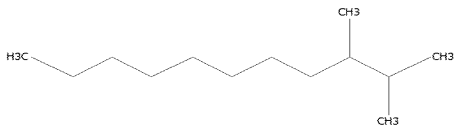




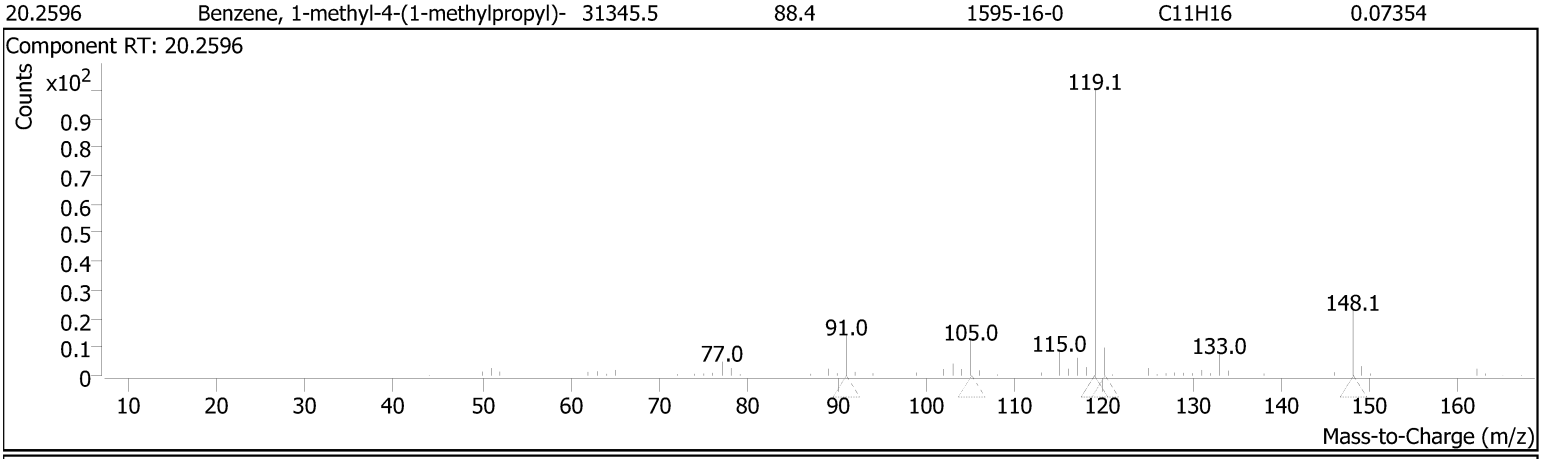


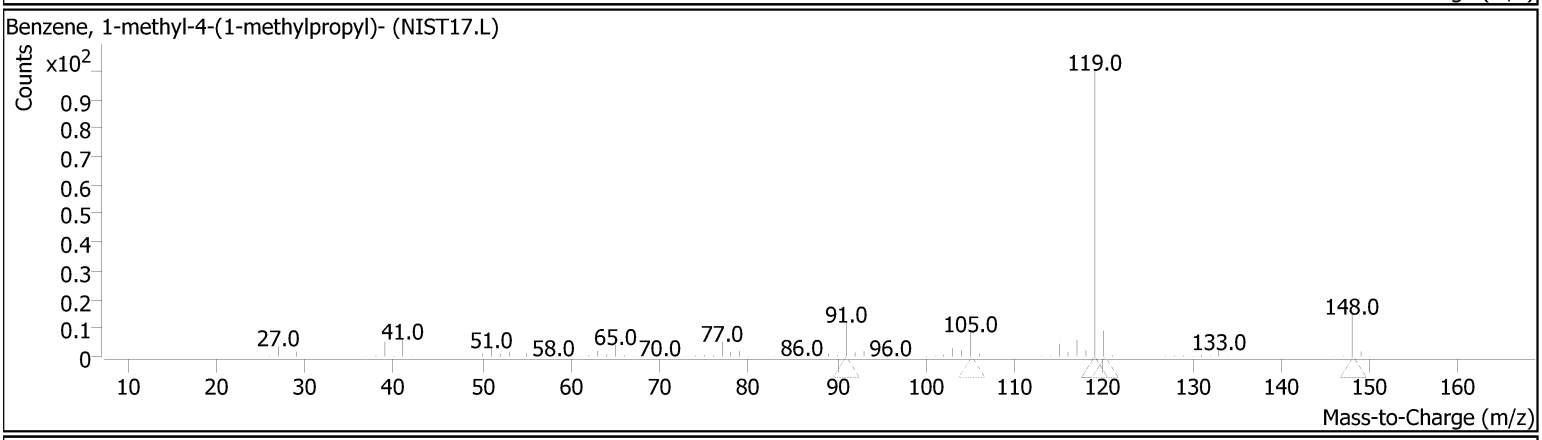


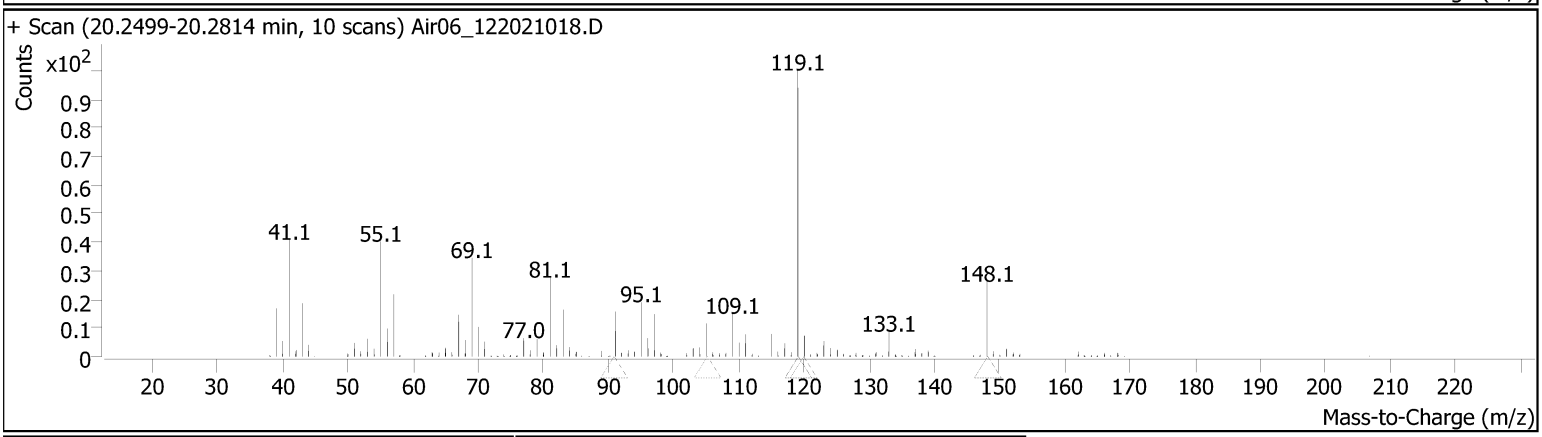


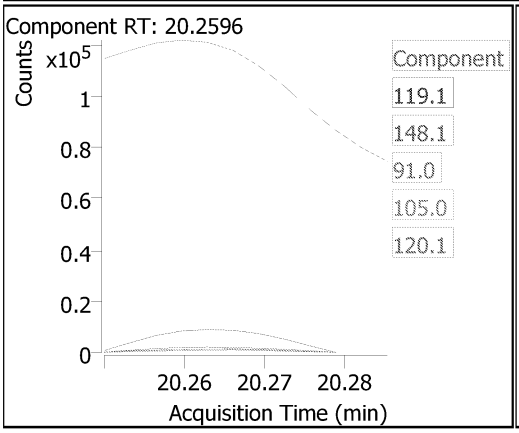


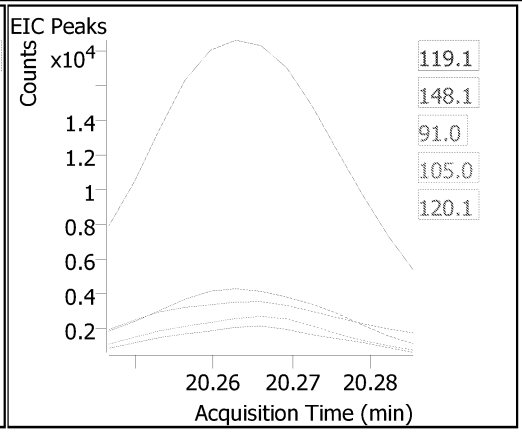
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.2596	Benzene, 1-methyl-4-(1-methylpropyl)-	31345.5	88.4	1595-16-0	C11H16	0.07354

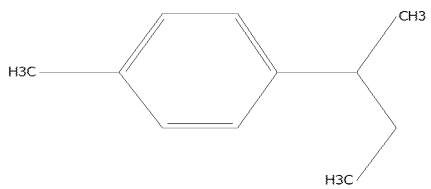








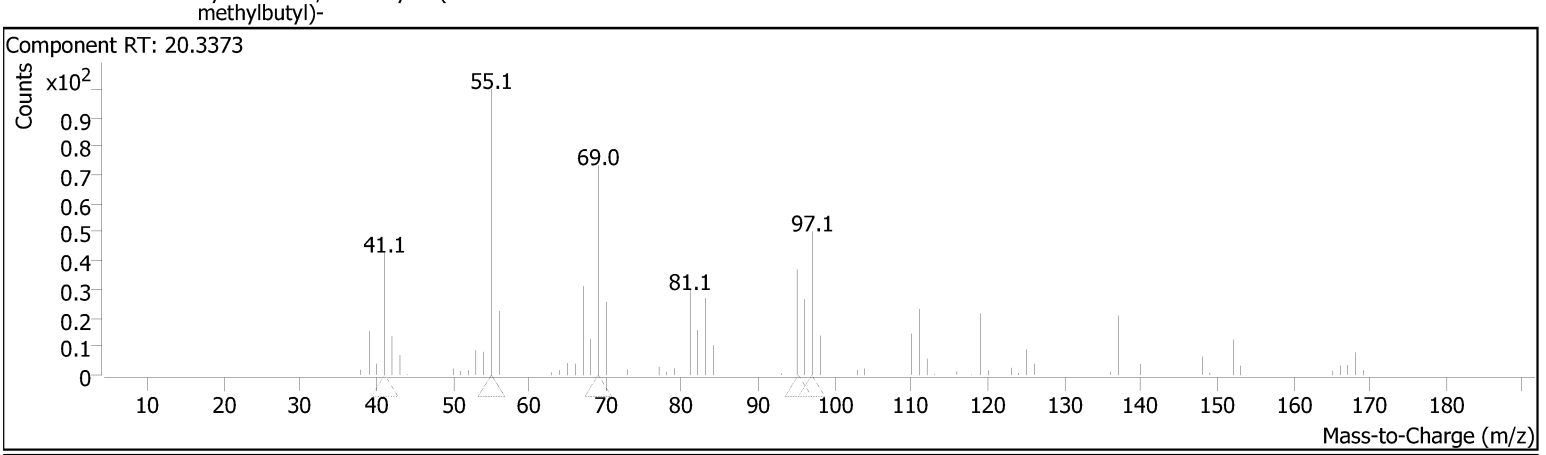


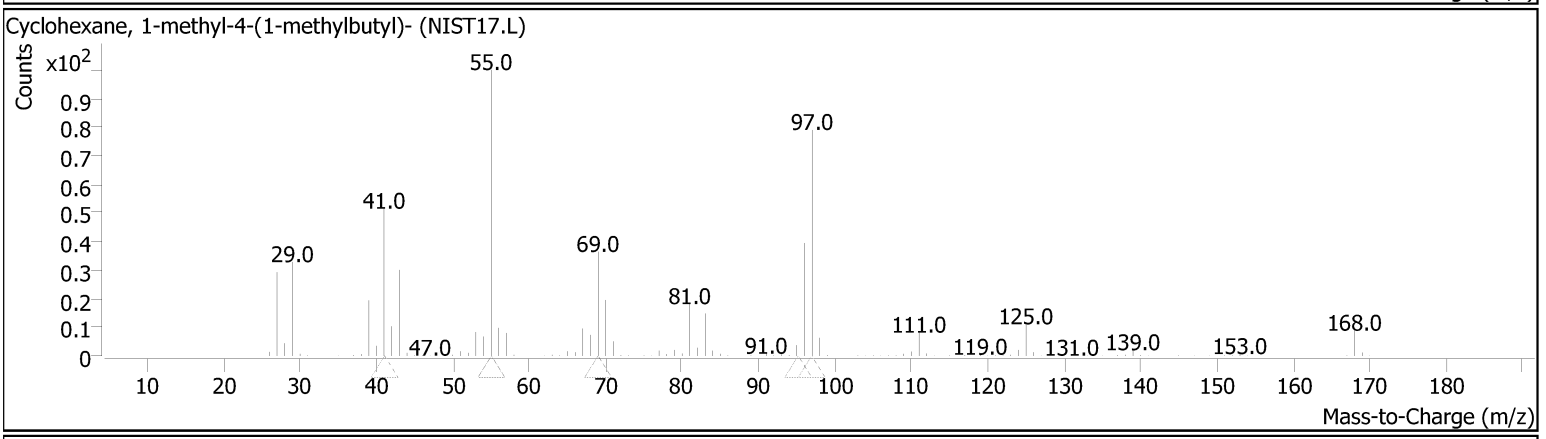


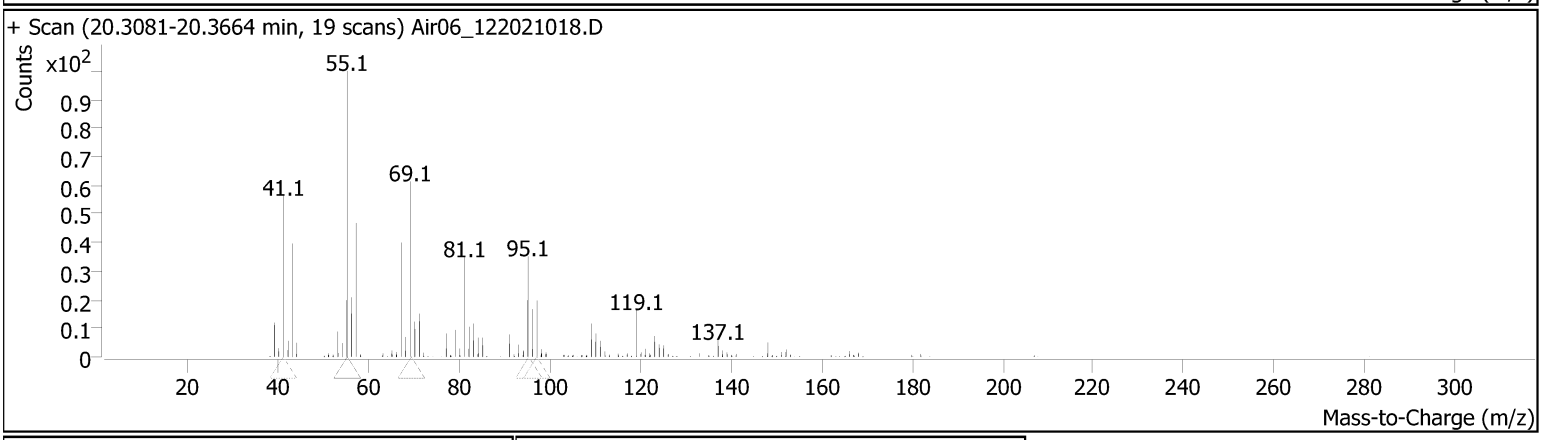
Library Search Results - NonTarget Hits with Details

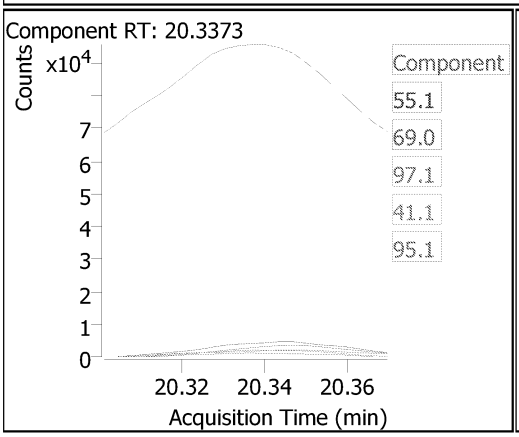
Agilent Technologies

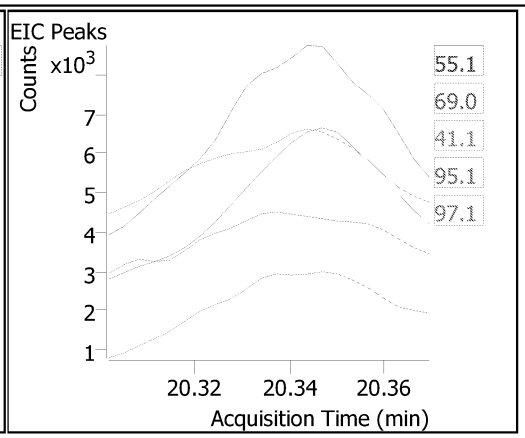
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.3373	Cyclohexane, 1-methyl-4-(1-methylbutyl)-	64519.2	78.0	54411-00-6	C12H24	0.1514

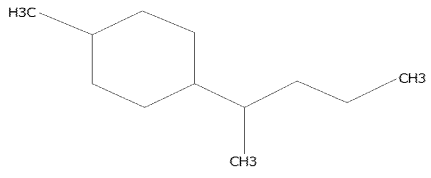








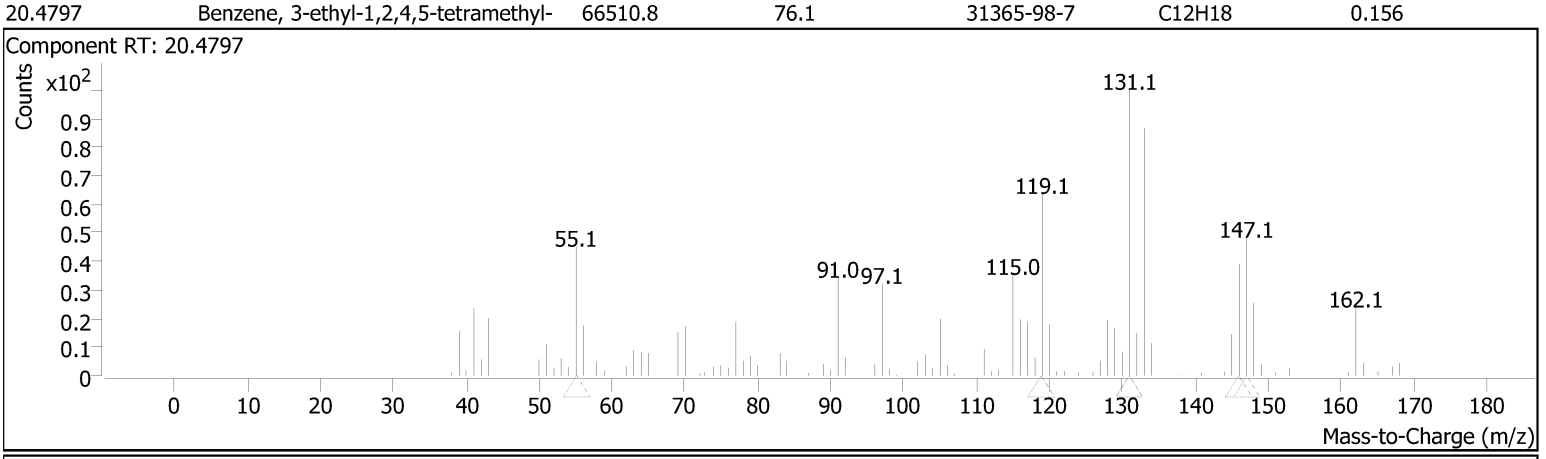


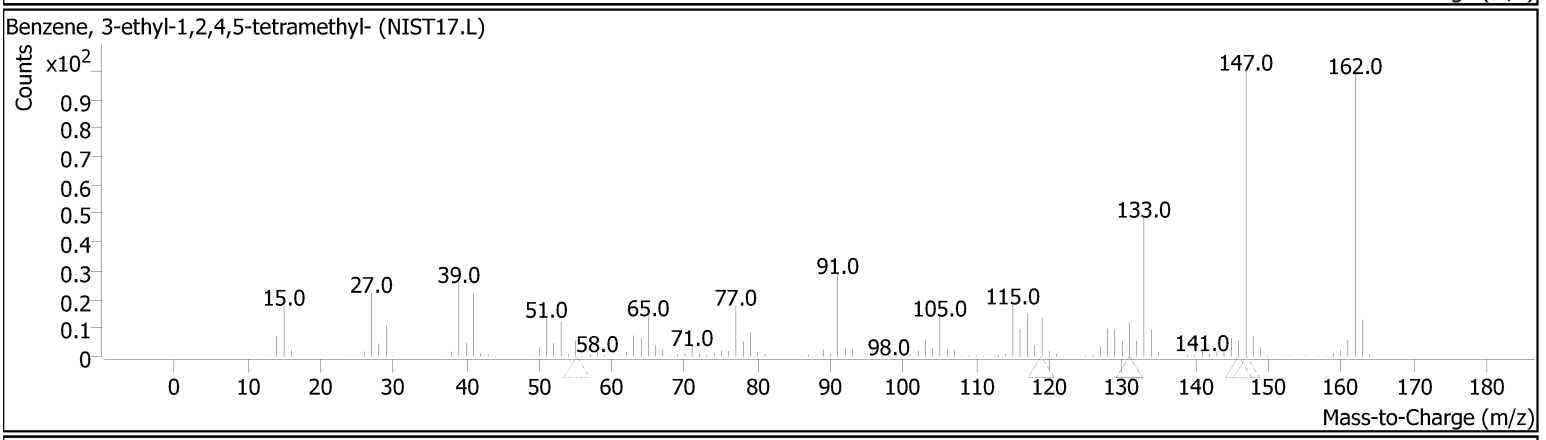


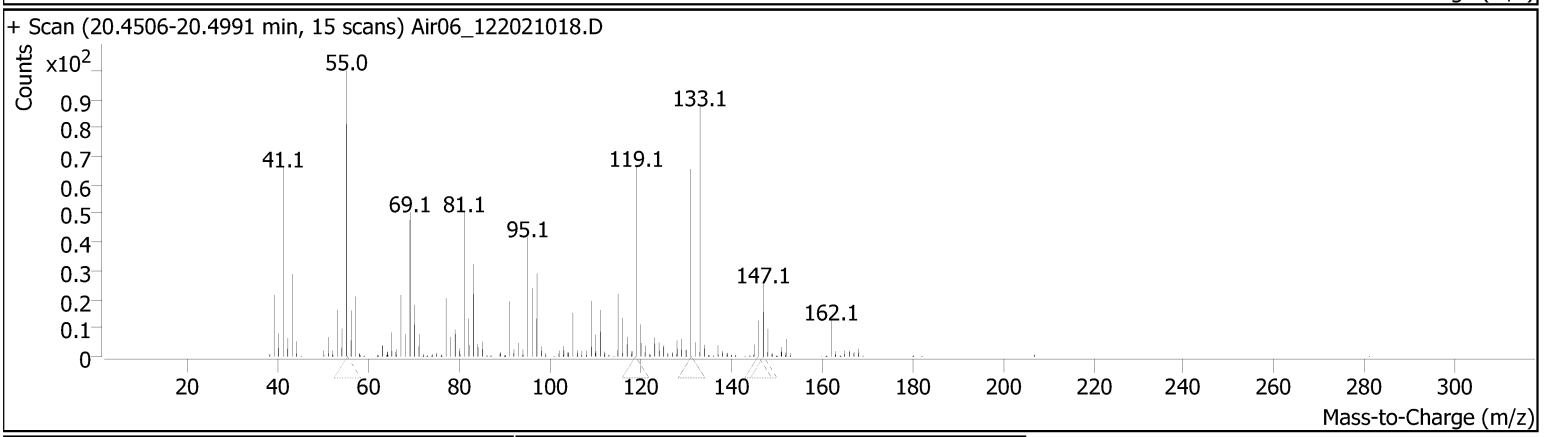
Library Search Results - NonTarget Hits with Details

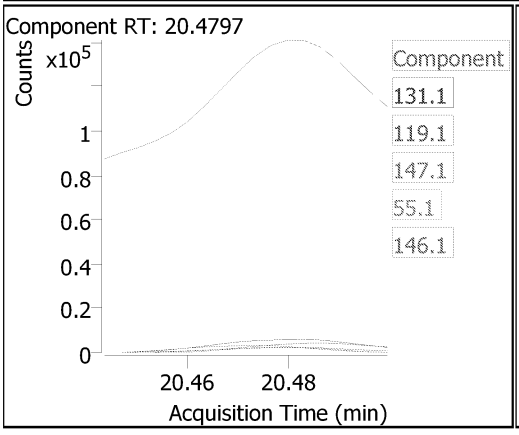
Agilent Technologies

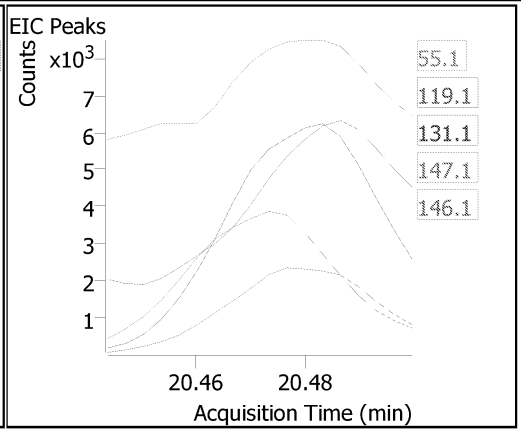
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.4797	Benzene, 3-ethyl-1,2,4,5-tetramethyl-	66510.8	76.1	31365-98-7	C12H18	0.156

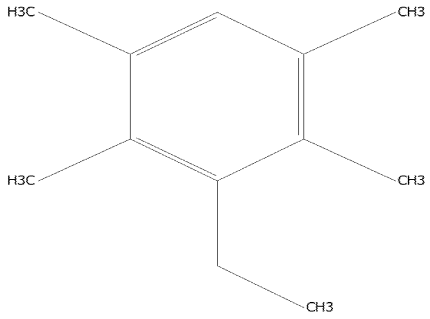




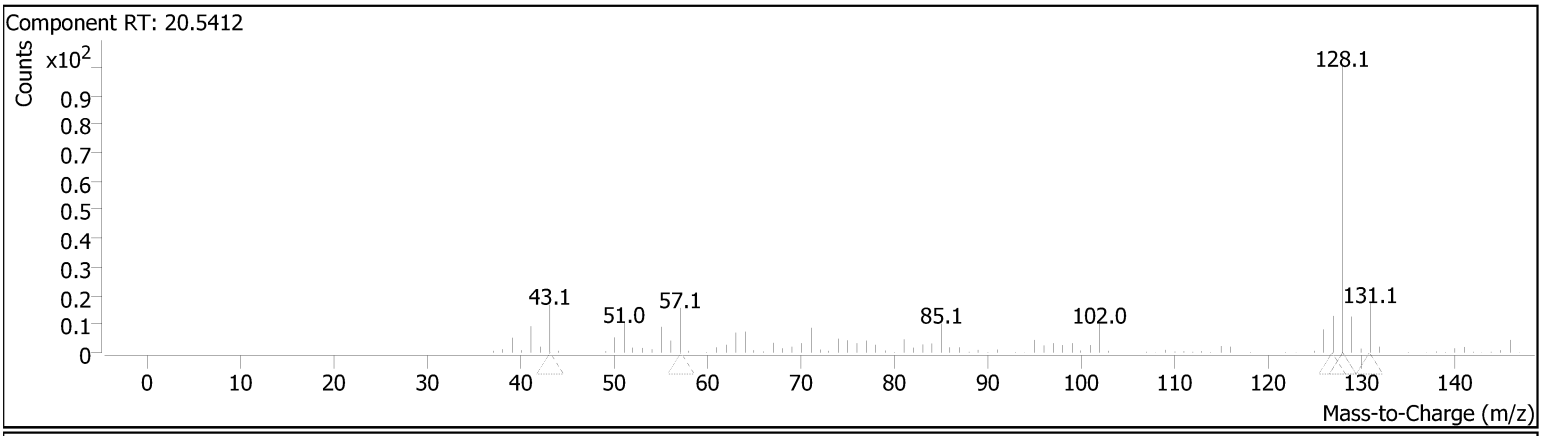


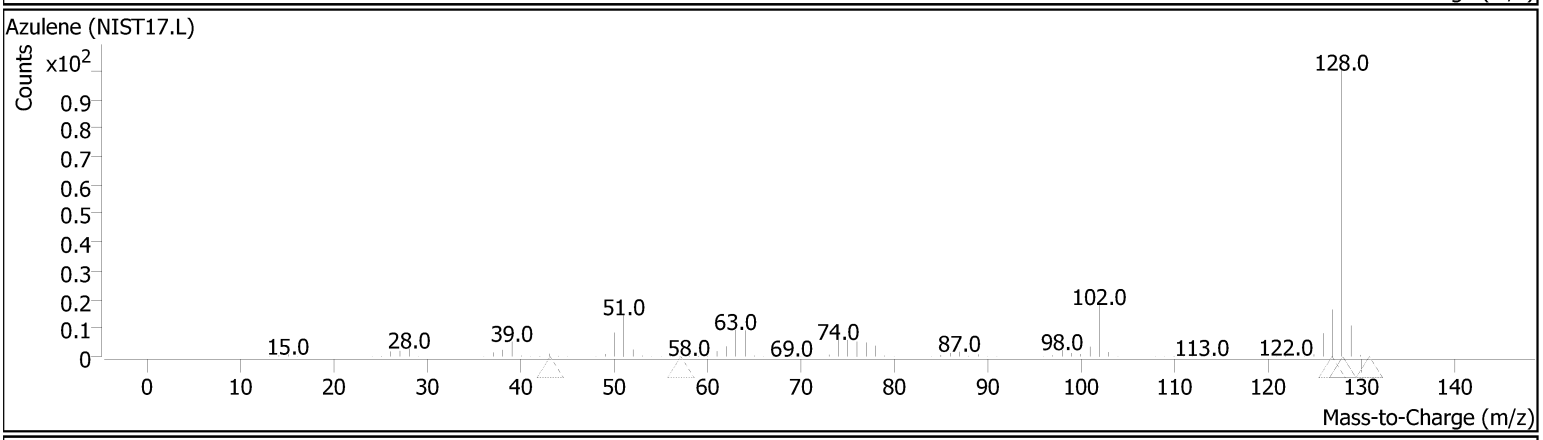


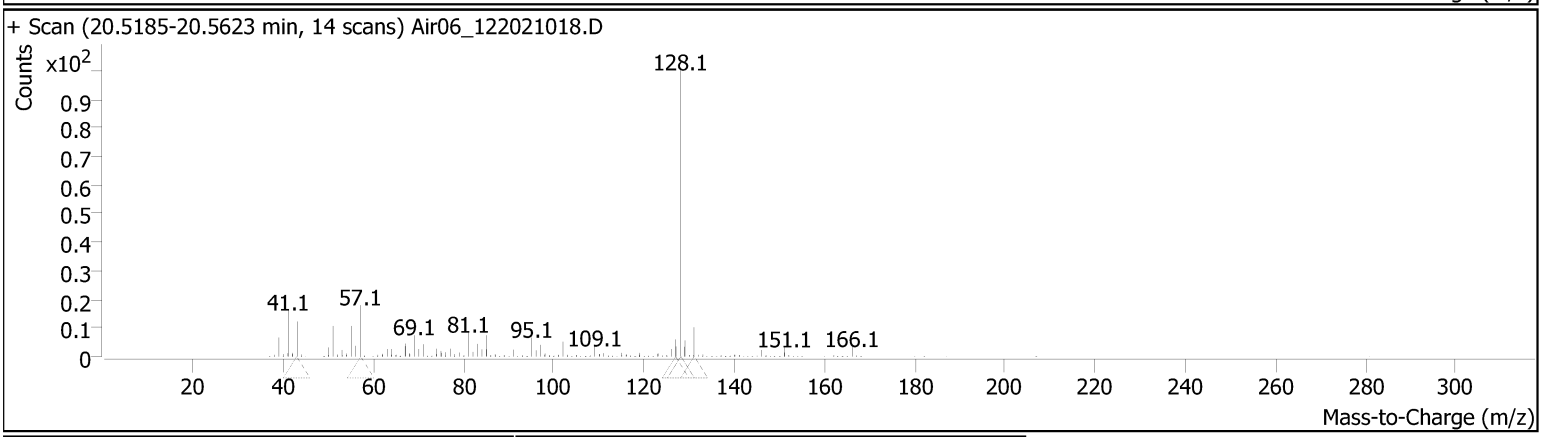


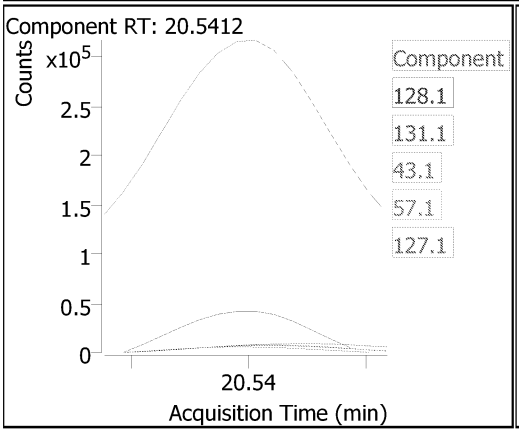


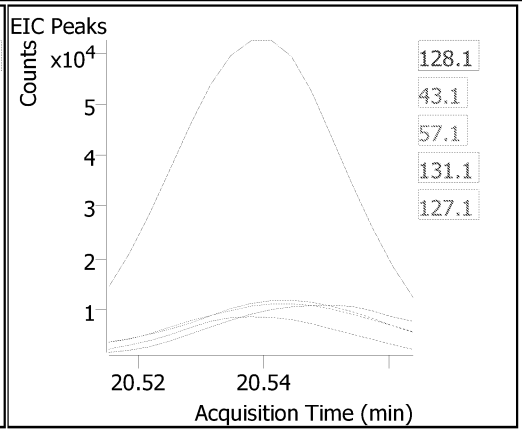
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.5412	Azulene	291697.8	75.9	275-51-4	C10H8	0.6843

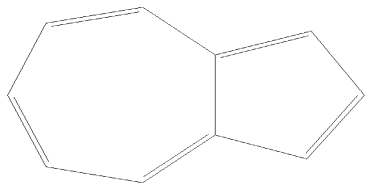




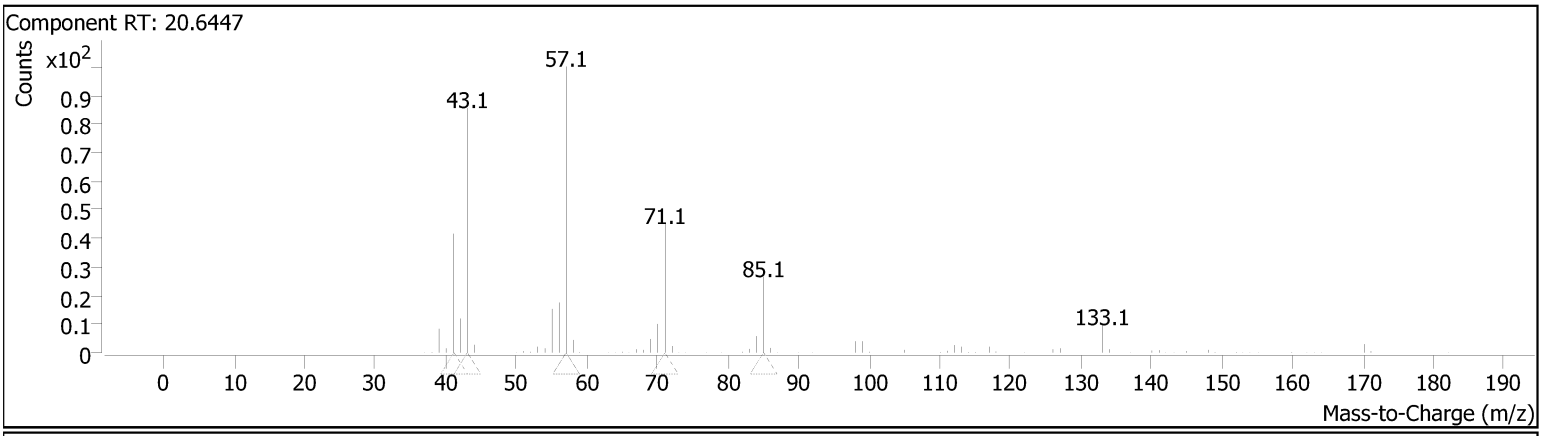


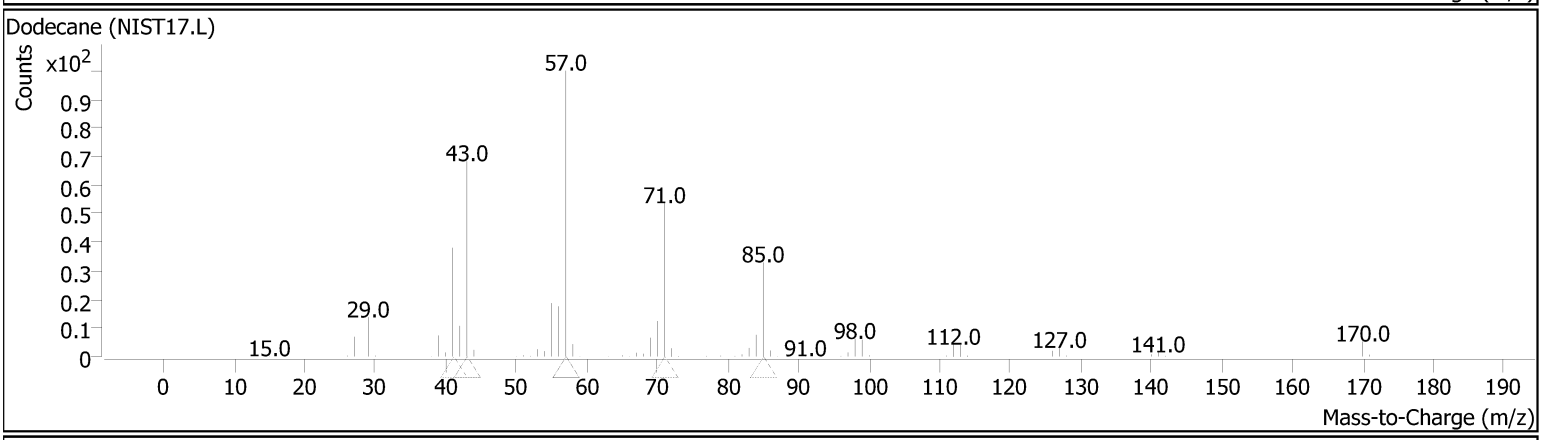


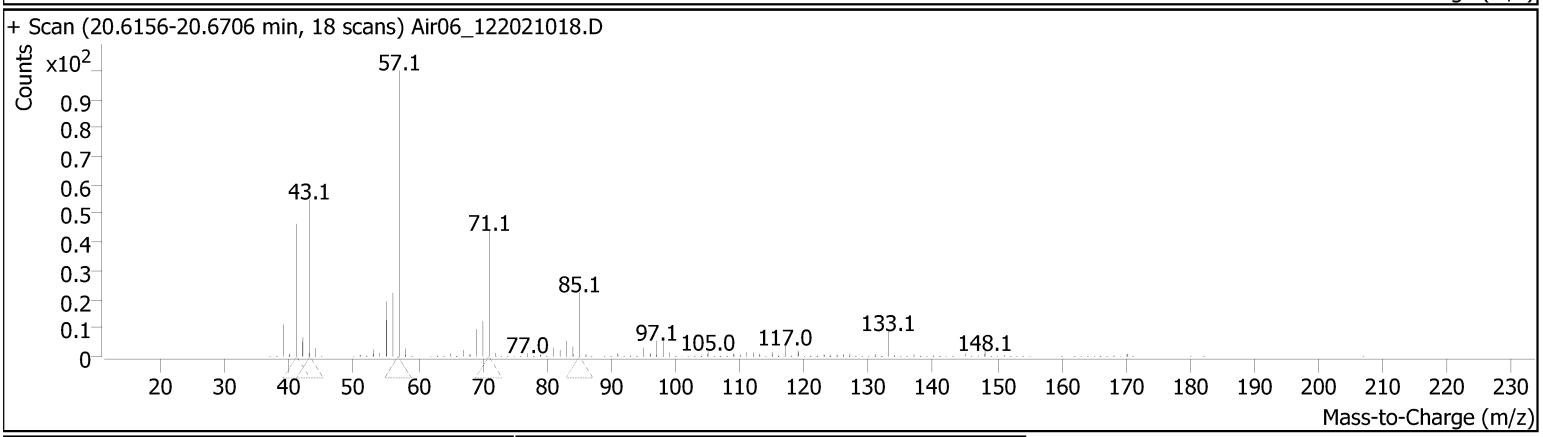


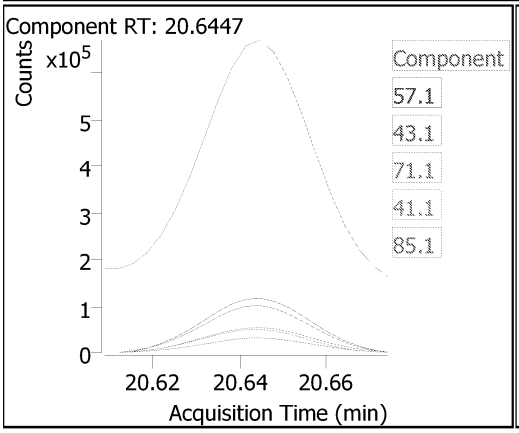


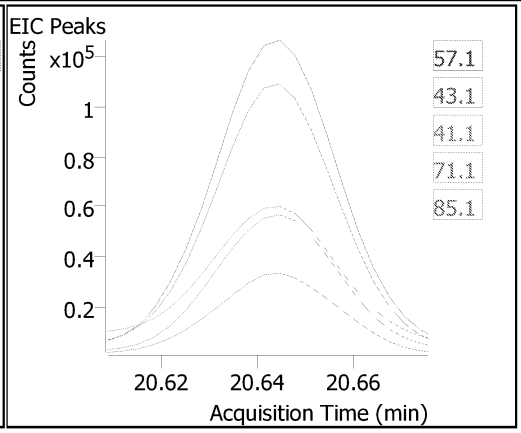
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.6447	Dodecane	901453.2	91.8	112-40-3	C12H26	2.115





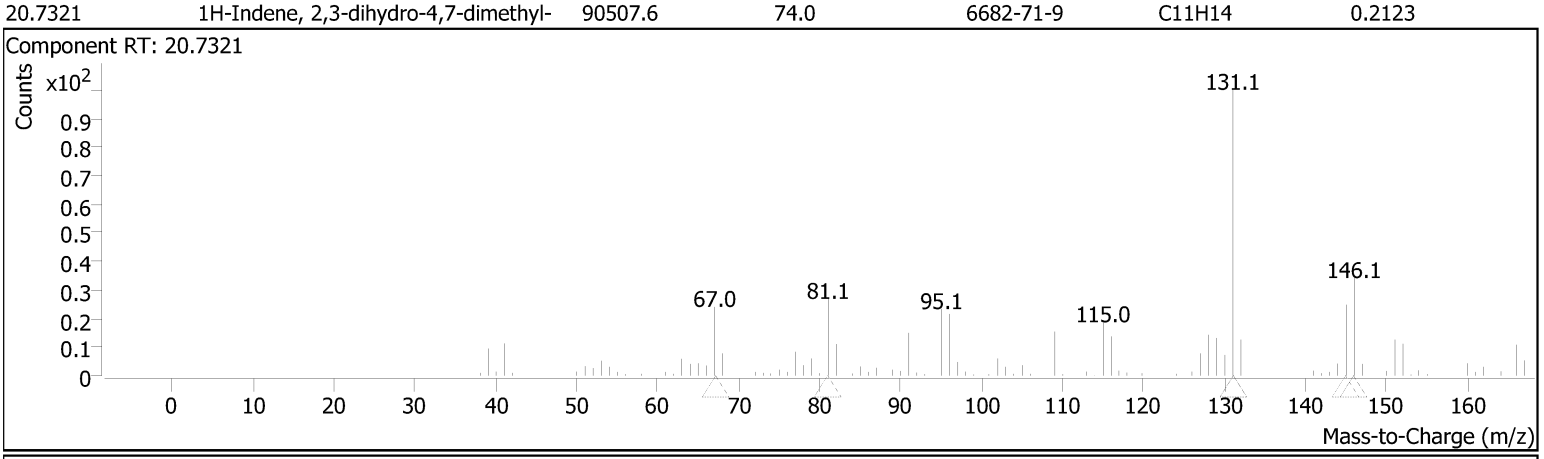


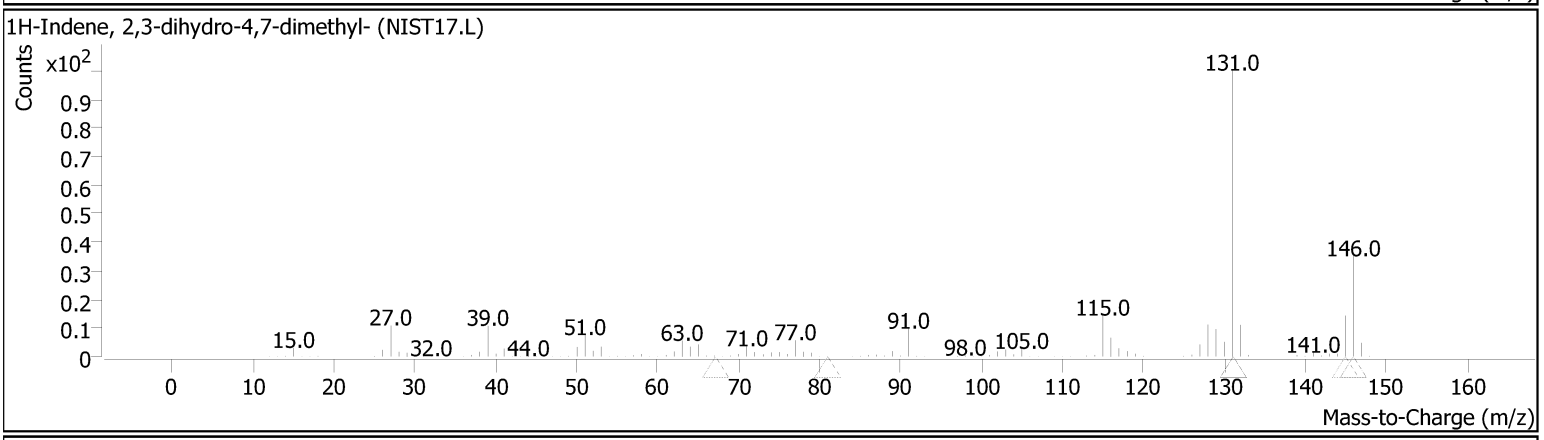


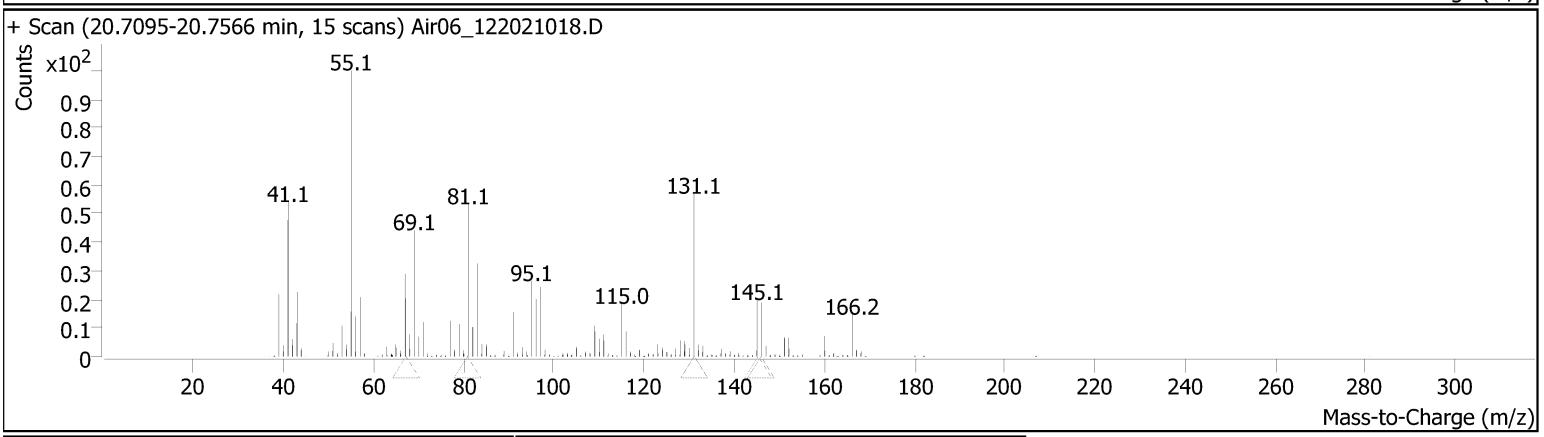


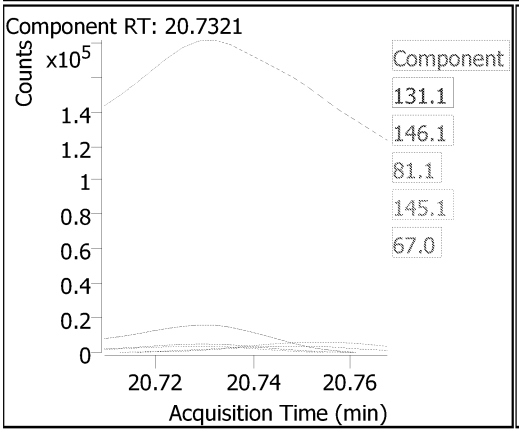


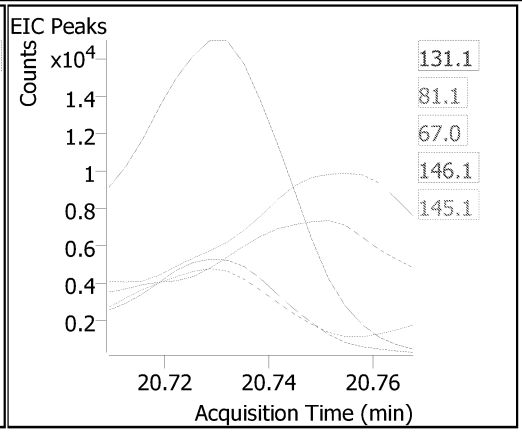
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.7321	1H-Indene, 2,3-dihydro-4,7-dimethyl-	90507.6	74.0	6682-71-9	C11H14	0.2123

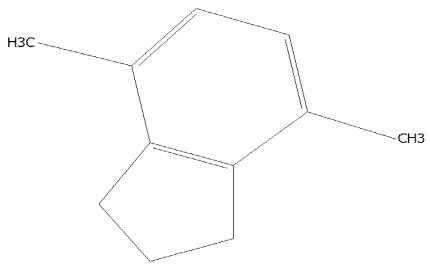




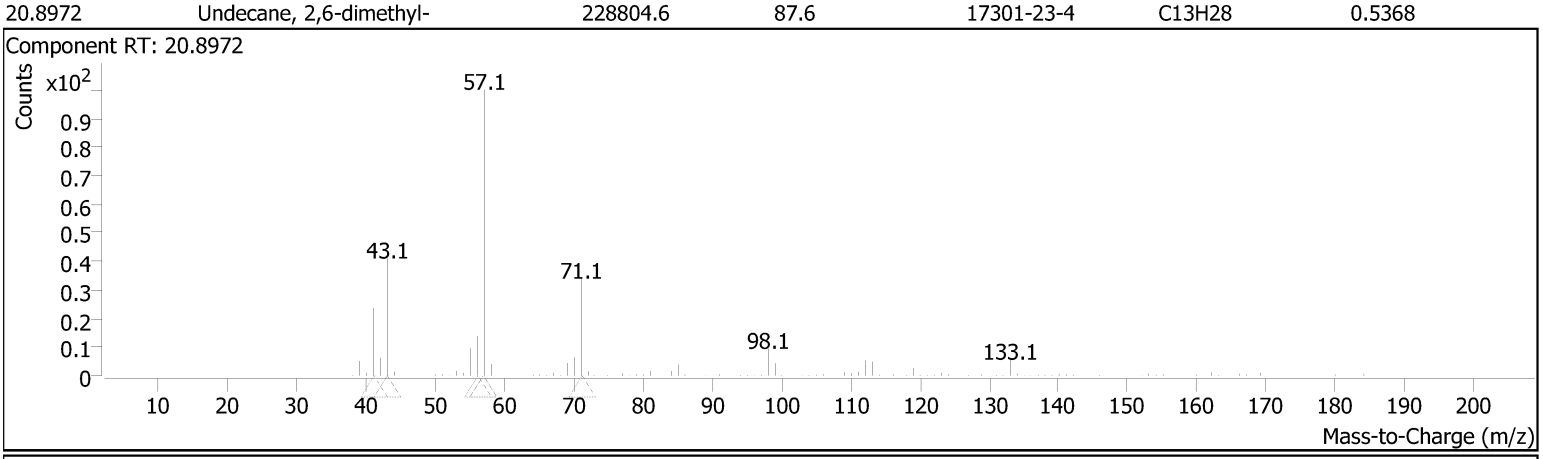


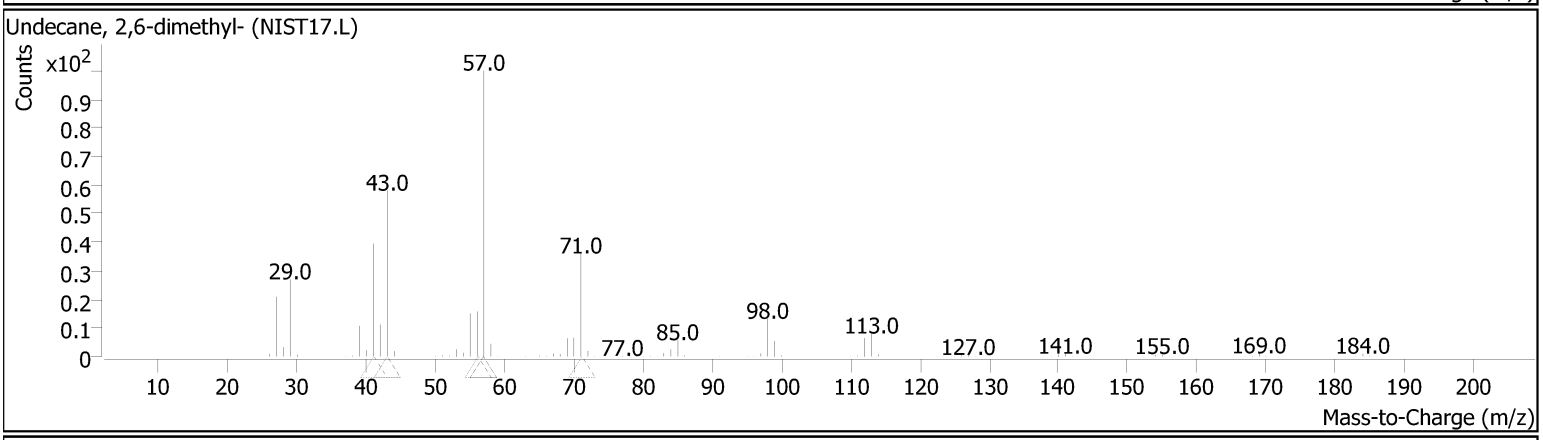


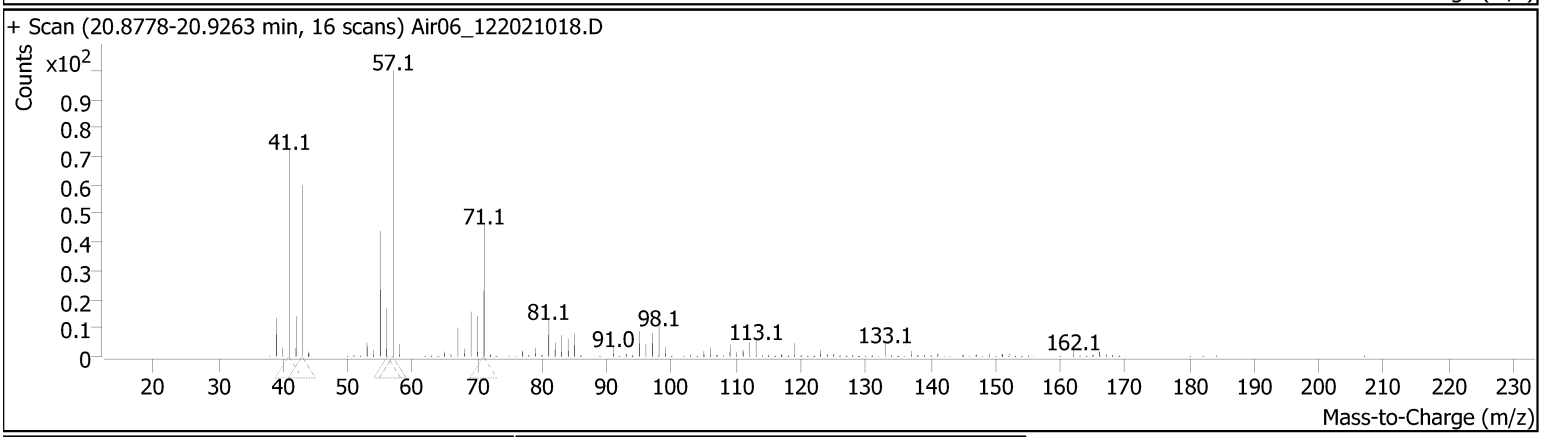


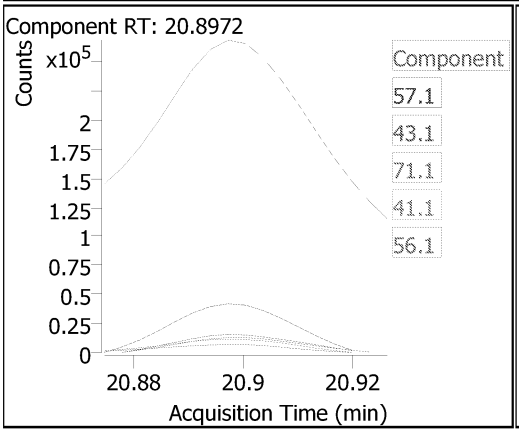


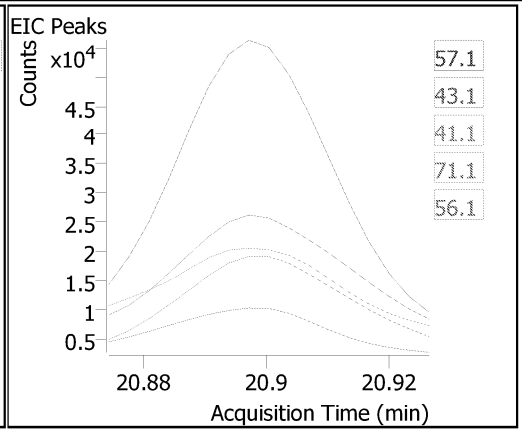
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.8972	Undecane, 2,6-dimethyl-	228804.6	87.6	17301-23-4	C13H28	0.5368

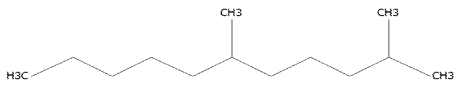








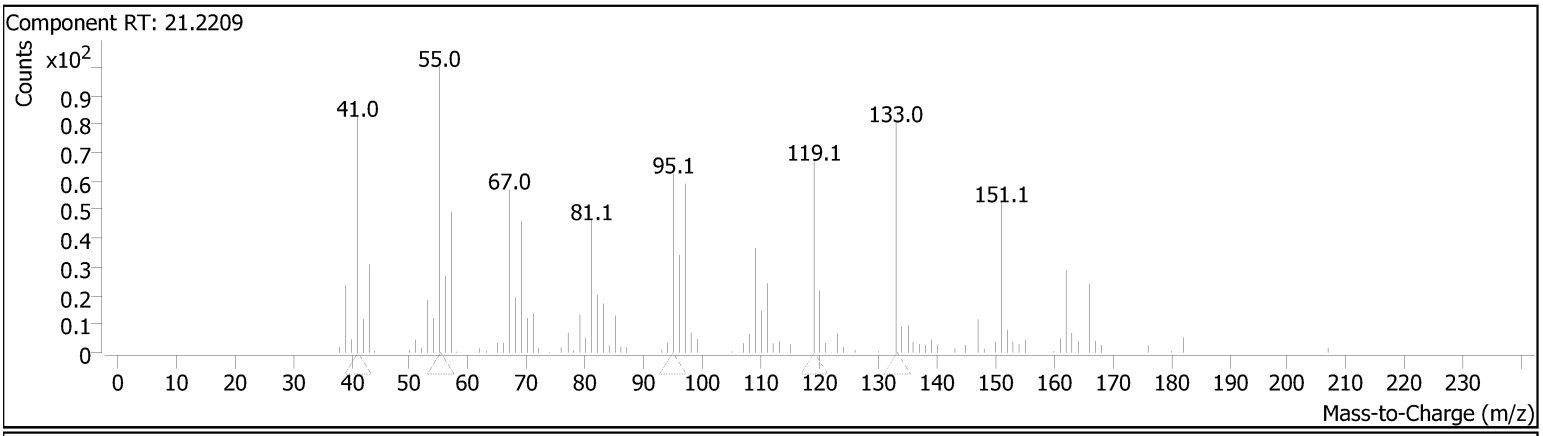


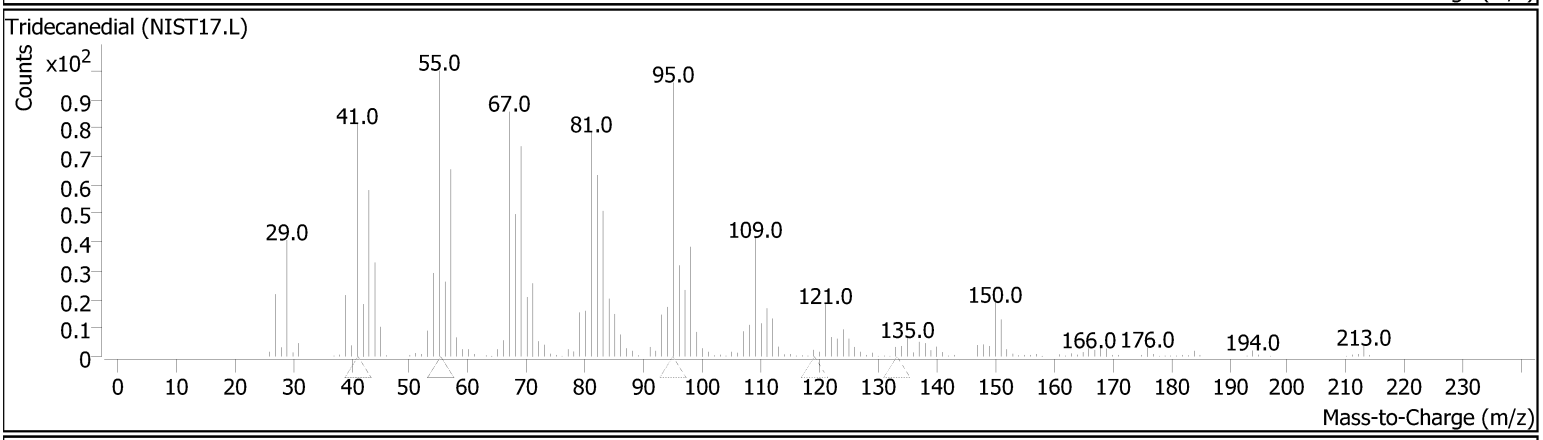


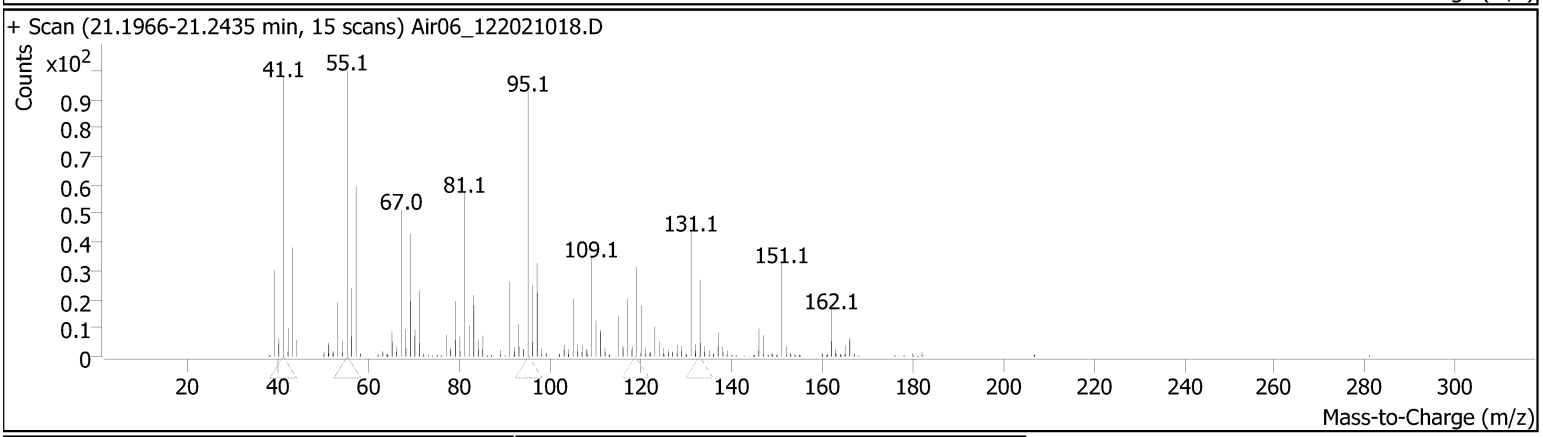
Library Search Results - NonTarget Hits with Details

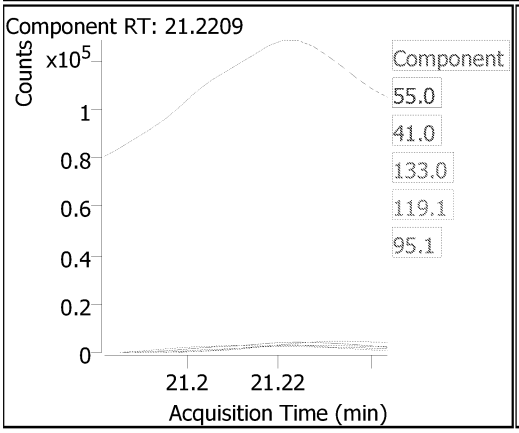
Agilent Technologies

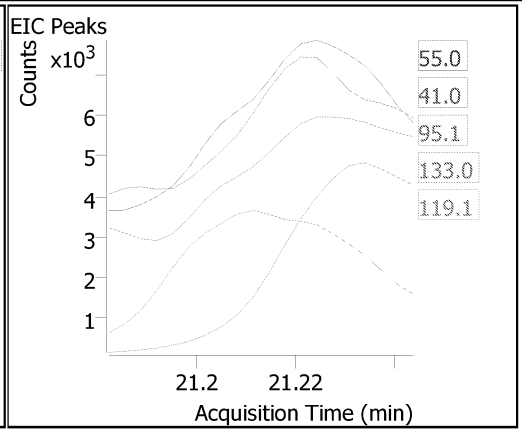
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.2209	Tridecanedial	64170.3	71.3	63521-76-6	C13H24O2	0.1505

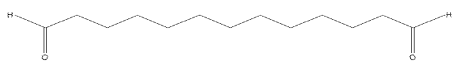




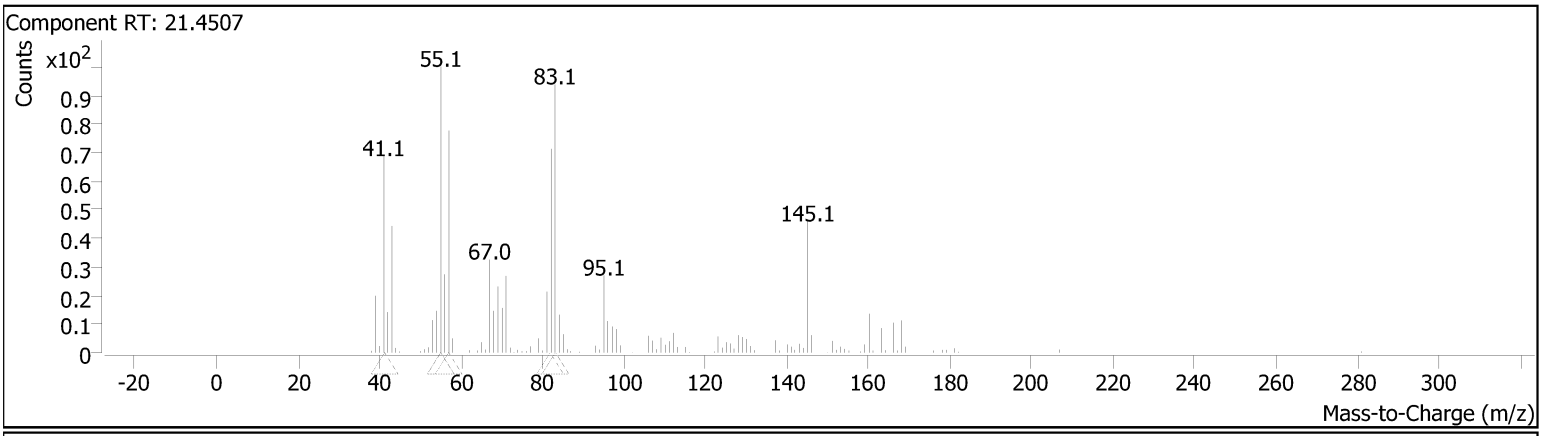


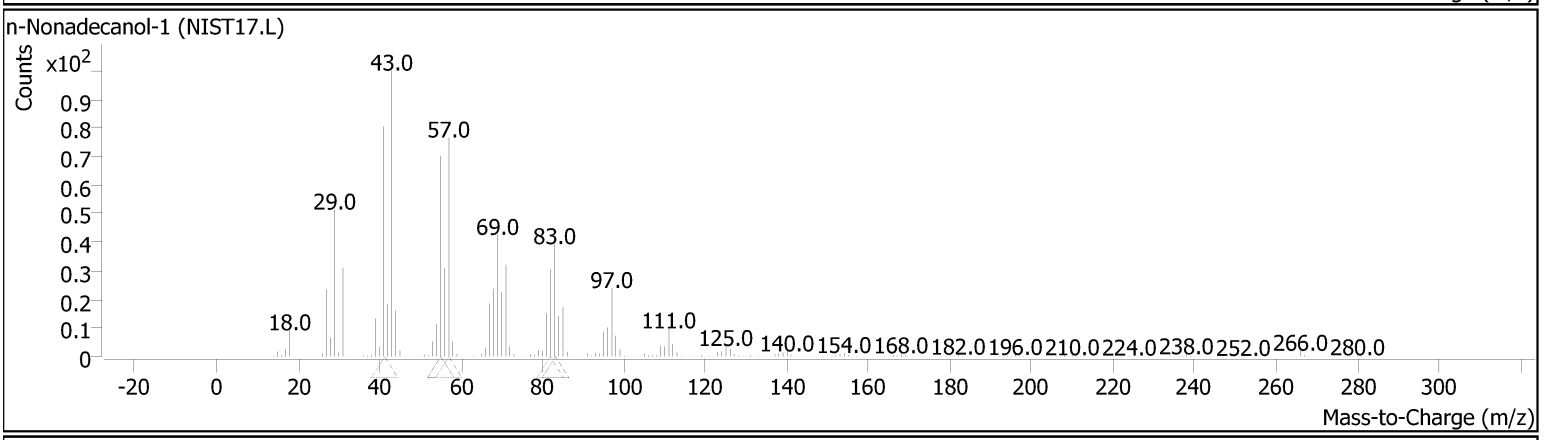


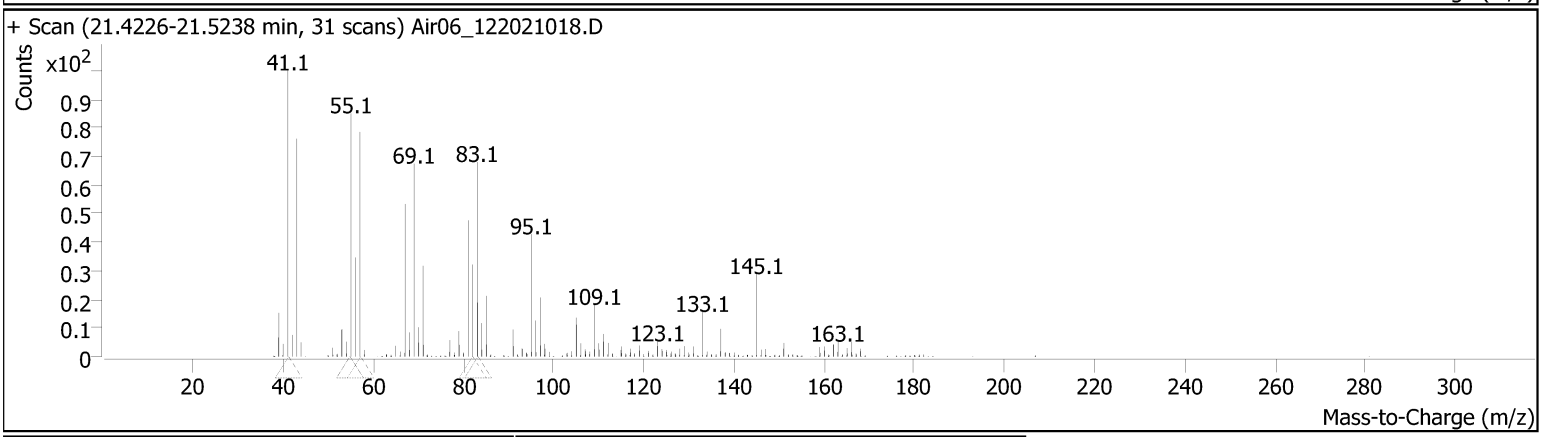


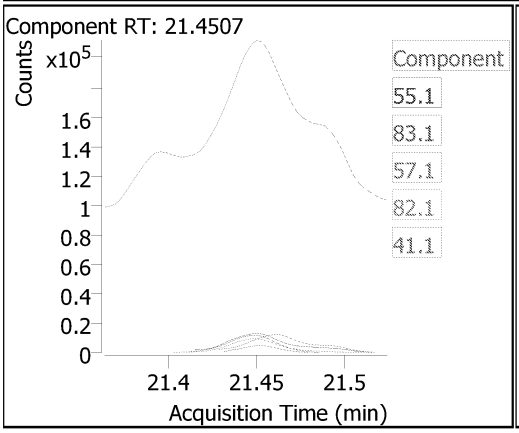


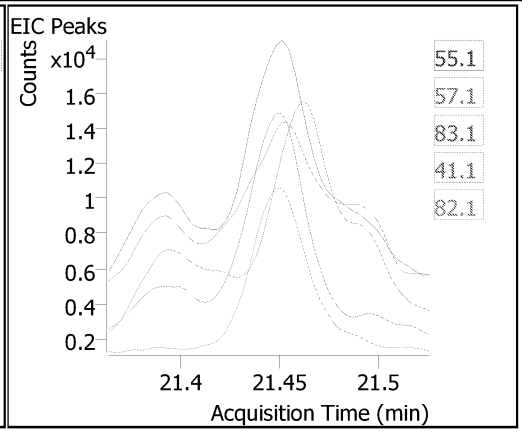
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.4507	n-Nonadecanol-1	466883.2	75.3	1454-84-8	C19H40O	1.095



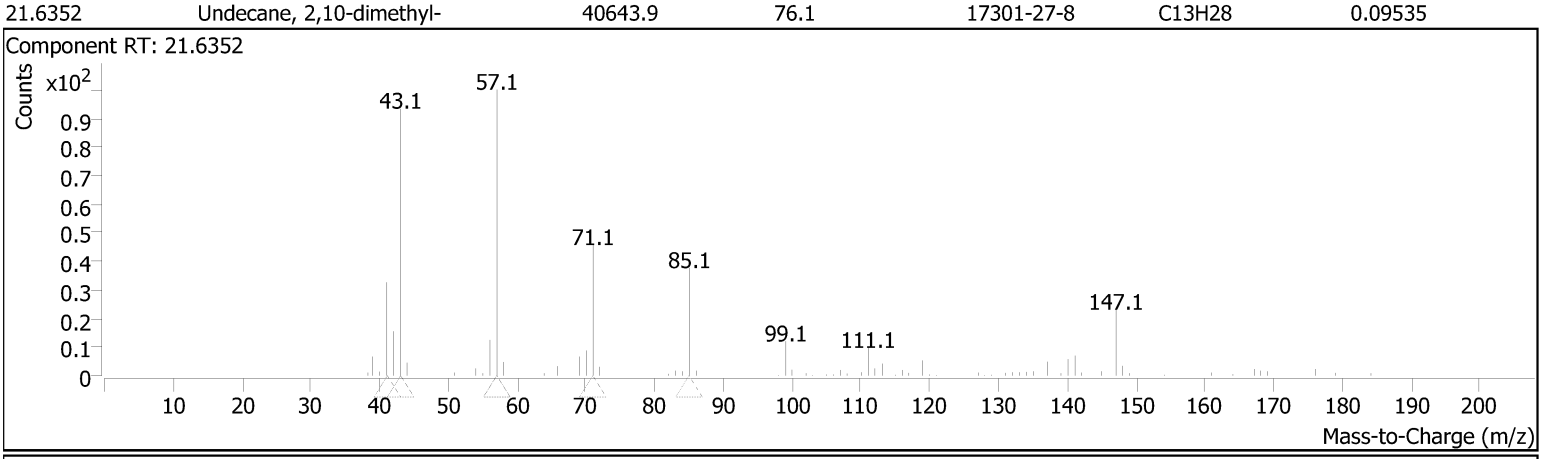


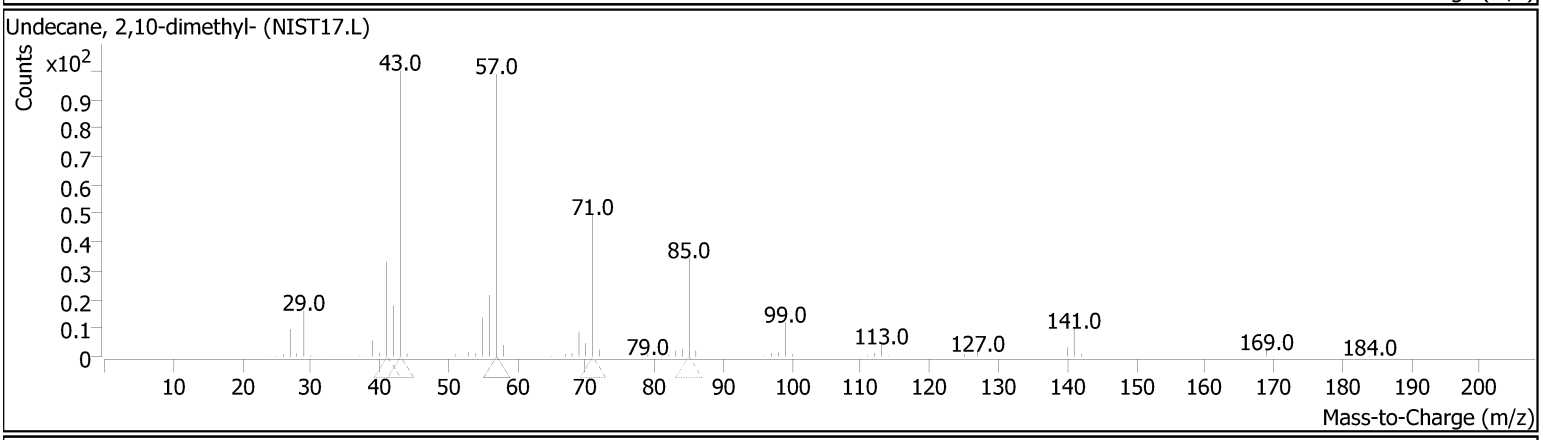


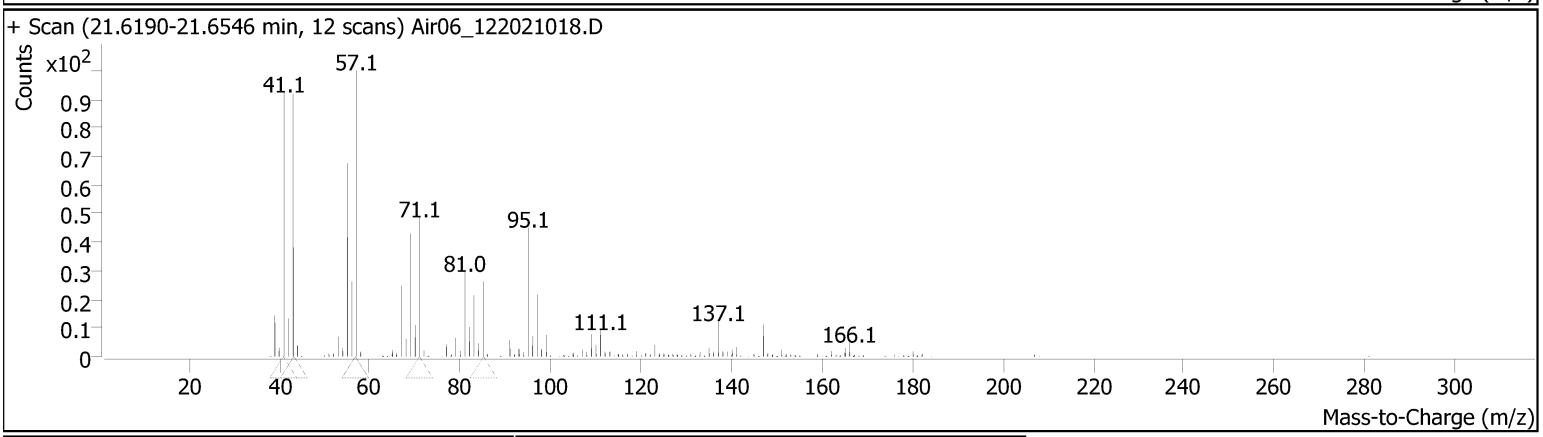


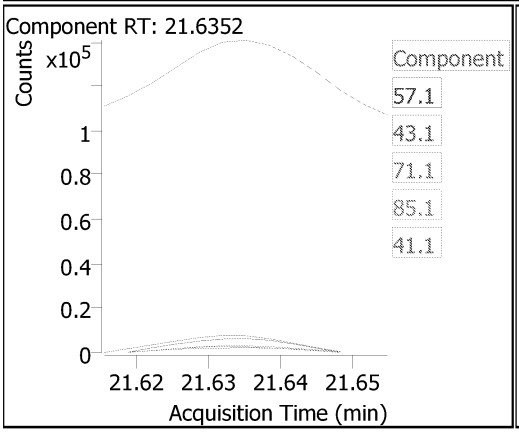


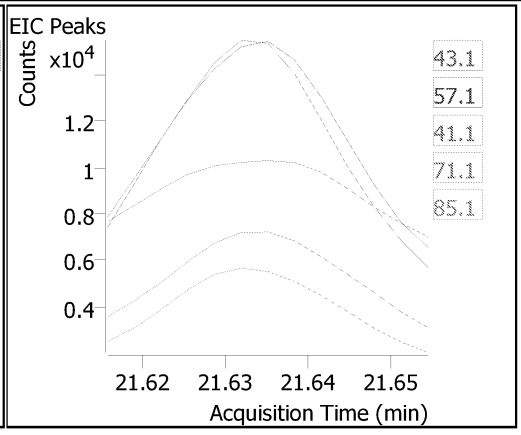
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.6352	Undecane, 2,10-dimethyl-	40643.9	76.1	17301-27-8	C13H28	0.09535

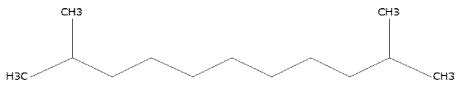




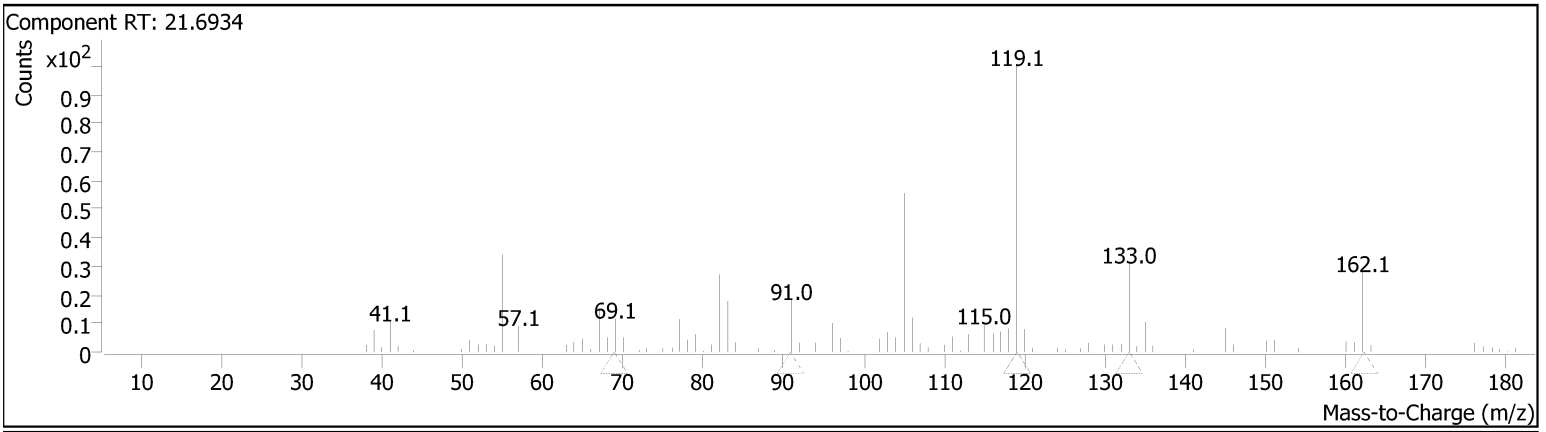


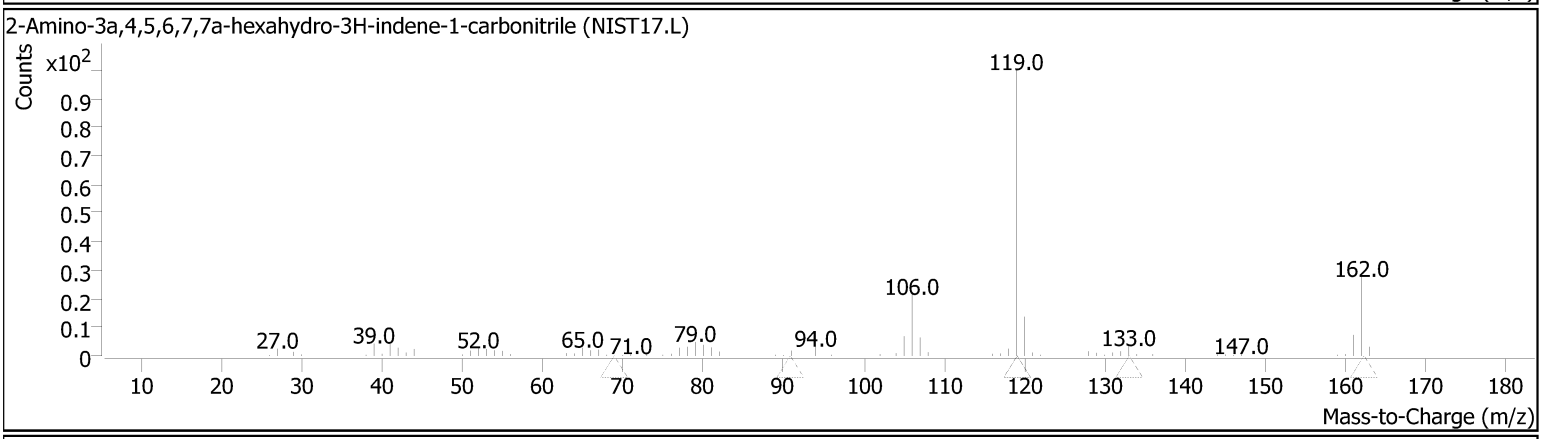


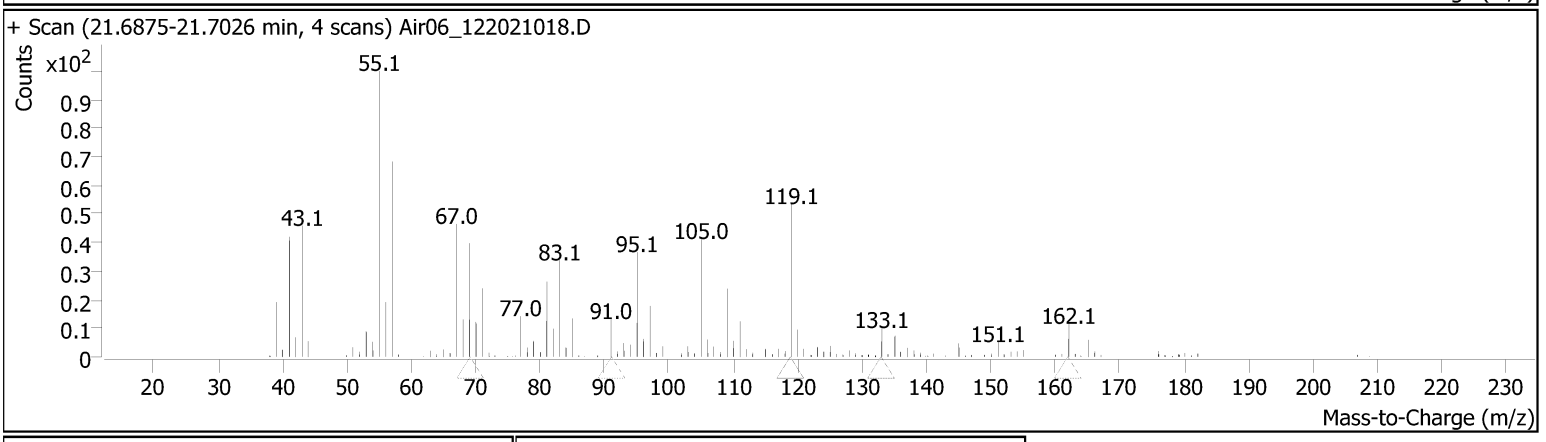


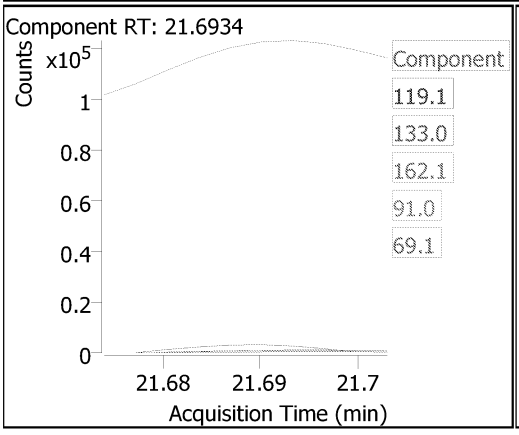


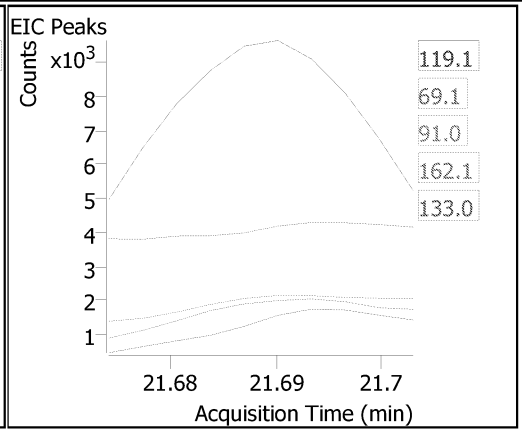
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.6934	2-Amino-3a,4,5,6,7,7a-hexahydro-3H-indene-1-carbonitrile	13404.3	70.3	1000185-29-8	C10H14N2	0.03145

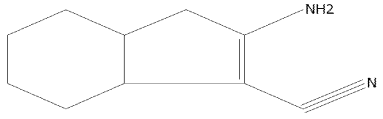




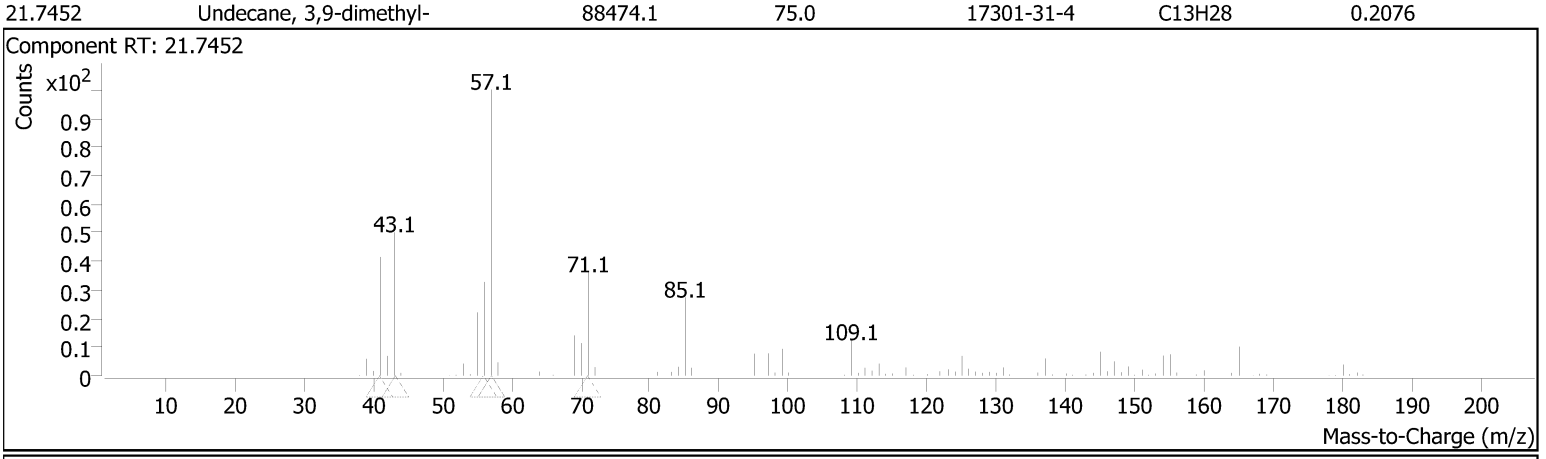


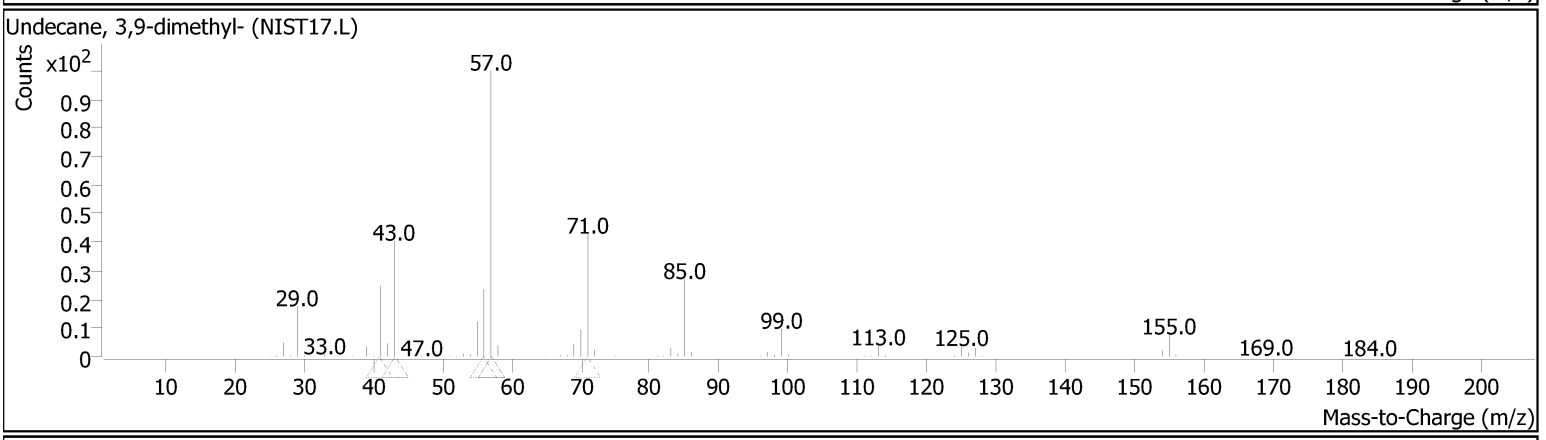


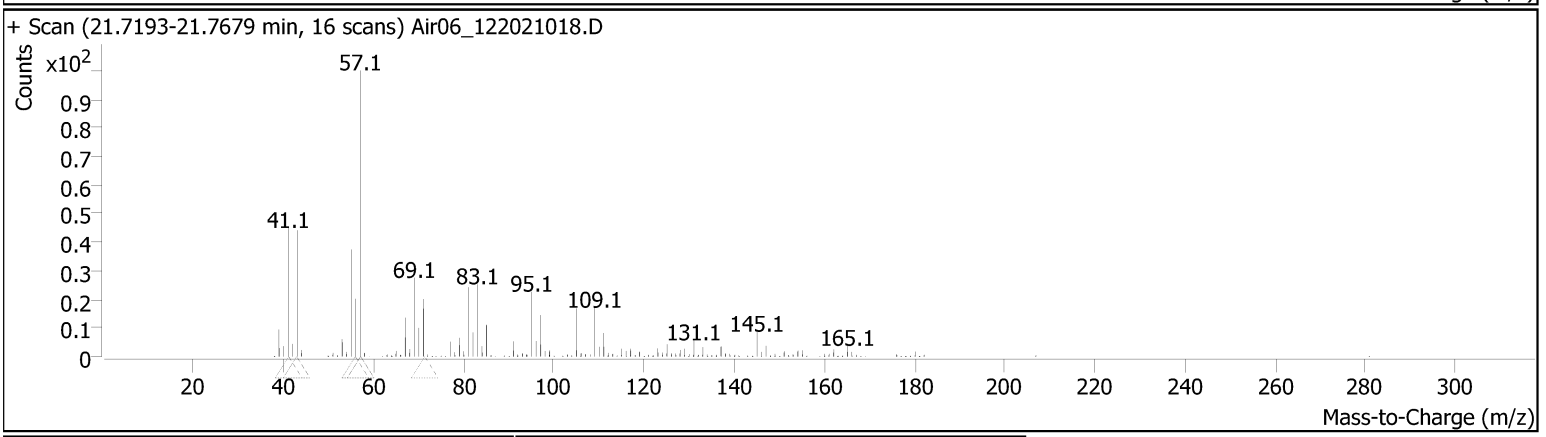


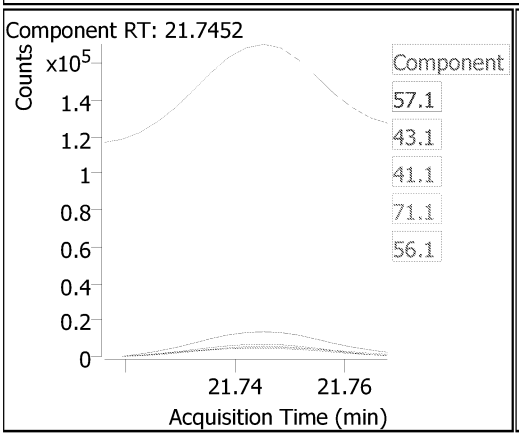


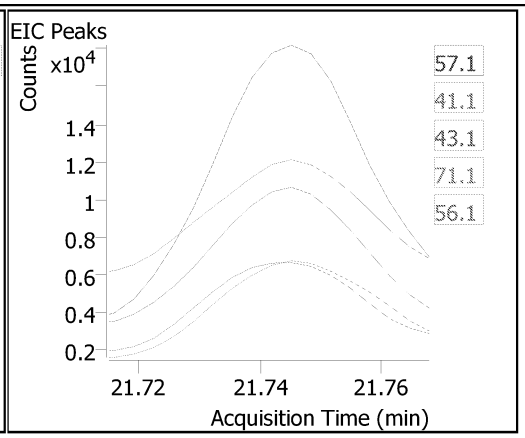
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.7452	Undecane, 3,9-dimethyl-	88474.1	75.0	17301-31-4	C13H28	0.2076





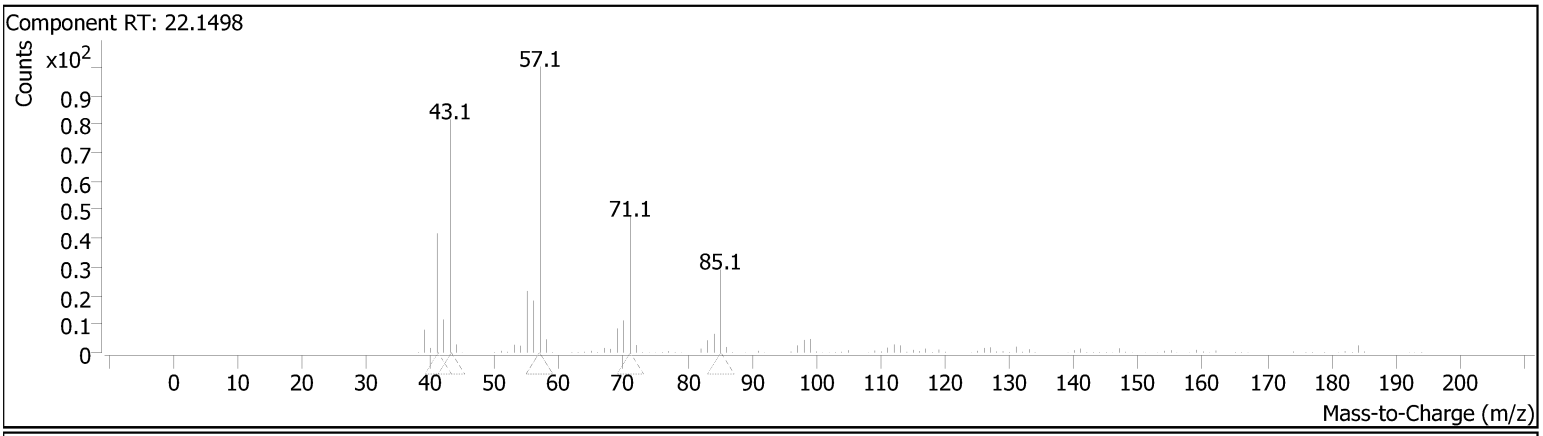


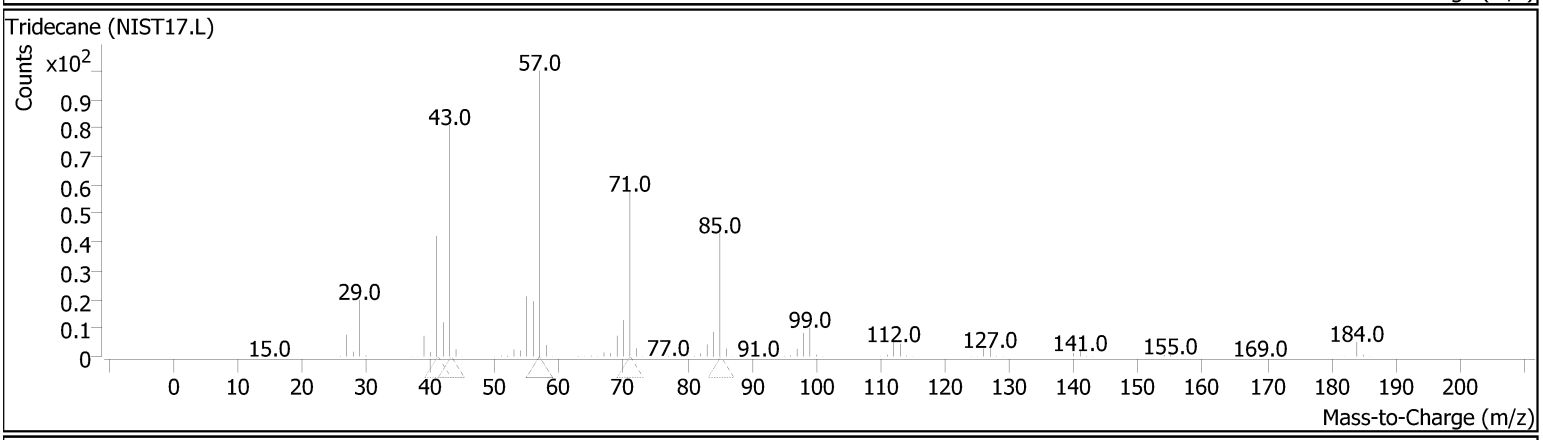


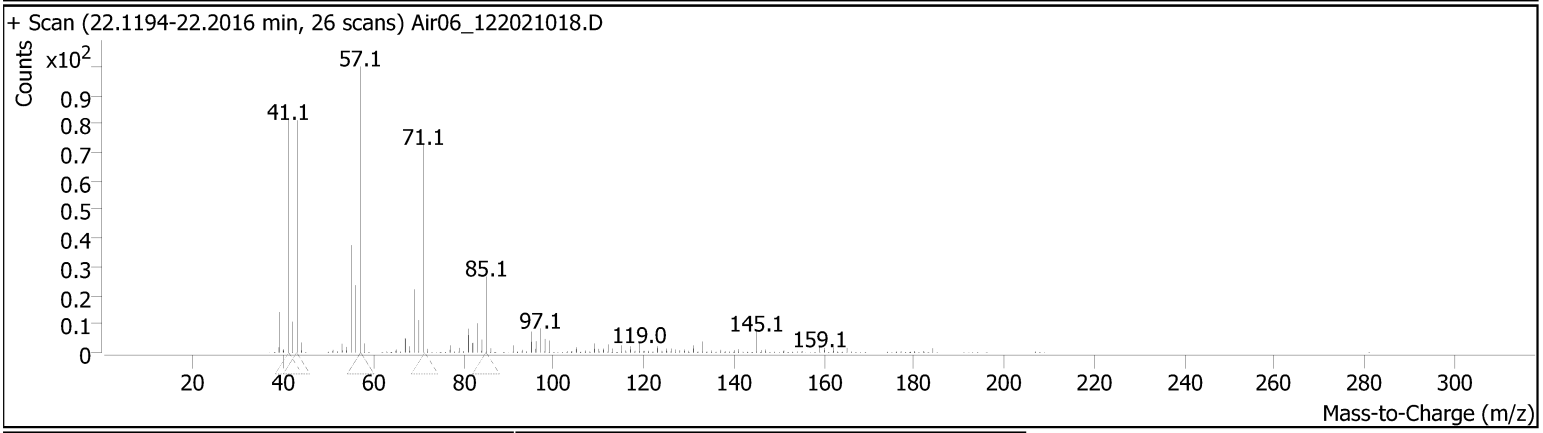


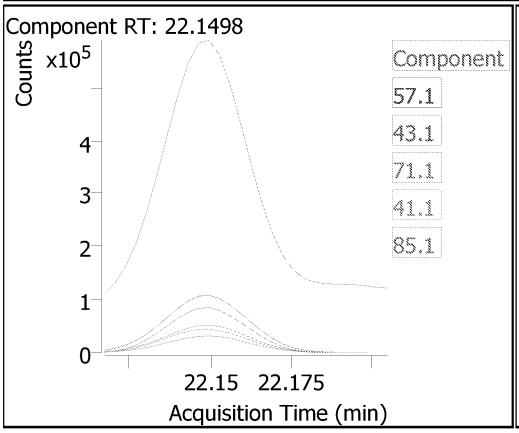


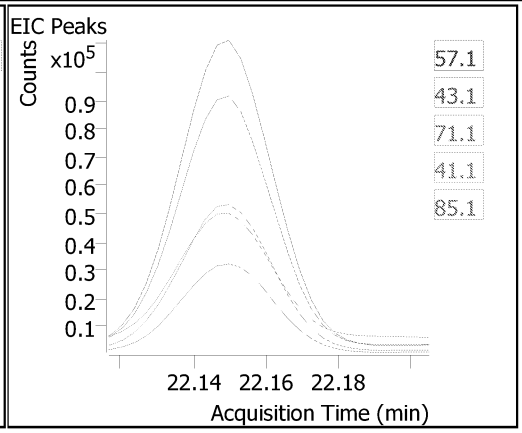
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.1498	Tridecane	910663.7	92.5	629-50-5	C13H28	2.136

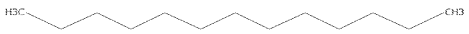








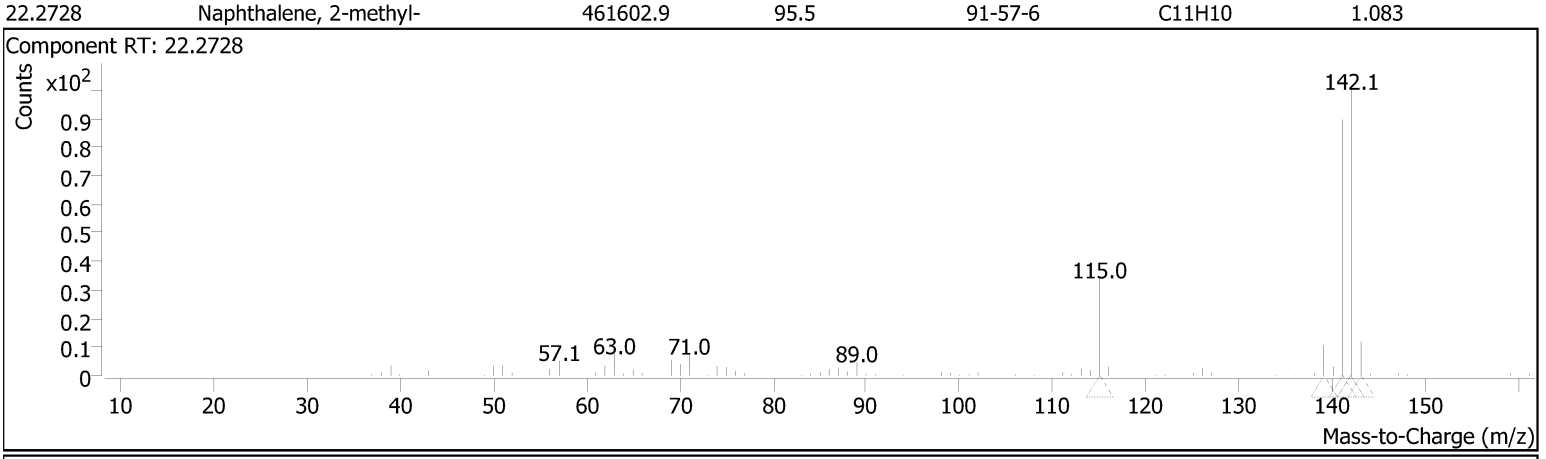


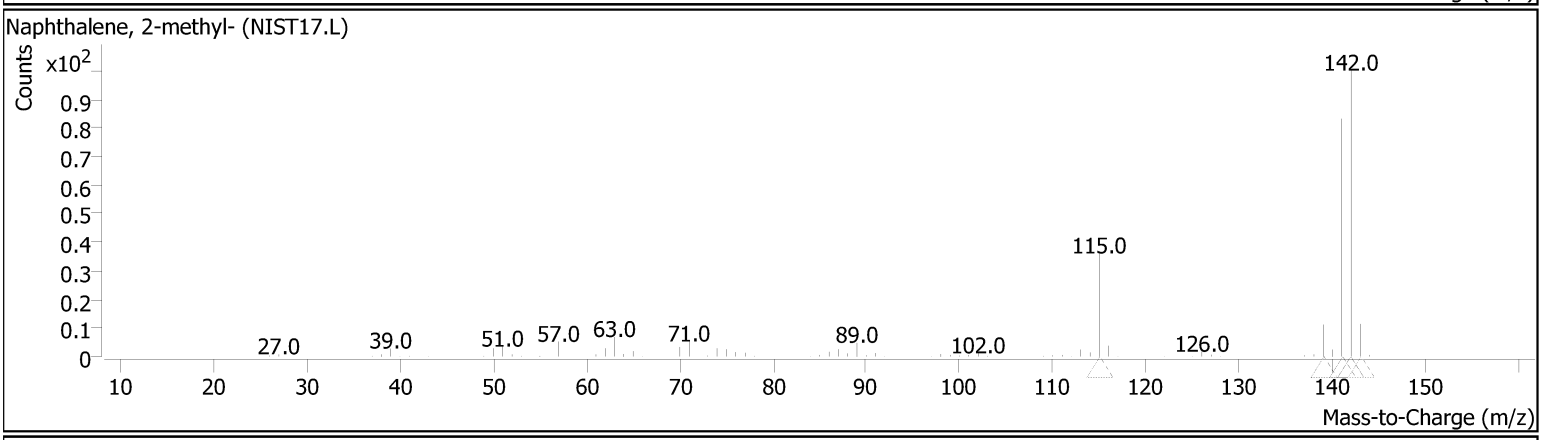


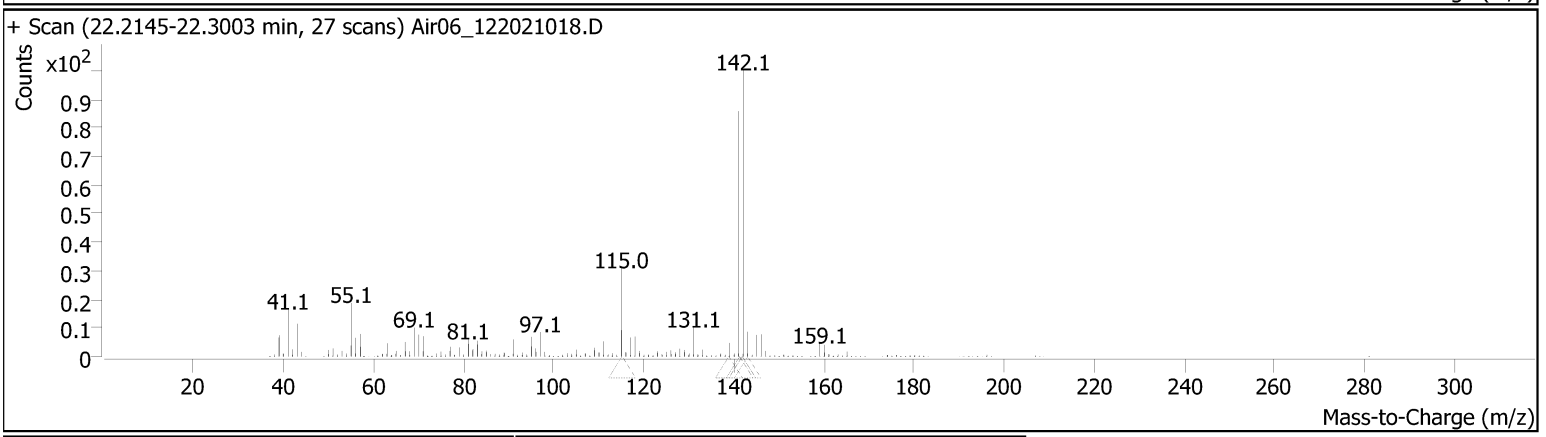
Library Search Results - NonTarget Hits with Details

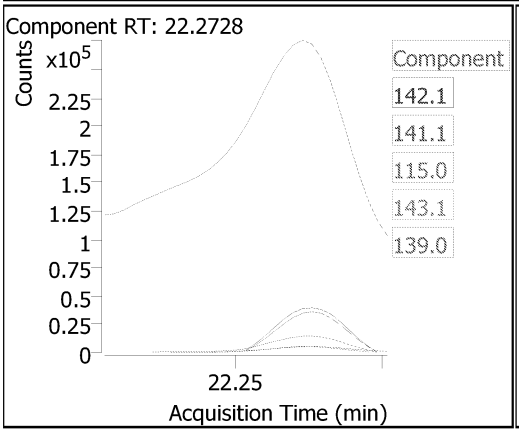
Agilent Technologies

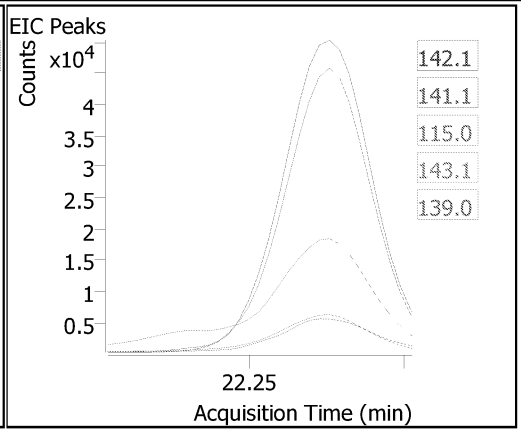
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.2728	Naphthalene, 2-methyl-	461602.9	95.5	91-57-6	C11H10	1.083

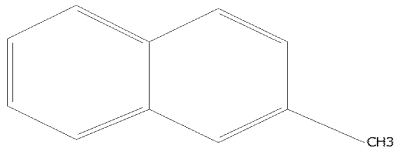








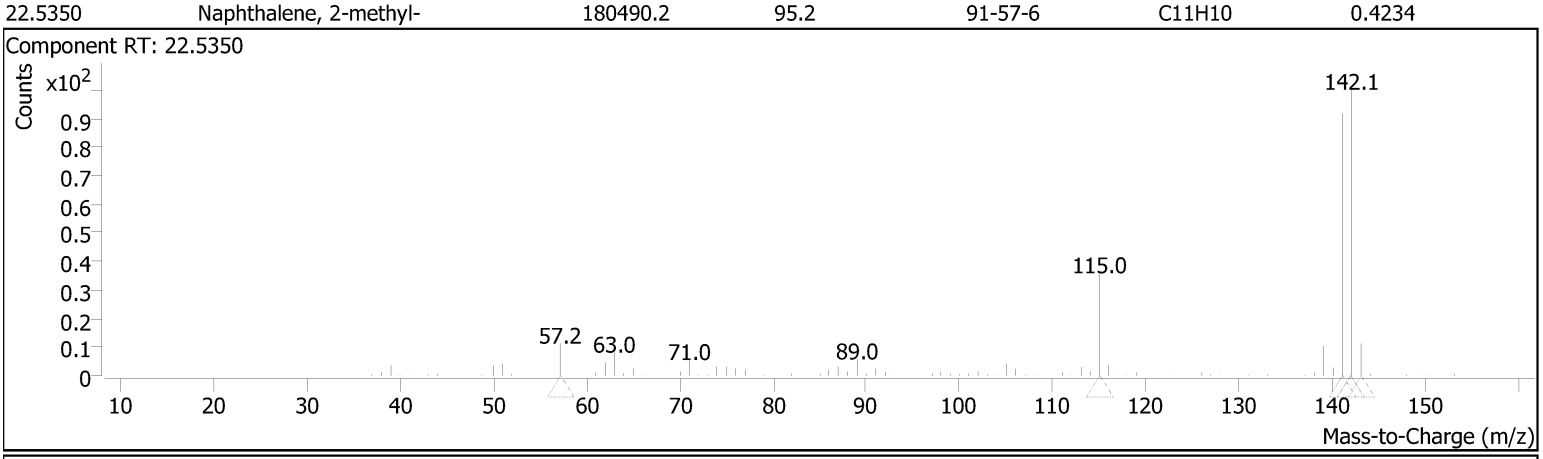


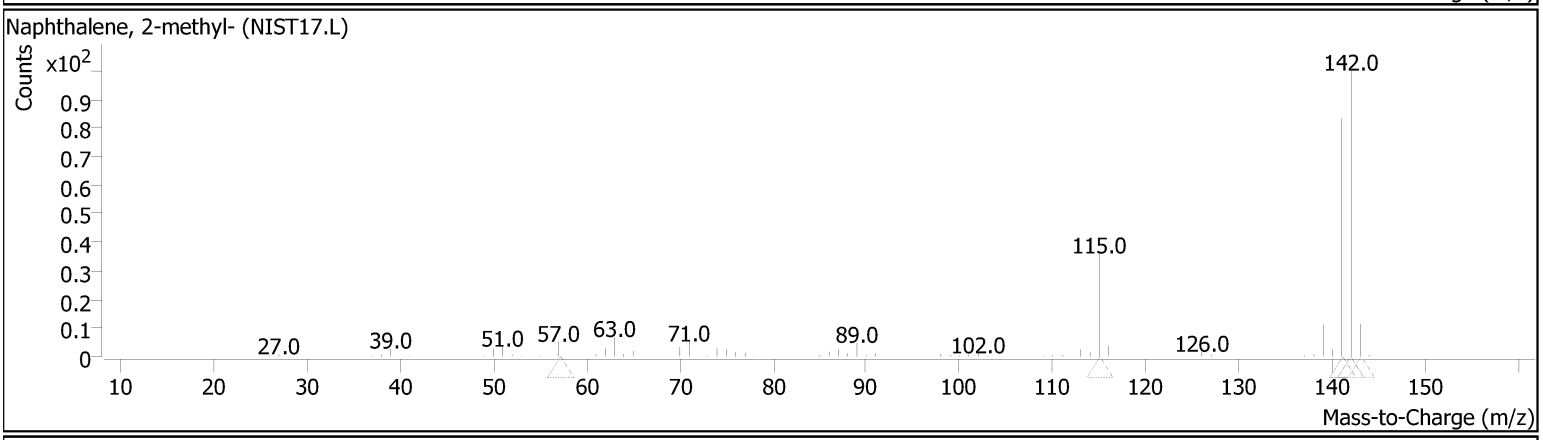


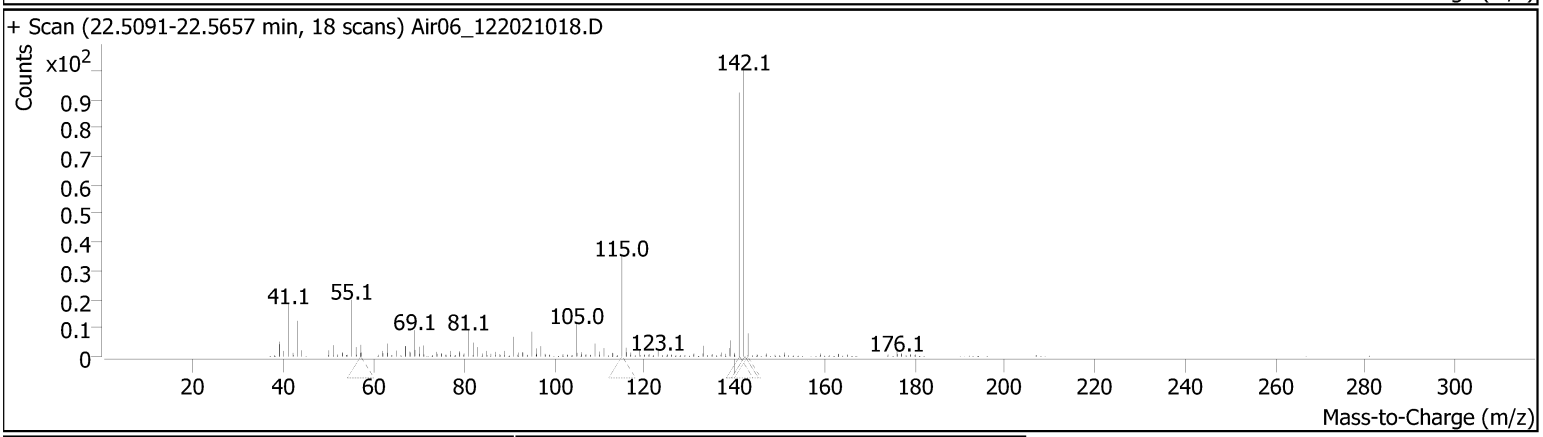
Library Search Results - NonTarget Hits with Details

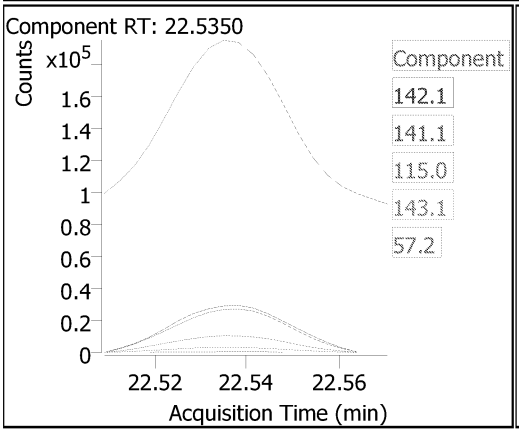
Agilent Technologies

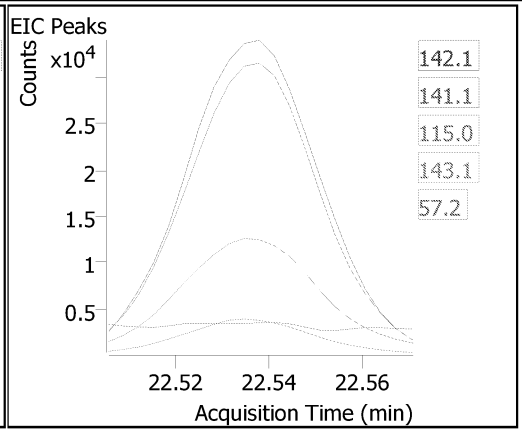
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.5350	Naphthalene, 2-methyl-	180490.2	95.2	91-57-6	C11H10	0.4234

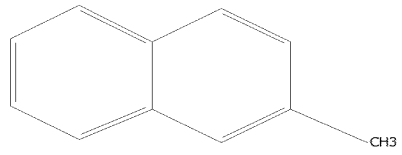




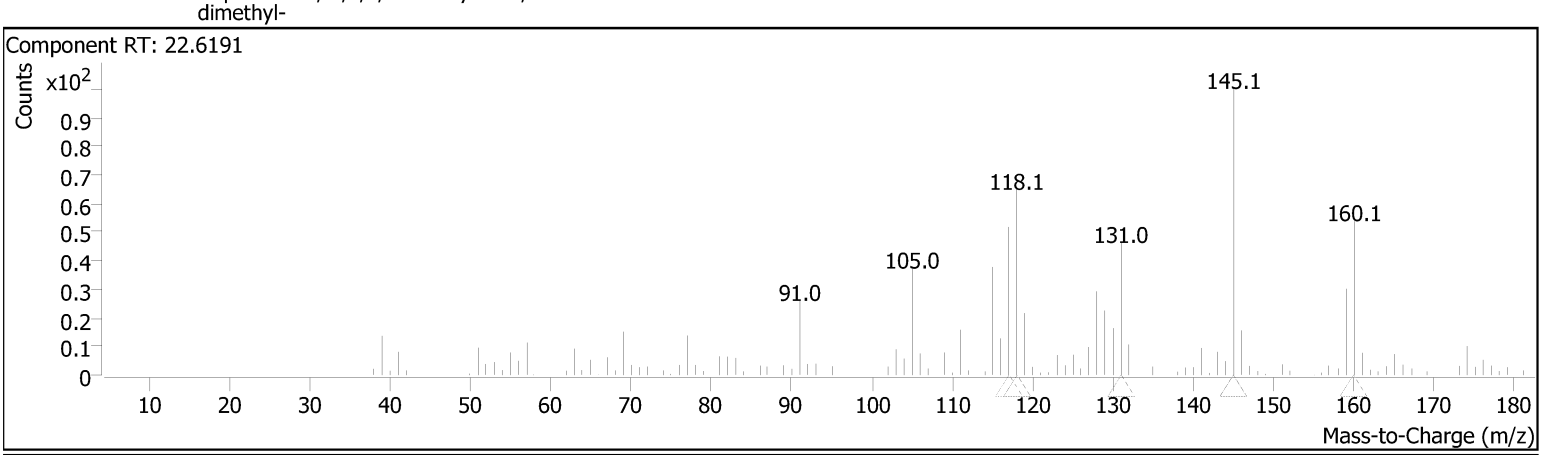


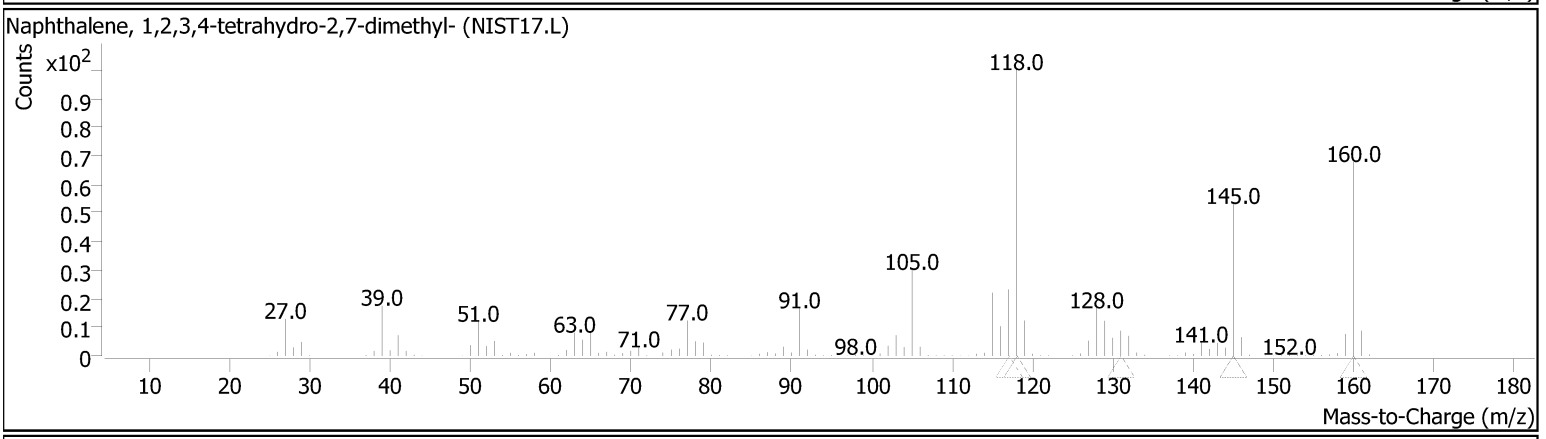


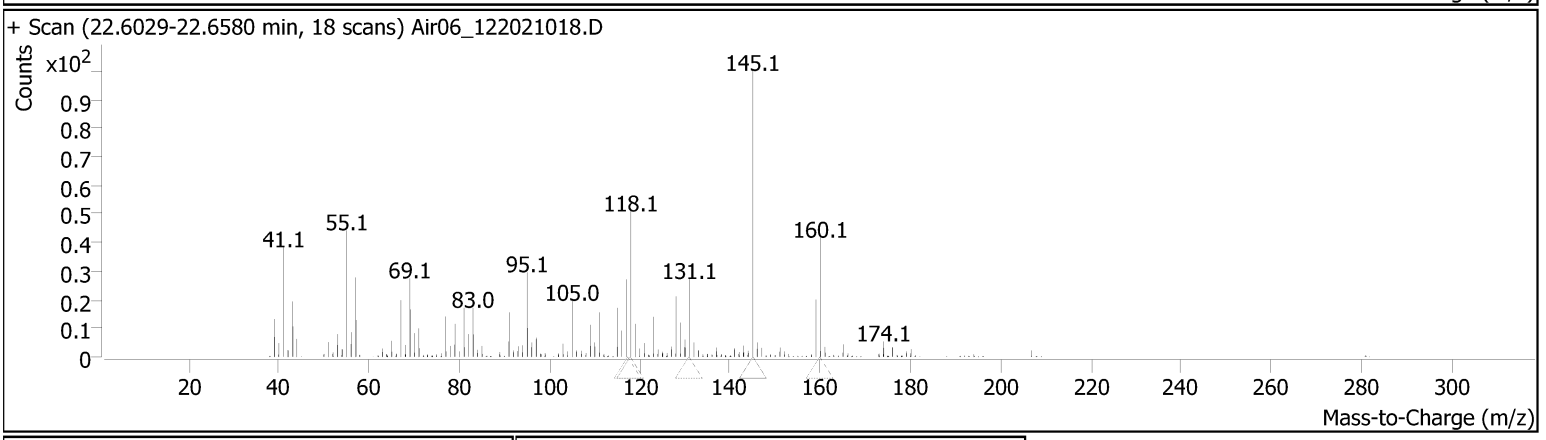


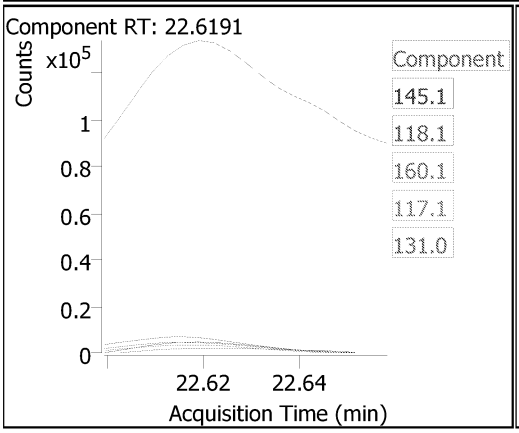


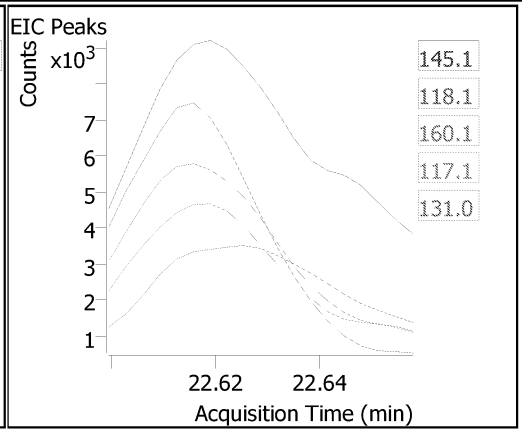
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.6191	Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	79094.8	83.3	13065-07-1	C12H16	0.1856

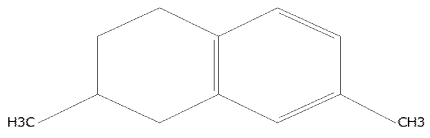




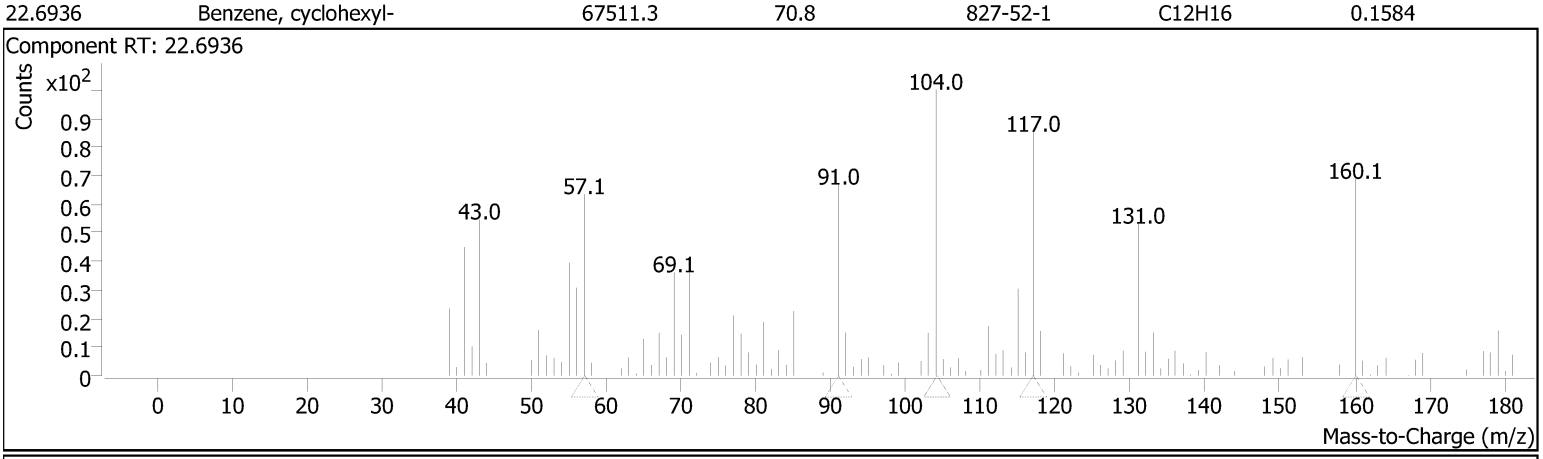


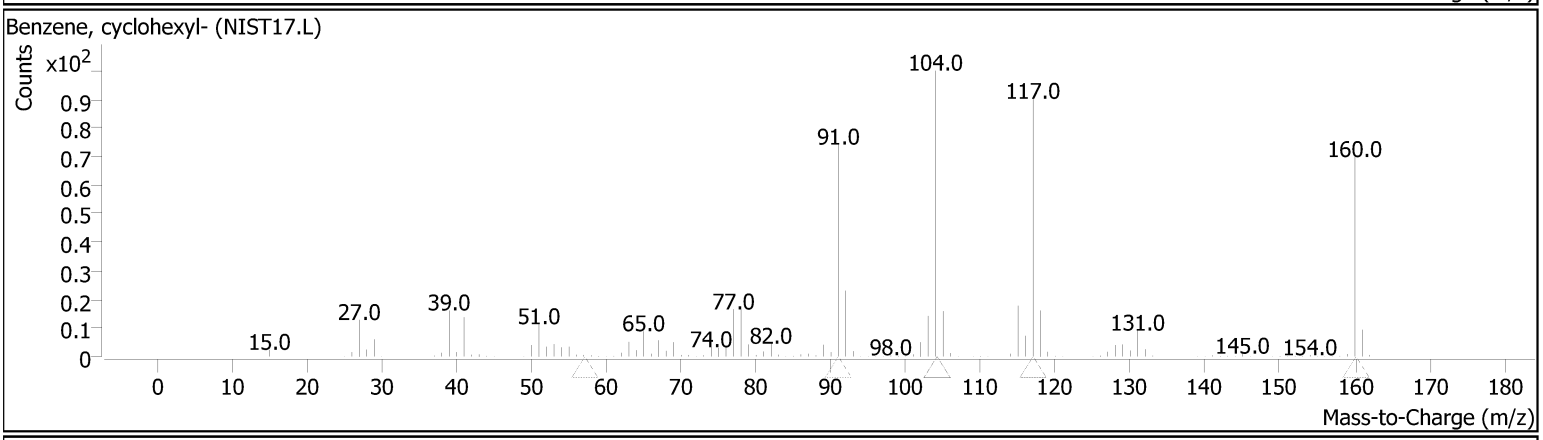


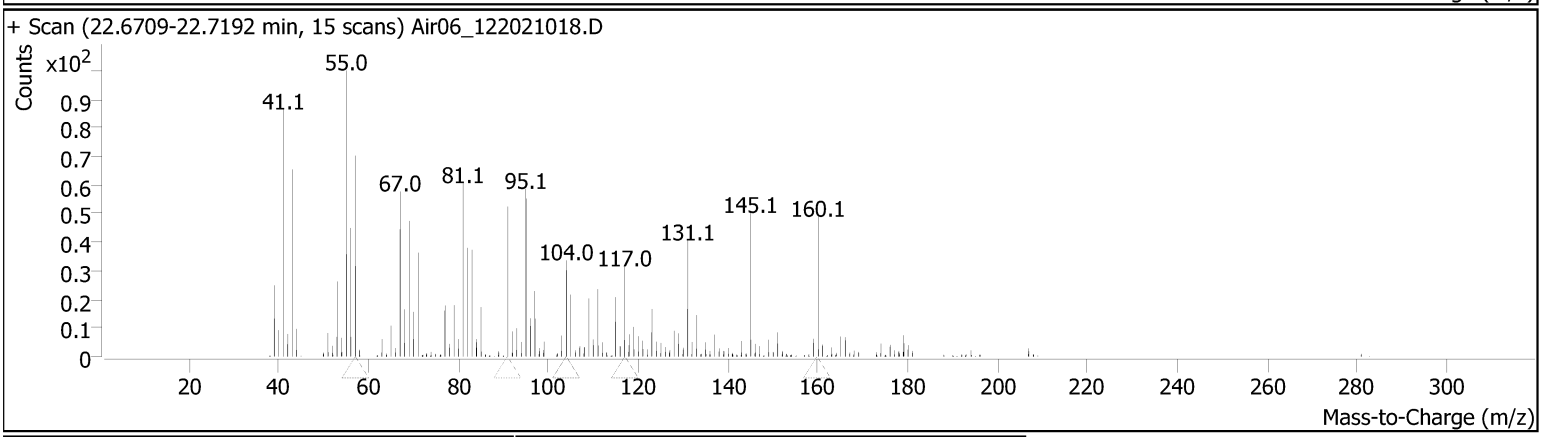


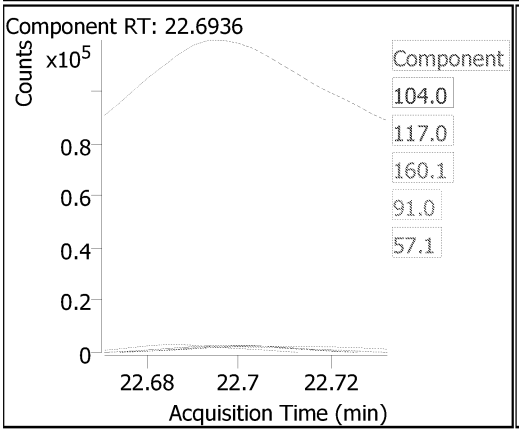


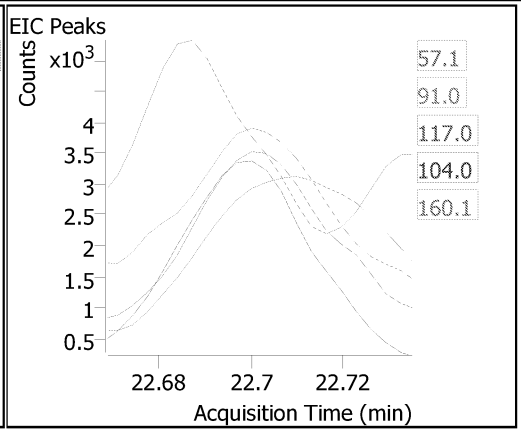
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.6936	Benzene, cyclohexyl-	67511.3	70.8	827-52-1	C12H16	0.1584

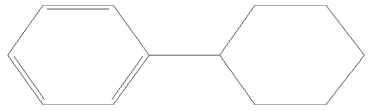




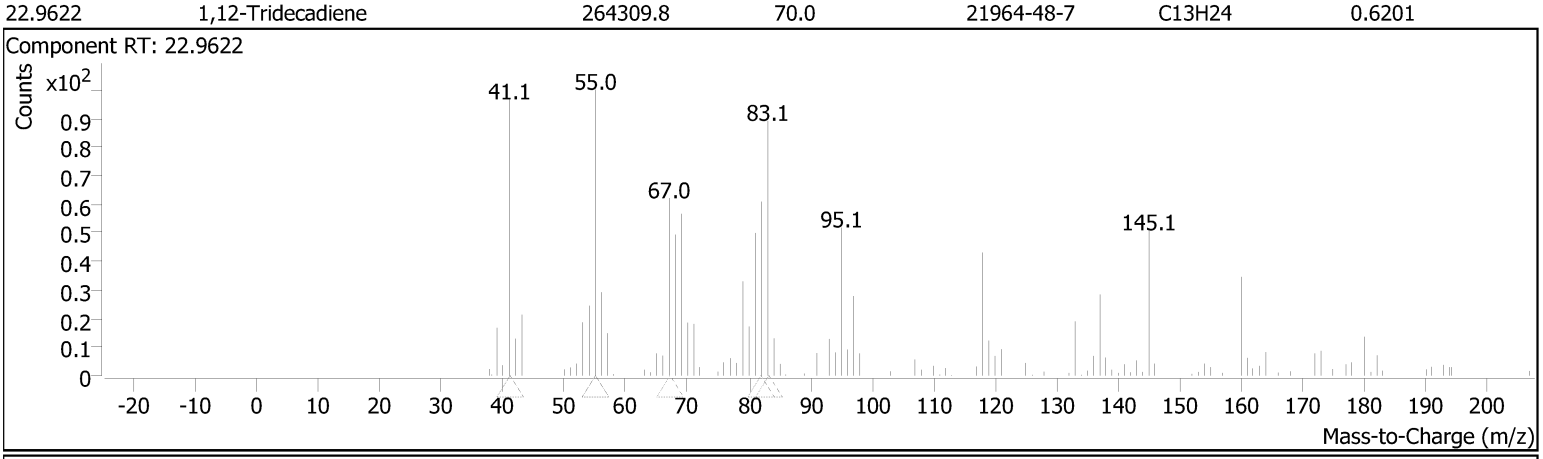


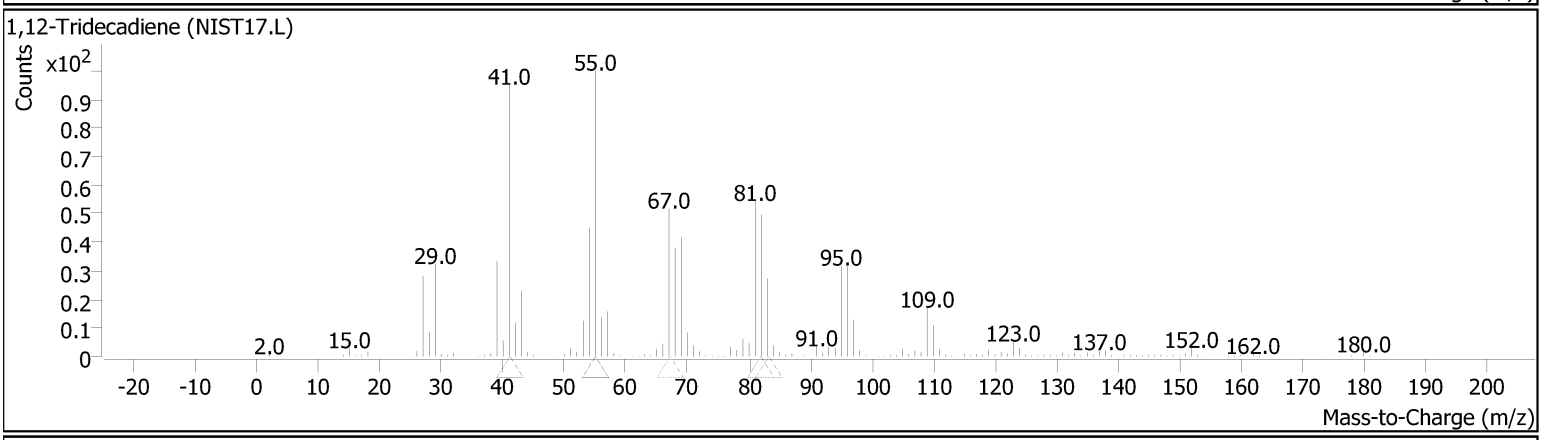


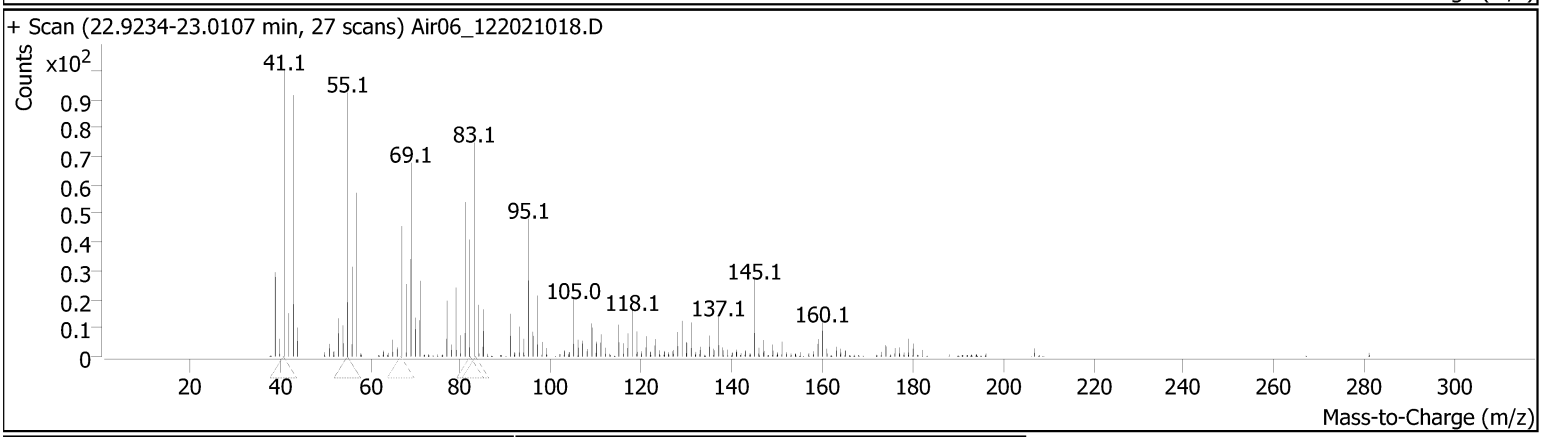


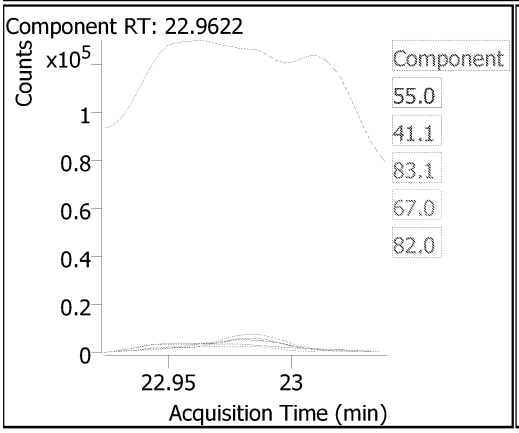


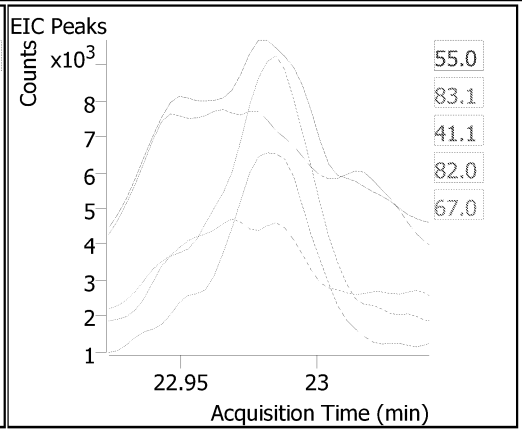
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.9622	1,12-Tridecadiene	264309.8	70.0	21964-48-7	C13H24	0.6201

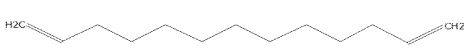




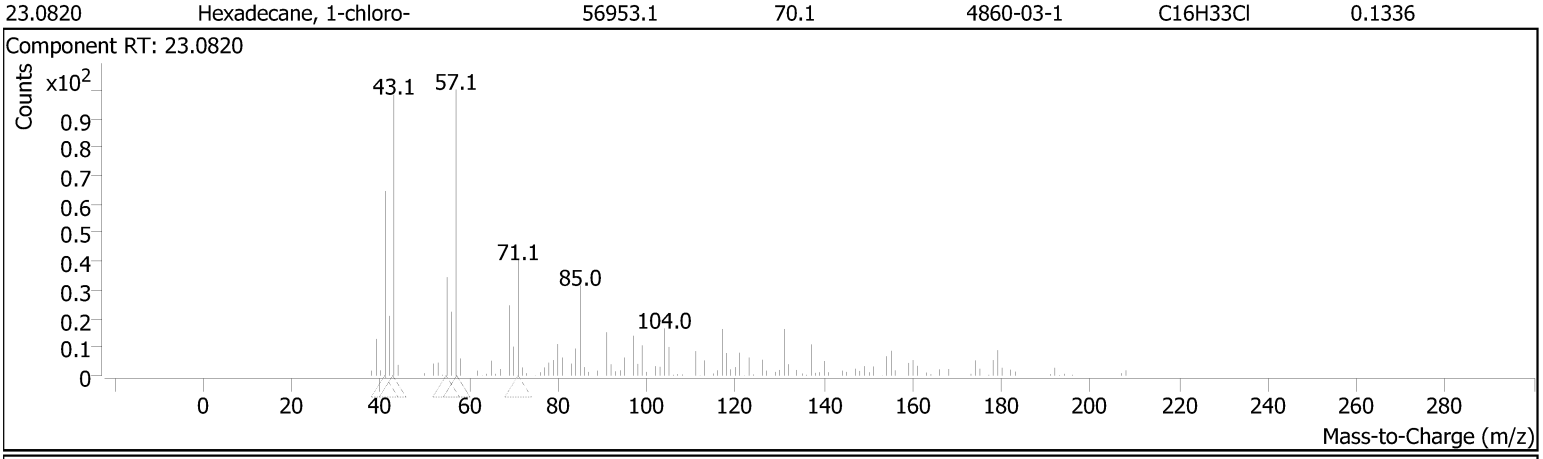


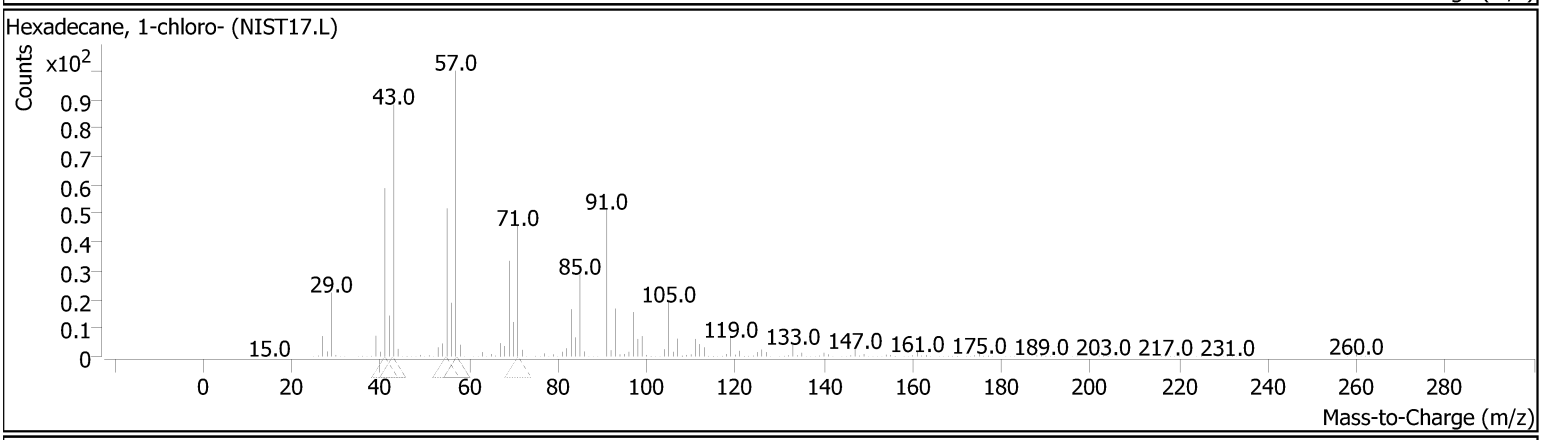


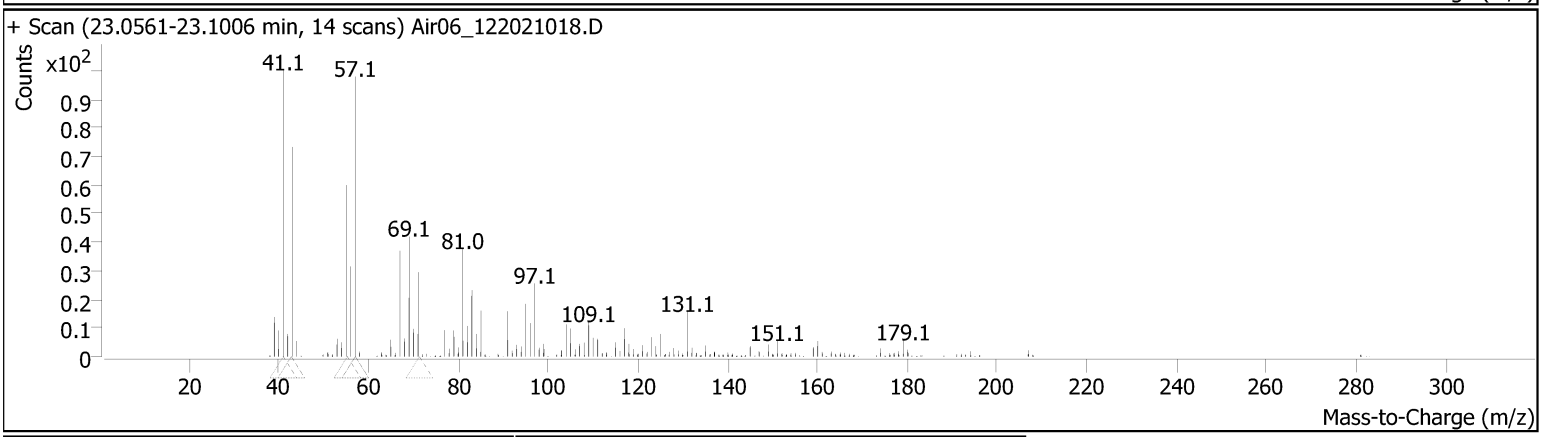


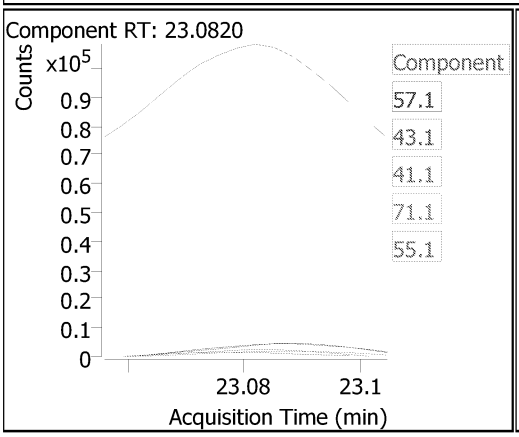


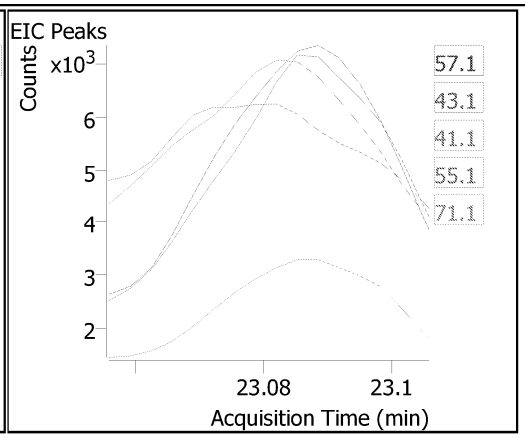
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.0820	Hexadecane, 1-chloro-	56953.1	70.1	4860-03-1	C16H33Cl	0.1336









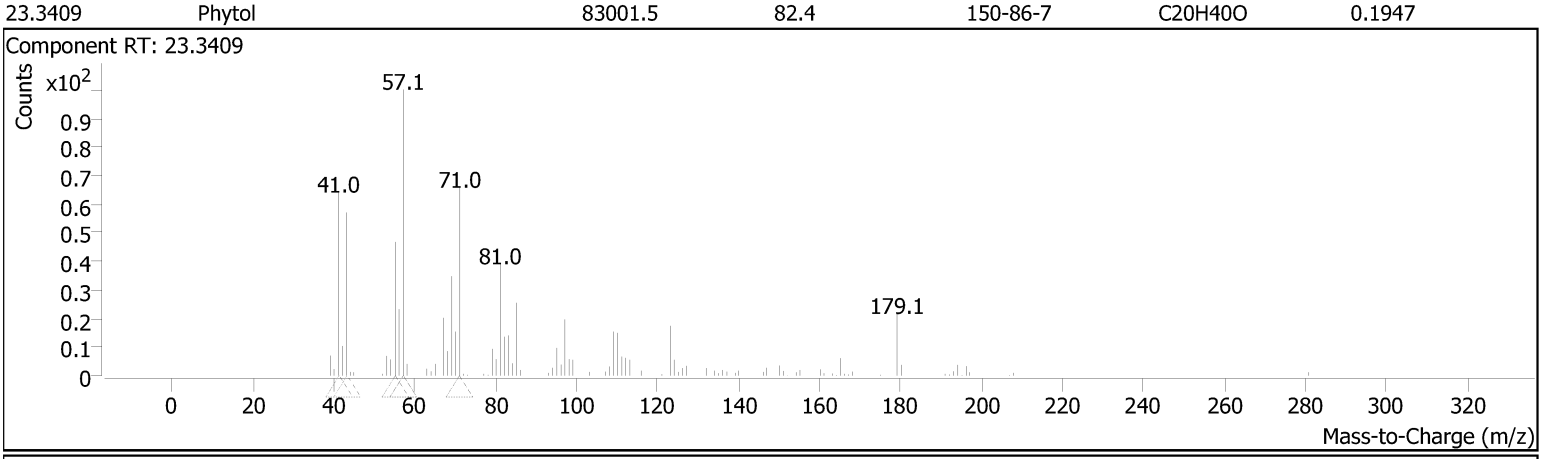


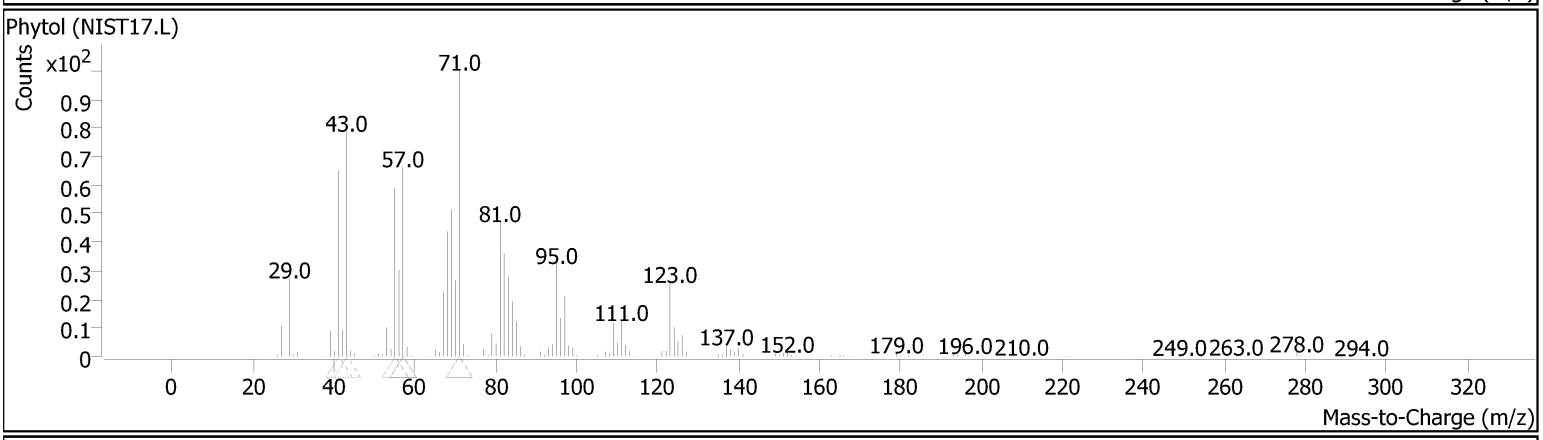


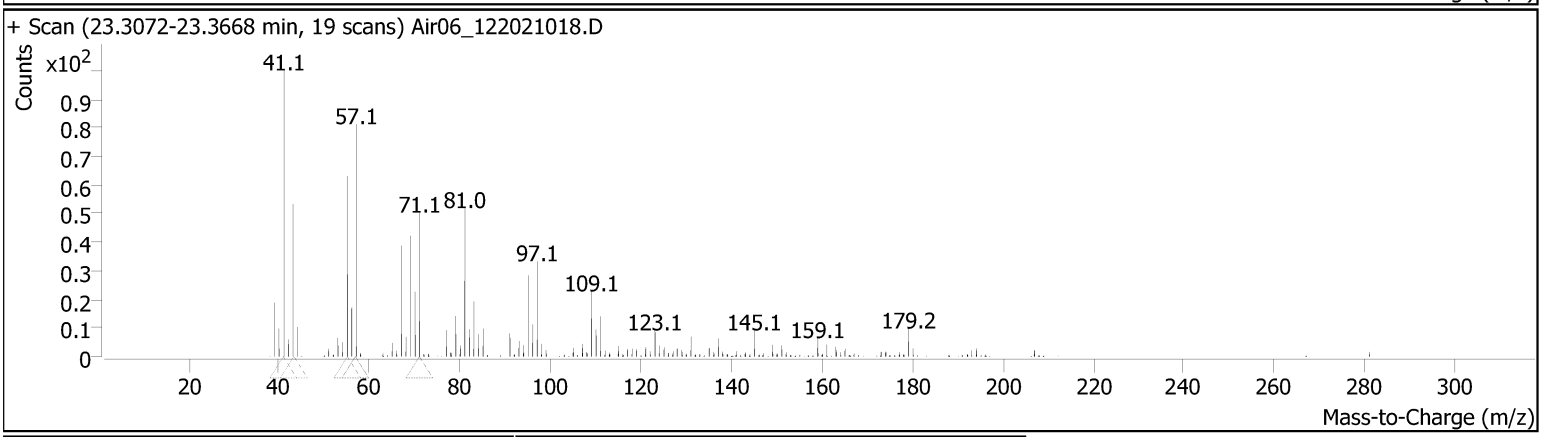
Library Search Results - NonTarget Hits with Details

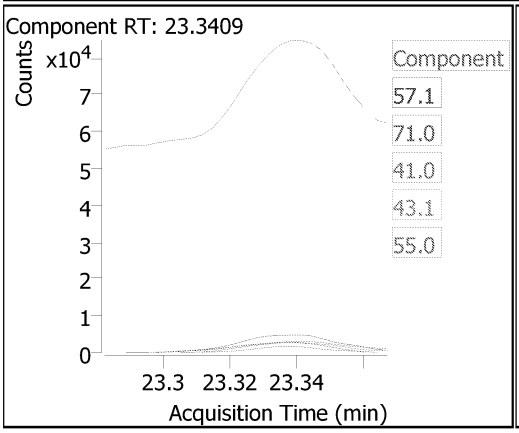
Agilent Technologies

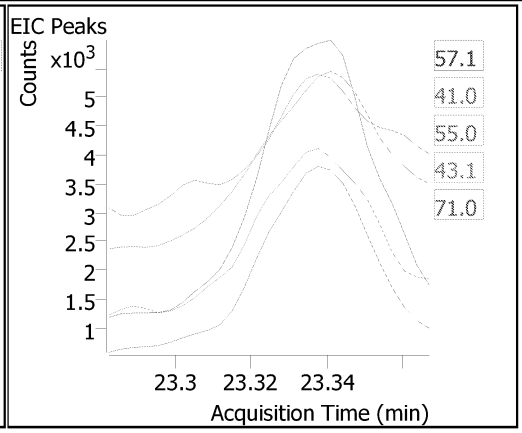
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.3409	Phytol	83001.5	82.4	150-86-7	C20H40O	0.1947

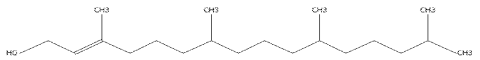




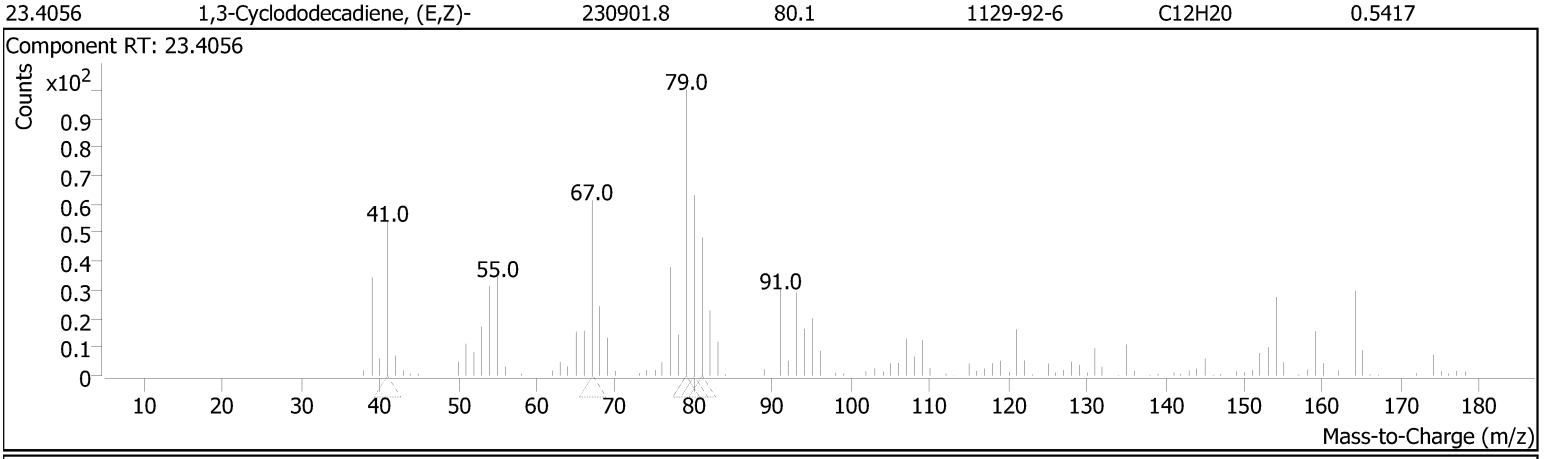


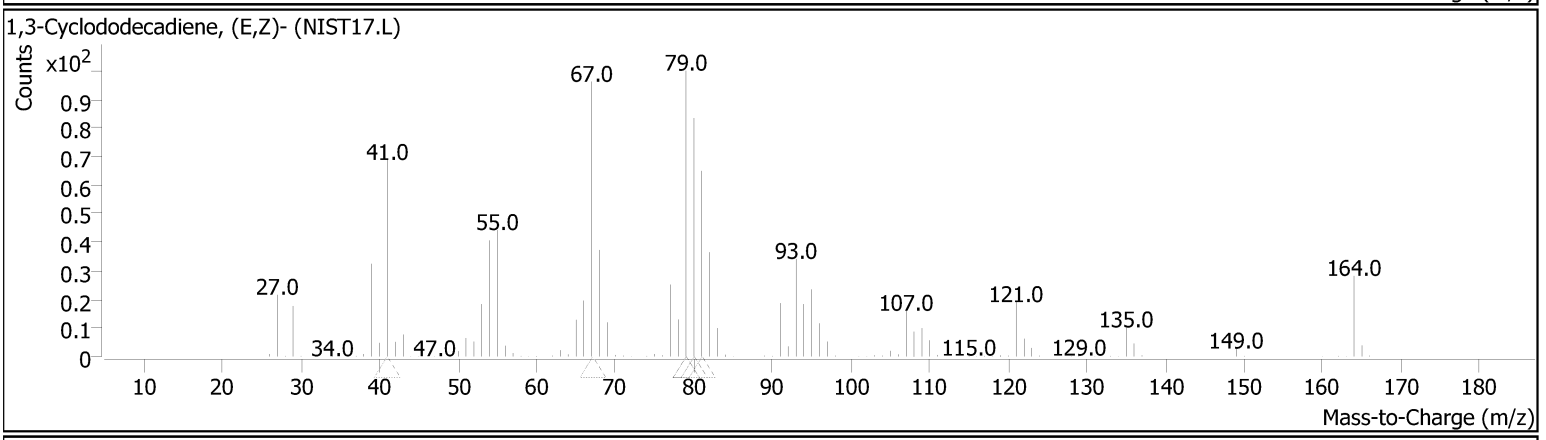


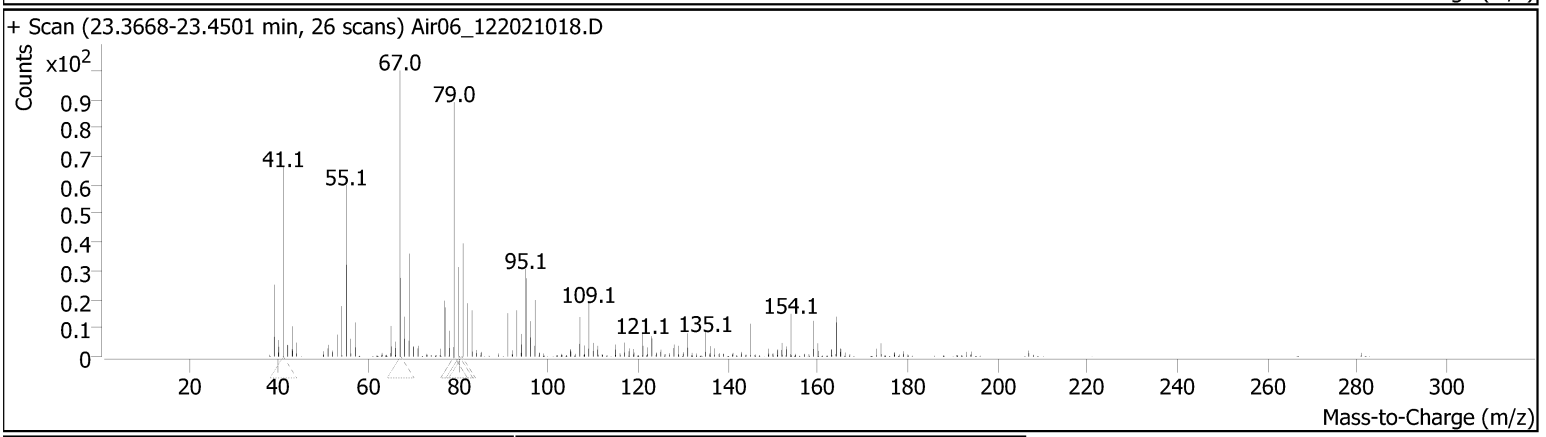


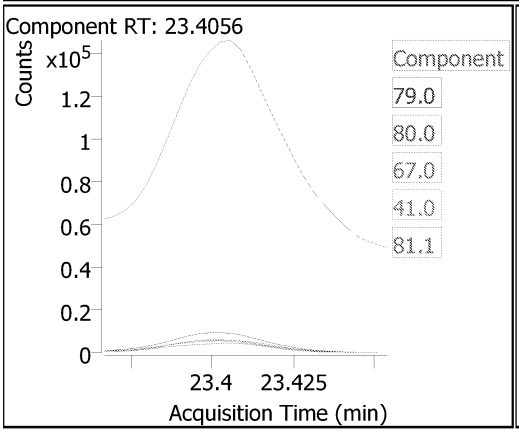


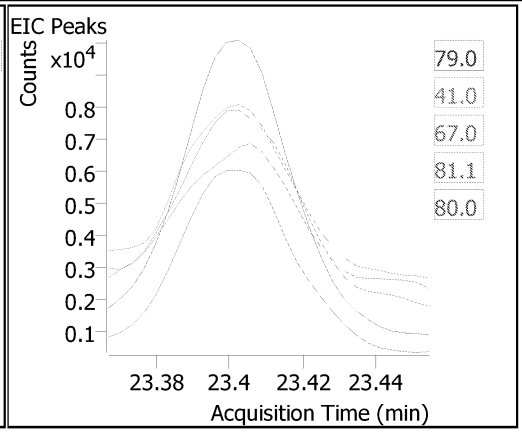
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.4056	1,3-Cyclododecadiene, (E,Z)-	230901.8	80.1	1129-92-6	C12H20	0.5417

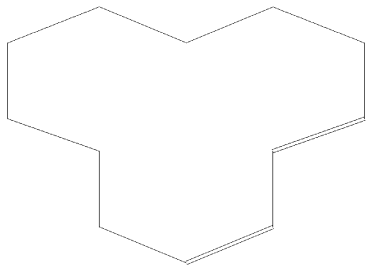








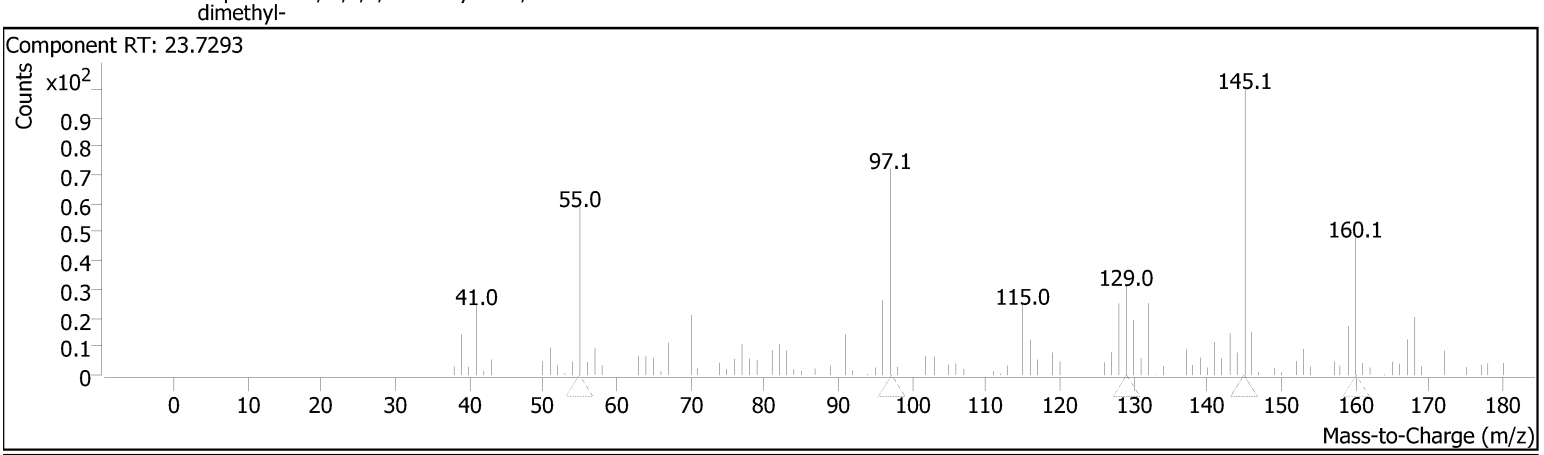


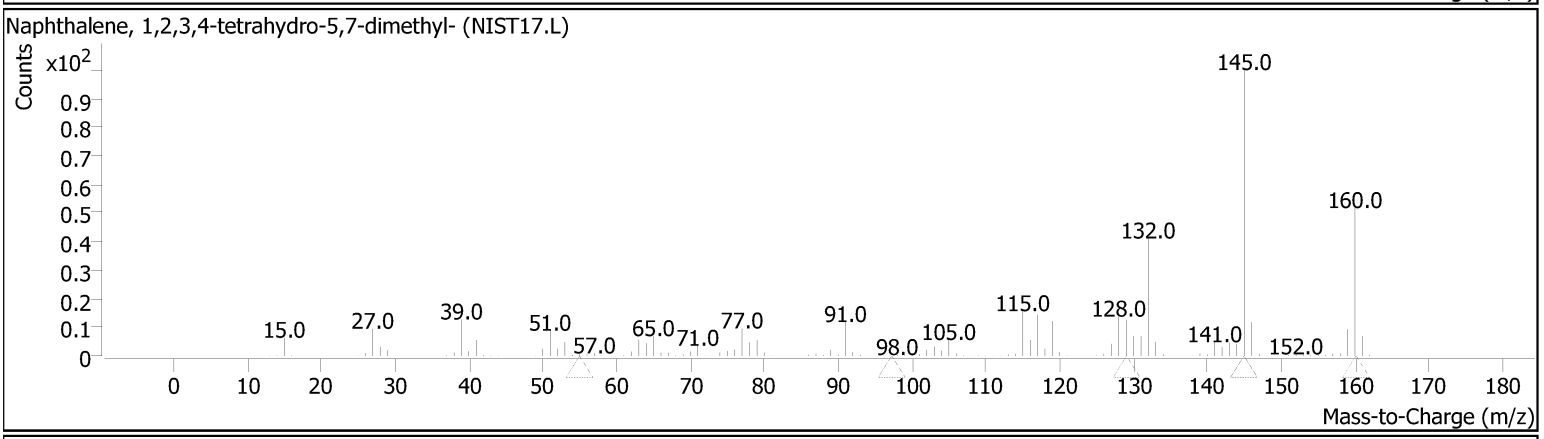


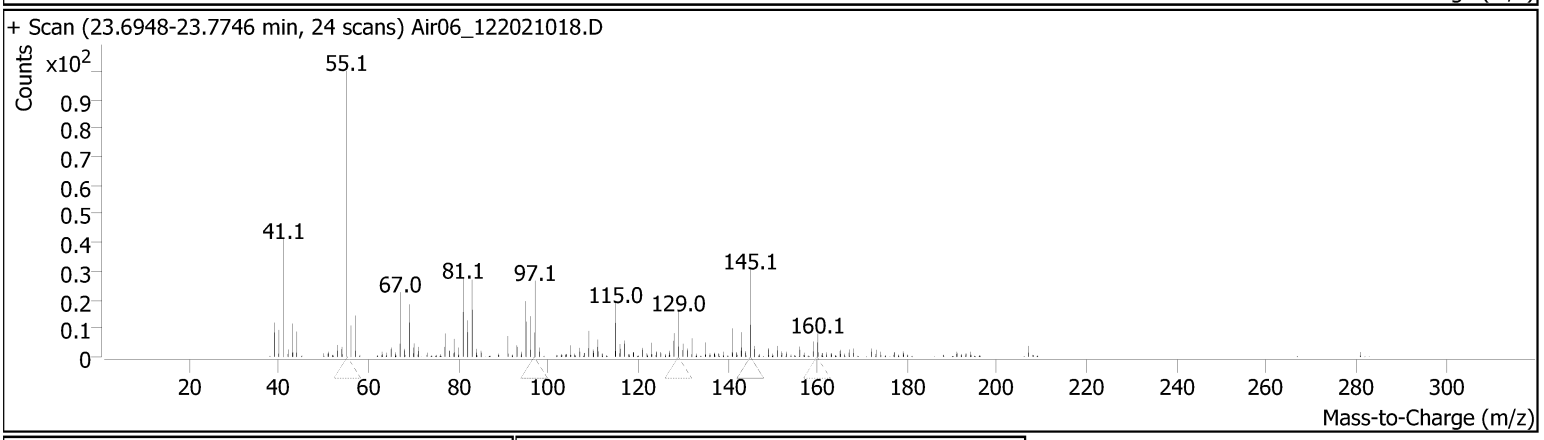
Library Search Results - NonTarget Hits with Details

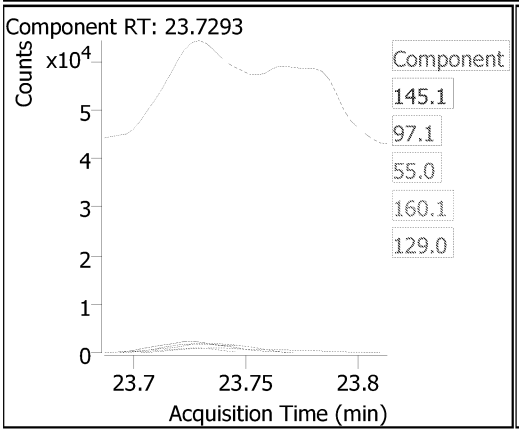
Agilent Technologies

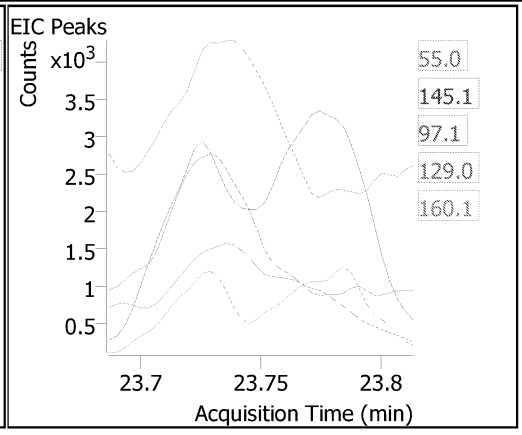
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.7293	Naphthalene, 1,2,3,4-tetrahydro-5,7-dimethyl-	97366.2	70.7	21693-54-9	C12H16	0.2284

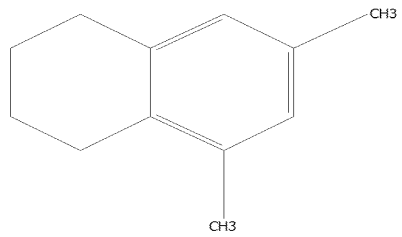












ENTHALPY SAMPLE USER REPORT FOR EPA TO-15

Inst	: AIR-MS-06	Lab ID	: 455620-008 C10001	Client ID	: SVMP-20D
Seqnum	: 371510273019	Matrix	: Air	Acct	: ELEMENT (JG)
File	: air06_122021019	Batch	: 280281	Time	: 21-DEC-2021 02:18
Cal	: 371497775001	Caldate	: 11-DEC-2021		
IDF	: 2.0	Raw Units	: nL/L	Units	: nL/L
PDF	: 1.0				

Analyte	Raw	Result	RTS	RL	Blank	Flags
Freon 12	0.2125	0.43		0.40		u
Freon 114	0.007209	ND		0.40		u
Chloromethane	0.04971	ND		0.40		u
Vinyl Chloride	0.01294	ND		0.40		u
Bromomethane	0	ND		0.40		u
Chloroethane	0.3778	0.76		0.40		u
Trichlorofluoromethane	0.07145	ND		0.40		u
1,1-Dichloroethene	0.0002414	ND		0.40		u
Freon 113	0.02842	ND		0.40		calc u
Acetone	0.6454	ND		2.0	0.13	u
Carbon Disulfide	0.2319	0.46		0.40		u
Isopropanol (IPA)	0.3883	ND		2.0	0.067	u
Methylene Chloride	0.3289	0.66		0.40	0.34	u
trans-1,2-Dichloroethene	0.001535	ND		0.40		u
MTBE	0.001323	ND		0.40		u
n-Hexane	0.08521	ND		0.40		u
1,1-Dichloroethane	0.001183	ND		0.40		u
Vinyl Acetate	0.04657	ND		2.0		calc u
cis-1,2-Dichloroethene	0.4892	0.98	0.200	0.40		u x
2-Butanone	0.06351	ND		2.0		u
Chloroform	0.01921	ND		0.40		u
1,1,1-Trichloroethane	0.0004357	ND		0.40		u
Carbon Tetrachloride	0.02528	ND		0.40		calc u
Benzene	0.03220	ND		0.40		u
1,2-Dichloroethane	0.02270	ND		0.40		calc u
Trichloroethene	0.007639	ND		0.40		u
1,2-Dichloropropane	0.002251	ND		0.40		u
Bromodichloromethane	0.002789	ND		0.40		u
cis-1,3-Dichloropropene	0	ND		0.40		u
4-Methyl-2-Pentanone	0.006633	ND		0.40		u
Toluene	0.1059	ND		0.40		u
trans-1,3-Dichloropropene	0	ND		0.40		u
1,1,2-Trichloroethane	0.0009743	ND		0.40		u
Tetrachloroethene	0.01796	ND		0.40		u
2-Hexanone	0.01110	ND		1.0		u
Dibromochloromethane	0.0005641	ND		0.40		u
1,2-Dibromoethane	0.003260	ND		0.40		u
Chlorobenzene	0.002634	ND		0.40		u
Ethylbenzene	0.04713	ND		0.40		u
m,p-Xylenes	0.2306	ND		0.80		u
o-Xylene	0.1427	ND		0.40		u
Styrene	0.06028	ND		0.40		u
Bromoform	0.002993	ND		0.40		u
1,1,2,2-Tetrachloroethane	0.002250	ND		0.40		u
1,1,1,2-Tetrachloroethane	0	ND		0.40		u
4-Ethyltoluene	0.05910	ND		0.40		u
1,3,5-Trimethylbenzene	0.1514	ND		0.40		u
1,2,4-Trimethylbenzene	0.4607	0.92		0.40		u

Analyte	Raw	Result	RTS	RL	Blank	Flags
1,3-Dichlorobenzene	0.1307	ND		0.40		u
1,4-Dichlorobenzene	0.1324	ND		0.40	0.027	u
Benzyl chloride	0.01740	ND		0.40	0.020	u
1,2-Dichlorobenzene	0.01736	ND		0.40	0.034	u
1,2,4-Trichlorobenzene	0.01504	ND		0.40	0.069	u v+
Hexachlorobutadiene	0.004809	ND		0.40		u

Tentatively Identified Compound	CAS #	Raw	Units	Result	Units
Azulene	275-51-4	1.7	nL/L	3.5	nL/L
Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	1.9	nL/L	3.8	nL/L
Dodecane	112-40-3	3.3	nL/L	6.5	nL/L
Hexanol-1, 6-cyclohexyl-	4354-58-9	2.0	nL/L	4.0	nL/L
Naphthalene, 1-methyl-	90-12-0	1.7	nL/L	3.3	nL/L
Naphthalene, decahydro-2-methyl	2958-76-1	1.8	nL/L	3.6	nL/L
Tridecane	629-50-5	2.3	nL/L	4.5	nL/L
Tridecane, 7-methyl-	26730-14-3	2.1	nL/L	4.1	nL/L
Undecane	1120-21-4	2.7	nL/L	5.5	nL/L
Undecane, 2,6-dimethyl-	17301-23-4	1.9	nL/L	3.7	nL/L

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Bromofluorobenzene	10.27	20.00	20.53	103	60-140	u

ISTD (ICAL air06_121121009)	ICAL Area	SAMPLE Area	%Drift	ICAL RT	SAMPLE RT	Drift
Bromochloromethane	329831	371428	12.61	8.18	8.18	0.00
1,4-Difluorobenzene	1230119	1384332	12.54	9.91	9.91	0.00
Chlorobenzene-d5	754830	764307	1.26	14.02	14.01	-0.01

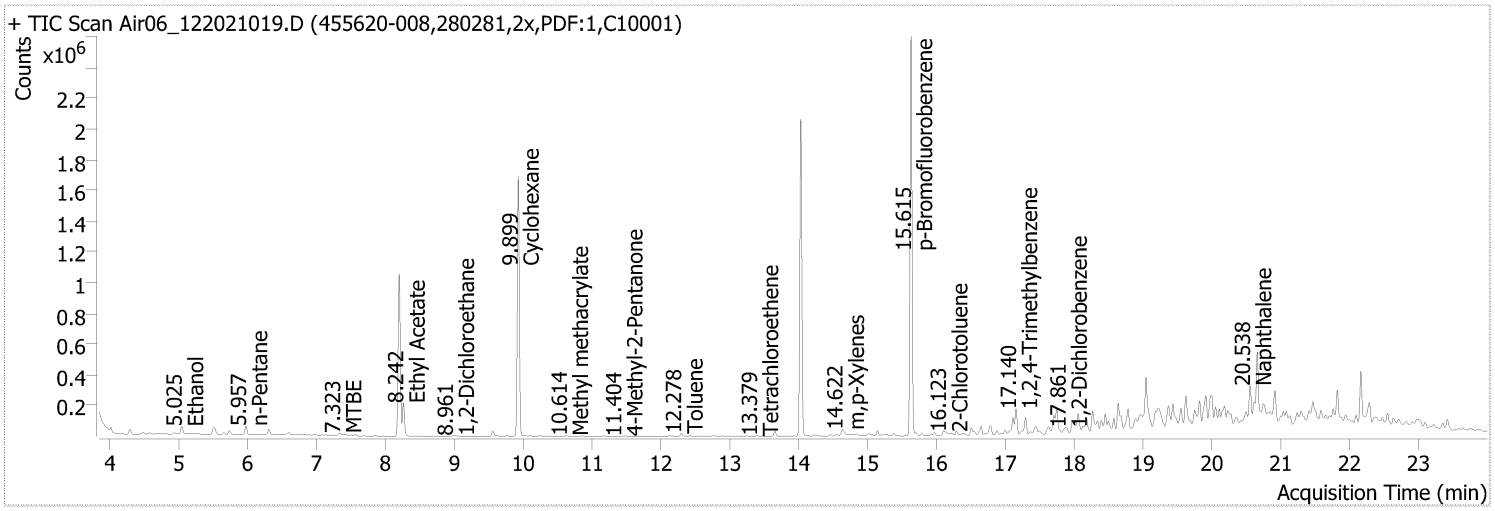
(not in upper half)

Analyst: GSG Date: 01/04/22 Reviewer: SLL Date: 01/04/22

+=high bias calc=check quantitation u=use v=ICV x=false positive

Quantitation Results Report (Not Reviewed)

Data File	Air06_122021019.D	Operator	ZNZ/DJL/LJB
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	12/21/2021 2:18:33 AM
Sample Name	455620-008,280281,2x,PDF:1,C10001	Instrument	Air-MS-06
Vial	3	Multiplier	1.00
DA Method File	TO15_121121.m	Comment	2x400mL
Tune File	bfb.u	Tune Date	12/14/2021 7:38:43 AM
Batch Name	2021 Dec 20 1433 TO15_121121.m.batch.bin	Last Calib Update	12/13/2021 9:29:07 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



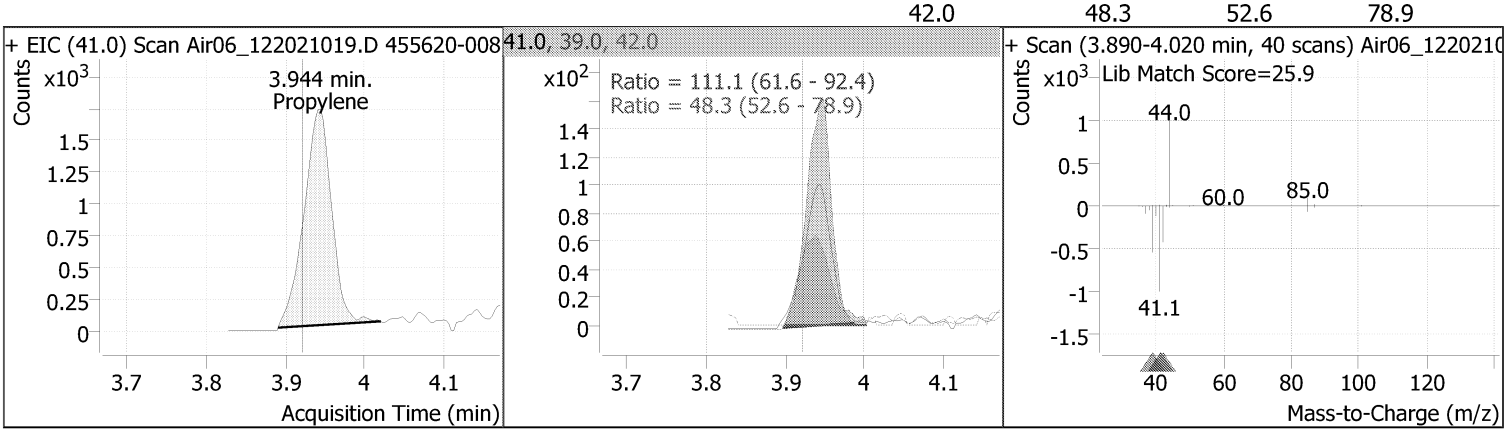
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.184	130.0	371428	10.0000	nL/L		0.004
M 1,4-Difluorobenzene	9.912	114.0	1384332	10.0000	nL/L		0.000
M Chlorobenzene-d5	14.013	82.0	764307	10.0000	nL/L	#	-0.003
System Monitoring Compounds							
S p-Bromofluorobenzene	15.615	95.0	1007076	10.2662	nL/L		-0.003
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 102.66%			
Target Compounds							QValue
T Propylene	3.944	41.0	4153	0.1020	nL/L	#	69
T Freon 12	3.995	85.0	28229	0.2125	nL/L		99
T Chloromethane	4.148	50.0	2310	0.0497	nL/L	#	93
T Freon 114	4.254	135.0	560	0.0072	nL/L	#	90
T Vinyl Chloride	4.358	62.0	564	0.0129	nL/L		93
T 1,3-Butadiene	4.468	54.0	189	0.0050	nL/L	#	1
T Butane	4.555	43.0	6789	0.0907	nL/L		99
T Bromomethane	0.000		0	N.D.			
T Chloroethane	4.918	64.0	8222	0.3779	nL/L		92
T Ethanol	5.025	45.0	60204	2.0659	nL/L		99
T Vinyl bromide	0.000		0	N.D.			
T Acrolein	5.342	56.0	591	0.0314	nL/L		92
T Acetone	5.481	58.0	16232	0.6454	nL/L	#	70
T Trichloromonofluoromethane	5.627	101.0	10742	0.0715	nL/L		97
T Isopropanol (IPA)	5.714	45.0	38182	0.3883	nL/L		98
T n-Pentane	5.957	43.0	41242	0.4277	nL/L		98
T 1,1-Dichloroethene	6.196	61.0	22	0.0002	nL/L		39
T Tert-butyl alcohol (TBA)	6.290	59.0	5749	0.0554	nL/L	#	44
T Methylene Chloride	6.290	84.0	13116	0.3289	nL/L		82
T 3-Chloropropene	6.578	76.0	25738	1.5335	nL/L	#	60
T Freon 113	6.546	101.0	2703	0.0284	nL/L		97
T Carbon Disulfide	6.578	76.0	25738	0.2319	nL/L	#	84

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.138	61.0	111	0.0015	nL/L		37
T 1,1-Dichloroethane	7.313	63.0	107	0.0012	nL/L		55
T MTBE	7.323	73.0	161	0.0013	nL/L	#	1
T Vinyl Acetate	7.410	43.0	7084	0.0466	nL/L	#	89
T 2-Butanone	7.672	43.0	7629	0.0635	nL/L	#	93
T cis-1,2-Dichloroethene	8.242	61.0	36150	0.4892	nL/L	#	44
T Ethyl Acetate	8.242	61.0	36236	2.1692	nL/L	#	8
T n-Hexane	8.252	57.0	6628	0.0852	nL/L	#	82
T Chloroform	8.297	83.0	2036	0.0192	nL/L		77
T Tetrahydrofuran	8.705	72.0	88	0.0051	nL/L	#	1
T 1,2-Dichloroethane	8.961	62.0	1934	0.0227	nL/L	#	89
T 1,1,1-Trichloroethane	9.207	97.0	48	0.0004	nL/L		26
T Benzene	9.611	78.0	3796	0.0322	nL/L	#	92
T Carbon Tetrachloride	9.750	117.0	3033	0.0253	nL/L		96
T Cyclohexane	9.899	84.0	2296	0.0471	nL/L	#	1
T 1,2-Dichloropropane	10.110	63.0	120	0.0023	nL/L		24
T Methane, bromodichloro-	10.504	83.0	304	0.0028	nL/L	#	47
T 1,4-Dioxane	10.595	88.0	43	0.0017	nL/L	#	1
T Trichloroethene	10.566	132.0	409	0.0076	nL/L	#	86
T 2,2,4-Trimethylpentane	10.614	57.0	4903	0.0195	nL/L	#	84
T Methyl methacrylate	10.614	69.0	214	0.0049	nL/L	#	1
T n-Heptane	10.831	71.0	511	0.0130	nL/L	#	76
T cis-1,3-Dichloropropene	0.000		0	N.D.			
T 4-Methyl-2-Pentanone	11.404	58.0	308	0.0066	nL/L	#	1
T trans-1,3-Dichloropropene	0.000		0	N.D.			
T 1,1,2-Trichloroethane	11.993	97.0	51	0.0010	nL/L	#	26
T Toluene	12.278	91.0	15866	0.1059	nL/L	#	97
T TPH Gasoline (C3 to C12)	12.396	165.0	32241418	2.9720	nL/L		100
T 2-Hexanone	12.537	58.0	643	0.0111	nL/L		88
T Dibromochloromethane	12.663	129.0	60	0.0006	nL/L	#	67
T 1,2-Dibromoethane	12.919	108.9	261	0.0033	nL/L	#	49
T Tetrachloroethene	13.379	166.0	1579	0.0180	nL/L	#	93
T 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
T Benzene, chloro-	14.055	112.0	287	0.0026	nL/L	#	35
T Ethylbenzene	14.443	91.0	8284	0.0471	nL/L		97
T TPH Gasoline (C6 to C12)	14.521	165.0	28405094	3.5177	nL/L		100
T m,p-Xylenes	14.622	91.0	34192	0.2306	nL/L		98
T Bromoform	14.696	173.0	350	0.0030	nL/L	#	1
T Styrene	15.007	104.0	5987	0.0603	nL/L		97
T 1,1,2,2-Tetrachloroethane	15.107	83.0	239	0.0023	nL/L	#	71
T o-Xylene	15.126	91.0	21956	0.1427	nL/L		97
T n-Nonane	15.363	85.0	1687	0.0537	nL/L	#	85
T Isopropylbenzene	15.774	105.0	3437	0.0165	nL/L	#	87
T 2-Chlorotoluene	16.123	126.0	1303	0.0279	nL/L	#	1
T n-Propylbenzene	16.363	120.0	1846	0.0351	nL/L		96
T 4-Ethyltoluene	16.538	105.1	11725	0.0591	nL/L	#	97
T 1,3,5-Trimethylbenzene	16.631	105.0	27335	0.1514	nL/L		98
T 1,2,4-Trimethylbenzene	17.140	105.0	77814	0.4607	nL/L		98
T Benzyl chloride	17.434	91.0	2533	0.0174	nL/L	#	66
T 1,3-Dichlorobenzene	17.412	146.0	15271	0.1307	nL/L	#	90
T 1,4-Dichlorobenzene	17.412	146.0	15271	0.1324	nL/L	#	90
T 1,2-Dichlorobenzene	17.861	146.0	1954	0.0174	nL/L	#	53
T 1,2,4-Trichlorobenzene	20.367	179.9	1204	0.0150	nL/L		88
T Naphthalene	20.538	128.0	104689	0.8417	nL/L		98
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.121	225.0	632	0.0048	nL/L	#	92

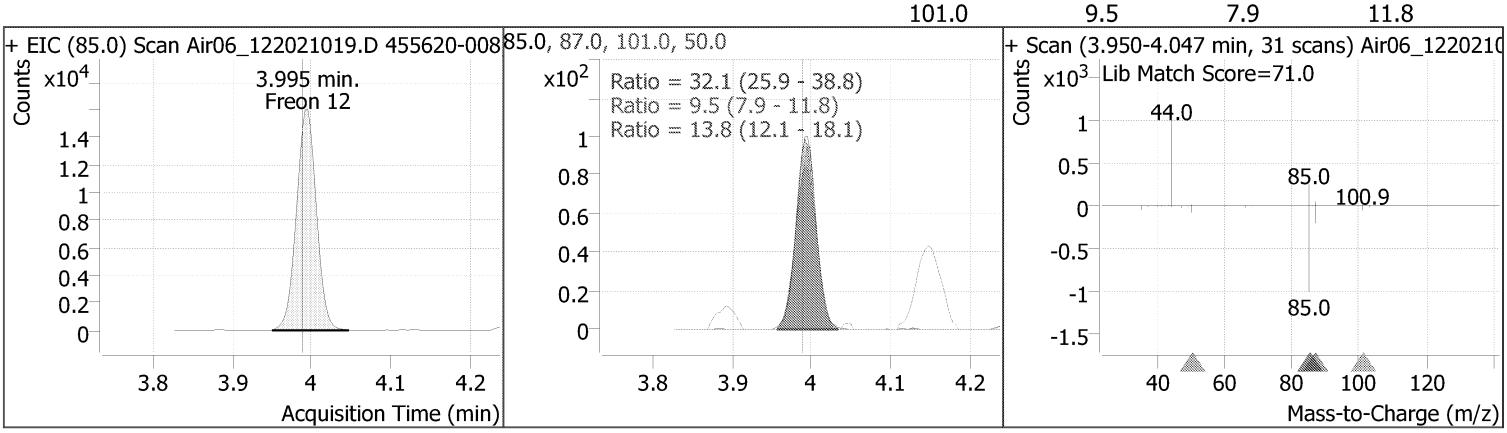
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

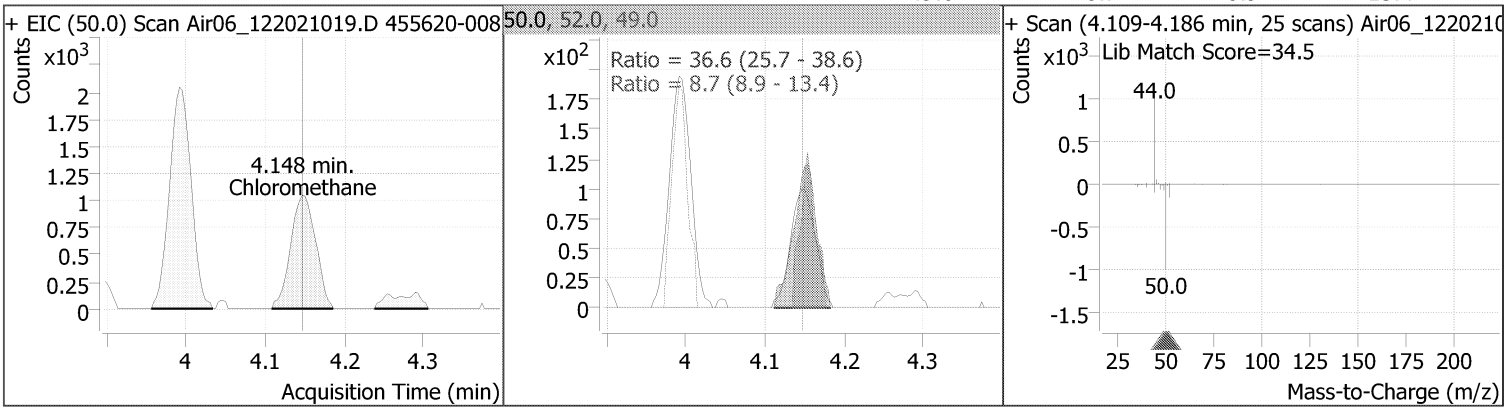
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.1020	3.94	0.03	4153	39.0	111.1	61.6	92.4
					42.0	48.3	52.6	78.9



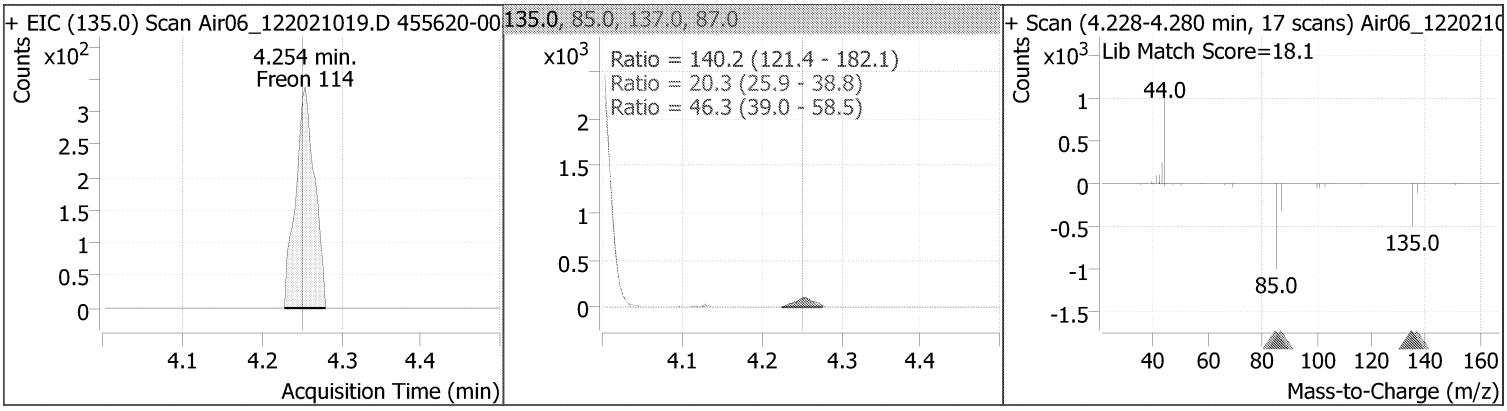
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	0.2125	4.00	0.01	28229	87.0	32.1	25.9	38.8
					50.0	13.8	12.1	18.1
					101.0	9.5	7.9	11.8



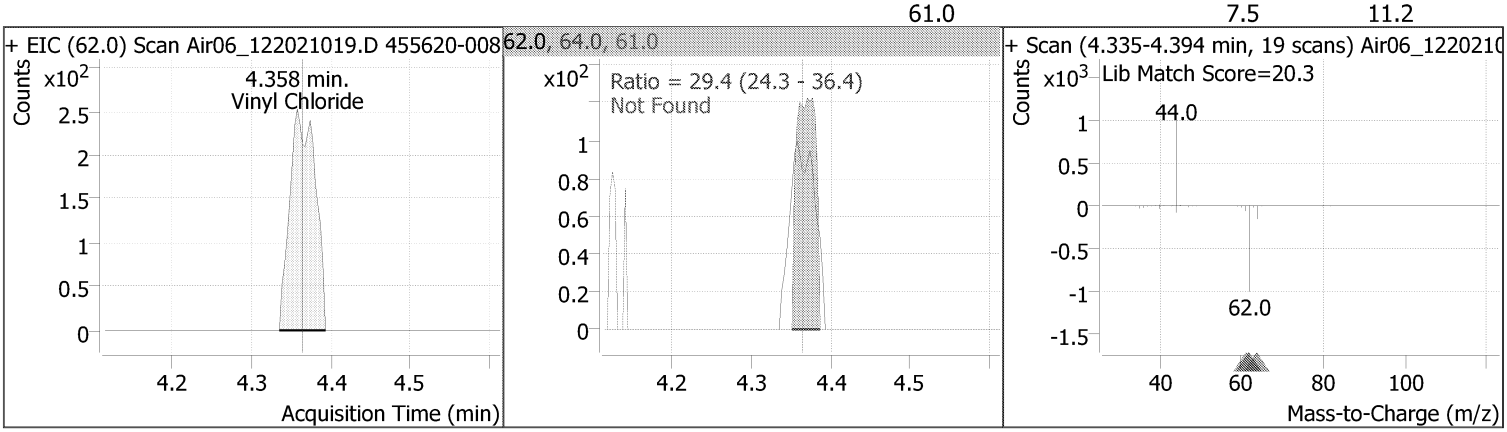
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	0.0497	4.15	0.00	2310	52.0	36.6	25.7	38.6
					49.0	8.7	8.9	13.4



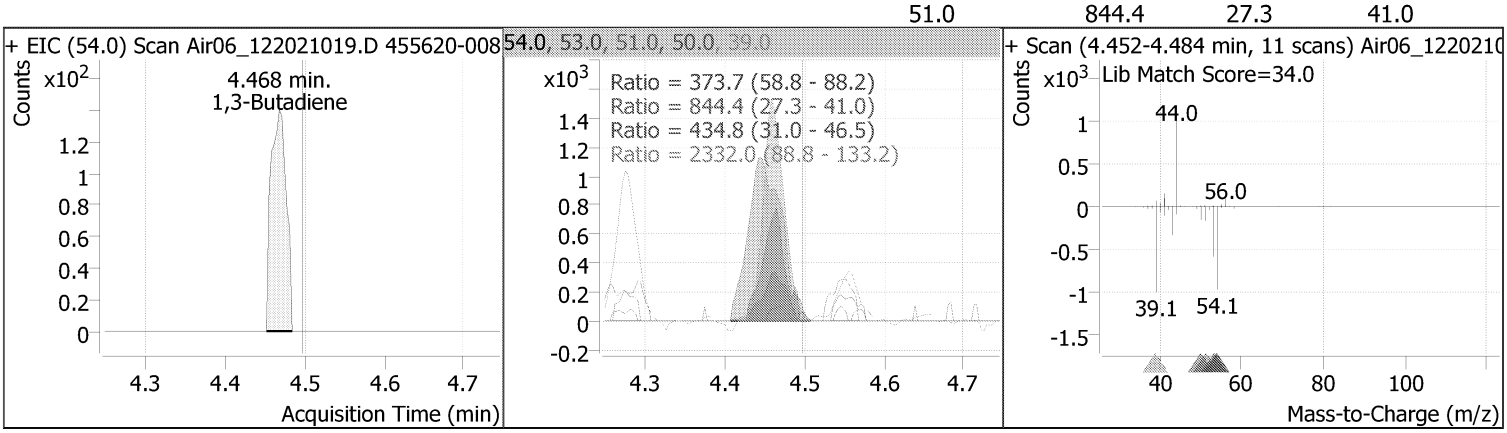
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	0.0072	4.25	0.01	560	85.0	140.2	121.4	182.1
					87.0	46.3	39.0	58.5
					137.0	20.3	25.9	38.8



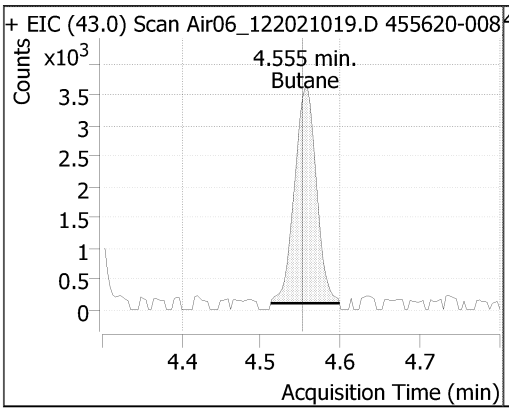
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	0.0129	4.36	0.00	564	64.0	29.4	24.3	36.4
					61.0		7.5	11.2

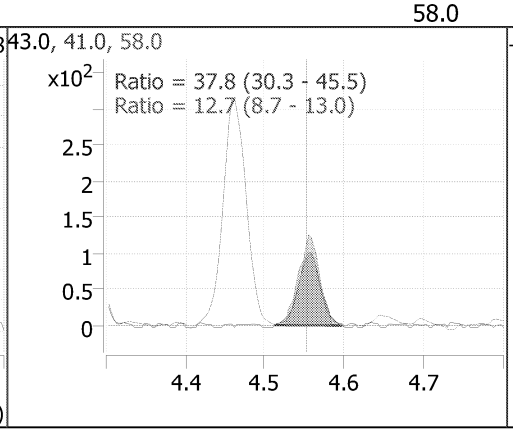


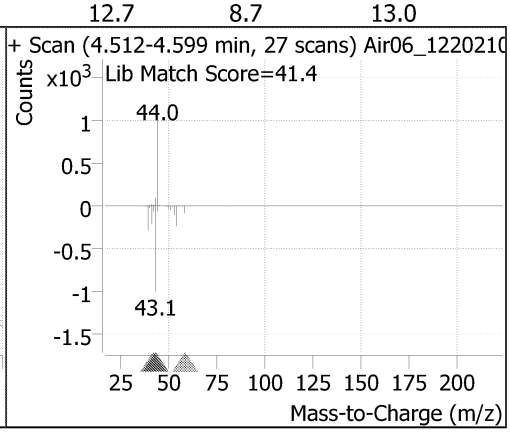
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	0.0050	4.47	-0.03	189	39.0	2332.0	88.8	133.2
					53.0	373.7	58.8	88.2
					50.0	434.8	31.0	46.5
					51.0	844.4	27.3	41.0



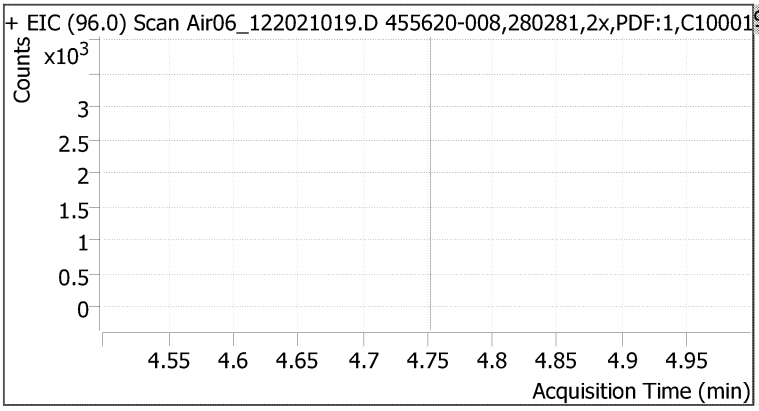
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	0.0907	4.56	0.01	6789	41.0	37.8	30.3	45.5
					58.0	12.7	8.7	13.0

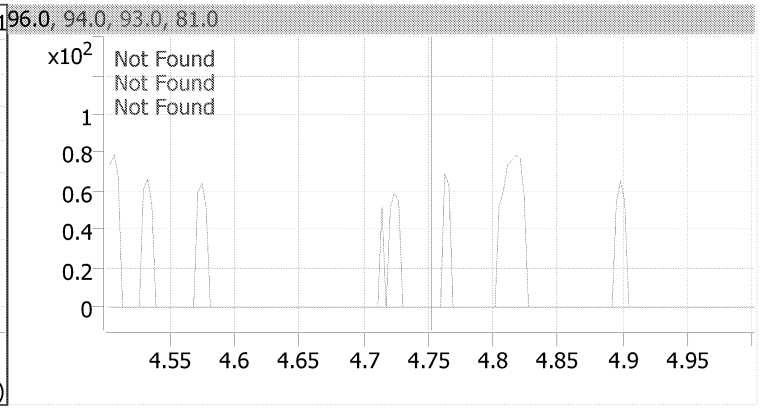




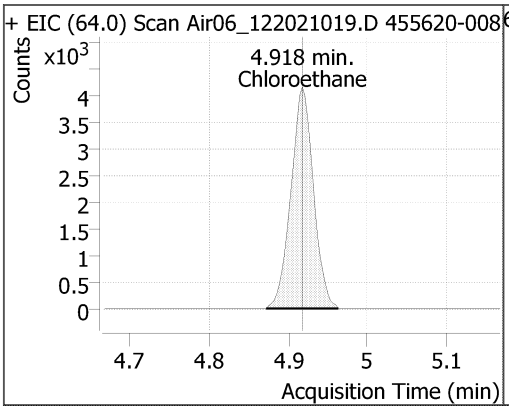


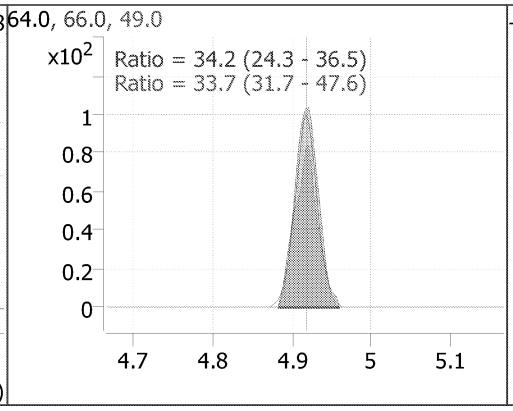
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Bromomethane	N.D.	4.75	94.0	107.8	93.0	23.9	81.0	23.8

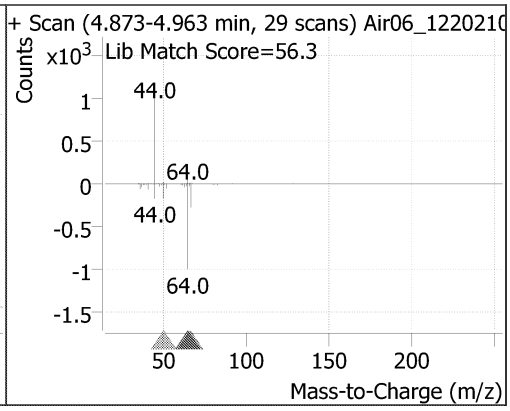




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	0.3779	4.92	0.00	8222	49.0	33.7	31.7	47.6
					66.0	34.2	24.3	36.5

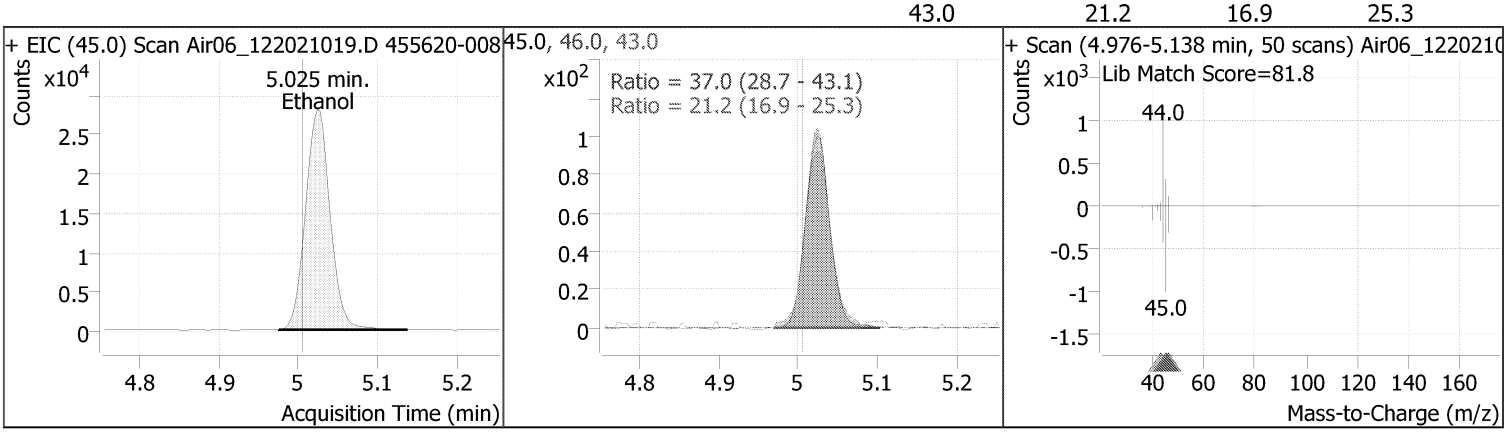




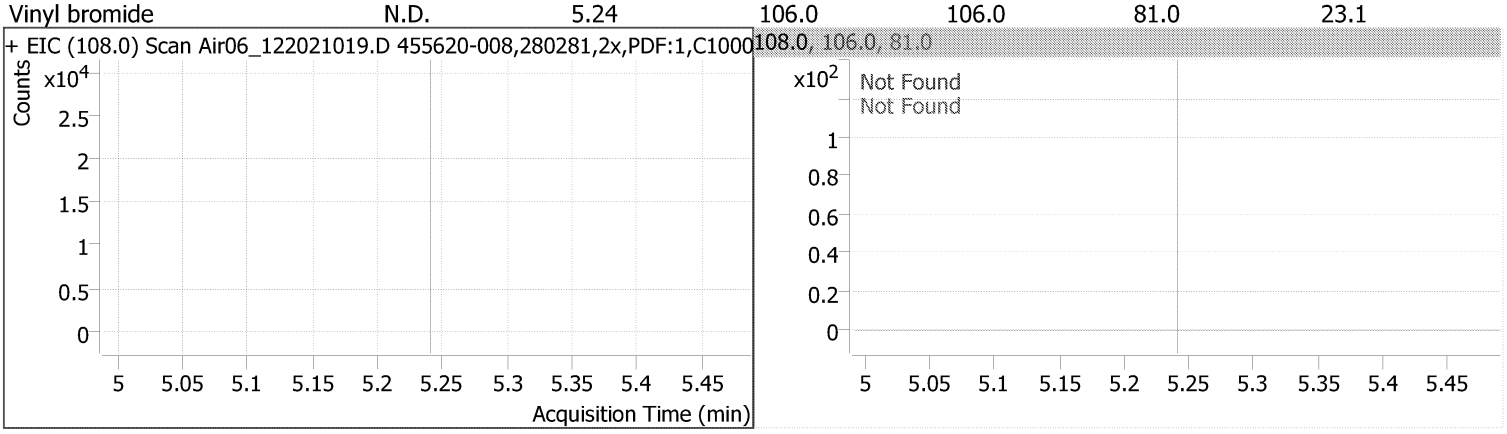


Quantitation Results Report (Not Reviewed)

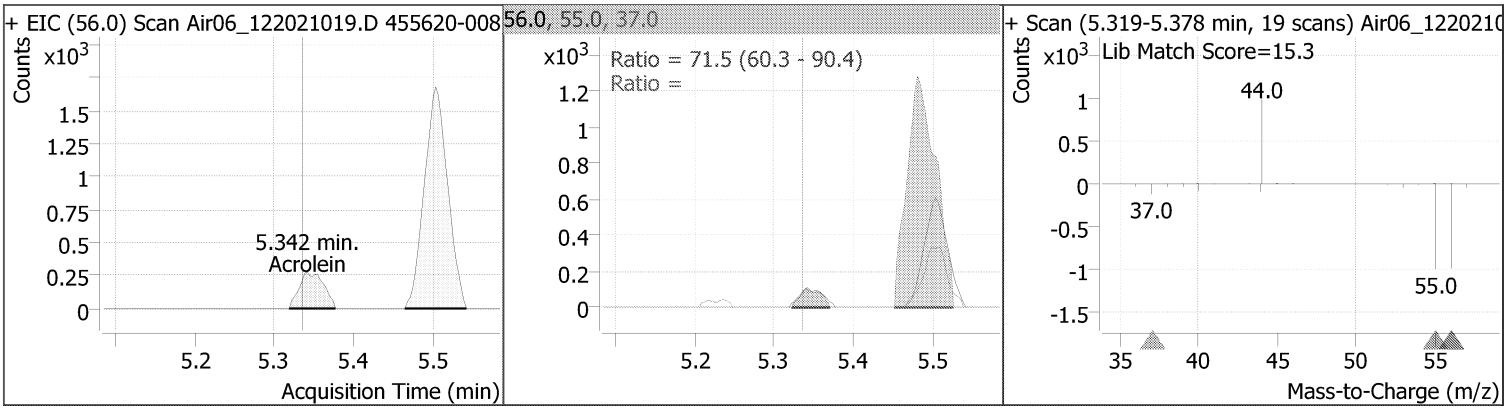
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	2.0659	5.02	0.02	60204	46.0	37.0	28.7	43.1
					43.0	21.2	16.9	25.3



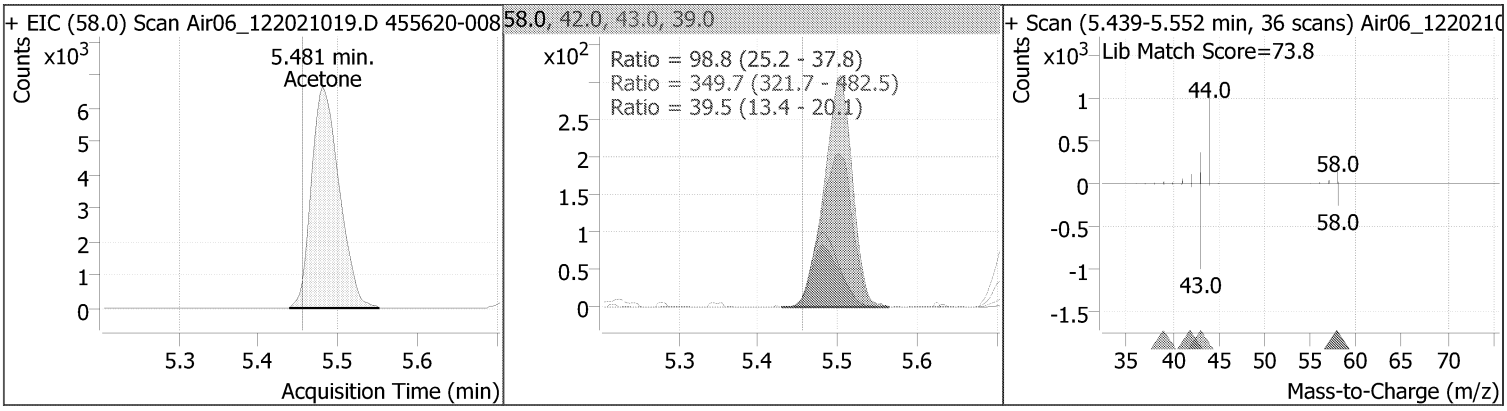
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl bromide	N.D.	5.24	106.0	106.0	81.0	23.1



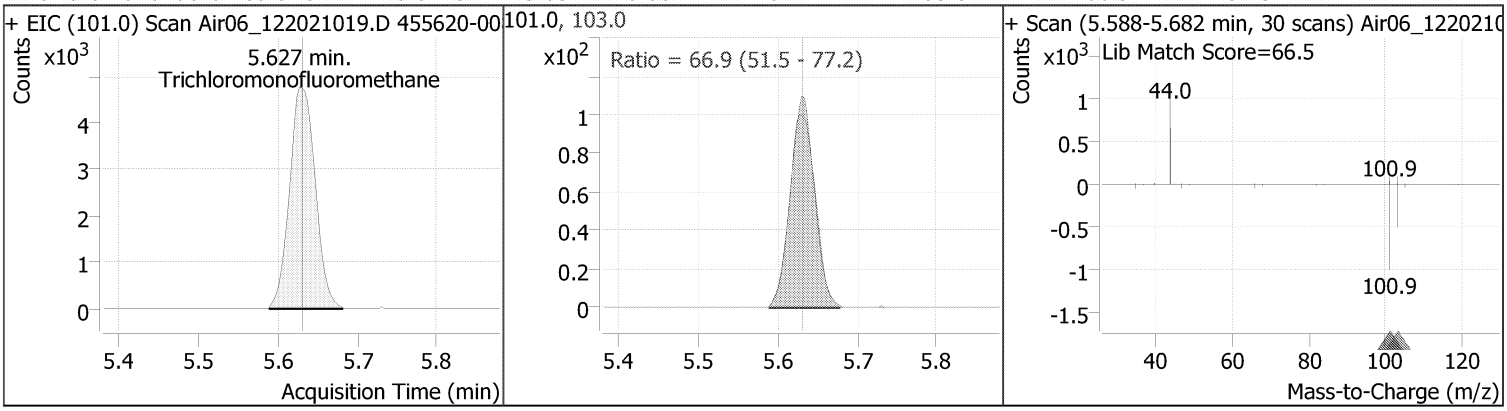
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	0.0314	5.34	0.01	591	55.0	71.5	60.3	90.4
					37.0		9.1	13.7



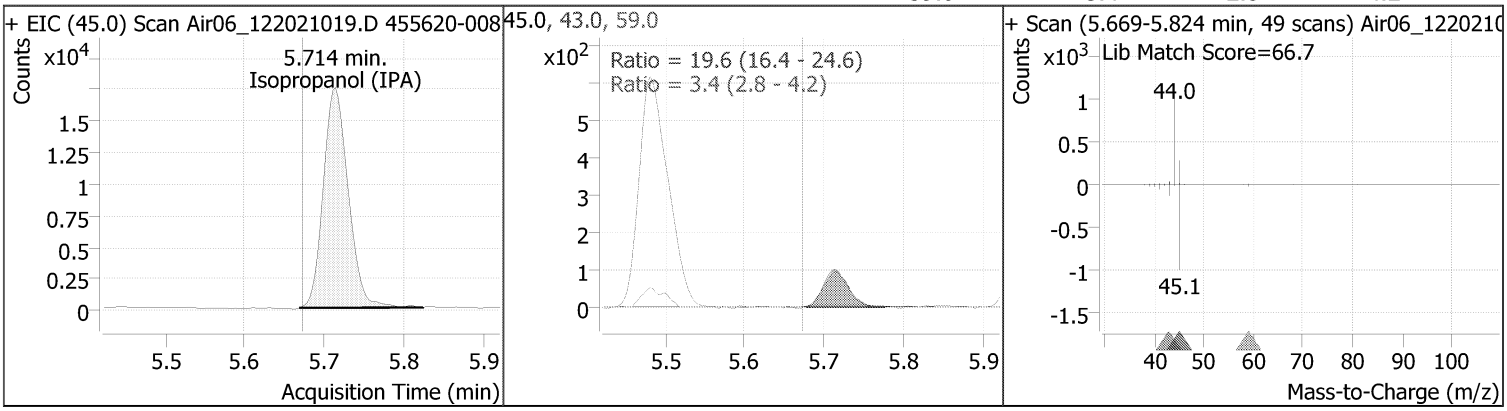
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	0.6454	5.48	0.03	16232	43.0	349.7	321.7	482.5
					42.0	98.8	25.2	37.8
					39.0	39.5	13.4	20.1



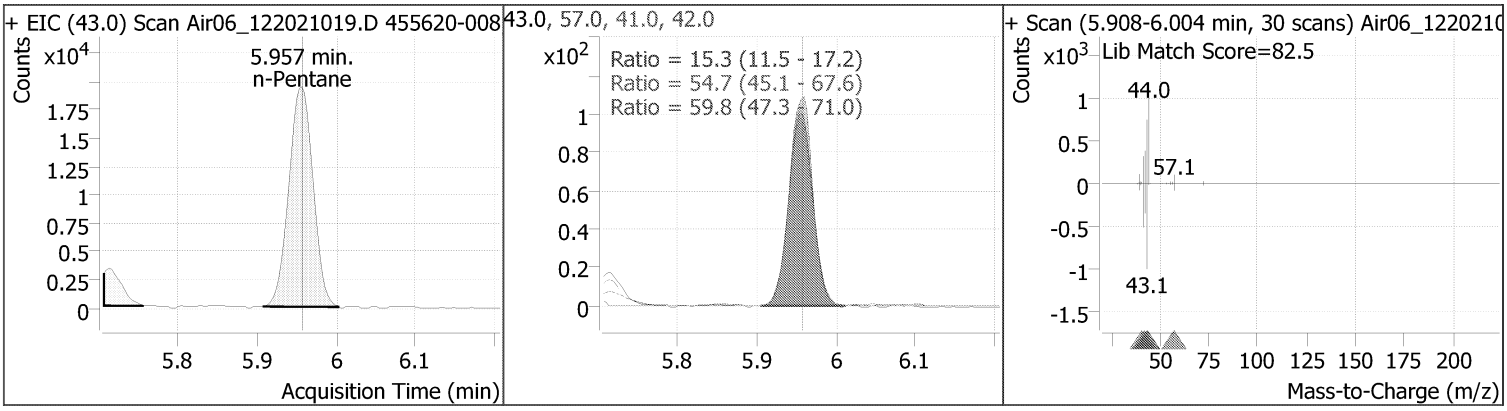
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	0.0715	5.63	0.00	10742	103.0	66.9	51.5	77.2



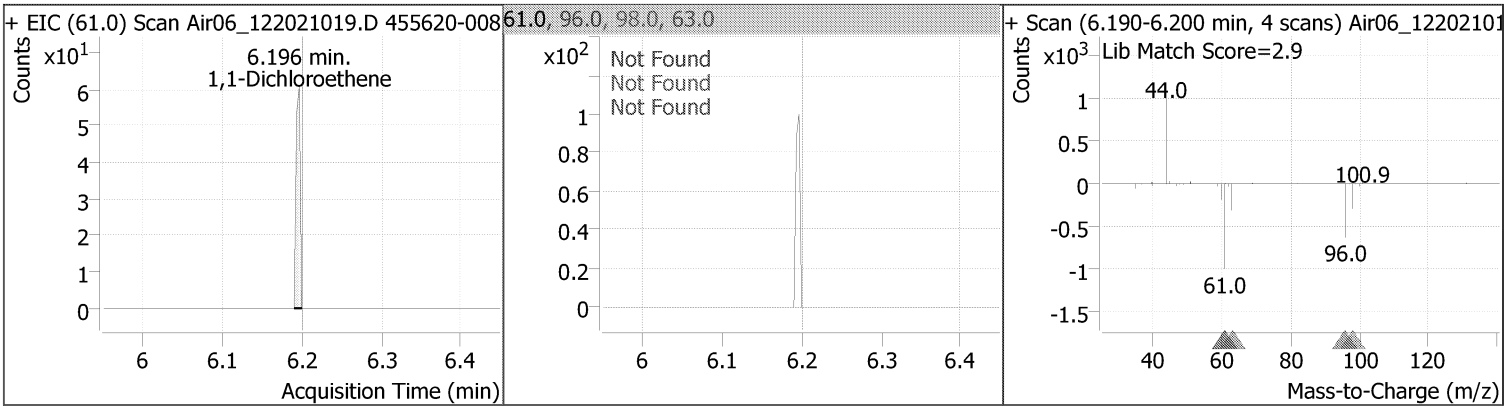
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.3883	5.71	0.05	38182	43.0	19.6	16.4	24.6
					59.0	3.4	2.8	4.2



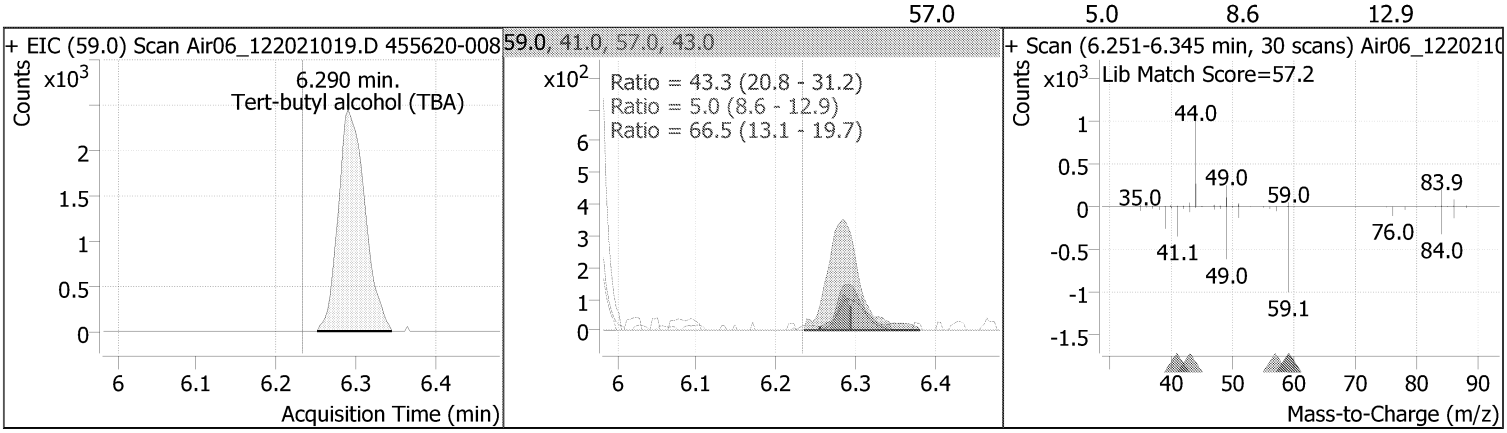
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.4277	5.96	0.00	41242	42.0	59.8	47.3	71.0
					41.0	54.7	45.1	67.6
					57.0	15.3	11.5	17.2



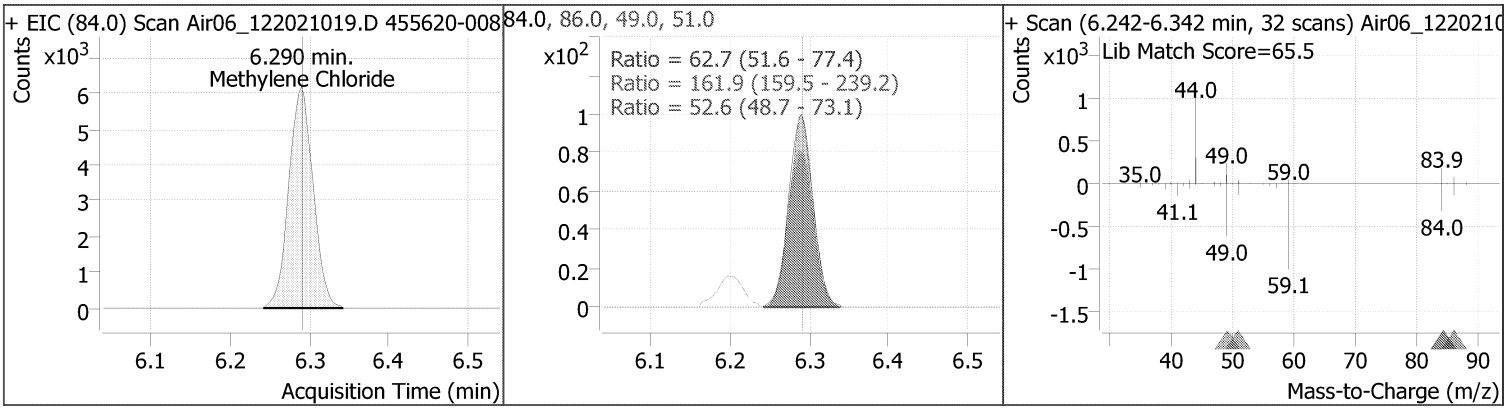
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	0.0002	6.20	0.00	22	96.0		35.3	53.0
					63.0		24.7	37.1
					98.0		22.7	34.0



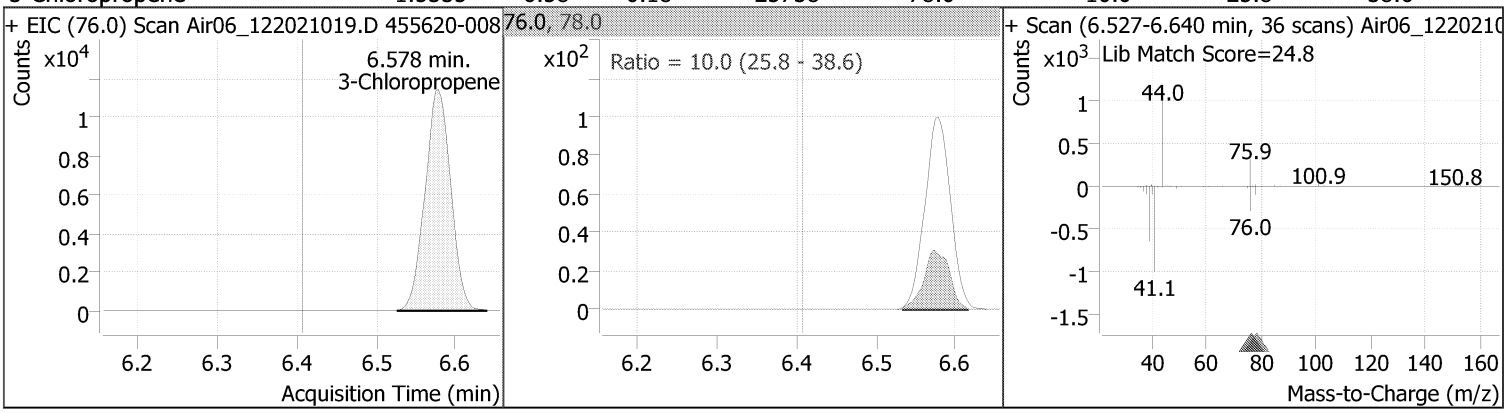
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.0554	6.29	0.06	5749	41.0	43.3	20.8	31.2
					43.0	66.5	13.1	19.7
					57.0	5.0	8.6	12.9



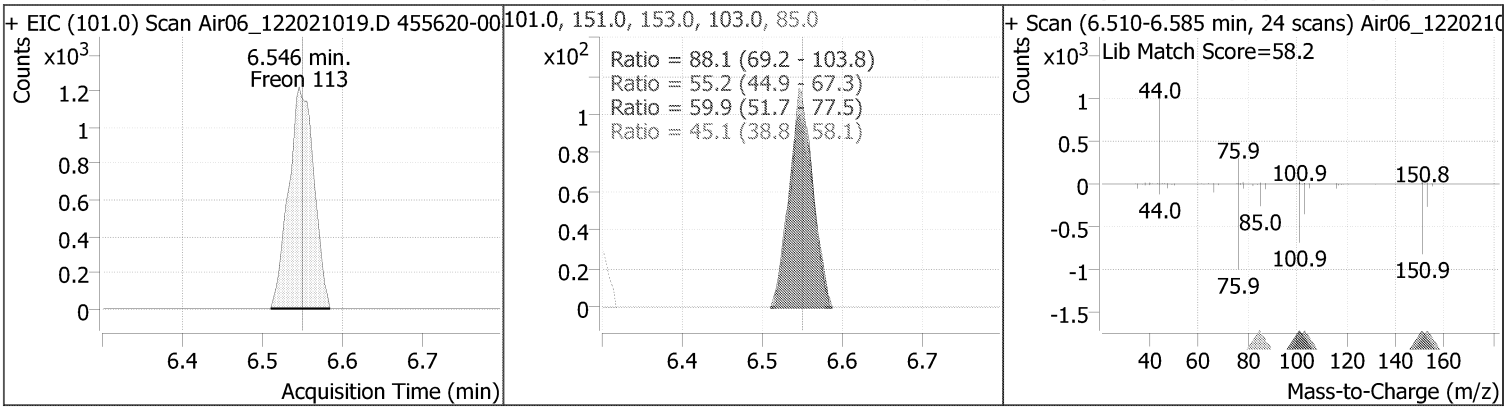
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.3289	6.29	0.00	13116	49.0	161.9	159.5	239.2
					86.0	62.7	51.6	77.4
					51.0	52.6	48.7	73.1



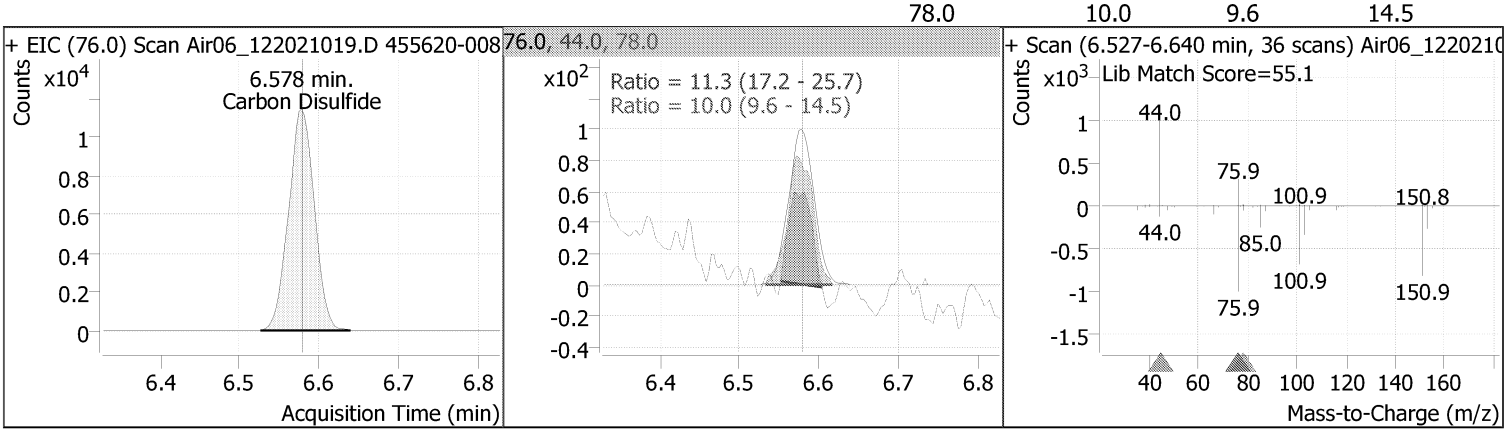
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	1.5335	6.58	0.18	25738	78.0	10.0	25.8	38.6



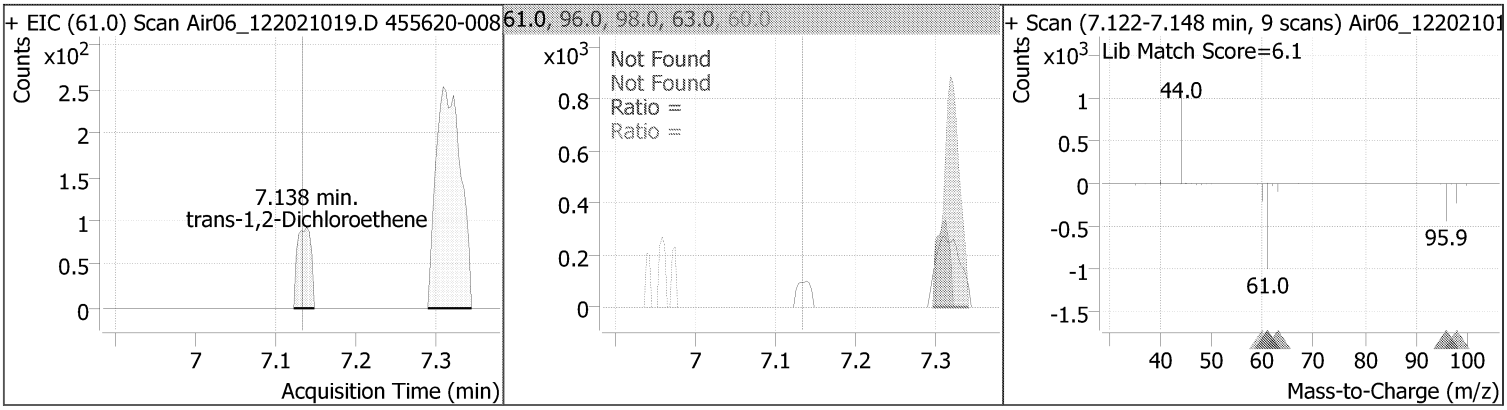
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	0.0284	6.55	0.00	2703	151.0	88.1	69.2	103.8
					103.0	59.9	51.7	77.5
					153.0	55.2	44.9	67.3
					85.0	45.1	38.8	58.1



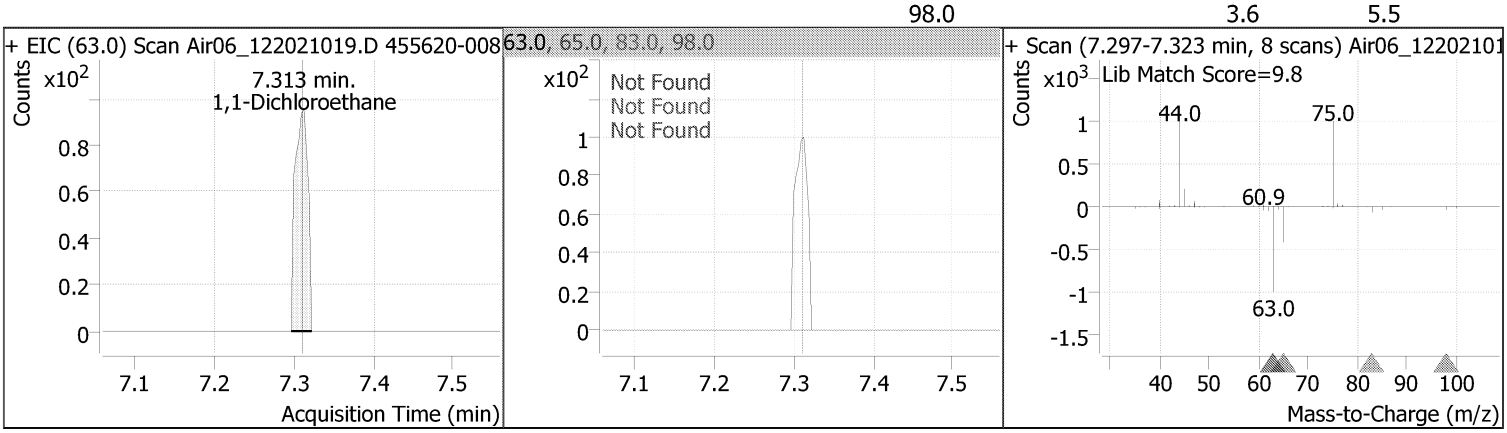
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.2319	6.58	0.00	25738	44.0	11.3	17.2	25.7
					78.0	10.0	9.6	14.5



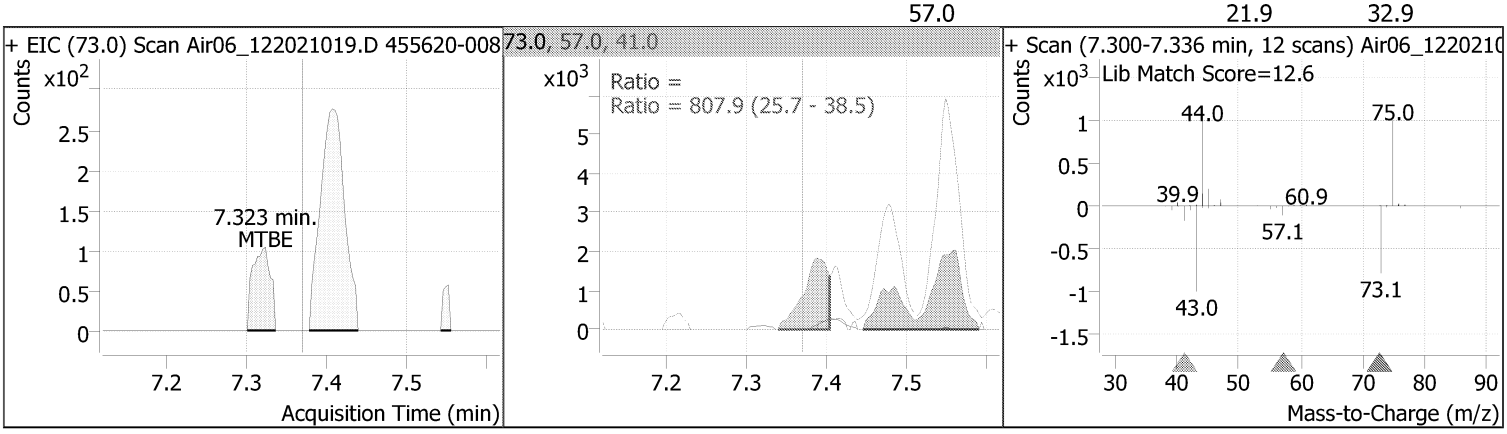
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.0015	7.14	0.01	111	96.0		41.3	61.9
					98.0		26.5	39.8
					63.0		24.6	36.9
					60.0		23.1	34.7



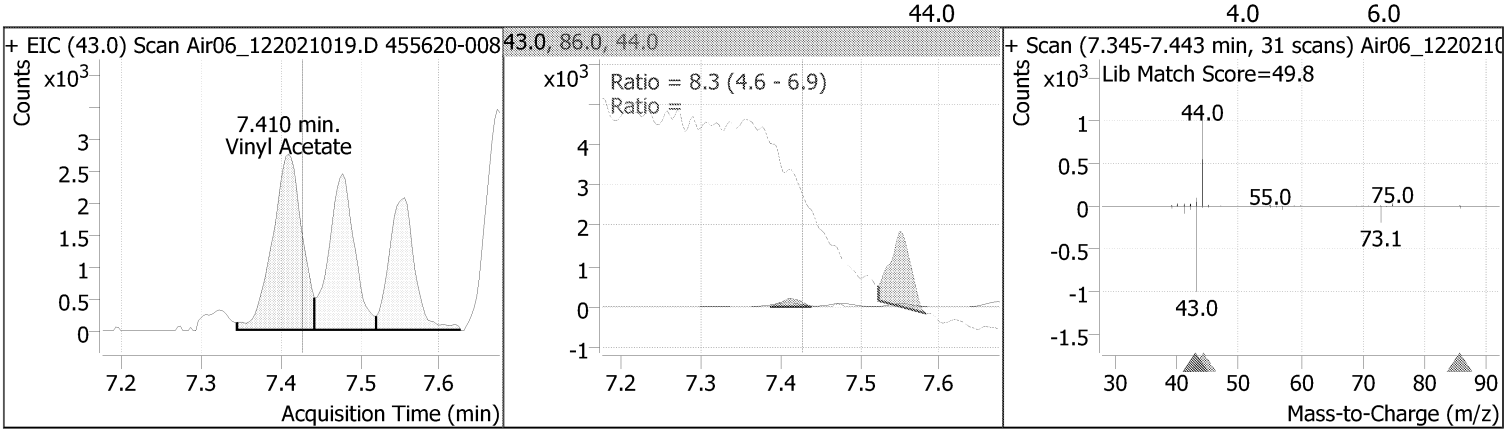
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	0.0012	7.31	0.01	107	65.0		24.1	36.1
					83.0		9.9	14.8
					98.0		3.6	5.5



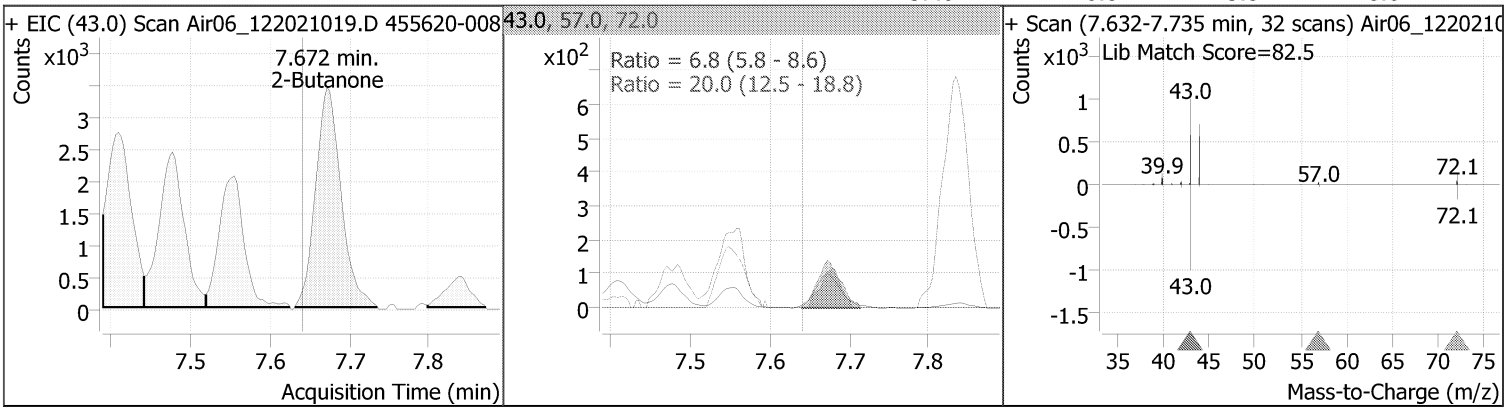
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	0.0013	7.32	-0.04	161	41.0	807.9	25.7	38.5
					57.0		21.9	32.9



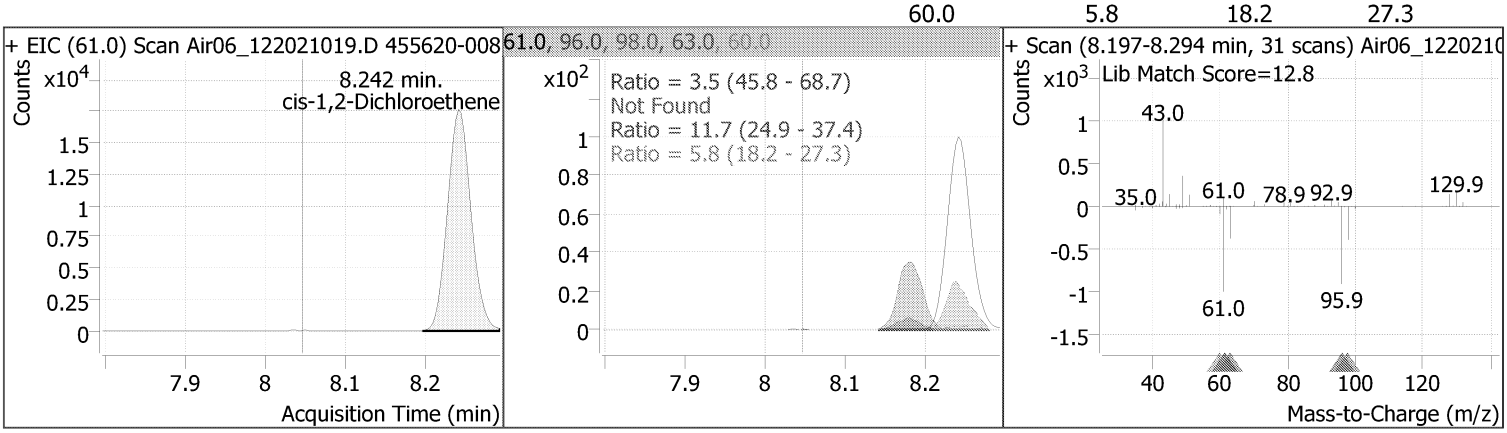
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.0466	7.41	-0.01	7084	86.0	8.3	4.6	6.9
					44.0		4.0	6.0



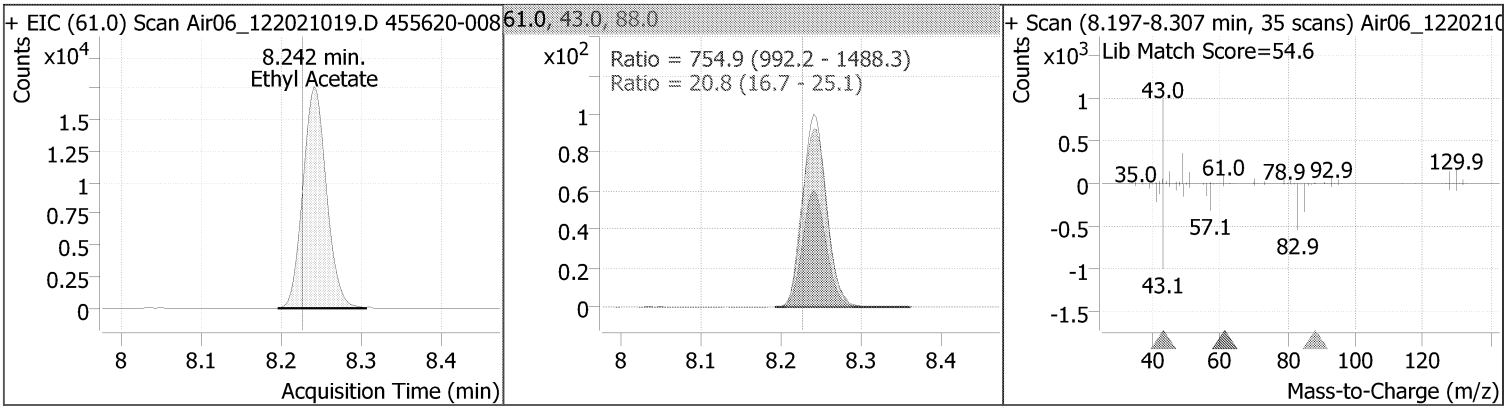
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.0635	7.67	0.04	7629	72.0	20.0	12.5	18.8
					57.0	6.8	5.8	8.6



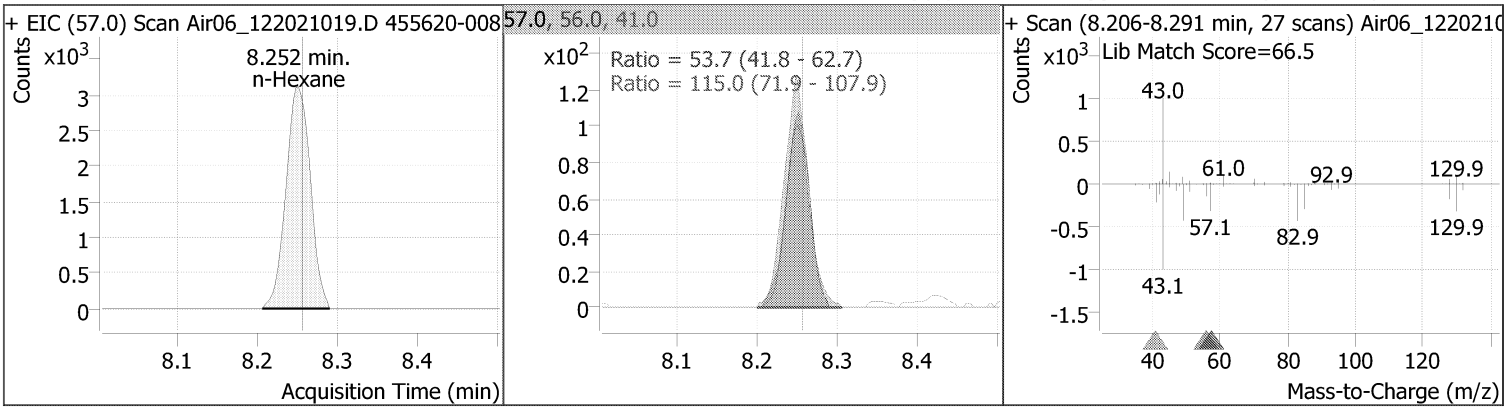
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.4892	8.24	0.20	36150	96.0	3.5	45.8	68.7
					98.0		29.3	43.9
					63.0	11.7	24.9	37.4
					60.0	5.8	18.2	27.3



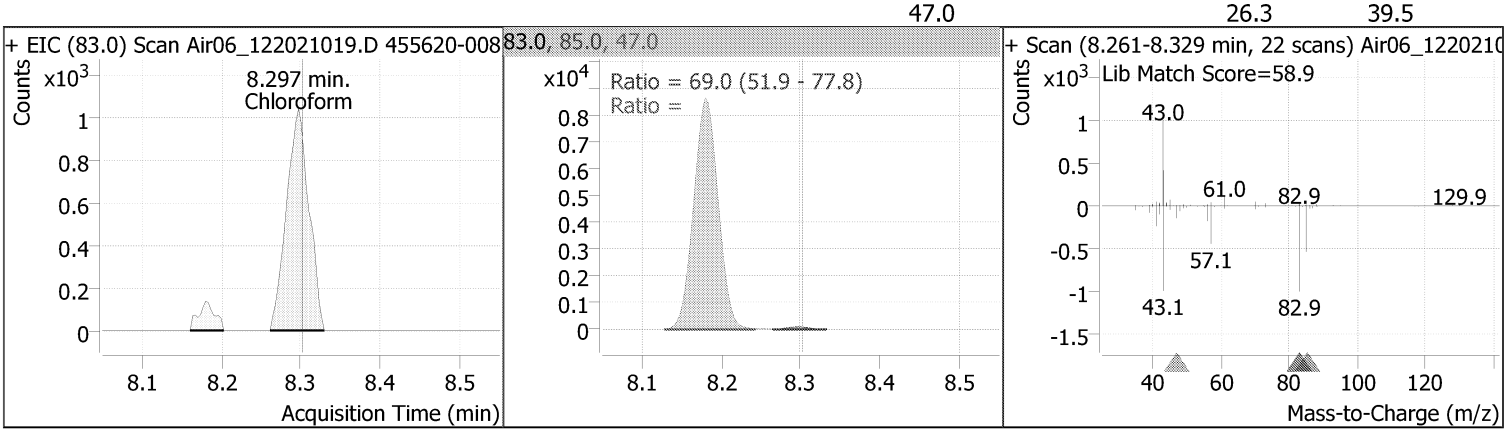
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	2.1692	8.24	0.02	36236	43.0	754.9	992.2	1488.3
					88.0	20.8	16.7	25.1



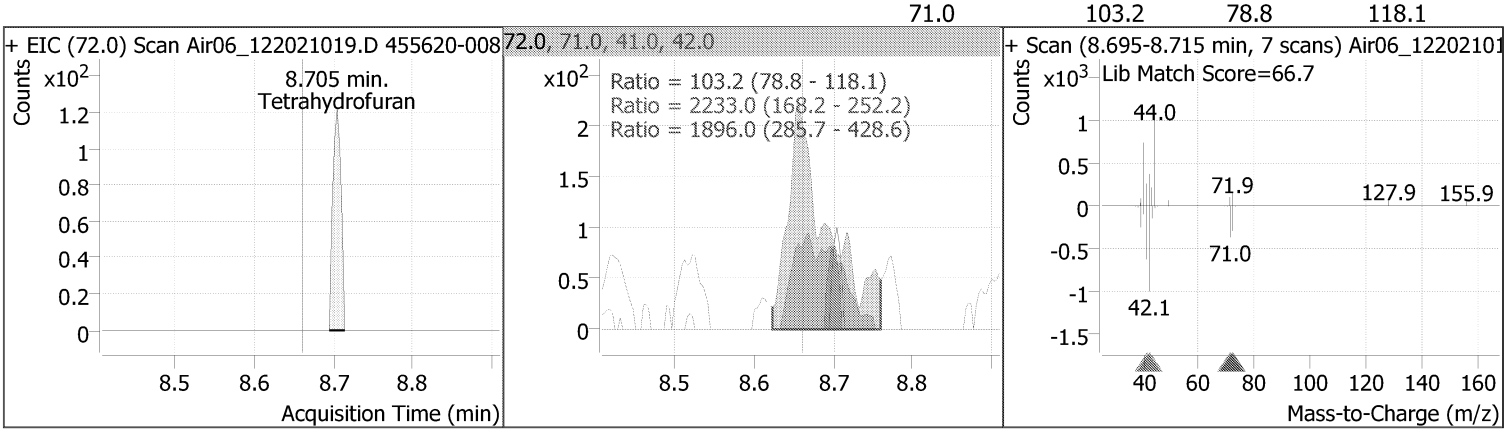
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.0852	8.25	0.00	6628	41.0	115.0	71.9	107.9
					56.0	53.7	41.8	62.7



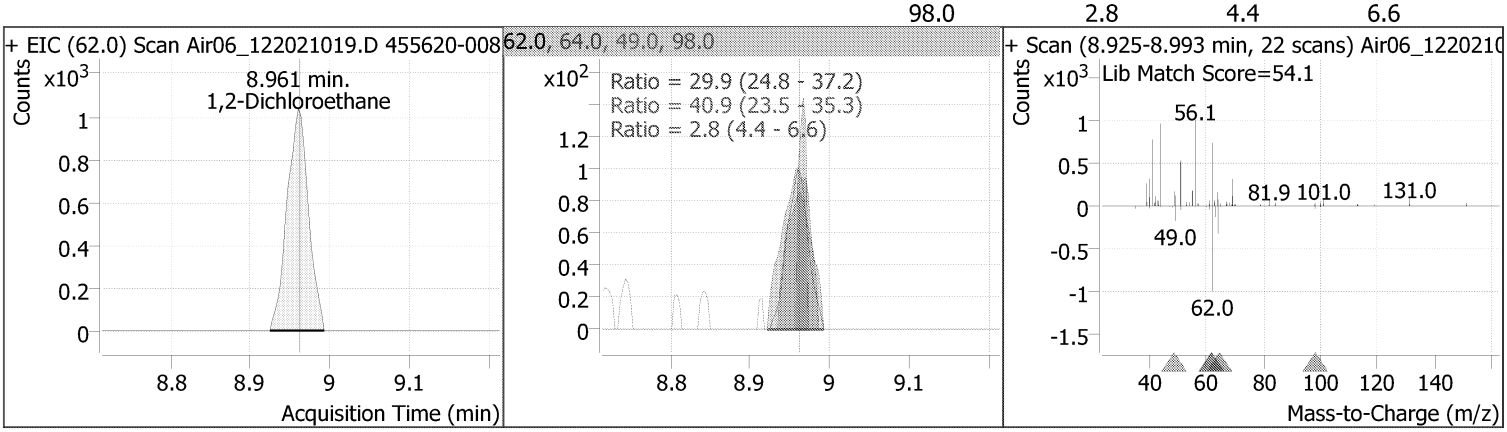
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.0192	8.30	0.00	2036	85.0	69.0	51.9	77.8
					47.0		26.3	39.5



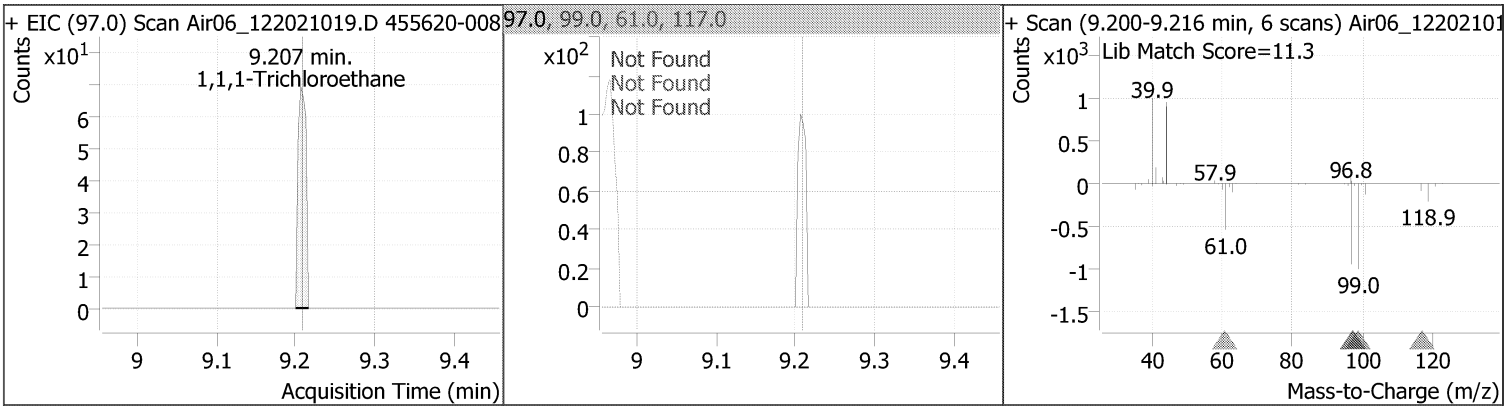
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	0.0051	8.70	0.05	88	42.0	1896.0	285.7	428.6
					41.0	2233.0	168.2	252.2
					71.0	103.2	78.8	118.1



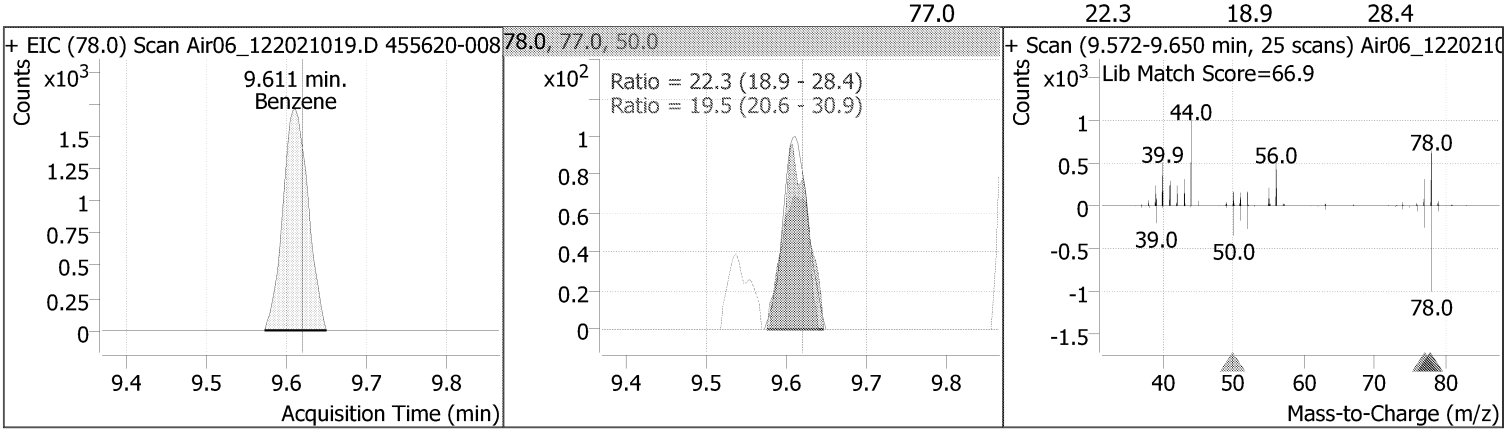
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	0.0227	8.96	0.00	1934	64.0	29.9	24.8	37.2
					49.0	40.9	23.5	35.3
					98.0	2.8	4.4	6.6



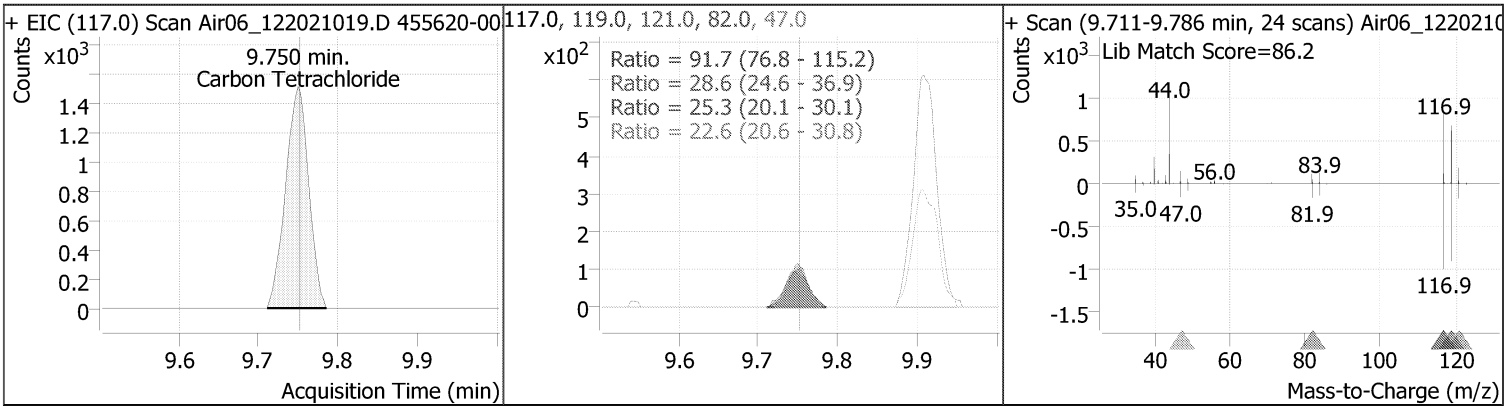
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	0.0004	9.21	0.00	48	99.0		52.0	78.0
					61.0		40.4	60.5
					117.0		9.1	13.6



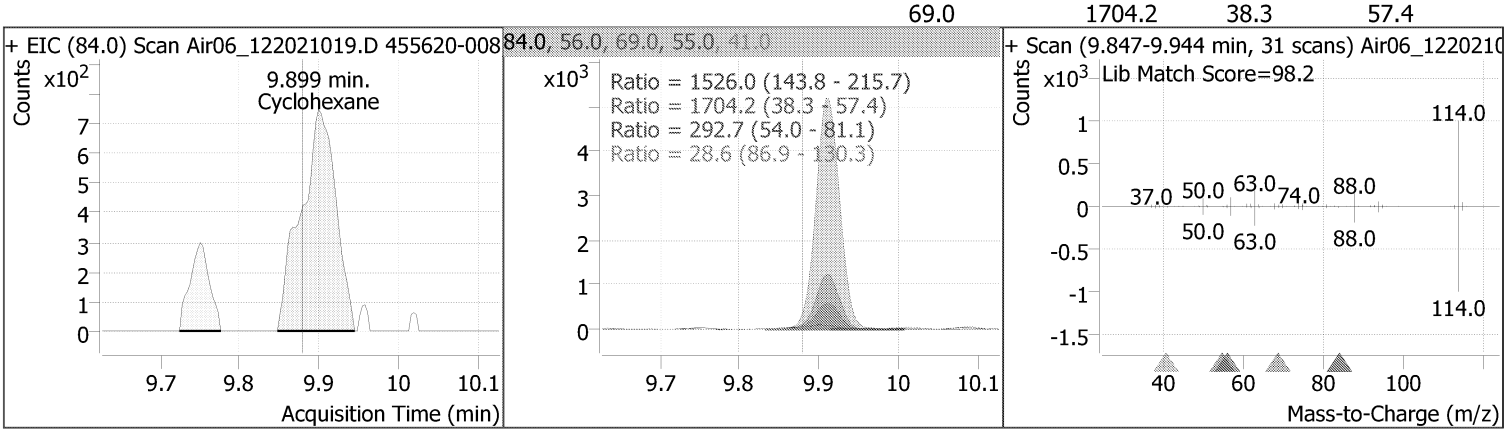
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.0322	9.61	0.00	3796	50.0	19.5	20.6	30.9
					77.0	22.3	18.9	28.4



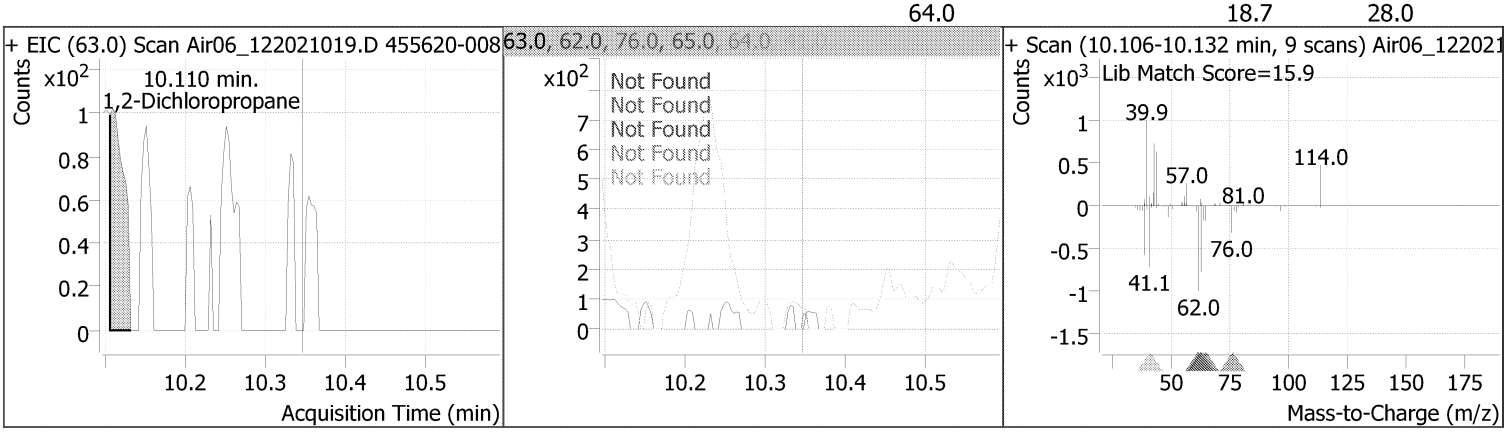
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	0.0253	9.75	0.00	3033	119.0	91.7	76.8	115.2
					121.0	28.6	24.6	36.9
					47.0	22.6	20.6	30.8
					82.0	25.3	20.1	30.1



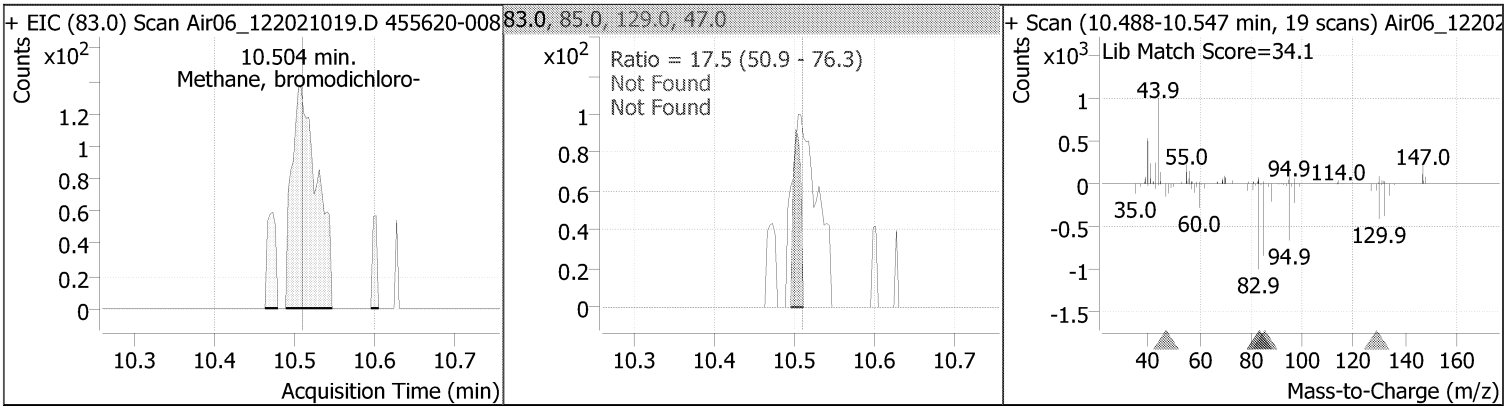
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.0471	9.90	0.03	2296	56.0	1526.0	143.8	215.7
					41.0	28.6	86.9	130.3
					55.0	292.7	54.0	81.1
					69.0	1704.2	38.3	57.4



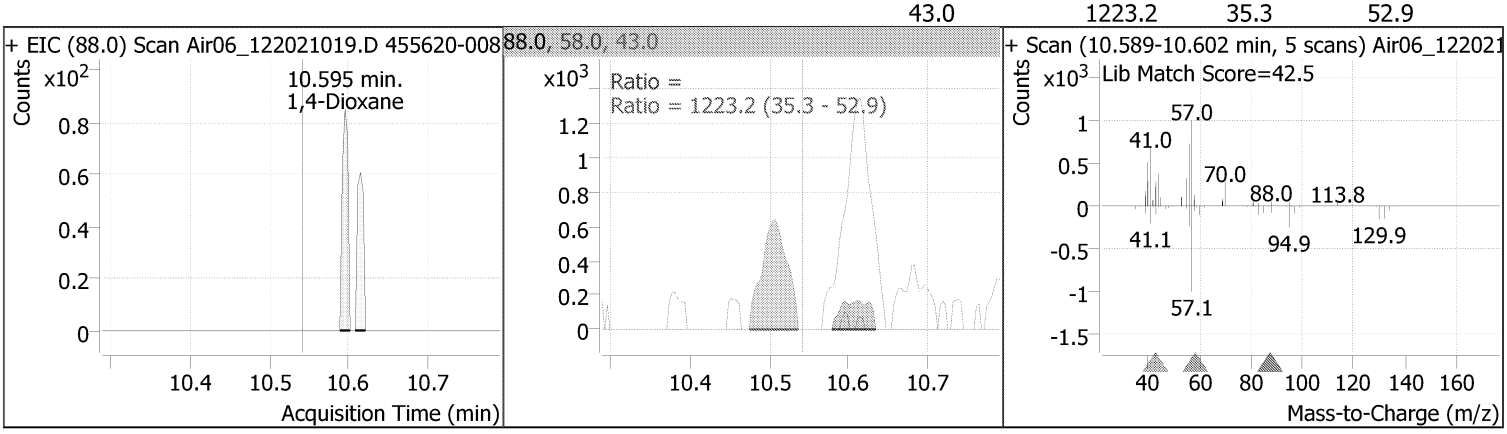
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.0023	10.11	-0.24	120	41.0		60.7	91.1
					62.0		55.7	83.6
					76.0		35.7	53.6
					65.0		23.3	35.0
					64.0		18.7	28.0



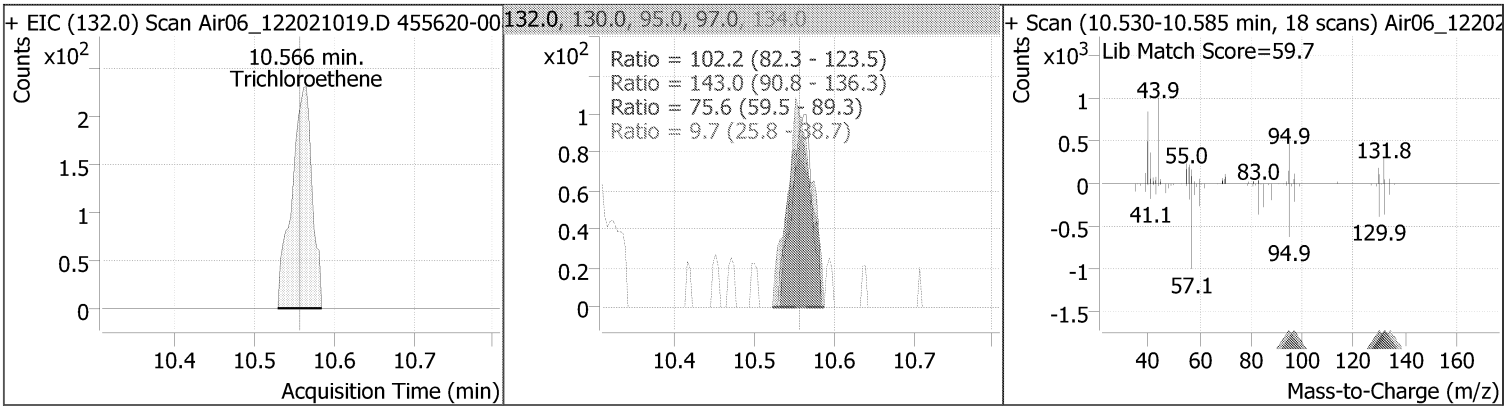
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	0.0028	10.50	0.00	304	85.0	17.5	50.9	76.3
					47.0		19.9	29.9
					129.0		9.1	13.7



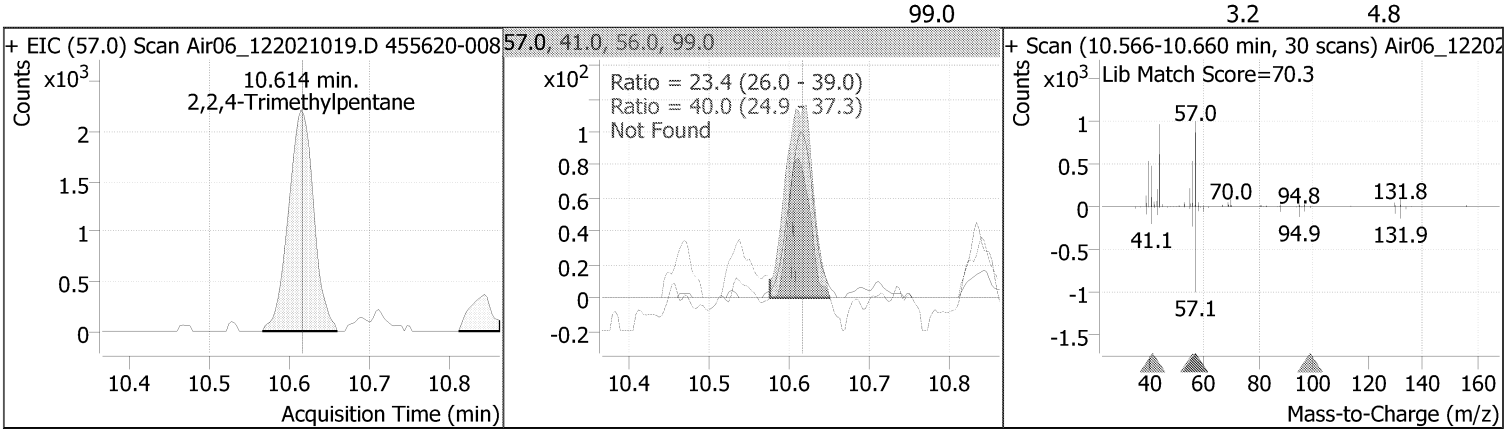
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.0017	10.60	0.06	43	58.0		73.4	110.0
					43.0	1223.2	35.3	52.9



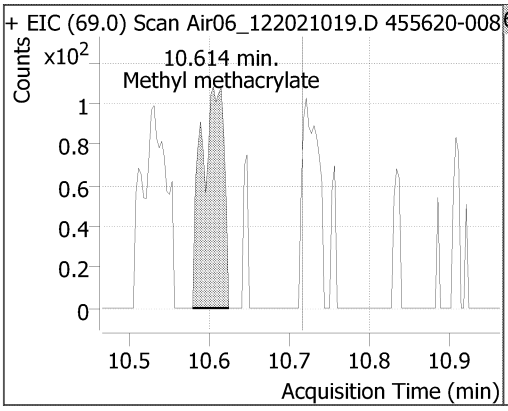
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.0076	10.57	0.01	409	95.0	143.0	90.8	136.3
					130.0	102.2	82.3	123.5
					97.0	75.6	59.5	89.3
					134.0	9.7	25.8	38.7

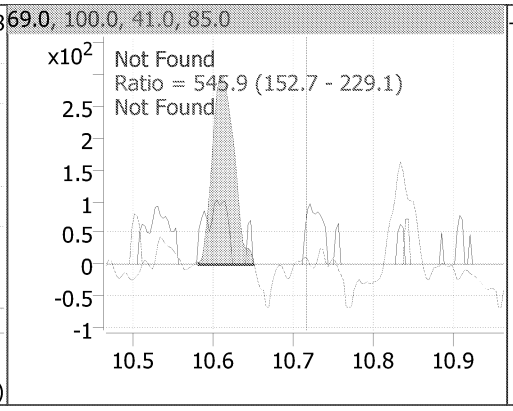


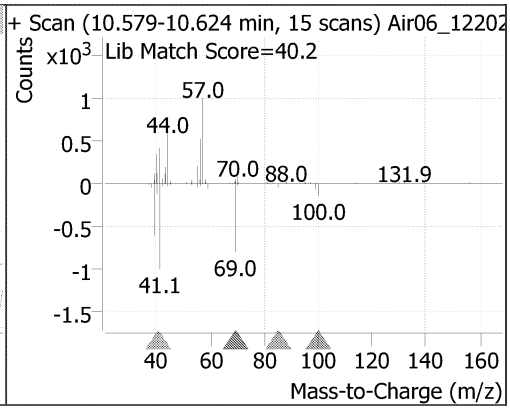
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.0195	10.61	0.00	4903	41.0	23.4	26.0	39.0
					56.0	40.0	24.9	37.3
					99.0		3.2	4.8



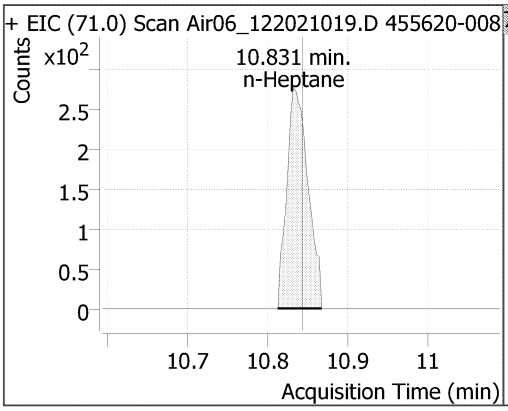
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	0.0049	10.61	-0.10	214	41.0	545.9	152.7	229.1
					100.0		29.1	43.6
					85.0		7.9	11.8

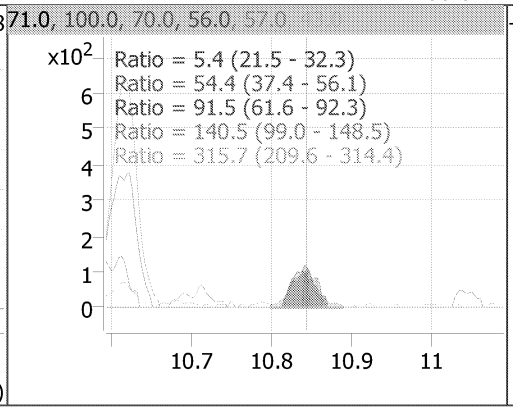


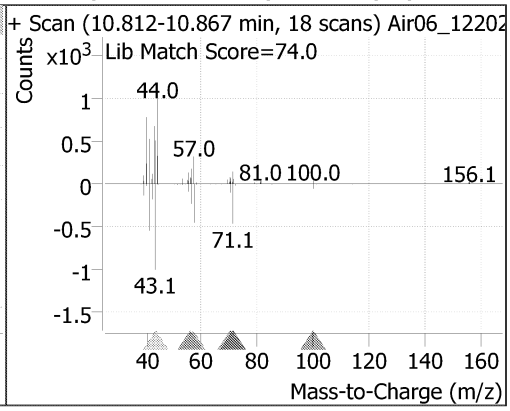




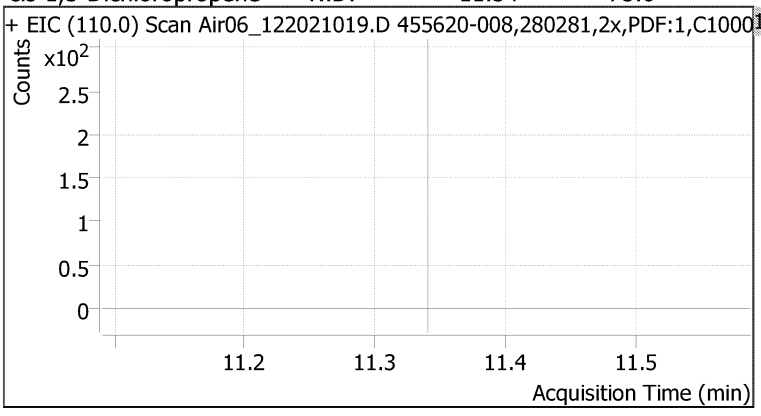
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	0.0130	10.83	-0.01	511	43.0	315.7	209.6	314.4
					57.0	140.5	99.0	148.5
					56.0	91.5	61.6	92.3
					70.0	54.4	37.4	56.1
					100.0	5.4	21.5	32.3

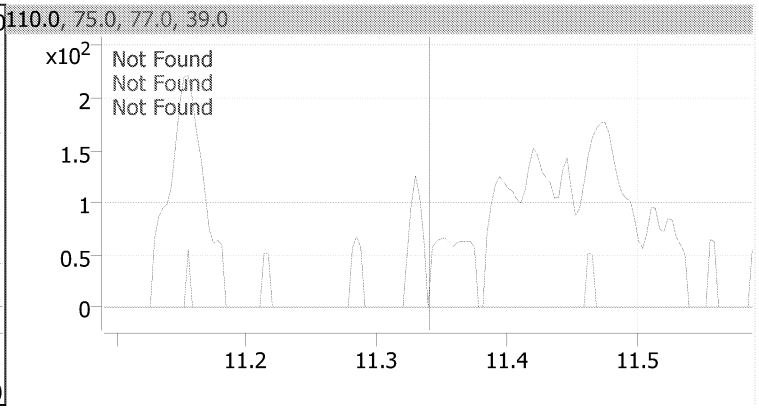




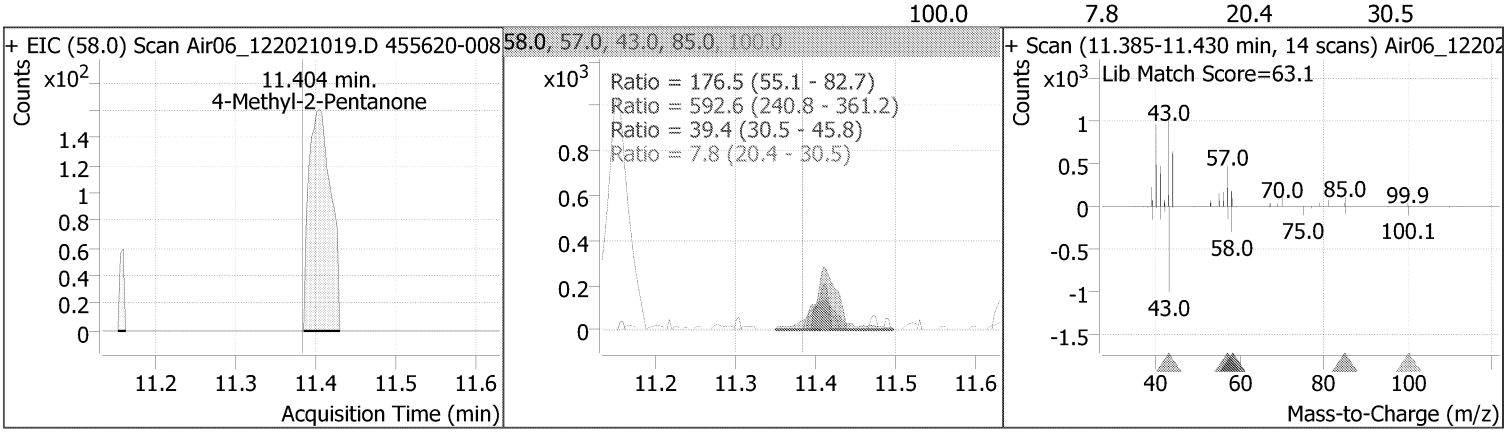


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
cis-1,3-Dichloropropene	N.D.	11.34	75.0	469.2	39.0	370.5	77.0	149.6

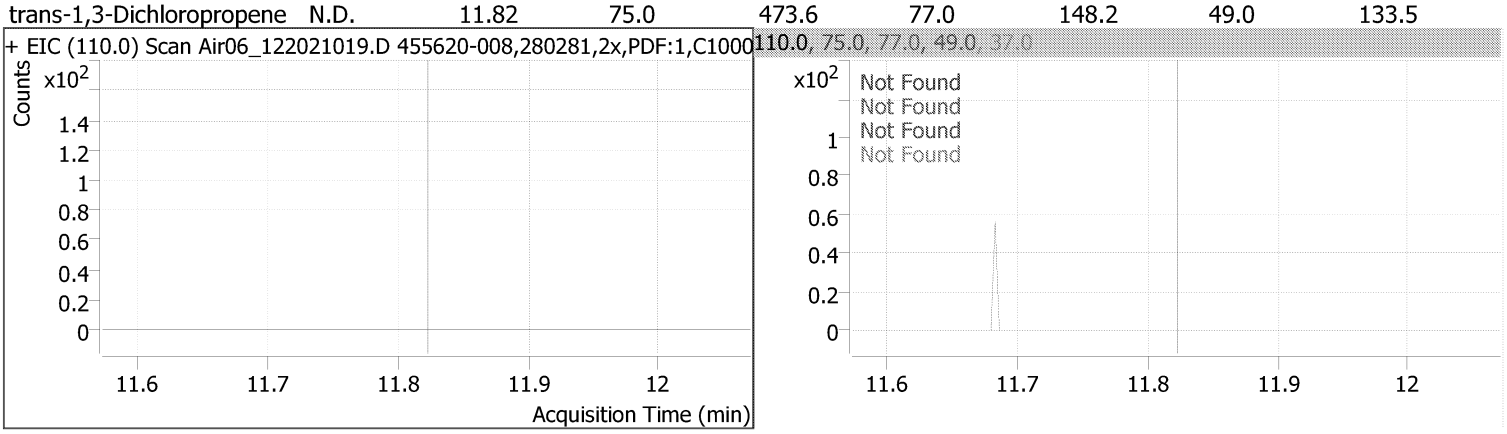




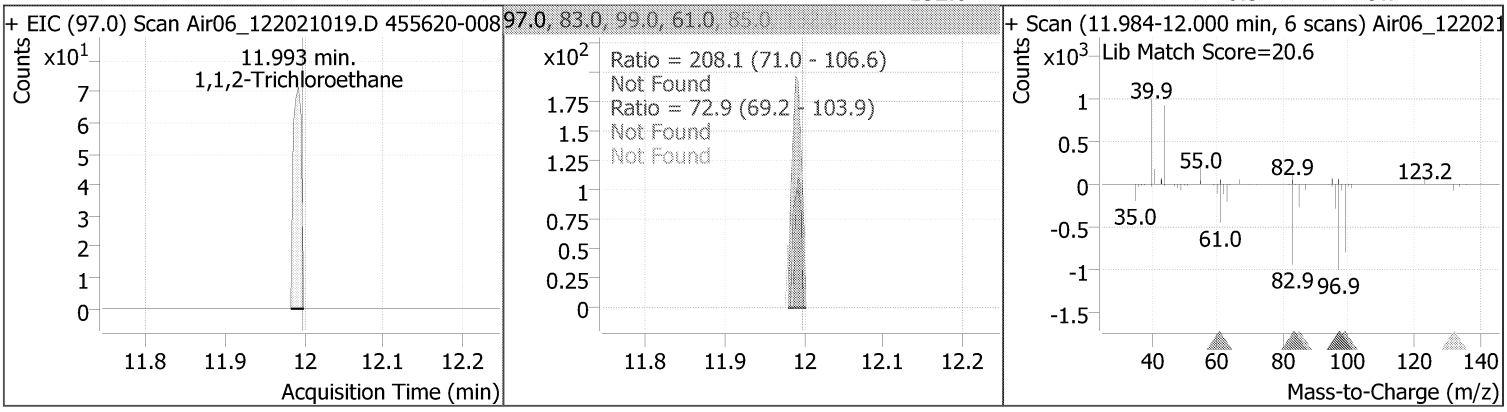
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.0066	11.40	0.02	308	43.0	592.6	240.8	361.2
					57.0	176.5	55.1	82.7
					85.0	39.4	30.5	45.8
					100.0	7.8	20.4	30.5



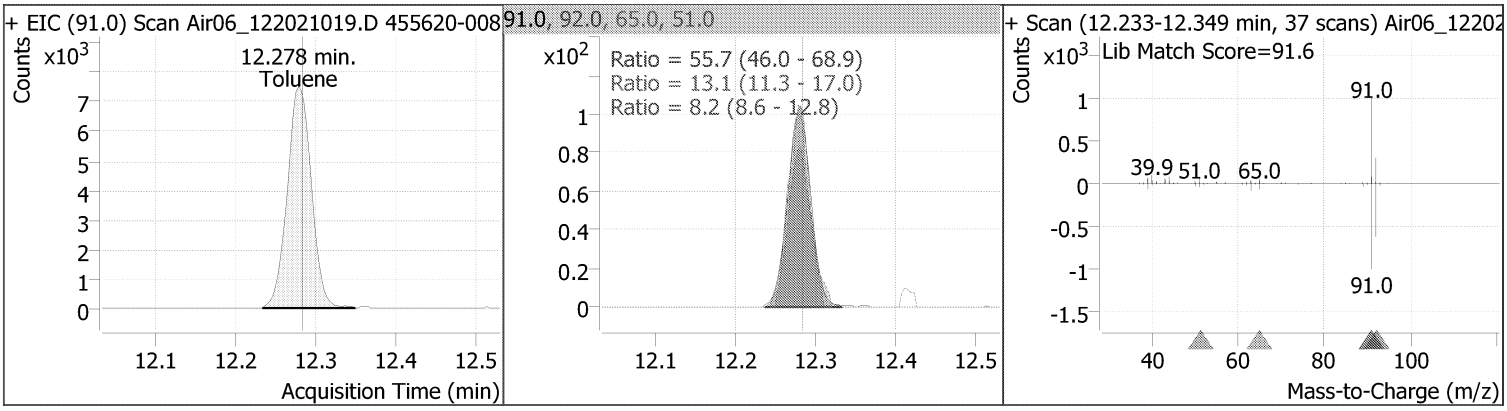
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
trans-1,3-Dichloropropene	N.D.	11.82	75.0	473.6	77.0	148.2	49.0	133.5



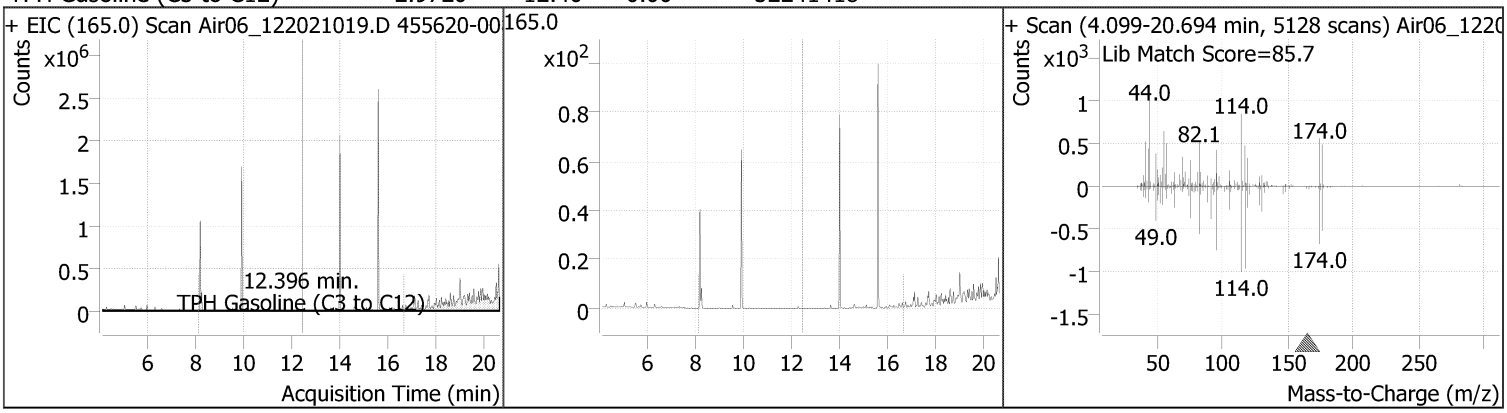
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	0.0010	11.99	0.00	51	83.0	208.1	71.0	106.6
					61.0	72.9	69.2	103.9
					99.0		49.9	74.9
					85.0		46.4	69.6
					132.0		6.5	9.7



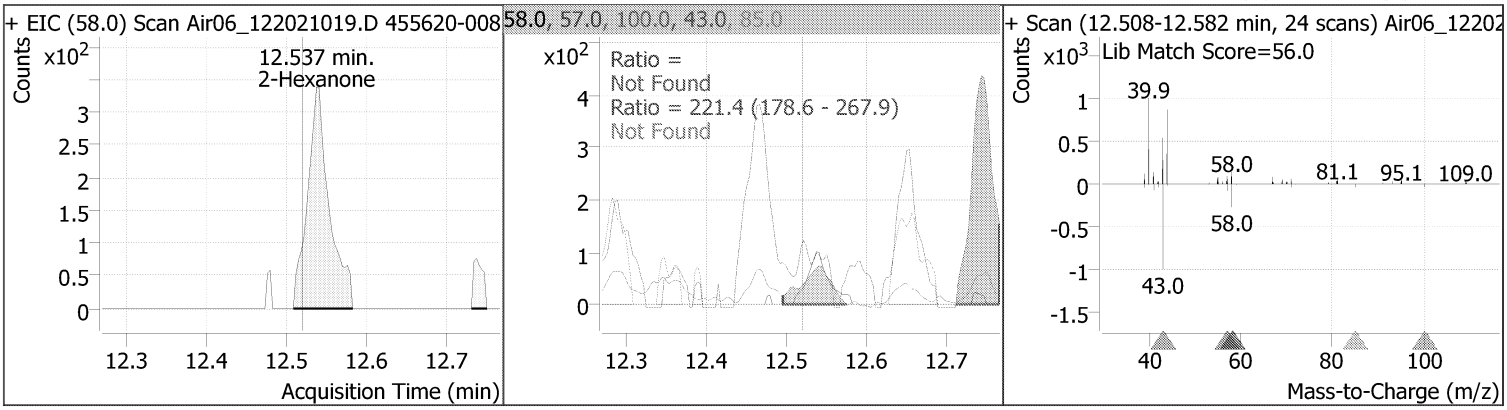
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.1059	12.28	0.00	15866	92.0	55.7	46.0	68.9
					65.0	13.1	11.3	17.0
					51.0	8.2	8.6	12.8



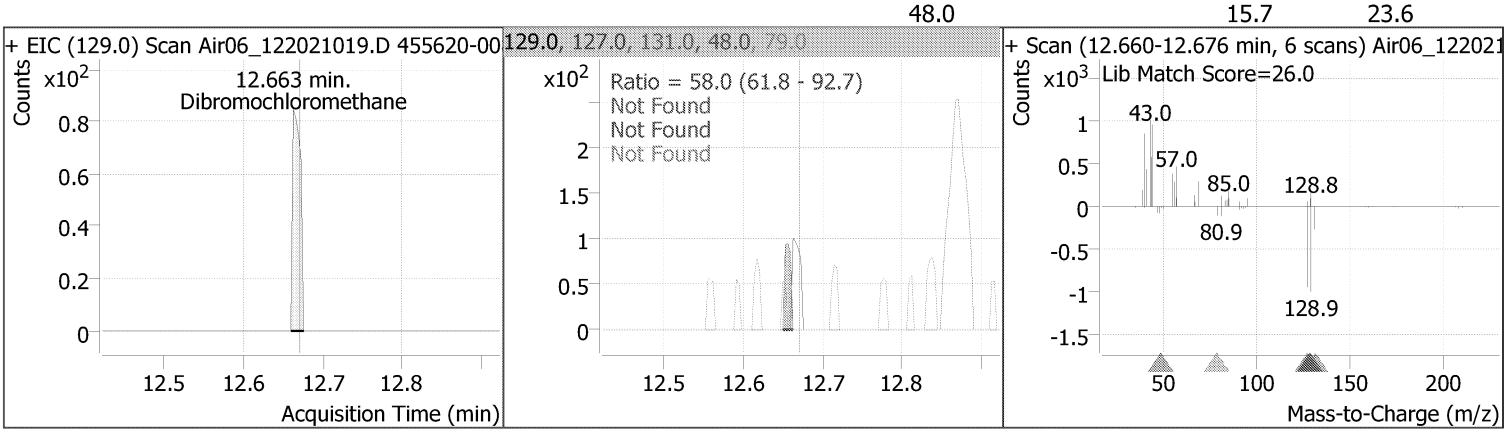
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	2.9720	12.40	0.00	32241418				



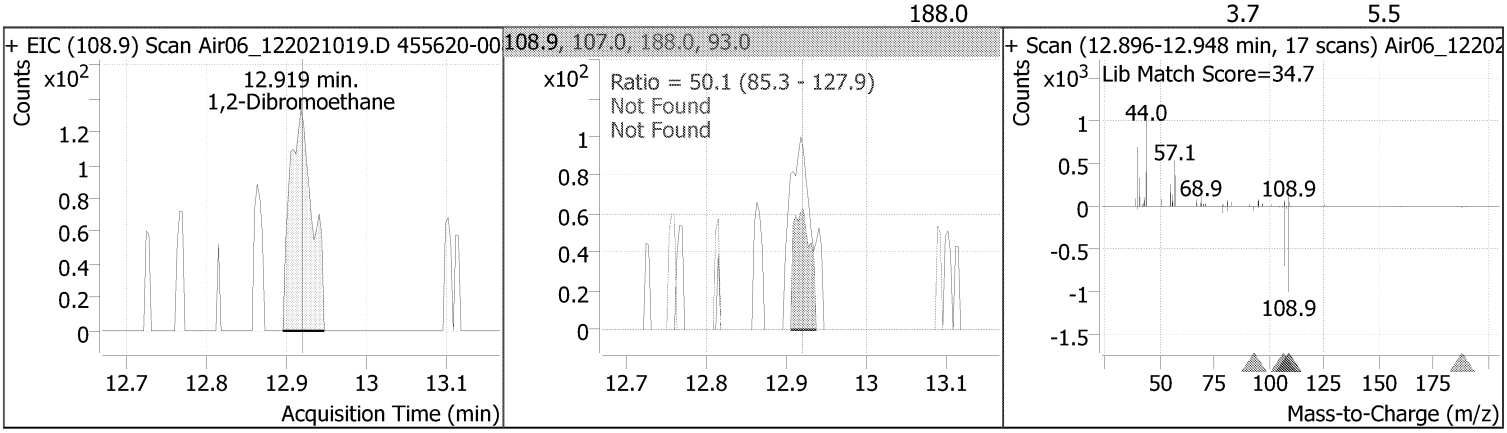
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.0111	12.54	0.02	643	43.0	221.4	178.6	267.9
					57.0		30.3	45.4
					100.0		11.5	17.3
					85.0		10.6	15.9



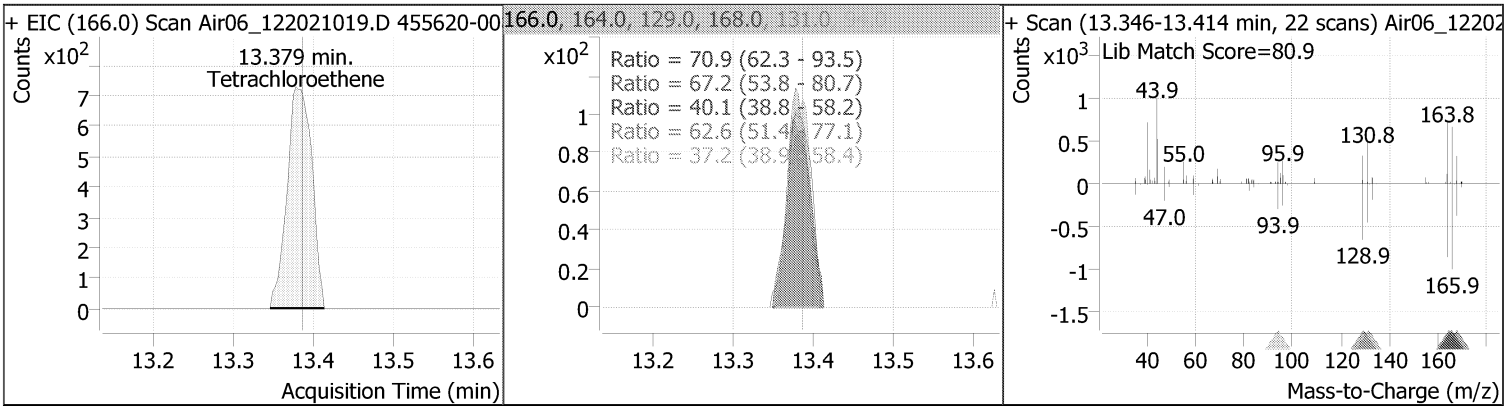
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.0006	12.66	-0.01	60	127.0	58.0	61.8	92.7
					131.0		19.2	28.8
					79.0		16.0	24.0
					48.0		15.7	23.6



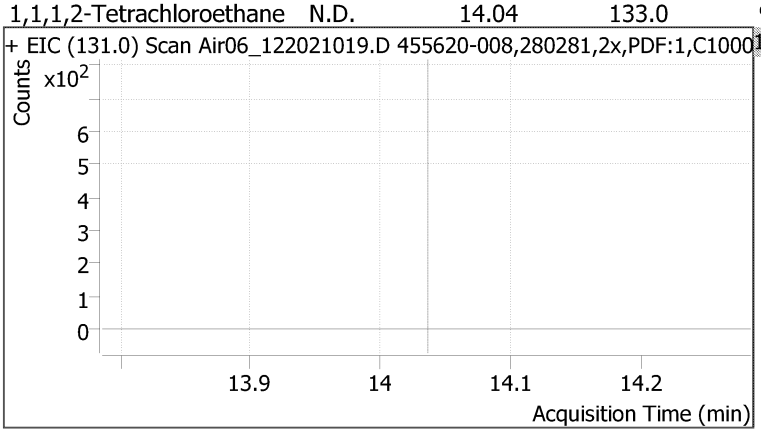
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.0033	12.92	0.00	261	107.0	50.1	85.3	127.9
					93.0		6.2	9.3
					188.0		3.7	5.5

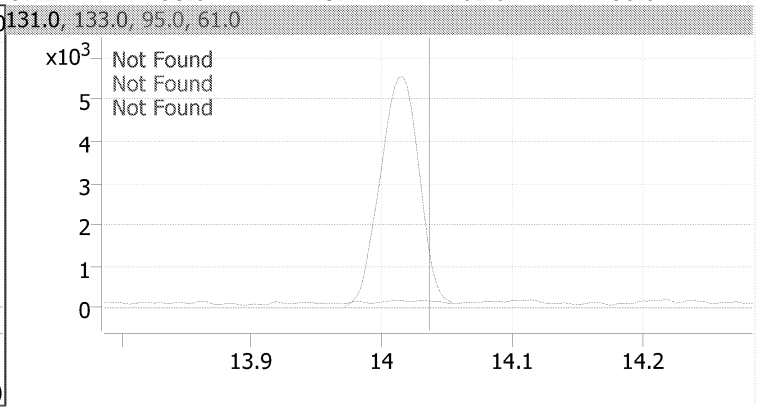


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.0180	13.38	-0.01	1579	164.0	70.9	62.3	93.5
					129.0	67.2	53.8	80.7
					131.0	62.6	51.4	77.1
					94.0	37.2	38.9	58.4
					168.0	40.1	38.8	58.2

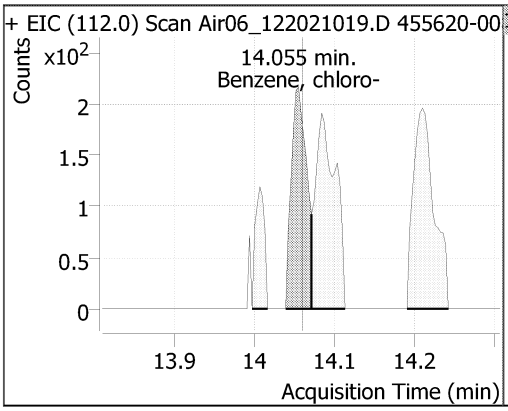


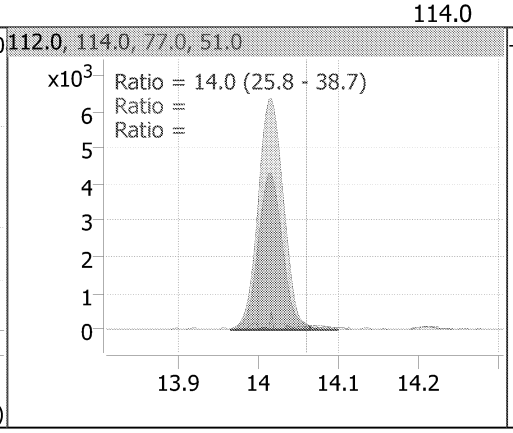
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1,2-Tetrachloroethane	N.D.	14.04	133.0	97.2	95.0	45.4	61.0	38.0

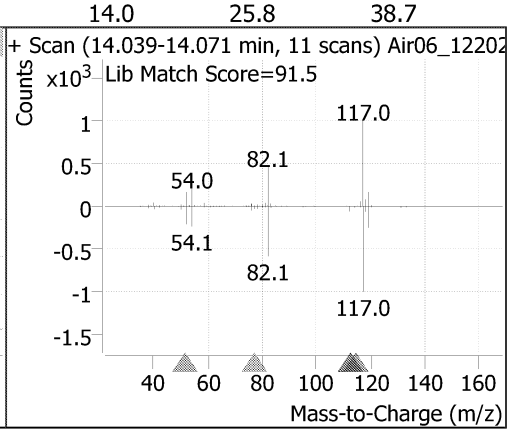




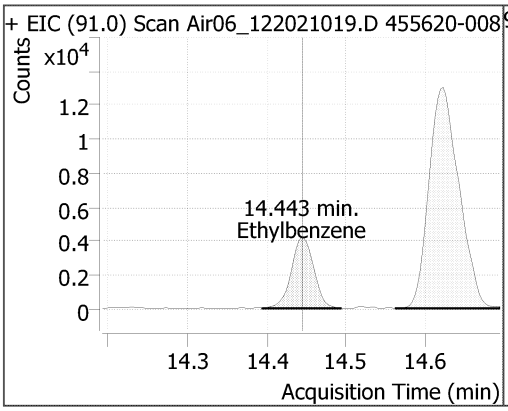
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0026	14.06	-0.01	287	77.0		53.0	79.5
					51.0		28.8	43.2
					114.0	14.0	25.8	38.7

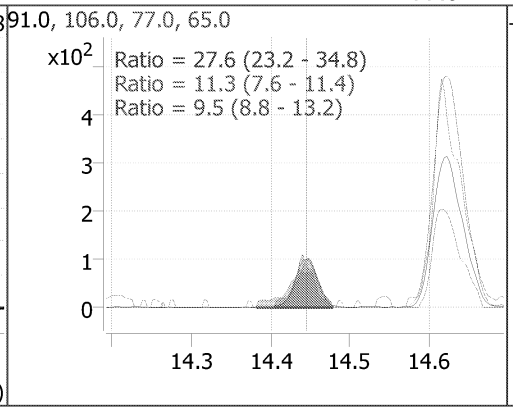


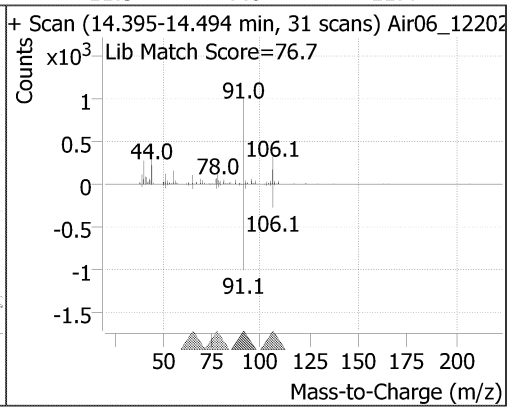




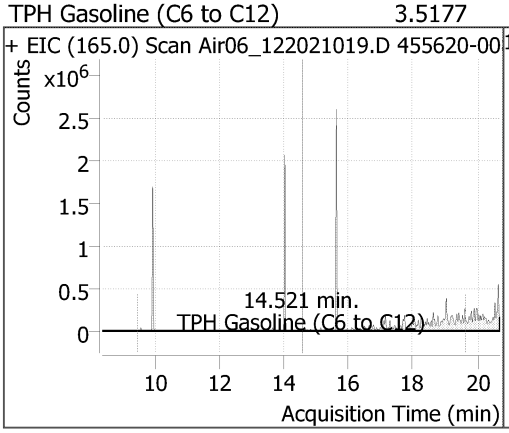
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.0471	14.44	0.00	8284	106.0	27.6	23.2	34.8
					65.0	9.5	8.8	13.2
					77.0	11.3	7.6	11.4

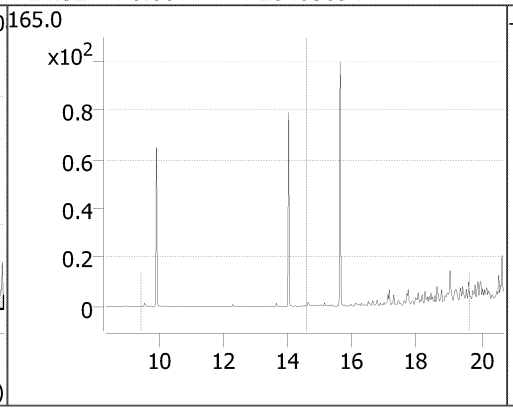


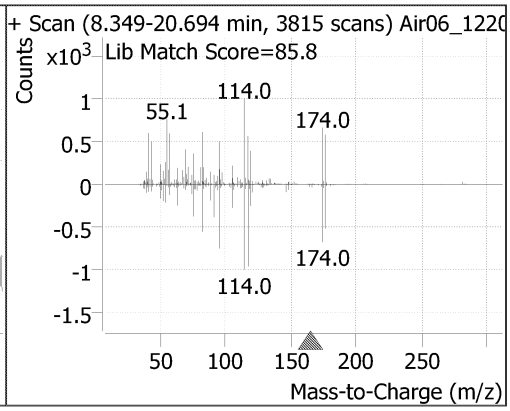




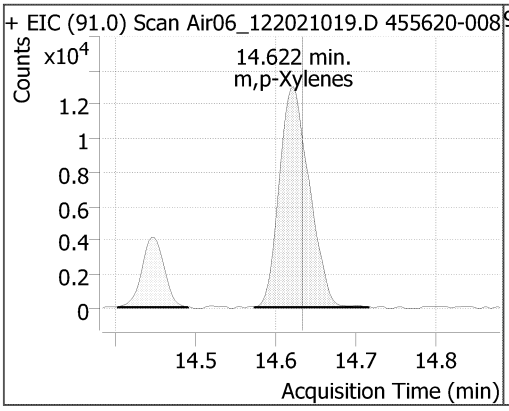
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	3.5177	14.52	0.00	28405094				

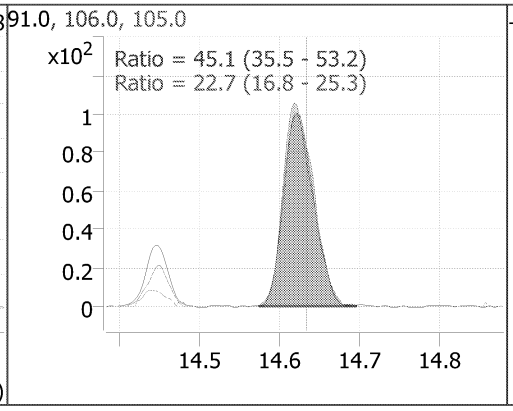


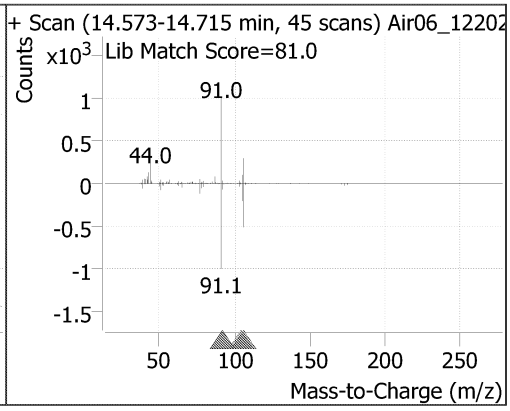




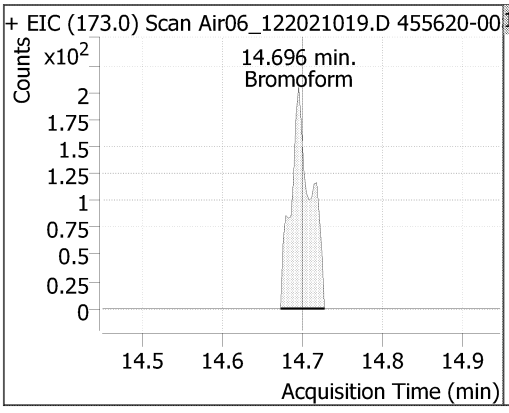
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	0.2306	14.62	-0.01	34192	106.0	45.1	35.5	53.2
					105.0	22.7	16.8	25.3

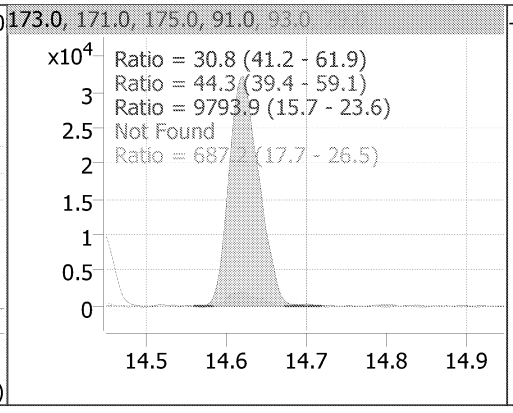


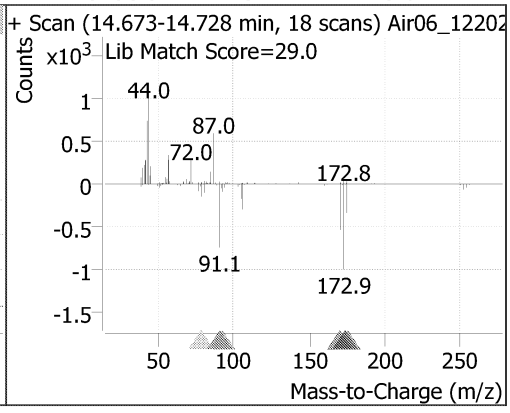




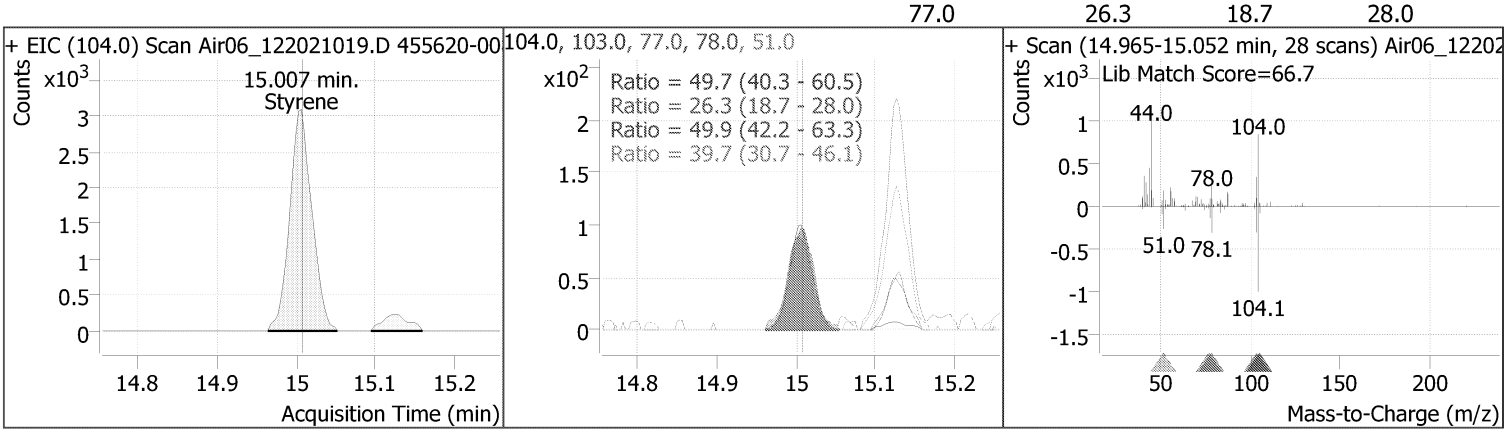
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.0030	14.70	-0.01	350	171.0	30.8	41.2	61.9
					175.0	44.3	39.4	59.1
					79.0	687.2	17.7	26.5
					93.0		16.1	24.1
					91.0	9793.9	15.7	23.6



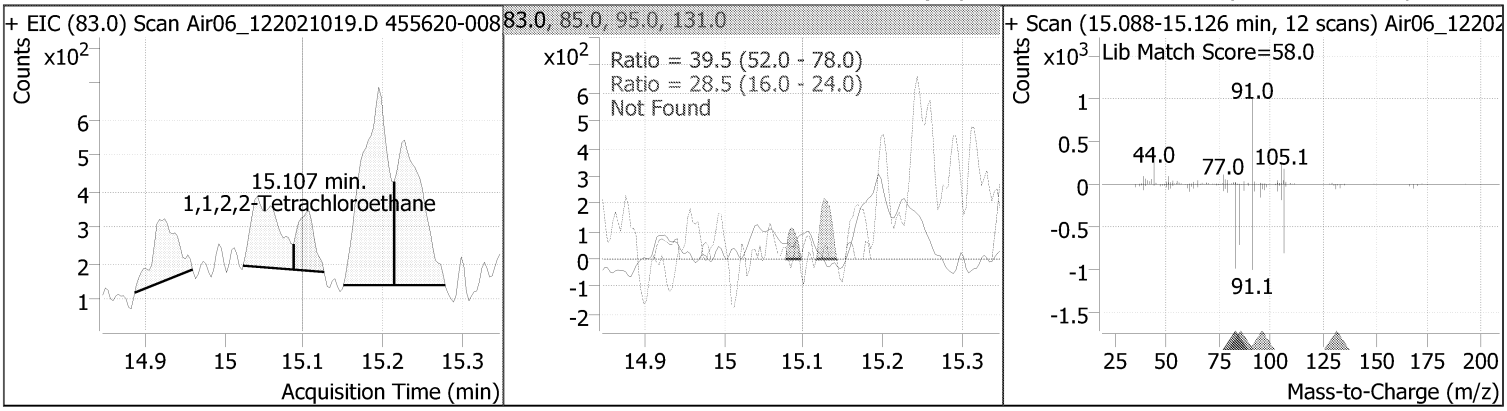




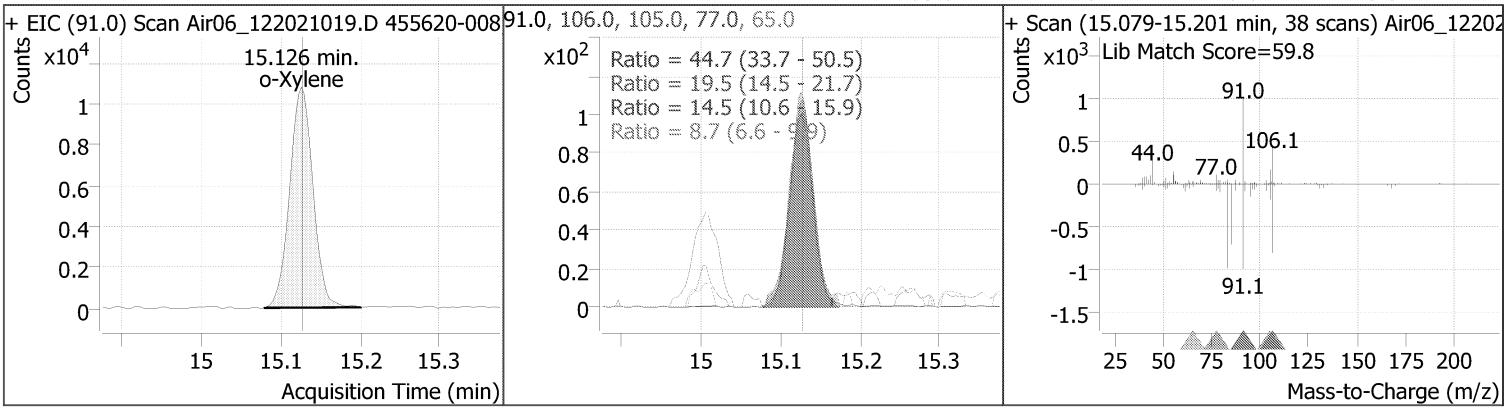
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	0.0603	15.01	0.00	5987	78.0	49.9	42.2	63.3
					103.0	49.7	40.3	60.5
					51.0	39.7	30.7	46.1
					77.0	26.3	18.7	28.0



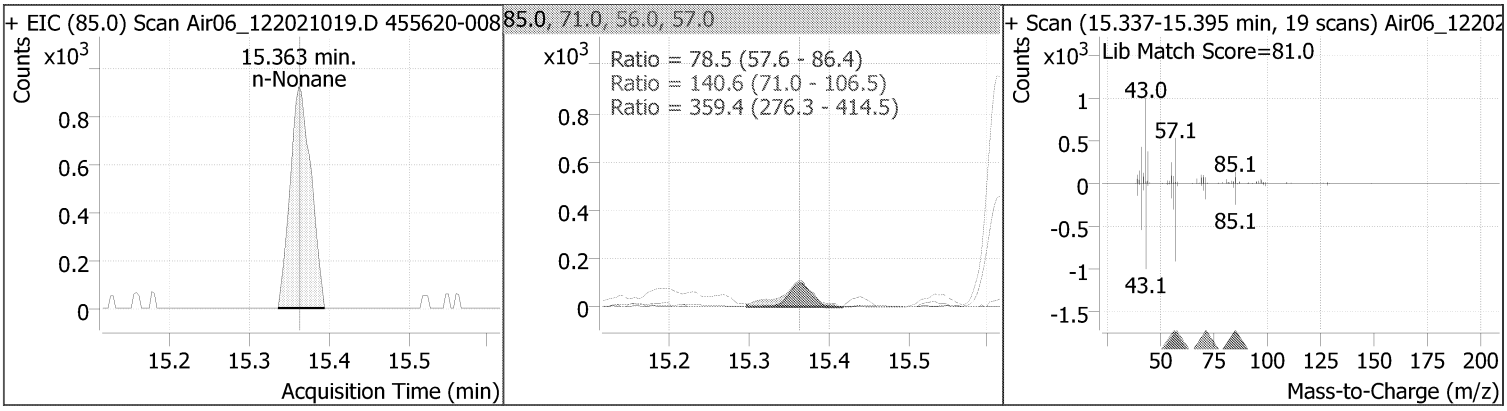
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.0023	15.11	0.01	239	85.0	39.5	52.0	78.0
					95.0	28.5	16.0	24.0
					131.0		8.4	12.6



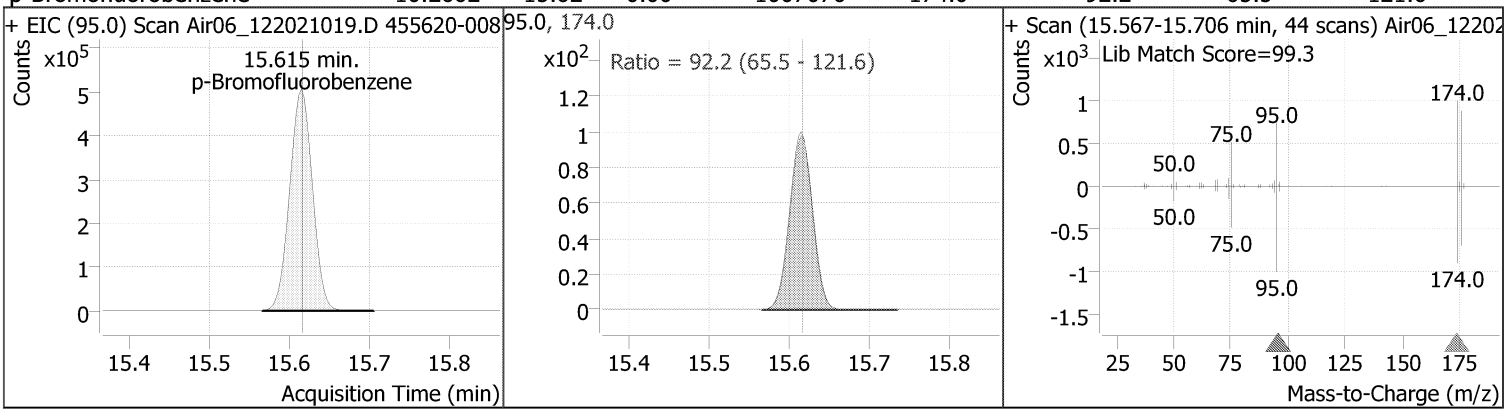
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.1427	15.13	0.00	21956	106.0	44.7	33.7	50.5
					105.0	19.5	14.5	21.7
					77.0	14.5	10.6	15.9
					65.0	8.7	6.6	9.9



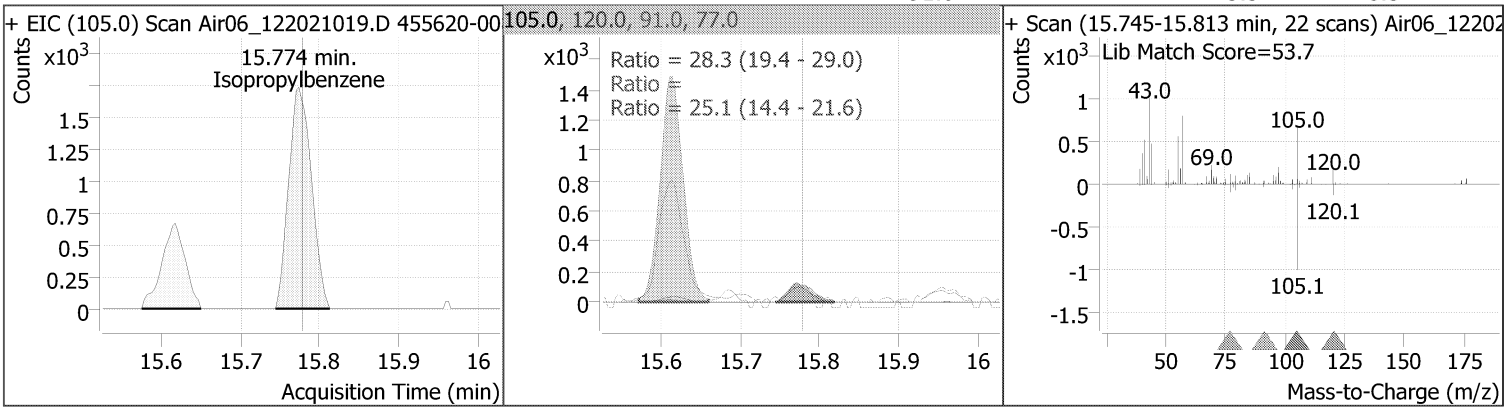
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	0.0537	15.36	-0.01	1687	57.0	359.4	276.3	414.5
					56.0	140.6	71.0	106.5
					71.0	78.5	57.6	86.4



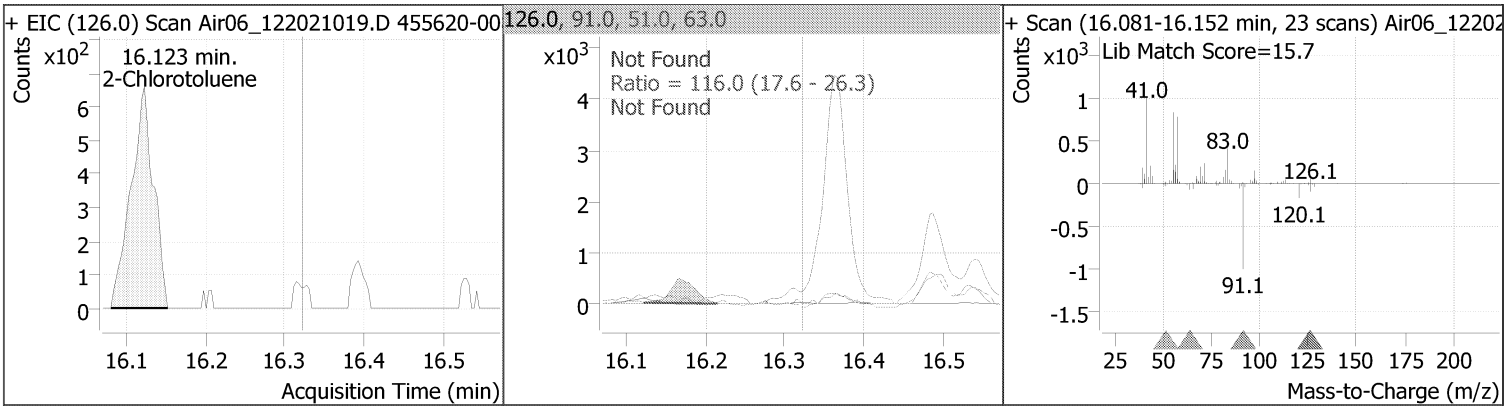
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.2662	15.62	0.00	1007076	174.0	92.2	65.5	121.6



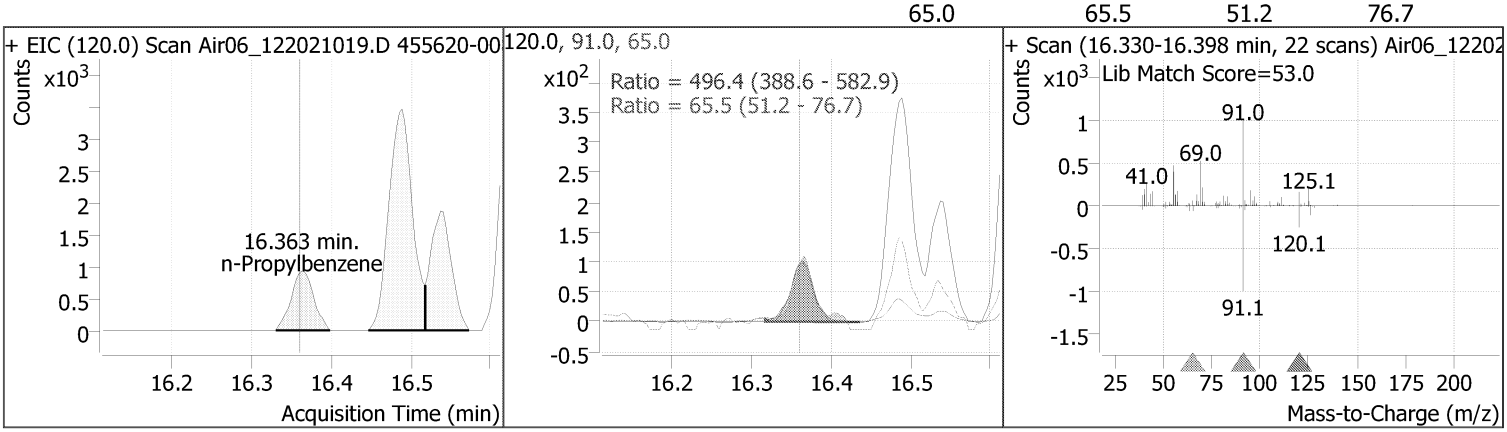
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.0165	15.77	-0.01	3437	120.0	28.3	19.4	29.0
					77.0	25.1	14.4	21.6
					91.0		5.5	8.3



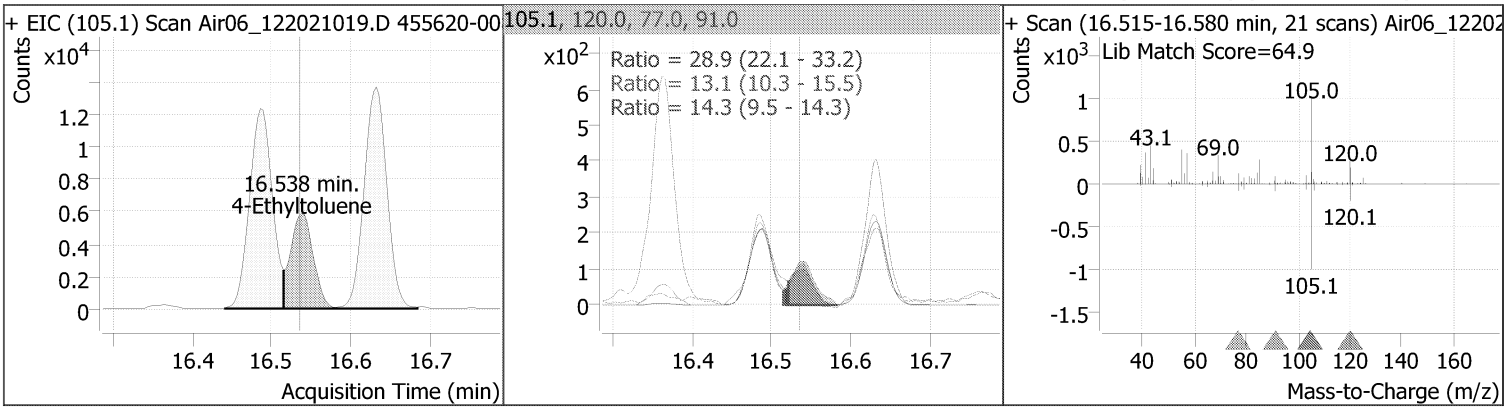
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	0.0279	16.12	-0.20	1303	91.0		244.6	366.9
					63.0		50.0	74.9
					51.0	116.0	17.6	26.3



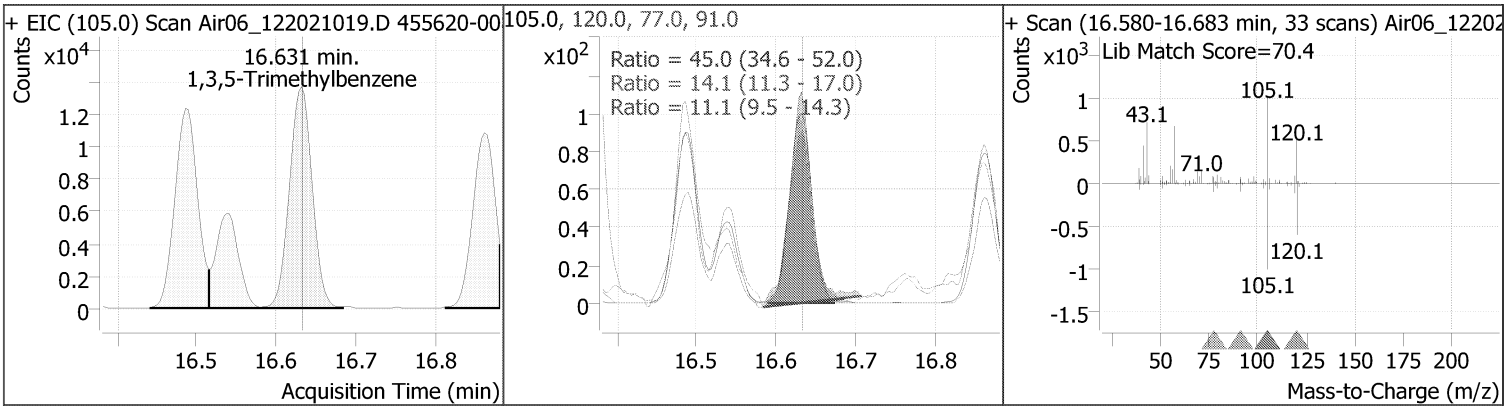
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.0351	16.36	0.00	1846	91.0	496.4	388.6	582.9
					65.0	65.5	51.2	76.7



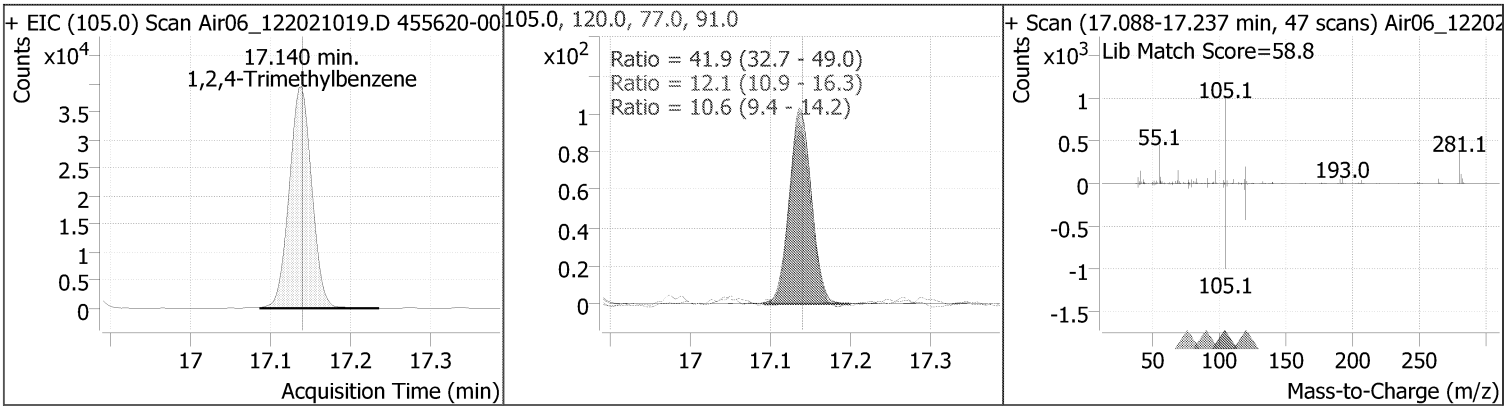
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.0591	16.54	0.00	11725	120.0	28.9	22.1	33.2
					77.0	13.1	10.3	15.5
					91.0	14.3	9.5	14.3



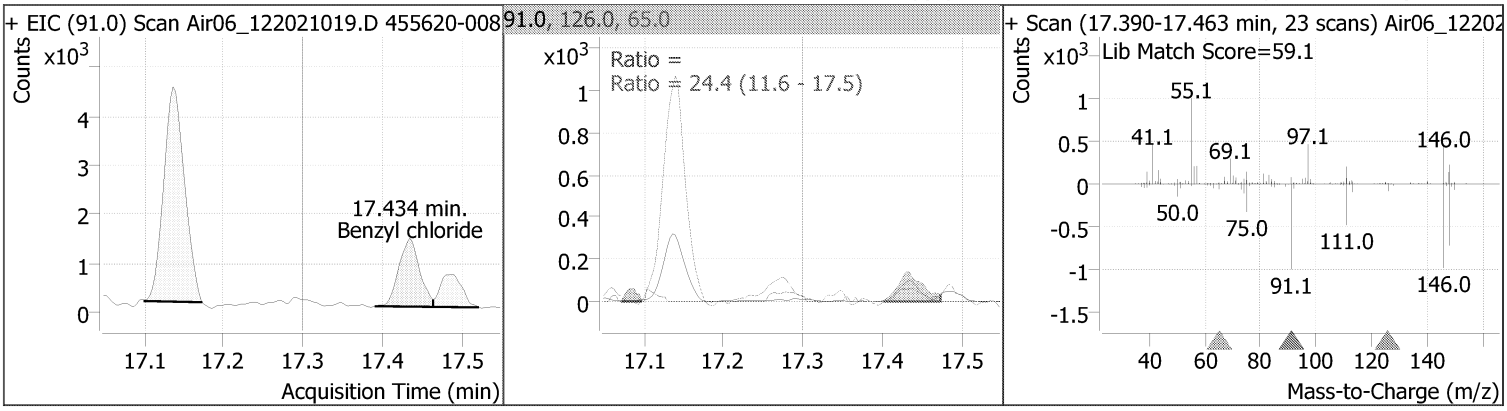
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.1514	16.63	0.00	27335	120.0	45.0	34.6	52.0
					77.0	14.1	11.3	17.0
					91.0	11.1	9.5	14.3



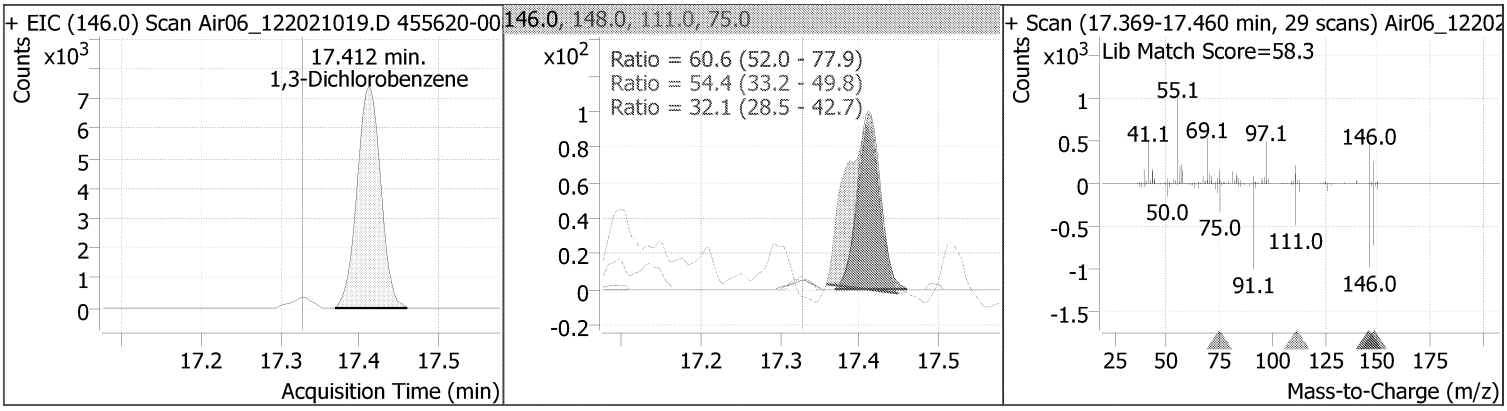
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	0.4607	17.14	0.00	77814	120.0	41.9	32.7	49.0
					77.0	12.1	10.9	16.3
					91.0	10.6	9.4	14.2



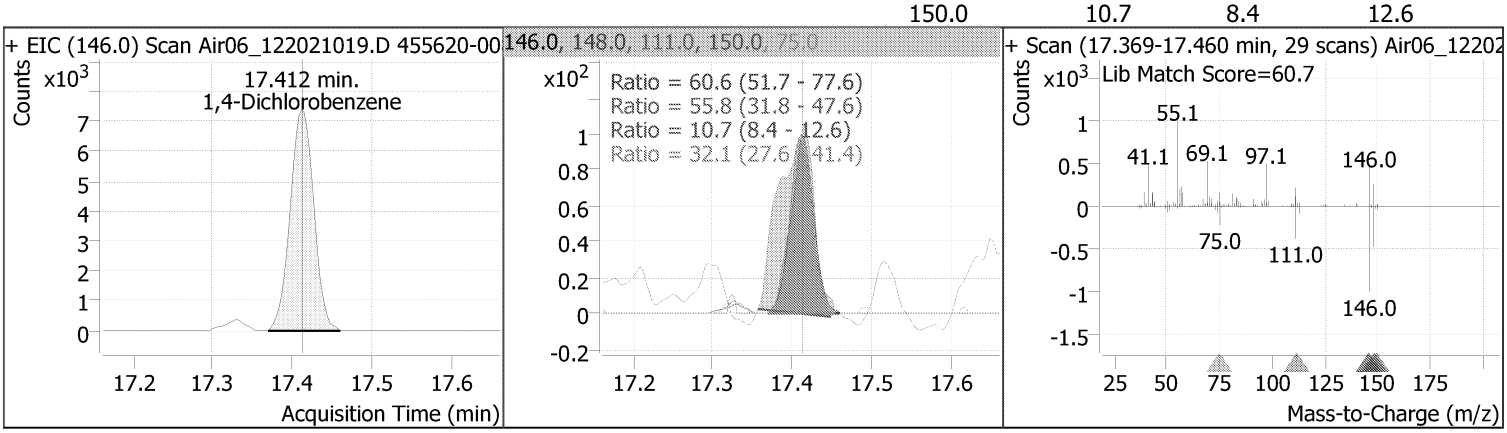
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.0174	17.43	0.13	2533	126.0		14.6	22.0
					65.0	24.4	11.6	17.5



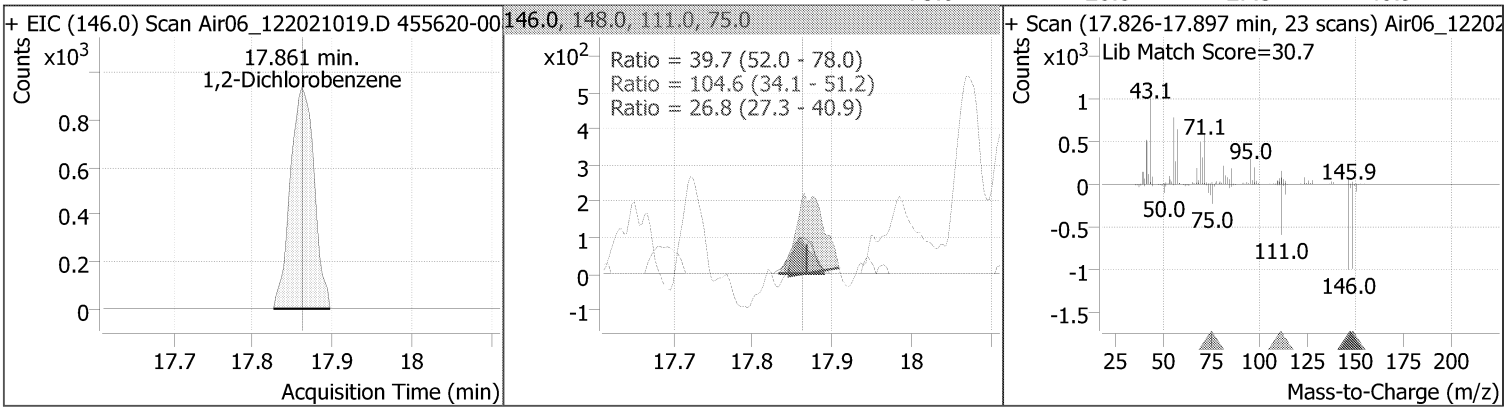
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.1307	17.41	0.08	15271	148.0	60.6	52.0	77.9
					111.0	54.4	33.2	49.8
					75.0	32.1	28.5	42.7



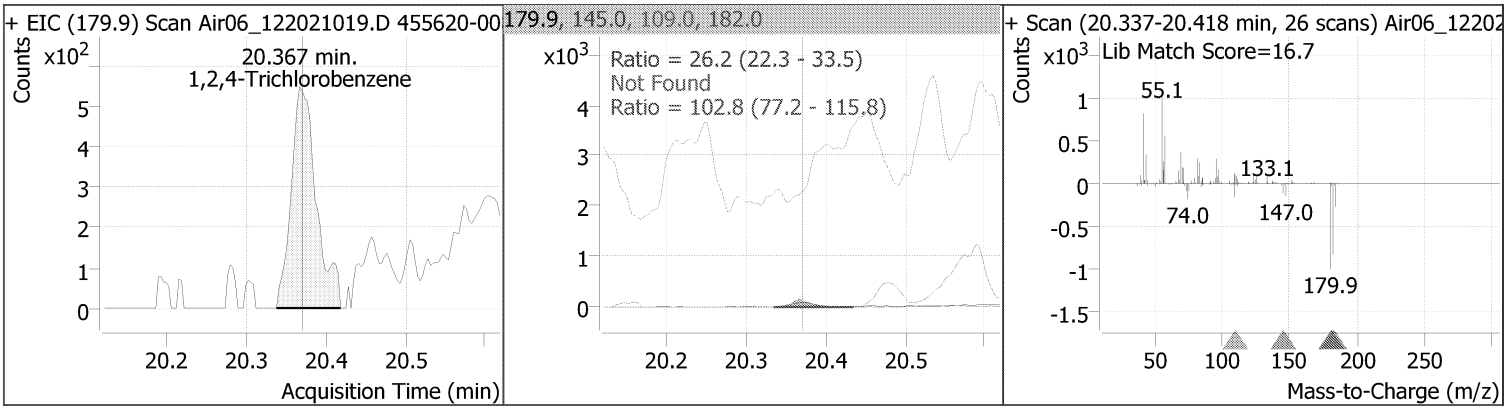
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.1324	17.41	0.00	15271	148.0	60.6	51.7	77.6
					111.0	55.8	31.8	47.6
					75.0	32.1	27.6	41.4
					150.0	10.7	8.4	12.6



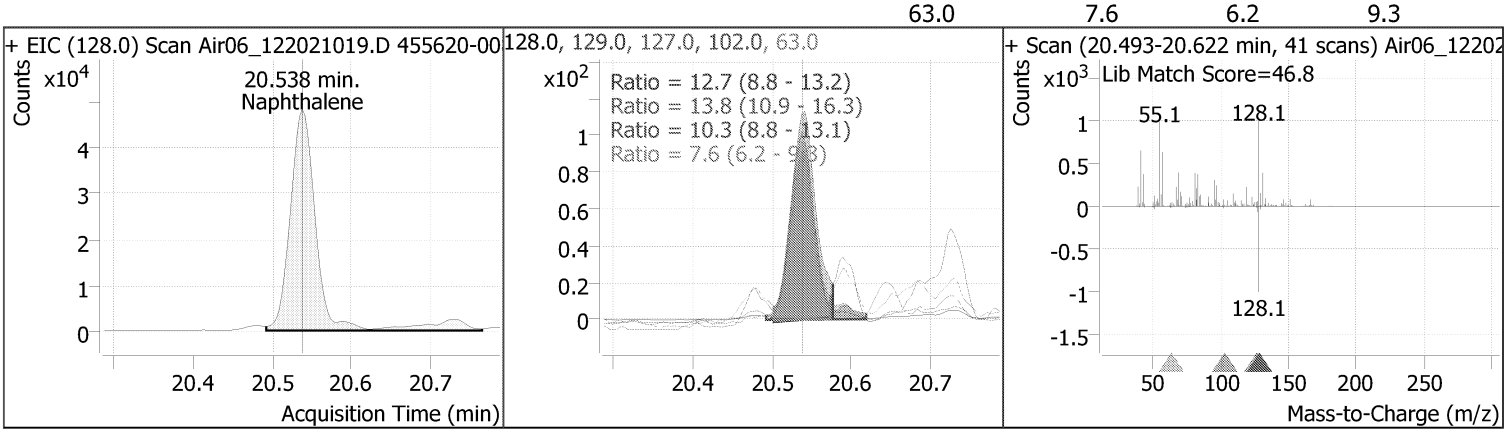
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.0174	17.86	0.00	1954	148.0	39.7	52.0	78.0
					111.0	104.6	34.1	51.2
					75.0	26.8	27.3	40.9



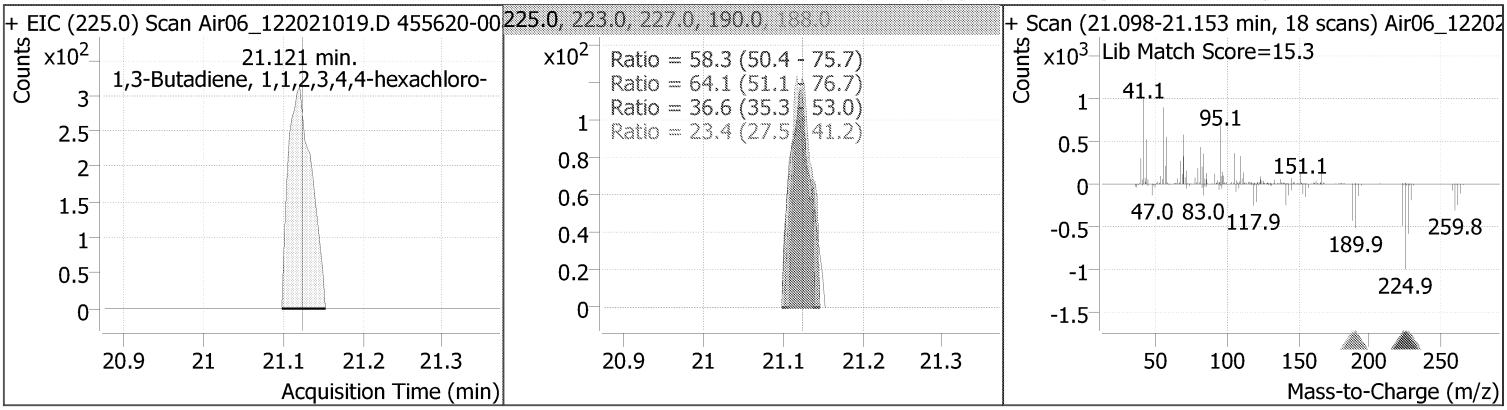
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.0150	20.37	-0.01	1204	182.0	102.8	77.2	115.8
					145.0	26.2	22.3	33.5
					109.0		18.8	28.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	0.8417	20.54	0.00	104689	127.0	13.8	10.9	16.3
					129.0	12.7	8.8	13.2
					102.0	10.3	8.8	13.1
					63.0	7.6	6.2	9.3



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.0048	21.12	-0.01	632	227.0	64.1	51.1	76.7
					223.0	58.3	50.4	75.7
					190.0	36.6	35.3	53.0
					188.0	23.4	27.5	41.2



Library Search Results - NonTarget Hits with Details

Agilent Technologies

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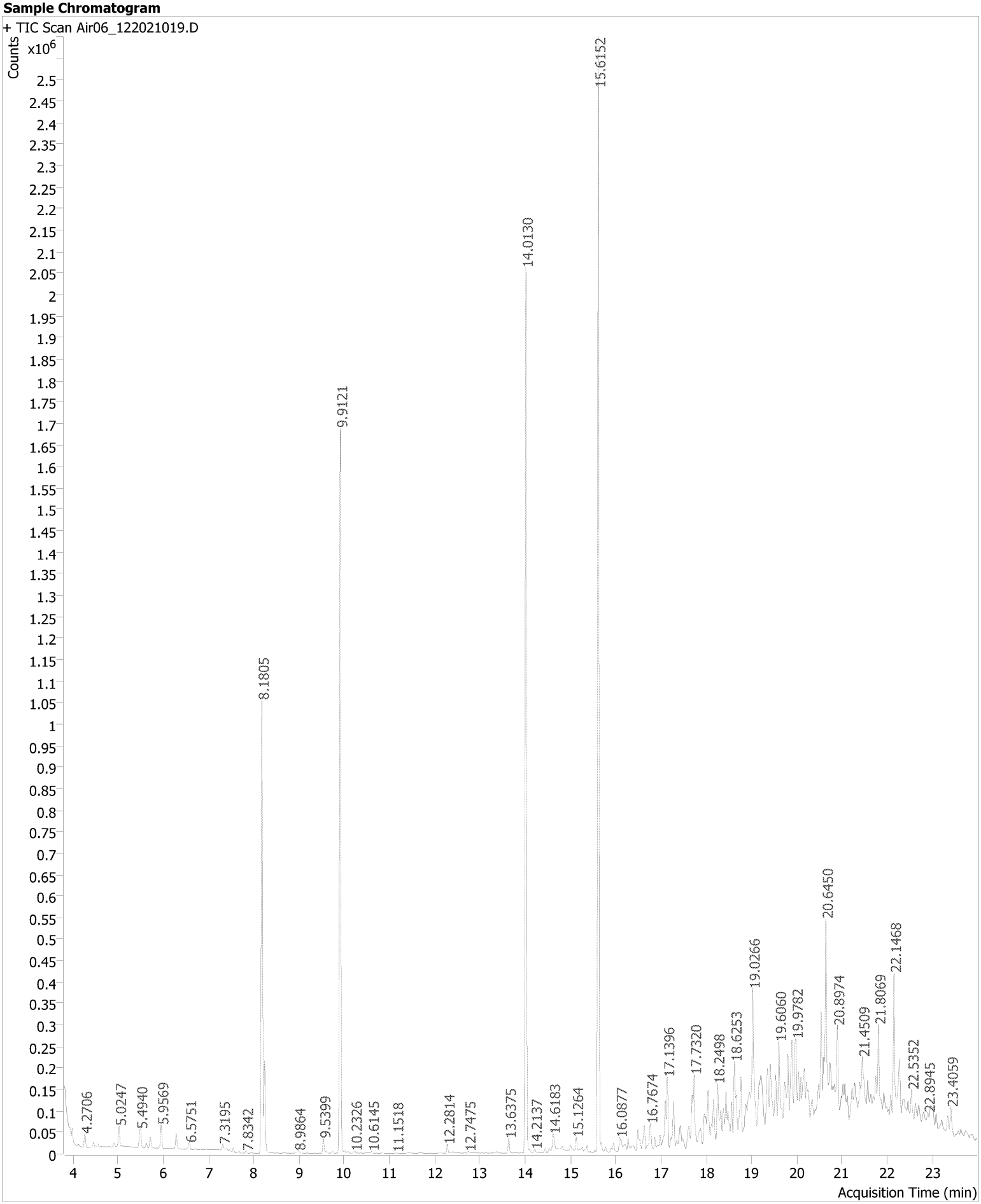
File Name	Air06_122021019.D	**Path Name**	D:\MassHunter\GCMS\1\data\2021\122021
Sample Name	455620-008,280281,2x,PDF:1,C10001	**Type**	Sample
Acq. Method File	TO15_Acq_013120_1	**Acq. Method Path**	D:\MassHunter\GCMS\1\methods\
Acq. Date-Time	12/21/2021 2:18:33 AM	**Acq. Operator**	ZNZ/DJL/LJB
Instrument Name	Air-MS-06	**Dil.**	1

Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
3.9372	Propane, 2-nitro-	79-46-9	C3H7NO2	94186.8	74.7	0.4129
3.9922	Dichlorodifluoromethane	75-71-8	CCl2F2	90283.7	97.8	0.3958
4.2706	Isobutane	75-28-5	C4H10	66751.0	85.7	0.2926
4.4615	2-Butene	107-01-7	C4H8	25034.1	98.2	0.1098
4.5554	Butane	106-97-8	C4H10	13709.1	92.6	0.0601
4.9179	Ethyl Chloride	75-00-3	C2H5Cl	15985.1	93.6	0.07008
5.0247	Dimethyl ether	115-10-6	C2H6O	106839.5	89.3	0.4684
5.4940	Butane	106-97-8	C4H10	128470.3	92.0	0.5632
5.6300	Trichloromonofluoromethane	75-69-4	CCl3F	20937.7	96.8	0.09179
5.7141	Isopropyl Alcohol	67-63-0	C3H8O	56952.1	96.6	0.2497
5.9569	Pentane	109-66-0	C5H12	116504.1	98.8	0.5108
6.2903	Methylene chloride	75-09-2	CH2Cl2	79509.1	91.0	0.3486
6.5751	Carbon disulfide	75-15-0	CS2	42045.6	93.1	0.1843
7.3195	Silanol, trimethyl-	1066-40-6	C3H10OSi	26049.3	94.9	0.1142
7.3972	2-Butanone, 3-methyl-	563-80-4	C5H10O	10491.9	72.6	0.046
7.4749	Pentane, 2-methyl-	107-83-5	C6H14	7127.2	93.0	0.03125
7.5493	Butanal	123-72-8	C4H8O	17907.9	95.9	0.07851
7.6723	2-Butanone	78-93-3	C4H8O	10601.2	90.2	0.04648
7.8342	Pentane, 3-methyl-	96-14-0	C6H14	13035.2	93.9	0.05715
8.1805	Methane, bromochloro-	74-97-5	CH2BrCl	2281005.3	99.0	10
8.2420	Ethyl Acetate	141-78-6	C4H8O2	462083.1	96.2	2.026
8.9864	Cyclopentane, methyl-	96-37-7	C6H12	20837.1	82.5	0.09135
9.0415	1H-Tetrazol-5-amine	4418-61-5	CH3N5	4592.4	81.0	0.02013
9.5399	1-Butanol	71-36-3	C4H10O	76892.4	95.3	0.2232
9.6111	Benzene	71-43-2	C6H6	11022.4	93.5	0.032
9.7503	Carbon Tetrachloride	56-23-5	CCl4	9701.1	93.5	0.02816
9.9121	Benzene, 1,4-difluoro-	540-36-3	C6H4F2	3444608.2	99.5	10
10.0060	Ethanone, 1-(3-ethyloxiranyl)-	17257-81-7	C6H10O2	14530.3	81.5	0.04218
10.0772	Pentane, 3-ethyl-2,2-dimethyl-	16747-32-3	C9H20	11467.8	84.4	0.03329
10.2326	Hydroxylamine, O-(2-methylpropyl)-	5618-62-2	C4H11NO	14304.1	87.1	0.04153
10.6145	Butane, 1-chloro-2-methyl-, (S)-	40560-29-0	C5H11Cl	12399.6	85.2	0.036
10.8346	Butane, 2,2-dimethyl-	75-83-2	C6H14	5617.6	82.7	0.01631
11.1518	1-Pentene, 2,4,4-trimethyl-	107-39-1	C8H16	5138.0	90.0	0.01492
11.4139	Pentane, 2,4-dimethyl-	108-08-7	C7H16	4447.3	83.2	0.01291
11.4657	Cyclohexane, methyl-	108-87-2	C7H14	5923.3	82.2	0.0172
12.1098	1-Pentanol	71-41-0	C5H12O	12084.7	91.0	0.02851
12.2814	Toluene	108-88-3	C7H8	41137.2	94.6	0.09706
12.4044	Cyclopentanone	120-92-3	C5H8O	9280.4	88.5	0.0219
12.7475	Hexanal	66-25-1	C6H12O	9950.7	93.2	0.02348
13.2362	Heptane, 2,4-dimethyl-	2213-23-2	C9H20	5063.8	81.8	0.01195
13.3786	Tetrachloroethylene	127-18-4	C2Cl4	8276.3	91.1	0.01953
13.6375	Cyclotrisiloxane, hexamethyl-	541-05-9	C6H18O3Si3	70775.4	97.9	0.167
14.0130	Chlorobenzene-d5	3114-55-4	C6D5Cl	4238253.7	96.0	10
14.2137	Cyclohexane, 1,1,3-trimethyl-	3073-66-3	C9H18	17026.2	92.6	0.04017
14.4435	o-Xylene	95-47-6	C8H10	22881.7	89.8	0.05399
14.5373	Cyclohexane, 1,2,4-trimethyl-, (1.alpha.,2.beta.,4.beta.)-	7667-60-9	C9H18	12158.8	83.3	0.02869
14.6183	p-Xylene	106-42-3	C8H10	107432.6	96.9	0.2535
14.7121	3-Heptanone	106-35-4	C7H14O	6140.9	70.3	0.01449
14.8157	Heptane, 4-(1-methylethyl)-	52896-87-4	C10H22	26405.3	87.7	0.0623
15.0067	1,3,5,7-Cyclooctatetraene	629-20-9	C8H8	26467.3	87.8	0.06245
15.1264	o-Xylene	95-47-6	C8H10	61836.7	94.2	0.1459
15.1912	Cyclooctane, methyl-	1502-38-1	C9H18	9212.3	78.9	0.02174
15.2591	Cyclohexane, 1-bromo-4-methyl-	6294-40-2	C7H13Br	23688.8	77.8	0.05589
15.3271	Cyclohexane, 1-ethyl-4-methyl-, cis-	4926-78-7	C9H18	5731.6	76.9	0.01352
15.3659	Nonane	111-84-2	C9H20	23915.9	87.8	0.05643
15.6152	Benzene, 1-bromo-3-fluoro-	1073-06-9	C6H4BrF	5171893.3	98.7	12.2
15.6831	Cyclooctane, 1-methyl-3-propyl-	255885-37-1	C12H24	45209.1	76.1	0.1067
15.7738	Hydratropic acid, isohexyl ester	1000415-06-2	C15H22O2	29963.0	70.9	0.0707
15.9065	1-Hexene, 3,5,5-trimethyl-	4316-65-8	C9H18	20315.4	86.9	0.04793

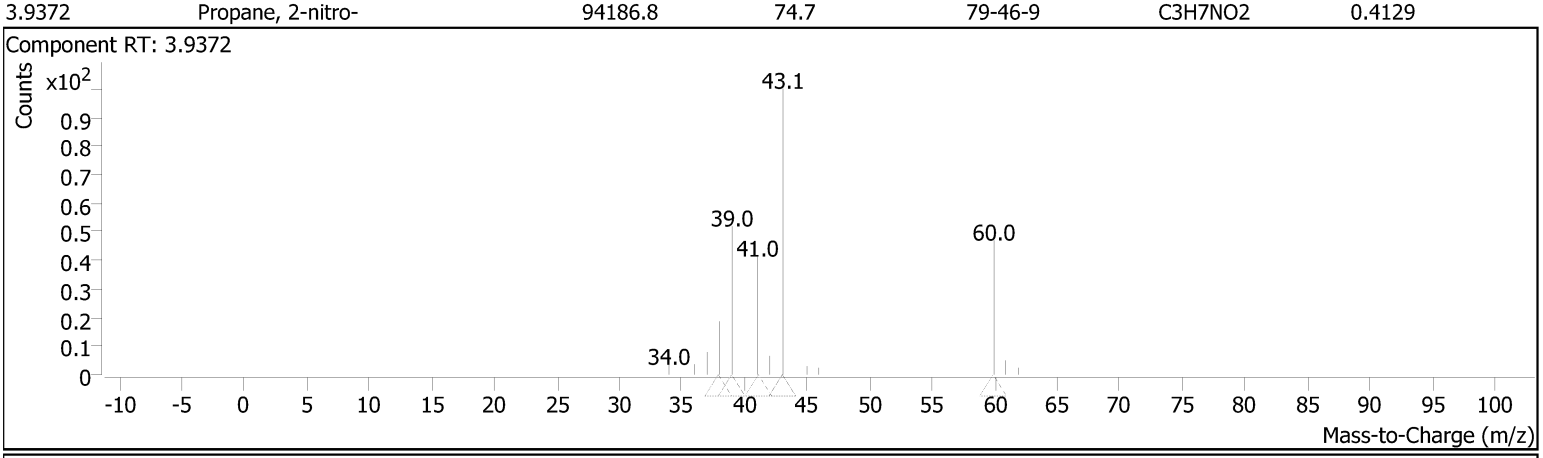
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
15.9518	Cyclohexanepropanol-	1124-63-6	C9H18O	55226.4	87.8	0.1303
16.0877	Nonane, 3-methyl-	5911-04-6	C10H22	44627.3	90.7	0.1053
16.1201	Cyclohexane, propyl-	1678-92-8	C9H18	17820.6	73.7	0.04205
16.2010	1-Hexanol, 2-ethyl-	104-76-7	C8H18O	10085.0	83.9	0.0238
16.2755	Heptane, 3-ethyl-2-methyl-	14676-29-0	C10H22	29109.6	90.7	0.06868
16.3628	Benzene, propyl-	103-65-1	C9H12	3064.8	73.3	0.007231
16.3952	Bicyclo[3.1.1]heptan-3-one, 6,6-dimethyl-2-(2-methylpropyl)-	1000163-97-9	C13H22O	2368.1	74.4	0.005587
16.4923	Benzene, 1-ethyl-2-methyl-	611-14-3	C9H12	82141.1	80.1	0.1938
16.5311	Benzene, 1-ethyl-3-methyl-	620-14-4	C9H12	32861.0	81.8	0.07753
16.6315	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	116830.5	92.3	0.2757
16.6930	Heptane, 2,2,4,6,6-pentamethyl-	13475-82-6	C12H26	8556.7	75.4	0.02019
16.7674	Cyclohexane, 1,1,2,3-tetramethyl-	6783-92-2	C10H20	153830.3	93.1	0.363
16.8613	Benzene, 1-ethyl-2-methyl-	611-14-3	C9H12	39852.9	93.5	0.09403
16.9810	Cycloheptanemethanol	4448-75-3	C8H16O	43964.8	84.9	0.1037
17.0943	Cyclotetrasiloxane, octamethyl-	556-67-2	C8H24O4Si4	136598.6	95.7	0.3223
17.1396	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	248920.7	86.0	0.5873
17.2206	Cyclopentane, 1-methyl-3-(2-methylpropyl)-	29053-04-1	C10H20	17078.3	89.7	0.0403
17.2788	Decane	124-18-5	C10H22	232392.3	92.8	0.5483
17.3436	1-Pentadecyne	765-13-9	C15H28	14723.7	87.6	0.03474
17.4860	Benzene, (1-methylpropyl)-	135-98-8	C10H14	10545.6	76.3	0.02488
17.6154	6-Octen-1-yn-3-ol, 3,7-dimethyl-	29171-20-8	C10H16O	97950.9	75.7	0.2311
17.6899	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	184180.9	89.2	0.4346
17.7320	Decane, 4-methyl-	2847-72-5	C11H24	291339.9	95.8	0.6874
17.8679	trans-2-Dodecen-1-ol, trifluoroacetate	1000352-26-2	C14H23F3O2	91520.8	75.9	0.2159
17.9553	Isobutyl nonyl carbonate	959311-27-4	C14H28O3	87768.3	75.9	0.2071
18.0394	Oxalic acid, cyclohexyl nonyl ester	1000309-31-1	C17H30O4	245156.1	80.0	0.5784
18.1107	trans-p-mentha-1(7),8-dien-2-ol	21391-84-4	C10H16O	42608.2	76.6	0.1005
18.1624	Benzene, 1-methyl-2-propyl-	1074-17-5	C10H14	168953.4	80.1	0.3986
18.2498	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	280434.5	88.9	0.6617
18.3210	Decane, 5-methyl-	13151-35-4	C11H24	132934.3	79.9	0.3137
18.3793	Decane, 4-methyl-	2847-72-5	C11H24	132595.8	86.4	0.3129
18.4376	1-Octanol, 2-butyl-	3913-02-8	C12H26O	207288.8	86.1	0.4891
18.4796	Benzene, 1-methyl-4-propyl-	1074-55-1	C10H14	130854.1	93.6	0.3087
18.5606	Decane, 3-methyl-	13151-34-3	C11H24	132187.2	91.3	0.3119
18.6253	Cyclohexane, 1-methyl-3-(1-methylethenyl)-, cis-	24399-15-3	C10H18	375155.9	78.9	0.8852
18.6609	Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	C10H14	168147.4	88.5	0.3967
18.7677	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	368095.1	86.1	0.8685
18.9490	Sulfurous acid, cyclohexylmethyl undecyl ester	1000309-21-9	C18H36O3S	361785.5	85.9	0.8536
19.0266	Undecane	1120-21-4	C11H24	1161869.2	94.9	2.741
19.1658	(S,E)-2,5-Dimethyl-4-vinylhexa-2,5-dien-1-yl acetate	20384-05-8	C12H18O2	275085.5	79.2	0.6491
19.3535	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	488101.3	81.4	1.152
19.4183	Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	C10H14	576831.5	85.3	1.361
19.5348	Decane, 3,7-dimethyl-	17312-54-8	C12H26	397719.6	88.0	0.9384
19.6060	Naphthalene, decahydro-2-methyl-	2958-76-1	C11H20	609546.5	92.7	1.438
19.6643	Benzene, 1,3-diethyl-5-methyl-	2050-24-0	C11H16	124424.6	79.1	0.2936
19.7355	Benzene, 1,3-diethyl-5-methyl-	2050-24-0	C11H16	408578.5	83.4	0.964
19.8067	Cyclohexane, pentyl-	4292-92-6	C11H22	485613.7	76.0	1.146
19.8941	Naphthalene, decahydro-2-methyl-	2958-76-1	C11H20	761376.6	93.2	1.796
19.9782	Benzene, 4-ethyl-1,2-dimethyl-	934-80-5	C10H14	814602.8	86.5	1.922
20.0365	Benzene, 1-methyl-4-(1-methylpropyl)-	1595-16-0	C11H16	382562.2	74.1	0.9026
20.0915	Undecane, 2-methyl-	7045-71-8	C12H26	282109.6	90.1	0.6656
20.1659	Benzene, (1,2-dimethylpropyl)-	4481-30-5	C11H16	560448.0	82.1	1.322
20.2113	Undecane, 3-methyl-	1002-43-3	C12H26	326240.8	85.7	0.7698
20.2598	Benzene, 1-methyl-4-(1-methylpropyl)-	1595-16-0	C11H16	236693.4	87.8	0.5585
20.3407	Cyclododecanemethanol	1892-12-2	C13H26O	295206.8	82.2	0.6965
20.4799	Anisole, o-(1-ethylvinyl)-	18272-74-7	C11H14O	406301.3	76.9	0.9587
20.5382	Azulene	275-51-4	C10H8	735677.1	70.1	1.736
20.6450	Dodecane	112-40-3	C12H26	1386807.8	87.8	3.272
20.8974	Undecane, 2,6-dimethyl-	17301-23-4	C13H28	788926.8	86.1	1.861
21.2211	cis,cis-7,10,-Hexadecadienal	56829-23-3	C16H28O	392712.4	75.5	0.9266
21.3927	Cyclohexane, 2-butyl-1,1,3-trimethyl-	54676-39-0	C13H26	383886.0	86.9	0.9058
21.4509	Hexanol-1, 6-cyclohexyl-	4354-58-9	C12H24O	856742.5	77.3	2.021
21.6937	Benzene, 1,4-dimethyl-2-(2-methylpropyl)-	55669-88-0	C12H18	200664.2	73.2	0.4735
21.7455	Tetradecane, 6,9-dimethyl-	55045-13-1	C16H34	380527.1	70.3	0.8978
21.8069	Tridecane, 7-methyl-	26730-14-3	C14H30	870343.2	73.8	2.054
22.0788	2-Benzofuranmethanol, 2,4,5,6,7,7a-hexahydro-4,4,7a-trimethyl-, cis-	77384-15-7	C12H20O2	238485.9	72.8	0.5627
22.1468	Tridecane	629-50-5	C13H28	953443.5	89.9	2.25
22.2698	Naphthalene, 1-methyl-	90-12-0	C11H10	700207.9	91.2	1.652

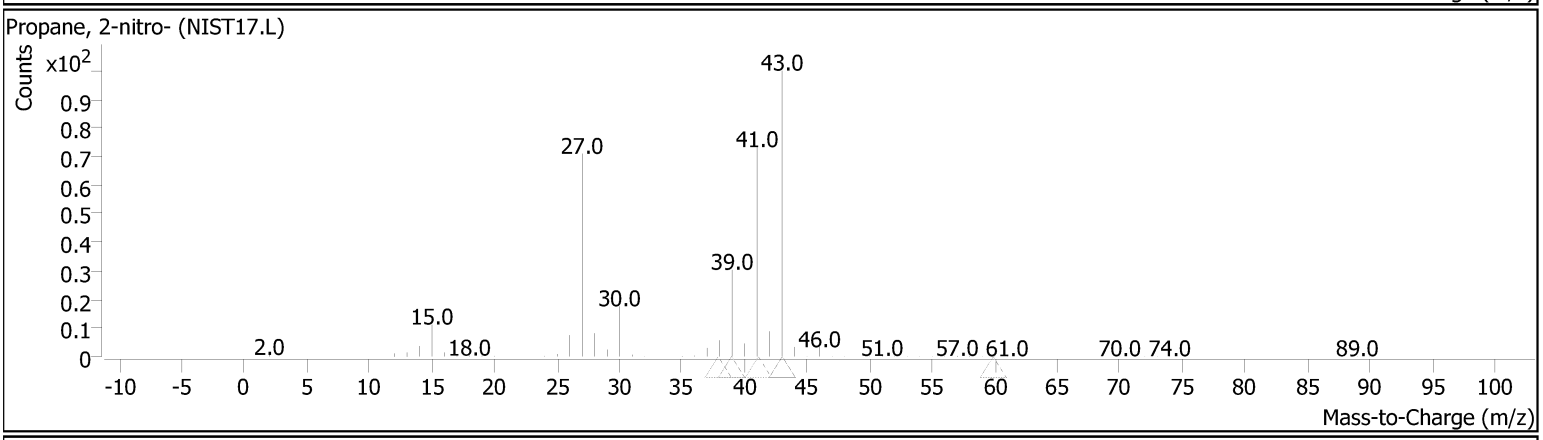
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
22.5352	Naphthalene, 2-methyl-	91-57-6	C11H10	353339.5	89.5	0.8337
22.6194	Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	13065-07-1	C12H16	222598.2	87.3	0.5252
22.8945	1H-Indene, 2,3-dihydro-1,1,4,5-tetramethyl-	16204-57-2	C13H18	138932.8	70.2	0.3278
23.3347	Phytol	150-86-7	C20H40O	87527.9	78.9	0.2065
23.4059	1,3-Cyclododecadiene, (E,Z)-	1129-92-6	C12H20	137488.5	77.7	0.3244

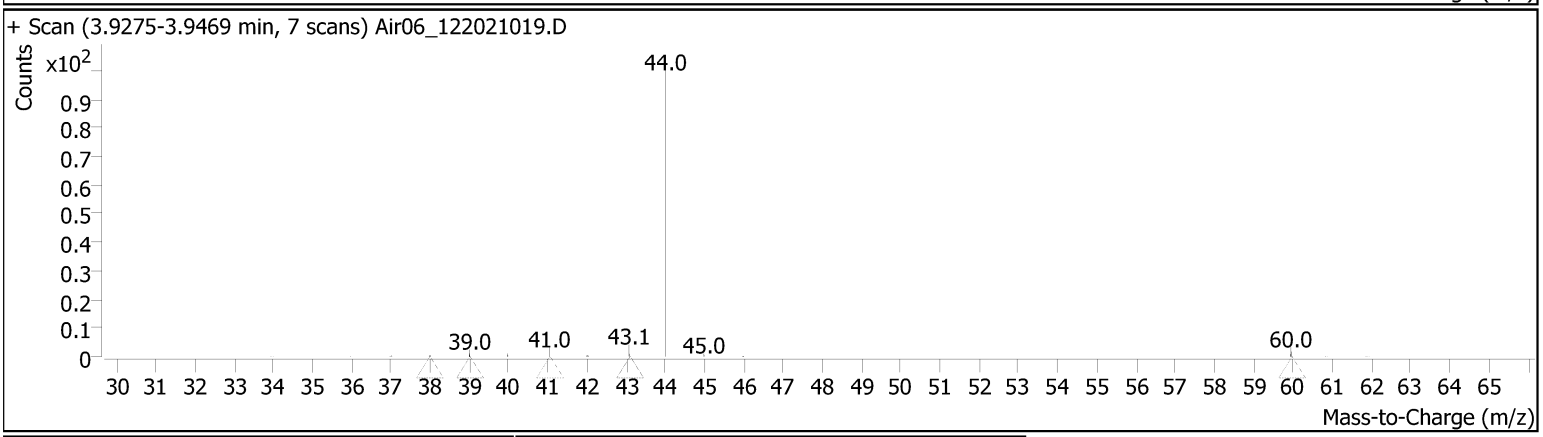
Sample Chromatogram

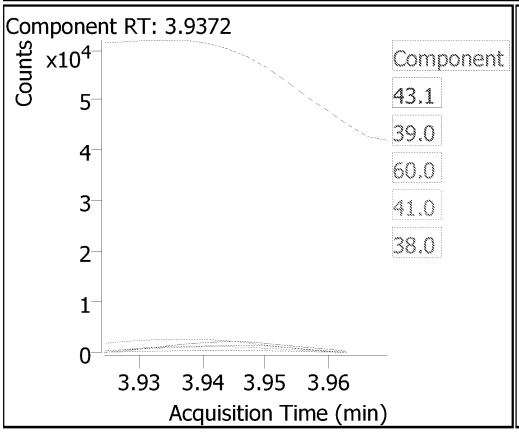


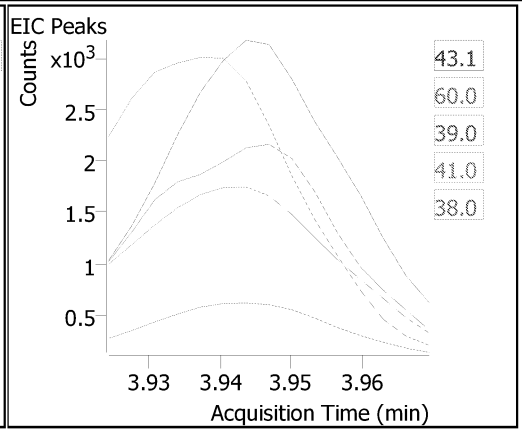
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
3.9372	Propane, 2-nitro-	94186.8	74.7	79-46-9	C3H7NO2	0.4129

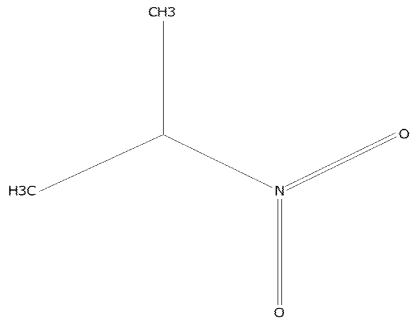




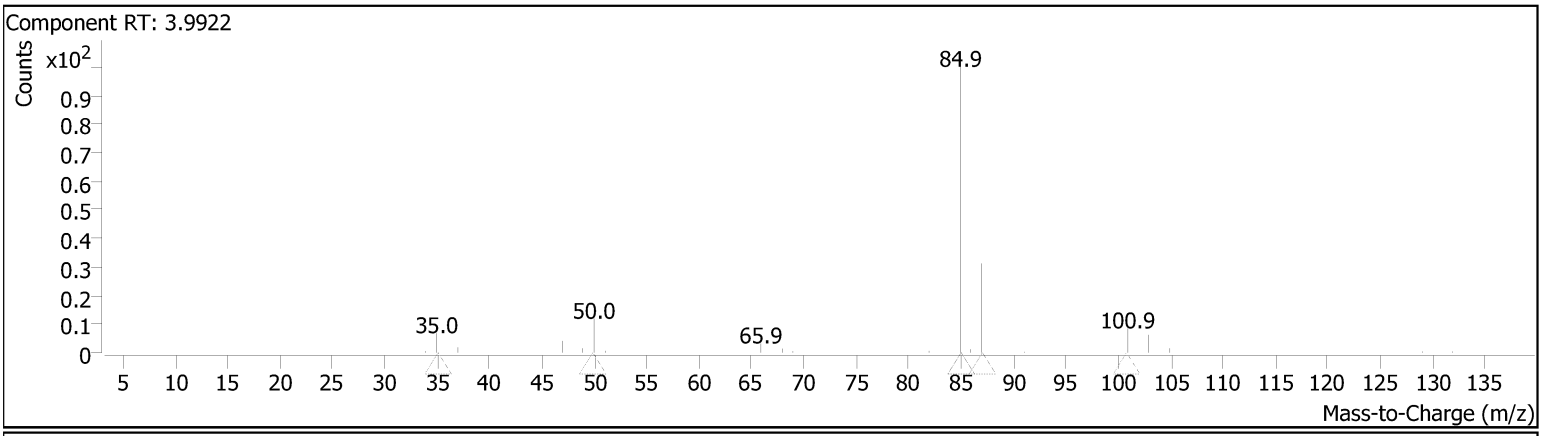


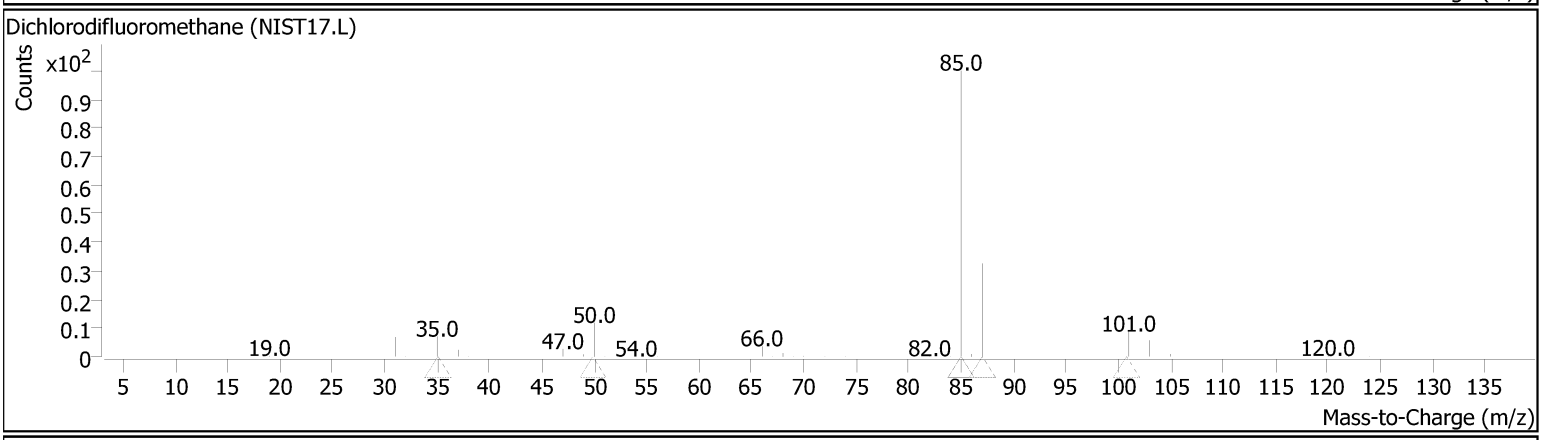


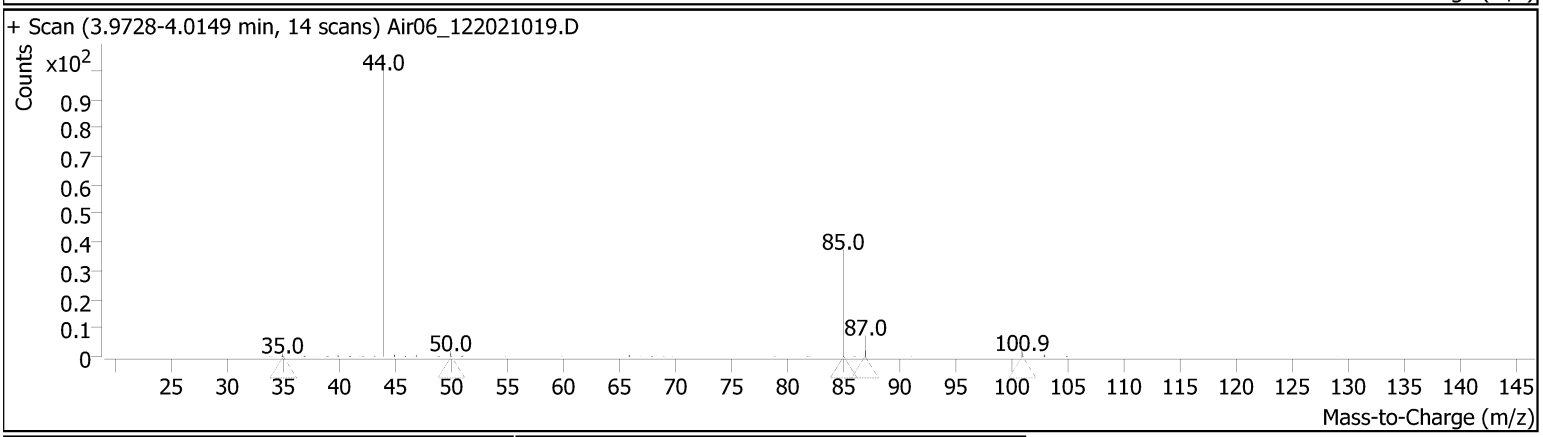


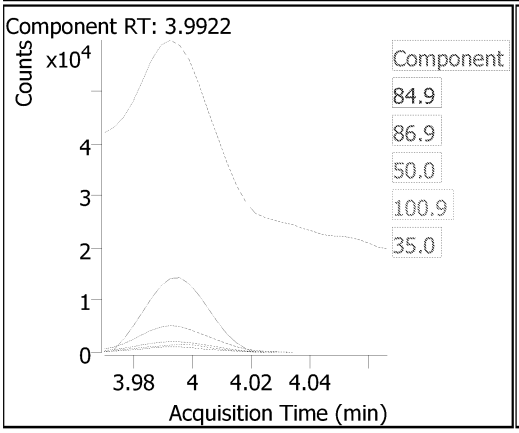


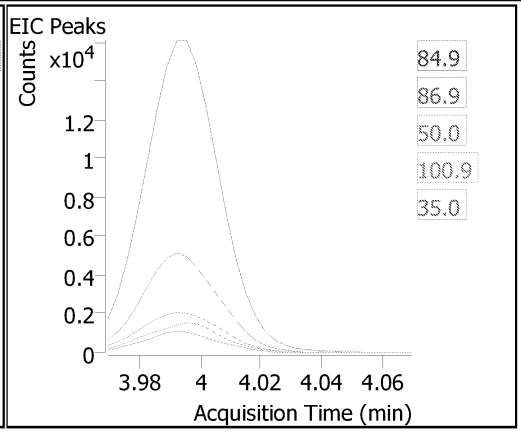
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
3.9922	Dichlorodifluoromethane	90283.7	97.8	75-71-8	CCl2F2	0.3958

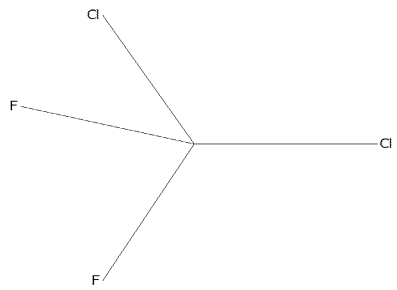




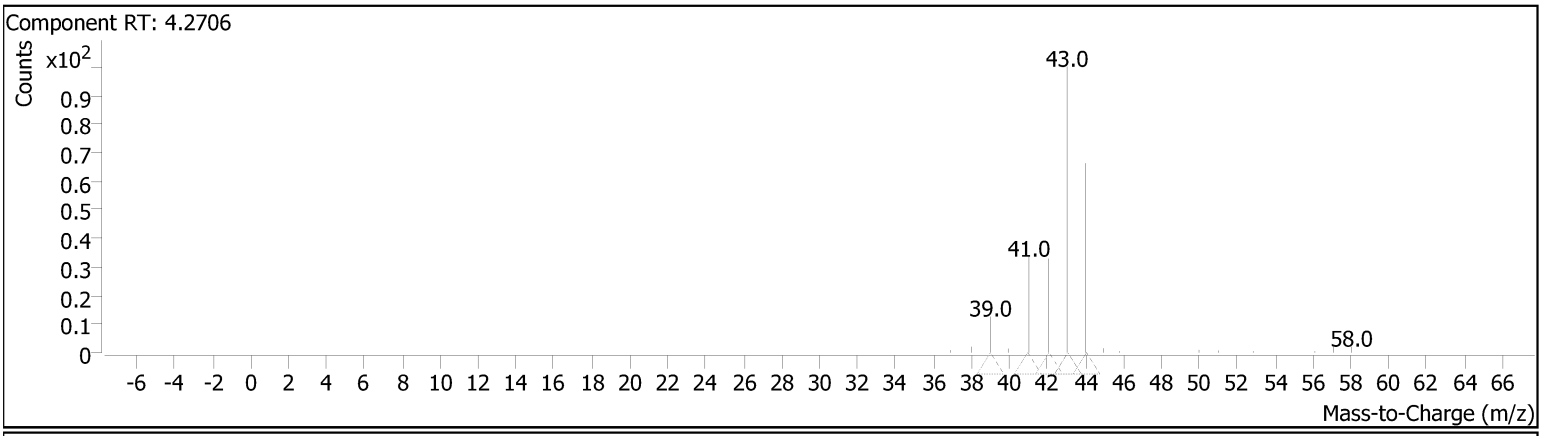


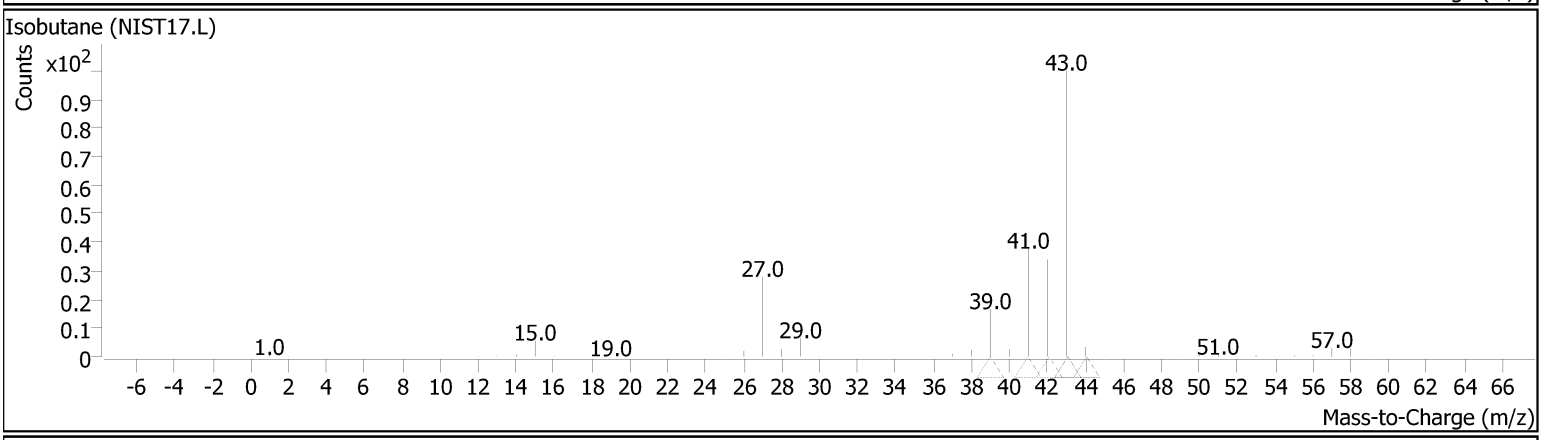


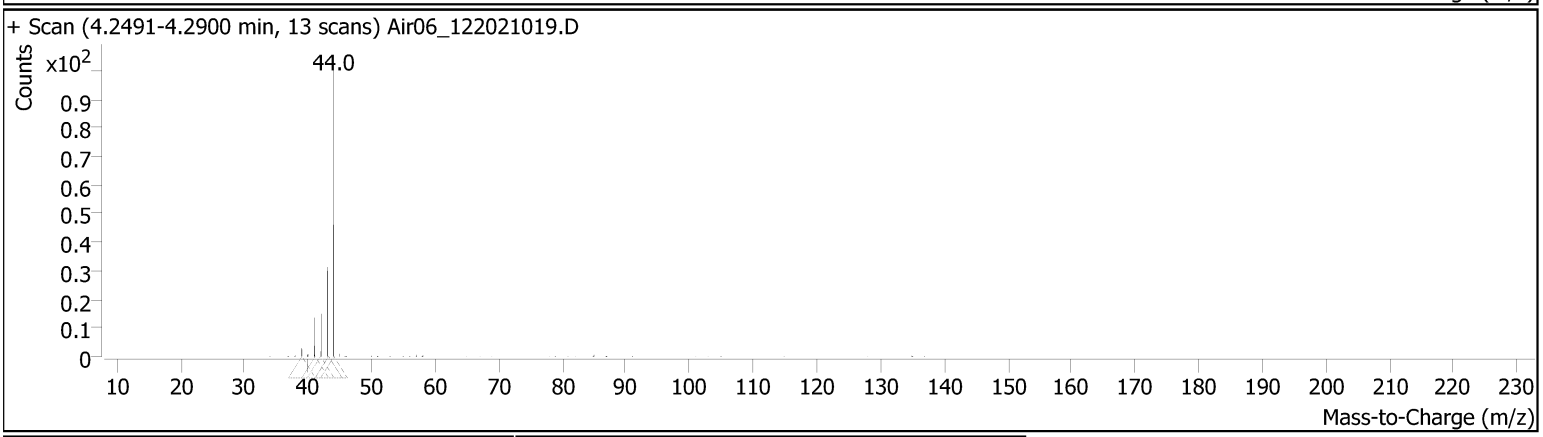


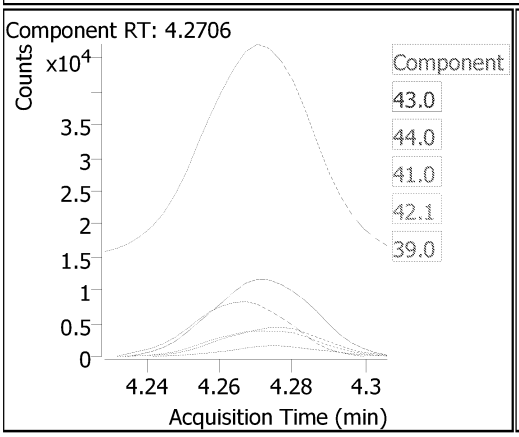


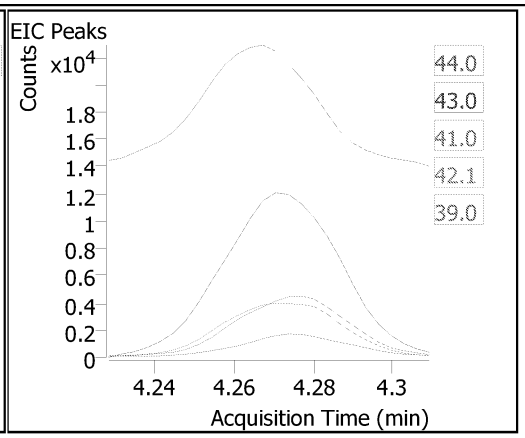
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.2706	Isobutane	66751.0	85.7	75-28-5	C4H10	0.2926

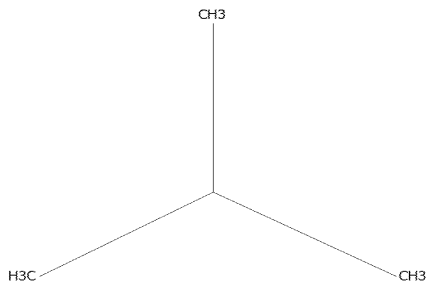




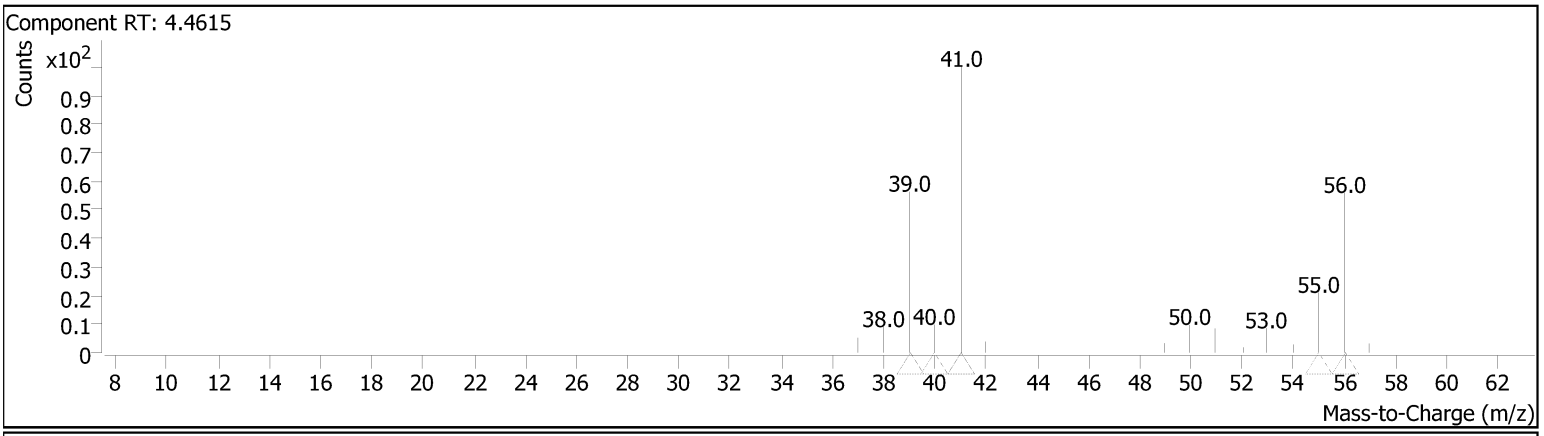


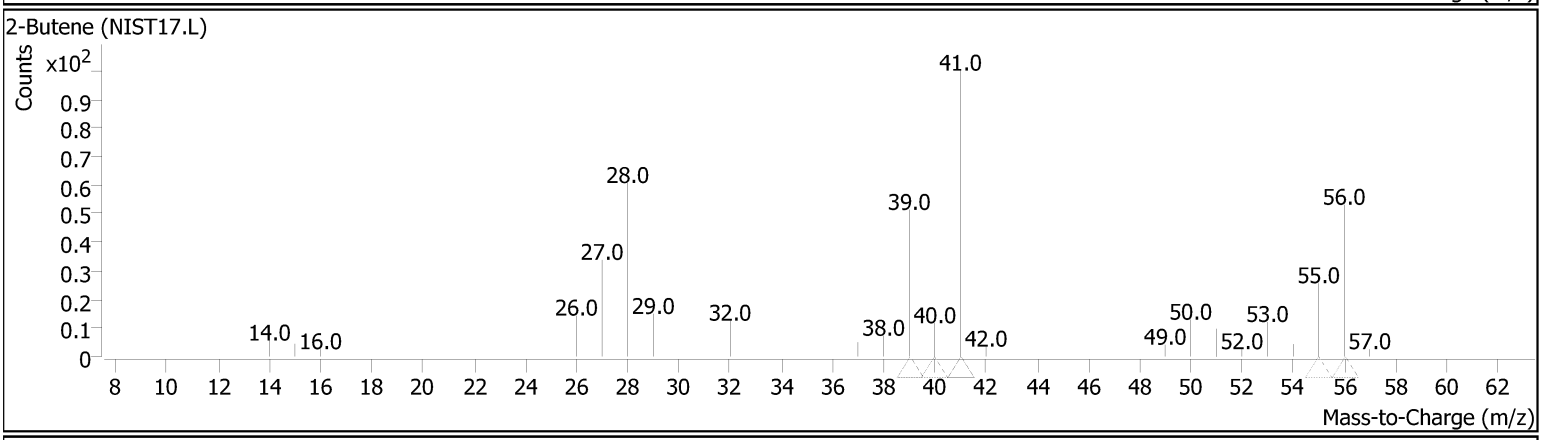


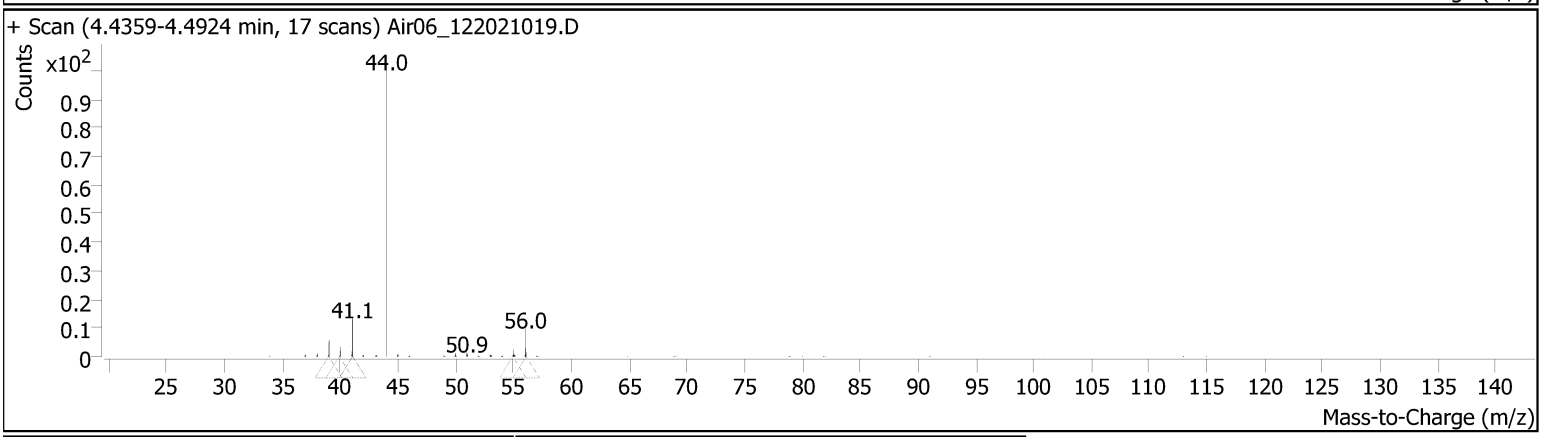


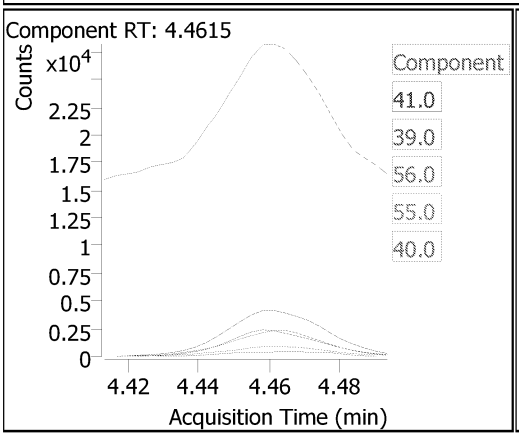


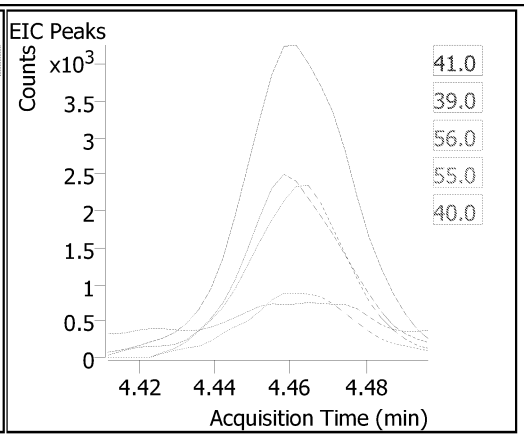
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.4615	2-Butene	25034.1	98.2	107-01-7	C4H8	0.1098





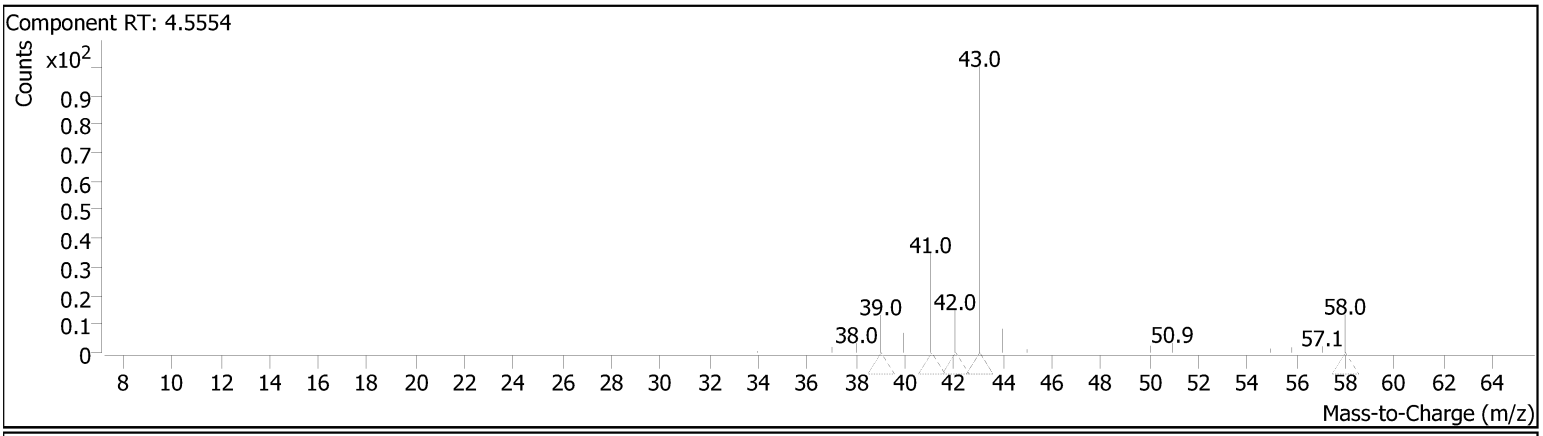


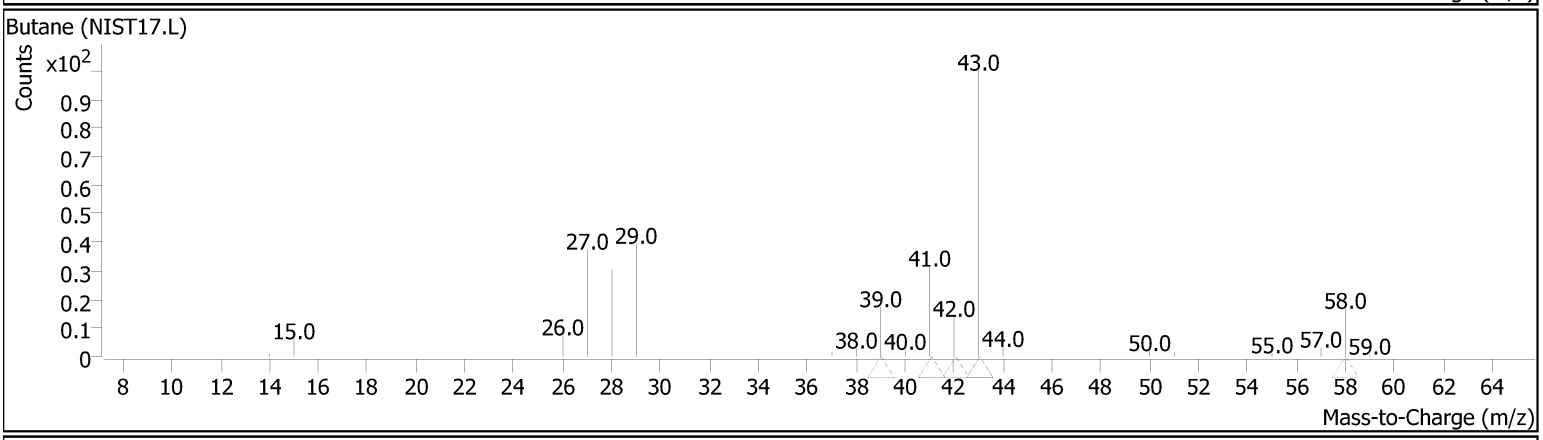


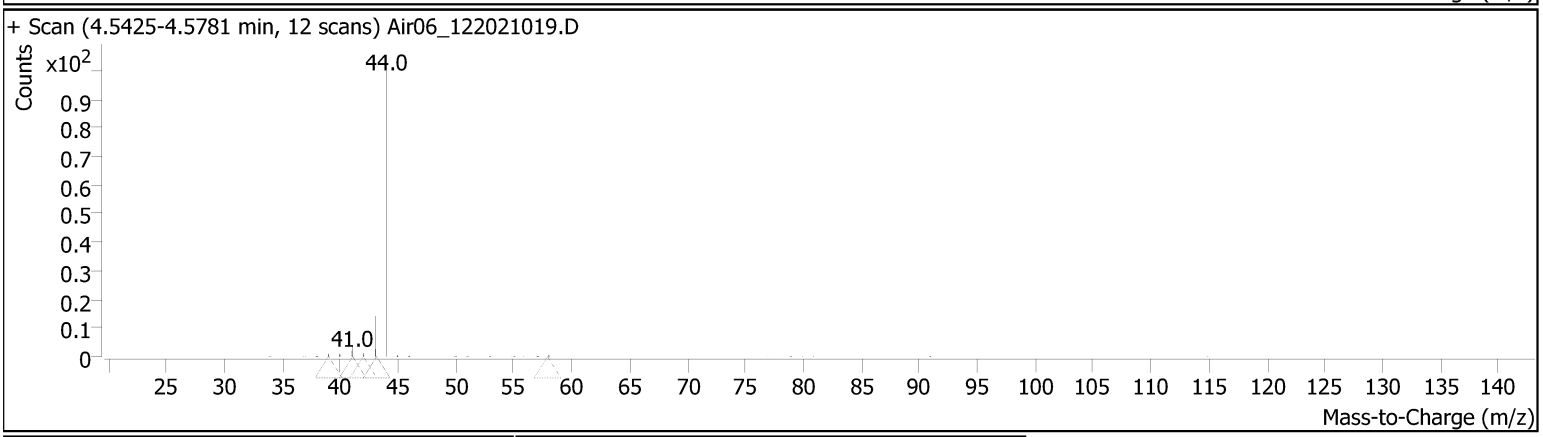


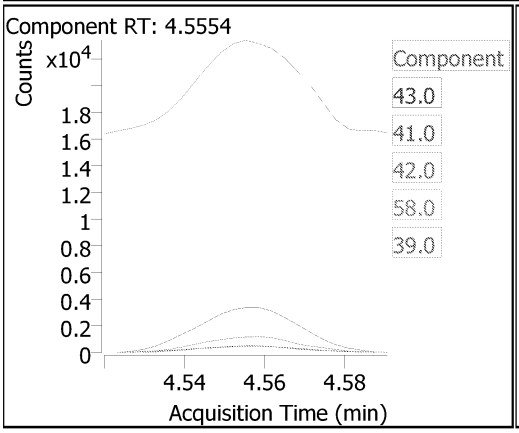


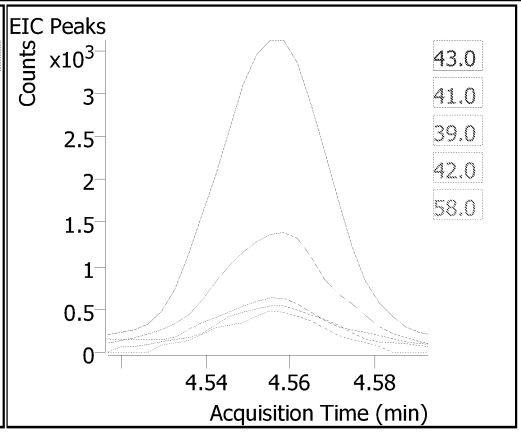
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.5554	Butane	13709.1	92.6	106-97-8	C4H10	0.0601









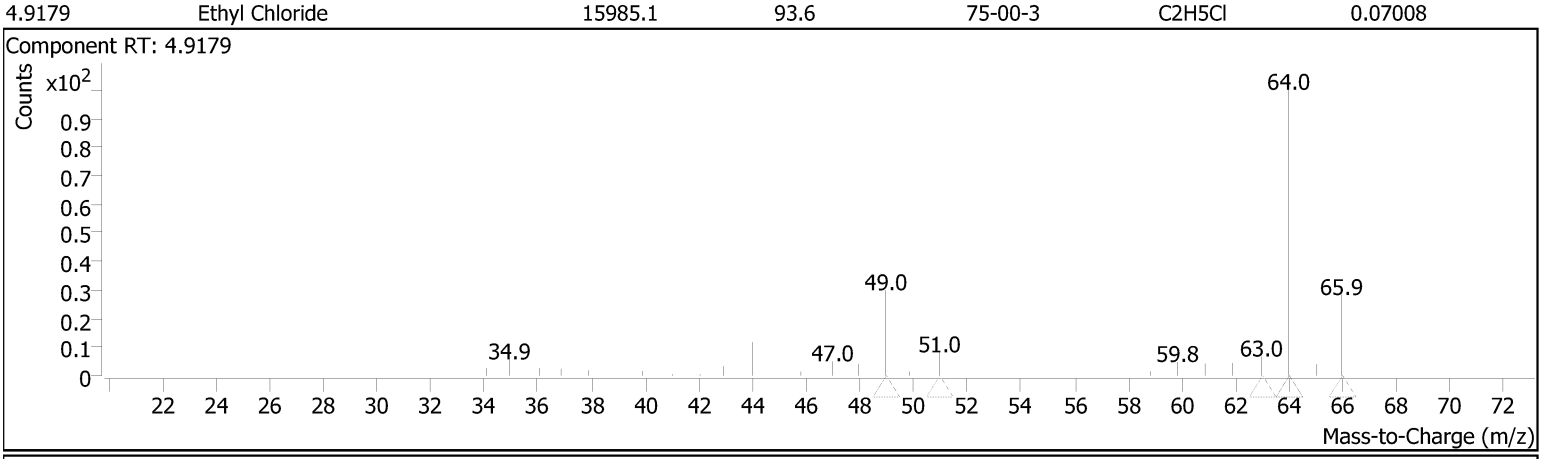


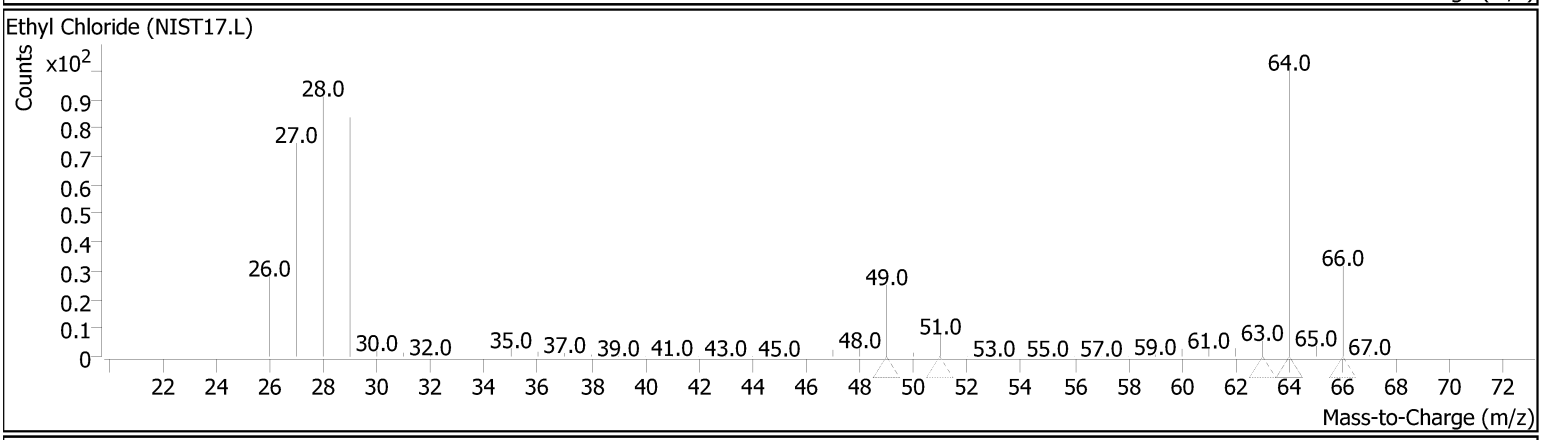


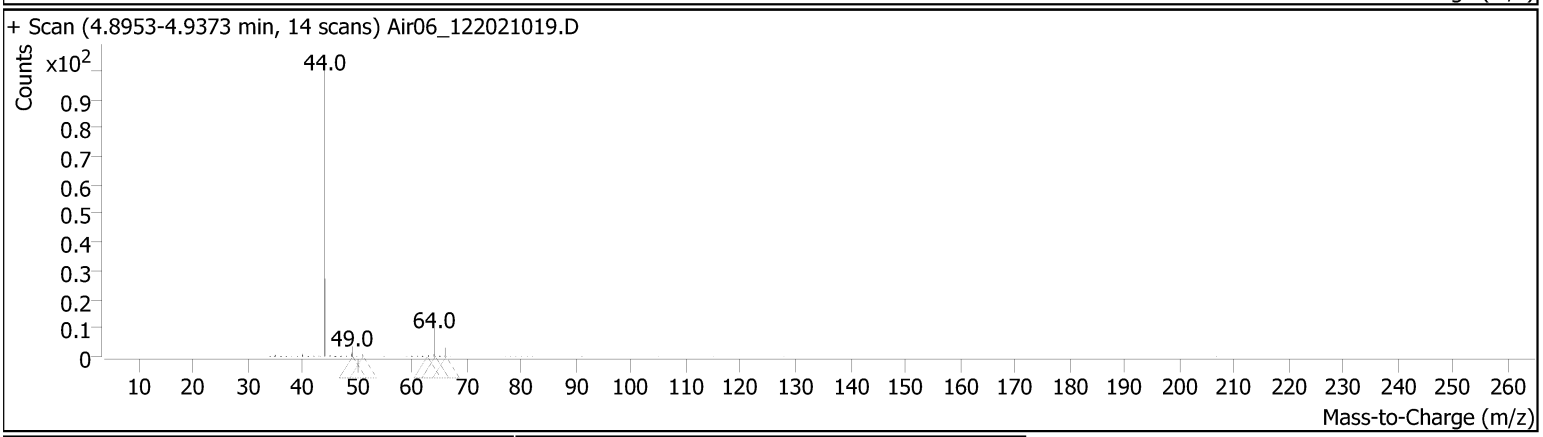
Library Search Results - NonTarget Hits with Details

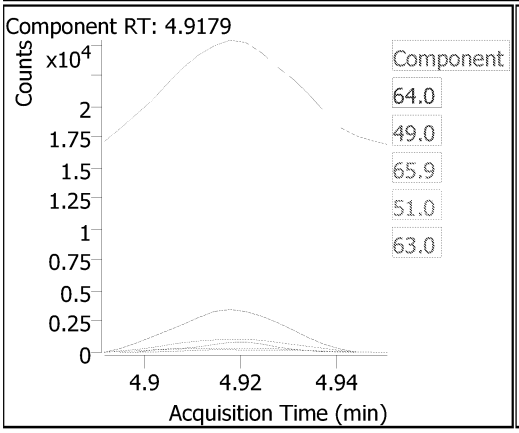
Agilent Technologies

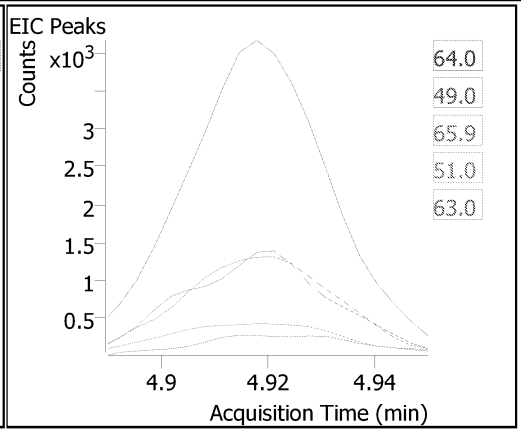
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.9179	Ethyl Chloride	15985.1	93.6	75-00-3	C2H5Cl	0.07008





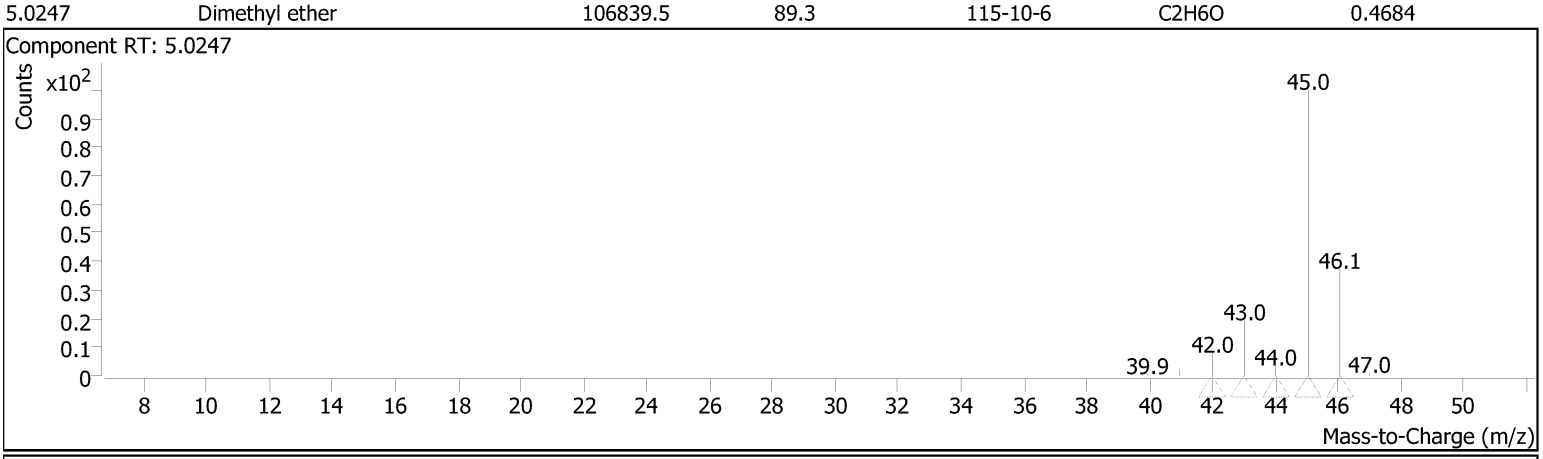


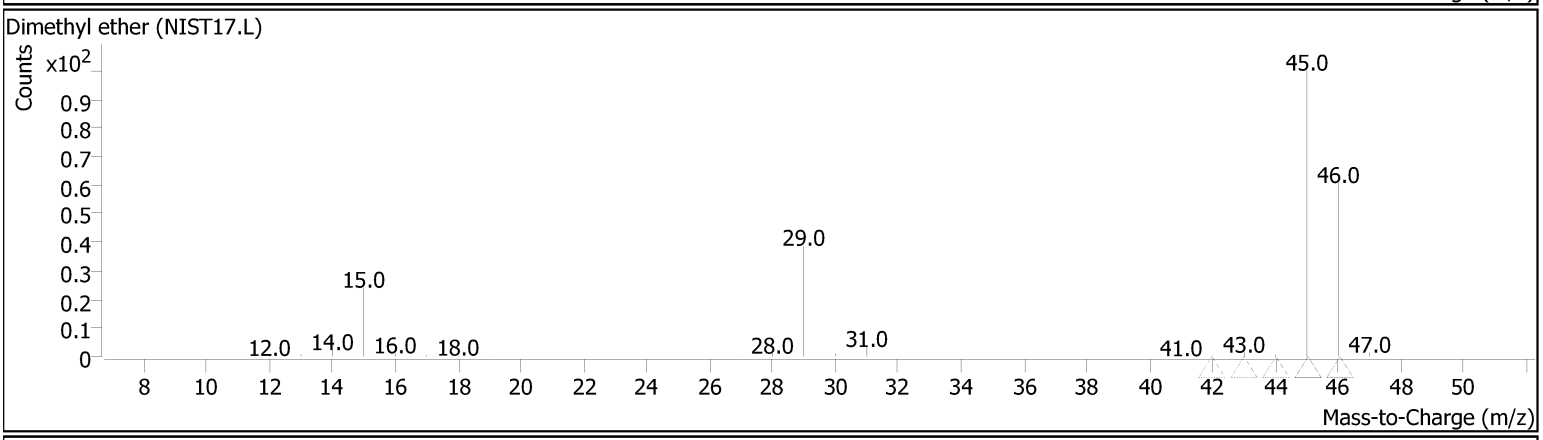


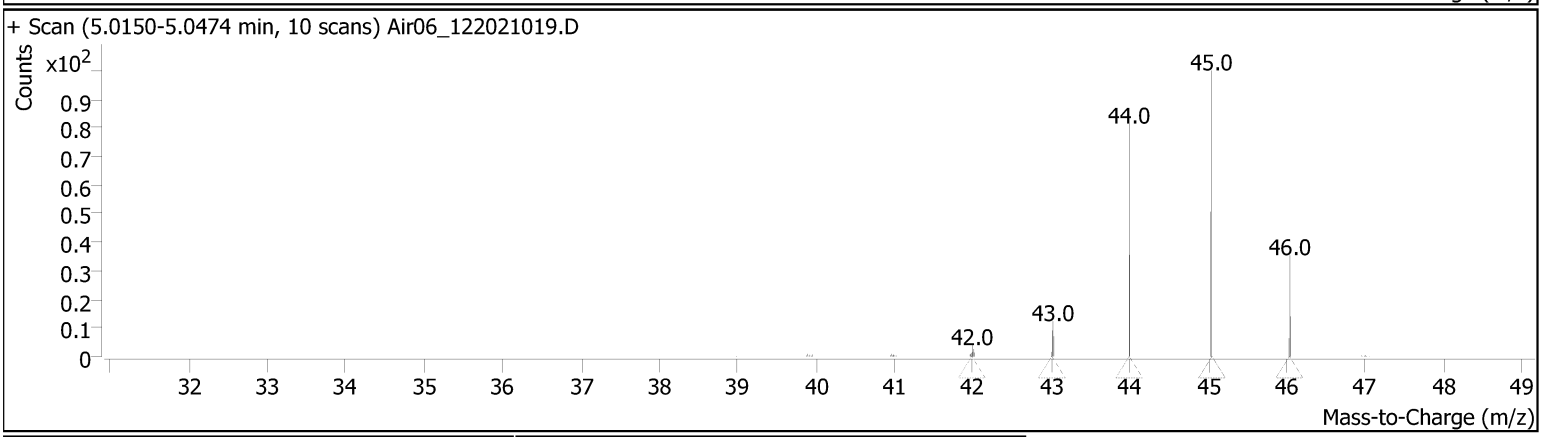


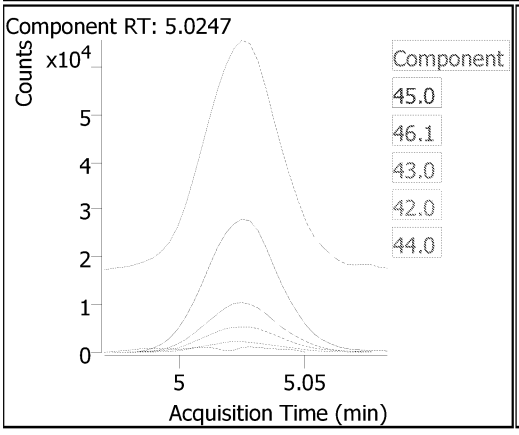


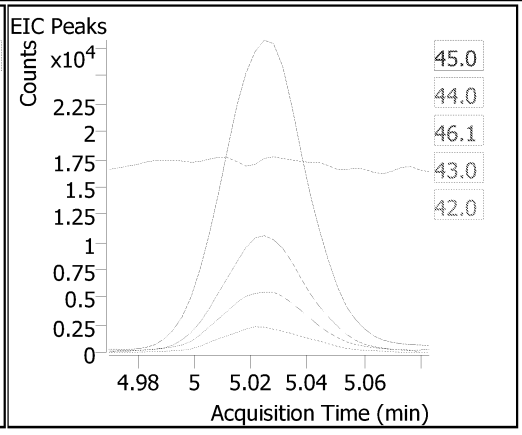
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.0247	Dimethyl ether	106839.5	89.3	115-10-6	C2H6O	0.4684

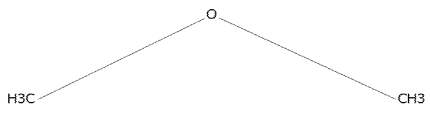




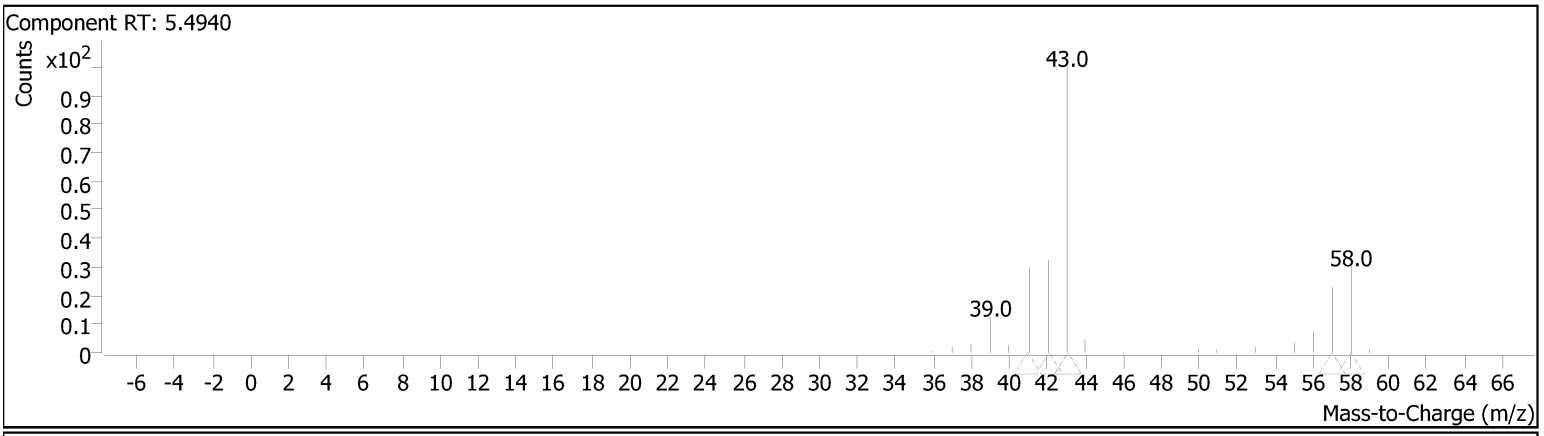


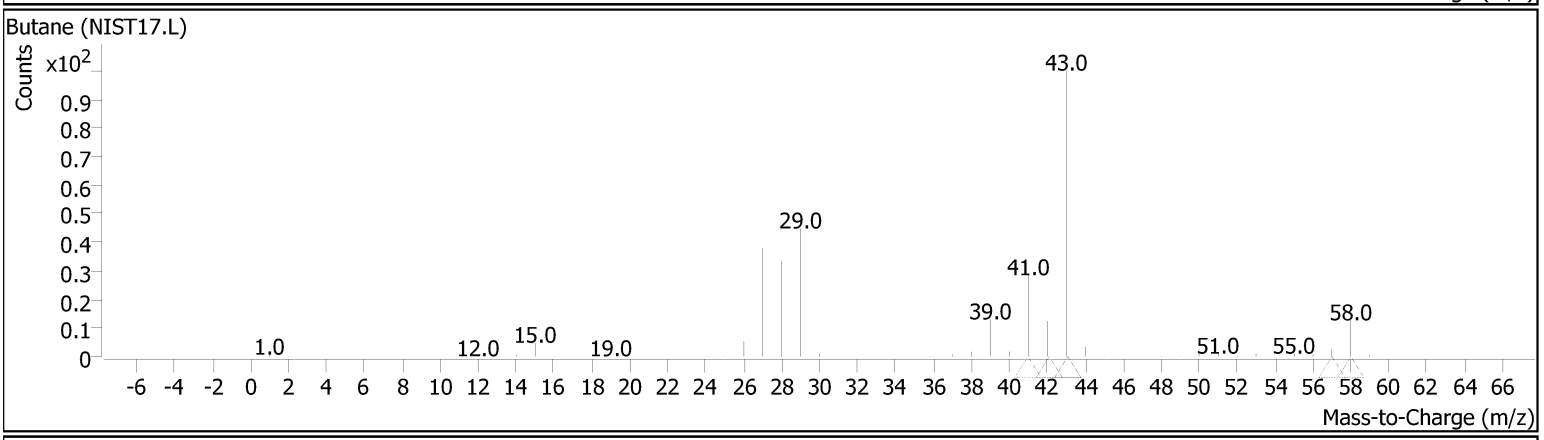


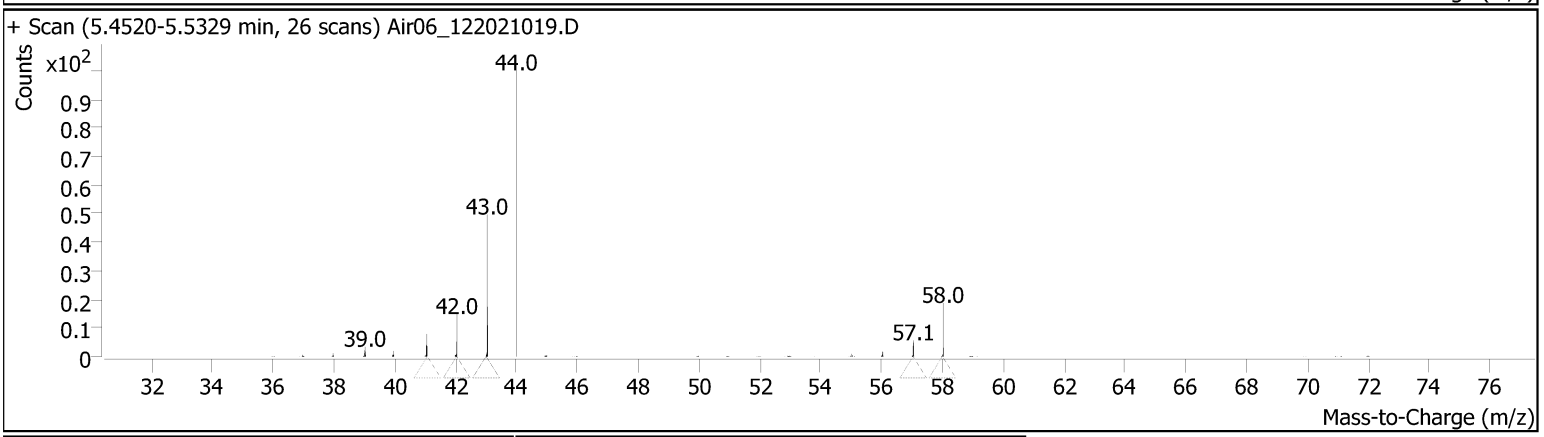


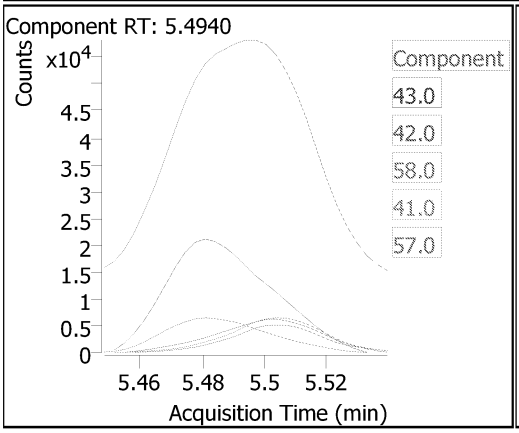


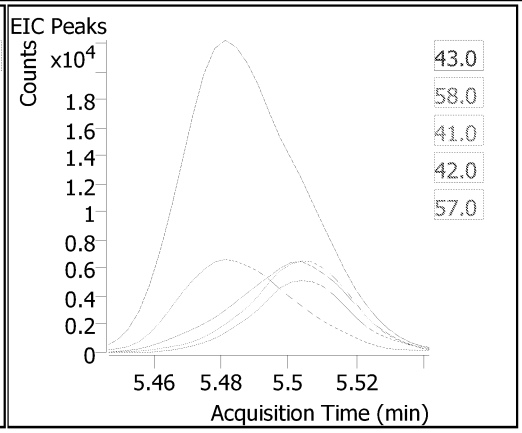
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.4940	Butane	128470.3	92.0	106-97-8	C4H10	0.5632





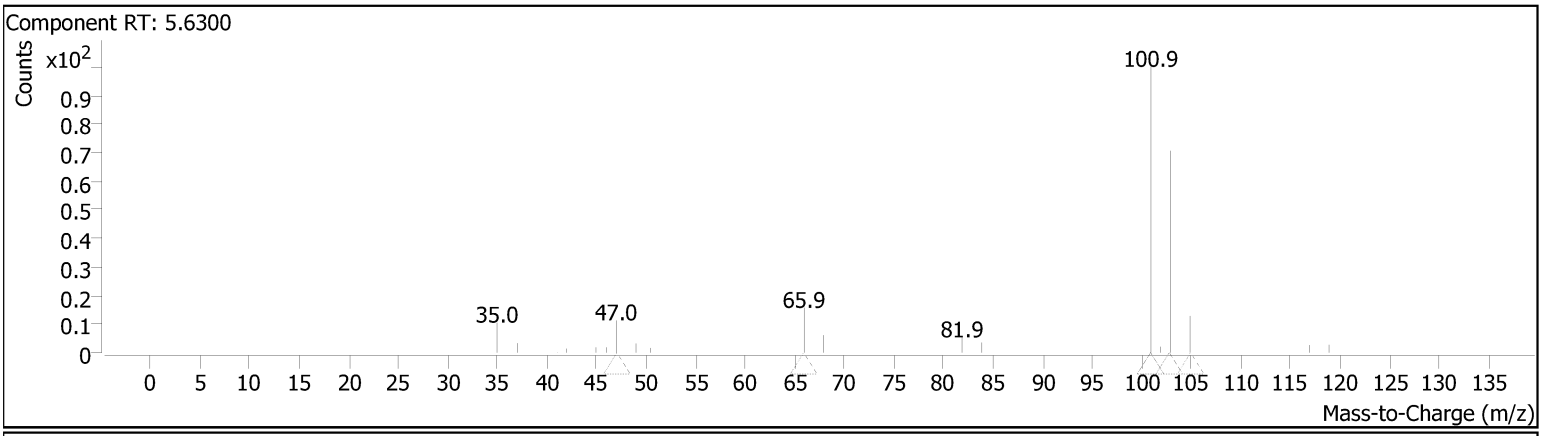


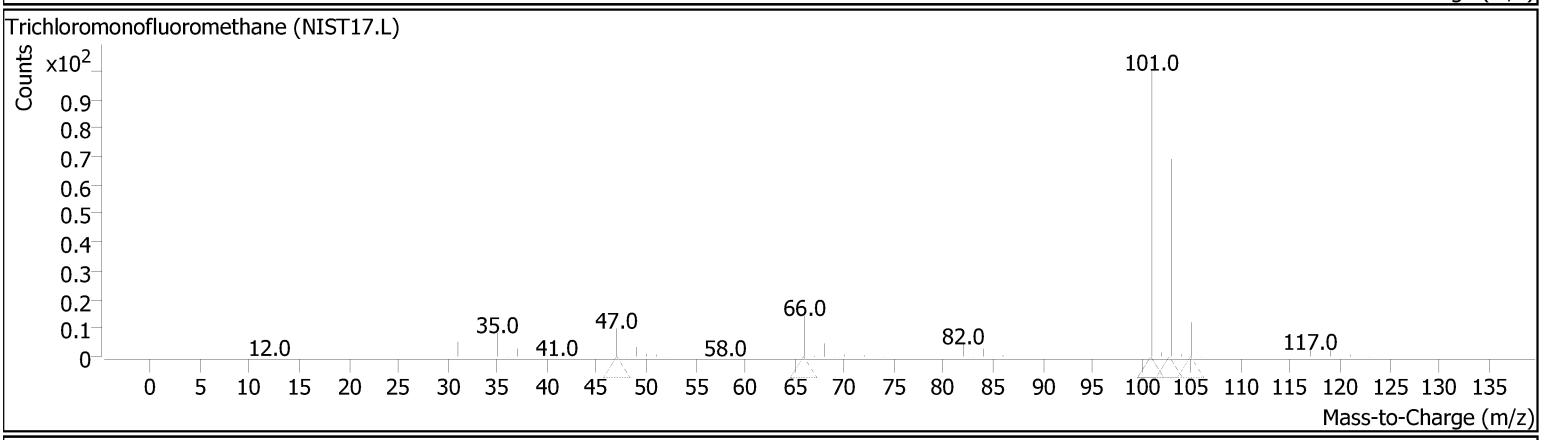


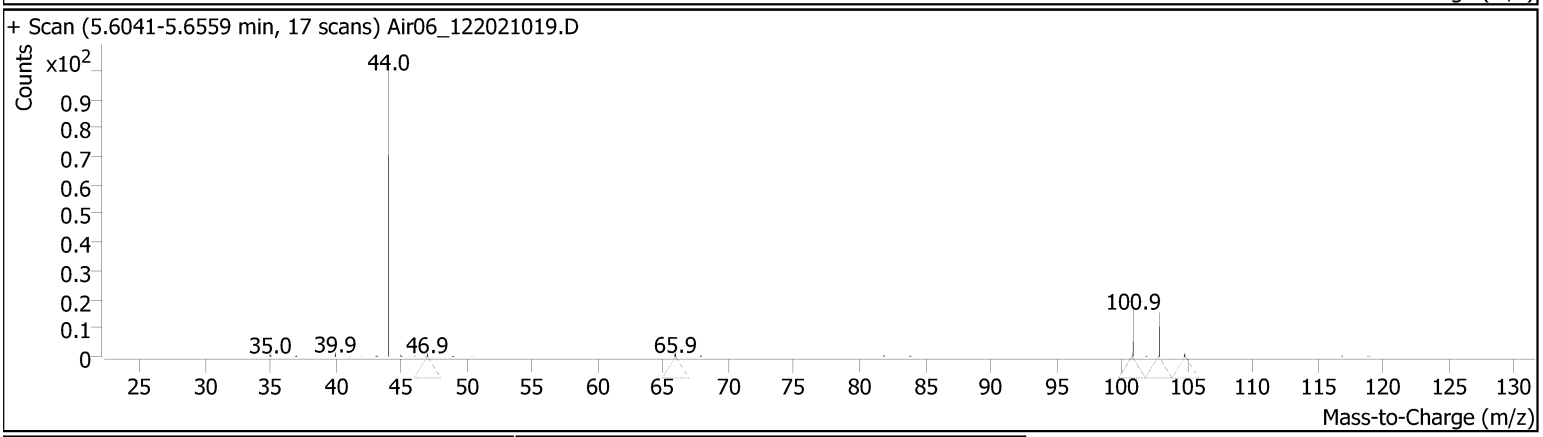


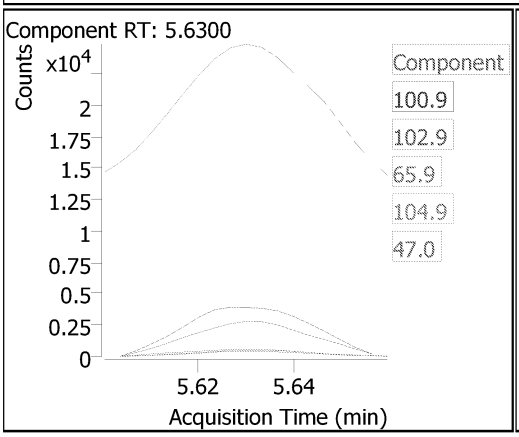


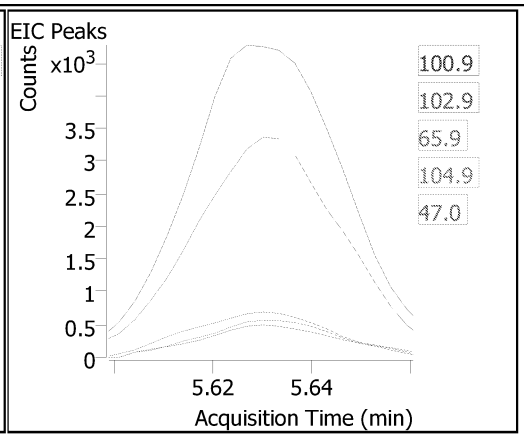
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.6300	Trichloromonofluoromethane	20937.7	96.8	75-69-4	CCl3F	0.09179

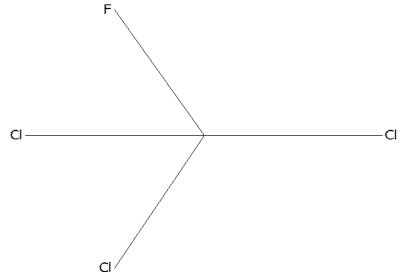




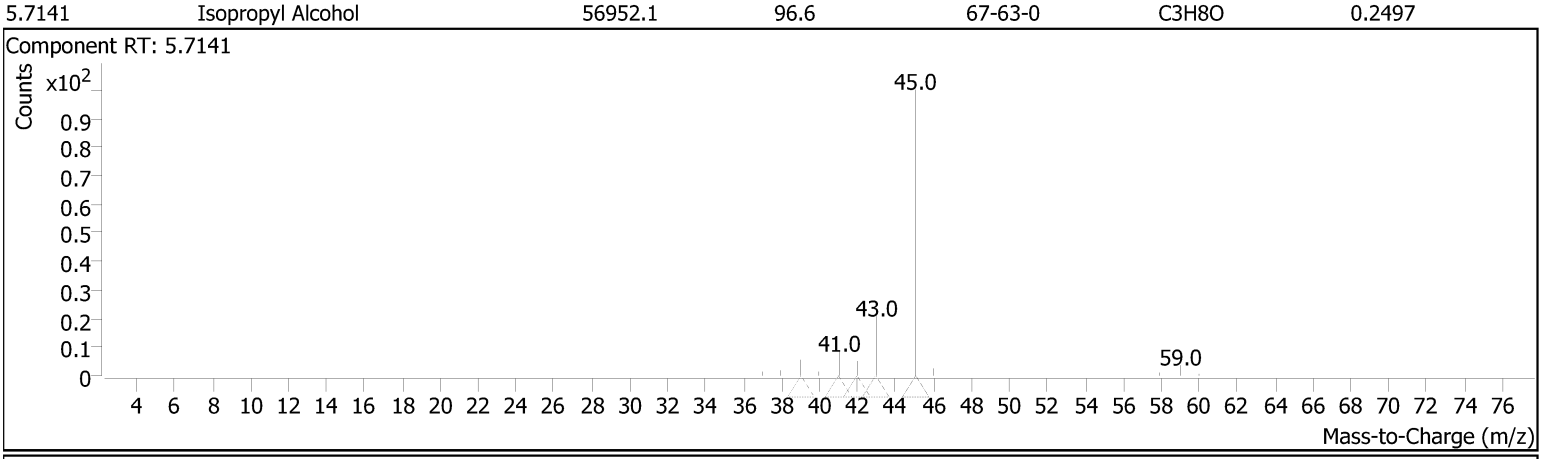


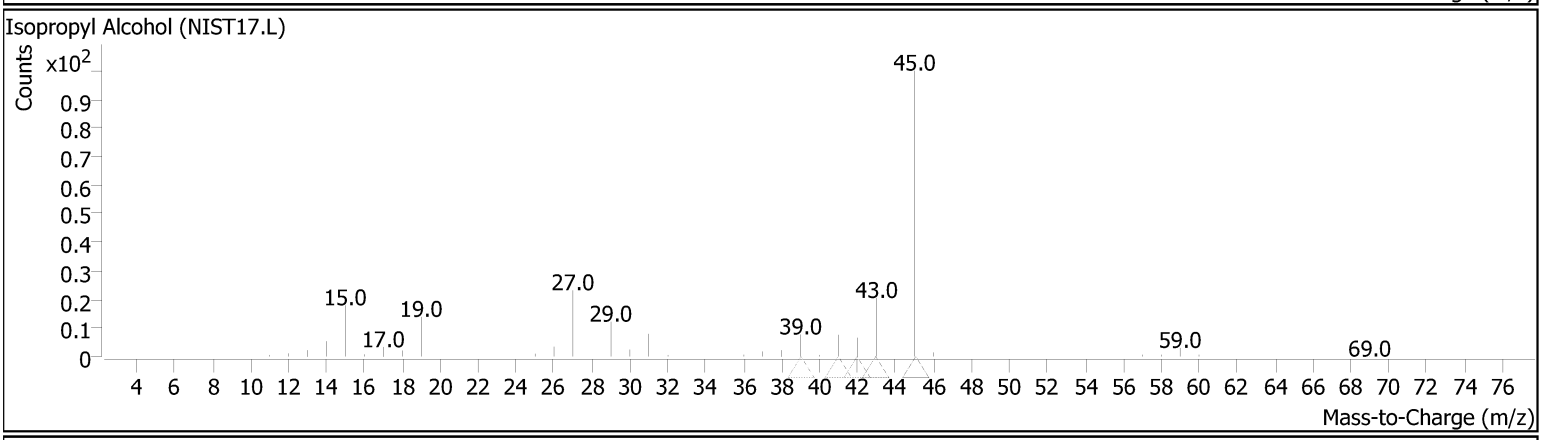


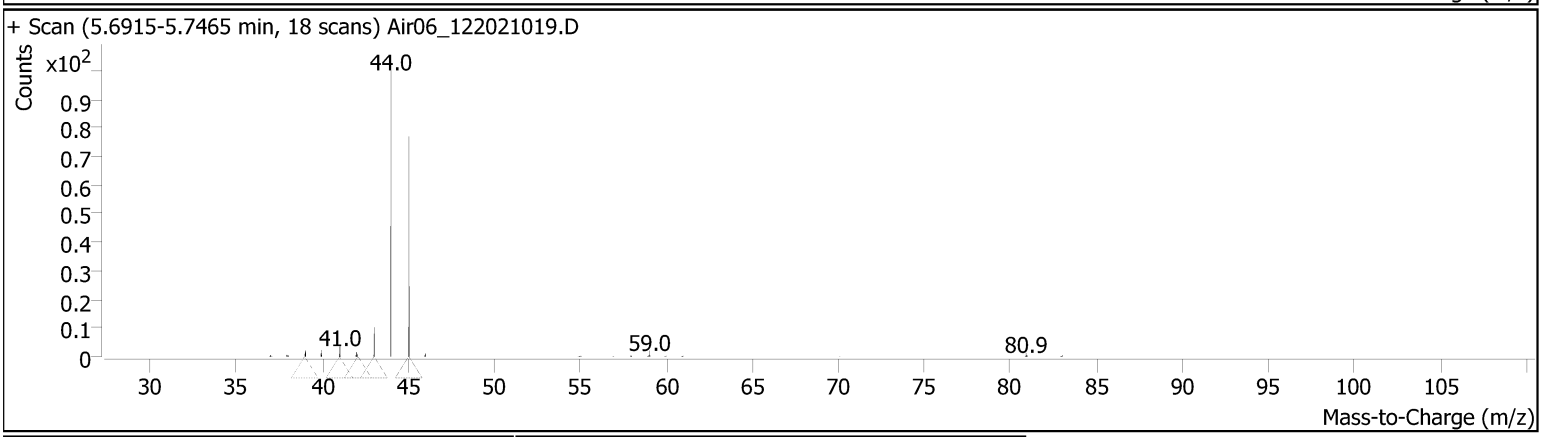


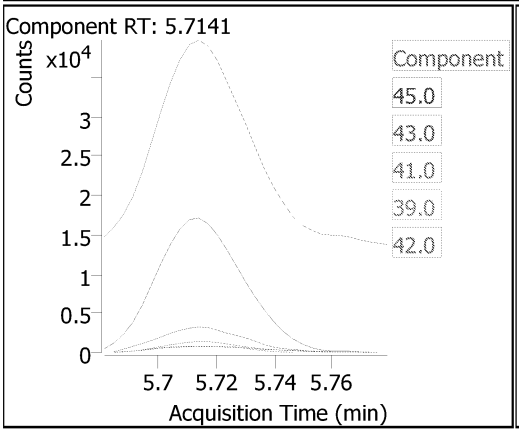


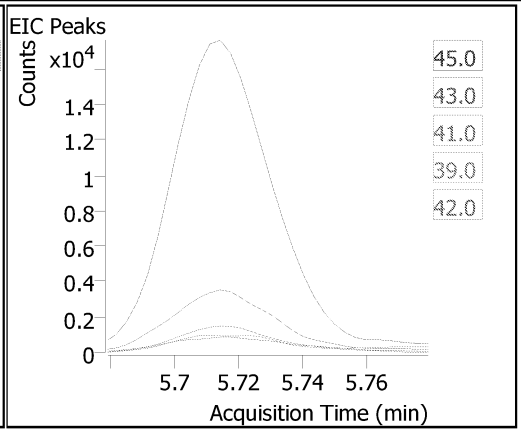
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.7141	Isopropyl Alcohol	56952.1	96.6	67-63-0	C3H8O	0.2497

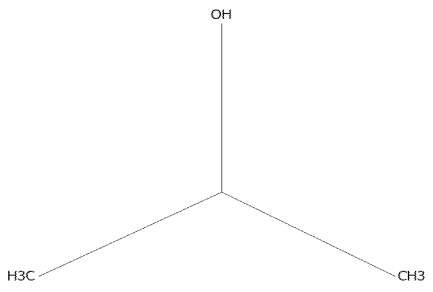




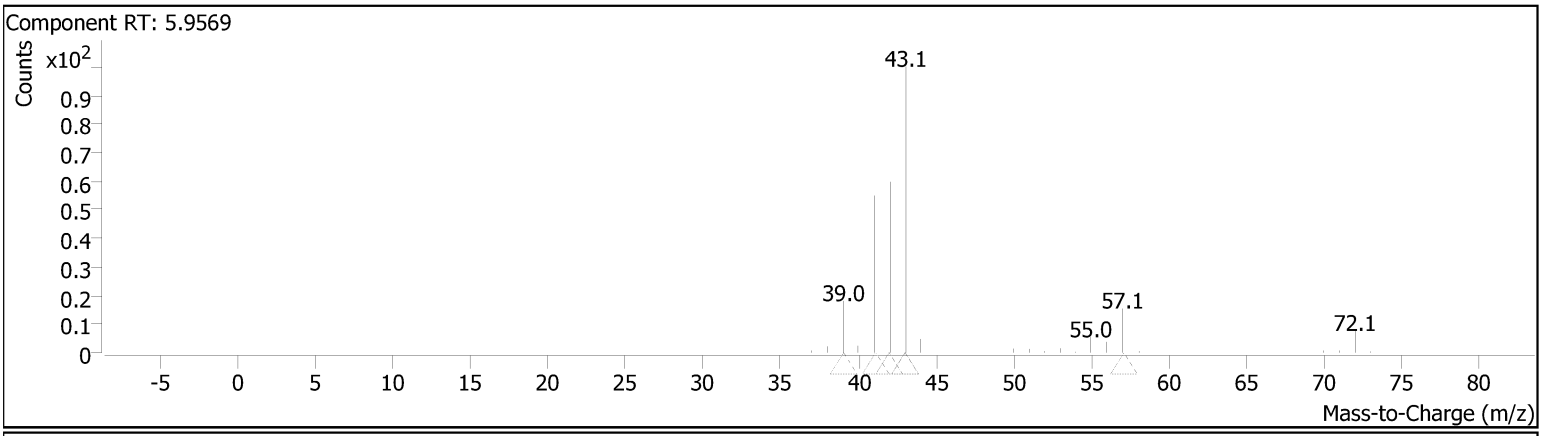


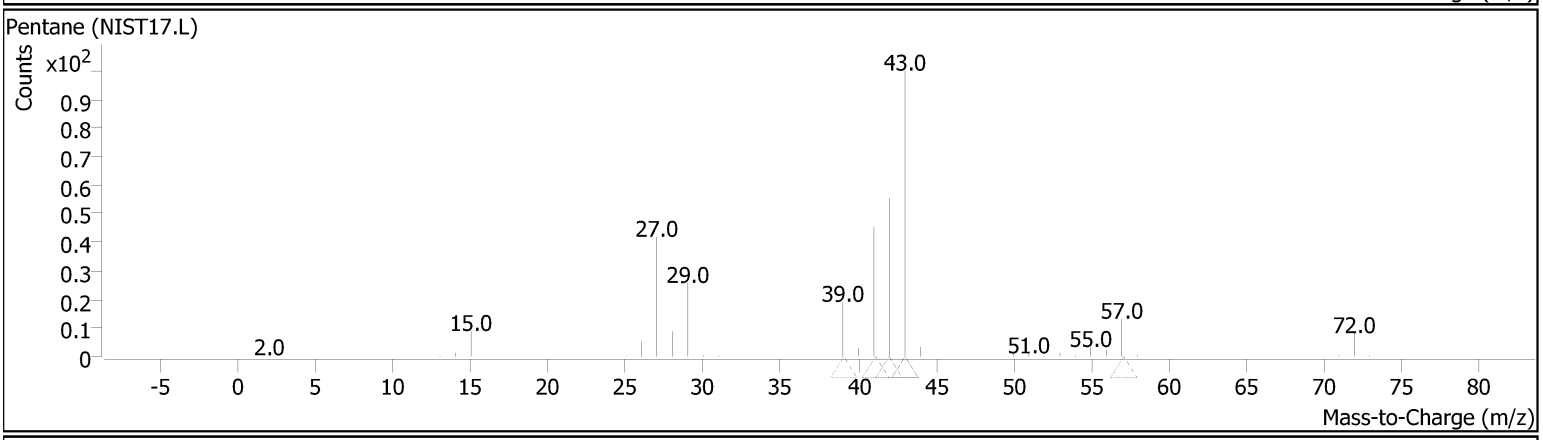


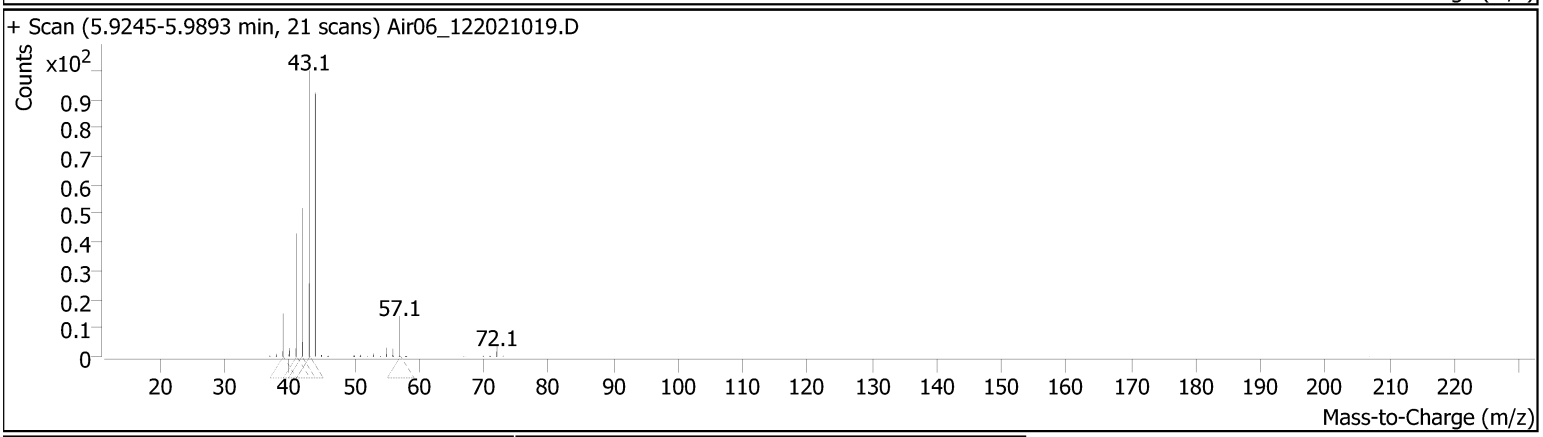


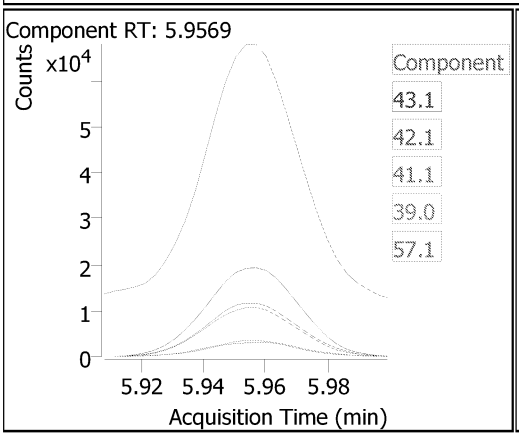


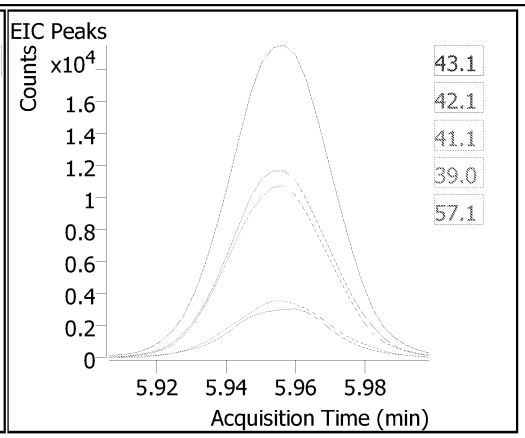
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.9569	Pentane	116504.1	98.8	109-66-0	C5H12	0.5108

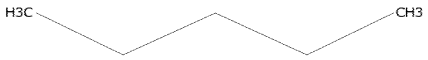




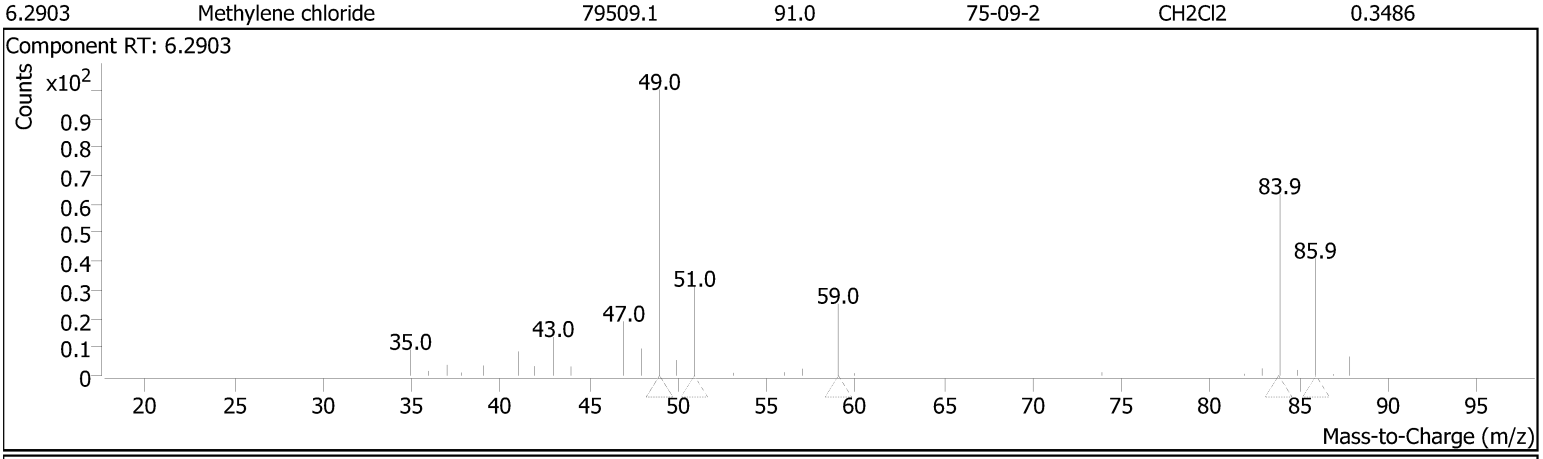


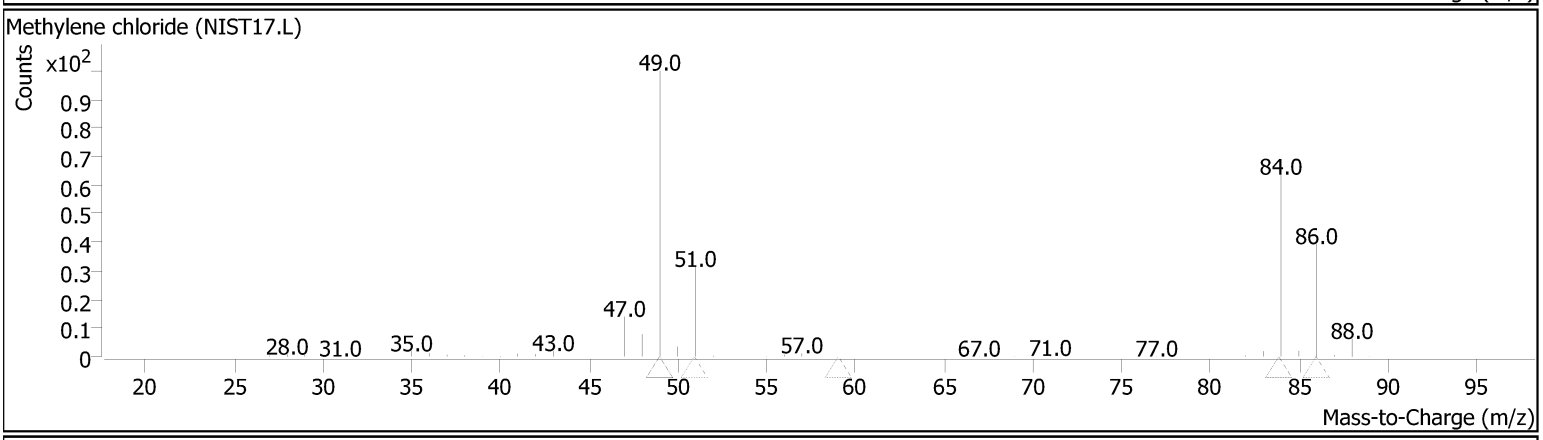


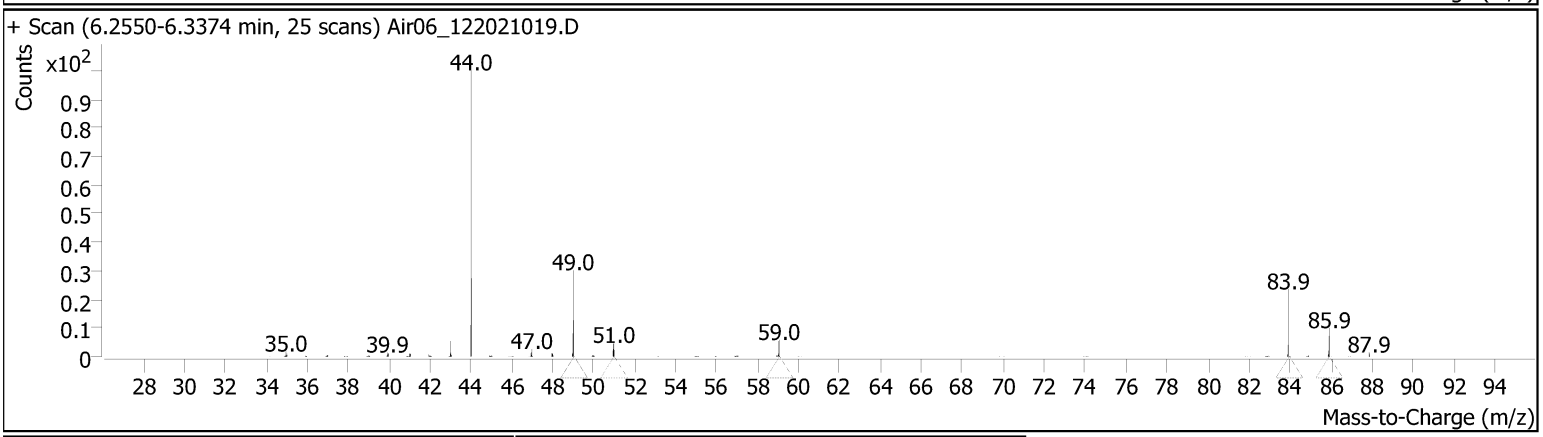


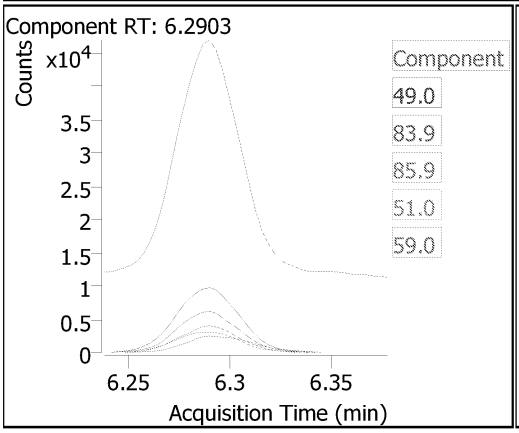


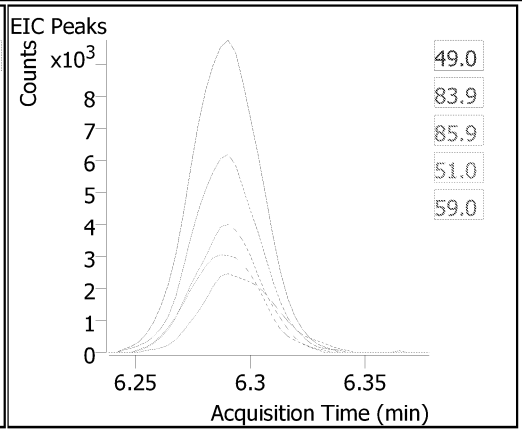
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.2903	Methylene chloride	79509.1	91.0	75-09-2	CH2Cl2	0.3486

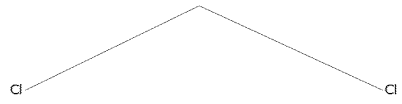




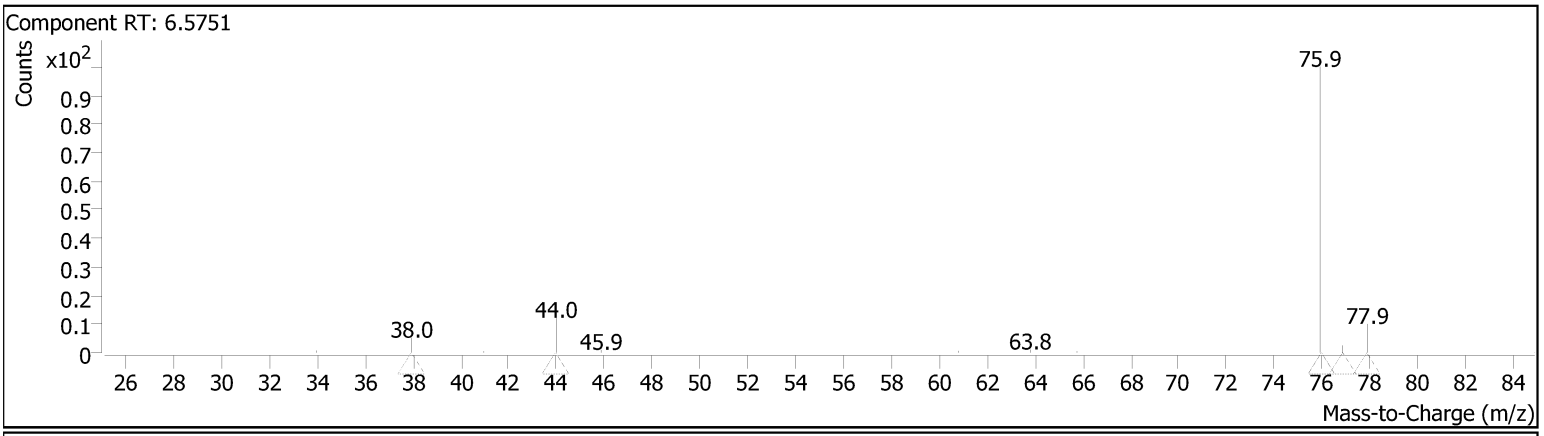


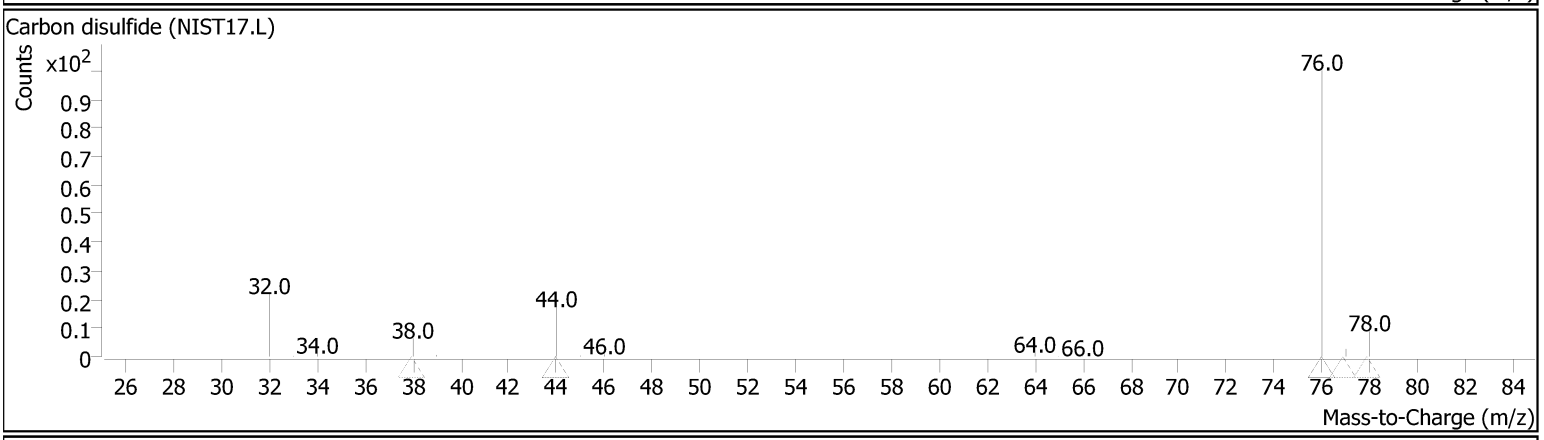


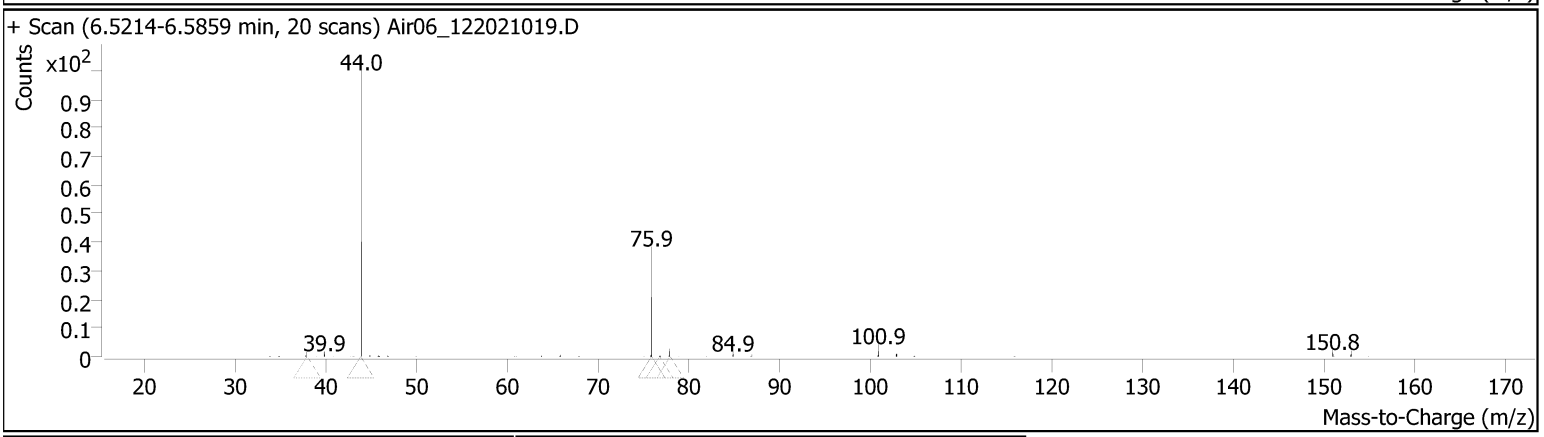


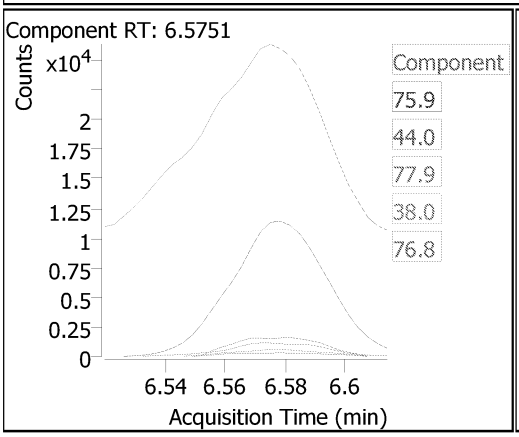


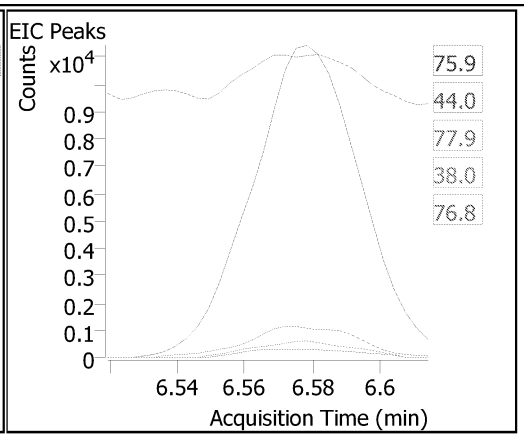
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.5751	Carbon disulfide	42045.6	93.1	75-15-0	CS2	0.1843



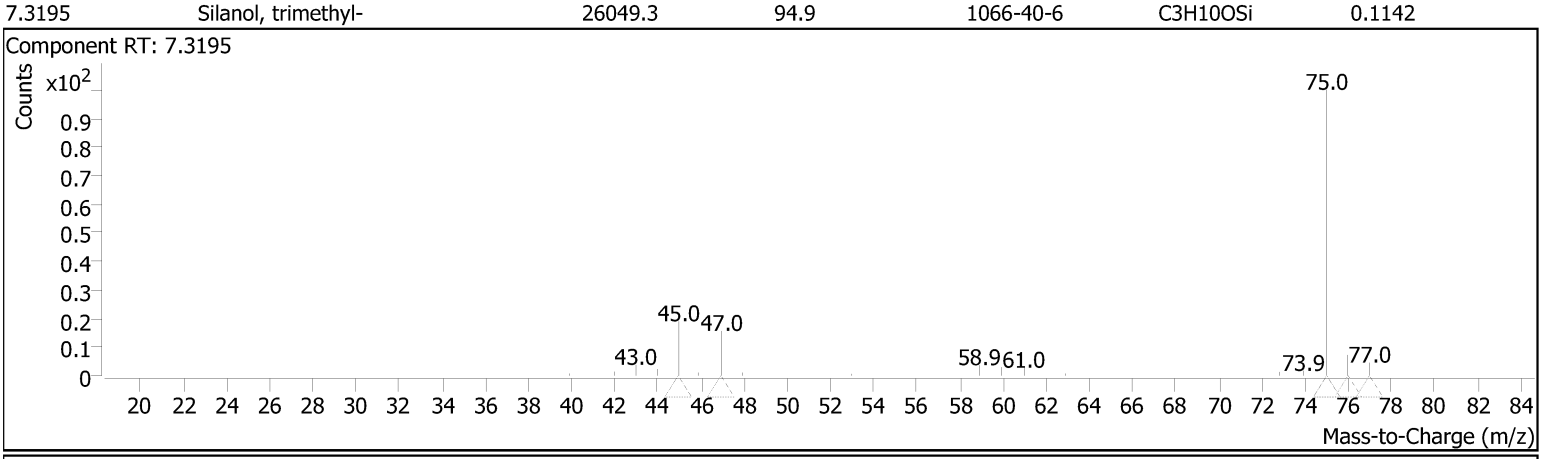


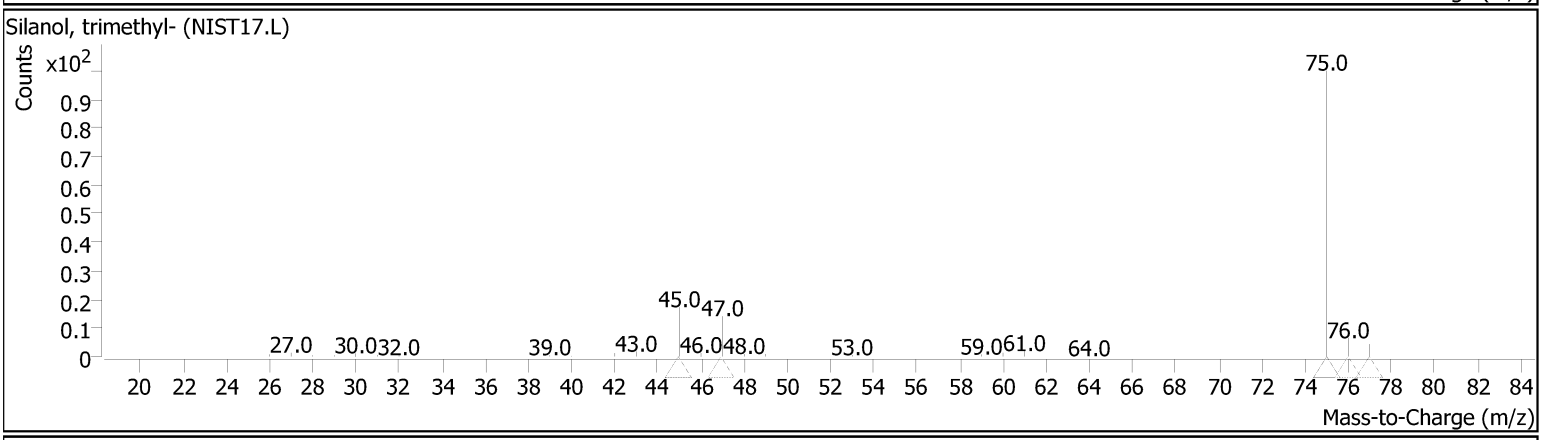


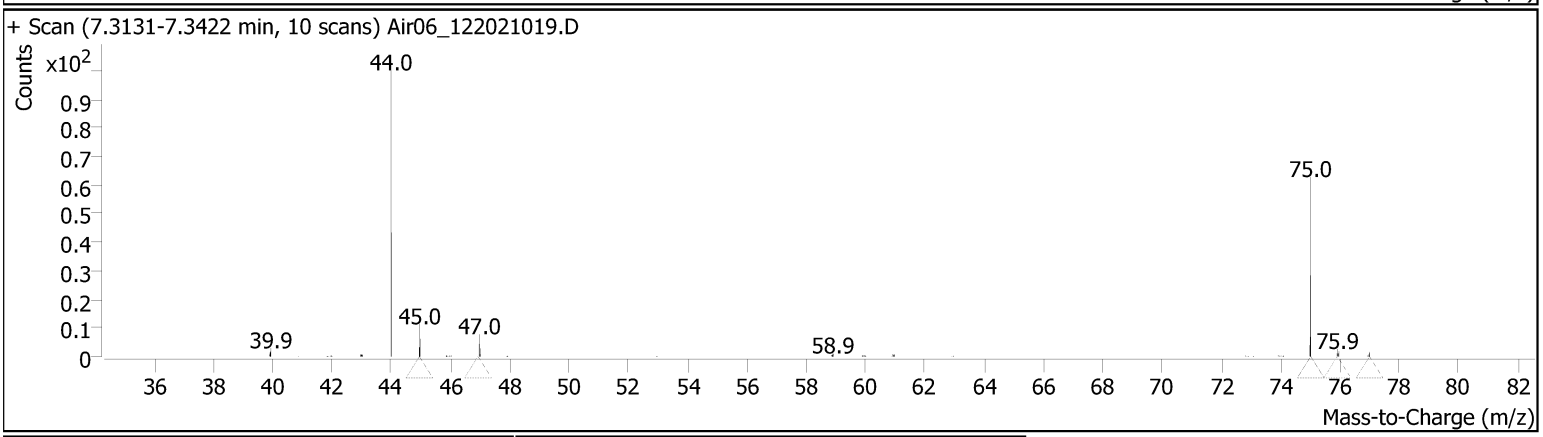


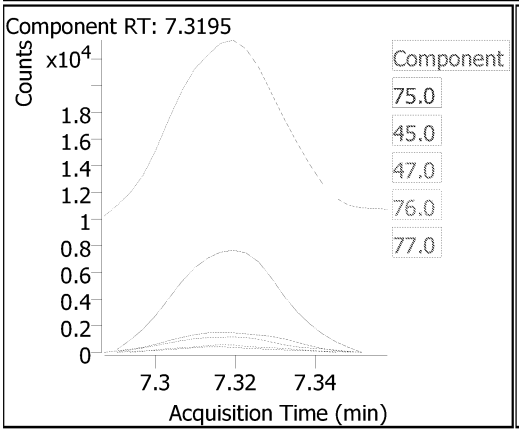


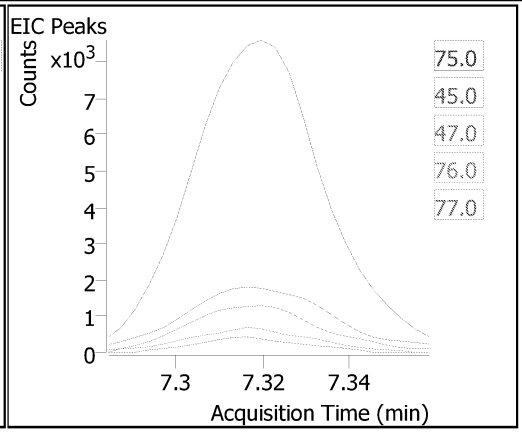
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.3195	Silanol, trimethyl-	26049.3	94.9	1066-40-6	C3H10OSi	0.1142

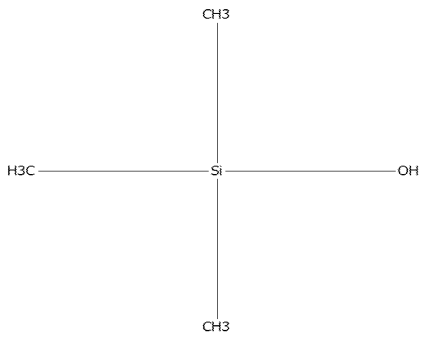




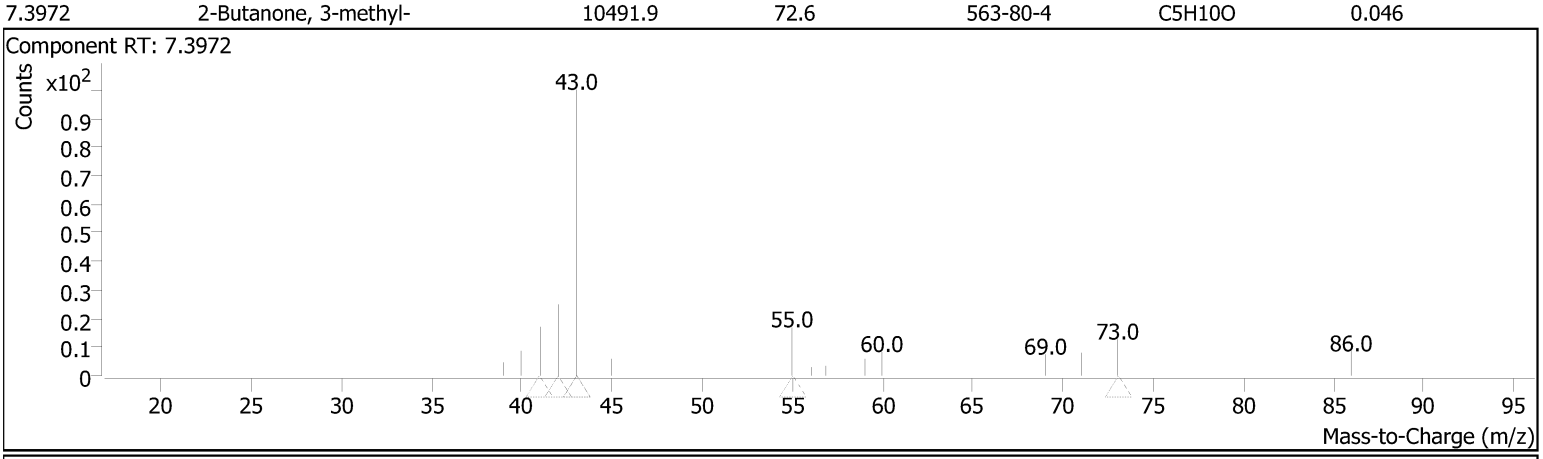


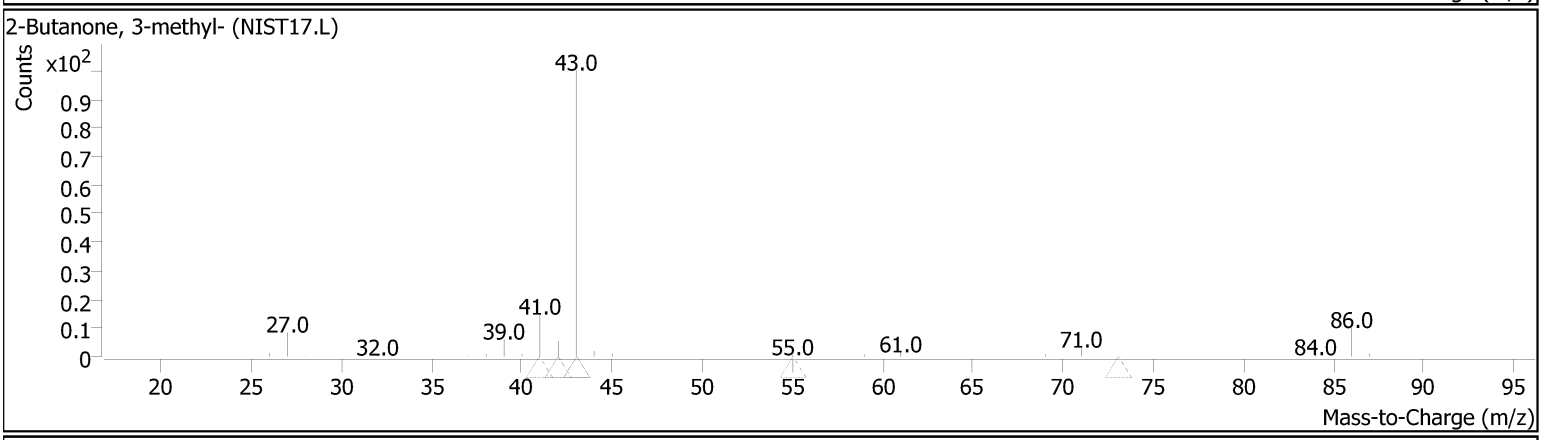


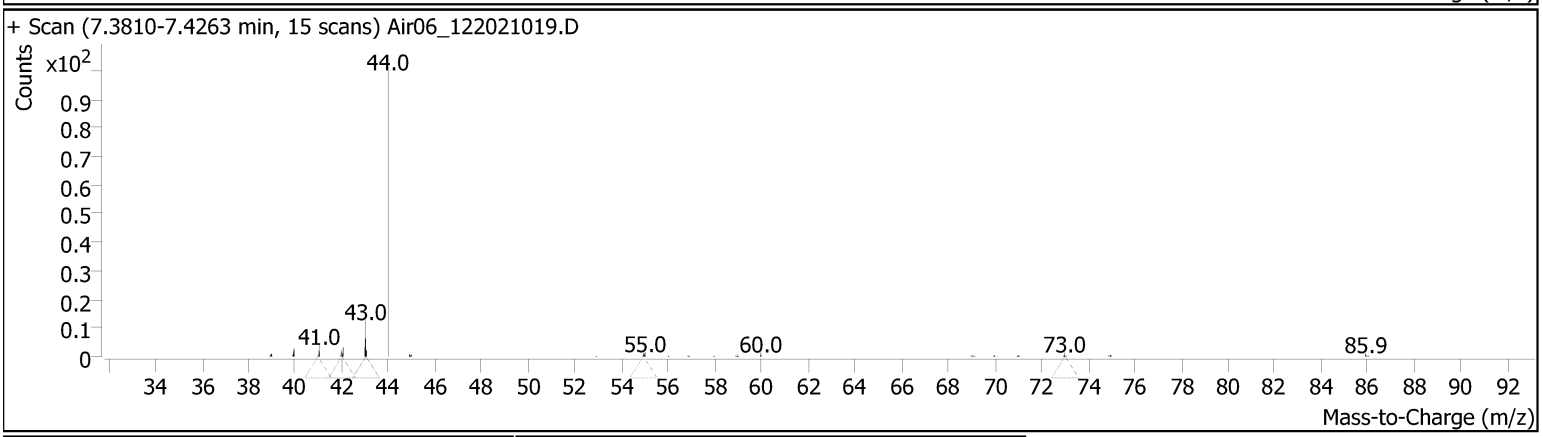


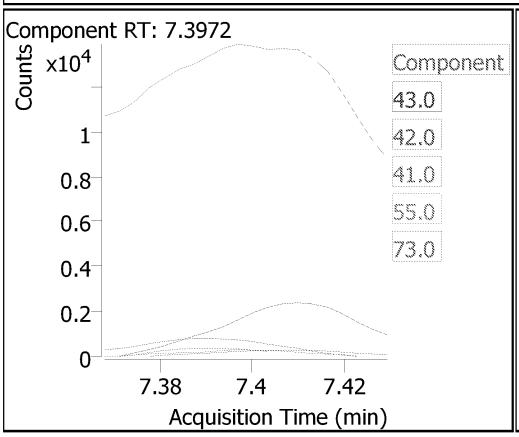


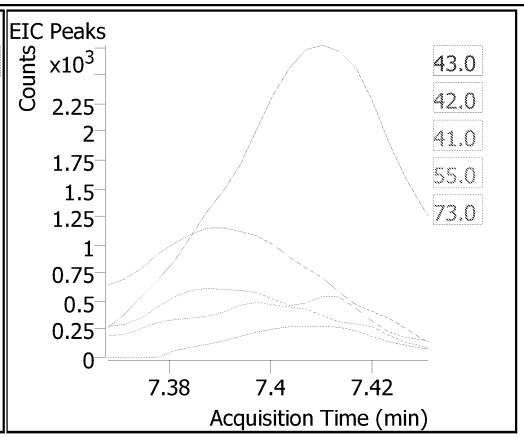
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.3972	2-Butanone, 3-methyl-	10491.9	72.6	563-80-4	C5H10O	0.046

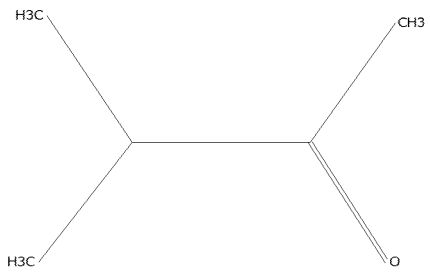




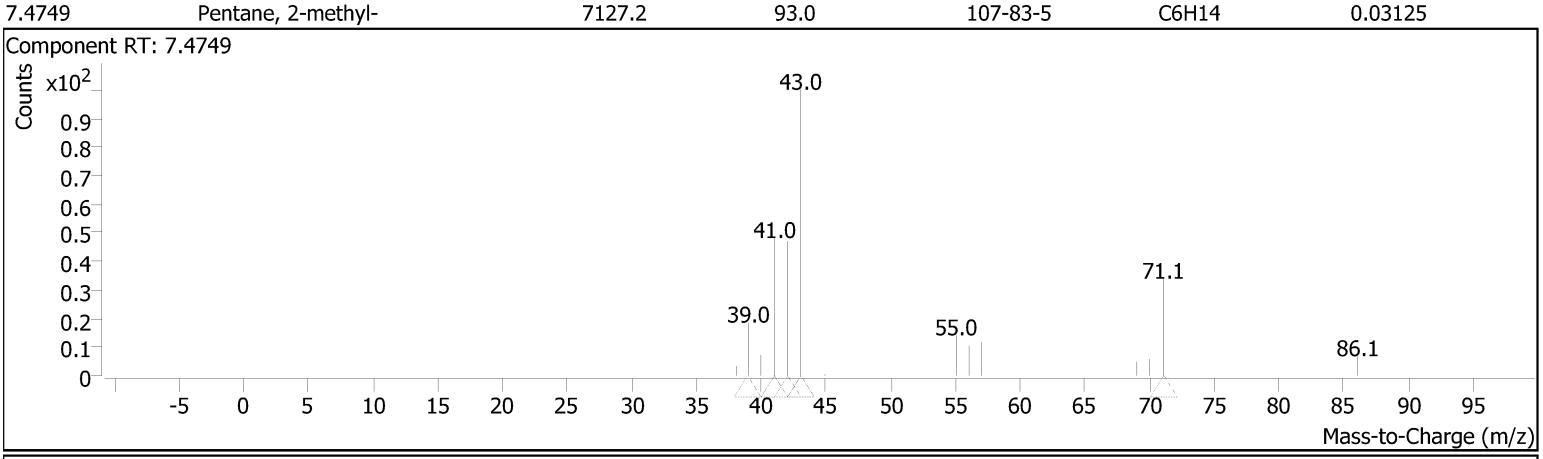


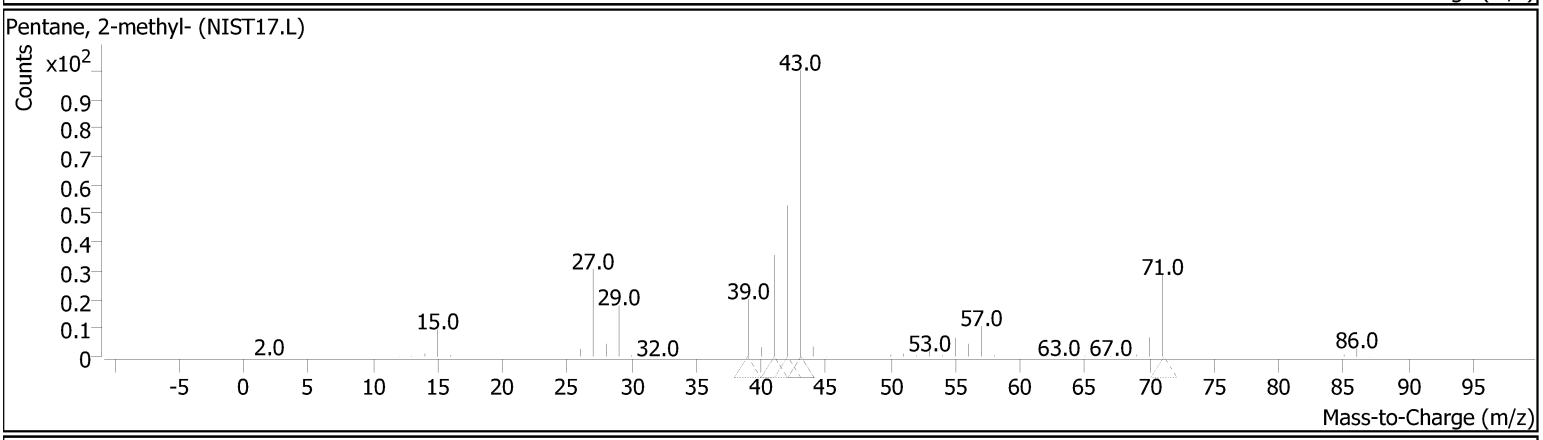


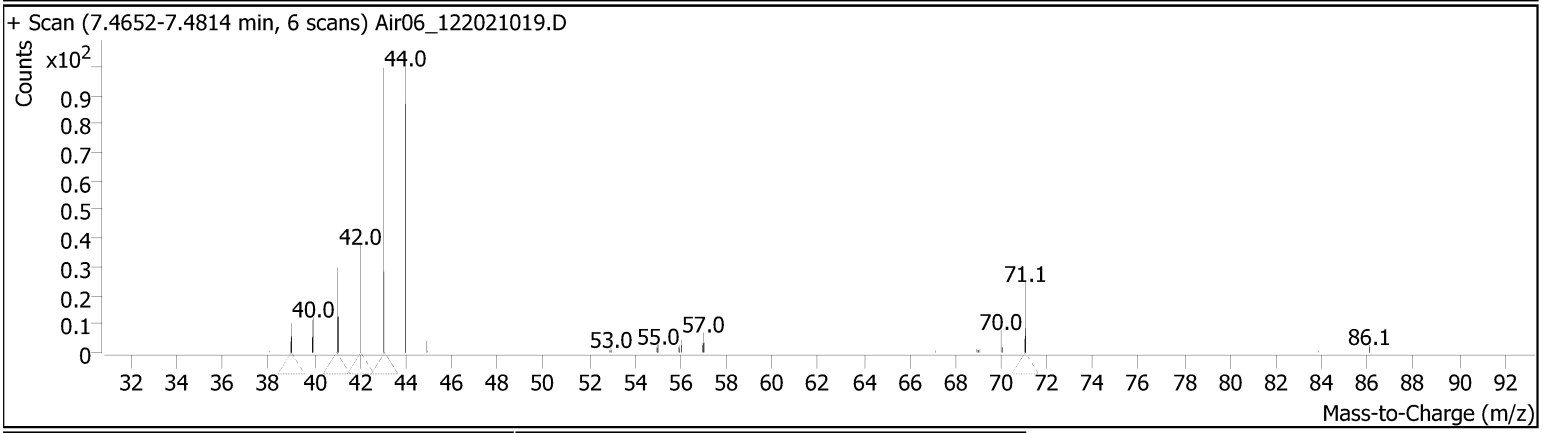


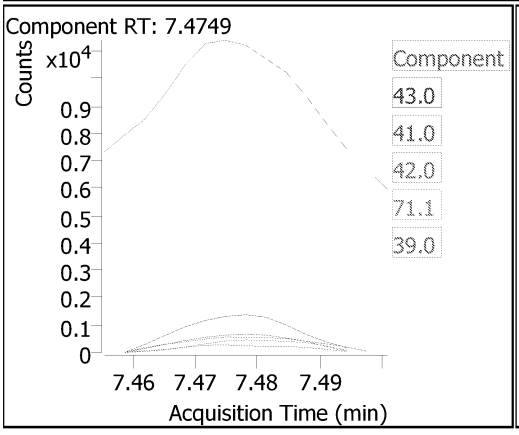


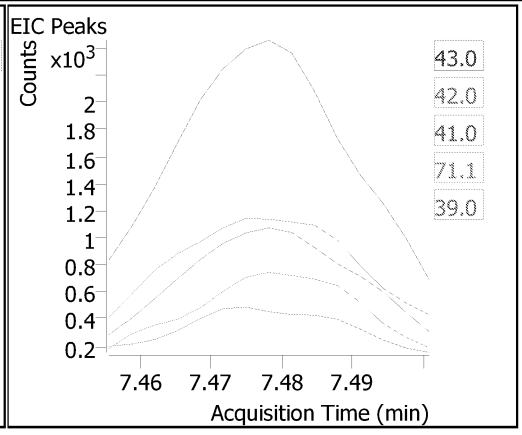
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.4749	Pentane, 2-methyl-	7127.2	93.0	107-83-5	C6H14	0.03125

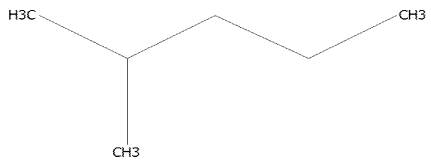




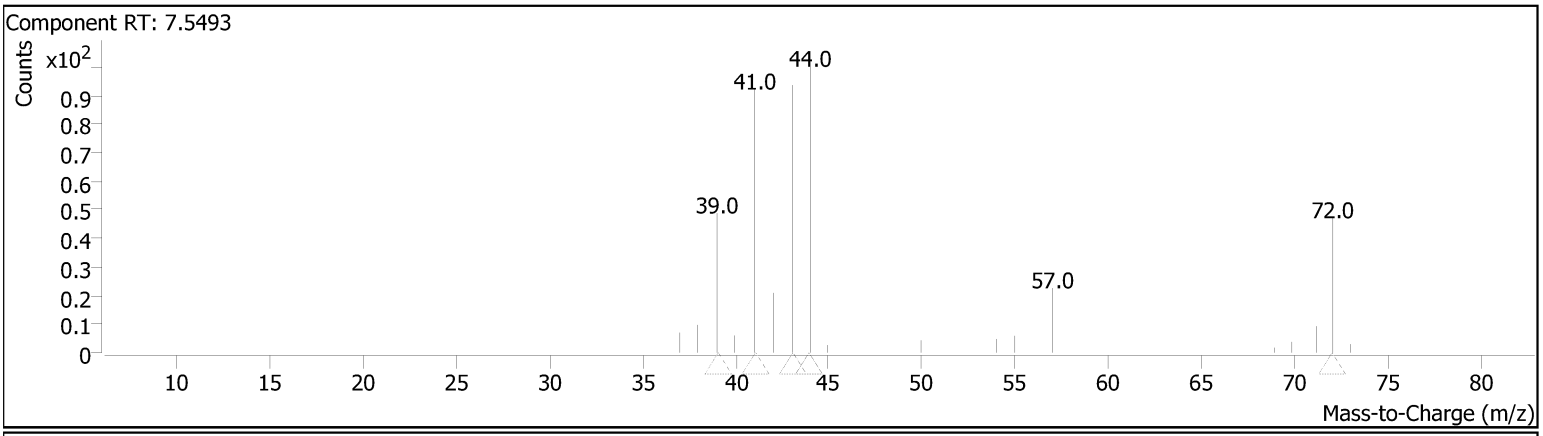


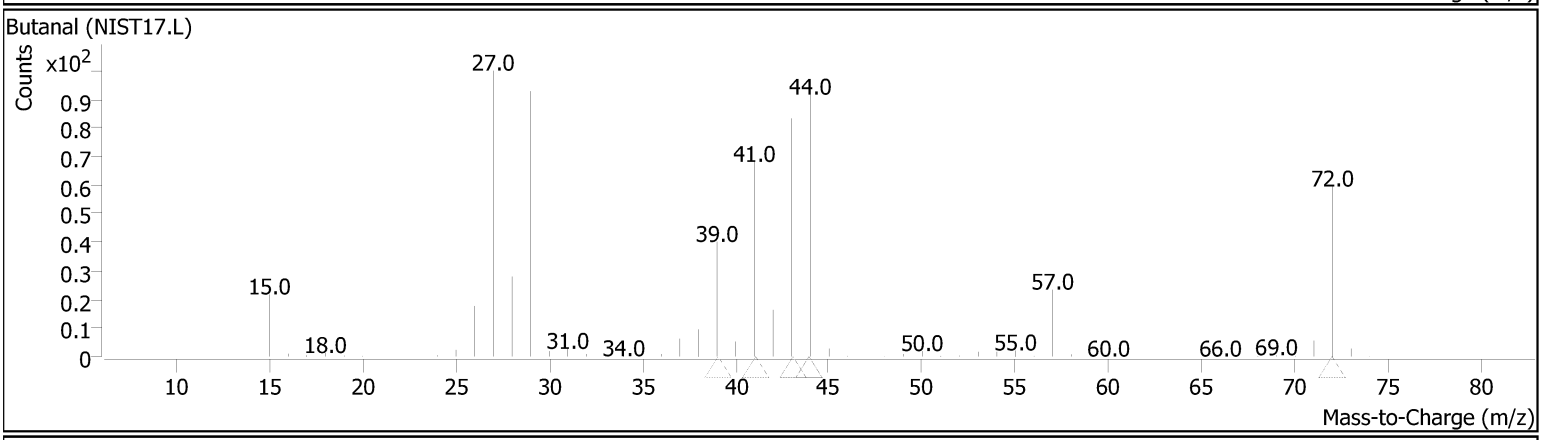


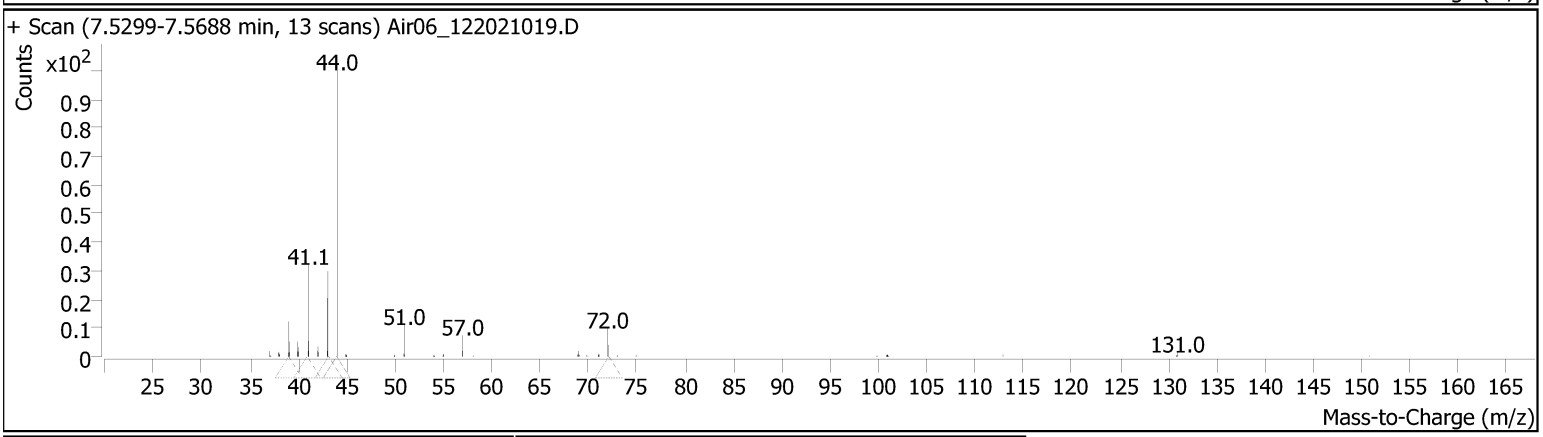


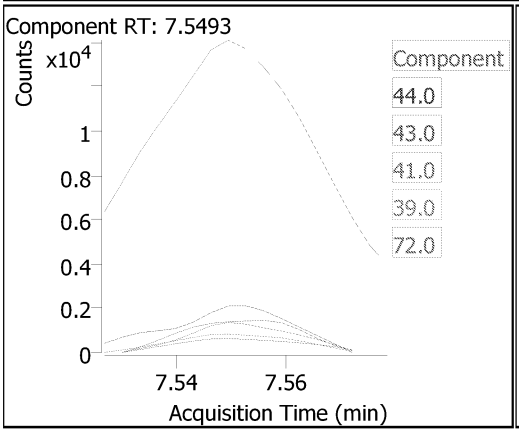


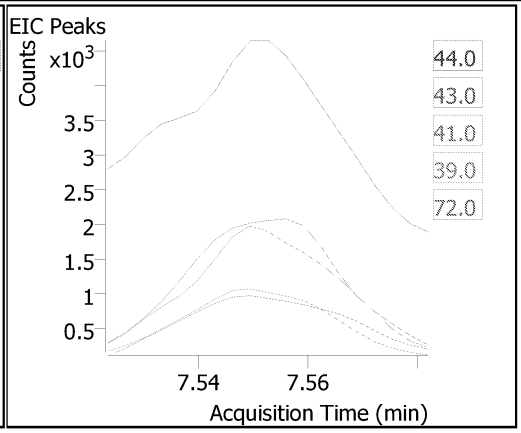
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.5493	Butanal	17907.9	95.9	123-72-8	C4H8O	0.07851

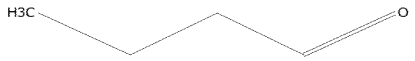




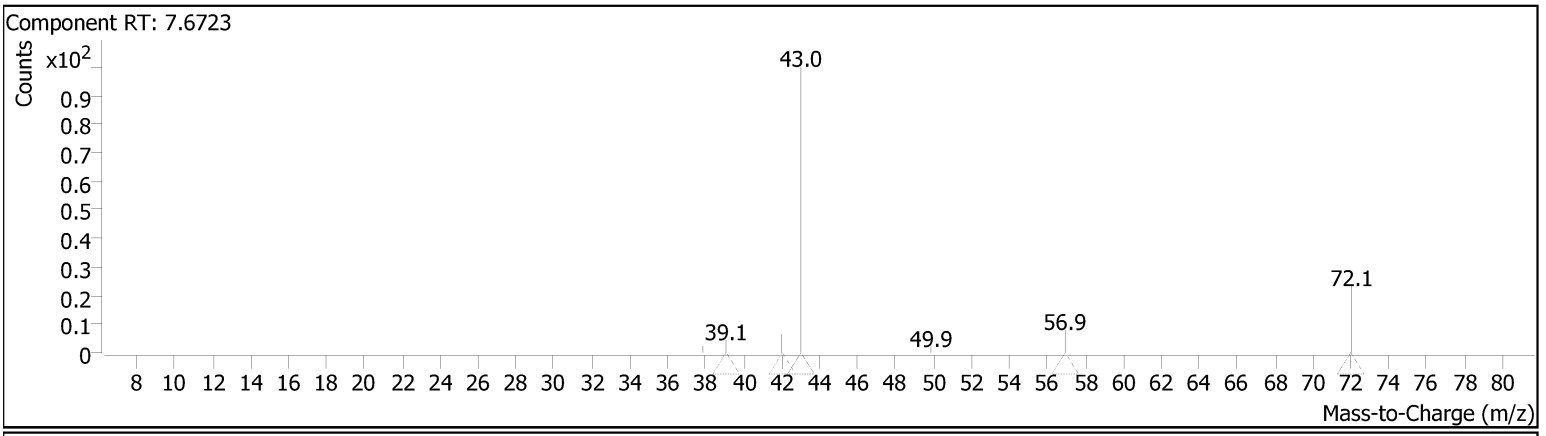


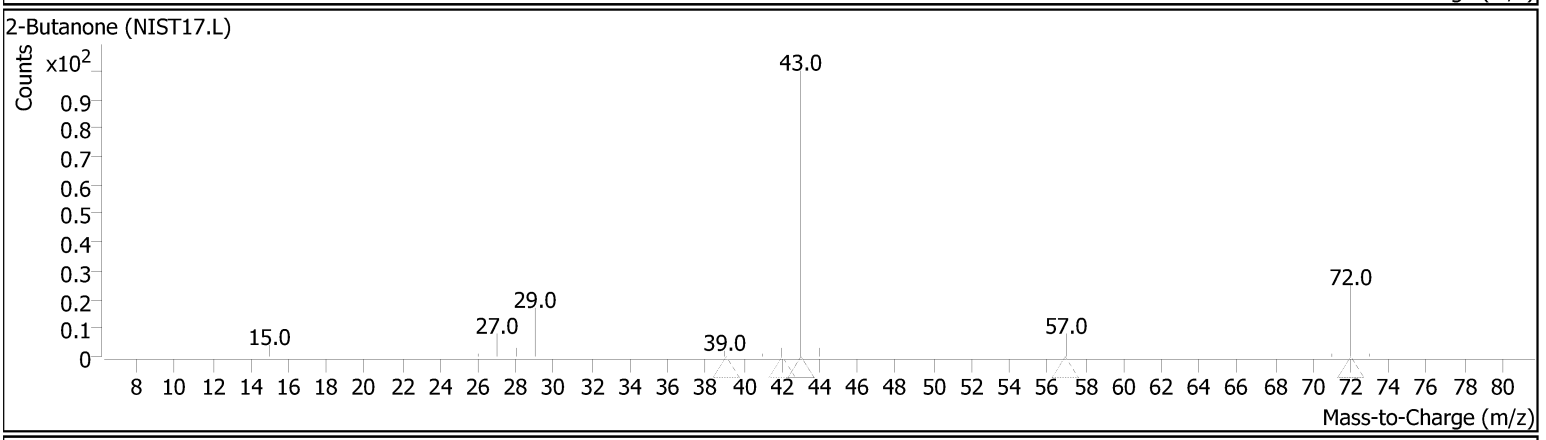


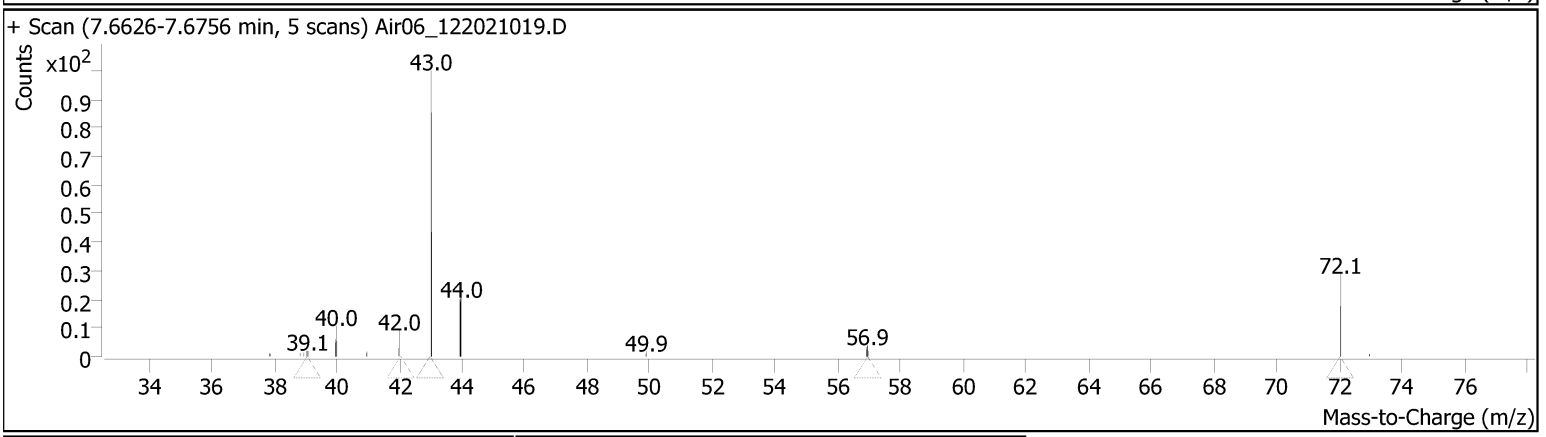


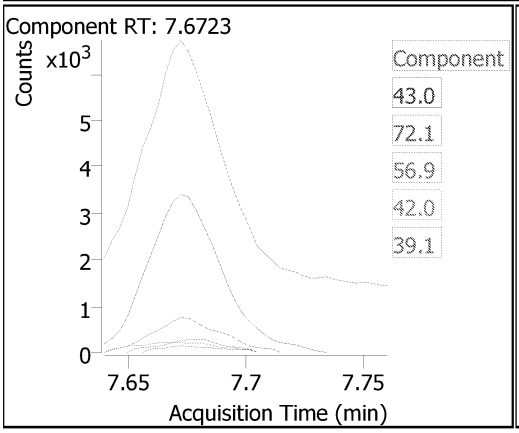


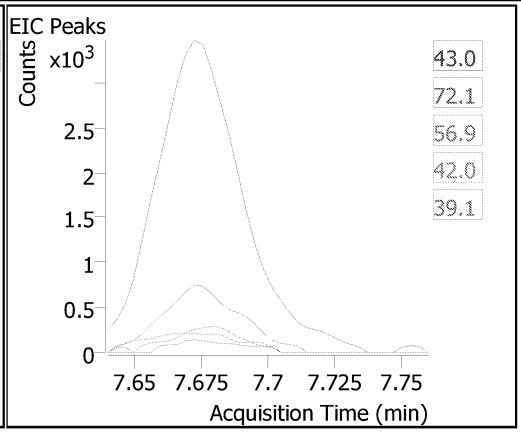
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.6723	2-Butanone	10601.2	90.2	78-93-3	C4H8O	0.04648

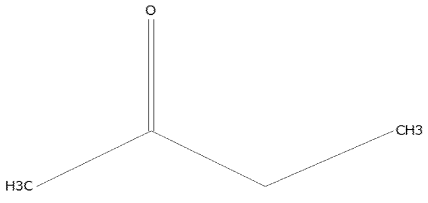




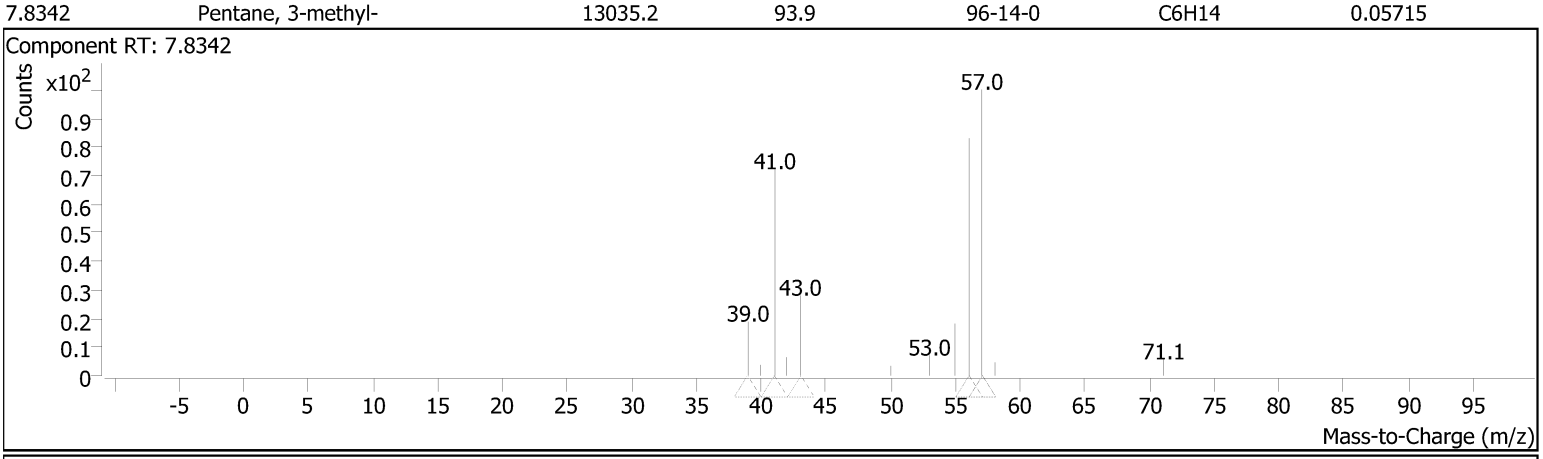


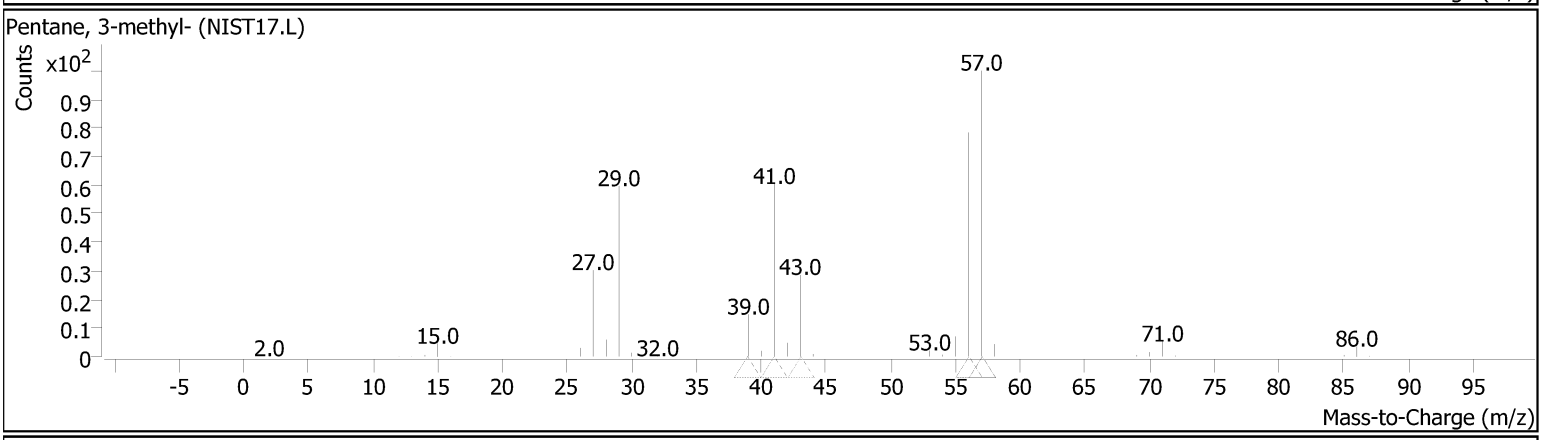


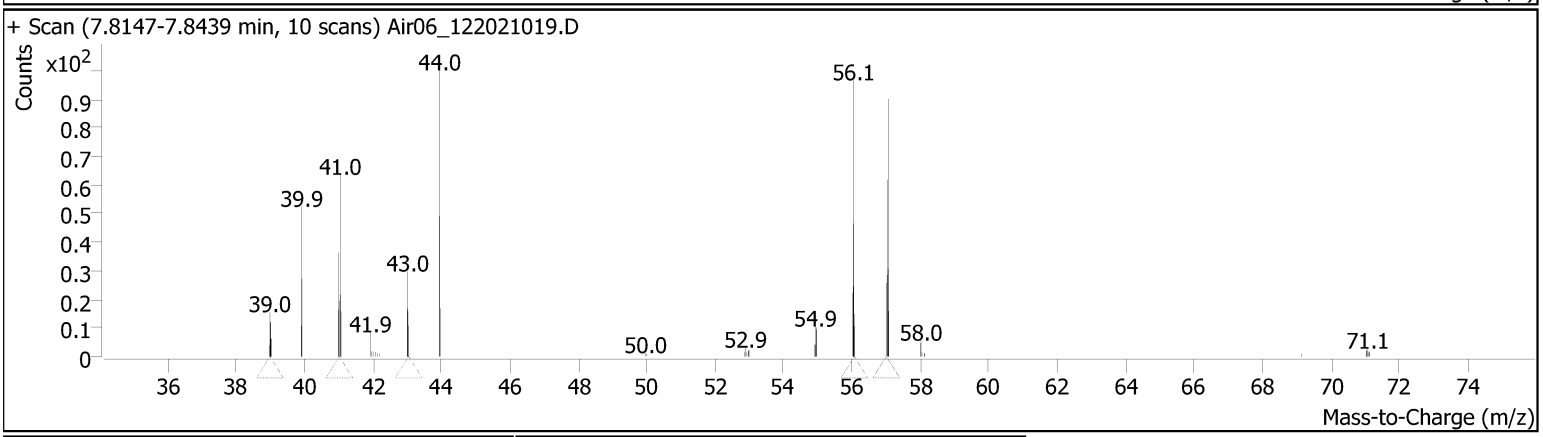


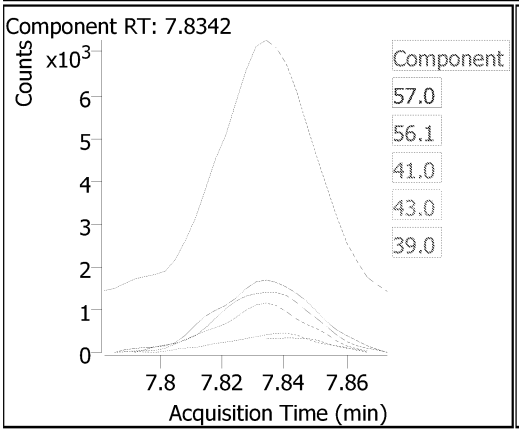


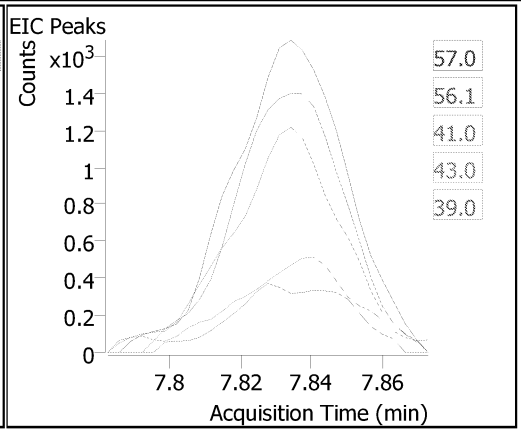
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.8342	Pentane, 3-methyl-	13035.2	93.9	96-14-0	C6H14	0.05715

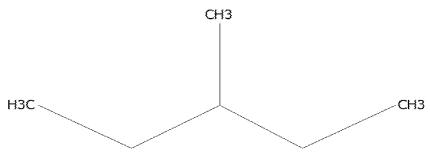




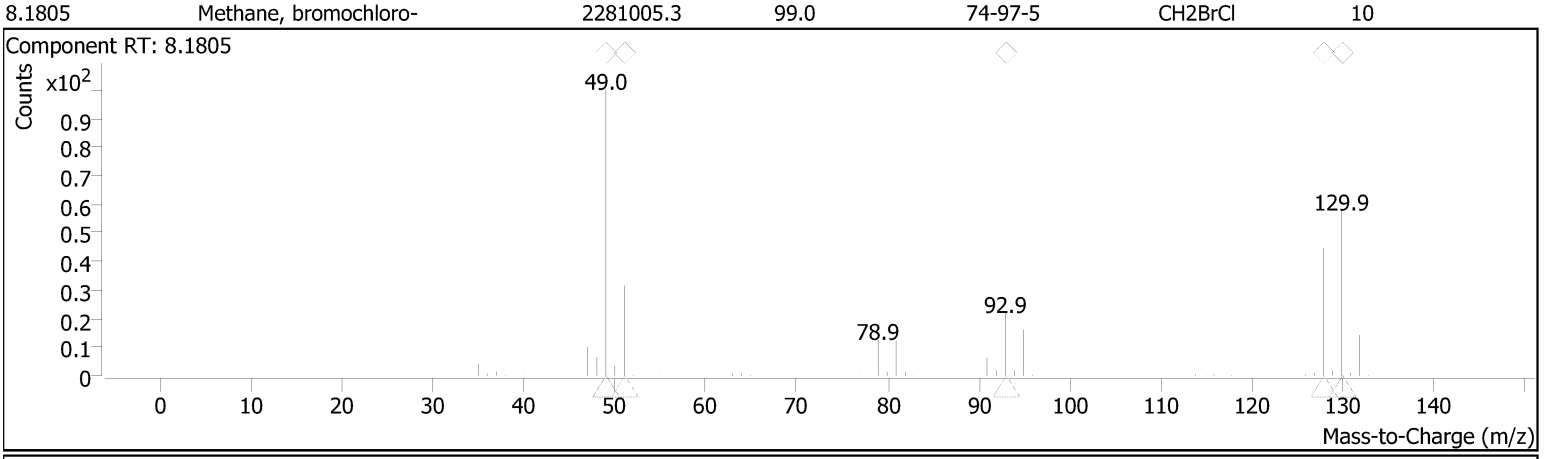


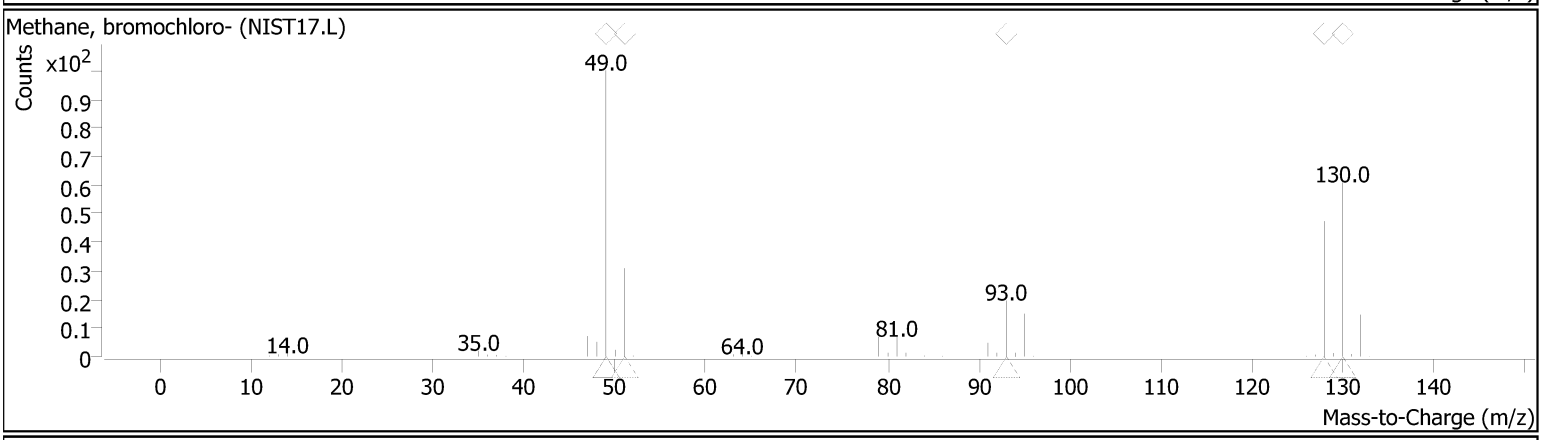


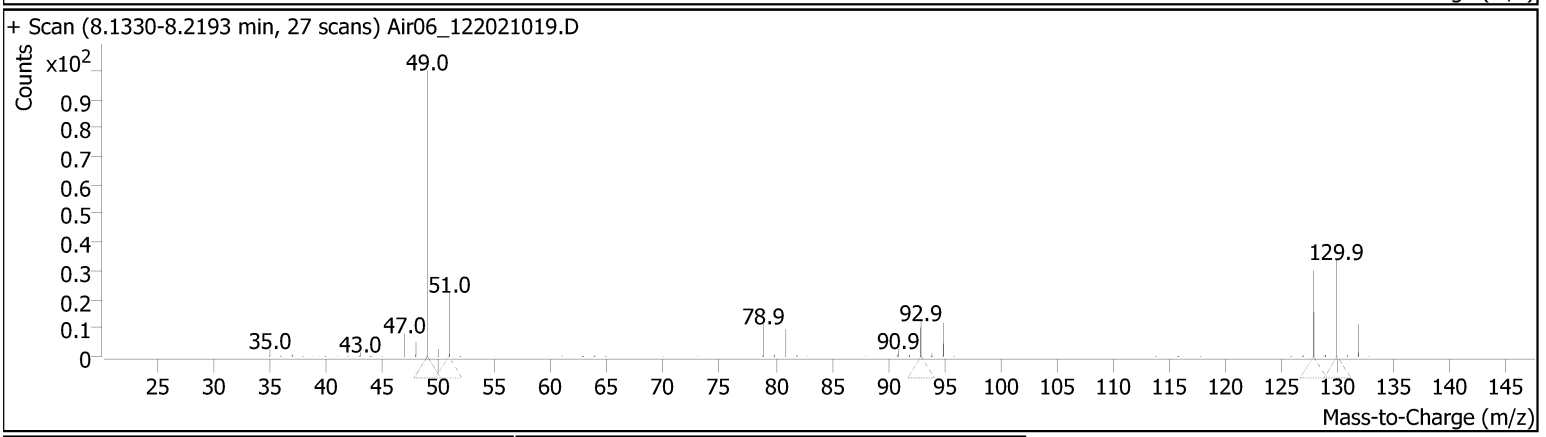


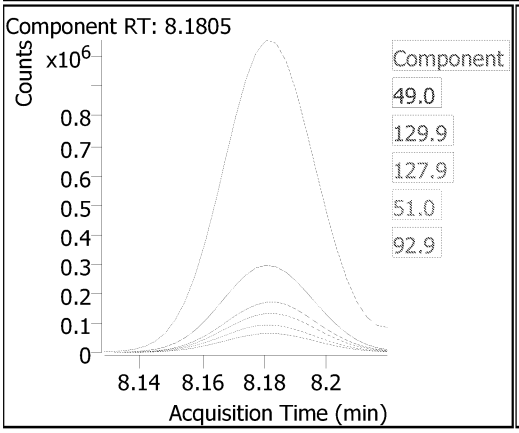


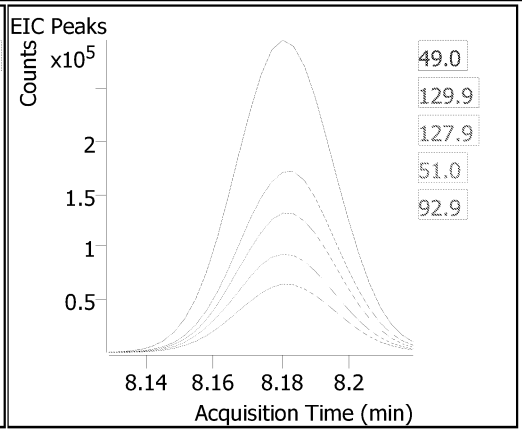
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.1805	Methane, bromochloro-	2281005.3	99.0	74-97-5	CH2BrCl	10

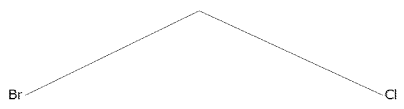




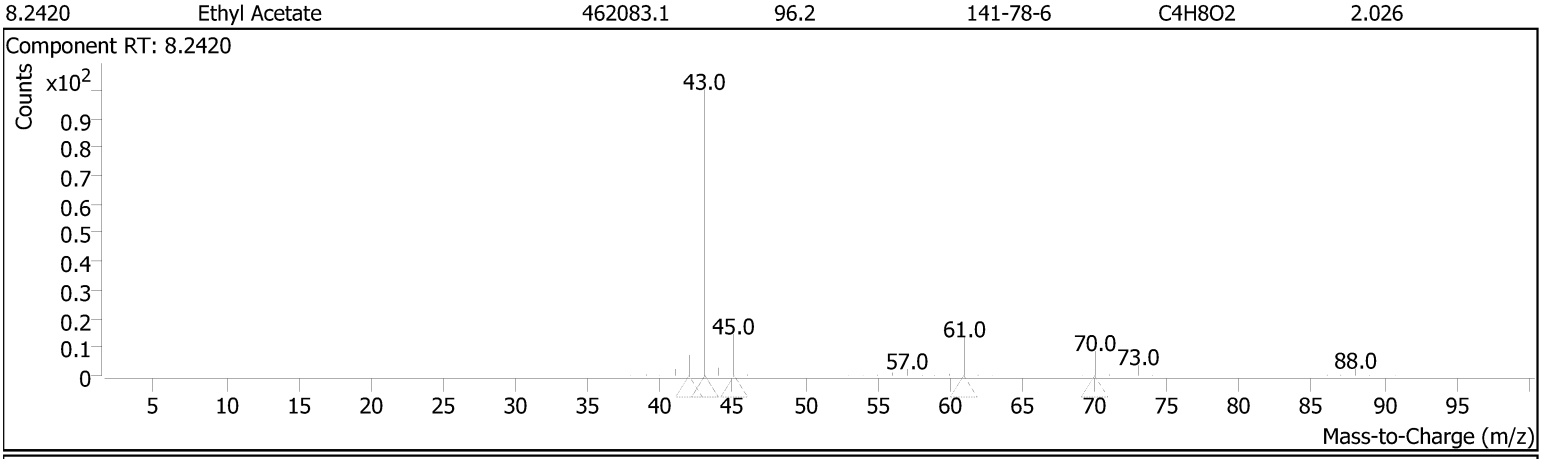


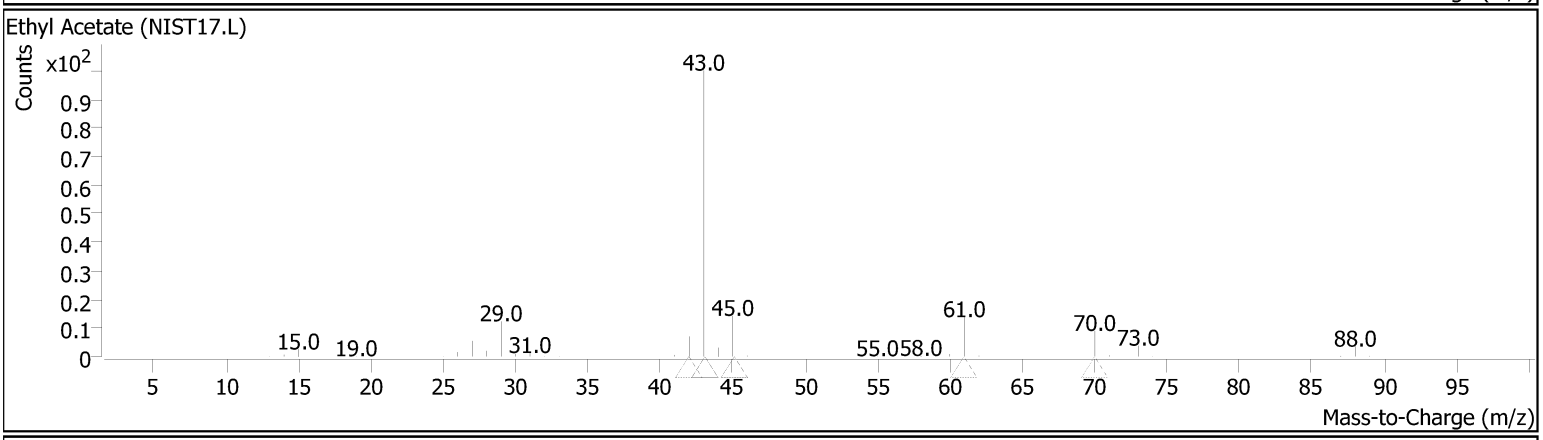


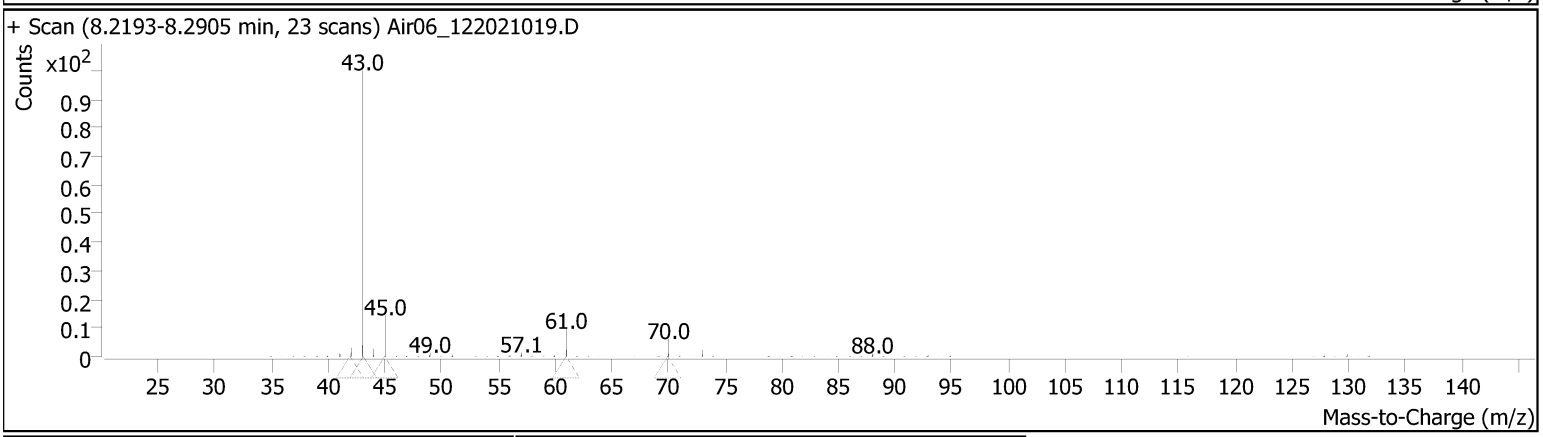


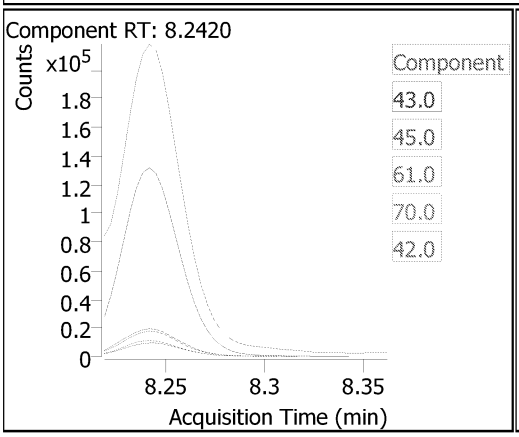


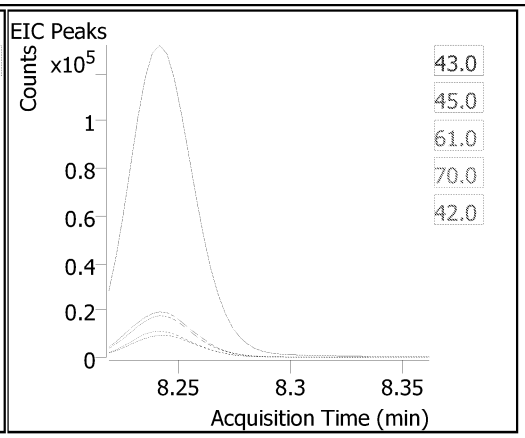
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.2420	Ethyl Acetate	462083.1	96.2	141-78-6	C4H8O2	2.026

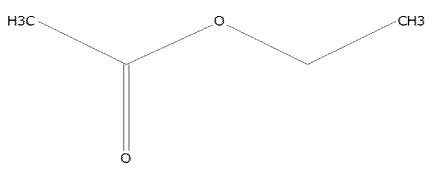




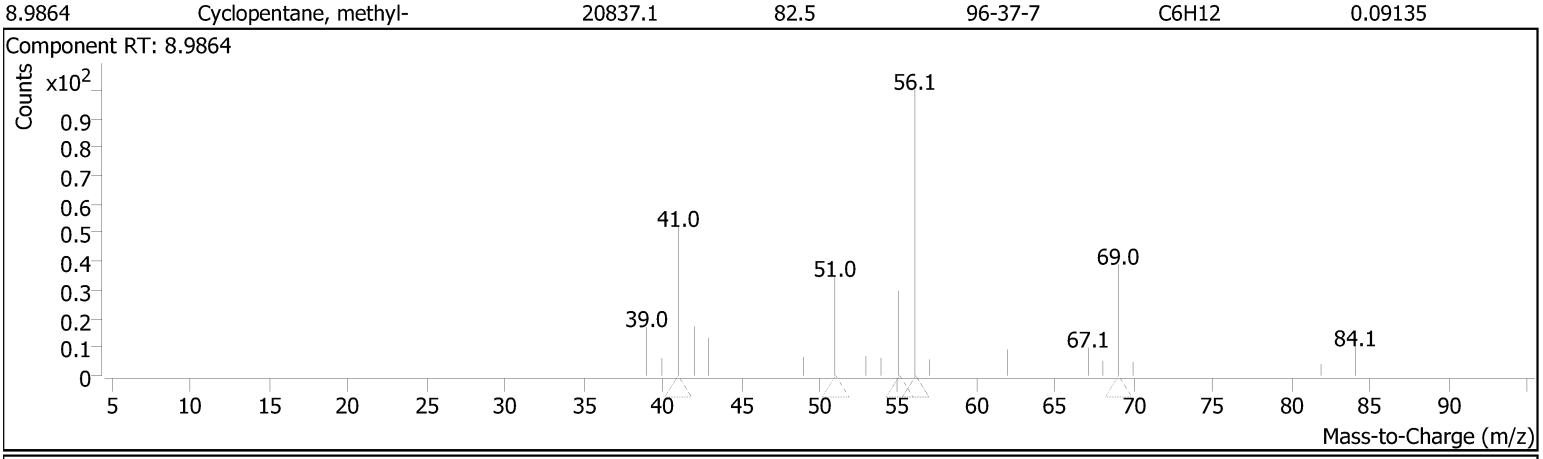


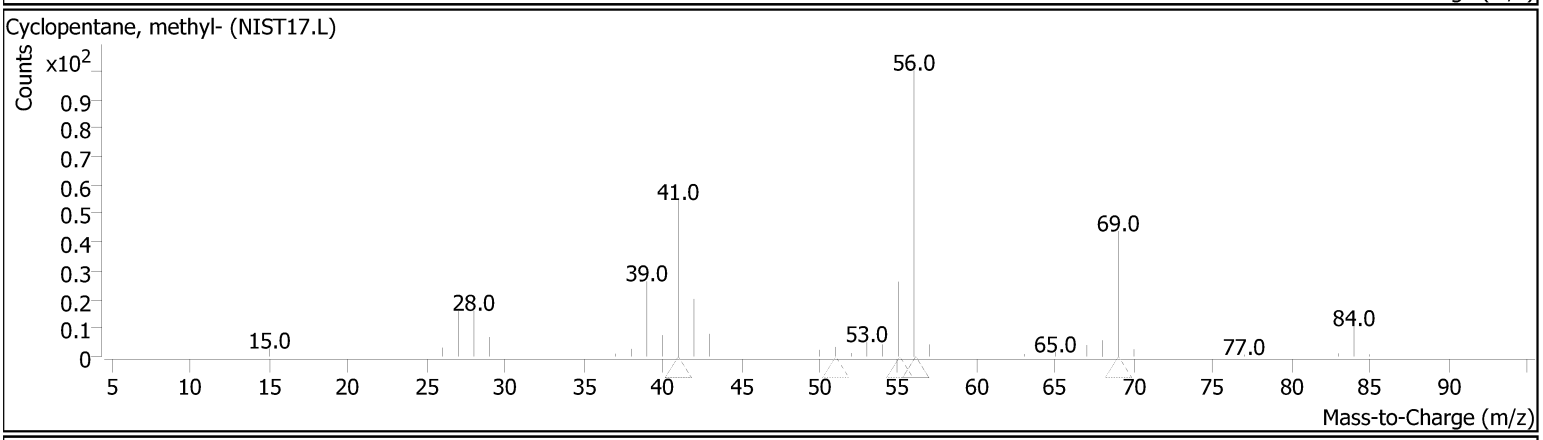


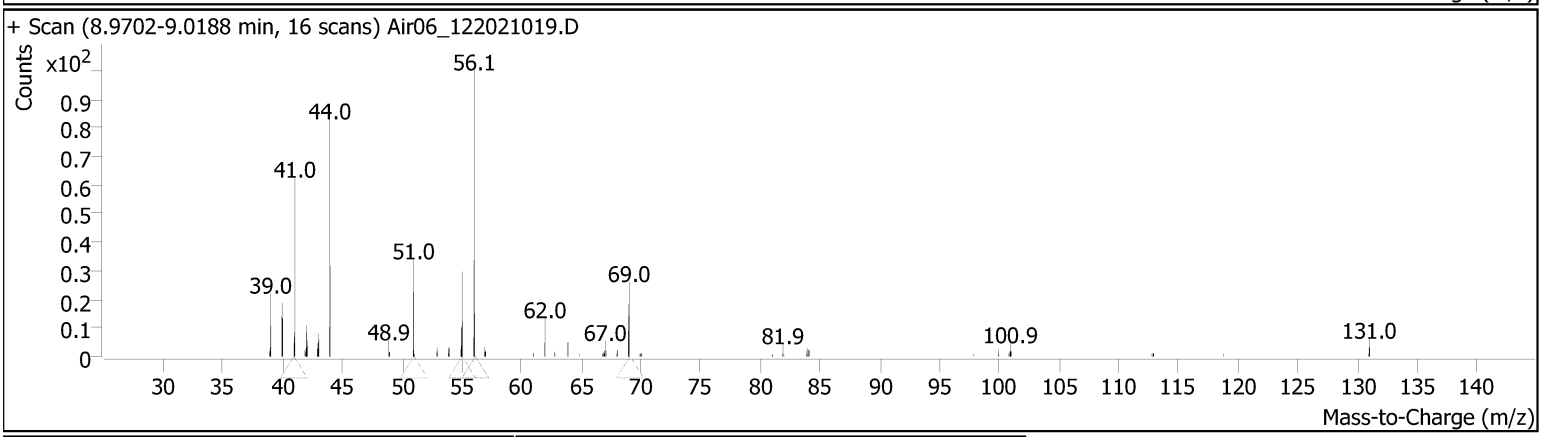


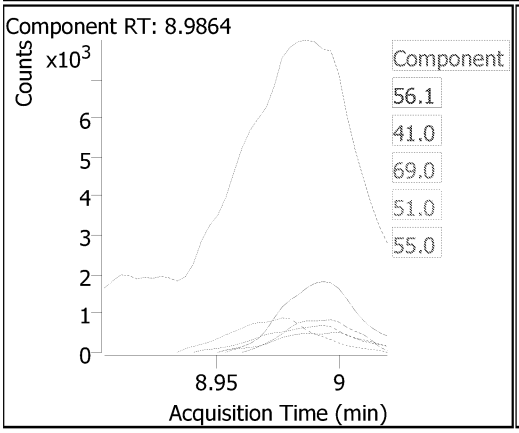


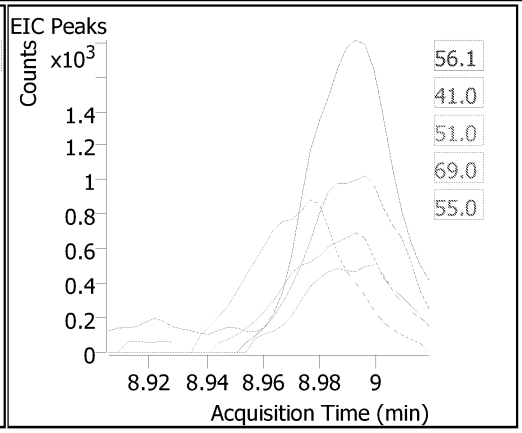
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.9864	Cyclopentane, methyl-	20837.1	82.5	96-37-7	C6H12	0.09135

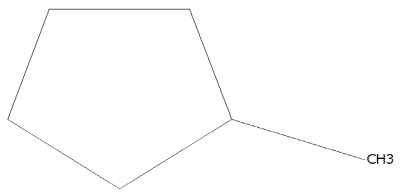




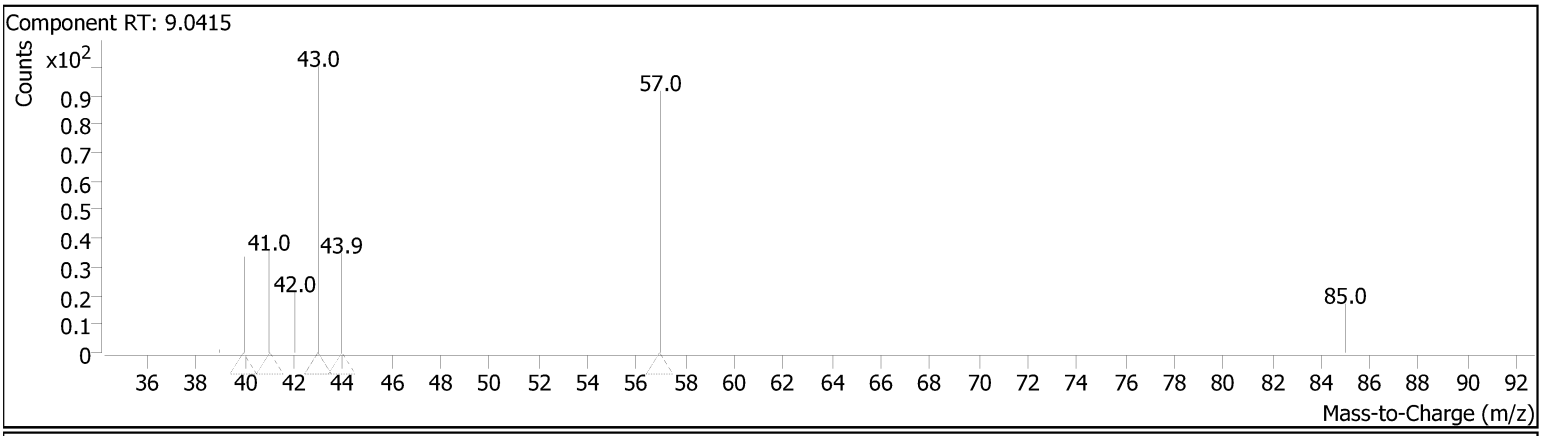


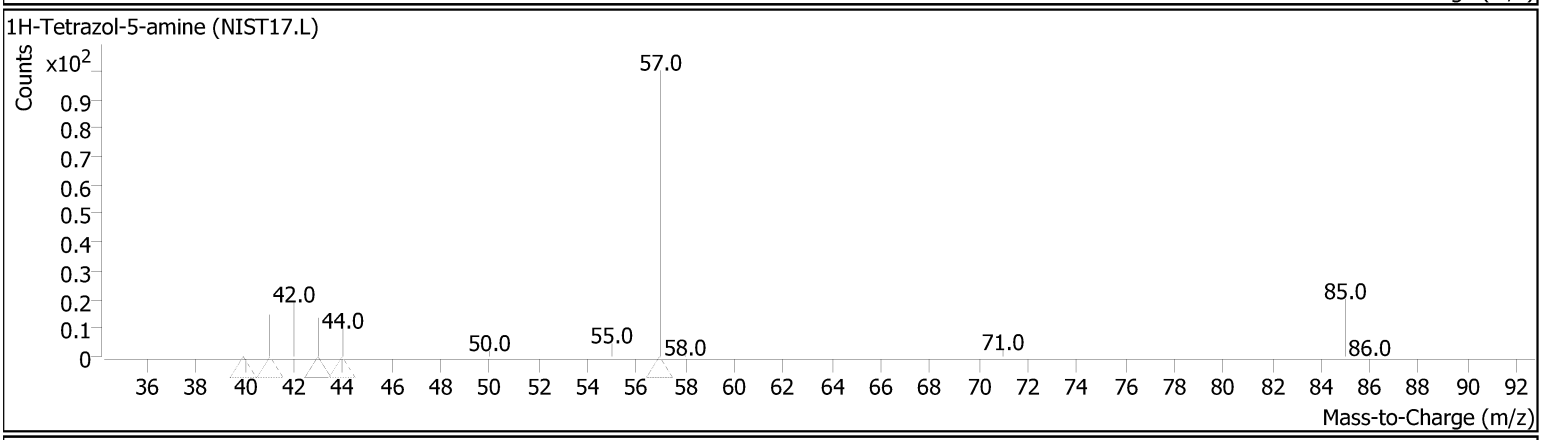


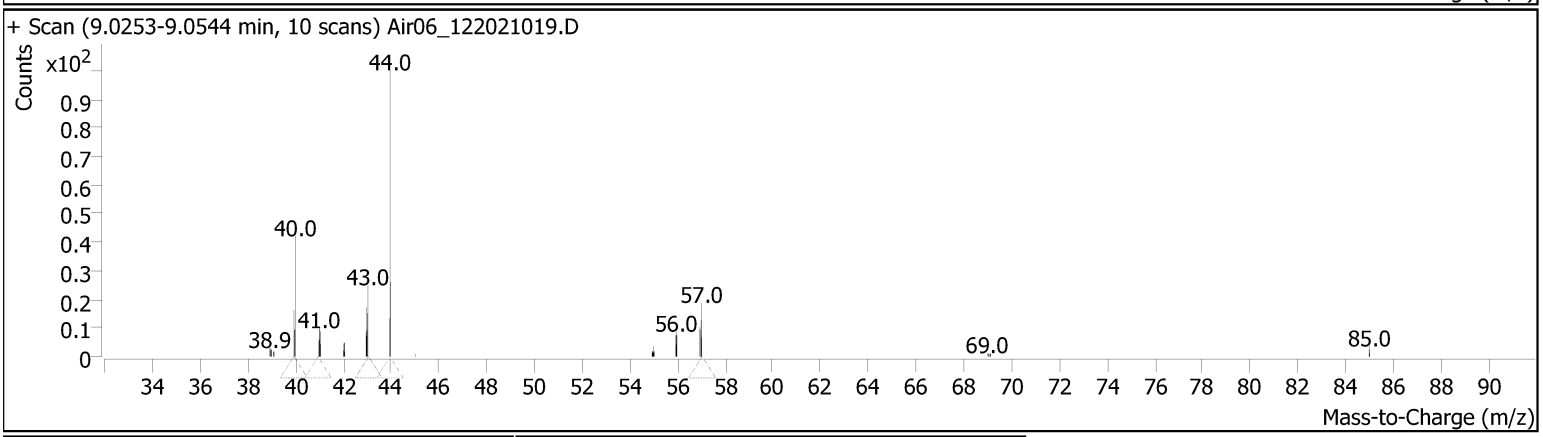


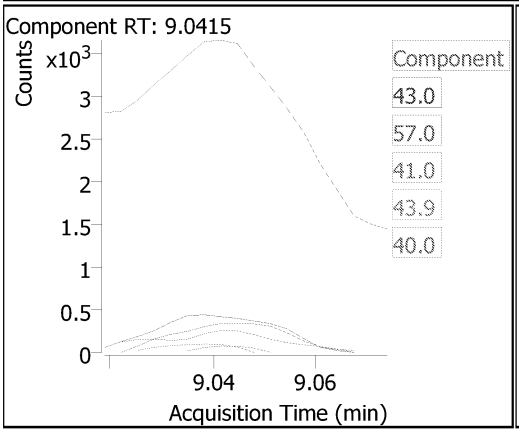


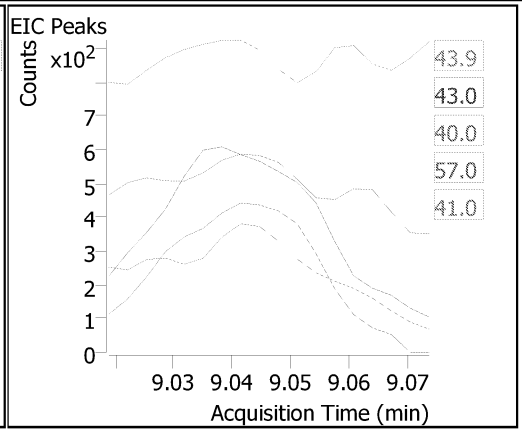
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.0415	1H-Tetrazol-5-amine	4592.4	81.0	4418-61-5	CH3N5	0.02013

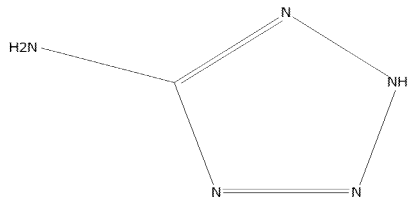




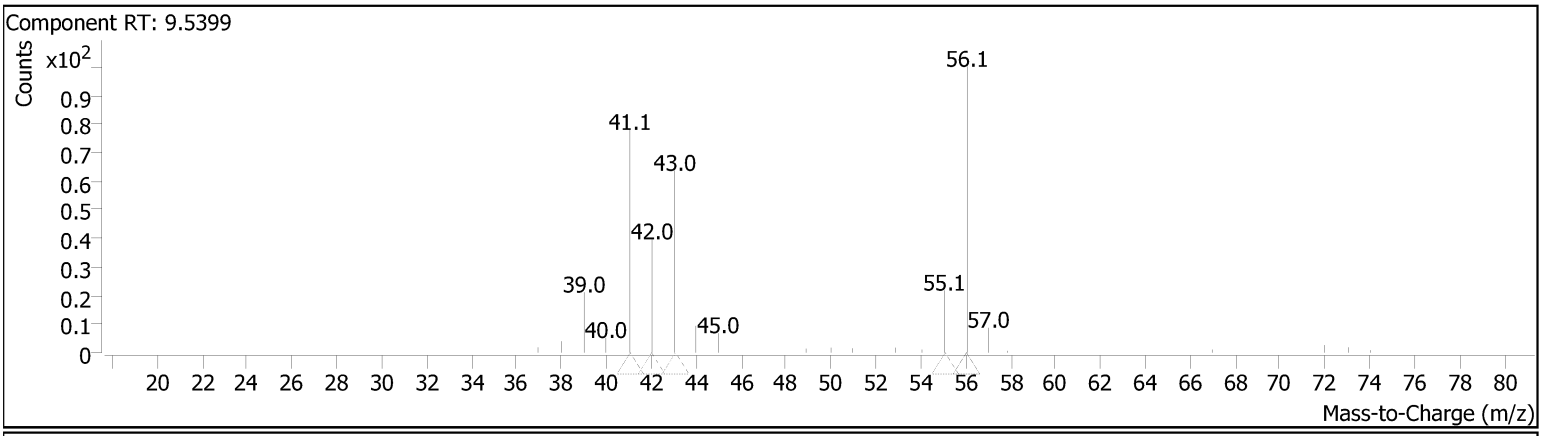


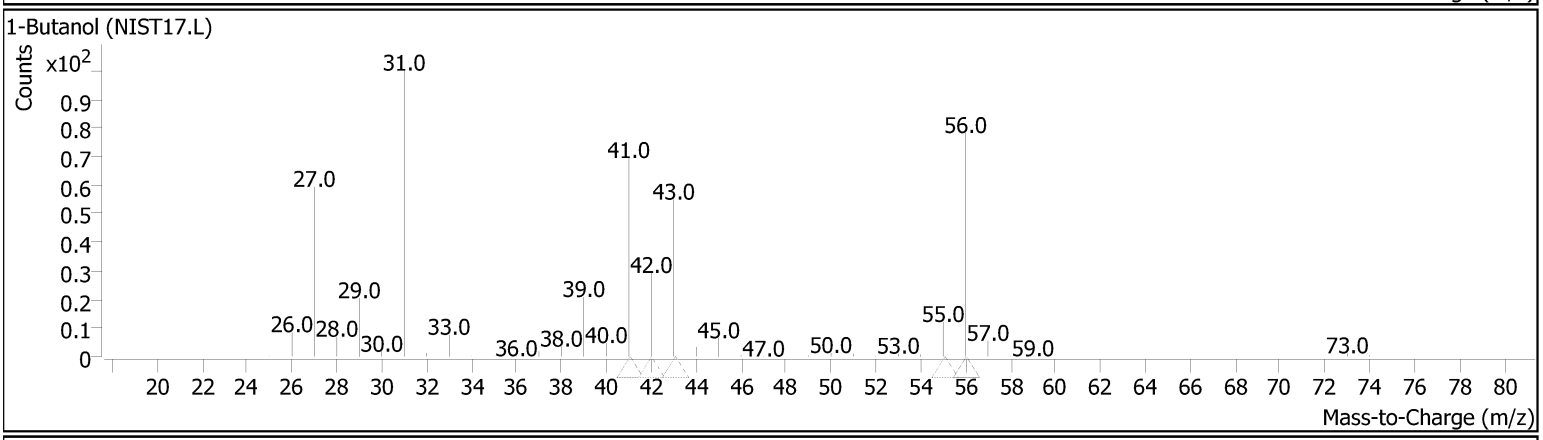


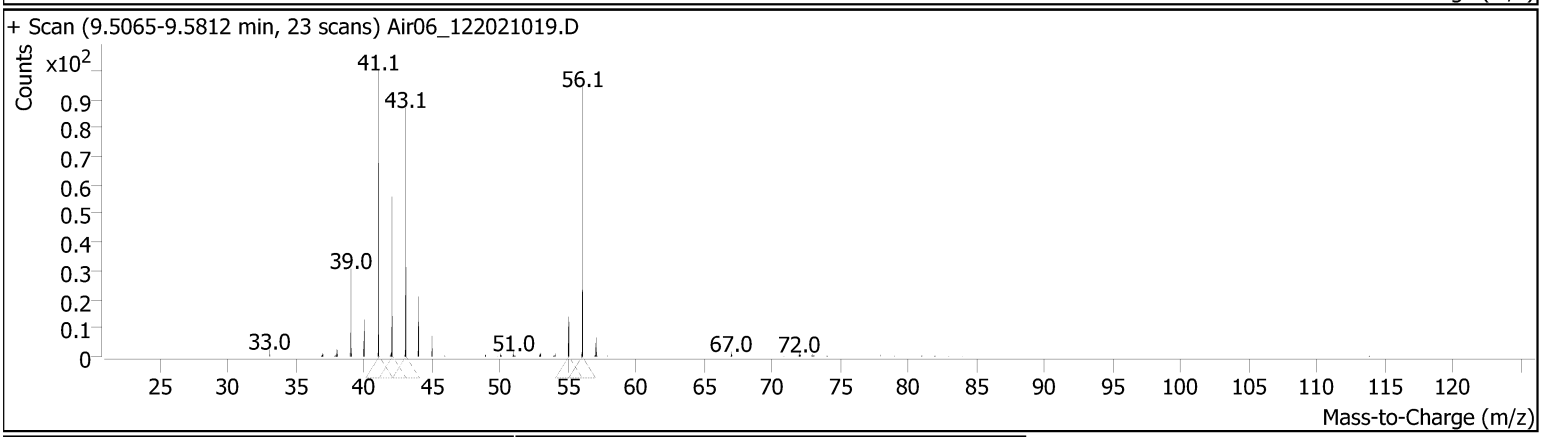


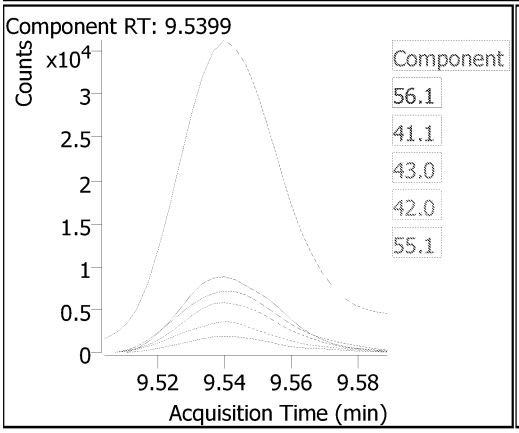


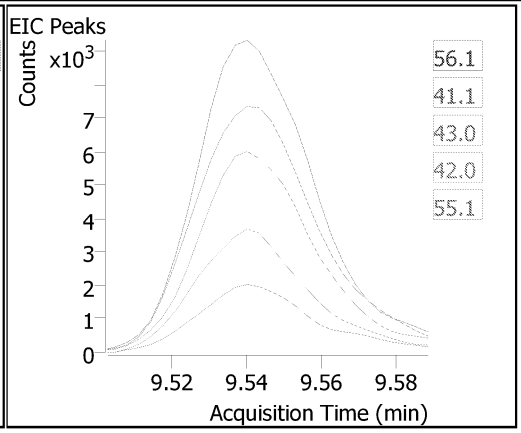
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.5399	1-Butanol	76892.4	95.3	71-36-3	C4H10O	0.2232

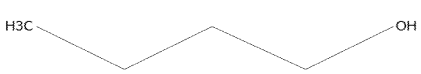




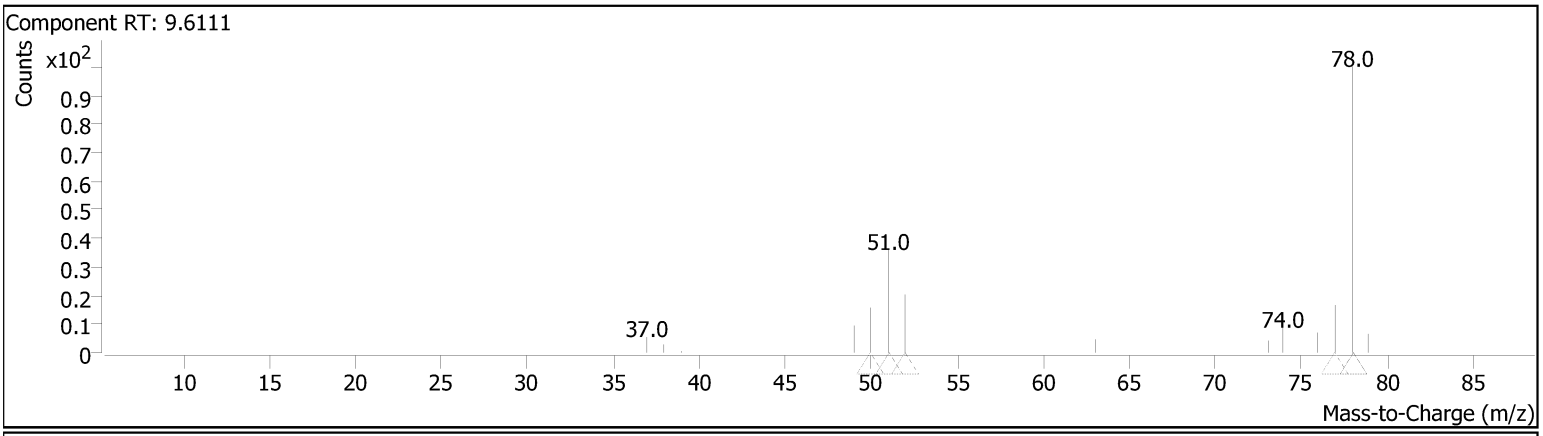


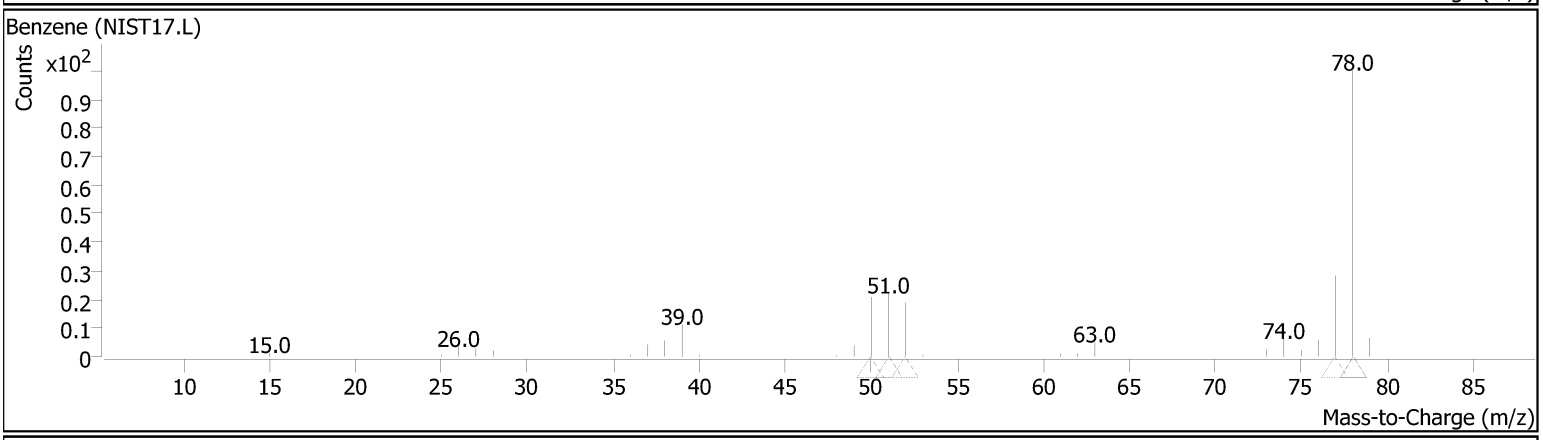


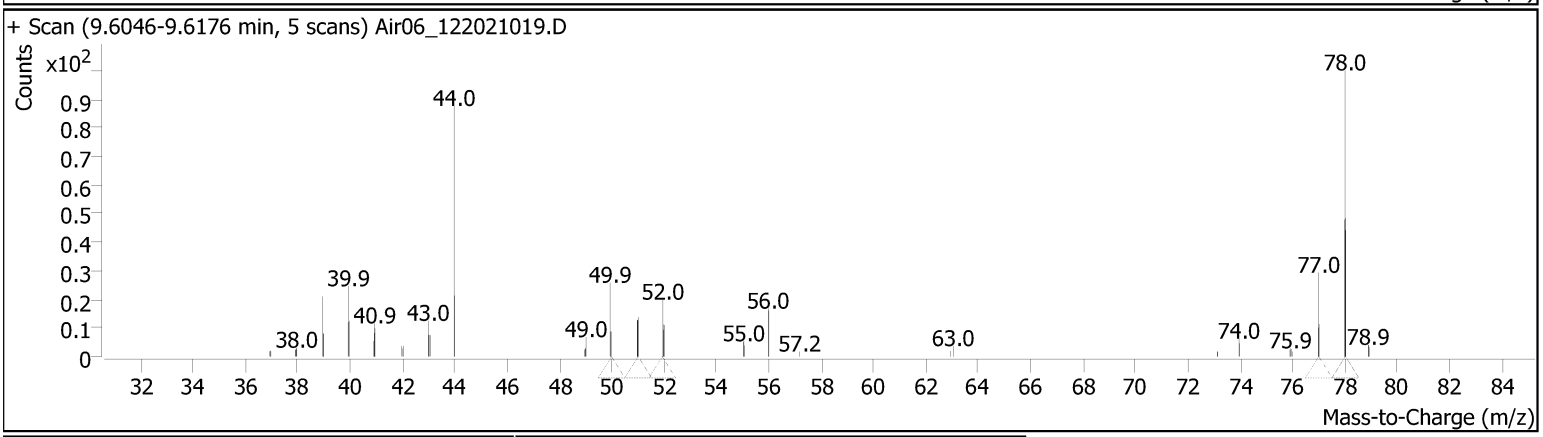


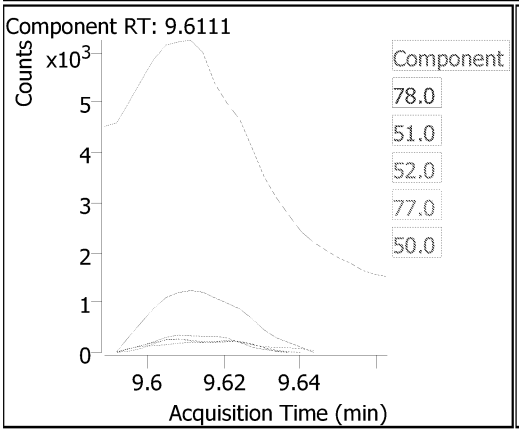


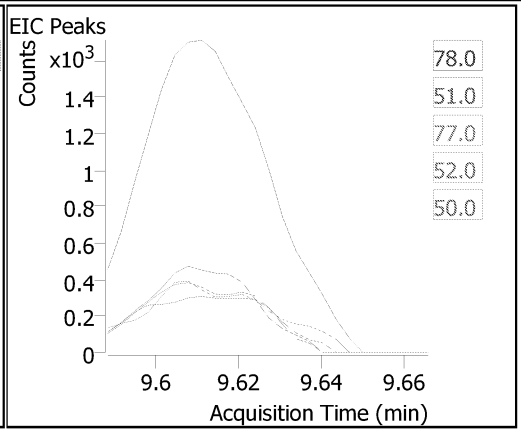
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.6111	Benzene	11022.4	93.5	71-43-2	C6H6	0.032

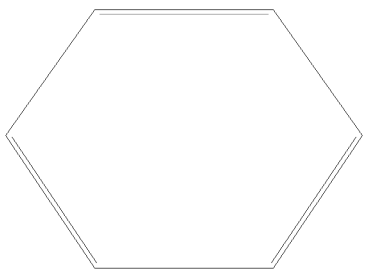




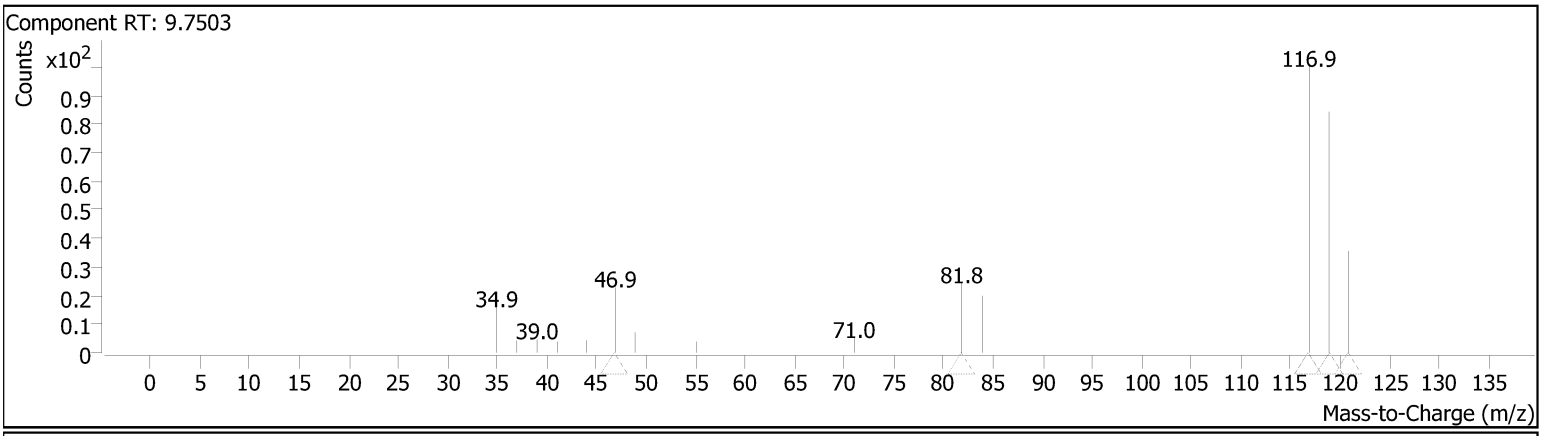


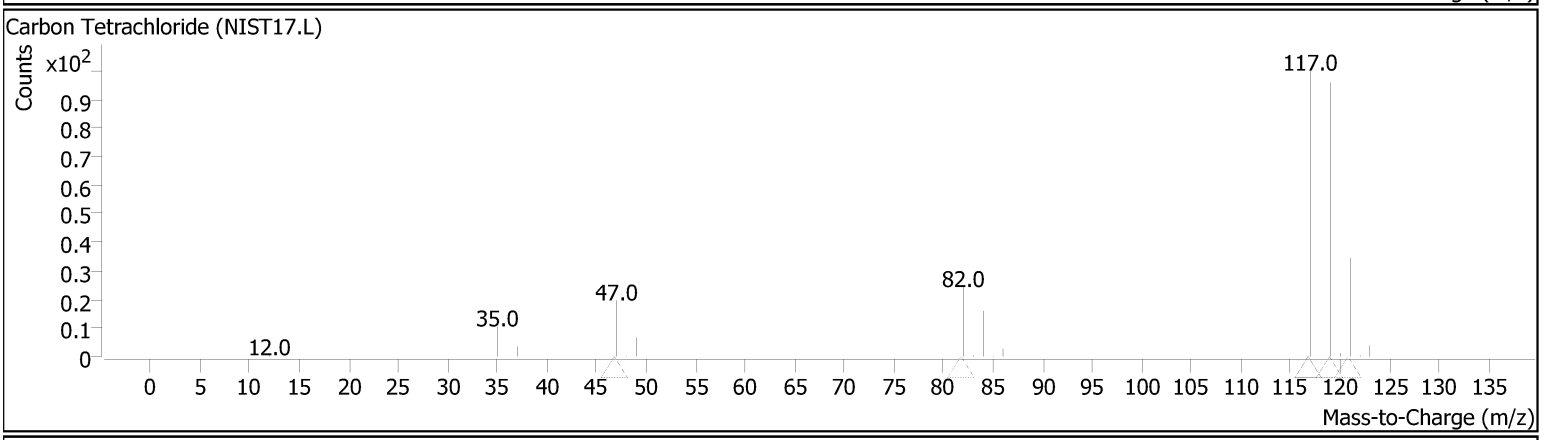


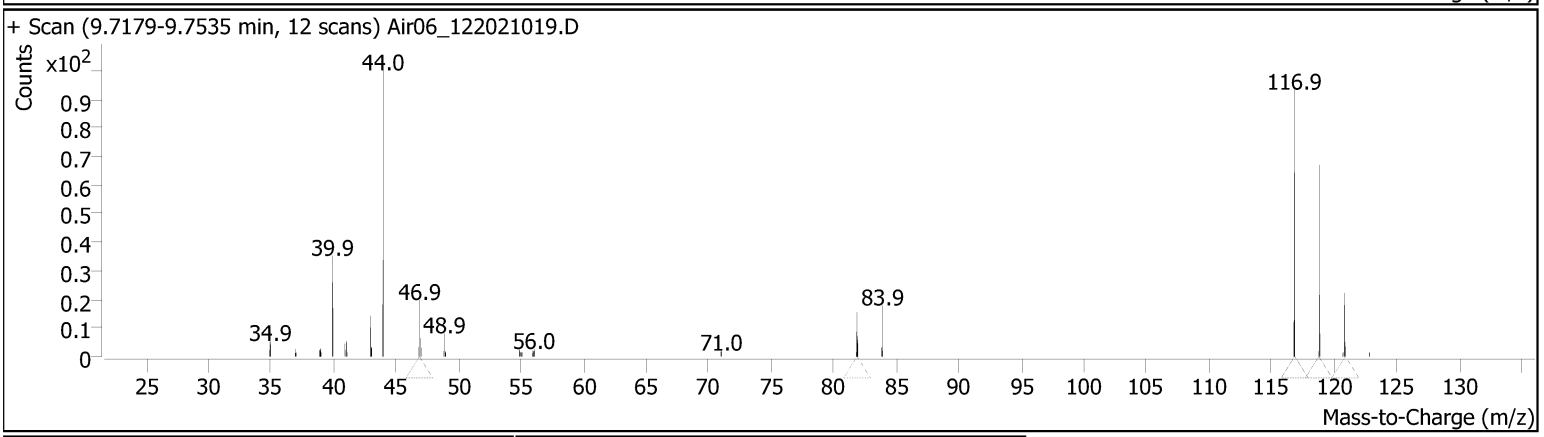


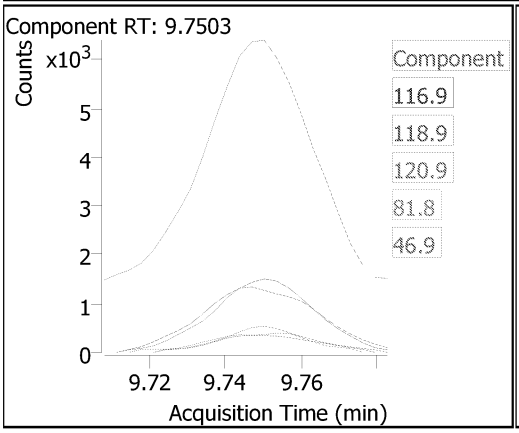


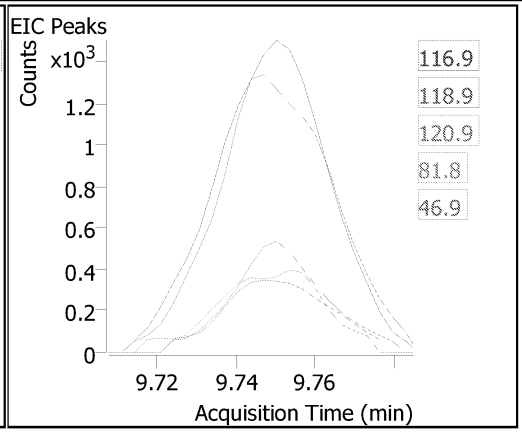
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.7503	Carbon Tetrachloride	9701.1	93.5	56-23-5	CCl4	0.02816

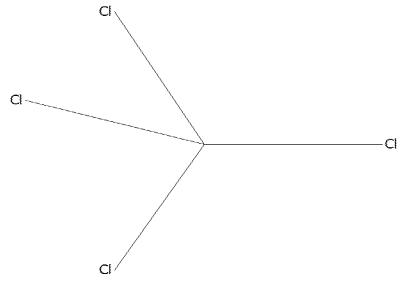




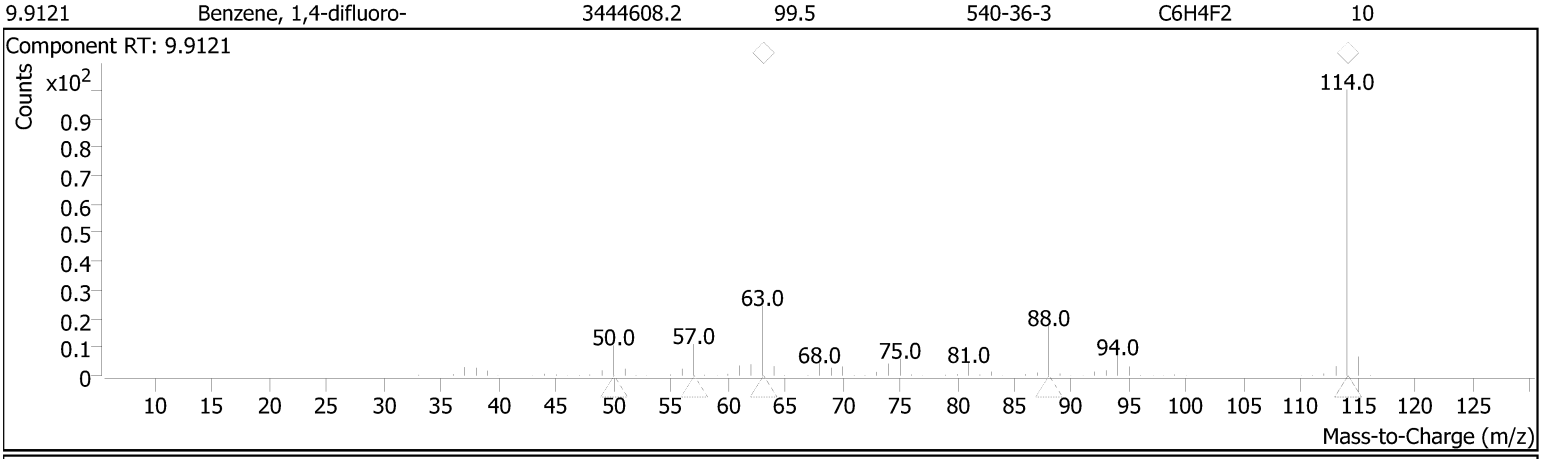


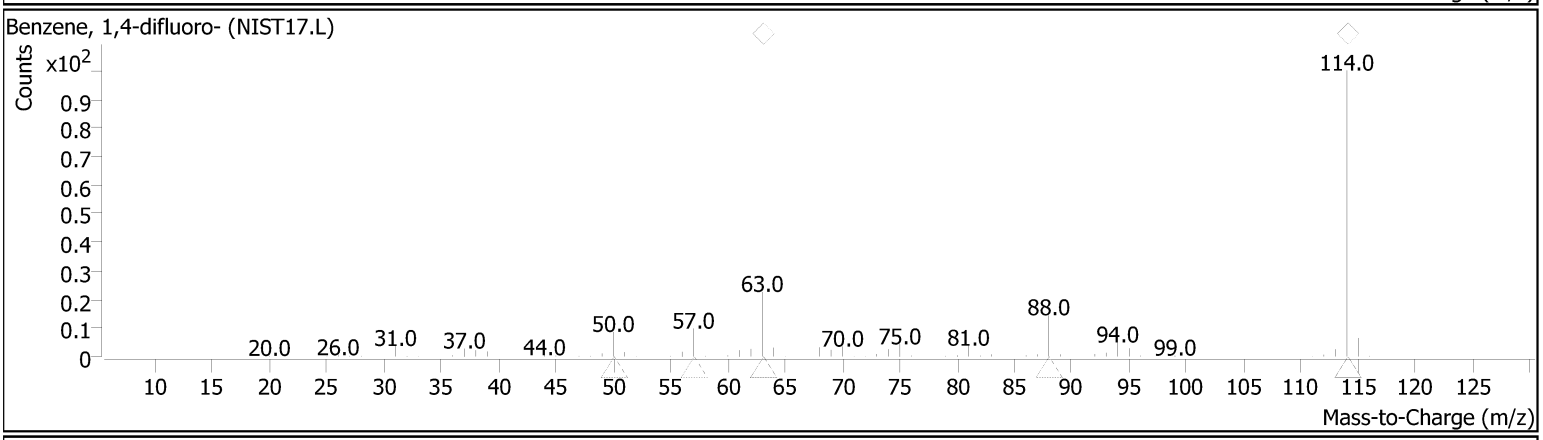


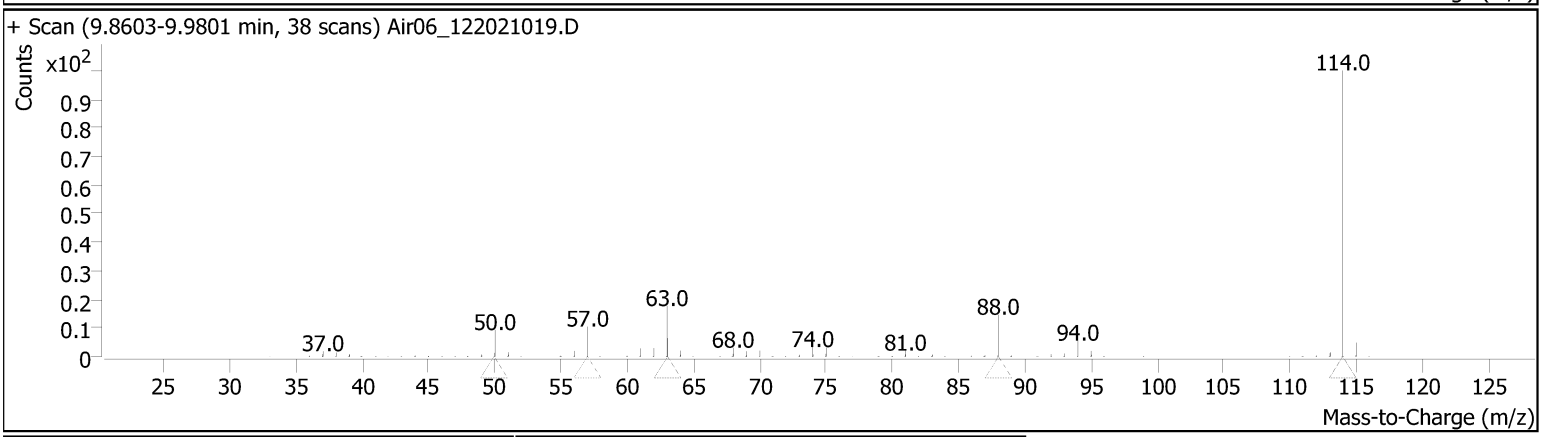


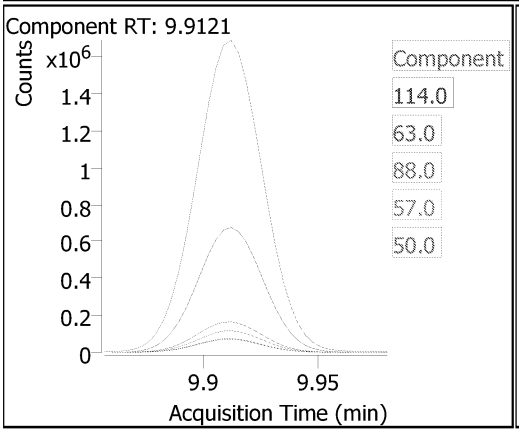


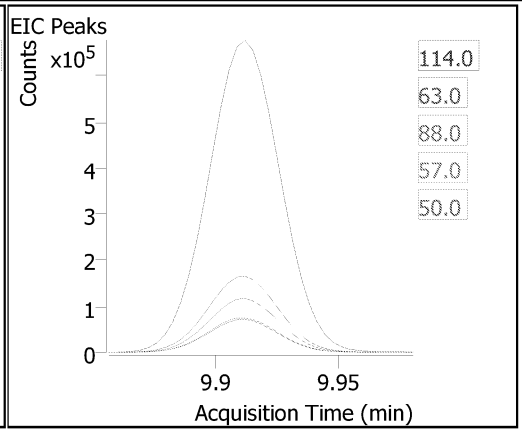
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.9121	Benzene, 1,4-difluoro-	3444608.2	99.5	540-36-3	C6H4F2	10

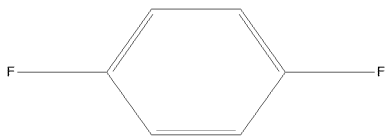




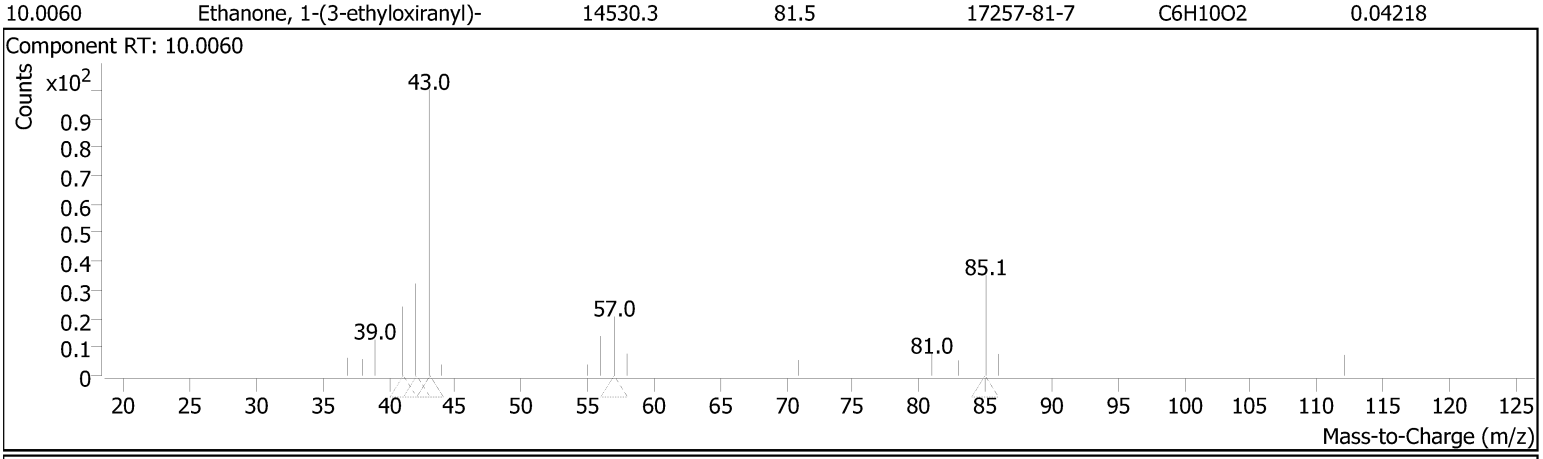


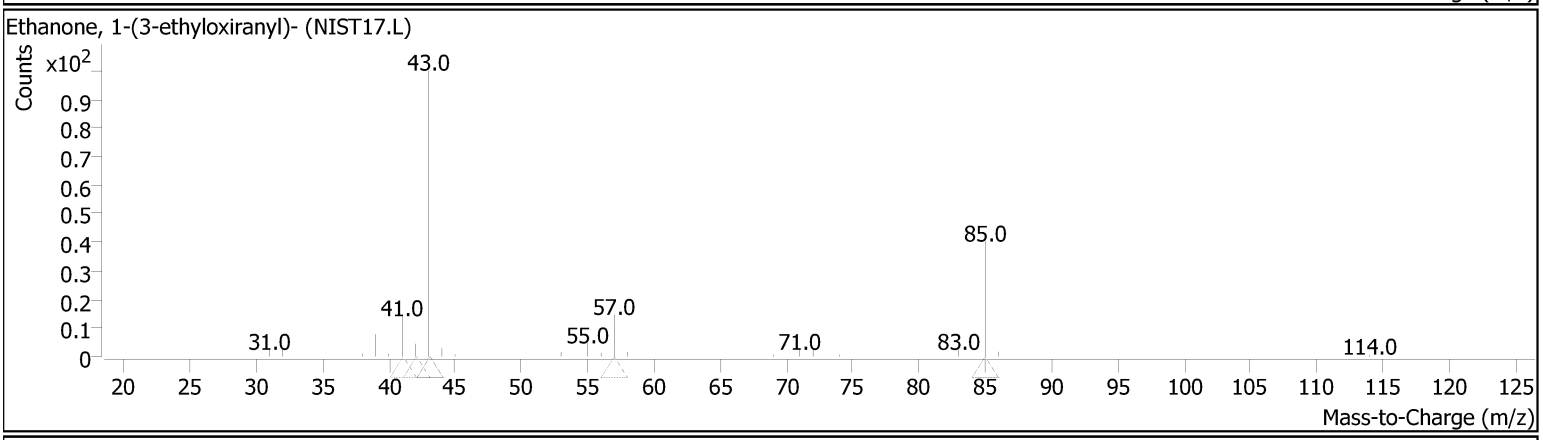


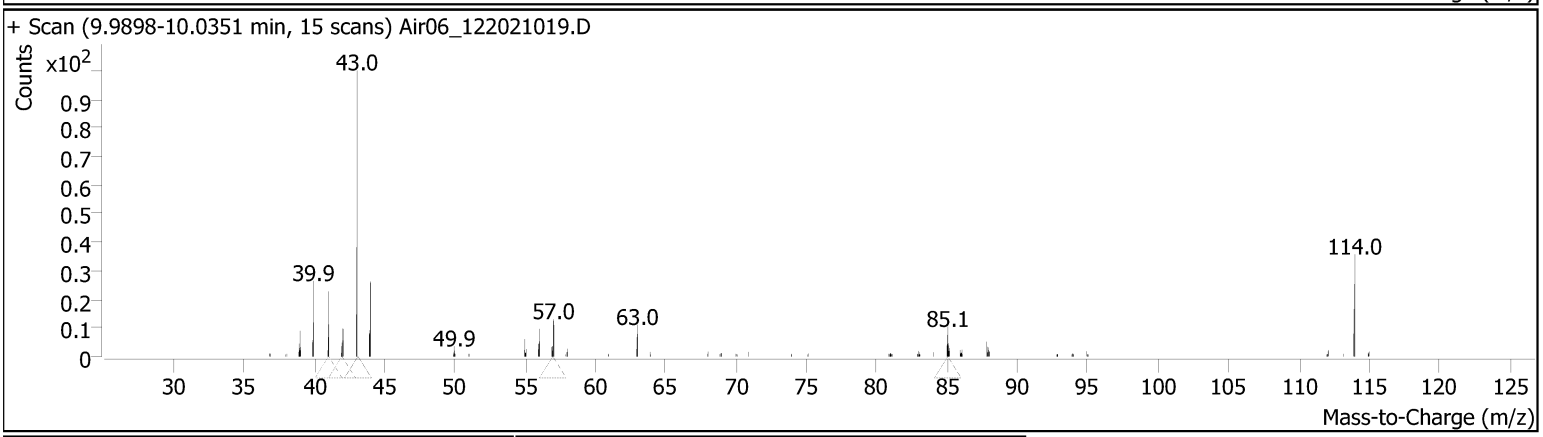


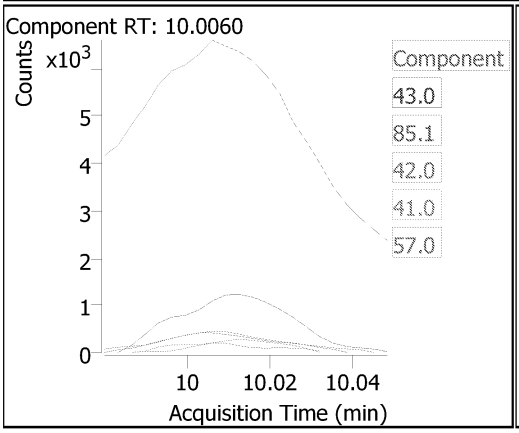


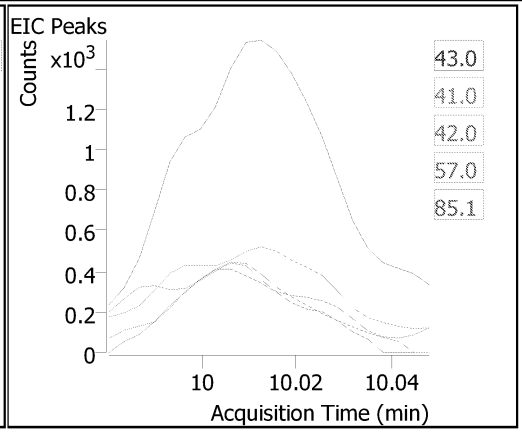
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.0060	Ethanone, 1-(3-ethyloxiranyl)-	14530.3	81.5	17257-81-7	C6H10O2	0.04218

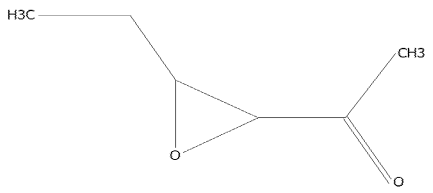




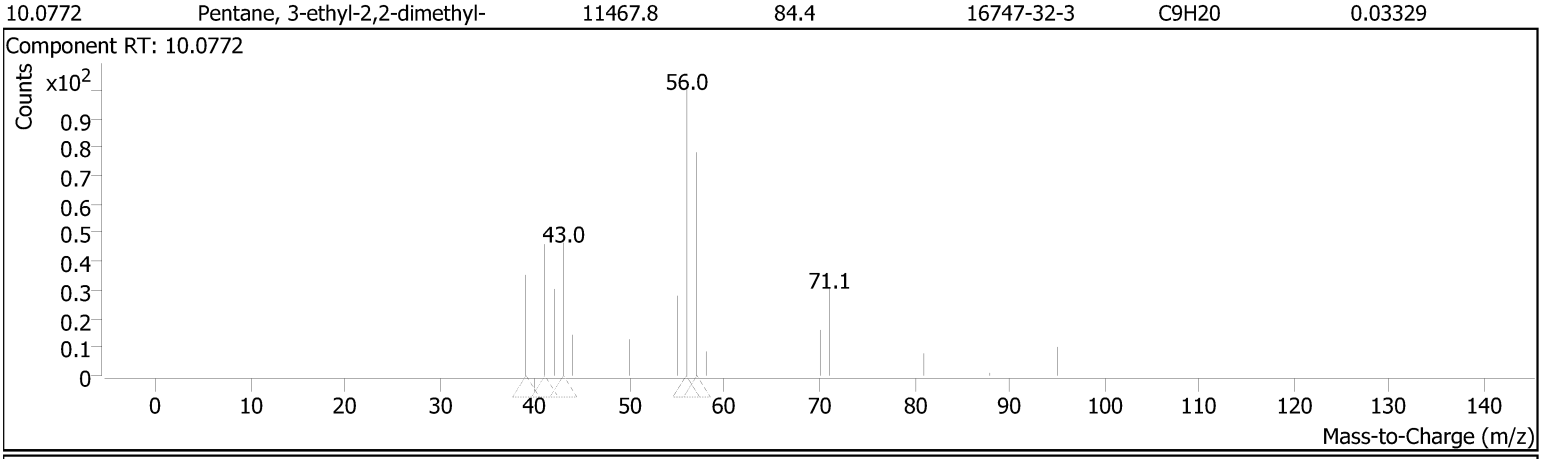


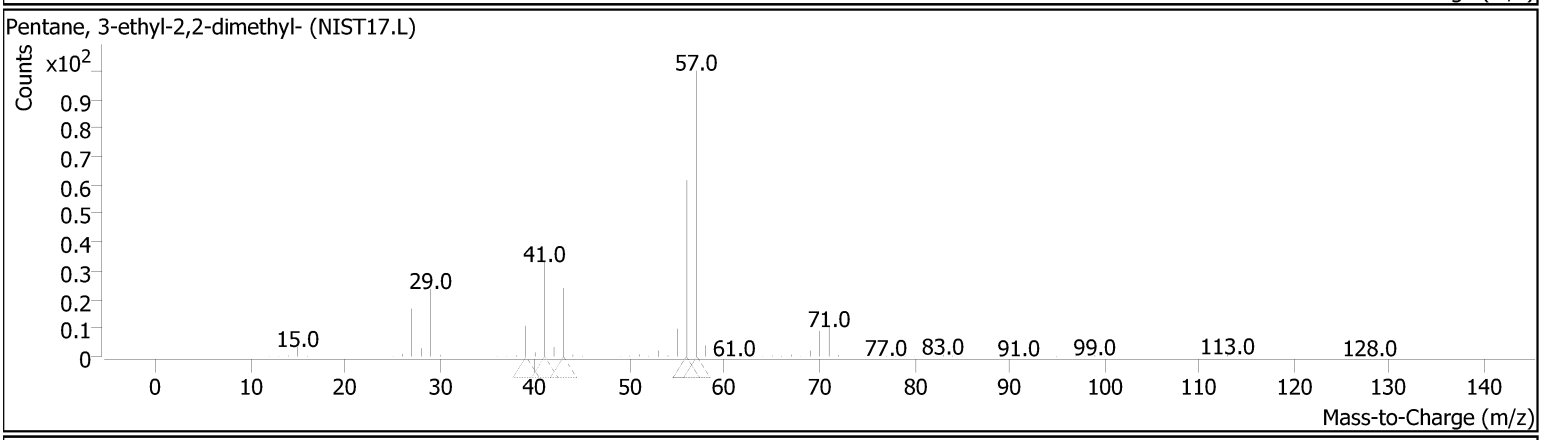


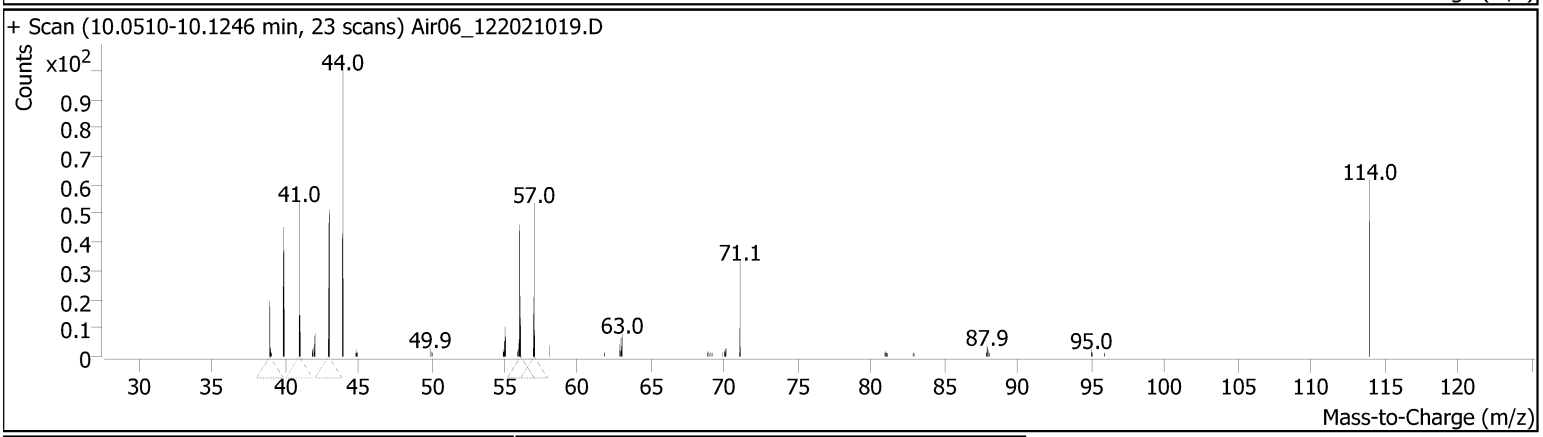


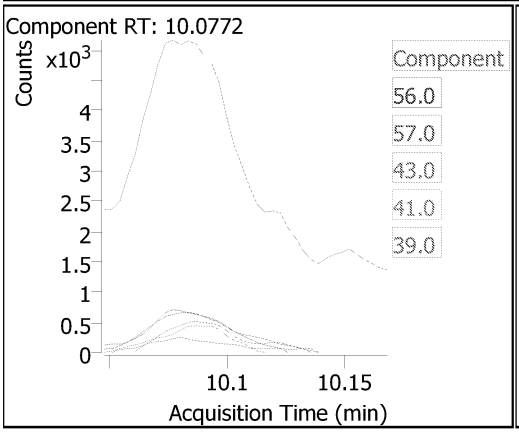


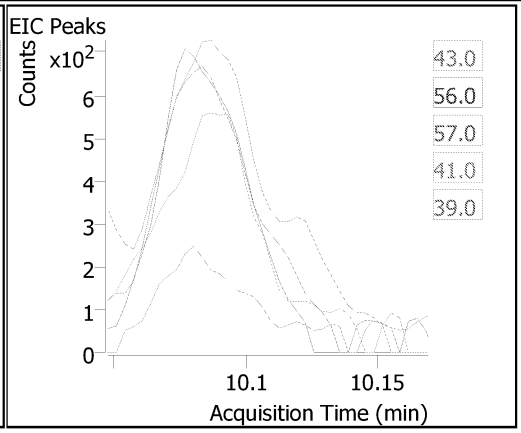
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.0772	Pentane, 3-ethyl-2,2-dimethyl-	11467.8	84.4	16747-32-3	C9H20	0.03329

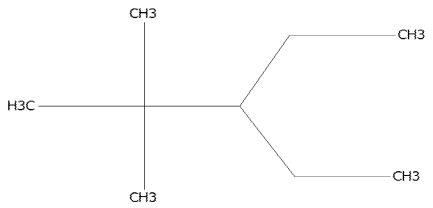




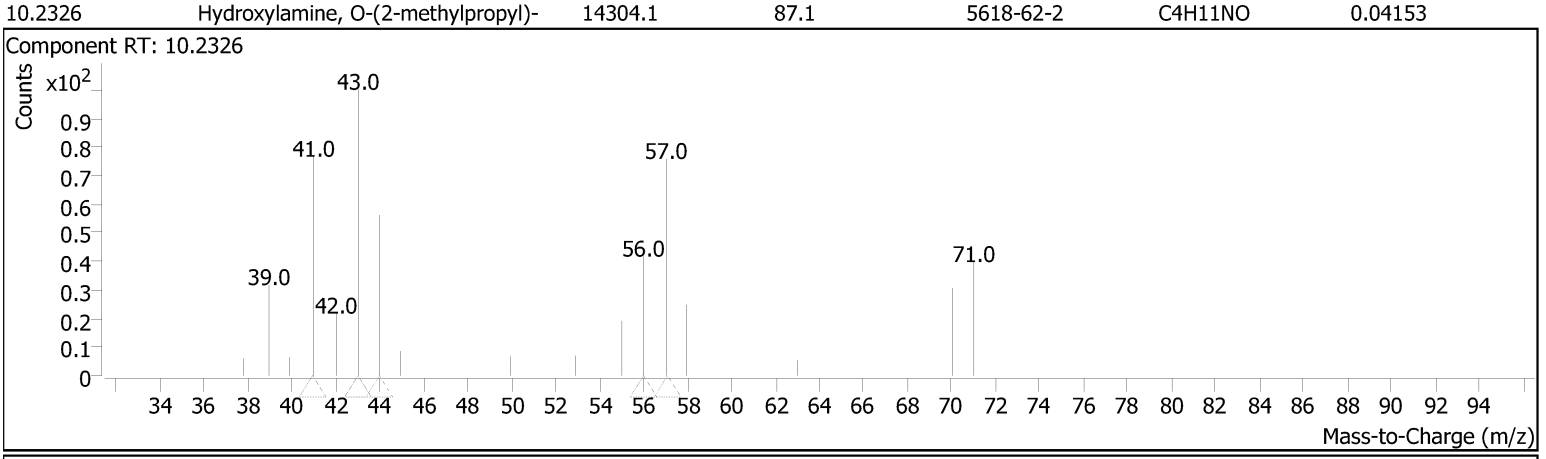


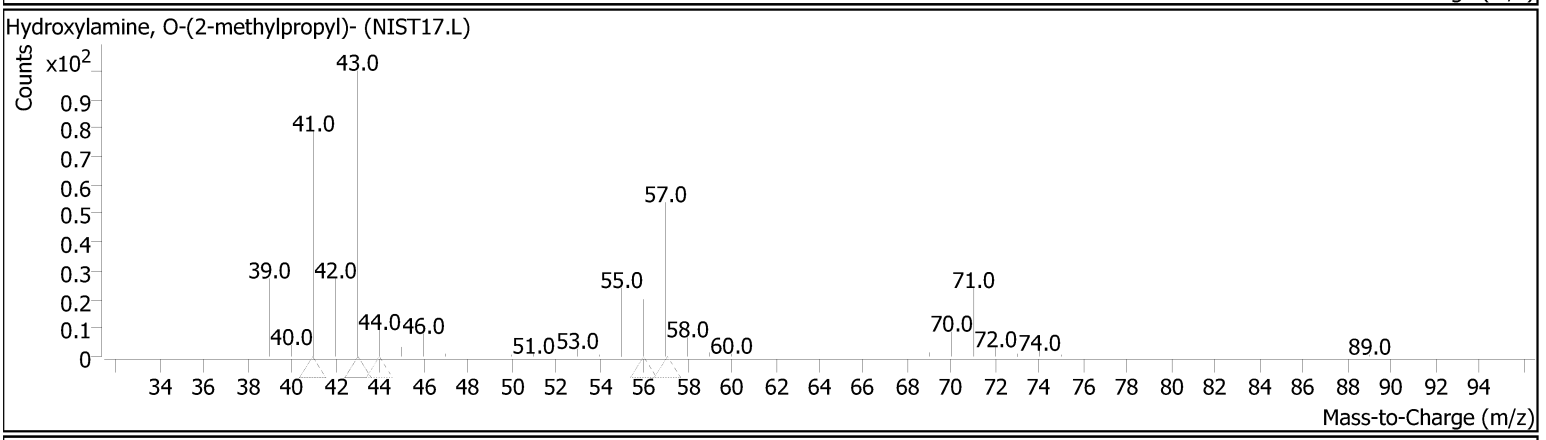


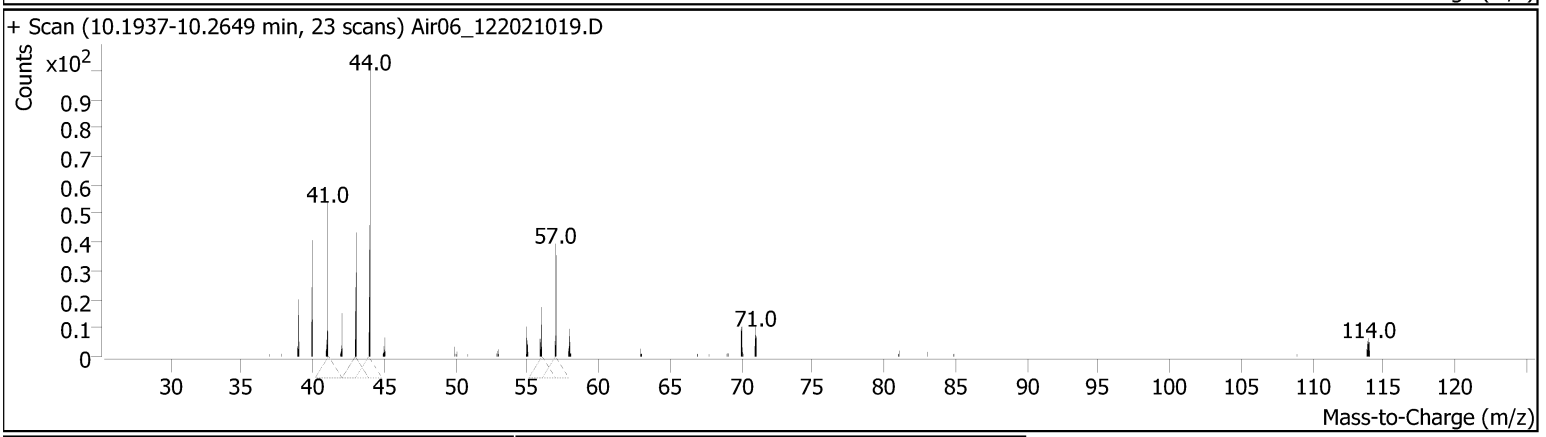


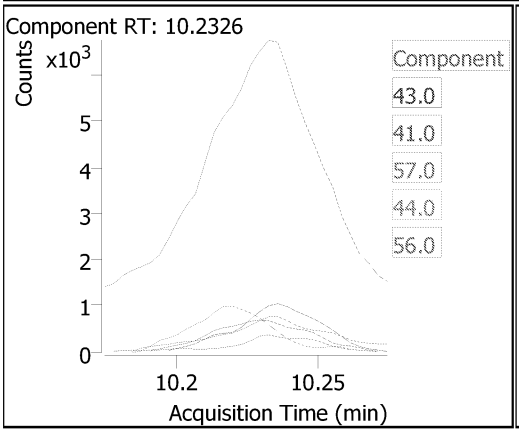


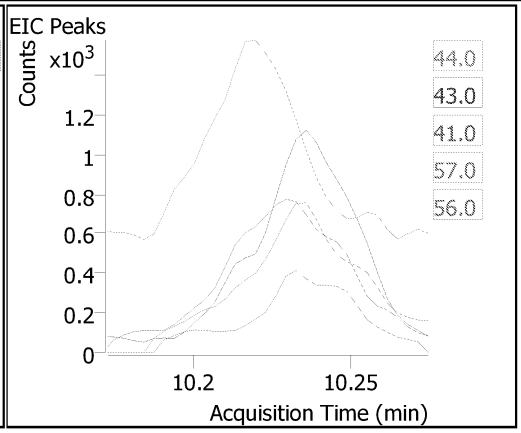
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.2326	Hydroxylamine, O-(2-methylpropyl)-	14304.1	87.1	5618-62-2	C4H11NO	0.04153

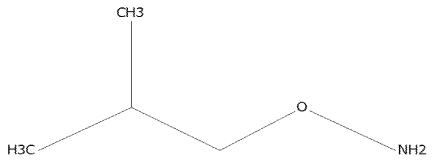




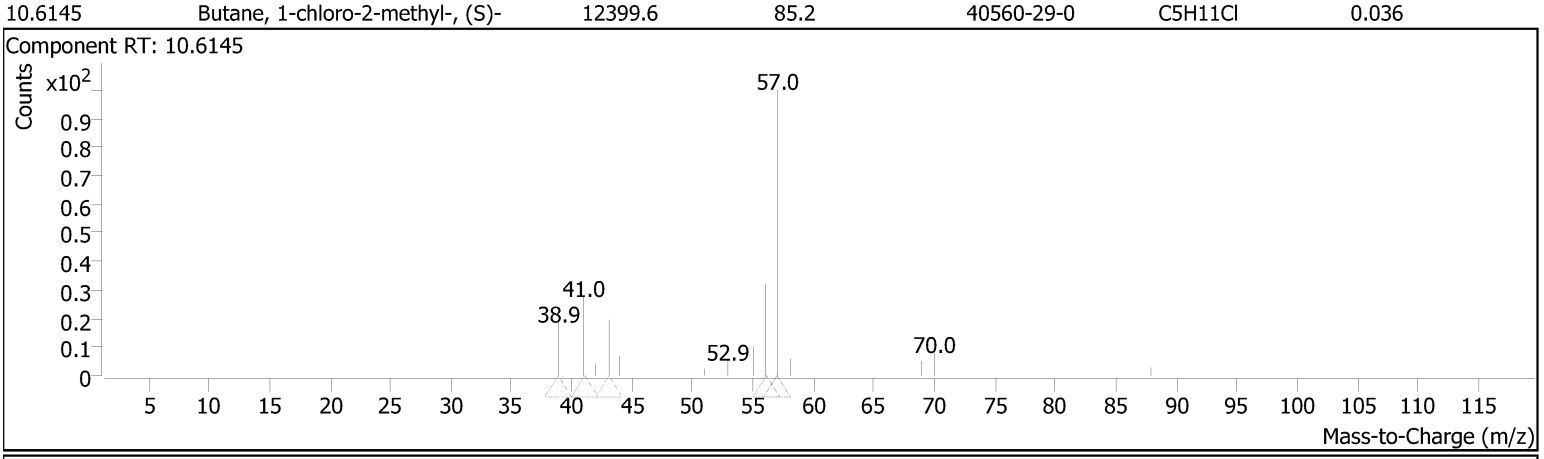


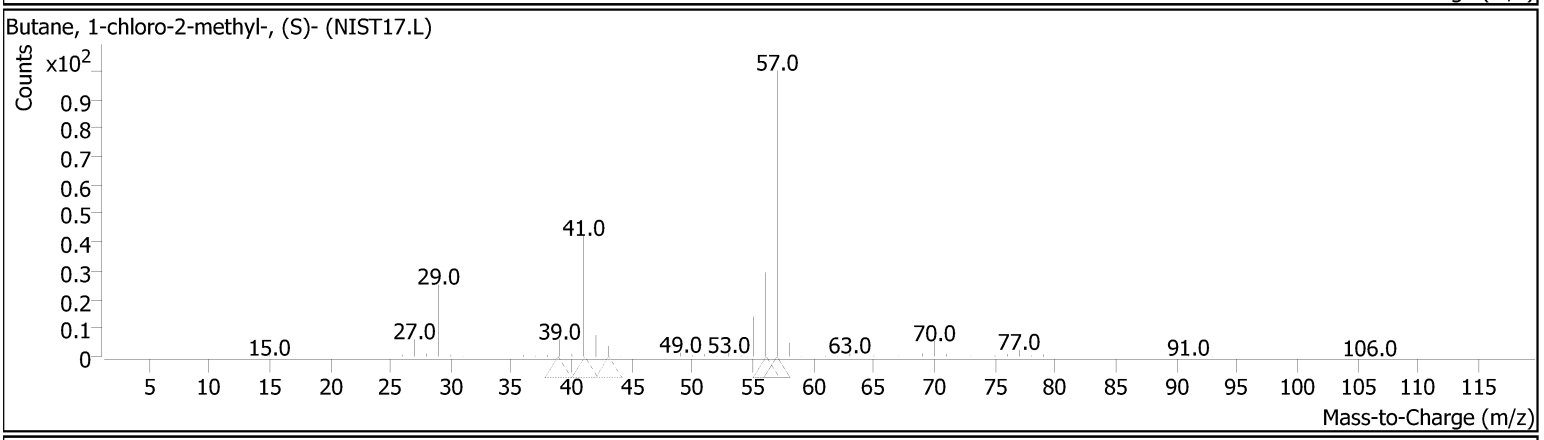


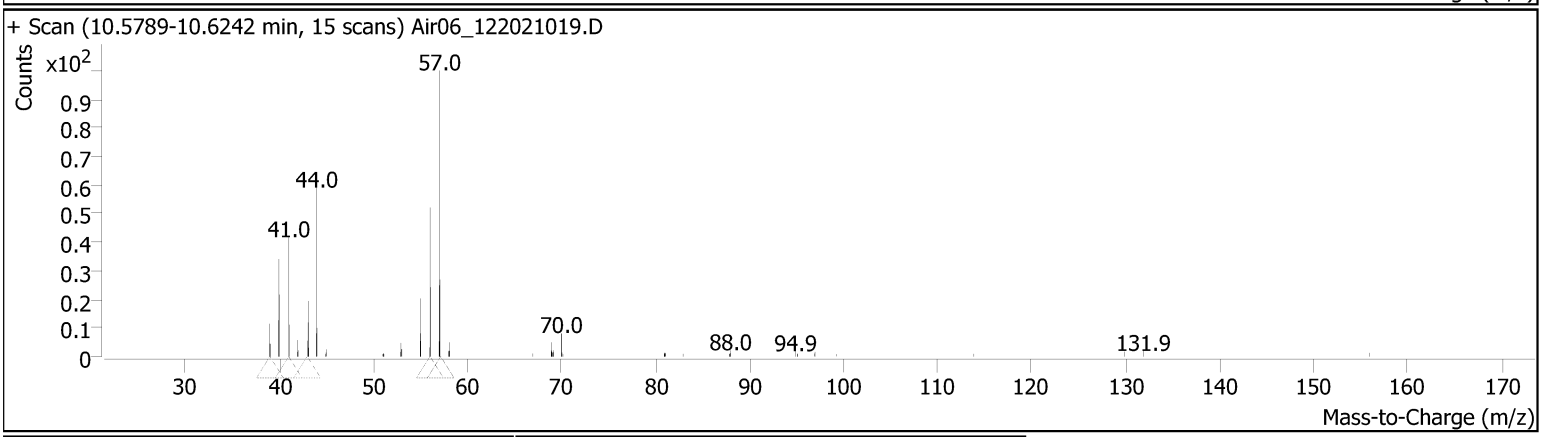


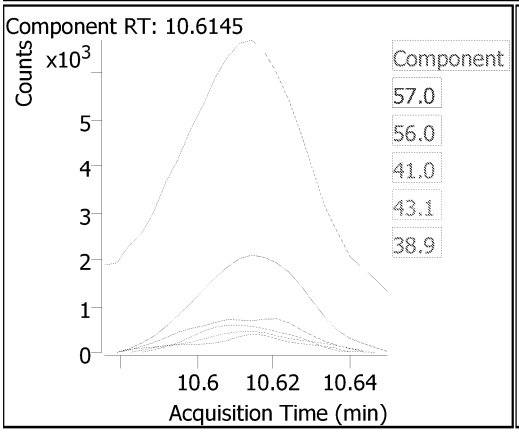


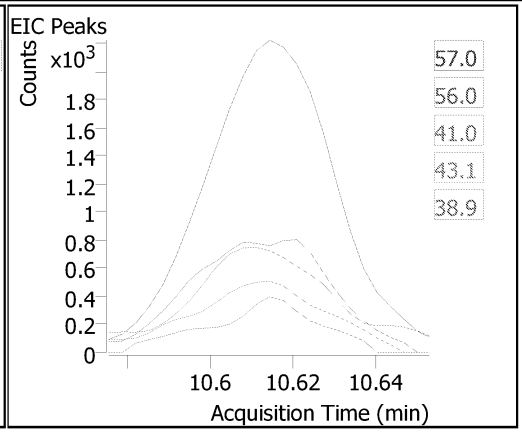
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.6145	Butane, 1-chloro-2-methyl-, (S)-	12399.6	85.2	40560-29-0	C5H11Cl	0.036

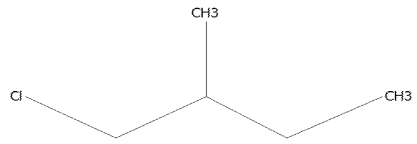




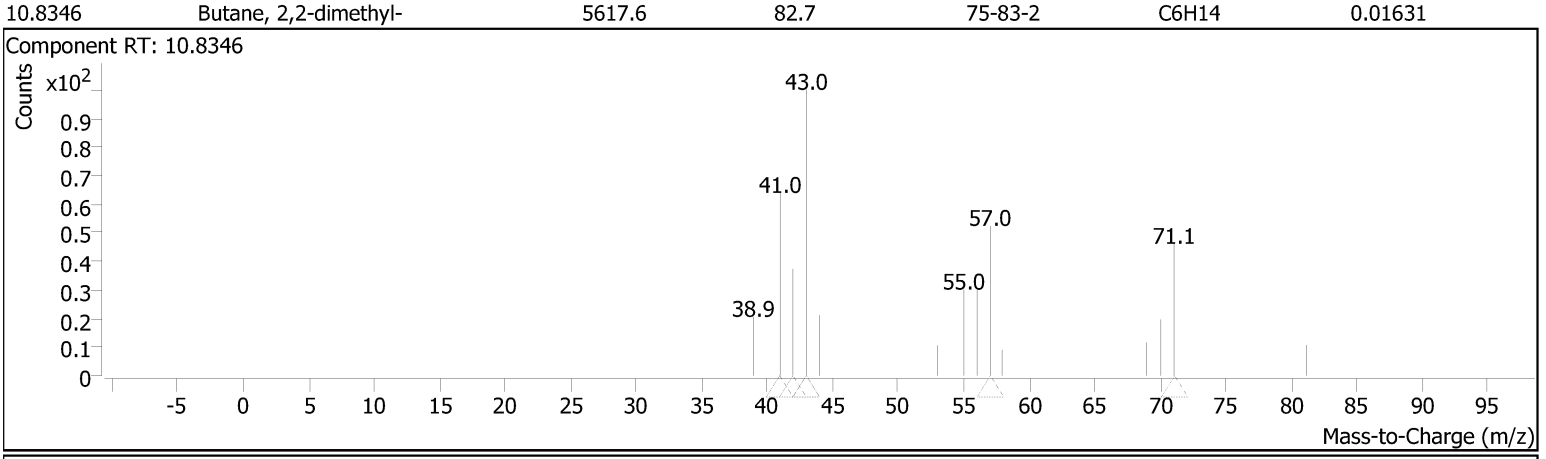


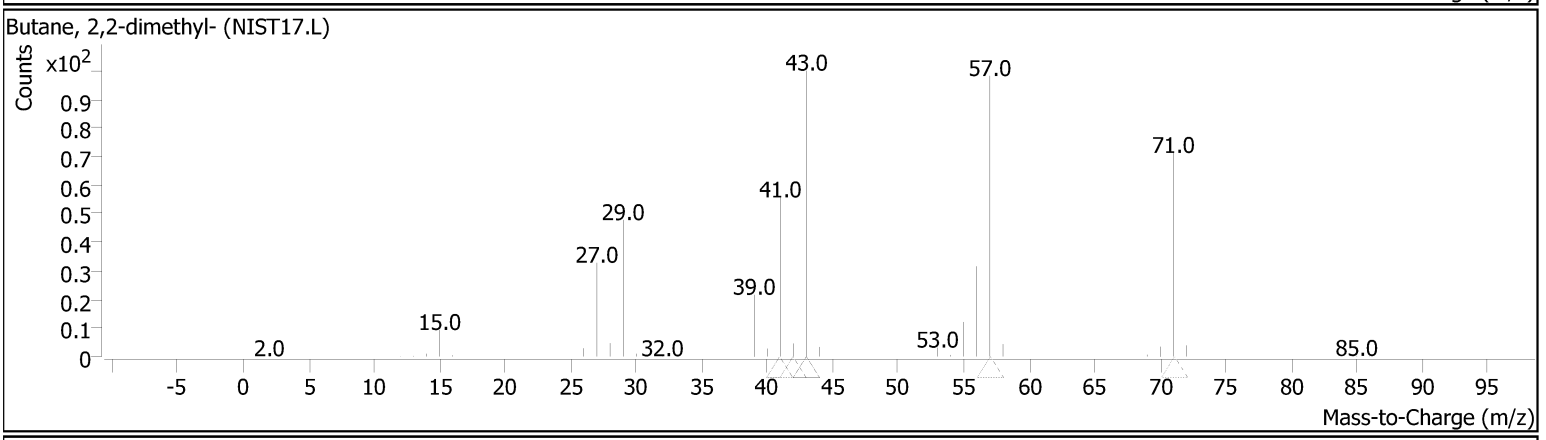


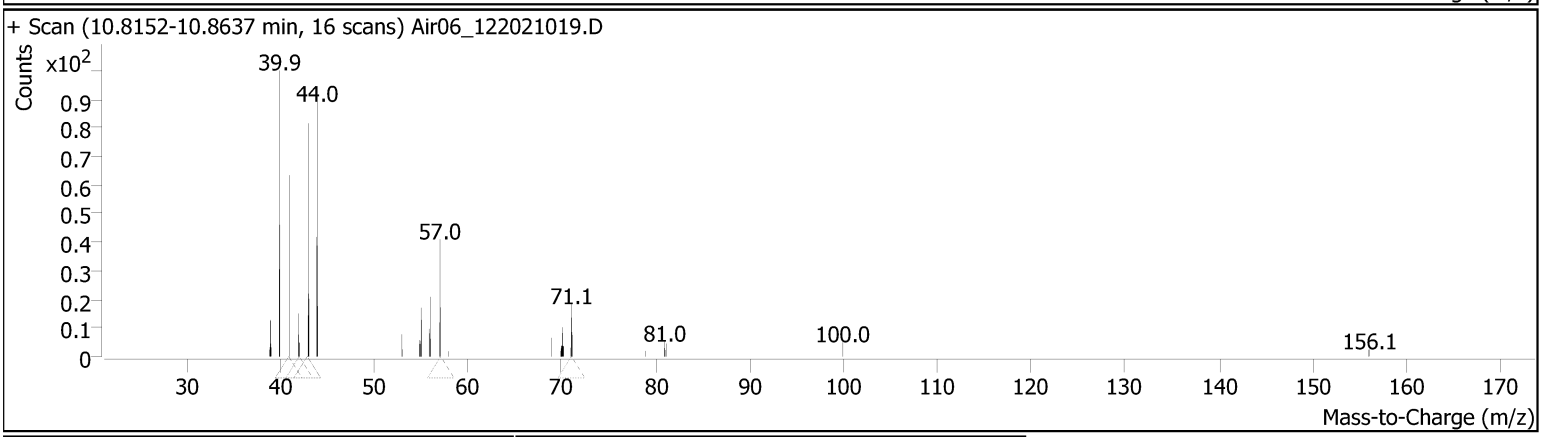


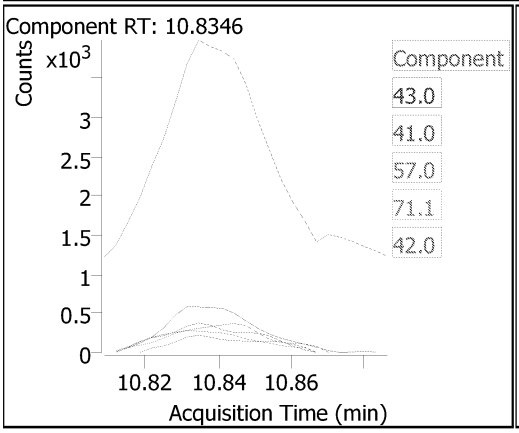


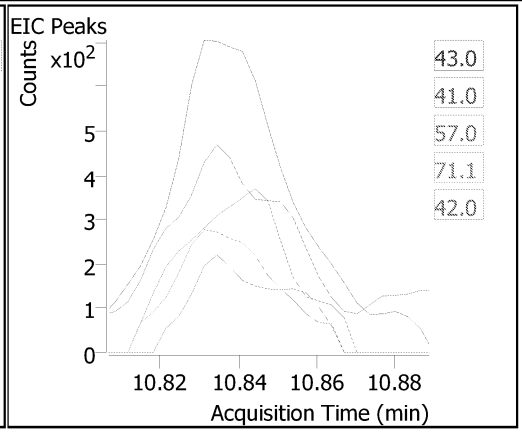
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.8346	Butane, 2,2-dimethyl-	5617.6	82.7	75-83-2	C6H14	0.01631

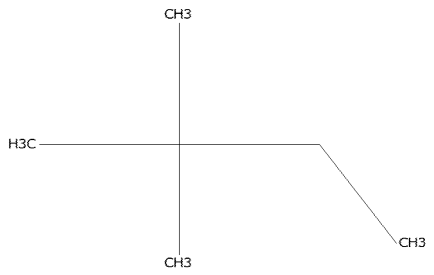




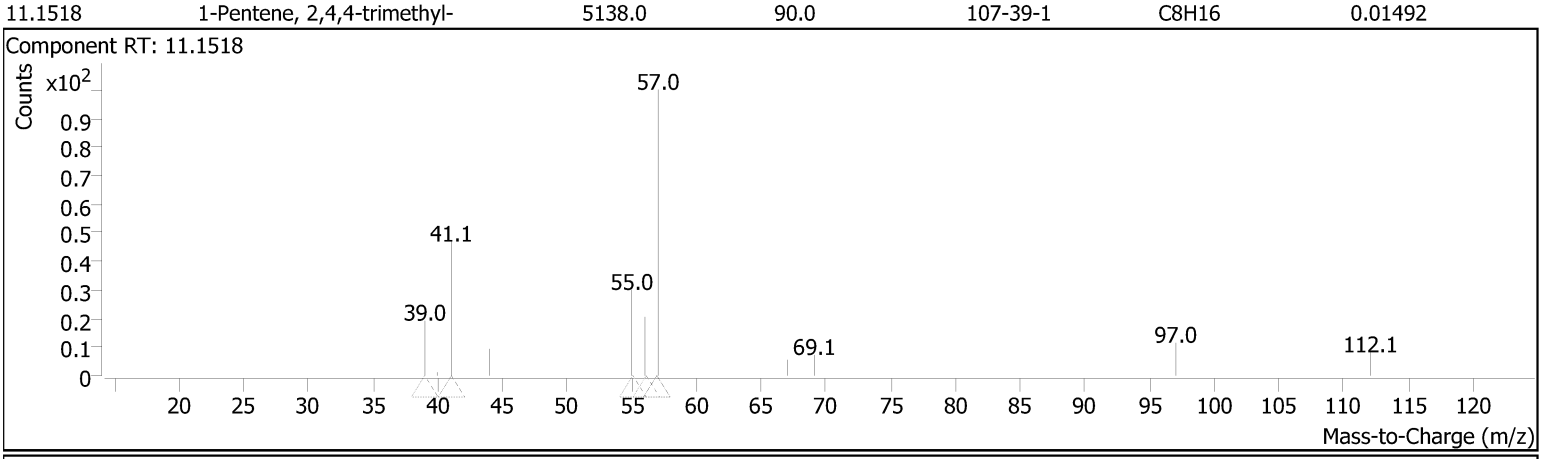


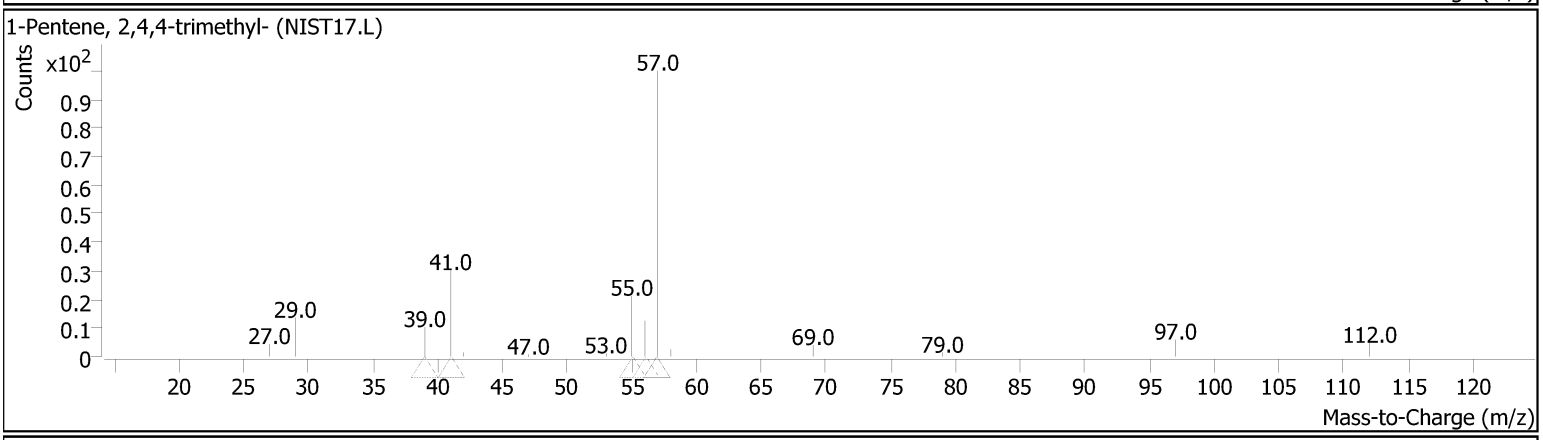


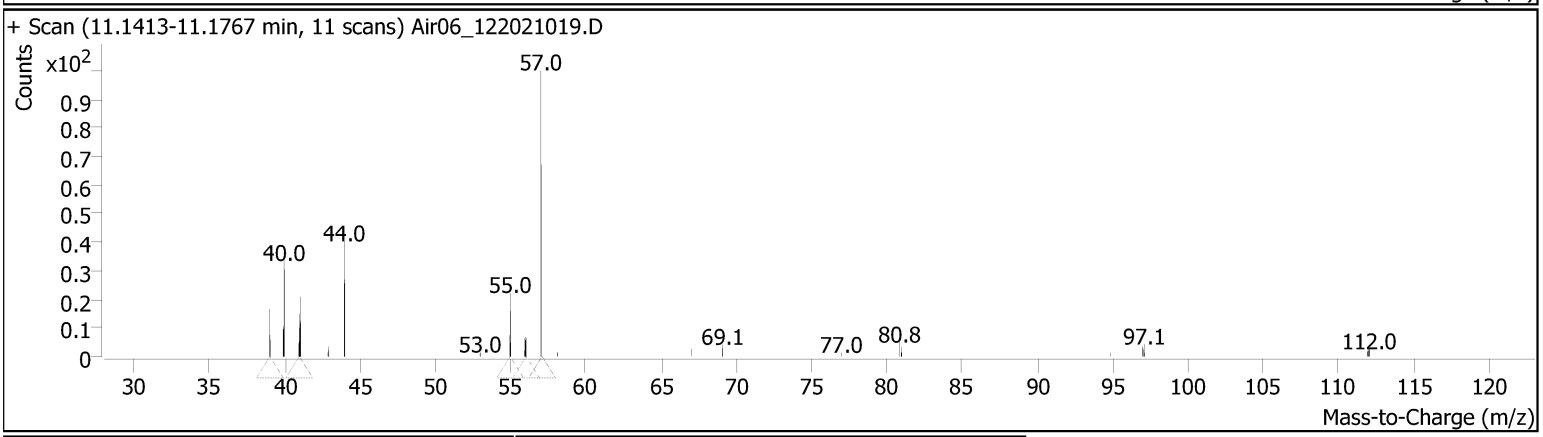


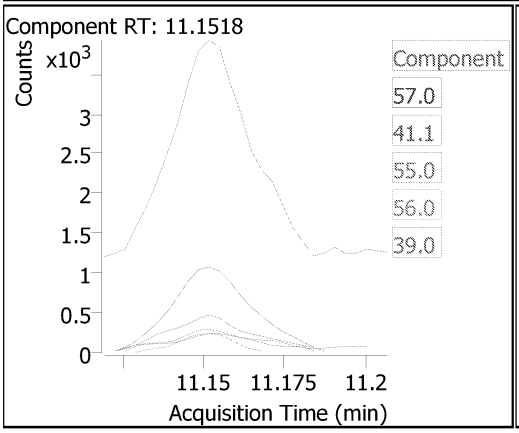


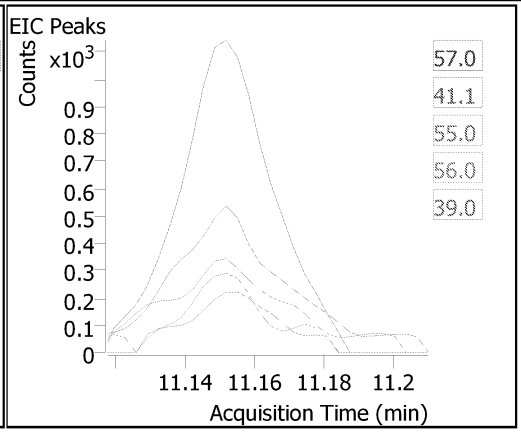
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.1518	1-Pentene, 2,4,4-trimethyl-	5138.0	90.0	107-39-1	C8H16	0.01492

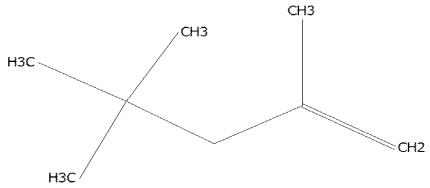




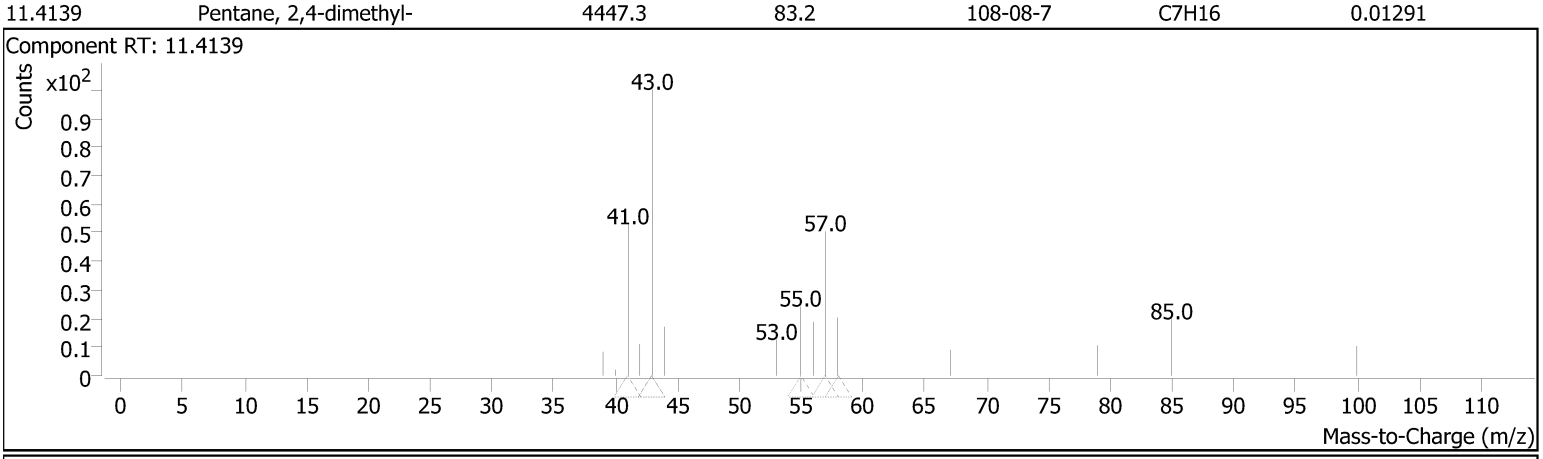


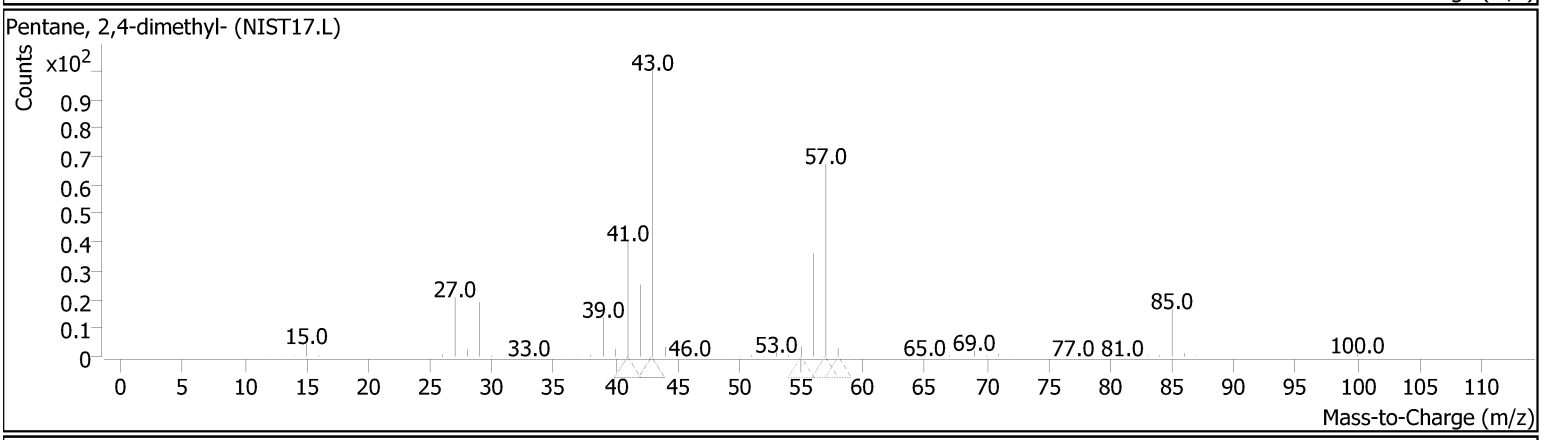


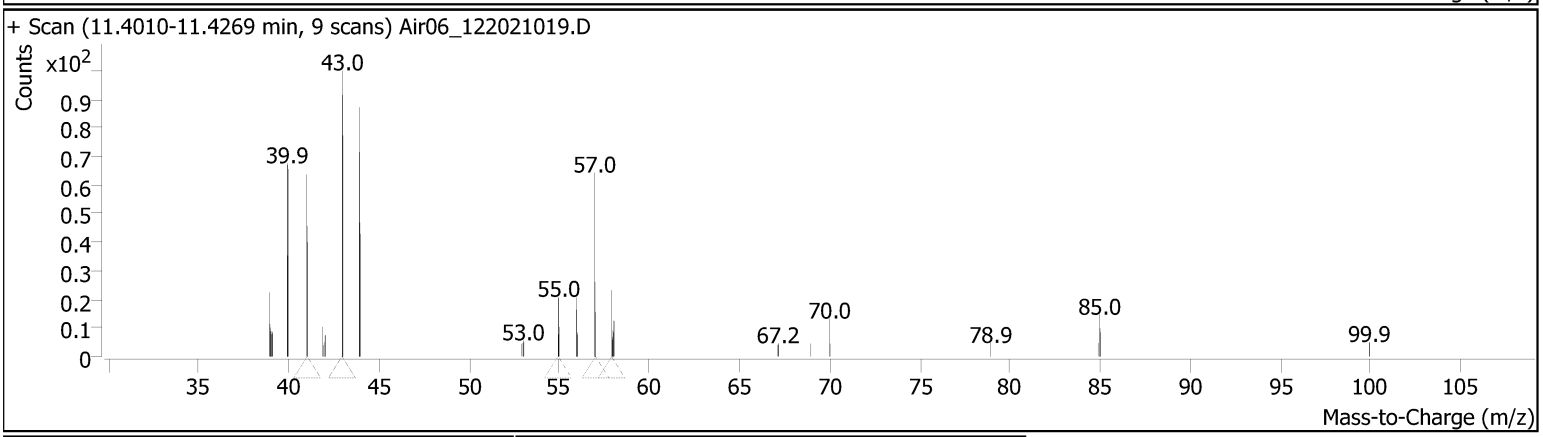


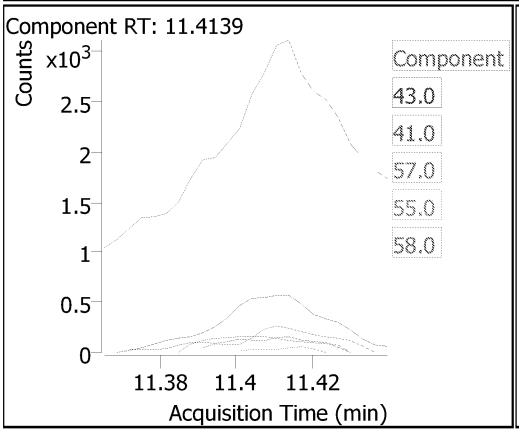


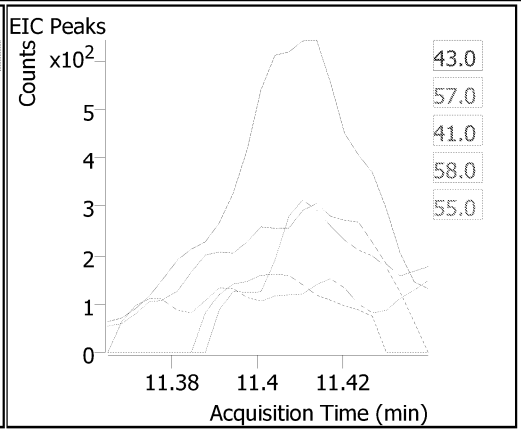
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.4139	Pentane, 2,4-dimethyl-	4447.3	83.2	108-08-7	C7H16	0.01291

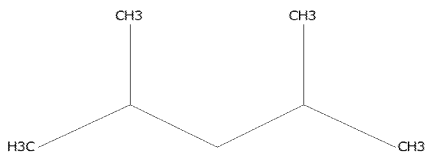




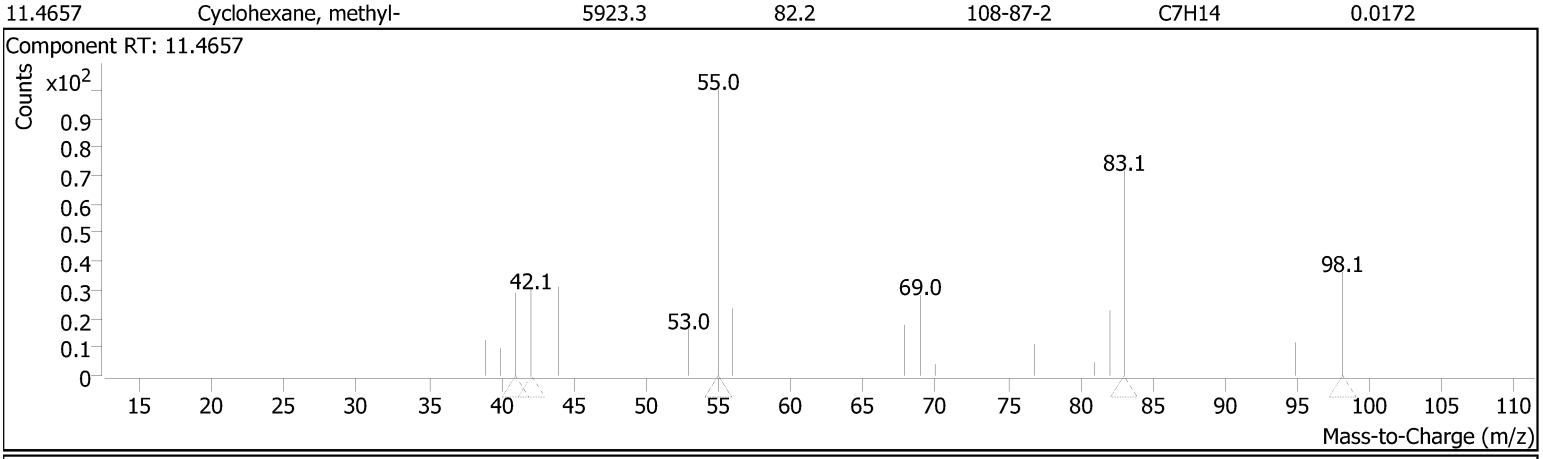


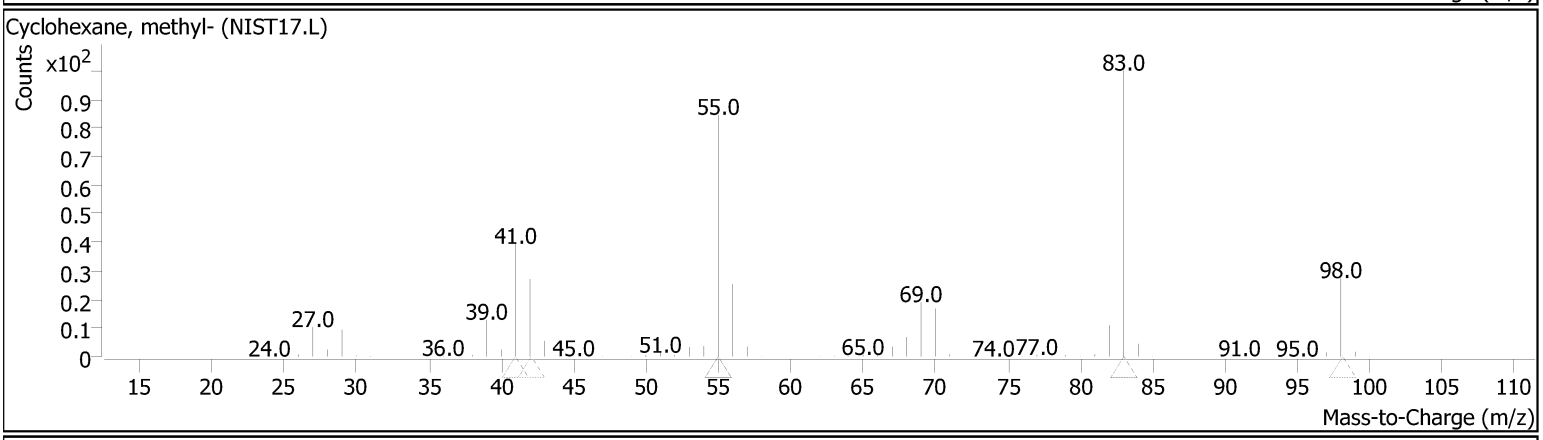


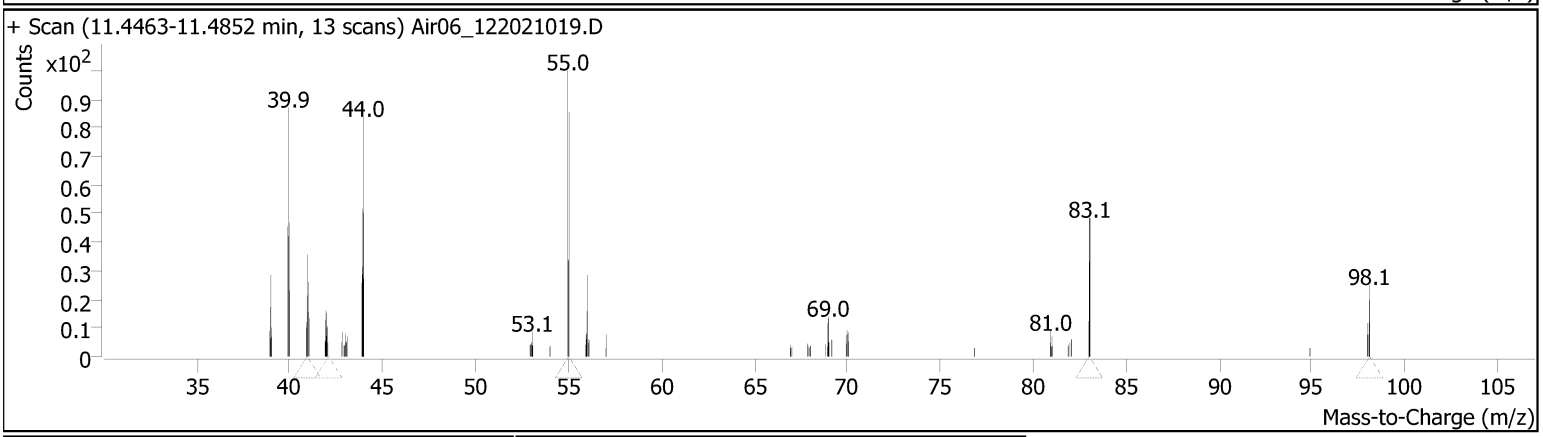


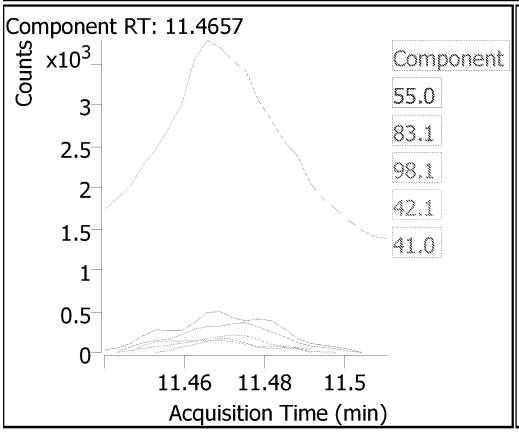


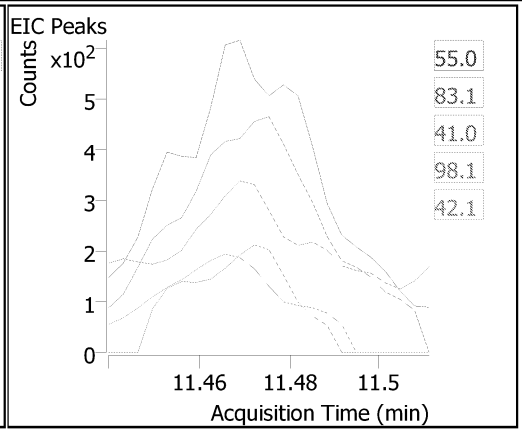
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.4657	Cyclohexane, methyl-	5923.3	82.2	108-87-2	C7H14	0.0172

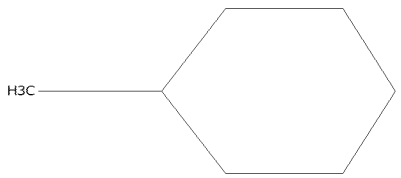




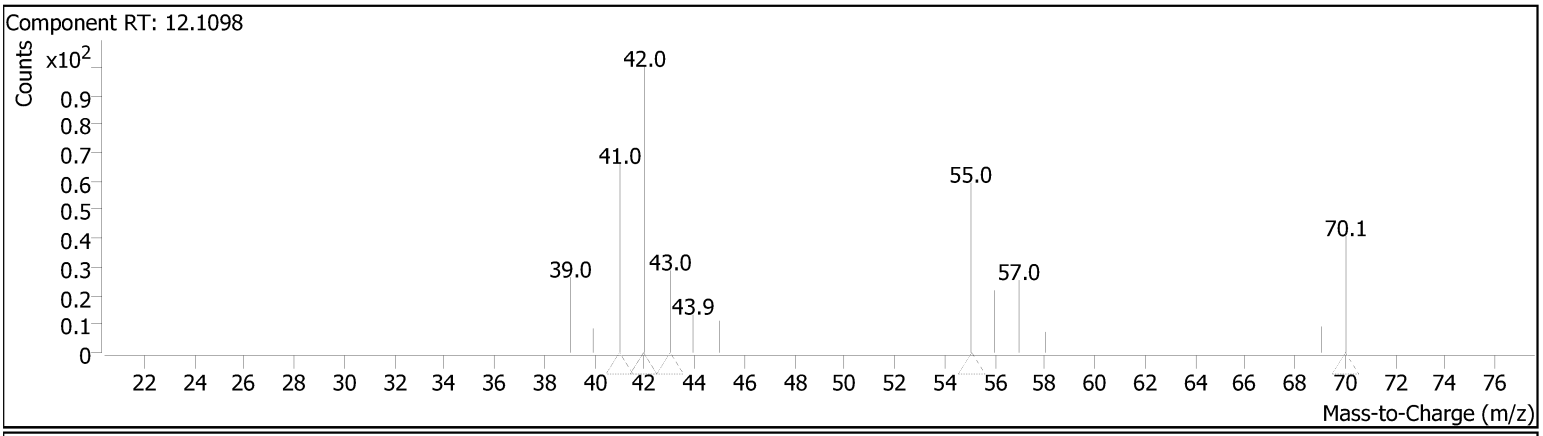


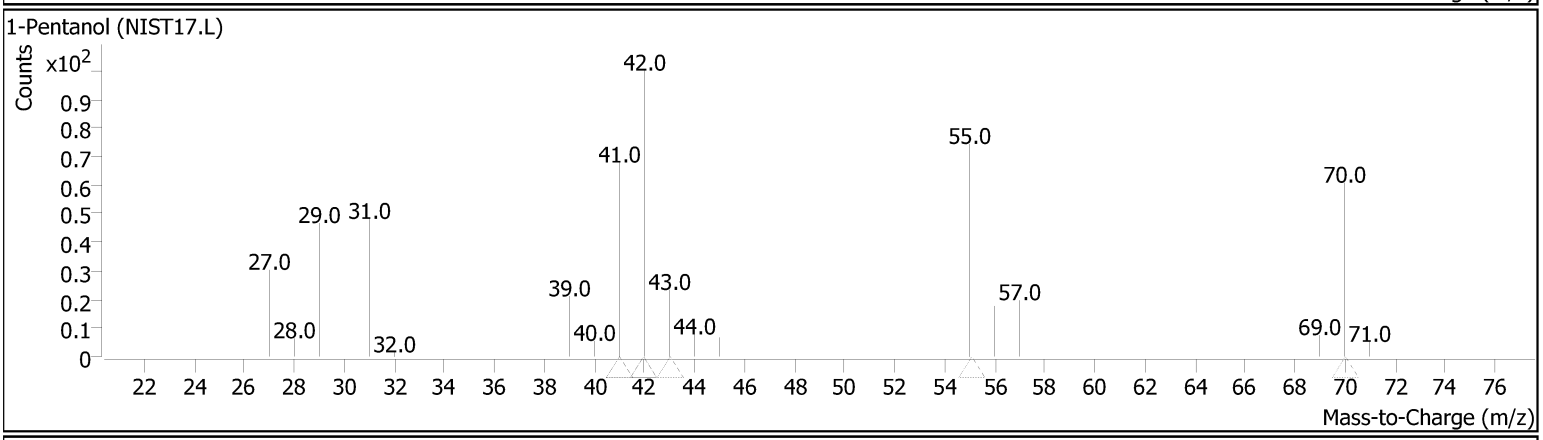


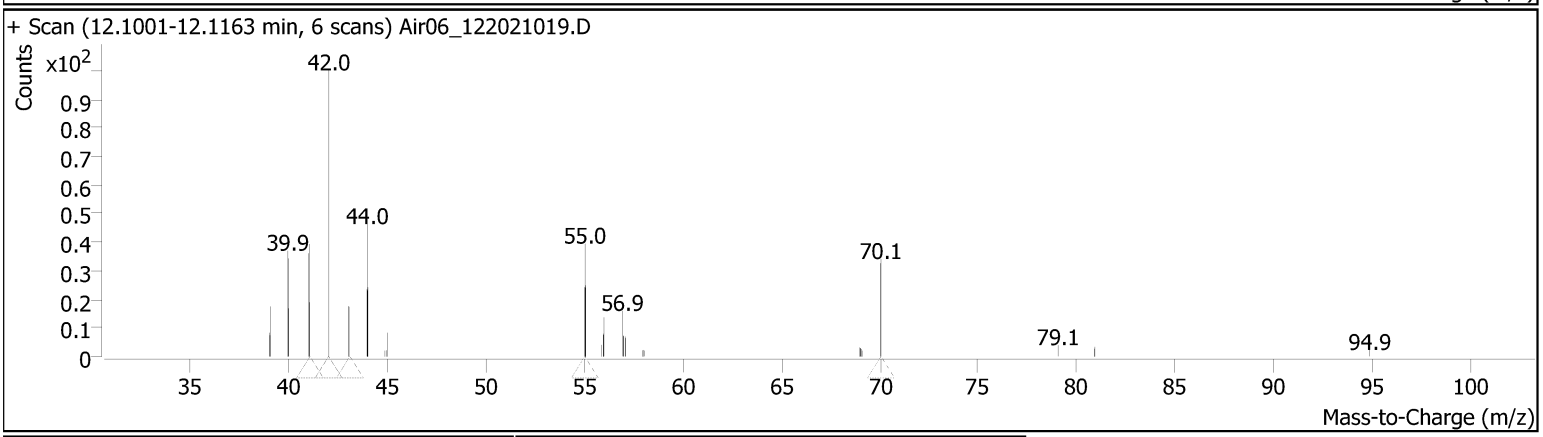


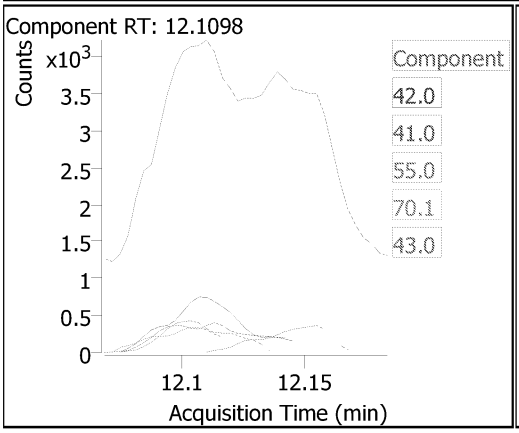


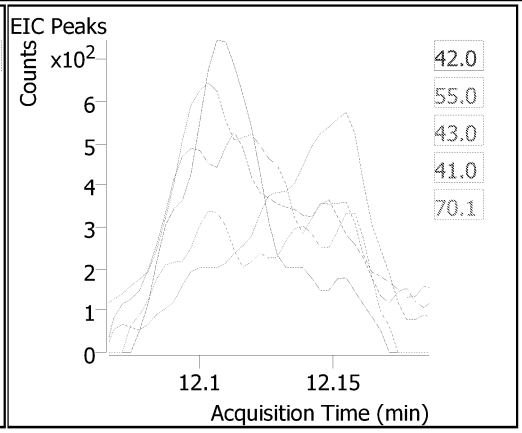
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.1098	1-Pentanol	12084.7	91.0	71-41-0	C5H12O	0.02851





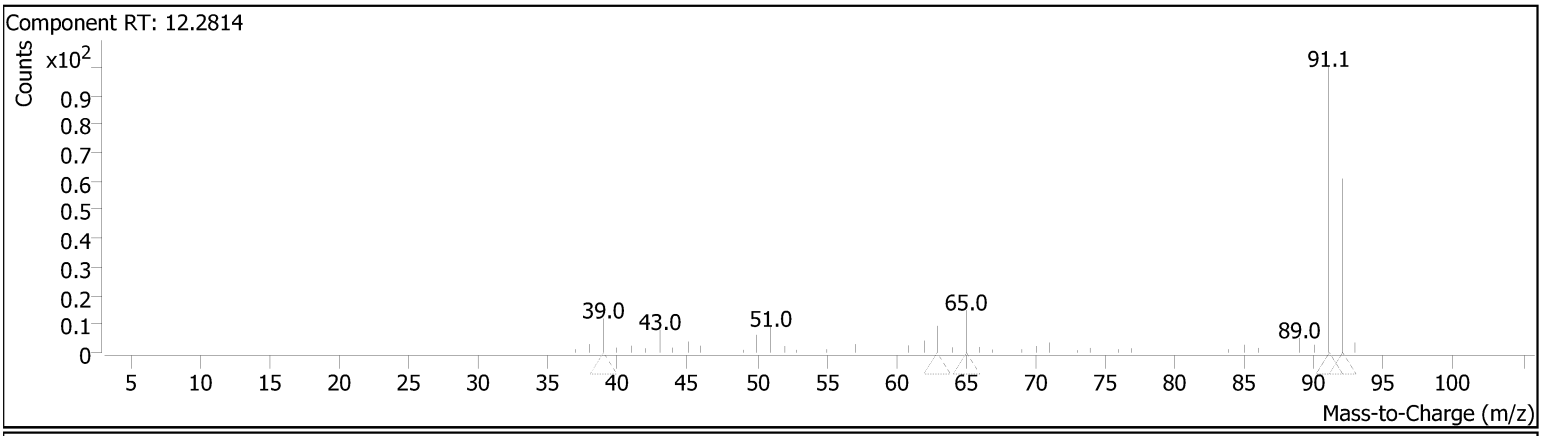


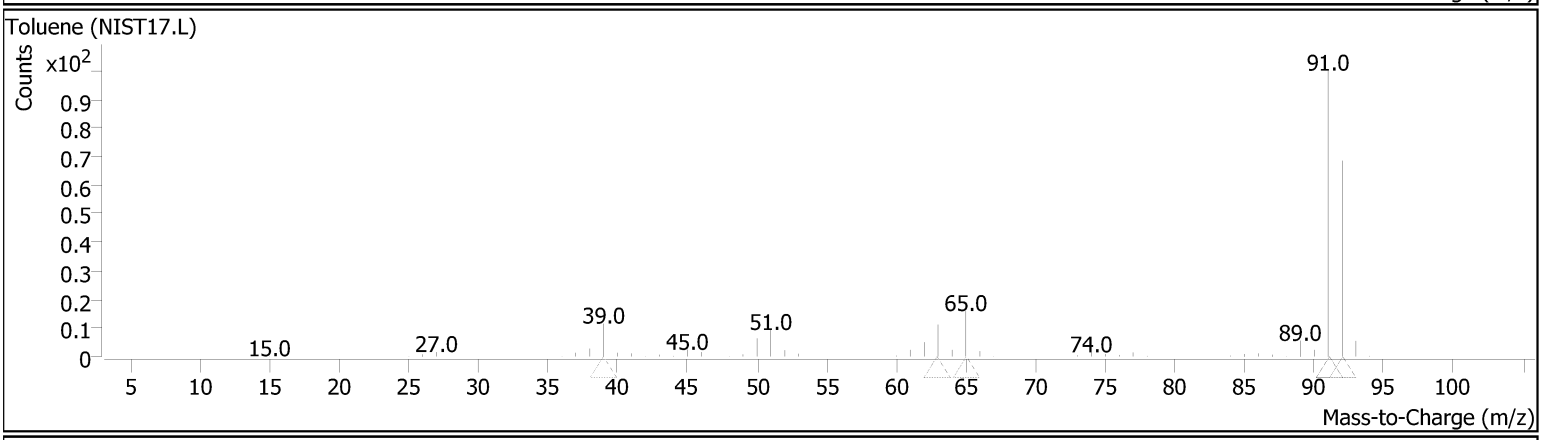


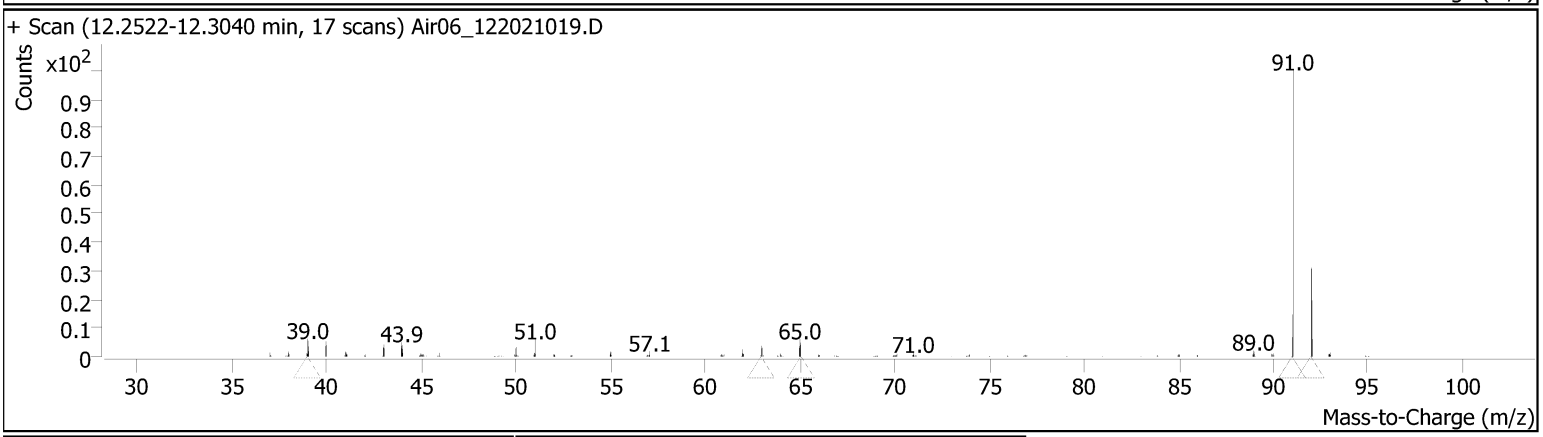


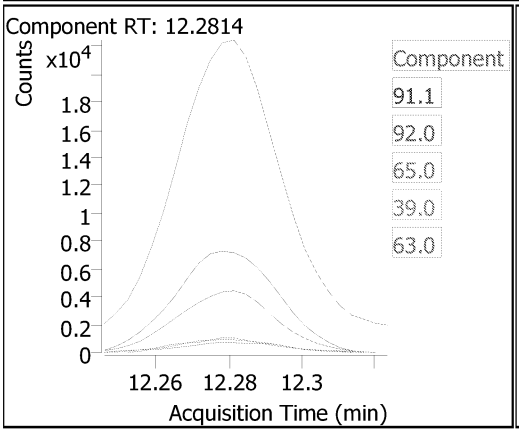


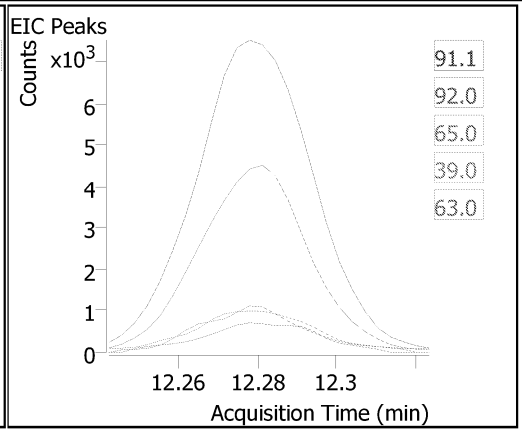
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.2814	Toluene	41137.2	94.6	108-88-3	C7H8	0.09706

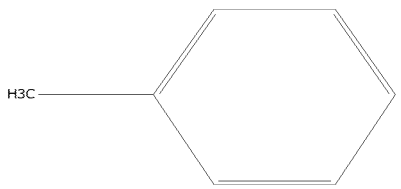




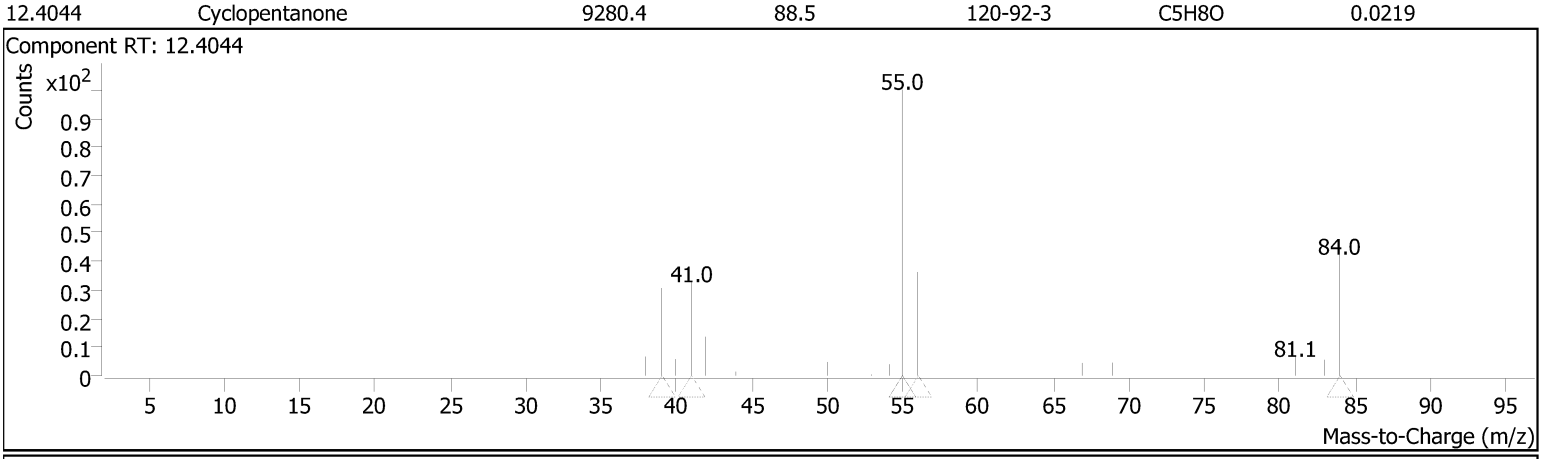


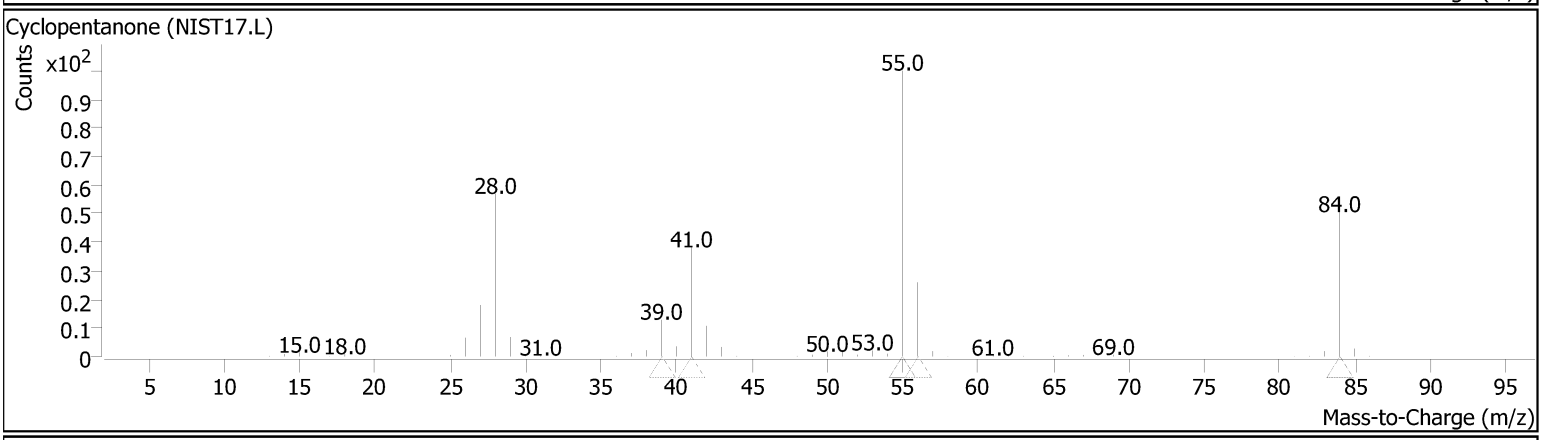


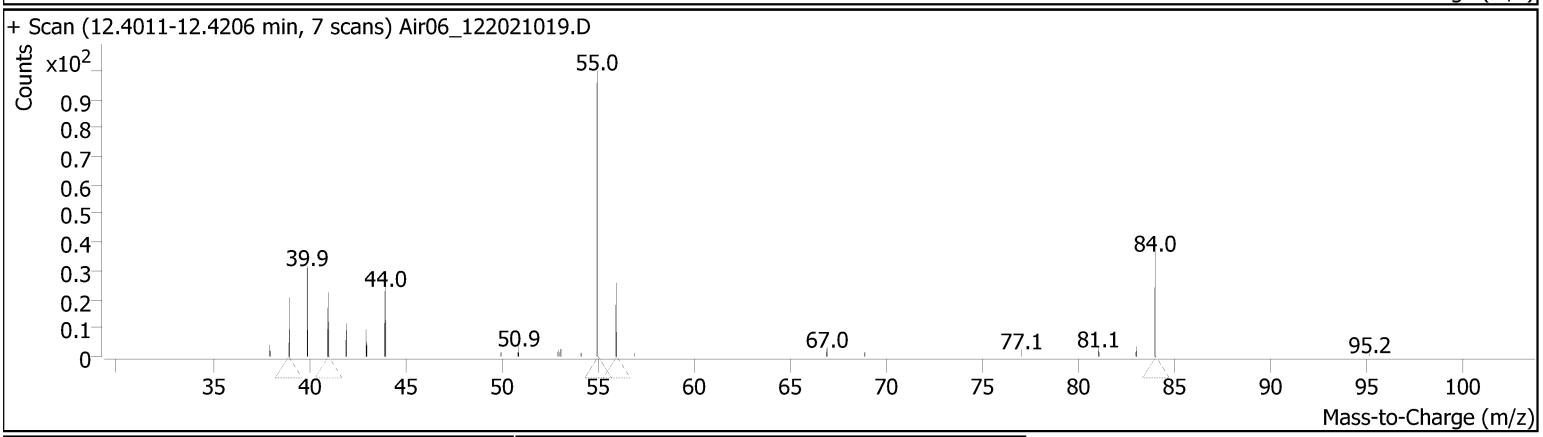


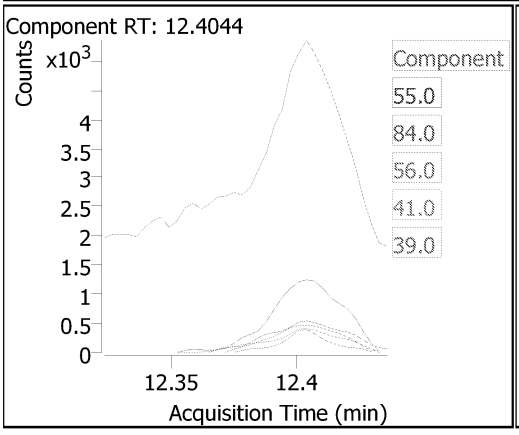


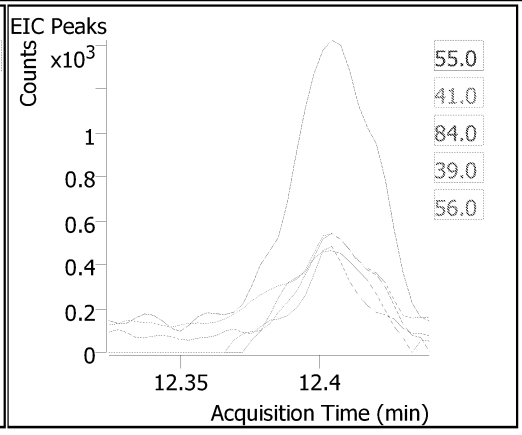
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.4044	Cyclopentanone	9280.4	88.5	120-92-3	C5H8O	0.0219

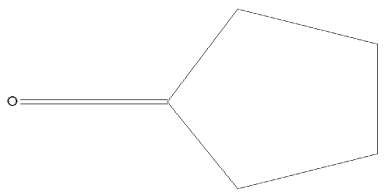




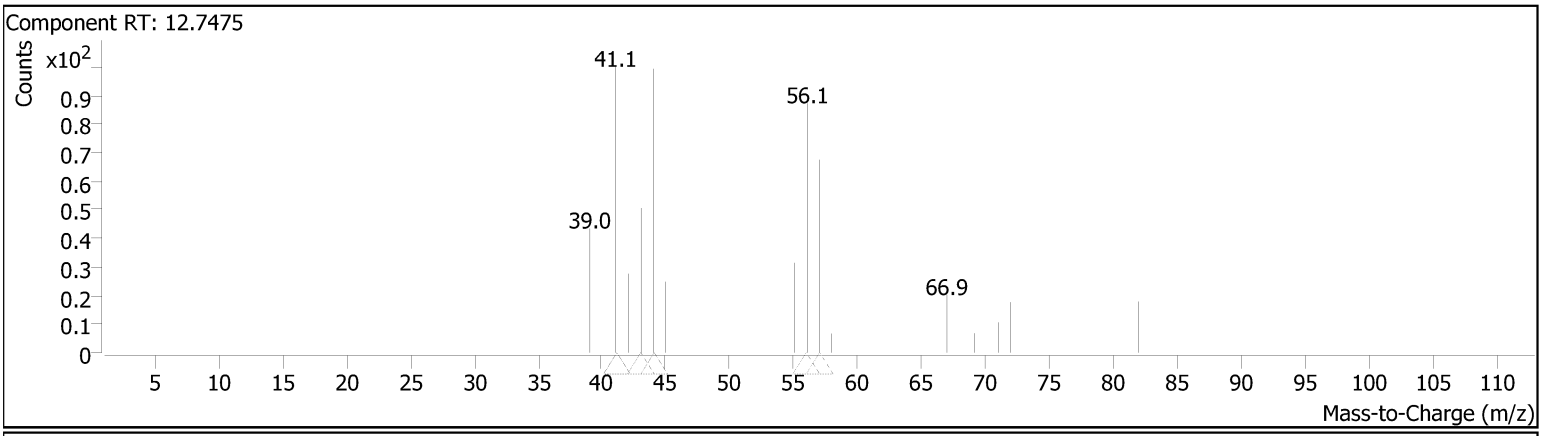


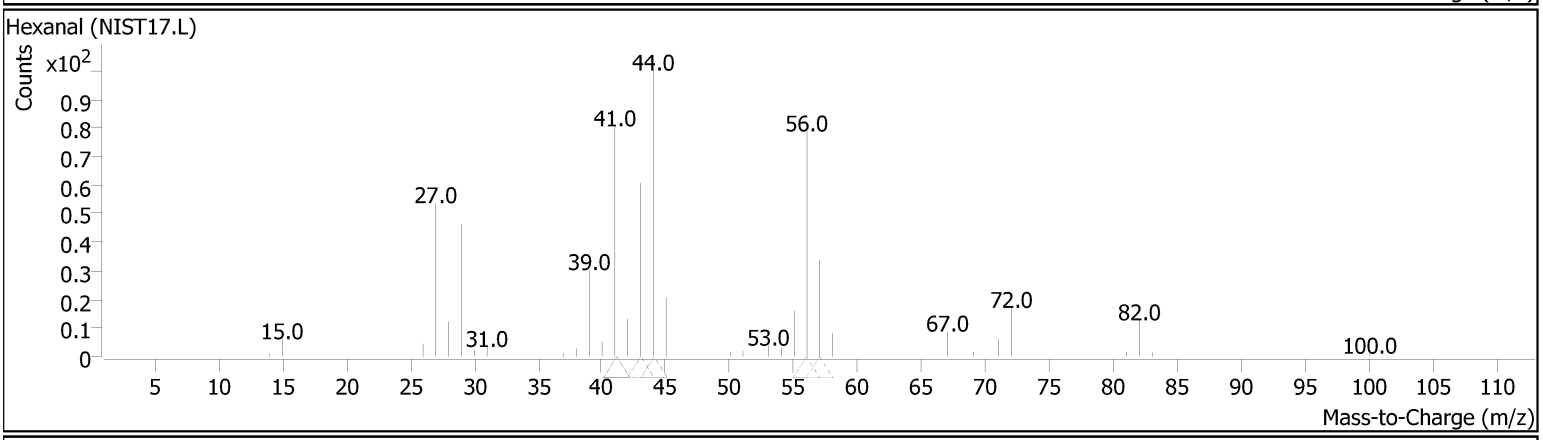


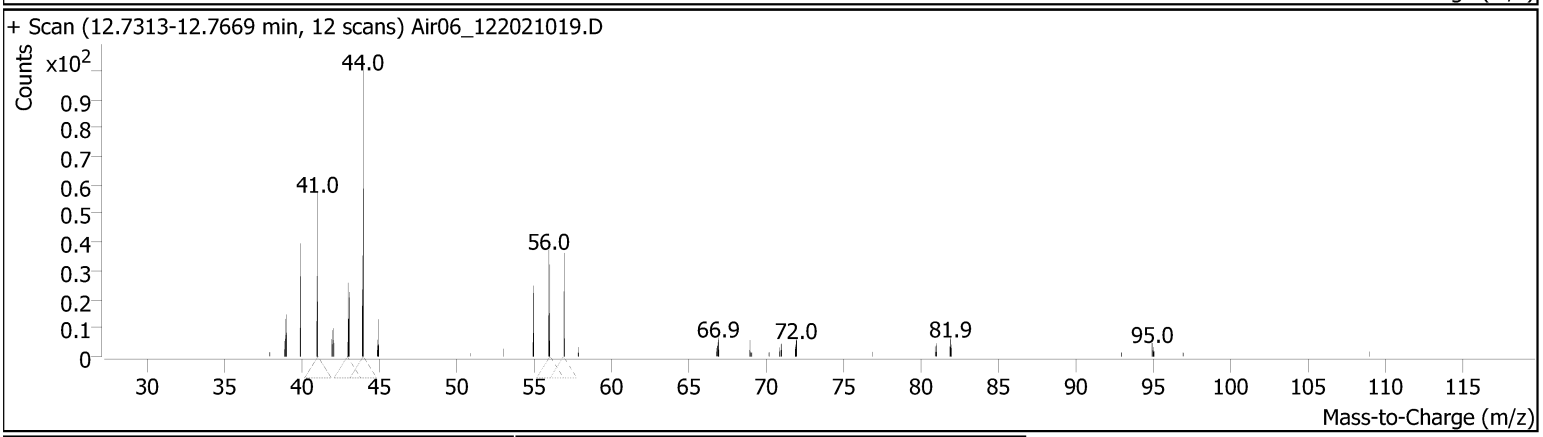


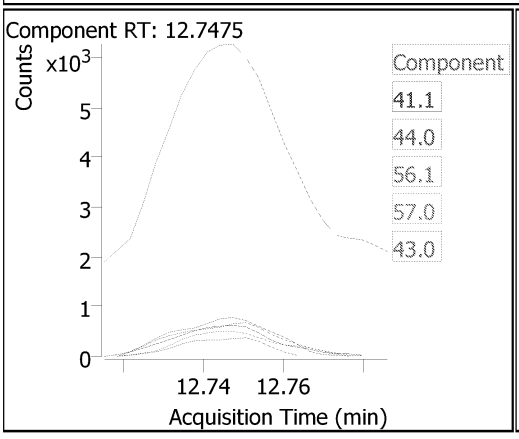


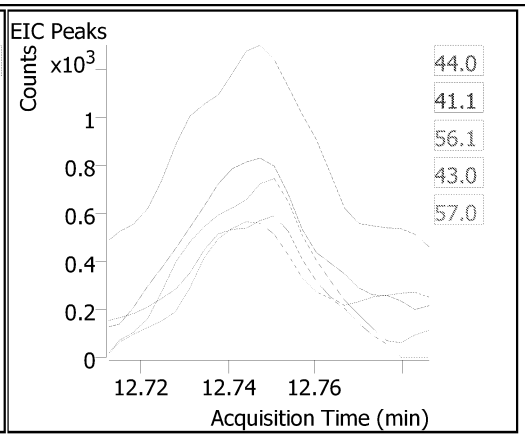
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.7475	Hexanal	9950.7	93.2	66-25-1	C6H12O	0.02348





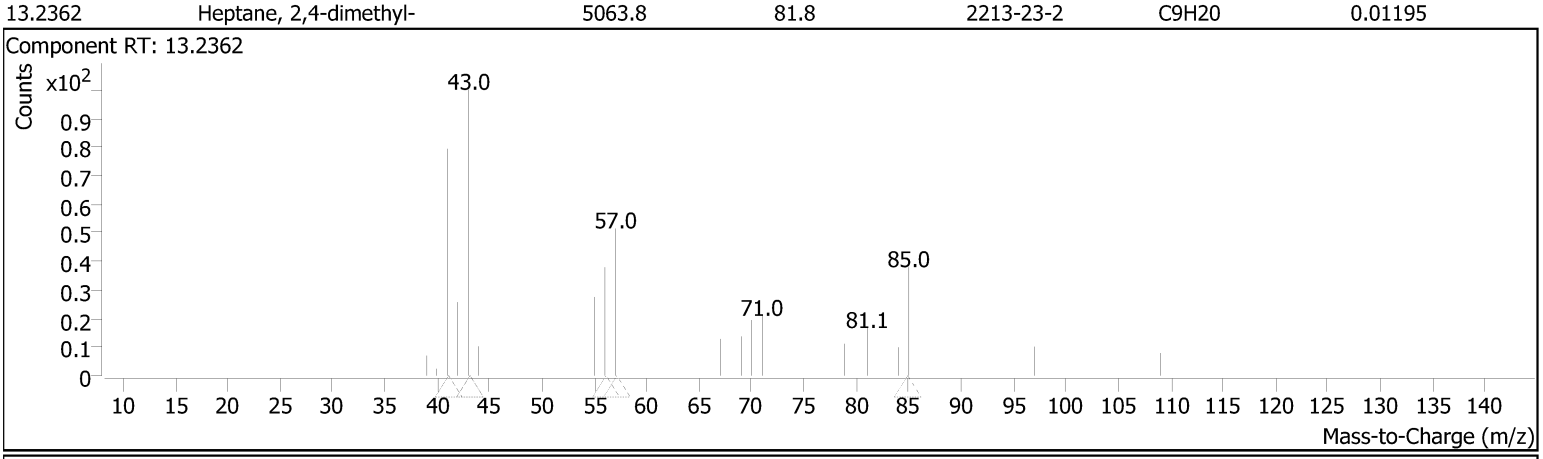


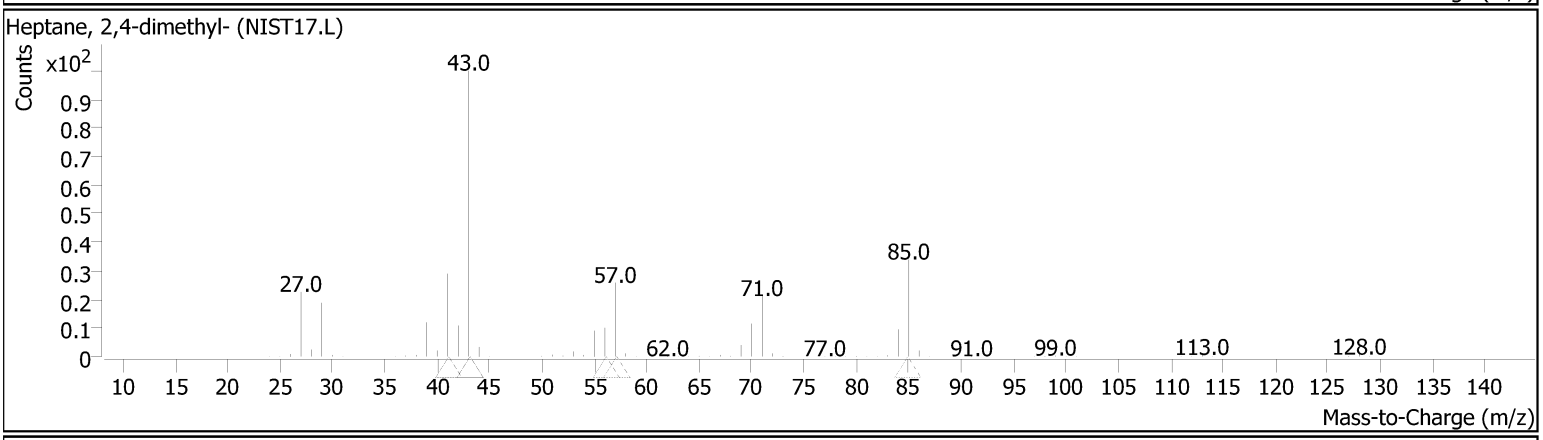


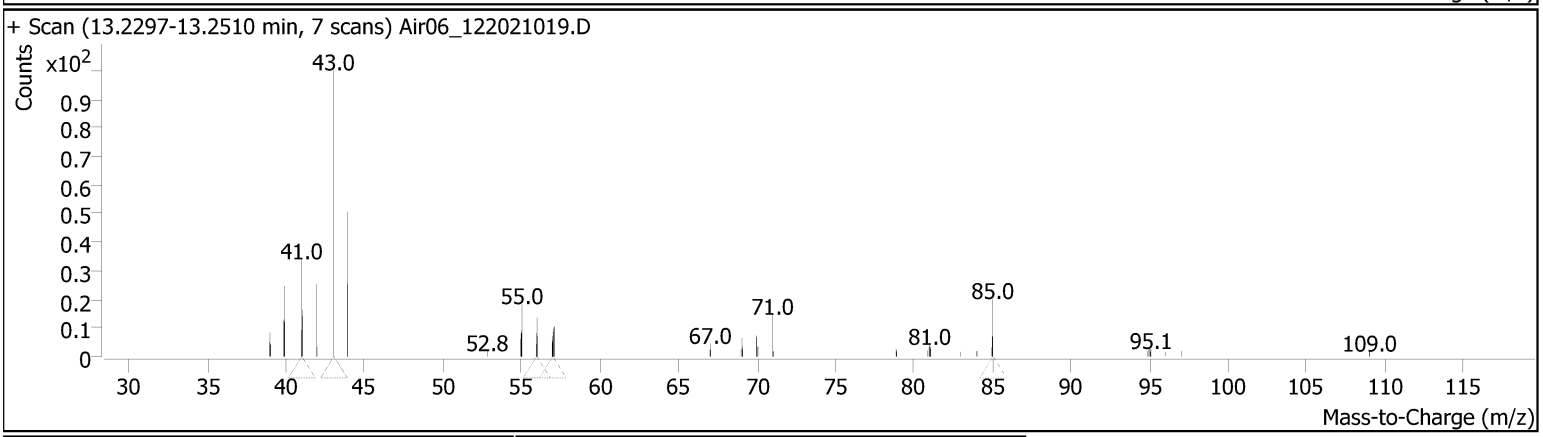


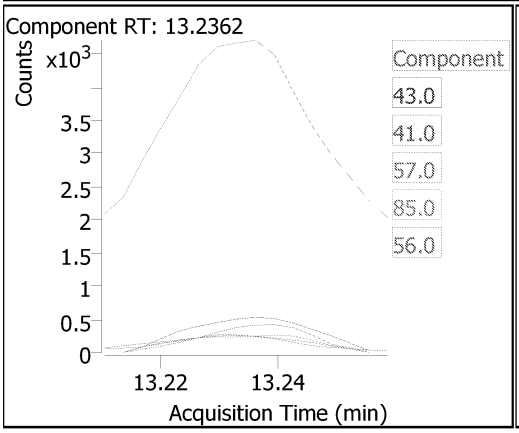


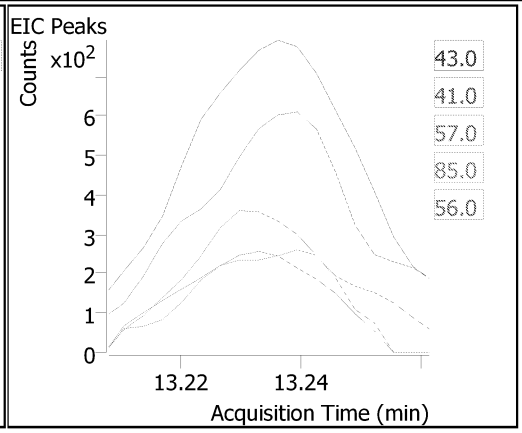
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.2362	Heptane, 2,4-dimethyl-	5063.8	81.8	2213-23-2	C9H20	0.01195

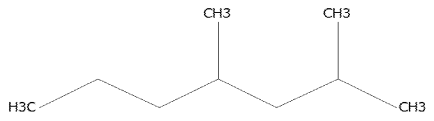




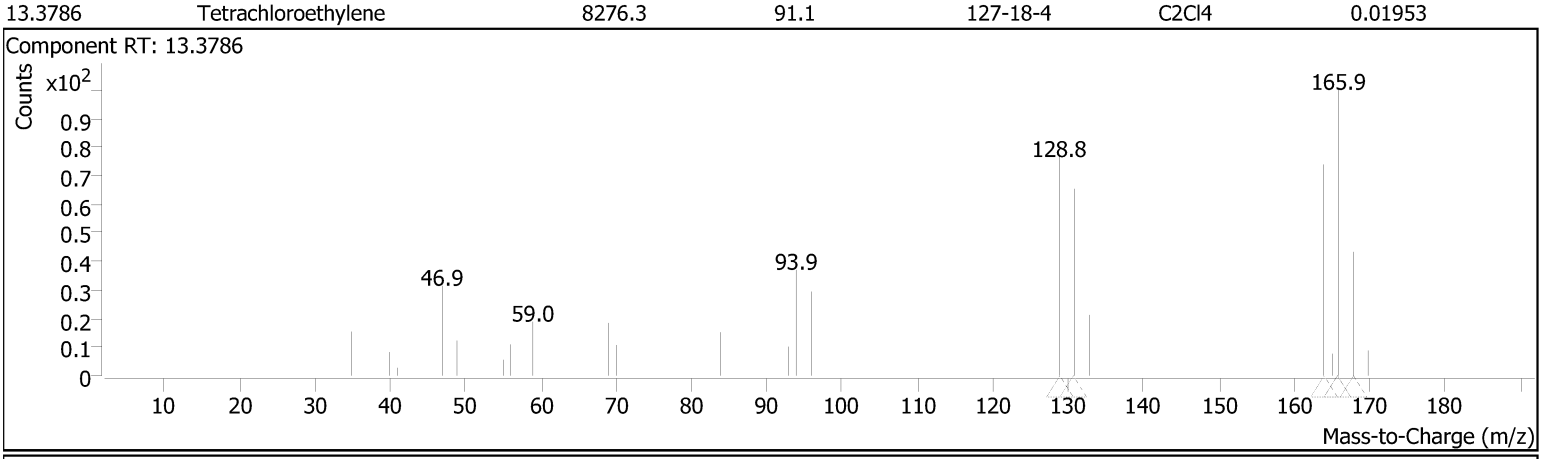


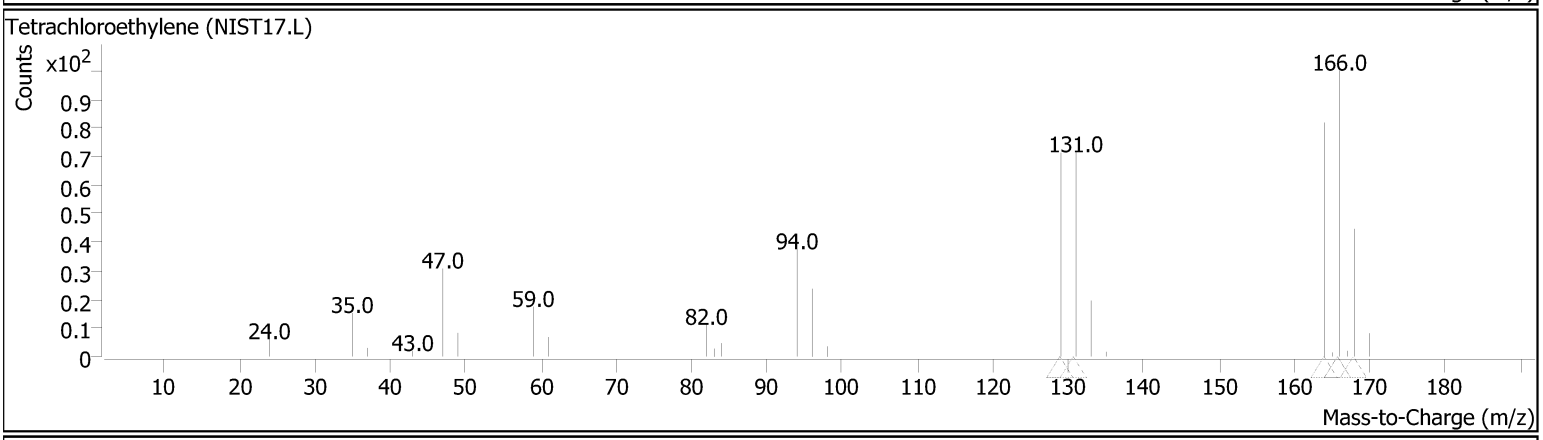


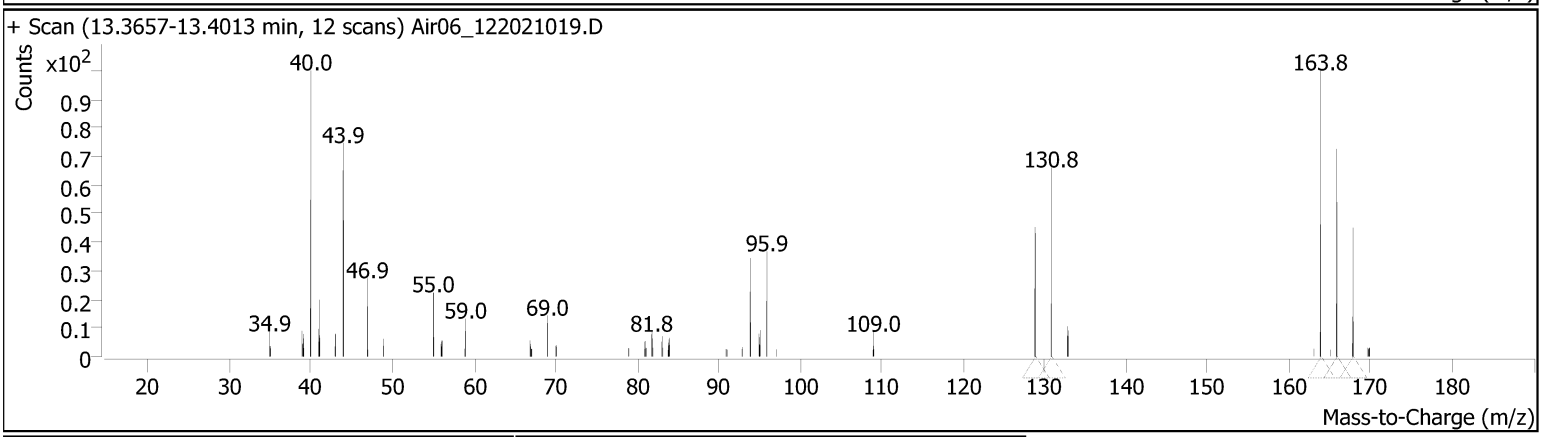


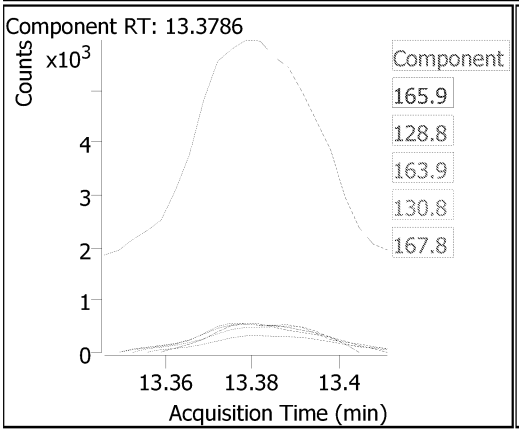


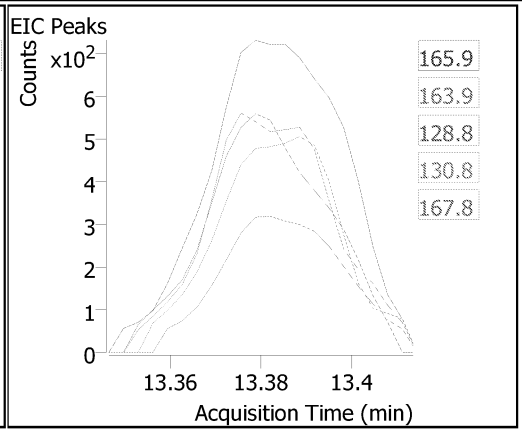
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.3786	Tetrachloroethylene	8276.3	91.1	127-18-4	C2Cl4	0.01953

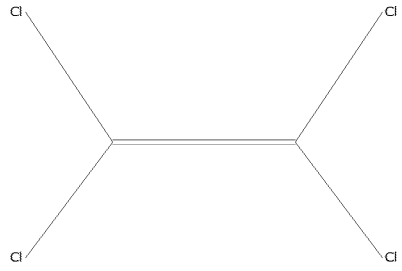




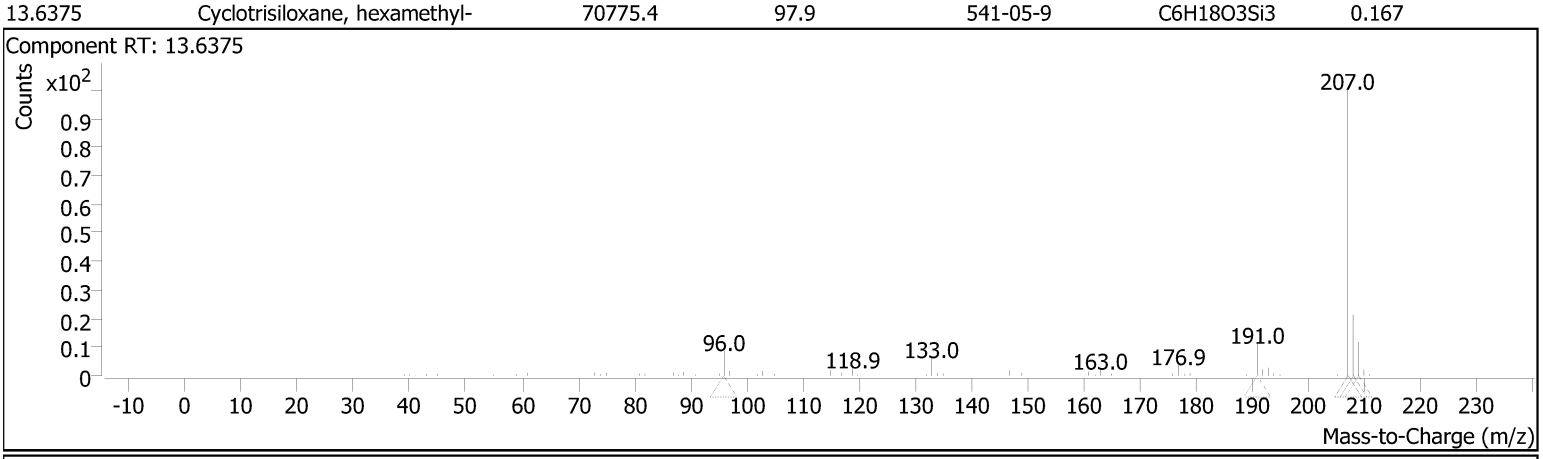


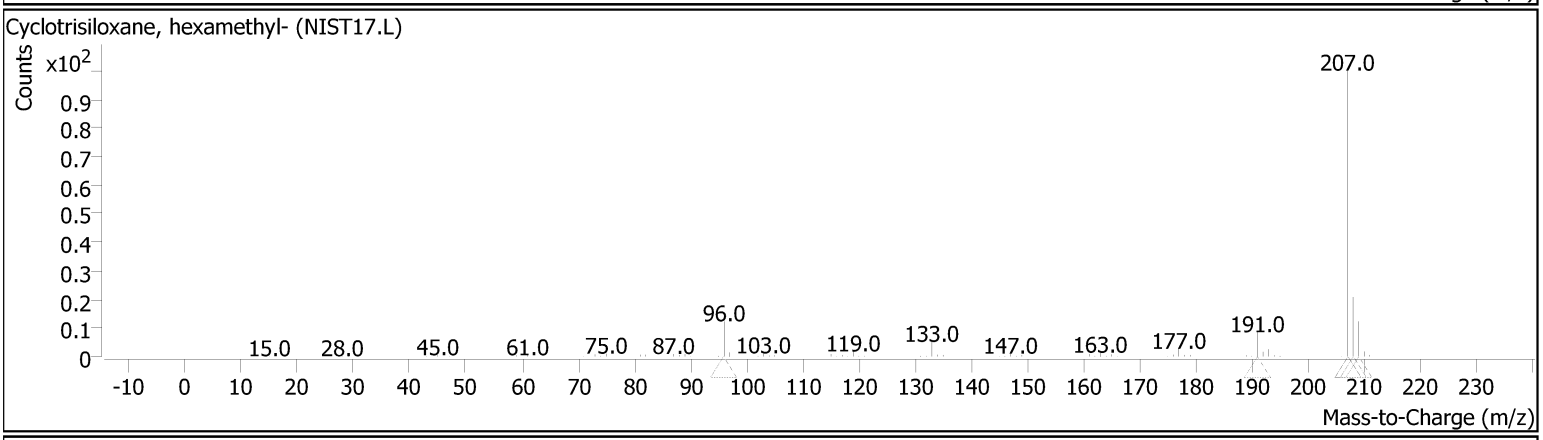


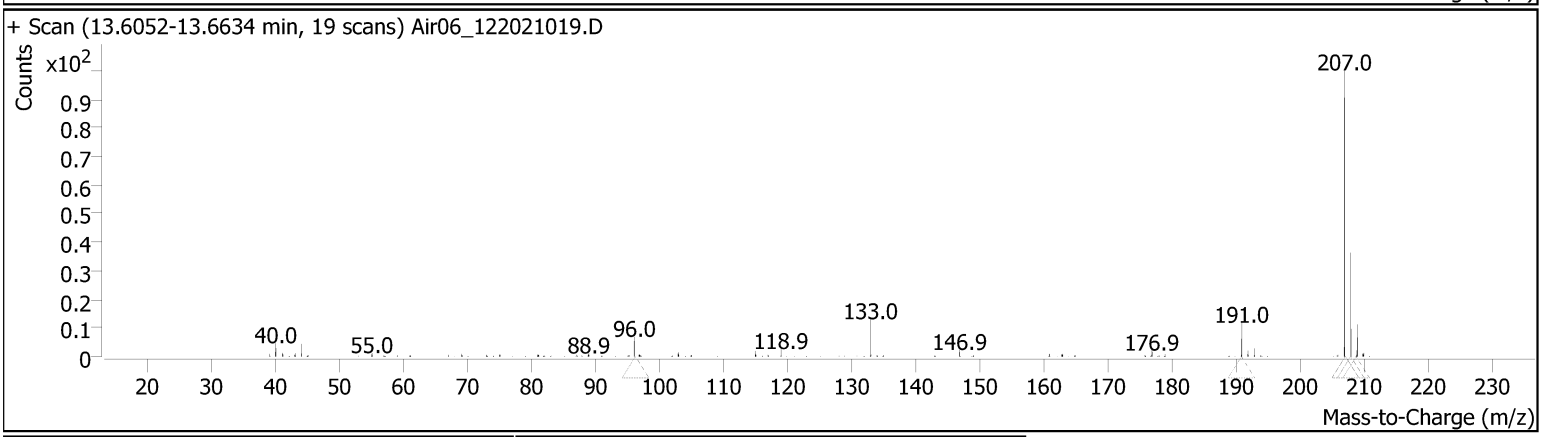


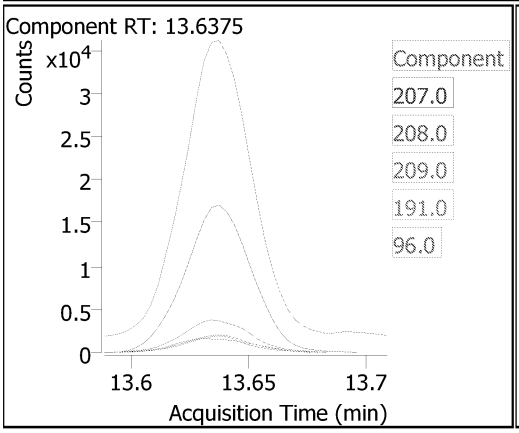


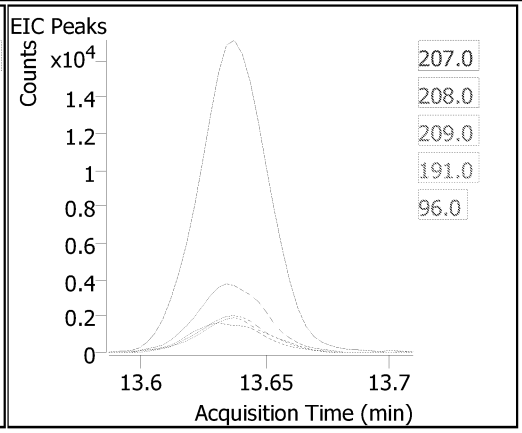
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.6375	Cyclotrisiloxane, hexamethyl-	70775.4	97.9	541-05-9	C6H18O3Si3	0.167

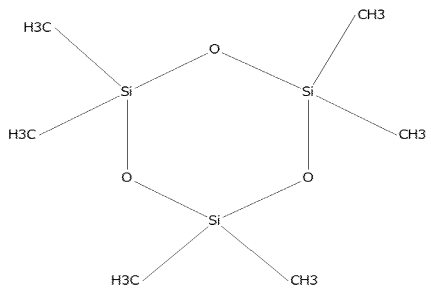




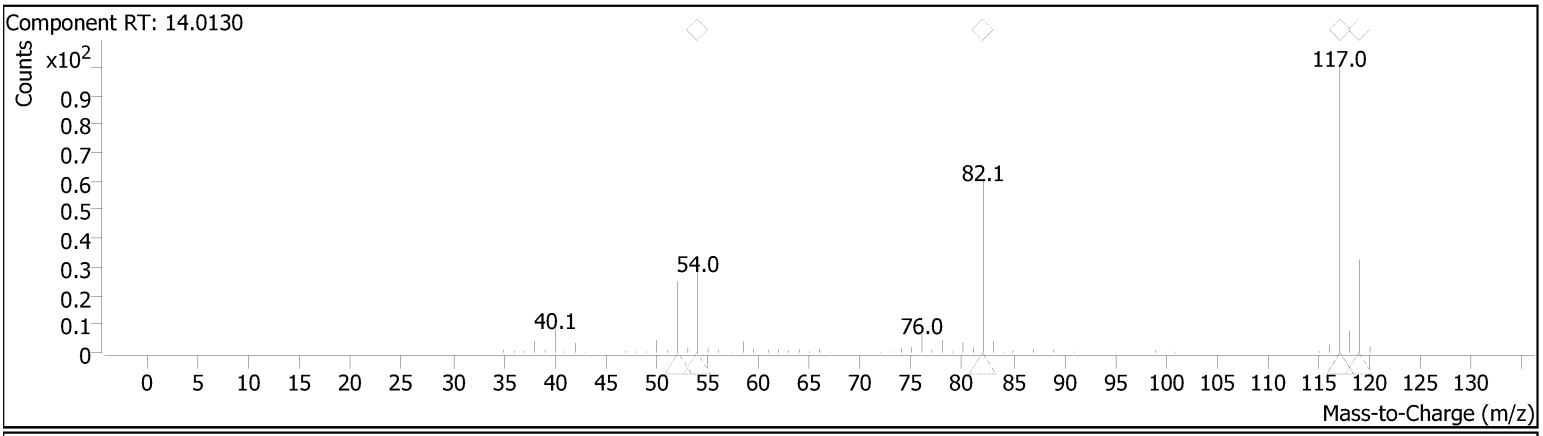


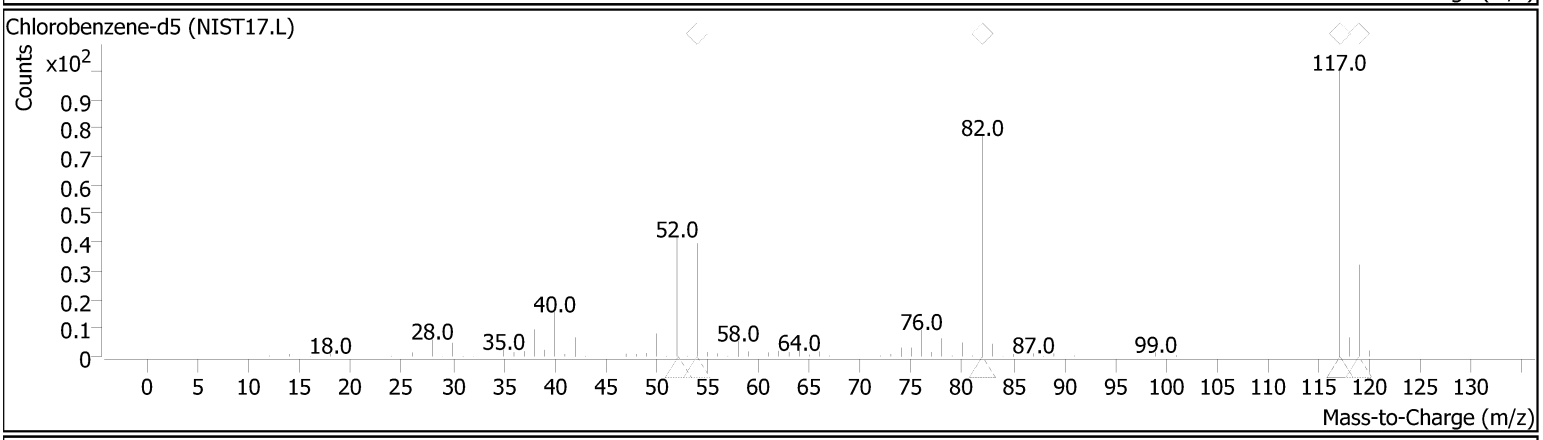


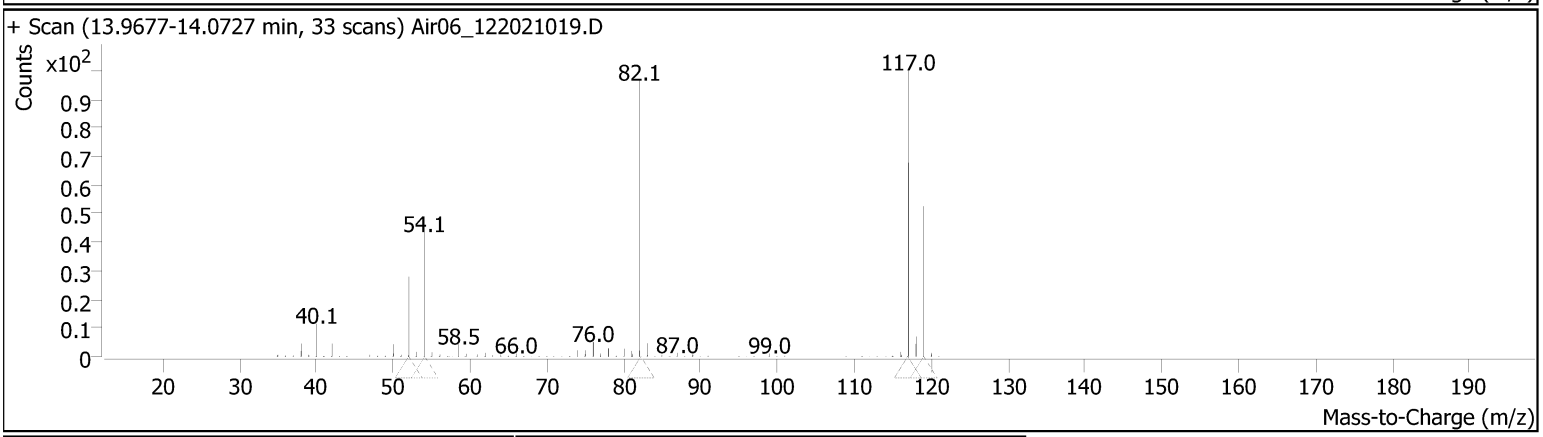


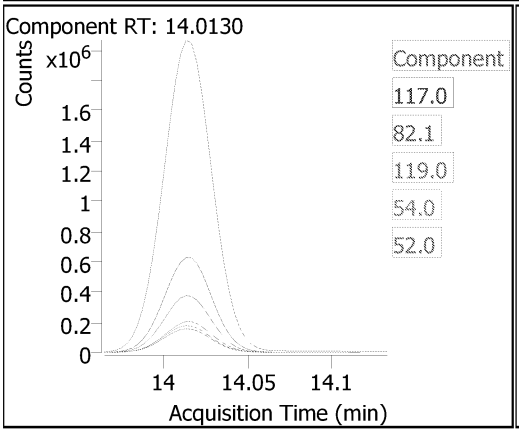


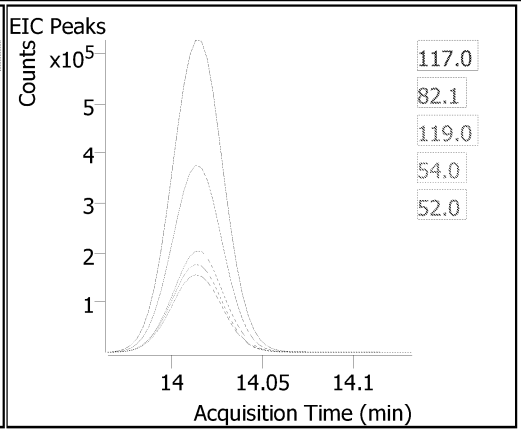
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.0130	Chlorobenzene-d5	4238253.7	96.0	3114-55-4	C6D5Cl	10

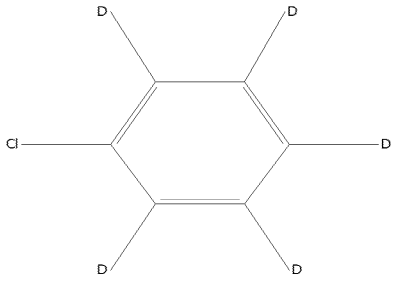




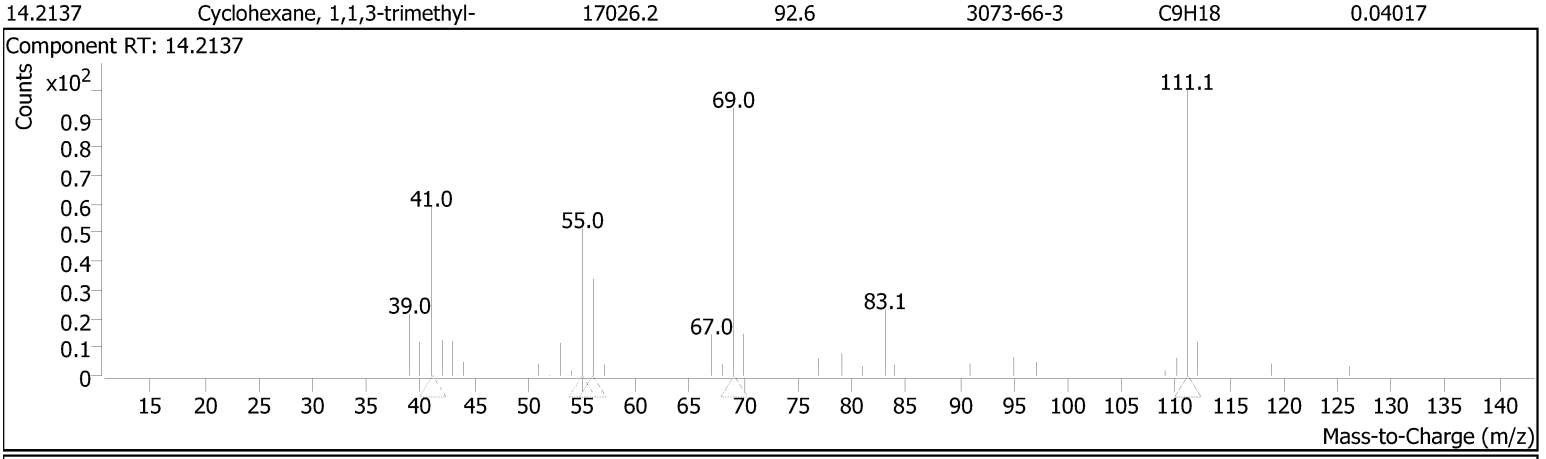


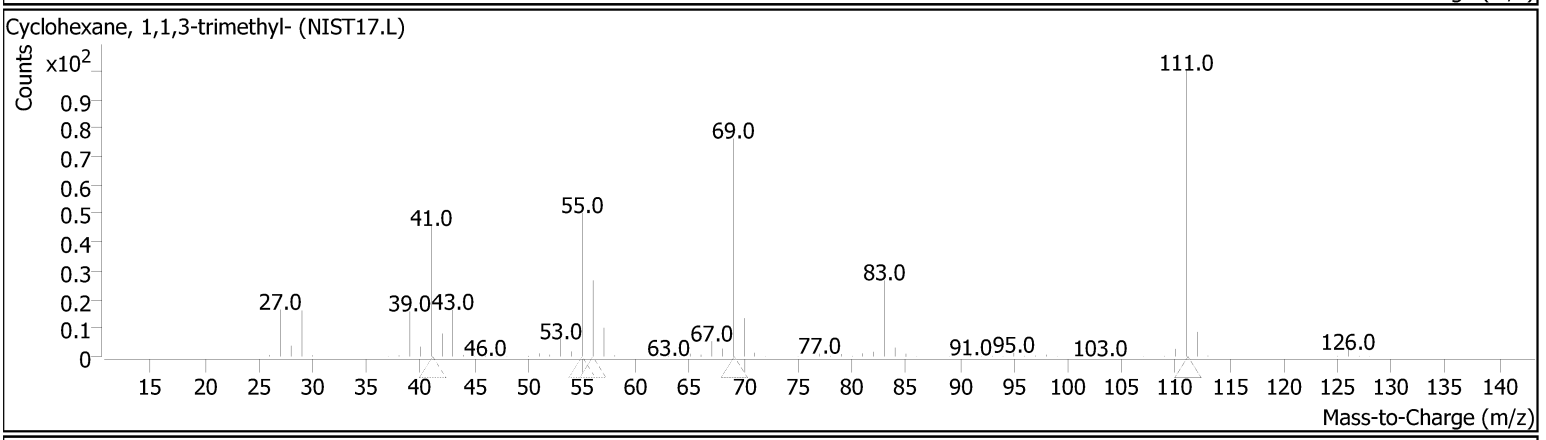


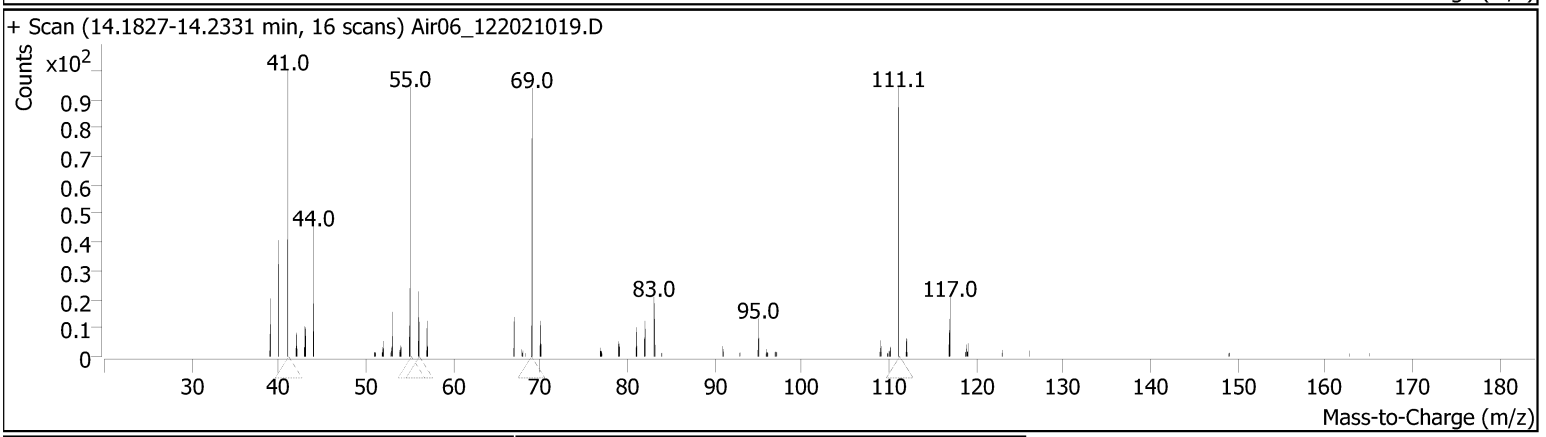


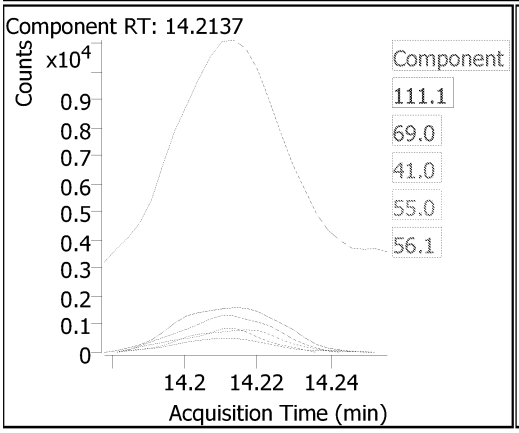


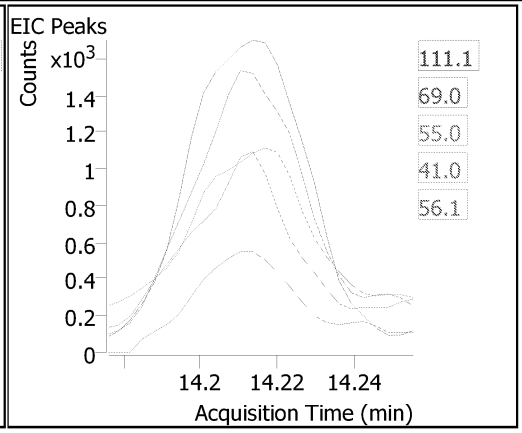
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.2137	Cyclohexane, 1,1,3-trimethyl-	17026.2	92.6	3073-66-3	C9H18	0.04017

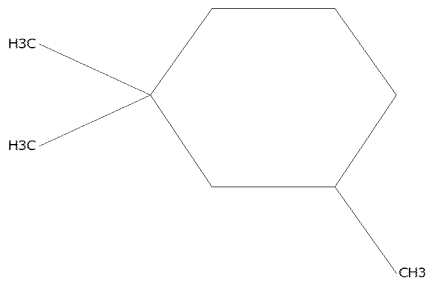




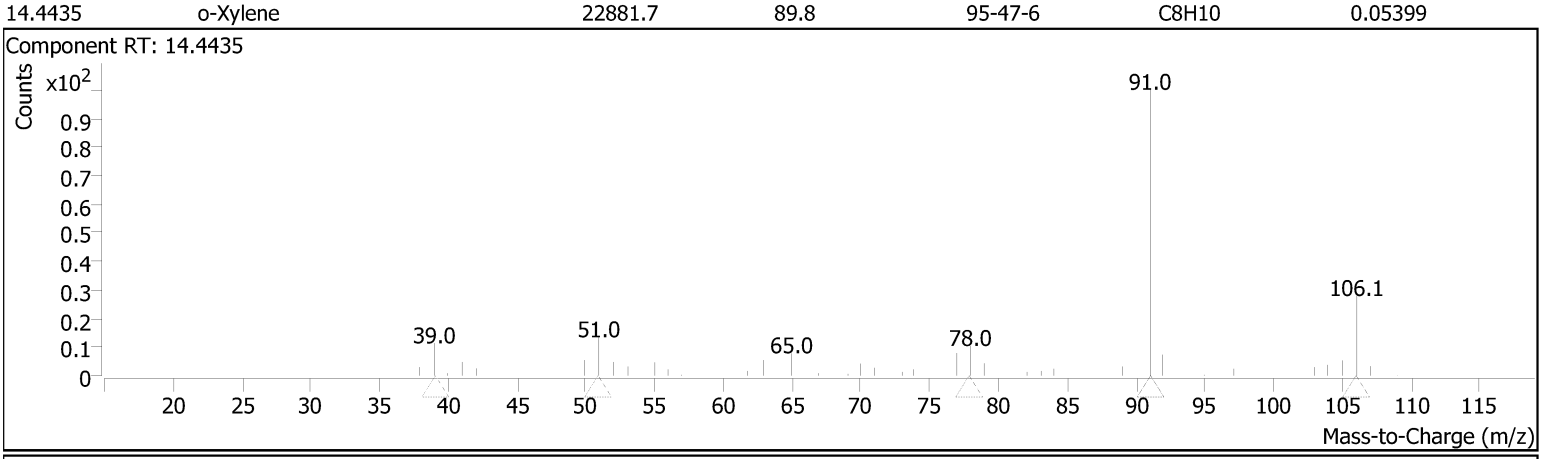


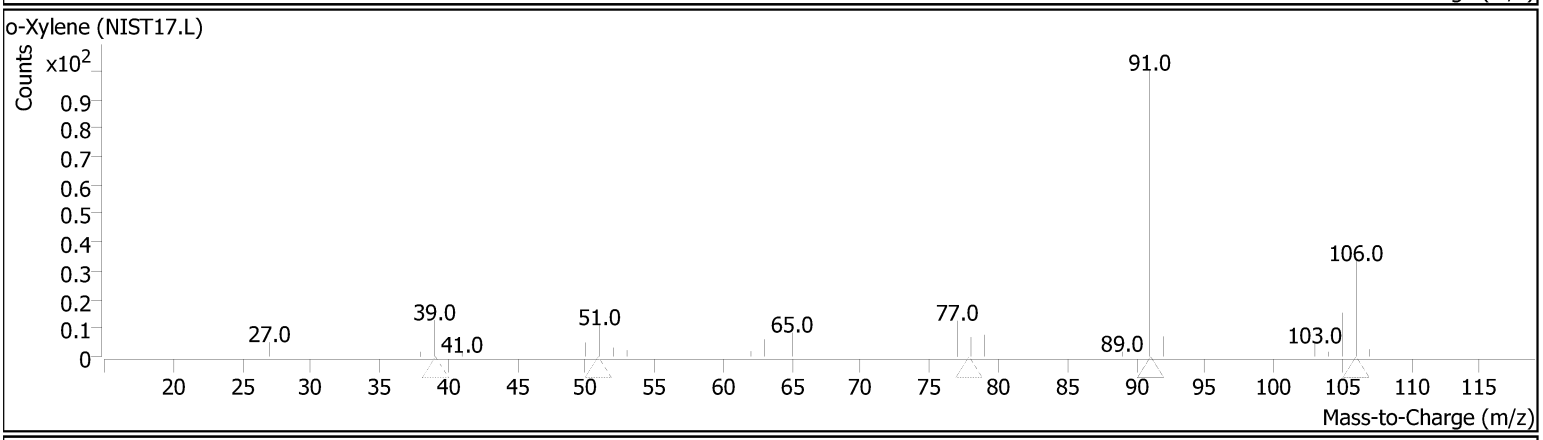


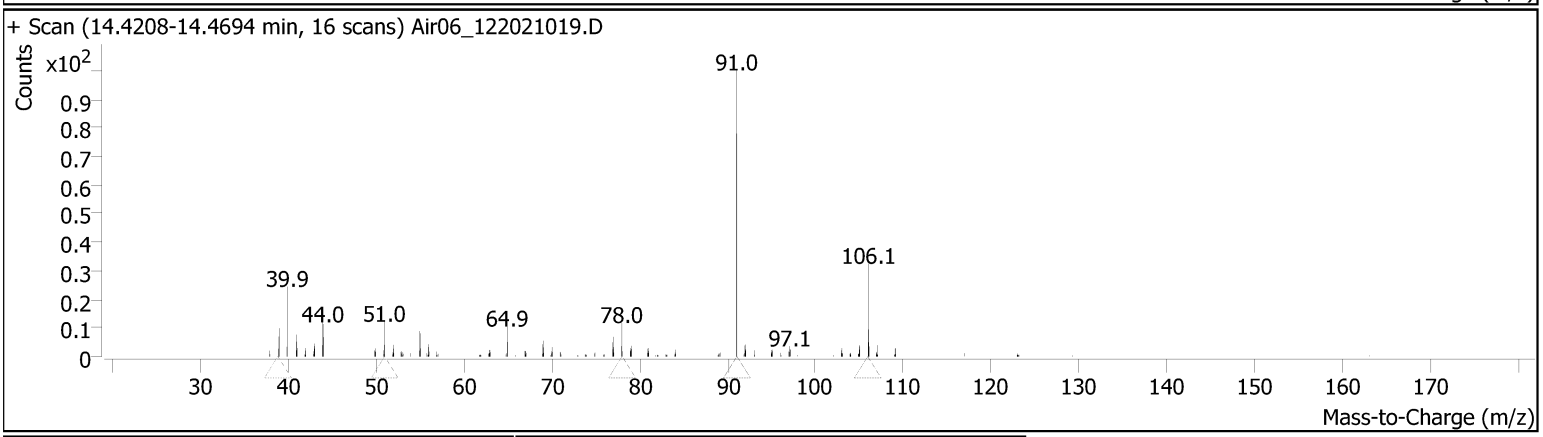


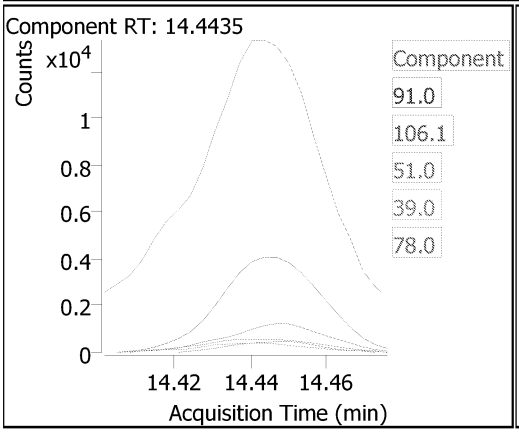


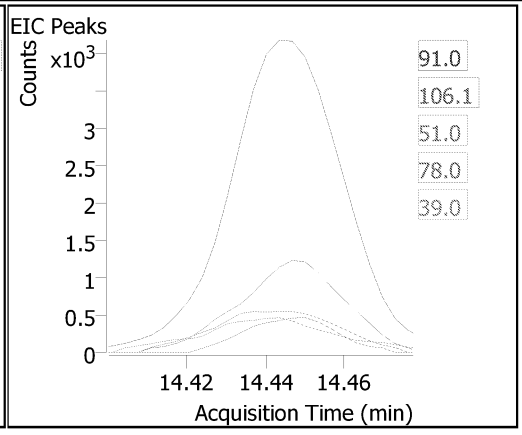
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.4435	o-Xylene	22881.7	89.8	95-47-6	C8H10	0.05399

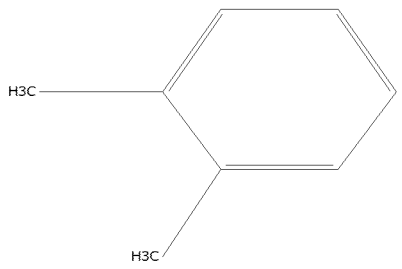




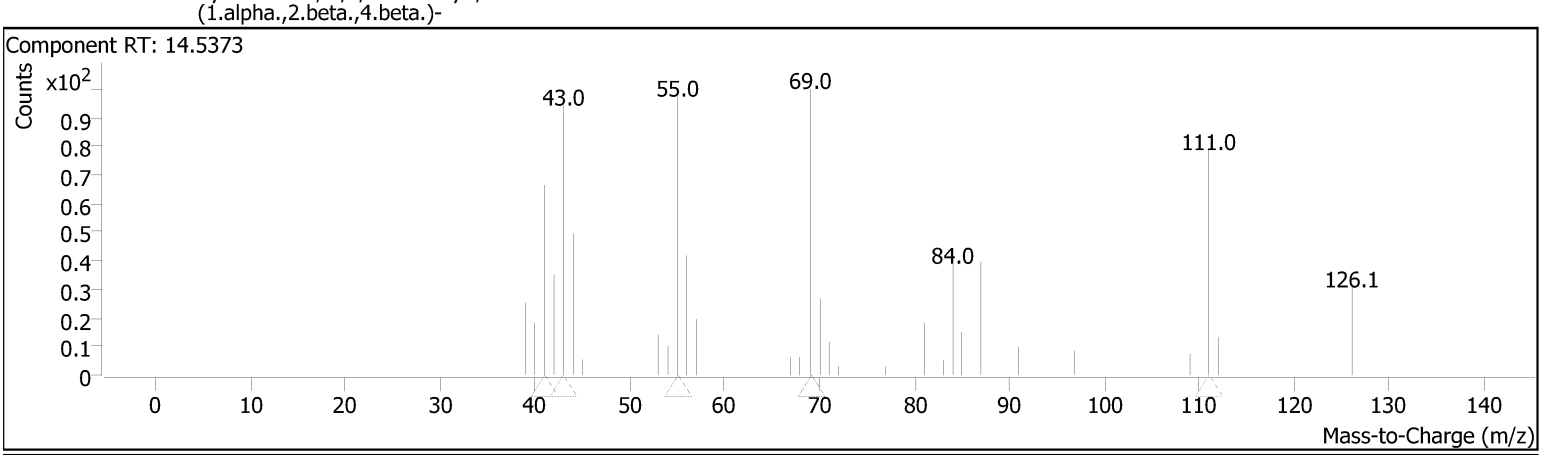


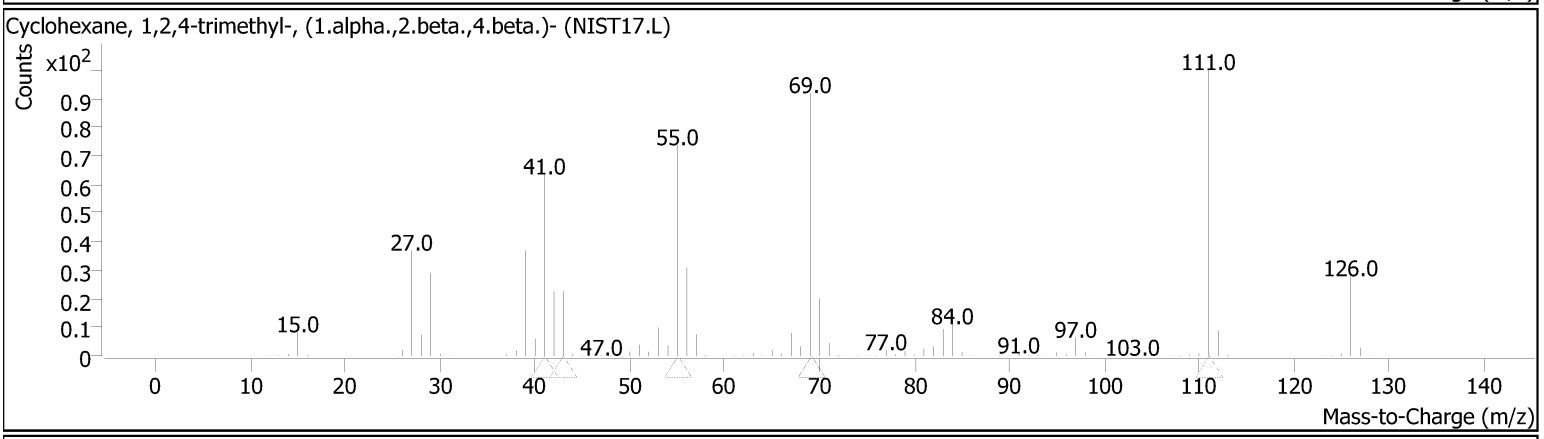


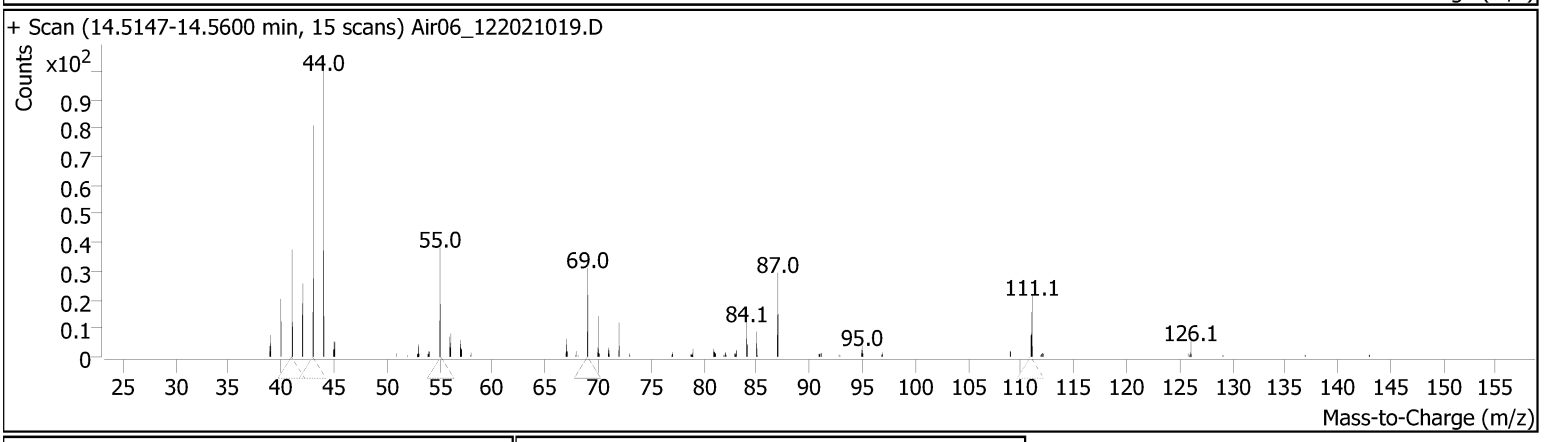


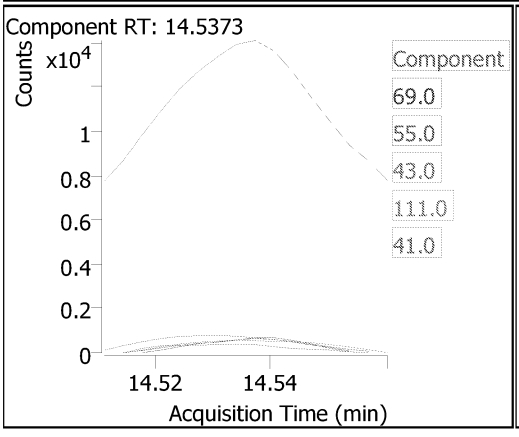


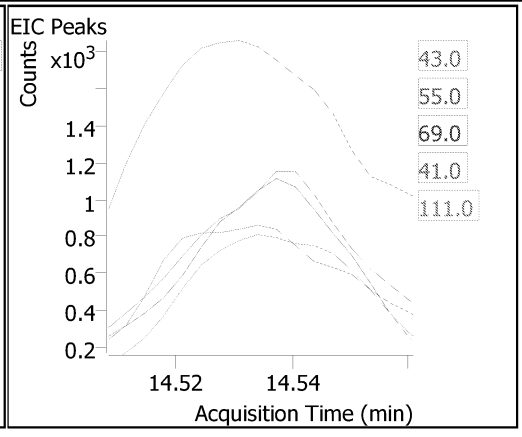
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.5373	Cyclohexane, 1,2,4-trimethyl-, (1.alpha.,2.beta.,4.beta.)-	12158.8	83.3	7667-60-9	C9H18	0.02869

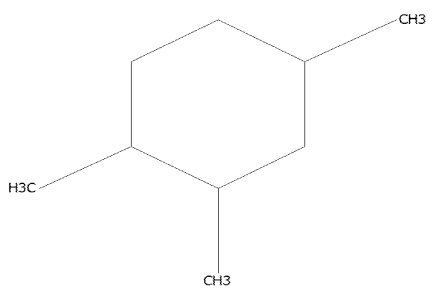




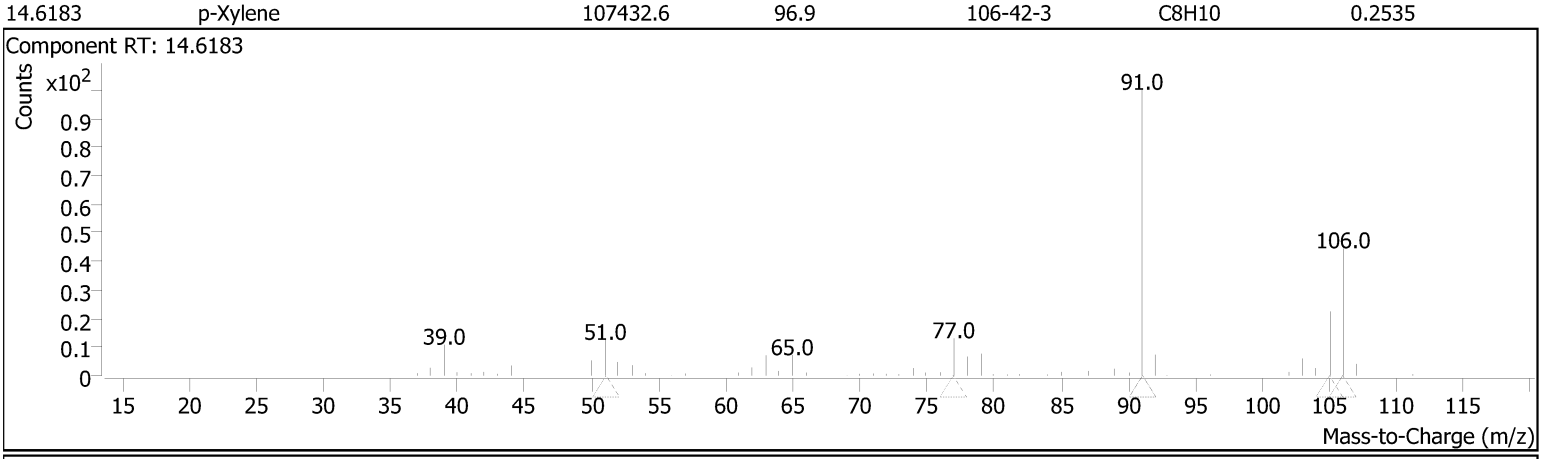


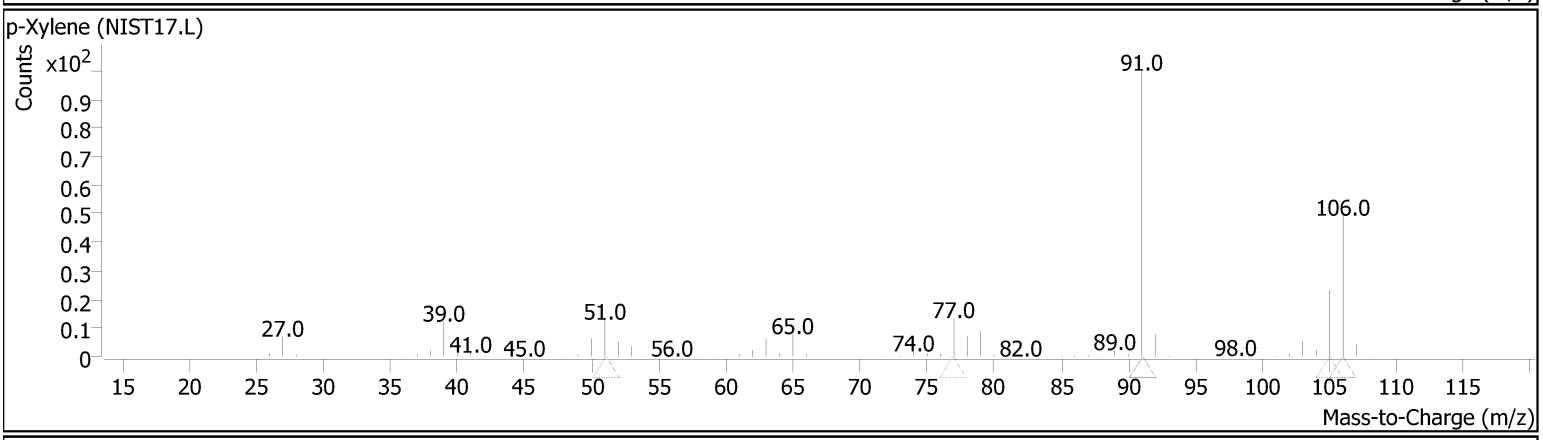


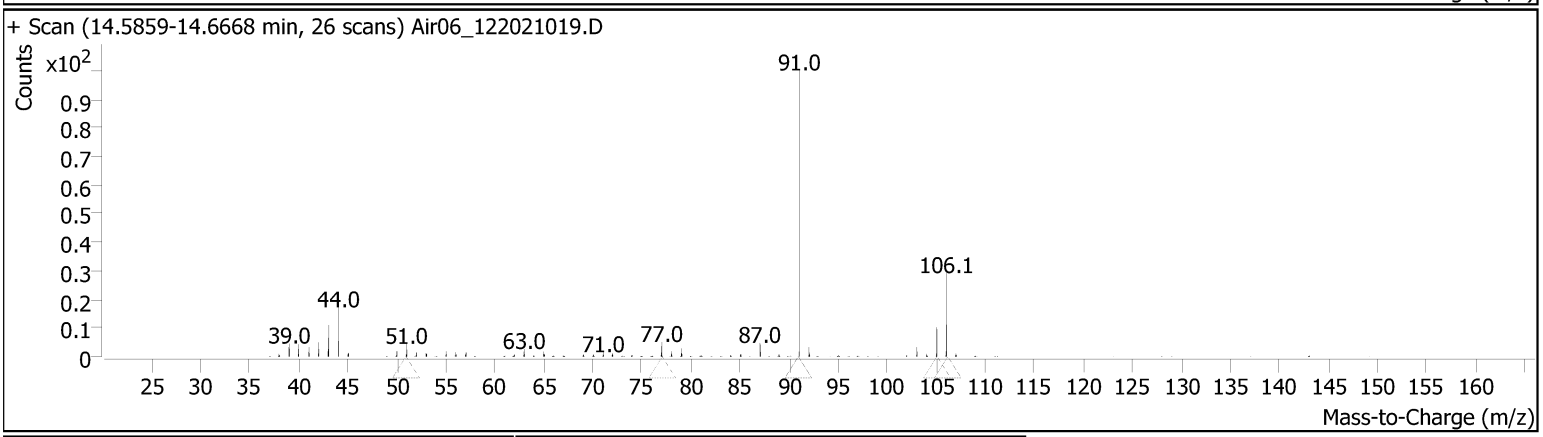


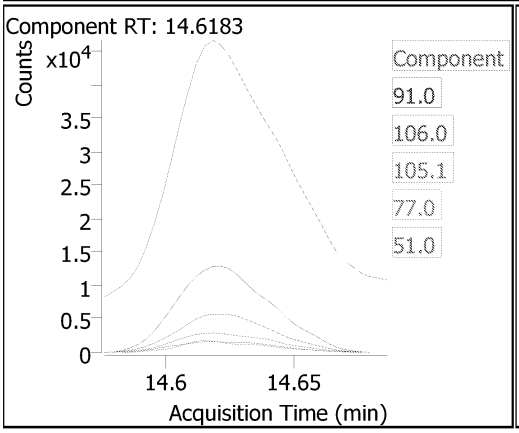


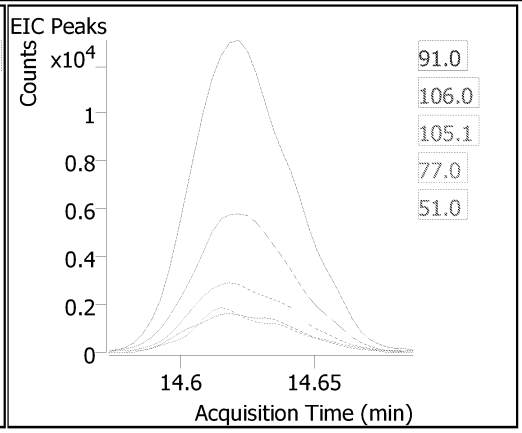
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.6183	p-Xylene	107432.6	96.9	106-42-3	C8H10	0.2535

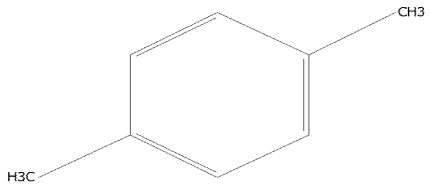




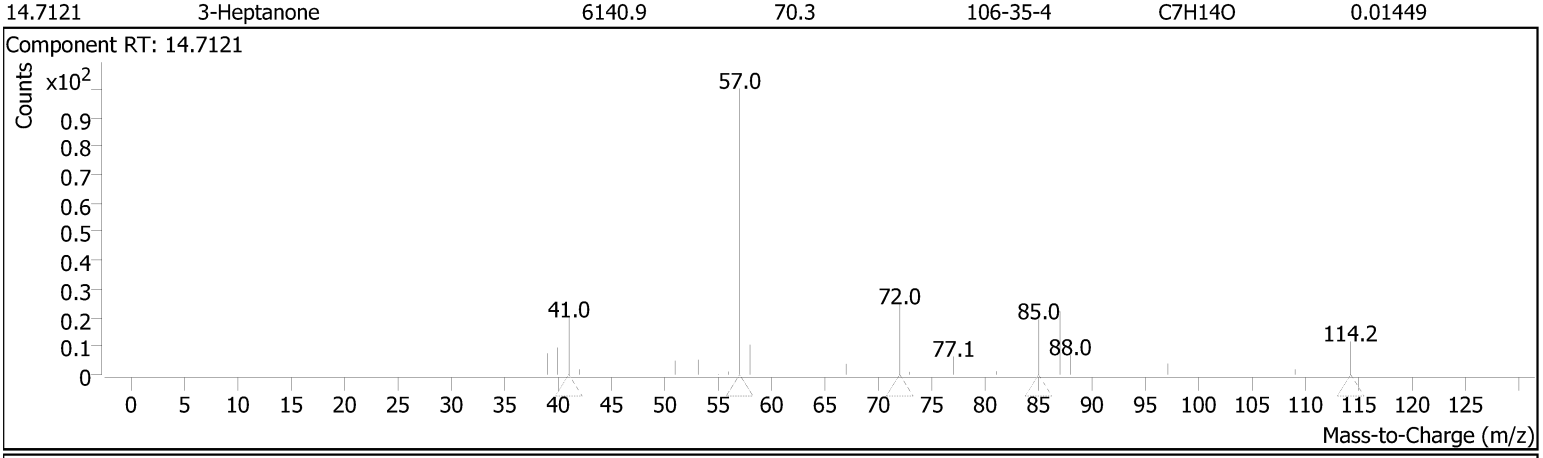


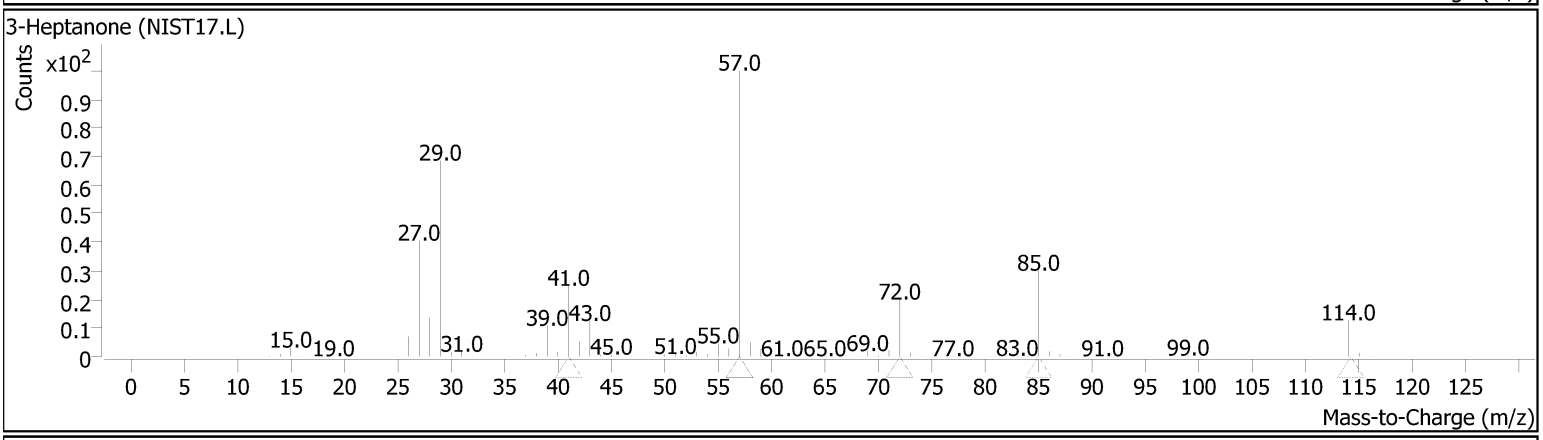


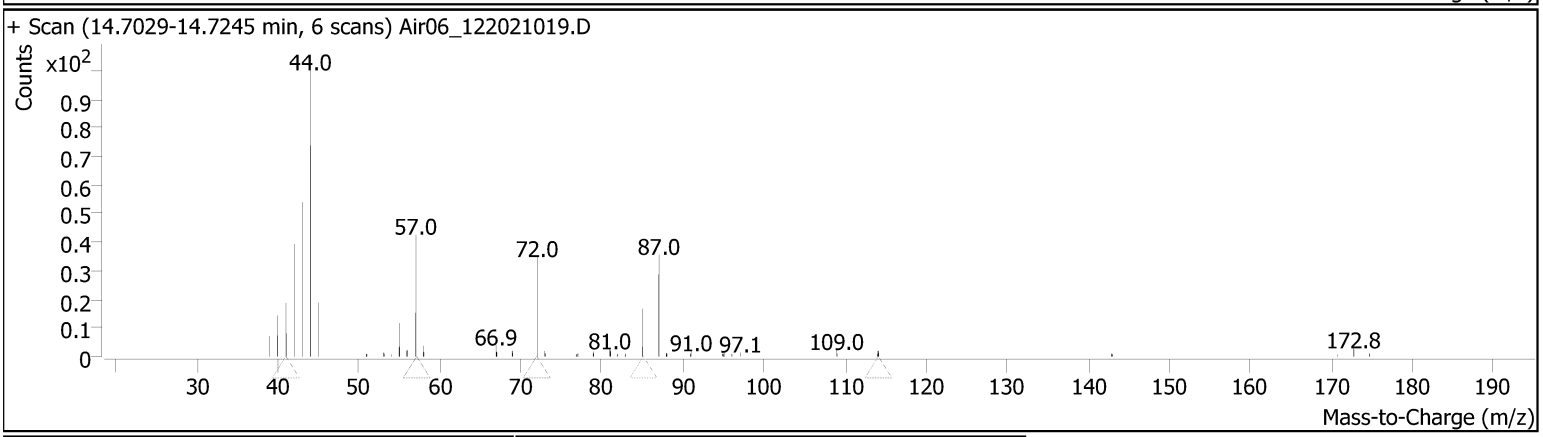


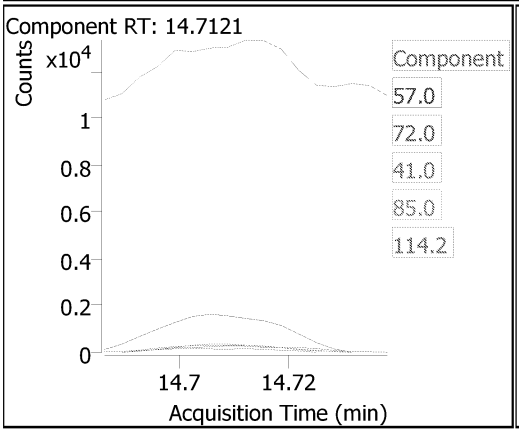


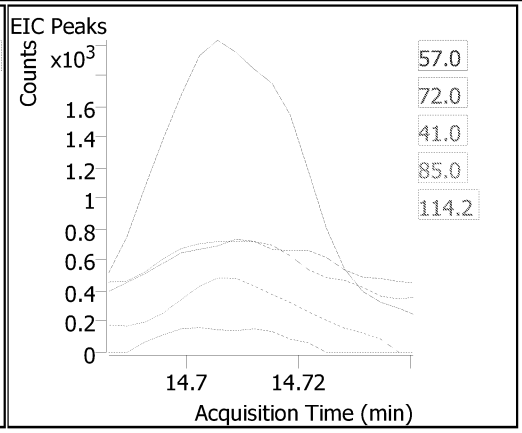
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.7121	3-Heptanone	6140.9	70.3	106-35-4	C7H14O	0.01449

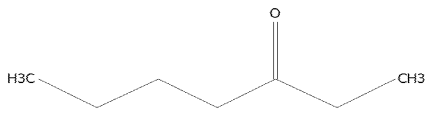




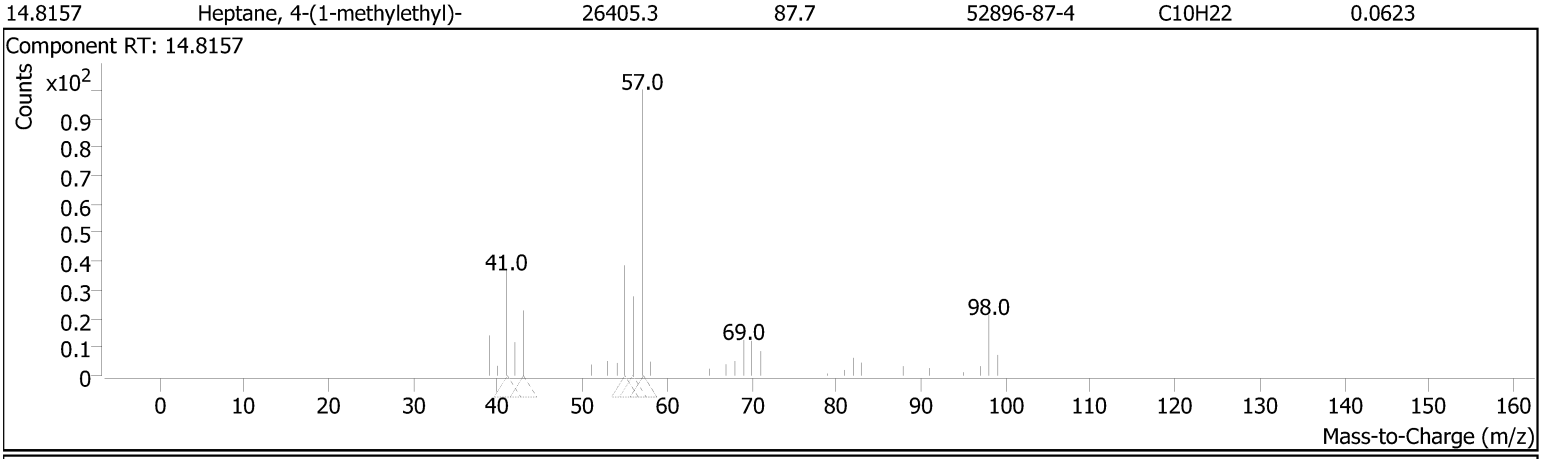


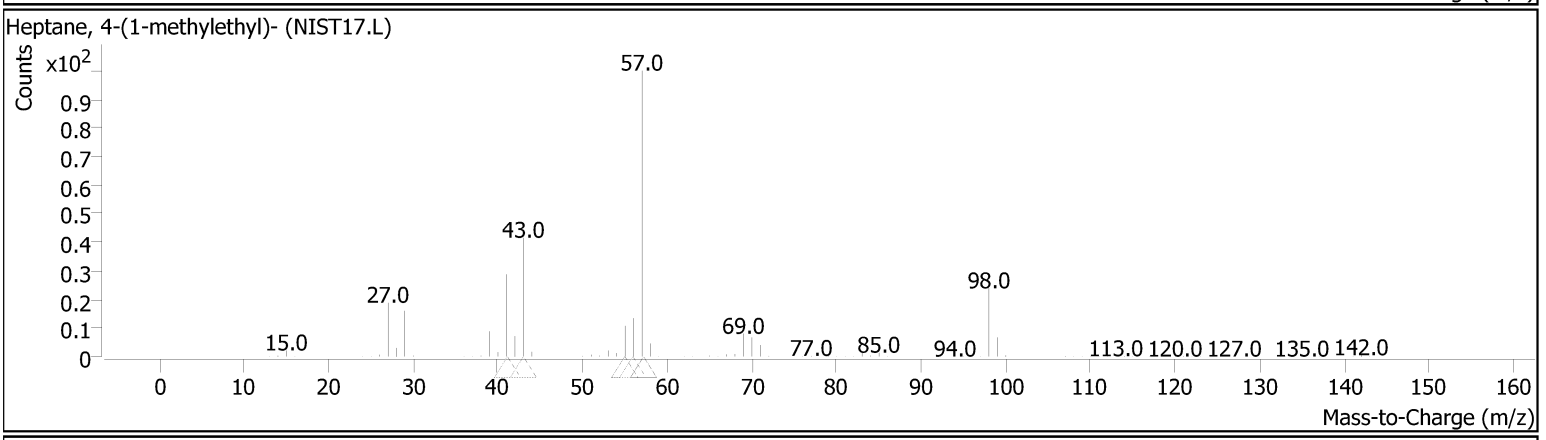


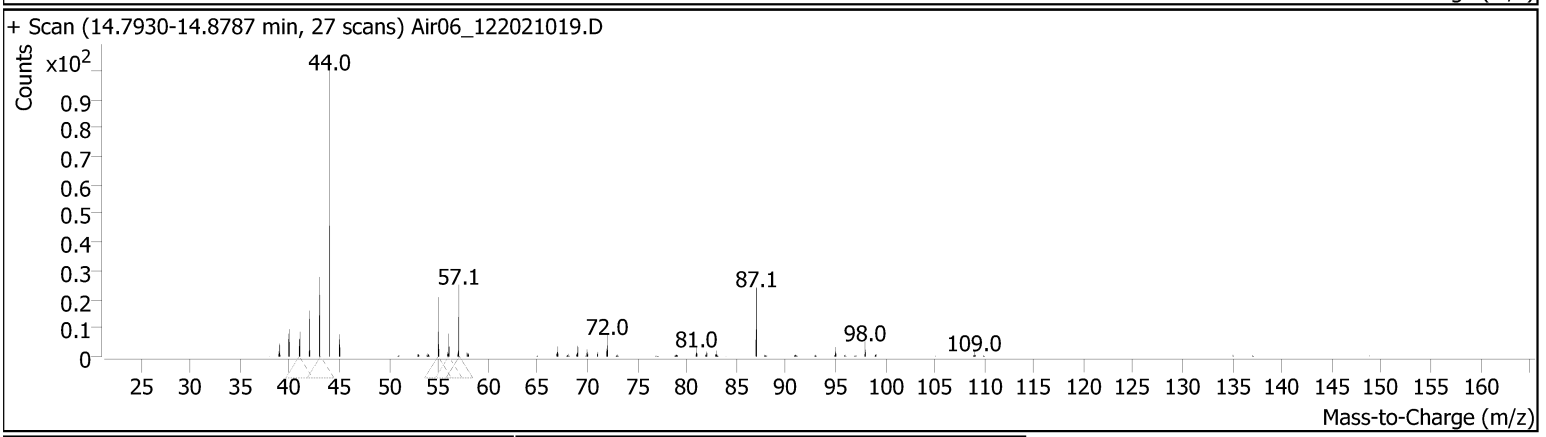


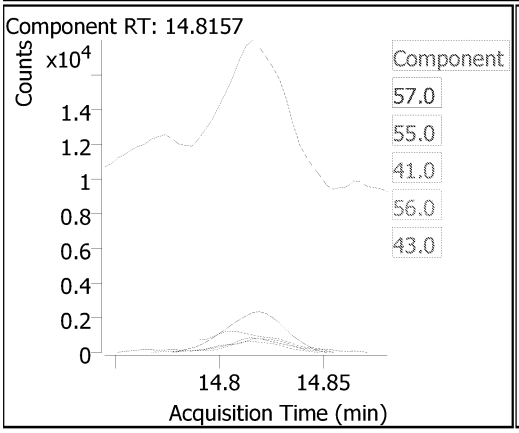


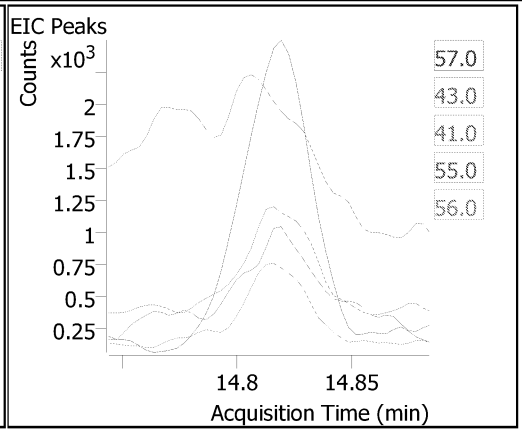
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.8157	Heptane, 4-(1-methylethyl)-	26405.3	87.7	52896-87-4	C10H22	0.0623

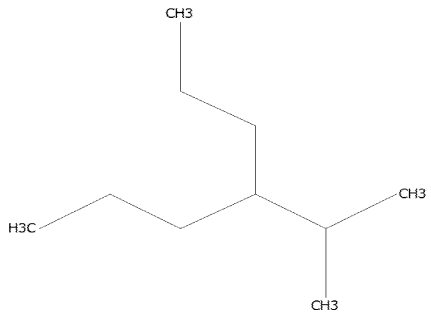




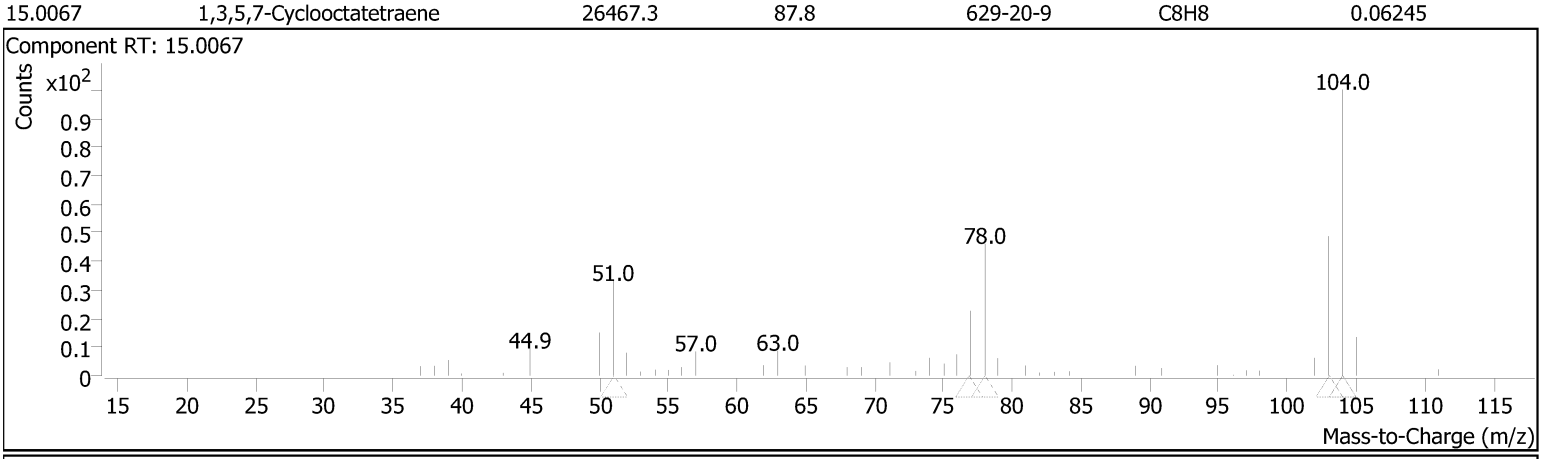


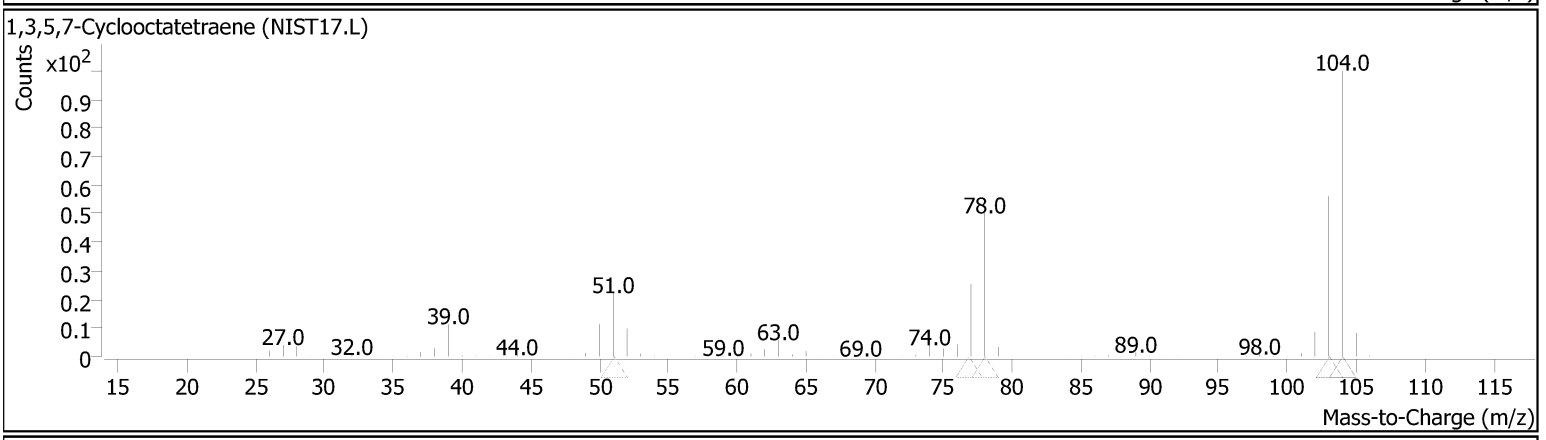


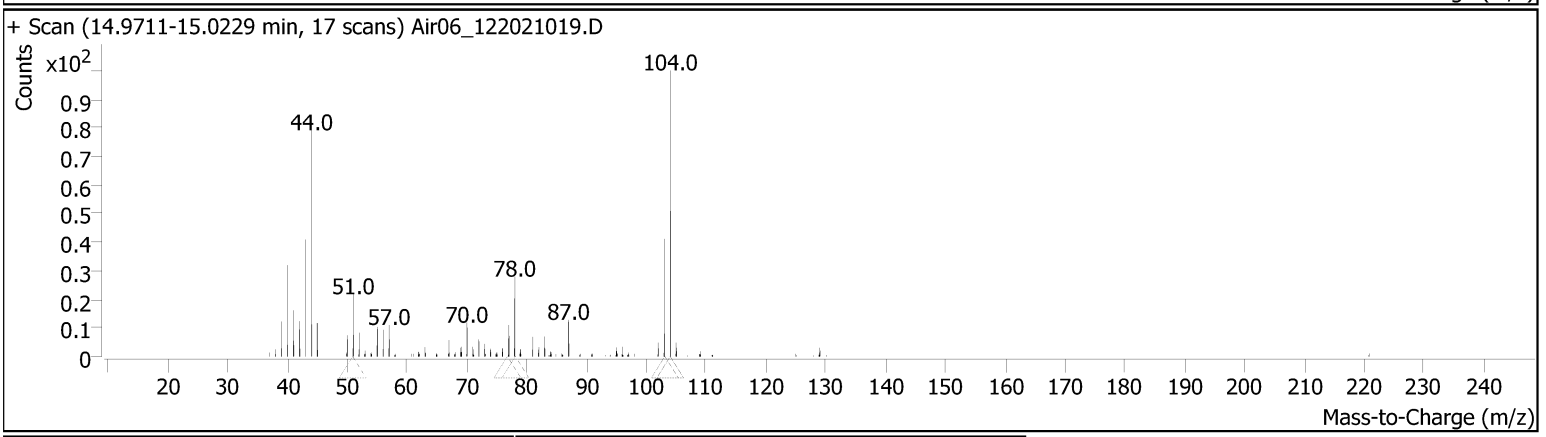


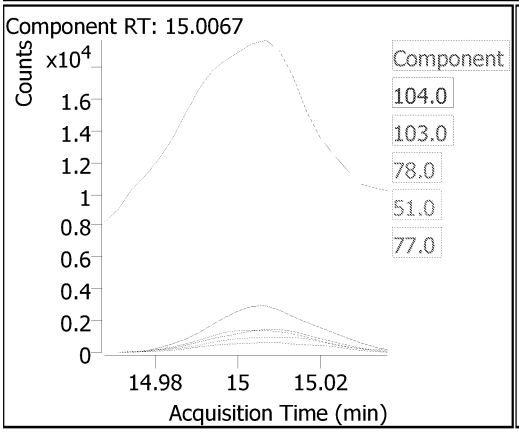


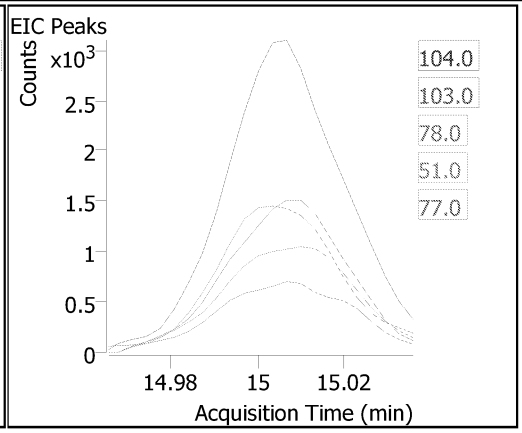
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.0067	1,3,5,7-Cyclooctatetraene	26467.3	87.8	629-20-9	C8H8	0.06245

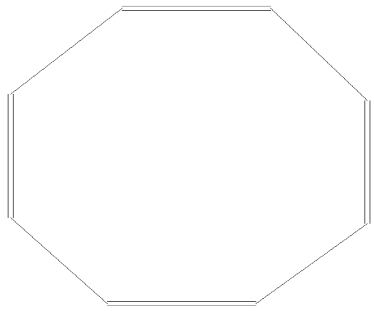




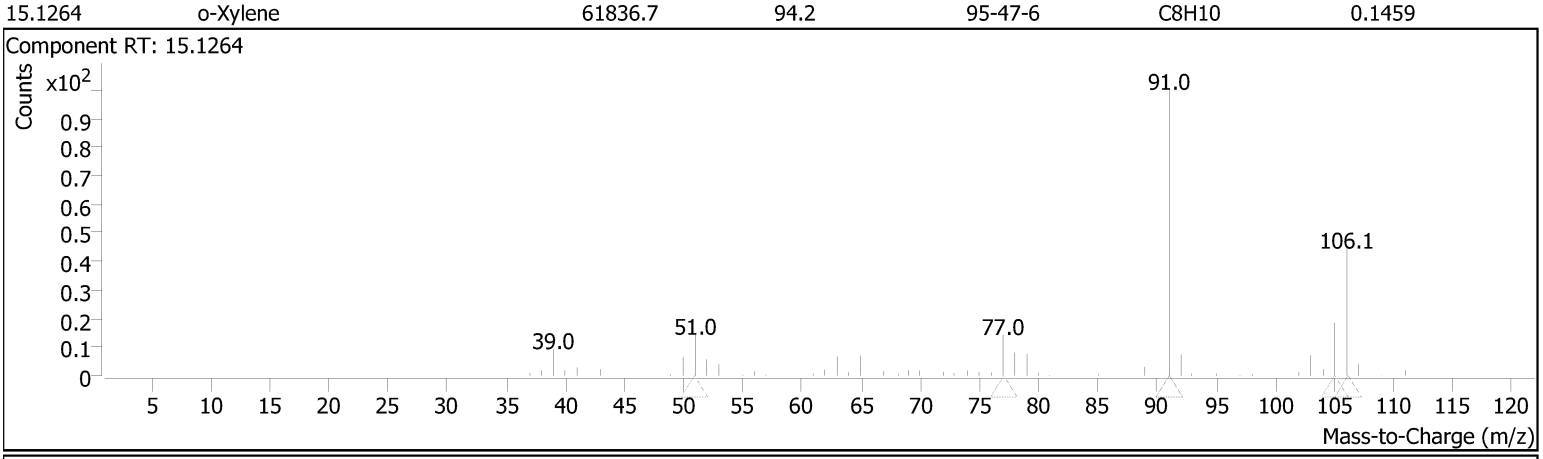


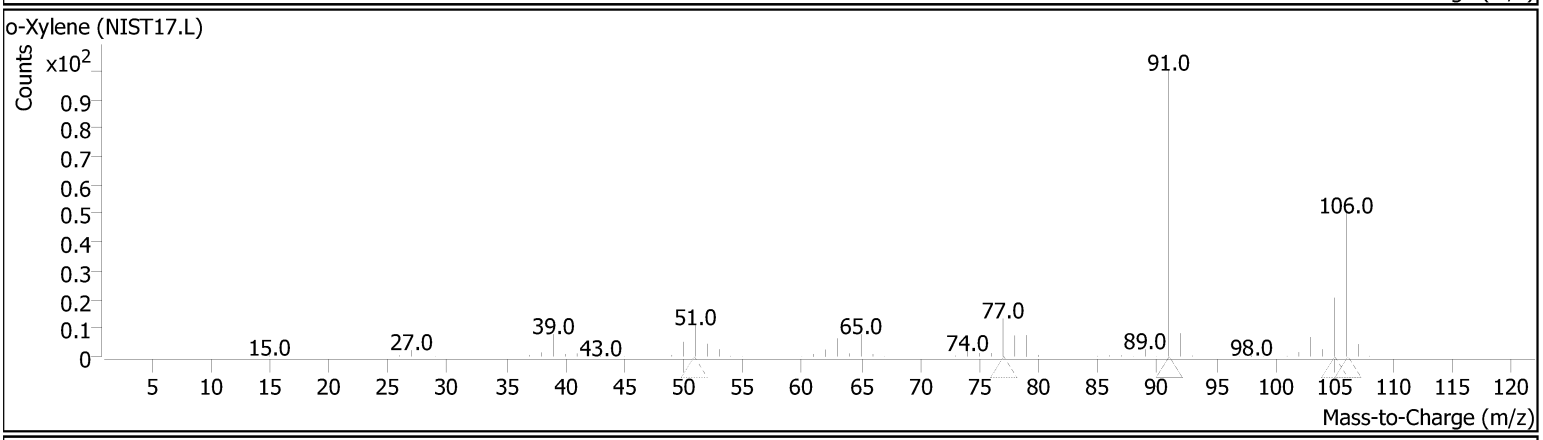


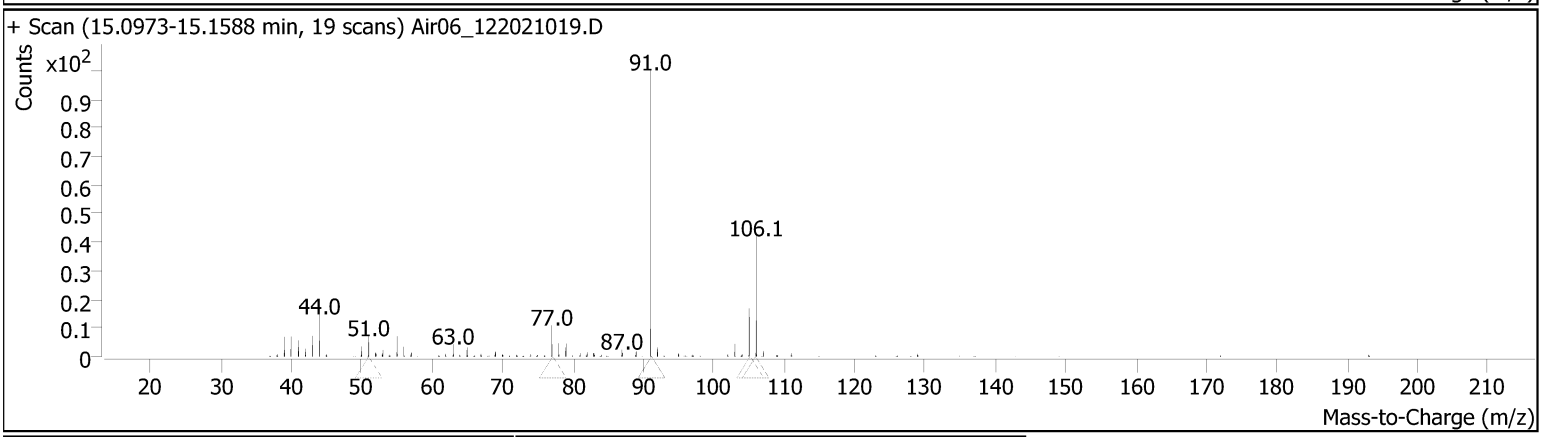


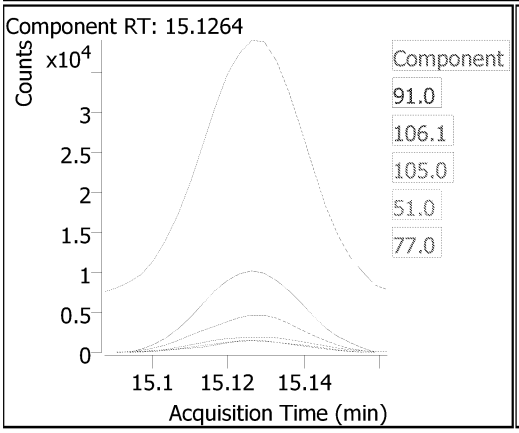


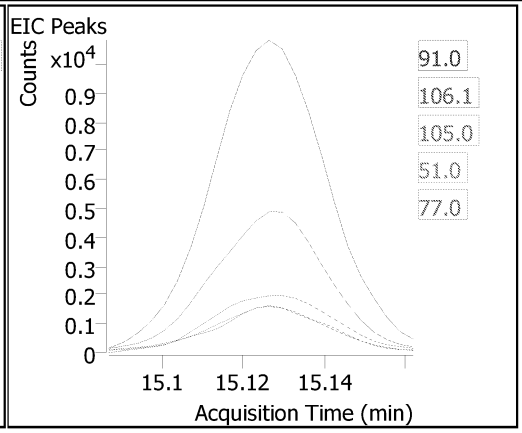
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.1264	o-Xylene	61836.7	94.2	95-47-6	C8H10	0.1459

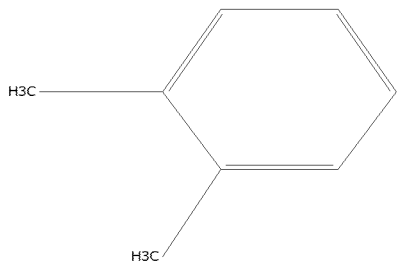




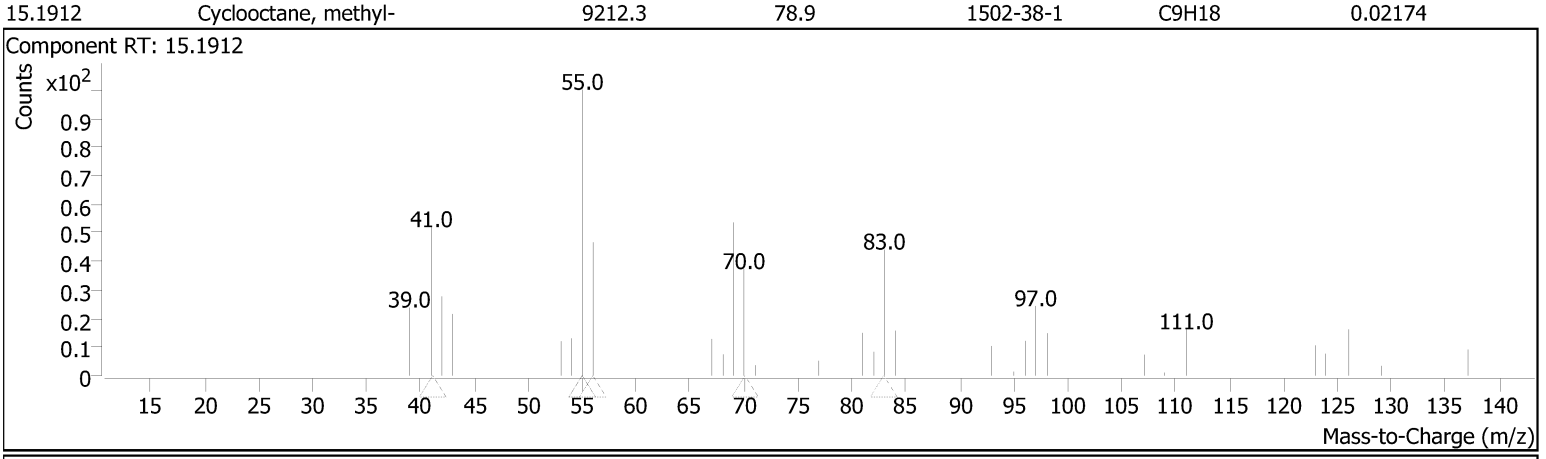


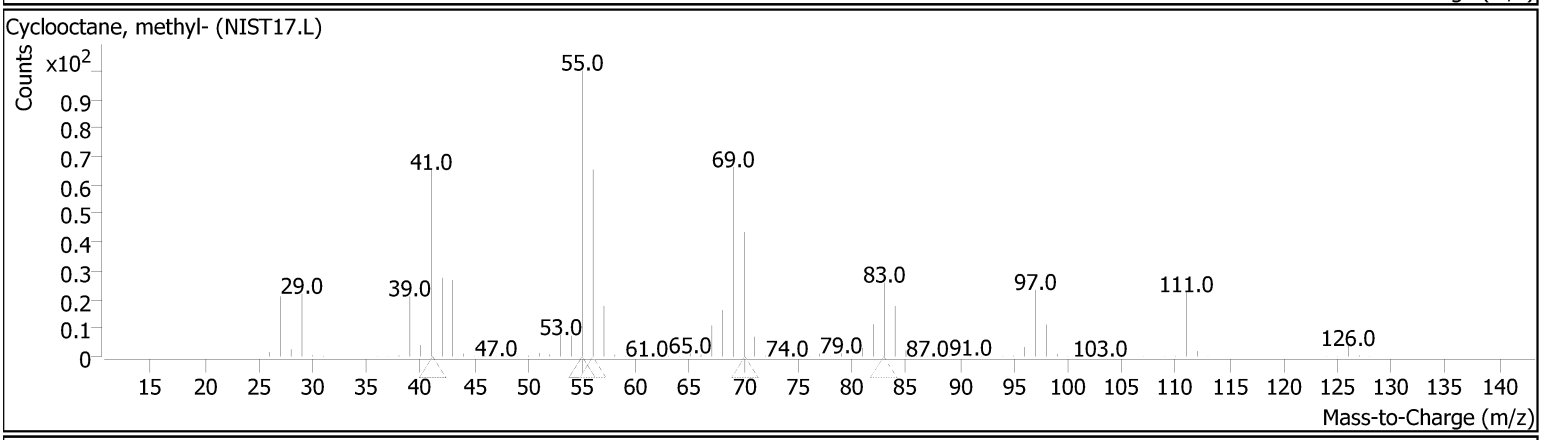


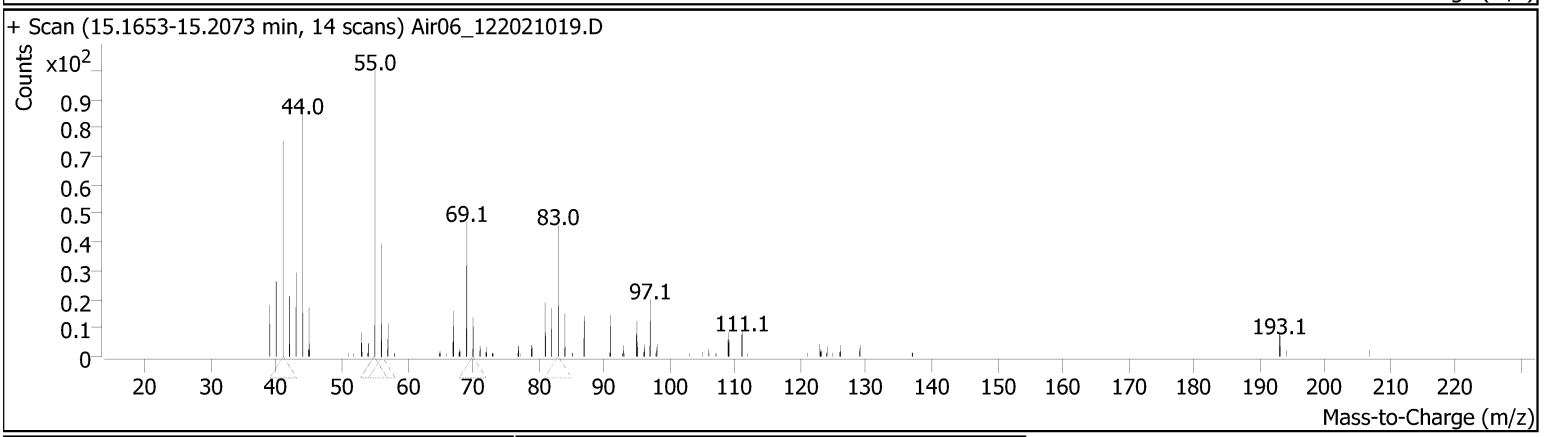


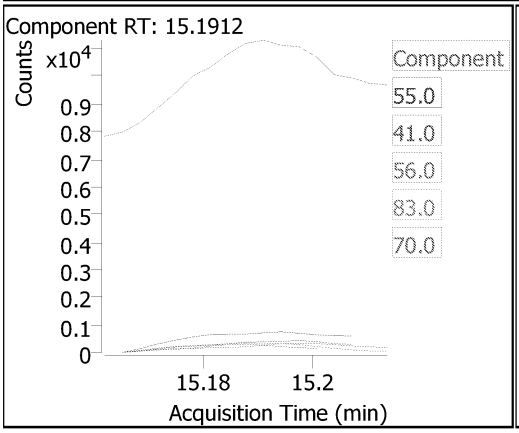


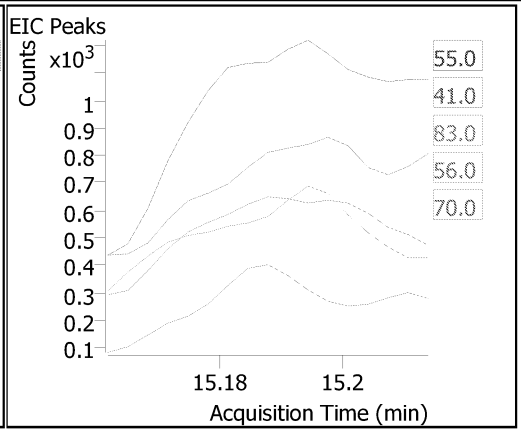
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.1912	Cyclooctane, methyl-	9212.3	78.9	1502-38-1	C9H18	0.02174

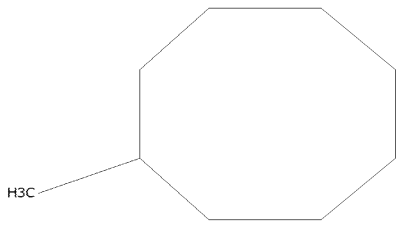




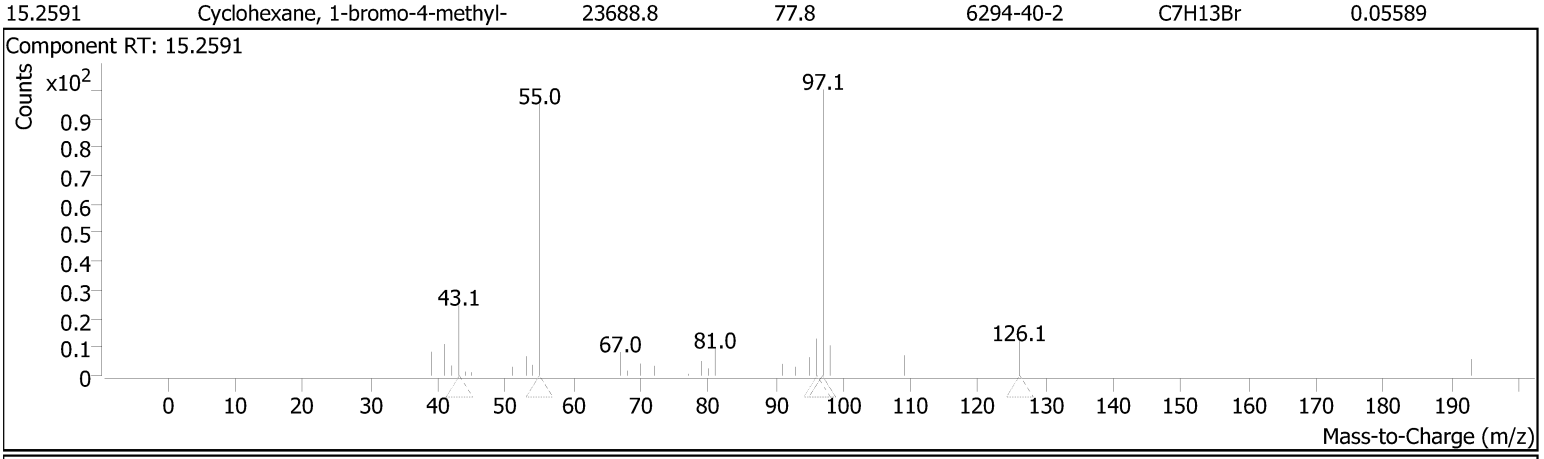


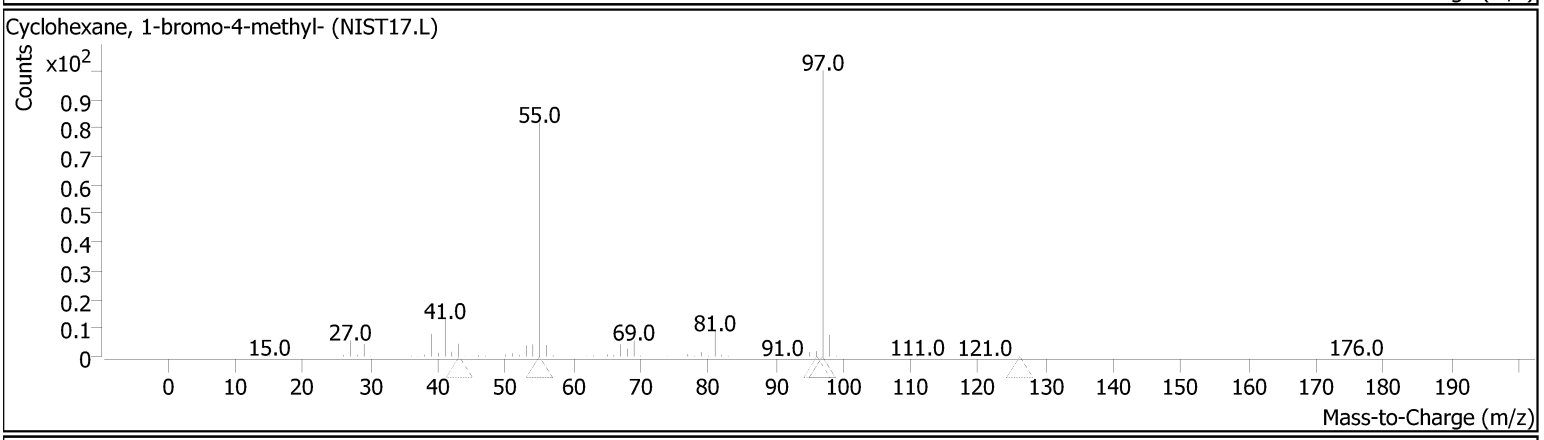


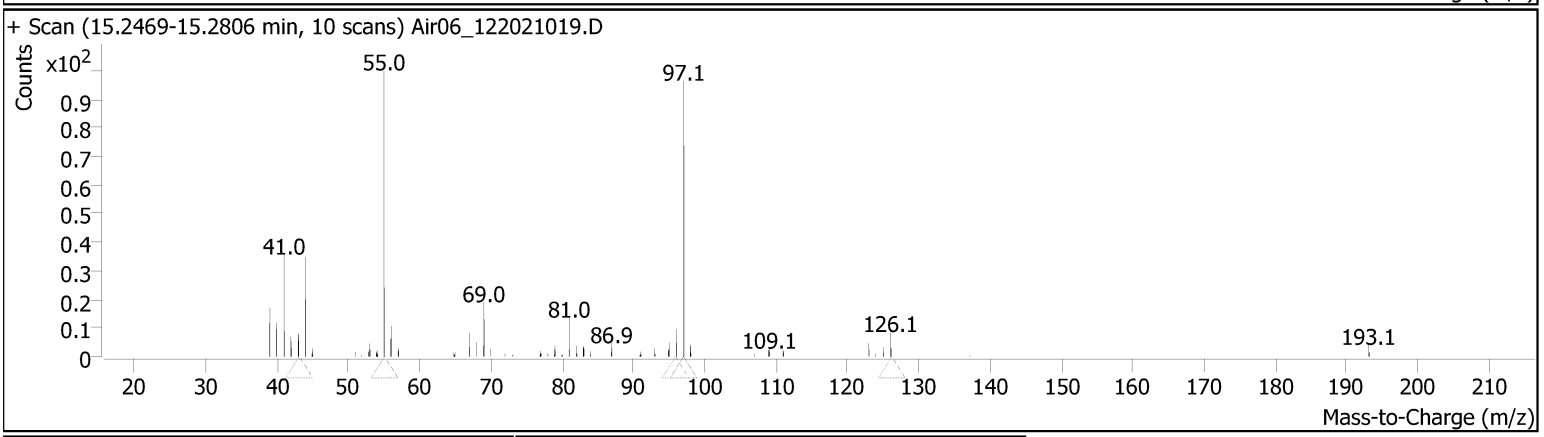


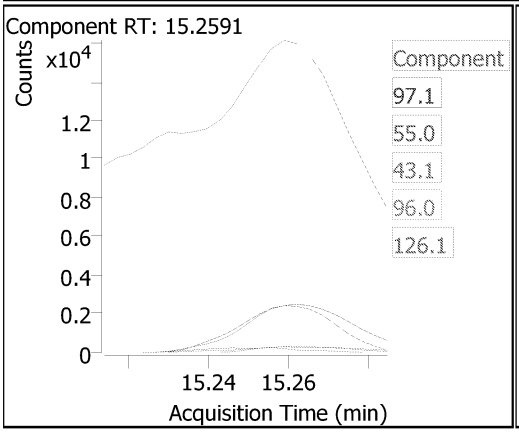


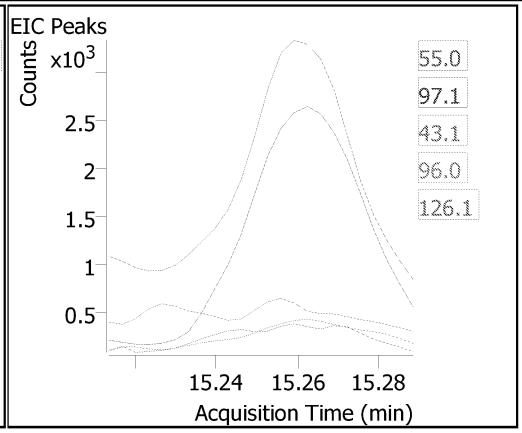
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.2591	Cyclohexane, 1-bromo-4-methyl-	23688.8	77.8	6294-40-2	C7H13Br	0.05589

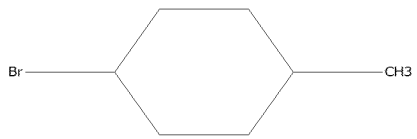




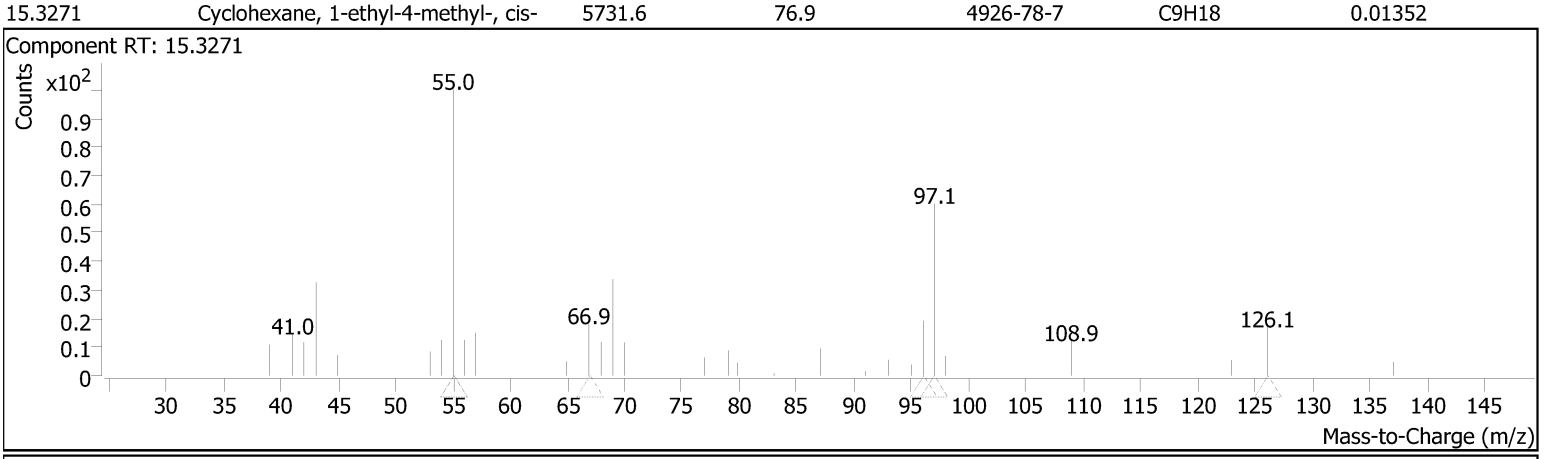


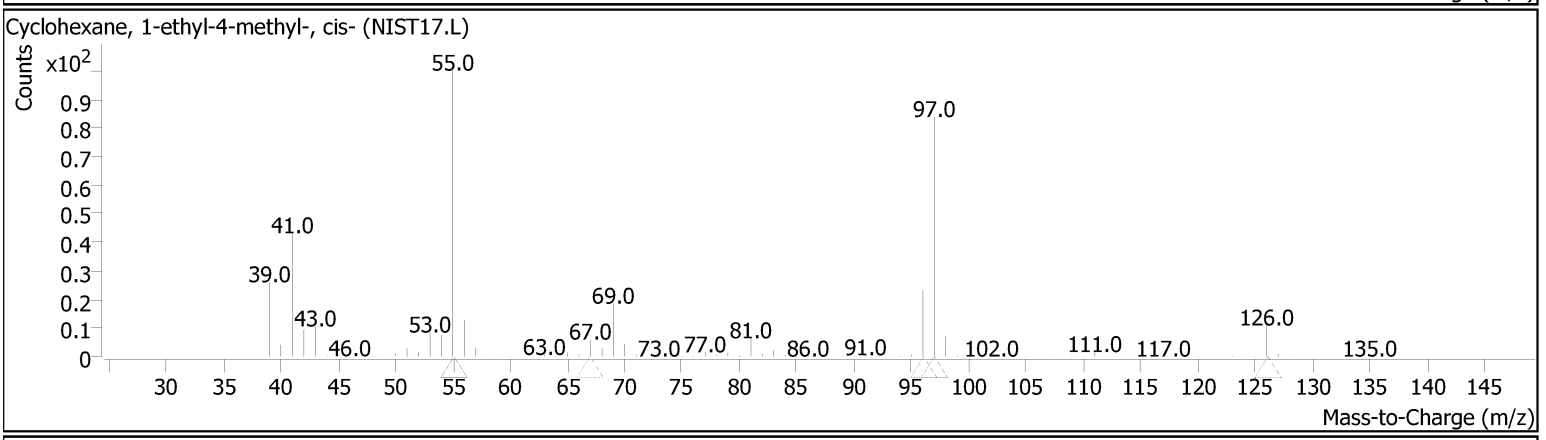


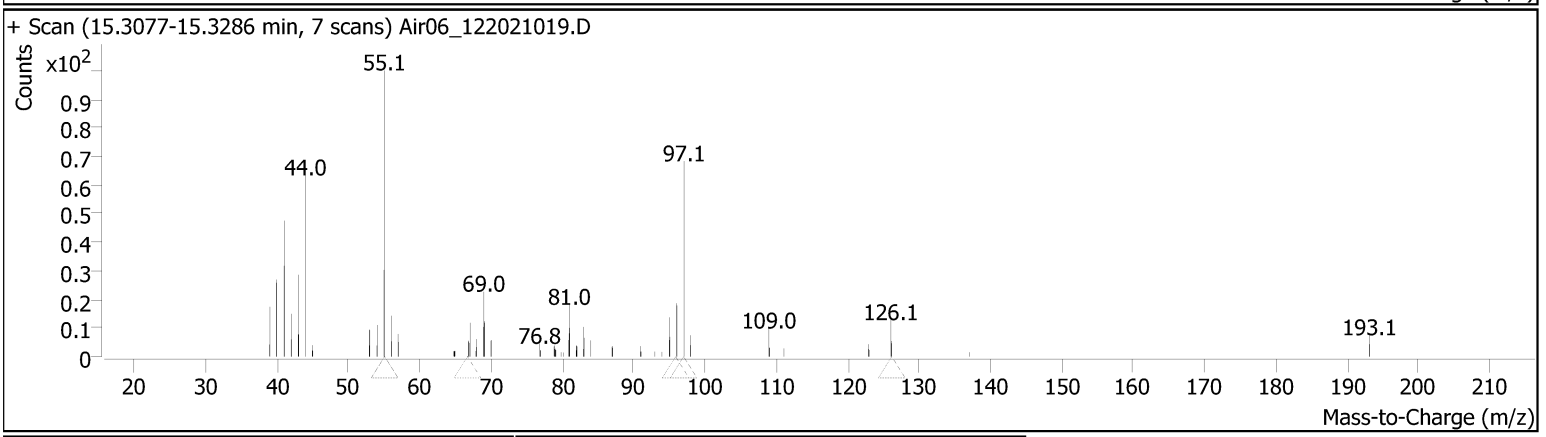


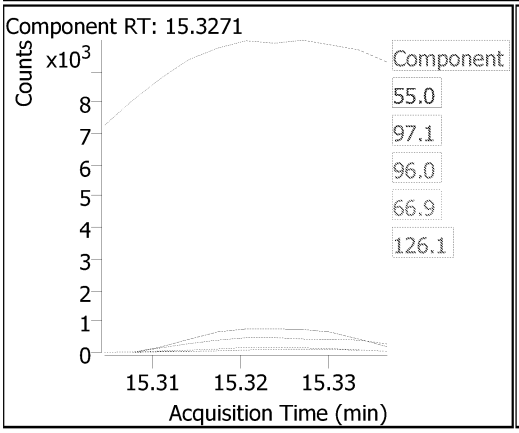


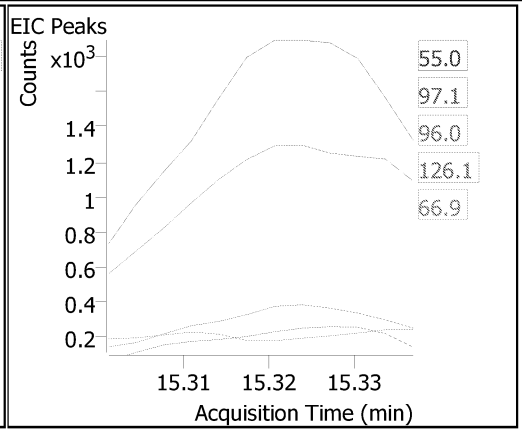
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.3271	Cyclohexane, 1-ethyl-4-methyl-, cis-	5731.6	76.9	4926-78-7	C9H18	0.01352

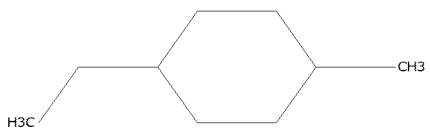




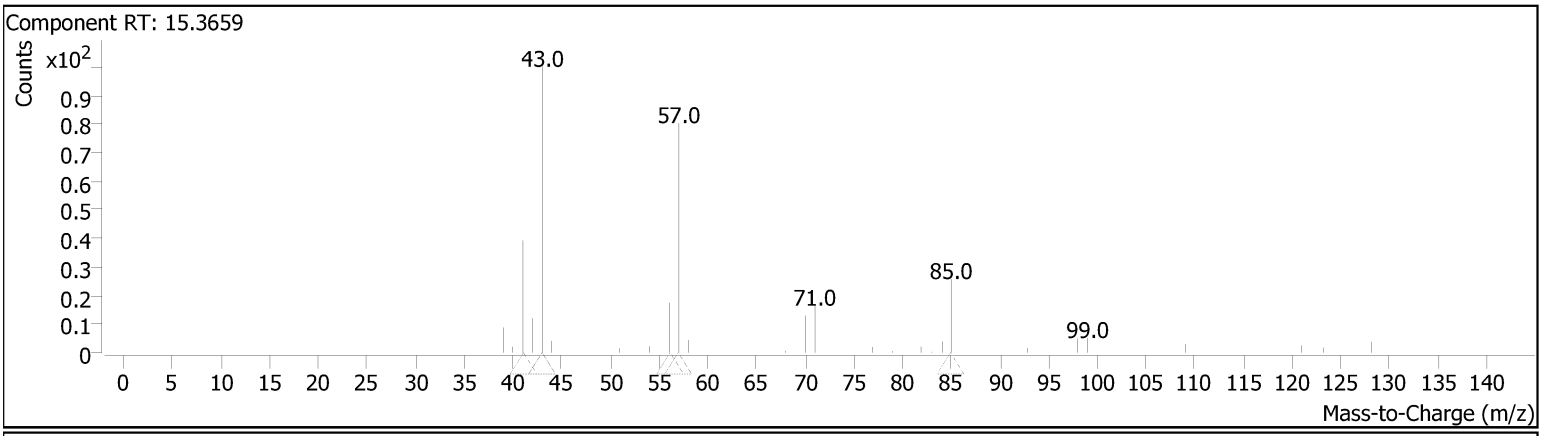


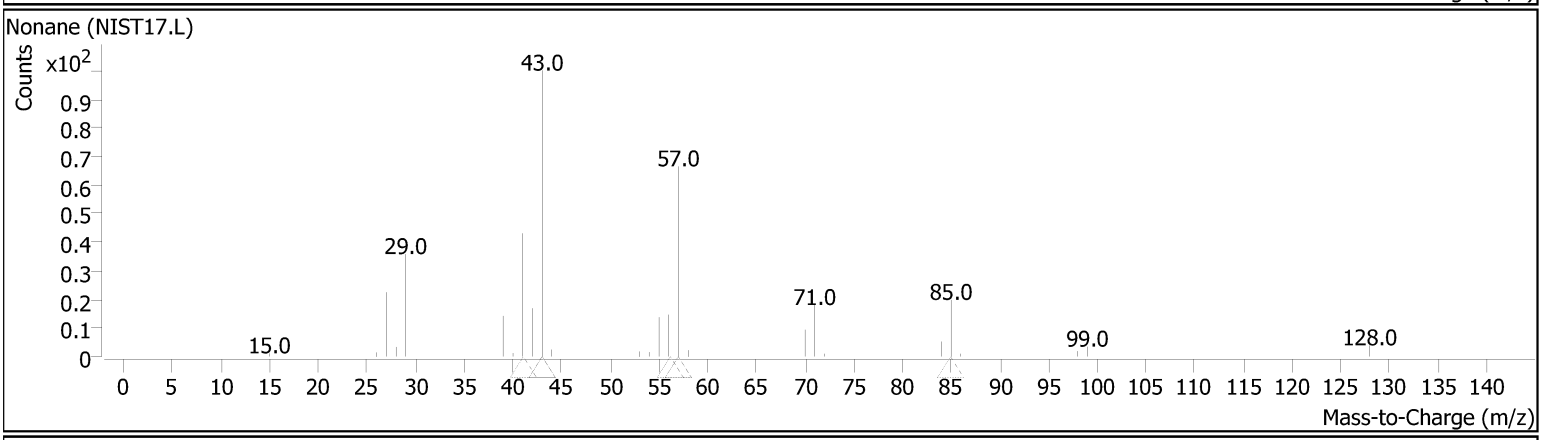


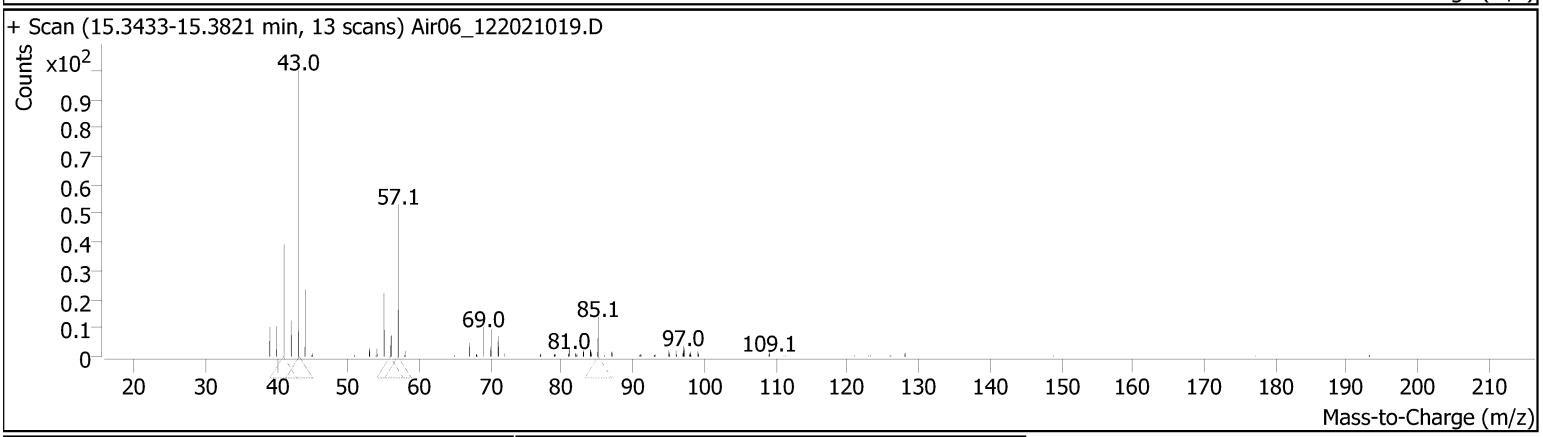


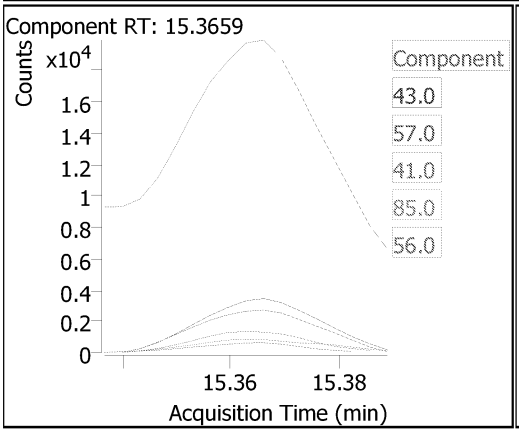


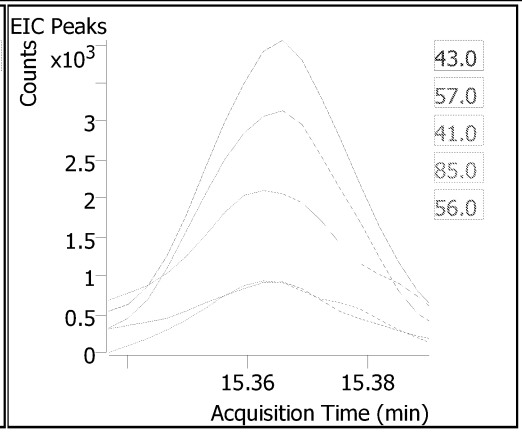
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.3659	Nonane	23915.9	87.8	111-84-2	C9H20	0.05643

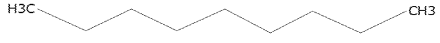




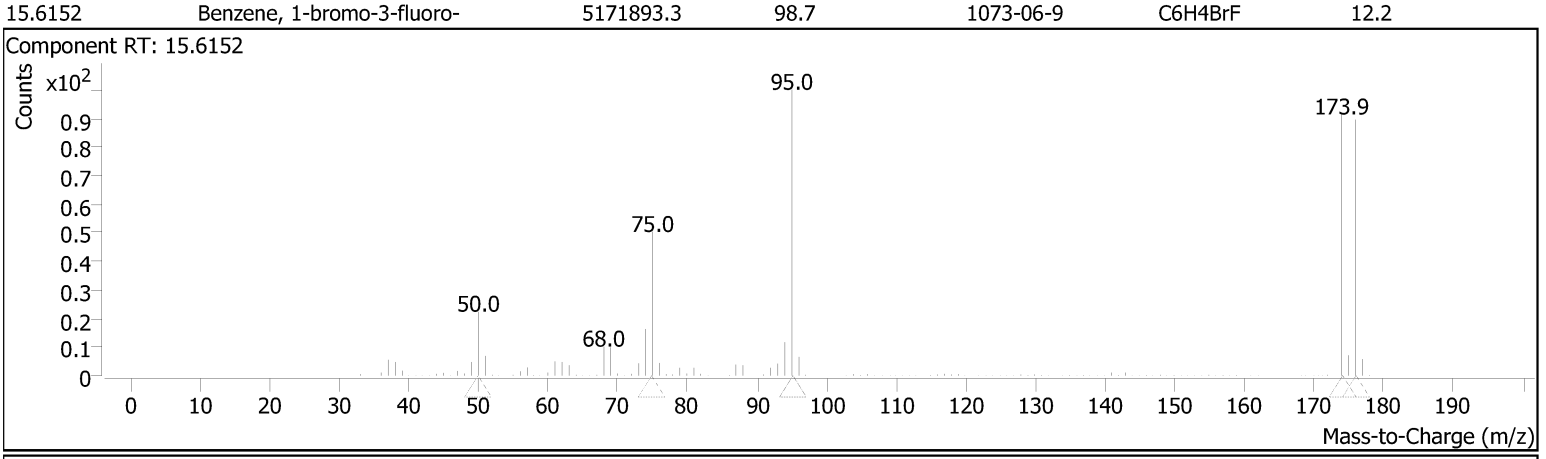


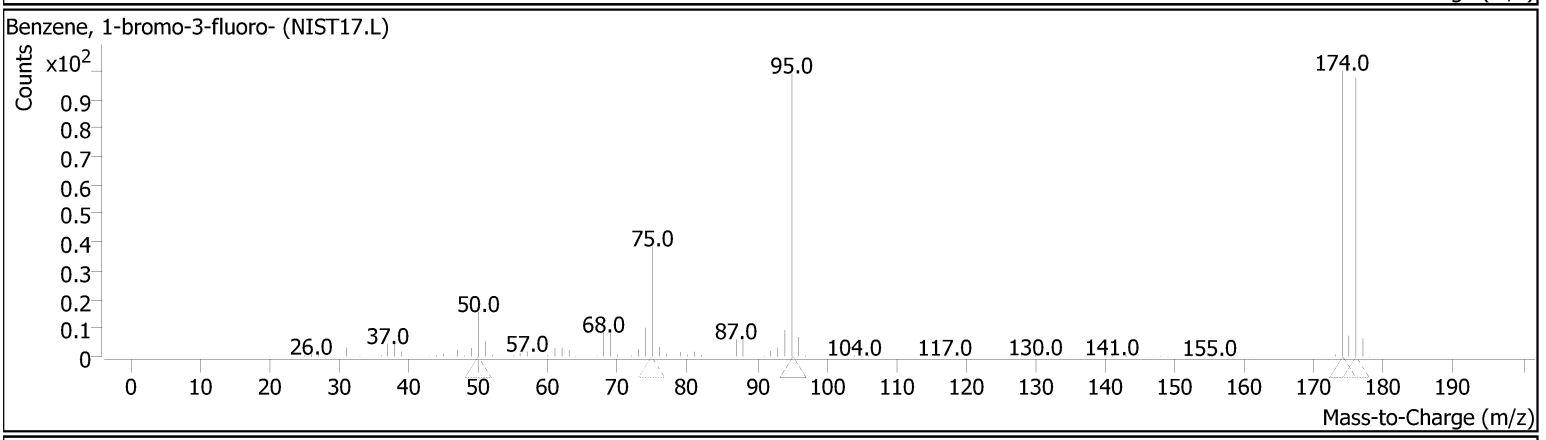


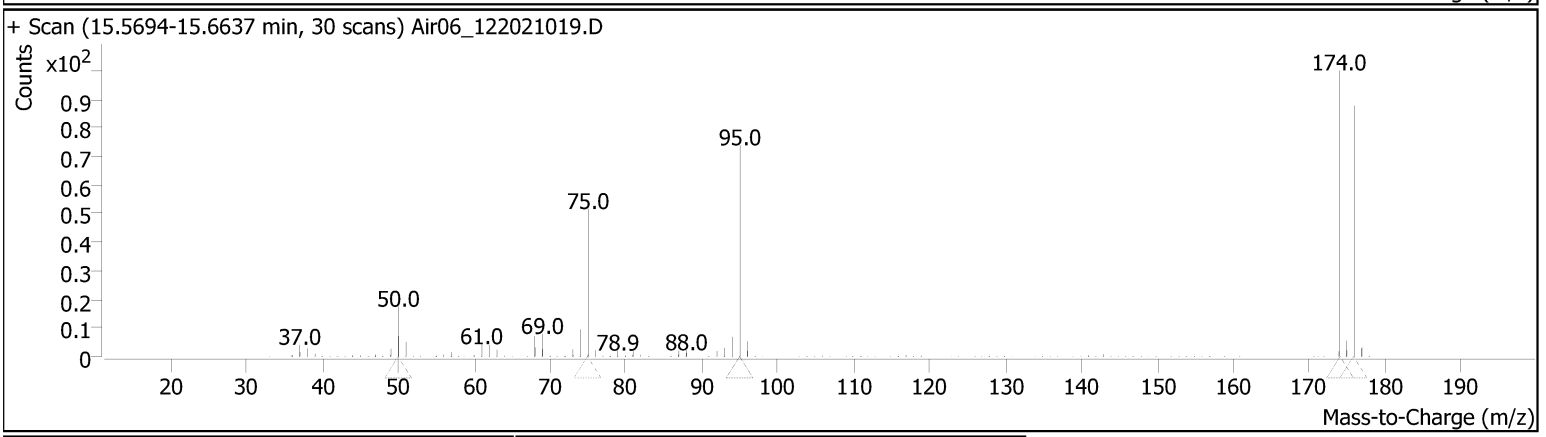


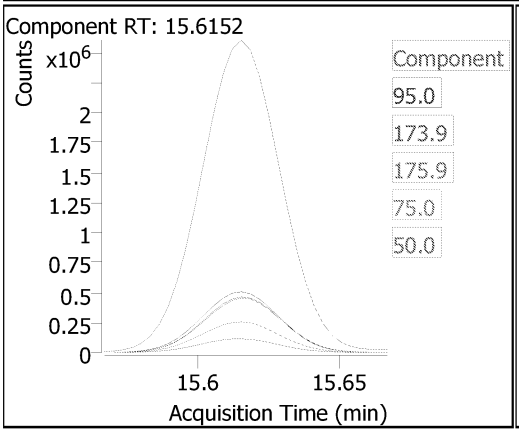


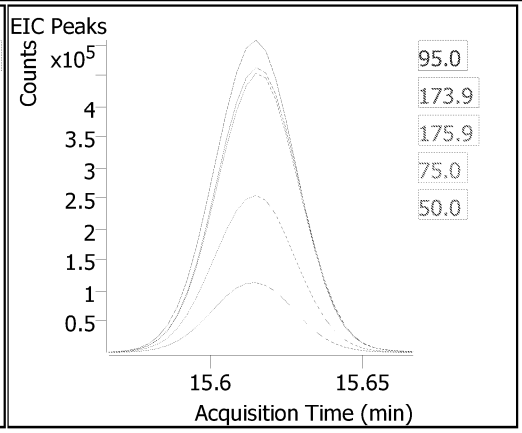
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.6152	Benzene, 1-bromo-3-fluoro-	5171893.3	98.7	1073-06-9	C6H4BrF	12.2

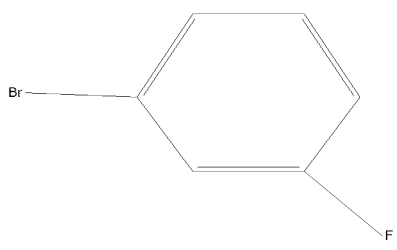




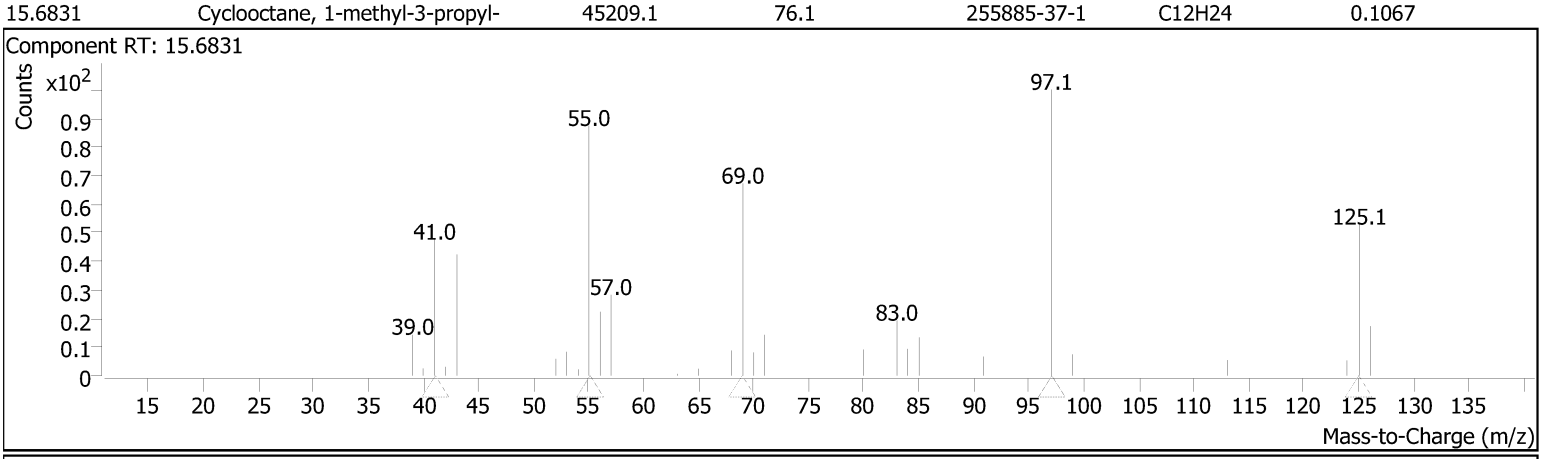


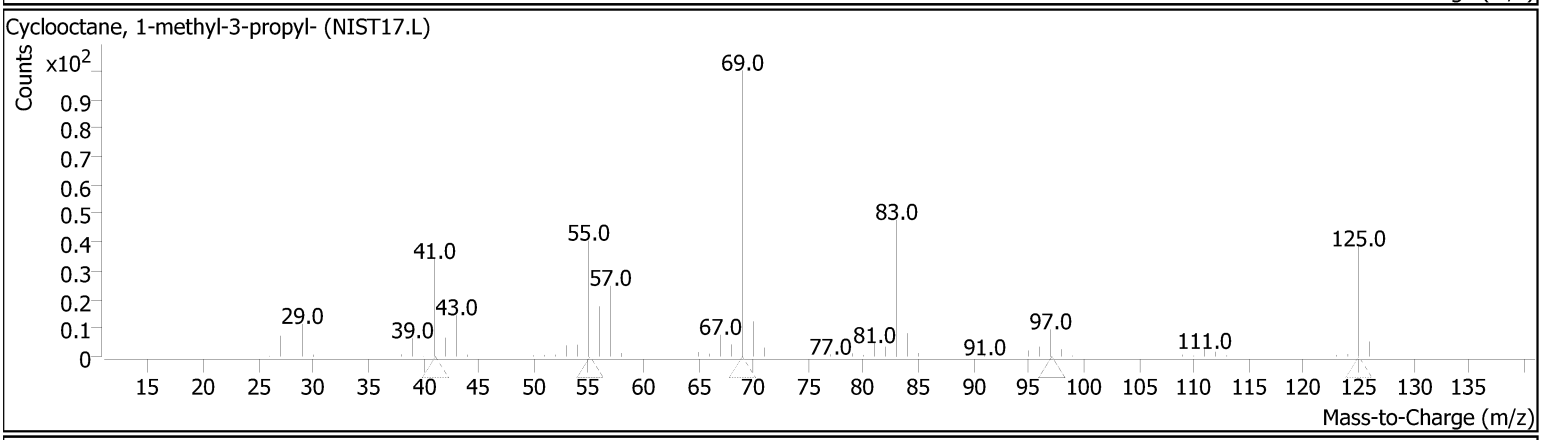


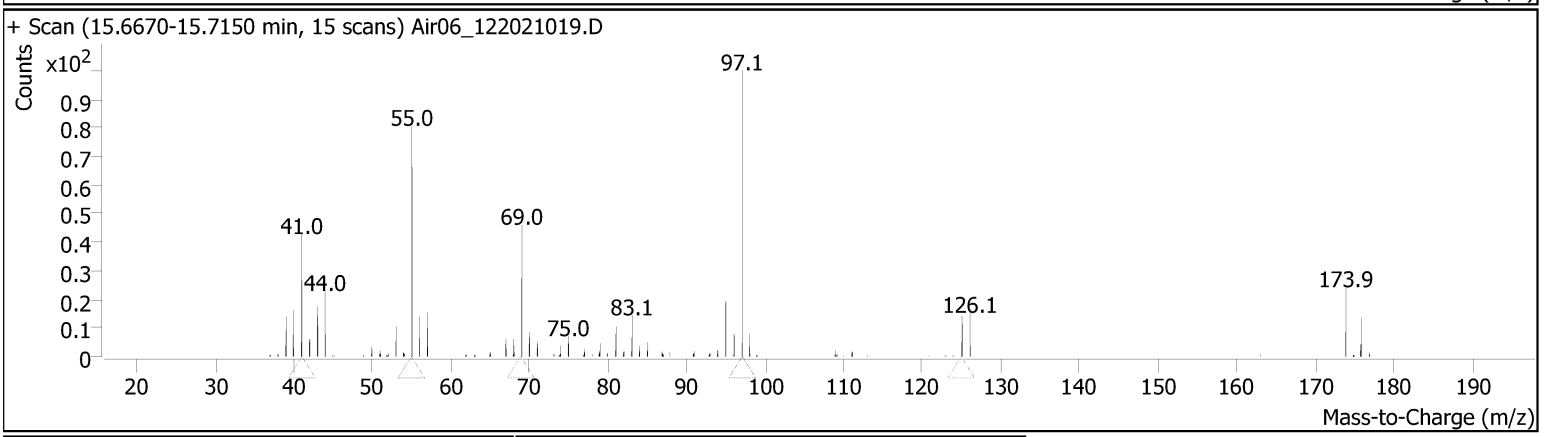


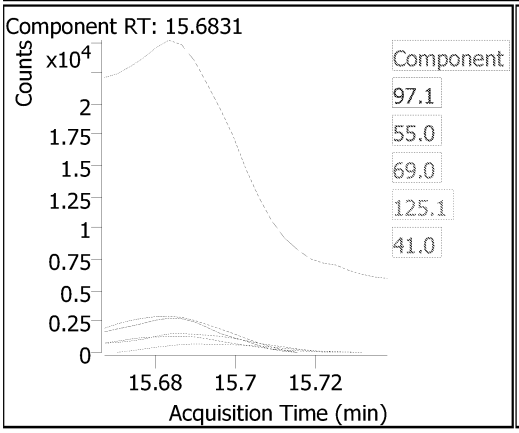


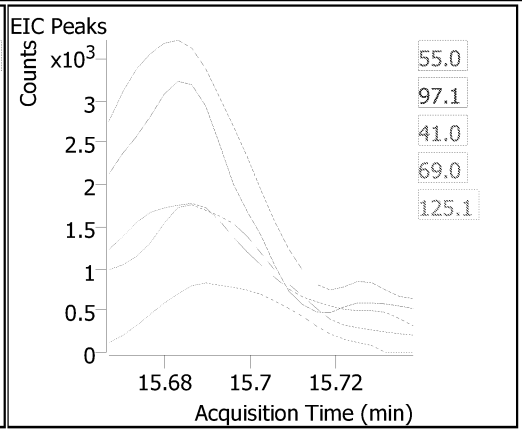
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.6831	Cyclooctane, 1-methyl-3-propyl-	45209.1	76.1	255885-37-1	C12H24	0.1067

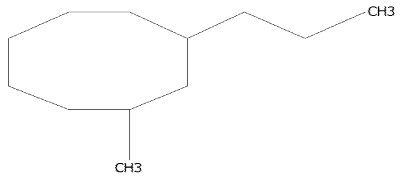




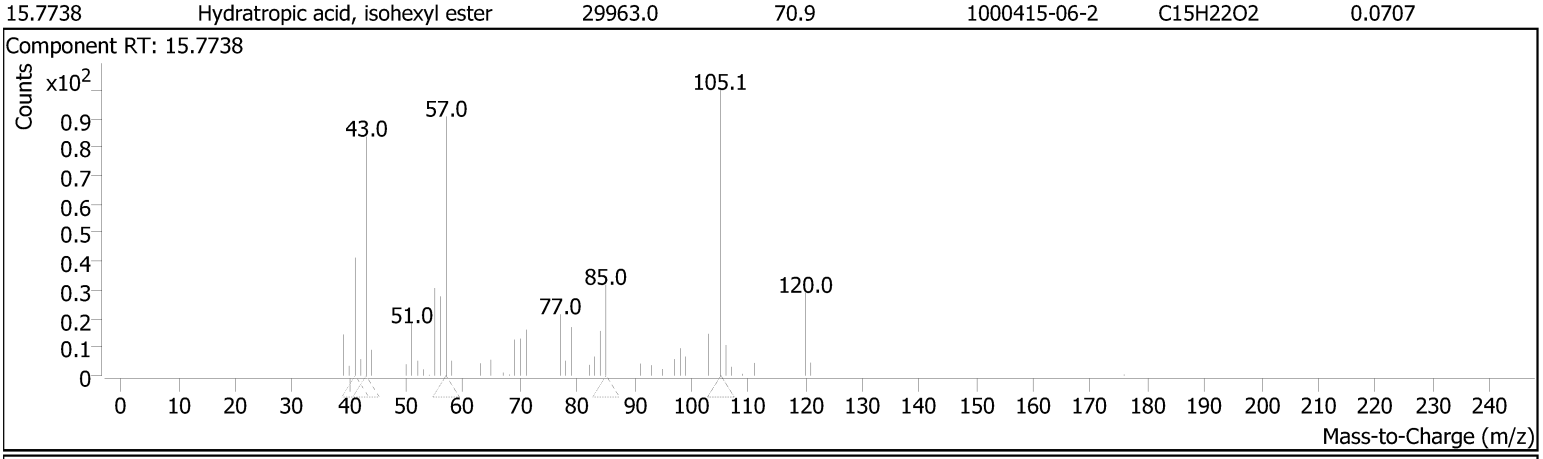


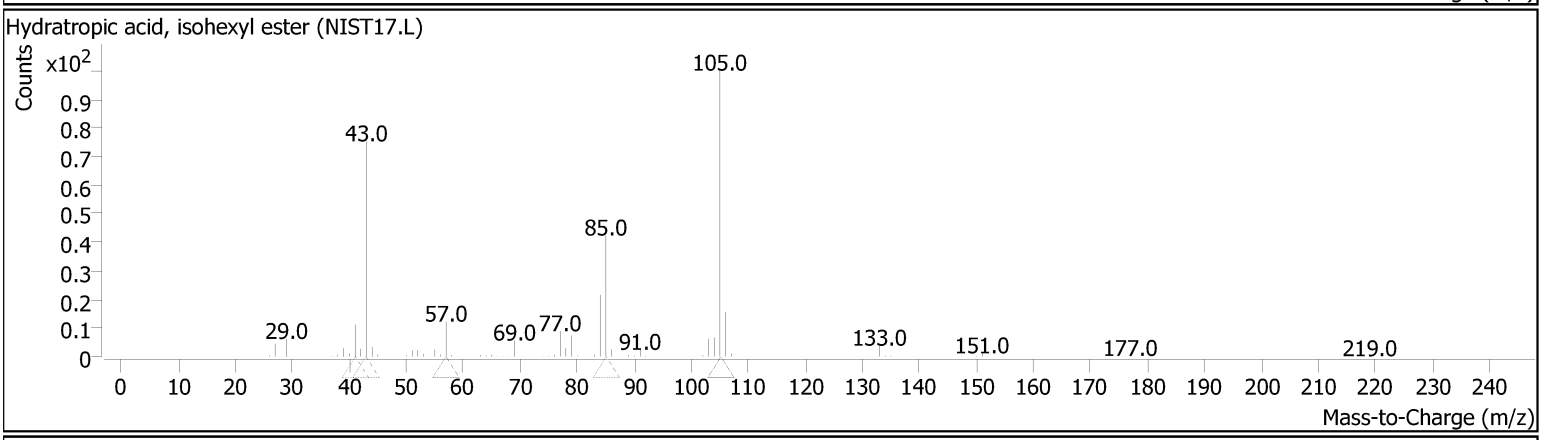


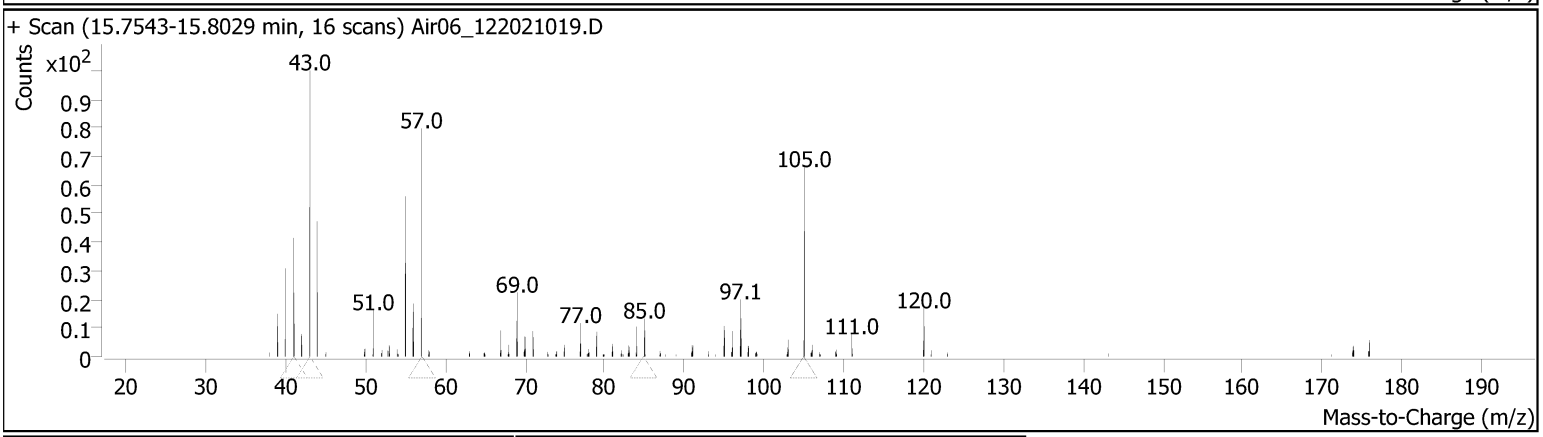


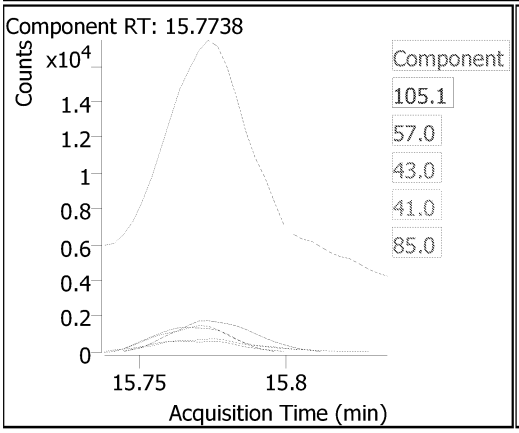


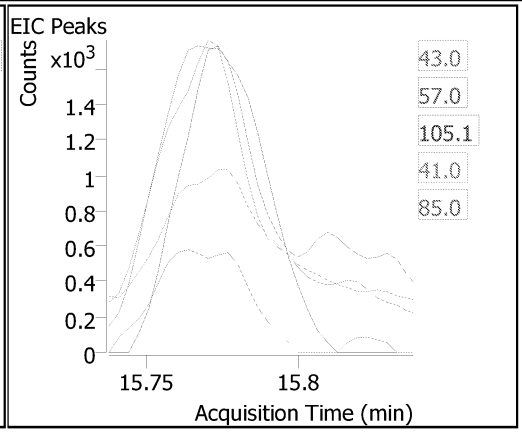
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.7738	Hydratropic acid, isohexyl ester	29963.0	70.9	1000415-06-2	C15H22O2	0.0707

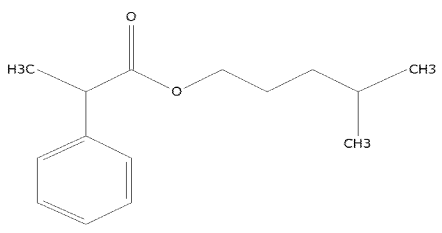




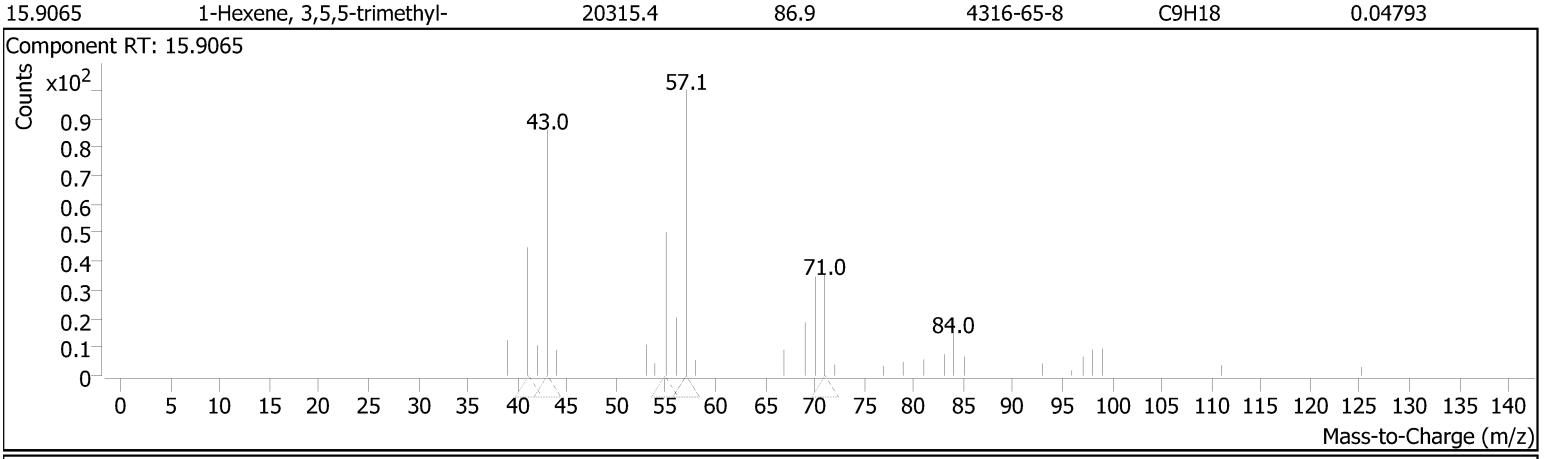


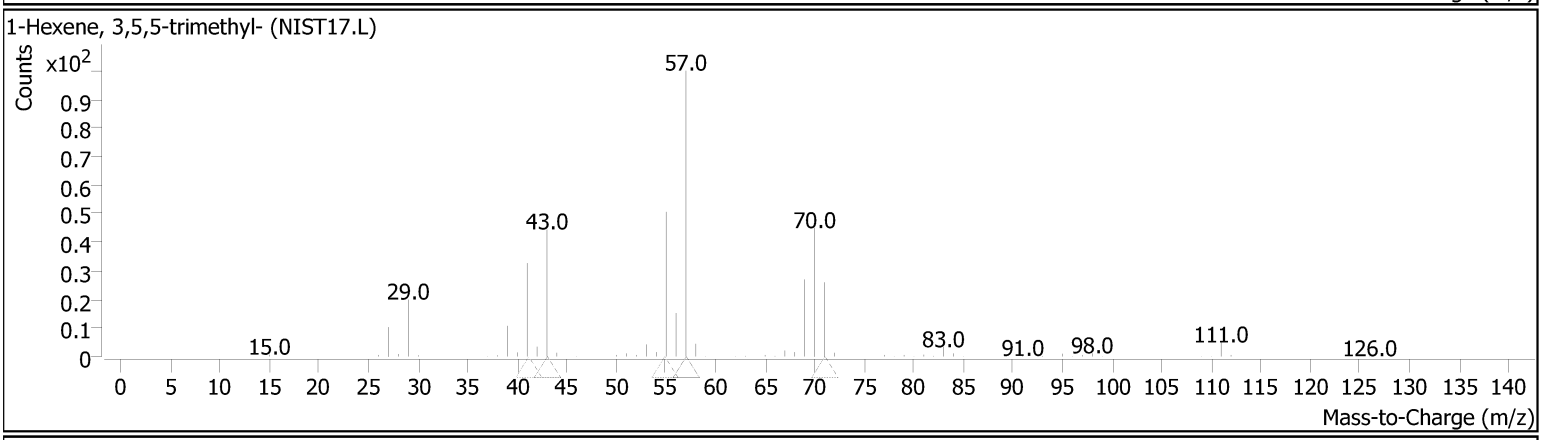


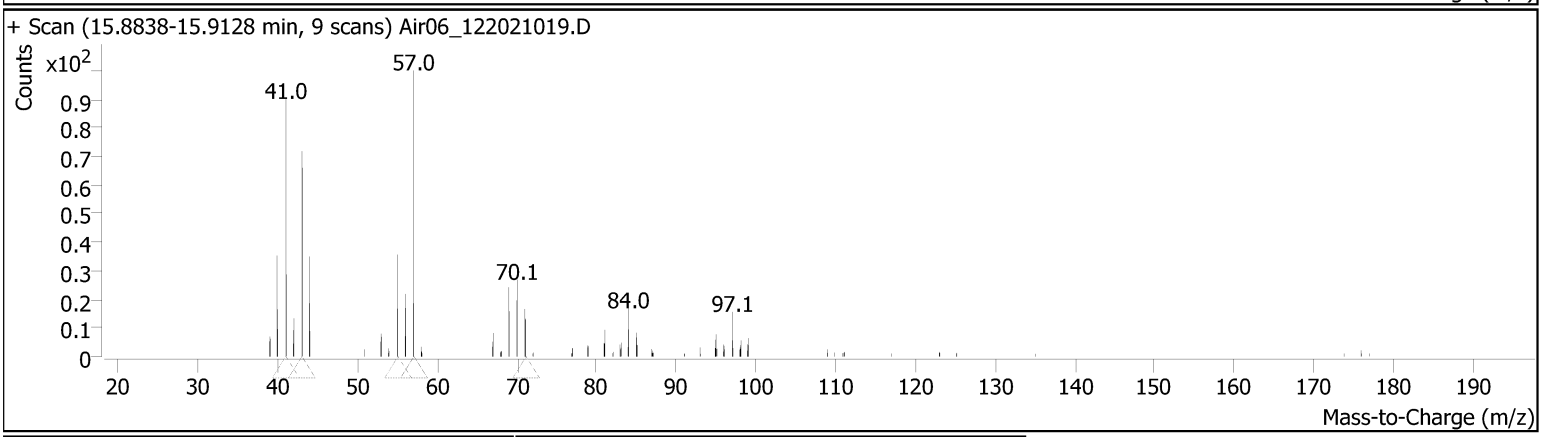


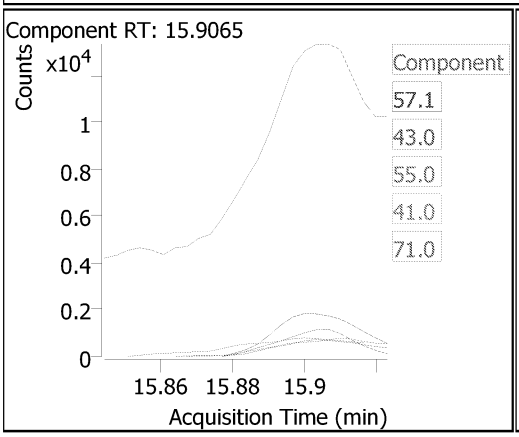


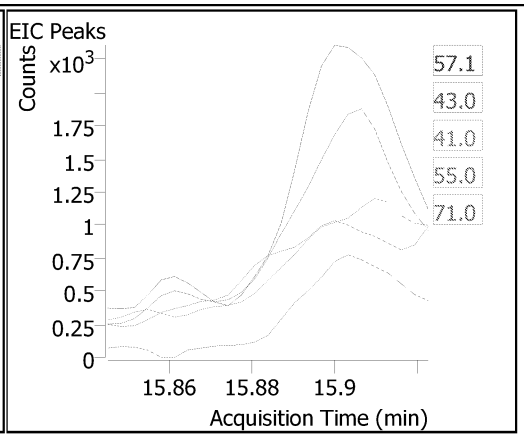
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.9065	1-Hexene, 3,5,5-trimethyl-	20315.4	86.9	4316-65-8	C9H18	0.04793

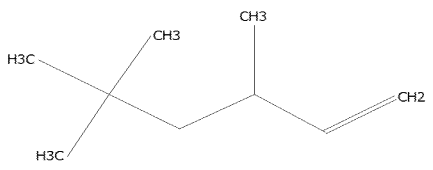




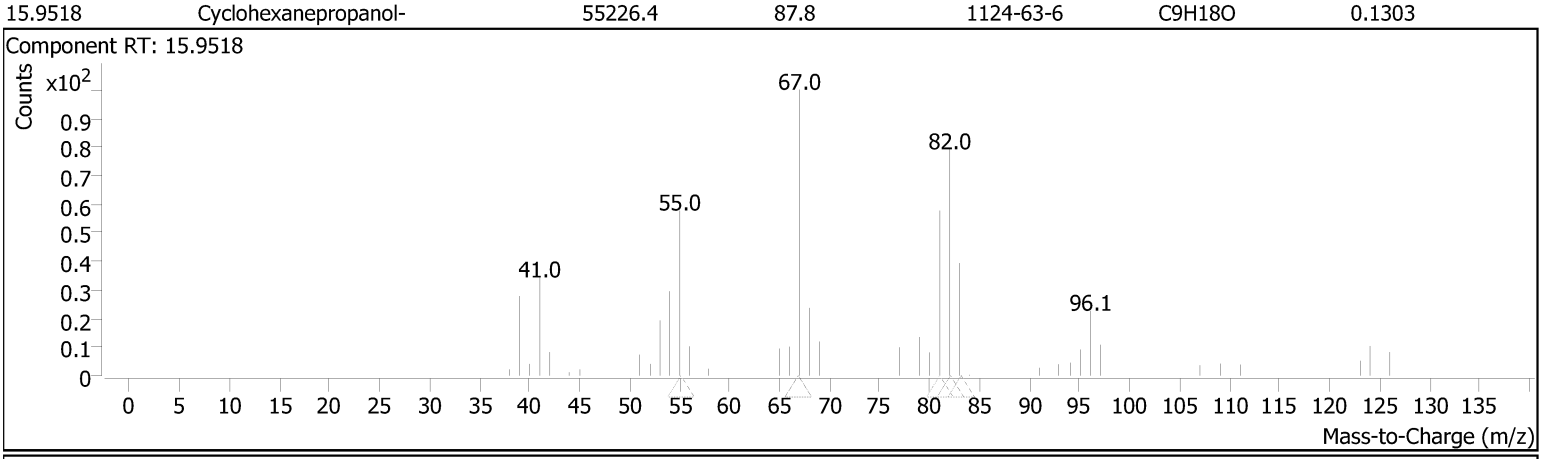


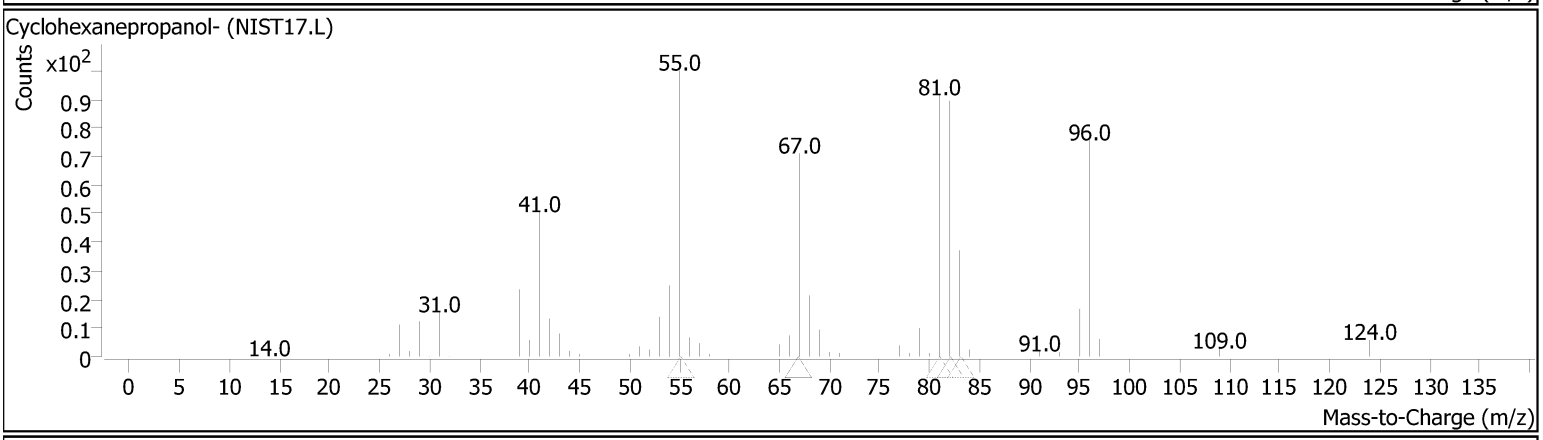


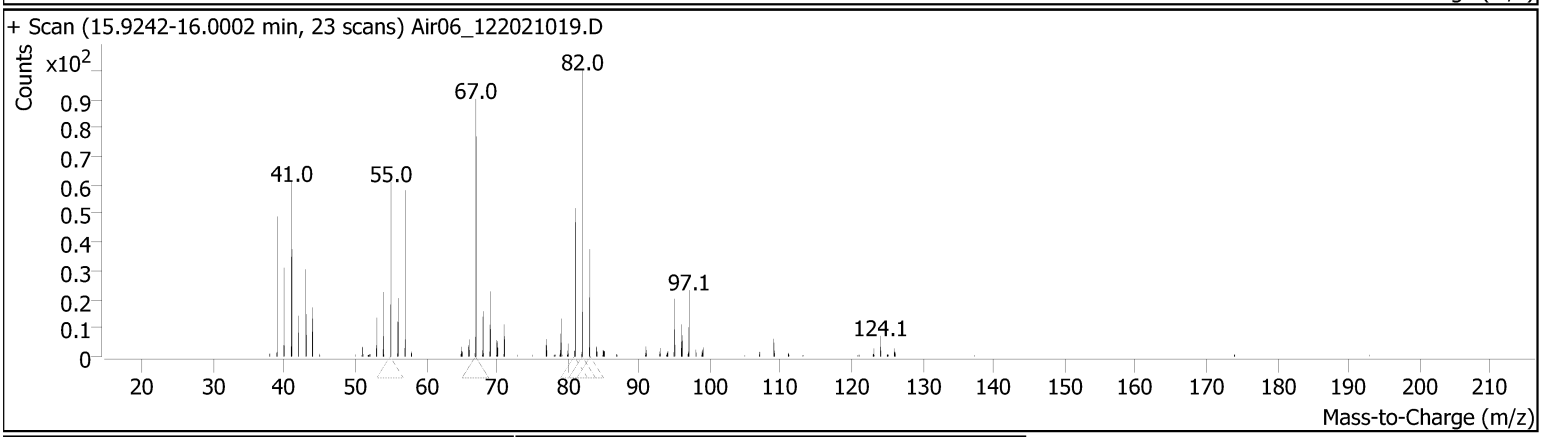


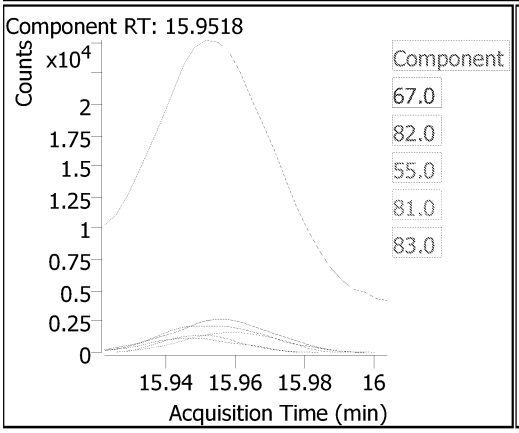


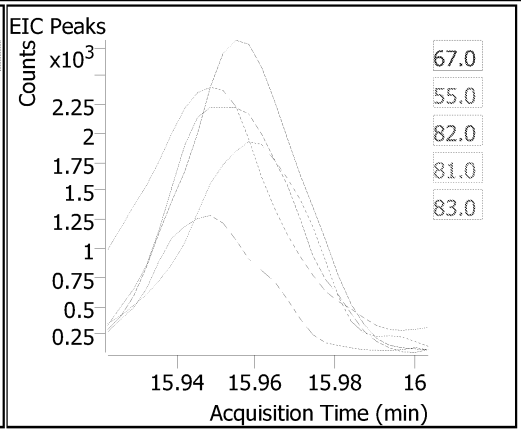
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.9518	Cyclohexanepropanol-	55226.4	87.8	1124-63-6	C9H18O	0.1303

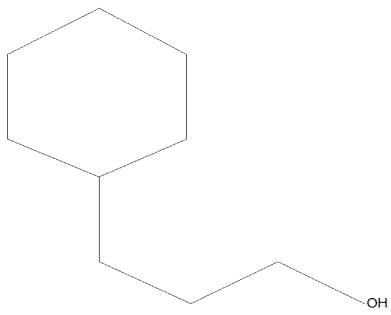




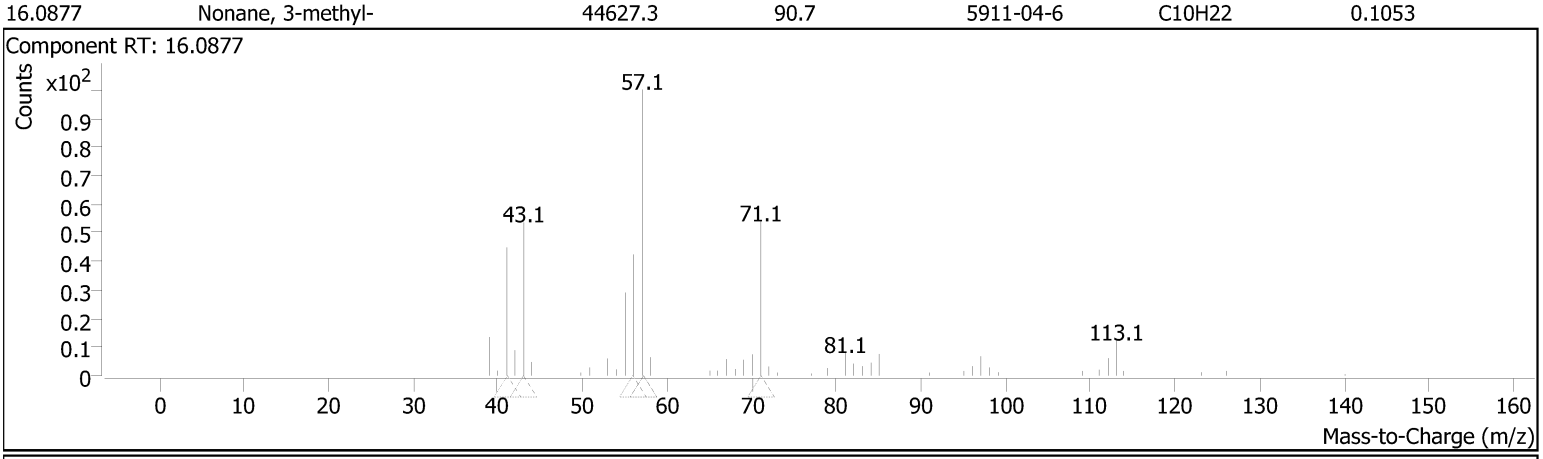


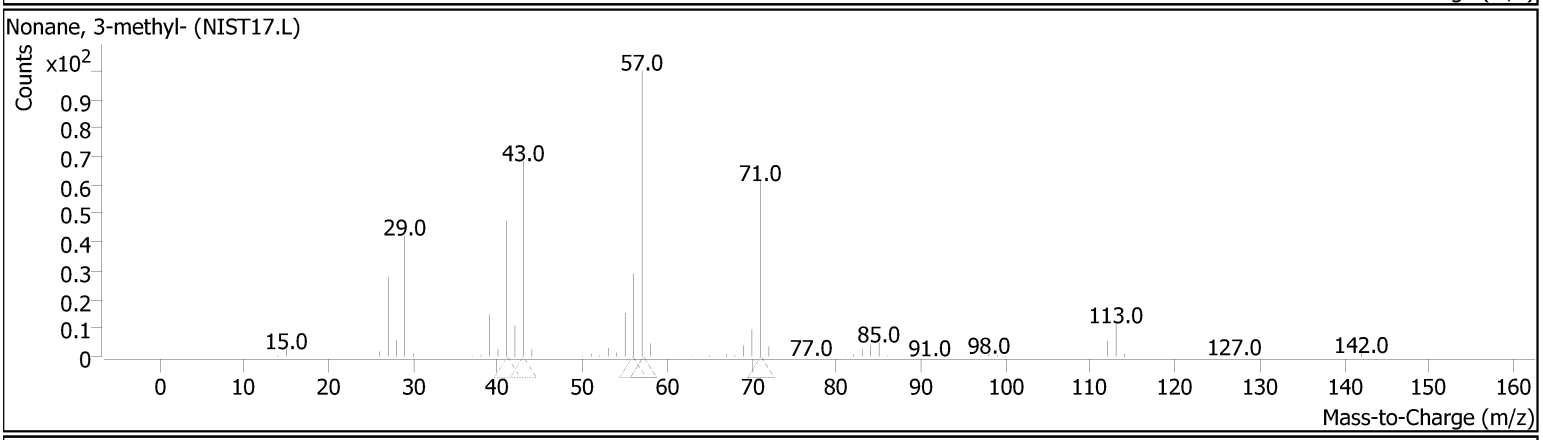


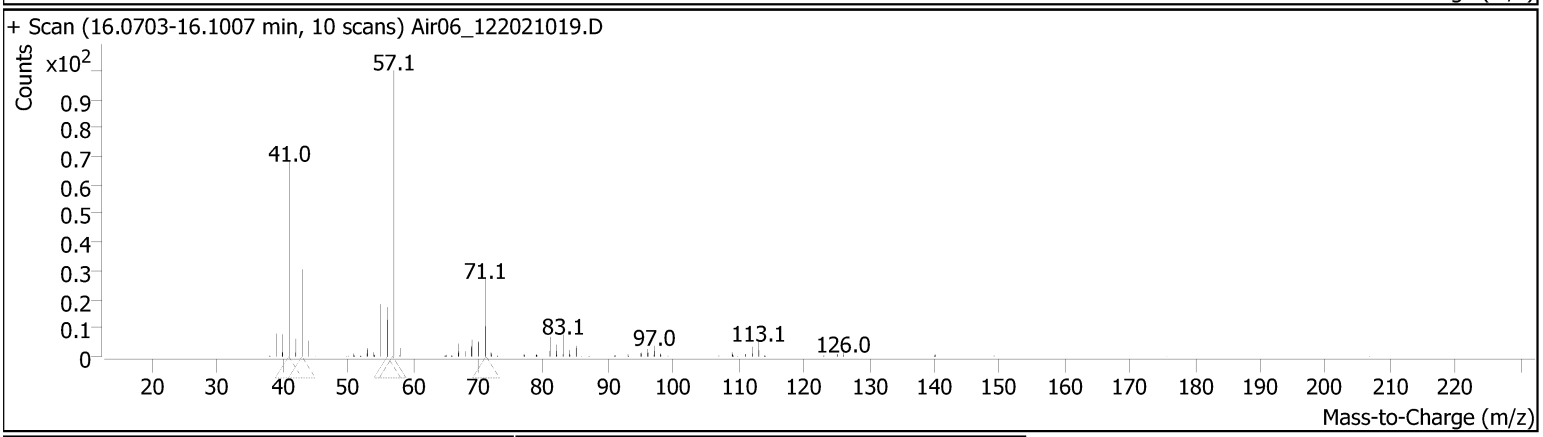


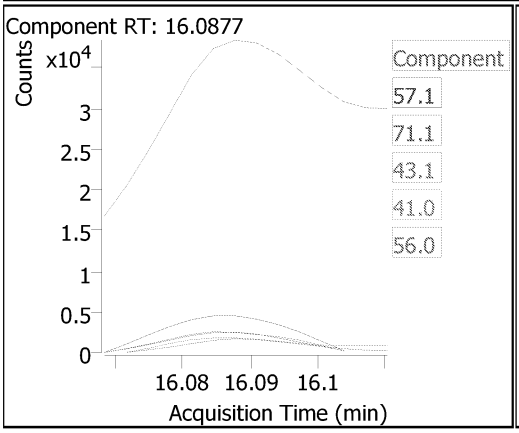


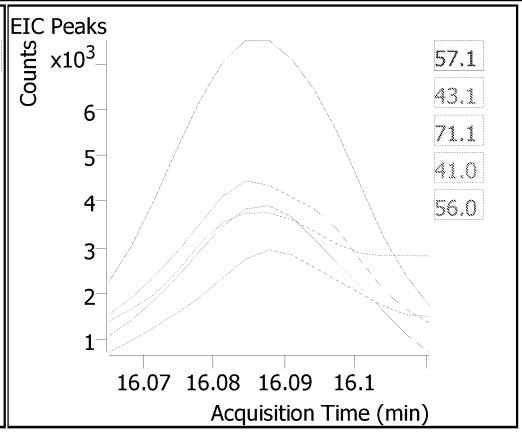
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.0877	Nonane, 3-methyl-	44627.3	90.7	5911-04-6	C10H22	0.1053





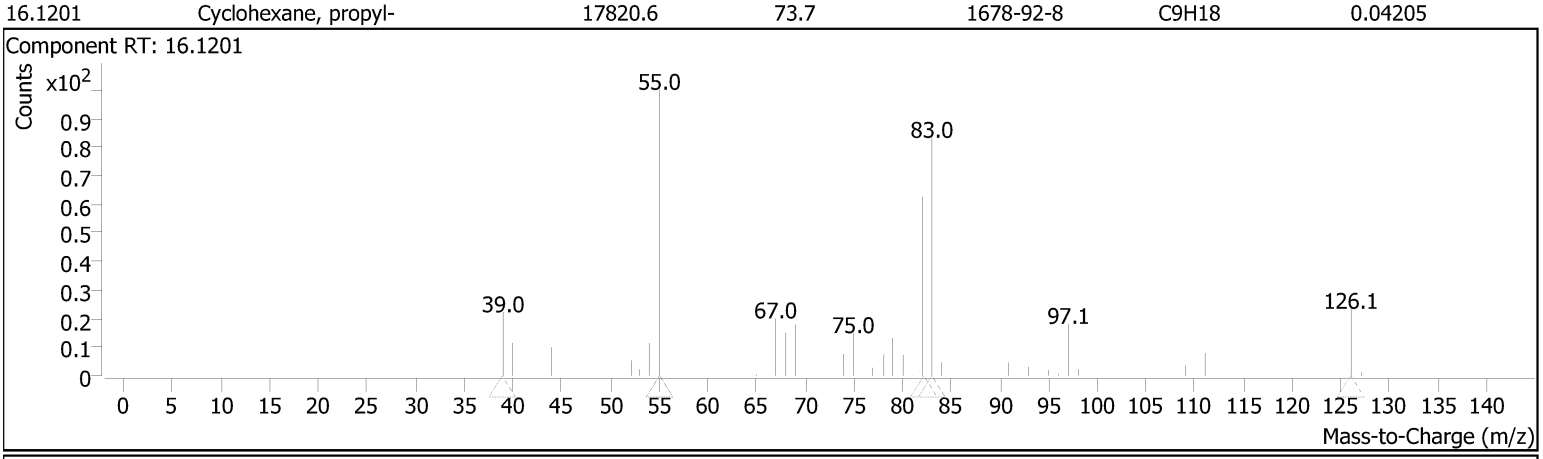


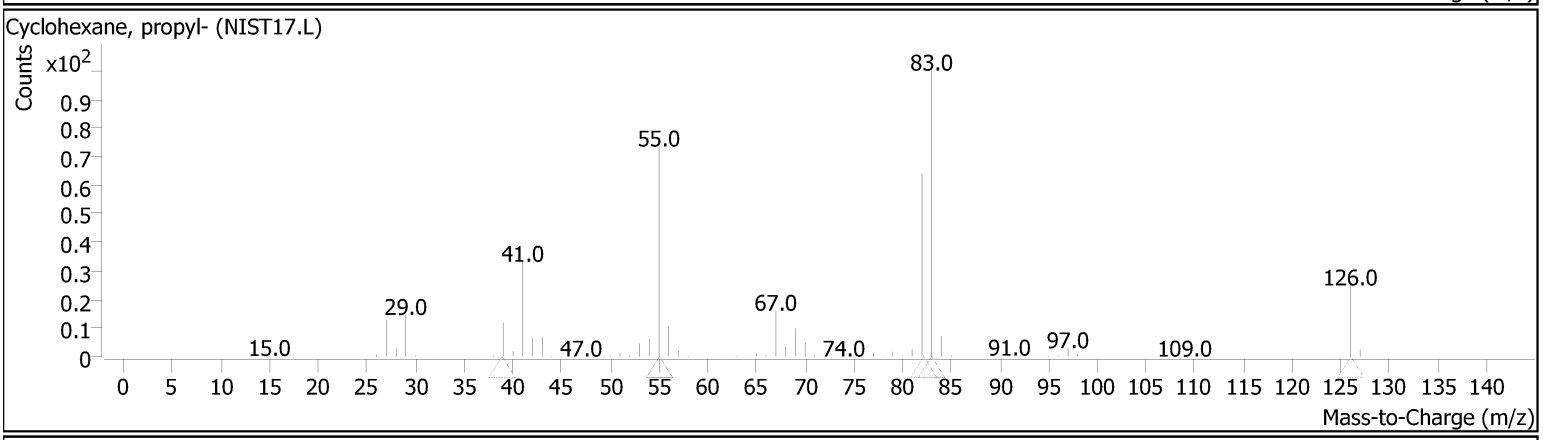


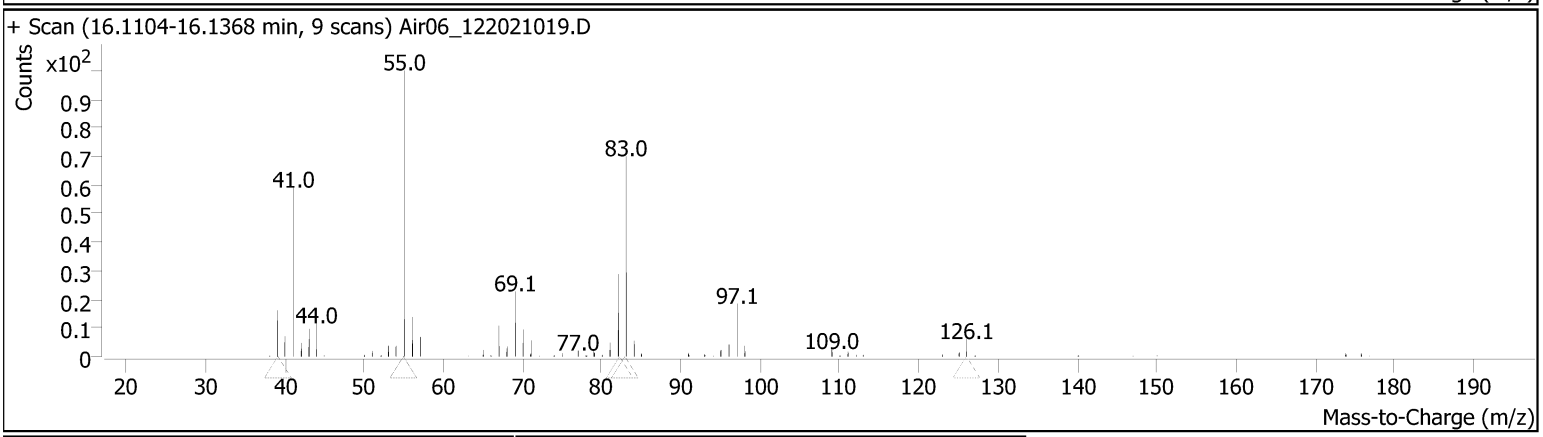


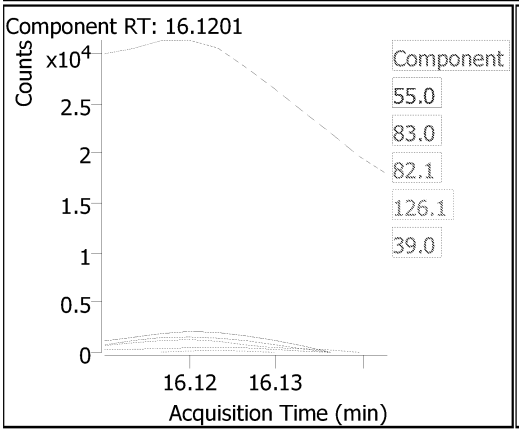


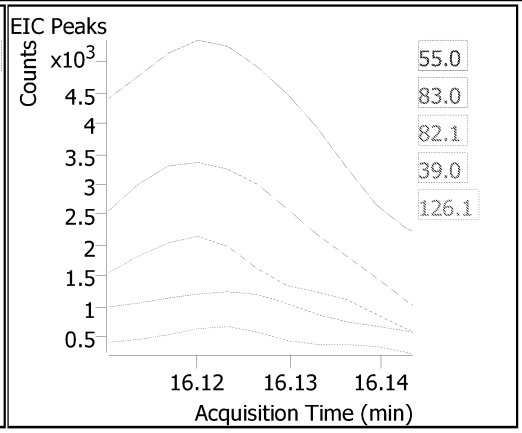
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.1201	Cyclohexane, propyl-	17820.6	73.7	1678-92-8	C9H18	0.04205

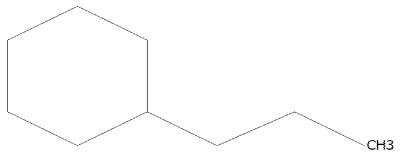




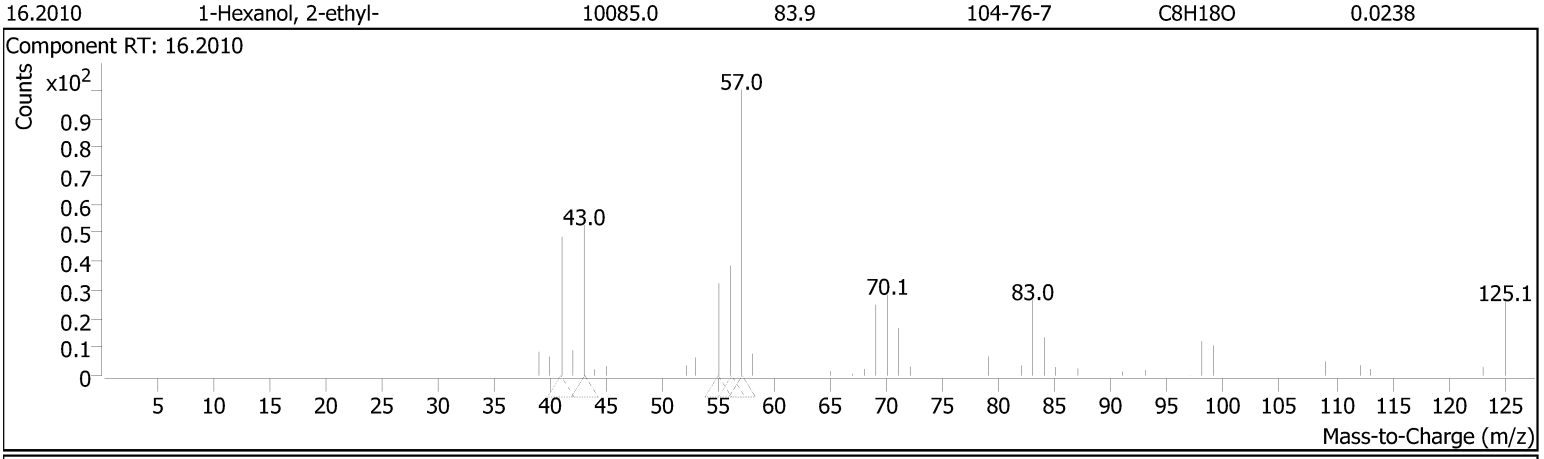


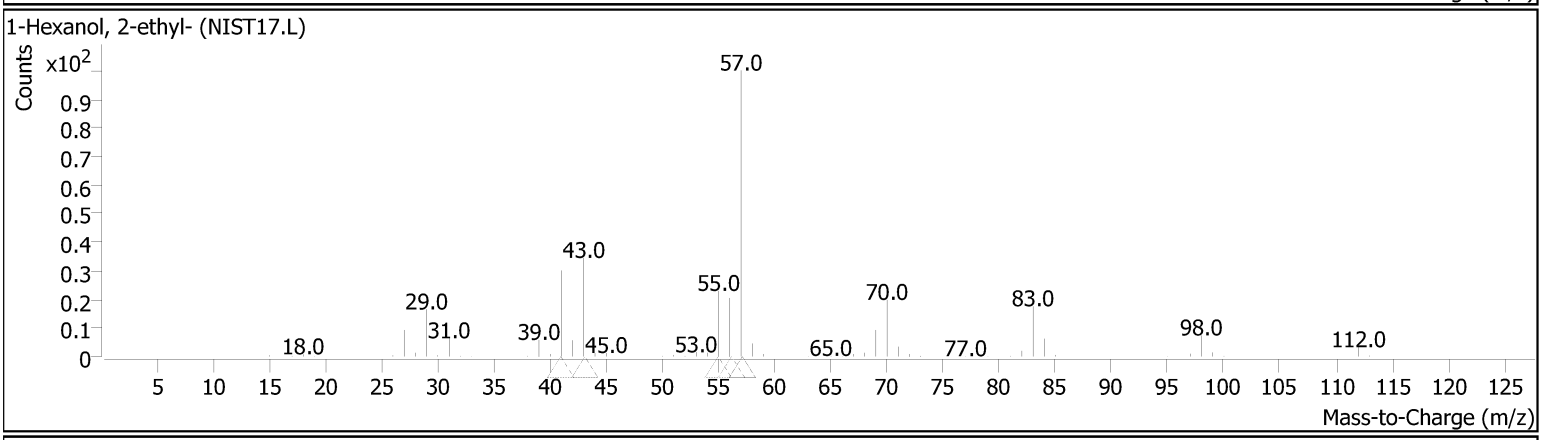


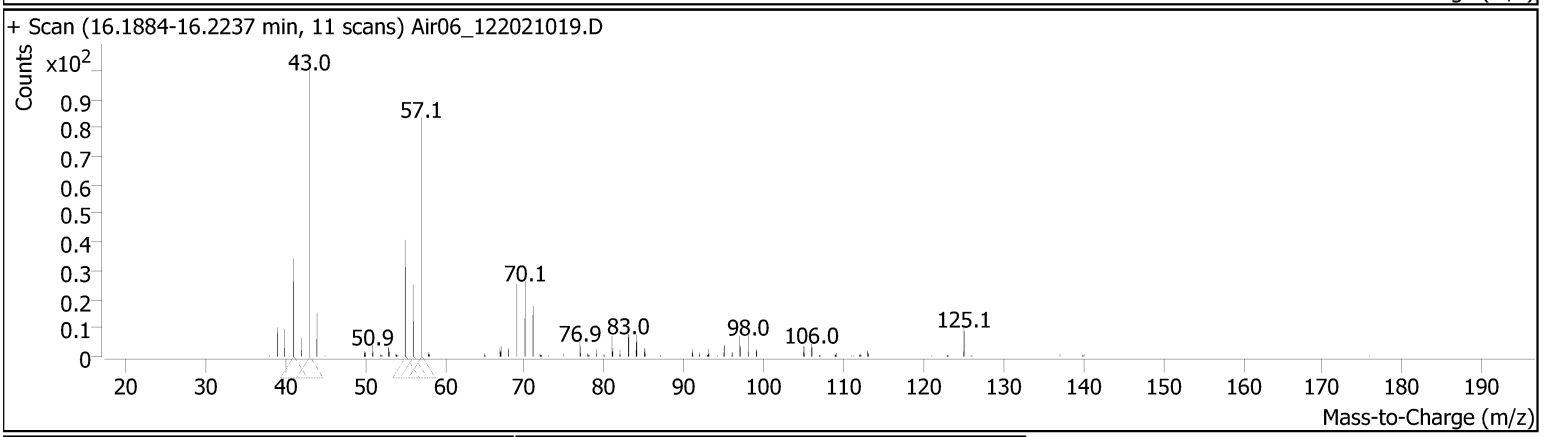


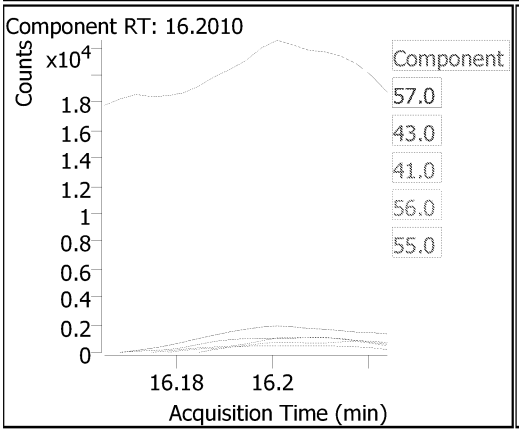


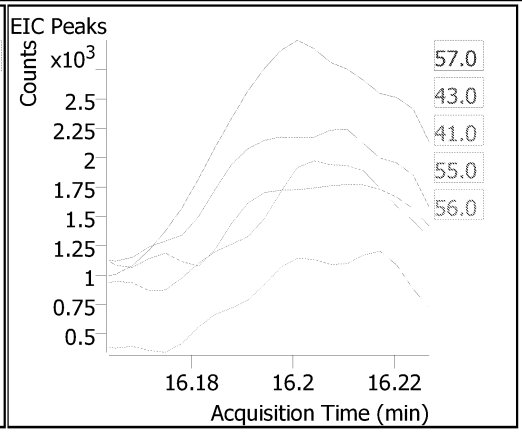
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.2010	1-Hexanol, 2-ethyl-	10085.0	83.9	104-76-7	C8H18O	0.0238

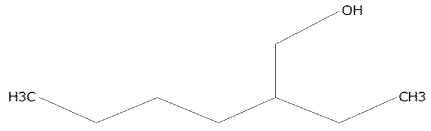




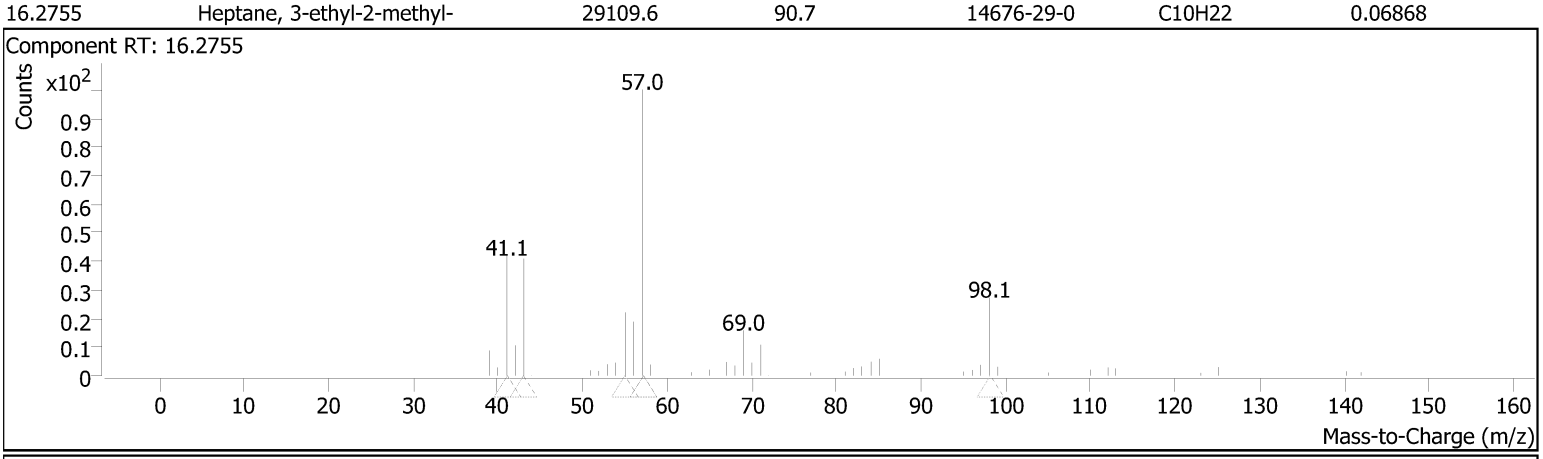


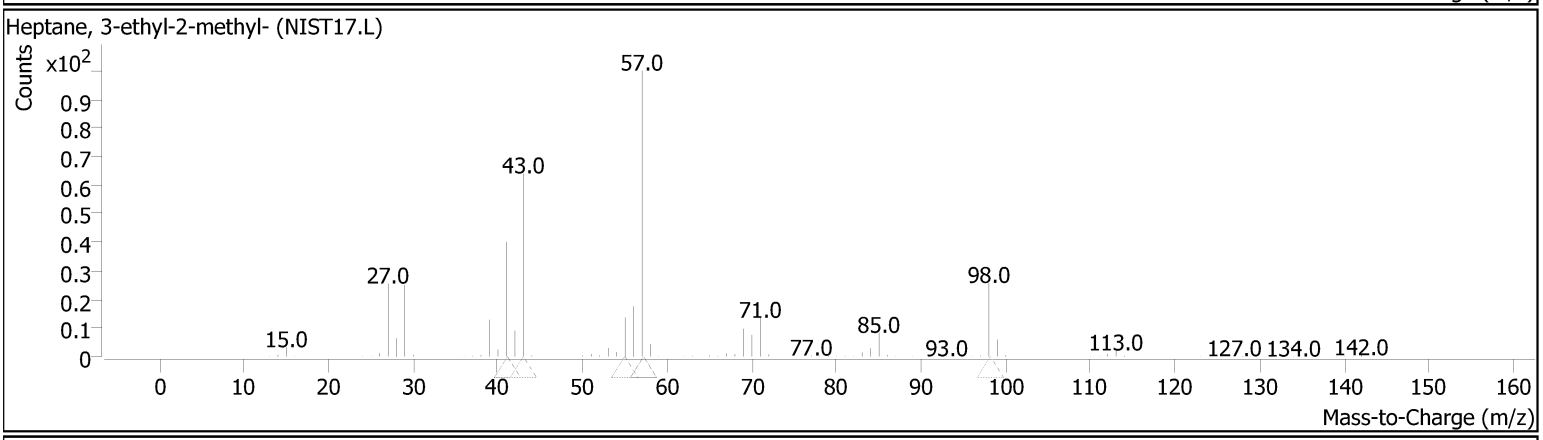


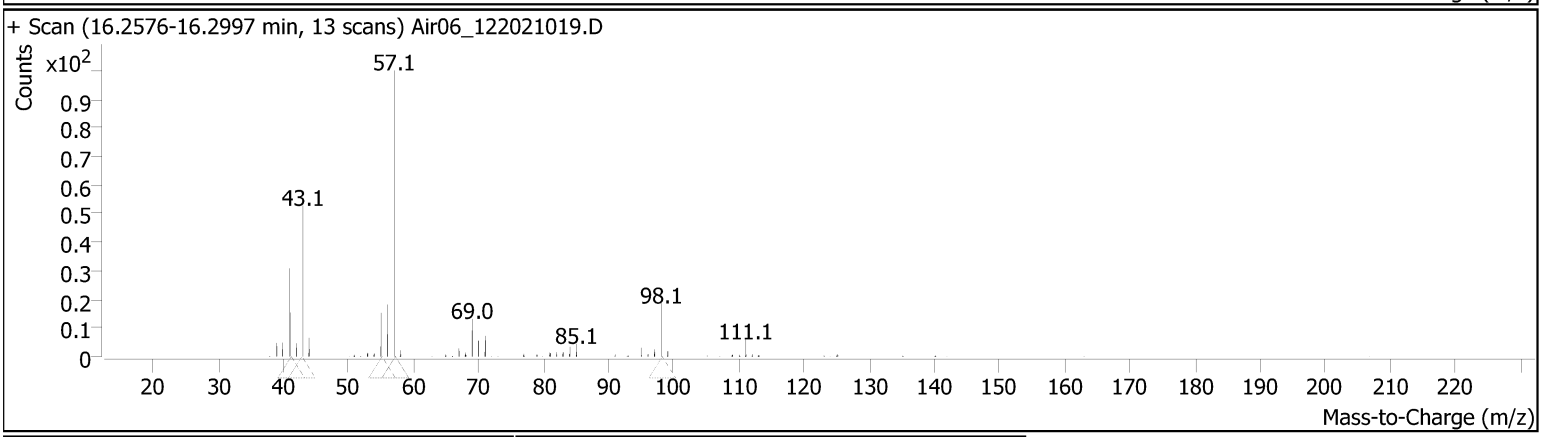


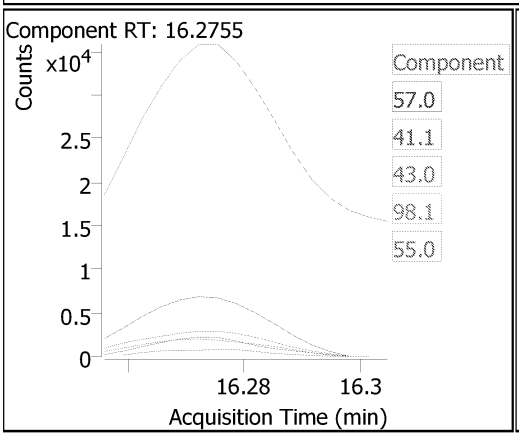


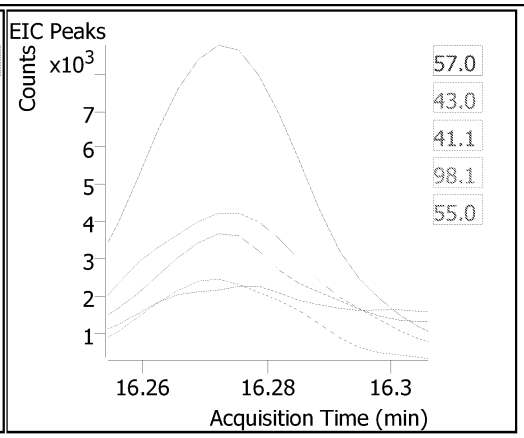
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.2755	Heptane, 3-ethyl-2-methyl-	29109.6	90.7	14676-29-0	C10H22	0.06868

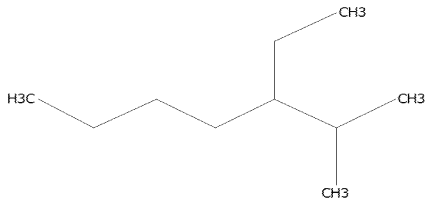




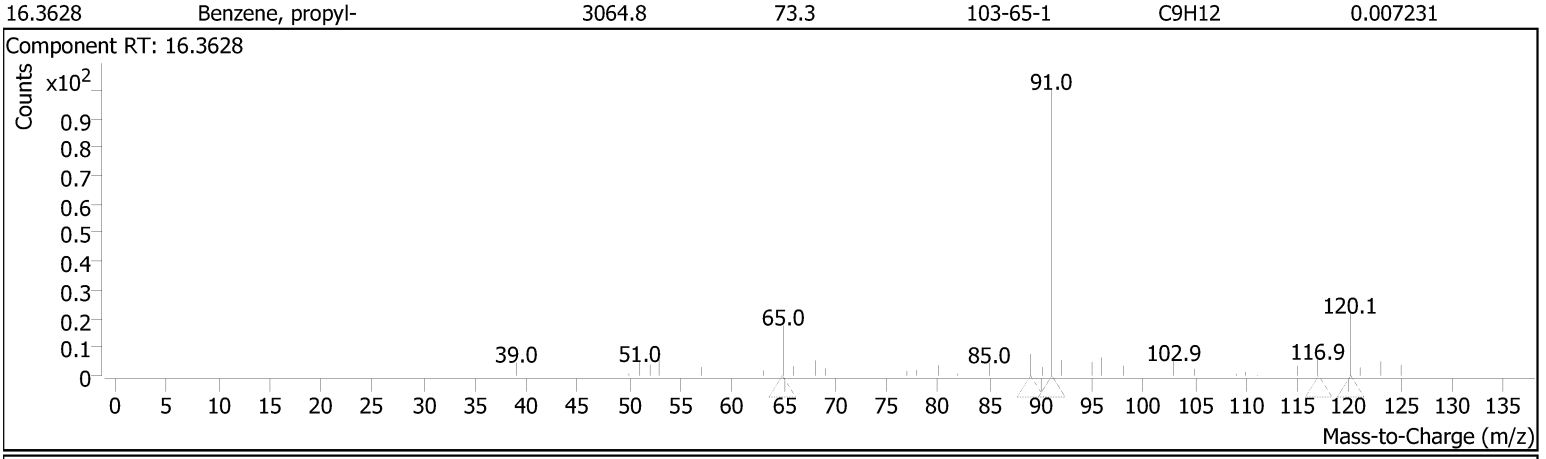


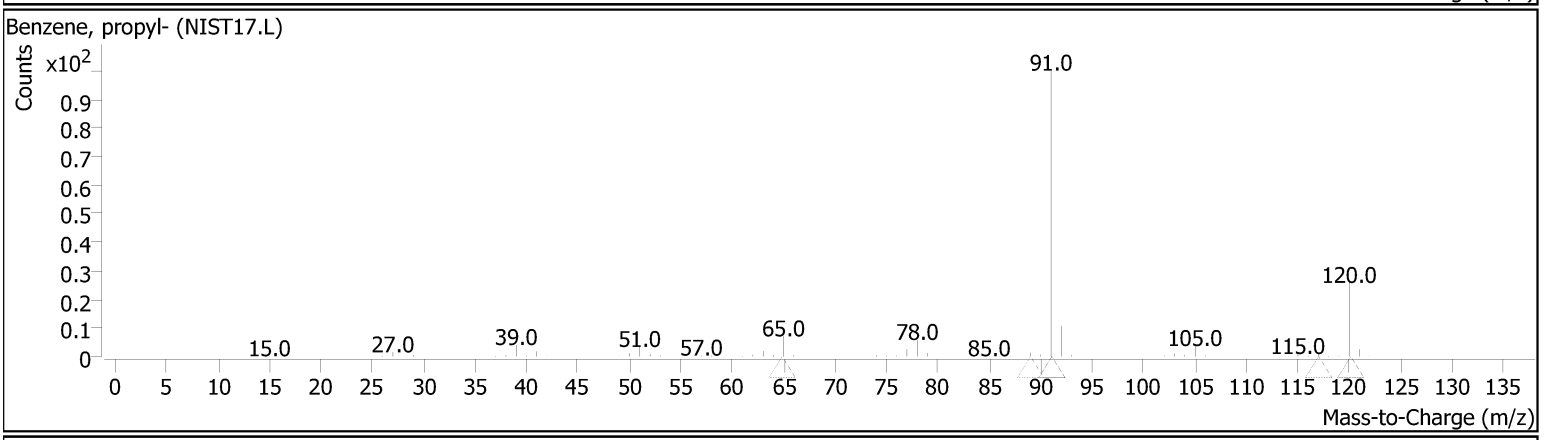


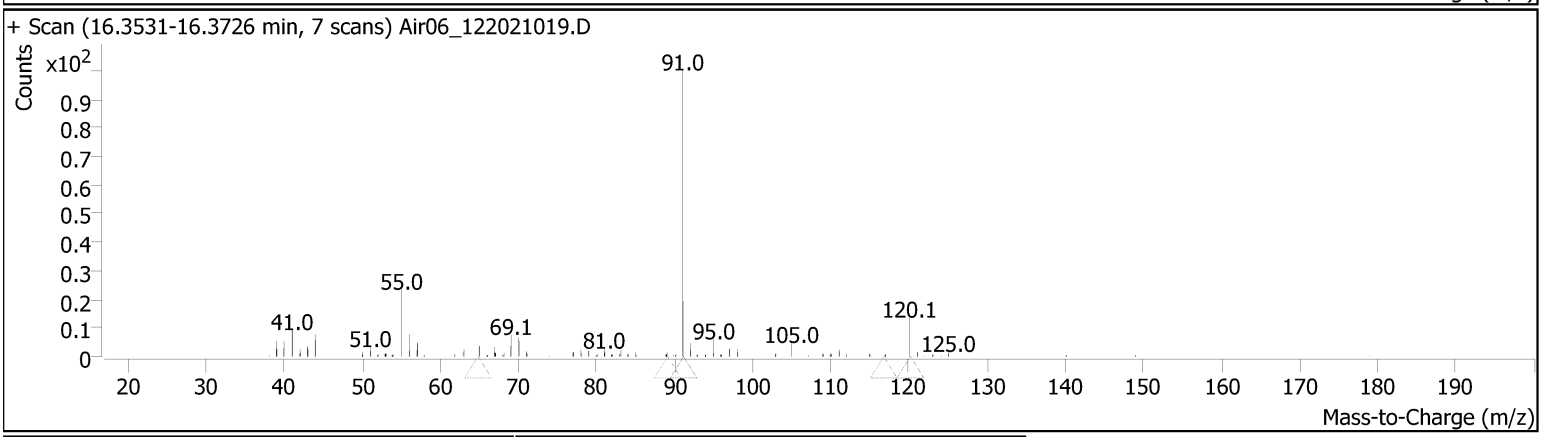


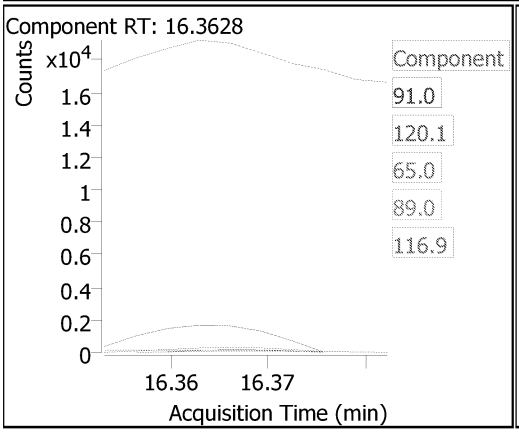


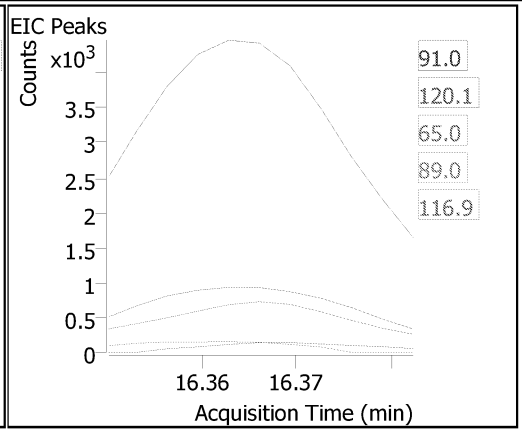
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.3628	Benzene, propyl-	3064.8	73.3	103-65-1	C9H12	0.007231

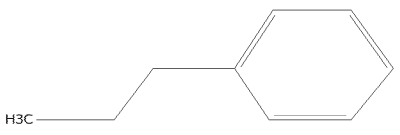




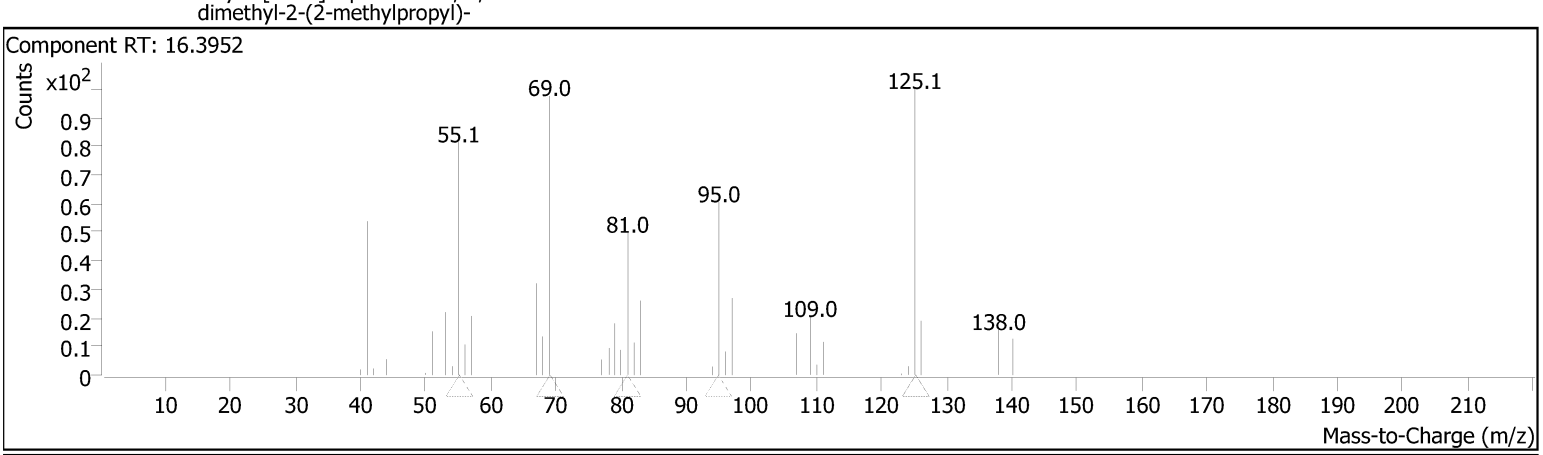


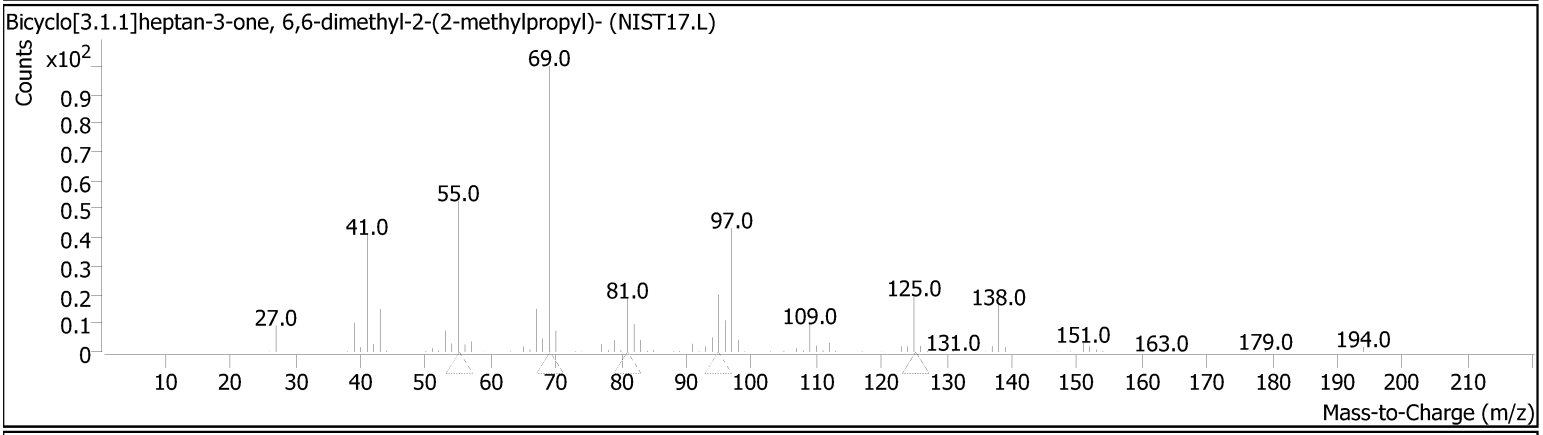


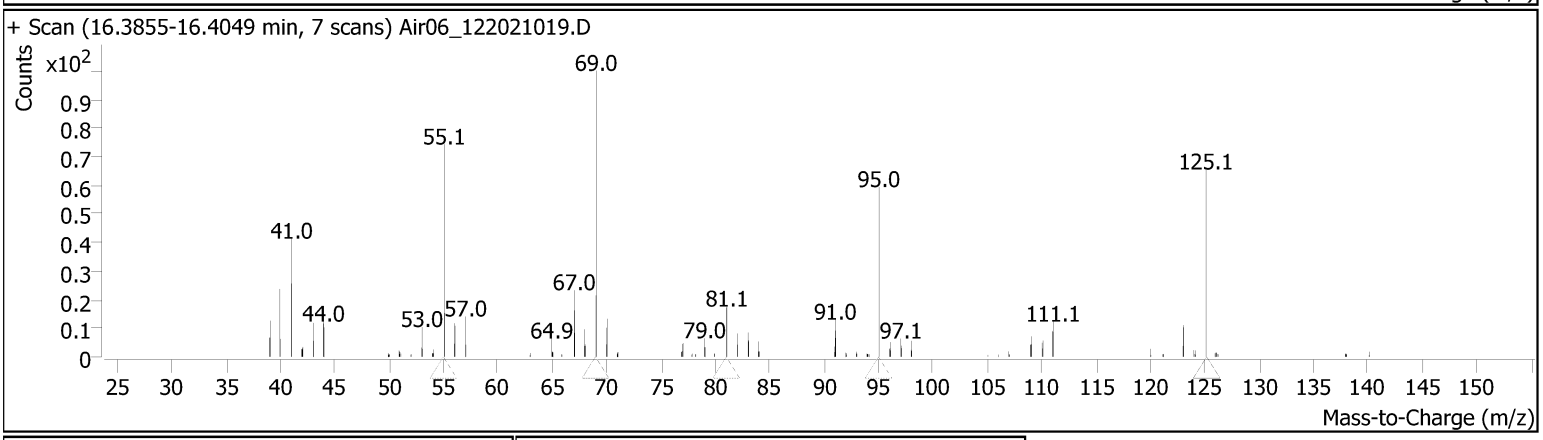


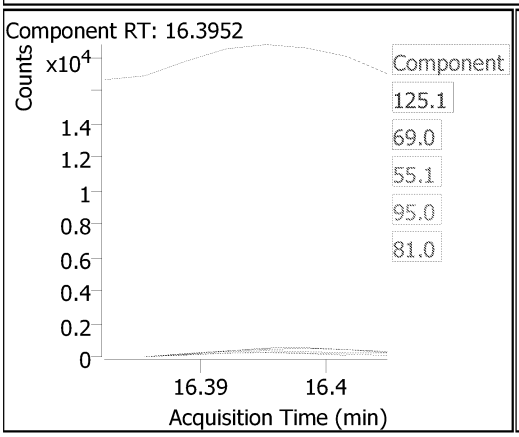


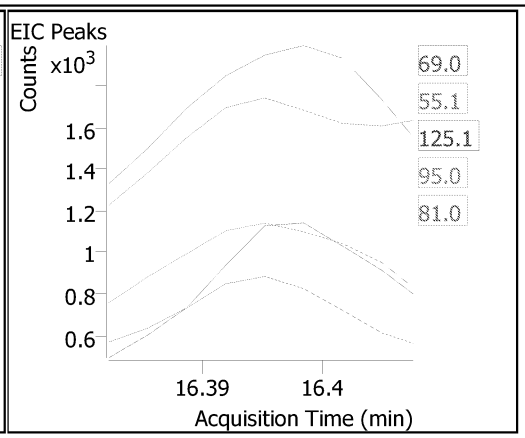
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.3952	Bicyclo[3.1.1]heptan-3-one, 6,6-dimethyl-2-(2-methylpropyl)-	2368.1	74.4	1000163-97-9	C13H22O	0.005587

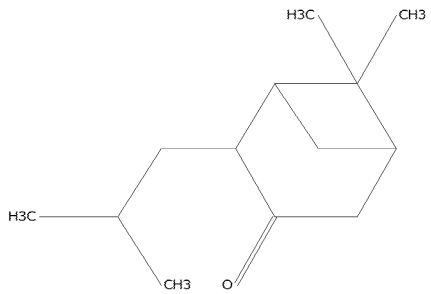




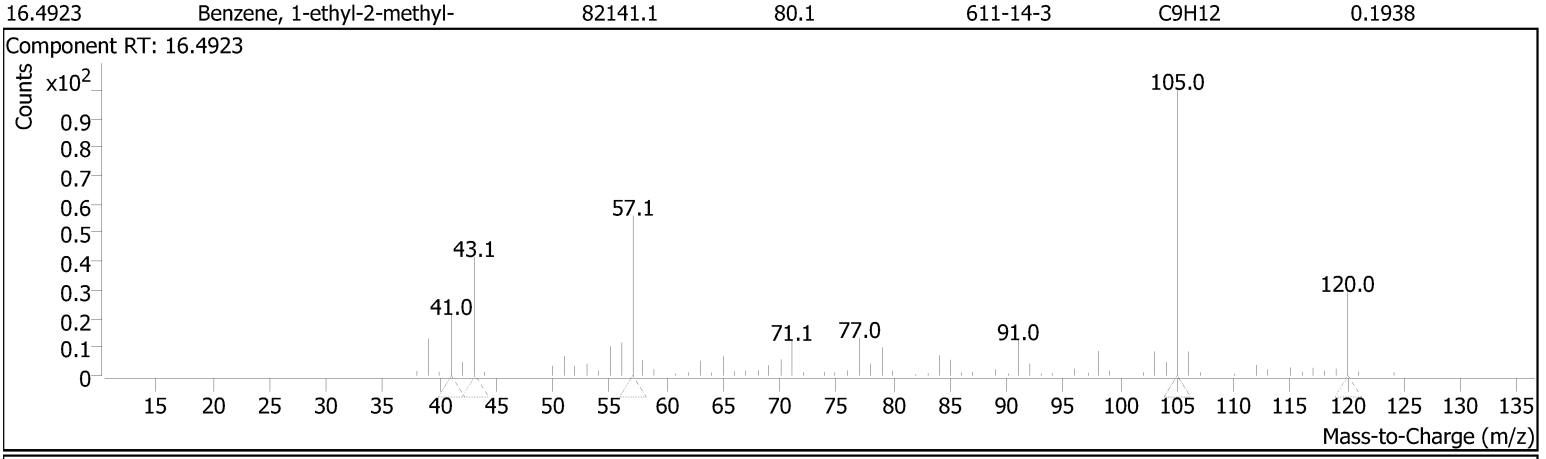


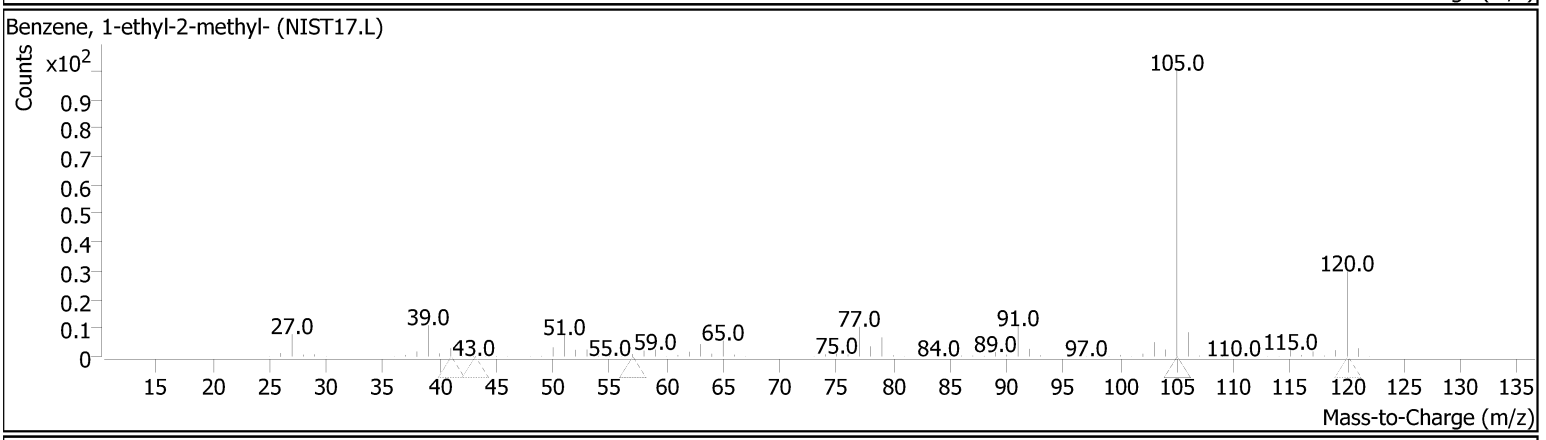


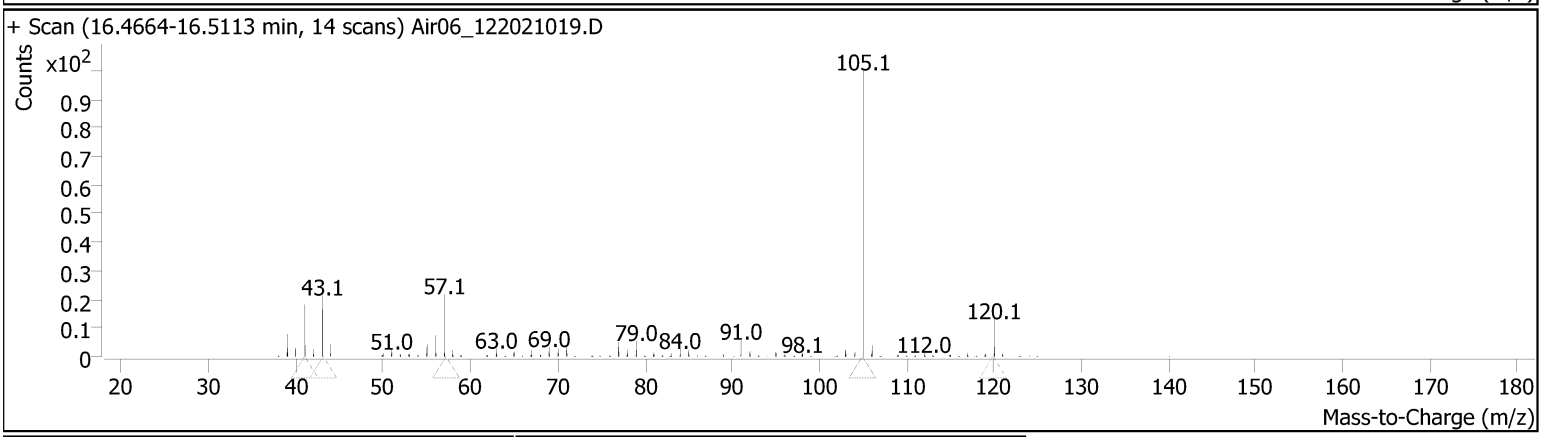


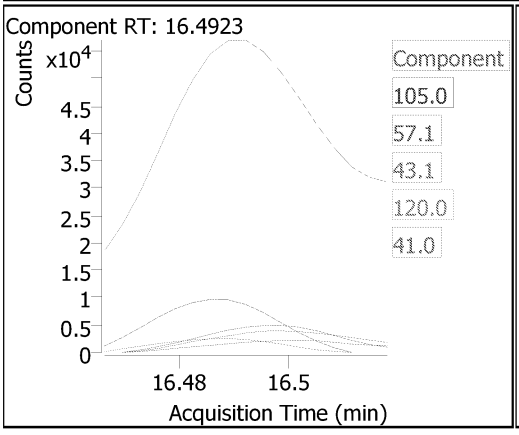


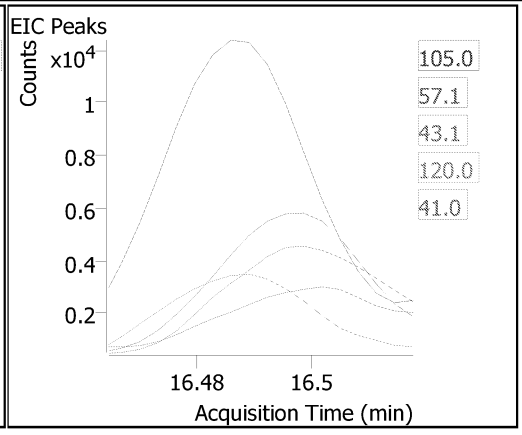
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.4923	Benzene, 1-ethyl-2-methyl-	82141.1	80.1	611-14-3	C9H12	0.1938

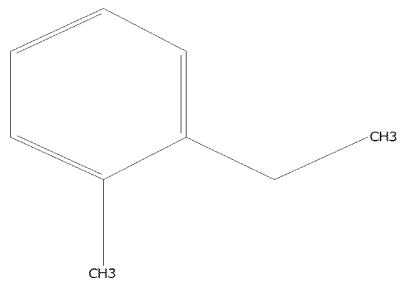




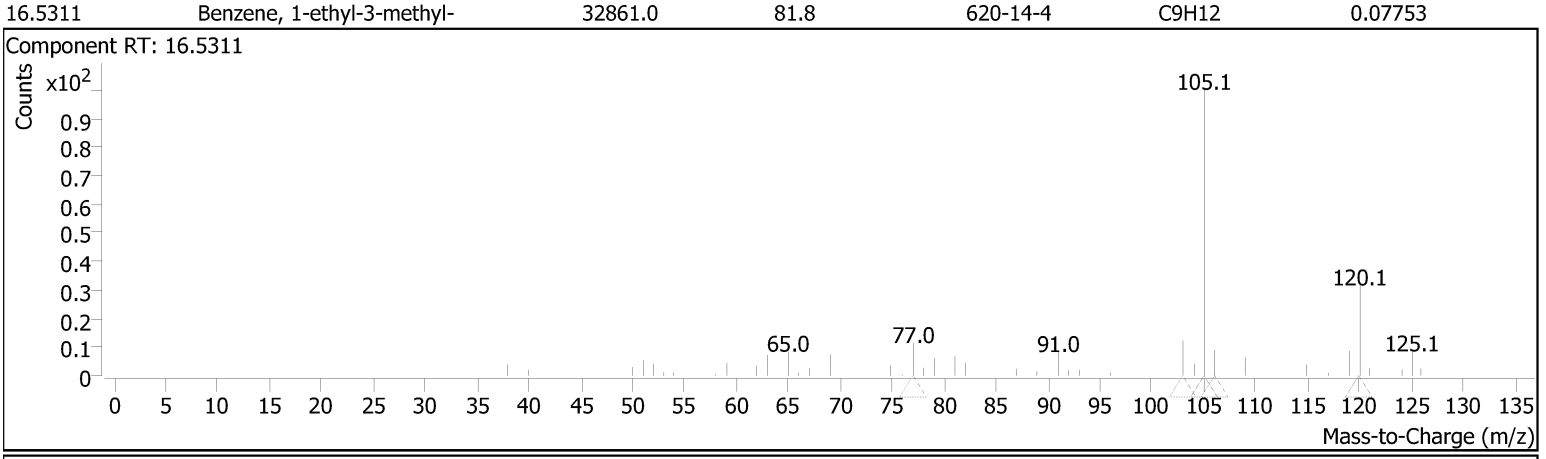


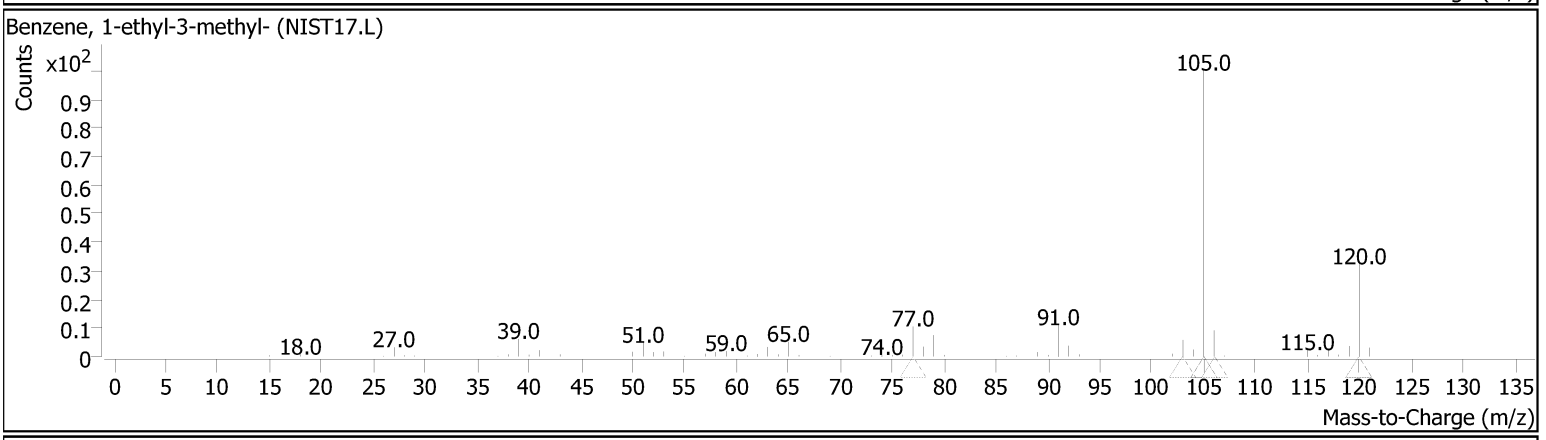


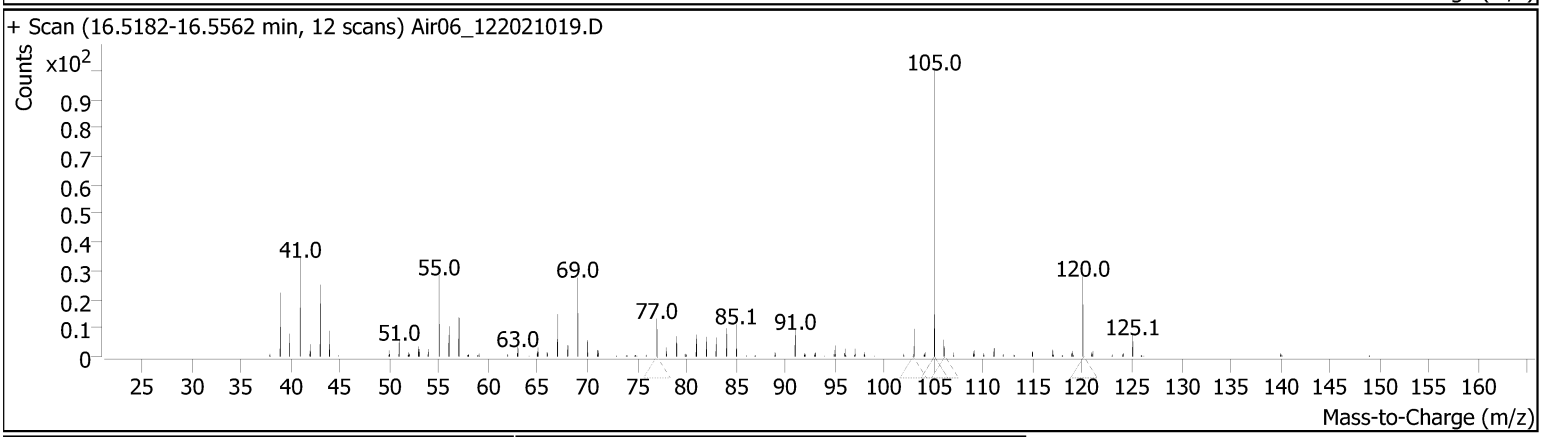


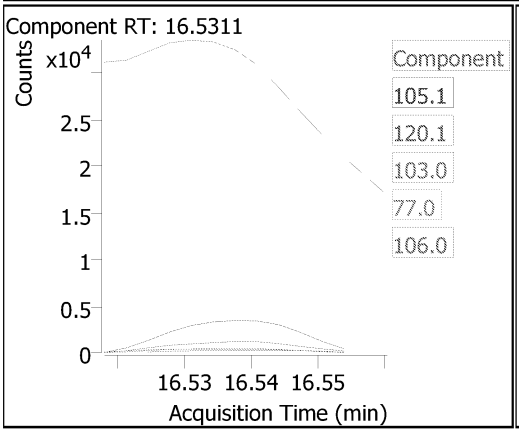


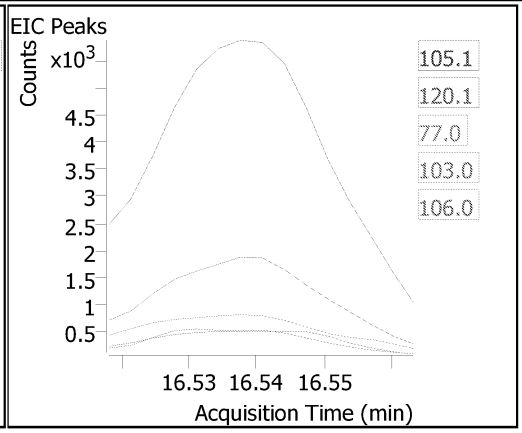
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.5311	Benzene, 1-ethyl-3-methyl-	32861.0	81.8	620-14-4	C9H12	0.07753

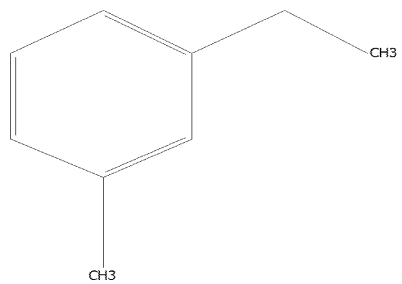




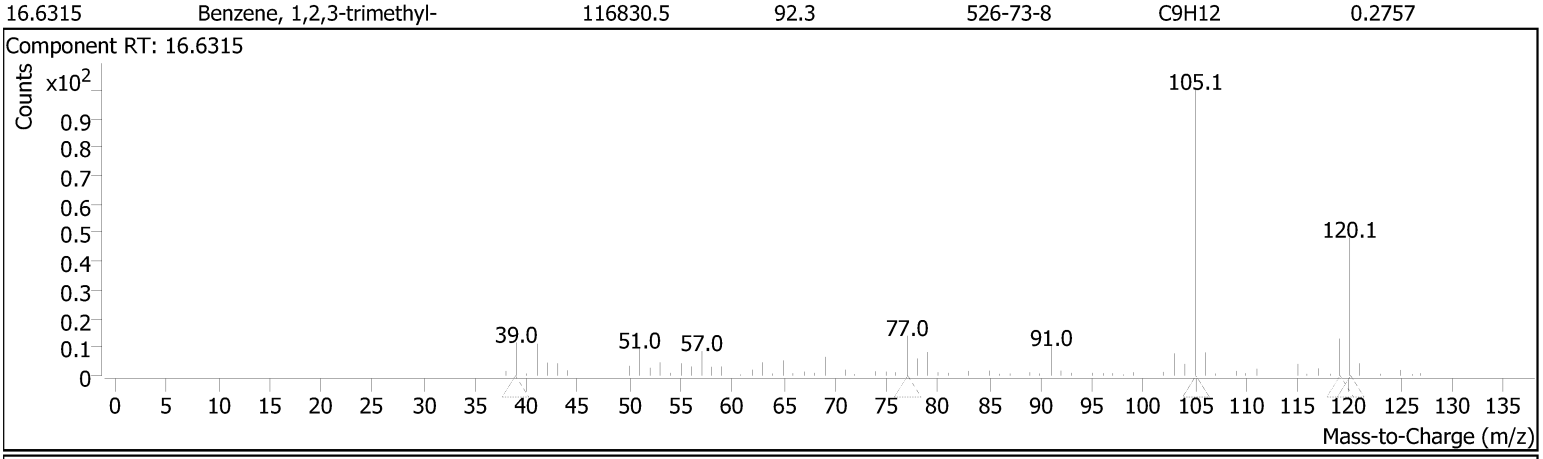


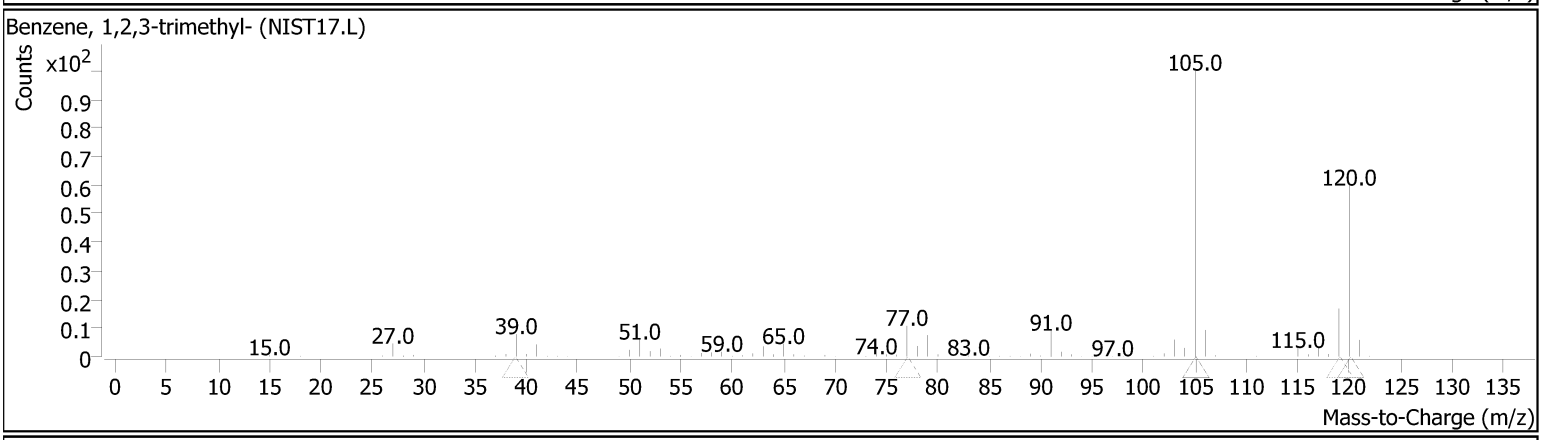


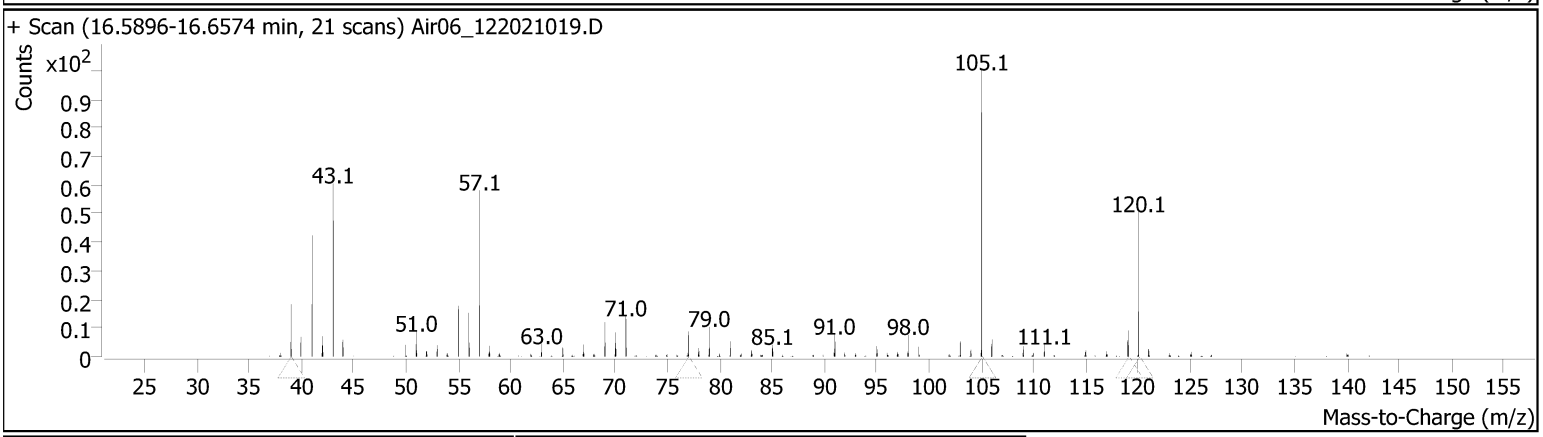


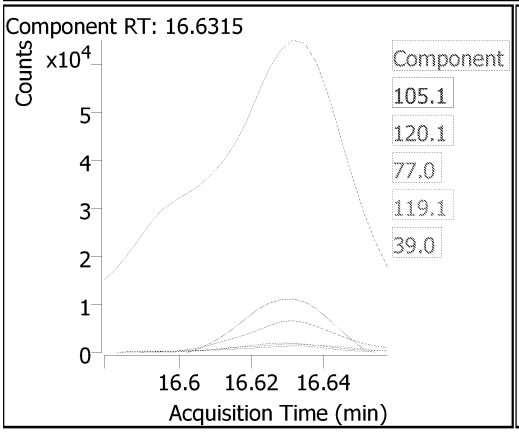


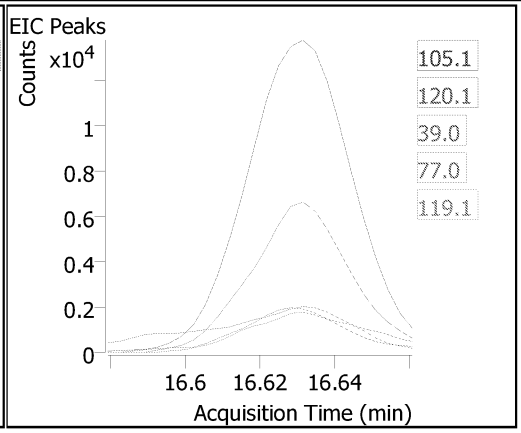
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.6315	Benzene, 1,2,3-trimethyl-	116830.5	92.3	526-73-8	C9H12	0.2757

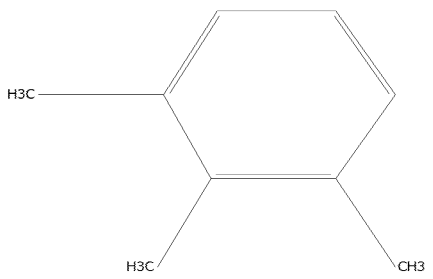




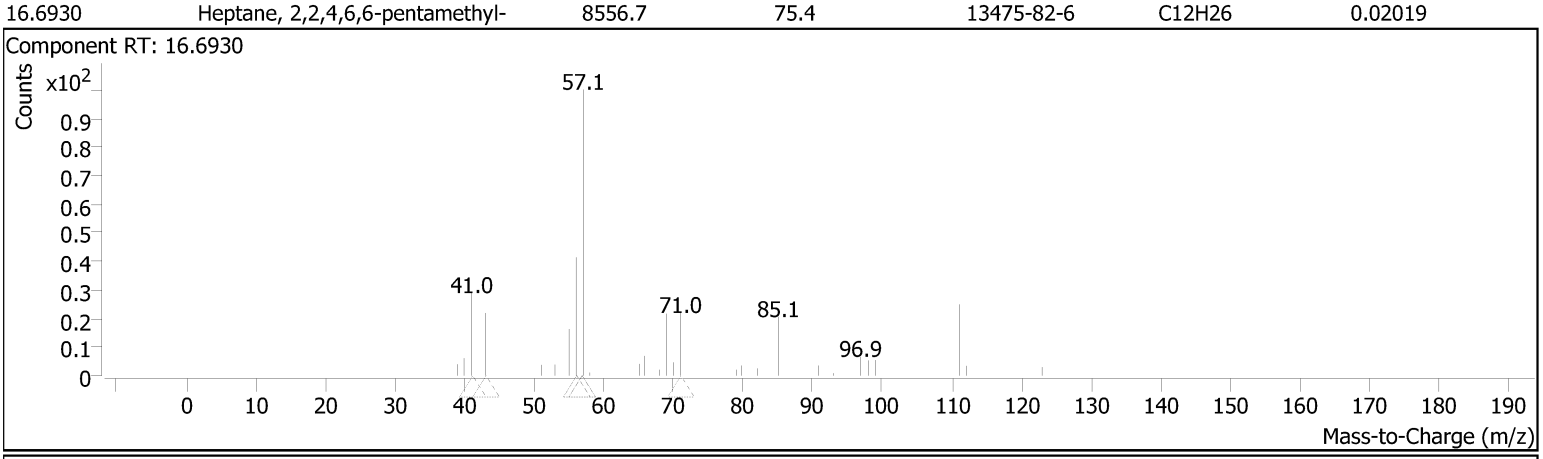


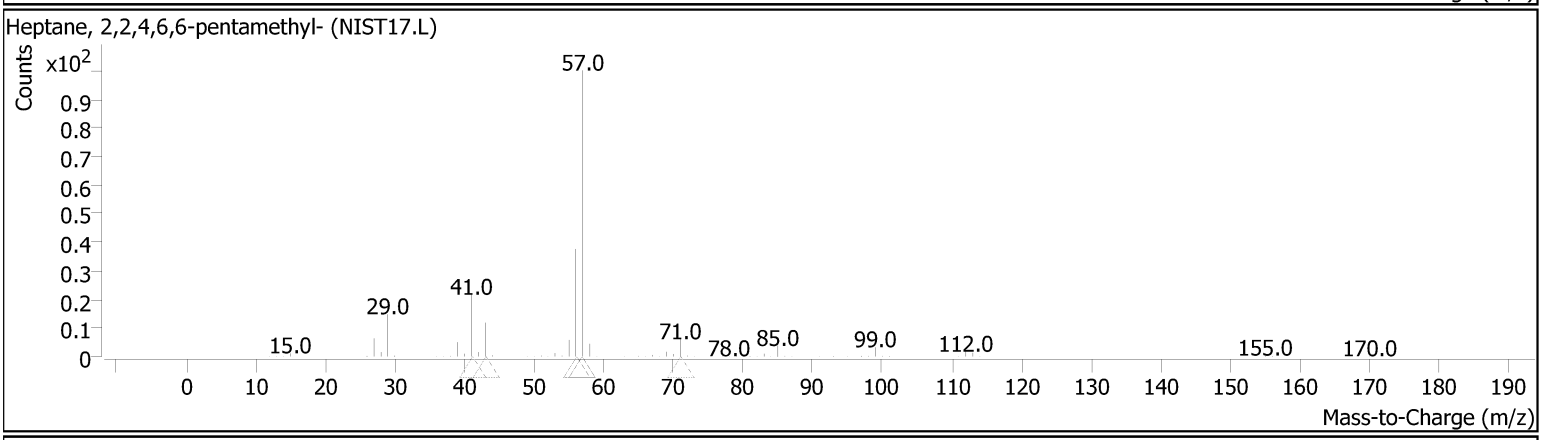


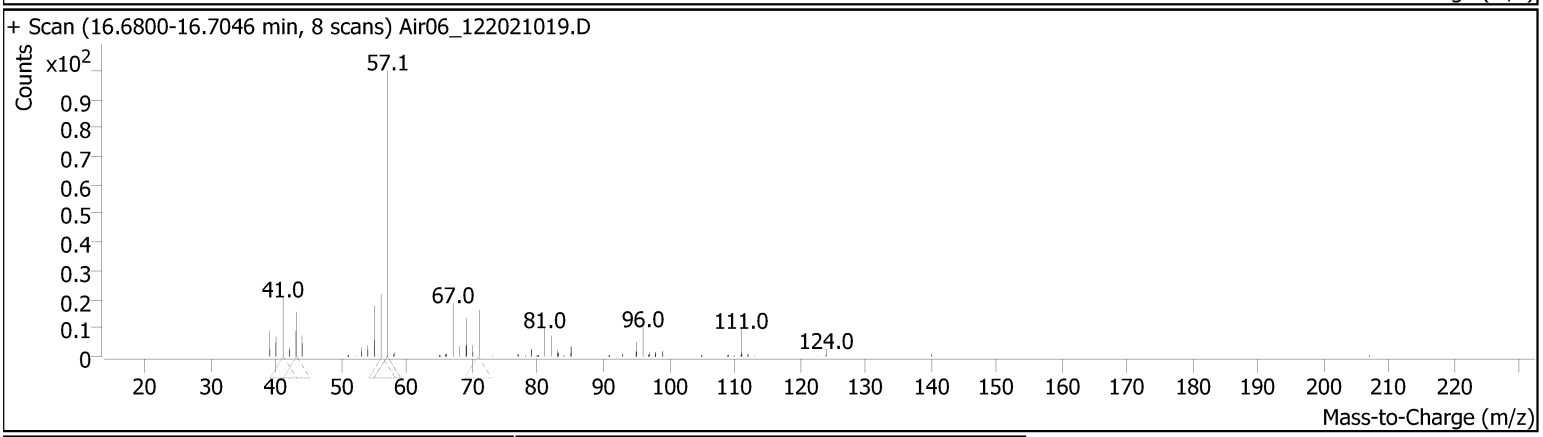


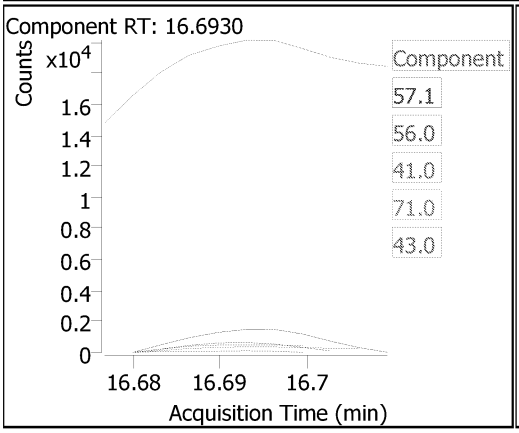


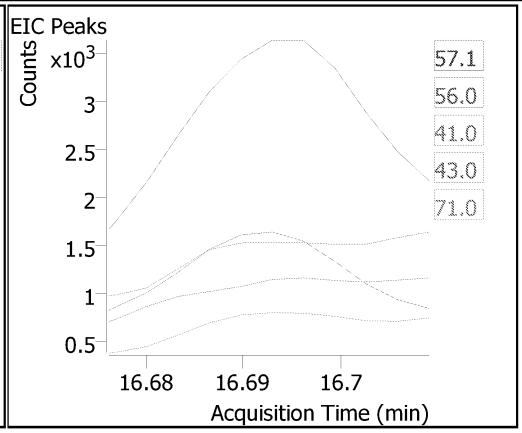
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.6930	Heptane, 2,2,4,6,6-pentamethyl-	8556.7	75.4	13475-82-6	C12H26	0.02019

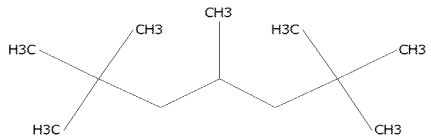




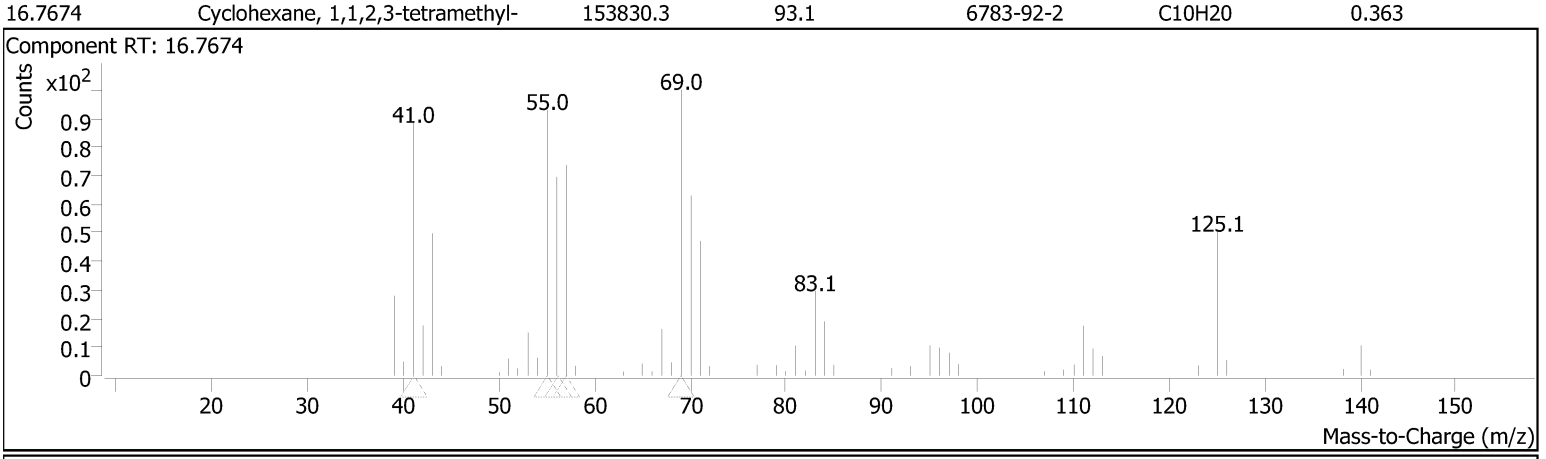


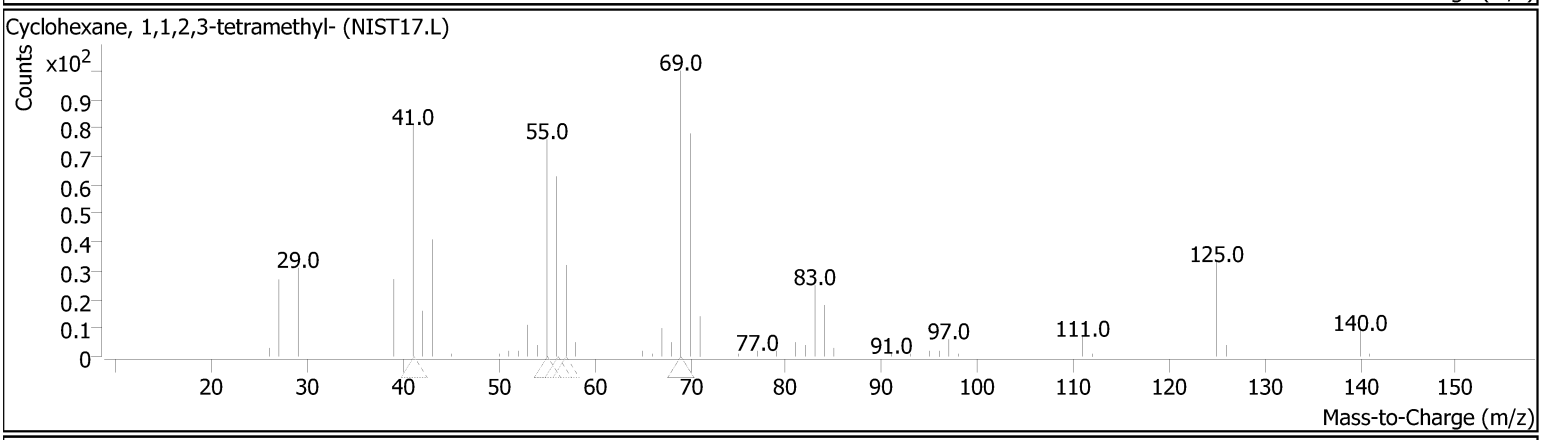


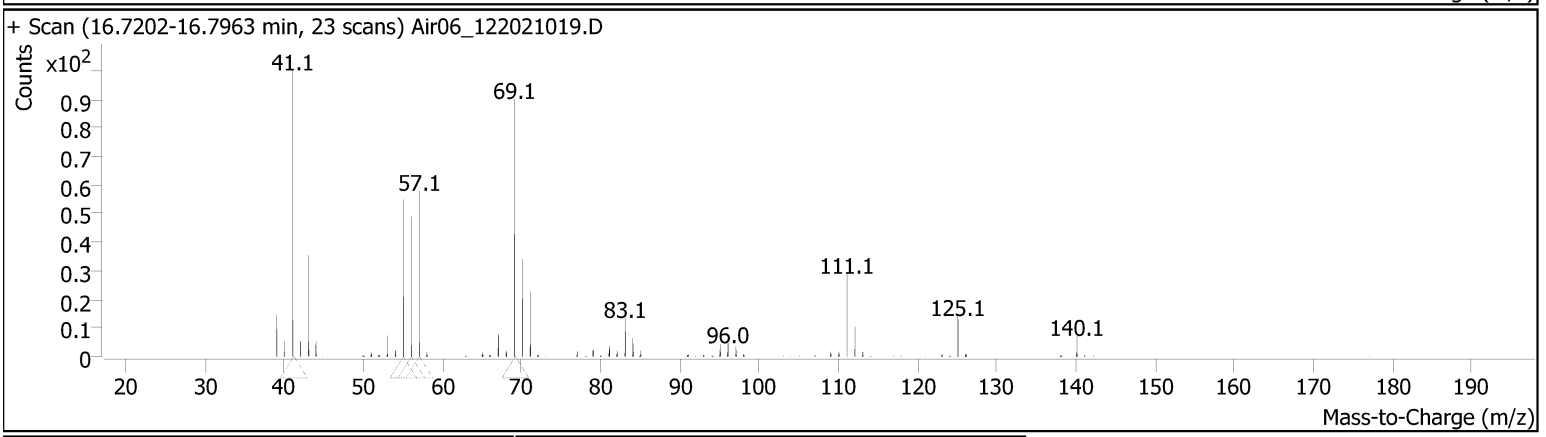


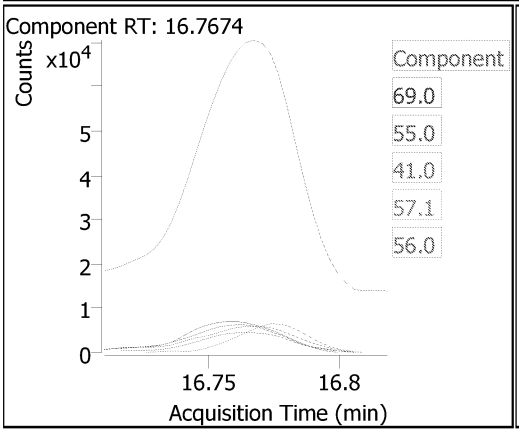


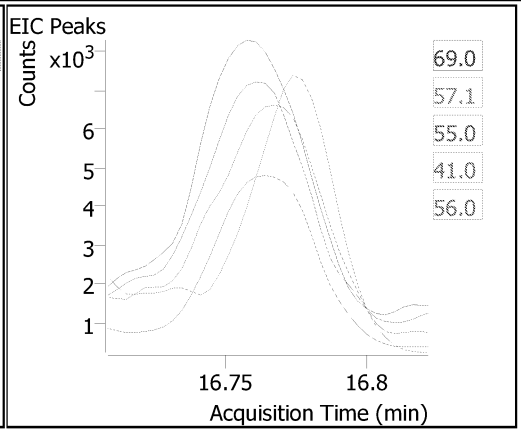
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.7674	Cyclohexane, 1,1,2,3-tetramethyl-	153830.3	93.1	6783-92-2	C10H20	0.363

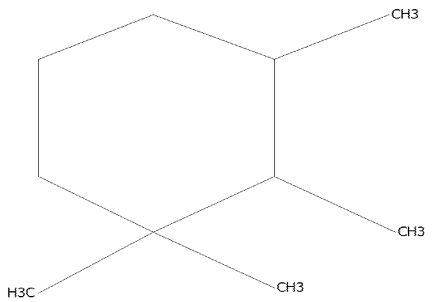




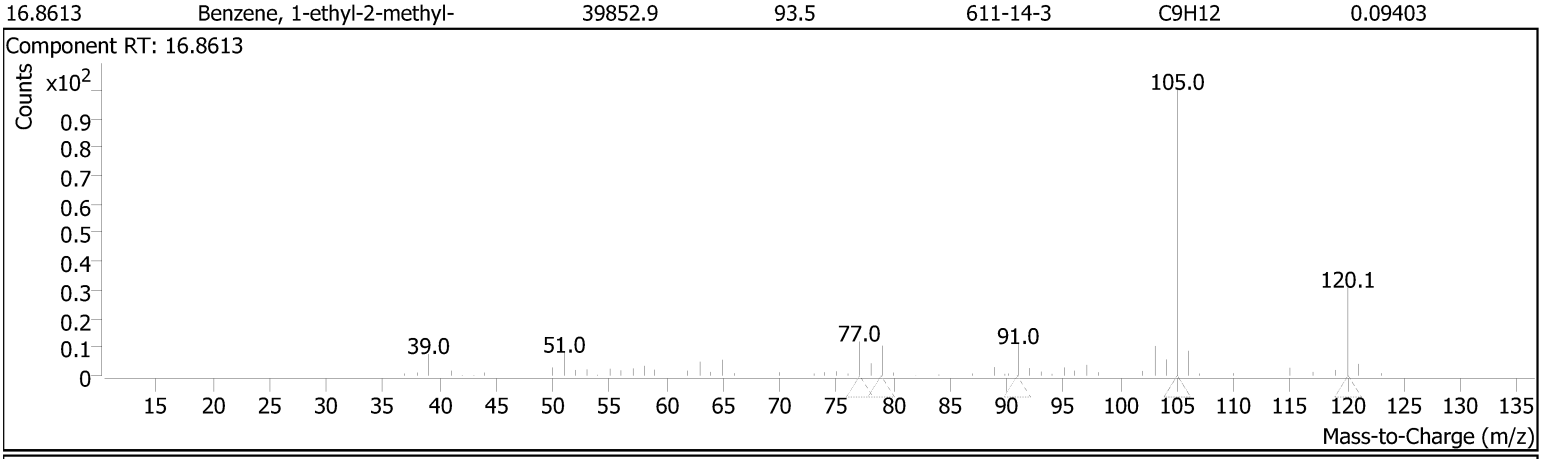


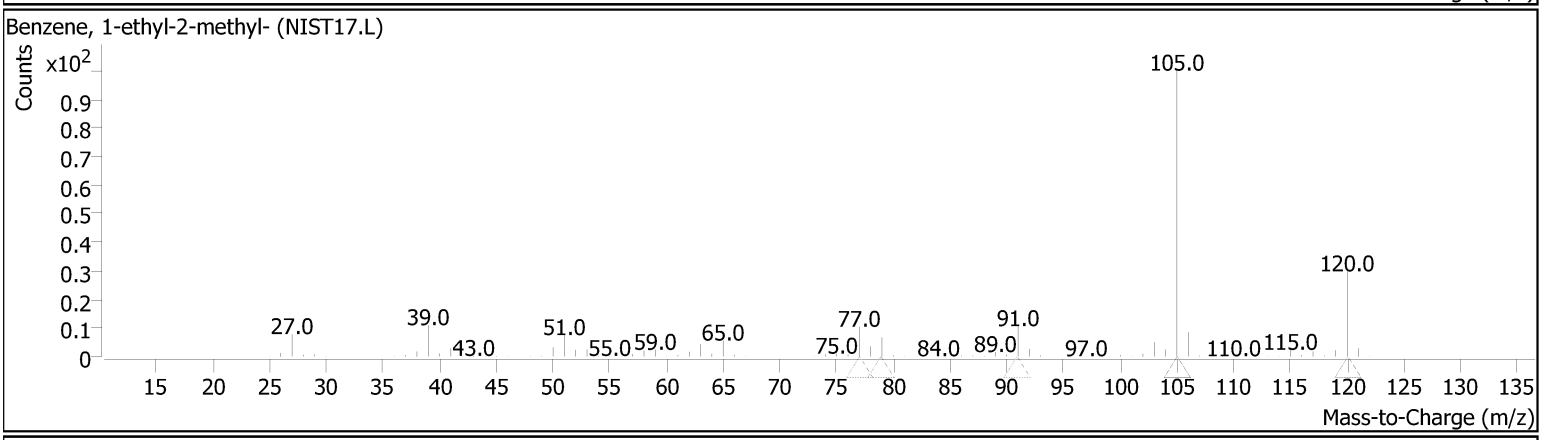


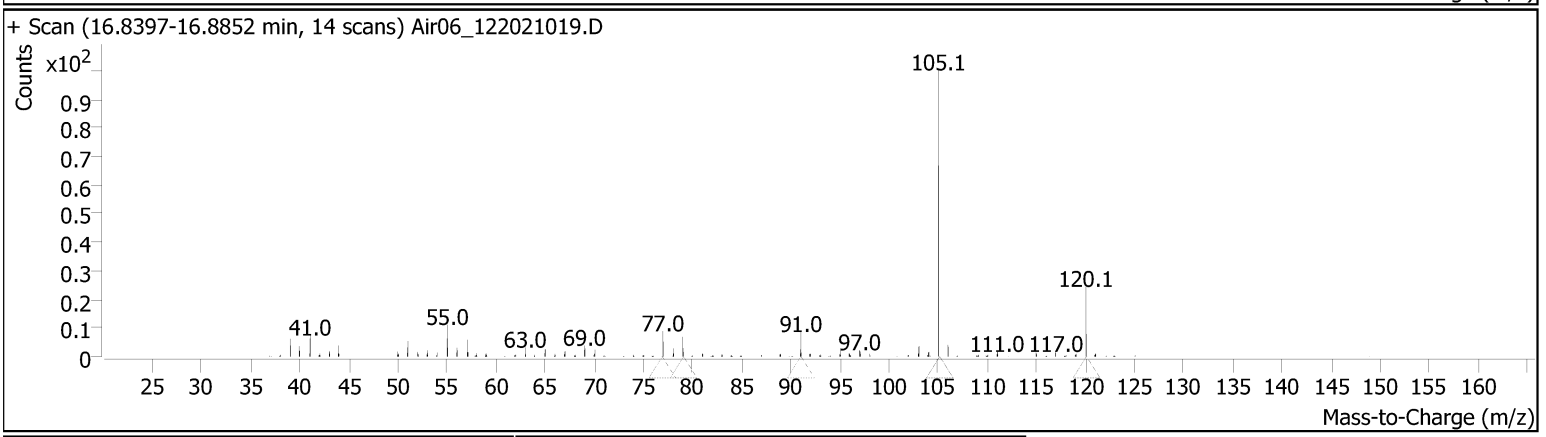


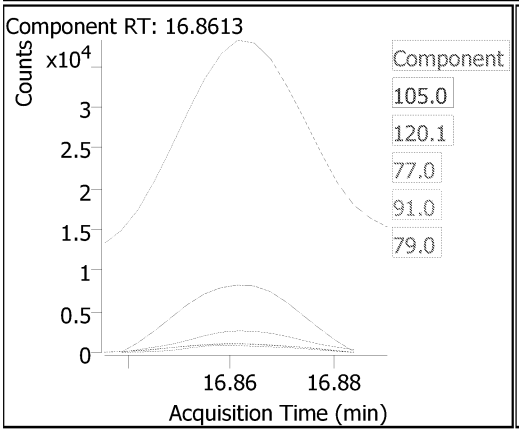


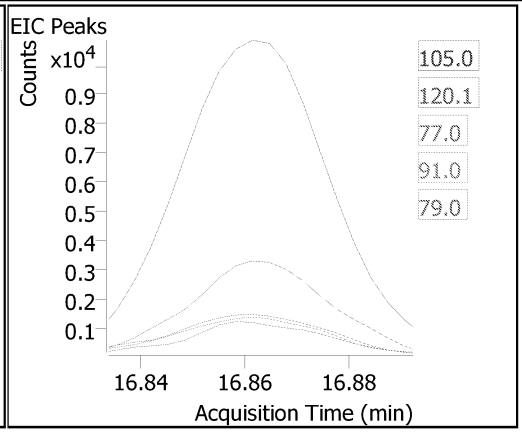
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.8613	Benzene, 1-ethyl-2-methyl-	39852.9	93.5	611-14-3	C9H12	0.09403

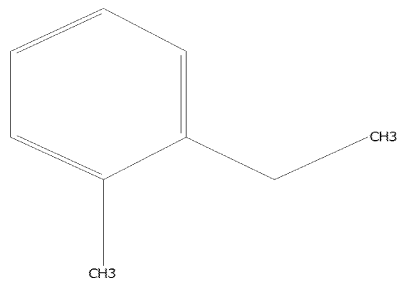




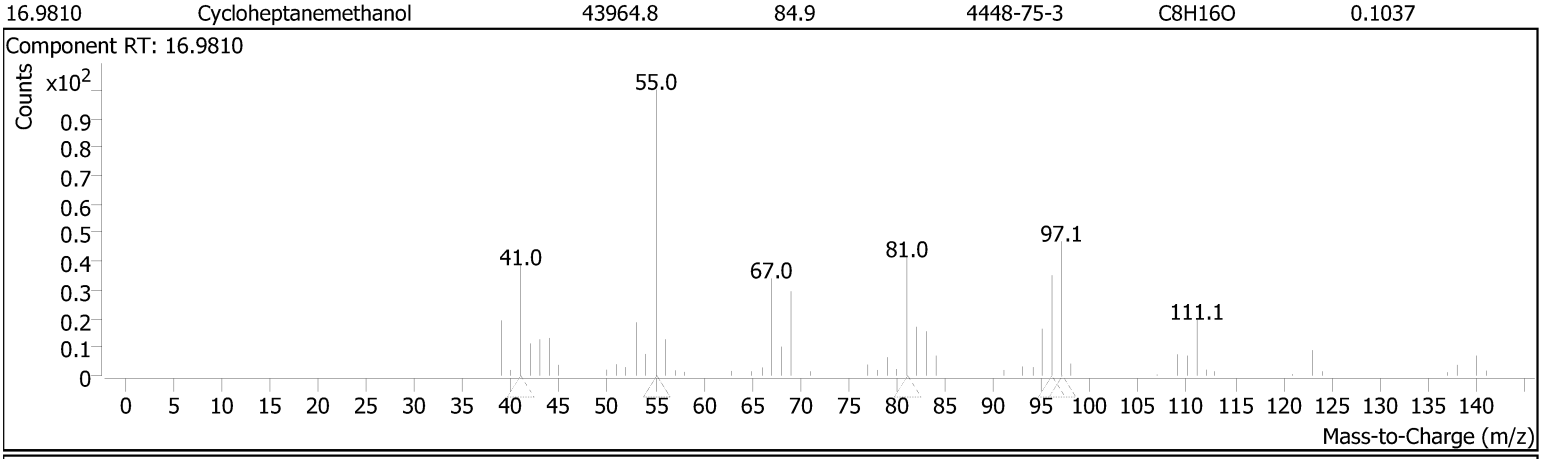


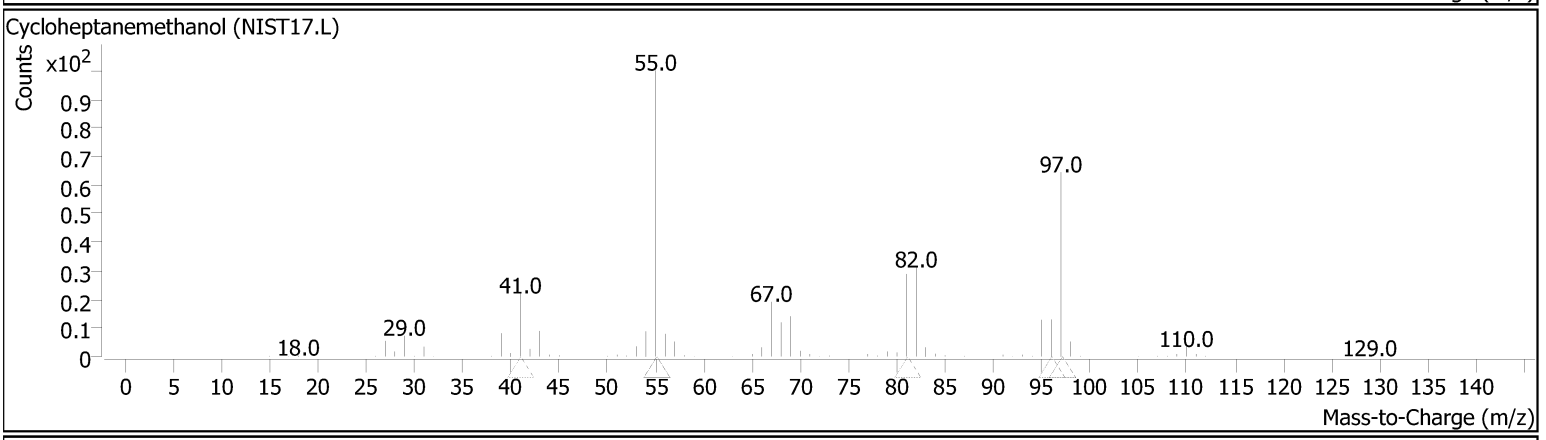


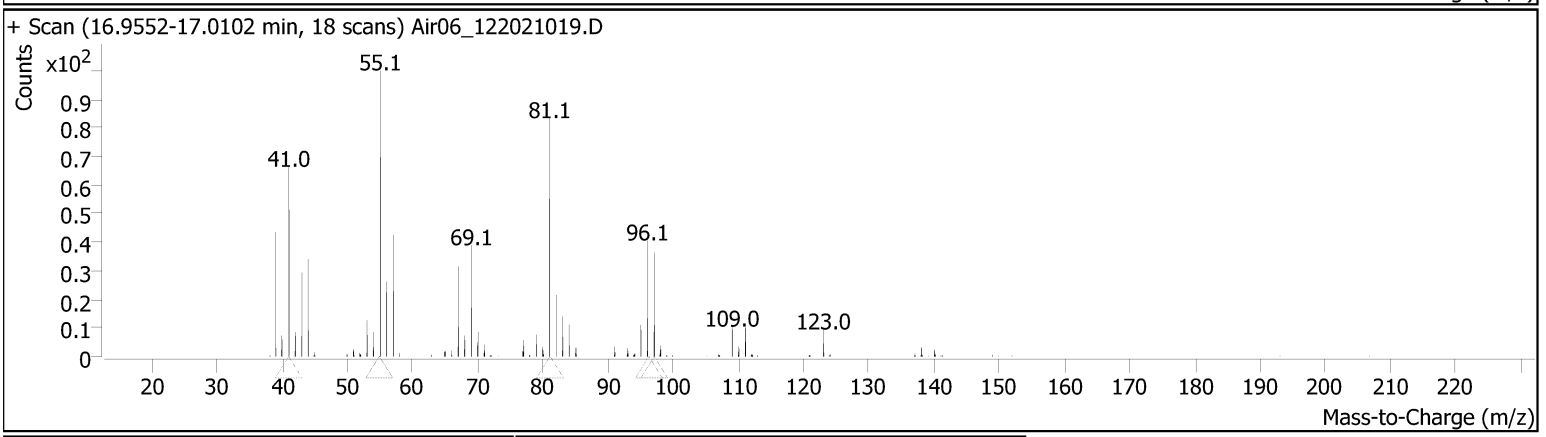


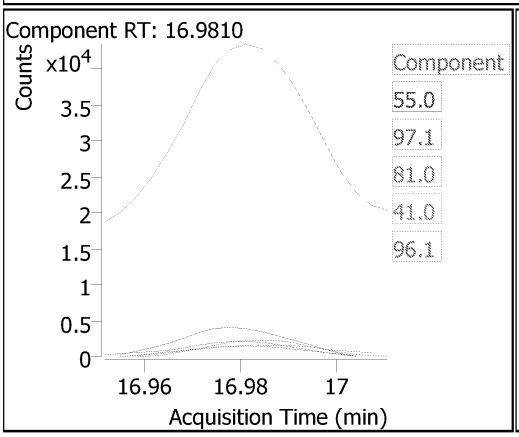


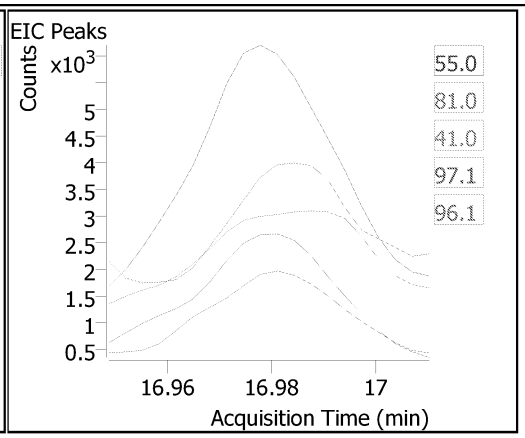
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.9810	Cycloheptanemethanol	43964.8	84.9	4448-75-3	C8H16O	0.1037

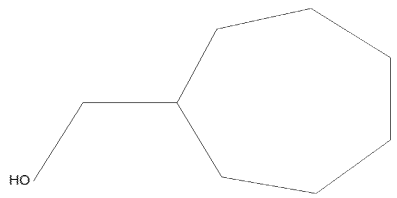




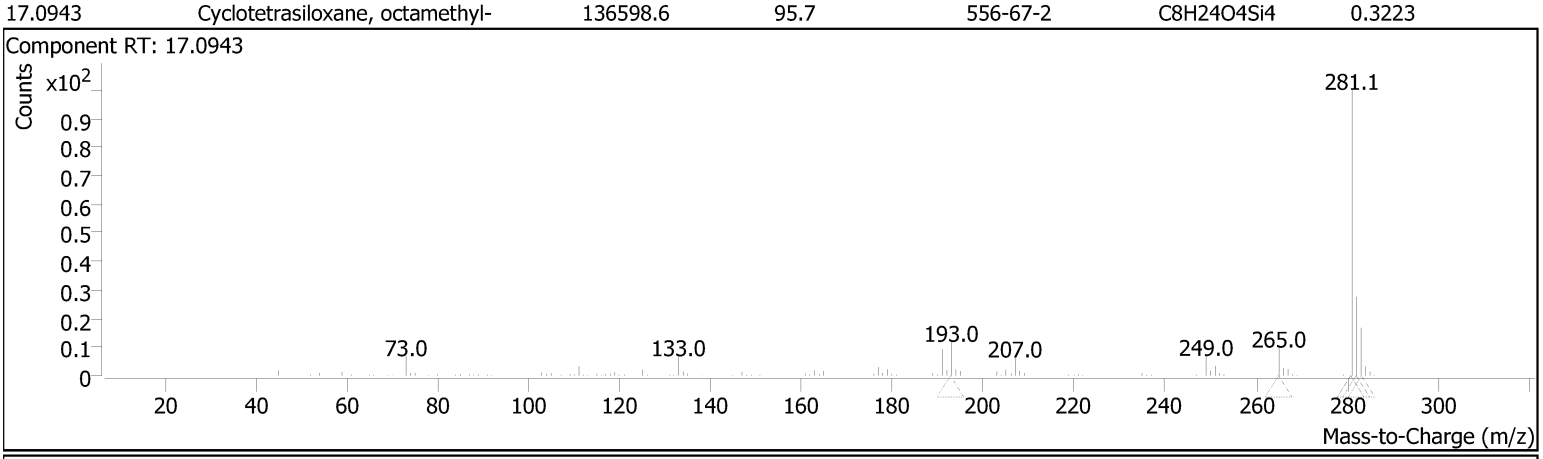


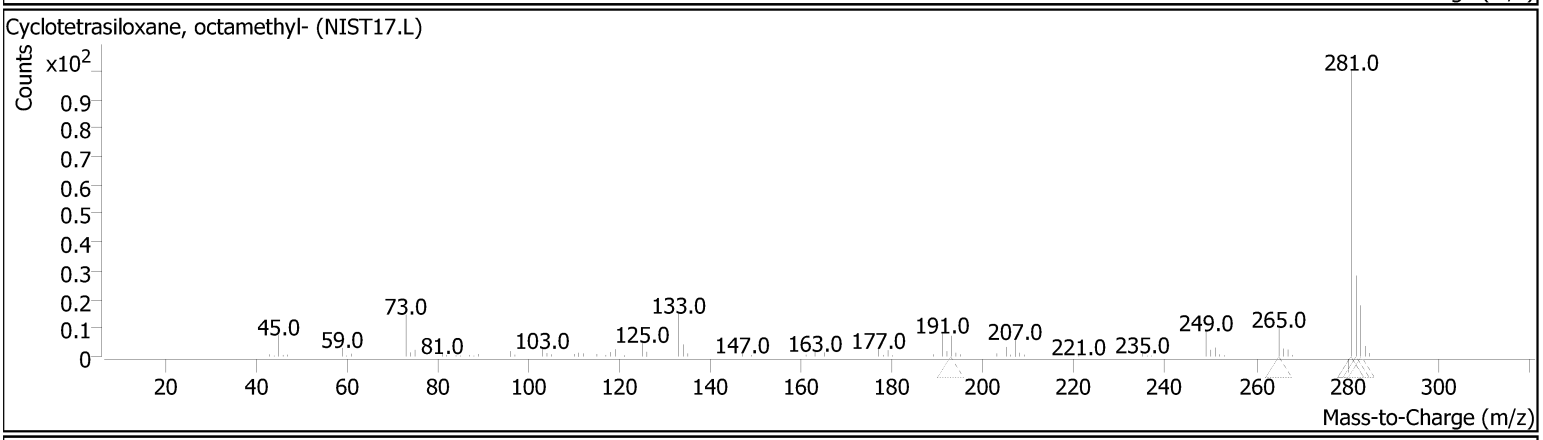


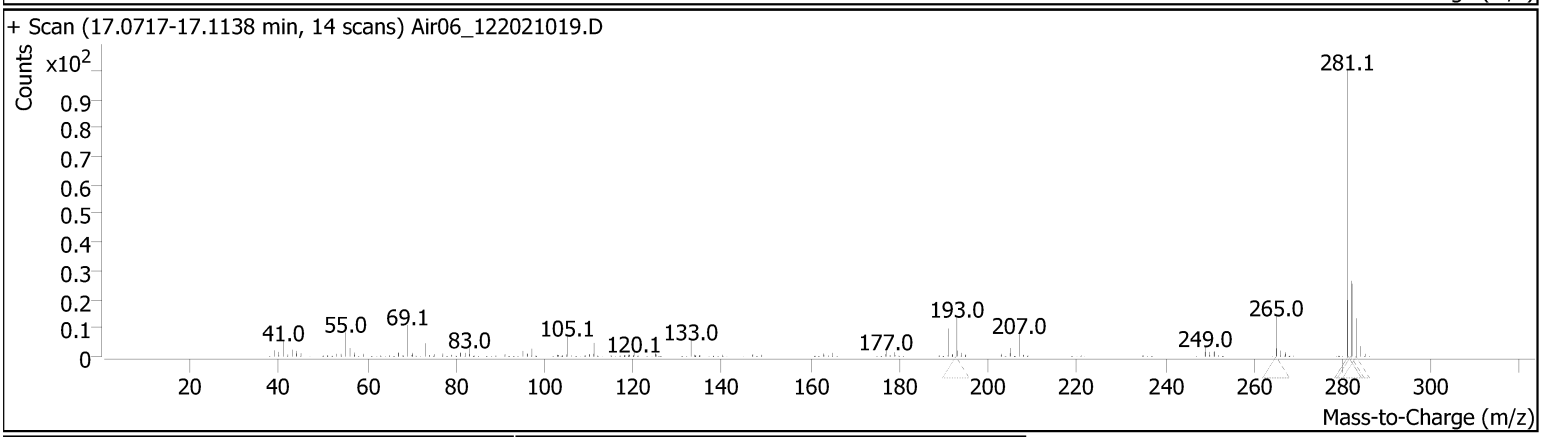


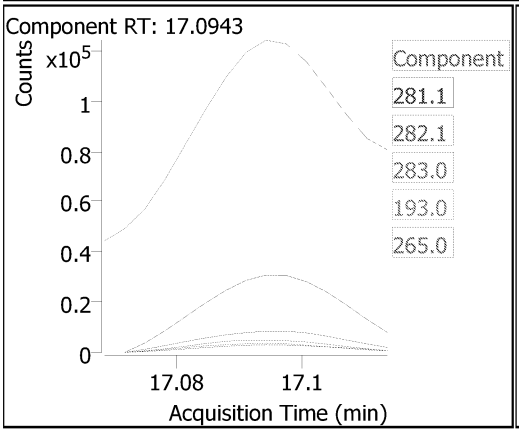


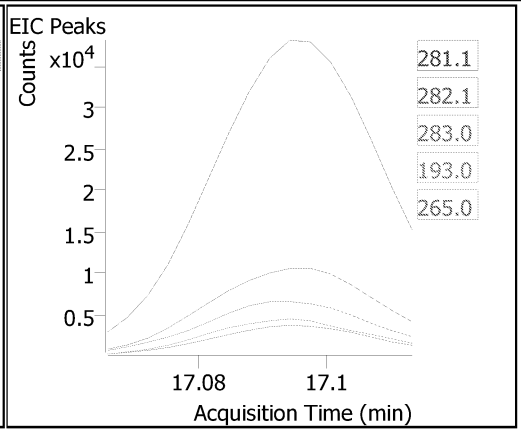
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.0943	Cyclotetrasiloxane, octamethyl-	136598.6	95.7	556-67-2	C8H24O4Si4	0.3223

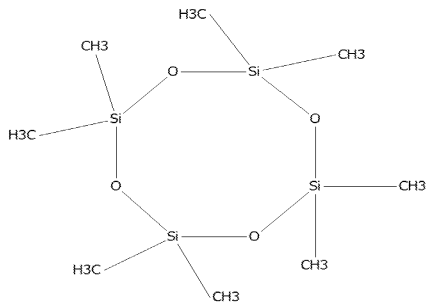




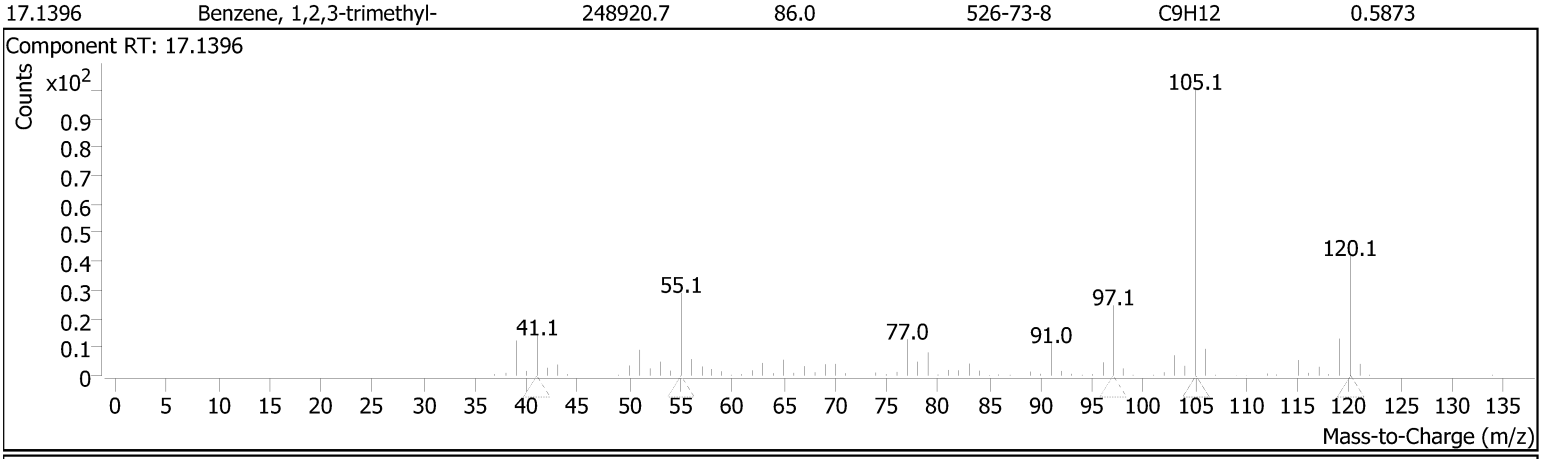


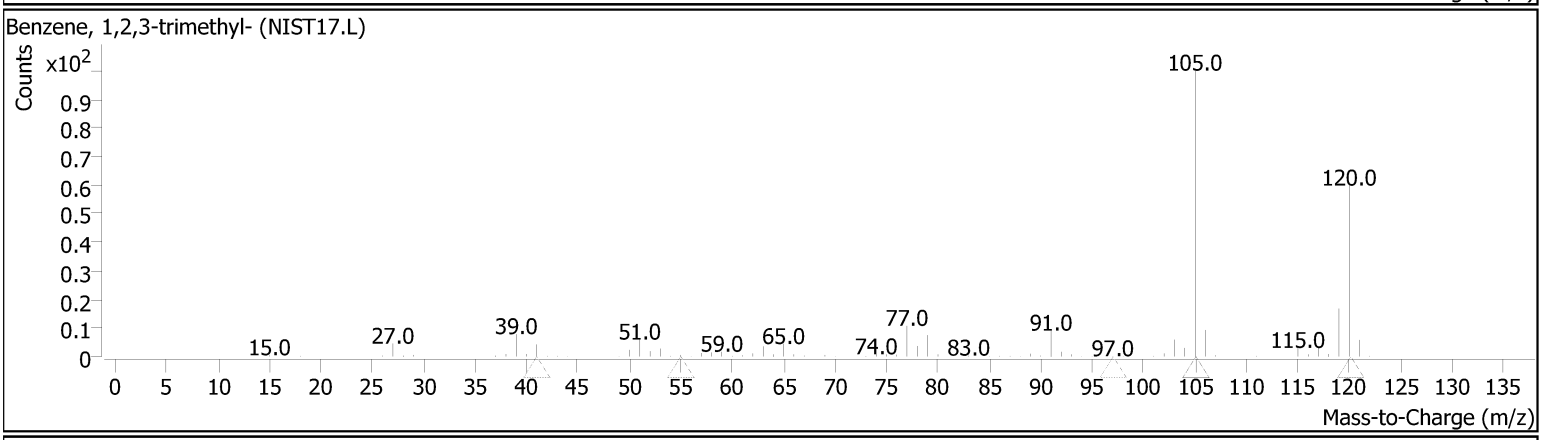


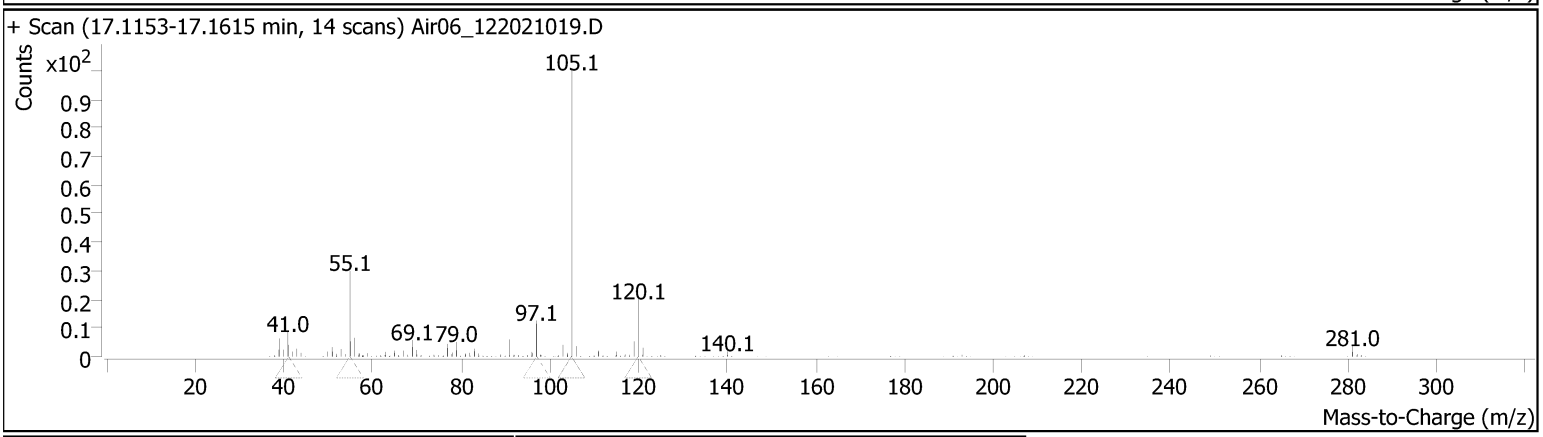


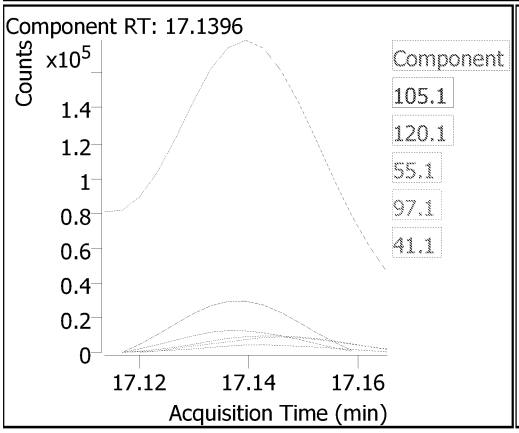


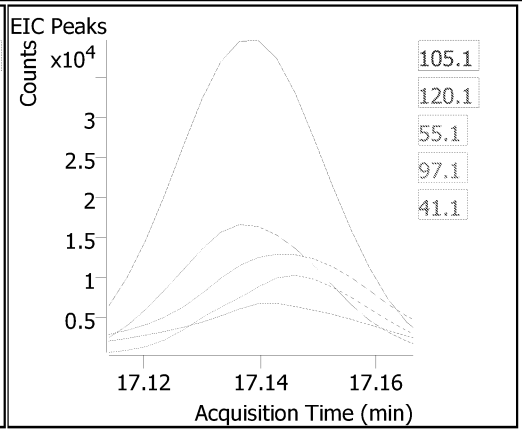
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.1396	Benzene, 1,2,3-trimethyl-	248920.7	86.0	526-73-8	C9H12	0.5873

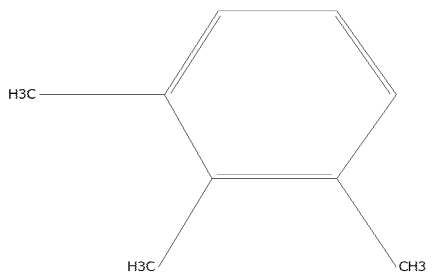




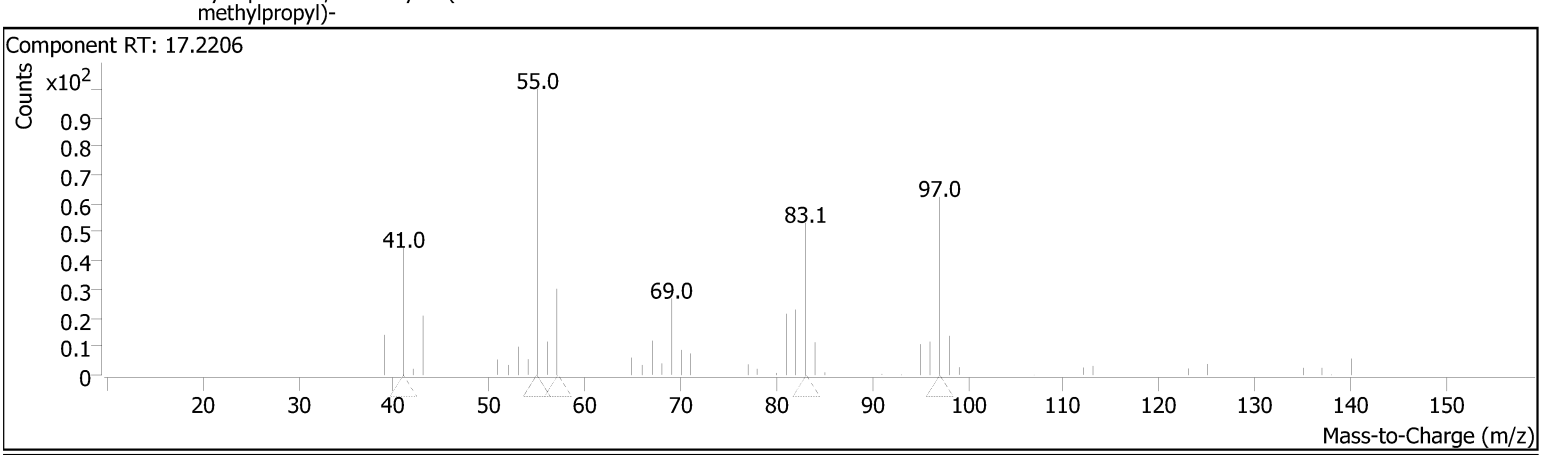


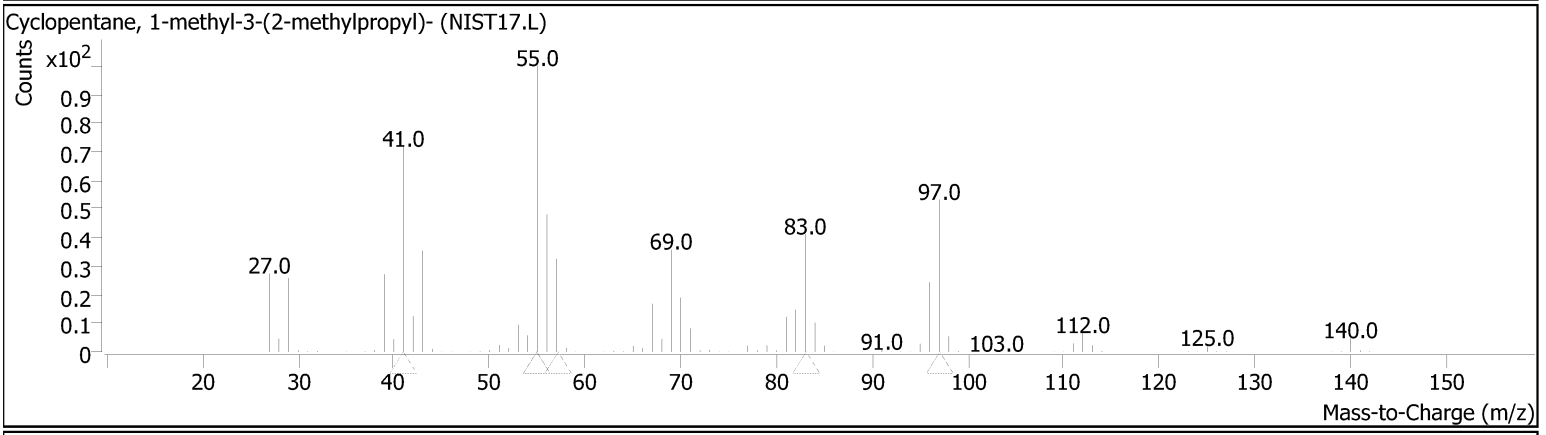


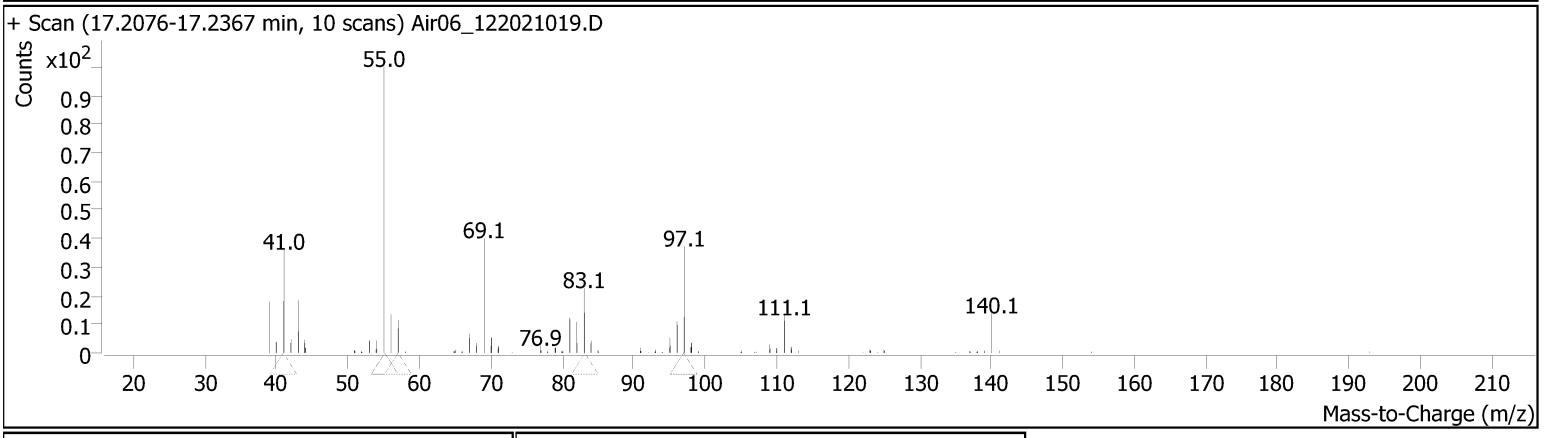


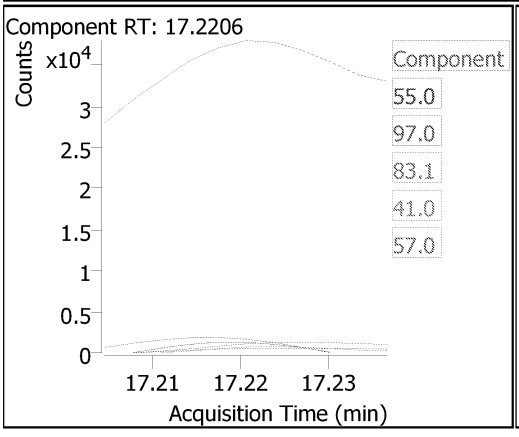


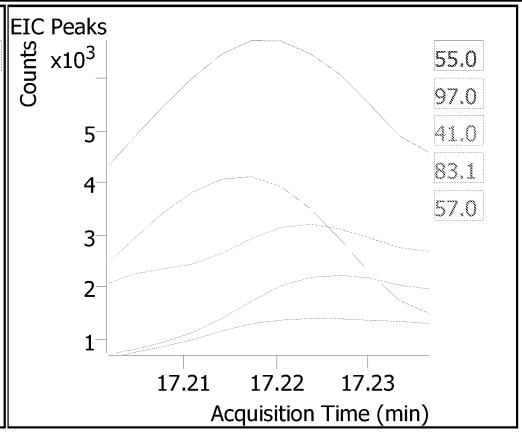
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.2206	Cyclopentane, 1-methyl-3-(2-methylpropyl)-	17078.3	89.7	29053-04-1	C10H20	0.0403

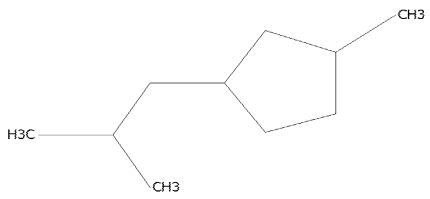




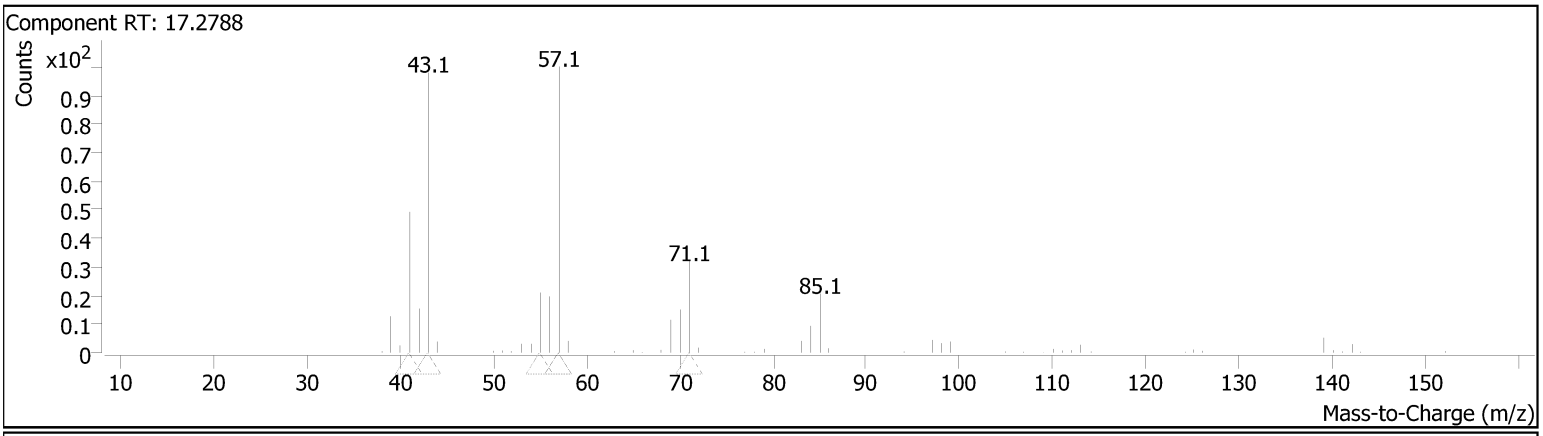


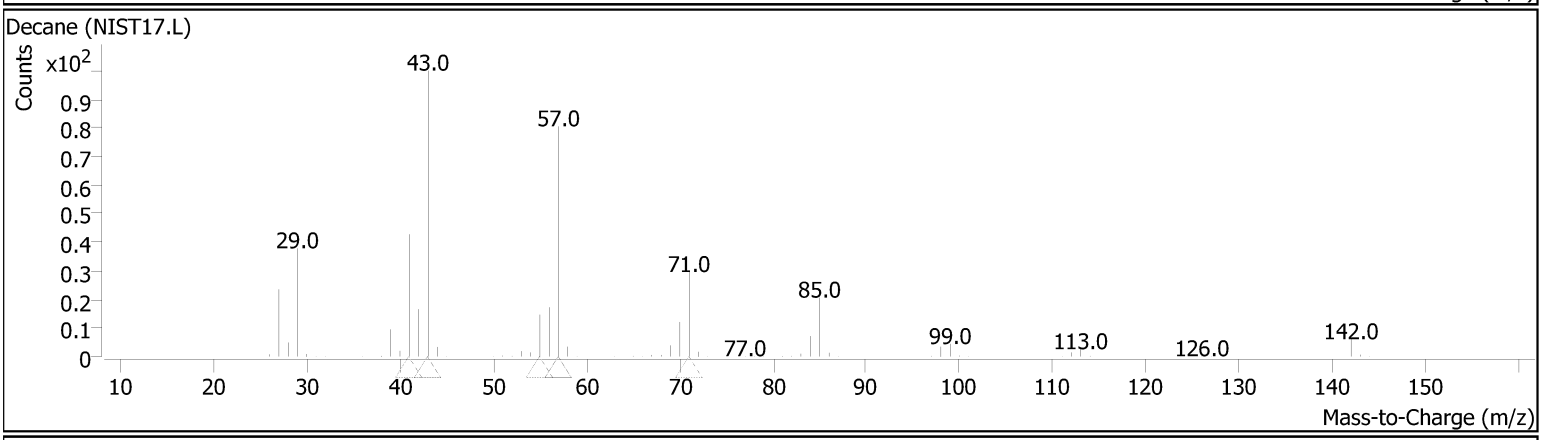


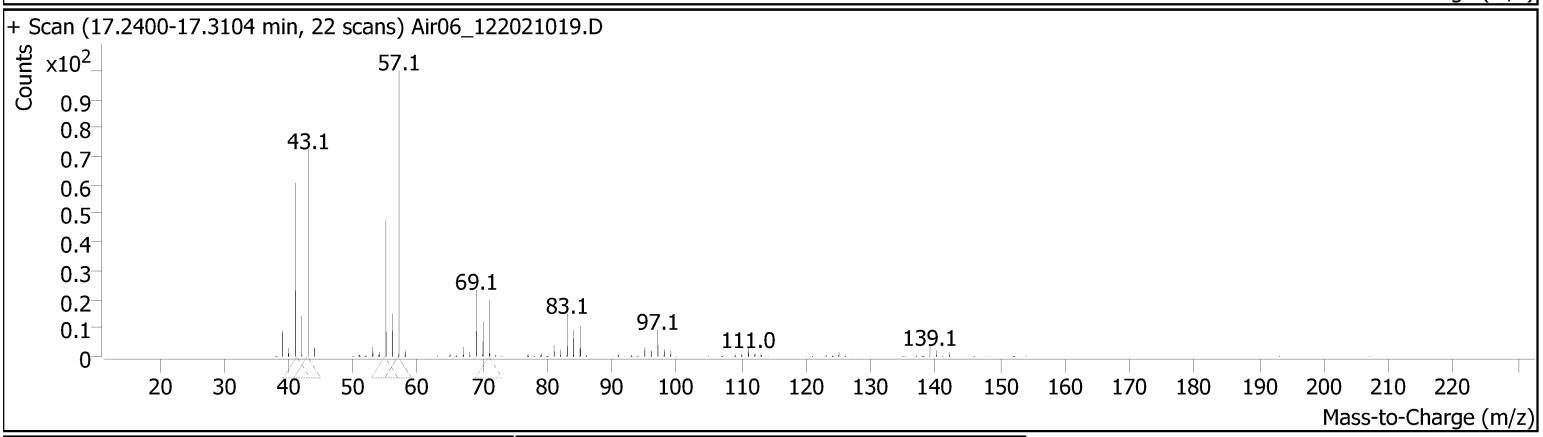


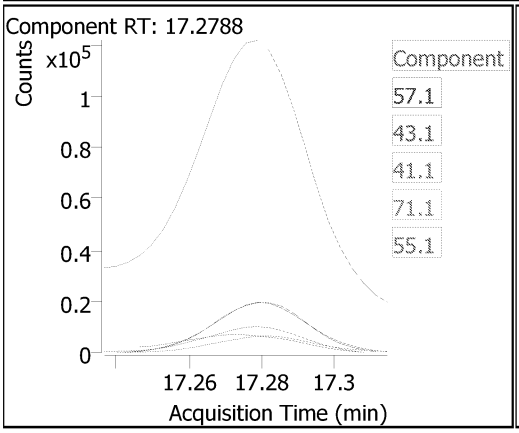


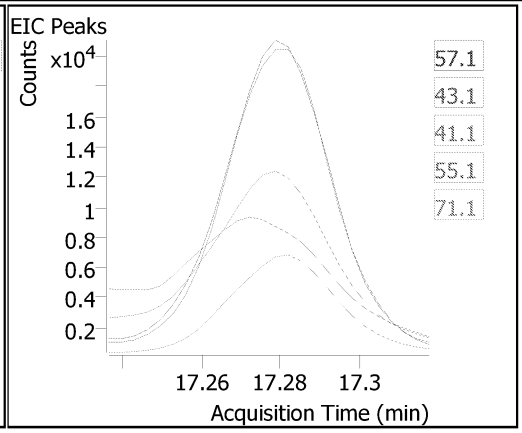
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.2788	Decane	232392.3	92.8	124-18-5	C10H22	0.5483





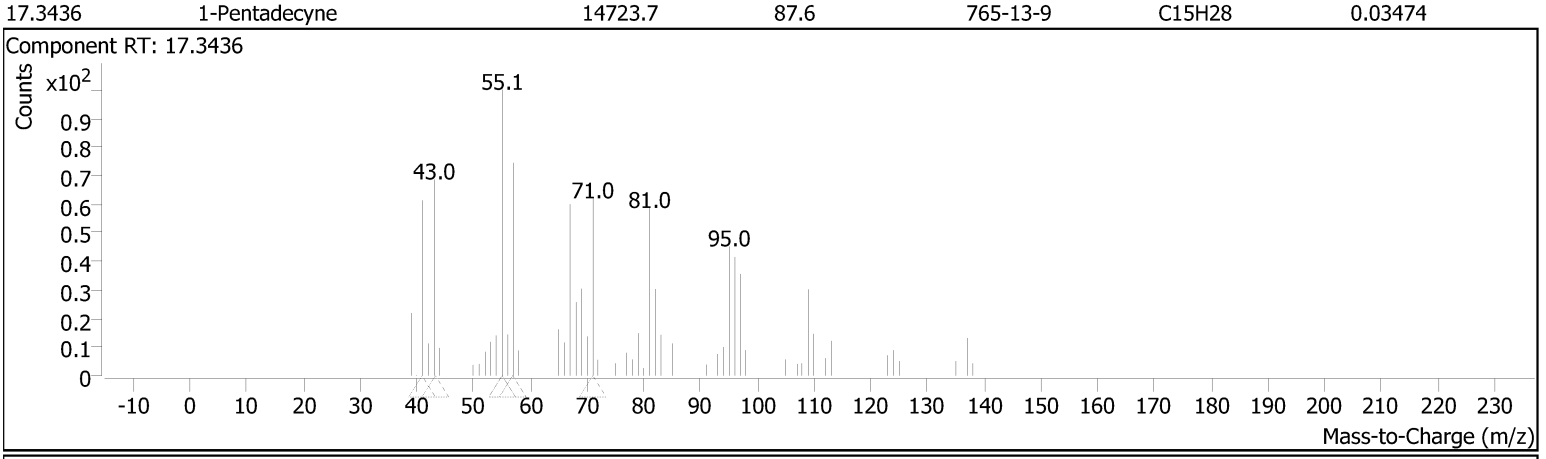


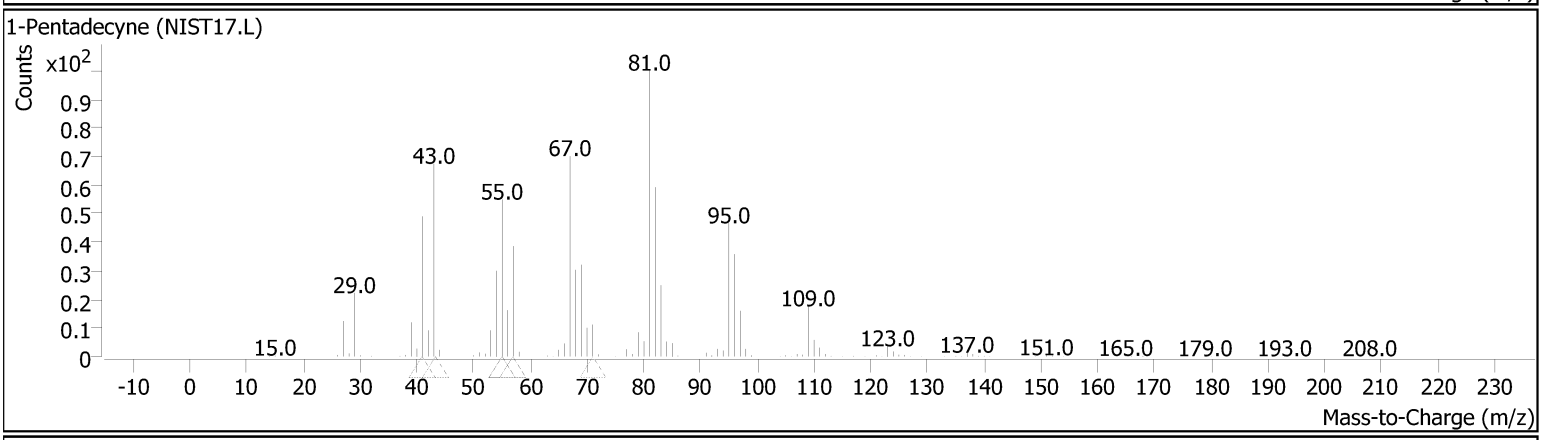


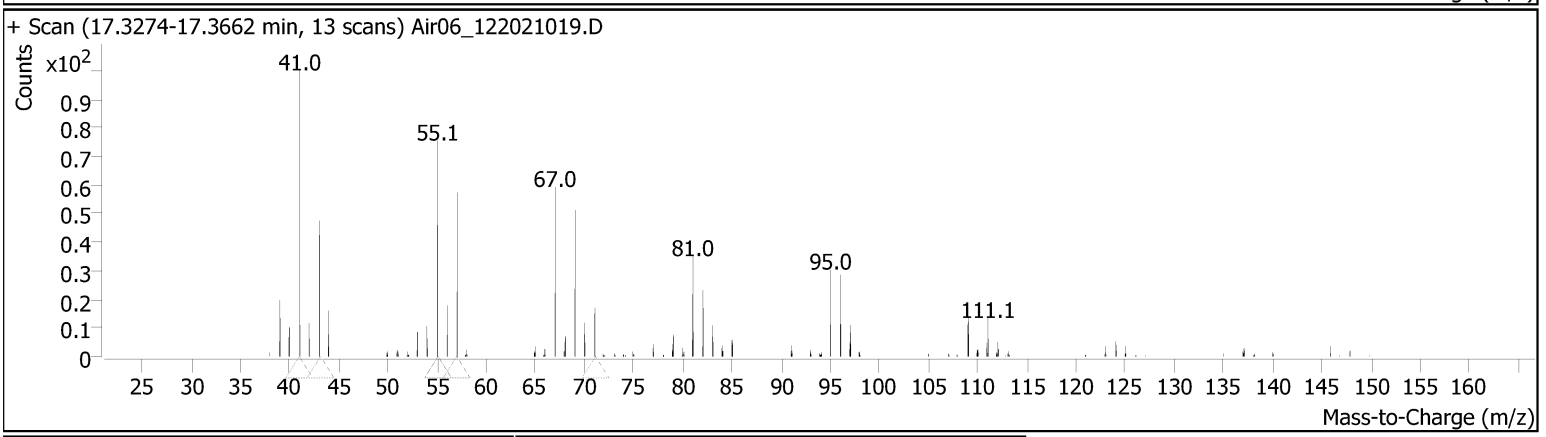


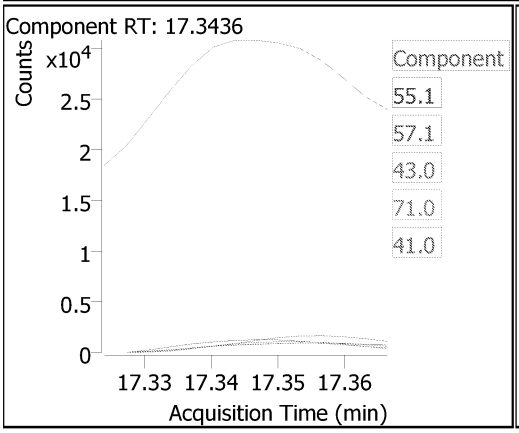


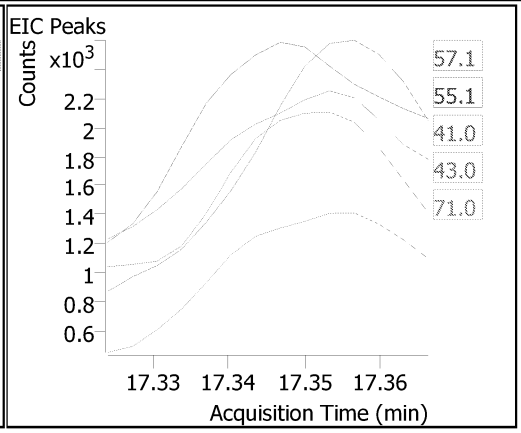
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.3436	1-Pentadecyne	14723.7	87.6	765-13-9	C15H28	0.03474

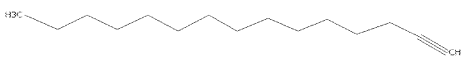




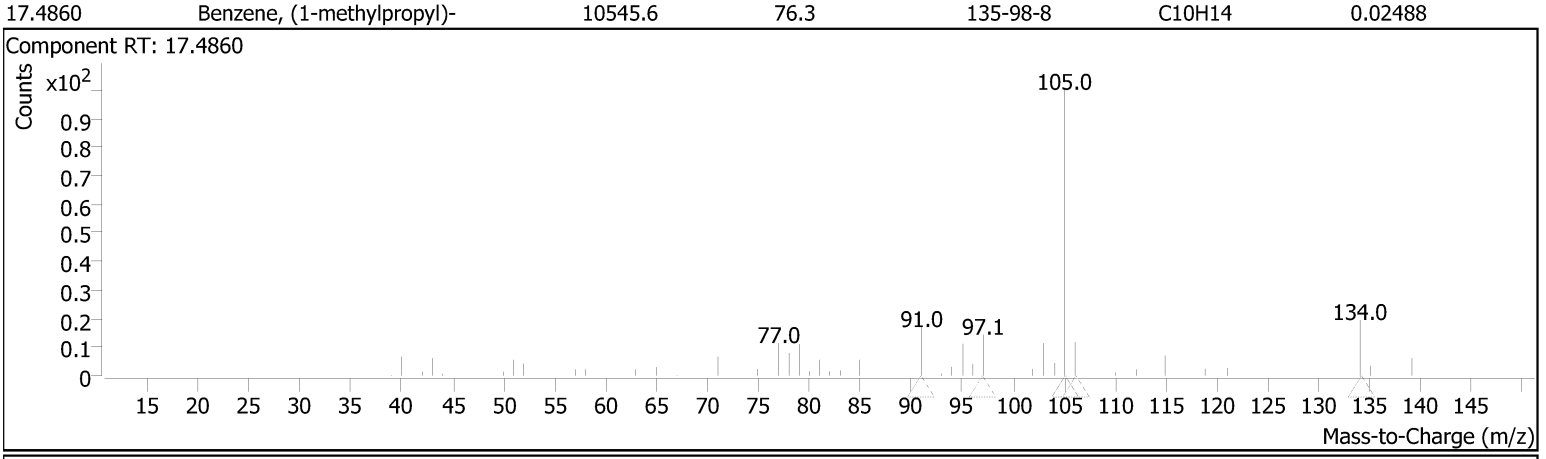


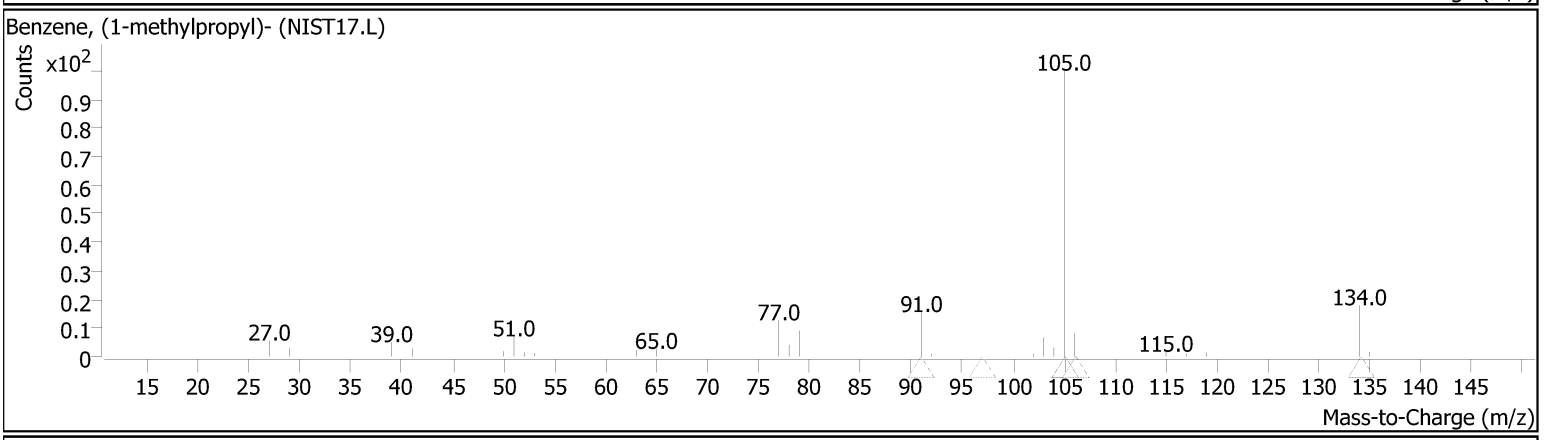


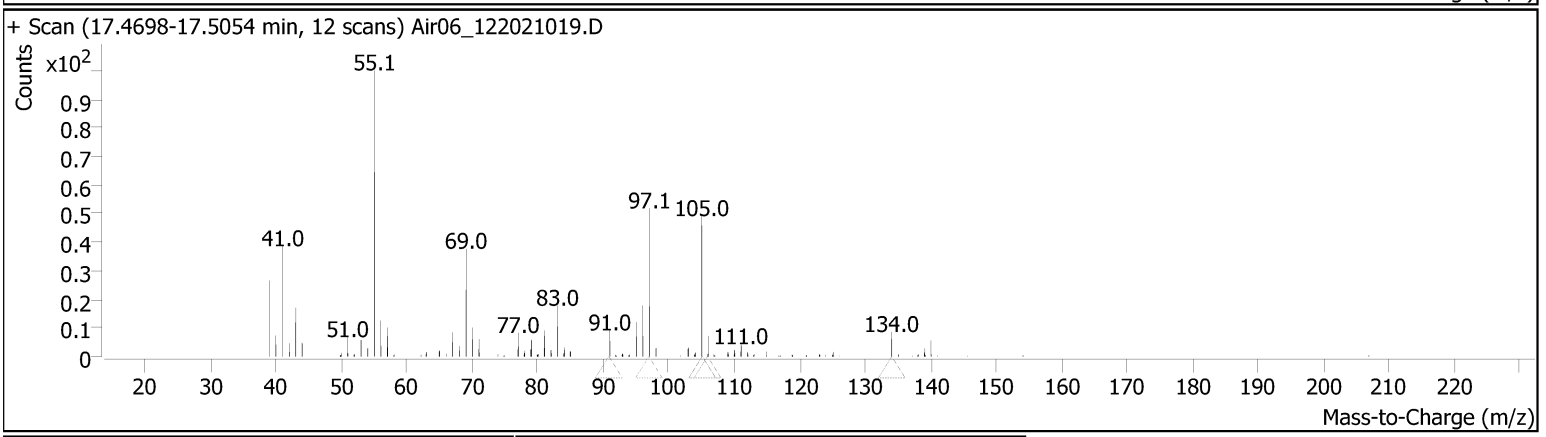


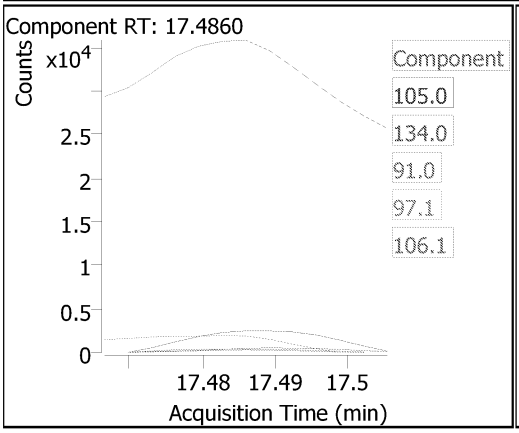


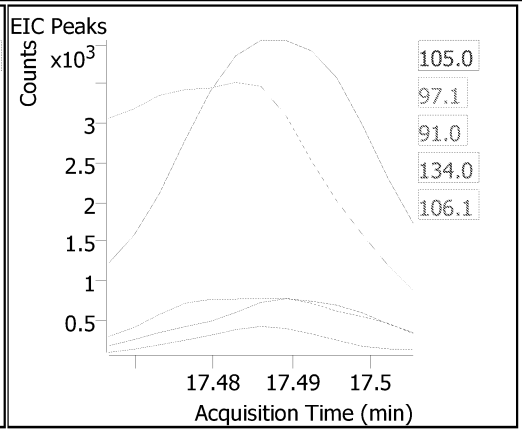
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.4860	Benzene, (1-methylpropyl)-	10545.6	76.3	135-98-8	C10H14	0.02488

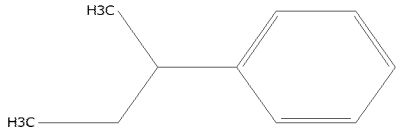




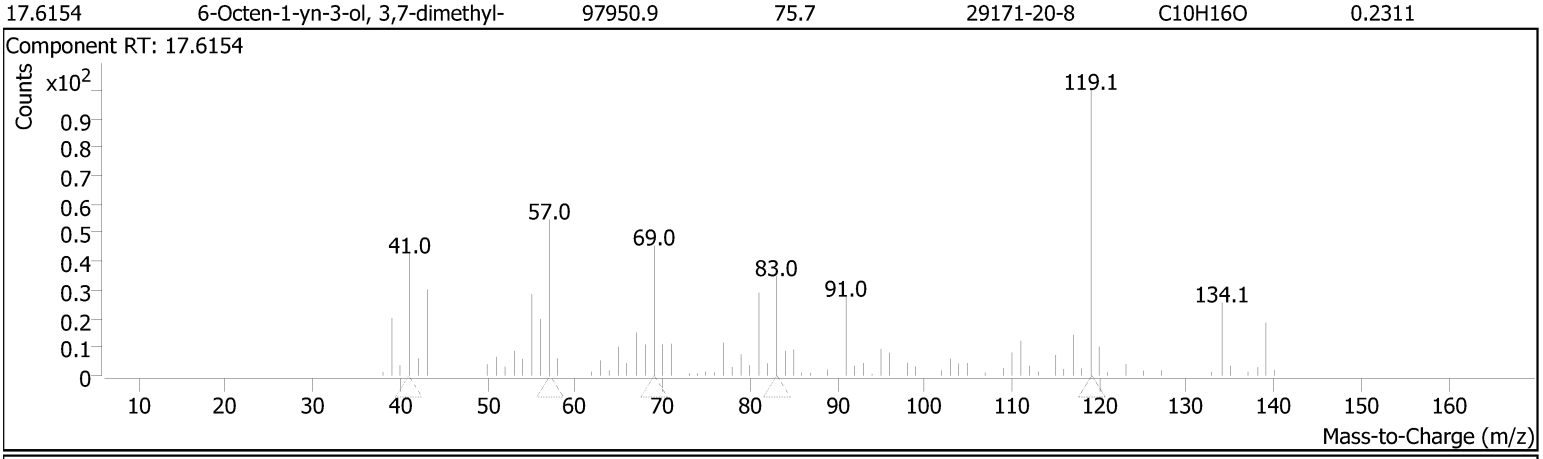


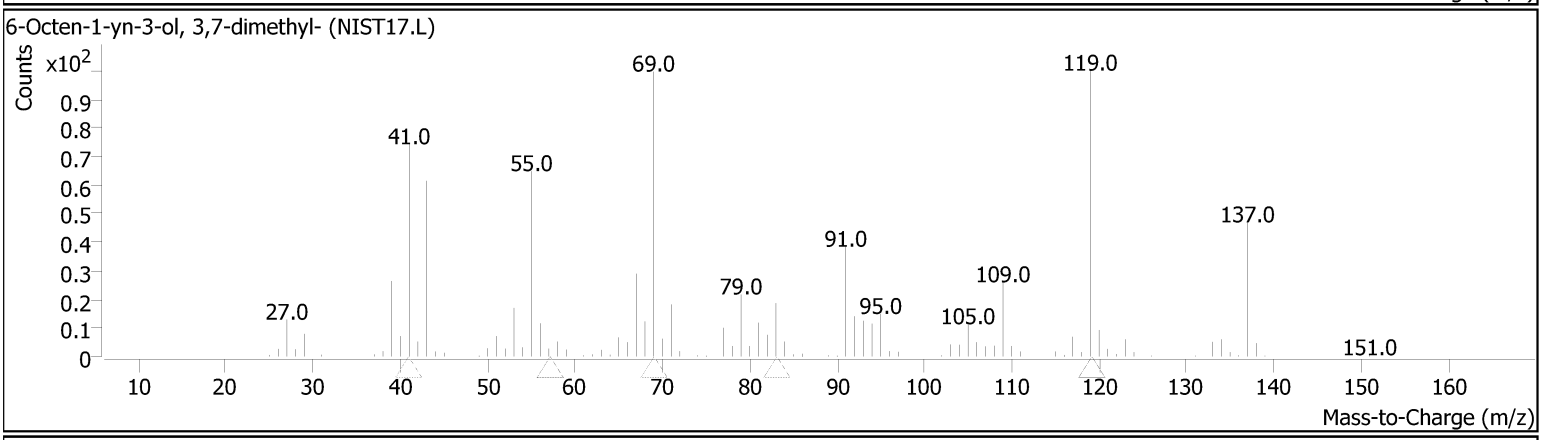


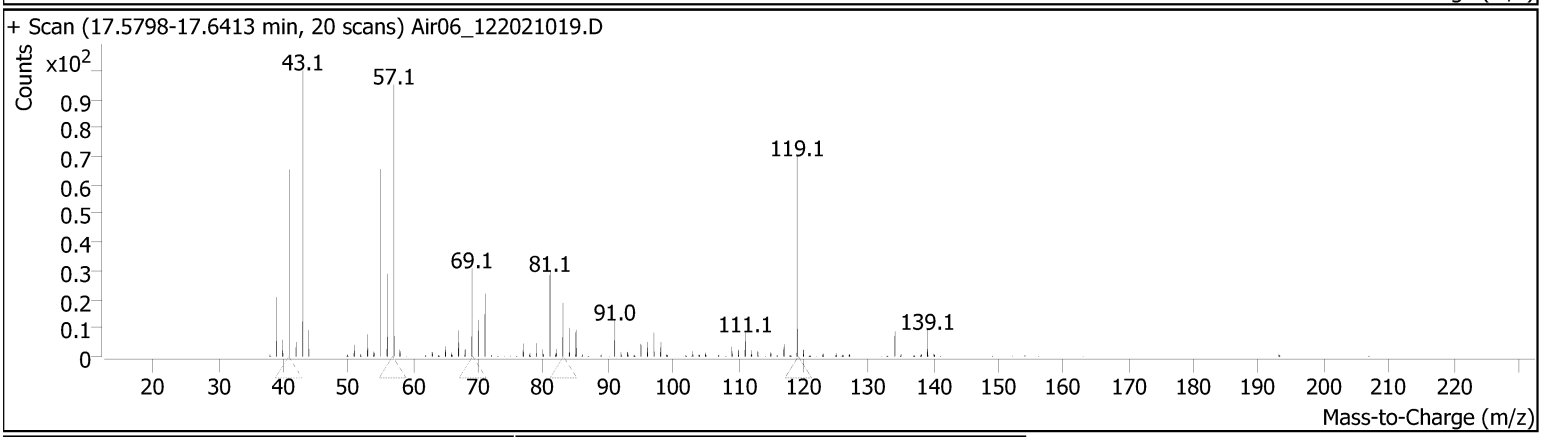


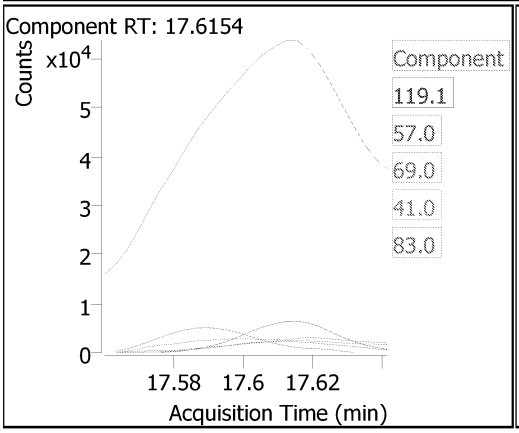


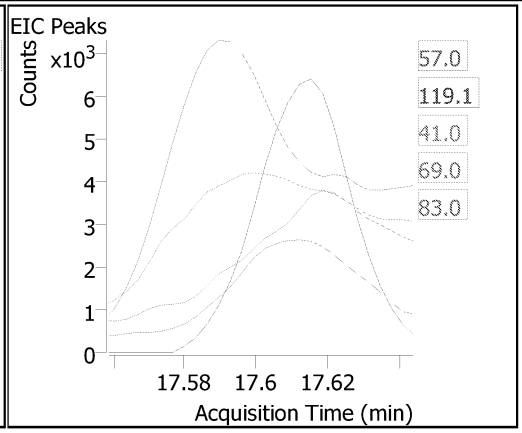
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.6154	6-Octen-1-yn-3-ol, 3,7-dimethyl-	97950.9	75.7	29171-20-8	C10H16O	0.2311

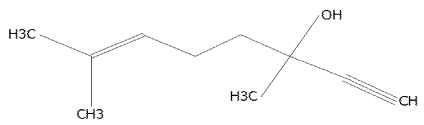




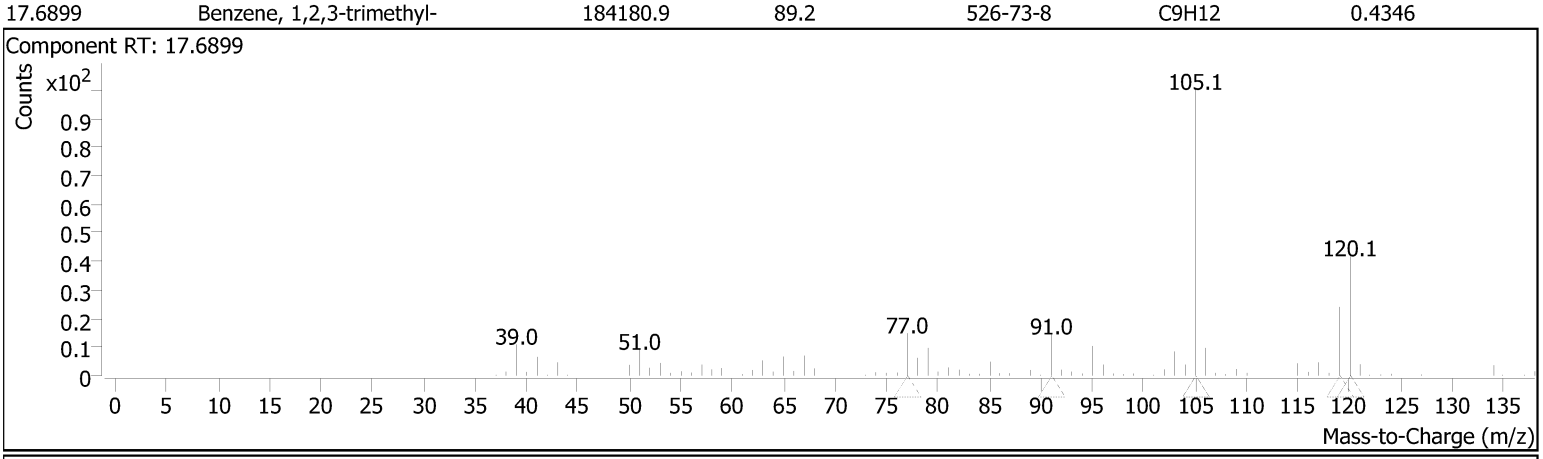


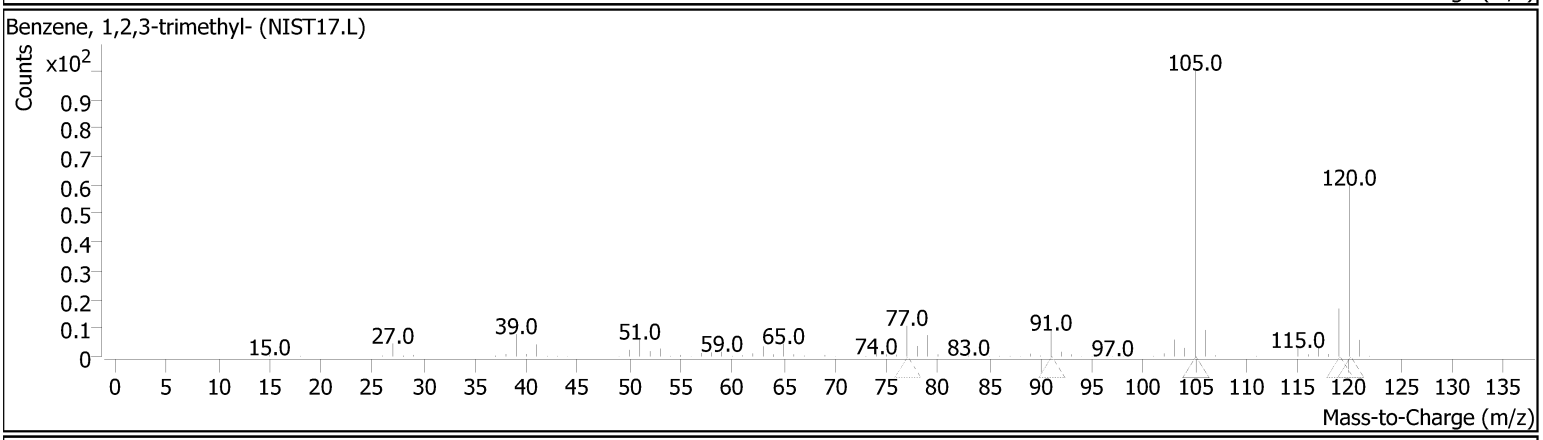


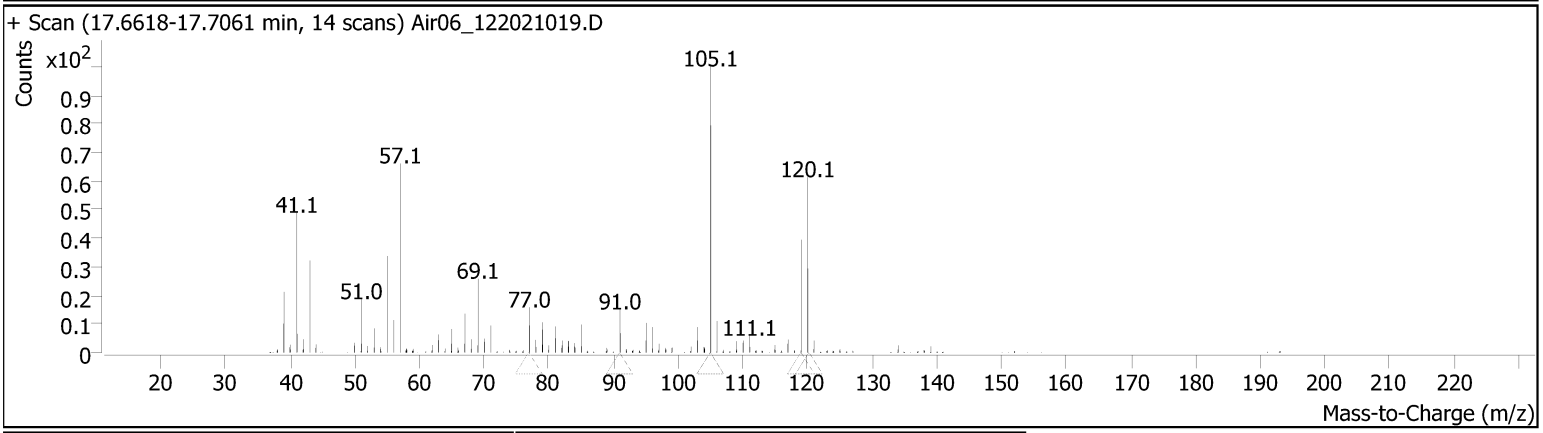


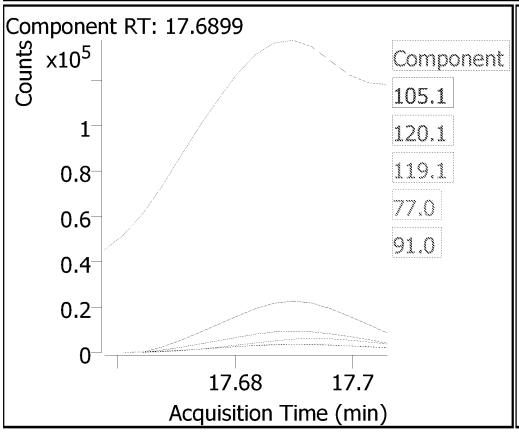


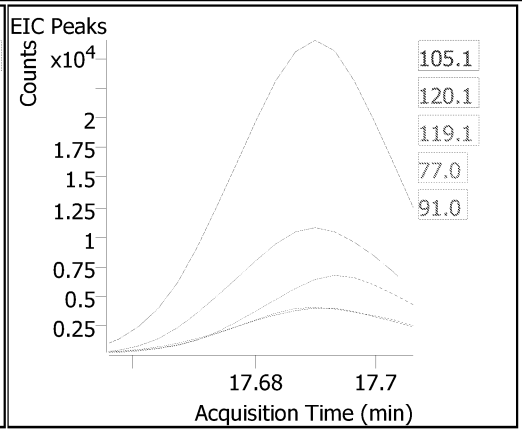
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.6899	Benzene, 1,2,3-trimethyl-	184180.9	89.2	526-73-8	C9H12	0.4346

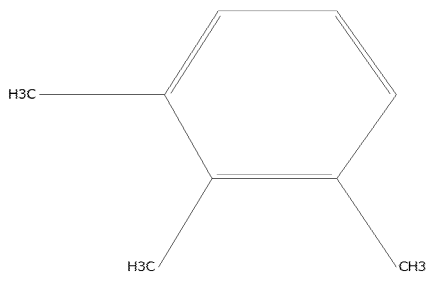




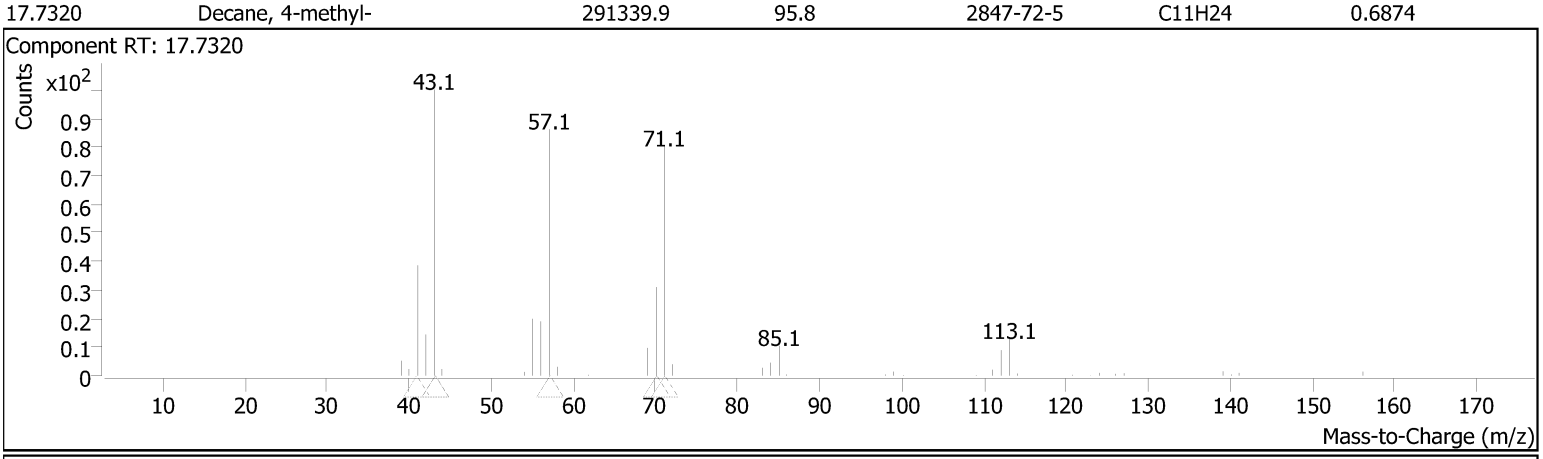


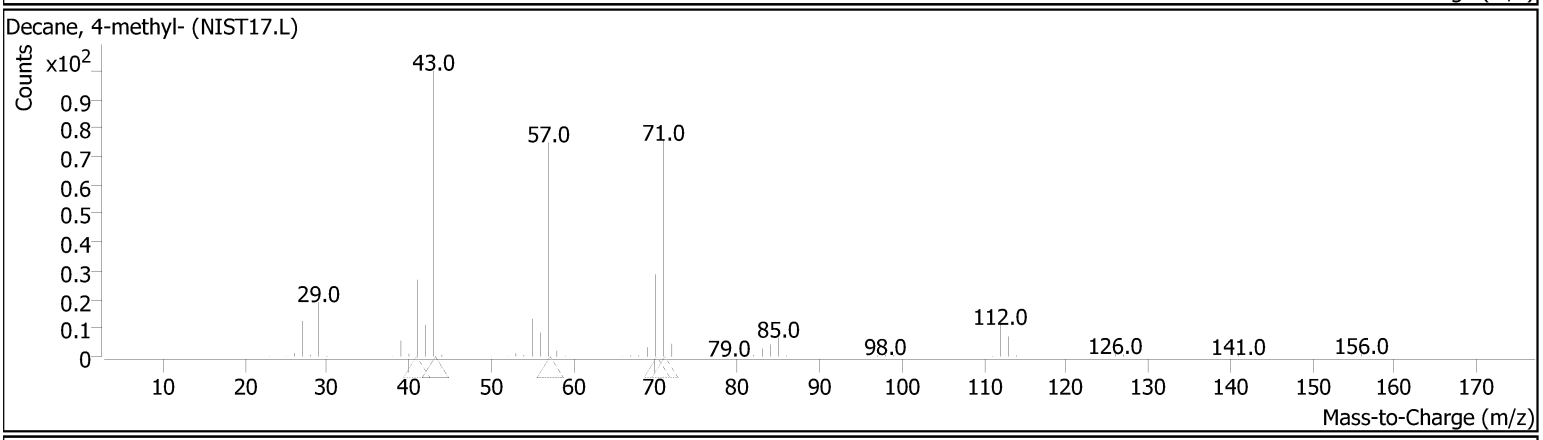


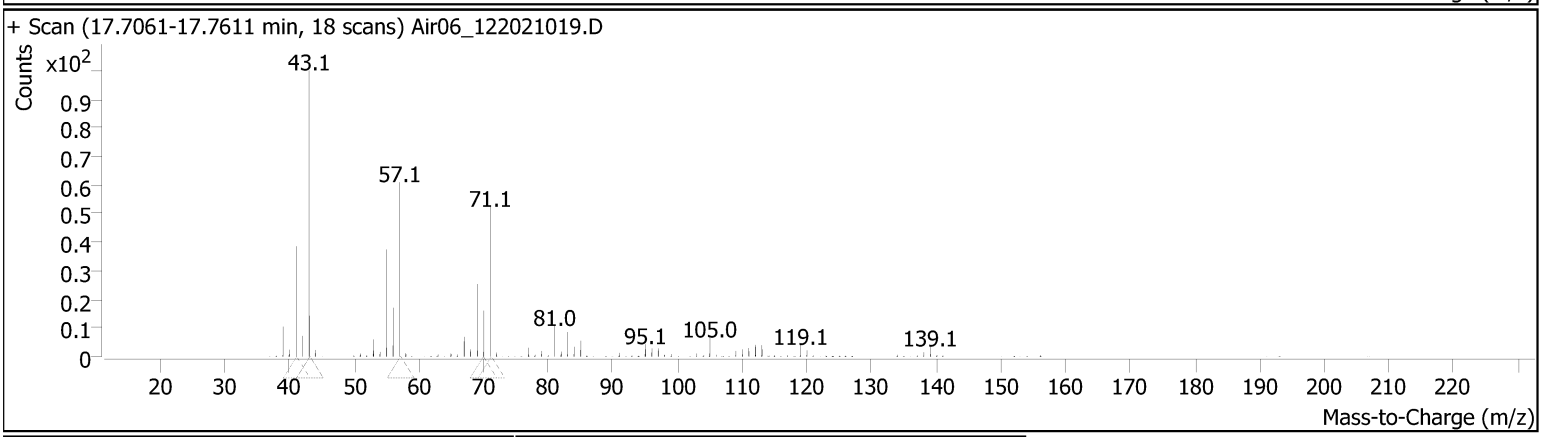


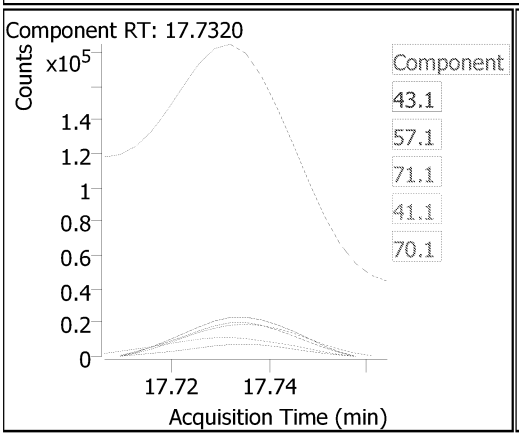


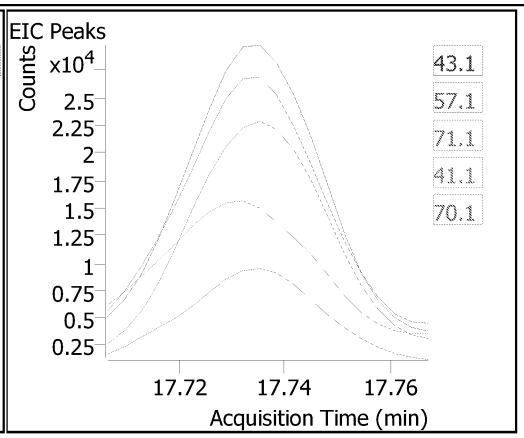
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.7320	Decane, 4-methyl-	291339.9	95.8	2847-72-5	C11H24	0.6874

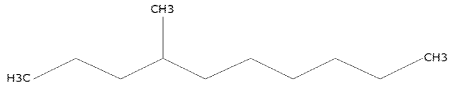




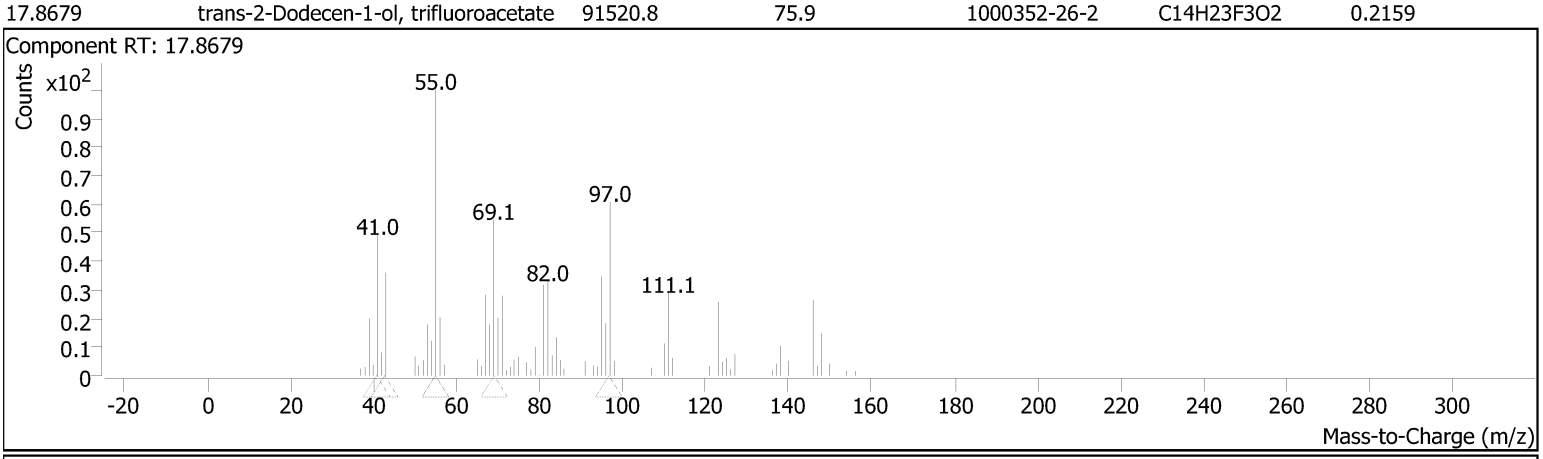


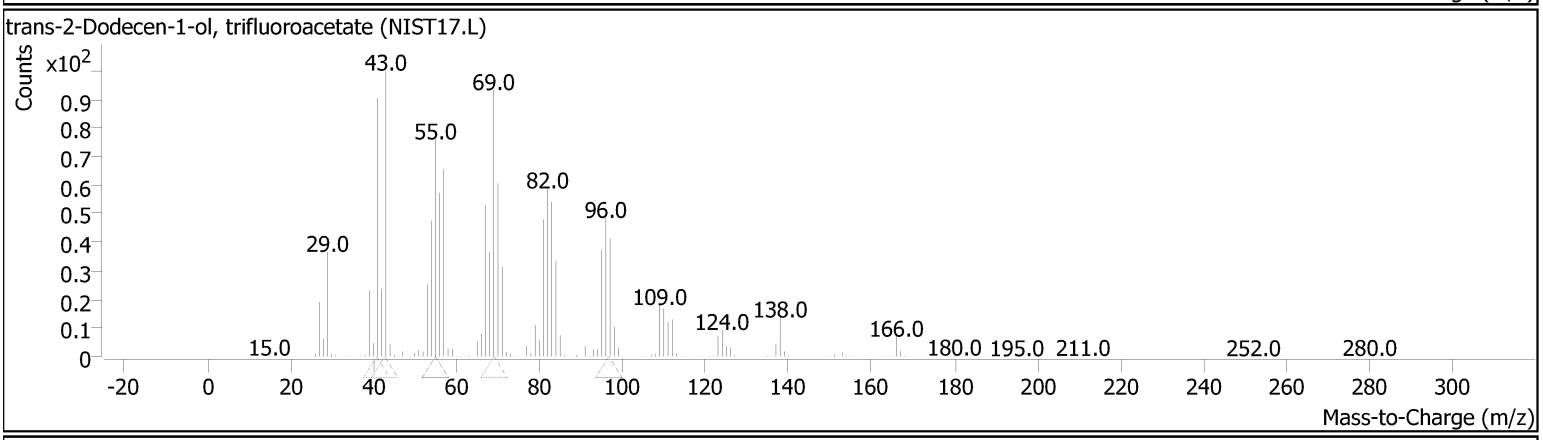


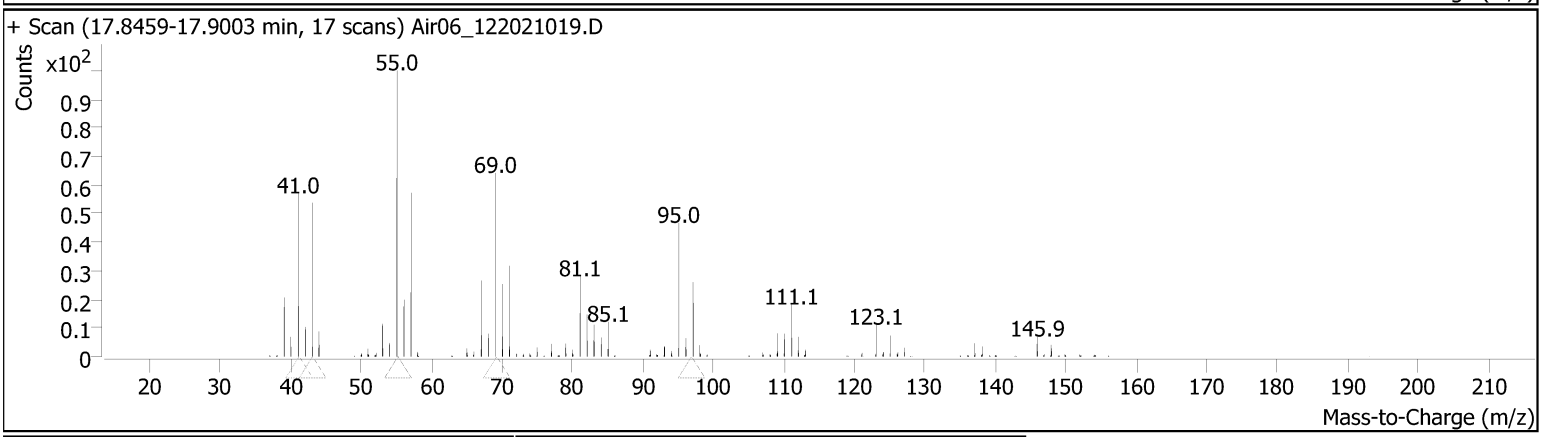


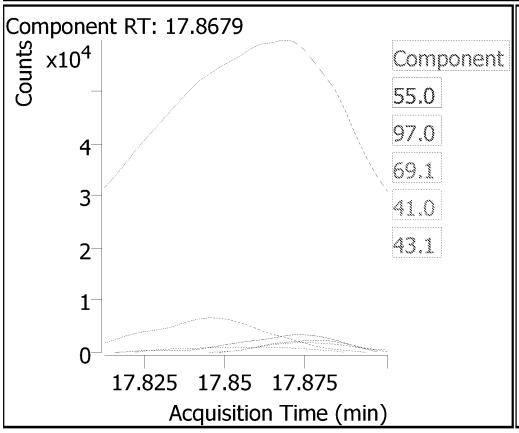


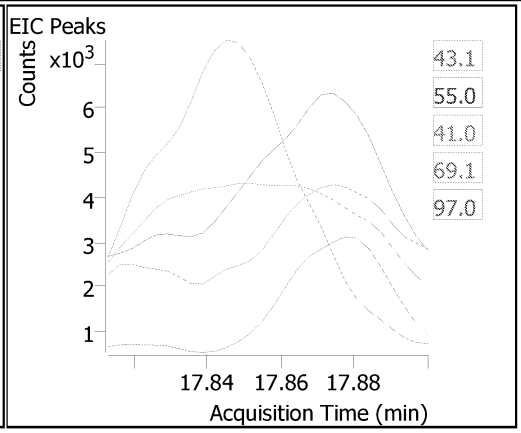
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.8679	trans-2-Dodecen-1-ol, trifluoroacetate	91520.8	75.9	1000352-26-2	C14H23F3O2	0.2159

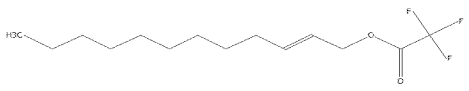




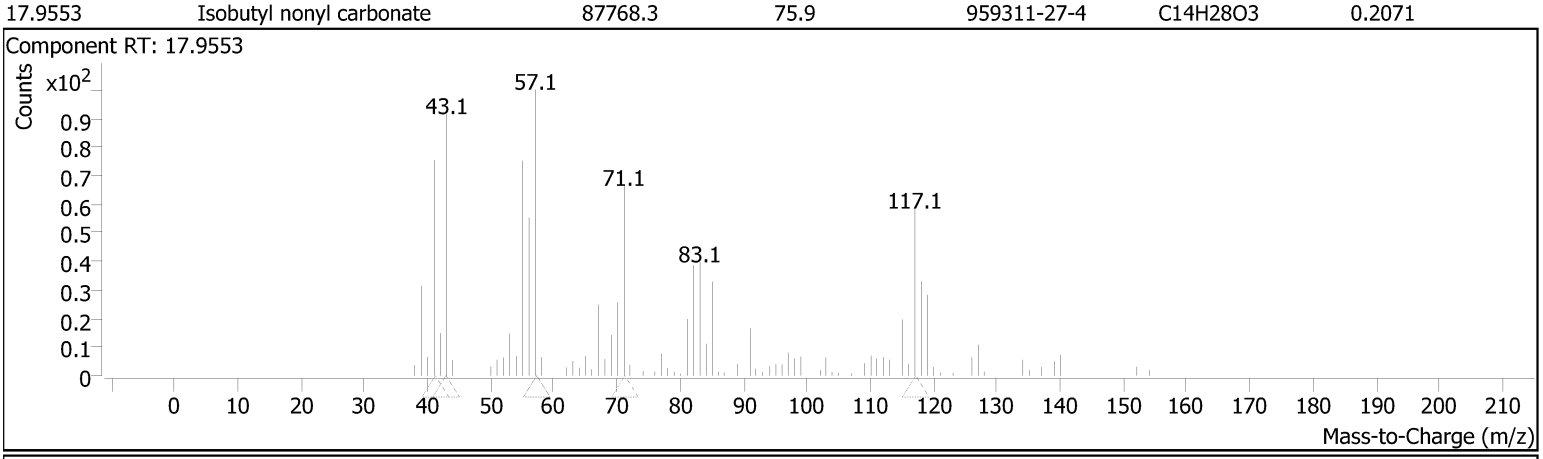


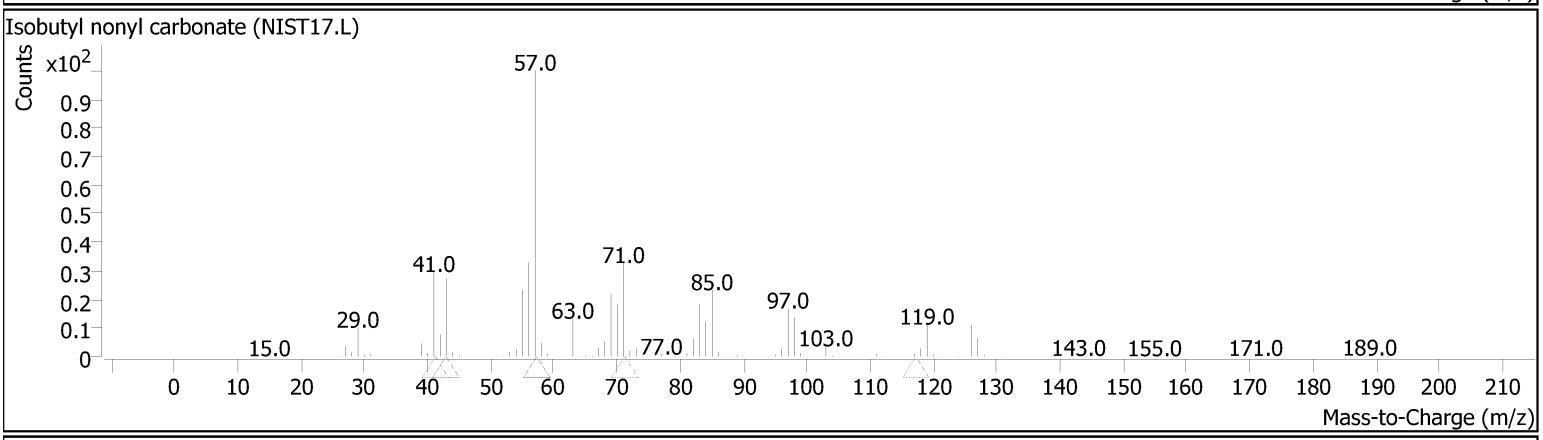


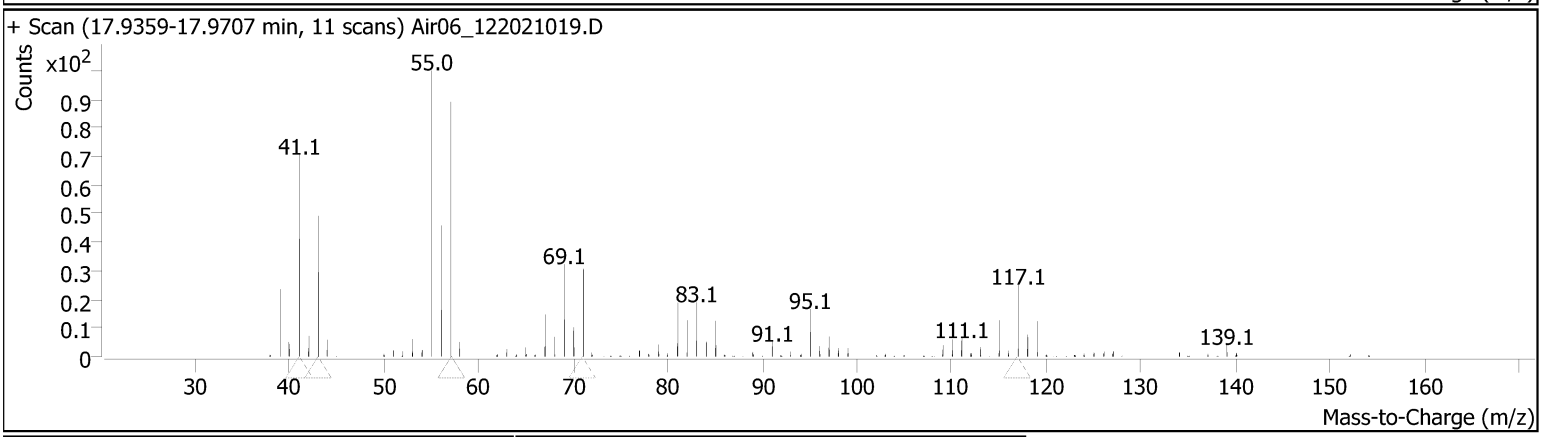


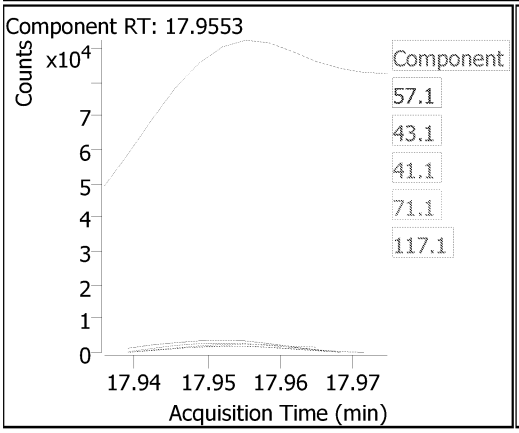


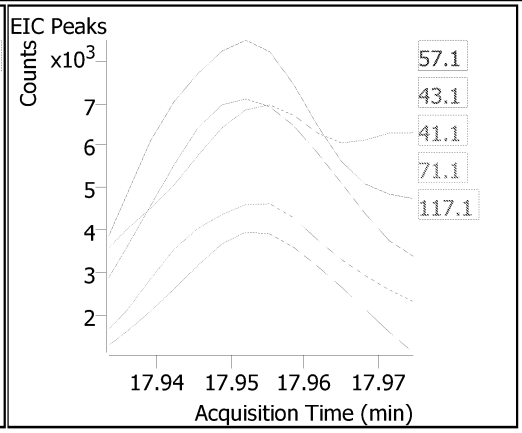
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.9553	Isobutyl nonyl carbonate	87768.3	75.9	959311-27-4	C14H28O3	0.2071

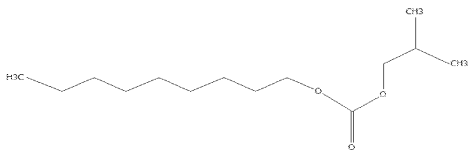




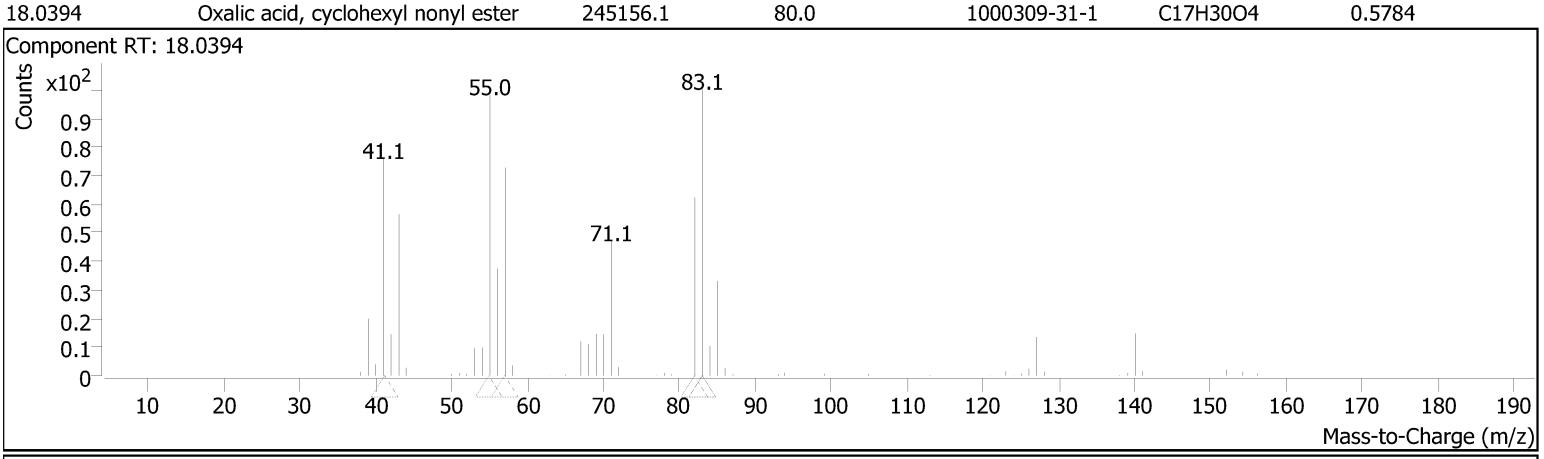


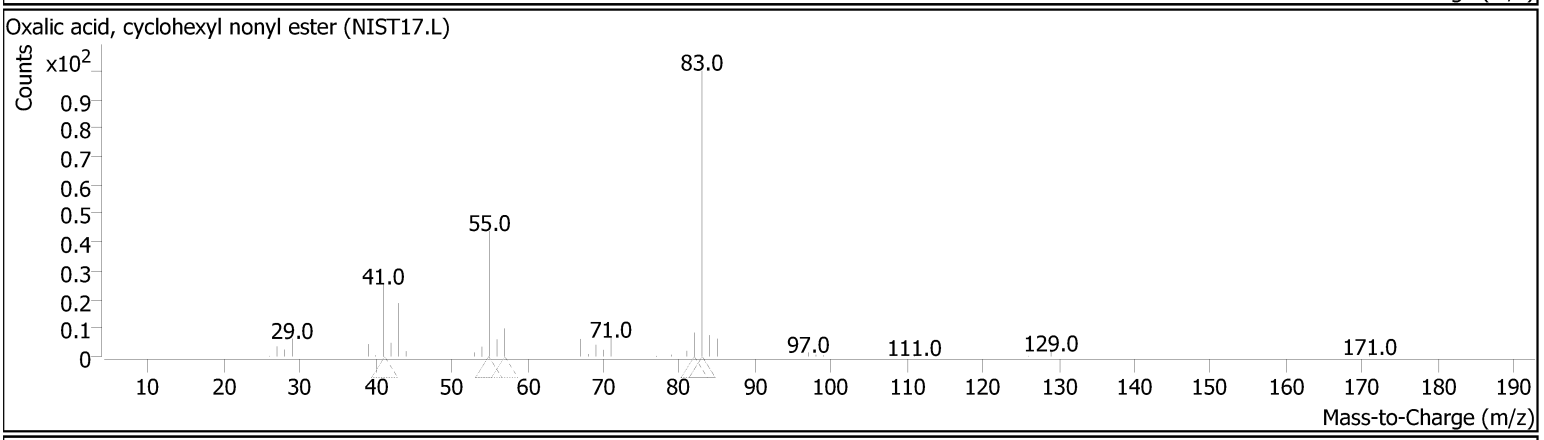


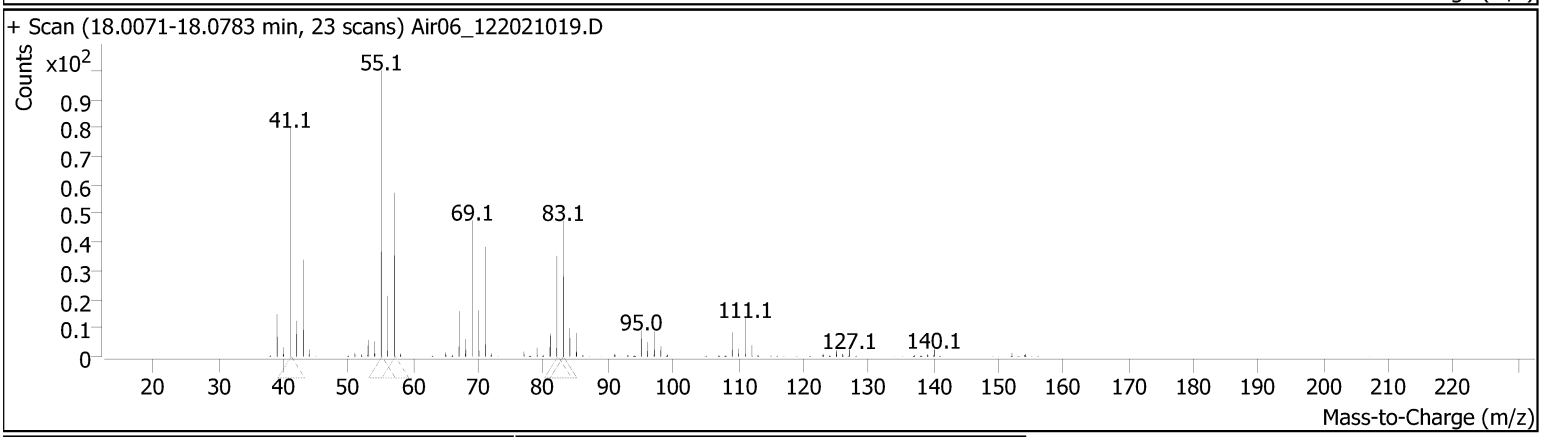


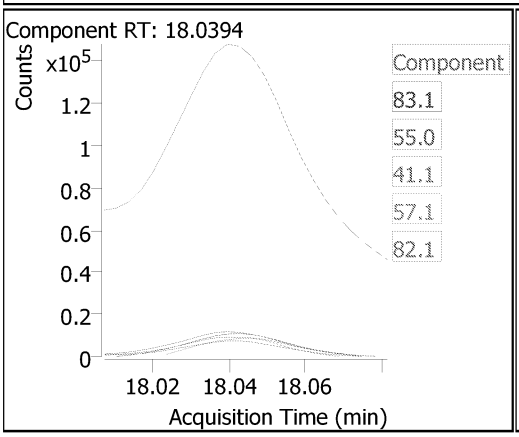


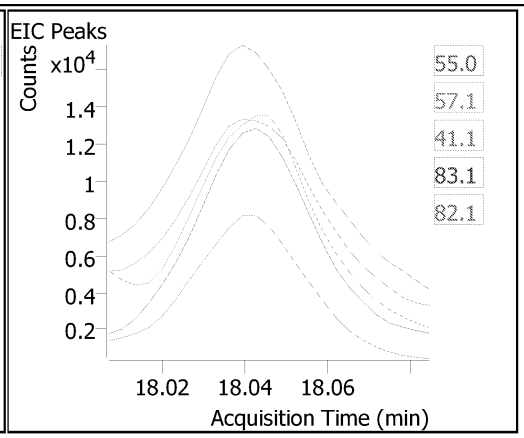
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.0394	Oxalic acid, cyclohexyl nonyl ester	245156.1	80.0	1000309-31-1	C17H30O4	0.5784

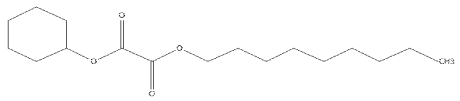




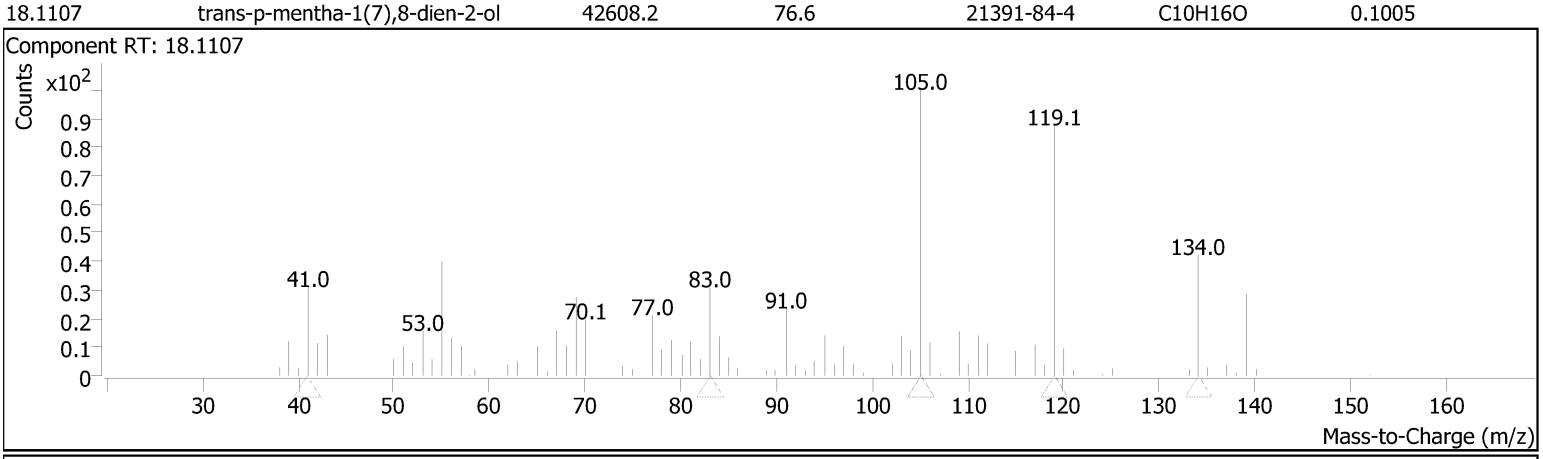


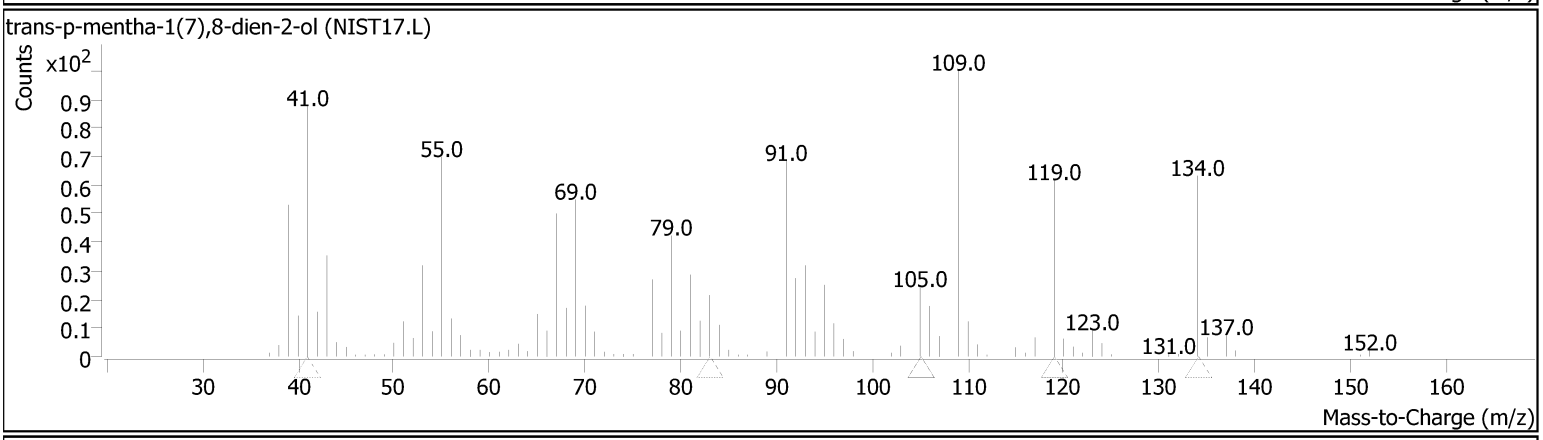


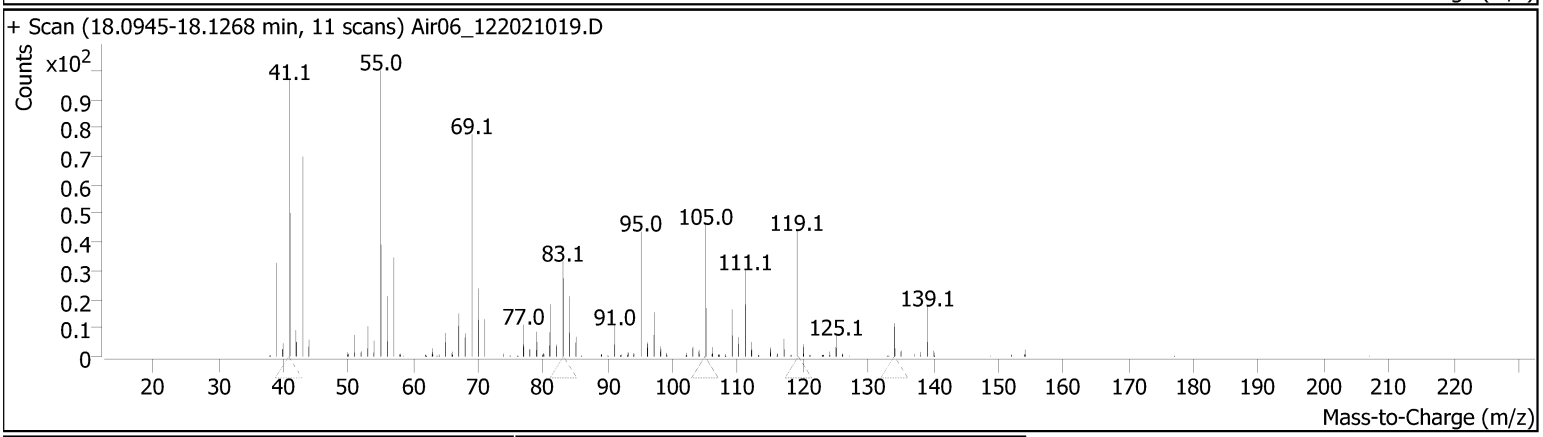


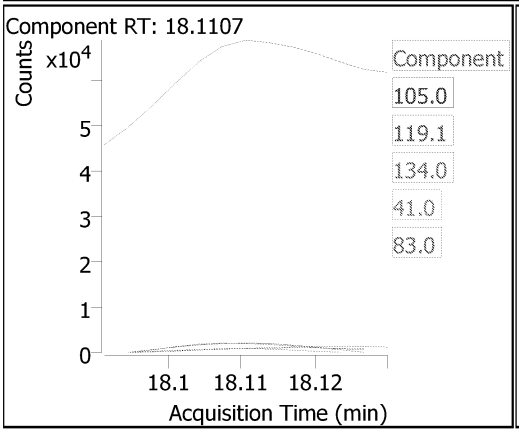


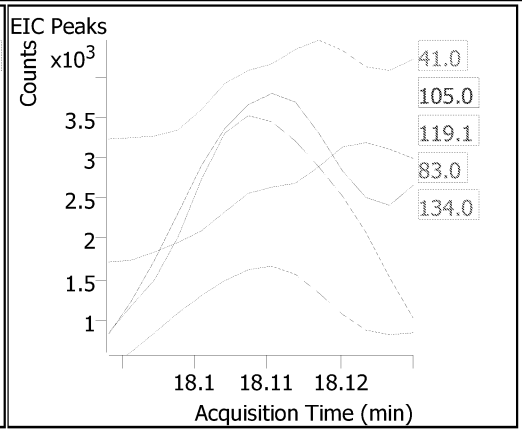
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.1107	trans-p-mentha-1(7),8-dien-2-ol	42608.2	76.6	21391-84-4	C10H16O	0.1005

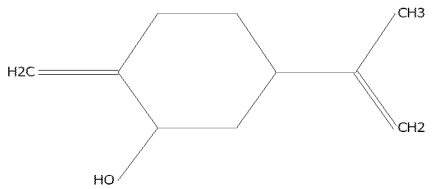




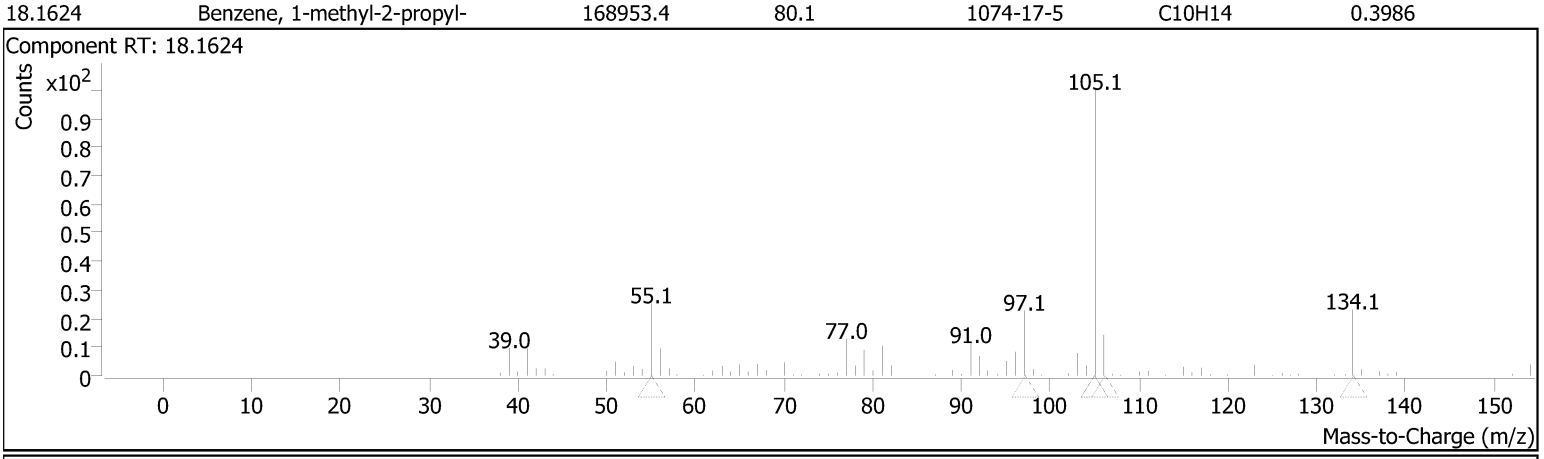


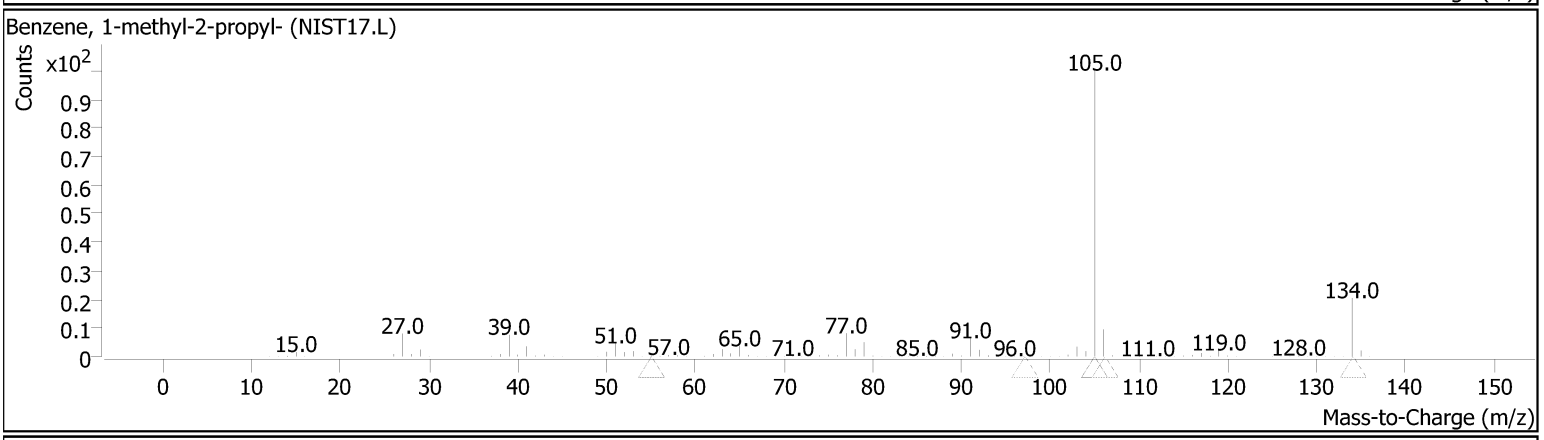


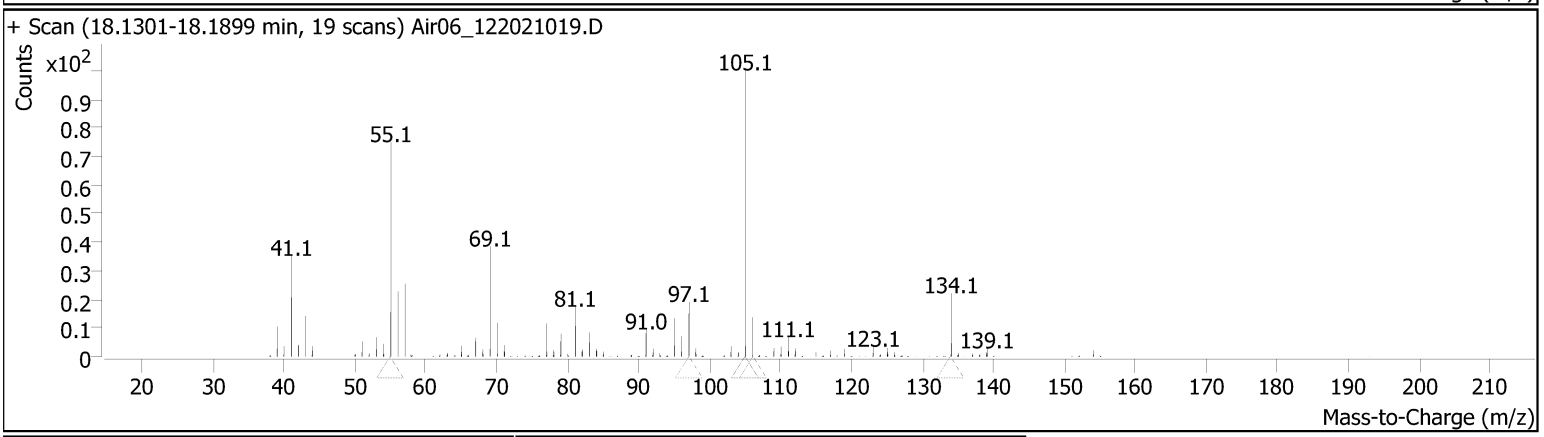


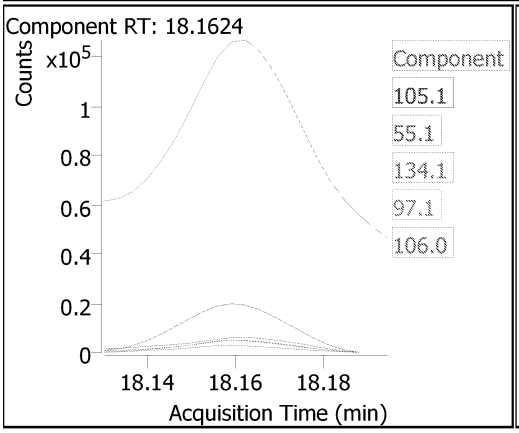


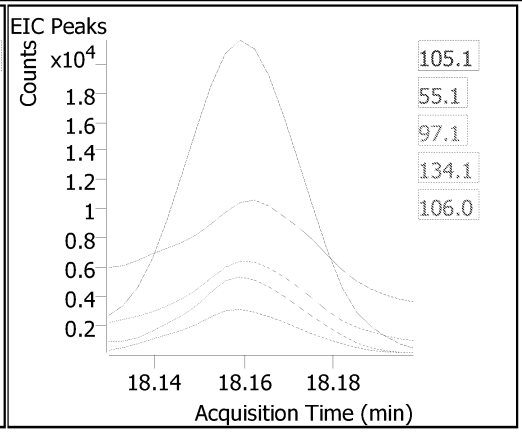
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.1624	Benzene, 1-methyl-2-propyl-	168953.4	80.1	1074-17-5	C10H14	0.3986

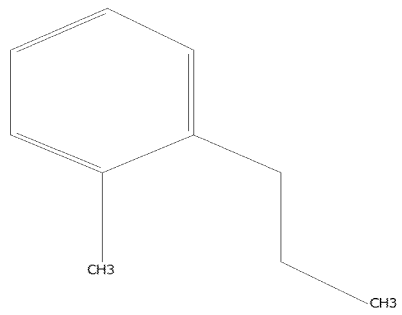




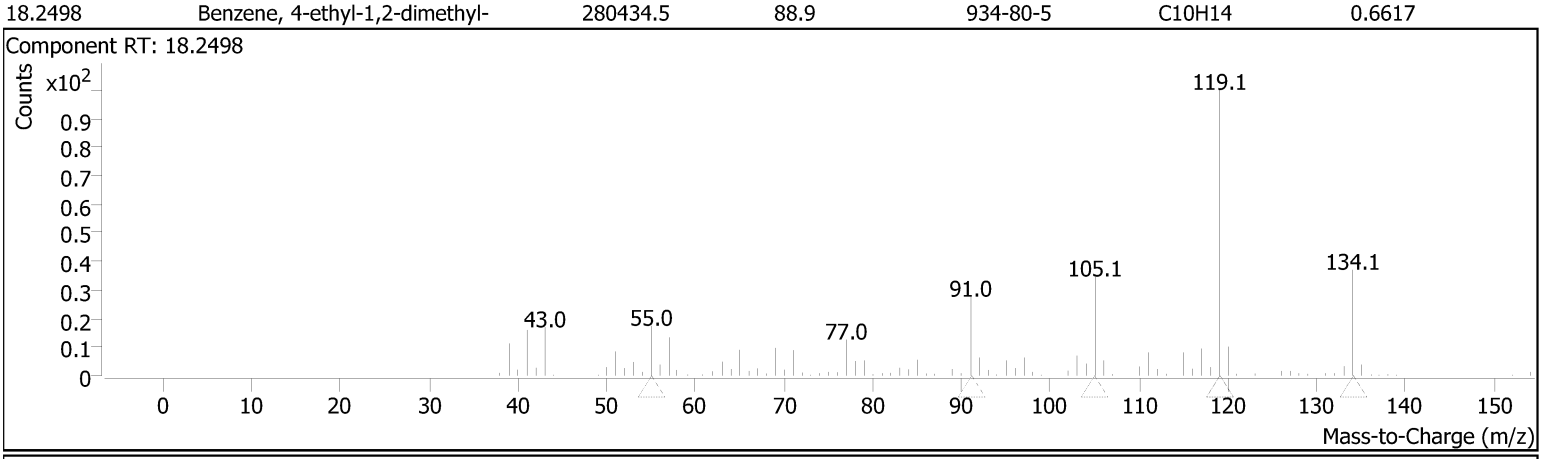


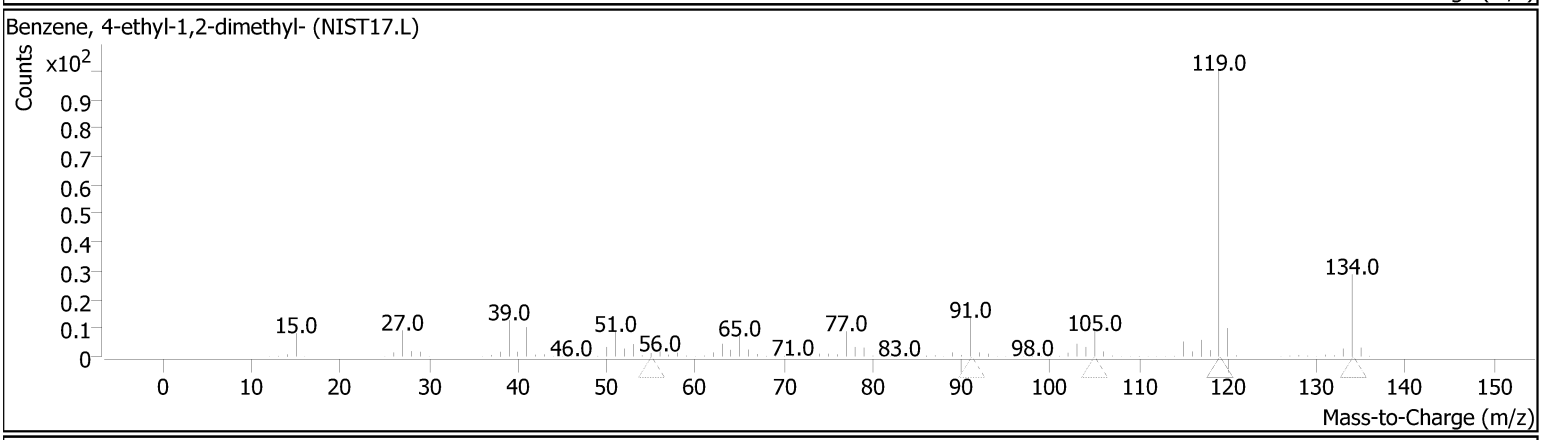


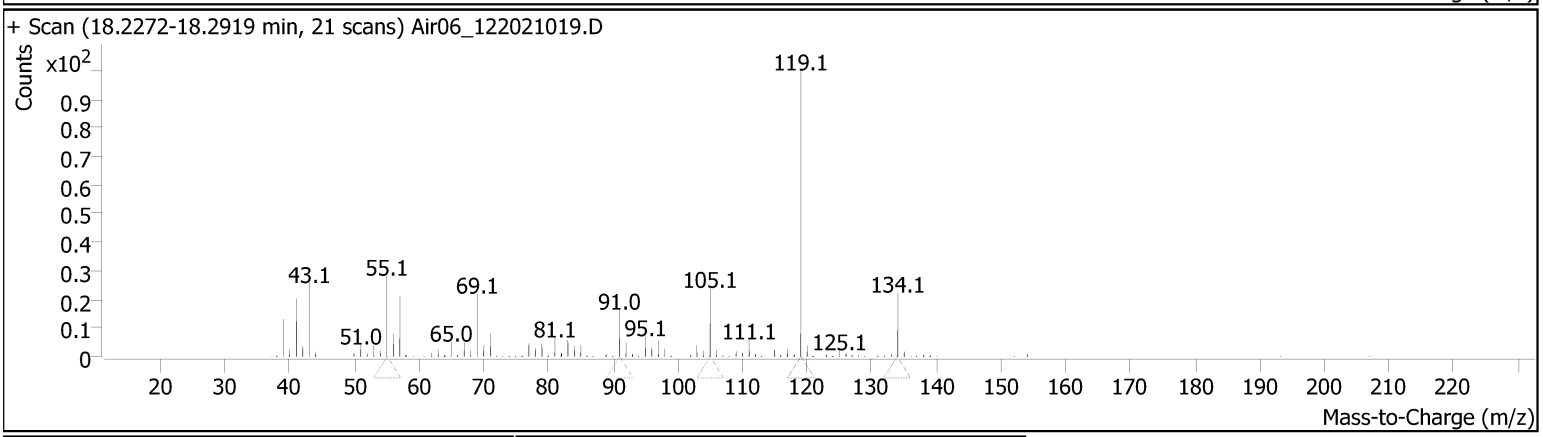


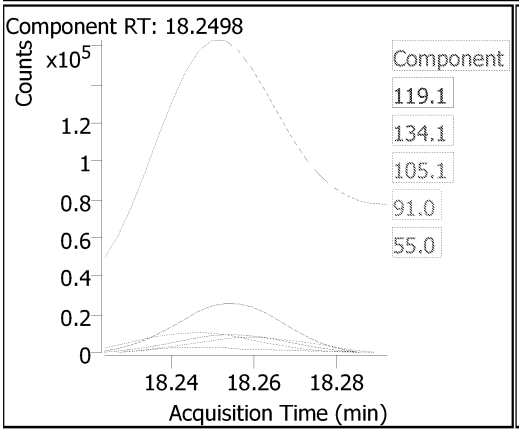


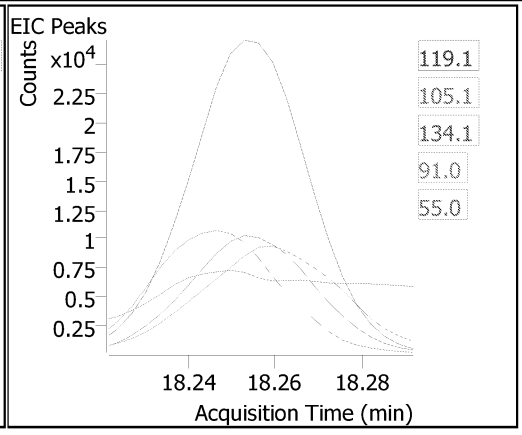
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.2498	Benzene, 4-ethyl-1,2-dimethyl-	280434.5	88.9	934-80-5	C10H14	0.6617

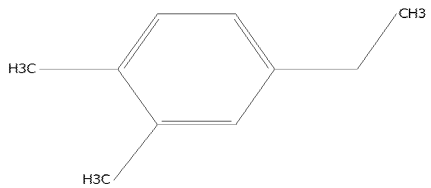




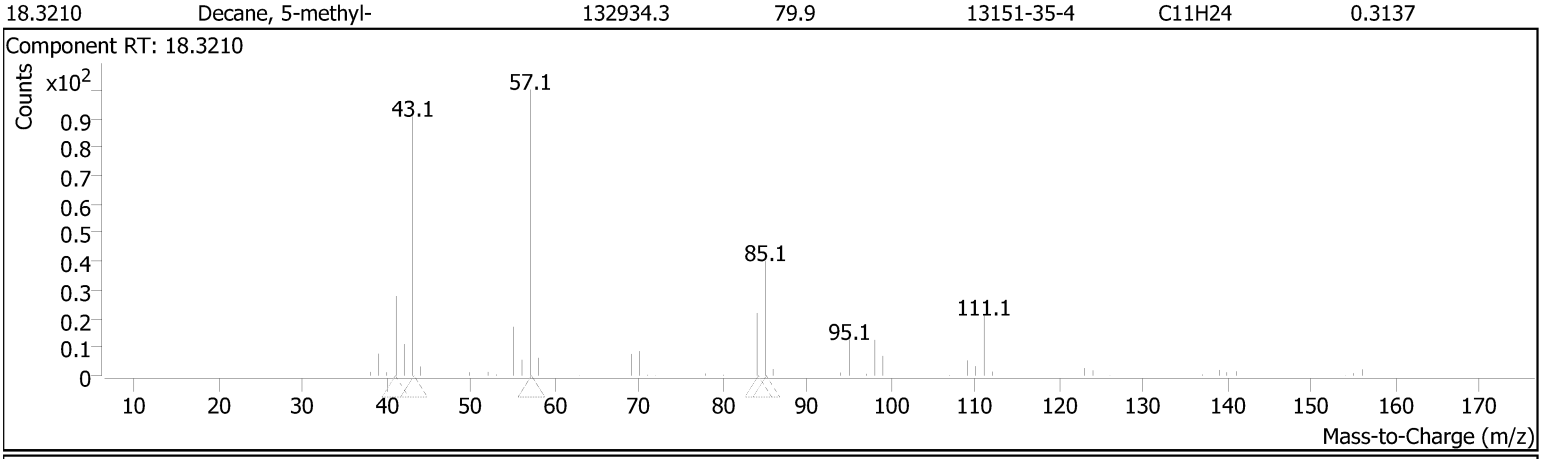


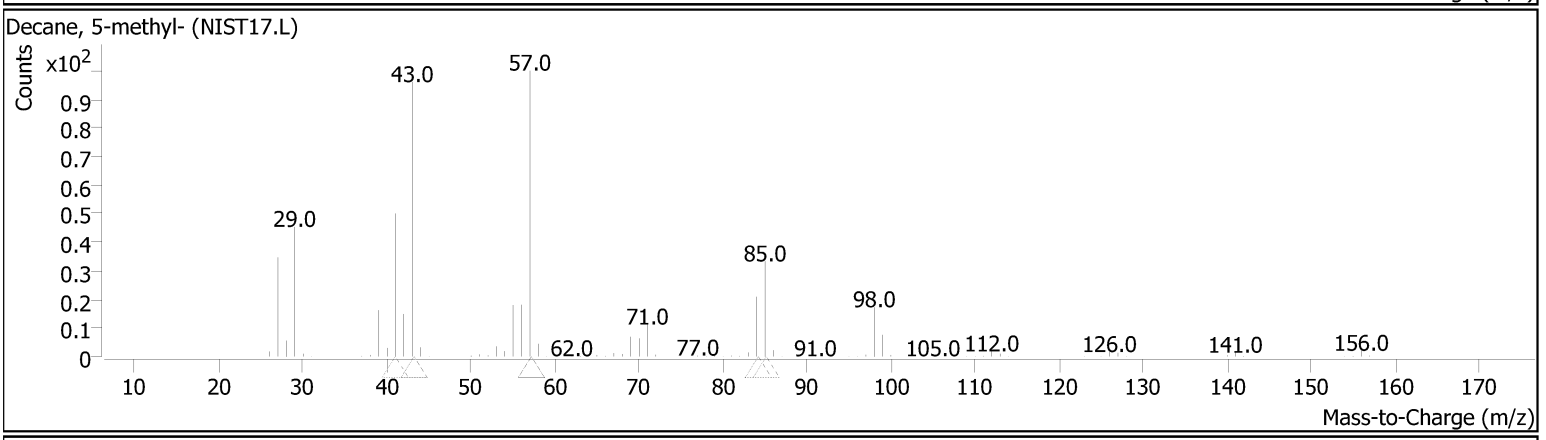


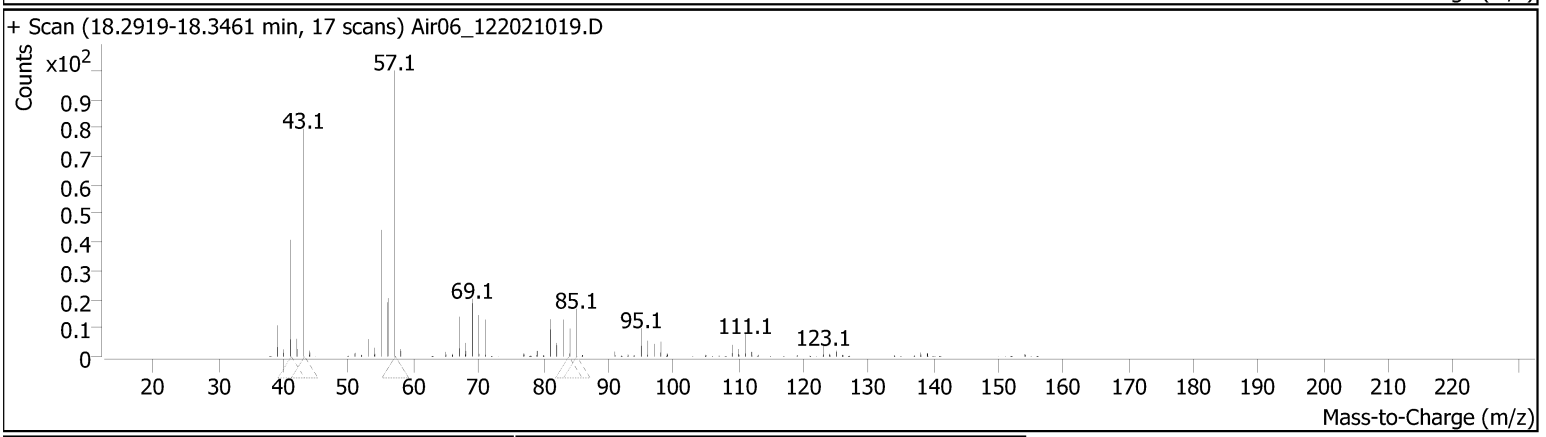


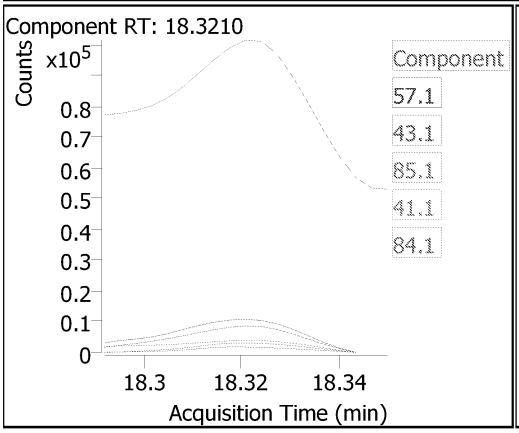


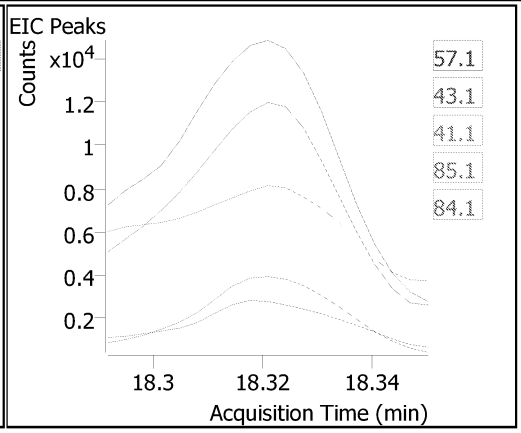
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3210	Decane, 5-methyl-	132934.3	79.9	13151-35-4	C11H24	0.3137

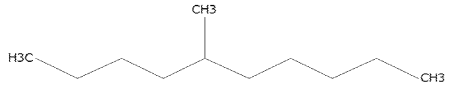




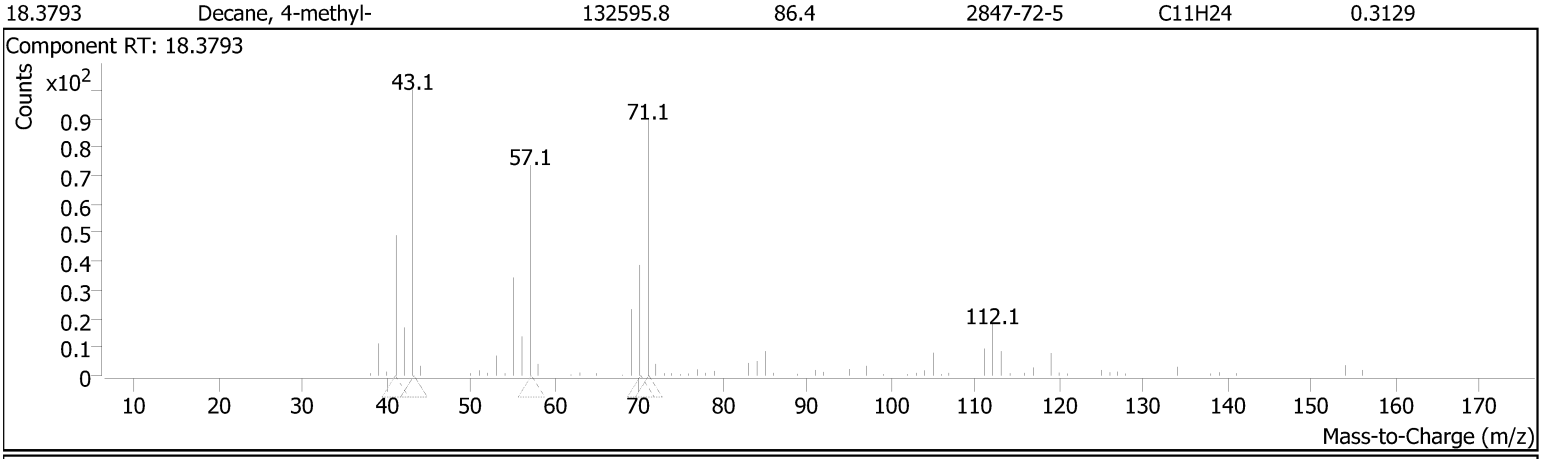


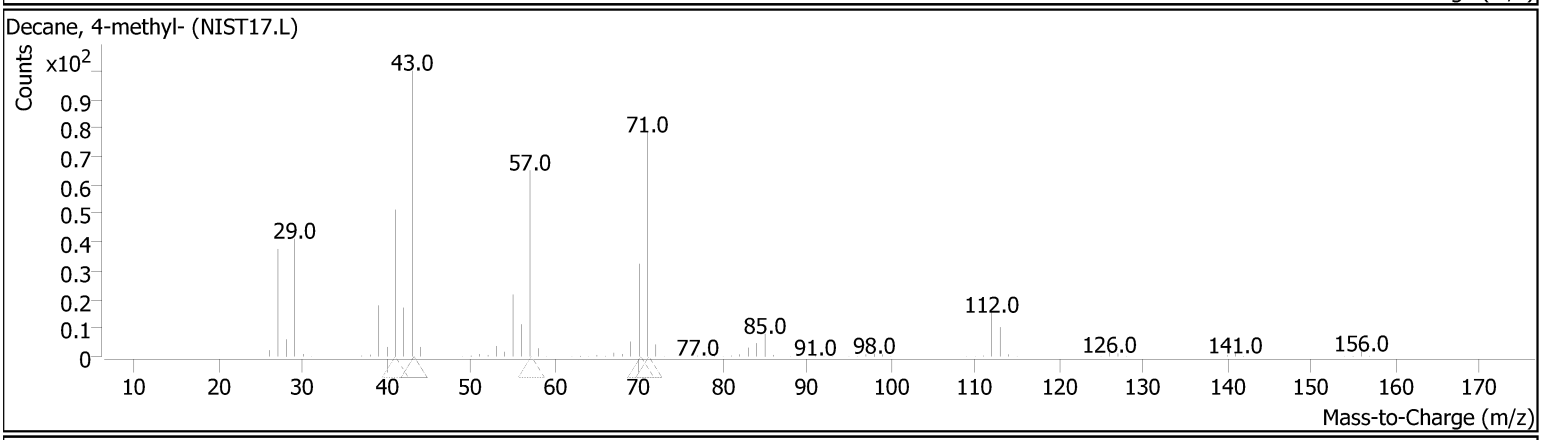


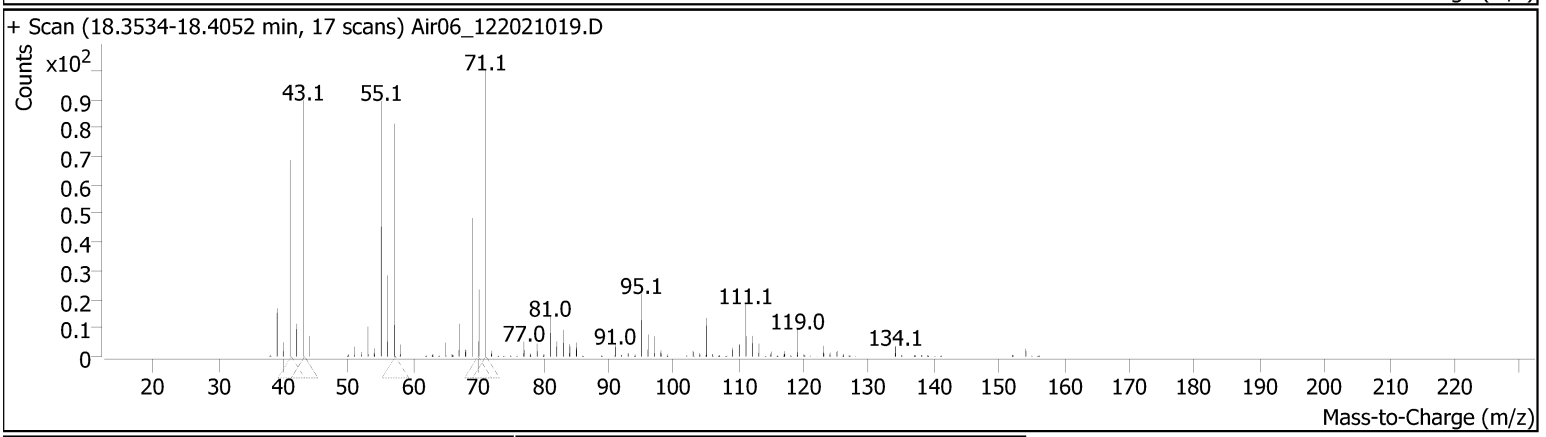


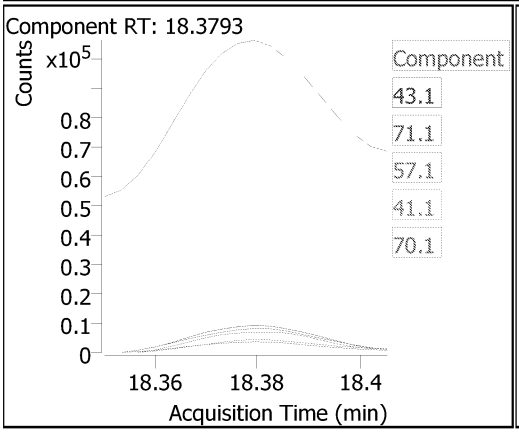


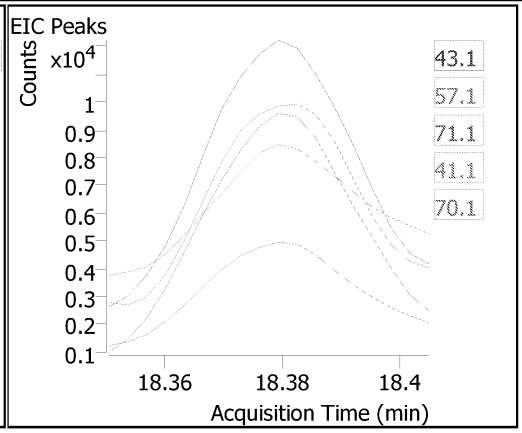
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3793	Decane, 4-methyl-	132595.8	86.4	2847-72-5	C11H24	0.3129

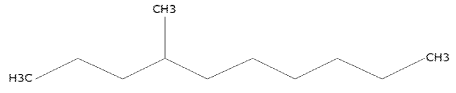




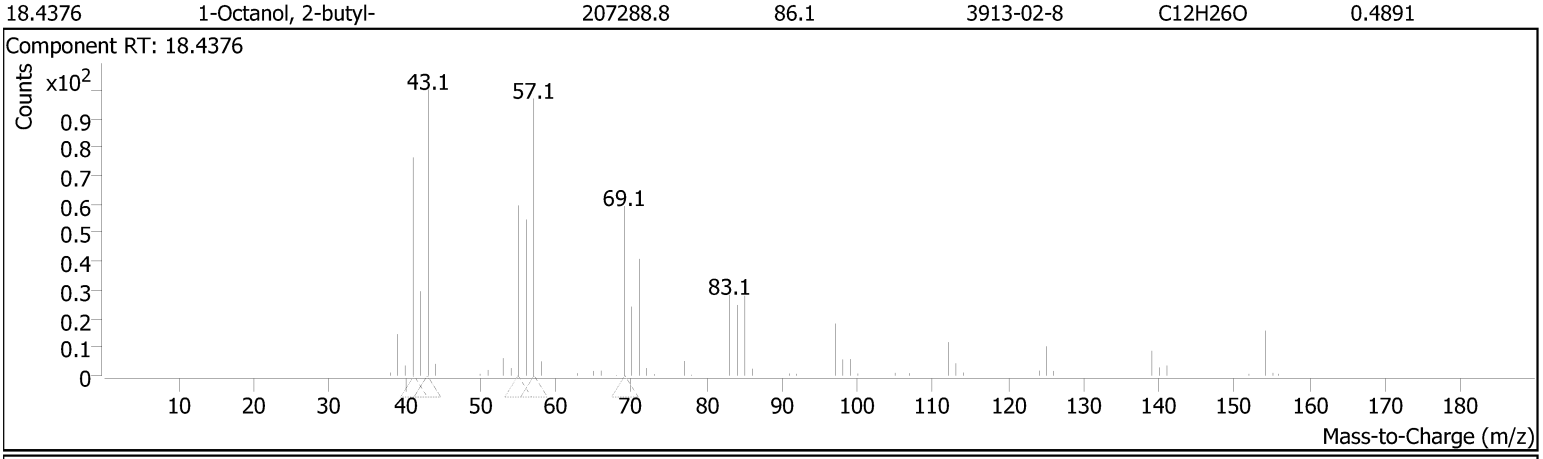


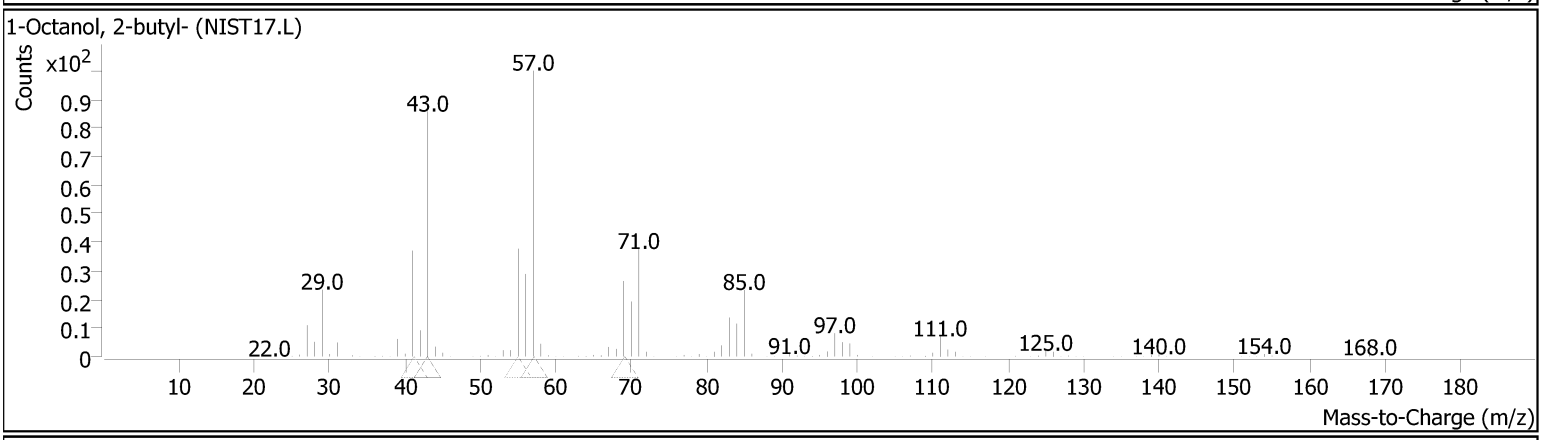


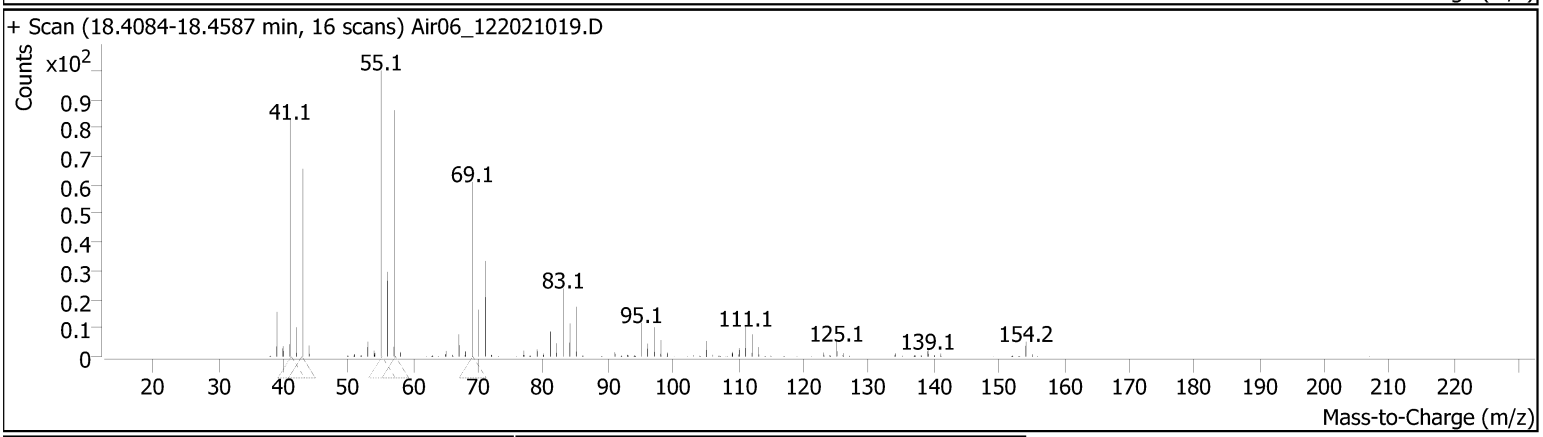


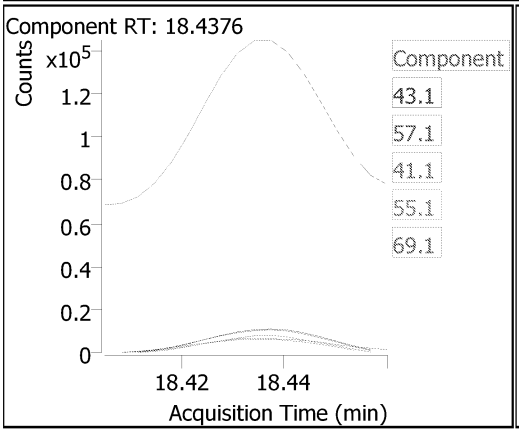


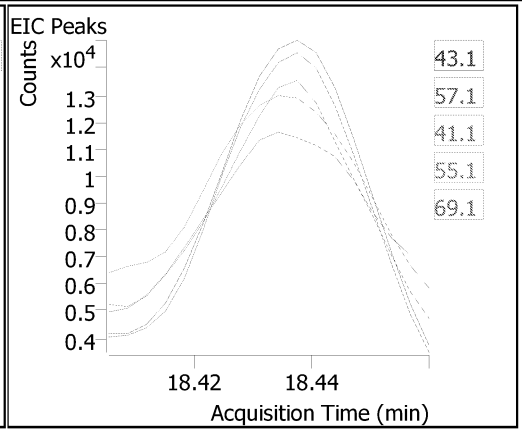
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.4376	1-Octanol, 2-butyl-	207288.8	86.1	3913-02-8	C12H26O	0.4891

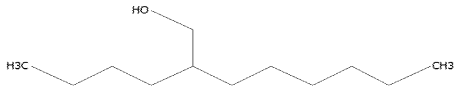




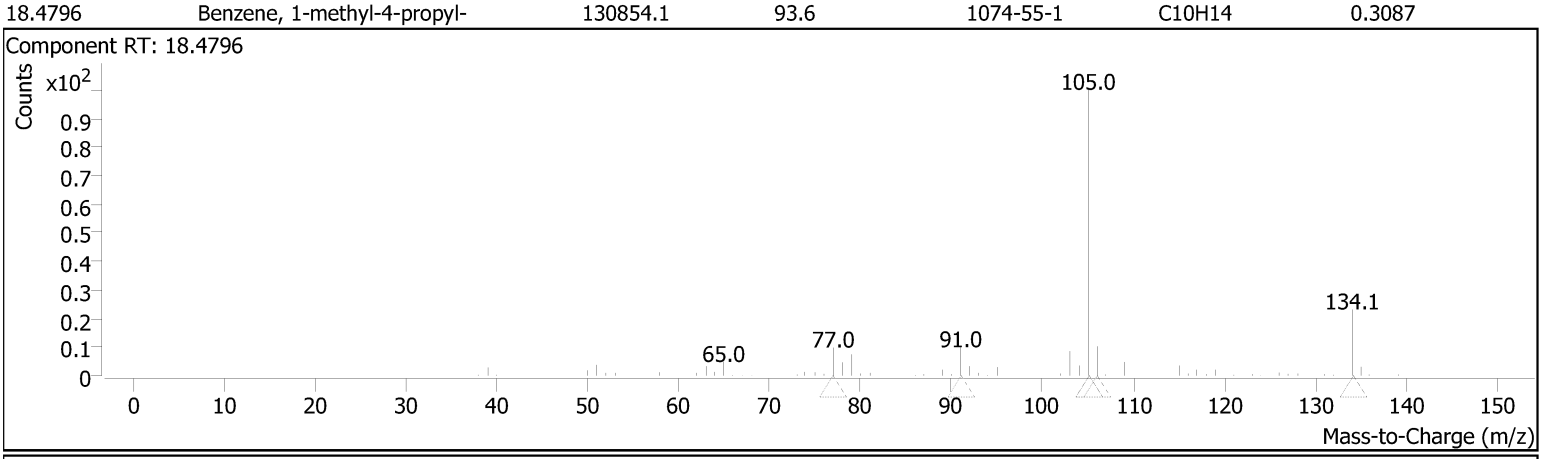


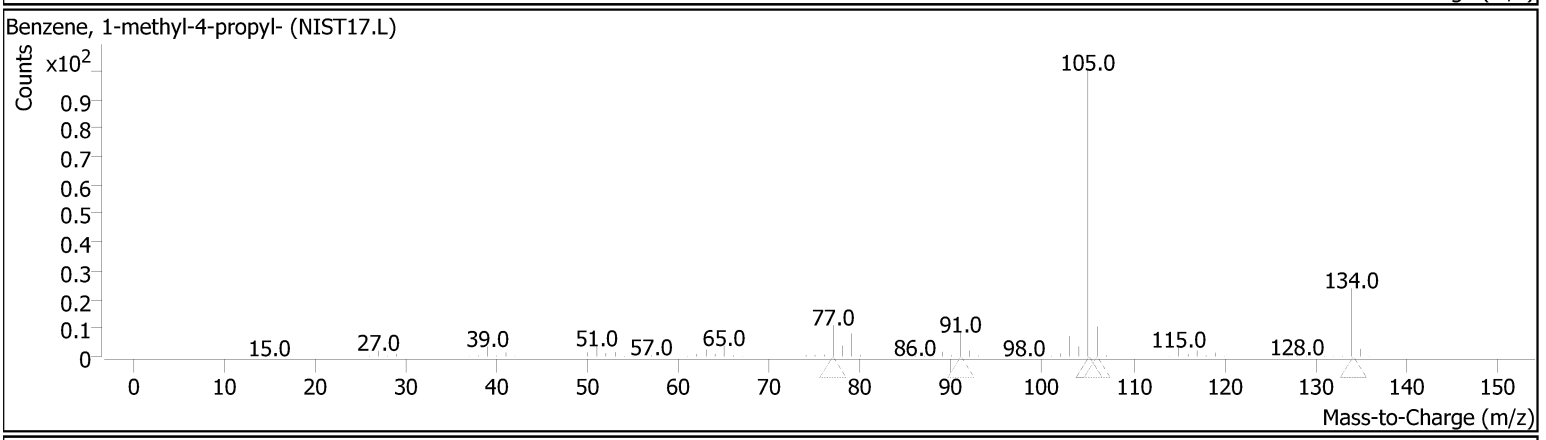


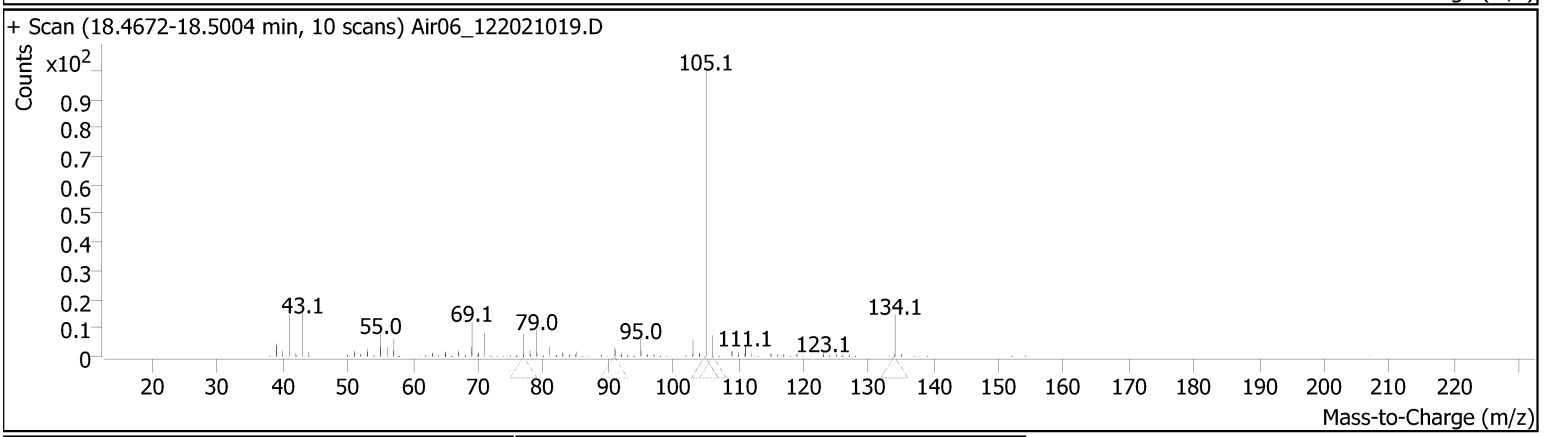


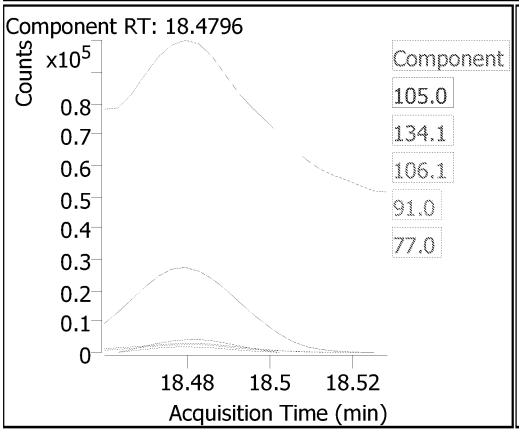


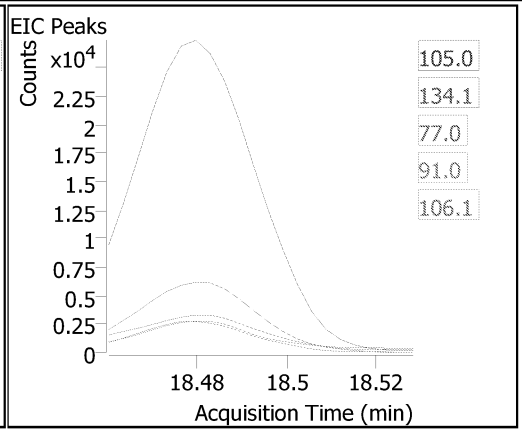
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.4796	Benzene, 1-methyl-4-propyl-	130854.1	93.6	1074-55-1	C10H14	0.3087

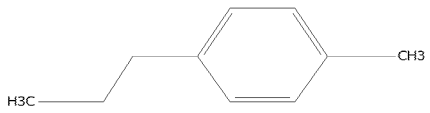




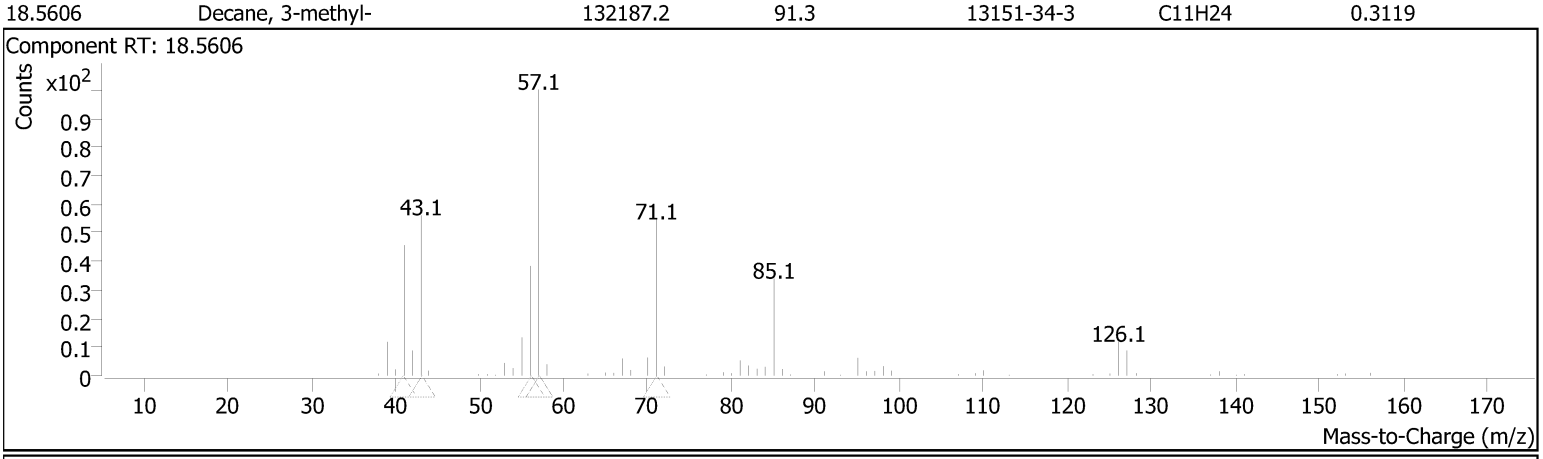


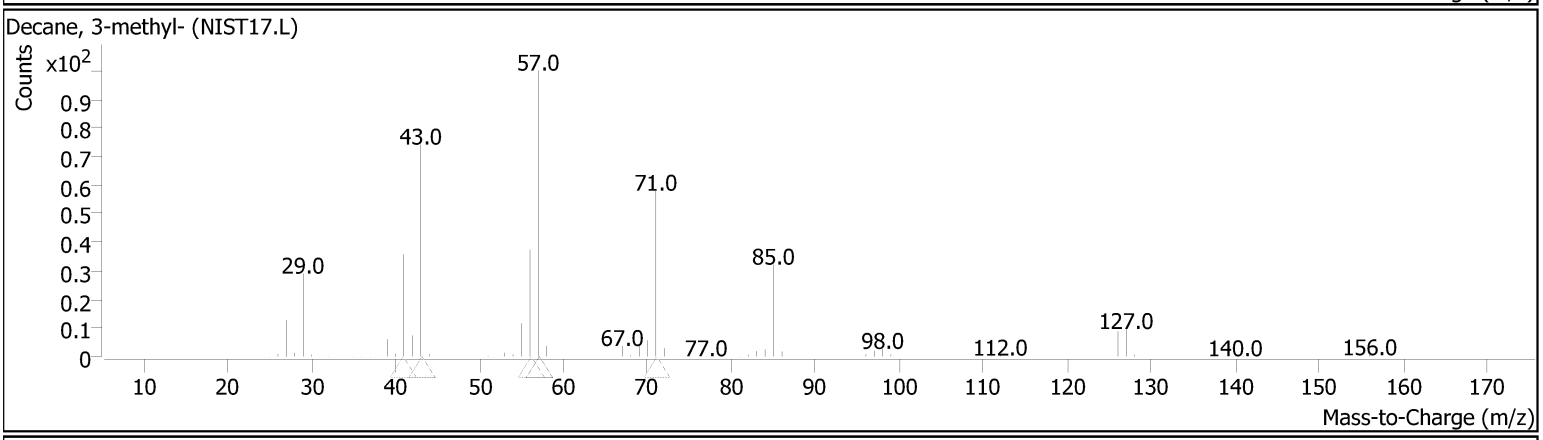


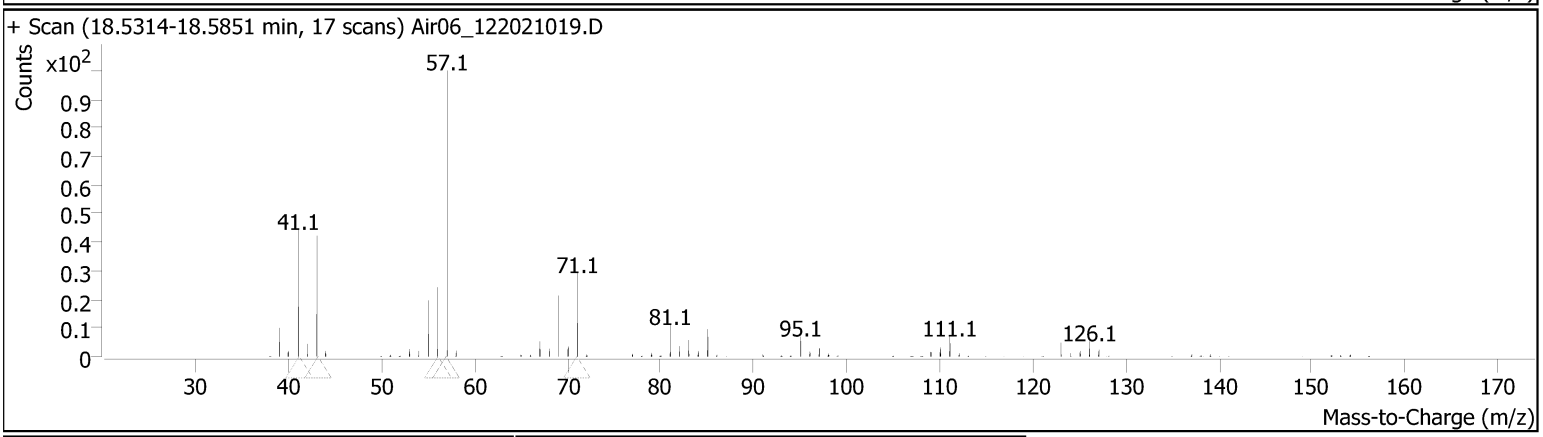


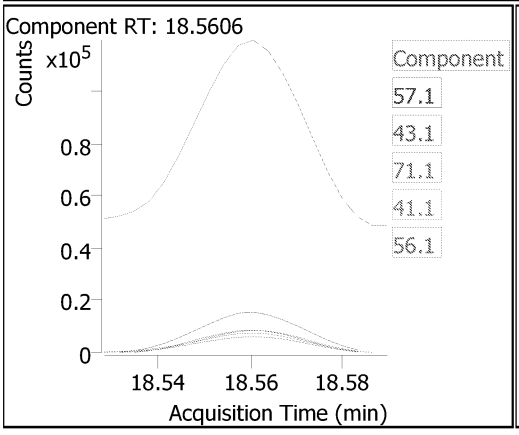


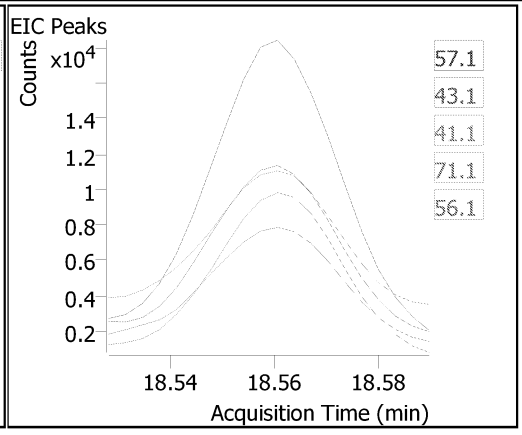
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.5606	Decane, 3-methyl-	132187.2	91.3	13151-34-3	C11H24	0.3119

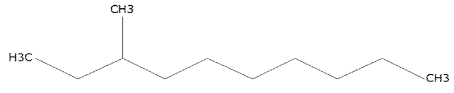




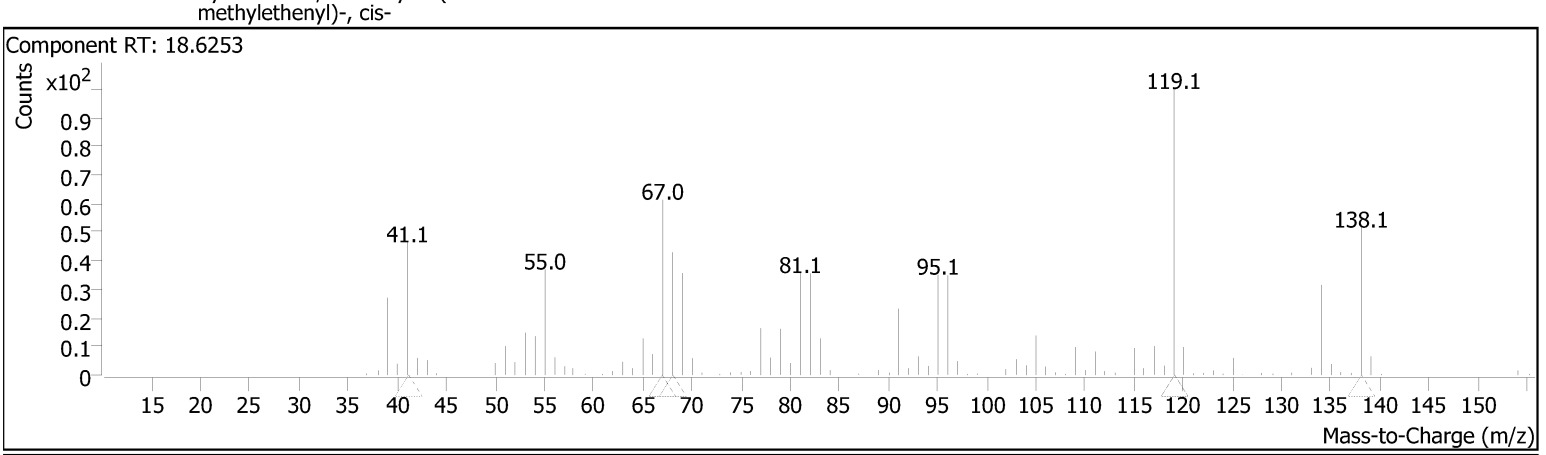


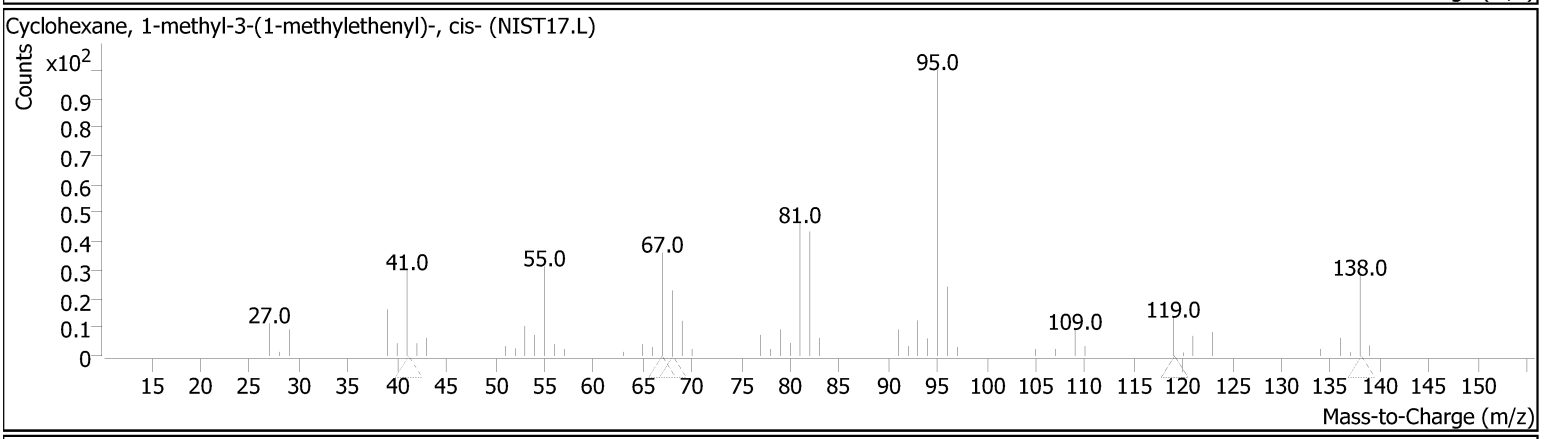


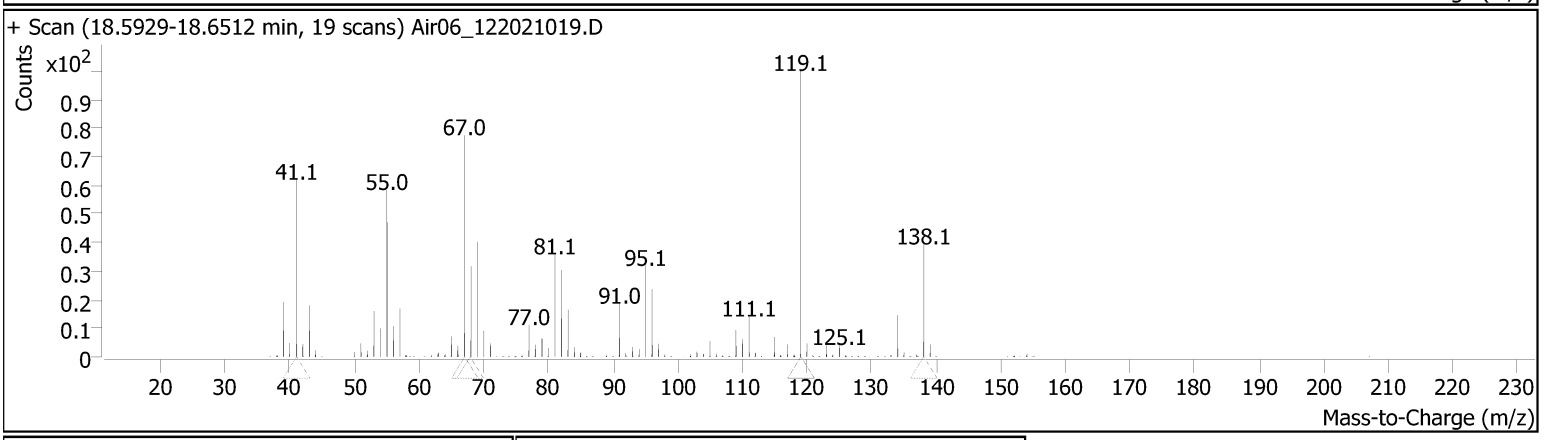


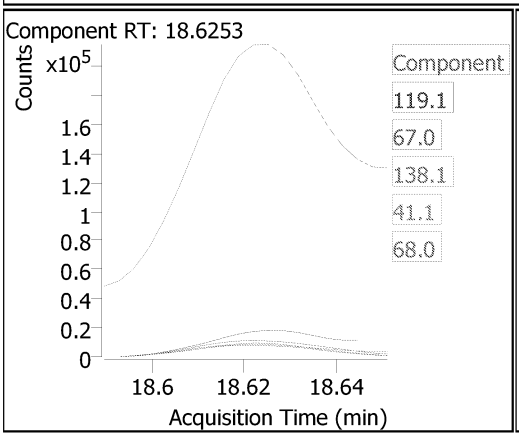


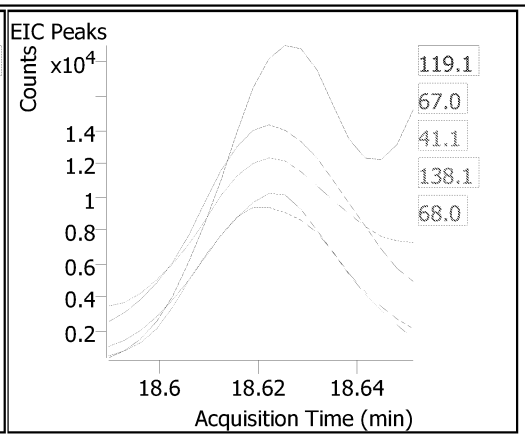
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.6253	Cyclohexane, 1-methyl-3-(1-methylethenyl)-, cis-	375155.9	78.9	24399-15-3	C10H18	0.8852

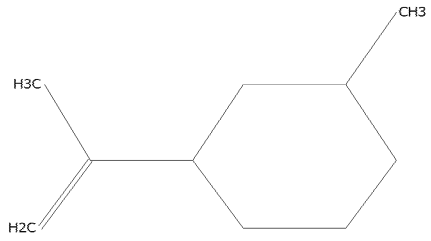




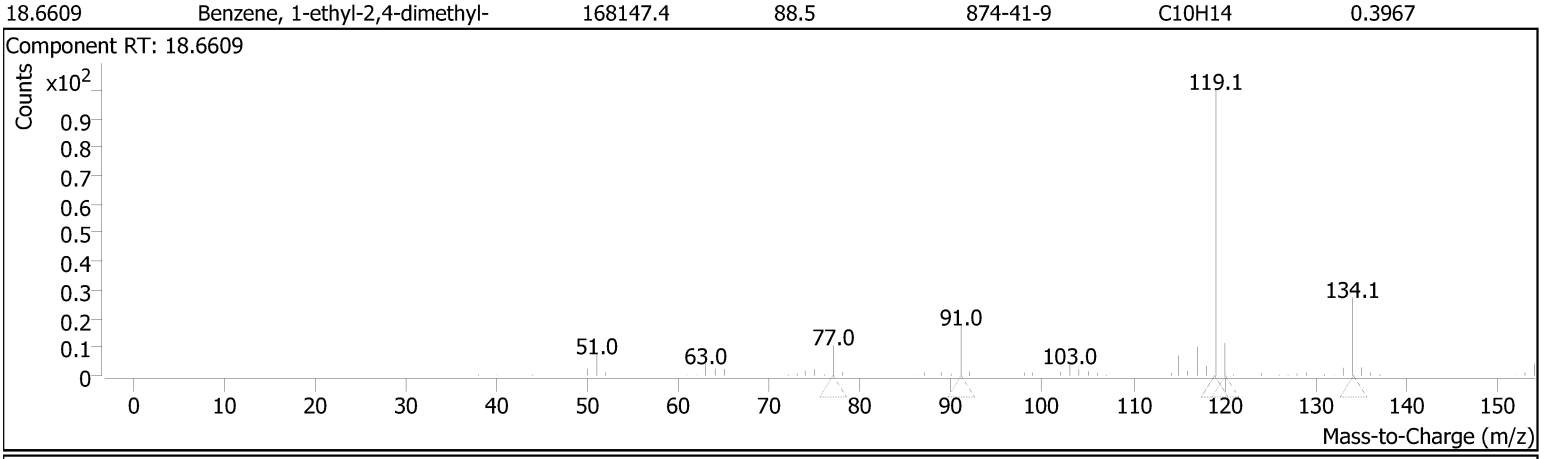


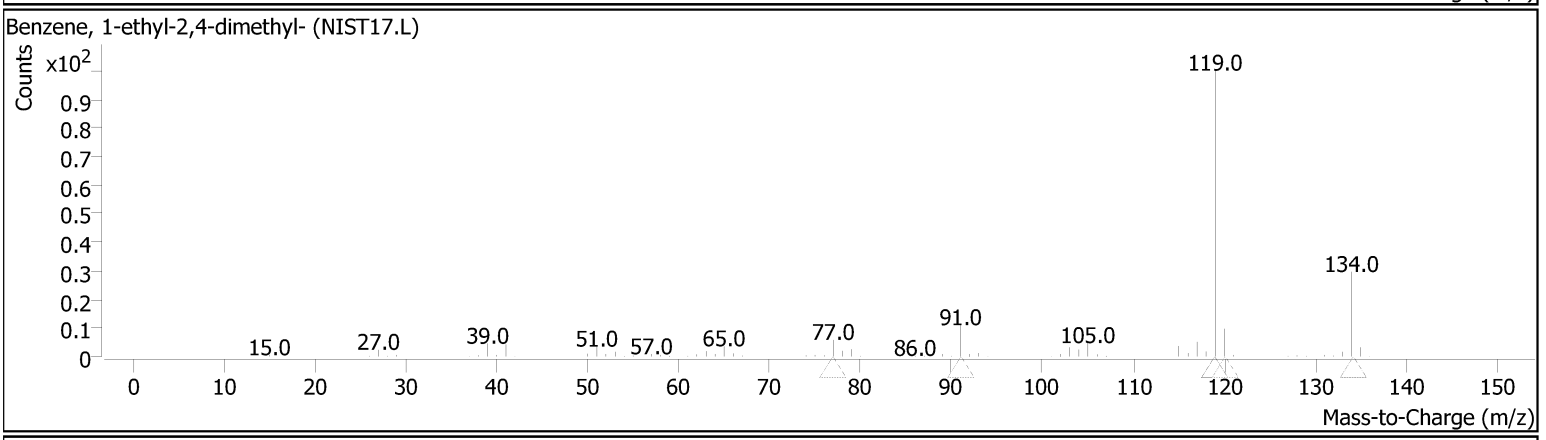


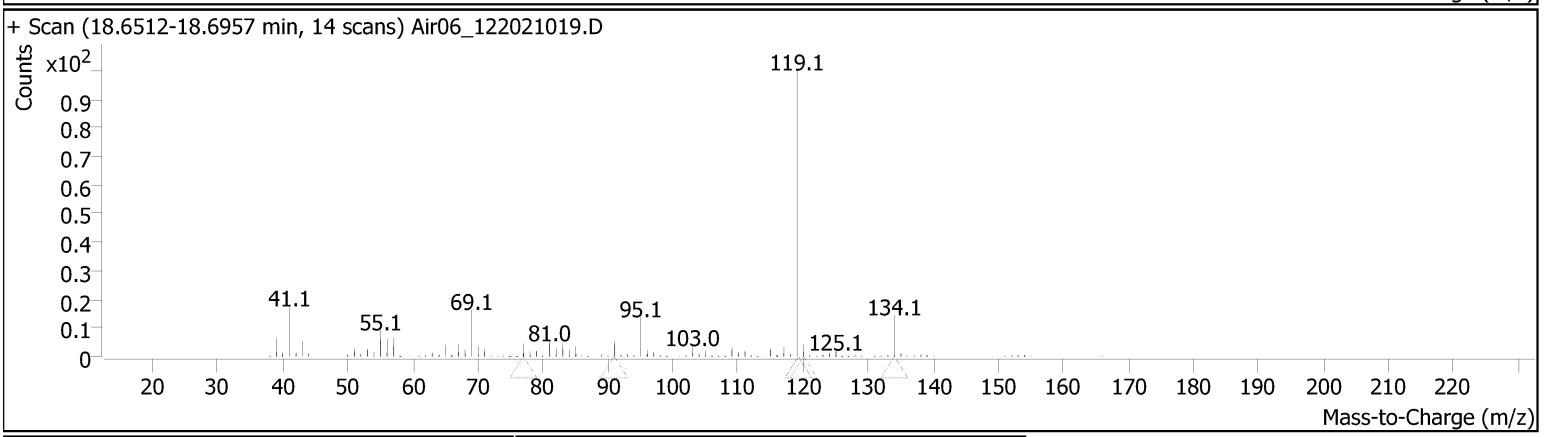


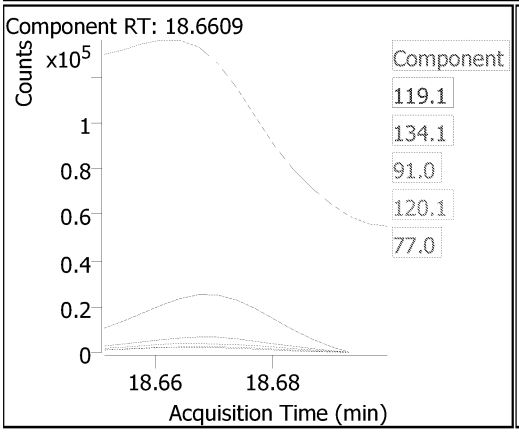


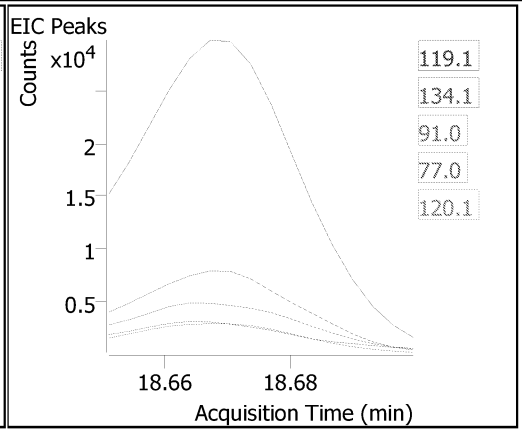
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.6609	Benzene, 1-ethyl-2,4-dimethyl-	168147.4	88.5	874-41-9	C10H14	0.3967

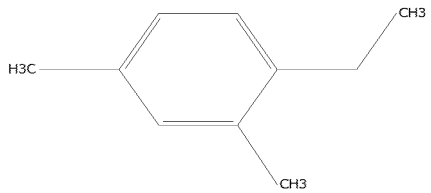




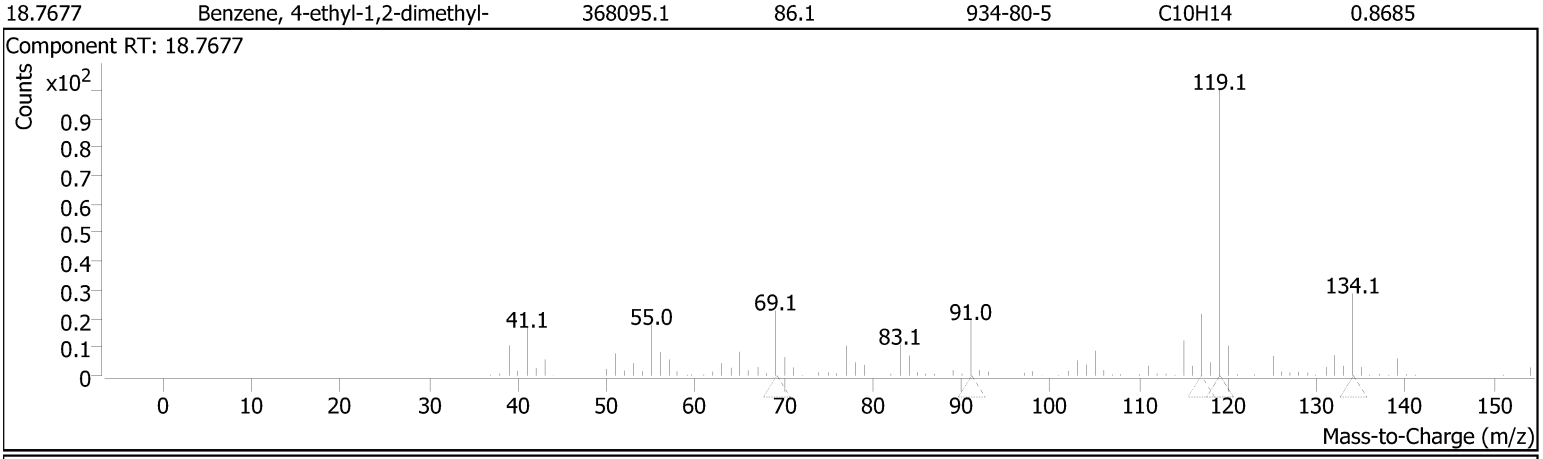


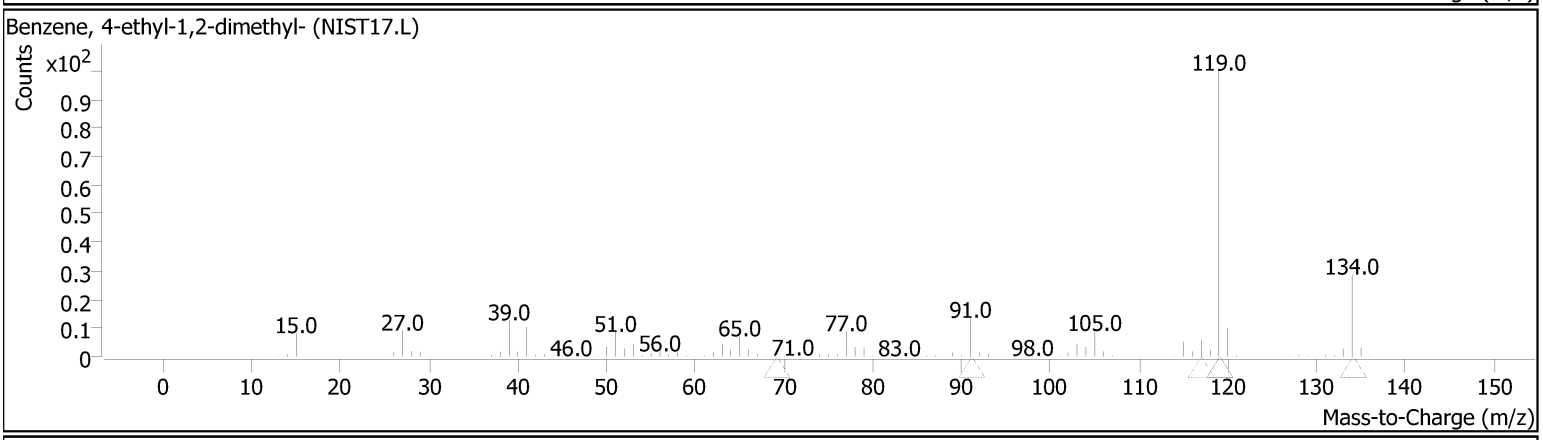


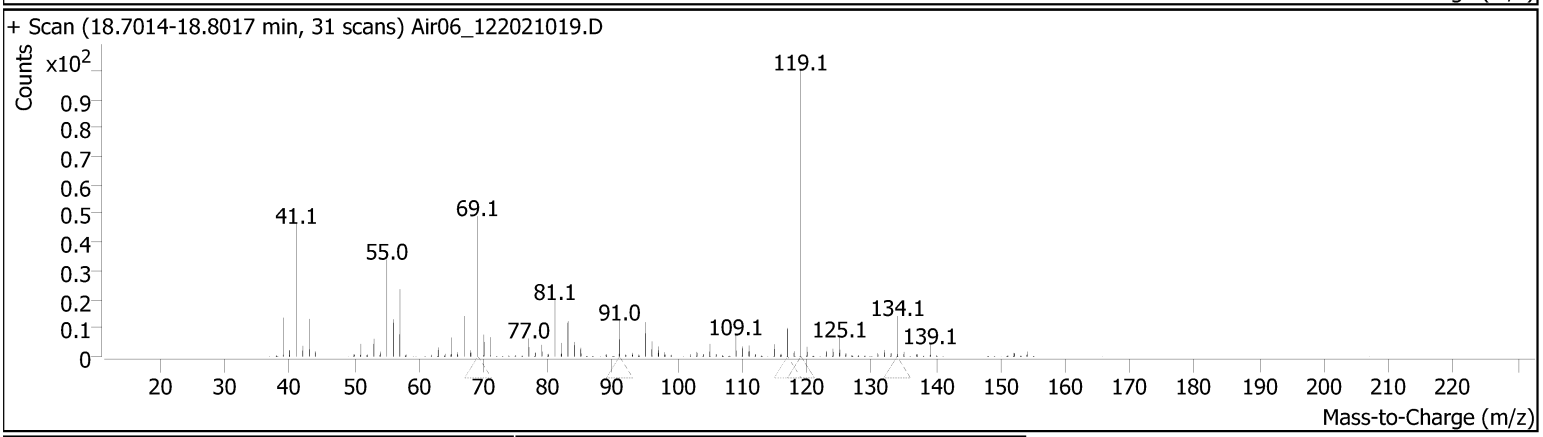


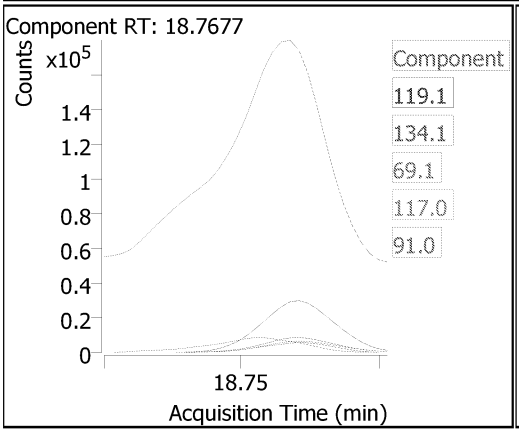


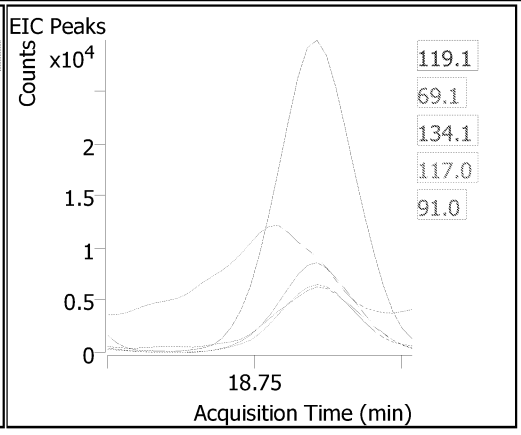
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.7677	Benzene, 4-ethyl-1,2-dimethyl-	368095.1	86.1	934-80-5	C10H14	0.8685

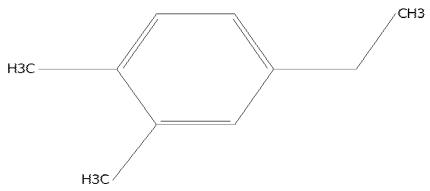








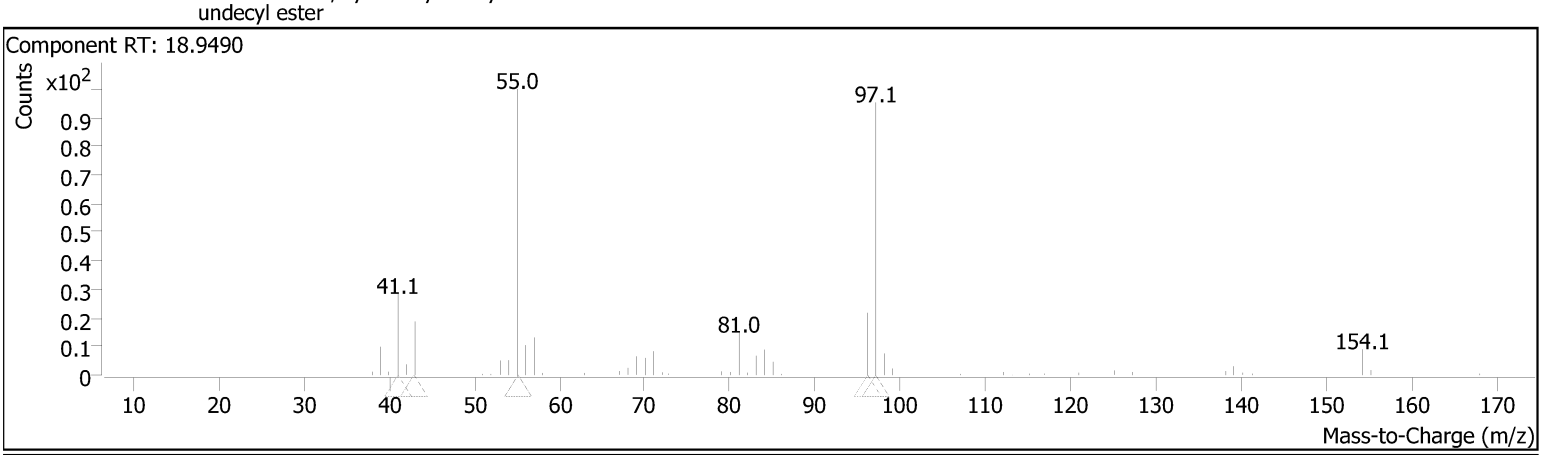


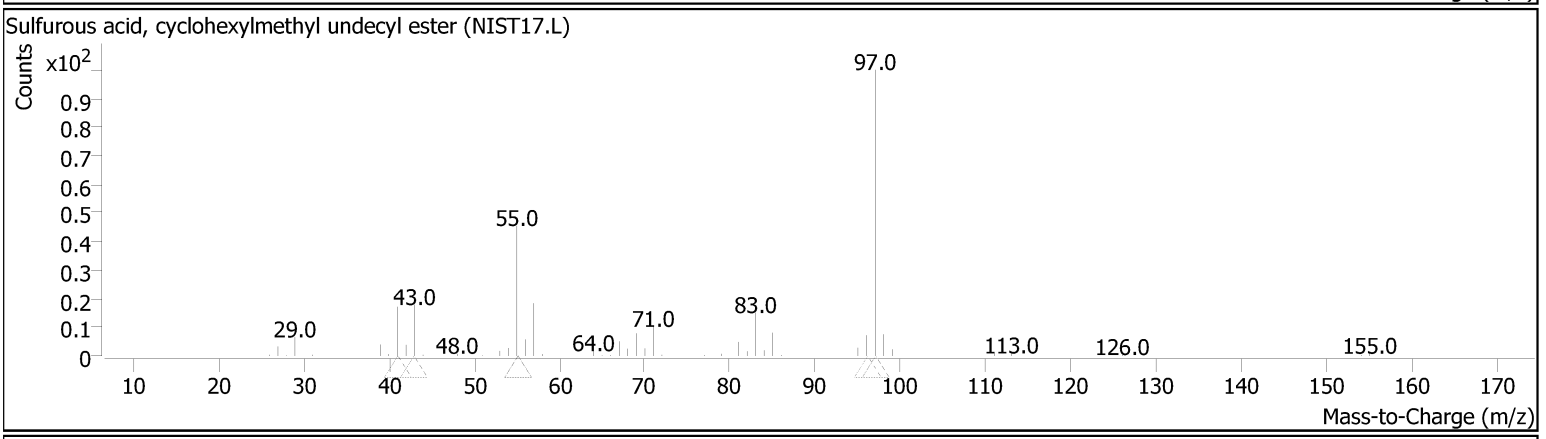


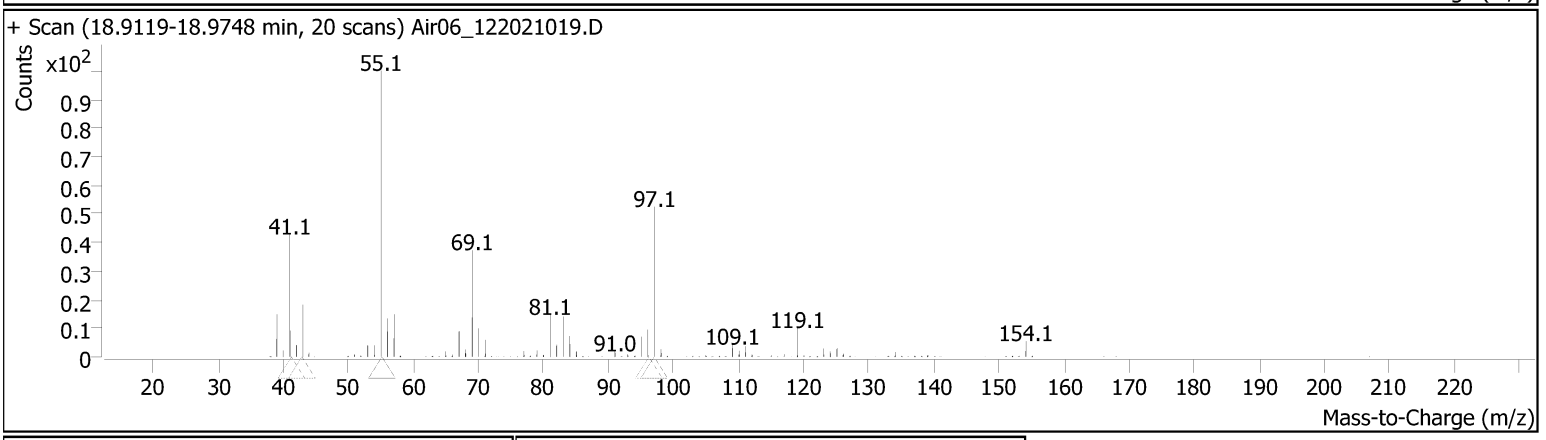
Library Search Results - NonTarget Hits with Details

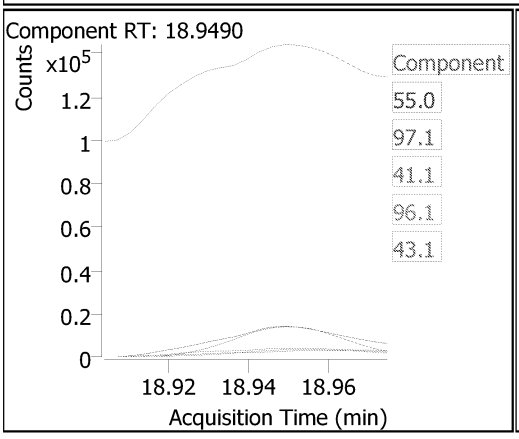
Agilent Technologies

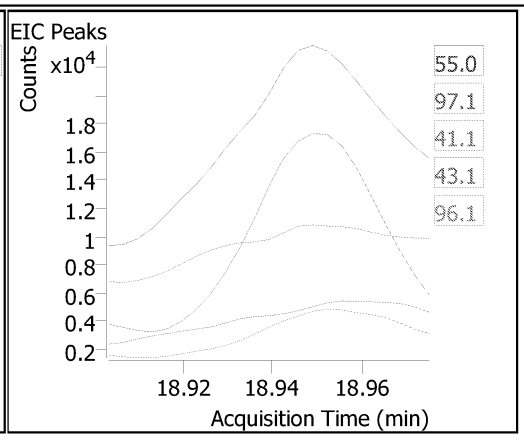
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.9490	Sulfurous acid, cyclohexylmethyl undecyl ester	361785.5	85.9	1000309-21-9	C18H36O3S	0.8536

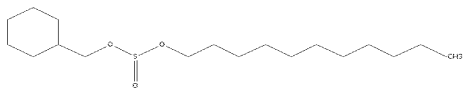




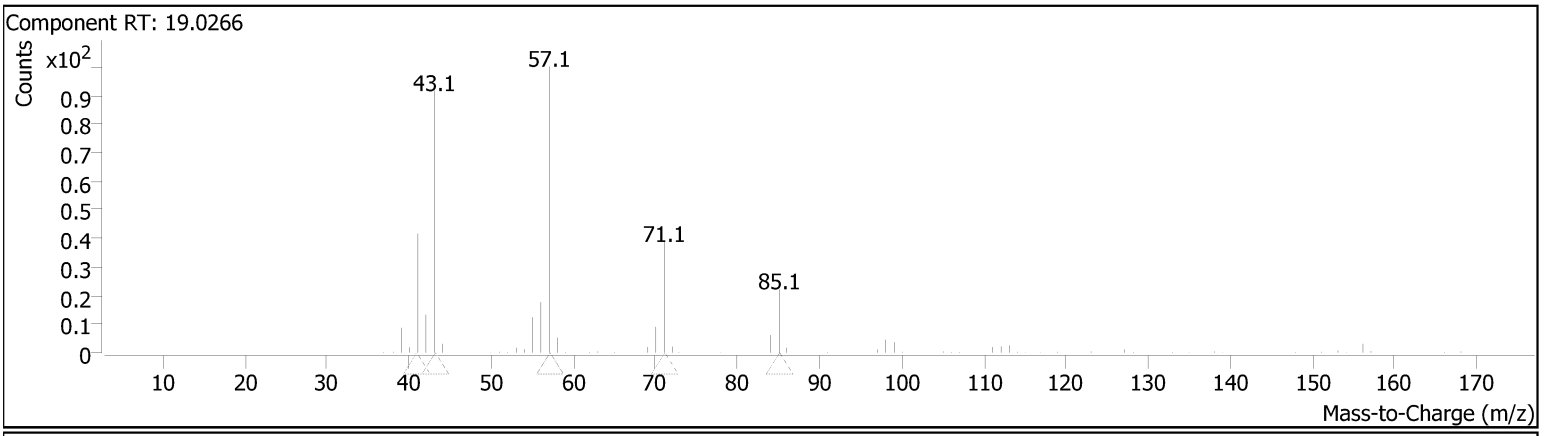


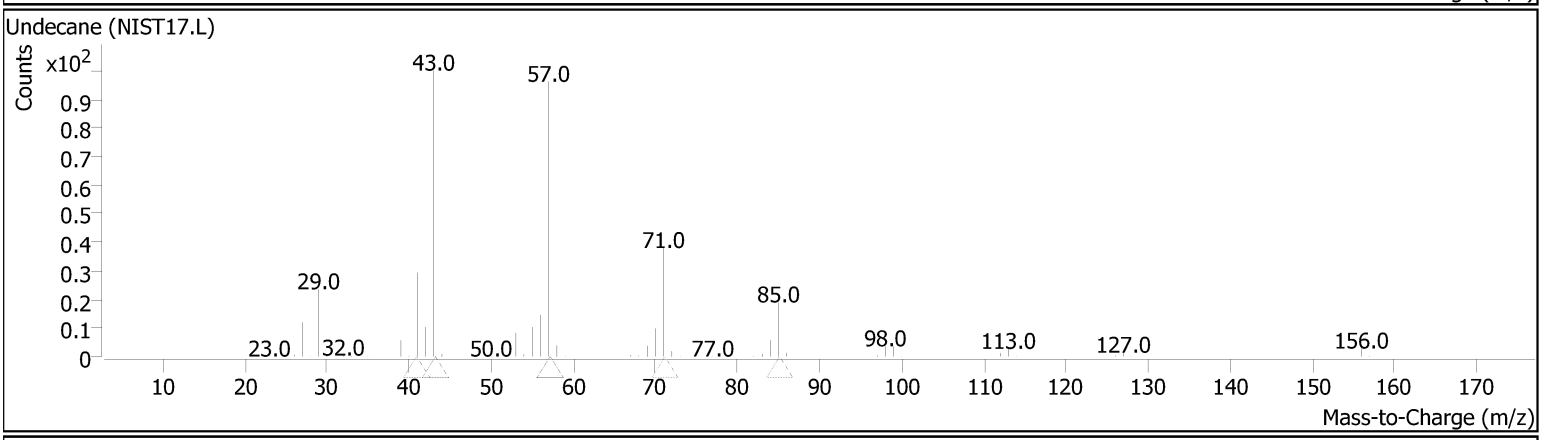


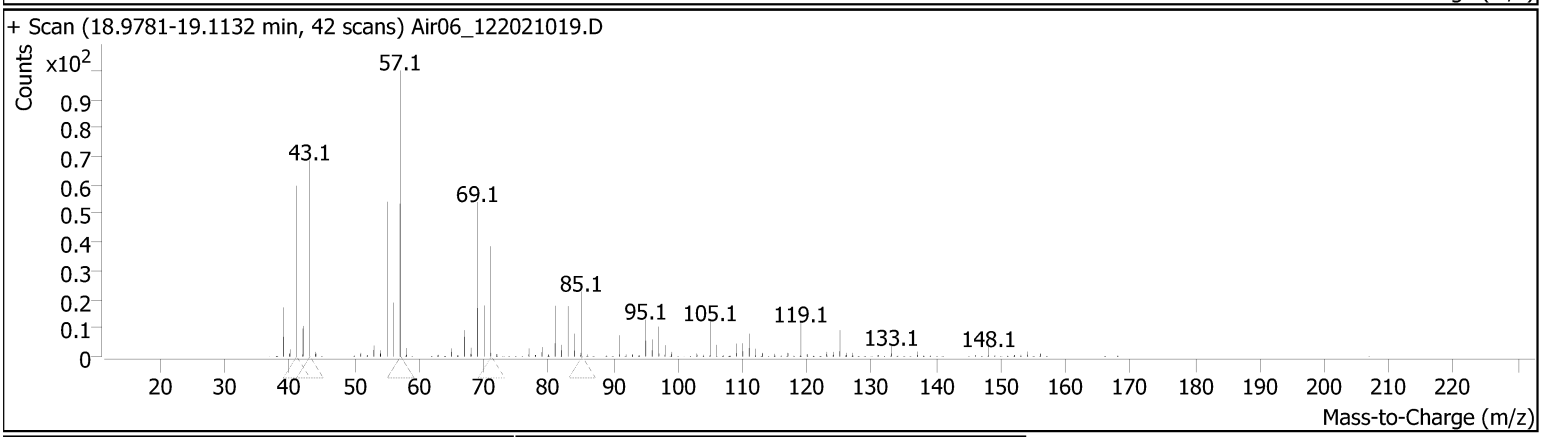


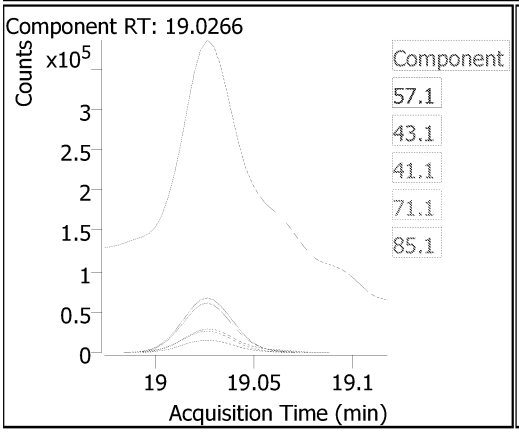


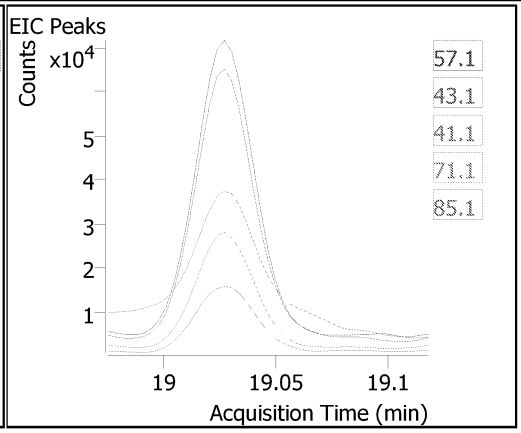
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.0266	Undecane	1161869.2	94.9	1120-21-4	C11H24	2.741





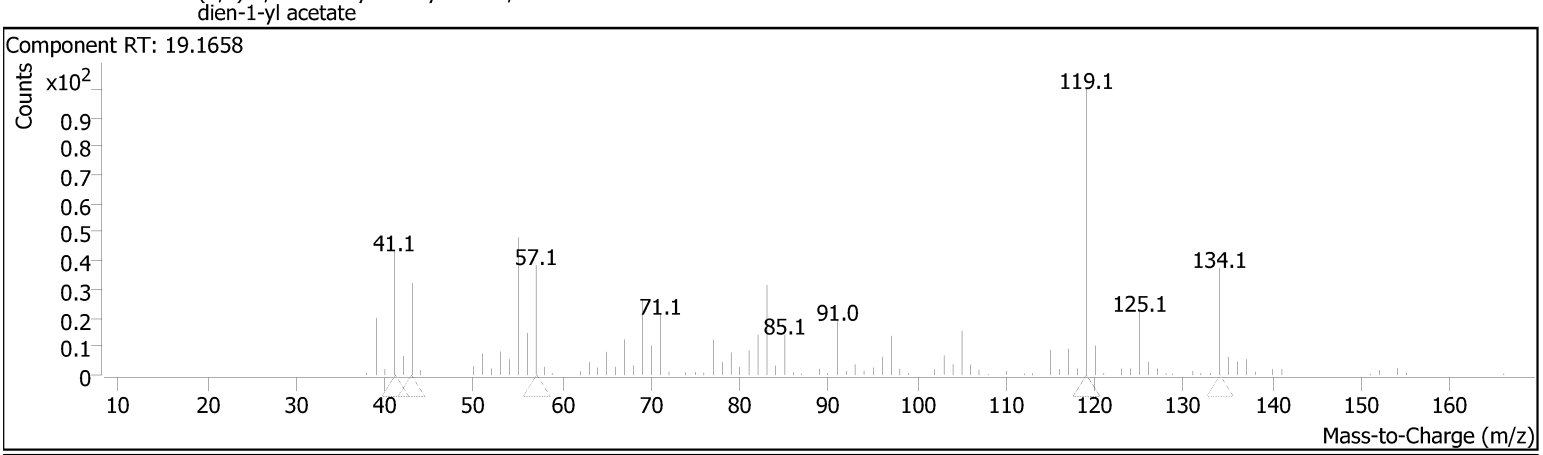


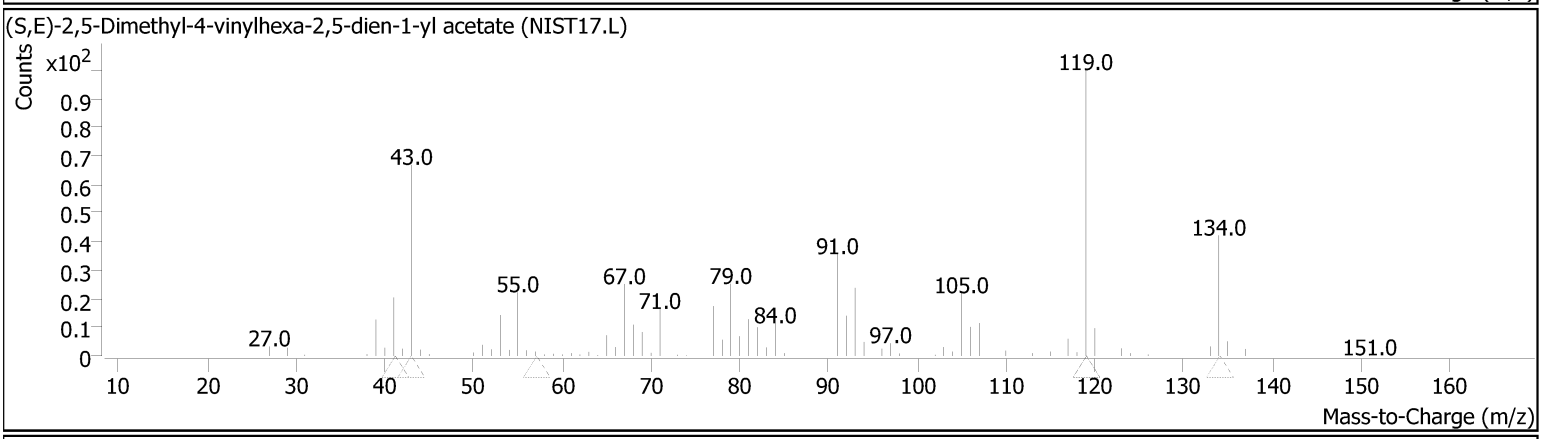


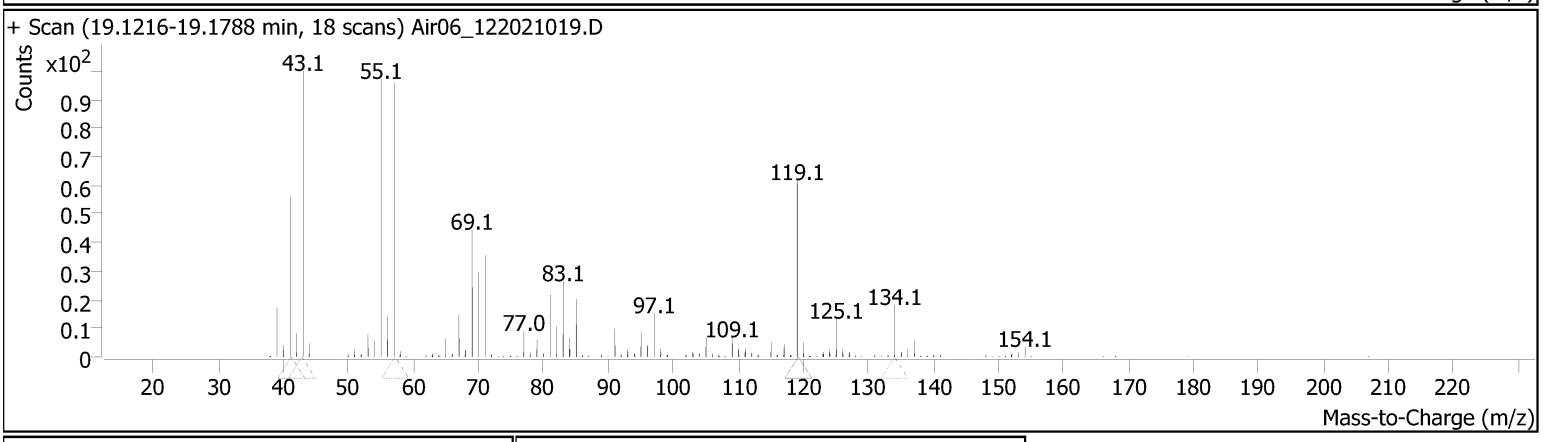


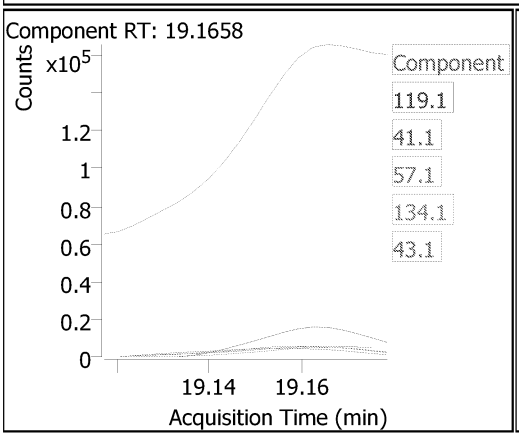


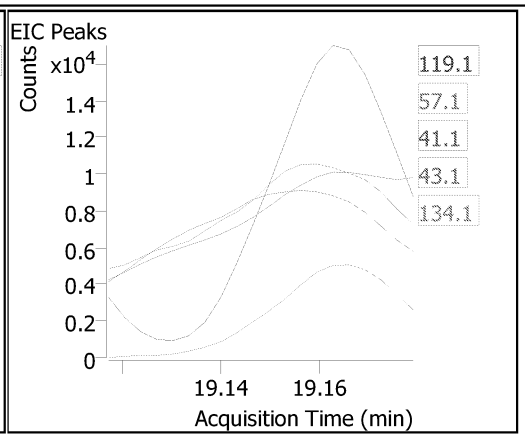
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.1658	(S,E)-2,5-Dimethyl-4-vinylhexa-2,5-dien-1-yl acetate	275085.5	79.2	20384-05-8	C12H18O2	0.6491

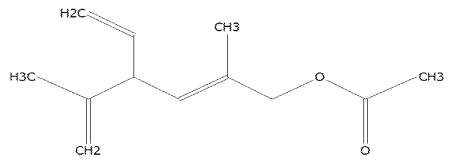




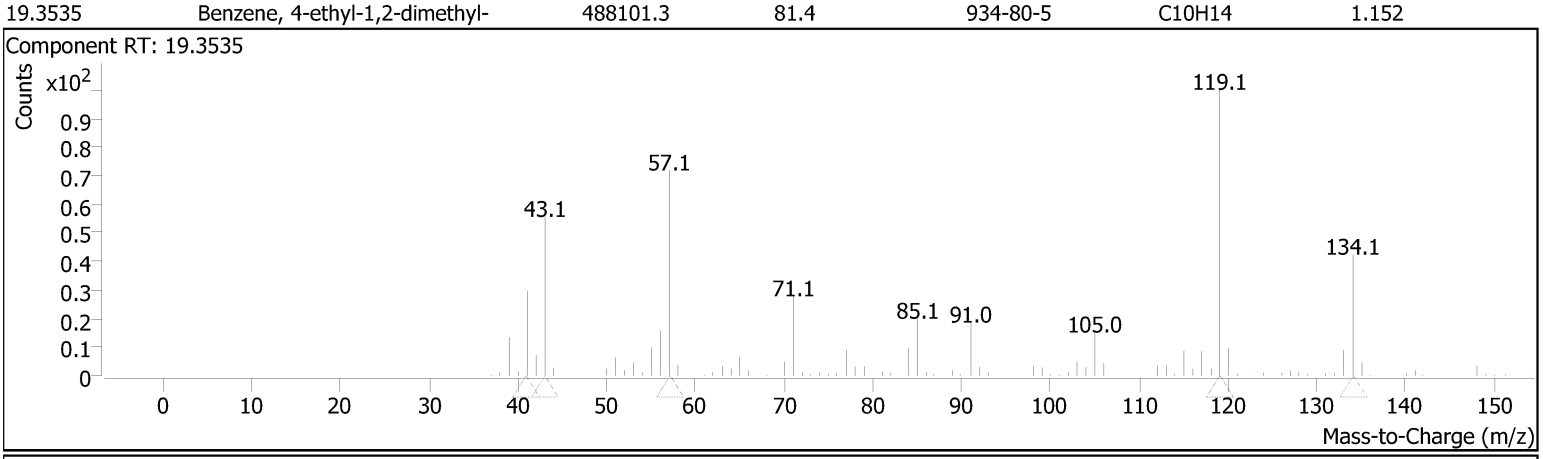


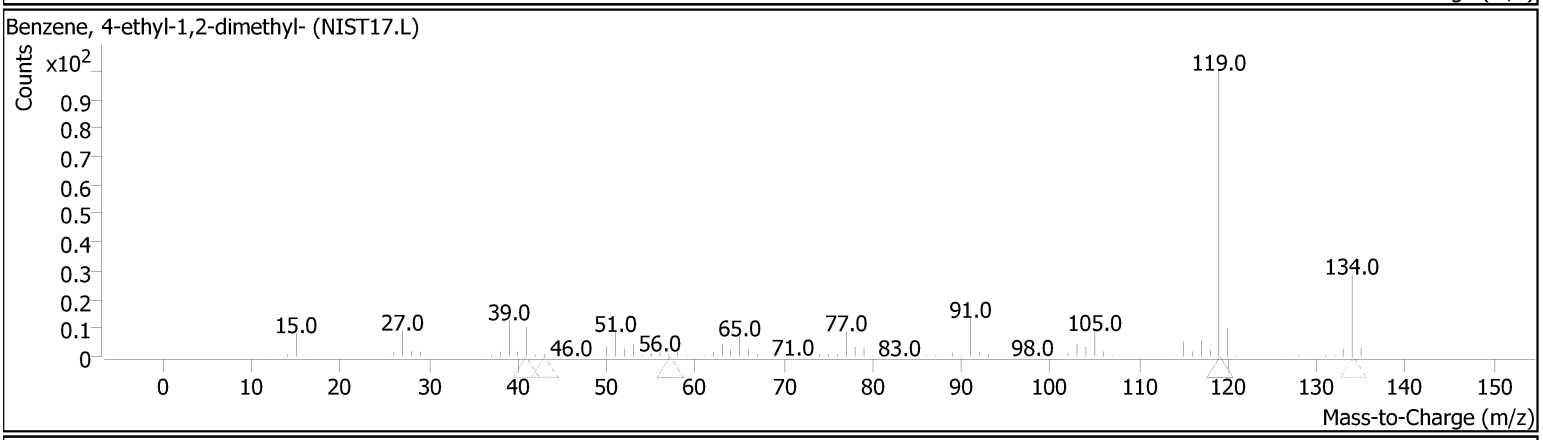


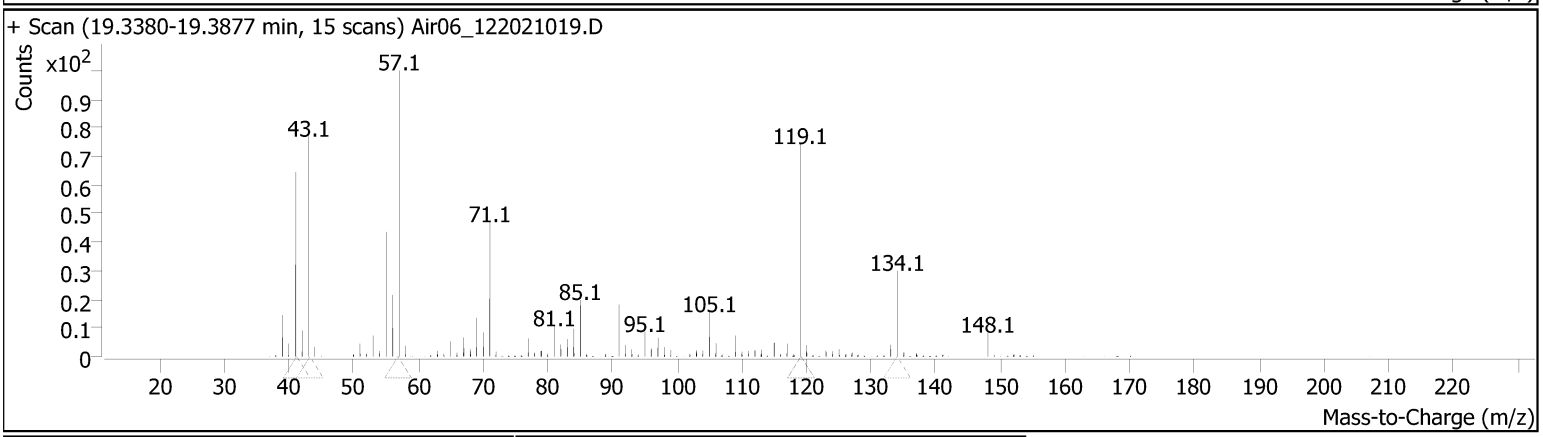


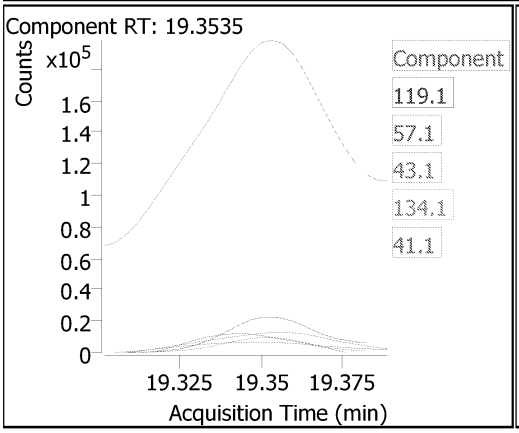


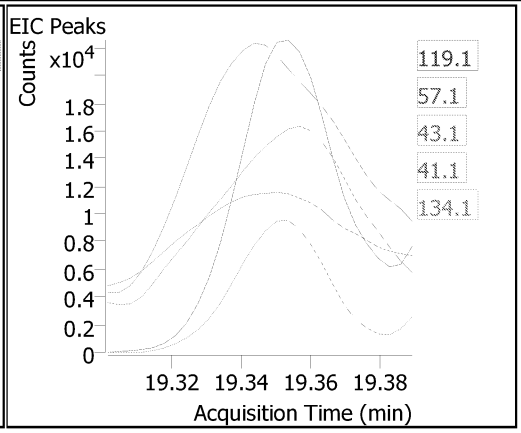
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.3535	Benzene, 4-ethyl-1,2-dimethyl-	488101.3	81.4	934-80-5	C10H14	1.152

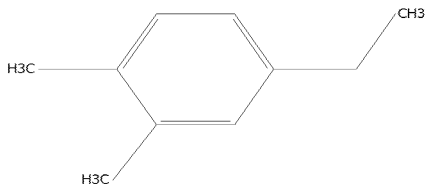




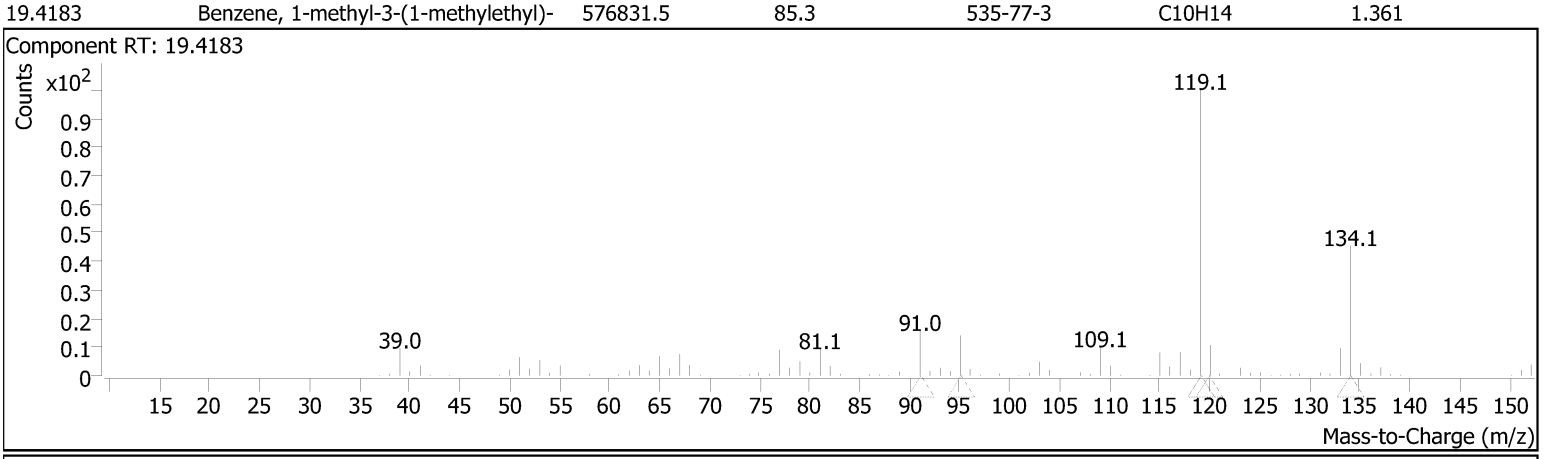


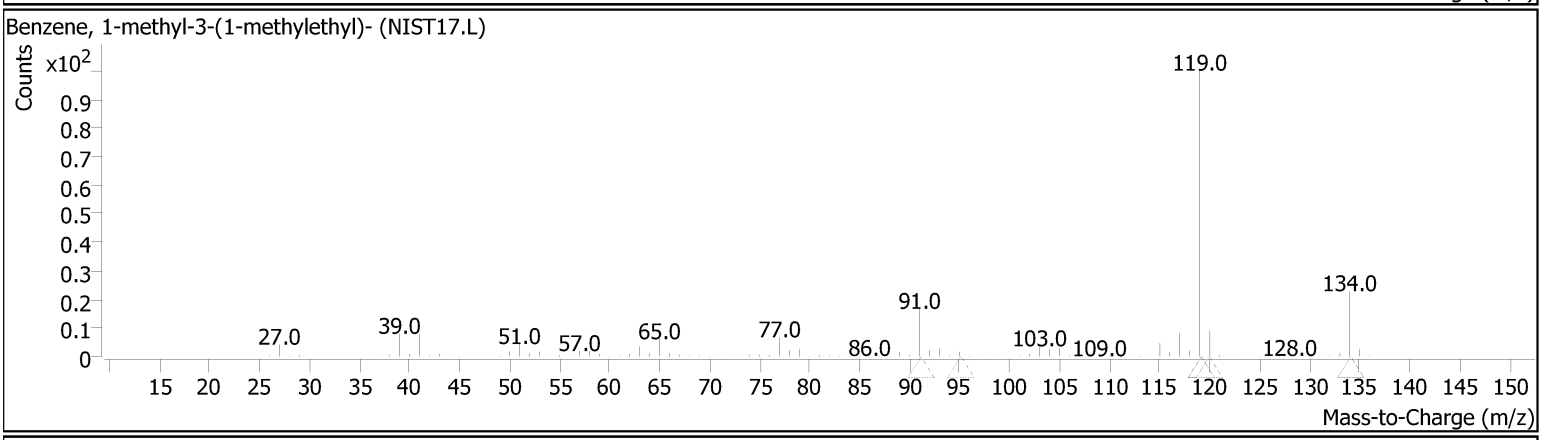


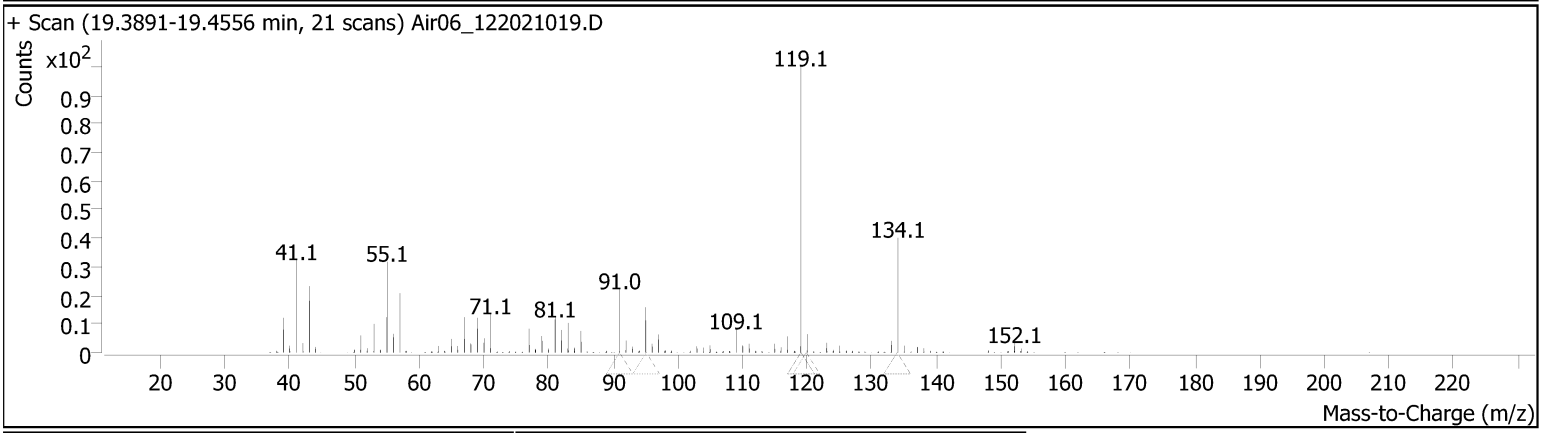


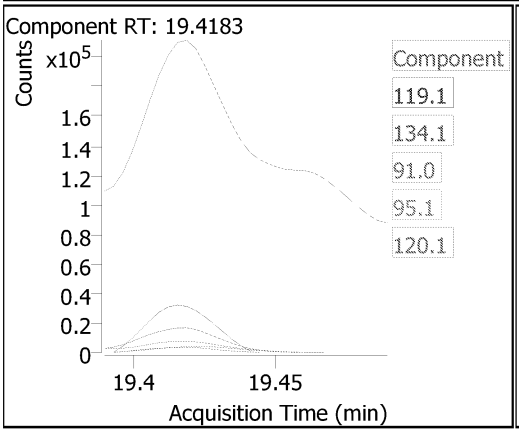


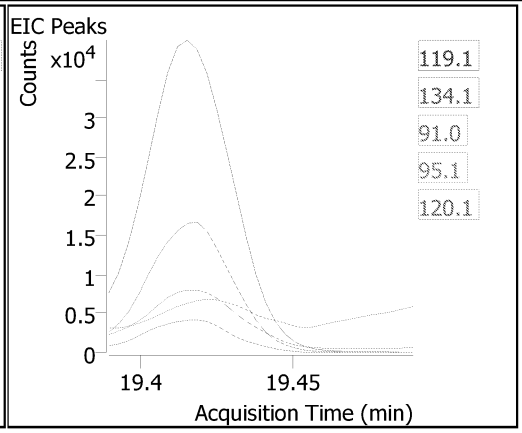
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.4183	Benzene, 1-methyl-3-(1-methylethyl)-	576831.5	85.3	535-77-3	C10H14	1.361

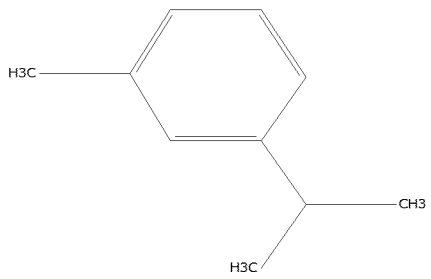




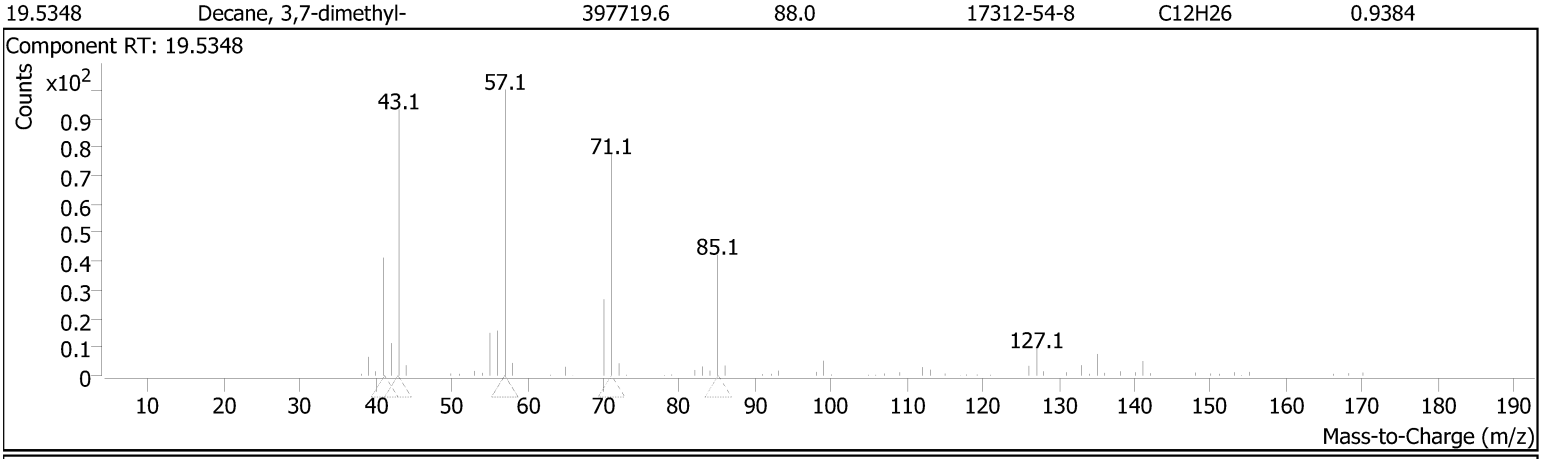


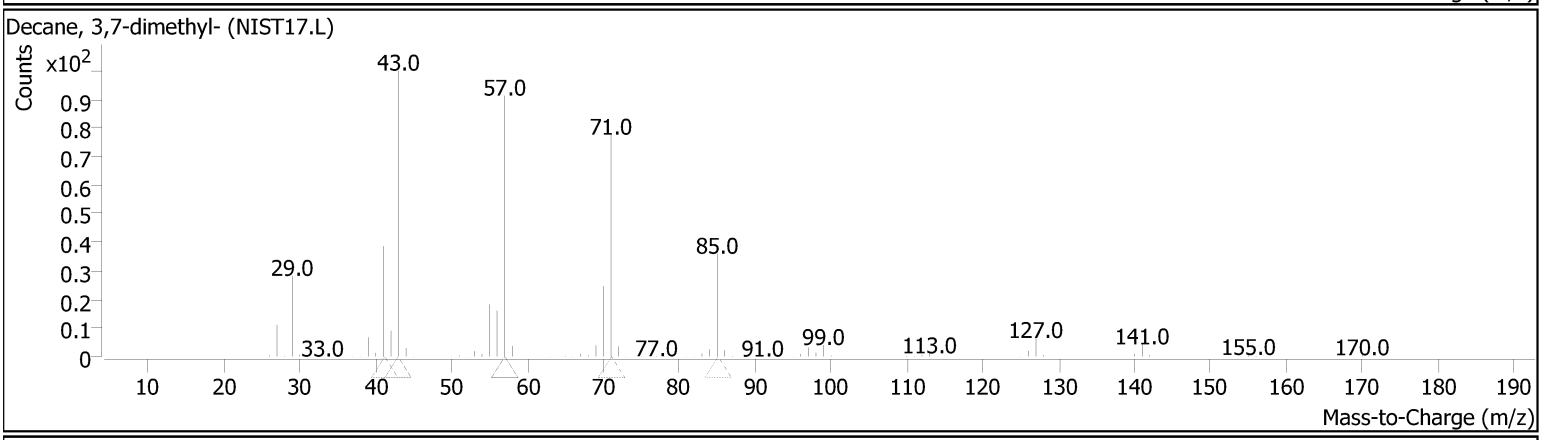


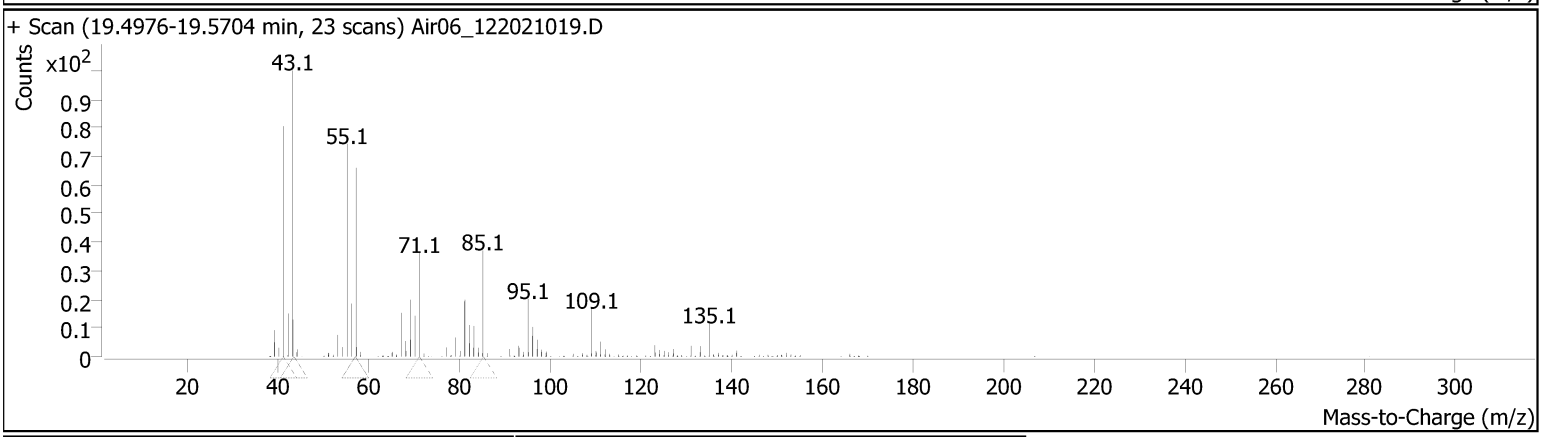


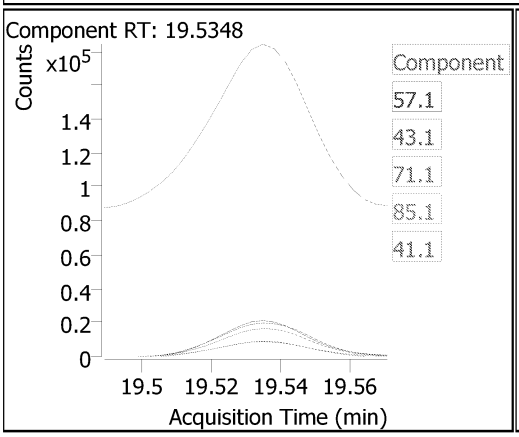


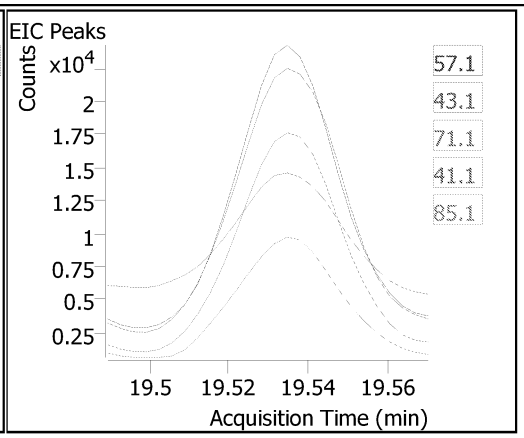
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.5348	Decane, 3,7-dimethyl-	397719.6	88.0	17312-54-8	C12H26	0.9384

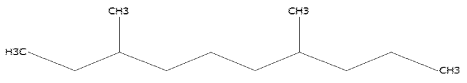








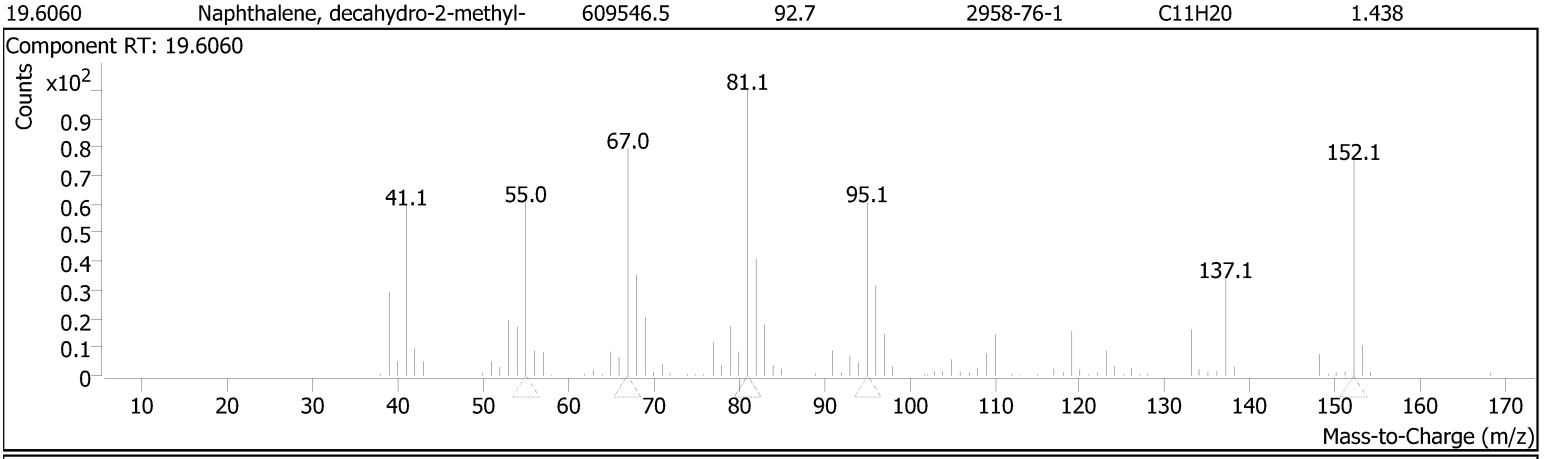


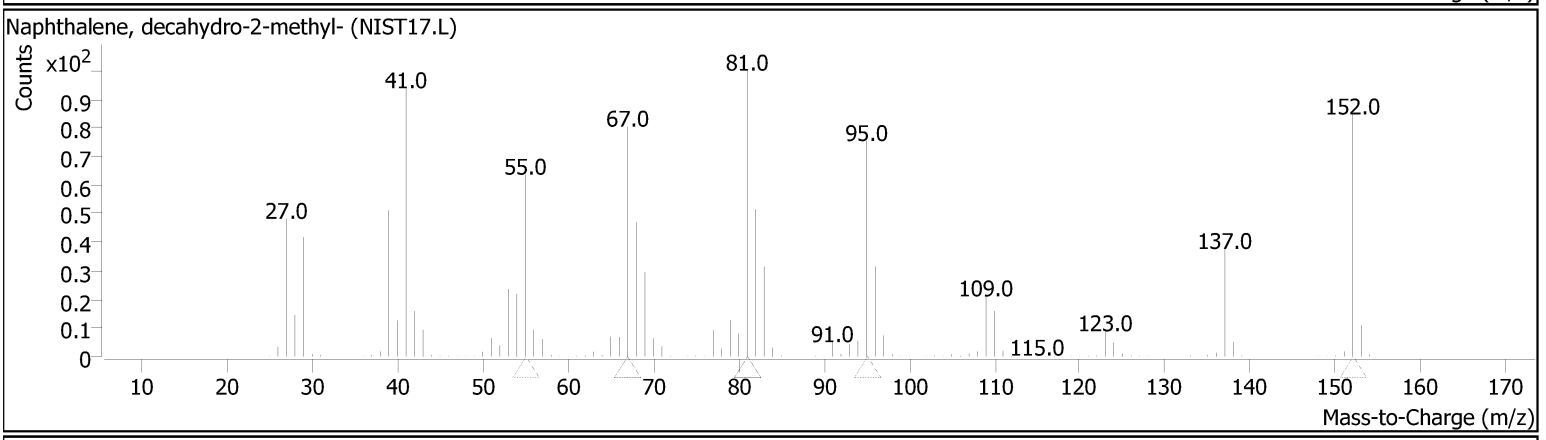


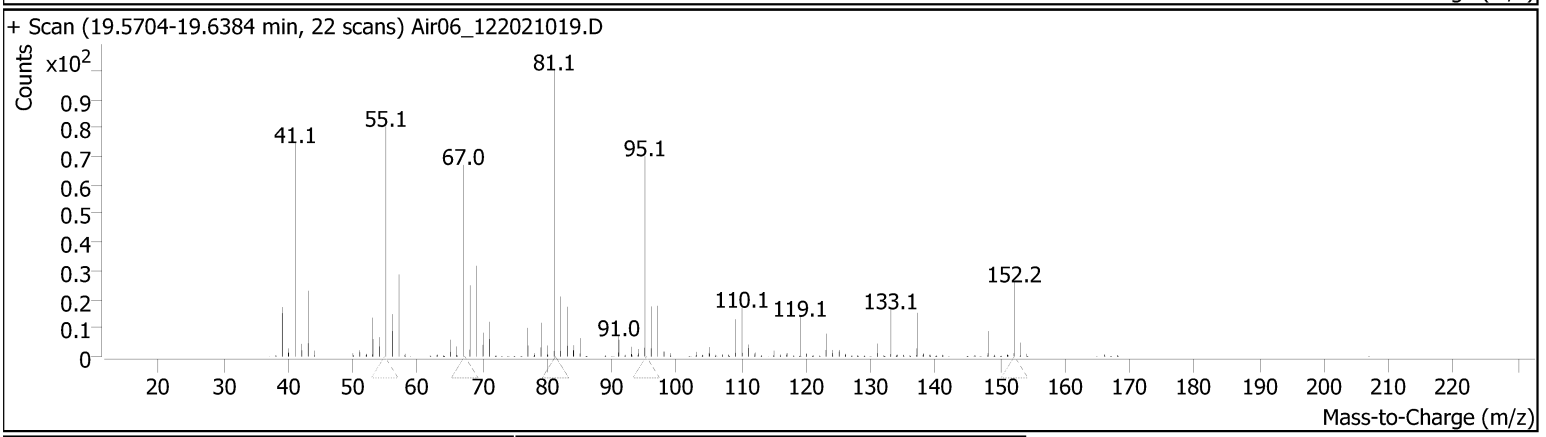
Library Search Results - NonTarget Hits with Details

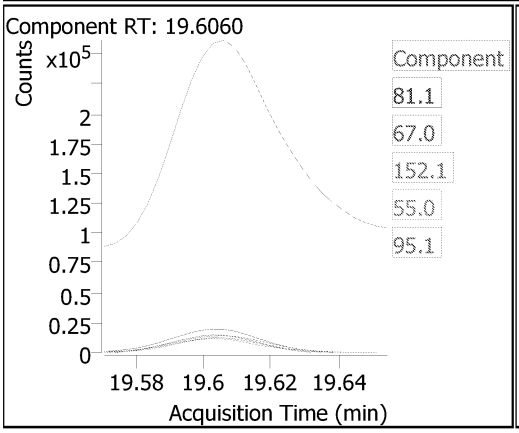
Agilent Technologies

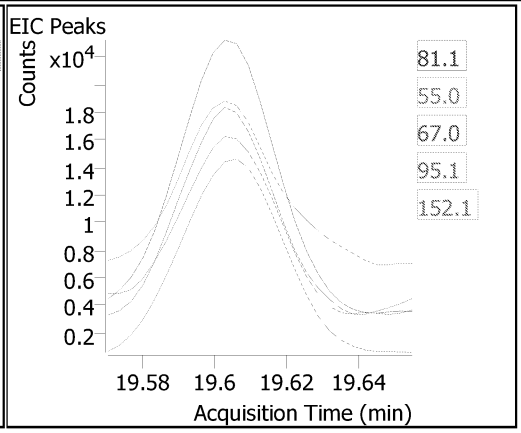
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.6060	Naphthalene, decahydro-2-methyl-	609546.5	92.7	2958-76-1	C11H20	1.438

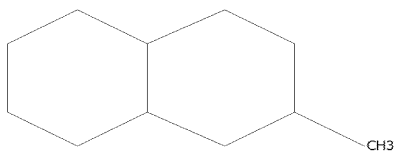




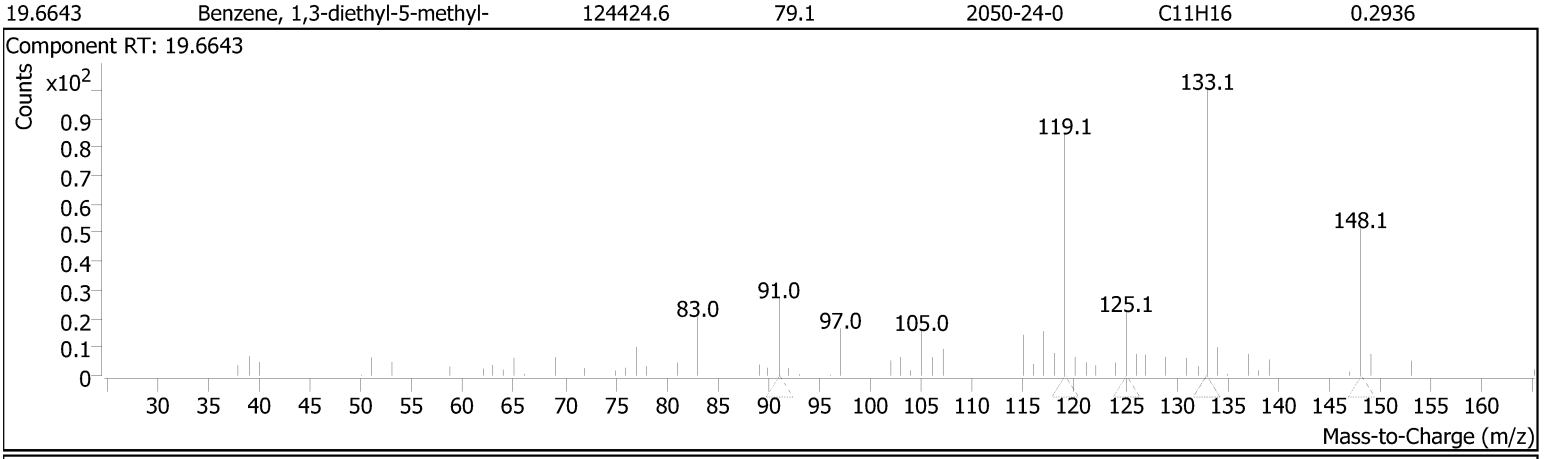


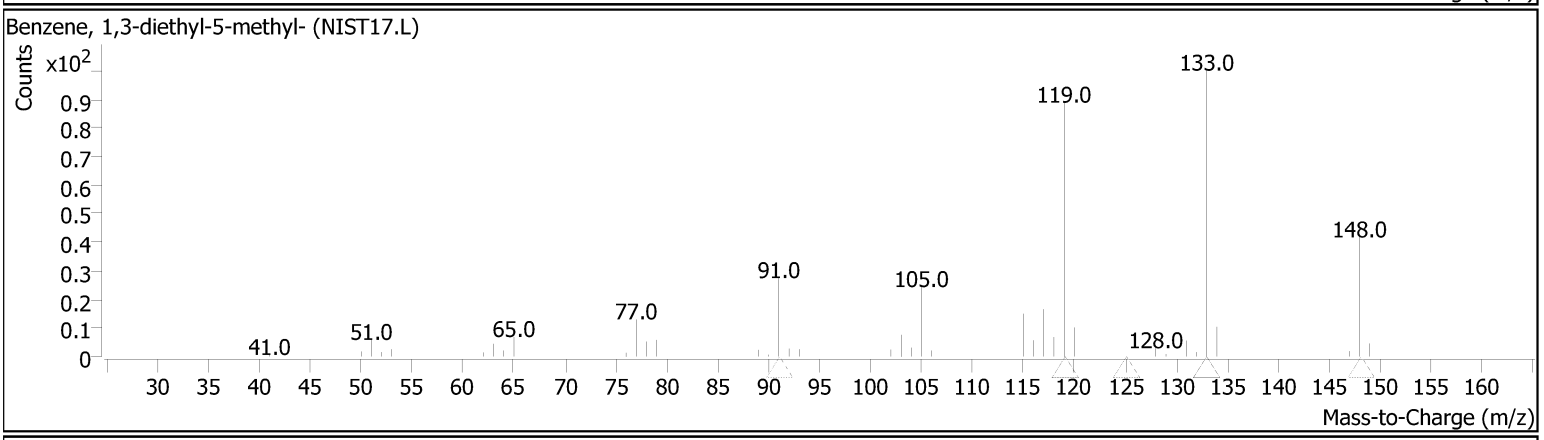


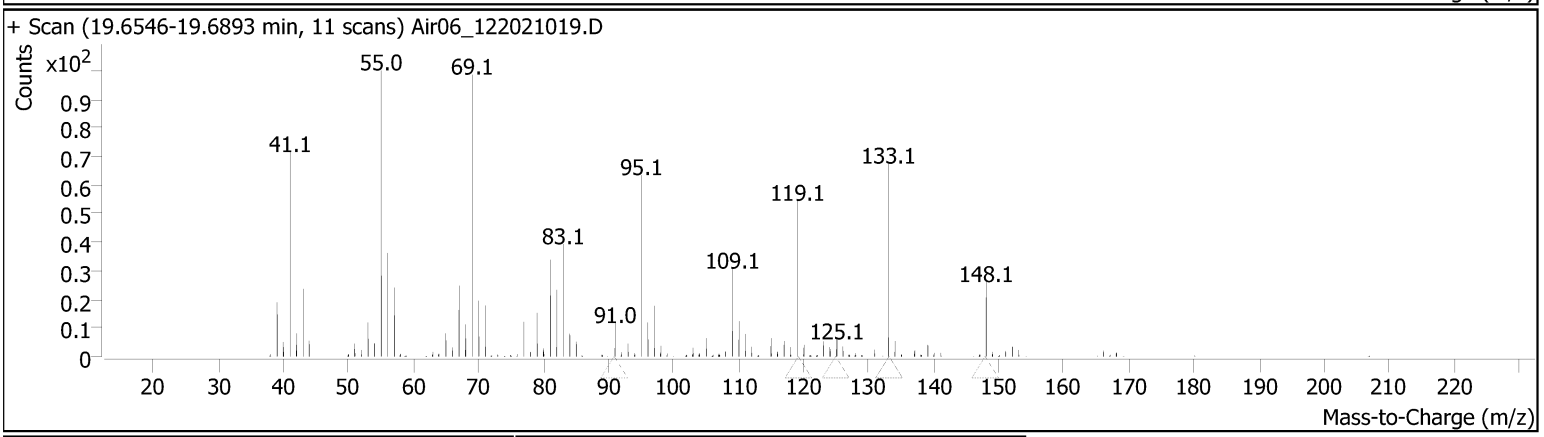


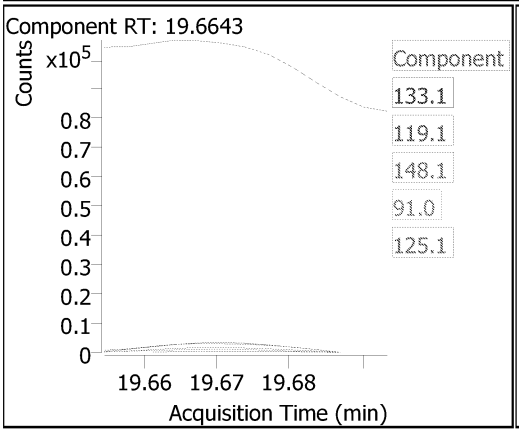


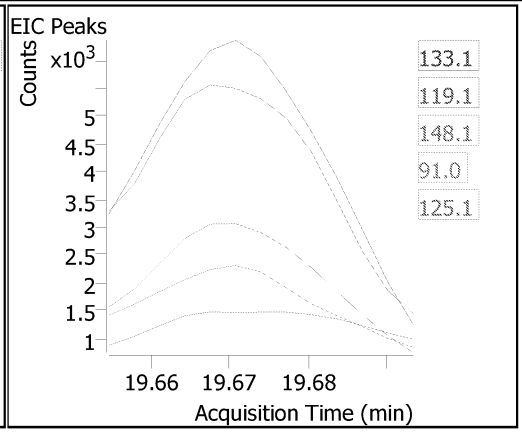
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.6643	Benzene, 1,3-diethyl-5-methyl-	124424.6	79.1	2050-24-0	C11H16	0.2936

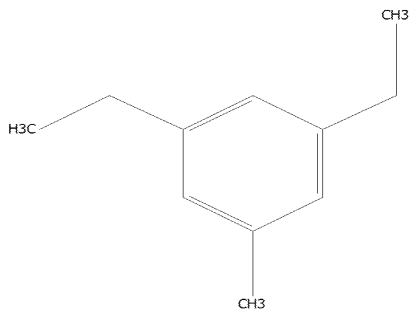




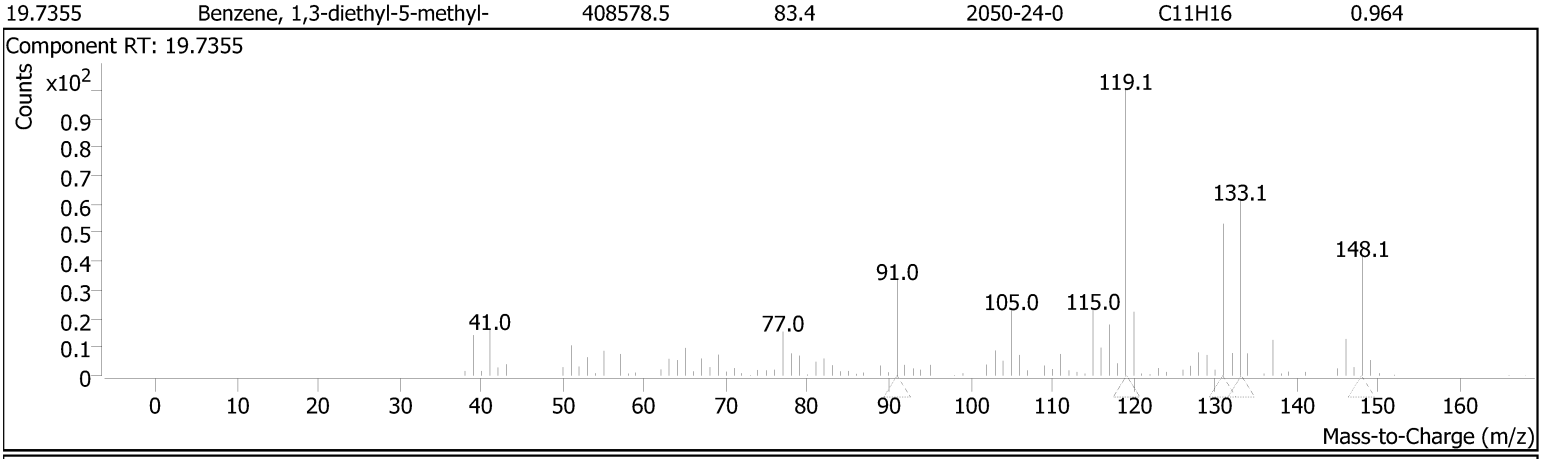


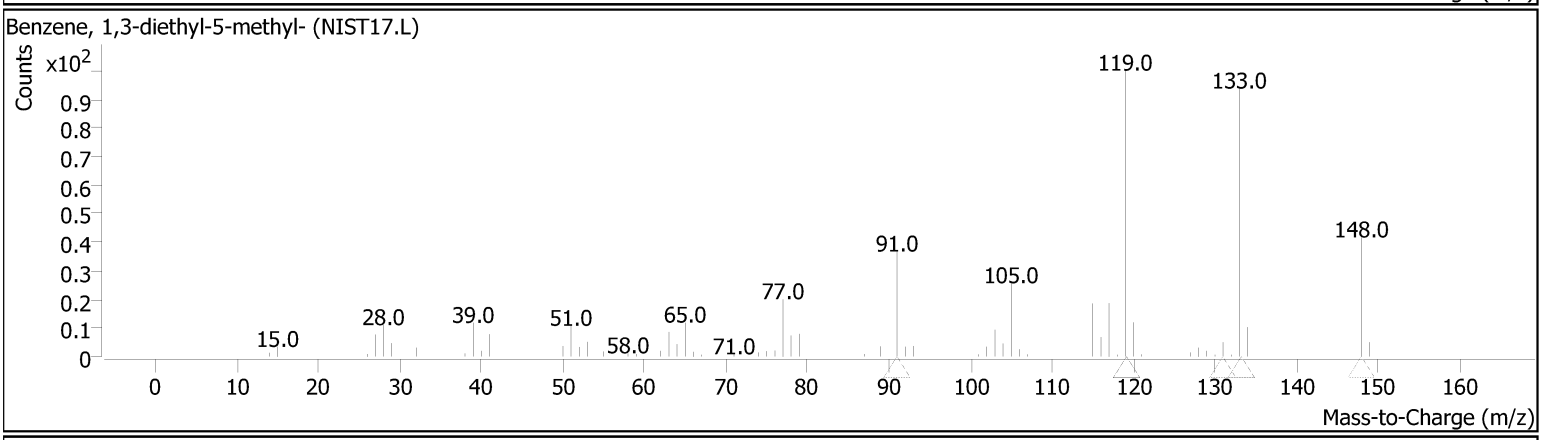


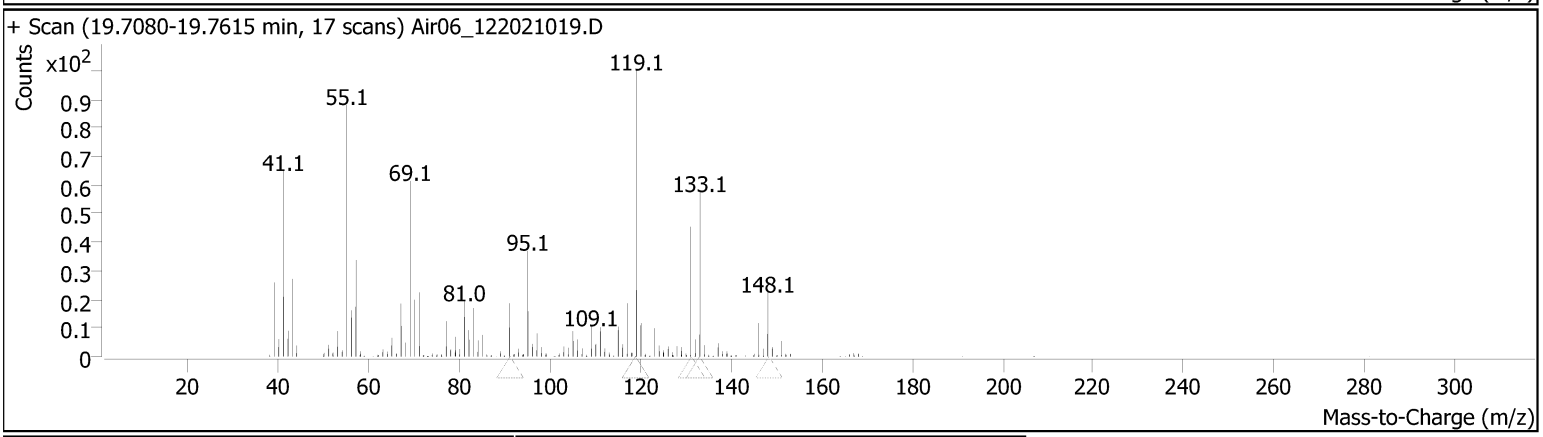


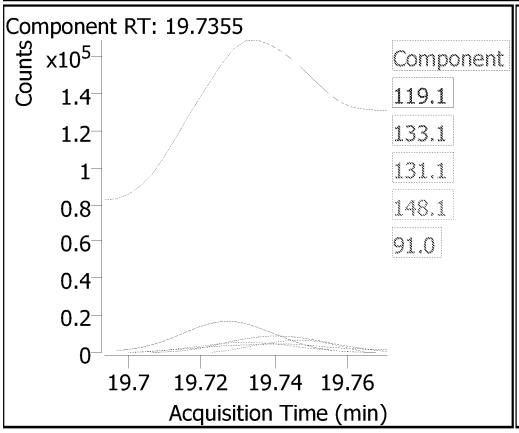


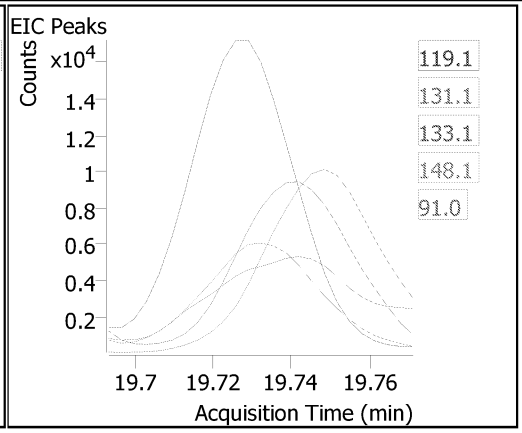
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.7355	Benzene, 1,3-diethyl-5-methyl-	408578.5	83.4	2050-24-0	C11H16	0.964

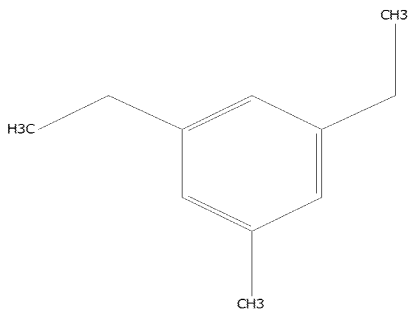




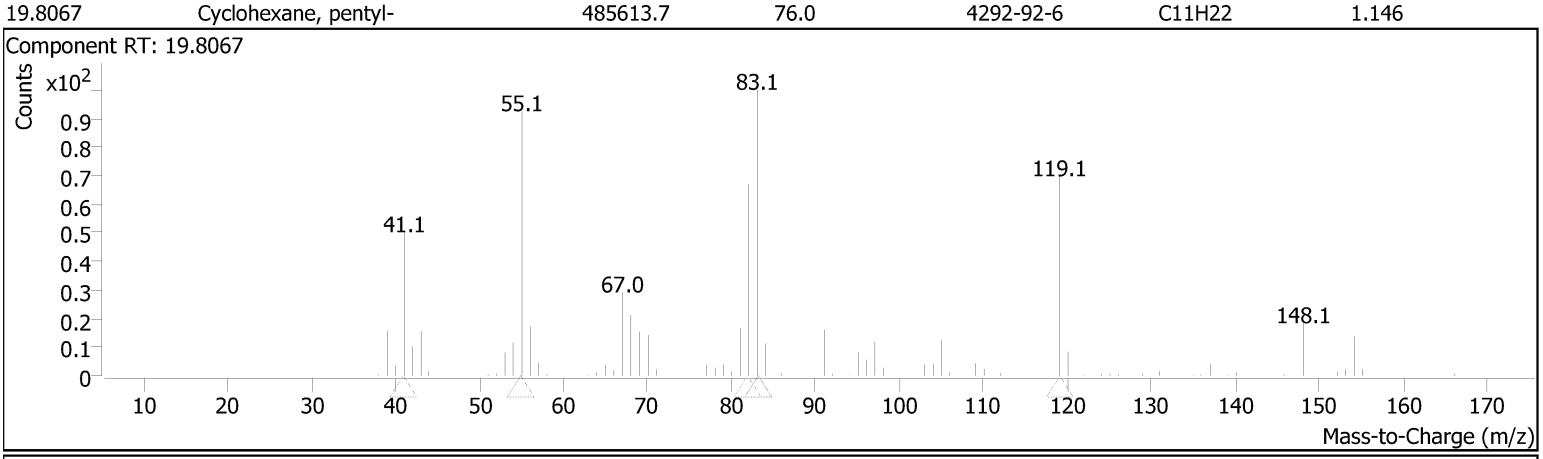


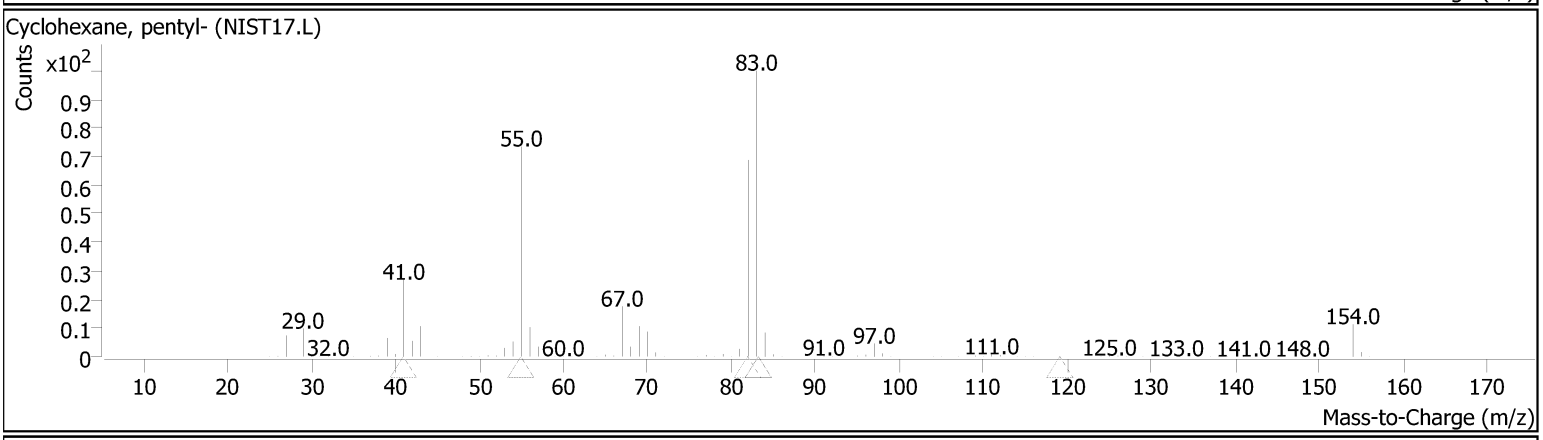


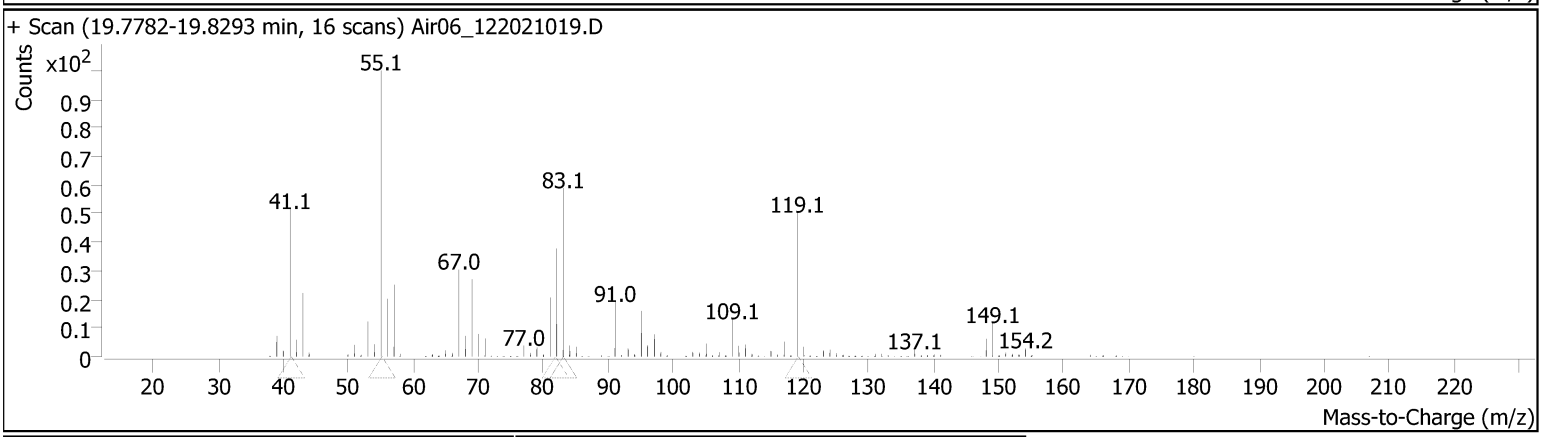


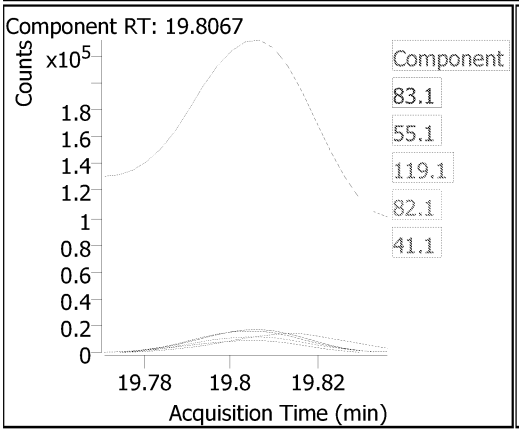


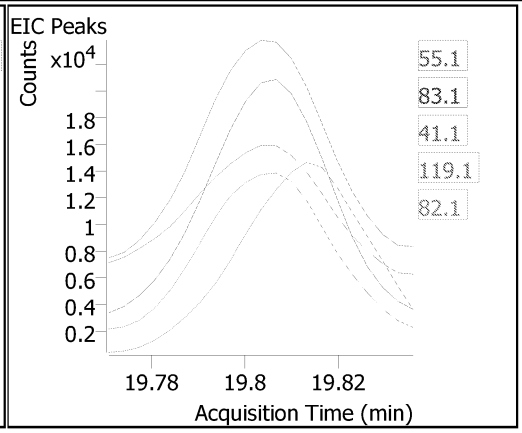
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.8067	Cyclohexane, pentyl-	485613.7	76.0	4292-92-6	C11H22	1.146

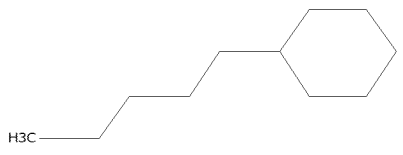








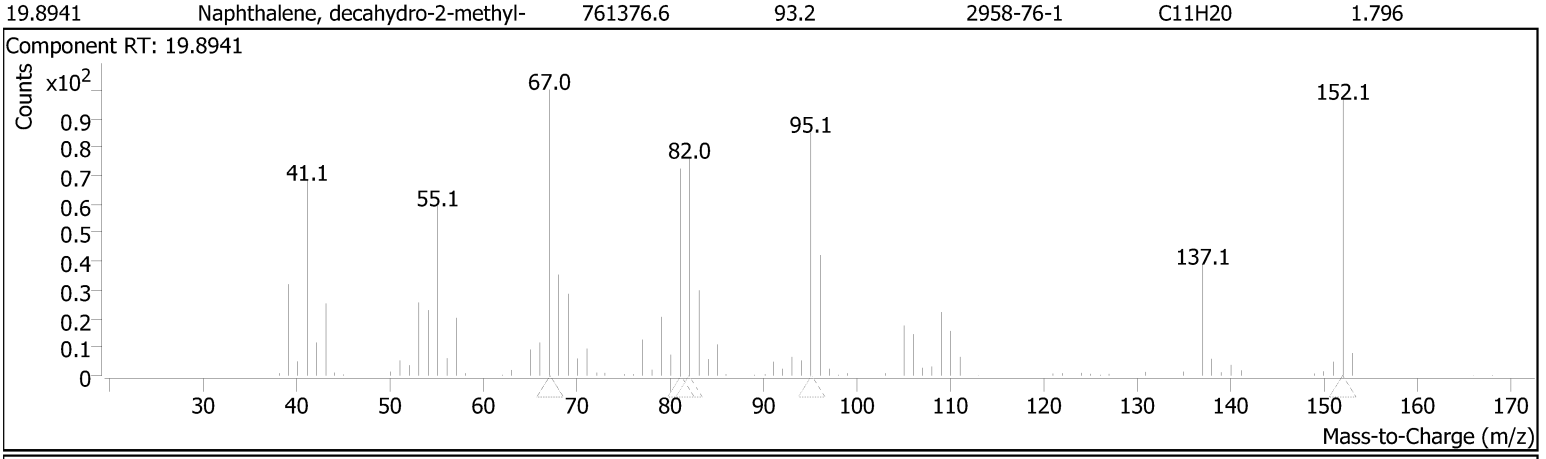


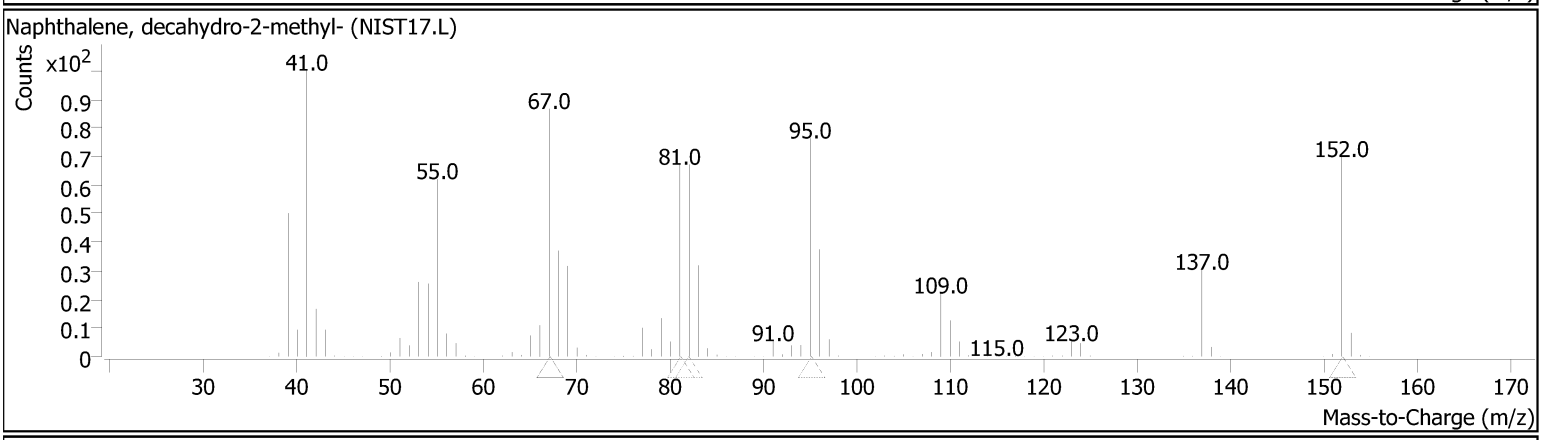


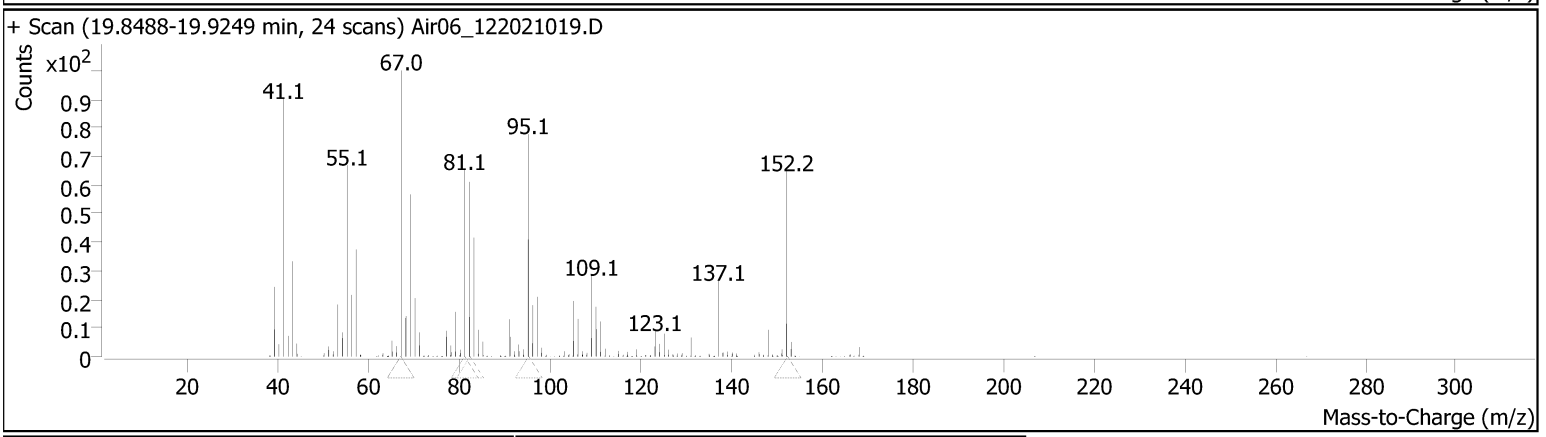
Library Search Results - NonTarget Hits with Details

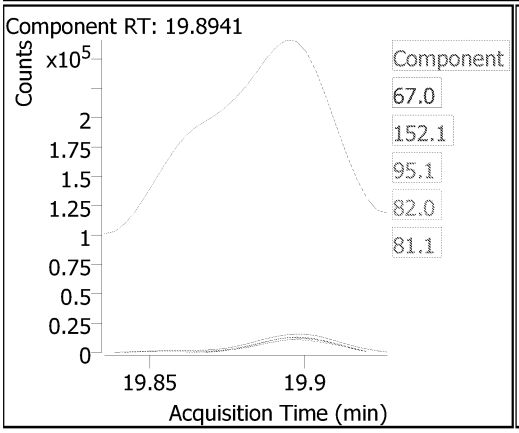
Agilent Technologies

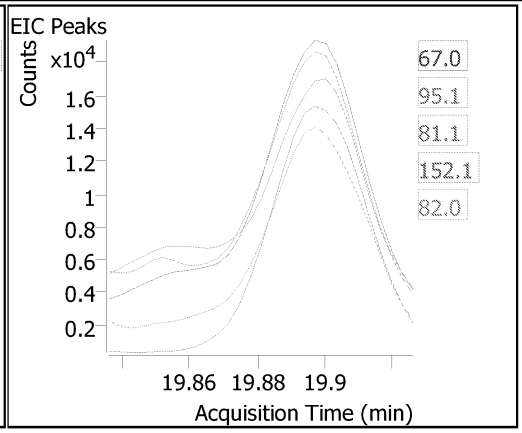
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.8941	Naphthalene, decahydro-2-methyl-	761376.6	93.2	2958-76-1	C11H20	1.796

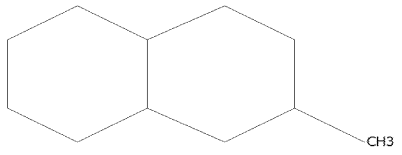








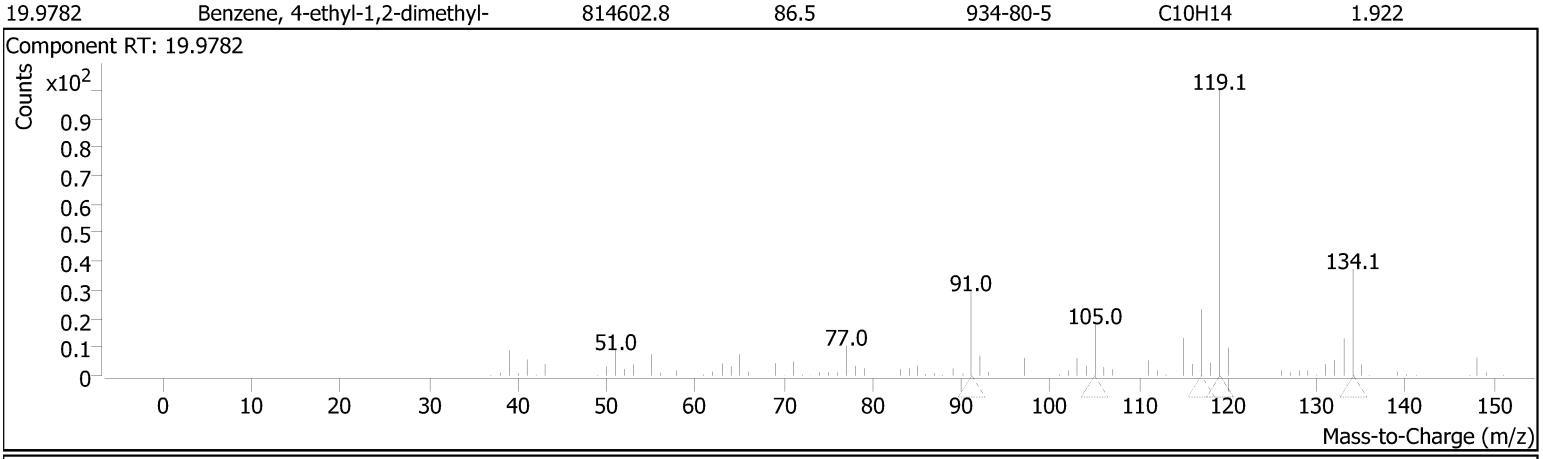


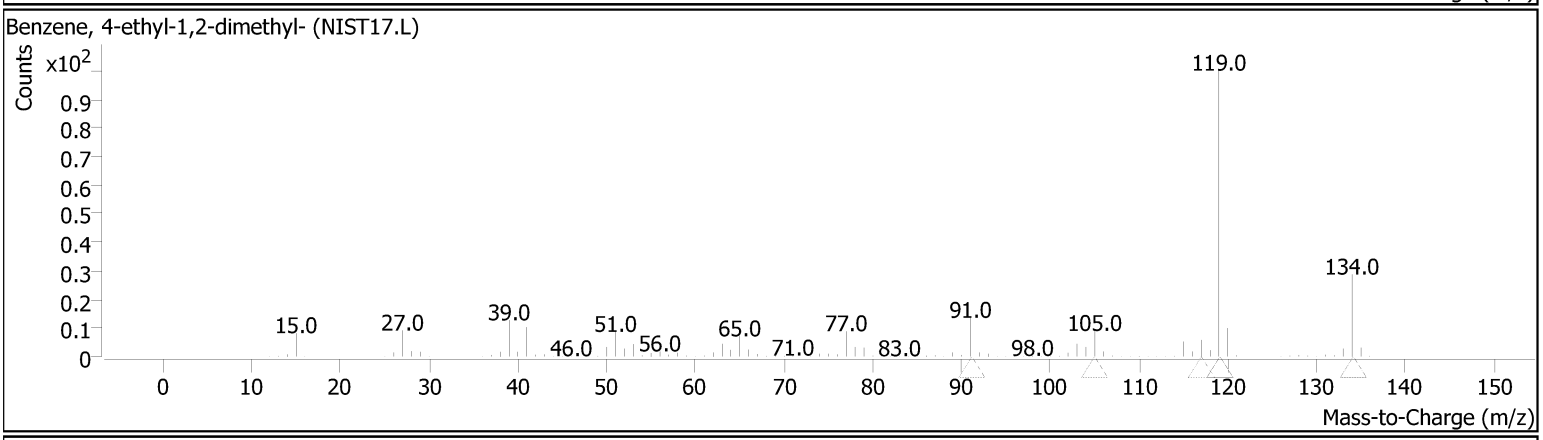


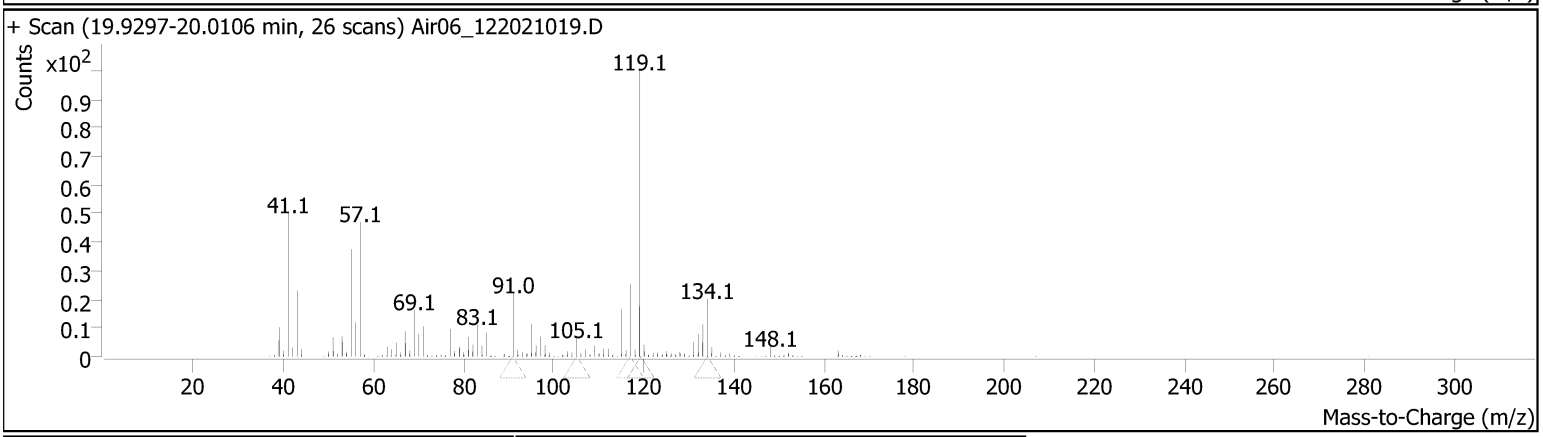
Library Search Results - NonTarget Hits with Details

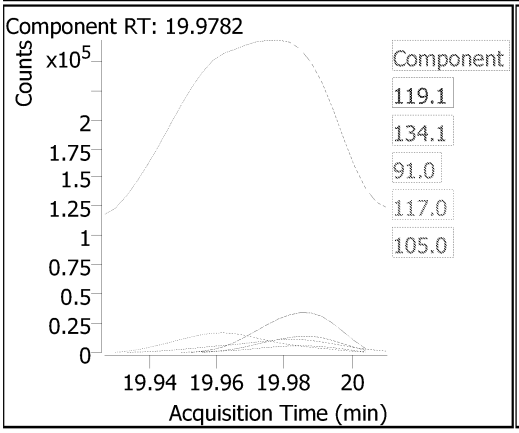
Agilent Technologies

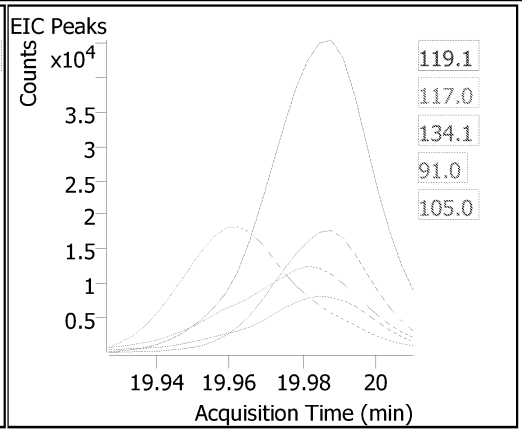
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.9782	Benzene, 4-ethyl-1,2-dimethyl-	814602.8	86.5	934-80-5	C10H14	1.922

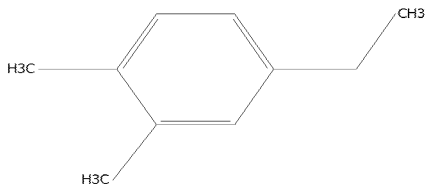




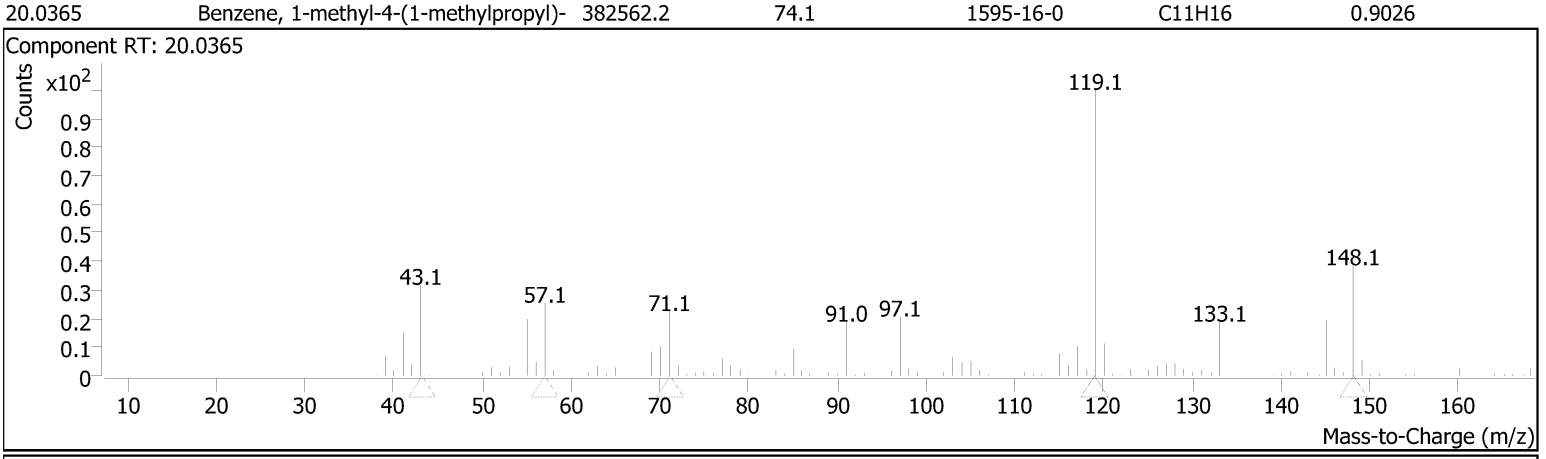


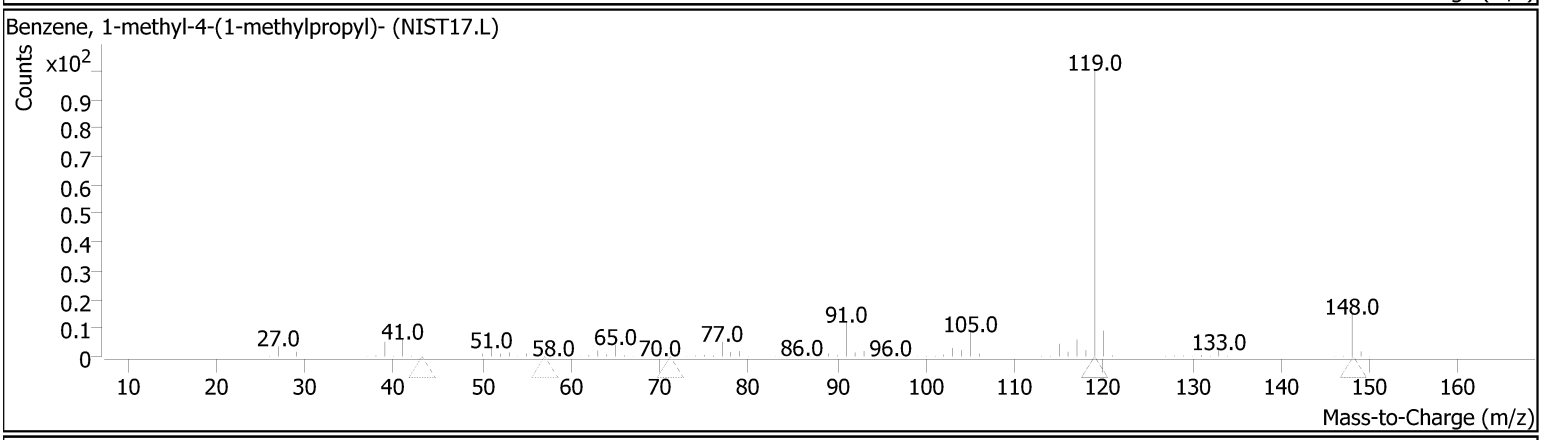


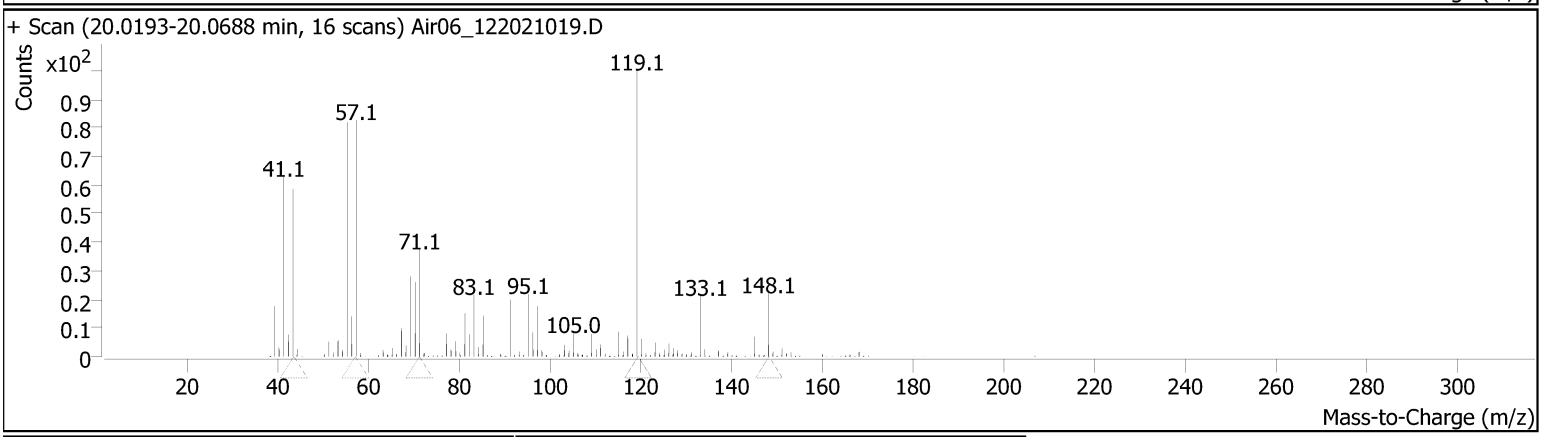


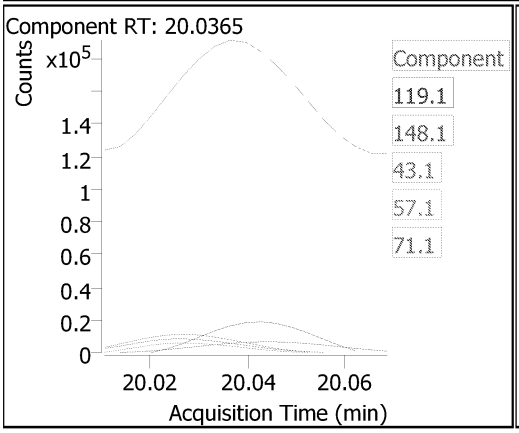


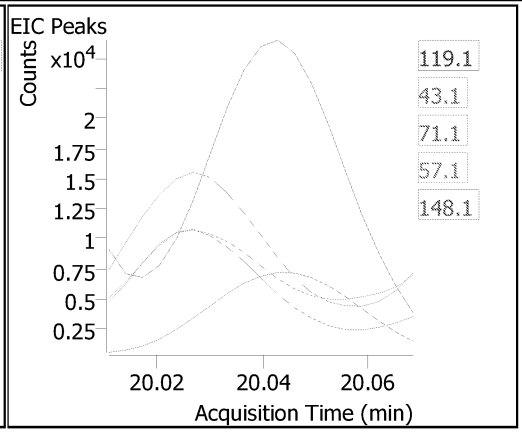
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.0365	Benzene, 1-methyl-4-(1-methylpropyl)-	382562.2	74.1	1595-16-0	C11H16	0.9026

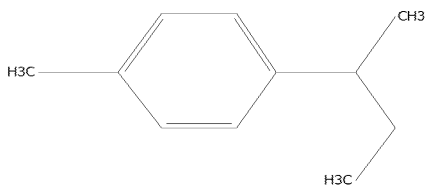




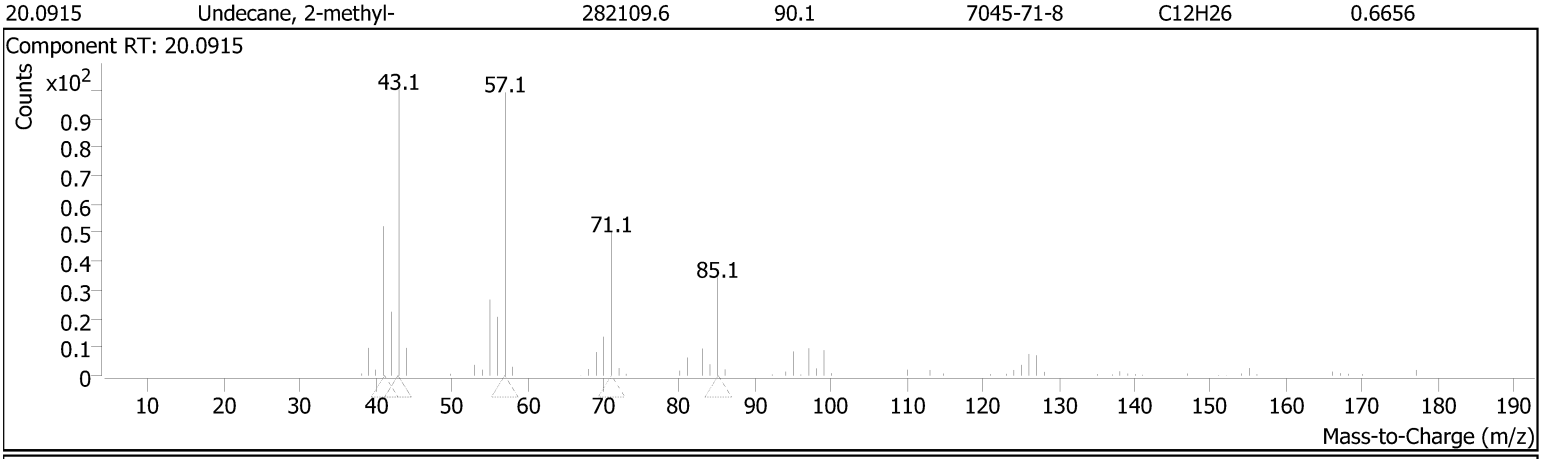


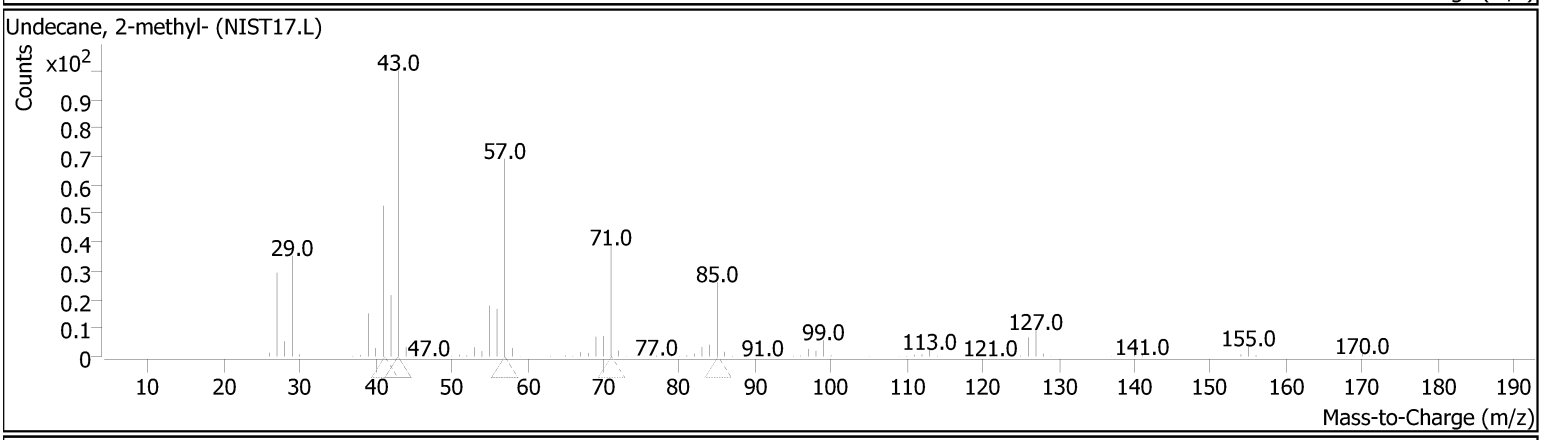


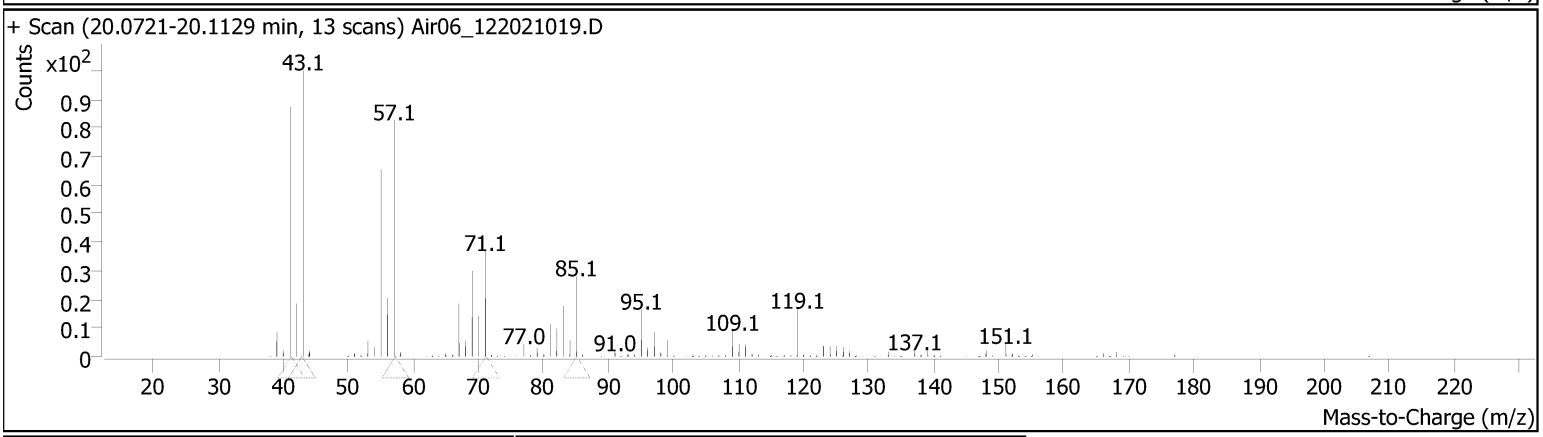


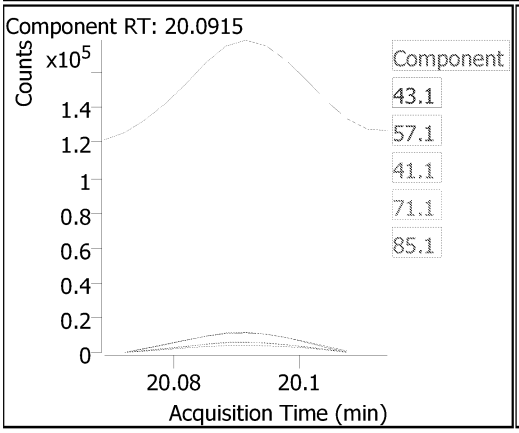


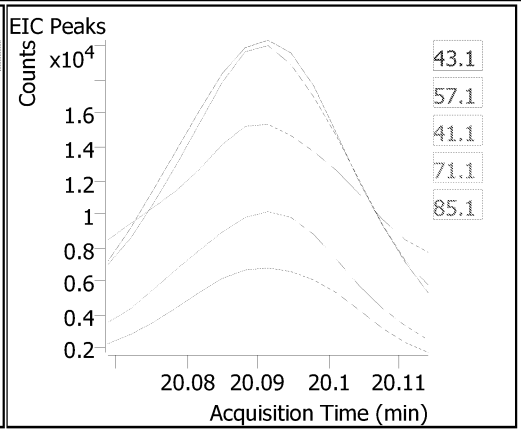
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.0915	Undecane, 2-methyl-	282109.6	90.1	7045-71-8	C12H26	0.6656





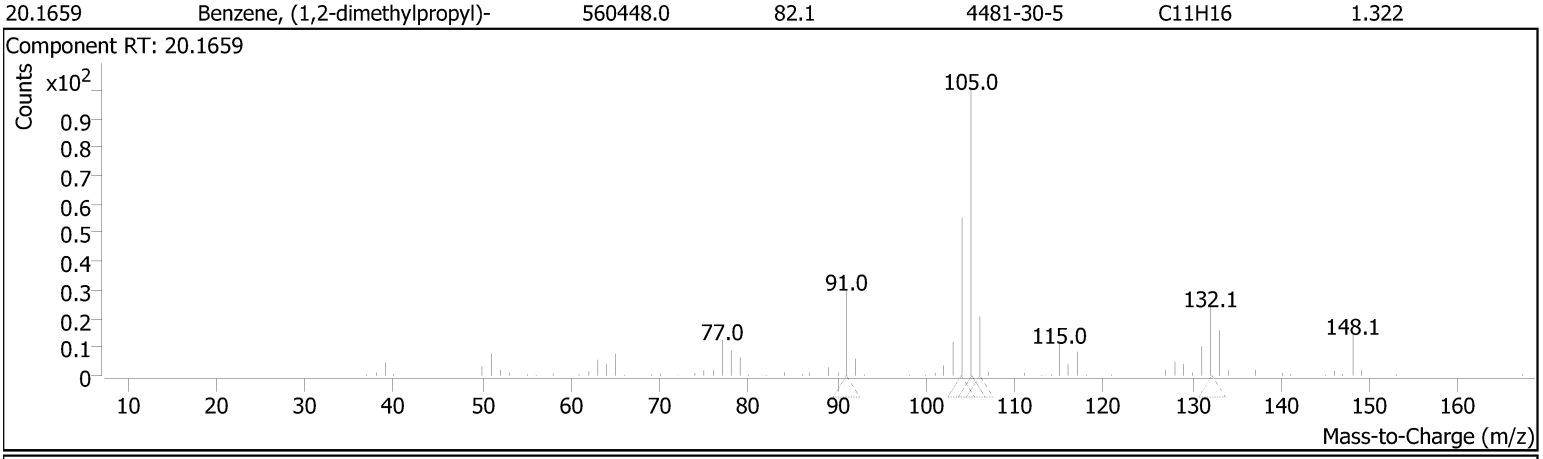


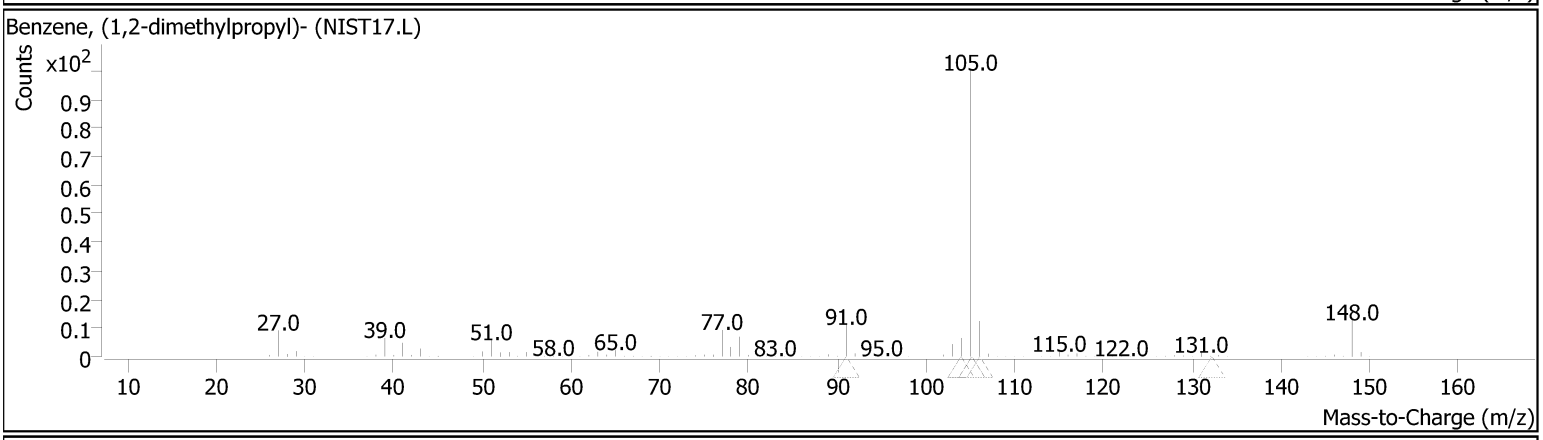


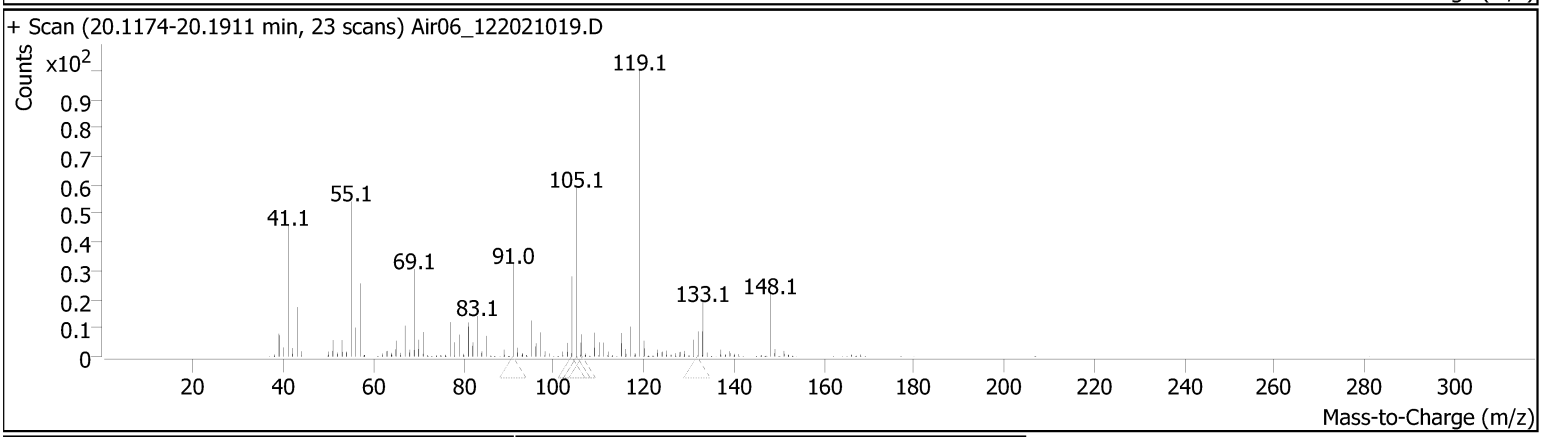


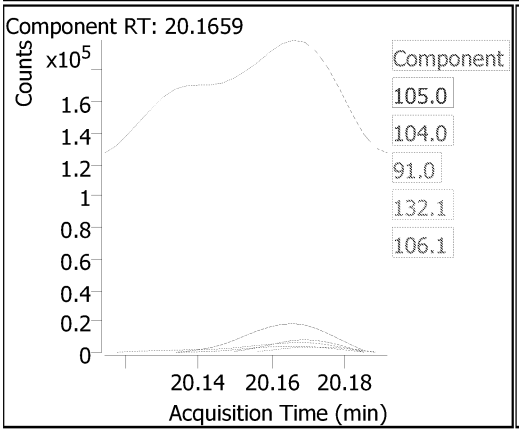


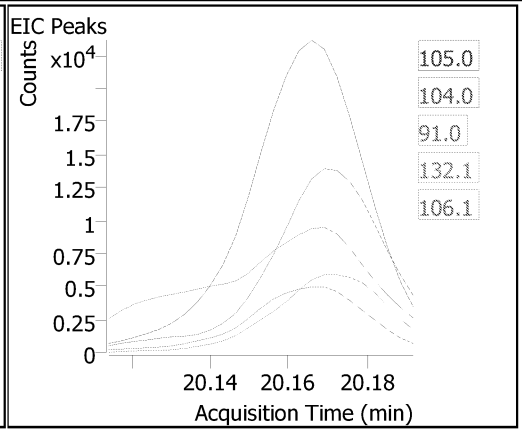
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.1659	Benzene, (1,2-dimethylpropyl)-	560448.0	82.1	4481-30-5	C11H16	1.322

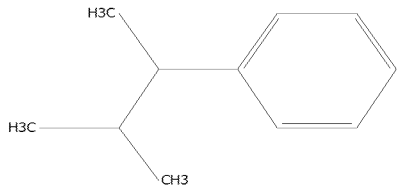








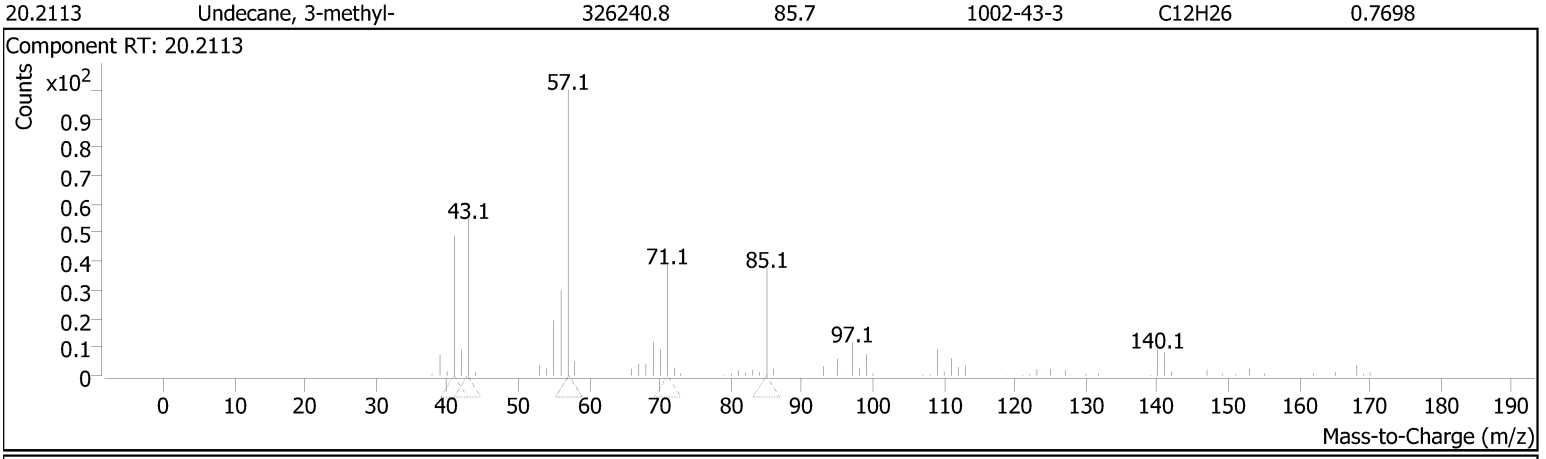


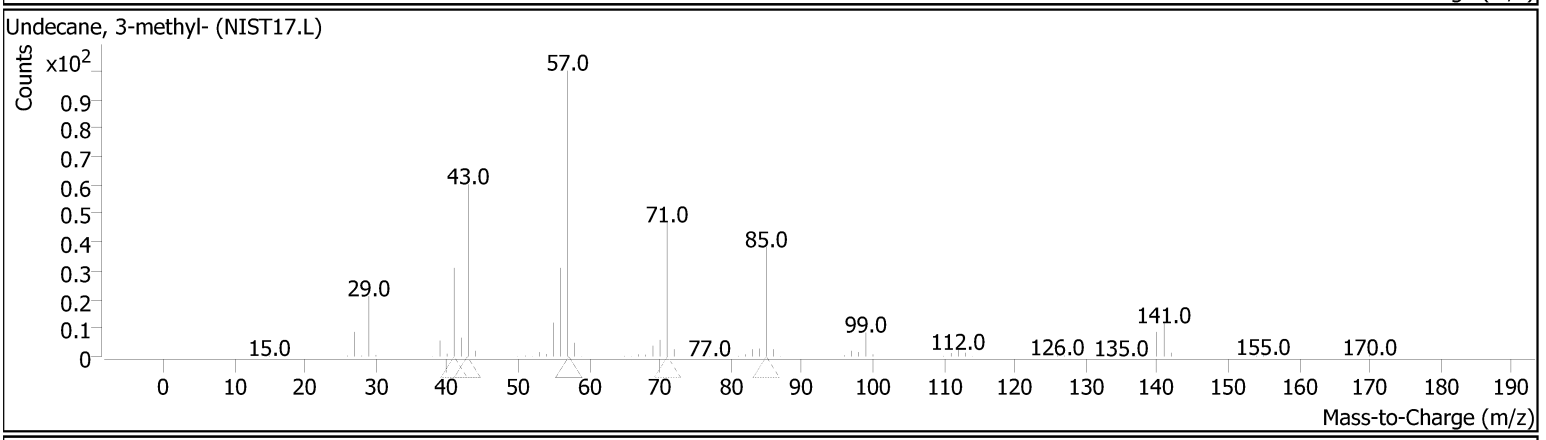


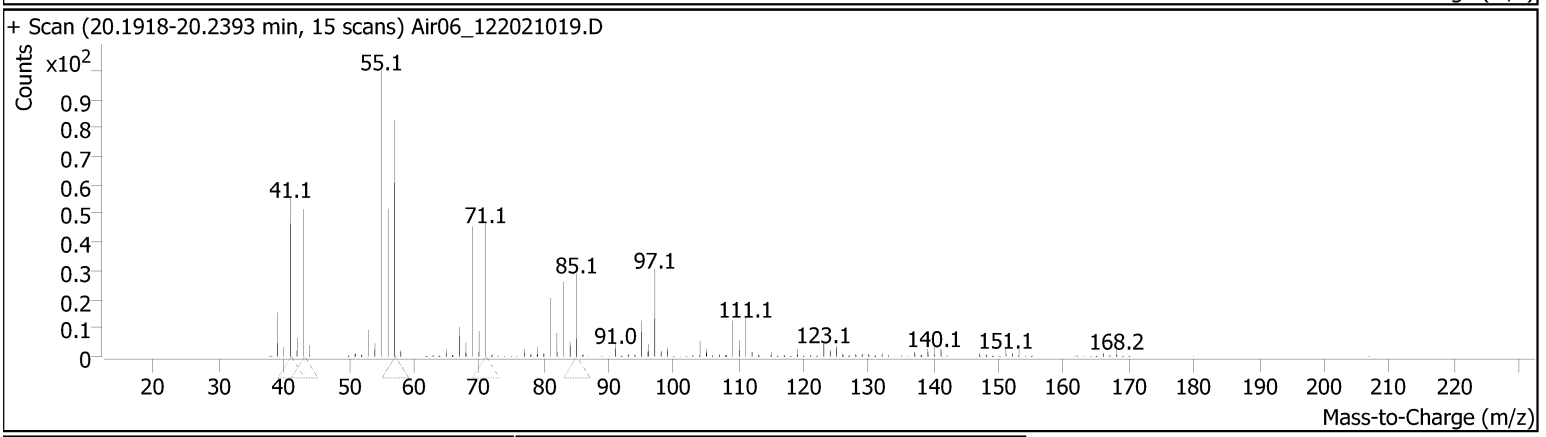
Library Search Results - NonTarget Hits with Details

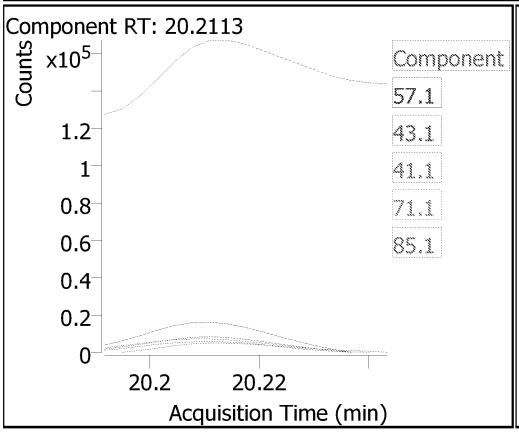
Agilent Technologies

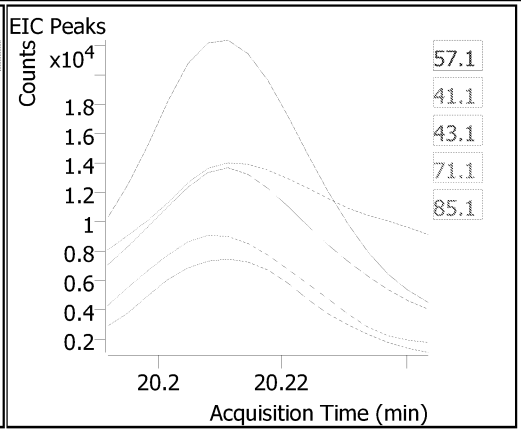
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.2113	Undecane, 3-methyl-	326240.8	85.7	1002-43-3	C12H26	0.7698

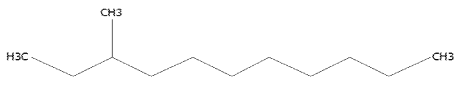




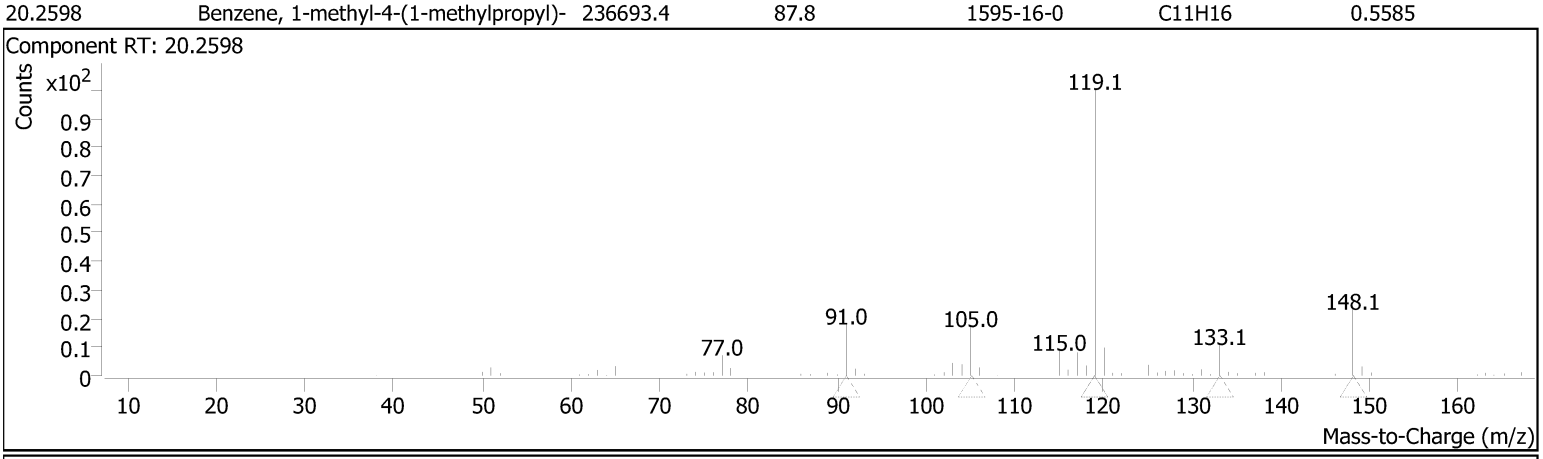


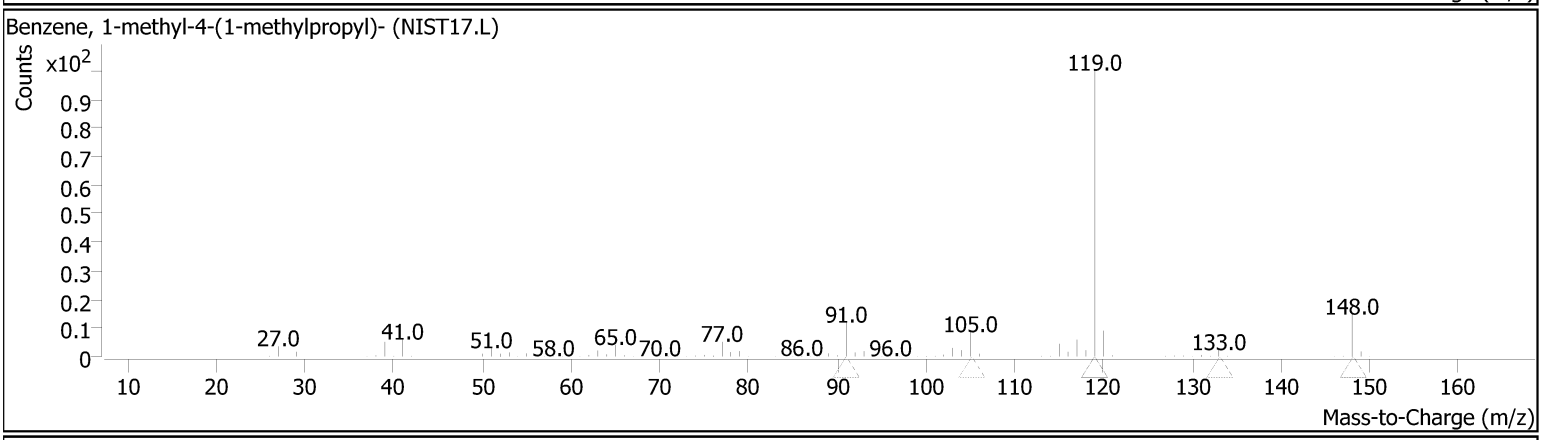


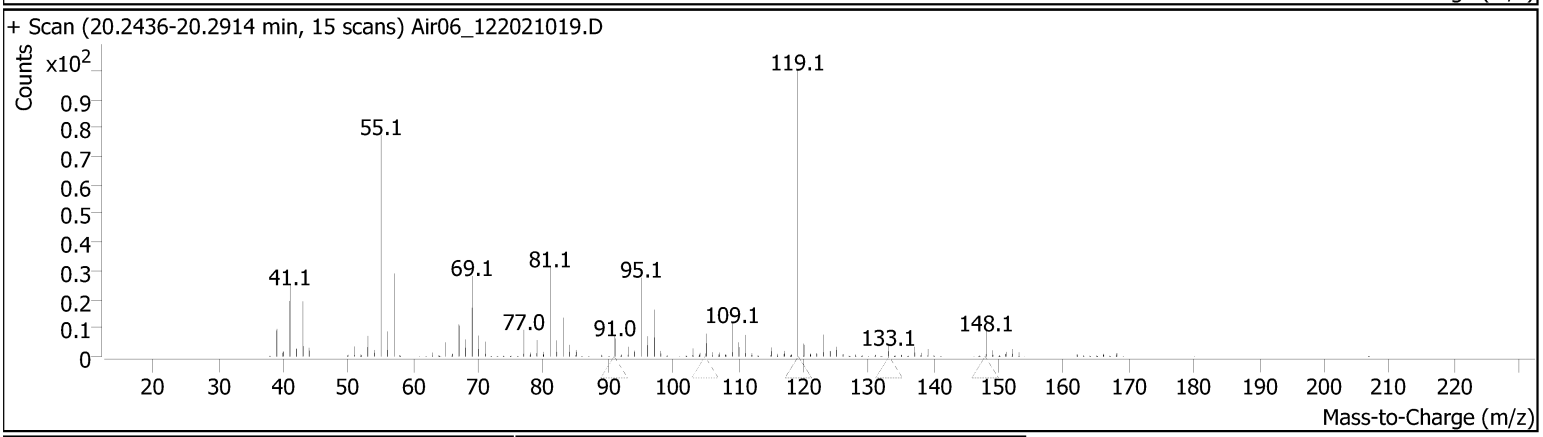


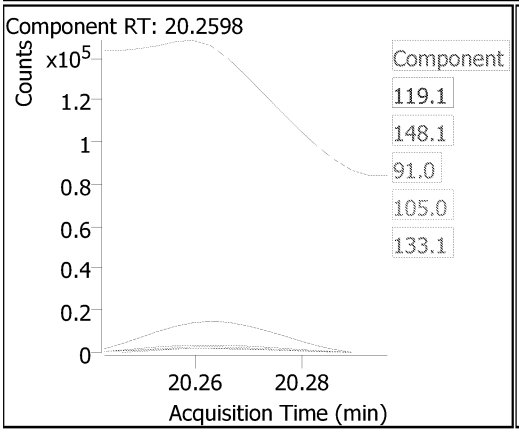


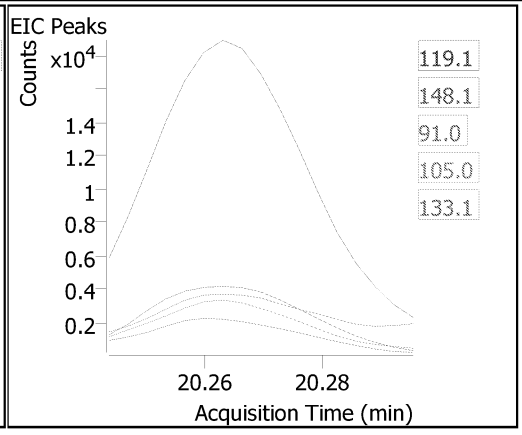
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.2598	Benzene, 1-methyl-4-(1-methylpropyl)-	236693.4	87.8	1595-16-0	C11H16	0.5585

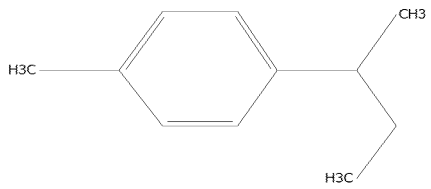








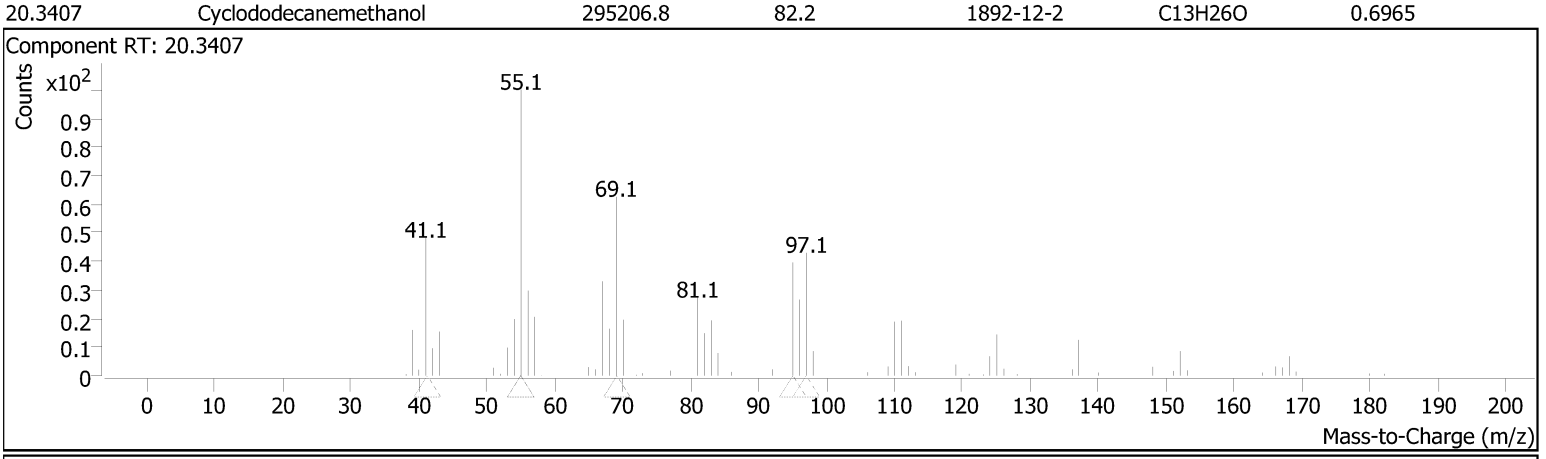


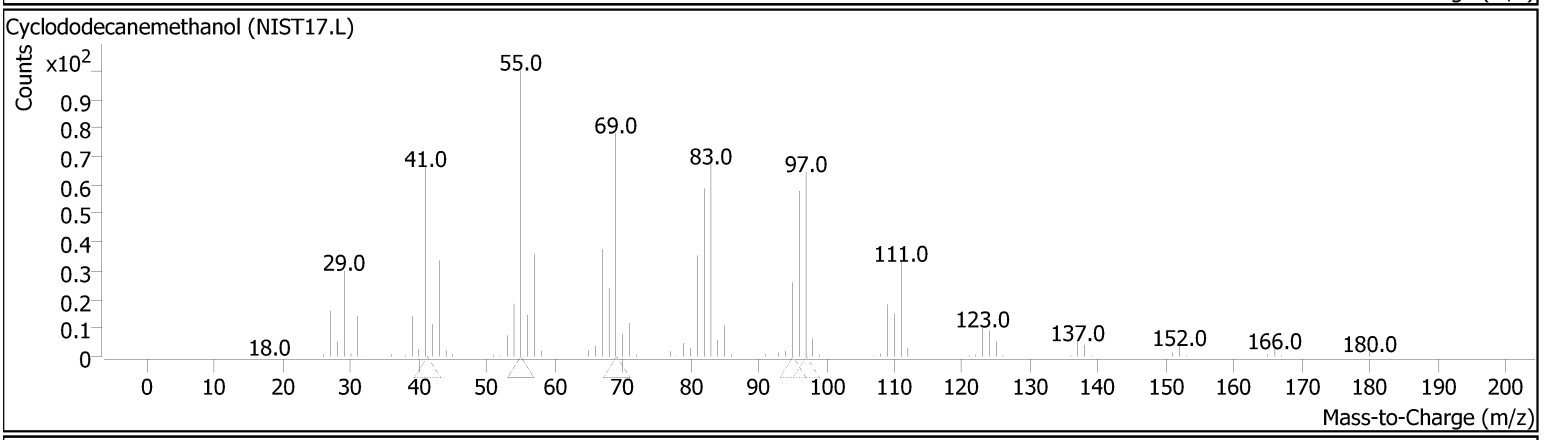


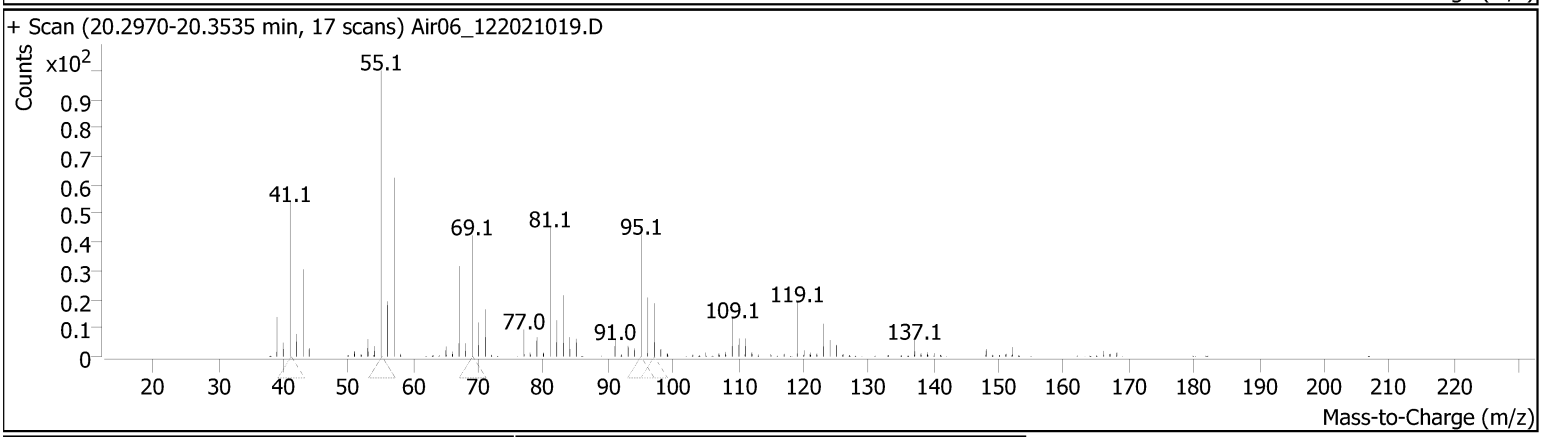
Library Search Results - NonTarget Hits with Details

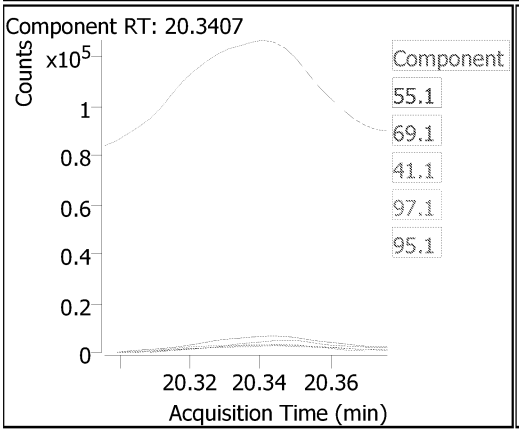
Agilent Technologies

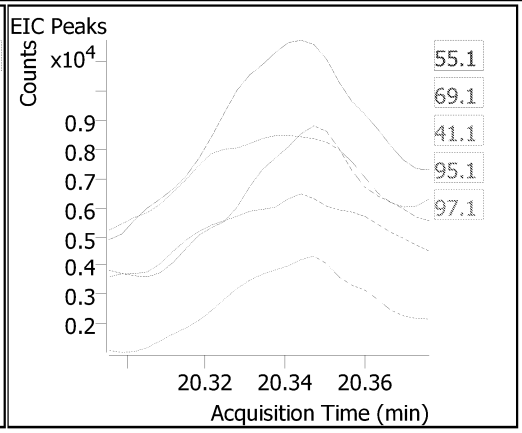
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.3407	Cyclododecanemethanol	295206.8	82.2	1892-12-2	C13H26O	0.6965

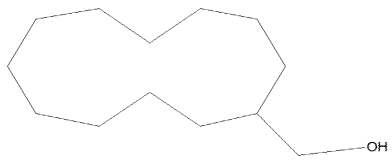








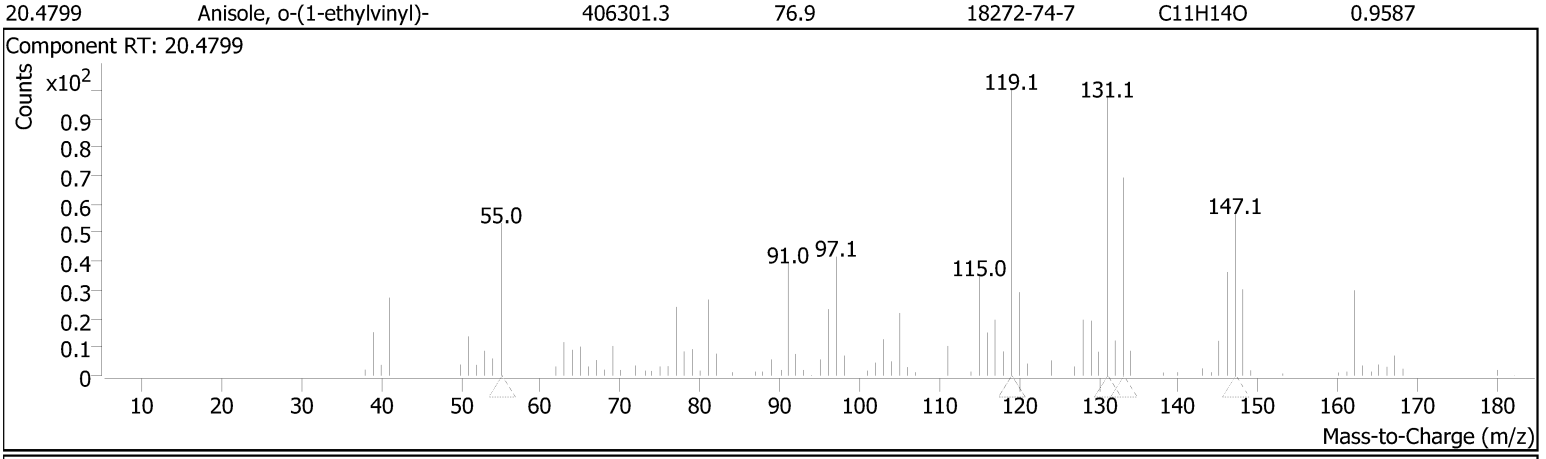


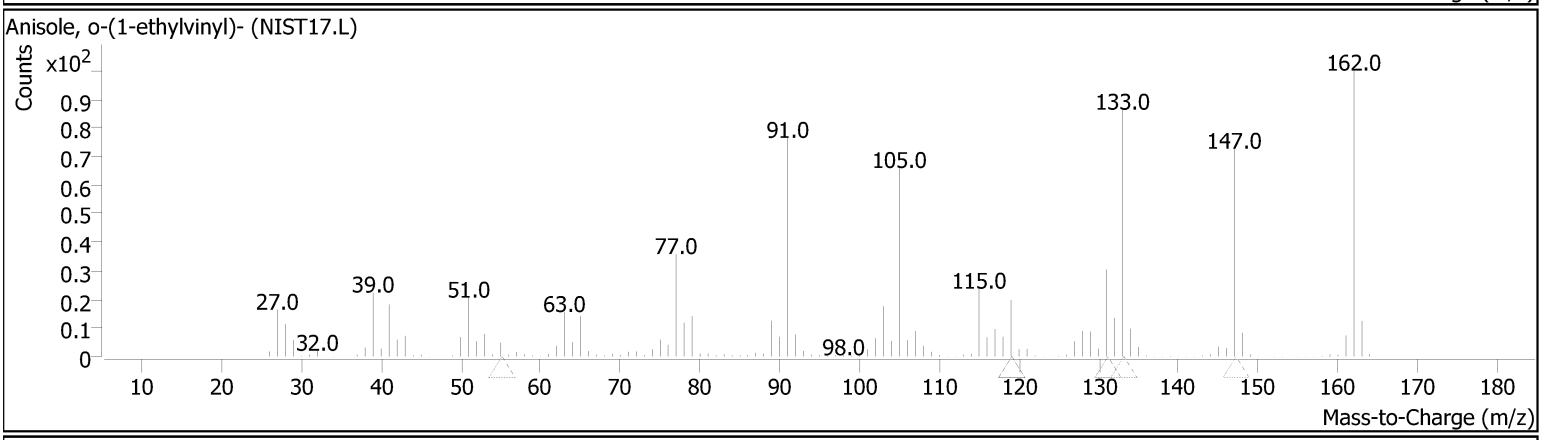


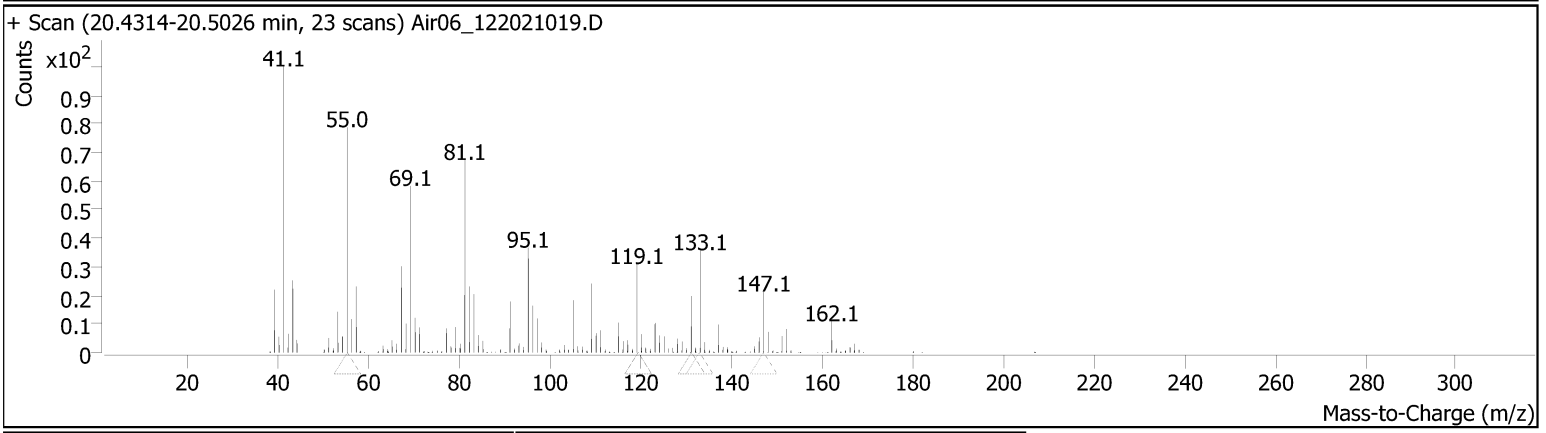
Library Search Results - NonTarget Hits with Details

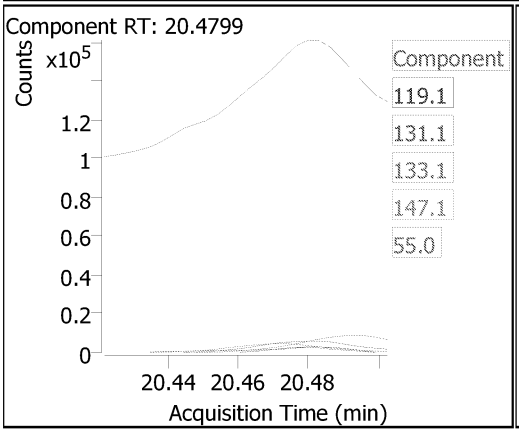
Agilent Technologies

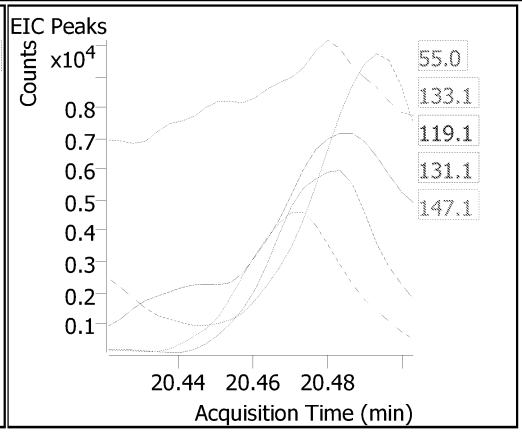
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.4799	Anisole, o-(1-ethylvinyl)-	406301.3	76.9	18272-74-7	C11H14O	0.9587

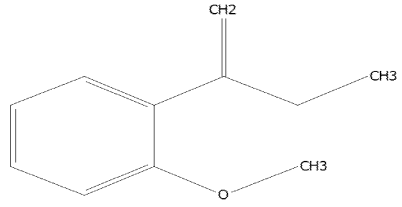




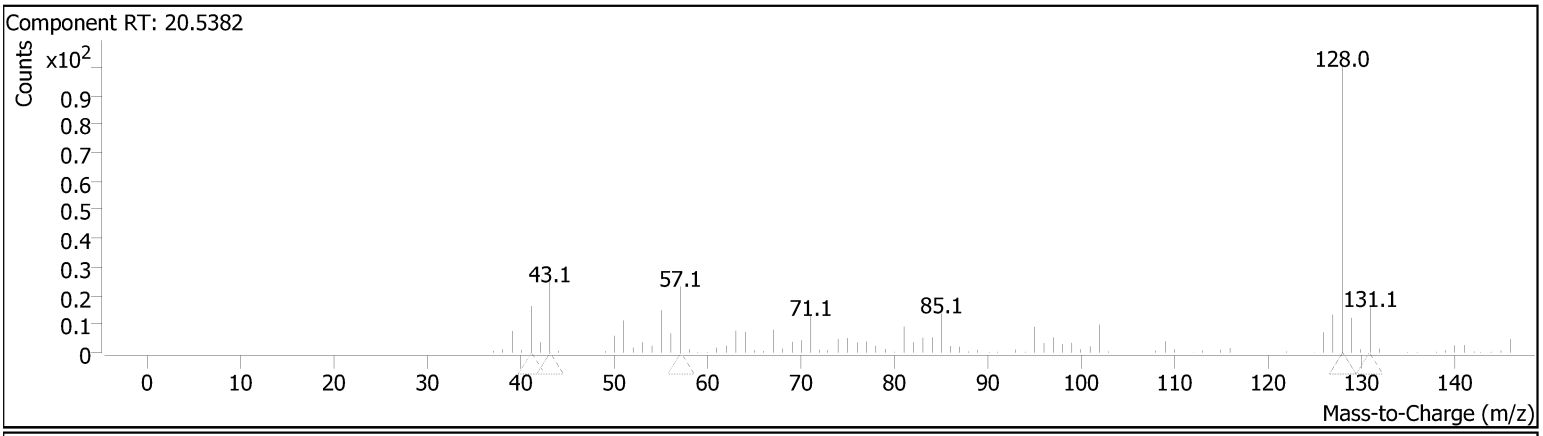


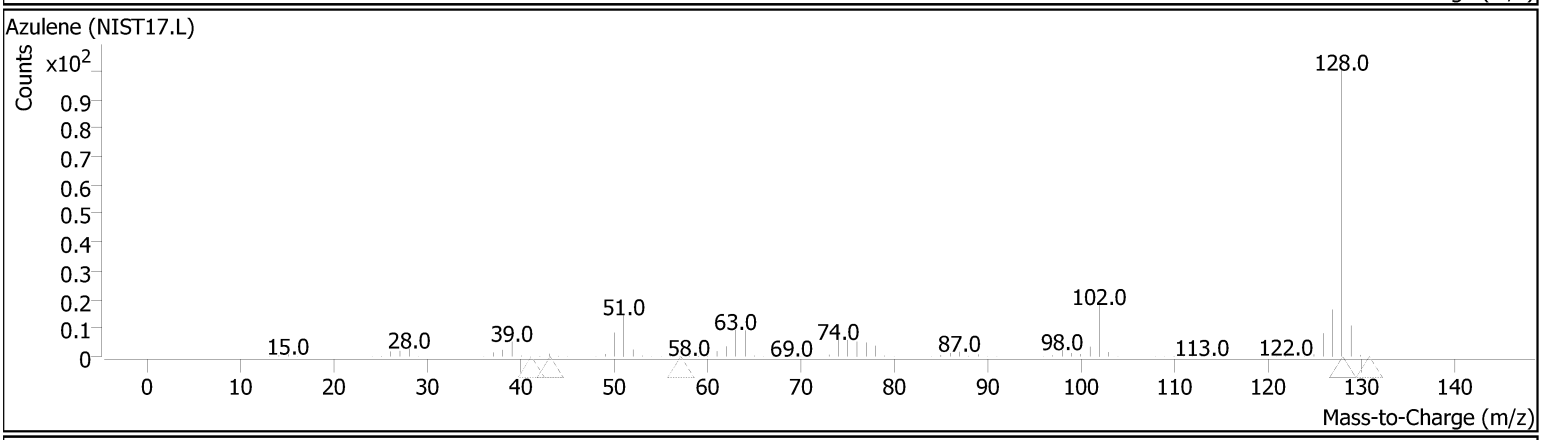


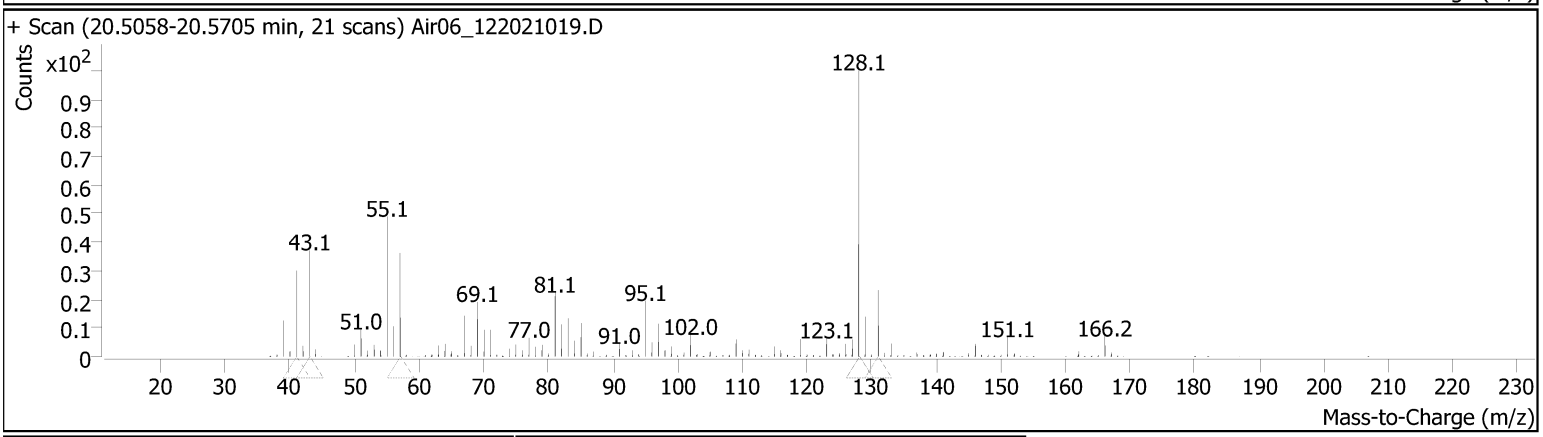


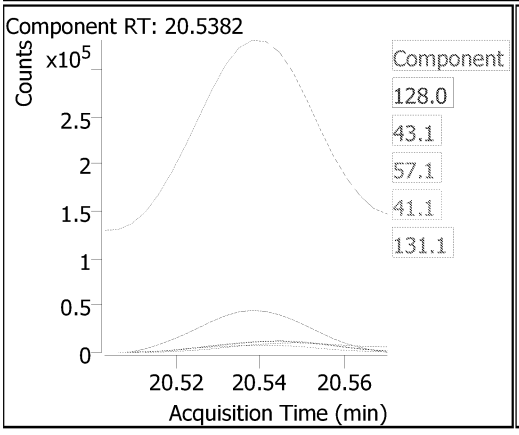


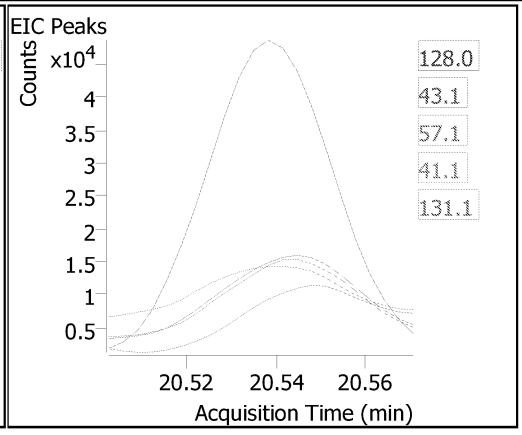
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.5382	Azulene	735677.1	70.1	275-51-4	C10H8	1.736

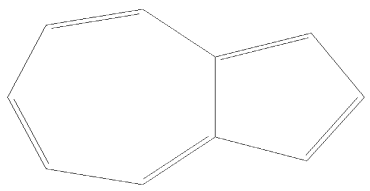




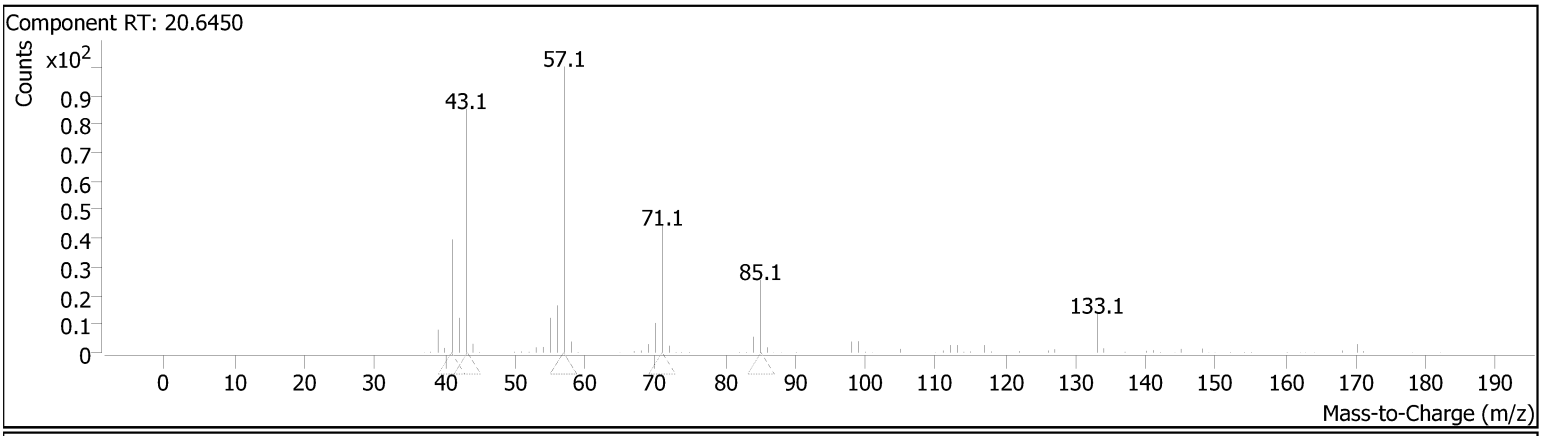


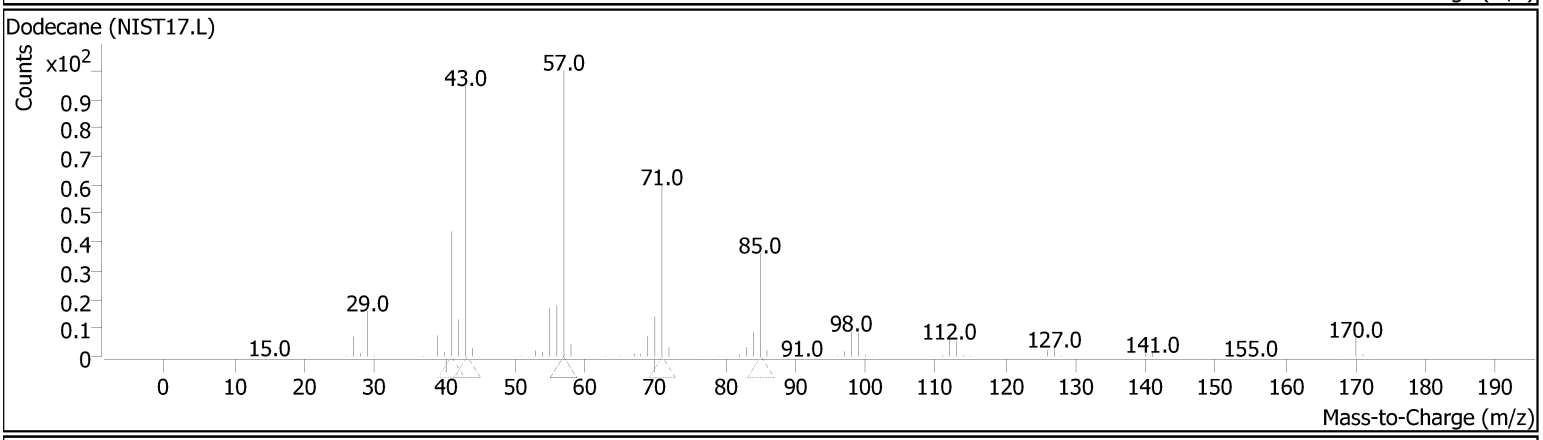


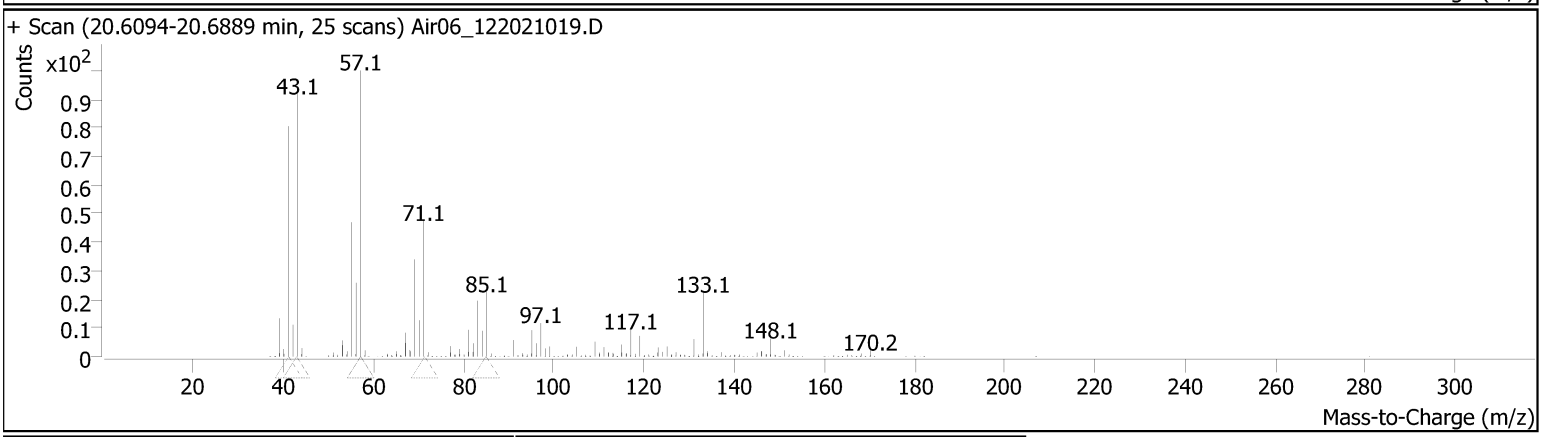


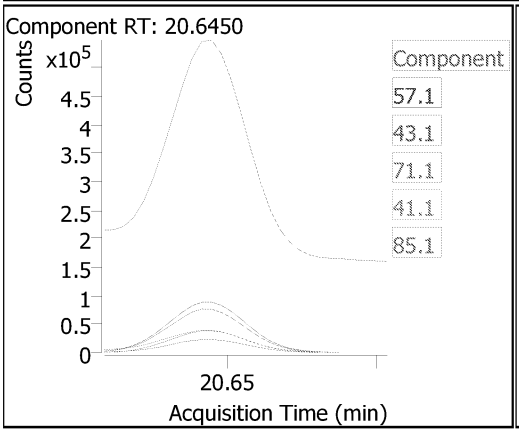


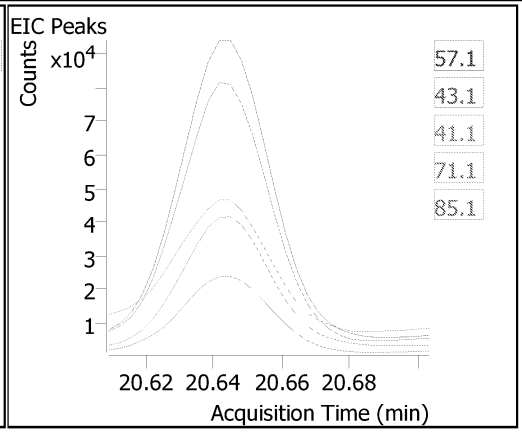
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.6450	Dodecane	1386807.8	87.8	112-40-3	C12H26	3.272









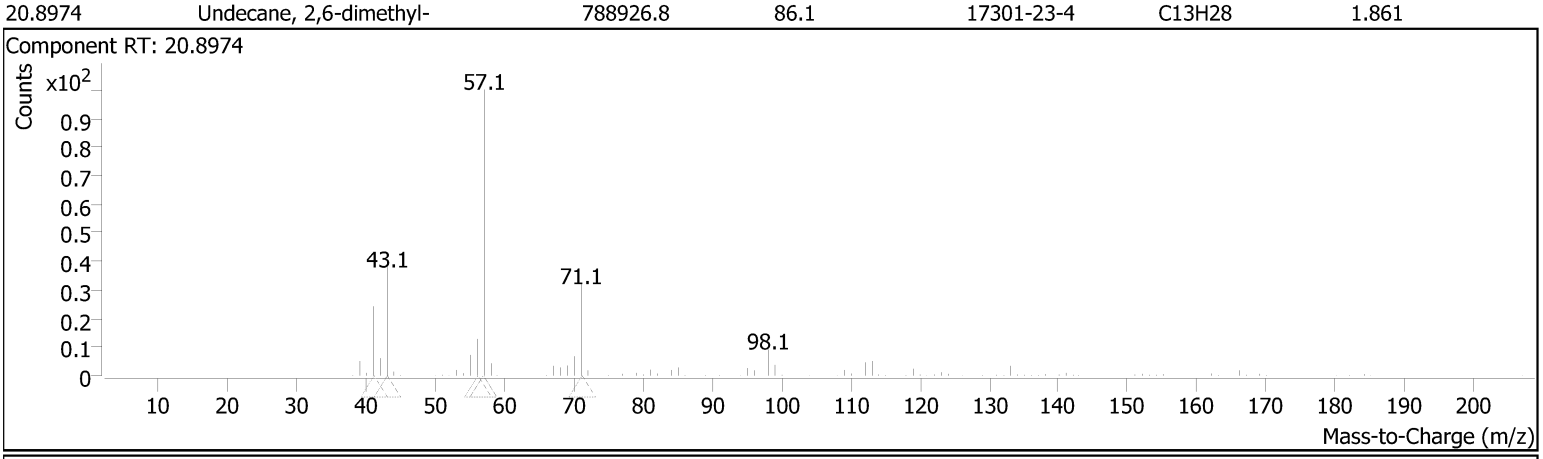


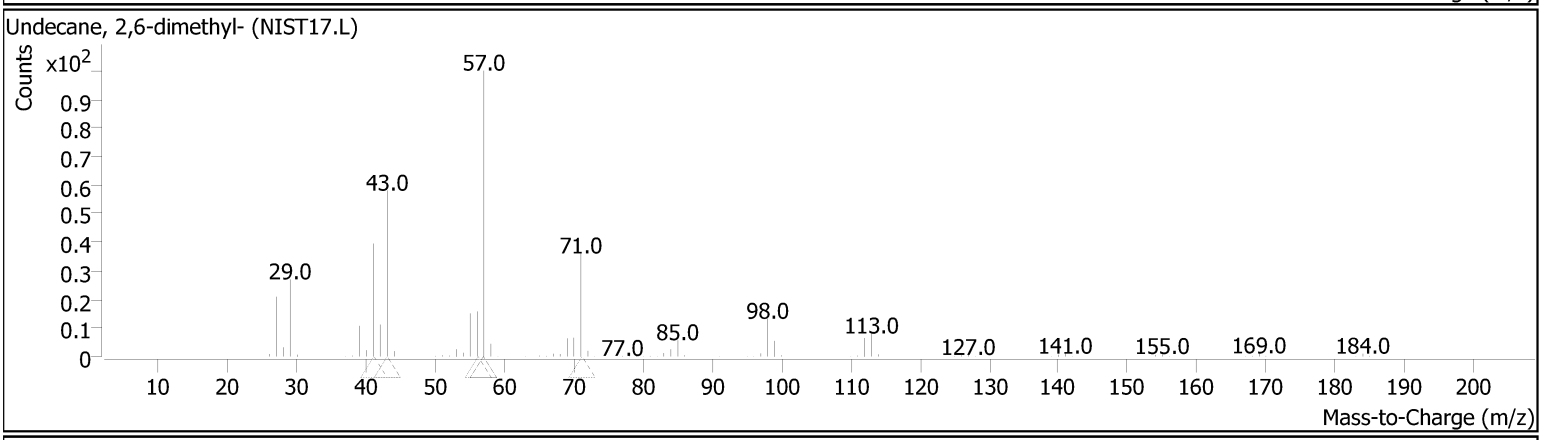


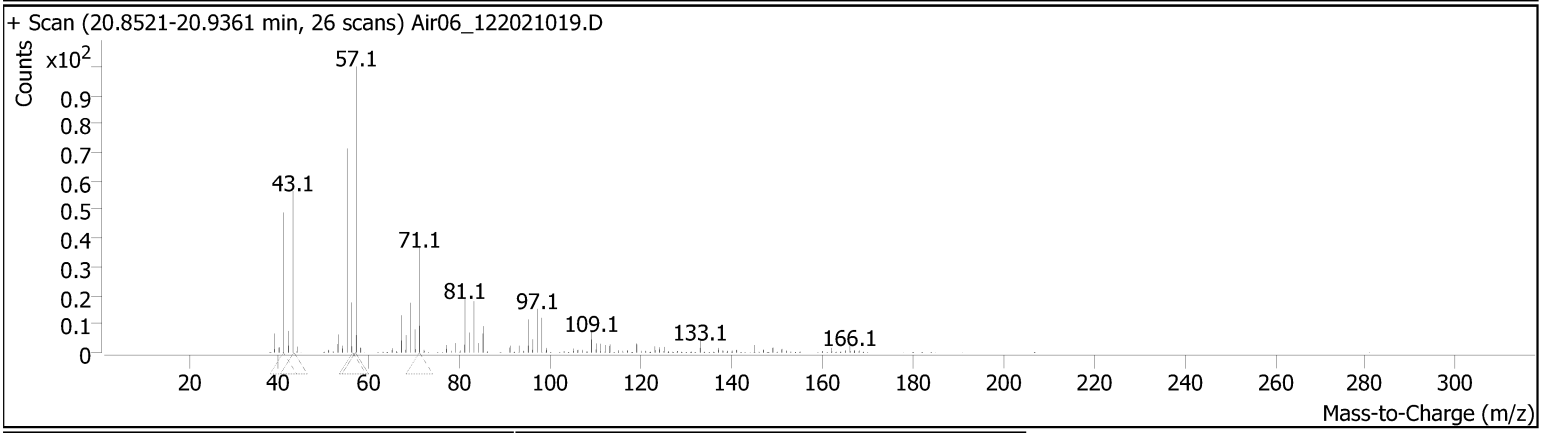
Library Search Results - NonTarget Hits with Details

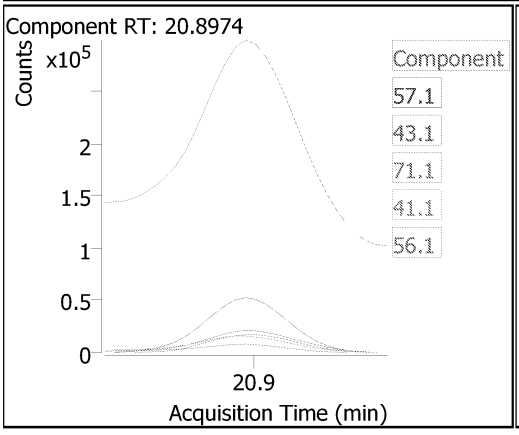
Agilent Technologies

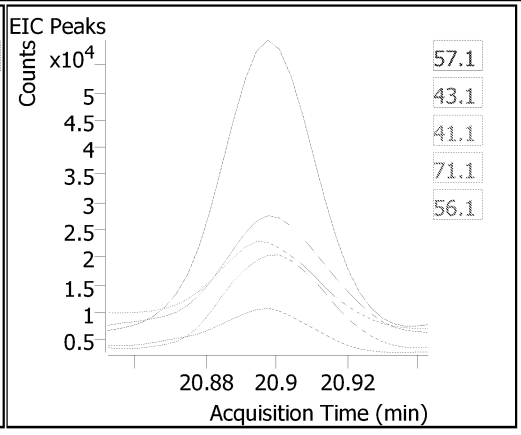
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.8974	Undecane, 2,6-dimethyl-	788926.8	86.1	17301-23-4	C13H28	1.861

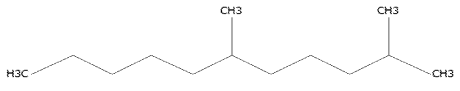




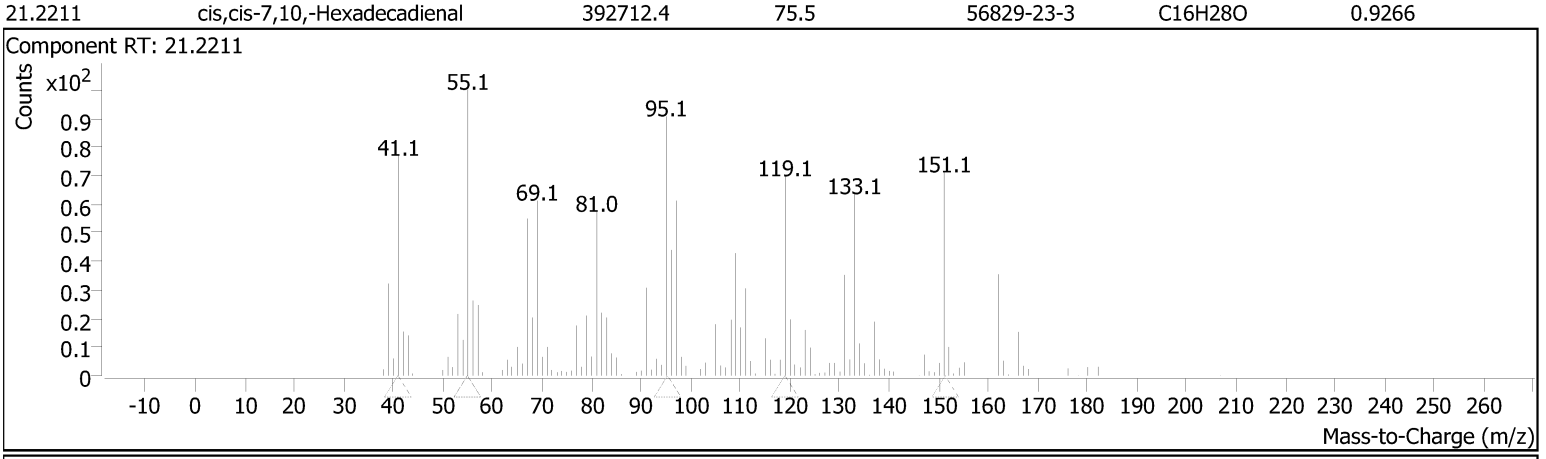


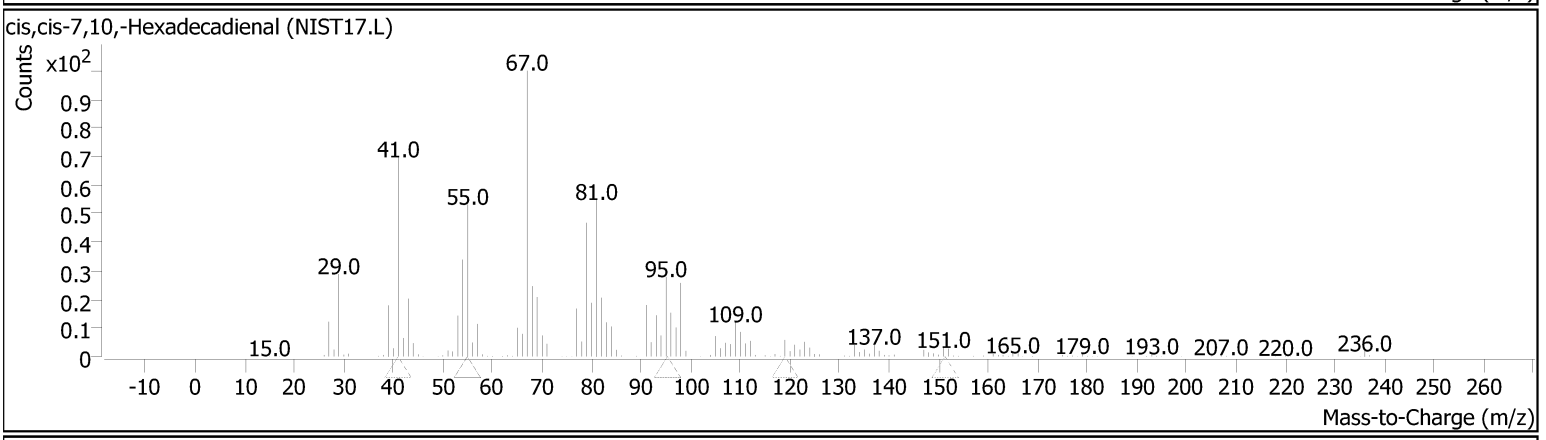


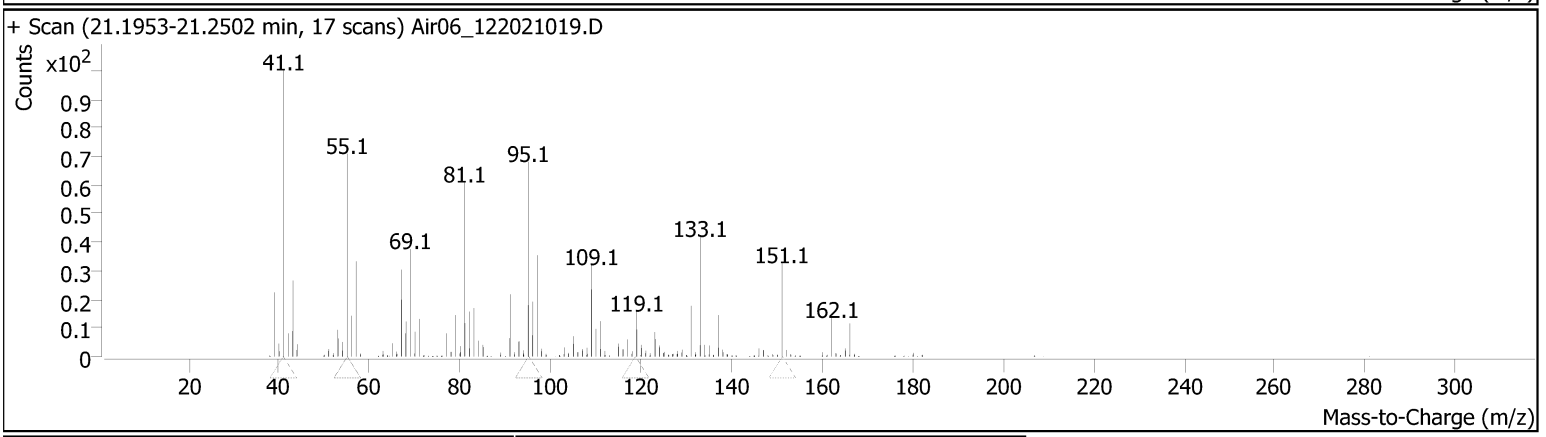


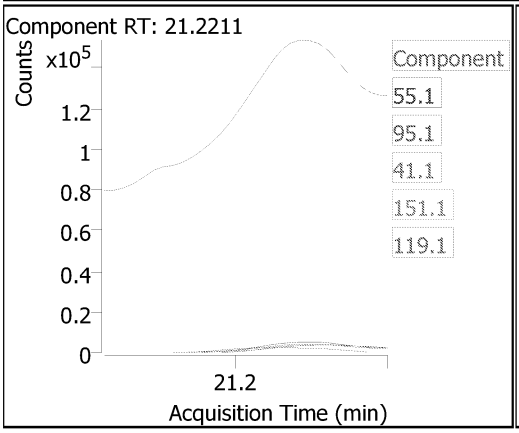


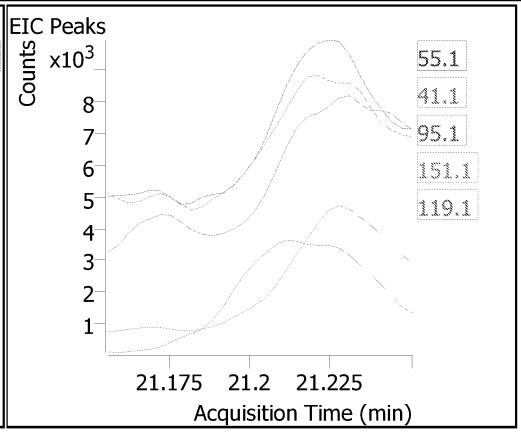
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.2211	cis,cis-7,10,-Hexadecadienal	392712.4	75.5	56829-23-3	C16H28O	0.9266

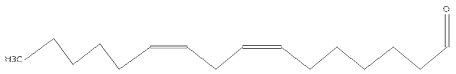




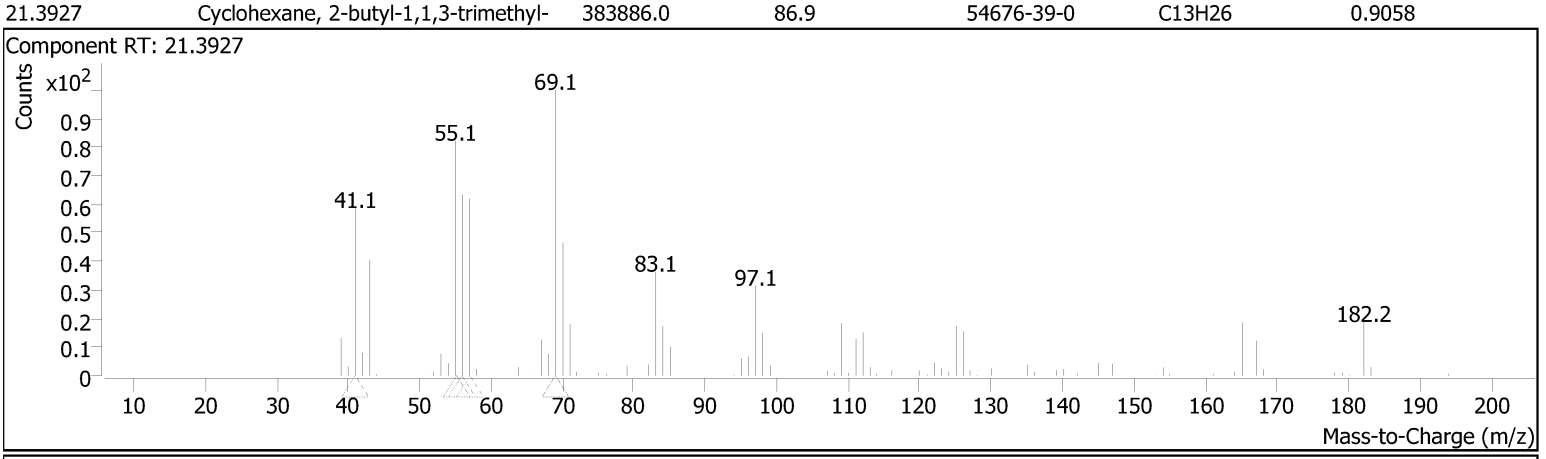


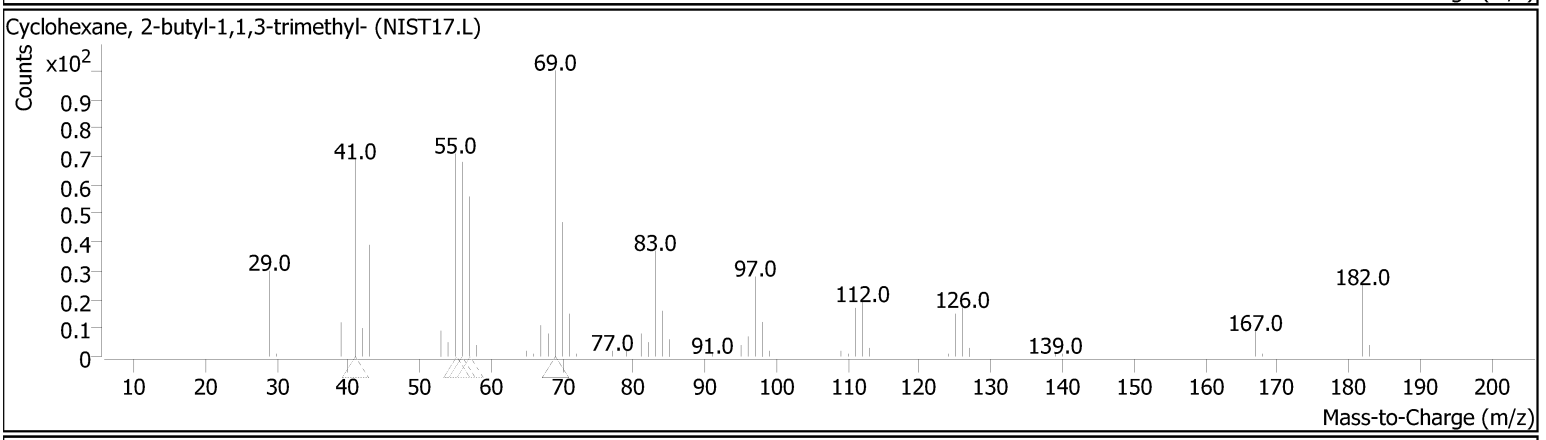


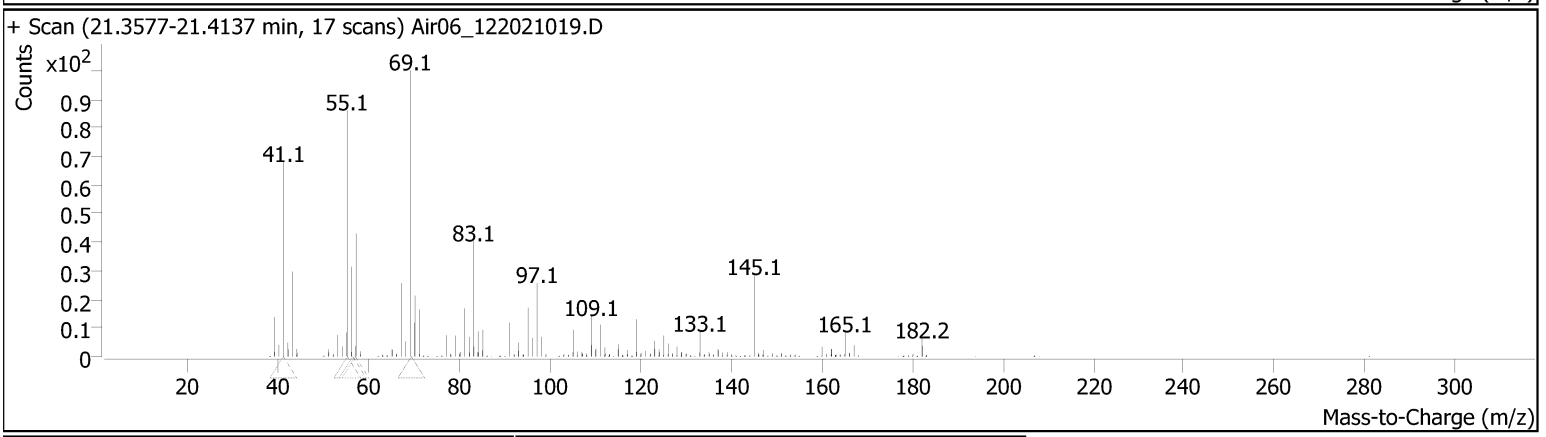


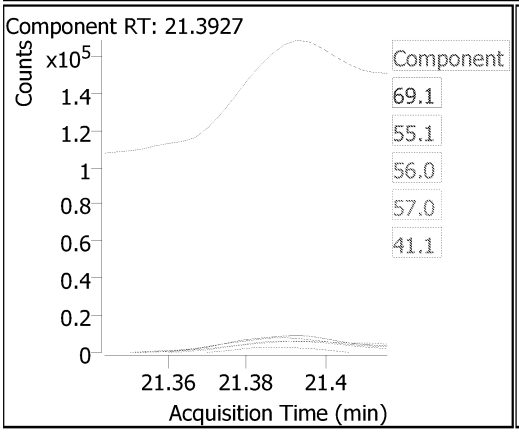


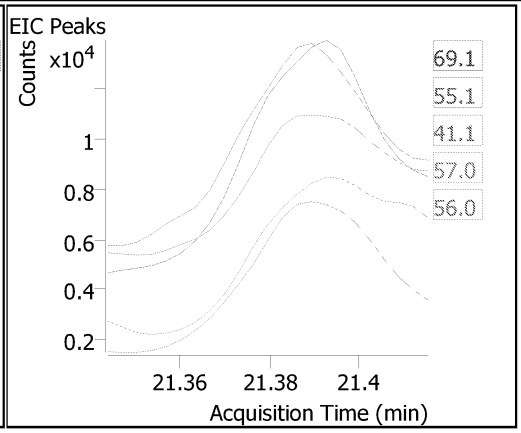
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.3927	Cyclohexane, 2-butyl-1,1,3-trimethyl-	383886.0	86.9	54676-39-0	C13H26	0.9058

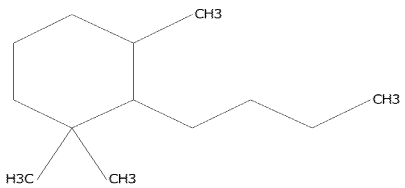








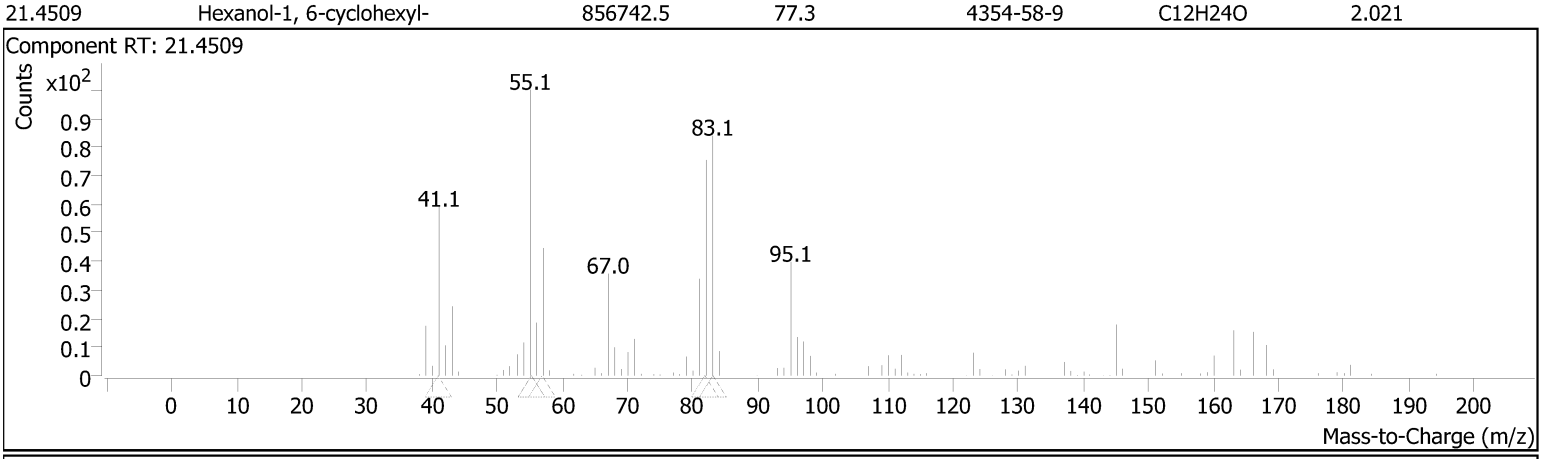


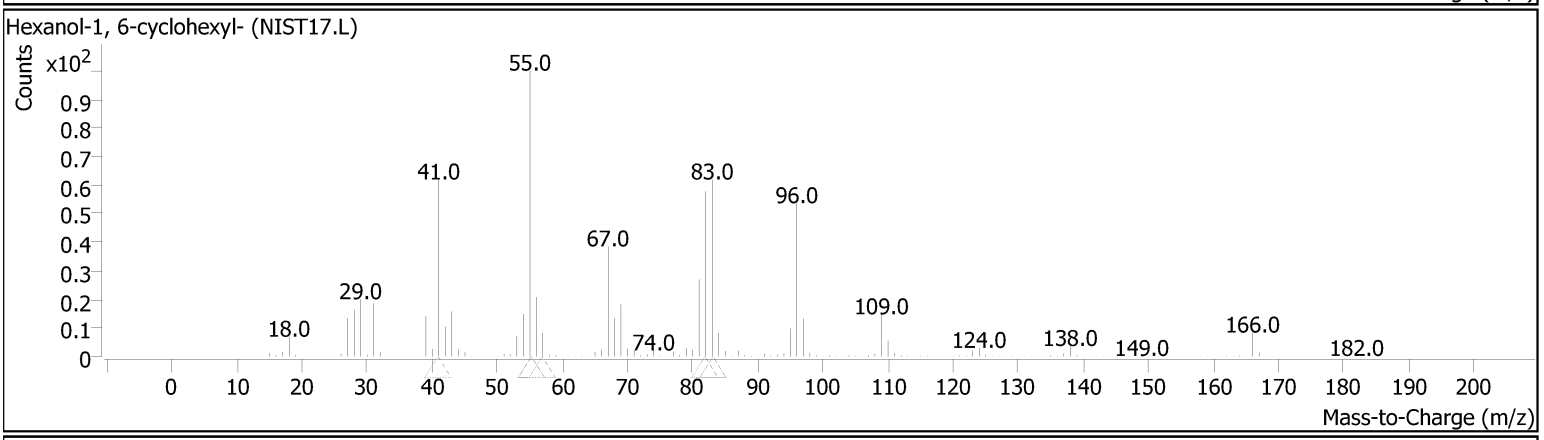


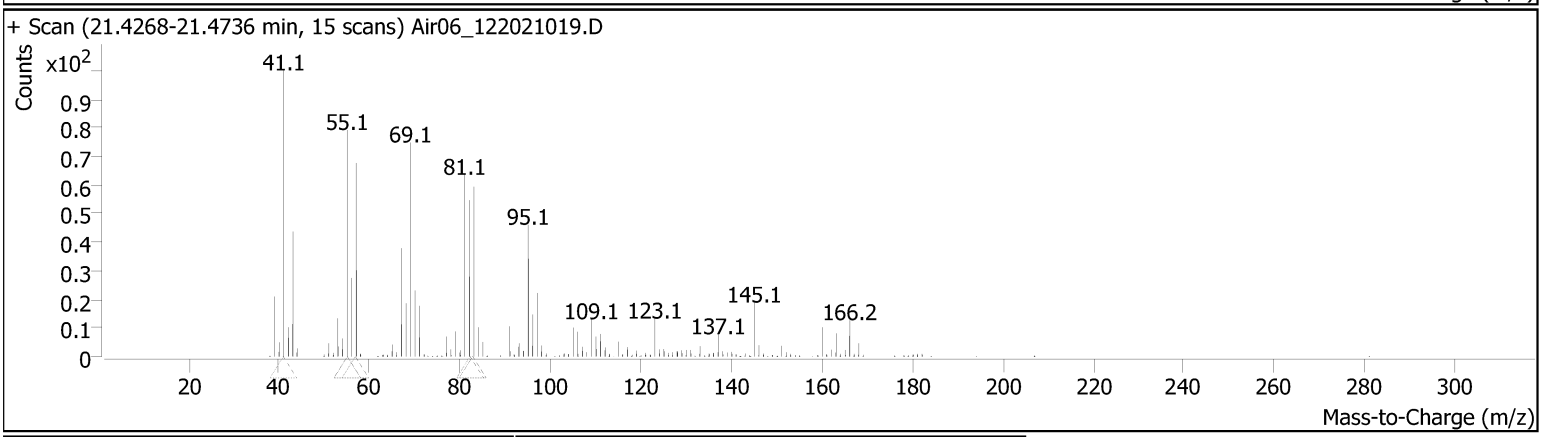
Library Search Results - NonTarget Hits with Details

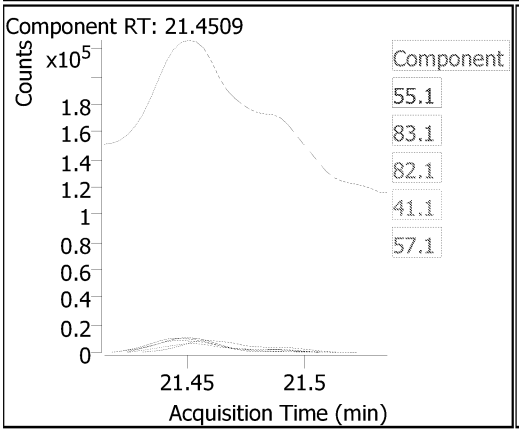
Agilent Technologies

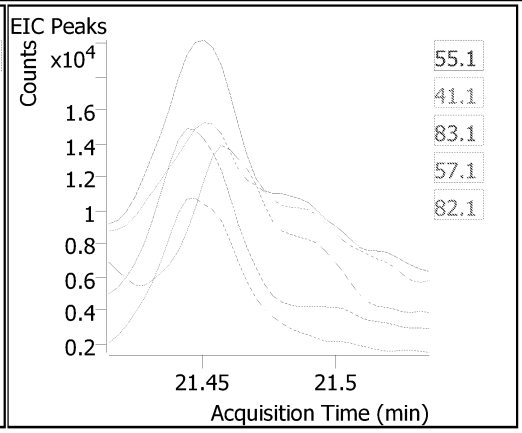
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.4509	Hexanol-1, 6-cyclohexyl-	856742.5	77.3	4354-58-9	C12H24O	2.021

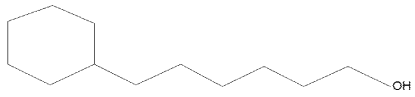










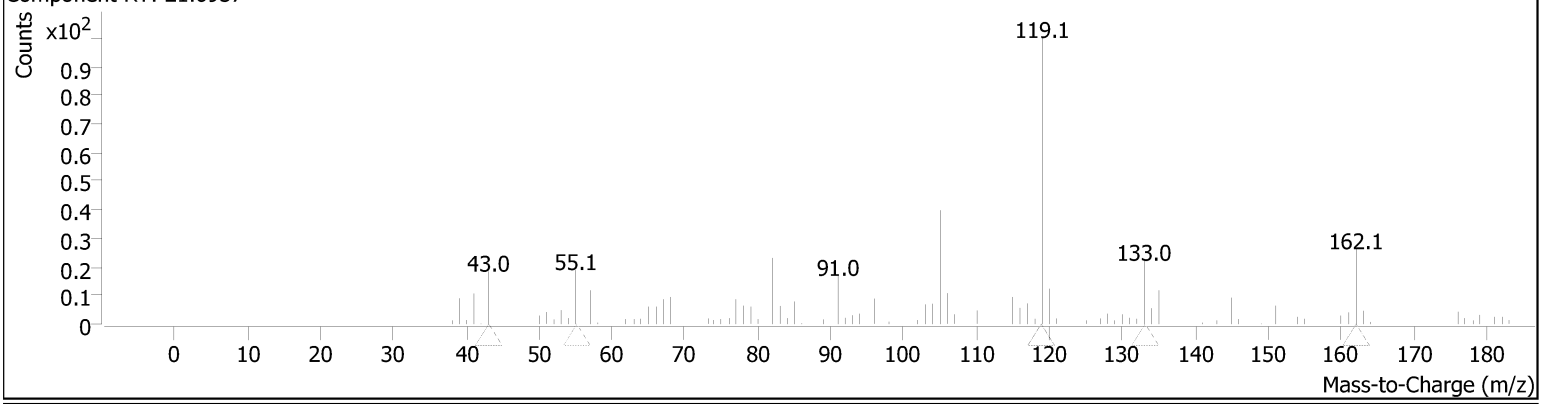


Library Search Results - NonTarget Hits with Details

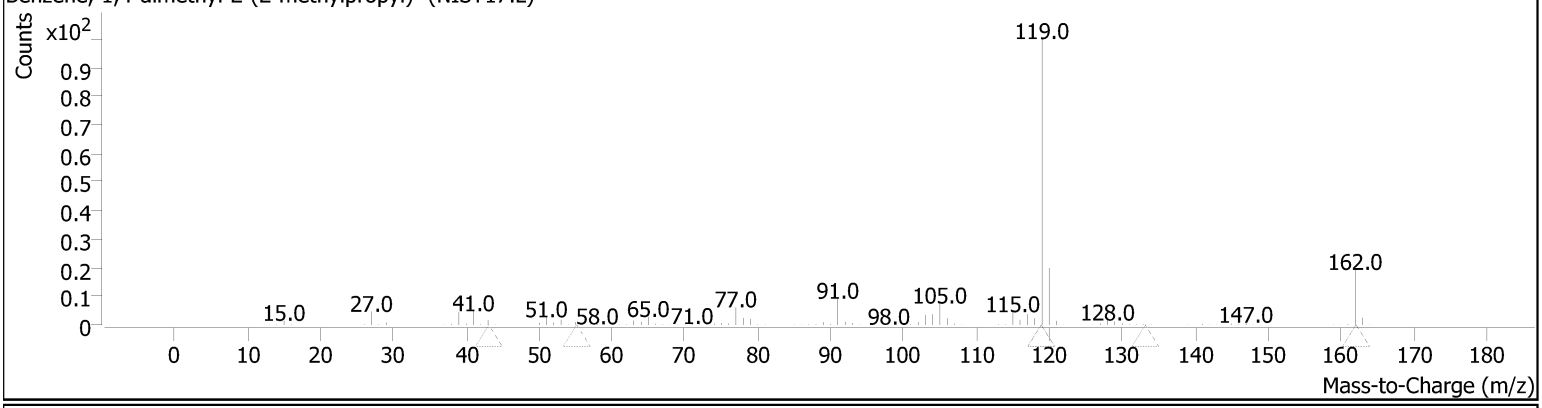
Agilent Technologies

Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.6937	Benzene, 1,4-dimethyl-2-(2-methylpropyl)-	200664.2	73.2	55669-88-0	C12H18	0.4735

Component RT: 21.6937



Benzene, 1,4-dimethyl-2-(2-methylpropyl)- (NIST17.L)



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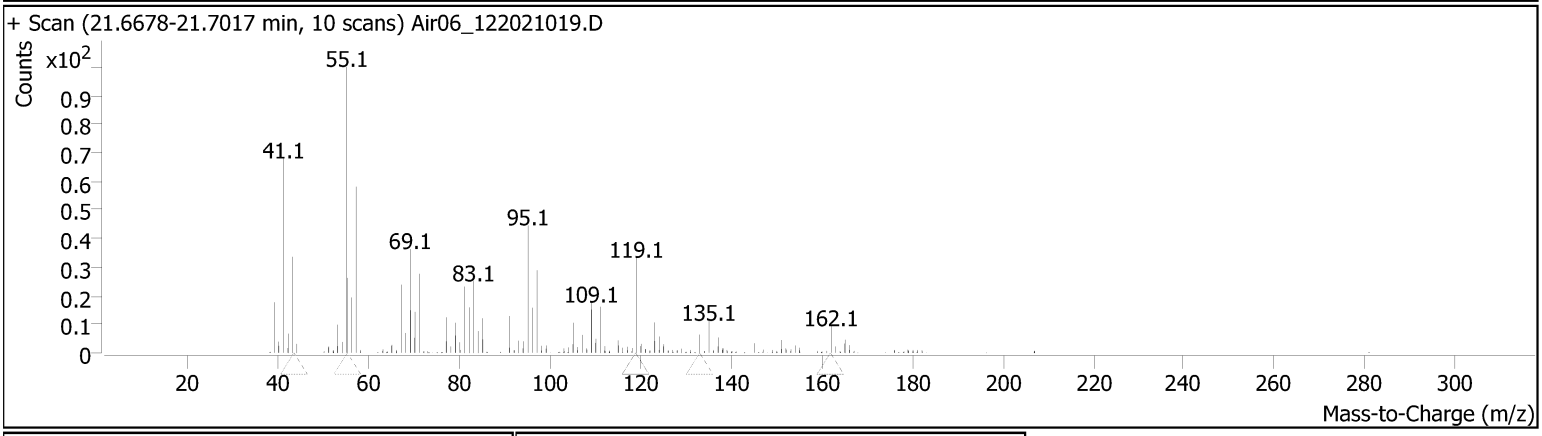
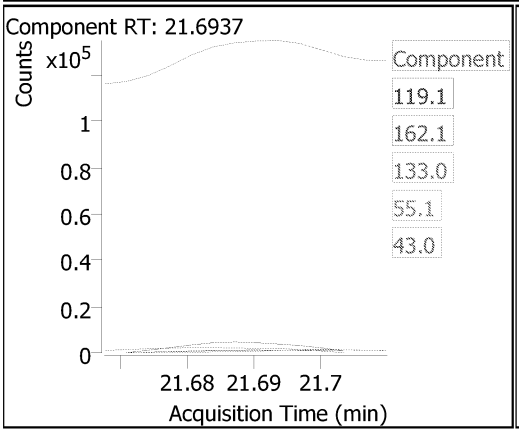
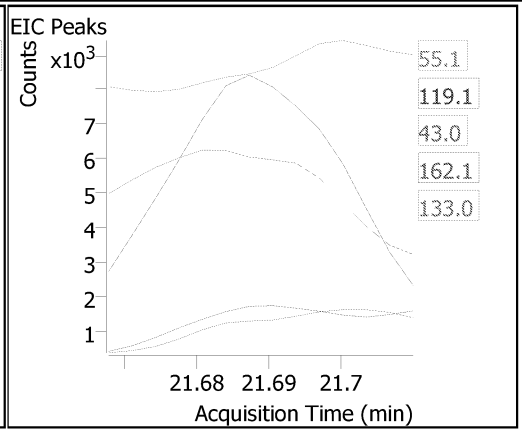
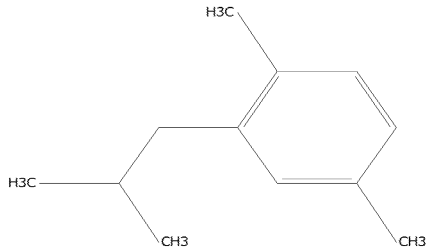


Component RT: 21.6937

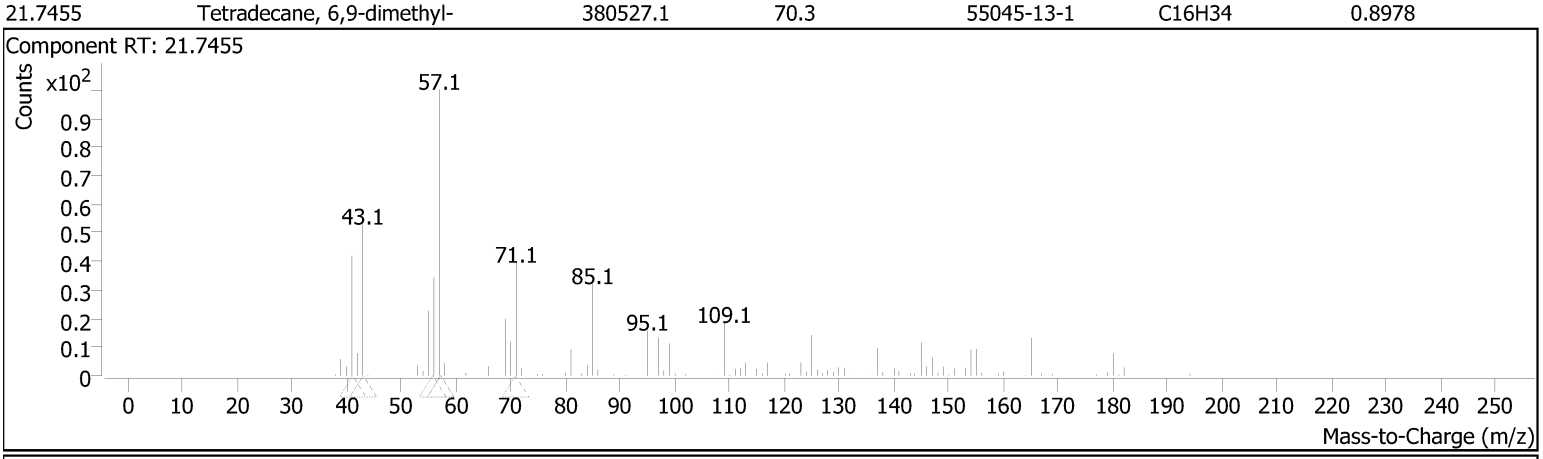


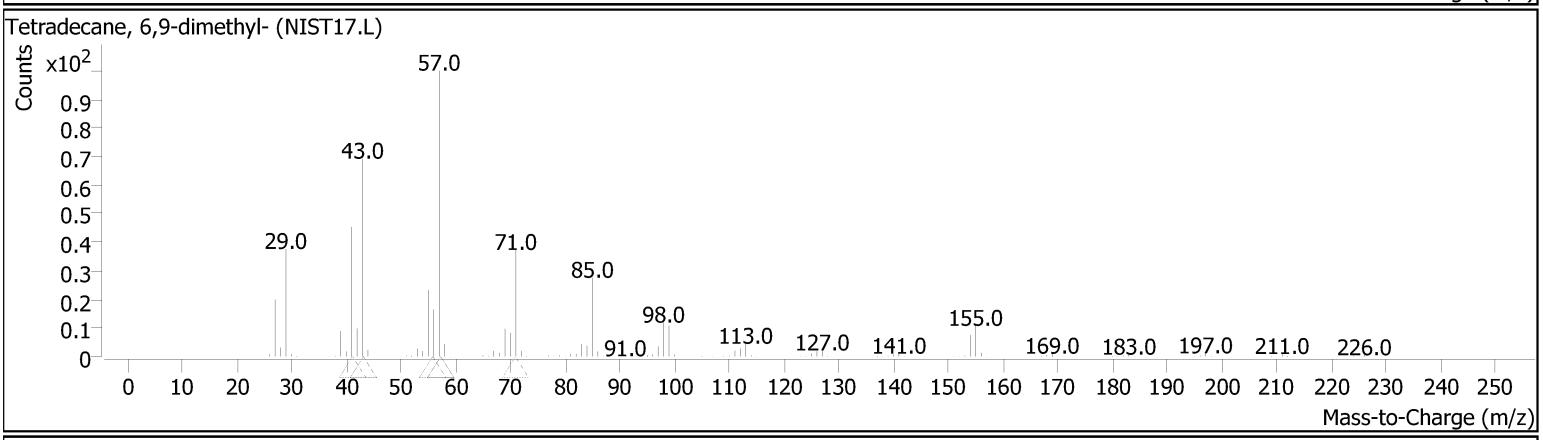
EIC Peaks

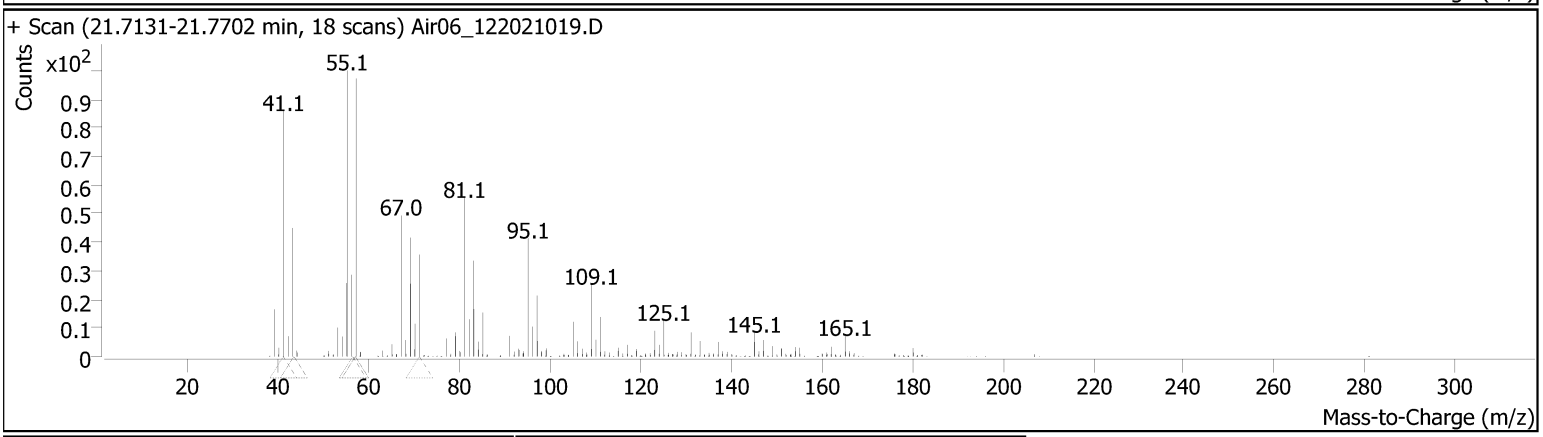


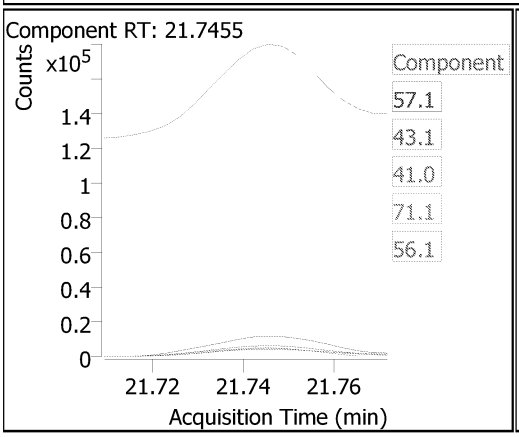


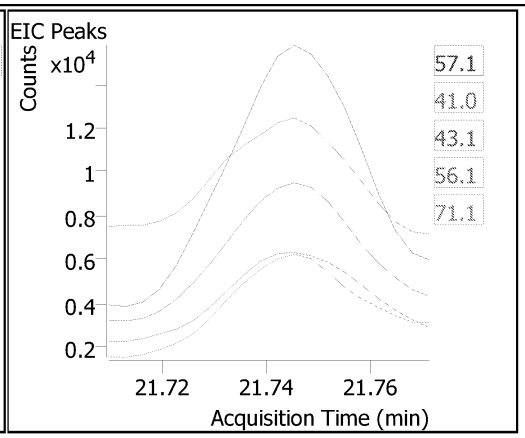
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.7455	Tetradecane, 6,9-dimethyl-	380527.1	70.3	55045-13-1	C16H34	0.8978

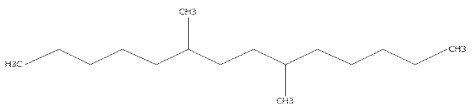




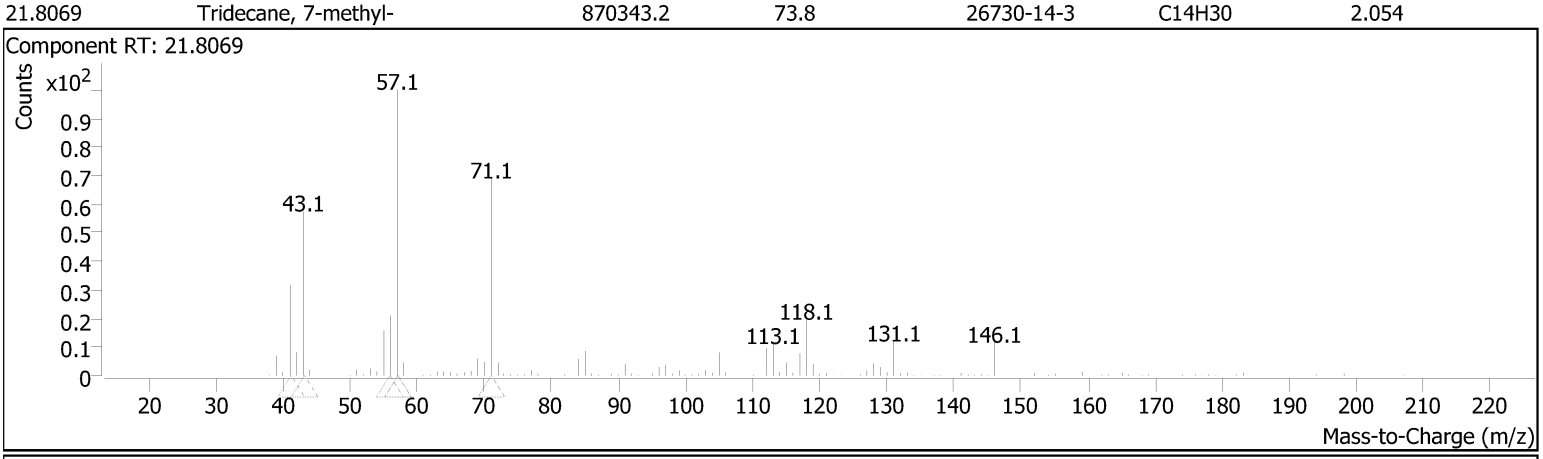


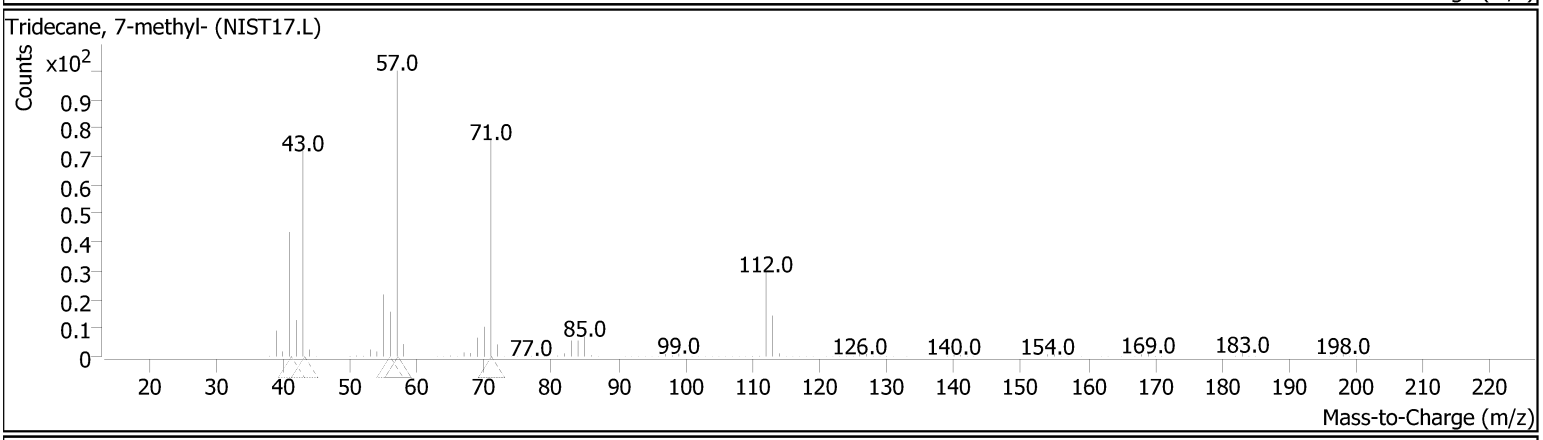


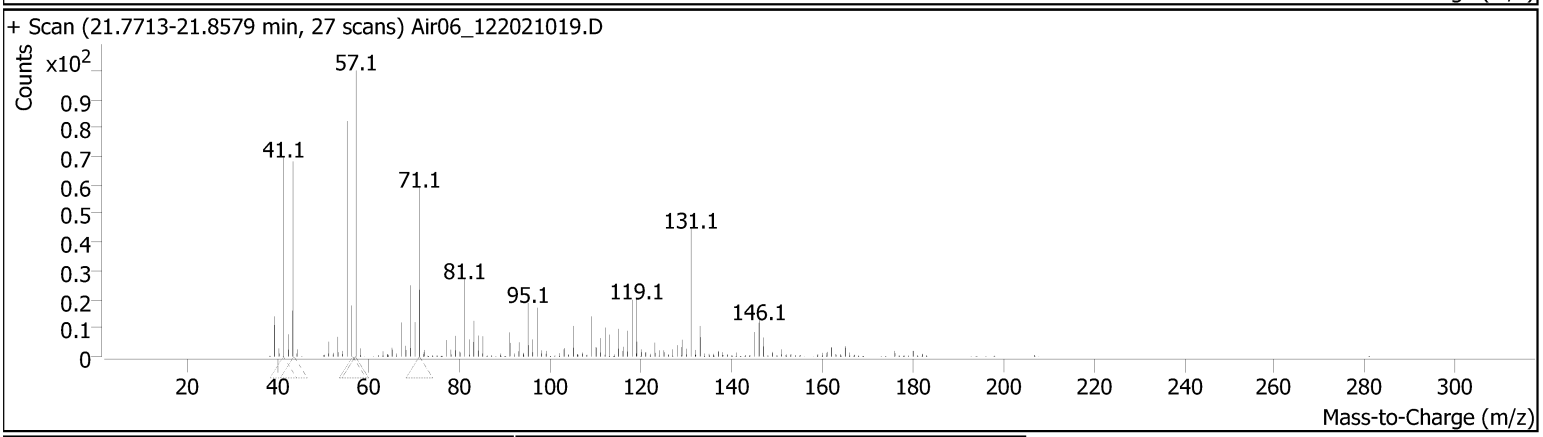


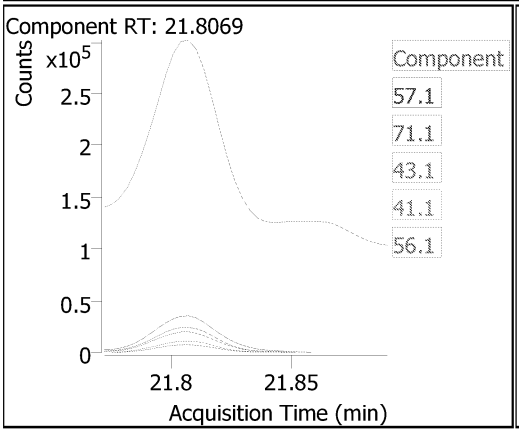


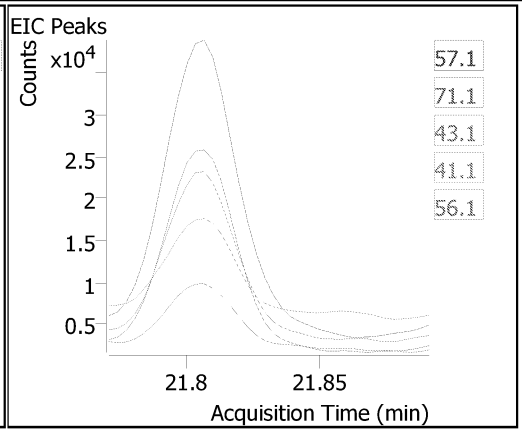
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.8069	Tridecane, 7-methyl-	870343.2	73.8	26730-14-3	C14H30	2.054

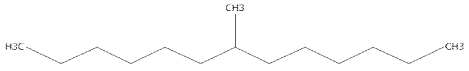




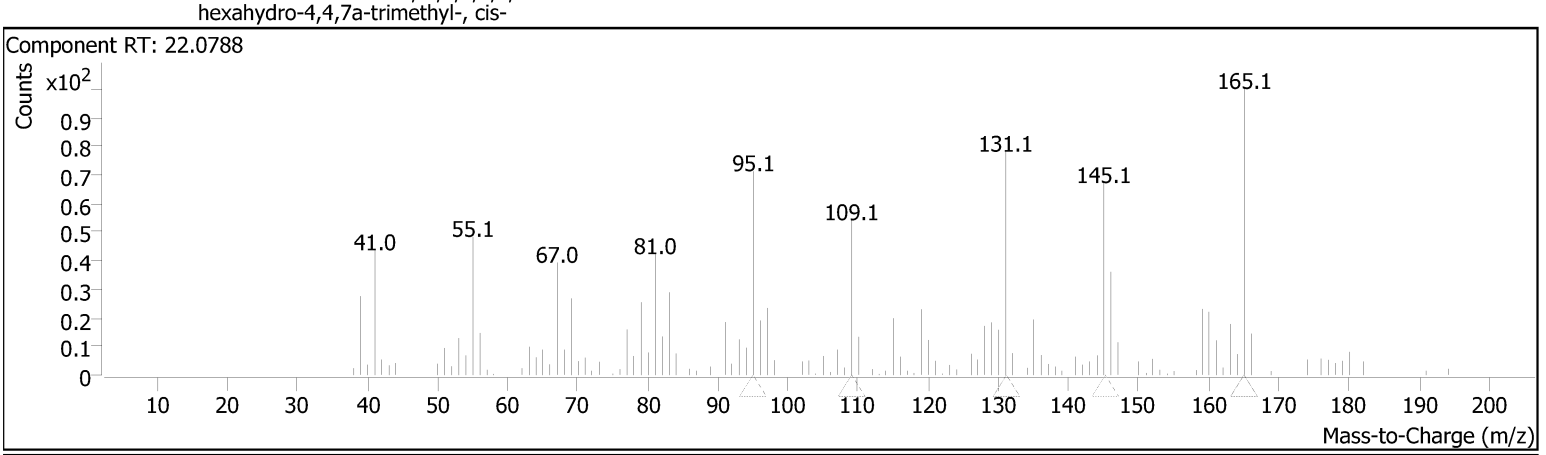


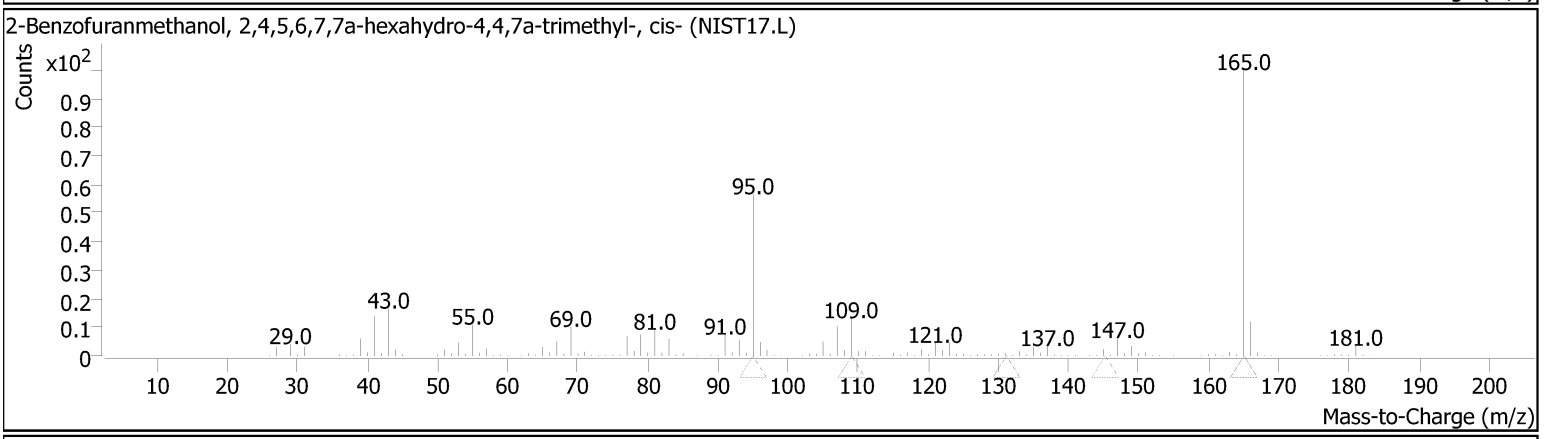


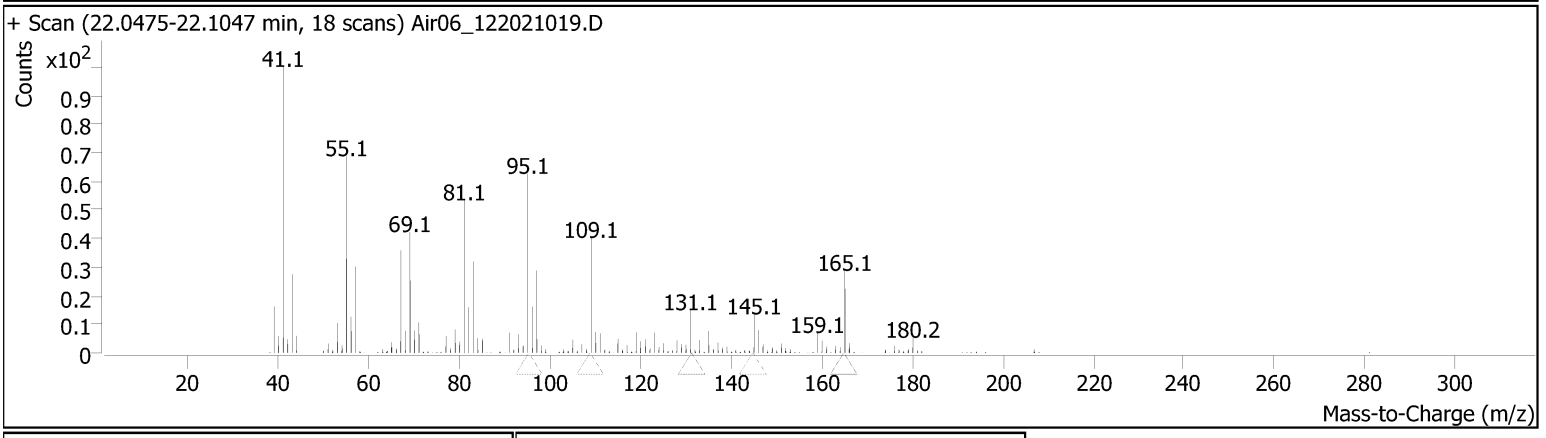


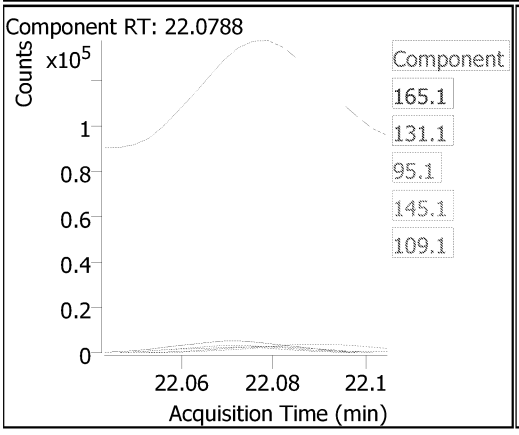


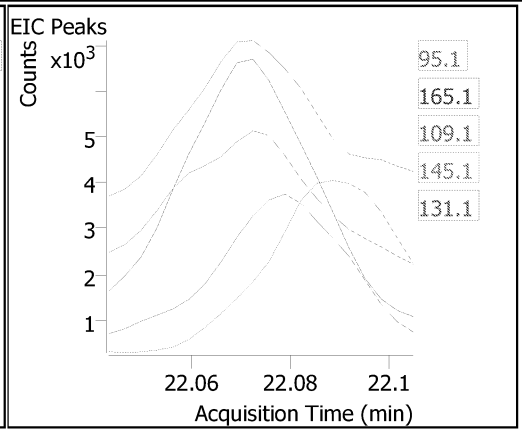
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.0788	2-Benzofuranmethanol, 2,4,5,6,7,7a-hexahydro-4,4,7a-trimethyl-, cis-	238485.9	72.8	77384-15-7	C12H20O2	0.5627

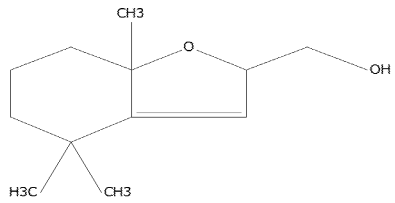




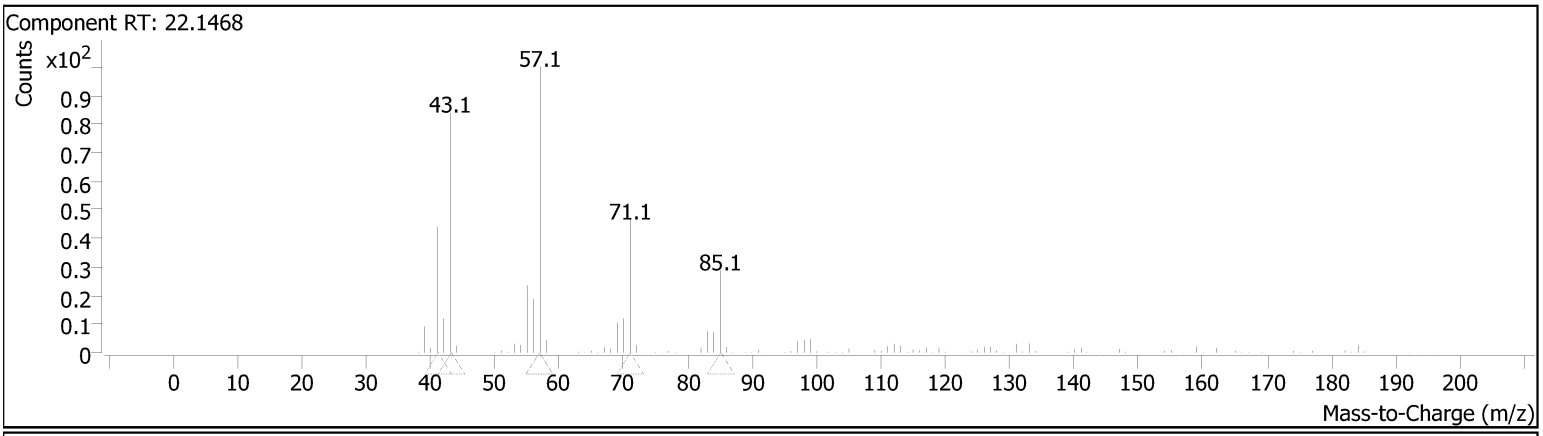


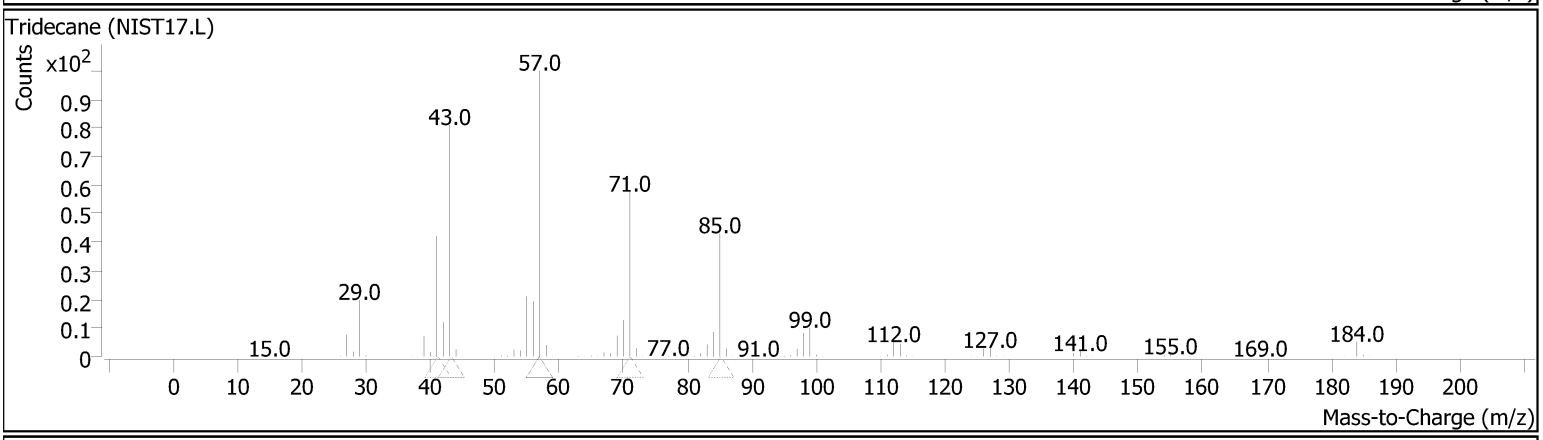


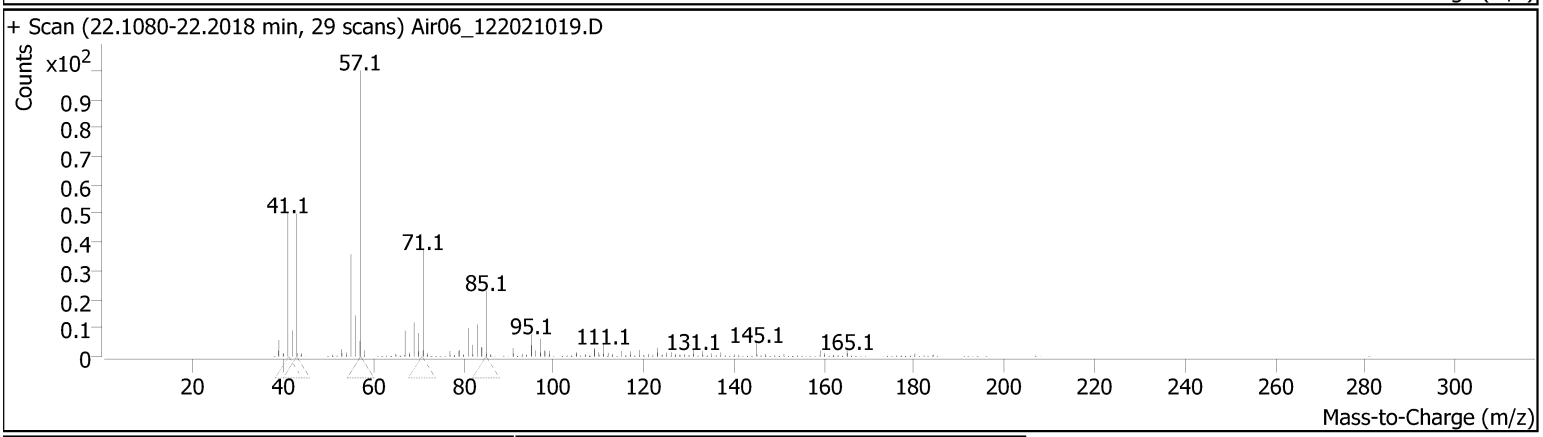


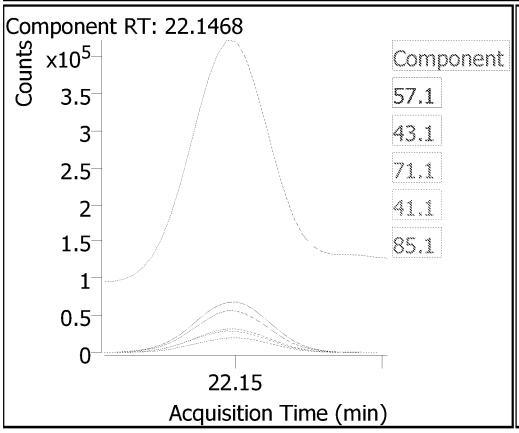


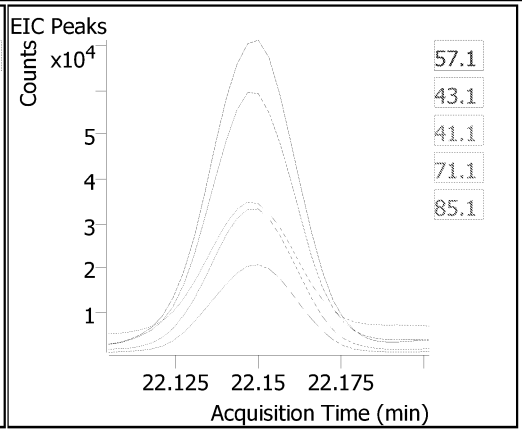
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.1468	Tridecane	953443.5	89.9	629-50-5	C13H28	2.25

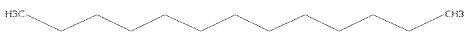




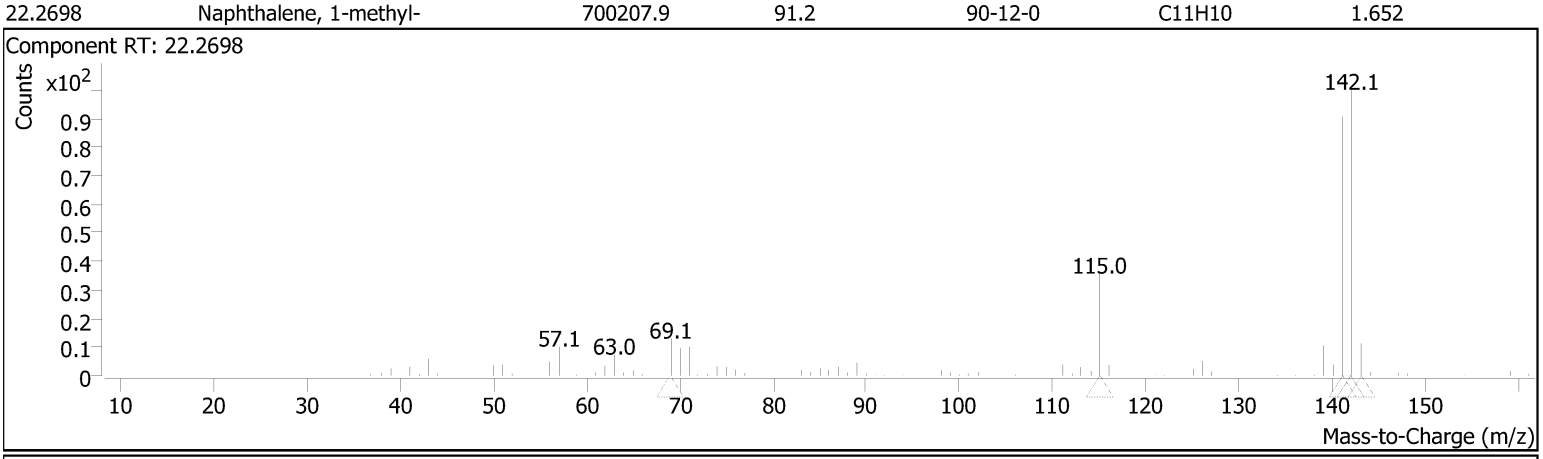


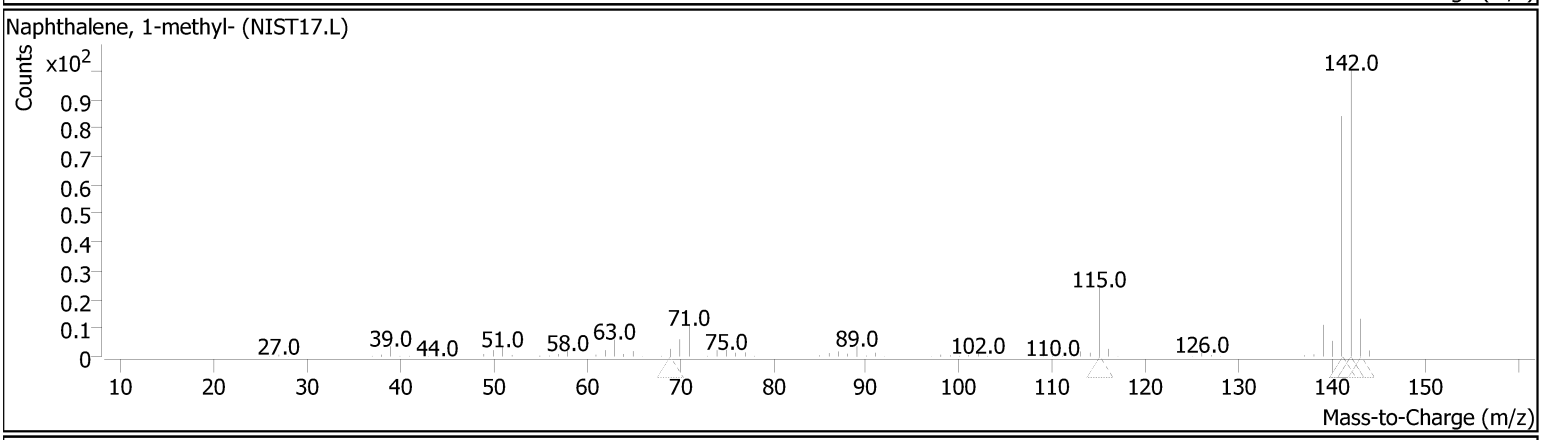


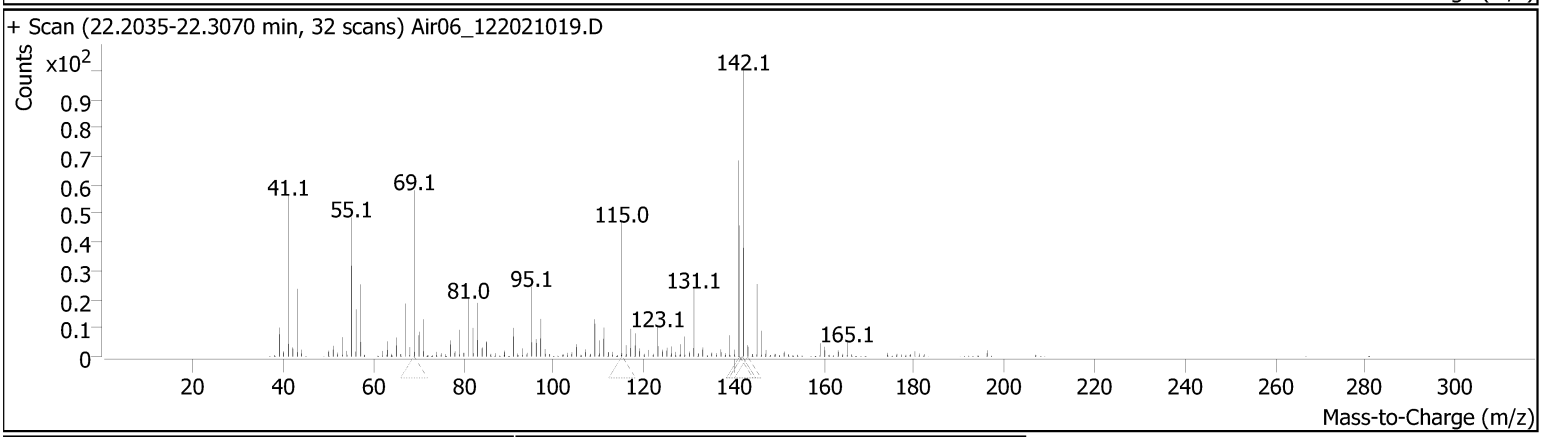


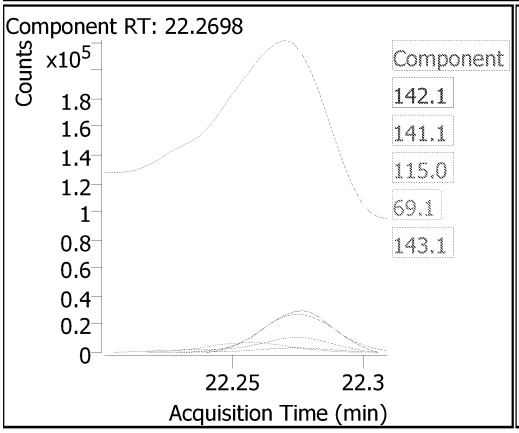


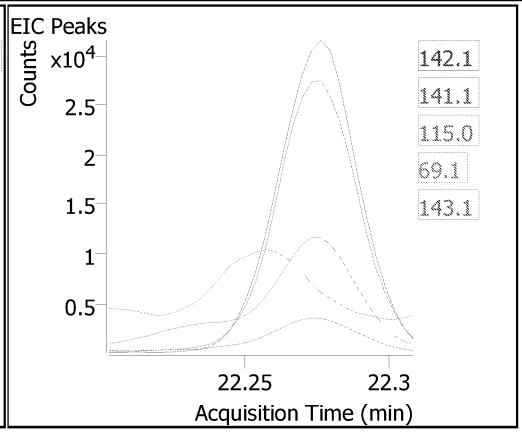
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.2698	Naphthalene, 1-methyl-	700207.9	91.2	90-12-0	C11H10	1.652

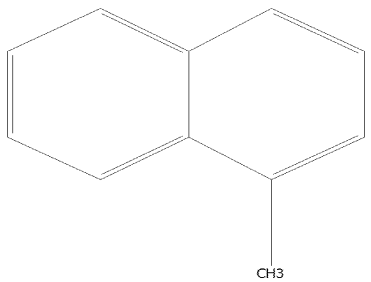




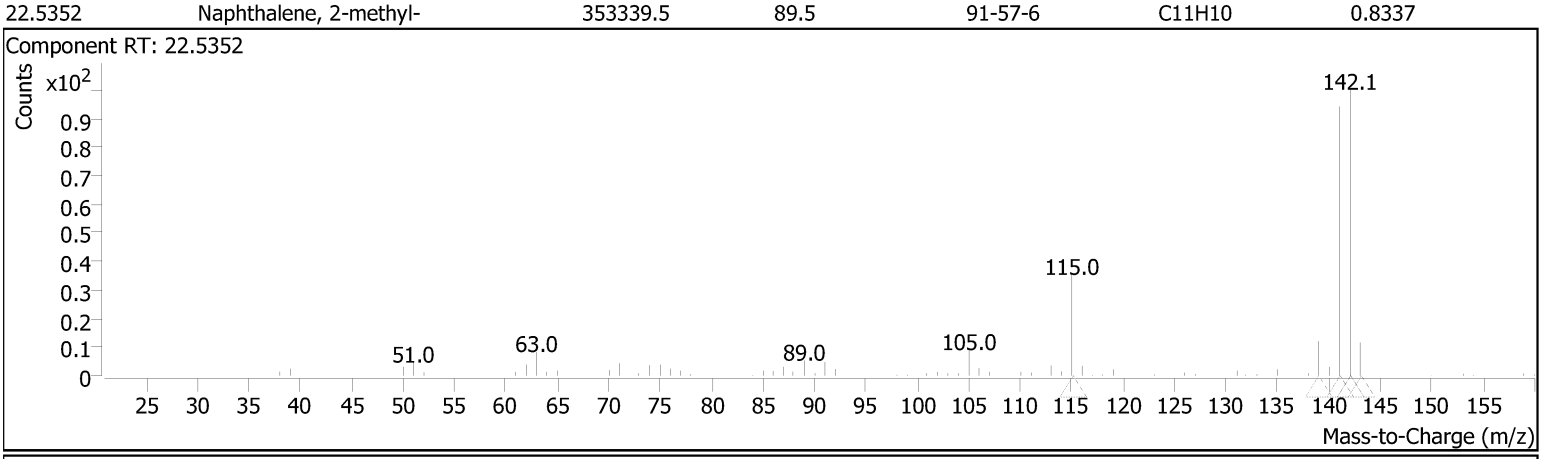


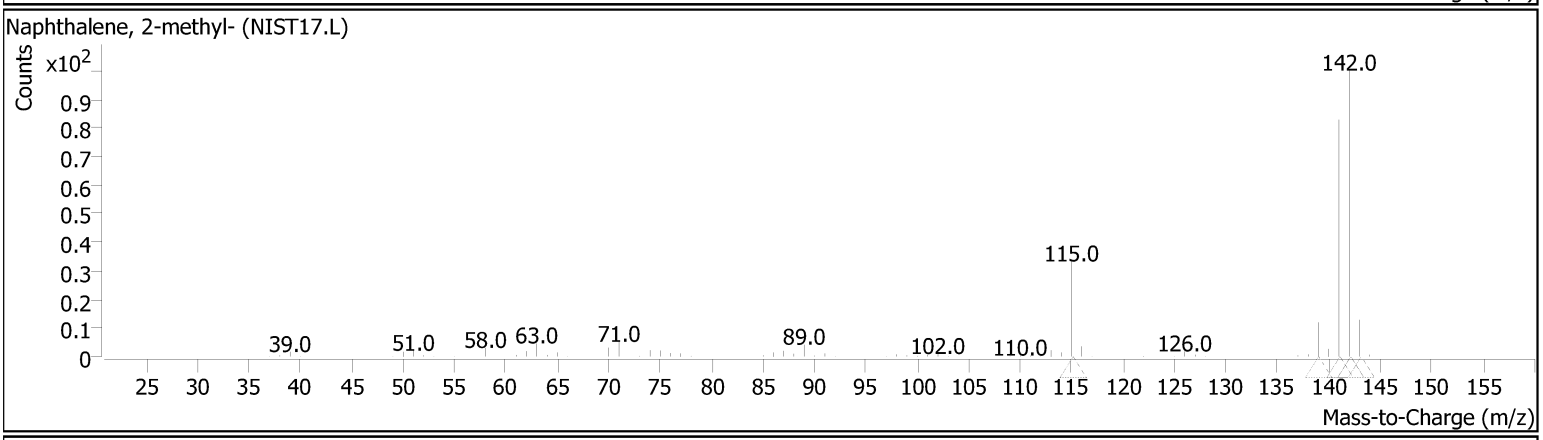


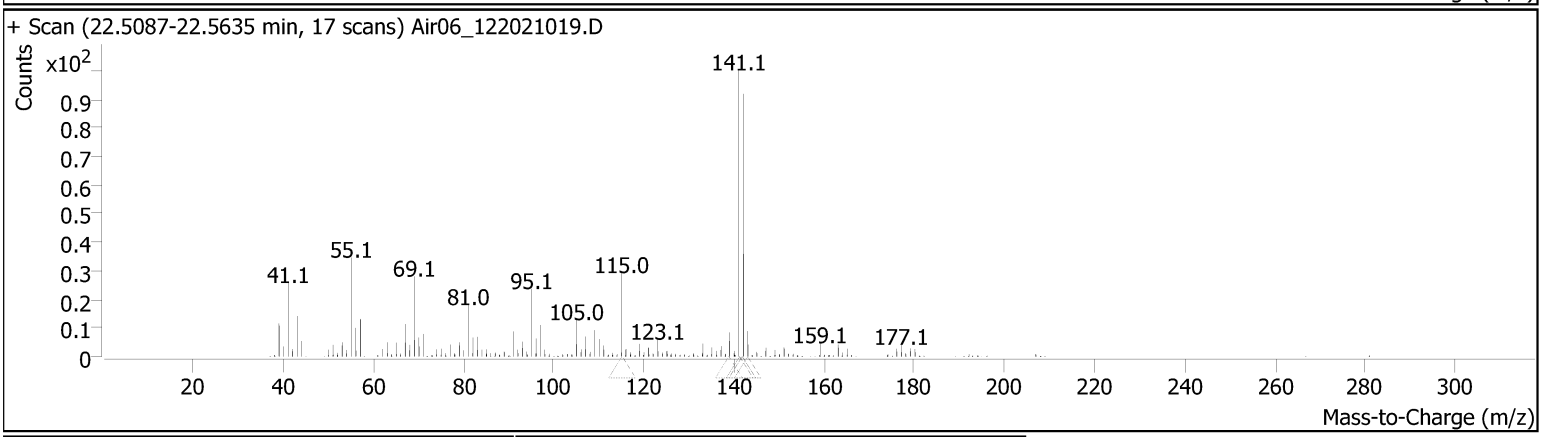


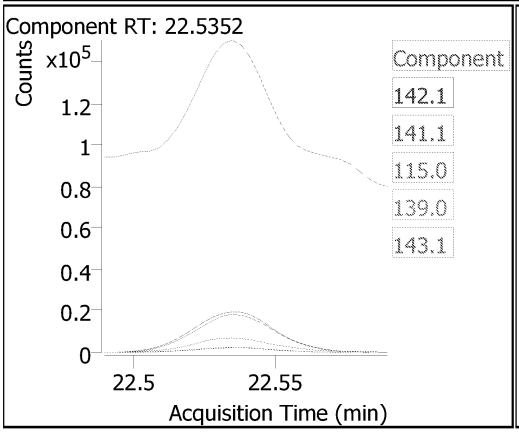


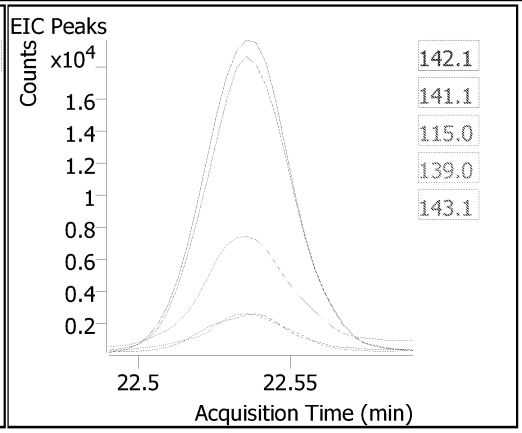
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.5352	Naphthalene, 2-methyl-	353339.5	89.5	91-57-6	C11H10	0.8337

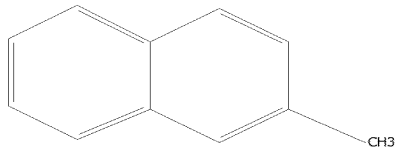




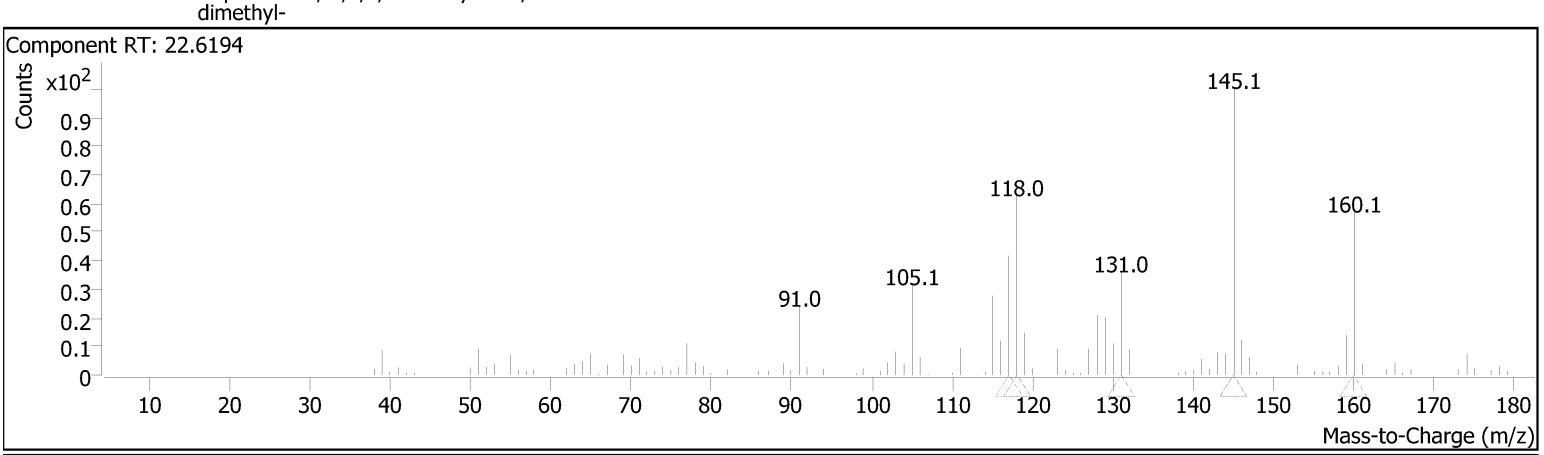


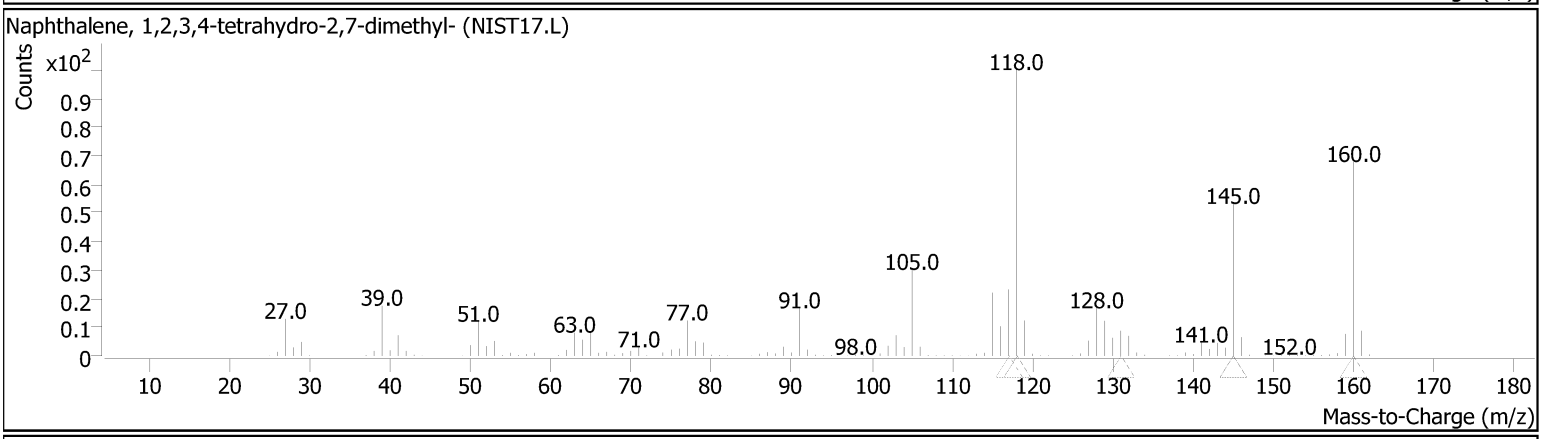


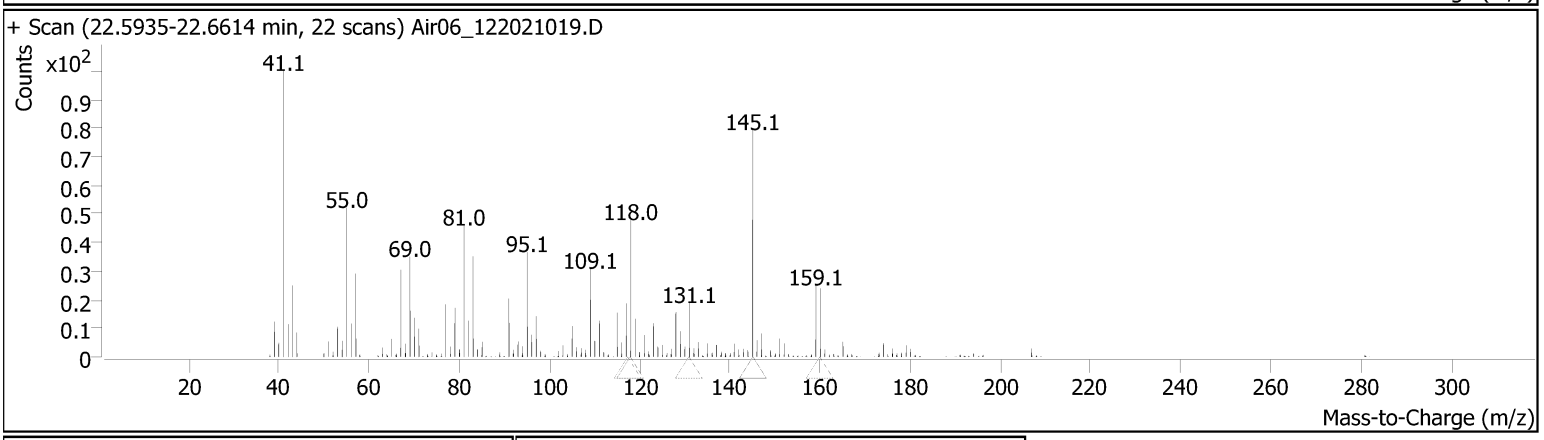


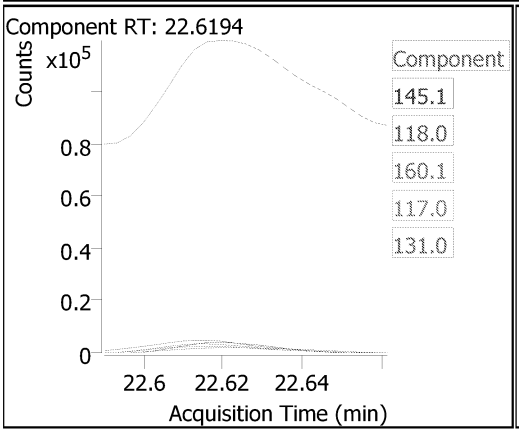


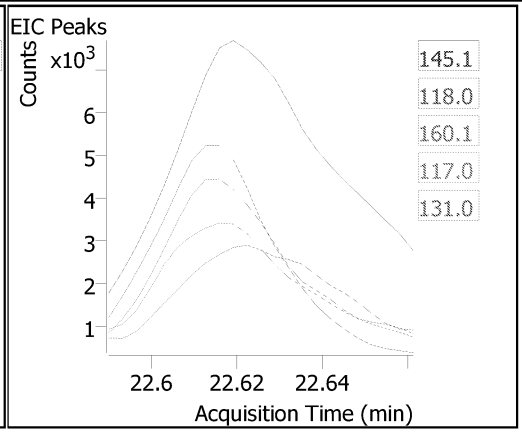
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.6194	Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	222598.2	87.3	13065-07-1	C12H16	0.5252

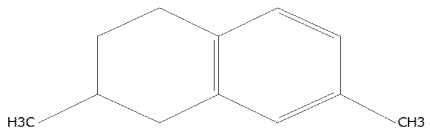




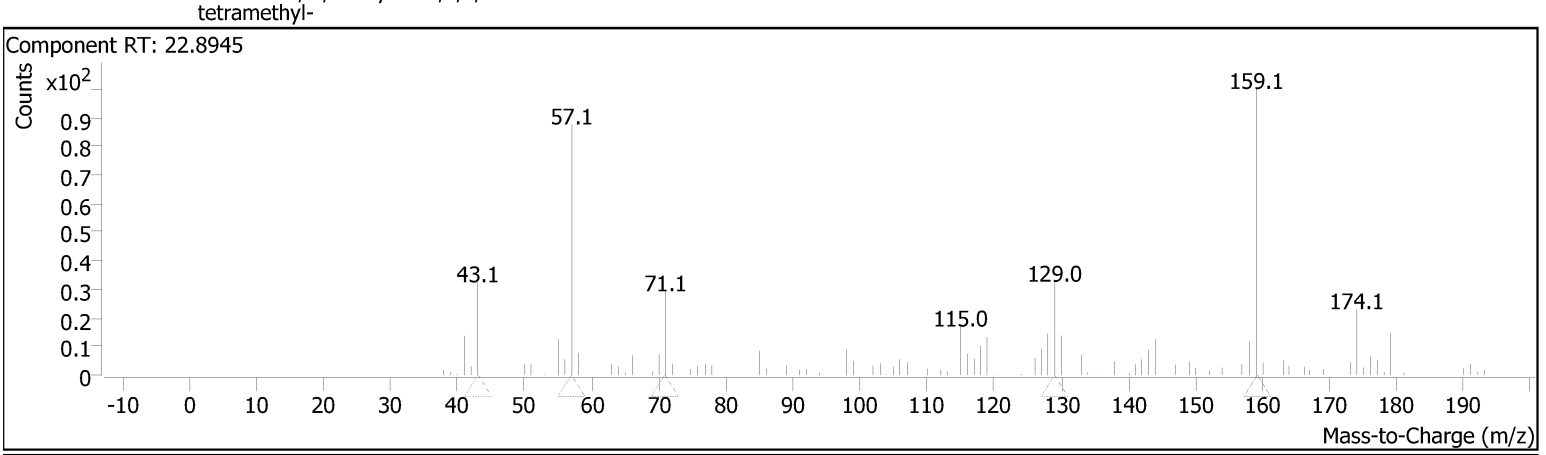


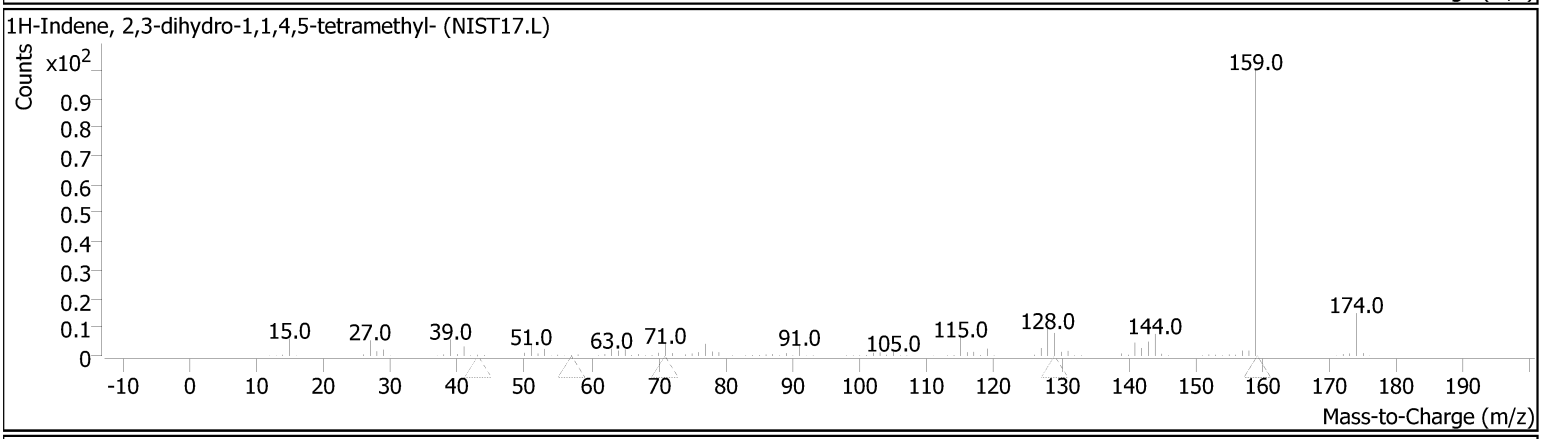


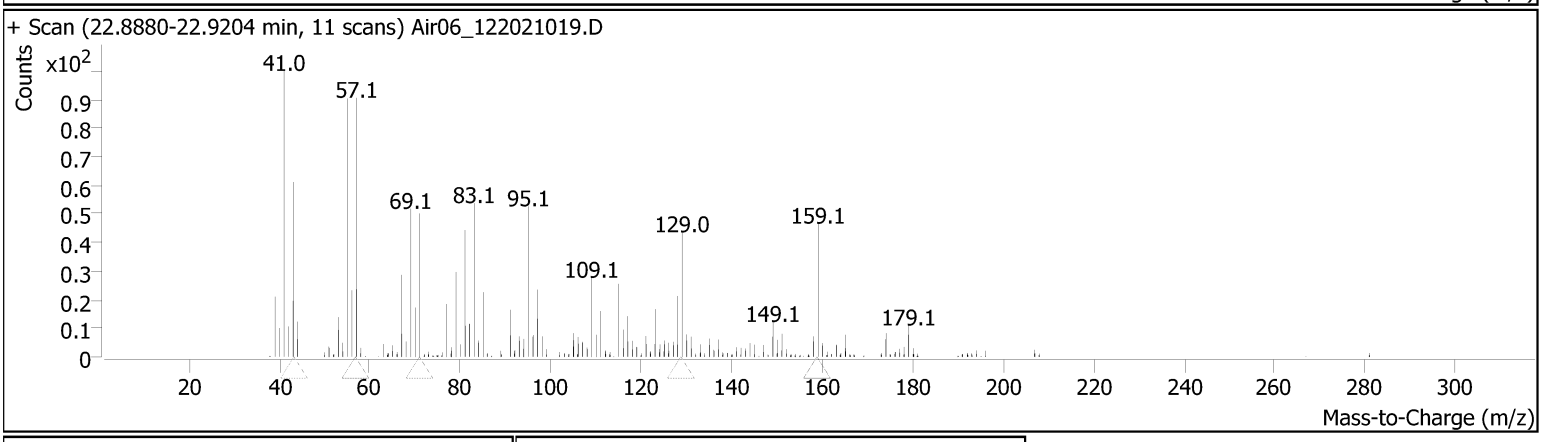


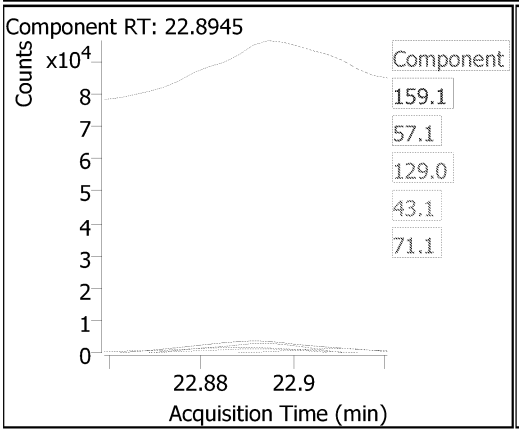


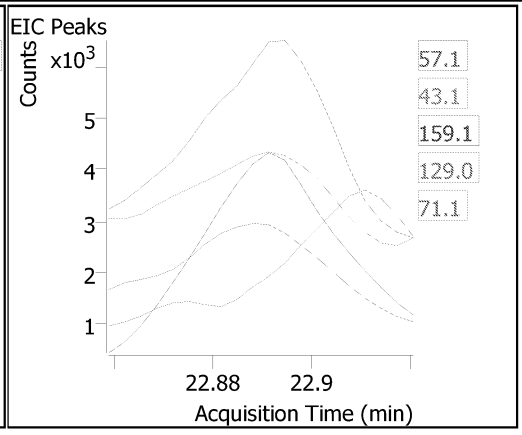
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
22.8945	1H-Indene, 2,3-dihydro-1,1,4,5-tetramethyl-	138932.8	70.2	16204-57-2	C13H18	0.3278

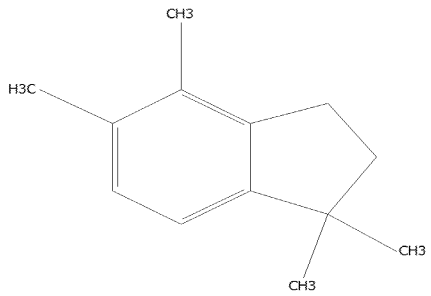




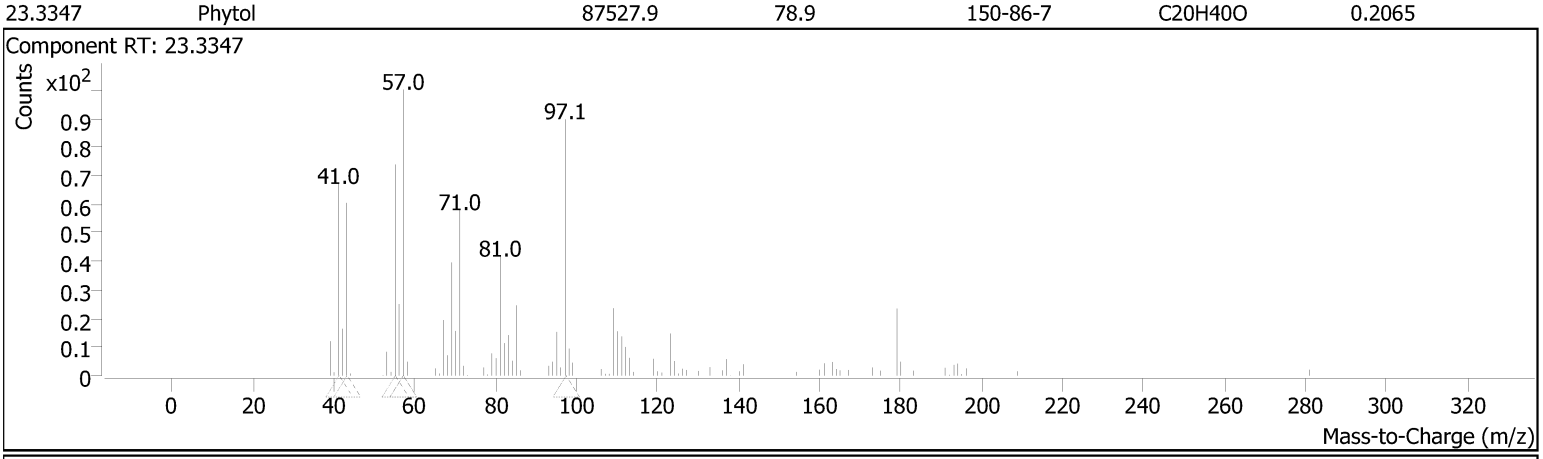


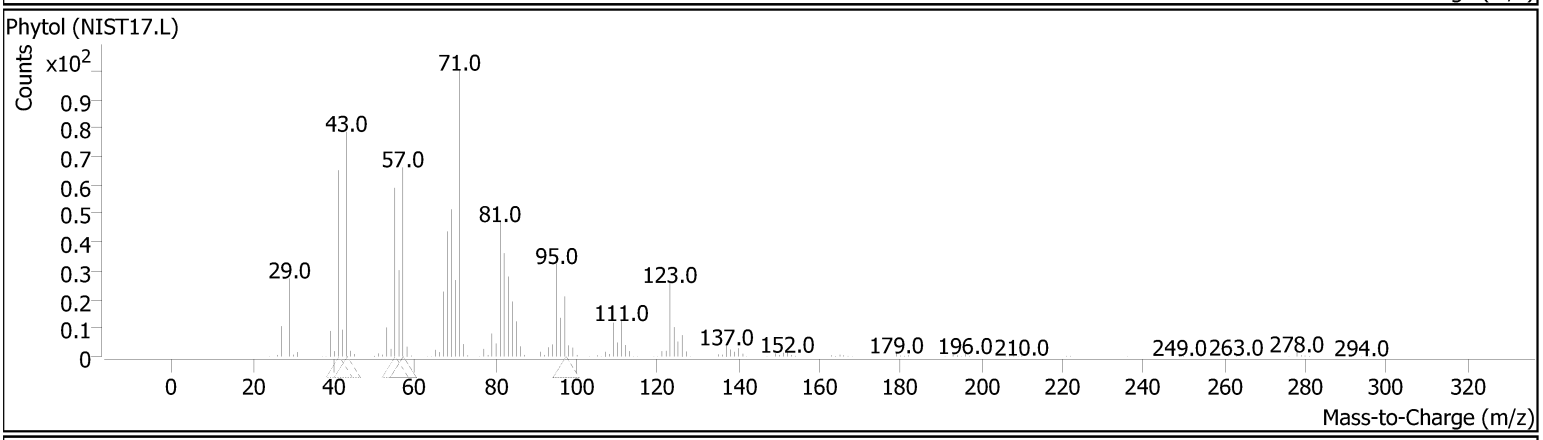


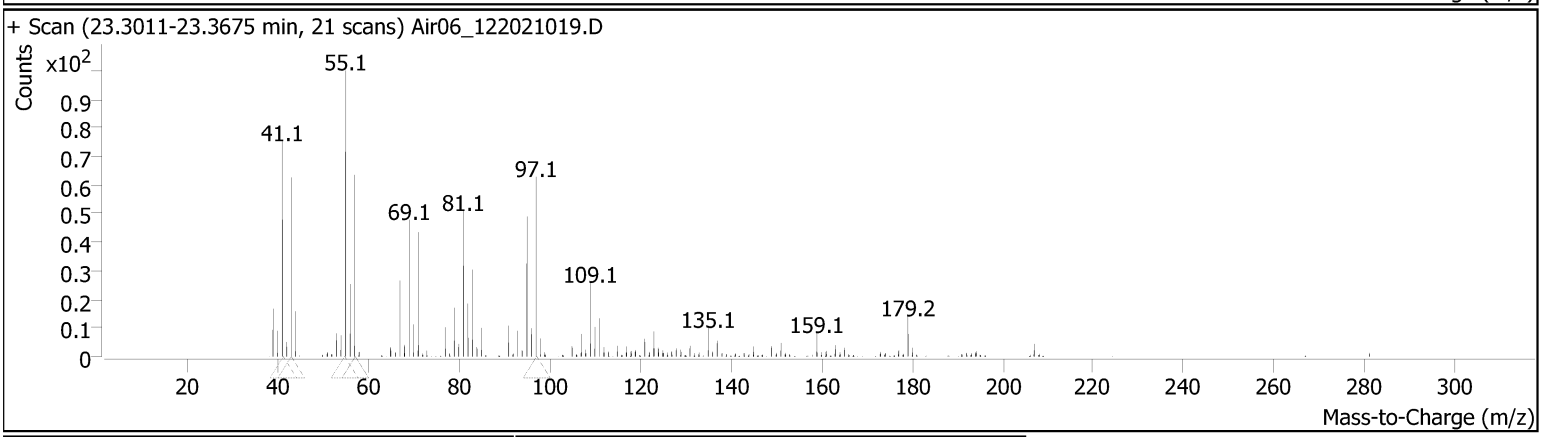


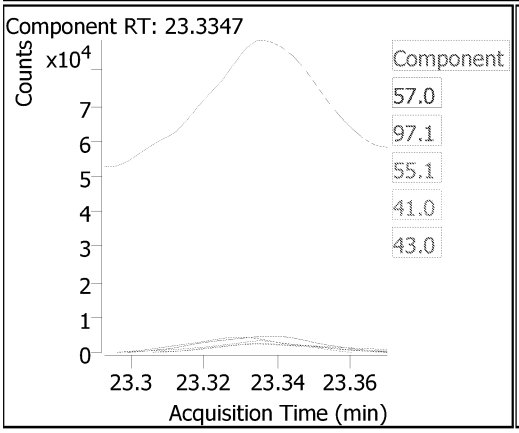


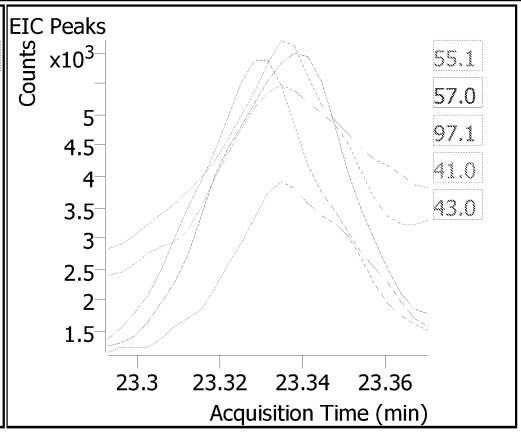
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.3347	Phytol	87527.9	78.9	150-86-7	C20H40O	0.2065

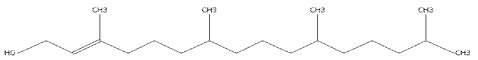








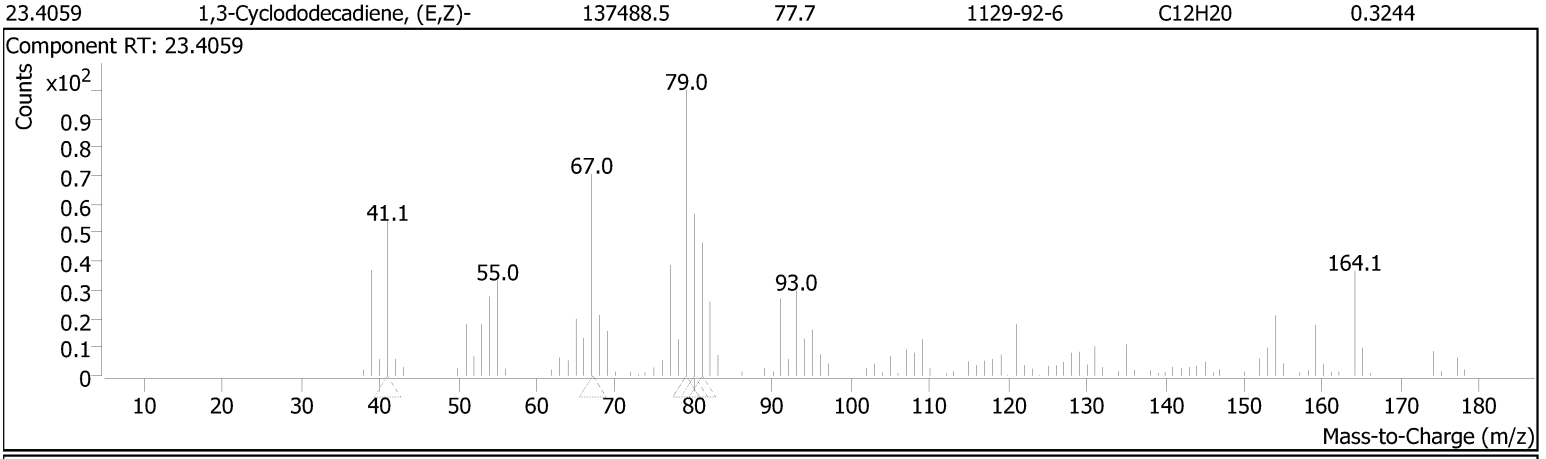


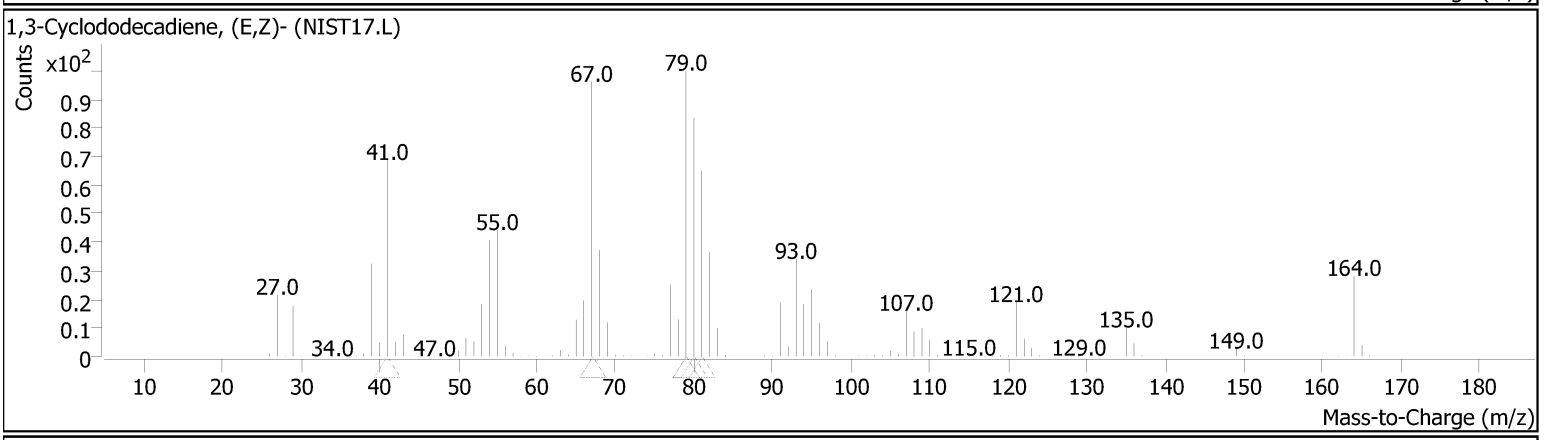


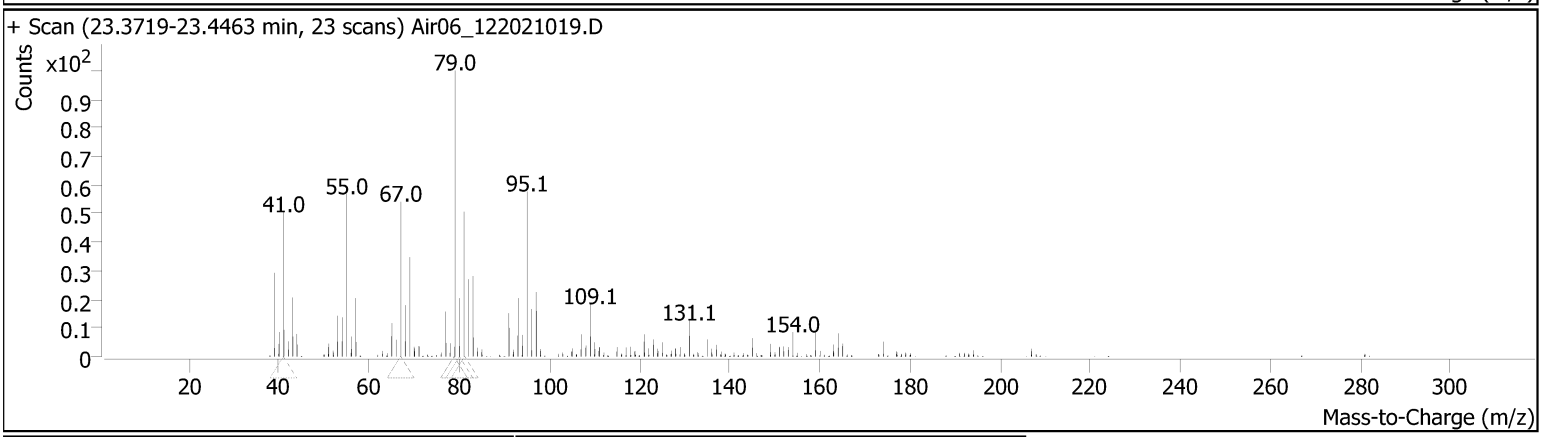
Library Search Results - NonTarget Hits with Details

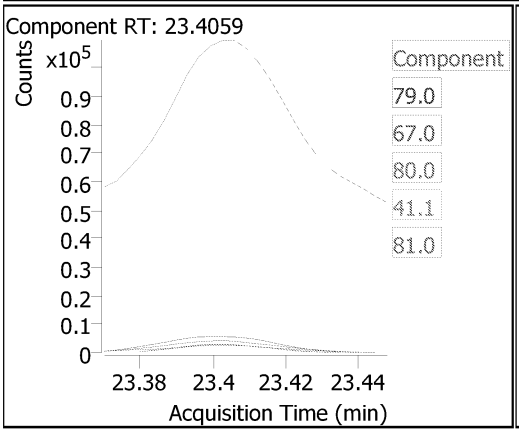
Agilent Technologies

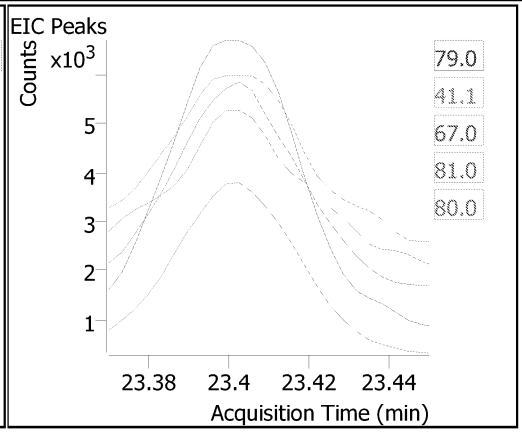
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
23.4059	1,3-Cyclododecadiene, (E,Z)-	137488.5	77.7	1129-92-6	C12H20	0.3244

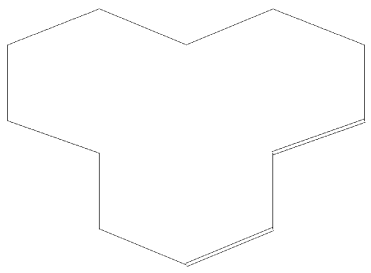












QC Raw Data

ENTHALPY BLANK USER REPORT FOR 455620 MSAIR Air
EPA TO-15

Inst : AIR-MS-06 Lab ID : QC957224 C10819
Seqnum : 371471408005.16 Matrix : Air
File : air06_112321005 Batch : 278593 Time : 23-NOV-2021 12:34
Cal : 371424323001 Caldate : 21-OCT-2021
IDF : 1.0 Raw Units : nL/L Units : nL/L
PDF : 1.0

Analyte	Raw	Result	RL	Flags
Freon 12	0	ND	0.20	u
Freon 114	0	ND	0.20	u
Chloromethane	0.001065	ND	0.20	u
Vinyl Chloride	0	ND	0.20	u
Bromomethane	0	ND	0.20	u
Chloroethane	0	ND	0.20	u
Trichlorofluoromethane	0	ND	0.20	u
1,1-Dichloroethene	0	ND	0.20	u
Freon 113	0	ND	0.20	u
Acetone	0.03398	ND	1.0	u
Carbon Disulfide	0.02016	ND	0.20	u
Isopropanol (IPA)	0.009776	ND	1.0	rsd u
Methylene Chloride	0.04858	ND	0.20	!v- calc u
trans-1,2-Dichloroethene	0.005748	ND	0.20	u
MTBE	0.0006199	ND	0.20	u
n-Hexane	0.006554	ND	0.20	u
1,1-Dichloroethane	0	ND	0.20	u
Vinyl Acetate	0.003264	ND	1.0	u
cis-1,2-Dichloroethene	0	ND	0.20	u
2-Butanone	0.009229	ND	1.0	u
Chloroform	0.002688	ND	0.20	u
1,1,1-Trichloroethane	0	ND	0.20	u
Carbon Tetrachloride	0	ND	0.20	u
Benzene	0.004400	ND	0.20	u
1,2-Dichloroethane	0	ND	0.20	u
Trichloroethene	0.001936	ND	0.20	u
1,2-Dichloropropane	0.002042	ND	0.20	u
Bromodichloromethane	0	ND	0.20	u
cis-1,3-Dichloropropene	0	ND	0.20	u
4-Methyl-2-Pentanone	0.0006635	ND	0.20	u
Toluene	0.004105	ND	0.20	u
trans-1,3-Dichloropropene	0	ND	0.20	u
1,1,2-Trichloroethane	0	ND	0.20	u
Tetrachloroethene	0.003177	ND	0.20	u
2-Hexanone	0.006131	ND	0.50	u
Dibromochloromethane	0.0004429	ND	0.20	u
1,2-Dibromoethane	0.002109	ND	0.20	u
Chlorobenzene	0.003303	ND	0.20	u
Ethylbenzene	0.001556	ND	0.20	u
m,p-Xylenes	0.002796	ND	0.40	u
o-Xylene	0.001669	ND	0.20	u
Styrene	0.002735	ND	0.20	u
Bromoform	0.002821	ND	0.20	u
1,1,2,2-Tetrachloroethane	0.001982	ND	0.20	u
1,1,1,2-Tetrachloroethane	0	ND	0.20	u
4-Ethyltoluene	0.003114	ND	0.20	u
1,3,5-Trimethylbenzene	0.003298	ND	0.20	u

Analyte	Raw	Result	RL	Flags
1,2,4-Trimethylbenzene	0.004616	ND	0.20	u
1,3-Dichlorobenzene	0.007314	ND	0.20	u
1,4-Dichlorobenzene	0.009802	ND	0.20	u
Benzyl chloride	0.007169	ND	0.20	u
1,2-Dichlorobenzene	0.01177	ND	0.20	u
1,2,4-Trichlorobenzene	0.02519	ND	0.20	u
Hexachlorobutadiene	0.01109	ND	0.20	u

TICs not entered.

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Bromofluorobenzene	10.05	10.00	10.05	101	60-140	u

ISTD (ICAL air06_102121011)	ICAL Area	BLANK Area	%Drift	ICAL RT	BLANK RT	Drift
Bromochloromethane	389038	342740	-11.90	8.19	8.18	-0.01
1,4-Difluorobenzene	1458162	1279087	-12.28	9.92	9.91	-0.01
Chlorobenzene-d5	778633	676491	-13.12	14.02	14.01	-0.01

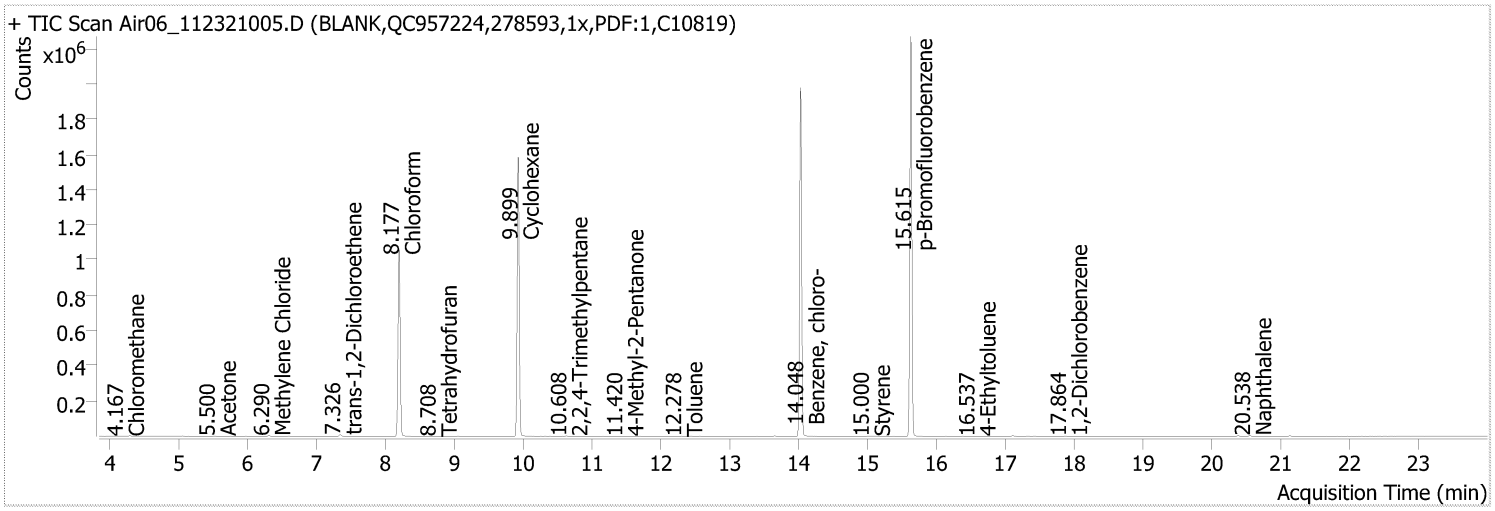
GSG 01/04/22 : CanCheck for C10819.

Analyst: GSG Date: 01/04/22 Reviewer: SLL Date: 01/04/22

!=warning -=low bias calc=check quantitation rsd=ICAL %RSD failure u=use v=ICV

Quantitation Results Report (Not Reviewed)

Data File	Air06_112321005.D	Operator	ZNZ
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	11/23/2021 12:34:58 PM
Sample Name	BLANK,QC957224,278593,1x,PDF:1,C10819	Instrument	Air-MS-06
Vial	1	Multiplier	1.00
DA Method File	TO15_102121.m	Comment	1x400mL
Tune File	bfb.u	Tune Date	11/1/2021 11:46:40 AM
Batch Name	2021 Nov 23 1111 TO15_102121.m.batch.bin	Last Calib Update	10/23/2021 7:11:09 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.180	130.0	342740	10.0000	nL/L		-0.006
M 1,4-Difluorobenzene	9.912	114.0	1279087	10.0000	nL/L		-0.003
M Chlorobenzene-d5	14.013	82.0	676491	10.0000	nL/L	#	-0.003
System Monitoring Compounds							
S p-Bromofluorobenzene	15.615	95.0	895244	10.0505	nL/L		0.000
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 100.50%			
Target Compounds							QValue
T Propylene	3.931	41.0	342	0.0106	nL/L	#	67
T Freon 12	0.000		0	N.D.			
T Chloromethane	4.167	50.0	40	0.0011	nL/L		50
T Freon 114	0.000		0	N.D.			
T Vinyl Chloride	0.000		0	N.D.			
T 1,3-Butadiene	0.000		0	N.D.			
T Butane	0.000		0	N.D.			
T Bromomethane	0.000		0	N.D.			
T Chloroethane	0.000		0	N.D.			
T Ethanol	5.034	45.0	2570	0.1596	nL/L		97
T Vinyl bromide	0.000		0	N.D.			
T Acrolein	5.345	56.0	22	0.0013	nL/L		19
T Acetone	5.500	58.0	790	0.0340	nL/L	#	83
T Trichloromonofluoromethane	0.000		0	N.D.			
T Isopropanol (IPA)	5.730	45.0	872	0.0098	nL/L	#	84
T n-Pentane	5.957	43.0	517	0.0067	nL/L		85
T 1,1-Dichloroethene	0.000		0	N.D.			
T Tert-butyl alcohol (TBA)	6.309	59.0	442	0.0062	nL/L	#	74
T Methylene Chloride	6.290	84.0	1732	0.0486	nL/L		97
T 3-Chloropropene	6.575	76.0	1791	0.1309	nL/L	#	46
T Freon 113	0.000		0	N.D.			
T Carbon Disulfide	6.575	76.0	1791	0.0202	nL/L	#	84

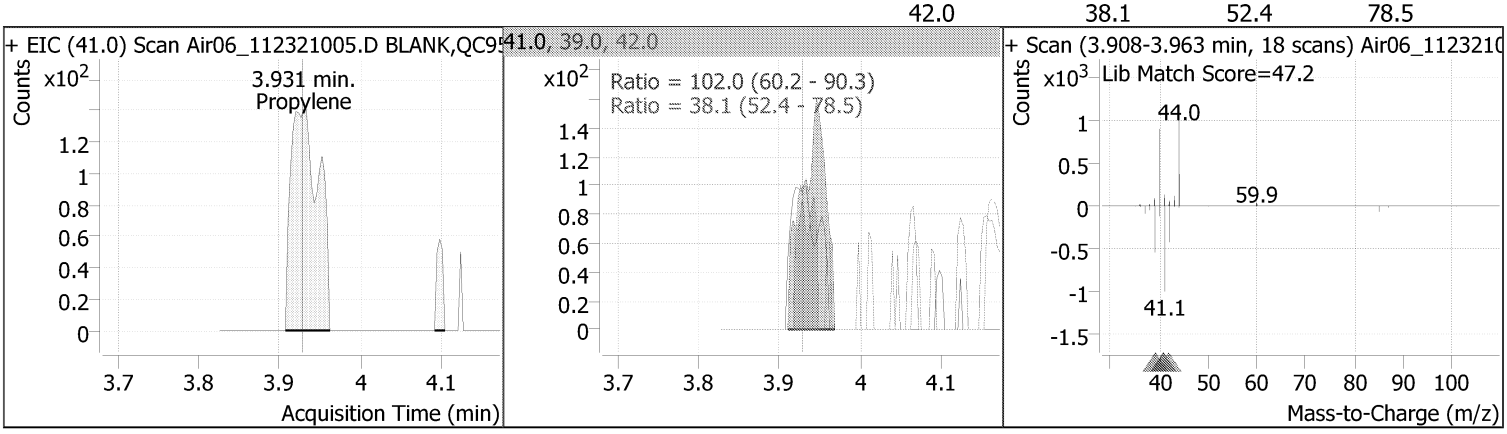
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.326	61.0	322	0.0057	nL/L	#	39
T 1,1-Dichloroethane	0.000		0	N.D.			
T MTBE	7.319	73.0	52	0.0006	nL/L		42
T Vinyl Acetate	7.416	43.0	369	0.0033	nL/L	#	72
T 2-Butanone	7.698	43.0	836	0.0092	nL/L	#	84
T cis-1,2-Dichloroethene	0.000		0	N.D.			
T Ethyl Acetate	0.000		0	N.D.			
T n-Hexane	8.242	57.0	442	0.0066	nL/L	#	86
T Chloroform	8.177	83.0	190	0.0027	nL/L	#	1
T Tetrahydrofuran	8.708	72.0	47	0.0032	nL/L	#	1
T 1,2-Dichloroethane	0.000		0	N.D.			
T 1,1,1-Trichloroethane	0.000		0	N.D.			
T Benzene	9.614	78.0	432	0.0044	nL/L	#	65
T Carbon Tetrachloride	0.000		0	N.D.			
T Cyclohexane	9.899	84.0	1773	0.0431	nL/L	#	1
T 1,2-Dichloropropane	10.109	63.0	93	0.0020	nL/L		27
T Methane, bromodichloro-	0.000		0	N.D.			
T 1,4-Dioxane	10.601	88.0	388	0.0181	nL/L	#	32
T Trichloroethene	10.556	132.0	85	0.0019	nL/L	#	44
T 2,2,4-Trimethylpentane	10.608	57.0	2047	0.0096	nL/L		95
T Methyl methacrylate	0.000		0	N.D.			
T n-Heptane	0.000		0	N.D.			
T cis-1,3-Dichloropropene	0.000		0	N.D.			
T 4-Methyl-2-Pentanone	11.420	58.0	26	0.0007	nL/L	#	1
T trans-1,3-Dichloropropene	0.000		0	N.D.			
T 1,1,2-Trichloroethane	0.000		0	N.D.			
T Toluene	12.278	91.0	498	0.0041	nL/L		88
T TPH Gasoline (C3 to C12)	12.396	165.0	474150	0.0549	nL/L		100
T 2-Hexanone	12.547	58.0	308	0.0061	nL/L	#	77
T Dibromochloromethane	12.673	129.0	33	0.0004	nL/L		31
T 1,2-Dibromoethane	12.919	108.9	133	0.0021	nL/L	#	79
T Tetrachloroethene	13.382	166.0	198	0.0032	nL/L	#	64
T 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
T Benzene, chloro-	14.048	112.0	321	0.0033	nL/L	#	1
T Ethylbenzene	14.447	91.0	233	0.0016	nL/L		55
T TPH Gasoline (C6 to C12)	14.521	165.0	286962	0.0444	nL/L		100
T m,p-Xylenes	14.634	91.0	339	0.0028	nL/L	#	63
T Bromoform	14.693	173.0	222	0.0028	nL/L	#	34
T Styrene	15.000	104.0	253	0.0027	nL/L	#	64
T 1,1,2,2-Tetrachloroethane	15.104	83.0	187	0.0020	nL/L		86
T o-Xylene	15.120	91.0	209	0.0017	nL/L	#	56
T n-Nonane	15.369	85.0	22	0.0008	nL/L	#	1
T Isopropylbenzene	15.774	105.0	252	0.0015	nL/L		57
T 2-Chlorotoluene	0.000		0	N.D.			
T n-Propylbenzene	16.531	120.0	106	0.0022	nL/L		1
T 4-Ethyltoluene	16.537	105.1	529	0.0031	nL/L	#	76
T 1,3,5-Trimethylbenzene	16.631	105.0	485	0.0033	nL/L		85
T 1,2,4-Trimethylbenzene	17.136	105.0	656	0.0046	nL/L	#	75
T Benzyl chloride	17.298	91.0	835	0.0072	nL/L	#	76
T 1,3-Dichlorobenzene	17.324	146.0	744	0.0073	nL/L	#	85
T 1,4-Dichlorobenzene	17.415	146.0	999	0.0098	nL/L	#	95
T 1,2-Dichlorobenzene	17.864	146.0	1158	0.0118	nL/L		89
T 1,2,4-Trichlorobenzene	20.363	179.9	1879	0.0252	nL/L		95
T Naphthalene	20.538	128.0	4768	0.0304	nL/L		99
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.114	225.0	896	0.0111	nL/L		96

Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

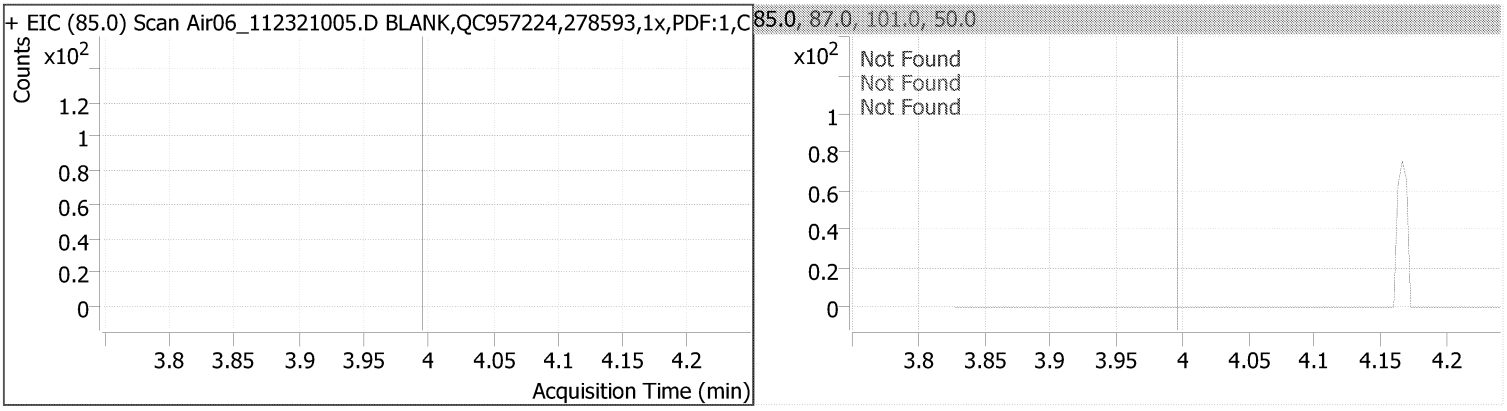
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitation Results Report (Not Reviewed)

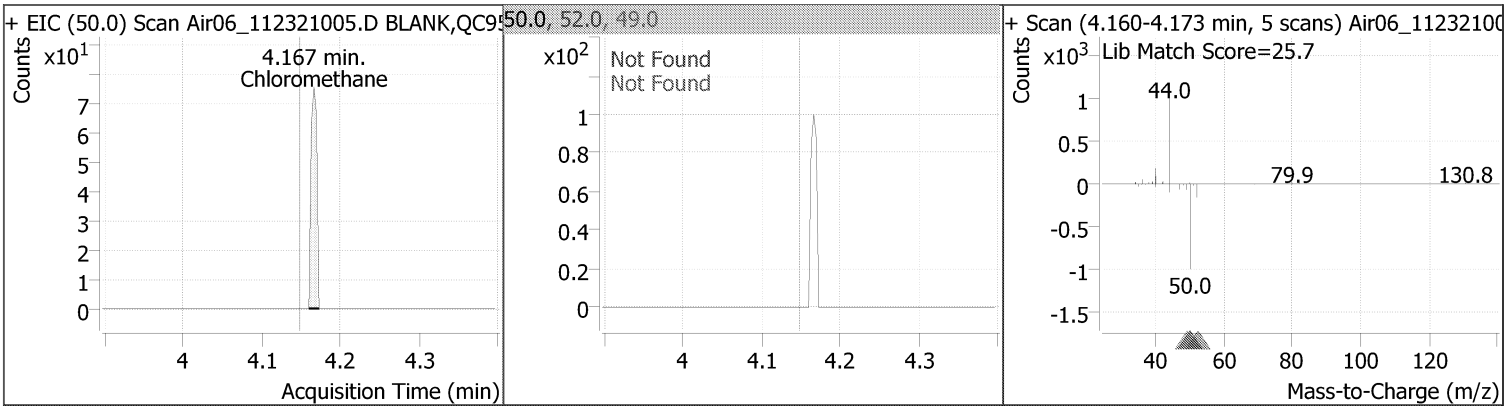
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.0106	3.93	0.00	342	39.0	102.0	60.2	90.3
					42.0	38.1	52.4	78.5



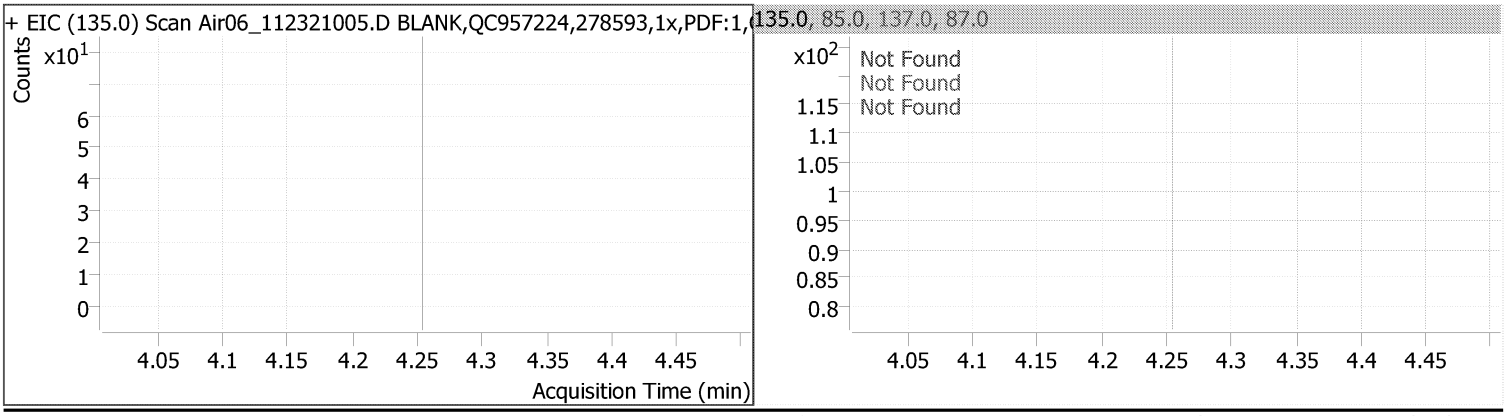
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 12	N.D.	4.00	87.0	32.4	50.0	17.3	101.0	9.4



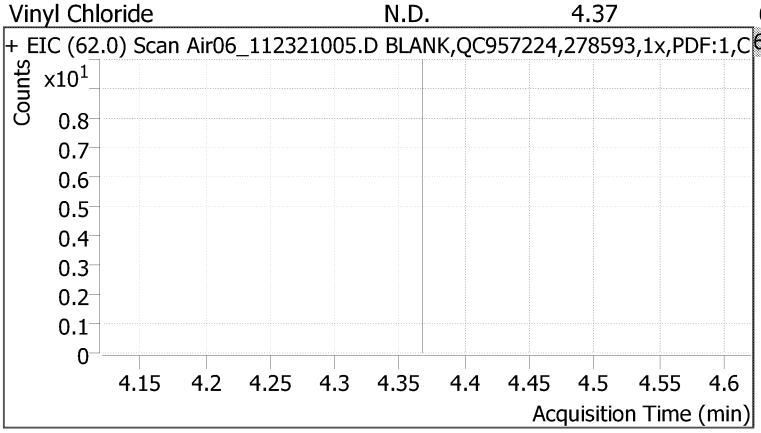
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	0.0011	4.17	0.01	40	52.0		25.5	38.3
					49.0		8.3	12.5

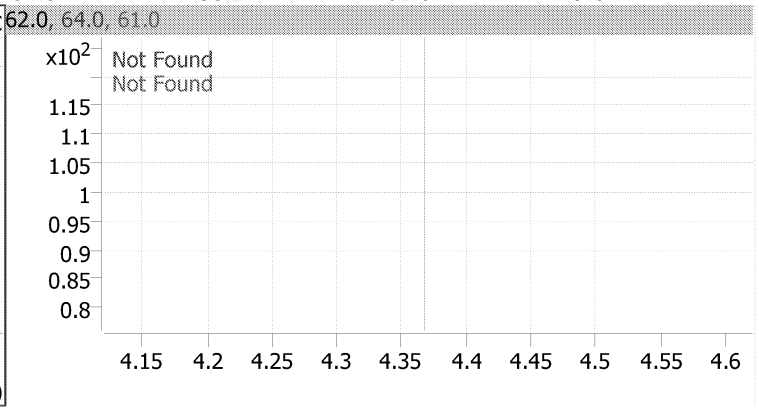


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 114	N.D.	4.26	85.0	151.0	87.0	48.3	137.0	32.5

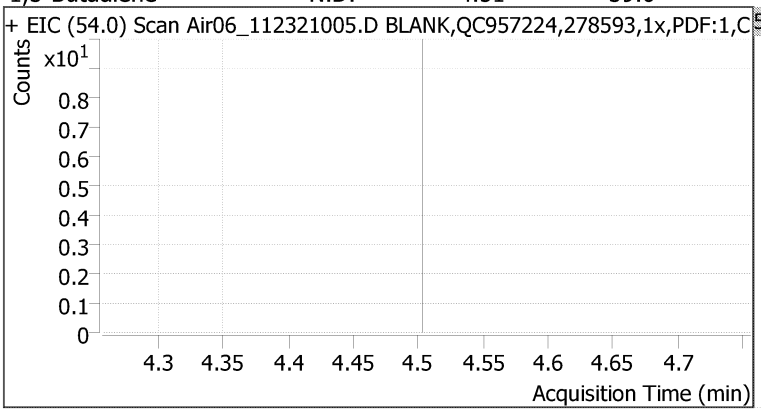


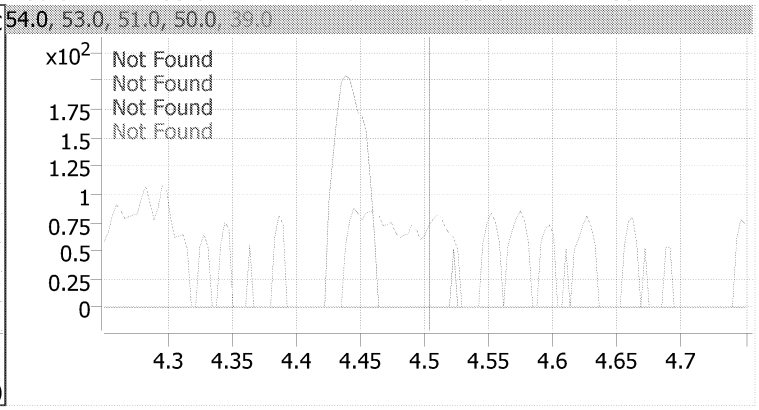
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl Chloride	N.D.	4.37	64.0	30.2	61.0	9.0



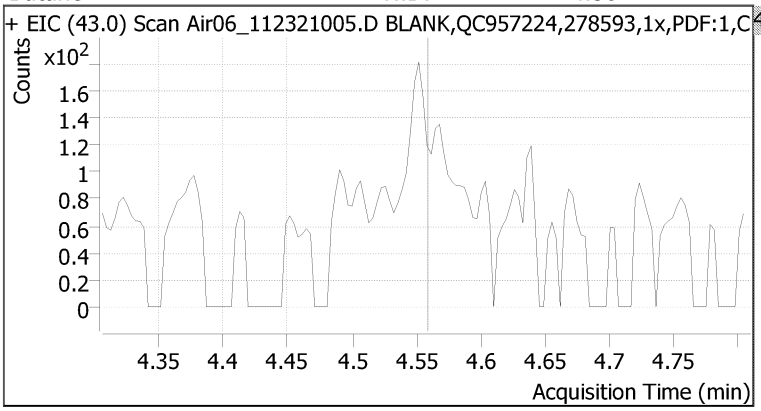


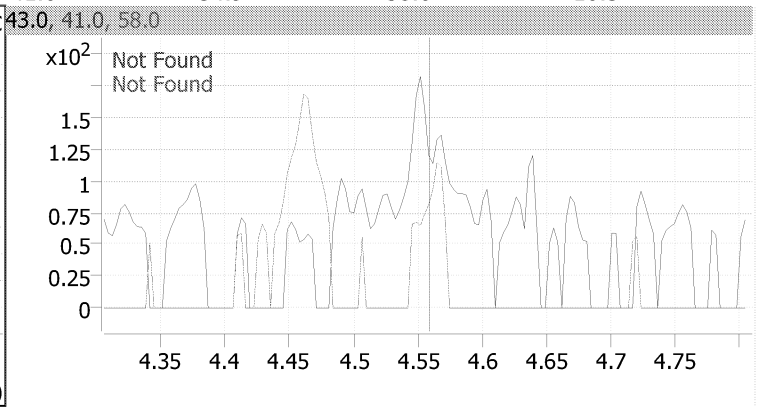
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,3-Butadiene	N.D.	4.51	39.0	106.8	53.0	71.6	50.0	35.2



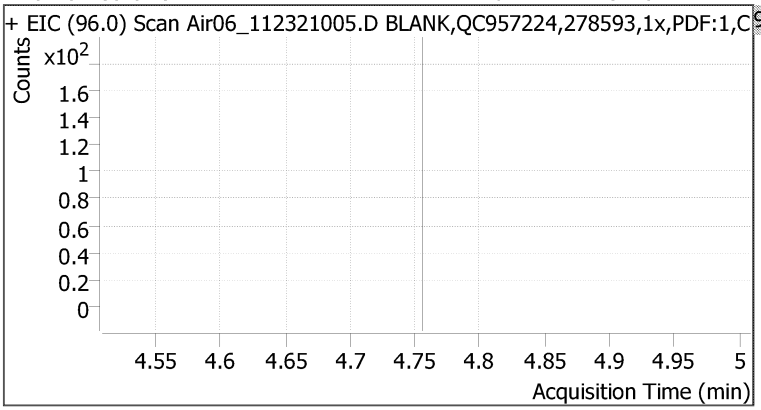


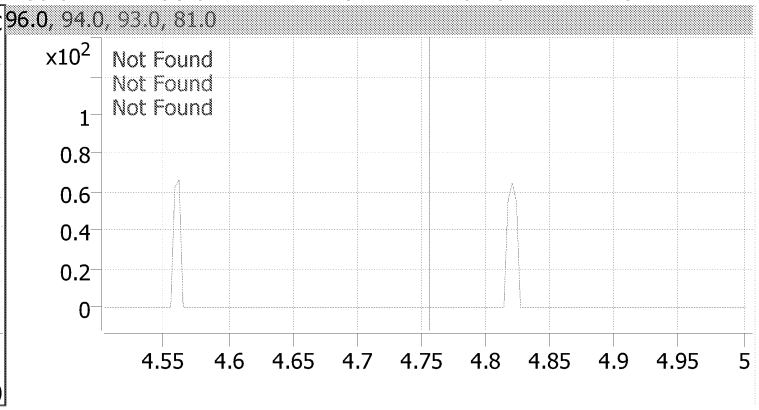
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Butane	N.D.	4.56	41.0	34.9	58.0	10.3



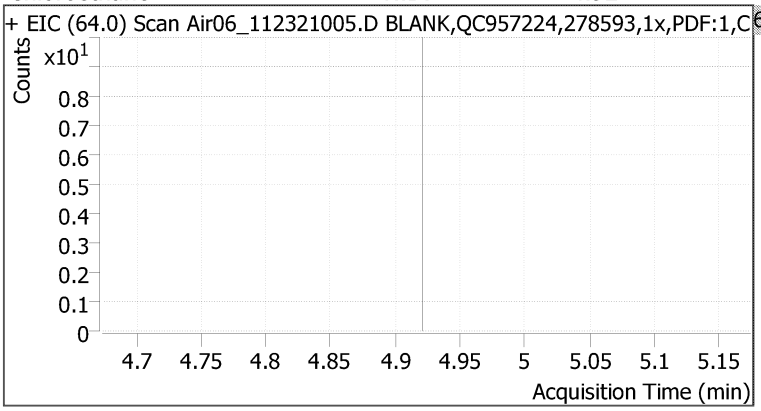


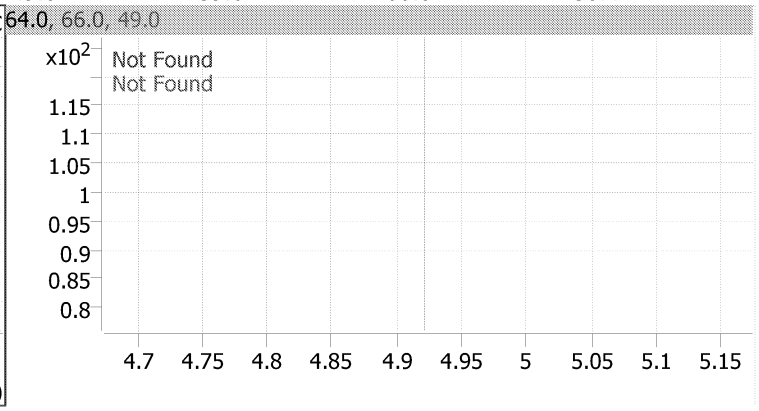
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Bromomethane	N.D.	4.76	94.0	106.0	93.0	21.9	81.0	19.1



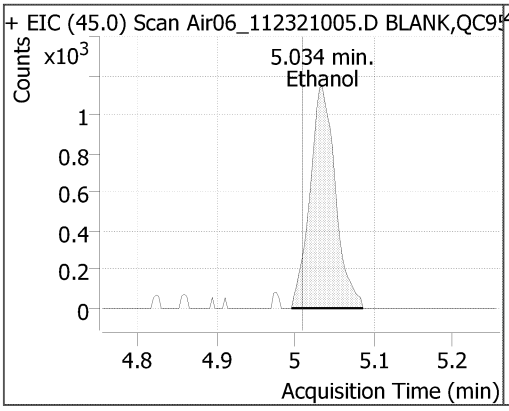


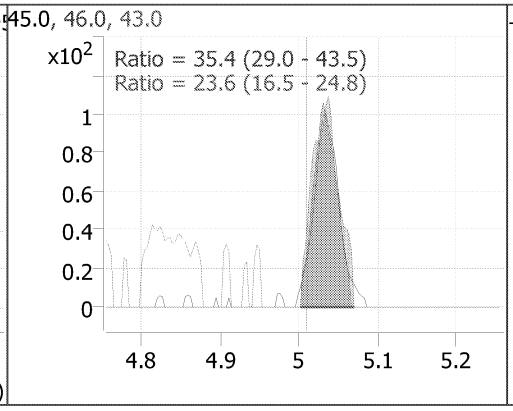
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Chloroethane	N.D.	4.92	49.0	39.6	66.0	30.4

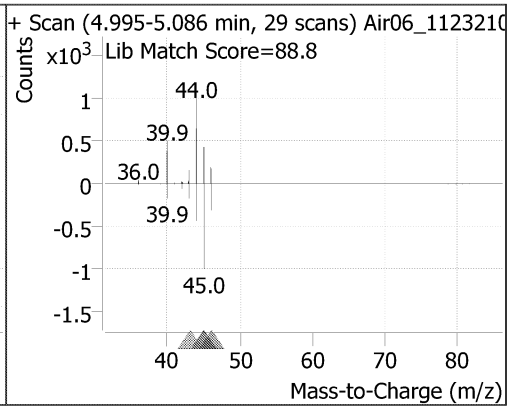




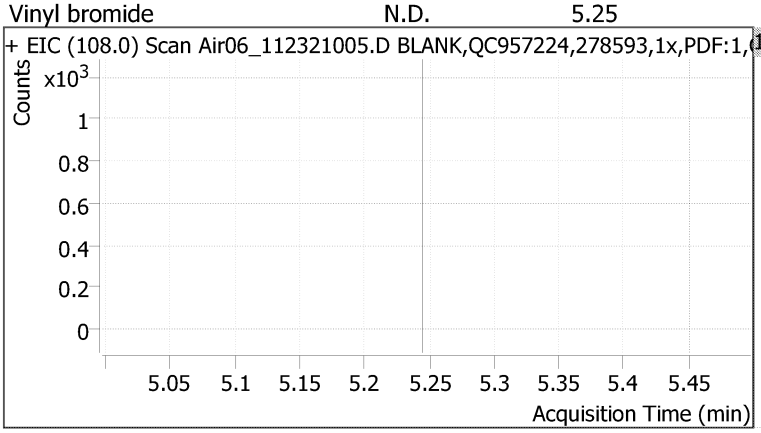
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	0.1596	5.03	0.02	2570	46.0	35.4	29.0	43.5
					43.0	23.6	16.5	24.8

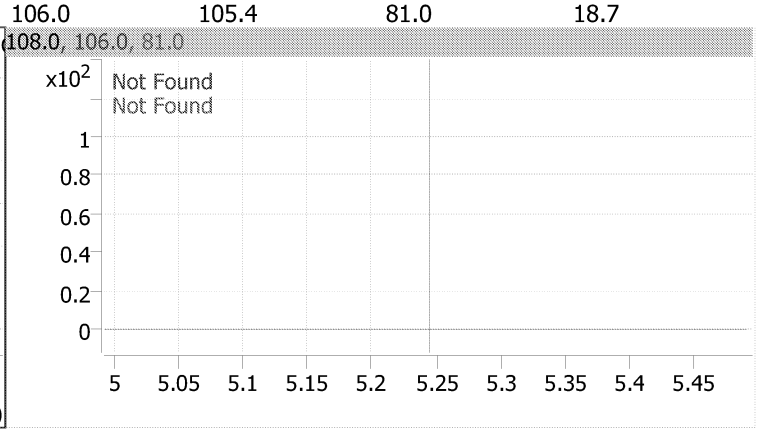




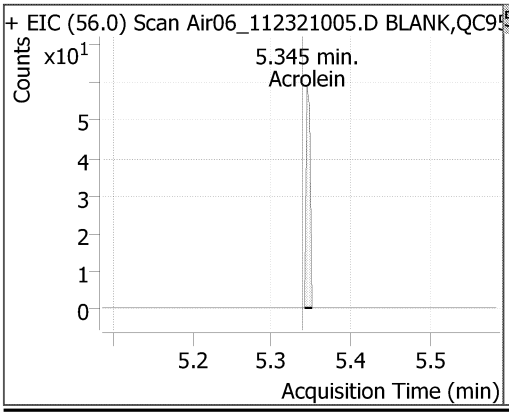


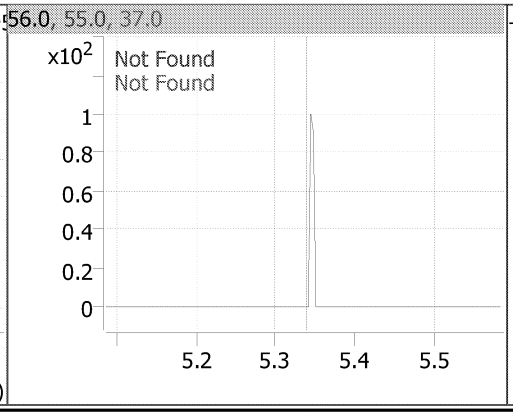
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl bromide	N.D.	5.25	106.0	105.4	81.0	18.7

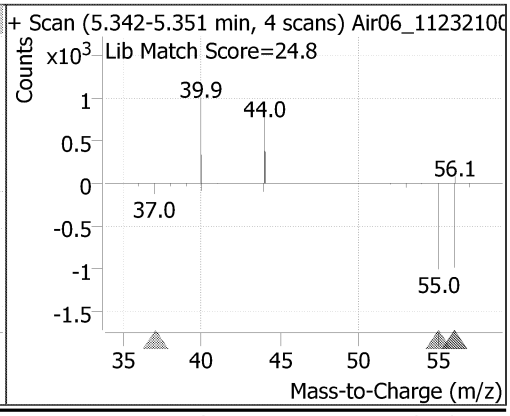




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	0.0013	5.34	0.00	22	55.0		60.0	90.0
					37.0		8.5	12.8

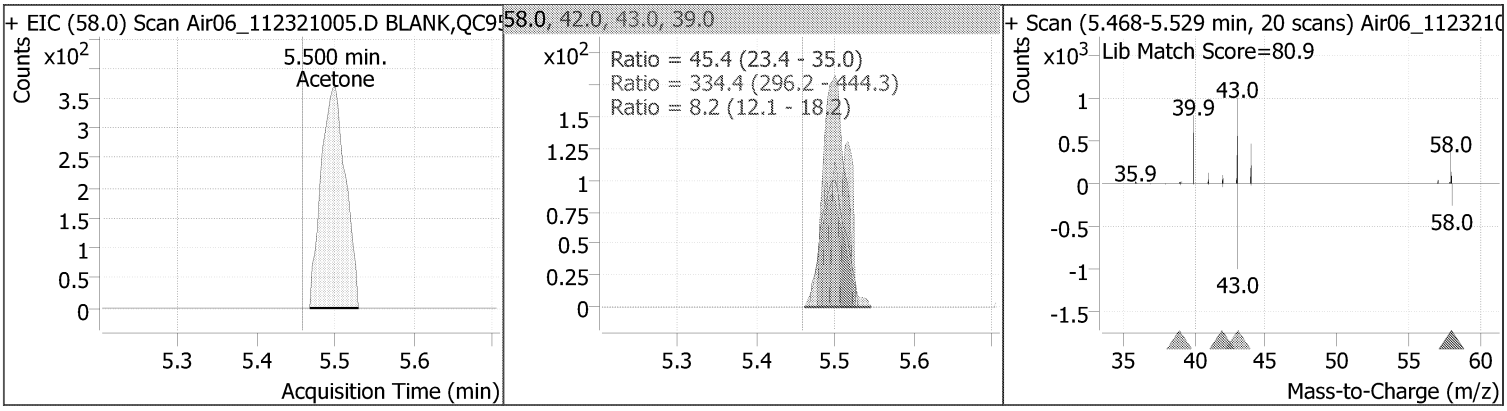




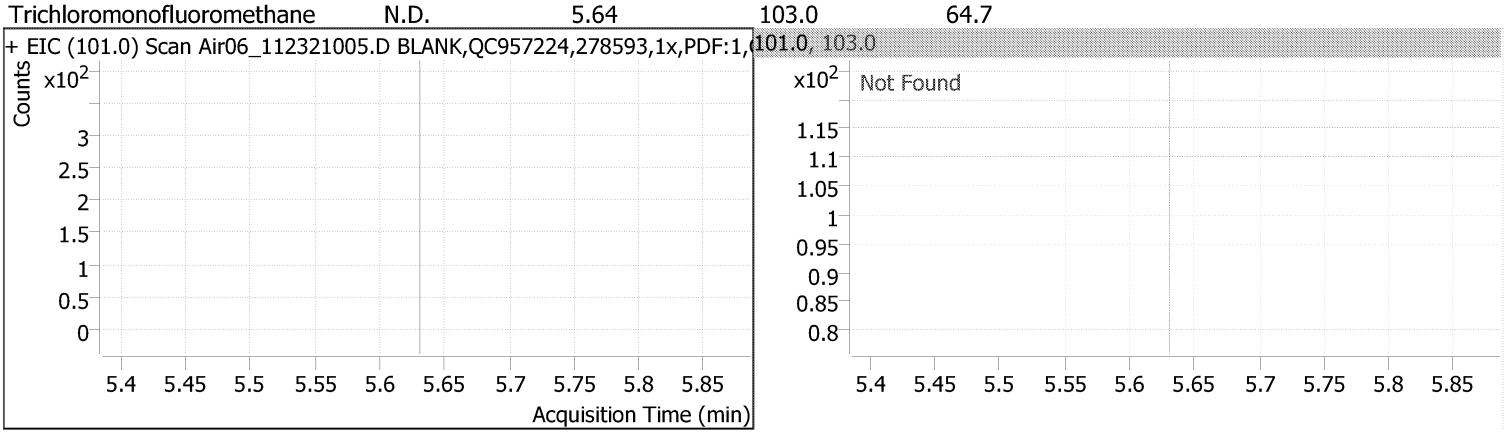


Quantitation Results Report (Not Reviewed)

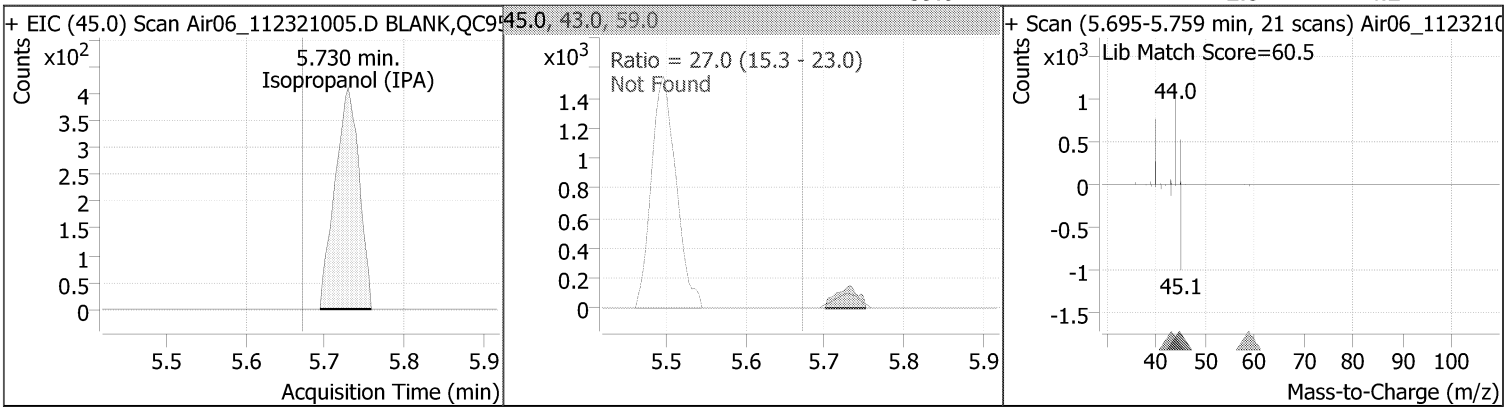
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	0.0340	5.50	0.04	790	43.0	334.4	296.2	444.3
					42.0	45.4	23.4	35.0
					39.0	8.2	12.1	18.2



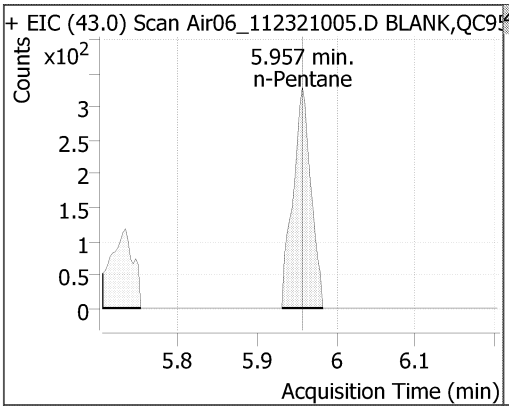
Compound	Conc.	Exp RT	QIon	Exp Ratio
Trichloromonofluoromethane	N.D.	5.64	103.0	64.7

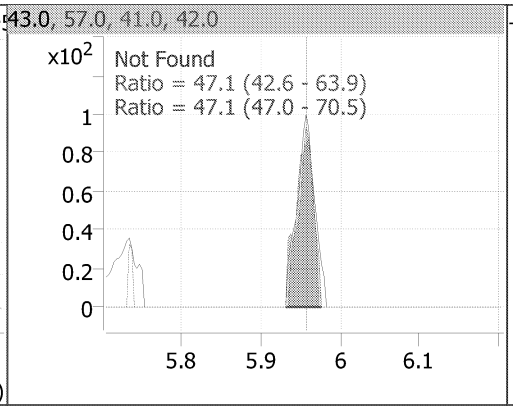


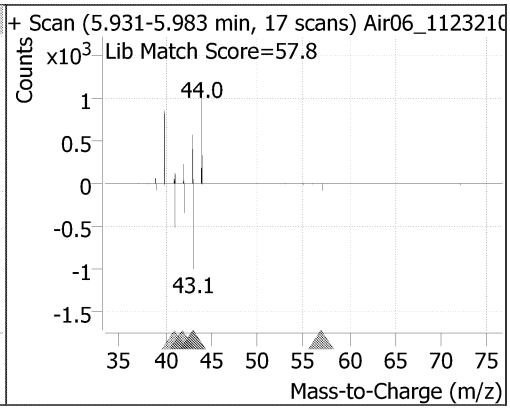
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.0098	5.73	0.06	872	43.0	27.0	15.3	23.0
					59.0		2.8	4.2



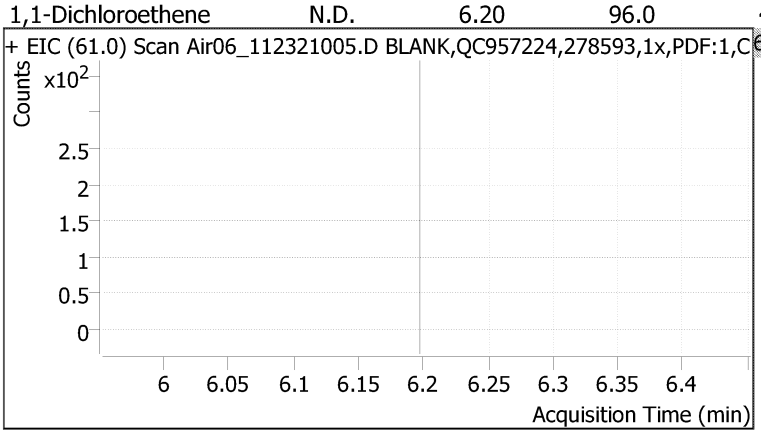
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.0067	5.96	0.00	517	42.0	47.1	47.0	70.5
					41.0	47.1	42.6	63.9
					57.0		11.1	16.7

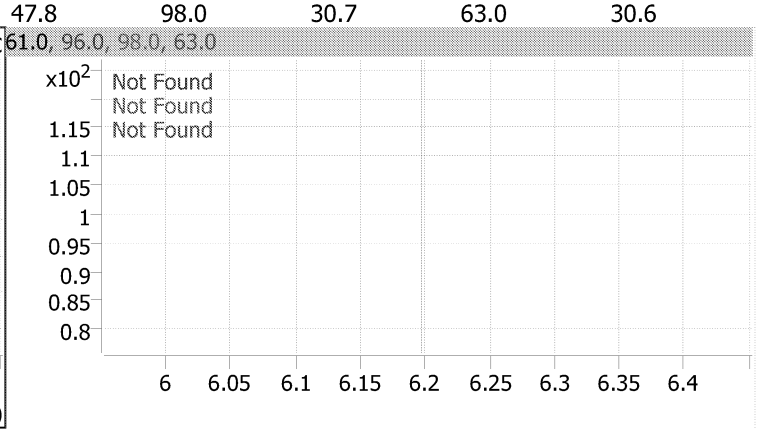




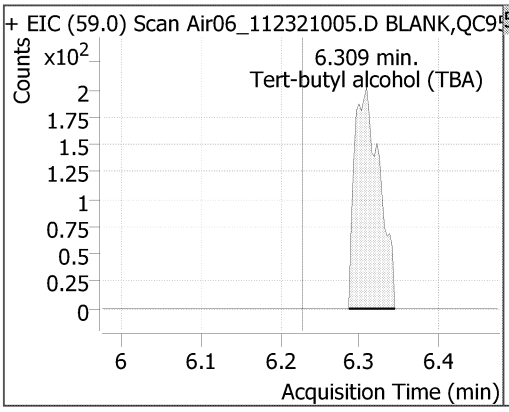


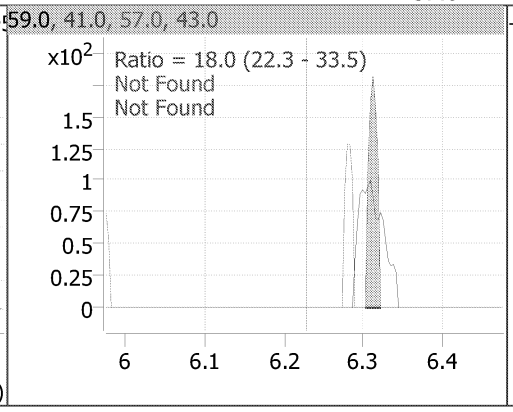
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethene	N.D.	6.20	96.0	47.8	98.0	30.7	63.0	30.6

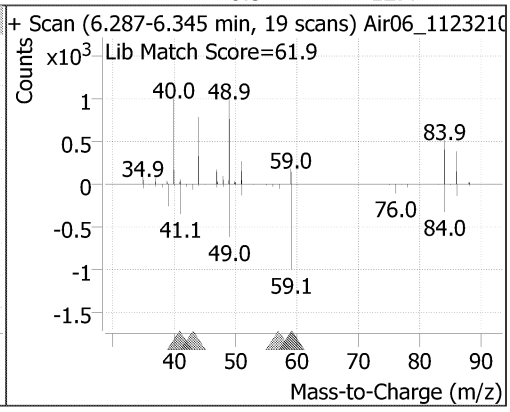




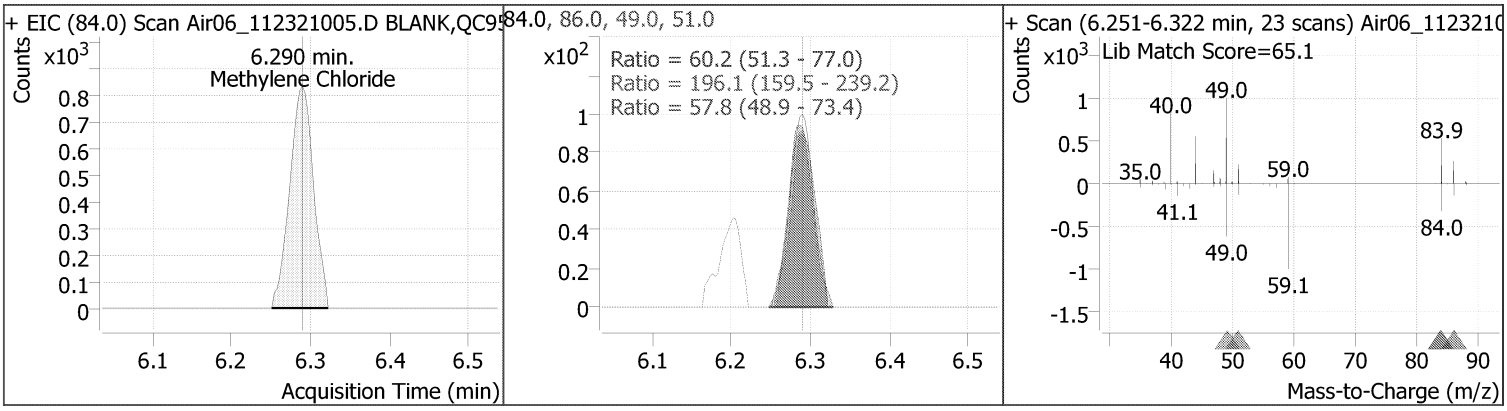
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.0062	6.31	0.08	442	41.0	18.0	22.3	33.5
					43.0		13.0	19.5
					57.0		8.3	12.4



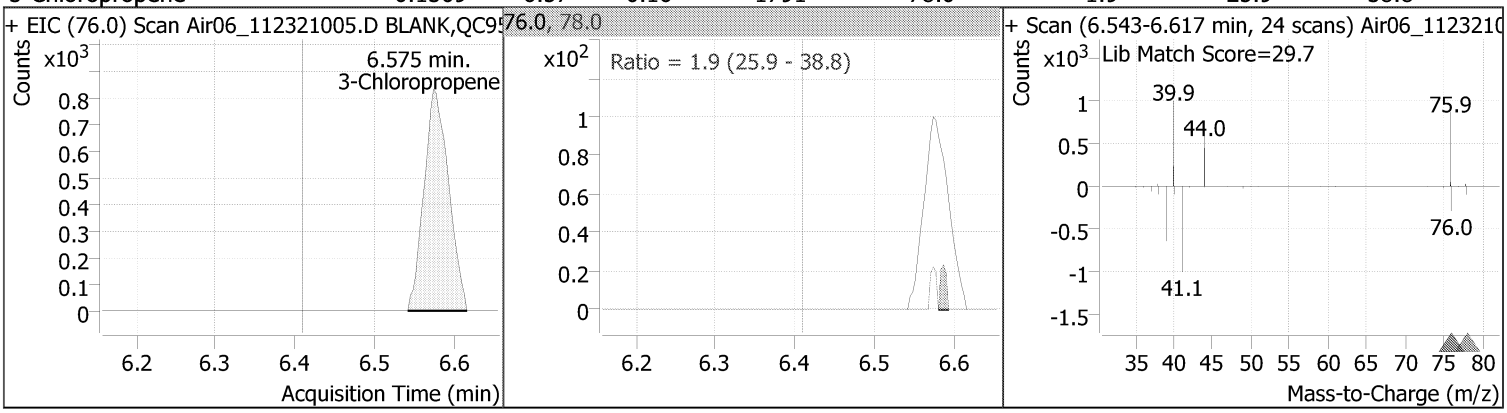




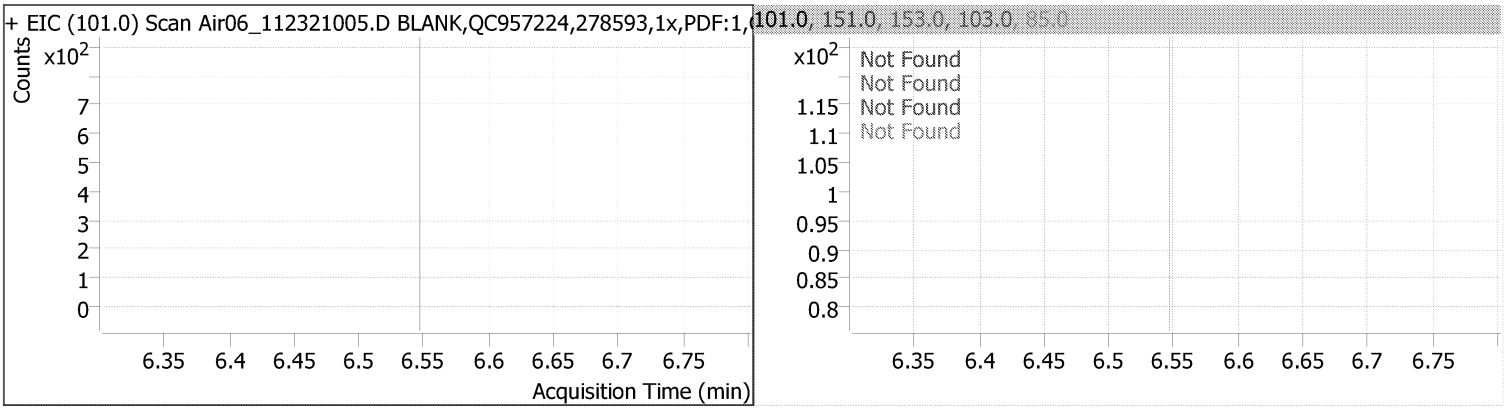
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.0486	6.29	0.00	1732	49.0	196.1	159.5	239.2
					86.0	60.2	51.3	77.0
					51.0	57.8	48.9	73.4



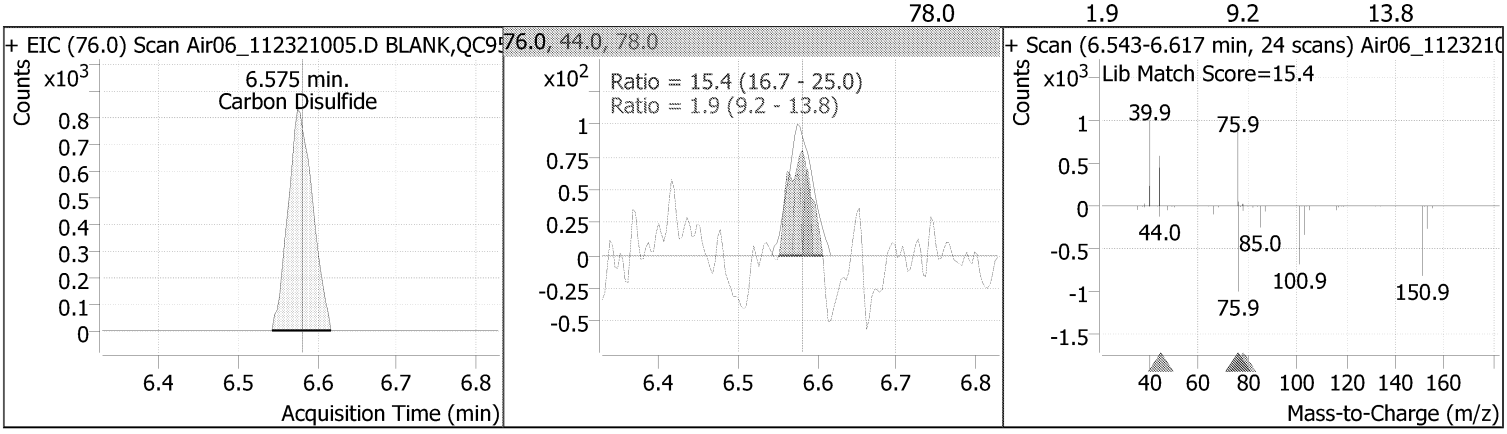
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	0.1309	6.57	0.16	1791	78.0	1.9	25.9	38.8



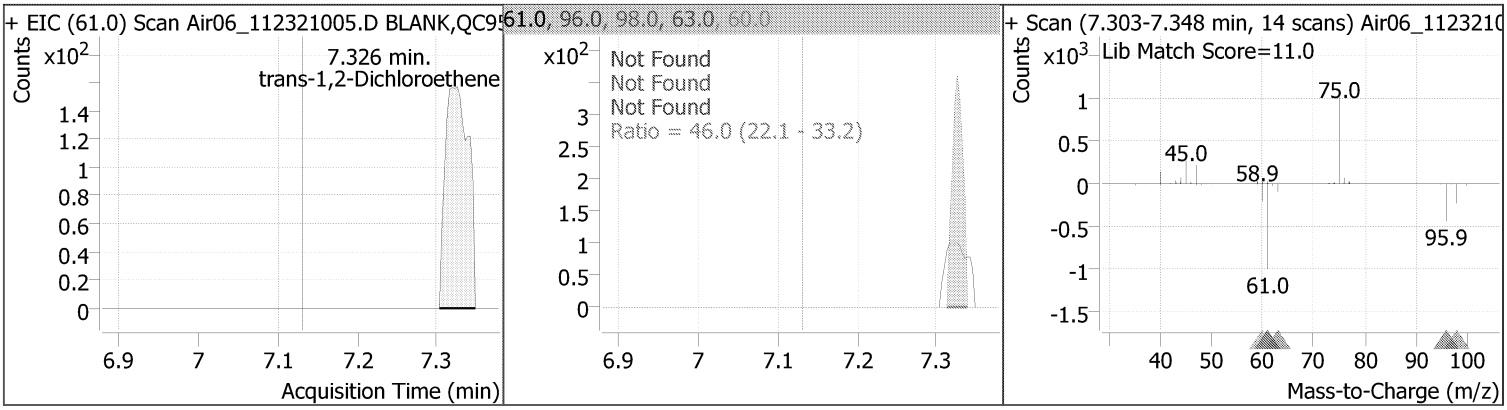
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 113	N.D.	6.55	151.0	83.8	103.0	64.0	153.0	54.1



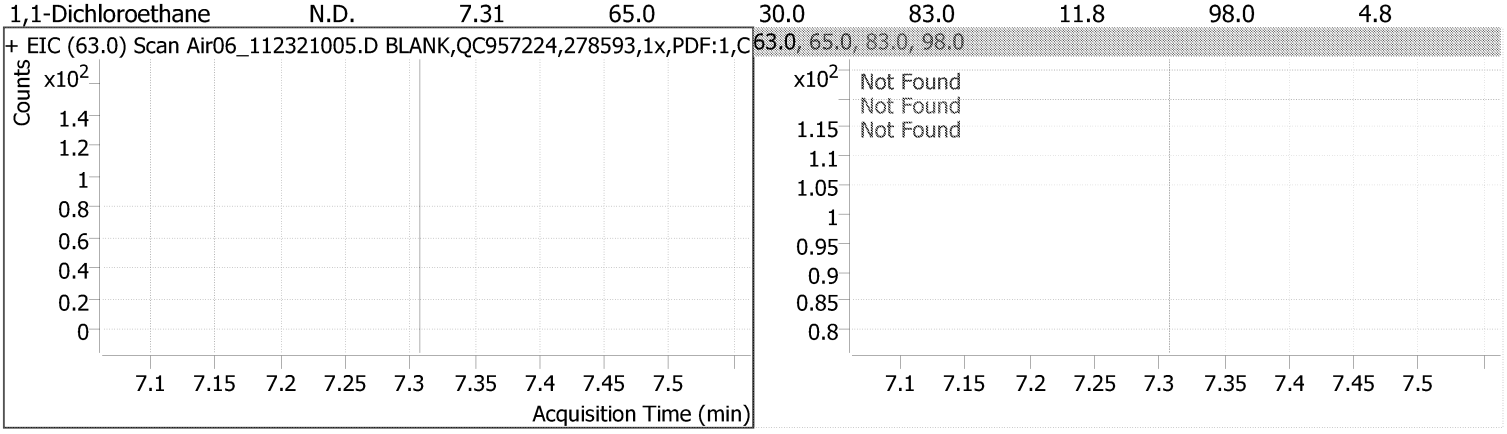
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.0202	6.57	-0.01	1791	44.0	15.4	16.7	25.0
					78.0	1.9	9.2	13.8



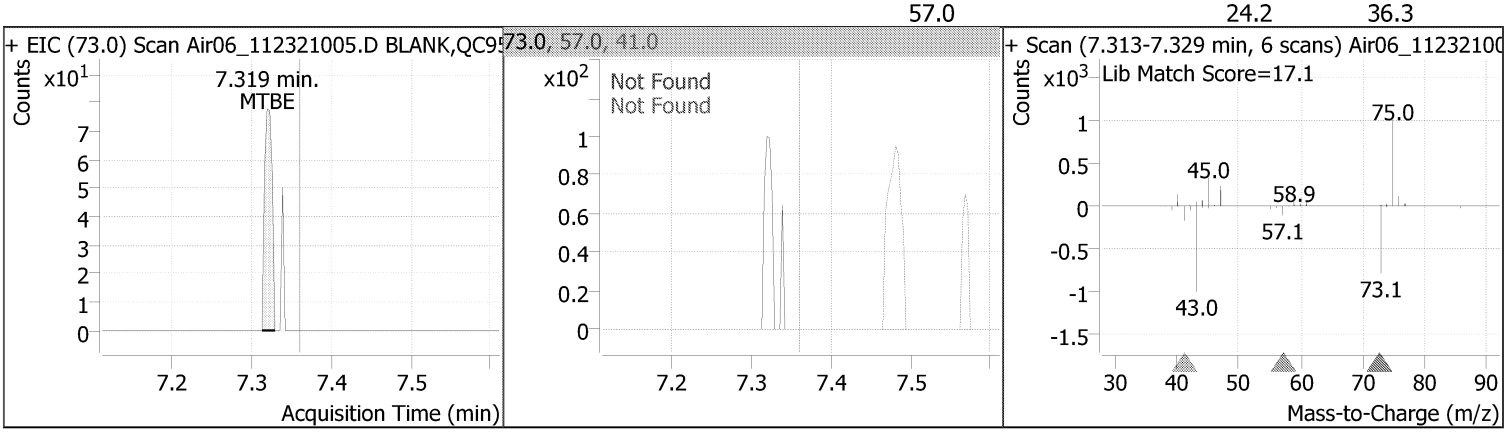
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.0057	7.33	0.19	322	96.0		44.1	66.2
					98.0		27.9	41.9
					63.0		24.4	36.6
					60.0	46.0	22.1	33.2



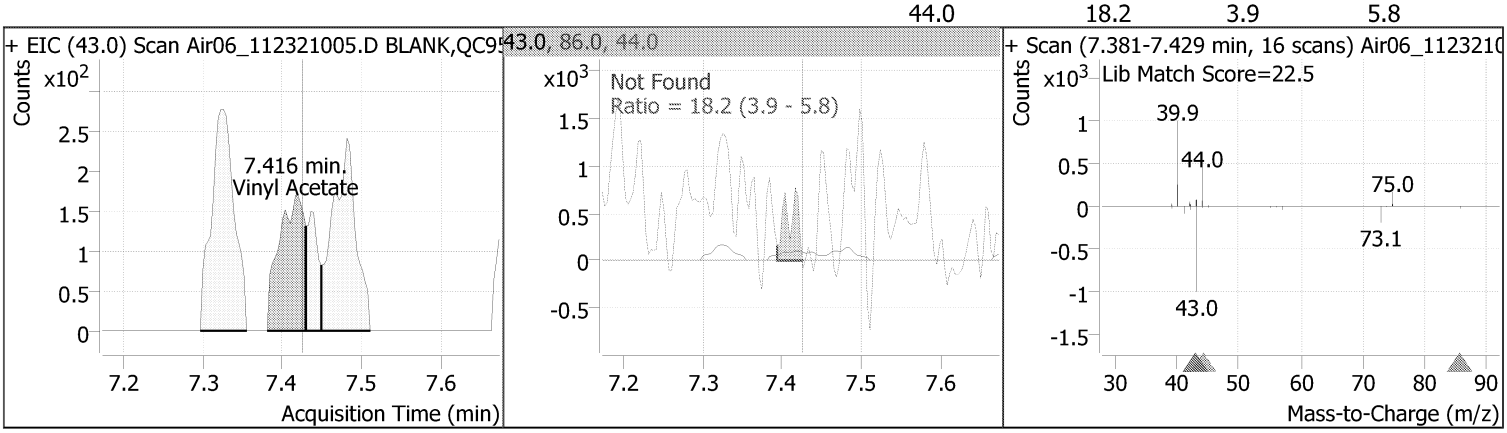
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethane	N.D.	7.31	65.0	30.0	83.0	11.8	98.0	4.8



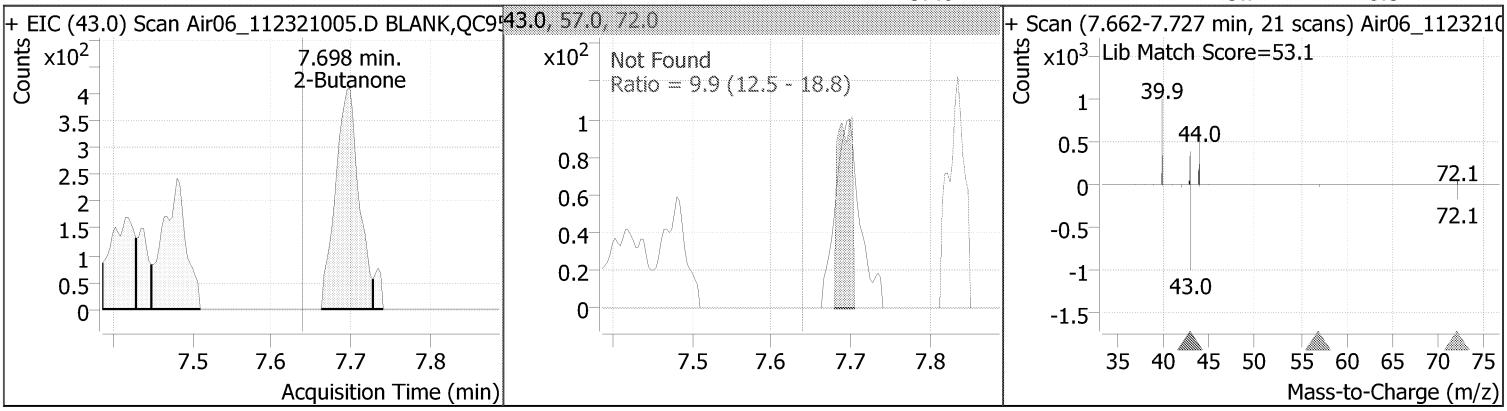
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	0.0006	7.32	-0.05	52	41.0		27.6	41.3
					57.0		24.2	36.3



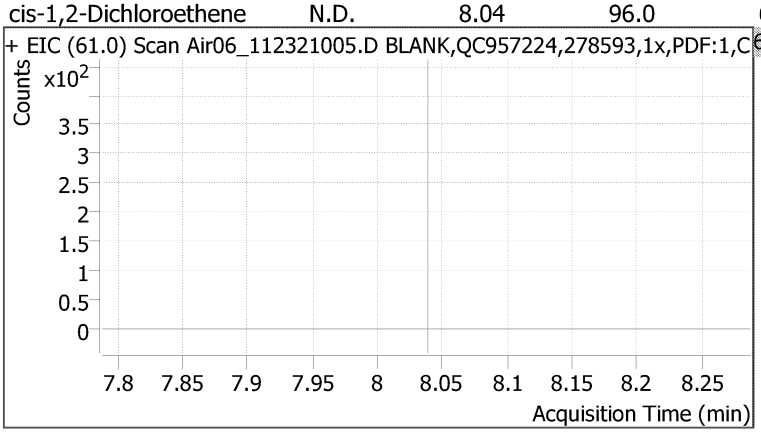
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.0033	7.42	-0.01	369	86.0		4.6	6.9
					44.0	18.2	3.9	5.8

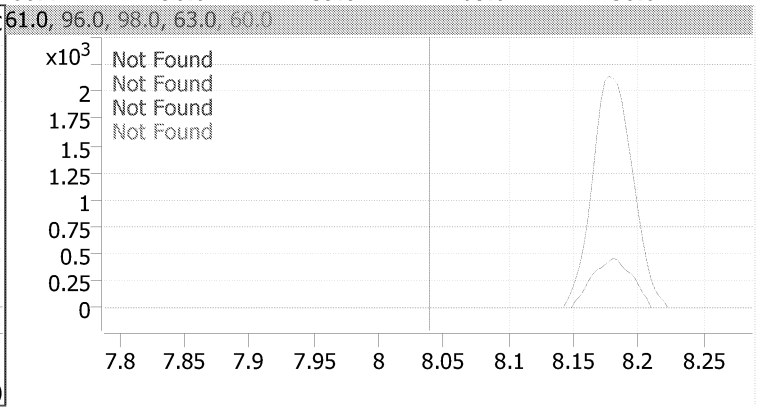


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.0092	7.70	0.06	836	72.0	9.9	12.5	18.8
					57.0		5.7	8.5

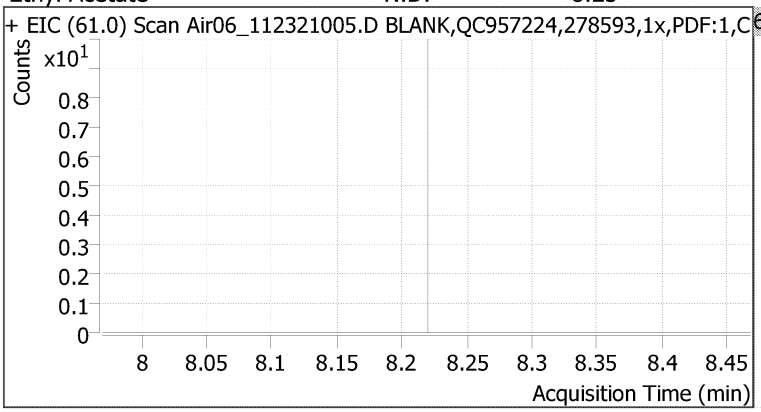


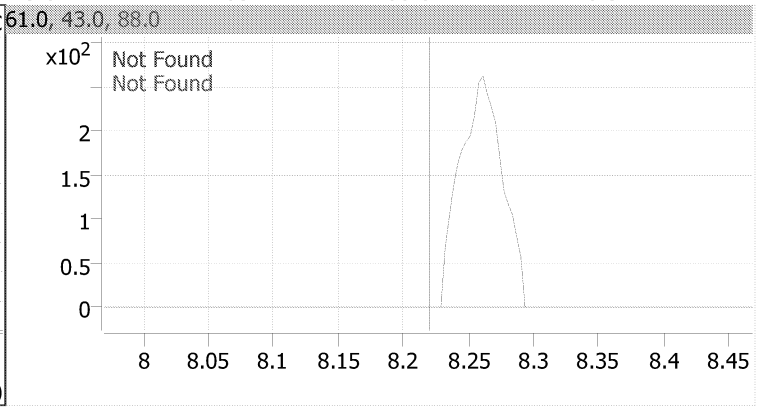
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
cis-1,2-Dichloroethene	N.D.	8.04	96.0	60.4	98.0	39.0	63.0	30.6



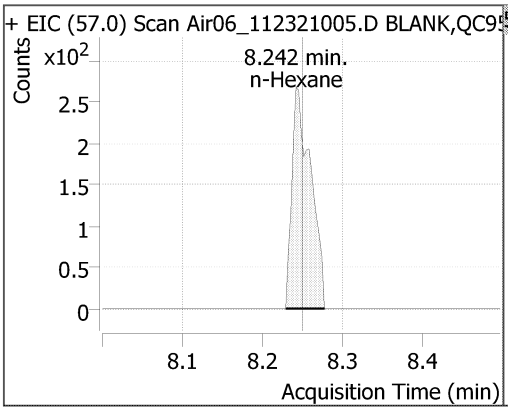


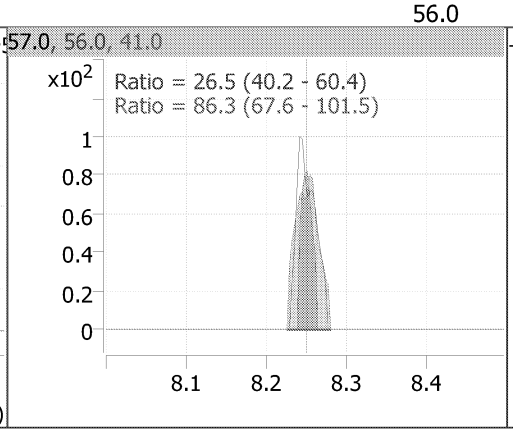
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Ethyl Acetate	N.D.	8.23	43.0	1203.7	88.0	20.3

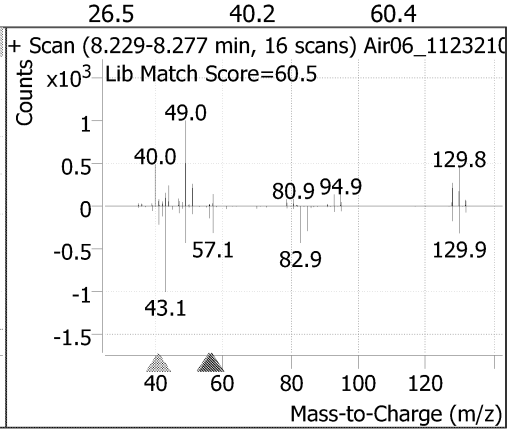




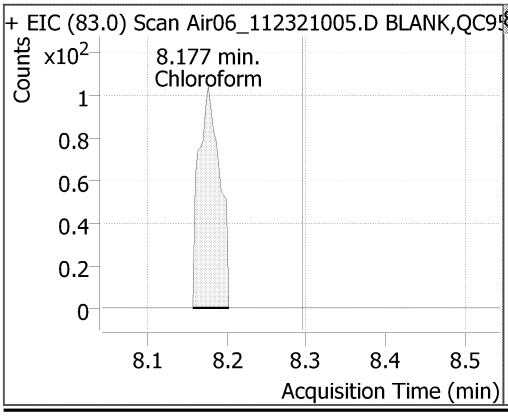
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.0066	8.24	-0.01	442	41.0	86.3	67.6	101.5
					56.0	26.5	40.2	60.4

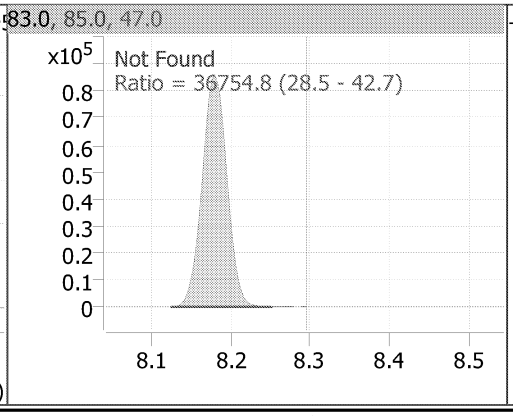


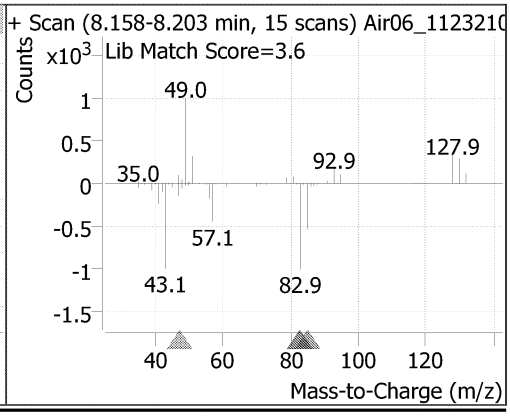




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.0027	8.18	-0.12	190	85.0		52.2	78.4
					47.0	36754.8	28.5	42.7

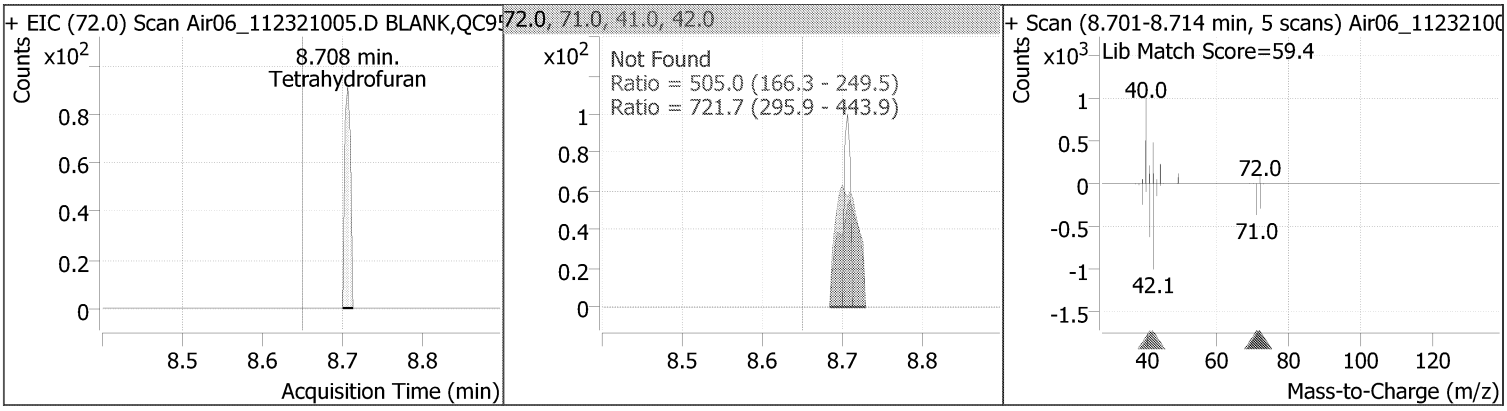




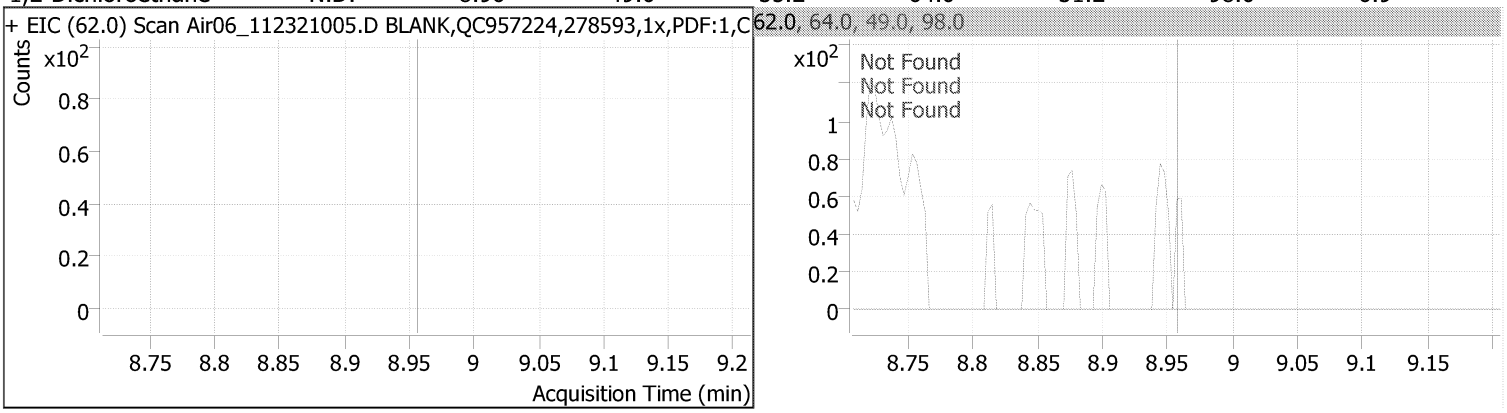


Quantitation Results Report (Not Reviewed)

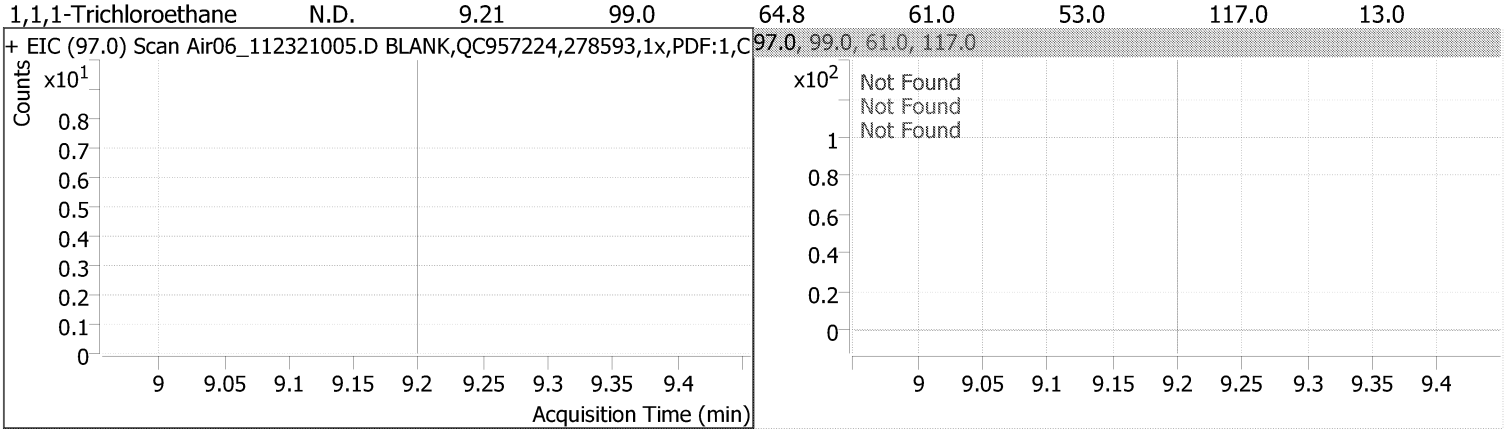
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	0.0032	8.71	0.05	47	42.0	721.7	295.9	443.9
					41.0	505.0	166.3	249.5
					71.0		78.5	117.8



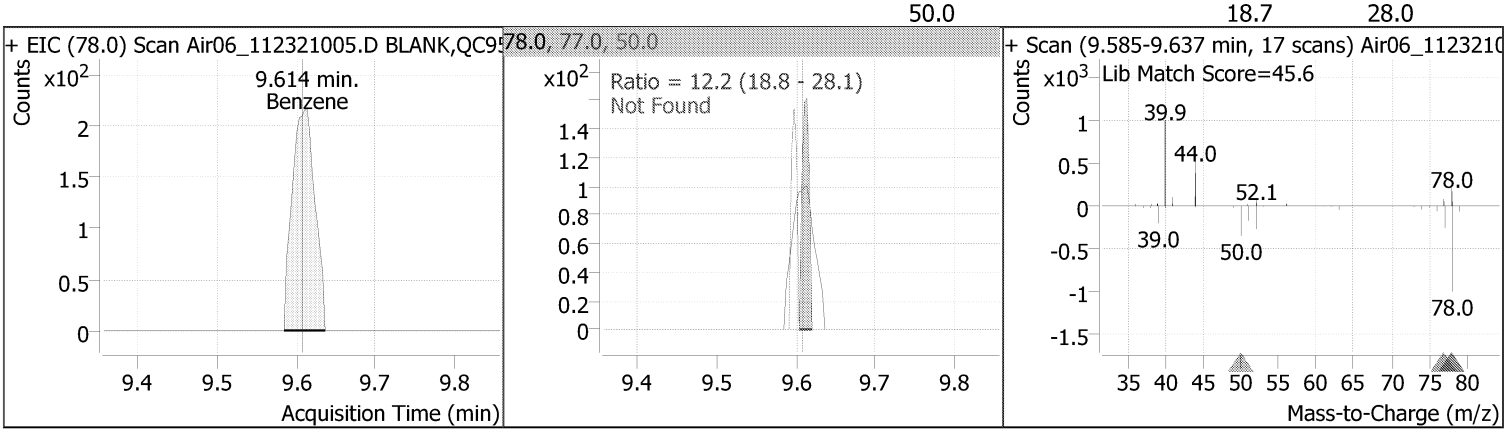
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,2-Dichloroethane	N.D.	8.96	49.0	35.2	64.0	31.2	98.0	6.9



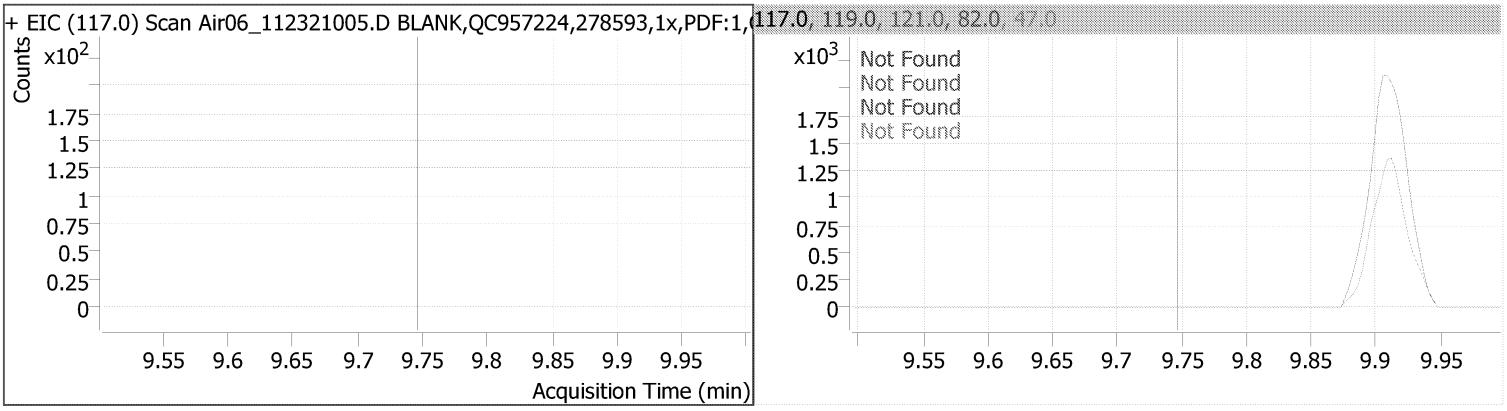
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1-Trichloroethane	N.D.	9.21	99.0	64.8	61.0	53.0	117.0	13.0



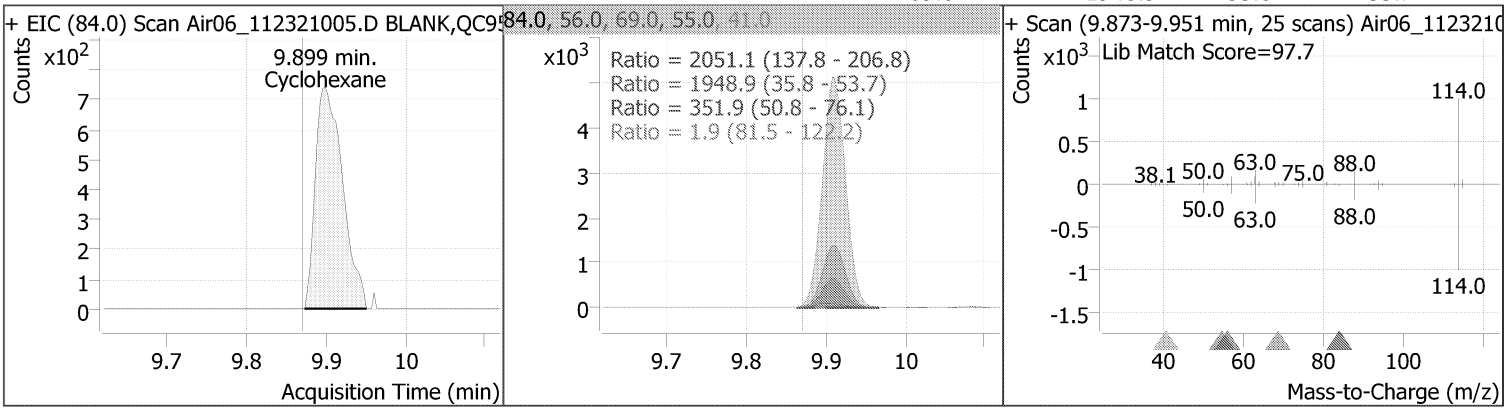
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.0044	9.61	0.00	432	77.0	12.2	18.8	28.1
					50.0		18.7	28.0



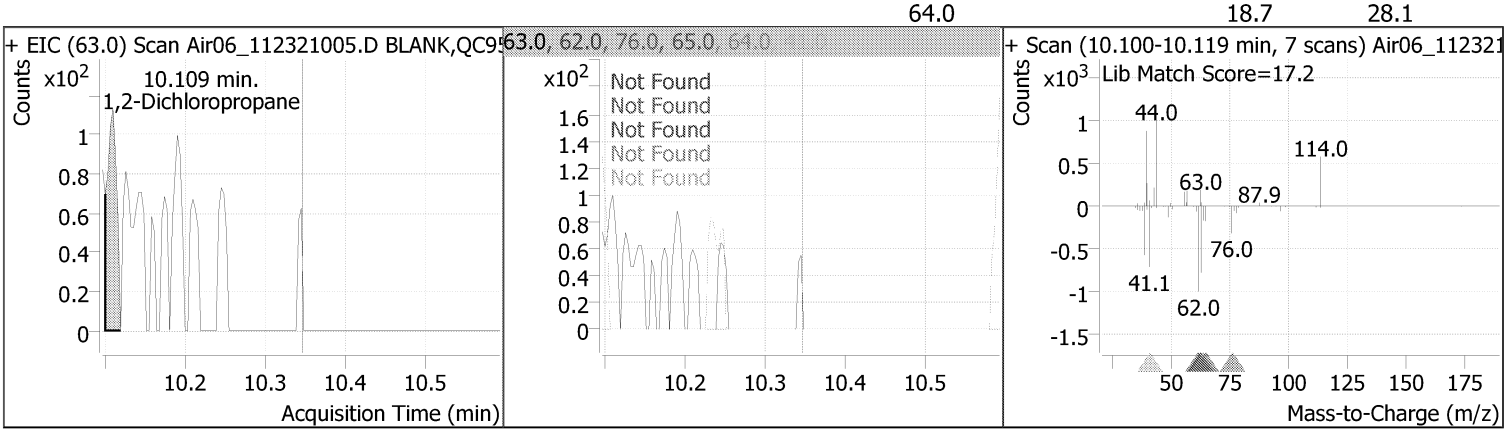
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Carbon Tetrachloride	N.D.	9.75	119.0	96.4	121.0	31.2	47.0	30.4



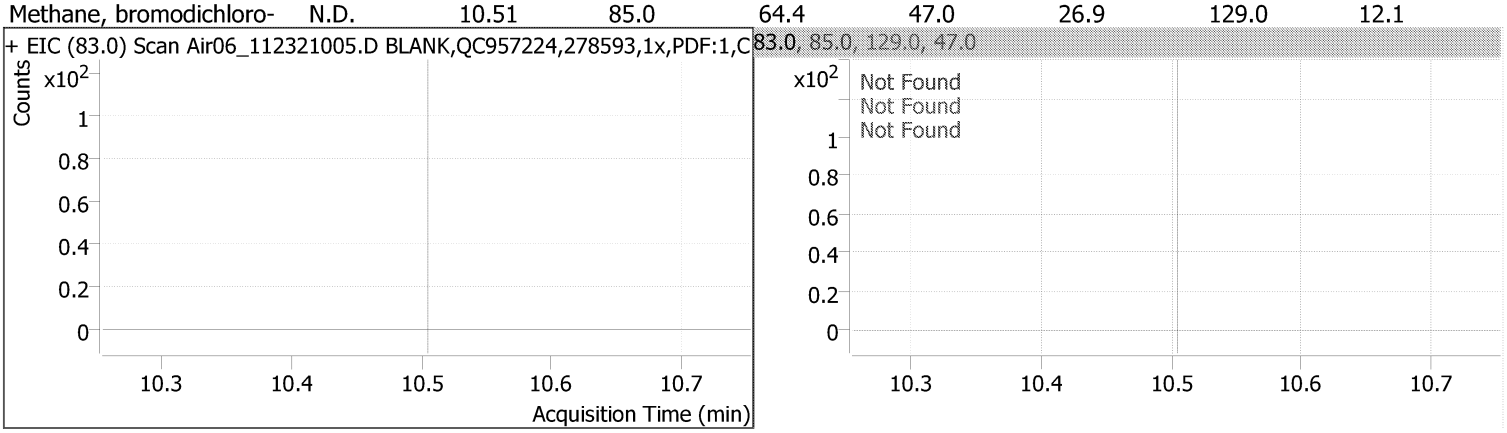
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.0431	9.90	0.02	1773	56.0	2051.1	137.8	206.8
					41.0	1.9	81.5	122.2
					55.0	351.9	50.8	76.1
					69.0	1948.9	35.8	53.7



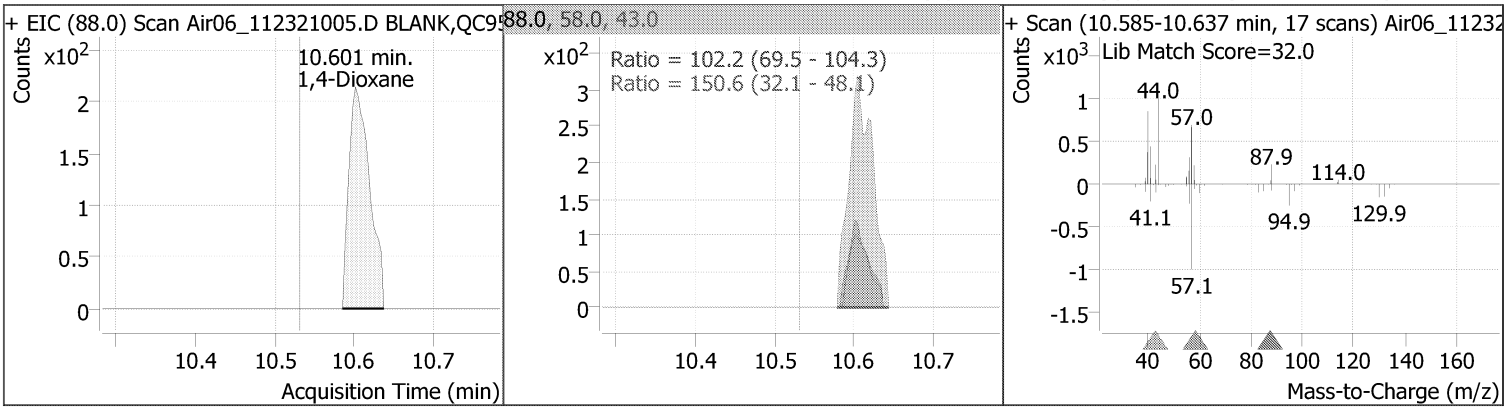
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.0020	10.11	-0.24	93	41.0		55.7	83.5
					62.0		55.5	83.2
					76.0		28.3	42.5
					65.0		23.4	35.1
					64.0		18.7	28.1



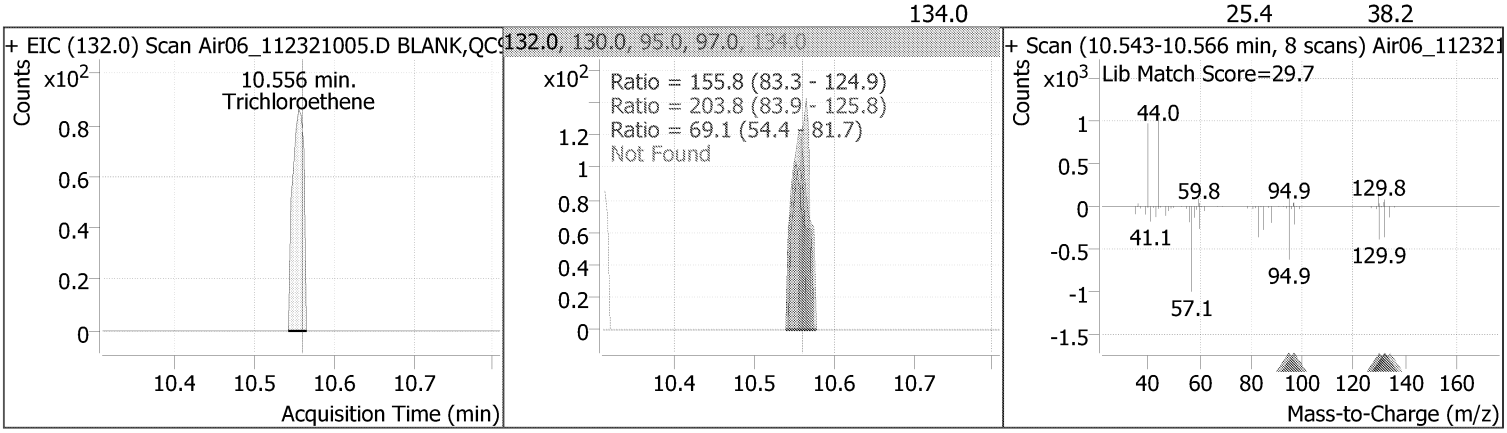
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Methane, bromodichloro-	N.D.	10.51	85.0	64.4	47.0	26.9	129.0	12.1



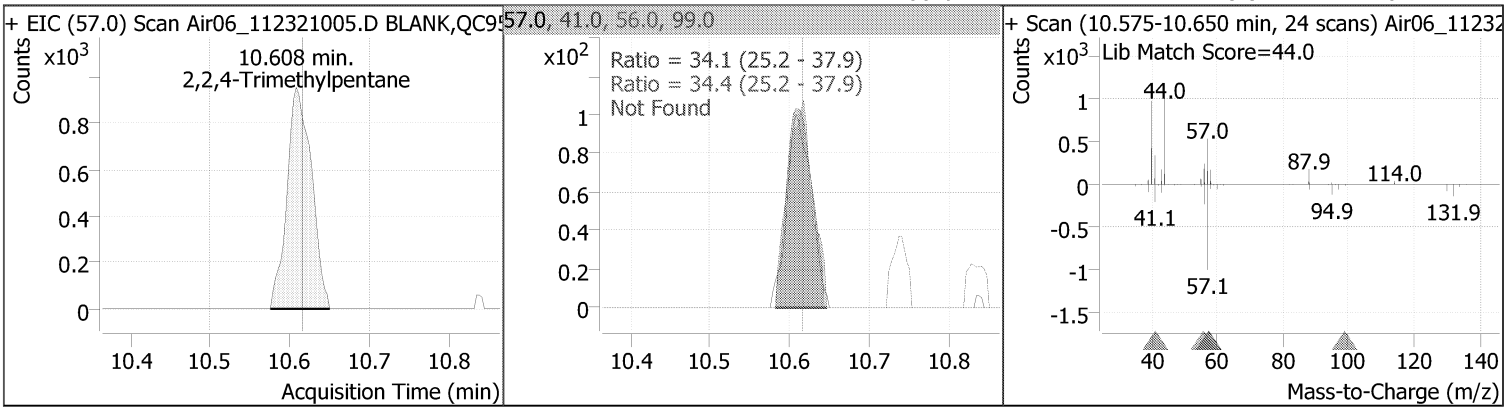
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.0181	10.60	0.06	388	58.0	102.2	69.5	104.3
					43.0	150.6	32.1	48.1



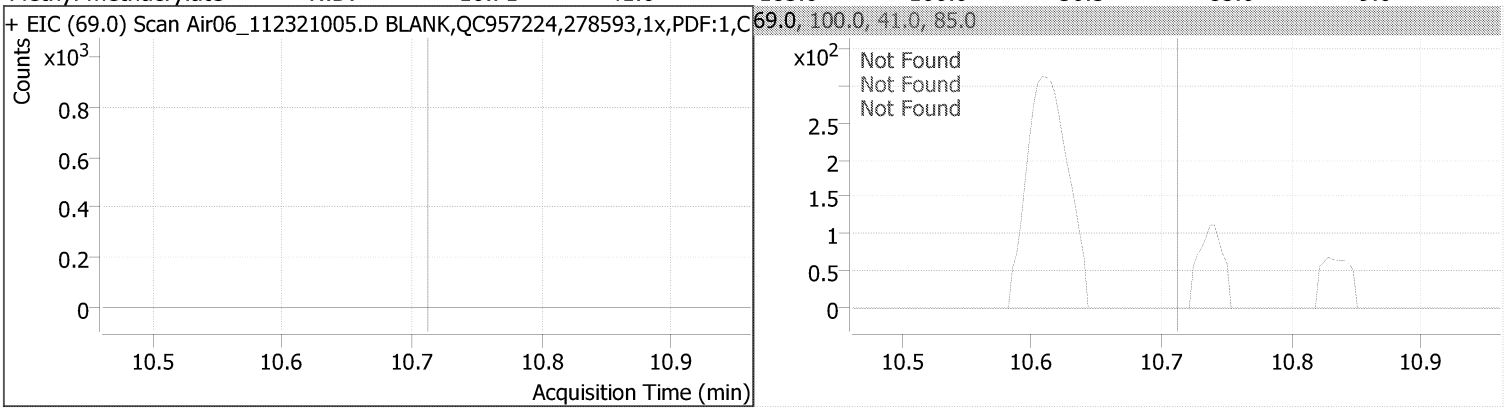
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.0019	10.56	-0.01	85	95.0	203.8	83.9	125.8
					130.0	155.8	83.3	124.9
					97.0	69.1	54.4	81.7
					134.0		25.4	38.2



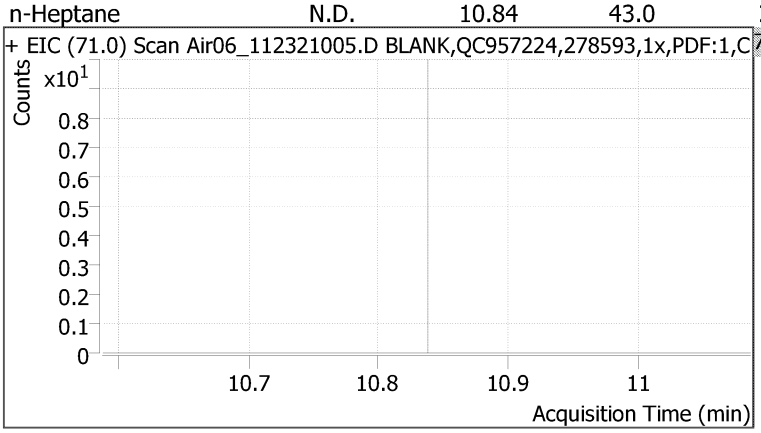
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.0096	10.61	-0.01	2047	41.0	34.1	25.2	37.9
					56.0	34.4	25.2	37.9
					99.0		3.3	4.9

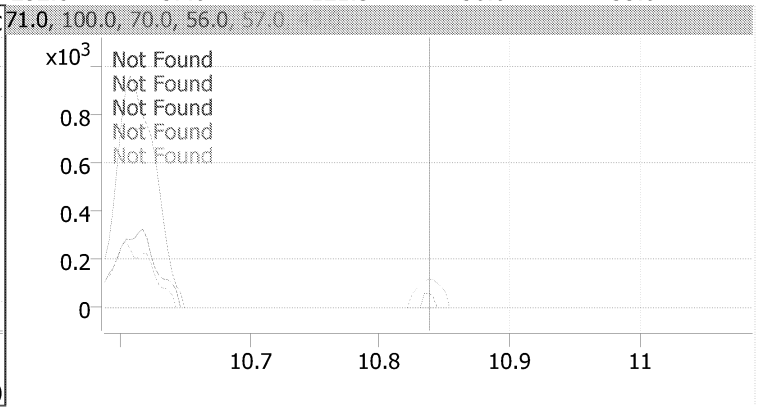


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Methyl methacrylate	N.D.	10.71	41.0	183.0	100.0	36.3	85.0	9.0

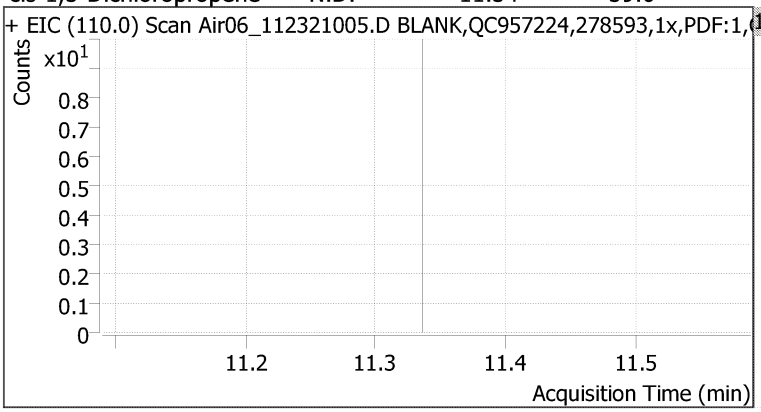


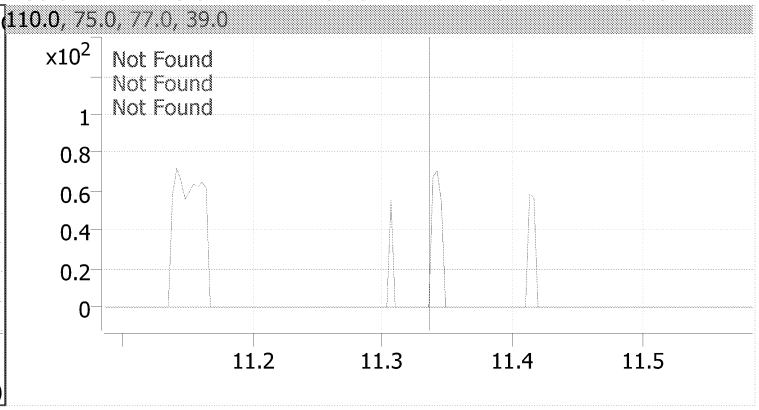
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
n-Heptane	N.D.	10.84	43.0	252.8	57.0	121.3	56.0	53.0



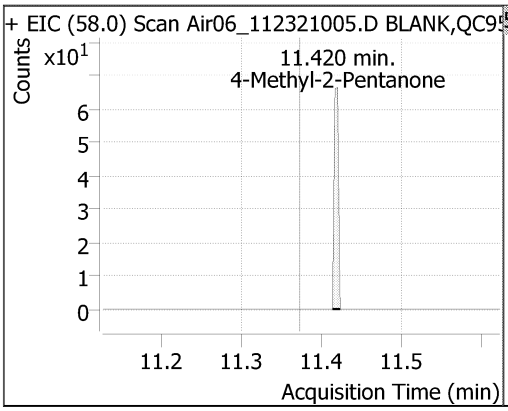


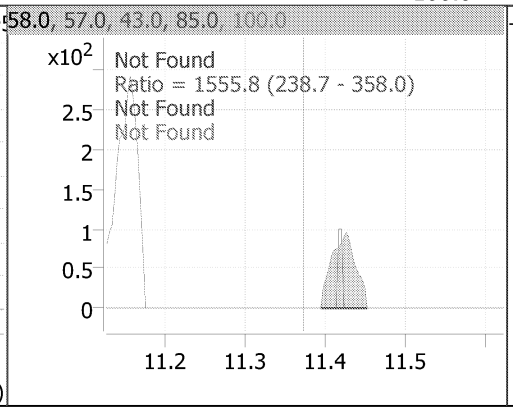
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
cis-1,3-Dichloropropene	N.D.	11.34	39.0	438.3	75.0	432.5	77.0	138.5

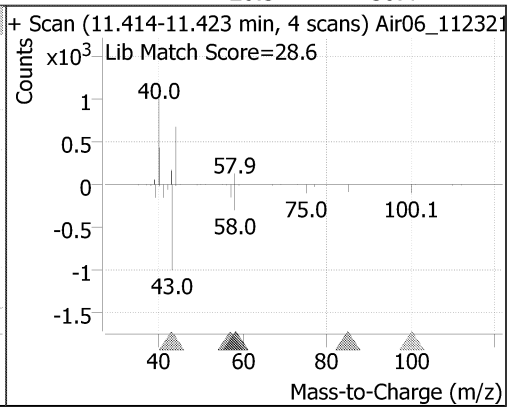




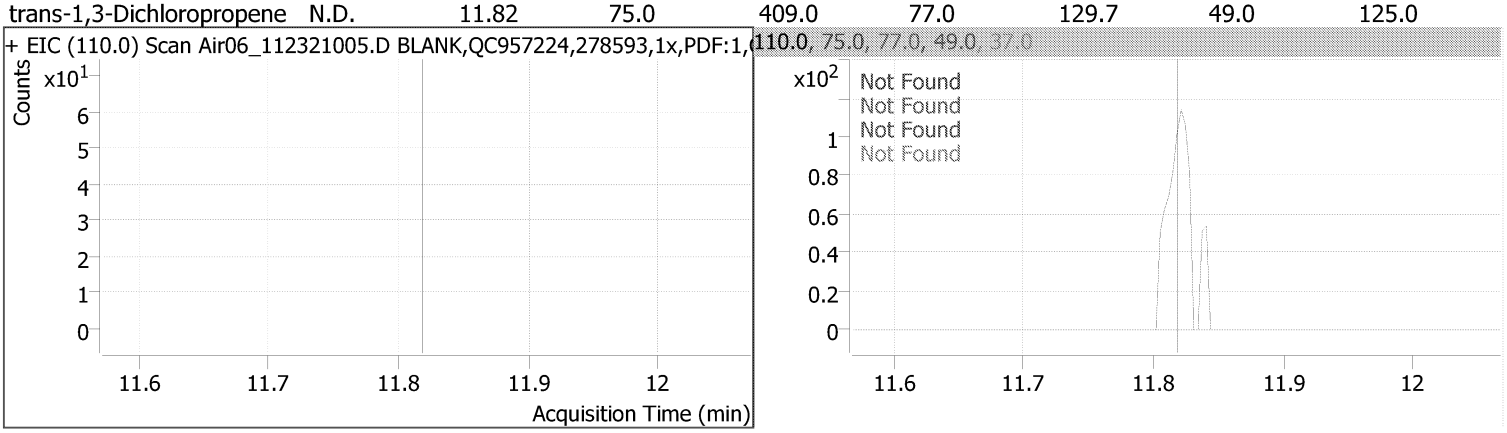
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.0007	11.42	0.04	26	43.0	1555.8	238.7	358.0
					57.0		51.0	76.5
					85.0		28.5	42.8
					100.0		20.3	30.4



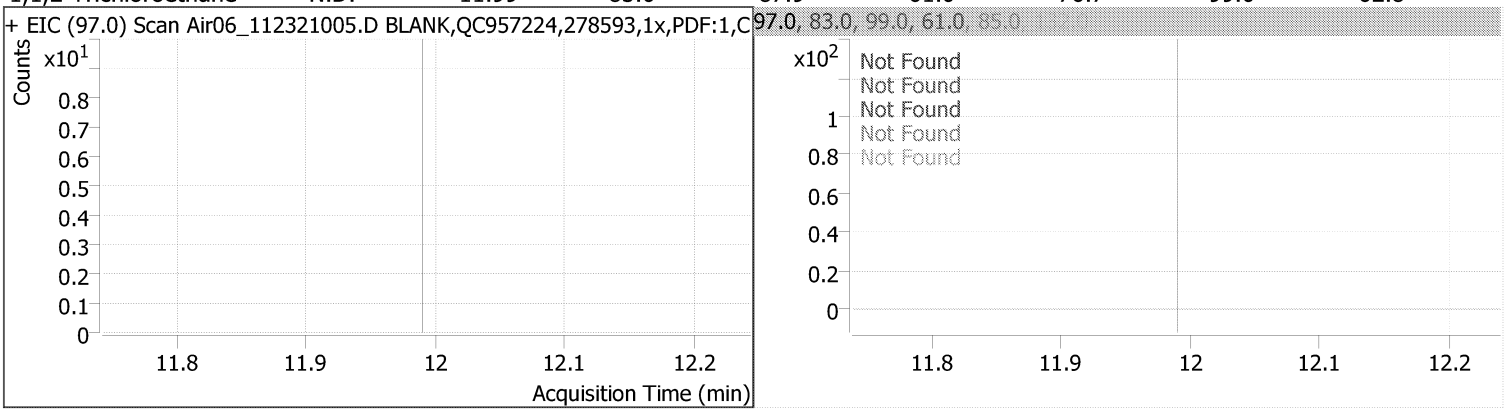




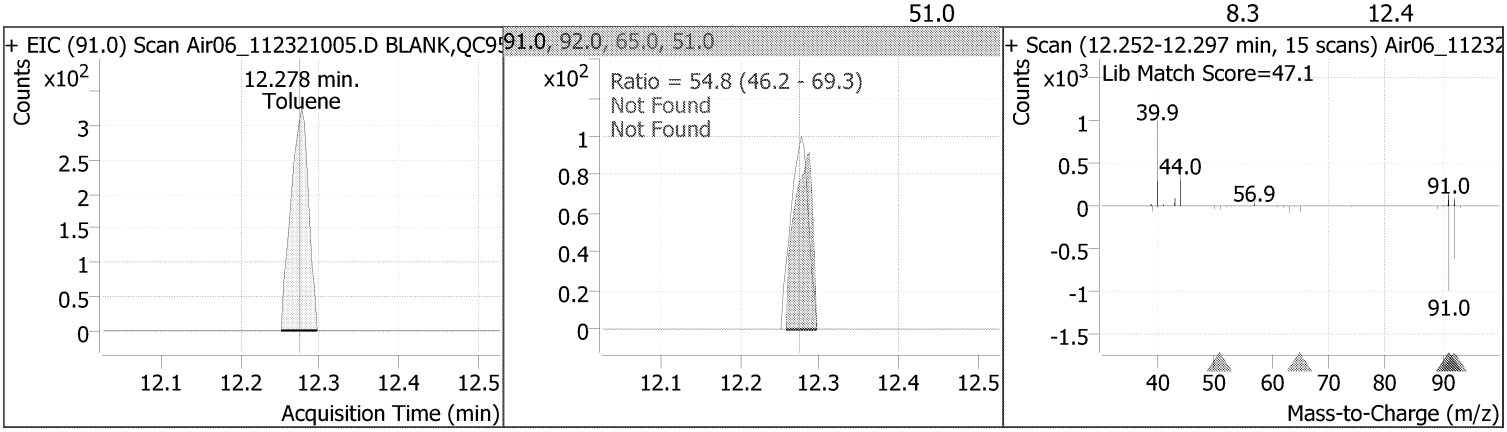
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
trans-1,3-Dichloropropene	N.D.	11.82	75.0	409.0	77.0	129.7	49.0	125.0



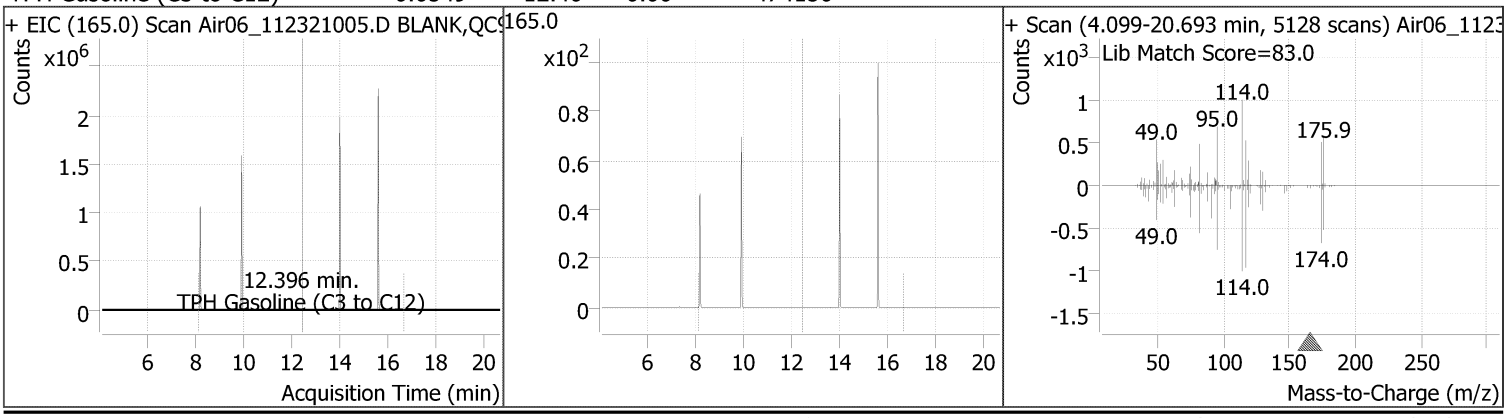
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,2-Trichloroethane	N.D.	11.99	83.0	87.9	61.0	76.7	99.0	62.8



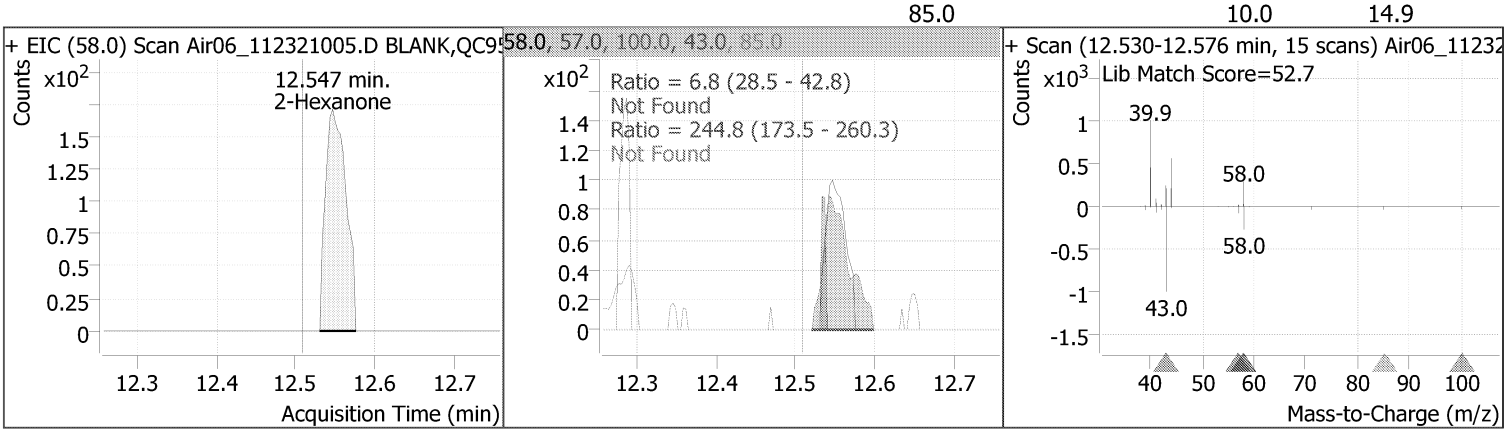
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.0041	12.28	0.00	498	92.0	54.8	46.2	69.3
					65.0		10.6	15.9
					51.0		8.3	12.4



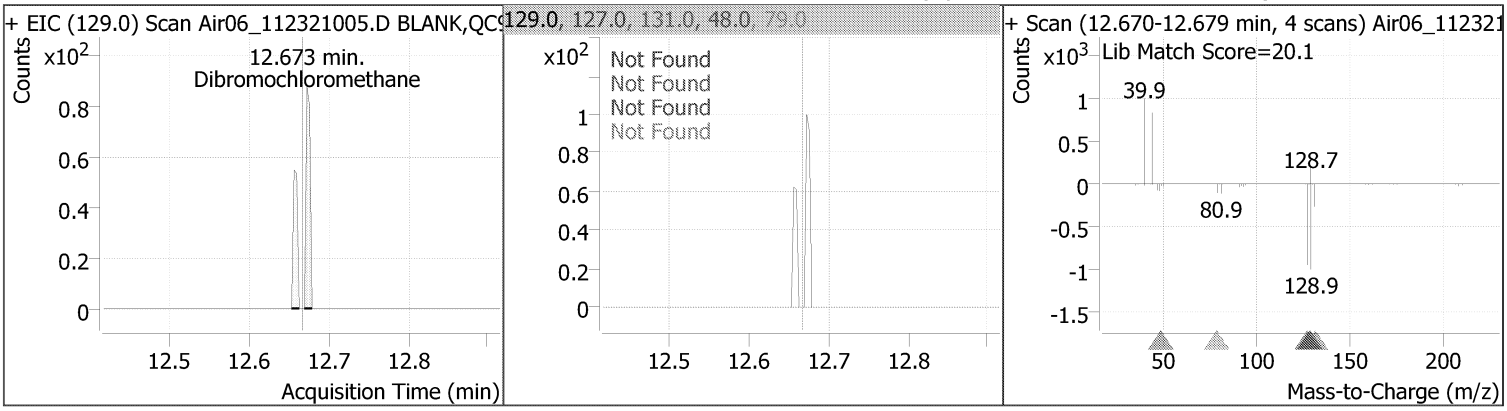
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	0.0549	12.40	0.00	474150				



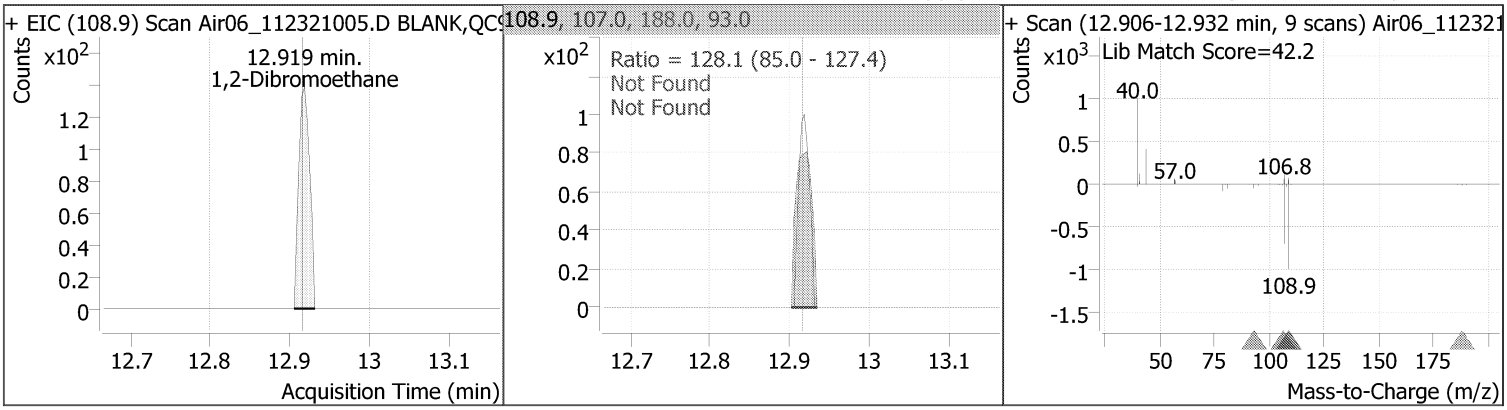
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.0061	12.55	0.04	308	43.0	244.8	173.5	260.3
					57.0	6.8	28.5	42.8
					100.0		11.2	16.8
					85.0		10.0	14.9



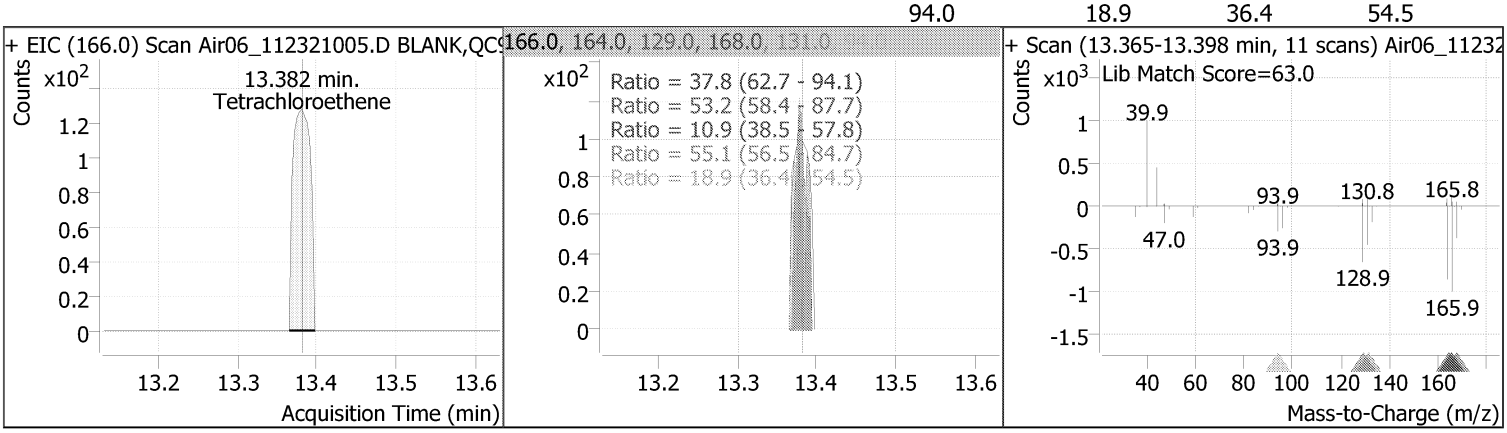
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.0004	12.67	0.00	33	127.0		61.8	92.7
					131.0		19.3	29.0
					48.0		16.2	24.2
					79.0		14.5	21.7



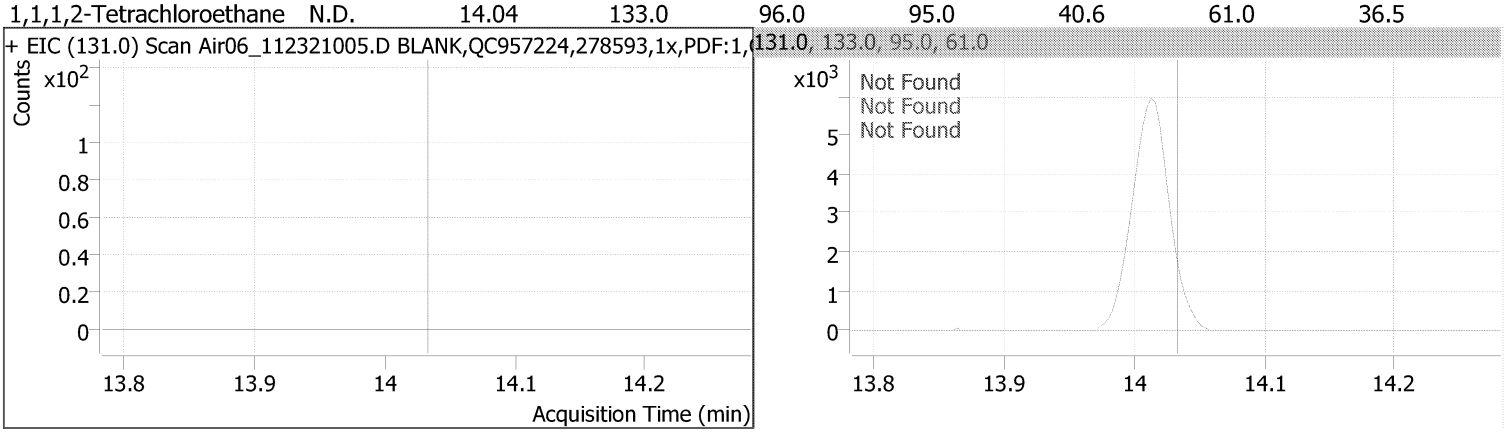
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.0021	12.92	0.00	133	107.0	128.1	85.0	127.4
					93.0		5.7	8.6
					188.0		3.1	4.6



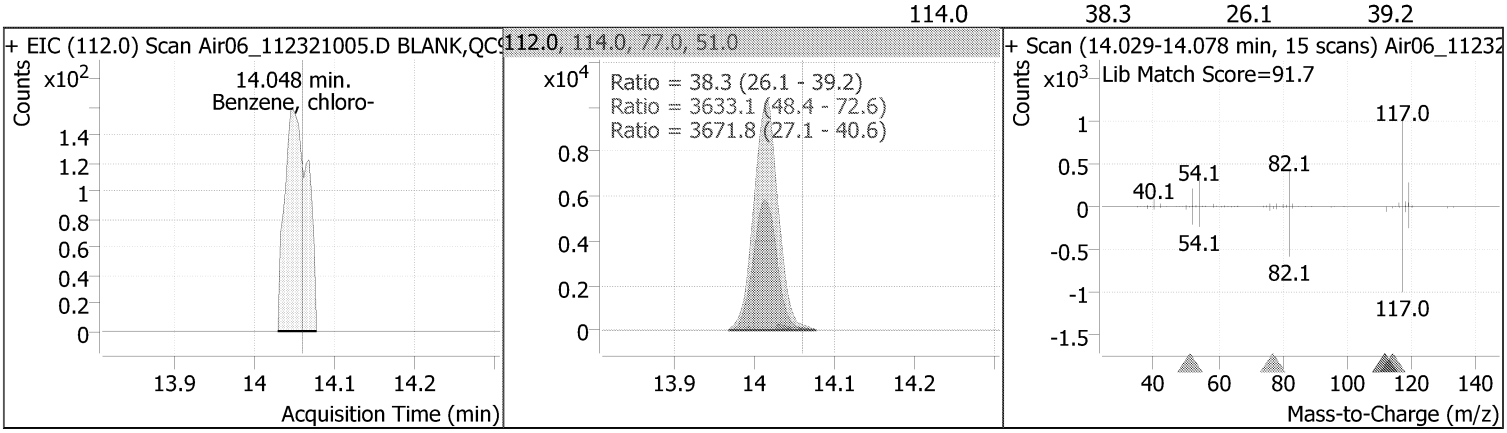
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.0032	13.38	0.00	198	164.0	37.8	62.7	94.1
					129.0	53.2	58.4	87.7
					131.0	55.1	56.5	84.7
					168.0	10.9	38.5	57.8
					94.0	18.9	36.4	54.5



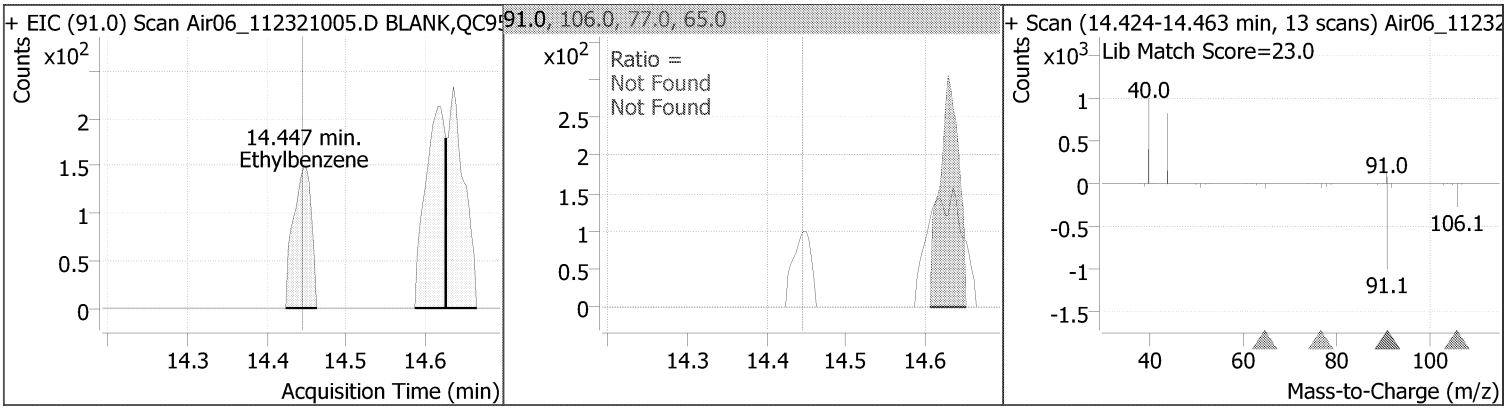
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1,2-Tetrachloroethane	N.D.	14.04	133.0	96.0	95.0	40.6	61.0	36.5



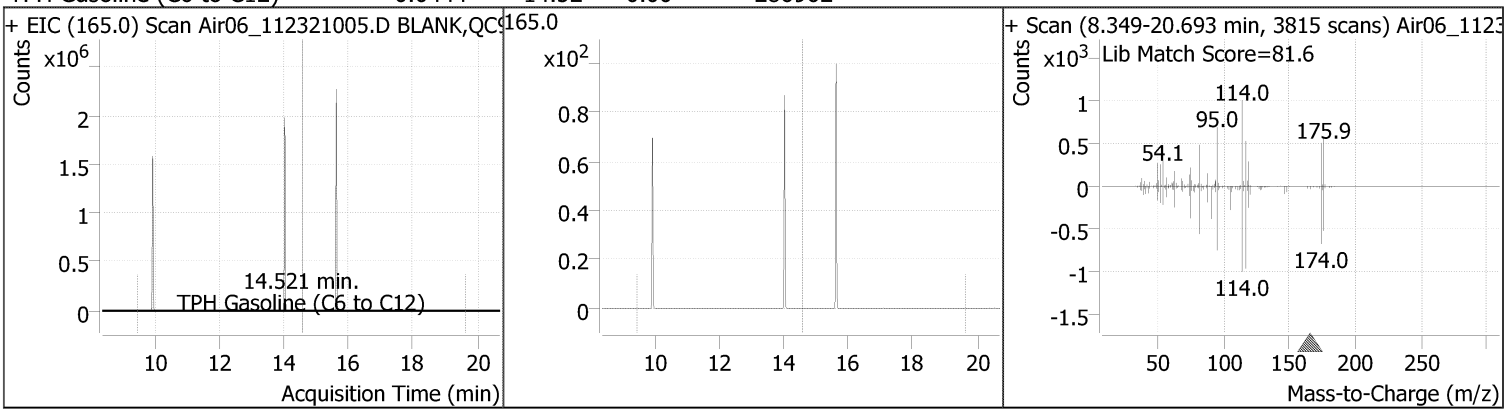
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0033	14.05	-0.01	321	77.0	3633.1	48.4	72.6
					51.0	3671.8	27.1	40.6
					114.0	38.3	26.1	39.2



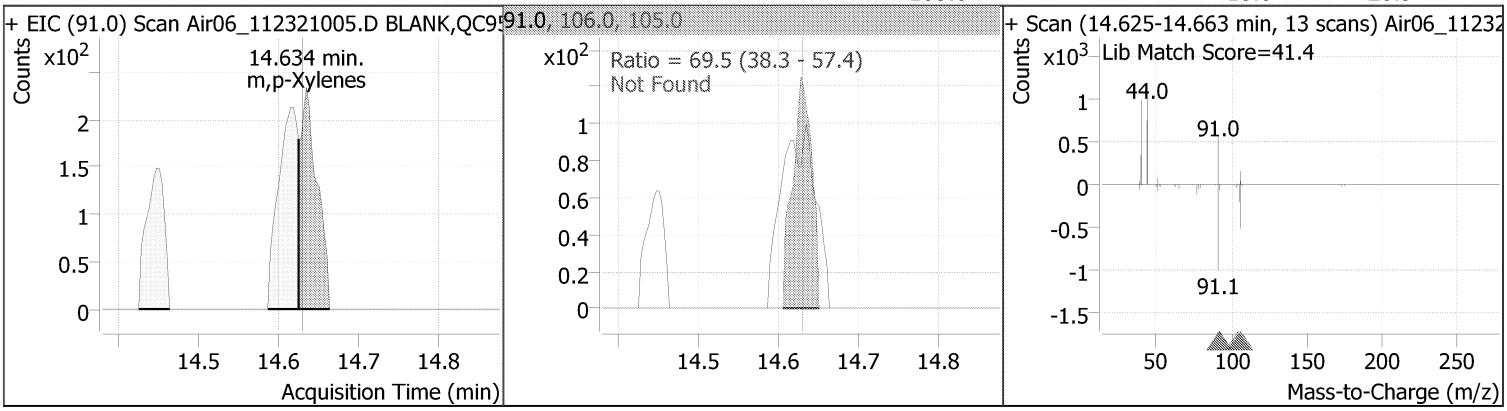
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.0016	14.45	0.00	233	106.0		24.8	37.2
					65.0		8.1	12.2
					77.0		7.2	10.8



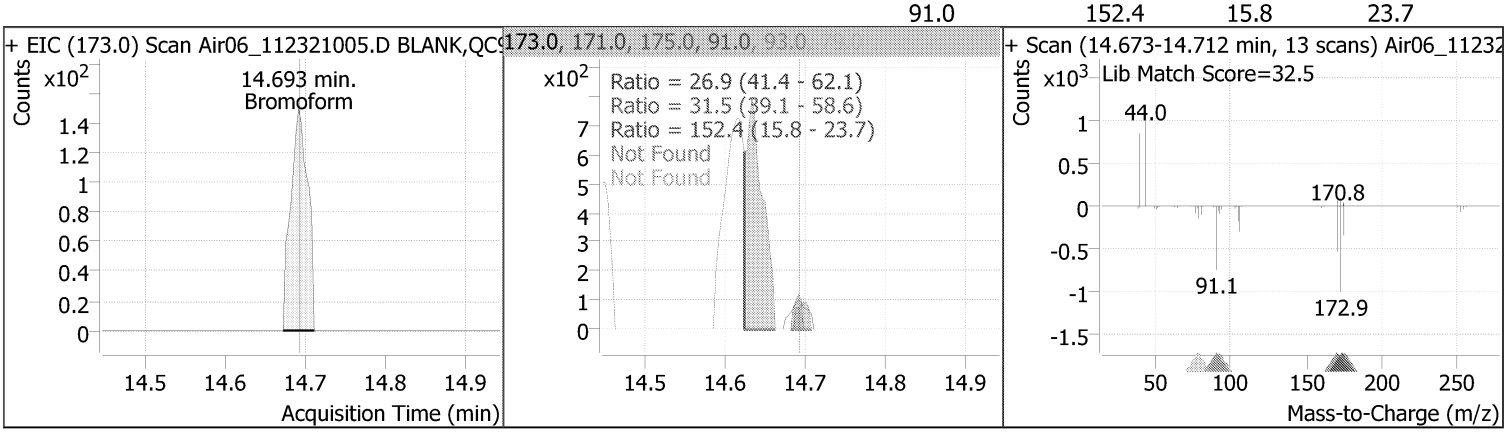
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	0.0444	14.52	0.00	286962				



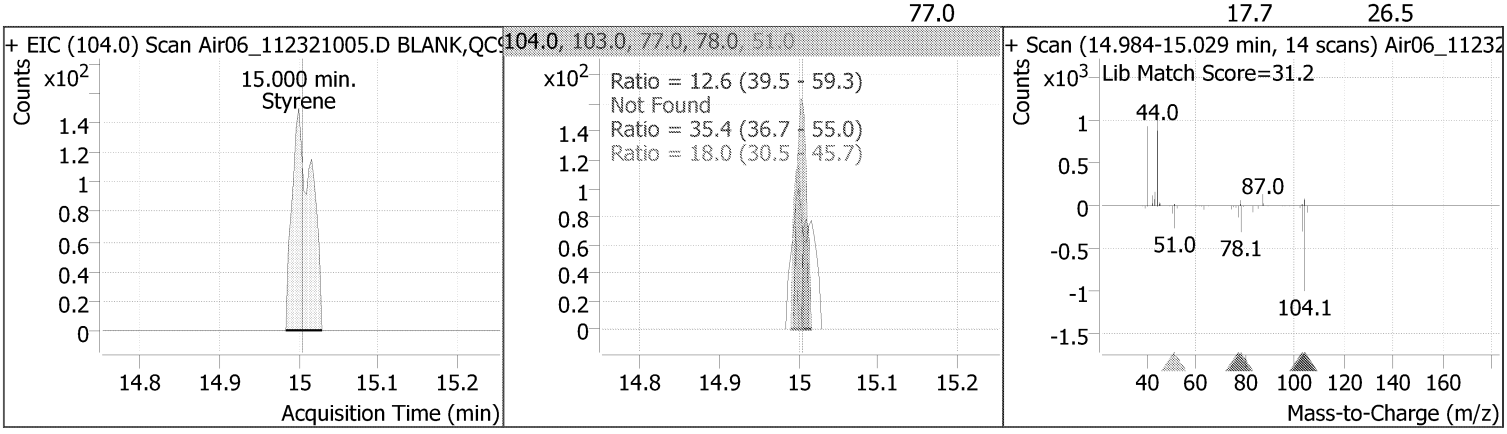
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	0.0028	14.63	0.00	339	106.0	69.5	38.3	57.4
					105.0		18.0	26.9



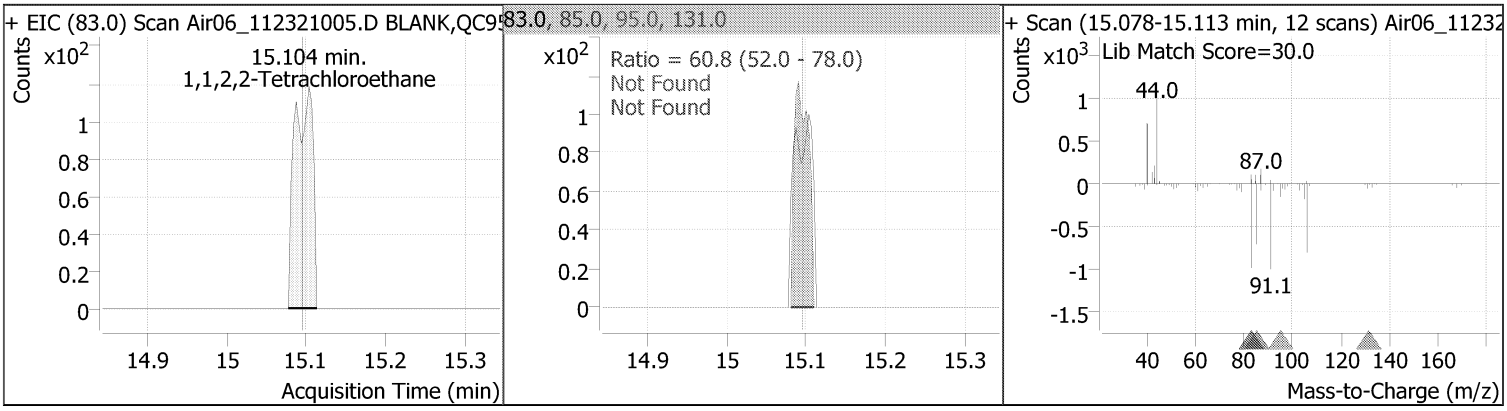
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.0028	14.69	-0.01	222	171.0	26.9	41.4	62.1
					175.0	31.5	39.1	58.6
					79.0		17.9	26.8
					93.0		16.8	25.2
					91.0	152.4	15.8	23.7



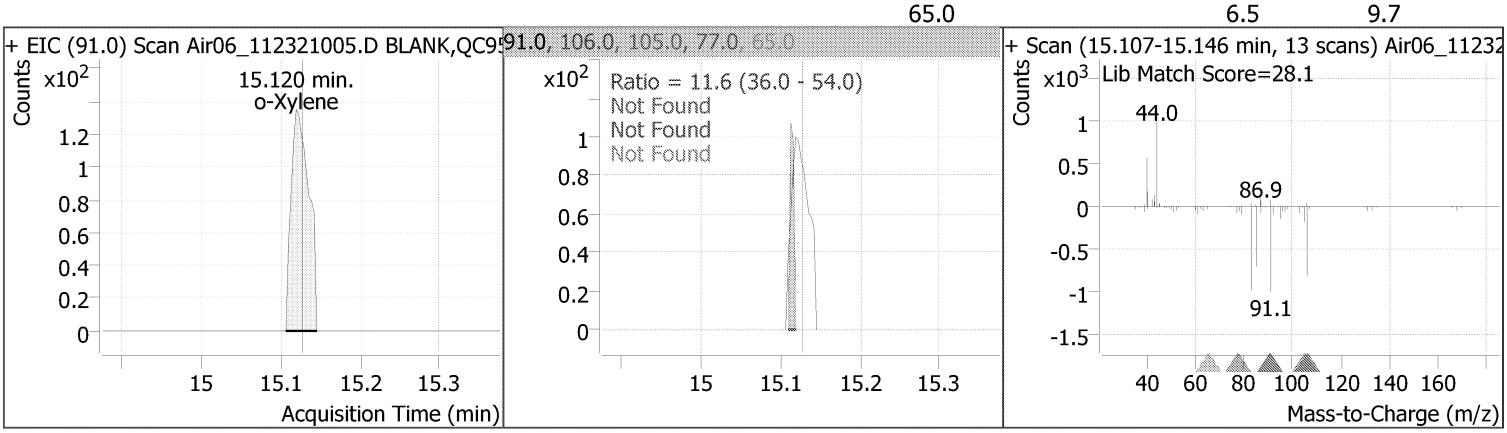
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	0.0027	15.00	-0.01	253	103.0	12.6	39.5	59.3
					78.0	35.4	36.7	55.0
					51.0	18.0	30.5	45.7
					77.0		17.7	26.5



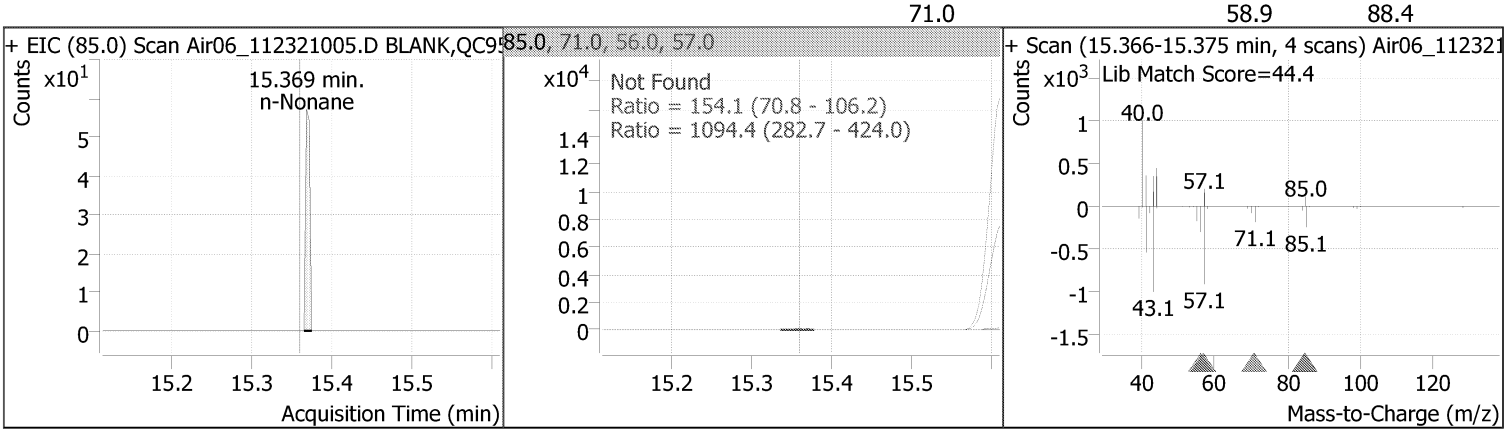
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.0020	15.10	0.01	187	85.0	60.8	52.0	78.0
					95.0		13.3	20.0
					131.0		8.2	12.3



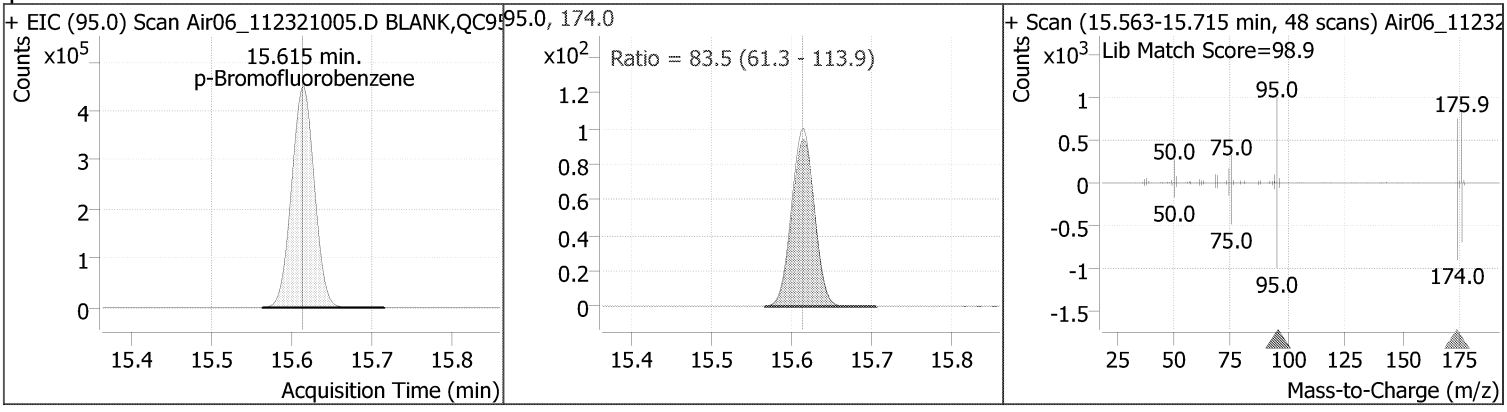
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.0017	15.12	-0.01	209	106.0	11.6	36.0	54.0
					105.0		15.4	23.0
					77.0		10.2	15.4
					65.0		6.5	9.7



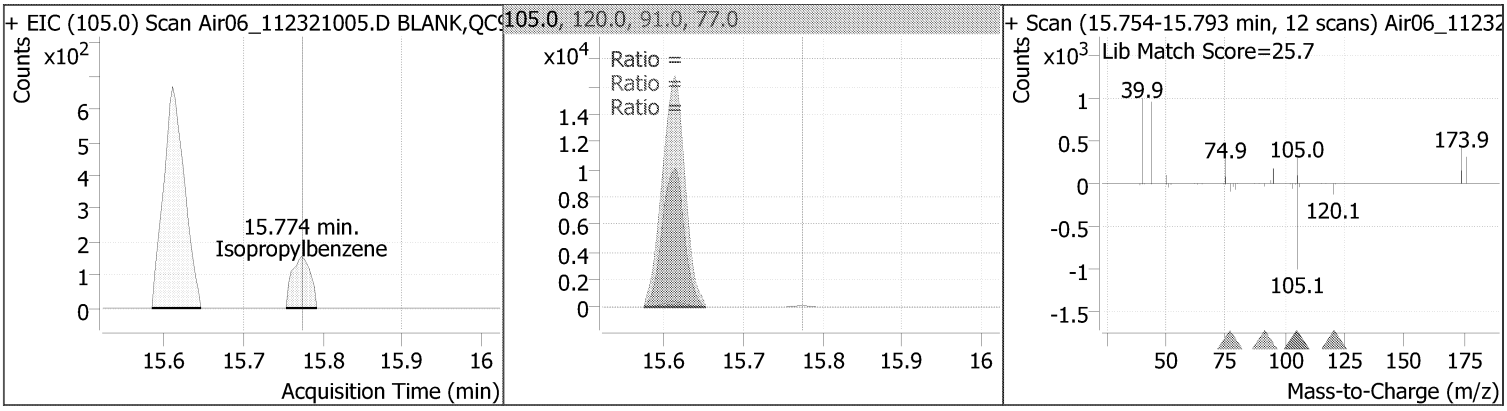
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	0.0008	15.37	0.00	22	57.0	1094.4	282.7	424.0
					56.0	154.1	70.8	106.2
					71.0		58.9	88.4



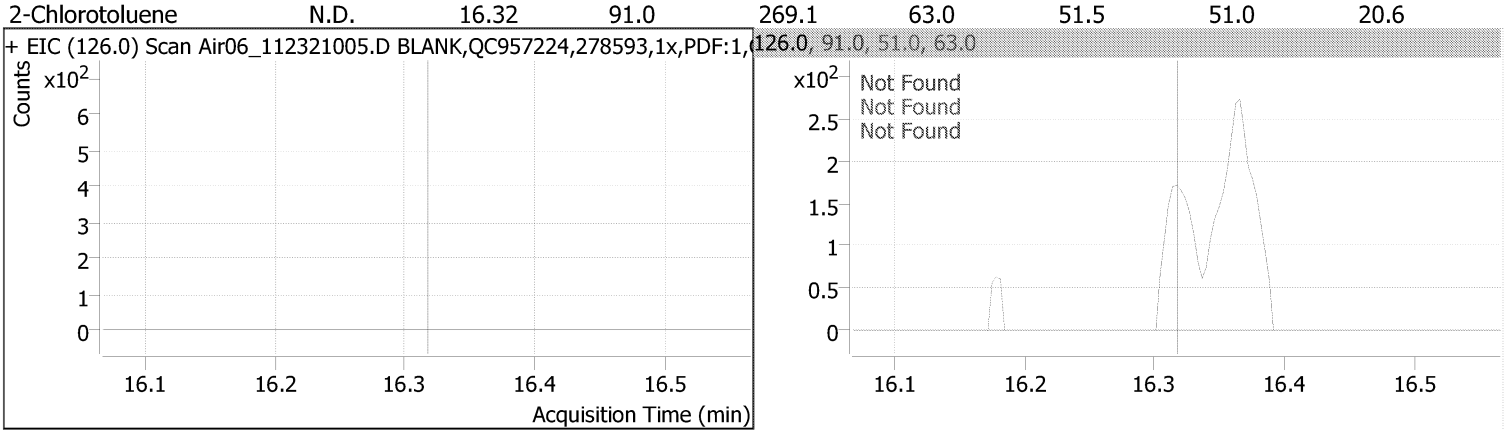
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.0505	15.61	0.00	895244	174.0	83.5	61.3	113.9



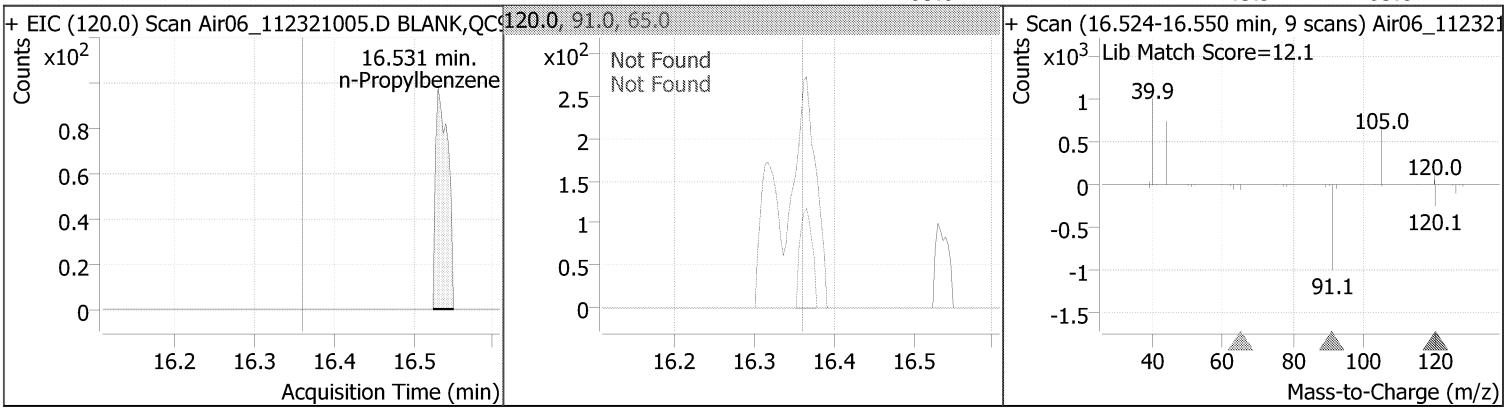
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.0015	15.77	0.00	252	120.0		20.8	31.2
					77.0		13.1	19.7
					91.0		5.1	7.6



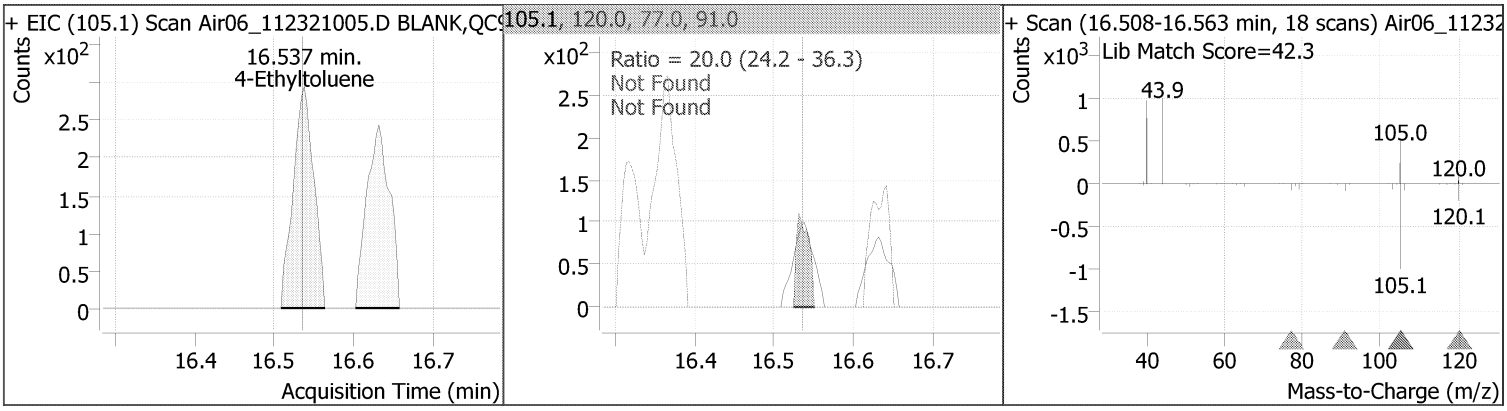
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
2-Chlorotoluene	N.D.	16.32	91.0	269.1	63.0	51.5	51.0	20.6



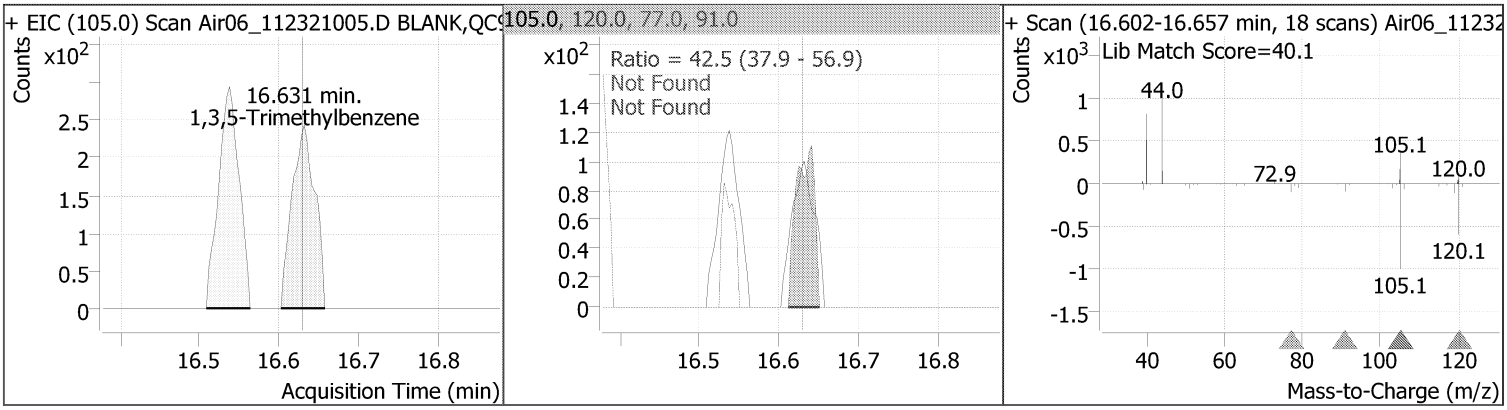
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.0022	16.53	0.17	106	91.0		367.7	551.6
					65.0		43.9	65.8



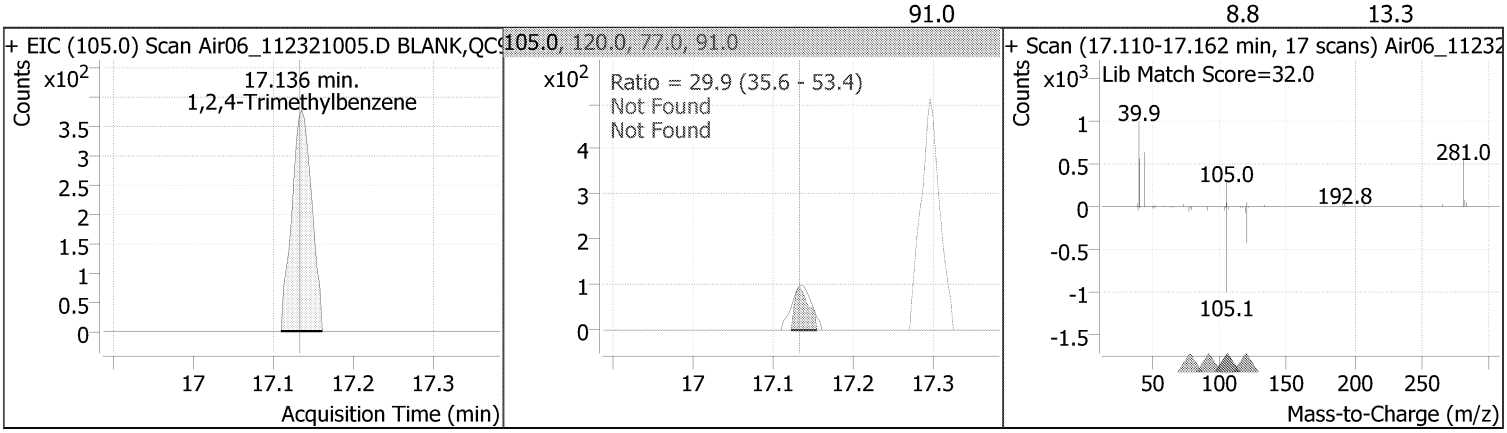
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.0031	16.54	0.00	529	120.0	20.0	24.2	36.3
					77.0		9.5	14.3
					91.0		8.9	13.4



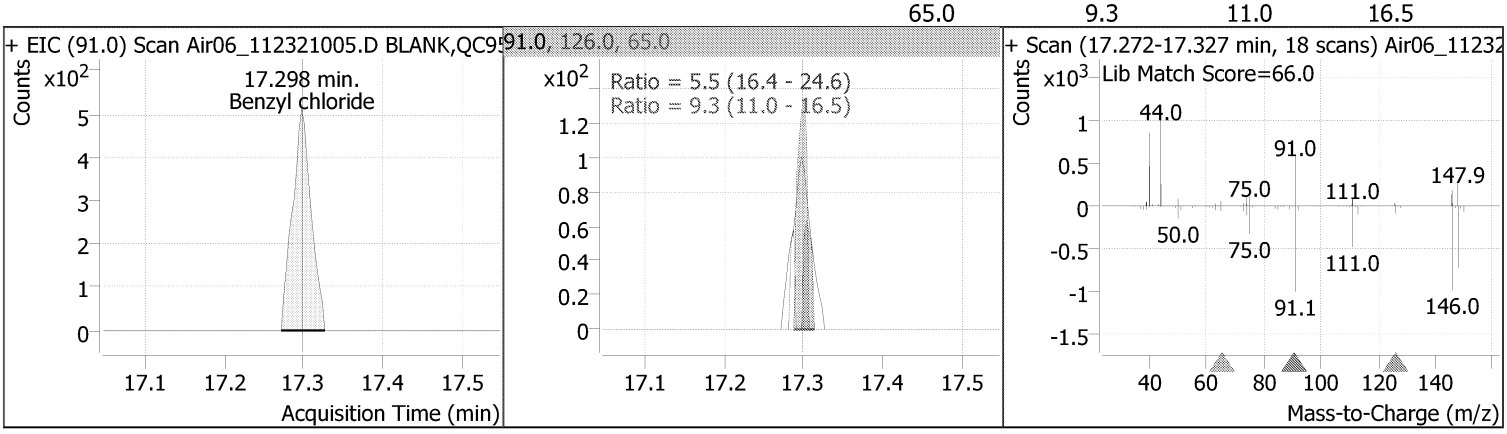
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.0033	16.63	0.00	485	120.0	42.5	37.9	56.9
					77.0		10.7	16.0
					91.0		8.8	13.2



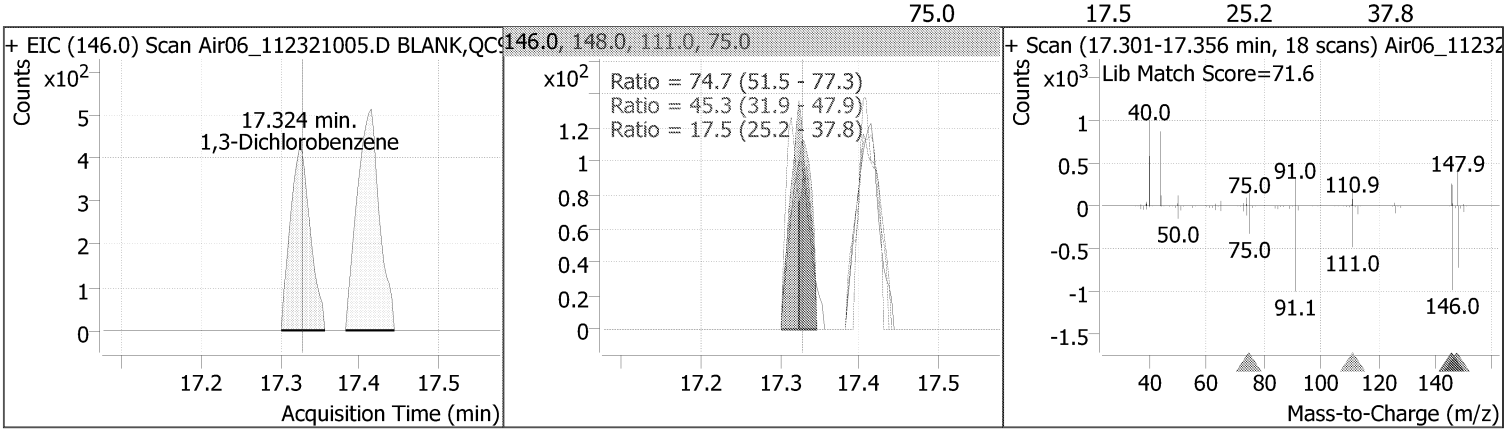
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	0.0046	17.14	0.00	656	120.0	29.9	35.6	53.4
					77.0		10.4	15.6
					91.0		8.8	13.3



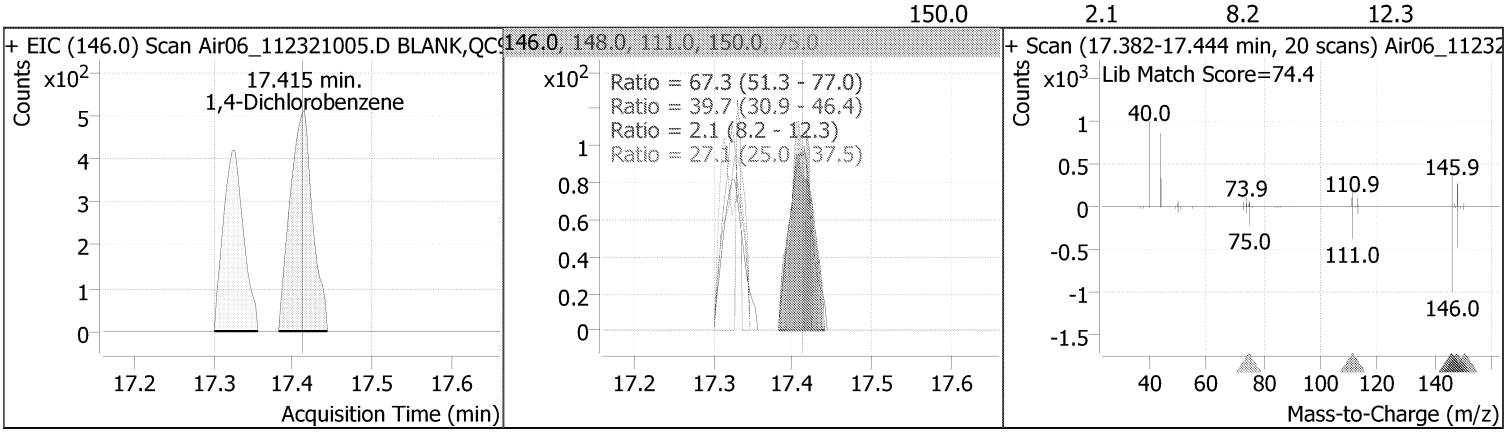
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.0072	17.30	0.00	835	126.0	5.5	16.4	24.6
					65.0	9.3	11.0	16.5



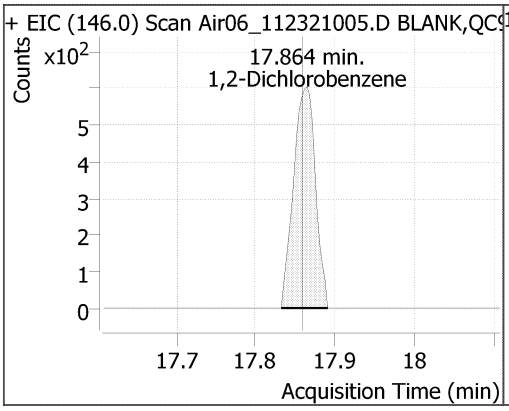
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.0073	17.32	-0.01	744	148.0	74.7	51.5	77.3
					111.0	45.3	31.9	47.9
					75.0	17.5	25.2	37.8

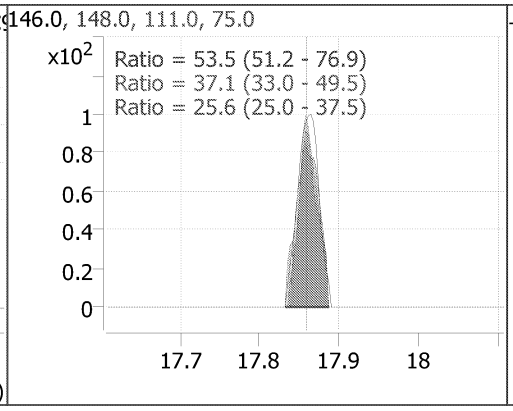


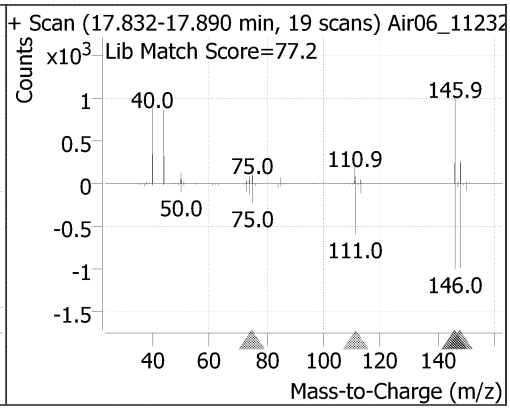
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.0098	17.41	0.00	999	148.0	67.3	51.3	77.0
					111.0	39.7	30.9	46.4
					75.0	27.1	25.0	37.5
					150.0	2.1	8.2	12.3



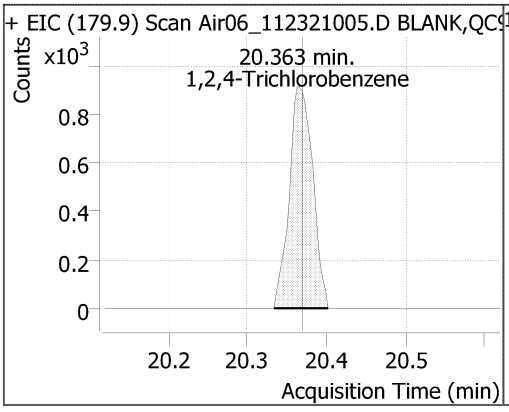
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.0118	17.86	0.00	1158	148.0	53.5	51.2	76.9
					111.0	37.1	33.0	49.5
					75.0	25.6	25.0	37.5

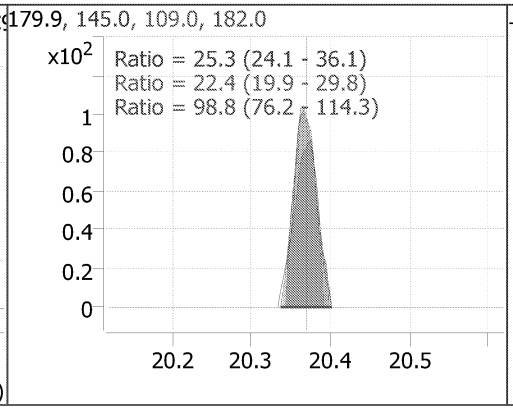


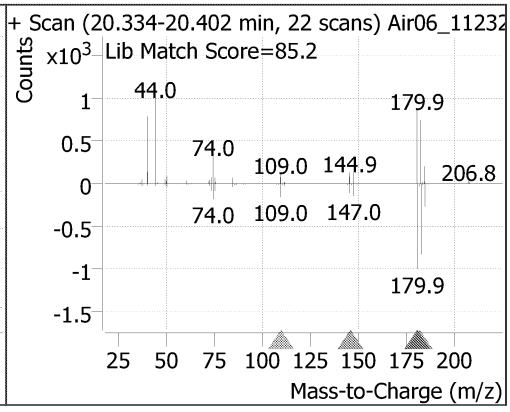




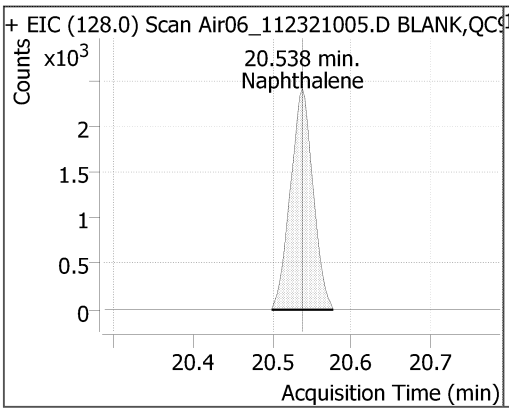
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.0252	20.36	-0.01	1879	182.0	98.8	76.2	114.3
					145.0	25.3	24.1	36.1
					109.0	22.4	19.9	29.8

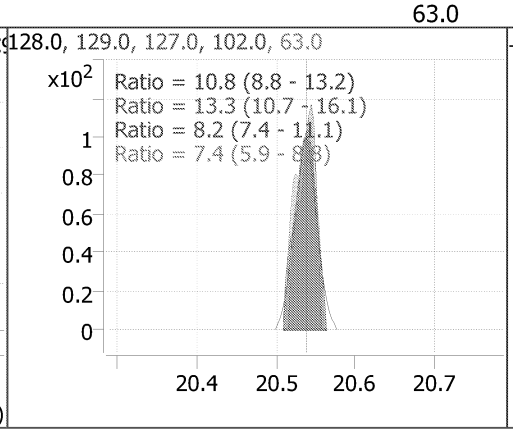


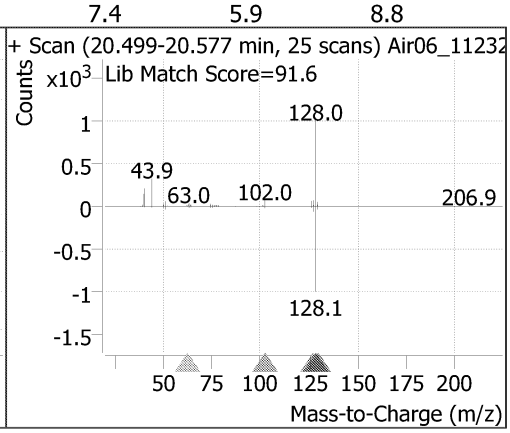




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	0.0304	20.54	0.00	4768	127.0	13.3	10.7	16.1
					129.0	10.8	8.8	13.2
					102.0	8.2	7.4	11.1
					63.0	7.4	5.9	8.8

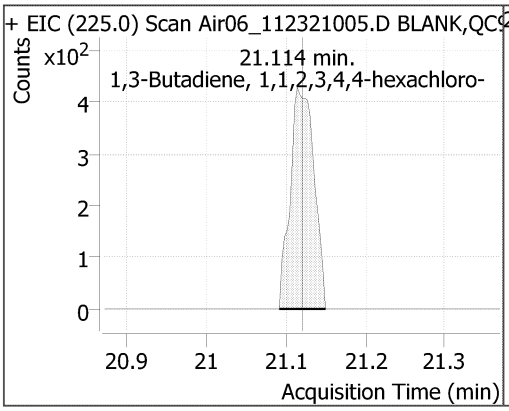


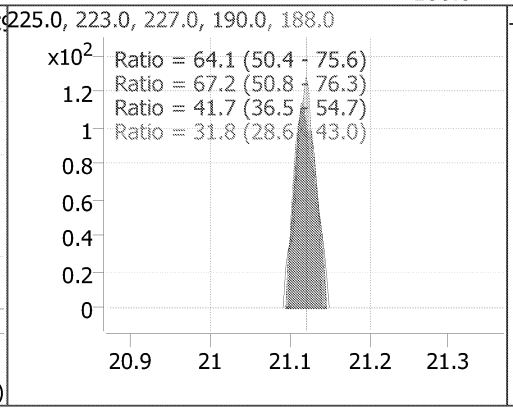


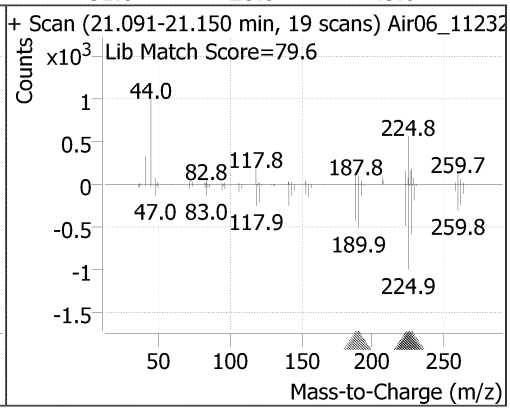


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.0111	21.11	-0.01	896	227.0	67.2	50.8	76.3
					223.0	64.1	50.4	75.6
					190.0	41.7	36.5	54.7
					188.0	31.8	28.6	43.0







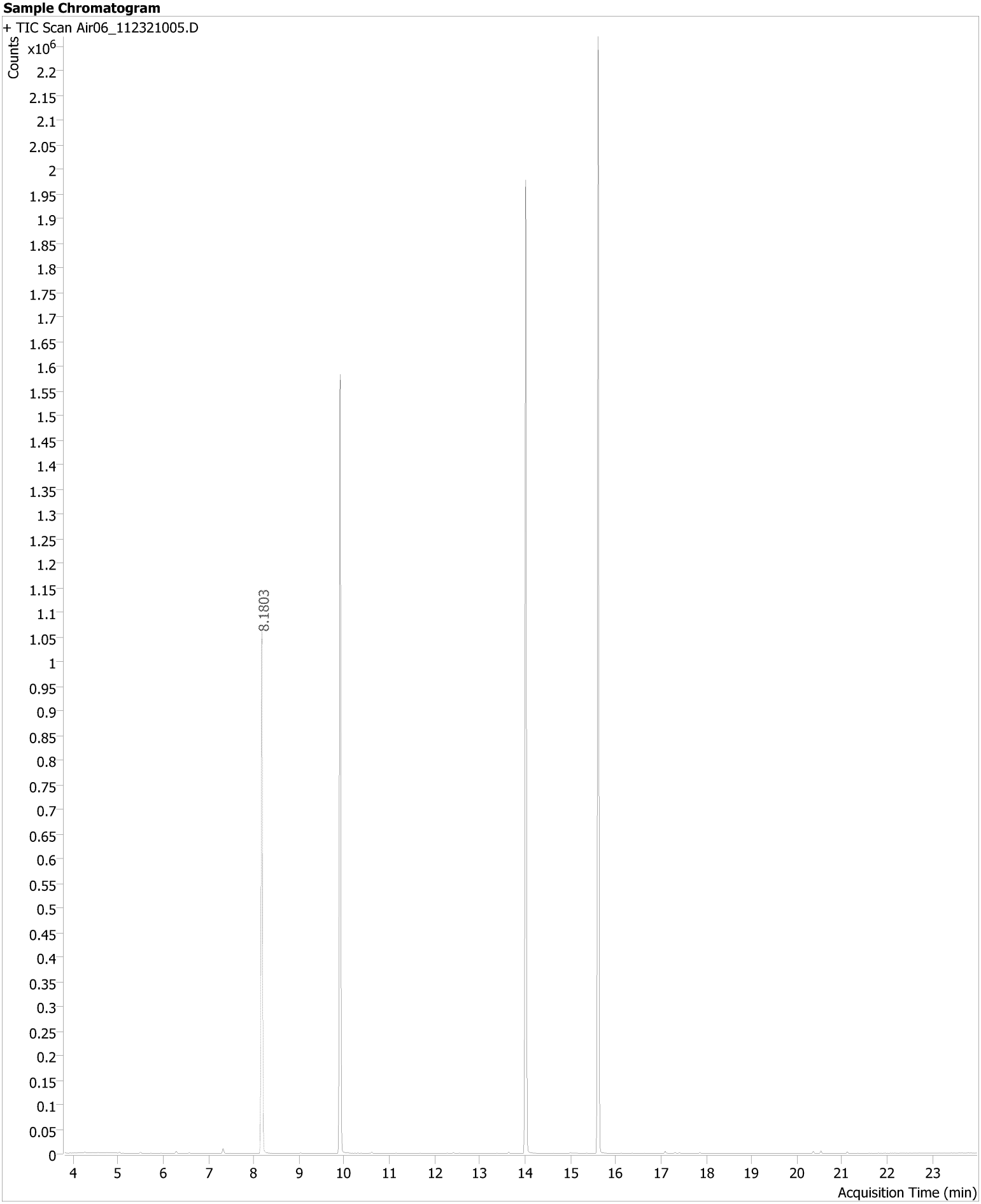
Library Search Results - NonTarget Hits with Details

Agilent Technologies

Batch Path	D:\MassHunter\GCMS\1\data\2021\112321		
Analysis File Name	112321.uaf		
Analyst Name	003AIRMS06	**Analysis Time**	11/24/2021 12:05:14 PM
File Name	Air06_112321005.D	**Path Name**	D:\MassHunter\GCMS\1\data\2021\112321
Sample Name	BLANK,QC957224,278593,1x,PDF:1,C10819	**Type**	Sample
Acq. Method File	TO15_Acq_013120_1	**Acq. Method Path**	D:\MassHunter\GCMS\1\methods\
Acq. Date-Time	11/23/2021 12:34:58 PM	**Acq. Operator**	ZNZ
Instrument Name	Air-MS-06	**Dil.**	1

Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
8.1803	Bromochloromethane	74-97-5		2297361.9	98.9	10

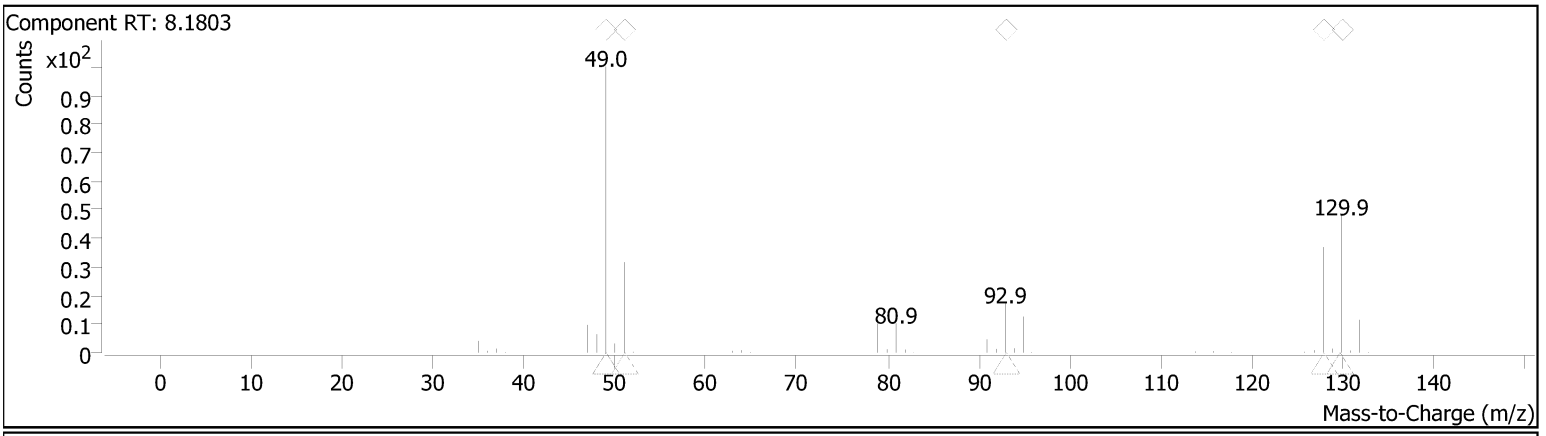
Sample Chromatogram

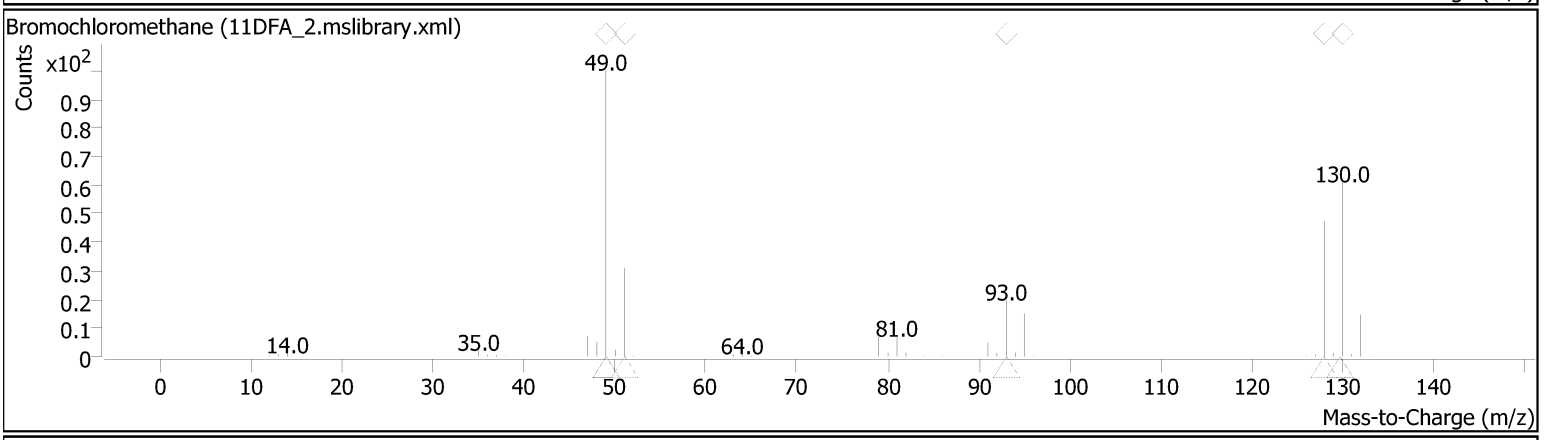


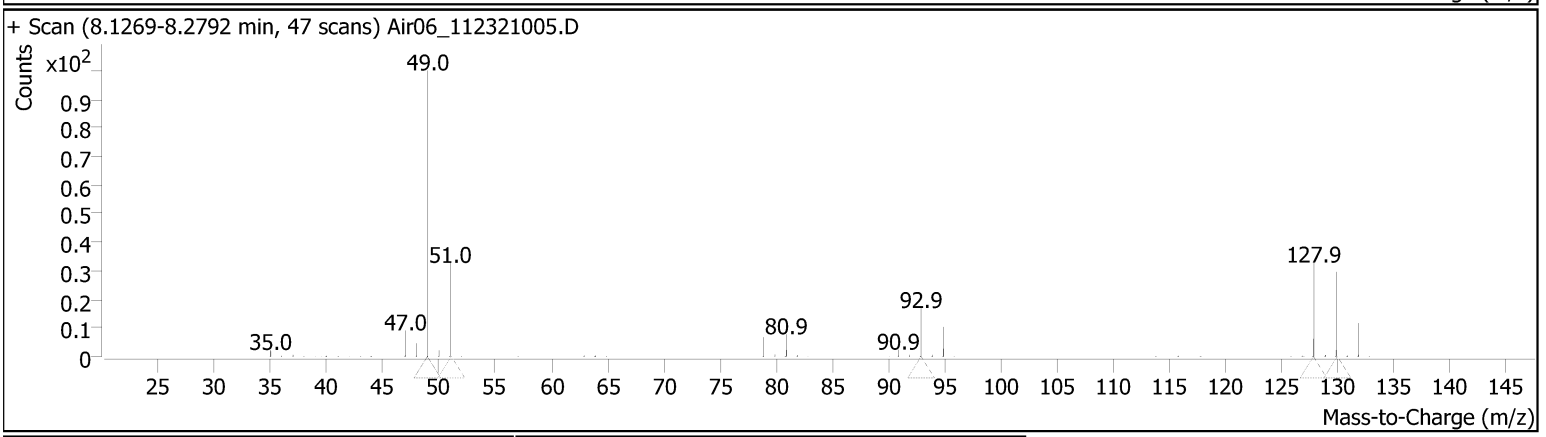
Library Search Results - NonTarget Hits with Details

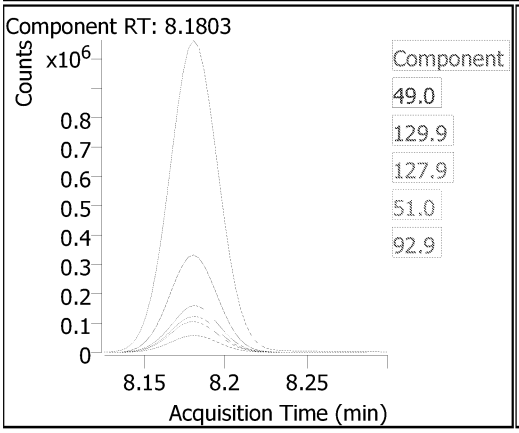
Agilent Technologies

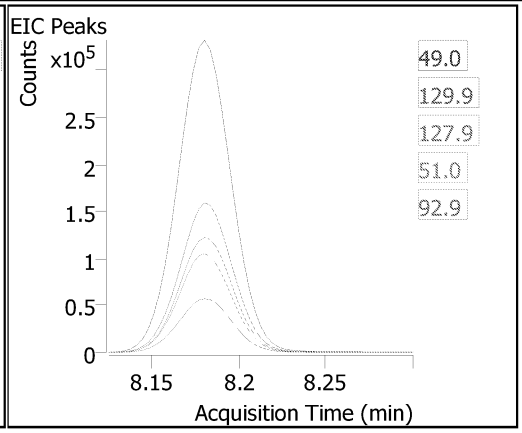
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.1803	Bromochloromethane	2297361.9	98.9	74-97-5		10











ENTHALPY BLANK USER REPORT FOR 455620 MSAIR Air
EPA TO-15

Inst : AIR-MS-06 Lab ID : QC958137 C10774
Seqnum : 371481516008.10 Matrix : Air
File : air06_113021008 Batch : 278926 Time : 30-NOV-2021 16:11
Cal : 371424323001 Caldate : 21-OCT-2021
IDF : 1.0 Raw Units : nL/L Units : nL/L
PDF : 1.0

Analyte	Raw	Result	RL	Flags
Freon 12	0	ND	0.20	u
Freon 114	0	ND	0.20	u
Chloromethane	0.002493	ND	0.20	u
Vinyl Chloride	0	ND	0.20	u
Bromomethane	0	ND	0.20	u
Chloroethane	0	ND	0.20	u
Trichlorofluoromethane	0	ND	0.20	u
1,1-Dichloroethene	0	ND	0.20	u
Freon 113	0	ND	0.20	u
Acetone	0.06472	ND	1.0	u
Carbon Disulfide	0.03685	ND	0.20	u
Isopropanol (IPA)	0.08777	ND	1.0	rsd u
Methylene Chloride	0.04656	ND	0.20	!v- calc u
trans-1,2-Dichloroethene	0.01649	ND	0.20	u
MTBE	0.001172	ND	0.20	u
n-Hexane	0.001941	ND	0.20	u
1,1-Dichloroethane	0	ND	0.20	u
Vinyl Acetate	0.001600	ND	1.0	u
cis-1,2-Dichloroethene	0.002374	ND	0.20	u
2-Butanone	0.01466	ND	1.0	u
Chloroform	0.001548	ND	0.20	u
1,1,1-Trichloroethane	0	ND	0.20	u
Carbon Tetrachloride	0	ND	0.20	u
Benzene	0.003132	ND	0.20	u
1,2-Dichloroethane	0	ND	0.20	u
Trichloroethene	0.001915	ND	0.20	u
1,2-Dichloropropane	0.0009742	ND	0.20	u
Bromodichloromethane	0	ND	0.20	u
cis-1,3-Dichloropropene	0	ND	0.20	u
4-Methyl-2-Pentanone	0.001513	ND	0.20	u
Toluene	0.002567	ND	0.20	u
trans-1,3-Dichloropropene	0	ND	0.20	u
1,1,2-Trichloroethane	0	ND	0.20	u
Tetrachloroethene	0.004680	ND	0.20	u
2-Hexanone	0.005068	ND	0.50	u
Dibromochloromethane	0.0009577	ND	0.20	u
1,2-Dibromoethane	0.003542	ND	0.20	u
Chlorobenzene	0.003963	ND	0.20	u
Ethylbenzene	0.001950	ND	0.20	u
m,p-Xylenes	0.003846	ND	0.40	u
o-Xylene	0.001323	ND	0.20	u
Styrene	0.001751	ND	0.20	u
Bromoform	0.004438	ND	0.20	u
1,1,2,2-Tetrachloroethane	0.001336	ND	0.20	u
1,1,1,2-Tetrachloroethane	0	ND	0.20	u
4-Ethyltoluene	0.001888	ND	0.20	u
1,3,5-Trimethylbenzene	0.002411	ND	0.20	u

Analyte	Raw	Result	RL	Flags
1,2,4-Trimethylbenzene	0.003373	ND	0.20	u
1,3-Dichlorobenzene	0.009564	ND	0.20	u
1,4-Dichlorobenzene	0.01039	ND	0.20	u
Benzyl chloride	0.007033	ND	0.20	u
1,2-Dichlorobenzene	0.007922	ND	0.20	u
1,2,4-Trichlorobenzene	0.01788	ND	0.20	u
Hexachlorobutadiene	0.005877	ND	0.20	u

TICs not entered.

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Bromofluorobenzene	9.982	10.00	9.982	100	60-140	u

ISTD (ICAL air06_102121011)	ICAL Area	BLANK Area	%Drift	ICAL RT	BLANK RT	Drift
Bromochloromethane	389038	262921	-32.42	8.19	8.18	-0.01
1,4-Difluorobenzene	1458162	967157	-33.67	9.92	9.91	-0.01
Chlorobenzene-d5	778633	527901	-32.20	14.02	14.01	-0.01

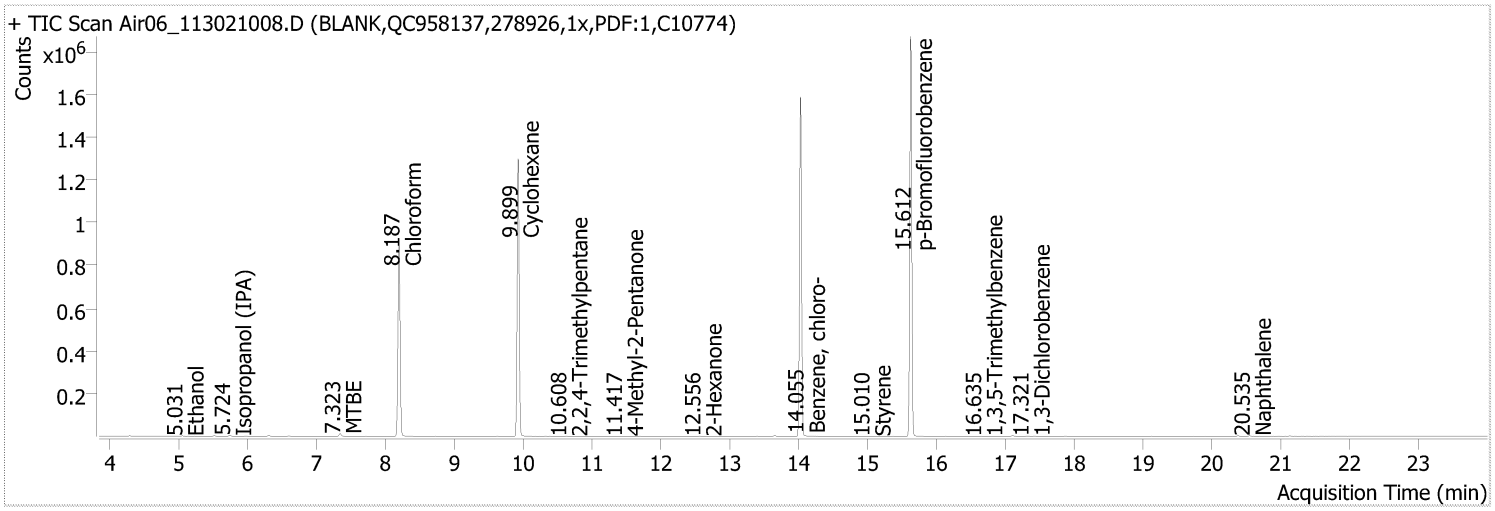
GSG 01/04/22 : CanCheck for C10774.

Analyst: GSG Date: 01/04/22 Reviewer: SLL Date: 01/04/22

!=warning -=low bias calc=check quantitation rsd=ICAL %RSD failure u=use v=ICV

Quantitation Results Report (Not Reviewed)

Data File	Air06_113021008.D	Operator	ZNZ
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	11/30/2021 4:11:37 PM
Sample Name	BLANK,QC958137,278926,1x,PDF:1,C10774	Instrument	Air-MS-06
Vial	5	Multiplier	1.00
DA Method File	TO15_102121.m	Comment	1x400mL
Tune File	bfb.u	Tune Date	11/29/2021 10:26:09 AM
Batch Name	2021 Nov 30 1452 TO15_102121.m.batch.bin	Last Calib Update	10/23/2021 7:11:09 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.180	130.0	262921	10.0000	nL/L	#	-0.006
M 1,4-Difluorobenzene	9.912	114.0	967157	10.0000	nL/L		-0.003
M Chlorobenzene-d5	14.010	82.0	527901	10.0000	nL/L	#	-0.006
System Monitoring Compounds							
S p-Bromofluorobenzene	15.612	95.0	693825	9.9817	nL/L		-0.003
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 99.82%			
Target Compounds							QValue
T Propylene	3.918	41.0	78	0.0031	nL/L	#	32
T Freon 12	0.000		0	N.D.			
T Chloromethane	4.151	50.0	71	0.0025	nL/L		50
T Freon 114	0.000		0	N.D.			
T Vinyl Chloride	0.000		0	N.D.			
T 1,3-Butadiene	0.000		0	N.D.			
T Butane	4.549	43.0	251	0.0056	nL/L	#	56
T Bromomethane	0.000		0	N.D.			
T Chloroethane	0.000		0	N.D.			
T Ethanol	5.031	45.0	2345	0.1899	nL/L		95
T Vinyl bromide	0.000		0	N.D.			
T Acrolein	0.000		0	N.D.			
T Acetone	5.497	58.0	1154	0.0647	nL/L	#	88
T Trichloromonofluoromethane	0.000		0	N.D.			
T Isopropanol (IPA)	5.724	45.0	6008	0.0878	nL/L	#	92
T n-Pentane	5.950	43.0	948	0.0160	nL/L		90
T 1,1-Dichloroethene	0.000		0	N.D.			
T Tert-butyl alcohol (TBA)	6.316	59.0	348	0.0063	nL/L	#	81
T Methylene Chloride	6.287	84.0	1274	0.0466	nL/L	#	76
T 3-Chloropropene	6.582	76.0	2511	0.2394	nL/L	#	57
T Freon 113	0.000		0	N.D.			
T Carbon Disulfide	6.582	76.0	2511	0.0369	nL/L	#	92

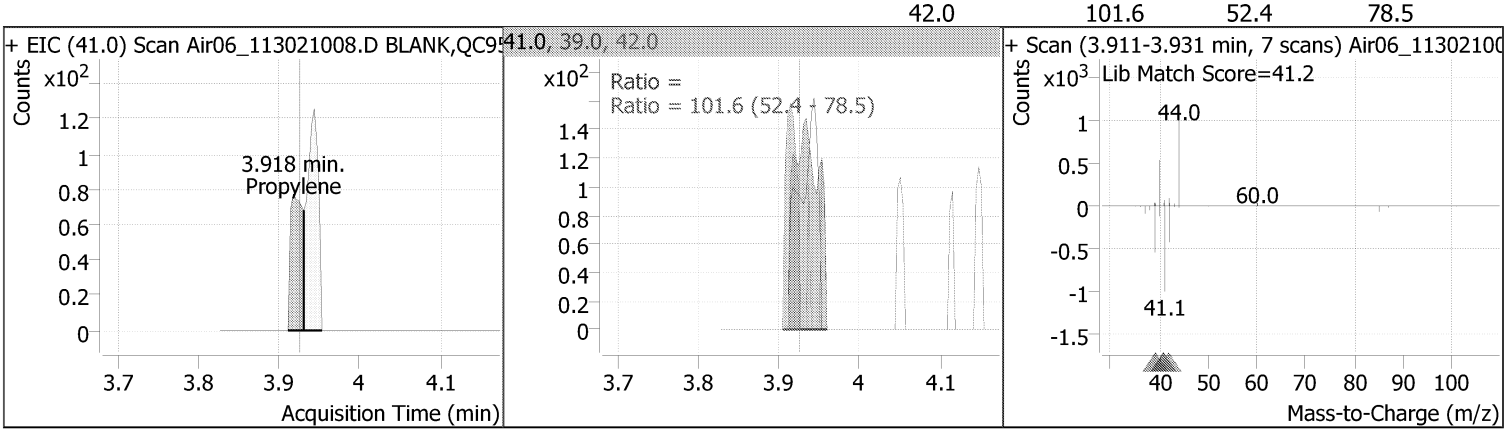
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.316	61.0	708	0.0165	nL/L	#	44
T 1,1-Dichloroethane	0.000		0	N.D.			
T MTBE	7.323	73.0	75	0.0012	nL/L		42
T Vinyl Acetate	7.413	43.0	139	0.0016	nL/L		84
T 2-Butanone	7.692	43.0	1019	0.0147	nL/L		68
T cis-1,2-Dichloroethene	8.045	61.0	104	0.0024	nL/L		34
T Ethyl Acetate	8.045	61.0	104	0.0097	nL/L		1
T n-Hexane	8.248	57.0	100	0.0019	nL/L	#	60
T Chloroform	8.187	83.0	84	0.0015	nL/L	#	1
T Tetrahydrofuran	0.000		0	N.D.			
T 1,2-Dichloroethane	0.000		0	N.D.			
T 1,1,1-Trichloroethane	0.000		0	N.D.			
T Benzene	9.608	78.0	236	0.0031	nL/L	#	73
T Carbon Tetrachloride	0.000		0	N.D.			
T Cyclohexane	9.899	84.0	1851	0.0587	nL/L	#	1
T 1,2-Dichloropropane	10.210	63.0	33	0.0010	nL/L		27
T Methane, bromodichloro-	0.000		0	N.D.			
T 1,4-Dioxane	10.601	88.0	37	0.0023	nL/L	#	1
T Trichloroethene	10.559	132.0	63	0.0019	nL/L	#	47
T 2,2,4-Trimethylpentane	10.608	57.0	575	0.0036	nL/L	#	88
T Methyl methacrylate	0.000		0	N.D.			
T n-Heptane	0.000		0	N.D.			
T cis-1,3-Dichloropropene	0.000		0	N.D.			
T 4-Methyl-2-Pentanone	11.417	58.0	44	0.0015	nL/L	#	1
T trans-1,3-Dichloropropene	0.000		0	N.D.			
T 1,1,2-Trichloroethane	0.000		0	N.D.			
T Toluene	12.272	91.0	235	0.0026	nL/L		87
T TPH Gasoline (C3 to C12)	12.393	165.0	454893	0.0675	nL/L		100
T 2-Hexanone	12.556	58.0	193	0.0051	nL/L	#	53
T Dibromochloromethane	12.663	129.0	53	0.0010	nL/L		31
T 1,2-Dibromoethane	12.922	108.9	169	0.0035	nL/L	#	67
T Tetrachloroethene	13.385	166.0	220	0.0047	nL/L	#	88
T 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
T Benzene, chloro-	14.055	112.0	301	0.0040	nL/L	#	35
T Ethylbenzene	14.434	91.0	228	0.0020	nL/L		55
T TPH Gasoline (C6 to C12)	14.518	165.0	246402	0.0489	nL/L		100
T m,p-Xylenes	14.634	91.0	364	0.0038	nL/L	#	43
T Bromoform	14.693	173.0	273	0.0044	nL/L	#	17
T Styrene	15.010	104.0	126	0.0018	nL/L	#	57
T 1,1,2,2-Tetrachloroethane	15.097	83.0	99	0.0013	nL/L	#	66
T o-Xylene	15.130	91.0	129	0.0013	nL/L		47
T n-Nonane	0.000		0	N.D.			
T Isopropylbenzene	15.767	105.0	114	0.0008	nL/L		57
T 2-Chlorotoluene	0.000		0	N.D.			
T n-Propylbenzene	0.000		0	N.D.			
T 4-Ethyltoluene	16.538	105.1	250	0.0019	nL/L		55
T 1,3,5-Trimethylbenzene	16.635	105.0	277	0.0024	nL/L		88
T 1,2,4-Trimethylbenzene	17.136	105.0	374	0.0034	nL/L	#	60
T Benzyl chloride	17.298	91.0	639	0.0070	nL/L	#	72
T 1,3-Dichlorobenzene	17.321	146.0	759	0.0096	nL/L	#	78
T 1,4-Dichlorobenzene	17.408	146.0	826	0.0104	nL/L	#	89
T 1,2-Dichlorobenzene	17.858	146.0	608	0.0079	nL/L	#	92
T 1,2,4-Trichlorobenzene	20.367	179.9	1041	0.0179	nL/L		96
T Naphthalene	20.535	128.0	2475	0.0202	nL/L	#	95
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.117	225.0	371	0.0059	nL/L	#	73

Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

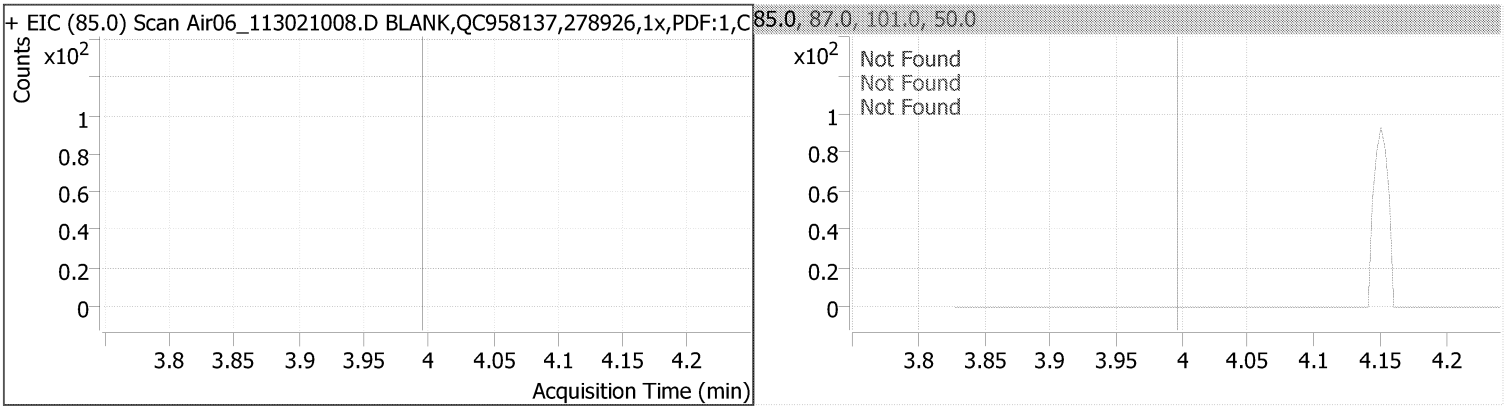
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitation Results Report (Not Reviewed)

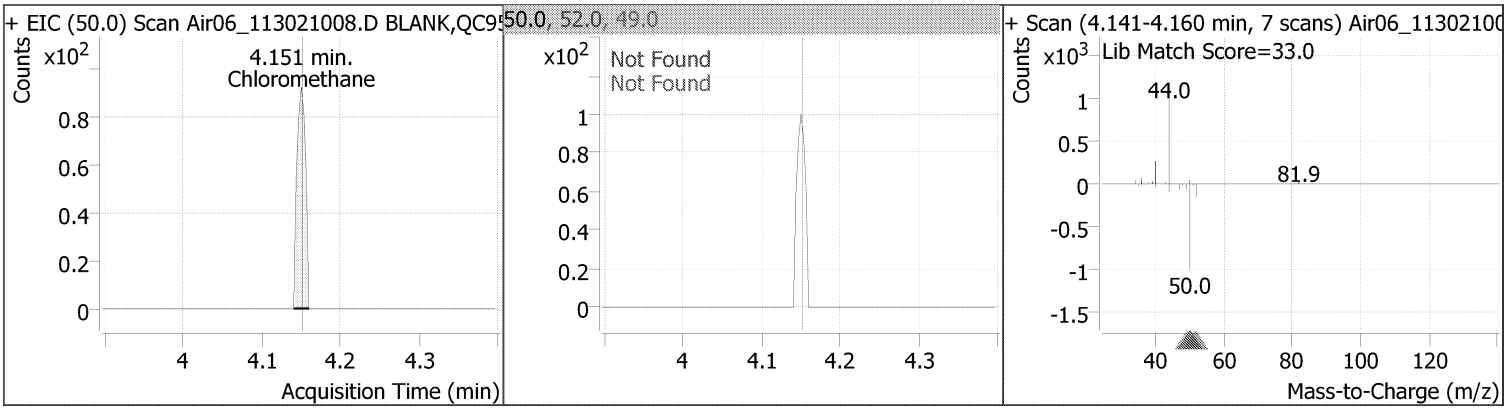
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.0031	3.92	-0.01	78	39.0		60.2	90.3
					42.0	101.6	52.4	78.5



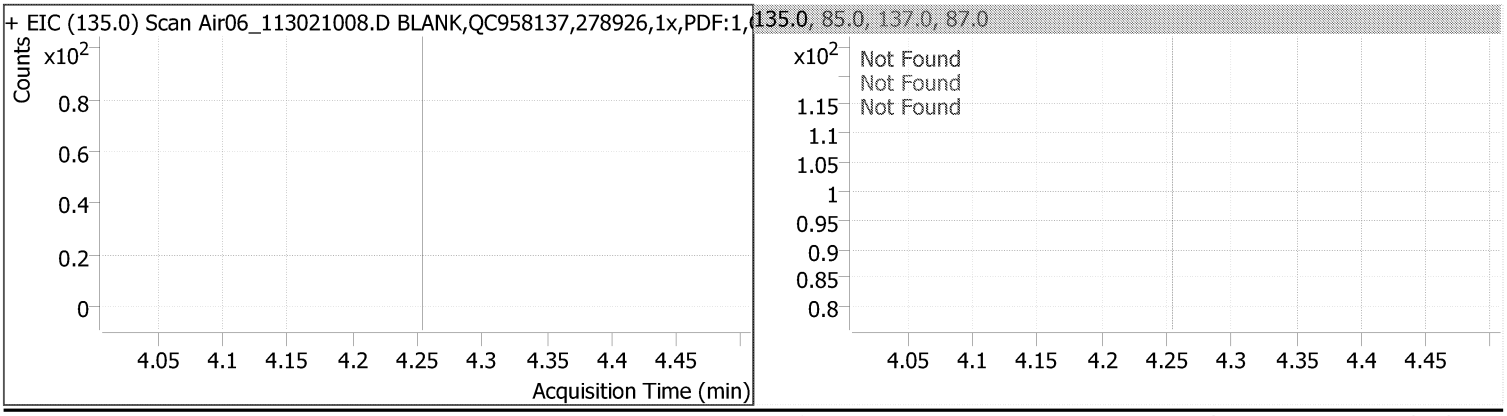
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 12	N.D.	4.00	87.0	32.4	50.0	17.3	101.0	9.4



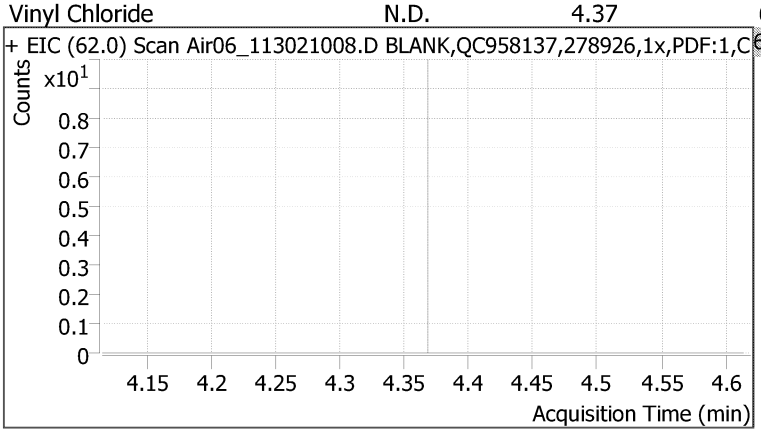
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	0.0025	4.15	0.00	71	52.0		25.5	38.3
					49.0		8.3	12.5

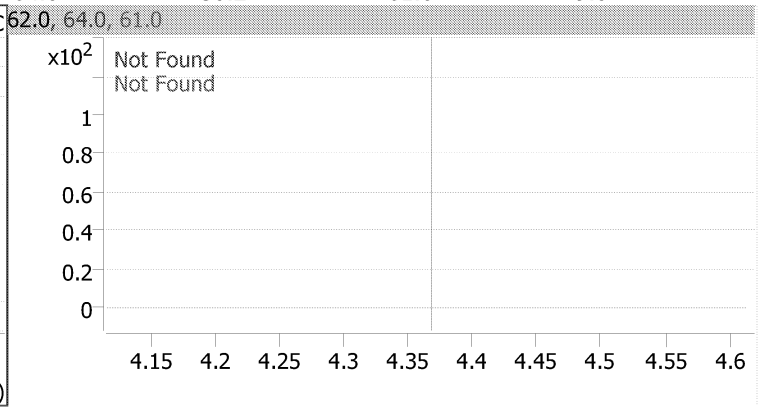


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 114	N.D.	4.26	85.0	151.0	87.0	48.3	137.0	32.5

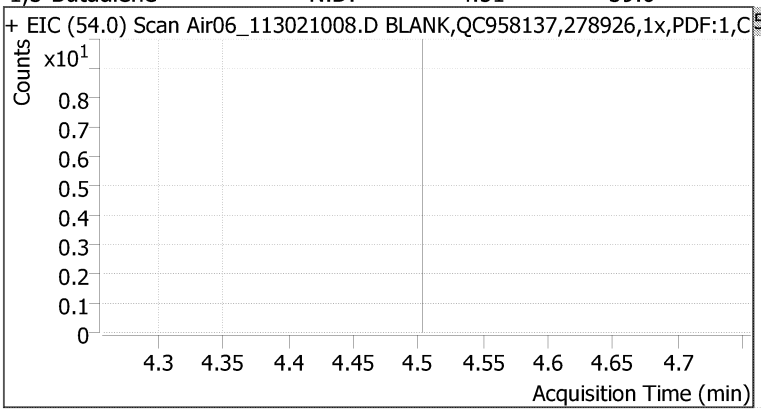


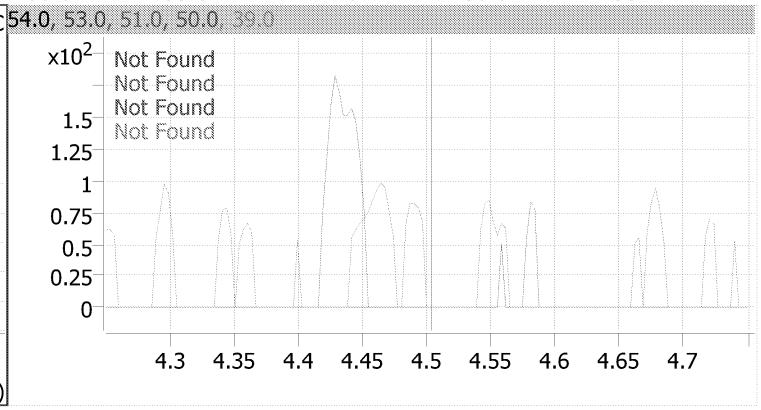
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl Chloride	N.D.	4.37	64.0	30.2	61.0	9.0



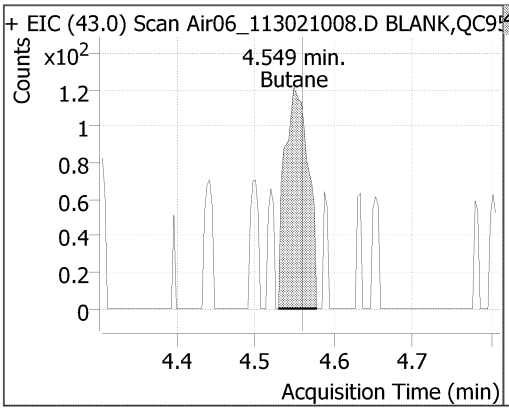


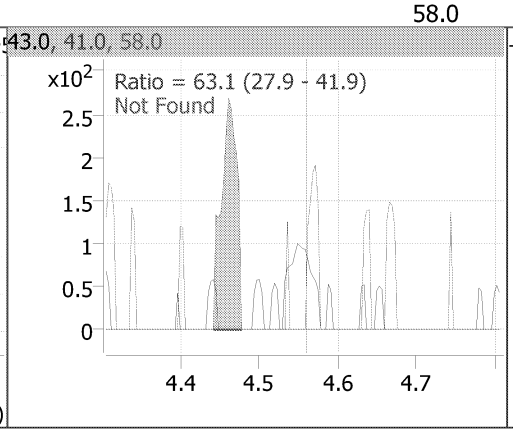
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,3-Butadiene	N.D.	4.51	39.0	106.8	53.0	71.6	50.0	35.2

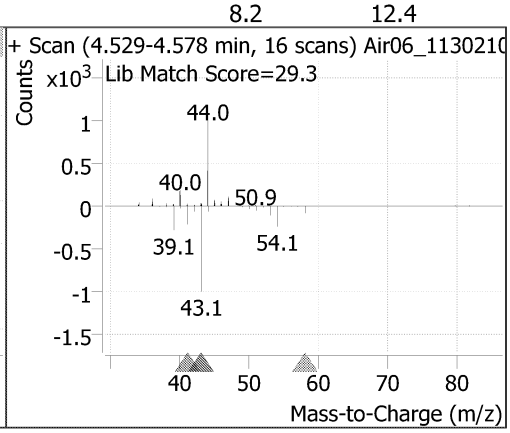




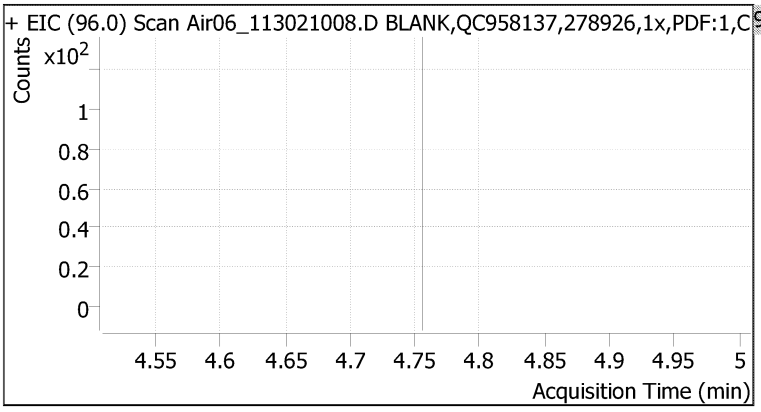
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	0.0056	4.55	-0.01	251	41.0	63.1	27.9	41.9
					58.0		8.2	12.4

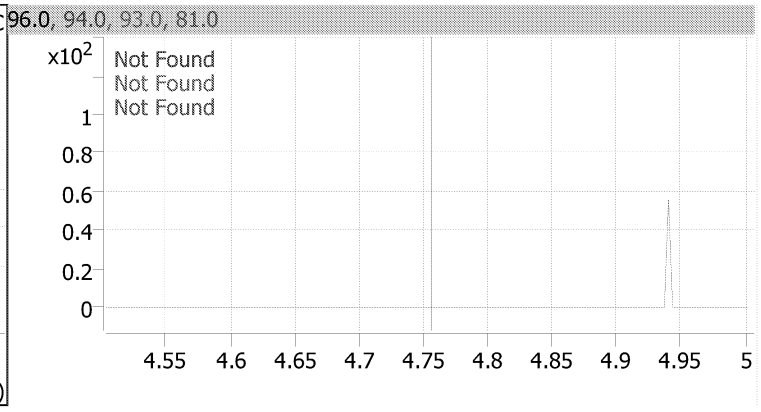




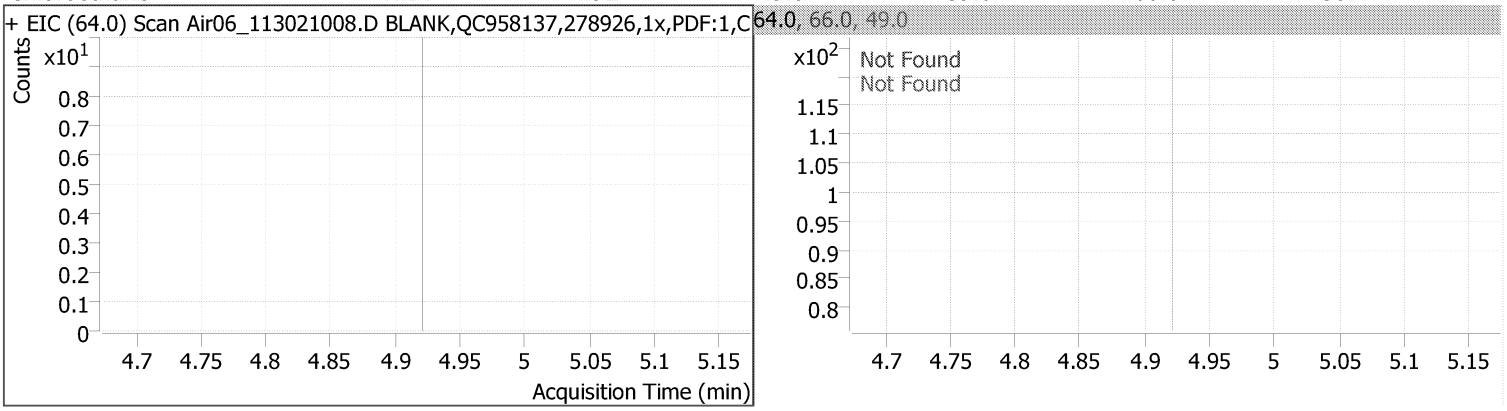


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Bromomethane	N.D.	4.76	94.0	106.0	93.0	21.9	81.0	19.1

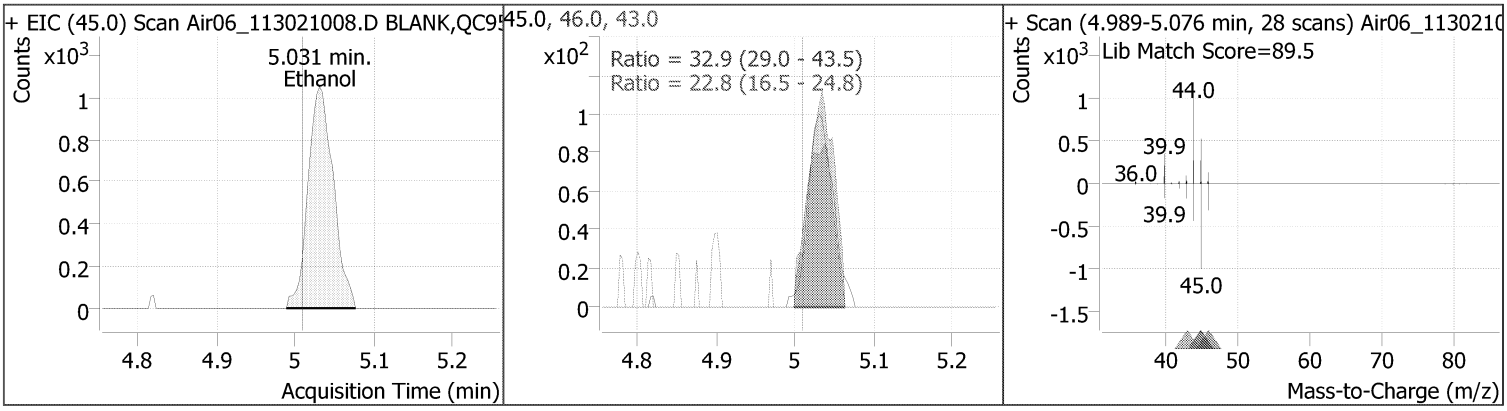




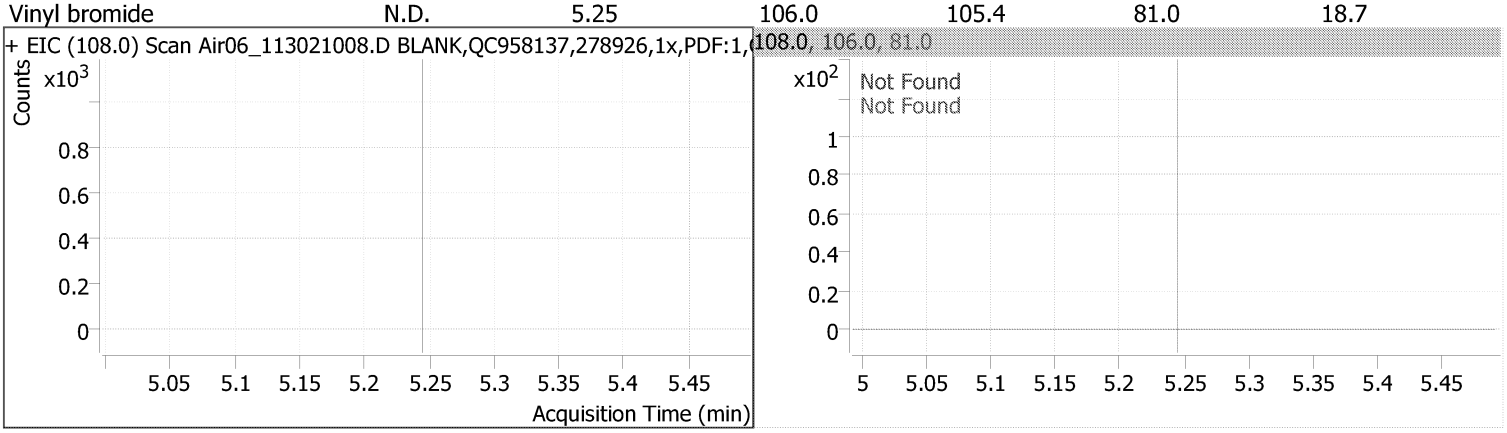
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Chloroethane	N.D.	4.92	49.0	39.6	66.0	30.4



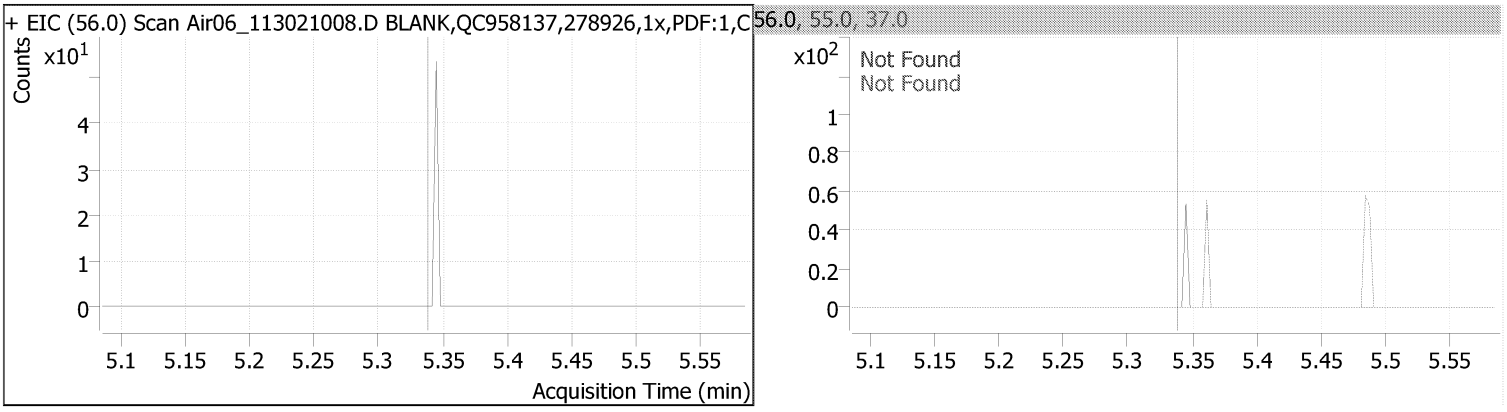
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	0.1899	5.03	0.02	2345	46.0	32.9	29.0	43.5
					43.0	22.8	16.5	24.8



Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl bromide	N.D.	5.25	106.0	105.4	81.0	18.7

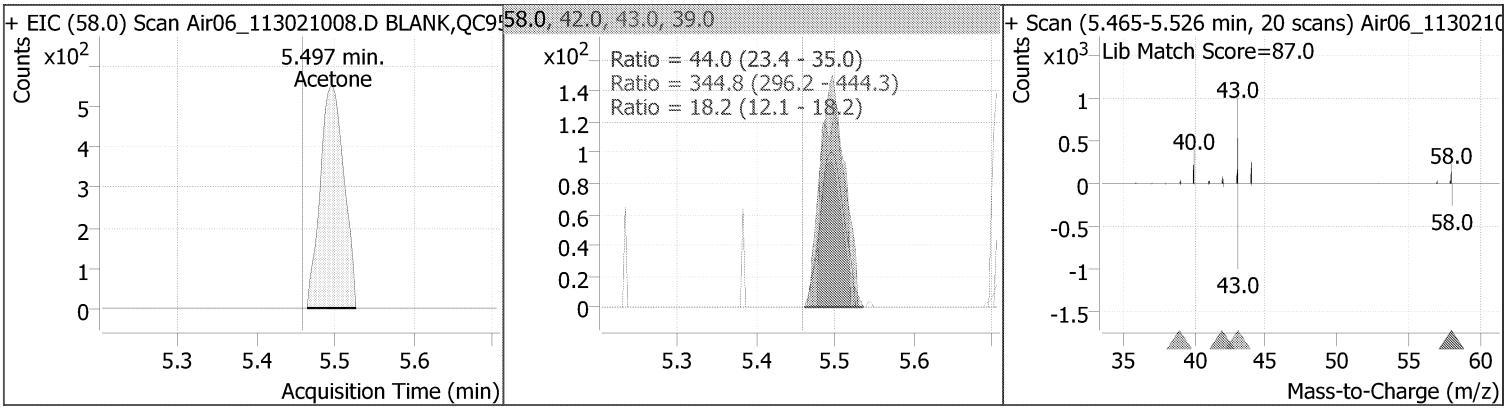


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Acrolein	N.D.	5.34	55.0	75.0	37.0	10.6

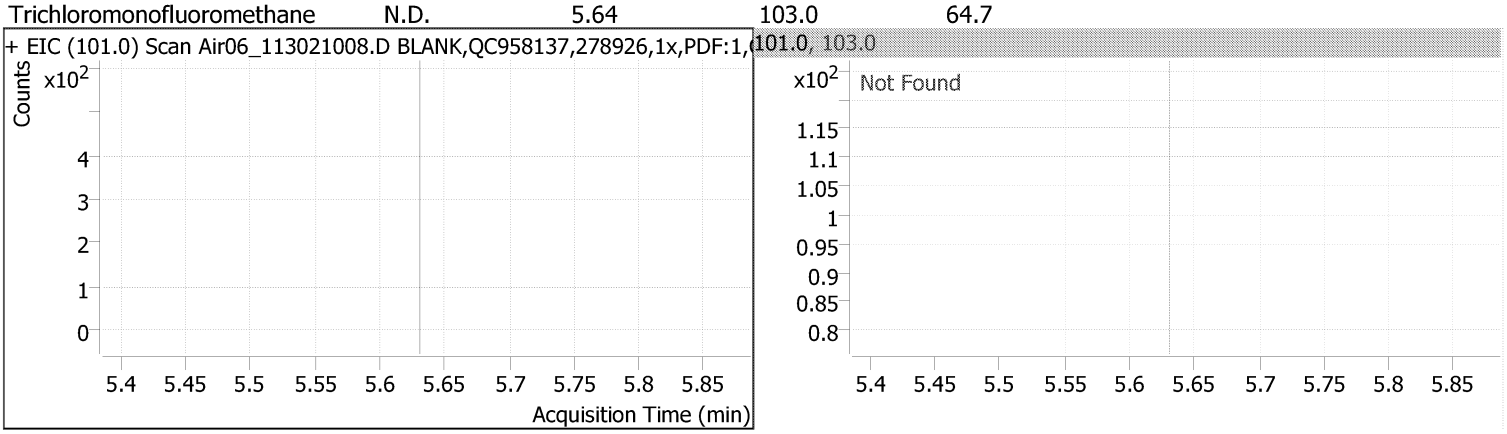


Quantitation Results Report (Not Reviewed)

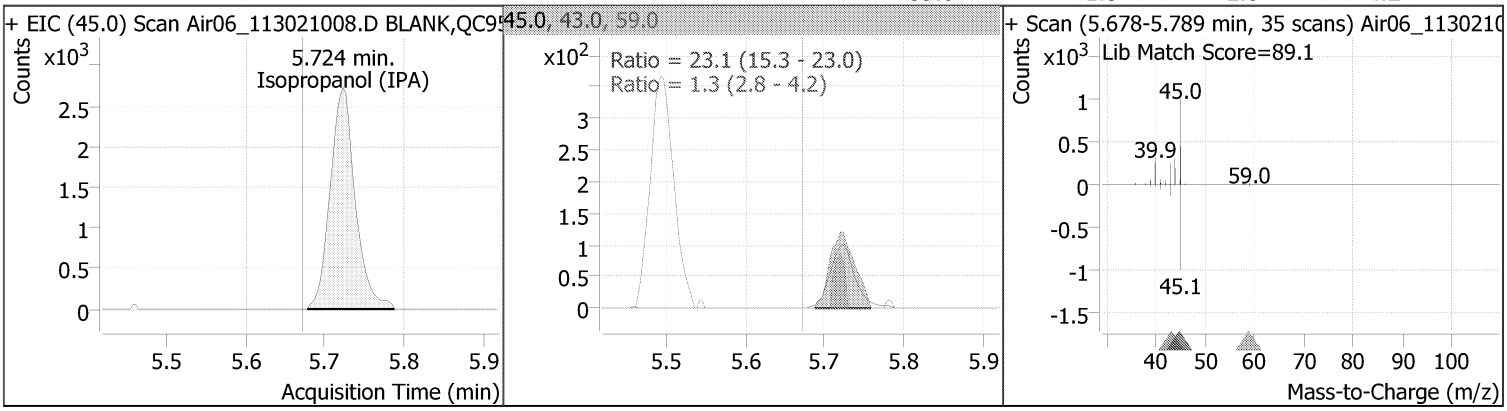
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	0.0647	5.50	0.04	1154	43.0	344.8	296.2	444.3
					42.0	44.0	23.4	35.0
					39.0	18.2	12.1	18.2



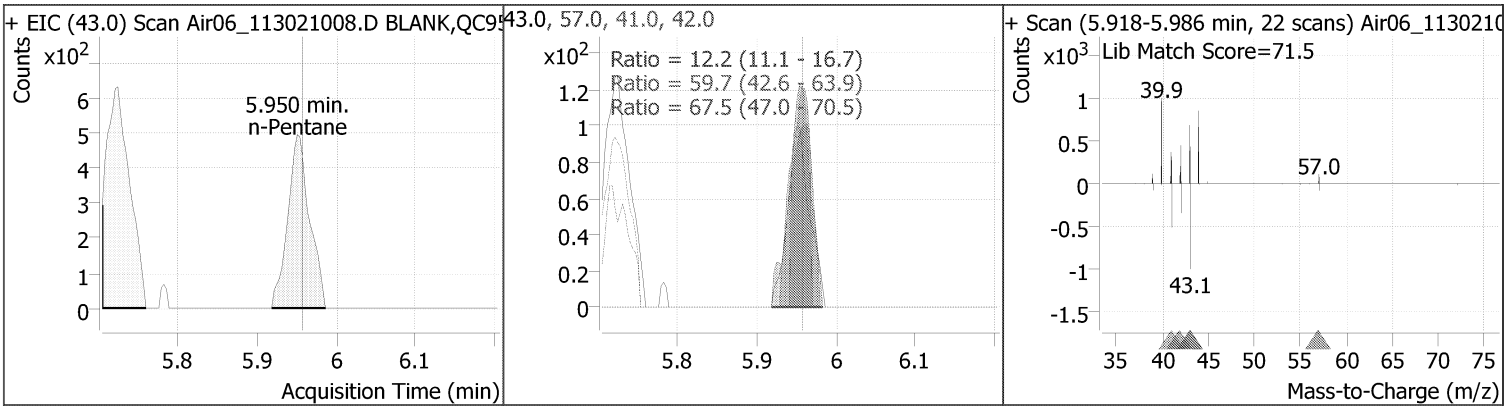
Compound	Conc.	Exp RT	QIon	Exp Ratio
Trichloromonofluoromethane	N.D.	5.64	103.0	64.7



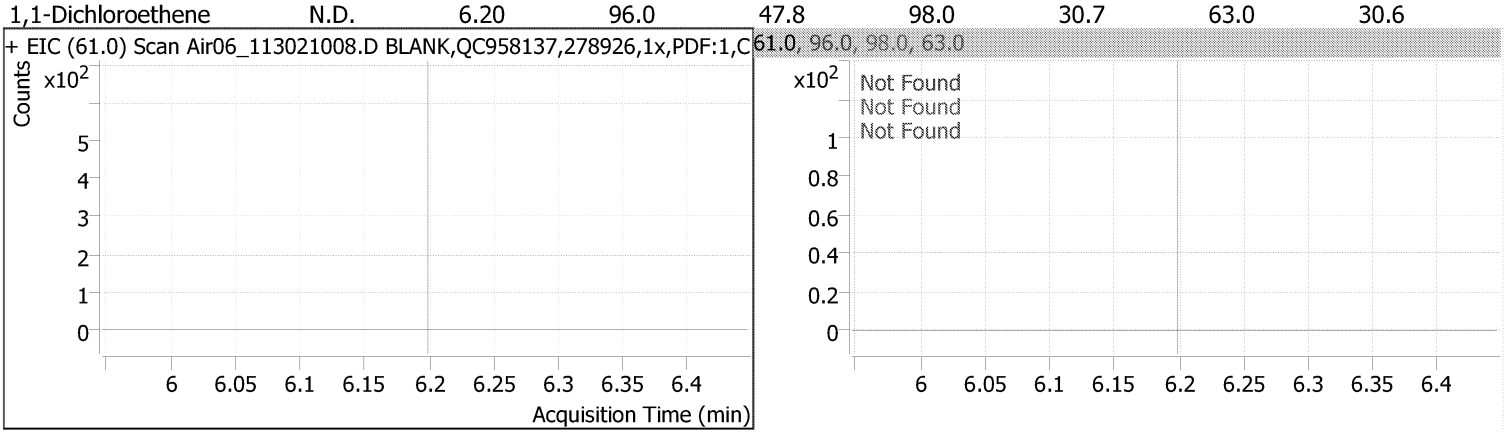
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.0878	5.72	0.05	6008	43.0	23.1	15.3	23.0
					59.0	1.3	2.8	4.2



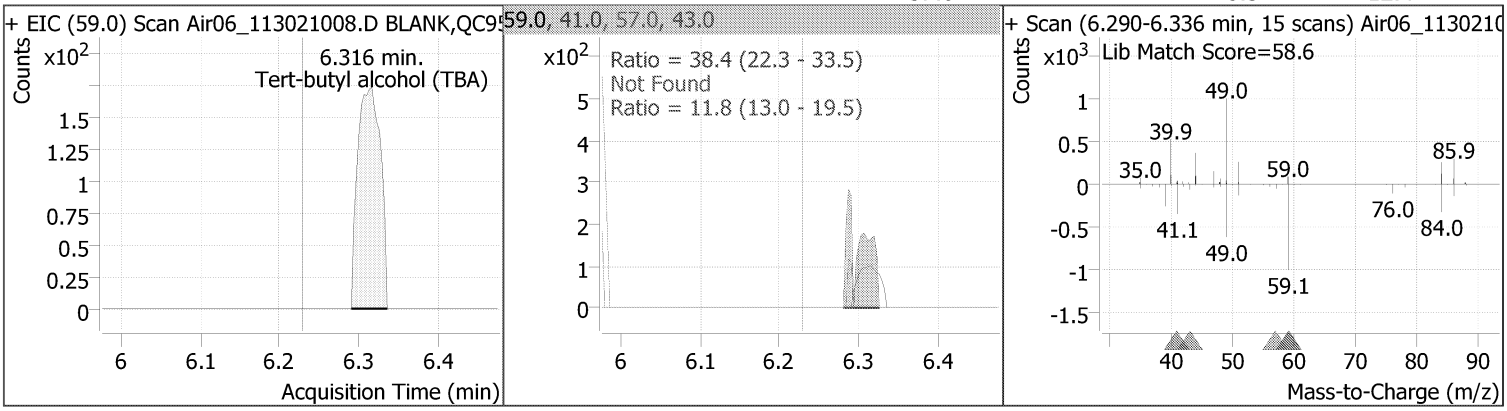
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.0160	5.95	-0.01	948	42.0	67.5	47.0	70.5
					41.0	59.7	42.6	63.9
					57.0	12.2	11.1	16.7



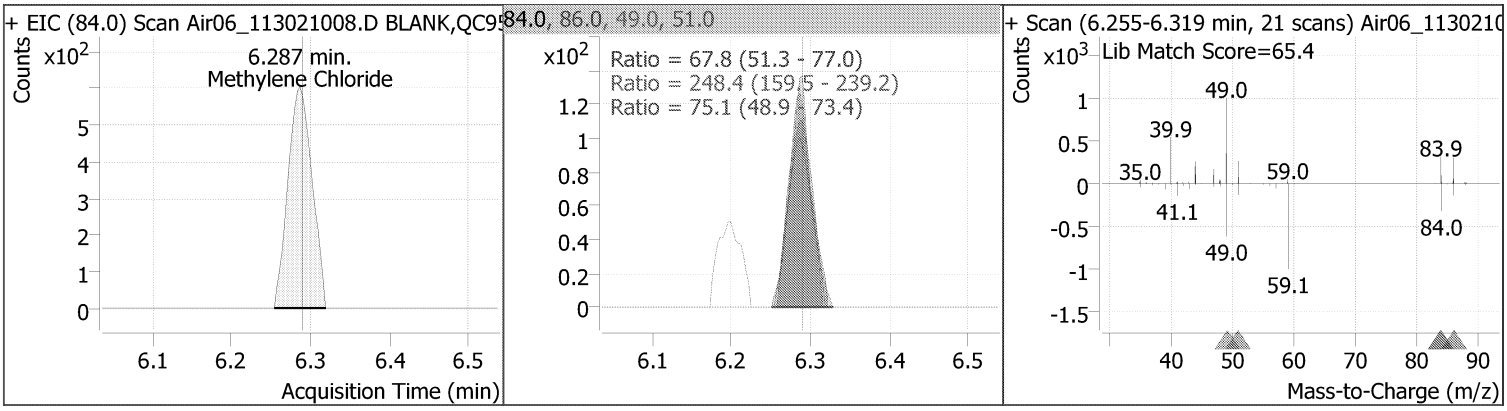
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethene	N.D.	6.20	96.0	47.8	98.0	30.7	63.0	30.6



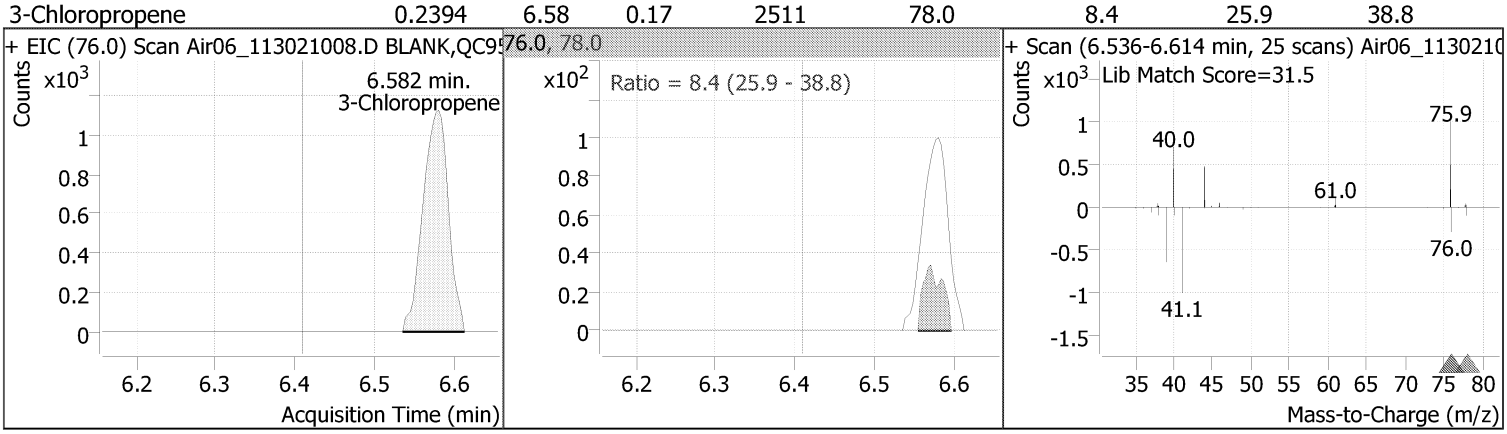
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.0063	6.32	0.08	348	41.0	38.4	22.3	33.5
					43.0	11.8	13.0	19.5
					57.0		8.3	12.4



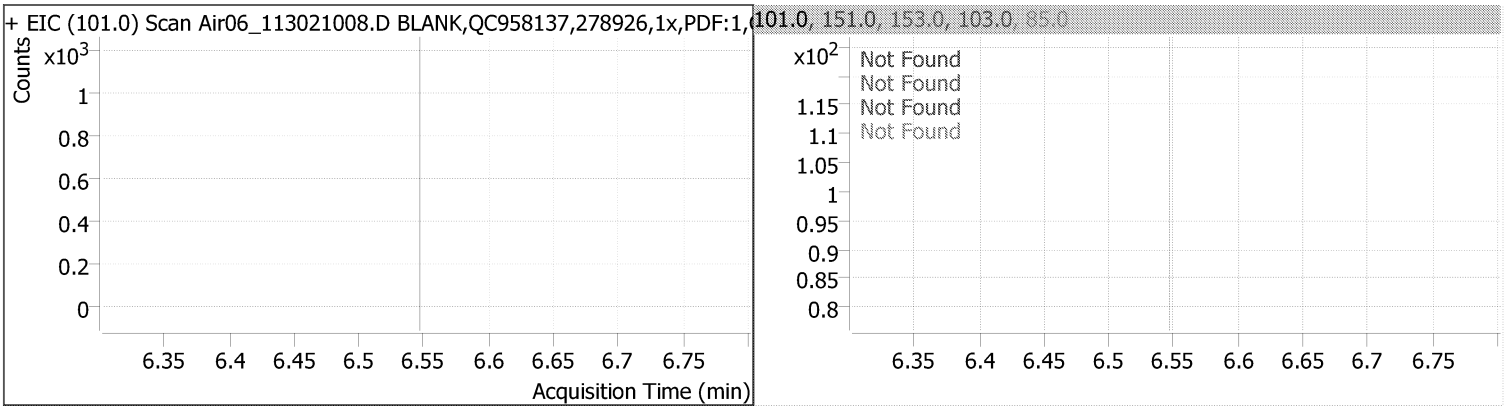
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.0466	6.29	-0.01	1274	49.0	248.4	159.5	239.2
					86.0	67.8	51.3	77.0
					51.0	75.1	48.9	73.4



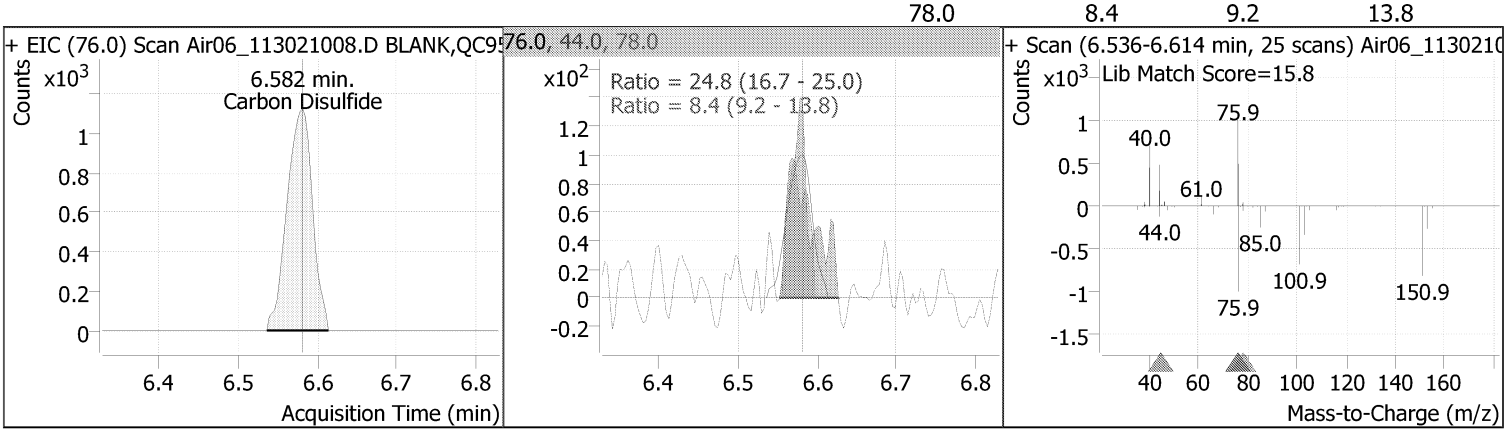
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	0.2394	6.58	0.17	2511	78.0	8.4	25.9	38.8



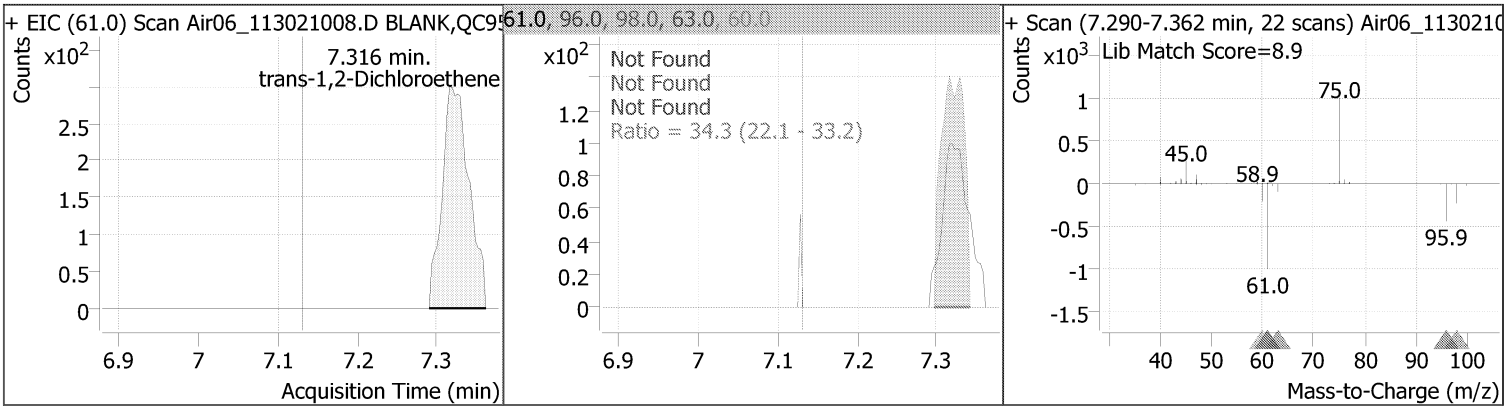
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 113	N.D.	6.55	151.0	83.8	103.0	64.0	153.0	54.1



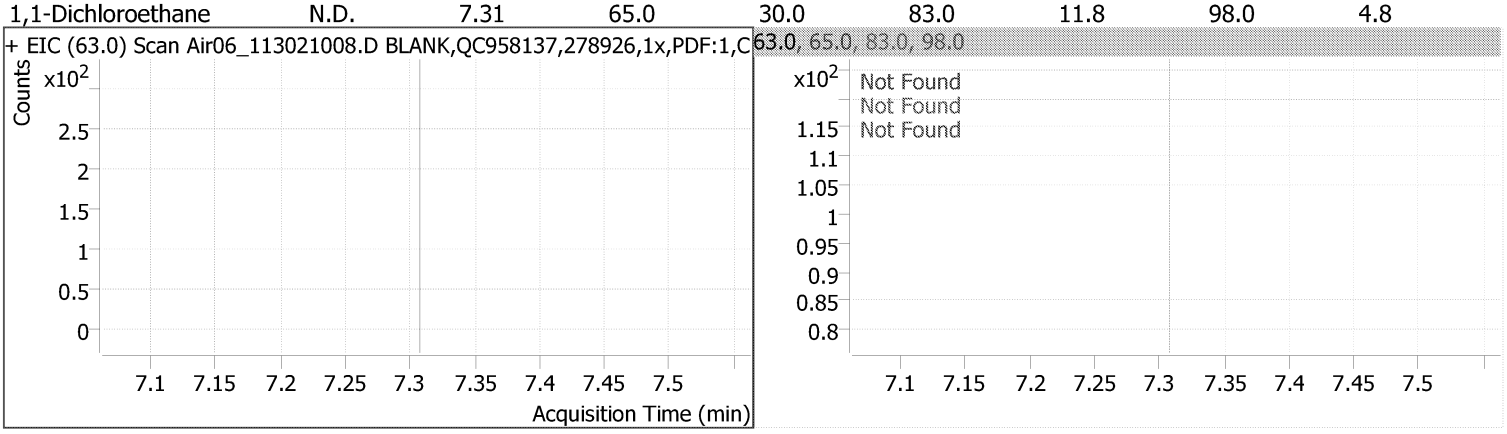
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.0369	6.58	0.00	2511	44.0	24.8	16.7	25.0
					78.0	8.4	9.2	13.8



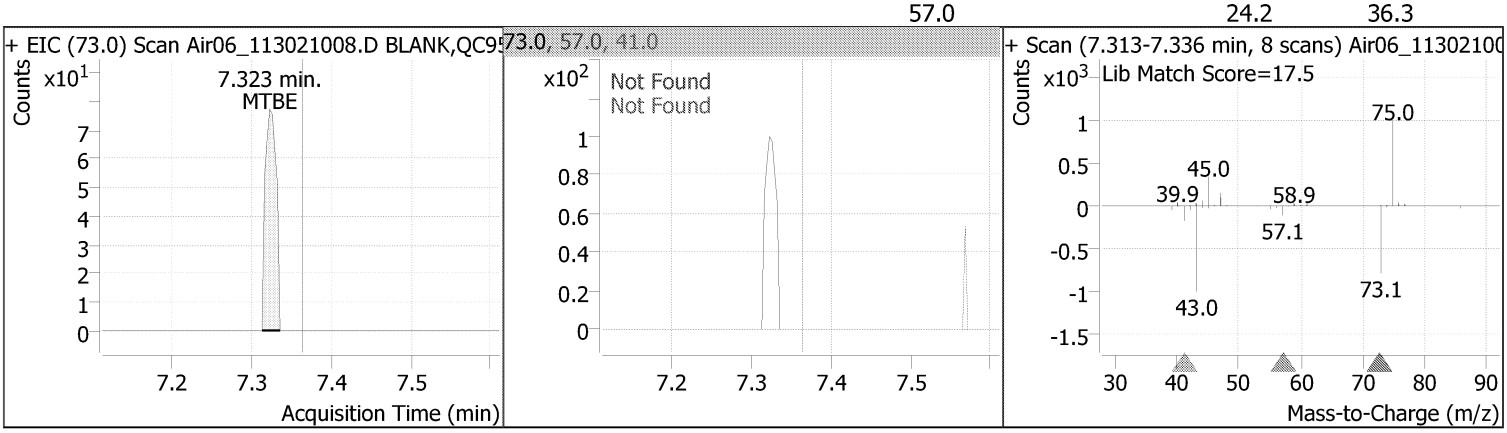
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.0165	7.32	0.18	708	96.0		44.1	66.2
					98.0		27.9	41.9
					63.0		24.4	36.6
					60.0	34.3	22.1	33.2



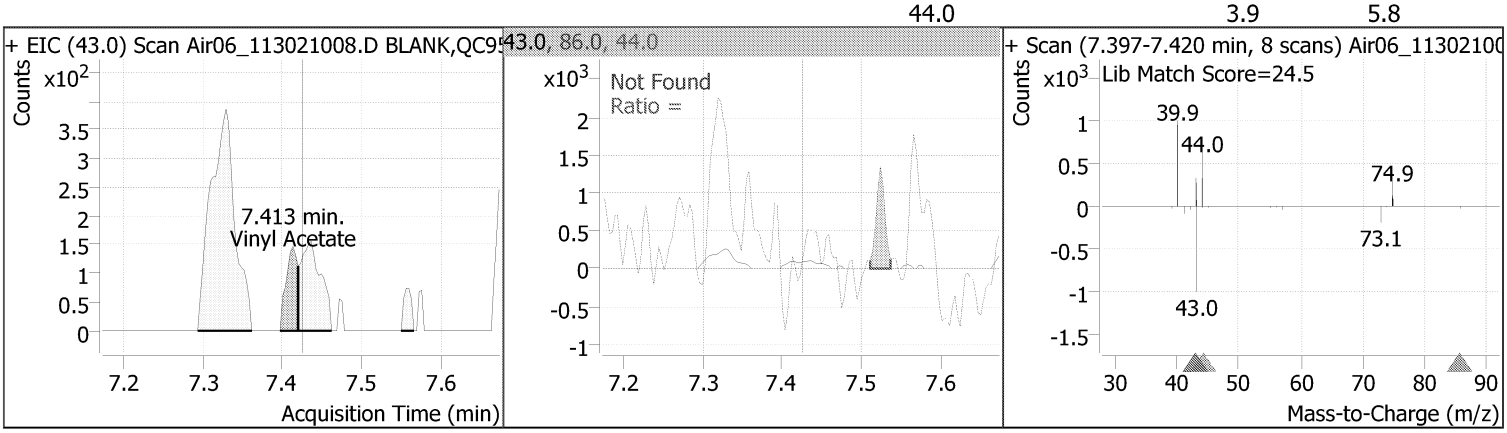
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethane	N.D.	7.31	65.0	30.0	83.0	11.8	98.0	4.8



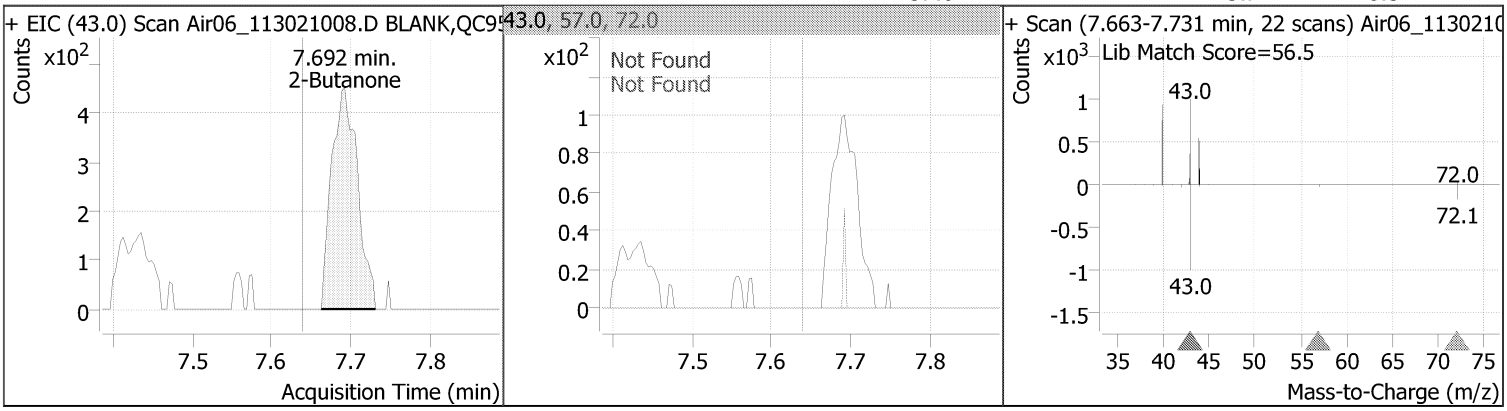
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	0.0012	7.32	-0.05	75	41.0		27.6	41.3
					57.0		24.2	36.3



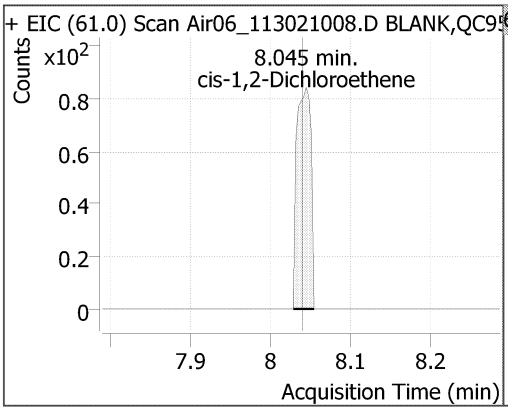
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.0016	7.41	-0.02	139	86.0		4.6	6.9
					44.0		3.9	5.8

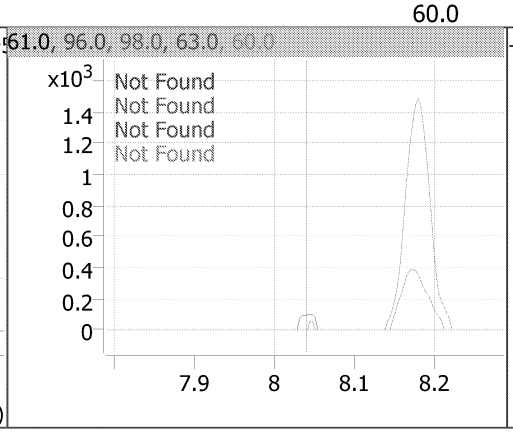


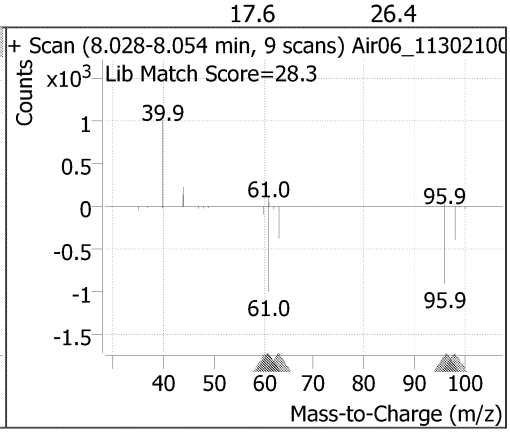
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.0147	7.69	0.05	1019	72.0		12.5	18.8
					57.0		5.7	8.5



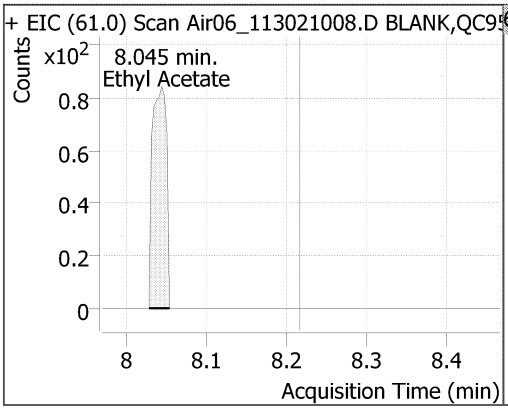
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.0024	8.04	0.00	104	96.0		48.3	72.4
					98.0		31.2	46.8
					63.0		24.5	36.7
					60.0		17.6	26.4

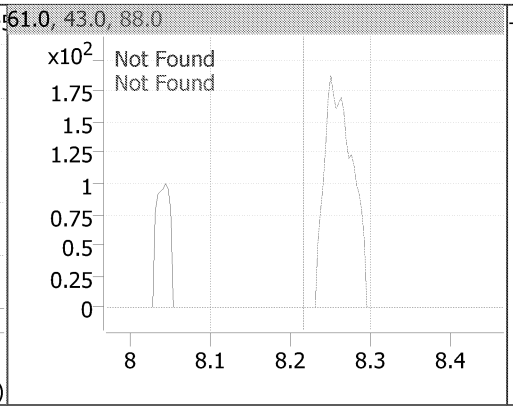


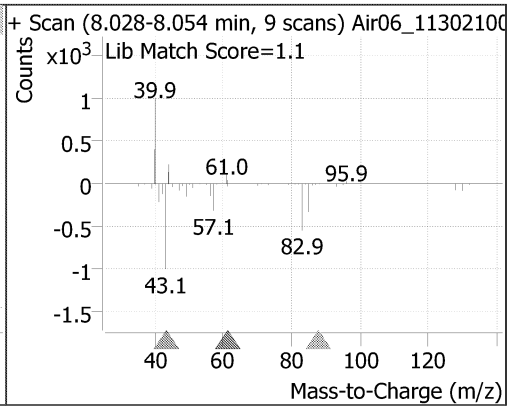




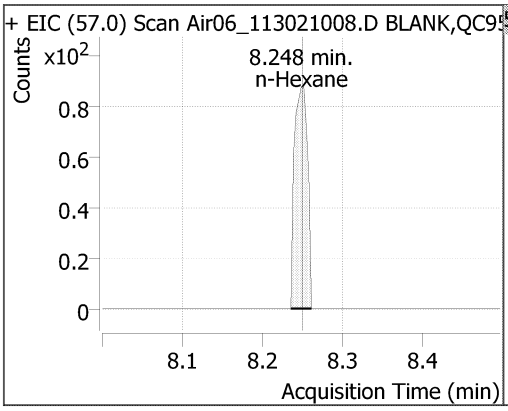
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	0.0097	8.04	-0.18	104	43.0		963.0	1444.5
					88.0		16.2	24.3

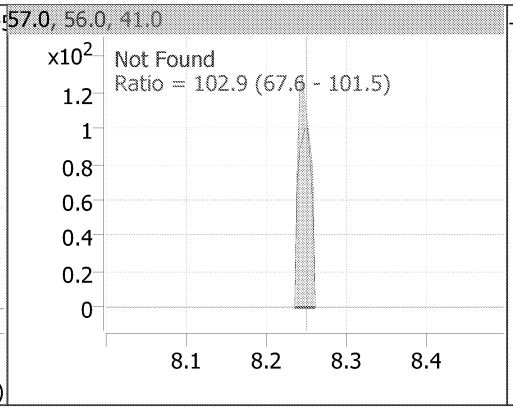


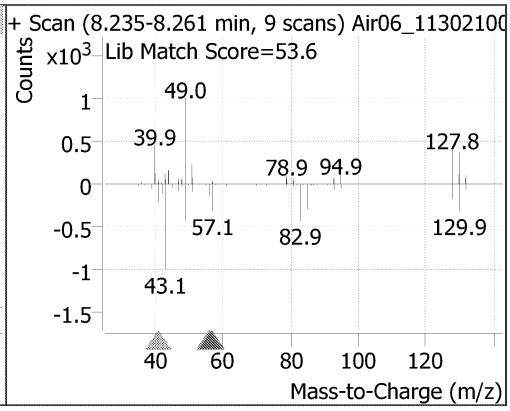




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.0019	8.25	-0.01	100	41.0	102.9	67.6	101.5
					56.0		40.2	60.4

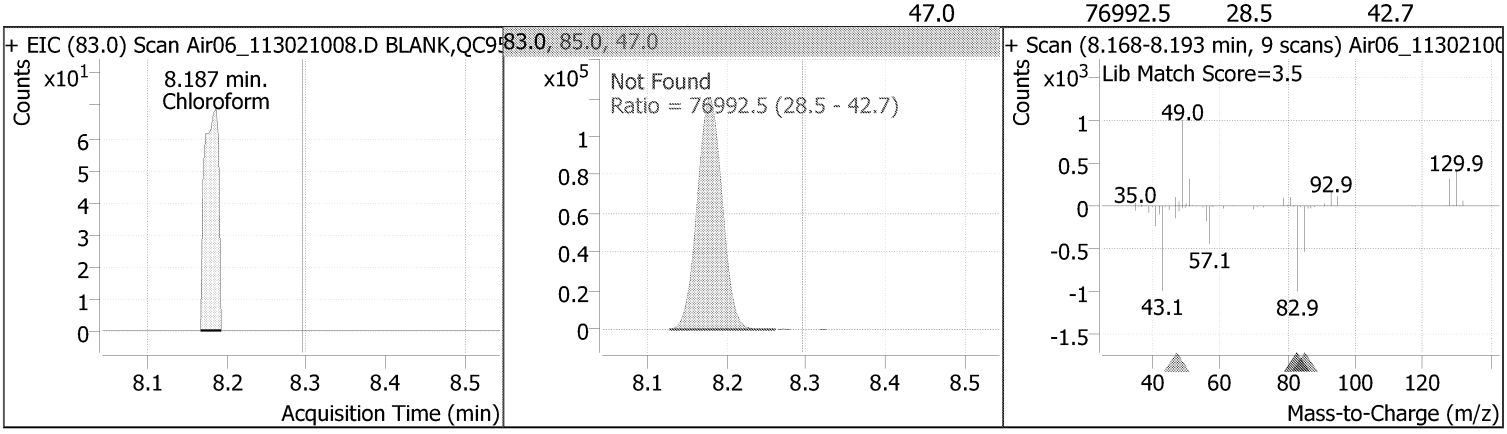




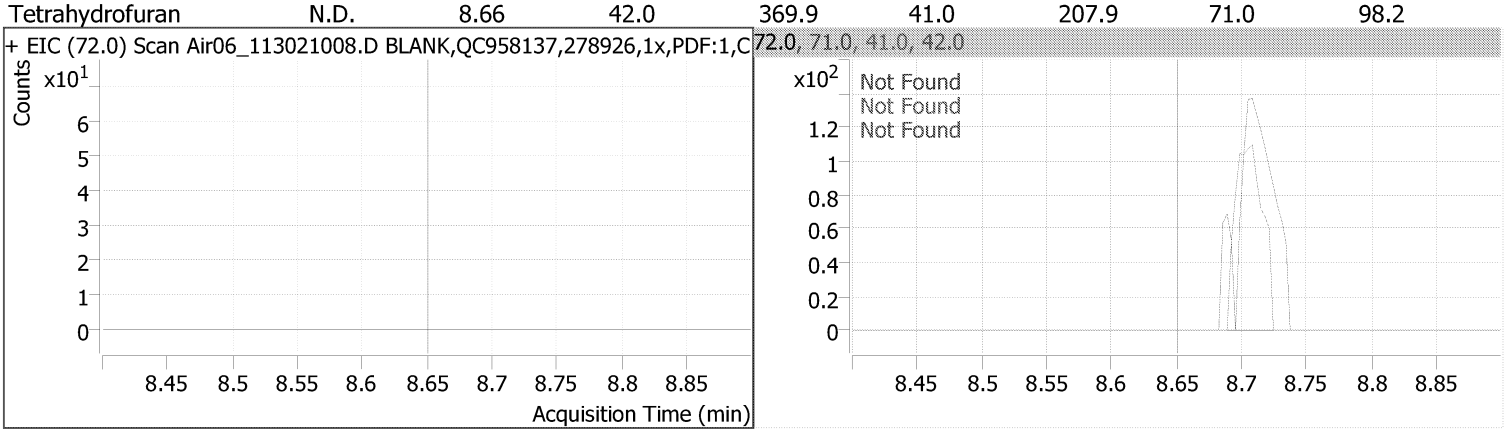


Quantitation Results Report (Not Reviewed)

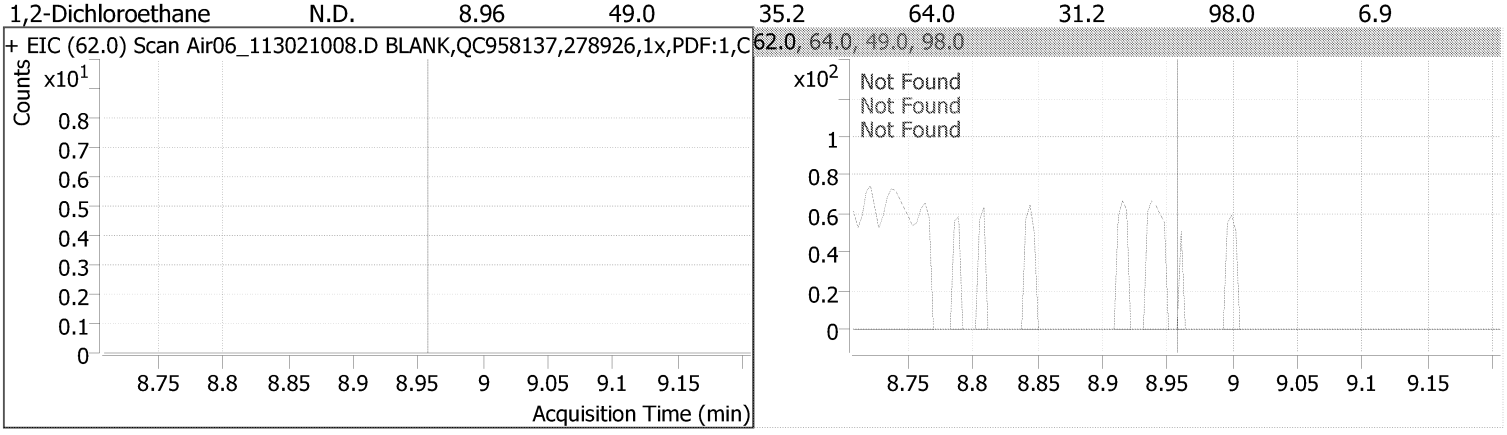
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.0015	8.19	-0.11	84	85.0		52.2	78.4
					47.0	76992.5	28.5	42.7



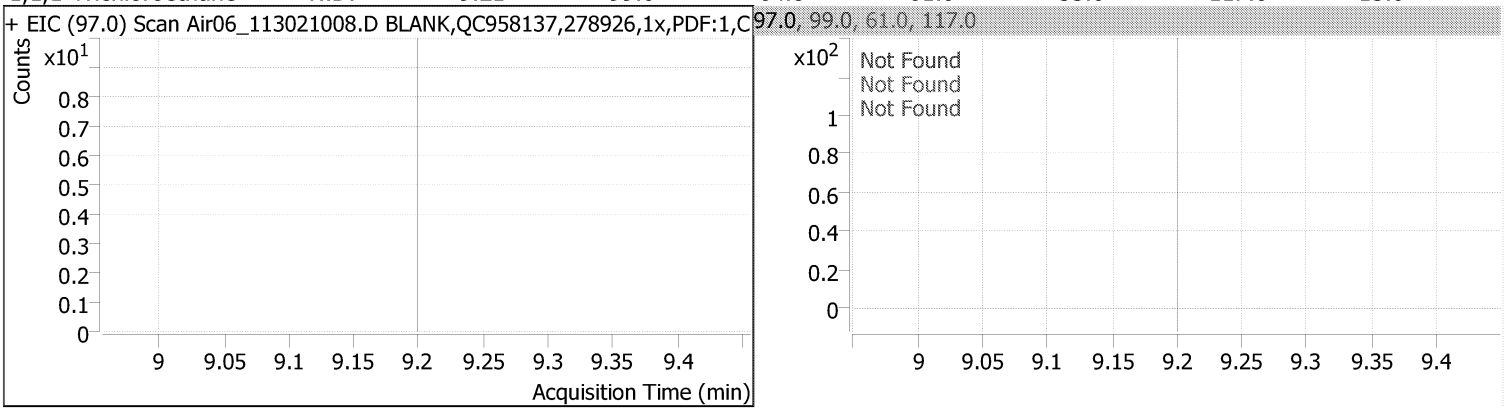
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Tetrahydrofuran	N.D.	8.66	42.0	369.9	41.0	207.9	71.0	98.2



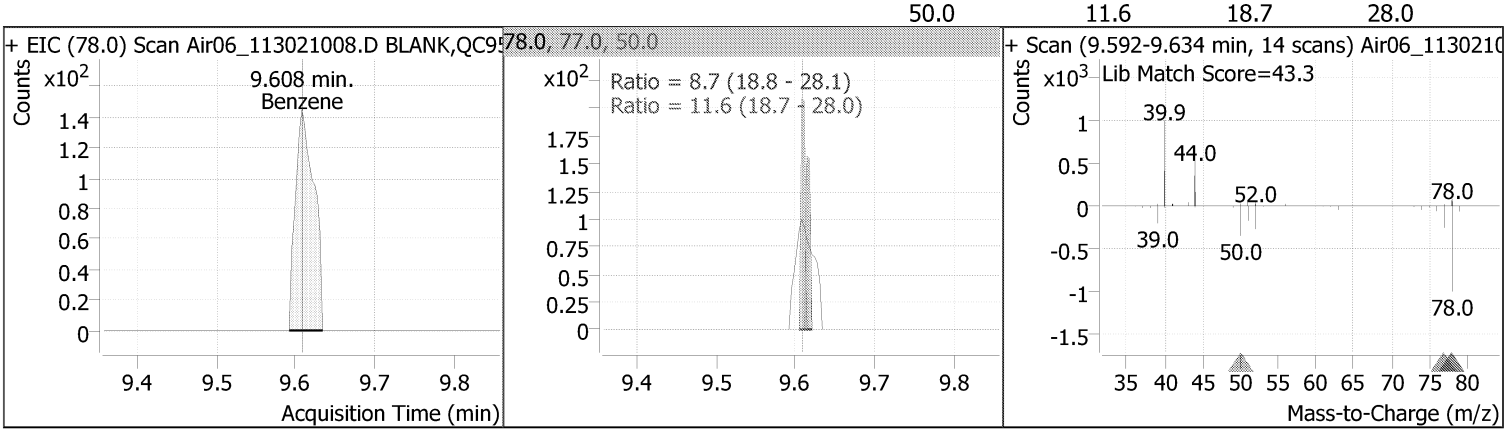
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,2-Dichloroethane	N.D.	8.96	49.0	35.2	64.0	31.2	98.0	6.9



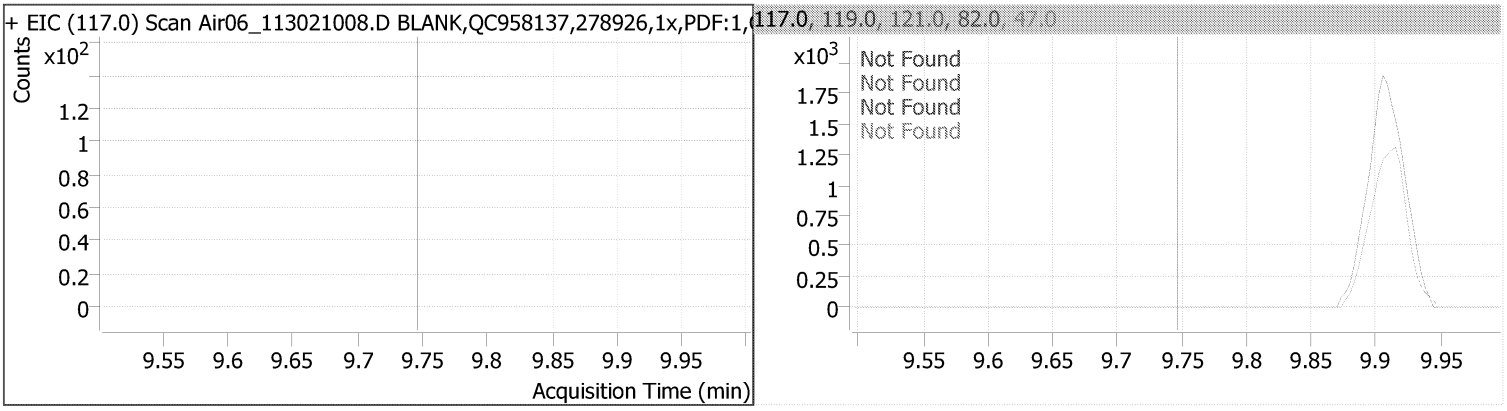
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1-Trichloroethane	N.D.	9.21	99.0	64.8	61.0	53.0	117.0	13.0



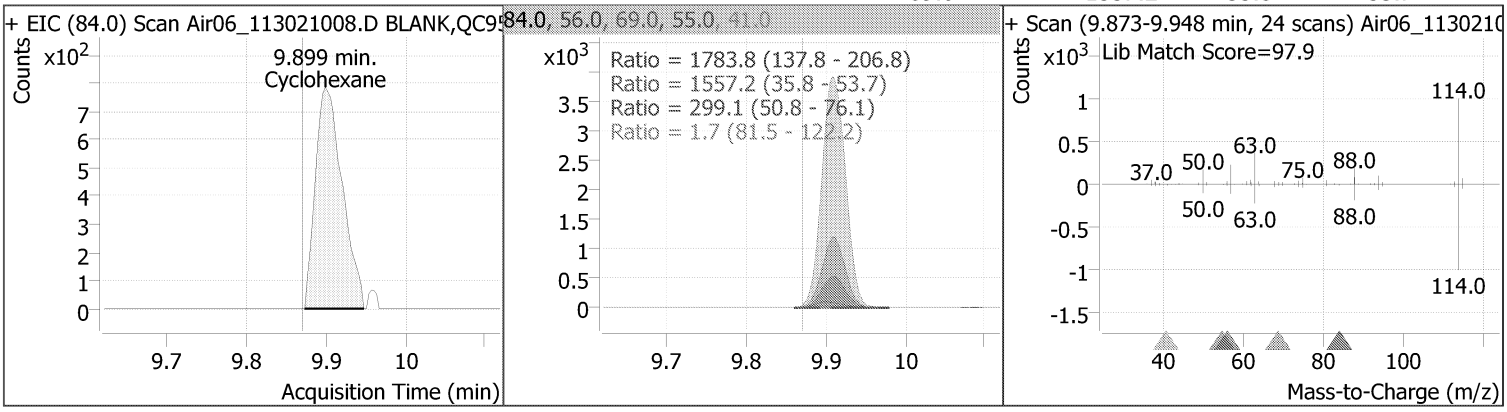
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.0031	9.61	-0.01	236	77.0	8.7	18.8	28.1
					50.0	11.6	18.7	28.0



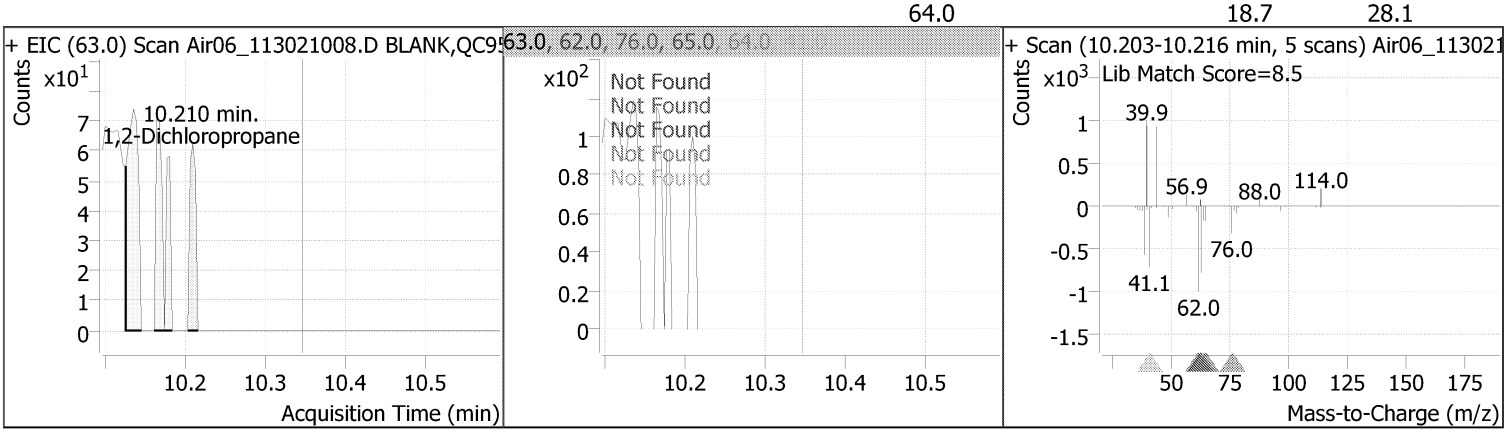
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Carbon Tetrachloride	N.D.	9.75	119.0	96.4	121.0	31.2	47.0	30.4



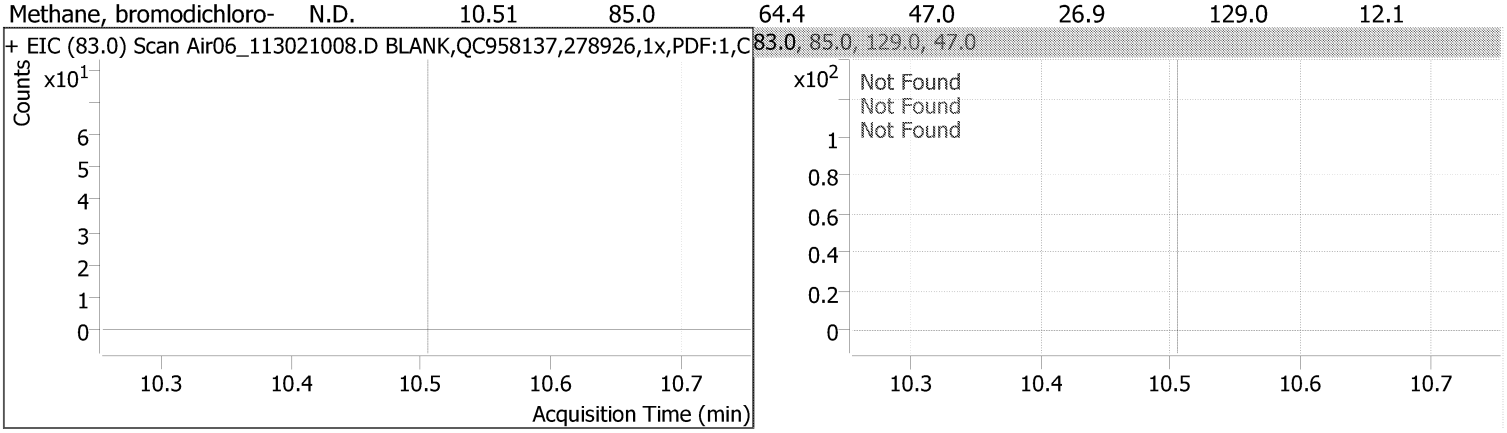
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.0587	9.90	0.02	1851	56.0	1783.8	137.8	206.8
					41.0	1.7	81.5	122.2
					55.0	299.1	50.8	76.1
					69.0	1557.2	35.8	53.7



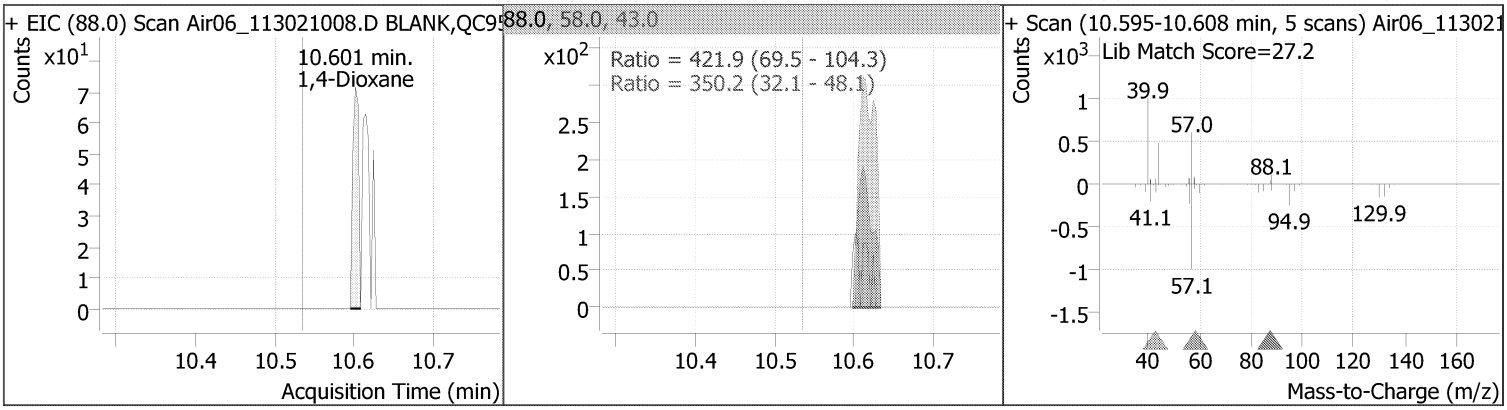
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.0010	10.21	-0.14	33	41.0		55.7	83.5
					62.0		55.5	83.2
					76.0		28.3	42.5
					65.0		23.4	35.1
					64.0		18.7	28.1



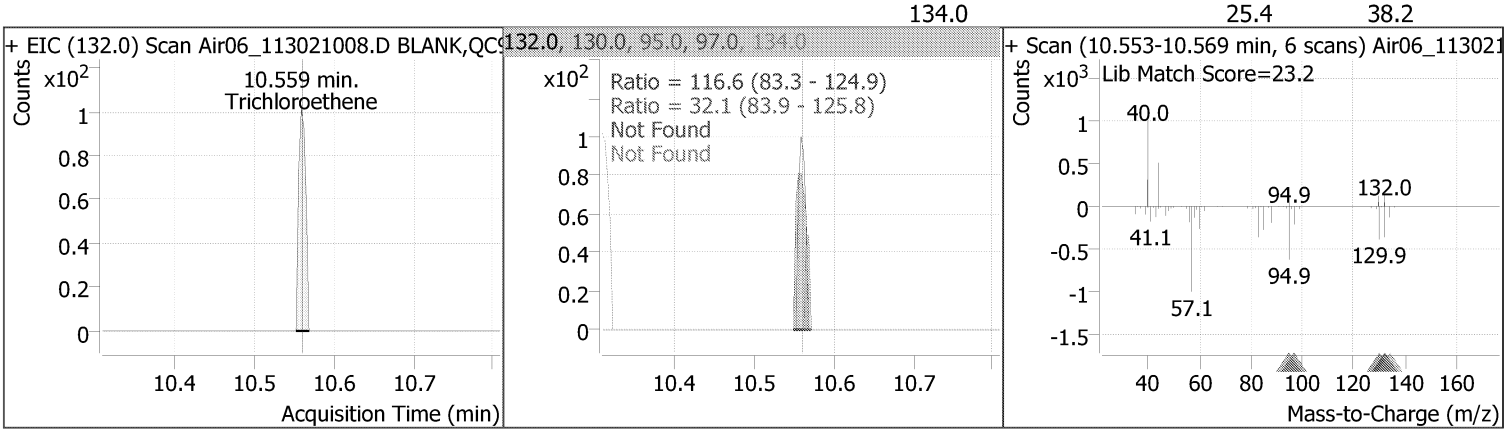
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Methane, bromodichloro-	N.D.	10.51	85.0	64.4	47.0	26.9	129.0	12.1



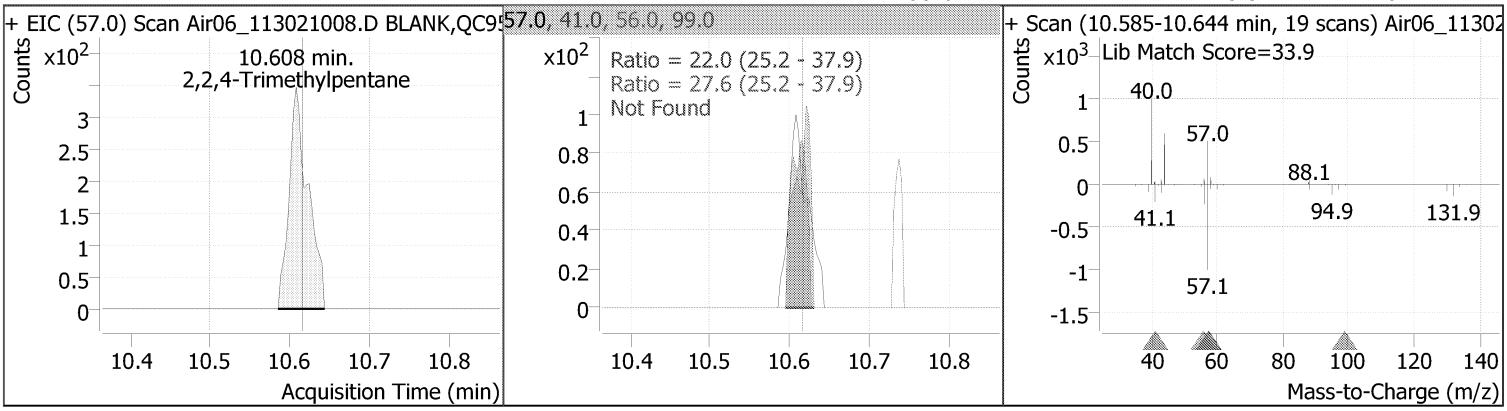
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.0023	10.60	0.06	37	58.0	421.9	69.5	104.3
					43.0	350.2	32.1	48.1



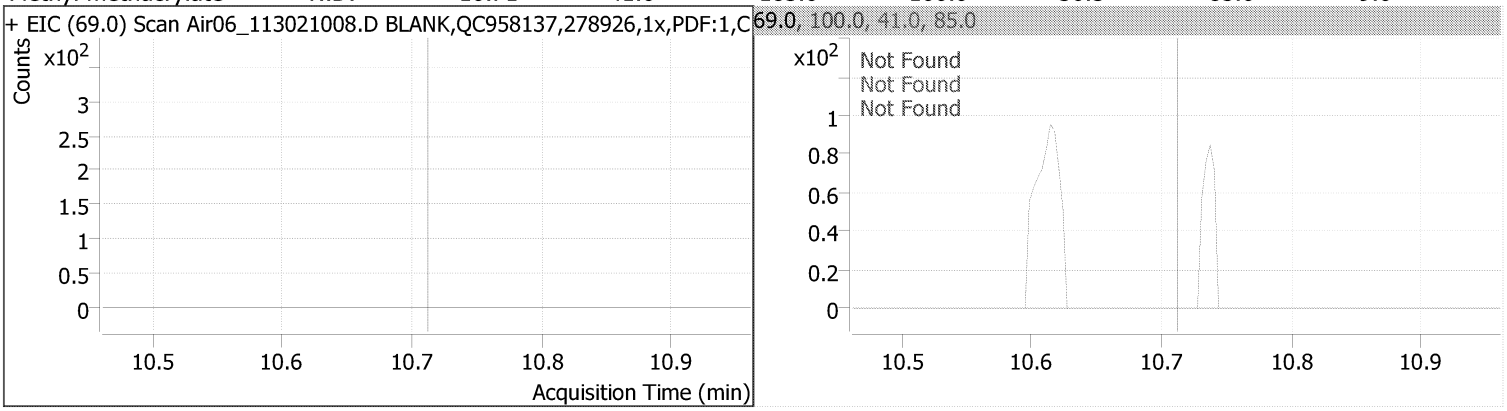
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.0019	10.56	0.00	63	95.0	32.1	83.9	125.8
					130.0	116.6	83.3	124.9
					97.0		54.4	81.7
					134.0		25.4	38.2



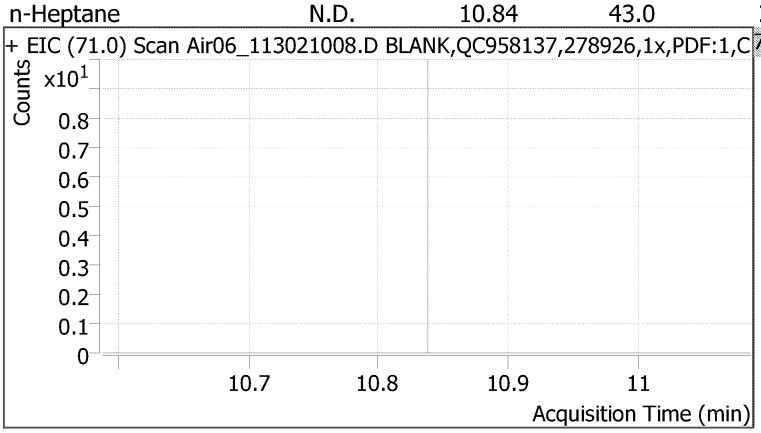
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.0036	10.61	-0.01	575	41.0	22.0	25.2	37.9
					56.0	27.6	25.2	37.9
					99.0		3.3	4.9

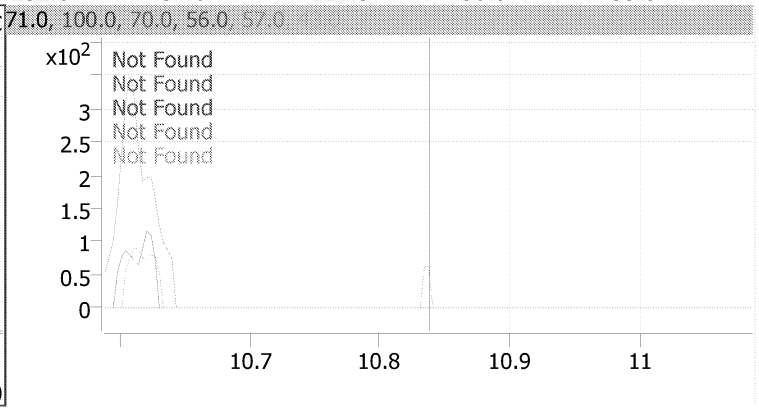


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Methyl methacrylate	N.D.	10.71	41.0	183.0	100.0	36.3	85.0	9.0

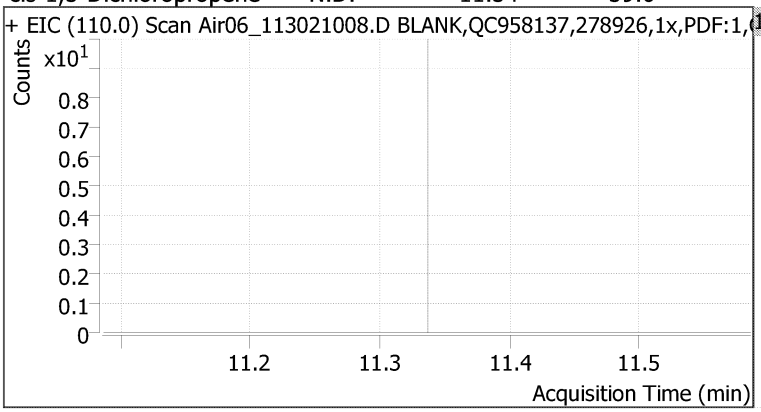


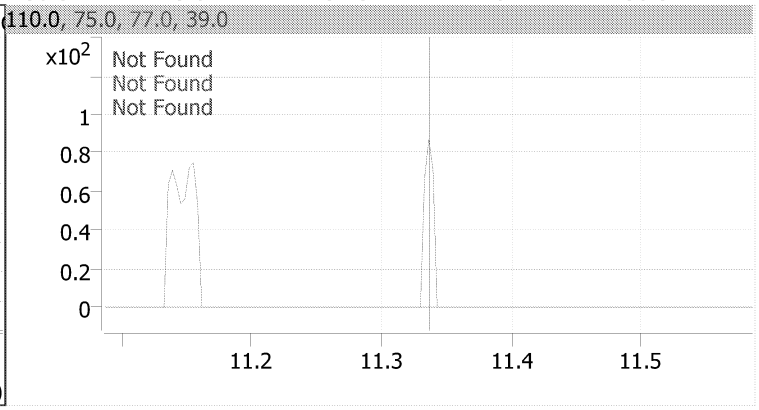
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
n-Heptane	N.D.	10.84	43.0	252.8	57.0	121.3	56.0	53.0



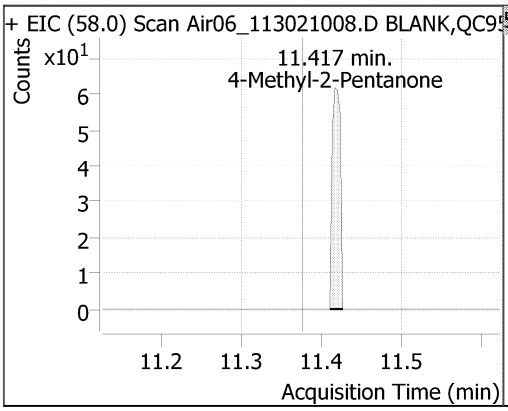


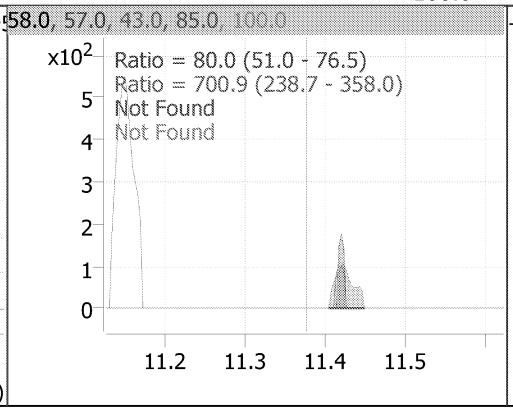
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
cis-1,3-Dichloropropene	N.D.	11.34	39.0	438.3	75.0	432.5	77.0	138.5

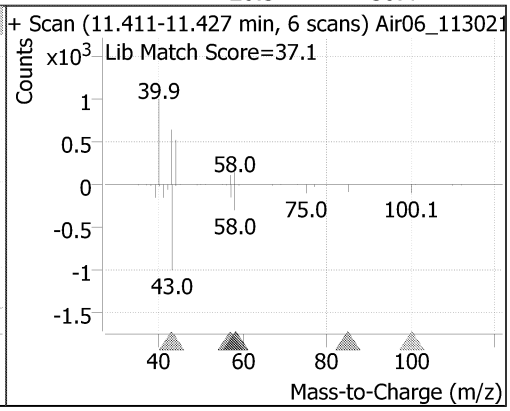




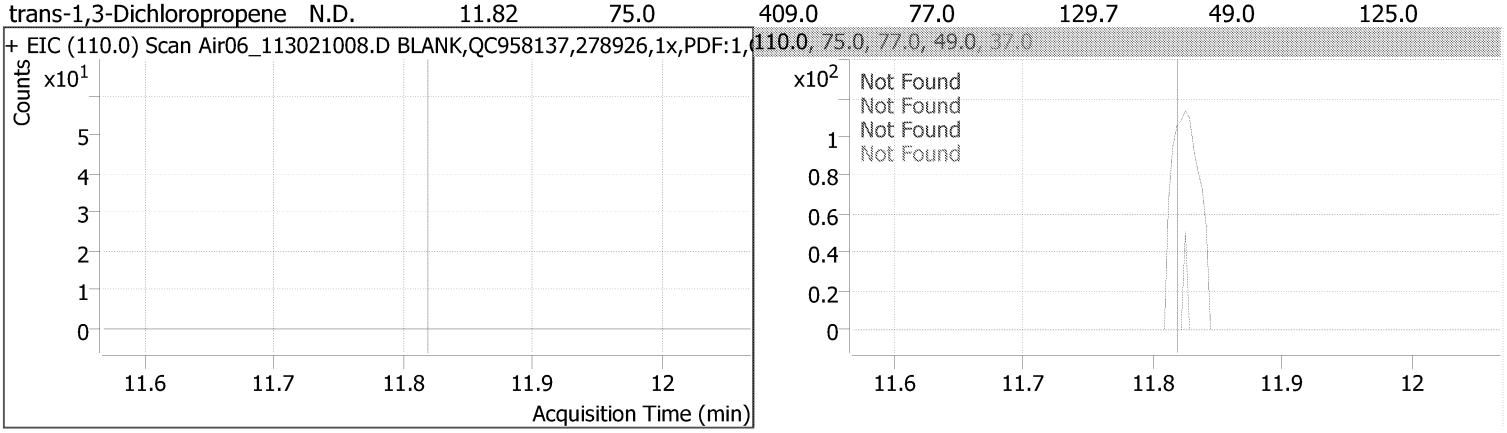
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.0015	11.42	0.04	44	43.0	700.9	238.7	358.0
					57.0	80.0	51.0	76.5
					85.0		28.5	42.8
					100.0		20.3	30.4



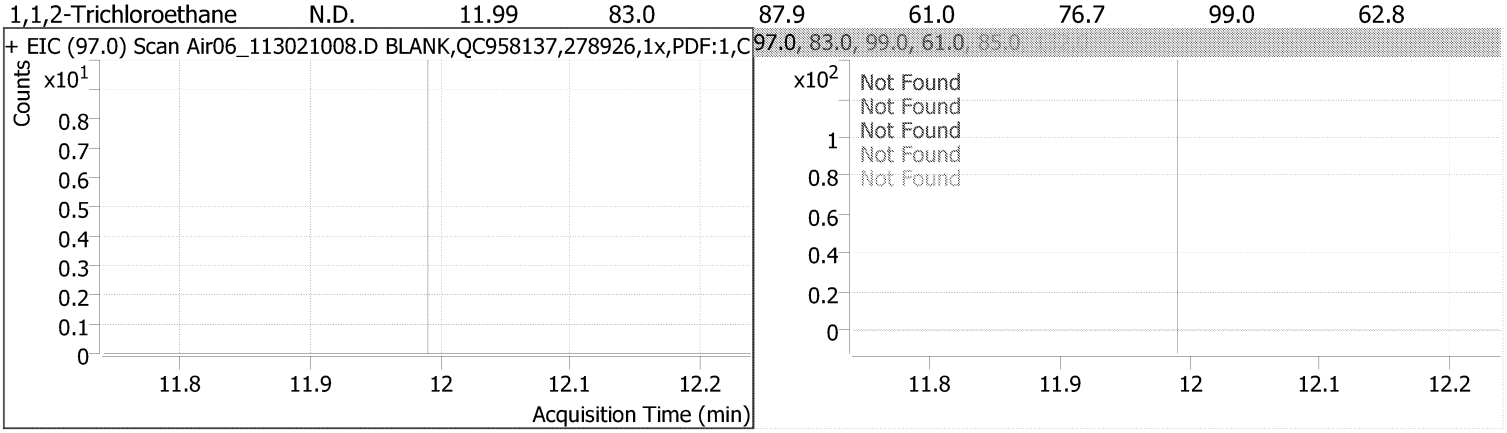




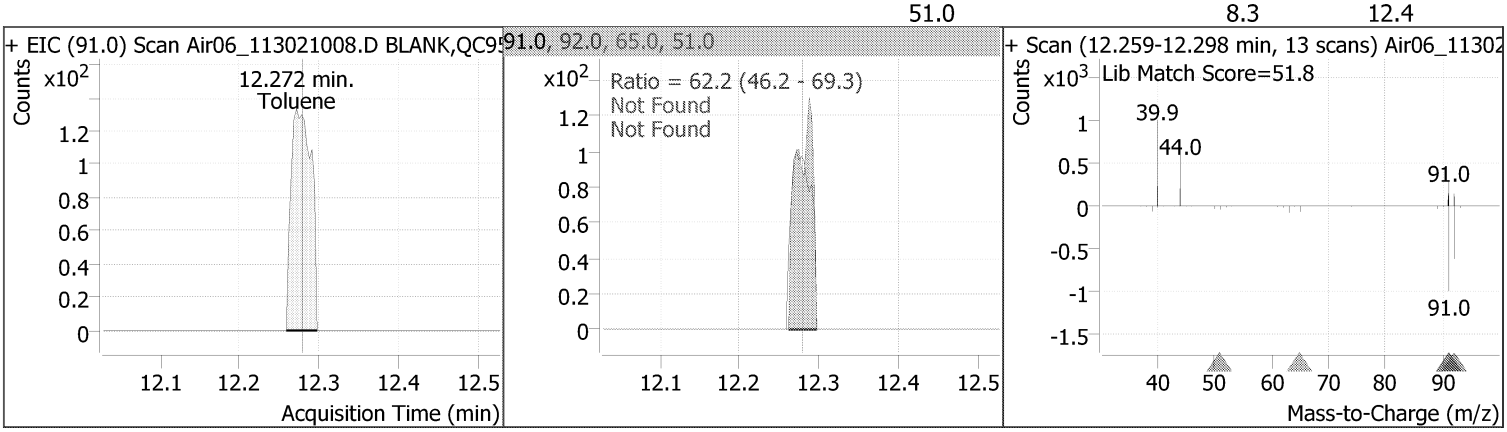
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
trans-1,3-Dichloropropene	N.D.	11.82	75.0	409.0	77.0	129.7	49.0	125.0



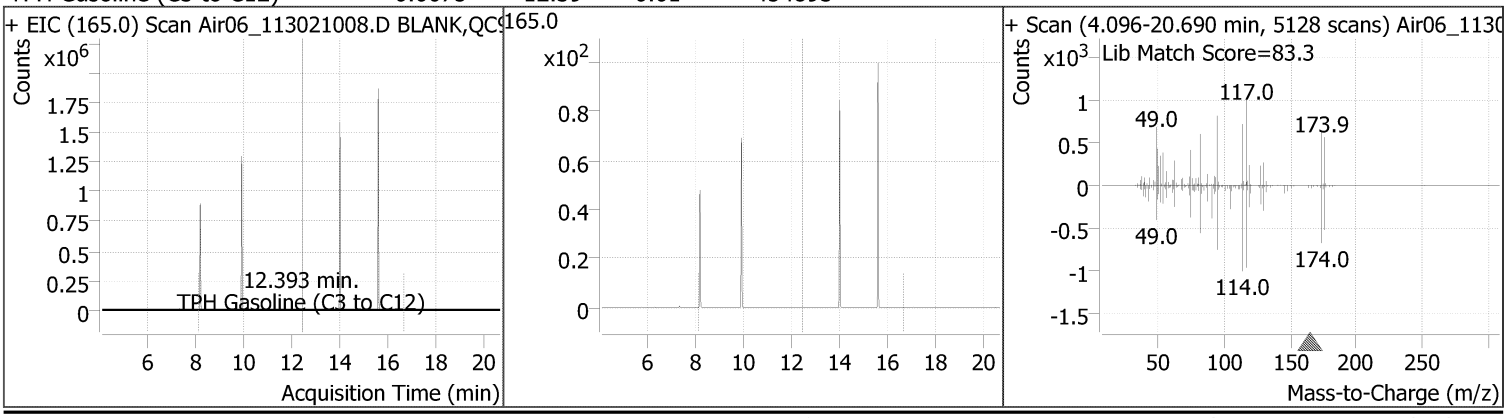
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,2-Trichloroethane	N.D.	11.99	83.0	87.9	61.0	76.7	99.0	62.8



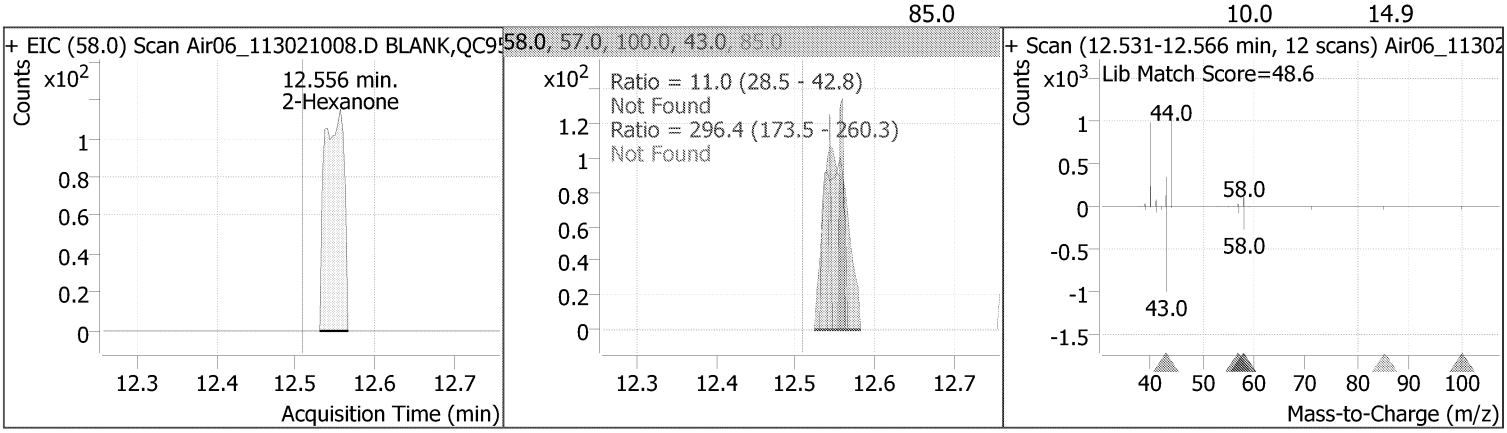
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.0026	12.27	-0.01	235	92.0	62.2	46.2	69.3
					65.0		10.6	15.9
					51.0		8.3	12.4



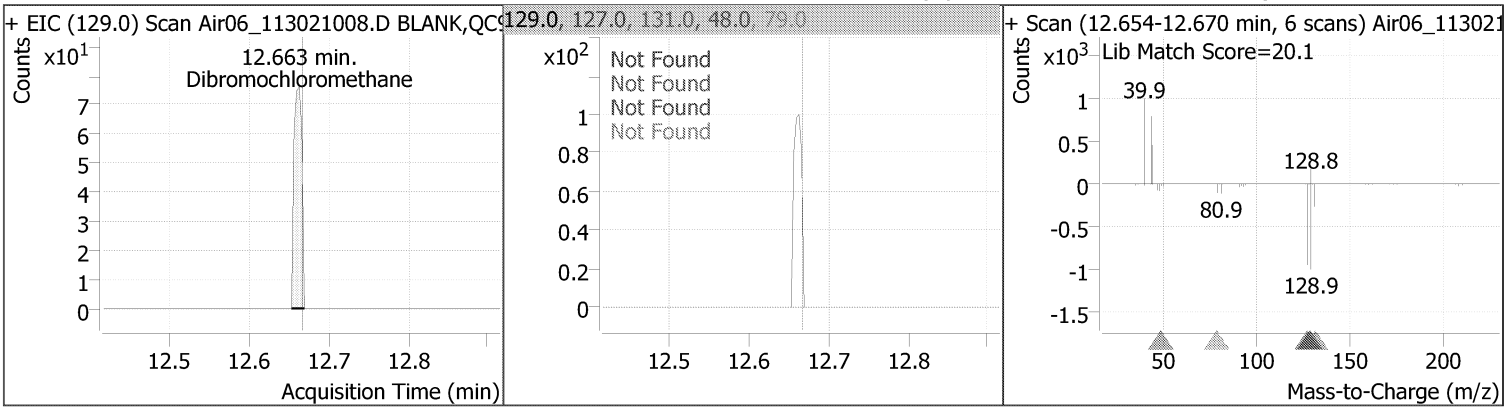
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	0.0675	12.39	-0.01	454893				



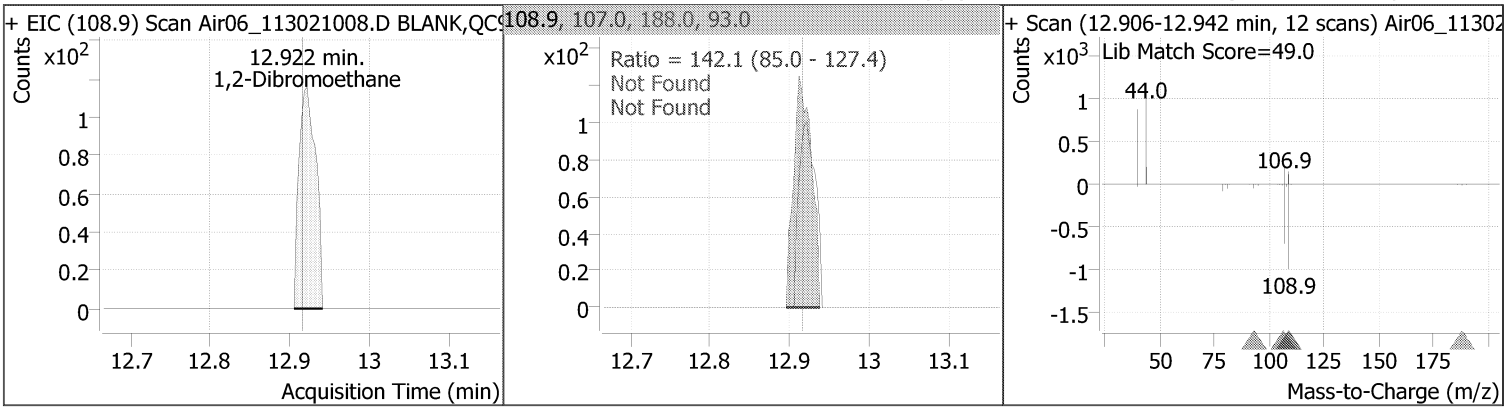
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.0051	12.56	0.05	193	43.0	296.4	173.5	260.3
					57.0	11.0	28.5	42.8
					100.0		11.2	16.8
					85.0		10.0	14.9



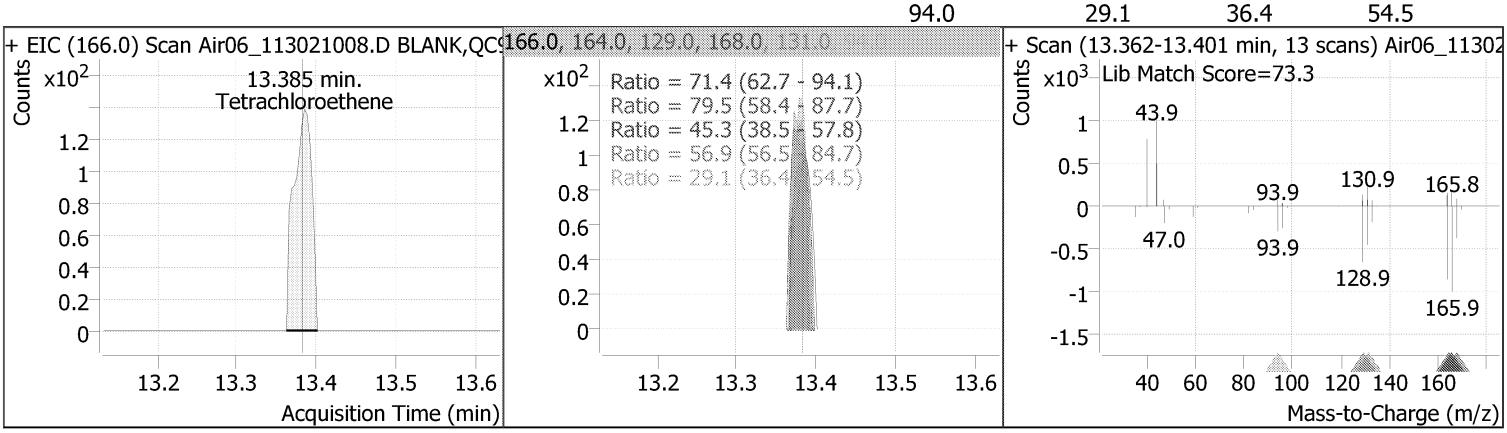
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.0010	12.66	-0.01	53	127.0		61.8	92.7
					131.0		19.3	29.0
					48.0		16.2	24.2
					79.0		14.5	21.7



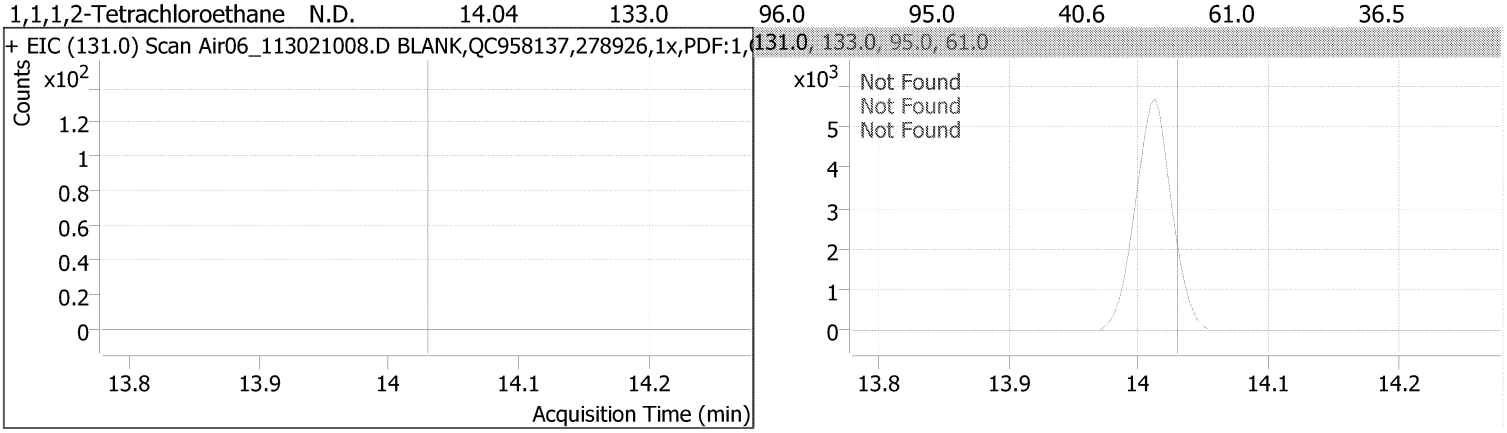
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.0035	12.92	0.00	169	107.0	142.1	85.0	127.4
					93.0		5.7	8.6
					188.0		3.1	4.6



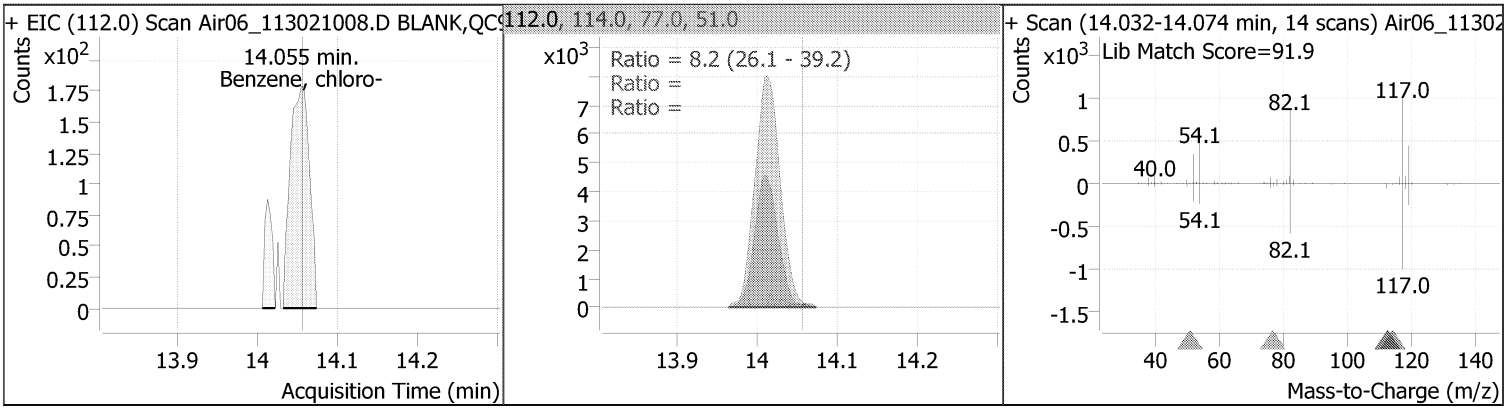
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.0047	13.39	0.00	220	164.0	71.4	62.7	94.1
					129.0	79.5	58.4	87.7
					131.0	56.9	56.5	84.7
					168.0	45.3	38.5	57.8
					94.0	29.1	36.4	54.5



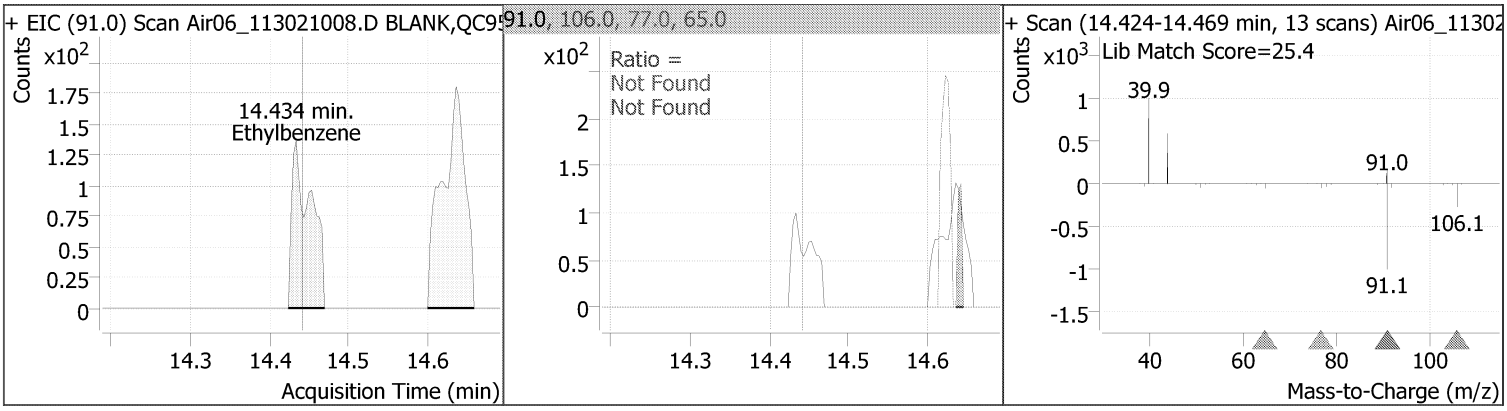
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1,2-Tetrachloroethane	N.D.	14.04	133.0	96.0	95.0	40.6	61.0	36.5



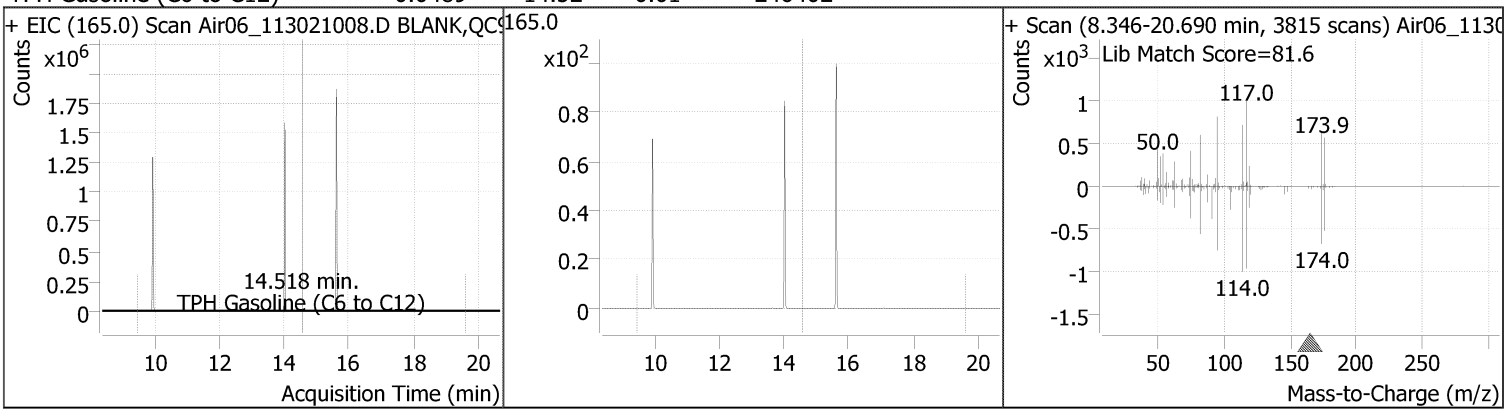
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0040	14.06	-0.01	301	77.0		48.4	72.6
					51.0		27.1	40.6
					114.0	8.2	26.1	39.2



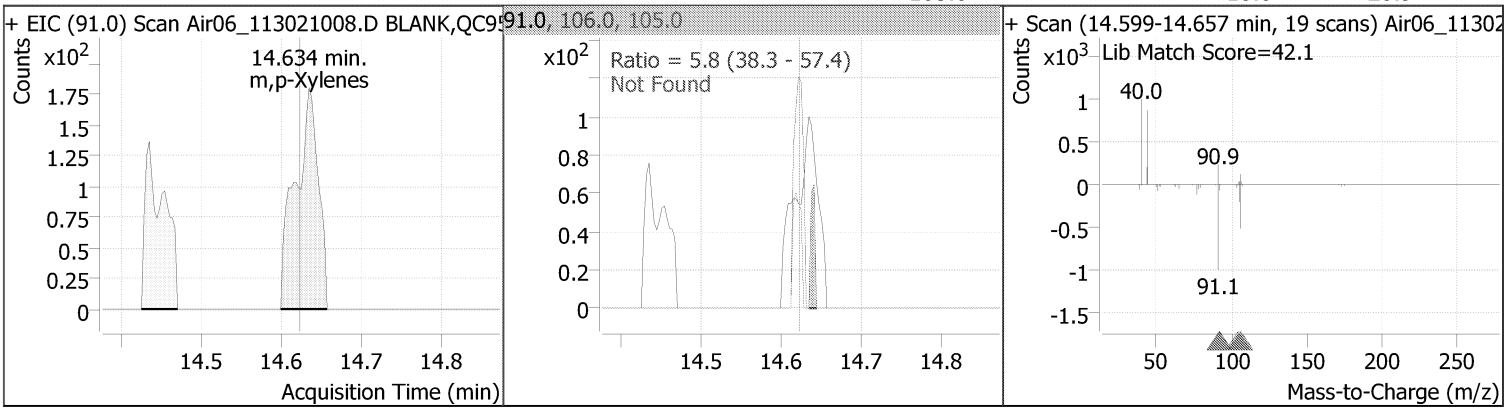
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.0020	14.43	-0.01	228	106.0		24.8	37.2
					65.0		8.1	12.2
					77.0		7.2	10.8



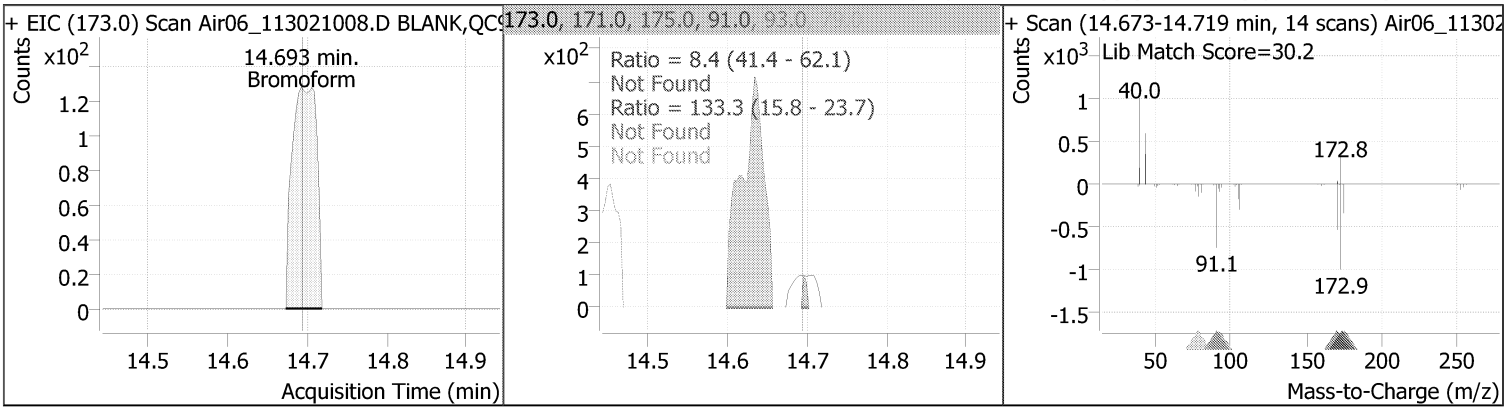
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	0.0489	14.52	-0.01	246402				



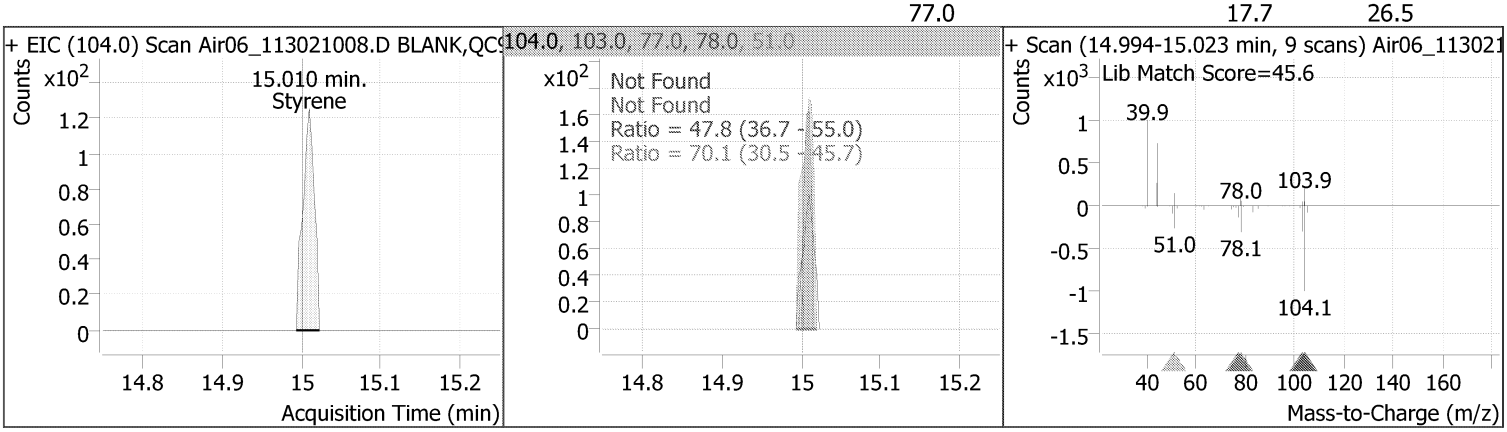
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	0.0038	14.63	0.00	364	106.0	5.8	38.3	57.4
					105.0		18.0	26.9



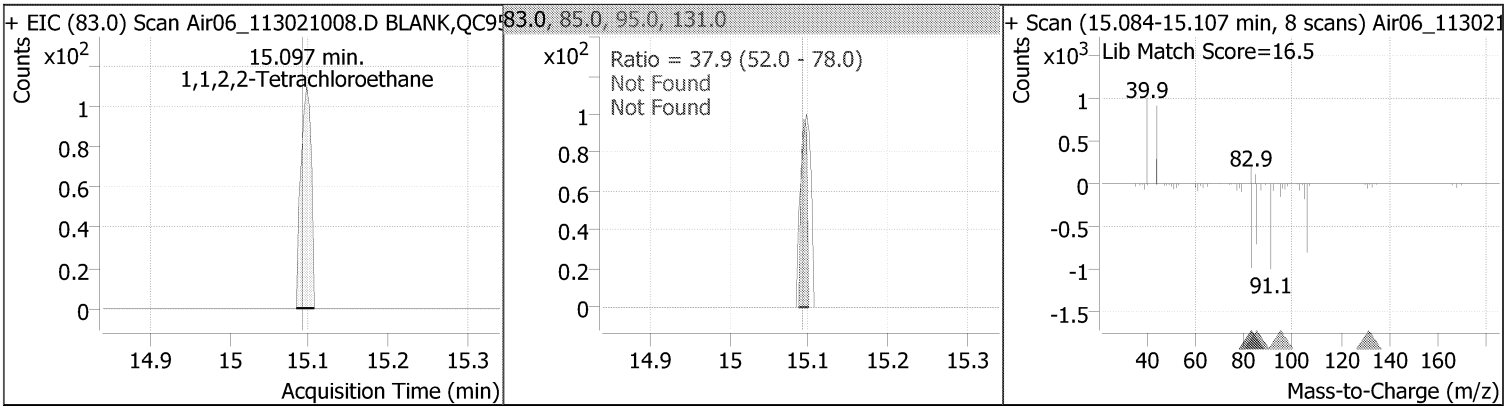
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.0044	14.69	-0.01	273	171.0	8.4	41.4	62.1
					175.0		39.1	58.6
					79.0		17.9	26.8
					93.0		16.8	25.2
					91.0	133.3	15.8	23.7



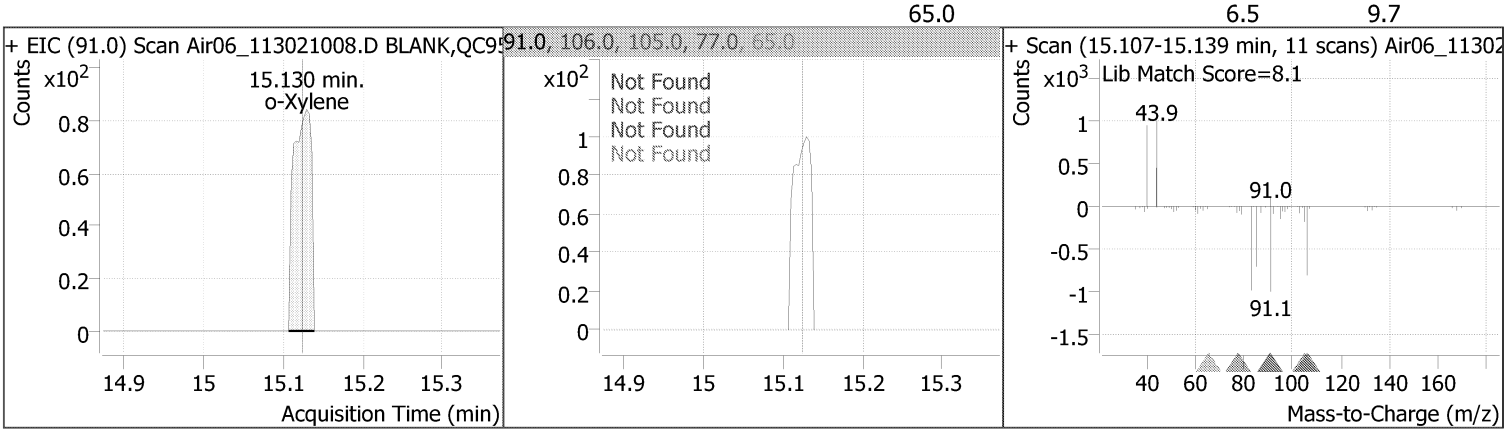
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	0.0018	15.01	0.00	126	103.0		39.5	59.3
					78.0	47.8	36.7	55.0
					51.0	70.1	30.5	45.7
					77.0		17.7	26.5



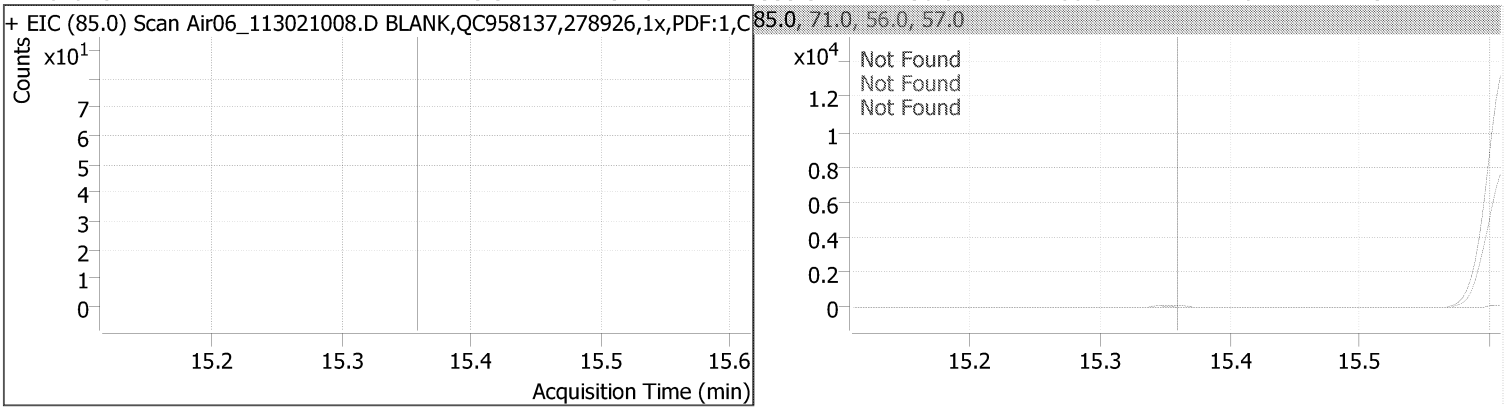
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.0013	15.10	0.00	99	85.0	37.9	52.0	78.0
					95.0		13.3	20.0
					131.0		8.2	12.3



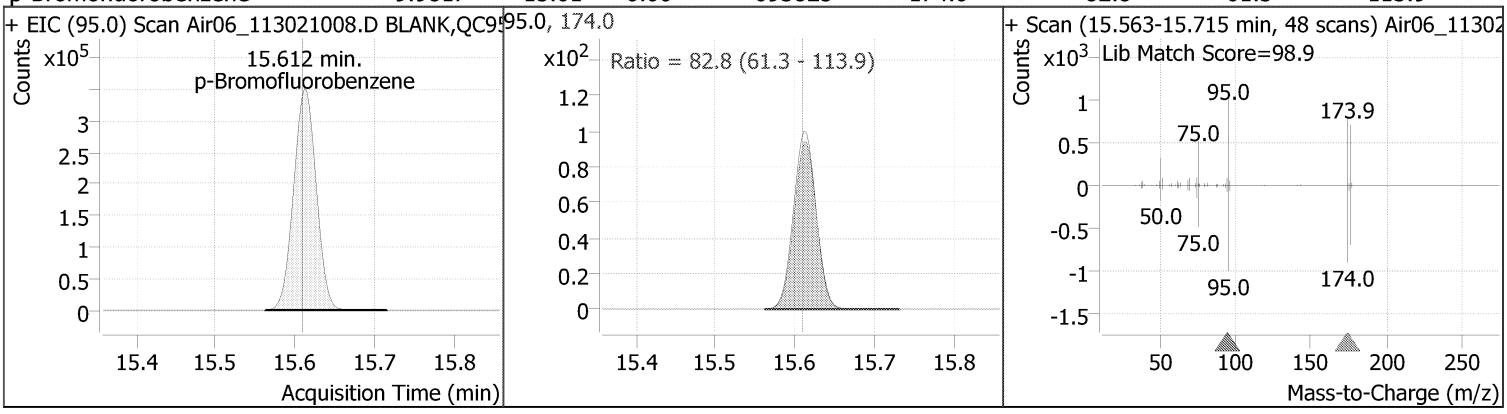
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.0013	15.13	0.00	129	106.0		36.0	54.0
					105.0		15.4	23.0
					77.0		10.2	15.4
					65.0		6.5	9.7



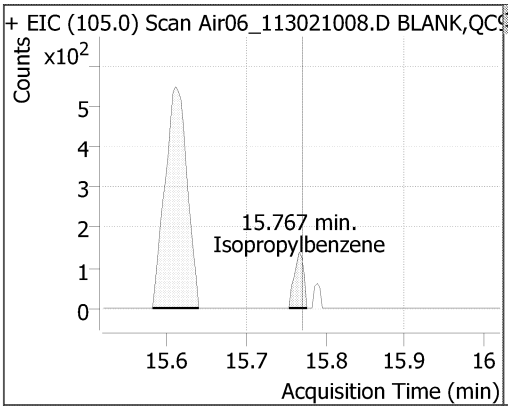
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
n-Nonane	N.D.	15.37	57.0	353.3	56.0	88.5	71.0	73.7

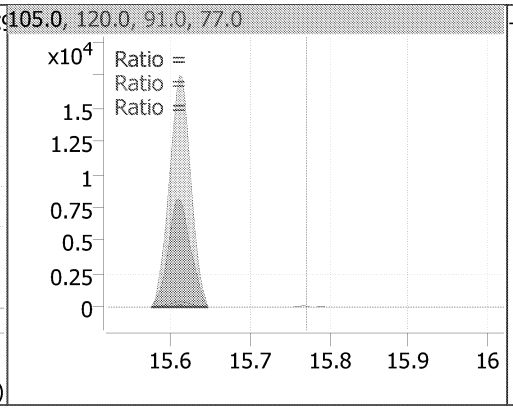


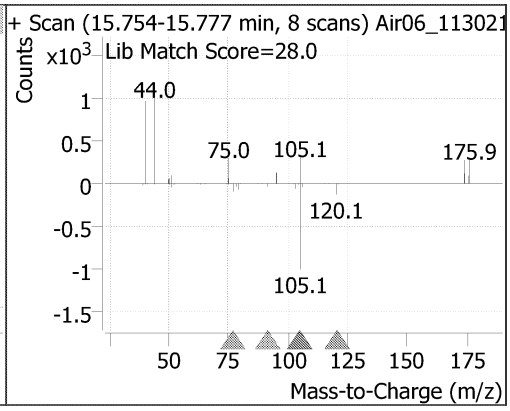
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	9.9817	15.61	0.00	693825	174.0	82.8	61.3	113.9



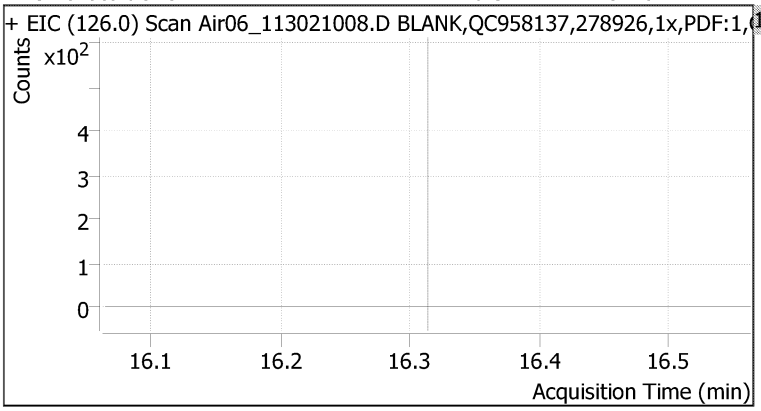
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.0008	15.77	-0.01	114	120.0		20.8	31.2
					77.0		13.1	19.7
					91.0		5.1	7.6

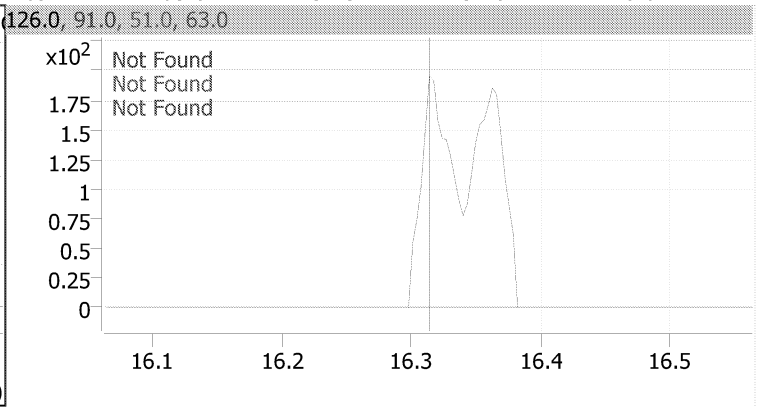




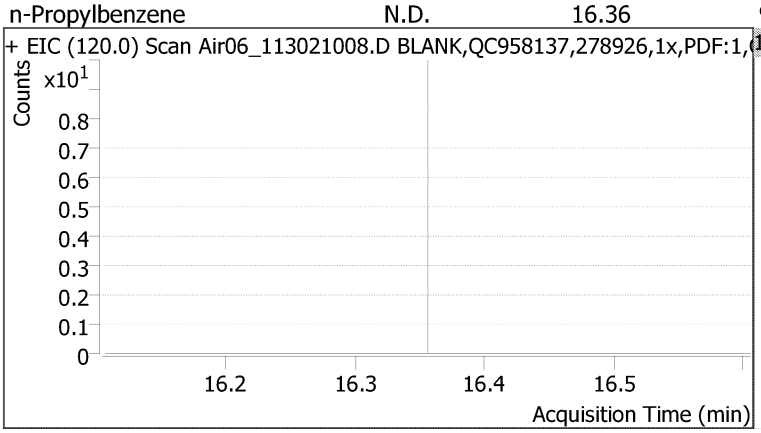


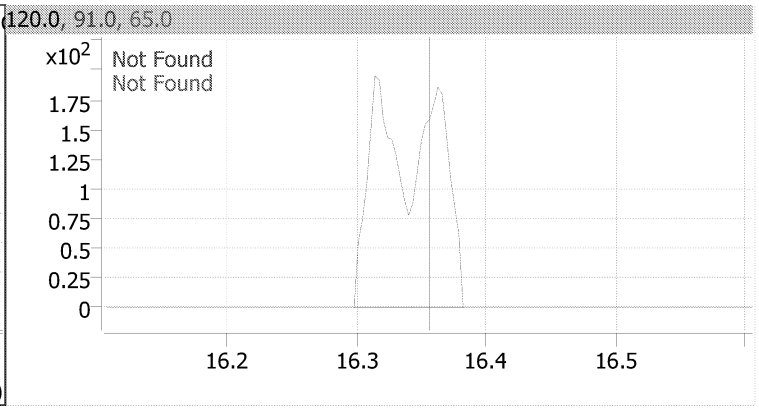
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
2-Chlorotoluene	N.D.	16.32	91.0	269.1	63.0	51.5	51.0	20.6



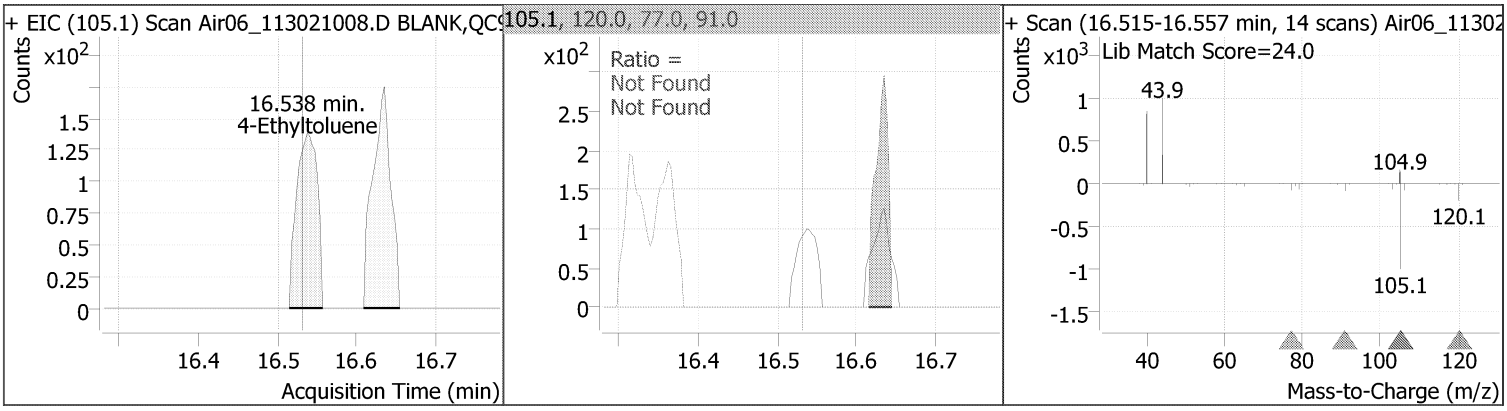


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
n-Propylbenzene	N.D.	16.36	91.0	459.7	65.0	54.8

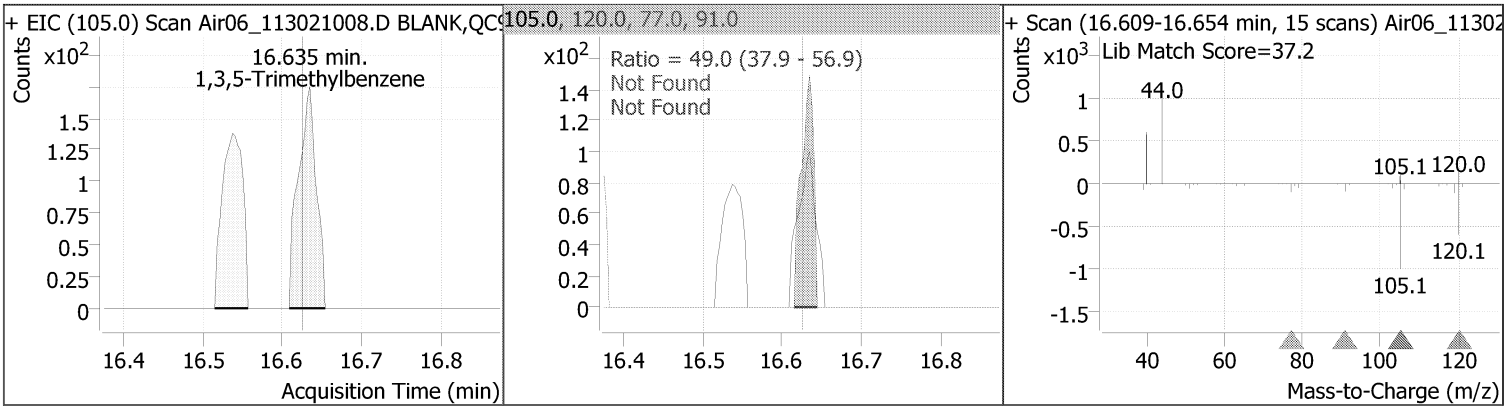




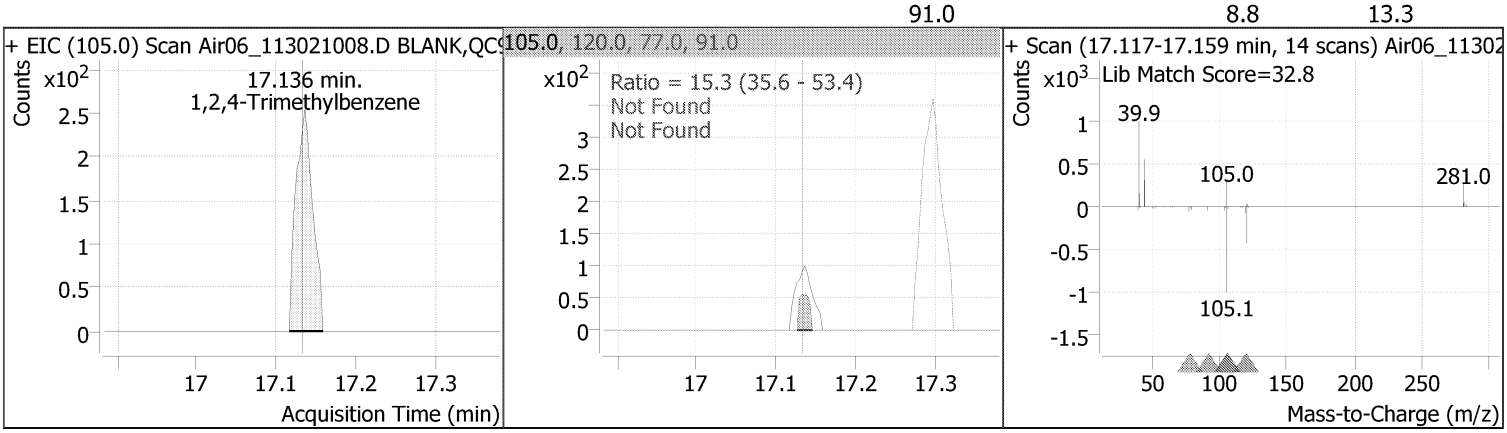
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.0019	16.54	0.00	250	120.0		24.2	36.3
					77.0		9.5	14.3
					91.0		8.9	13.4



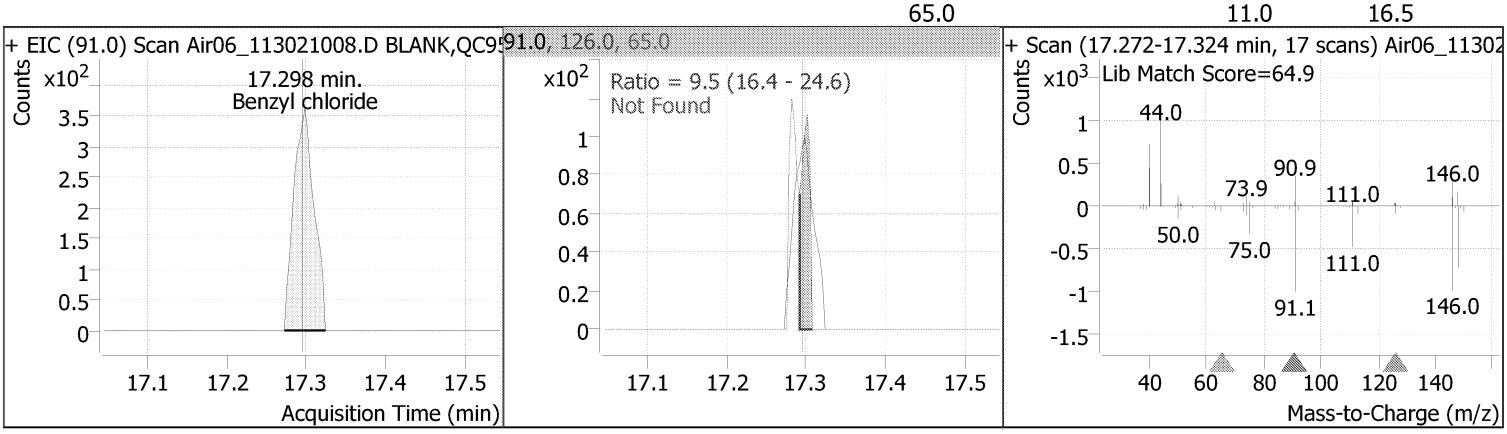
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.0024	16.63	0.00	277	120.0	49.0	37.9	56.9
					77.0		10.7	16.0
					91.0		8.8	13.2



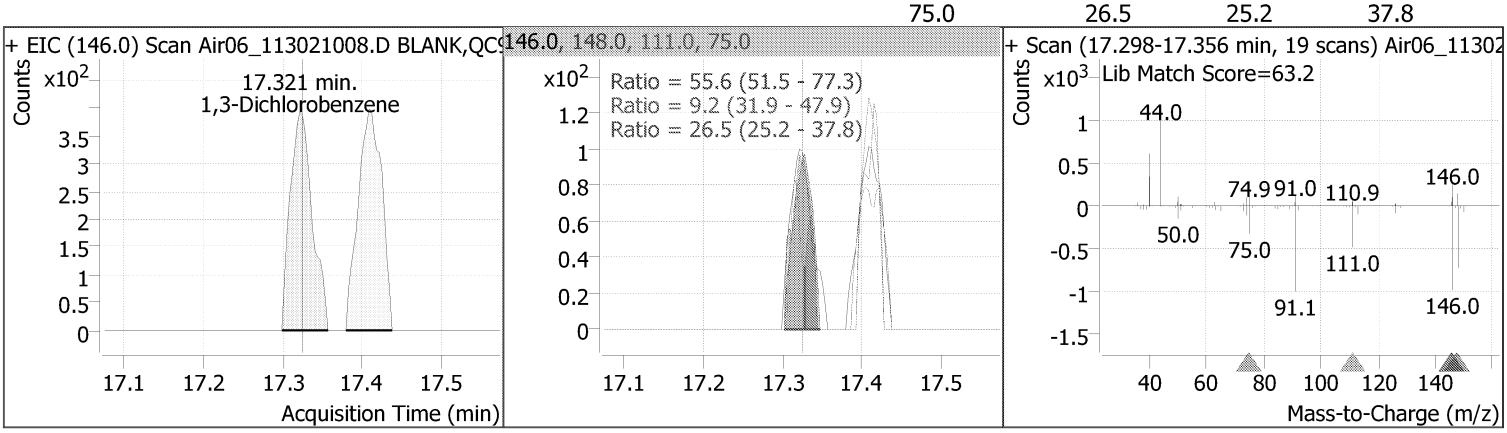
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	0.0034	17.14	0.00	374	120.0	15.3	35.6	53.4
					77.0		10.4	15.6
					91.0		8.8	13.3



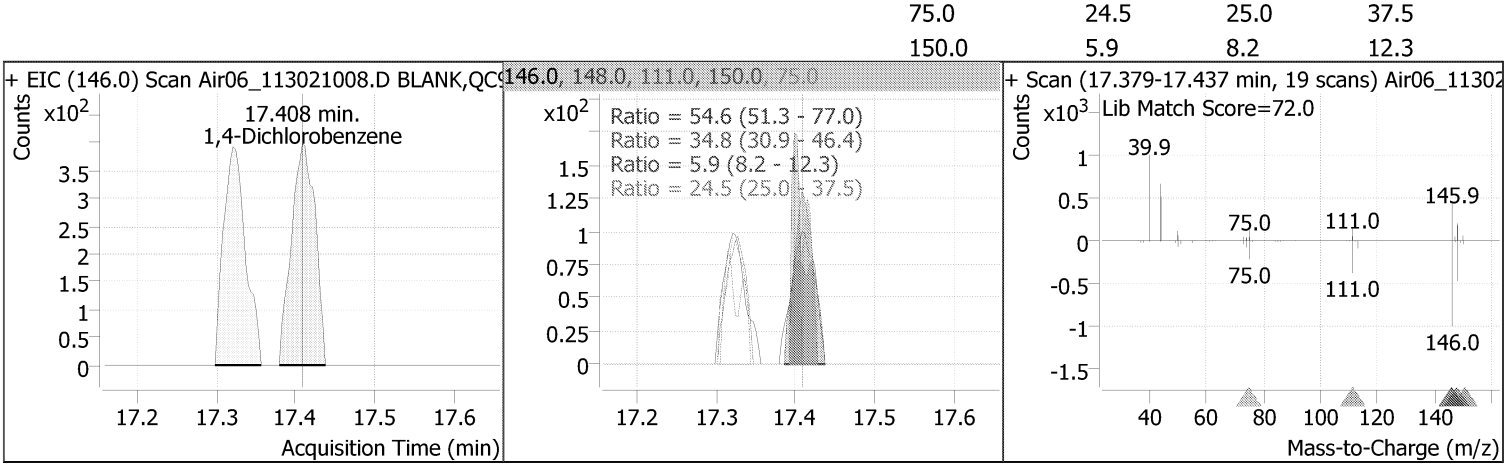
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.0070	17.30	0.00	639	126.0	9.5	16.4	24.6
					65.0		11.0	16.5



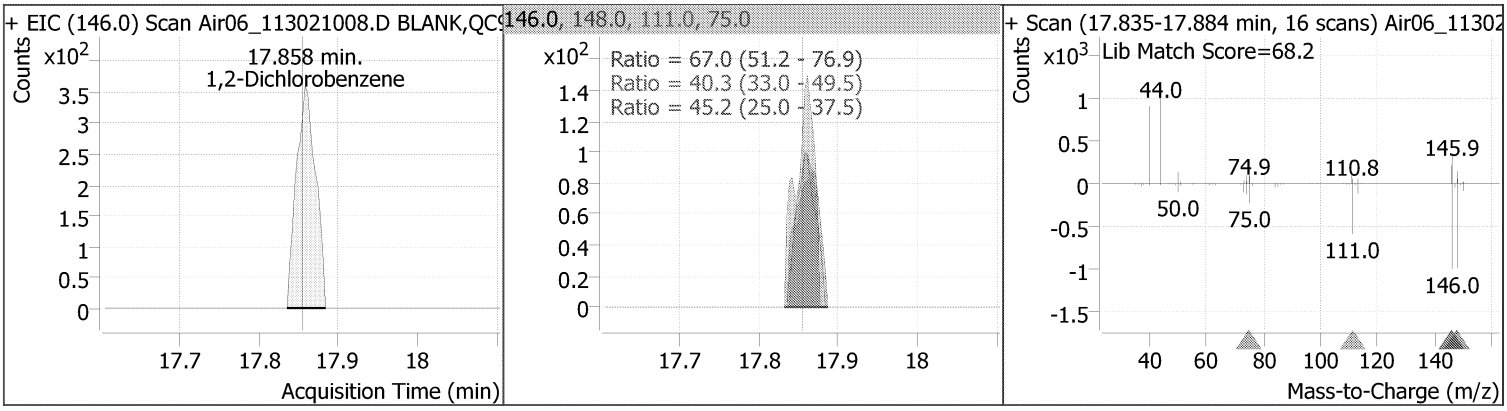
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.0096	17.32	-0.01	759	148.0	55.6	51.5	77.3
					111.0	9.2	31.9	47.9
					75.0	26.5	25.2	37.8



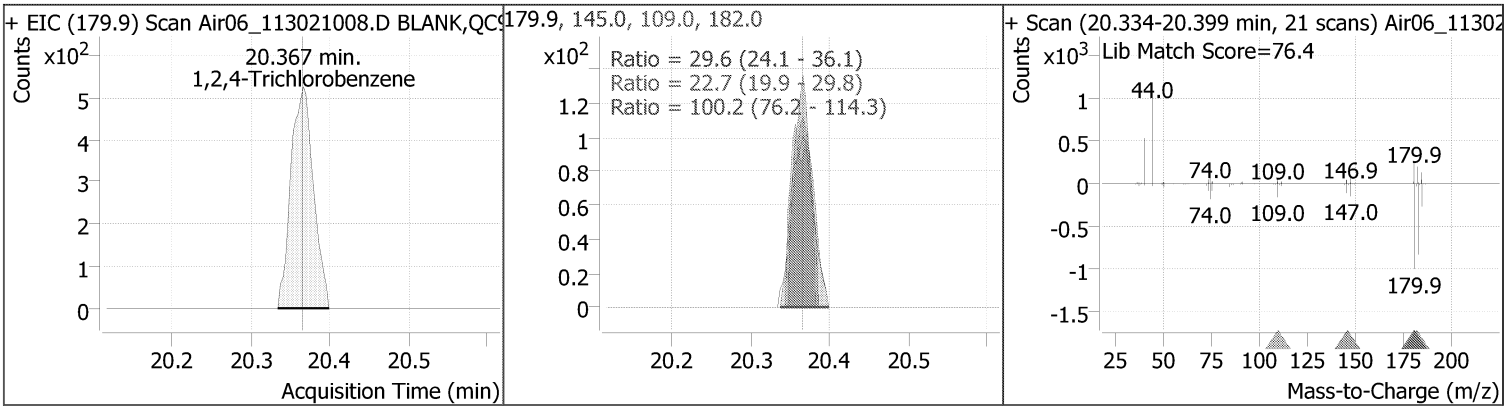
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.0104	17.41	-0.01	826	148.0	54.6	51.3	77.0
					111.0	34.8	30.9	46.4
					75.0	24.5	25.0	37.5
					150.0	5.9	8.2	12.3



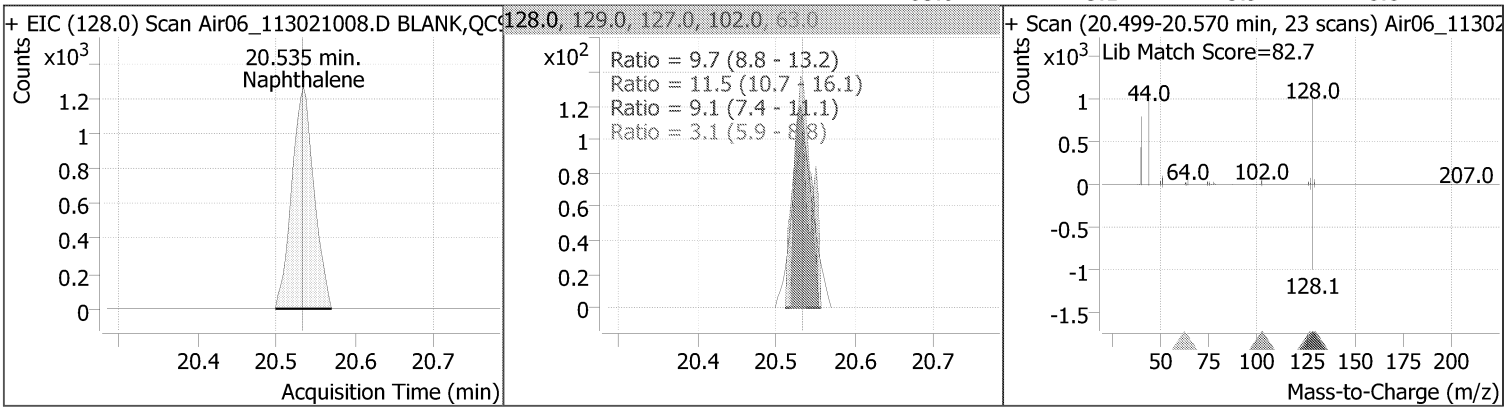
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.0079	17.86	0.00	608	148.0	67.0	51.2	76.9
					111.0	40.3	33.0	49.5
					75.0	45.2	25.0	37.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.0179	20.37	-0.01	1041	182.0	100.2	76.2	114.3
					145.0	29.6	24.1	36.1
					109.0	22.7	19.9	29.8

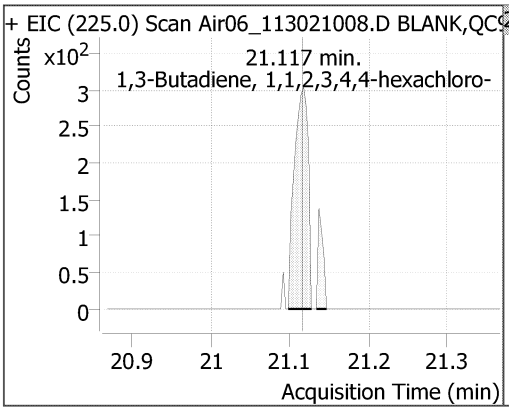


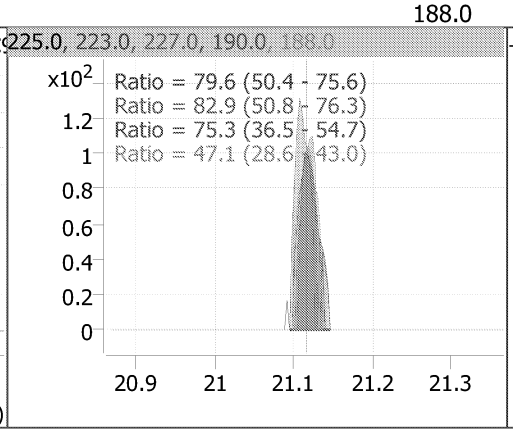
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	0.0202	20.53	-0.01	2475	127.0	11.5	10.7	16.1
					129.0	9.7	8.8	13.2
					102.0	9.1	7.4	11.1
					63.0	3.1	5.9	8.8

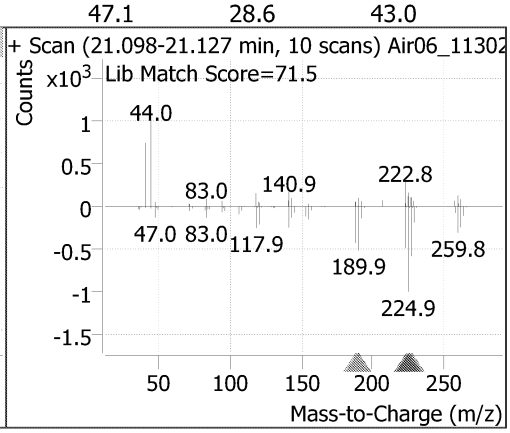


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.0059	21.12	-0.01	371	227.0	82.9	50.8	76.3
					223.0	79.6	50.4	75.6
					190.0	75.3	36.5	54.7
					188.0	47.1	28.6	43.0







Library Search Results - NonTarget Hits with Details

Agilent Technologies

Batch Path	D:\MassHunter\GCMS\1\data\2021\113021		
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Analyst Name	003AIRMS06	**Analysis Time**	12/6/2021 11:35:34 AM
File Name	Air06_113021008.D	**Path Name**	D:\MassHunter\GCMS\1\data\2021\113021
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Acq. Method File	TO15_Acq_013120_1	**Acq. Method Path**	D:\MassHunter\GCMS\1\methods\
Acq. Date-Time	11/30/2021 4:11:37 PM	**Acq. Operator**	ZNZ
Instrument Name	Air-MS-06	**Dil.**	1

Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
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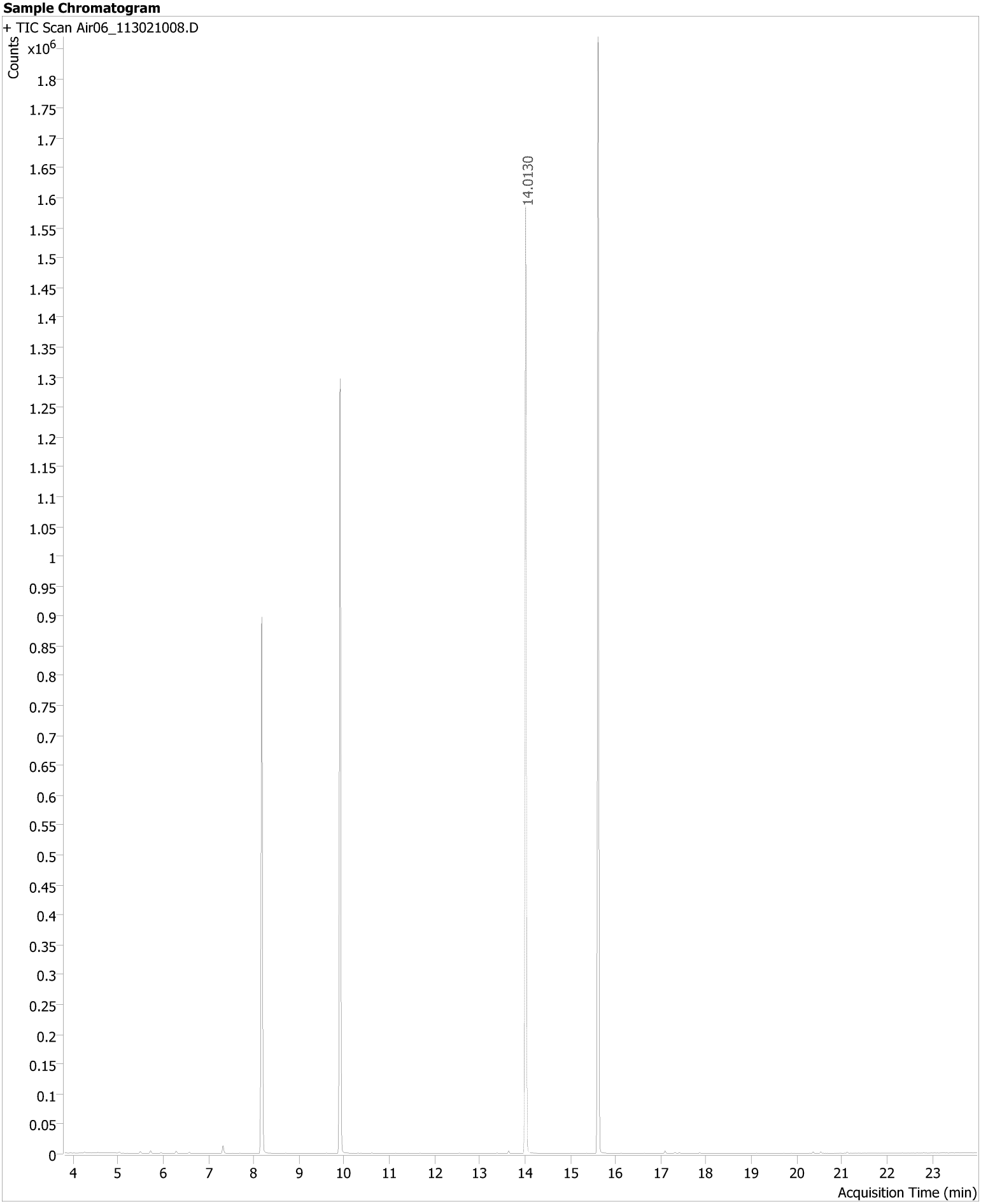
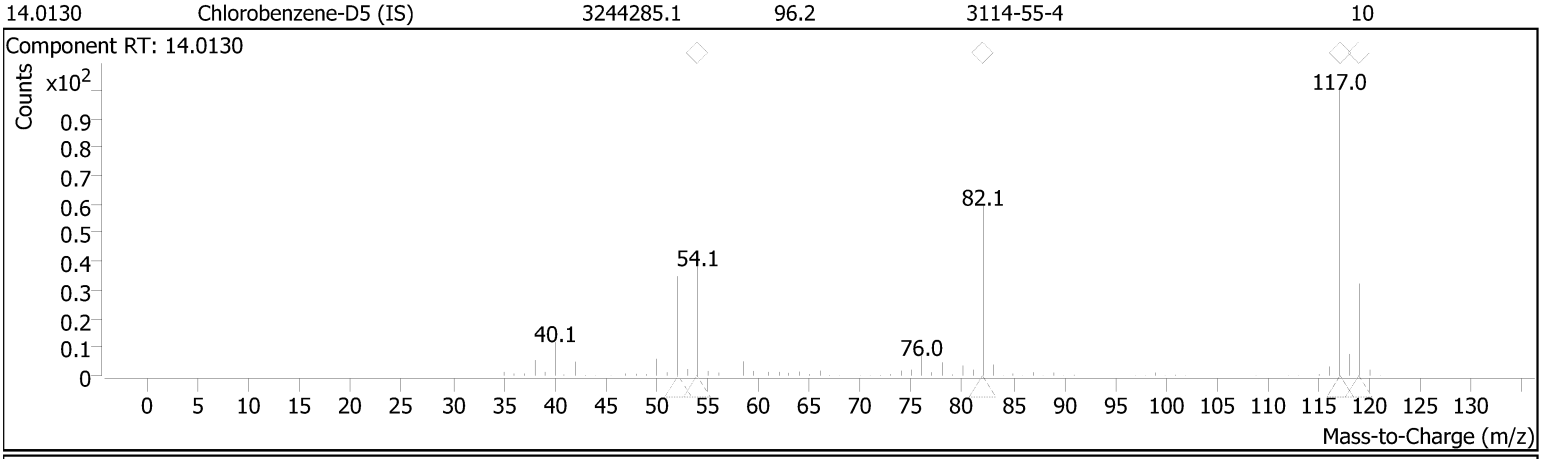
Sample Chromatogram

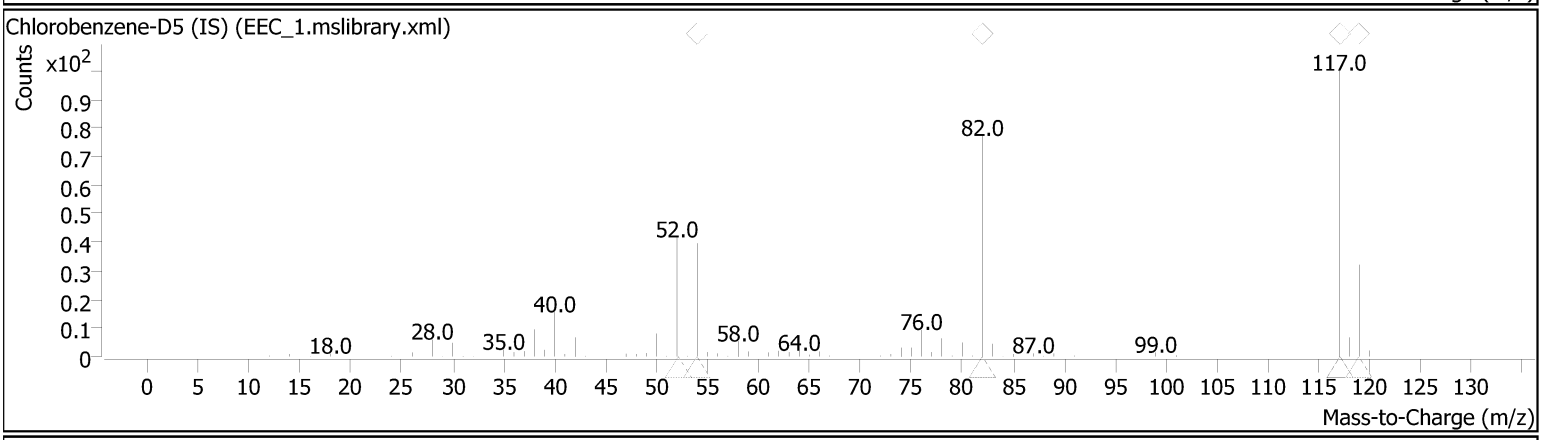


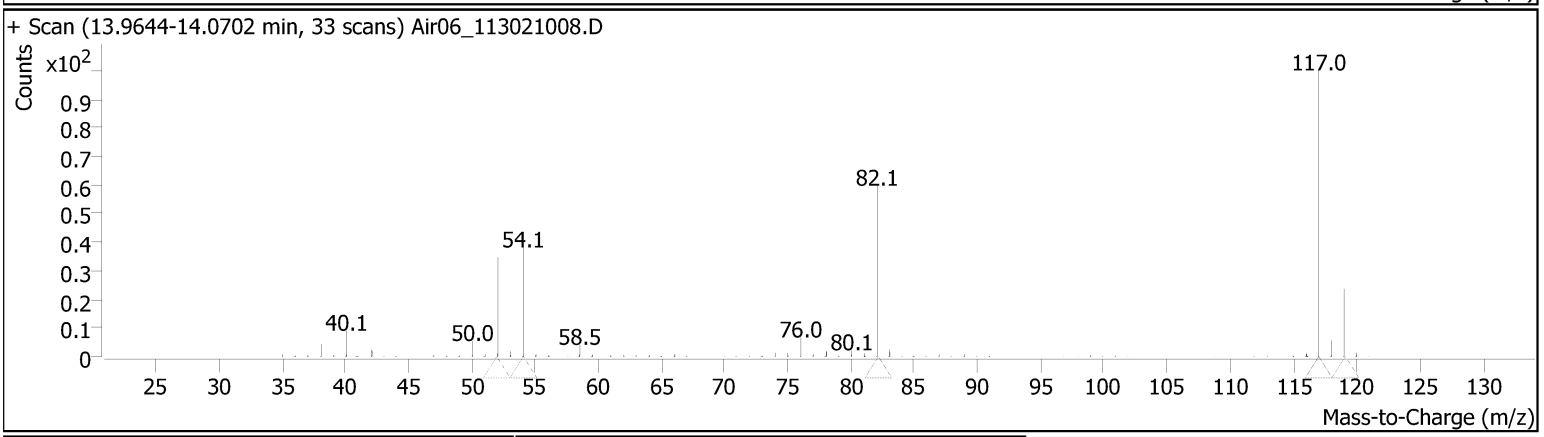
Library Search Results - NonTarget Hits with Details

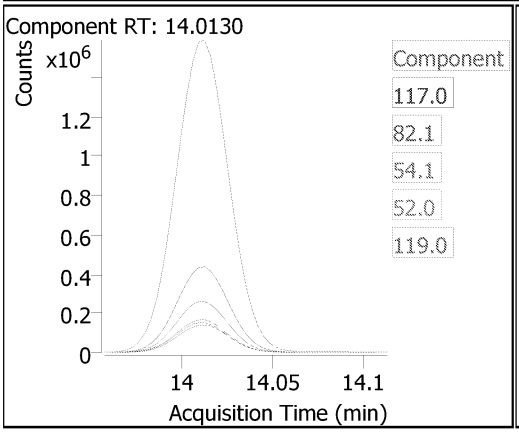
Agilent Technologies

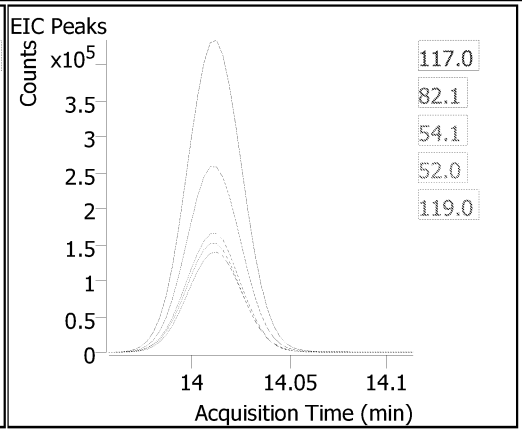
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.0130	Chlorobenzene-D5 (IS)	3244285.1	96.2	3114-55-4		10











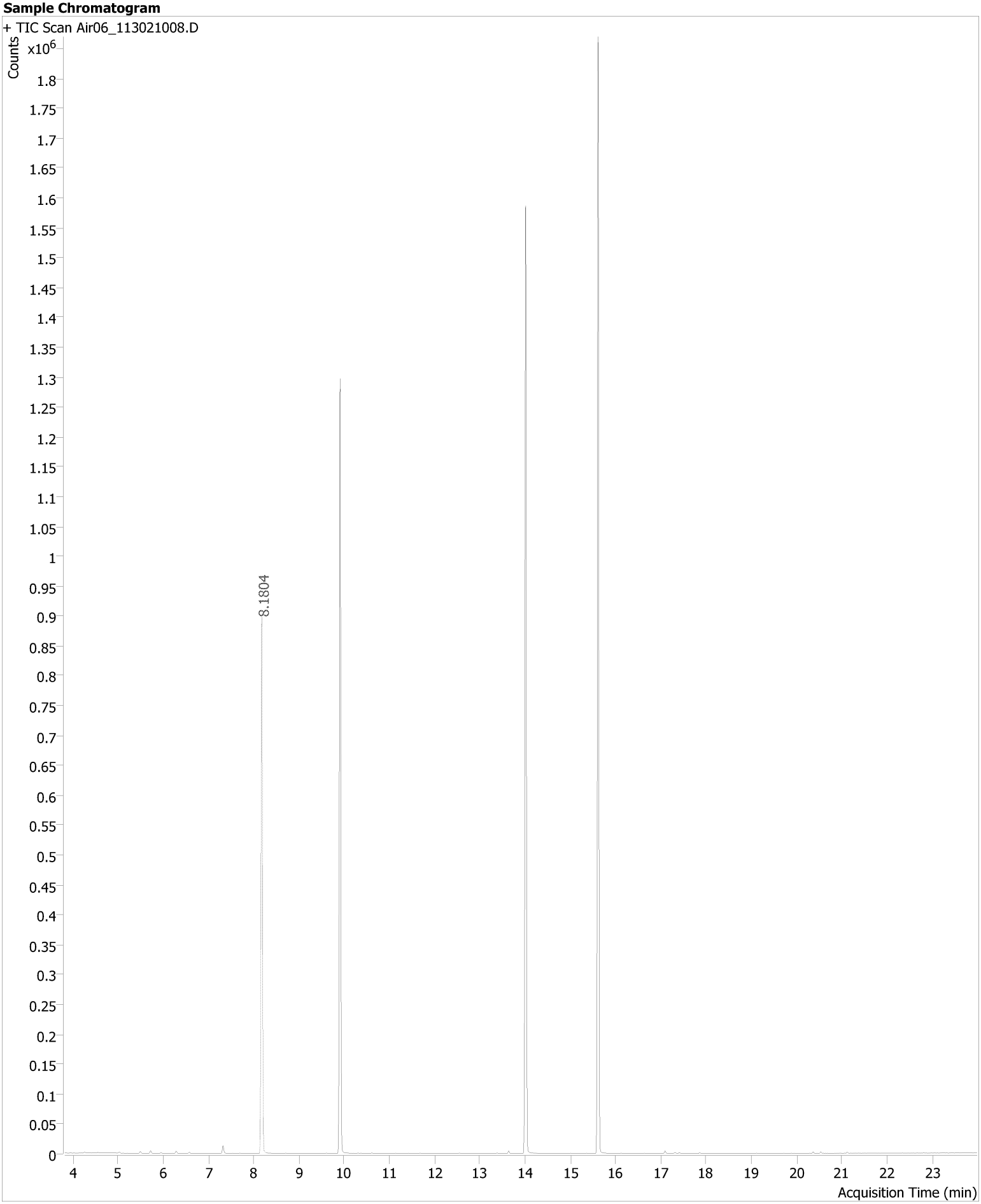
Library Search Results - NonTarget Hits with Details

Agilent Technologies

Batch Path	D:\MassHunter\GCMS\1\data\2021\113021		
Analysis File Name	113021_1.uaf		
Analyst Name	003AIRMS06	**Analysis Time**	12/3/2021 9:59:28 AM
File Name	Air06_113021008.D	**Path Name**	D:\MassHunter\GCMS\1\data\2021\113021
Sample Name	BLANK,QC958137,278926,1x,PDF:1,C10774	**Type**	Sample
Acq. Method File	TO15_Acq_013120_1	**Acq. Method Path**	D:\MassHunter\GCMS\1\methods\
Acq. Date-Time	11/30/2021 4:11:37 PM	**Acq. Operator**	ZNZ
Instrument Name	Air-MS-06	**Dil.**	1

Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
8.1804	Bromochloromethane	74-97-5		1957486.5	98.3	10

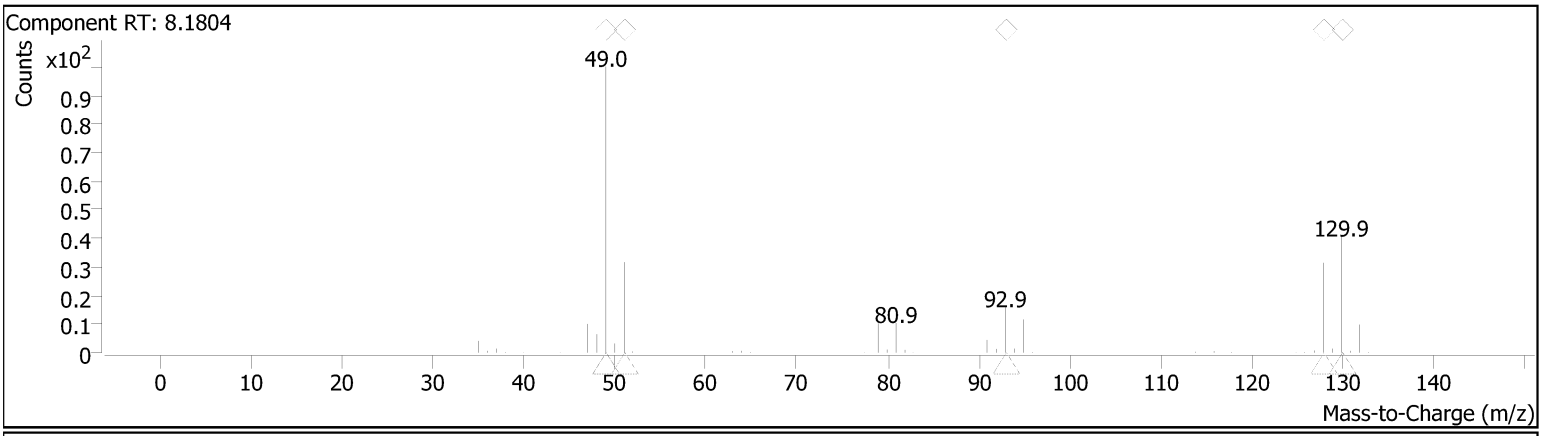
Sample Chromatogram

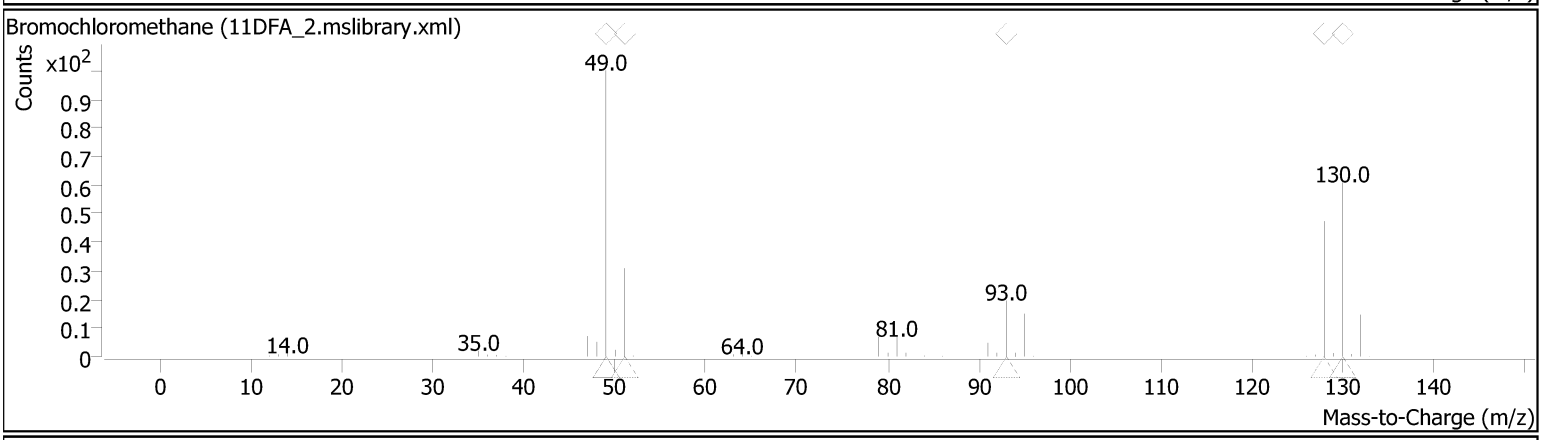


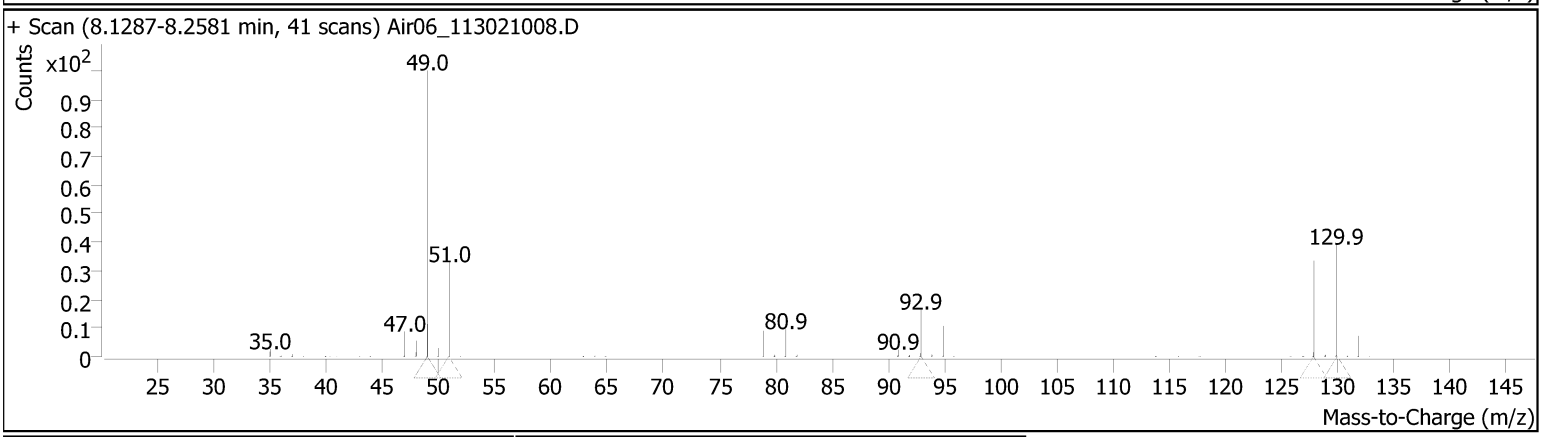
Library Search Results - NonTarget Hits with Details

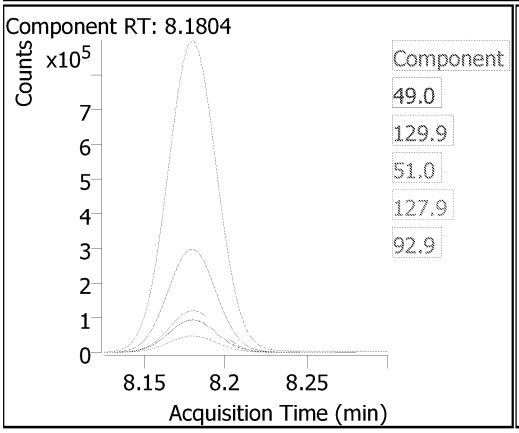
Agilent Technologies

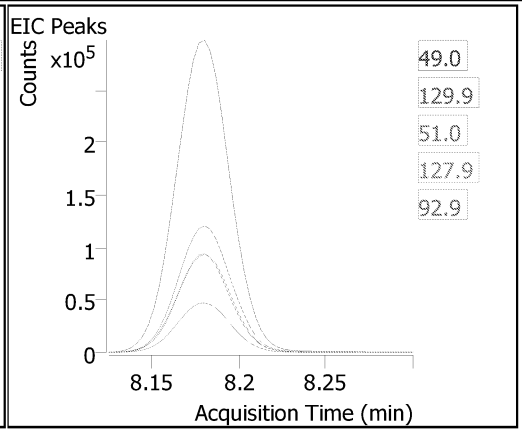
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.1804	Bromochloromethane	1957486.5	98.3	74-97-5		10











ENTHALPY BLANK USER REPORT FOR 455620 MSAIR Air
EPA TO-15

Inst : AIR-MS-06 Lab ID : QC962007 C10812
Seqnum : 371510273006.1 Matrix : Air
File : air06_122021006 Batch : 280281 Time : 20-DEC-2021 13:39
Cal : 371497775001 Caldate : 11-DEC-2021
IDF : 1.0 Raw Units : nL/L Units : nL/L
PDF : 1.0

Analyte	Raw	Result	RL	Flags
Freon 12	0.0008577	ND	0.20	u
Freon 114	0	ND	0.20	u
Chloromethane	0.002381	ND	0.20	u
Vinyl Chloride	0	ND	0.20	u
Bromomethane	0.0007759	ND	0.20	u
Chloroethane	0	ND	0.20	u
Trichlorofluoromethane	0	ND	0.20	u
1,1-Dichloroethene	0.0002420	ND	0.20	u
Freon 113	0	ND	0.20	u
Acetone	0.06295	ND	1.0	u
Carbon Disulfide	0.004516	ND	0.20	u
Isopropanol (IPA)	0.03342	ND	1.0	u
Methylene Chloride	0.1690	ND	0.20	u
trans-1,2-Dichloroethene	0.0005455	ND	0.20	u
MTBE	0	ND	0.20	u
n-Hexane	0.006464	ND	0.20	u
1,1-Dichloroethane	0	ND	0.20	u
Vinyl Acetate	0.003552	ND	1.0	u
cis-1,2-Dichloroethene	0.001094	ND	0.20	u
2-Butanone	0.007733	ND	1.0	u
Chloroform	0.001368	ND	0.20	u
1,1,1-Trichloroethane	0	ND	0.20	u
Carbon Tetrachloride	0	ND	0.20	u
Benzene	0.006578	ND	0.20	u
1,2-Dichloroethane	0.0004562	ND	0.20	u
Trichloroethene	0.001445	ND	0.20	u
1,2-Dichloropropane	0	ND	0.20	u
Bromodichloromethane	0.0002280	ND	0.20	u
cis-1,3-Dichloropropene	0	ND	0.20	u
4-Methyl-2-Pentanone	0.006465	ND	0.20	u
Toluene	0.006326	ND	0.20	u
trans-1,3-Dichloropropene	0	ND	0.20	u
1,1,2-Trichloroethane	0	ND	0.20	u
Tetrachloroethene	0.001237	ND	0.20	u
2-Hexanone	0.005656	ND	0.50	u
Dibromochloromethane	0.001331	ND	0.20	u
1,2-Dibromoethane	0.003029	ND	0.20	u
Chlorobenzene	0.005181	ND	0.20	u
Ethylbenzene	0.003361	ND	0.20	u
m,p-Xylenes	0.01306	ND	0.40	u
o-Xylene	0.005603	ND	0.20	u
Styrene	0.005908	ND	0.20	u
Bromoform	0.004235	ND	0.20	u
1,1,2,2-Tetrachloroethane	0.004966	ND	0.20	u
1,1,1,2-Tetrachloroethane	0	ND	0.20	u
4-Ethyltoluene	0.005879	ND	0.20	u
1,3,5-Trimethylbenzene	0.007000	ND	0.20	u

Analyte	Raw	Result	RL	Flags
1,2,4-Trimethylbenzene	0.009289	ND	0.20	u
1,3-Dichlorobenzene	0.01248	ND	0.20	u
1,4-Dichlorobenzene	0.01329	ND	0.20	u
Benzyl chloride	0.01010	ND	0.20	u
1,2-Dichlorobenzene	0.01701	ND	0.20	u
1,2,4-Trichlorobenzene	0.03429	ND	0.20	u v+
Hexachlorobutadiene	0.01459	ND	0.20	u

No TICs found.

Surrogate	Raw	Spiked	Result	%Rec	Limits	Flags
Bromofluorobenzene	10.40	10.00	10.40	104	60-140	u

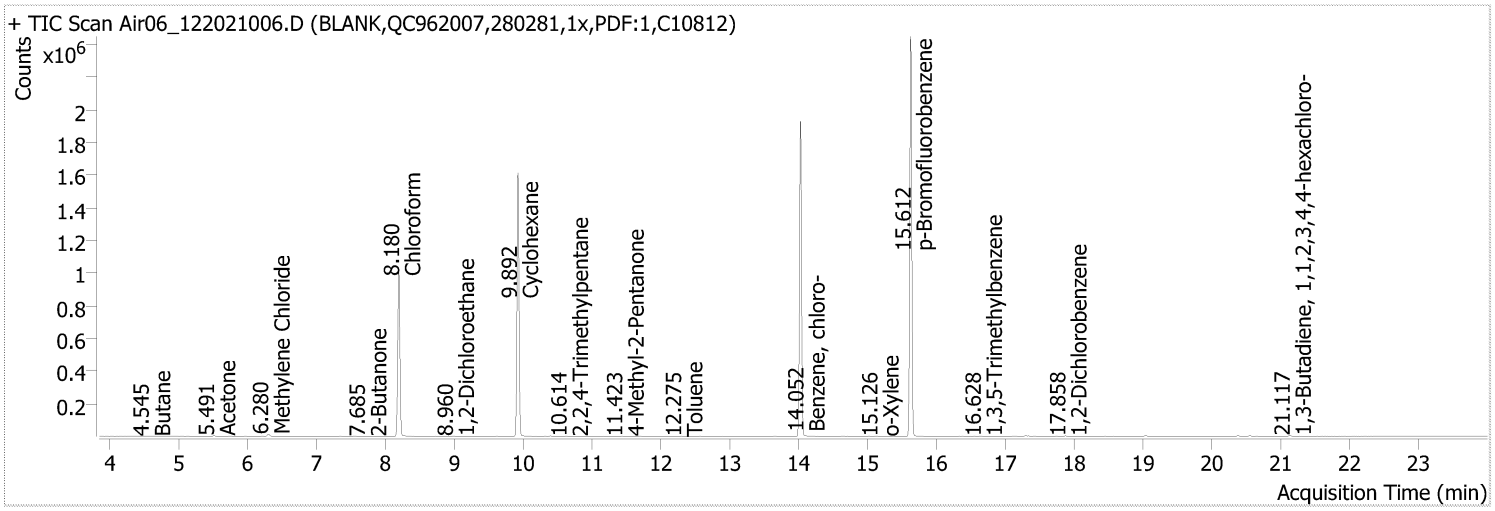
ISTD (ICAL air06_121121009)	ICAL Area	BLANK Area	%Drift	ICAL RT	BLANK RT	Drift
Bromochloromethane	329831	348828	5.76	8.18	8.18	0.00
1,4-Difluorobenzene	1230119	1292248	5.05	9.91	9.91	0.00
Chlorobenzene-d5	754830	705840	-6.49	14.02	14.01	-0.01

Analyst: GSG Date: 01/04/22 Reviewer: SLL Date: 01/04/22

+=high bias u=use v=ICV

Quantitation Results Report (Not Reviewed)

Data File	Air06_122021006.D	Operator	ZNZ/DJL/LJB
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	12/20/2021 1:39:48 PM
Sample Name	BLANK,QC962007,280281,1x,PDF:1,C10812	Instrument	Air-MS-06
Vial	5	Multiplier	1.00
DA Method File	TO15_121121.m	Comment	1x400mL
Tune File	bfb.u	Tune Date	12/14/2021 7:38:43 AM
Batch Name	2021 Dec 20 1228 TO15_121121.m.batch.bin	Last Calib Update	12/13/2021 9:29:07 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



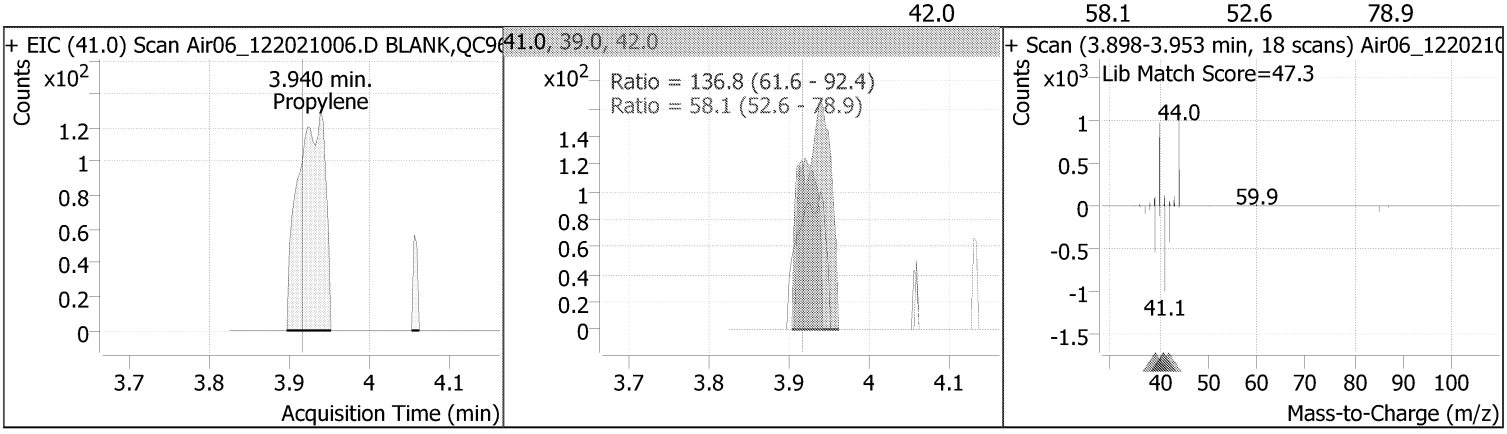
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.177	130.0	348828	10.0000	nL/L		-0.003
M 1,4-Difluorobenzene	9.909	114.0	1292248	10.0000	nL/L		-0.003
M Chlorobenzene-d5	14.010	82.0	705840	10.0000	nL/L	#	-0.006
System Monitoring Compounds							
S p-Bromofluorobenzene	15.612	95.0	941993	10.3981	nL/L		-0.006
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 103.98%			
Target Compounds							QValue
T Propylene	3.940	41.0	307	0.0080	nL/L	#	58
T Freon 12	3.989	85.0	107	0.0009	nL/L		53
T Chloromethane	4.147	50.0	104	0.0024	nL/L		50
T Freon 114	0.000		0	N.D.			
T Vinyl Chloride	0.000		0	N.D.			
T 1,3-Butadiene	0.000		0	N.D.			
T Butane	4.545	43.0	471	0.0067	nL/L	#	64
T Bromomethane	4.749	96.0	26	0.0008	nL/L	#	3
T Chloroethane	0.000		0	N.D.			
T Ethanol	5.031	45.0	2795	0.1021	nL/L		96
T Vinyl bromide	0.000		0	N.D.			
T Acrolein	5.342	56.0	54	0.0030	nL/L	#	61
T Acetone	5.491	58.0	1487	0.0630	nL/L	#	71
T Trichloromonofluoromethane	0.000		0	N.D.			
T Isopropanol (IPA)	5.720	45.0	3086	0.0334	nL/L	#	98
T n-Pentane	5.950	43.0	969	0.0107	nL/L	#	90
T 1,1-Dichloroethene	6.193	61.0	21	0.0002	nL/L		39
T Tert-butyl alcohol (TBA)	6.309	59.0	1035	0.0106	nL/L	#	68
T Methylene Chloride	6.280	84.0	6329	0.1690	nL/L		84
T 3-Chloropropene	6.568	76.0	471	0.0299	nL/L		42
T Freon 113	0.000		0	N.D.			
T Carbon Disulfide	6.568	76.0	471	0.0045	nL/L	#	6

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.122	61.0	37	0.0005	nL/L		37
T 1,1-Dichloroethane	0.000		0	N.D.			
T MTBE	0.000		0	N.D.			
T Vinyl Acetate	7.423	43.0	508	0.0036	nL/L	#	78
T 2-Butanone	7.685	43.0	872	0.0077	nL/L	#	77
T cis-1,2-Dichloroethene	8.041	61.0	76	0.0011	nL/L	#	47
T Ethyl Acetate	8.255	61.0	123	0.0078	nL/L	#	41
T n-Hexane	8.245	57.0	472	0.0065	nL/L		92
T Chloroform	8.180	83.0	136	0.0014	nL/L	#	1
T Tetrahydrofuran	8.718	72.0	21	0.0013	nL/L	#	1
T 1,2-Dichloroethane	8.960	62.0	36	0.0005	nL/L		48
T 1,1,1-Trichloroethane	0.000		0	N.D.			
T Benzene	9.611	78.0	728	0.0066	nL/L	#	82
T Carbon Tetrachloride	0.000		0	N.D.			
T Cyclohexane	9.892	84.0	2181	0.0476	nL/L	#	1
T 1,2-Dichloropropane	0.000		0	N.D.			
T Methane, bromodichloro-	10.504	83.0	23	0.0002	nL/L		32
T 1,4-Dioxane	10.605	88.0	534	0.0223	nL/L		91
T Trichloroethene	10.556	132.0	72	0.0014	nL/L	#	47
T 2,2,4-Trimethylpentane	10.614	57.0	500	0.0021	nL/L	#	60
T Methyl methacrylate	10.728	69.0	51	0.0013	nL/L	#	67
T n-Heptane	0.000		0	N.D.			
T cis-1,3-Dichloropropene	0.000		0	N.D.			
T 4-Methyl-2-Pentanone	11.423	58.0	280	0.0065	nL/L		89
T trans-1,3-Dichloropropene	0.000		0	N.D.			
T 1,1,2-Trichloroethane	0.000		0	N.D.			
T Toluene	12.275	91.0	885	0.0063	nL/L	#	93
T TPH Gasoline (C3 to C12)	12.393	165.0	549273	0.0548	nL/L		100
T 2-Hexanone	12.547	58.0	306	0.0057	nL/L	#	43
T Dibromochloromethane	12.663	129.0	131	0.0013	nL/L	#	48
T 1,2-Dibromoethane	12.919	108.9	226	0.0030	nL/L		94
T Tetrachloroethene	13.378	166.0	102	0.0012	nL/L	#	59
T 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
T Benzene, chloro-	14.052	112.0	521	0.0052	nL/L	#	39
T Ethylbenzene	14.443	91.0	545	0.0034	nL/L	#	76
T TPH Gasoline (C6 to C12)	14.518	165.0	365672	0.0490	nL/L		100
T m,p-Xylenes	14.634	91.0	1788	0.0131	nL/L		93
T Bromoform	14.696	173.0	458	0.0042	nL/L	#	1
T Styrene	15.006	104.0	542	0.0059	nL/L	#	81
T 1,1,2,2-Tetrachloroethane	15.104	83.0	488	0.0050	nL/L	#	87
T o-Xylene	15.126	91.0	796	0.0056	nL/L	#	82
T n-Nonane	15.369	85.0	45	0.0015	nL/L	#	1
T Isopropylbenzene	15.777	105.0	666	0.0035	nL/L	#	70
T 2-Chlorotoluene	16.311	126.0	216	0.0050	nL/L	#	75
T n-Propylbenzene	16.363	120.0	175	0.0036	nL/L	#	76
T 4-Ethyltoluene	16.534	105.1	1077	0.0059	nL/L		85
T 1,3,5-Trimethylbenzene	16.628	105.0	1167	0.0070	nL/L	#	97
T 1,2,4-Trimethylbenzene	17.133	105.0	1449	0.0093	nL/L	#	95
T Benzyl chloride	17.295	91.0	1358	0.0101	nL/L		98
T 1,3-Dichlorobenzene	17.327	146.0	1347	0.0125	nL/L		95
T 1,4-Dichlorobenzene	17.411	146.0	1415	0.0133	nL/L	#	92
T 1,2-Dichlorobenzene	17.858	146.0	1768	0.0170	nL/L		97
T 1,2,4-Trichlorobenzene	20.363	179.9	2535	0.0343	nL/L	#	95
T Naphthalene	20.535	128.0	5014	0.0437	nL/L	#	91
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.117	225.0	1770	0.0146	nL/L	#	93

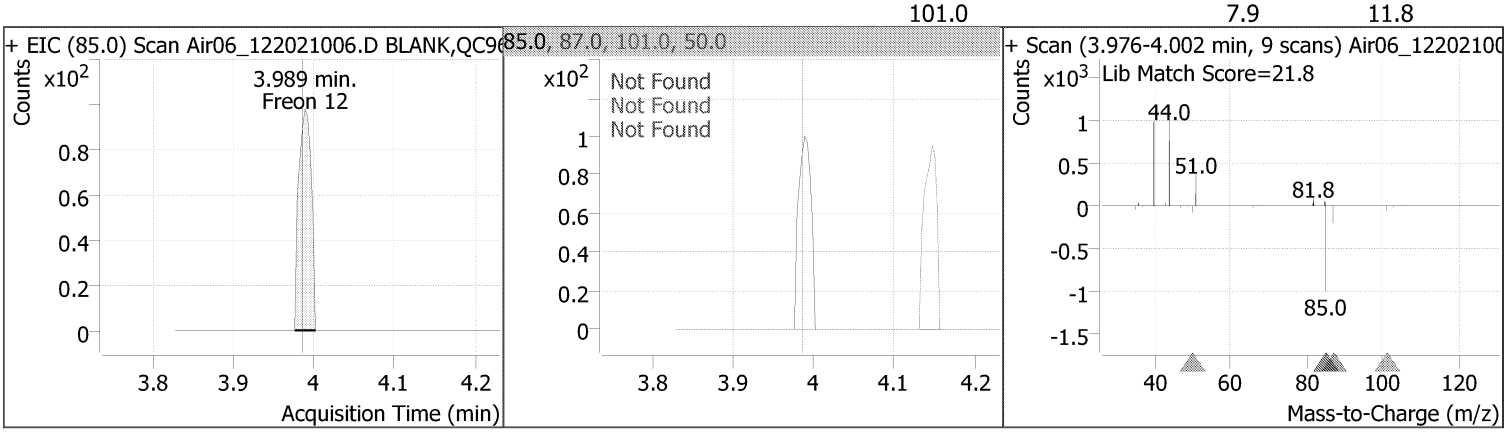
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

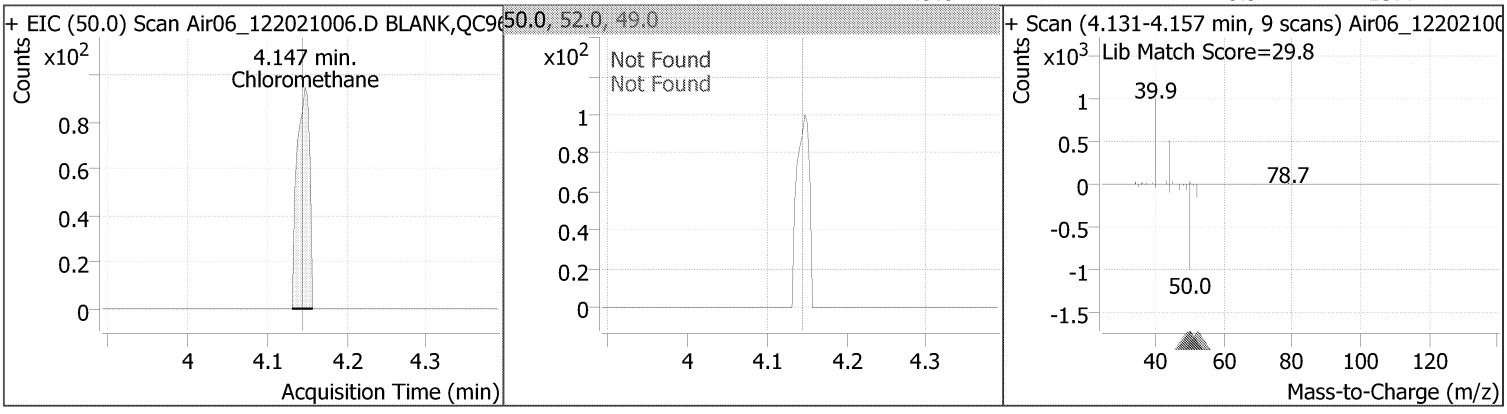
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.0080	3.94	0.02	307	39.0	136.8	61.6	92.4
					42.0	58.1	52.6	78.9



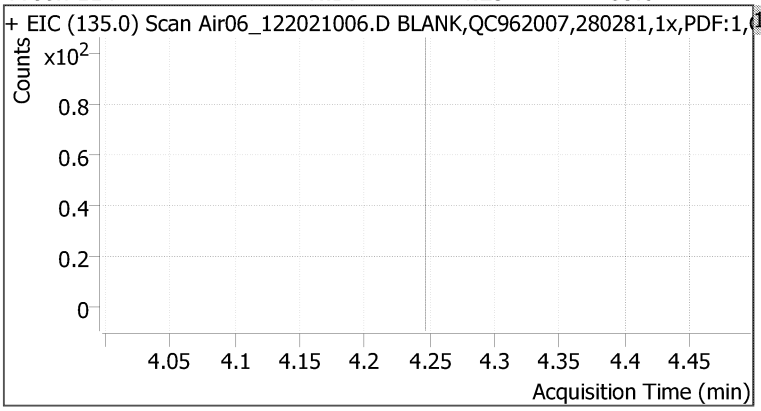
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	0.0009	3.99	0.00	107	87.0		25.9	38.8
					50.0		12.1	18.1
					101.0		7.9	11.8

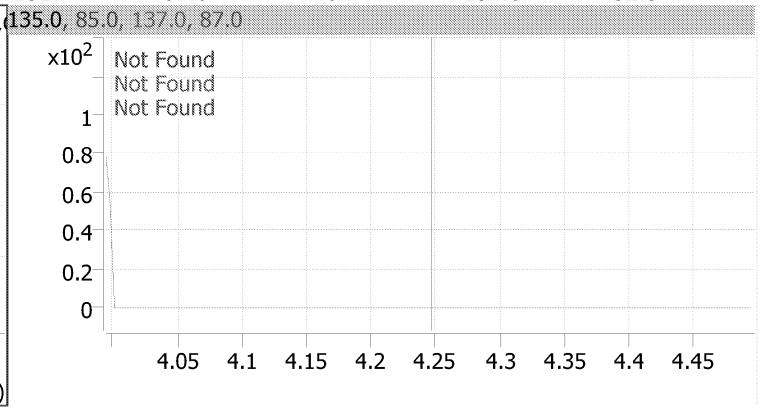


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	0.0024	4.15	0.00	104	52.0		25.7	38.6
					49.0		8.9	13.4

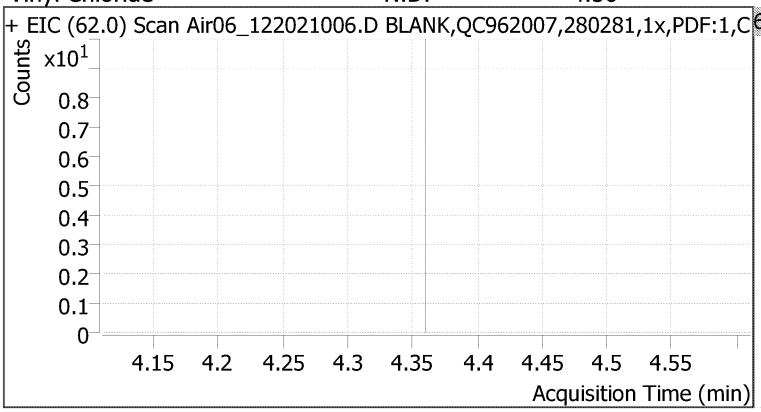


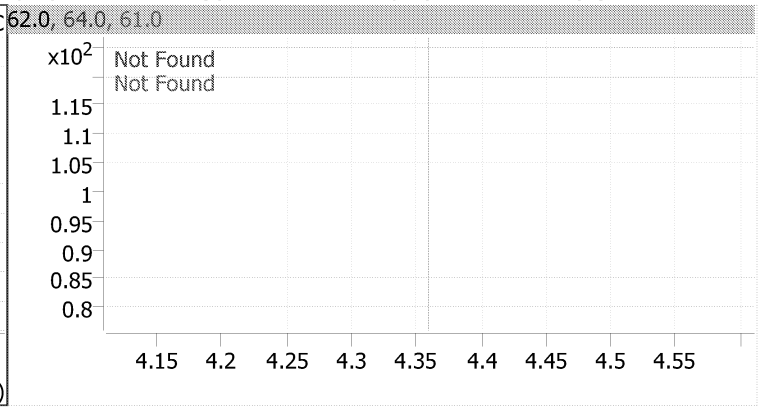
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 114	N.D.	4.25	85.0	151.7	87.0	48.7	137.0	32.3



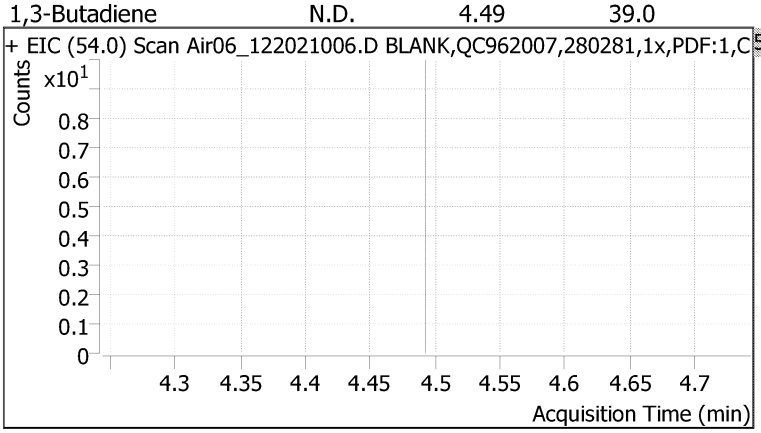


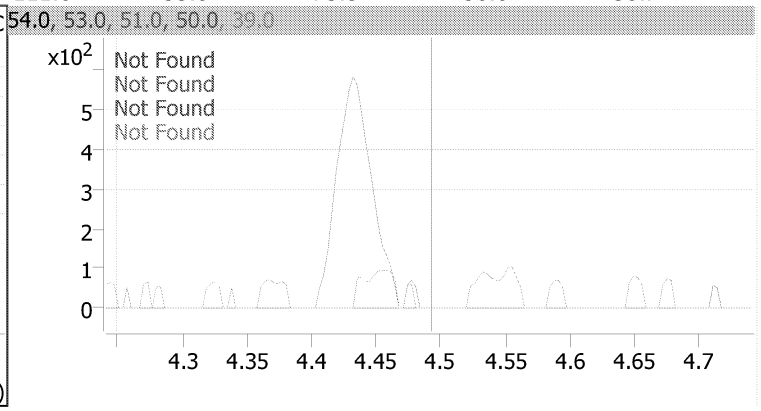
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl Chloride	N.D.	4.36	64.0	30.4	61.0	9.3



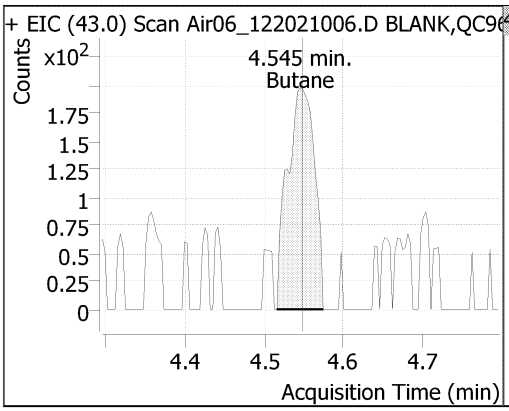


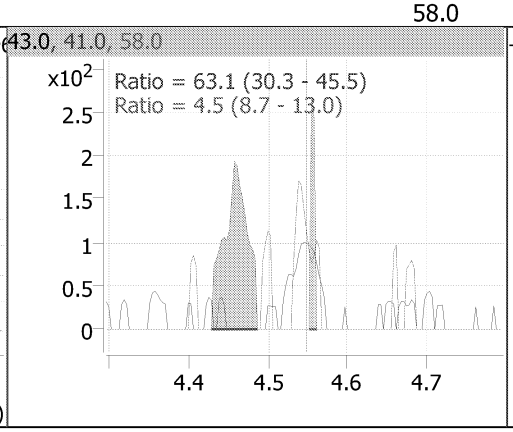
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,3-Butadiene	N.D.	4.49	39.0	111.0	53.0	73.5	50.0	38.7

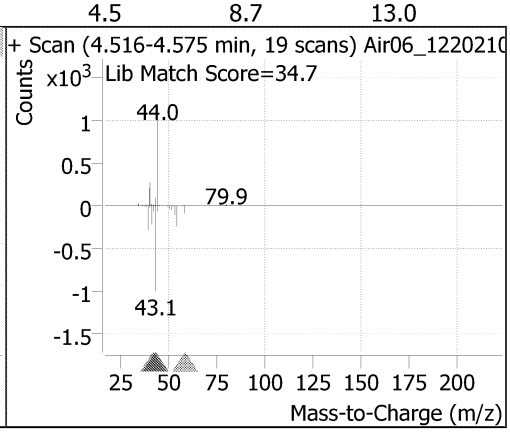




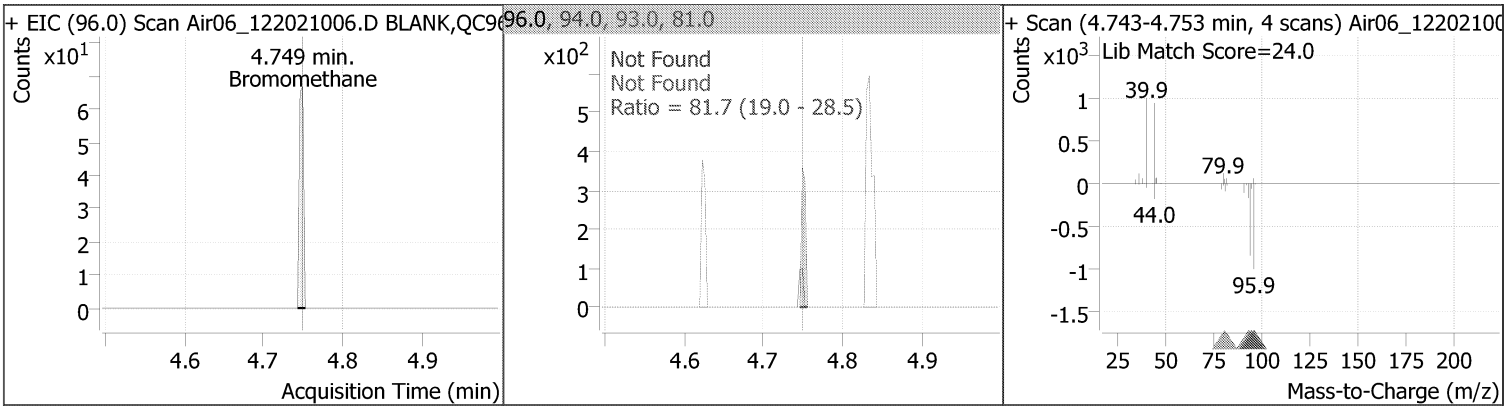
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	0.0067	4.55	0.00	471	41.0	63.1	30.3	45.5
					58.0	4.5	8.7	13.0



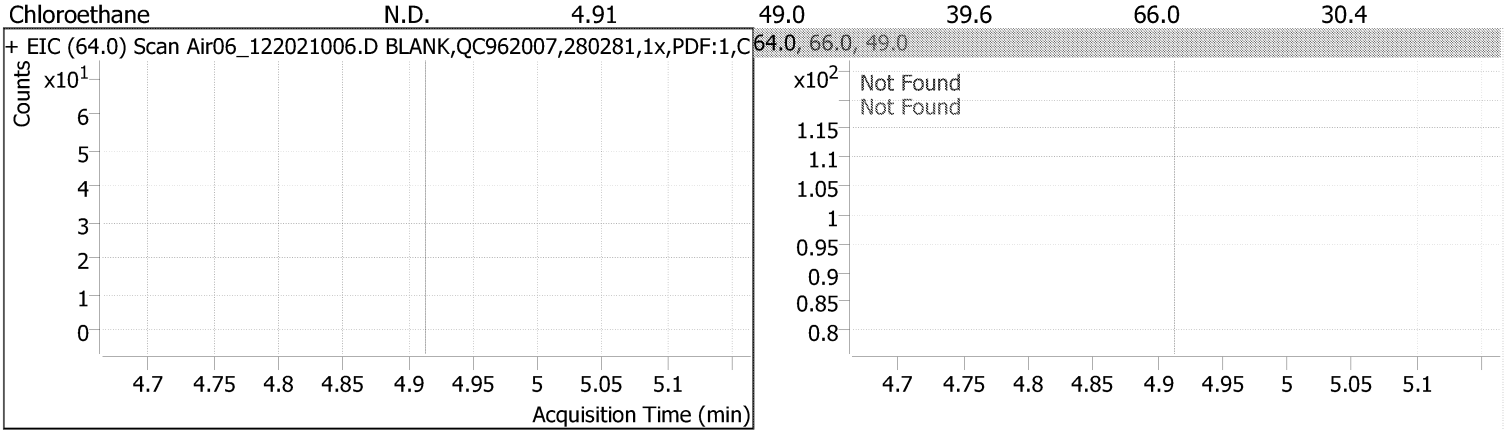




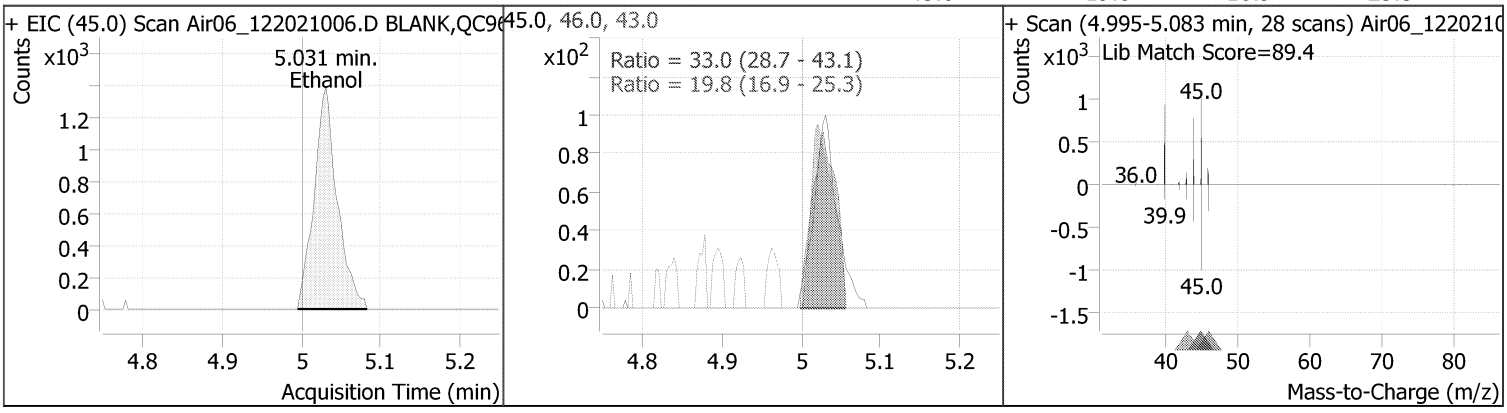
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromomethane	0.0008	4.75	0.00	26	94.0		86.3	129.4
					93.0		19.1	28.7
					81.0	81.7	19.0	28.5



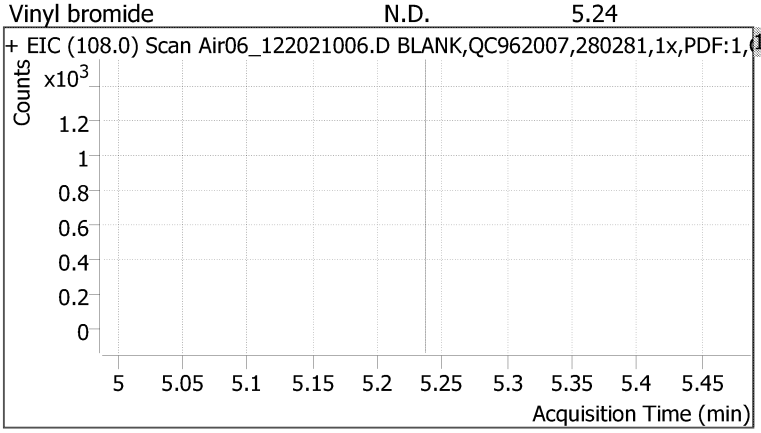
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Chloroethane	N.D.	4.91	49.0	39.6	66.0	30.4

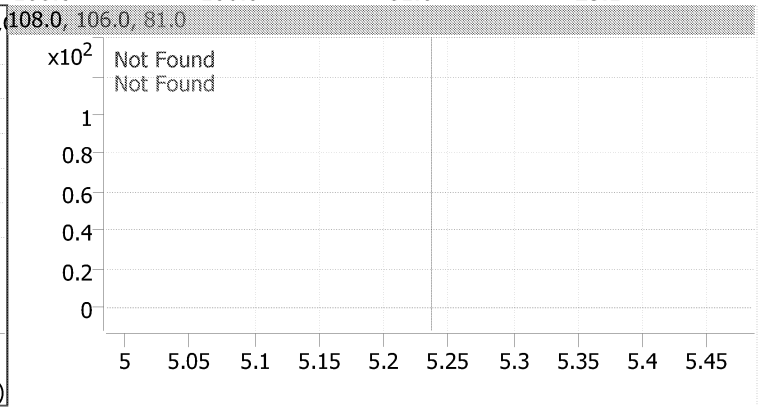


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	0.1021	5.03	0.03	2795	46.0	33.0	28.7	43.1
					43.0	19.8	16.9	25.3

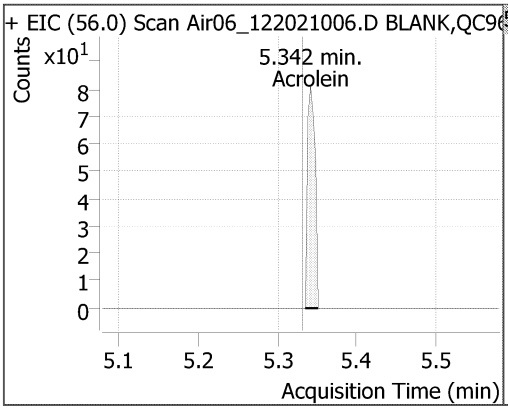


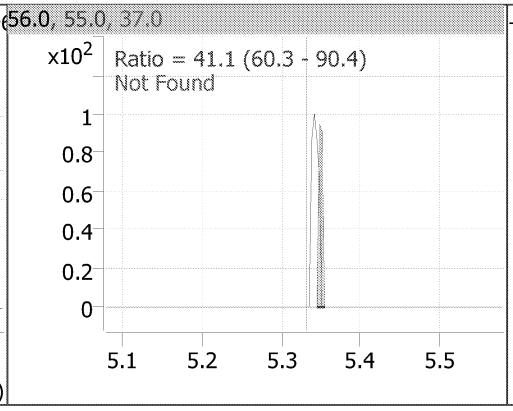
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl bromide	N.D.	5.24	106.0	106.0	81.0	23.1

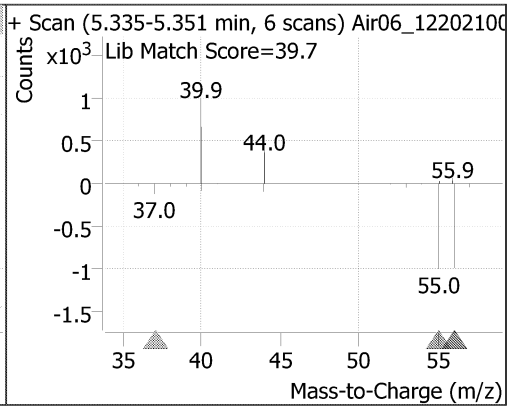




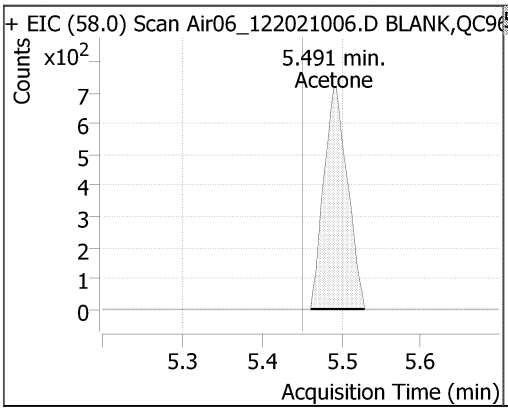
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	0.0030	5.34	0.01	54	55.0	41.1	60.3	90.4
					37.0		9.1	13.7

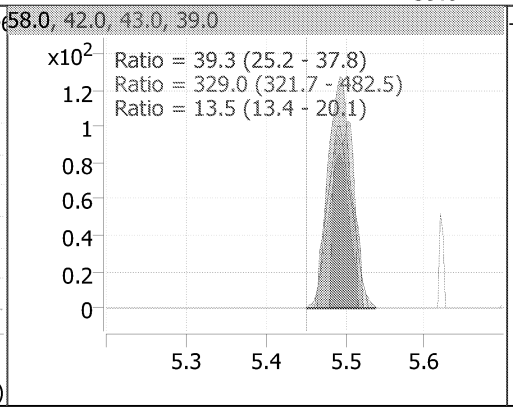


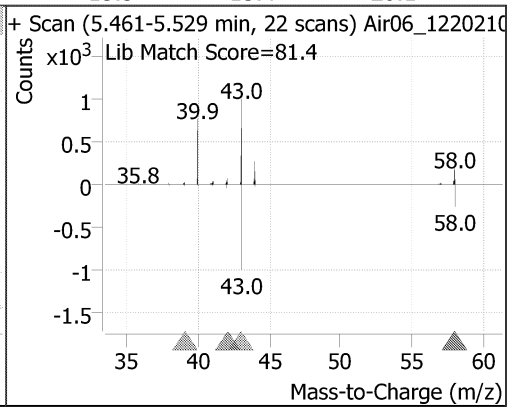




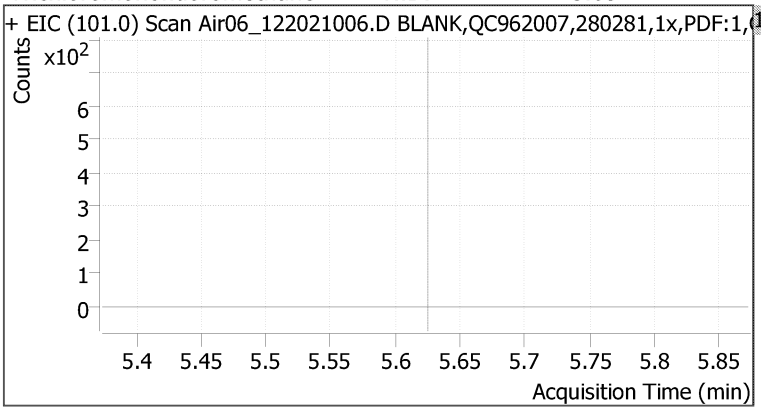
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	0.0630	5.49	0.04	1487	43.0	329.0	321.7	482.5
					42.0	39.3	25.2	37.8
					39.0	13.5	13.4	20.1

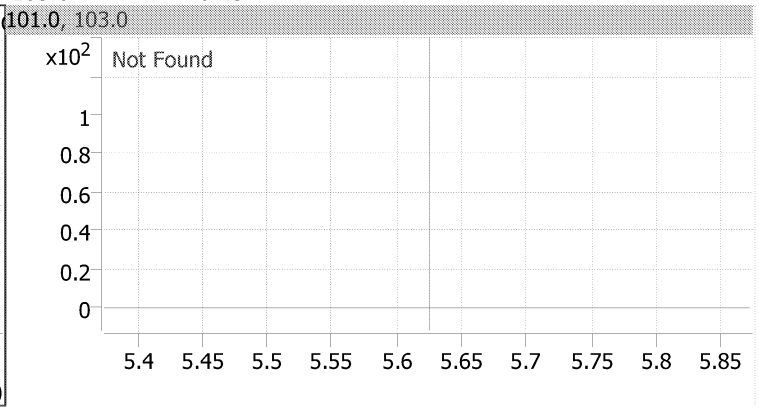




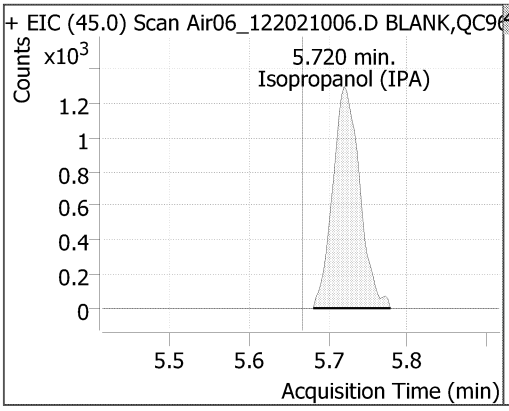


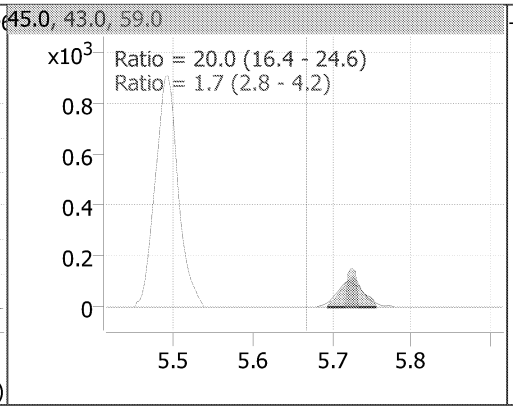
Compound	Conc.	Exp RT	QIon	Exp Ratio
Trichloromonofluoromethane	N.D.	5.63	103.0	64.3

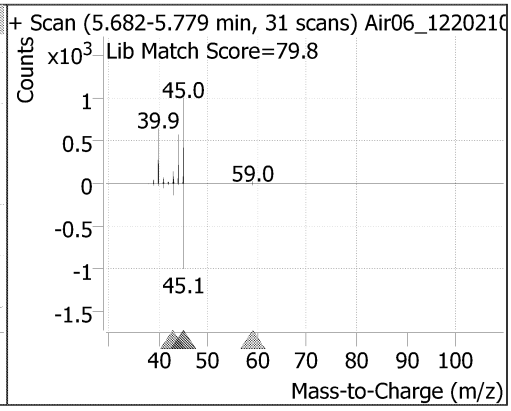




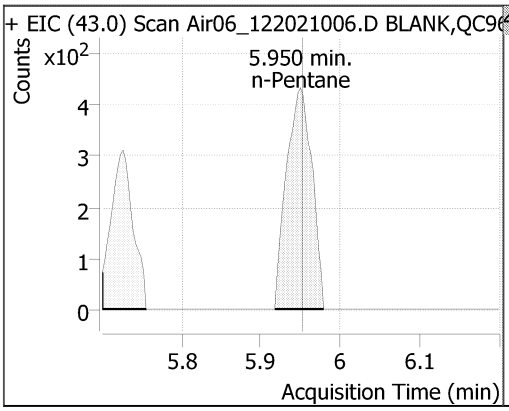
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.0334	5.72	0.05	3086	43.0	20.0	16.4	24.6
					59.0	1.7	2.8	4.2

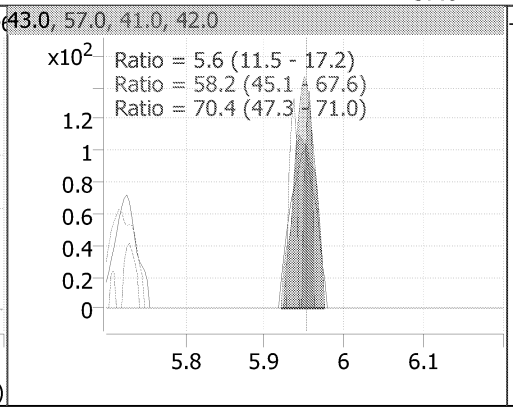


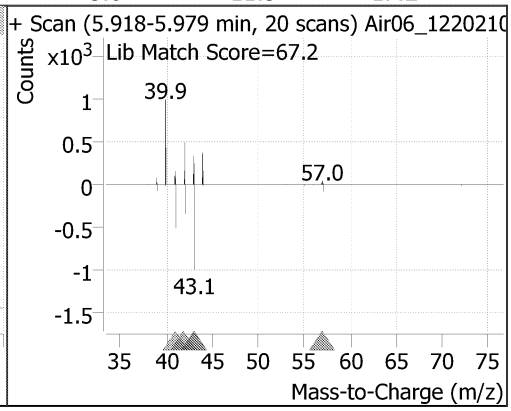




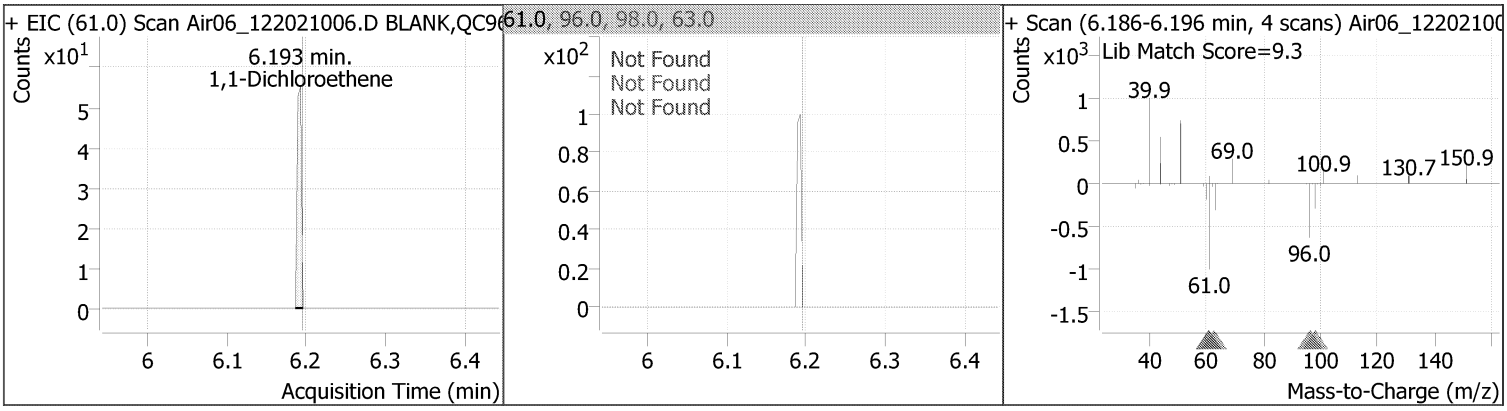
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.0107	5.95	0.00	969	42.0	70.4	47.3	71.0
					41.0	58.2	45.1	67.6
					57.0	5.6	11.5	17.2



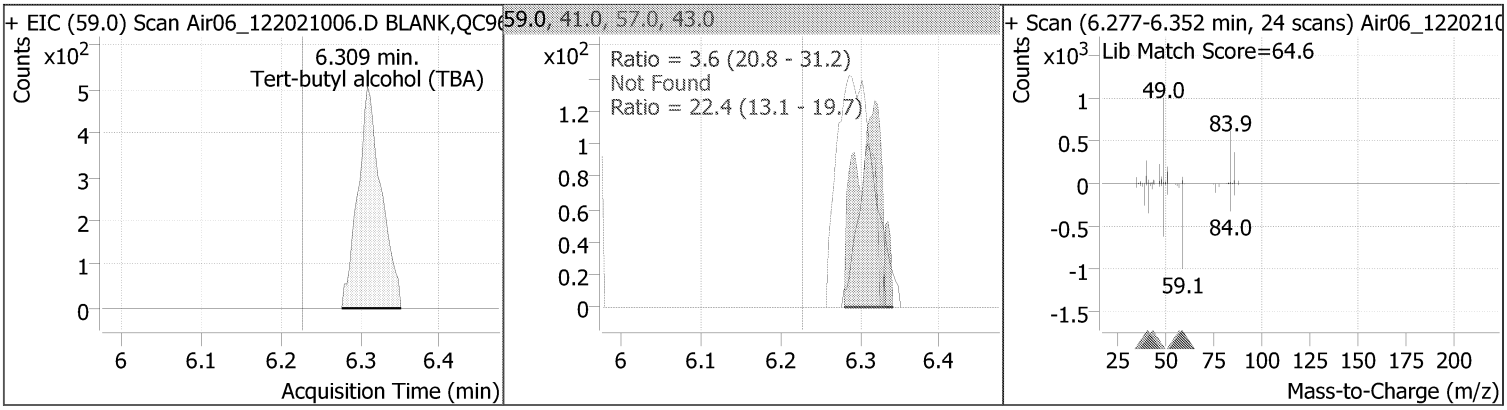




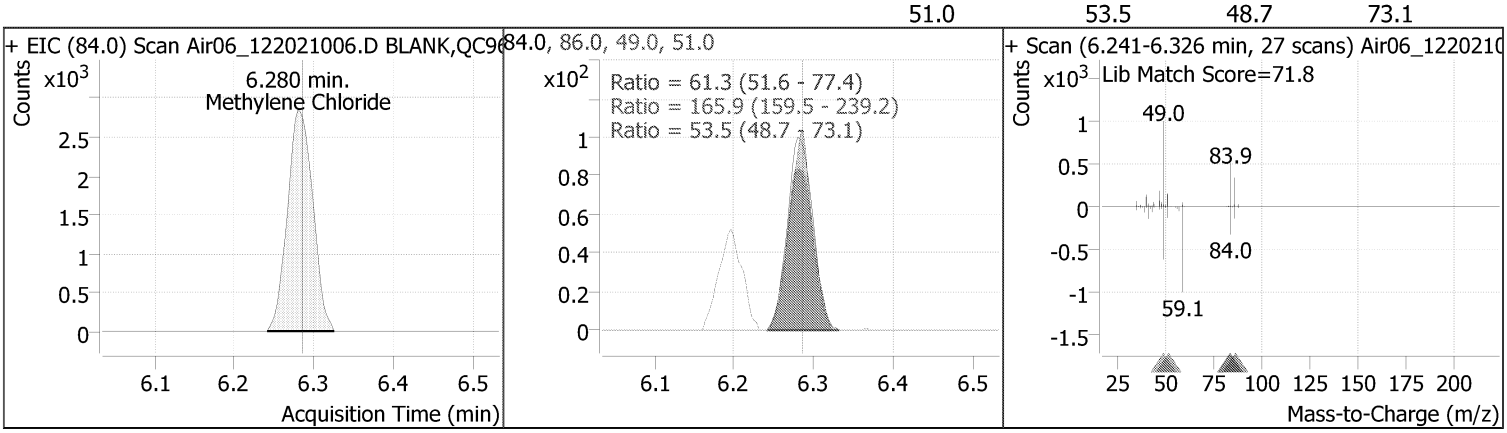
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	0.0002	6.19	0.00	21	96.0		35.3	53.0
					63.0		24.7	37.1
					98.0		22.7	34.0



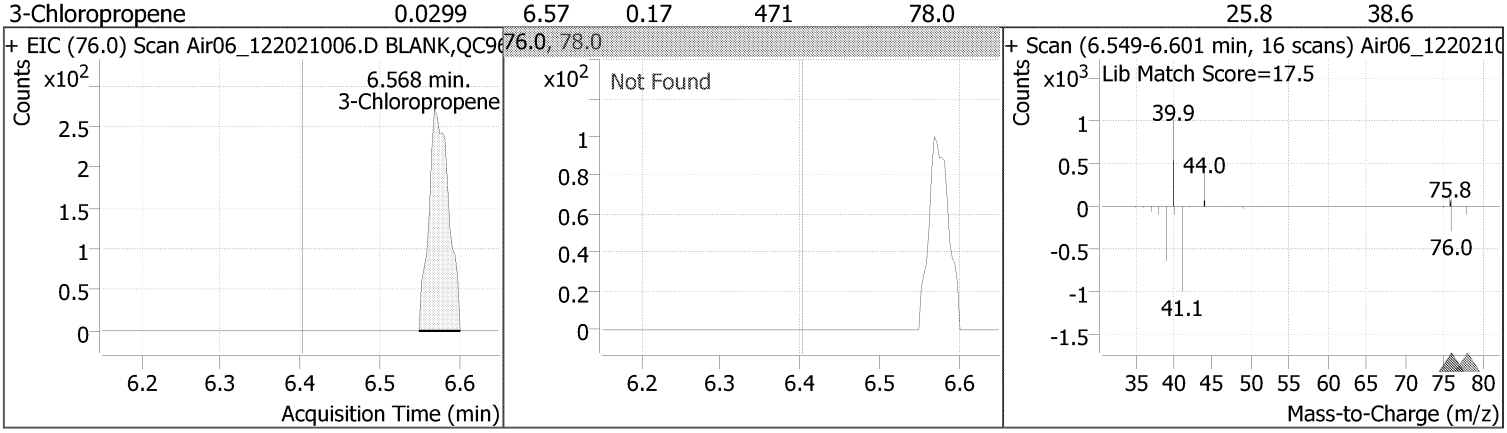
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.0106	6.31	0.08	1035	41.0	3.6	20.8	31.2
					43.0	22.4	13.1	19.7
					57.0		8.6	12.9



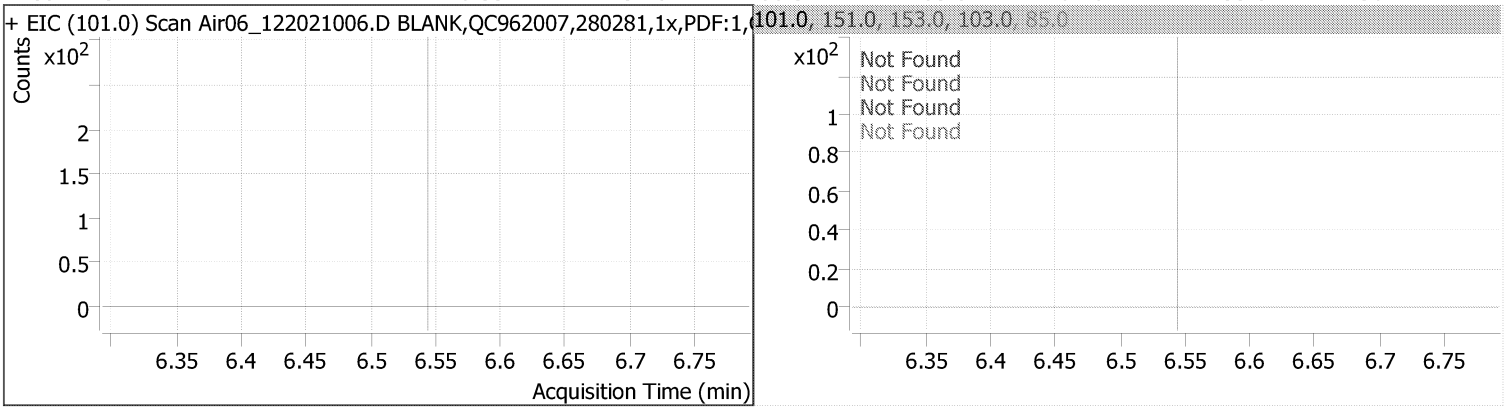
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.1690	6.28	-0.01	6329	49.0	165.9	159.5	239.2
					86.0	61.3	51.6	77.4
					51.0	53.5	48.7	73.1



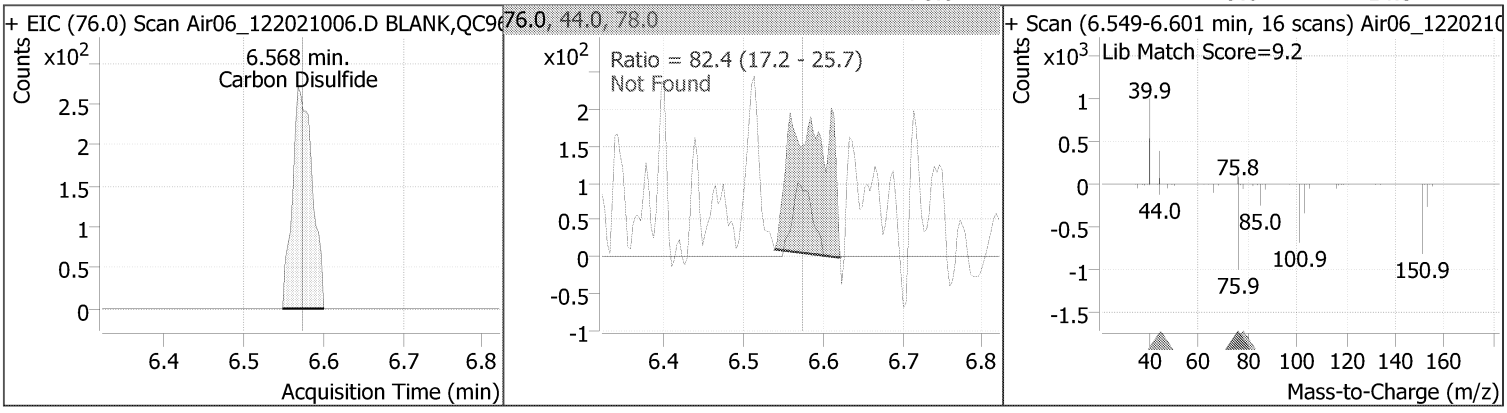
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	0.0299	6.57	0.17	471	78.0		25.8	38.6



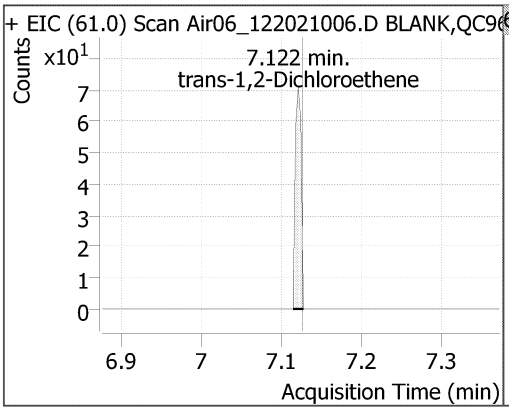
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 113	N.D.	6.55	151.0	86.5	103.0	64.6	153.0	56.1

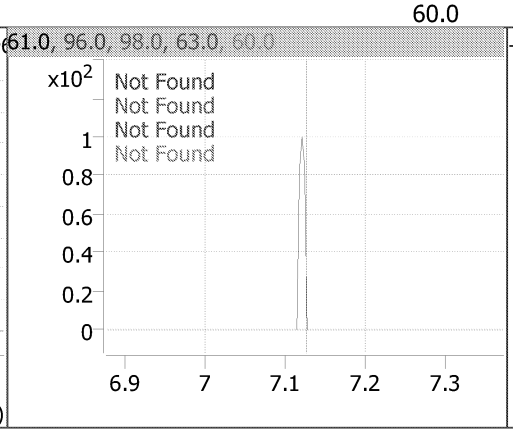


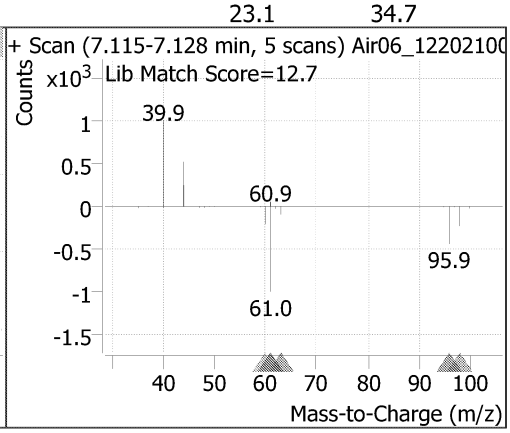
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.0045	6.57	-0.01	471	44.0	82.4	17.2	25.7
					78.0		9.6	14.5



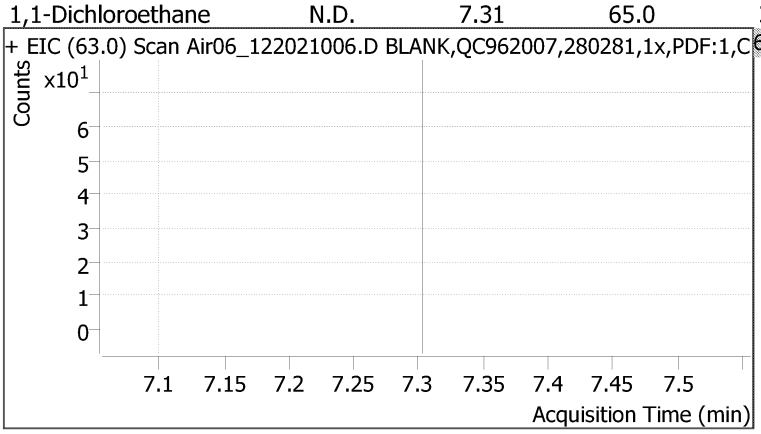
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.0005	7.12	-0.01	37	96.0		41.3	61.9
					98.0		26.5	39.8
					63.0		24.6	36.9
					60.0		23.1	34.7

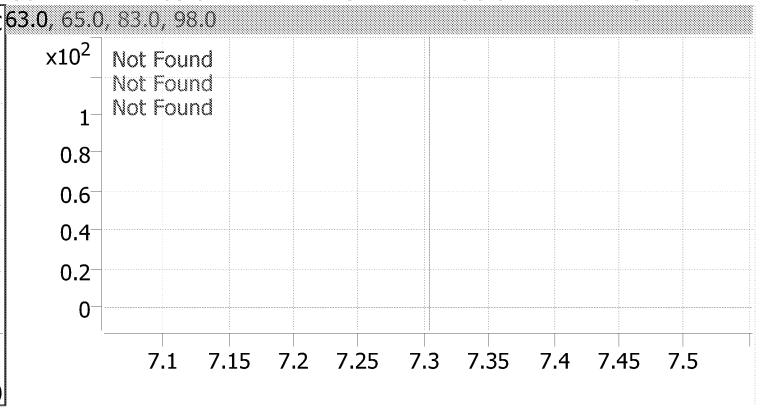




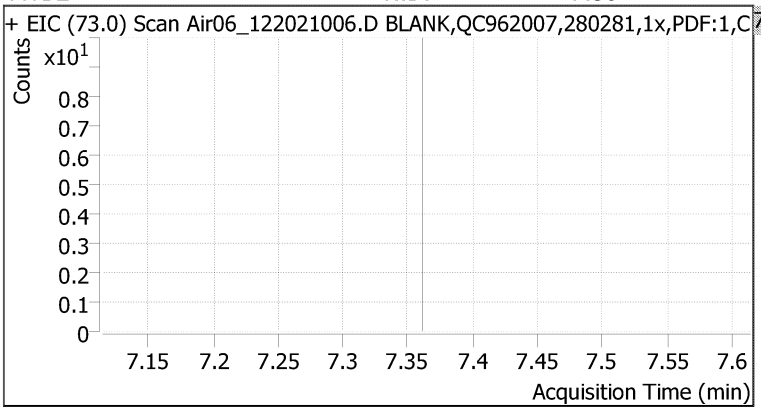


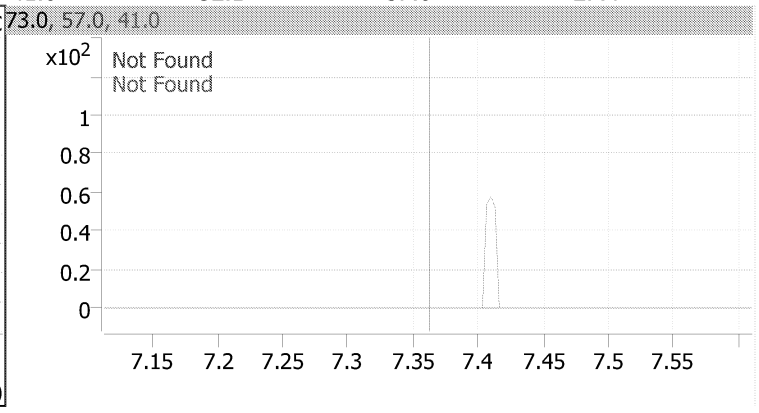
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethane	N.D.	7.31	65.0	30.1	83.0	12.3	98.0	4.5



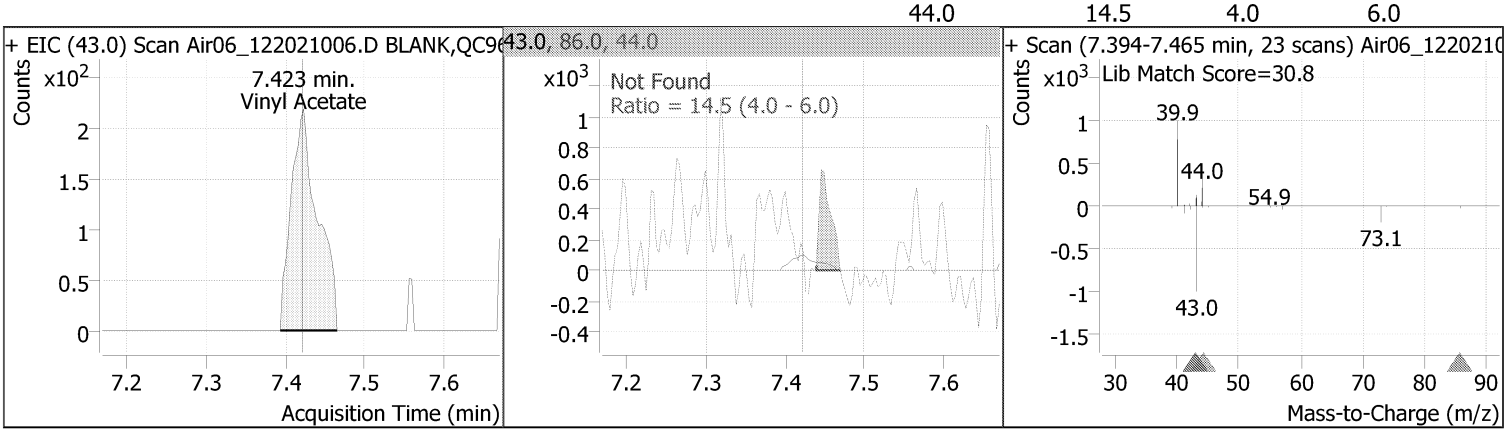


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
MTBE	N.D.	7.36	41.0	32.1	57.0	27.4

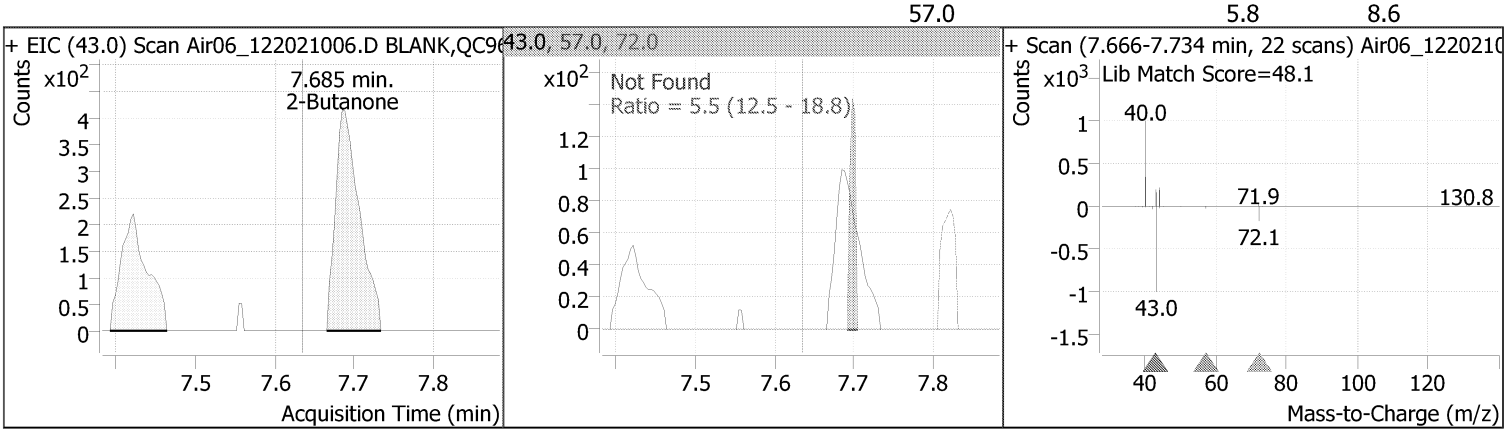




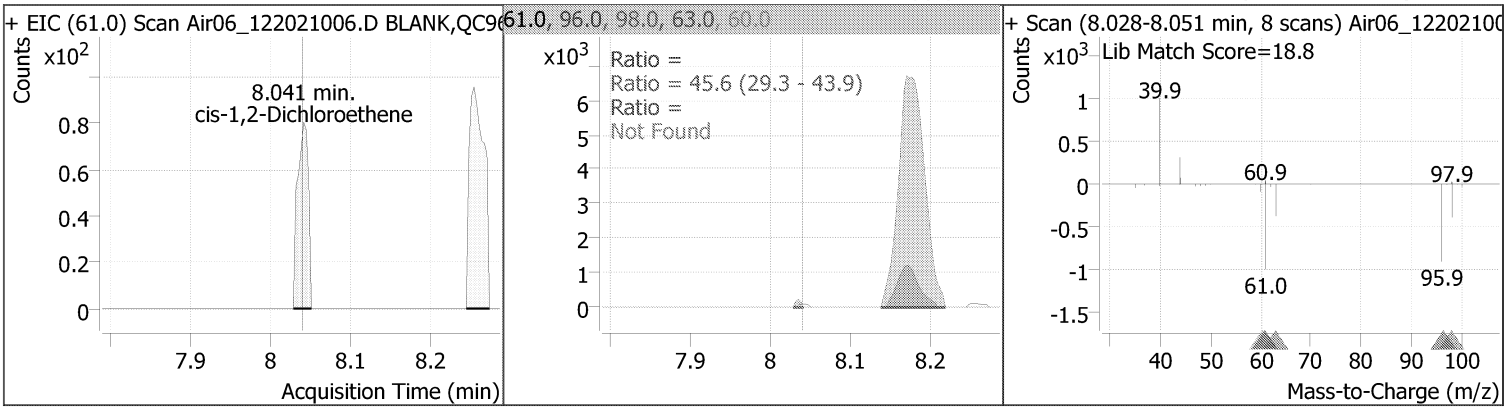
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.0036	7.42	0.00	508	86.0		4.6	6.9
					44.0	14.5	4.0	6.0



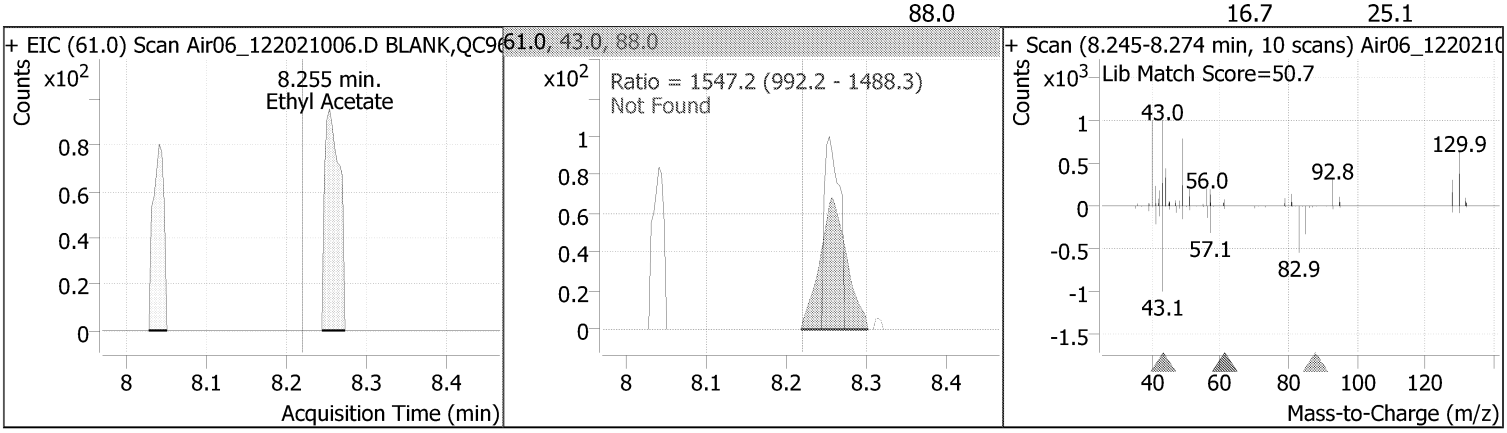
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.0077	7.69	0.05	872	72.0	5.5	12.5	18.8
					57.0		5.8	8.6



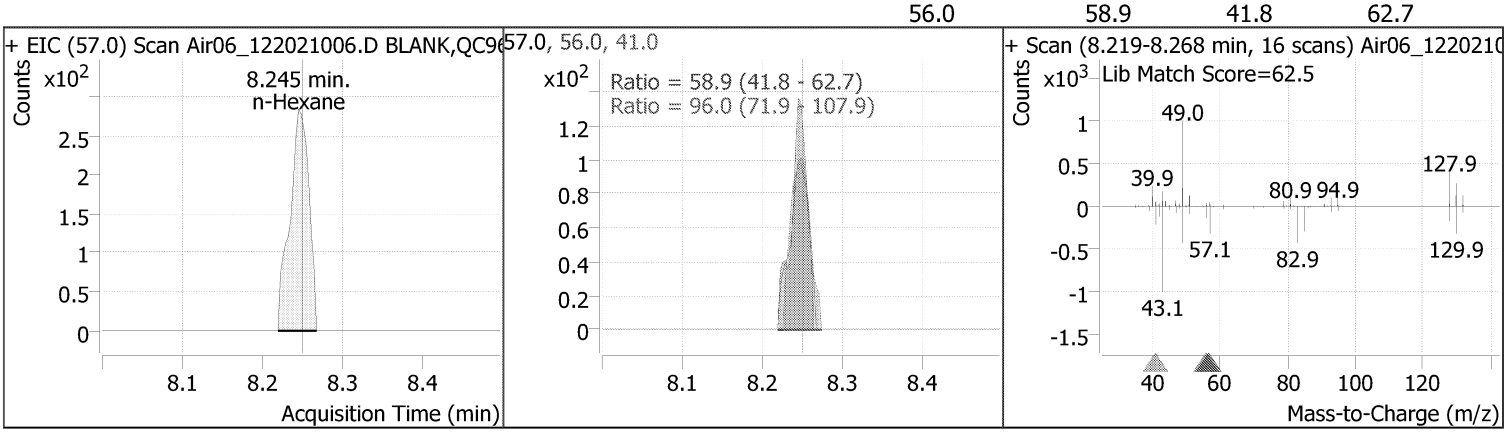
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.0011	8.04	0.00	76	96.0		45.8	68.7
					98.0	45.6	29.3	43.9
					63.0		24.9	37.4
					60.0		18.2	27.3



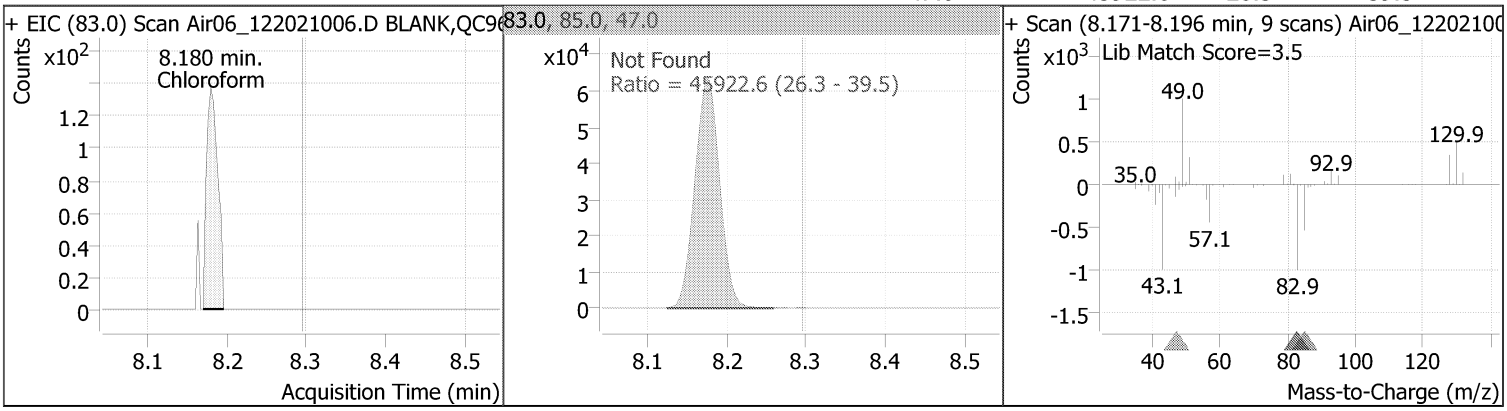
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	0.0078	8.25	0.03	123	43.0	1547.2	992.2	1488.3
					88.0		16.7	25.1



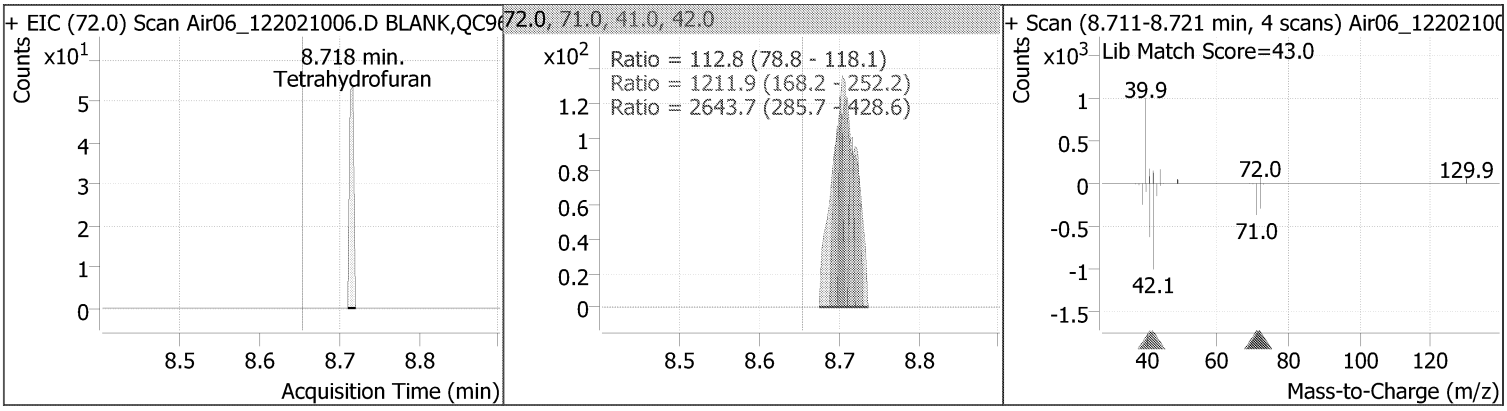
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.0065	8.24	-0.01	472	41.0	96.0	71.9	107.9
					56.0	58.9	41.8	62.7



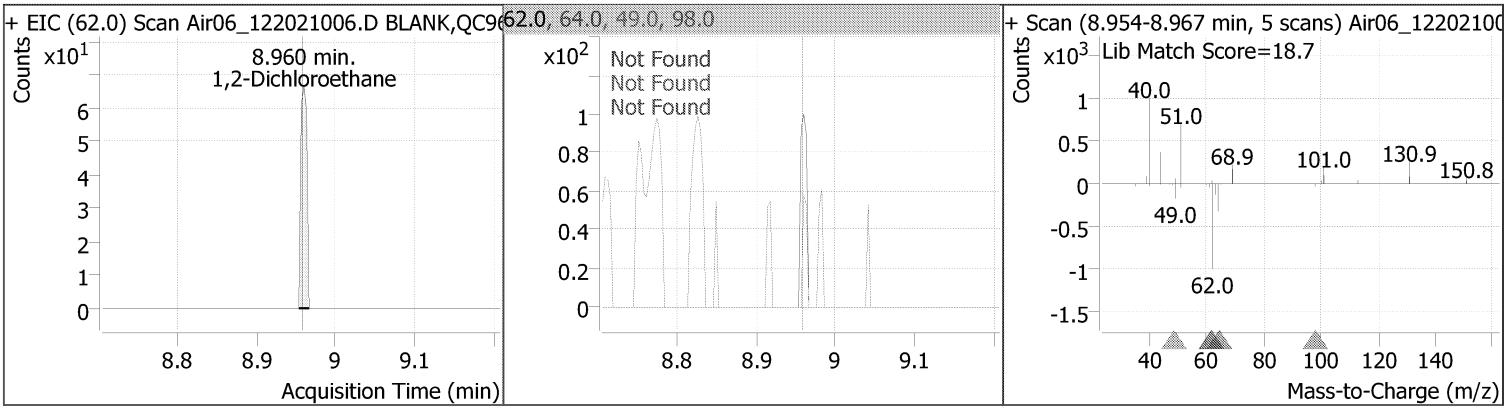
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.0014	8.18	-0.12	136	85.0		51.9	77.8
					47.0	45922.6	26.3	39.5



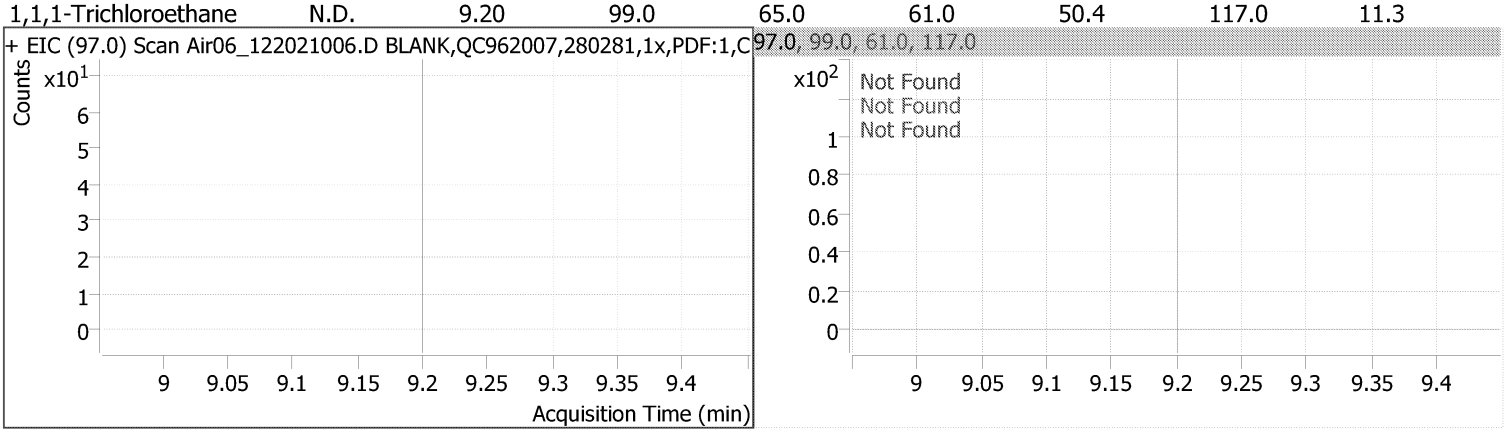
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	0.0013	8.72	0.06	21	42.0	2643.7	285.7	428.6
					41.0	1211.9	168.2	252.2
					71.0	112.8	78.8	118.1



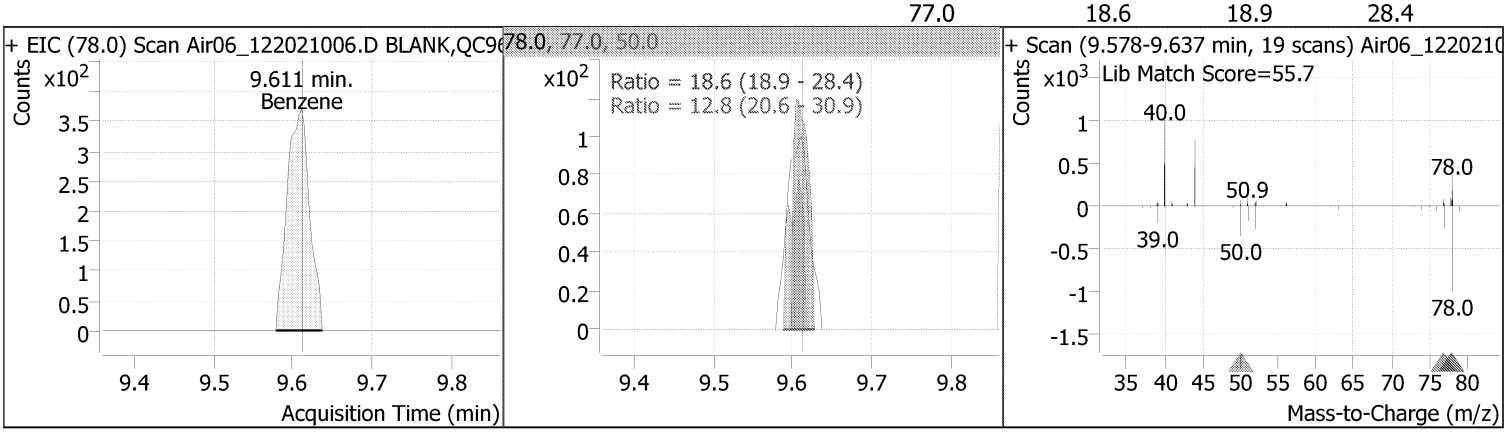
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	0.0005	8.96	0.00	36	64.0		24.8	37.2
					49.0		23.5	35.3
					98.0		4.4	6.6



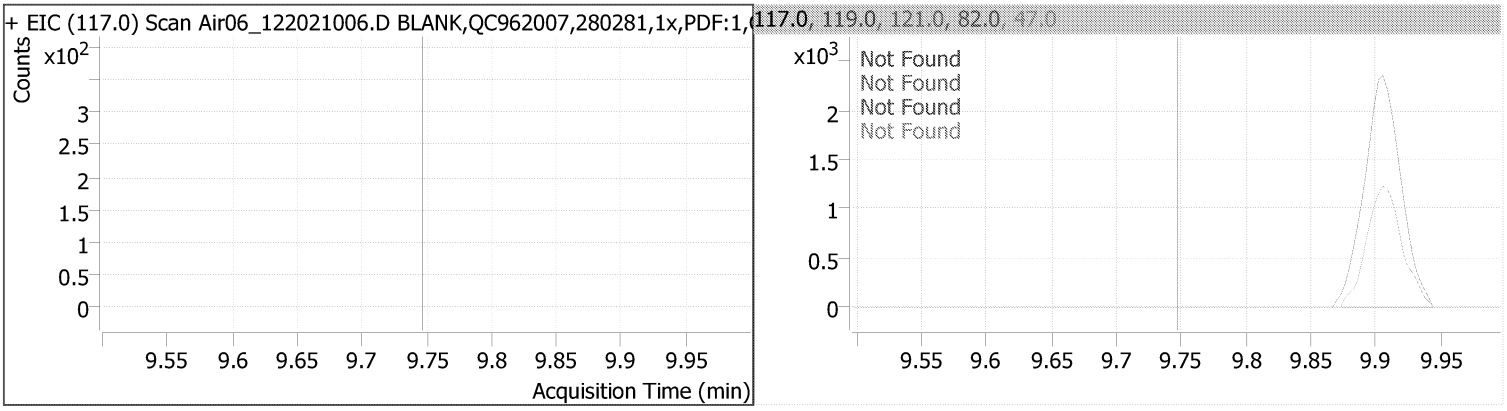
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1-Trichloroethane	N.D.	9.20	99.0	65.0	61.0	50.4	117.0	11.3



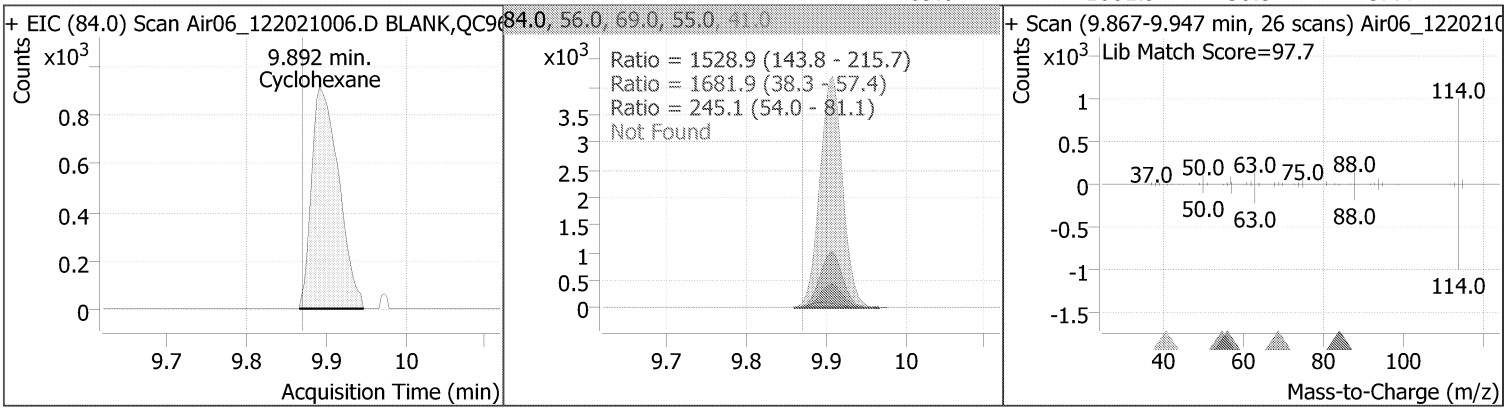
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.0066	9.61	0.00	728	50.0	12.8	20.6	30.9
					77.0	18.6	18.9	28.4



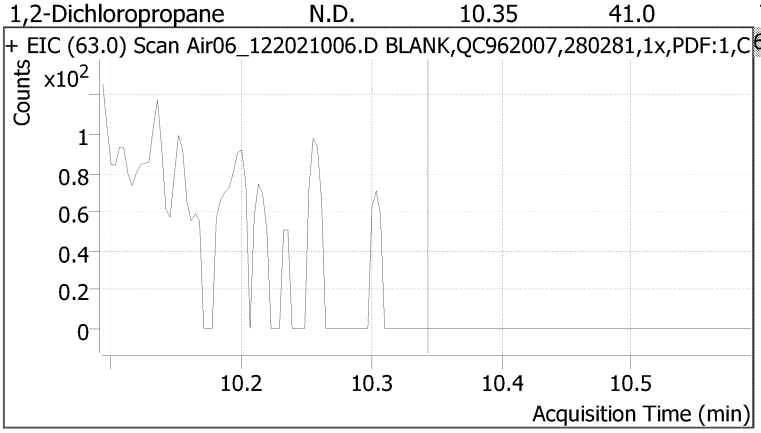
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Carbon Tetrachloride	N.D.	9.75	119.0	96.0	121.0	30.8	47.0	25.7

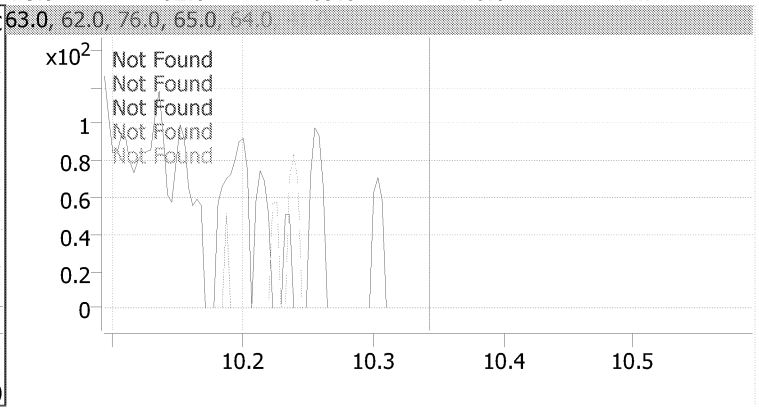


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.0476	9.89	0.02	2181	56.0	1528.9	143.8	215.7
					41.0		86.9	130.3
					55.0	245.1	54.0	81.1
					69.0	1681.9	38.3	57.4

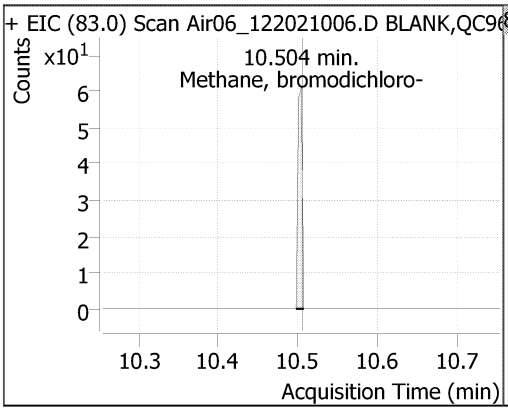


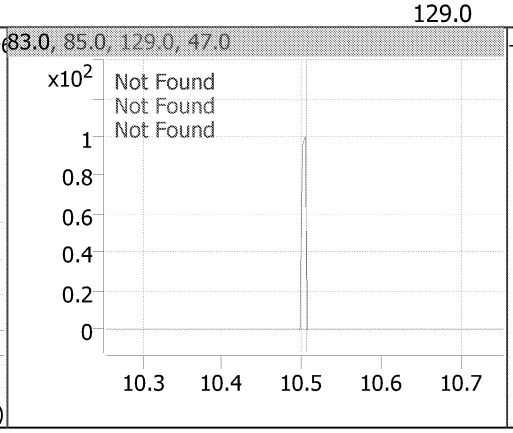
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,2-Dichloropropane	N.D.	10.35	41.0	75.9	62.0	69.6	76.0	44.7

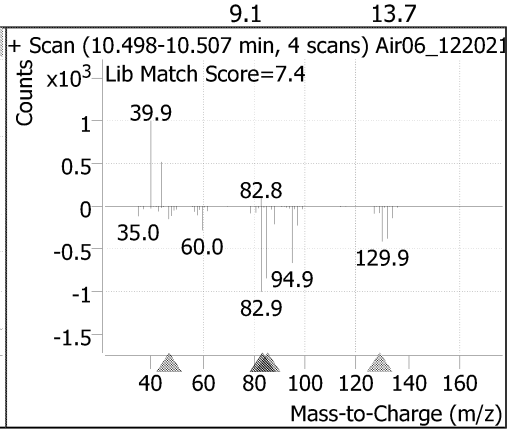




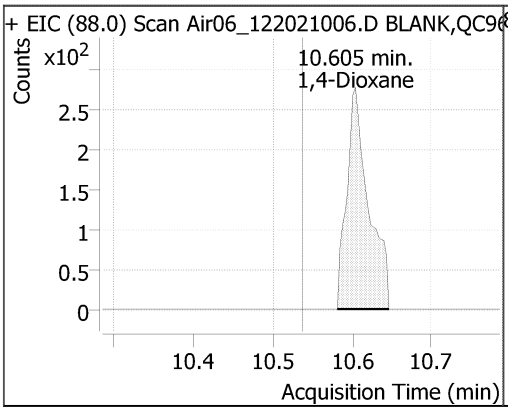
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	0.0002	10.50	0.00	23	85.0		50.9	76.3
					47.0		19.9	29.9
					129.0		9.1	13.7

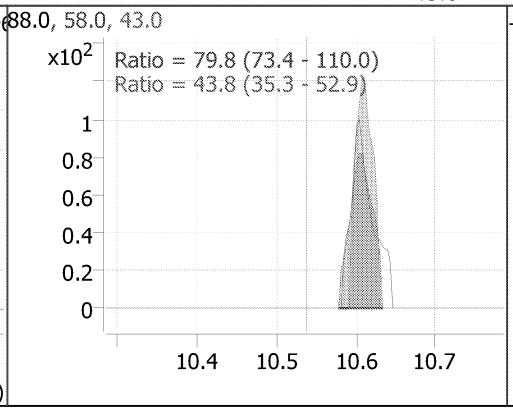


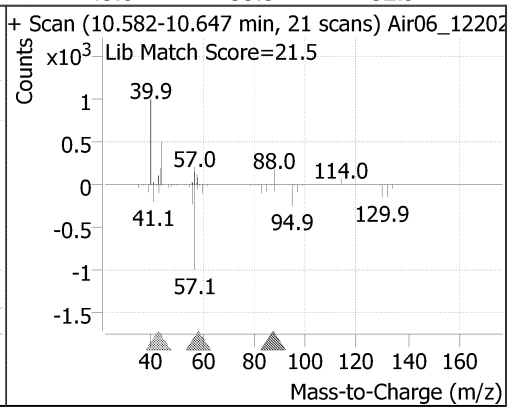




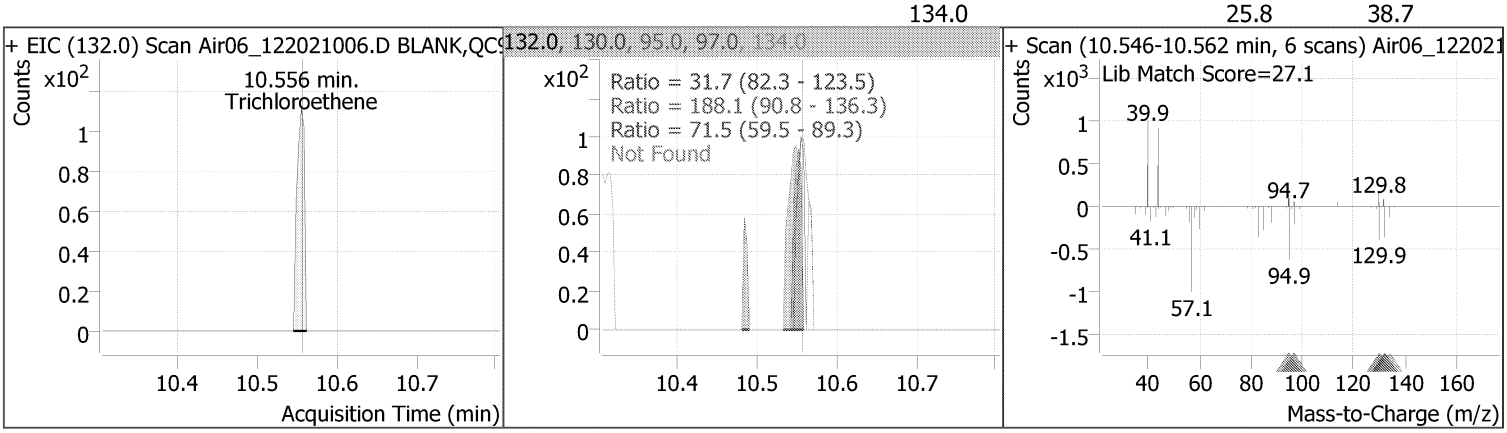
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.0223	10.60	0.06	534	58.0	79.8	73.4	110.0
					43.0	43.8	35.3	52.9



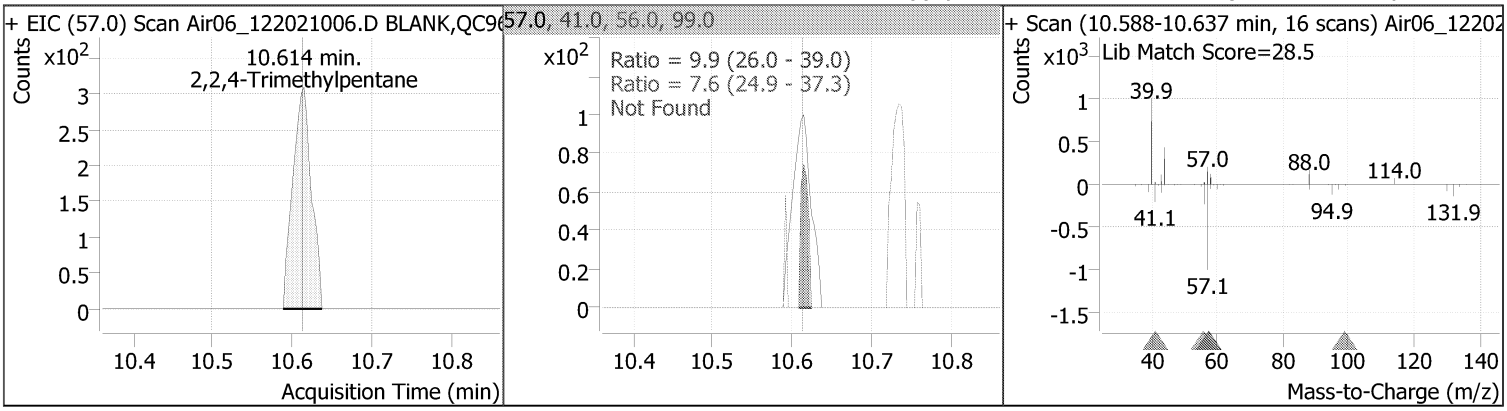




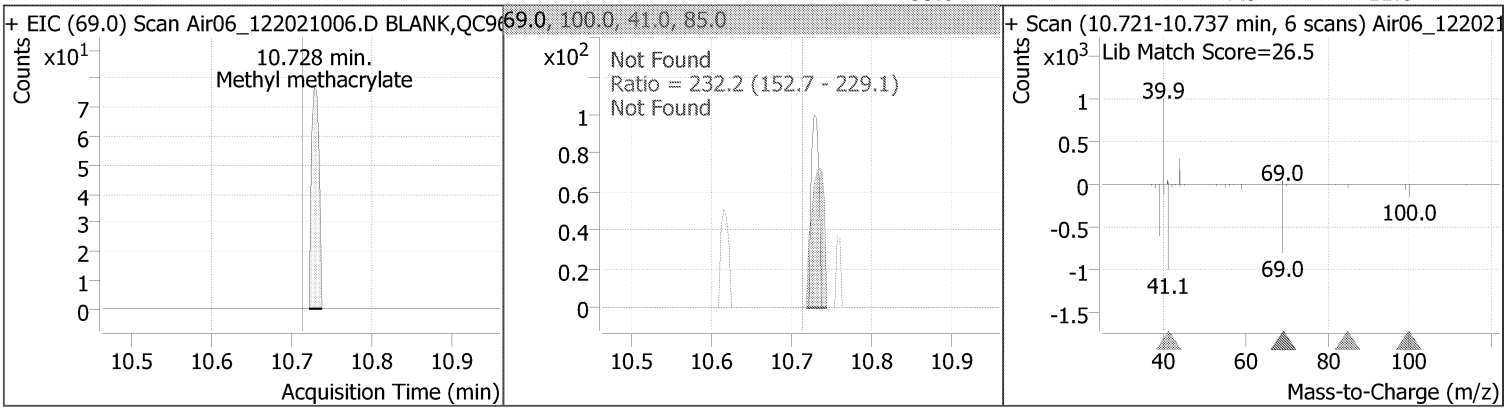
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.0014	10.56	0.00	72	95.0	188.1	90.8	136.3
					130.0	31.7	82.3	123.5
					97.0	71.5	59.5	89.3
					134.0		25.8	38.7



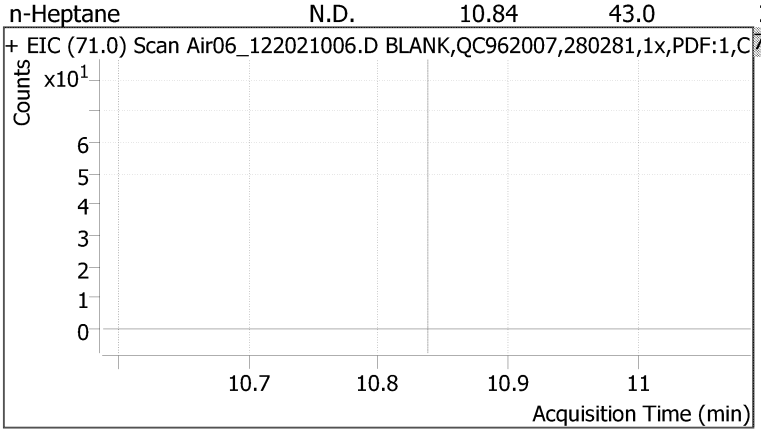
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.0021	10.61	0.00	500	41.0	9.9	26.0	39.0
					56.0	7.6	24.9	37.3
					99.0		3.2	4.8

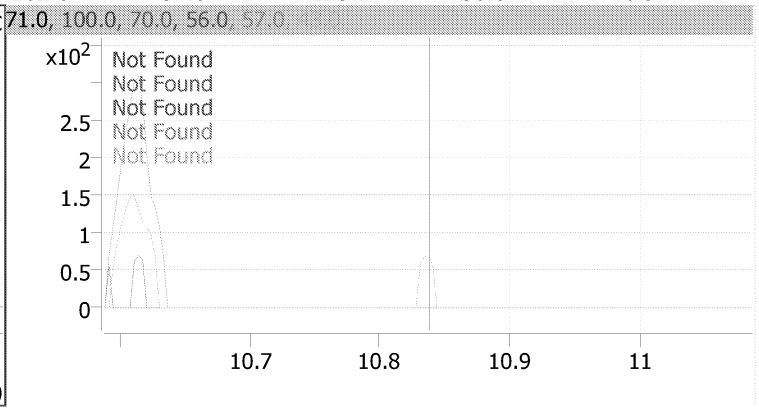


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	0.0013	10.73	0.01	51	41.0	232.2	152.7	229.1
					100.0		29.1	43.6
					85.0		7.9	11.8

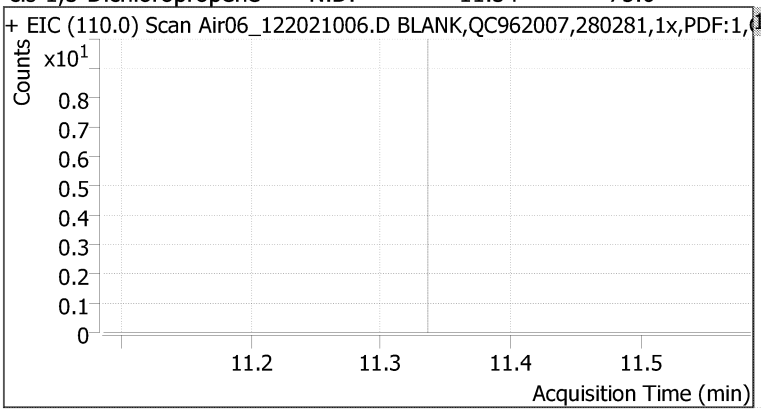


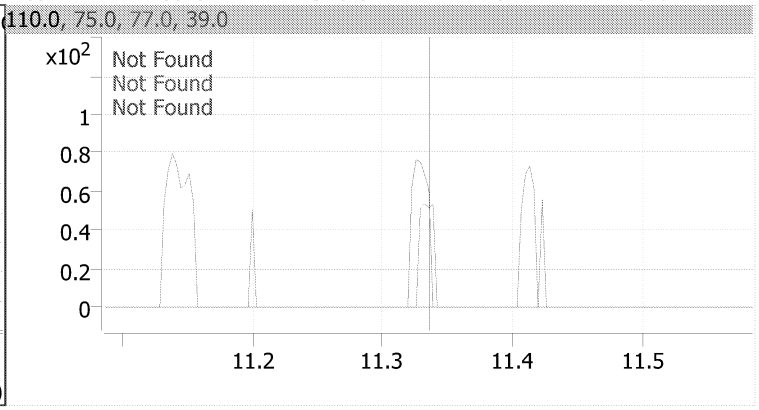
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
n-Heptane	N.D.	10.84	43.0	262.0	57.0	123.7	56.0	76.9



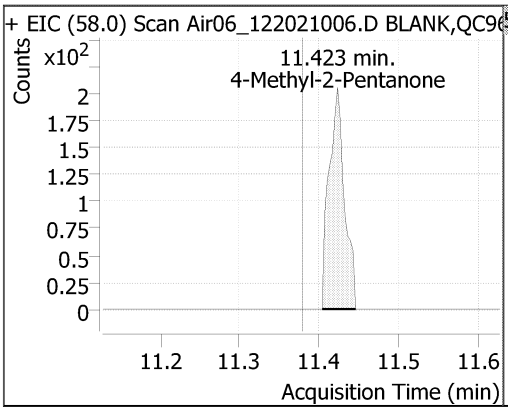


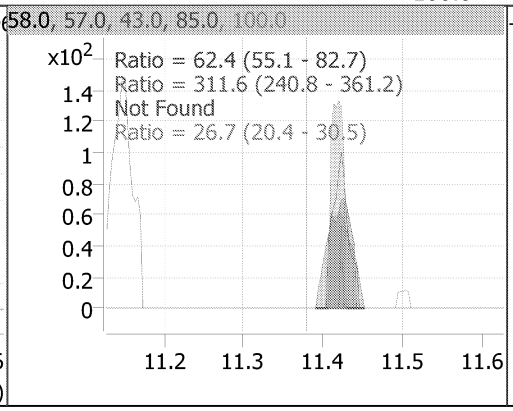
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
cis-1,3-Dichloropropene	N.D.	11.34	75.0	469.2	39.0	370.5	77.0	149.6

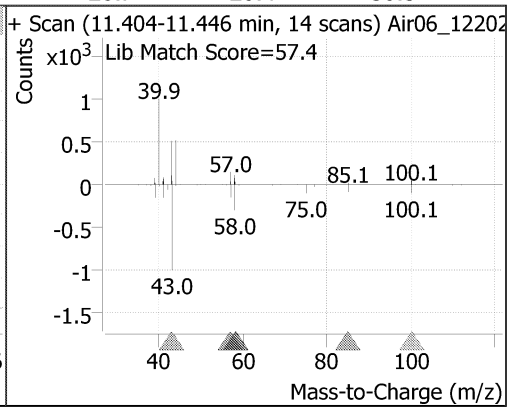




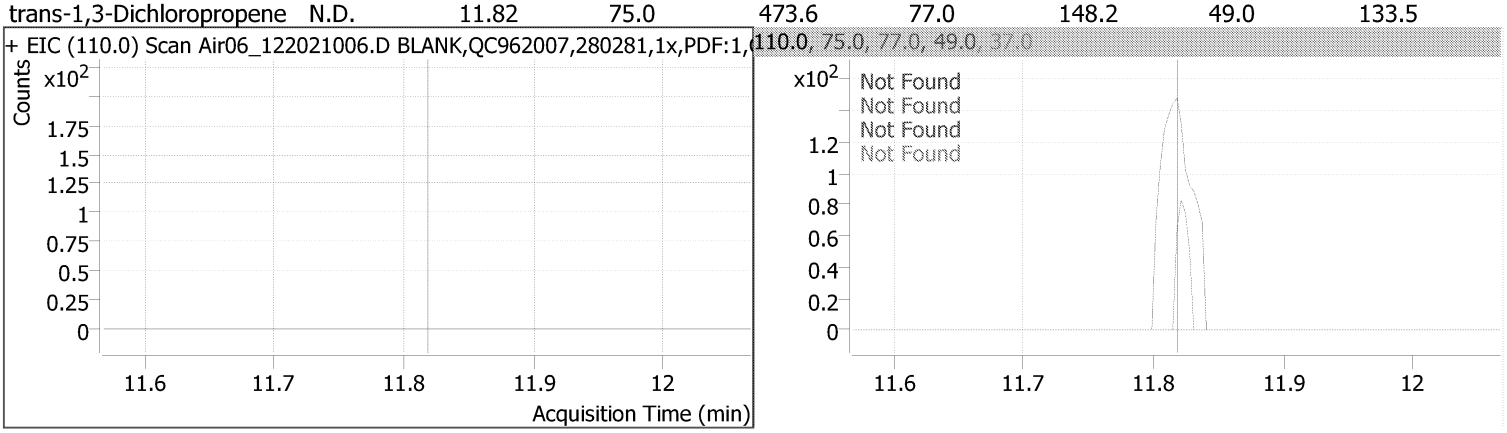
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.0065	11.42	0.04	280	43.0	311.6	240.8	361.2
					57.0	62.4	55.1	82.7
					85.0		30.5	45.8
					100.0	26.7	20.4	30.5



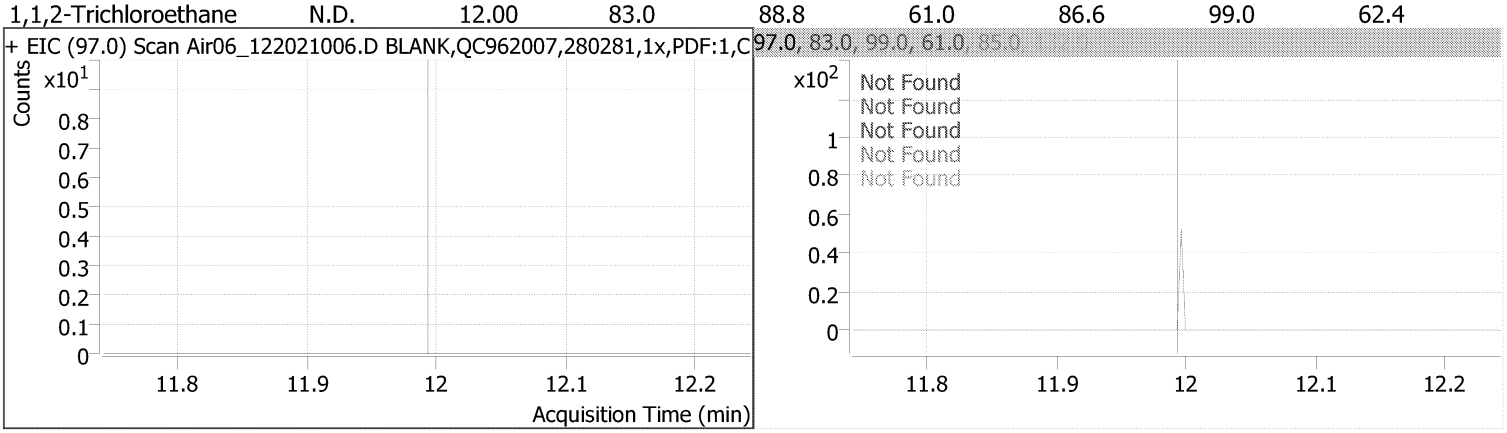




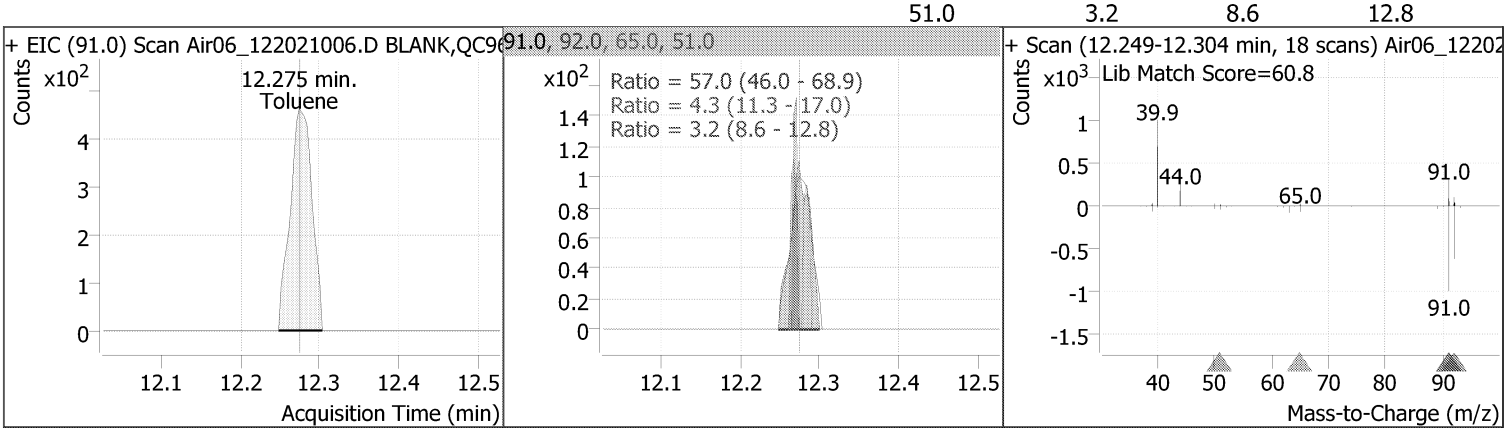
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
trans-1,3-Dichloropropene	N.D.	11.82	75.0	473.6	77.0	148.2	49.0	133.5



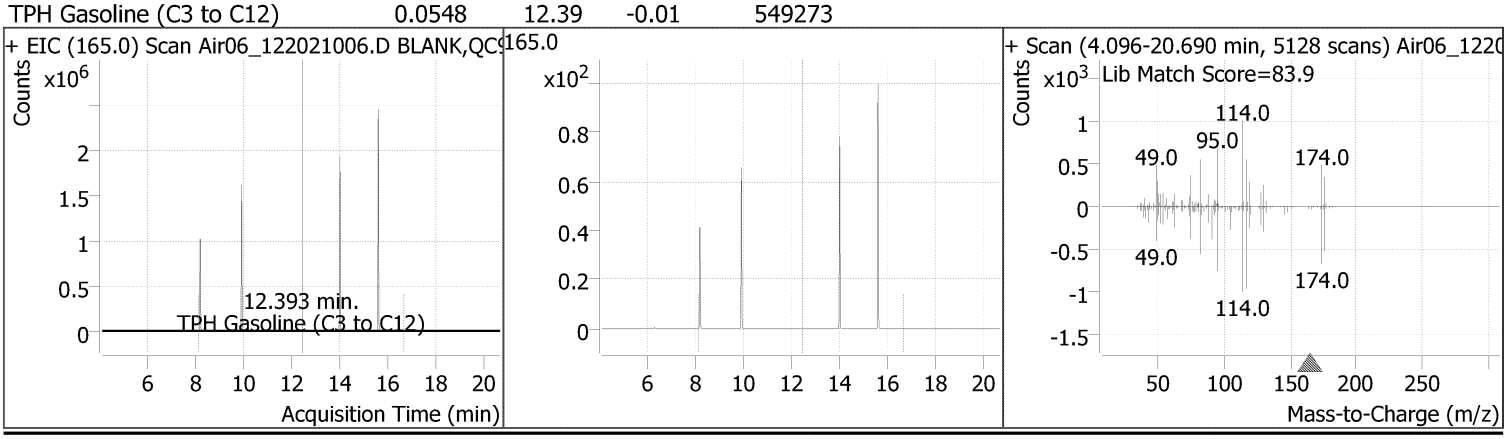
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,2-Trichloroethane	N.D.	12.00	83.0	88.8	61.0	86.6	99.0	62.4



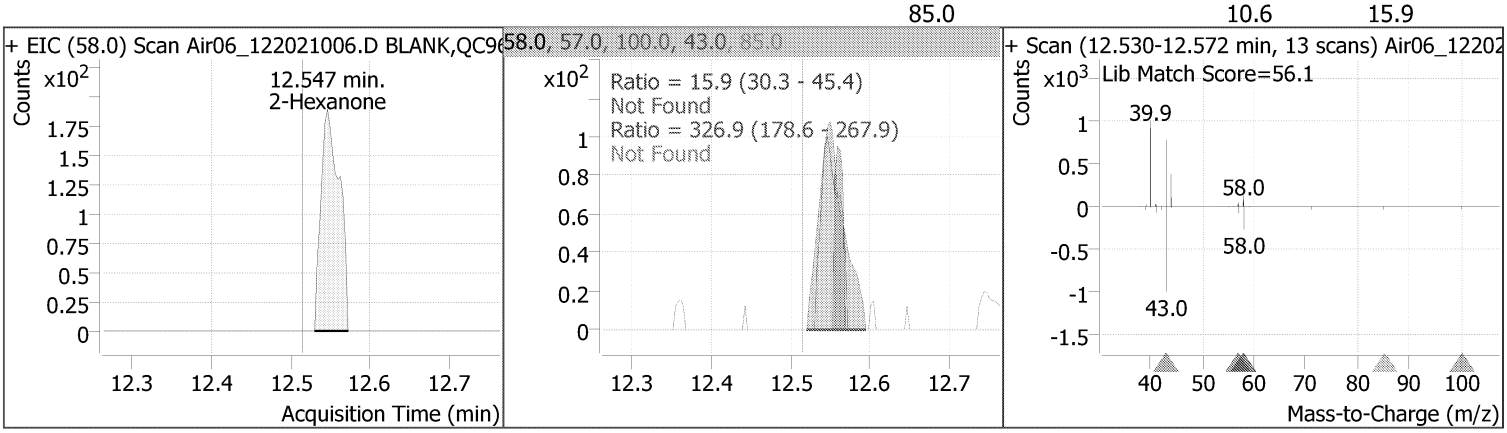
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.0063	12.27	-0.01	885	92.0	57.0	46.0	68.9
					65.0	4.3	11.3	17.0
					51.0	3.2	8.6	12.8



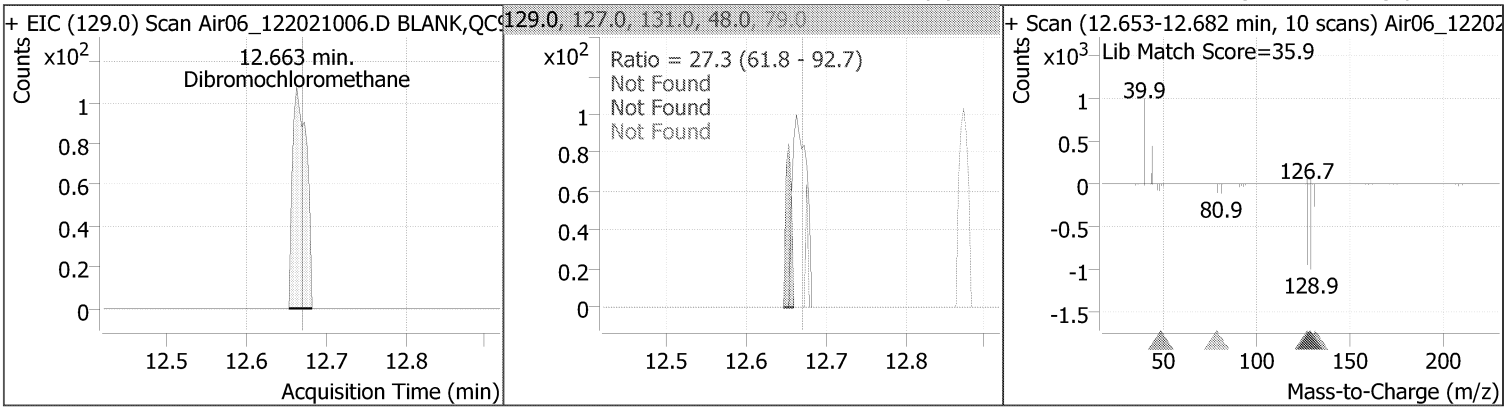
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	0.0548	12.39	-0.01	549273				



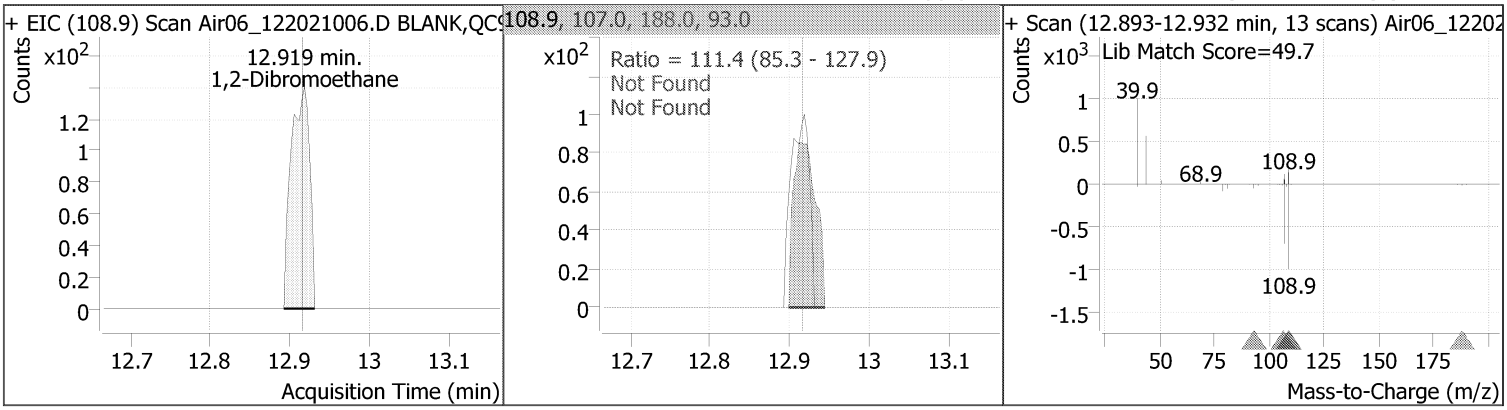
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.0057	12.55	0.03	306	43.0	326.9	178.6	267.9
					57.0	15.9	30.3	45.4
					100.0		11.5	17.3
					85.0		10.6	15.9



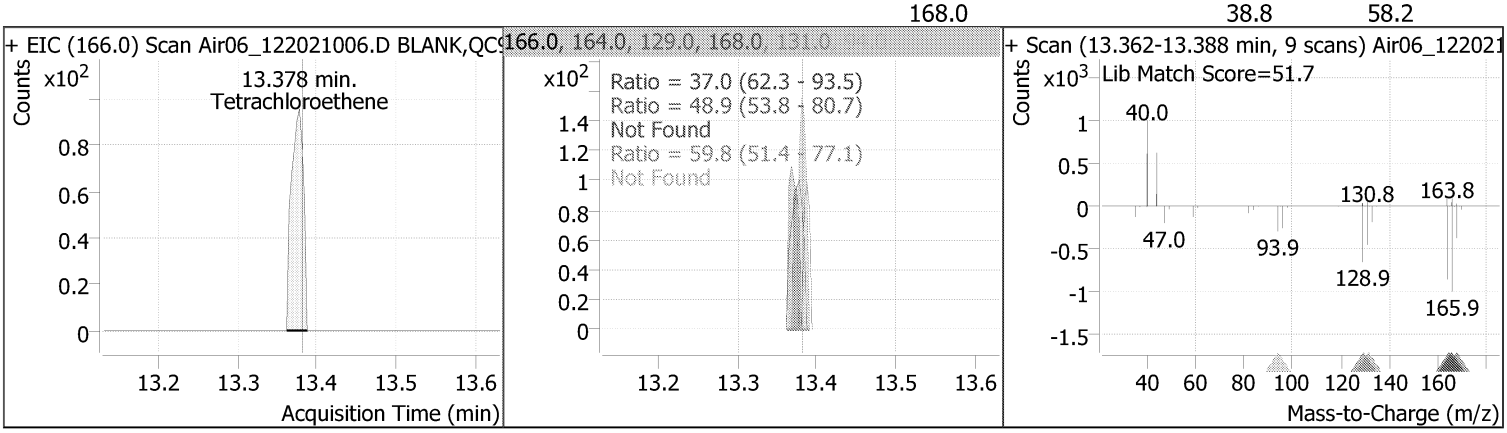
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.0013	12.66	-0.01	131	127.0	27.3	61.8	92.7
					131.0		19.2	28.8
					79.0		16.0	24.0
					48.0		15.7	23.6



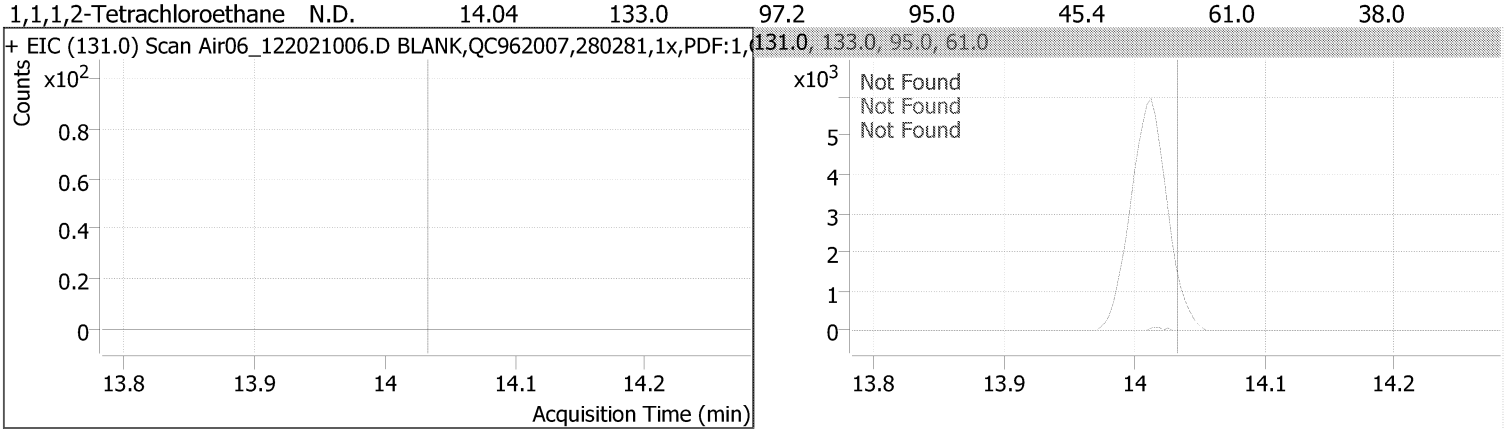
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.0030	12.92	0.00	226	107.0	111.4	85.3	127.9
					93.0		6.2	9.3
					188.0		3.7	5.5



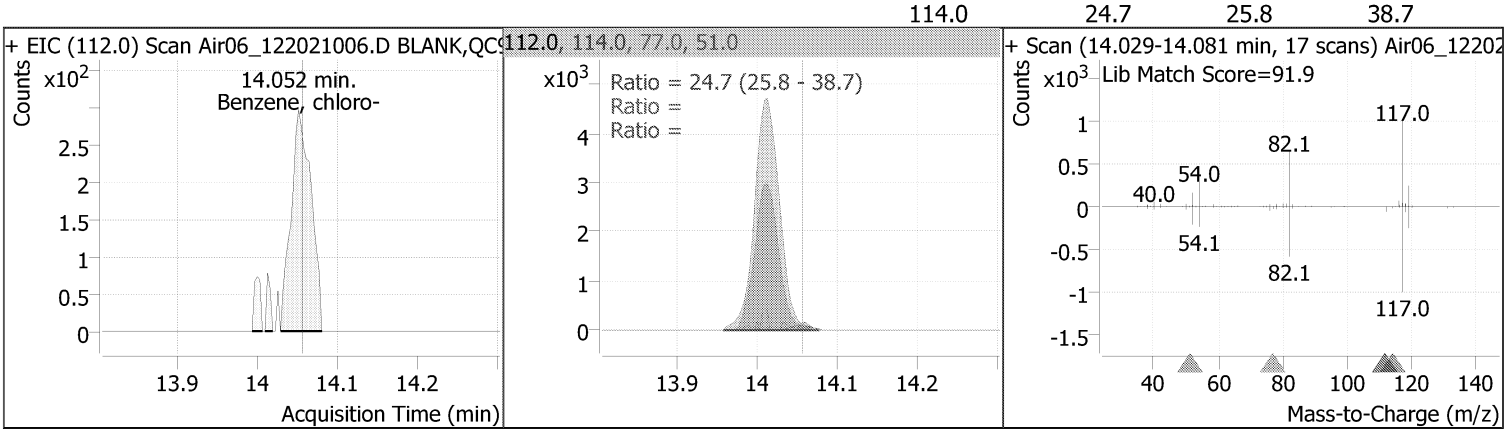
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.0012	13.38	-0.01	102	164.0	37.0	62.3	93.5
					129.0	48.9	53.8	80.7
					131.0	59.8	51.4	77.1
					94.0		38.9	58.4
					168.0		38.8	58.2



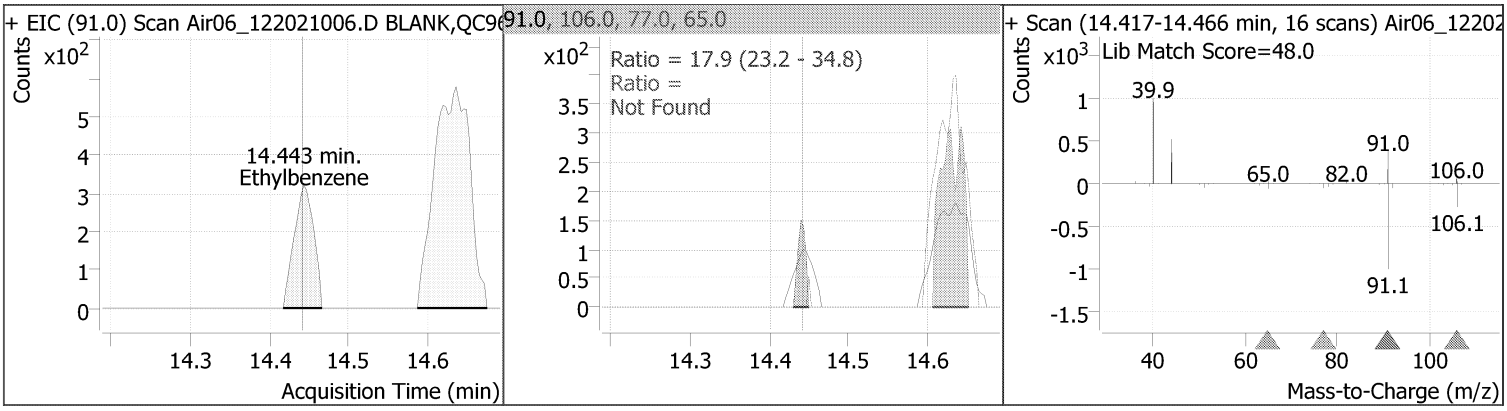
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1,2-Tetrachloroethane	N.D.	14.04	133.0	97.2	95.0	45.4	61.0	38.0



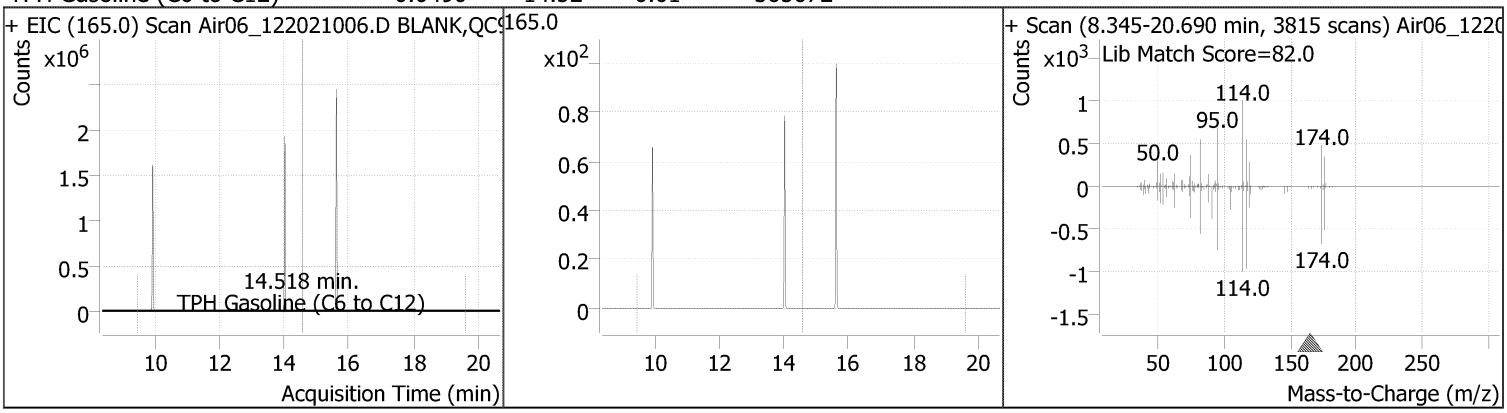
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0052	14.05	-0.01	521	77.0		53.0	79.5
					51.0		28.8	43.2
					114.0	24.7	25.8	38.7



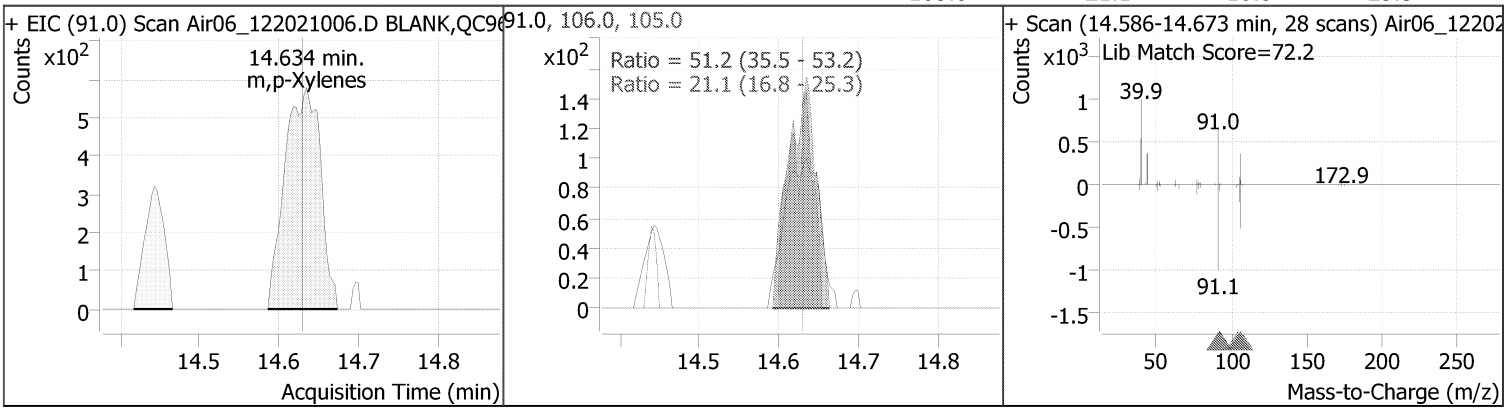
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.0034	14.44	0.00	545	106.0	17.9	23.2	34.8
					65.0		8.8	13.2
					77.0		7.6	11.4



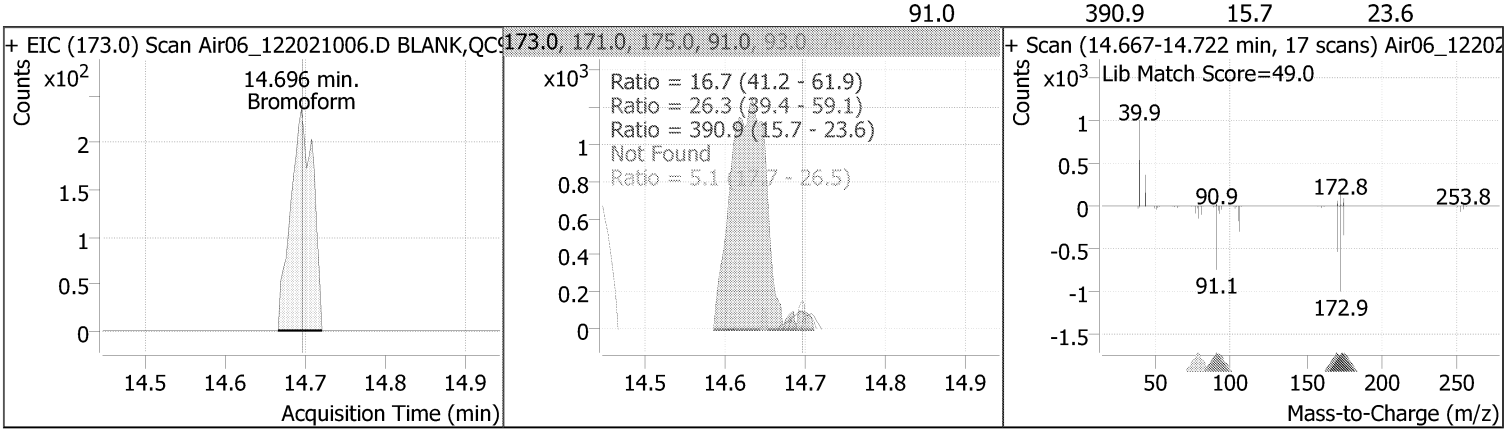
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	0.0490	14.52	-0.01	365672				



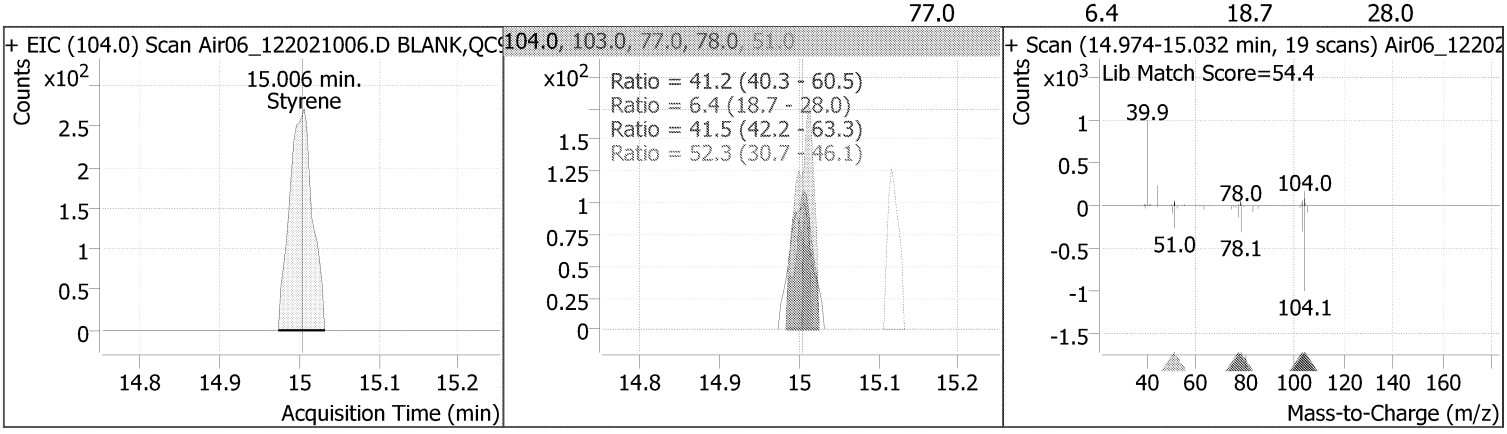
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	0.0131	14.63	0.00	1788	106.0	51.2	35.5	53.2
					105.0	21.1	16.8	25.3



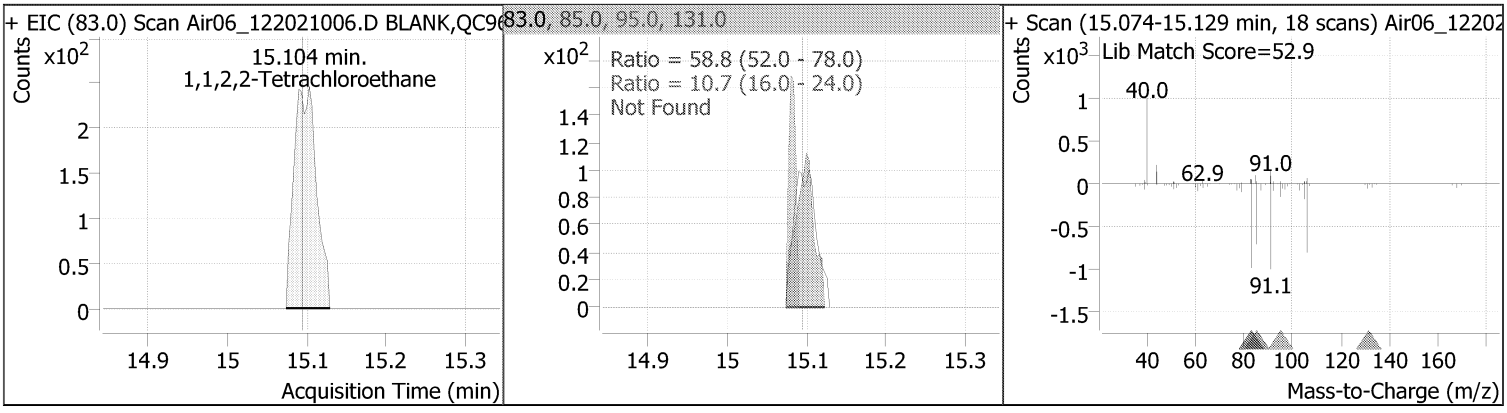
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.0042	14.70	-0.01	458	171.0	16.7	41.2	61.9
					175.0	26.3	39.4	59.1
					79.0	5.1	17.7	26.5
					93.0		16.1	24.1
					91.0	390.9	15.7	23.6



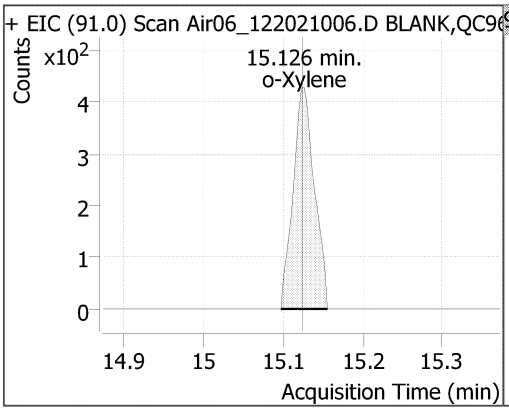
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	0.0059	15.01	0.00	542	78.0	41.5	42.2	63.3
					103.0	41.2	40.3	60.5
					51.0	52.3	30.7	46.1
					77.0	6.4	18.7	28.0

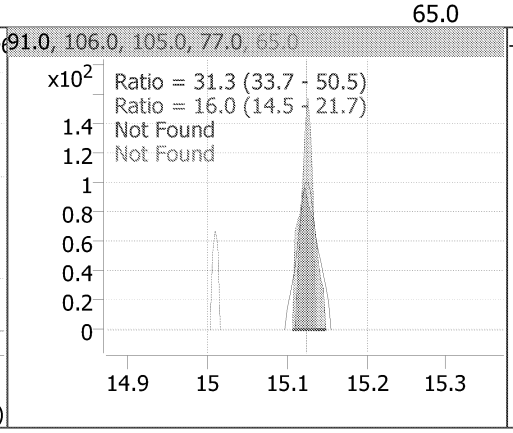


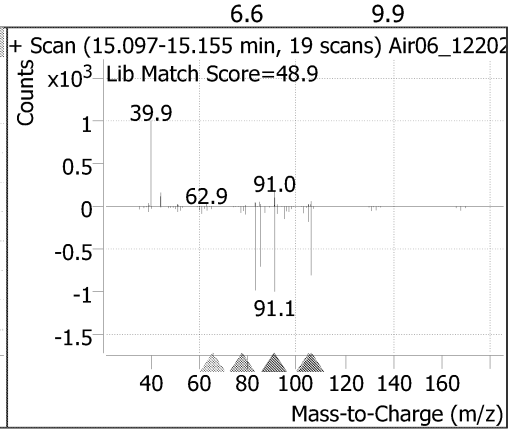
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.0050	15.10	0.00	488	85.0	58.8	52.0	78.0
					95.0	10.7	16.0	24.0
					131.0		8.4	12.6



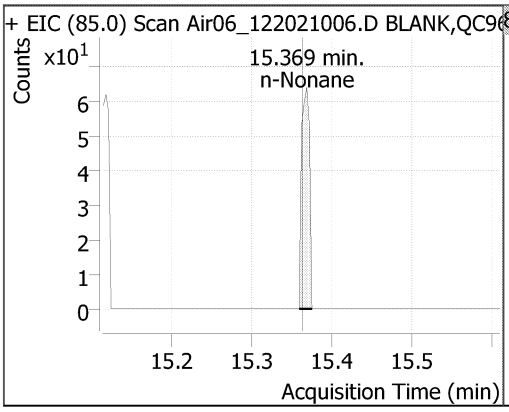
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.0056	15.13	0.00	796	106.0	31.3	33.7	50.5
					105.0	16.0	14.5	21.7
					77.0		10.6	15.9
					65.0		6.6	9.9

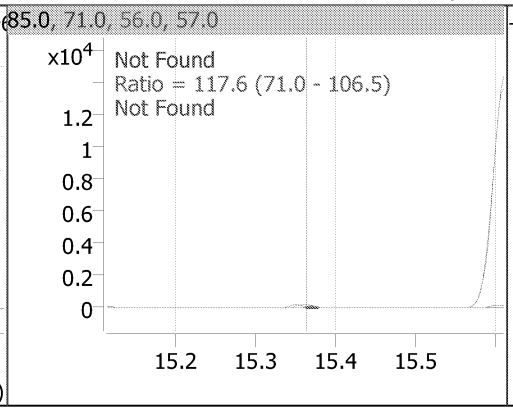


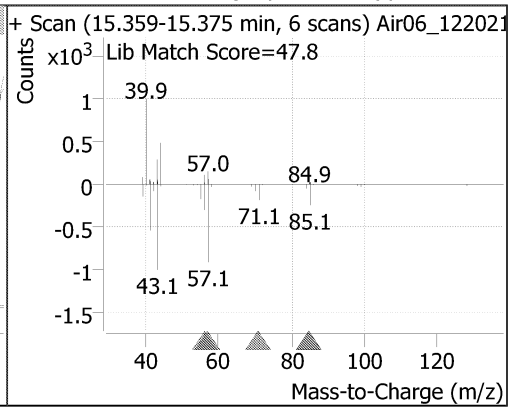




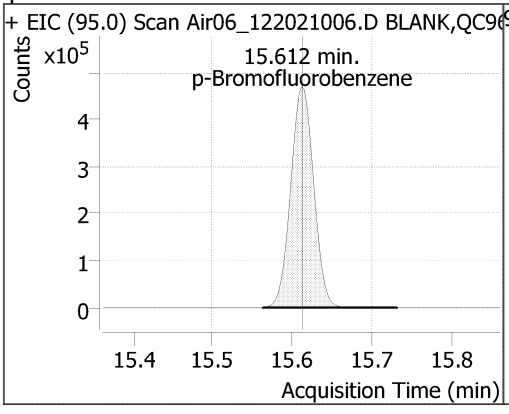
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	0.0015	15.37	0.00	45	57.0		276.3	414.5
					56.0	117.6	71.0	106.5
					71.0		57.6	86.4

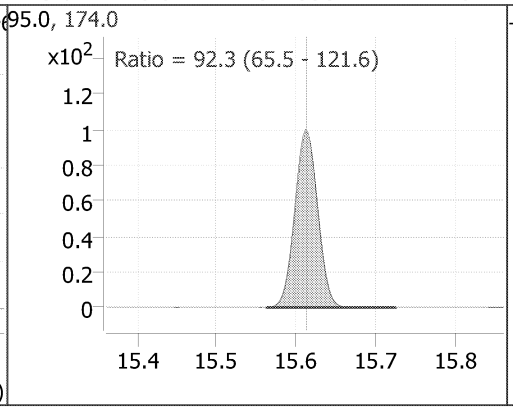


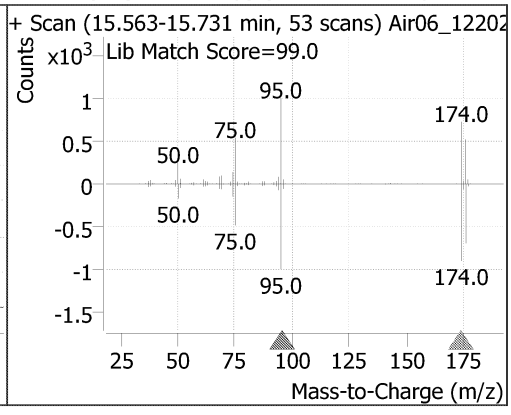




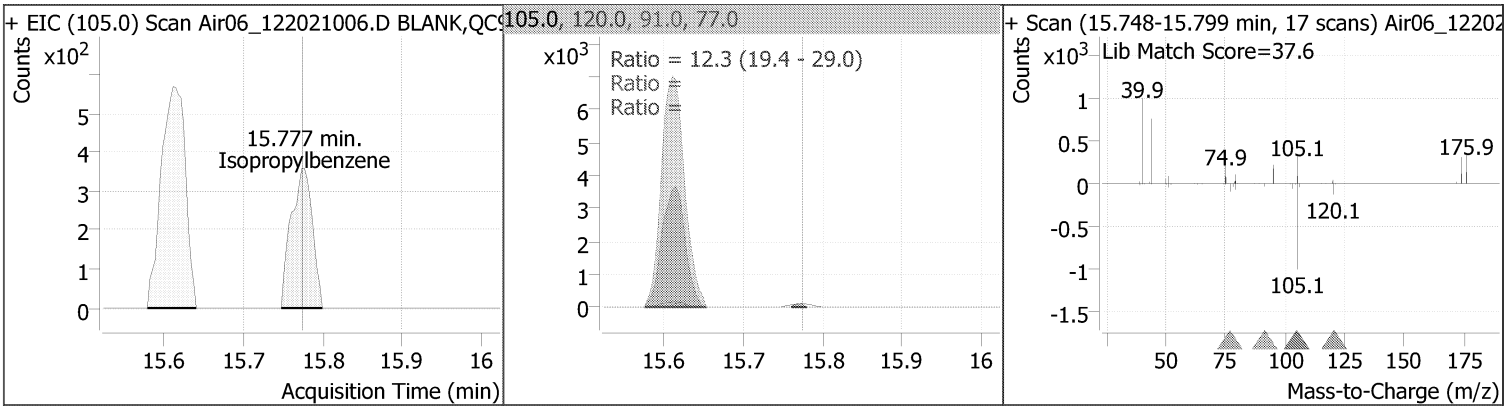
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.3981	15.61	-0.01	941993	174.0	92.3	65.5	121.6



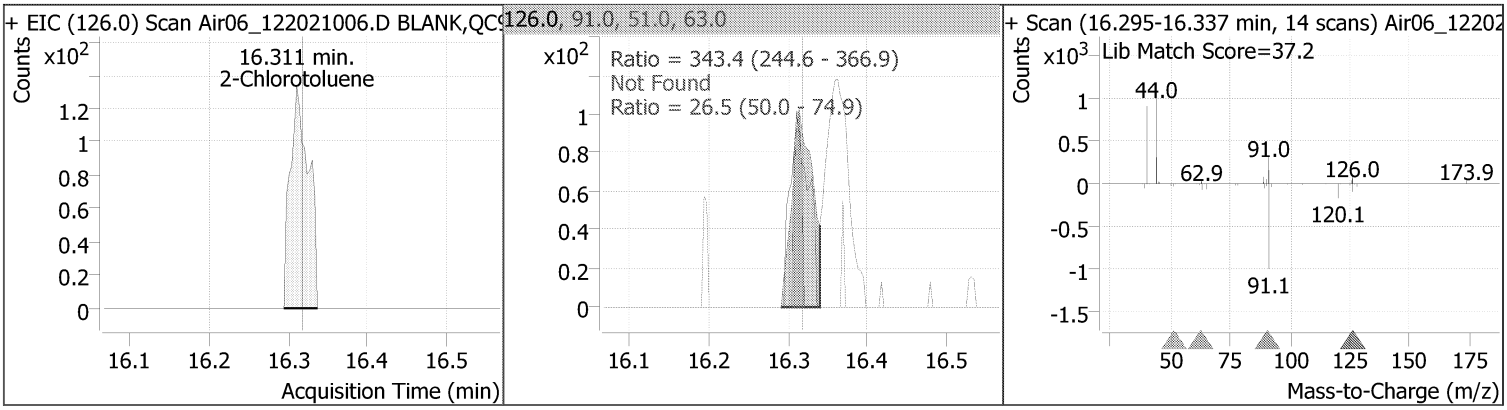




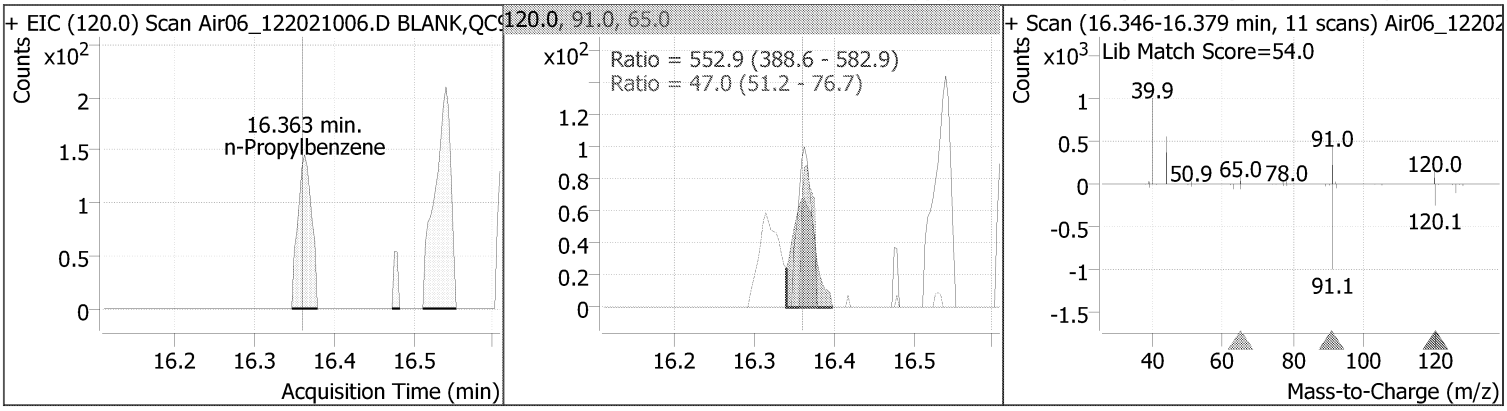
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.0035	15.78	0.00	666	120.0	12.3	19.4	29.0
					77.0		14.4	21.6
					91.0		5.5	8.3



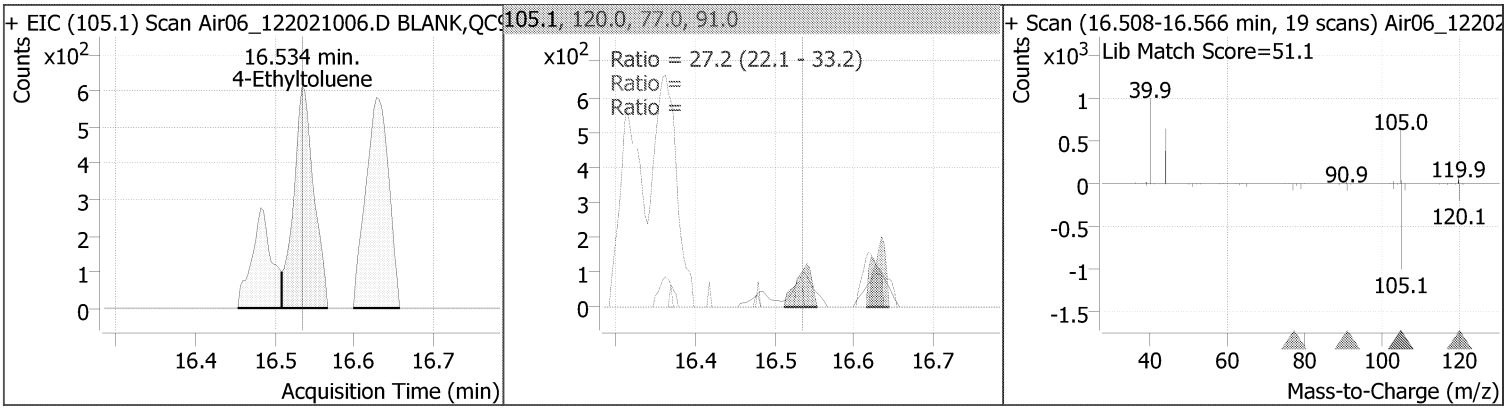
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	0.0050	16.31	-0.01	216	91.0	343.4	244.6	366.9
					63.0	26.5	50.0	74.9
					51.0		17.6	26.3



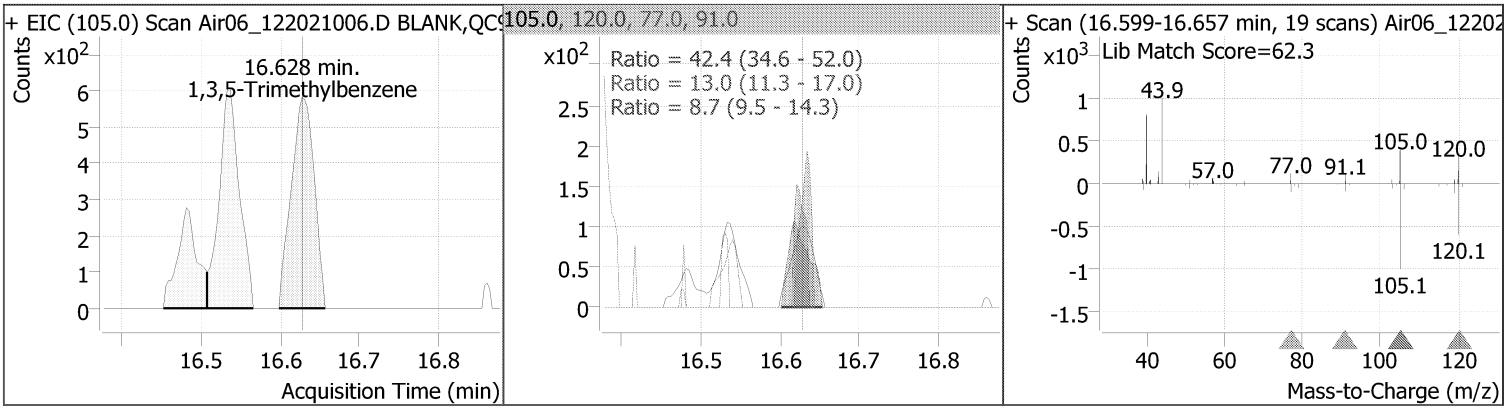
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.0036	16.36	0.00	175	91.0	552.9	388.6	582.9
					65.0	47.0	51.2	76.7



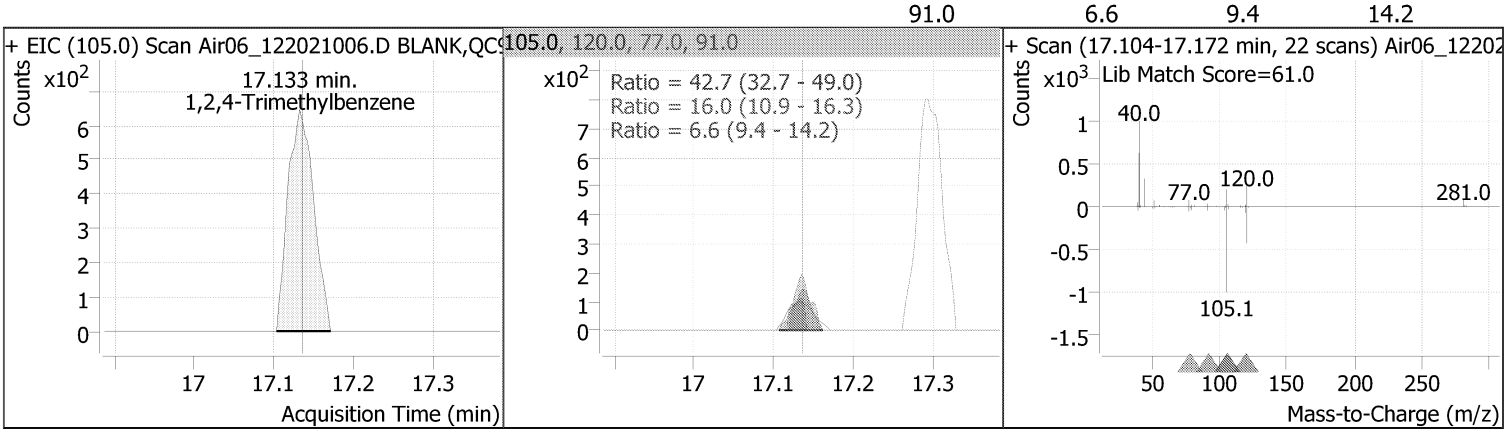
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.0059	16.53	-0.01	1077	120.0	27.2	22.1	33.2
					77.0		10.3	15.5
					91.0		9.5	14.3



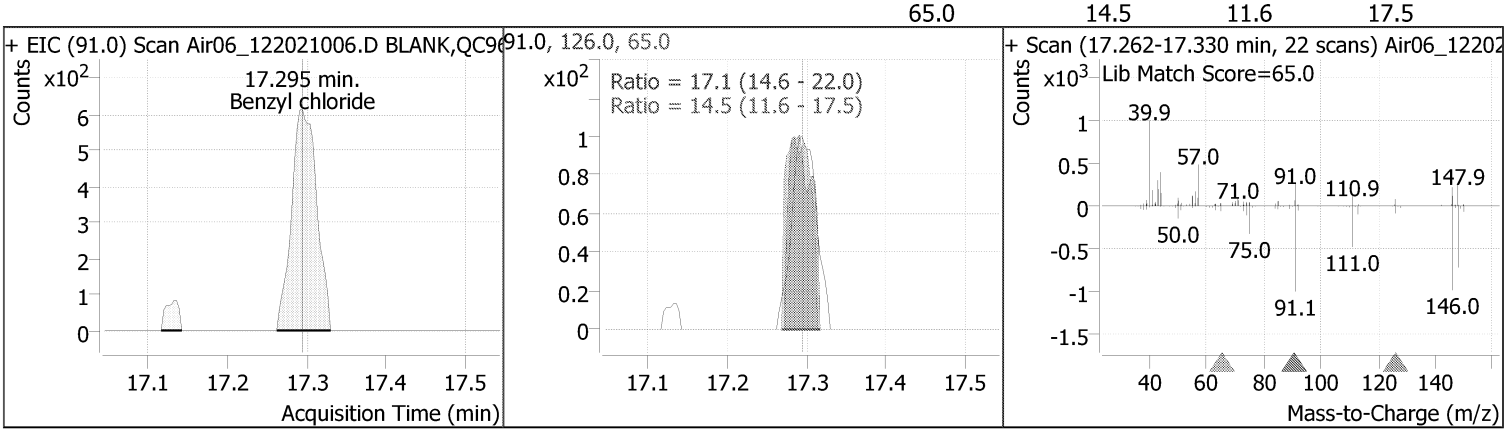
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.0070	16.63	-0.01	1167	120.0	42.4	34.6	52.0
					77.0	13.0	11.3	17.0
					91.0	8.7	9.5	14.3



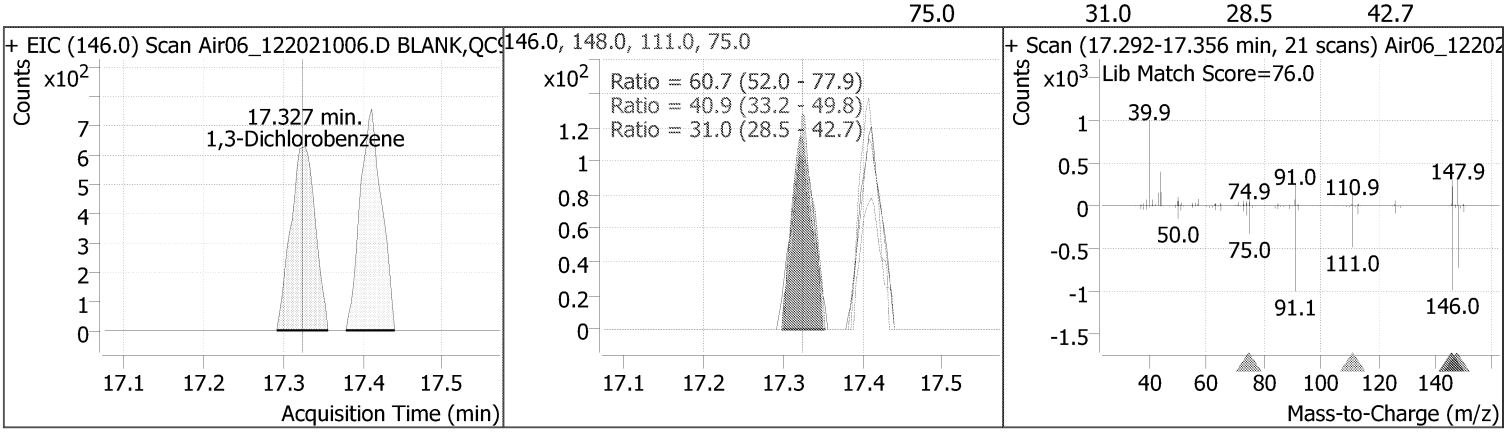
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	0.0093	17.13	-0.01	1449	120.0	42.7	32.7	49.0
					77.0	16.0	10.9	16.3
					91.0	6.6	9.4	14.2



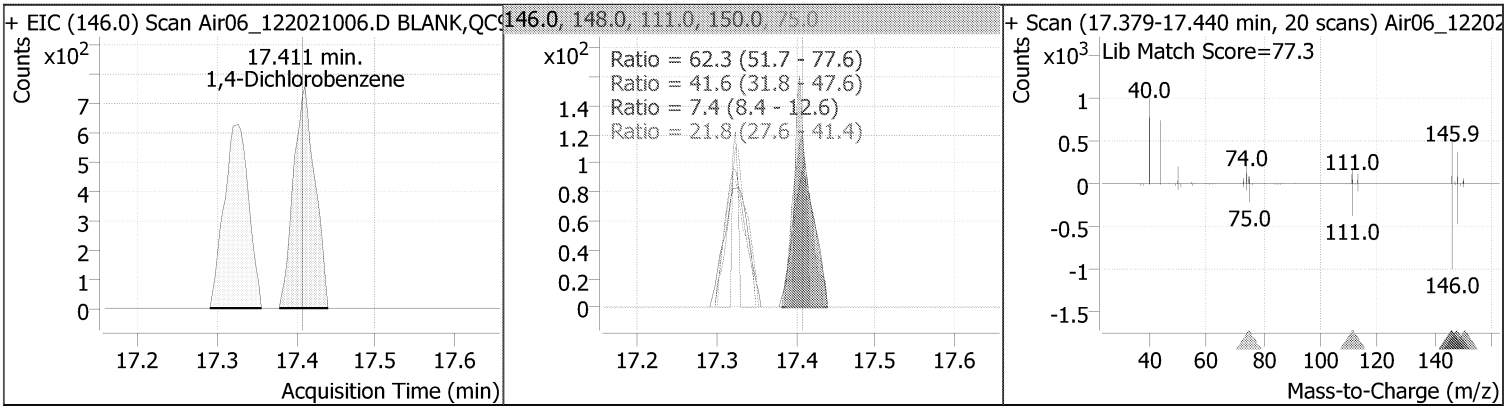
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.0101	17.29	-0.01	1358	126.0	17.1	14.6	22.0
					65.0	14.5	11.6	17.5



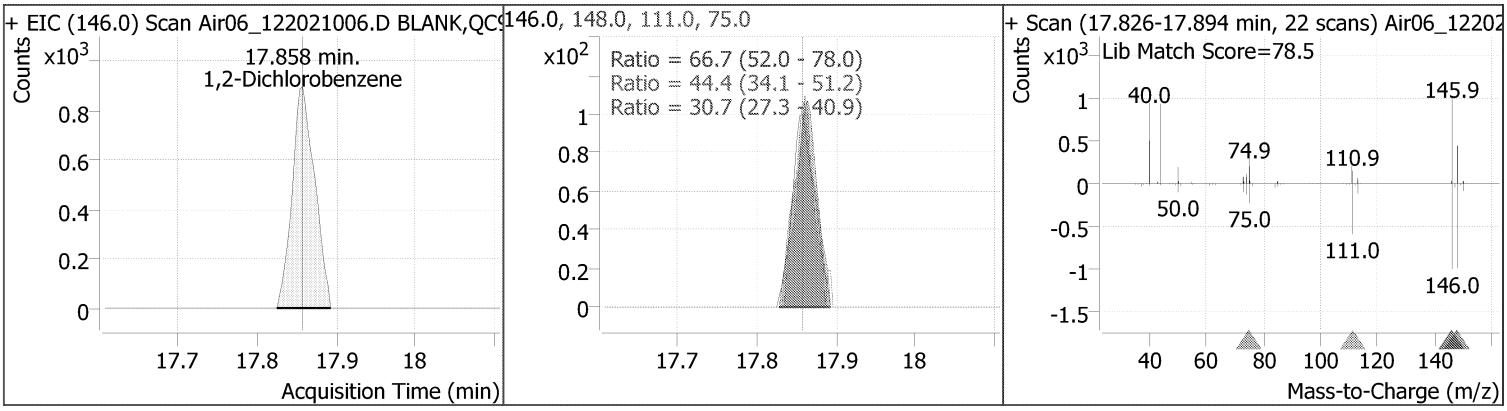
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.0125	17.33	0.00	1347	148.0	60.7	52.0	77.9
					111.0	40.9	33.2	49.8
					75.0	31.0	28.5	42.7



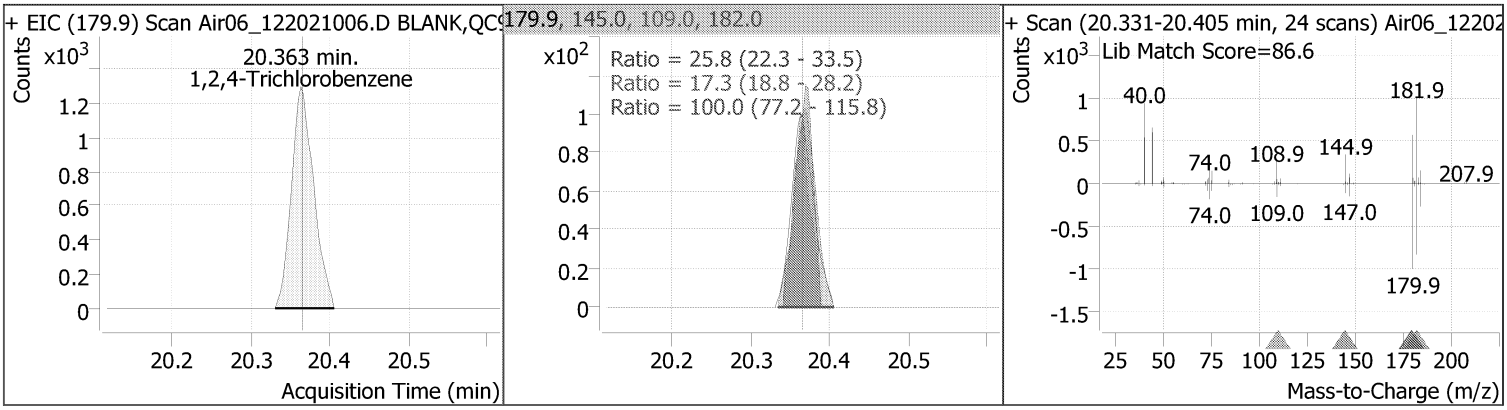
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.0133	17.41	0.00	1415	148.0	62.3	51.7	77.6
					111.0	41.6	31.8	47.6
					75.0	21.8	27.6	41.4
					150.0	7.4	8.4	12.6



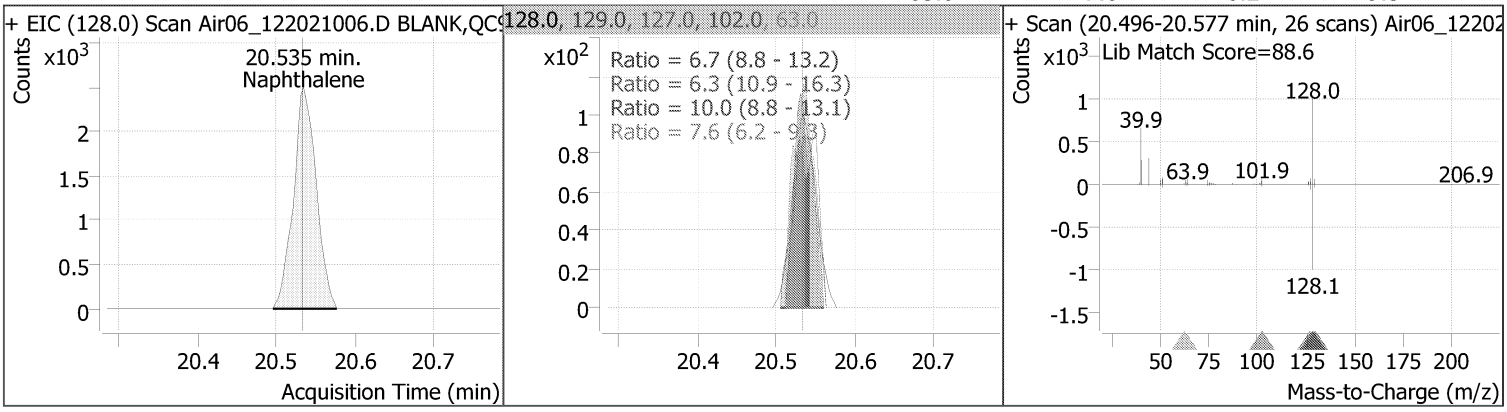
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.0170	17.86	-0.01	1768	148.0	66.7	52.0	78.0
					111.0	44.4	34.1	51.2
					75.0	30.7	27.3	40.9



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.0343	20.36	-0.01	2535	182.0	100.0	77.2	115.8
					145.0	25.8	22.3	33.5
					109.0	17.3	18.8	28.2

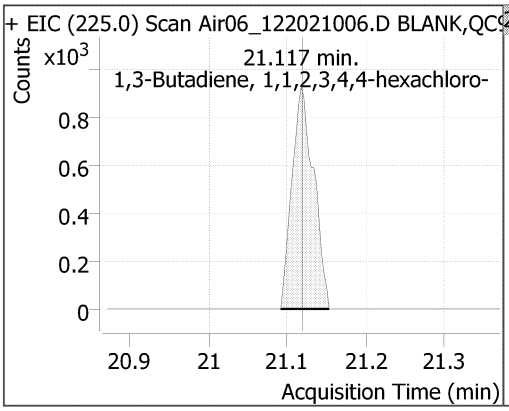


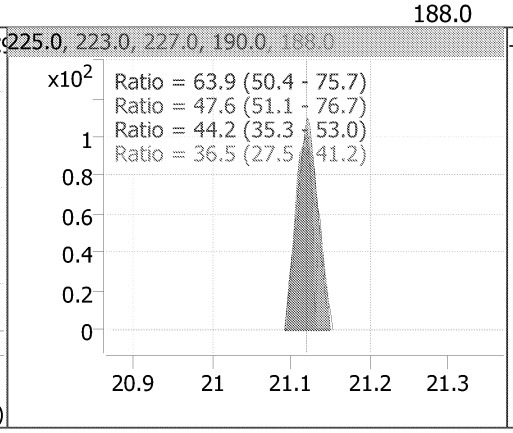
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	0.0437	20.53	-0.01	5014	127.0	6.3	10.9	16.3
					129.0	6.7	8.8	13.2
					102.0	10.0	8.8	13.1
					63.0	7.6	6.2	9.3

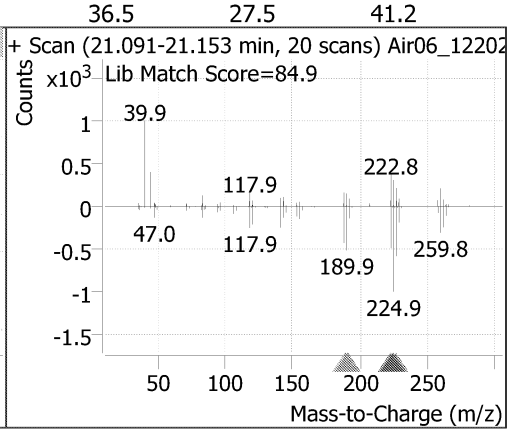


Quantitation Results Report (Not Reviewed)

Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.0146	21.12	-0.01	1770	227.0	47.6	51.1	76.7
					223.0	63.9	50.4	75.7
					190.0	44.2	35.3	53.0
					188.0	36.5	27.5	41.2







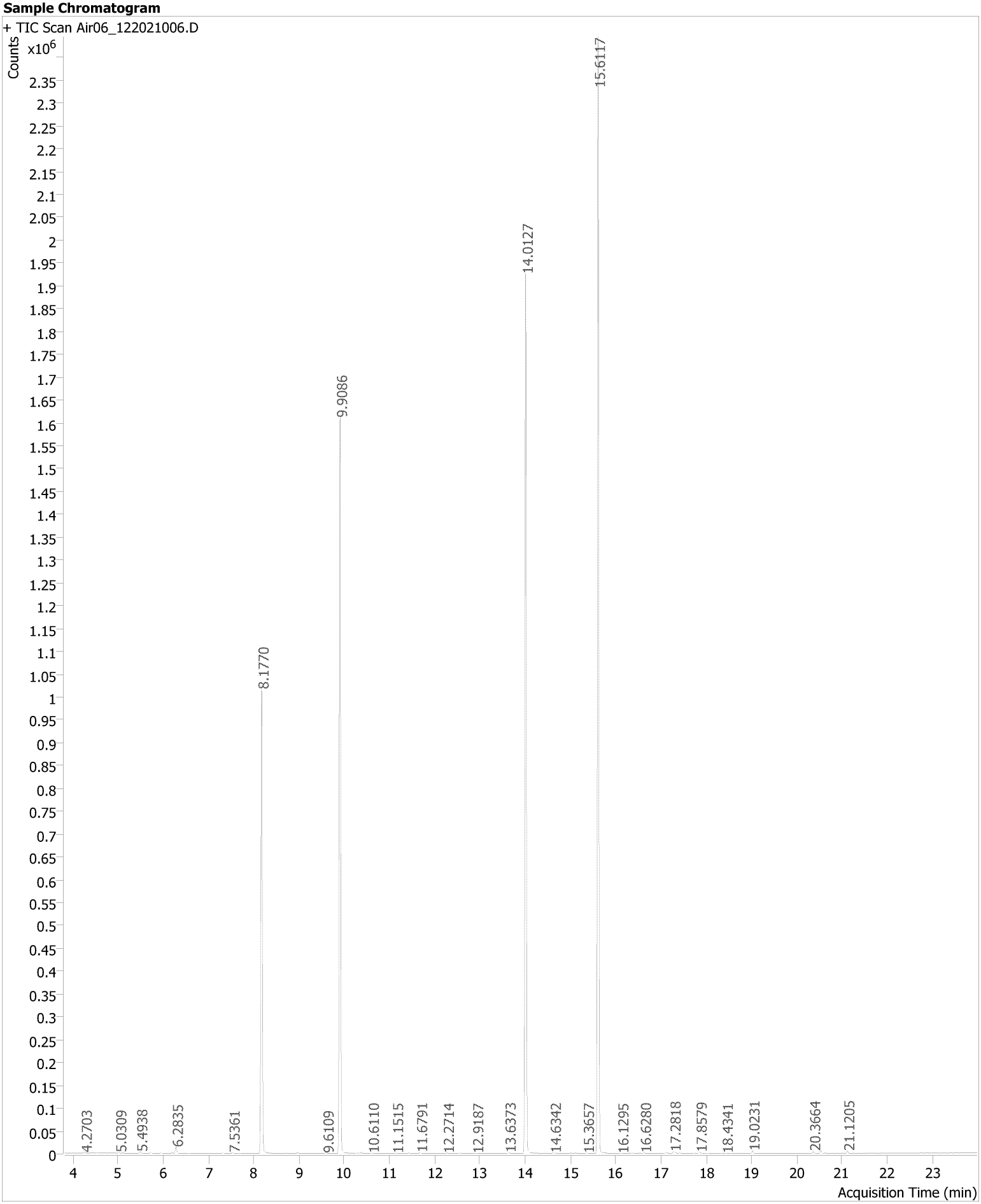
Library Search Results - NonTarget Hits with Details

Agilent Technologies

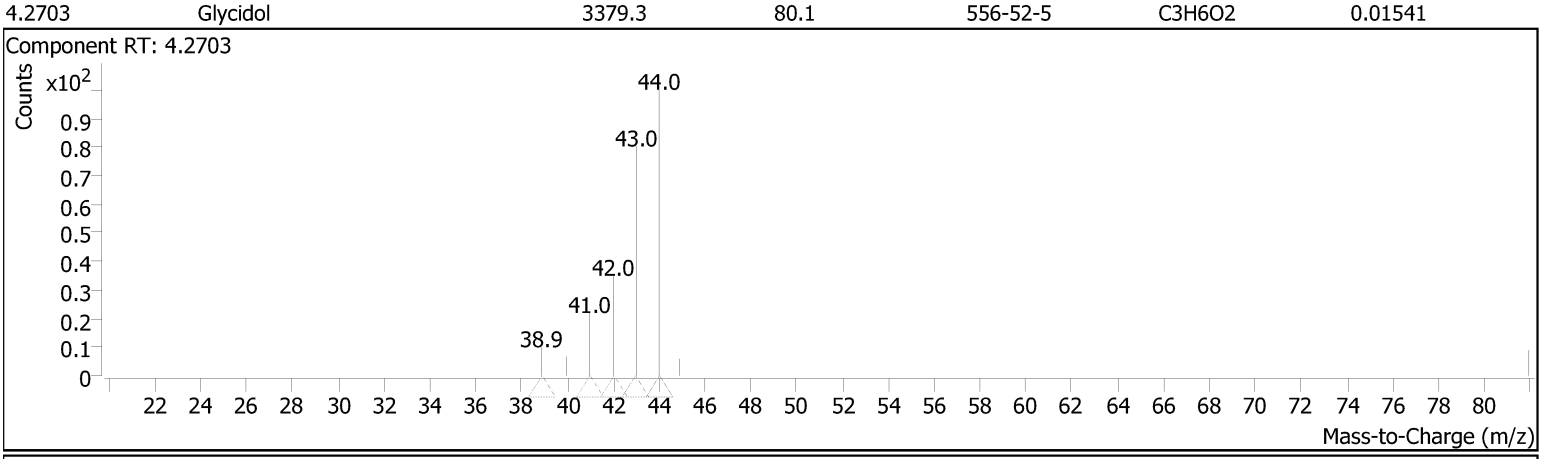
Batch Path	D:\MassHunter\GCMS\1\data\2021\122021		
Analysis File Name	122021_1.uaf		
Analyst Name	003AIRMS06	**Analysis Time**	1/4/2022 11:18:48 AM
File Name	Air06_122021006.D	**Path Name**	D:\MassHunter\GCMS\1\data\2021\122021
Sample Name	BLANK,QC962007,280281,1x,PDF:1,C10812	**Type**	Sample
Acq. Method File	TO15_Acq_013120_1	**Acq. Method Path**	D:\MassHunter\GCMS\1\methods\
Acq. Date-Time	12/20/2021 1:39:48 PM	**Acq. Operator**	ZNZ/DJL/LJB
Instrument Name	Air-MS-06	**Dil.**	1

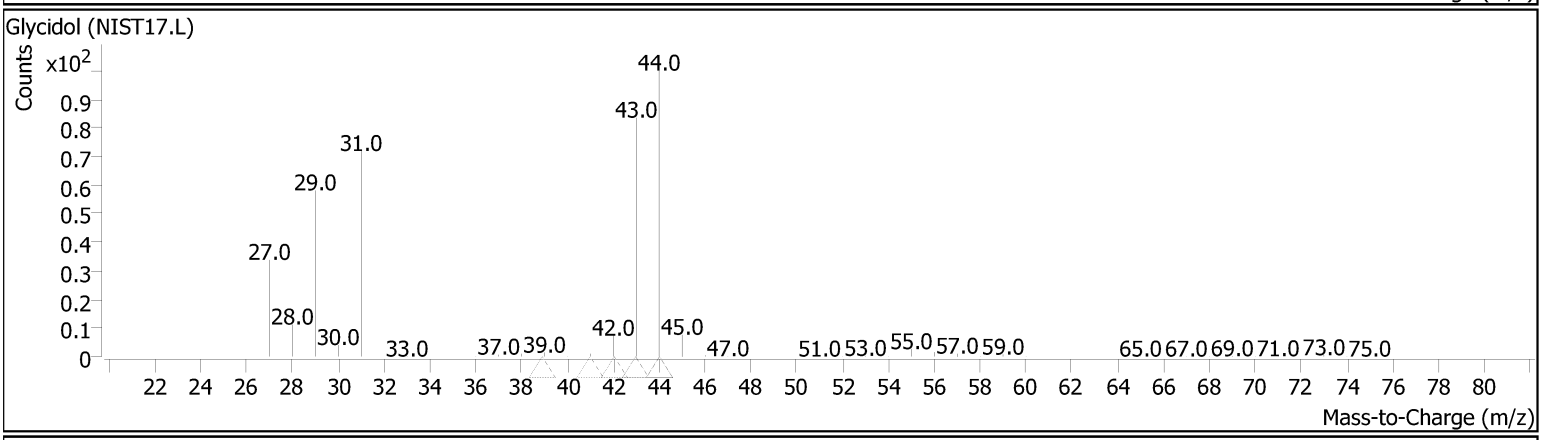
Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
4.2703	Glycidol	556-52-5	C3H6O2	3379.3	80.1	0.01541
4.5487	Propane, 2-nitro-	79-46-9	C3H7NO2	1019.1	80.7	0.004649
5.0309	Dimethyl ether	115-10-6	C2H6O	3815.0	88.7	0.0174
5.4938	Acetone	67-64-1	C3H6O	7928.2	94.8	0.03616
5.7236	Isopropyl Alcohol	67-63-0	C3H8O	4653.9	87.6	0.02123
5.9534	Isobutane	75-28-5	C4H10	2346.8	88.9	0.01071
6.2835	Methylene chloride	75-09-2	CH2Cl2	31882.2	98.4	0.1454
6.5651	Carbon disulfide	75-15-0	CS2	515.9	71.3	0.002353
7.3225	Glycine	56-40-6	C2H5NO2	1835.1	80.8	0.008371
7.5361	Hexane, 1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-	355-37-3	C6HF13	3969.9	74.3	0.01811
7.6947	2-Butanone	78-93-3	C4H8O	994.7	73.1	0.004537
8.1770	Methane, bromochloro-	74-97-5	CH2BrCl	2192272.3	98.9	10
9.6109	Fumaronitrile	764-42-1	C4H2N2	1687.1	84.8	0.005194
9.9086	Benzene, 1,4-difluoro-	540-36-3	C6H4F2	3248295.0	99.5	10
10.3035	Methane, dibromo-	74-95-3	CH2Br2	2096.8	80.0	0.006455
10.6110	3-Furanol, tetrahydro-	453-20-3	C4H8O2	2012.3	74.8	0.006195
11.1515	Neopentane	463-82-1	C5H12	1216.1	72.1	0.003744
11.4169	Ether,1- propenyl propyl	3424-89-3	C6H12O	1596.0	82.7	0.004913
11.6791	Hexane, 1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-	355-37-3	C6HF13	3884.2	71.2	0.01196
12.2714	Bicyclo[3.2.0]hepta-2,6-diene	2422-86-8	C7H8	1788.1	87.3	0.004538
12.5530	Acetone	67-64-1	C3H6O	1338.9	76.5	0.003398
12.9187	Ethane, 1,2-dibromo-	106-93-4	C2H4Br2	490.1	73.0	0.001244
13.6373	Cyclotrisiloxane, hexamethyl-	541-05-9	C6H18O3Si3	3628.6	80.4	0.009209
14.0127	Chlorobenzene-d5	3114-55-4	C6D5Cl	3940127.0	95.9	10
14.6342	Benzene, 1,3-dimethyl-	108-38-3	C8H10	3219.5	73.8	0.008171
15.3657	Pentane, 2,4-dimethyl-	108-08-7	C7H16	1381.8	89.4	0.003507
15.6117	Benzene, 1-bromo-3-fluoro-	1073-06-9	C6H4BrF	4867328.5	98.7	12.35
16.1295	p-Bromofluorobenzene	460-00-4	C6H4BrF	1409.2	78.7	0.003576
16.3626	4,5-Dihydro-2(1H)-pentalenone	1000099-19-0	C8H8O	1452.8	83.7	0.003687
16.6280	Benzene, 1,2,3-trimethyl-	526-73-8	C9H12	3136.7	70.3	0.007961
17.0973	Cyclotetrasiloxane, octamethyl-	556-67-2	C8H24O4Si4	1101.8	76.2	0.002796
17.1362	Mesitylene	108-67-8	C9H12	3403.8	73.6	0.008639
17.2818	2,4,6-Trimethyl-1-nonene	55771-40-9	C12H24	9230.3	76.3	0.02343
17.3239	Benzene, 1,4-dichloro-	106-46-7	C6H4Cl2	4409.5	83.8	0.01119
17.4113	Benzene, 1,4-dichloro-	106-46-7	C6H4Cl2	3928.4	87.9	0.00997
17.7285	Hydroxylamine, O-(3-methylbutyl)-	19411-65-5	C5H13NO	1253.3	81.9	0.003181
17.8579	Benzene, 1,4-dichloro-	106-46-7	C6H4Cl2	5602.0	85.8	0.01422
18.0392	Oxalic acid, cyclohexyl isobutyl ester	1000309-30-4	C12H20O4	819.1	73.5	0.002079
18.3208	Oxalic acid, butyl propyl ester	1000309-25-6	C9H16O4	400.8	74.7	0.001017
18.4341	Oxalic acid, butyl propyl ester	1000309-25-6	C9H16O4	818.6	85.0	0.002078
18.5603	Cyclopropyl carbinol	2516-33-8	C4H8O	509.8	75.0	0.001294
19.0231	2,4,6,8-Tetramethyl-1-undecene	59920-26-2	C15H30	11051.6	89.4	0.02805
20.3664	Benzene, 1,3,5-trichloro-	108-70-3	C6H3Cl3	9696.8	90.7	0.02461
20.5347	Naphthalene	91-20-3	C10H8	9469.8	90.4	0.02403
21.1205	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87-68-3	C4Cl6	10882.0	86.0	0.02762

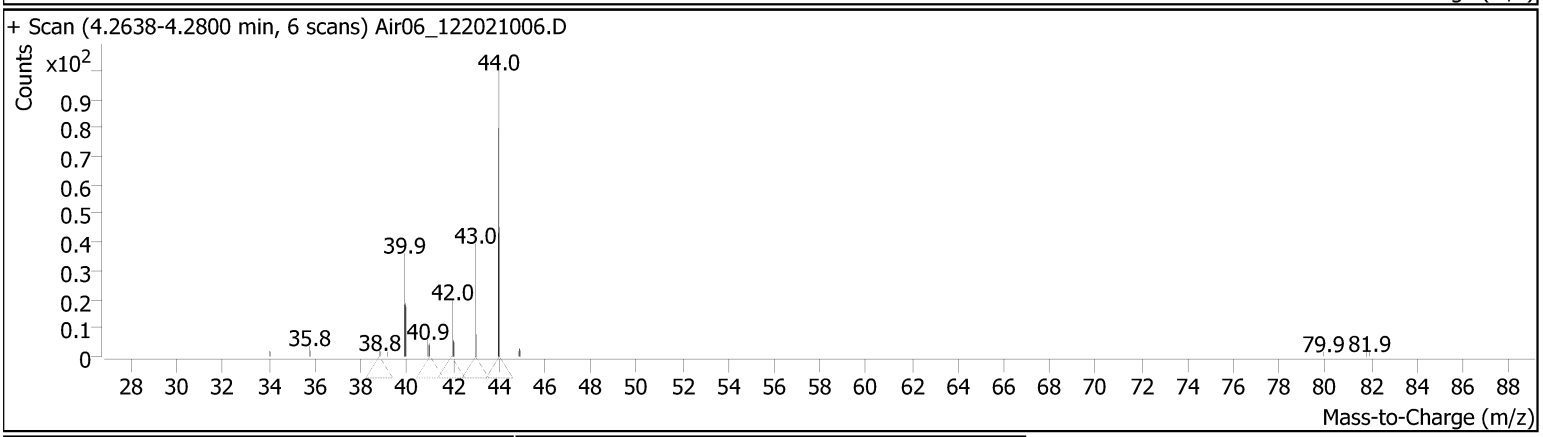
Sample Chromatogram

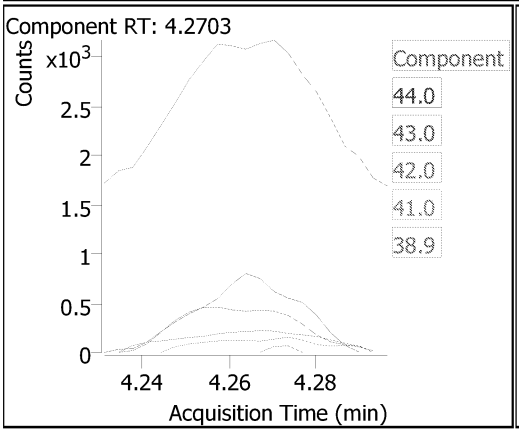


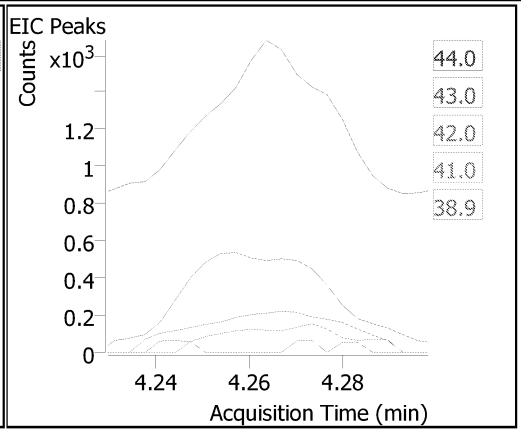
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.2703	Glycidol	3379.3	80.1	556-52-5	C3H6O2	0.01541

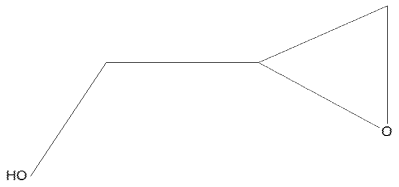




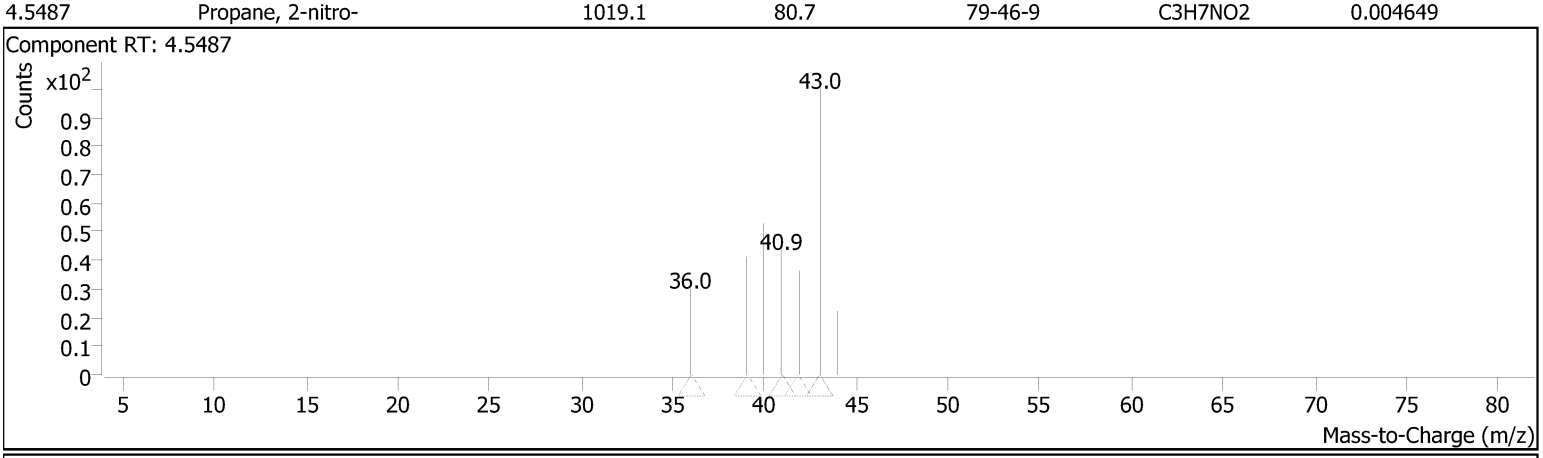


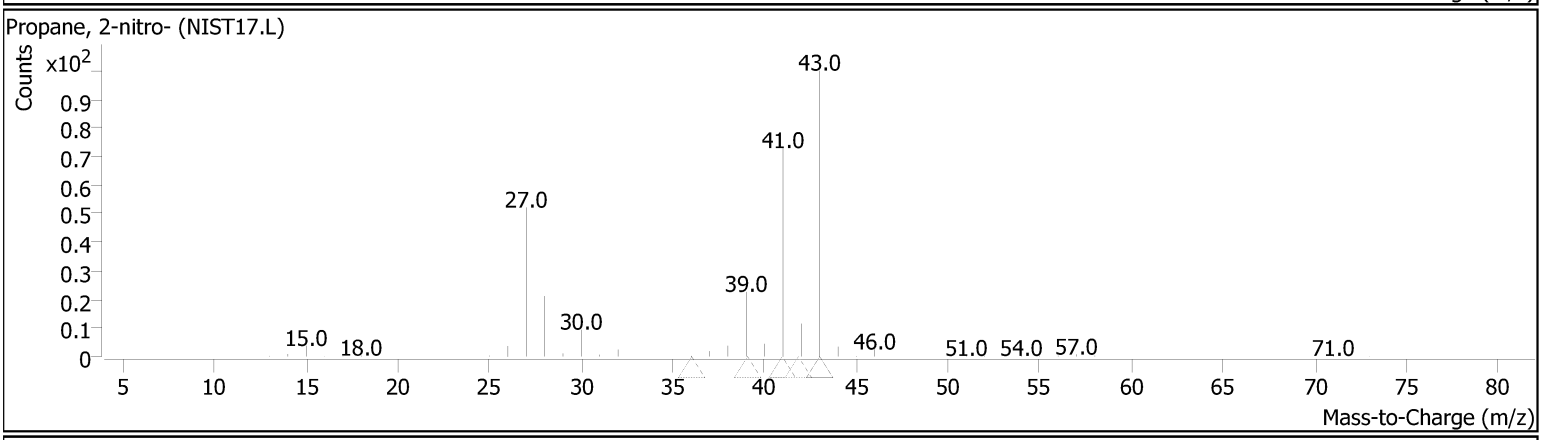


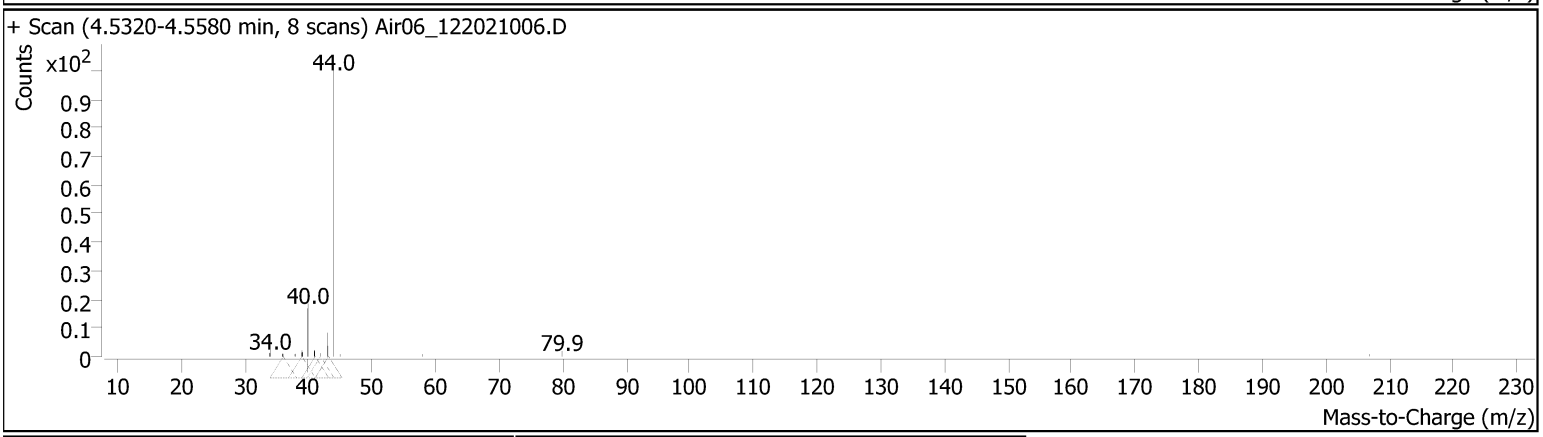


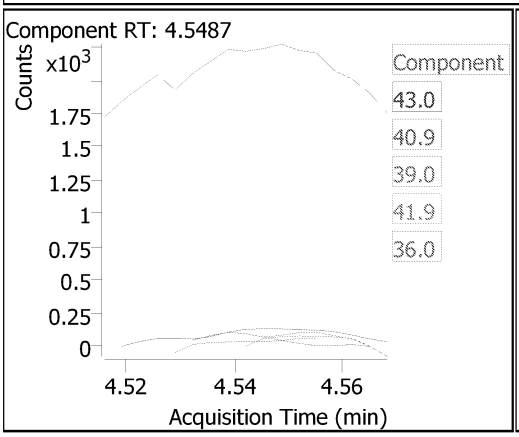


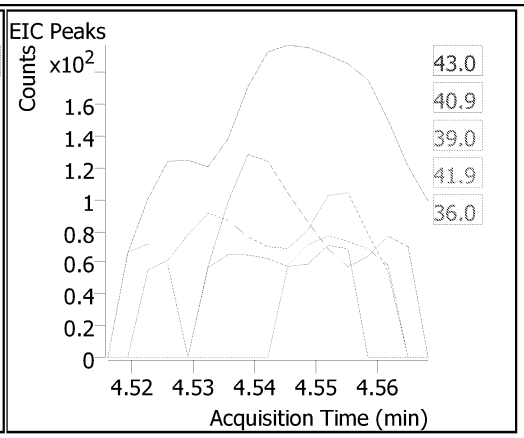
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
4.5487	Propane, 2-nitro-	1019.1	80.7	79-46-9	C3H7NO2	0.004649

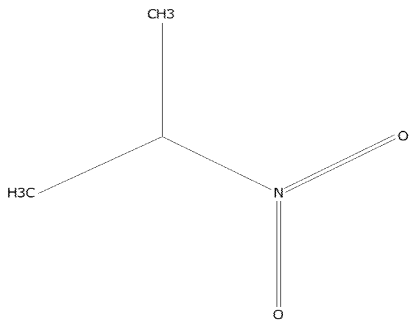




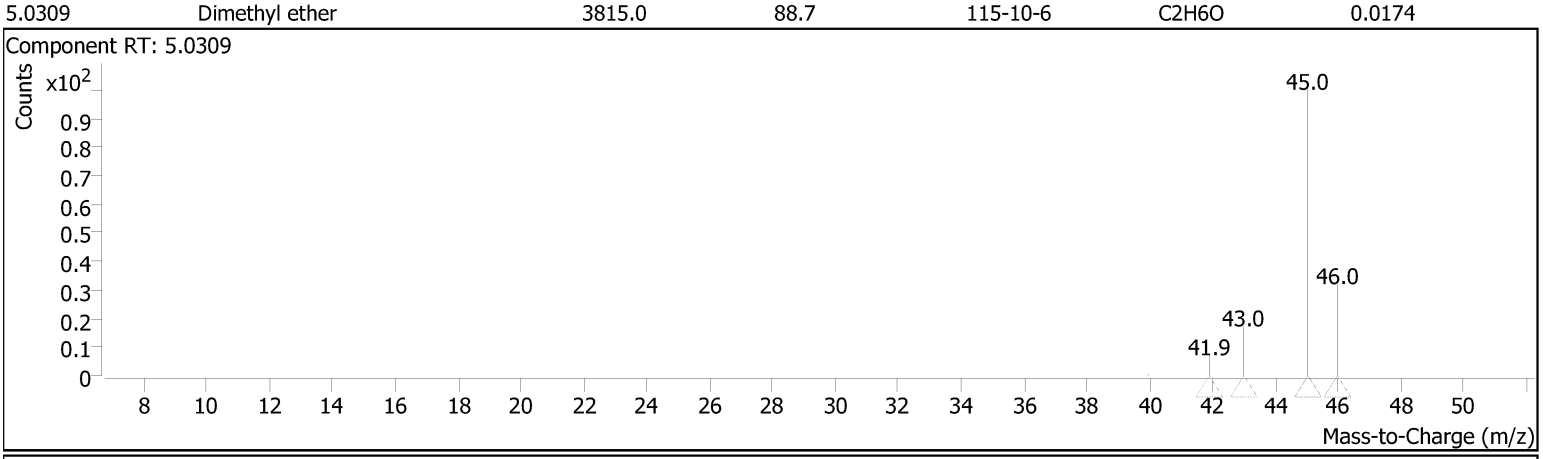


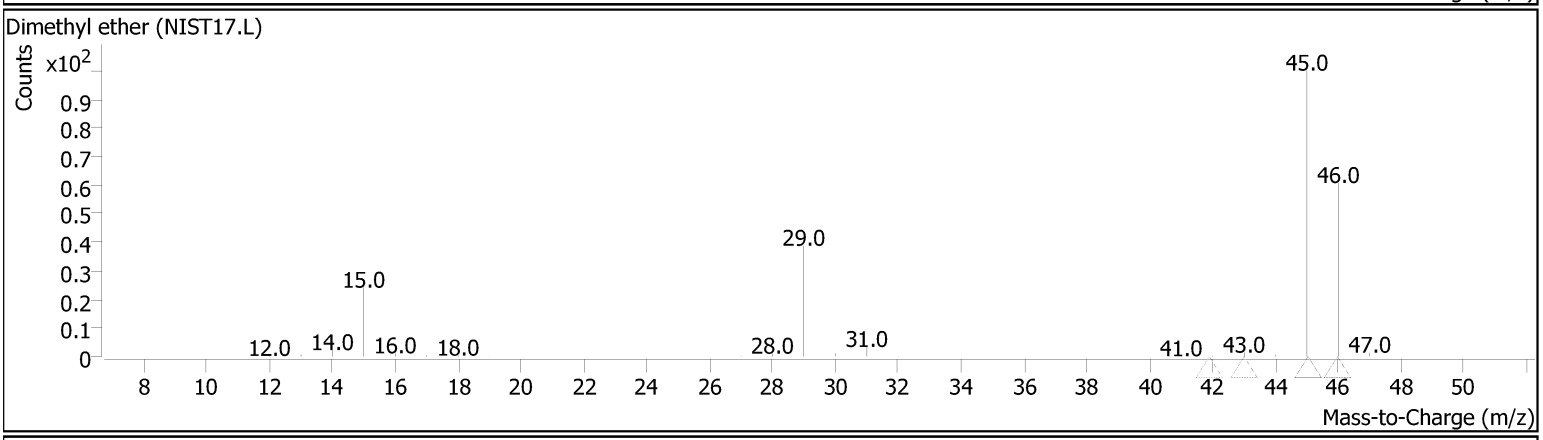


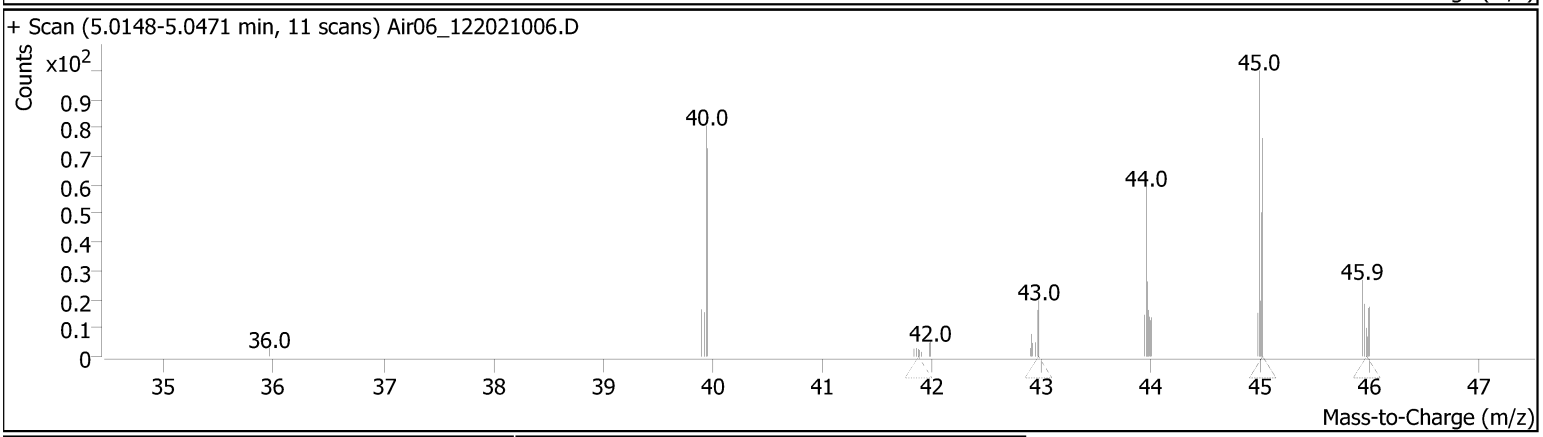


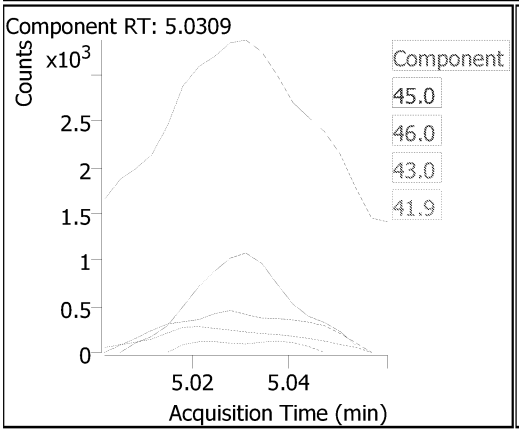


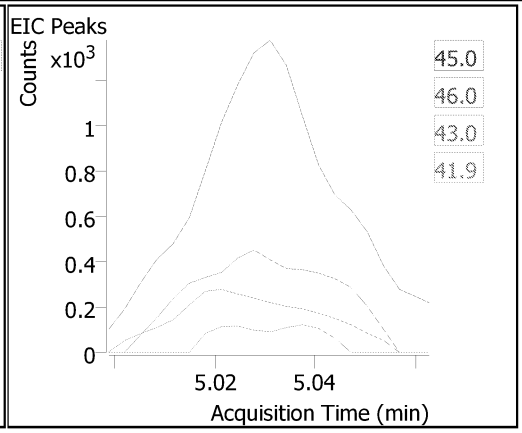
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.0309	Dimethyl ether	3815.0	88.7	115-10-6	C2H6O	0.0174

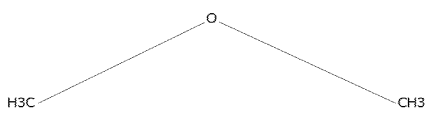




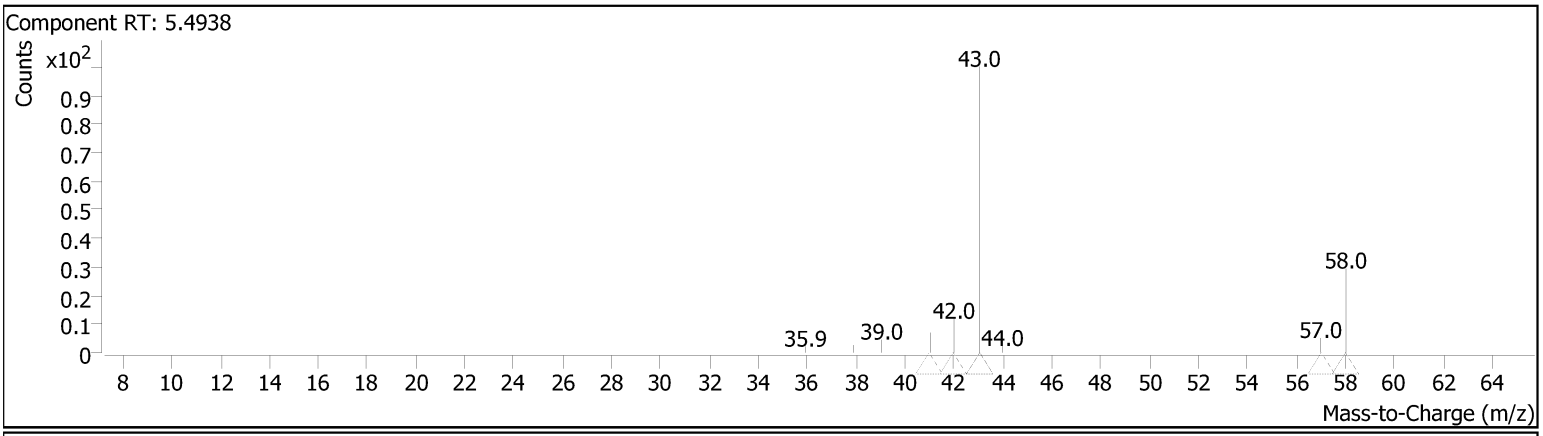


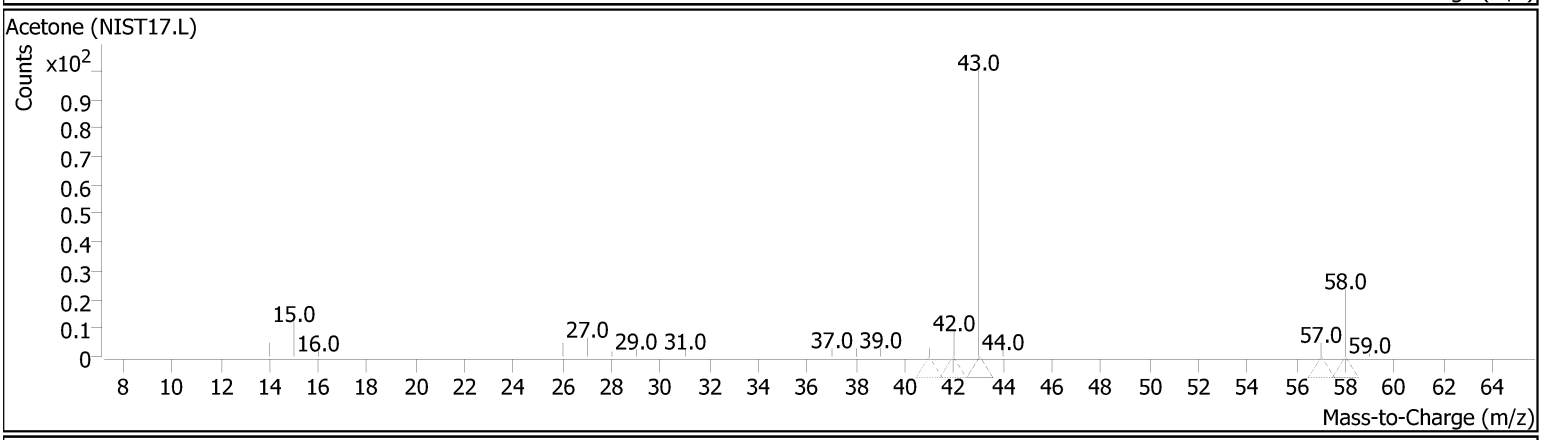


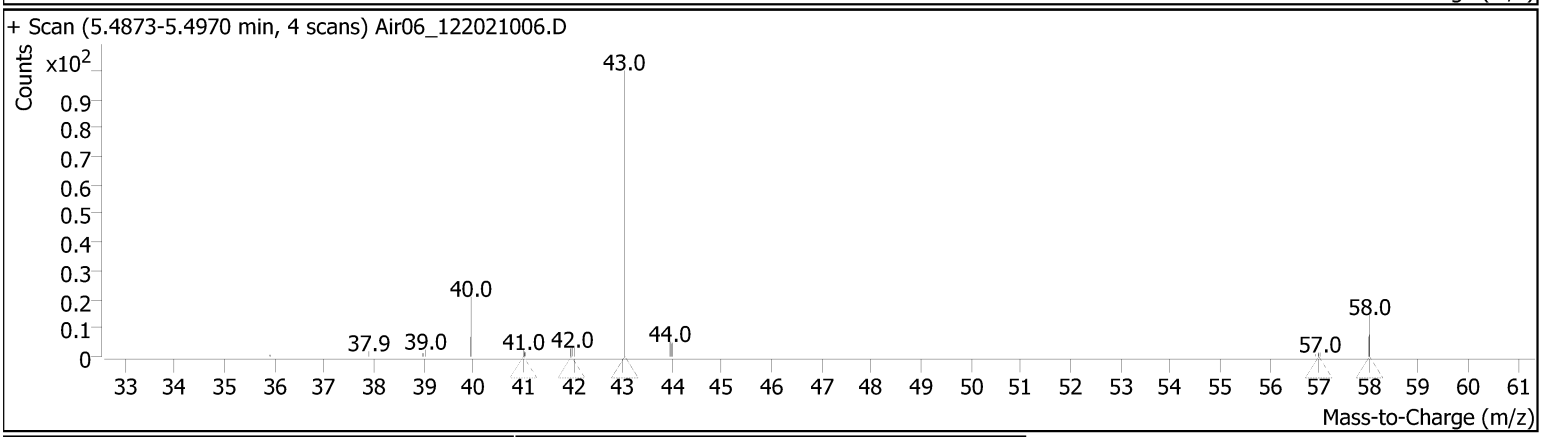


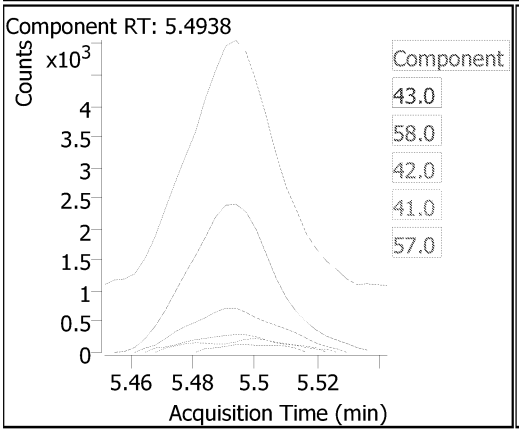


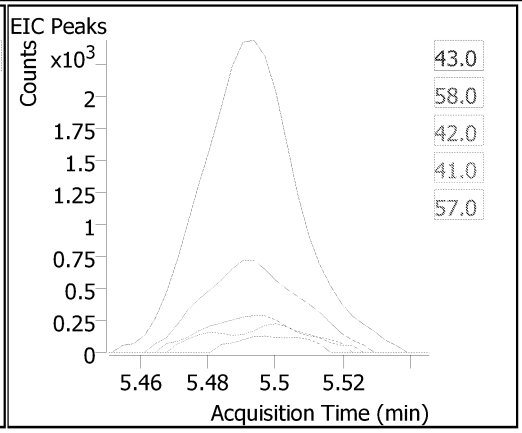
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.4938	Acetone	7928.2	94.8	67-64-1	C3H6O	0.03616

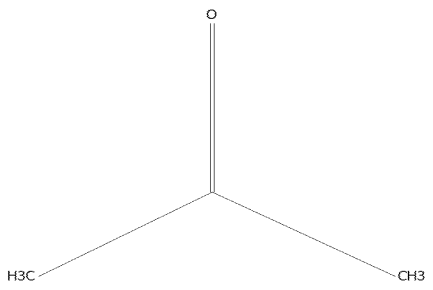




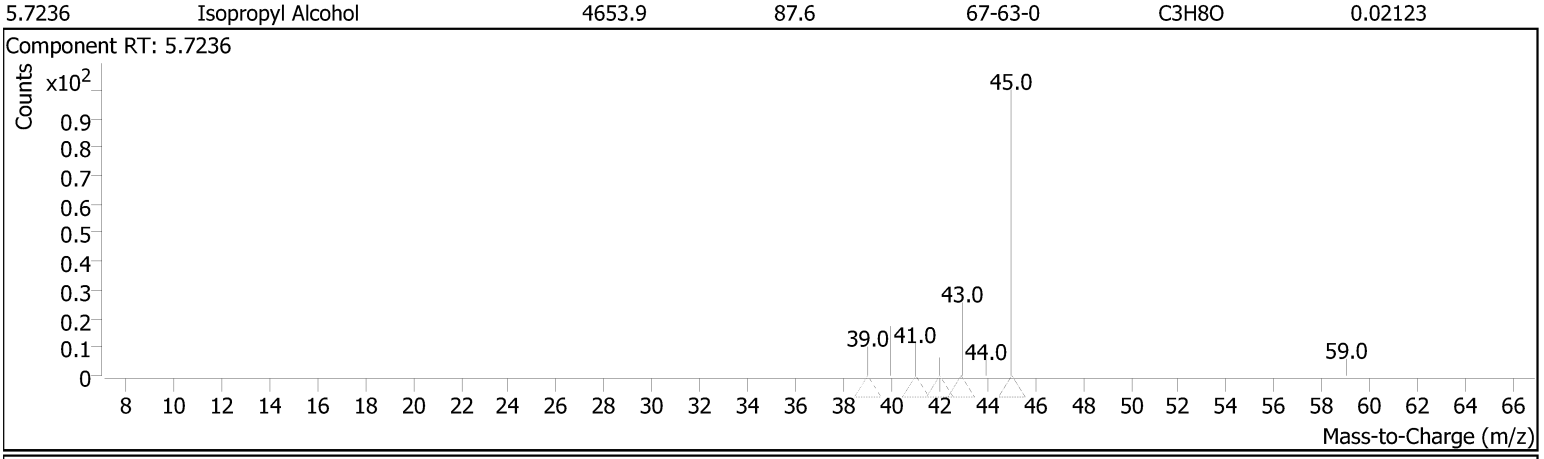


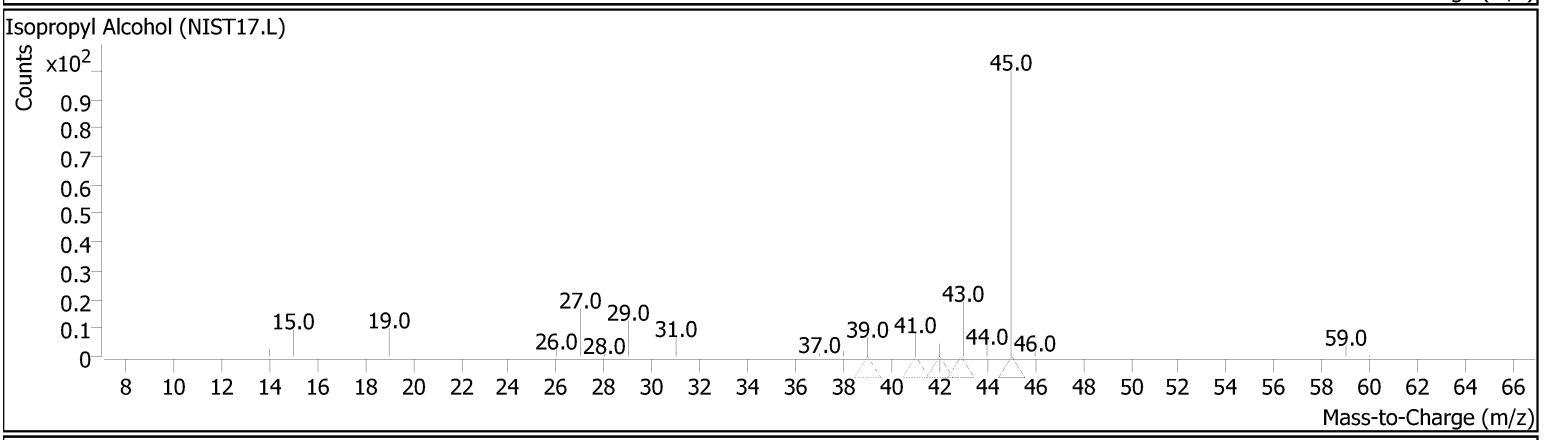


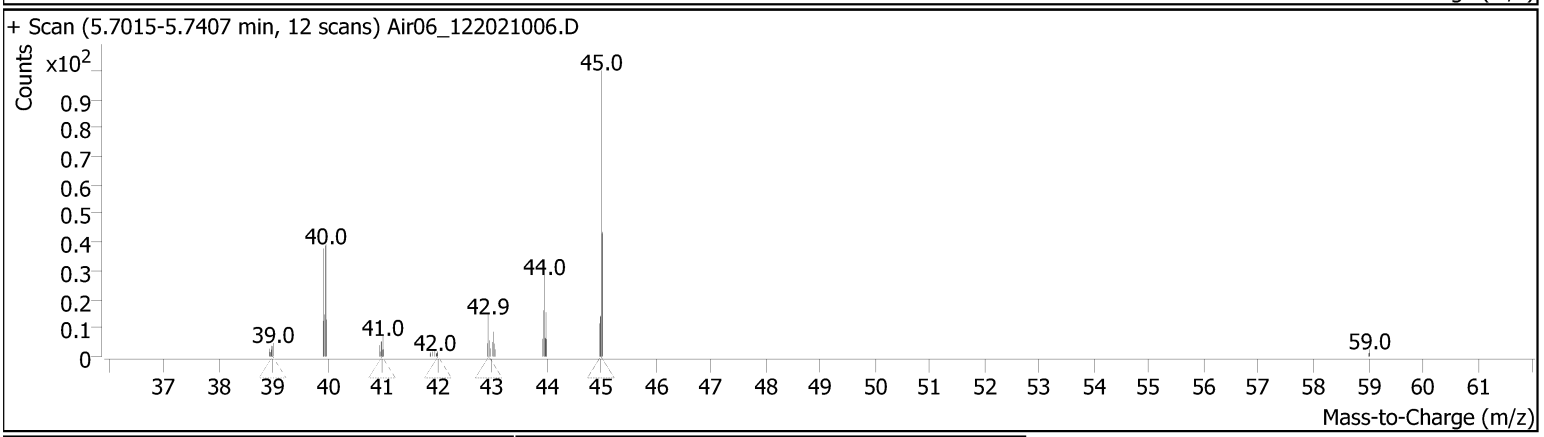


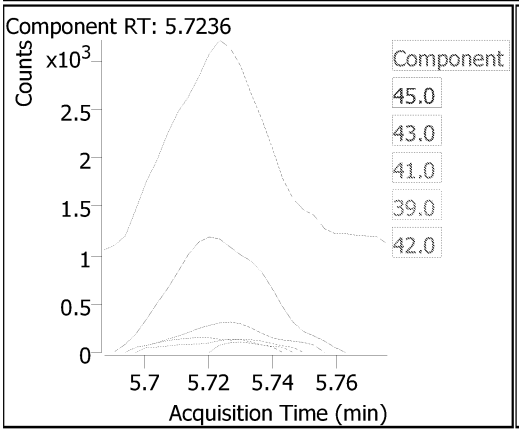


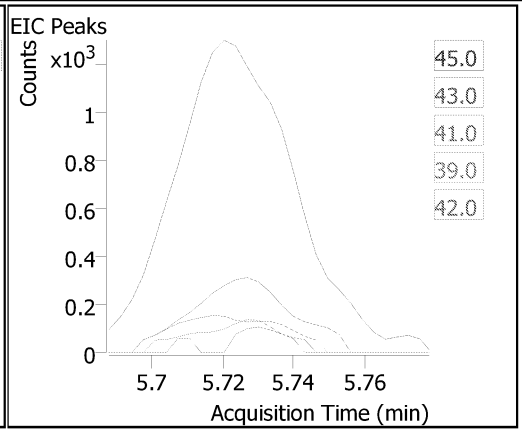
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.7236	Isopropyl Alcohol	4653.9	87.6	67-63-0	C3H8O	0.02123

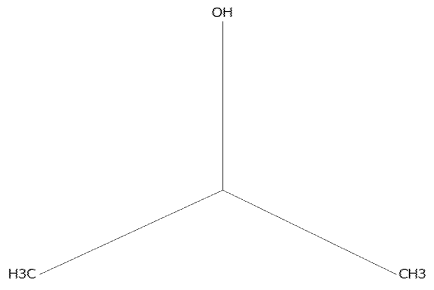




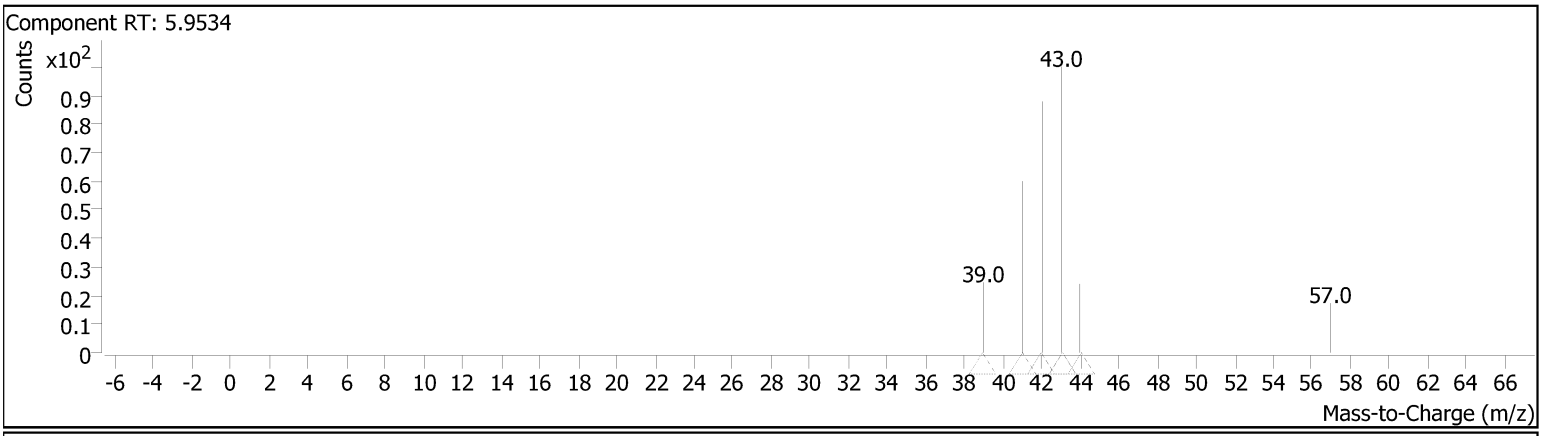


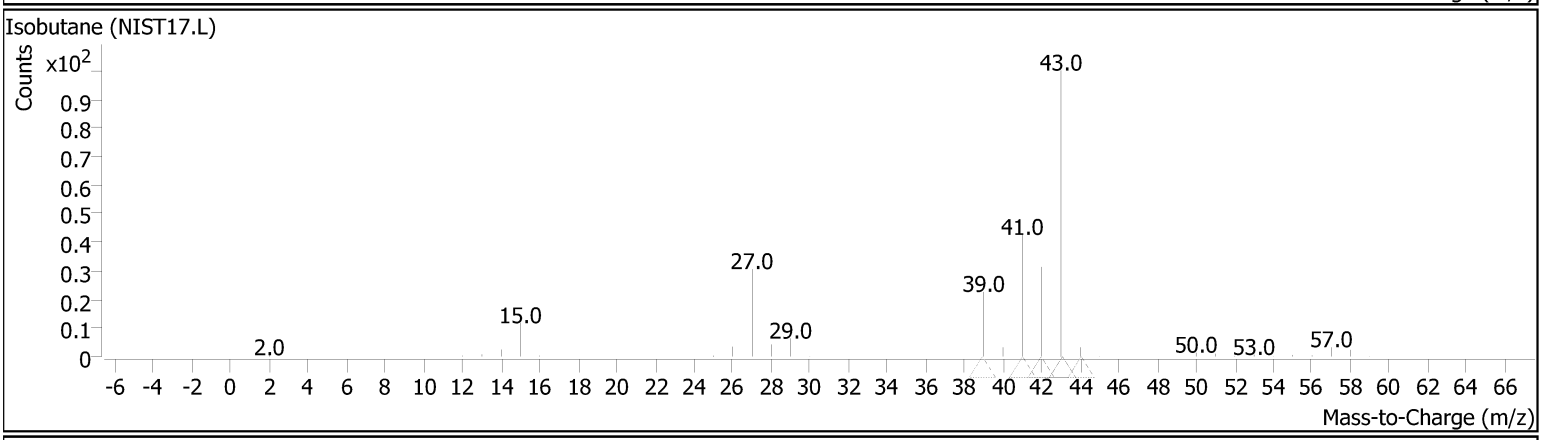


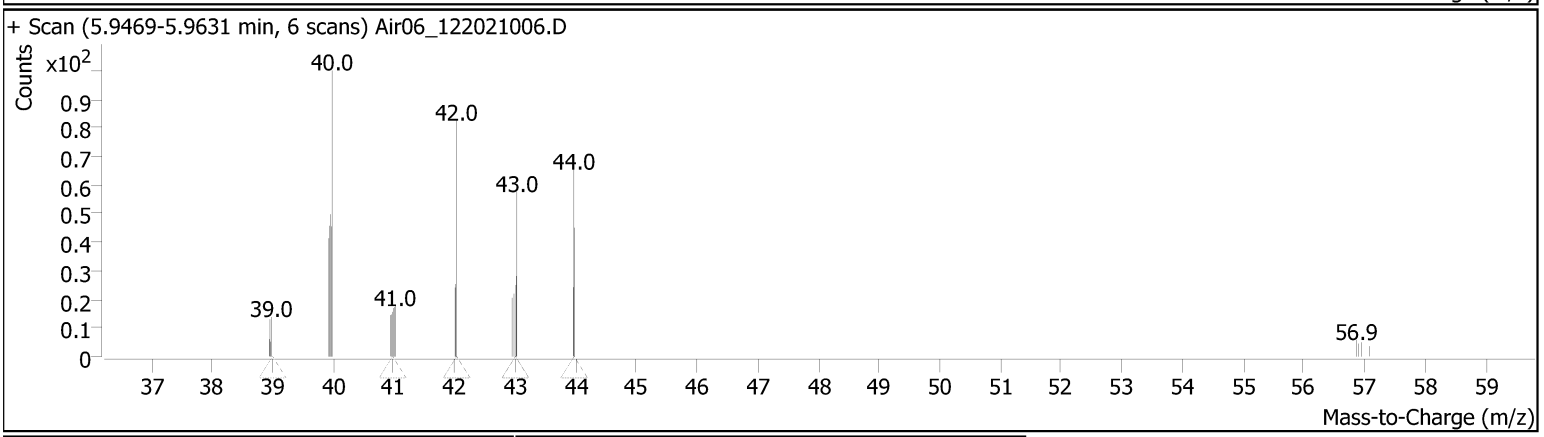


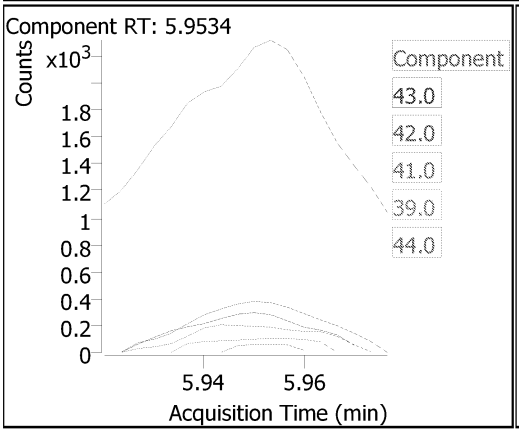


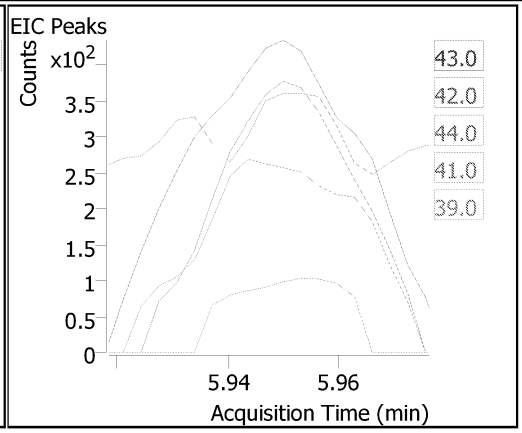
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
5.9534	Isobutane	2346.8	88.9	75-28-5	C4H10	0.01071

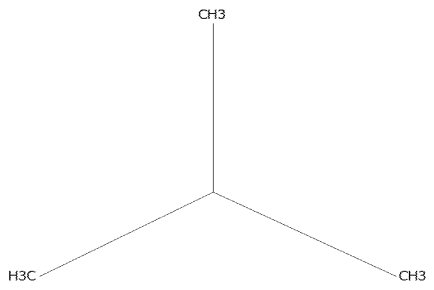




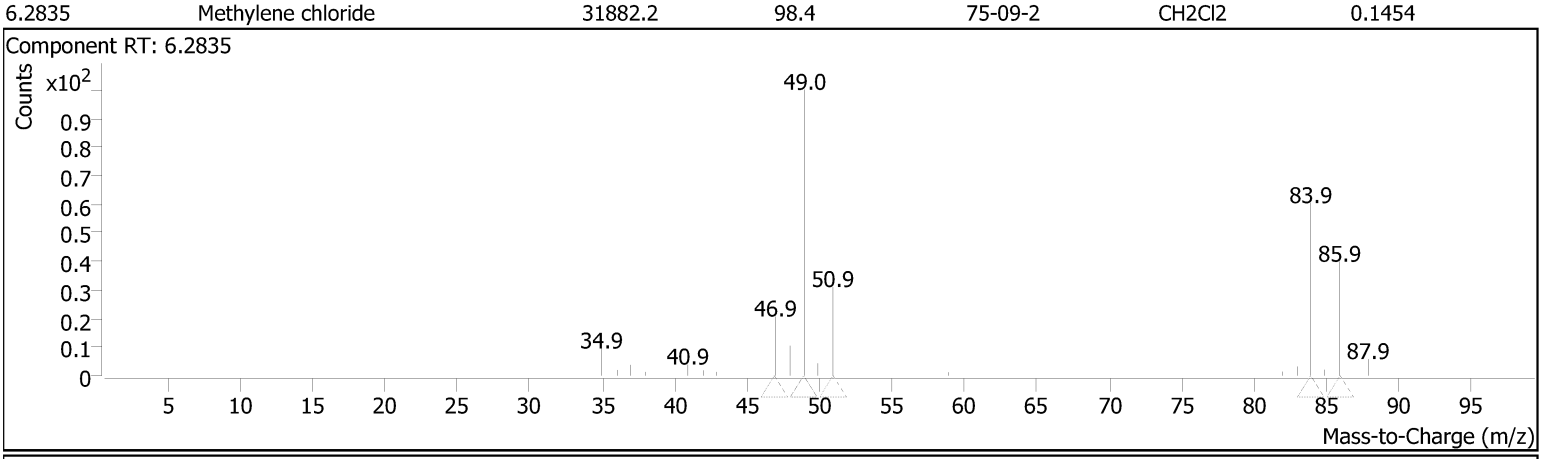


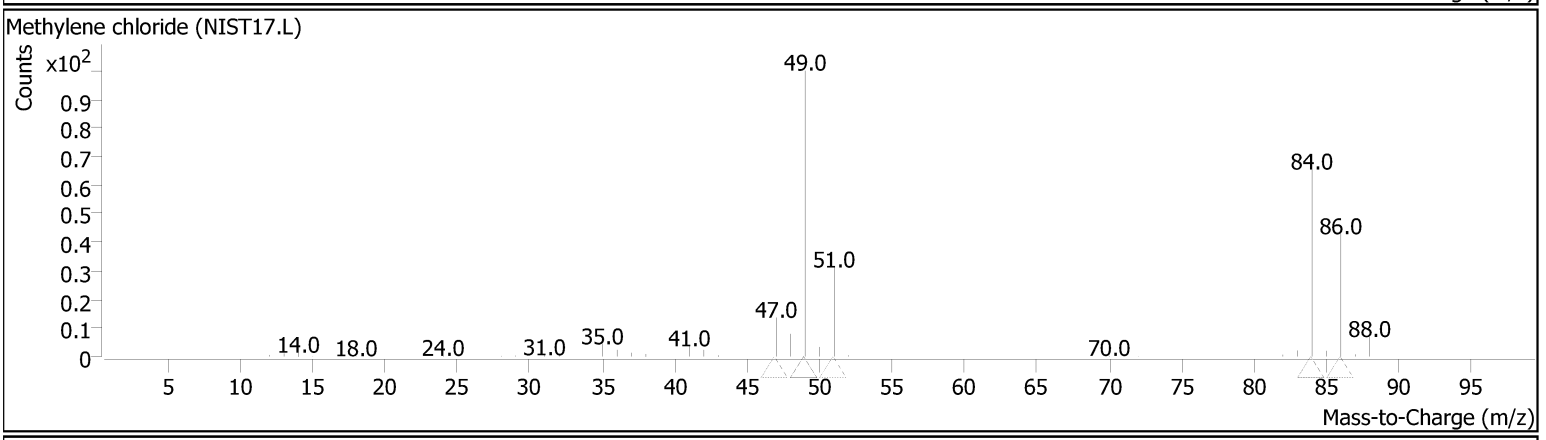


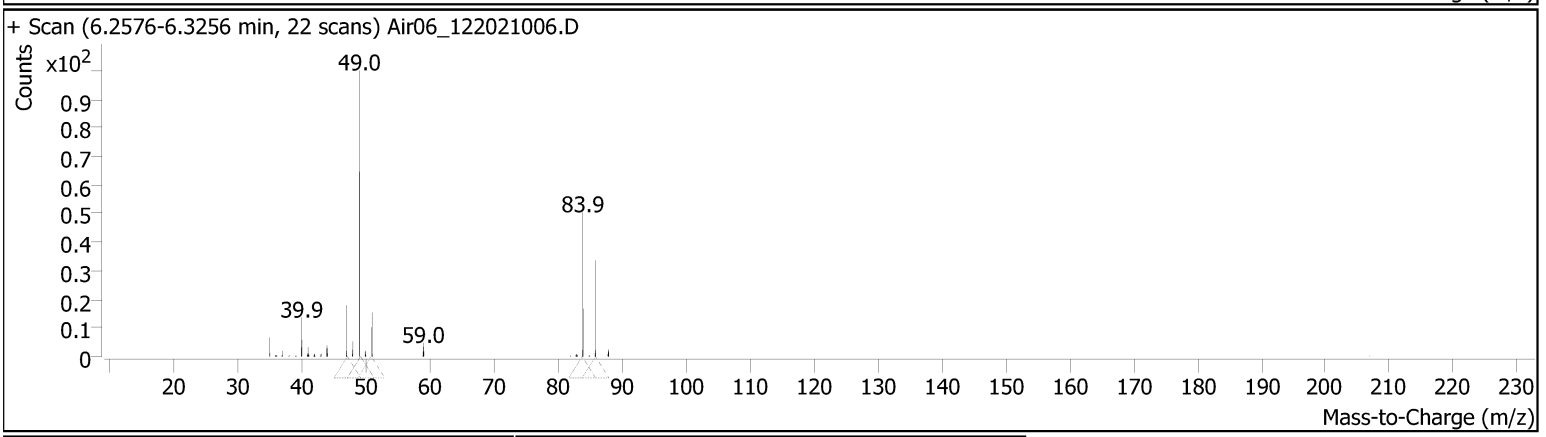


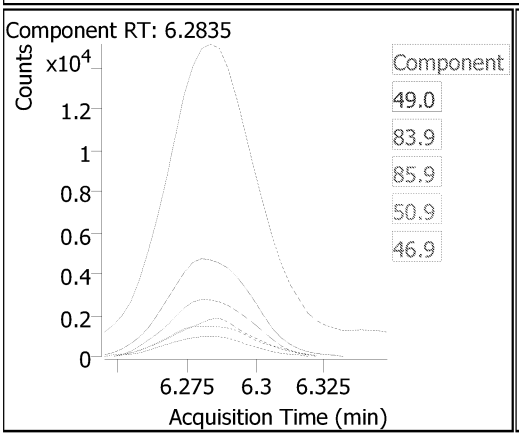


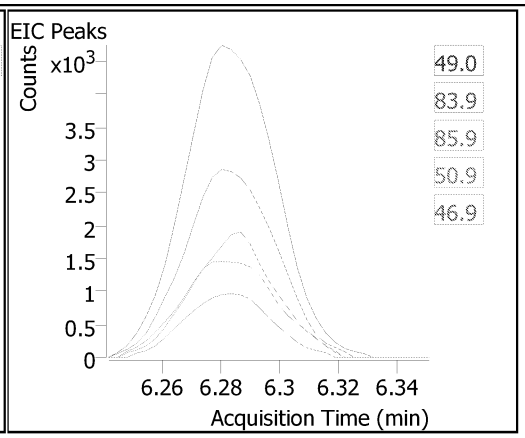
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.2835	Methylene chloride	31882.2	98.4	75-09-2	CH2Cl2	0.1454

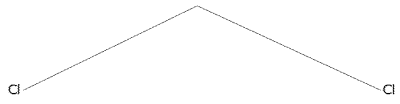




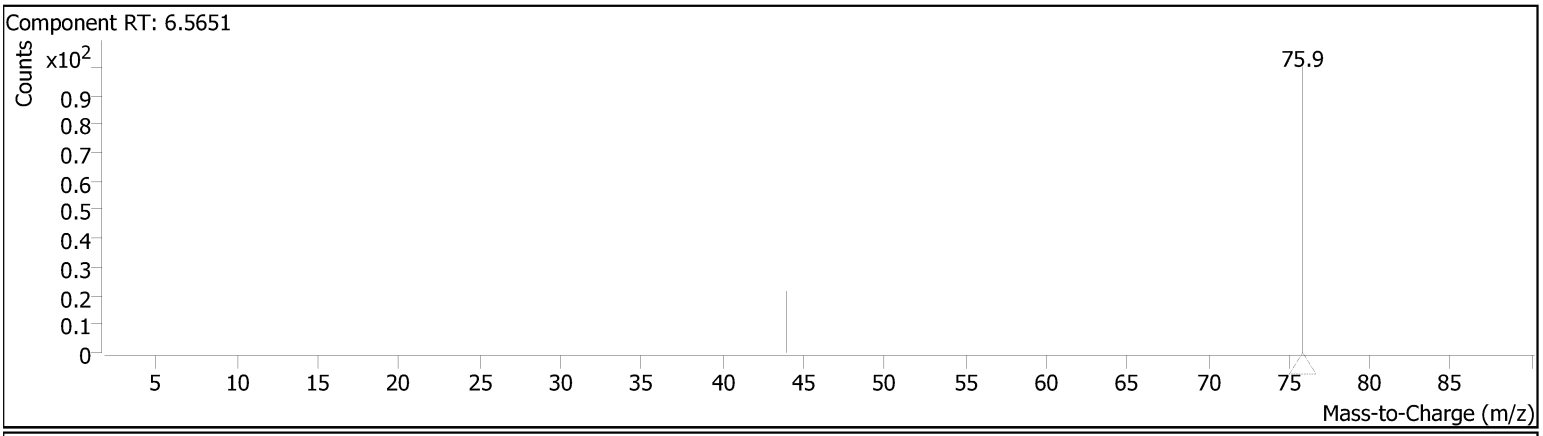


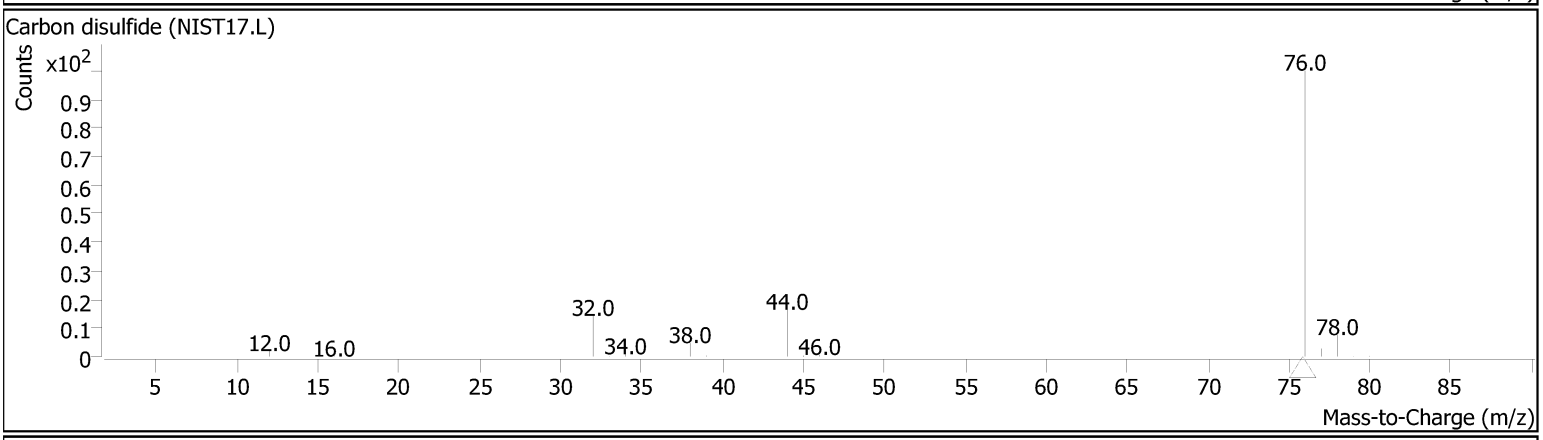


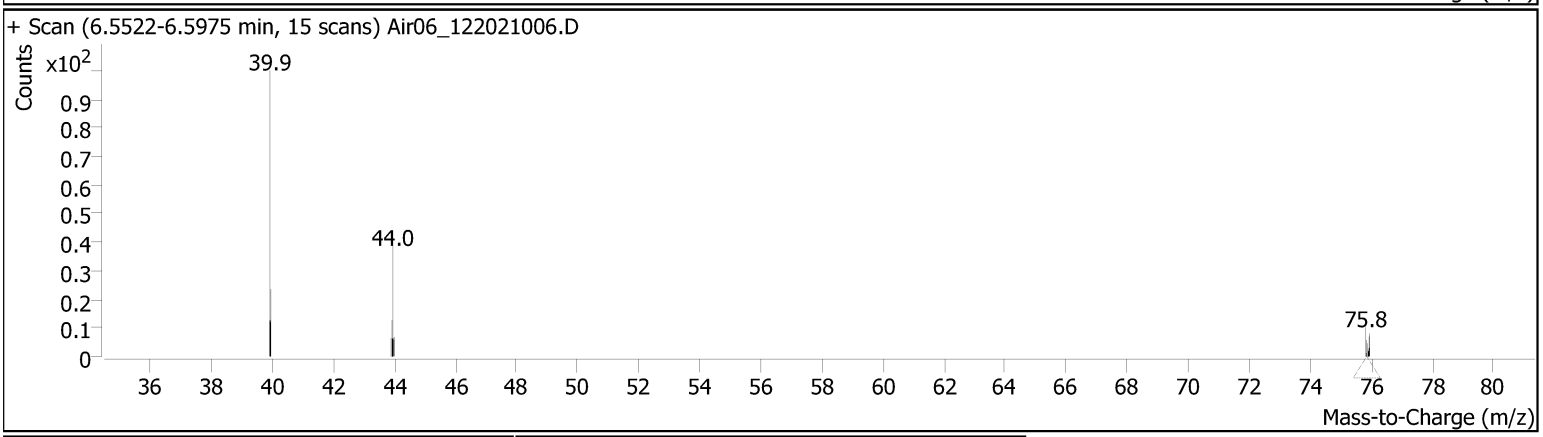


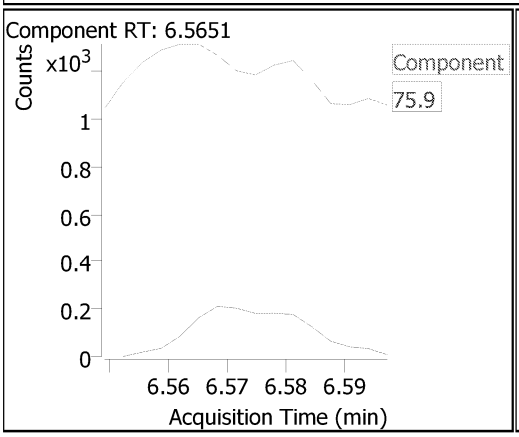


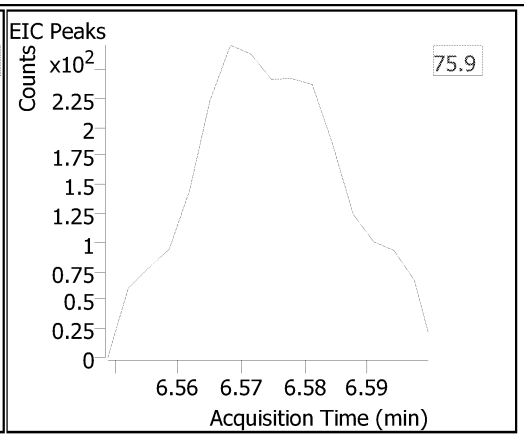
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
6.5651	Carbon disulfide	515.9	71.3	75-15-0	CS2	0.002353



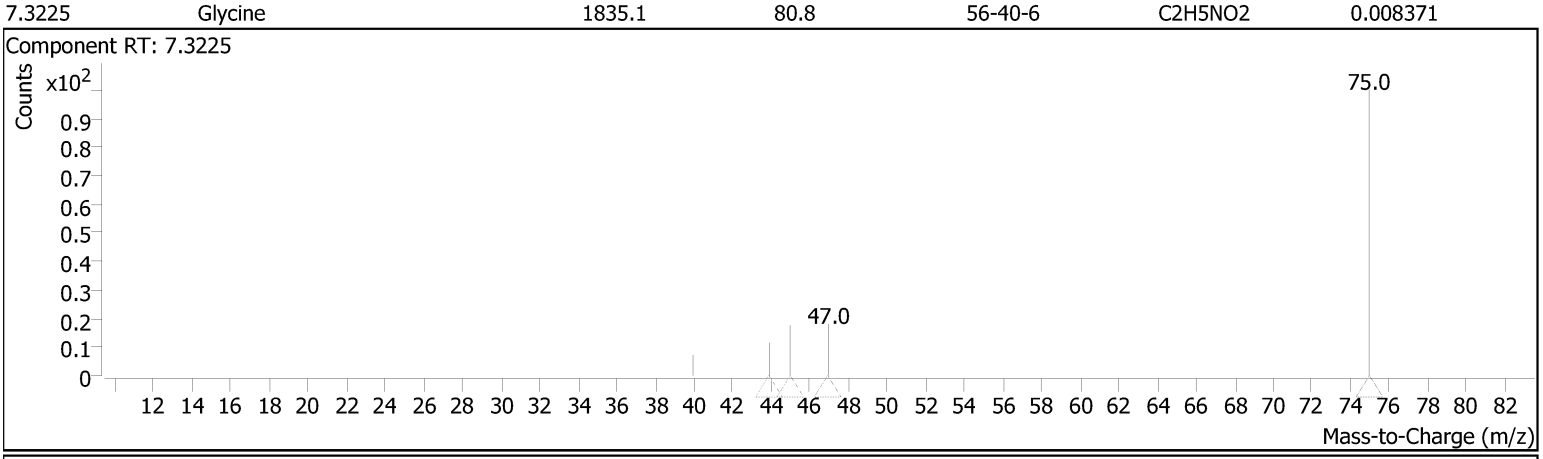


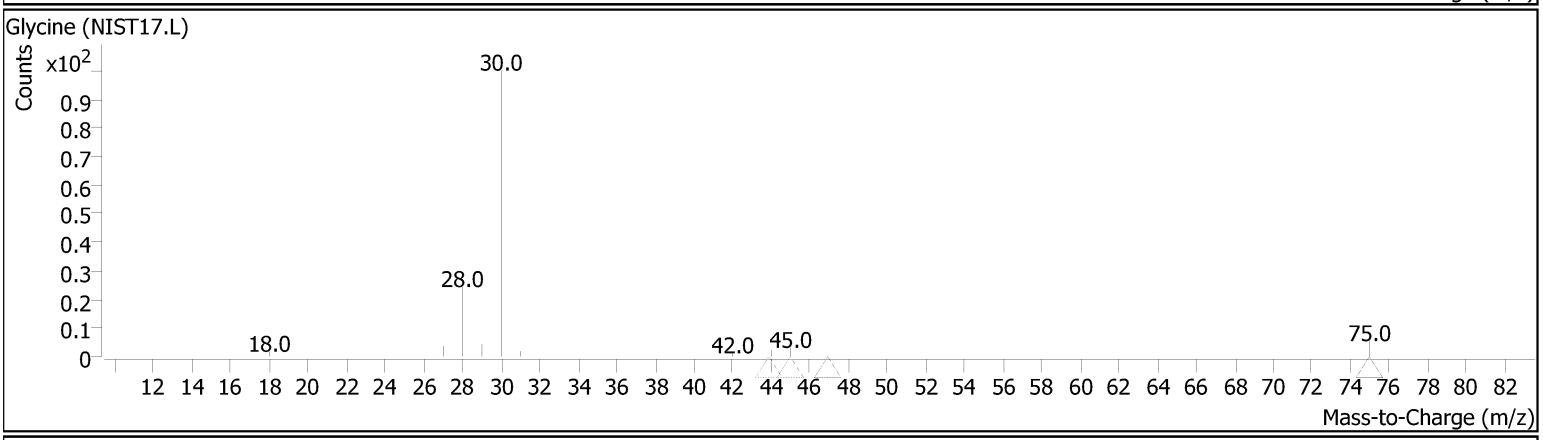


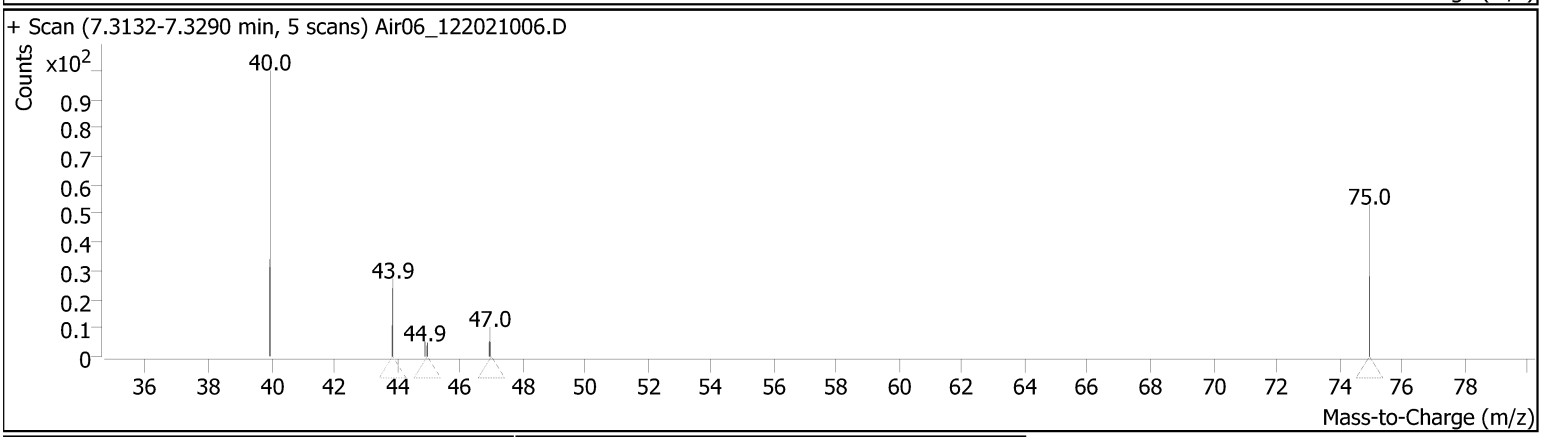


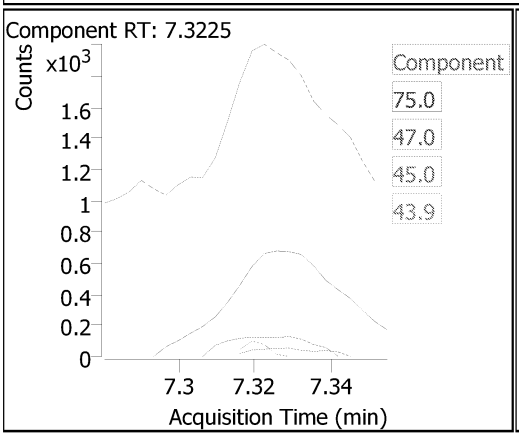


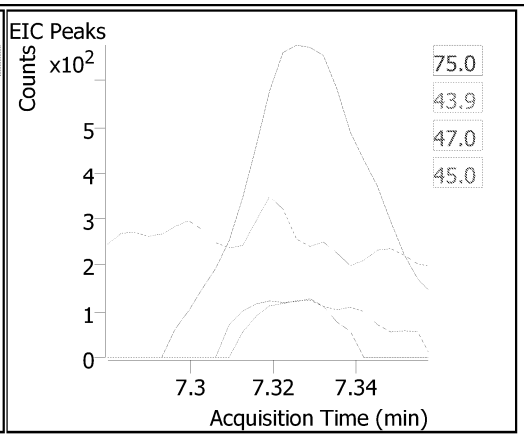
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.3225	Glycine	1835.1	80.8	56-40-6	C2H5NO2	0.008371

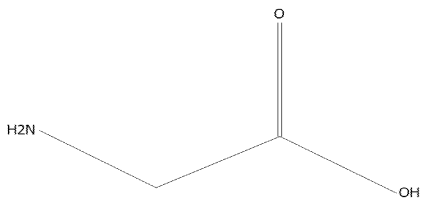




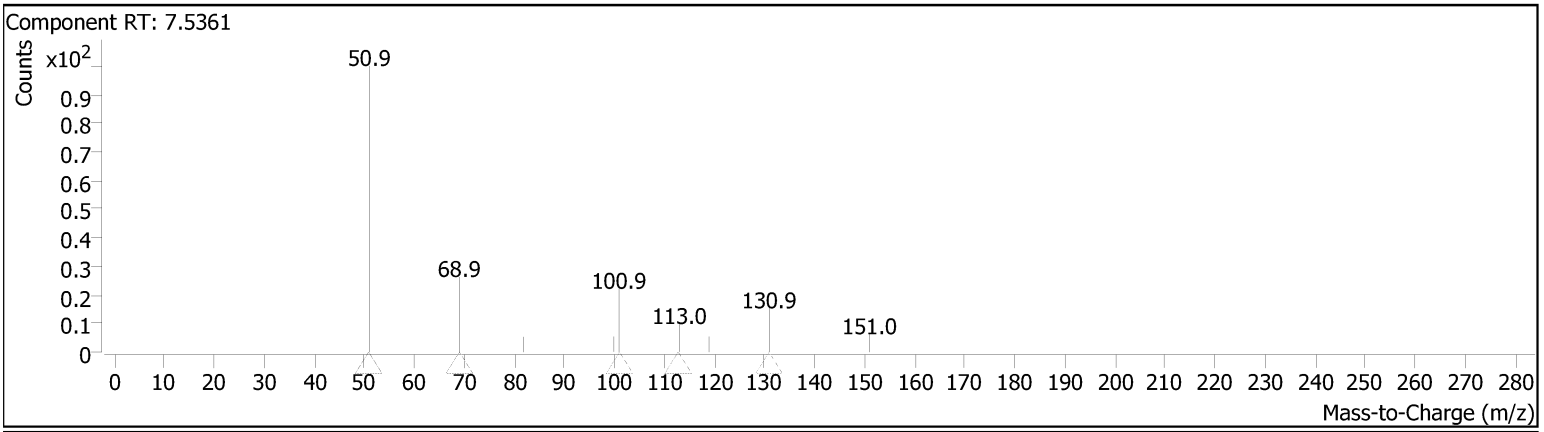


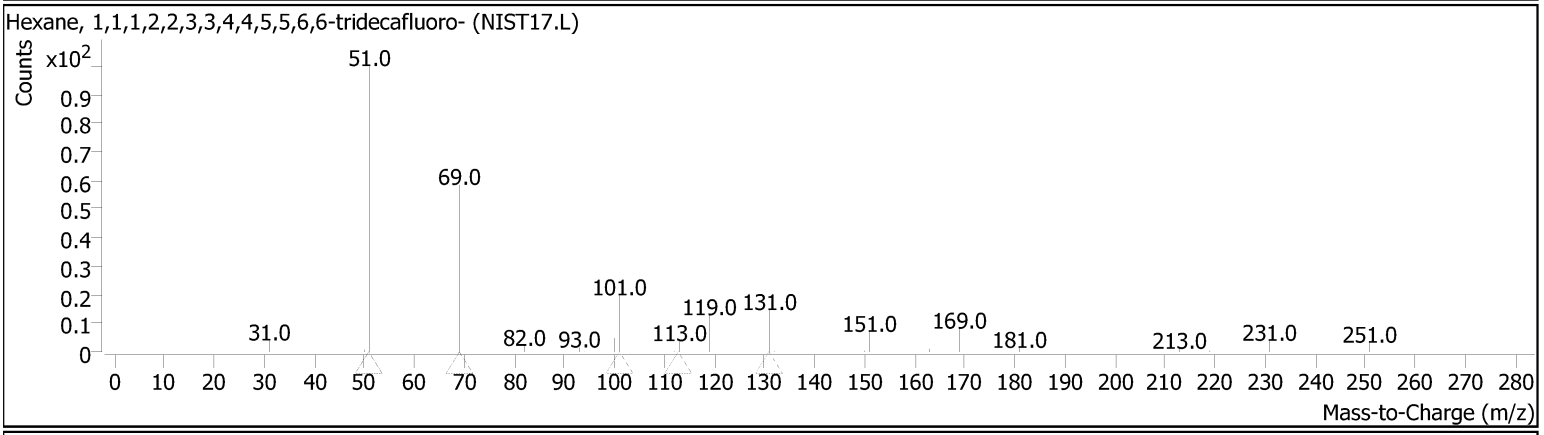


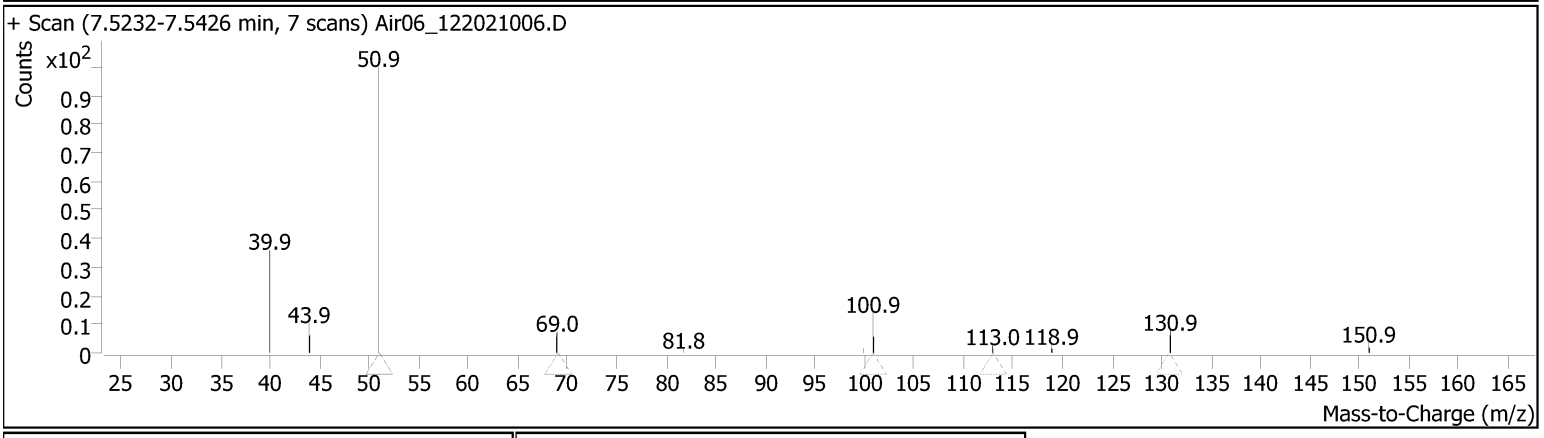


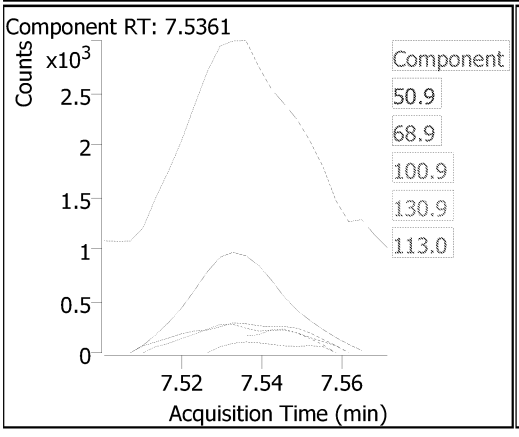


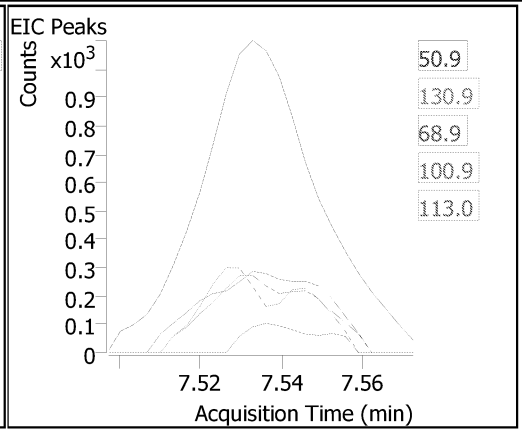
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.5361	Hexane, 1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-	3969.9	74.3	355-37-3	C6HF13	0.01811

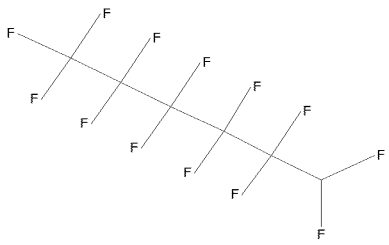




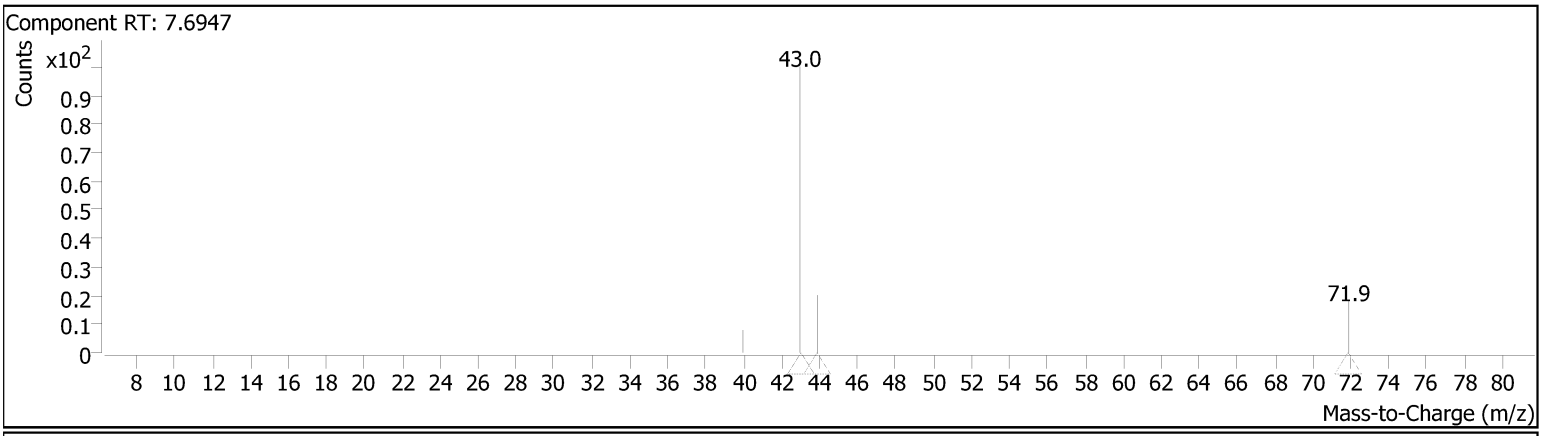


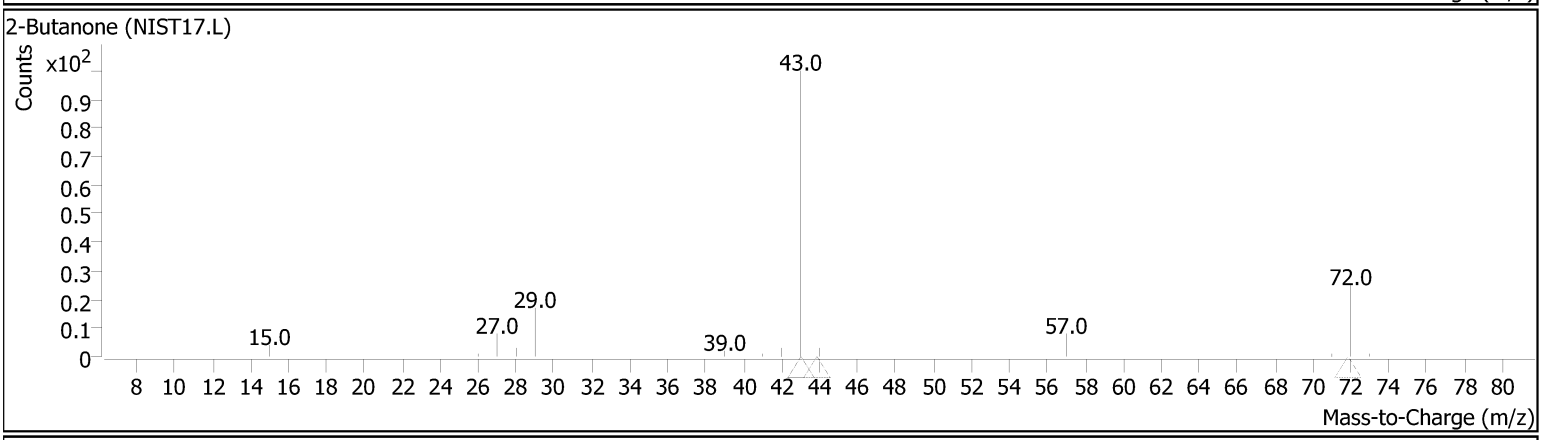


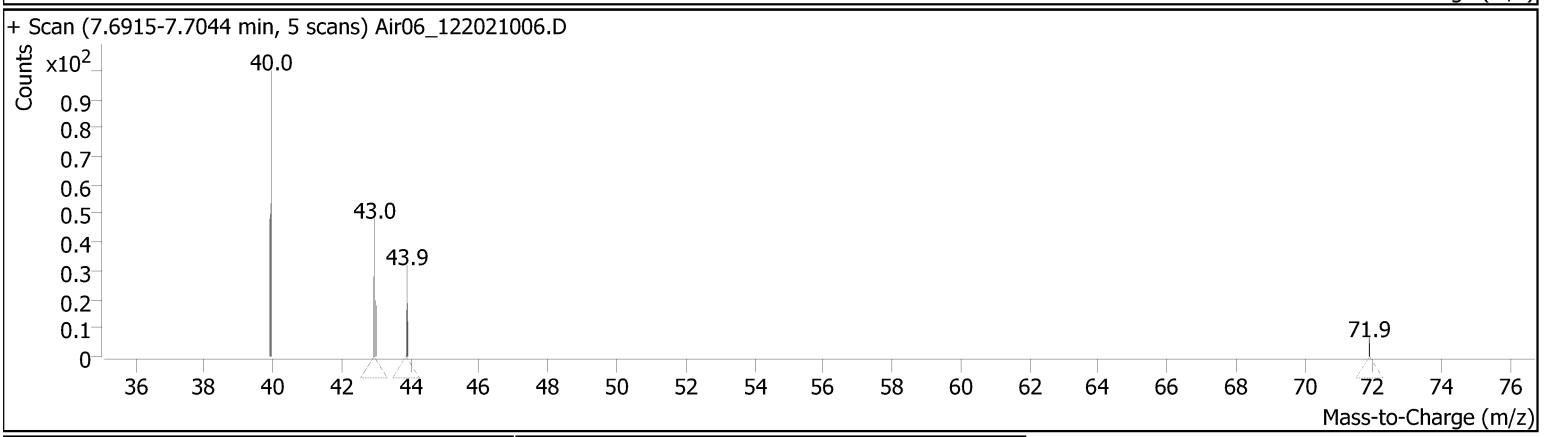


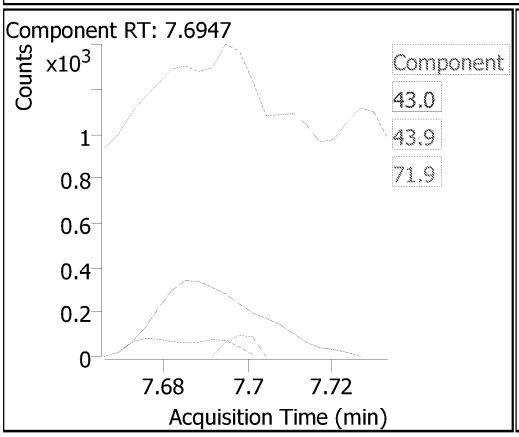


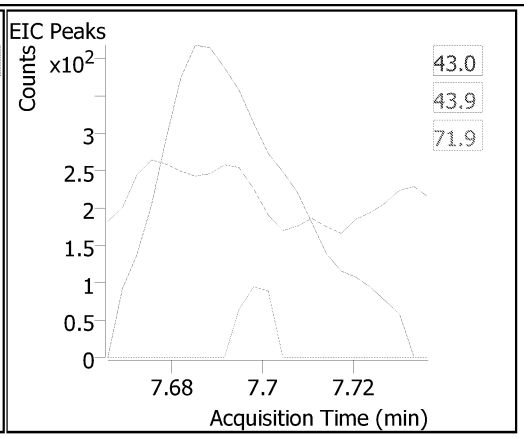
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
7.6947	2-Butanone	994.7	73.1	78-93-3	C4H8O	0.004537

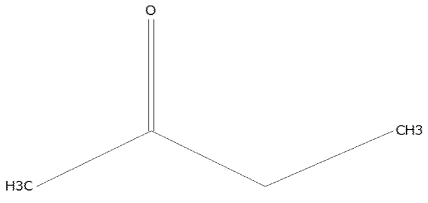




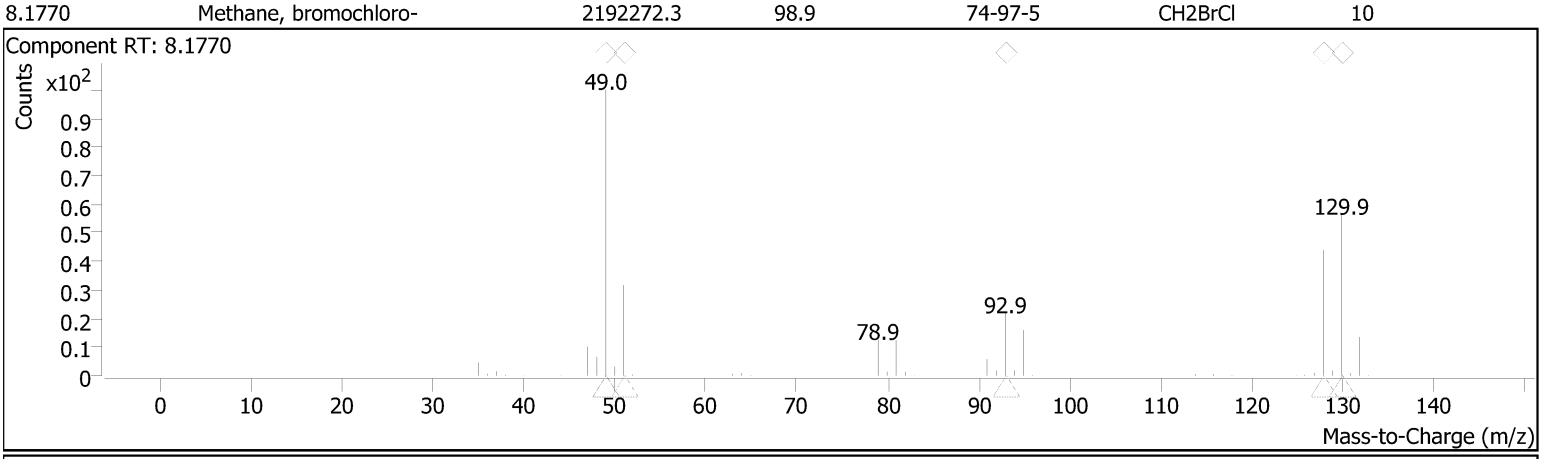


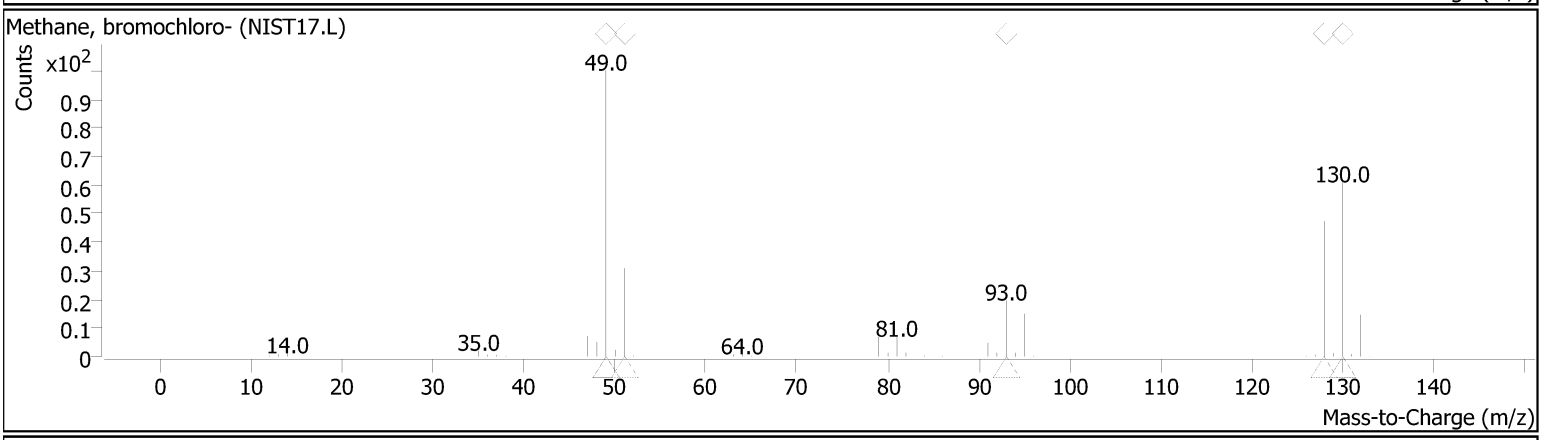


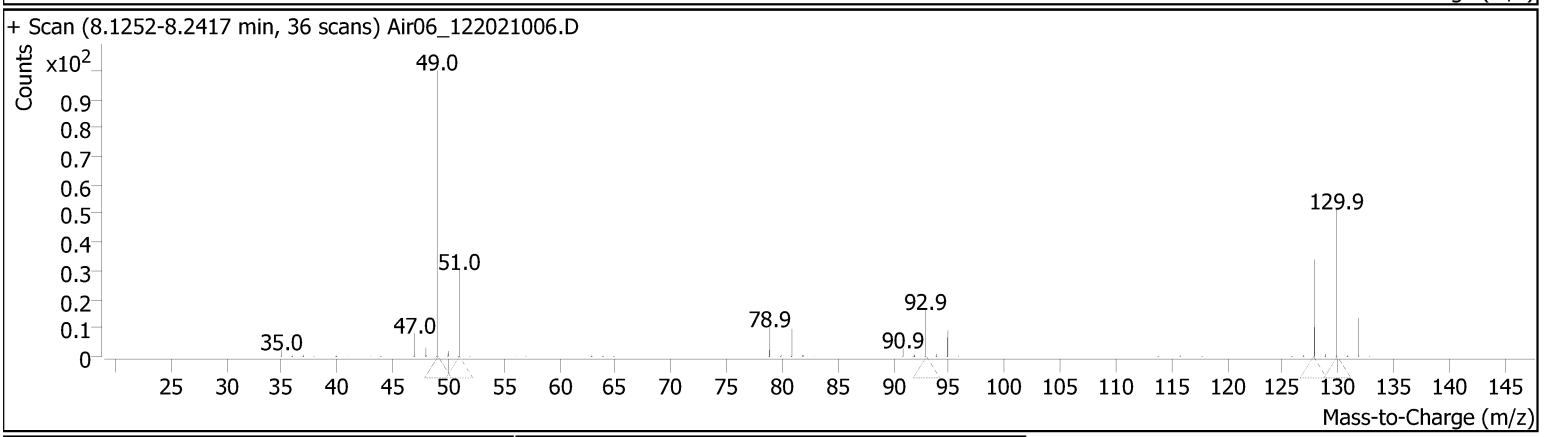


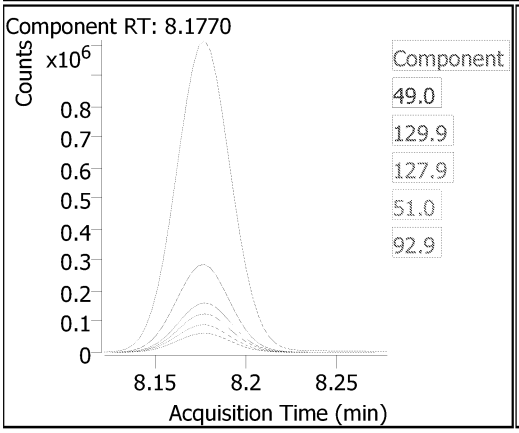


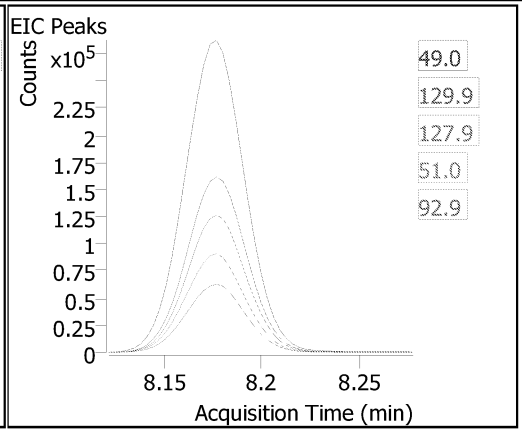
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.1770	Methane, bromochloro-	2192272.3	98.9	74-97-5	CH2BrCl	10

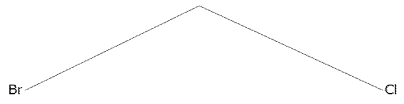




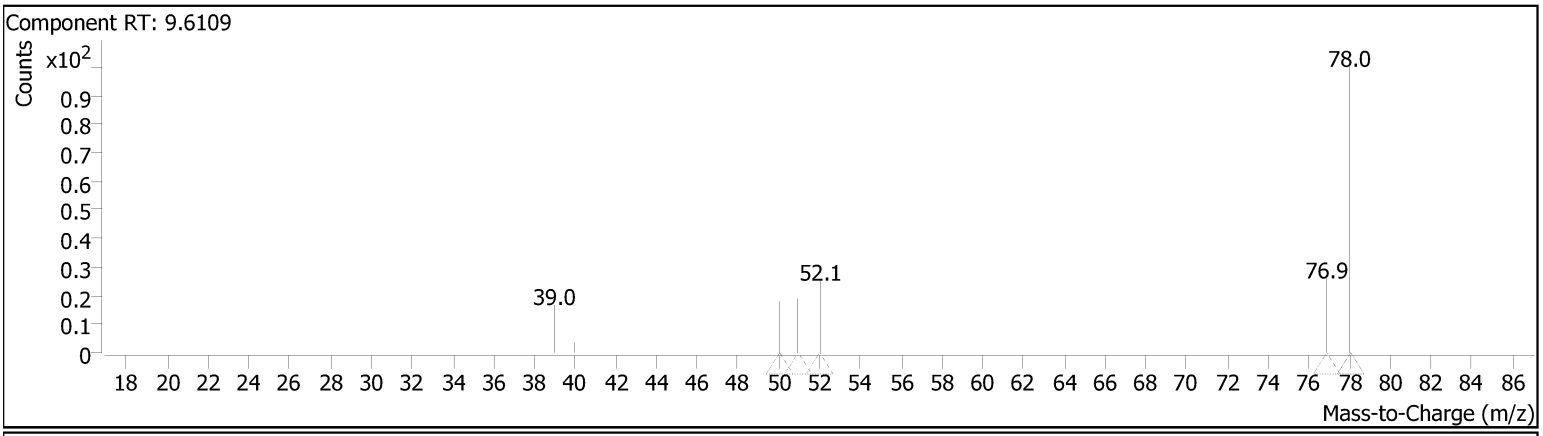


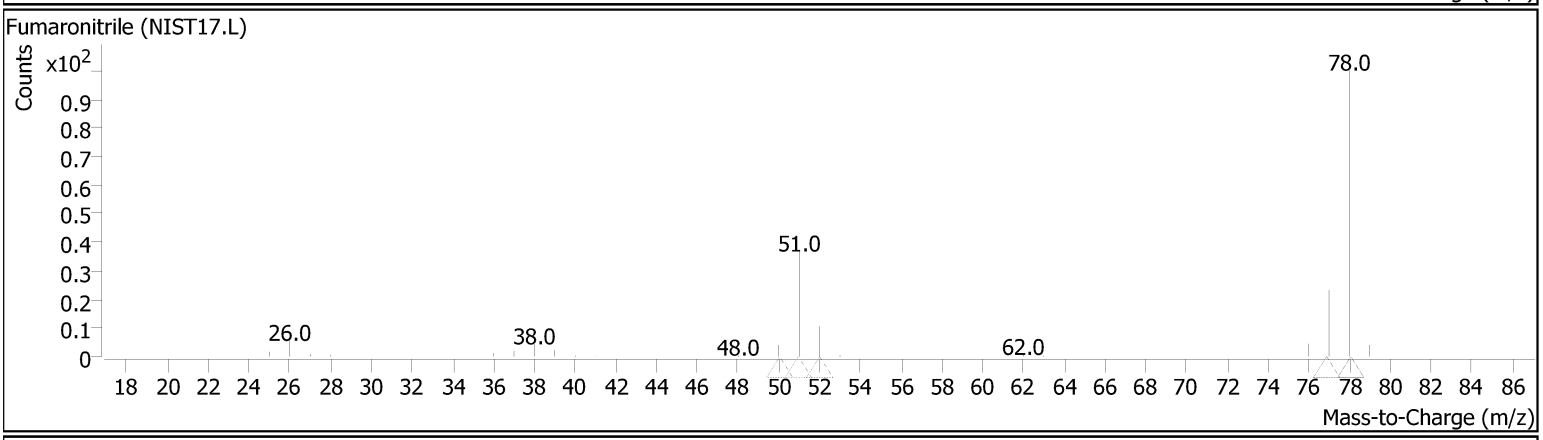


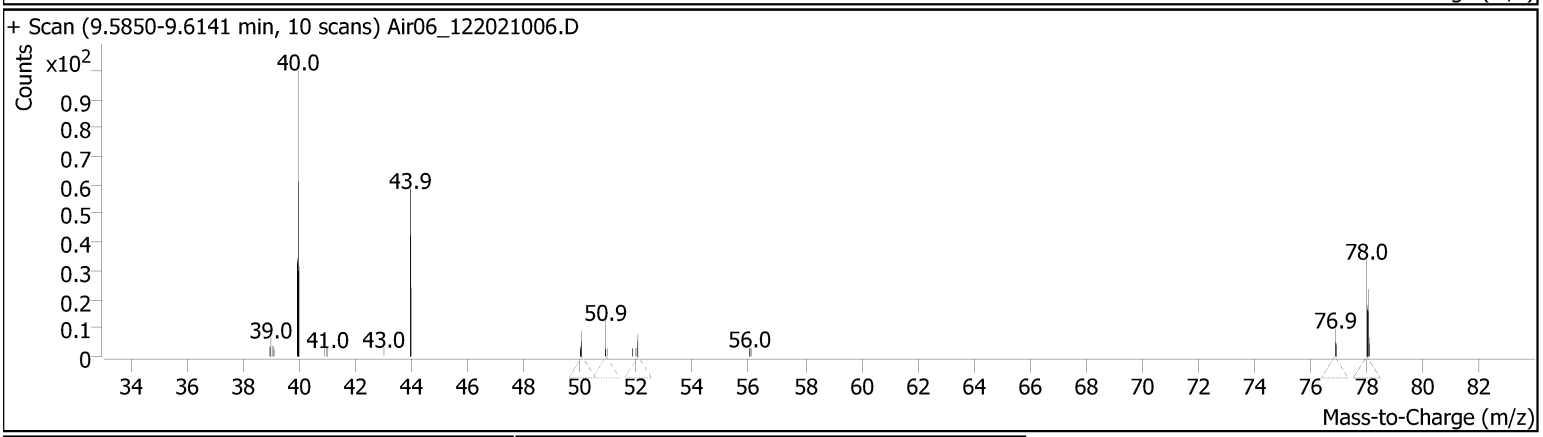


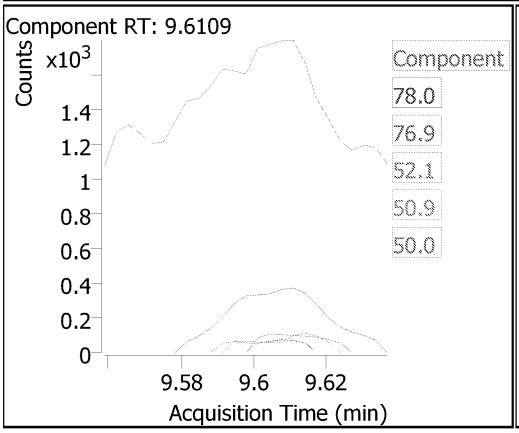


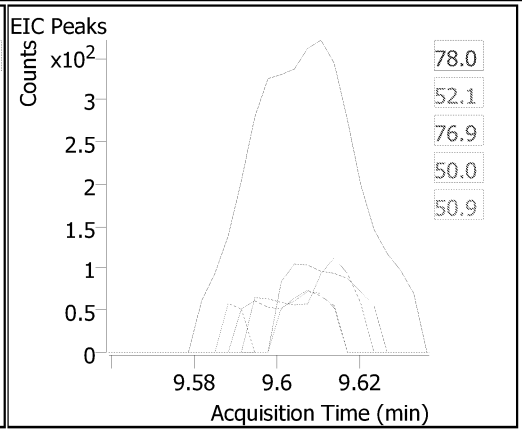
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.6109	Fumaronitrile	1687.1	84.8	764-42-1	C4H2N2	0.005194

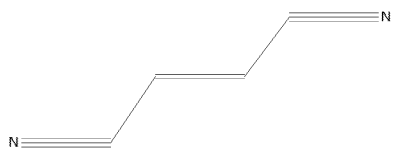




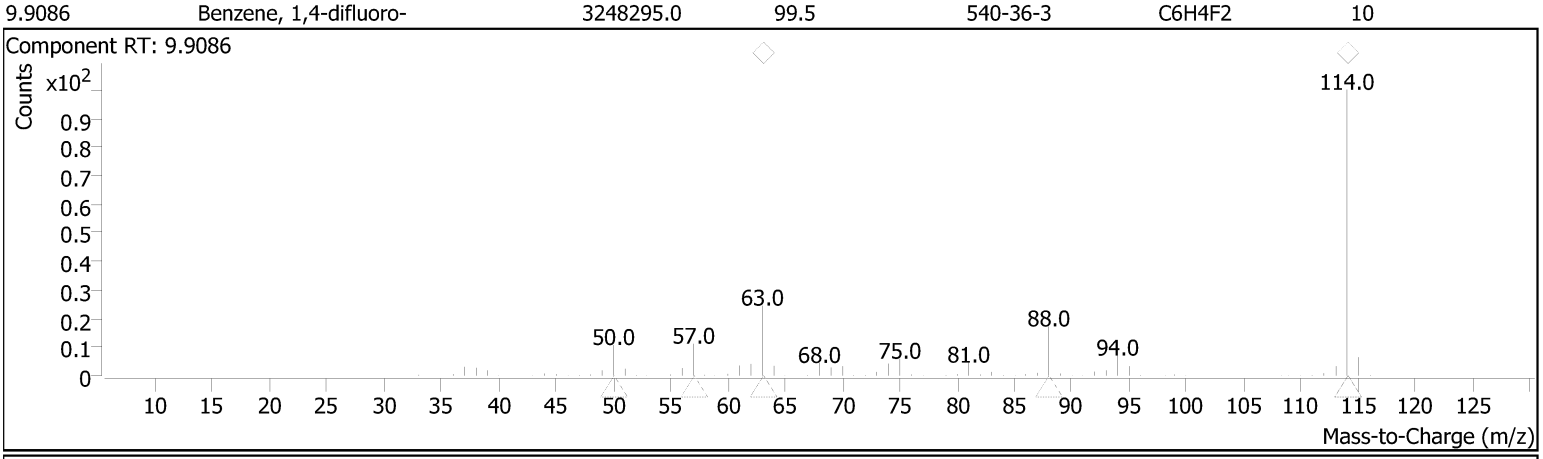


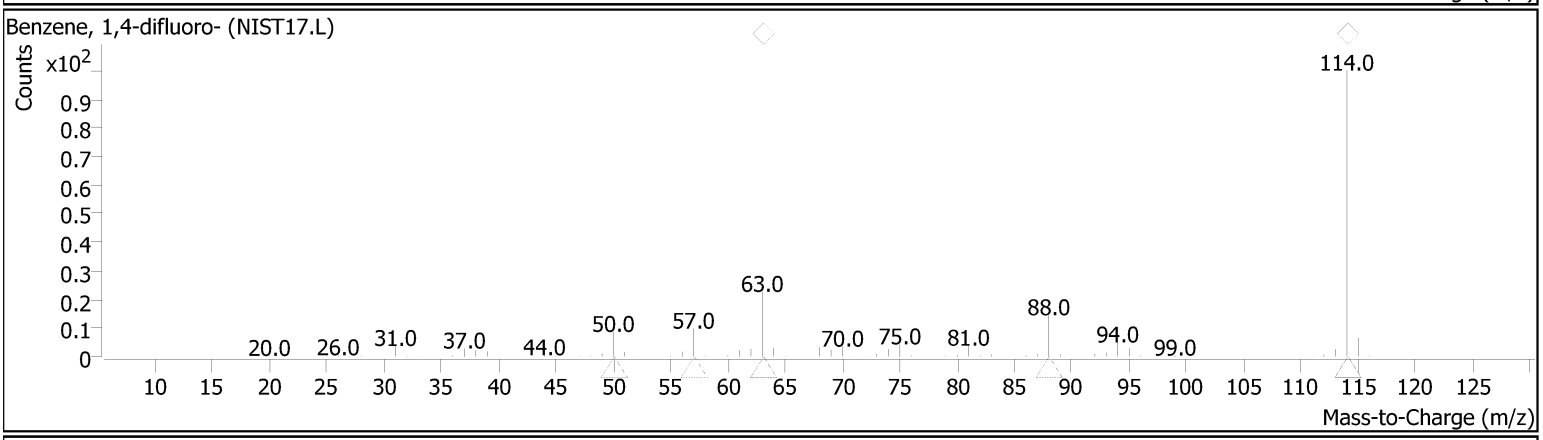


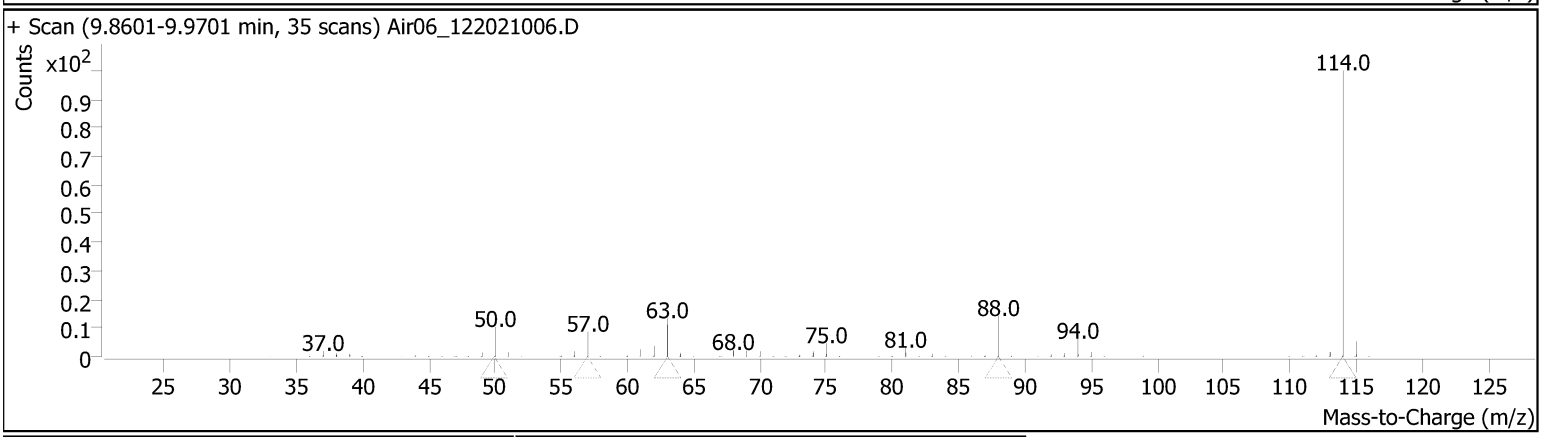


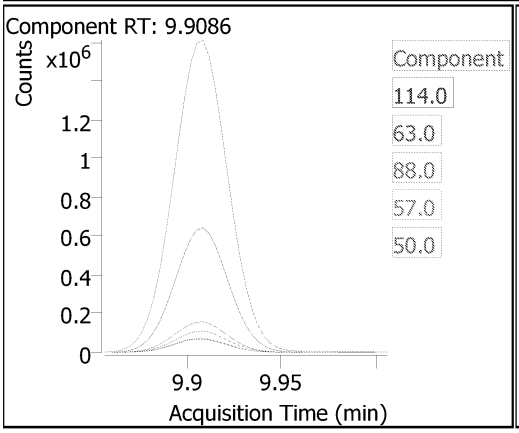


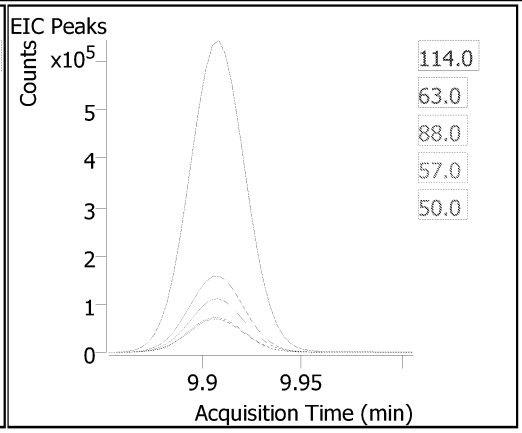
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
9.9086	Benzene, 1,4-difluoro-	3248295.0	99.5	540-36-3	C6H4F2	10





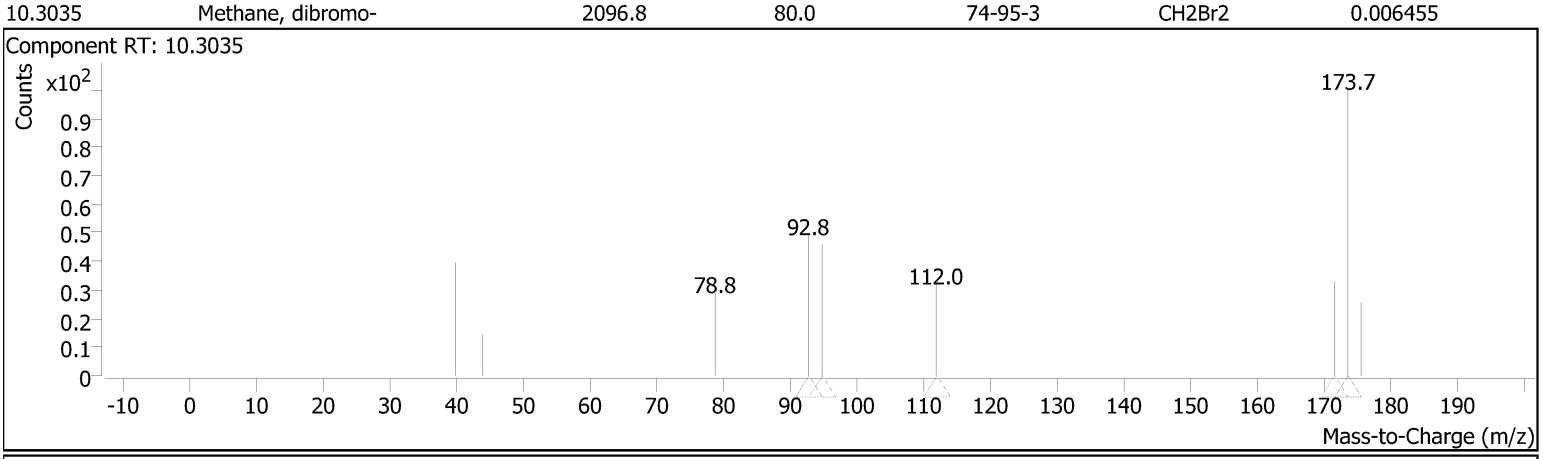


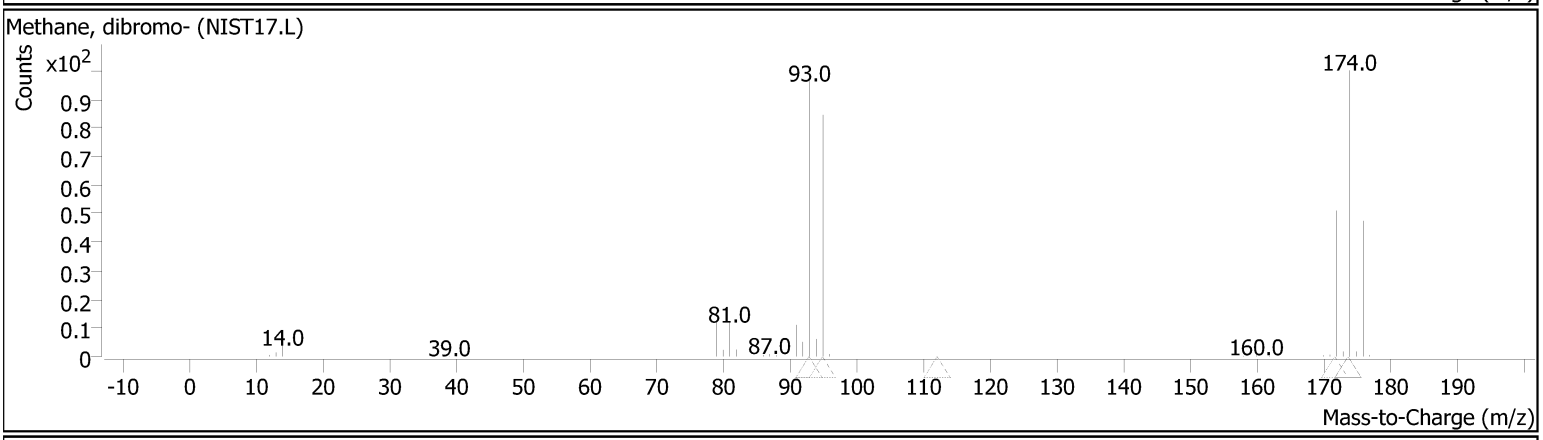


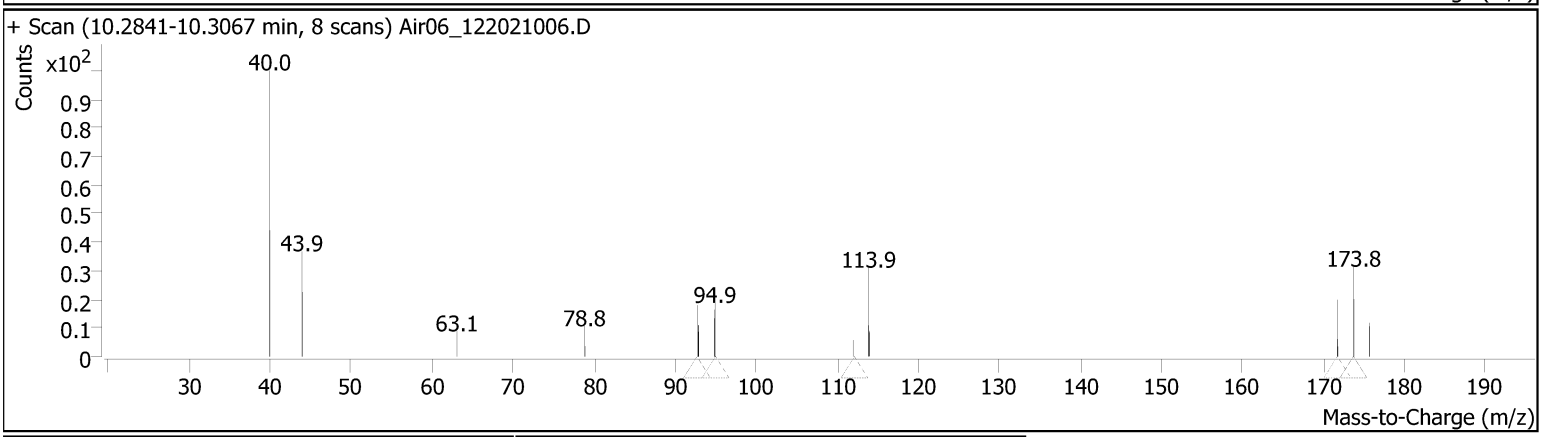


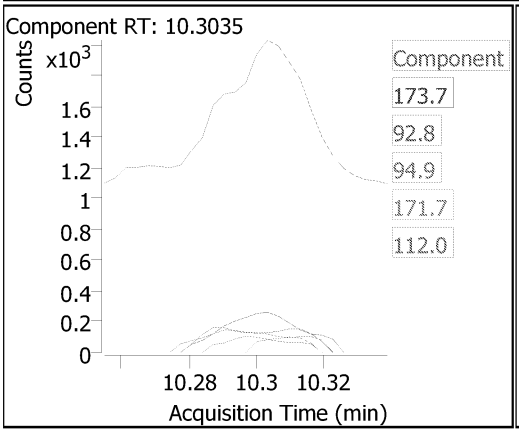


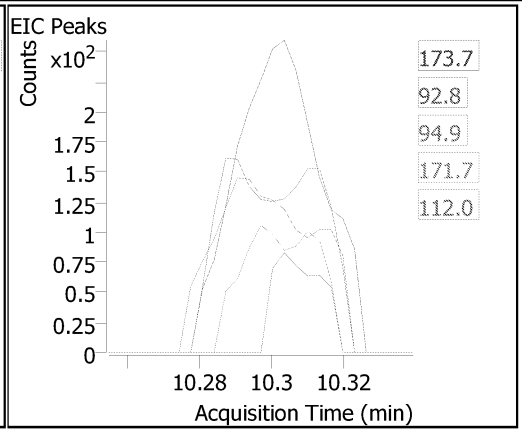
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.3035	Methane, dibromo-	2096.8	80.0	74-95-3	CH2Br2	0.006455

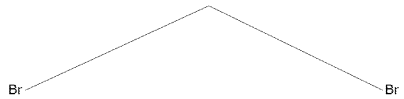




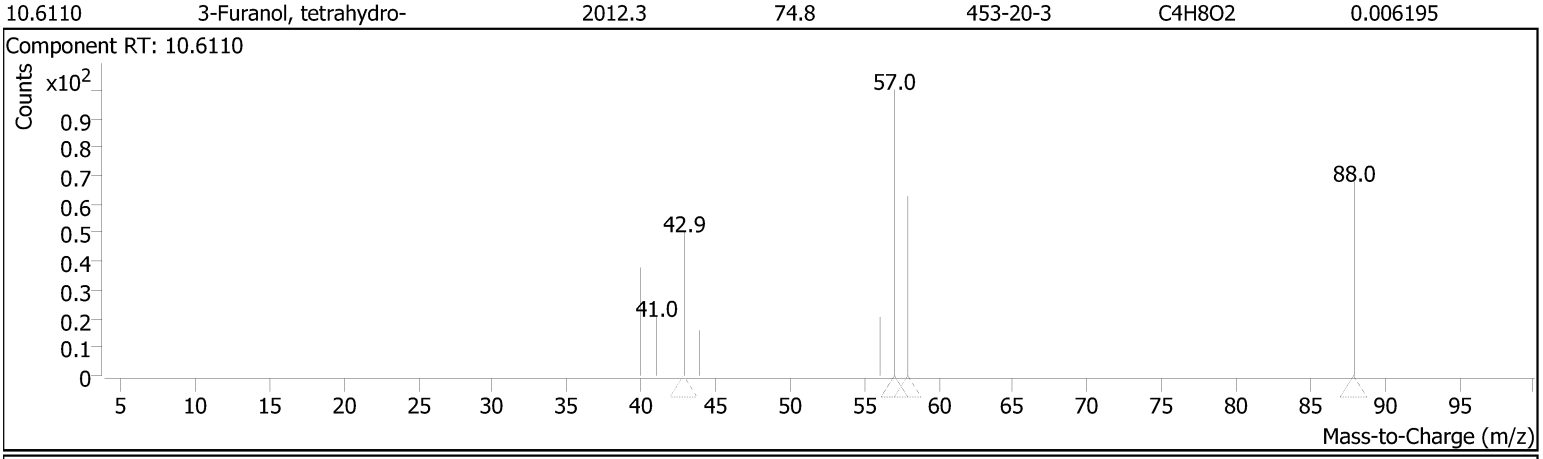


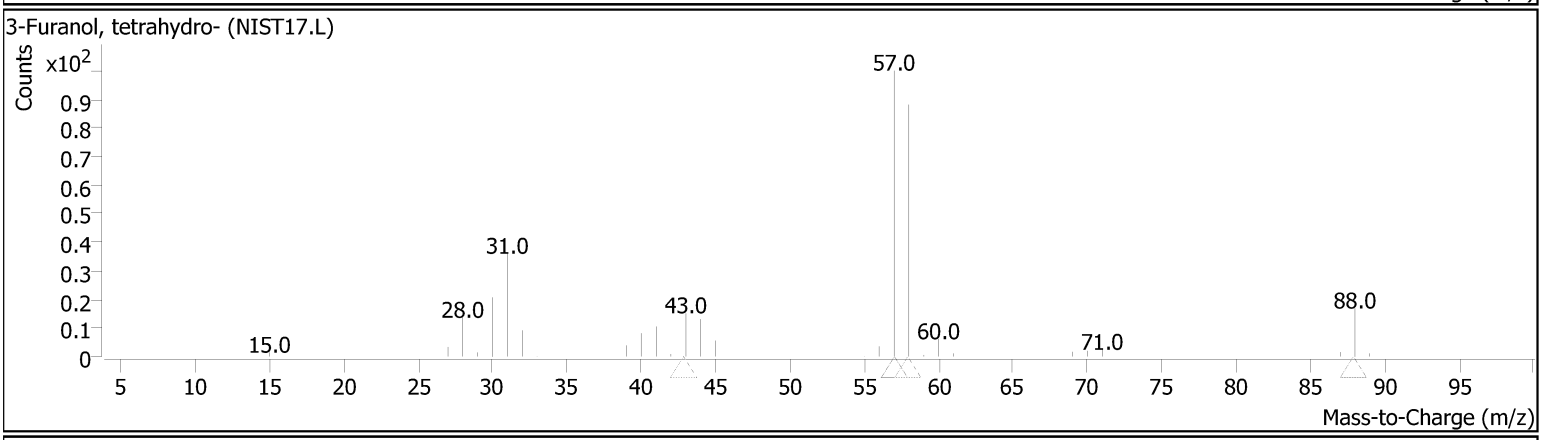


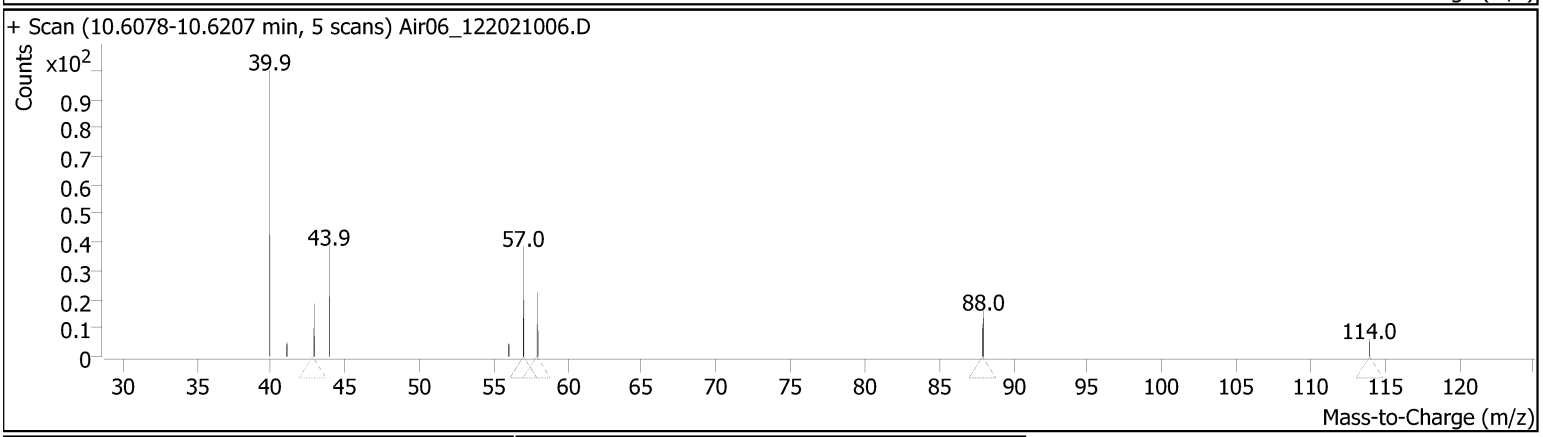


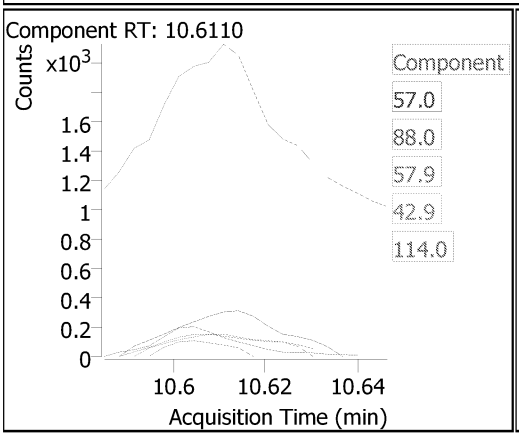


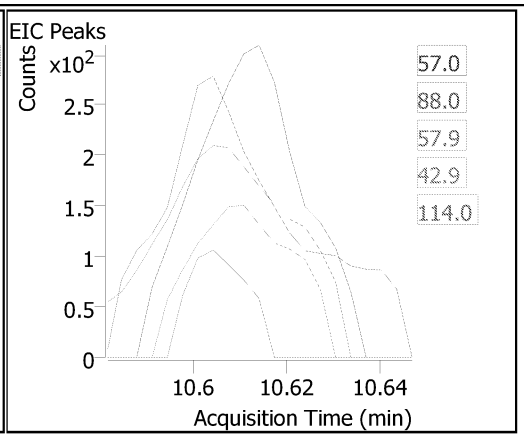
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
10.6110	3-Furanol, tetrahydro-	2012.3	74.8	453-20-3	C4H8O2	0.006195

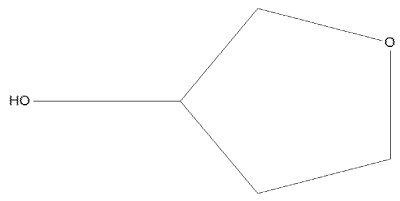




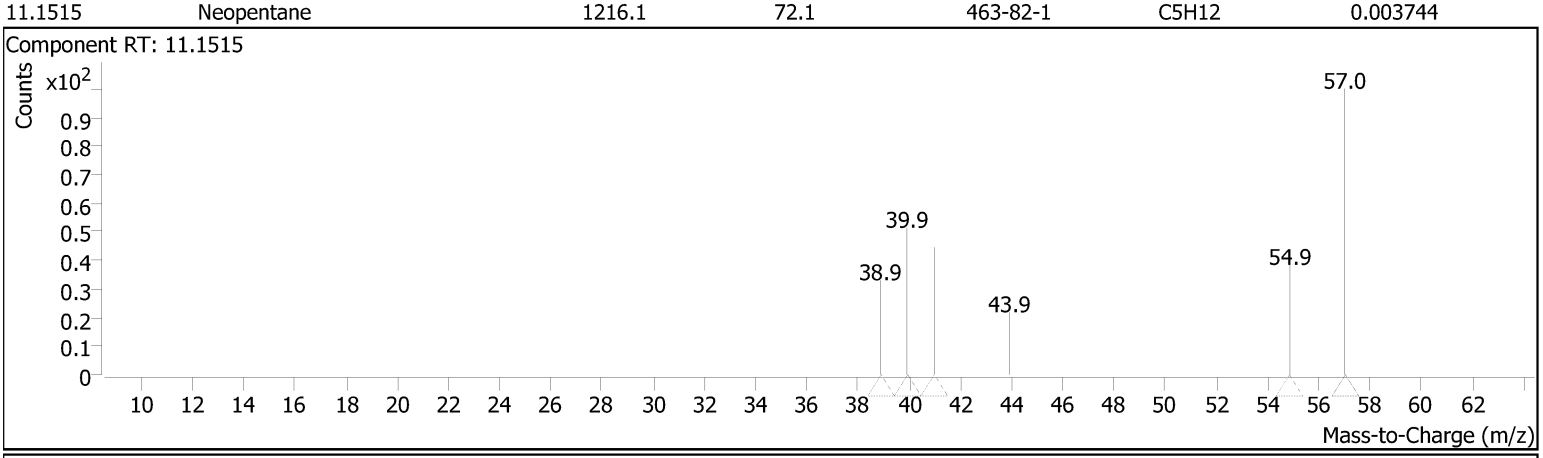


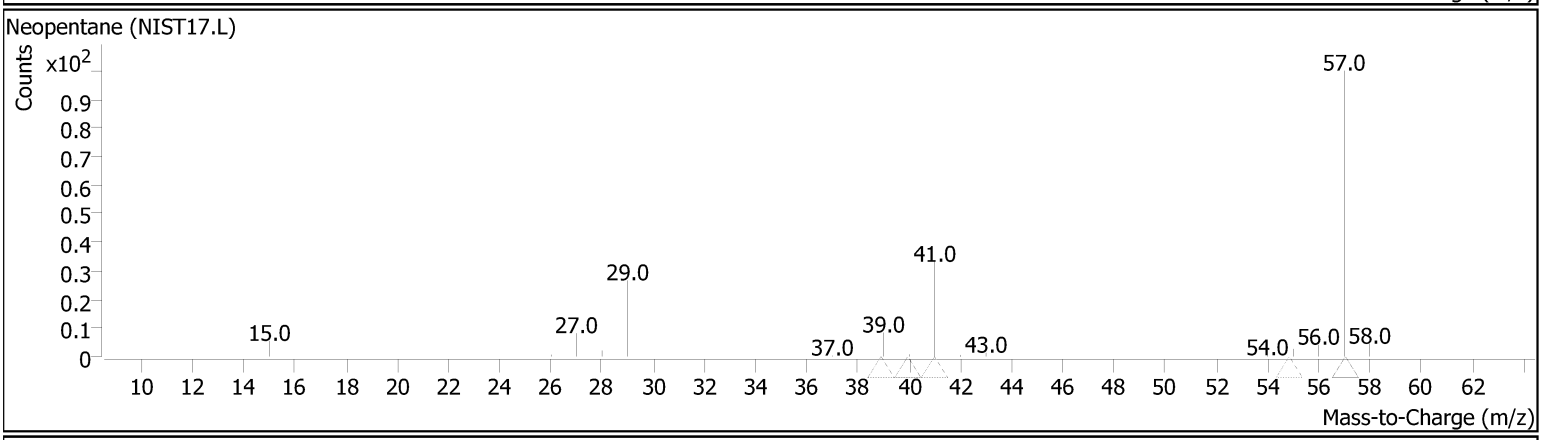


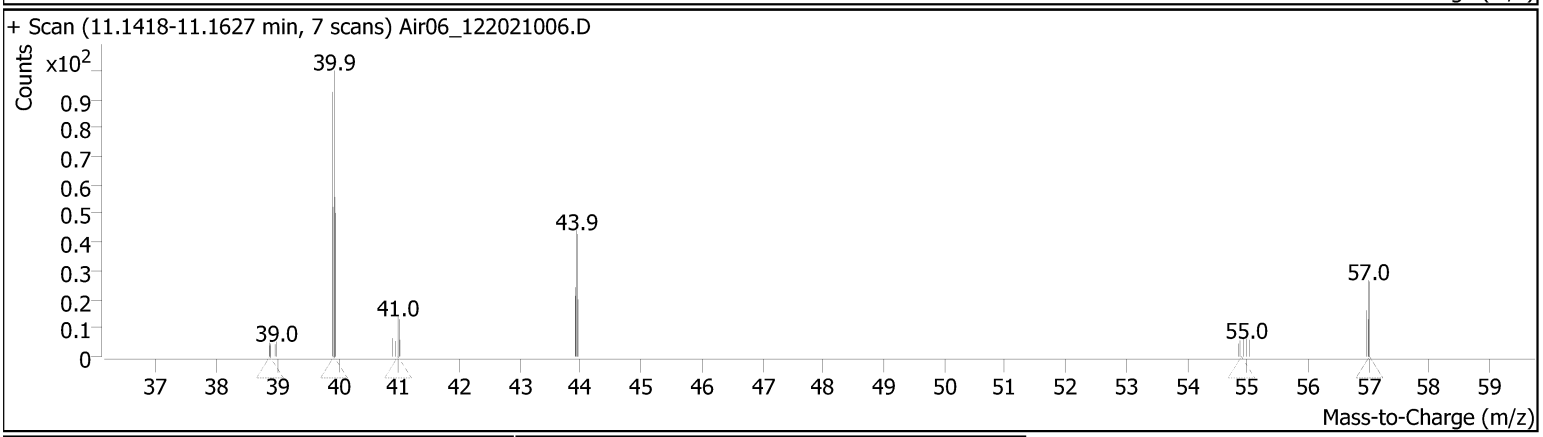


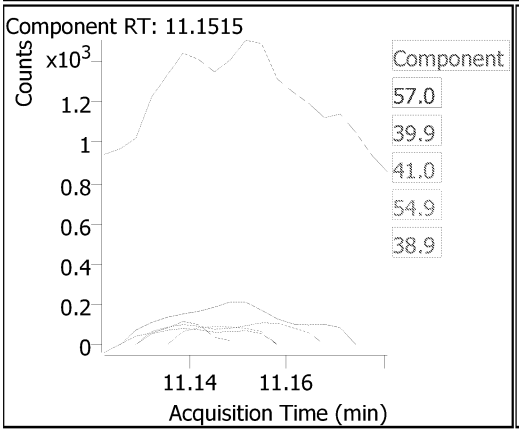


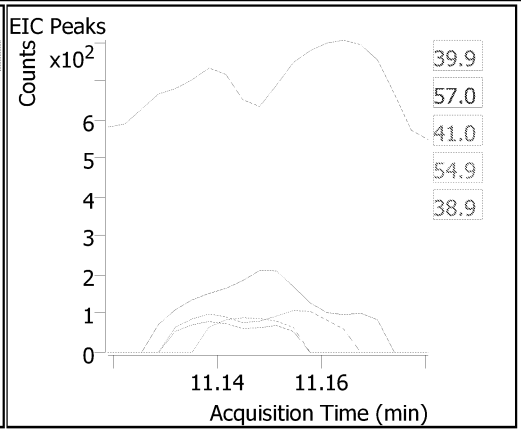
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.1515	Neopentane	1216.1	72.1	463-82-1	C5H12	0.003744

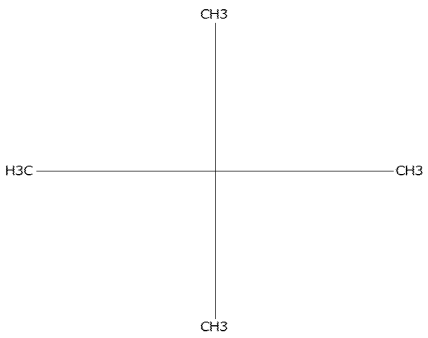




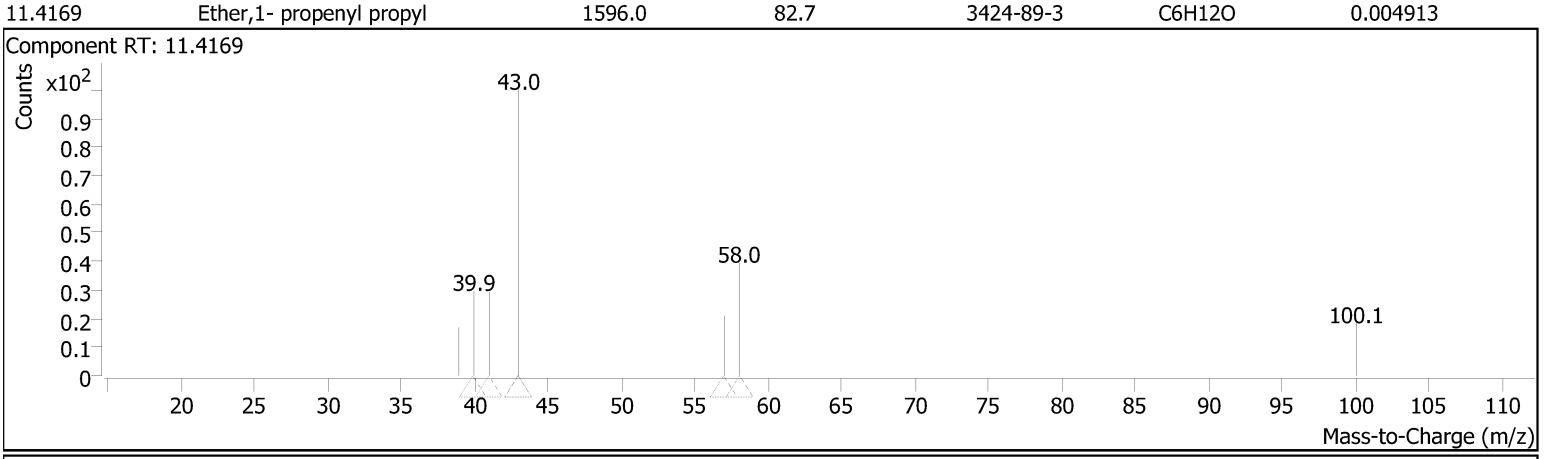


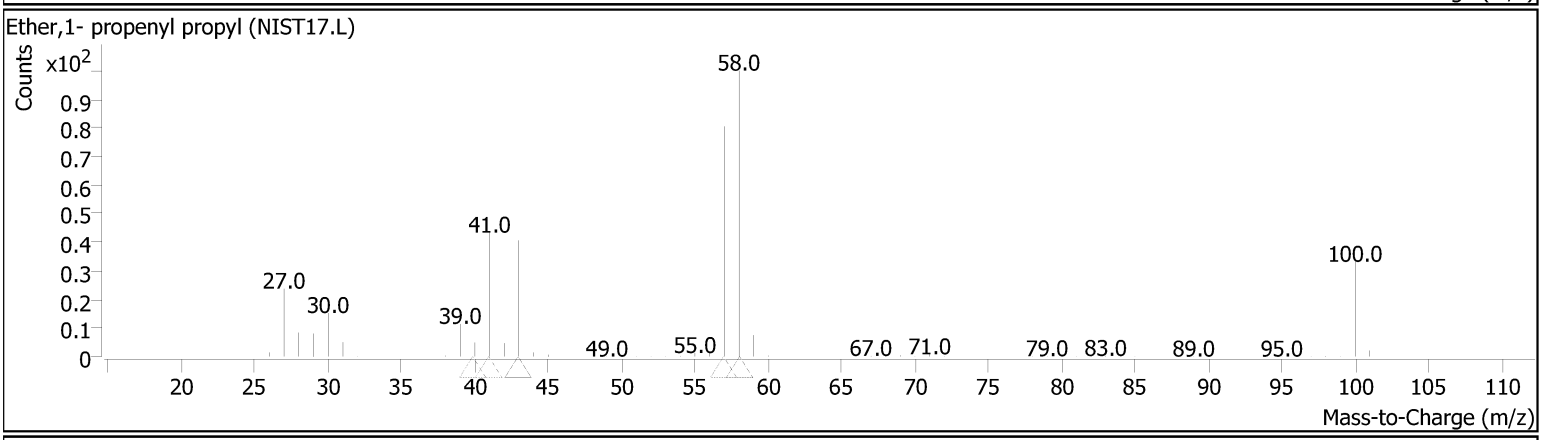


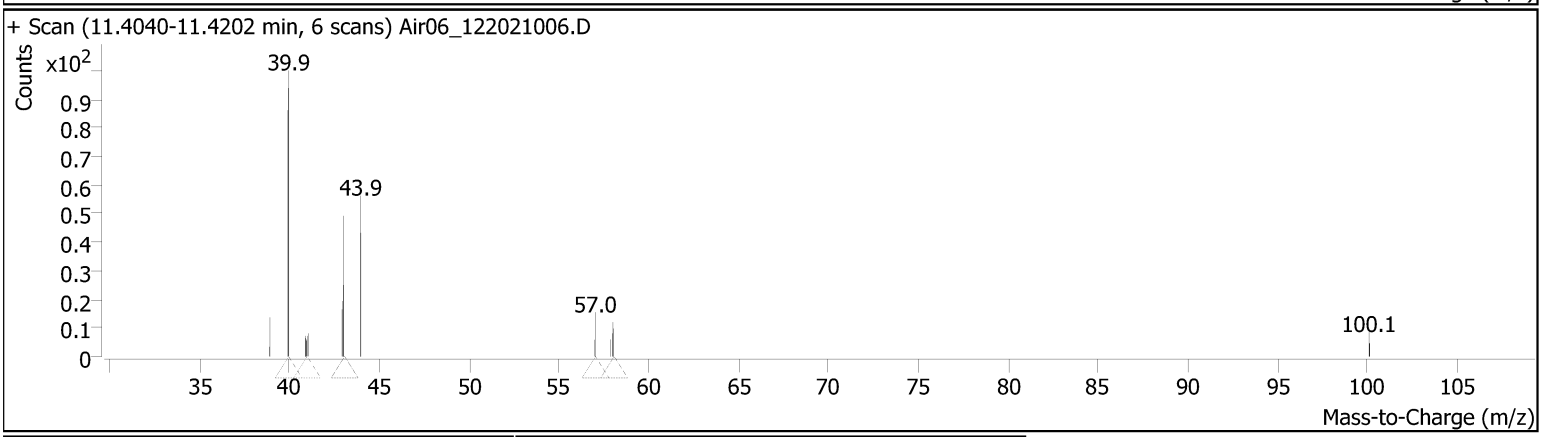


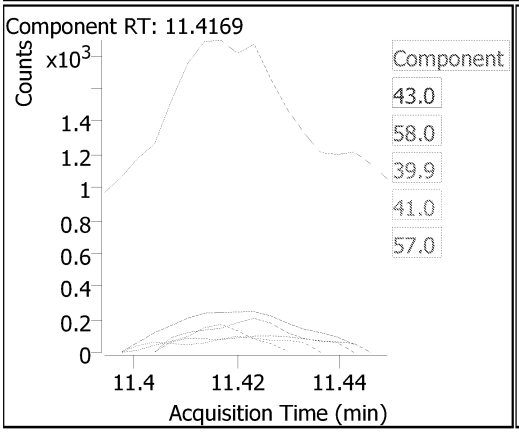


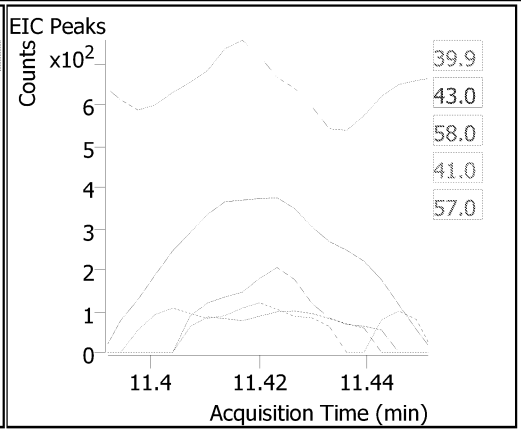
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.4169	Ether,1- propenyl propyl	1596.0	82.7	3424-89-3	C6H12O	0.004913

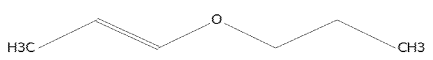




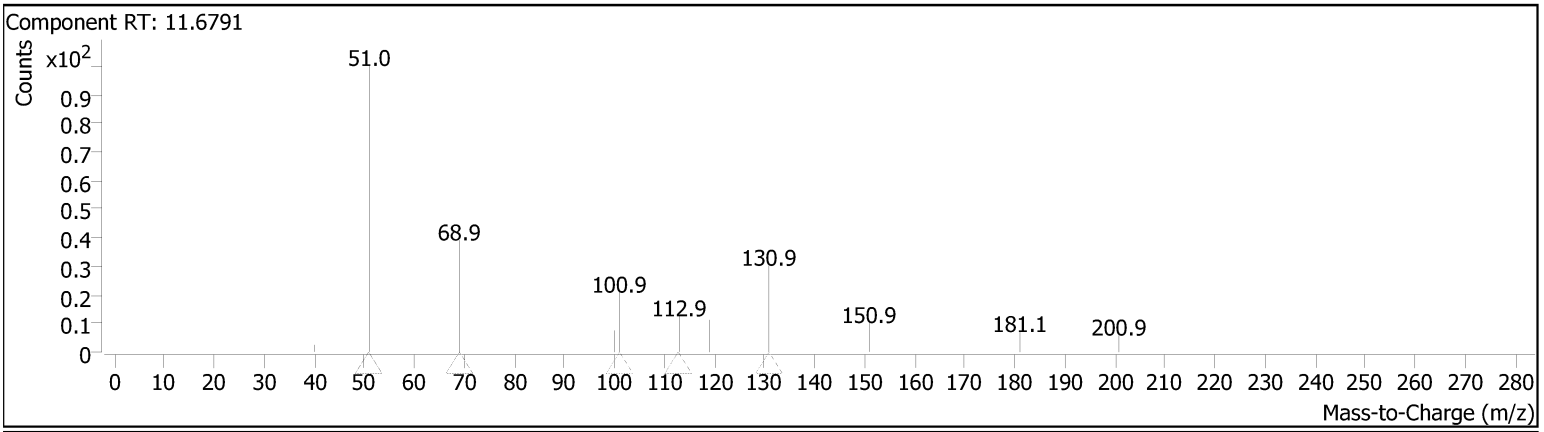


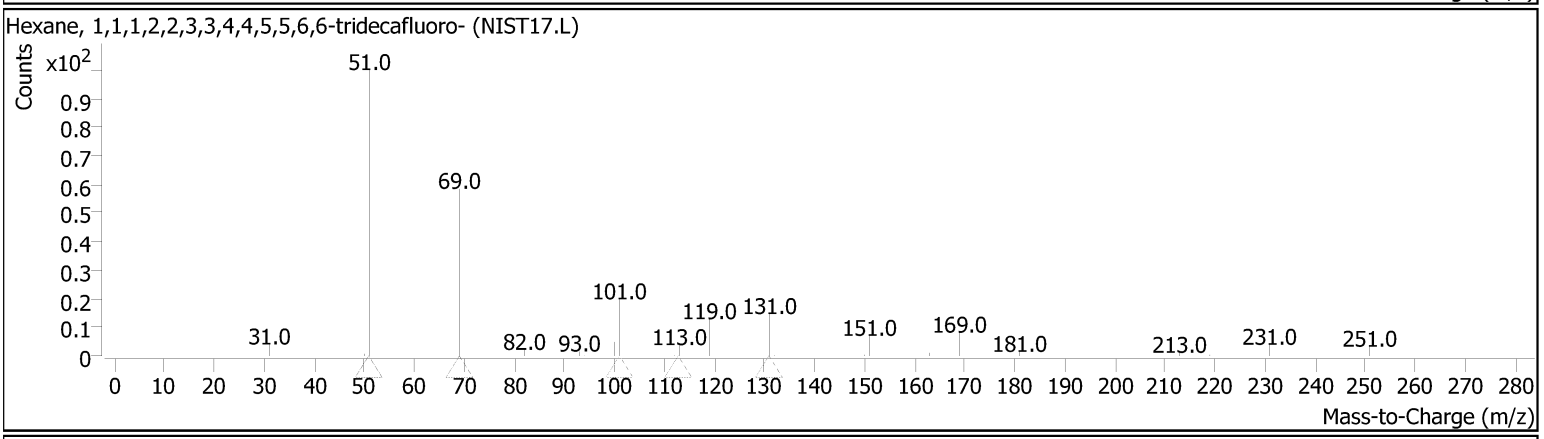


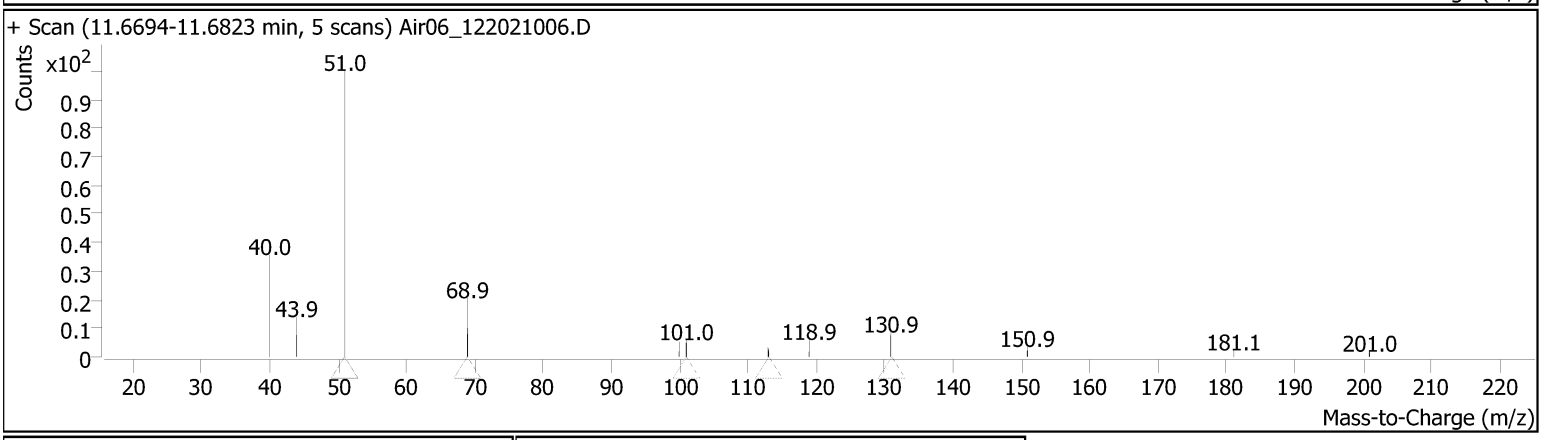


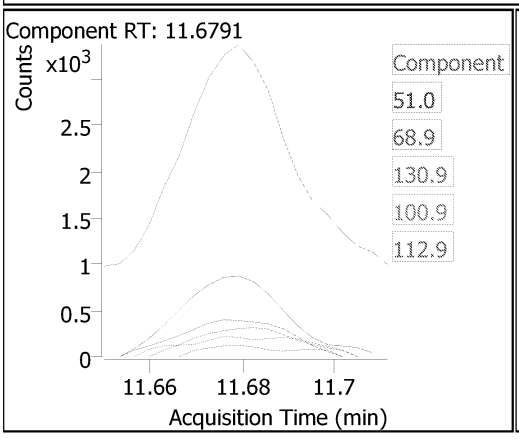


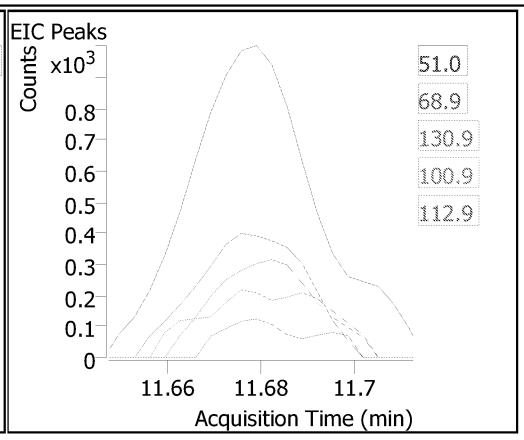
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
11.6791	Hexane, 1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-	3884.2	71.2	355-37-3	C6HF13	0.01196

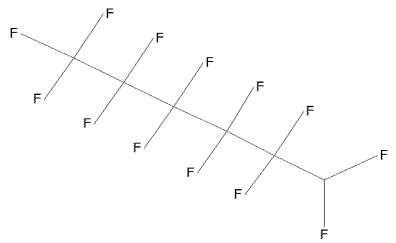




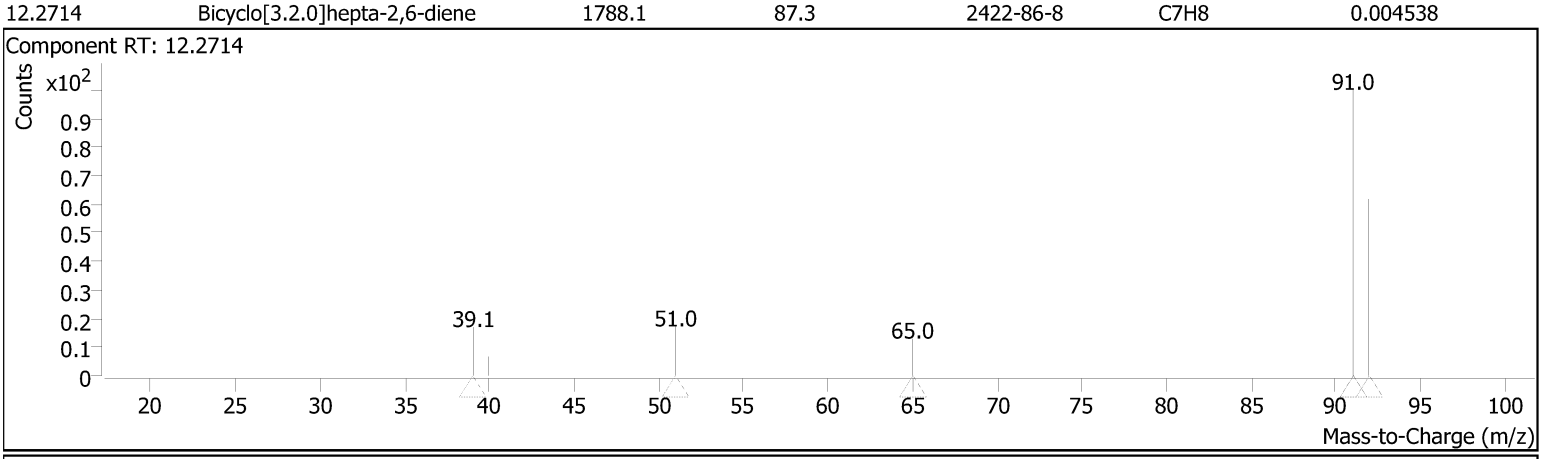


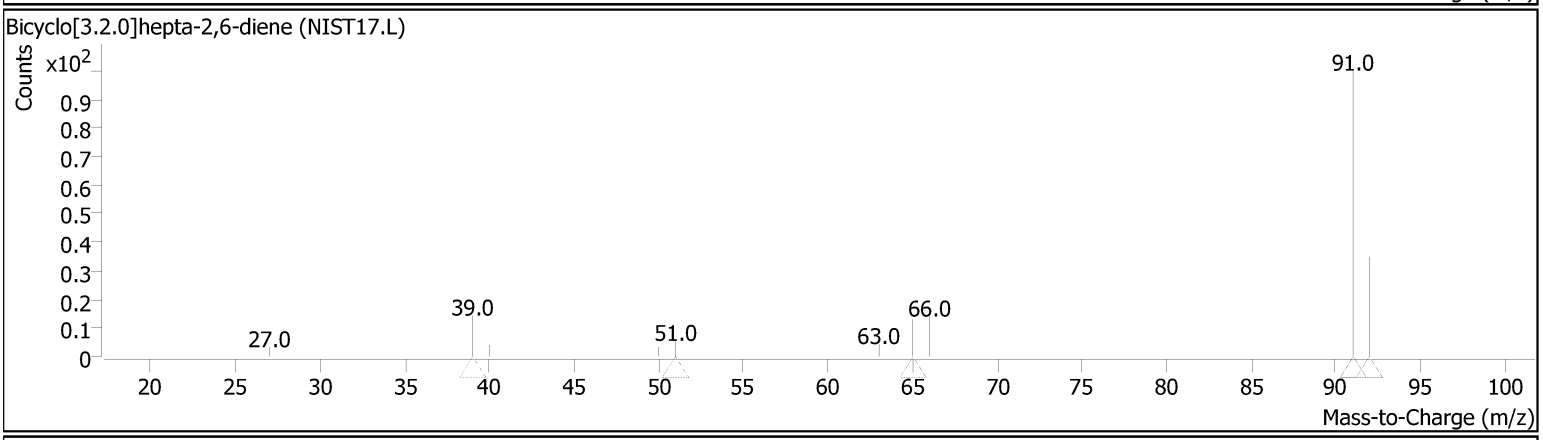


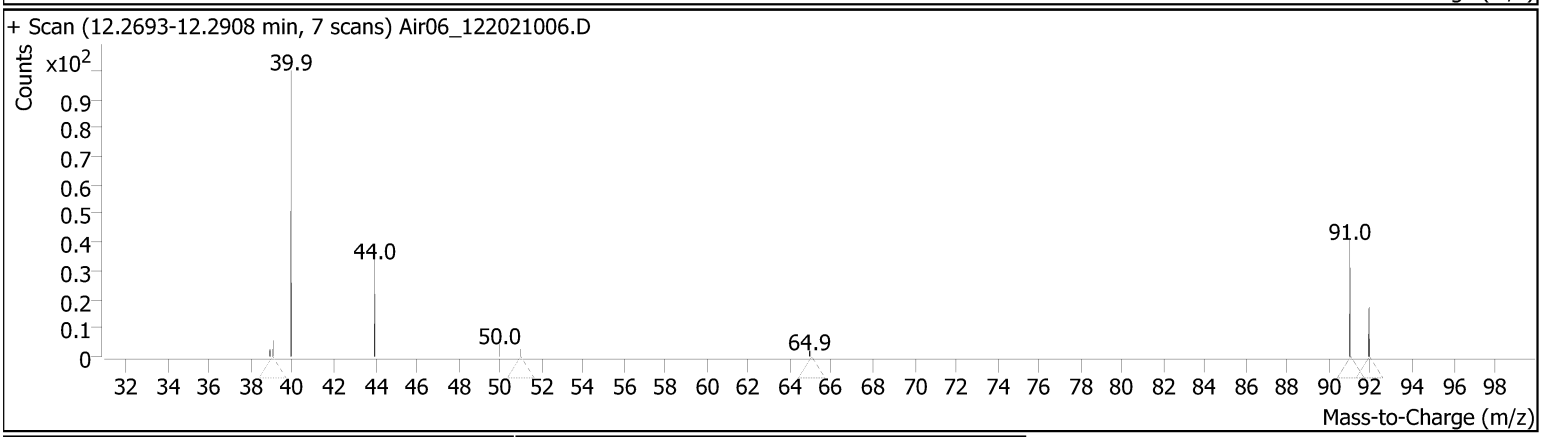


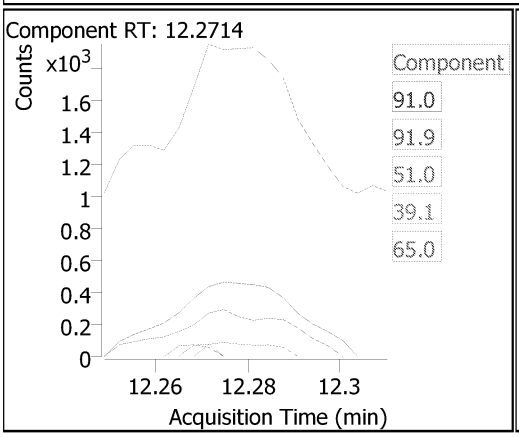


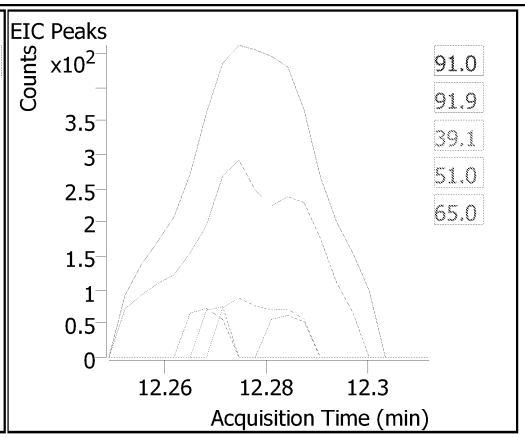
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.2714	Bicyclo[3.2.0]hepta-2,6-diene	1788.1	87.3	2422-86-8	C7H8	0.004538

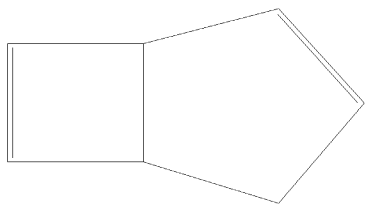




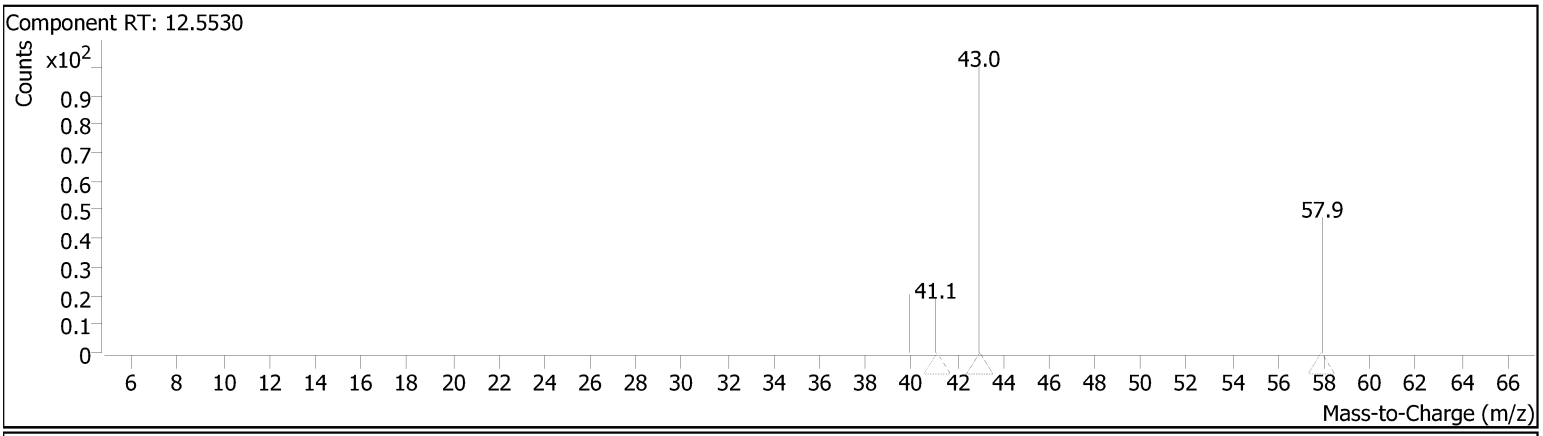


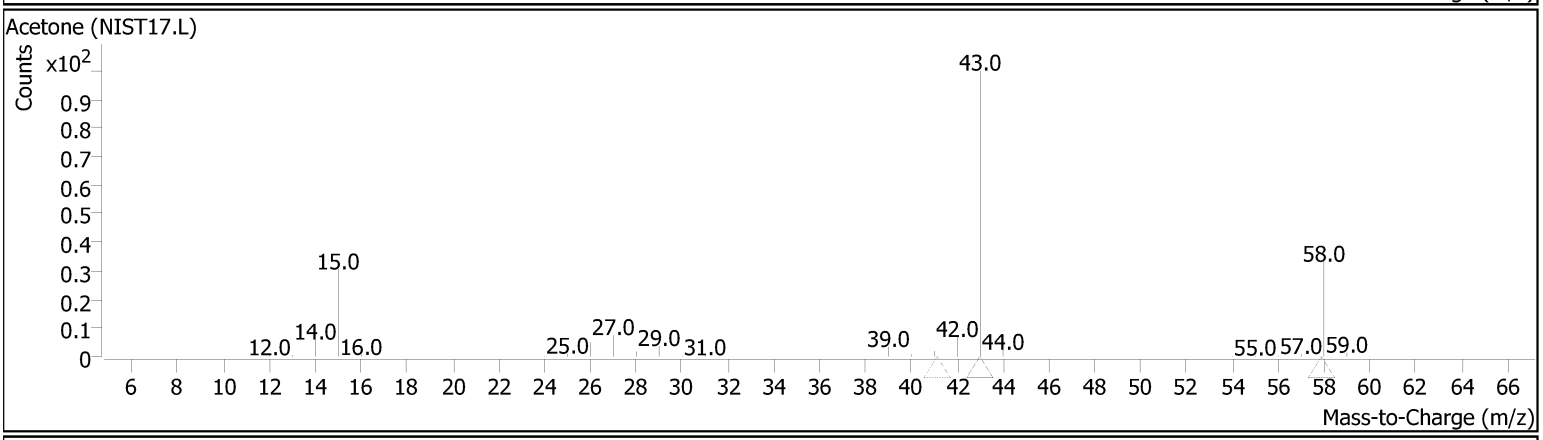


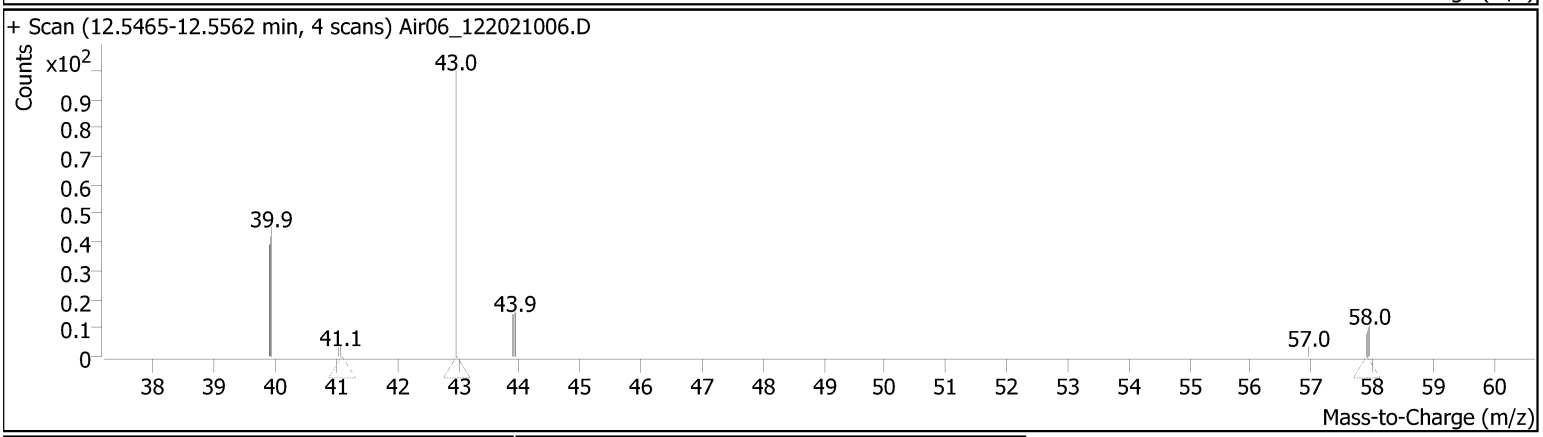


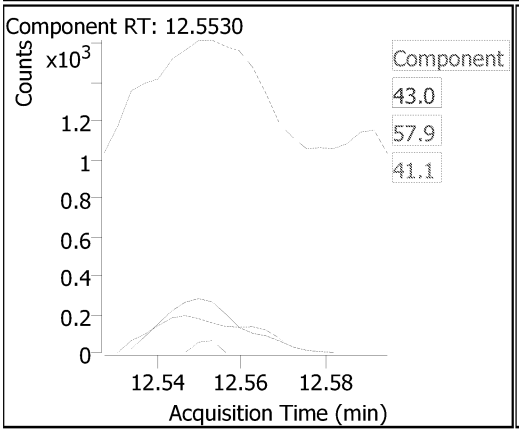


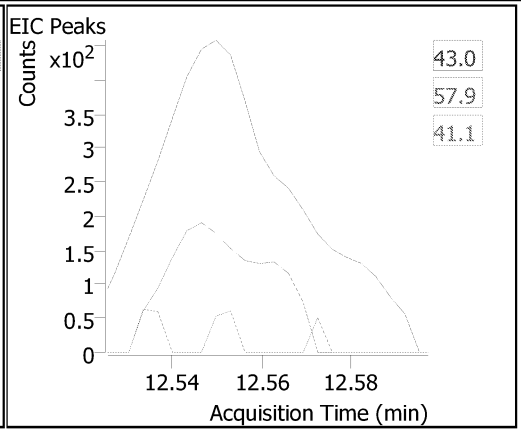
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.5530	Acetone	1338.9	76.5	67-64-1	C3H6O	0.003398

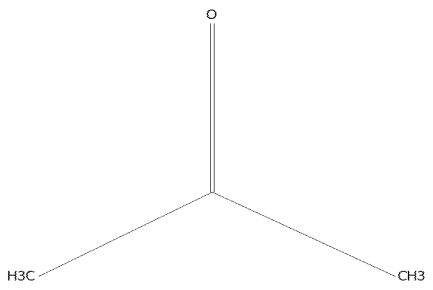








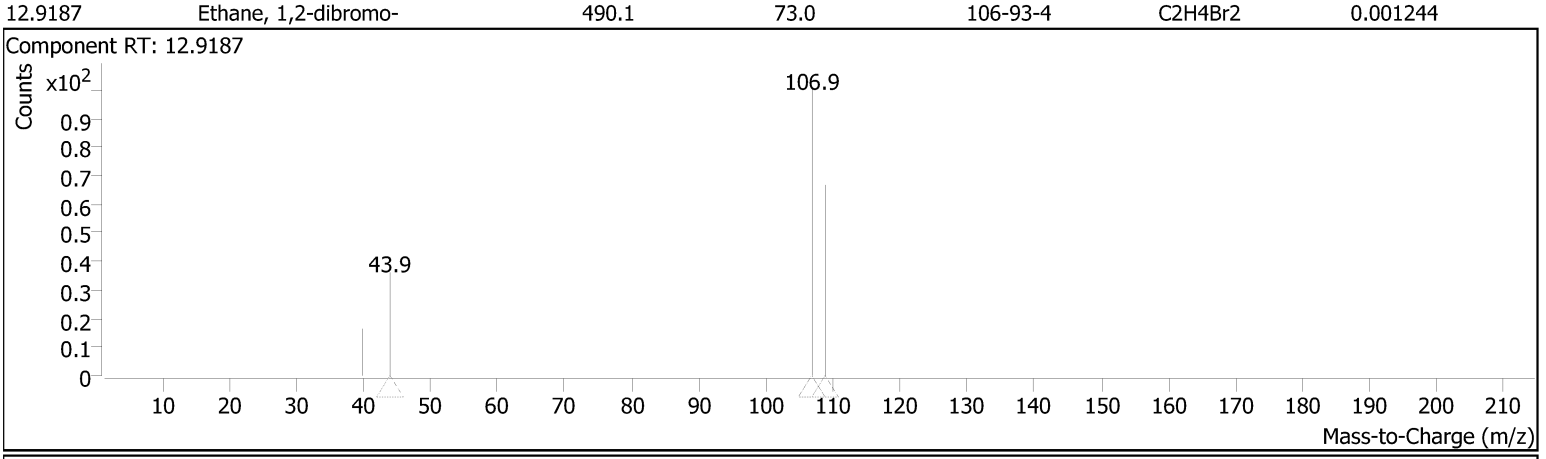


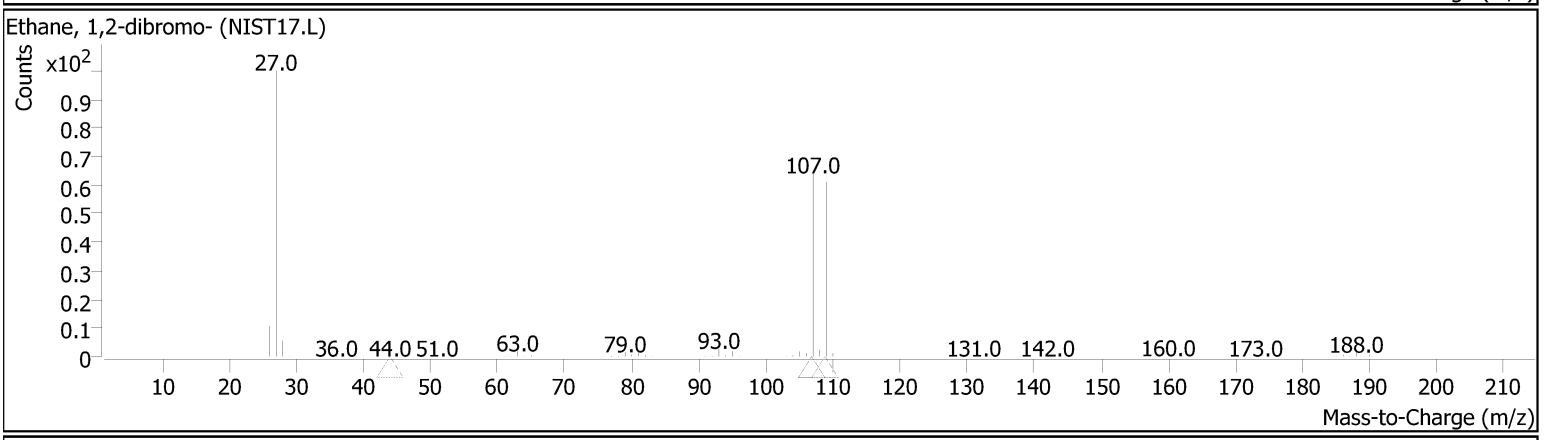


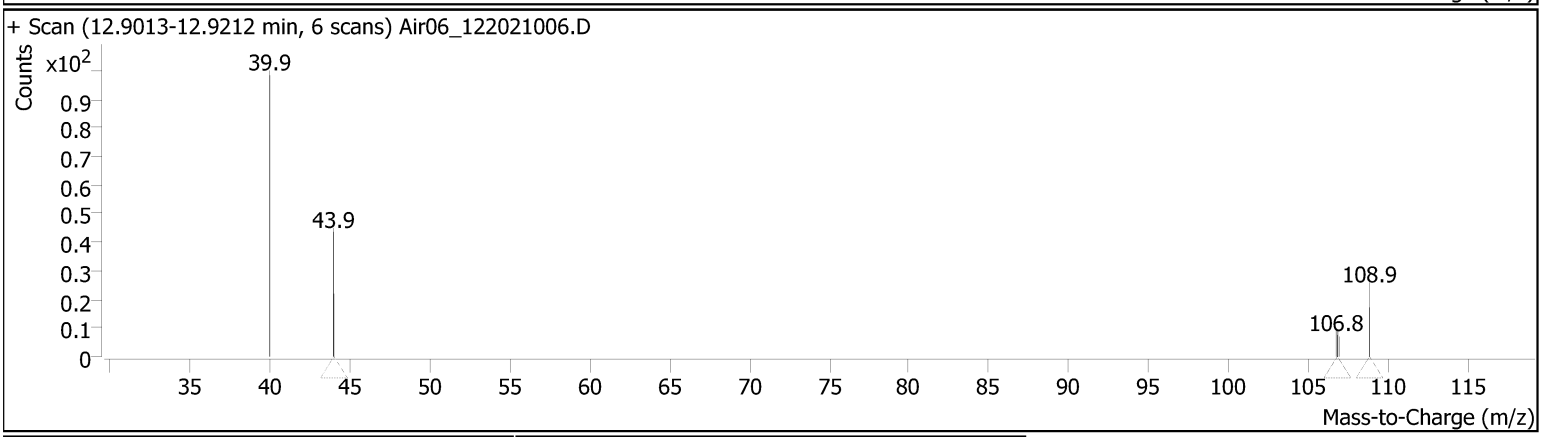
Library Search Results - NonTarget Hits with Details

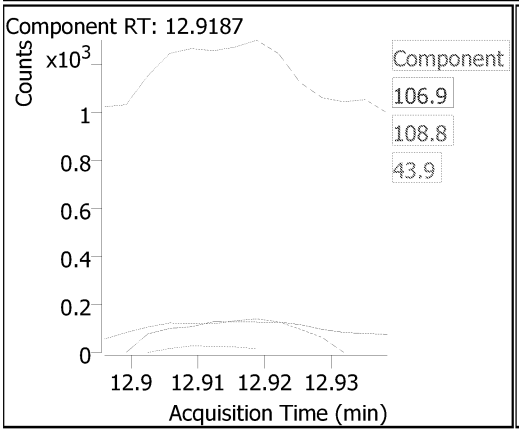
Agilent Technologies

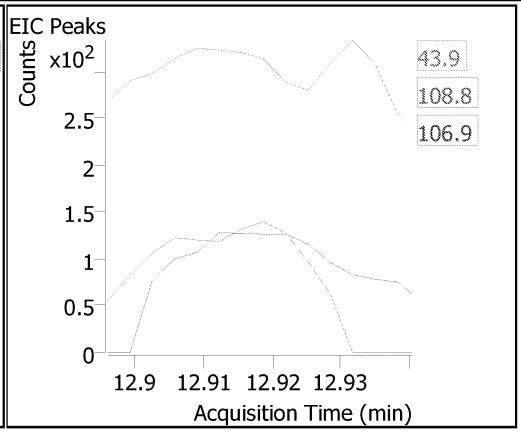
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
12.9187	Ethane, 1,2-dibromo-	490.1	73.0	106-93-4	C2H4Br2	0.001244





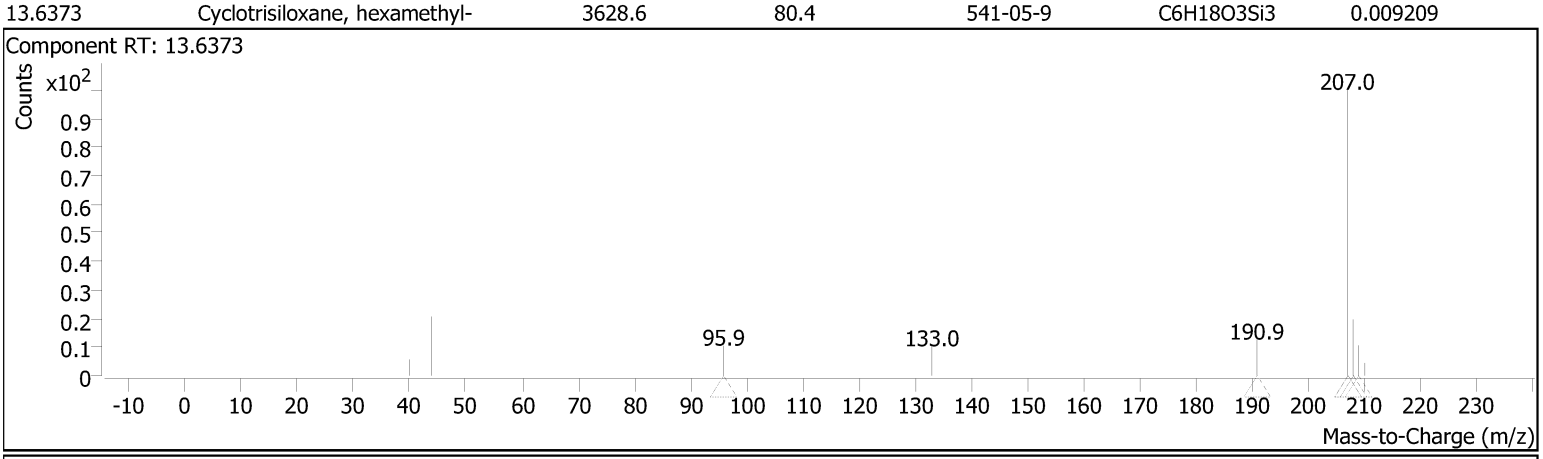


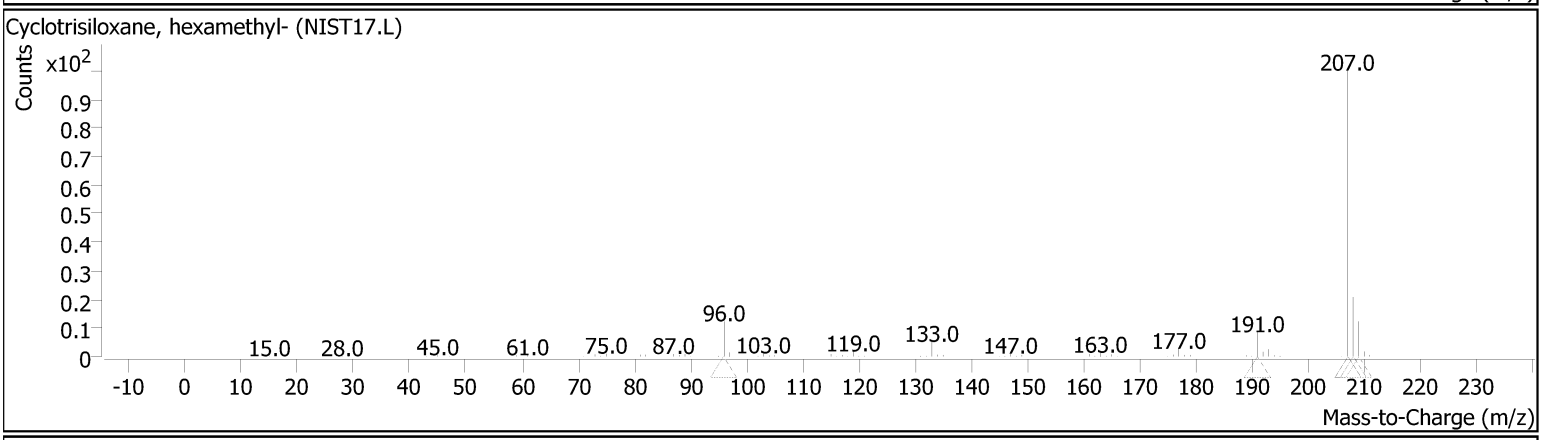


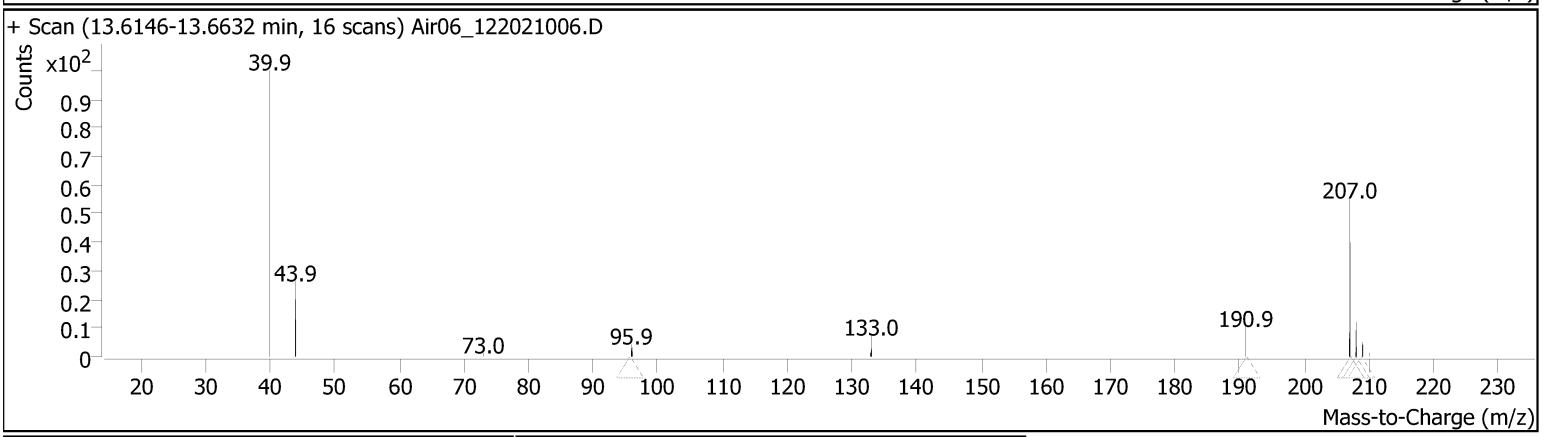


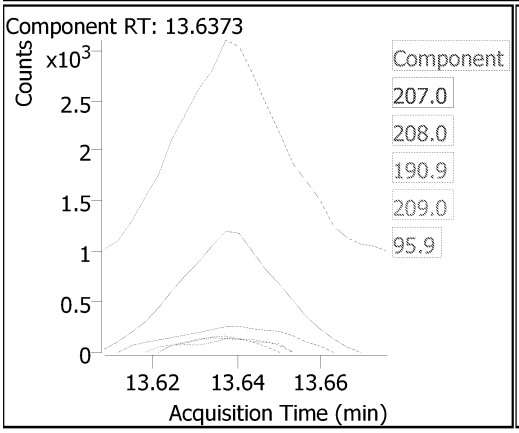


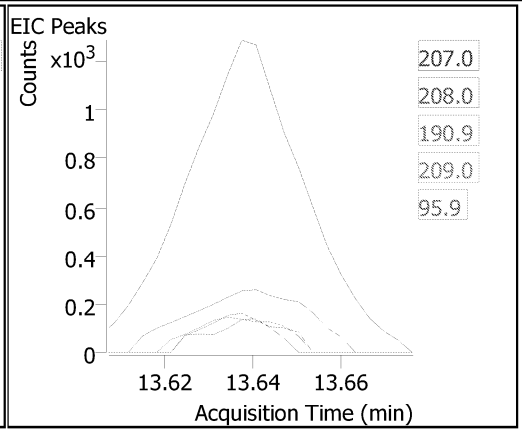
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
13.6373	Cyclotrisiloxane, hexamethyl-	3628.6	80.4	541-05-9	C6H18O3Si3	0.009209

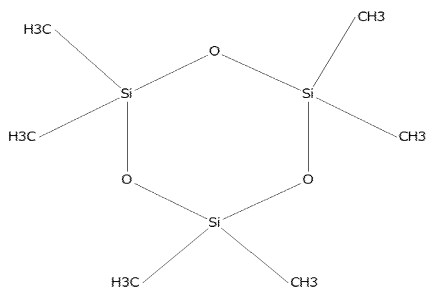




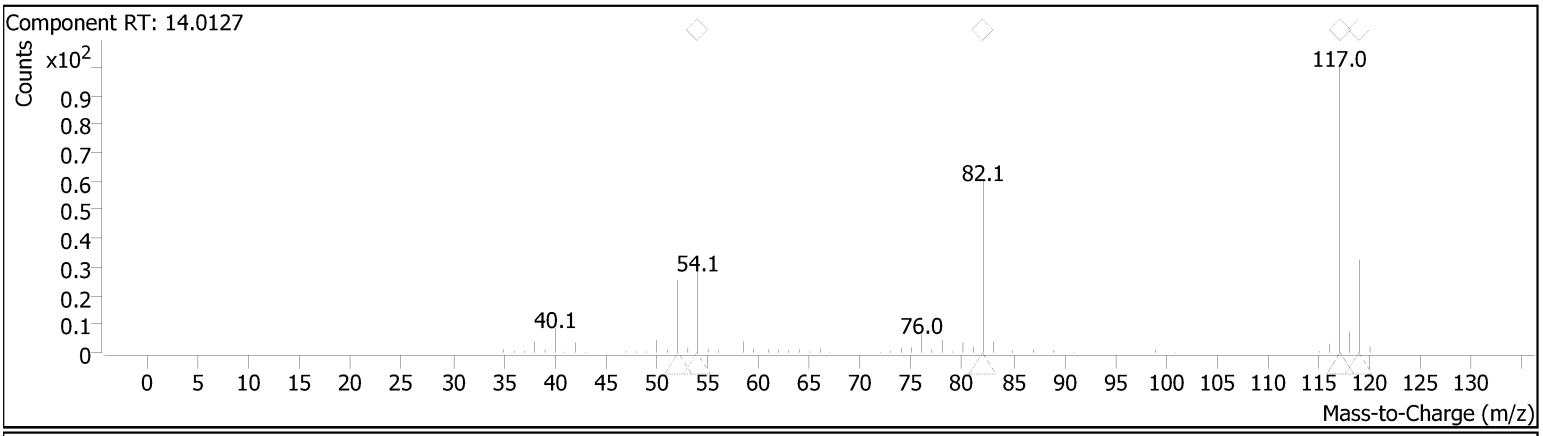


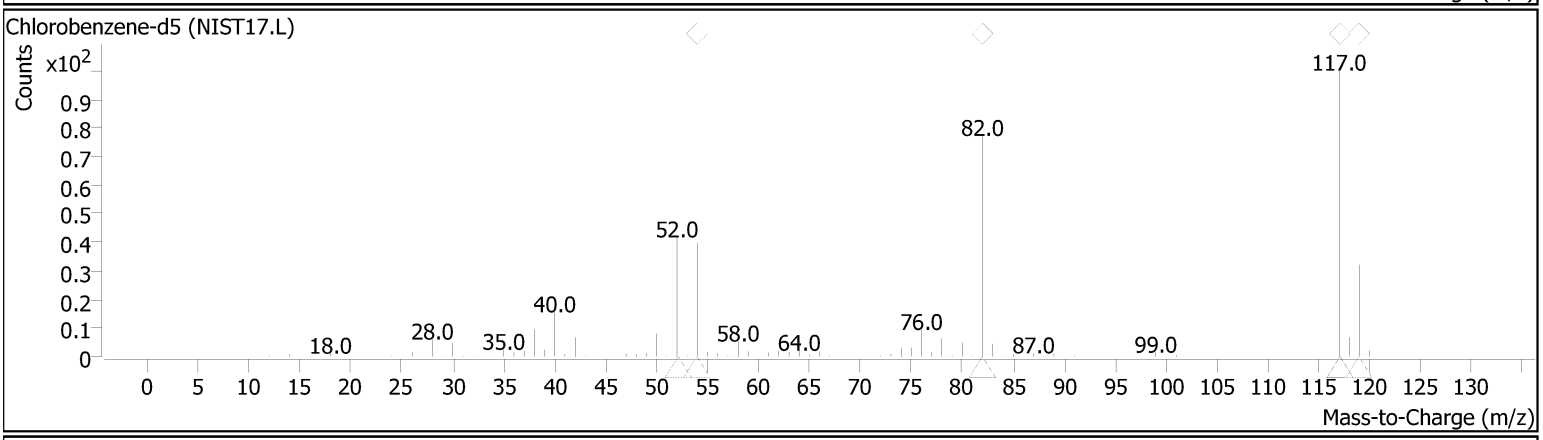


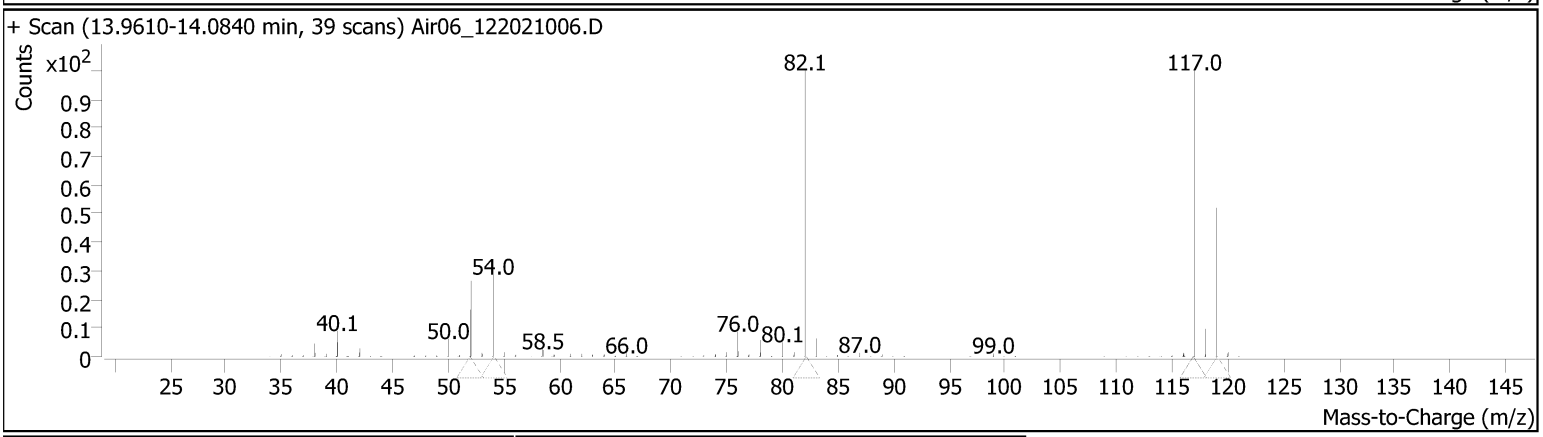


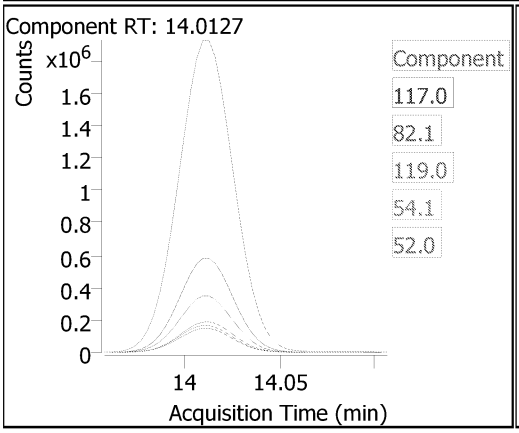


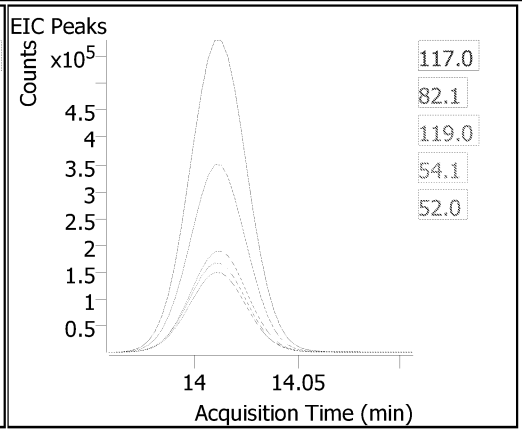
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.0127	Chlorobenzene-d5	3940127.0	95.9	3114-55-4	C6D5Cl	10

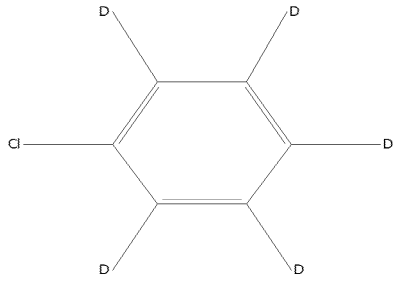




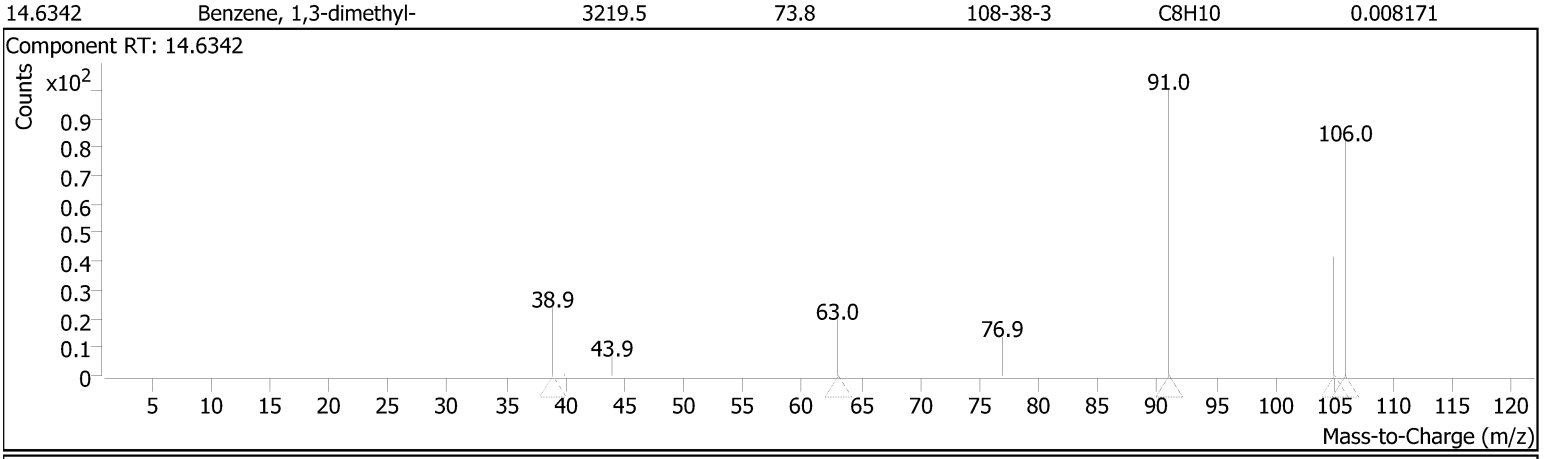


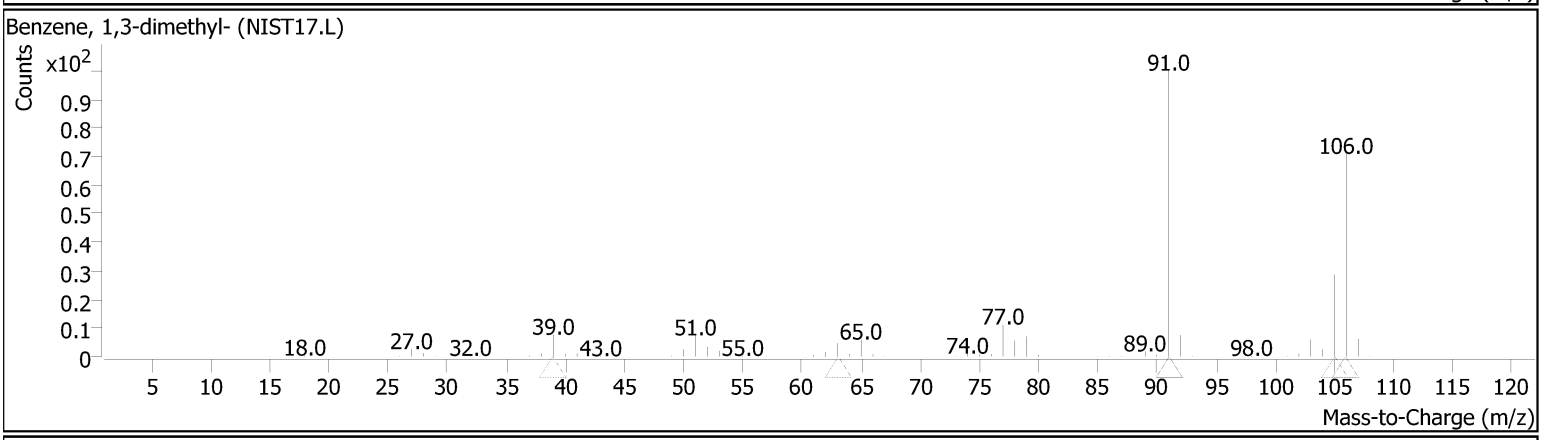


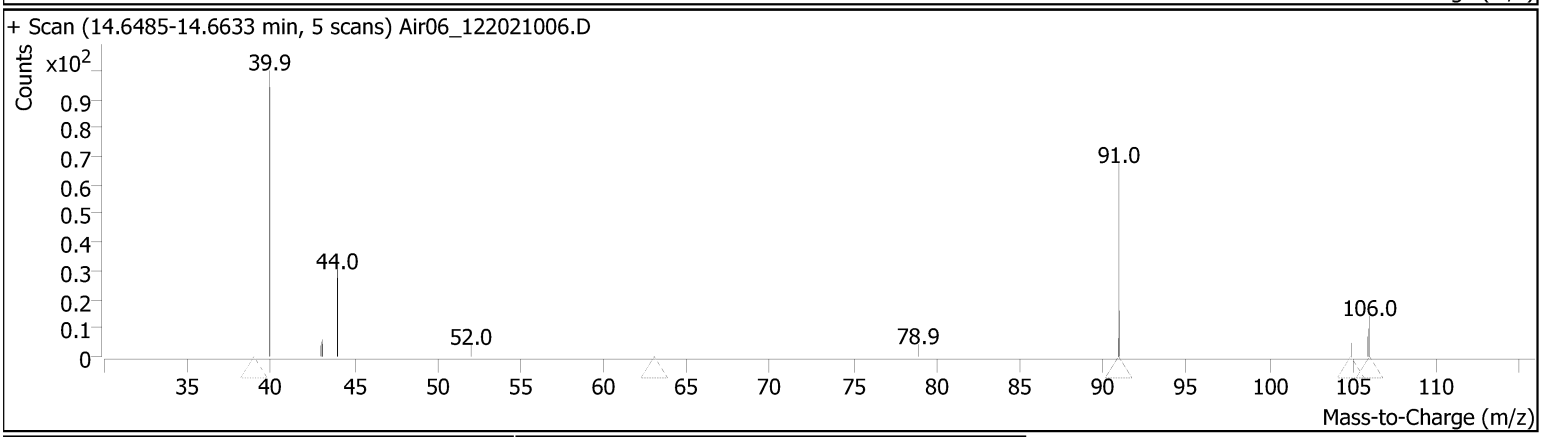


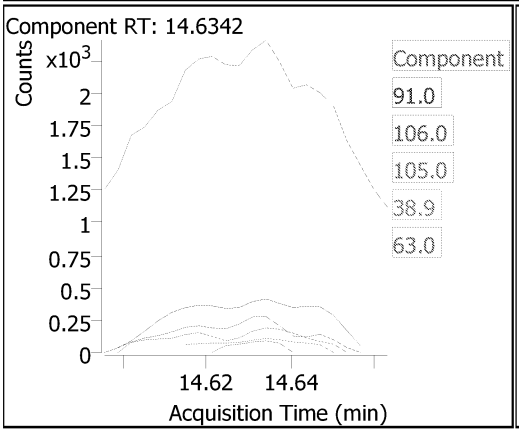


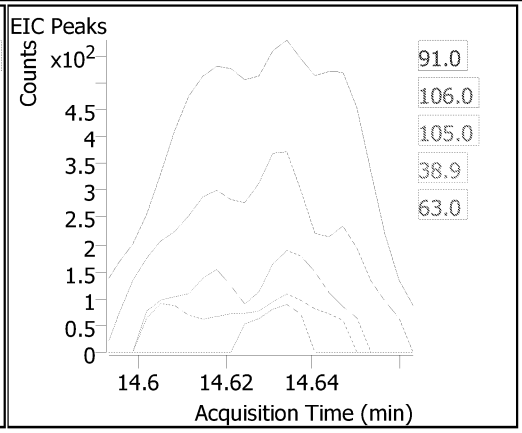
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
14.6342	Benzene, 1,3-dimethyl-	3219.5	73.8	108-38-3	C8H10	0.008171

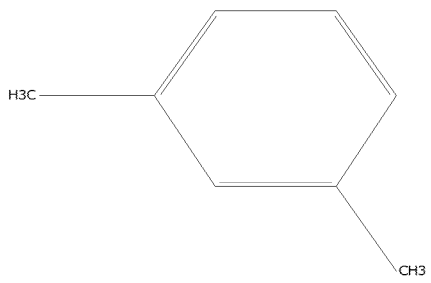




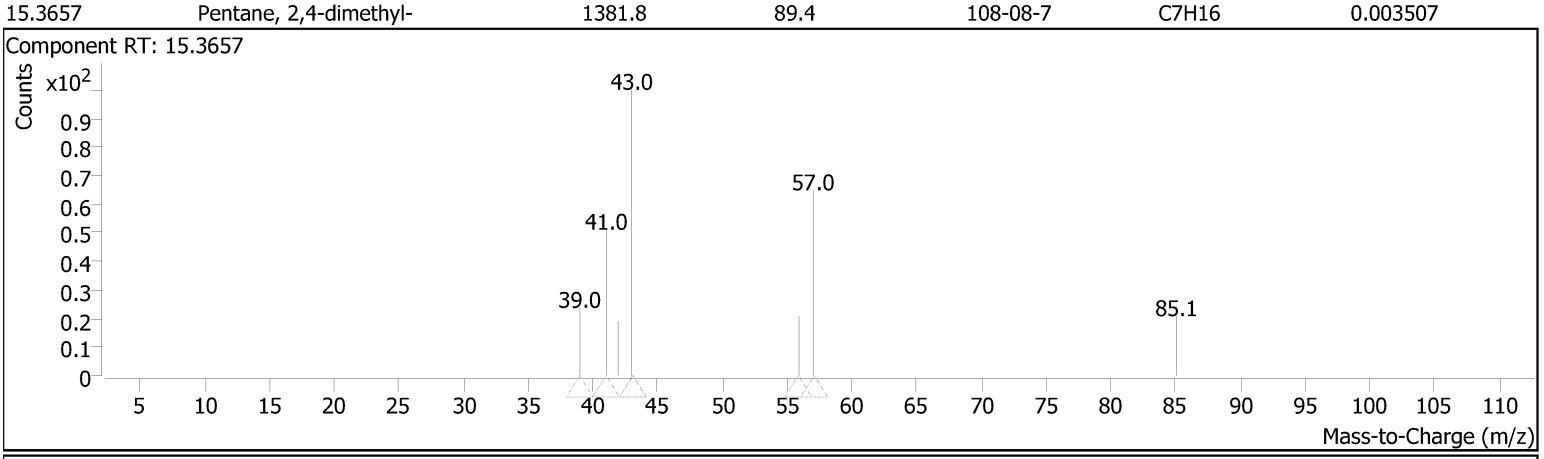


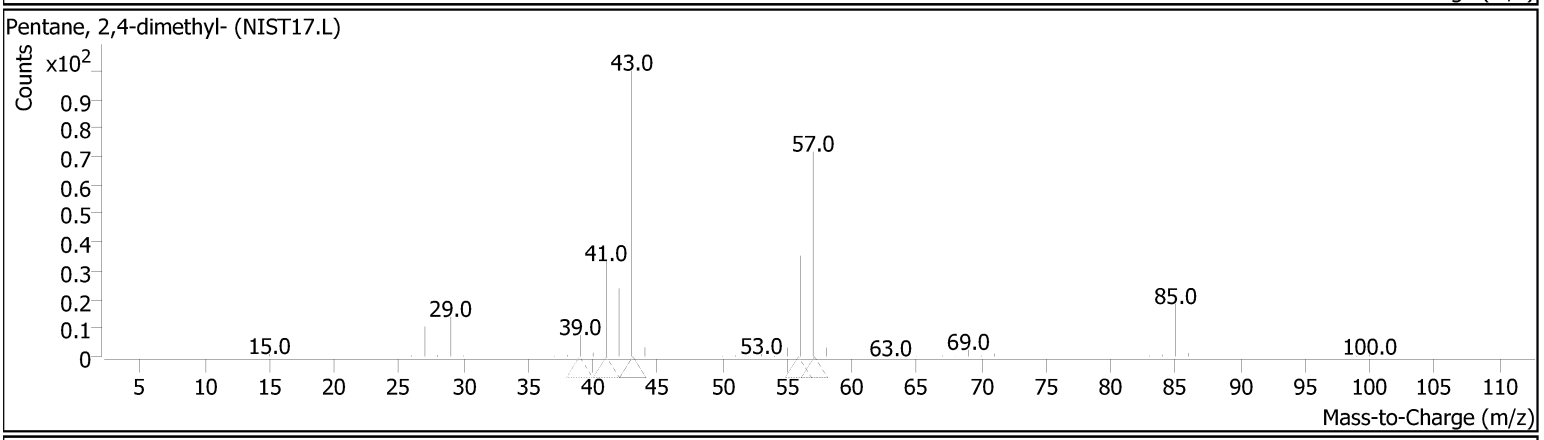


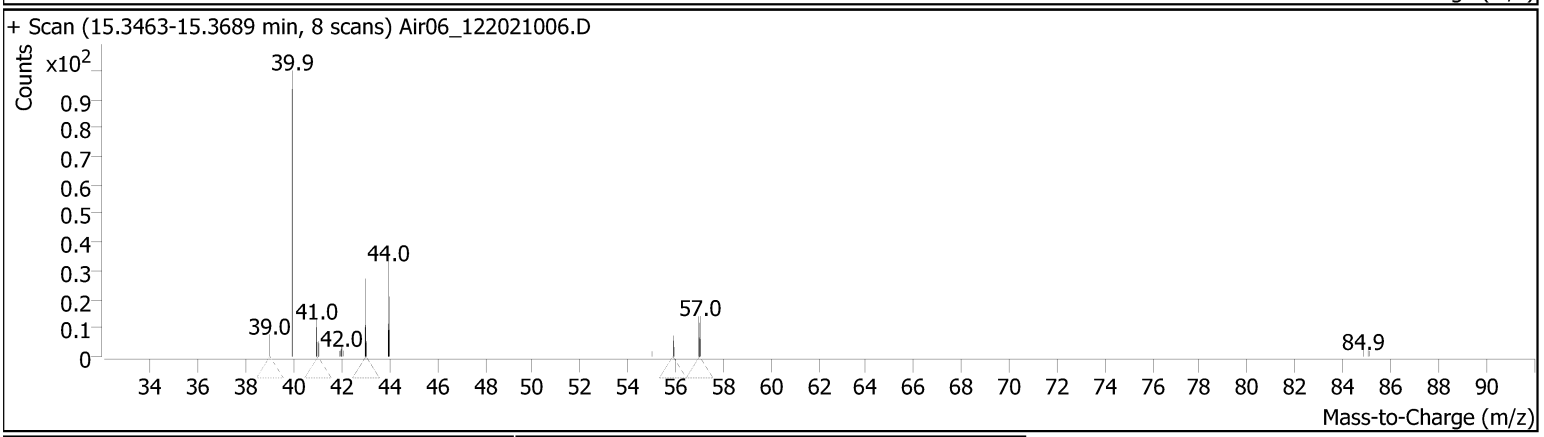


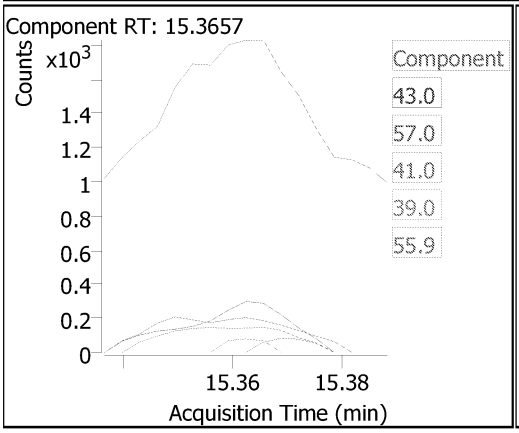


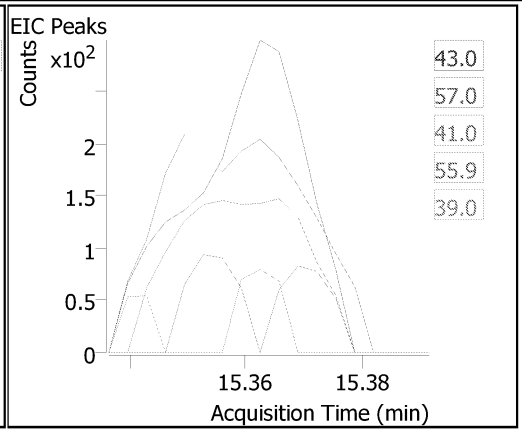
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.3657	Pentane, 2,4-dimethyl-	1381.8	89.4	108-08-7	C7H16	0.003507

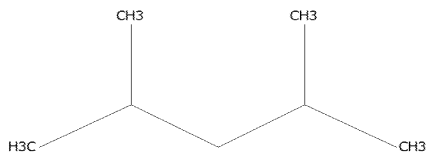




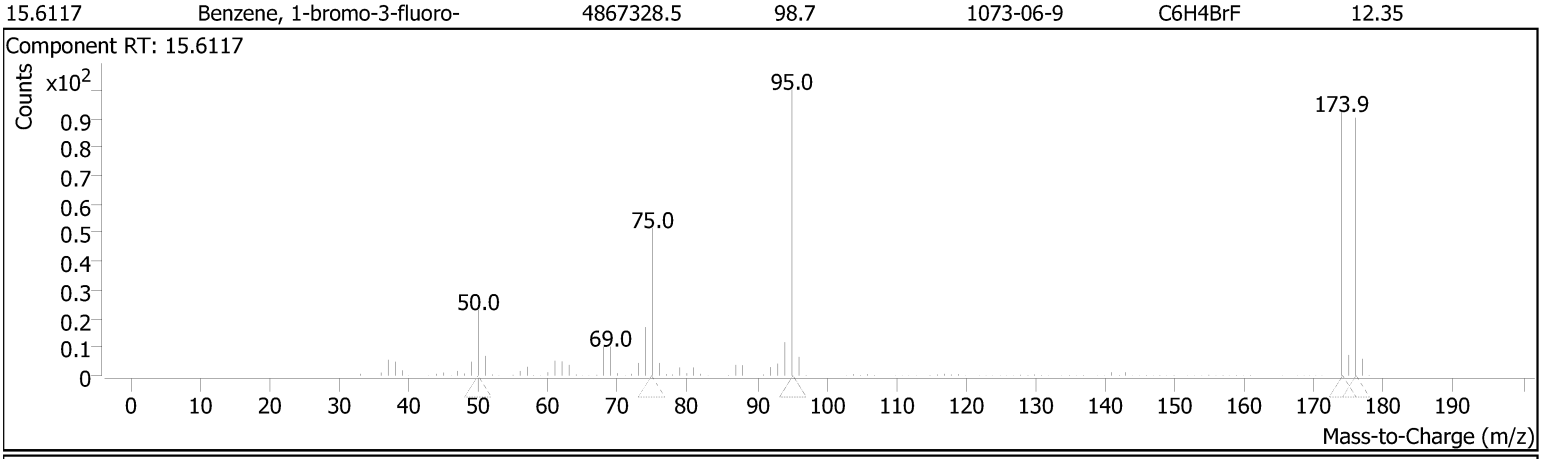


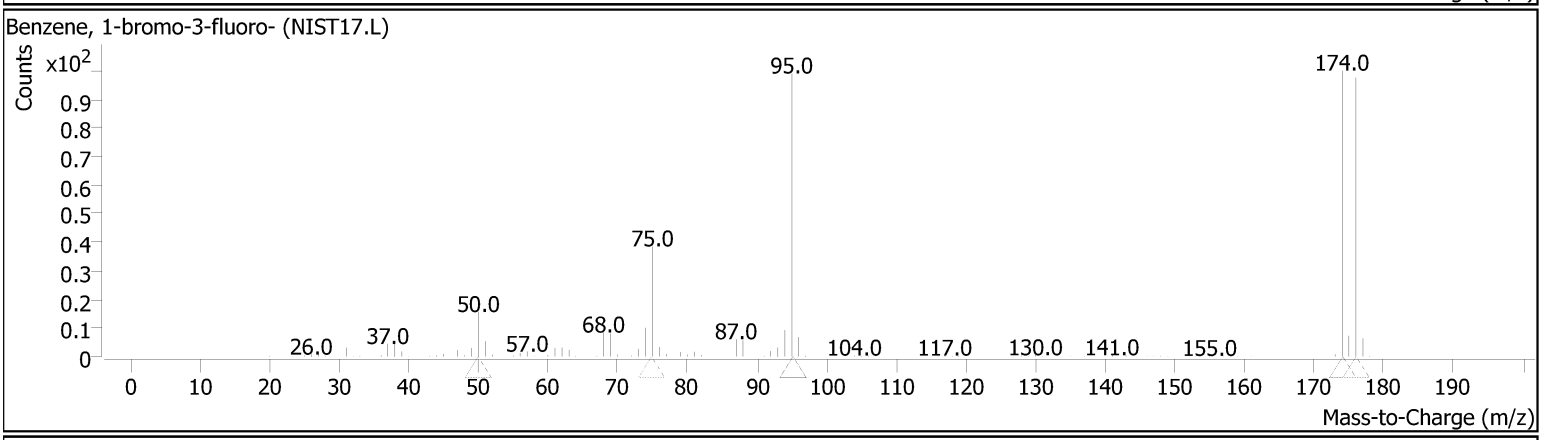


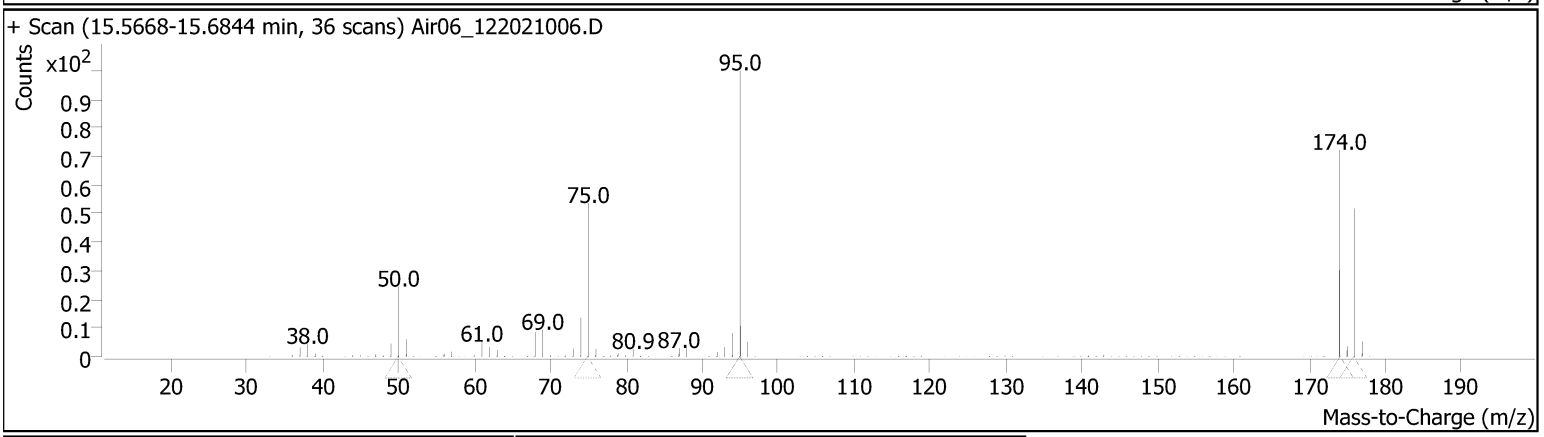


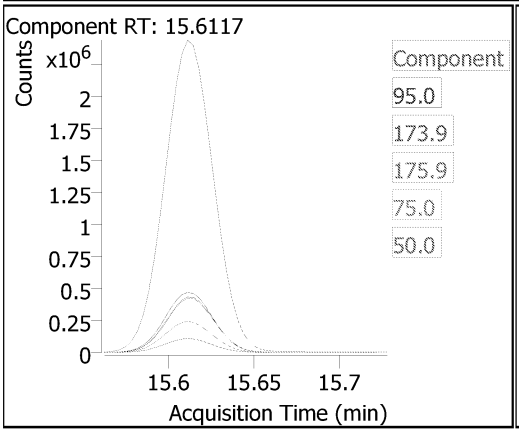


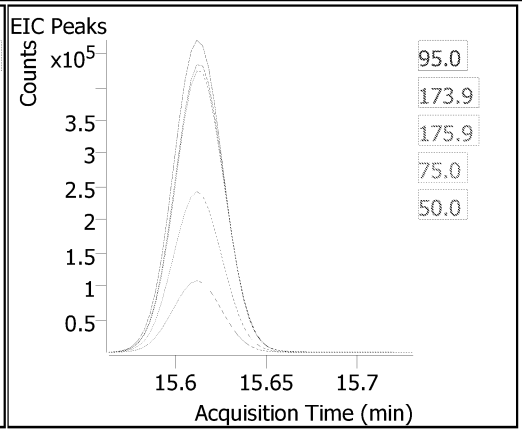
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
15.6117	Benzene, 1-bromo-3-fluoro-	4867328.5	98.7	1073-06-9	C6H4BrF	12.35

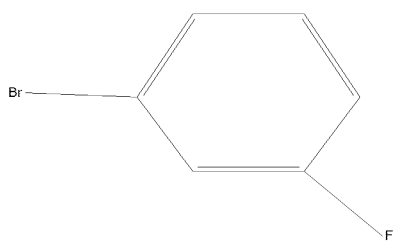




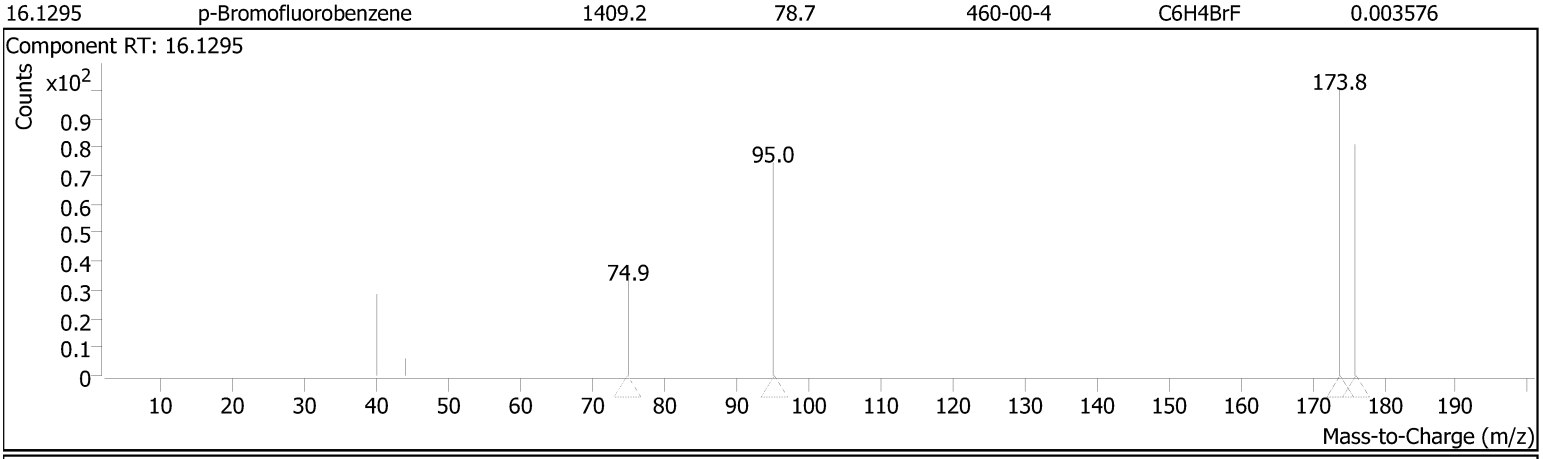


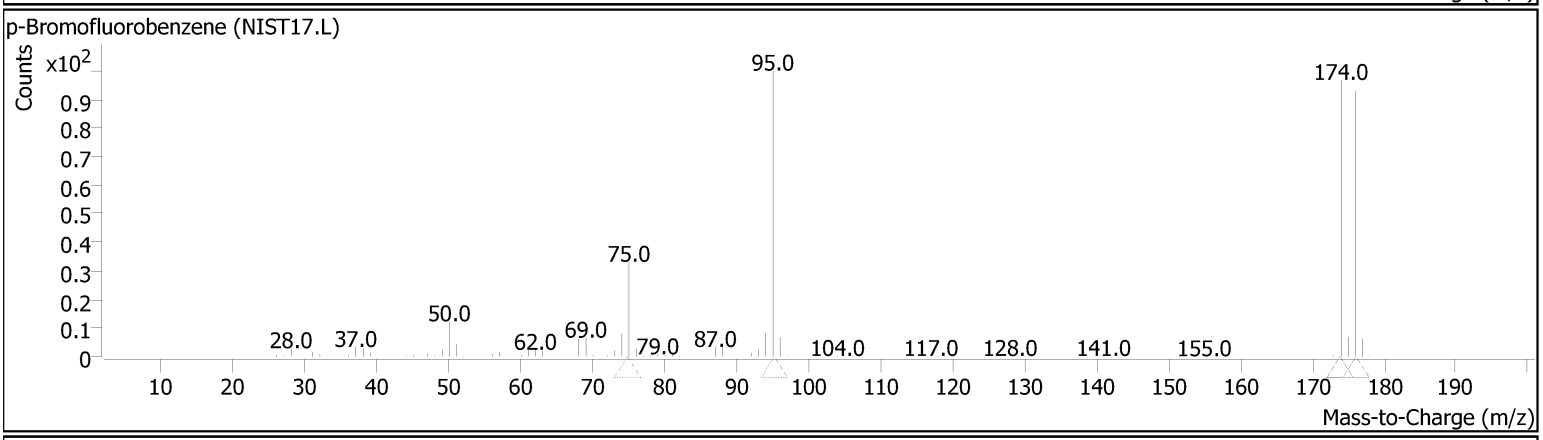


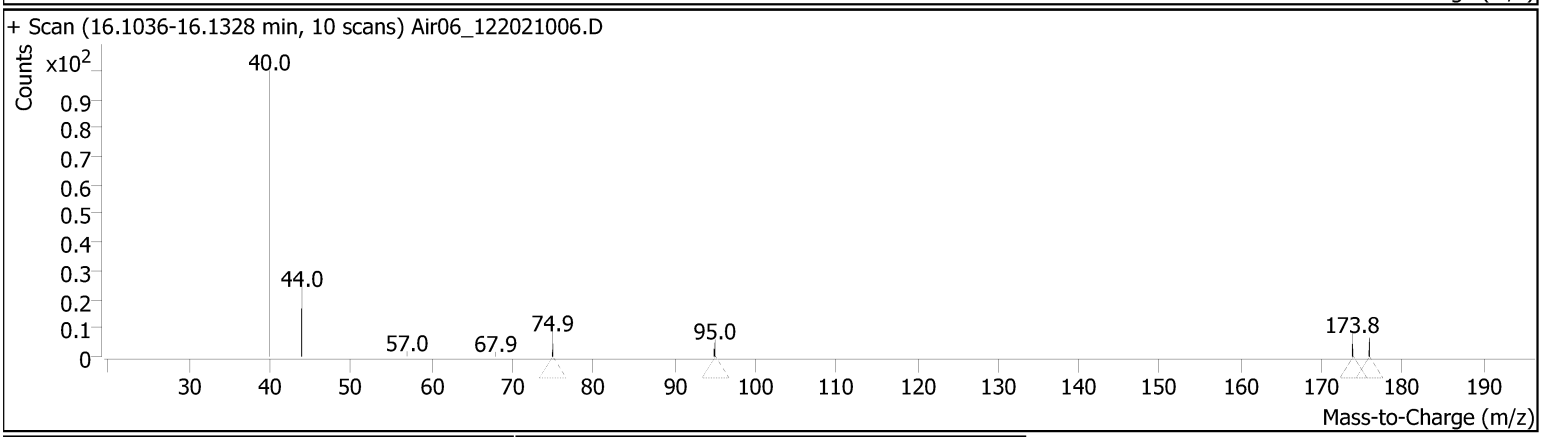


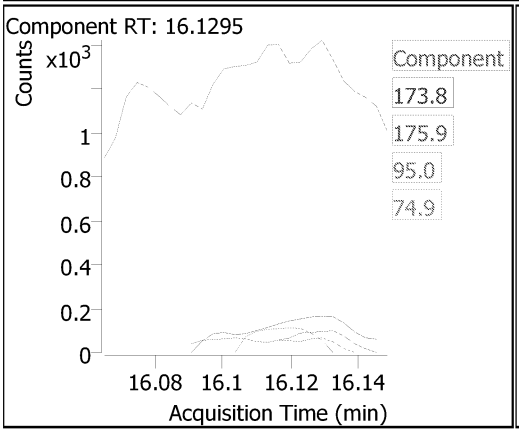


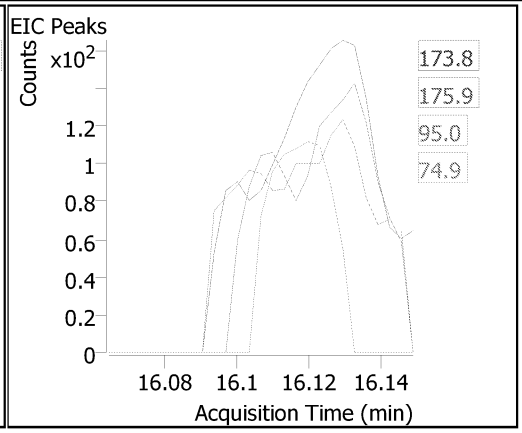
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.1295	p-Bromofluorobenzene	1409.2	78.7	460-00-4	C6H4BrF	0.003576

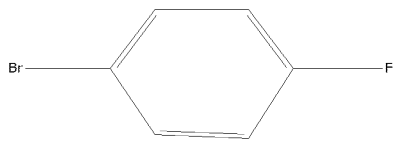




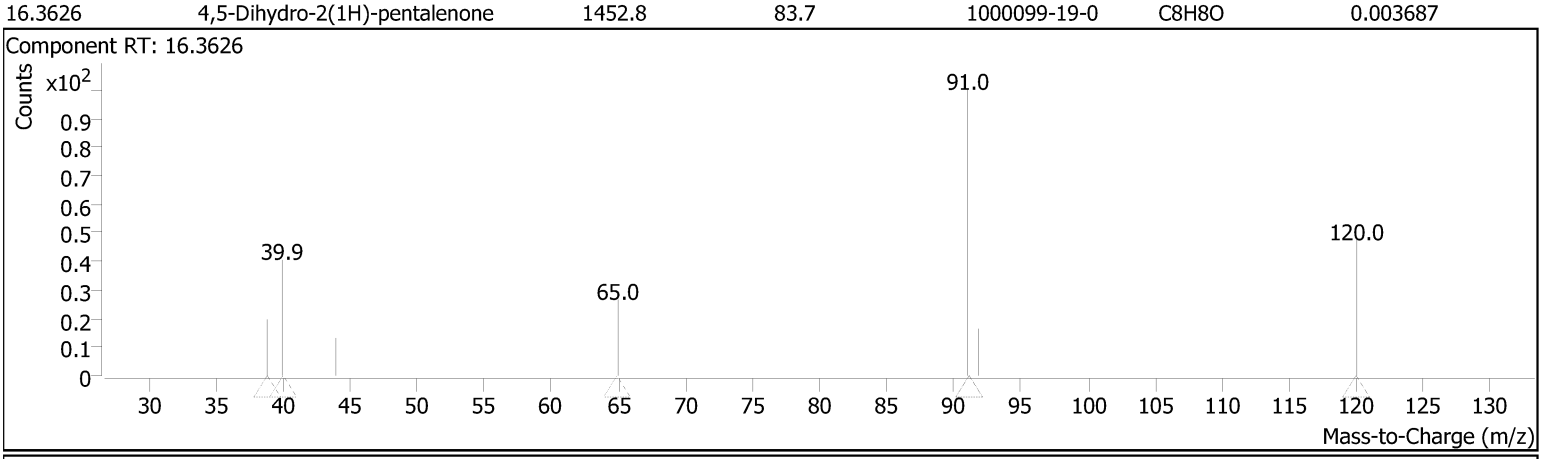


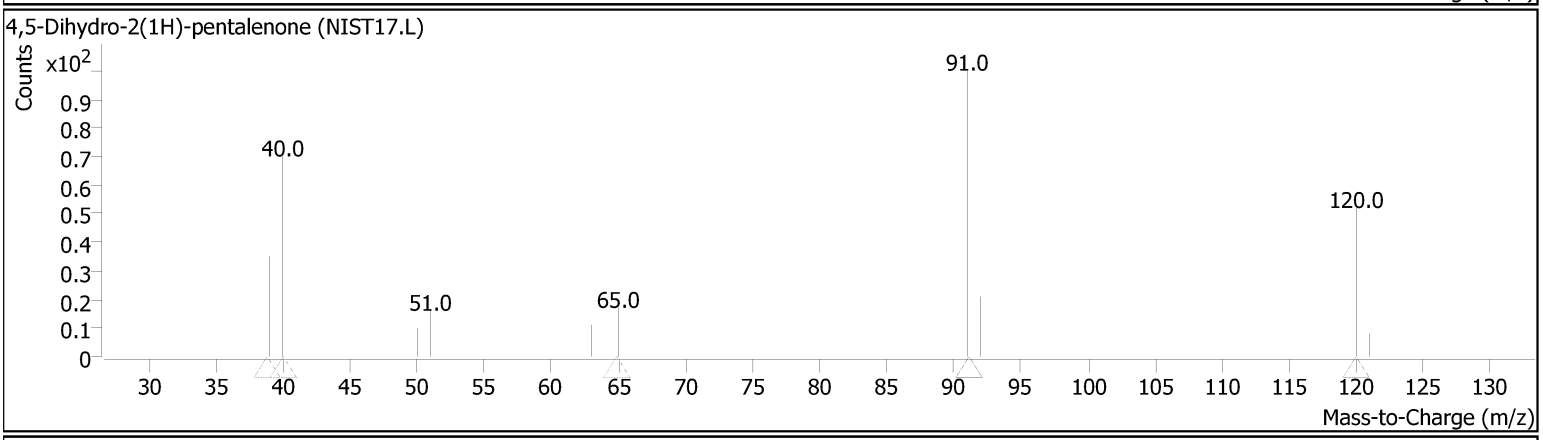


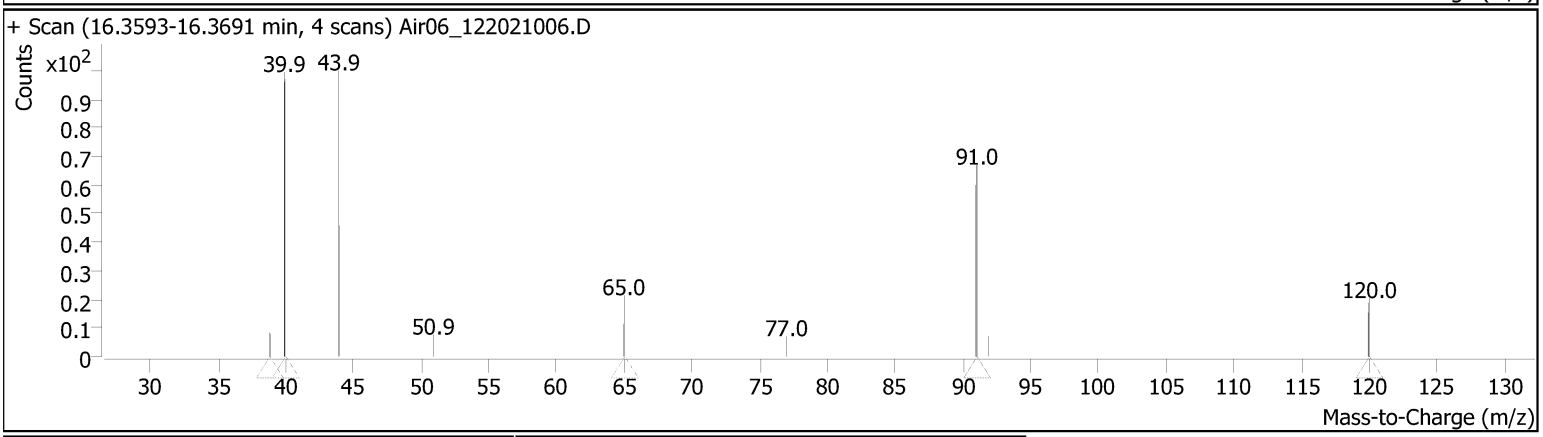


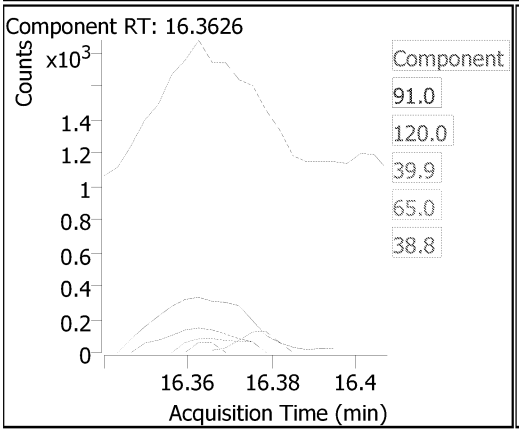


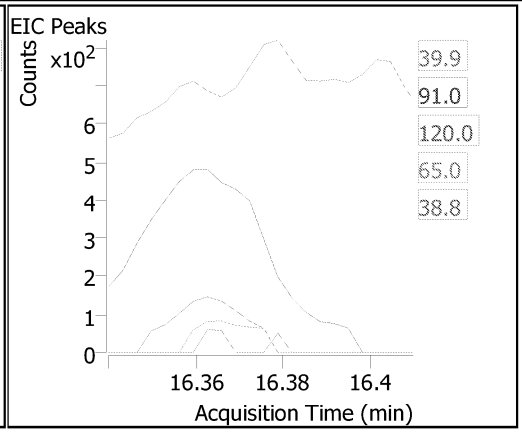
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.3626	4,5-Dihydro-2(1H)-pentalenone	1452.8	83.7	1000099-19-0	C8H8O	0.003687

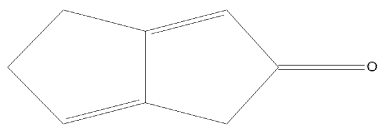




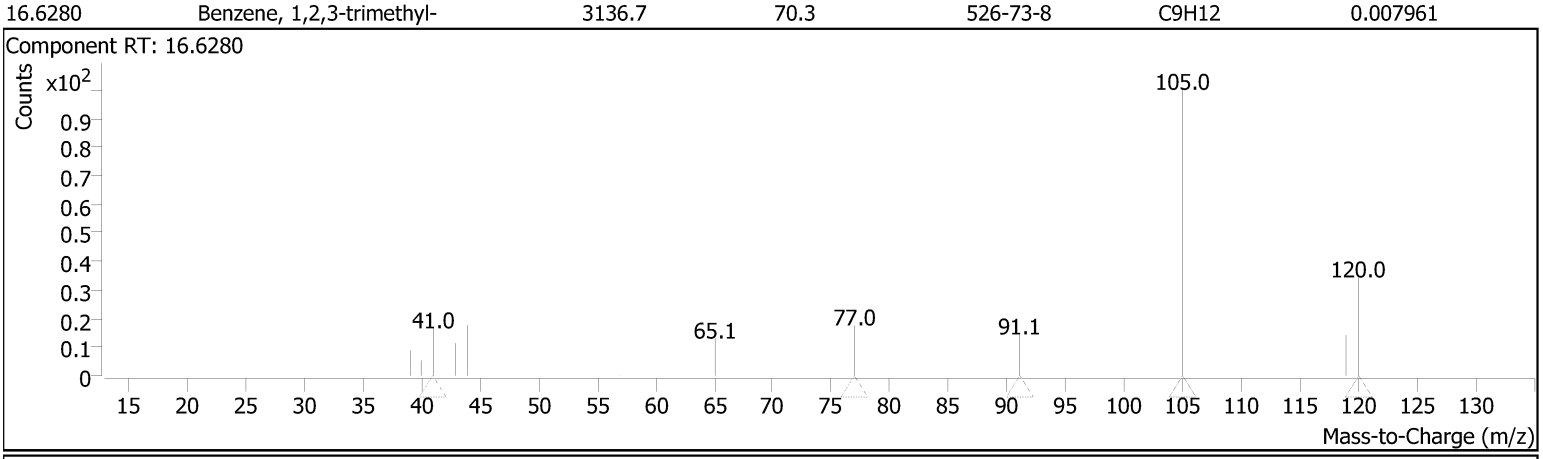


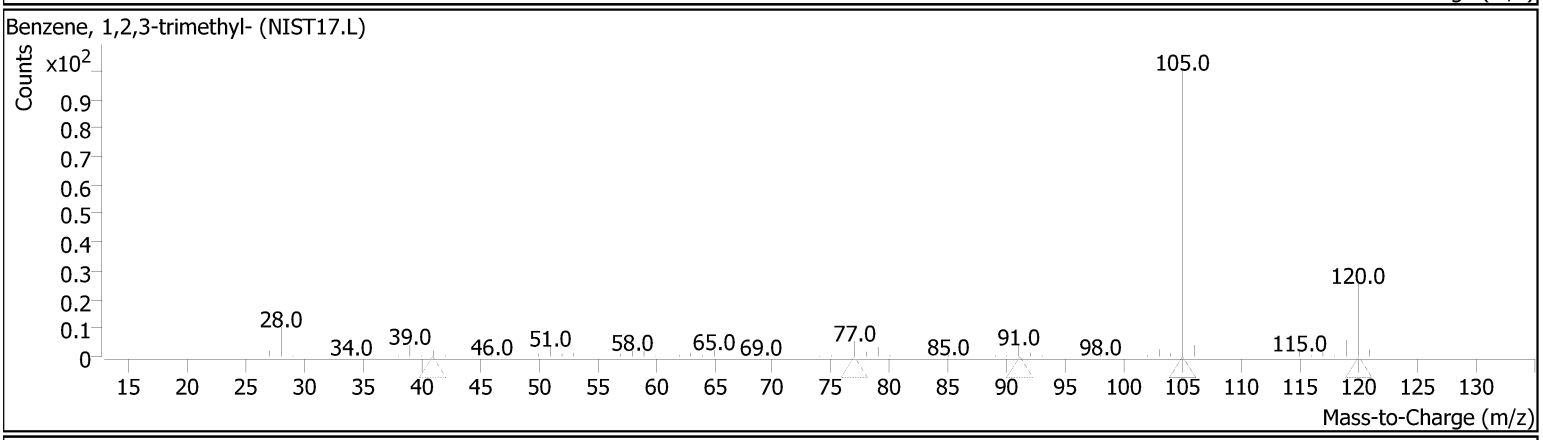


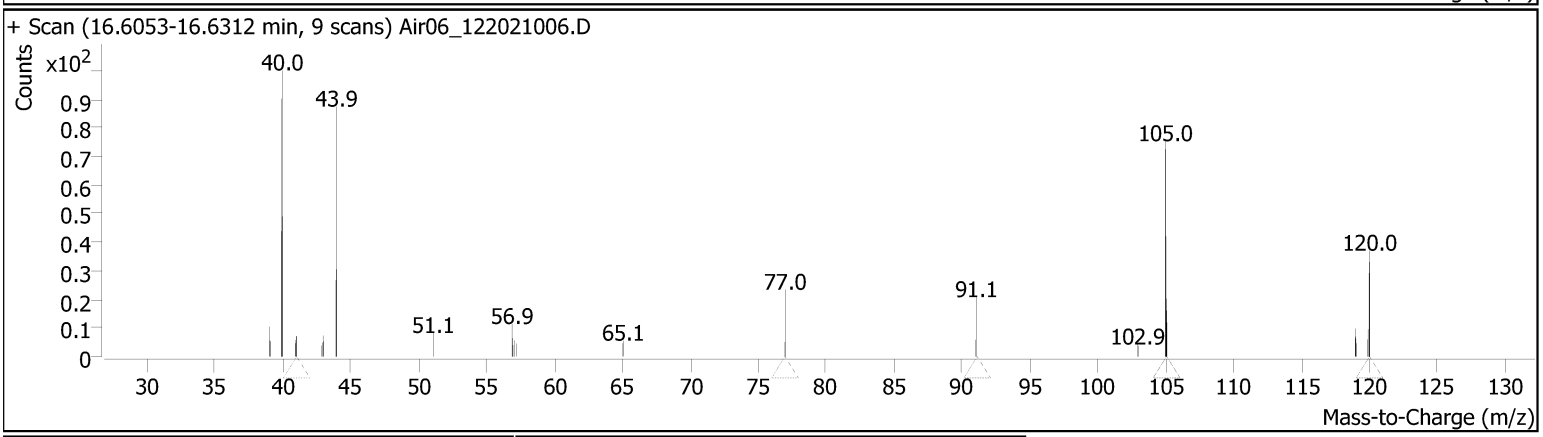


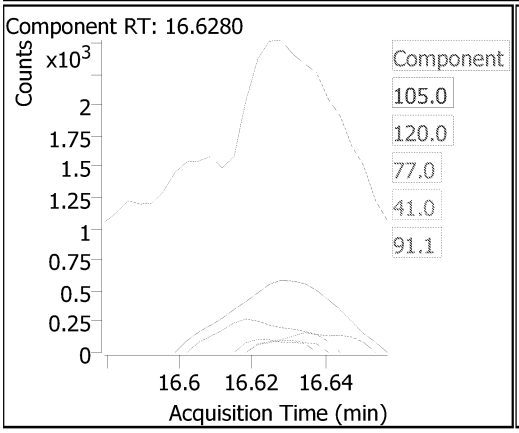


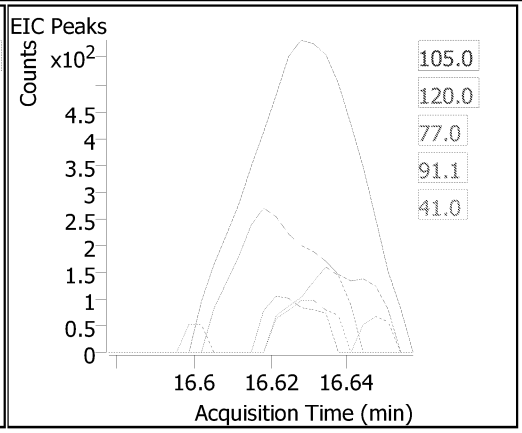
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
16.6280	Benzene, 1,2,3-trimethyl-	3136.7	70.3	526-73-8	C9H12	0.007961

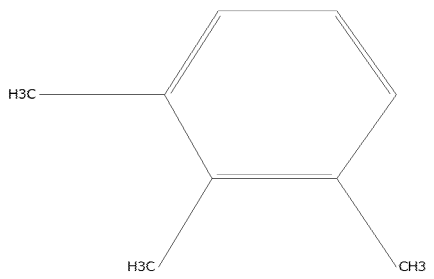




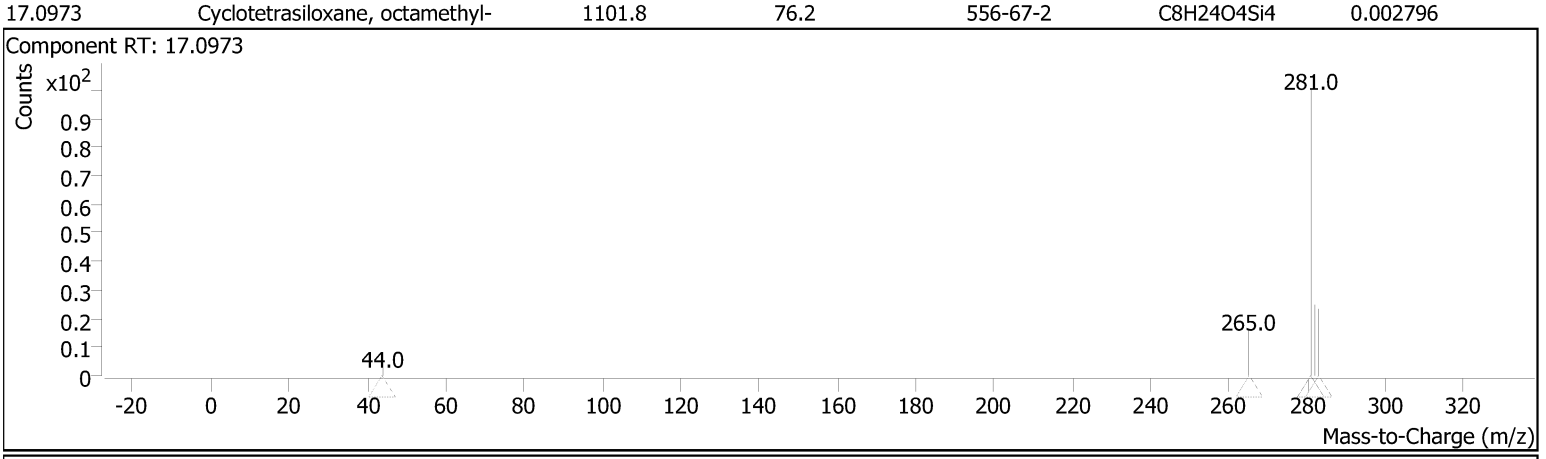


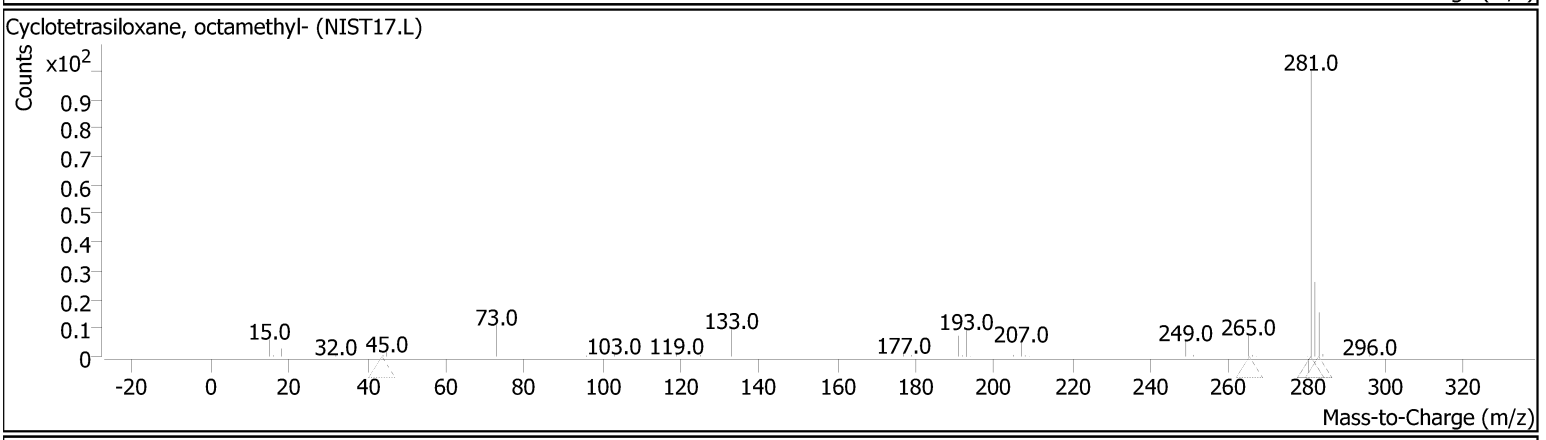


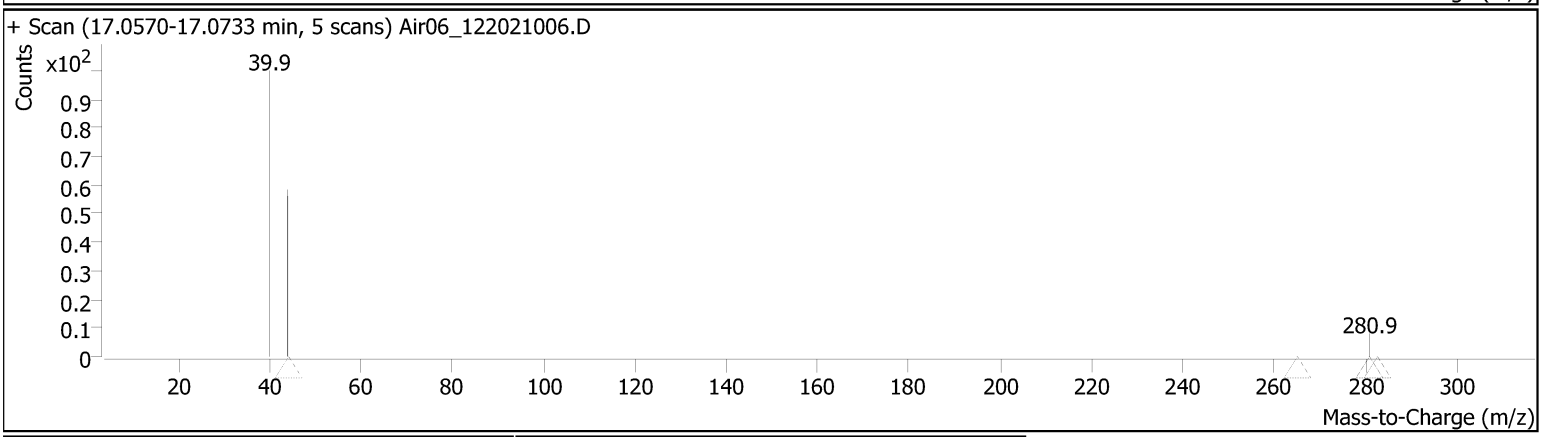


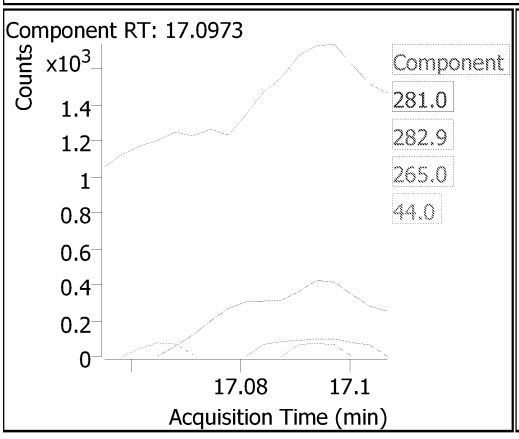


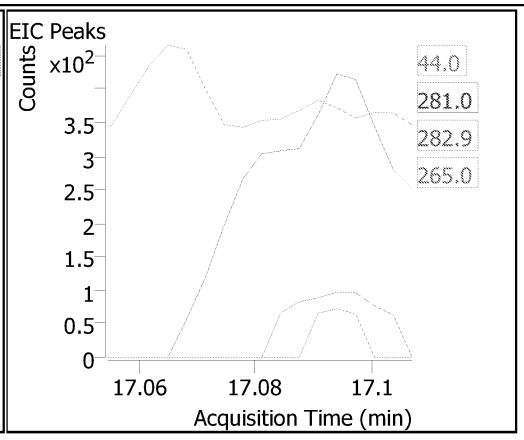
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.0973	Cyclotetrasiloxane, octamethyl-	1101.8	76.2	556-67-2	C8H24O4Si4	0.002796

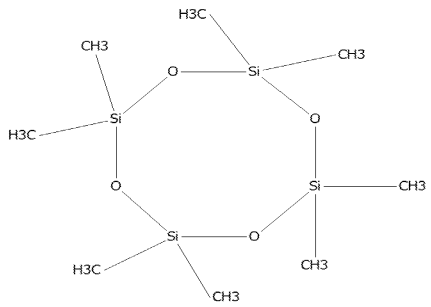




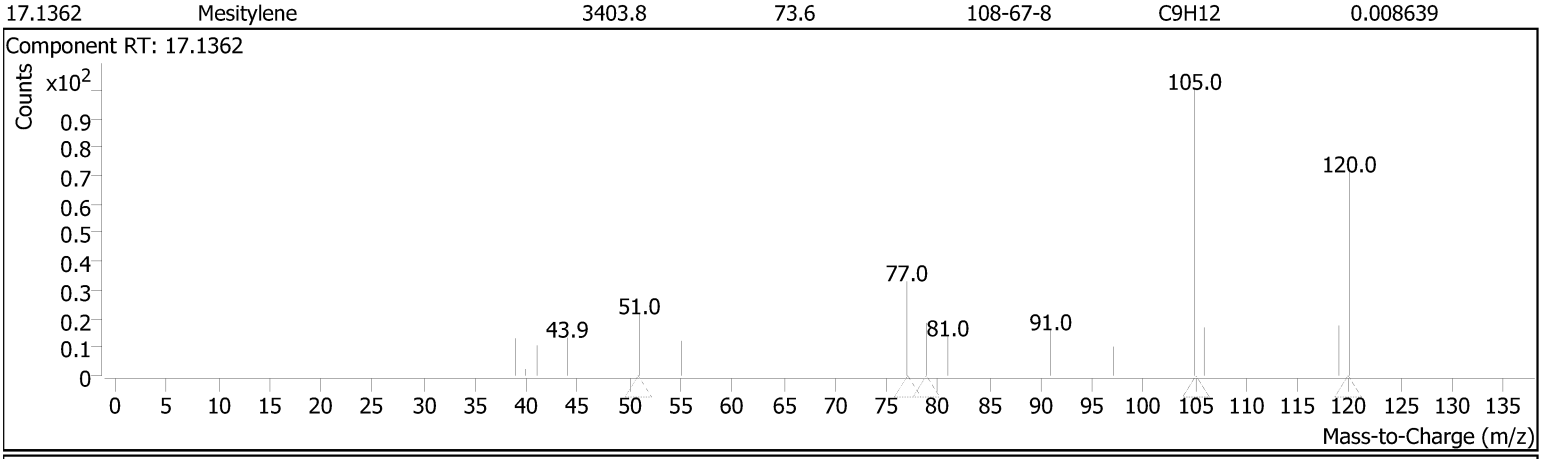


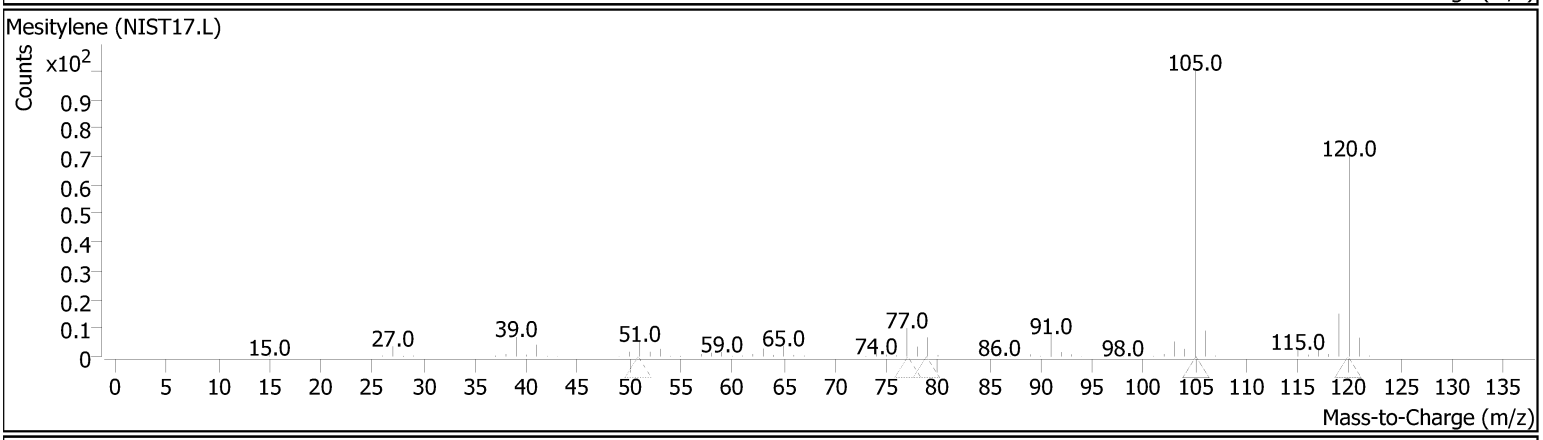


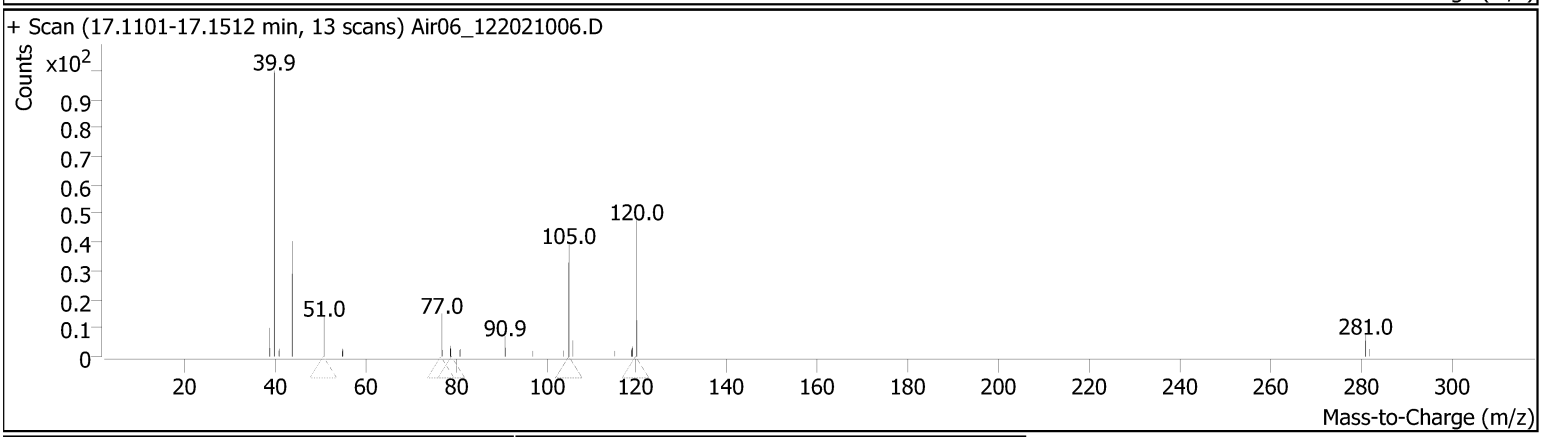


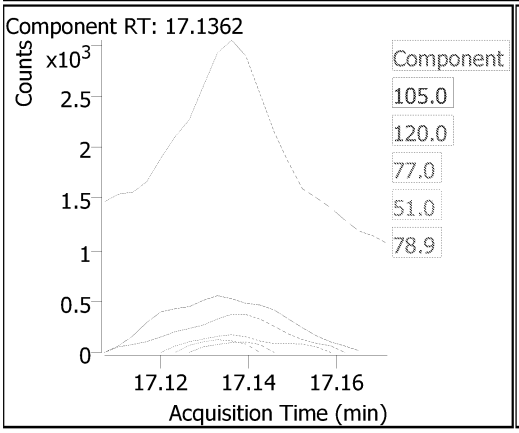


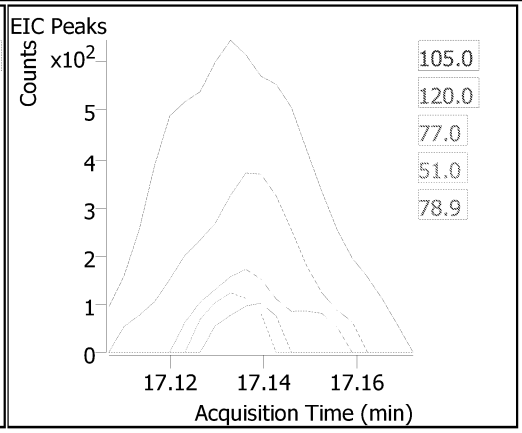
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.1362	Mesitylene	3403.8	73.6	108-67-8	C9H12	0.008639

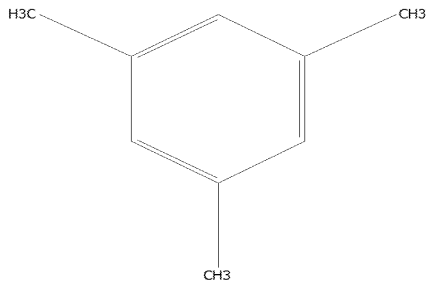




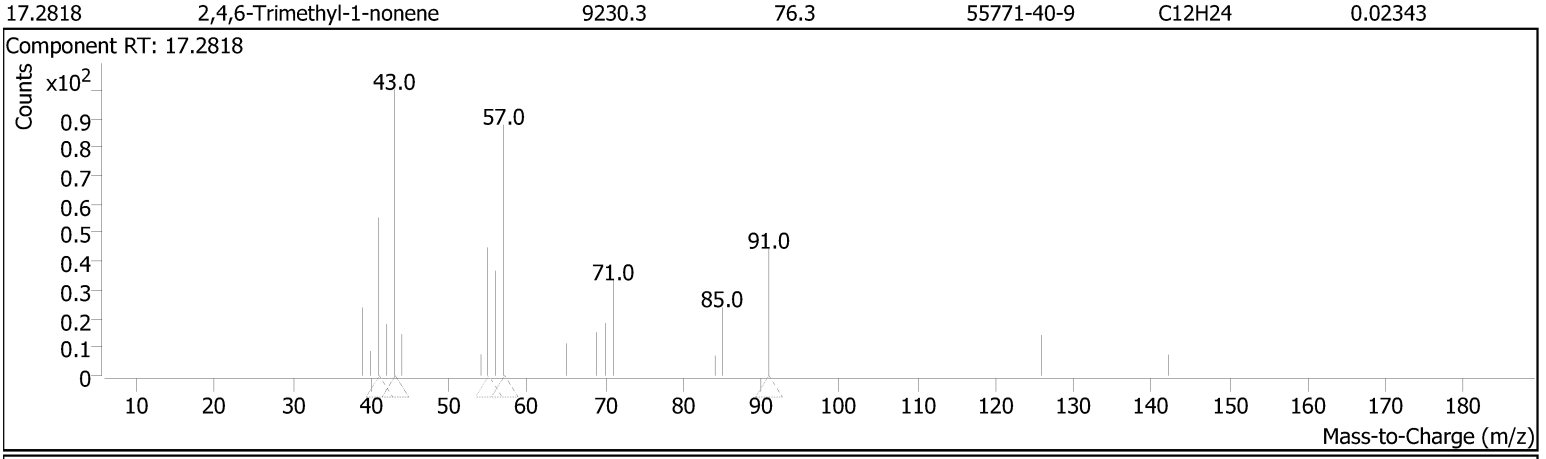


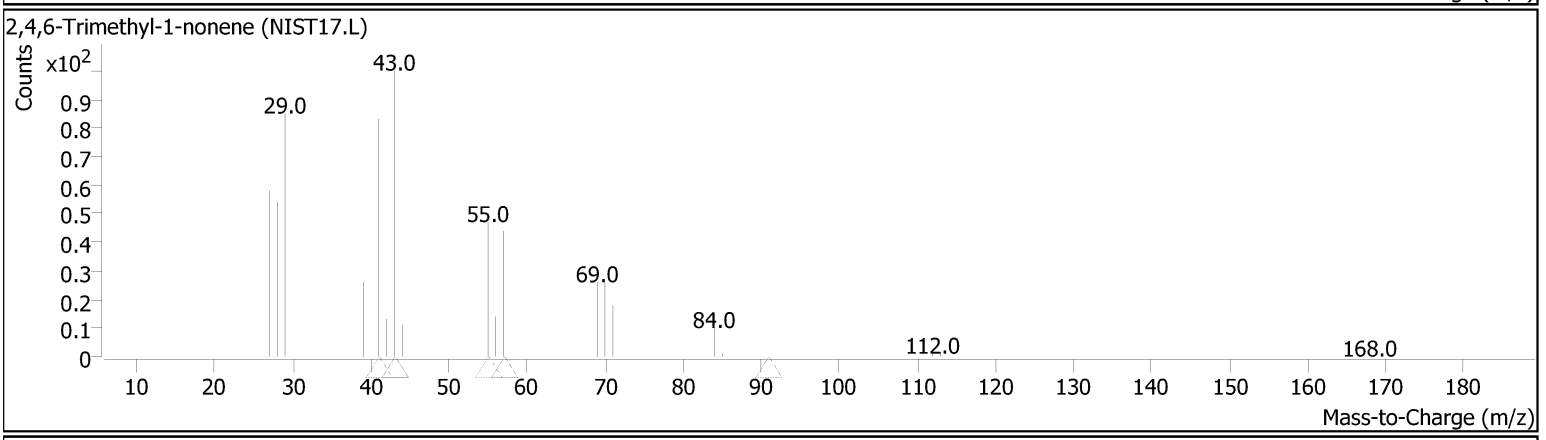


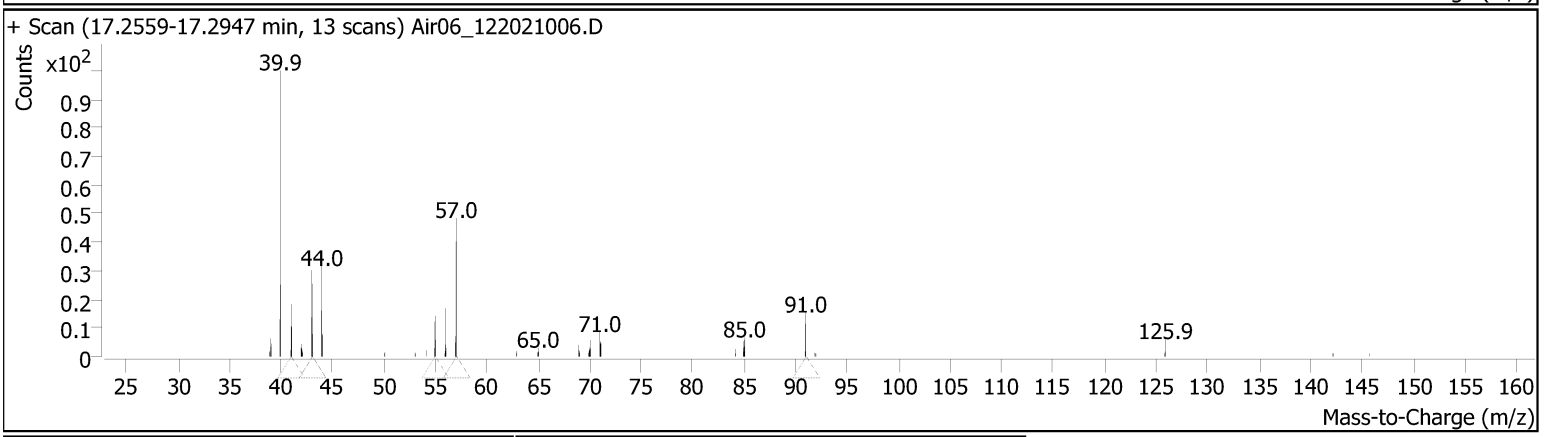


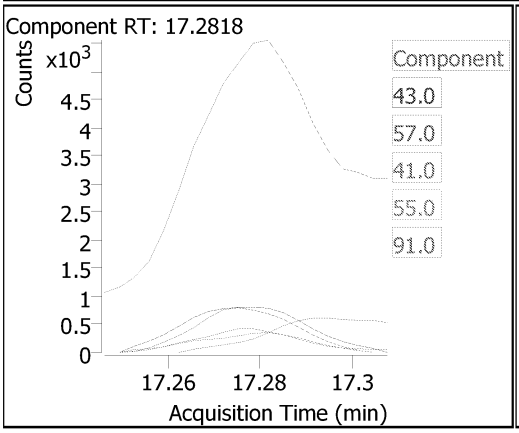


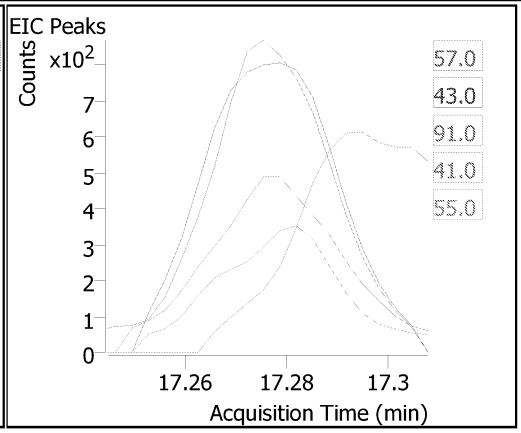
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.2818	2,4,6-Trimethyl-1-nonene	9230.3	76.3	55771-40-9	C12H24	0.02343

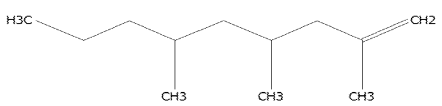




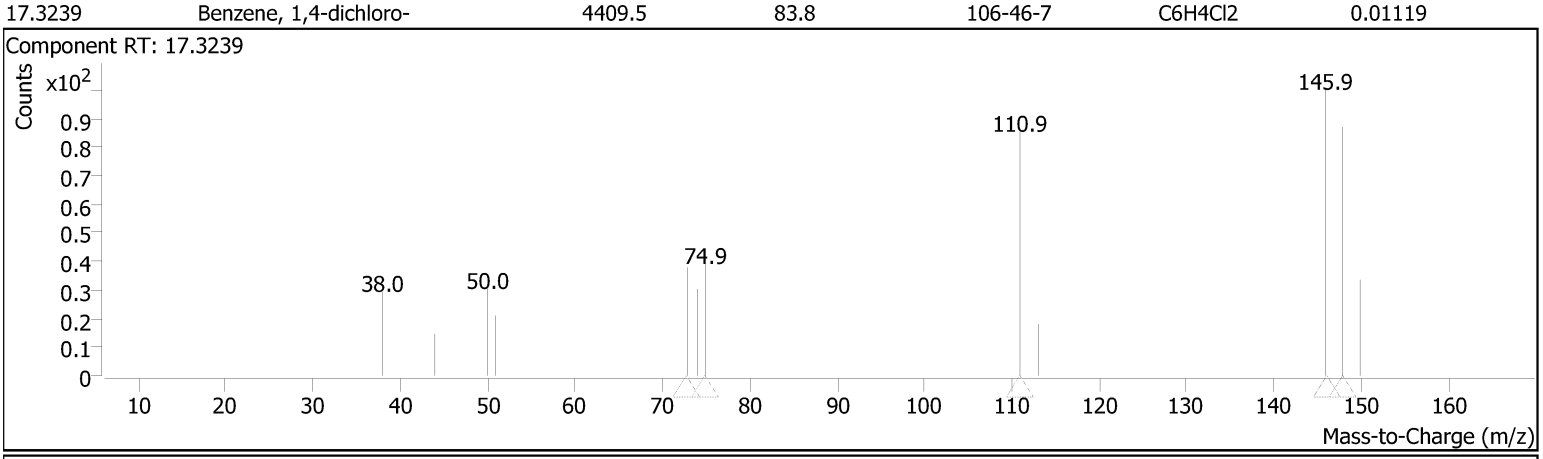


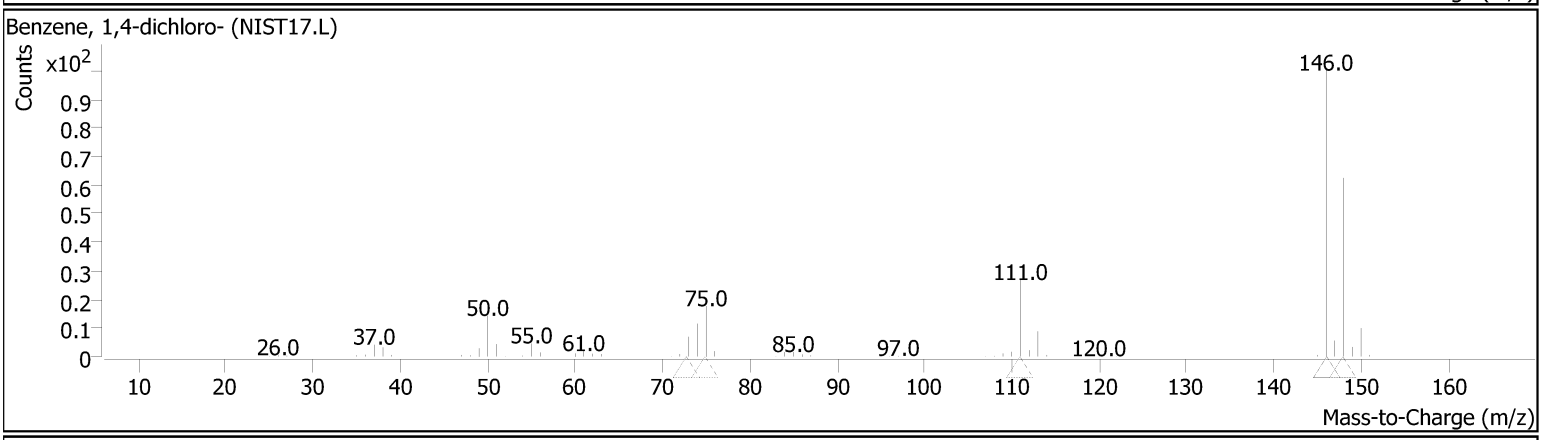


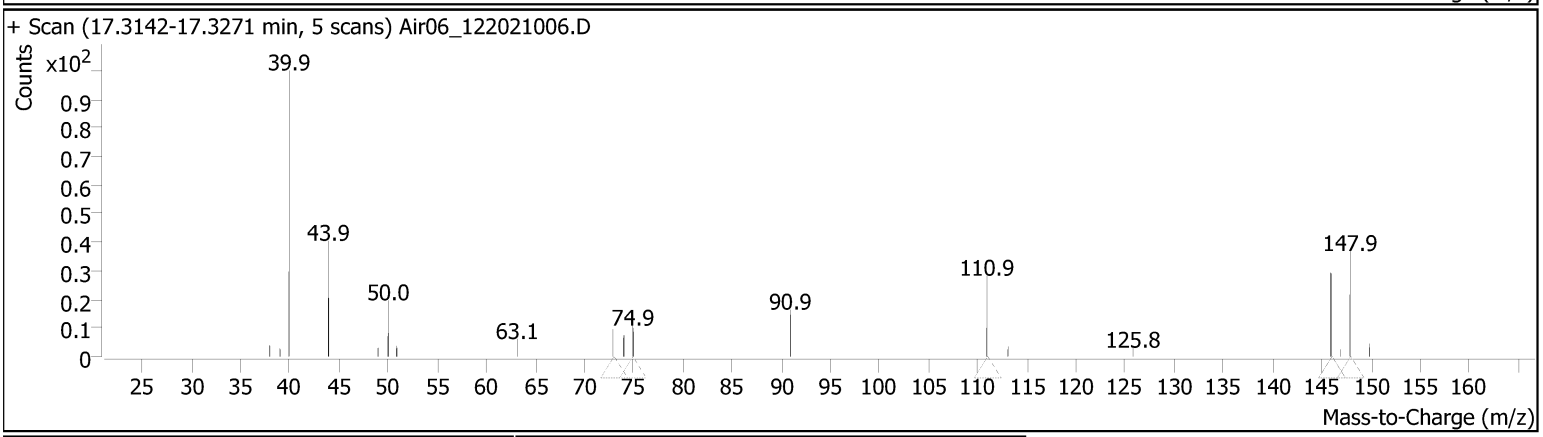


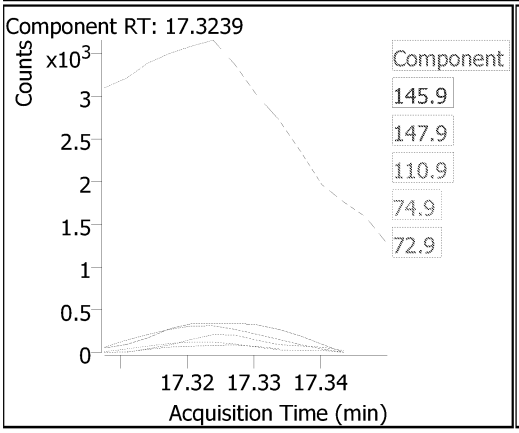


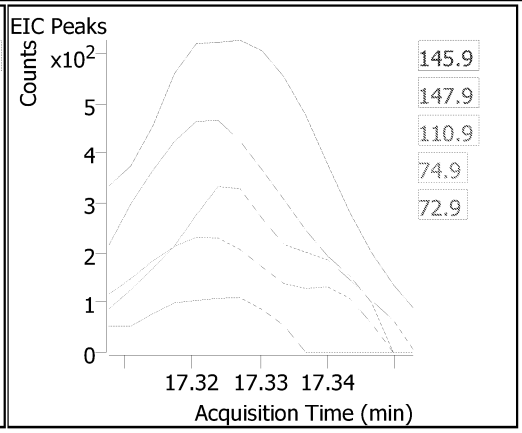
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.3239	Benzene, 1,4-dichloro-	4409.5	83.8	106-46-7	C6H4Cl2	0.01119

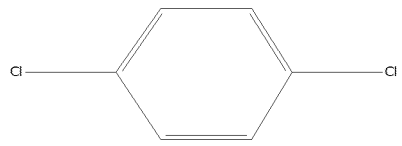




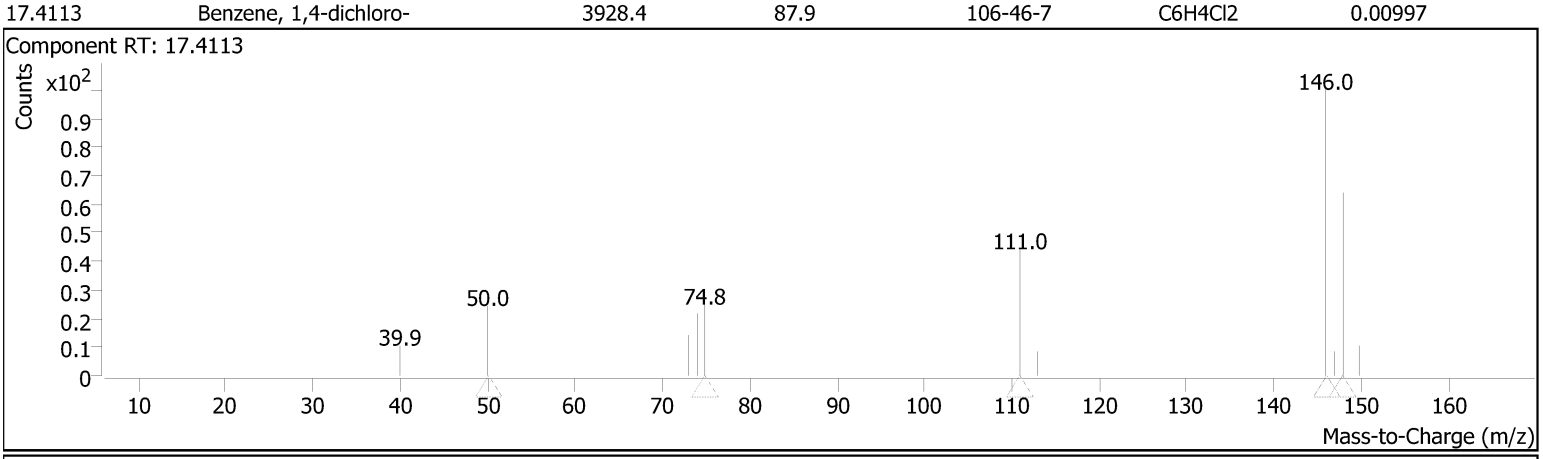


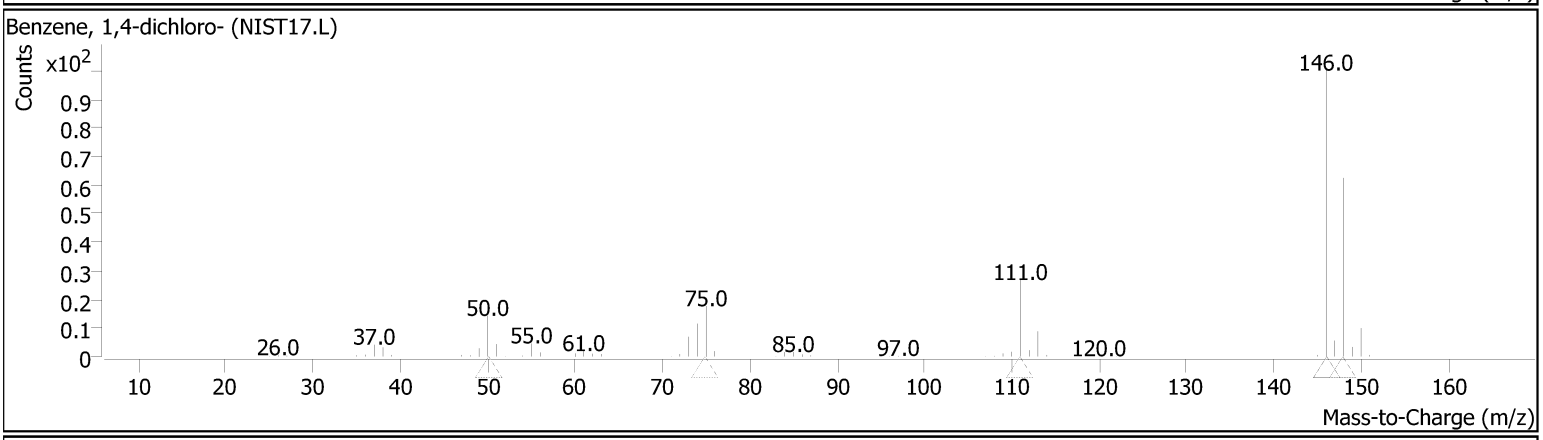


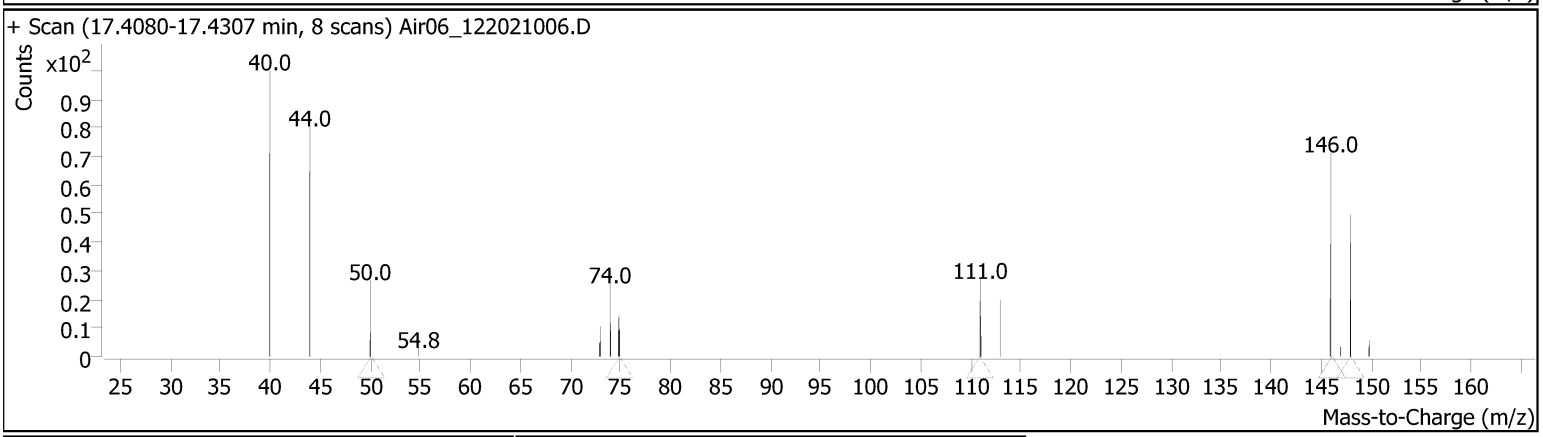


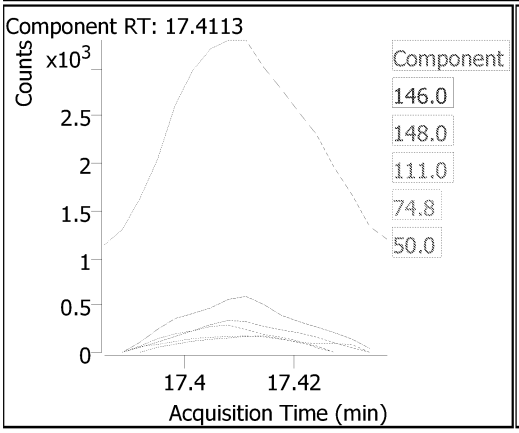


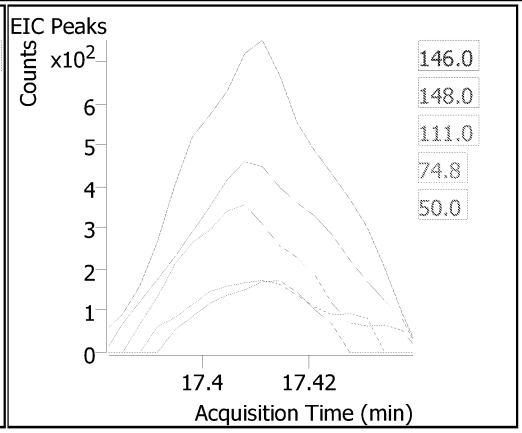
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.4113	Benzene, 1,4-dichloro-	3928.4	87.9	106-46-7	C6H4Cl2	0.00997

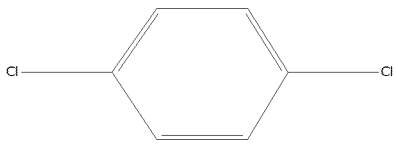




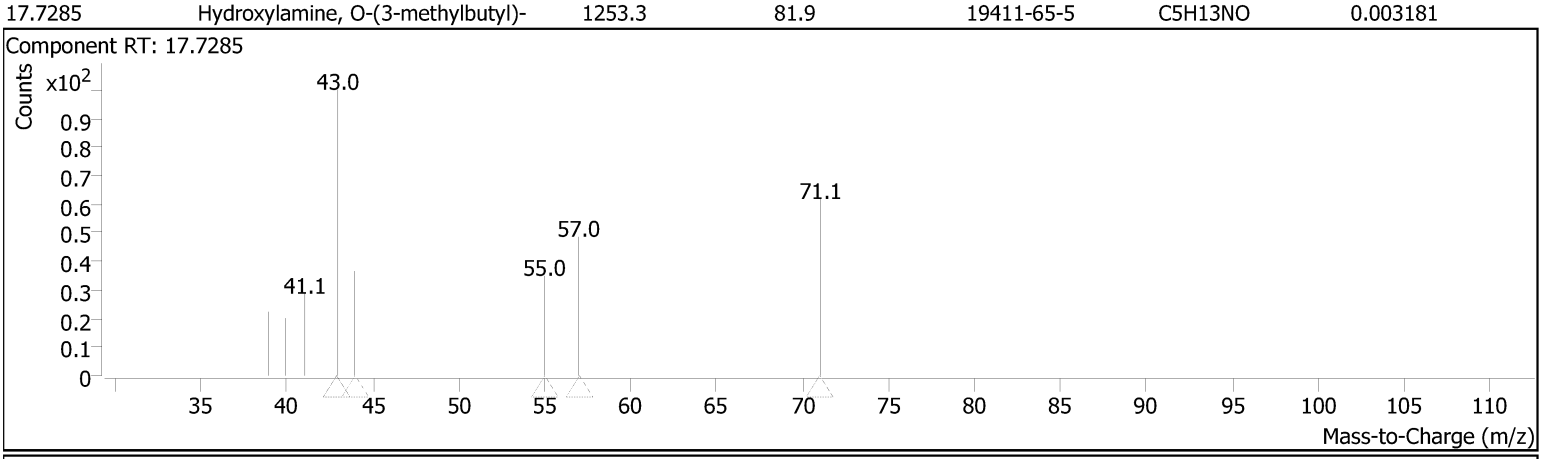


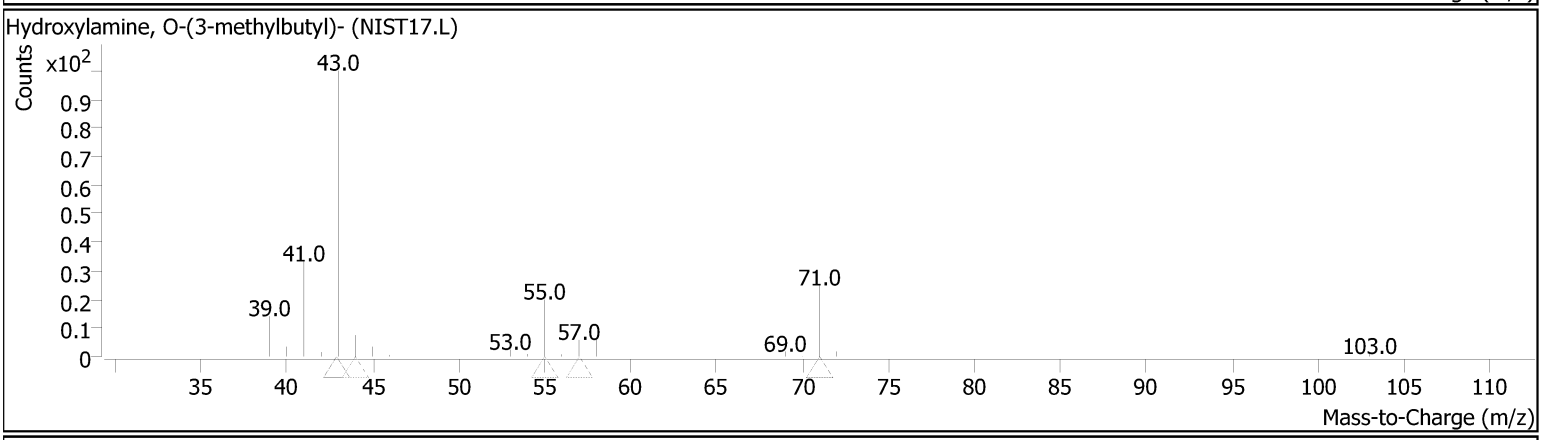


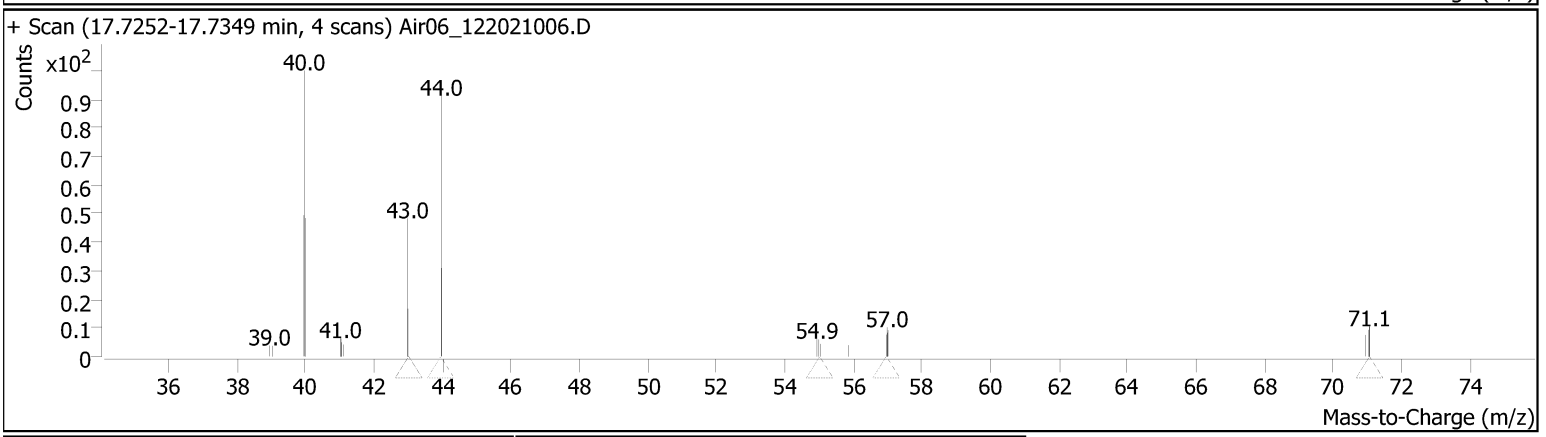


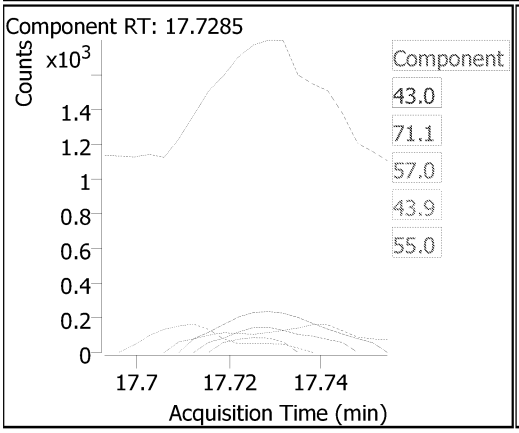


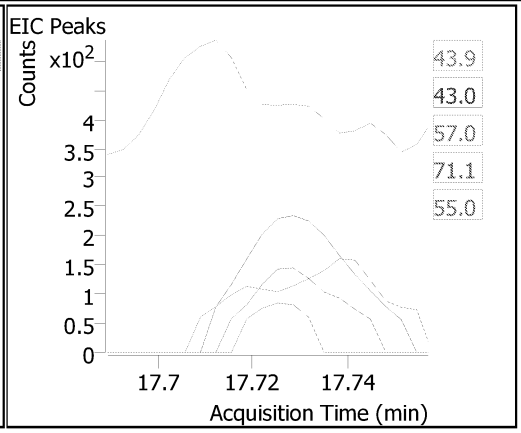
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.7285	Hydroxylamine, O-(3-methylbutyl)-	1253.3	81.9	19411-65-5	C5H13NO	0.003181

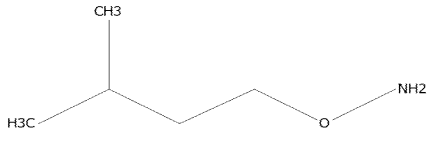




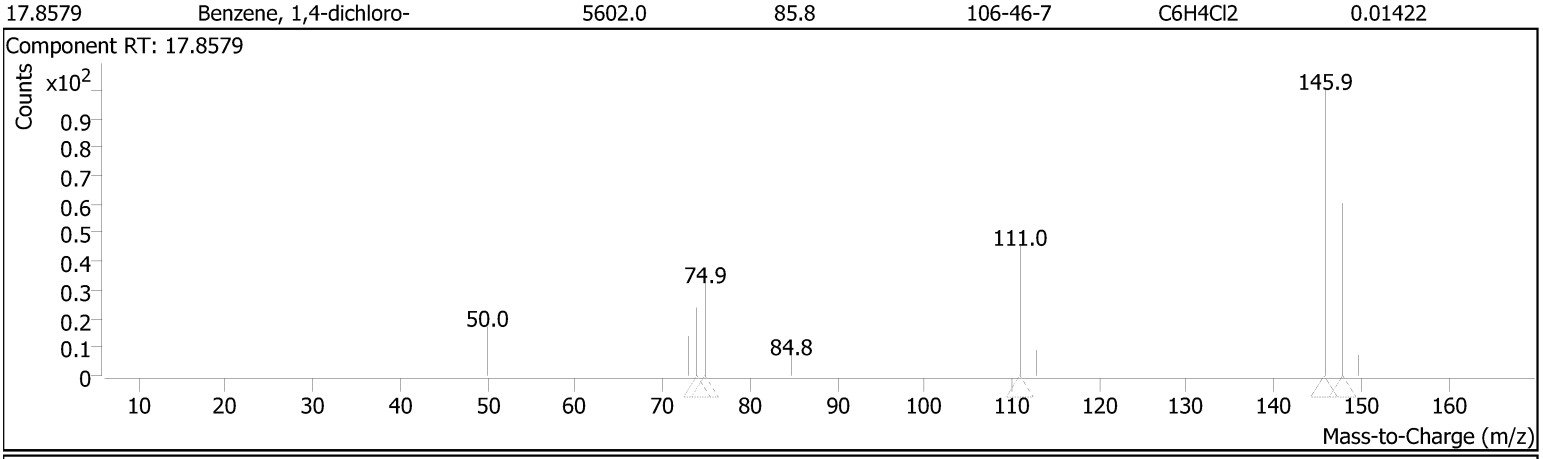


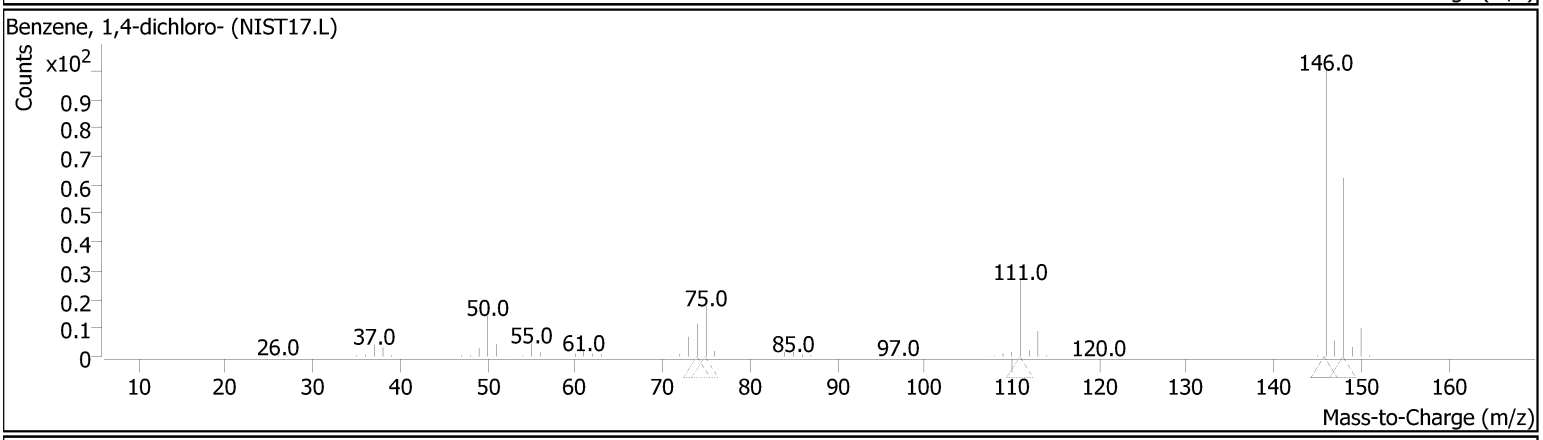


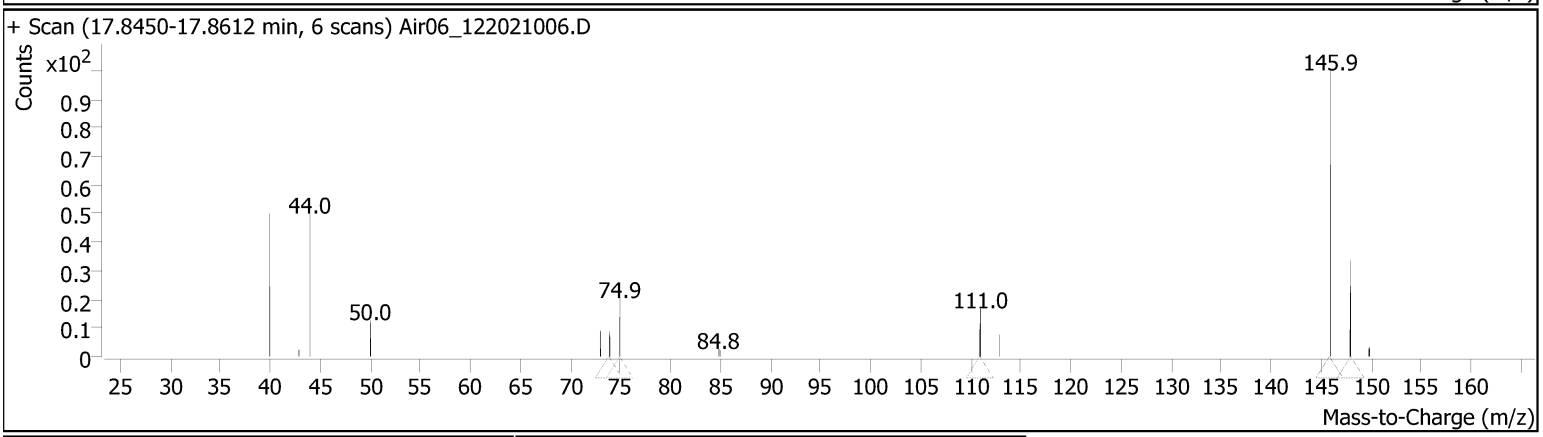


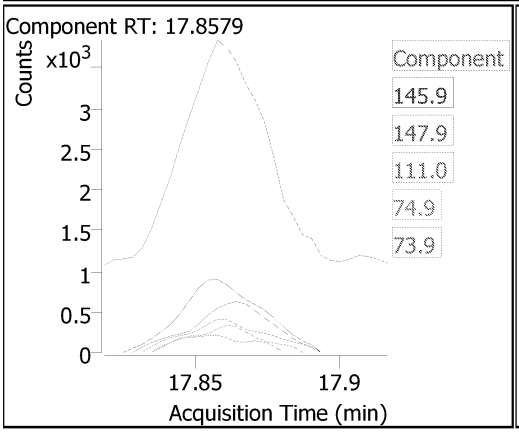


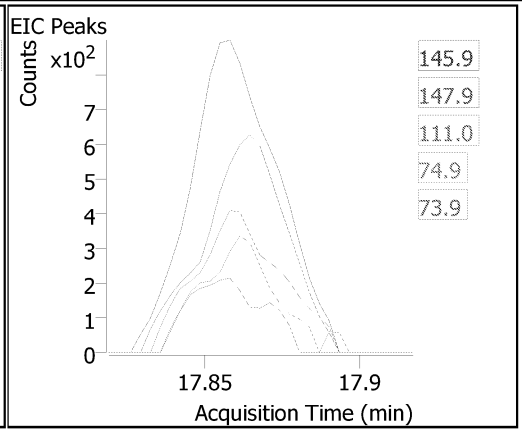
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
17.8579	Benzene, 1,4-dichloro-	5602.0	85.8	106-46-7	C6H4Cl2	0.01422

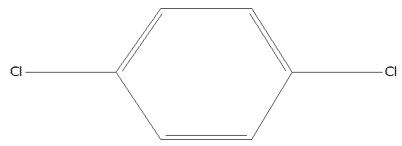




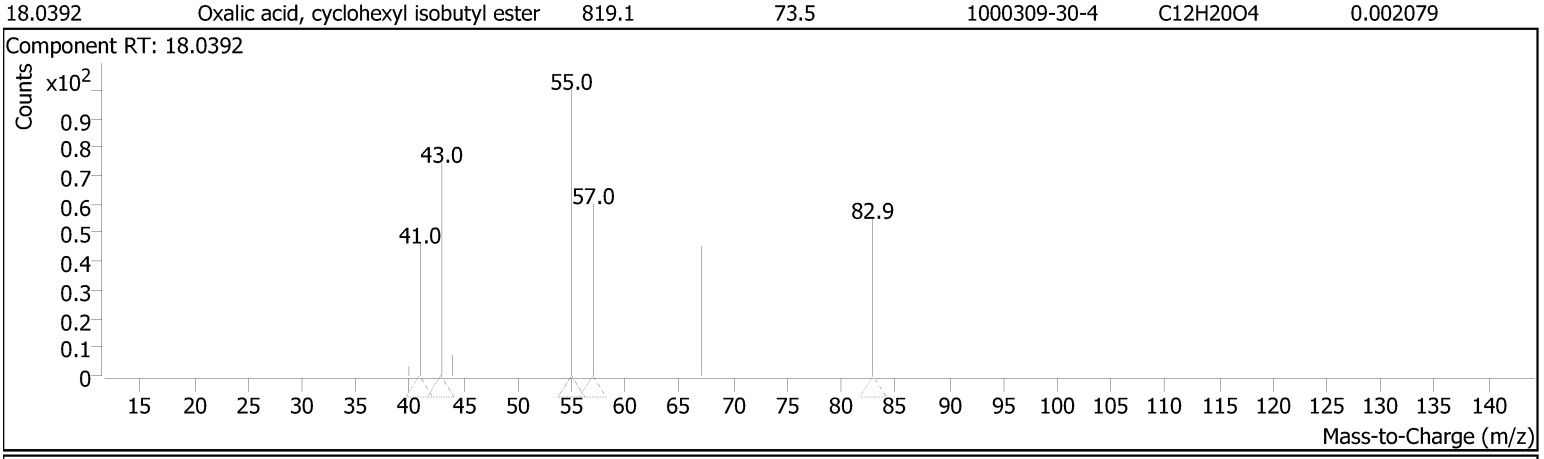


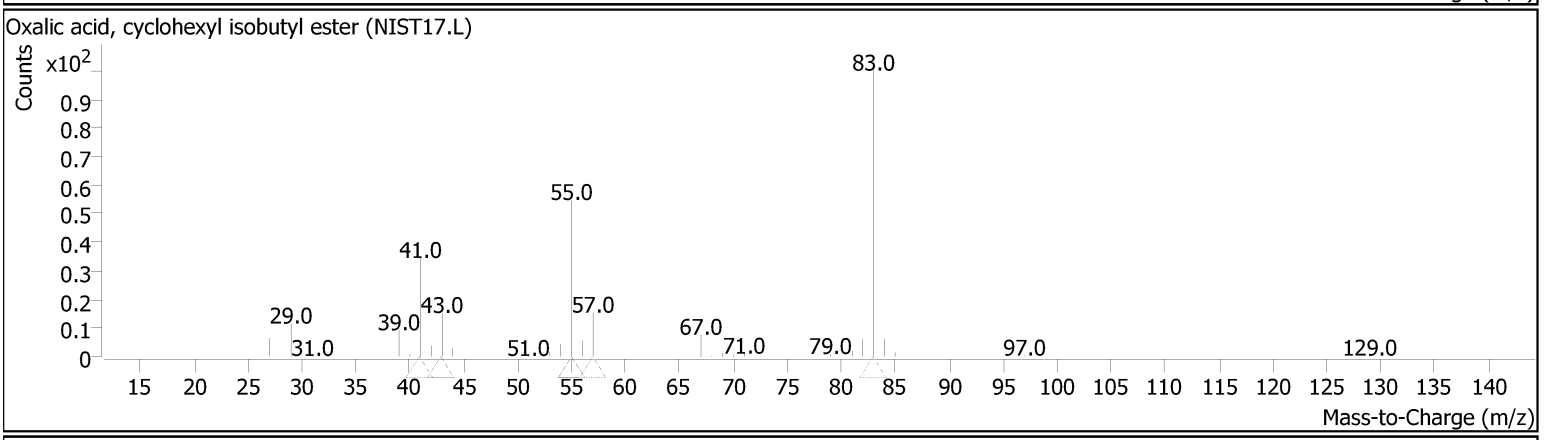


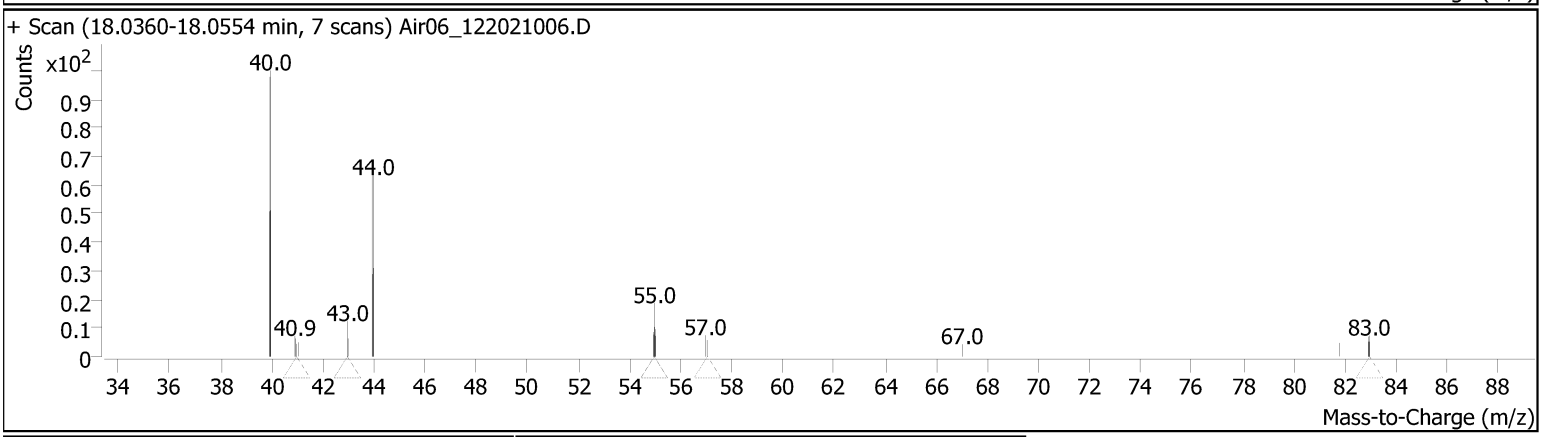


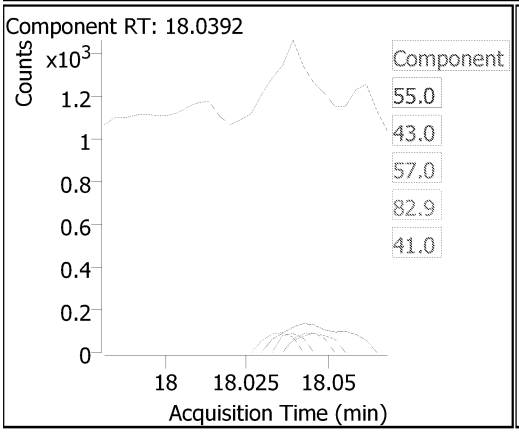


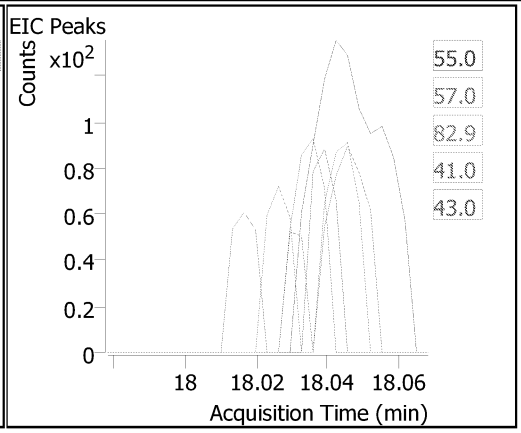
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.0392	Oxalic acid, cyclohexyl isobutyl ester	819.1	73.5	1000309-30-4	C12H20O4	0.002079

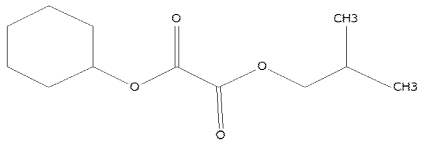




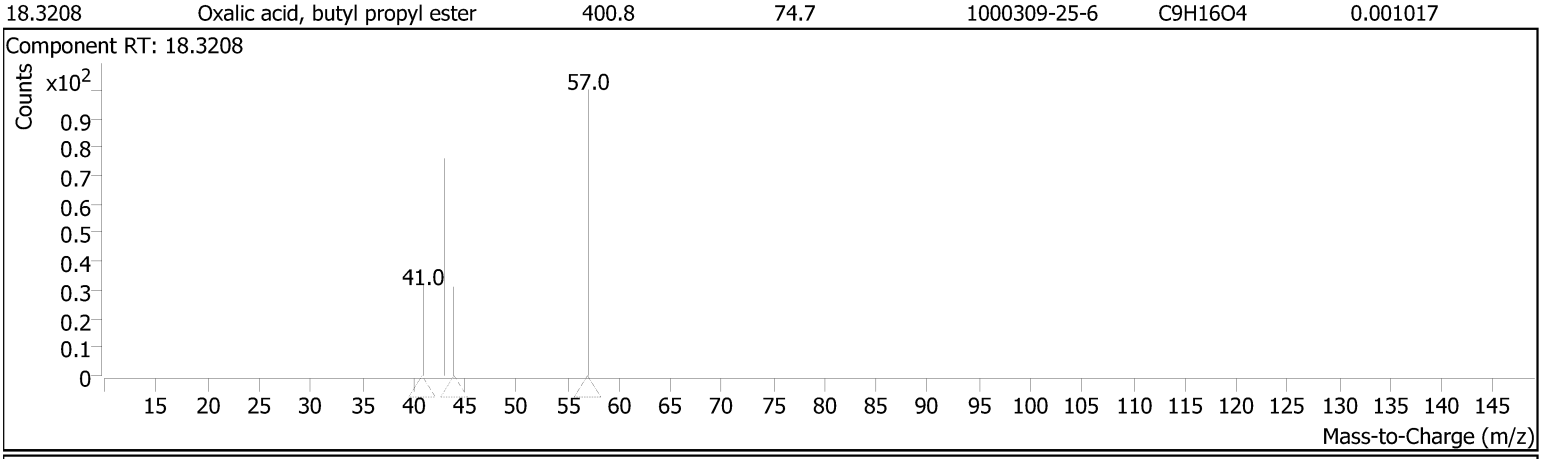


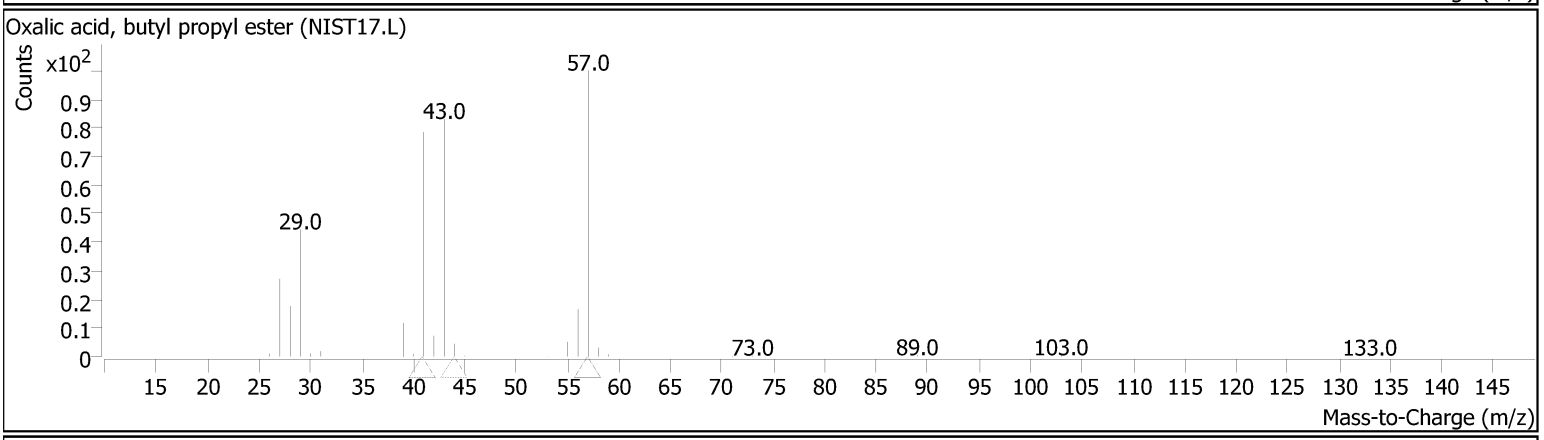


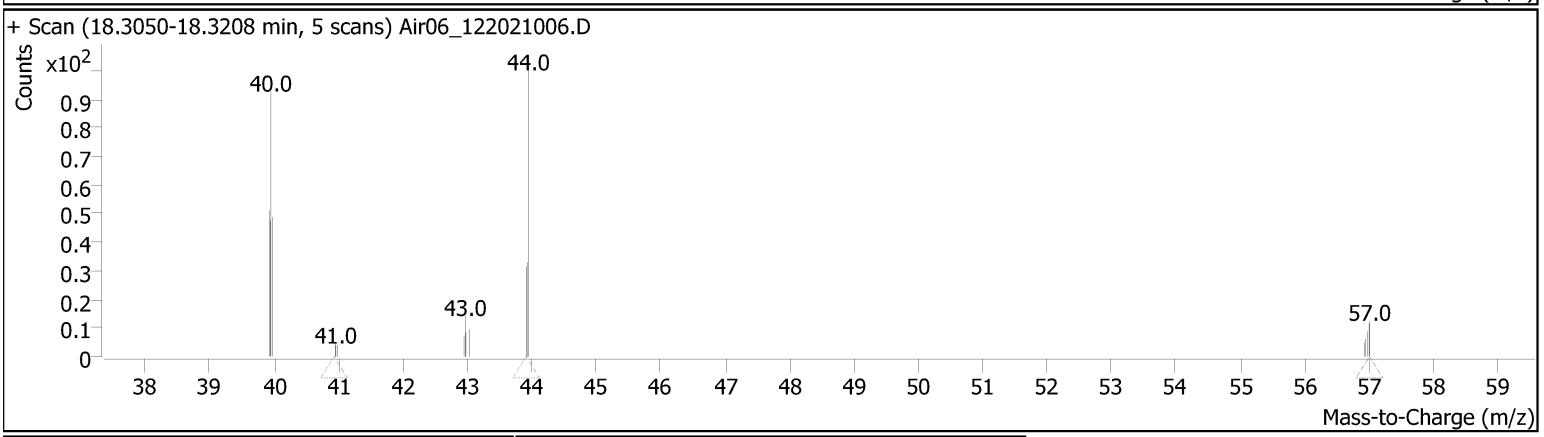


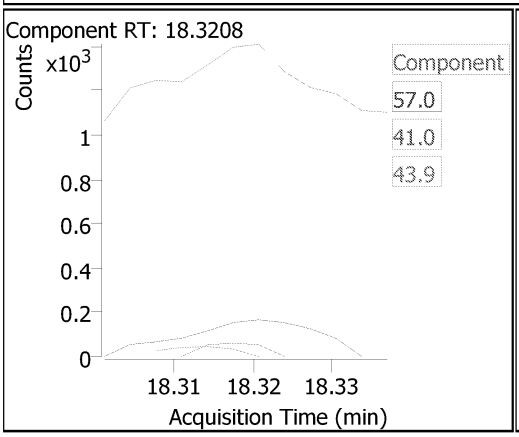


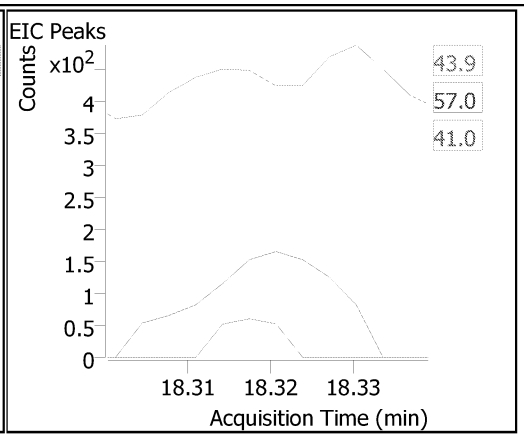
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.3208	Oxalic acid, butyl propyl ester	400.8	74.7	1000309-25-6	C9H16O4	0.001017

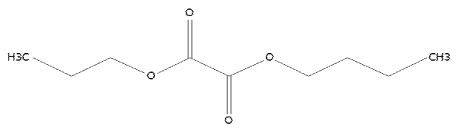




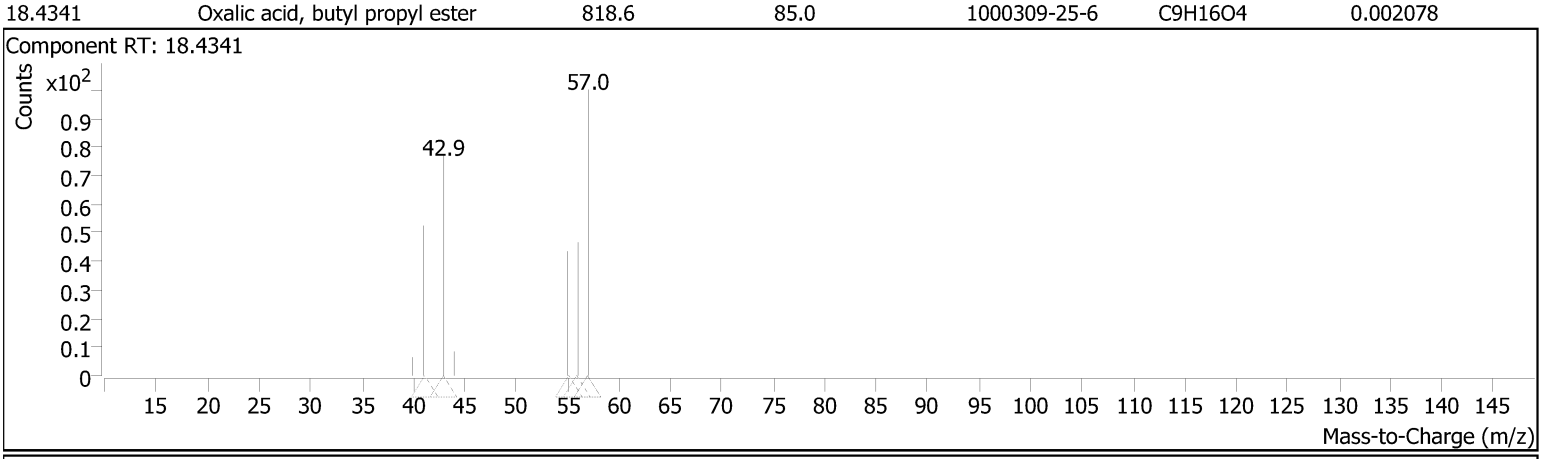


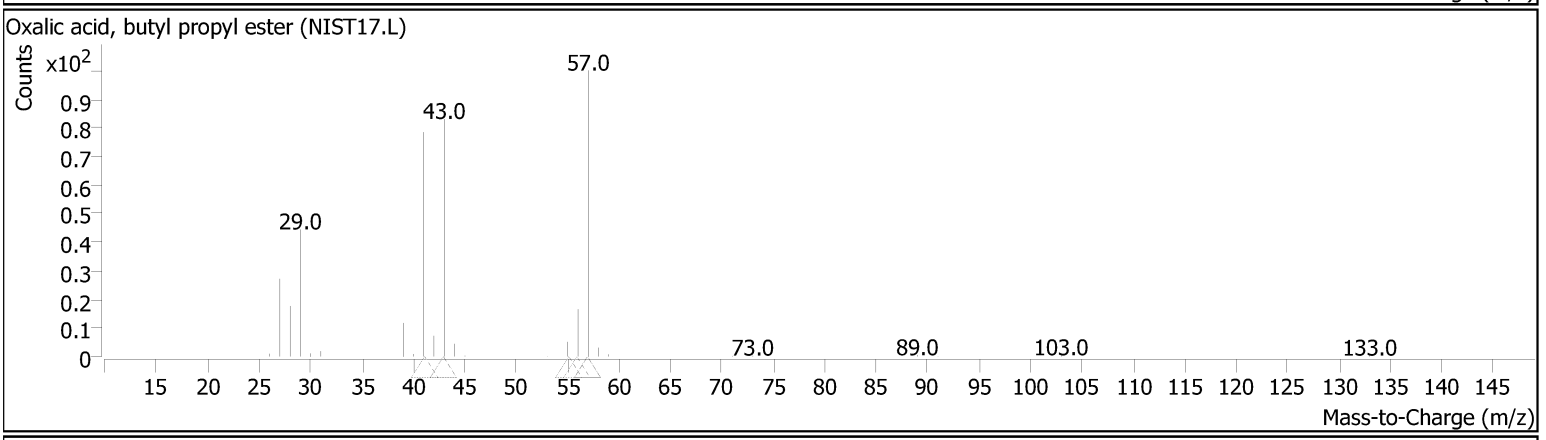


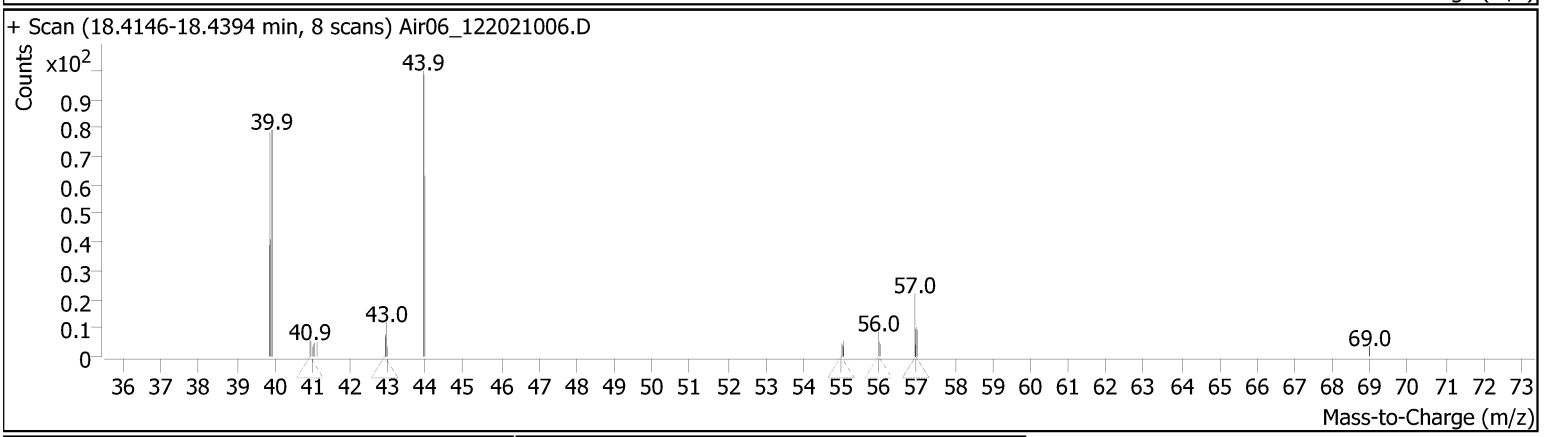


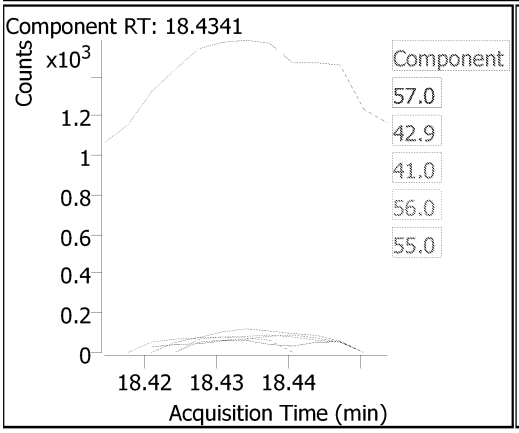


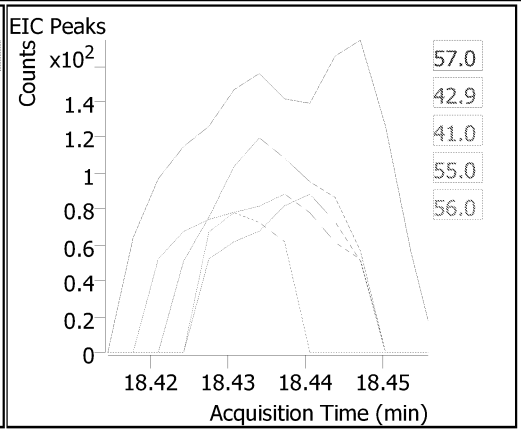
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.4341	Oxalic acid, butyl propyl ester	818.6	85.0	1000309-25-6	C9H16O4	0.002078

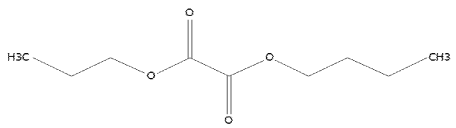




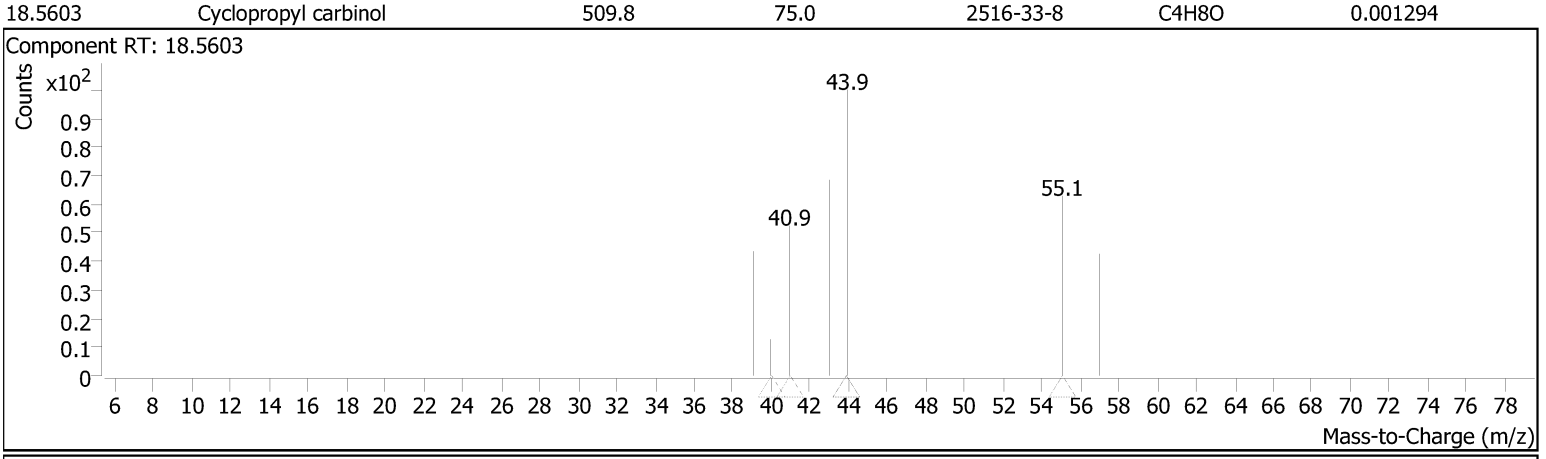


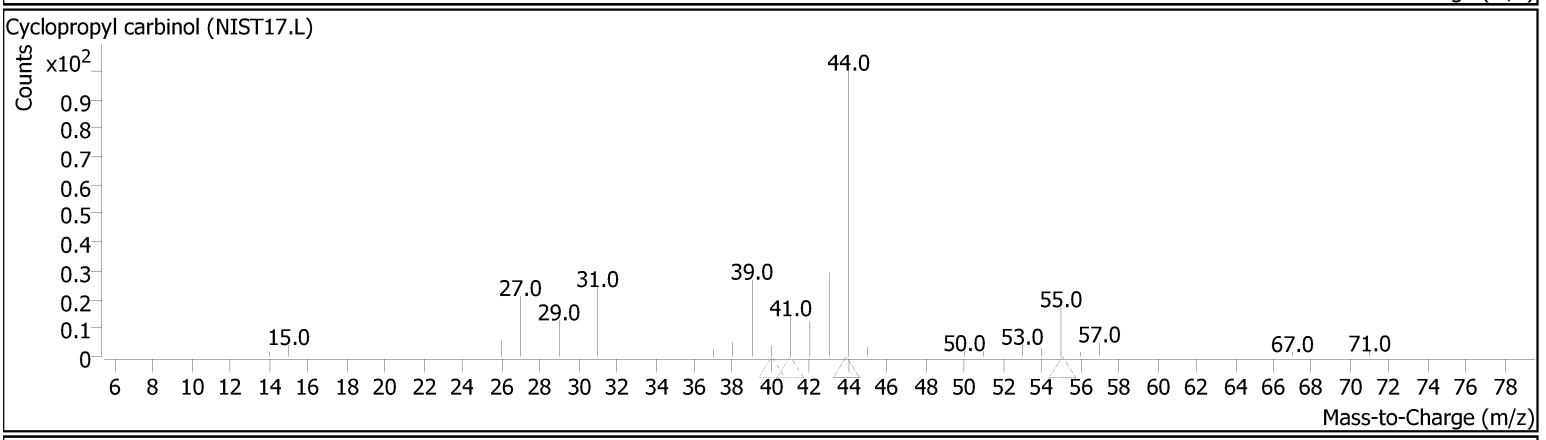


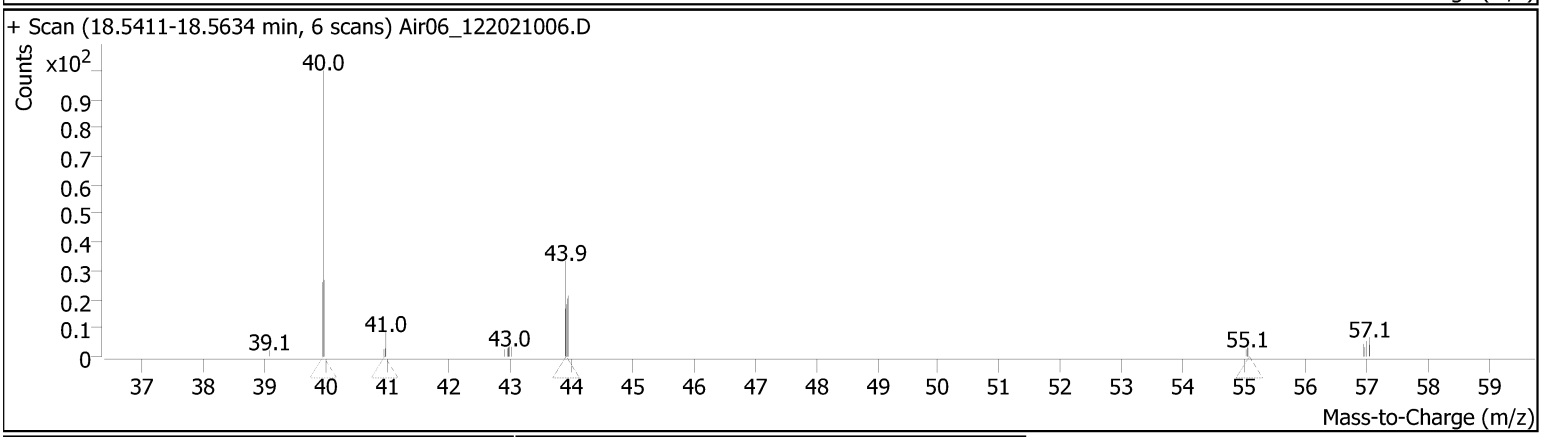


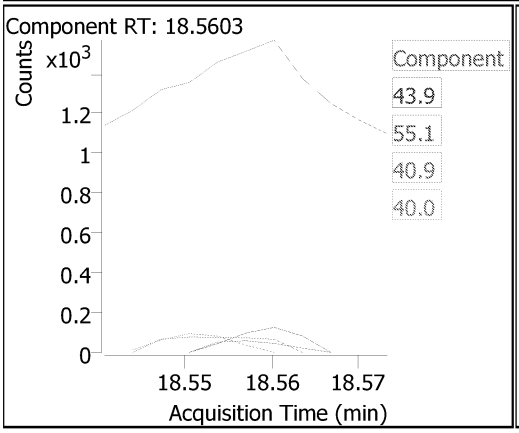


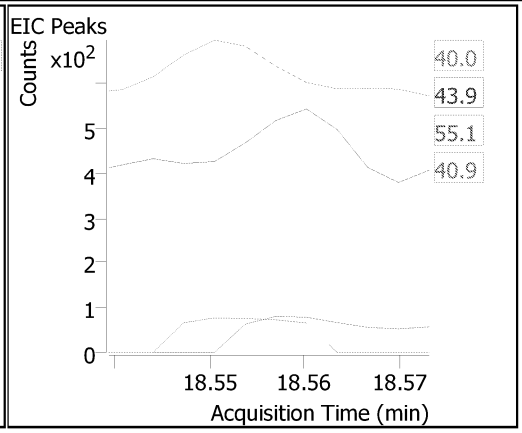
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
18.5603	Cyclopropyl carbinol	509.8	75.0	2516-33-8	C4H8O	0.001294

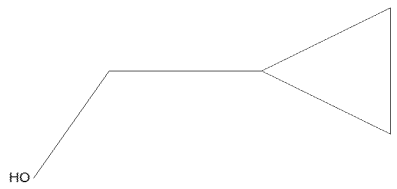




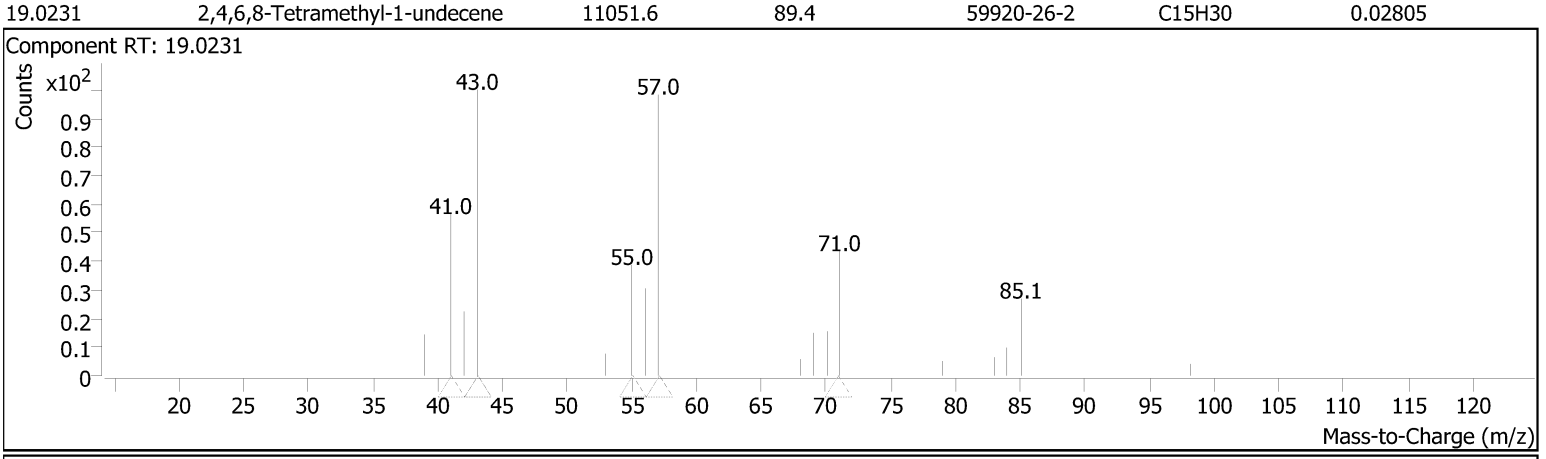


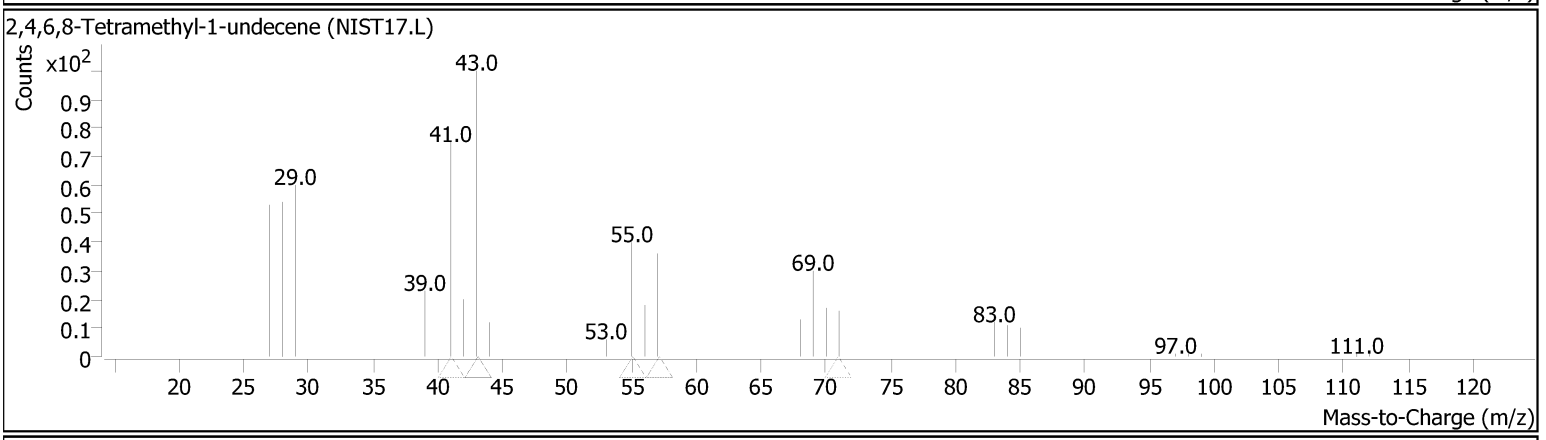


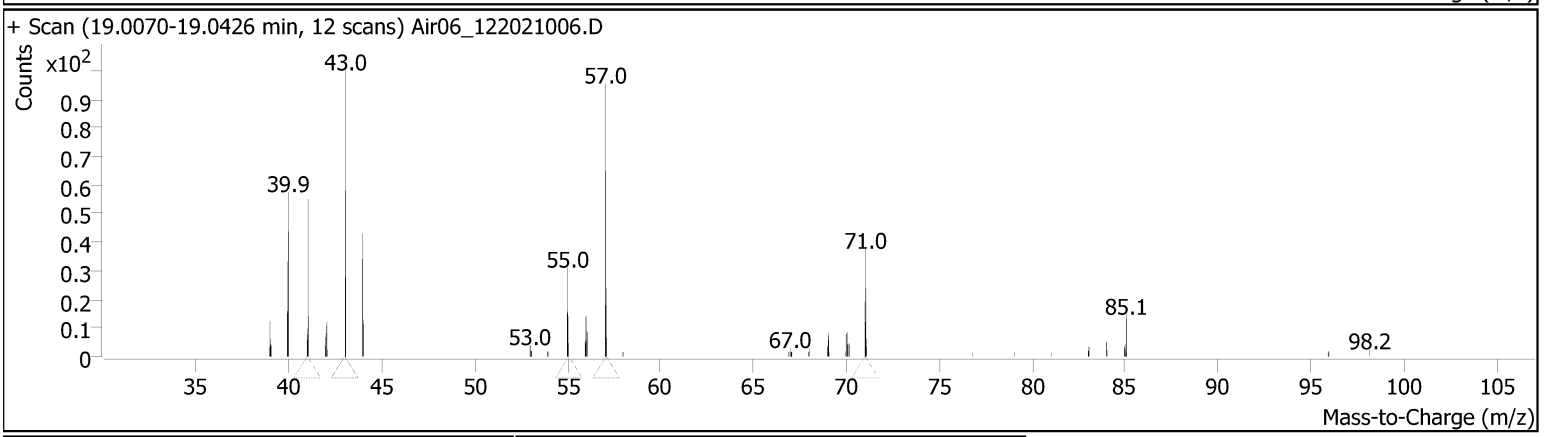


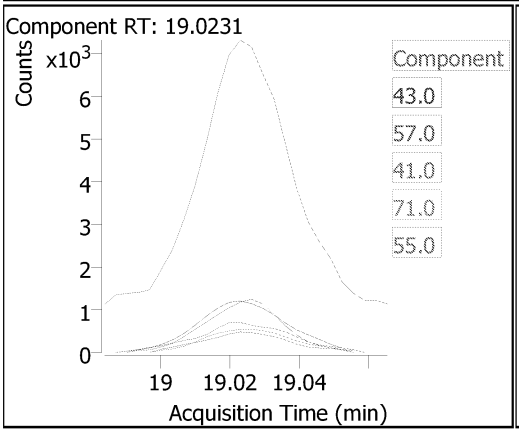


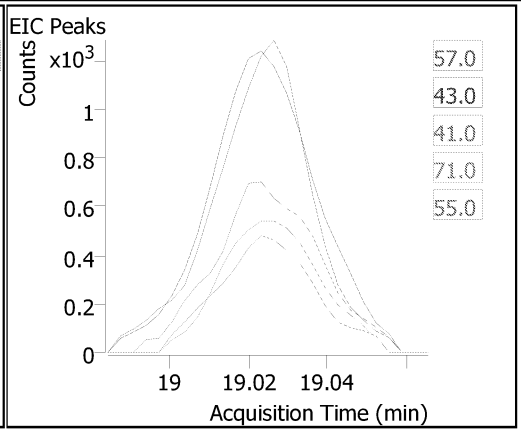
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
19.0231	2,4,6,8-Tetramethyl-1-undecene	11051.6	89.4	59920-26-2	C15H30	0.02805

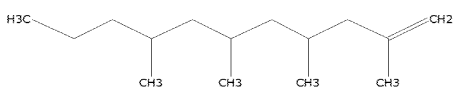




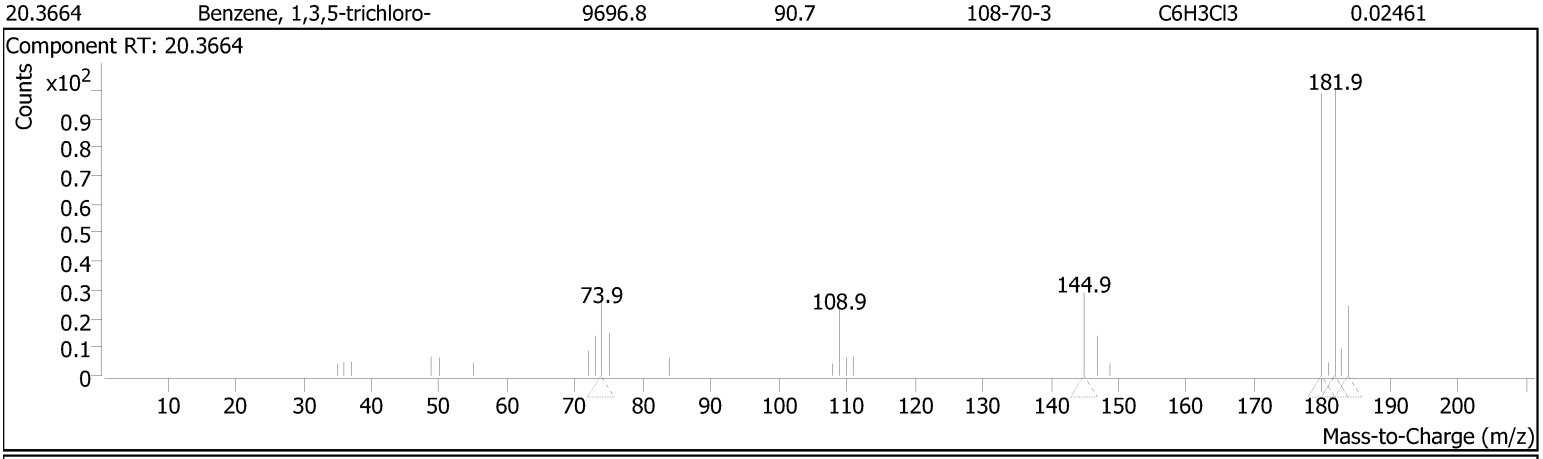


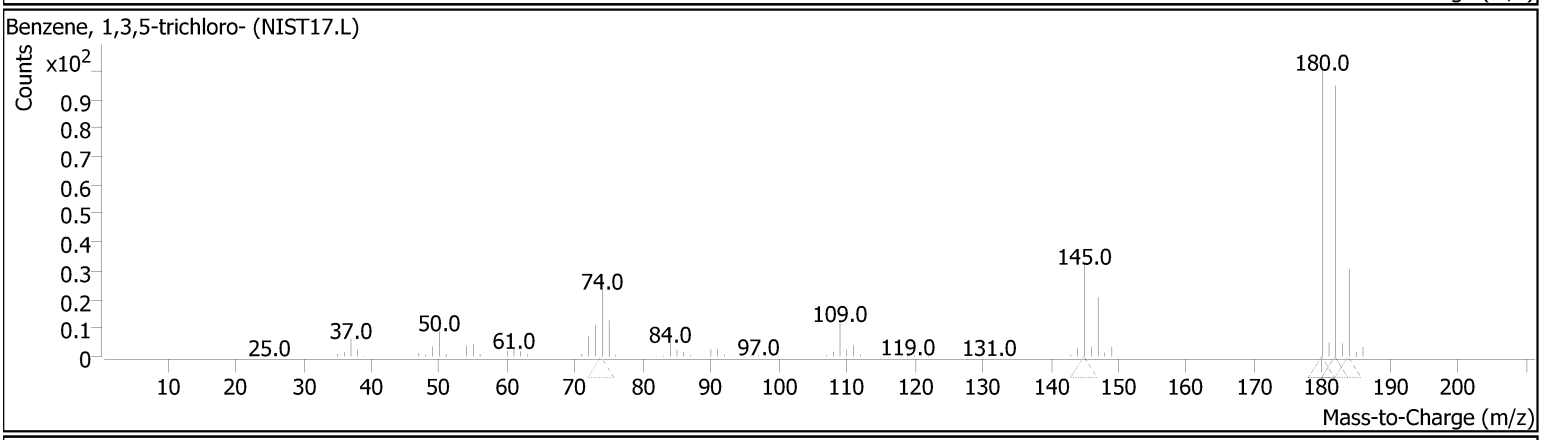


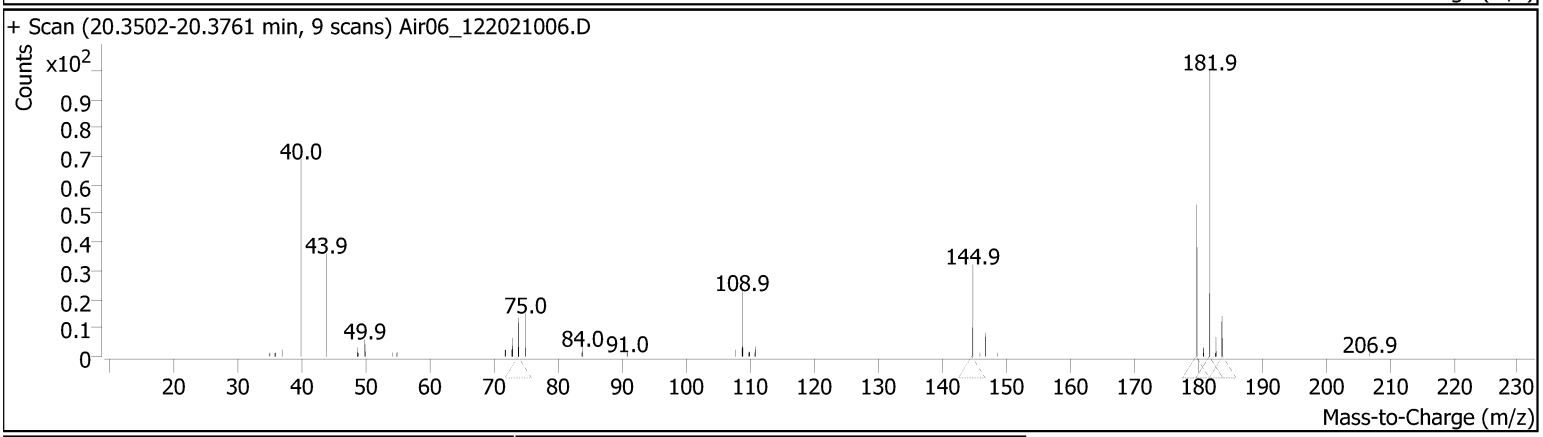


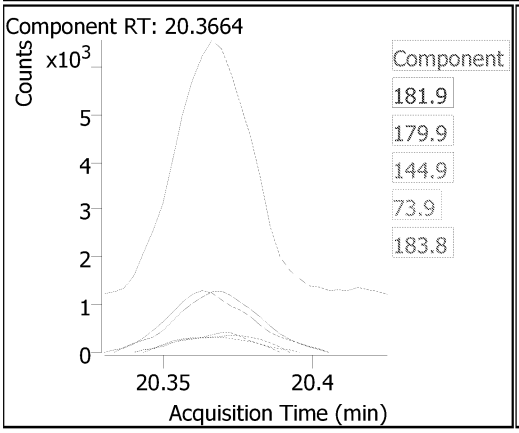


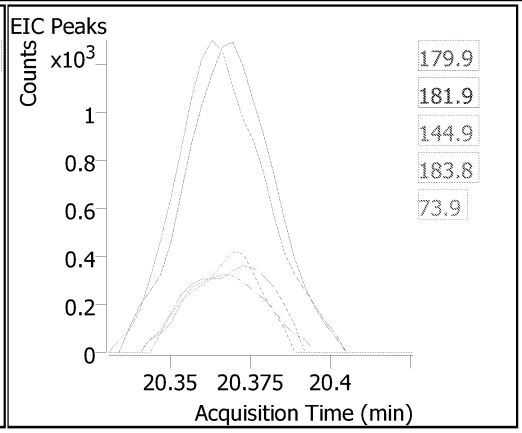
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.3664	Benzene, 1,3,5-trichloro-	9696.8	90.7	108-70-3	C6H3Cl3	0.02461

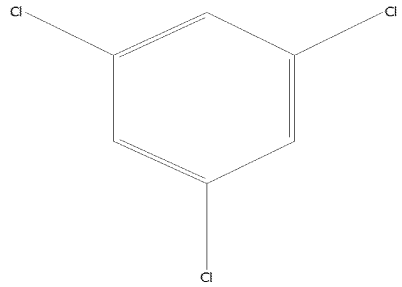




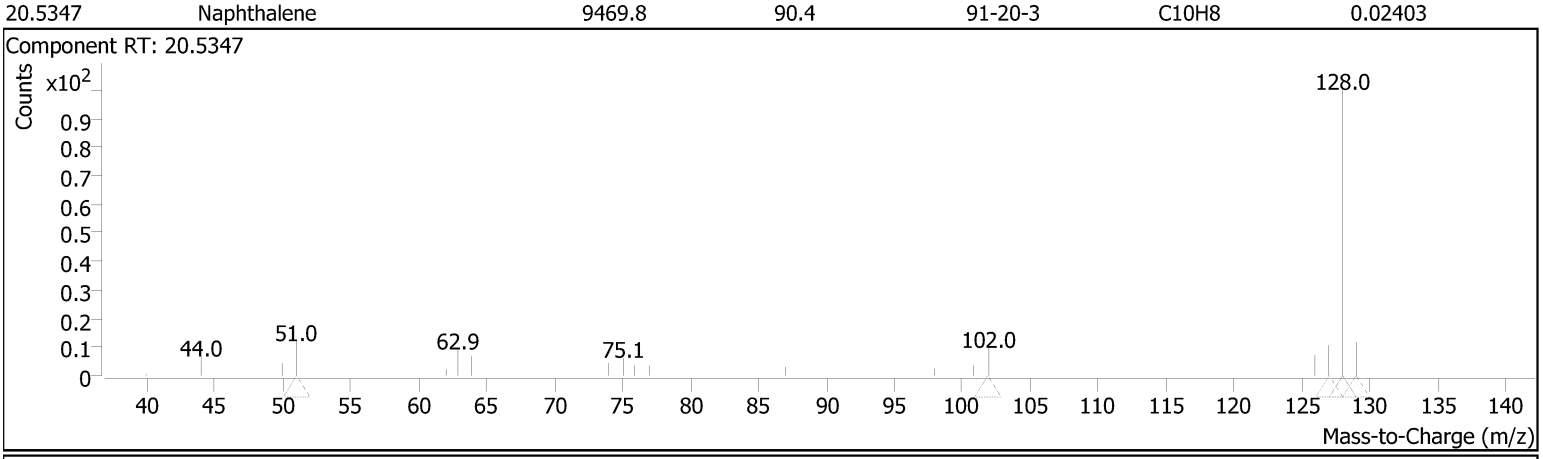


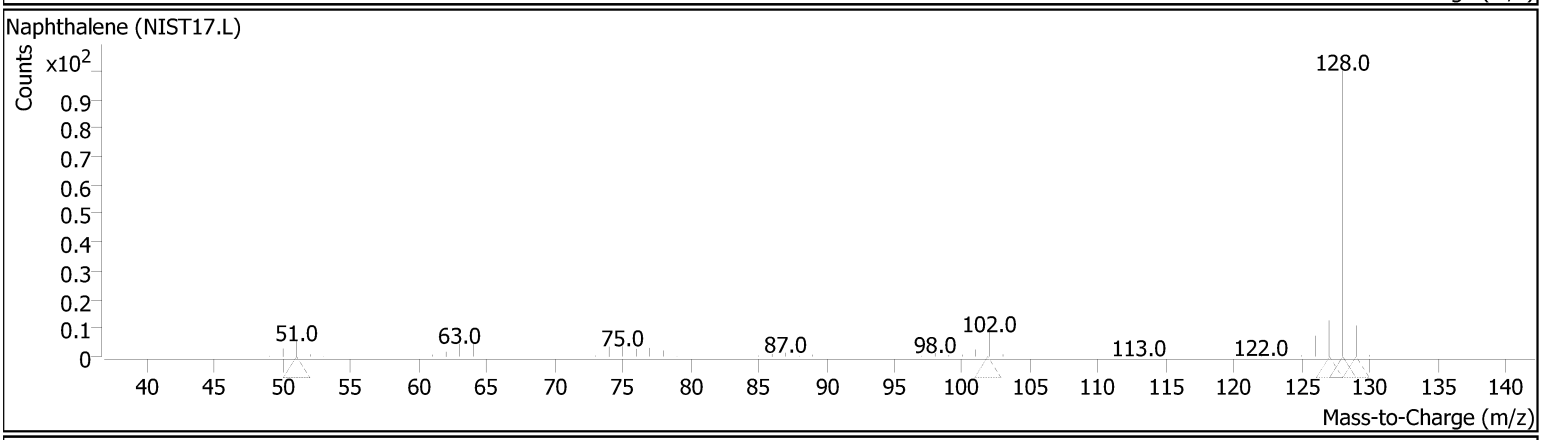


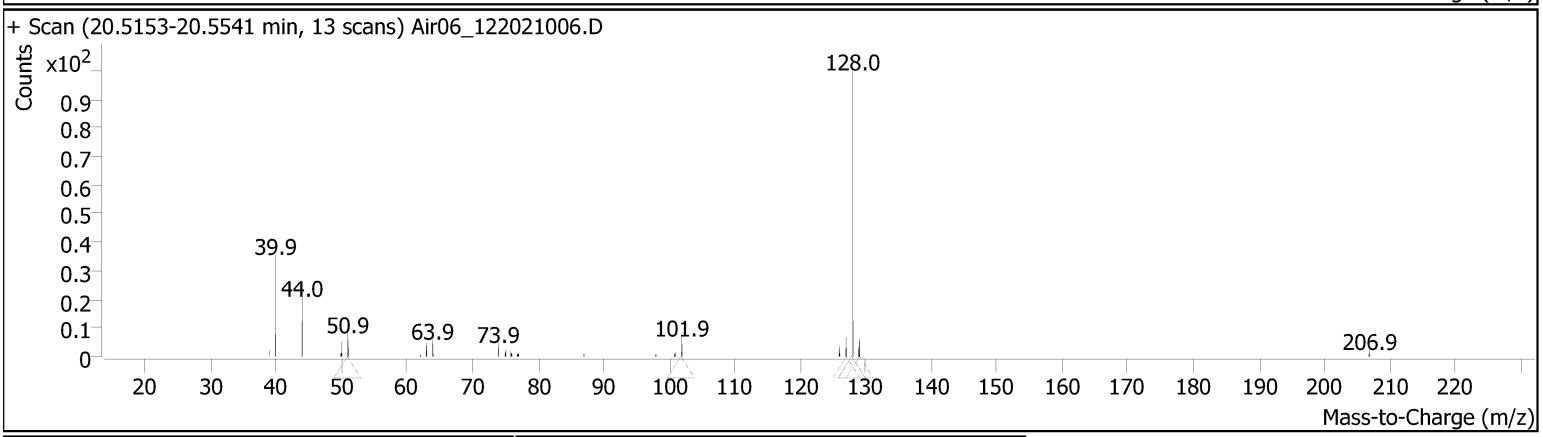


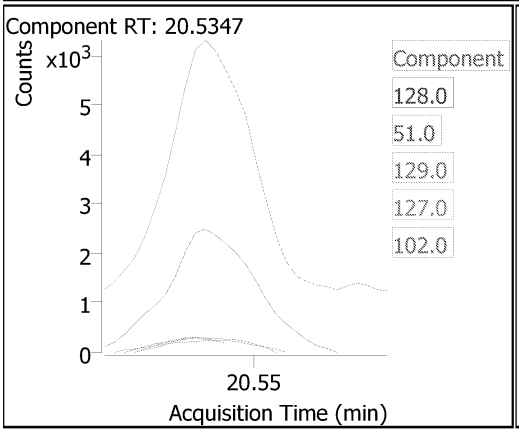


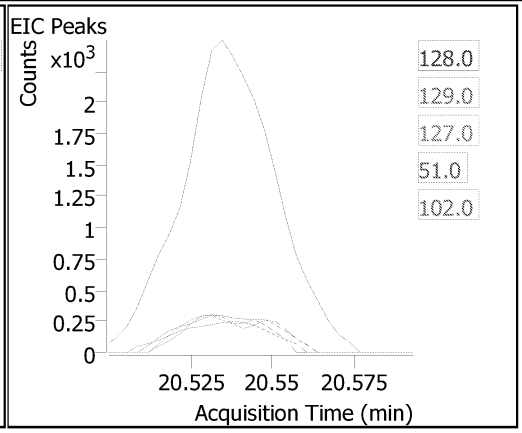
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
20.5347	Naphthalene	9469.8	90.4	91-20-3	C10H8	0.02403

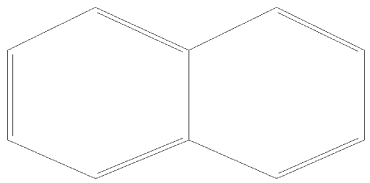




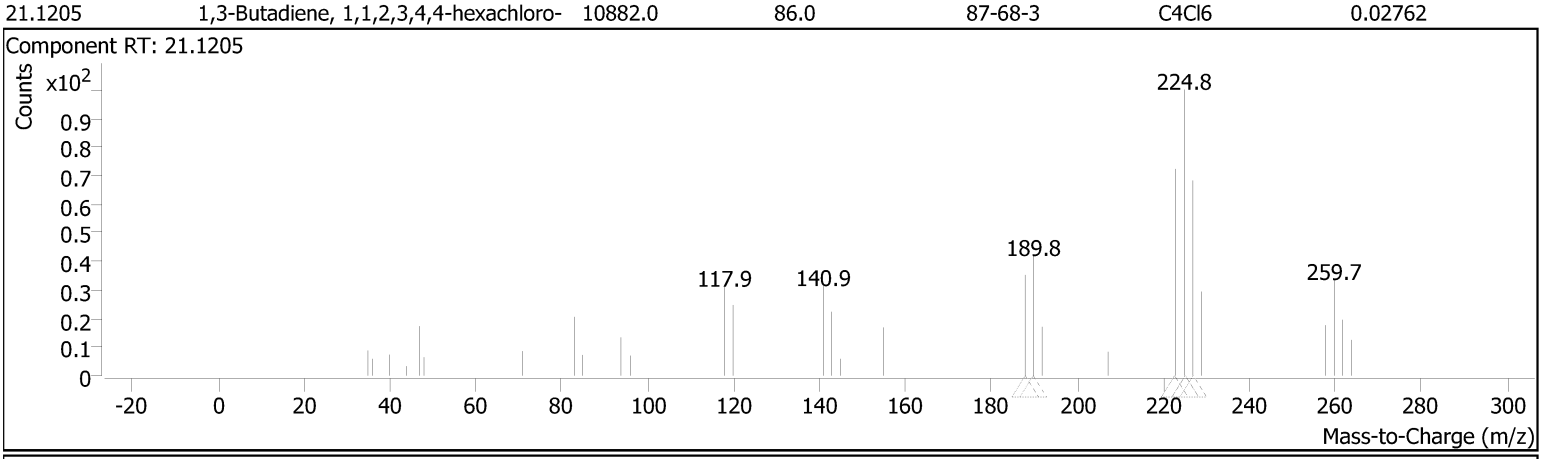


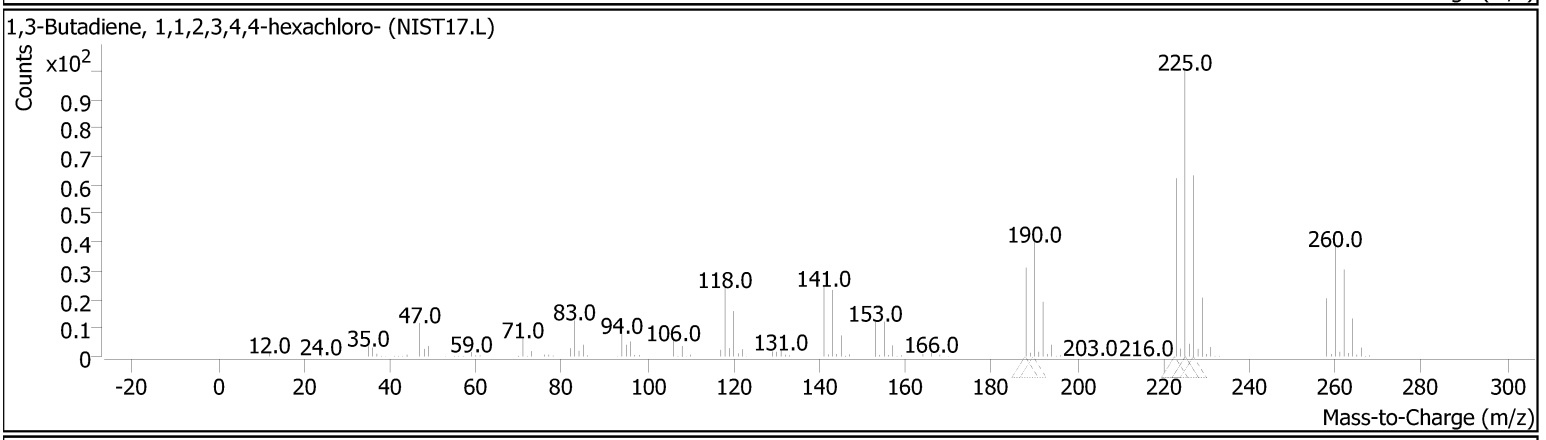


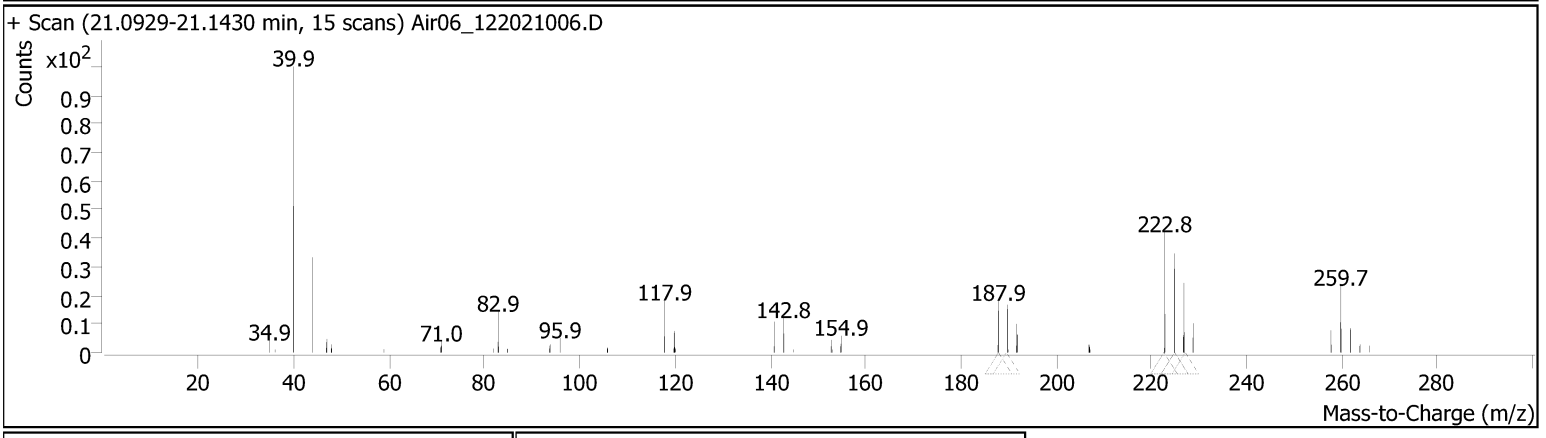


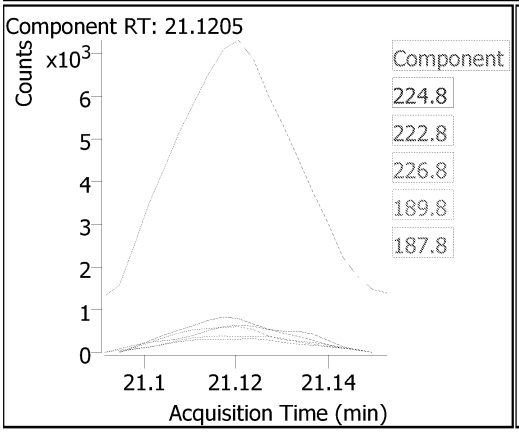


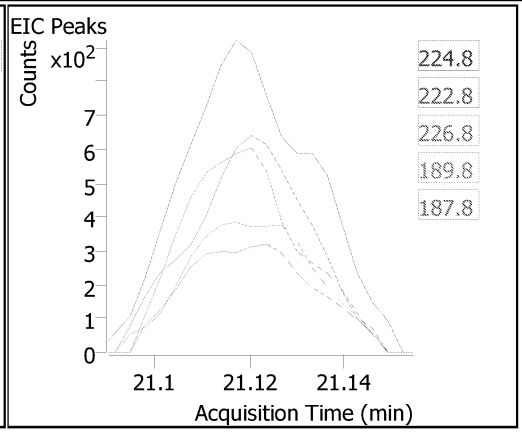
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
21.1205	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	10882.0	86.0	87-68-3	C4Cl6	0.02762

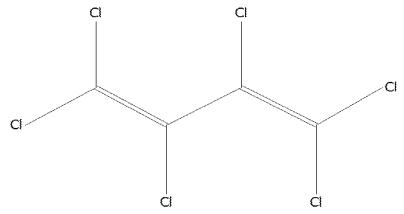












Library Search Results - NonTarget Hits with Details

Agilent Technologies

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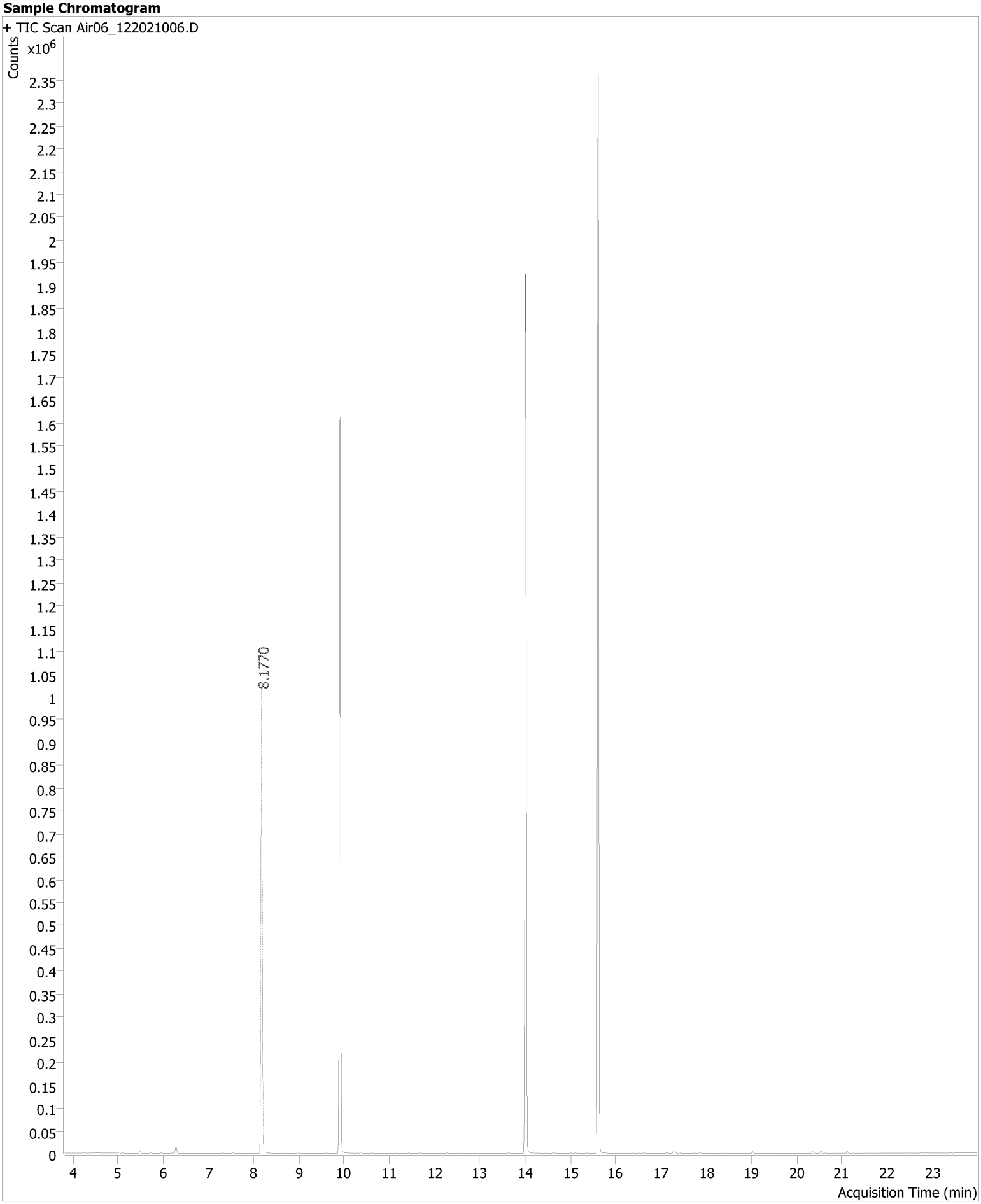
File Name	Air06_122021006.D	**Path Name**	D:\MassHunter\GCMS\1\data\2021\122021
Sample Name	BLANK,QC962007,280281,1x,PDF:1,C10812	**Type**	Sample
Acq. Method File	TO15_Acq_013120_1	**Acq. Method Path**	D:\MassHunter\GCMS\1\methods\
Acq. Date-Time	12/20/2021 1:39:48 PM	**Acq. Operator**	ZNZ/DJL/LJB
Instrument Name	Air-MS-06	**Dil.**	1

Component RT	Compound Name	CAS#	Formula	Component Area	Match Factor	Estimated Conc.
8.1770	Bromochloromethane	74-97-5		2192272.3	98.9	10

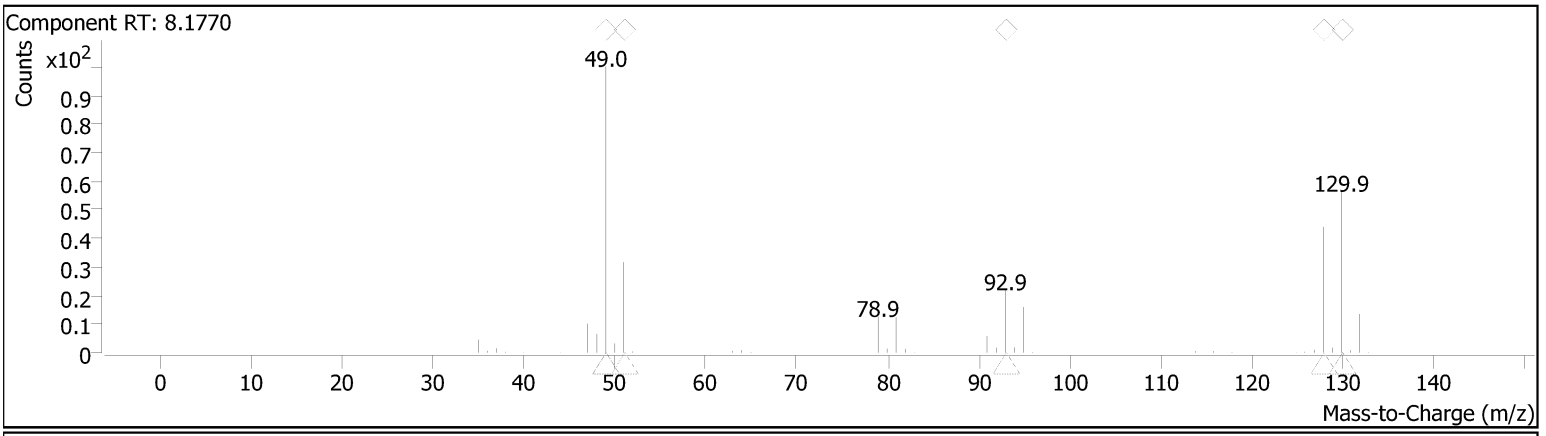
Sample Chromatogram

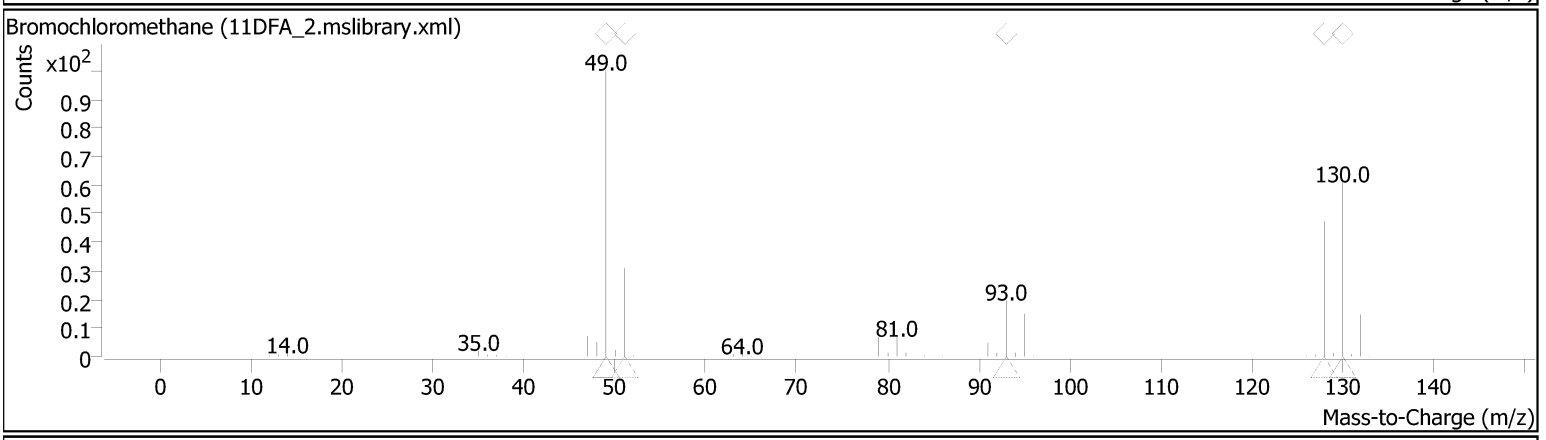


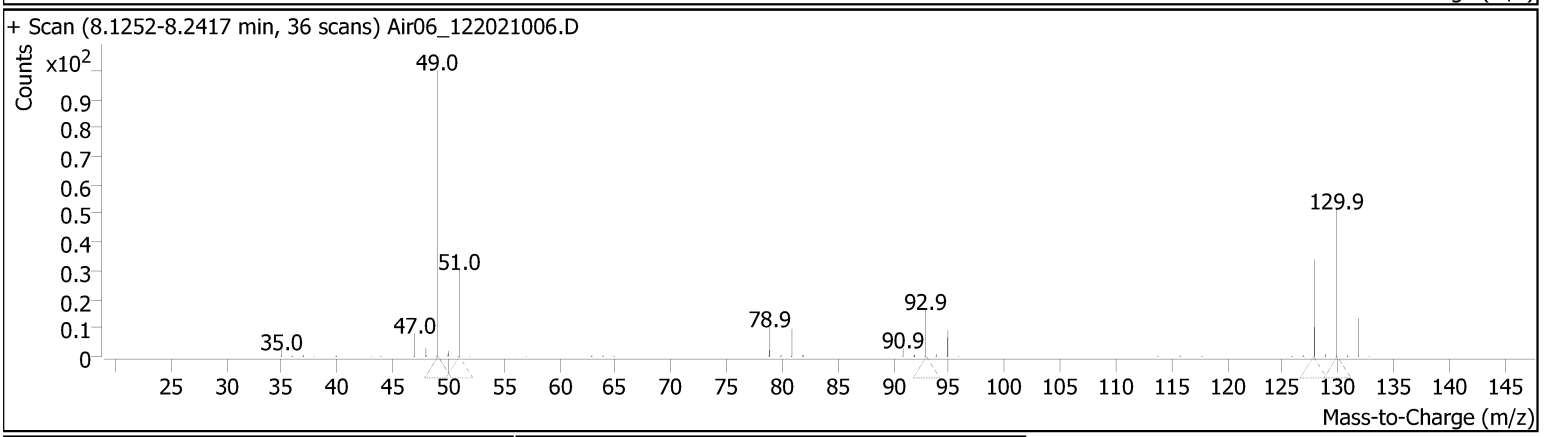
Library Search Results - NonTarget Hits with Details

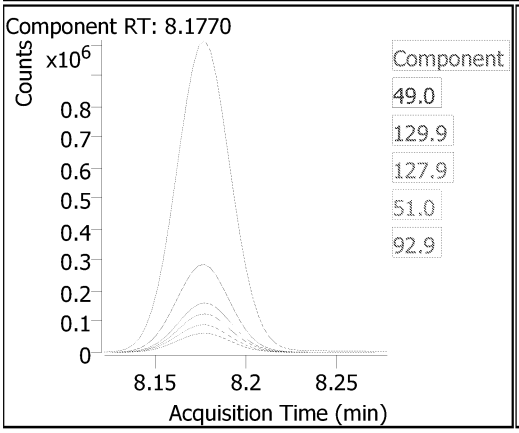
Agilent Technologies

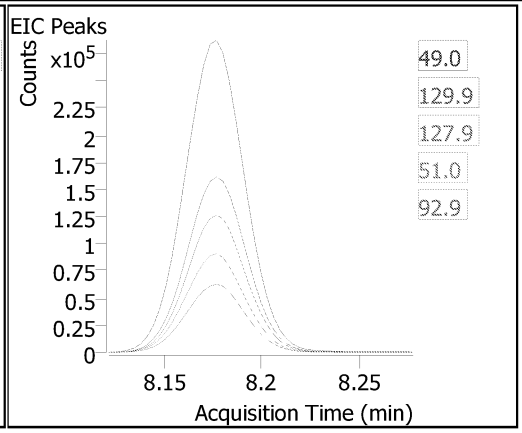
Component RT	Compound Name	Component Area	Match Factor	CAS#	Formula	Estimated Conc.
8.1770	Bromochloromethane	2192272.3	98.9	74-97-5		10











ENTHALPY SPIKE USER REPORT FOR 455620 MSAIR Air
EPA TO-15

Type : CCV/BS
Inst : AIR-MS-06
Seqnum : 371510273003.5
File : air06_122021003
IDF : 1.0
PDF : 1.0
Lab ID : QC962005
Matrix : Air
Batch : 280281
Time : 20-DEC-2021 10:06
Cal : 371497775001
Units : nL/L

Type : BSD
Inst : AIR-MS-06
Seqnum : 371510273004.5
File : air06_122021004
IDF : 1.0
PDF : 1.0
Lab ID : QC962006
Matrix : Air
Batch : 280281
Time : 20-DEC-2021 10:56
Cal : 371497775001

Analyte	Spiked	CCV/BS Raw	CCV/BS Result	%Rec	BSD Raw	BSD Result	%Rec	Limits	RPD	Lim	Flags
Freon 12	10.00	8.457	8.457	85	7.954	7.954	80	70-130	6	30	u
Freon 114	10.00	9.108	9.108	91	8.812	8.812	88	70-130	3	30	u
Chloromethane	10.00	8.874	8.874	89	8.453	8.453	85	70-130	5	30	u
Vinyl Chloride	10.00	9.489	9.489	95	9.103	9.103	91	70-130	4	30	u
Bromomethane	10.00	9.489	9.489	95	9.216	9.216	92	70-130	3	30	u
Chloroethane	10.00	9.598	9.598	96	9.143	9.143	91	70-130	5	30	u
Trichlorofluoromethane	10.00	8.067	8.067	81	7.725	7.725	77	70-130	4	30	u
1,1-Dichloroethene	10.00	8.893	8.893	89	8.430	8.430	84	70-130	5	30	u
Freon 113	10.00	9.299	9.299	93	8.927	8.927	89	70-130	4	30	u
Acetone	10.00	9.224	9.224	92	8.571	8.571	86	70-130	7	30	u
Carbon Disulfide	10.00	10.02	10.02	100	9.661	9.661	97	70-130	4	30	u
Isopropanol (IPA)	10.00	8.978	8.978	90	8.093	8.093	81	70-130	10	30	u
Methylene Chloride	10.00	9.188	9.188	92	8.843	8.843	88	70-130	4	30	u
trans-1,2-Dichloroethene	10.00	9.193	9.193	92	8.756	8.756	88	70-130	5	30	u
MTBE	10.00	9.030	9.030	90	8.691	8.691	87	70-130	4	30	u
n-Hexane	10.00	9.742	9.742	97	9.194	9.194	92	70-130	6	30	u
1,1-Dichloroethane	10.00	9.138	9.138	91	8.791	8.791	88	70-130	4	30	u
Vinyl Acetate	10.00	8.438	8.438	84	7.821	7.821	78	70-130	8	30	u
cis-1,2-Dichloroethene	10.00	9.068	9.068	91	8.735	8.735	87	70-130	4	30	u
2-Butanone	10.00	8.848	8.848	88	8.530	8.530	85	70-130	4	30	u
Chloroform	10.00	8.749	8.749	87	8.433	8.433	84	70-130	4	30	u
1,1,1-Trichloroethane	10.00	8.345	8.345	83	8.026	8.026	80	70-130	4	30	u
Carbon Tetrachloride	10.00	8.239	8.239	82	7.935	7.935	79	70-130	4	30	u
Benzene	10.00	10.22	10.22	102	9.799	9.799	98	70-130	4	30	u
1,2-Dichloroethane	10.00	7.745	7.745	77	7.450	7.450	75	70-130	4	30	u
Trichloroethene	10.00	9.725	9.725	97	9.549	9.549	95	70-130	2	30	u
1,2-Dichloropropane	10.00	9.832	9.832	98	9.514	9.514	95	70-130	3	30	u
Bromodichloromethane	10.00	8.826	8.826	88	8.476	8.476	85	70-130	4	30	u
cis-1,3-Dichloropropene	10.00	10.26	10.26	103	10.14	10.14	101	70-130	1	30	u
4-Methyl-2-Pentanone	10.00	9.721	9.721	97	9.506	9.506	95	70-130	2	30	u
Toluene	10.00	10.47	10.47	105	9.862	9.862	99	70-130	6	30	u
trans-1,3-Dichloropropene	10.00	10.16	10.16	102	9.904	9.904	99	70-130	3	30	u
1,1,2-Trichloroethane	10.00	9.804	9.804	98	9.553	9.553	96	70-130	3	30	u
Tetrachloroethene	10.00	9.500	9.500	95	9.193	9.193	92	70-130	3	30	u
2-Hexanone	10.00	10.02	10.02	100	9.758	9.758	98	70-130	3	30	u
Dibromochloromethane	10.00	9.289	9.289	93	9.045	9.045	90	70-130	3	30	u
1,2-Dibromoethane	10.00	9.640	9.640	96	9.429	9.429	94	70-130	2	30	u
Chlorobenzene	10.00	10.04	10.04	100	9.752	9.752	98	70-130	3	30	u
Ethylbenzene	10.00	10.67	10.67	107	10.19	10.19	102	70-130	5	30	u
m,p-Xylenes	20.00	21.08	21.08	105	19.54	19.54	98	70-130	8	30	u

Analyte	Spiked	CCV/BS Raw	CCV/BS Result	%Rec	BSD Raw	BSD Result	%Rec	Limits	RPD	Lim	Flags
o-Xylene	10.00	10.45	10.45	104	9.692	9.692	97	70-130	7	30	u
Styrene	10.00	10.79	10.79	108	10.47	10.47	105	70-130	3	30	u
Bromoform	10.00	9.581	9.581	96	9.368	9.368	94	70-130	2	30	u
1,1,2,2-Tetrachloroethane	10.00	10.27	10.27	103	10.06	10.06	101	70-130	2	30	u
1,1,1,2-Tetrachloroethane	10.00	9.611	9.611	96	9.350	9.350	94	70-130	3	30	u
4-Ethyltoluene	10.00	10.46	10.46	105	10.06	10.06	101	70-130	4	30	u
1,3,5-Trimethylbenzene	10.00	10.27	10.27	103	9.683	9.683	97	70-130	6	30	u
1,2,4-Trimethylbenzene	10.00	10.76	10.76	108	10.14	10.14	101	70-130	6	30	u
1,3-Dichlorobenzene	10.00	9.644	9.644	96	9.390	9.390	94	70-130	3	30	u
1,4-Dichlorobenzene	10.00	9.584	9.584	96	9.359	9.359	94	70-130	2	30	u
Benzyl chloride	10.00	9.772	9.772	98	9.542	9.542	95	70-130	2	30	u
1,2-Dichlorobenzene	10.00	9.967	9.967	100	9.745	9.745	97	70-130	2	30	u
1,2,4-Trichlorobenzene	10.00	10.27	10.27	103	9.905	9.905	99	70-130	4	30	u v+ **b***
Hexachlorobutadiene	10.00	8.959	8.959	90	8.784	8.784	88	70-130	2	30	u
Bromofluorobenzene	10.00	9.985	9.985	100	10.03	10.03	100	60-140			u

ISTD (ICAL air06_121121009)	ICAL Area	CCV/BS Area	%Drift	ICAL RT	CCV/BS RT	Drift
Bromochloromethane	329831	348979	5.81	8.18	8.18	0.00
1,4-Difluorobenzene	1230119	1305225	6.11	9.91	9.91	0.00
Chlorobenzene-d5	754830	756651	0.24	14.02	14.02	0.00

ISTD (ICAL air06_121121009)	ICAL Area	BSD Area	%Drift	ICAL RT	BSD RT	Drift
Bromochloromethane	329831	346906	5.18	8.18	8.18	0.00
1,4-Difluorobenzene	1230119	1290615	4.92	9.91	9.91	0.00
Chlorobenzene-d5	754830	745359	-1.25	14.02	14.02	0.00

ZNZ 12/20/21 [1,2,4-Trichlorobenzene]: The ICV failed high for 1,2,4-Trichlorobenzene. Samples with detectable hits will be re-analyzed on an instrument with a passing ICAL. [general version]

ZNZ 12/20/21 [Naphthalene]: The ICV failed high for Naphthalene. Samples with detectable hits will be re-analyzed on an instrument with a passing ICAL. [general version]

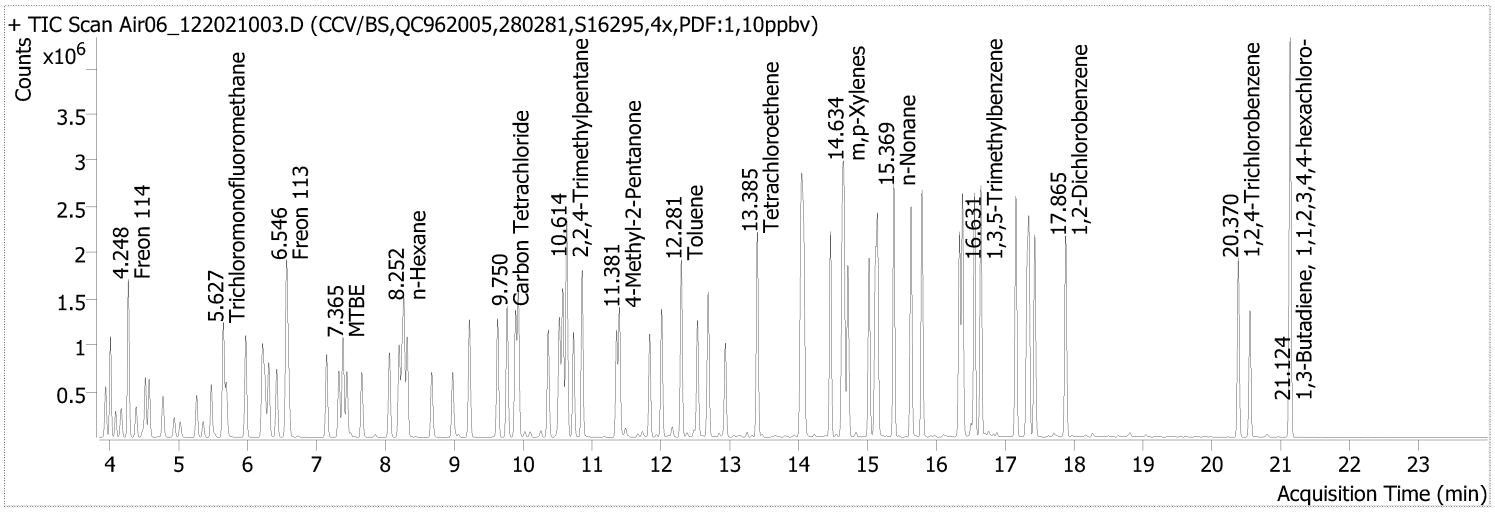
GSG 01/04/22 [1,2,4-Trichlorobenzene]: The ICV failed high for 1,2,4-Trichlorobenzene. Samples with detectable hits will be re-analyzed on an instrument with a passing ICAL.

Analyst: GSG Date: 01/04/22 Reviewer: SLL Date: 01/04/22

+=high bias b=noncompliant u=use v=ICV

Quantitation Results Report (Not Reviewed)

Data File	Air06_122021003.D	Operator	ZNZ/DJL/LJB
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	12/20/2021 10:06:36 AM
Sample Name	CCV/BS,QC962005,280281,S16295,4x,PDF:1,10ppbv	Instrument	Air-MS-06
Vial	5	Multiplier	1.00
DA Method File	TO15_121121.m	Comment	1x100mL
Tune File	bfb.u	Tune Date	12/14/2021 7:38:43 AM
Batch Name	2021 Dec 20 0806 TO15_121121.m.batch.bin	Last Calib Update	12/13/2021 9:29:07 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



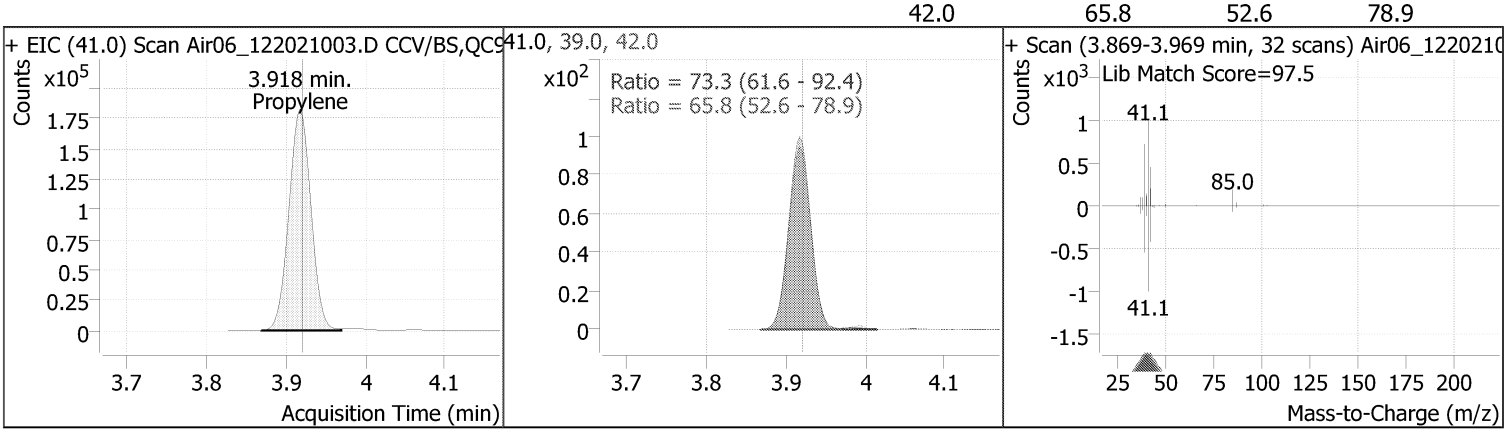
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.184	130.0	348979	10.0000	nL/L		0.003
M 1,4-Difluorobenzene	9.912	114.0	1305225	10.0000	nL/L		0.000
M Chlorobenzene-d5	14.016	82.0	756651	10.0000	nL/L		0.000
System Monitoring Compounds							
S p-Bromofluorobenzene	15.615	95.0	969722	9.9854	nL/L		-0.003
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 99.85%			
Target Compounds							QValue
T Propylene	3.918	41.0	353548	9.2376	nL/L		98
T Freon 12	3.989	85.0	1055583	8.4578	nL/L		99
T Chloromethane	4.144	50.0	387463	8.8742	nL/L		99
T Freon 114	4.248	135.0	664351	9.1080	nL/L		100
T Vinyl Chloride	4.361	62.0	388630	9.4890	nL/L		99
T 1,3-Butadiene	4.494	54.0	323114	9.1744	nL/L		99
T Butane	4.549	43.0	618081	8.7886	nL/L		97
T Bromomethane	4.749	96.0	314467	9.4896	nL/L	#	97
T Chloroethane	4.915	64.0	196238	9.5981	nL/L		95
T Ethanol	5.002	45.0	208581	7.6181	nL/L		98
T Vinyl bromide	5.241	108.0	350737	10.1538	nL/L	#	98
T Acrolein	5.335	56.0	158376	8.9622	nL/L		98
T Acetone	5.452	58.0	217976	9.2243	nL/L		78
T Trichloromonofluoromethane	5.627	101.0	1139611	8.0676	nL/L		99
T Isopropanol (IPA)	5.669	45.0	829371	8.9781	nL/L		97
T n-Pentane	5.954	43.0	831372	9.1757	nL/L		98
T 1,1-Dichloroethene	6.196	61.0	771955	8.8932	nL/L		94
T Tert-butyl alcohol (TBA)	6.229	59.0	861022	8.8310	nL/L		96
T Methylene Chloride	6.287	84.0	344268	9.1888	nL/L		87
T 3-Chloropropene	6.403	76.0	163298	10.3552	nL/L		100
T Freon 113	6.546	101.0	831174	9.2987	nL/L		99

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T Carbon Disulfide	6.575	76.0	1044506	10.0181	nL/L	#	93
T trans-1,2-Dichloroethene	7.128	61.0	622185	9.1935	nL/L		95
T 1,1-Dichloroethane	7.306	63.0	774656	9.1380	nL/L		99
T MTBE	7.365	73.0	1032427	9.0309	nL/L		97
T Vinyl Acetate	7.423	43.0	1206052	8.4385	nL/L		98
T 2-Butanone	7.637	43.0	998587	8.8488	nL/L		95
T cis-1,2-Dichloroethene	8.041	61.0	629583	9.0685	nL/L		95
T Ethyl Acetate	8.222	61.0	142465	9.0770	nL/L		75
T n-Hexane	8.252	57.0	711910	9.7420	nL/L		91
T Chloroform	8.297	83.0	871336	8.7491	nL/L		97
T Tetrahydrofuran	8.656	72.0	171425	10.5069	nL/L		82
T 1,2-Dichloroethane	8.957	62.0	619943	7.7453	nL/L	#	97
T 1,1,1-Trichloroethane	9.203	97.0	872883	8.3456	nL/L		98
T Benzene	9.611	78.0	1131728	10.2198	nL/L		95
T Carbon Tetrachloride	9.750	117.0	928789	8.2390	nL/L		99
T Cyclohexane	9.873	84.0	469940	10.2555	nL/L		88
T 1,2-Dichloropropane	10.346	63.0	495434	9.8328	nL/L	#	91
T Methane, bromodichloro-	10.508	83.0	907248	8.8260	nL/L		98
T 1,4-Dioxane	10.540	88.0	240600	9.9649	nL/L	#	87
T Trichloroethene	10.559	132.0	490810	9.7265	nL/L		98
T 2,2,4-Trimethylpentane	10.614	57.0	2352322	9.9180	nL/L		96
T Methyl methacrylate	10.715	69.0	420099	10.2976	nL/L		84
T n-Heptane	10.841	71.0	392066	10.6140	nL/L		88
T cis-1,3-Dichloropropene	11.339	110.0	151908	10.2652	nL/L	#	83
T 4-Methyl-2-Pentanone	11.381	58.0	425050	9.7212	nL/L		90
T trans-1,3-Dichloropropene	11.822	110.0	154537	10.1609	nL/L	#	83
T 1,1,2-Trichloroethane	11.993	97.0	481970	9.8043	nL/L		95
T Toluene	12.281	91.0	1478387	10.4691	nL/L		99
T TPH Gasoline (C3 to C12)	12.399	165.0	205861420	19.1680	nL/L		100
T 2-Hexanone	12.514	58.0	547522	10.0165	nL/L		90
T Dibromochloromethane	12.670	129.0	923773	9.2897	nL/L		98
T 1,2-Dibromoethane	12.919	108.9	727433	9.6405	nL/L		99
T Tetrachloroethene	13.385	166.0	787563	9.5003	nL/L		98
T 1,1,1,2-Tetrachloroethane	14.039	131.0	598679	9.6115	nL/L		95
T Benzene, chloro-	14.061	112.0	1082028	10.0352	nL/L		95
T Ethylbenzene	14.447	91.0	1857327	10.6744	nL/L		98
T TPH Gasoline (C6 to C12)	14.524	165.0	157340749	19.6822	nL/L		100
T m,p-Xylenes	14.634	91.0	3093498	21.0754	nL/L		97
T Bromoform	14.699	173.0	1109452	9.5805	nL/L		98
T Styrene	15.007	104.0	1061443	10.7949	nL/L		95
T 1,1,2,2-Tetrachloroethane	15.097	83.0	1081911	10.2705	nL/L		98
T o-Xylene	15.130	91.0	1591559	10.4465	nL/L		98
T n-Nonane	15.369	85.0	338459	10.8915	nL/L		91
T Isopropylbenzene	15.777	105.0	2072070	10.0209	nL/L		98
T 2-Chlorotoluene	16.321	126.0	484918	10.5067	nL/L		97
T n-Propylbenzene	16.366	120.0	545910	10.4818	nL/L		93
T 4-Ethyltoluene	16.538	105.1	2055007	10.4639	nL/L		98
T 1,3,5-Trimethylbenzene	16.631	105.0	1836095	10.2700	nL/L		97
T 1,2,4-Trimethylbenzene	17.140	105.0	1799487	10.7612	nL/L		98
T Benzyl chloride	17.301	91.0	1408584	9.7720	nL/L		98
T 1,3-Dichlorobenzene	17.327	146.0	1115417	9.6436	nL/L		97
T 1,4-Dichlorobenzene	17.415	146.0	1094117	9.5840	nL/L		98
T 1,2-Dichlorobenzene	17.865	146.0	1110615	9.9674	nL/L		97
T 1,2,4-Trichlorobenzene	20.370	179.9	813679	10.2676	nL/L		99
T Naphthalene	20.538	128.0	1291219	10.4866	nL/L		99

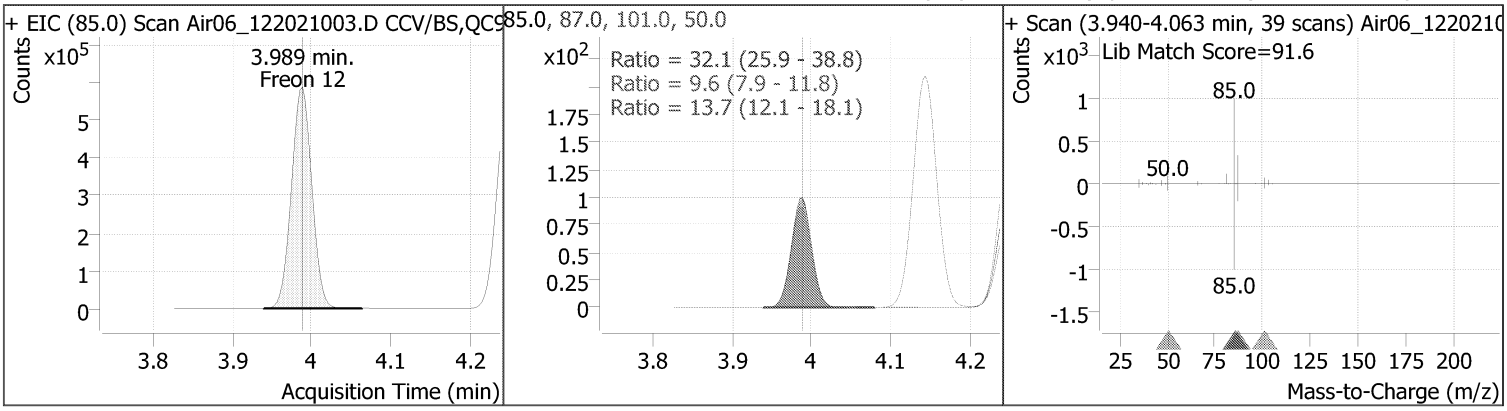
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.124	225.0	1165069	8.9595	nL/L	99

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

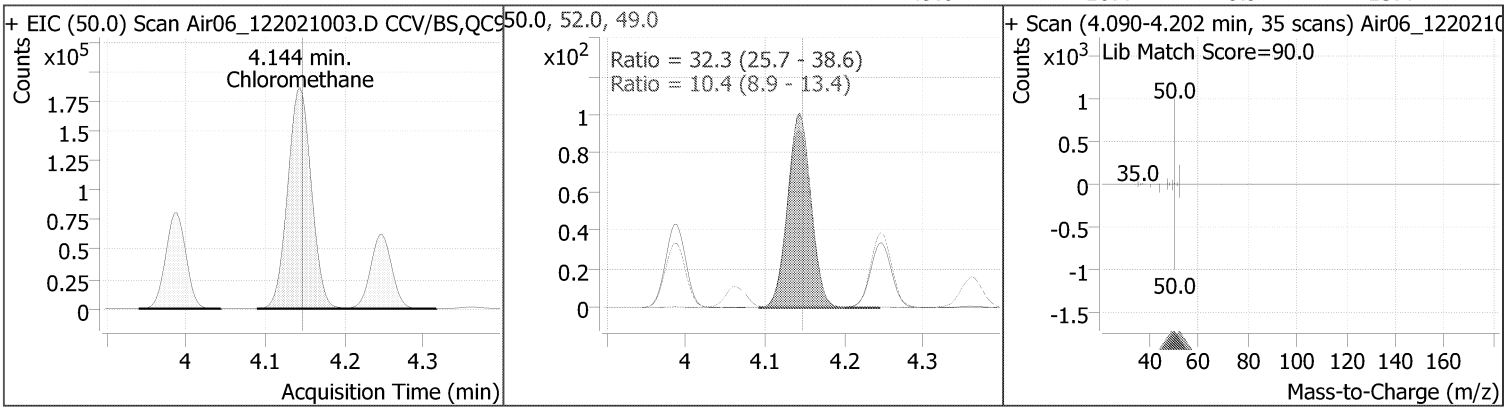
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	9.2376	3.92	0.00	353548	39.0	73.3	61.6	92.4
					42.0	65.8	52.6	78.9



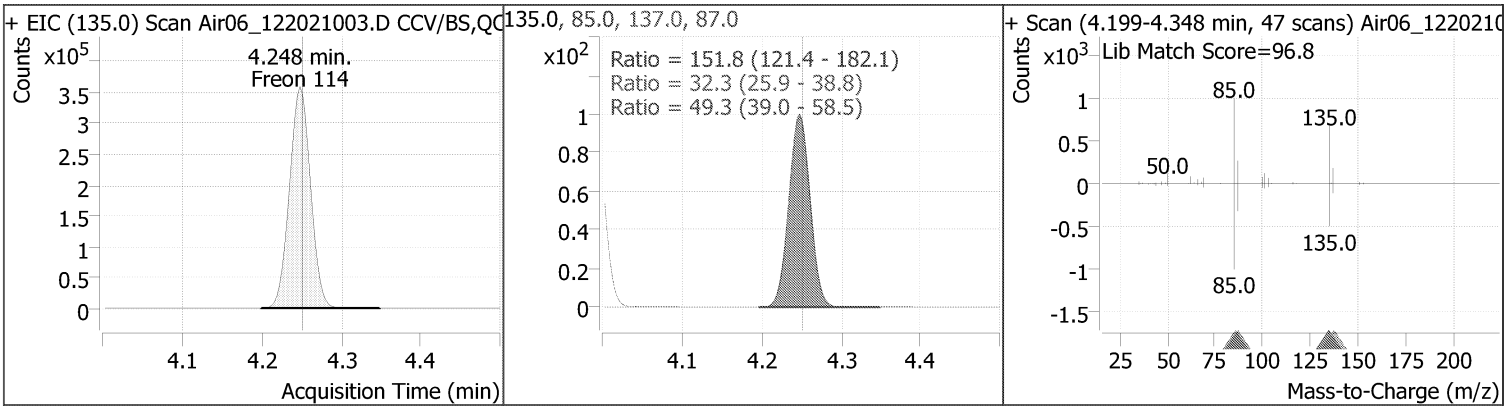
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	8.4578	3.99	0.00	1055583	87.0	32.1	25.9	38.8
					50.0	13.7	12.1	18.1
					101.0	9.6	7.9	11.8



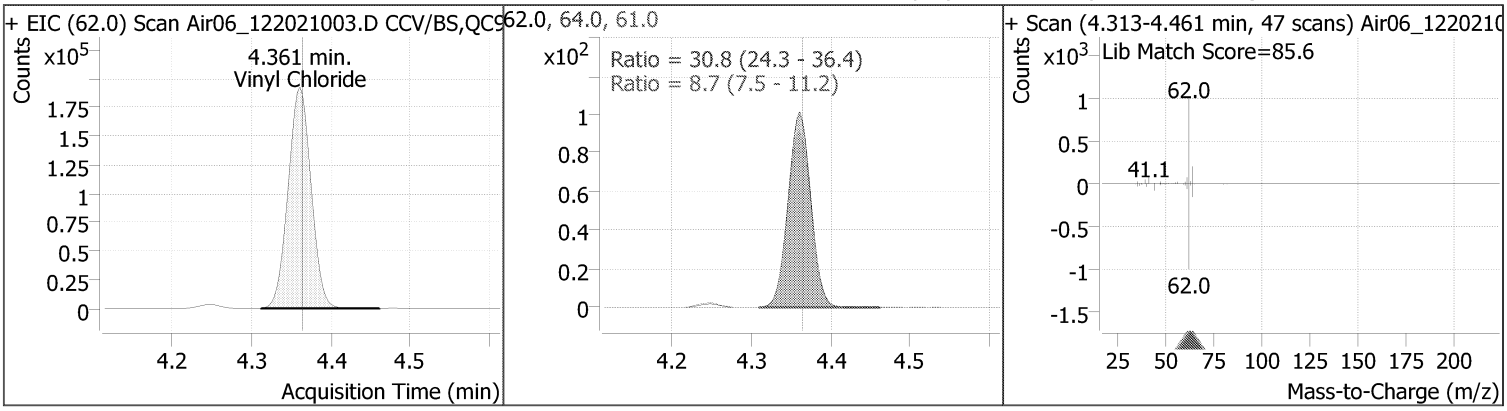
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	8.8742	4.14	0.00	387463	52.0	32.3	25.7	38.6
					49.0	10.4	8.9	13.4



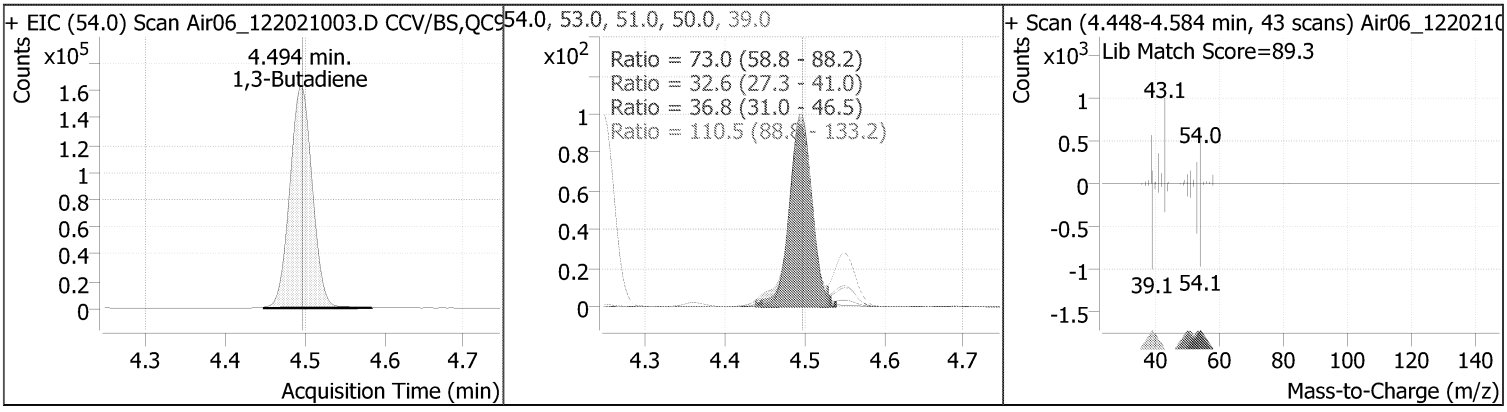
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	9.1080	4.25	0.00	664351	85.0	151.8	121.4	182.1
					87.0	49.3	39.0	58.5
					137.0	32.3	25.9	38.8



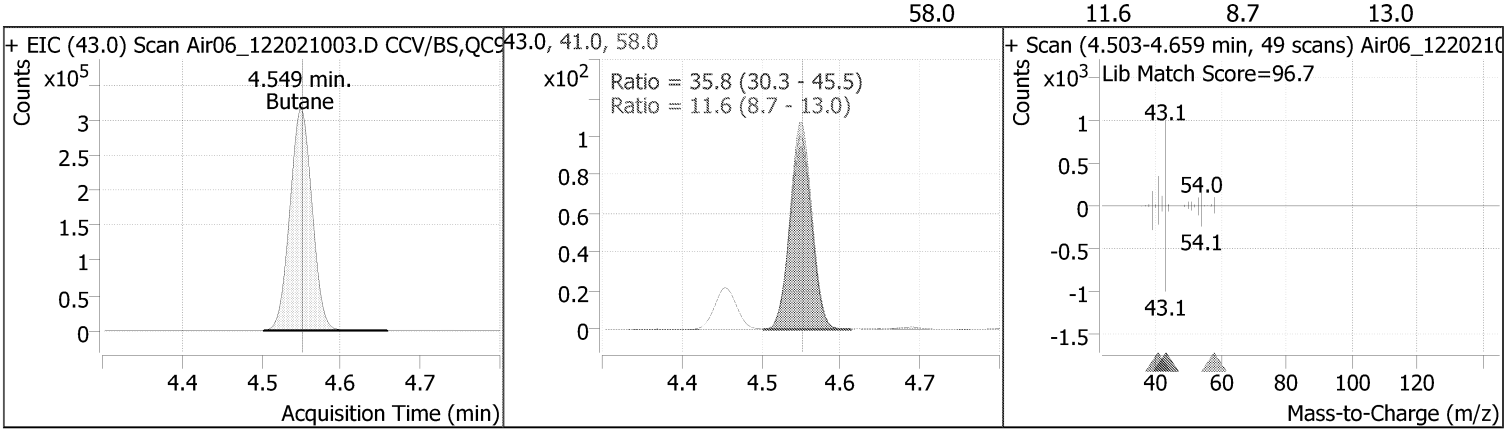
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	9.4890	4.36	0.00	388630	64.0	30.8	24.3	36.4
					61.0	8.7	7.5	11.2



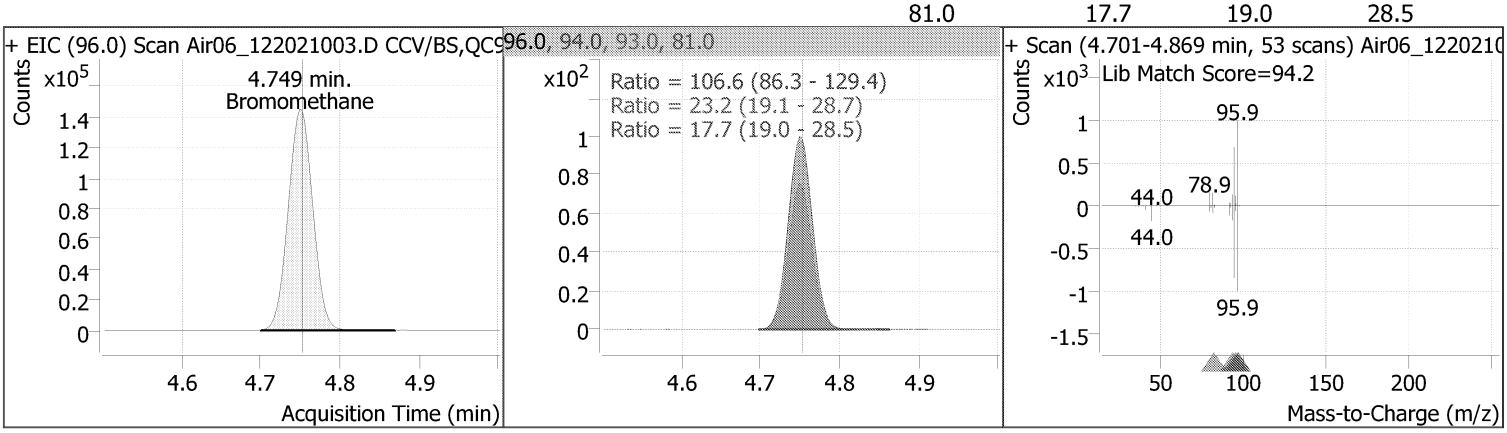
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	9.1744	4.49	0.00	323114	39.0	110.5	88.8	133.2
					53.0	73.0	58.8	88.2
					50.0	36.8	31.0	46.5
					51.0	32.6	27.3	41.0



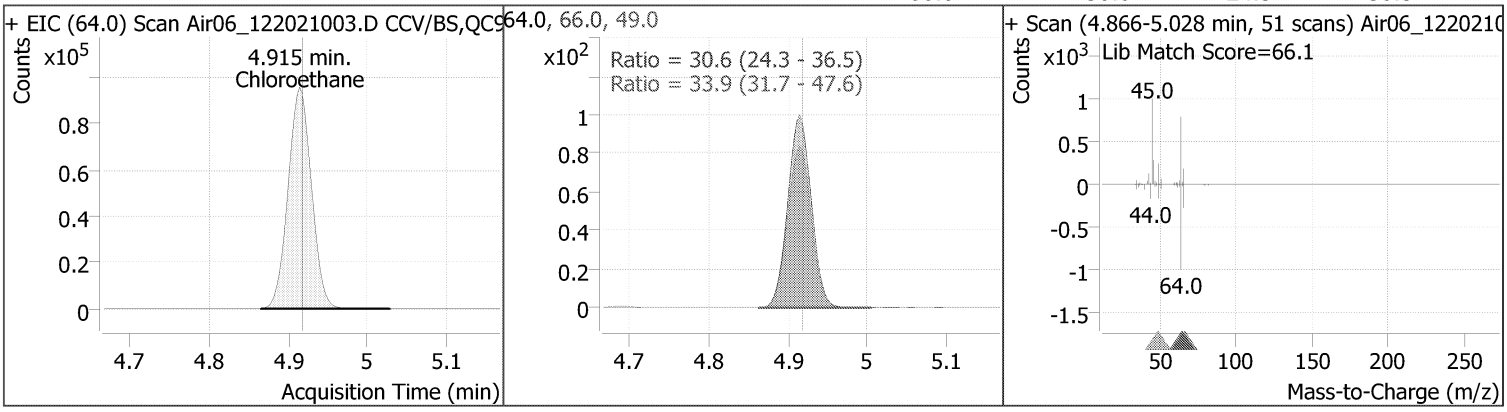
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	8.7886	4.55	0.00	618081	41.0	35.8	30.3	45.5
					58.0	11.6	8.7	13.0



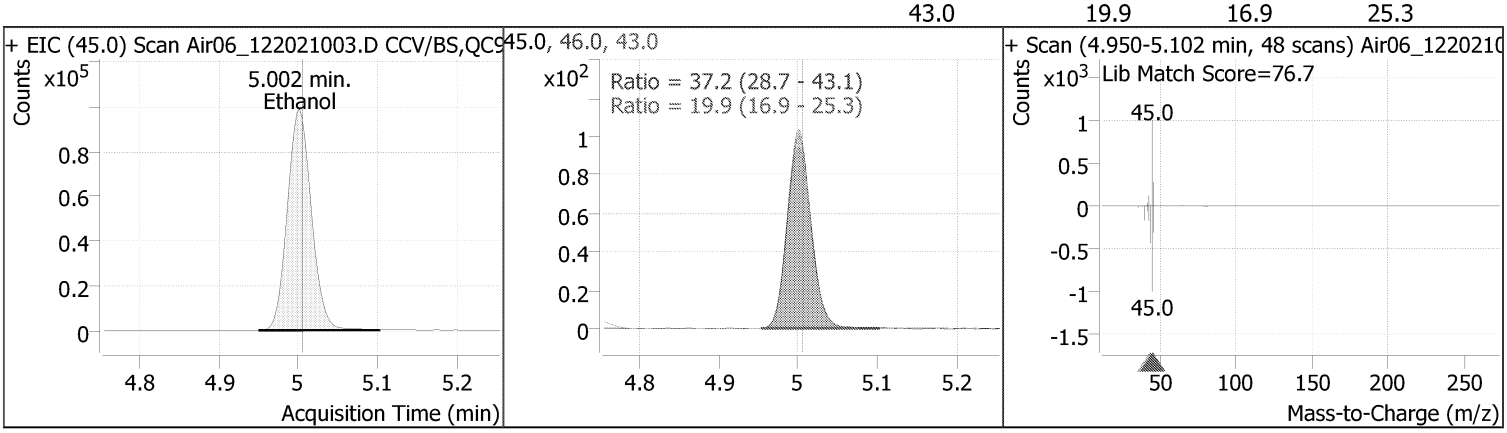
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromomethane	9.4896	4.75	0.00	314467	94.0	106.6	86.3	129.4
					93.0	23.2	19.1	28.7
					81.0	17.7	19.0	28.5



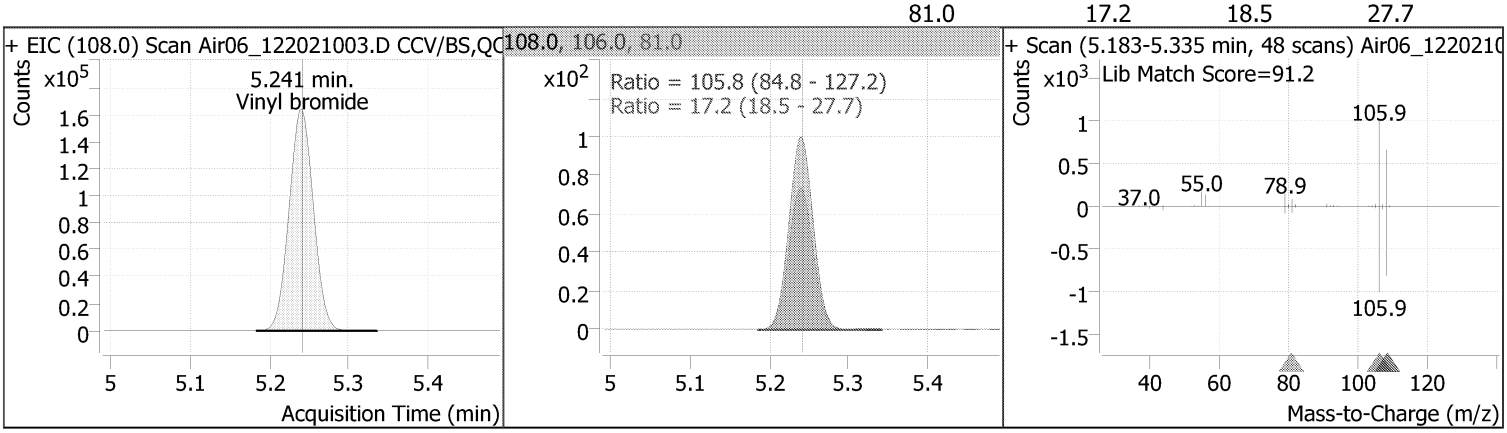
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	9.5981	4.91	0.00	196238	49.0	33.9	31.7	47.6
					66.0	30.6	24.3	36.5



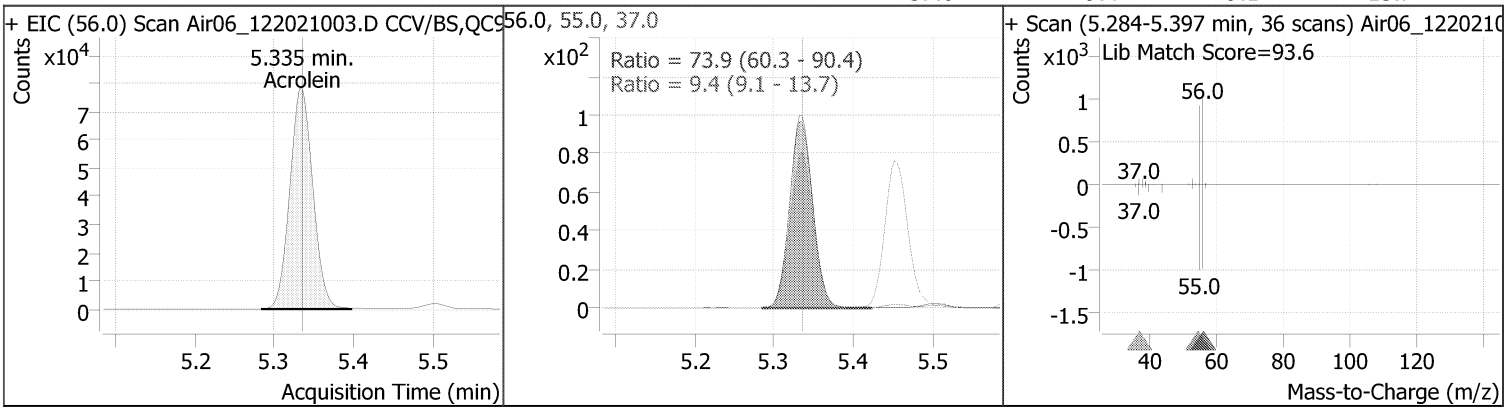
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	7.6181	5.00	0.00	208581	46.0	37.2	28.7	43.1
					43.0	19.9	16.9	25.3



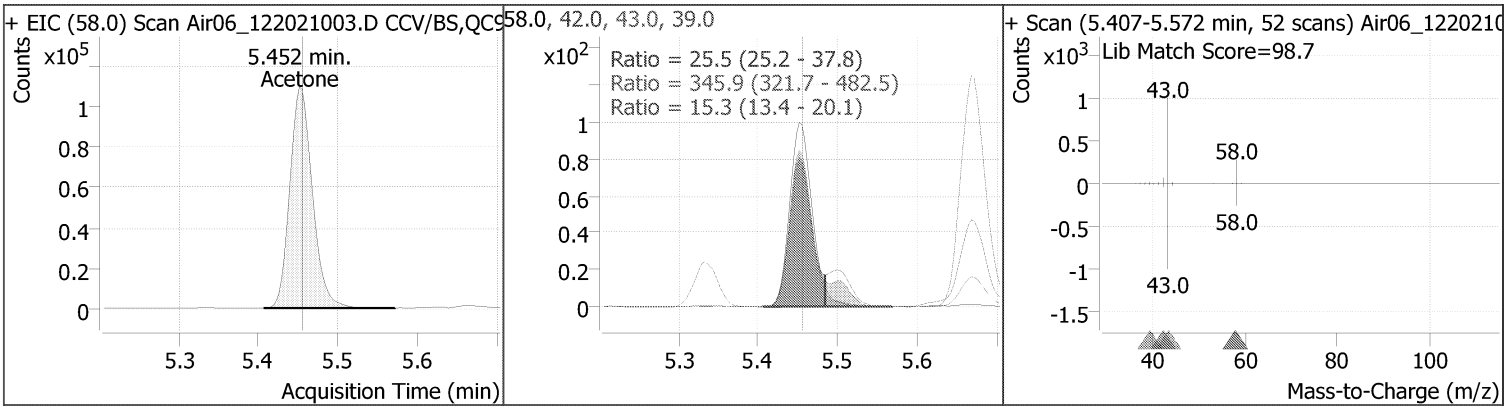
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl bromide	10.1538	5.24	0.00	350737	106.0	105.8	84.8	127.2
					81.0	17.2	18.5	27.7



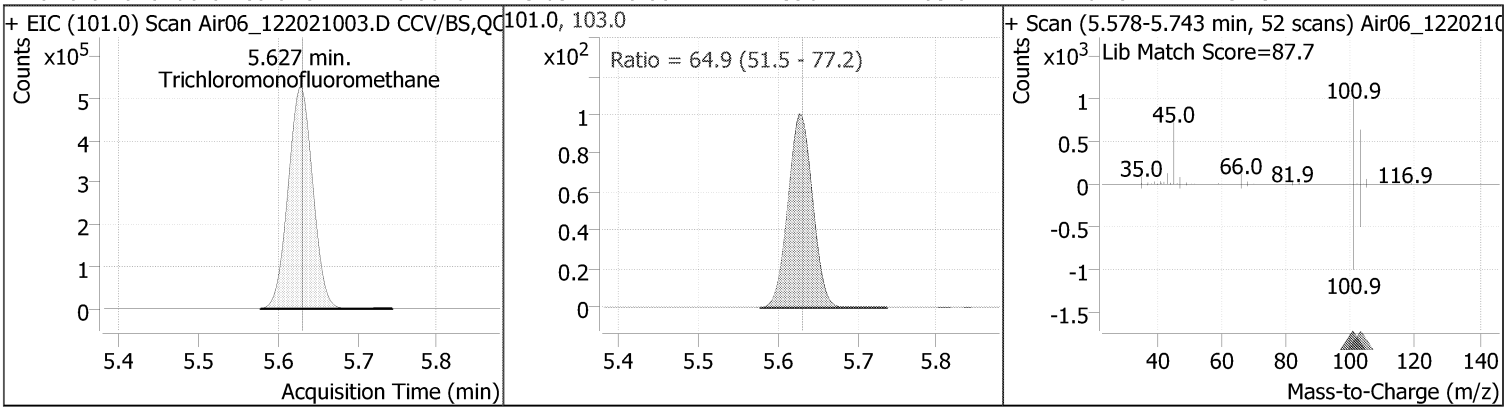
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	8.9622	5.34	0.00	158376	55.0	73.9	60.3	90.4
					37.0	9.4	9.1	13.7



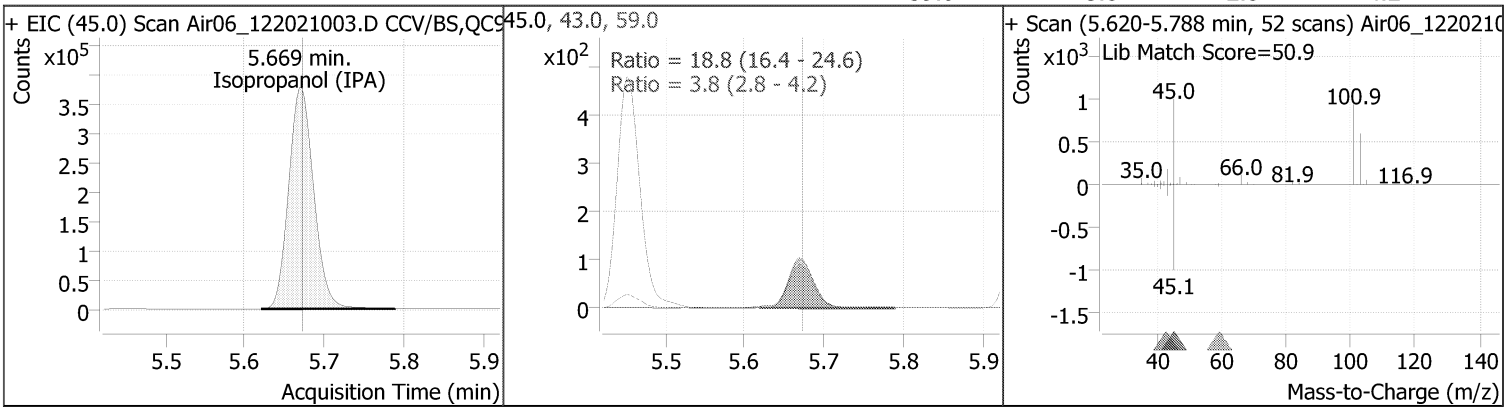
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	9.2243	5.45	0.00	217976	43.0	345.9	321.7	482.5
					42.0	25.5	25.2	37.8
					39.0	15.3	13.4	20.1



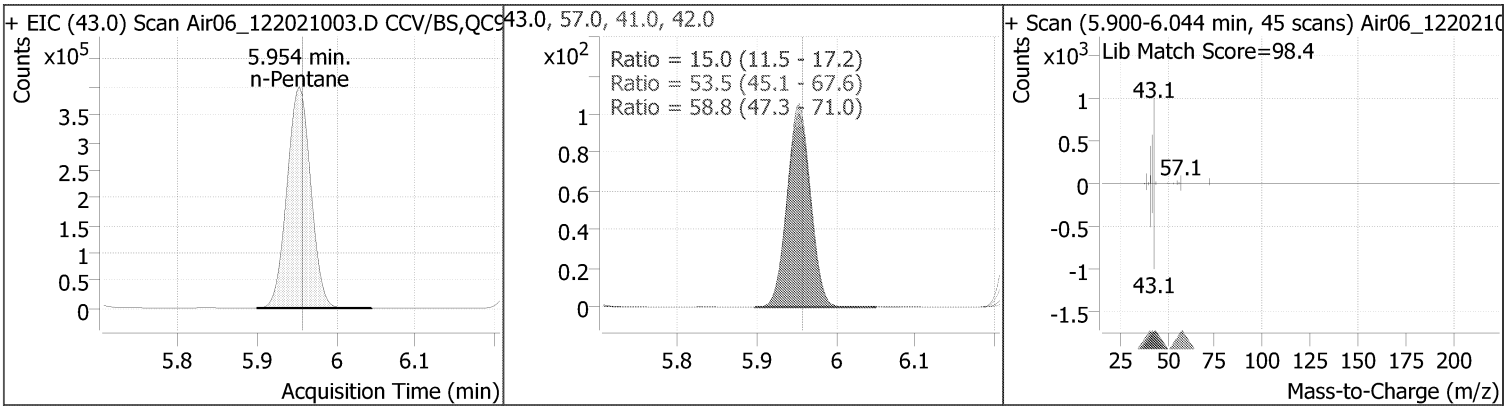
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	8.0676	5.63	0.00	1139611	103.0	64.9	51.5	77.2



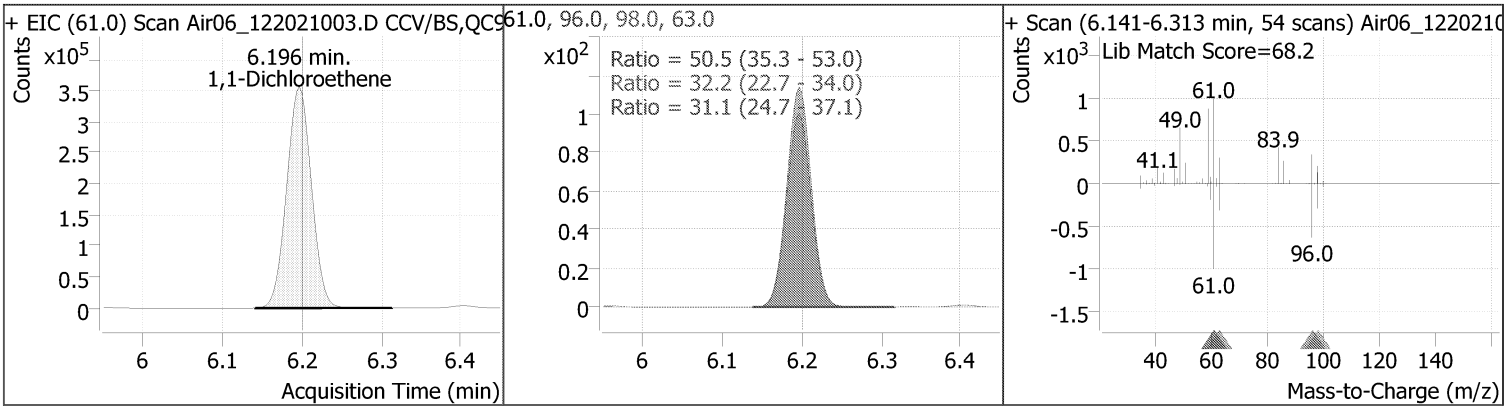
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	8.9781	5.67	0.00	829371	43.0	18.8	16.4	24.6
					59.0	3.8	2.8	4.2



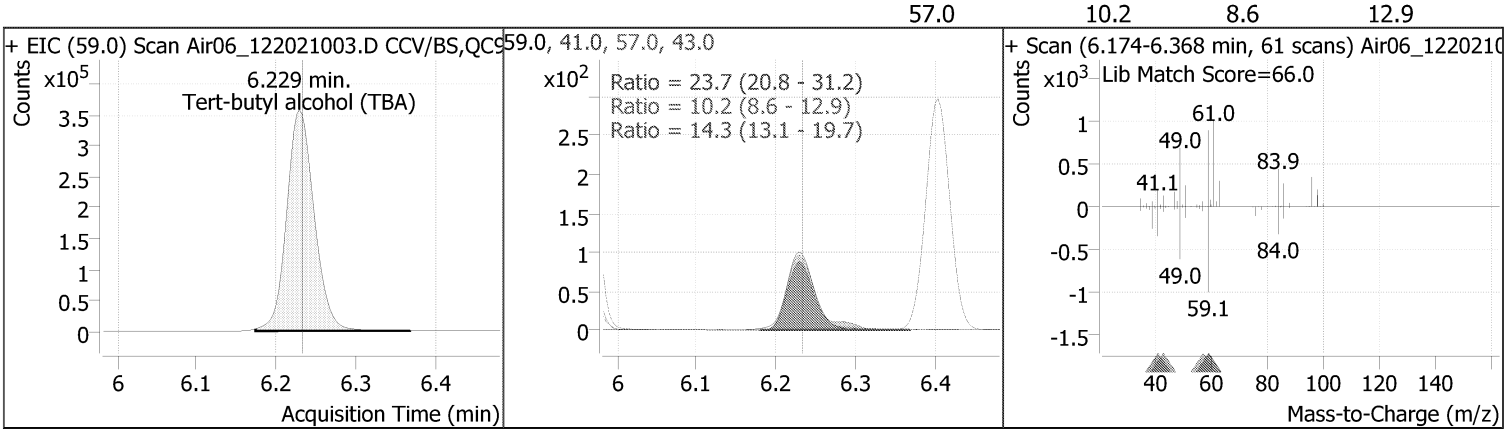
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	9.1757	5.95	0.00	831372	42.0	58.8	47.3	71.0
					41.0	53.5	45.1	67.6
					57.0	15.0	11.5	17.2



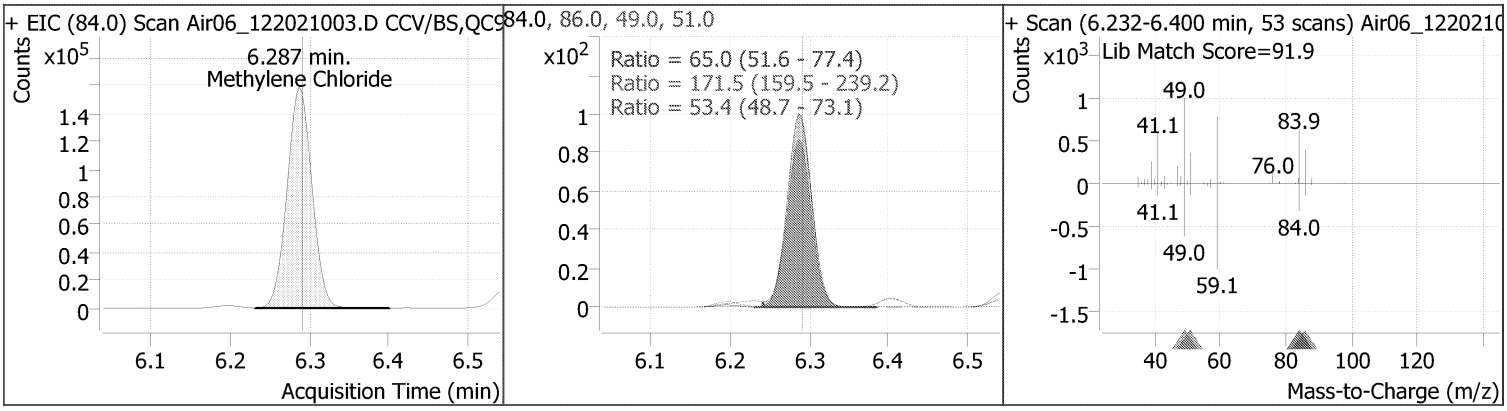
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	8.8932	6.20	0.00	771955	96.0	50.5	35.3	53.0
					63.0	31.1	24.7	37.1
					98.0	32.2	22.7	34.0



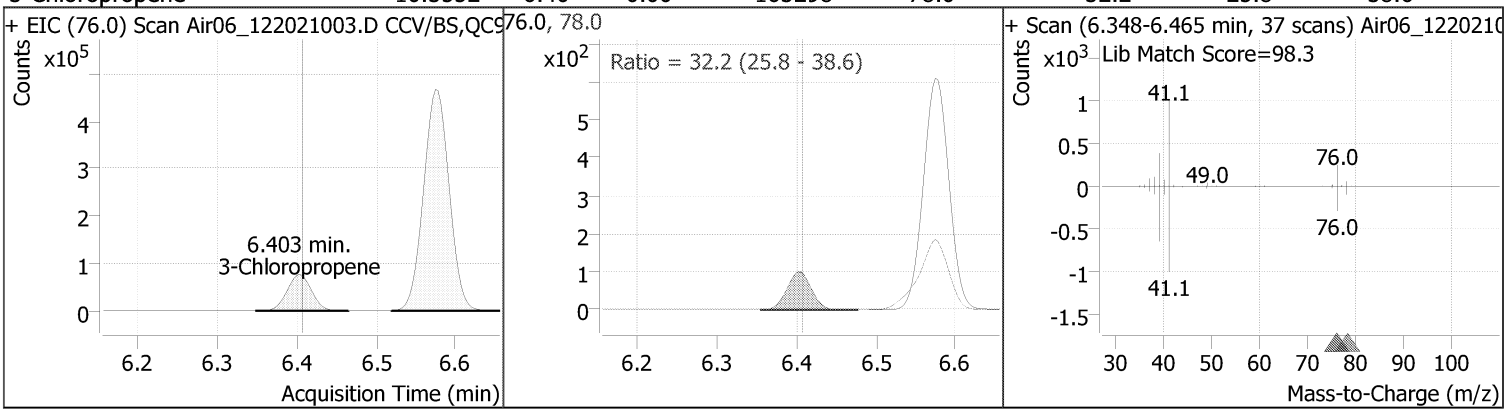
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	8.8310	6.23	0.00	861022	41.0	23.7	20.8	31.2
					43.0	14.3	13.1	19.7
					57.0	10.2	8.6	12.9



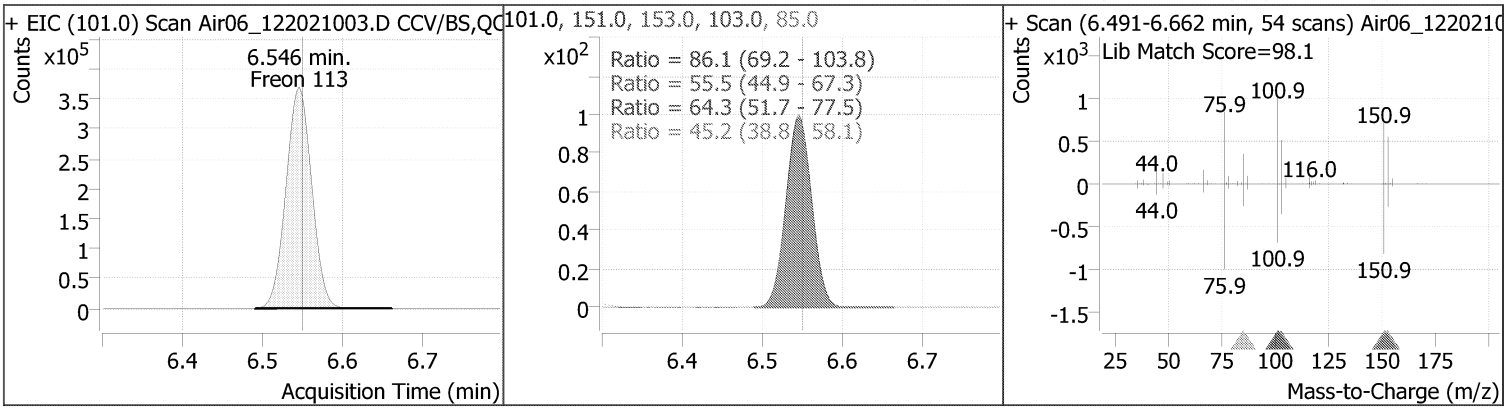
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	9.1888	6.29	0.00	344268	49.0	171.5	159.5	239.2
					86.0	65.0	51.6	77.4
					51.0	53.4	48.7	73.1



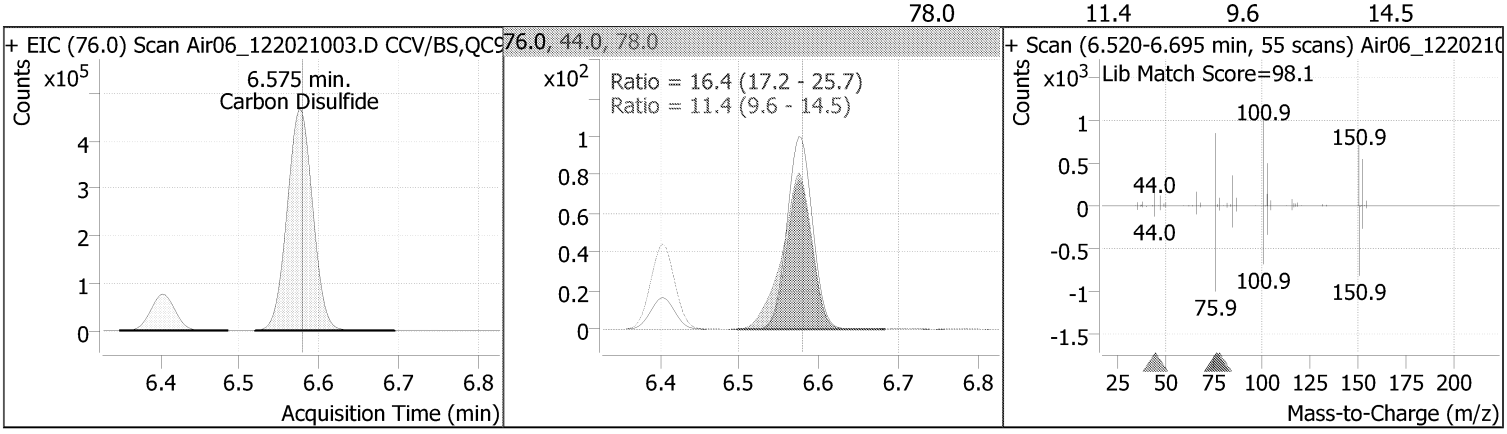
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	10.3552	6.40	0.00	163298	78.0	32.2	25.8	38.6



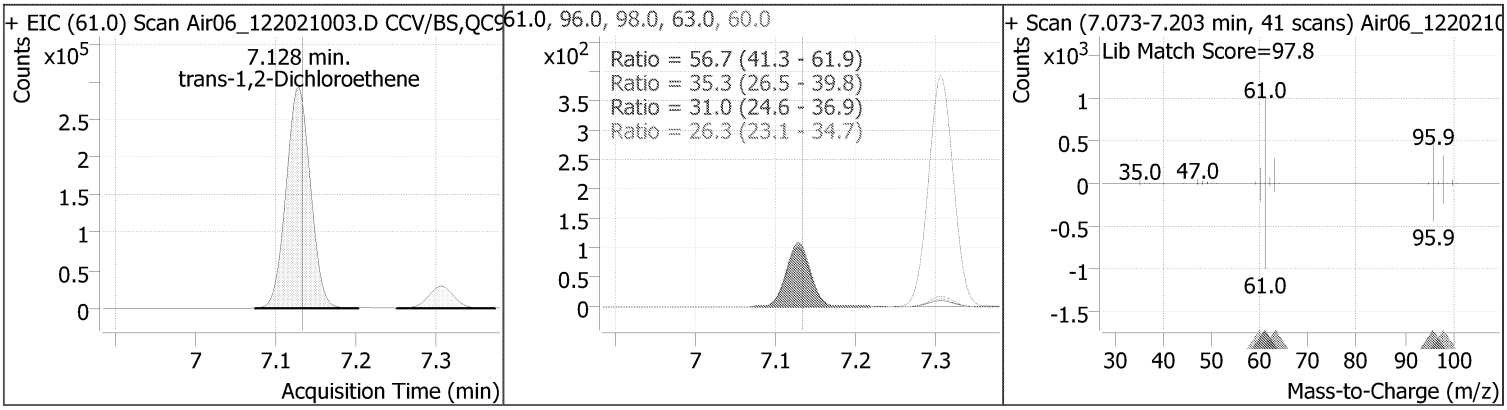
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	9.2987	6.55	0.00	831174	151.0	86.1	69.2	103.8
					103.0	64.3	51.7	77.5
					153.0	55.5	44.9	67.3
					85.0	45.2	38.8	58.1



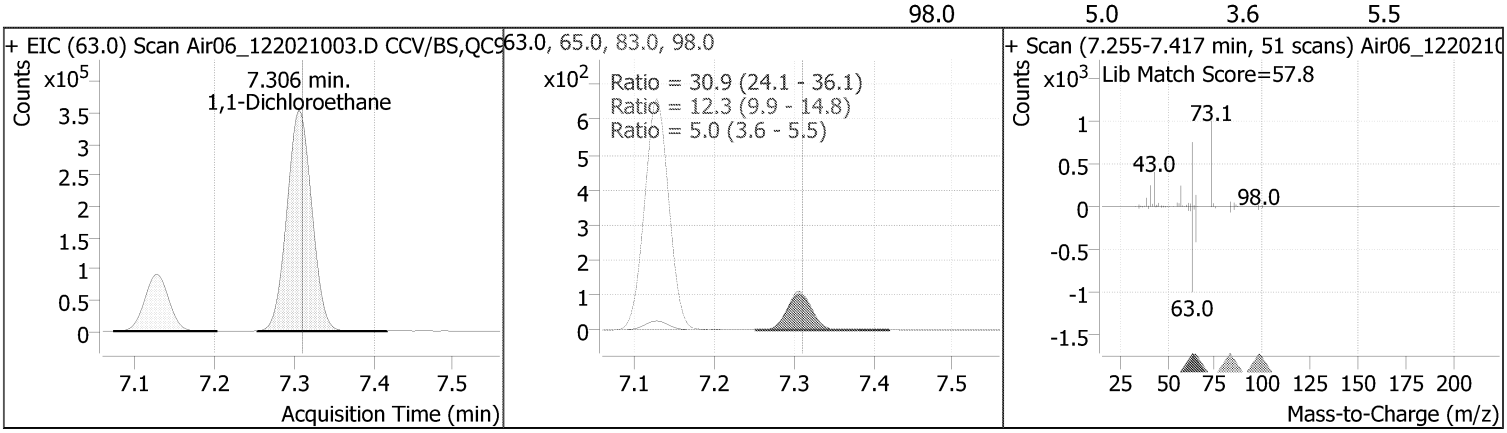
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	10.0181	6.57	0.00	1044506	44.0	16.4	17.2	25.7
					78.0	11.4	9.6	14.5



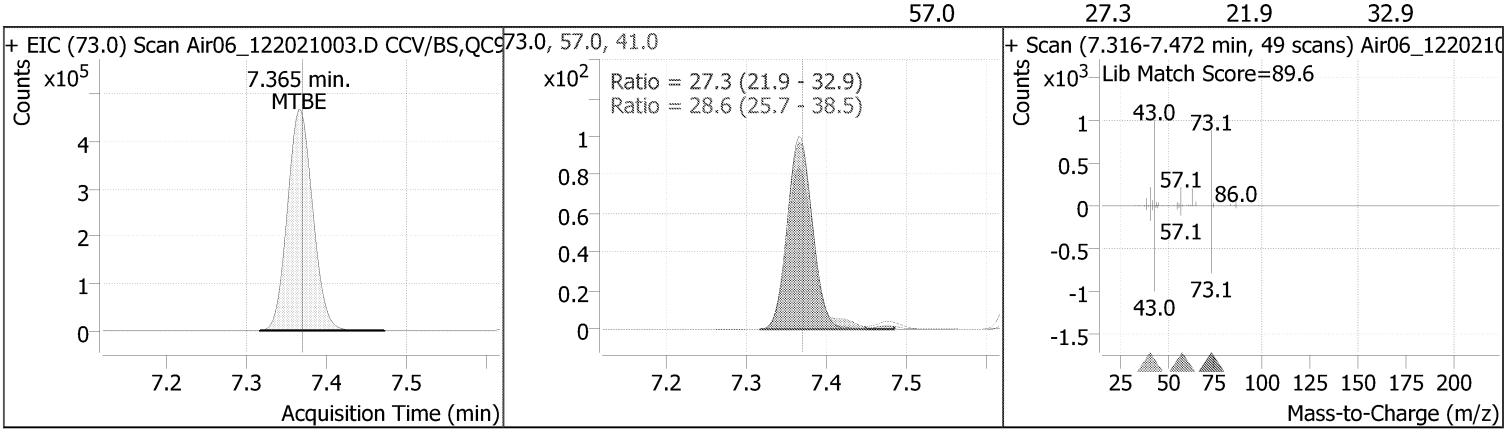
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	9.1935	7.13	0.00	622185	96.0	56.7	41.3	61.9
					98.0	35.3	26.5	39.8
					63.0	31.0	24.6	36.9
					60.0	26.3	23.1	34.7



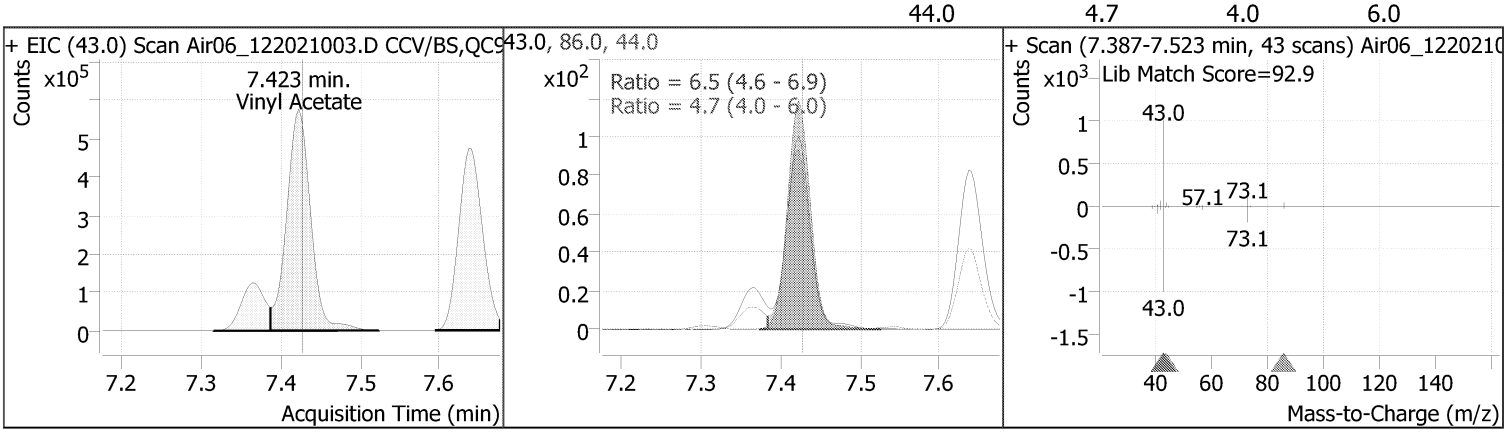
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	9.1380	7.31	0.00	774656	65.0	30.9	24.1	36.1
					83.0	12.3	9.9	14.8
					98.0	5.0	3.6	5.5



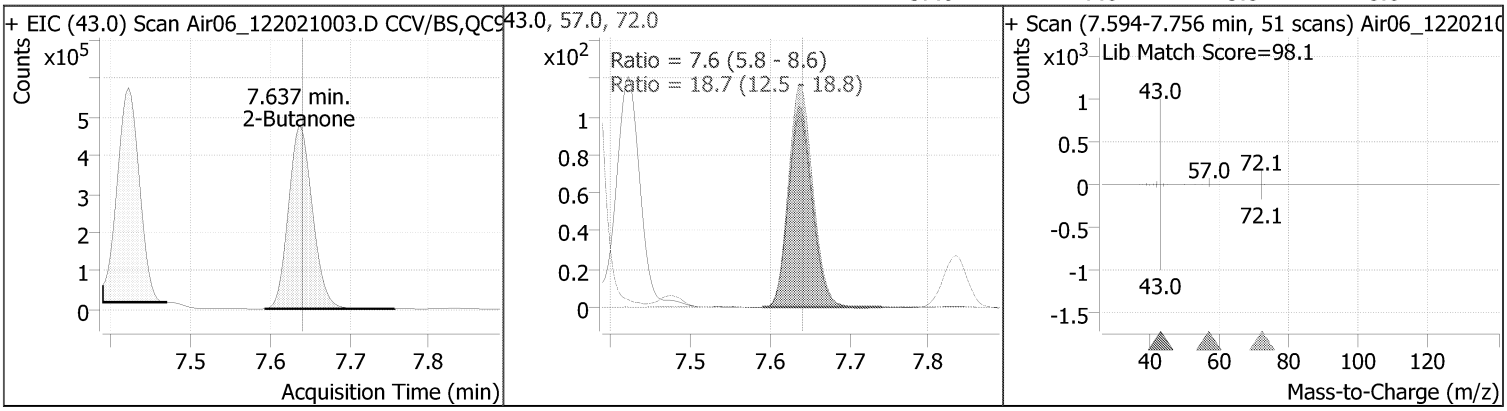
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	9.0309	7.36	0.00	1032427	41.0	28.6	25.7	38.5
					57.0	27.3	21.9	32.9



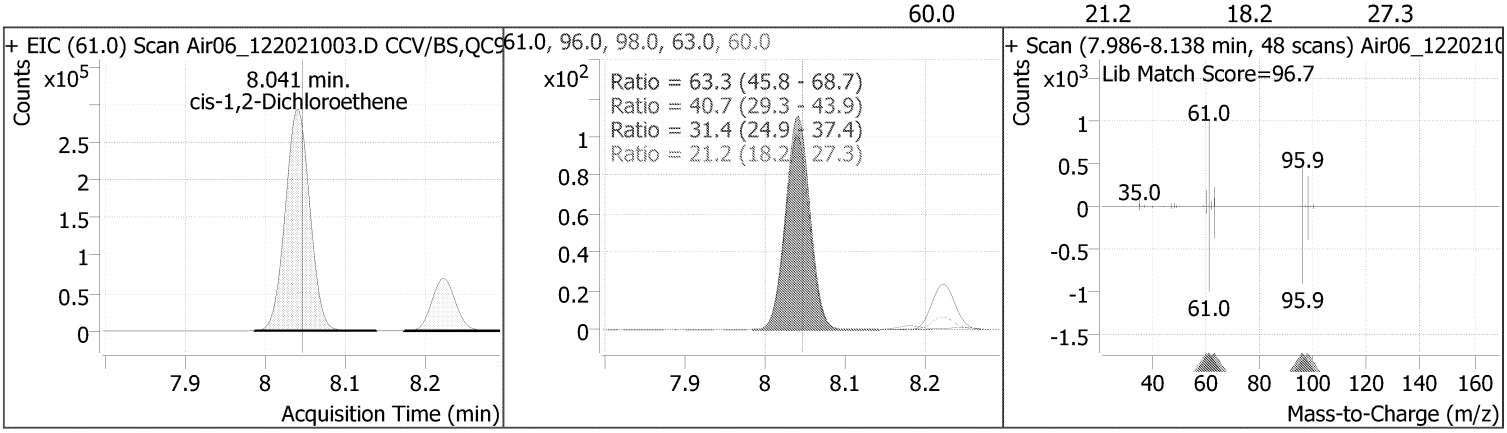
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	8.4385	7.42	0.00	1206052	86.0	6.5	4.6	6.9
					44.0	4.7	4.0	6.0



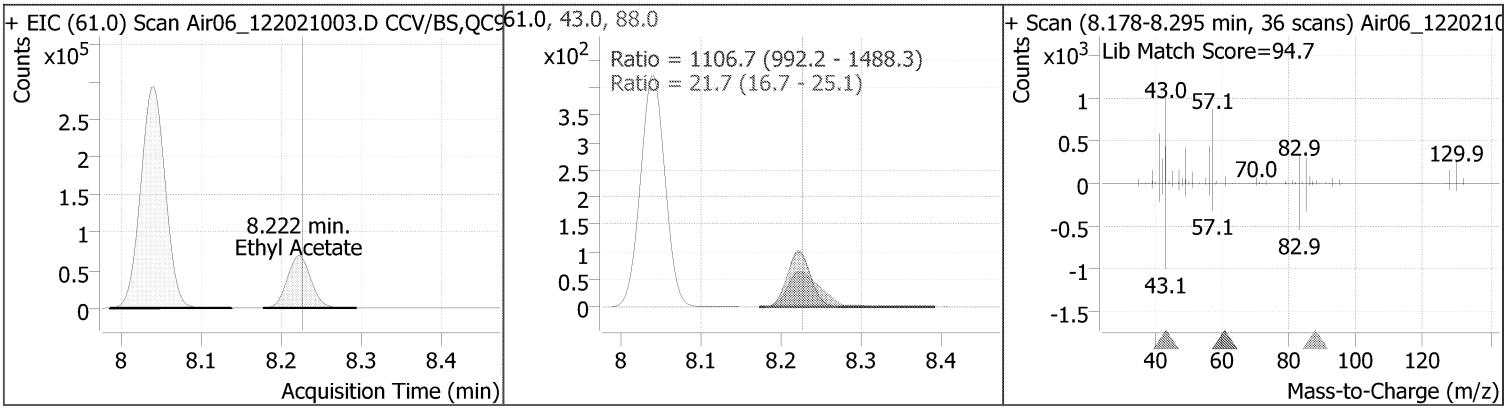
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	8.8488	7.64	0.00	998587	72.0	18.7	12.5	18.8
					57.0	7.6	5.8	8.6



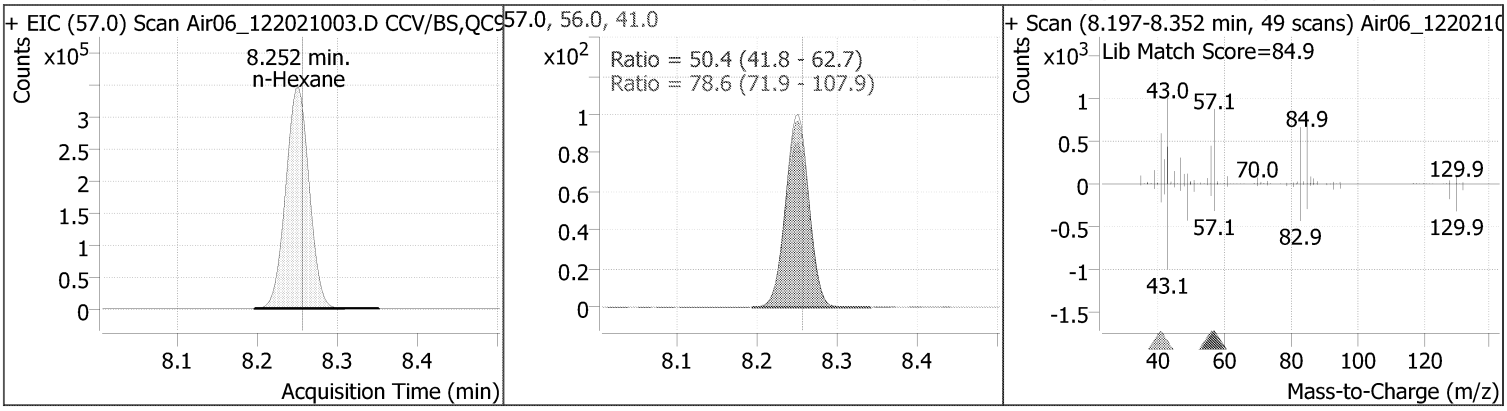
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	9.0685	8.04	0.00	629583	96.0	63.3	45.8	68.7
					98.0	40.7	29.3	43.9
					63.0	31.4	24.9	37.4
					60.0	21.2	18.2	27.3



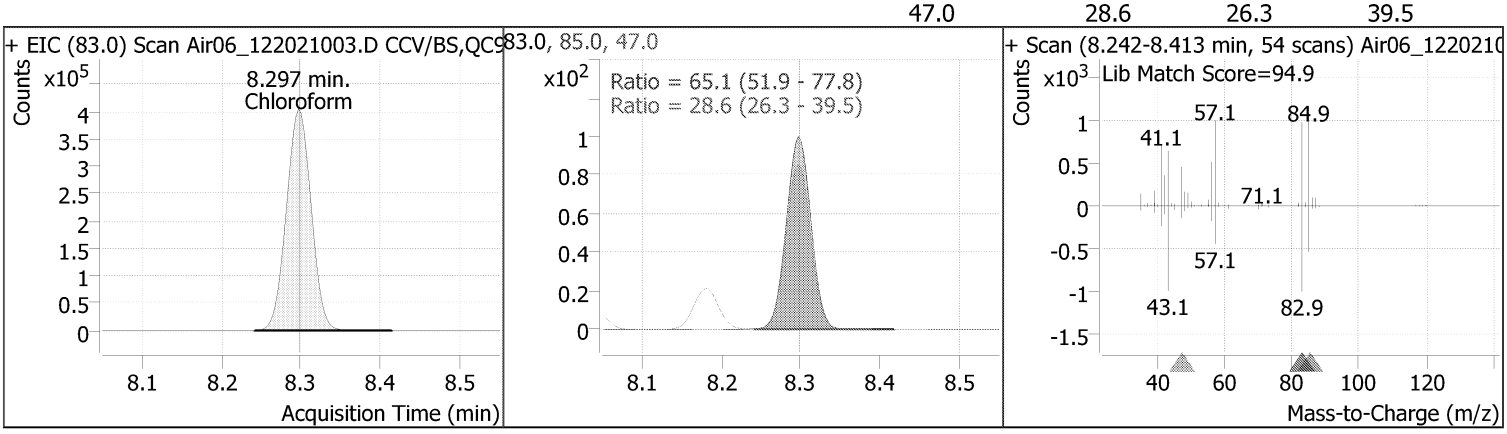
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	9.0770	8.22	0.00	142465	43.0	1106.7	992.2	1488.3
					88.0	21.7	16.7	25.1



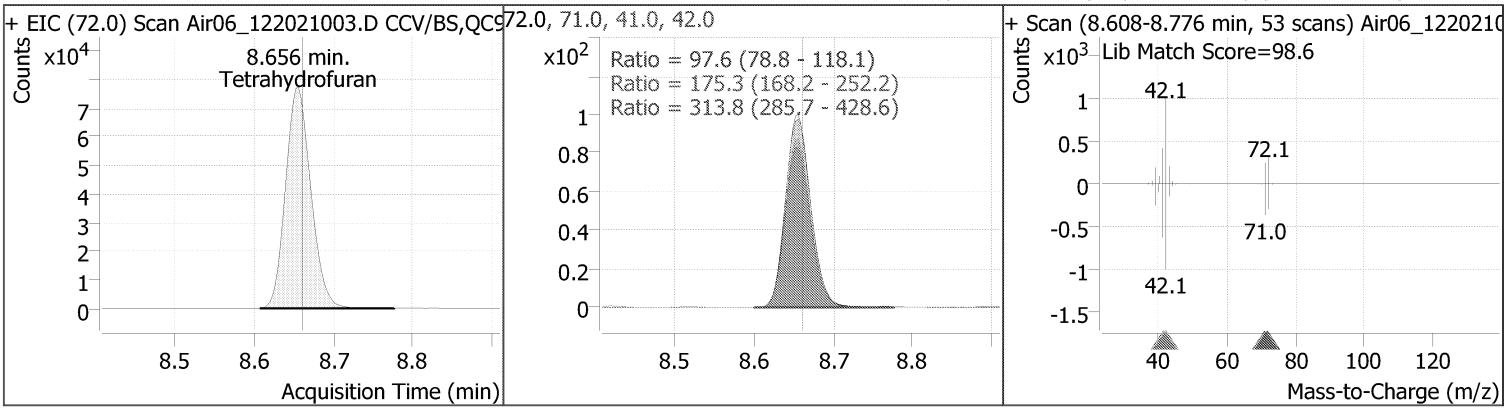
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	9.7420	8.25	0.00	711910	41.0	78.6	71.9	107.9
					56.0	50.4	41.8	62.7



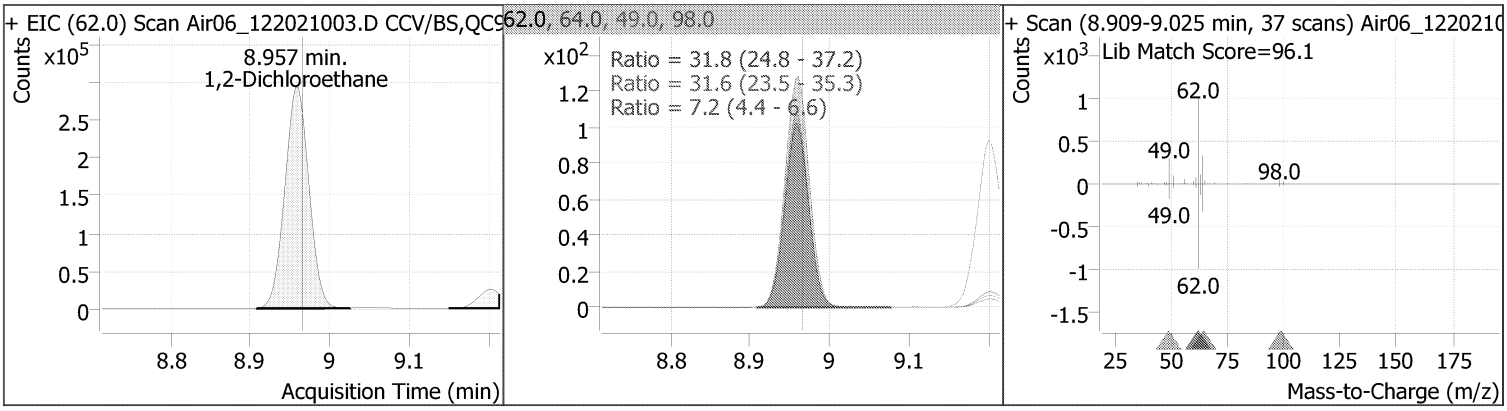
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	8.7491	8.30	0.00	871336	85.0	65.1	51.9	77.8
					47.0	28.6	26.3	39.5



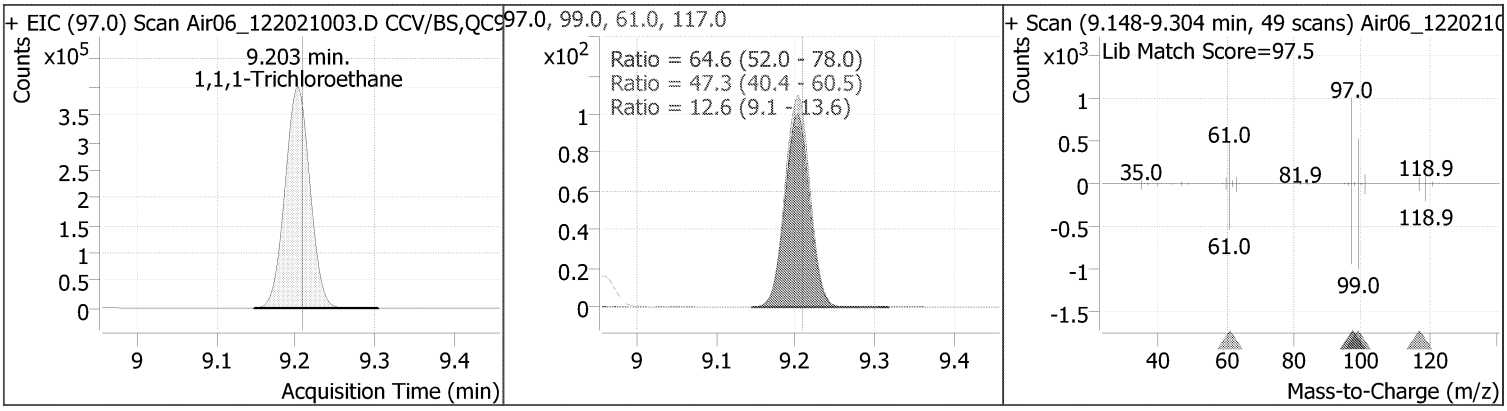
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	10.5069	8.66	0.00	171425	42.0	313.8	285.7	428.6
					41.0	175.3	168.2	252.2
					71.0	97.6	78.8	118.1



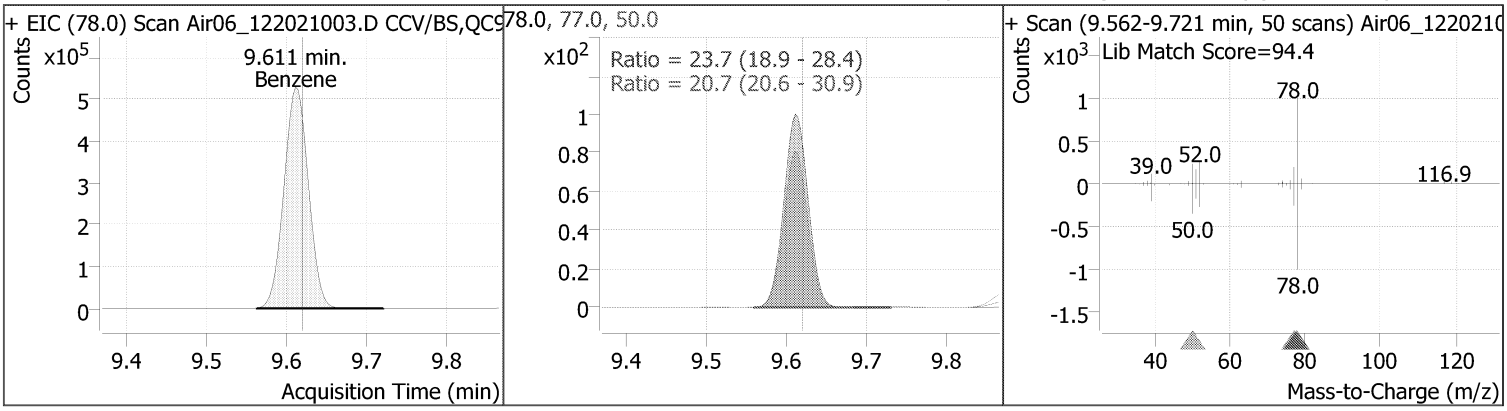
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	7.7453	8.96	0.00	619943	64.0	31.8	24.8	37.2
					49.0	31.6	23.5	35.3
					98.0	7.2	4.4	6.6



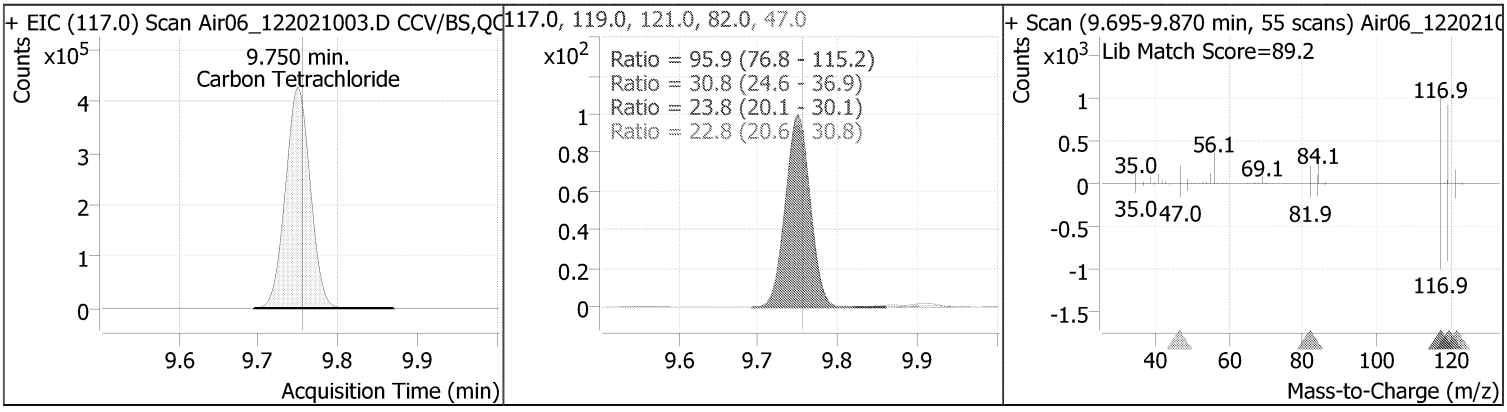
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	8.3456	9.20	0.00	872883	99.0	64.6	52.0	78.0
					61.0	47.3	40.4	60.5
					117.0	12.6	9.1	13.6



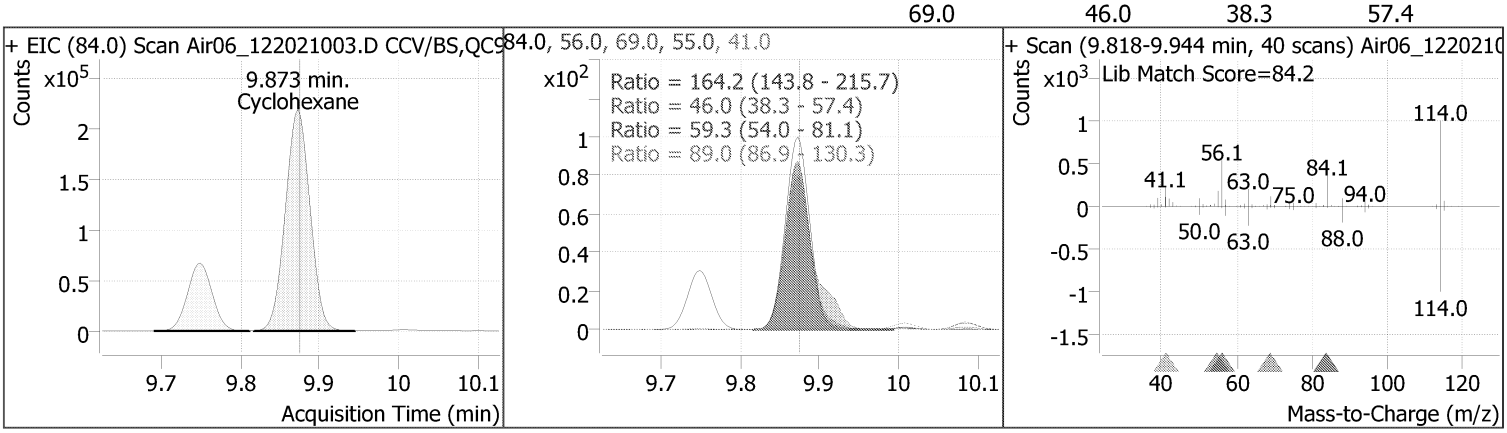
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	10.2198	9.61	0.00	1131728	50.0	20.7	20.6	30.9
					77.0	23.7	18.9	28.4



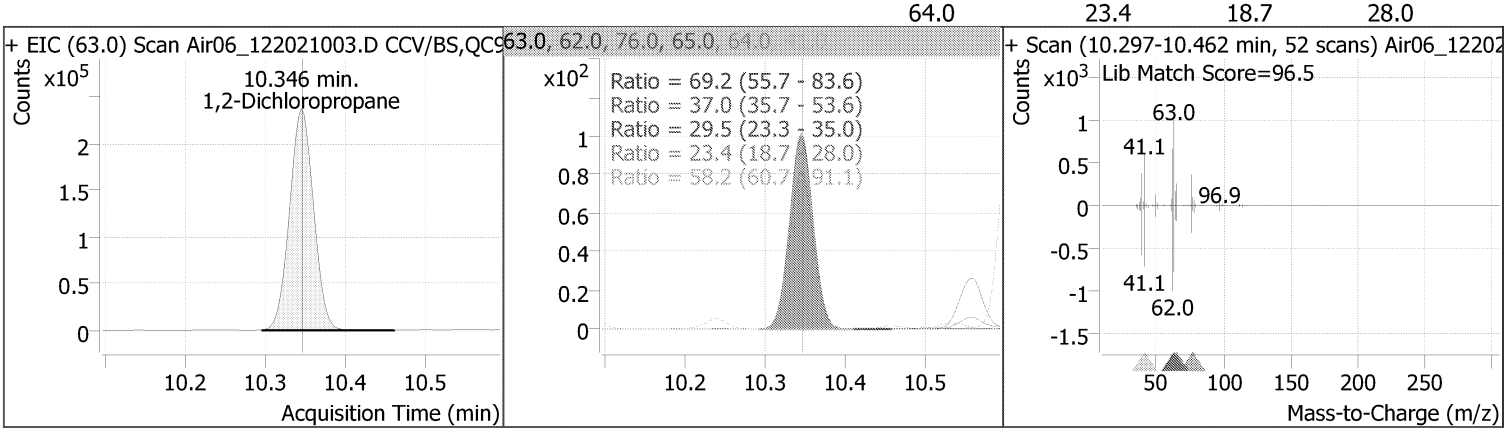
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	8.2390	9.75	0.00	928789	119.0	95.9	76.8	115.2
					121.0	30.8	24.6	36.9
					47.0	22.8	20.6	30.8
					82.0	23.8	20.1	30.1



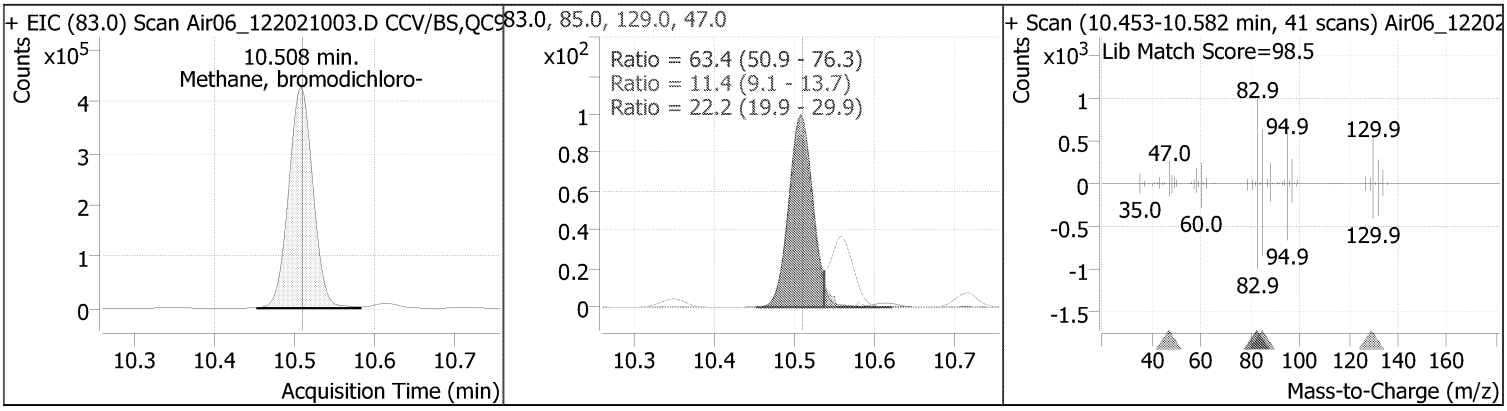
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	10.2555	9.87	0.00	469940	56.0	164.2	143.8	215.7
					41.0	89.0	86.9	130.3
					55.0	59.3	54.0	81.1
					69.0	46.0	38.3	57.4



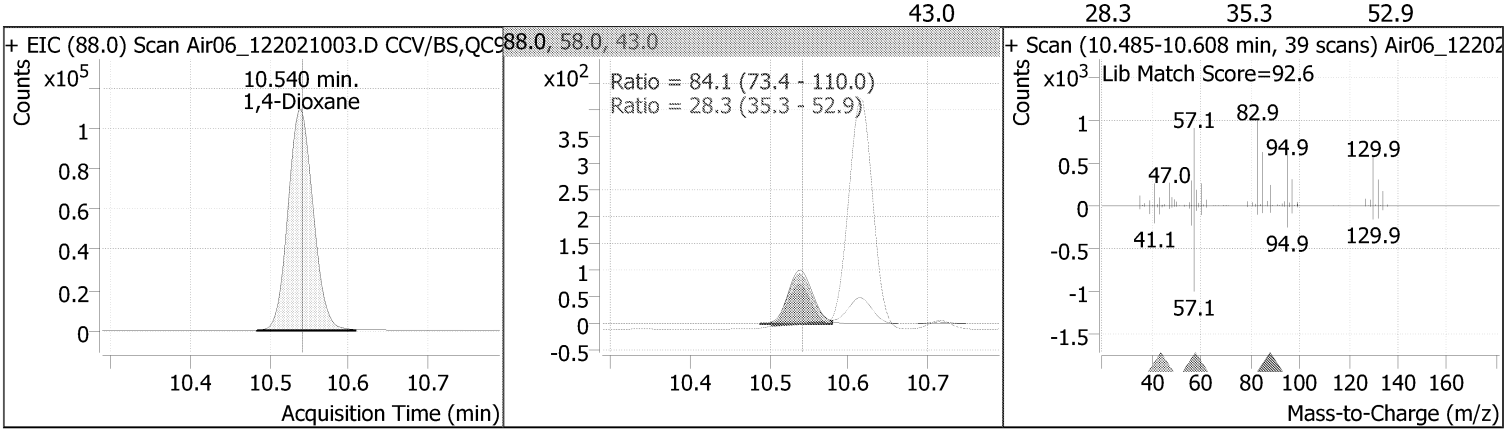
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	9.8328	10.35	0.00	495434	41.0	58.2	60.7	91.1
					62.0	69.2	55.7	83.6
					76.0	37.0	35.7	53.6
					65.0	29.5	23.3	35.0
					64.0	23.4	18.7	28.0



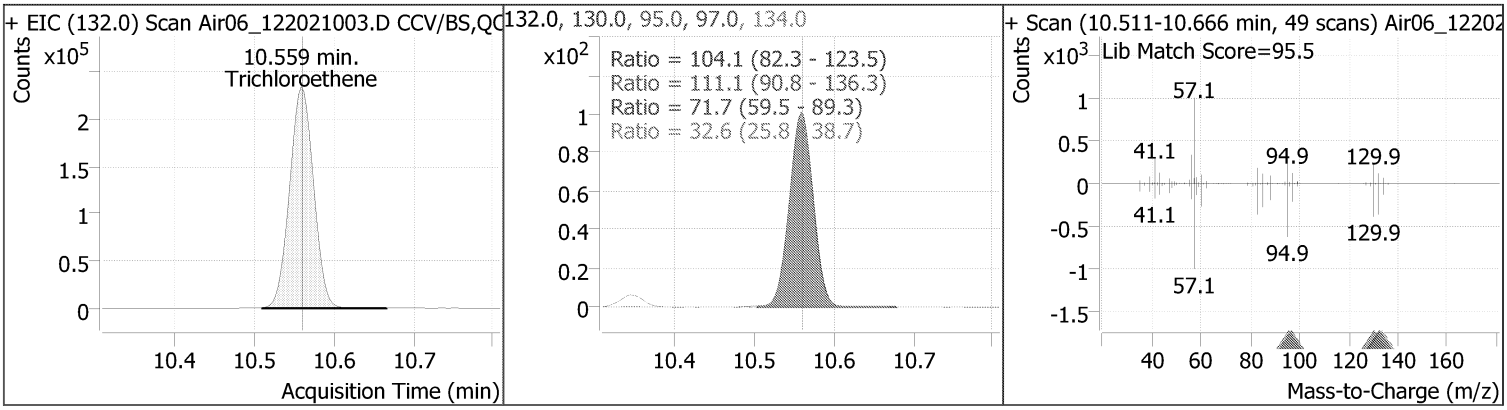
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	8.8260	10.51	0.00	907248	85.0	63.4	50.9	76.3
					47.0	22.2	19.9	29.9
					129.0	11.4	9.1	13.7



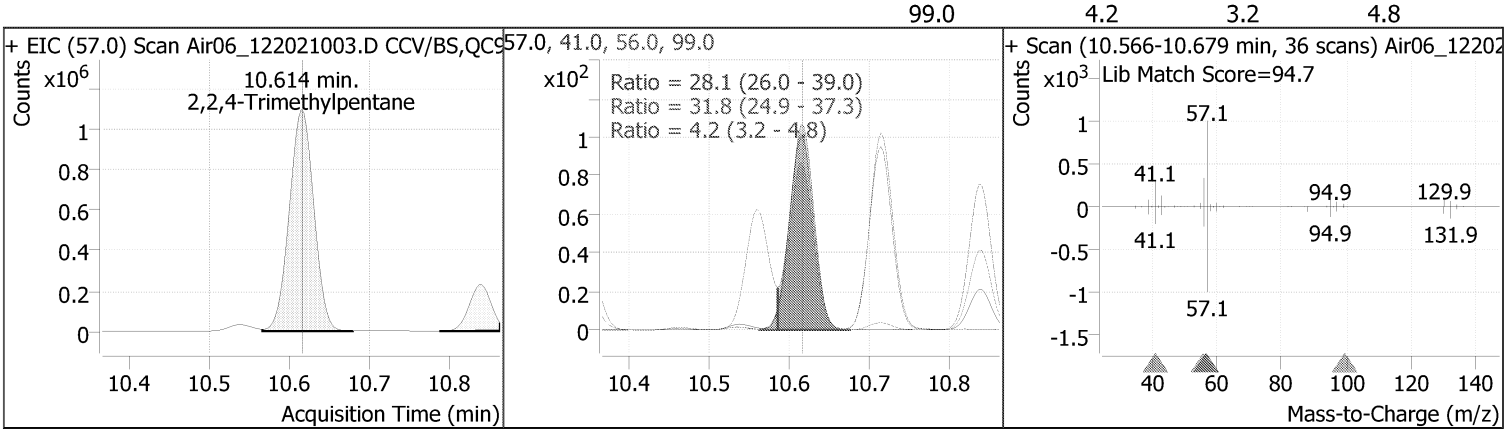
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	9.9649	10.54	0.00	240600	58.0	84.1	73.4	110.0
					43.0	28.3	35.3	52.9



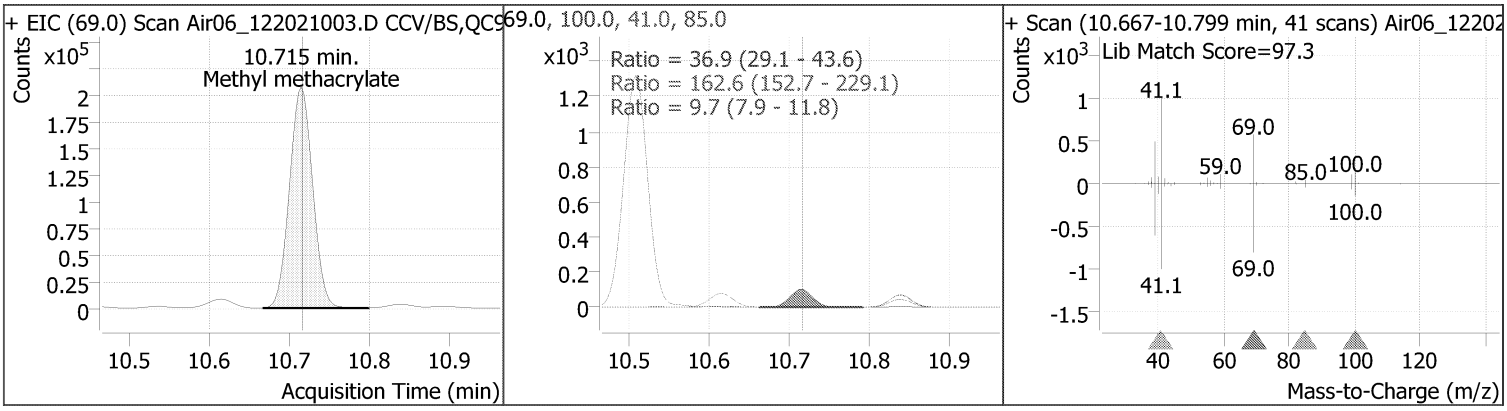
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	9.7265	10.56	0.00	490810	95.0	111.1	90.8	136.3
					130.0	104.1	82.3	123.5
					97.0	71.7	59.5	89.3
					134.0	32.6	25.8	38.7



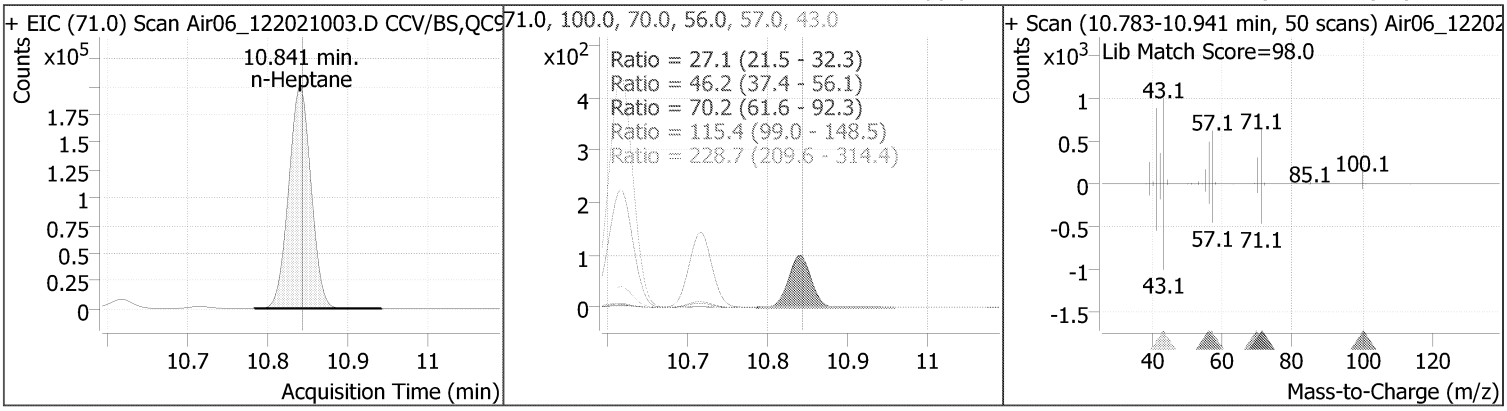
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	9.9180	10.61	0.00	2352322	41.0	28.1	26.0	39.0
					56.0	31.8	24.9	37.3
					99.0	4.2	3.2	4.8



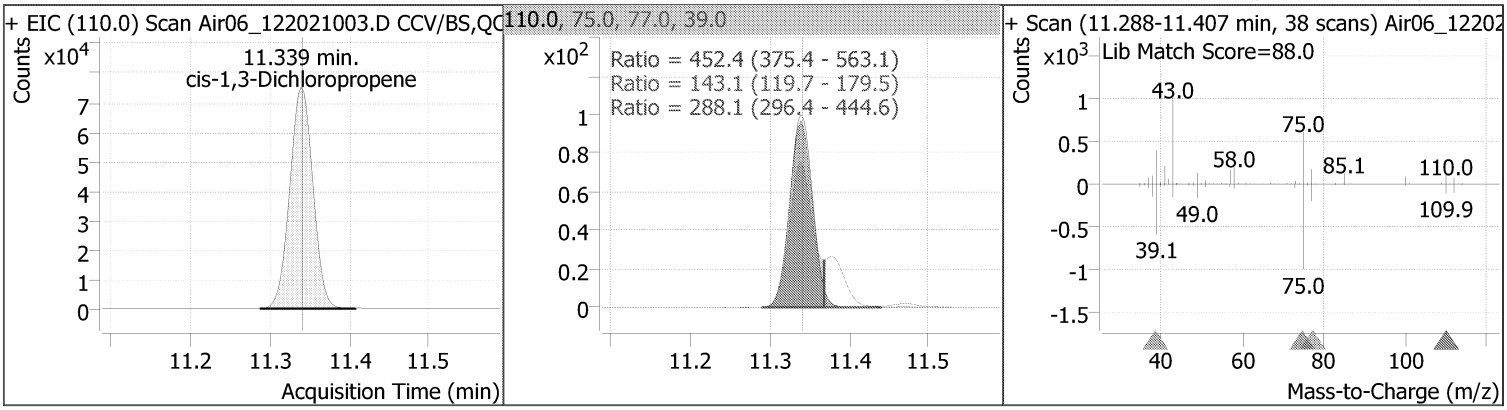
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	10.2976	10.71	0.00	420099	41.0	162.6	152.7	229.1
					100.0	36.9	29.1	43.6
					85.0	9.7	7.9	11.8



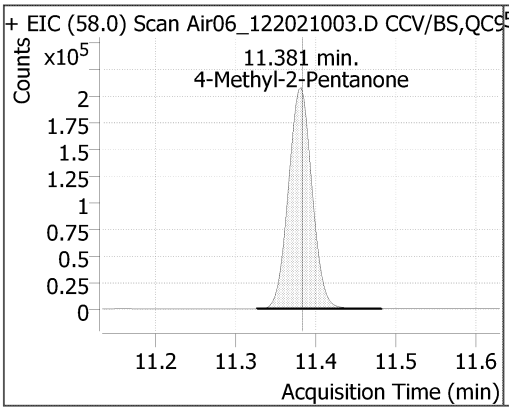
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	10.6140	10.84	0.00	392066	43.0	228.7	209.6	314.4
					57.0	115.4	99.0	148.5
					56.0	70.2	61.6	92.3
					70.0	46.2	37.4	56.1
					100.0	27.1	21.5	32.3

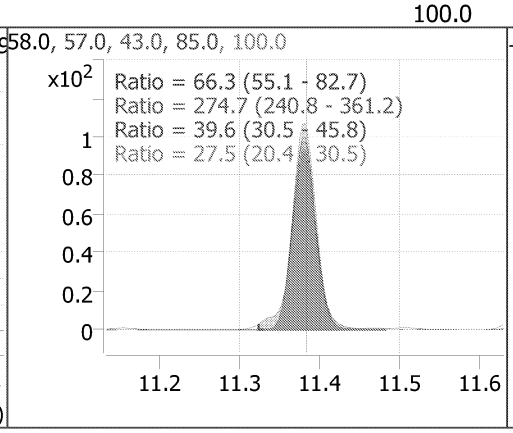


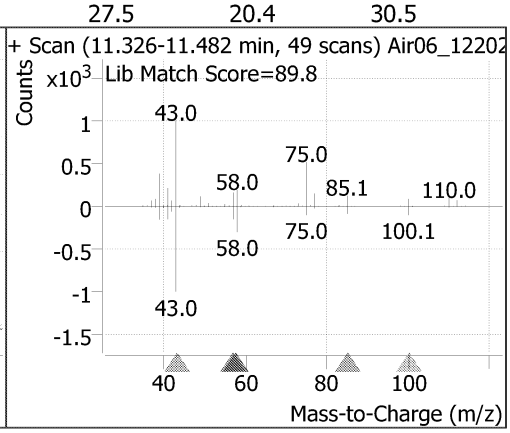
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	10.2652	11.34	0.00	151908	75.0	452.4	375.4	563.1
					39.0	288.1	296.4	444.6
					77.0	143.1	119.7	179.5



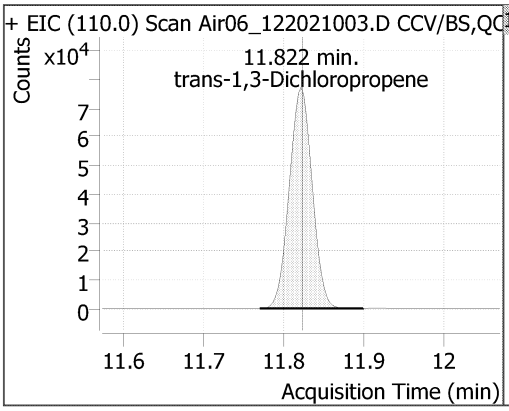
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	9.7212	11.38	0.00	425050	43.0	274.7	240.8	361.2
					57.0	66.3	55.1	82.7
					85.0	39.6	30.5	45.8
					100.0	27.5	20.4	30.5

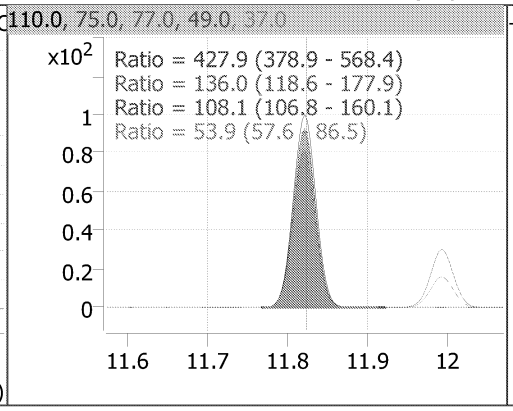


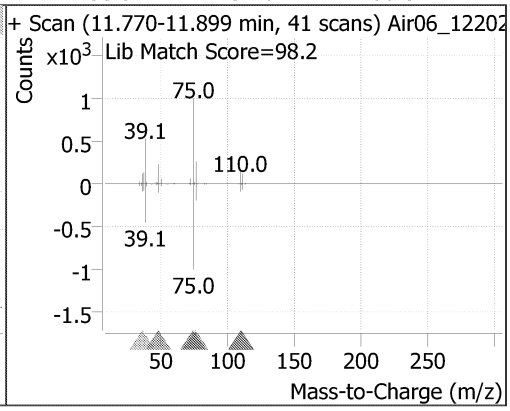




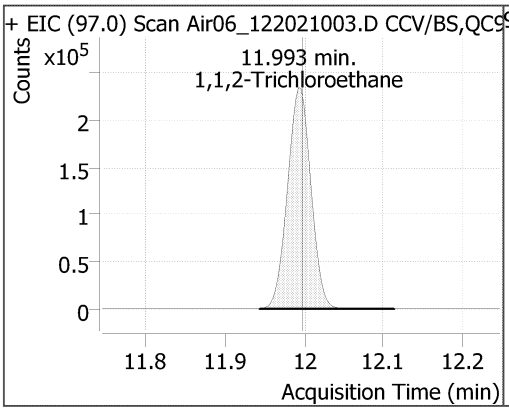
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	10.1609	11.82	0.00	154537	75.0	427.9	378.9	568.4
					77.0	136.0	118.6	177.9
					49.0	108.1	106.8	160.1
					37.0	53.9	57.6	86.5

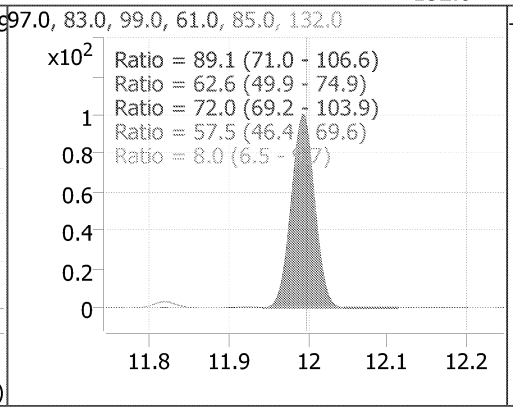


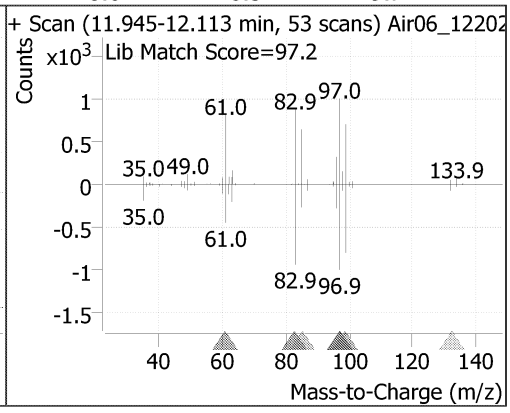




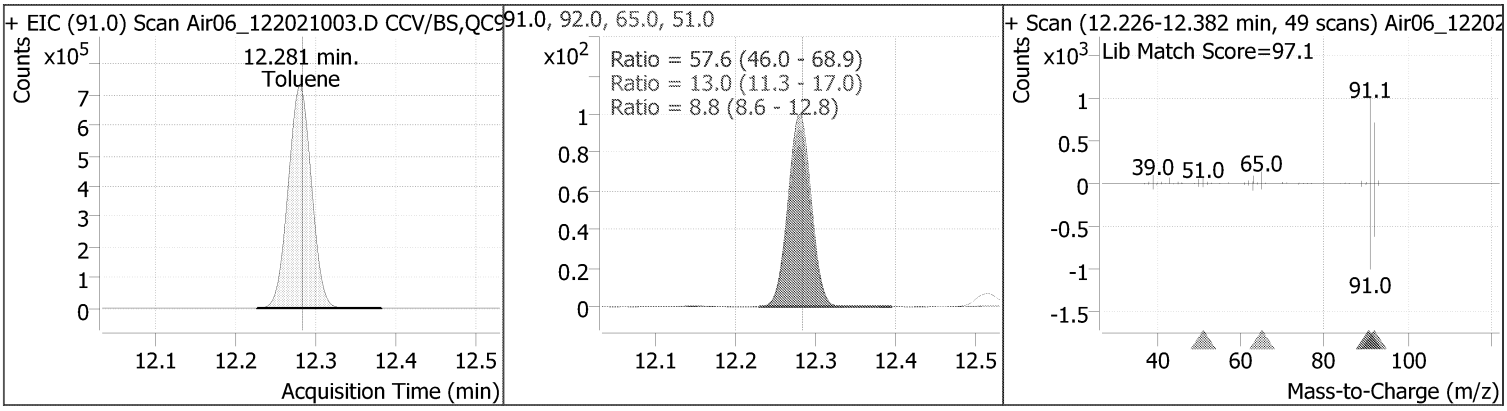
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	9.8043	11.99	0.00	481970	83.0	89.1	71.0	106.6
					61.0	72.0	69.2	103.9
					99.0	62.6	49.9	74.9
					85.0	57.5	46.4	69.6
					132.0	8.0	6.5	9.7



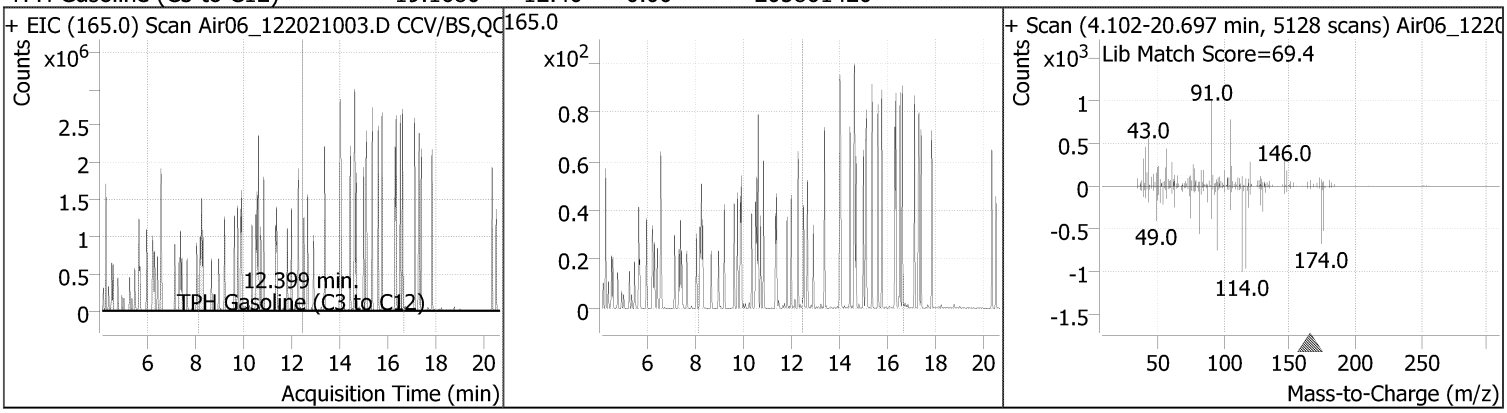




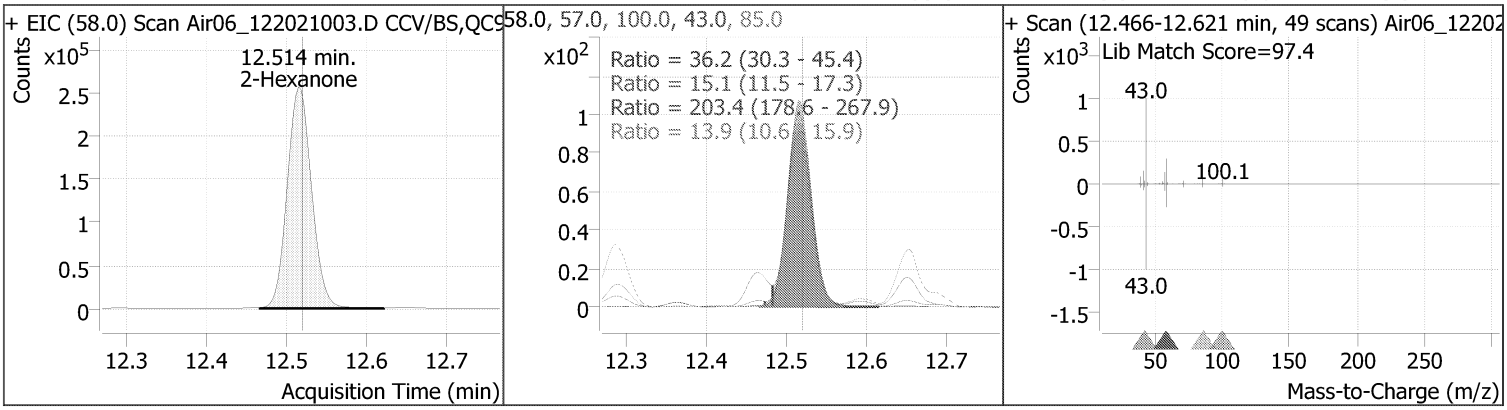
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	10.4691	12.28	0.00	1478387	92.0	57.6	46.0	68.9
					65.0	13.0	11.3	17.0
					51.0	8.8	8.6	12.8



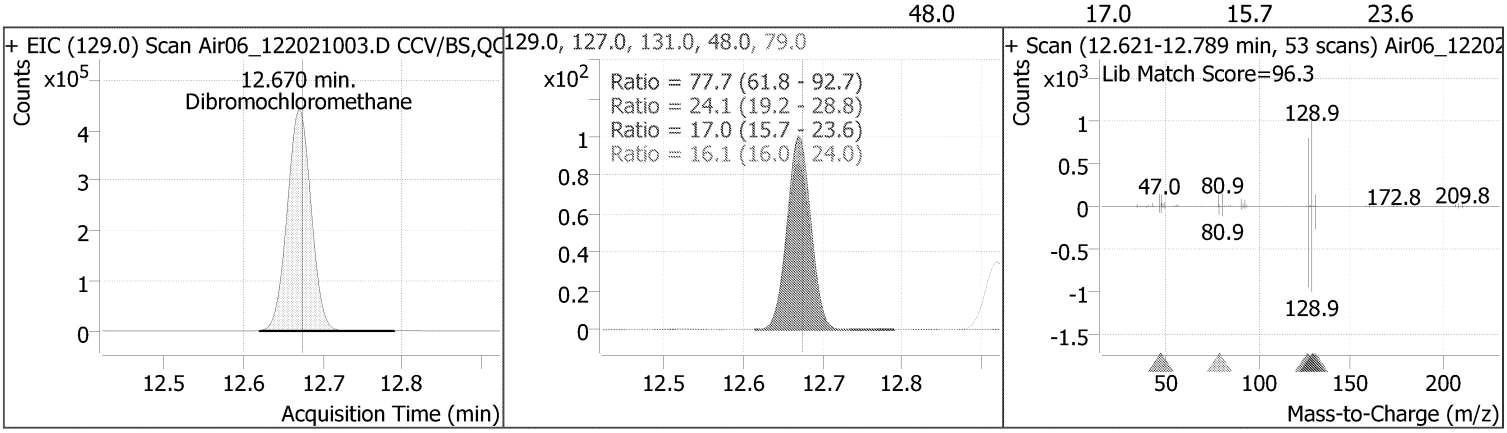
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	19.1680	12.40	0.00	205861420				



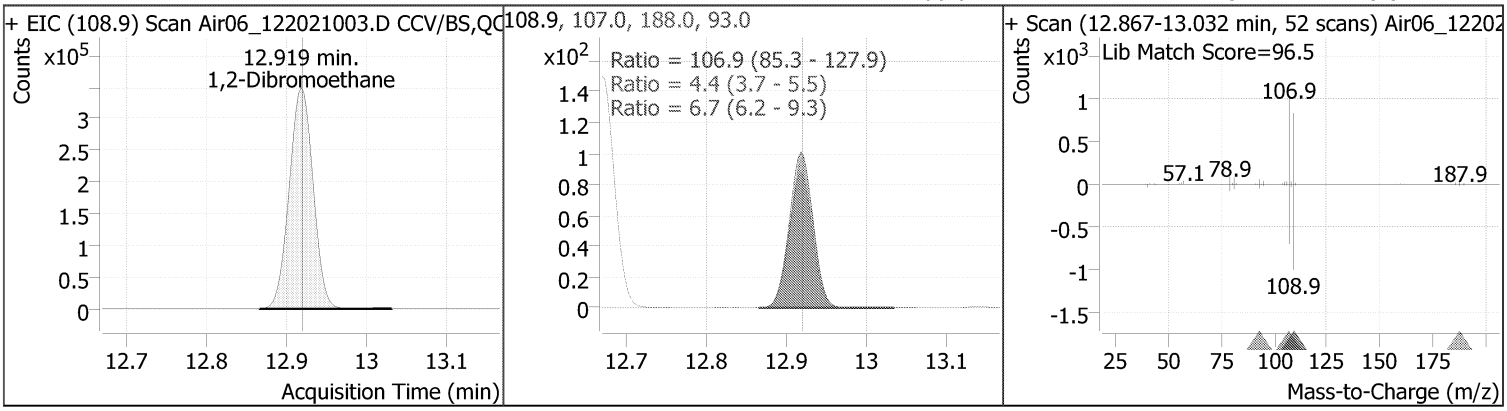
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	10.0165	12.51	0.00	547522	43.0	203.4	178.6	267.9
					57.0	36.2	30.3	45.4
					100.0	15.1	11.5	17.3
					85.0	13.9	10.6	15.9



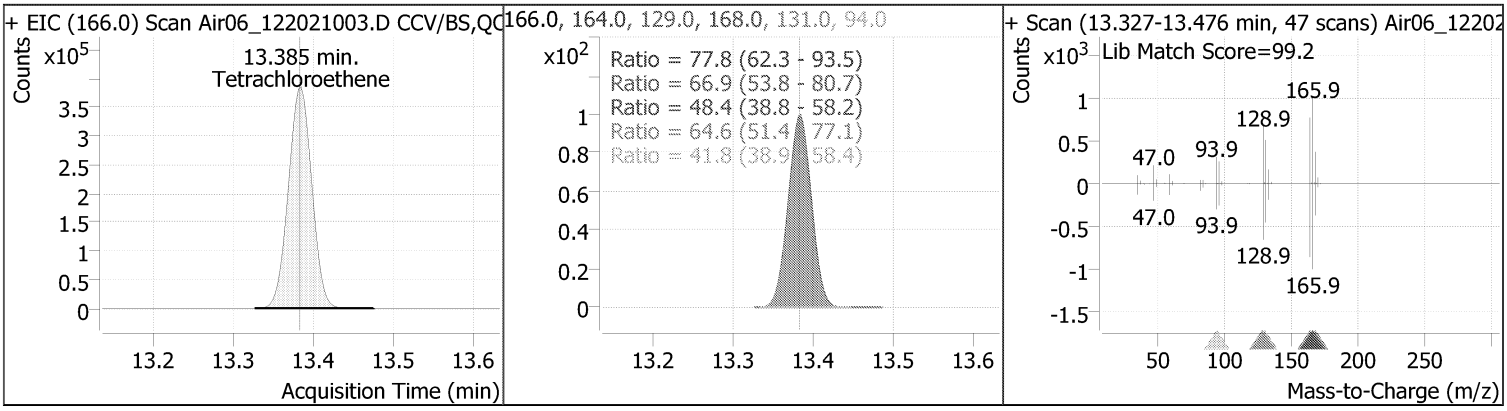
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	9.2897	12.67	0.00	923773	127.0	77.7	61.8	92.7
					131.0	24.1	19.2	28.8
					79.0	16.1	16.0	24.0
					48.0	17.0	15.7	23.6



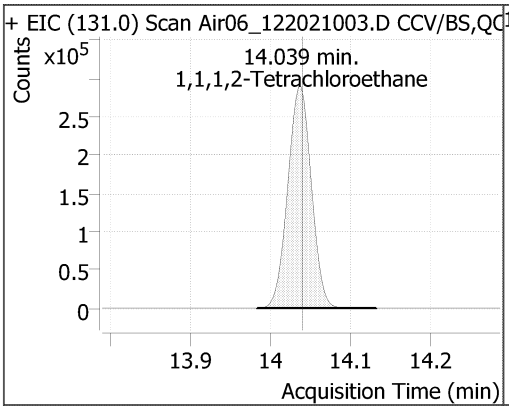
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	9.6405	12.92	0.00	727433	107.0	106.9	85.3	127.9
					93.0	6.7	6.2	9.3
					188.0	4.4	3.7	5.5

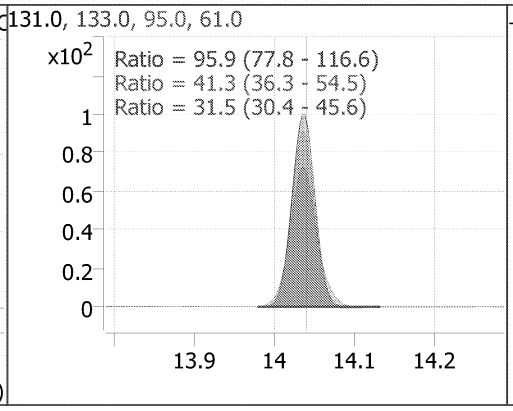


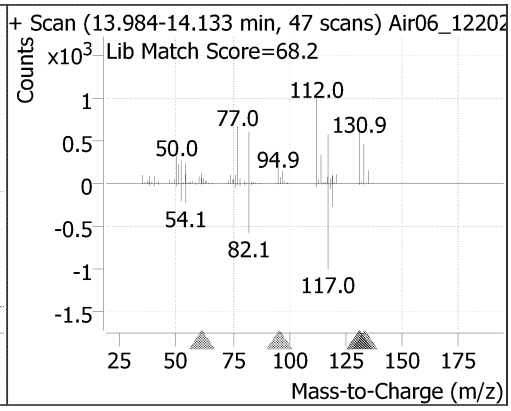
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	9.5003	13.38	0.00	787563	164.0	77.8	62.3	93.5
					129.0	66.9	53.8	80.7
					131.0	64.6	51.4	77.1
					94.0	41.8	38.9	58.4
					168.0	48.4	38.8	58.2



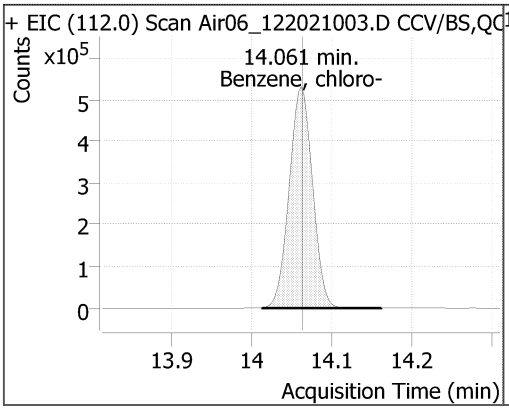
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	9.6115	14.04	0.00	598679	133.0	95.9	77.8	116.6
					95.0	41.3	36.3	54.5
					61.0	31.5	30.4	45.6

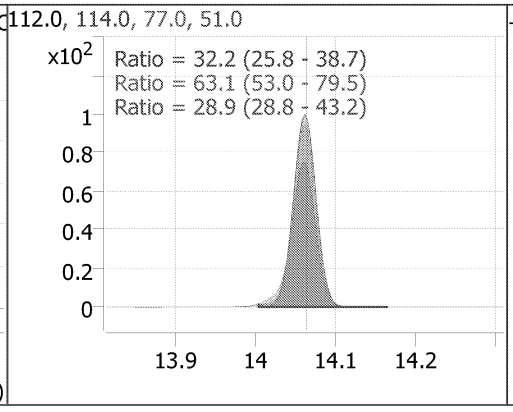


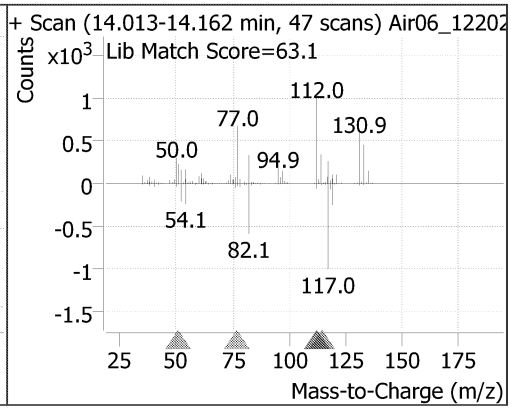




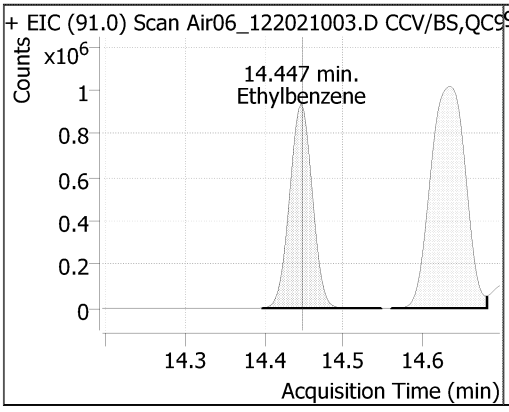
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	10.0352	14.06	0.00	1082028	77.0	63.1	53.0	79.5
					51.0	28.9	28.8	43.2
					114.0	32.2	25.8	38.7

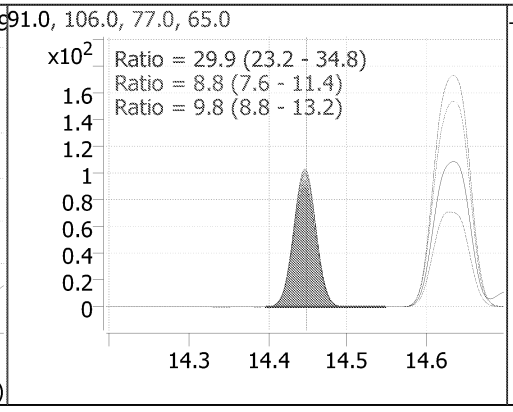


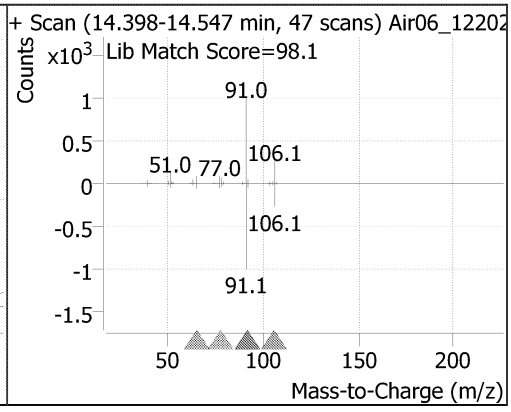




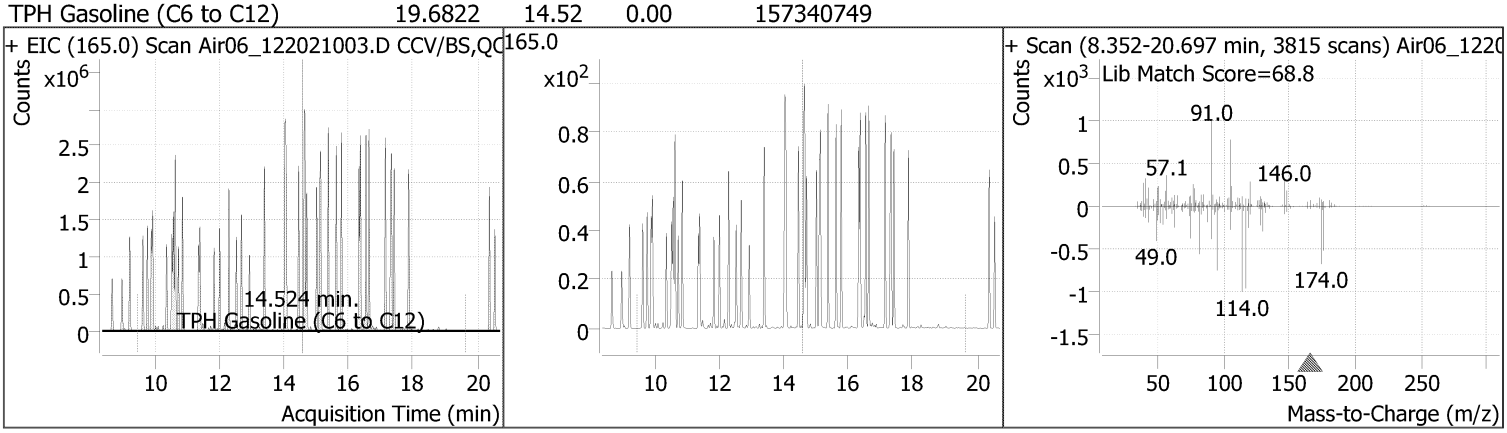
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	10.6744	14.45	0.00	1857327	106.0	29.9	23.2	34.8
					65.0	9.8	8.8	13.2
					77.0	8.8	7.6	11.4



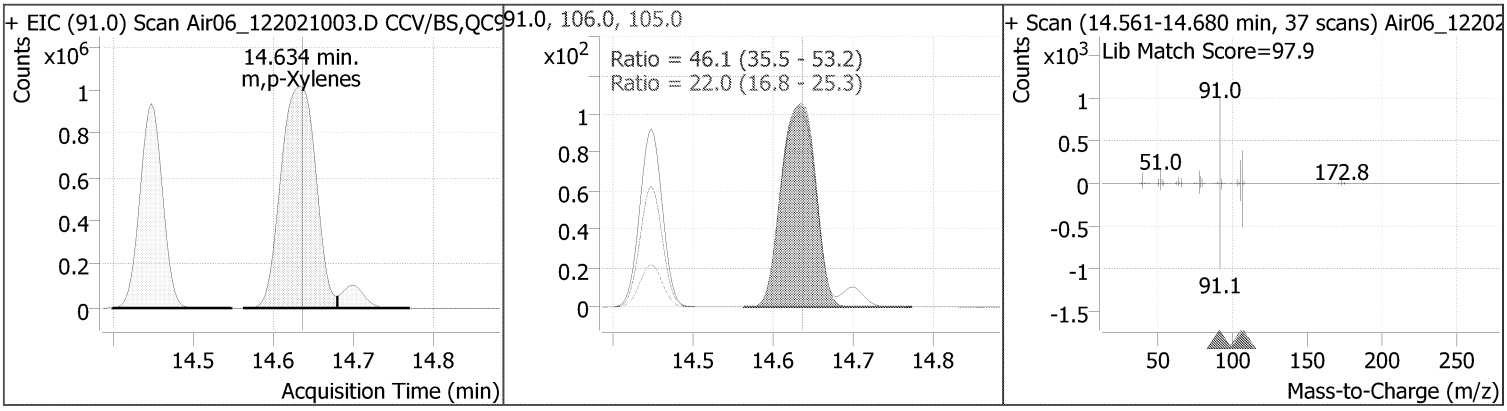




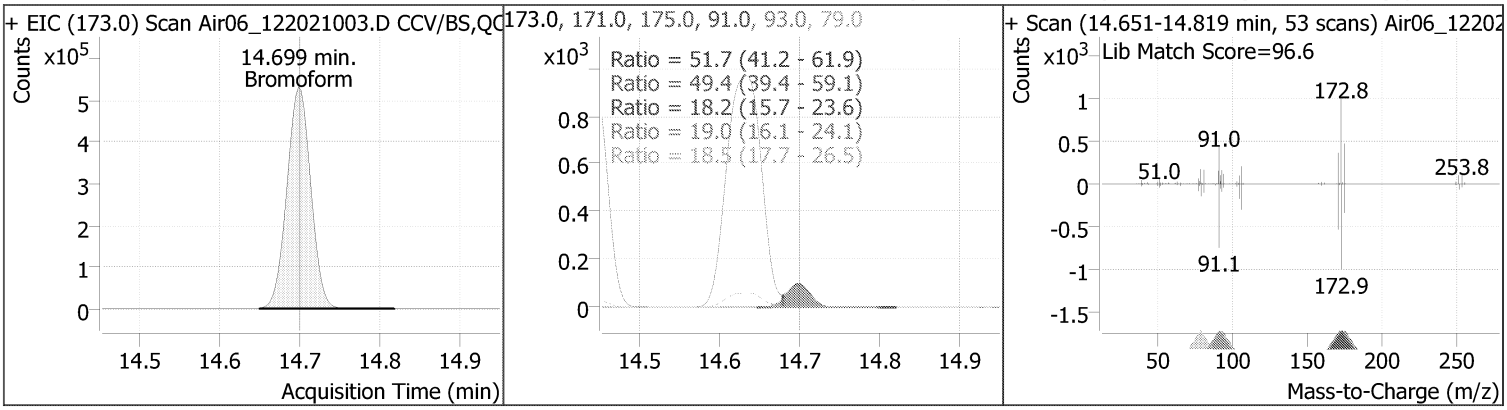
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	19.6822	14.52	0.00	157340749				



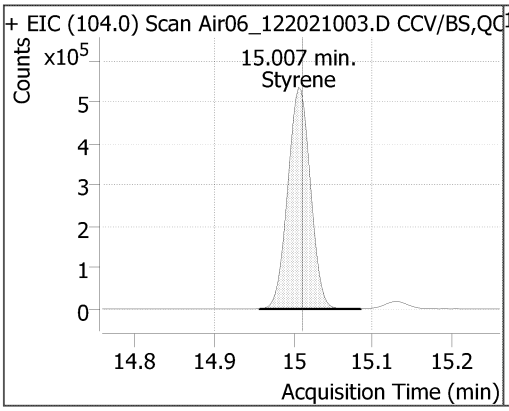
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	21.0754	14.63	0.00	3093498	106.0	46.1	35.5	53.2
					105.0	22.0	16.8	25.3

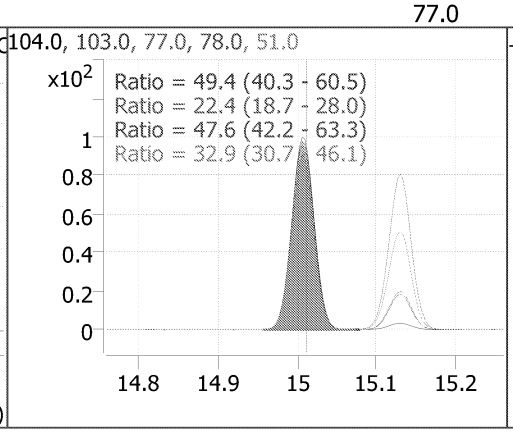


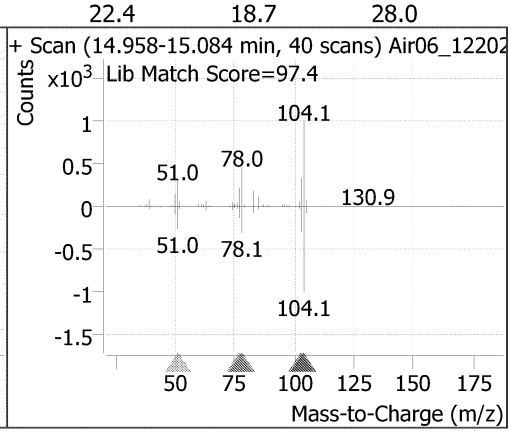
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	9.5805	14.70	0.00	1109452	171.0	51.7	41.2	61.9
					175.0	49.4	39.4	59.1
					79.0	18.5	17.7	26.5
					93.0	19.0	16.1	24.1
					91.0	18.2	15.7	23.6



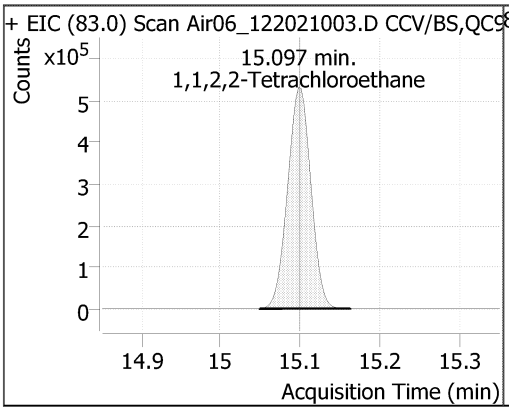
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	10.7949	15.01	0.00	1061443	78.0	47.6	42.2	63.3
					103.0	49.4	40.3	60.5
					51.0	32.9	30.7	46.1
					77.0	22.4	18.7	28.0

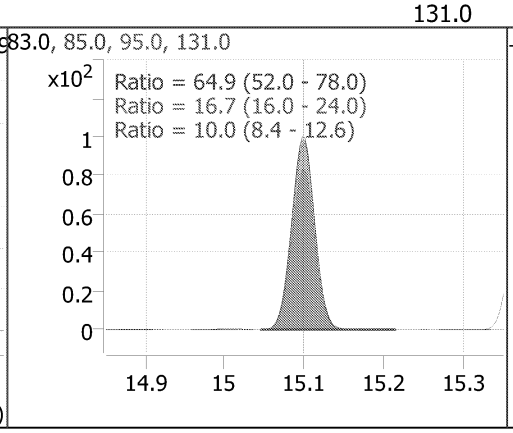


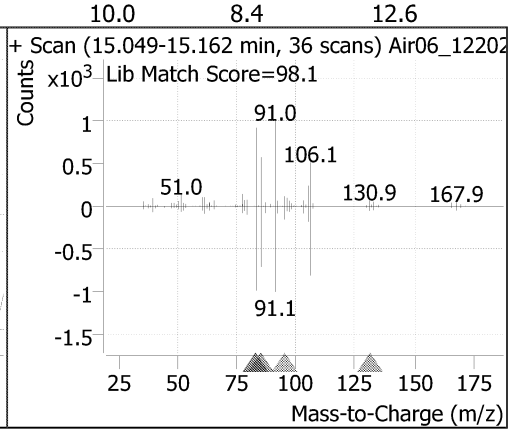




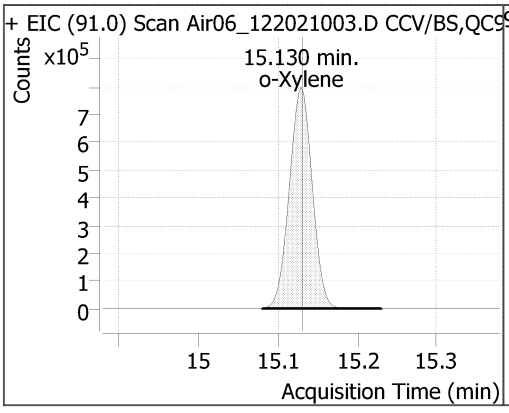
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	10.2705	15.10	0.00	1081911	85.0	64.9	52.0	78.0
					95.0	16.7	16.0	24.0
					131.0	10.0	8.4	12.6

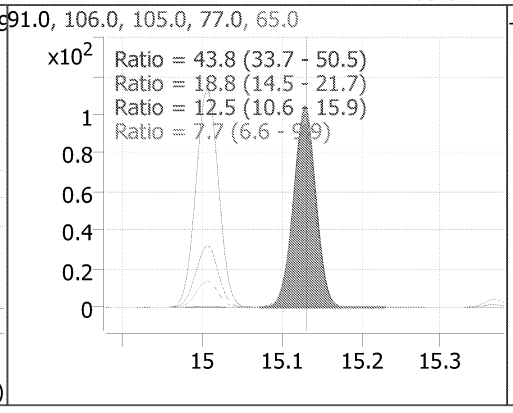


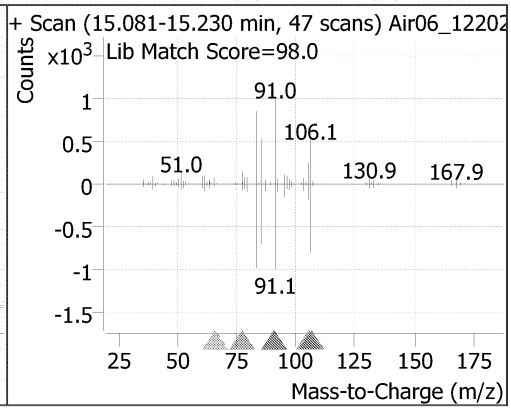




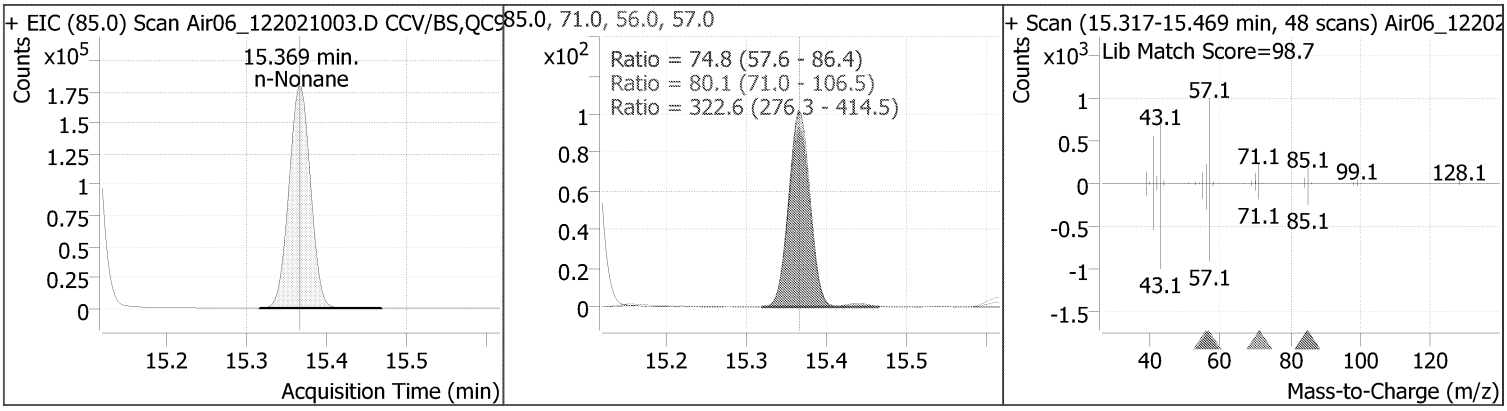
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	10.4465	15.13	0.00	1591559	106.0	43.8	33.7	50.5
					105.0	18.8	14.5	21.7
					77.0	12.5	10.6	15.9
					65.0	7.7	6.6	9.9



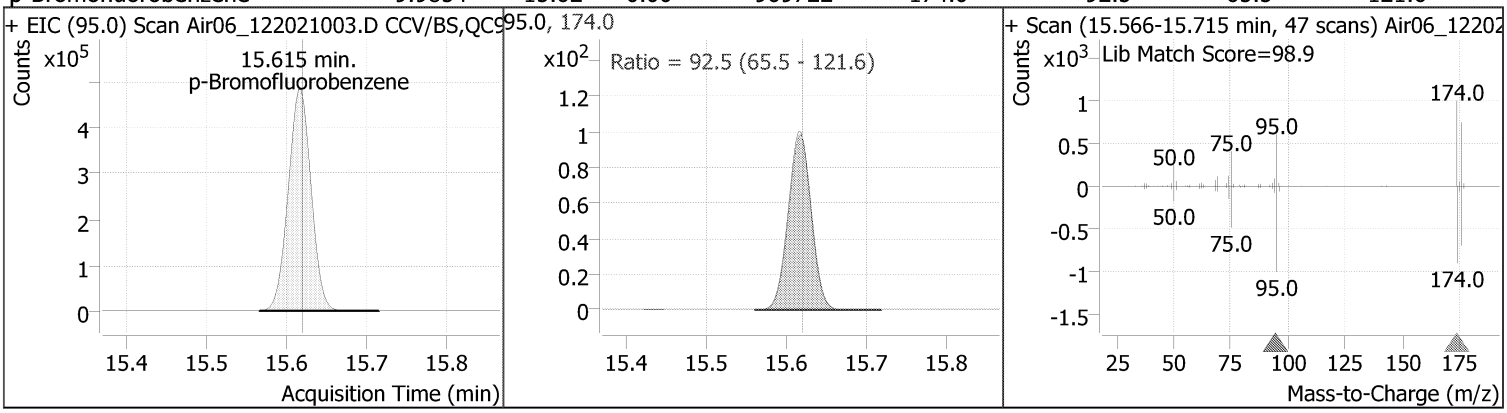




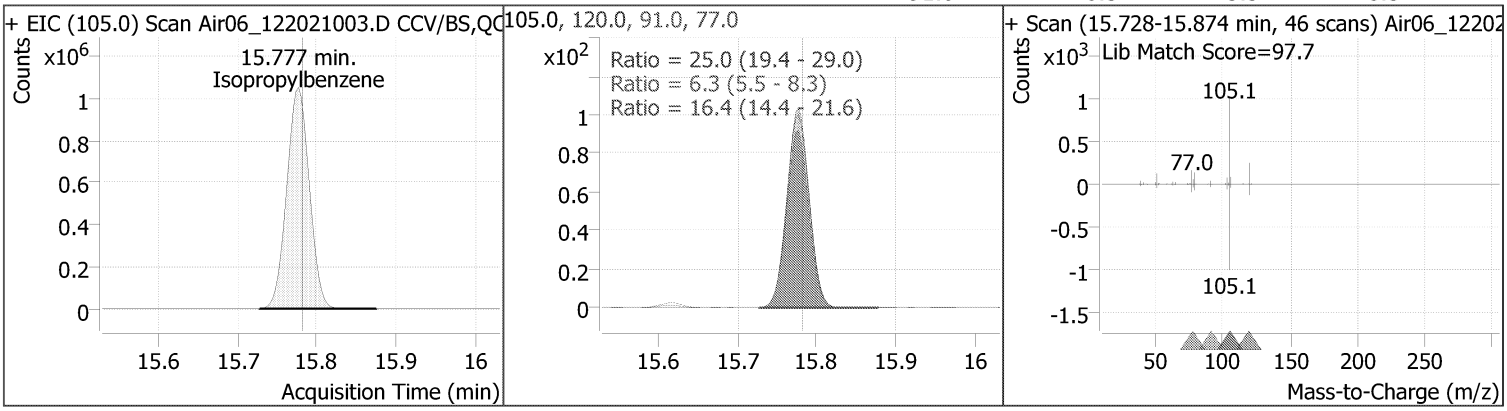
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	10.8915	15.37	0.00	338459	57.0	322.6	276.3	414.5
					56.0	80.1	71.0	106.5
					71.0	74.8	57.6	86.4



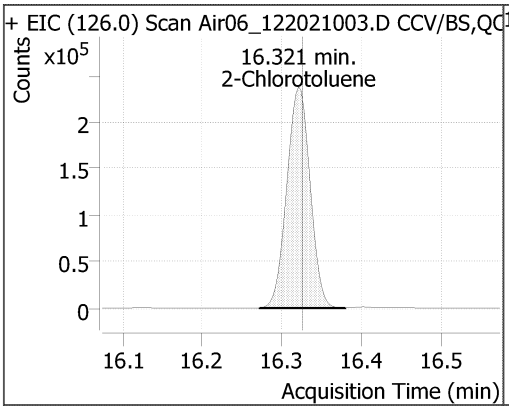
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	9.9854	15.62	0.00	969722	174.0	92.5	65.5	121.6

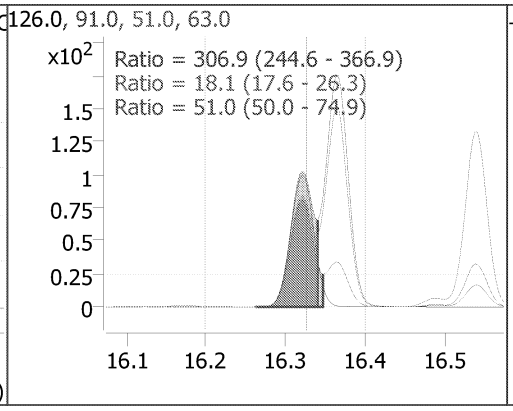


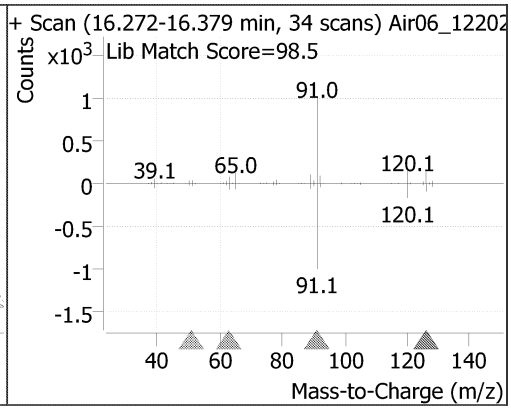
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	10.0209	15.78	0.00	2072070	120.0	25.0	19.4	29.0
					77.0	16.4	14.4	21.6
					91.0	6.3	5.5	8.3



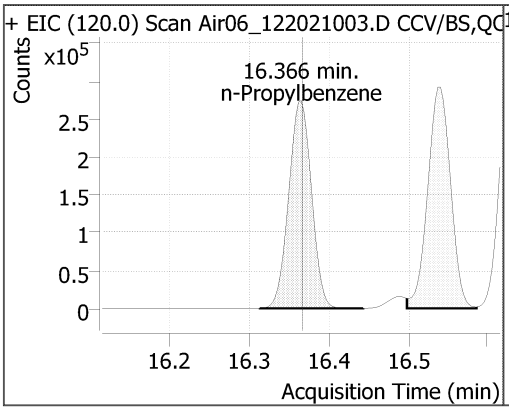
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	10.5067	16.32	0.00	484918	91.0	306.9	244.6	366.9
					63.0	51.0	50.0	74.9
					51.0	18.1	17.6	26.3

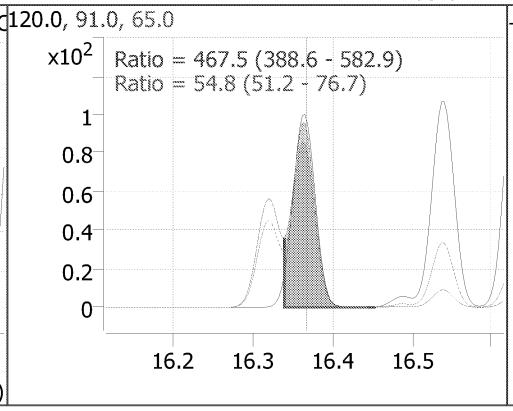


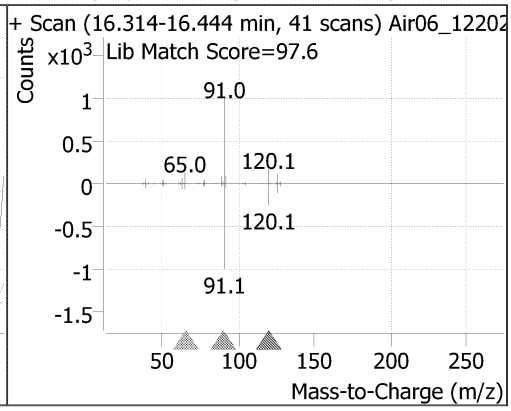




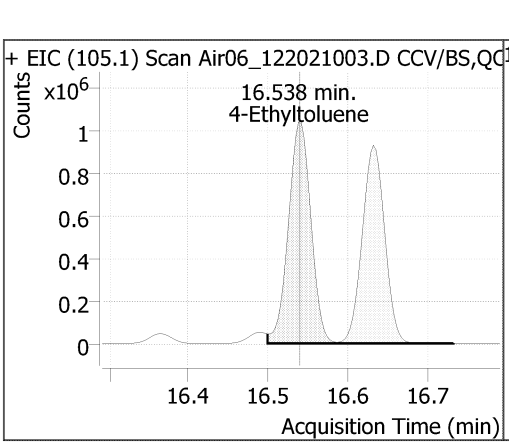
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	10.4818	16.37	0.00	545910	91.0	467.5	388.6	582.9
					65.0	54.8	51.2	76.7

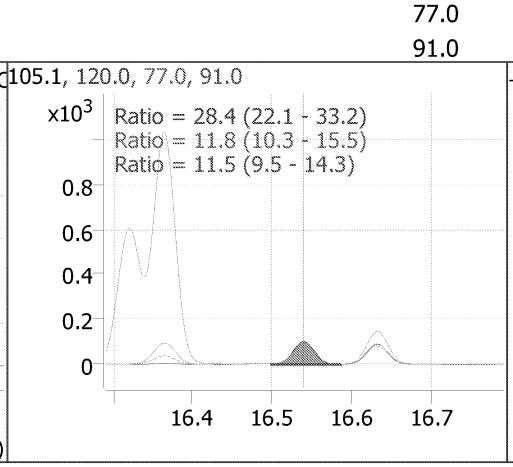


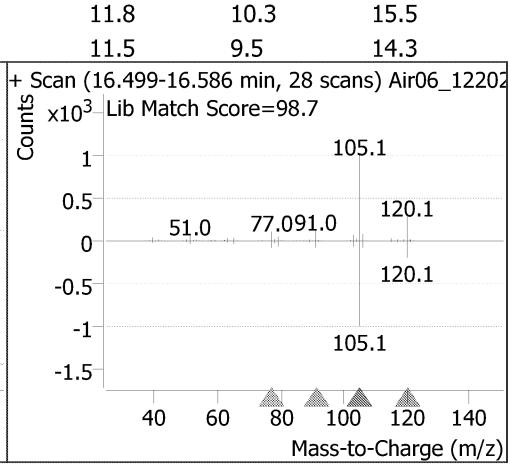




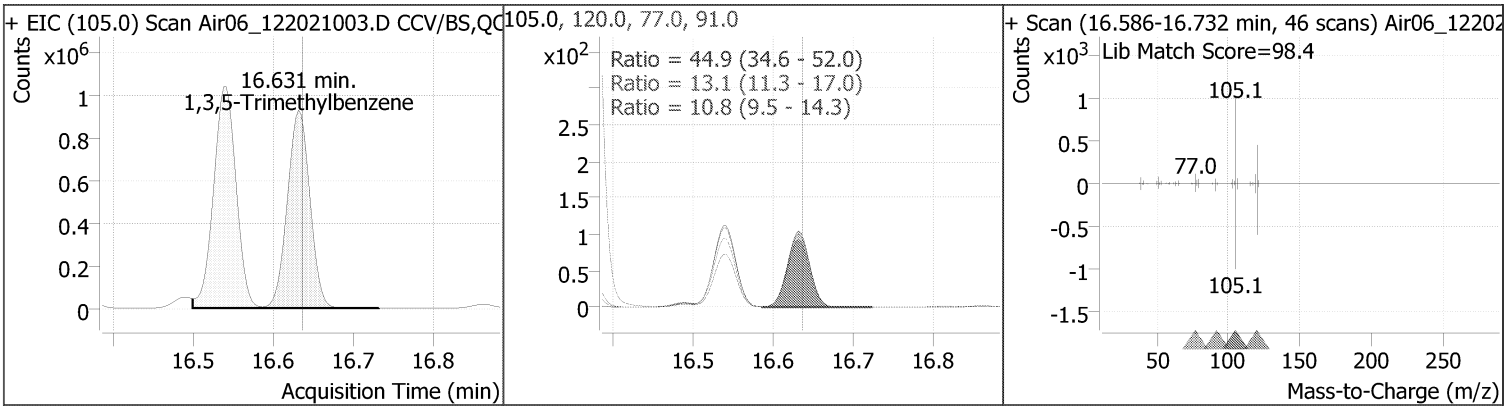
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	10.4639	16.54	0.00	2055007	120.0	28.4	22.1	33.2
					77.0	11.8	10.3	15.5
					91.0	11.5	9.5	14.3



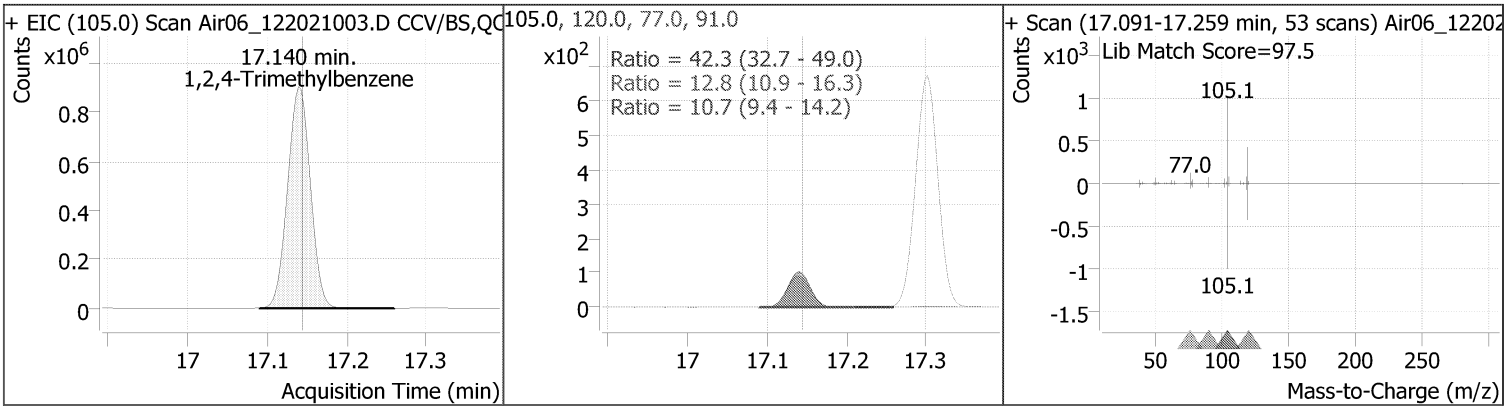




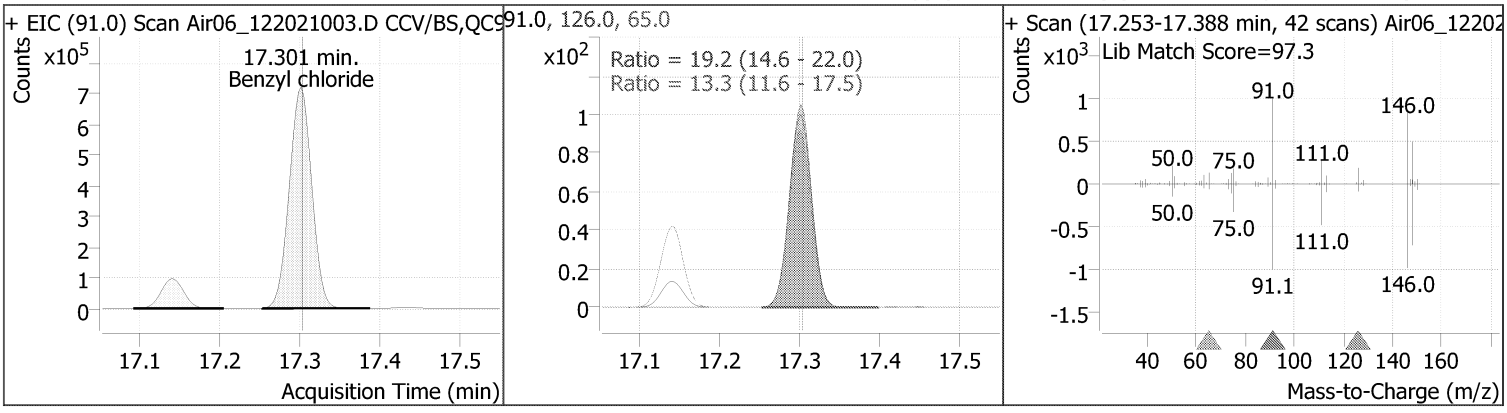
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	10.2700	16.63	0.00	1836095	120.0	44.9	34.6	52.0
					77.0	13.1	11.3	17.0
					91.0	10.8	9.5	14.3



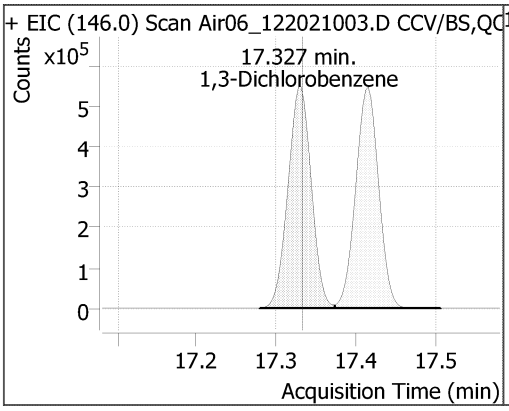
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	10.7612	17.14	0.00	1799487	120.0	42.3	32.7	49.0
					77.0	12.8	10.9	16.3
					91.0	10.7	9.4	14.2

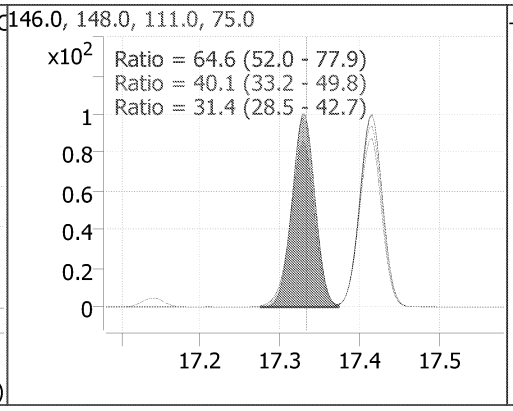


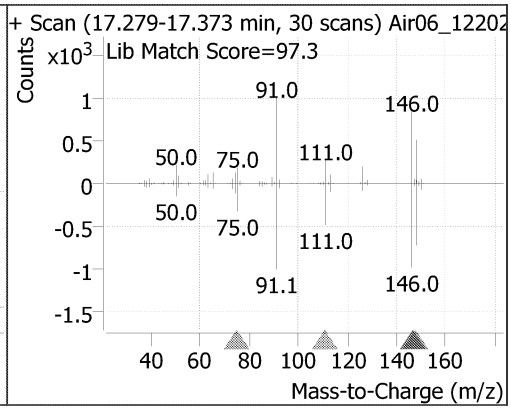
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	9.7720	17.30	0.00	1408584	126.0	19.2	14.6	22.0
					65.0	13.3	11.6	17.5



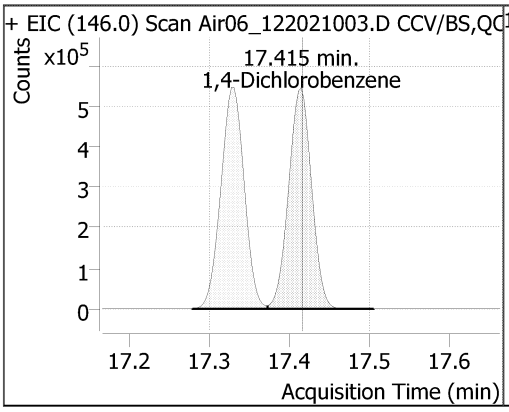
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	9.6436	17.33	0.00	1115417	148.0	64.6	52.0	77.9
					111.0	40.1	33.2	49.8
					75.0	31.4	28.5	42.7

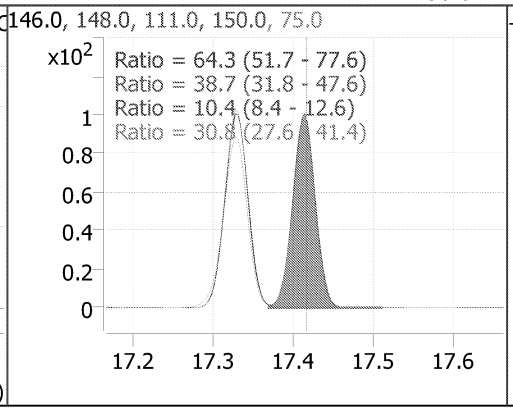


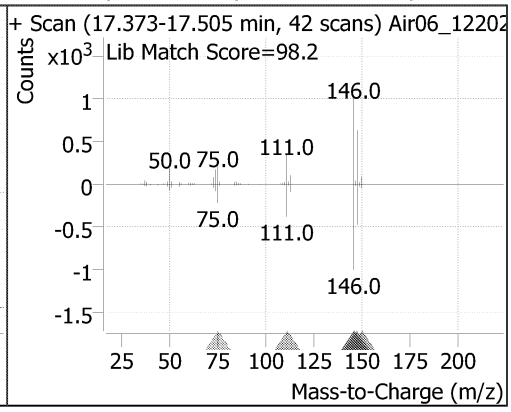




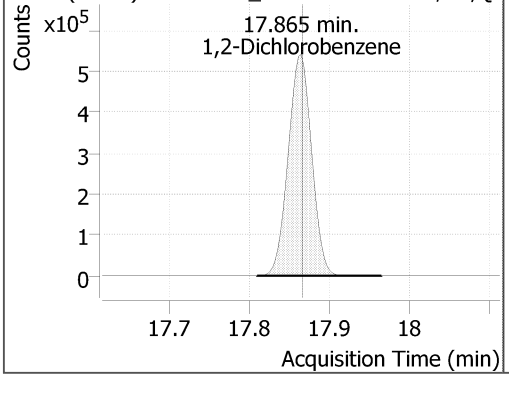
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	9.5840	17.41	0.00	1094117	148.0	64.3	51.7	77.6
					111.0	38.7	31.8	47.6
					75.0	30.8	27.6	41.4
					150.0	10.4	8.4	12.6

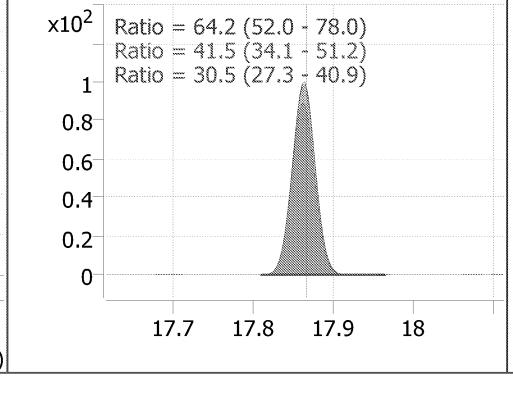


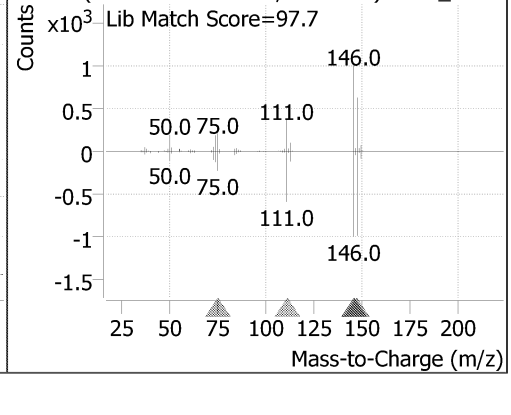




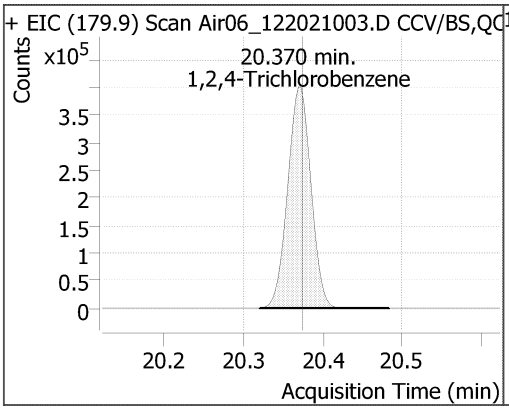
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	9.9674	17.86	0.00	1110615	148.0	64.2	52.0	78.0
					111.0	41.5	34.1	51.2
					75.0	30.5	27.3	40.9

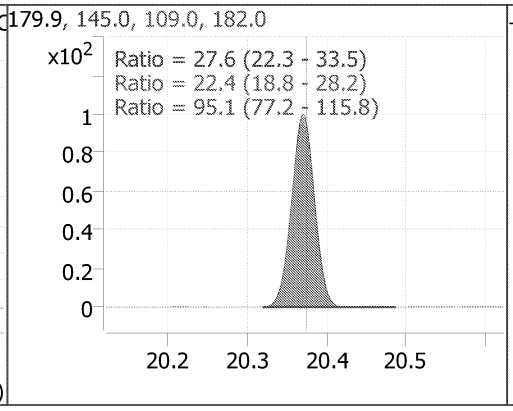


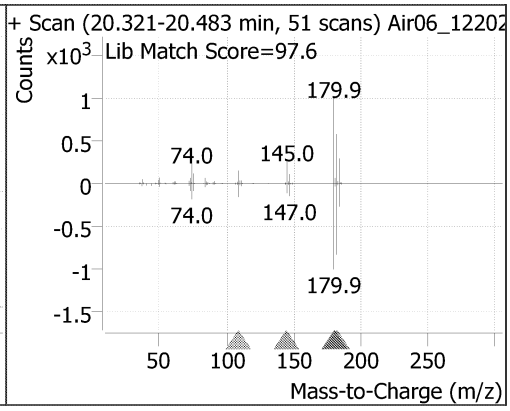




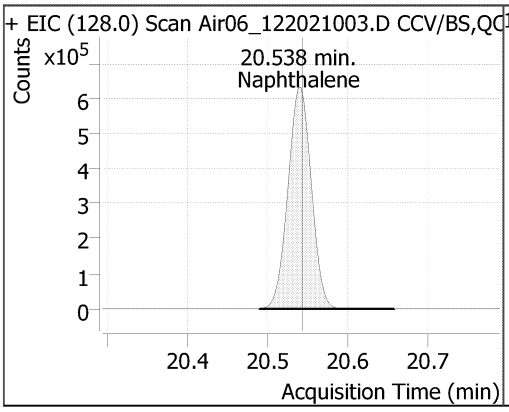
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	10.2676	20.37	0.00	813679	182.0	95.1	77.2	115.8
					145.0	27.6	22.3	33.5
					109.0	22.4	18.8	28.2

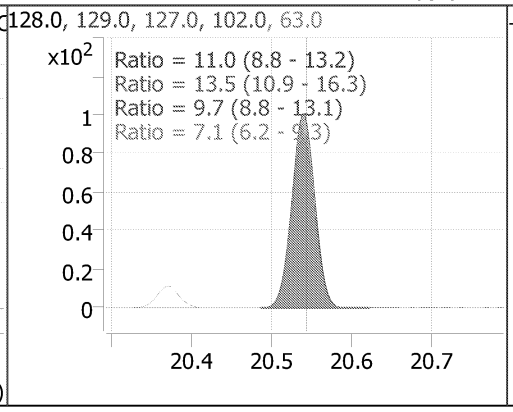


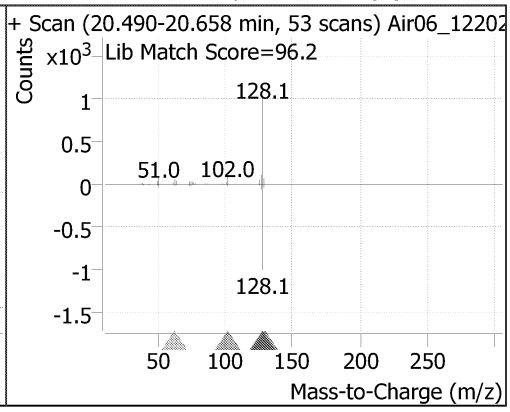




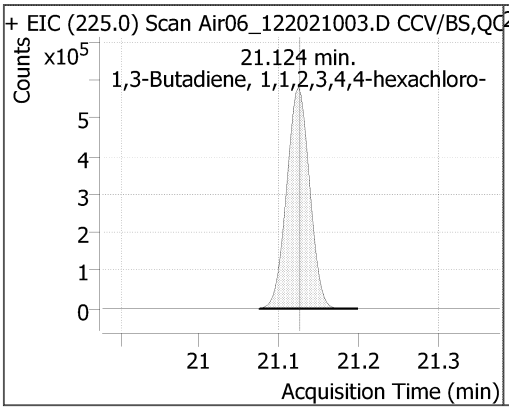
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	10.4866	20.54	0.00	1291219	127.0	13.5	10.9	16.3
					129.0	11.0	8.8	13.2
					102.0	9.7	8.8	13.1
					63.0	7.1	6.2	9.3

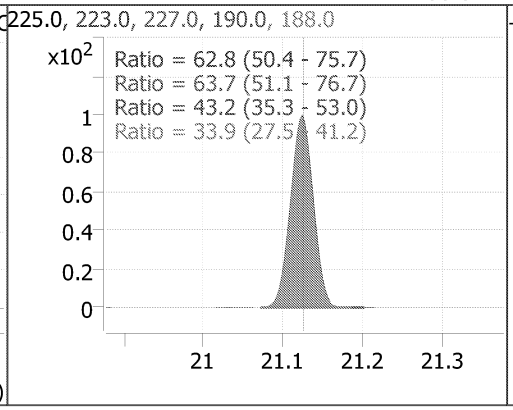


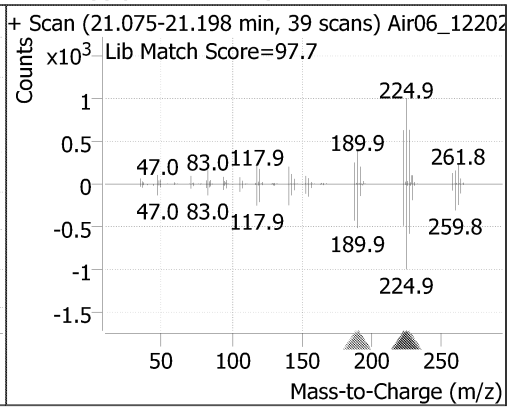




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	8.9595	21.12	0.00	1165069	227.0	63.7	51.1	76.7
					223.0	62.8	50.4	75.7
					190.0	43.2	35.3	53.0
					188.0	33.9	27.5	41.2







Quantitation Results Report (Not Reviewed)

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Tune File	bfb.u	Tune Date	12/14/2021 7:38:43 AM
Batch Name	2021 Dec 20 1034 TO15_121121.m.batch.bin	Last Calib Update	12/13/2021 9:29:07 AM
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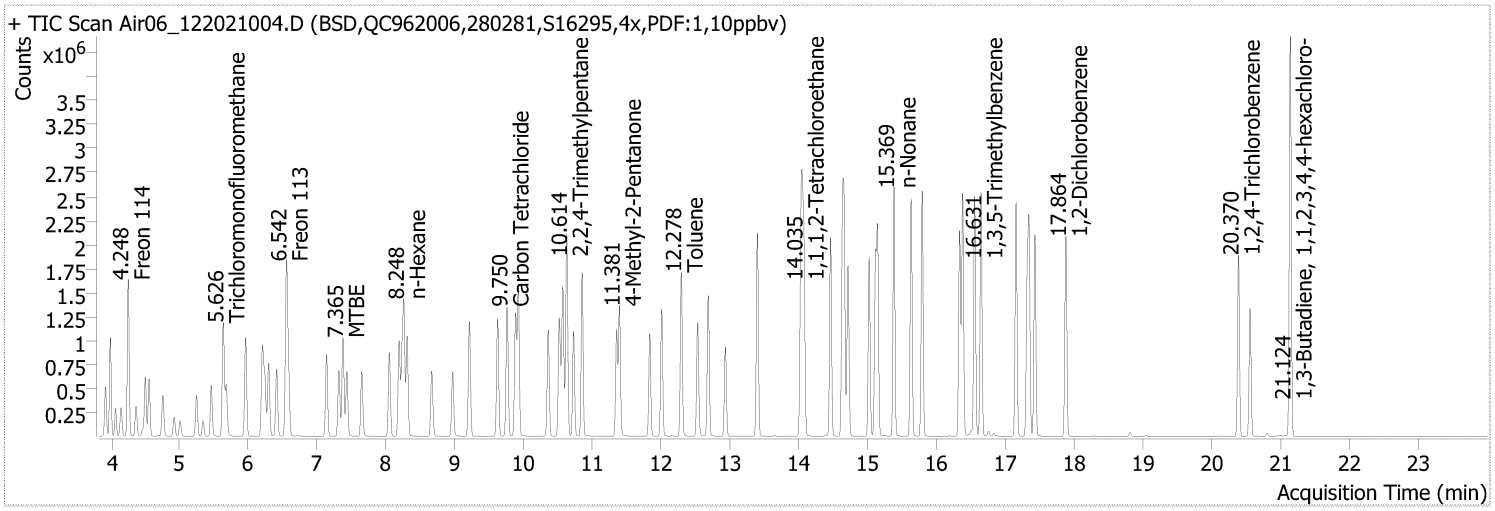


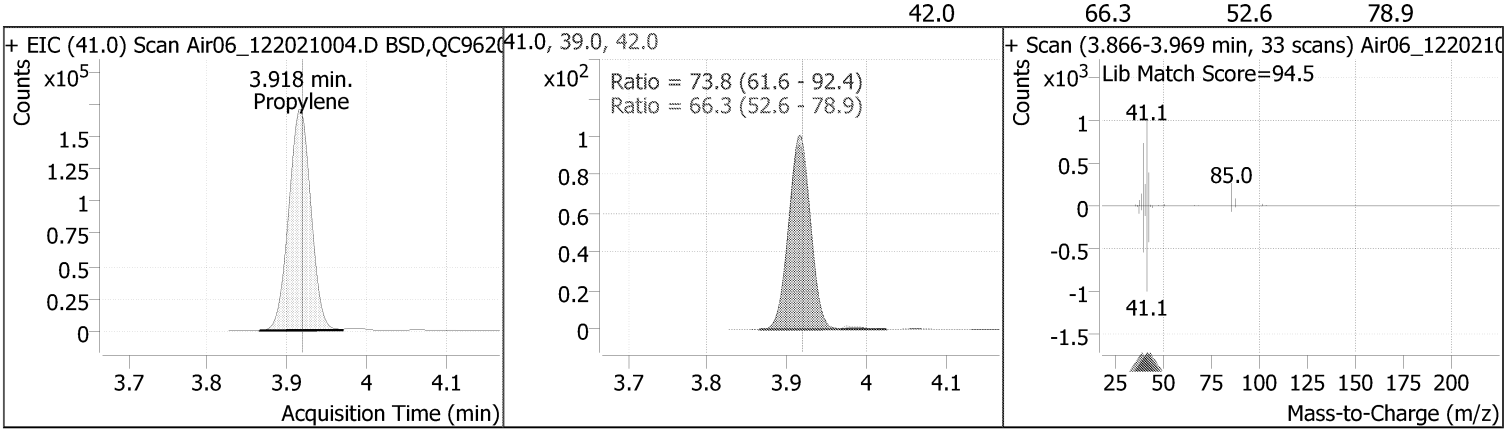
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.180	130.0	346906	10.0000	nL/L		0.000
M 1,4-Difluorobenzene	9.912	114.0	1290615	10.0000	nL/L		0.000
M Chlorobenzene-d5	14.016	82.0	745359	10.0000	nL/L		0.000
System Monitoring Compounds							
S p-Bromofluorobenzene	15.615	95.0	959058	10.0252	nL/L		-0.003
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 100.25%			
Target Compounds							QValue
T Propylene	3.918	41.0	332075	8.7284	nL/L		98
T Freon 12	3.985	85.0	986815	7.9541	nL/L		99
T Chloromethane	4.141	50.0	366887	8.4532	nL/L		99
T Freon 114	4.248	135.0	638981	8.8125	nL/L		100
T Vinyl Chloride	4.358	62.0	370613	9.1032	nL/L		99
T 1,3-Butadiene	4.494	54.0	308200	8.8033	nL/L		97
T Butane	4.549	43.0	582580	8.3333	nL/L		97
T Bromomethane	4.749	96.0	303585	9.2160	nL/L	#	96
T Chloroethane	4.914	64.0	185836	9.1436	nL/L		94
T Ethanol	4.999	45.0	197292	7.2488	nL/L		98
T Vinyl bromide	5.238	108.0	331604	9.6573	nL/L	#	98
T Acrolein	5.332	56.0	149524	8.5118	nL/L		97
T Acetone	5.452	58.0	201339	8.5712	nL/L	#	76
T Trichloromonofluoromethane	5.626	101.0	1084801	7.7255	nL/L		99
T Isopropanol (IPA)	5.669	45.0	743239	8.0938	nL/L		96
T n-Pentane	5.950	43.0	777003	8.6269	nL/L		98
T 1,1-Dichloroethene	6.193	61.0	727472	8.4308	nL/L		93
T Tert-butyl alcohol (TBA)	6.229	59.0	827961	8.5427	nL/L		96
T Methylene Chloride	6.284	84.0	329352	8.8432	nL/L		86
T 3-Chloropropene	6.403	76.0	155239	9.9030	nL/L		100
T Freon 113	6.542	101.0	793142	8.9263	nL/L		99
T Carbon Disulfide	6.575	76.0	1001333	9.6614	nL/L	#	92

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.125	61.0	589070	8.7562	nL/L		95
T 1,1-Dichloroethane	7.306	63.0	740817	8.7910	nL/L		99
T MTBE	7.365	73.0	987750	8.6917	nL/L		96
T Vinyl Acetate	7.423	43.0	1111226	7.8215	nL/L		98
T 2-Butanone	7.636	43.0	956908	8.5301	nL/L		95
T cis-1,2-Dichloroethene	8.038	61.0	602922	8.7364	nL/L		94
T Ethyl Acetate	8.222	61.0	137246	8.7967	nL/L		72
T n-Hexane	8.248	57.0	667870	9.1940	nL/L		91
T Chloroform	8.297	83.0	834855	8.4329	nL/L		97
T Tetrahydrofuran	8.653	72.0	165254	10.1892	nL/L		82
T 1,2-Dichloroethane	8.957	62.0	592803	7.4505	nL/L	#	97
T 1,1,1-Trichloroethane	9.200	97.0	834468	8.0260	nL/L		98
T Benzene	9.611	78.0	1078882	9.8008	nL/L		95
T Carbon Tetrachloride	9.750	117.0	889295	7.9358	nL/L		98
T Cyclohexane	9.873	84.0	443783	9.7426	nL/L		88
T 1,2-Dichloropropane	10.346	63.0	474048	9.5149	nL/L	#	91
T Methane, bromodichloro-	10.507	83.0	861537	8.4762	nL/L		98
T 1,4-Dioxane	10.537	88.0	235686	9.8719	nL/L	#	90
T Trichloroethene	10.559	132.0	476508	9.5500	nL/L		98
T 2,2,4-Trimethylpentane	10.614	57.0	2131631	9.0892	nL/L		96
T Methyl methacrylate	10.715	69.0	406473	10.0764	nL/L		84
T n-Heptane	10.838	71.0	367953	10.0740	nL/L	#	80
T cis-1,3-Dichloropropene	11.339	110.0	148416	10.1428	nL/L	#	80
T 4-Methyl-2-Pentanone	11.381	58.0	411023	9.5068	nL/L		89
T trans-1,3-Dichloropropene	11.822	110.0	148945	9.9041	nL/L	#	82
T 1,1,2-Trichloroethane	11.993	97.0	464382	9.5535	nL/L		95
T Toluene	12.278	91.0	1377193	9.8629	nL/L		99
T TPH Gasoline (C3 to C12)	12.399	165.0	188864091	17.8518	nL/L		100
T 2-Hexanone	12.514	58.0	527421	9.7580	nL/L		88
T Dibromochloromethane	12.670	129.0	889397	9.0452	nL/L		98
T 1,2-Dibromoethane	12.919	108.9	703533	9.4293	nL/L		99
T Tetrachloroethene	13.385	166.0	753616	9.1937	nL/L		98
T 1,1,1,2-Tetrachloroethane	14.035	131.0	573710	9.3502	nL/L		96
T Benzene, chloro-	14.061	112.0	1035808	9.7521	nL/L		95
T Ethylbenzene	14.446	91.0	1747229	10.1938	nL/L		98
T TPH Gasoline (C6 to C12)	14.524	165.0	143034590	18.1637	nL/L		100
T m,p-Xylenes	14.631	91.0	2825630	19.5421	nL/L		97
T Bromoform	14.699	173.0	1068684	9.3682	nL/L		98
T Styrene	15.006	104.0	1014554	10.4744	nL/L		95
T 1,1,2,2-Tetrachloroethane	15.097	83.0	1043741	10.0583	nL/L		98
T o-Xylene	15.129	91.0	1454567	9.6919	nL/L		98
T n-Nonane	15.369	85.0	320839	10.4809	nL/L		91
T Isopropylbenzene	15.777	105.0	1981379	9.7275	nL/L		98
T 2-Chlorotoluene	16.321	126.0	464459	10.2159	nL/L		97
T n-Propylbenzene	16.366	120.0	519351	10.1230	nL/L		94
T 4-Ethyltoluene	16.537	105.1	1945855	10.0582	nL/L		99
T 1,3,5-Trimethylbenzene	16.631	105.0	1705395	9.6834	nL/L		97
T 1,2,4-Trimethylbenzene	17.139	105.0	1671123	10.1450	nL/L		98
T Benzyl chloride	17.301	91.0	1354880	9.5418	nL/L		97
T 1,3-Dichlorobenzene	17.327	146.0	1069885	9.3901	nL/L		98
T 1,4-Dichlorobenzene	17.415	146.0	1052548	9.3596	nL/L		98
T 1,2-Dichlorobenzene	17.864	146.0	1069591	9.7446	nL/L		98
T 1,2,4-Trichlorobenzene	20.370	179.9	773240	9.9051	nL/L		100
T Naphthalene	20.538	128.0	1257533	10.3678	nL/L		99
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.124	225.0	1125174	8.7838	nL/L		99

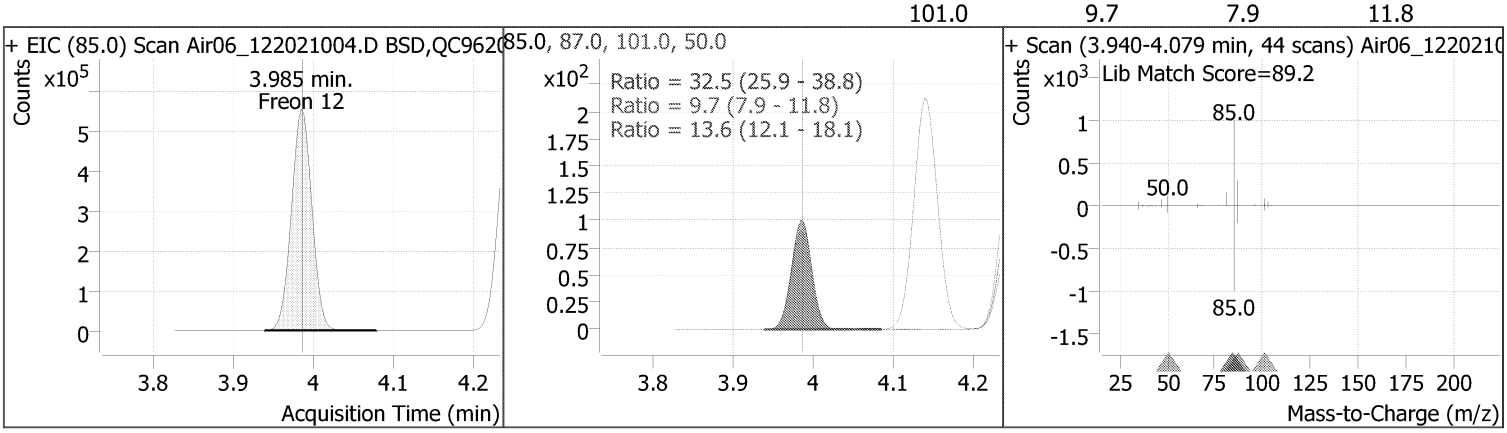
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

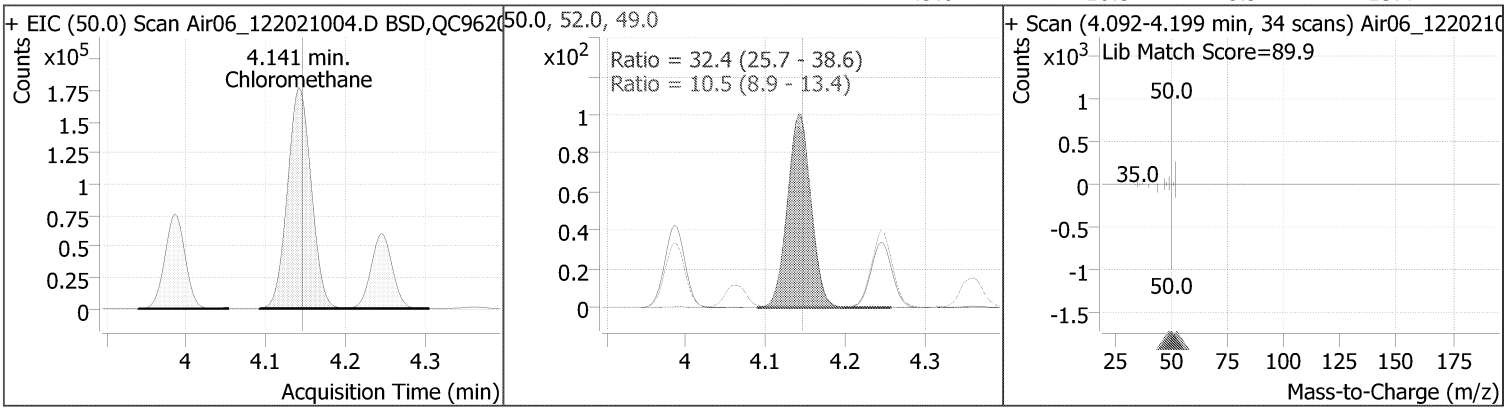
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	8.7284	3.92	0.00	332075	39.0	73.8	61.6	92.4
					42.0	66.3	52.6	78.9



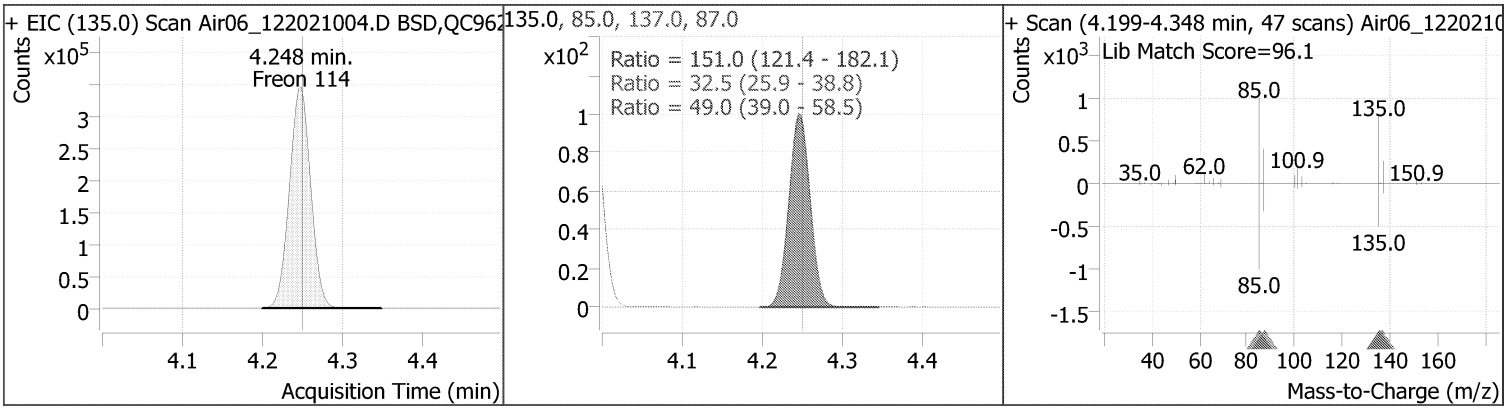
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	7.9541	3.99	0.00	986815	87.0	32.5	25.9	38.8
					50.0	13.6	12.1	18.1
					101.0	9.7	7.9	11.8



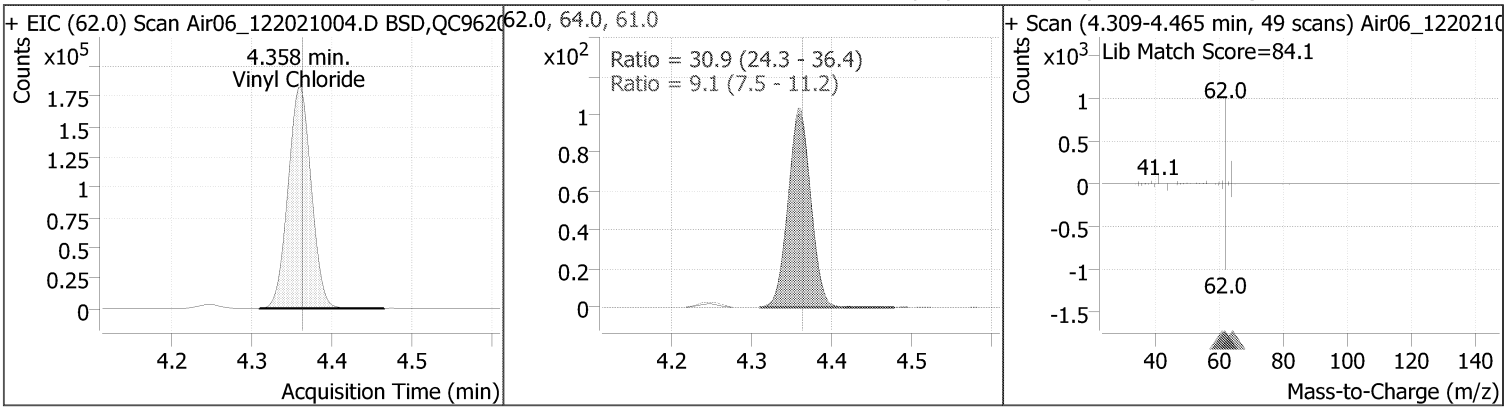
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	8.4532	4.14	0.00	366887	52.0	32.4	25.7	38.6
					49.0	10.5	8.9	13.4



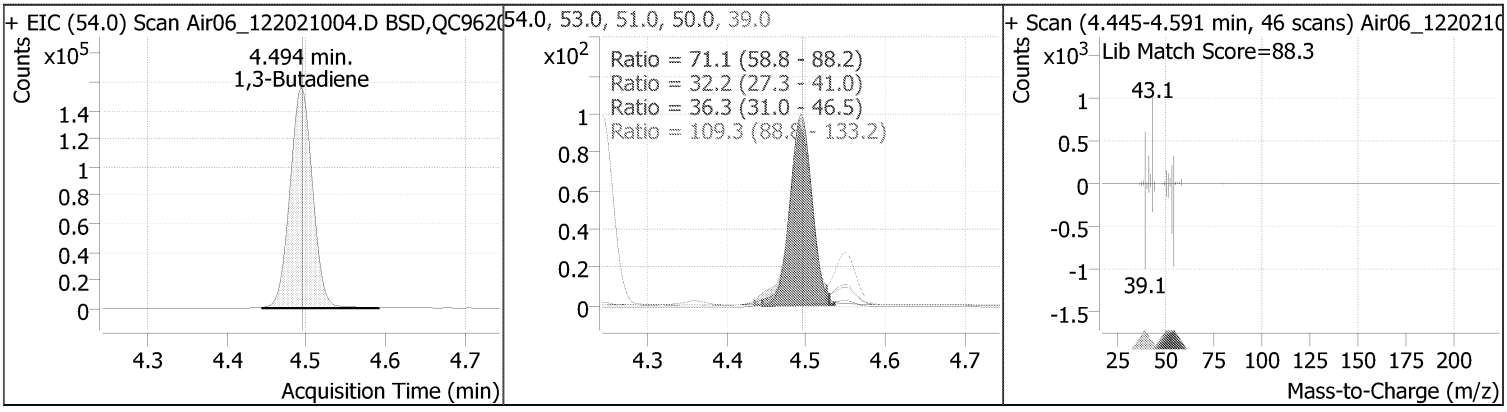
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	8.8125	4.25	0.00	638981	85.0	151.0	121.4	182.1
					87.0	49.0	39.0	58.5
					137.0	32.5	25.9	38.8



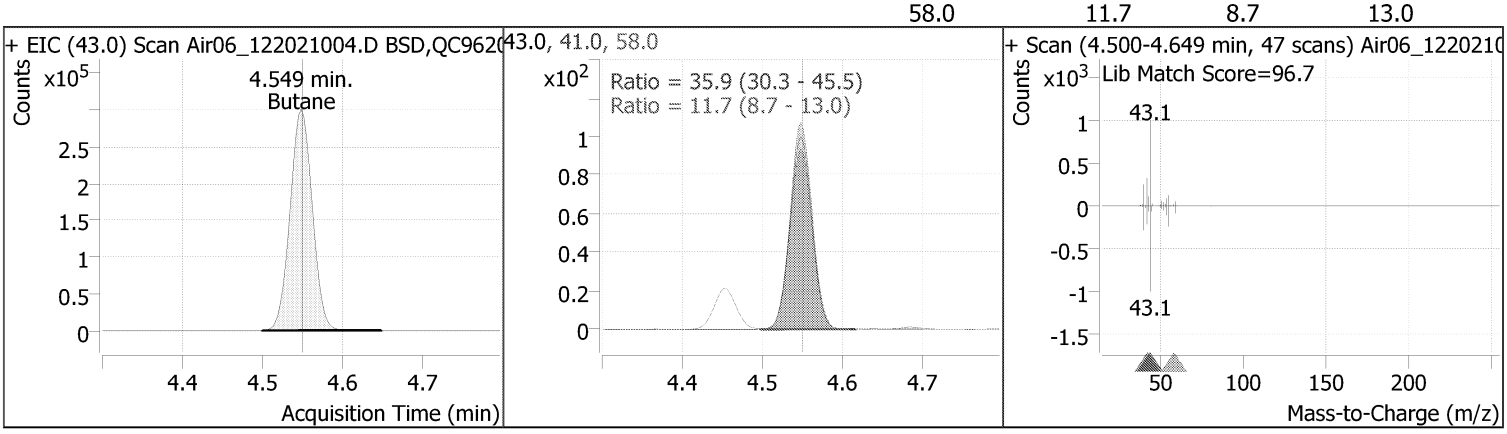
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	9.1032	4.36	0.00	370613	64.0	30.9	24.3	36.4
					61.0	9.1	7.5	11.2



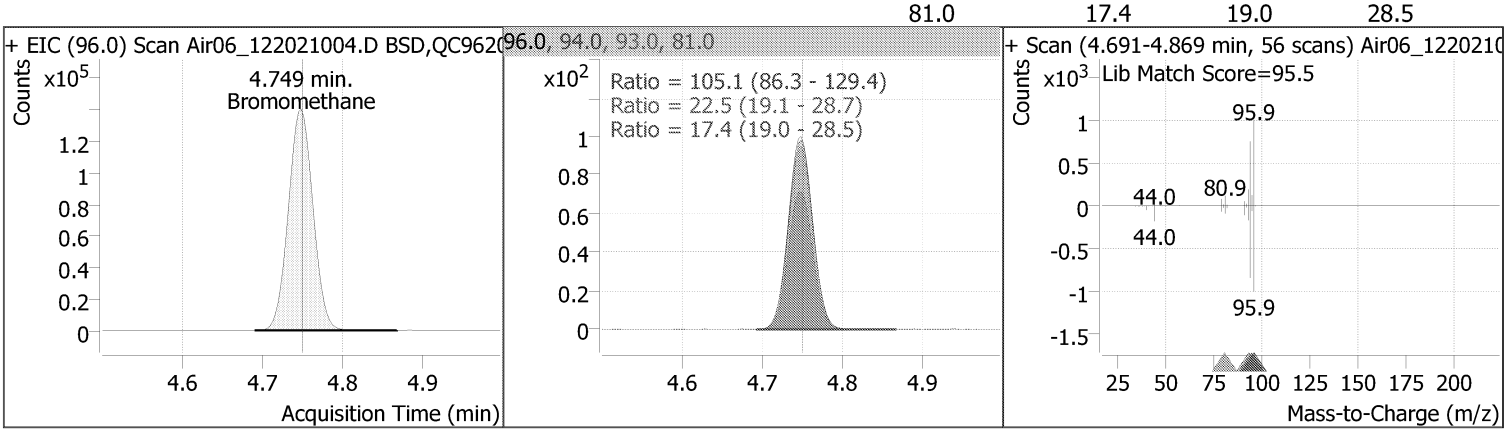
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	8.8033	4.49	0.00	308200	39.0	109.3	88.8	133.2
					53.0	71.1	58.8	88.2
					50.0	36.3	31.0	46.5
					51.0	32.2	27.3	41.0



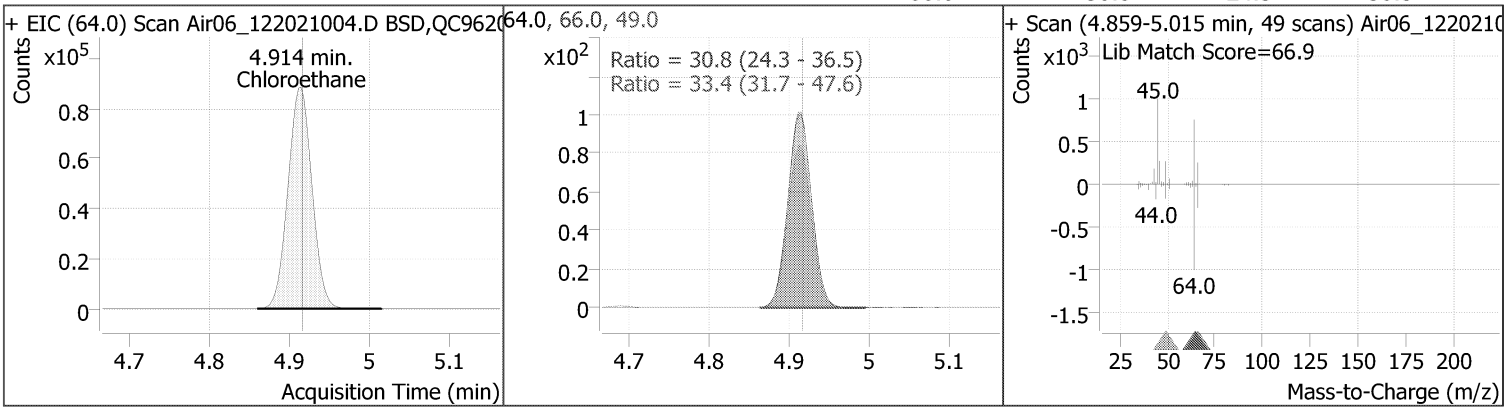
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	8.3333	4.55	0.00	582580	41.0	35.9	30.3	45.5
					58.0	11.7	8.7	13.0



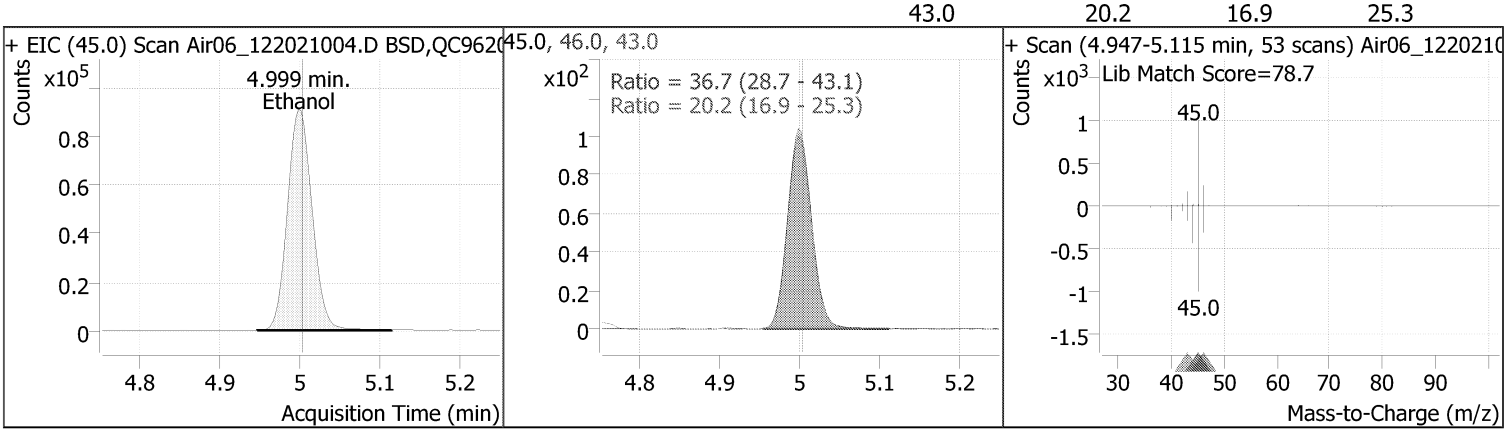
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromomethane	9.2160	4.75	0.00	303585	94.0	105.1	86.3	129.4
					93.0	22.5	19.1	28.7
					81.0	17.4	19.0	28.5



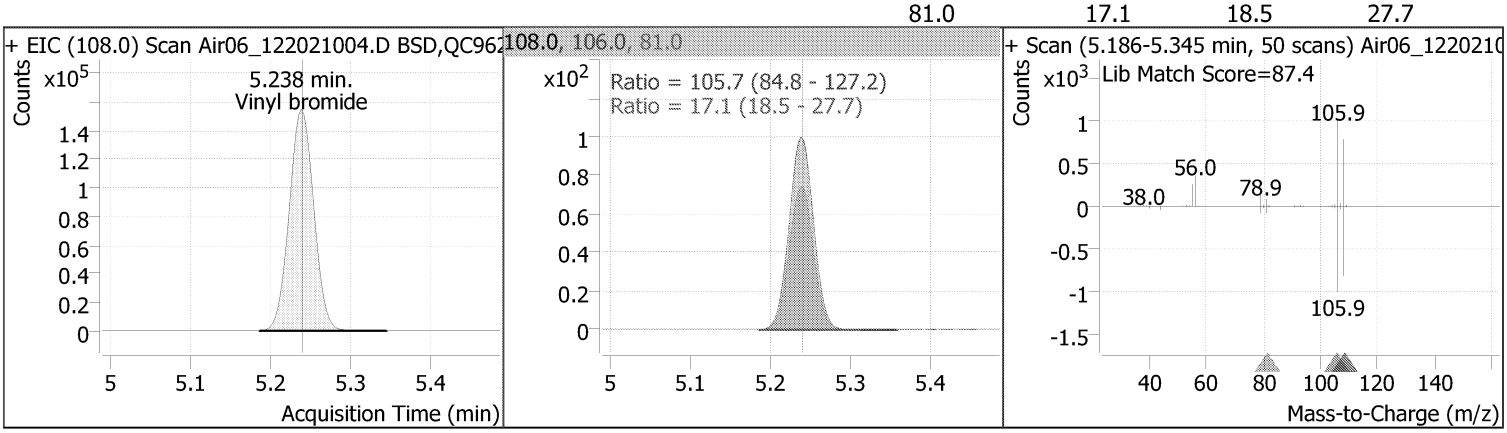
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	9.1436	4.91	0.00	185836	49.0	33.4	31.7	47.6
					66.0	30.8	24.3	36.5



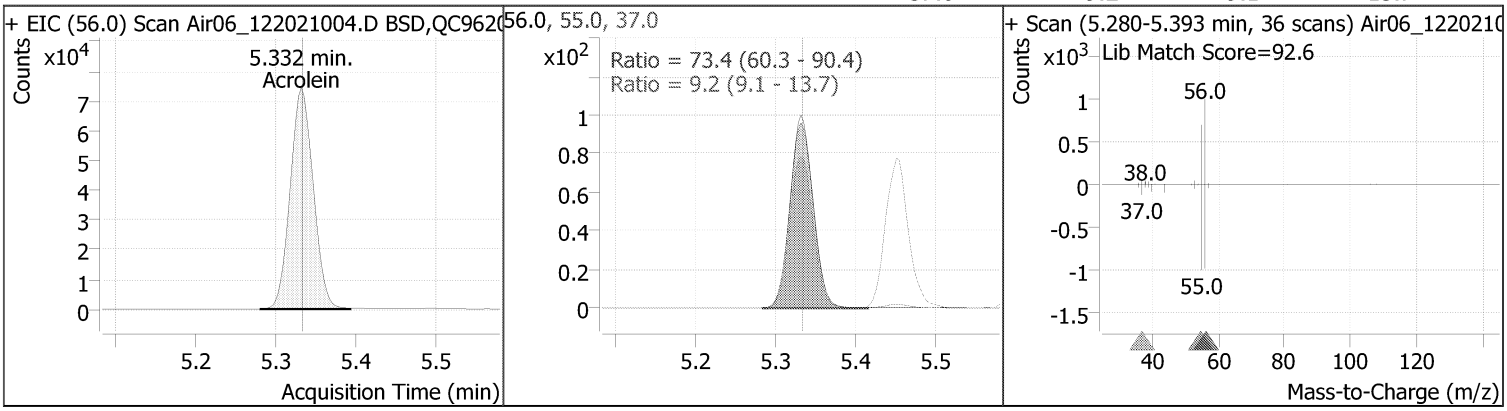
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	7.2488	5.00	0.00	197292	46.0	36.7	28.7	43.1
					43.0	20.2	16.9	25.3



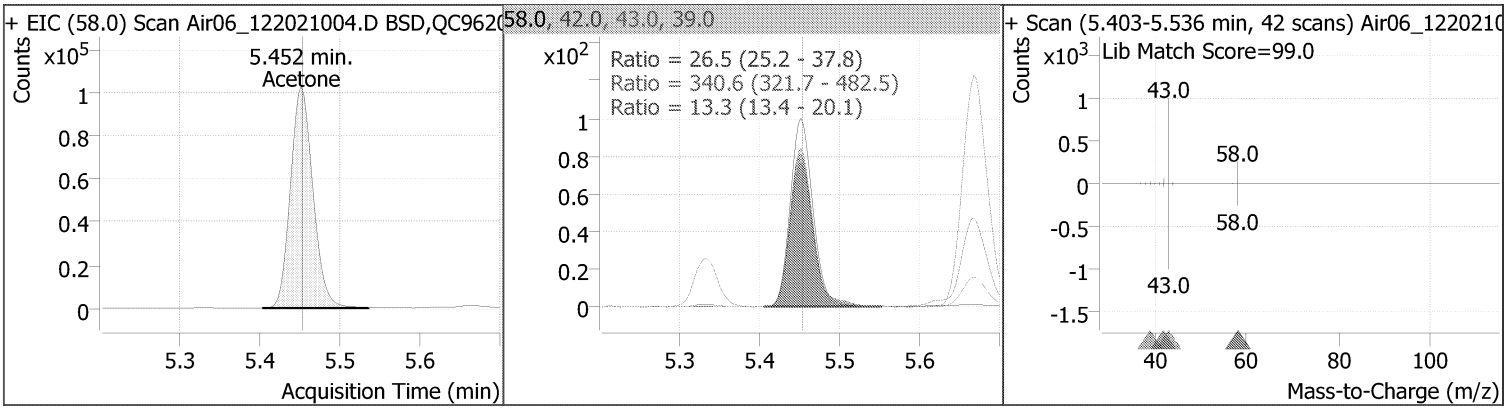
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl bromide	9.6573	5.24	0.00	331604	106.0	105.7	84.8	127.2
					81.0	17.1	18.5	27.7



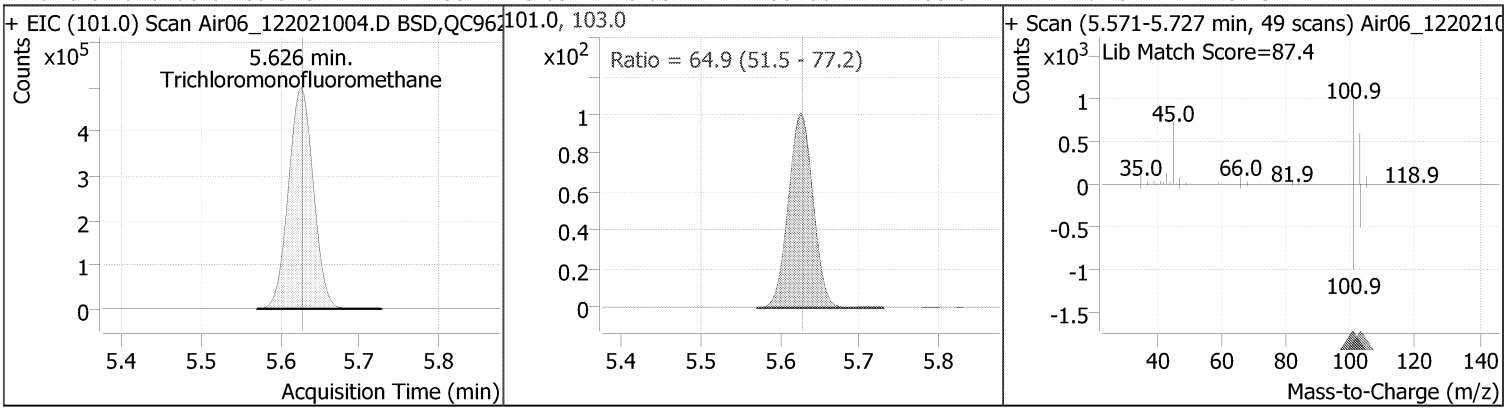
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	8.5118	5.33	0.00	149524	55.0	73.4	60.3	90.4
					37.0	9.2	9.1	13.7



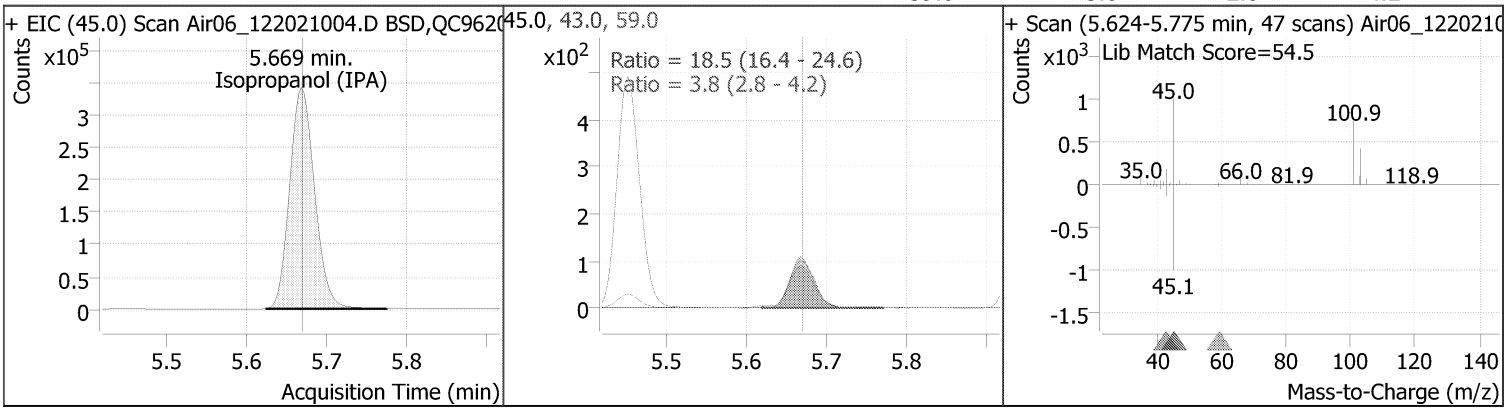
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	8.5712	5.45	0.00	201339	43.0	340.6	321.7	482.5
					42.0	26.5	25.2	37.8
					39.0	13.3	13.4	20.1



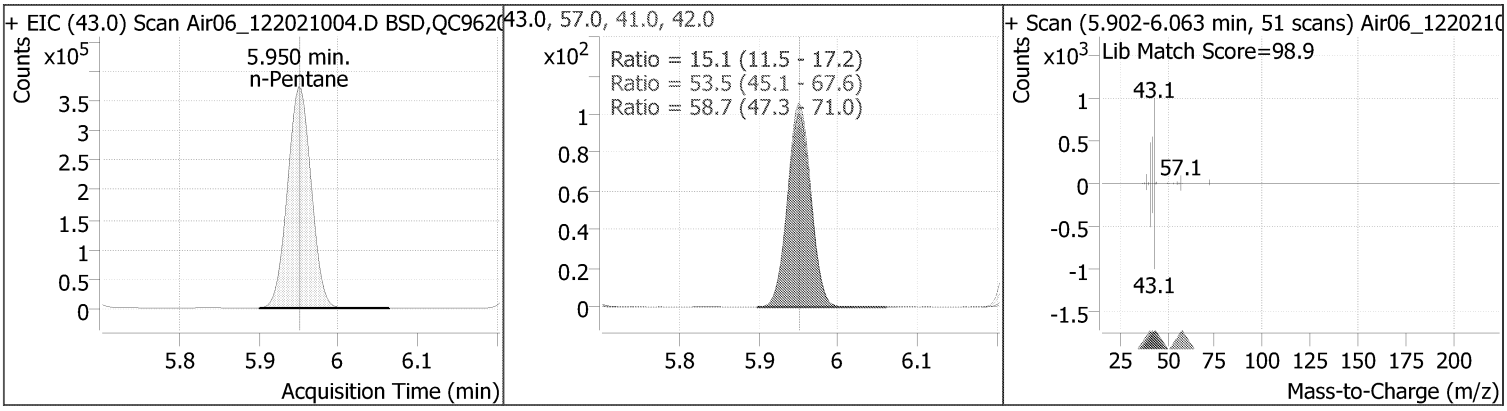
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	7.7255	5.63	0.00	1084801	103.0	64.9	51.5	77.2



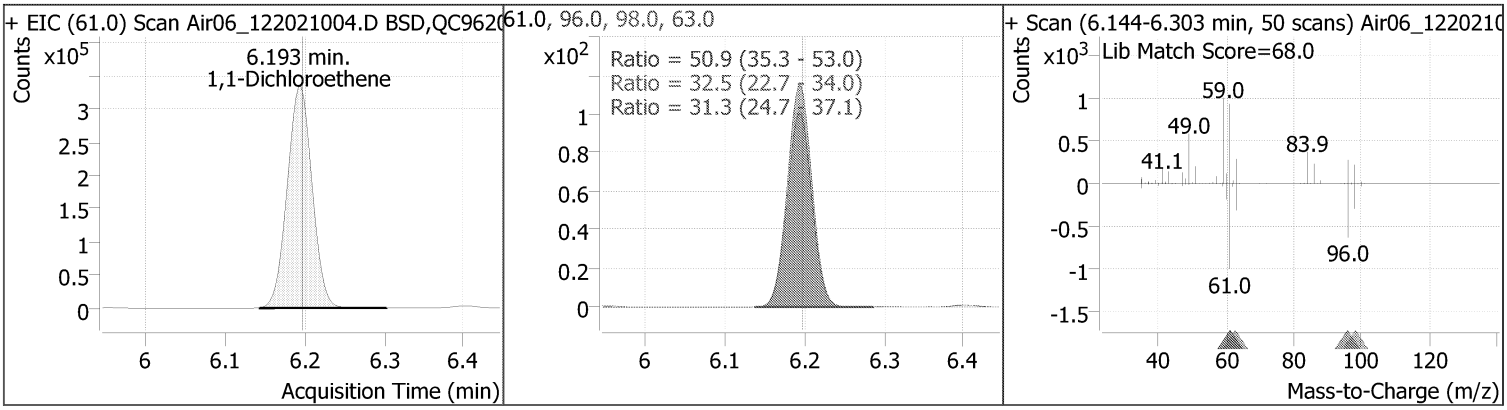
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	8.0938	5.67	0.00	743239	43.0	18.5	16.4	24.6
					59.0	3.8	2.8	4.2



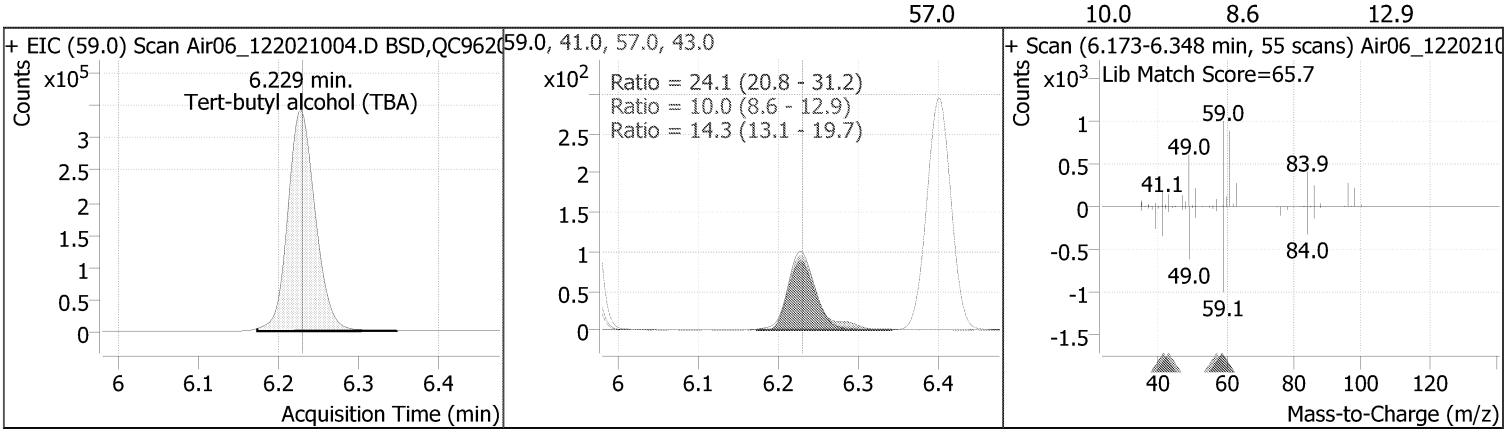
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	8.6269	5.95	0.00	777003	42.0	58.7	47.3	71.0
					41.0	53.5	45.1	67.6
					57.0	15.1	11.5	17.2



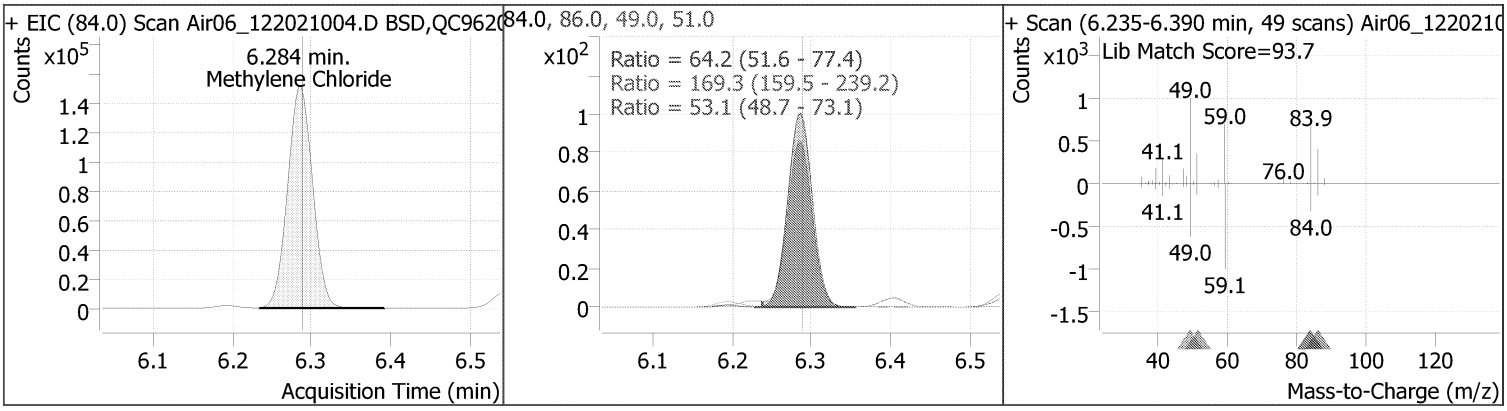
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	8.4308	6.19	0.00	727472	96.0	50.9	35.3	53.0
					63.0	31.3	24.7	37.1
					98.0	32.5	22.7	34.0



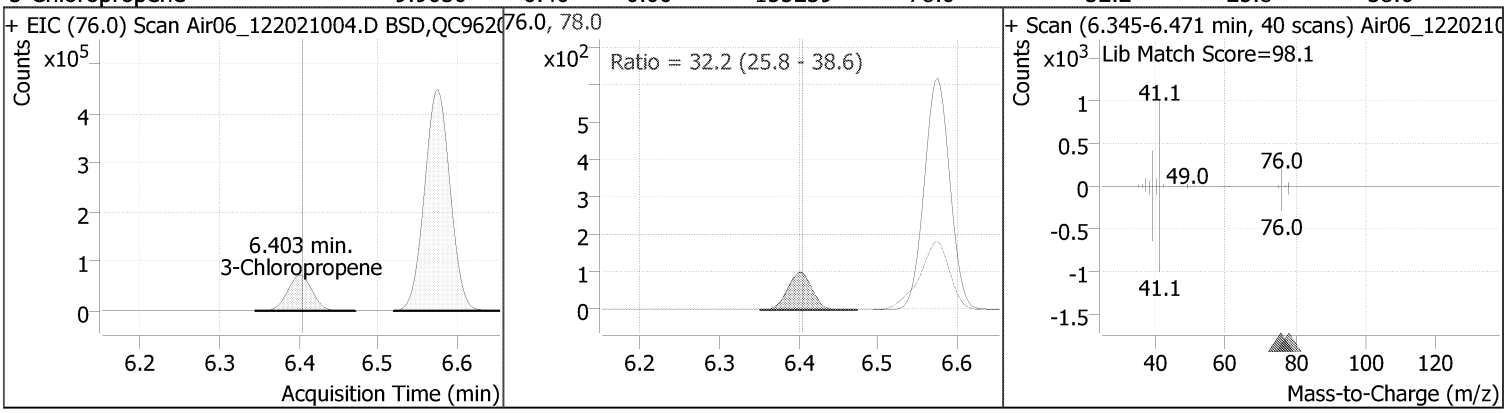
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	8.5427	6.23	0.00	827961	41.0	24.1	20.8	31.2
					43.0	14.3	13.1	19.7
					57.0	10.0	8.6	12.9



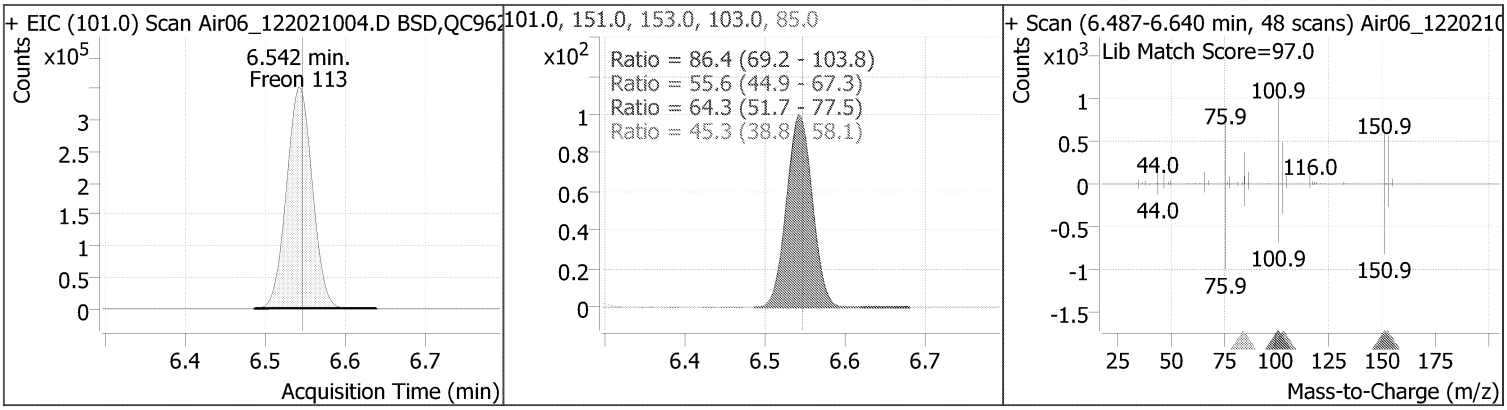
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	8.8432	6.28	0.00	329352	49.0	169.3	159.5	239.2
					86.0	64.2	51.6	77.4
					51.0	53.1	48.7	73.1



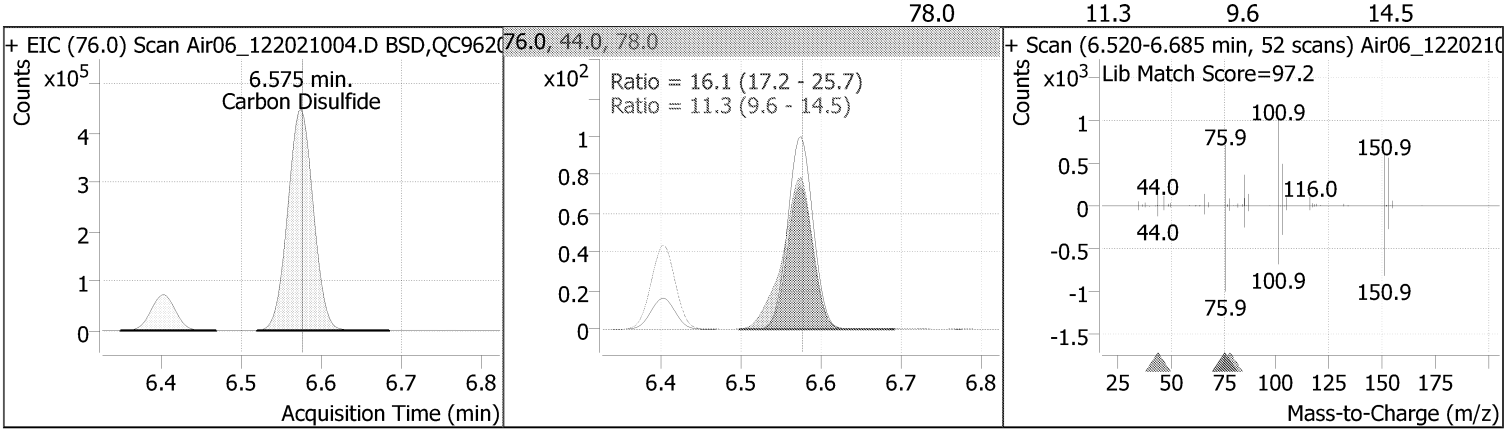
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	9.9030	6.40	0.00	155239	78.0	32.2	25.8	38.6



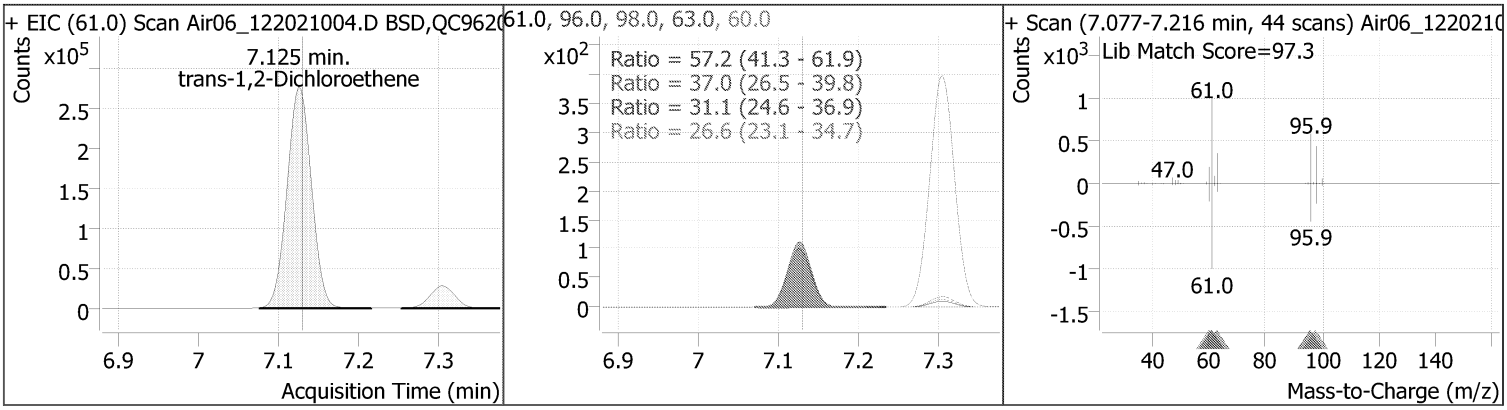
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	8.9263	6.54	0.00	793142	151.0	86.4	69.2	103.8
					103.0	64.3	51.7	77.5
					153.0	55.6	44.9	67.3
					85.0	45.3	38.8	58.1



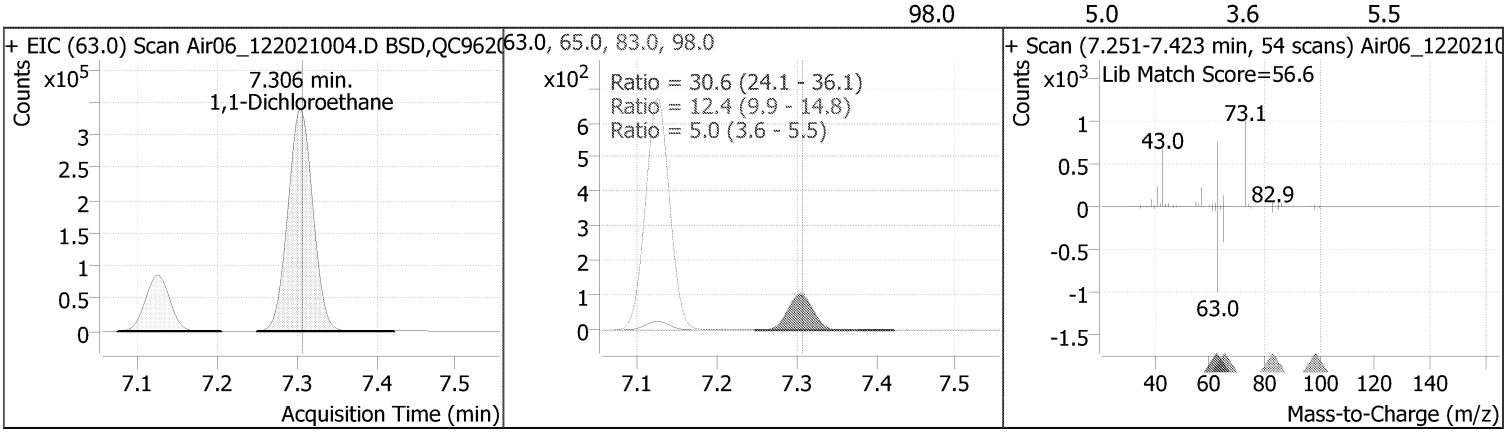
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	9.6614	6.57	0.00	1001333	44.0	16.1	17.2	25.7
					78.0	11.3	9.6	14.5



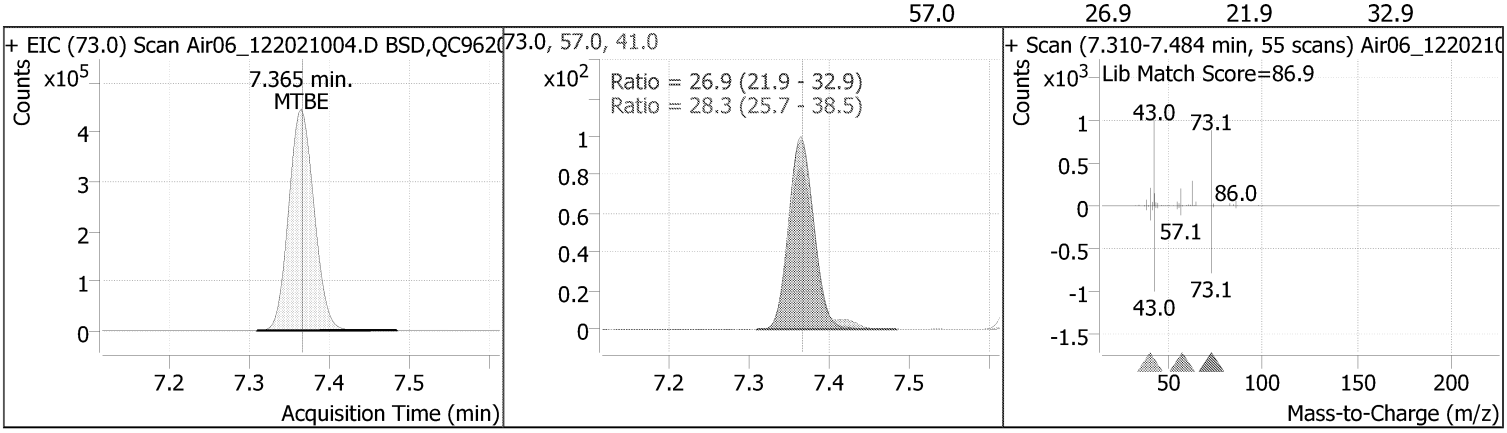
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	8.7562	7.13	0.00	589070	96.0	57.2	41.3	61.9
					98.0	37.0	26.5	39.8
					63.0	31.1	24.6	36.9
					60.0	26.6	23.1	34.7



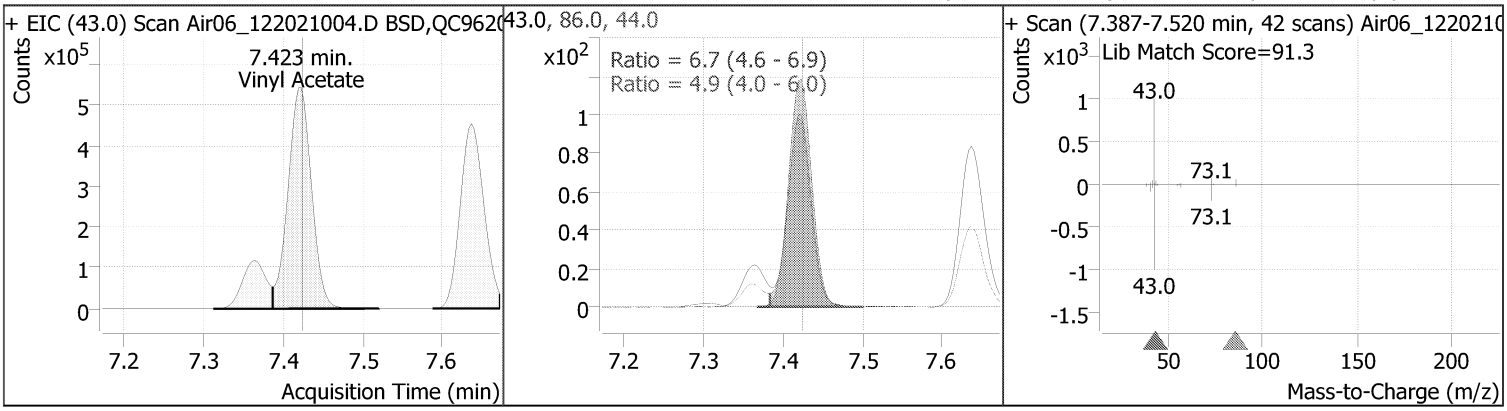
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	8.7910	7.31	0.00	740817	65.0	30.6	24.1	36.1
					83.0	12.4	9.9	14.8
					98.0	5.0	3.6	5.5



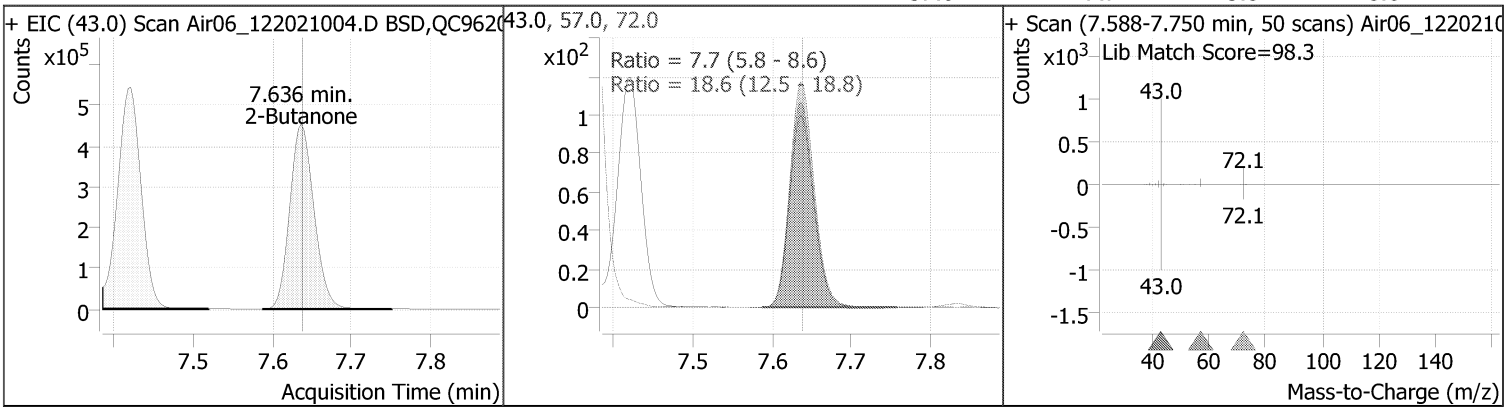
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	8.6917	7.36	0.00	987750	41.0	28.3	25.7	38.5
					57.0	26.9	21.9	32.9



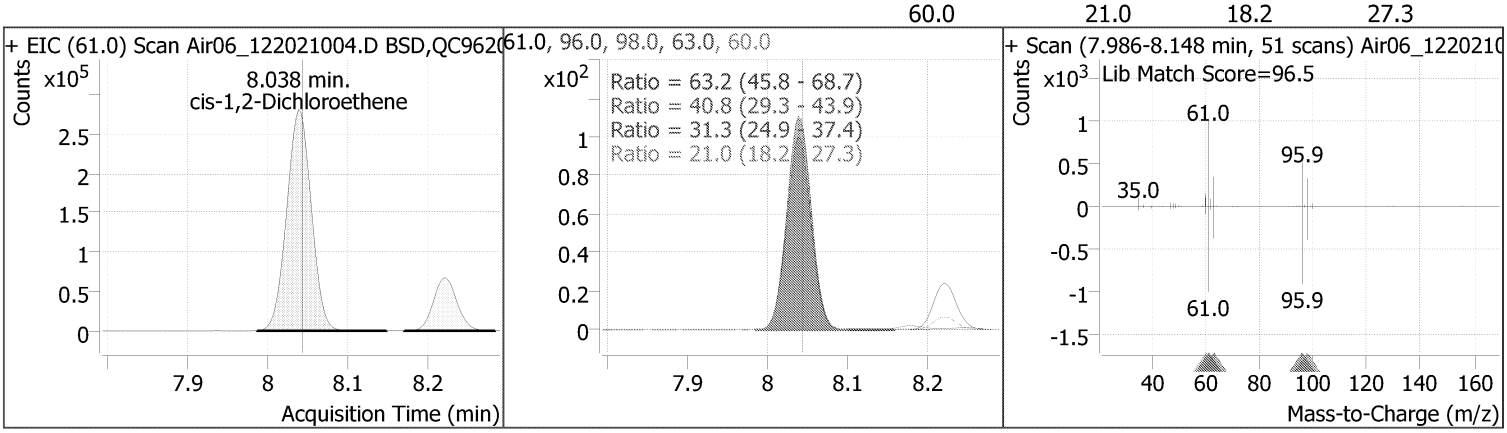
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	7.8215	7.42	0.00	1111226	86.0	6.7	4.6	6.9
					44.0	4.9	4.0	6.0



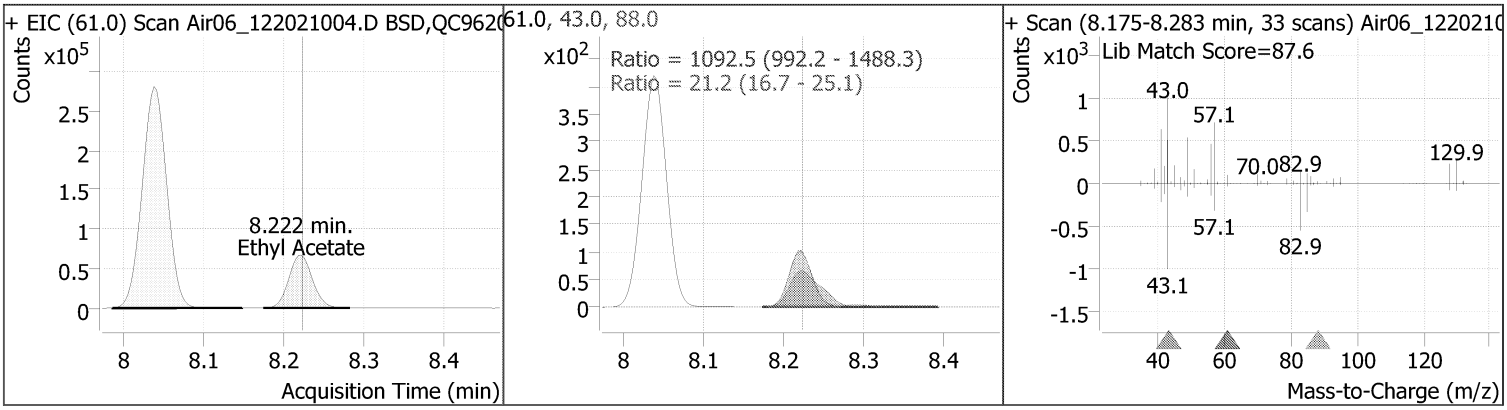
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	8.5301	7.64	0.00	956908	72.0	18.6	12.5	18.8
					57.0	7.7	5.8	8.6



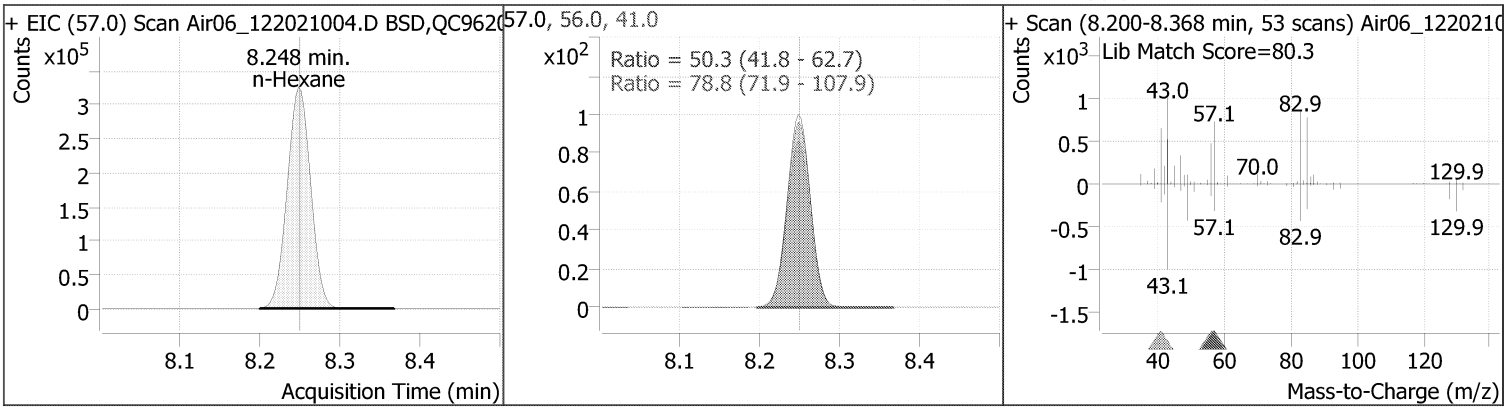
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	8.7364	8.04	0.00	602922	96.0	63.2	45.8	68.7
					98.0	40.8	29.3	43.9
					63.0	31.3	24.9	37.4
					60.0	21.0	18.2	27.3



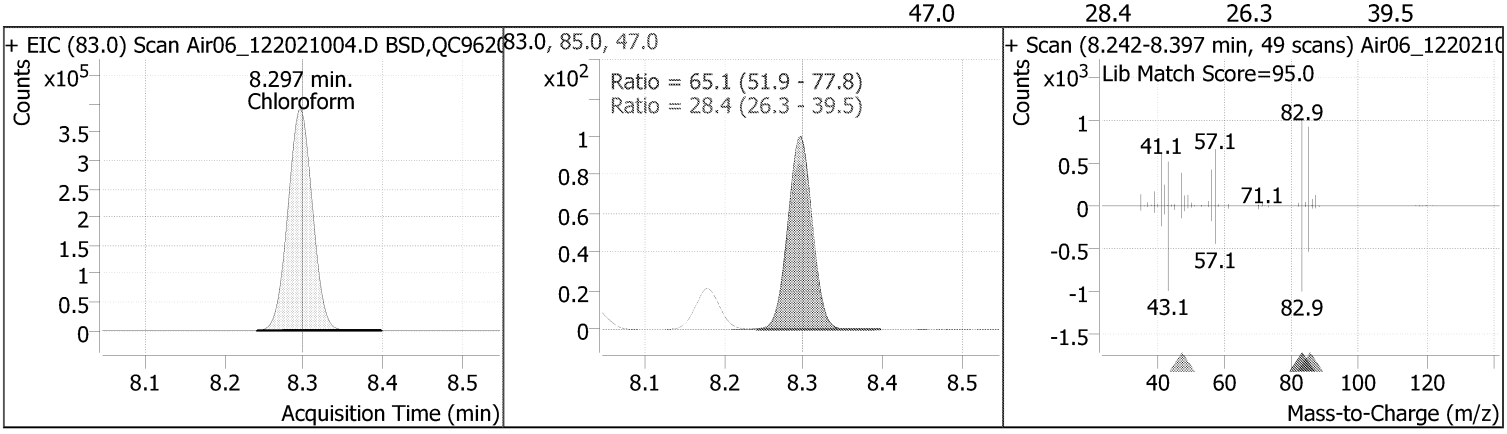
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	8.7967	8.22	0.00	137246	43.0	1092.5	992.2	1488.3
					88.0	21.2	16.7	25.1



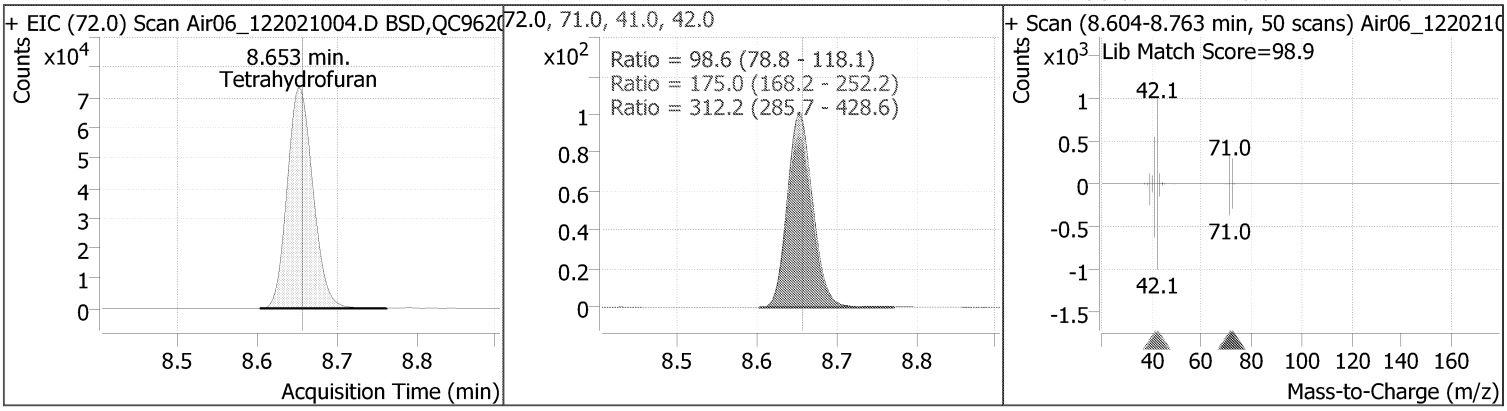
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	9.1940	8.25	0.00	667870	41.0	78.8	71.9	107.9
					56.0	50.3	41.8	62.7



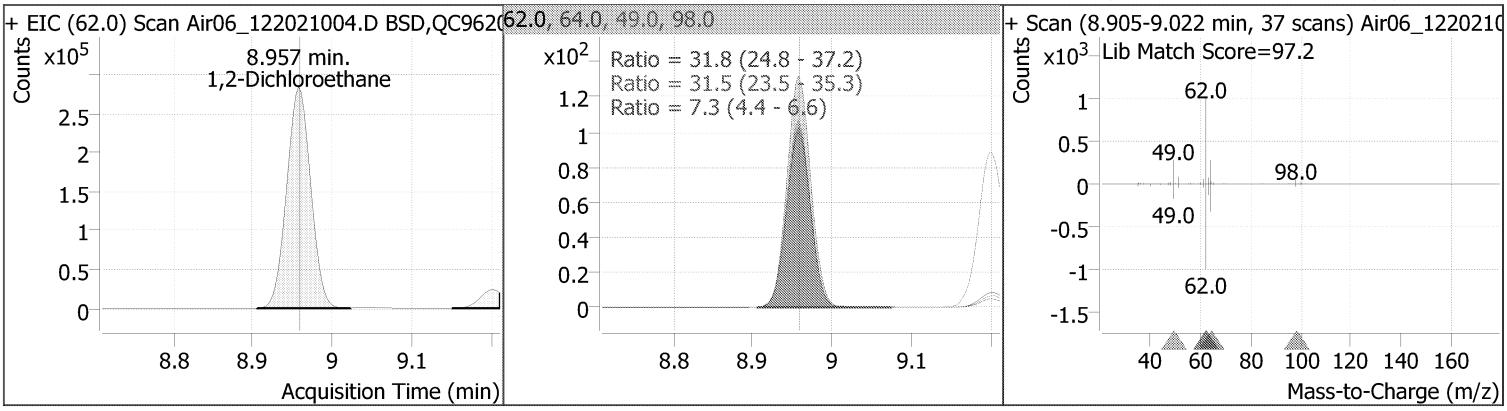
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	8.4329	8.30	0.00	834855	85.0	65.1	51.9	77.8
					47.0	28.4	26.3	39.5



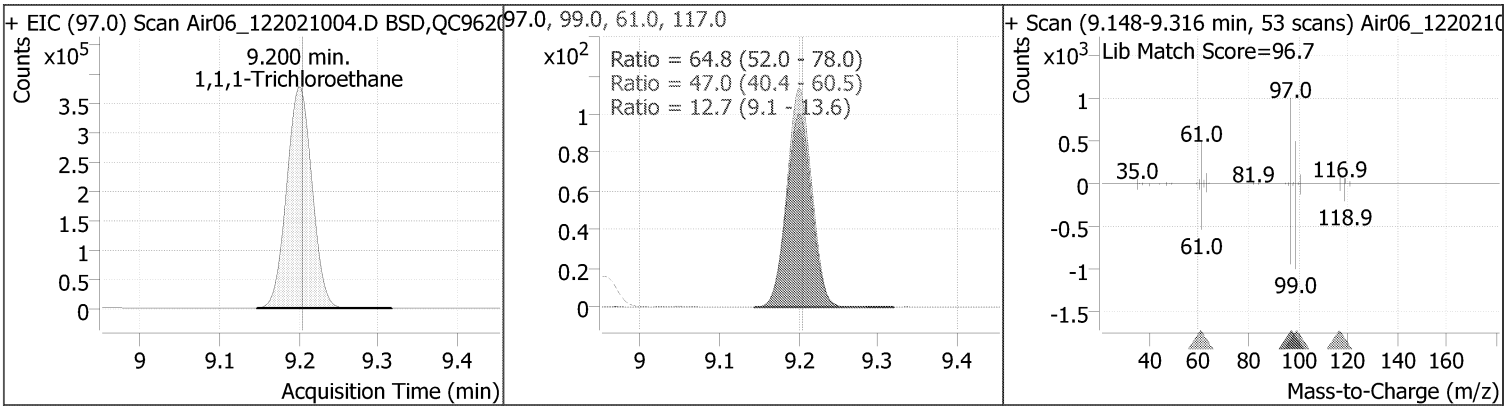
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	10.1892	8.65	0.00	165254	42.0	312.2	285.7	428.6
					41.0	175.0	168.2	252.2
					71.0	98.6	78.8	118.1



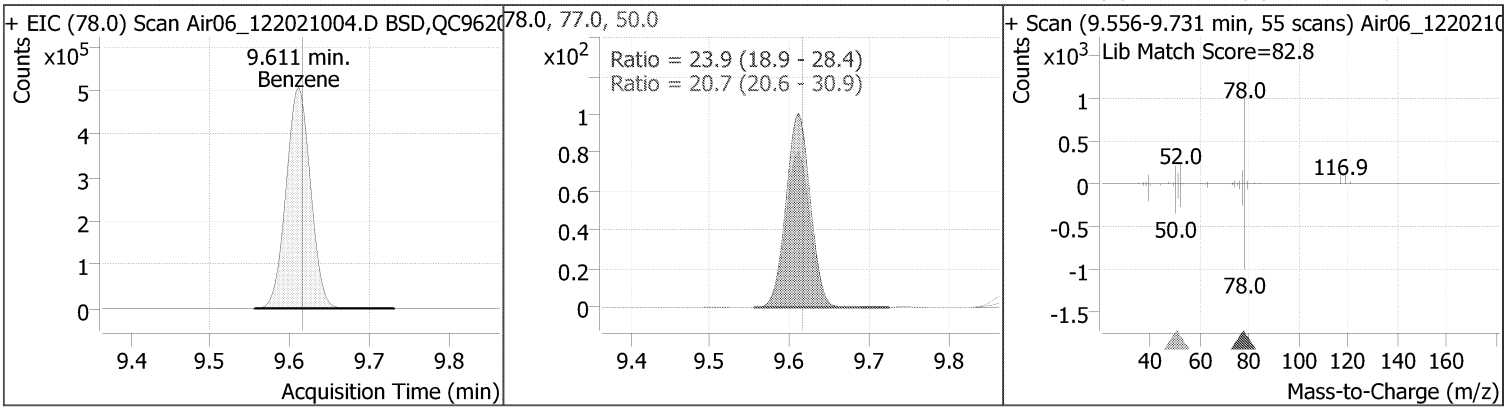
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	7.4505	8.96	0.00	592803	64.0	31.8	24.8	37.2
					49.0	31.5	23.5	35.3
					98.0	7.3	4.4	6.6



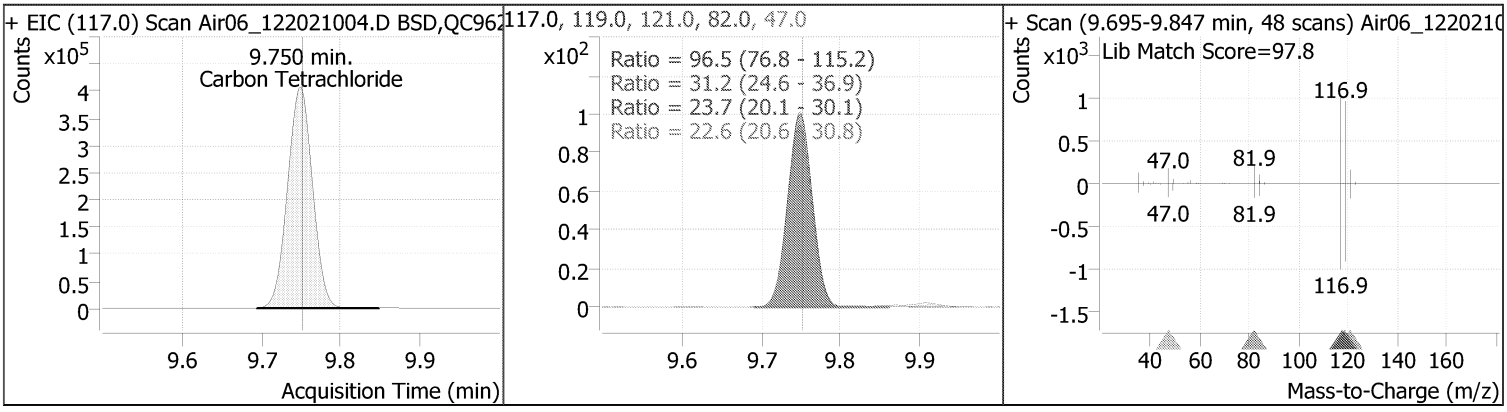
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	8.0260	9.20	0.00	834468	99.0	64.8	52.0	78.0
					61.0	47.0	40.4	60.5
					117.0	12.7	9.1	13.6



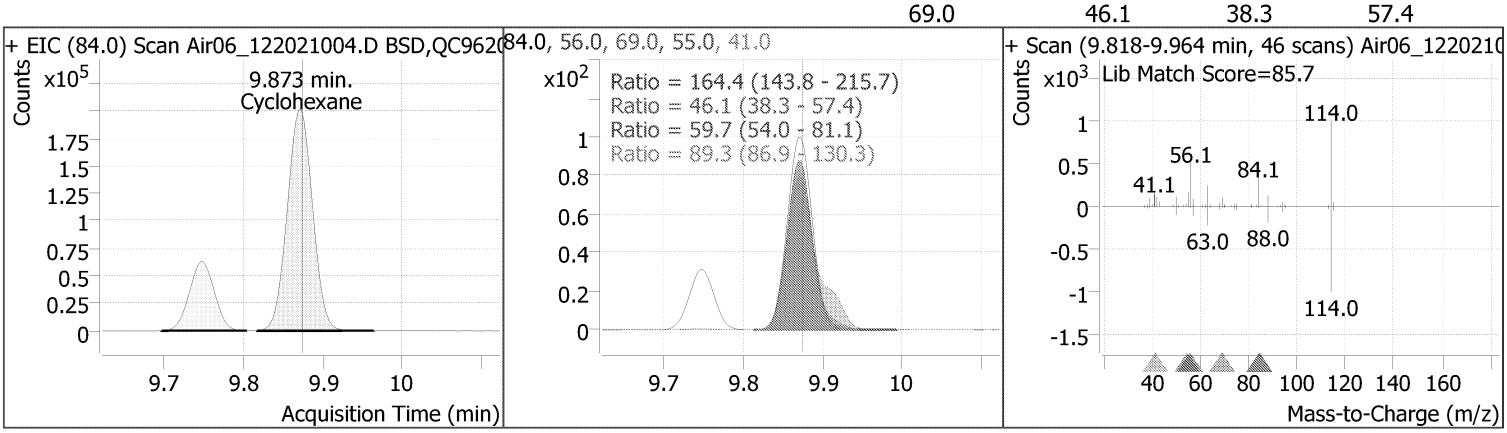
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	9.8008	9.61	0.00	1078882	50.0	20.7	20.6	30.9
					77.0	23.9	18.9	28.4



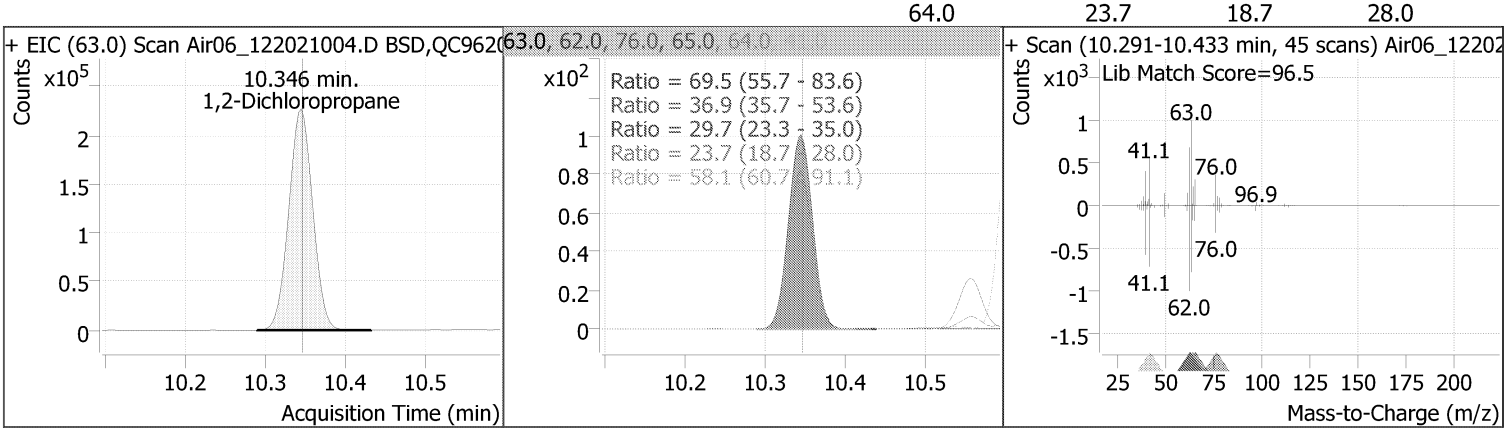
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	7.9358	9.75	0.00	889295	119.0	96.5	76.8	115.2
					121.0	31.2	24.6	36.9
					47.0	22.6	20.6	30.8
					82.0	23.7	20.1	30.1



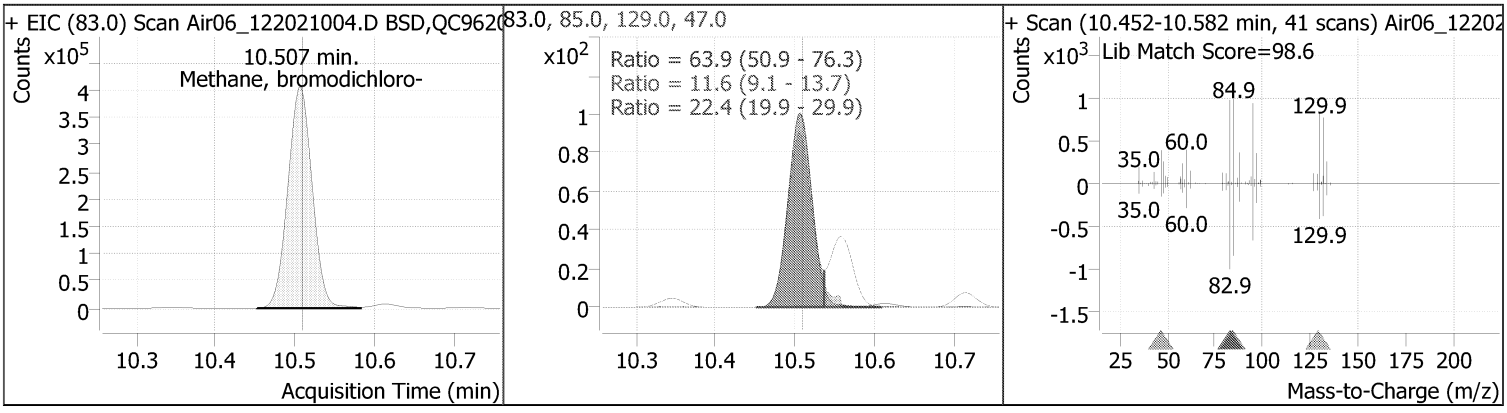
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	9.7426	9.87	0.00	443783	56.0	164.4	143.8	215.7
					41.0	89.3	86.9	130.3
					55.0	59.7	54.0	81.1
					69.0	46.1	38.3	57.4



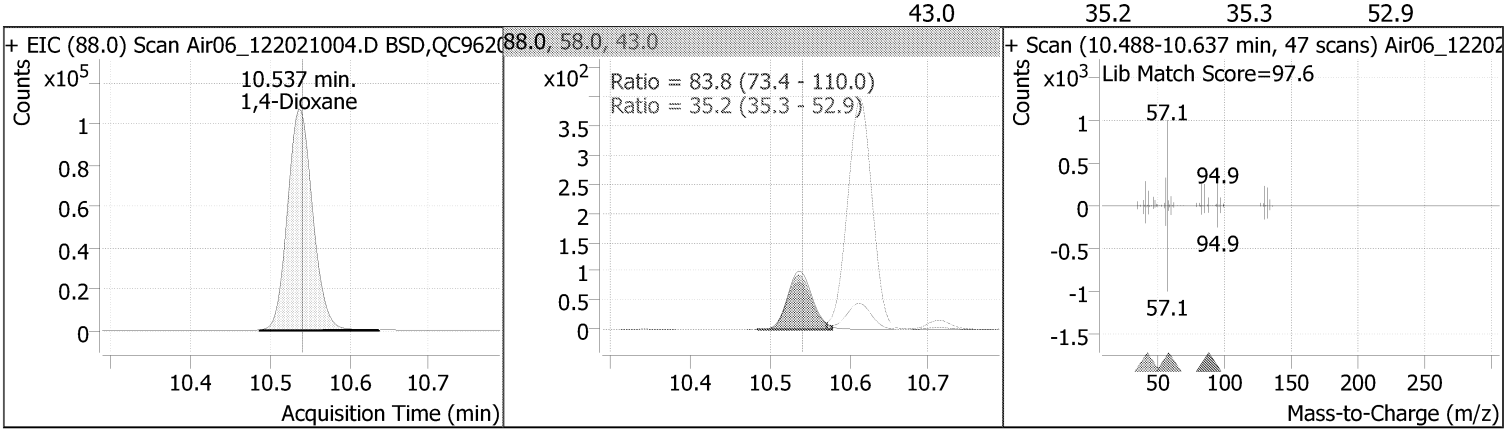
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	9.5149	10.35	0.00	474048	41.0	58.1	60.7	91.1
					62.0	69.5	55.7	83.6
					76.0	36.9	35.7	53.6
					65.0	29.7	23.3	35.0
					64.0	23.7	18.7	28.0



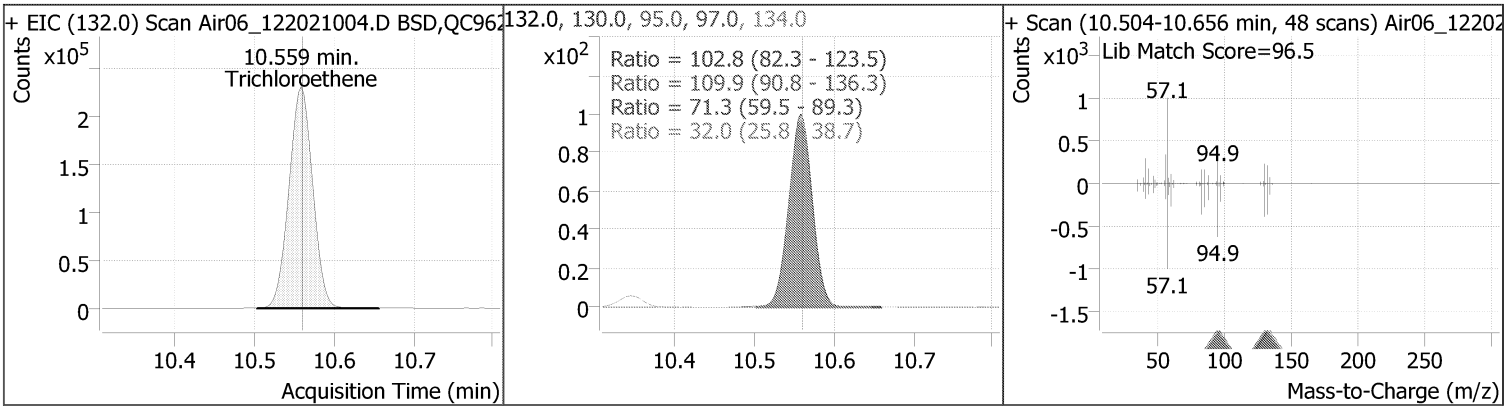
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	8.4762	10.51	0.00	861537	85.0	63.9	50.9	76.3
					47.0	22.4	19.9	29.9
					129.0	11.6	9.1	13.7



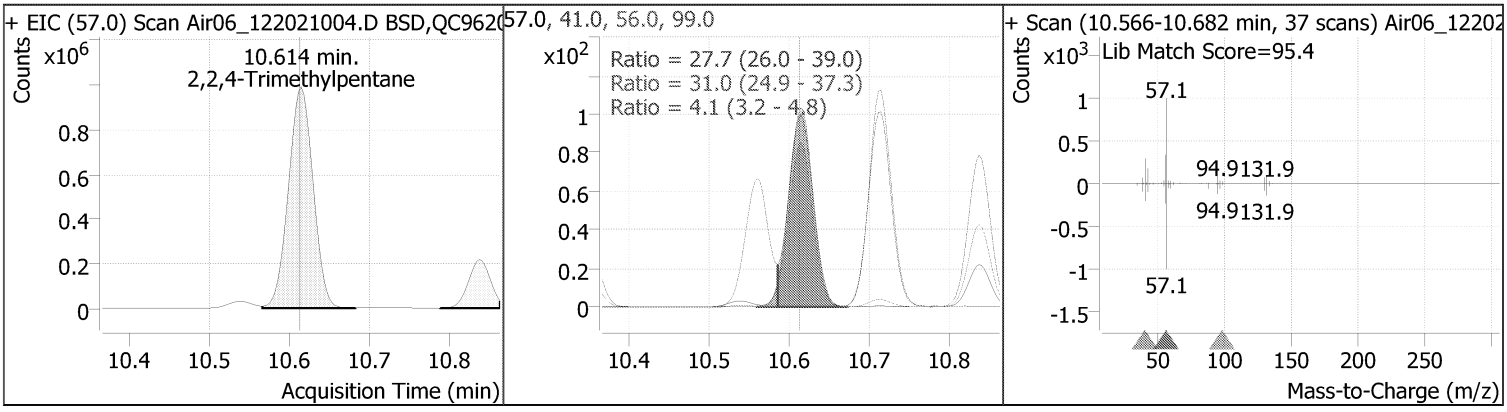
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	9.8719	10.54	0.00	235686	58.0	83.8	73.4	110.0
					43.0	35.2	35.3	52.9



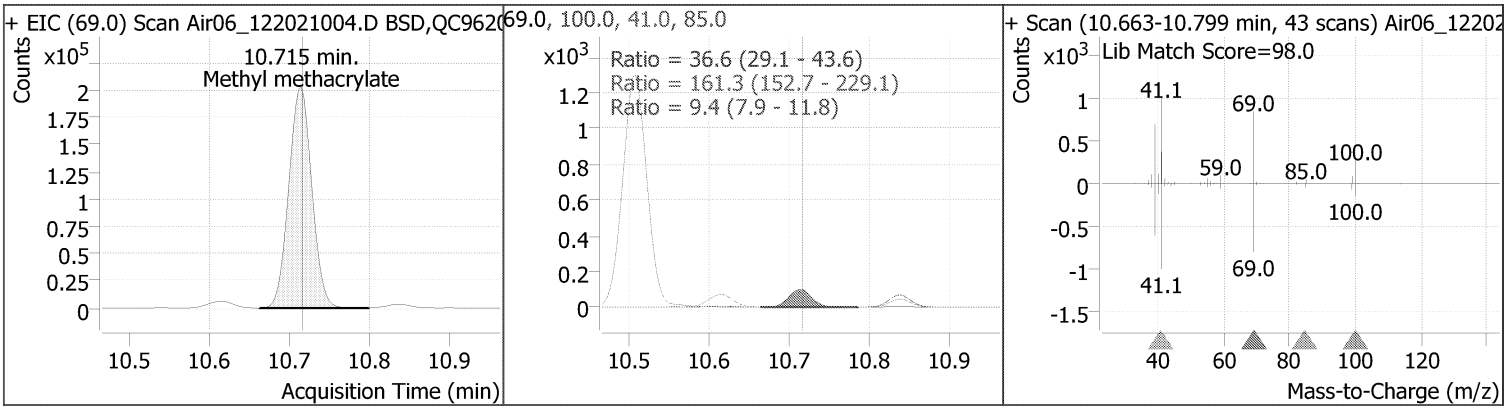
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	9.5500	10.56	0.00	476508	95.0	109.9	90.8	136.3
					130.0	102.8	82.3	123.5
					97.0	71.3	59.5	89.3
					134.0	32.0	25.8	38.7



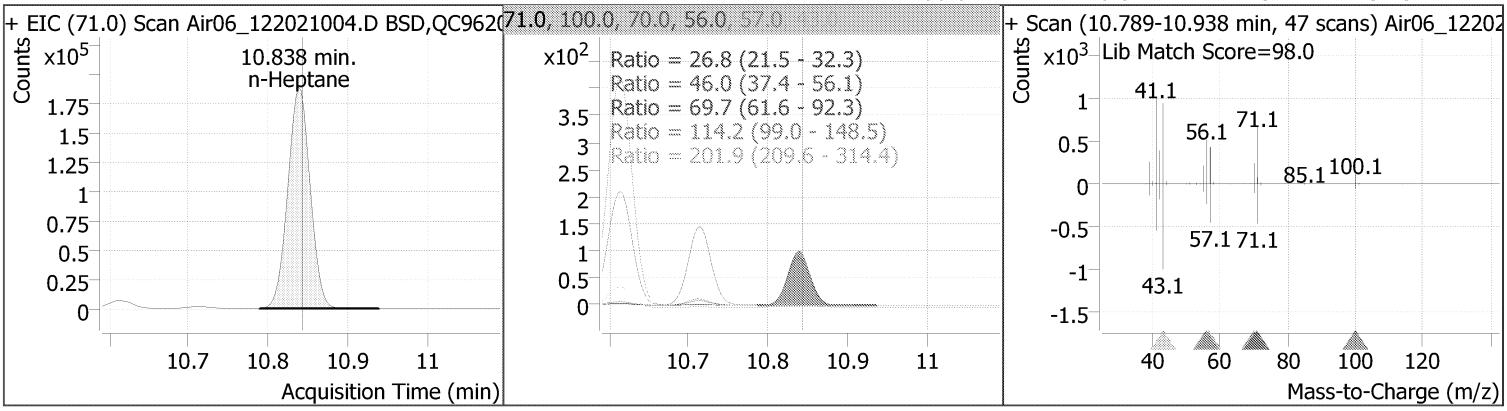
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	9.0892	10.61	0.00	2131631	41.0	27.7	26.0	39.0
					56.0	31.0	24.9	37.3
					99.0	4.1	3.2	4.8



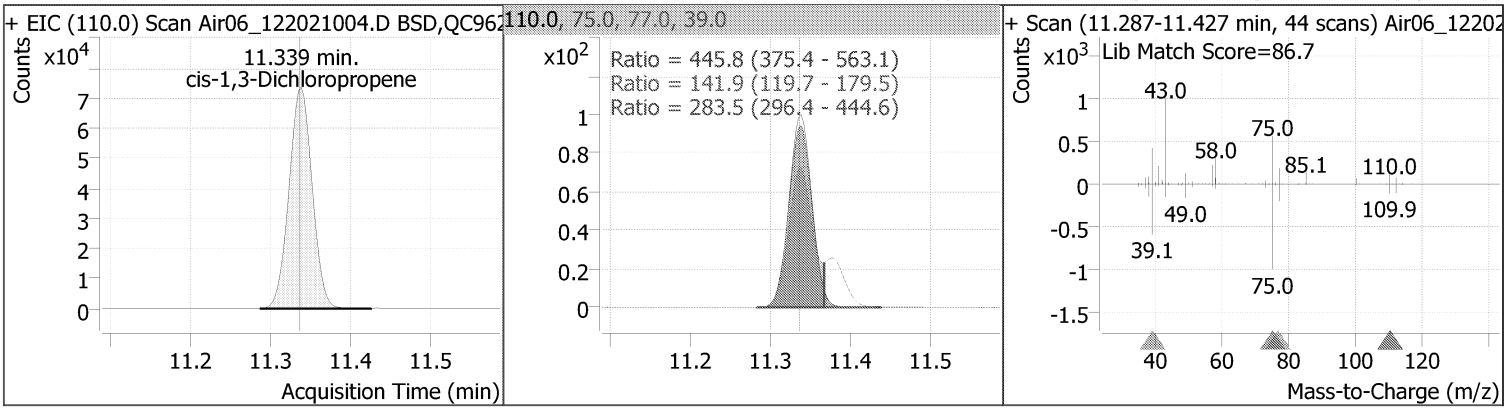
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	10.0764	10.71	0.00	406473	41.0	161.3	152.7	229.1
					100.0	36.6	29.1	43.6
					85.0	9.4	7.9	11.8



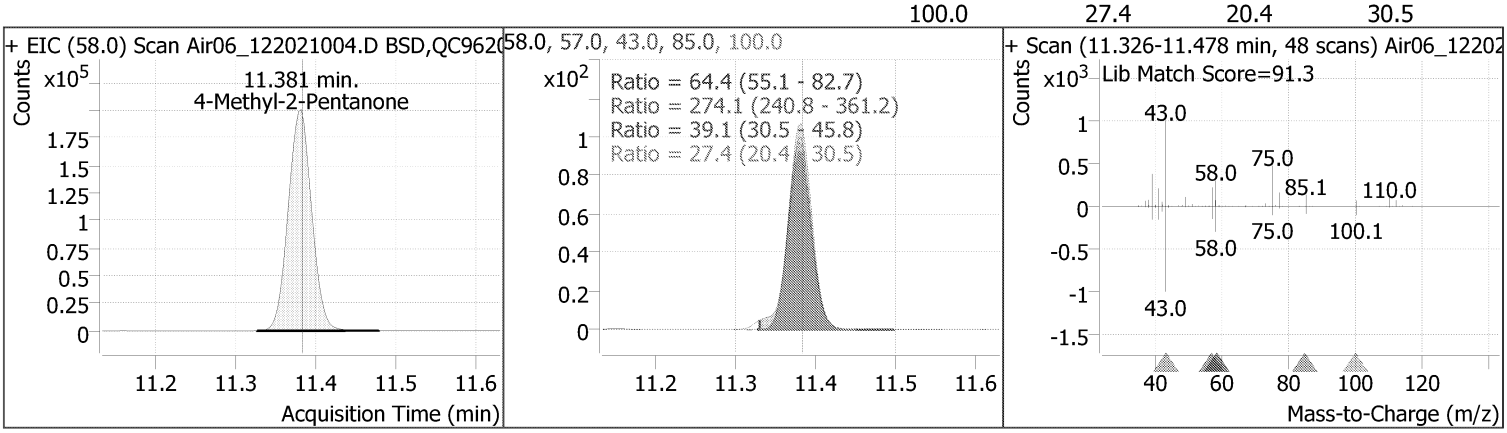
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	10.0740	10.84	0.00	367953	43.0	201.9	209.6	314.4
					57.0	114.2	99.0	148.5
					56.0	69.7	61.6	92.3
					70.0	46.0	37.4	56.1
					100.0	26.8	21.5	32.3



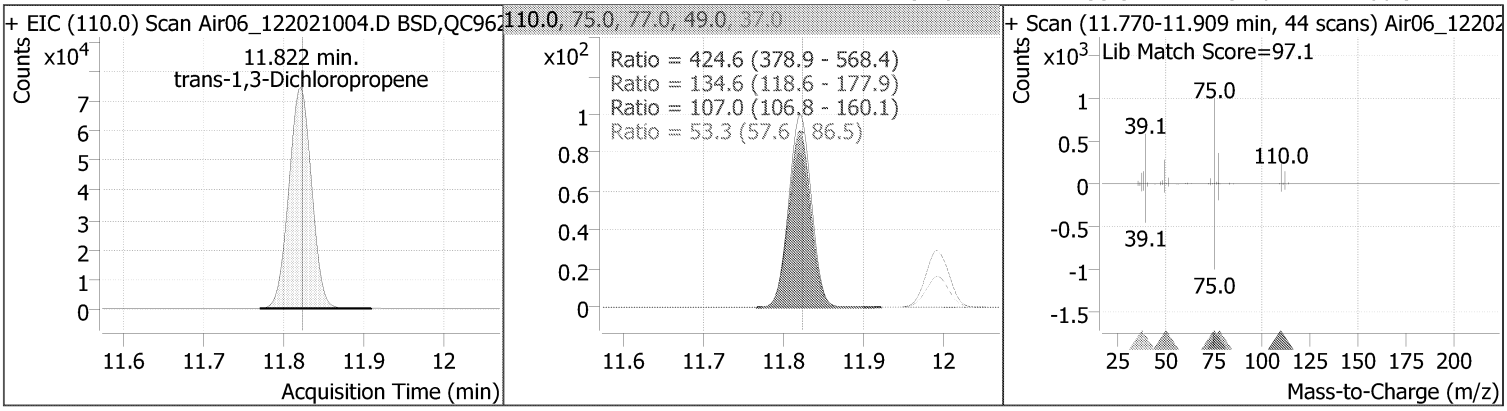
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	10.1428	11.34	0.00	148416	75.0	445.8	375.4	563.1
					39.0	283.5	296.4	444.6
					77.0	141.9	119.7	179.5



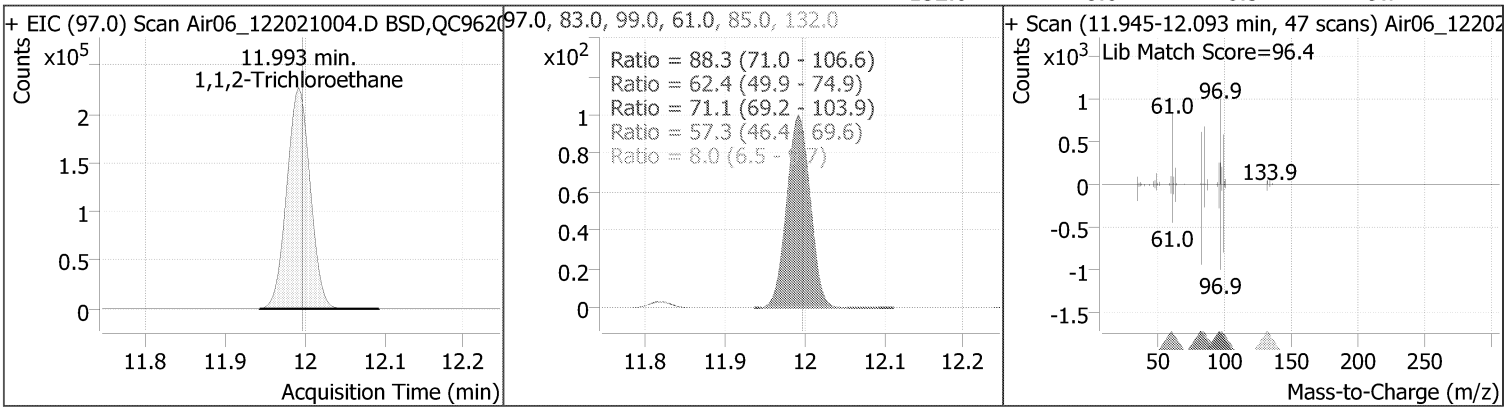
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	9.5068	11.38	0.00	411023	43.0	274.1	240.8	361.2
					57.0	64.4	55.1	82.7
					85.0	39.1	30.5	45.8
					100.0	27.4	20.4	30.5



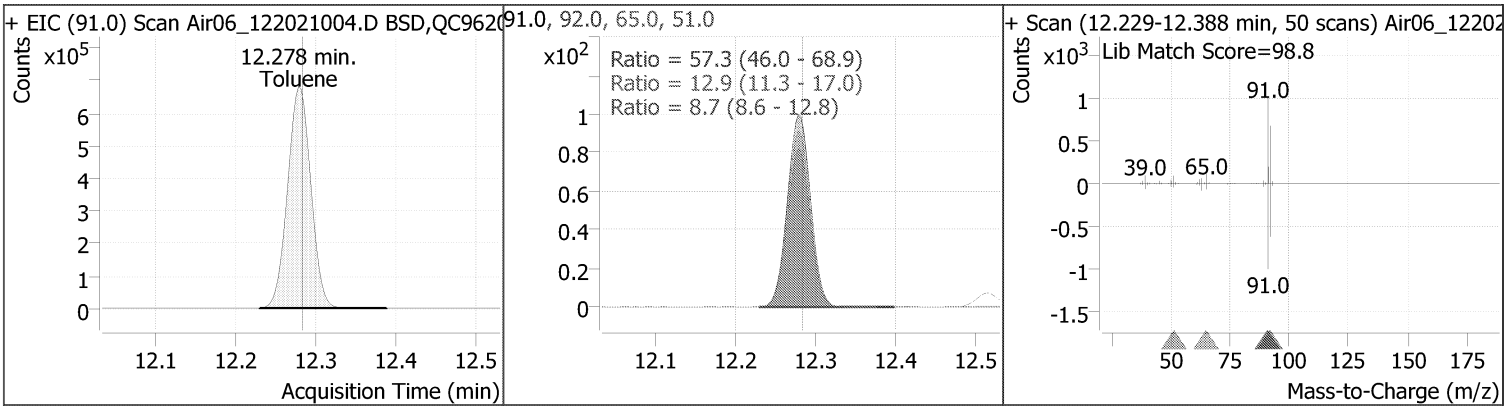
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	9.9041	11.82	0.00	148945	75.0	424.6	378.9	568.4
					77.0	134.6	118.6	177.9
					49.0	107.0	106.8	160.1
					37.0	53.3	57.6	86.5



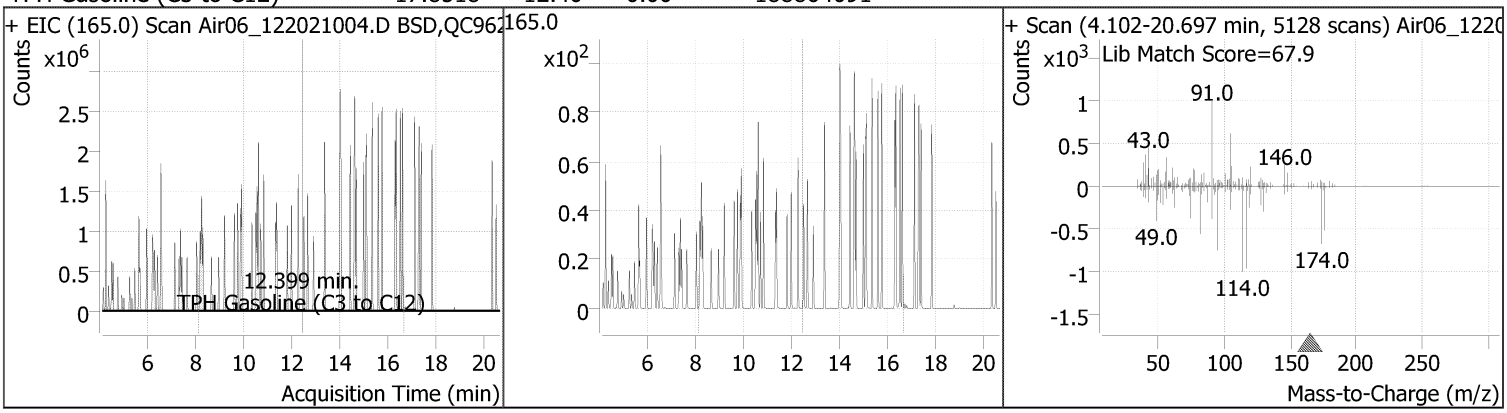
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	9.5535	11.99	0.00	464382	83.0	88.3	71.0	106.6
					61.0	71.1	69.2	103.9
					99.0	62.4	49.9	74.9
					85.0	57.3	46.4	69.6
					132.0	8.0	6.5	9.7



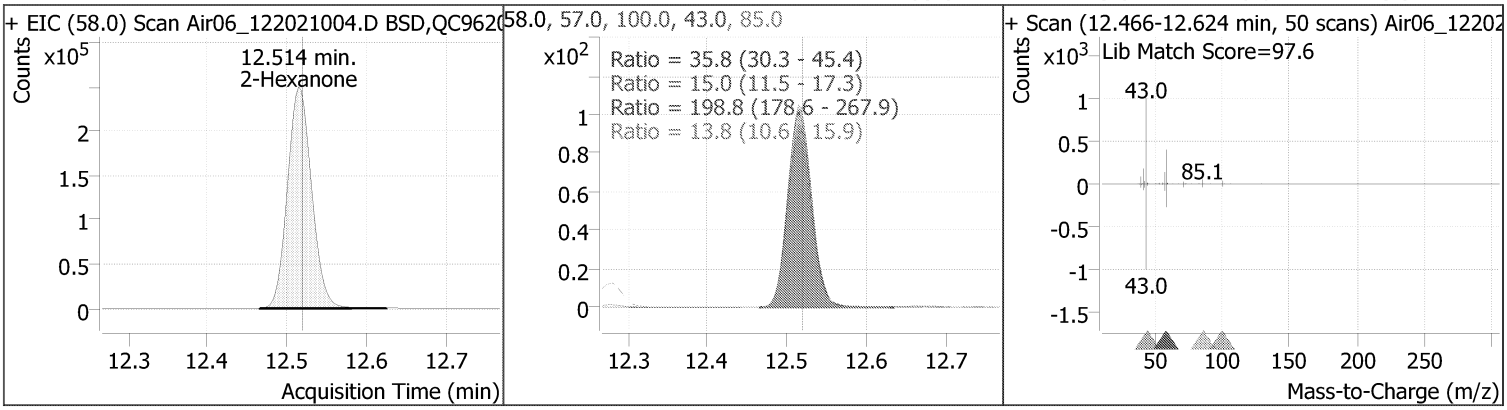
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	9.8629	12.28	0.00	1377193	92.0	57.3	46.0	68.9
					65.0	12.9	11.3	17.0
					51.0	8.7	8.6	12.8



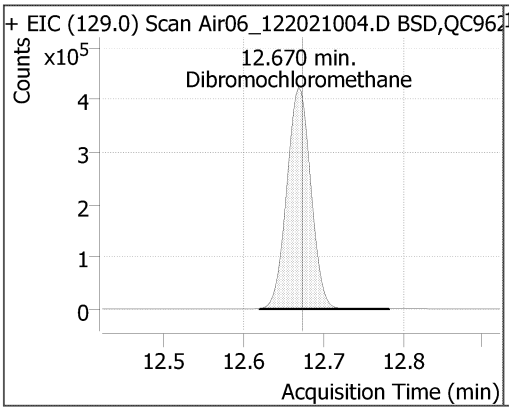
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	17.8518	12.40	0.00	188864091				

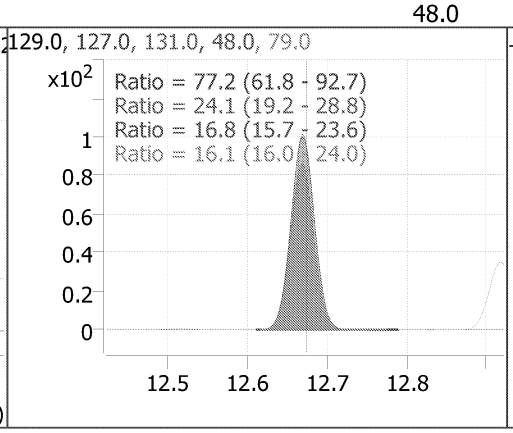


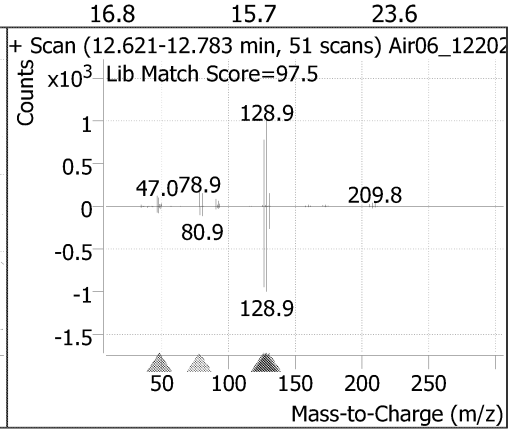
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	9.7580	12.51	0.00	527421	43.0	198.8	178.6	267.9
					57.0	35.8	30.3	45.4
					100.0	15.0	11.5	17.3
					85.0	13.8	10.6	15.9



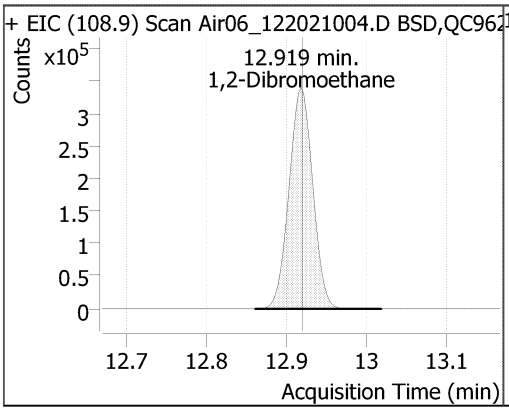
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	9.0452	12.67	0.00	889397	127.0	77.2	61.8	92.7
					131.0	24.1	19.2	28.8
					79.0	16.1	16.0	24.0
					48.0	16.8	15.7	23.6

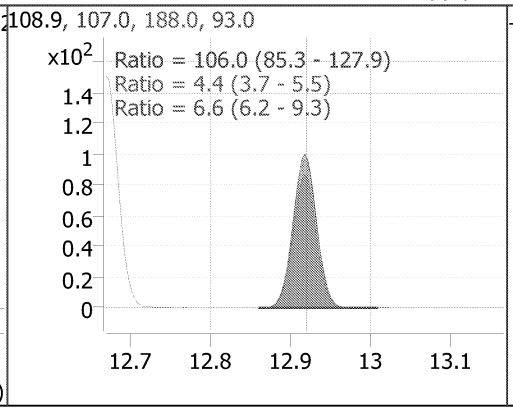


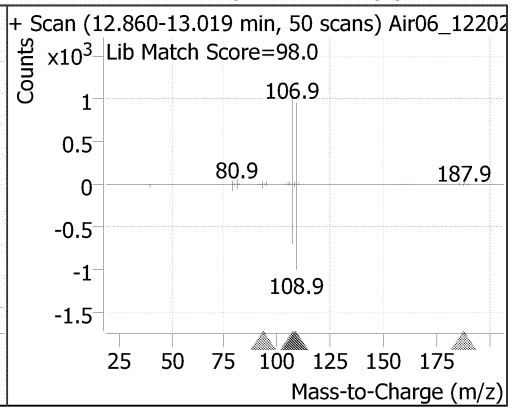




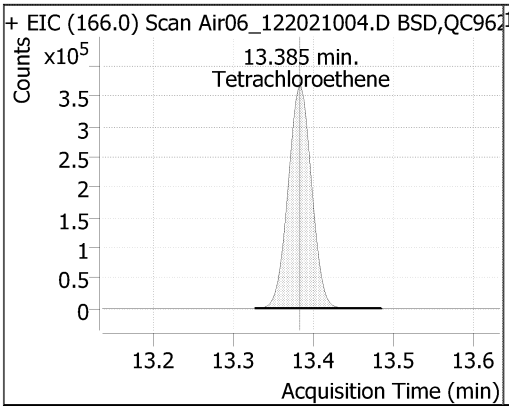
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	9.4293	12.92	0.00	703533	107.0	106.0	85.3	127.9
					93.0	6.6	6.2	9.3
					188.0	4.4	3.7	5.5

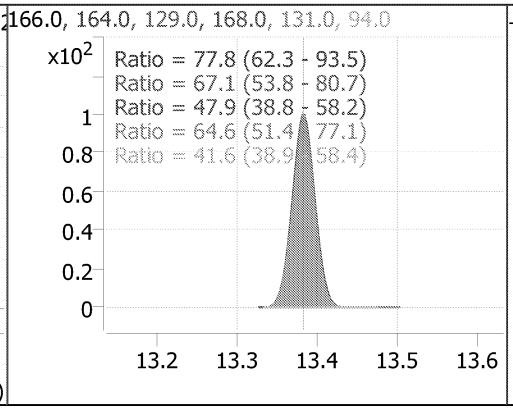


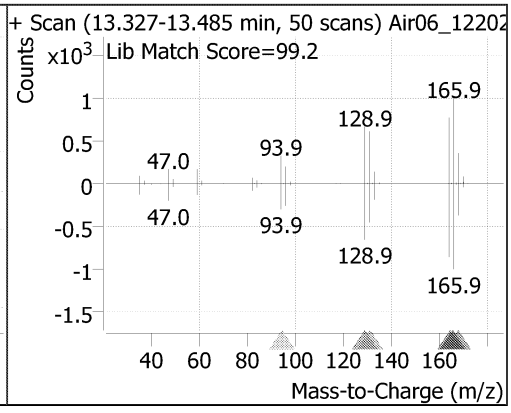




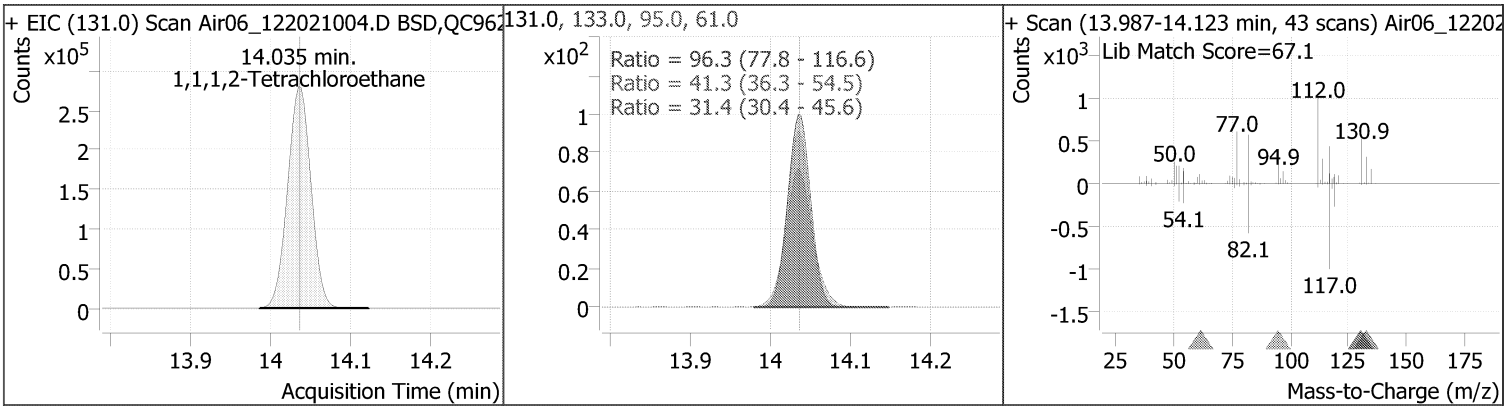
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	9.1937	13.38	0.00	753616	164.0	77.8	62.3	93.5
					129.0	67.1	53.8	80.7
					131.0	64.6	51.4	77.1
					94.0	41.6	38.9	58.4
					168.0	47.9	38.8	58.2



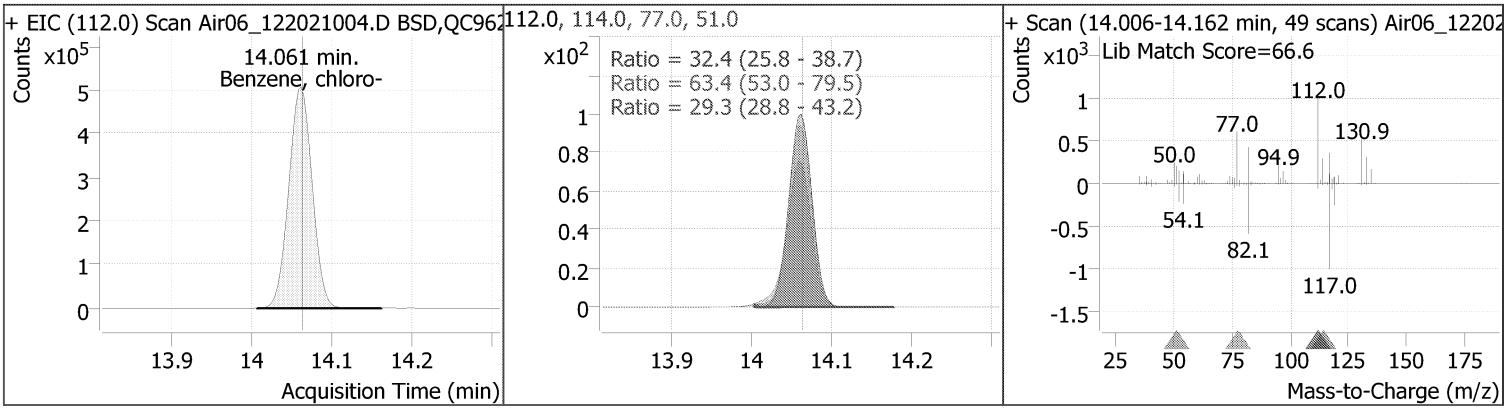




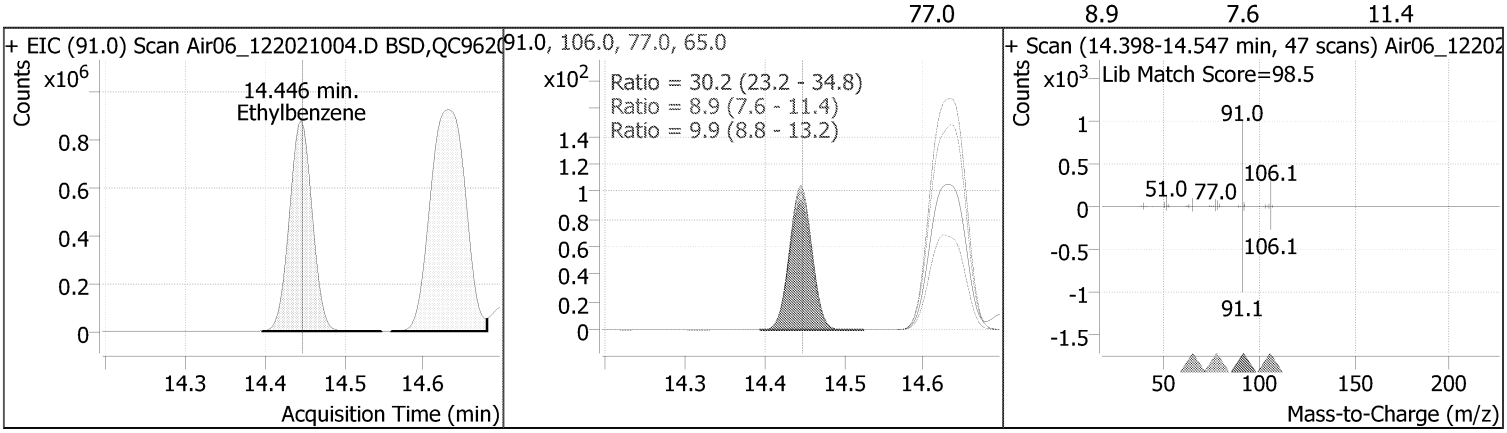
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	9.3502	14.04	0.00	573710	133.0	96.3	77.8	116.6
					95.0	41.3	36.3	54.5
					61.0	31.4	30.4	45.6



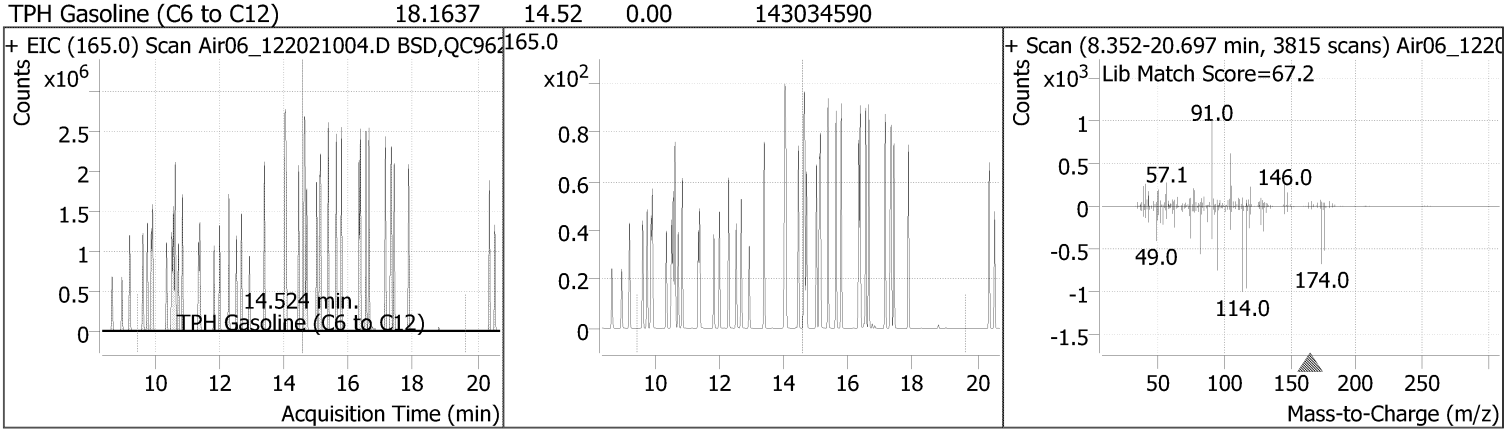
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	9.7521	14.06	0.00	1035808	77.0	63.4	53.0	79.5
					51.0	29.3	28.8	43.2
					114.0	32.4	25.8	38.7



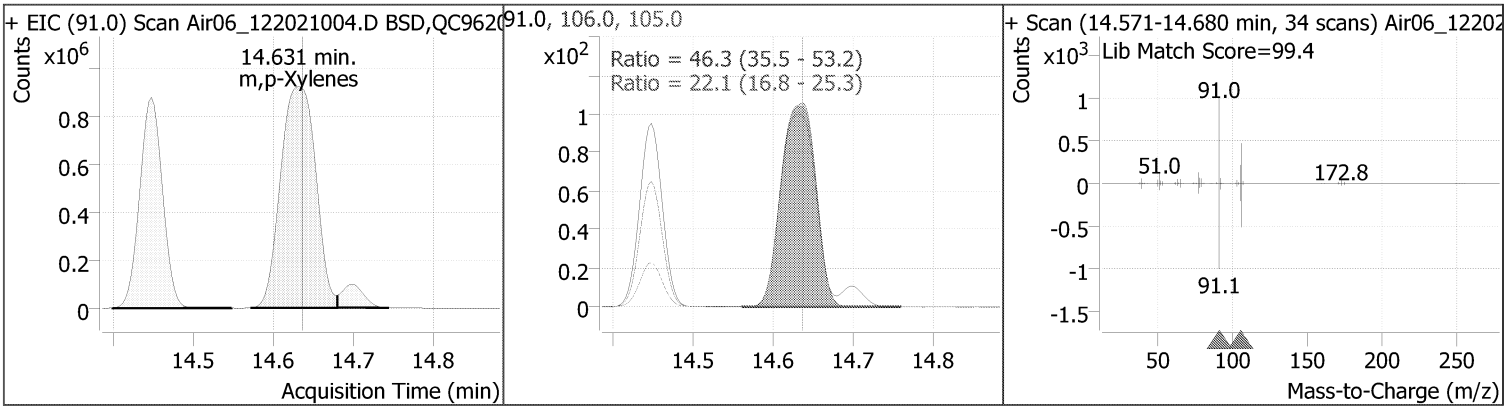
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	10.1938	14.45	0.00	1747229	106.0	30.2	23.2	34.8
					65.0	9.9	8.8	13.2
					77.0	8.9	7.6	11.4



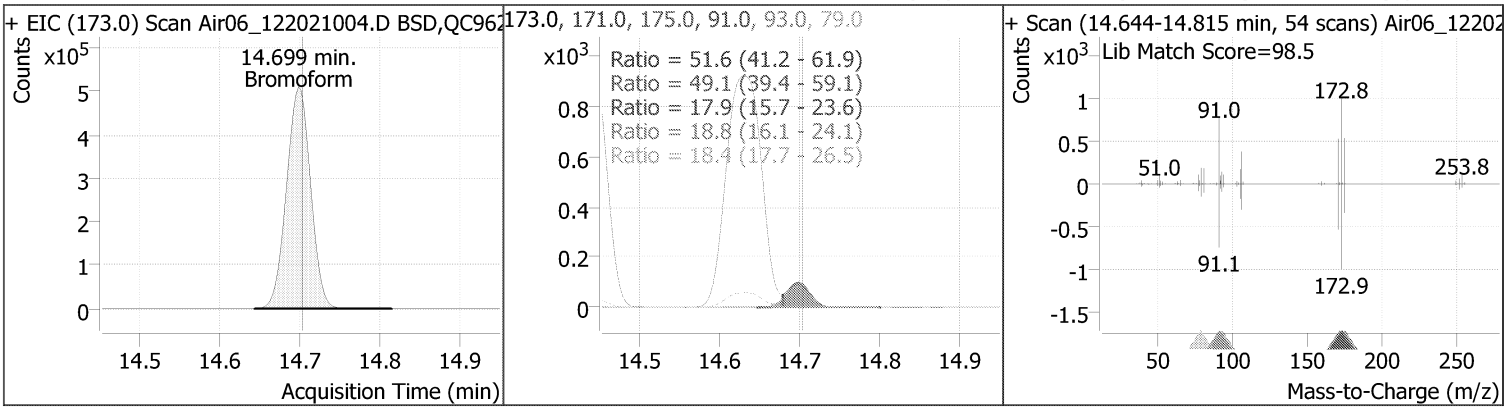
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	18.1637	14.52	0.00	143034590				



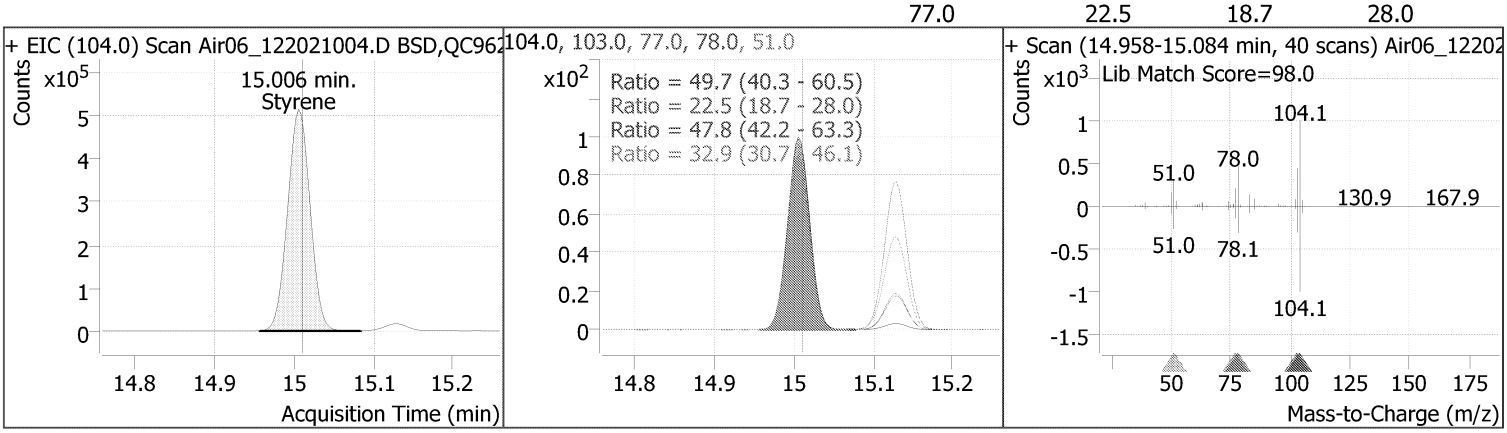
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	19.5421	14.63	0.00	2825630	106.0	46.3	35.5	53.2
					105.0	22.1	16.8	25.3



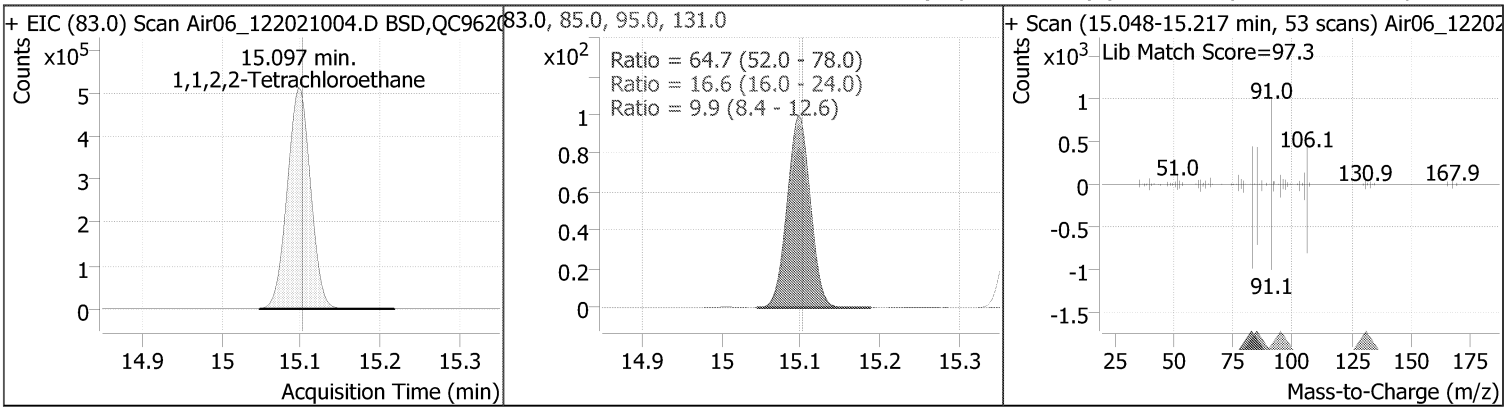
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	9.3682	14.70	0.00	1068684	171.0	51.6	41.2	61.9
					175.0	49.1	39.4	59.1
					79.0	18.4	17.7	26.5
					93.0	18.8	16.1	24.1
					91.0	17.9	15.7	23.6



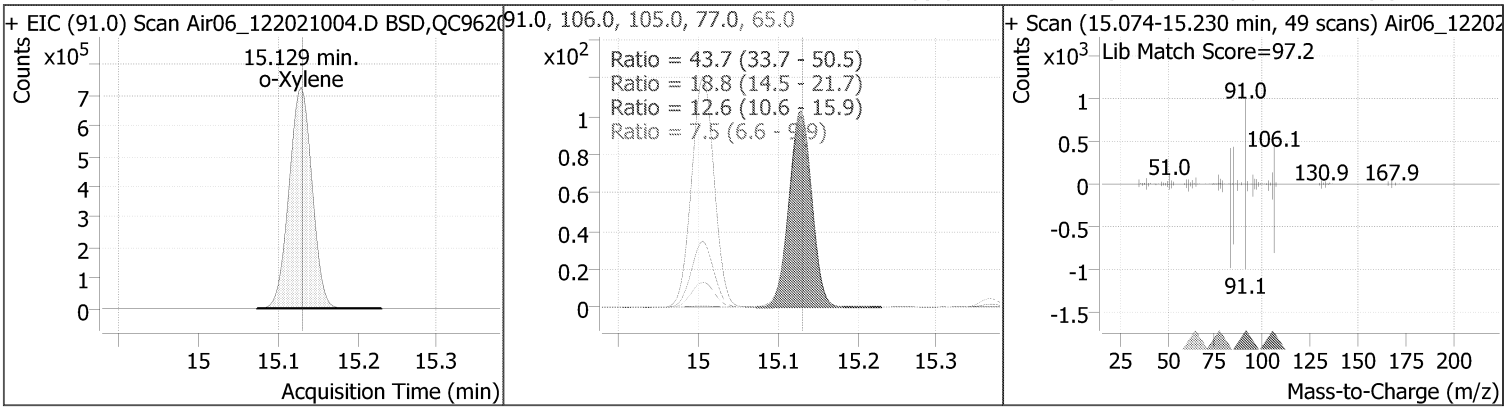
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	10.4744	15.01	0.00	1014554	78.0	47.8	42.2	63.3
					103.0	49.7	40.3	60.5
					51.0	32.9	30.7	46.1
					77.0	22.5	18.7	28.0



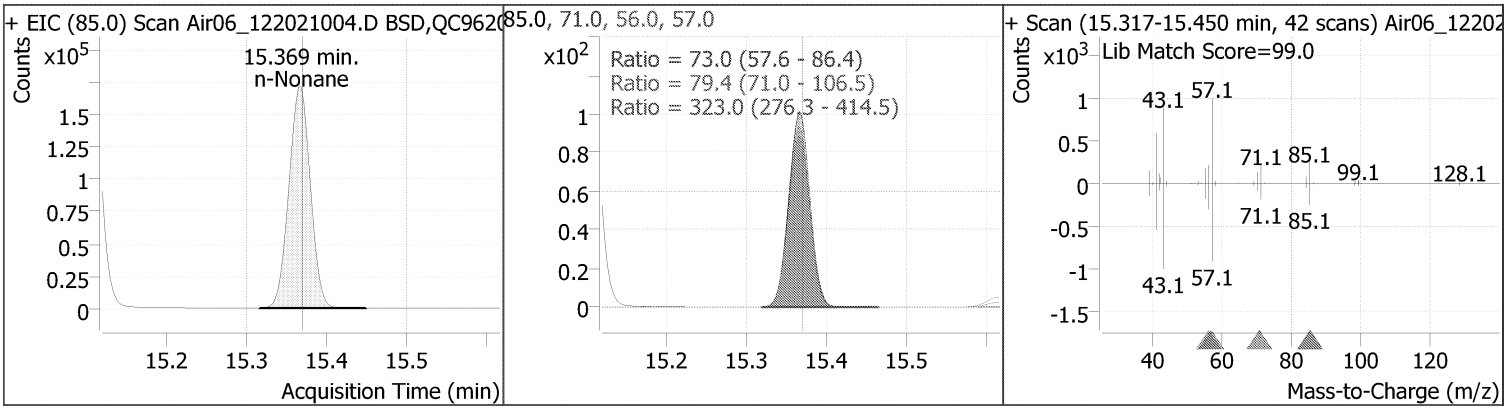
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	10.0583	15.10	0.00	1043741	85.0	64.7	52.0	78.0
					95.0	16.6	16.0	24.0
					131.0	9.9	8.4	12.6



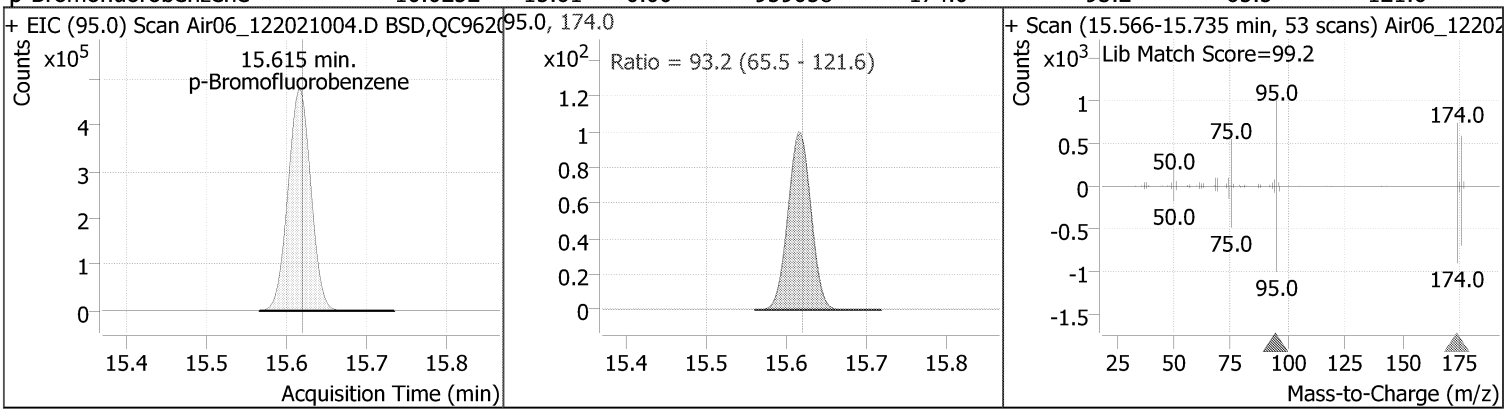
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	9.6919	15.13	0.00	1454567	106.0	43.7	33.7	50.5
					105.0	18.8	14.5	21.7
					77.0	12.6	10.6	15.9
					65.0	7.5	6.6	9.9



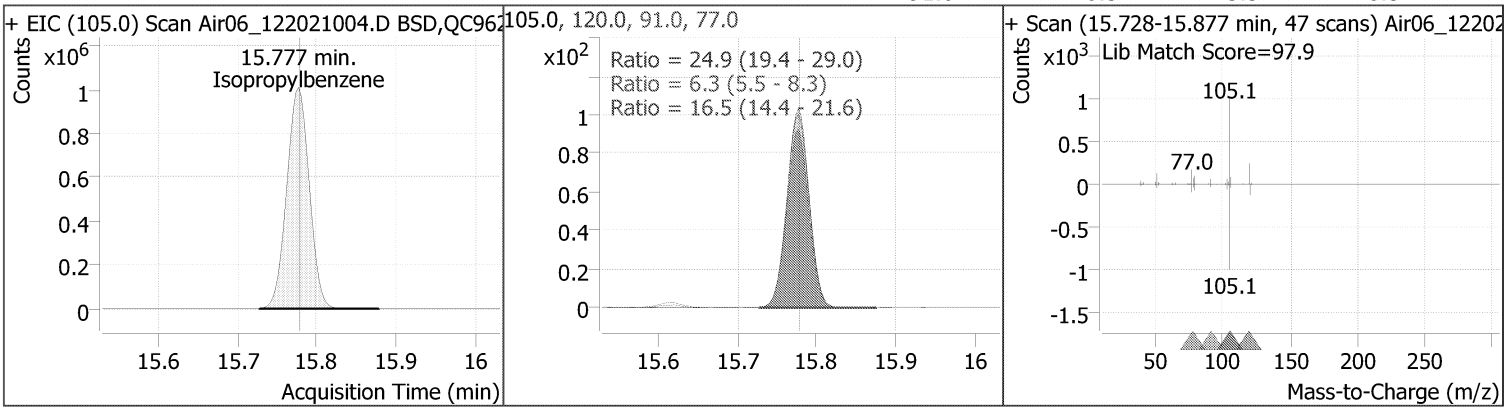
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	10.4809	15.37	0.00	320839	57.0	323.0	276.3	414.5
					56.0	79.4	71.0	106.5
					71.0	73.0	57.6	86.4



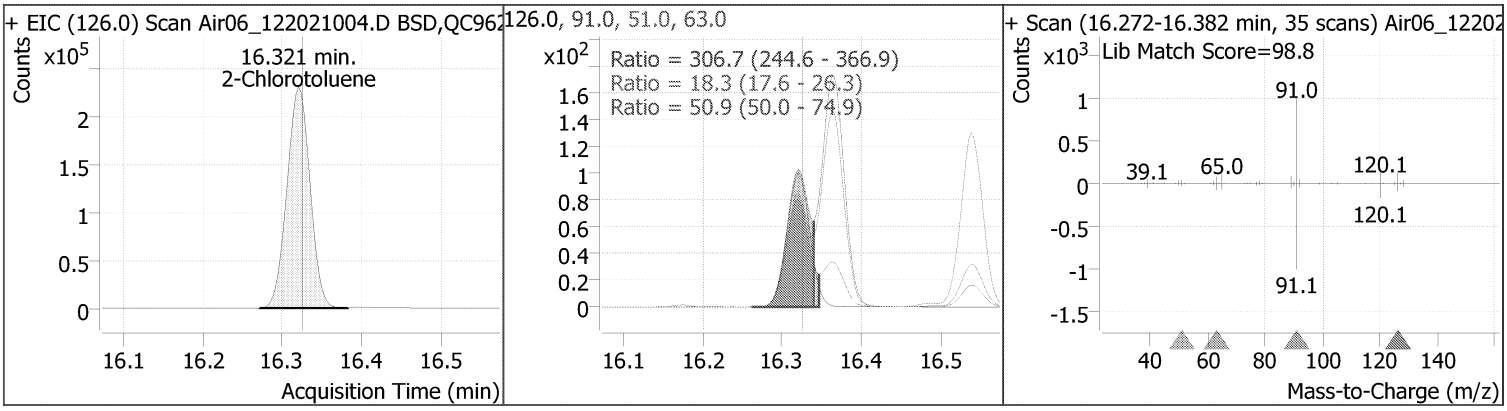
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.0252	15.61	0.00	959058	174.0	93.2	65.5	121.6



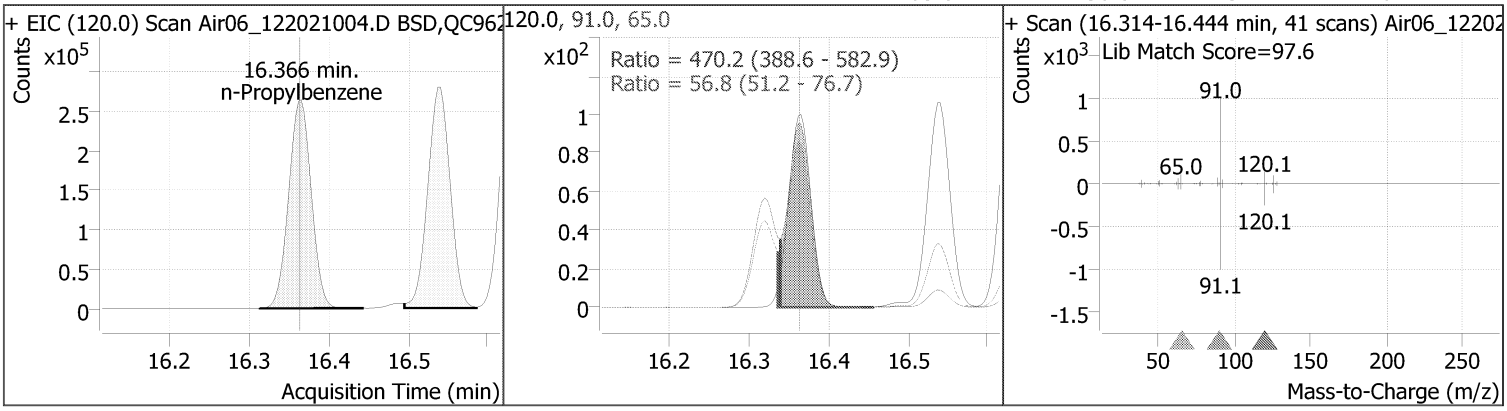
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	9.7275	15.78	0.00	1981379	120.0	24.9	19.4	29.0
					77.0	16.5	14.4	21.6
					91.0	6.3	5.5	8.3



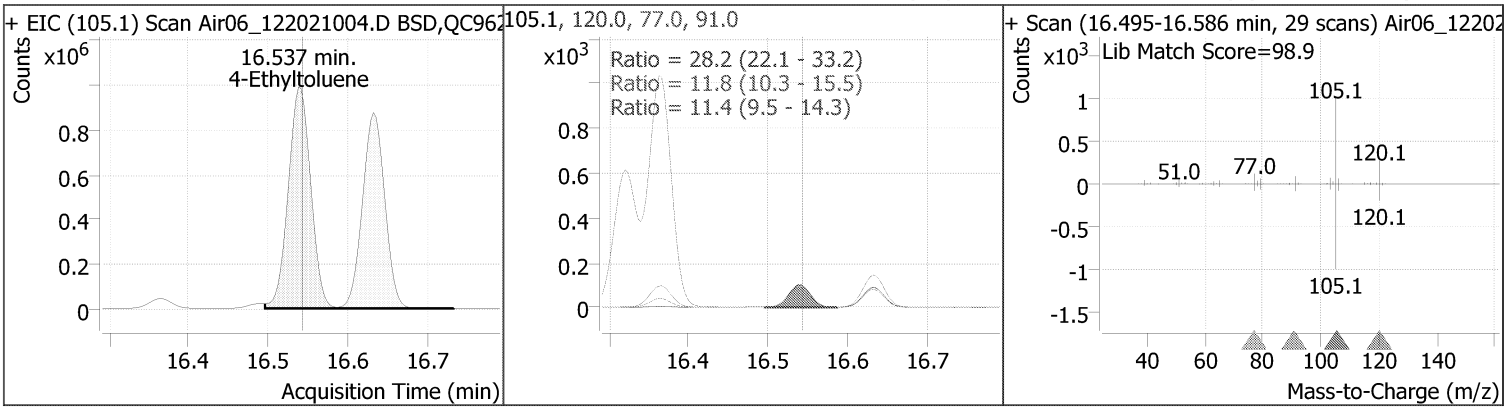
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	10.2159	16.32	0.00	464459	91.0	306.7	244.6	366.9
					63.0	50.9	50.0	74.9
					51.0	18.3	17.6	26.3



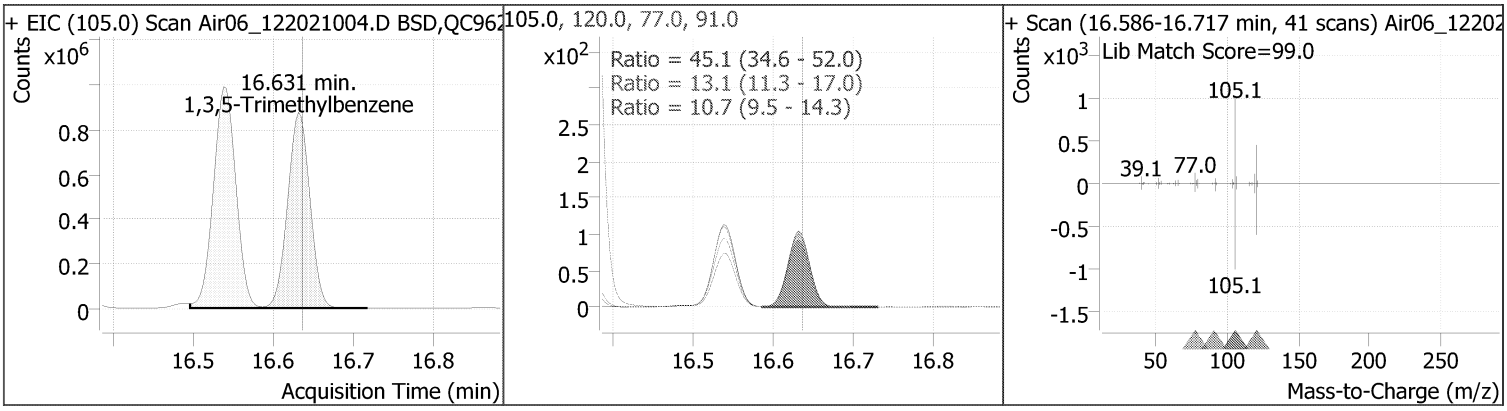
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	10.1230	16.37	0.00	519351	91.0	470.2	388.6	582.9
					65.0	56.8	51.2	76.7



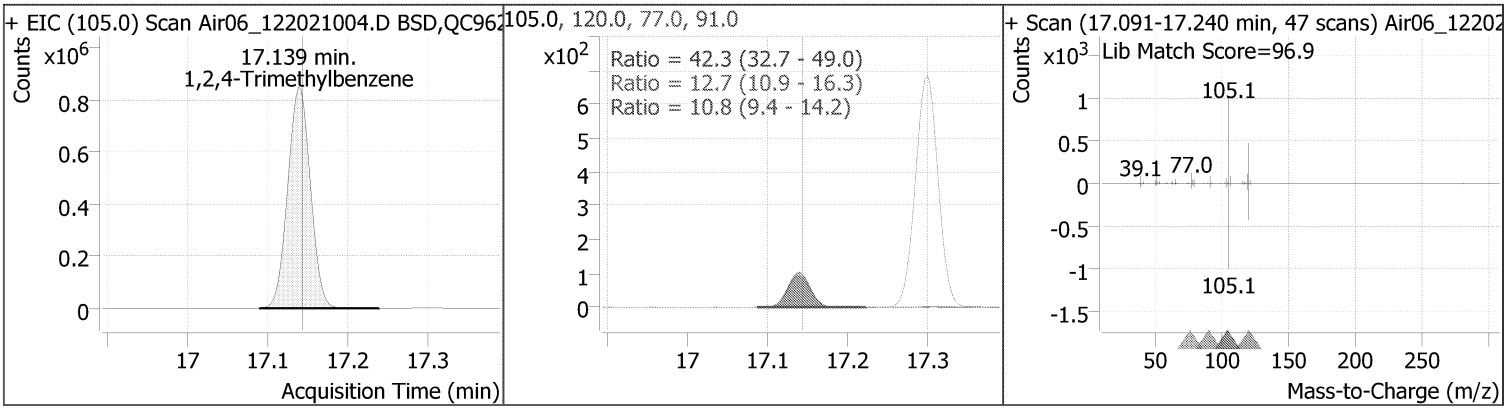
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	10.0582	16.54	0.00	1945855	120.0	28.2	22.1	33.2
					77.0	11.8	10.3	15.5
					91.0	11.4	9.5	14.3



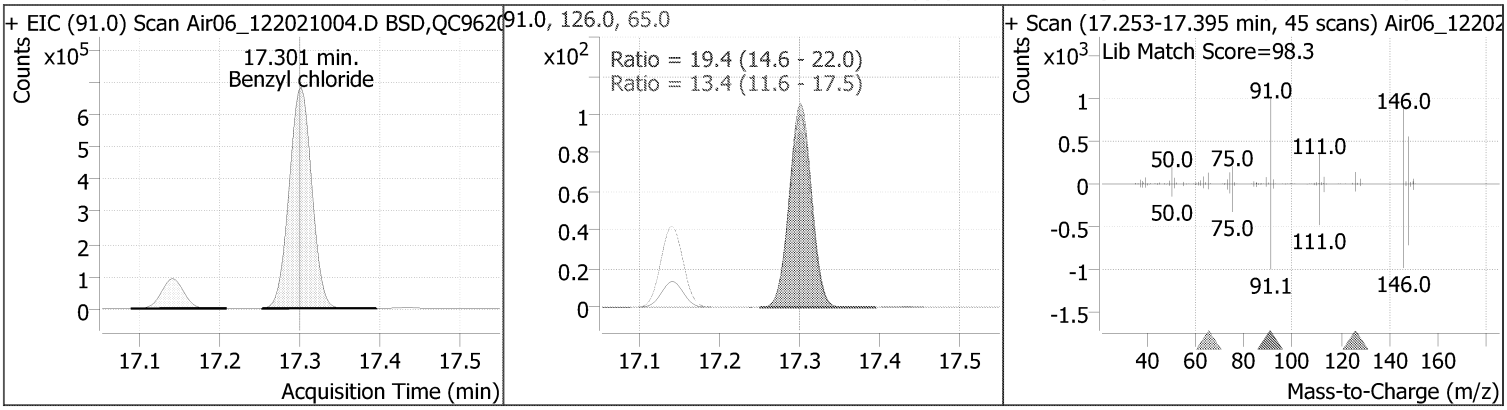
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	9.6834	16.63	0.00	1705395	120.0	45.1	34.6	52.0
					77.0	13.1	11.3	17.0
					91.0	10.7	9.5	14.3



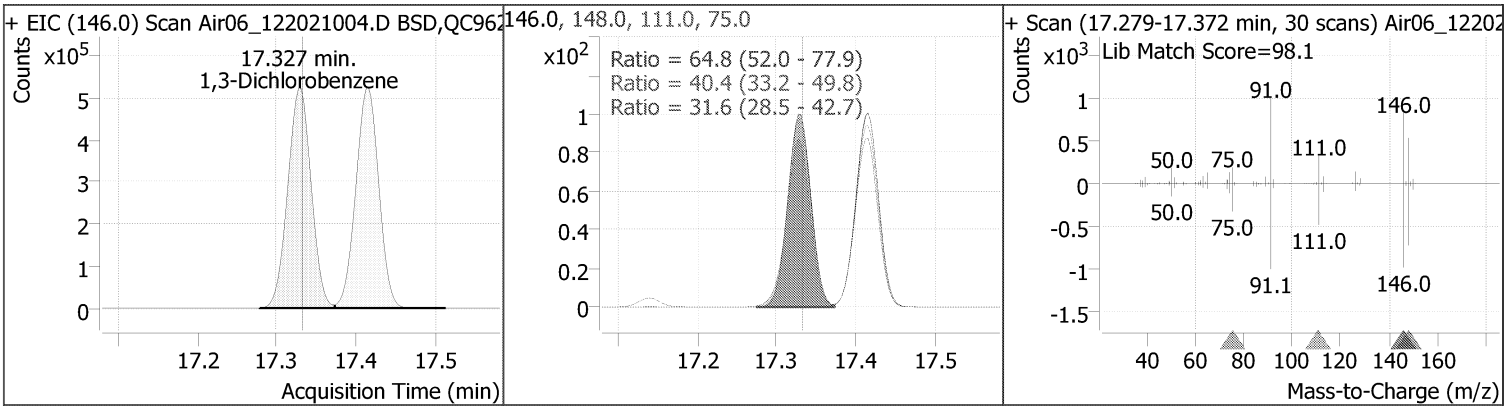
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	10.1450	17.14	0.00	1671123	120.0	42.3	32.7	49.0
					77.0	12.7	10.9	16.3
					91.0	10.8	9.4	14.2



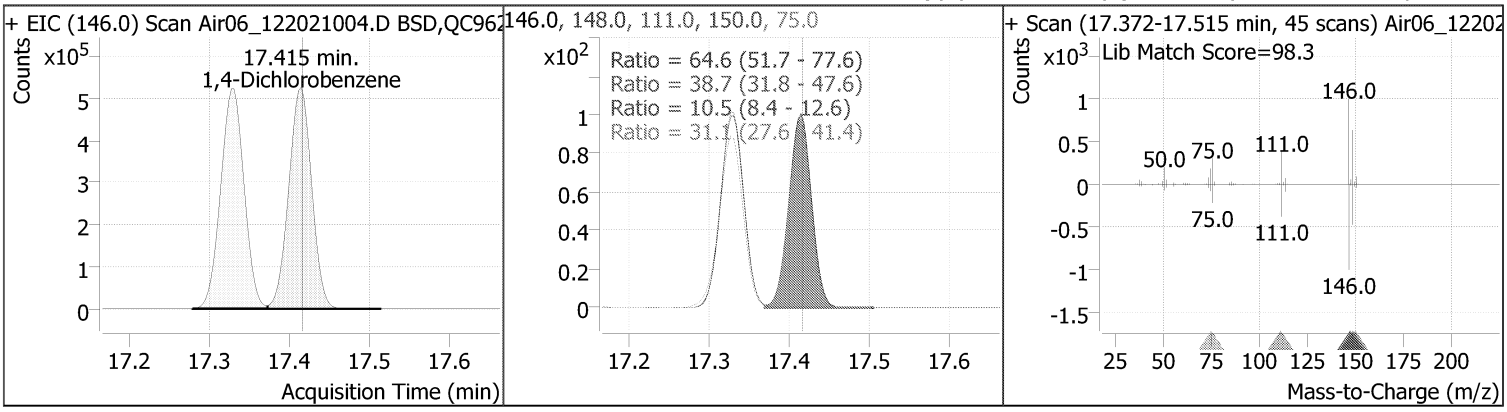
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	9.5418	17.30	0.00	1354880	126.0	19.4	14.6	22.0
					65.0	13.4	11.6	17.5



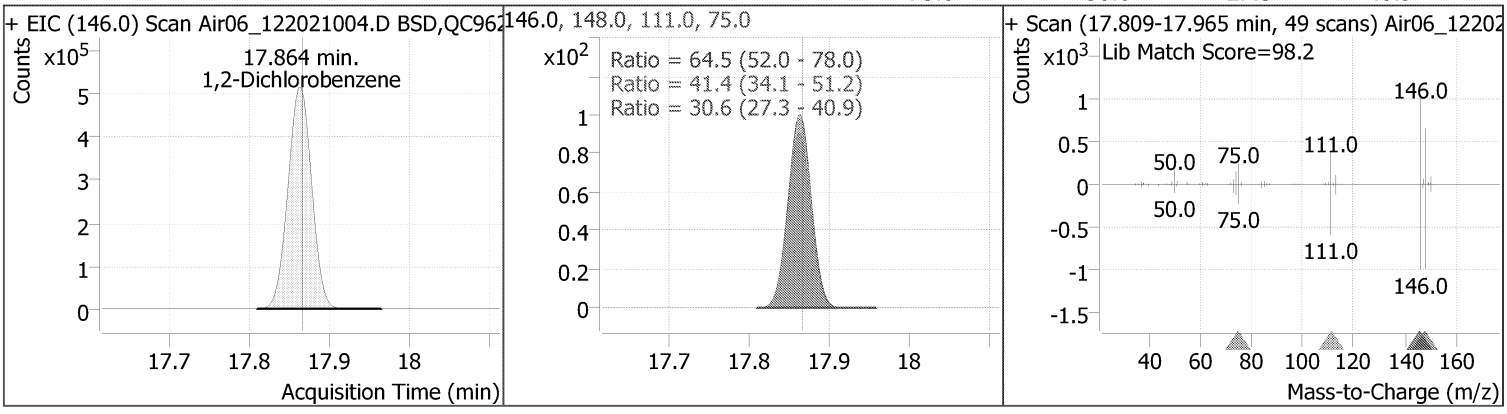
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	9.3901	17.33	0.00	1069885	148.0	64.8	52.0	77.9
					111.0	40.4	33.2	49.8
					75.0	31.6	28.5	42.7



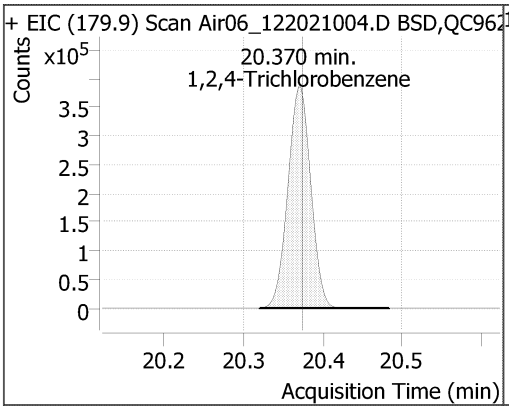
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	9.3596	17.41	0.00	1052548	148.0	64.6	51.7	77.6
					111.0	38.7	31.8	47.6
					75.0	31.1	27.6	41.4
					150.0	10.5	8.4	12.6

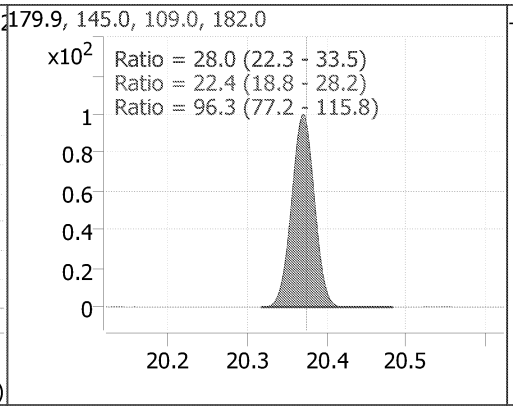


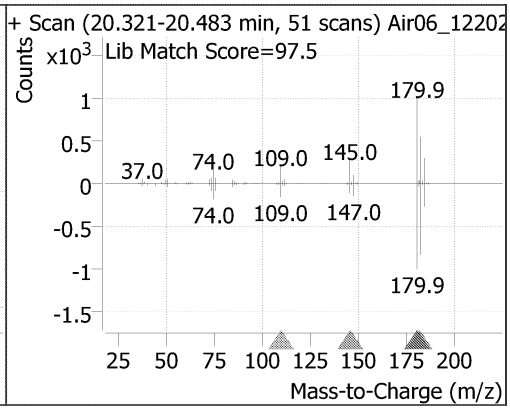
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	9.7446	17.86	0.00	1069591	148.0	64.5	52.0	78.0
					111.0	41.4	34.1	51.2
					75.0	30.6	27.3	40.9



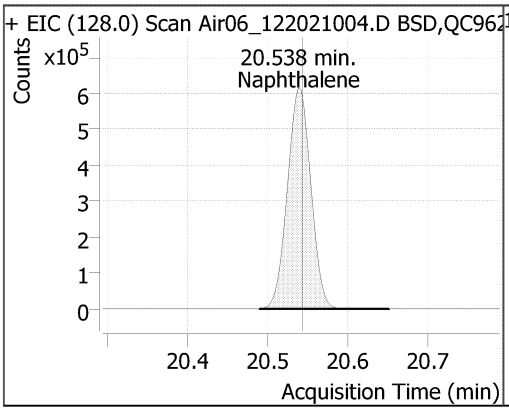
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	9.9051	20.37	0.00	773240	182.0	96.3	77.2	115.8
					145.0	28.0	22.3	33.5
					109.0	22.4	18.8	28.2

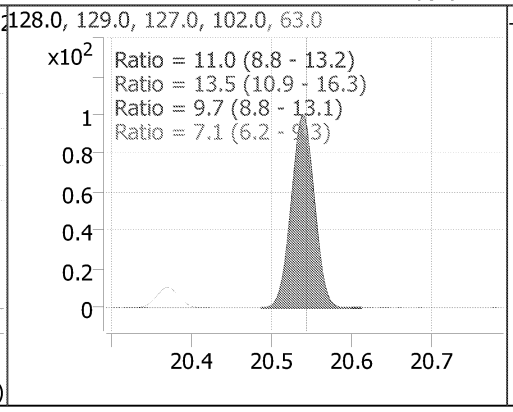


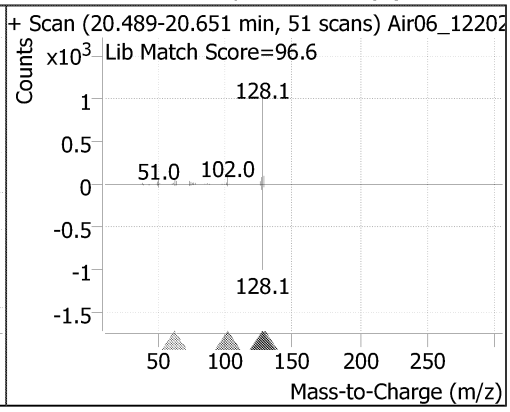




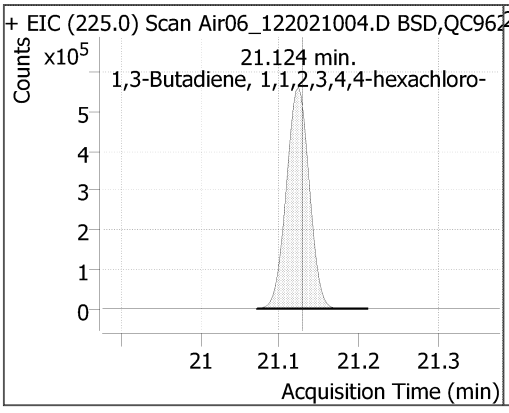
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	10.3678	20.54	0.00	1257533	127.0	13.5	10.9	16.3
					129.0	11.0	8.8	13.2
					102.0	9.7	8.8	13.1
					63.0	7.1	6.2	9.3

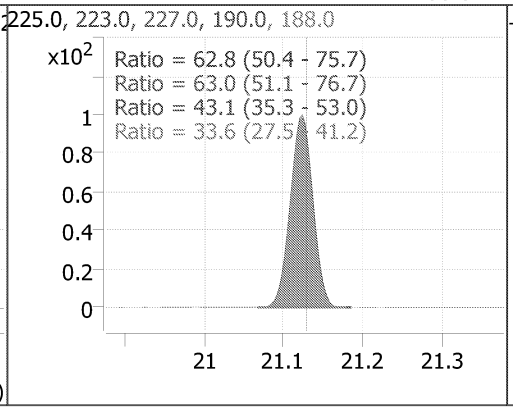


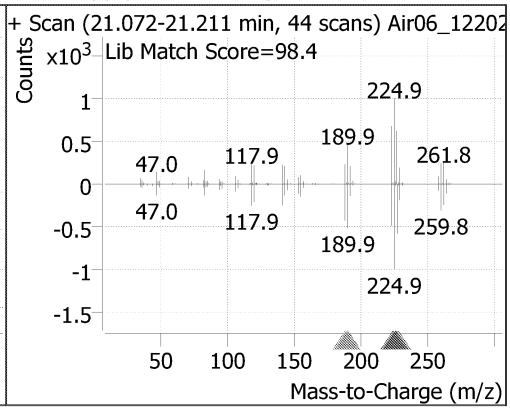




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	8.7838	21.12	0.00	1125174	227.0	63.0	51.1	76.7
					223.0	62.8	50.4	75.7
					190.0	43.1	35.3	53.0
					188.0	33.6	27.5	41.2







Initial Calibration Raw Data

ENTHALPY BFB TUNE FOR 455620 MSAIR Air
EPA TO-15

Inst : AIR-MS-06 Run Name : TUNE IDF : 1.0
Seqnum : 371497775002 File : air06_121121002 Time : 11-DEC-2021 17:49

Standards: S16071 (5X)

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	121194	27.50	
75	30% - 66% of mass 95	254835	57.83	
95		440677	100.00	
96	5% - 9% of mass 95	29330	6.66	
173	< 2% of mass 174	0	0.00	
174	50% - 120% of mass 95	407669	92.51	
175	4% - 9% of mass 174	32229	7.91	
176	93% - 101% of mass 174	396607	97.29	
177	5% - 9% of mass 176	25799	6.50	

Analyst: ZNZ Date: 12/13/21 Reviewer: SLL Date: 12/13/21

Quantitation Results Report (Not Reviewed)

Data File	Air06_121121002.D	Operator	ZNZ/DJL
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	12/11/2021 5:49:11 PM
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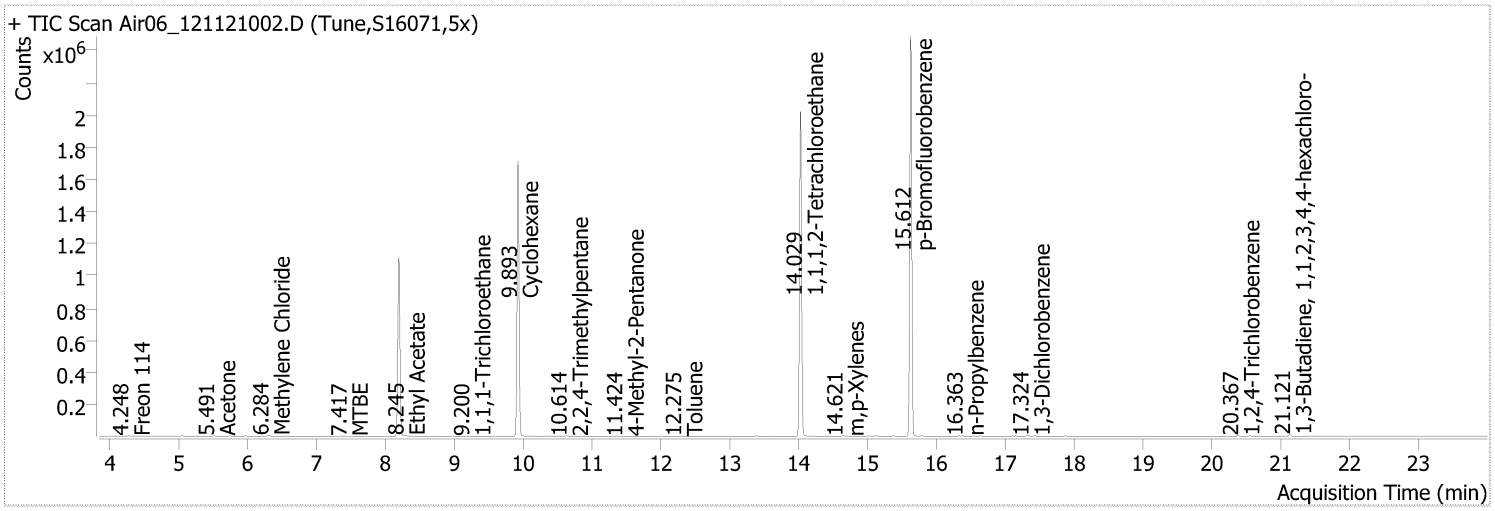
Vial	5	Multiplier	1.00
DA Method File	TO15_121121.m	Comment	
Tune File	bfb.u	Tune Date	12/10/2021 1:37:12 PM
Batch Name	121121_ICAL.batch.bin	Last Calib Update	12/13/2021 9:29:07 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



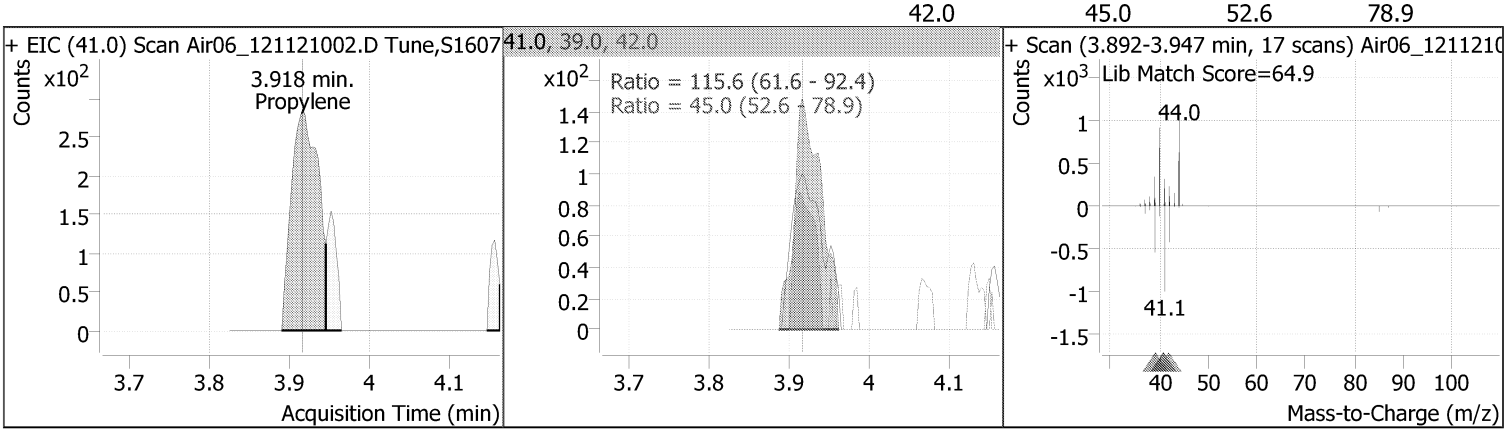
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.177	130.0	346999	10.0000	nL/L		-0.003
M 1,4-Difluorobenzene	9.909	114.0	1270604	10.0000	nL/L		-0.003
M Chlorobenzene-d5	14.010	82.0	711250	10.0000	nL/L	#	-0.006
System Monitoring Compounds							
S p-Bromofluorobenzene	15.612	95.0	887745	9.7248	nL/L		-0.006
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 97.25%			
Target Compounds							QValue
T Propylene	3.918	41.0	659	0.0173	nL/L	#	64
T Freon 12	3.989	85.0	1501	0.0121	nL/L	#	88
T Chloromethane	4.144	50.0	635	0.0146	nL/L	#	60
T Freon 114	4.248	135.0	568	0.0078	nL/L	#	82
T Vinyl Chloride	4.368	62.0	388	0.0095	nL/L		86
T 1,3-Butadiene	4.500	54.0	342	0.0098	nL/L	#	11
T Butane	4.546	43.0	1054	0.0151	nL/L	#	97
T Bromomethane	4.759	96.0	241	0.0073	nL/L	#	74
T Chloroethane	4.918	64.0	206	0.0101	nL/L	#	65
T Ethanol	5.028	45.0	3707	0.1362	nL/L		97
T Vinyl bromide	5.238	108.0	290	0.0084	nL/L		82
T Acrolein	5.345	56.0	413	0.0235	nL/L		89
T Acetone	5.491	58.0	1502	0.0639	nL/L	#	78
T Trichloromonofluoromethane	5.623	101.0	1193	0.0085	nL/L		90
T Isopropanol (IPA)	5.724	45.0	4203	0.0458	nL/L	#	88
T n-Pentane	5.957	43.0	2061	0.0229	nL/L		95
T 1,1-Dichloroethene	6.193	61.0	682	0.0079	nL/L	#	81
T Tert-butyl alcohol (TBA)	6.316	59.0	1627	0.0168	nL/L	#	78
T Methylene Chloride	6.284	84.0	2933	0.0787	nL/L		99
T 3-Chloropropene	6.578	76.0	1194	0.0761	nL/L		42
T Freon 113	6.539	101.0	917	0.0103	nL/L	#	93
T Carbon Disulfide	6.578	76.0	1194	0.0115	nL/L	#	63

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.122	61.0	768	0.0114	nL/L	#	87
T 1,1-Dichloroethane	7.297	63.0	844	0.0100	nL/L	#	81
T MTBE	7.417	73.0	1512	0.0133	nL/L	#	84
T Vinyl Acetate	7.430	43.0	2779	0.0196	nL/L	#	88
T 2-Butanone	7.679	43.0	2580	0.0230	nL/L	#	89
T cis-1,2-Dichloroethene	8.041	61.0	791	0.0115	nL/L	#	39
T Ethyl Acetate	8.245	61.0	116	0.0075	nL/L		1
T n-Hexane	8.242	57.0	1450	0.0199	nL/L		96
T Chloroform	8.303	83.0	975	0.0098	nL/L		79
T Tetrahydrofuran	8.702	72.0	267	0.0164	nL/L	#	59
T 1,2-Dichloroethane	8.954	62.0	1077	0.0135	nL/L	#	73
T 1,1,1-Trichloroethane	9.200	97.0	1123	0.0108	nL/L		94
T Benzene	9.605	78.0	1896	0.0172	nL/L	#	87
T Carbon Tetrachloride	9.744	117.0	1205	0.0107	nL/L		88
T Cyclohexane	9.893	84.0	3999	0.0878	nL/L	#	1
T 1,2-Dichloropropane	10.346	63.0	668	0.0136	nL/L	#	76
T Methane, bromodichloro-	10.508	83.0	1444	0.0144	nL/L	#	88
T 1,4-Dioxane	10.605	88.0	539	0.0229	nL/L	#	28
T Trichloroethene	10.563	132.0	680	0.0138	nL/L	#	94
T 2,2,4-Trimethylpentane	10.614	57.0	2568	0.0111	nL/L	#	86
T Methyl methacrylate	10.731	69.0	413	0.0104	nL/L	#	84
T n-Heptane	10.835	71.0	386	0.0107	nL/L	#	87
T cis-1,3-Dichloropropene	11.333	110.0	176	0.0122	nL/L		93
T 4-Methyl-2-Pentanone	11.424	58.0	491	0.0115	nL/L	#	1
T trans-1,3-Dichloropropene	11.818	110.0	118	0.0080	nL/L	#	1
T 1,1,2-Trichloroethane	11.996	97.0	577	0.0121	nL/L	#	52
T Toluene	12.275	91.0	1729	0.0126	nL/L	#	85
T TPH Gasoline (C3 to C12)	12.393	165.0	729750	0.0723	nL/L		100
T 2-Hexanone	12.534	58.0	669	0.0126	nL/L	#	87
T Dibromochloromethane	12.666	129.0	1236	0.0128	nL/L	#	90
T 1,2-Dibromoethane	12.916	108.9	1056	0.0144	nL/L	#	97
T Tetrachloroethene	13.382	166.0	1063	0.0132	nL/L	#	92
T 1,1,1,2-Tetrachloroethane	14.029	131.0	574	0.0098	nL/L	#	1
T Benzene, chloro-	14.058	112.0	1824	0.0180	nL/L		29
T Ethylbenzene	14.453	91.0	2062	0.0126	nL/L	#	94
T TPH Gasoline (C6 to C12)	14.518	165.0	484349	0.0645	nL/L		100
T m,p-Xylenes	14.621	91.0	1956	0.0142	nL/L		39
T Bromoform	14.689	173.0	1541	0.0142	nL/L	#	90
T Styrene	15.007	104.0	1405	0.0152	nL/L	#	93
T 1,1,2,2-Tetrachloroethane	15.091	83.0	1537	0.0155	nL/L		89
T o-Xylene	15.123	91.0	1772	0.0124	nL/L	#	94
T n-Nonane	15.363	85.0	446	0.0153	nL/L	#	89
T Isopropylbenzene	15.774	105.0	2942	0.0151	nL/L	#	91
T 2-Chlorotoluene	16.301	126.0	556	0.0128	nL/L	#	35
T n-Propylbenzene	16.363	120.0	636	0.0130	nL/L		82
T 4-Ethyltoluene	16.538	105.1	2545	0.0138	nL/L		99
T 1,3,5-Trimethylbenzene	16.631	105.0	2177	0.0130	nL/L	#	94
T 1,2,4-Trimethylbenzene	17.140	105.0	2488	0.0158	nL/L	#	94
T Benzyl chloride	17.298	91.0	2510	0.0185	nL/L	#	95
T 1,3-Dichlorobenzene	17.324	146.0	2251	0.0207	nL/L	#	88
T 1,4-Dichlorobenzene	17.408	146.0	2300	0.0214	nL/L	#	98
T 1,2-Dichlorobenzene	17.865	146.0	2300	0.0220	nL/L		97
T 1,2,4-Trichlorobenzene	20.367	179.9	2447	0.0329	nL/L		97
T Naphthalene	20.538	128.0	3624	0.0313	nL/L	#	94
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.121	225.0	3518	0.0288	nL/L		95

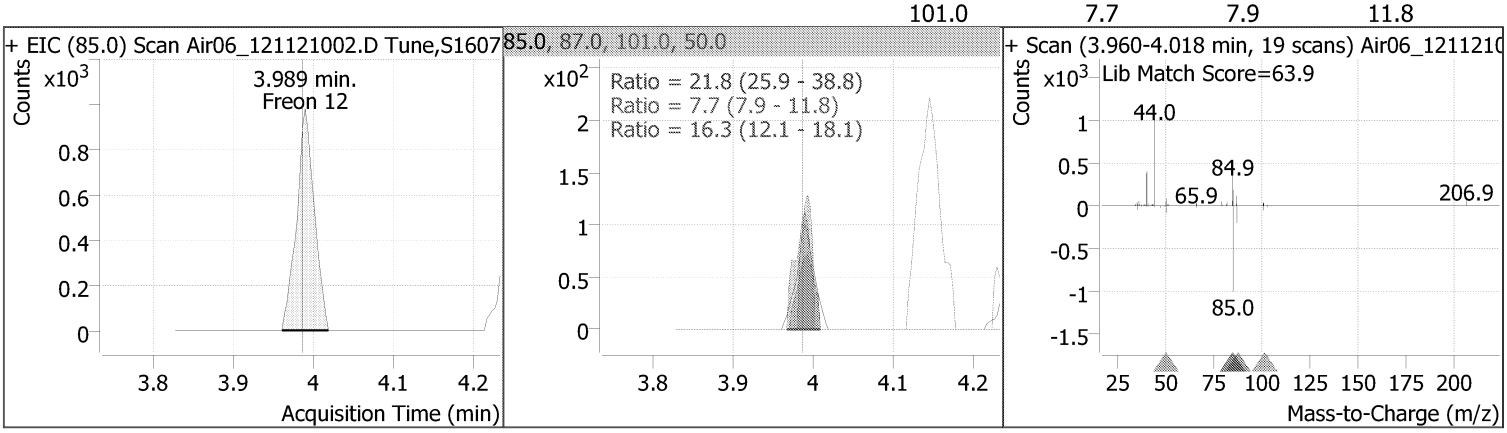
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

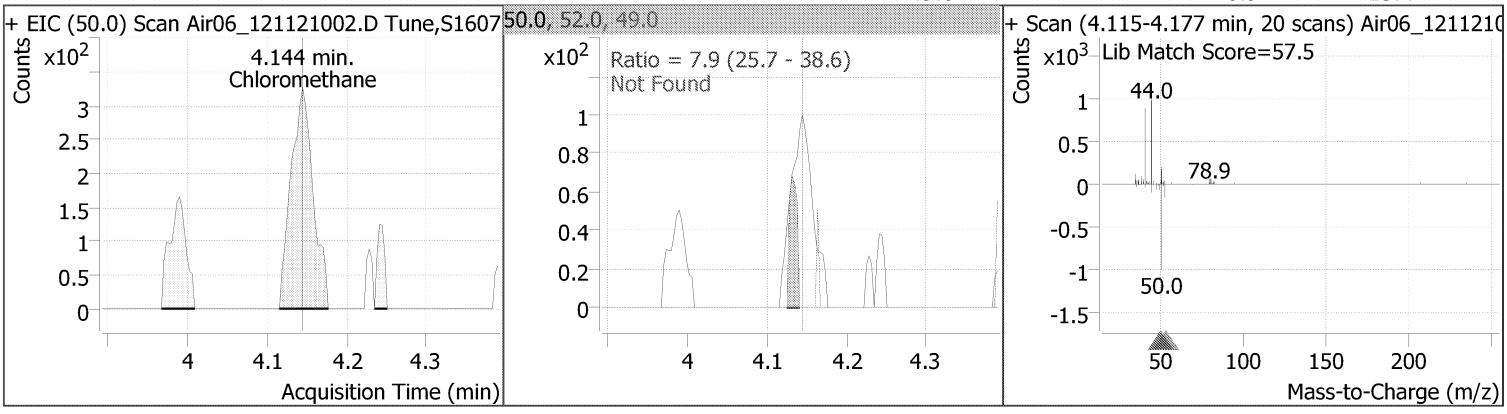
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.0173	3.92	0.00	659	39.0	115.6	61.6	92.4
					42.0	45.0	52.6	78.9



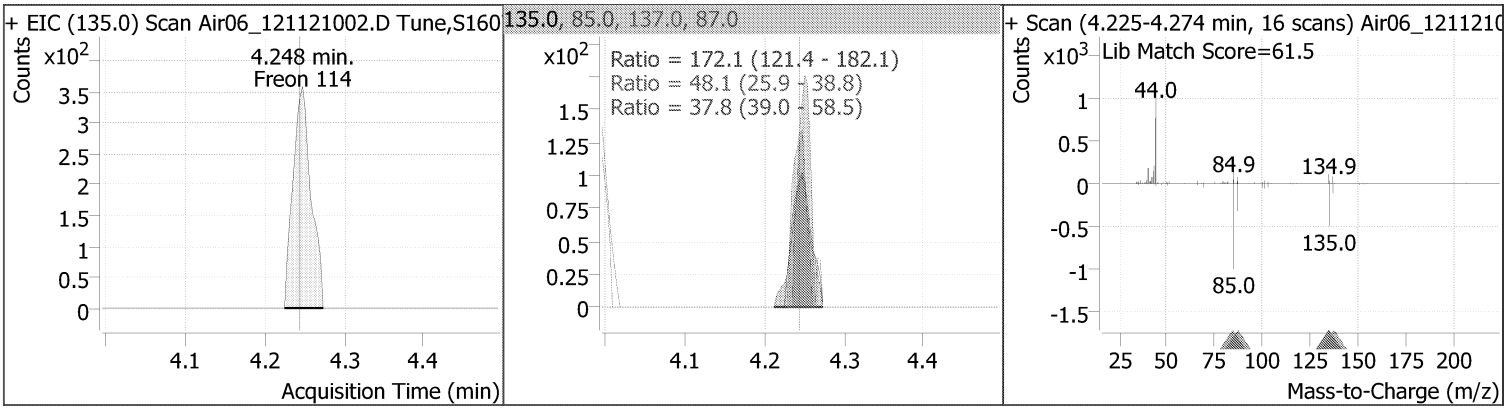
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	0.0121	3.99	0.00	1501	87.0	21.8	25.9	38.8
					50.0	16.3	12.1	18.1
					101.0	7.7	7.9	11.8



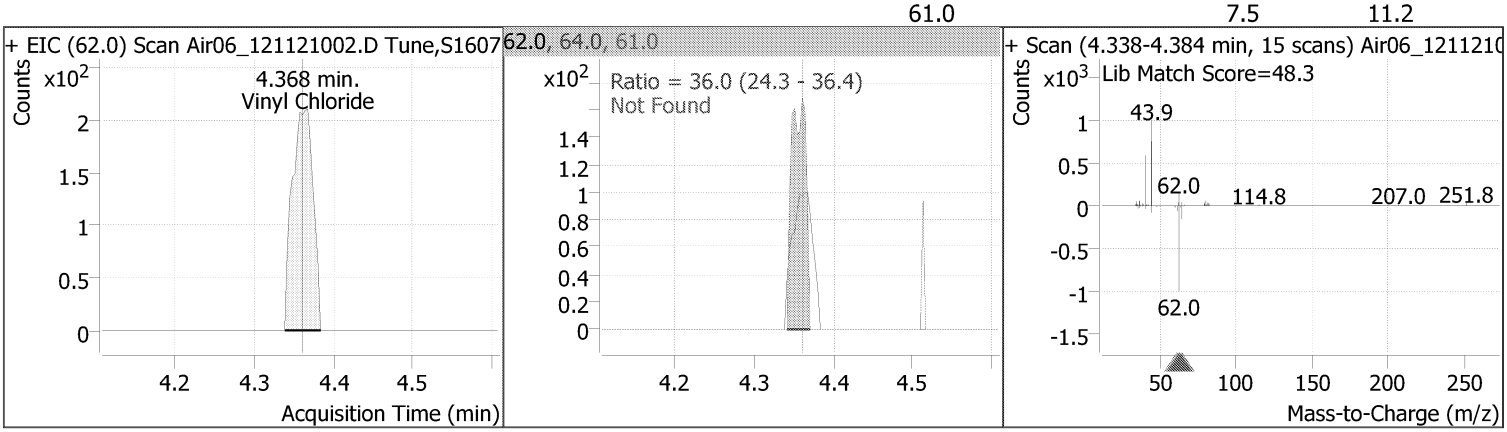
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	0.0146	4.14	0.00	635	52.0	7.9	25.7	38.6
					49.0		8.9	13.4



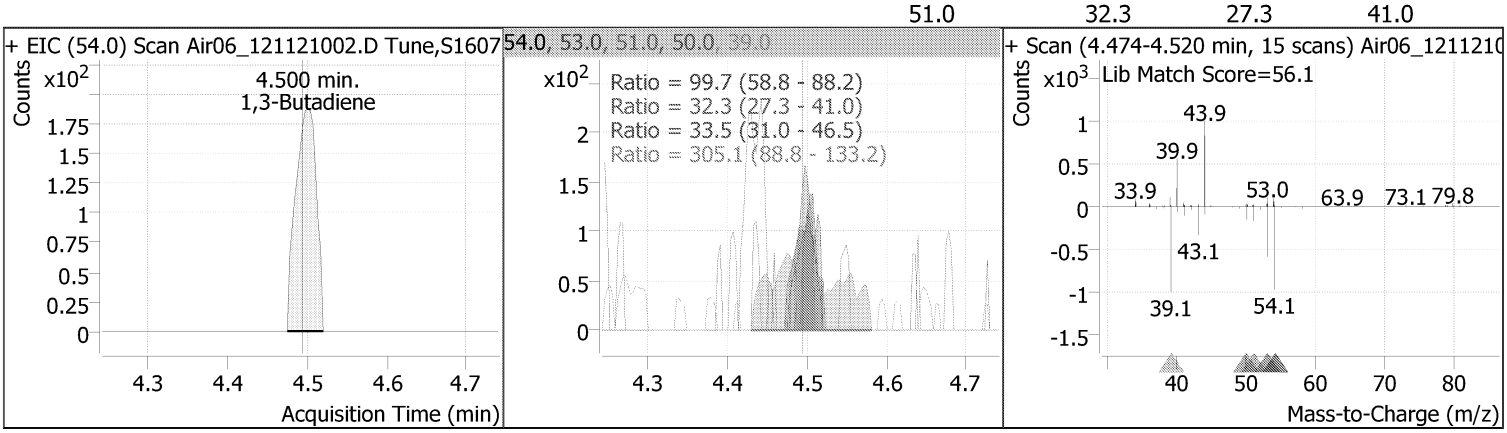
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	0.0078	4.25	0.00	568	85.0	172.1	121.4	182.1
					87.0	37.8	39.0	58.5
					137.0	48.1	25.9	38.8



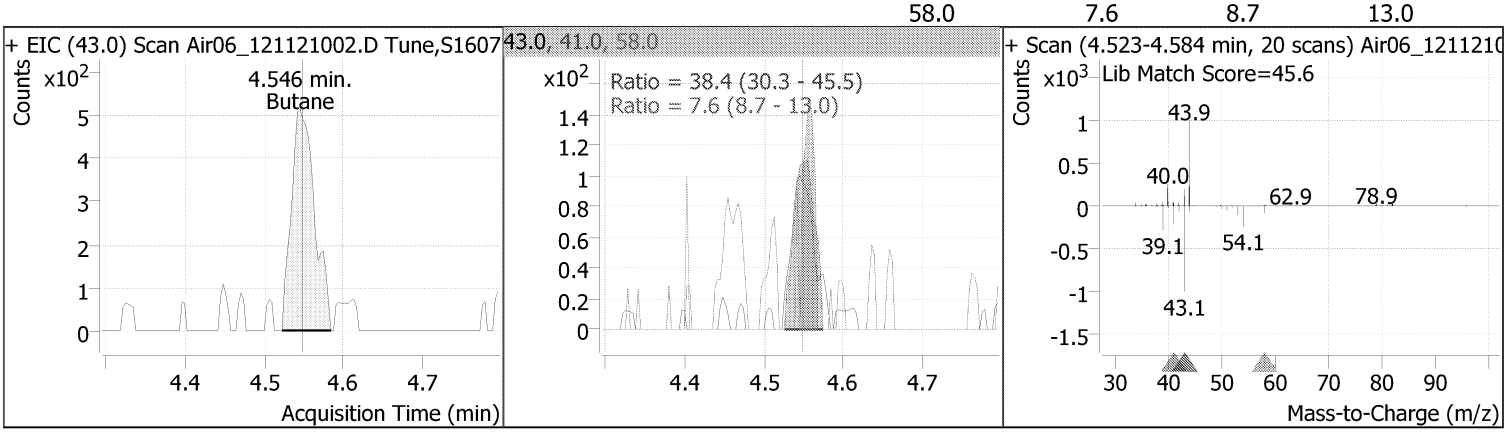
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	0.0095	4.37	0.01	388	64.0	36.0	24.3	36.4
					61.0		7.5	11.2



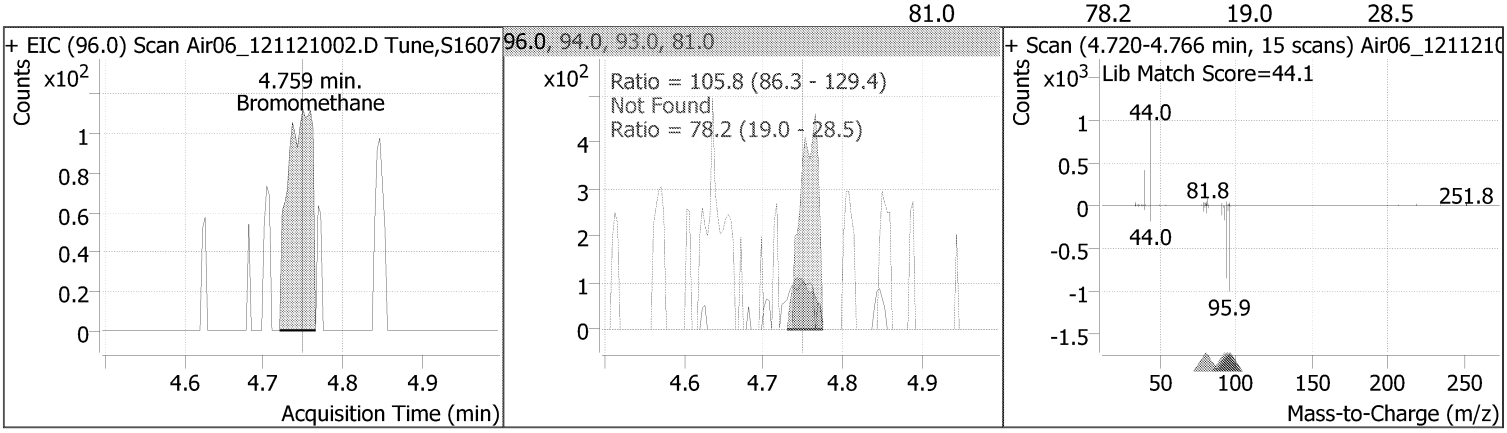
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	0.0098	4.50	0.01	342	39.0	305.1	88.8	133.2
					53.0	99.7	58.8	88.2
					50.0	33.5	31.0	46.5
					51.0	32.3	27.3	41.0



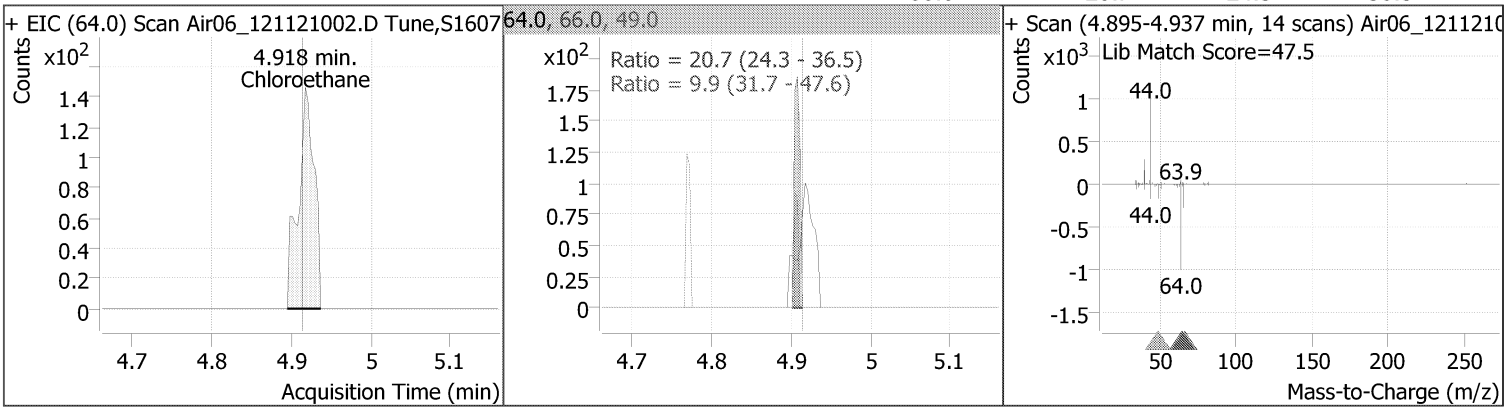
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	0.0151	4.55	0.00	1054	41.0	38.4	30.3	45.5
					58.0	7.6	8.7	13.0



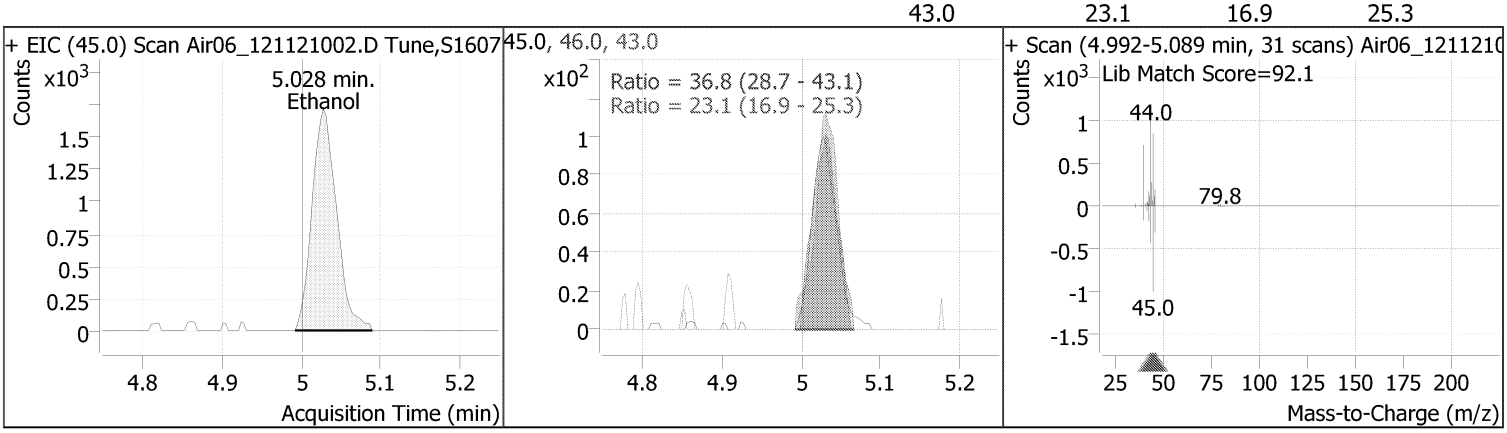
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromomethane	0.0073	4.76	0.01	241	94.0	105.8	86.3	129.4
					93.0		19.1	28.7
					81.0	78.2	19.0	28.5



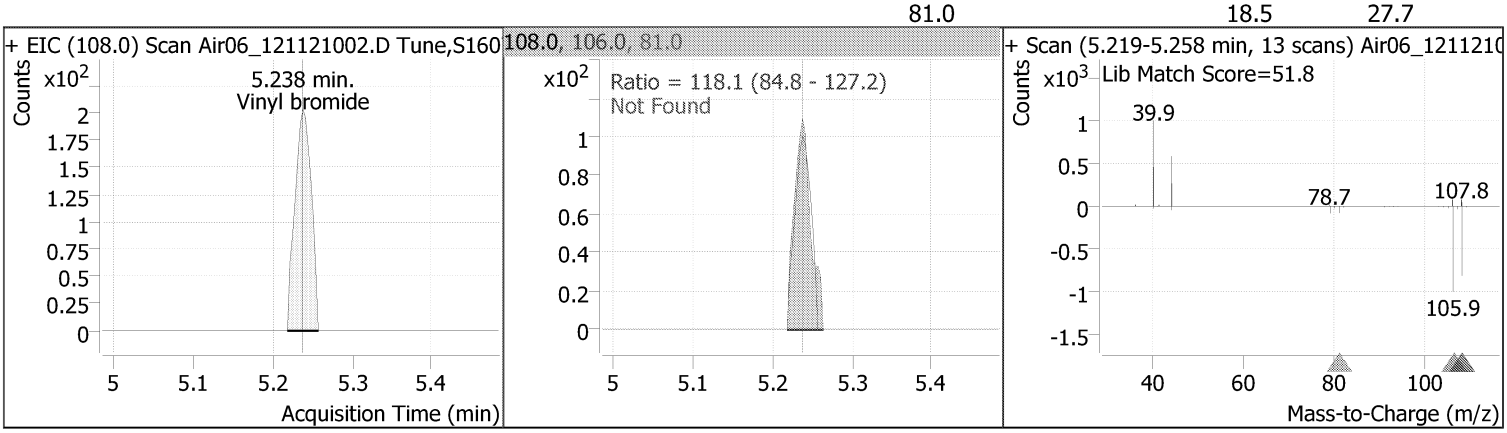
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	0.0101	4.92	0.00	206	49.0	9.9	31.7	47.6
					66.0	20.7	24.3	36.5



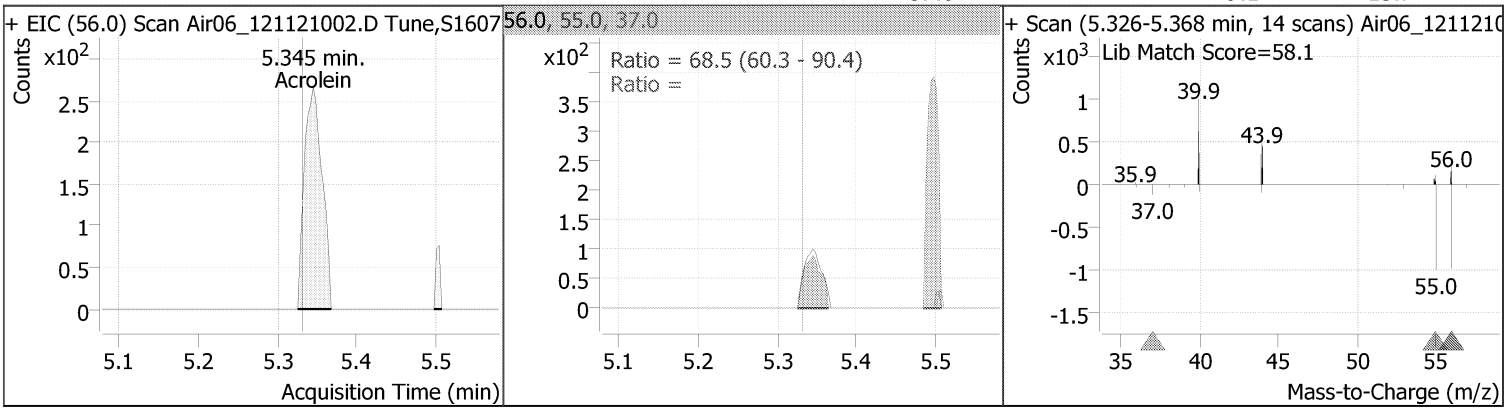
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	0.1362	5.03	0.03	3707	46.0	36.8	28.7	43.1
					43.0	23.1	16.9	25.3



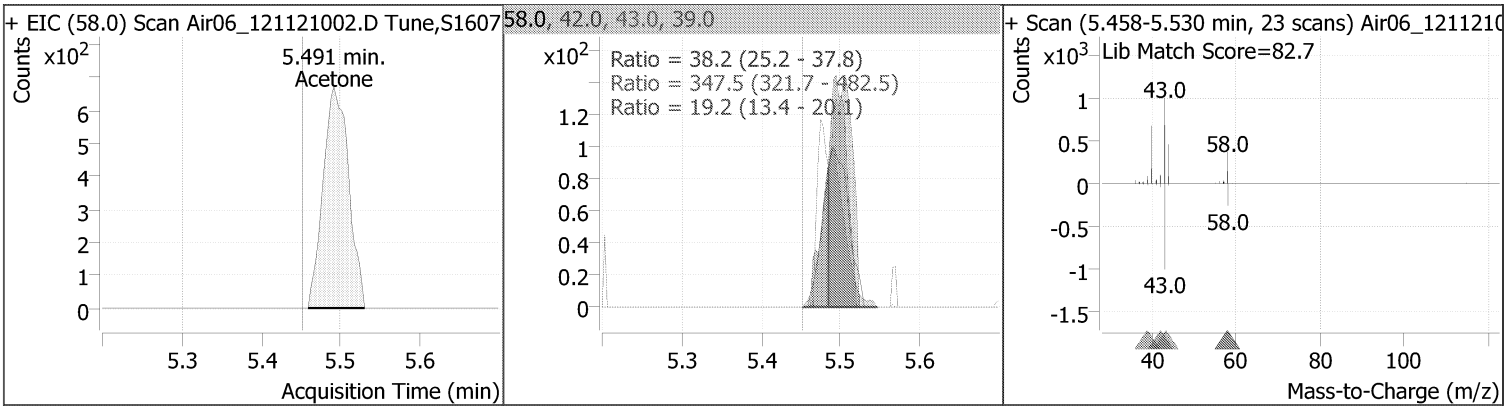
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl bromide	0.0084	5.24	0.00	290	106.0	118.1	84.8	127.2
					81.0		18.5	27.7



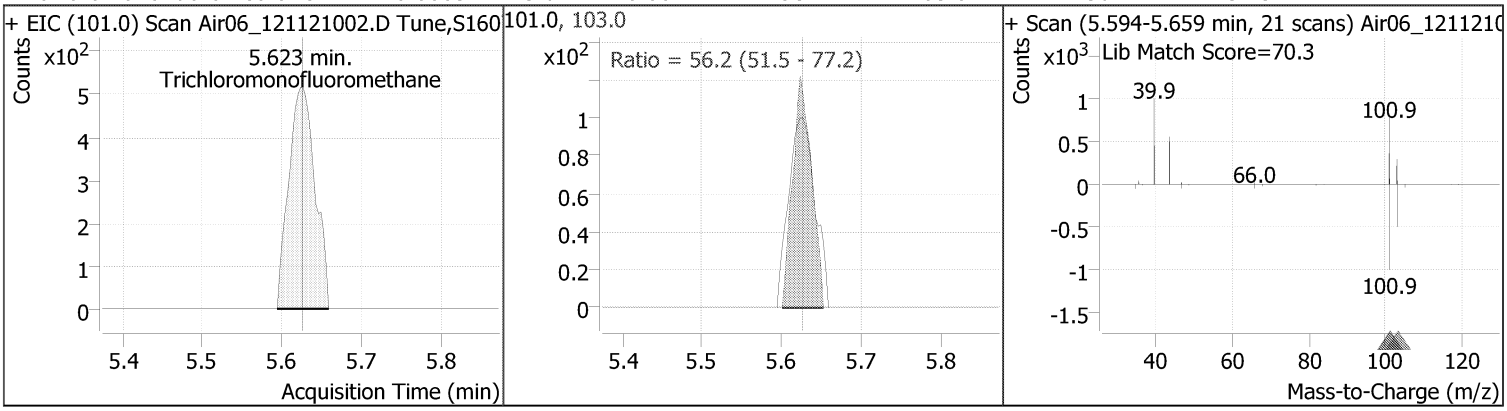
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	0.0235	5.35	0.01	413	55.0	68.5	60.3	90.4
					37.0		9.1	13.7



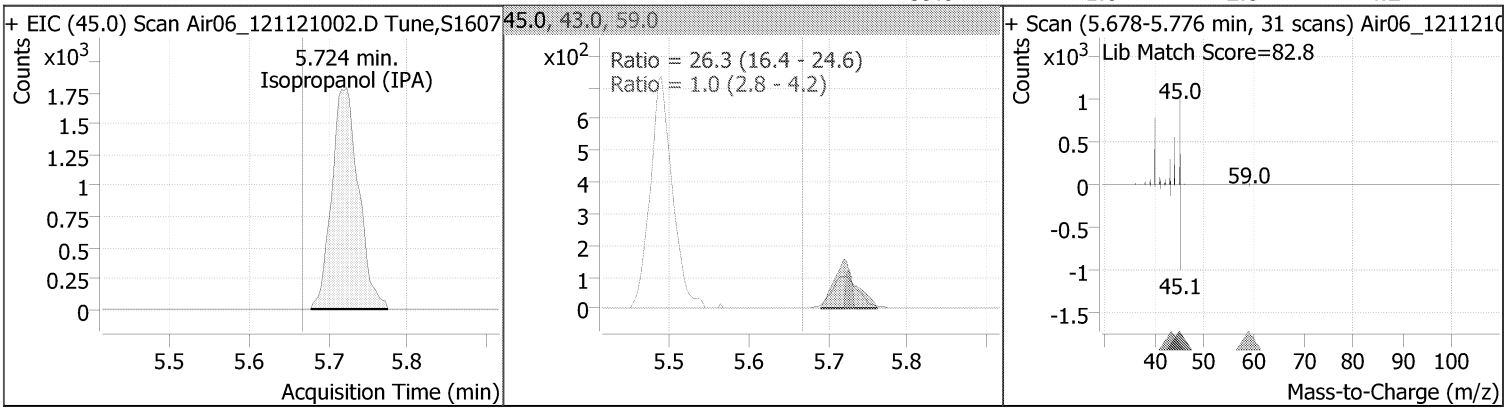
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	0.0639	5.49	0.04	1502	43.0	347.5	321.7	482.5
					42.0	38.2	25.2	37.8
					39.0	19.2	13.4	20.1



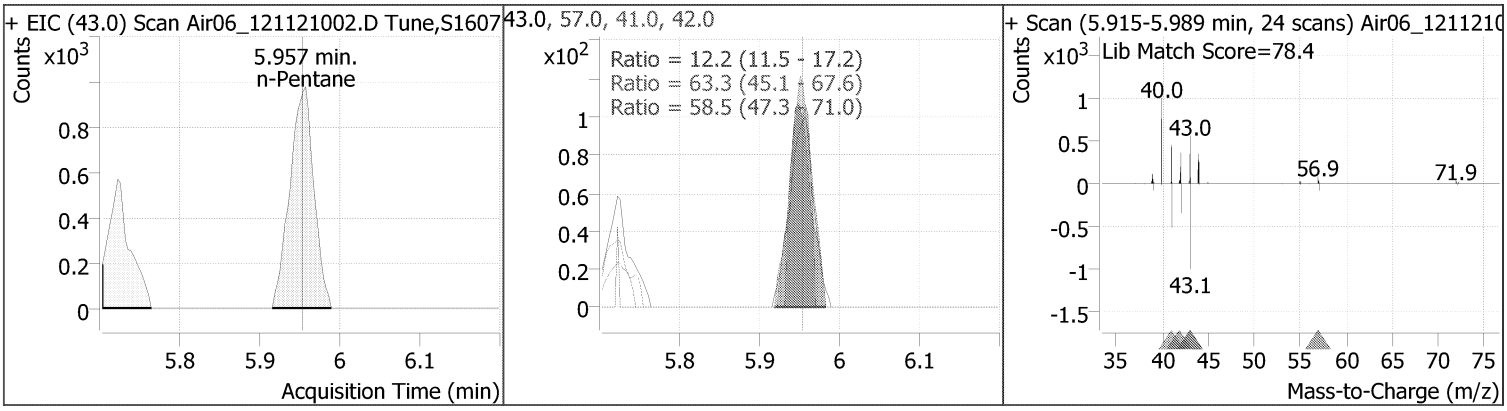
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	0.0085	5.62	0.00	1193	103.0	56.2	51.5	77.2



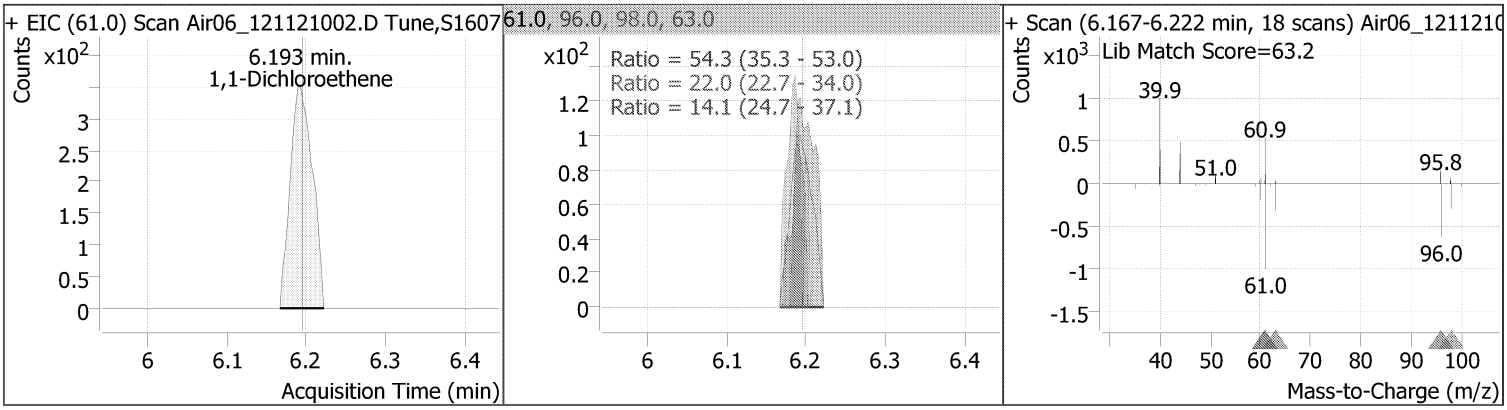
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.0458	5.72	0.06	4203	43.0	26.3	16.4	24.6
					59.0	1.0	2.8	4.2



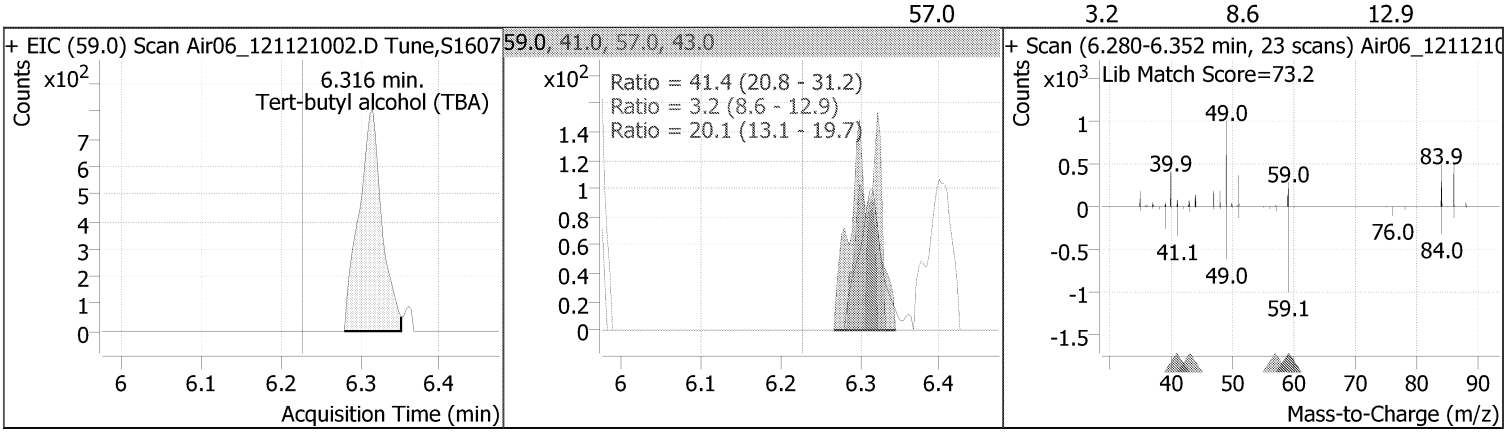
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.0229	5.96	0.00	2061	42.0	58.5	47.3	71.0
					41.0	63.3	45.1	67.6
					57.0	12.2	11.5	17.2



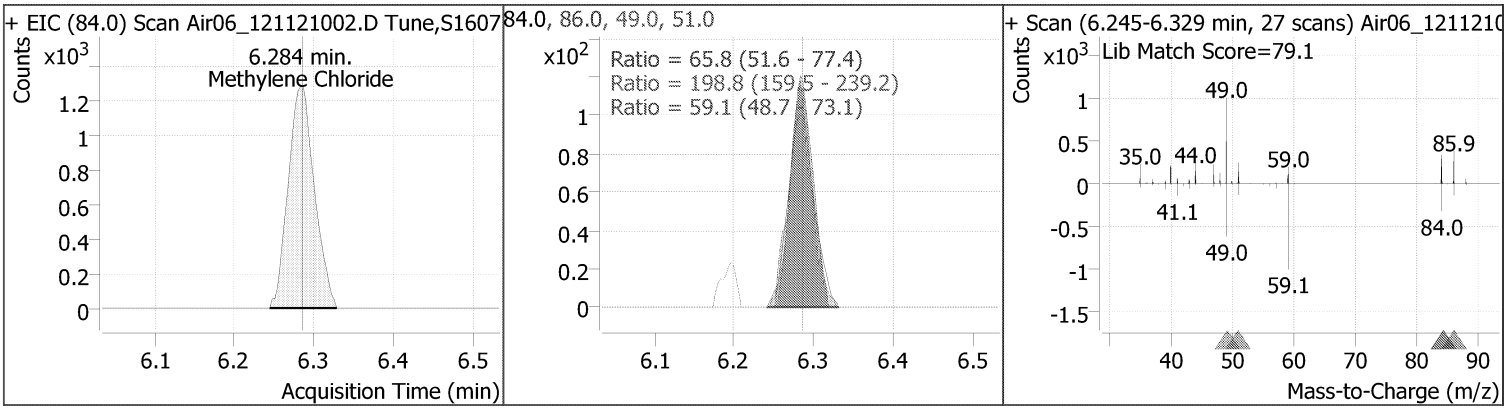
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	0.0079	6.19	0.00	682	96.0	54.3	35.3	53.0
					63.0	14.1	24.7	37.1
					98.0	22.0	22.7	34.0



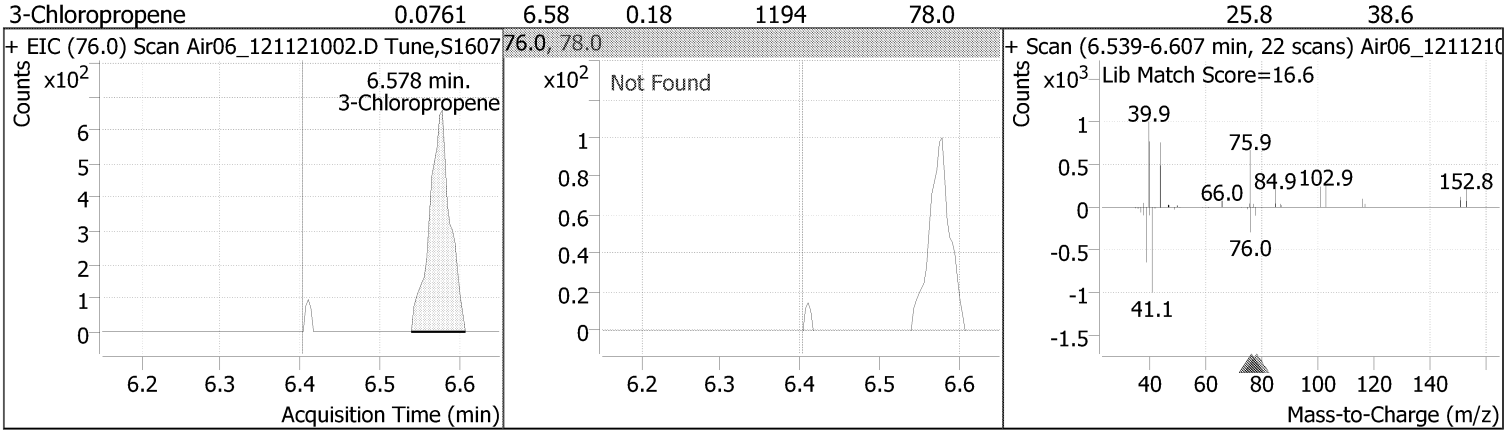
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.0168	6.32	0.09	1627	41.0	41.4	20.8	31.2
					43.0	20.1	13.1	19.7
					57.0	3.2	8.6	12.9



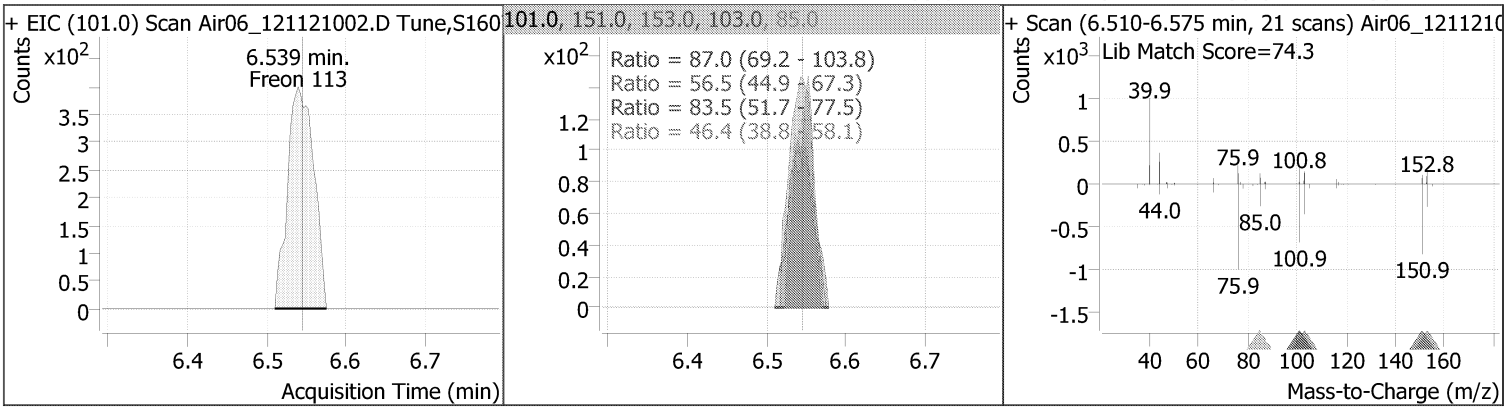
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.0787	6.28	0.00	2933	49.0	198.8	159.5	239.2
					86.0	65.8	51.6	77.4
					51.0	59.1	48.7	73.1



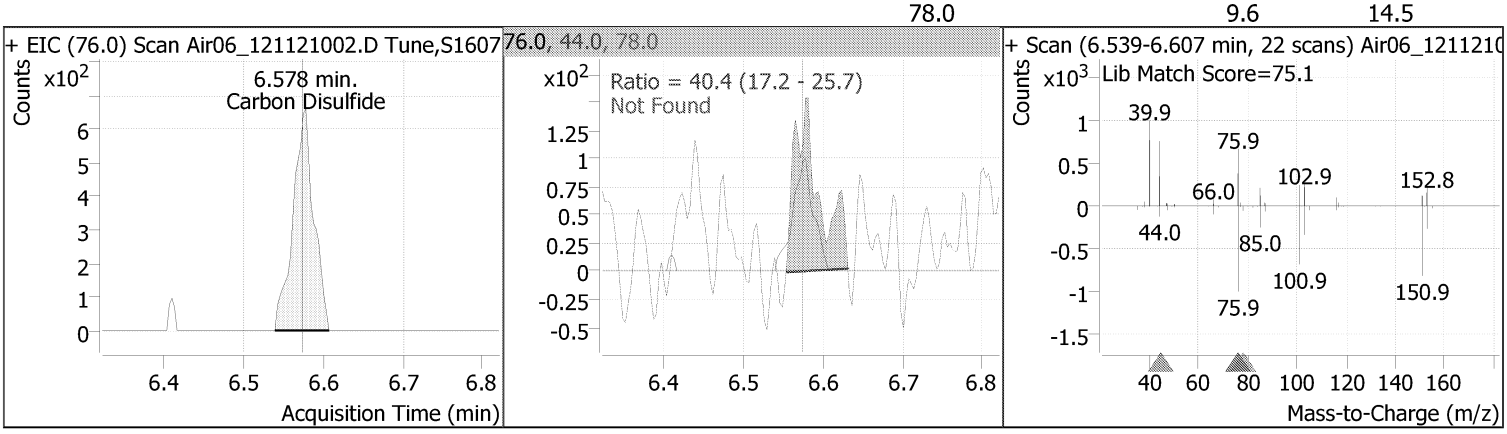
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	0.0761	6.58	0.18	1194	78.0		25.8	38.6



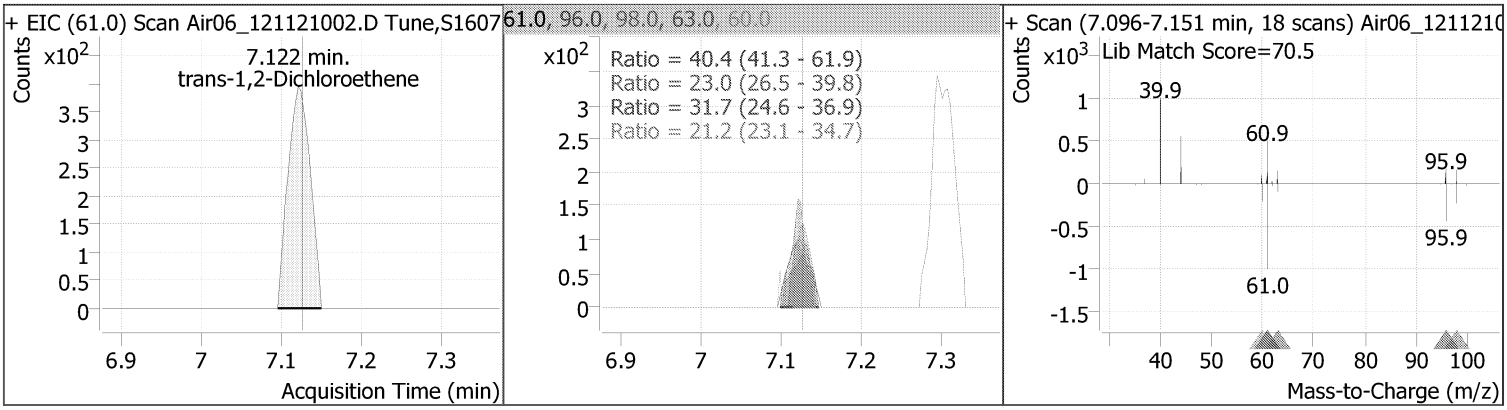
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	0.0103	6.54	-0.01	917	151.0	87.0	69.2	103.8
					103.0	83.5	51.7	77.5
					153.0	56.5	44.9	67.3
					85.0	46.4	38.8	58.1



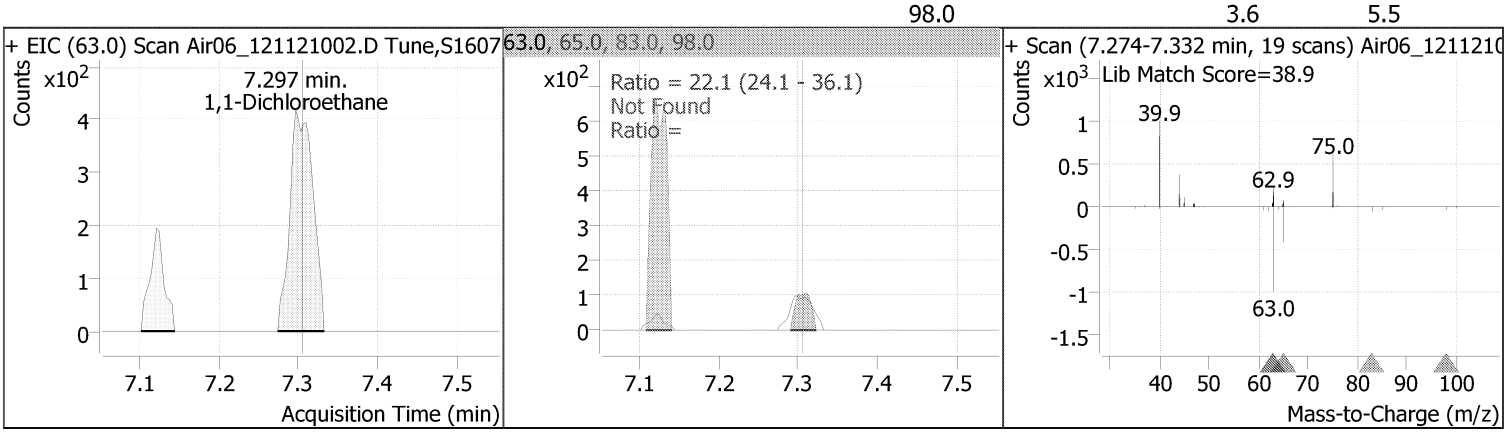
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.0115	6.58	0.00	1194	44.0	40.4	17.2	25.7
					78.0		9.6	14.5



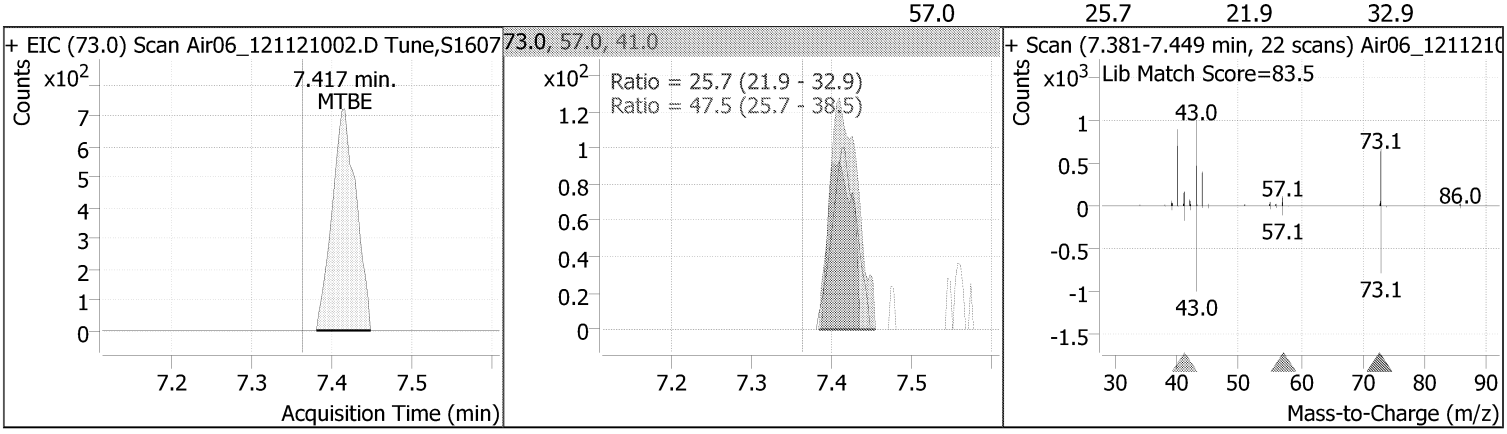
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.0114	7.12	-0.01	768	96.0	40.4	41.3	61.9
					98.0	23.0	26.5	39.8
					63.0	31.7	24.6	36.9
					60.0	21.2	23.1	34.7



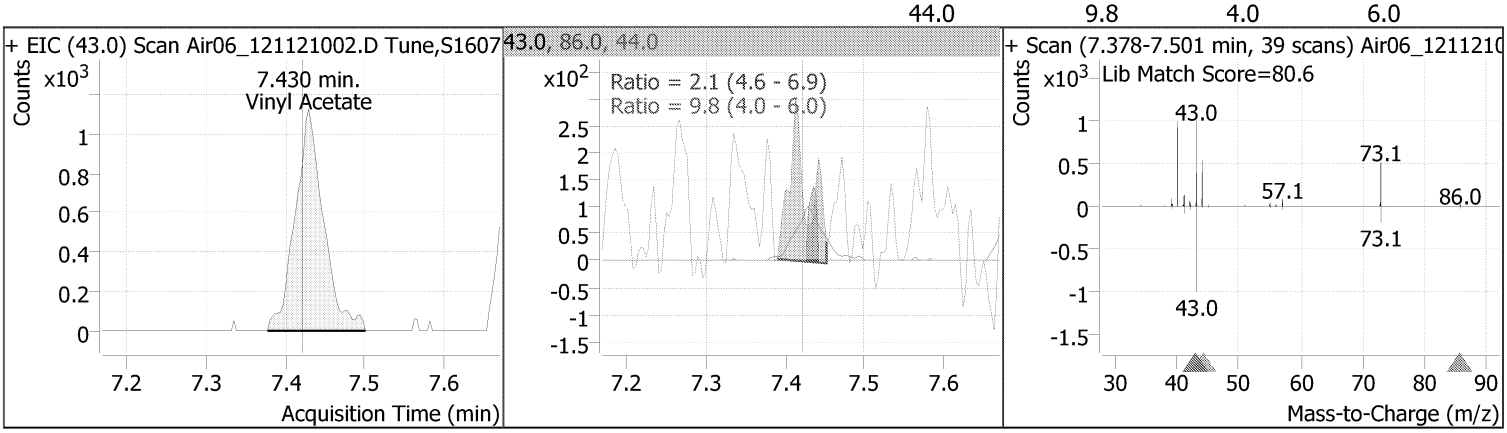
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	0.0100	7.30	-0.01	844	65.0	22.1	24.1	36.1
					83.0		9.9	14.8
					98.0		3.6	5.5



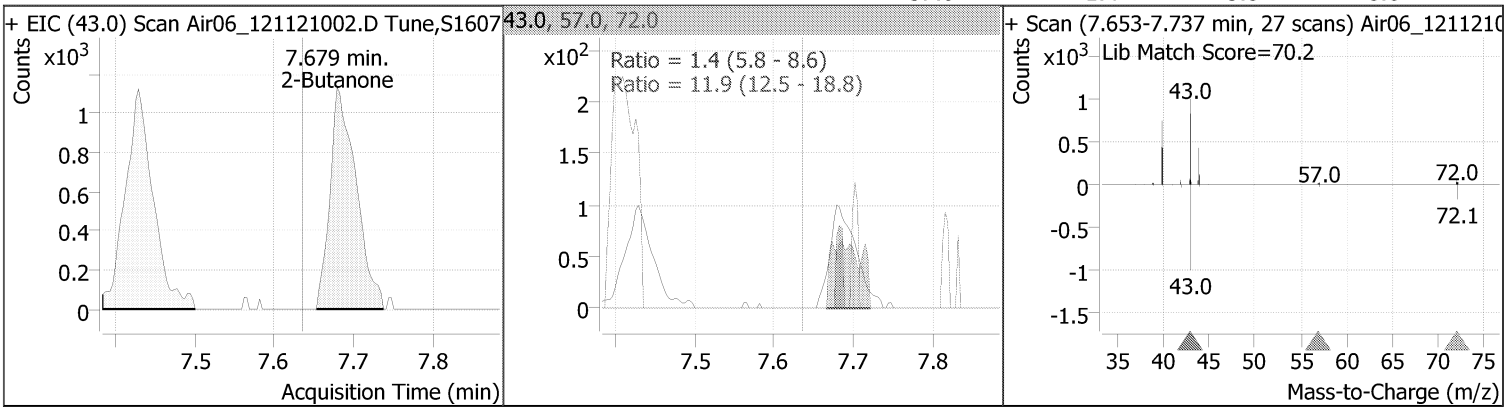
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	0.0133	7.42	0.05	1512	41.0	47.5	25.7	38.5
					57.0	25.7	21.9	32.9



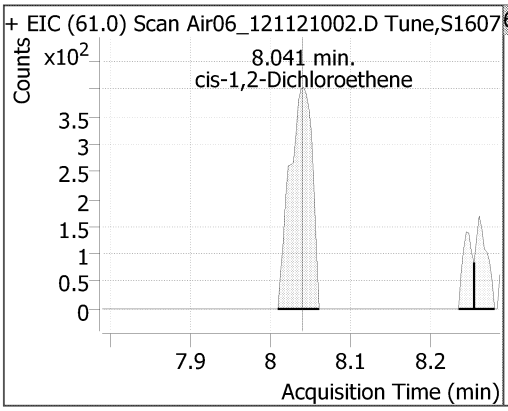
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.0196	7.43	0.01	2779	86.0	2.1	4.6	6.9
					44.0	9.8	4.0	6.0

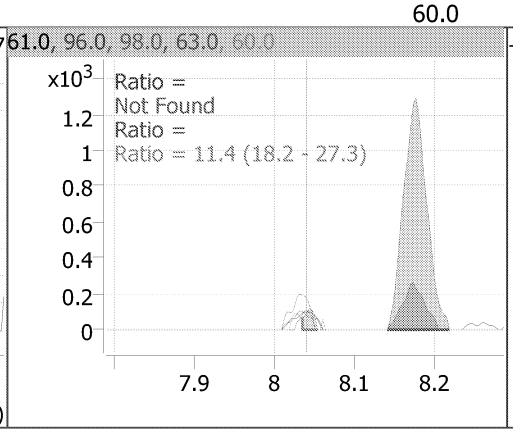


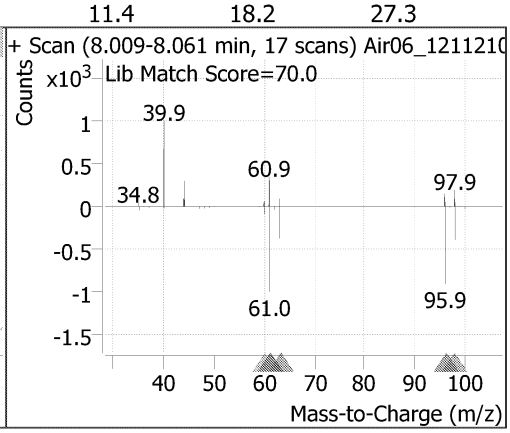
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.0230	7.68	0.04	2580	72.0	11.9	12.5	18.8
					57.0	1.4	5.8	8.6



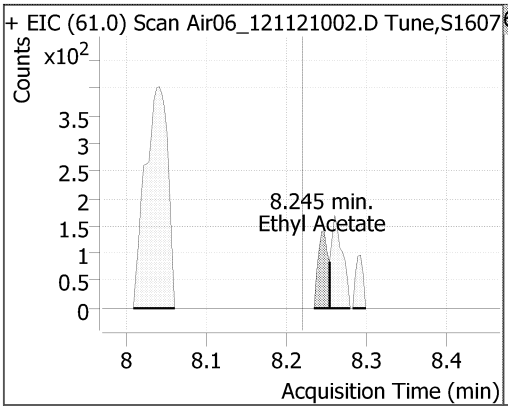
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.0115	8.04	0.00	791	96.0		45.8	68.7
					98.0		29.3	43.9
					63.0		24.9	37.4
					60.0	11.4	18.2	27.3

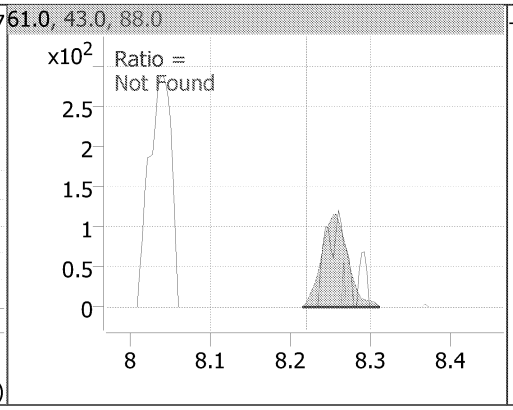


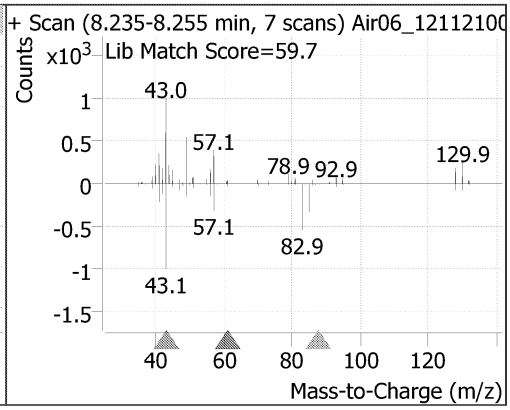




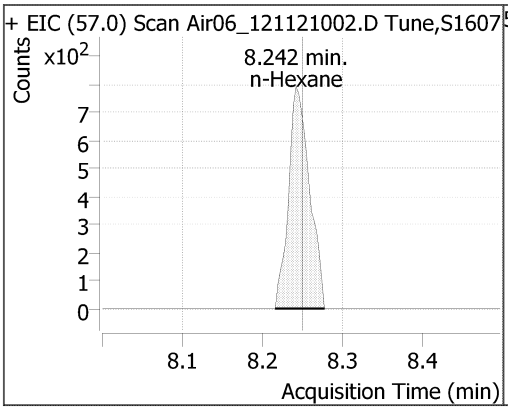
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	0.0075	8.25	0.02	116	43.0		992.2	1488.3
					88.0		16.7	25.1

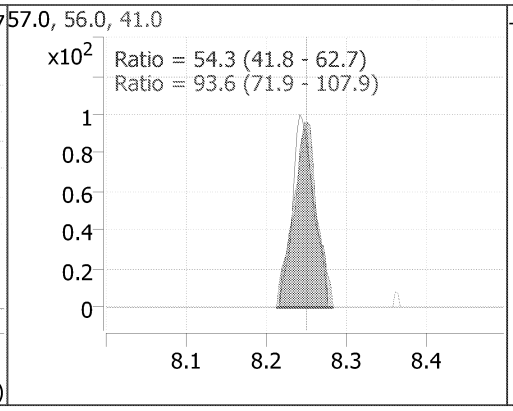


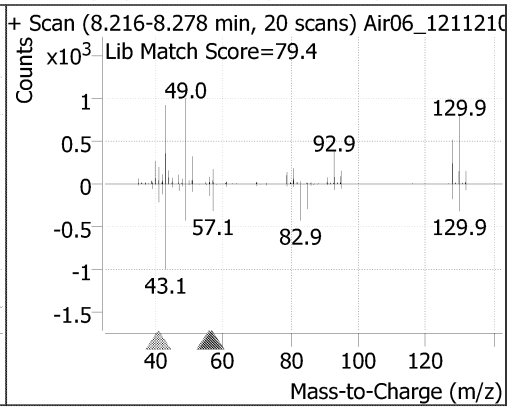




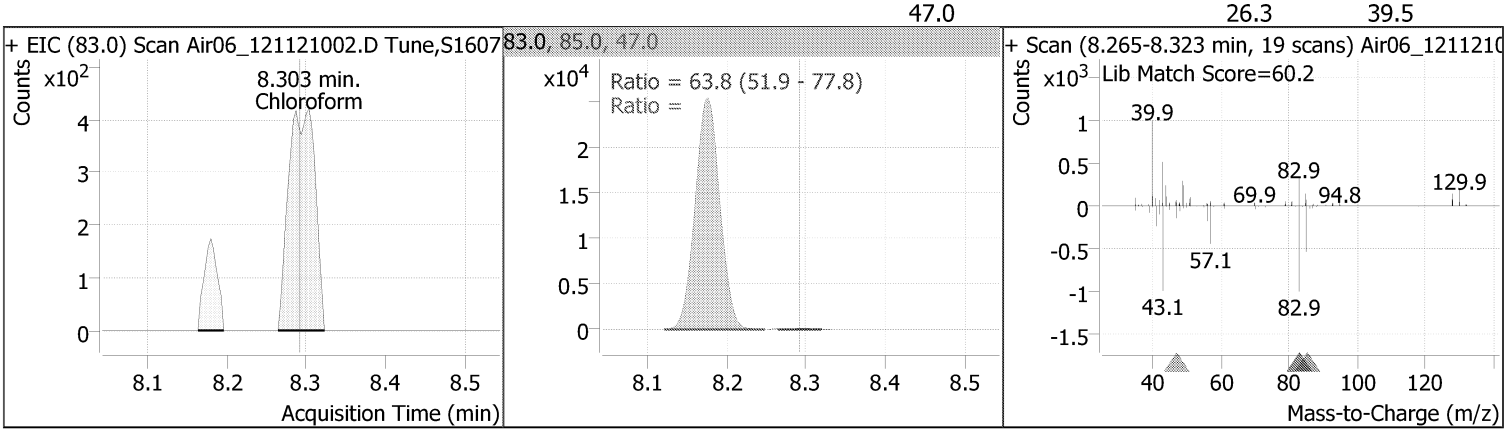
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.0199	8.24	-0.01	1450	41.0	93.6	71.9	107.9
					56.0	54.3	41.8	62.7



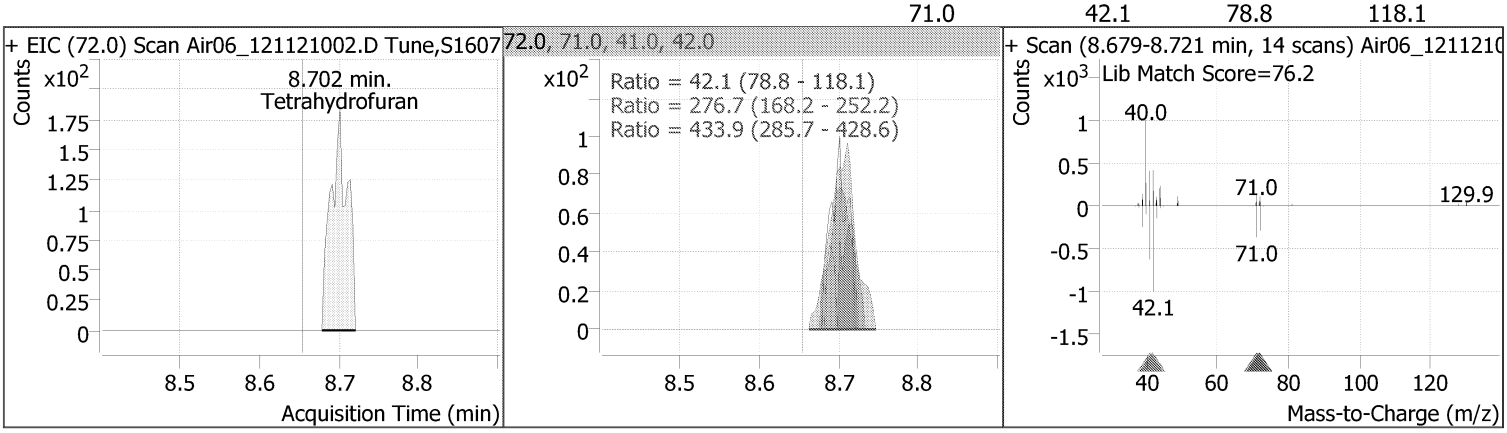




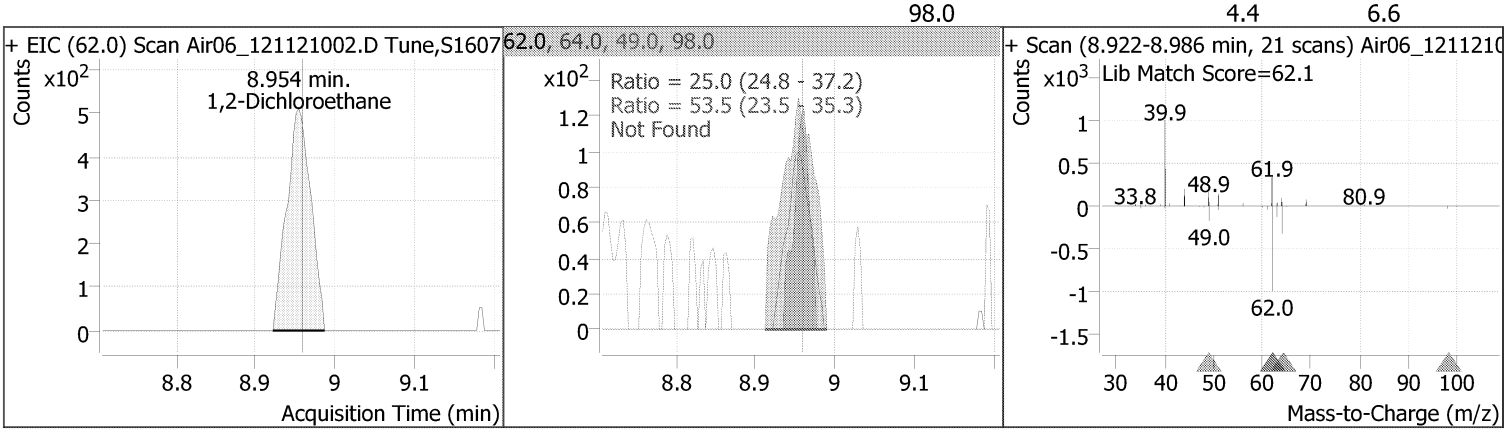
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.0098	8.30	0.01	975	85.0	63.8	51.9	77.8
					47.0		26.3	39.5



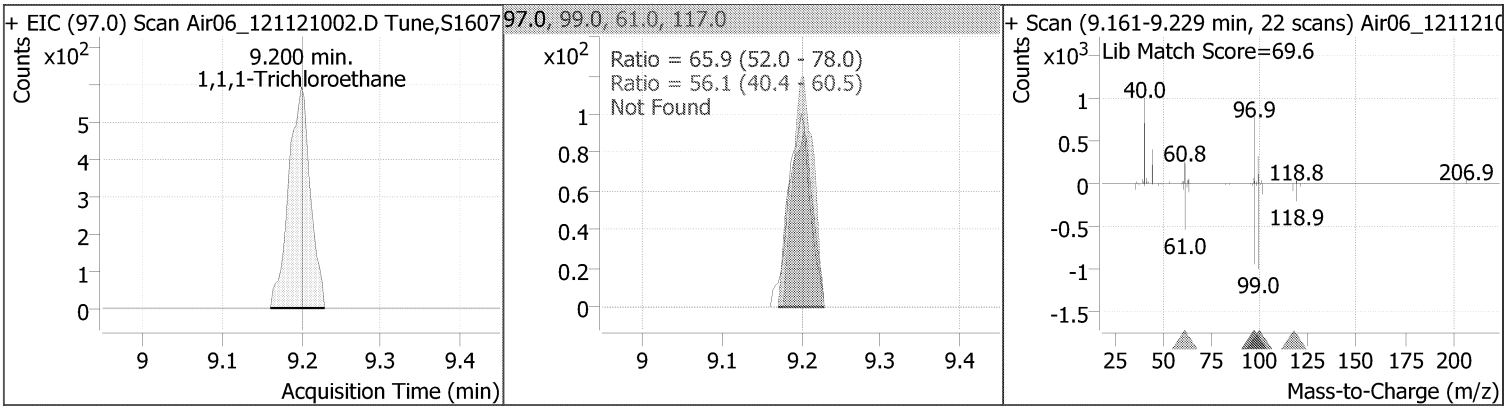
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	0.0164	8.70	0.05	267	42.0	433.9	285.7	428.6
					41.0	276.7	168.2	252.2
					71.0	42.1	78.8	118.1



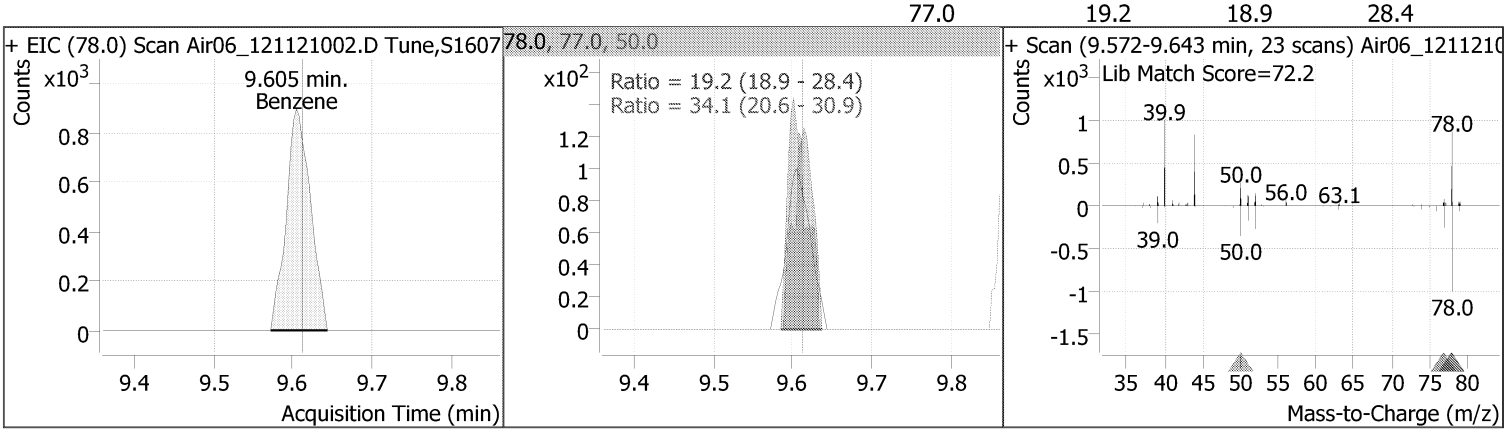
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	0.0135	8.95	-0.01	1077	64.0	25.0	24.8	37.2
					49.0	53.5	23.5	35.3
					98.0		4.4	6.6



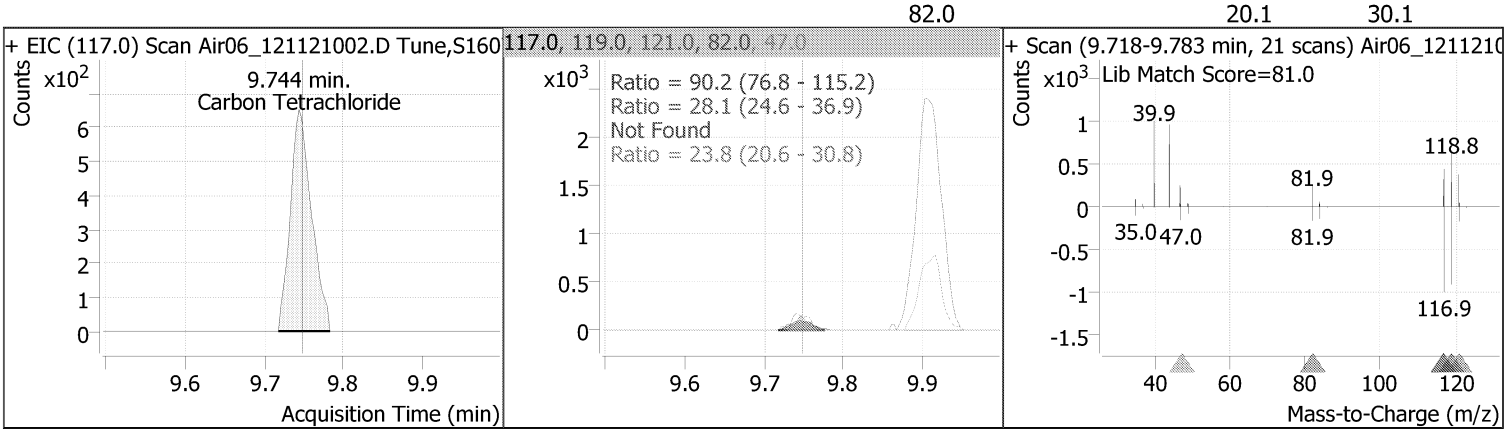
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	0.0108	9.20	0.00	1123	99.0	65.9	52.0	78.0
					61.0	56.1	40.4	60.5
					117.0		9.1	13.6



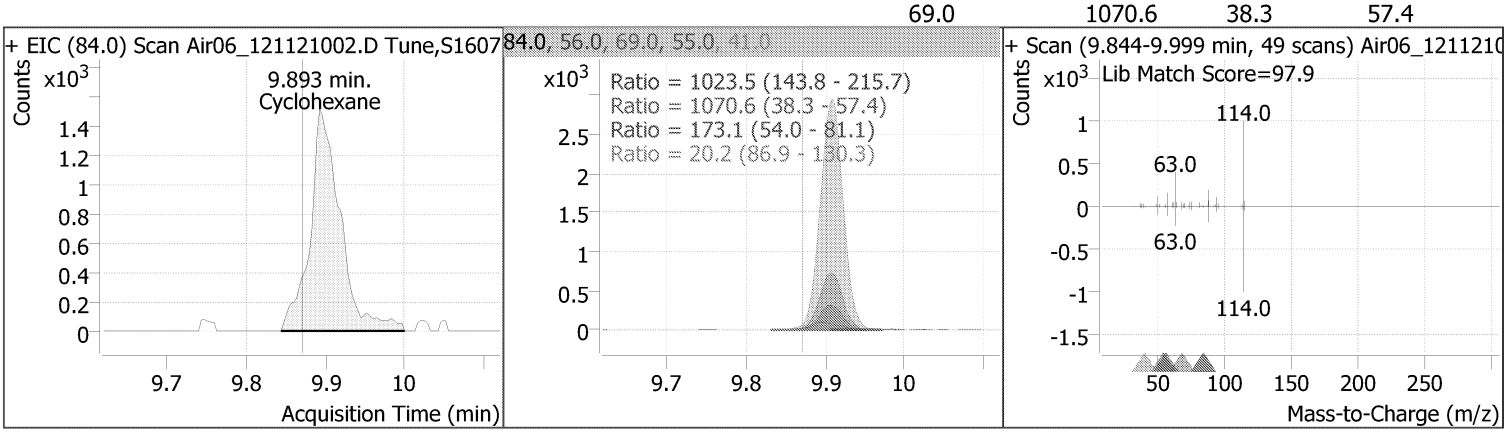
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.0172	9.60	-0.01	1896	50.0	34.1	20.6	30.9
					77.0	19.2	18.9	28.4



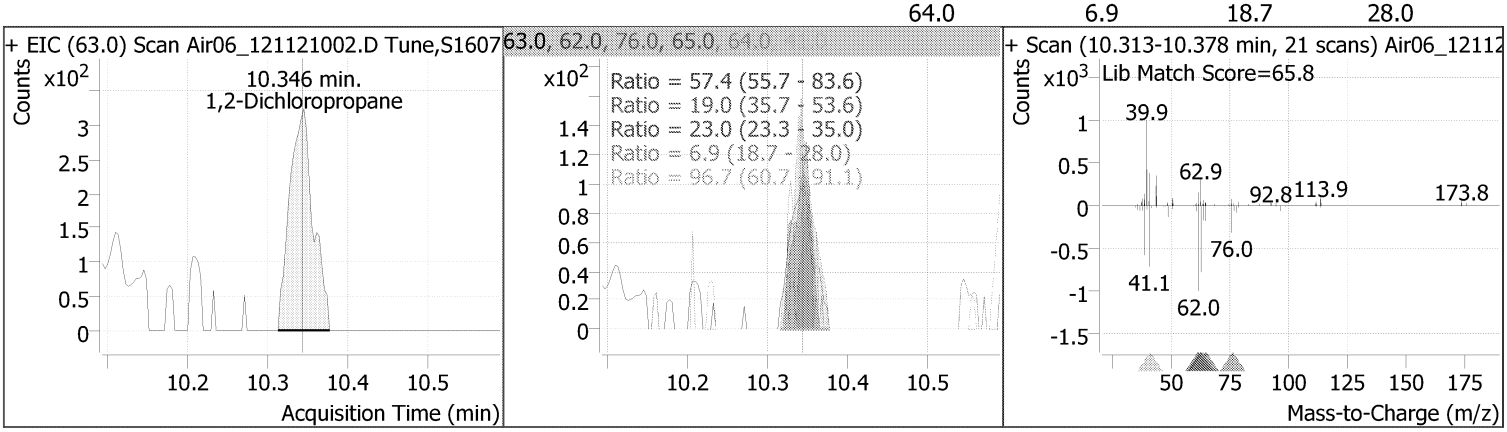
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	0.0107	9.74	-0.01	1205	119.0	90.2	76.8	115.2
					121.0	28.1	24.6	36.9
					47.0	23.8	20.6	30.8
					82.0		20.1	30.1



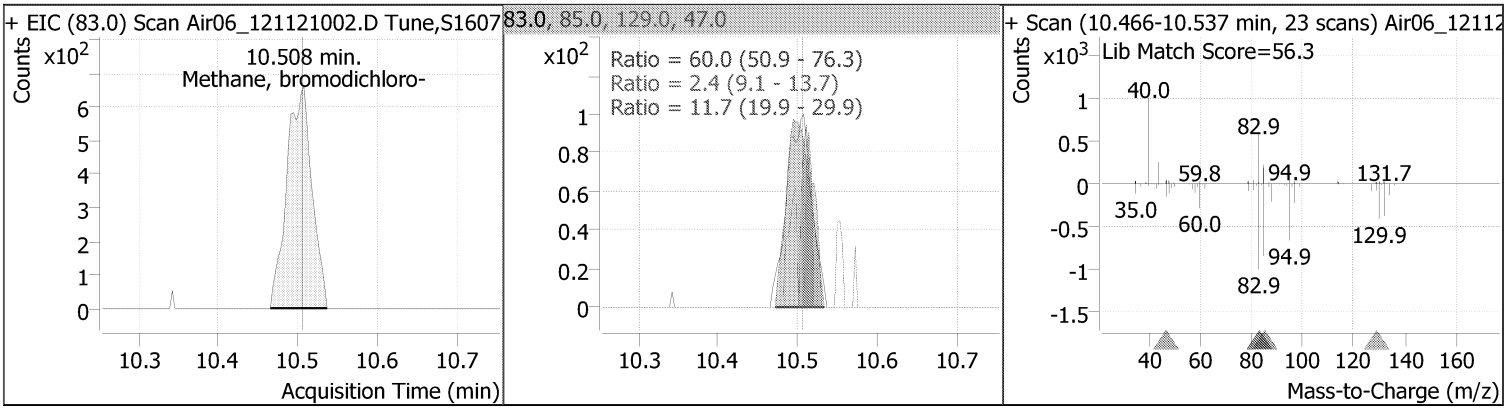
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.0878	9.89	0.02	3999	56.0	1023.5	143.8	215.7
					41.0	20.2	86.9	130.3
					55.0	173.1	54.0	81.1
					69.0	1070.6	38.3	57.4



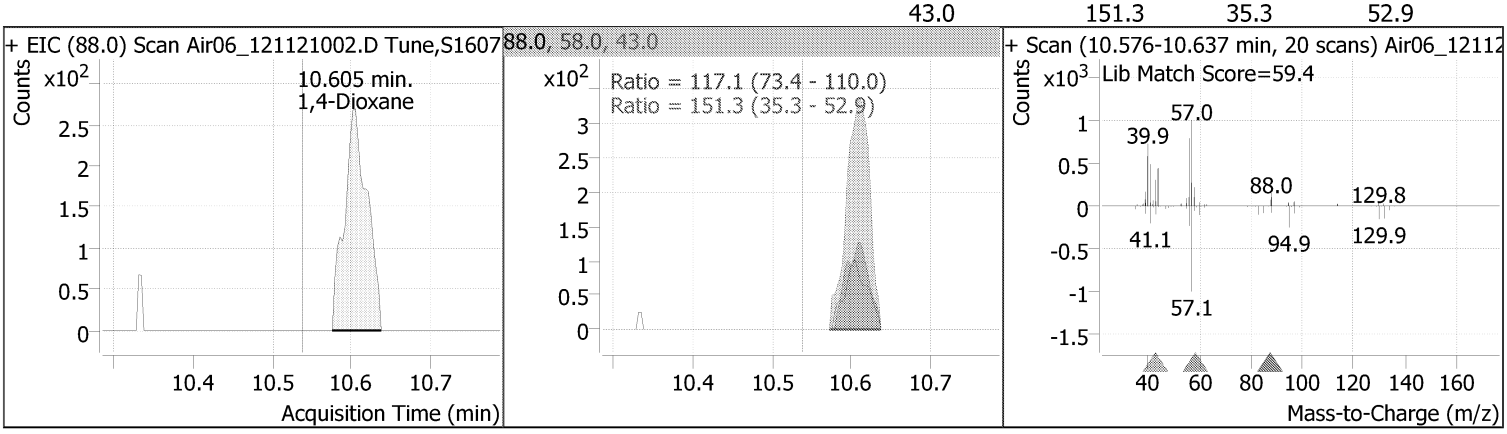
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.0136	10.35	0.00	668	41.0	96.7	60.7	91.1
					62.0	57.4	55.7	83.6
					76.0	19.0	35.7	53.6
					65.0	23.0	23.3	35.0
					64.0	6.9	18.7	28.0



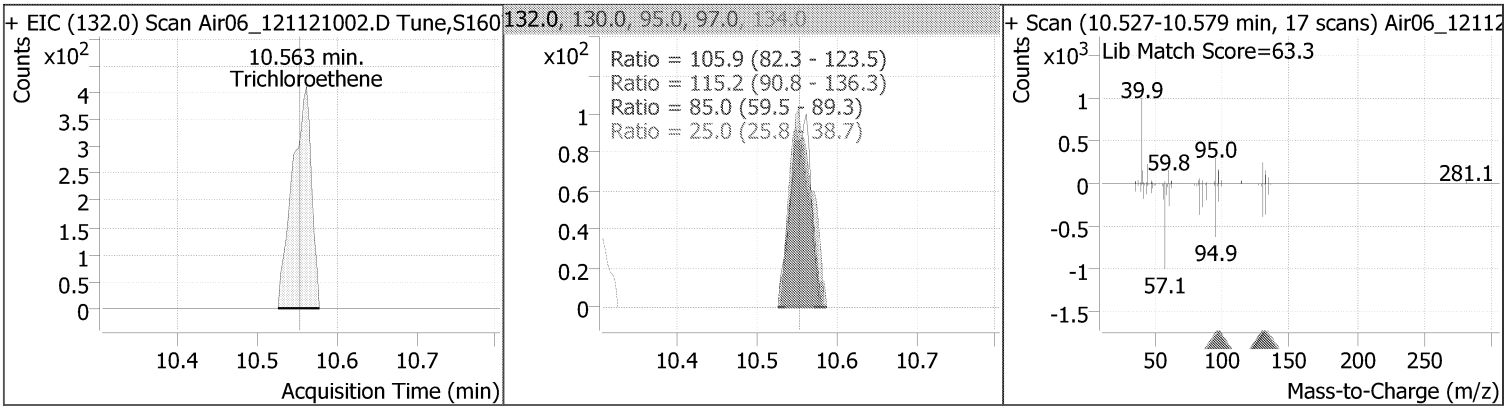
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	0.0144	10.51	0.00	1444	85.0	60.0	50.9	76.3
					47.0	11.7	19.9	29.9
					129.0	2.4	9.1	13.7



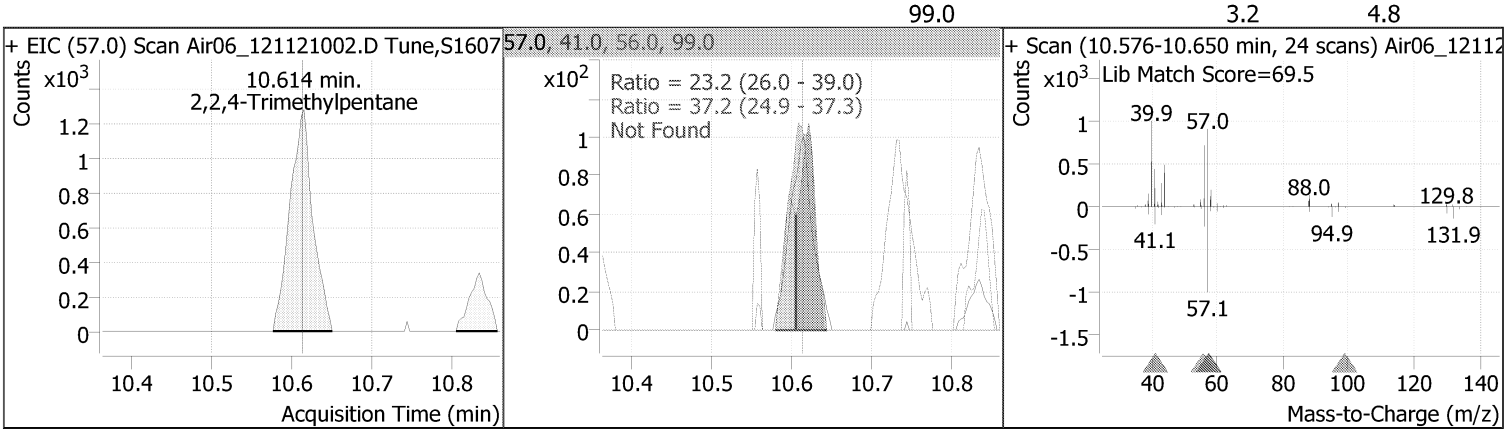
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.0229	10.60	0.07	539	58.0	117.1	73.4	110.0
					43.0	151.3	35.3	52.9



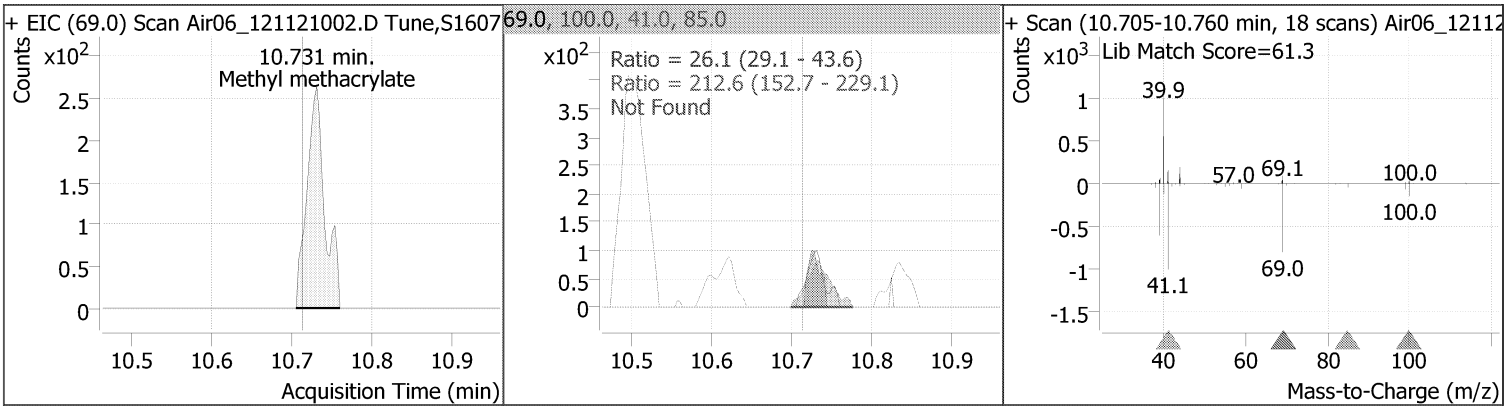
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.0138	10.56	0.00	680	95.0	115.2	90.8	136.3
					130.0	105.9	82.3	123.5
					97.0	85.0	59.5	89.3
					134.0	25.0	25.8	38.7



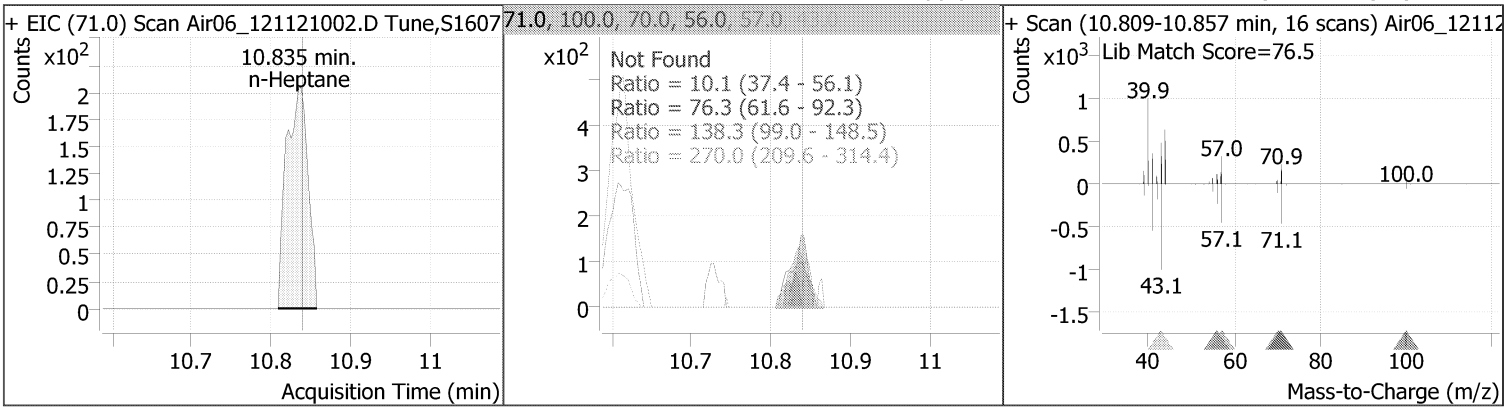
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.0111	10.61	0.00	2568	41.0	23.2	26.0	39.0
					56.0	37.2	24.9	37.3
					99.0		3.2	4.8



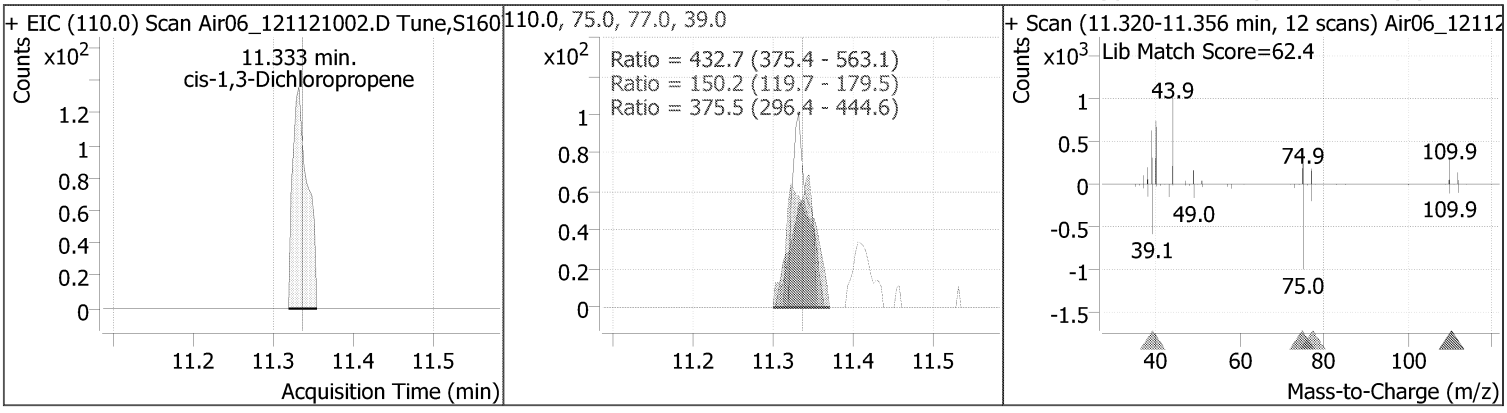
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	0.0104	10.73	0.02	413	41.0	212.6	152.7	229.1
					100.0	26.1	29.1	43.6
					85.0		7.9	11.8



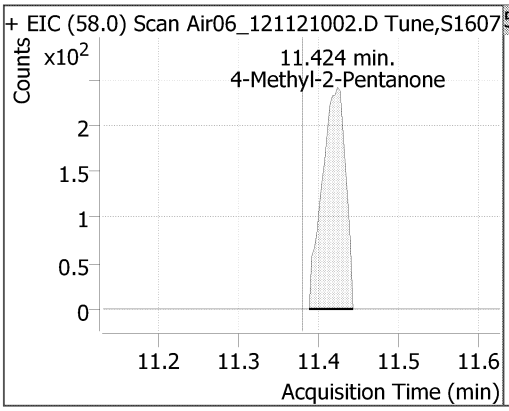
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	0.0107	10.83	-0.01	386	43.0	270.0	209.6	314.4
					57.0	138.3	99.0	148.5
					56.0	76.3	61.6	92.3
					70.0	10.1	37.4	56.1
					100.0		21.5	32.3

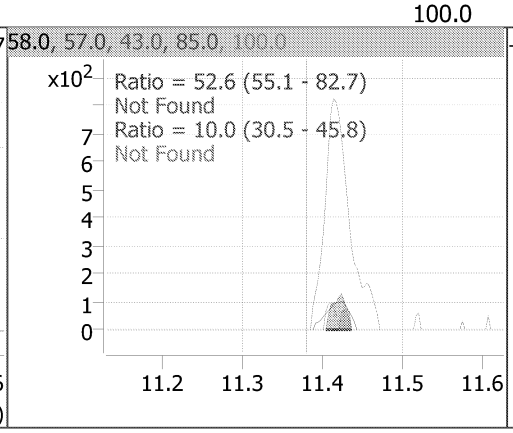


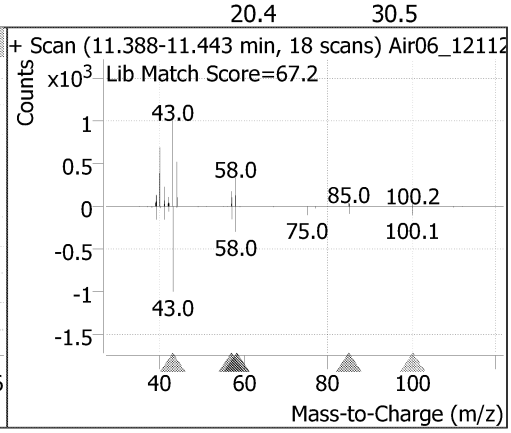
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	0.0122	11.33	-0.01	176	75.0	432.7	375.4	563.1
					39.0	375.5	296.4	444.6
					77.0	150.2	119.7	179.5



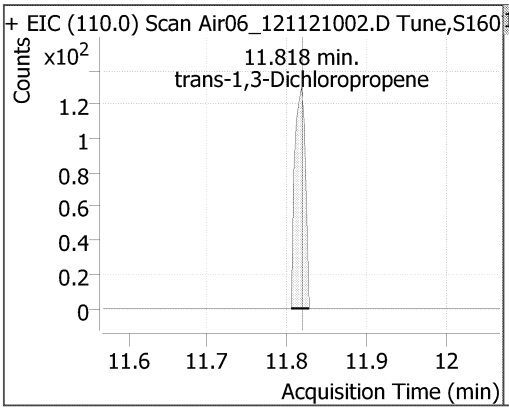
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.0115	11.42	0.04	491	43.0		240.8	361.2
					57.0	52.6	55.1	82.7
					85.0	10.0	30.5	45.8
					100.0		20.4	30.5

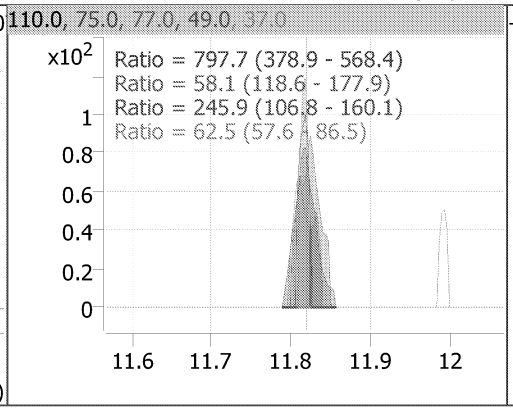


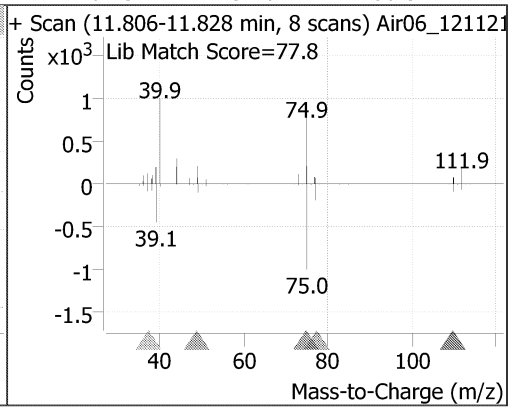




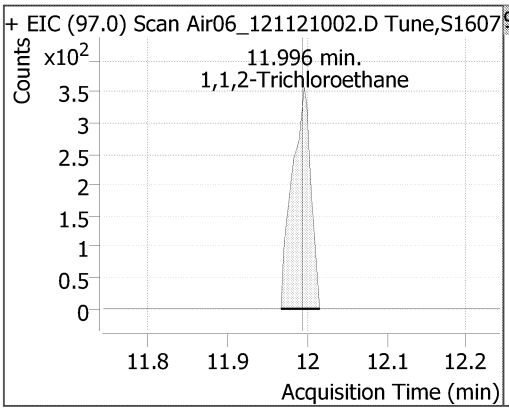
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	0.0080	11.82	0.00	118	75.0	797.7	378.9	568.4
					77.0	58.1	118.6	177.9
					49.0	245.9	106.8	160.1
					37.0	62.5	57.6	86.5

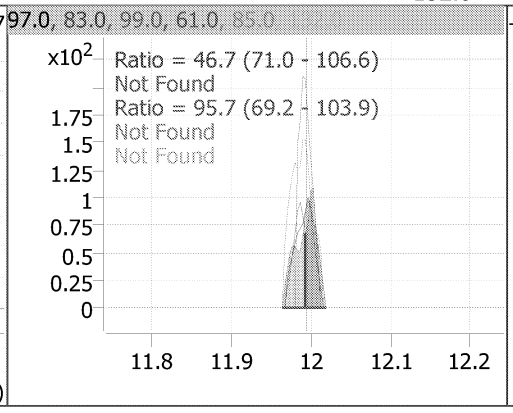


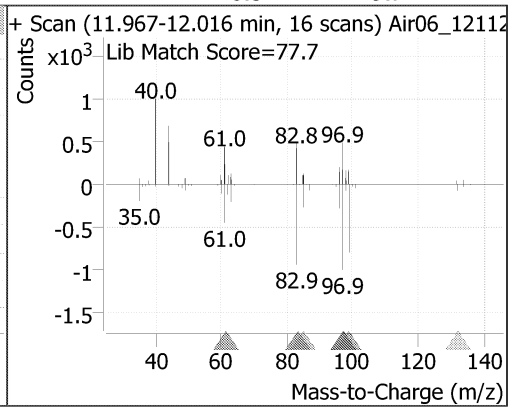




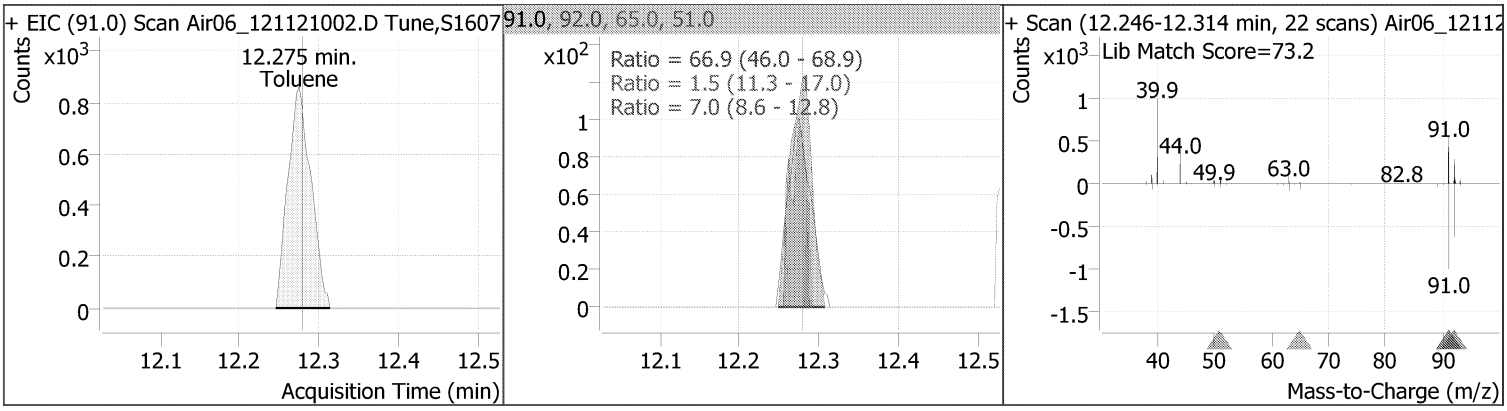
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	0.0121	12.00	0.00	577	83.0	46.7	71.0	106.6
					61.0	95.7	69.2	103.9
					99.0		49.9	74.9
					85.0		46.4	69.6
					132.0		6.5	9.7



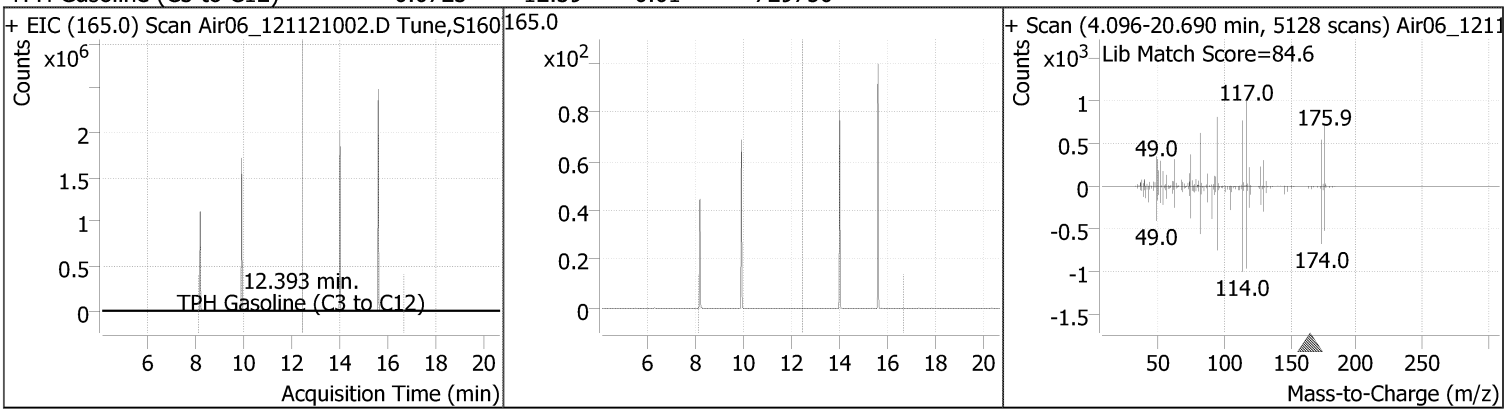




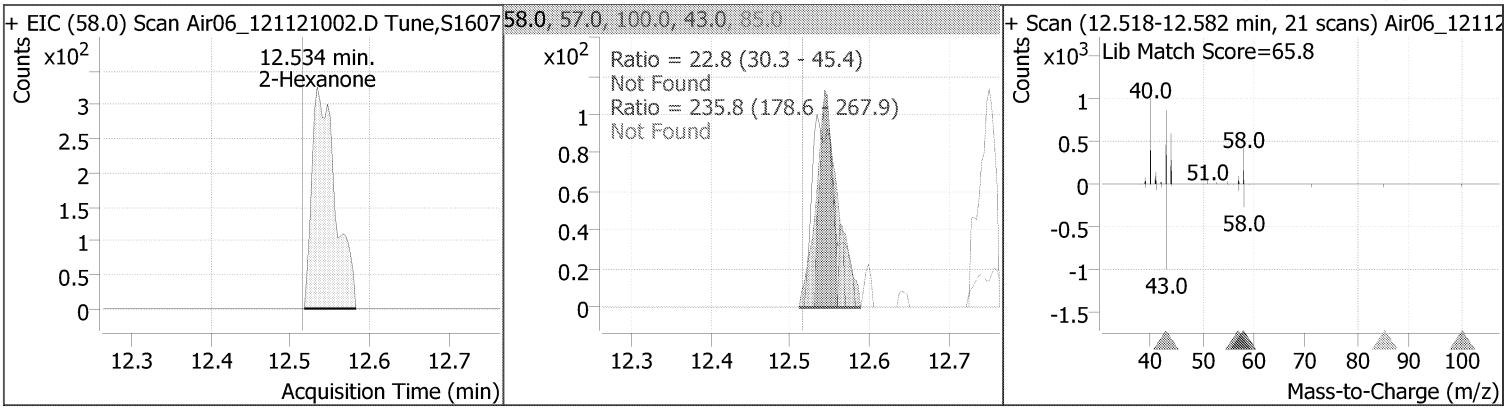
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.0126	12.27	-0.01	1729	92.0	66.9	46.0	68.9
					65.0	1.5	11.3	17.0
					51.0	7.0	8.6	12.8



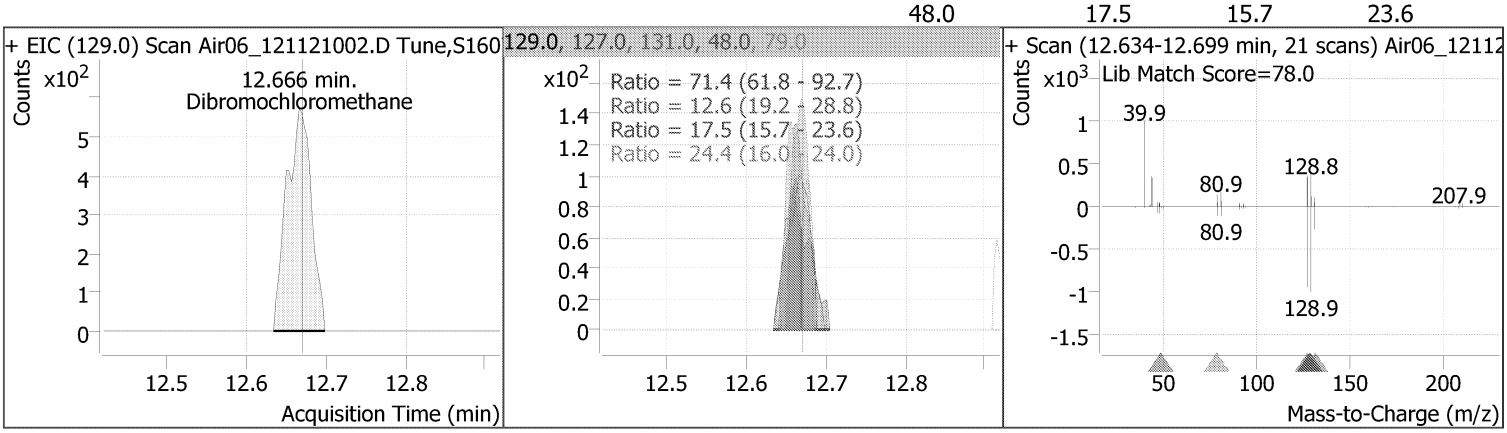
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	0.0723	12.39	-0.01	729750				



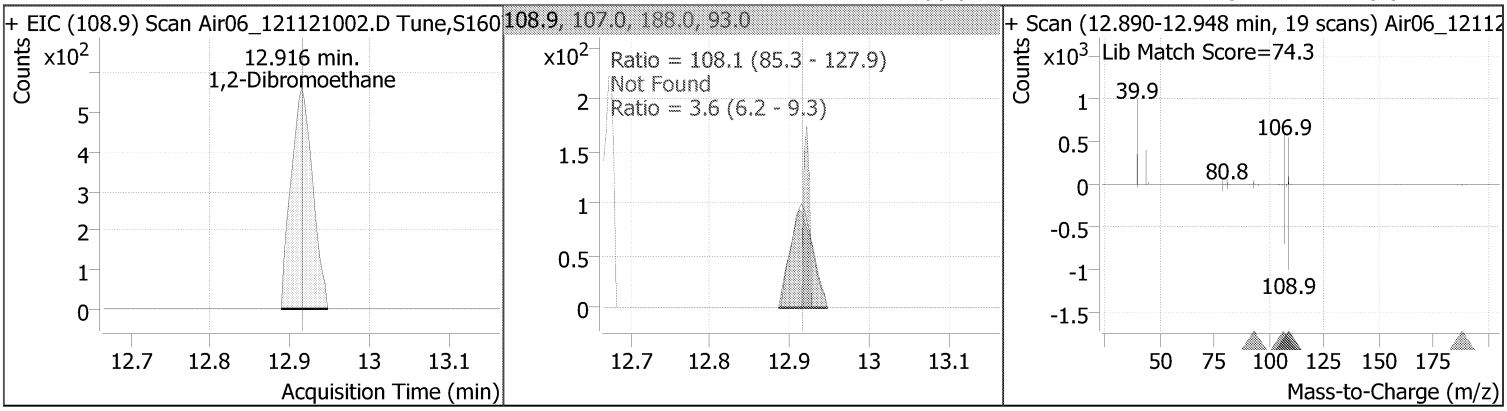
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.0126	12.53	0.02	669	43.0	235.8	178.6	267.9
					57.0	22.8	30.3	45.4
					100.0		11.5	17.3
					85.0		10.6	15.9



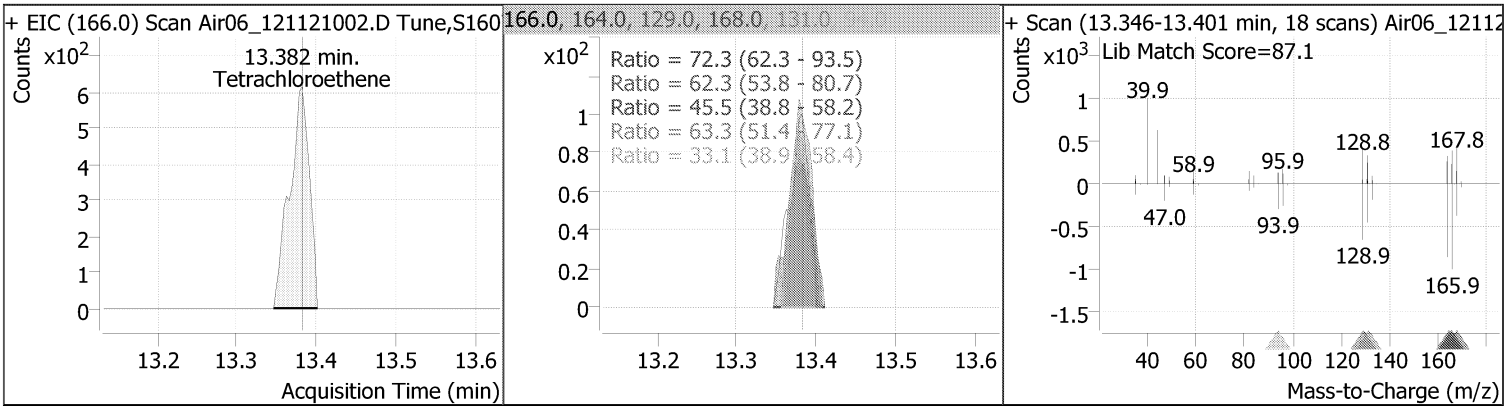
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.0128	12.67	-0.01	1236	127.0	71.4	61.8	92.7
					131.0	12.6	19.2	28.8
					79.0	24.4	16.0	24.0
					48.0	17.5	15.7	23.6



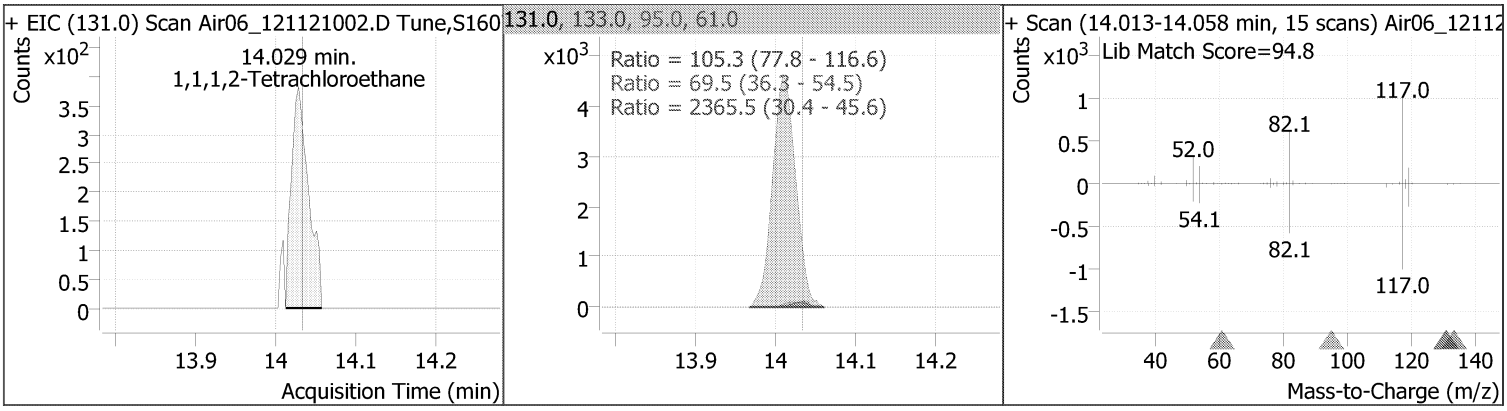
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.0144	12.92	0.00	1056	107.0	108.1	85.3	127.9
					93.0	3.6	6.2	9.3
					188.0		3.7	5.5



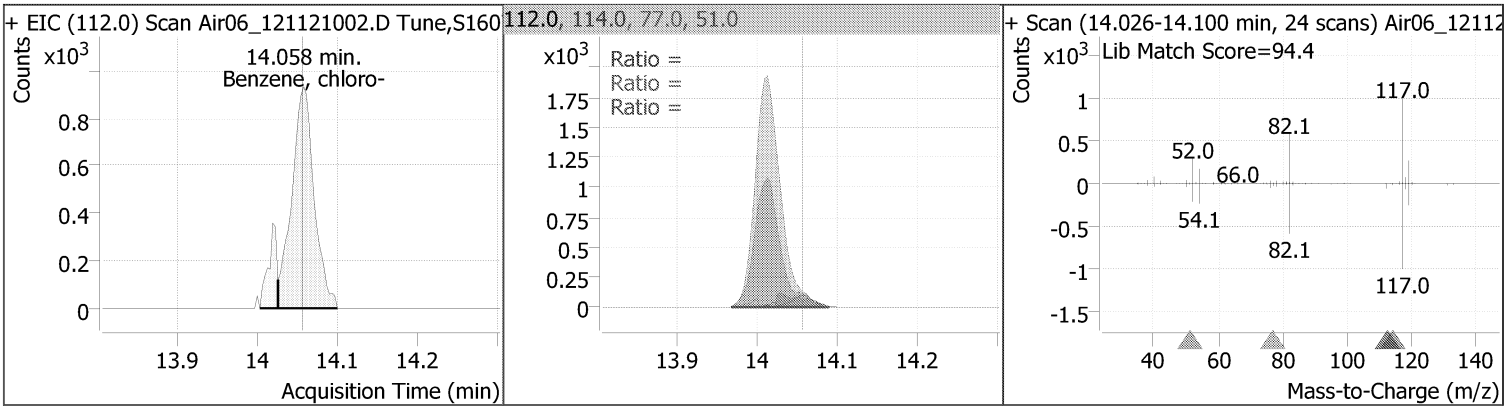
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.0132	13.38	0.00	1063	164.0	72.3	62.3	93.5
					129.0	62.3	53.8	80.7
					131.0	63.3	51.4	77.1
					94.0	33.1	38.9	58.4
					168.0	45.5	38.8	58.2



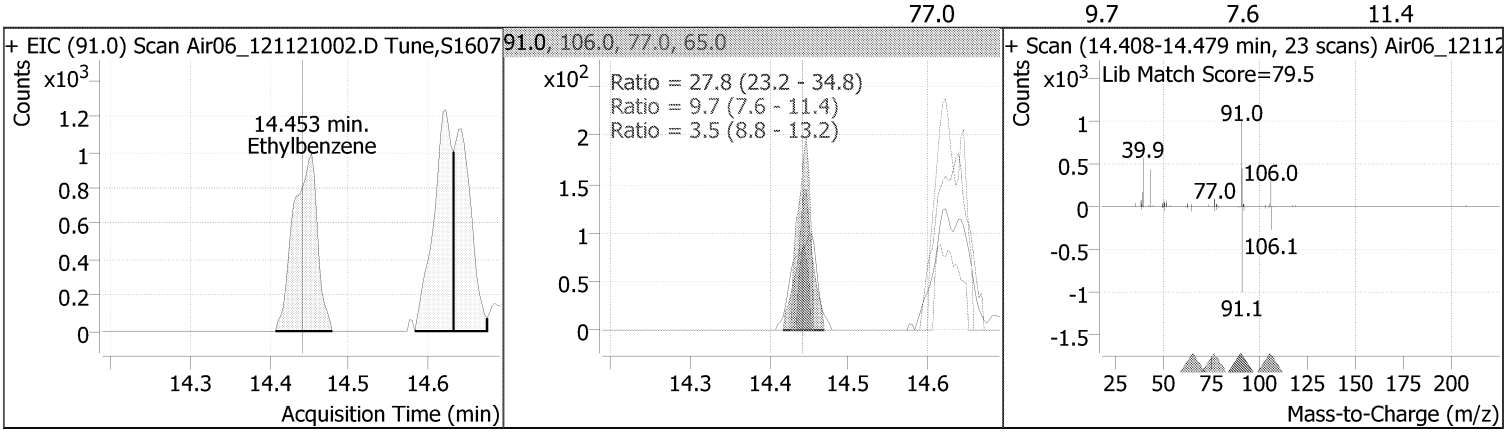
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	0.0098	14.03	-0.01	574	133.0	105.3	77.8	116.6
					95.0	69.5	36.3	54.5
					61.0	2365.5	30.4	45.6



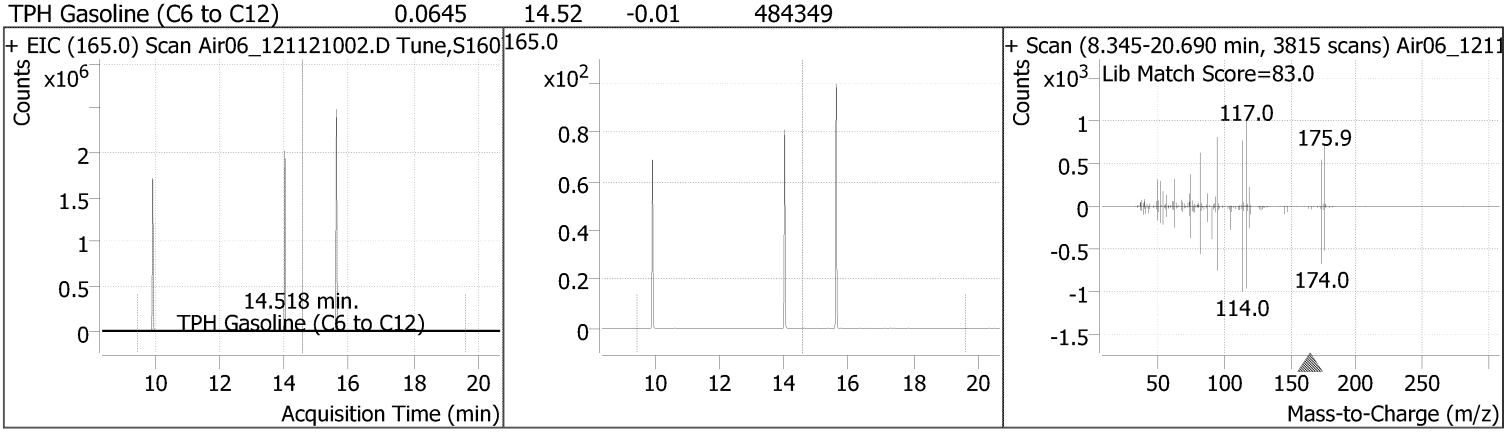
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0180	14.06	0.00	1824	77.0		53.0	79.5
					51.0		28.8	43.2
					114.0		25.8	38.7



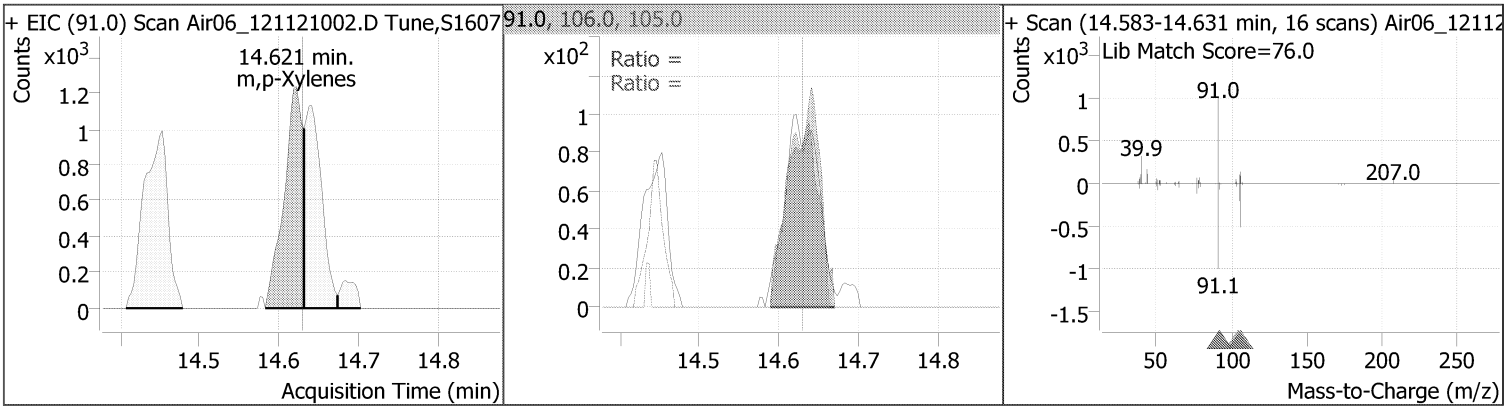
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.0126	14.45	0.01	2062	106.0	27.8	23.2	34.8
					65.0	3.5	8.8	13.2
					77.0	9.7	7.6	11.4



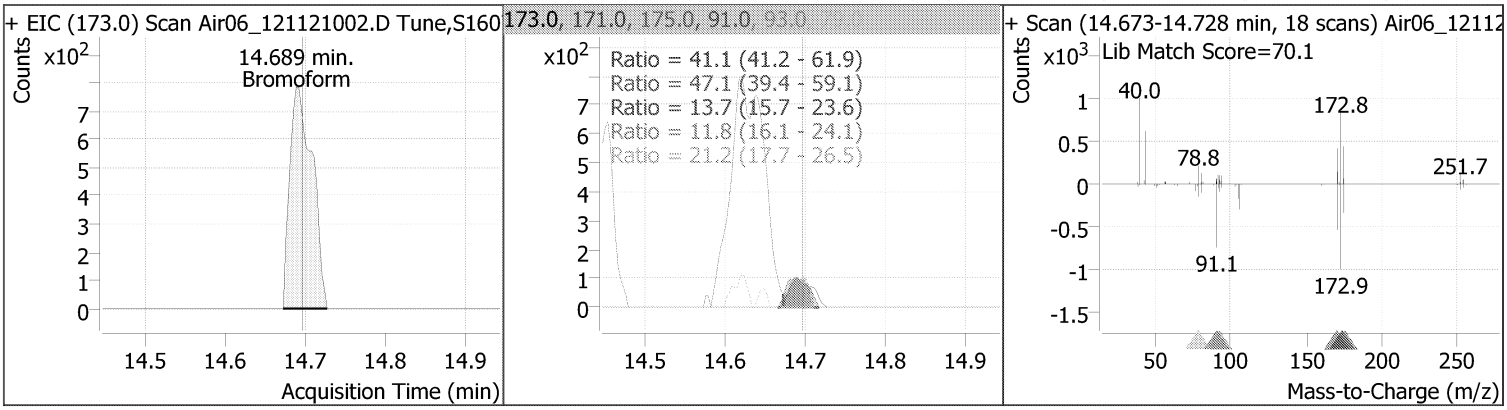
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	0.0645	14.52	-0.01	484349				



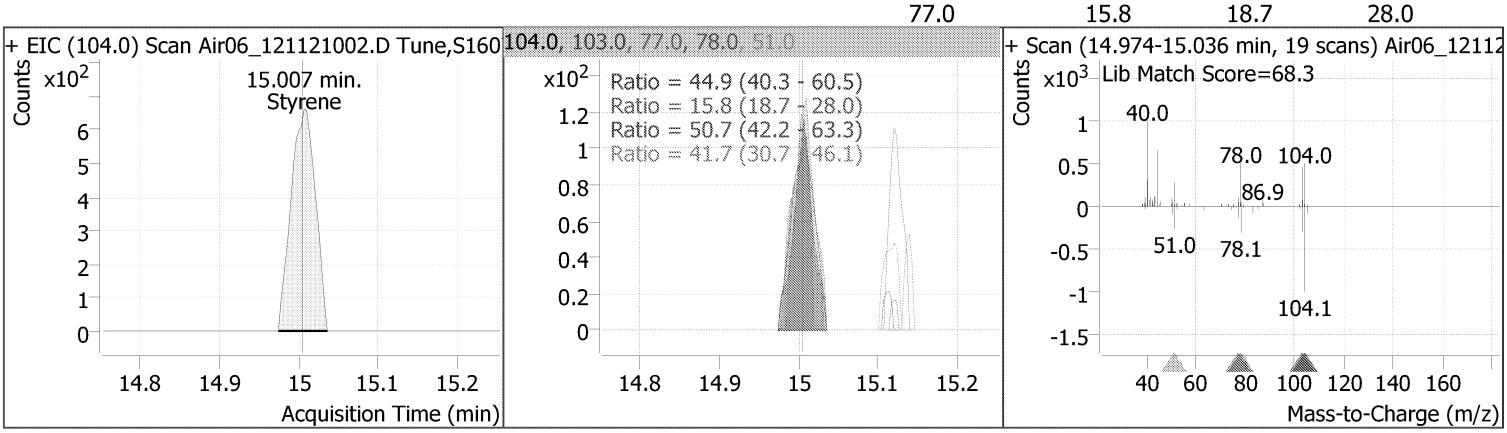
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	0.0142	14.62	-0.01	1956	106.0		35.5	53.2
					105.0		16.8	25.3



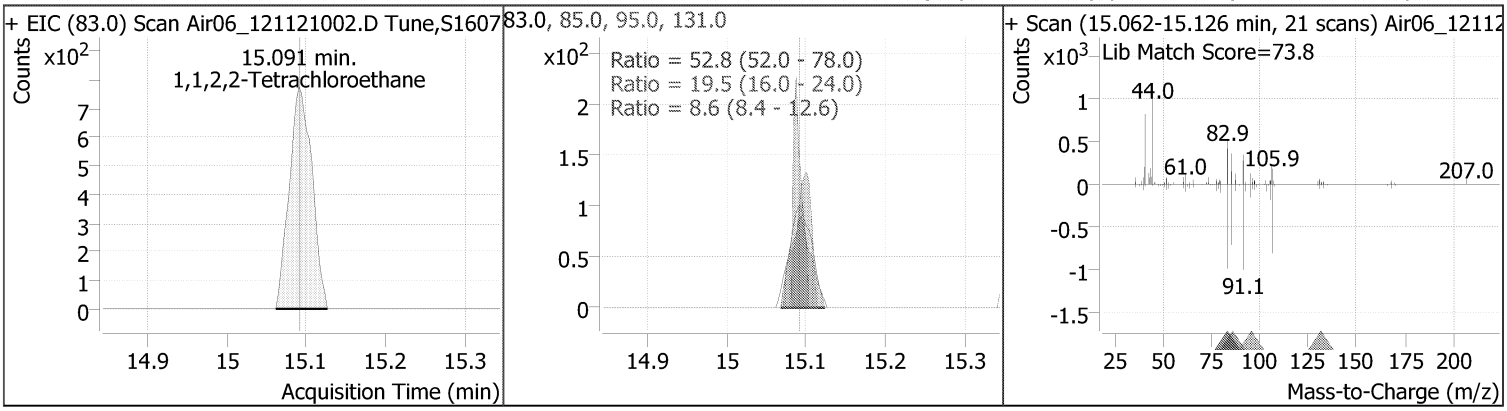
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.0142	14.69	-0.01	1541	171.0	41.1	41.2	61.9
					175.0	47.1	39.4	59.1
					79.0	21.2	17.7	26.5
					93.0	11.8	16.1	24.1
					91.0	13.7	15.7	23.6



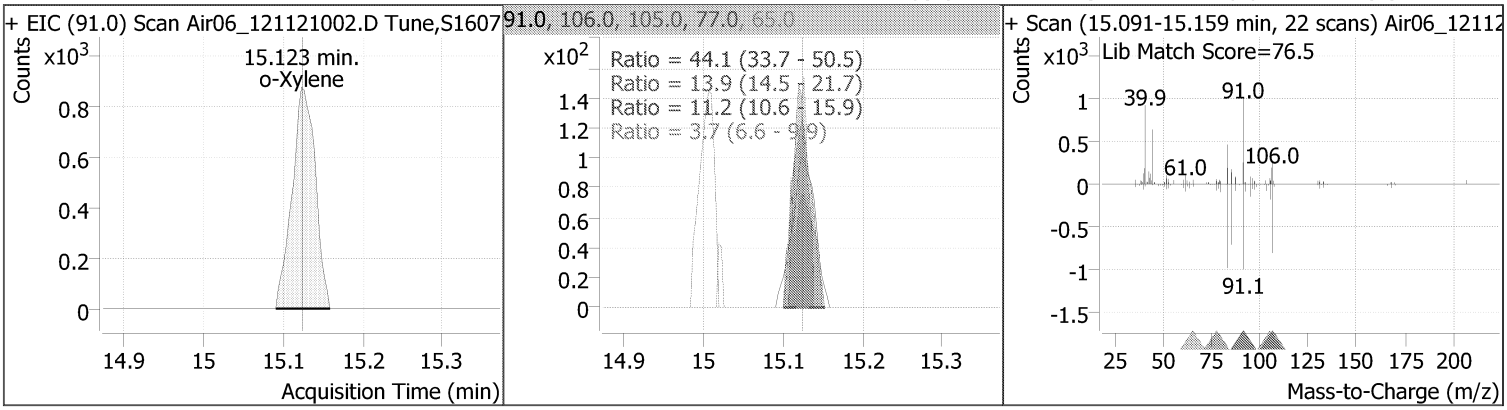
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	0.0152	15.01	0.00	1405	78.0	50.7	42.2	63.3
					103.0	44.9	40.3	60.5
					51.0	41.7	30.7	46.1
					77.0	15.8	18.7	28.0



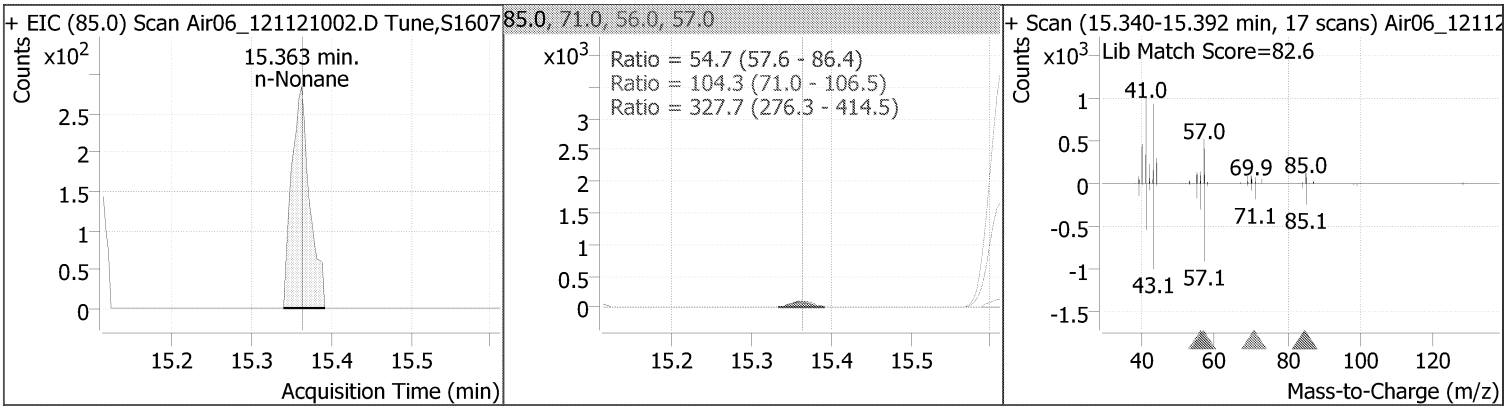
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.0155	15.09	-0.01	1537	85.0	52.8	52.0	78.0
					95.0	19.5	16.0	24.0
					131.0	8.6	8.4	12.6



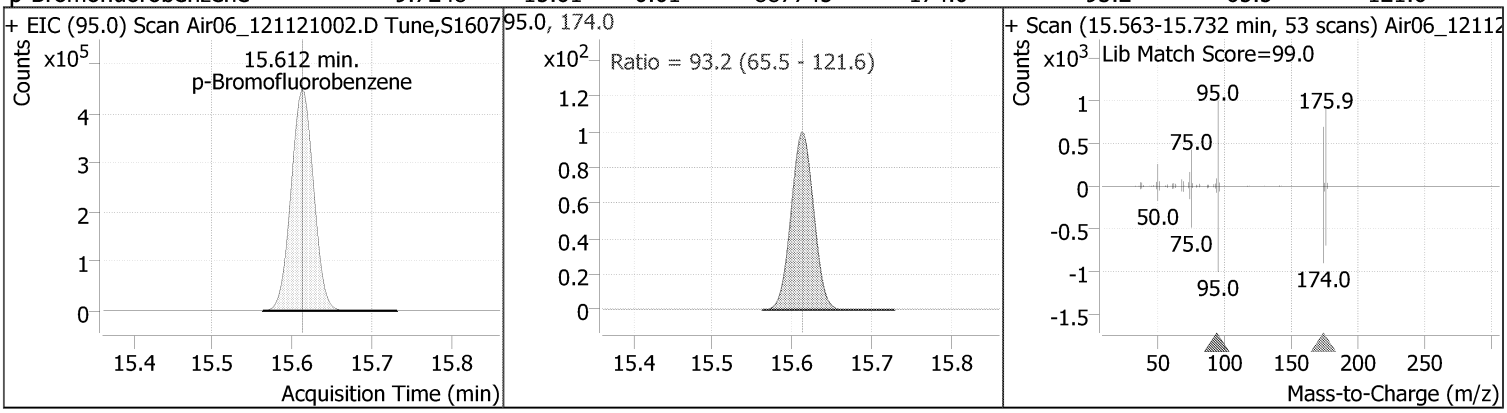
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.0124	15.12	-0.01	1772	106.0	44.1	33.7	50.5
					105.0	13.9	14.5	21.7
					77.0	11.2	10.6	15.9
					65.0	3.7	6.6	9.9



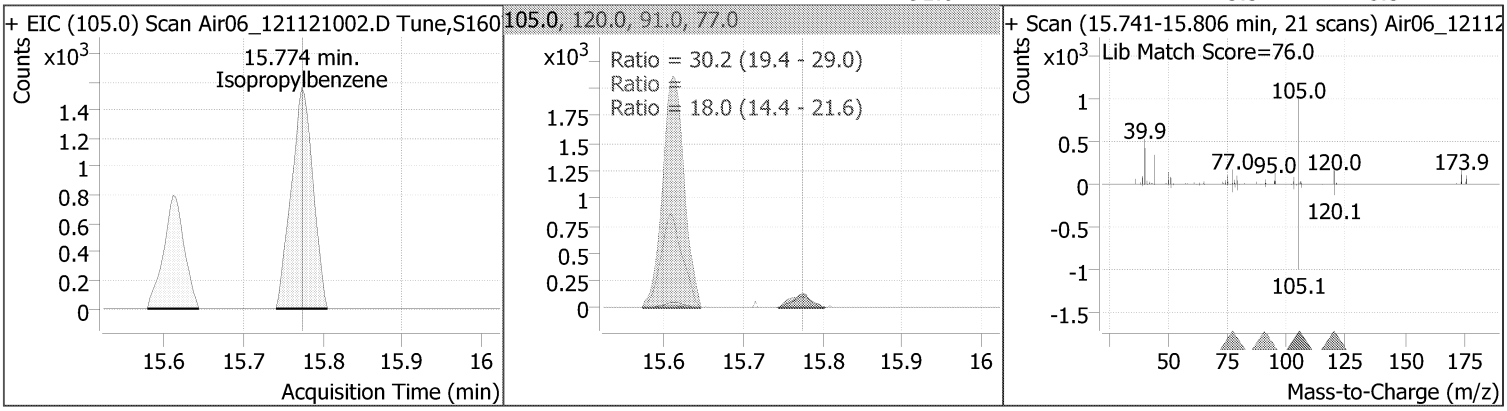
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	0.0153	15.36	-0.01	446	57.0	327.7	276.3	414.5
					56.0	104.3	71.0	106.5
					71.0	54.7	57.6	86.4



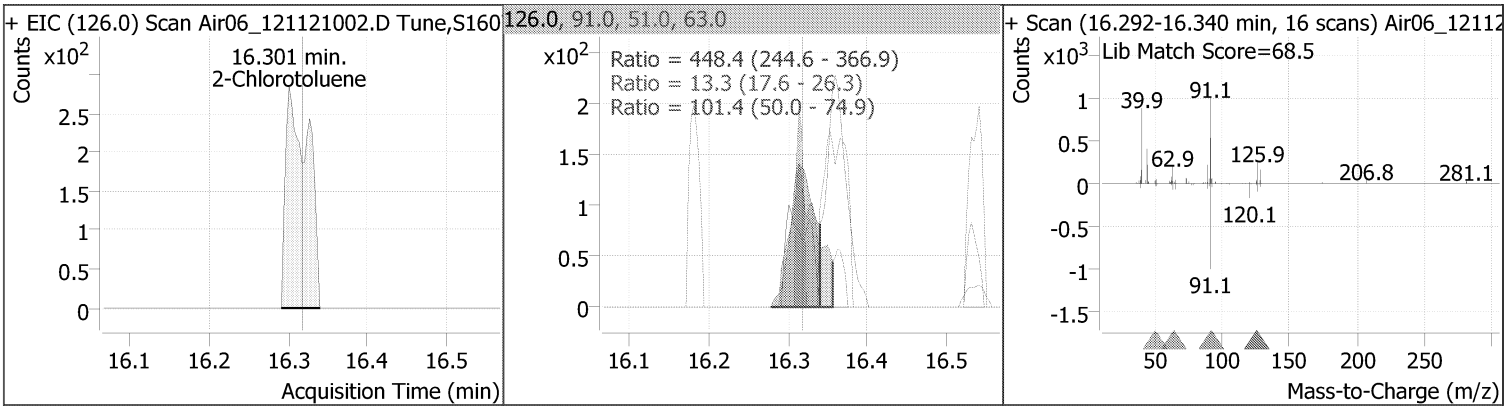
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	9.7248	15.61	-0.01	887745	174.0	93.2	65.5	121.6



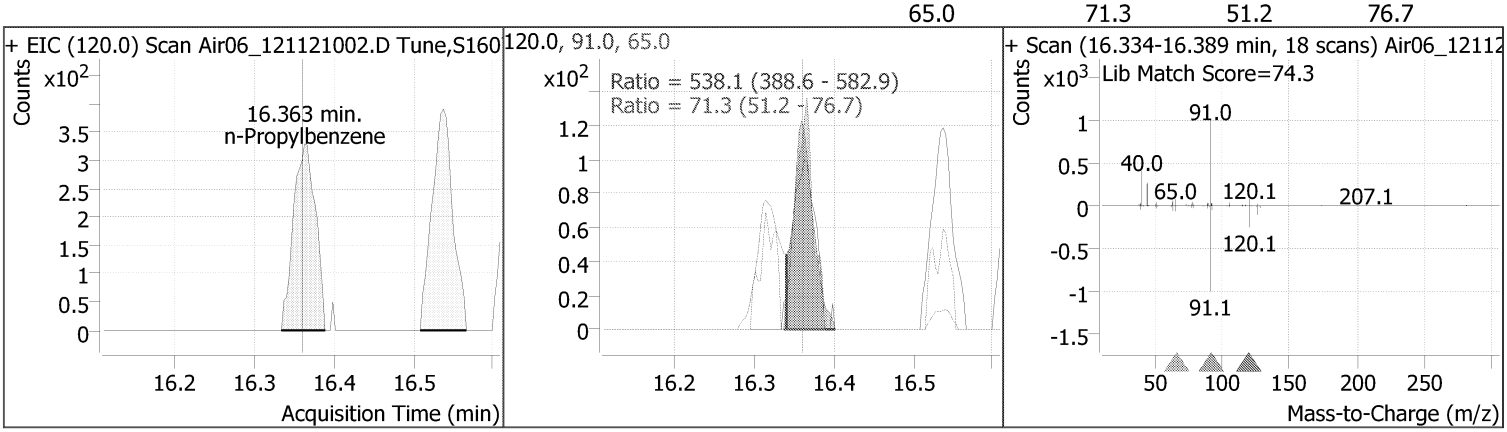
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.0151	15.77	-0.01	2942	120.0	30.2	19.4	29.0
					77.0	18.0	14.4	21.6
					91.0		5.5	8.3



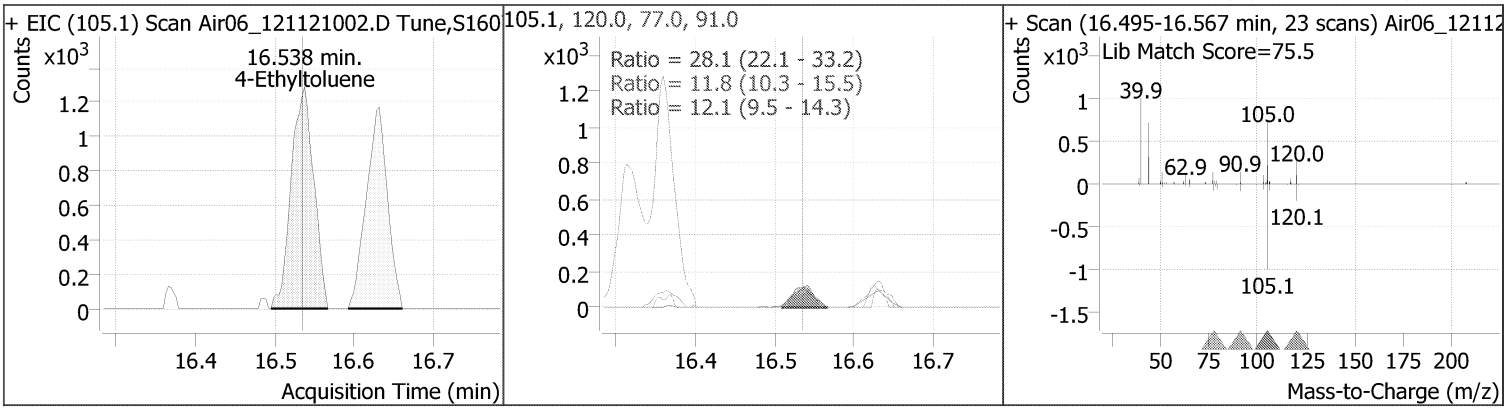
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	0.0128	16.30	-0.02	556	91.0	448.4	244.6	366.9
					63.0	101.4	50.0	74.9
					51.0	13.3	17.6	26.3



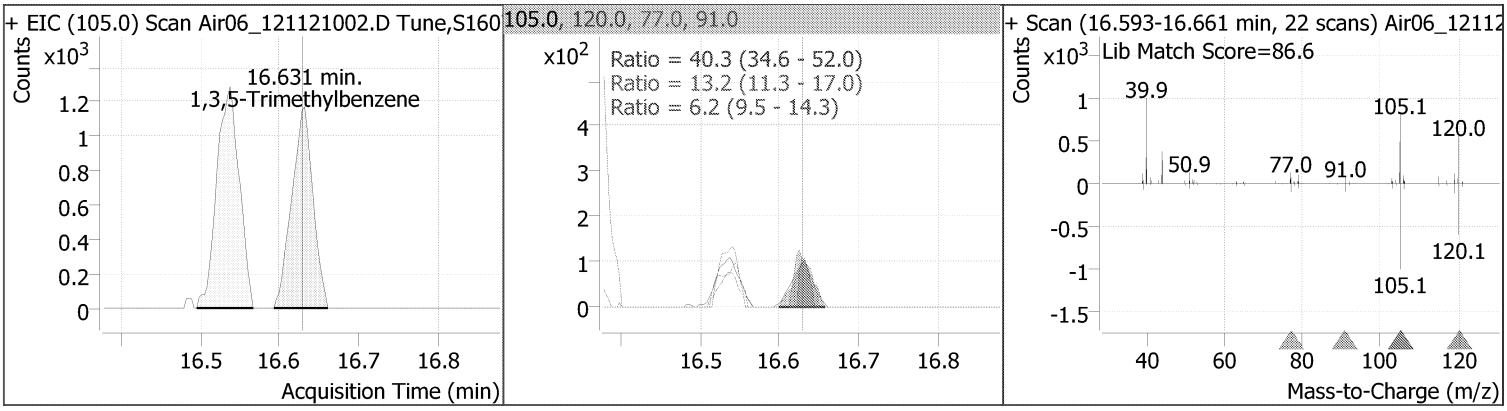
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.0130	16.36	0.00	636	91.0	538.1	388.6	582.9
					65.0	71.3	51.2	76.7



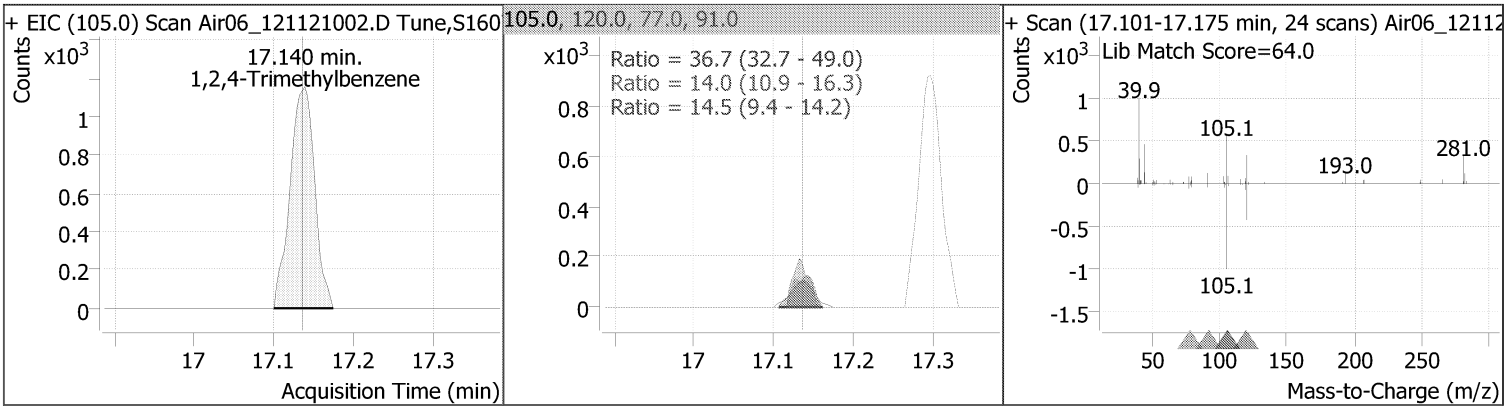
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.0138	16.54	0.00	2545	120.0	28.1	22.1	33.2
					77.0	11.8	10.3	15.5
					91.0	12.1	9.5	14.3



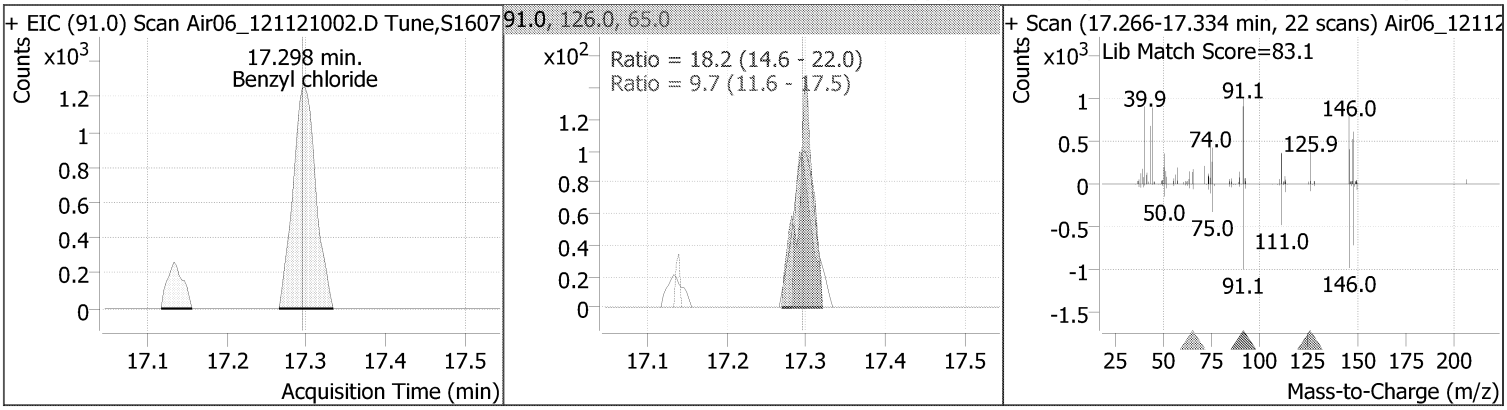
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.0130	16.63	0.00	2177	120.0	40.3	34.6	52.0
					77.0	13.2	11.3	17.0
					91.0	6.2	9.5	14.3



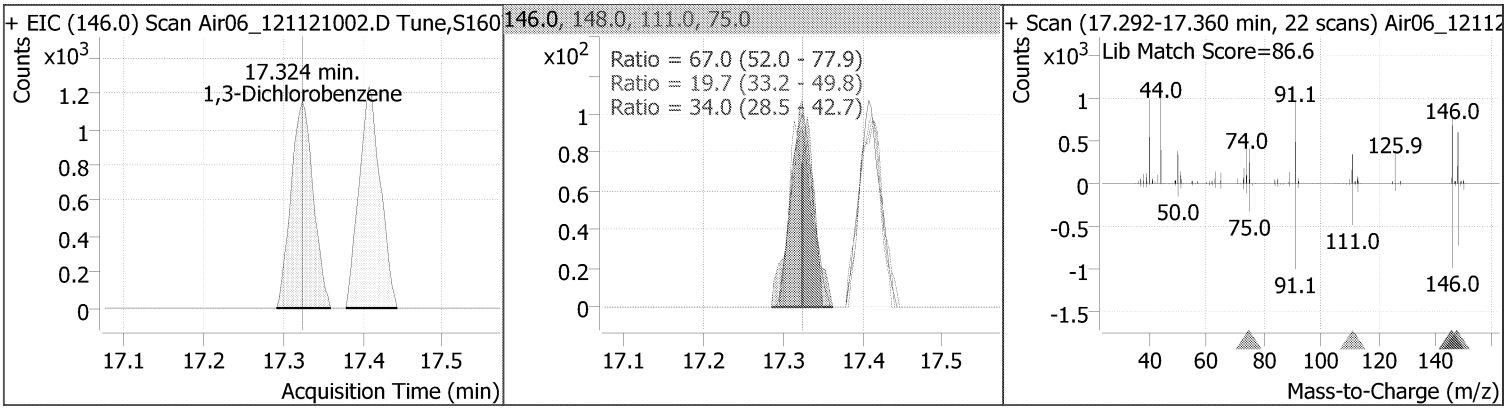
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	0.0158	17.14	0.00	2488	120.0	36.7	32.7	49.0
					77.0	14.0	10.9	16.3
					91.0	14.5	9.4	14.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.0185	17.30	0.00	2510	126.0	18.2	14.6	22.0
					65.0	9.7	11.6	17.5



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.0207	17.32	-0.01	2251	148.0	67.0	52.0	77.9
					111.0	19.7	33.2	49.8
					75.0	34.0	28.5	42.7



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.0214	17.41	-0.01	2300	148.0	64.6	51.7	77.6
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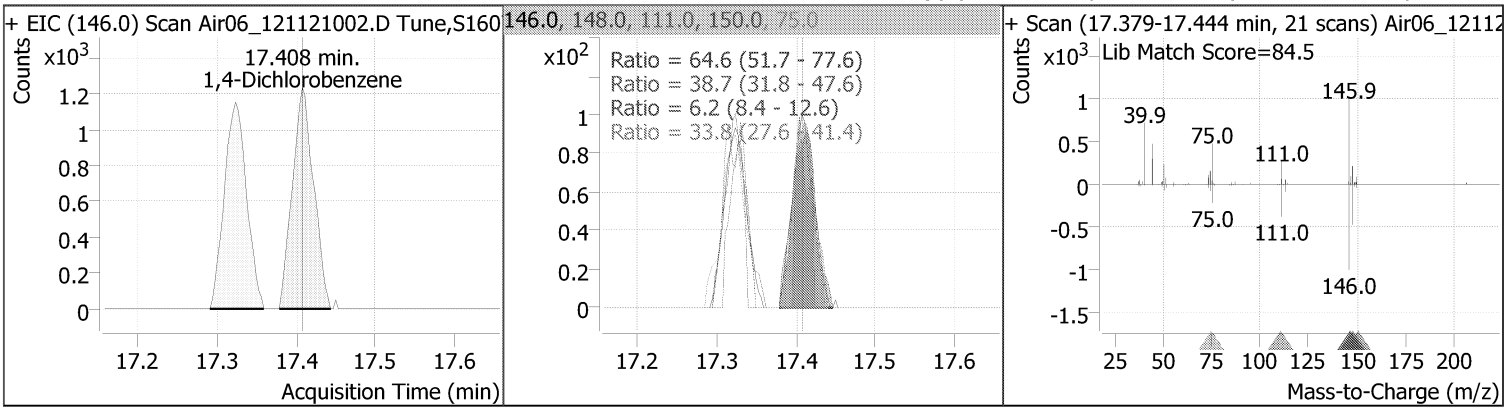
					75.0	33.8	27.6	41.4
					150.0	6.2	8.4	12.6



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.0220	17.86	0.00	2300	148.0	66.0	52.0	78.0
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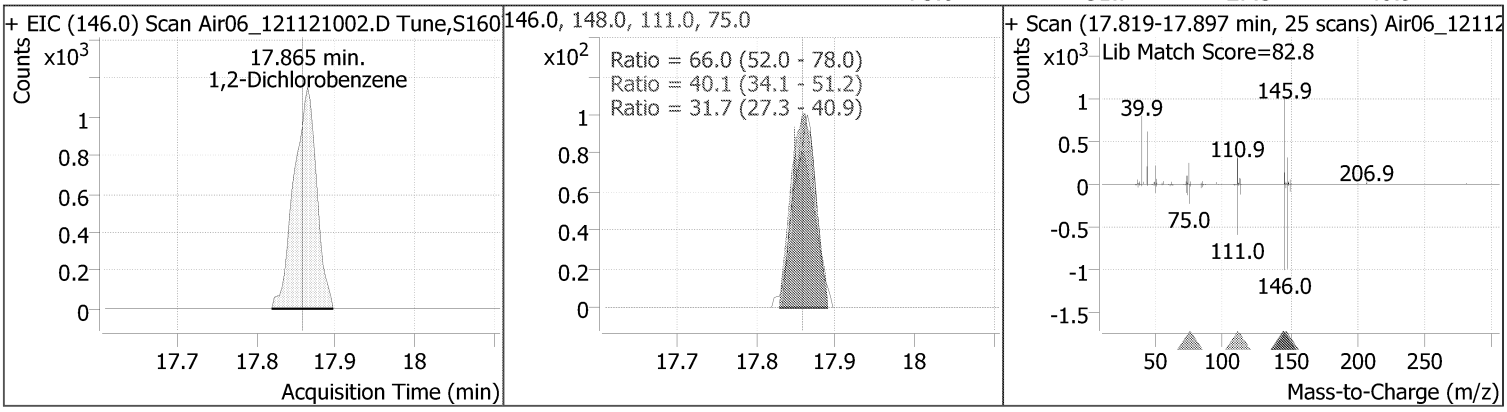
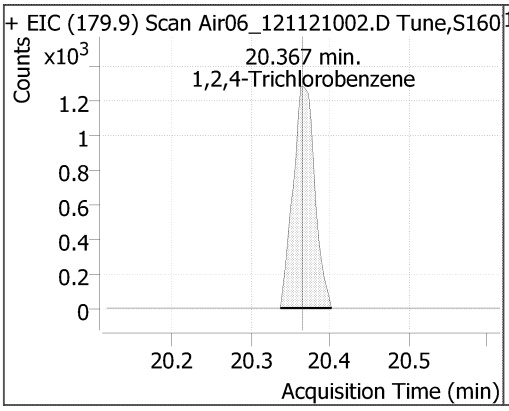
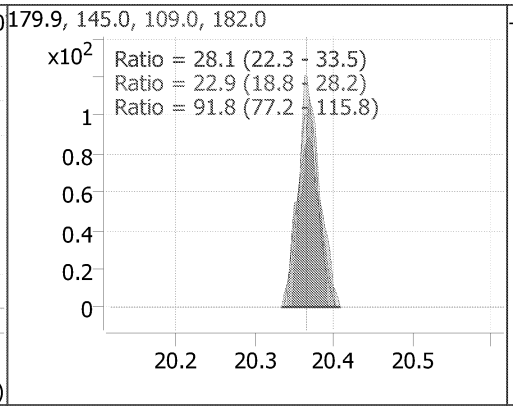
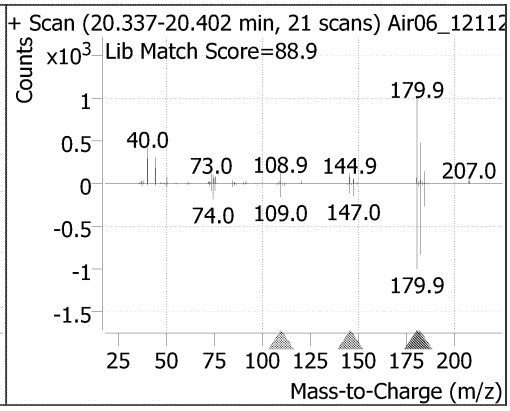
					75.0	31.7	27.3	40.9



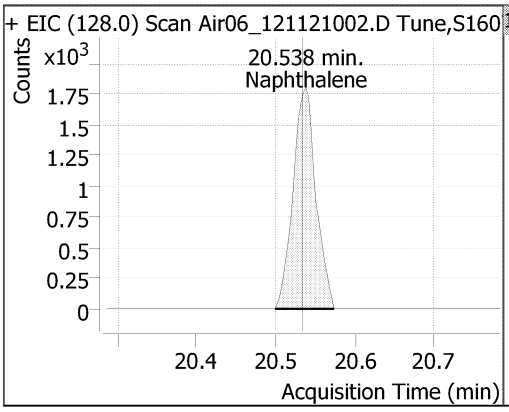
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.0329	20.37	-0.01	2447	182.0	91.8	77.2	115.8
					145.0	28.1	22.3	33.5
					109.0	22.9	18.8	28.2

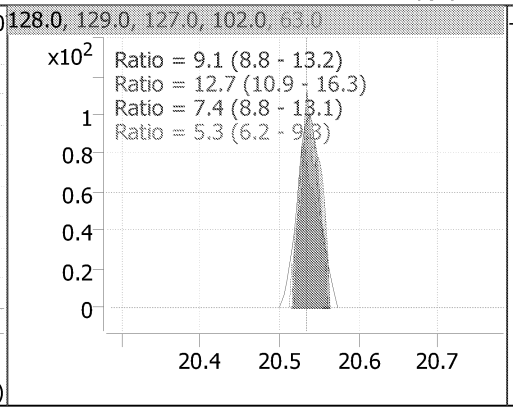


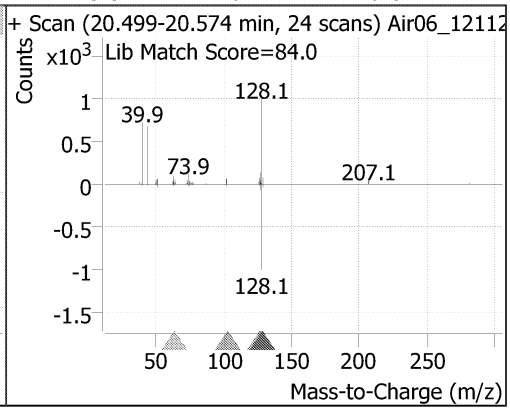




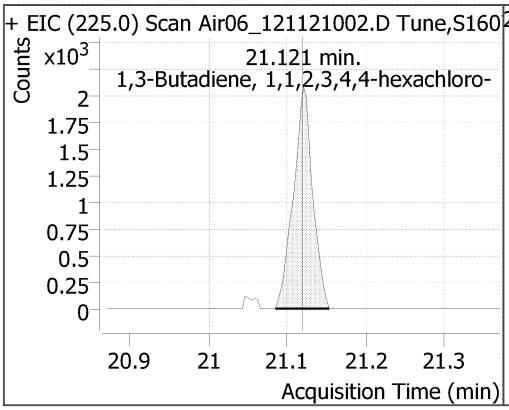
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	0.0313	20.54	0.00	3624	127.0	12.7	10.9	16.3
					129.0	9.1	8.8	13.2
					102.0	7.4	8.8	13.1
					63.0	5.3	6.2	9.3

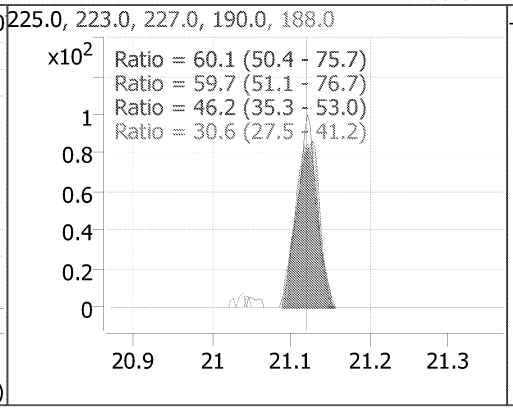


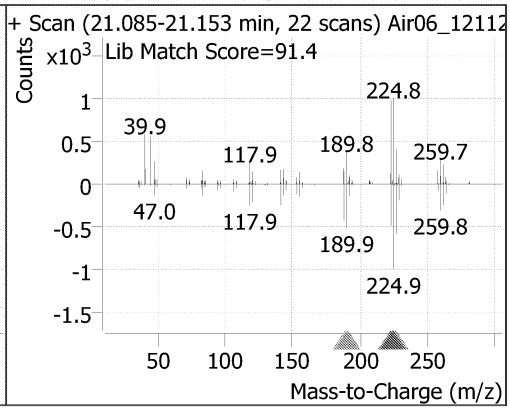




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.0288	21.12	-0.01	3518	227.0	59.7	51.1	76.7
					223.0	60.1	50.4	75.7
					190.0	46.2	35.3	53.0
					188.0	30.6	27.5	41.2







Tune Evaluation Report

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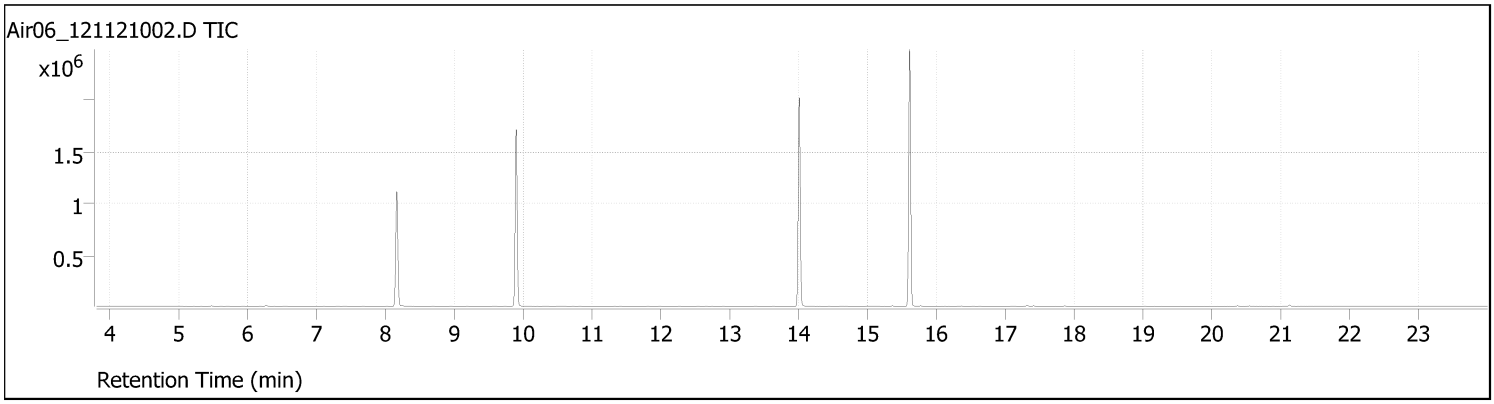
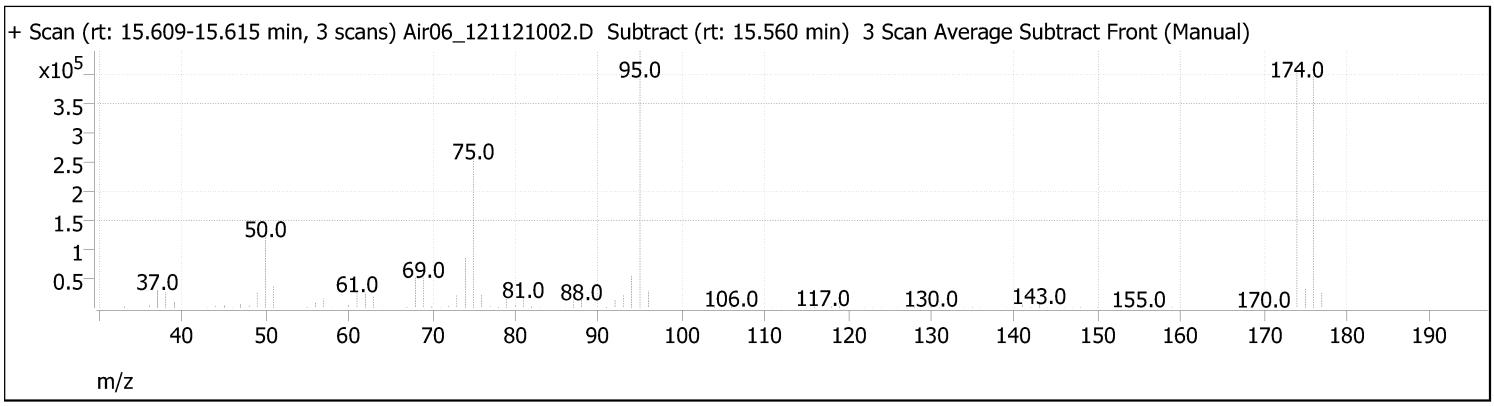
Sample:	Tune,S16071,5x
Inst Name:	Air-MS-06
ALS Vial:	5
Method:	





Target Mass	Rel. To Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Pass/Fail
50	95	15	40	27.5	121194	Pass
75	95	30	60	57.8	254835	Pass
95	95	100	100	100.0	440677	Pass
96	95	5	9	6.7	29330	Pass
173	174	0	2	0.0	0	Pass
174	95	50	100	92.5	407669	Pass
175	174	5	9	7.9	32229	Pass
176	174	95	101	97.3	396607	Pass
177	176	5	9	6.5	25799	Pass

ENTHALPY BFB TUNE FOR 455620 MSAIR Air
EPA TO-15

Inst : AIR-MS-06 Run Name : TUNE IDF : 1.0
Seqnum : 371497775012 File : air06_121121012 Time : 12-DEC-2021 01:29

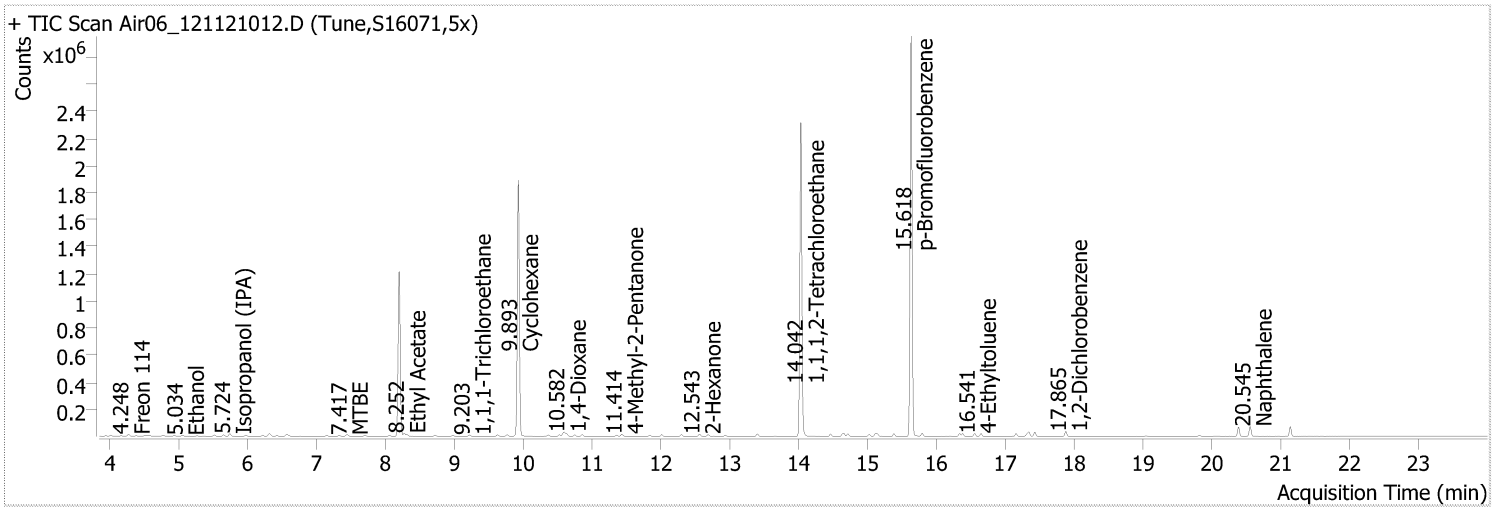
Standards: S16071 (5X)

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	142777	26.89	
75	30% - 66% of mass 95	300648	56.61	
95		531062	100.00	
96	5% - 9% of mass 95	35069	6.60	
173	< 2% of mass 174	0	0.00	
174	50% - 120% of mass 95	489118	92.10	
175	4% - 9% of mass 174	38385	7.85	
176	93% - 101% of mass 174	471978	96.50	
177	5% - 9% of mass 176	31544	6.68	

Analyst: ZNZ Date: 12/13/21 Reviewer: SLL Date: 12/13/21

Quantitation Results Report (Not Reviewed)

Data File	Air06_121121012.D	Operator	ZNZ/DJL
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	12/12/2021 1:29:01 AM
Sample Name	Tune,S16071,5x	Instrument	Air-MS-06
Vial	5	Multiplier	1.00
DA Method File	TO15_121121.m	Comment	
Tune File	bfb.u	Tune Date	12/10/2021 1:37:12 PM
Batch Name	121121_ICAL.batch.bin	Last Calib Update	12/13/2021 9:29:07 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



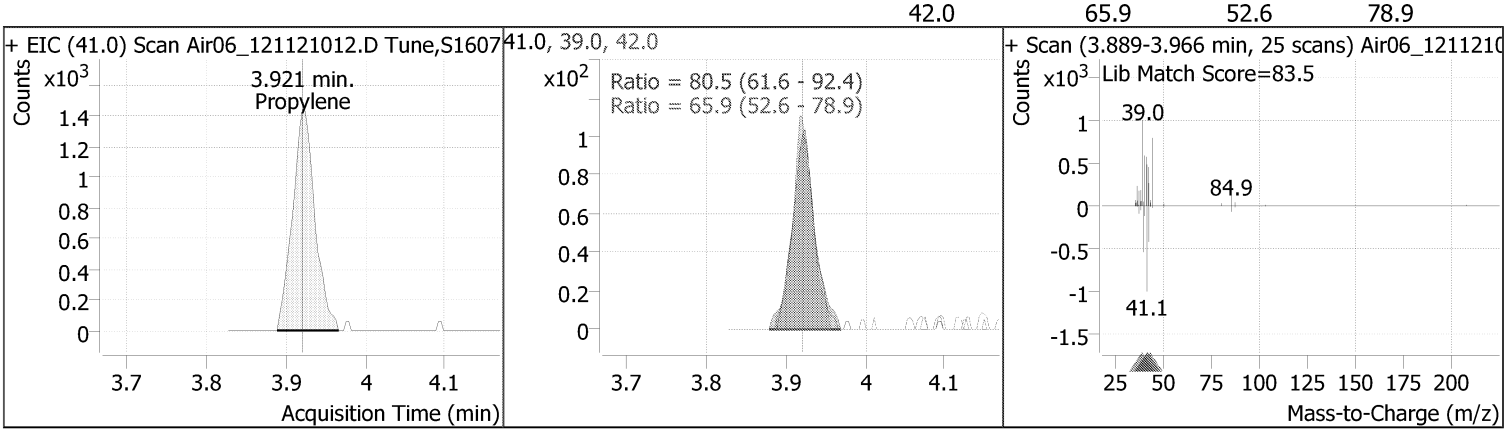
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.184	130.0	386612	10.0000	nL/L		0.004
M 1,4-Difluorobenzene	9.912	114.0	1441281	10.0000	nL/L		0.000
M Chlorobenzene-d5	14.016	82.0	817142	10.0000	nL/L	#	0.000
System Monitoring Compounds							
S p-Bromofluorobenzene	15.618	95.0	1070744	10.2094	nL/L		0.000
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 102.09%			
Target Compounds							QValue
T Propylene	3.921	41.0	2852	0.0673	nL/L		98
T Freon 12	3.992	85.0	8109	0.0587	nL/L	#	92
T Chloromethane	4.151	50.0	2990	0.0618	nL/L		93
T Freon 114	4.248	135.0	4757	0.0589	nL/L		96
T Vinyl Chloride	4.364	62.0	2825	0.0623	nL/L		92
T 1,3-Butadiene	4.500	54.0	2517	0.0645	nL/L	#	88
T Butane	4.552	43.0	5418	0.0695	nL/L		98
T Bromomethane	4.753	96.0	2579	0.0703	nL/L		90
T Chloroethane	4.915	64.0	1524	0.0673	nL/L		94
T Ethanol	5.034	45.0	7929	0.2614	nL/L		95
T Vinyl bromide	5.242	108.0	2506	0.0655	nL/L		100
T Acrolein	5.348	56.0	1643	0.0839	nL/L		96
T Acetone	5.494	58.0	3614	0.1381	nL/L	#	86
T Trichloromonofluoromethane	5.627	101.0	9411	0.0601	nL/L		98
T Isopropanol (IPA)	5.724	45.0	26602	0.2599	nL/L		95
T n-Pentane	5.954	43.0	7236	0.0721	nL/L		97
T 1,1-Dichloroethene	6.196	61.0	6107	0.0635	nL/L		94
T Tert-butyl alcohol (TBA)	6.306	59.0	13045	0.1208	nL/L		96
T Methylene Chloride	6.287	84.0	5214	0.1256	nL/L		99
T 3-Chloropropene	6.407	76.0	902	0.0516	nL/L		94
T Freon 113	6.549	101.0	6345	0.0641	nL/L		96
T Carbon Disulfide	6.578	76.0	7815	0.0677	nL/L		96

Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	7.129	61.0	5143	0.0686	nL/L		97
T 1,1-Dichloroethane	7.310	63.0	6123	0.0652	nL/L	#	97
T MTBE	7.417	73.0	8032	0.0634	nL/L		96
T Vinyl Acetate	7.436	43.0	11777	0.0744	nL/L	#	96
T 2-Butanone	7.685	43.0	14715	0.1177	nL/L		98
T cis-1,2-Dichloroethene	8.044	61.0	5324	0.0692	nL/L		96
T Ethyl Acetate	8.252	61.0	1879	0.1080	nL/L	#	40
T n-Hexane	8.252	57.0	5794	0.0716	nL/L		94
T Chloroform	8.297	83.0	7586	0.0688	nL/L		77
T Tetrahydrofuran	8.702	72.0	1895	0.1049	nL/L		94
T 1,2-Dichloroethane	8.960	62.0	5801	0.0654	nL/L		93
T 1,1,1-Trichloroethane	9.203	97.0	7109	0.0614	nL/L		96
T Benzene	9.611	78.0	9069	0.0739	nL/L		97
T Carbon Tetrachloride	9.750	117.0	7302	0.0585	nL/L		99
T Cyclohexane	9.893	84.0	5306	0.1045	nL/L	#	1
T 1,2-Dichloropropane	10.346	63.0	3990	0.0717	nL/L		93
T Methane, bromodichloro-	10.511	83.0	7135	0.0629	nL/L		98
T 1,4-Dioxane	10.582	88.0	18526	0.6949	nL/L	#	90
T Trichloroethene	10.563	132.0	5185	0.0931	nL/L		94
T 2,2,4-Trimethylpentane	10.614	57.0	22145	0.0846	nL/L	#	90
T Methyl methacrylate	10.728	69.0	3771	0.0837	nL/L		93
T n-Heptane	10.838	71.0	2505	0.0614	nL/L	#	93
T cis-1,3-Dichloropropene	11.346	110.0	662	0.0405	nL/L	#	13
T 4-Methyl-2-Pentanone	11.414	58.0	4851	0.1005	nL/L		96
T trans-1,3-Dichloropropene	11.818	110.0	1217	0.0725	nL/L		85
T 1,1,2-Trichloroethane	11.996	97.0	3903	0.0719	nL/L	#	97
T Toluene	12.281	91.0	10462	0.0671	nL/L		97
T TPH Gasoline (C3 to C12)	12.399	165.0	2660000	0.2293	nL/L		100
T 2-Hexanone	12.543	58.0	6726	0.1114	nL/L		93
T Dibromochloromethane	12.670	129.0	7505	0.0684	nL/L		97
T 1,2-Dibromoethane	12.922	108.9	5993	0.0719	nL/L	#	98
T Tetrachloroethene	13.385	166.0	6120	0.0669	nL/L		97
T 1,1,1,2-Tetrachloroethane	14.042	131.0	4894	0.0728	nL/L	#	1
T Benzene, chloro-	14.061	112.0	10455	0.0898	nL/L		95
T Ethylbenzene	14.447	91.0	13668	0.0727	nL/L		99
T TPH Gasoline (C6 to C12)	14.524	165.0	1951944	0.2261	nL/L		100
T m,p-Xylenes	14.638	91.0	23966	0.1512	nL/L		95
T Bromoform	14.702	173.0	10418	0.0833	nL/L		98
T Styrene	15.013	104.0	7582	0.0714	nL/L		98
T 1,1,2,2-Tetrachloroethane	15.097	83.0	10791	0.0949	nL/L		99
T o-Xylene	15.133	91.0	11691	0.0711	nL/L		98
T n-Nonane	15.372	85.0	1943	0.0579	nL/L	#	86
T Isopropylbenzene	15.777	105.0	16521	0.0740	nL/L		99
T 2-Chlorotoluene	16.321	126.0	3947	0.0792	nL/L		96
T n-Propylbenzene	16.366	120.0	3943	0.0701	nL/L		97
T 4-Ethyltoluene	16.541	105.1	14859	0.0701	nL/L	#	97
T 1,3,5-Trimethylbenzene	16.635	105.0	13556	0.0702	nL/L		99
T 1,2,4-Trimethylbenzene	17.143	105.0	13496	0.0747	nL/L		96
T Benzyl chloride	17.301	91.0	13205	0.0848	nL/L		96
T 1,3-Dichlorobenzene	17.331	146.0	14657	0.1173	nL/L		99
T 1,4-Dichlorobenzene	17.415	146.0	14952	0.1213	nL/L		97
T 1,2-Dichlorobenzene	17.865	146.0	18000	0.1496	nL/L		96
T 1,2,4-Trichlorobenzene	20.373	179.9	27060	0.3162	nL/L		98
T Naphthalene	20.545	128.0	66508	0.5002	nL/L		99
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.127	225.0	18780	0.1337	nL/L		98

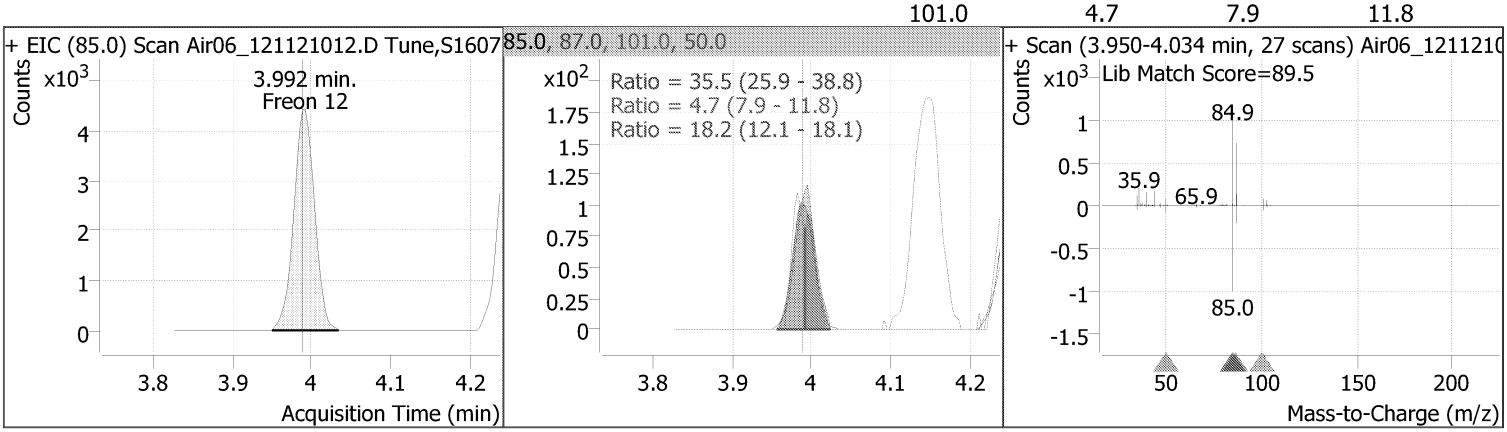
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

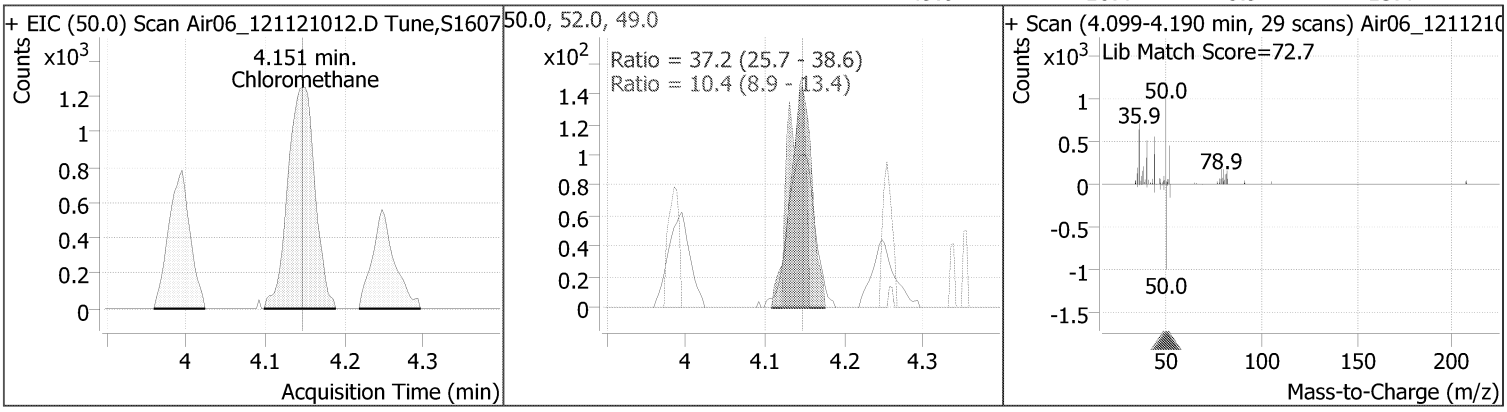
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.0673	3.92	0.00	2852	39.0	80.5	61.6	92.4
					42.0	65.9	52.6	78.9



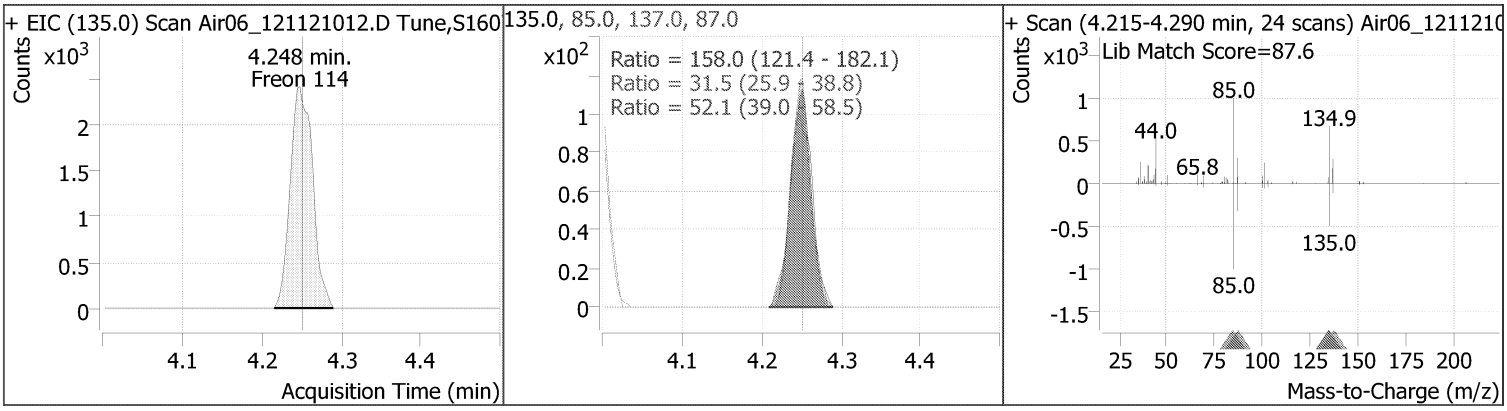
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 12	0.0587	3.99	0.01	8109	87.0	35.5	25.9	38.8
					50.0	18.2	12.1	18.1
					101.0	4.7	7.9	11.8



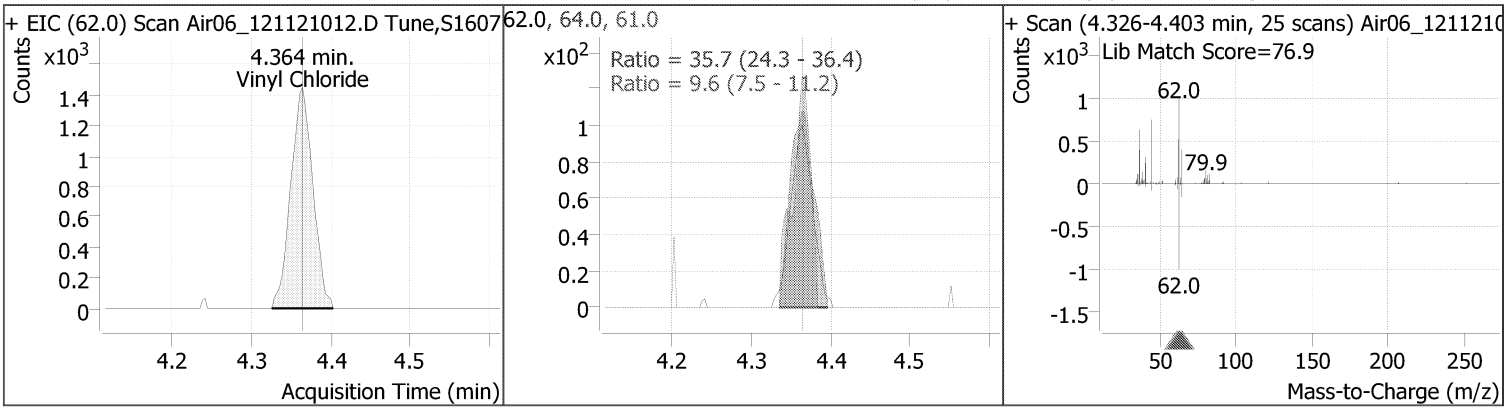
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloromethane	0.0618	4.15	0.01	2990	52.0	37.2	25.7	38.6
					49.0	10.4	8.9	13.4



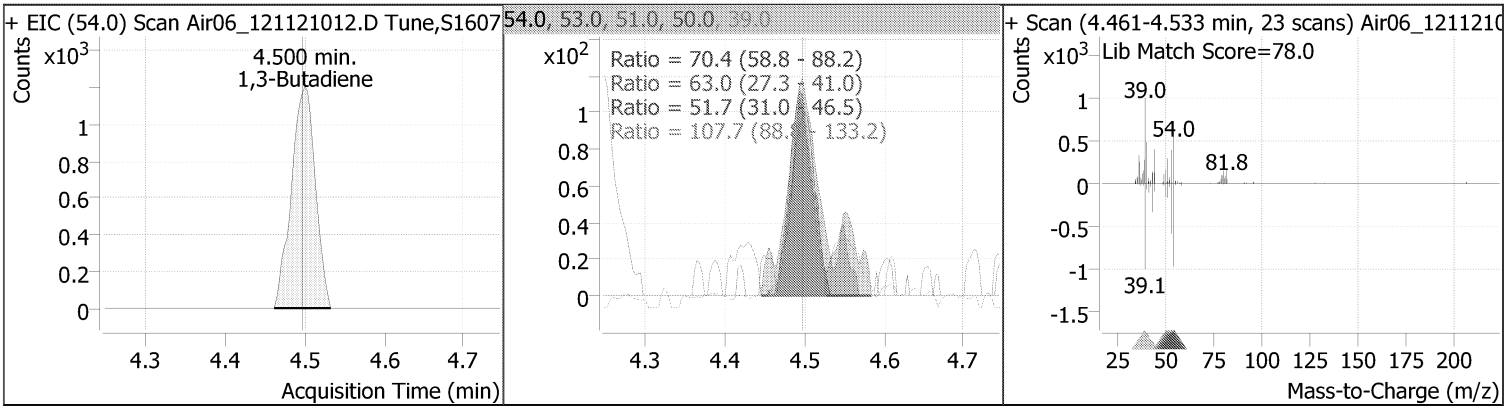
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 114	0.0589	4.25	0.00	4757	85.0	158.0	121.4	182.1
					87.0	52.1	39.0	58.5
					137.0	31.5	25.9	38.8



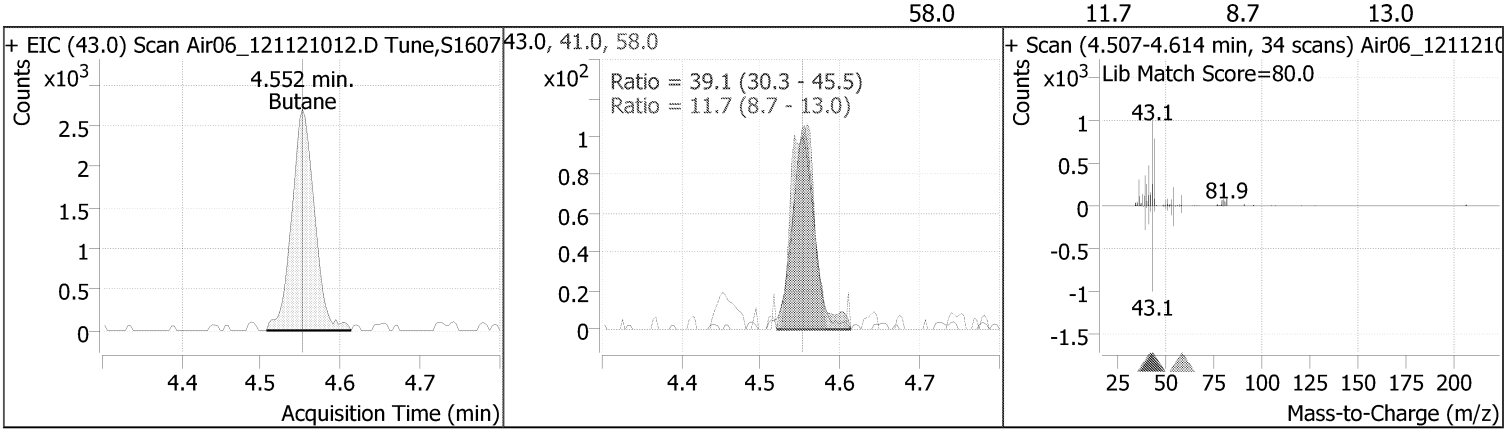
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Chloride	0.0623	4.36	0.00	2825	64.0	35.7	24.3	36.4
					61.0	9.6	7.5	11.2



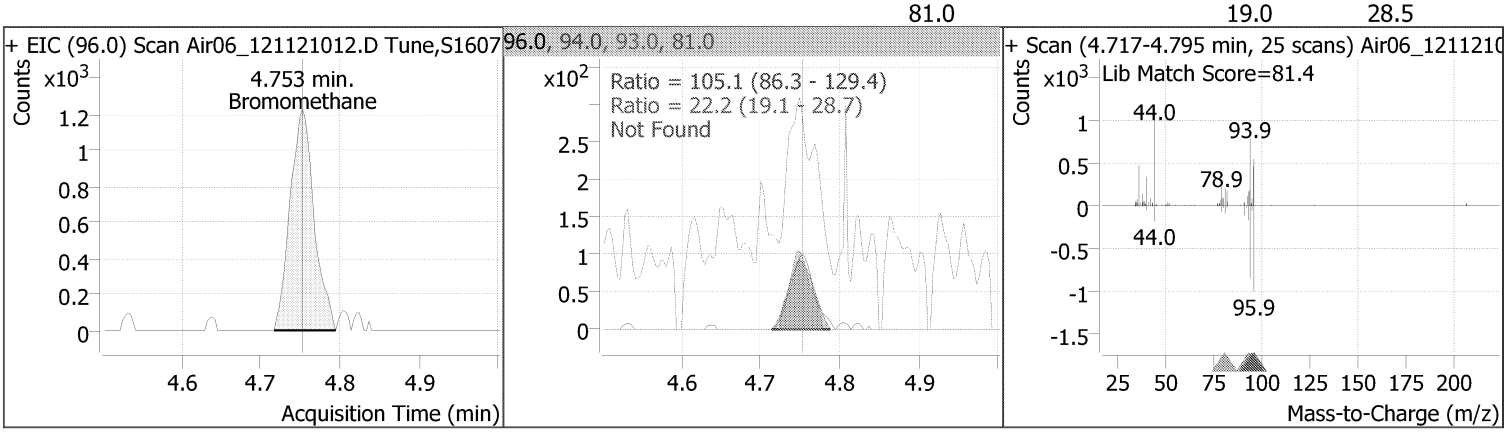
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene	0.0645	4.50	0.01	2517	39.0	107.7	88.8	133.2
					53.0	70.4	58.8	88.2
					50.0	51.7	31.0	46.5
					51.0	63.0	27.3	41.0



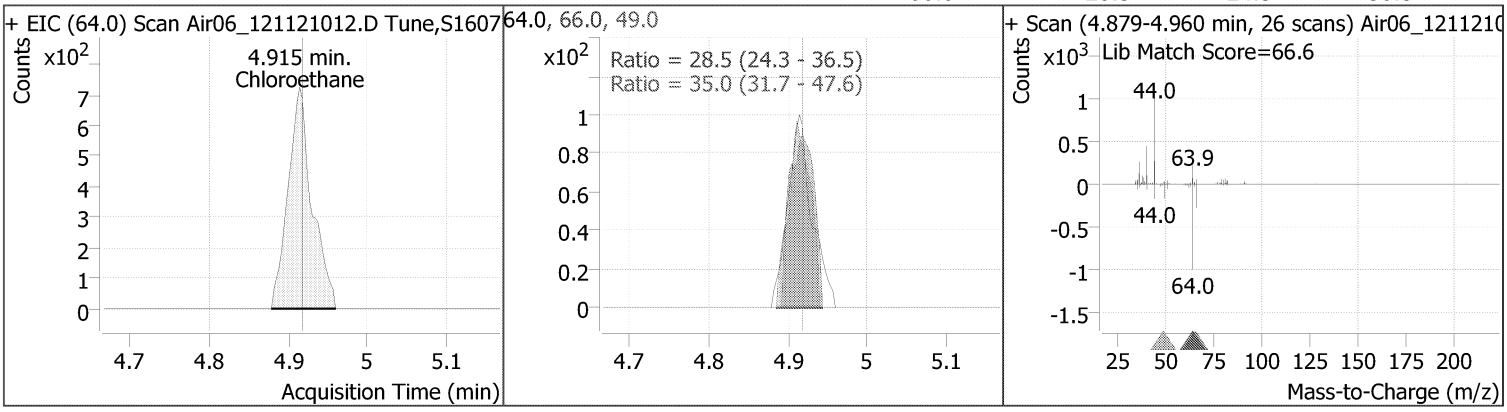
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	0.0695	4.55	0.00	5418	41.0	39.1	30.3	45.5
					58.0	11.7	8.7	13.0



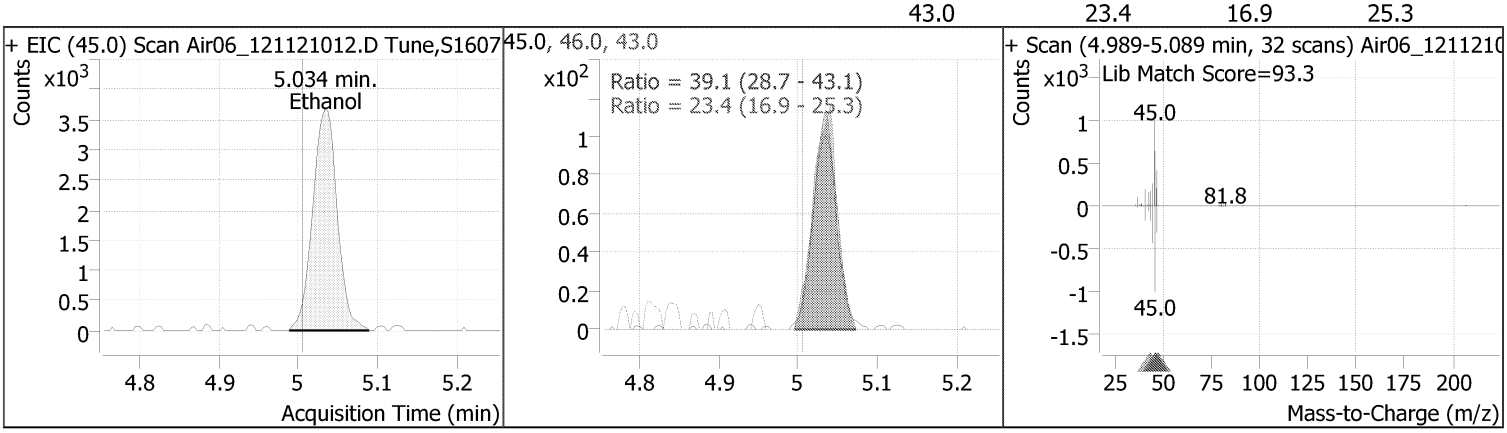
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromomethane	0.0703	4.75	0.00	2579	94.0	105.1	86.3	129.4
					93.0	22.2	19.1	28.7
					81.0		19.0	28.5



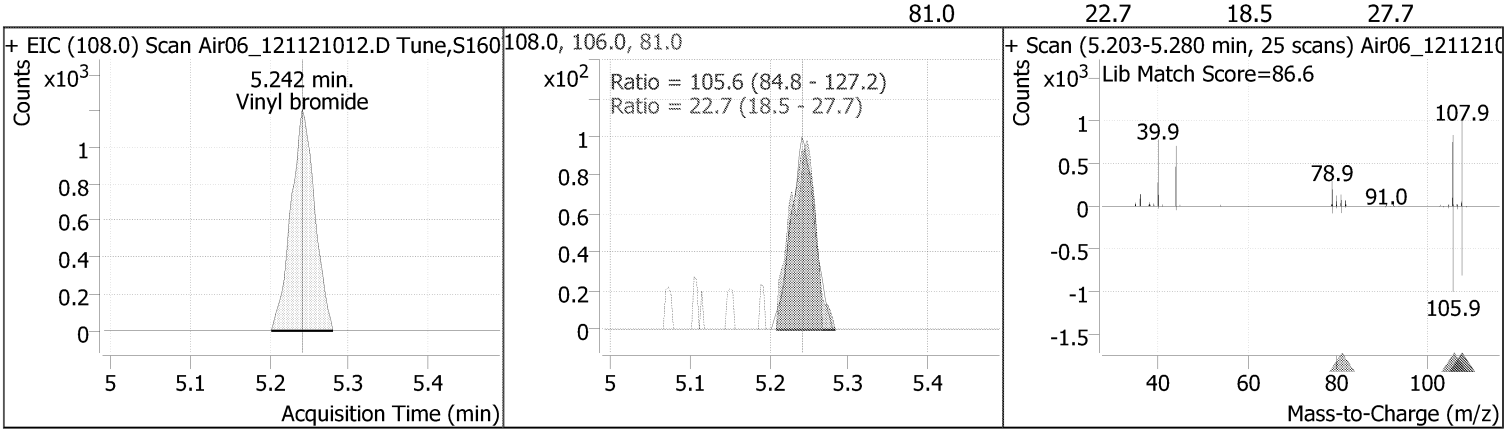
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroethane	0.0673	4.91	0.00	1524	49.0	35.0	31.7	47.6
					66.0	28.5	24.3	36.5



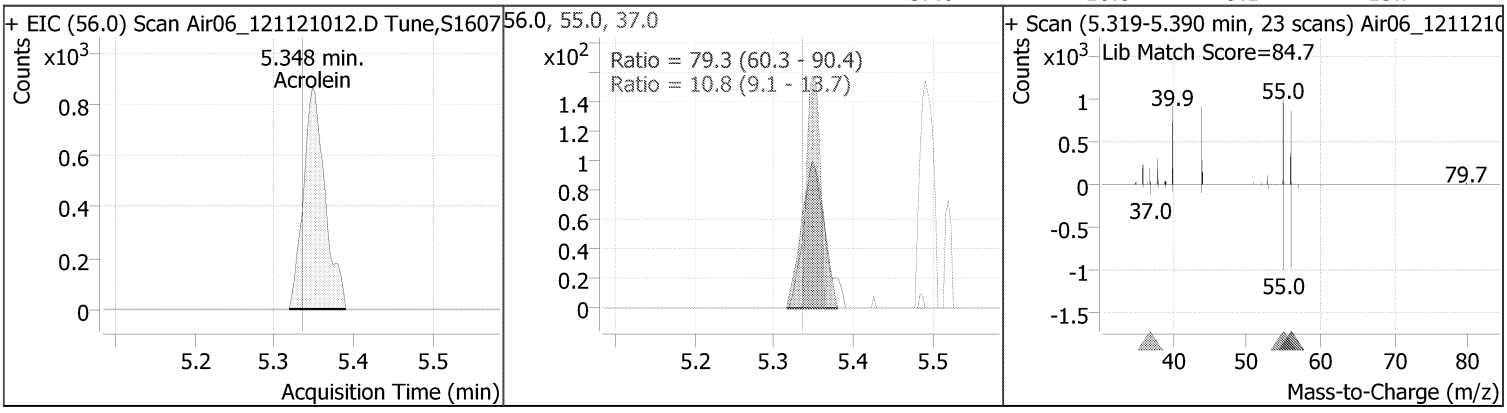
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	0.2614	5.03	0.03	7929	46.0	39.1	28.7	43.1
					43.0	23.4	16.9	25.3



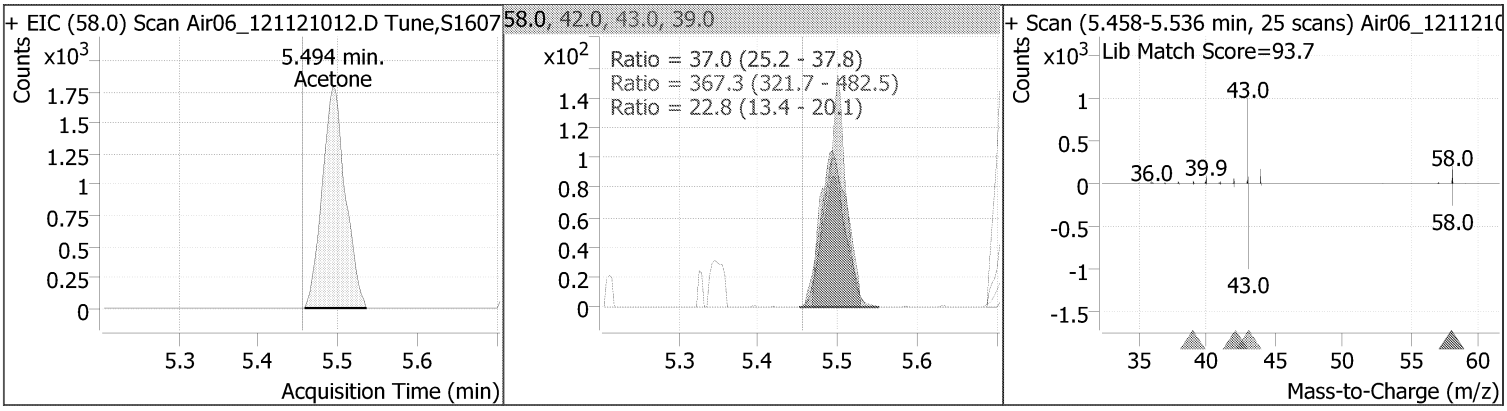
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl bromide	0.0655	5.24	0.00	2506	106.0	105.6	84.8	127.2
					81.0	22.7	18.5	27.7



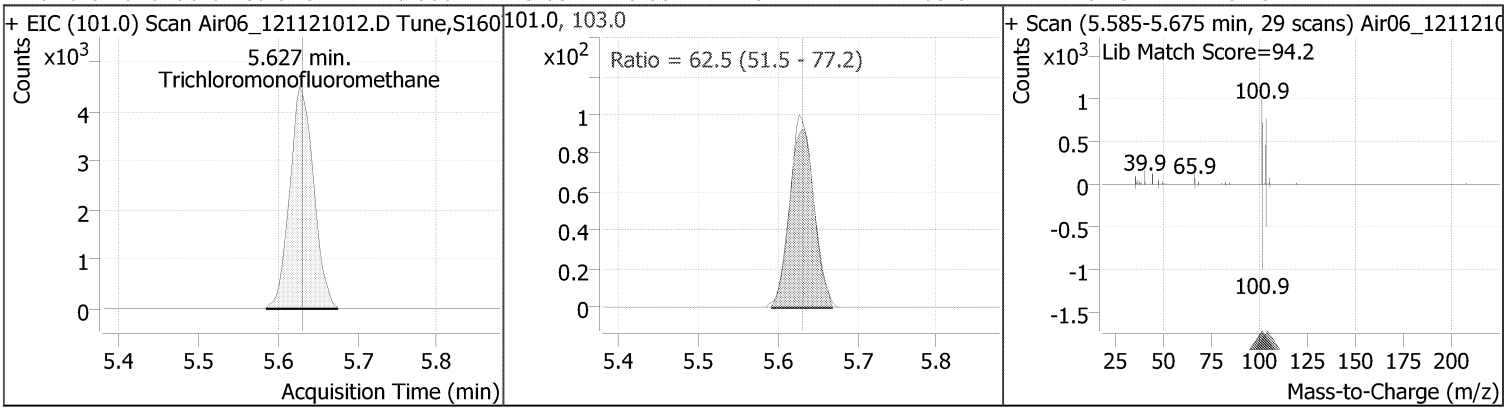
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	0.0839	5.35	0.02	1643	55.0	79.3	60.3	90.4
					37.0	10.8	9.1	13.7



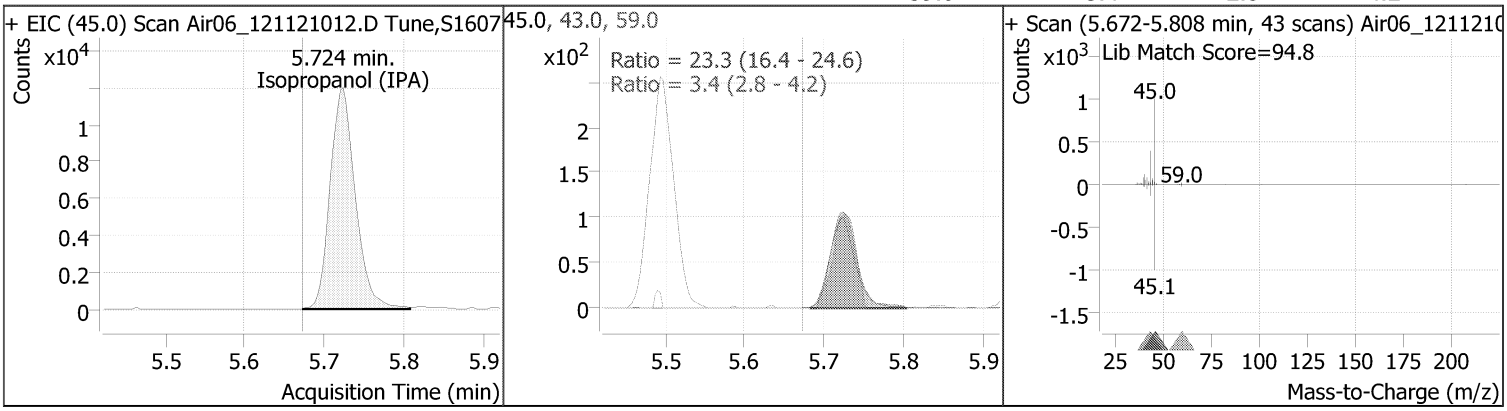
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	0.1381	5.49	0.04	3614	43.0	367.3	321.7	482.5
					42.0	37.0	25.2	37.8
					39.0	22.8	13.4	20.1



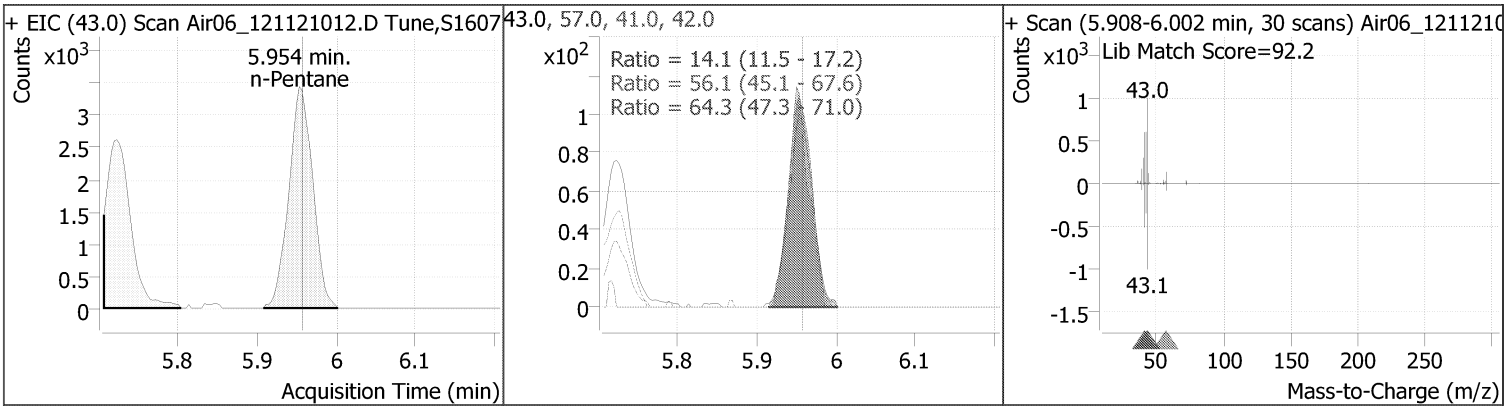
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloromonofluoromethane	0.0601	5.63	0.00	9411	103.0	62.5	51.5	77.2



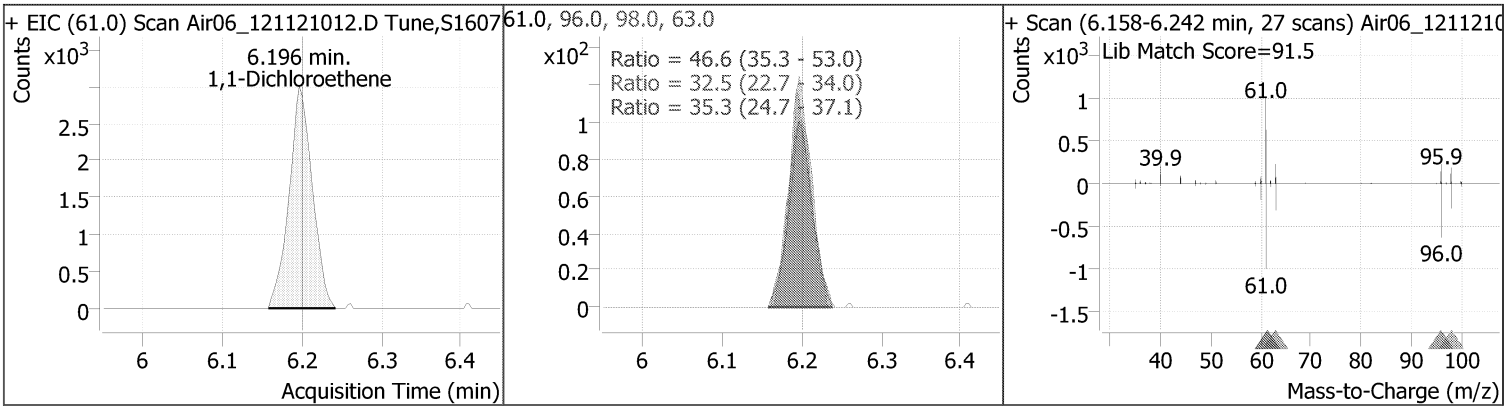
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.2599	5.72	0.06	26602	43.0	23.3	16.4	24.6
					59.0	3.4	2.8	4.2



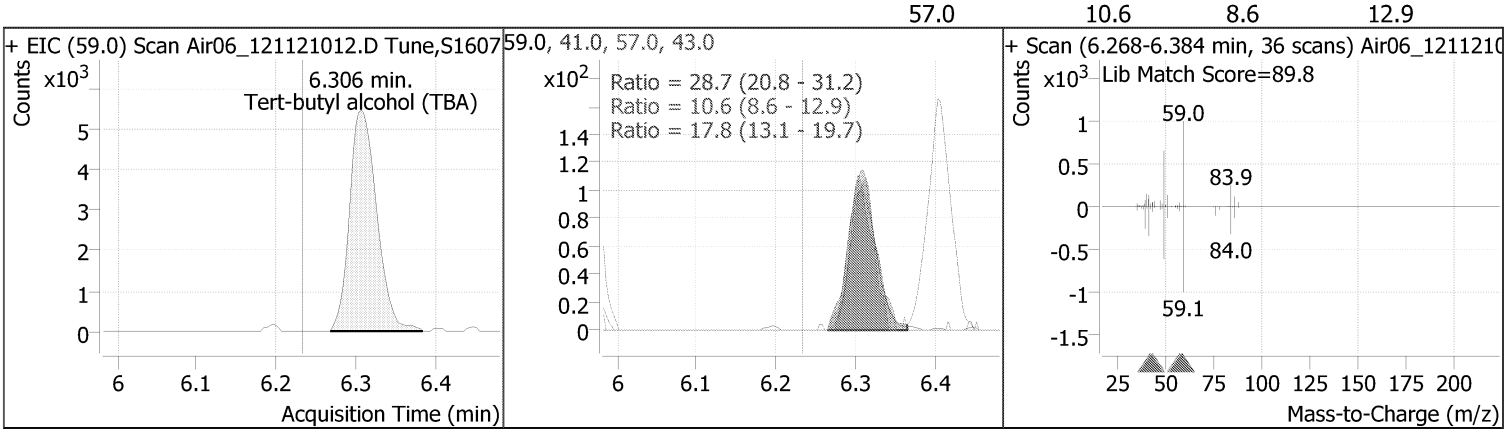
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.0721	5.95	0.00	7236	42.0	64.3	47.3	71.0
					41.0	56.1	45.1	67.6
					57.0	14.1	11.5	17.2



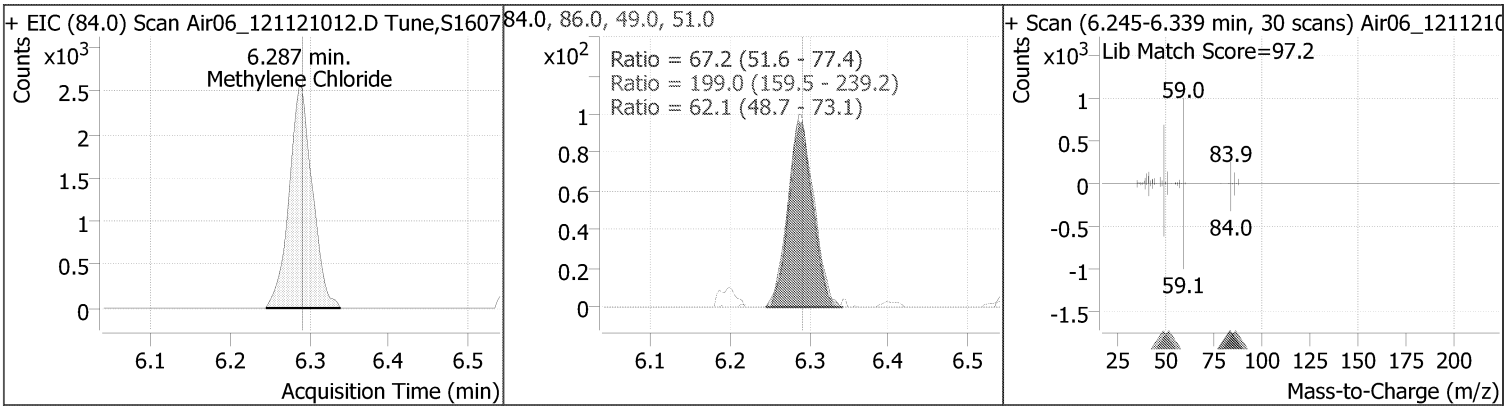
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethene	0.0635	6.20	0.00	6107	96.0	46.6	35.3	53.0
					63.0	35.3	24.7	37.1
					98.0	32.5	22.7	34.0



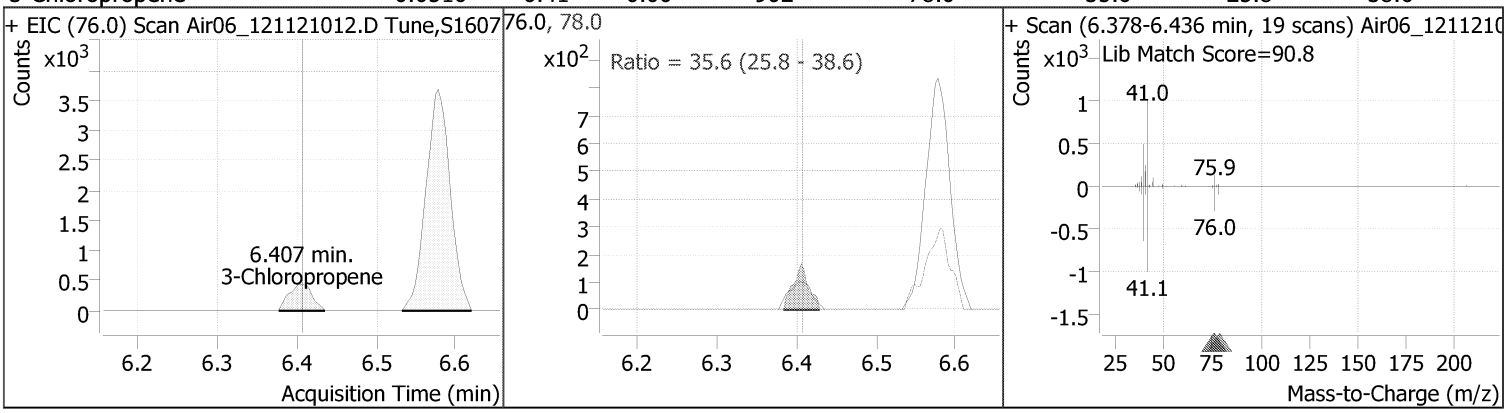
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.1208	6.31	0.08	13045	41.0	28.7	20.8	31.2
					43.0	17.8	13.1	19.7
					57.0	10.6	8.6	12.9



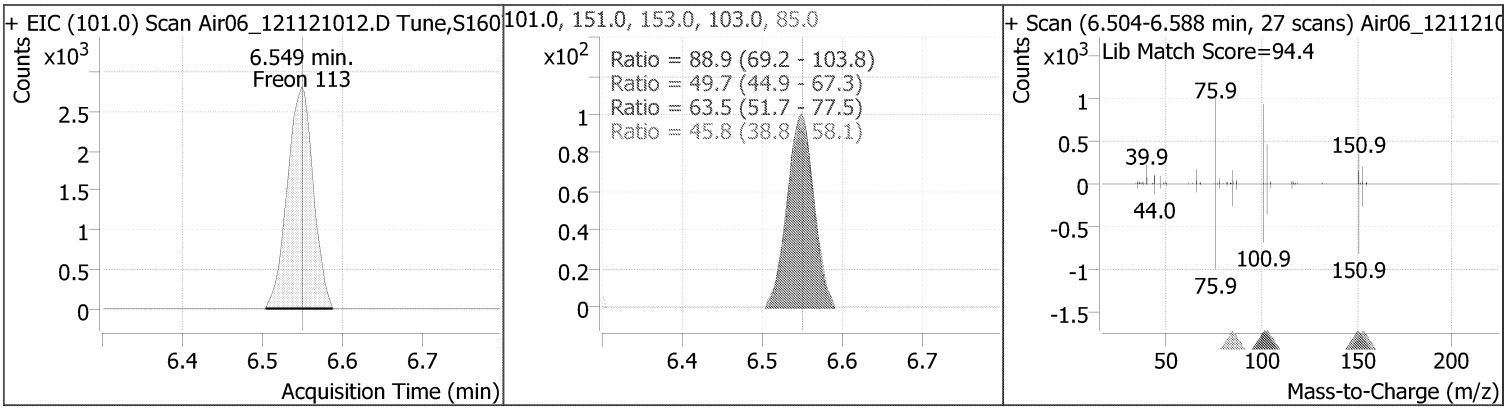
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.1256	6.29	0.00	5214	49.0	199.0	159.5	239.2
					86.0	67.2	51.6	77.4
					51.0	62.1	48.7	73.1



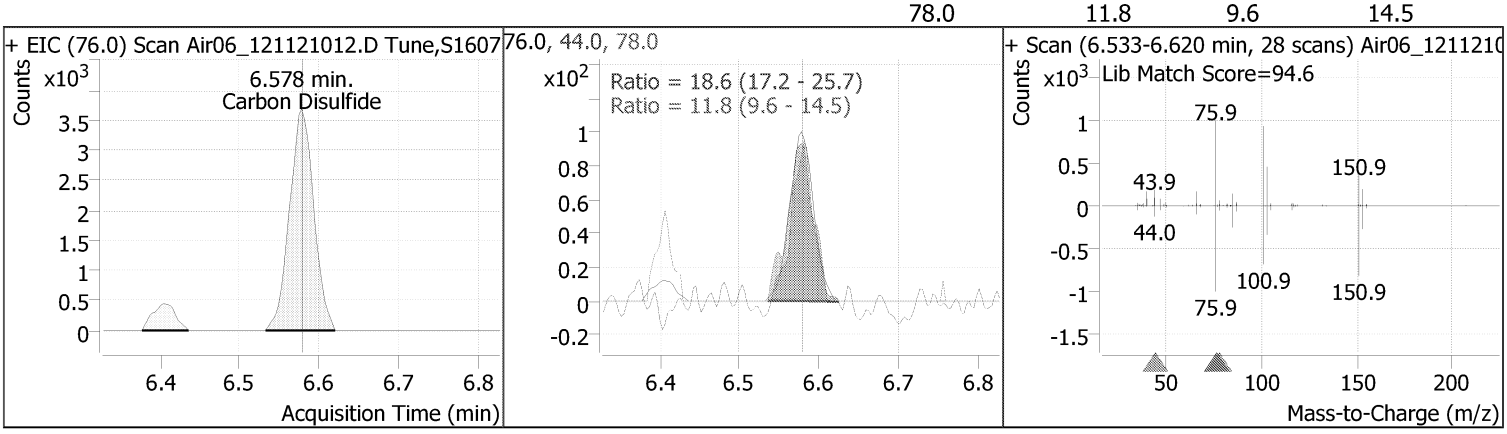
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	0.0516	6.41	0.00	902	78.0	35.6	25.8	38.6



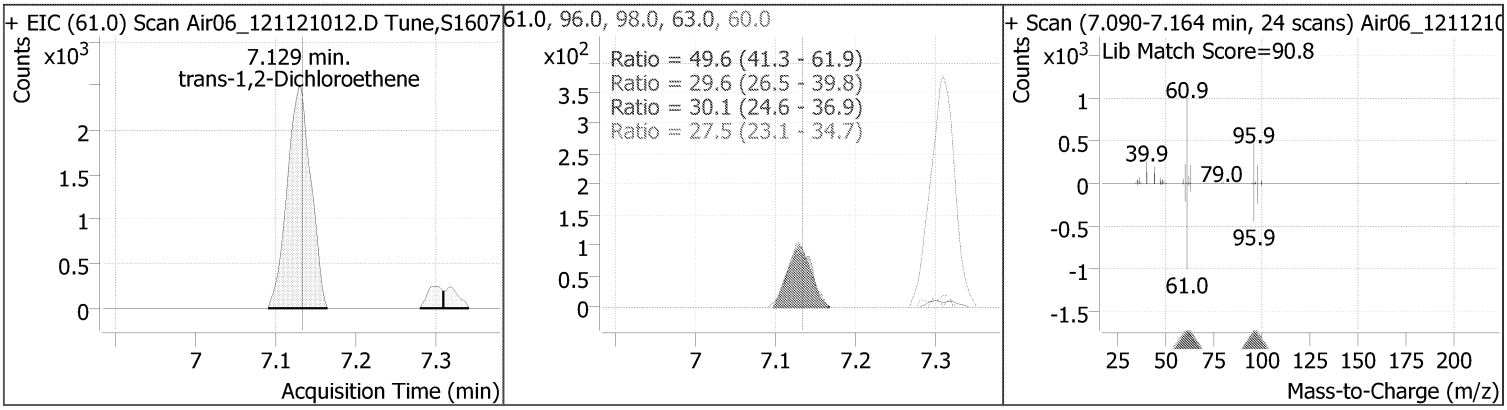
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Freon 113	0.0641	6.55	0.00	6345	151.0	88.9	69.2	103.8
					103.0	63.5	51.7	77.5
					153.0	49.7	44.9	67.3
					85.0	45.8	38.8	58.1



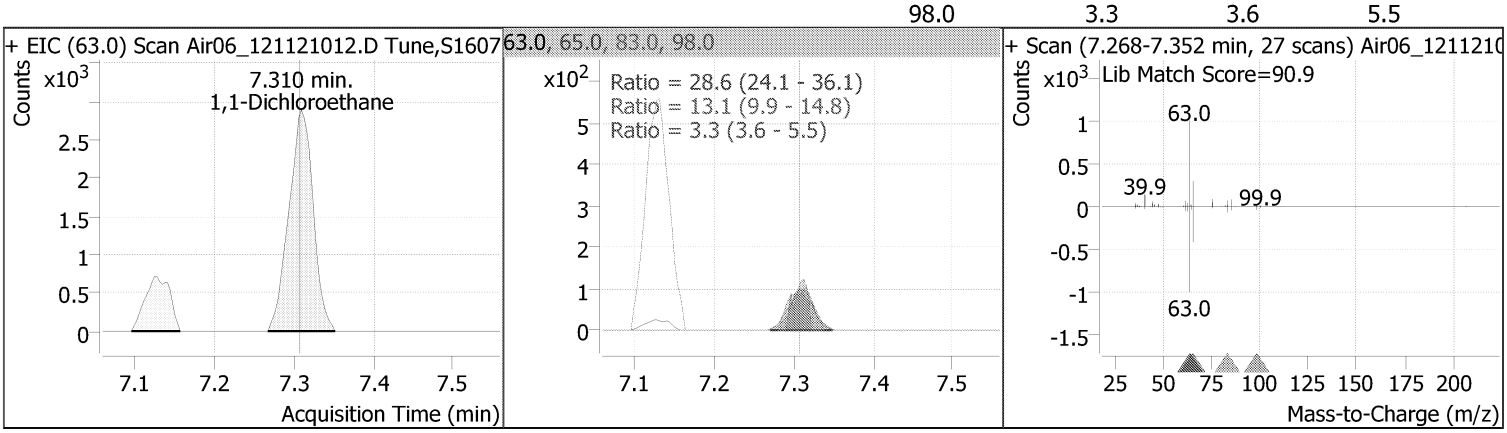
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.0677	6.58	0.00	7815	44.0	18.6	17.2	25.7
					78.0	11.8	9.6	14.5



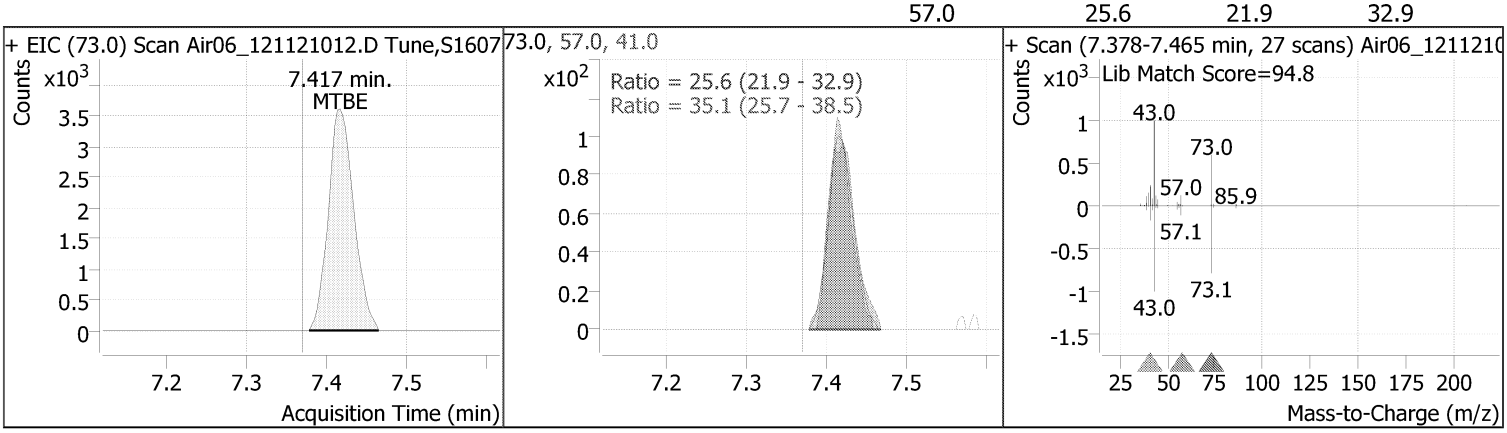
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,2-Dichloroethene	0.0686	7.13	0.00	5143	96.0	49.6	41.3	61.9
					98.0	29.6	26.5	39.8
					63.0	30.1	24.6	36.9
					60.0	27.5	23.1	34.7



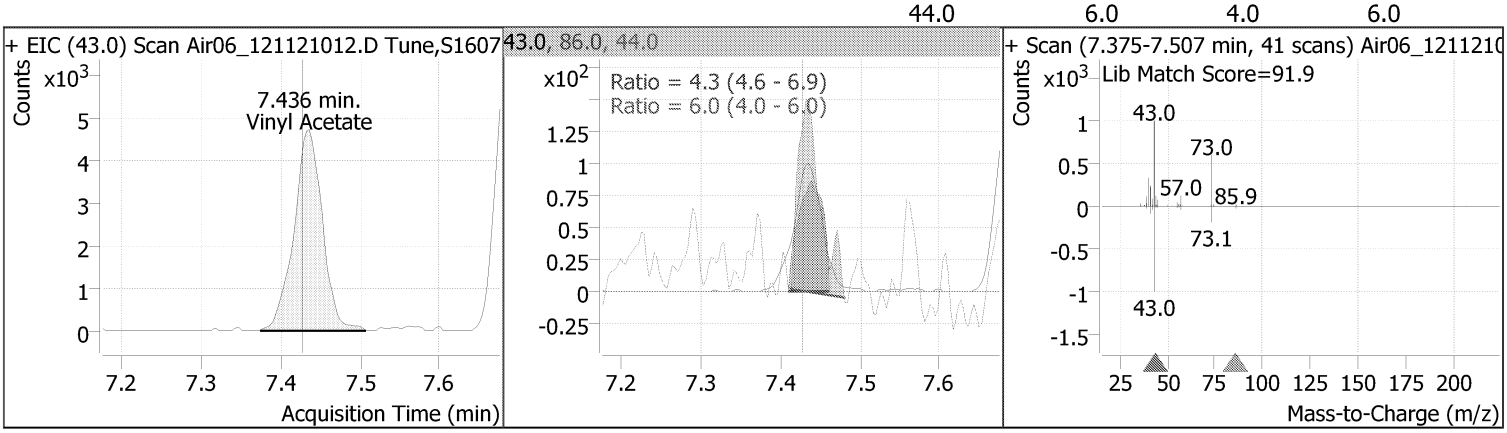
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1-Dichloroethane	0.0652	7.31	0.00	6123	65.0	28.6	24.1	36.1
					83.0	13.1	9.9	14.8
					98.0	3.3	3.6	5.5



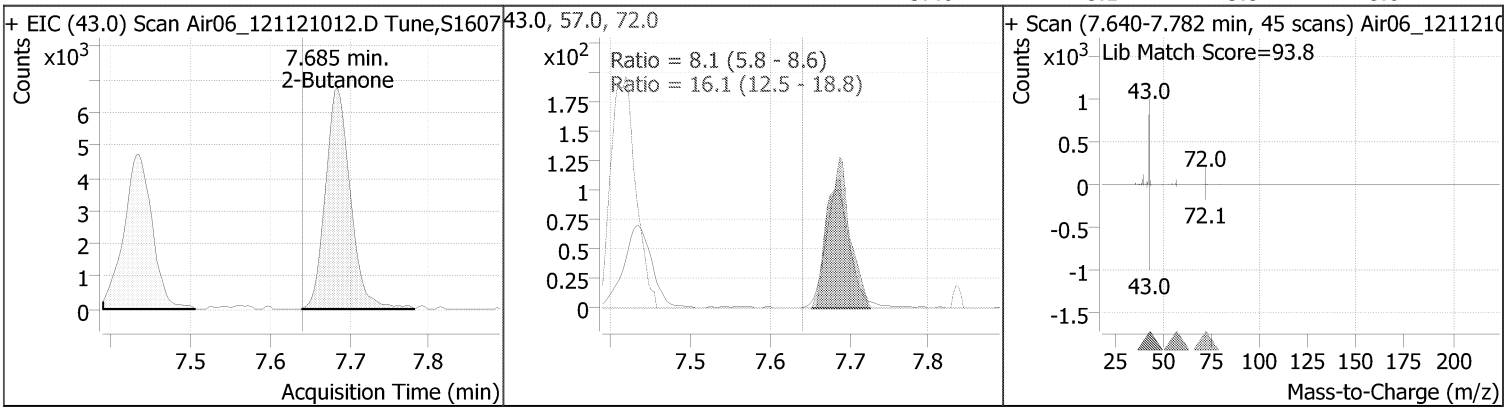
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
MTBE	0.0634	7.42	0.05	8032	41.0	35.1	25.7	38.5
					57.0	25.6	21.9	32.9



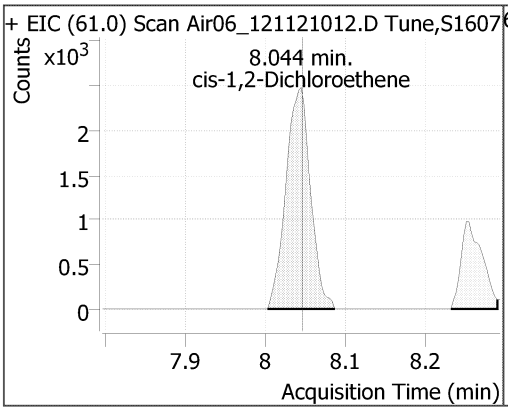
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.0744	7.44	0.01	11777	86.0	4.3	4.6	6.9
					44.0	6.0	4.0	6.0

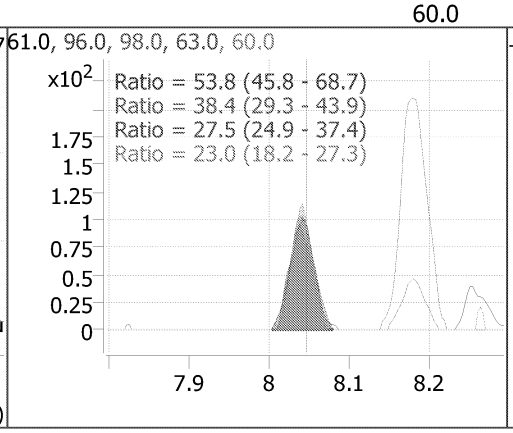


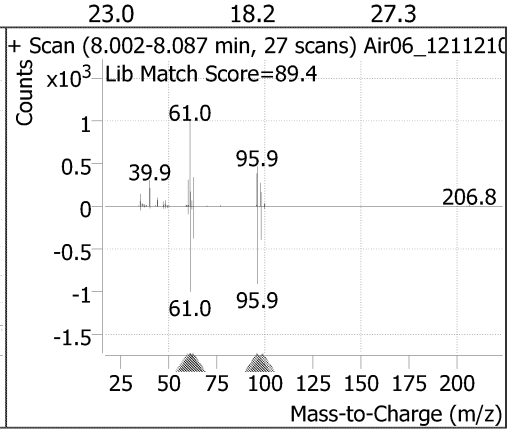
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.1177	7.69	0.05	14715	72.0	16.1	12.5	18.8
					57.0	8.1	5.8	8.6



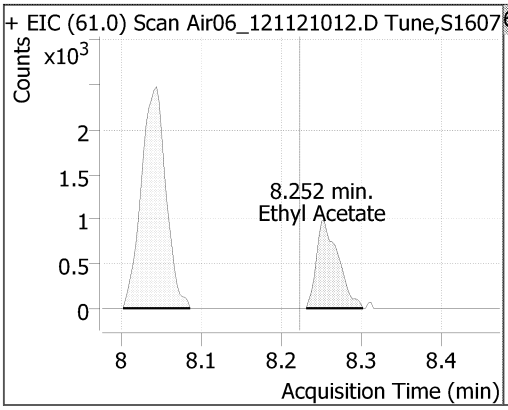
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.0692	8.04	0.00	5324	96.0	53.8	45.8	68.7
					98.0	38.4	29.3	43.9
					63.0	27.5	24.9	37.4
					60.0	23.0	18.2	27.3

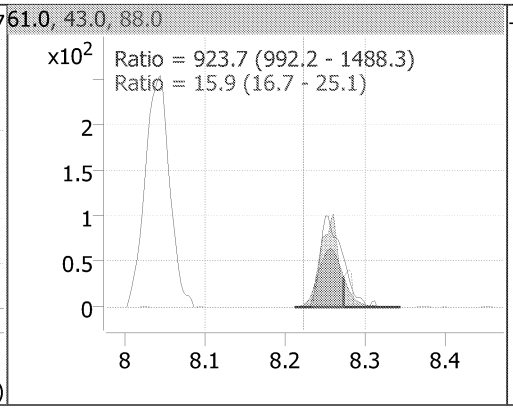


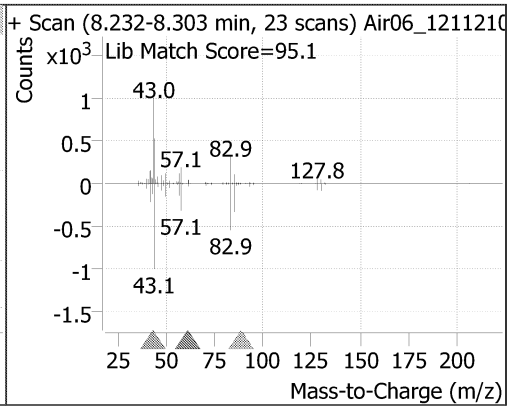




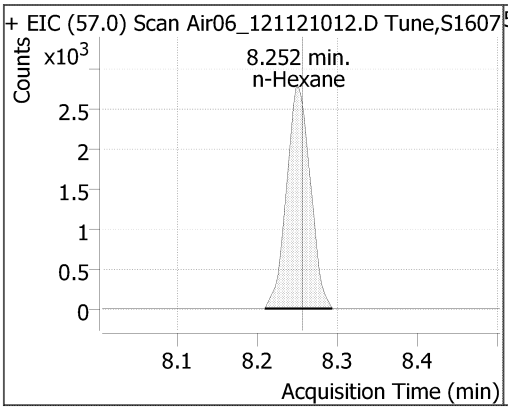
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	0.1080	8.25	0.03	1879	43.0	923.7	992.2	1488.3
					88.0	15.9	16.7	25.1

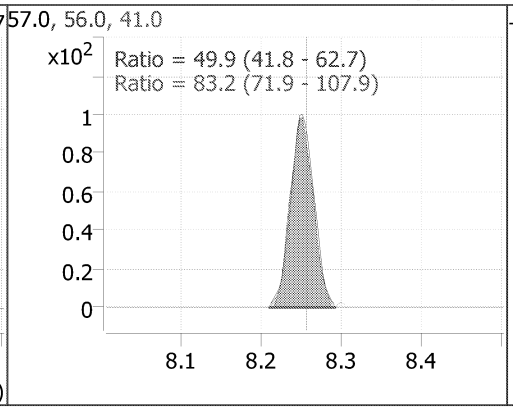


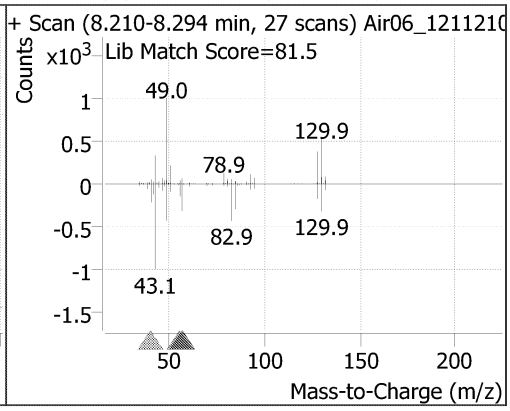




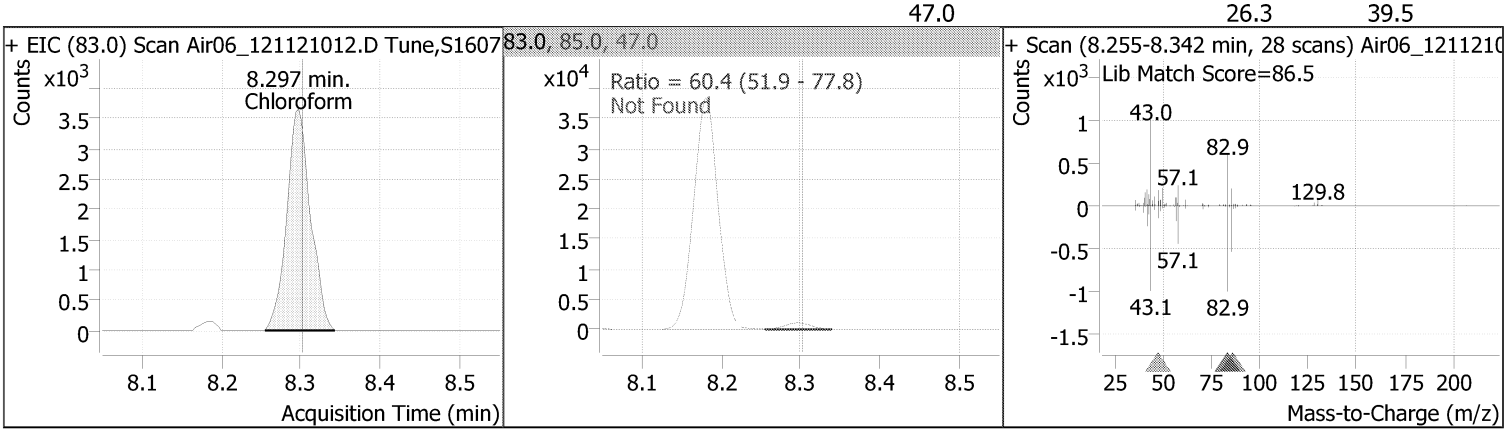
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.0716	8.25	0.00	5794	41.0	83.2	71.9	107.9
					56.0	49.9	41.8	62.7



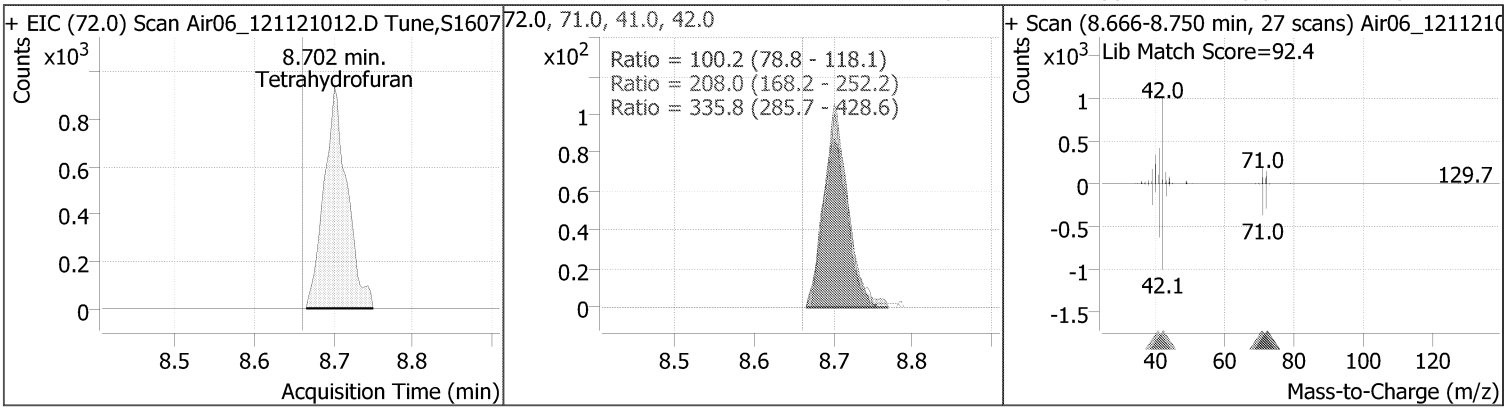




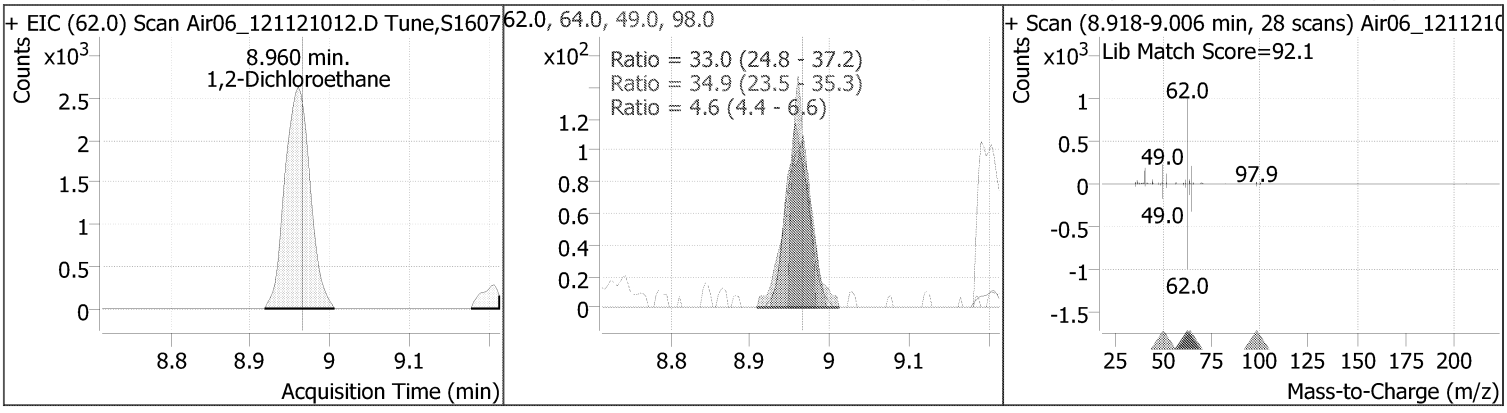
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.0688	8.30	0.00	7586	85.0	60.4	51.9	77.8
					47.0		26.3	39.5



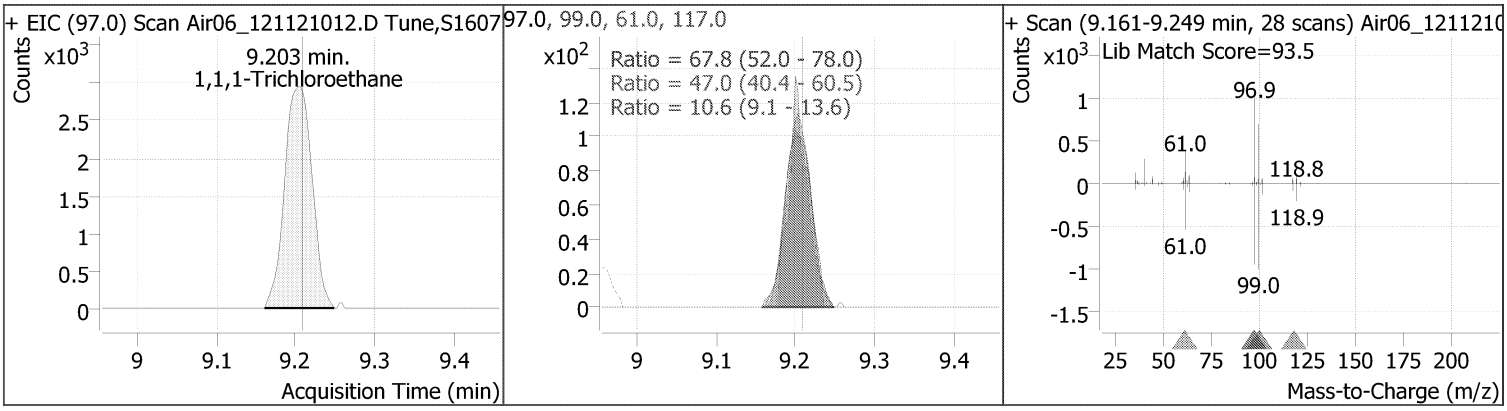
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrahydrofuran	0.1049	8.70	0.05	1895	42.0	335.8	285.7	428.6
					41.0	208.0	168.2	252.2
					71.0	100.2	78.8	118.1



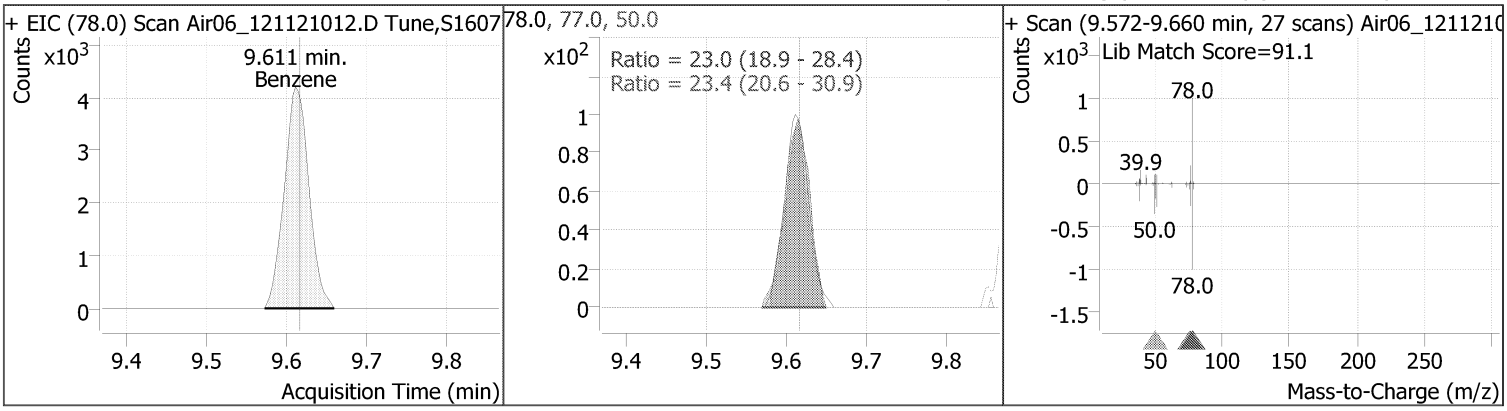
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloroethane	0.0654	8.96	0.00	5801	64.0	33.0	24.8	37.2
					49.0	34.9	23.5	35.3
					98.0	4.6	4.4	6.6



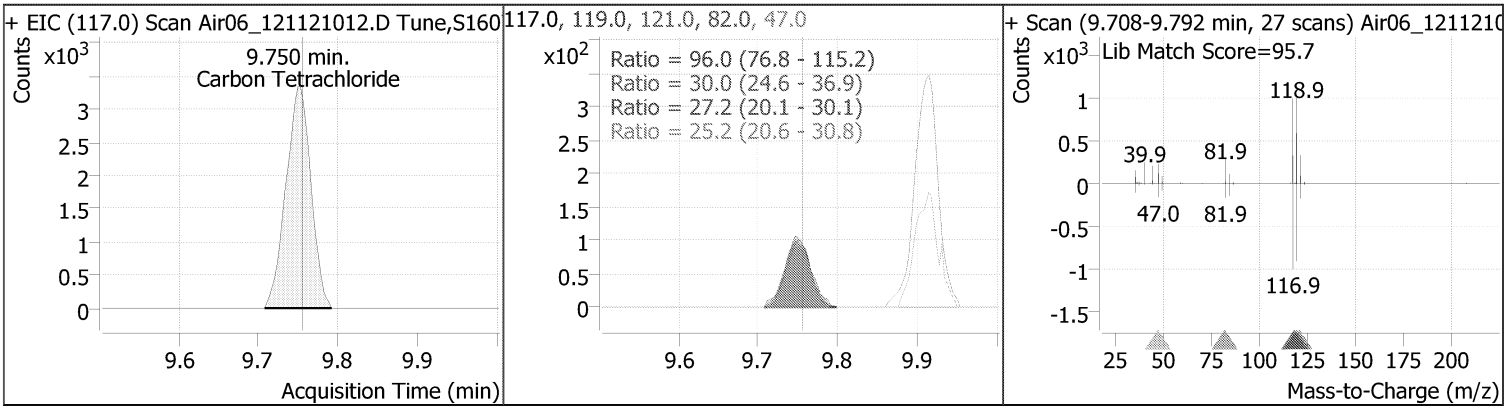
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1-Trichloroethane	0.0614	9.20	0.00	7109	99.0	67.8	52.0	78.0
					61.0	47.0	40.4	60.5
					117.0	10.6	9.1	13.6



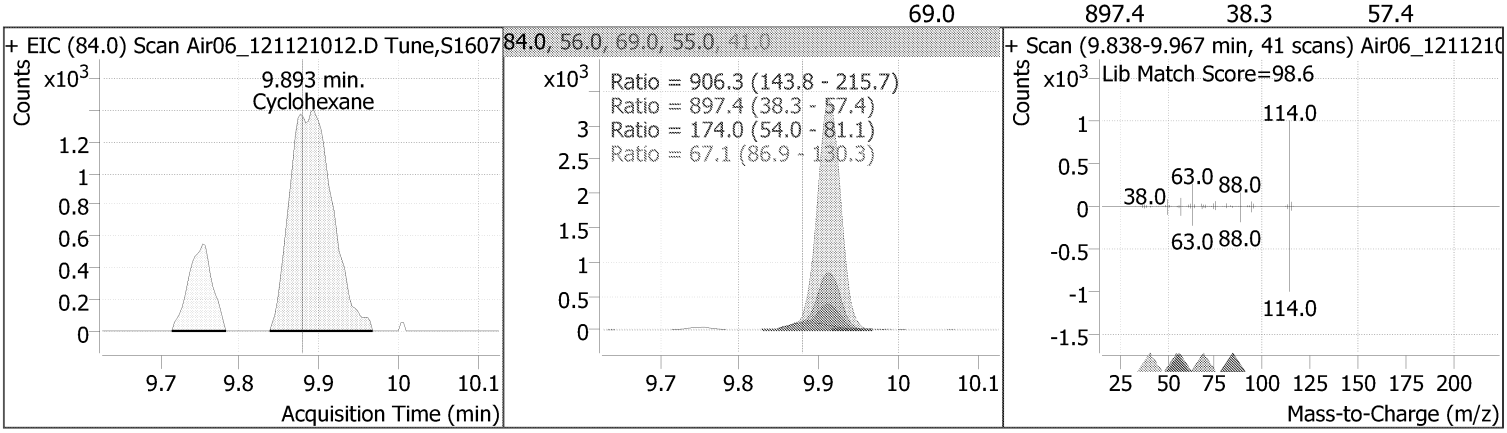
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.0739	9.61	0.00	9069	50.0	23.4	20.6	30.9
					77.0	23.0	18.9	28.4



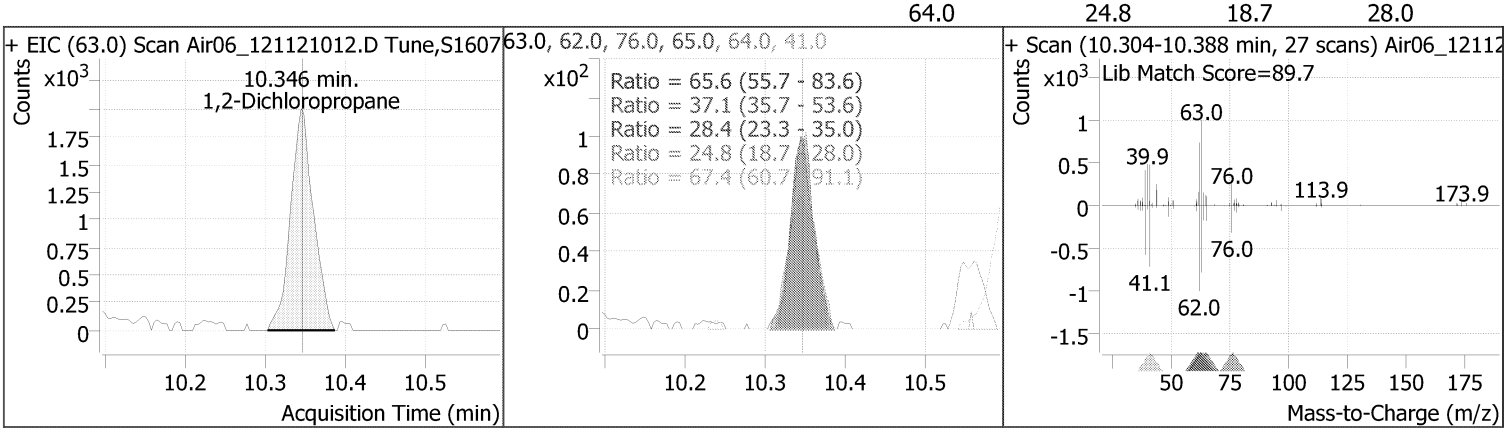
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Tetrachloride	0.0585	9.75	0.00	7302	119.0	96.0	76.8	115.2
					121.0	30.0	24.6	36.9
					47.0	25.2	20.6	30.8
					82.0	27.2	20.1	30.1



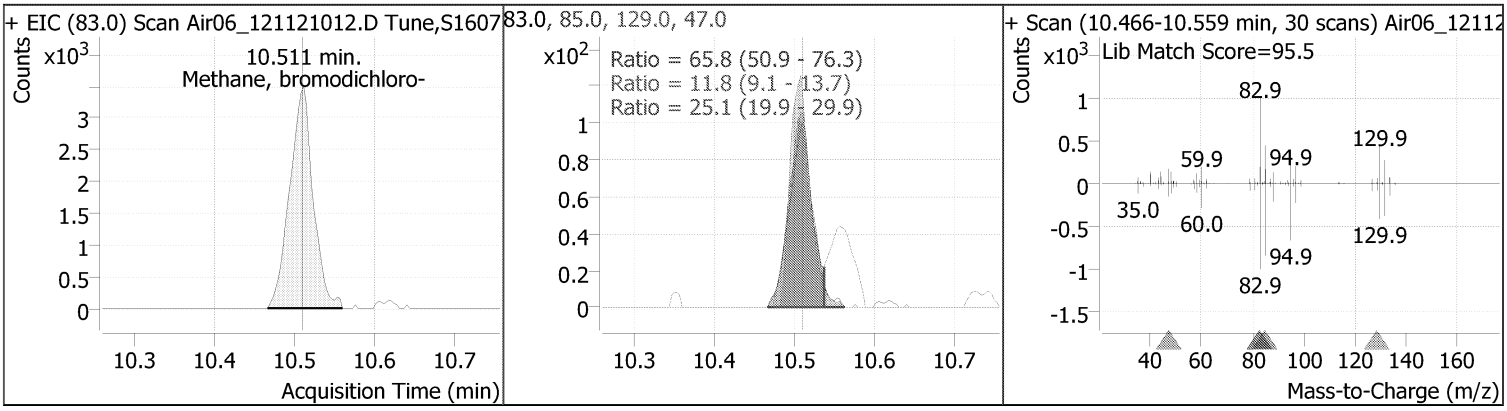
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.1045	9.89	0.02	5306	56.0	906.3	143.8	215.7
					41.0	67.1	86.9	130.3
					55.0	174.0	54.0	81.1
					69.0	897.4	38.3	57.4



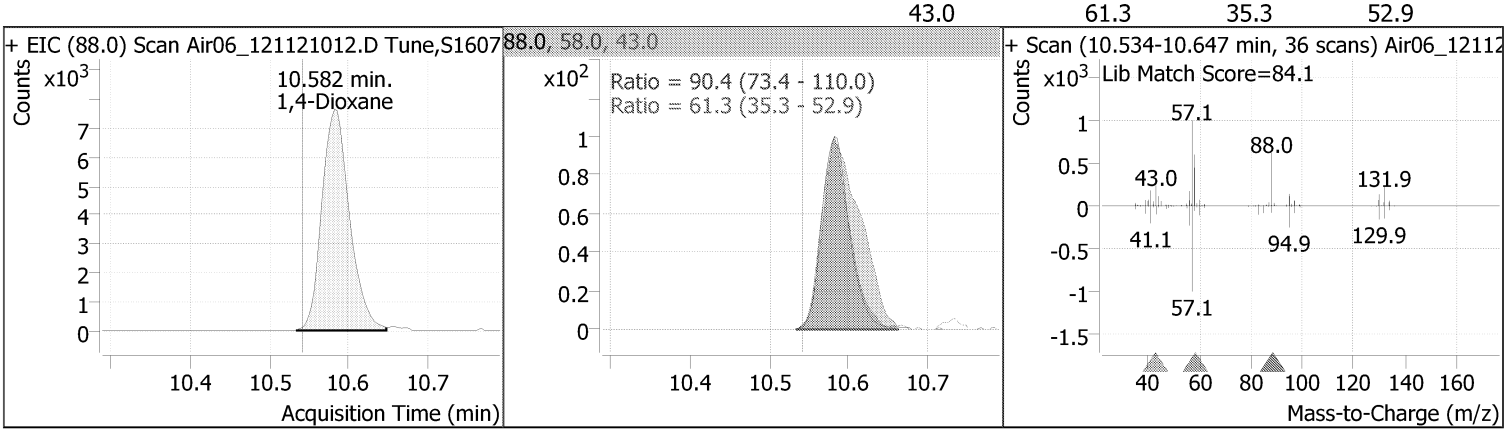
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.0717	10.35	0.00	3990	41.0	67.4	60.7	91.1
					62.0	65.6	55.7	83.6
					76.0	37.1	35.7	53.6
					65.0	28.4	23.3	35.0
					64.0	24.8	18.7	28.0



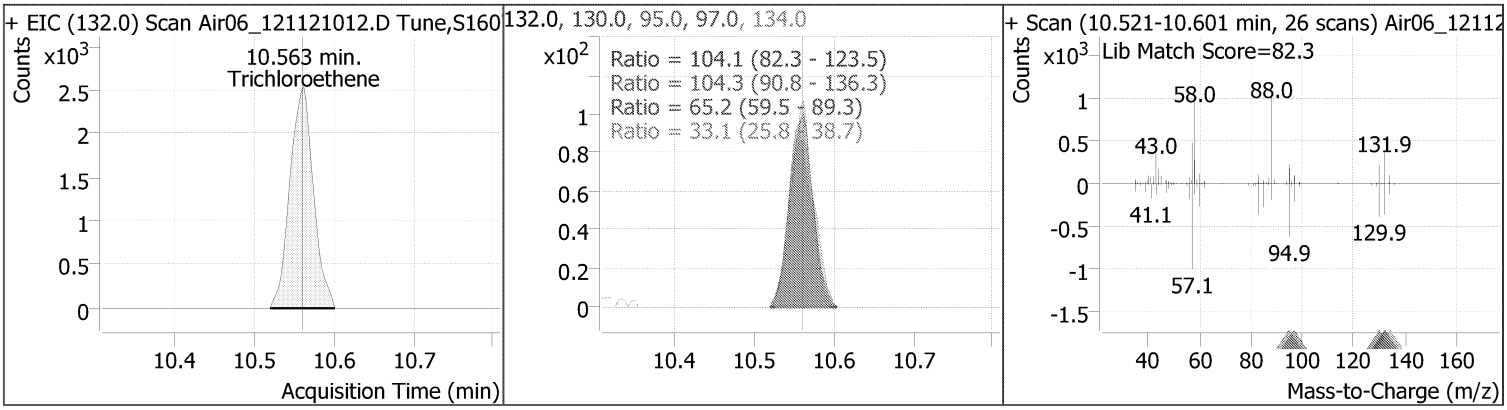
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methane, bromodichloro-	0.0629	10.51	0.00	7135	85.0	65.8	50.9	76.3
					47.0	25.1	19.9	29.9
					129.0	11.8	9.1	13.7



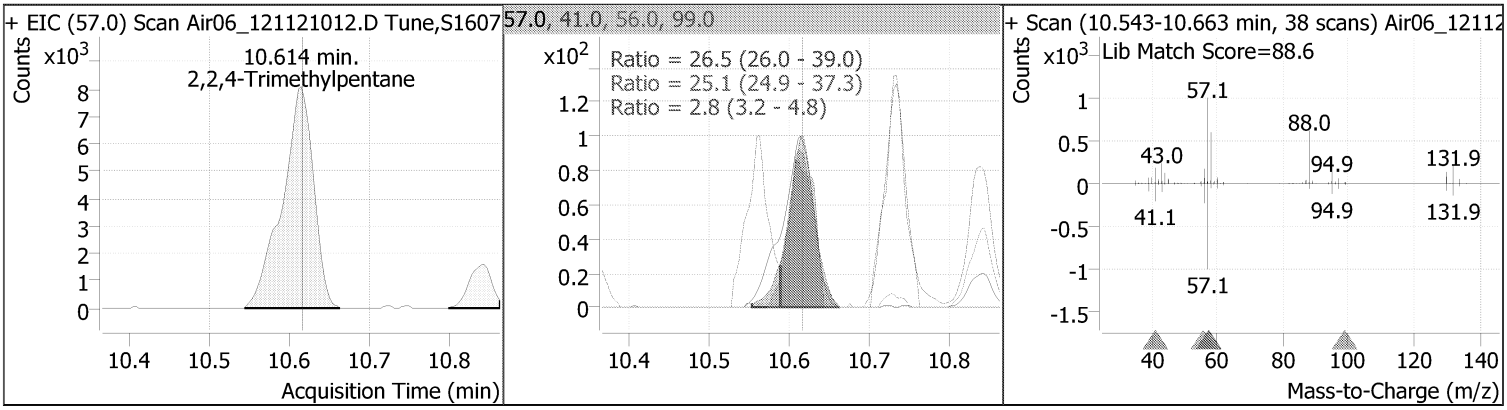
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dioxane	0.6949	10.58	0.04	18526	58.0	90.4	73.4	110.0
					43.0	61.3	35.3	52.9



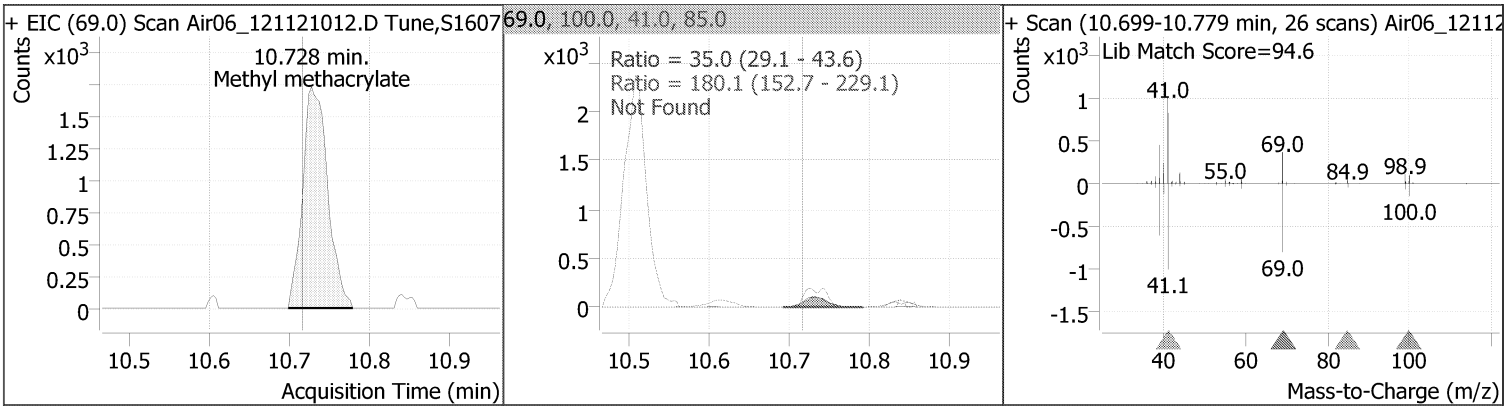
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Trichloroethene	0.0931	10.56	0.00	5185	95.0	104.3	90.8	136.3
					130.0	104.1	82.3	123.5
					97.0	65.2	59.5	89.3
					134.0	33.1	25.8	38.7



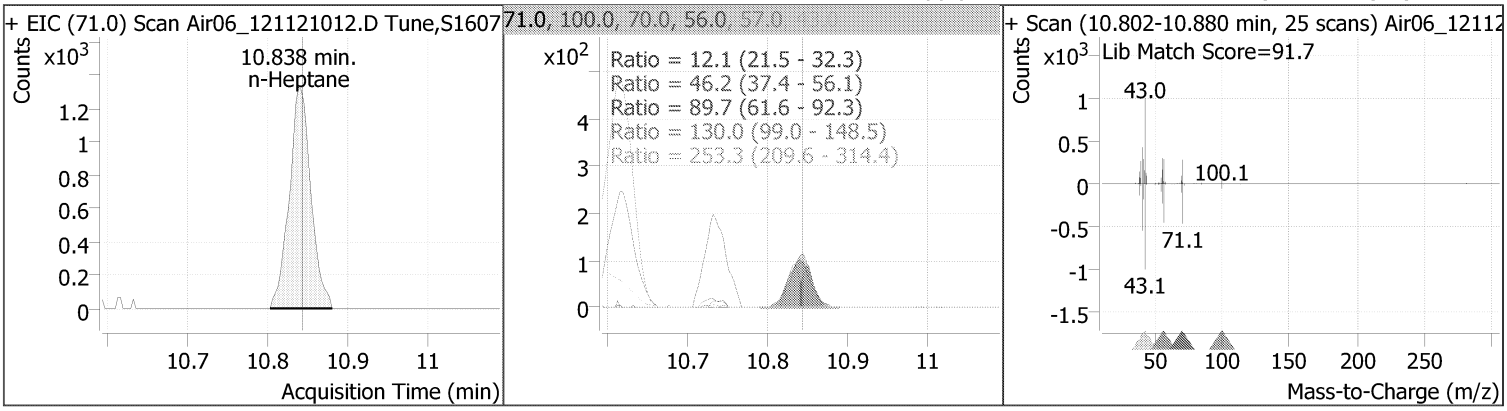
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.0846	10.61	0.00	22145	41.0	26.5	26.0	39.0
					56.0	25.1	24.9	37.3
					99.0	2.8	3.2	4.8



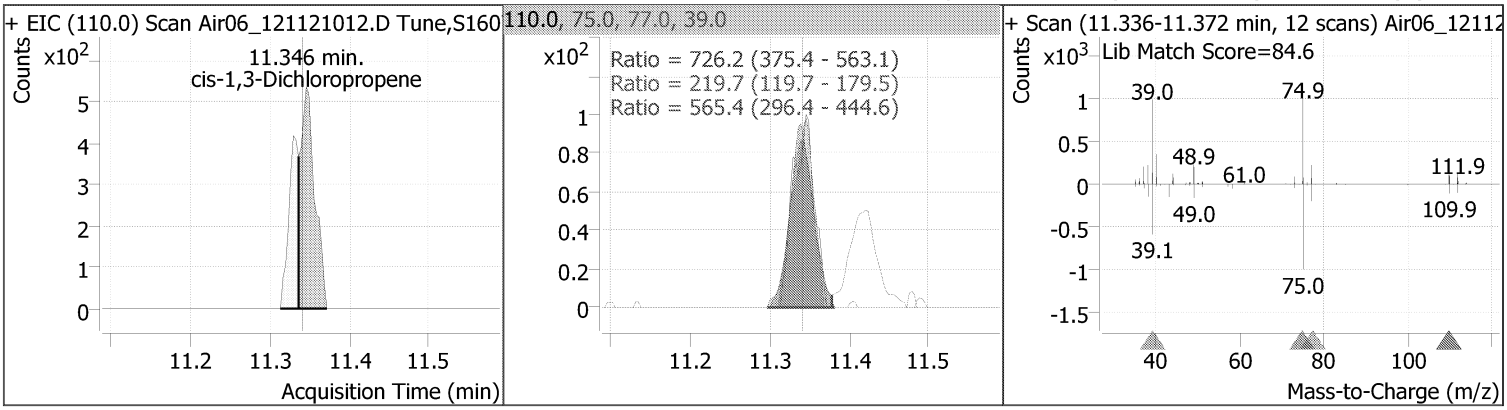
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methyl methacrylate	0.0837	10.73	0.01	3771	41.0	180.1	152.7	229.1
					100.0	35.0	29.1	43.6
					85.0		7.9	11.8



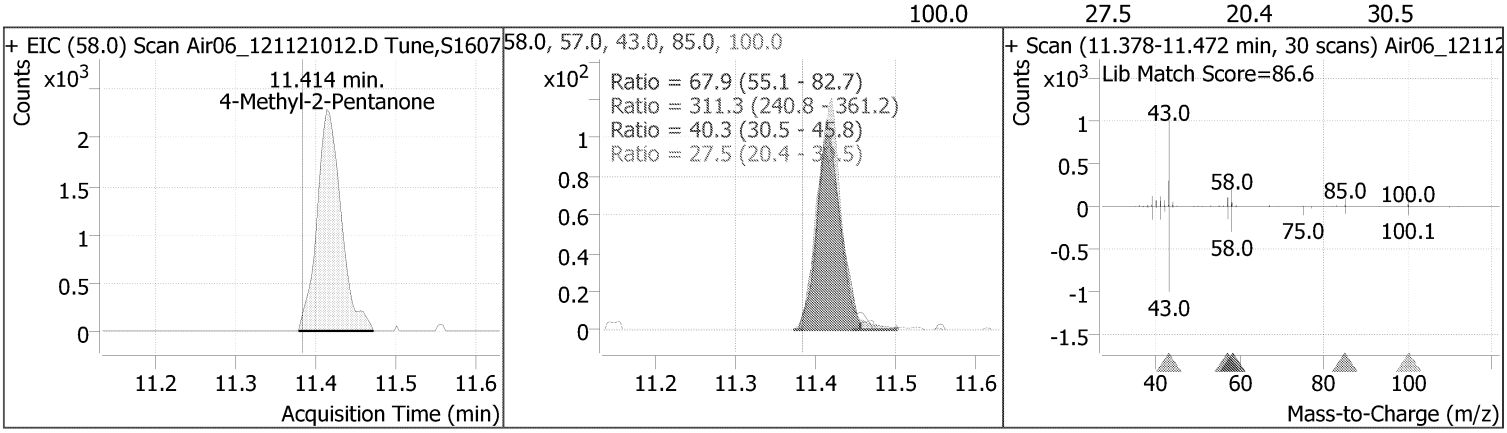
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Heptane	0.0614	10.84	0.00	2505	43.0	253.3	209.6	314.4
					57.0	130.0	99.0	148.5
					56.0	89.7	61.6	92.3
					70.0	46.2	37.4	56.1
					100.0	12.1	21.5	32.3



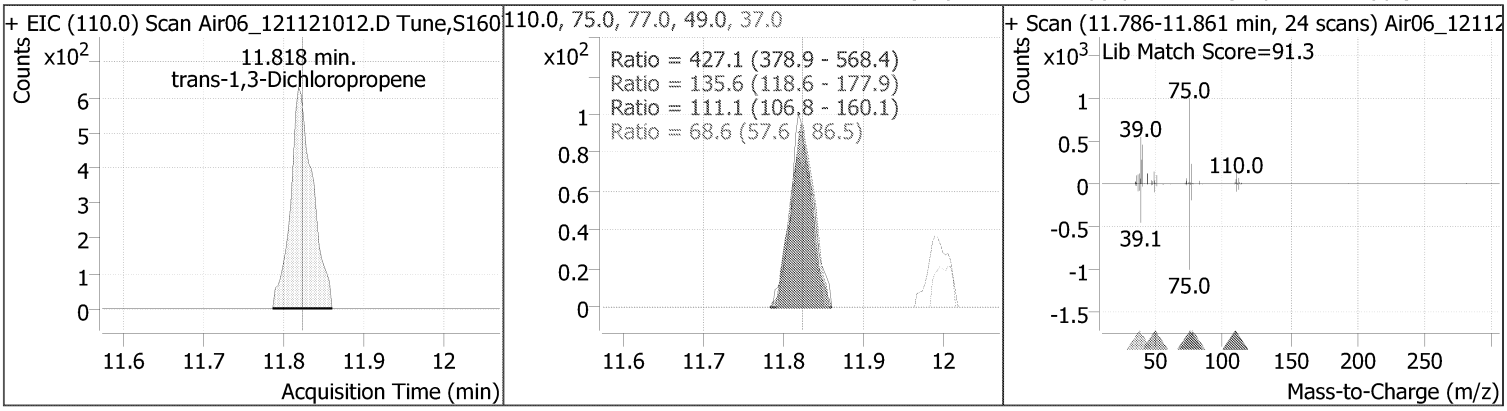
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,3-Dichloropropene	0.0405	11.35	0.01	662	75.0	726.2	375.4	563.1
					39.0	565.4	296.4	444.6
					77.0	219.7	119.7	179.5



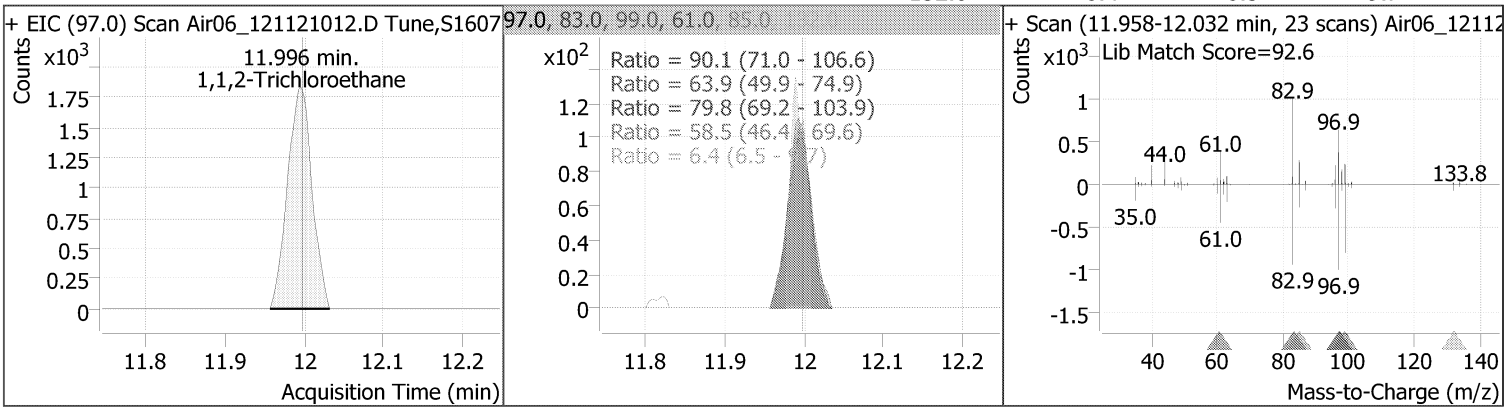
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.1005	11.41	0.03	4851	43.0	311.3	240.8	361.2
					57.0	67.9	55.1	82.7
					85.0	40.3	30.5	45.8
					100.0	27.5	20.4	30.5



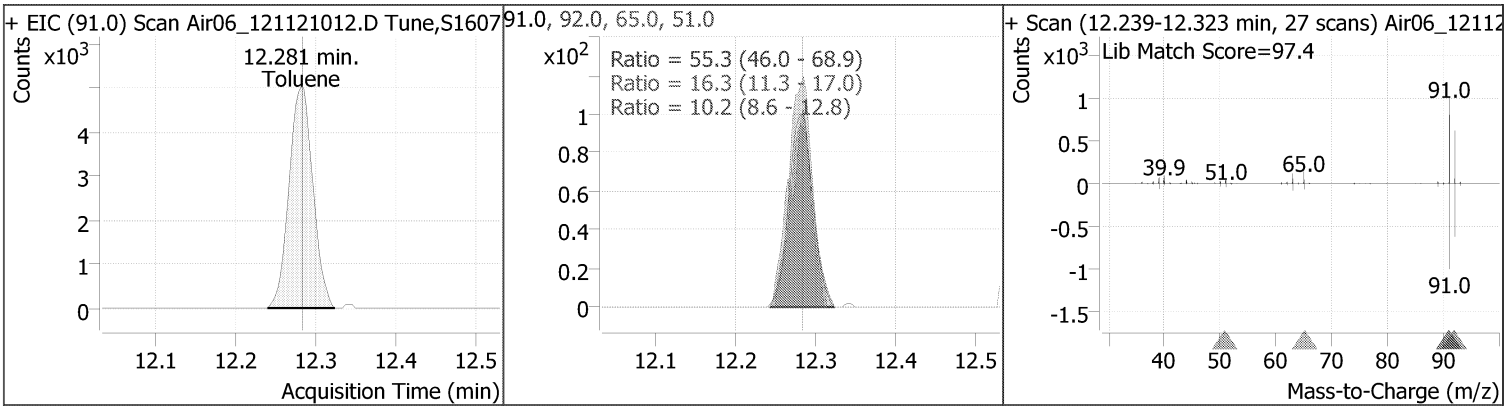
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
trans-1,3-Dichloropropene	0.0725	11.82	0.00	1217	75.0	427.1	378.9	568.4
					77.0	135.6	118.6	177.9
					49.0	111.1	106.8	160.1
					37.0	68.6	57.6	86.5



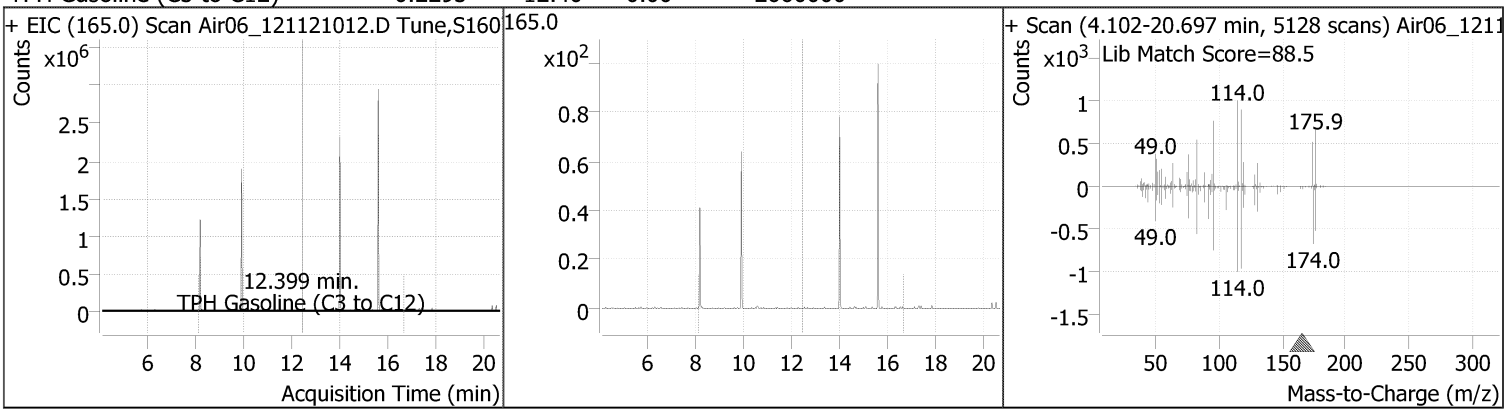
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2-Trichloroethane	0.0719	12.00	0.00	3903	83.0	90.1	71.0	106.6
					61.0	79.8	69.2	103.9
					99.0	63.9	49.9	74.9
					85.0	58.5	46.4	69.6
					132.0	6.4	6.5	9.7



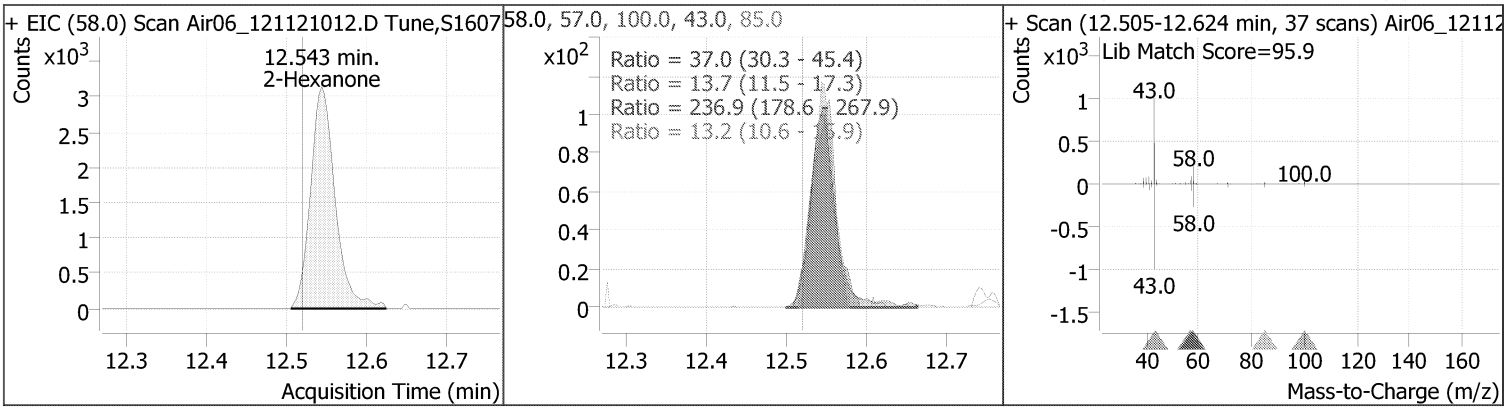
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.0671	12.28	0.00	10462	92.0	55.3	46.0	68.9
					65.0	16.3	11.3	17.0
					51.0	10.2	8.6	12.8



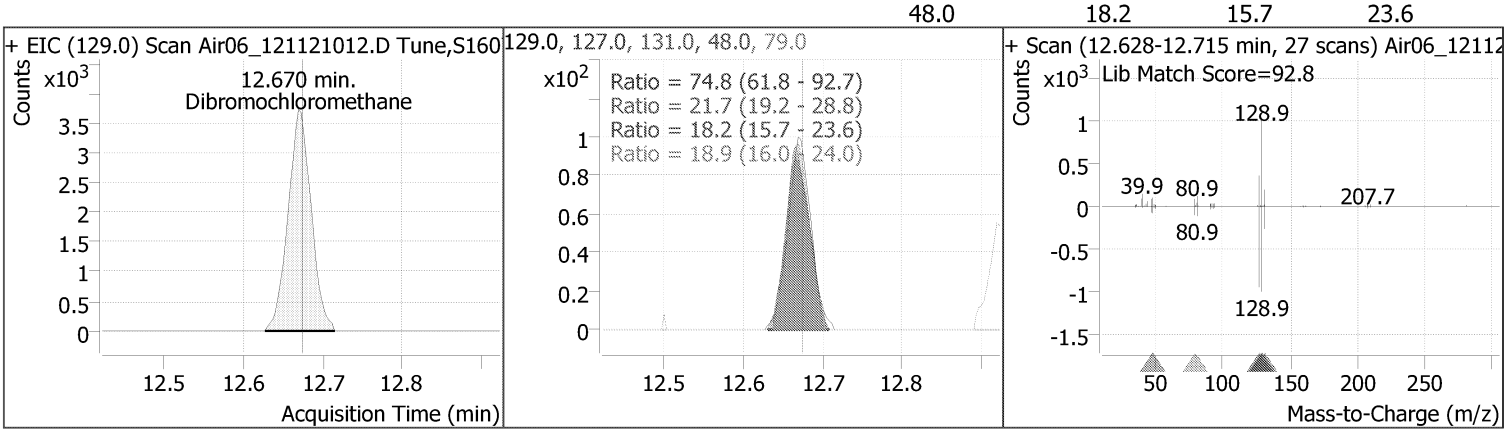
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	0.2293	12.40	0.00	2660000				



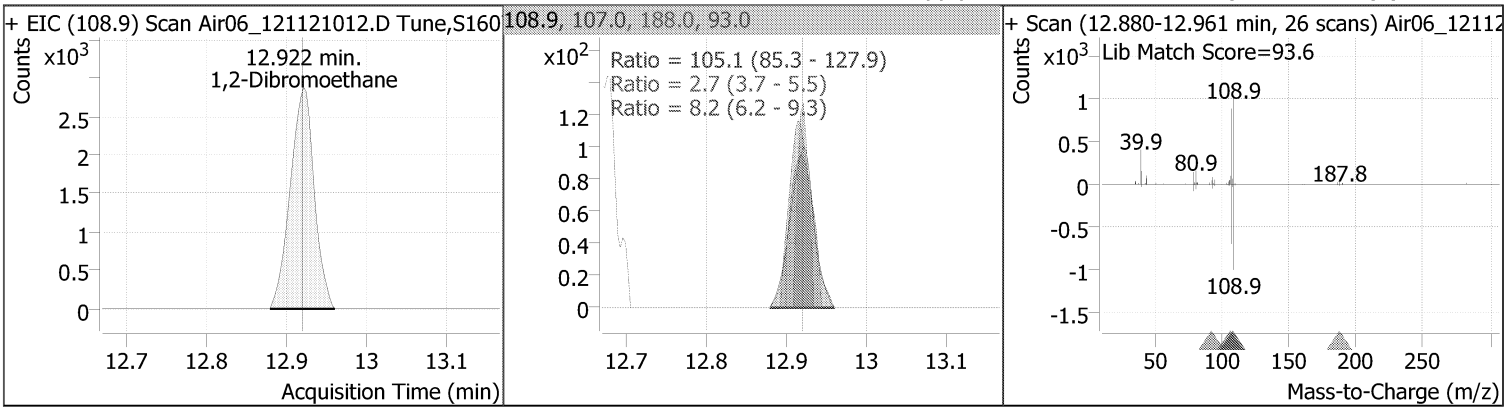
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Hexanone	0.1114	12.54	0.03	6726	43.0	236.9	178.6	267.9
					57.0	37.0	30.3	45.4
					100.0	13.7	11.5	17.3
					85.0	13.2	10.6	15.9



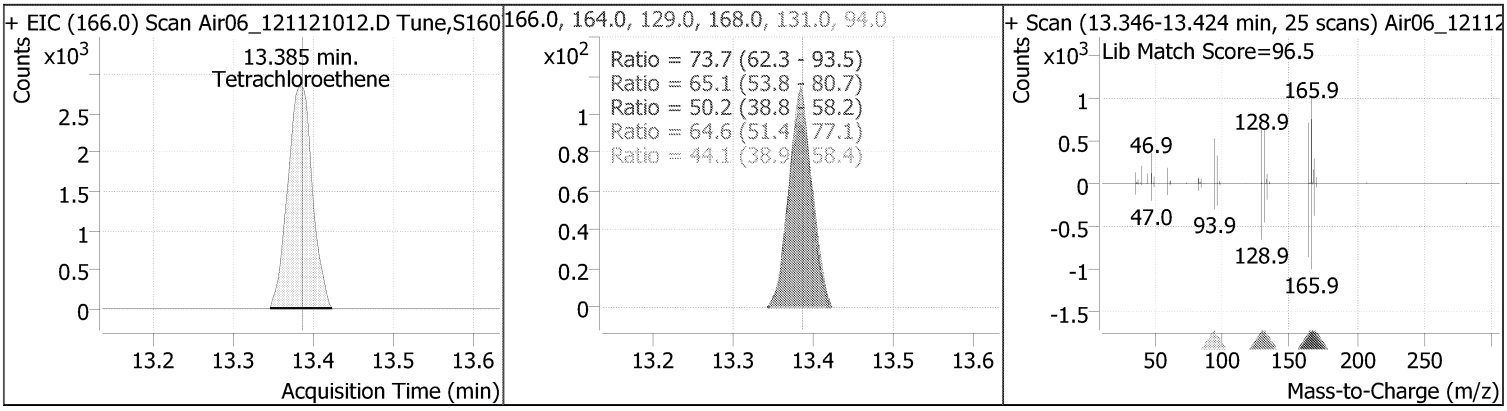
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Dibromochloromethane	0.0684	12.67	0.00	7505	127.0	74.8	61.8	92.7
					131.0	21.7	19.2	28.8
					79.0	18.9	16.0	24.0
					48.0	18.2	15.7	23.6



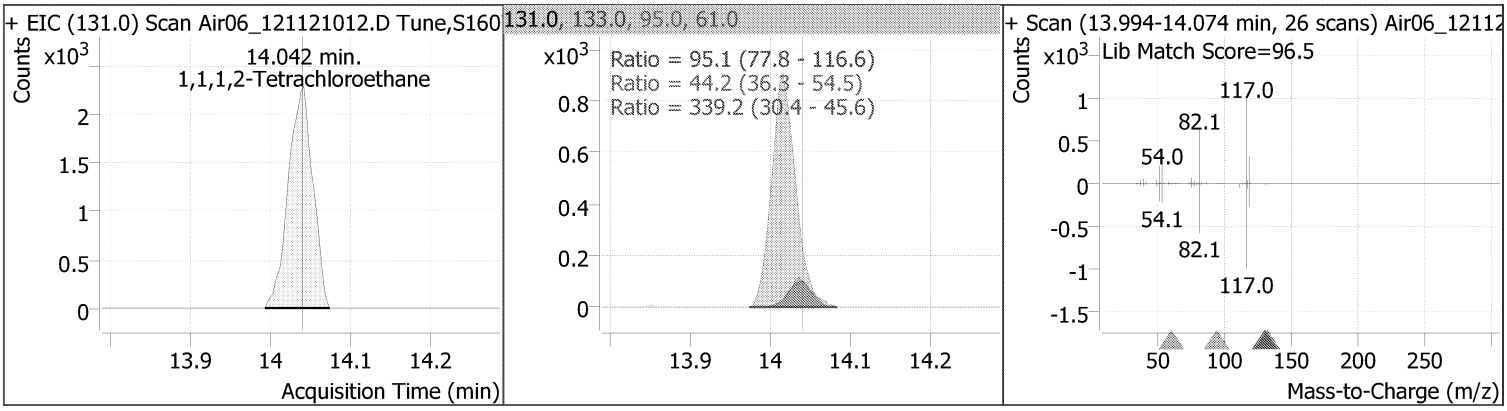
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dibromoethane	0.0719	12.92	0.00	5993	107.0	105.1	85.3	127.9
					93.0	8.2	6.2	9.3
					188.0	2.7	3.7	5.5



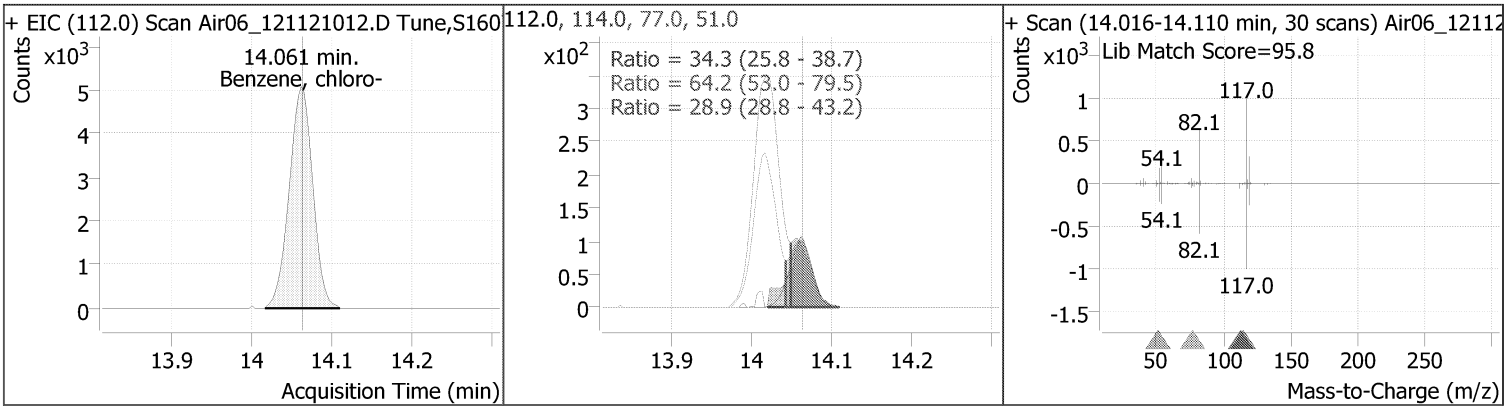
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tetrachloroethene	0.0669	13.39	0.00	6120	164.0	73.7	62.3	93.5
					129.0	65.1	53.8	80.7
					131.0	64.6	51.4	77.1
					94.0	44.1	38.9	58.4
					168.0	50.2	38.8	58.2



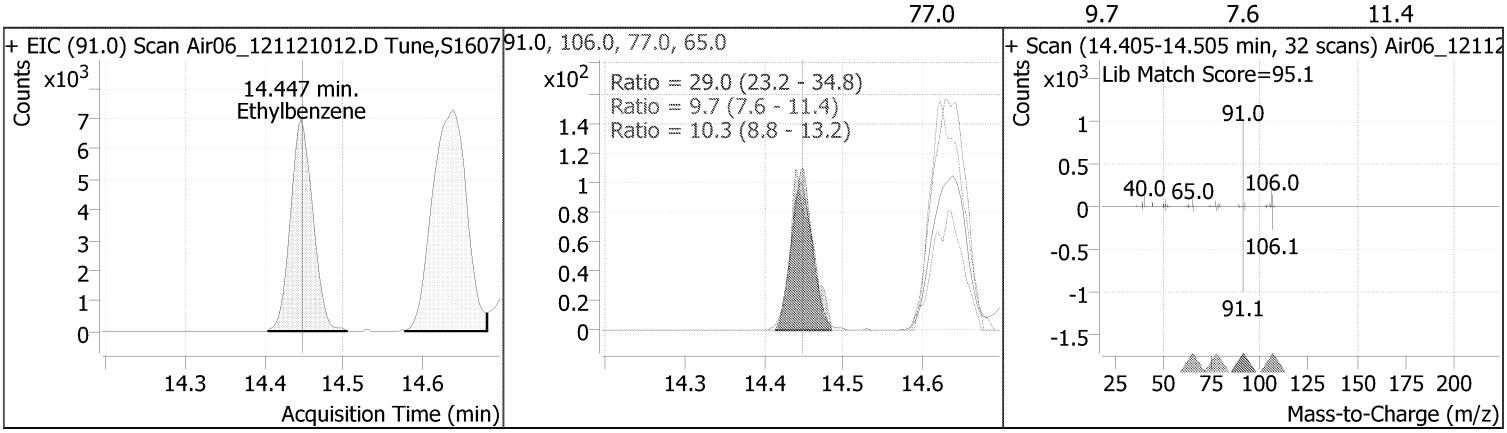
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,1,2-Tetrachloroethane	0.0728	14.04	0.00	4894	133.0	95.1	77.8	116.6
					95.0	44.2	36.3	54.5
					61.0	339.2	30.4	45.6



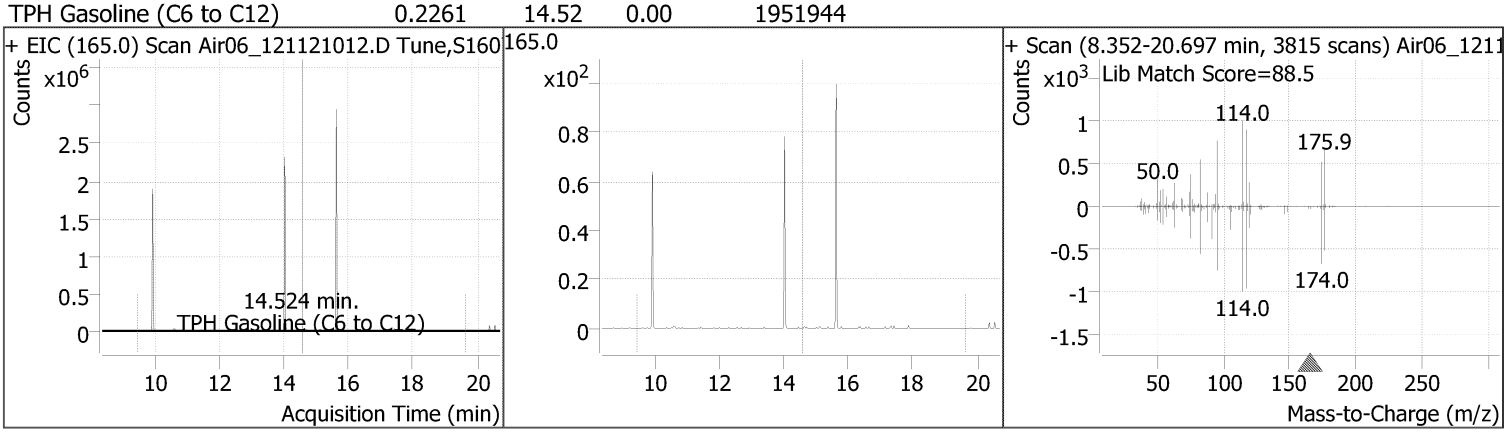
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0898	14.06	0.00	10455	77.0	64.2	53.0	79.5
					51.0	28.9	28.8	43.2
					114.0	34.3	25.8	38.7



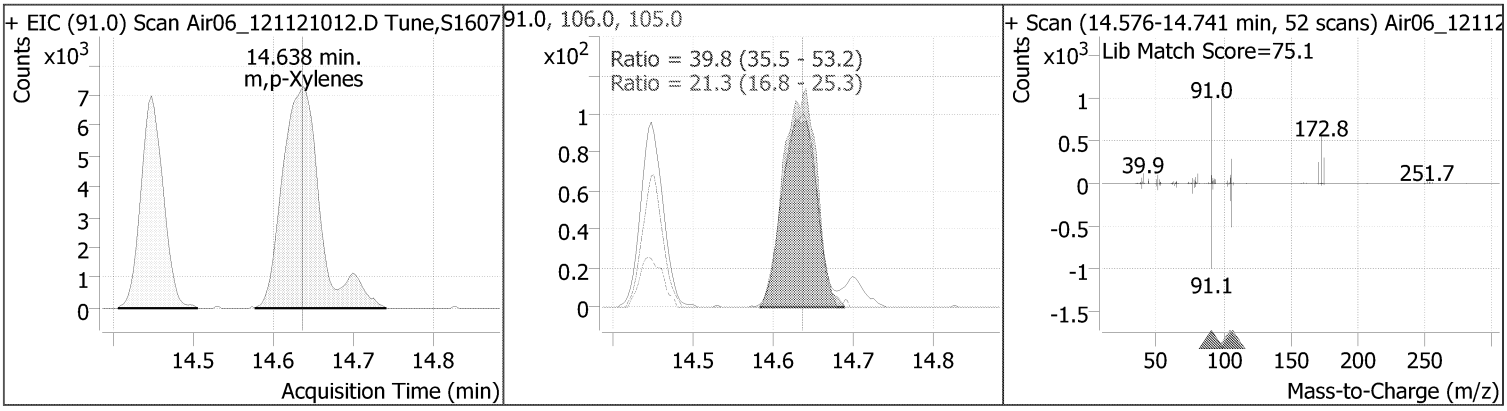
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.0727	14.45	0.00	13668	106.0	29.0	23.2	34.8
					65.0	10.3	8.8	13.2
					77.0	9.7	7.6	11.4



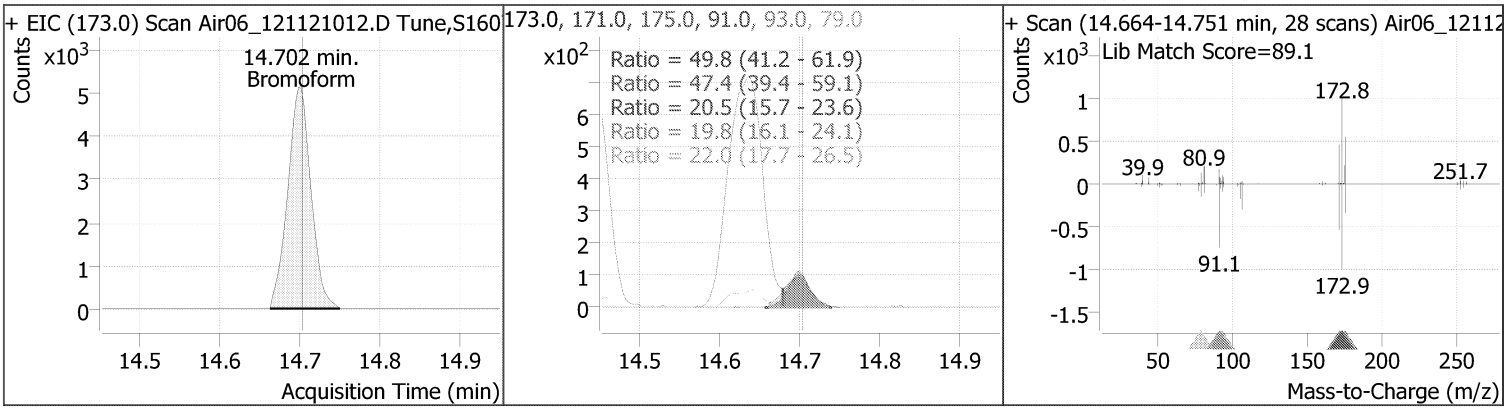
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	0.2261	14.52	0.00	1951944				



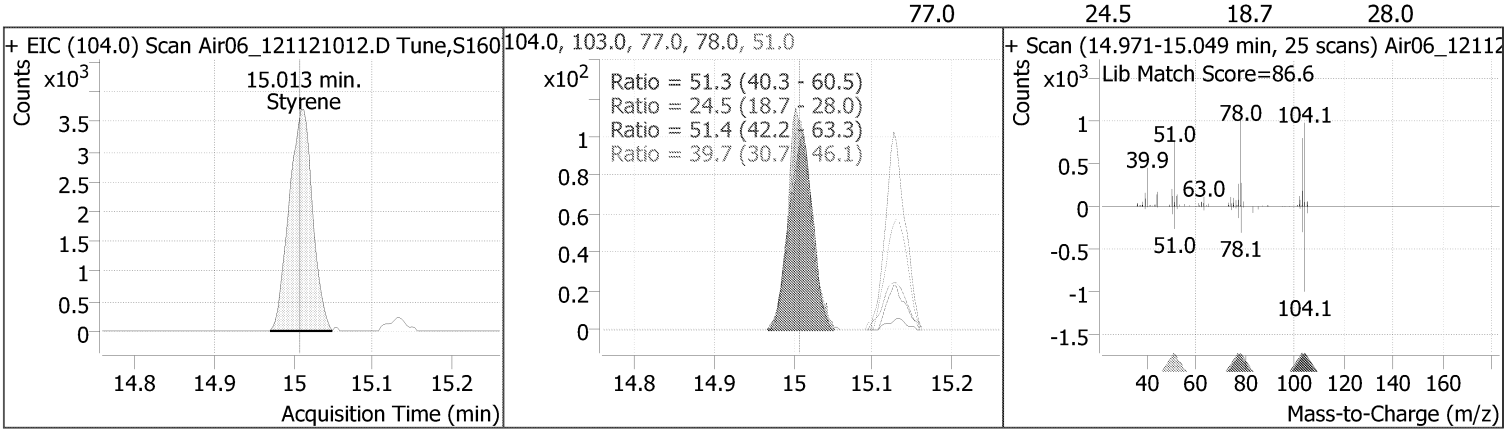
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	0.1512	14.64	0.00	23966	106.0	39.8	35.5	53.2
					105.0	21.3	16.8	25.3



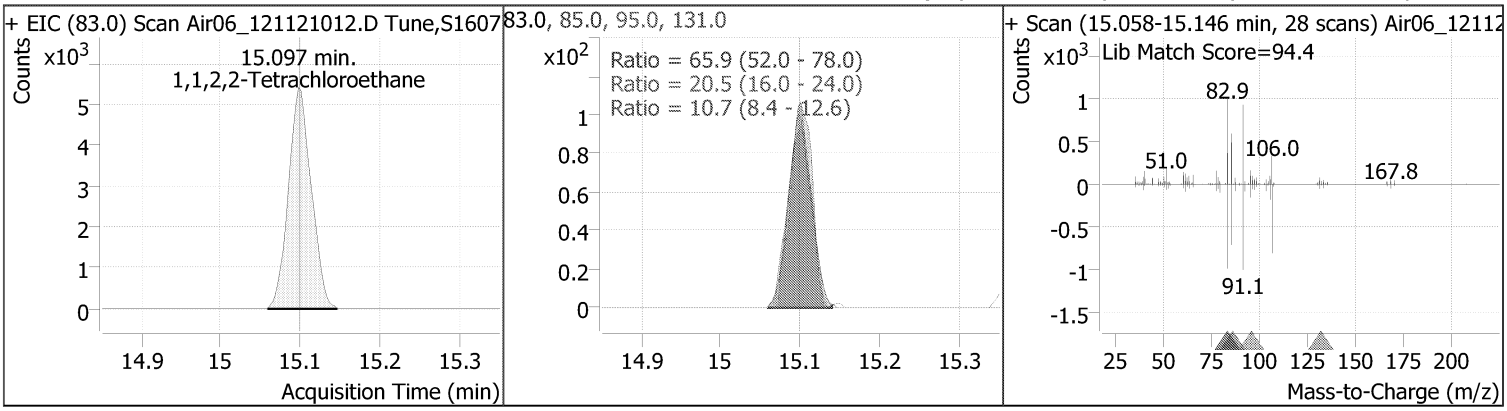
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Bromoform	0.0833	14.70	0.00	10418	171.0	49.8	41.2	61.9
					175.0	47.4	39.4	59.1
					79.0	22.0	17.7	26.5
					93.0	19.8	16.1	24.1
					91.0	20.5	15.7	23.6



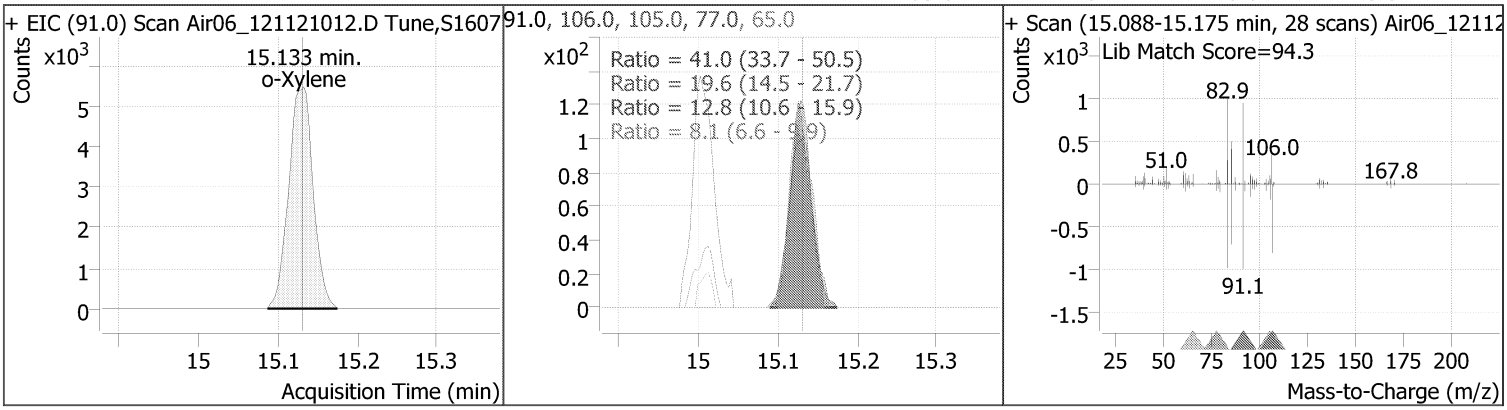
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Styrene	0.0714	15.01	0.00	7582	78.0	51.4	42.2	63.3
					103.0	51.3	40.3	60.5
					51.0	39.7	30.7	46.1
					77.0	24.5	18.7	28.0



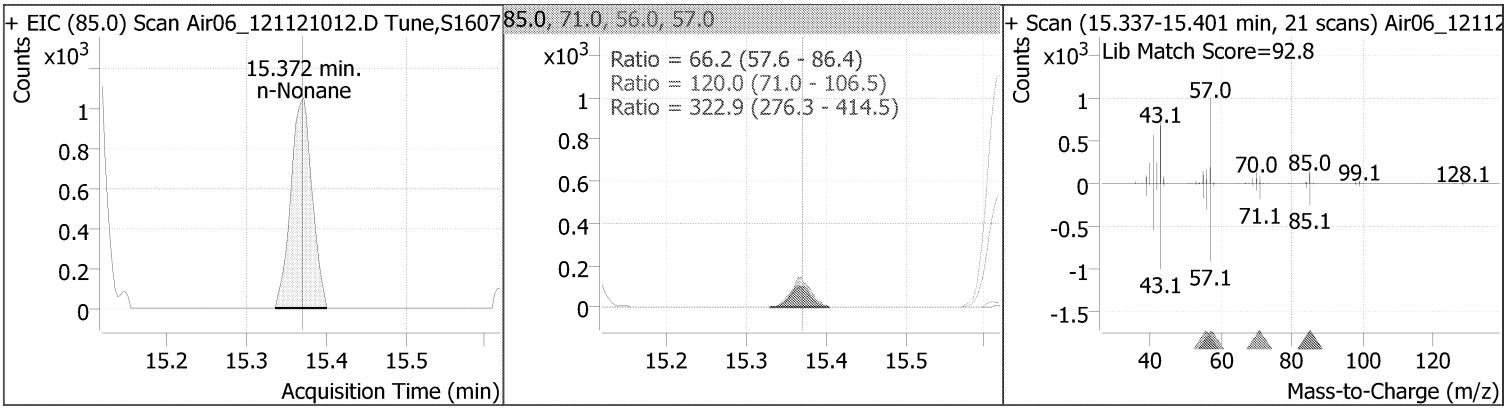
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,1,2,2-Tetrachloroethane	0.0949	15.10	0.00	10791	85.0	65.9	52.0	78.0
					95.0	20.5	16.0	24.0
					131.0	10.7	8.4	12.6



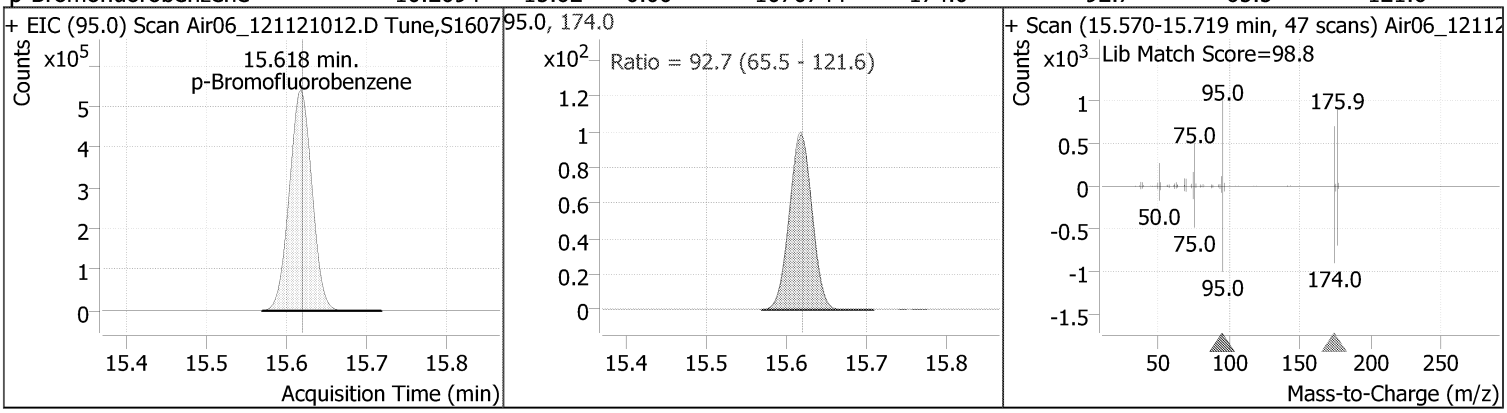
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
o-Xylene	0.0711	15.13	0.00	11691	106.0	41.0	33.7	50.5
					105.0	19.6	14.5	21.7
					77.0	12.8	10.6	15.9
					65.0	8.1	6.6	9.9



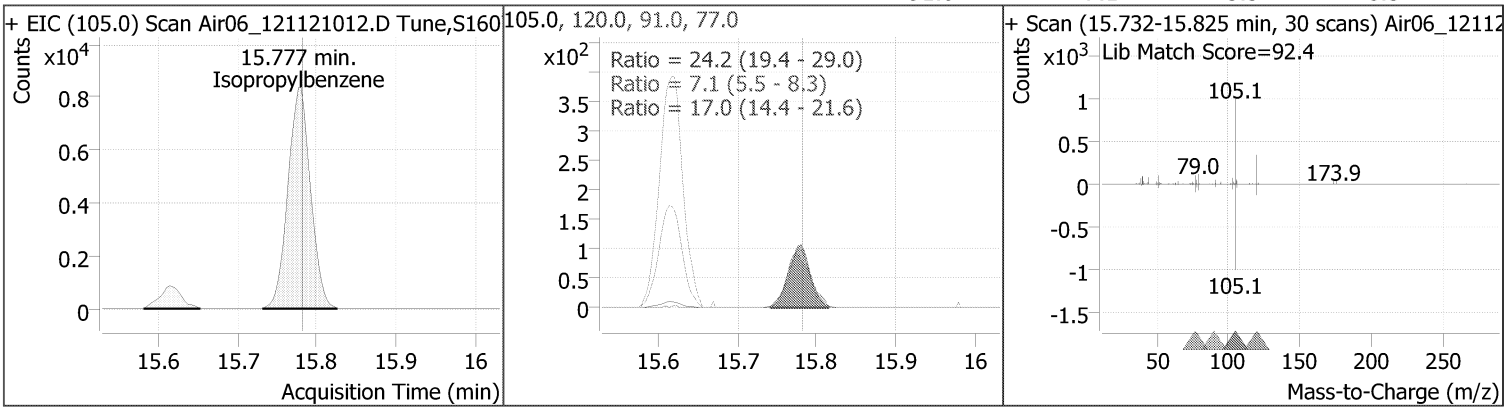
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Nonane	0.0579	15.37	0.00	1943	57.0	322.9	276.3	414.5
					56.0	120.0	71.0	106.5
					71.0	66.2	57.6	86.4



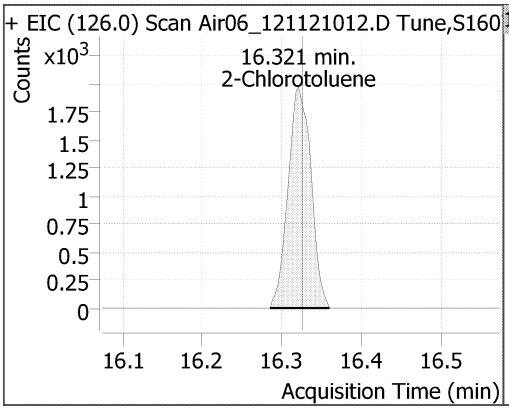
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
p-Bromofluorobenzene	10.2094	15.62	0.00	1070744	174.0	92.7	65.5	121.6

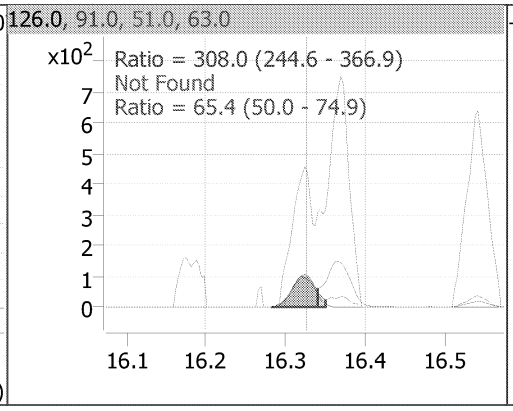


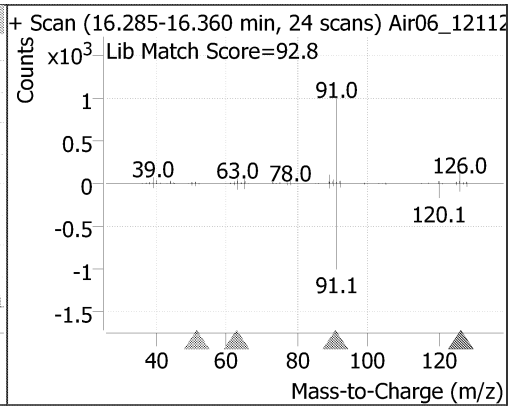
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropylbenzene	0.0740	15.78	0.00	16521	120.0	24.2	19.4	29.0
					77.0	17.0	14.4	21.6
					91.0	7.1	5.5	8.3



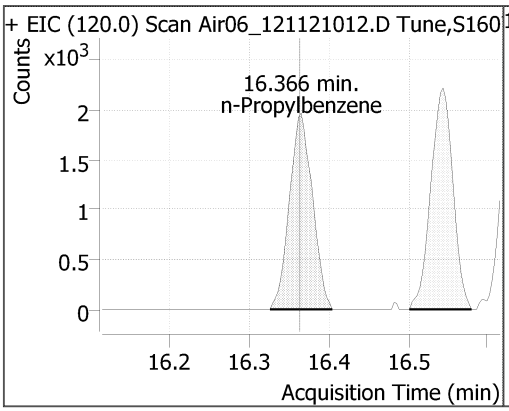
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Chlorotoluene	0.0792	16.32	0.00	3947	91.0	308.0	244.6	366.9
					63.0	65.4	50.0	74.9
					51.0		17.6	26.3

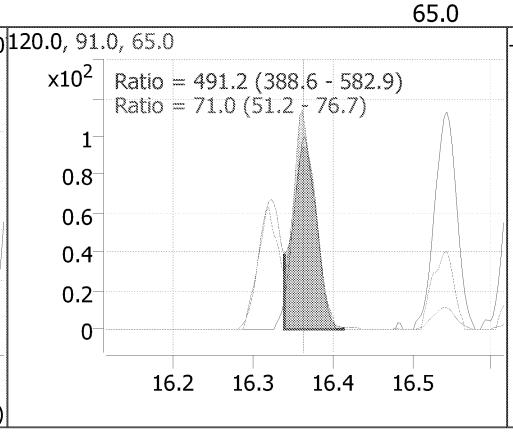


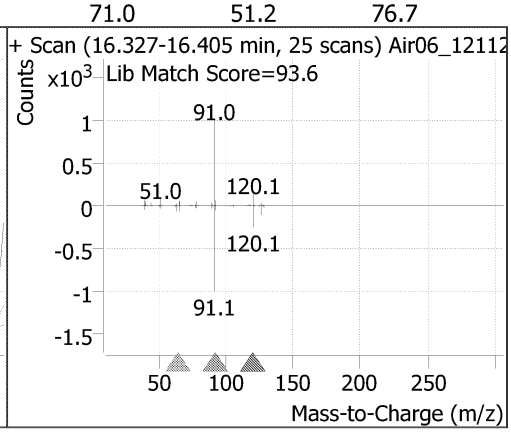




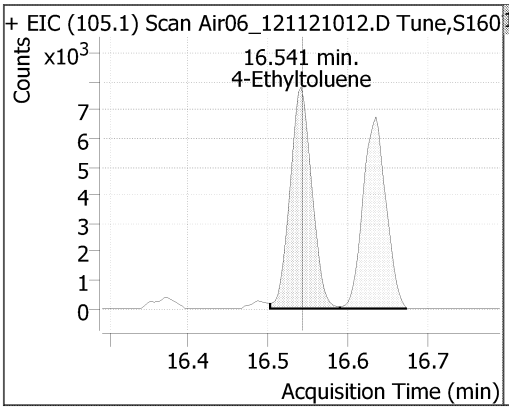
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Propylbenzene	0.0701	16.37	0.00	3943	91.0	491.2	388.6	582.9
					65.0	71.0	51.2	76.7

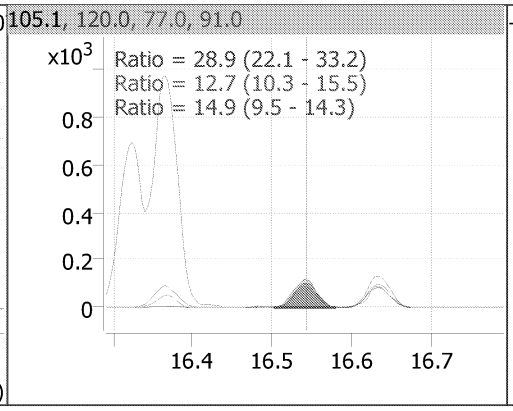


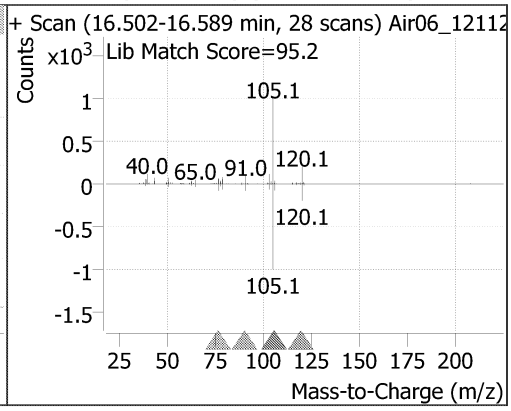




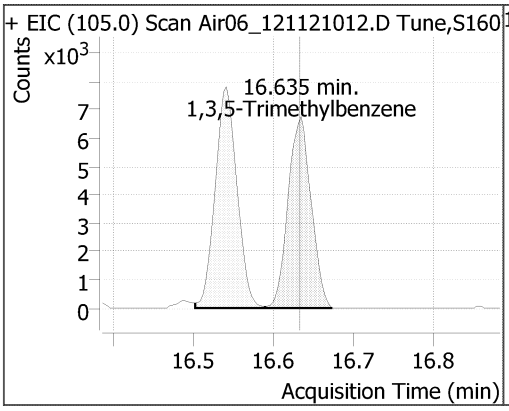
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Ethyltoluene	0.0701	16.54	0.00	14859	120.0	28.9	22.1	33.2
					77.0	12.7	10.3	15.5
					91.0	14.9	9.5	14.3

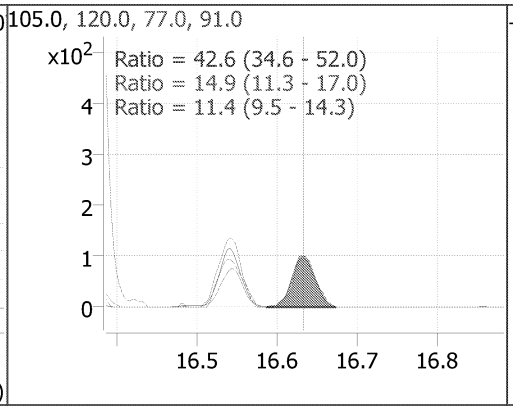


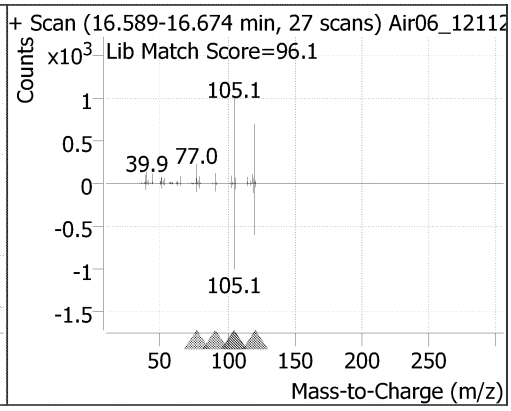




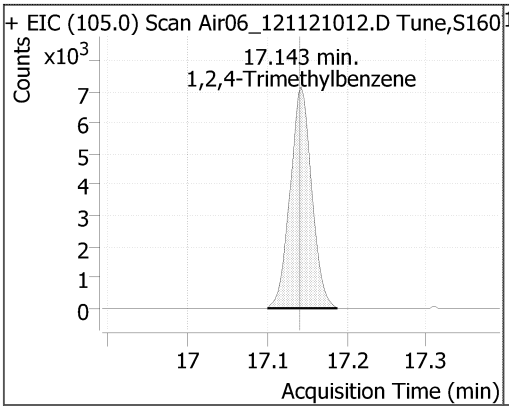
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3,5-Trimethylbenzene	0.0702	16.63	0.00	13556	120.0	42.6	34.6	52.0
					77.0	14.9	11.3	17.0
					91.0	11.4	9.5	14.3

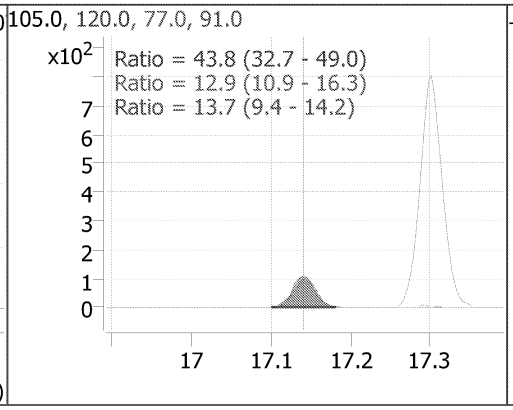


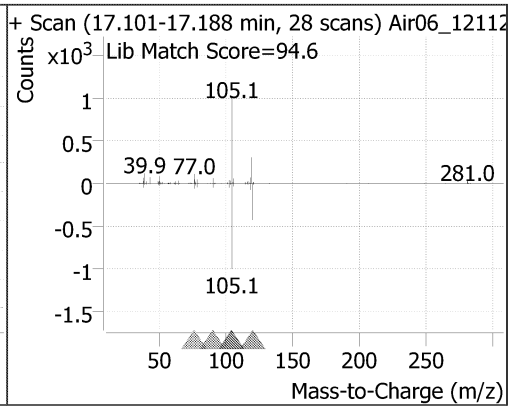




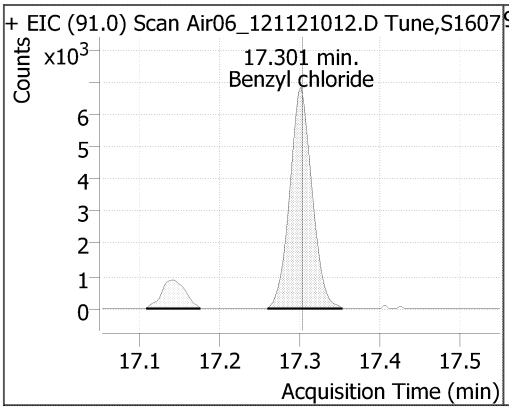
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trimethylbenzene	0.0747	17.14	0.00	13496	120.0	43.8	32.7	49.0
					77.0	12.9	10.9	16.3
					91.0	13.7	9.4	14.2

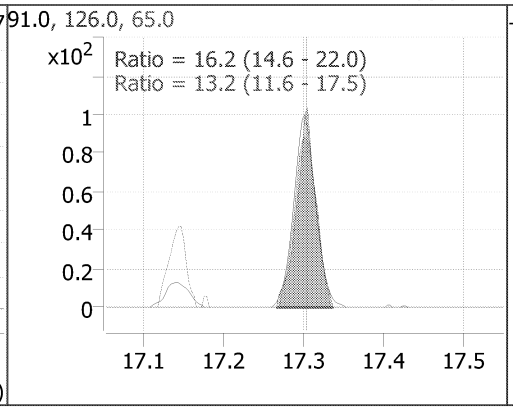


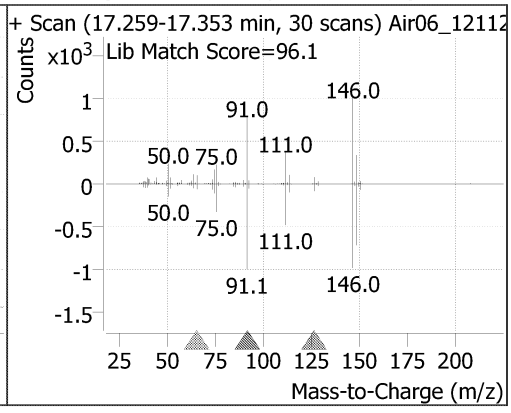




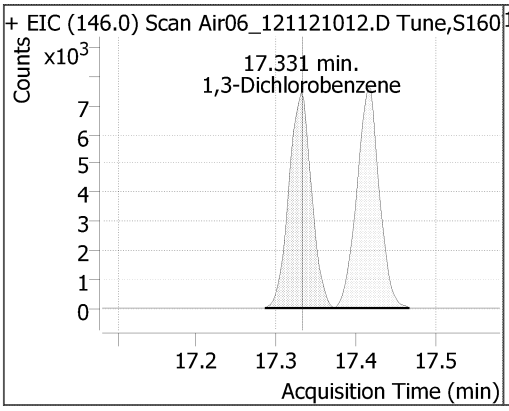
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzyl chloride	0.0848	17.30	0.00	13205	126.0	16.2	14.6	22.0
					65.0	13.2	11.6	17.5

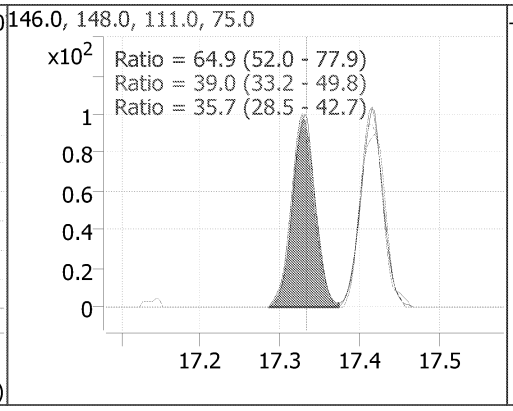


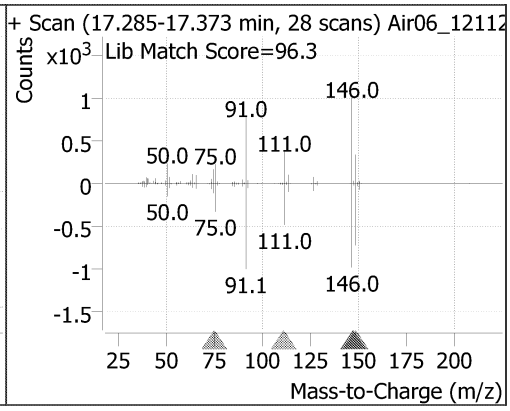




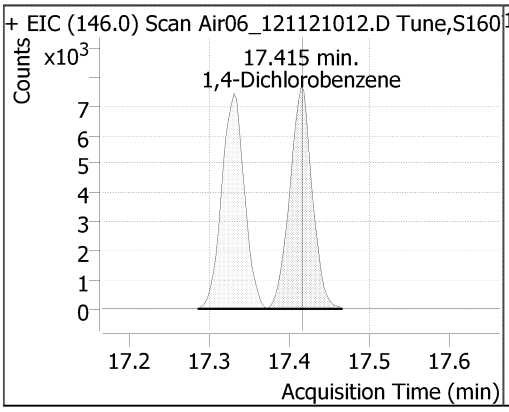
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Dichlorobenzene	0.1173	17.33	0.00	14657	148.0	64.9	52.0	77.9
					111.0	39.0	33.2	49.8
					75.0	35.7	28.5	42.7

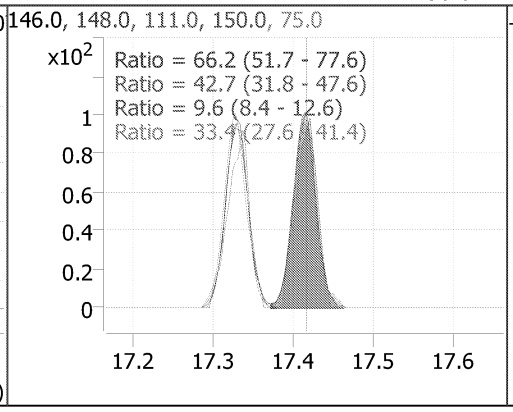


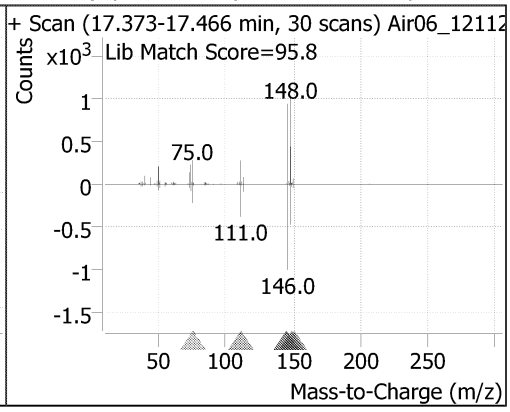




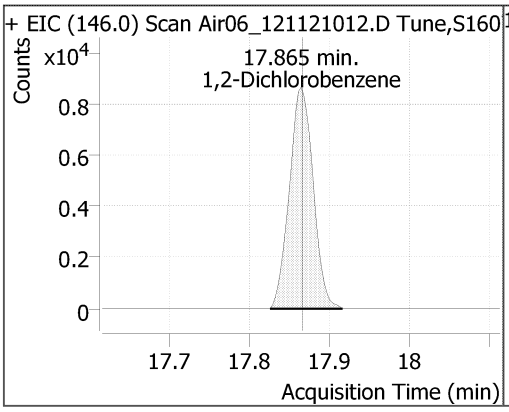
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,4-Dichlorobenzene	0.1213	17.41	0.00	14952	148.0	66.2	51.7	77.6
					111.0	42.7	31.8	47.6
					75.0	33.4	27.6	41.4
					150.0	9.6	8.4	12.6

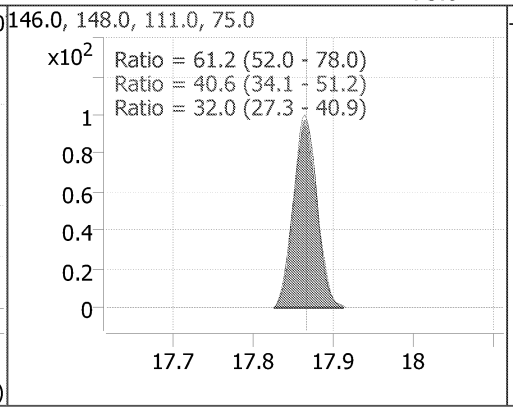


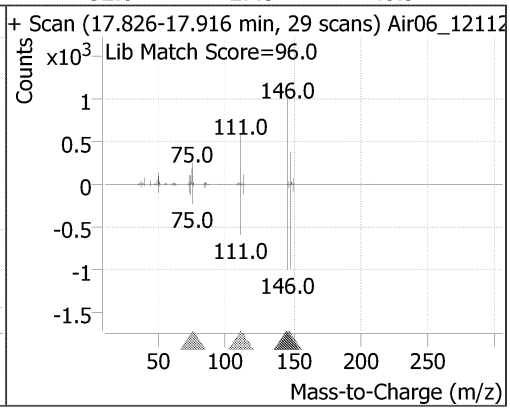




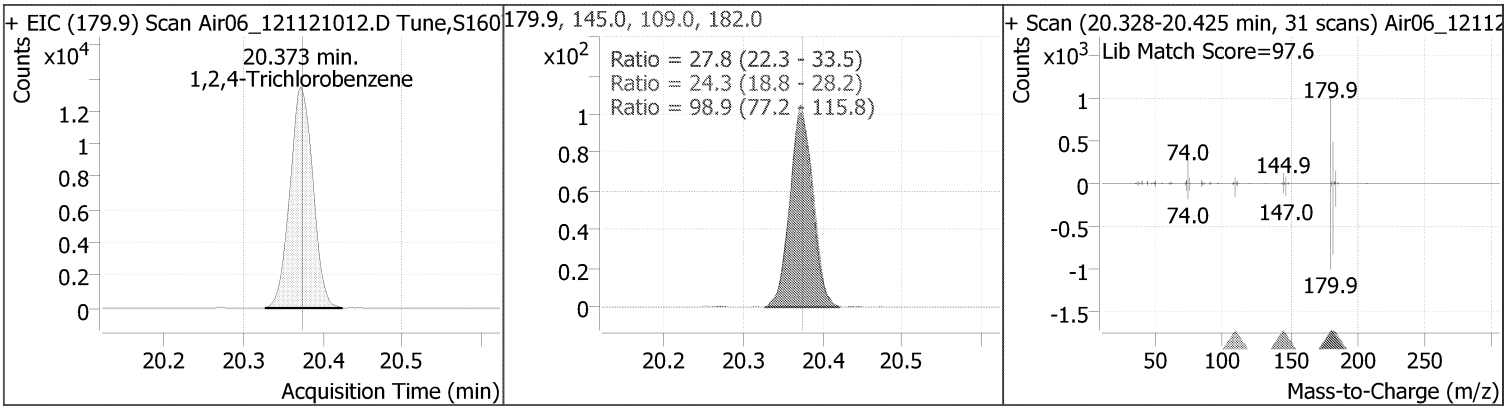
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichlorobenzene	0.1496	17.86	0.00	18000	148.0	61.2	52.0	78.0
					111.0	40.6	34.1	51.2
					75.0	32.0	27.3	40.9



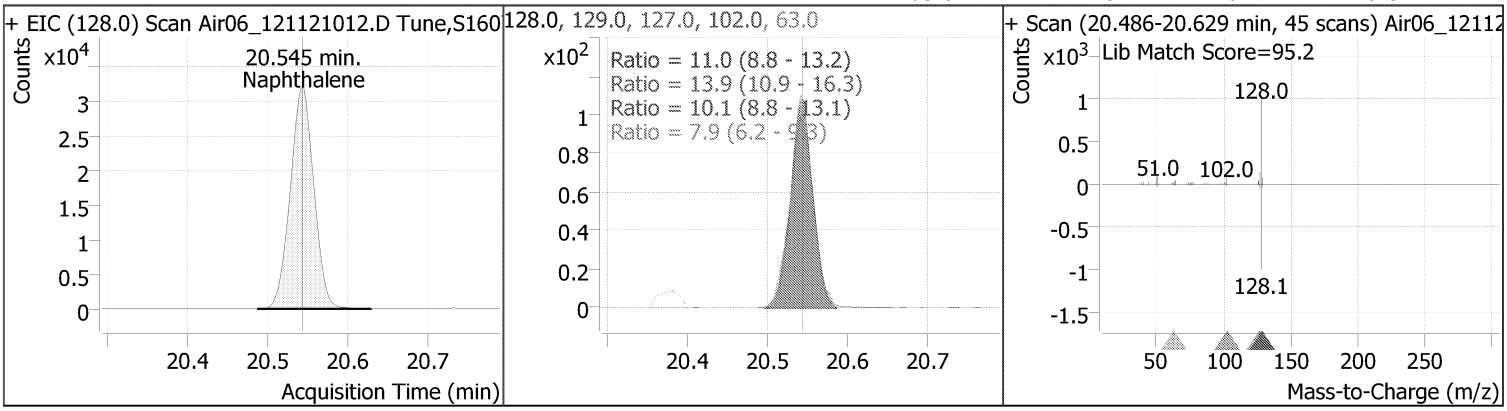




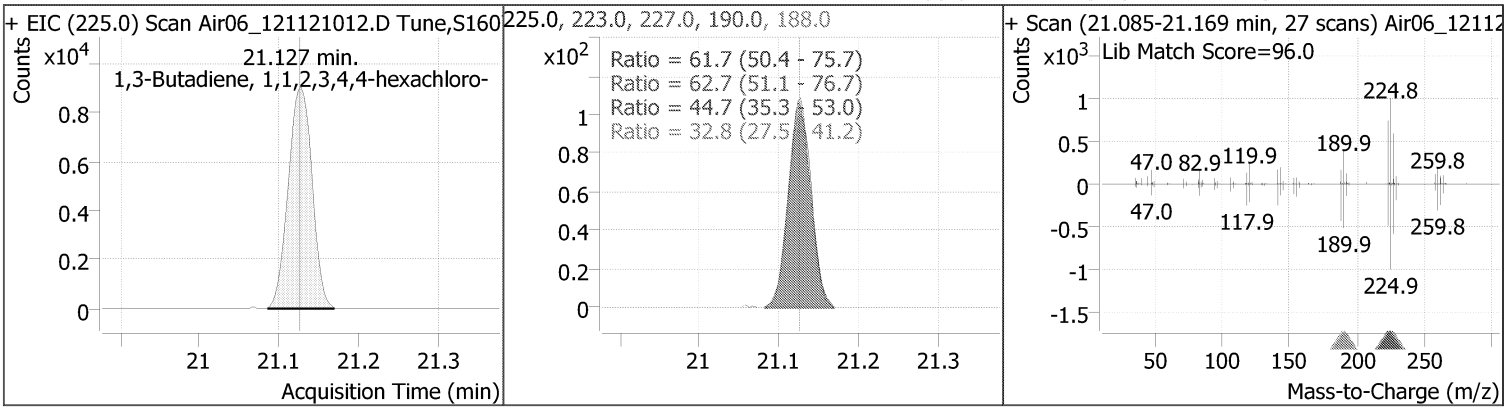
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2,4-Trichlorobenzene	0.3162	20.37	0.00	27060	182.0	98.9	77.2	115.8
					145.0	27.8	22.3	33.5
					109.0	24.3	18.8	28.2



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Naphthalene	0.5002	20.54	0.00	66508	127.0	13.9	10.9	16.3
					129.0	11.0	8.8	13.2
					102.0	10.1	8.8	13.1
					63.0	7.9	6.2	9.3

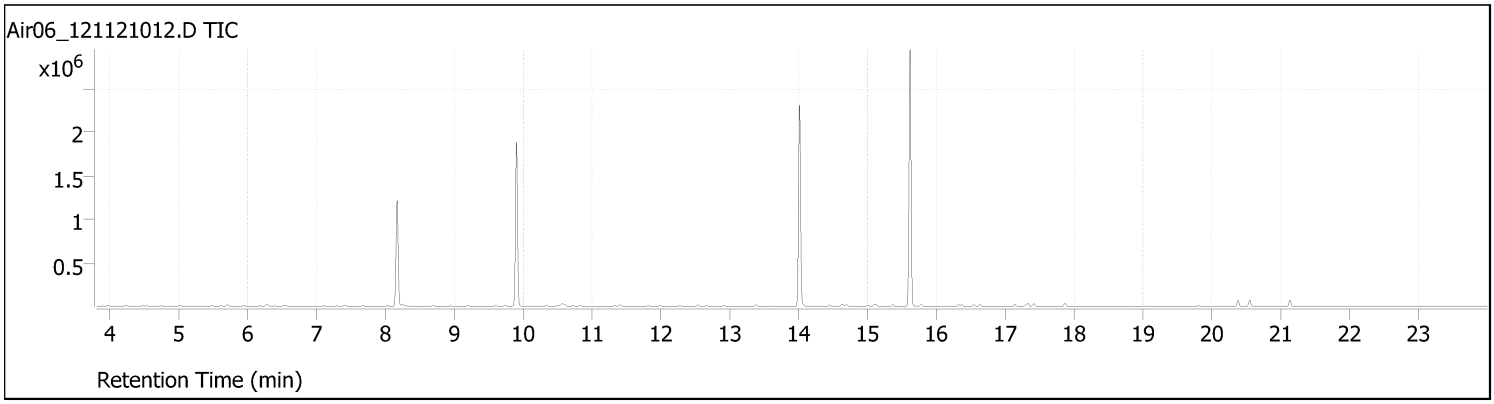


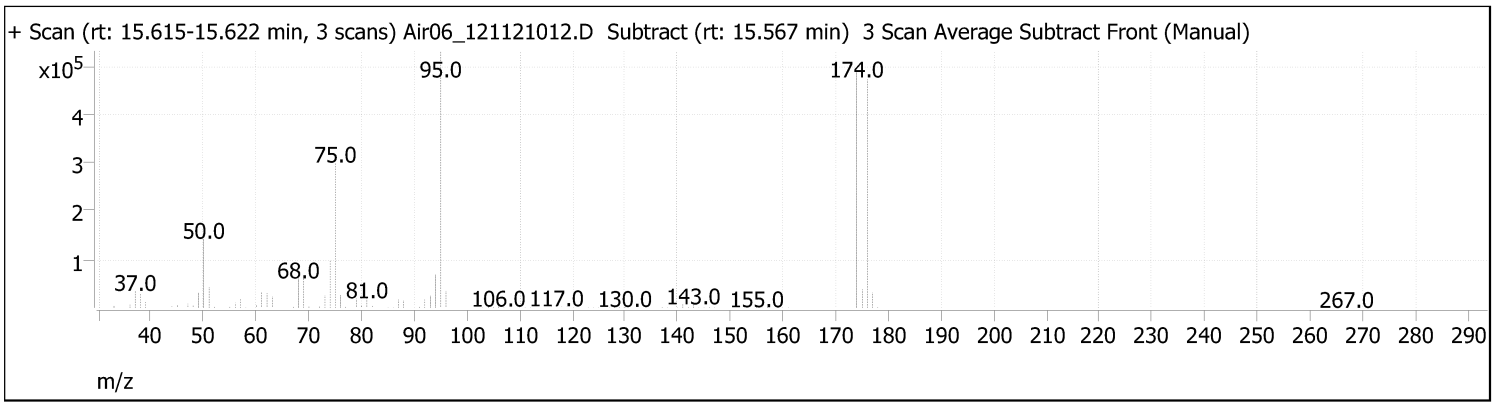
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.1337	21.13	0.00	18780	227.0	62.7	51.1	76.7
					223.0	61.7	50.4	75.7
					190.0	44.7	35.3	53.0
					188.0	32.8	27.5	41.2



Tune Evaluation Report

Data Path:	D:\MassHunter\GCMS\1\data\2021\121121_ICAL\Air06_121121012.D
Acq on:	12/12/2021 1:29:01 AM
Operator:	ZNZ/DJL
Sample:	Tune,S16071,5x
Inst Name:	Air-MS-06
ALS Vial:	5
Method:	





Target Mass	Rel. To Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Pass/Fail
50	95	15	40	26.9	142777	Pass
75	95	30	60	56.6	300648	Pass
95	95	100	100	100.0	531062	Pass
96	95	5	9	6.6	35069	Pass
173	174	0	2	0.0	0	Pass
174	95	50	100	92.1	489118	Pass
175	174	5	9	7.8	38385	Pass
176	174	95	101	96.5	471978	Pass
177	176	5	9	6.7	31544	Pass

ENTHALPY BFB TUNE FOR 455620 MSAIR Air
EPA TO-15

Inst : AIR-MS-06 Run Name : TUNE IDF : 1.0
Seqnum : 371510273002 File : air06_122021002 Time : 20-DEC-2021 09:15

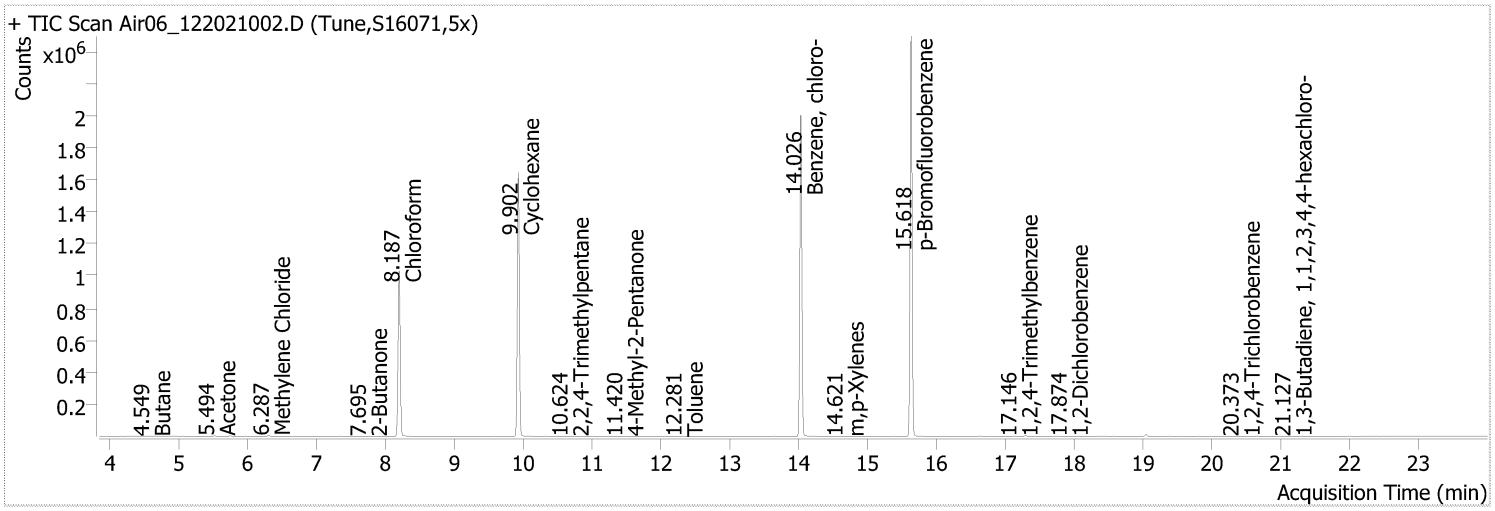
Standards: S16071 (5X)

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	107791	22.88	
75	30% - 66% of mass 95	243481	51.67	
95		471204	100.00	
96	5% - 9% of mass 95	30843	6.55	
173	< 2% of mass 174	0	0.00	
174	50% - 120% of mass 95	438421	93.04	
175	4% - 9% of mass 174	34035	7.76	
176	93% - 101% of mass 174	424929	96.92	
177	5% - 9% of mass 176	28312	6.66	

Analyst: ZNZ Date: 12/20/21 Reviewer: LW Date: 12/22/21

Quantitation Results Report (Not Reviewed)

Data File	Air06_122021002.D	Operator	ZNZ/DJL/LJB
Acq. Method	TO15_Acq_013120_1	Acq. Date-Time	12/20/2021 9:15:58 AM
Sample Name	Tune,S16071,5x	Instrument	Air-MS-06
Vial	5	Multiplier	1.00
DA Method File	TO15_121121.m	Comment	
Tune File	bfb.u	Tune Date	12/14/2021 7:38:43 AM
Batch Name	122021.batch.bin	Last Calib Update	12/13/2021 9:29:07 AM
Ref Library	D:\MassHunter\GCMS\1\data\2021\091621\091621_ICAL.reflibrary.xml		



Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
Internal Standards							
M Bromochloromethane	8.184	130.0	359003	10.0000	nL/L		0.004
M 1,4-Difluorobenzene	9.912	114.0	1343273	10.0000	nL/L		0.000
M Chlorobenzene-d5	14.016	82.0	734301	10.0000	nL/L	#	0.000
System Monitoring Compounds							
S p-Bromofluorobenzene	15.618	95.0	959016	10.1757	nL/L		0.000
Spiked Amount: 10.000	Range: 60.0 - 140.0%			Recovery = 101.76%			
Target Compounds							QValue
T Propylene	3.908	41.0	22	0.0006	nL/L		14
T Freon 12	0.000		0	N.D.			
T Chloromethane	0.000		0	N.D.			
T Freon 114	0.000		0	N.D.			
T Vinyl Chloride	0.000		0	N.D.			
T 1,3-Butadiene	0.000		0	N.D.			
T Butane	4.549	43.0	586	0.0081	nL/L	#	63
T Bromomethane	0.000		0	N.D.			
T Chloroethane	0.000		0	N.D.			
T Ethanol	5.034	45.0	2566	0.0911	nL/L	#	93
T Vinyl bromide	0.000		0	N.D.			
T Acrolein	5.352	56.0	48	0.0027	nL/L		19
T Acetone	5.494	58.0	1298	0.0534	nL/L	#	88
T Trichloromonofluoromethane	0.000		0	N.D.			
T Isopropanol (IPA)	5.724	45.0	4432	0.0466	nL/L	#	92
T n-Pentane	5.957	43.0	871	0.0093	nL/L	#	97
T 1,1-Dichloroethene	0.000		0	N.D.			
T Tert-butyl alcohol (TBA)	6.316	59.0	276	0.0027	nL/L	#	71
T Methylene Chloride	6.287	84.0	2724	0.0707	nL/L		84
T 3-Chloropropene	6.575	76.0	68	0.0042	nL/L		42
T Freon 113	0.000		0	N.D.			
T Carbon Disulfide	6.575	76.0	68	0.0006	nL/L	#	20

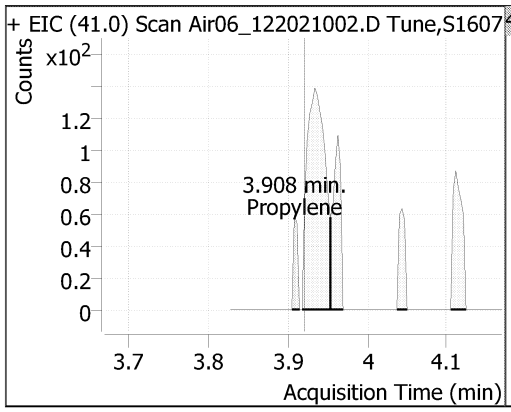
Compound	RT	QIon	Resp.	Conc.	Units		Dev(Min)
T trans-1,2-Dichloroethene	0.000		0	N.D.			
T 1,1-Dichloroethane	0.000		0	N.D.			
T MTBE	0.000		0	N.D.			
T Vinyl Acetate	7.430	43.0	195	0.0013	nL/L	#	35
T 2-Butanone	7.695	43.0	679	0.0058	nL/L		68
T cis-1,2-Dichloroethene	8.265	61.0	35	0.0005	nL/L	#	1
T Ethyl Acetate	8.265	61.0	35	0.0022	nL/L	#	1
T n-Hexane	8.255	57.0	471	0.0063	nL/L	#	86
T Chloroform	8.187	83.0	115	0.0011	nL/L	#	1
T Tetrahydrofuran	0.000		0	N.D.			
T 1,2-Dichloroethane	0.000		0	N.D.			
T 1,1,1-Trichloroethane	0.000		0	N.D.			
T Benzene	9.618	78.0	424	0.0037	nL/L	#	79
T Carbon Tetrachloride	0.000		0	N.D.			
T Cyclohexane	9.902	84.0	2242	0.0476	nL/L	#	1
T 1,2-Dichloropropane	10.139	63.0	122	0.0023	nL/L		24
T Methane, bromodichloro-	0.000		0	N.D.			
T 1,4-Dioxane	0.000		0	N.D.			
T Trichloroethene	0.000		0	N.D.			
T 2,2,4-Trimethylpentane	10.624	57.0	167	0.0007	nL/L		45
T Methyl methacrylate	0.000		0	N.D.			
T n-Heptane	0.000		0	N.D.			
T cis-1,3-Dichloropropene	0.000		0	N.D.			
T 4-Methyl-2-Pentanone	11.420	58.0	103	0.0023	nL/L	#	1
T trans-1,3-Dichloropropene	0.000		0	N.D.			
T 1,1,2-Trichloroethane	0.000		0	N.D.			
T Toluene	12.281	91.0	559	0.0038	nL/L	#	88
T TPH Gasoline (C3 to C12)	12.399	165.0	440299	0.0422	nL/L		100
T 2-Hexanone	0.000		0	N.D.			
T Dibromochloromethane	0.000		0	N.D.			
T 1,2-Dibromoethane	0.000		0	N.D.			
T Tetrachloroethene	0.000		0	N.D.			
T 1,1,1,2-Tetrachloroethane	0.000		0	N.D.			
T Benzene, chloro-	14.026	112.0	108	0.0010	nL/L	#	1
T Ethylbenzene	14.453	91.0	157	0.0009	nL/L		57
T TPH Gasoline (C6 to C12)	14.524	165.0	308874	0.0398	nL/L		100
T m,p-Xylenes	14.621	91.0	683	0.0048	nL/L	#	54
T Bromoform	0.000		0	N.D.			
T Styrene	15.016	104.0	47	0.0005	nL/L		32
T 1,1,2,2-Tetrachloroethane	0.000		0	N.D.			
T o-Xylene	15.133	91.0	418	0.0028	nL/L	#	74
T n-Nonane	15.372	85.0	139	0.0046	nL/L		80
T Isopropylbenzene	15.618	105.0	1125	0.0056	nL/L	#	1
T 2-Chlorotoluene	0.000		0	N.D.			
T n-Propylbenzene	16.486	120.0	68	0.0013	nL/L		1
T 4-Ethyltoluene	16.541	105.1	308	0.0016	nL/L		57
T 1,3,5-Trimethylbenzene	16.635	105.0	589	0.0034	nL/L	#	78
T 1,2,4-Trimethylbenzene	17.146	105.0	1000	0.0062	nL/L	#	83
T Benzyl chloride	17.140	91.0	77	0.0005	nL/L	#	58
T 1,3-Dichlorobenzene	17.334	146.0	96	0.0009	nL/L		28
T 1,4-Dichlorobenzene	17.424	146.0	25	0.0002	nL/L	#	23
T 1,2-Dichlorobenzene	17.874	146.0	104	0.0010	nL/L	#	64
T 1,2,4-Trichlorobenzene	20.373	179.9	178	0.0023	nL/L	#	63
T Naphthalene	20.538	128.0	345	0.0029	nL/L		71
T 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	21.127	225.0	71	0.0006	nL/L		25

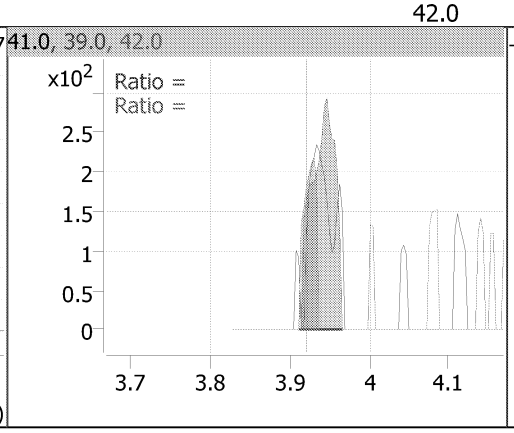
Compound	RT	QIon	Resp.	Conc.	Units	Dev(Min)

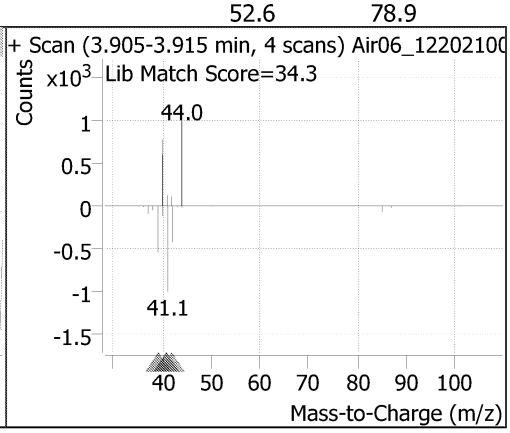
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed; (*) = Surrogate Percent Recovery Out of Range; (d): Zeroed Peak

Quantitation Results Report (Not Reviewed)

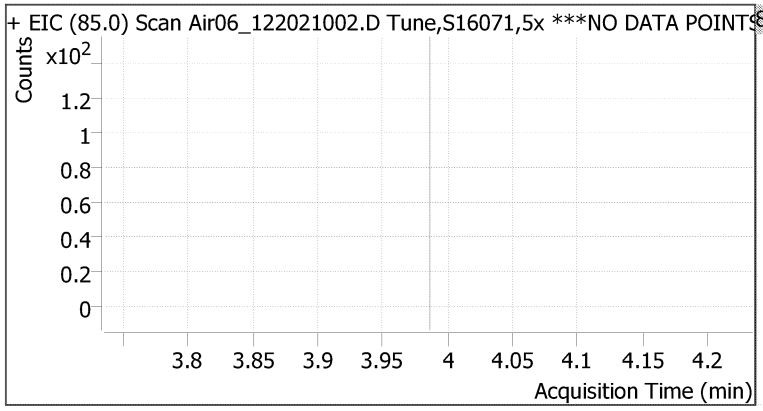
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Propylene	0.0006	3.91	-0.01	22	39.0		61.6	92.4
					42.0		52.6	78.9

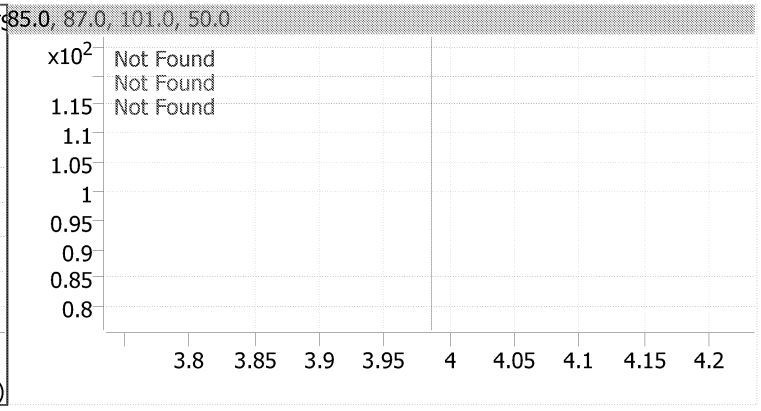




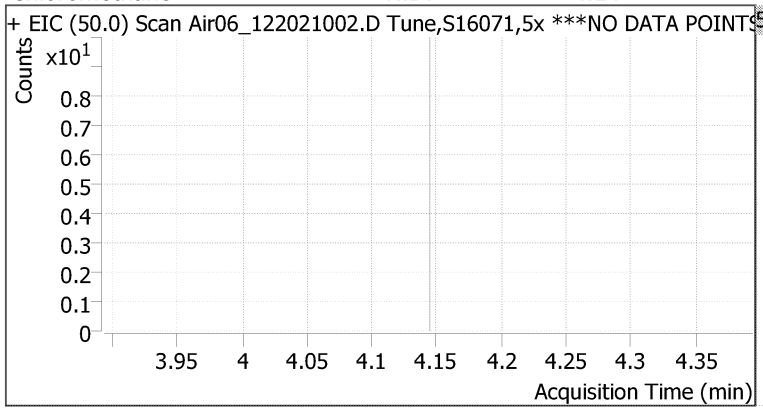


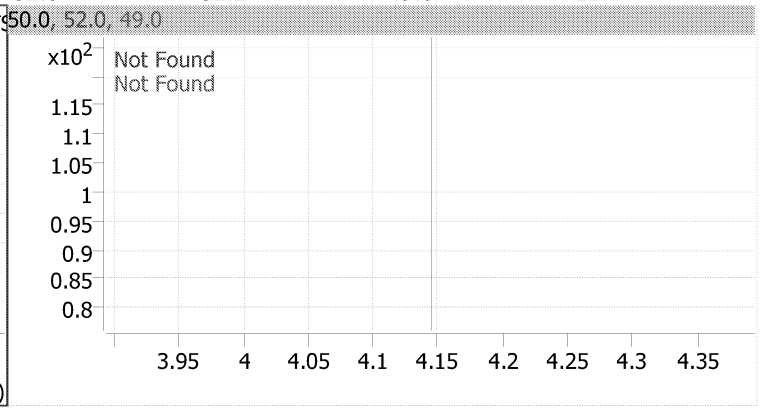
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 12	N.D.	3.99	87.0	32.3	50.0	15.1	101.0	9.9



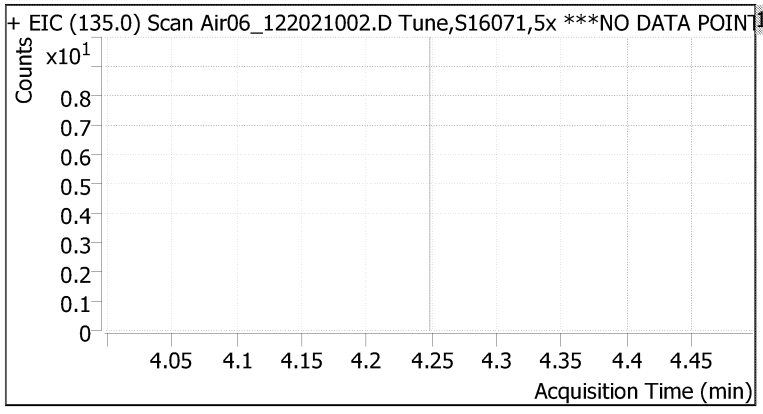


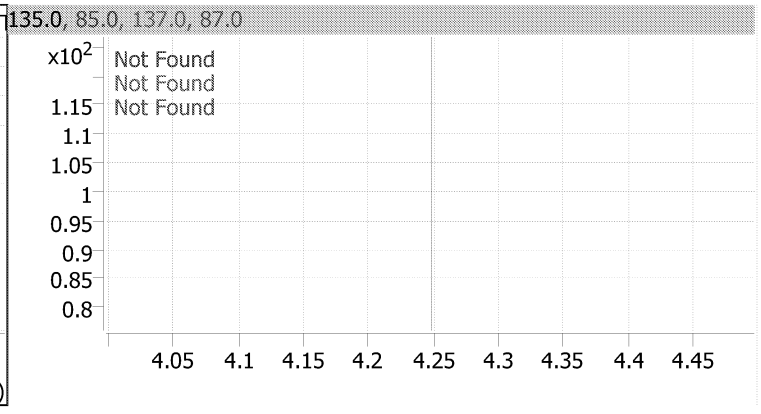
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Chloromethane	N.D.	4.14	52.0	32.2	49.0	11.1



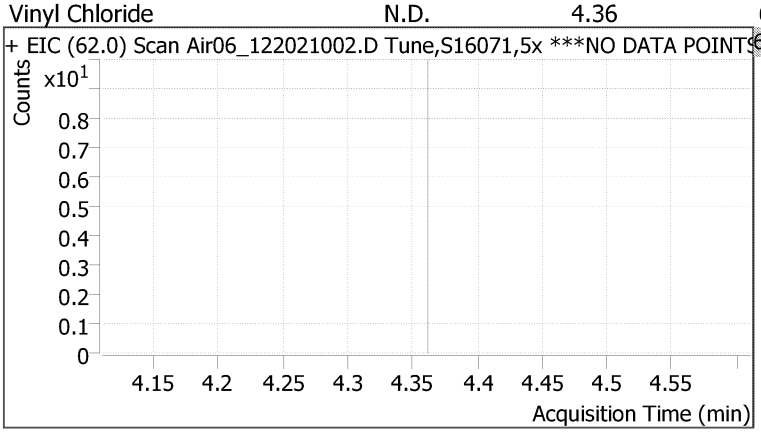


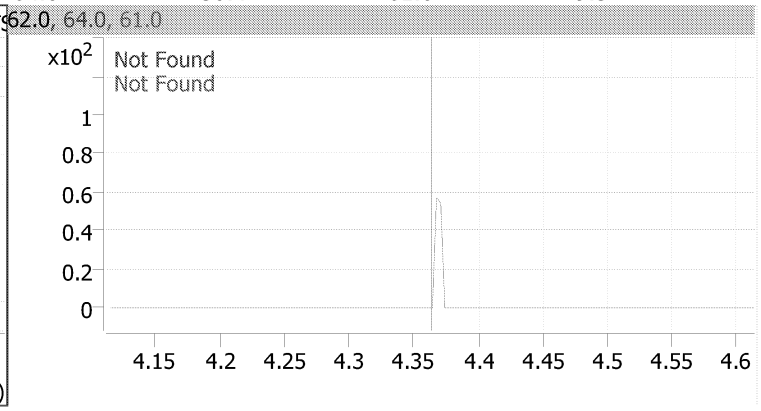
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 114	N.D.	4.25	85.0	151.7	87.0	48.7	137.0	32.3



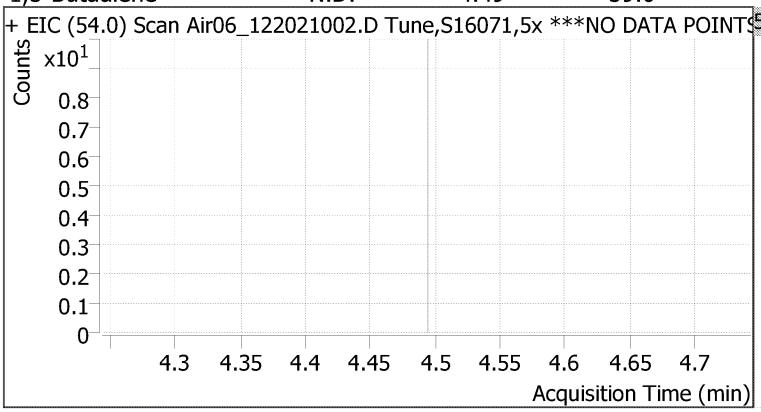


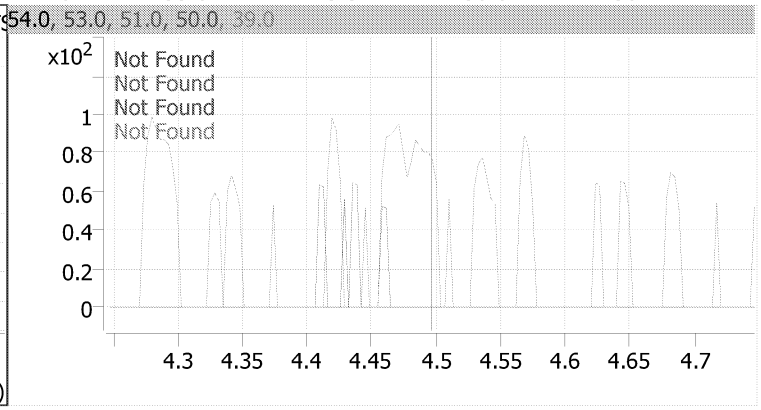
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl Chloride	N.D.	4.36	64.0	30.4	61.0	9.3



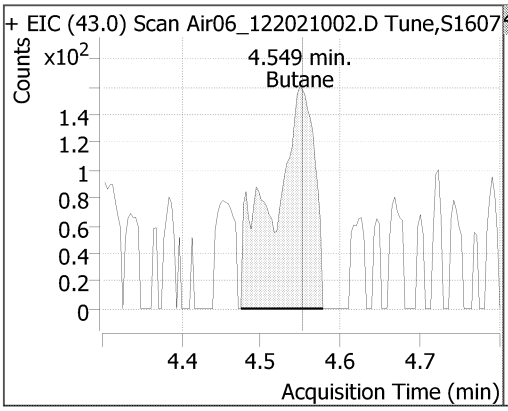


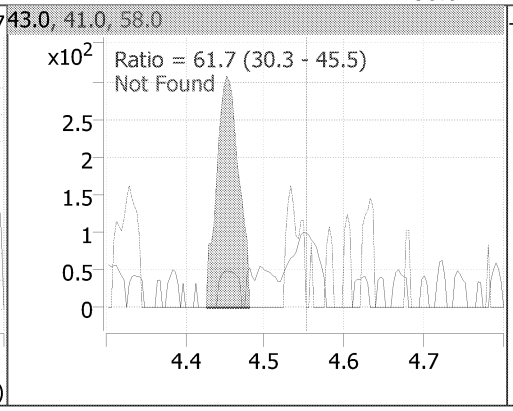
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,3-Butadiene	N.D.	4.49	39.0	111.0	53.0	73.5	50.0	38.7

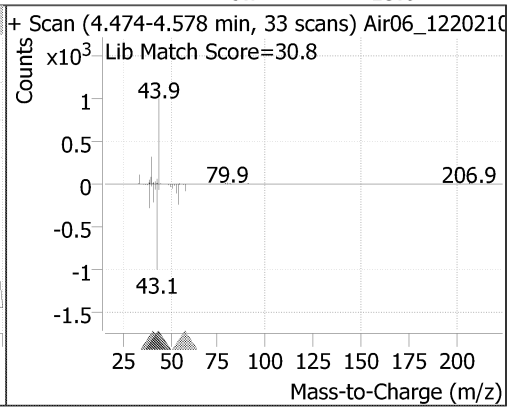




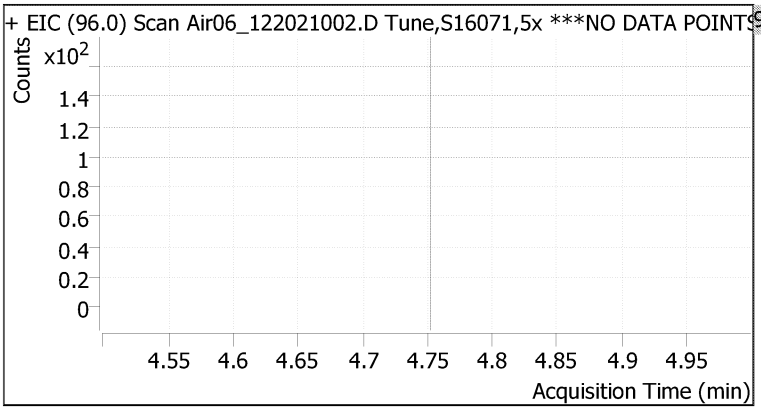
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Butane	0.0081	4.55	0.00	586	41.0	61.7	30.3	45.5
					58.0		8.7	13.0

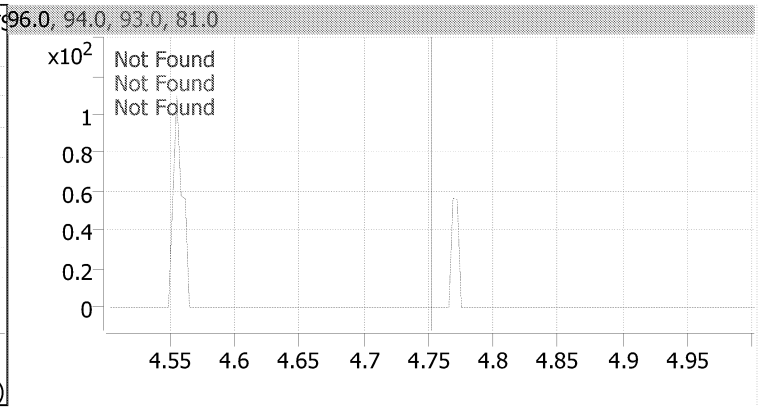




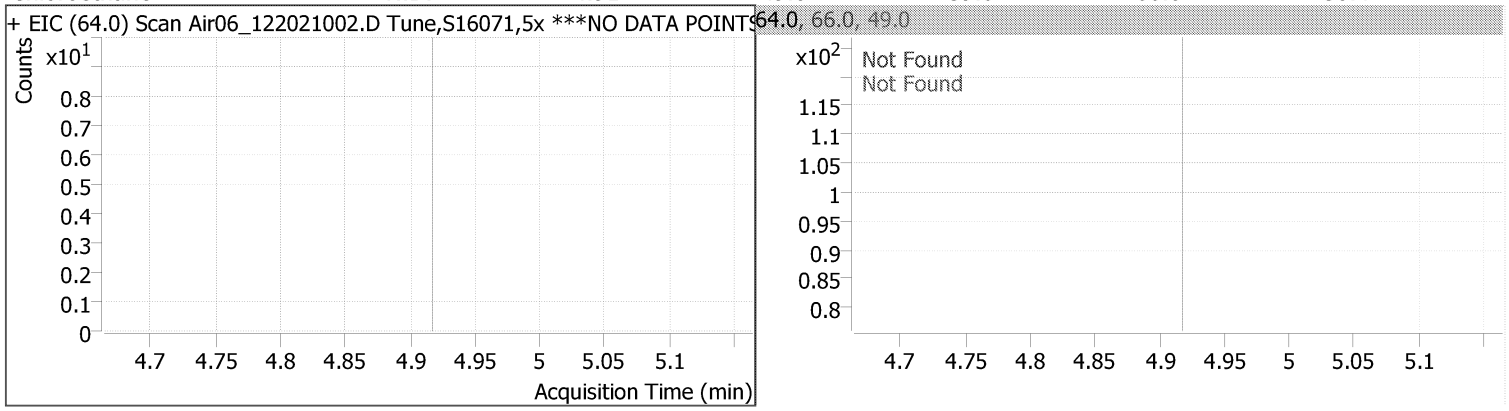


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Bromomethane	N.D.	4.75	94.0	107.8	93.0	23.9	81.0	23.8

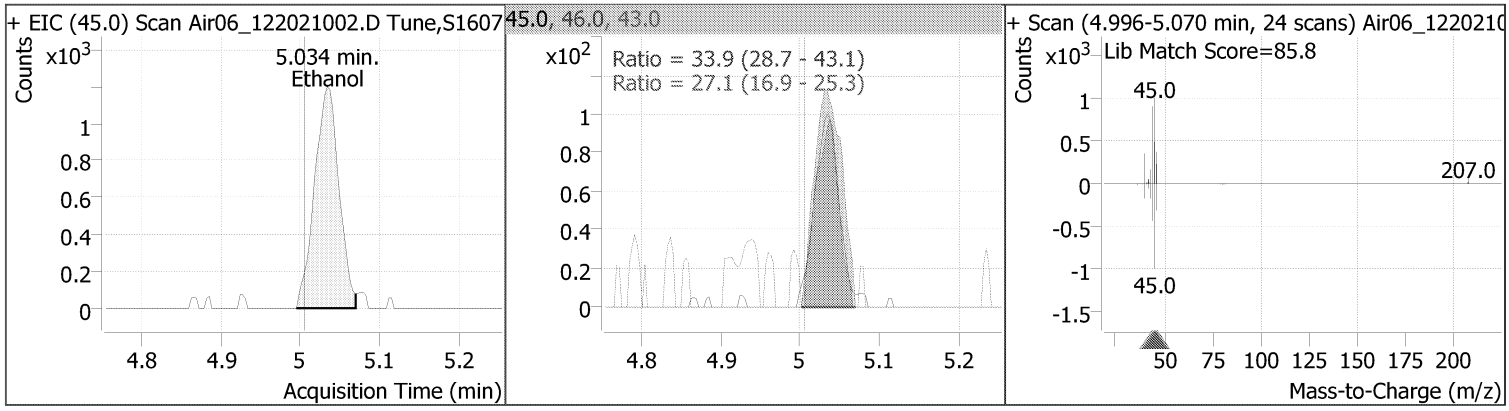




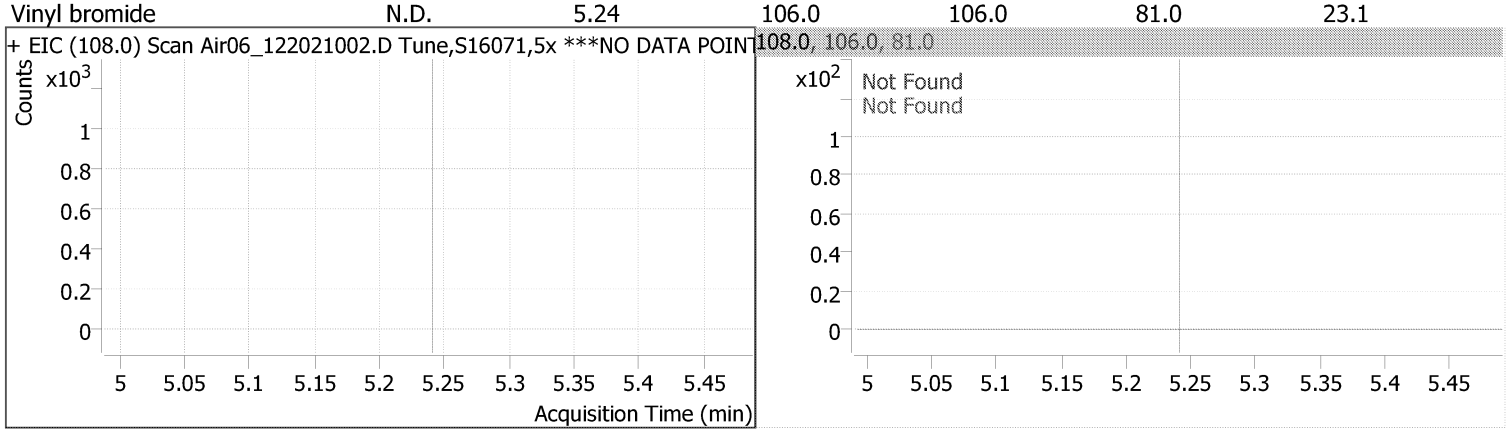
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Chloroethane	N.D.	4.91	49.0	39.6	66.0	30.4



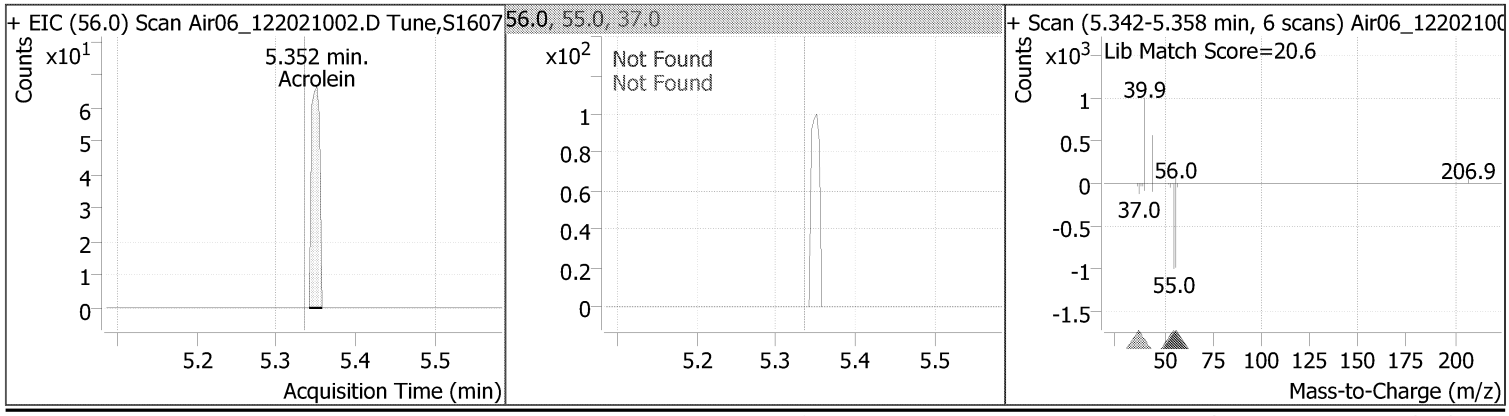
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethanol	0.0911	5.03	0.03	2566	46.0	33.9	28.7	43.1
					43.0	27.1	16.9	25.3



Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
Vinyl bromide	N.D.	5.24	106.0	106.0	81.0	23.1

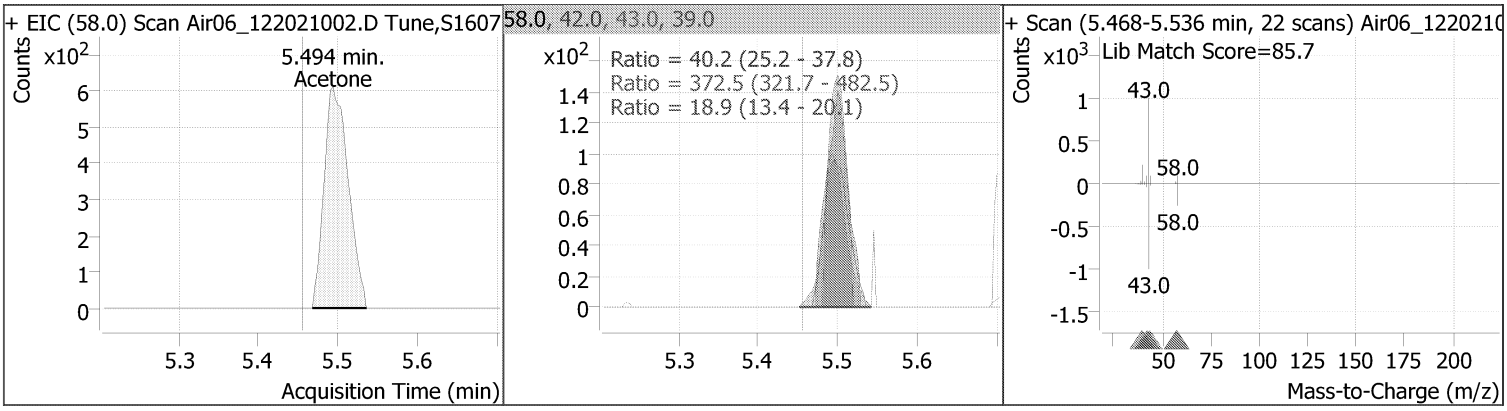


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acrolein	0.0027	5.35	0.02	48	55.0		60.3	90.4
					37.0		9.1	13.7

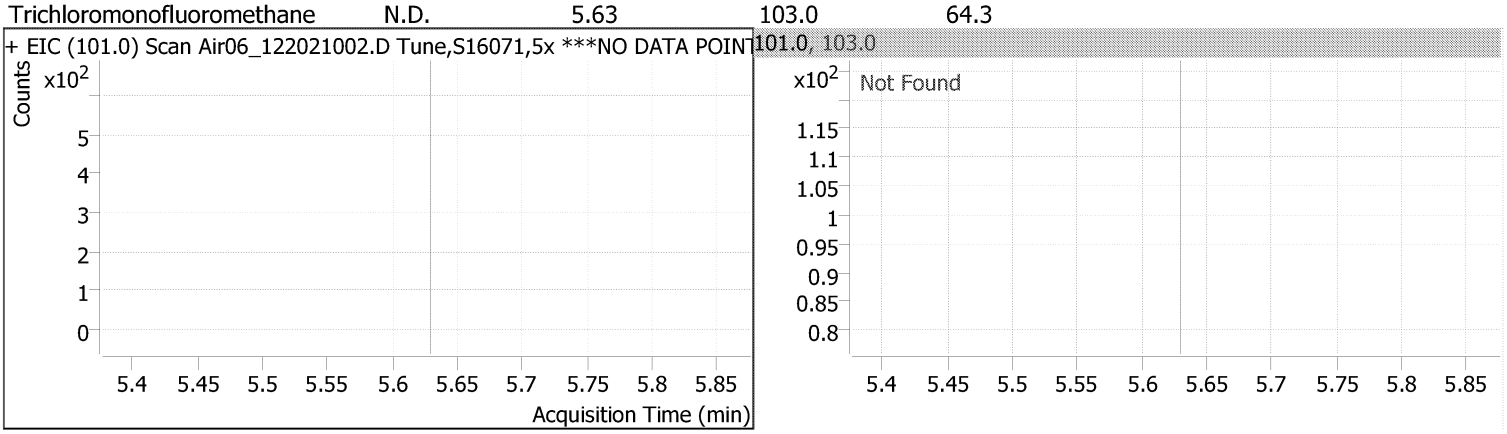


Quantitation Results Report (Not Reviewed)

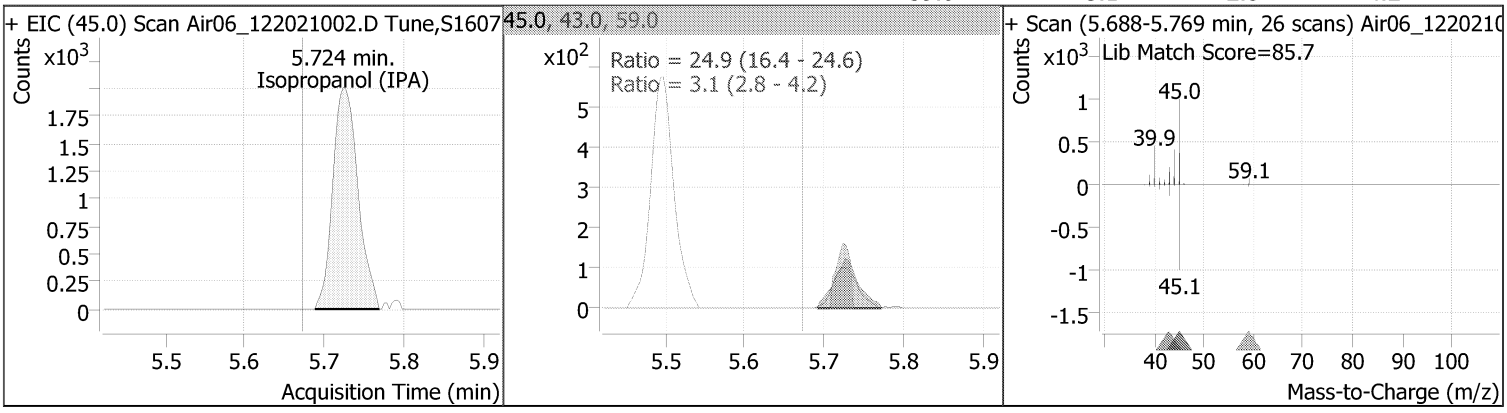
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Acetone	0.0534	5.49	0.04	1298	43.0	372.5	321.7	482.5
					42.0	40.2	25.2	37.8
					39.0	18.9	13.4	20.1



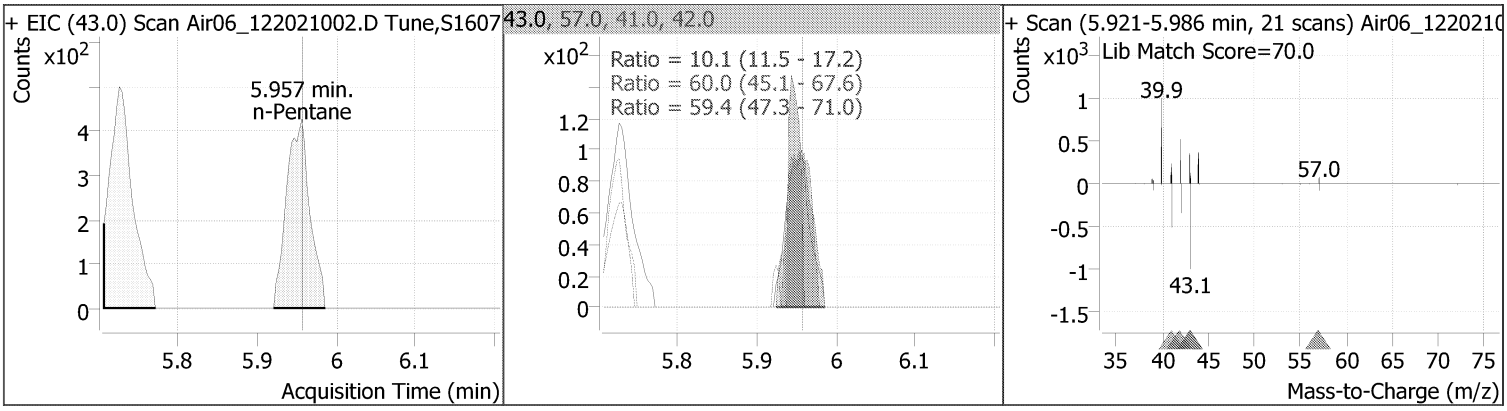
Compound	Conc.	Exp RT	QIon	Exp Ratio
Trichloromonofluoromethane	N.D.	5.63	103.0	64.3



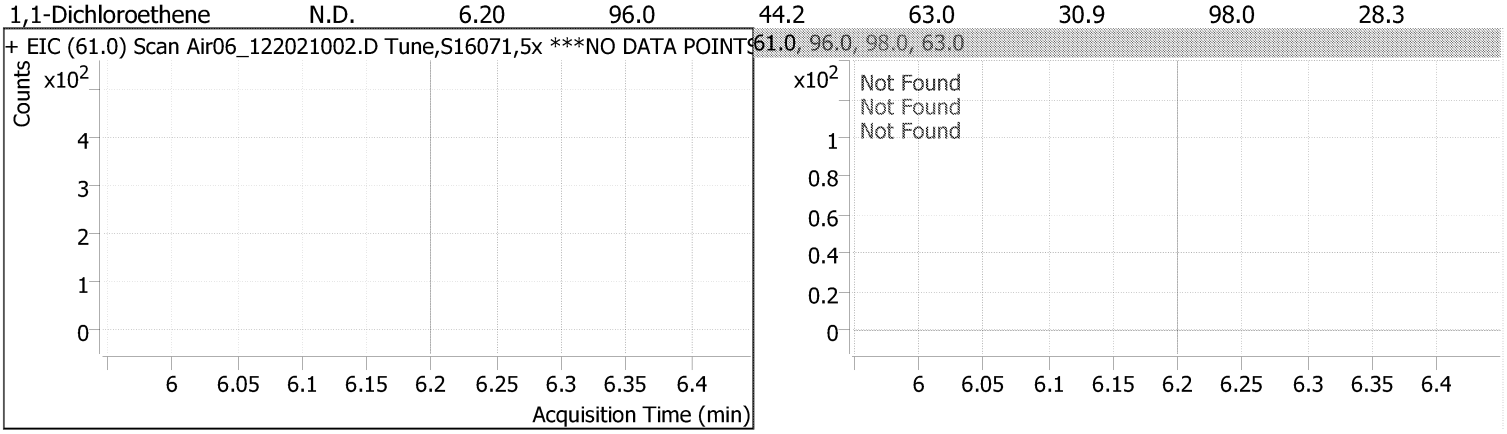
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Isopropanol (IPA)	0.0466	5.72	0.06	4432	43.0	24.9	16.4	24.6
					59.0	3.1	2.8	4.2



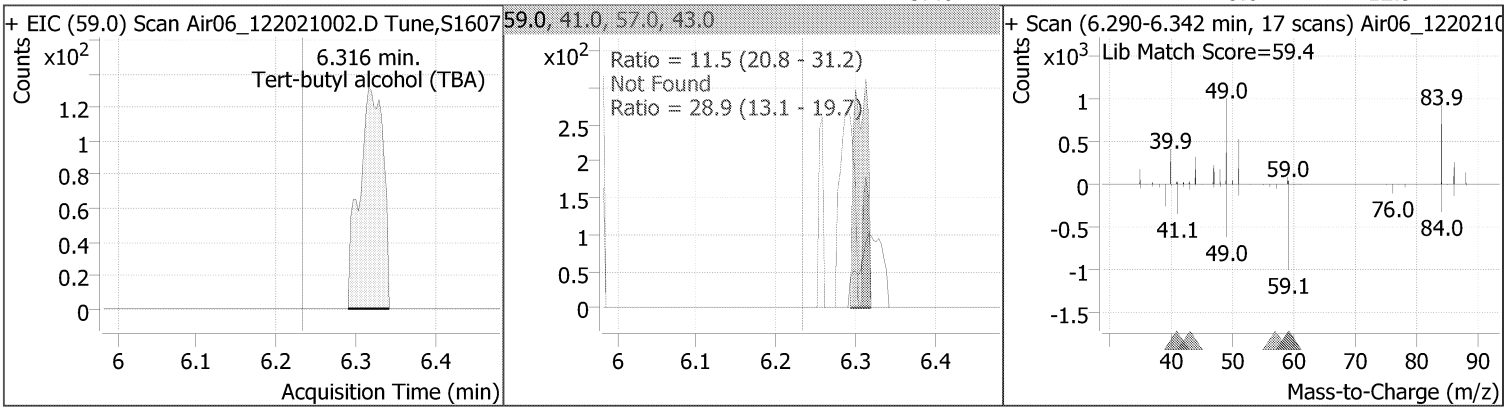
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Pentane	0.0093	5.96	0.00	871	42.0	59.4	47.3	71.0
					41.0	60.0	45.1	67.6
					57.0	10.1	11.5	17.2



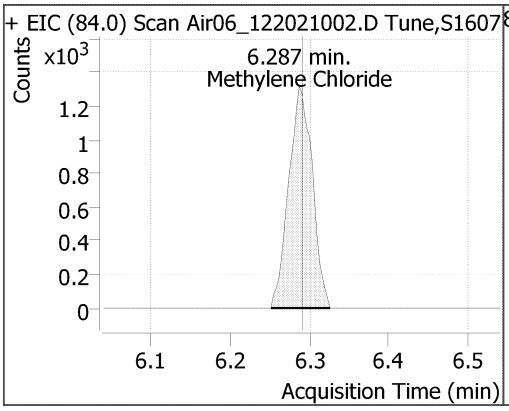
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethene	N.D.	6.20	96.0	44.2	63.0	30.9	98.0	28.3

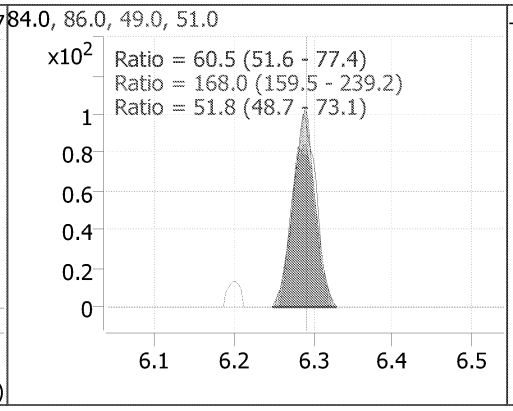


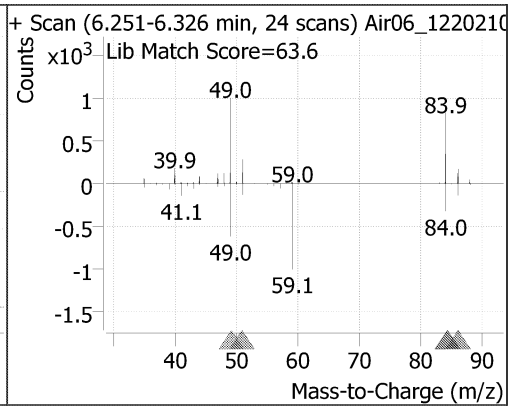
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Tert-butyl alcohol (TBA)	0.0027	6.32	0.09	276	41.0	11.5	20.8	31.2
					43.0	28.9	13.1	19.7
					57.0		8.6	12.9



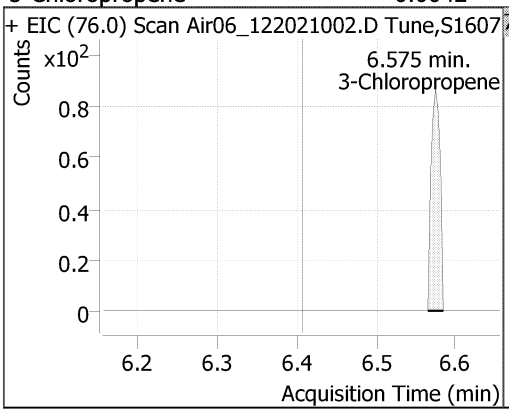
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Methylene Chloride	0.0707	6.29	0.00	2724	49.0	168.0	159.5	239.2
					86.0	60.5	51.6	77.4
					51.0	51.8	48.7	73.1

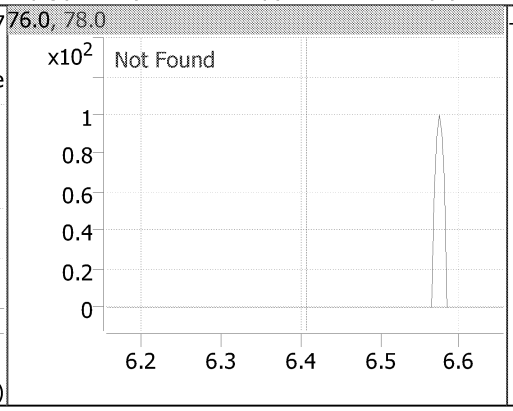


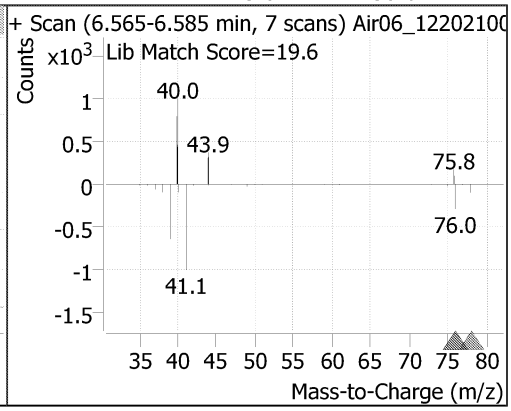




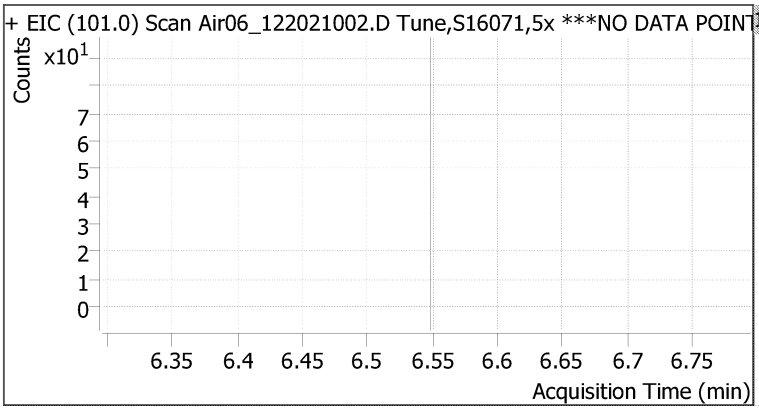
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
3-Chloropropene	0.0042	6.58	0.17	68	78.0		25.8	38.6

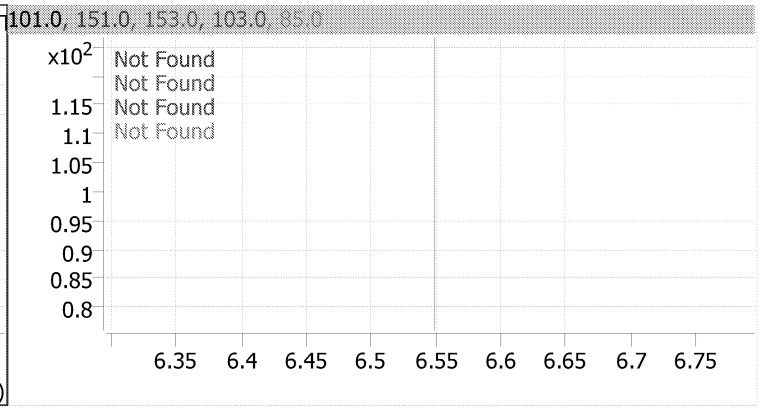




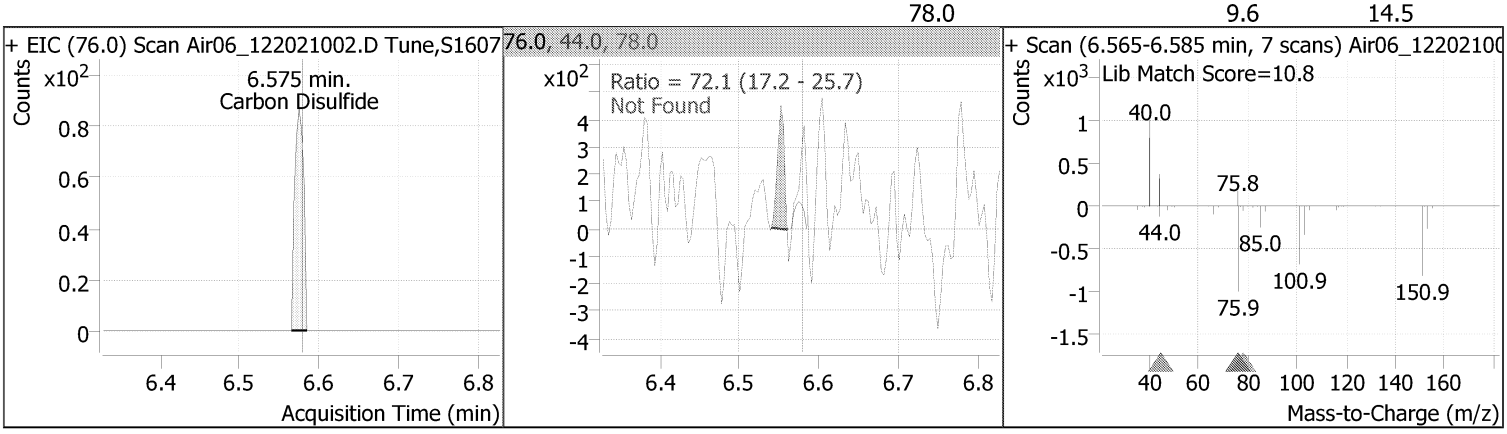


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Freon 113	N.D.	6.55	151.0	86.5	103.0	64.6	153.0	56.1

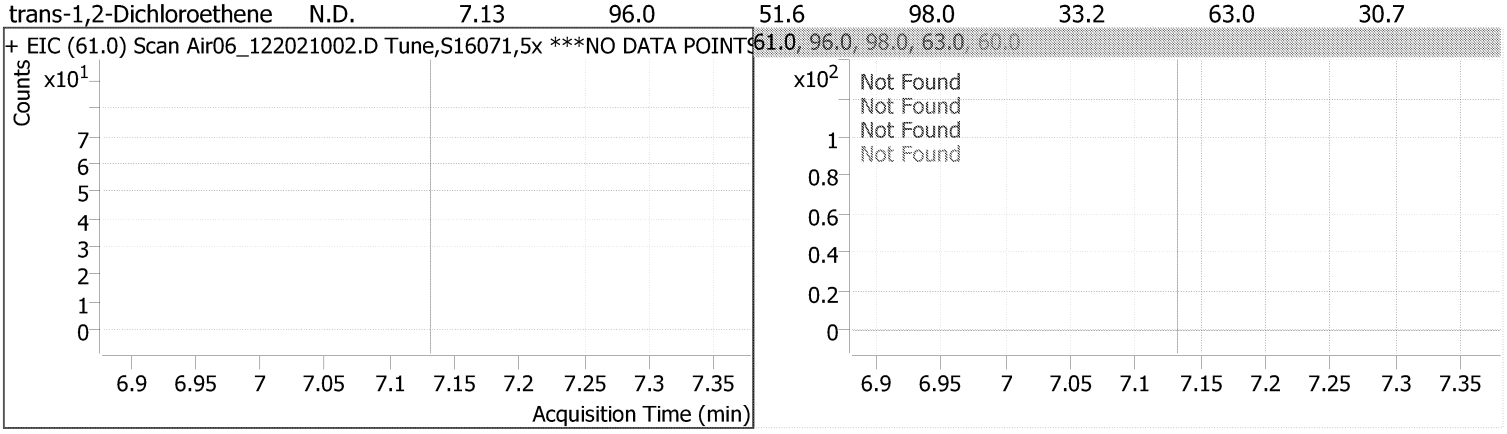




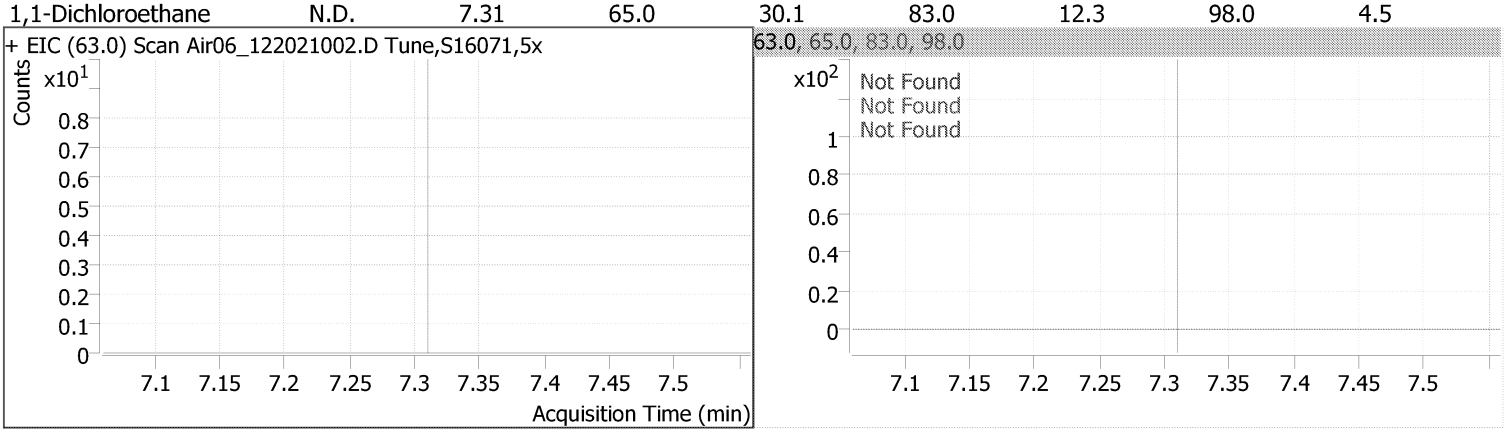
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Carbon Disulfide	0.0006	6.58	0.00	68	44.0	72.1	17.2	25.7
					78.0		9.6	14.5



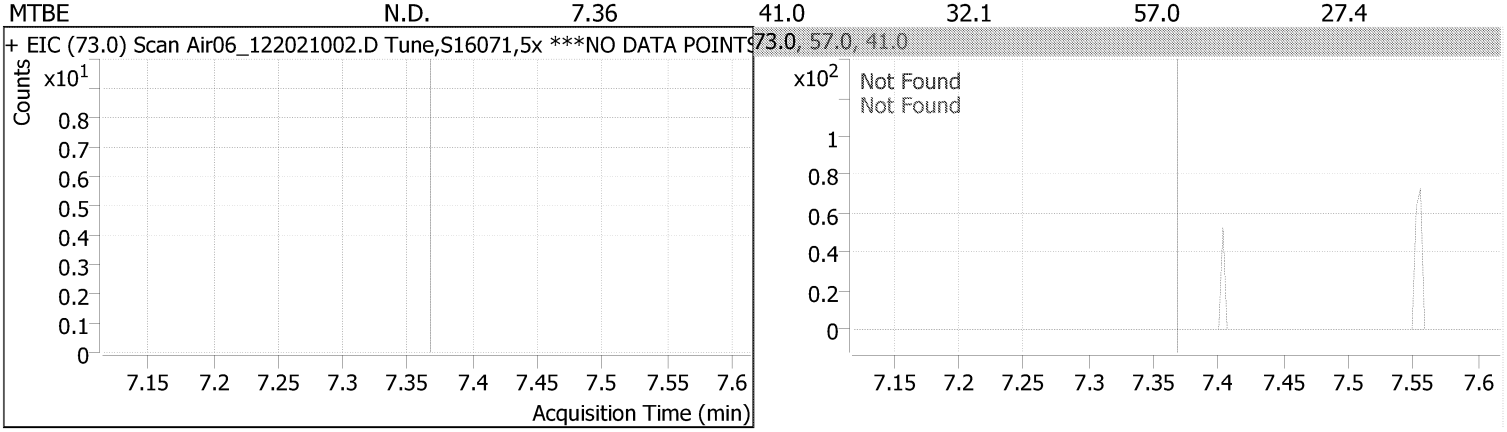
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
trans-1,2-Dichloroethene	N.D.	7.13	96.0	51.6	98.0	33.2	63.0	30.7



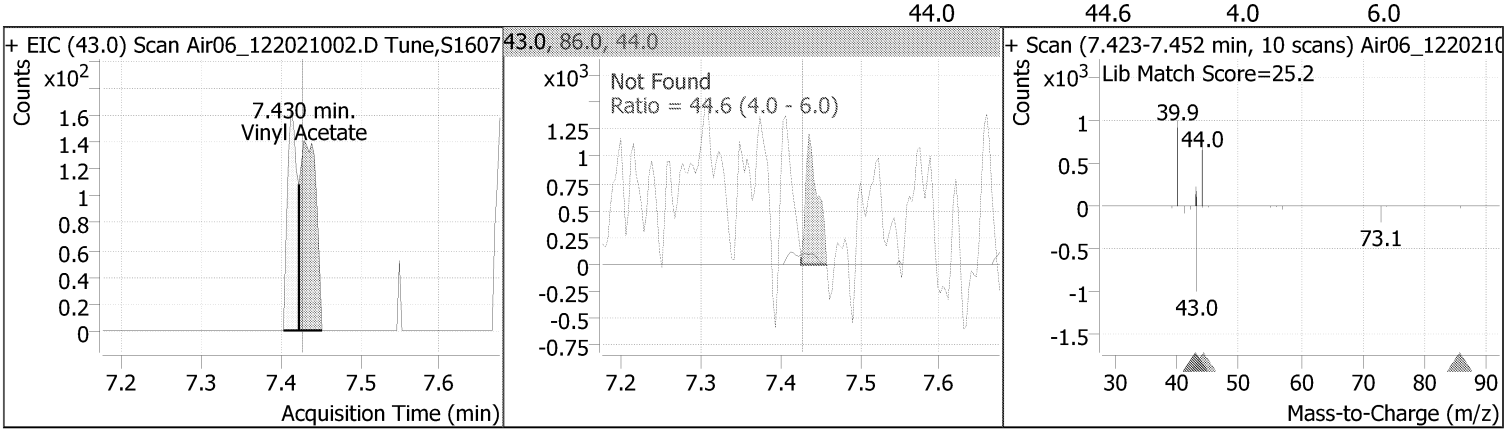
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1-Dichloroethane	N.D.	7.31	65.0	30.1	83.0	12.3	98.0	4.5



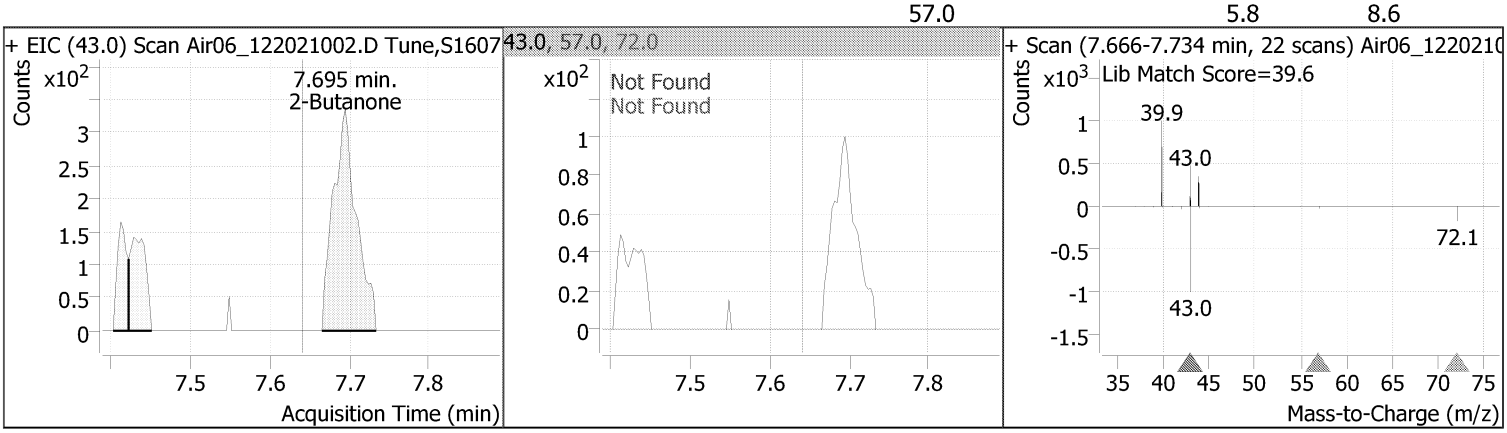
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
MTBE	N.D.	7.36	41.0	32.1	57.0	27.4



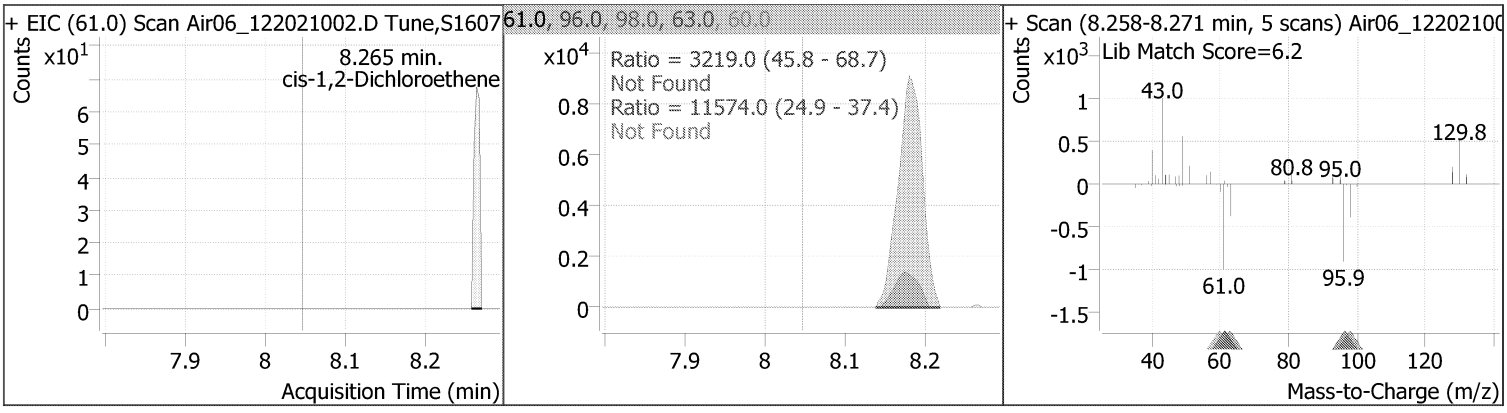
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Vinyl Acetate	0.0013	7.43	0.01	195	86.0		4.6	6.9
					44.0	44.6	4.0	6.0



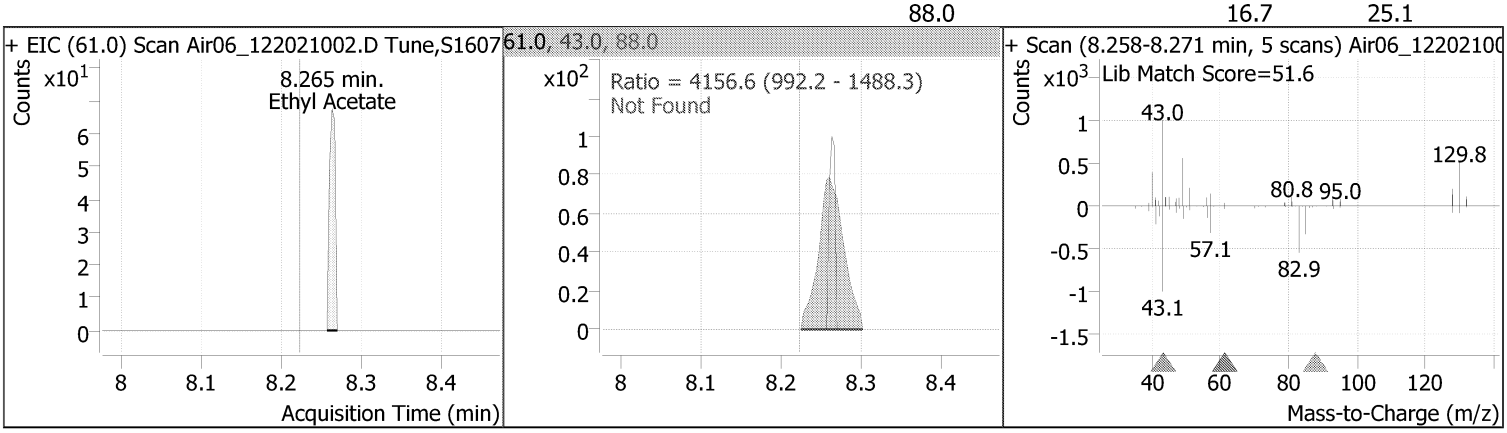
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2-Butanone	0.0058	7.69	0.06	679	72.0		12.5	18.8
					57.0		5.8	8.6



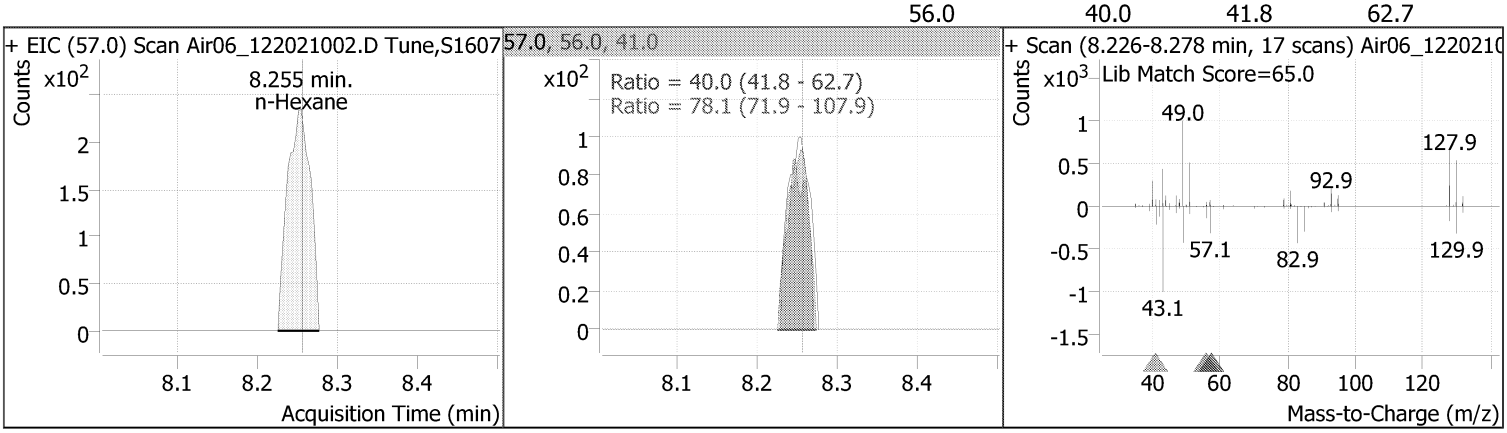
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
cis-1,2-Dichloroethene	0.0005	8.26	0.22	35	96.0	3219.0	45.8	68.7
					98.0		29.3	43.9
					63.0	11574.0	24.9	37.4
					60.0		18.2	27.3



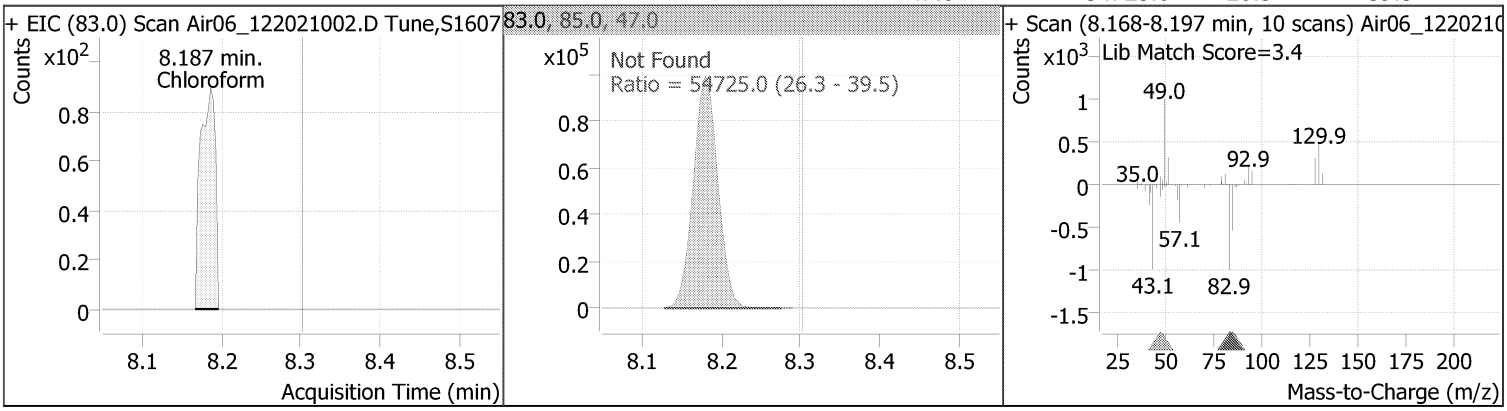
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethyl Acetate	0.0022	8.26	0.04	35	43.0	4156.6	992.2	1488.3
					88.0		16.7	25.1



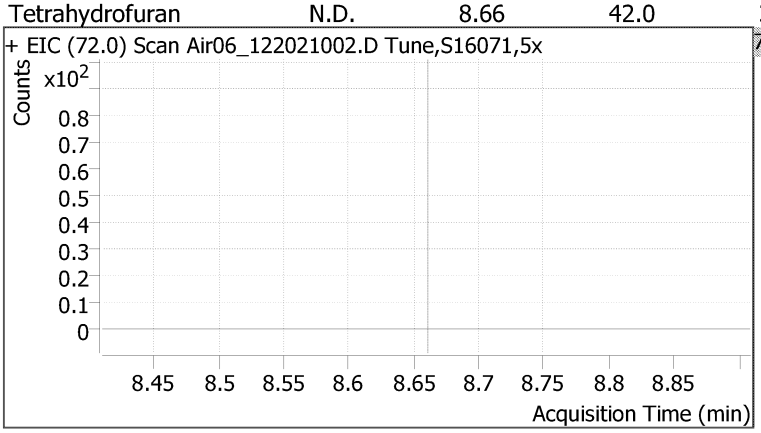
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
n-Hexane	0.0063	8.25	0.00	471	41.0	78.1	71.9	107.9
					56.0	40.0	41.8	62.7

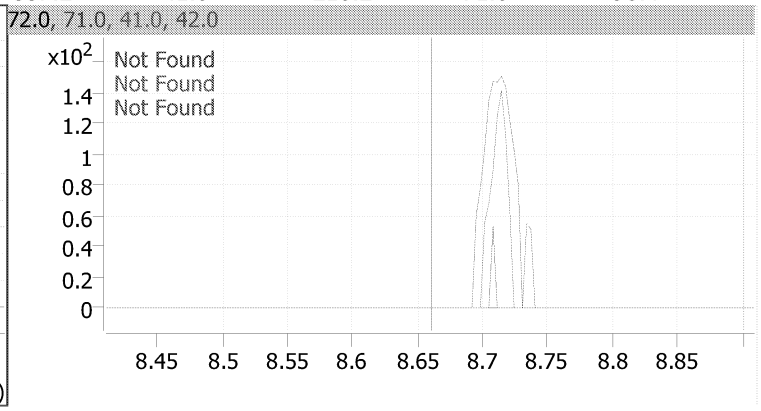


Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Chloroform	0.0011	8.19	-0.11	115	85.0		51.9	77.8
					47.0	54725.0	26.3	39.5

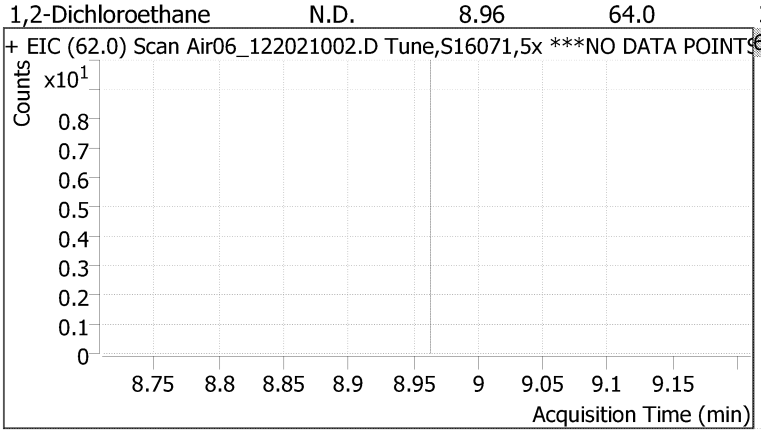


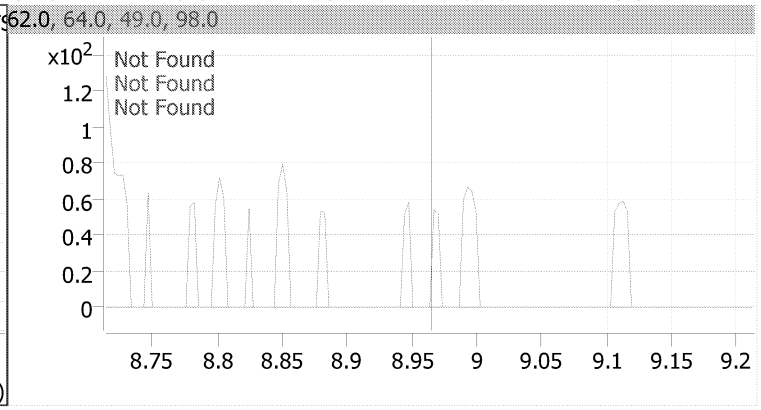
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Tetrahydrofuran	N.D.	8.66	42.0	357.2	41.0	210.2	71.0	98.4



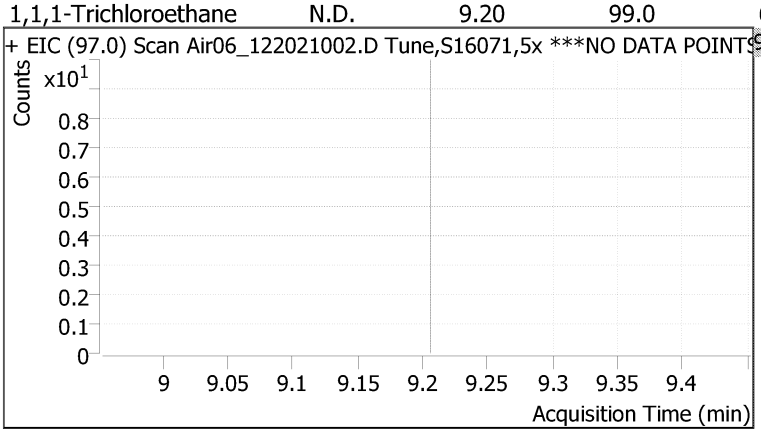


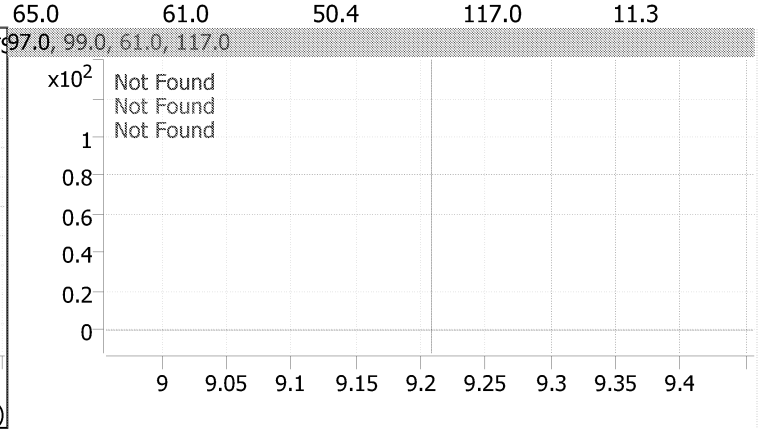
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,2-Dichloroethane	N.D.	8.96	64.0	31.0	49.0	29.4	98.0	5.5



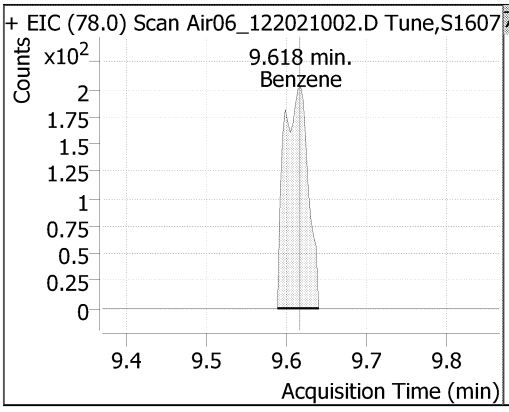


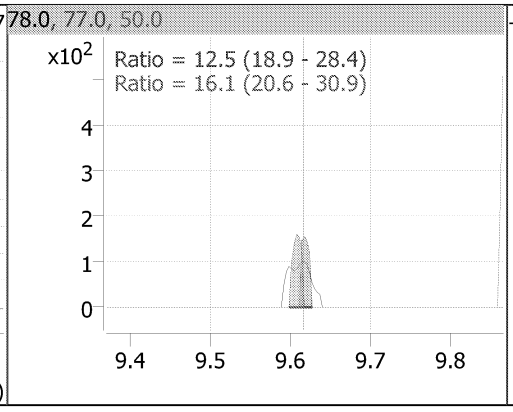
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1-Trichloroethane	N.D.	9.20	99.0	65.0	61.0	50.4	117.0	11.3

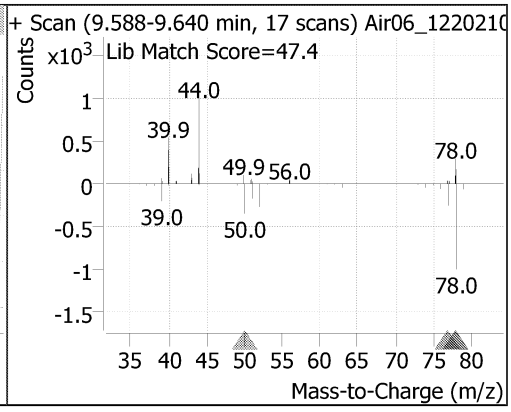




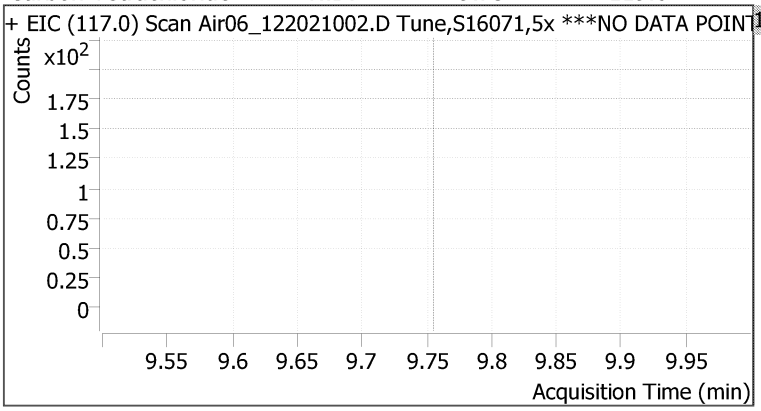
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene	0.0037	9.62	0.00	424	50.0	16.1	20.6	30.9
					77.0	12.5	18.9	28.4

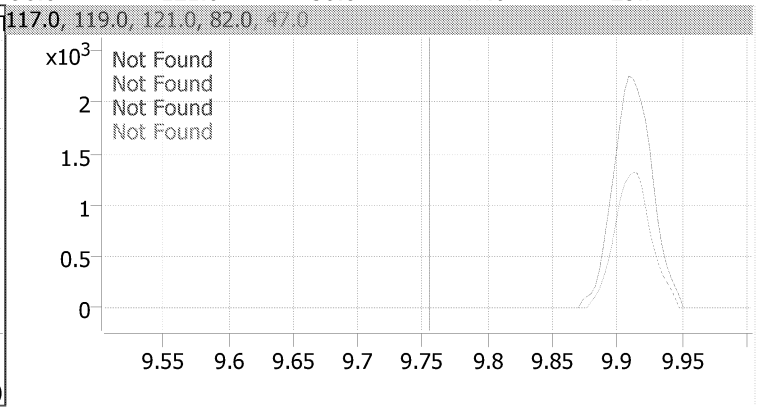




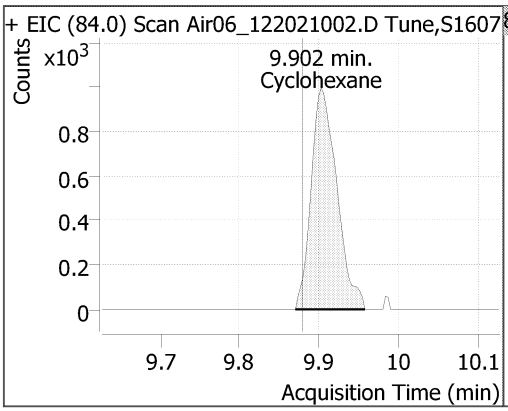


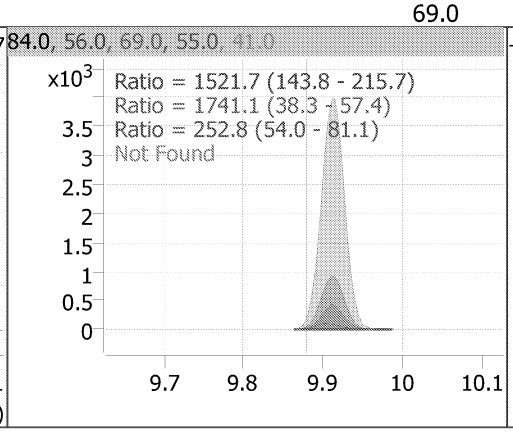
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Carbon Tetrachloride	N.D.	9.75	119.0	96.0	121.0	30.8	47.0	25.7

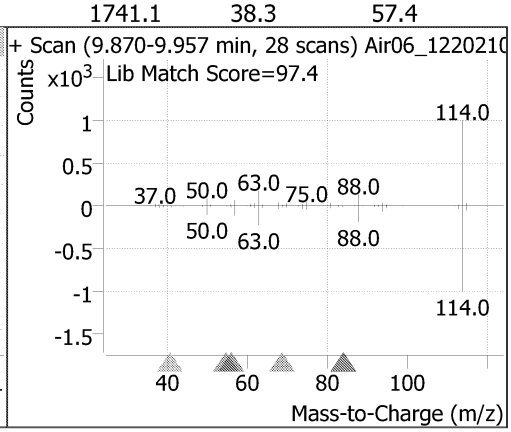




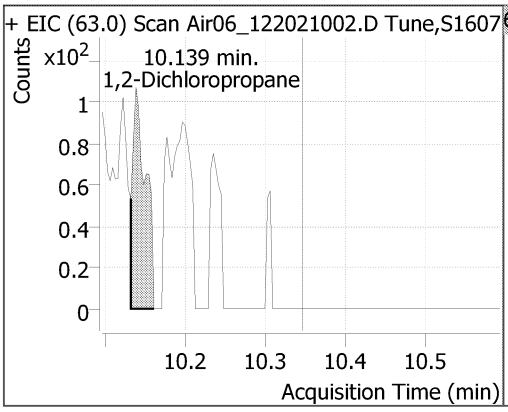
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Cyclohexane	0.0476	9.90	0.03	2242	56.0	1521.7	143.8	215.7
					41.0		86.9	130.3
					55.0	252.8	54.0	81.1
					69.0	1741.1	38.3	57.4

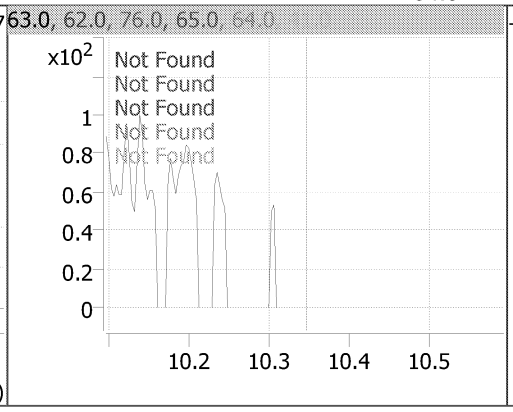


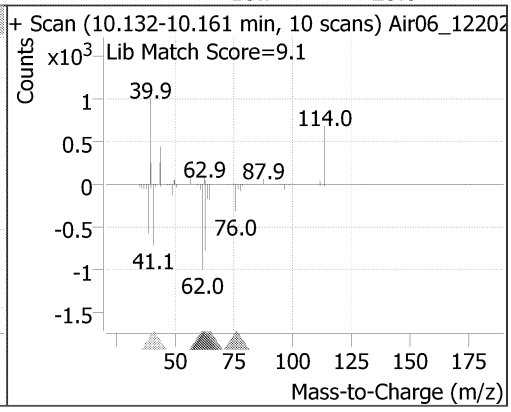




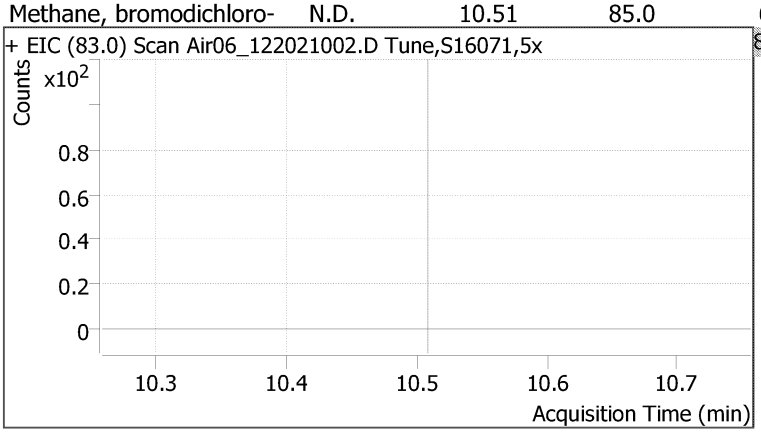
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
1,2-Dichloropropane	0.0023	10.14	-0.21	122	41.0		60.7	91.1
					62.0		55.7	83.6
					76.0		35.7	53.6
					65.0		23.3	35.0
					64.0		18.7	28.0

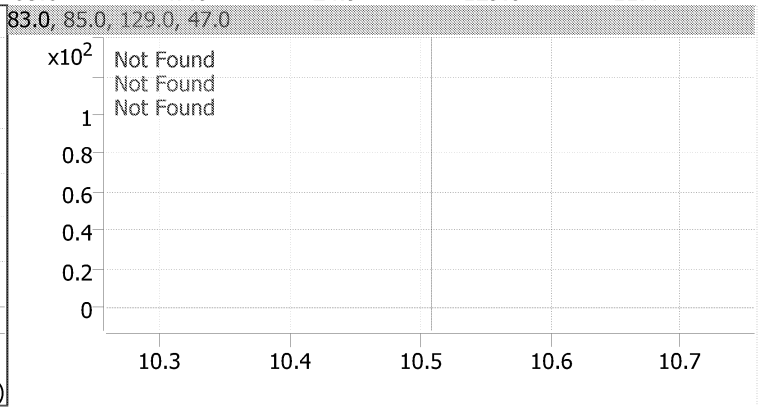




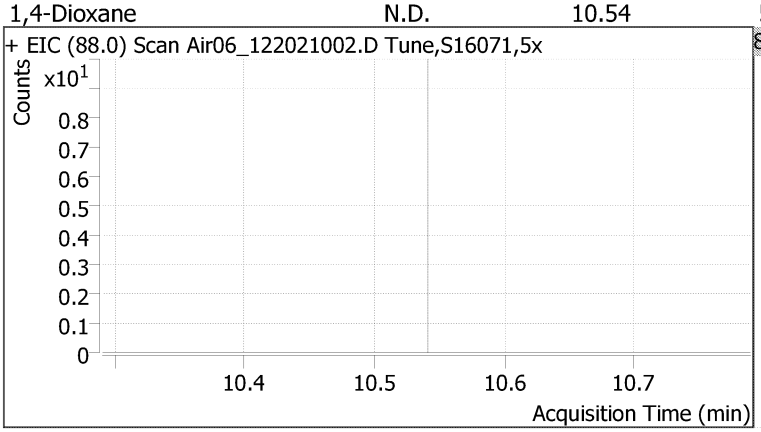


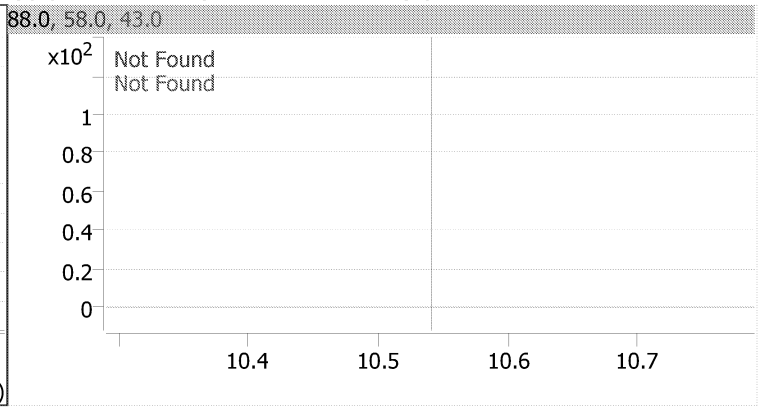
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Methane, bromodichloro-	N.D.	10.51	85.0	63.6	47.0	24.9	129.0	11.4



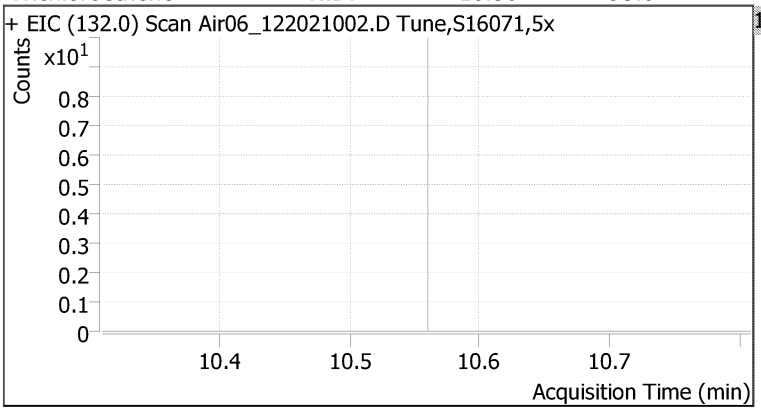


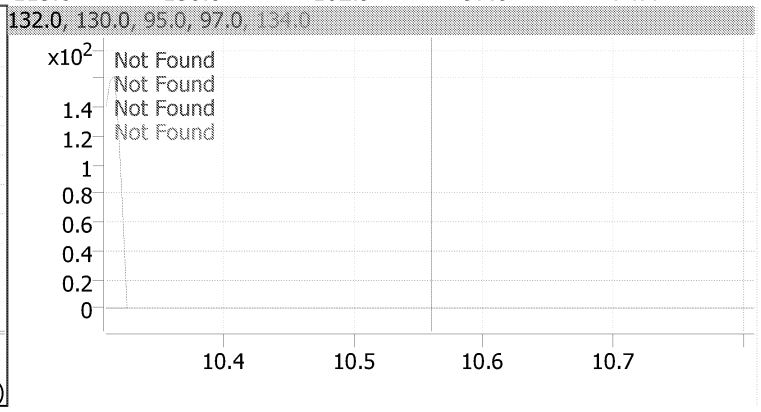
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio
1,4-Dioxane	N.D.	10.54	58.0	91.7	43.0	44.1



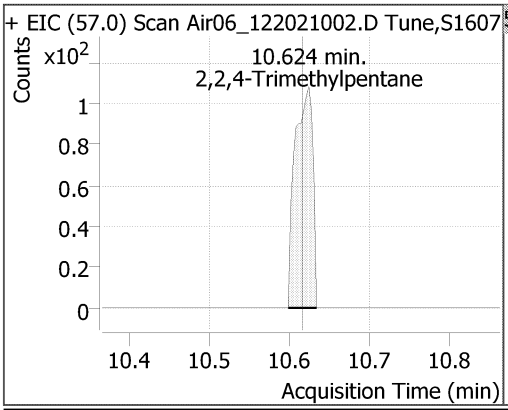


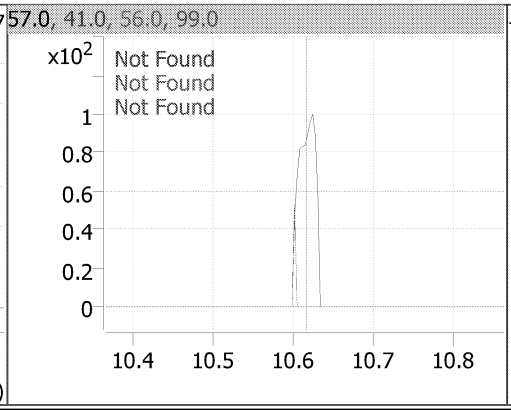
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Trichloroethene	N.D.	10.56	95.0	113.6	130.0	102.9	97.0	74.4

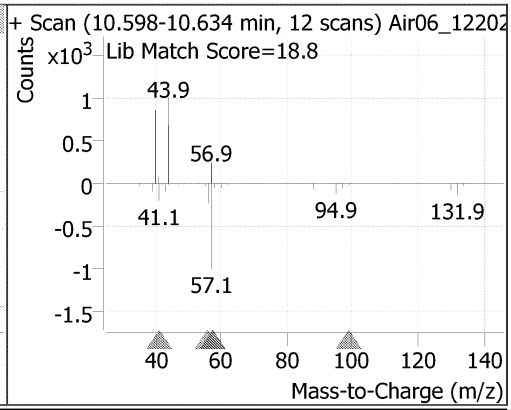




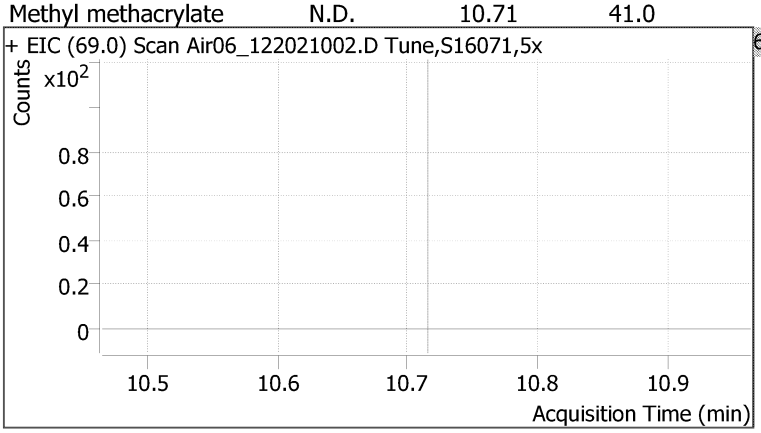
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
2,2,4-Trimethylpentane	0.0007	10.62	0.01	167	41.0		26.0	39.0
					56.0		24.9	37.3
					99.0		3.2	4.8

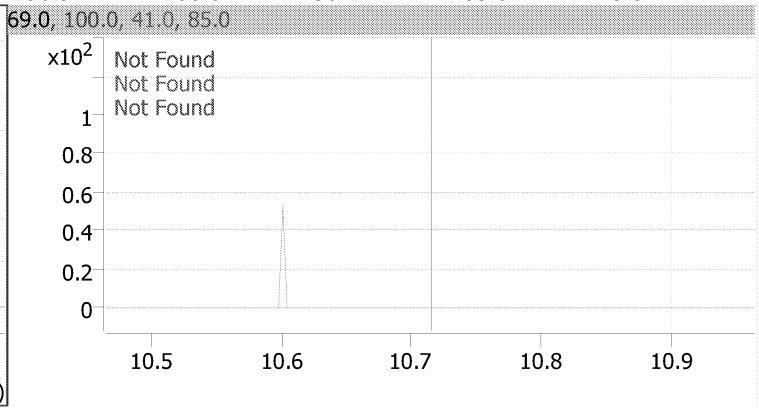




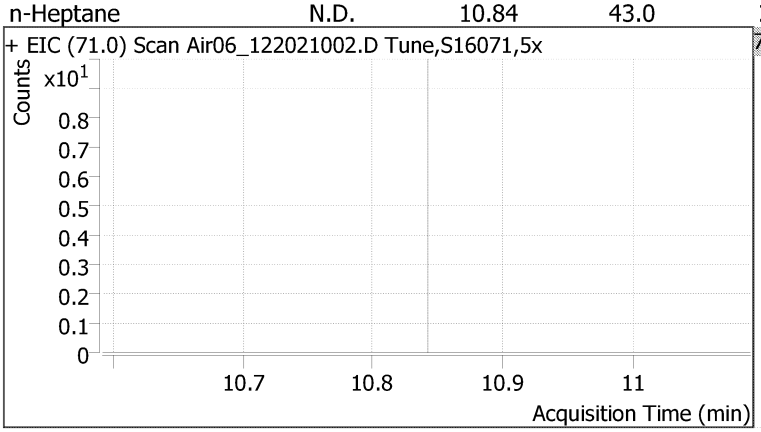


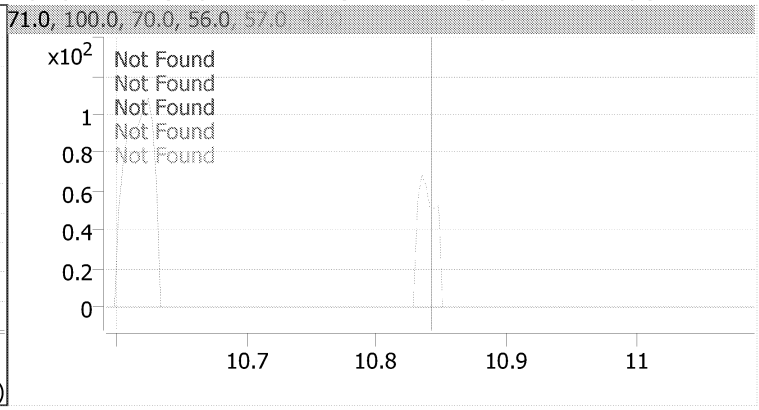
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Methyl methacrylate	N.D.	10.71	41.0	190.9	100.0	36.4	85.0	9.9



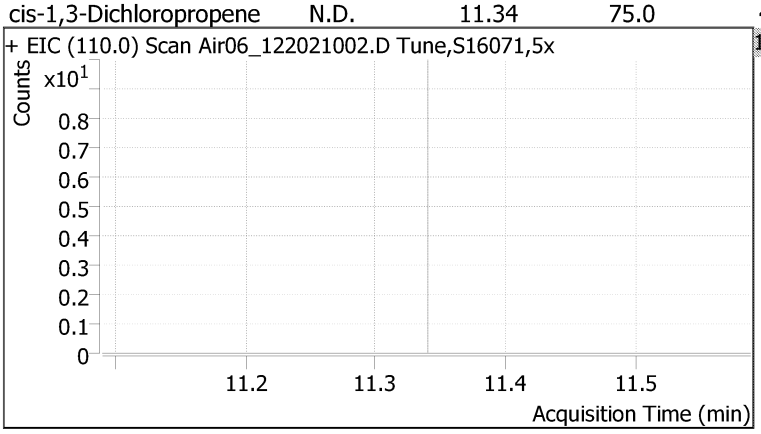


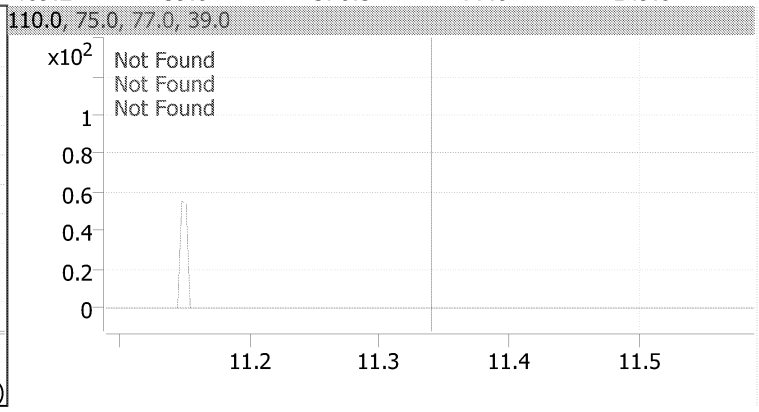
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
n-Heptane	N.D.	10.84	43.0	262.0	57.0	123.7	56.0	76.9



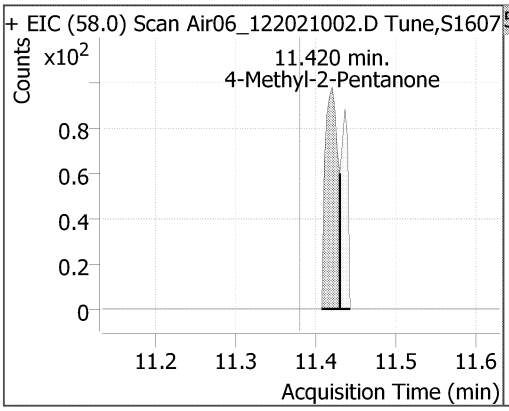


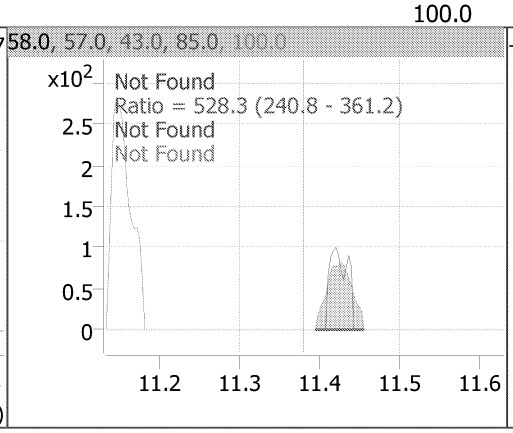
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
cis-1,3-Dichloropropene	N.D.	11.34	75.0	469.2	39.0	370.5	77.0	149.6

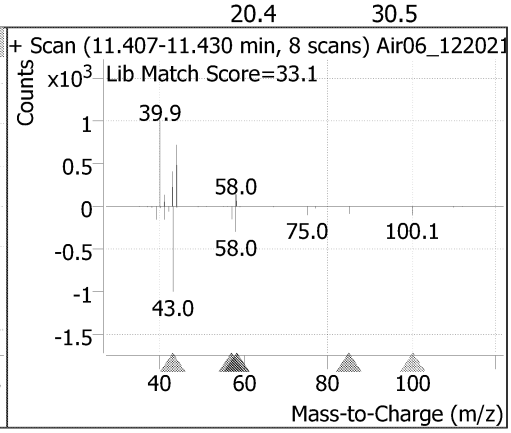




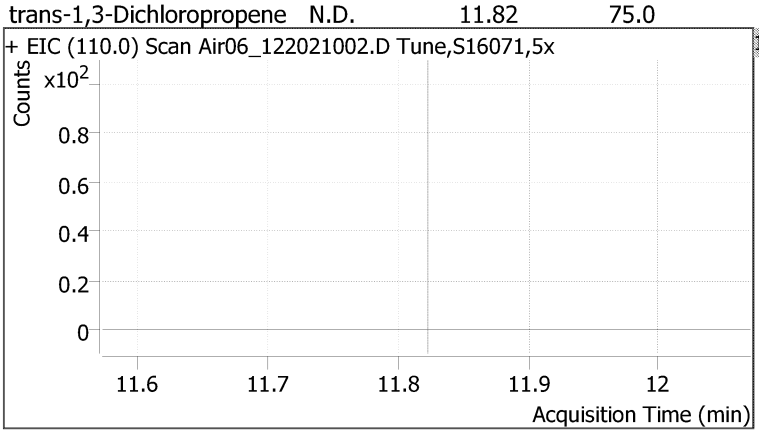
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
4-Methyl-2-Pentanone	0.0023	11.42	0.04	103	43.0	528.3	240.8	361.2
					57.0		55.1	82.7
					85.0		30.5	45.8
					100.0		20.4	30.5

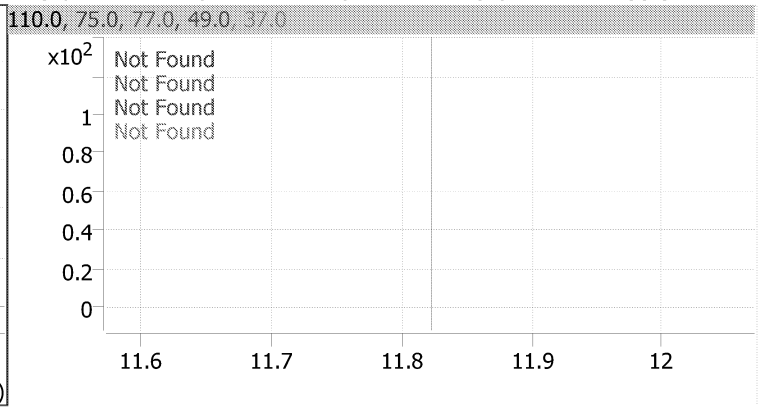




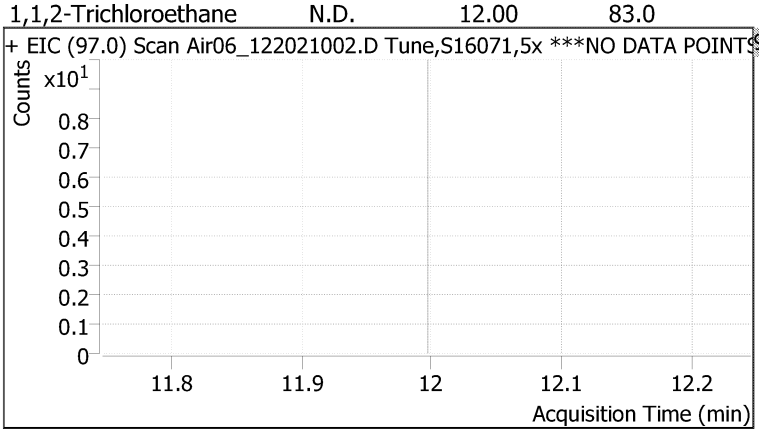


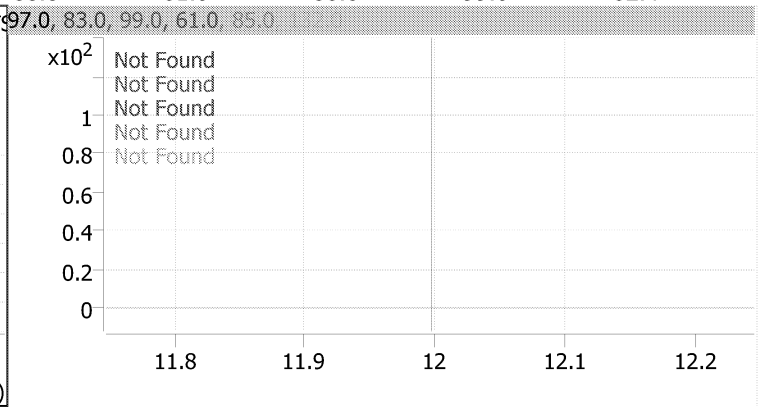
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
trans-1,3-Dichloropropene	N.D.	11.82	75.0	473.6	77.0	148.2	49.0	133.5





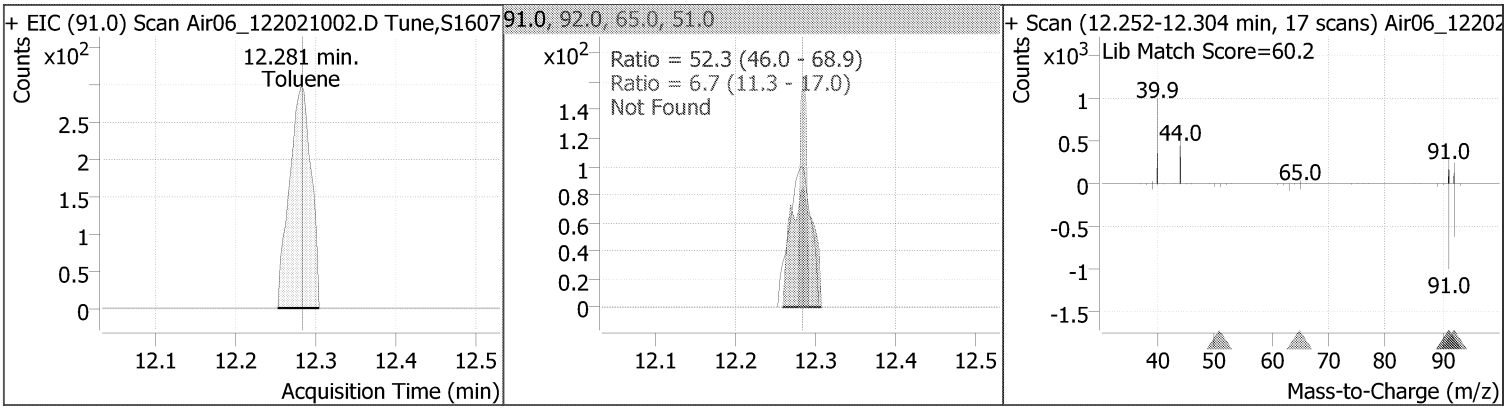
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,2-Trichloroethane	N.D.	12.00	83.0	88.8	61.0	86.6	99.0	62.4



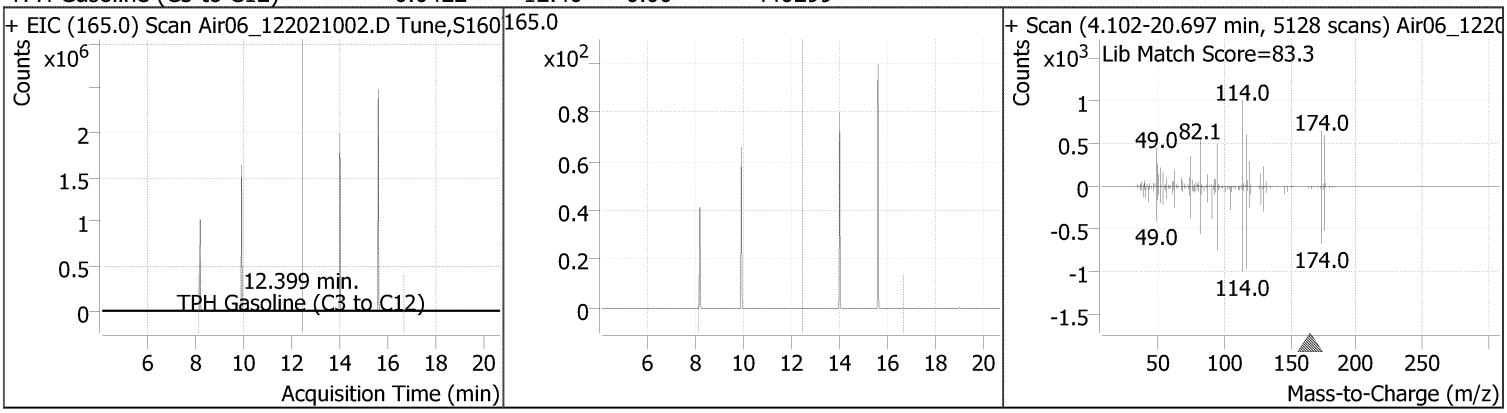


Quantitation Results Report (Not Reviewed)

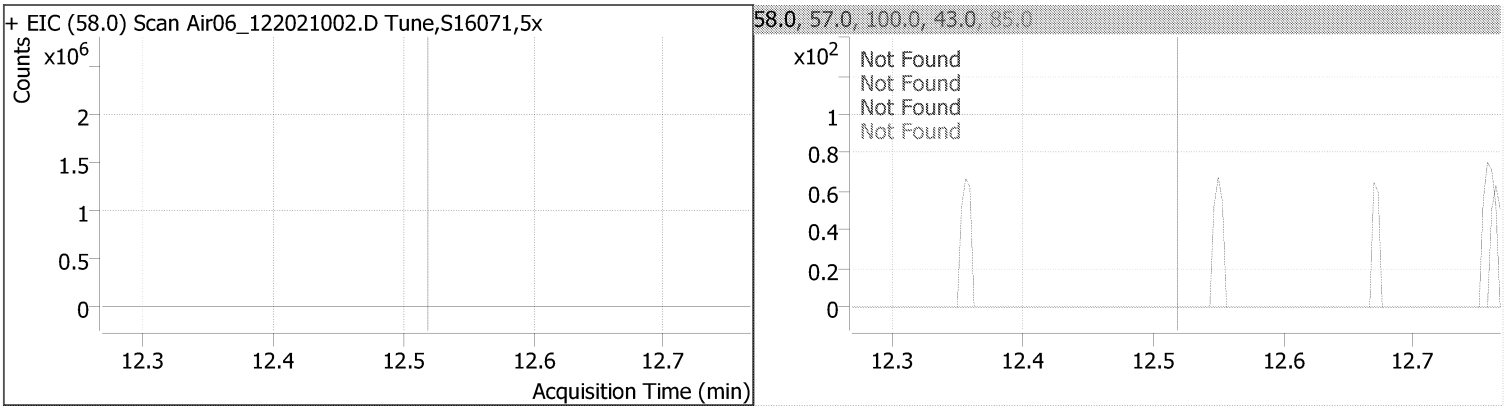
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Toluene	0.0038	12.28	0.00	559	92.0	52.3	46.0	68.9
					65.0	6.7	11.3	17.0
					51.0		8.6	12.8



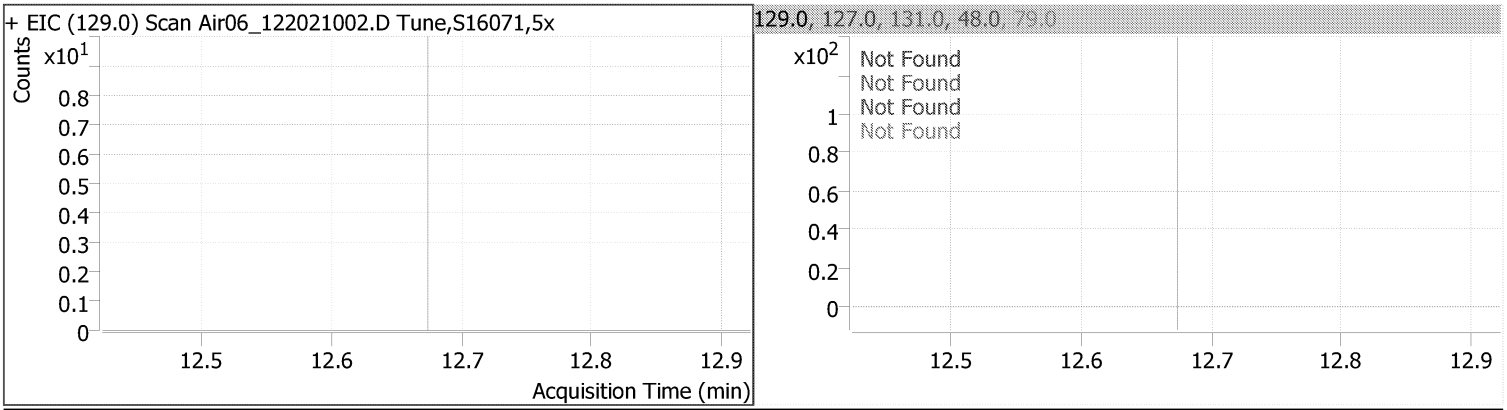
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C3 to C12)	0.0422	12.40	0.00	440299				



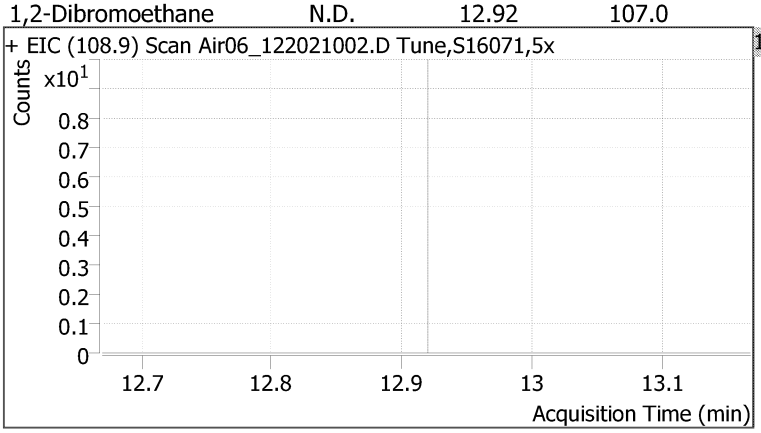
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
2-Hexanone	N.D.	12.52	43.0	223.3	57.0	37.8	100.0	14.4

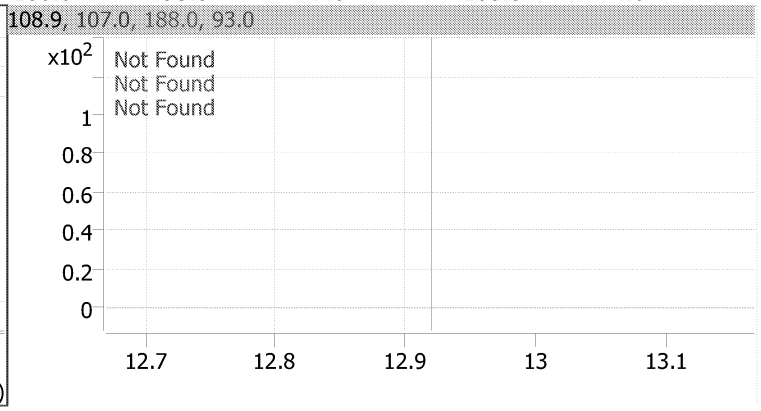


Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Dibromochloromethane	N.D.	12.67	127.0	77.3	131.0	24.0	79.0	20.0

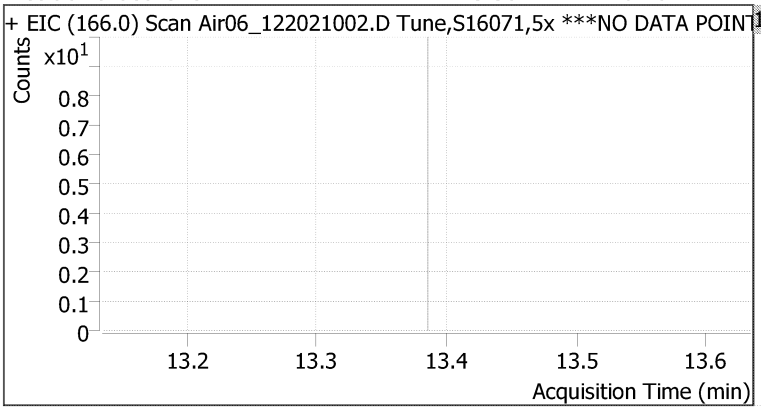


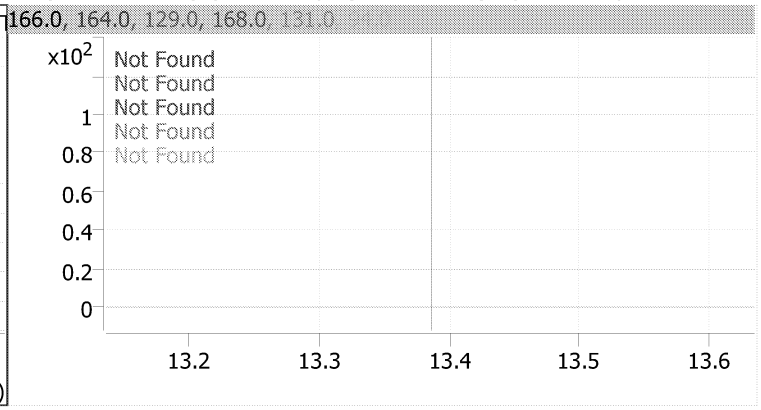
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,2-Dibromoethane	N.D.	12.92	107.0	106.6	93.0	7.8	188.0	4.6



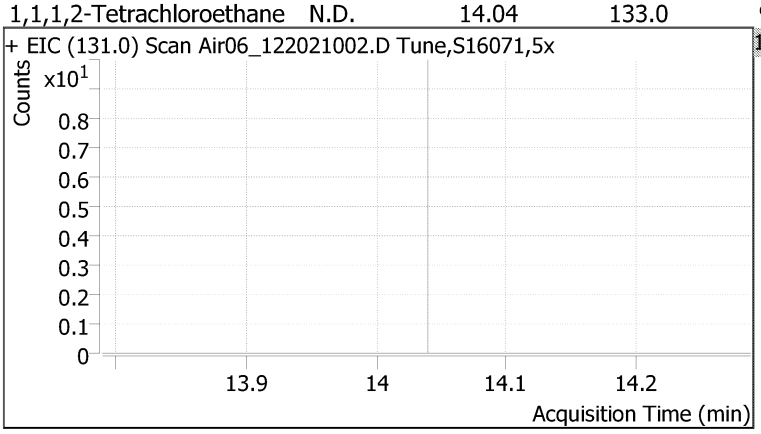


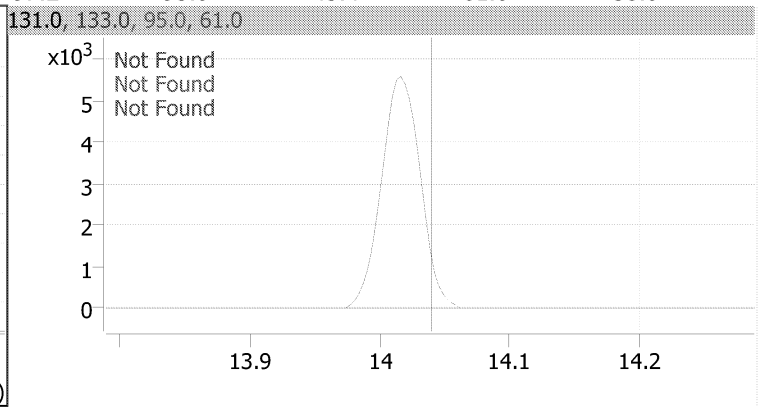
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
Tetrachloroethene	N.D.	13.38	164.0	77.9	129.0	67.3	131.0	64.2



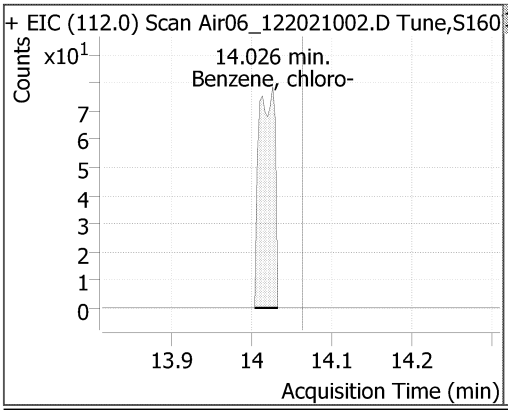


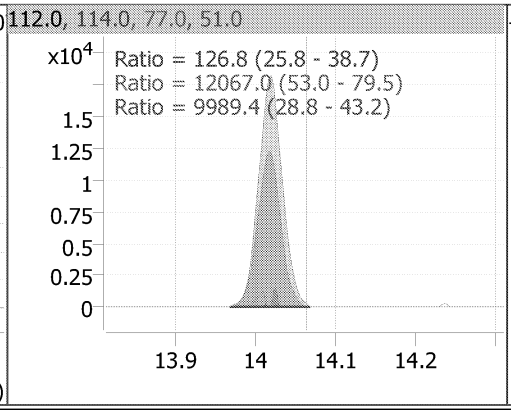
Compound	Conc.	Exp RT	QIon	Exp Ratio	QIon	Exp Ratio	QIon	Exp Ratio
1,1,1,2-Tetrachloroethane	N.D.	14.04	133.0	97.2	95.0	45.4	61.0	38.0

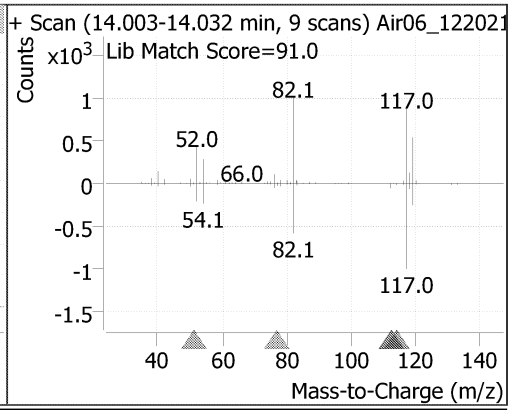




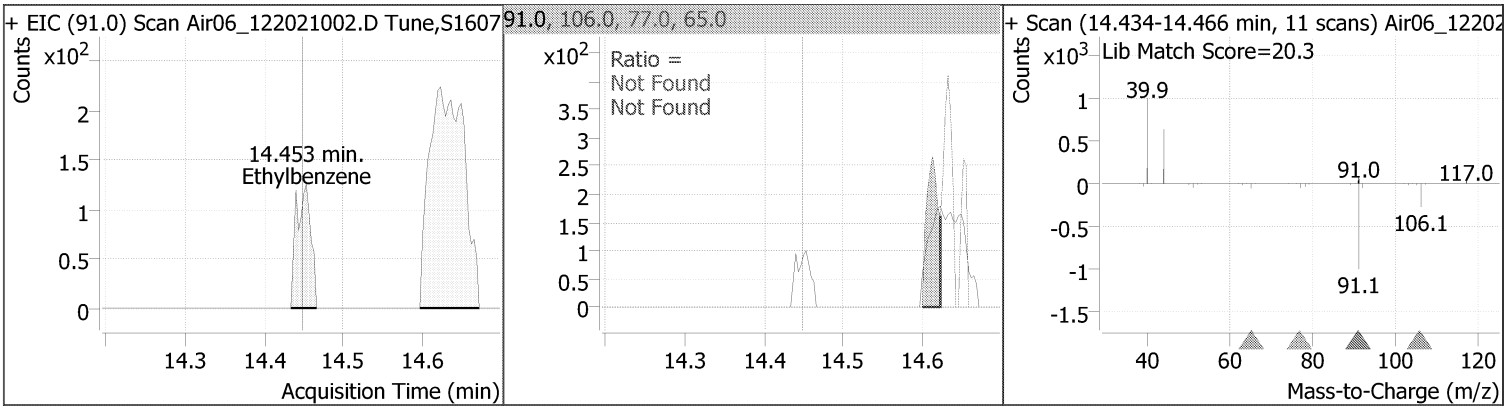
Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Benzene, chloro-	0.0010	14.03	-0.04	108	77.0	12067.0	53.0	79.5
					51.0	9989.4	28.8	43.2
					114.0	126.8	25.8	38.7



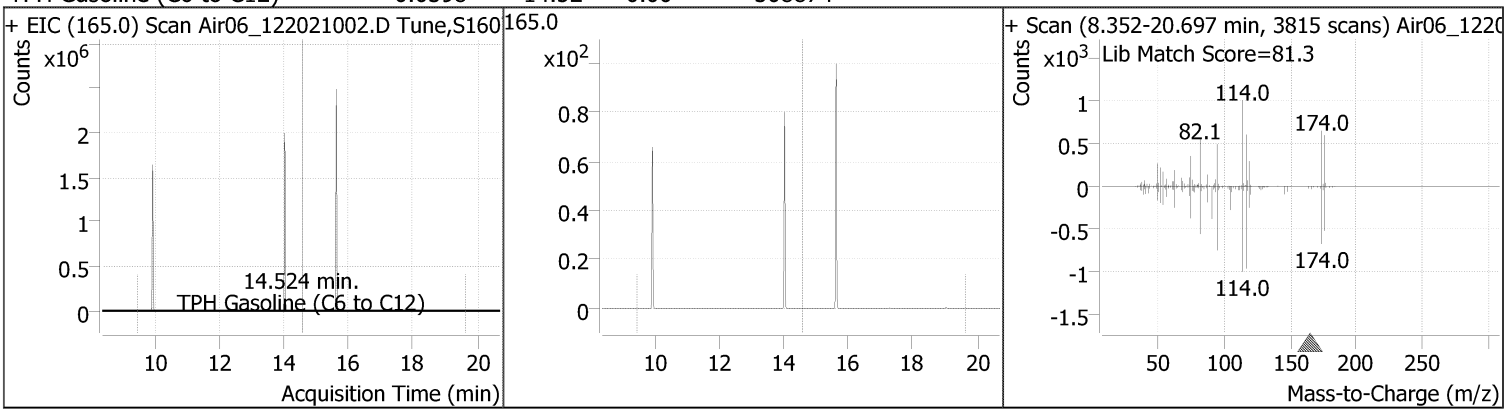




Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
Ethylbenzene	0.0009	14.45	0.01	157	106.0		23.2	34.8
					65.0		8.8	13.2
					77.0		7.6	11.4



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
TPH Gasoline (C6 to C12)	0.0398	14.52	0.00	308874				



Compound	Conc.	RT	Dev(Min)	Resp.	QIon	QRatio	Lower	Upper
m,p-Xylenes	0.0048	14.62	-0.01	683	106.0	14.0	35.5	53.2
					105.0		16.8	25.3

