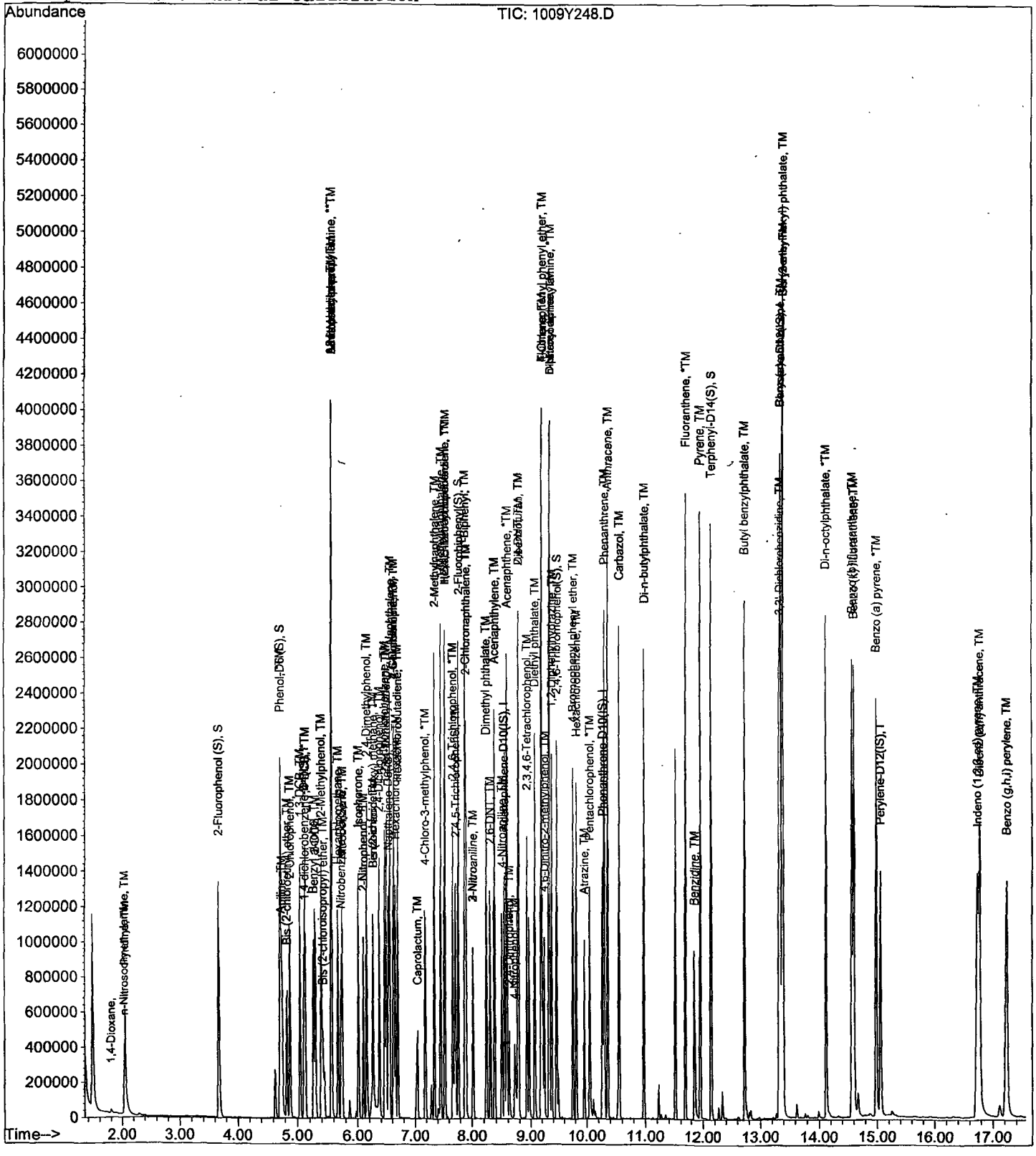
Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y248.D Vial: 48
Acq On : 26 Oct 20 15:59 Operator: MA
Sample : 50ug/mL 8270 7/22/20 (6) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 26 16:00 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y244.D Vial: 44
Acq On : 26 Oct 20 14:18 Operator: MA
Sample : BA20539W34 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 15:21 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	153641	40.00000	ppb	0.00
21) Napthalene-D8(IS)	6.52	136	625464	40.00000	ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	377061	40.00000	ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	756400	40.00000	ppb	0.00
79) Chrysene-D12(IS)	13.36	240	756837	40.00000	ppb	0.00
89) Perylene-D12(IS)	15.06	264	744062	40.00000	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.66	112	1000377	209.99238	ppb	0.00
Spiked Amount 250.000			Recovery =	83.997%		
6) Phenol-D6 (S)	4.72	99	1230807	204.93971	ppb	0.00
Spiked Amount 250.000			Recovery =	81.976%		
22) Nitrobenzene-D5(S)	5.72	82	560108	107.01382	ppb	0.00
Spiked Amount 125.000			Recovery =	85.611%		
46) 2-Fluorobiphenyl(S)	7.77	172	1273097	100.13565	ppb	0.00
Spiked Amount 125.000			Recovery =	80.109%		
64) 2,4,6-Tribromophenol(S)	9.47	330	456141	209.03187	ppb	0.00
Spiked Amount 250.000			Recovery =	83.613%		
82) Terphenyl-D14(S)	12.15	244	1973964	113.10272	ppb	0.00
Spiked Amount 125.000			Recovery =	90.482%		

Target Compounds Qvalue

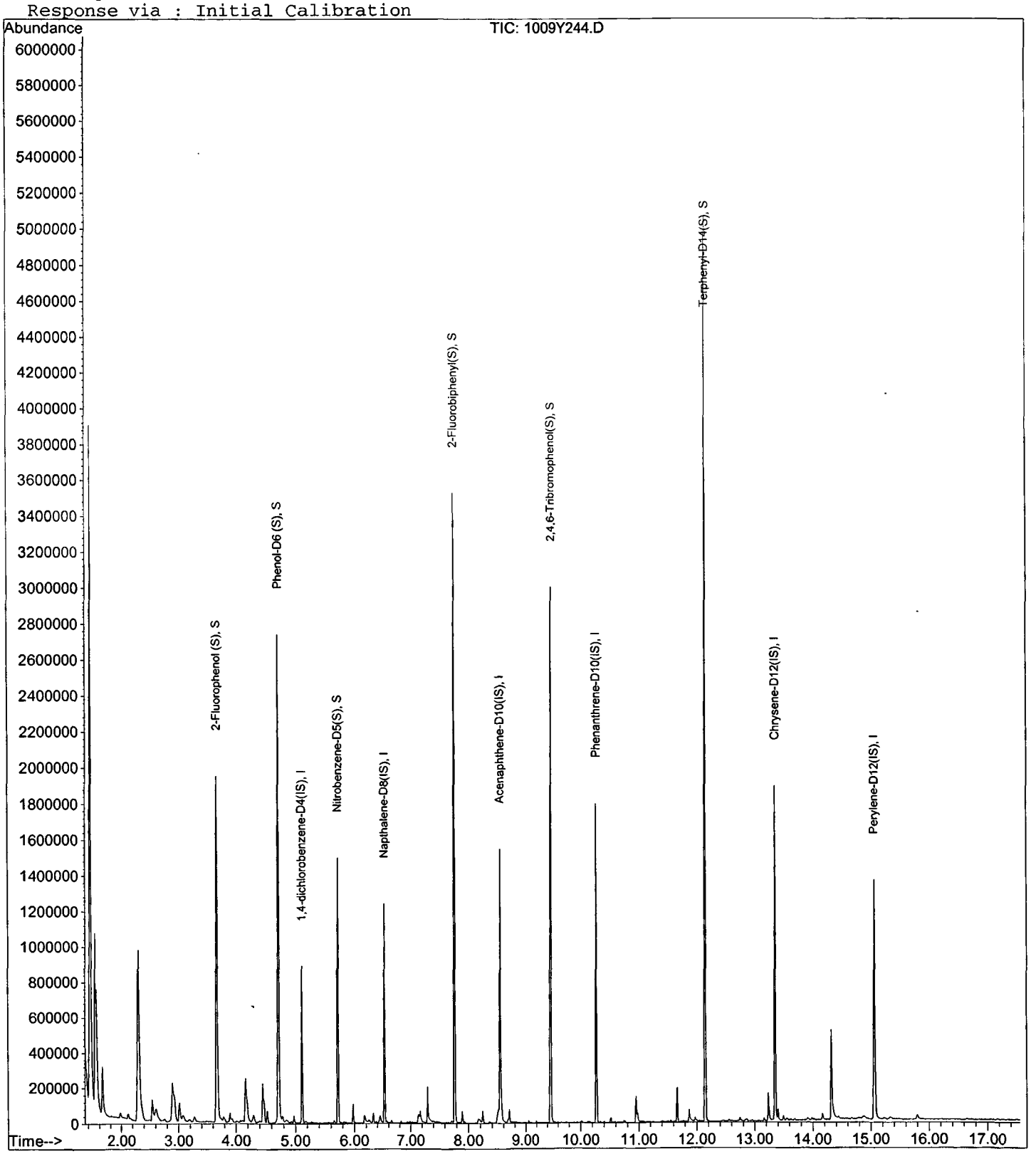
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y244.D Vial: 44
Acq On : 26 Oct 20 14:18 Operator: MA
Sample : BA20539W34 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 15:21 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y245.D Vial: 45
Acq On : 26 Oct 20 14:44 Operator: MA
Sample : BA20541W11 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 15:22 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.12	152	156368	40.00000	ppb	0.00
21) Napthalene-D8(IS)	6.53	136	629520	40.00000	ppb	0.00
41) Acenaphthene-D10(IS)	8.54	164	377095	40.00000	ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	753617	40.00000	ppb	0.00
79) Chrysene-D12(IS)	13.35	240	748060	40.00000	ppb	0.00
89) Perylene-D12(IS)	15.06	264	750287	40.00000	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.67	112	1046899	215.92546	ppb	0.00
Spiked Amount 250.000			Recovery =	86.370%		
6) Phenol-D6 (S)	4.72	99	1332056	217.93044	ppb	0.00
Spiked Amount 250.000			Recovery =	87.172%		
22) Nitrobenzene-D5(S)	5.72	82	579937	110.08844	ppb	0.00
Spiked Amount 125.000			Recovery =	88.070%		
46) 2-Fluorobiphenyl(S)	7.77	172	1420947	111.75474	ppb	0.00
Spiked Amount 125.000			Recovery =	89.404%		
64) 2,4,6-Tribromophenol(S)	9.47	330	512995	235.06468	ppb	0.00
Spiked Amount 250.000			Recovery =	94.026%		
82) Terphenyl-D14(S)	12.14	244	2210642	128.14987	ppb	-0.01
Spiked Amount 125.000			Recovery =	102.520%		

Target Compounds Qvalue

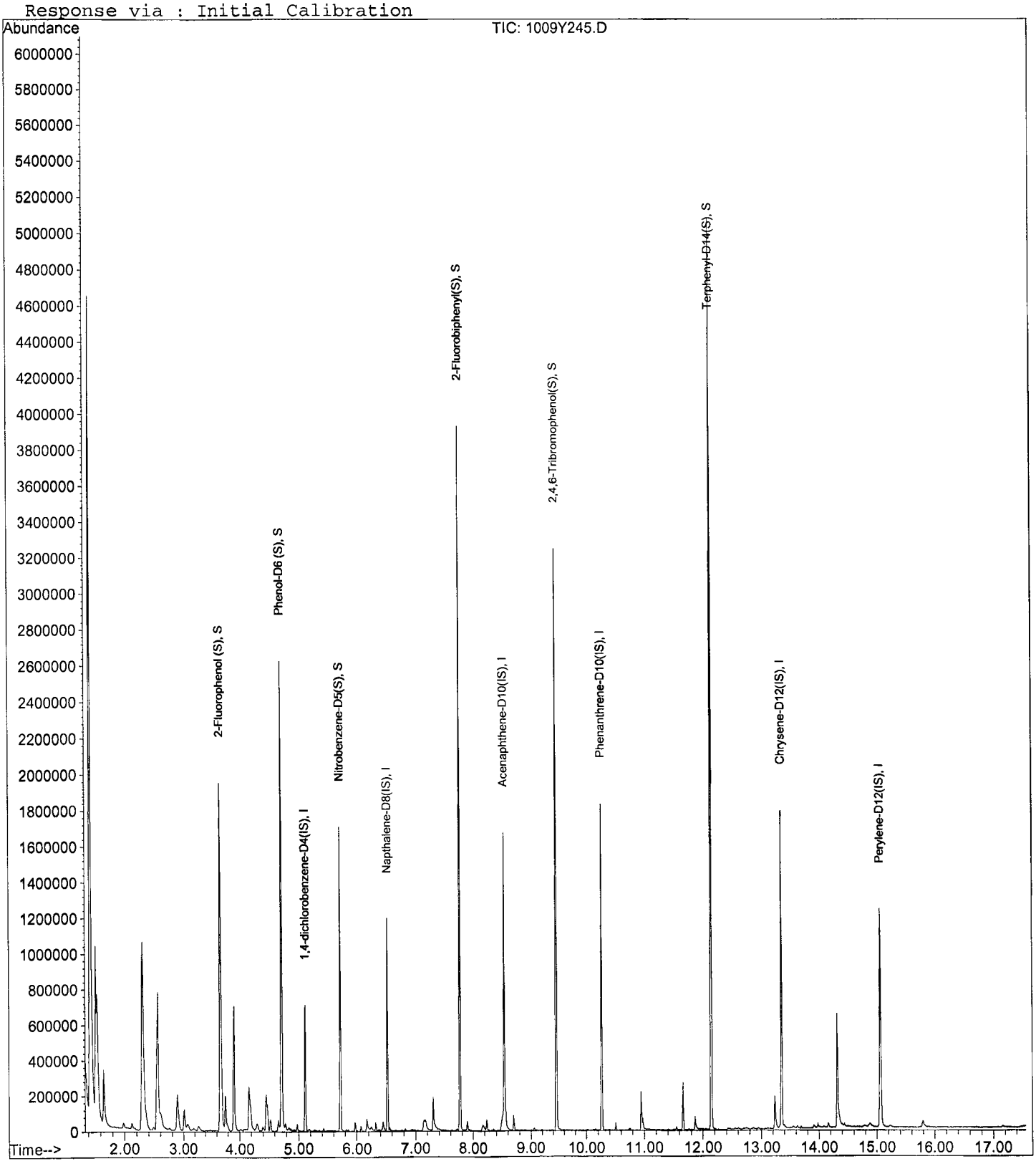
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y245.D Vial: 45
Acq On : 26 Oct 20 14:44 Operator: MA
Sample : BA20541W11 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 15:22 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y246.D Vial: 46
Acq On : 26 Oct 20 15:09 Operator: MA
Sample : BA20542W13 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 15:22 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	151573	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.52	136	610989	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.54	164	370026	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.26	188	720118	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	735398	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.06	264	717833	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.66	112	1045694	222.49985 ppb	0.00
Spiked Amount 250.000			Recovery =	89.000%	
6) Phenol-D6 (S)	4.72	99	1319653	222.73127 ppb	0.01
Spiked Amount 250.000			Recovery =	89.092%	
22) Nitrobenzene-D5(S)	5.72	82	586784	114.76654 ppb	0.00
Spiked Amount 125.000			Recovery =	91.814%	
46) 2-Fluorobiphenyl(S)	7.77	172	1392574	111.61560 ppb	0.00
Spiked Amount 125.000			Recovery =	89.293%	
64) 2,4,6-Tribromophenol(S)	9.47	330	506722	236.62604 ppb	0.00
Spiked Amount 250.000			Recovery =	94.650%	
82) Terphenyl-D14(S)	12.15	244	2251932	132.79111 ppb	0.00
Spiked Amount 125.000			Recovery =	106.233%	

Target Compounds	Qvalue

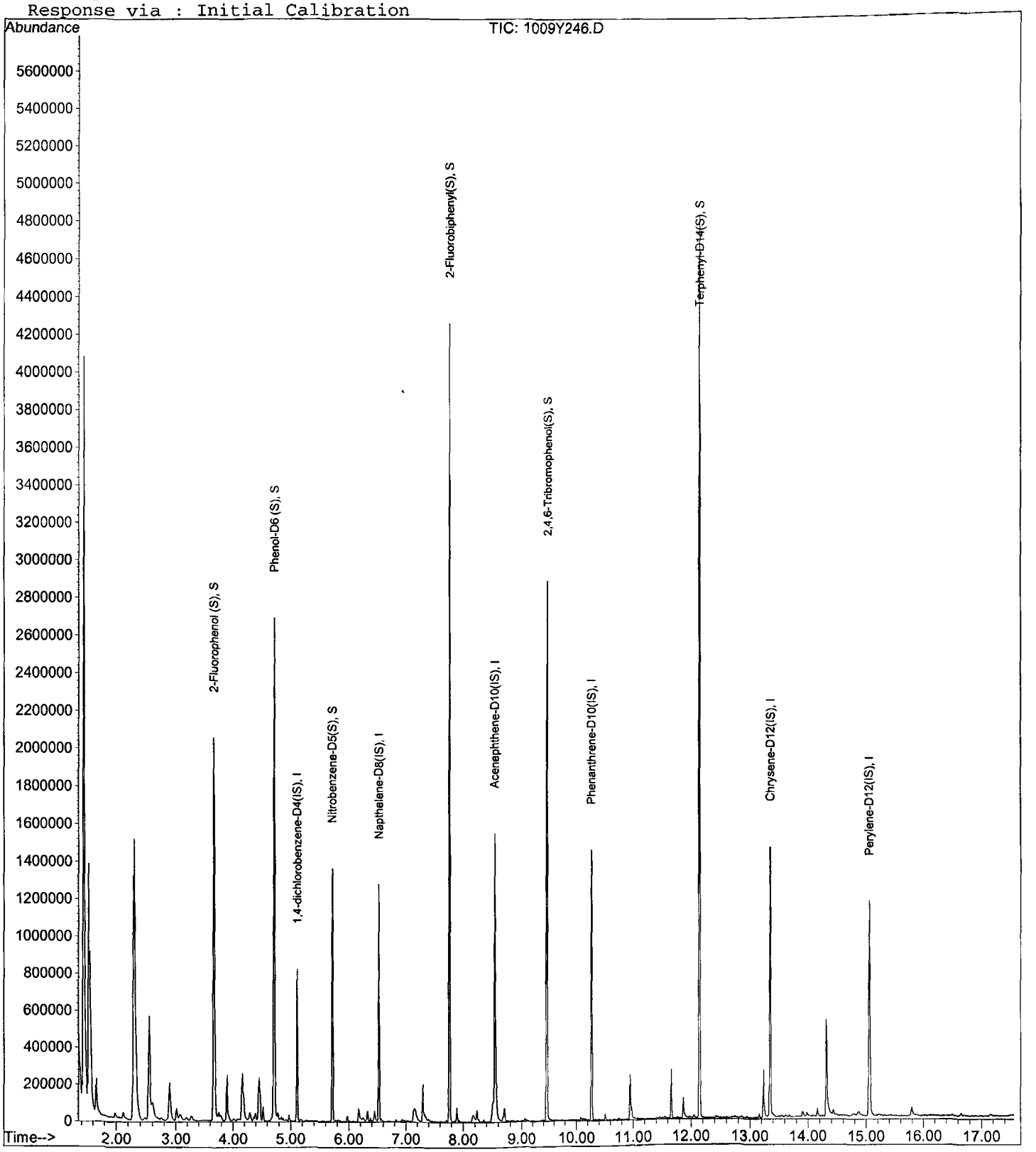
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y246.D Vial: 46
Acq On : 26 Oct 20 15:09 Operator: MA
Sample : BA20542W13 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 15:22 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y247.D Vial: 47
Acq On : 26 Oct 20 15:34 Operator: MA
Sample : BA20544W15 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 15:49 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	150510	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.52	136	602471	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.54	164	365253	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	712123	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	724074	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.06	264	714348	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.66	112	1032812	221.31094 ppb	0.00
Spiked Amount 250.000			Recovery =	88.524%	
6) Phenol-D6 (S)	4.72	99	1331613	226.33721 ppb	0.01
Spiked Amount 250.000			Recovery =	90.535%	
22) Nitrobenzene-D5(S)	5.72	82	579615	114.96718 ppb	0.00
Spiked Amount 125.000			Recovery =	91.974%	
46) 2-Fluorobiphenyl(S)	7.77	172	1397608	113.48290 ppb	0.00
Spiked Amount 125.000			Recovery =	90.786%	
64) 2,4,6-Tribromophenol(S)	9.47	330	504742	238.78150 ppb	0.00
Spiked Amount 250.000			Recovery =	95.512%	
82) Terphenyl-D14(S)	12.15	244	2185538	130.89154 ppb	0.00
Spiked Amount 125.000			Recovery =	104.714%	

Target Compounds	Qvalue

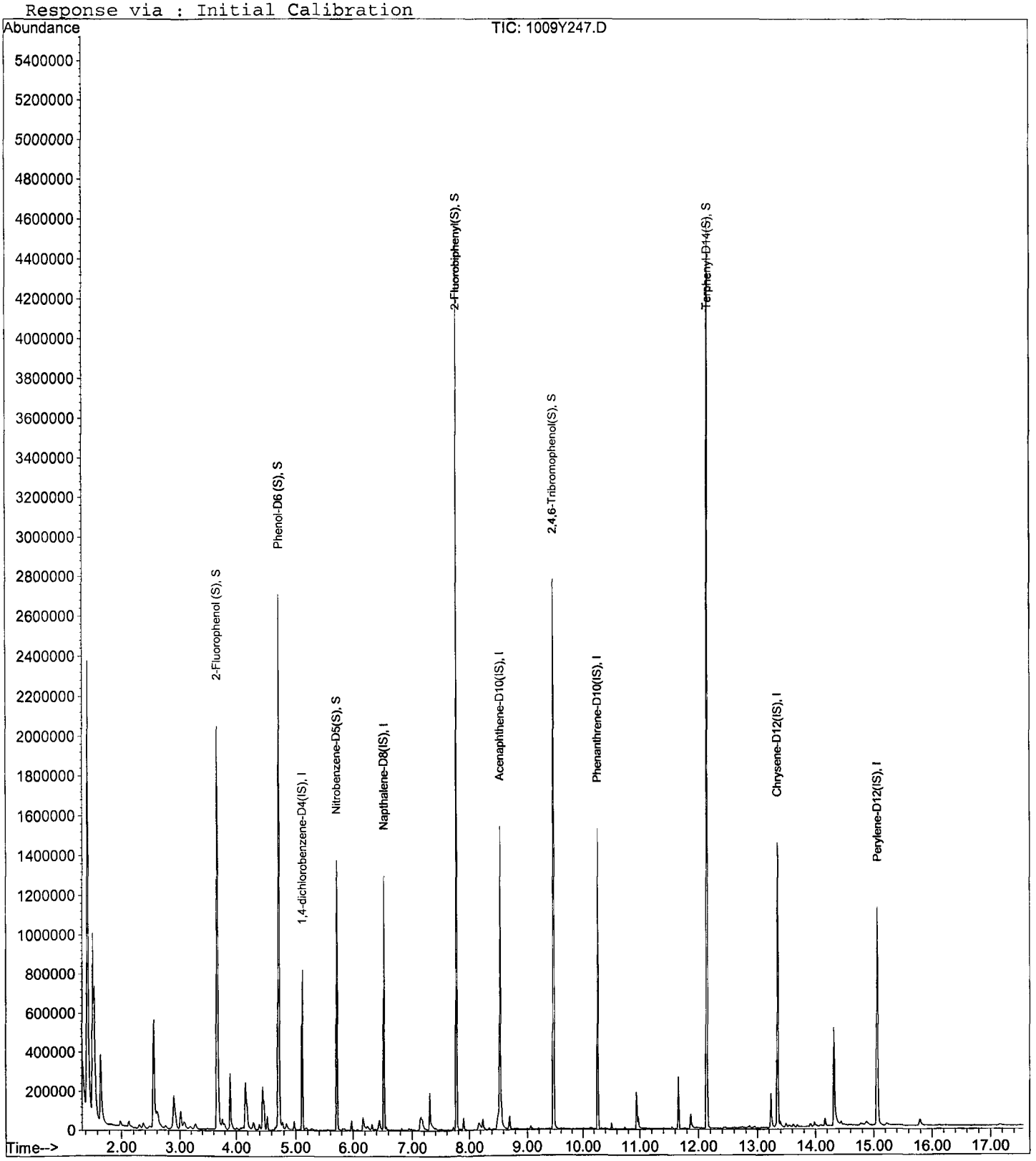
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y247.D Vial: 47
Acq On : 26 Oct 20 15:34 Operator: MA
Sample : BA20544W15 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 15:49 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y219.D Vial: 19
Acq On : 23 Oct 20 13:21 Operator: MA
Sample : 201021A BLK 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 17:55 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	148761	40.00000	ppb	0.00
21) Napthalene-D8(IS)	6.52	136	607132	40.00000	ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	370629	40.00000	ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	718091	40.00000	ppb	0.00
79) Chrysene-D12(IS)	13.36	240	743070	40.00000	ppb	0.00
89) Perylene-D12(IS)	15.06	264	716825	40.00000	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.67	112	954589	206.95422	ppb	0.01
Spiked Amount 250.000			Recovery =	82.782%		
6) Phenol-D6 (S)	4.72	99	1197709	205.97073	ppb	0.01
Spiked Amount 250.000			Recovery =	82.388%		
22) Nitrobenzene-D5(S)	5.72	82	563083	110.83061	ppb	0.00
Spiked Amount 125.000			Recovery =	88.665%		
46) 2-Fluorobiphenyl(S)	7.77	172	1335300	106.85093	ppb	0.00
Spiked Amount 125.000			Recovery =	85.481%		
64) 2,4,6-Tribromophenol(S)	9.47	330	465166	216.86706	ppb	0.00
Spiked Amount 250.000			Recovery =	86.747%		
82) Terphenyl-D14(S)	12.15	244	2106213	122.91609	ppb	0.00
Spiked Amount 125.000			Recovery =	98.333%		

Target Compounds Qvalue

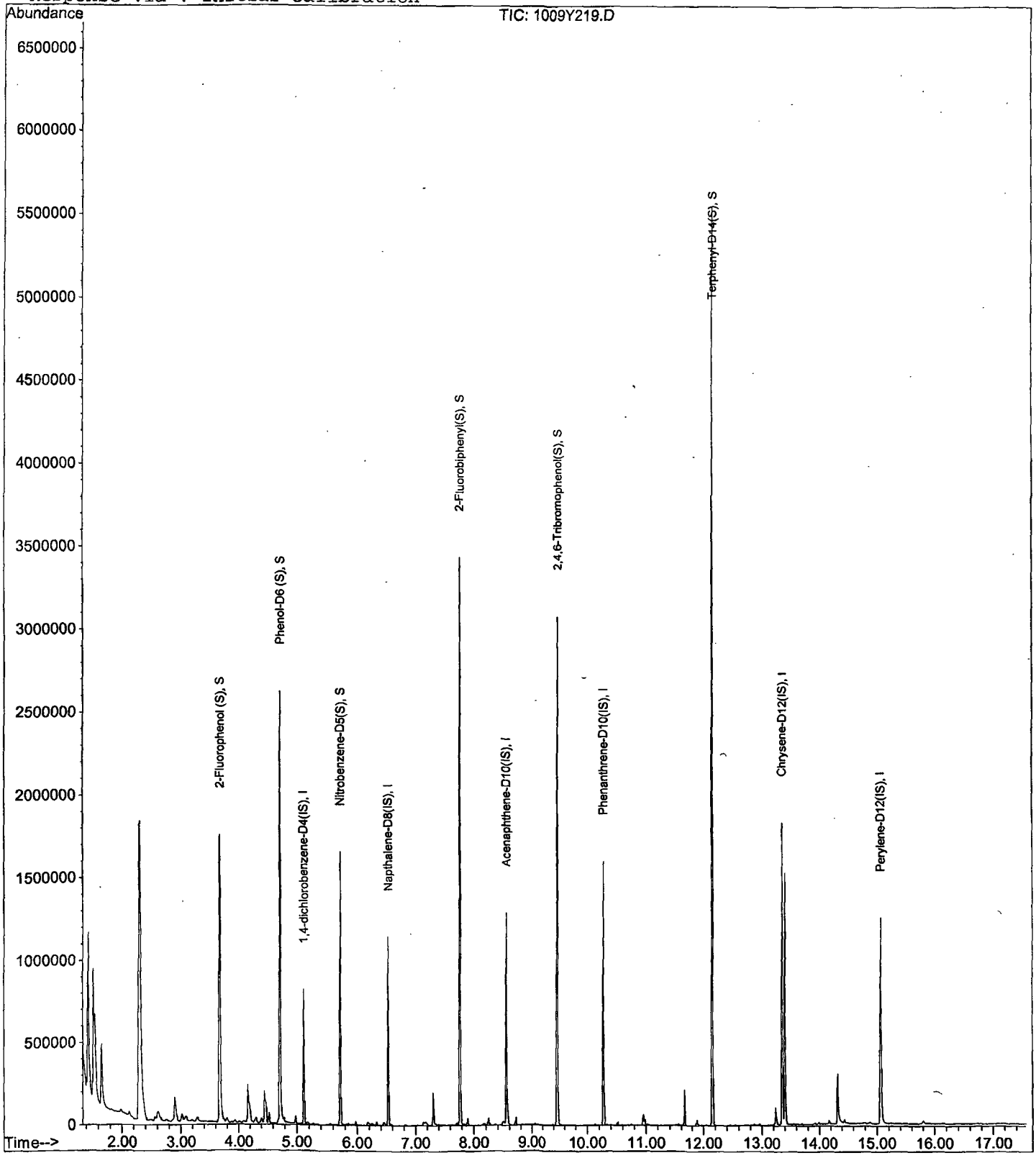
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y219.D Vial: 19
Acq On : 23 Oct 20 13:21 Operator: MA
Sample : 201021A BLK 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 17:55 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y220.D Vial: 20
Acq On : 23 Oct 20 13:47 Operator: MA
Sample : 201021A LCS-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 23 13:50 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	144438	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	584633	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	352993	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	710154	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	702959	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.06	264	698448	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.67	112	1043972	233.10648 ppb	0.01
Spiked Amount 250.000			Recovery =	93.242%	
6) Phenol-D6 (S)	4.73	99	1301517	230.52162 ppb	0.02
Spiked Amount 250.000			Recovery =	92.209%	
22) Nitrobenzene-D5(S)	5.73	82	560854	114.64019 ppb	0.00
Spiked Amount 125.000			Recovery =	91.712%	
46) 2-Fluorobiphenyl(S)	7.78	172	1324687	111.29766 ppb	0.00
Spiked Amount 125.000			Recovery =	89.038%	
64) 2,4,6-Tribromophenol(S)	9.48	330	478529	234.24331 ppb	0.00
Spiked Amount 250.000			Recovery =	93.697%	
82) Terphenyl-D14(S)	12.15	244	2083485	128.52765 ppb	0.00
Spiked Amount 125.000			Recovery =	102.822%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.81	58	7177	6.92529	77
3) n-Nitrosodimethylamine	2.03	42	95311	59.49369 ppb	98
4) Pyridine	2.06	79	120619	26.92065 ppb	98
7) Phenol	4.74	94	375459	58.05992 ppb	97
8) Aniline	4.76	93	113632	22.41546 ppb	97
9) Bis (2-chloroethyl) ether	4.83	63	152524	58.37123 ppb	97
10) 2-Chlorophenol	4.89	128	302433	56.18033 ppb	98
11) 1,3-DCB	5.05	146	294334	51.15792 ppb	97
12) 1,4-DCB	5.13	146	301161	51.28281 ppb	97
13) Benzyl alcohol	5.27	108	163490	54.30959 ppb	93
14) 1,2-DCB	5.30	146	290493	52.63600 ppb	97
15) 2-Methylphenol	5.39	107	223283	56.04131 ppb	99
16) Bis (2-chloroisopropyl) et	5.42	45	203352	59.35522 ppb	94
17) Acetophenone	5.56	105	363439	52.29442 ppb	83
18) 3&4-Methylphenol	5.57	107	616376	111.40339 ppb	98
19) n-Nitrosodi-n-propylamine	5.57	70	192205	54.90489 ppb	97
20) Hexachloroethane	5.67	117	90029	43.50437 ppb	89
23) Nitrobenzene	5.74	77	283970	56.36550 ppb	91
24) Isophorone	6.01	82	477572	55.35406 ppb	96
25) 2-Nitrophenol	6.10	139	172530	56.86900 ppb	92
26) 2,4-Dimethylphenol	6.15	122	259436	54.74017 ppb	98
27) Benzoic acid	6.27	105	156764	51.66187 ppb	97
28) Bis (2-chloroethoxy) metha	6.26	93	315000	57.50768 ppb	98
29) 2,4-Dichlorophenol	6.38	162	259783	55.09541 ppb	94
30) 1,2,4-Trichlorobenzene	6.47	180	267313	50.87120 ppb	97
31) 3,4-Dimethylphenol	6.50	107	370041	55.88664 ppb	94
32) Naphthalene	6.55	128	849275	55.37644 ppb	99
33) 4-Chloroaniline	6.62	127	141667	21.95582 ppb	97
34) 2,6-Dichlorophenol	6.63	162	255957	55.08249 ppb	98
35) Hexachloropropene	6.65	213	115173	30.11701 ppb	99
36) Hexachlorobutadiene	6.70	225	137307	42.54538 ppb	99
37) Caprolactum	7.03	55	93047	60.59457 ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y220.D Vial: 20
Acq On : 23 Oct 20 13:47 Operator: MA
Sample : 201021A LCS-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 23 13:50 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.18	107	265648	55.12490	ppb		99
39)	2-Methylnaphthalene	7.34	142	594500	57.43685	ppb		100
40)	1-Methylnaphthalene	7.45	142	569230	53.10428	ppb		99
42)	Hexachlorocyclopentadiene	7.53	237	54464	13.84124	ppb		100
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	296512	52.04153	ppb		97
44)	2,4,6-Trichlorophenol	7.67	196	209628	55.42572	ppb		97
45)	2,4,5-Trichlorophenol	7.72	196	225043	56.79574	ppb		99
47)	1,1'-Biphenyl	7.89	154	748781	55.12667	ppb		97
48)	2-Chloronaphthalene	7.91	162	585311	54.48387	ppb		95
49)	2-Nitroaniline	8.03	65	142457	53.15176	ppb		96
50)	Dimethyl phthalate	8.25	163	752441	58.53868	ppb		98
51)	2,6-DNT	8.32	165	167835	58.77427	ppb	#	79
52)	Acenaphthylene	8.38	152	903101	54.79774	ppb		99
53)	3-Nitroaniline	8.03	138	201181	56.83704	ppb		96
54)	Acenaphthene	8.58	154	586476	53.55285	ppb		99
55)	2,4-Dinitrophenol	8.62	184	83465	58.84463	ppb		97
56)	4-Nitrophenol	8.72	65	100488	50.39577	ppb		84
57)	Dibenzofuran	8.79	168	853213	54.69358	ppb		91
58)	2,4-DNT	8.77	165	230322	56.68947	ppb		95
59)	2,3,4,6-Tetrachlorophenol	8.93	232	185969	56.20019	ppb		97
60)	Diethyl phthalate	9.07	149	683685	54.45675	ppb		97
61)	4-Chlorophenyl phenyl ethe	9.19	204	395114	54.58008	ppb		98
62)	Fluorene	9.19	166	714060	55.33737	ppb		98
63)	4-Nitroaniline	8.50	138	38066	12.84885	ppb	#	76
66)	4,6-Dinitro-2-methylphenol	9.24	198	142611	51.59440	ppb	#	84
67)	Diphenyl amine	9.34	169	935437	86.97676	ppb		99
68)	n-Nitrosodiphenylamine	9.34	169	935437	86.97676	ppb		99
69)	1,2-Diphenylhydrazine	9.37	77	520820	50.02035	ppb		97
70)	4-Bromophenyl phenyl ether	9.76	248	234061	55.01880	ppb		97
71)	Hexachlorobenzene	9.82	284	249571	54.58561	ppb	#	92
72)	Atrazine	9.96	200	65329	16.52986	ppb		95
73)	Pentachlorophenol	10.06	266	158857	51.06399	ppb		98
74)	Phenanthrene	10.30	178	1035009	53.65562	ppb		99
75)	Anthracene	10.36	178	1049792	52.36399	ppb		99
76)	Carbazol	10.55	167	955957	53.01159	ppb		97
77)	Di-n-butylphthalate	10.98	149	1233158	56.50792	ppb		98
78)	Fluoranthene	11.69	202	1186244	53.18269	ppb	#	97
80)	Benzidine	11.86	184	15109	2.39717	ppb	#	73
81)	Pyrene	11.95	202	1267201	56.48874	ppb		98
83)	Butyl benzylphthalate	12.72	149	534092	57.78387	ppb		83
84)	3,3'-Dichlorobenzidine	13.33	252	43158	5.81054	ppb		94
85)	Benz (a) anthracene	13.35	228	1195850	52.94034	ppb		99
86)	Bis (2-ethylhexyl) phthala	13.40	149	1242559	95.86255	ppb		98
87)	Chrysene	13.39	228	1217795	56.02270	ppb		99
88)	Di-n-octylphthalate	14.13	149	1291080	60.83054	ppb		96
90)	Benzo (b) fluoranthene	14.57	252	1229082	56.69222	ppb		98
91)	Benzo (k) fluoranthene	14.61	252	1205470	57.40084	ppb		99
92)	Benzo (a) pyrene	14.99	252	1080215	54.49232	ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.74	276	1237830	55.30632	ppb		96
94)	Dibenz (a,h) anthracene	16.78	278	1140859	58.51411	ppb		99
95)	Benzo (g,h,i) perylene	17.25	276	1106770	56.92333	ppb		99

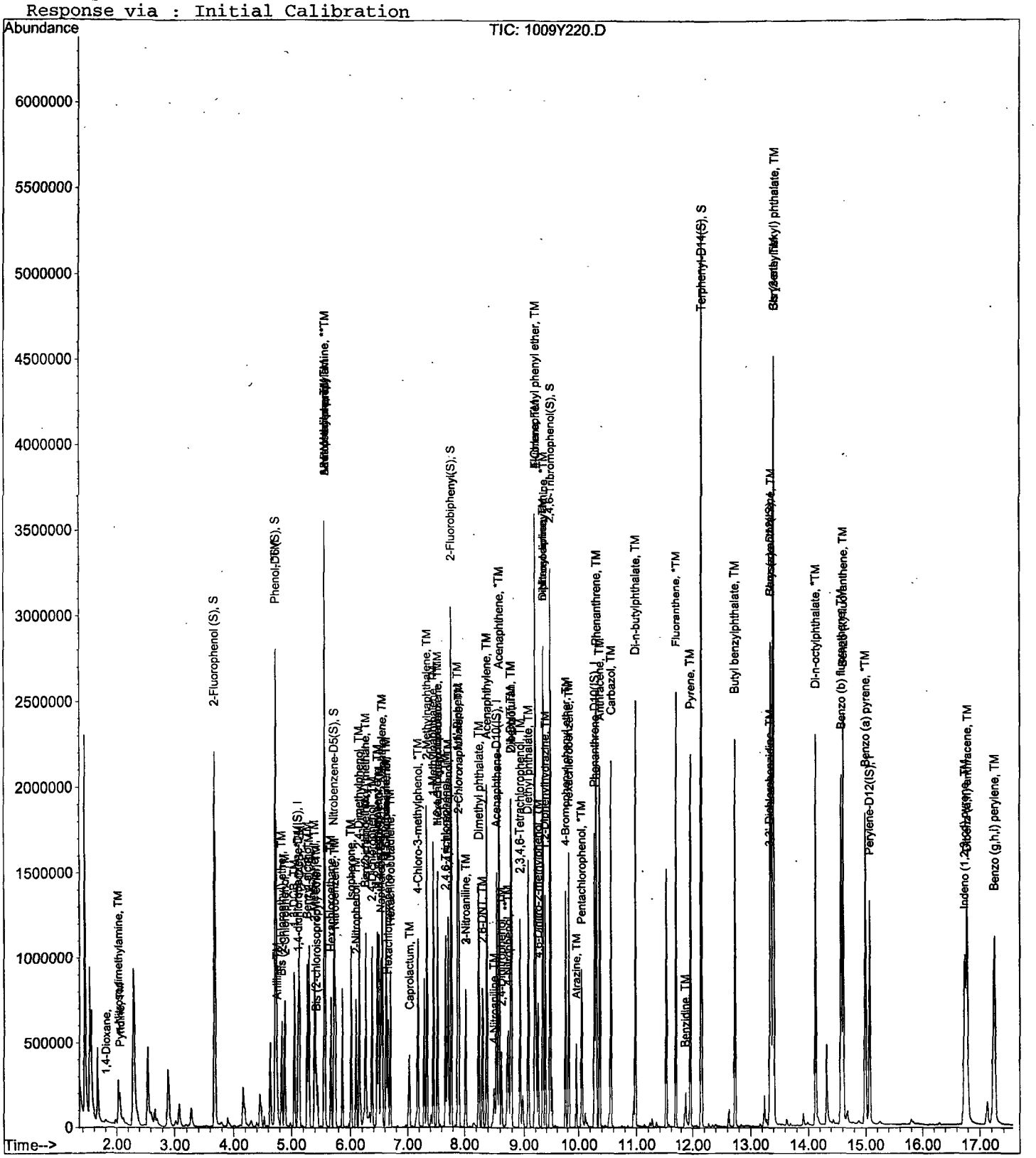
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y220.D Vial: 20
Acq On : 23 Oct 20 13:47 Operator: MA
Sample : 201021A LCS-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 23 13:50 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y221.D Vial: 21
Acq On : 23 Oct 20 14:13 Operator: MA
Sample : 201021A LCSD-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 23 14:32 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	143484	40.00000	ppb		0.00
21) Napthalene-D8(IS)	6.53	136	576643	40.00000	ppb		0.00
41) Acenaphthene-D10(IS)	8.55	164	351287	40.00000	ppb		0.00
65) Phenanthrene-D10(IS)	10.27	188	691284	40.00000	ppb		0.00
79) Chrysene-D12(IS)	13.36	240	694410	40.00000	ppb		0.00
89) Perylene-D12(IS)	15.06	264	701317	40.00000	ppb		0.00
System Monitoring Compounds							
5) 2-Fluorophenol (S)	3.68	112	1085052	243.89002	ppb		0.02
Spiked Amount 250.000			Recovery = 97.556%				
6) Phenol-D6 (S)	4.73	99	1363850	243.16800	ppb		0.02
Spiked Amount 250.000			Recovery = 97.267%				
22) Nitrobenzene-D5(S)	5.72	82	587082	121.66402	ppb		0.00
Spiked Amount 125.000			Recovery = 97.331%				
46) 2-Fluorobiphenyl(S)	7.78	172	1367124	115.42096	ppb		0.00
Spiked Amount 125.000			Recovery = 92.337%				
64) 2,4,6-Tribromophenol(S)	9.48	330	513418	252.54224	ppb		0.00
Spiked Amount 250.000			Recovery = 101.017%				
82) Terphenyl-D14(S)	12.15	244	2168912	135.44474	ppb		0.00
Spiked Amount 125.000			Recovery = 108.356%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.80	58	7007	6.80621			81
3) n-Nitrosodimethylamine	2.03	42	99562	62.56039	ppb		94
4) Pyridine	2.05	79	244956	55.03462	ppb		99
7) Phenol	4.74	94	401083	62.43472	ppb		94
8) Aniline	4.76	93	231552	45.98048	ppb		97
9) Bis (2-chloroethyl) ether	4.83	63	156179	60.16741	ppb		92
10) 2-Chlorophenol	4.89	128	318886	59.63052	ppb		98
11) 1,3-DCB	5.05	146	297297	52.01648	ppb		97
12) 1,4-DCB	5.13	146	305581	52.38143	ppb		97
13) Benzyl alcohol	5.27	108	173888	58.14776	ppb		95
14) 1,2-DCB	5.30	146	294310	53.68219	ppb		96
15) 2-Methylphenol	5.40	107	236042	59.63756	ppb		97
16) Bis (2-chloroisopropyl) et	5.42	45	211840	62.24385	ppb		96
17) Acetophenone	5.56	105	383531	55.55234	ppb		83
18) 3&4-Methylphenol	5.57	107	650258	118.30862	ppb		97
19) n-Nitrosodi-n-propylamine	5.57	70	203850	58.61855	ppb		97
20) Hexachloroethane	5.67	117	89150	43.36604	ppb		85
23) Nitrobenzene	5.74	77	296191	59.60587	ppb		90
24) Isophorone	6.01	82	500207	58.78096	ppb		95
25) 2-Nitrophenol	6.10	139	183759	61.40955	ppb	#	89
26) 2,4-Dimethylphenol	6.15	122	264157	56.50857	ppb		99
27) Benzoic acid	6.27	105	166460	54.82315	ppb		96
28) Bis (2-chloroethoxy) metha	6.26	93	331226	61.30784	ppb		98
29) 2,4-Dichlorophenol	6.37	162	272584	58.61130	ppb		94
30) 1,2,4-Trichlorobenzene	6.47	180	272330	52.54406	ppb		97
31) 3,4-Dimethylphenol	6.50	107	384742	58.91204	ppb		91
32) Naphthalene	6.55	128	885765	58.55601	ppb		99
33) 4-Chloroaniline	6.62	127	238397	37.45915	ppb		97
34) 2,6-Dichlorophenol	6.63	162	268050	58.48422	ppb		98
35) Hexachloropropene	6.65	213	107252	28.43432	ppb		98
36) Hexachlorobutadiene	6.70	225	133726	42.00992	ppb		97
37) Caprolactum	7.03	55	95798	63.25052	ppb		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y221.D Vial: 21
Acq On : 23 Oct 20 14:13 Operator: MA
Sample : 201021A LCSD-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 23 14:32 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.18	107	273704	57.58358 ppb		99
39)	2-Methylnaphthalene	7.34	142	612687	60.01416 ppb		99
40)	1-Methylnaphthalene	7.45	142	596735	56.44163 ppb		98
42)	Hexachlorocyclopentadiene	7.53	237	55488	14.16995 ppb		98
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	313594	55.30693 ppb		98
44)	2,4,6-Trichlorophenol	7.67	196	216932	57.63545 ppb		98
45)	2,4,5-Trichlorophenol	7.72	196	234518	59.47445 ppb		98
47)	1,1'-Biphenyl	7.89	154	795427	58.84523 ppb		98
48)	2-Chloronaphthalene	7.91	162	618017	57.80770 ppb		96
49)	2-Nitroaniline	8.03	65	149220	55.94547 ppb		92
50)	Dimethyl phthalate	8.25	163	780100	60.98524 ppb		98
51)	2,6-DNT	8.31	165	176086	61.96316 ppb	#	78
52)	Acenaphthylene	8.38	152	934792	56.99613 ppb		100
53)	3-Nitroaniline	8.03	138	213163	60.51462 ppb		95
54)	Acenaphthene	8.58	154	610964	56.05986 ppb		99
55)	2,4-Dinitrophenol	8.62	184	94010	63.89283 ppb		98
56)	4-Nitrophenol	8.72	65	107932	54.39189 ppb		86
57)	Dibenzofuran	8.79	168	896117	57.72283 ppb		92
58)	2,4-DNT	8.77	165	246178	60.88639 ppb		94
59)	2,3,4,6-Tetrachlorophenol	8.93	232	196288	59.60669 ppb		99
60)	Diethyl phthalate	9.07	149	716027	57.30982 ppb		97
61)	4-Chlorophenyl phenyl ethe	9.19	204	412057	57.19697 ppb		99
62)	Fluorene	9.19	166	743261	57.88009 ppb		99
63)	4-Nitroaniline	8.50	138	142881	48.46247 ppb		89
66)	4,6-Dinitro-2-methylphenol	9.24	198	153772	57.15087 ppb	#	84
67)	Diphenyl amine	9.34	169	1122014	107.17241 ppb		99
68)	n-Nitrosodiphenylamine	9.34	169	1122014	107.17241 ppb		99
69)	1,2-Diphenylhydrazine	9.37	77	554717	54.73014 ppb		98
70)	4-Bromophenyl phenyl ether	9.76	248	251708	60.78201 ppb		99
71)	Hexachlorobenzene	9.82	284	259932	58.40363 ppb	#	93
72)	Atrazine	9.96	200	106274	27.62399 ppb		96
73)	Pentachlorophenol	10.05	266	171250	56.55031 ppb		97
74)	Phenanthrene	10.30	178	1070835	57.02820 ppb		99
75)	Anthracene	10.37	178	1095227	56.12155 ppb		99
76)	Carbazol	10.55	167	1015132	57.82971 ppb		96
77)	Di-n-butylphthalate	10.98	149	1255328	59.09406 ppb		99
78)	Fluoranthene	11.68	202	1258231	57.94990 ppb	#	97
80)	Benzidine	11.86	184	121253	19.47463 ppb		96
81)	Pyrene	11.95	202	1331717	60.09556 ppb		99
83)	Butyl benzylphthalate	12.72	149	563643	61.73176 ppb		86
84)	3,3'-Dichlorobenzidine	13.33	252	69028	9.40793 ppb		97
85)	Benz (a) anthracene	13.35	228	1254684	56.22875 ppb		99
86)	Bis (2-ethylhexyl) phthala	13.40	149	1042892	81.44891 ppb		99
87)	Chrysene	13.39	228	1283698	59.78149 ppb		99
88)	Di-n-octylphthalate	14.13	149	1382295	65.93003 ppb		96
90)	Benzo (b) fluoranthene	14.57	252	1275626	58.59839 ppb		98
91)	Benzo (k) fluoranthene	14.61	252	1259117	59.71008 ppb		98
92)	Benzo (a) pyrene	14.99	252	1141406	57.34360 ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.74	276	1300804	57.88224 ppb		99
94)	Dibenz (a,h) anthracene	16.78	278	1203053	61.45159 ppb		98
95)	Benzo (g,h,i) perylene	17.25	276	1162557	59.54796 ppb		100

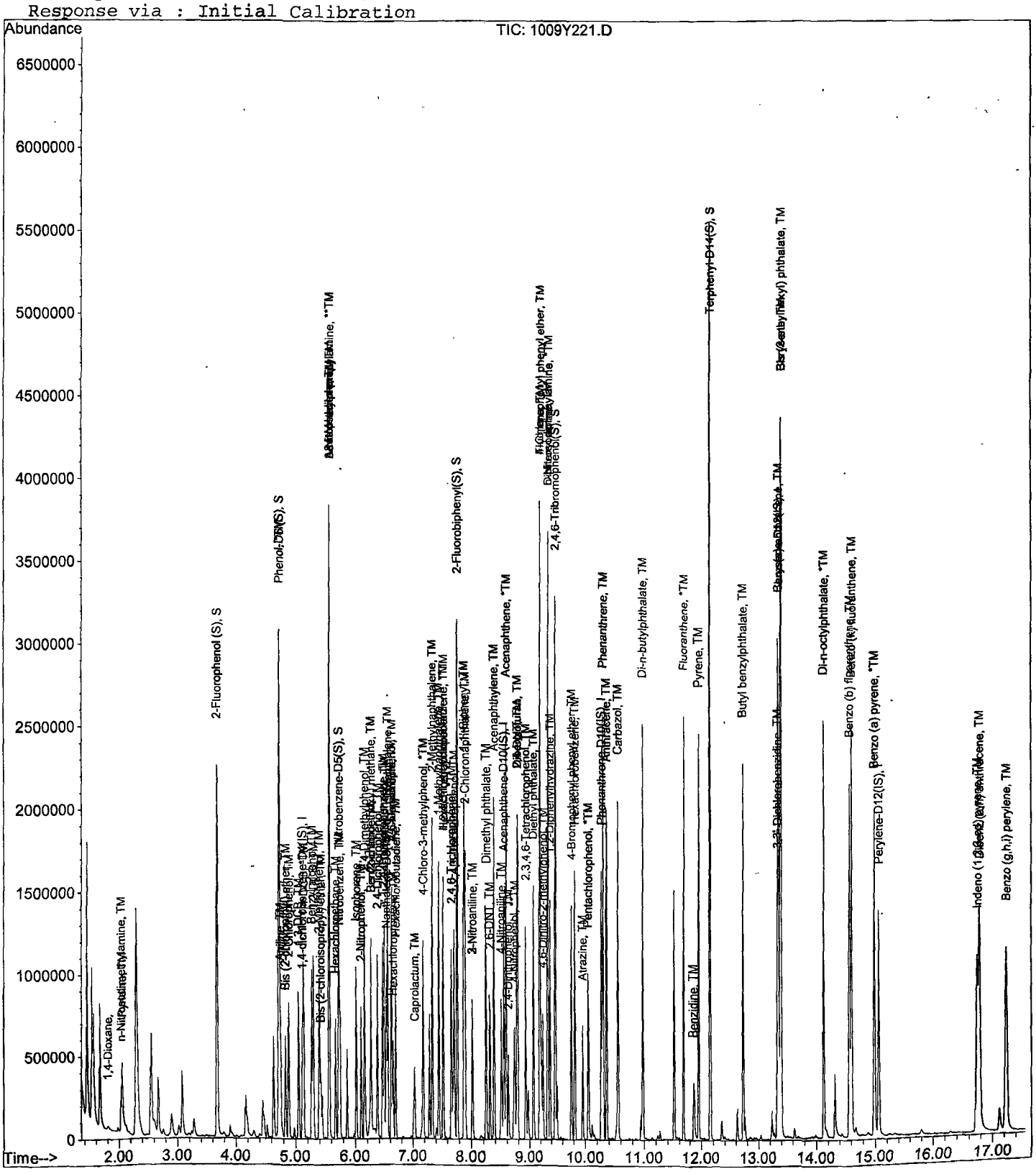
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y221.D Vial: 21
Acq On : 23 Oct 20 14:13 Operator: MA
Sample : 201021A LCSD-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 23 14:32 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y242.D Vial: 42
Acq On : 26 Oct 20 13:11 Operator: MA
Sample : BA20539W28 MS-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 15:14 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	154125	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.52	136	625662	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	378613	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	740648	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	760723	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.06	264	753071	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.67	112	1059578	221.72099 ppb	0.01
Spiked Amount 250.000			Recovery =	88.688%	
6) Phenol-D6 (S)	4.72	99	1319584	219.03183 ppb	0.01
Spiked Amount 250.000			Recovery =	87.613%	
22) Nitrobenzene-D5(S)	5.73	82	576190	110.05160 ppb	0.00
Spiked Amount 125.000			Recovery =	88.042%	
46) 2-Fluorobiphenyl(S)	7.77	172	1370566	107.36019 ppb	0.00
Spiked Amount 125.000			Recovery =	85.888%	
64) 2,4,6-Tribromophenol(S)	9.47	330	499877	228.13539 ppb	0.00
Spiked Amount 250.000			Recovery =	91.254%	
82) Terphenyl-D14(S)	12.15	244	2158099	123.02149 ppb	0.00
Spiked Amount 125.000			Recovery =	98.417%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.80	58	7437	6.72514	81
3) n-Nitrosodimethylamine	2.03	42	98419	57.57251 ppb	95
4) Pyridine	2.05	79	221528	46.33475 ppb	100
7) Phenol	4.74	94	380771	55.18057 ppb	97
8) Aniline	4.75	93	148864	27.51979 ppb	93
9) Bis (2-chloroethyl) ether	4.83	63	148679	53.32350 ppb	86
10) 2-Chlorophenol	4.88	128	309762	53.92519 ppb	95
11) 1,3-DCB	5.05	146	311835	50.79321 ppb	99
12) 1,4-DCB	5.13	146	325045	51.87104 ppb	99
13) Benzyl alcohol	5.27	108	168265	52.38266 ppb	91
14) 1,2-DCB	5.30	146	304432	51.69468 ppb	95
15) 2-Methylphenol	5.39	107	220308	51.81926 ppb	98
16) Bis (2-chloroisopropyl) et	5.42	45	201700	55.17277 ppb	98
17) Acetophenone	5.56	105	371018	50.02962 ppb	89
18) 3&4-Methylphenol	5.57	107	623291	105.57277 ppb	98
19) n-Nitrosodi-n-propylamine	5.57	70	200201	53.59459 ppb	99
20) Hexachloroethane	5.67	117	100615	45.56397 ppb	95
23) Nitrobenzene	5.74	77	287365	53.29891 ppb	95
24) Isophorone	6.01	82	487006	52.74587 ppb	99
25) 2-Nitrophenol	6.10	139	176951	54.50139 ppb	93
26) 2,4-Dimethylphenol	6.15	122	263694	51.98999 ppb	97
27) Benzoic acid	6.25	105	183071	55.42875 ppb	94
28) Bis (2-chloroethoxy) metha	6.26	93	313191	53.42790 ppb	97
29) 2,4-Dichlorophenol	6.37	162	263150	52.14968 ppb	98
30) 1,2,4-Trichlorobenzene	6.46	180	283881	50.48144 ppb	99
31) 3,4-Dimethylphenol	6.49	107	369939	52.20737 ppb	98
32) Naphthalene	6.55	128	885364	53.94387 ppb	99
33) 4-Chloroaniline	6.62	127	132589	19.20136 ppb	95
34) 2,6-Dichlorophenol	6.63	162	259146	52.11163 ppb	95
35) Hexachloropropene	6.65	213	113172	27.65309 ppb	98
36) Hexachlorobutadiene	6.69	225	148778	43.07665 ppb	99
37) Caprolactum	7.03	55	91222	55.51042 ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y242.D Vial: 42
Acq On : 26 Oct 20 13:11 Operator: MA
Sample : BA20539W28 MS-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 15:14 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.18	107	266449	51.66529	ppb		97
39)	2-Methylnaphthalene	7.34	142	619928	55.96591	ppb		98
40)	1-Methylnaphthalene	7.45	142	603032	52.56850	ppb		98
42)	Hexachlorocyclopentadiene	7.53	237	85696	20.30469	ppb		100
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	320821	52.49781	ppb		97
44)	2,4,6-Trichlorophenol	7.68	196	211297	52.08660	ppb		99
45)	2,4,5-Trichlorophenol	7.72	196	234512	55.18053	ppb		98
47)	1,1'-Biphenyl	7.88	154	785862	53.94159	ppb		98
48)	2-Chloronaphthalene	7.91	162	612855	53.18750	ppb		94
49)	2-Nitroaniline	8.02	65	147913	51.45301	ppb		81
50)	Dimethyl phthalate	8.24	163	761551	55.23826	ppb		100
51)	2,6-DNT	8.31	165	170879	55.79098	ppb		87
52)	Acenaphthylene	8.38	152	929935	52.60772	ppb		100
53)	3-Nitroaniline	8.03	138	208303	54.86692	ppb		94
54)	Acenaphthene	8.58	154	614121	52.28256	ppb		99
55)	2,4-Dinitrophenol	8.62	184	64857	48.29228	ppb		98
56)	4-Nitrophenol	8.72	65	118564	55.43746	ppb		81
57)	Dibenzofuran	8.78	168	869242	51.95055	ppb		100
58)	2,4-DNT	8.77	165	240138	55.10594	ppb		98
59)	2,3,4,6-Tetrachlorophenol	8.93	232	186843	52.64348	ppb		94
60)	Diethyl phthalate	9.07	149	716574	53.21416	ppb		97
61)	4-Chlorophenyl phenyl ethe	9.19	204	406887	52.40299	ppb		99
62)	Fluorene	9.18	166	726510	52.49235	ppb		99
63)	4-Nitroaniline	8.50	138	89487	28.16162	ppb	#	76
66)	4,6-Dinitro-2-methylphenol	9.24	198	138074	47.89632	ppb	#	87
67)	Diphenyl amine	9.34	169	1075984	95.92574	ppb		99
68)	n-Nitrosodiphenylamine	9.34	169	1075984	95.92574	ppb		99
69)	1,2-Diphenylhydrazine	9.37	77	544764	50.16585	ppb		96
70)	4-Bromophenyl phenyl ether	9.76	248	246623	55.58483	ppb		97
71)	Hexachlorobenzene	9.82	284	251426	52.72723	ppb		95
72)	Atrazine	9.96	200	93057	22.57631	ppb		99
73)	Pentachlorophenol	10.05	266	166251	51.24050	ppb		99
74)	Phenanthrene	10.30	178	1074699	53.41935	ppb		99
75)	Anthracene	10.36	178	1087804	52.02605	ppb		99
76)	Carbazol	10.55	167	1016451	54.04551	ppb		96
77)	Di-n-butylphthalate	10.98	149	1259166	55.32409	ppb		98
78)	Fluoranthene	11.69	202	1242274	53.40161	ppb		98
80)	Benzidine	11.86	184	29302	4.29599	ppb	#	93
81)	Pyrene	11.95	202	1306066	53.80034	ppb		100
83)	Butyl benzylphthalate	12.73	149	547728	54.75943	ppb		85
84)	3,3'-Dichlorobenzidine	13.33	252	45267	5.63171	ppb		98
85)	Benz (a) anthracene	13.35	228	1253138	51.26399	ppb		99
86)	Bis (2-ethylhexyl) phthala	13.40	149	768280	54.77154	ppb		98
87)	Chrysene	13.38	228	1247628	53.03694	ppb		99
88)	Di-n-octylphthalate	14.13	149	1315062	57.25563	ppb		95
90)	Benzo (b) fluoranthene	14.57	252	1276763	54.61992	ppb		99
91)	Benzo (k) fluoranthene	14.61	252	1215887	53.69740	ppb		99
92)	Benzo (a) pyrene	14.99	252	1110482	51.95589	ppb		100
93)	Indeno (1,2,3-cd) pyrene	16.74	276	1274557	52.81669	ppb		96
94)	Dibenz (a,h) anthracene	16.78	278	1170832	55.69566	ppb		98
95)	Benzo (g,h,i) perylene	17.24	276	1143740	54.55800	ppb		98

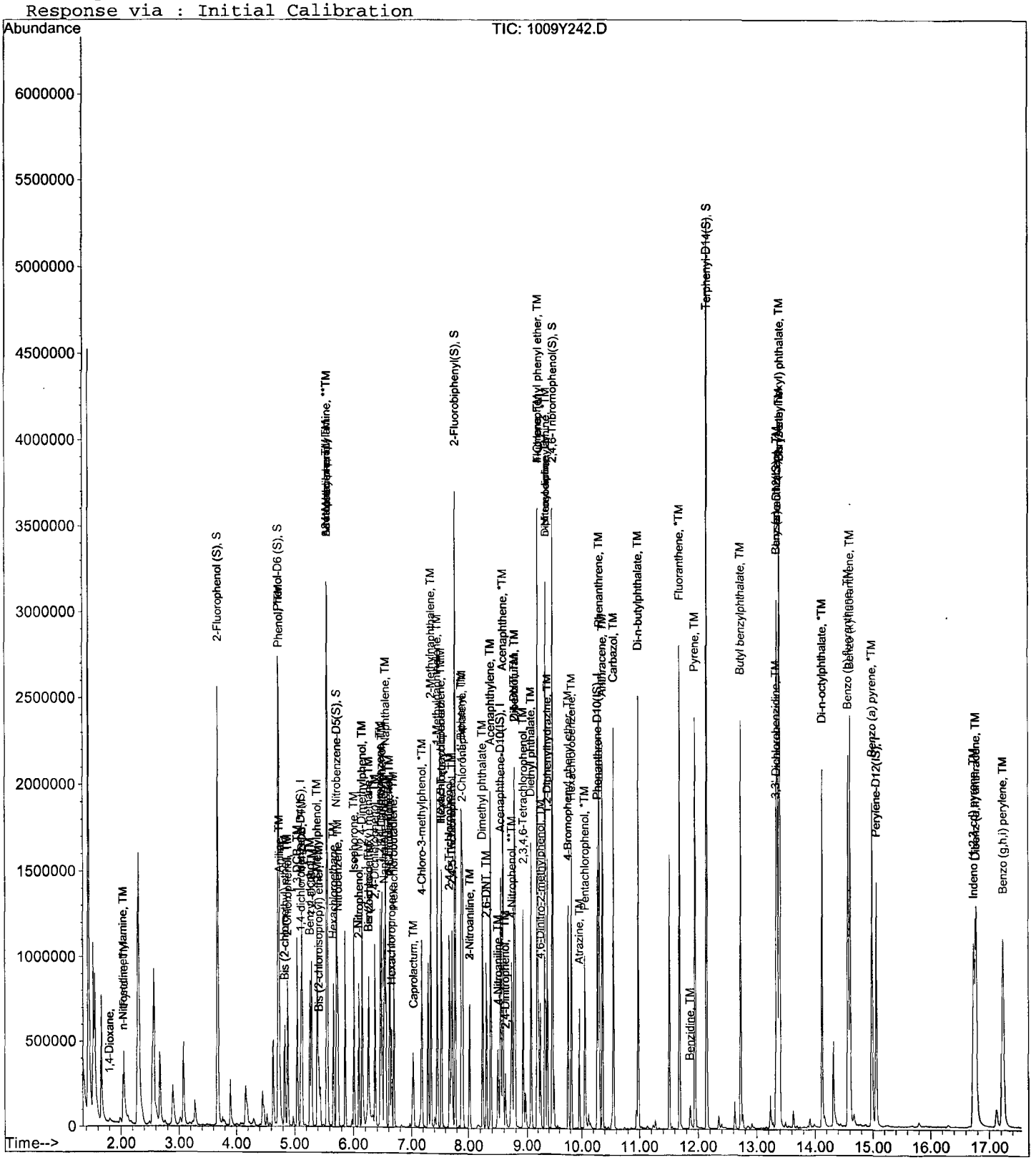
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y242.D Vial: 42
Acq On : 26 Oct 20 13:11 Operator: MA
Sample : BA20539W28 MS-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 15:14 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y243.D Vial: 43
Acq On : 26 Oct 20 13:36 Operator: MA
Sample : BA20539W27 MSD-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 15:15 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	149230	40.00000 ppb		0.00
21) Napthalene-D8(IS)	6.53	136	597199	40.00000 ppb		0.00
41) Acenaphthene-D10(IS)	8.54	164	357195	40.00000 ppb		0.00
65) Phenanthrene-D10(IS)	10.27	188	702735	40.00000 ppb		0.00
79) Chrysene-D12(IS)	13.36	240	735995	40.00000 ppb		0.00
89) Perylene-D12(IS)	15.06	264	728633	40.00000 ppb		0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.68	112	1008340	217.92036 ppb		0.01
Spiked Amount 250.000			Recovery =	87.168%		
6) Phenol-D6 (S)	4.72	99	1262923	216.50305 ppb		0.01
Spiked Amount 250.000			Recovery =	86.601%		
22) Nitrobenzene-D5(S)	5.73	82	571347	114.32766 ppb		0.00
Spiked Amount 125.000			Recovery =	91.462%		
46) 2-Fluorobiphenyl(S)	7.77	172	1356948	112.66699 ppb		0.00
Spiked Amount 125.000			Recovery =	90.134%		
64) 2,4,6-Tribromophenol(S)	9.47	330	487158	235.66196 ppb		0.00
Spiked Amount 250.000			Recovery =	94.265%		
82) Terphenyl-D14(S)	12.14	244	2058833	121.30604 ppb		-0.02
Spiked Amount 125.000			Recovery =	97.045%		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.80	58	6720	6.27610		89
3) n-Nitrosodimethylamine	2.03	42	91353	55.19198 ppb		90
4) Pyridine	2.05	79	222660	48.09915 ppb		96
7) Phenol	4.73	94	364023	54.48389 ppb		86
8) Aniline	4.75	93	161920	30.91525 ppb		99
9) Bis (2-chloroethyl) ether	4.83	63	146546	54.28251 ppb		99
10) 2-Chlorophenol	4.88	128	306542	55.11508 ppb		98
11) 1,3-DCB	5.05	146	321219	54.03797 ppb		99
12) 1,4-DCB	5.13	146	320984	52.90318 ppb		99
13) Benzyl alcohol	5.26	108	165907	53.34275 ppb		99
14) 1,2-DCB	5.29	146	302424	53.03820 ppb		98
15) 2-Methylphenol	5.39	107	221752	53.86981 ppb		96
16) Bis (2-chloroisopropyl) et	5.41	45	199001	56.22003 ppb		94
17) Acetophenone	5.56	105	362505	50.48510 ppb		99
18) 3&4-Methylphenol	5.56	107	605901	105.99361 ppb		94
19) n-Nitrosodi-n-propylamine	5.56	70	192885	53.32982 ppb		94
20) Hexachloroethane	5.67	117	101021	47.24843 ppb		85
23) Nitrobenzene	5.75	77	285965	55.56714 ppb		99
24) Isophorone	6.02	82	482882	54.79184 ppb		98
25) 2-Nitrophenol	6.10	139	172038	55.51363 ppb		99
26) 2,4-Dimethylphenol	6.15	122	252266	52.10734 ppb		96
27) Benzoic acid	6.26	105	150636	49.21301 ppb		97
28) Bis (2-chloroethoxy) metha	6.26	93	306880	54.84640 ppb		99
29) 2,4-Dichlorophenol	6.37	162	262555	54.51164 ppb		98
30) 1,2,4-Trichlorobenzene	6.46	180	284284	52.96251 ppb		98
31) 3,4-Dimethylphenol	6.49	107	367176	54.28710 ppb		97
32) Naphthalene	6.55	128	876233	55.93202 ppb		100
33) 4-Chloroaniline	6.62	127	144827	21.97327 ppb	#	93
34) 2,6-Dichlorophenol	6.62	162	254049	53.52150 ppb		99
35) Hexachloropropene	6.65	213	109624	28.06280 ppb		98
36) Hexachlorobutadiene	6.69	225	149460	45.33660 ppb		100
37) Caprolactum	7.03	55	91536	58.35627 ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y243.D Vial: 43
Acq On : 26 Oct 20 13:36 Operator: MA
Sample : BA20539W27 MSD-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 15:15 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.18	107	261095	53.04007 ppb		96
39)	2-Methylnaphthalene	7.34	142	613693	58.04358 ppb		99
40)	1-Methylnaphthalene	7.45	142	592880	54.14680 ppb		99
42)	Hexachlorocyclopentadiene	7.52	237	67296	16.90111 ppb		97
43)	1,2,4,5-Tetrachlorobenzene	7.53	216	317123	55.00425 ppb		98
44)	2,4,6-Trichlorophenol	7.67	196	211121	55.16381 ppb		95
45)	2,4,5-Trichlorophenol	7.71	196	228114	56.89353 ppb		92
47)	1,1'-Biphenyl	7.88	154	760145	55.30496 ppb		99
48)	2-Chloronaphthalene	7.90	162	598832	55.08673 ppb		98
49)	2-Nitroaniline	8.02	65	140825	51.92475 ppb		92
50)	Dimethyl phthalate	8.24	163	749530	57.62623 ppb		98
51)	2,6-DNT	8.31	165	167736	58.04860 ppb		94
52)	Acenaphthylene	8.38	152	901688	54.06838 ppb		100
53)	3-Nitroaniline	8.02	138	199993	55.83673 ppb		96
54)	Acenaphthene	8.58	154	587436	53.00949 ppb		99
55)	2,4-Dinitrophenol	8.62	184	70799	52.65050 ppb		90
56)	4-Nitrophenol	8.73	65	121926	60.42782 ppb		76
57)	Dibenzofuran	8.78	168	849256	53.79950 ppb		96
58)	2,4-DNT	8.77	165	235071	57.17771 ppb		92
59)	2,3,4,6-Tetrachlorophenol	8.93	232	188354	56.25133 ppb	#	91
60)	Diethyl phthalate	9.07	149	708228	55.74802 ppb		99
61)	4-Chlorophenyl phenyl ethe	9.19	204	397086	54.20720 ppb		92
62)	Fluorene	9.18	166	716646	54.88444 ppb		99
63)	4-Nitroaniline	8.49	138	98787	32.95244 ppb		97
66)	4,6-Dinitro-2-methylphenol	9.25	198	139742	51.09018 ppb		90
67)	Diphenyl amine	9.33	169	1102844	103.62480 ppb		98
68)	n-Nitrosodiphenylamine	9.33	169	1102844	103.62480 ppb		98
69)	1,2-Diphenylhydrazine	9.38	77	546390	53.03014 ppb	#	85
70)	4-Bromophenyl phenyl ether	9.76	248	238385	56.62679 ppb	#	91
71)	Hexachlorobenzene	9.82	284	251810	55.65677 ppb		92
72)	Atrazine	9.96	200	100906	25.80128 ppb		97
73)	Pentachlorophenol	10.05	266	163975	53.26562 ppb		98
74)	Phenanthrene	10.30	178	1047557	54.87944 ppb		99
75)	Anthracene	10.36	178	1062908	53.57795 ppb		99
76)	Carbazol	10.55	167	989034	55.42486 ppb		96
77)	Di-n-butylphthalate	10.97	149	1249545	57.86333 ppb		99
78)	Fluoranthene	11.69	202	1218157	55.19001 ppb		99
80)	Benzidine	11.85	184	105229	15.94605 ppb	#	97
81)	Pyrene	11.95	202	1288703	54.86866 ppb		99
83)	Butyl benzylphthalate	12.73	149	543840	56.19747 ppb		99
84)	3,3'-Dichlorobenzidine	13.32	252	36822	4.73497 ppb		98
85)	Benz (a) anthracene	13.34	228	1224774	51.78705 ppb		99
86)	Bis (2-ethylhexyl) phthala	13.40	149	748337	55.14223 ppb		95
87)	Chrysene	13.39	228	1211775	53.24355 ppb		99
88)	Di-n-octylphthalate	14.12	149	1294261	58.24324 ppb		99
90)	Benzo (b) fluoranthene	14.57	252	1203914	53.23084 ppb		98
91)	Benzo (k) fluoranthene	14.60	252	1237393	56.48001 ppb		98
92)	Benzo (a) pyrene	14.98	252	1099999	53.19155 ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.74	276	1249609	53.51963 ppb		100
94)	Dibenz (a,h) anthracene	16.77	278	1151983	56.63696 ppb		98
95)	Benzo (g,h,i) perylene	17.24	276	1125495	55.48834 ppb		99

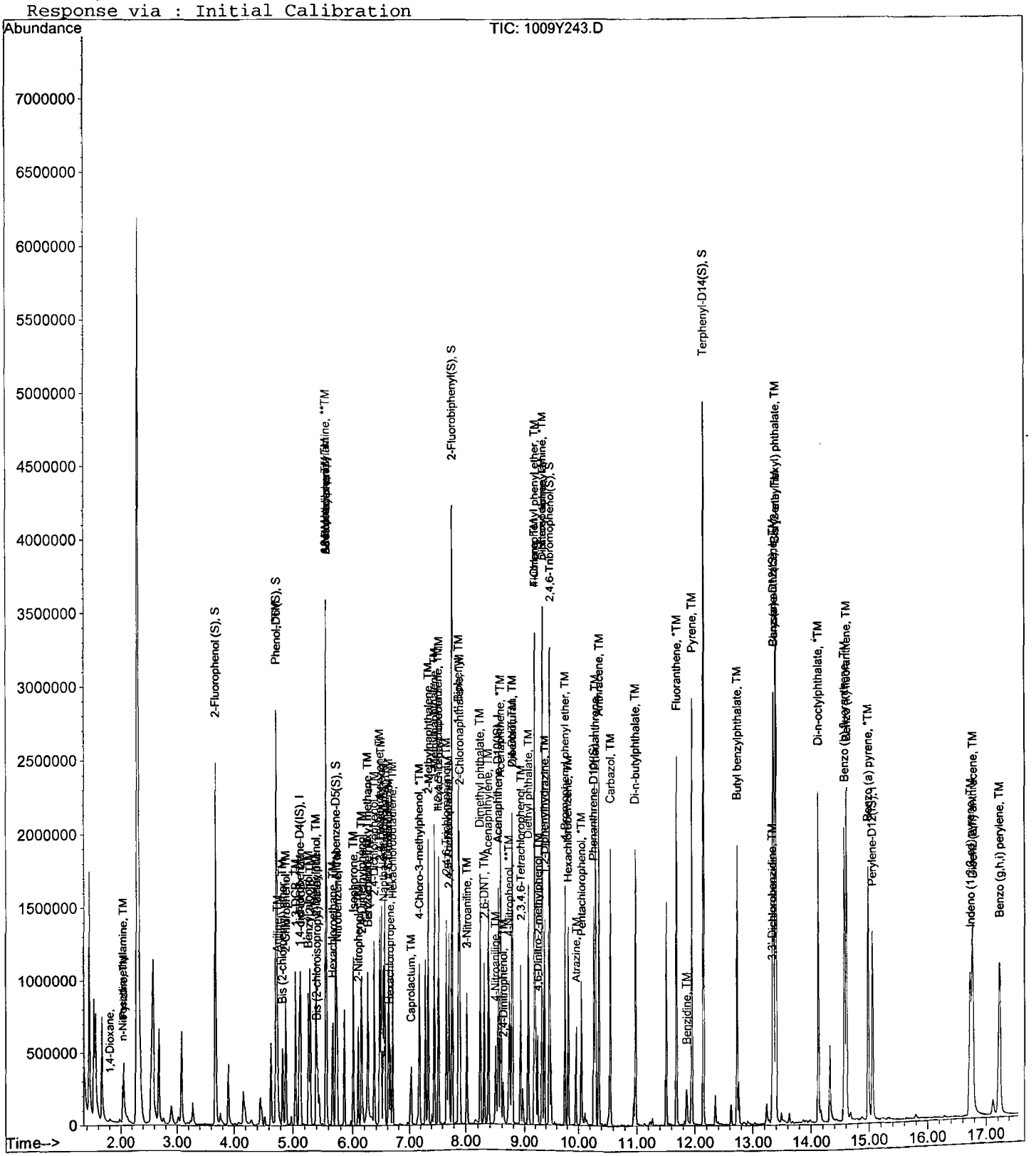
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y243.D Vial: 43
Acq On : 26 Oct 20 13:36 Operator: MA
Sample : BA20539W27 MSD-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 26 15:15 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration

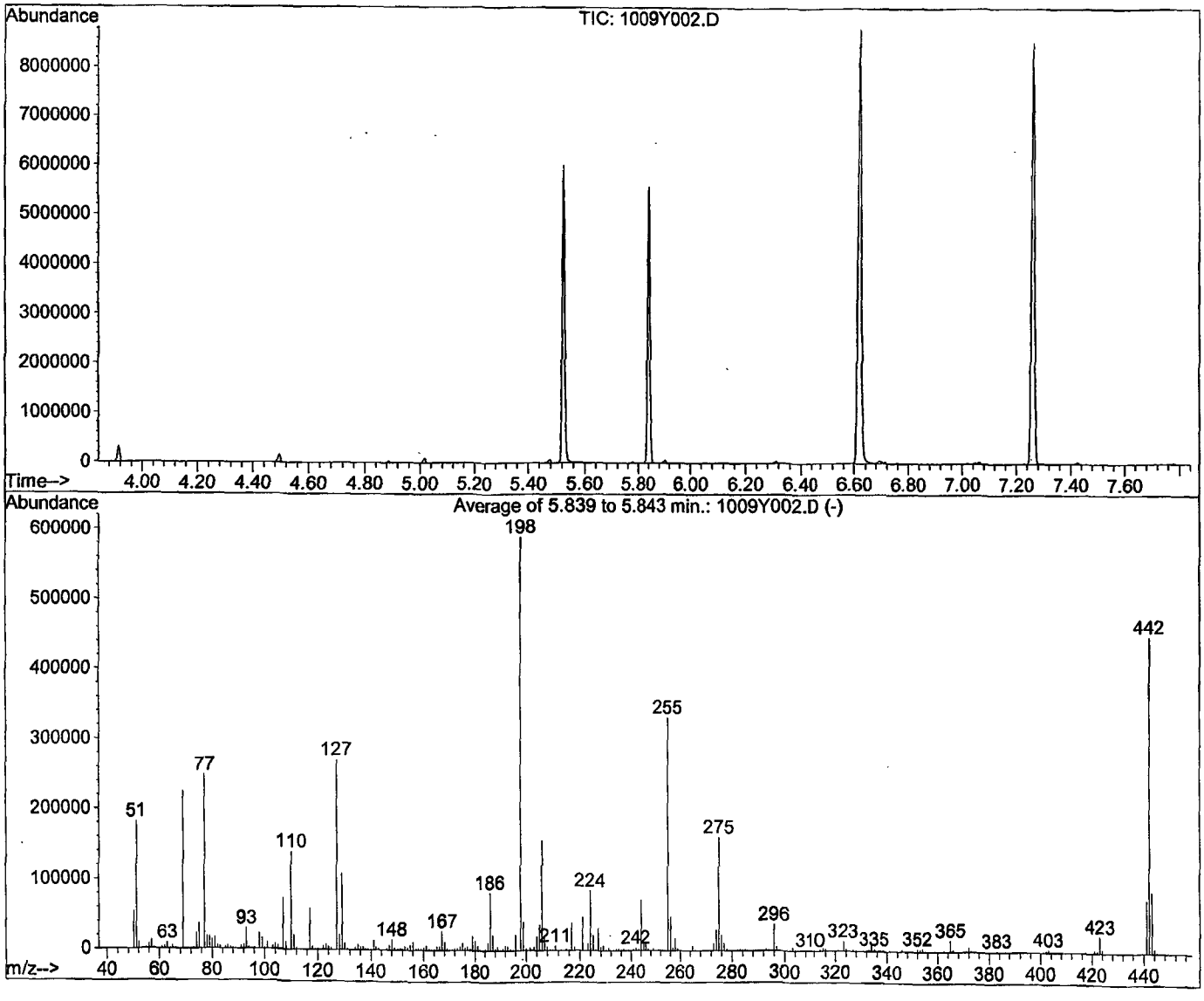


DFTPP

Data File : M:\YODA\DATA\Y201009\1009Y002.D
Acq On : 9 Oct 20 10:55
Sample : SV TUNE 10/02/20
Misc :

Vial: 2
Operator: MA
Inst : Yoda
Multiplr: 1.00

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 902, 903, 904; Background Corrected with Scan 893

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	30.7	181099	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.2	468	PASS
127	198	10	80	45.8	270485	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	590528	PASS
199	198	5	9	6.9	40837	PASS
275	198	10	60	27.3	160981	PASS
365	198	1	100	2.7	15871	PASS
441	442	0.01	24	16.5	74272	PASS
442	198	50	500	76.1	449344	PASS
443	442	15	24	19.4	86981	PASS

1009Y002.D Y1009.M Sat Oct 10 15:02:25 2020

Data File Name:	**1009Y002.D**
Data File Path:	**M:\YODA\DATA\Y201009**
Operator:	**MA**
Date Acquired:	**9 Oct 20 10:55**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/02/20**
Vial Number:	**2**
Instrument Name:	**Yoda**

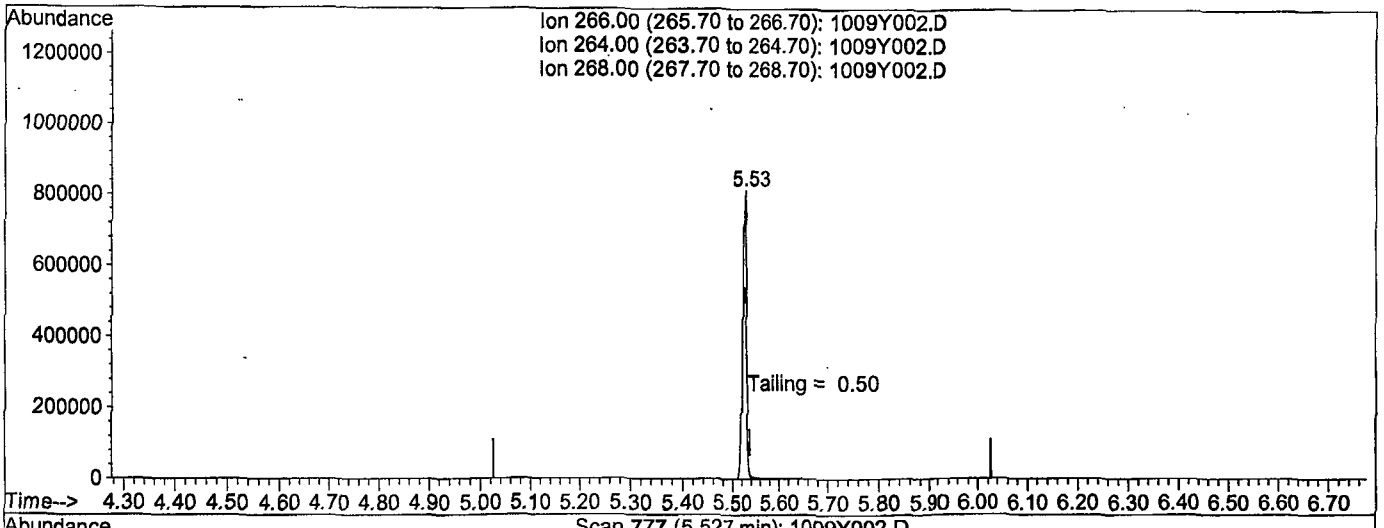
#	Name	Ret Time	Target Response
1)	DDT	7.26	61419600
2)	DDD	7.02	151178
3)	DDE	5.93	385231

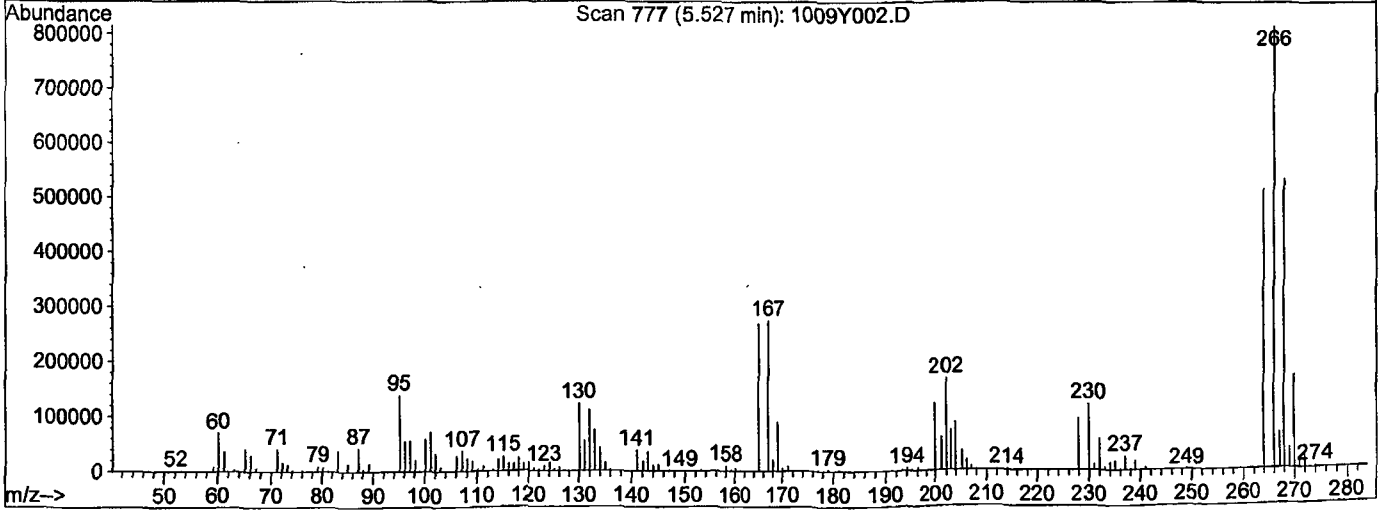
Breakdown **0.87**

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y002.D Vial: 2
Acq On : 9 Oct 20 10:55 Operator: MA
Sample : SV TUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 10:49 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration





TIC: 1009Y002.D

(5) Pentachlorophenol

5.53min 0.0000

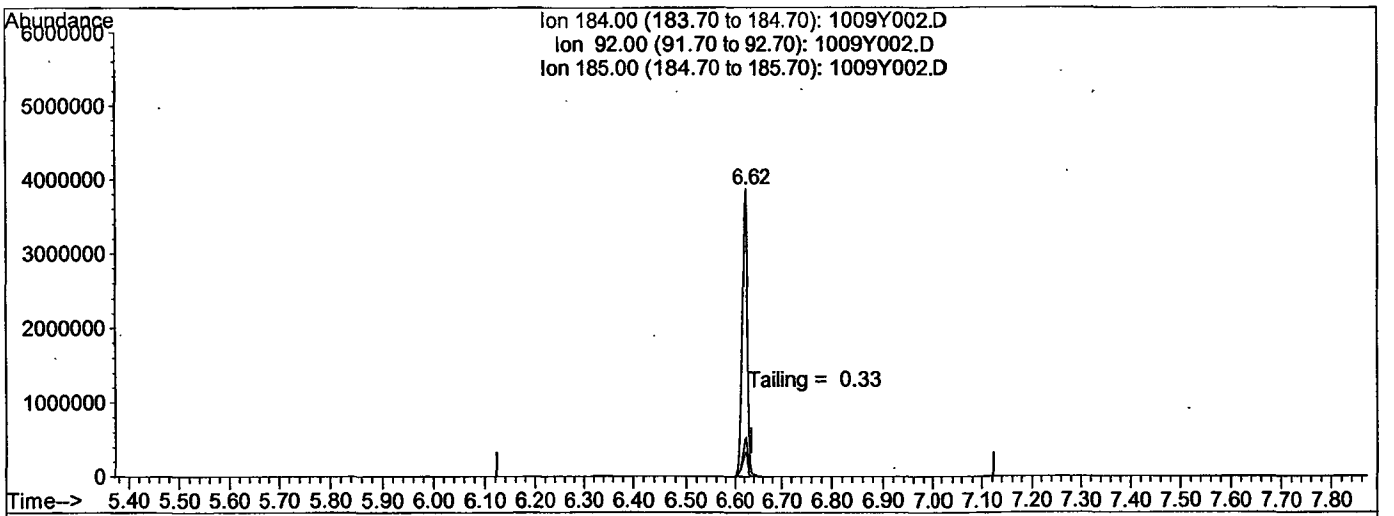
response 5042204

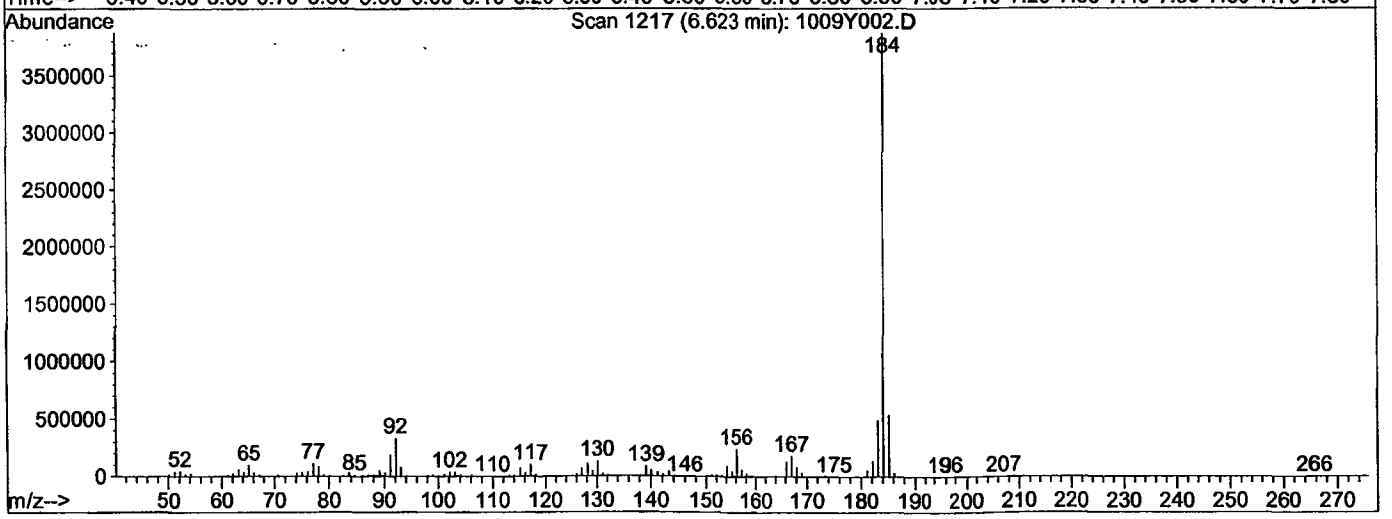
Ion	Exp%	Act%
266.00	100	100
264.00	63.10	64.09
268.00	65.40	65.83
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y002.D Vial: 2
Acq On : 9 Oct 20 10:55 Operator: MA
Sample : SV TUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 10:49 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration





TIC: 1009Y002.D

(6) Benzidine

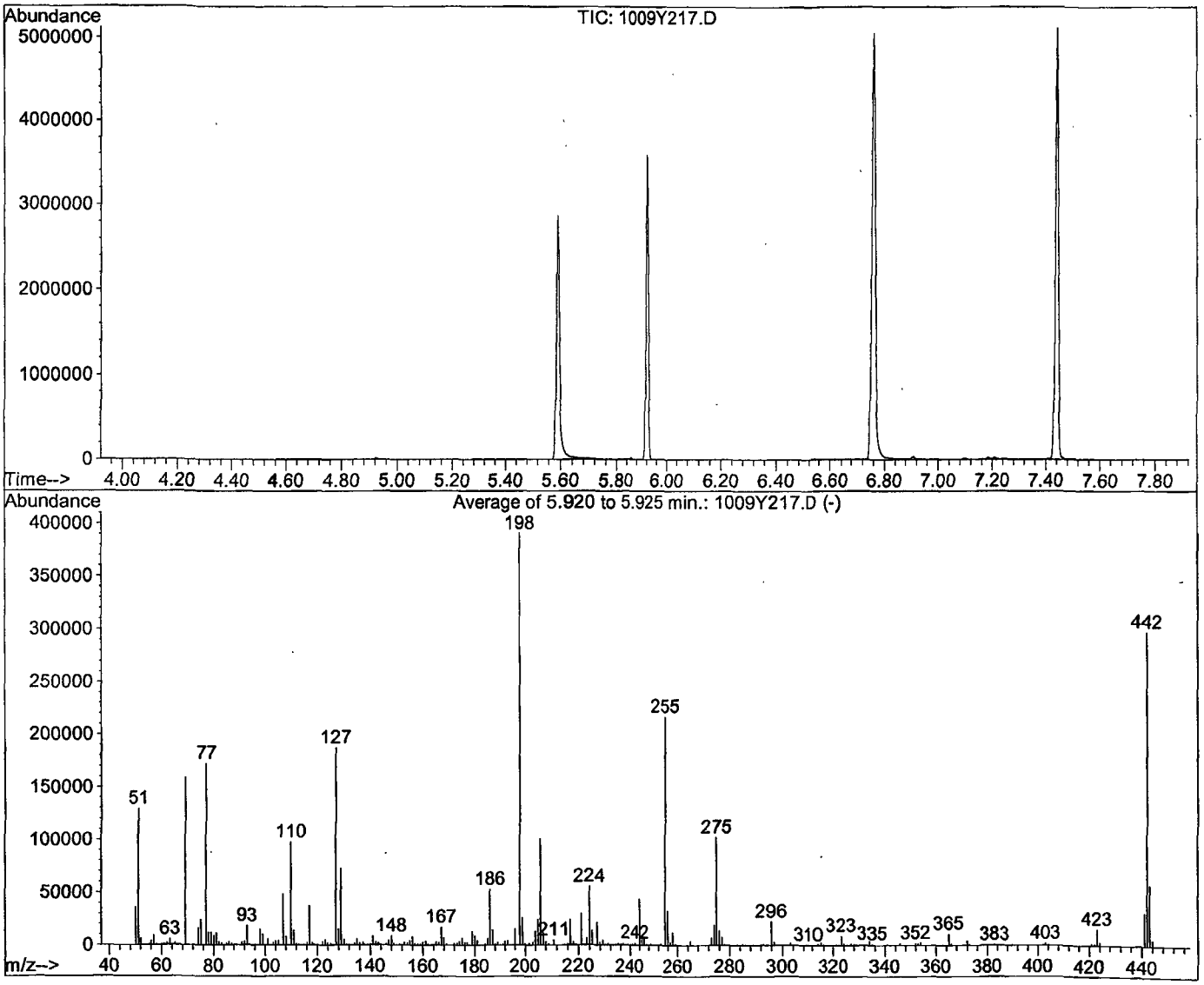
6.62min 0.0000

response 29089801

Ion	Exp%	Act%
184.00	100	100
92.00	8.50	8.82
185.00	13.80	13.96
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y201009\1009Y217.D Vial: 17
Acq On : 23 Oct 20 12:41 Operator: MA
Sample : SVTUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 935, 936, 937; Background Corrected with Scan 926

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	33.1	129585	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	584	PASS
127	198	10	80	48.0	187840	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	390997	PASS
199	198	5	9	6.6	25813	PASS
275	198	10	60	26.2	102549	PASS
365	198	1	100	2.8	10891	PASS
441	442	0.01	24	10.6	31461	PASS
442	198	50	500	76.2	297856	PASS
443	442	15	24	19.6	58232	PASS

1009Y217.D Y1009.M Fri Oct 23 12:33:49 2020

Data File Name:	**1009Y217.D**
Data File Path:	**M:\YODA\DATA\Y201009**
Operator:	**MA**
Date Acquired:	**23 Oct 2020 12:41**
Method File:	**DFTPP2.M**
Sample Name:	**SVTUNE 10/02/20**
Vial Number:	**17**
Instrument Name:	**Yoda**

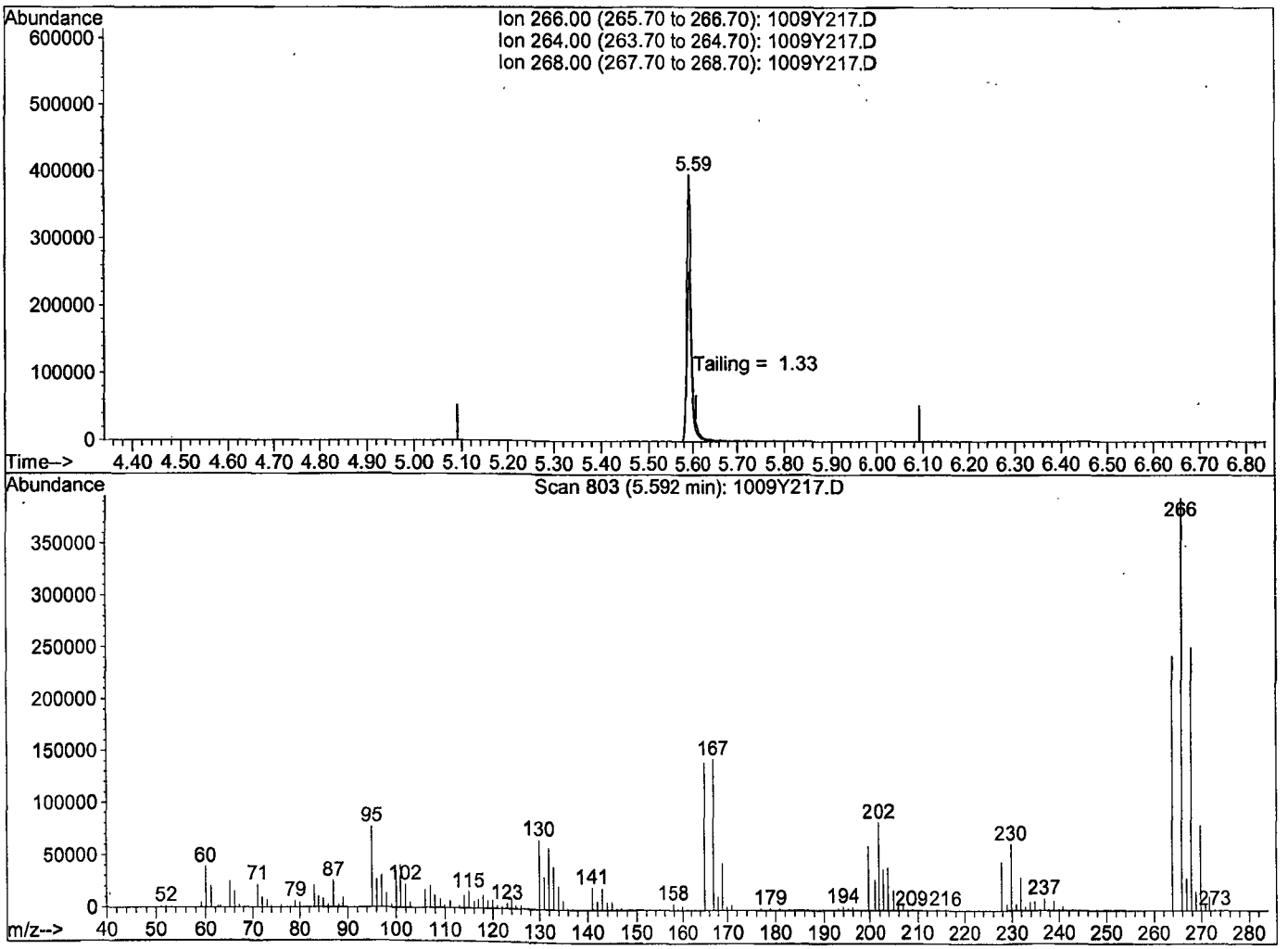
#	Name	Ret Time	Target Response
1)	DDT	7.44	40186600
2)	DDD	7.21	150397
3)	DDE	6.21	0

Breakdown **0.37**

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y217.D Vial: 17
Acq On : 23 Oct 20 12:41 Operator: MA
Sample : SVTUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 23 12:34 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 23 12:34:41 2020
Response via : Single Level Calibration



TIC: 1009Y217.D

(5) Pentachlorophenol

5.59min 0.0000

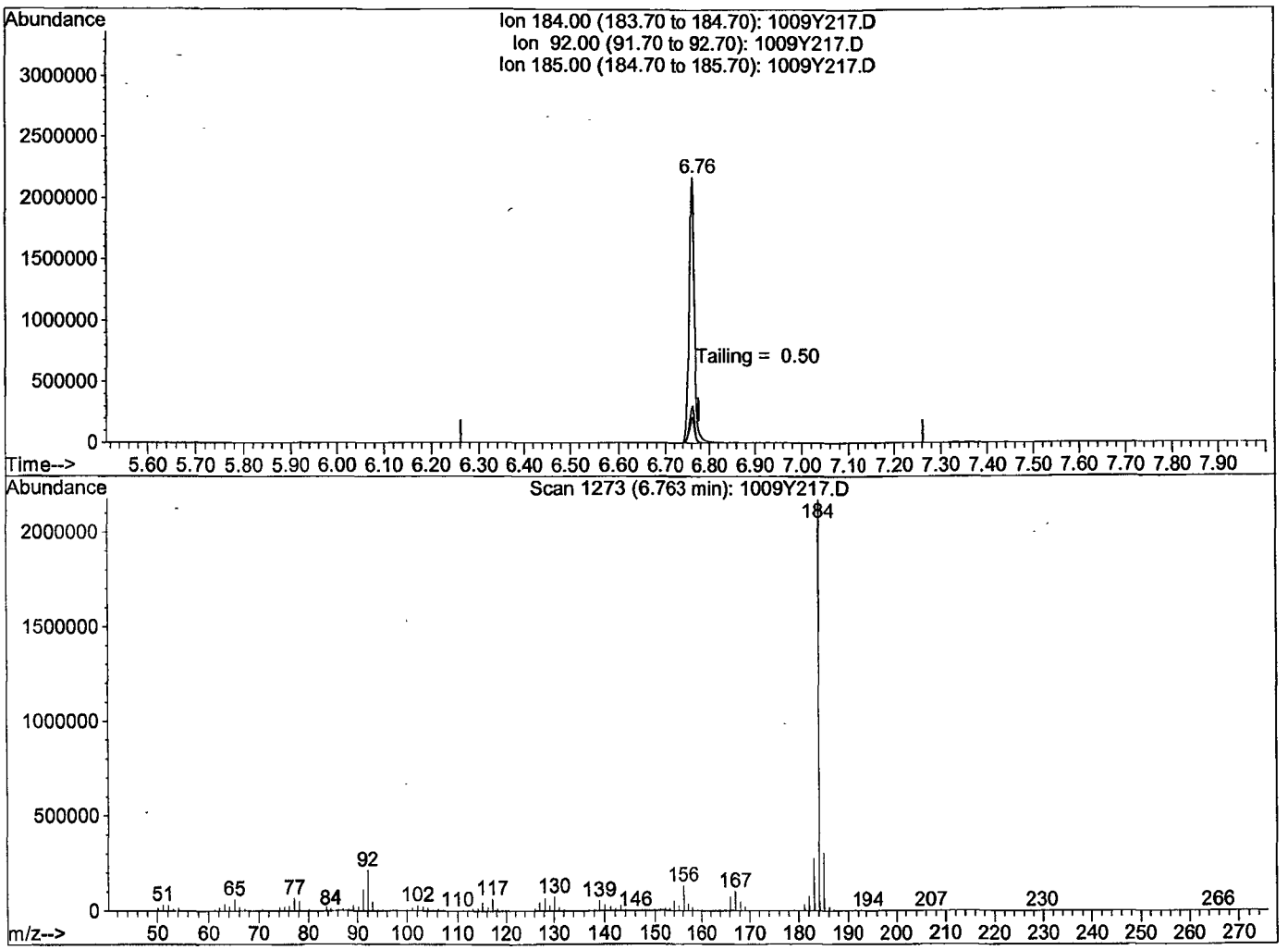
response 3020119

Ion	Exp%	Act%
266.00	100	100
264.00	61.70	62.71
268.00	63.80	63.48
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y217.D Vial: 17
Acq On : 23 Oct 20 12:41 Operator: MA
Sample : SVTUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 23 12:34 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 23 12:34:41 2020
Response via : Single Level Calibration



TIC: 1009Y217.D

(6) Benzidine

6.76min 0.0000

response 18909753

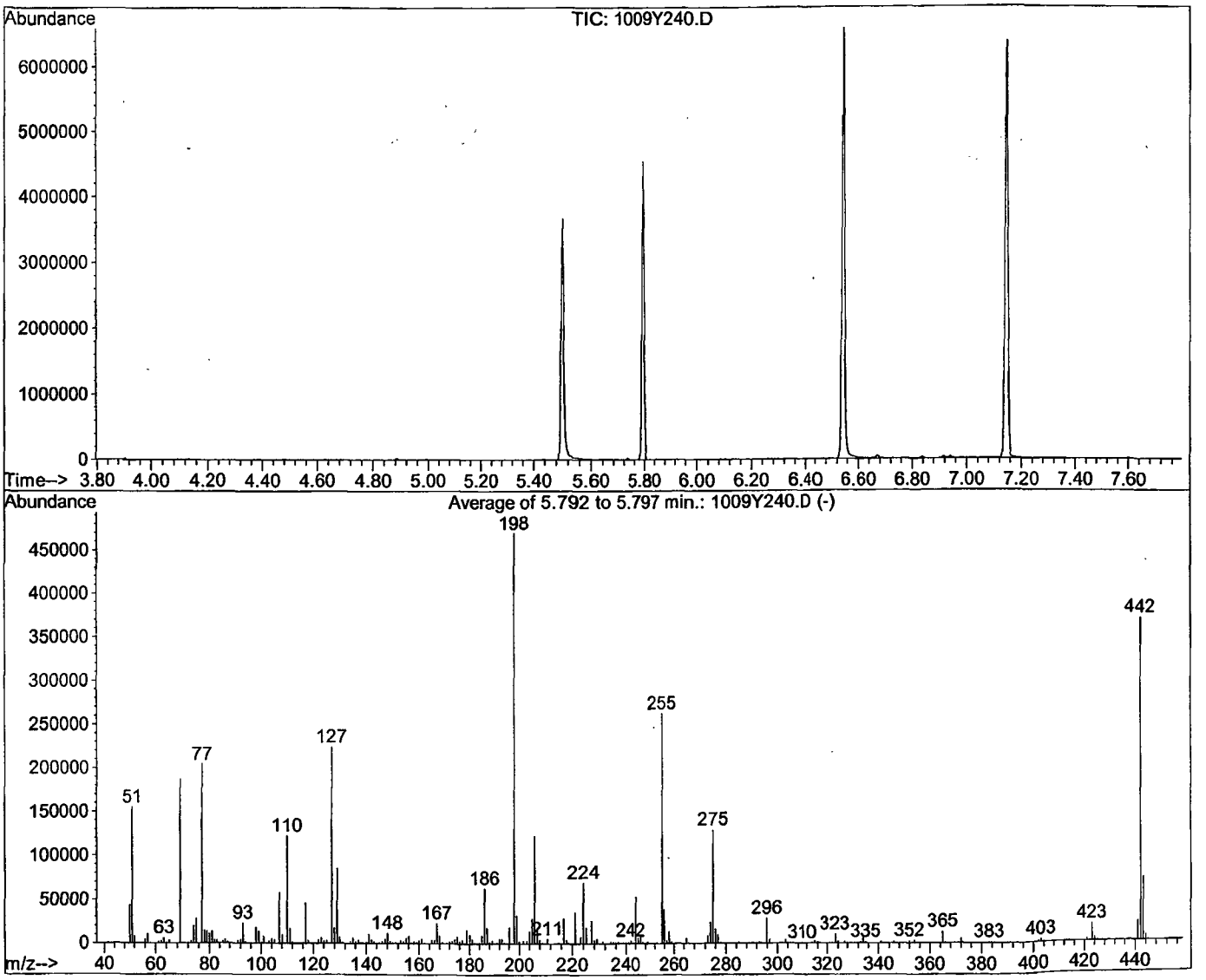
Ion	Exp%	Act%
184.00	100	100
92.00	9.70	9.19
185.00	14.10	13.82
0.00	0.00	0.00

DFTPP

Data File : M:\YODA\DATA\Y201009\1009Y240.D
Acq On : 26 Oct 20 11:40
Sample : SVTUNE 10/02/20
Misc :

Vial: 40
Operator: MA
Inst : Yoda
Multiplr: 1.00

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 883, 884, 885; Background Corrected with Scan 874

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	33.1	155574	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.3	506	PASS
127	198	10	80	47.8	224469	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	469909	PASS
199	198	5	9	6.8	32040	PASS
275	198	10	60	27.6	129467	PASS
365	198	1	100	2.8	13323	PASS
441	442	0.01	24	6.0	22112	PASS
442	198	50	500	78.9	370859	PASS
443	442	15	24	19.5	72485	PASS

Data File Name:	**1009Y240.D**
Data File Path:	**M:\YODA\DATA\Y201009**
Operator:	**MA**
Date Acquired:	**26 Oct 2020 11:40**
Method File:	**DFTPP2.M**
Sample Name:	**SVTUNE 10/02/20**
Vial Number:	**40**
Instrument Name:	**Yoda**

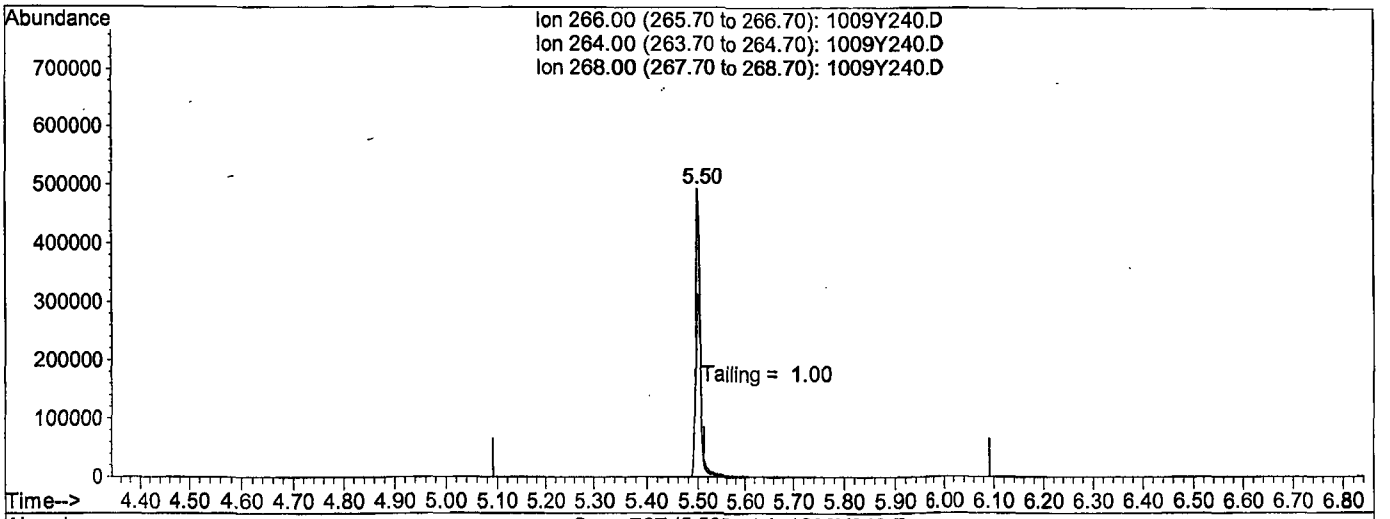
#	Name	Ret Time	Target Response
1)	DDT	7.25	46319900
2)	DDD	7.01	224137
3)	DDE	6.21	0

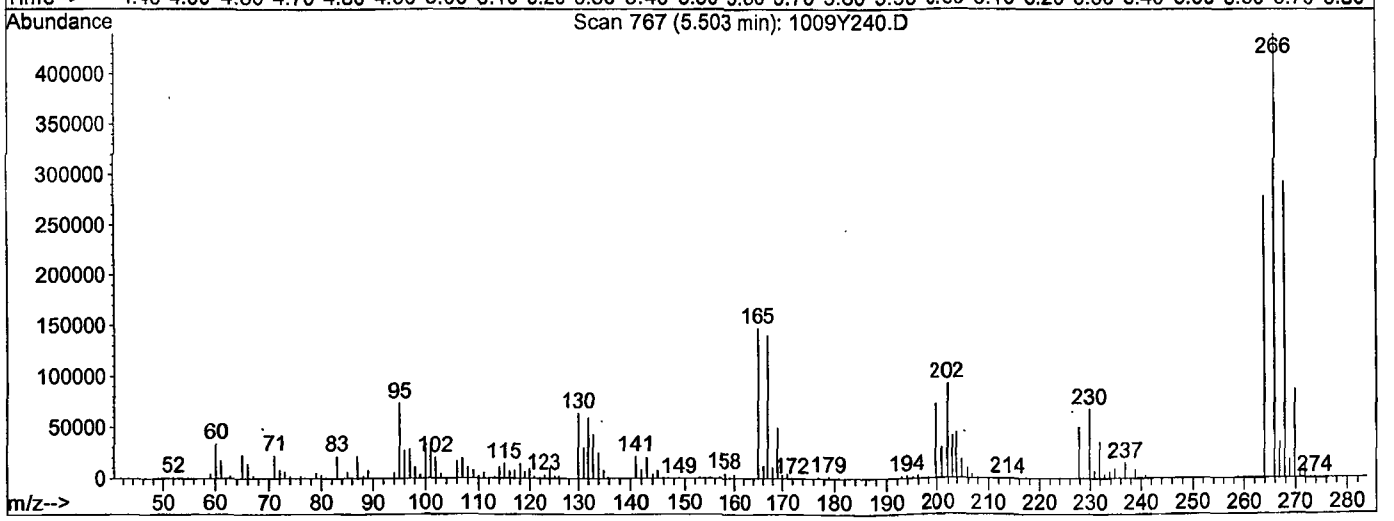
Breakdown **0.48**

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y240.D Vial: 40
Acq On : 26 Oct 20 11:40 Operator: MA
Sample : SVTUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 26 15:18 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Mon Oct 26 10:44:41 2020
Response via : Single Level Calibration





TIC: 1009Y240.D

(5) Pentachlorophenol

5.50min 0.0000

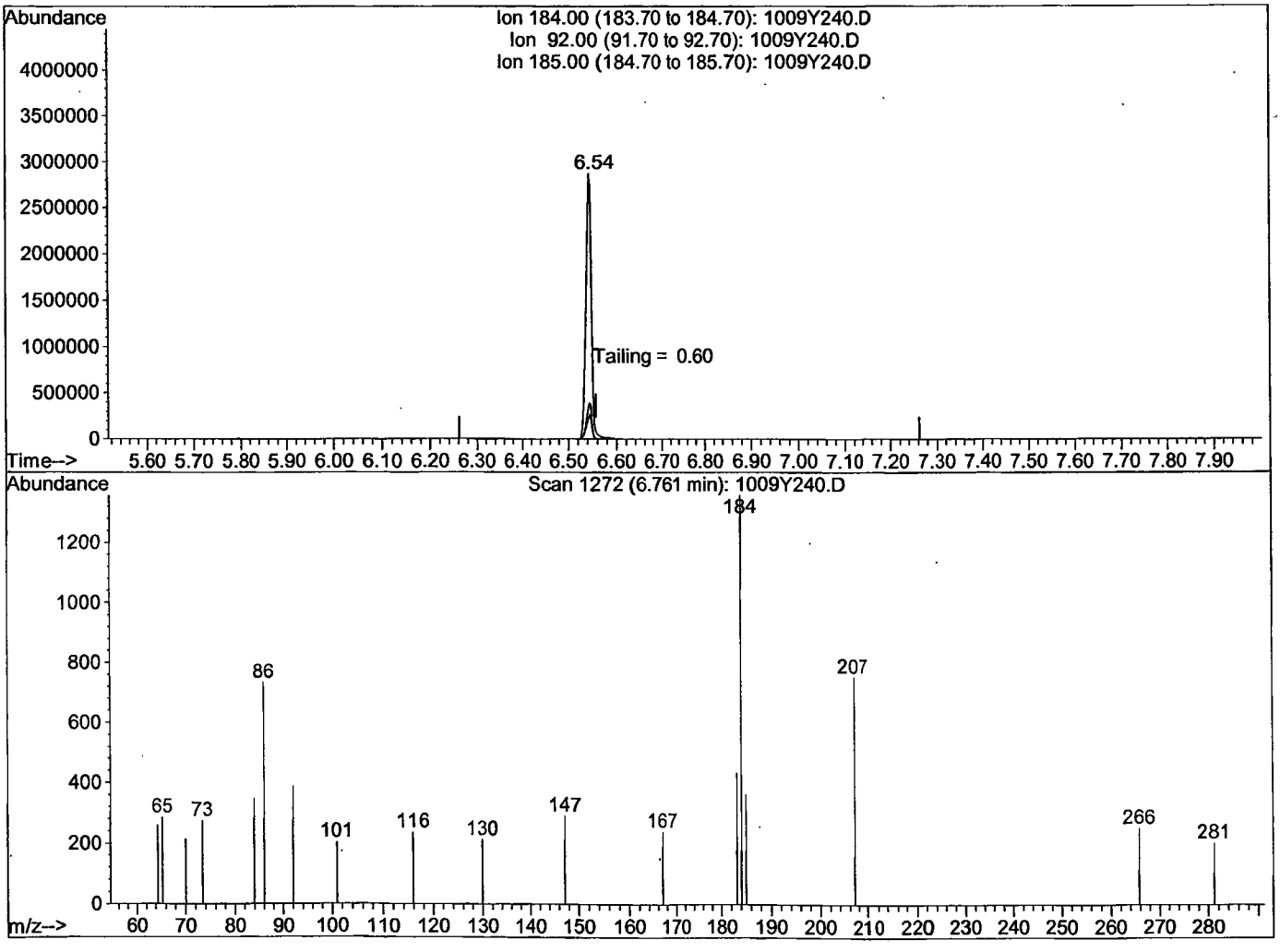
response 3338602

Ion	Exp%	Act%
266.00	100	100
264.00	61.70	61.76
268.00	63.80	64.36
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y240.D Vial: 40
Acq On : 26 Oct 20 11:40 Operator: MA
Sample : SVTUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 26 15:18 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Mon Oct 26 10:44:41 2020
Response via : Single Level Calibration



TIC: 1009Y240.D

(6) Benzidine

6.76min 0.0000

response 0

Ion	Exp%	Act%
184.00	100	0.00
92.00	9.70	0.00#
185.00	14.10	0.00#
0.00	0.00	0.00

Name of Final Standard 8270 Full Scan Standard Curve **Prep'd By (Initials)** CD

Prep Date 07/22/20

Exp Date 03/03/20

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc.(range)
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	4 uL	200uL	MC 56258 192uL	4 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	4 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	5 uL	200uL	MC 56258 190uL	5 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	5 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	5 uL	100uL	MC 56258 90uL	10 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	5 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	10 uL	100uL	MC 56258 80uL	20 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	10 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	20 uL	100uL	MC 56258 60uL	40 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	20 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	50 uL	200 uL	MC 56258 100uL	50 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	50 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	30 uL	100uL	MC 56258 40uL	60 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	30 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	40 uL	100uL	MC 56258 20uL	80 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	40 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	50 uL	100uL	na	100 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	50 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	2 uL			

Name of Final Standard 8270 Full Scan Second Source **Prep'd By (Initials)** CD

Prep Date 07/22/20

Exp Date 07/22/21

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 SS Stock	o2si	8270 SS Stock	200 ug/mL	07/20/20	07/20/21	50 uL	200uL	MC 56258 150uL	50 ug/mL
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	4 uL			

Name of Final Standard	8270 Stock	Prep'd By (Initials)	CD
Prep Date	07/20/20		
Exp Date	07/20/21		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc.(range)
10001	Absolute	10001	2000	041720-50312	07/20/21	1.0 mL	10 mL	NA	200 ug/mL
10002	Absolute	10002	2000	042820-50317	07/20/21	1.0 mL	"	"	200 ug/mL
10004	Absolute	10004	2000	103119-50322	07/20/21	1.0 mL	"	"	200 ug/mL
10005	Absolute	10005	2000	031618-50362	07/20/21	1.0 mL	"	"	200 ug/mL
10006	Absolute	10006	2000	050420-50327	07/20/21	1.0 mL	"	"	200 ug/mL
10007	Absolute	10007	2000	060118-50332	07/20/21	1.0 mL	"	"	200 ug/mL
10018	Absolute	10018	2000	022620-50337	07/20/21	1.0 mL	"	"	200 ug/mL
70023	Absolute	70023	1000	112119-50342	07/20/21	1.0 mL	"	"	100 ug/mL
82705	Absolute	82705	2000	050620-50352	07/20/21	1.0 mL	"	"	200 ug/mL
94552	Absolute	94562	various	032520-50356	07/20/21	1.0 mL	"	"	various

Name of Final Standard	8270 2nd Source Stock	Prep'd By (Initials)	CD
Prep Date	07/20/20		
Exp Date	01/17/21		

Initial Standard Information						Final Standard Information			
Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc.(range)
10001	Absolute	10001	2000	031618-39204	07/20/21	1.0 mL	10 mL	NA	200 ug/mL
10002	Absolute	10002	2000	041619-50074	07/20/21	1.0 mL	"	"	200 ug/mL
10004	Absolute	10004	2000	071618-50210	07/20/21	1.0 mL	"	"	200 ug/mL
10005	Absolute	10005	2000	011620-49804	07/20/21	1.0 mL	"	"	200 ug/mL
10006	Absolute	10006	2000	011718-39209	1/17/21	1.0 mL	"	"	200 ug/mL
10007	Absolute	10007	2000	011620-49809	07/20/21	1.0 mL	"	"	200 ug/mL
10018	Absolute	10018	2000	091919-49568	07/20/21	1.0 mL	"	"	200 ug/mL
70023	Absolute	70023	1000	051618-39216	07/20/21	1.0 mL	"	"	100 ug/mL
82705	Absolute	82705	2000	081418-50071	07/20/21	1.0 mL	"	"	200 ug/mL
94552	Absolute	94552	various	053119-50061	07/20/21	1.0 mL	"	"	various

Name of Final Standard	8270 Working Surrogate Stock	Prep'd By (Initials)	JP
Prep Date	03/03/20		
Exp Date	03/03/21		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Surrogate Stock	APPL	8270 Surrogate Stock	2000:1000 ug/mL	03/03/20	03/03/21	1.5 mL	7.5 mL	MC DW717.6 mL	400:200 ug/mL

8270 Internal Standard Ampules

Name of Final Standard	(4)
Prep Date	05/29/20
Exp Date	12/31/25

Prep'd By (Initials): MA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Semivolatile Internal Standard	Restek	31206	2000 ug/mL	AO157142-49996to49999	12/31/25	3 mL	3 mL	NA	2000ug/mL

Name of Final Standard	8270 Full Scan Spike	Prep'd By (Initials)	CD
Prep Date	06/19/20		
Exp Date	09/06/20		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	(or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
10001	Absolute	10001	2000	051018-40533, 40534	05/10/21	2.0 mL	80 mL	Methanol Lot# 235140	50 ug/mL
10002	Absolute	10002	2000	090919-49813 042820-50313	09/09/22 04/28/23	2.0 mL			50 ug/mL
10004	Absolute	10004	2000	051018-39197, 39198	05/10/21	2.0 mL			50 ug/mL
10005	Absolute	10005	2000	032018-49803 031618-50358	03/20/23 3/16/23	2.0 mL			50 ug/mL
10006	Absolute	10006	2000	011718-39209, 39210	01/17/21	2.0 mL			50 ug/mL
10007	Absolute	10007	2000	080116-49808 060118-50328	08/01/21 06/01/23	2.0 mL			50 ug/mL
10018	Absolute	10018	2000	030216-38196, 98197	03/02/21	2.0 mL			50 ug/mL
70023	Absolute	70023	1000	112119-50338, 49825	11/21/24	2.0 mL			25 ug/mL
82705	Absolute	82705	2000	090617-40540 081418-50069	09/06/20 08/14/21	2.0 mL			50 ug/mL
94552	Absolute	94552	various	032520-50357, 50057	03/25/22	2.0 mL			various

Name of Final Standard	**8270 Surrogate**	**Prep'd By (Initials)**	**CD**
Prep Date	**05/11/20**		
Exp Date	**05/11/21**		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot#. (or APPL Prep Date)	Final Standard Conc (range)
8270 Acid Surrogate Mix	Restek	33029	10,000 ug/mL	**A0158618-50005,50007**	**03/31/28**	20 mL	1000 mL	MeOH:Acetone 2:1	200 ug/mL
8270 B/N Surrogate Mix	Restek	31086	5000 ug/mL	**A0158684-50001,50002,50003,500011**	**02/28/26**	20 mL			100 ug/mL

Name of Final Standard	8270 Surrogate	Prep'd By (Initials)	MA
Prep Date	10/06/20		
Exp Date	10/06/21		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Acid Surrogate Mix	Restek	33029	10,000 ug/mL	A0158618-50006, A0152714-49436	09/30/27	20 mL	200 mL	Acetone 246130/ MC59353 1:1	1000 ug/mL
8270 B/N Surrogate Mix	Restek	31086	5000 ug/mL	A0158684-50244,5024550248,50004	02/28/26	20 mL			500 ug/mL

Use 0.2ml in extraction.

Name of Final Standard	8270 Spike	Prep'd By (Initials)	MA
Prep Date	10/06/20		
Exp Date	10/06/21		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
10001	Absolute	10001	2000	041720-50309,50311	04/17/23	2.0 mL	80 mL	Acetone Lot# 0246130	50 ug/mL
10002	Absolute	10002	2000	042820-50646,50647	04/28/23	2.0 mL			50 ug/mL
10004	Absolute	10004	2000	103119-50319,50321	10/31/24	2.0 mL			50 ug/mL
10005	Absolute	10005	2000	011620-50671,50672	01/16/25	2.0 mL			50 ug/mL
10006	Absolute	10006	2000	050420-50324,50325	05/04/23	2.0 mL			50 ug/mL
10007	Absolute	10007	2000	060118-50066,50067	06/01/23	2.0 mL			50 ug/mL
10018	Absolute	10018	2000	022620-50334,50687	02/26/25	2.0 mL			50 ug/mL
70023	Absolute	70023	1000	112119-50691,50692	11/21/24	2.0 mL			25 ug/mL
82705	Absolute	82705	2000	050620-50349,50350	05/06/23	2.0 mL			50 ug/mL
94552	Absolute	94552	various	032520-50711,50712	03/25/22	2.0 mL			various

_LIQ003

Organic Extraction Worksheet

Method	Continuous Liquid/Liquid SVOC 3520C	Extraction Set	201021A	Extraction Method	LIQ003	Units	mL

Spiked ID 1	8270T Spike 10/6/20 ex 10/6/21		Surrogate ID 1	8270 Surrogate 10/6/20 ex 10/6/21	
Spiked ID 2	Sim Spike 9/11/20 ex 9/11/21		Surrogate ID 2	SIM Surrogate 8/11/20 ex 8/11/21	
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	YES	
Spiked ID 7			Ext. Start Time:	10/21/20 12:00	
Spiked ID 8			Ext. End Time:	10/23/20 10:35	
			GC Requires Extract By:		

pH1	2	10/21/20 12:10	Water Bath Temp 1 °C	EWB5 75/74.1 °
pH2	14	10/22/20 11:05	Water Bath Temp 2 °C	
pH3			Water Bath Temp 3 °C	

Spiked By: **Date** 10/21/20 12:00:00 PM **Witnessed By:** 10/21/20 12:00 **Date** 10/23/20 1:59:16 PM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201021A Blk				0.2,0.05	1,2	800	1	2/1	10/21/20 12:00	
						equip	EWB5				
2	201021A LCS-1		1	1	0.2	1	800	1	2/1	10/21/20 12:00	
						equip	EWB5				
3	201021A LCS-2		0.125	2	0.050	2	800	1	2/1	10/21/20 12:00	
						equip	EWB5				
4	201021A LCSD-1		1	1	0.2	1	800	1	2/1	10/21/20 12:00	
						equip	EWB5				
5	201021A LCSD-2		0.125	2	0.050	2	800	1	2/1	10/21/20 12:00	
						equip	EWB5				
6	BA20268	BA20268W15			0.2,0.05	1,2	800	1	2/1	10/21/20 12:00	93765
						equip	EWB5				
7	BA20486	BA20486W13			0.2,0.05	1,2	800	1	2/1	10/22/20 10:35	93803
						equip	EWB5				
8	BA20539 MS-1	BA20539W28	1	1	0.2	1	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				
9	BA20539 MSD-1	BA20539W27	1	1	0.2	1	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				
10	BA20539 MS-2	BA20539W26	0.125	2	0.05	2	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				
11	BA20539 MSD-2	BA20539W24	0.125	2	0.05	2	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				
12	BA20539	BA20539W34			0.2,0.05	1,2	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				
13	BA20541	BA20541W11			0.2,0.05	1,2	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				
14	BA20542	BA20542W13			0.2,0.05	1,2	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				
15	BA20544	BA20544W15			0.2,0.05	1,2	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				

Solvent and Lot#	
PH Strips	.HC904495
Dichloromethane (DCM)	.60127
1+1 H2SO4	.231834
10N NaOH	.10/22/20
Filter Paper	.400178
Na2SO4	.2019070279

Extraction COC Transfer	
Extraction lab employee Initials	DL
GC analyst's initials	MA
Date	10/26/20
Time	12:00
Refrigerator	GC_C

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL

Modified	10/26/20 12:41:37 PM

Reviewed By: MA **Date** 10/26/20

Injection Log

Directory: M:\YODA\DATA\Y201009\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	1009Y002.D	1	SV TUNE 10/02/20		9 Oct 20 10:55
3	1009Y003.D	1	4ug/mL 8270 7/22/20		9 Oct 20 11:14
4	1009Y004.D	1	5ug/mL 8270 7/22/20		9 Oct 20 11:40
5	1009Y005.D	1	10ug/mL 8270 7/22/20		9 Oct 20 12:05
6	1009Y006.D	1	20ug/mL 8270 7/22/20		9 Oct 20 12:31
7	1009Y007.D	1	40ug/mL 8270 7/22/20		9 Oct 20 12:56
8	1009Y008.D	1	50ug/mL 8270 7/22/20		9 Oct 20 13:22
9	1009Y009.D	1	60ug/mL 8270 7/22/20		9 Oct 20 13:48
10	1009Y010.D	1	80ug/mL 8270 7/22/20		9 Oct 20 14:13
11	1009Y011.D	1	100ug/mL 8270 7/22/20		9 Oct 20 14:38
12	1009Y012.D	1	SS 50ug/mL 8270 7/22/20		9 Oct 20 15:04
17	1009Y217.D	1	SVTUNE 10/02/20		23 Oct 20 12:41
18	1009Y218.D	1	50ug/mL 8270 7/22/20 (6)		23 Oct 20 12:56
19	1009Y219.D	1.25	201021A BLK 1/800		23 Oct 20 13:21
20	1009Y220.D	1.25	201021A LCS-1 1/800		23 Oct 20 13:47
21	1009Y221.D	1.25	201021A LCSD-1 1/800		23 Oct 20 14:13
36	1009Y236.D	1	50ug/mL 8270 8/13/20 (2)		23 Oct 20 20:35
40	1009Y240.D	1	SVTUNE 10/02/20		26 Oct 20 11:40
41	1009Y241.D	1	50ug/mL 8270 7/22/20 (6)		26 Oct 20 11:56
42	1009Y242.D	1.25	BA20539W28 MS-1 1/800		26 Oct 20 13:11
43	1009Y243.D	1.25	BA20539W27 MSD-1 1/800		26 Oct 20 13:36
44	1009Y244.D	1.25	BA20539W34 1/800		26 Oct 20 14:18
45	1009Y245.D	1.25	BA20541W11 1/800		26 Oct 20 14:44
46	1009Y246.D	1.25	BA20542W13 1/800		26 Oct 20 15:09
47	1009Y247.D	1.25	BA20544W15 1/800		26 Oct 20 15:34
48	1009Y248.D	1	50ug/mL 8270 7/22/20 (6)		26 Oct 20 15:59

ORGANICS

Calibration Data

PAH by GCMS SIM
EPA 8270 SIM

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/16/20
Matrix: Instrument: Linus
Initials: HA

		Compound	1016L003.D 0.1	1016L004.D 0.2	1016L005.D 0.5	1016L006.D 1	1016L007.D 5	1016L008.D 10	1016L009.D 50	1016L010.D 100			Avg	%RSD	Type	r^2	Q	MRF
1	I	Napthalene-D8(IS)																
2	TM	Naphthalene	1.072	1.011	0.9676	1.022	0.9167	0.9139	0.9182	0.8593			0.96	7.4	TM			0.700
3	S	2-Methylnaphthalene-D10 (2M	1.176	1.100	1.058	1.081	1.179	1.100	1.103	1.115			1.1	3.9	S			
4	TM	2-Methylnaphthalene	0.7140	0.6668	0.6549	0.6735	0.6684	0.6295	0.6063	0.5873			0.65	6.2	TM			0.400
5	TM	1-Methylnaphthalene	0.7055	0.6769	0.6442	0.6665	0.6278	0.6160	0.6081	0.5750			0.64	6.6	TM			
6	I	Acenaphthene-D10(IS)																
7	TM	Acenaphthylene	4.020	3.698	3.609	3.849	3.853	3.617	3.693	3.090			3.7	7.5	TM			0.900
8	*TM	Acenaphthene	1.255	1.178	1.070	1.129	1.081	1.066	1.067	0.8941			1.1	9.6	*TM			0.900
9	TM	Fluorene	1.425	1.326	1.361	1.398	1.361	1.378	1.359	1.238			1.4	4.1	TM			0.900
10	I	Phenanthrene-D10(IS)																
11	TM	Phenanthrene	1.106	1.072	1.058	1.094	1.014	1.075	0.8950	0.8282			1.0	10.0	TM			0.700
12	TM	Anthracene	1.004	0.9774	0.9456	0.9873	0.9650	0.9772	0.8354	0.7568			0.93	9.4	TM			0.700
13	S	Fluoranthene-D10 (FRT)	1.325	1.172	1.200	1.205	1.196	1.284	1.270	1.255			1.2	4.3	S			
14	*TM	Fluoranthene	1.487	1.413	1.446	1.478	1.433	1.459	1.208	1.113			1.4	10	*TM			0.600
15	I	Chrysene-D12(IS)																
16	TM	Pyrene	1.113	1.074	1.065	1.102	1.058	1.049	0.9360	0.9508			1.0	6.3	TM			0.600
17	TM	Benz (a) anthracene	1.122	1.058	1.018	1.026	1.036	1.020	0.9993	0.9390			1.0	5.0	TM			0.800
18	TM	Chrysene	1.164	1.114	1.105	1.100	1.015	1.027	0.9314	0.8998			1.0	8.9	TM			0.700
19	TM	Indeno (1,2,3-cd) pyrene	1.282	1.197	1.190	1.247	1.262	1.263	1.262	1.253			1.2	2.7	TM			0.500
20	I	Perylene-D12(IS)																
21	TM	Benzo (b) fluoranthene	0.9987	0.9431	0.8304	0.8853	0.9907	1.093	1.028	0.9179			0.96	8.7	TM			0.700
22	TM	Benzo (k) fluoranthene	1.083	1.006	1.104	1.167	1.140	1.122	0.9848	0.9491			1.1	7.4	TM			0.700
23	*TM	Benzo (a) pyrene	0.8612	0.7892	0.8030	0.9158	0.9626	0.9531	0.9222	0.8779			0.89	7.3	*TM			0.700
24	TM	Dibenz (a,h) anthracene	0.9238	0.8974	0.9091	0.9540	1.001	1.033	0.9122	1.001			0.95	5.4	TM			0.400
25	TM	Benzo (g,h,i) perylene	1.019	0.9534	0.9591	0.9979	1.017	1.046	0.9207	0.9822			0.99	4.2	TM			0.500
26																		
27																		
28																		
29																		
30																		
31																		
32																		
33																		
34																		
35																		

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L003.D Vial: 3
Acq On : 16 Oct 20 10:37 Operator: MA
Sample : 0.1 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:49:24 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	44084	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	24595	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	48782	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.12	240	67228	2.50000	ppb		-0.01
20) Perylene-D12(IS)	13.56	264	75125	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	1037	0.05495	ppb		0.00
Spiked Amount 5.000			Recovery	=	1.100%		
13) Fluoranthene-D10 (FRT)	9.38	212	1293	0.05685	ppb		0.00
Spiked Amount 5.000			Recovery	=	1.140%		
Target Compounds							Qvalue
2) Naphthalene	4.30	128	1890	0.11284	ppb		99
4) 2-Methylnaphthalene	5.08	142	1259	0.11717	ppb		99
5) 1-Methylnaphthalene	5.19	142	1244	0.11294	ppb		100
7) Acenaphthylene	6.11	152	3955	0.11795	ppb		99
8) Acenaphthene	6.31	154	1235	0.11635	ppb		99
9) Fluorene	6.90	166	1402	0.11107	ppb		99
11) Phenanthrene	8.02	178	2158	0.11070	ppb		99
12) Anthracene	8.08	178	1960	0.11301	ppb		99
14) Fluoranthene	9.40	202	2902	0.11366	ppb		98
16) Pyrene	9.65	202	2993	0.11038	ppb	#	82
17) Benz (a) anthracene	11.11	228	3017	0.11408	ppb		100
18) Chrysene	11.16	228	3131	0.11082	ppb		98
19) Indeno (1,2,3-cd) pyrene	15.03	276	3448	0.10423	ppb	#	93
21) Benzo (b) fluoranthene	12.92	252	3001	0.11051	ppb	#	98
22) Benzo (k) fluoranthene	12.98	252	3253	0.09995	ppb		98
23) Benzo (a) pyrene	13.46	252	2588	0.10136	ppb		98
24) Dibenz (a,h) anthracene	15.07	278	2776	0.09615	ppb	#	96
25) Benzo (g,h,i) perylene	15.40	276	3061	0.10254	ppb		98

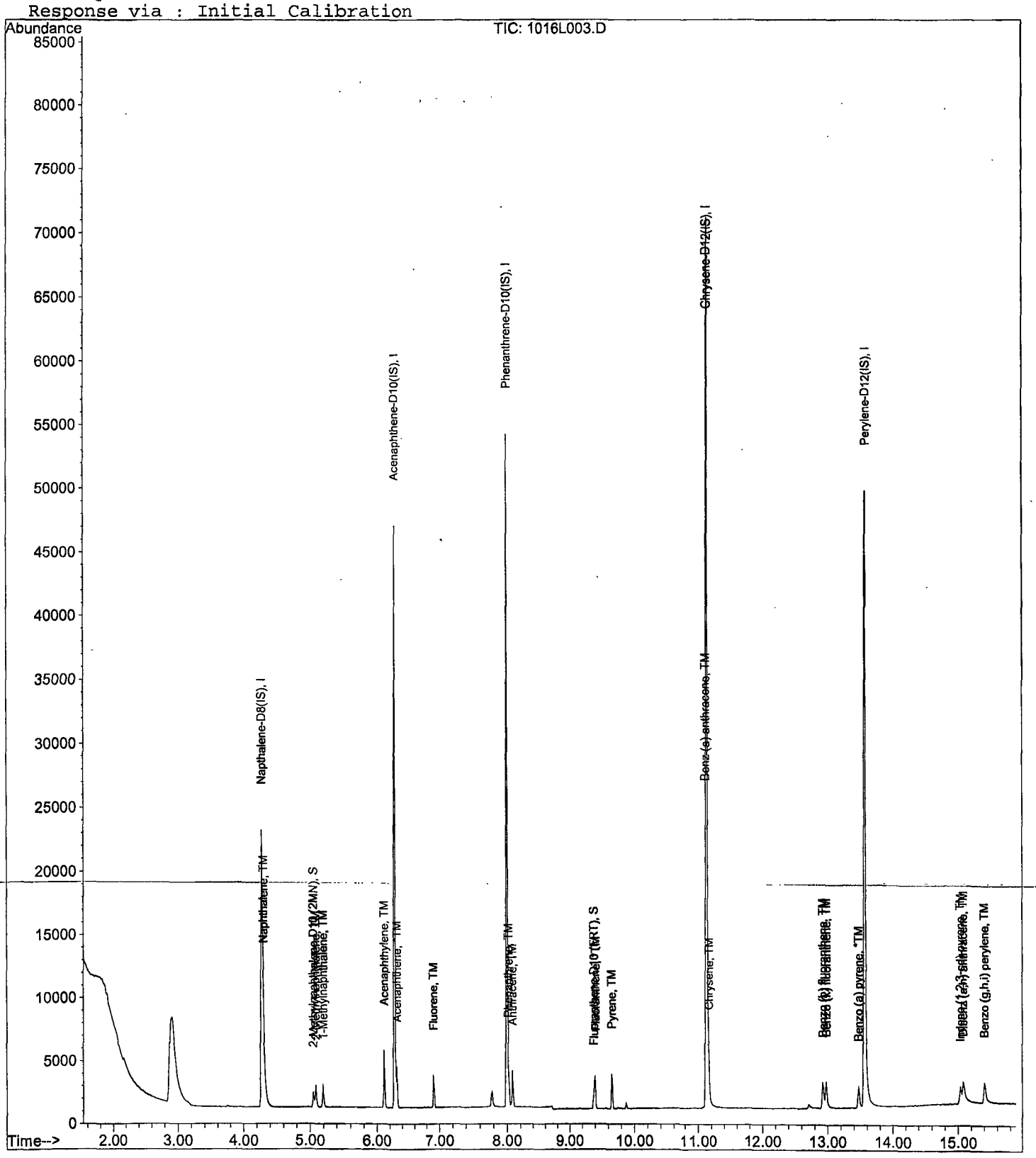
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L003.D Vial: 3
Acq On : 16 Oct 20 10:37 Operator: MA
Sample : 0.1 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L004.D Vial: 4
Acq On : 16 Oct 20 10:59 Operator: MA
Sample : 0.2 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:49:24 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	58321	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	32526	2.50000 ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	62347	2.50000 ppb		0.00
15) Chrysene-D12(IS)	11.12	240	83952	2.50000 ppb		-0.01
20) Perylene-D12(IS)	13.56	264	93534	2.50000 ppb		0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	2566	0.10278 ppb		0.00
Spiked Amount 5.000			Recovery =	2.060%		
13) Fluoranthene-D10 (FRT)	9.38	212	2923	0.10055 ppb		0.00
Spiked Amount 5.000			Recovery =	2.020%		
Target Compounds						Qvalue
2) Naphthalene	4.30	128	4715	0.21277 ppb		99
4) 2-Methylnaphthalene	5.08	142	3111	0.21884 ppb		99
5) 1-Methylnaphthalene	5.19	142	3158	0.21671 ppb		100
7) Acenaphthylene	6.11	152	9622	0.21698 ppb		100
8) Acenaphthene	6.31	154	3066	0.21841 ppb		99
9) Fluorene	6.90	166	3451	0.20674 ppb		96
11) Phenanthrene	8.01	178	5348	0.21466 ppb		100
12) Anthracene	8.08	178	4875	0.21993 ppb		99
14) Fluoranthene	9.40	202	7047	0.21596 ppb		98
16) Pyrene	9.66	202	7210	0.21292 ppb		99
17) Benz (a) anthracene	11.11	228	7107	0.21520 ppb		99
18) Chrysene	11.16	228	7480	0.21202 ppb		99
19) Indeno (1,2,3-cd) pyrene	15.03	276	8042	0.19468 ppb	#	90
21) Benzo (b) fluoranthene	12.92	252	7057	0.20872 ppb		99
22) Benzo (k) fluoranthene	12.98	252	7525	0.18570 ppb		98
23) Benzo (a) pyrene	13.46	252	5905	0.18575 ppb		98
24) Dibenz (a,h) anthracene	15.07	278	6715	0.18680 ppb	#	97
25) Benzo (g,h,i) perylene	15.40	276	7134	0.19194 ppb		96

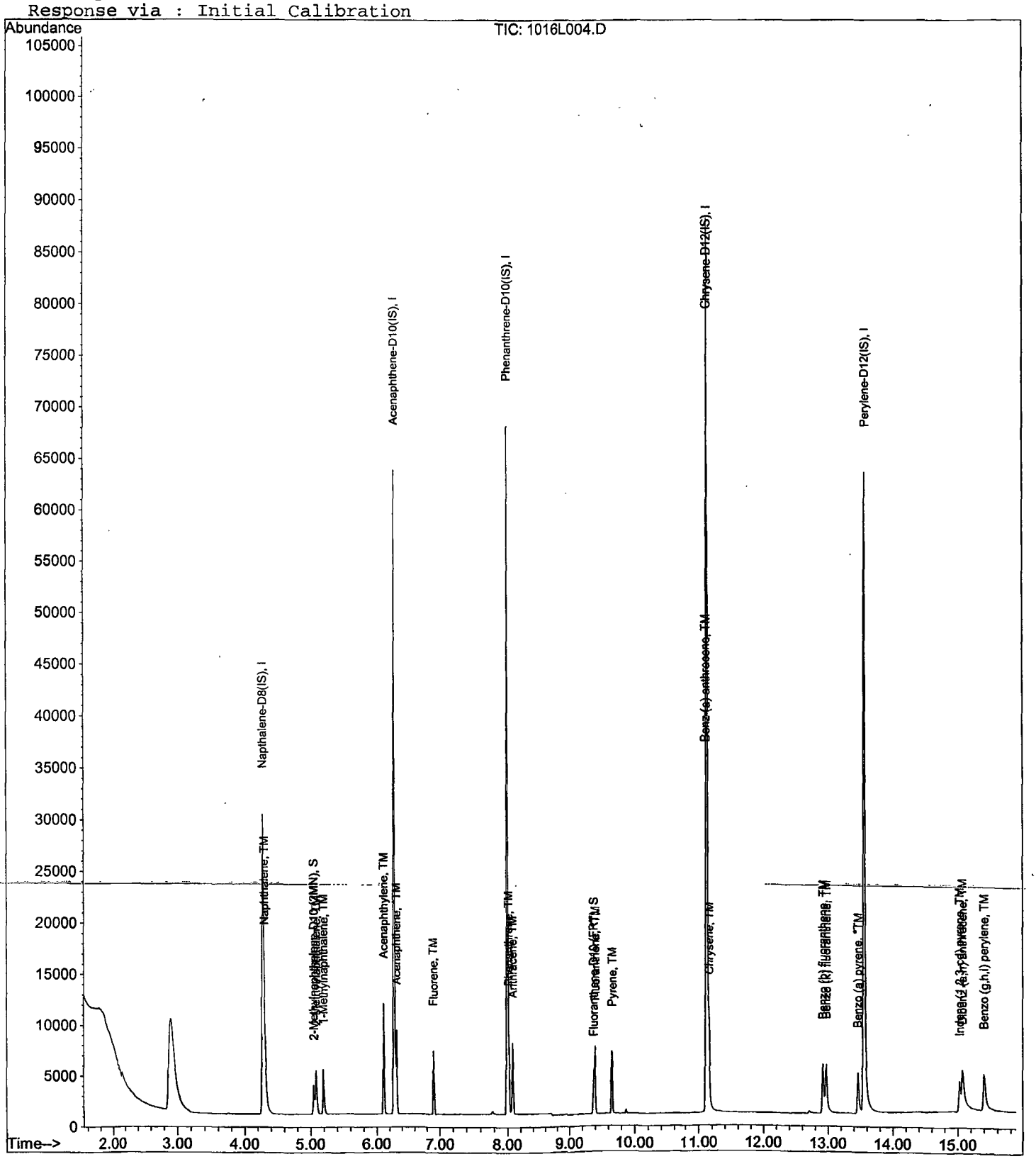
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L004.D Vial: 4
Acq On : 16 Oct 20 10:59 Operator: MA
Sample : 0.2 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L005.D Vial: 5
Acq On : 16 Oct 20 11:21 Operator: MA
Sample : 0.5 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:49:24 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	4.27	136	44248	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	6.28	164	24849	2.50000 ppb	0.00
10) Phenanthrene-D10(IS)	7.99	188	46124	2.50000 ppb	0.00
15) Chrysene-D12(IS)	11.12	240	63984	2.50000 ppb	-0.01
20) Perylene-D12(IS)	13.55	264	70650	2.50000 ppb	-0.01
System Monitoring Compounds					
3) 2-Methylnaphthalene-D10 (2	5.05	152	4681	0.24712 ppb	0.00
Spiked Amount 5.000			Recovery =	4.940%	
13) Fluoranthene-D10 (FRT)	9.38	212	5535	0.25737 ppb	0.00
Spiked Amount 5.000			Recovery =	5.140%	
Target Compounds					Qvalue
2) Naphthalene	4.30	128	8563	0.50933 ppb	99
4) 2-Methylnaphthalene	5.08	142	5796	0.53739 ppb	100
5) 1-Methylnaphthalene	5.19	142	5701	0.51565 ppb	98
7) Acenaphthylene	6.11	152	17937	0.52946 ppb	100
8) Acenaphthene	6.31	154	5316	0.49569 ppb	100
9) Fluorene	6.90	166	6766	0.53055 ppb	96
11) Phenanthrene	8.01	178	9757	0.52937 ppb	99
12) Anthracene	8.08	178	8723	0.53195 ppb	99
14) Fluoranthene	9.40	202	13338	0.55251 ppb	98
16) Pyrene	9.65	202	13623	0.52786 ppb #	82
17) Benz (a) anthracene	11.11	228	13025	0.51748 ppb	99
18) Chrysene	11.15	228	14146	0.52610 ppb #	95
19) Indeno (1,2,3-cd) pyrene	15.03	276	15224	0.48356 ppb	92
21) Benzo (b) fluoranthene	12.92	252	11733	0.45943 ppb	98
22) Benzo (k) fluoranthene	12.98	252	15599	0.50963 ppb	98
23) Benzo (a) pyrene	13.46	252	11347	0.47256 ppb	99
24) Dibenz (a,h) anthracene	15.07	278	12845	0.47308 ppb #	97
25) Benzo (g,h,i) perylene	15.40	276	13552	0.48272 ppb	98

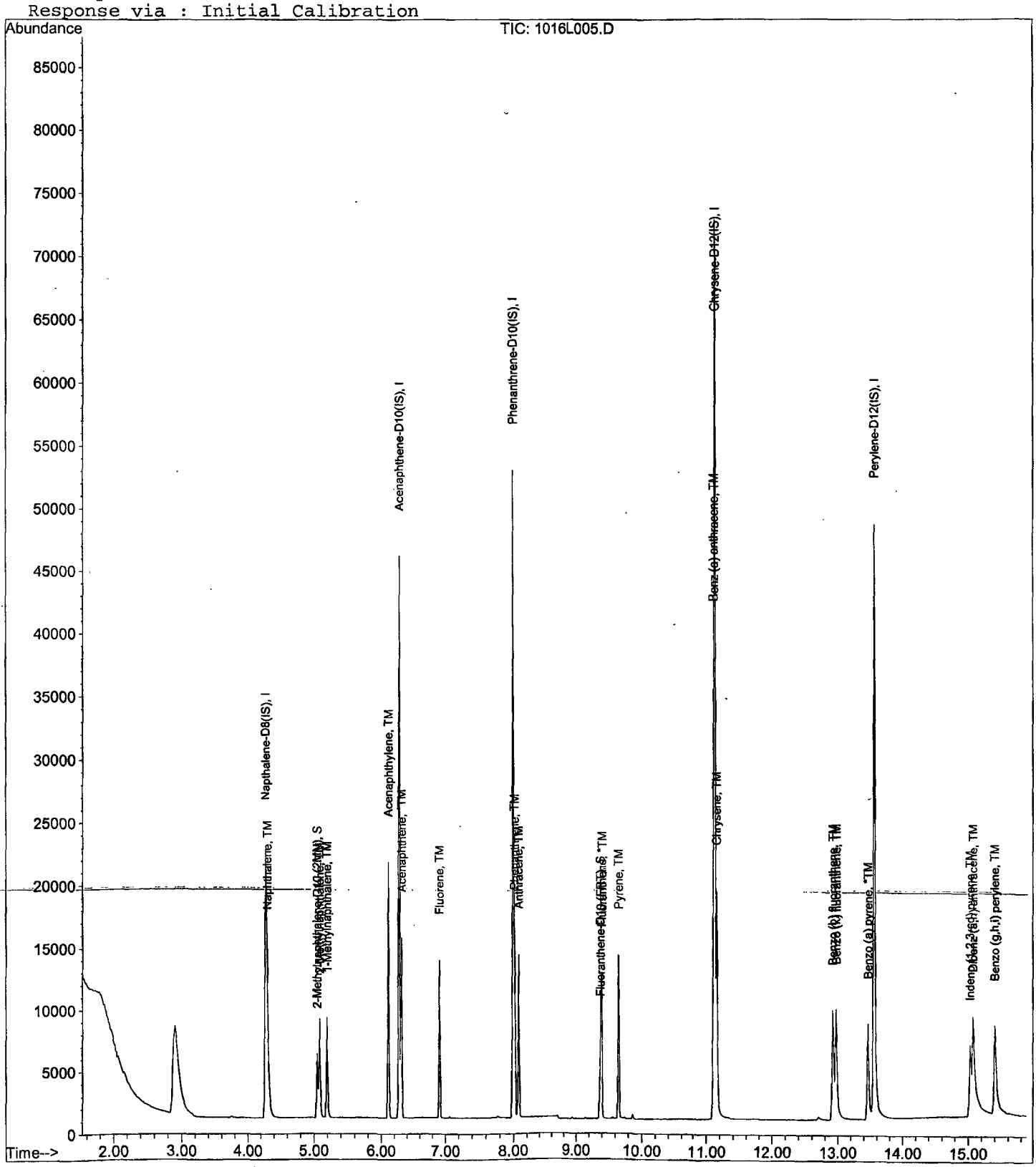
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L005.D Vial: 5
Acq On : 16 Oct 20 11:21 Operator: MA
Sample : 0.5 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L006.D Vial: 6
Acq On : 16 Oct 20 11:43 Operator: MA
Sample : 1 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:49:24 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	49012	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	26755	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	54274	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.12	240	71691	2.50000	ppb		-0.01
20) Perylene-D12(IS)	13.55	264	78644	2.50000	ppb		-0.01
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	10597	0.50507	ppb		0.00
Spiked Amount 5.000			Recovery = 10.100%				
13) Fluoranthene-D10 (FRT)	9.38	212	13081	0.51692	ppb		0.00
Spiked Amount 5.000			Recovery = 10.340%				
Target Compounds							Qvalue
2) Naphthalene	4.30	128	20041	1.07617	ppb		100
4) 2-Methylnaphthalene	5.08	142	13203	1.10516	ppb		99
5) 1-Methylnaphthalene	5.19	142	13067	1.06701	ppb		100
7) Acenaphthylene	6.11	152	41197	1.12942	ppb		100
8) Acenaphthene	6.31	154	12084	1.04651	ppb		98
9) Fluorene	6.90	166	14961	1.08959	ppb		95
11) Phenanthrene	8.01	178	23742	1.09469	ppb		100
12) Anthracene	8.08	178	21433	1.11077	ppb		99
14) Fluoranthene	9.40	202	32091	1.12971	ppb		98
16) Pyrene	9.65	202	31599	1.09276	ppb	#	84
17) Benz (a) anthracene	11.11	228	29434	1.04369	ppb		99
18) Chrysene	11.15	228	31530	1.04656	ppb	#	96
19) Indeno (1,2,3-cd) pyrene	15.03	276	35770	1.01403	ppb	#	93
21) Benzo (b) fluoranthene	12.92	252	27848	0.97960	ppb		98
22) Benzo (k) fluoranthene	12.98	252	36719	1.07769	ppb		98
23) Benzo (a) pyrene	13.46	252	28808	1.07779	ppb		98
24) Dibenz (a,h) anthracene	15.07	278	30010	0.99291	ppb	#	96
25) Benzo (g,h,i) perylene	15.40	276	31391	1.00449	ppb		98

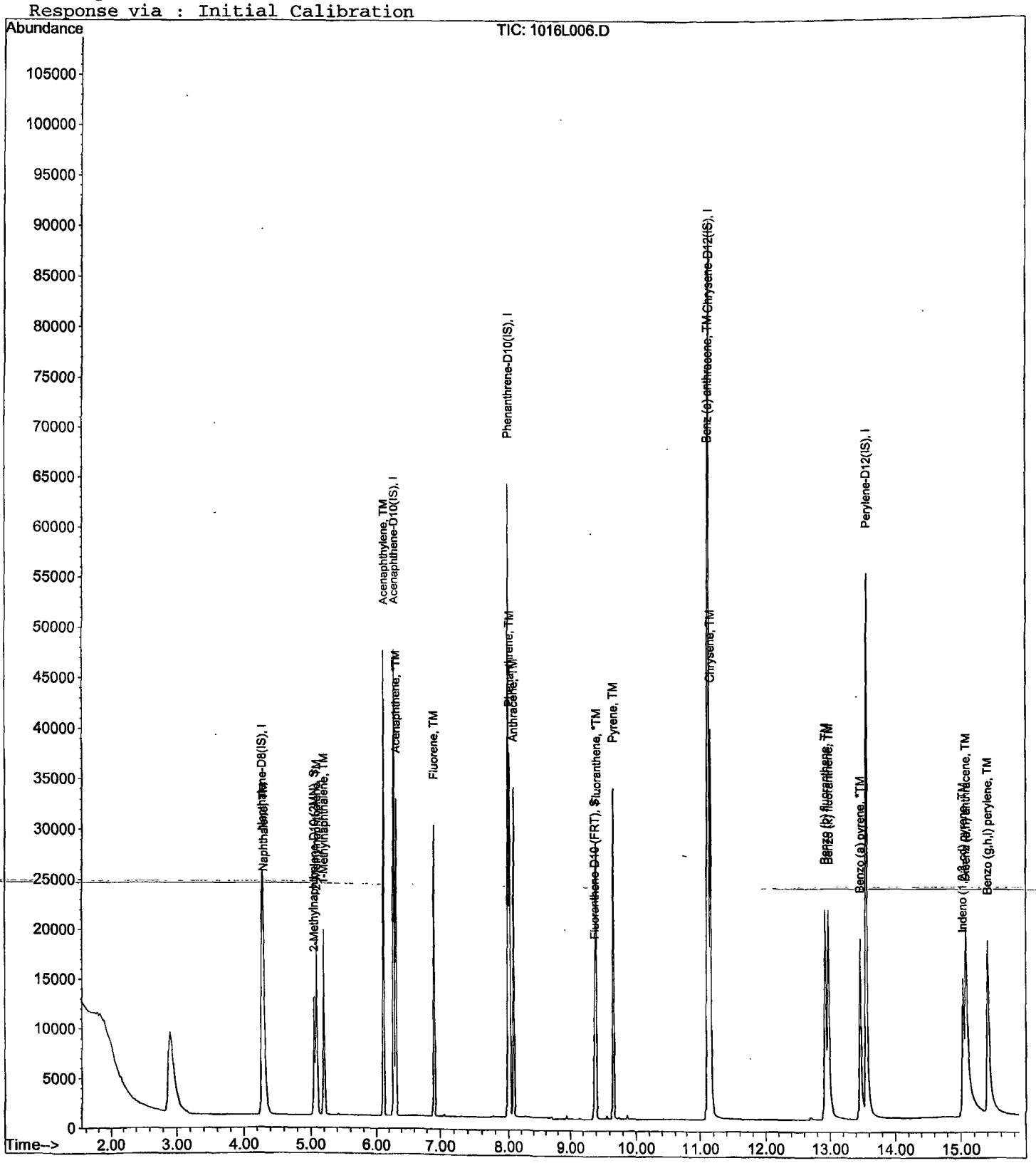
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L006.D Vial: 6
Acq On : 16 Oct 20 11:43 Operator: MA
Sample : 1 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L007.D Vial: 7
Acq On : 16 Oct 20 12:05 Operator: MA
Sample : 5 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:49:24 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	49866	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	26363	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	52853	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.13	240	72201	2.50000	ppb		0.00
20) Perylene-D12(IS)	13.56	264	77115	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	58812	2.75507	ppb		0.00
Spiked Amount 5.000			Recovery	= 55.100%			
13) Fluoranthene-D10 (FRT)	9.38	212	63208	2.56494	ppb		0.00
Spiked Amount 5.000			Recovery	= 51.300%			
Target Compounds							Qvalue
2) Naphthalene	4.30	128	91420	4.82503	ppb		100
4) 2-Methylnaphthalene	5.08	142	66664	5.48457	ppb		100
5) 1-Methylnaphthalene	5.19	142	62616	5.02547	ppb		100
7) Acenaphthylene	6.11	152	203147	5.65209	ppb		100
8) Acenaphthene	6.31	154	57006	5.01028	ppb		100
9) Fluorene	6.90	166	71772	5.30476	ppb		100
11) Phenanthrene	8.01	178	107223	5.07675	ppb		100
12) Anthracene	8.08	178	102004	5.42852	ppb		100
14) Fluoranthene	9.40	202	151517	5.47730	ppb		100
16) Pyrene	9.66	202	152720	5.24406	ppb		100
17) Benz (a) anthracene	11.11	228	149635	5.26839	ppb		100
18) Chrysene	11.16	228	146496	4.82821	ppb		100
19) Indeno (1,2,3-cd) pyrene	15.04	276	182195	5.12848	ppb	#	100
21) Benzo (b) fluoranthene	12.93	252	152793	5.48134	ppb		100
22) Benzo (k) fluoranthene	12.98	252	175807	5.26218	ppb		100
23) Benzo (a) pyrene	13.46	252	148467	5.66469	ppb		100
24) Dibenz (a,h) anthracene	15.08	278	154350	5.20809	ppb		100
25) Benzo (g,h,i) perylene	15.41	276	156806	5.11716	ppb		100

(#) = qualifier out of range (m) = manual integration

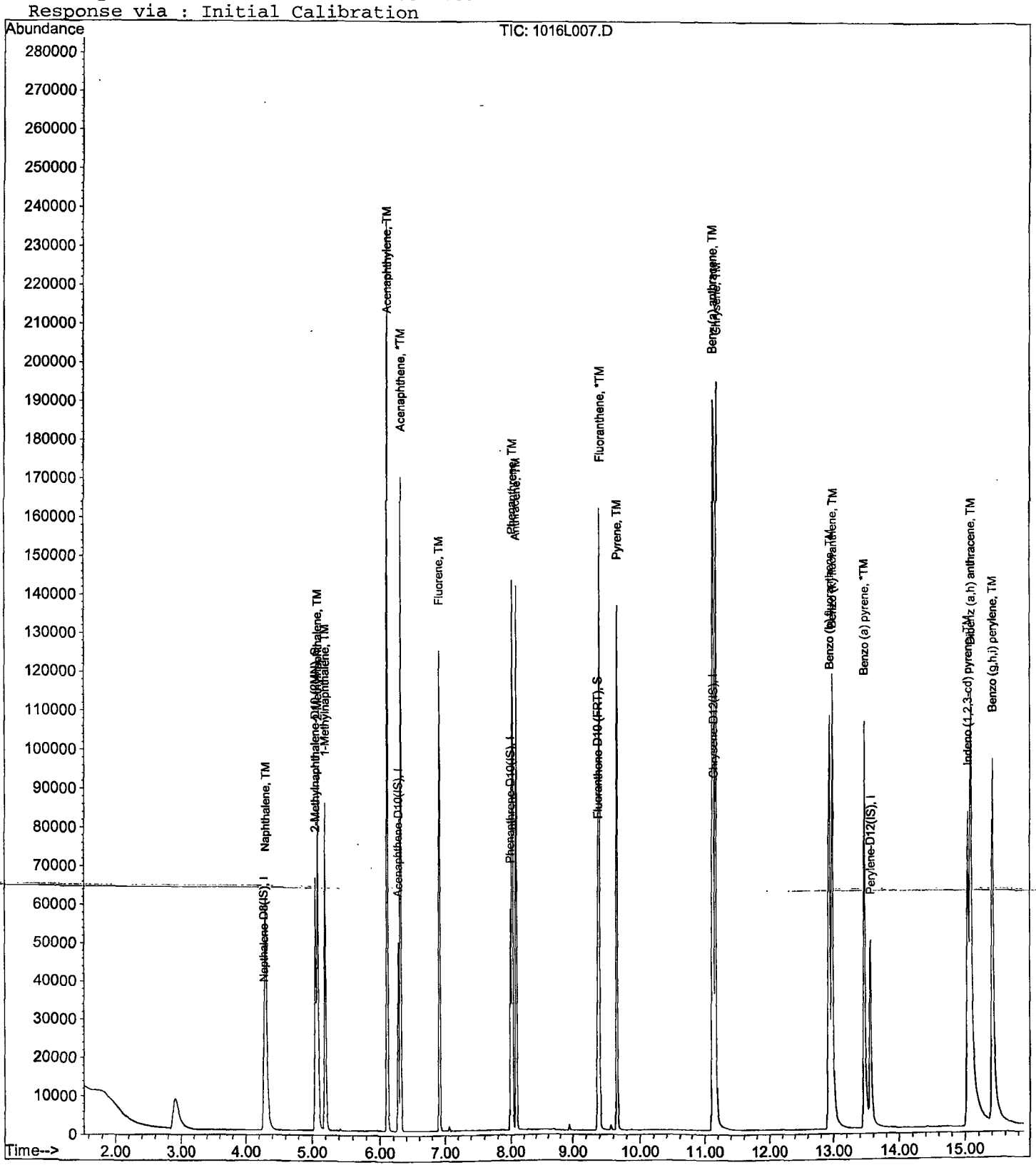
Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L007.D
Acq On : 16 Oct 20 12:05
Sample : 5 SIM 08/21/20
Misc :

Vial: 7
Operator: MA
Inst : Linus
Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L008.D Vial: 8
Acq On : 16 Oct 20 12:27 Operator: MA
Sample : 10 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:49:24 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	46239	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	24174	2.50000 ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	47454	2.50000 ppb		0.00
15) Chrysene-D12(IS)	11.13	240	66927	2.50000 ppb		0.00
20) Perylene-D12(IS)	13.56	264	68921	2.50000 ppb		0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	101736	5.13969 ppb		0.00
Spiked Amount 5.000			Recovery	= 102.800%		
13) Fluoranthene-D10 (FRT)	9.38	212	121907	5.50973 ppb		0.00
Spiked Amount 5.000			Recovery	= 110.200%		
Target Compounds						Qvalue
2) Naphthalene	4.30	128	169029	9.62090 ppb		100
4) 2-Methylnaphthalene	5.08	142	116429	10.33020 ppb		100
5) 1-Methylnaphthalene	5.19	142	113925	9.86066 ppb		100
7) Acenaphthylene	6.11	152	349784	10.61317 ppb		100
8) Acenaphthene	6.31	154	103108	9.88280 ppb		100
9) Fluorene	6.90	166	133281	10.74300 ppb		96
11) Phenanthrene	8.03	178	203962	10.75583 ppb		97
12) Anthracene	8.09	178	185489	10.99459 ppb		96
14) Fluoranthene	9.40	202	277003	11.15286 ppb		95
16) Pyrene	9.66	202	280854	10.40385 ppb		95
17) Benz (a) anthracene	11.12	228	272999	10.36925 ppb		97
18) Chrysene	11.16	228	274840	9.77196 ppb	#	97
19) Indeno (1,2,3-cd) pyrene	15.05	276	338064	10.26581 ppb	#	97
21) Benzo (b) fluoranthene	12.93	252	301266	12.09264 ppb	#	98
22) Benzo (k) fluoranthene	12.99	252	309244	10.35662 ppb		98
23) Benzo (a) pyrene	13.48	252	262761	11.21745 ppb		98
24) Dibenz (a,h) anthracene	15.10	278	284747	10.75025 ppb		99
25) Benzo (g,h,i) perylene	15.42	276	288237	10.52455 ppb		99

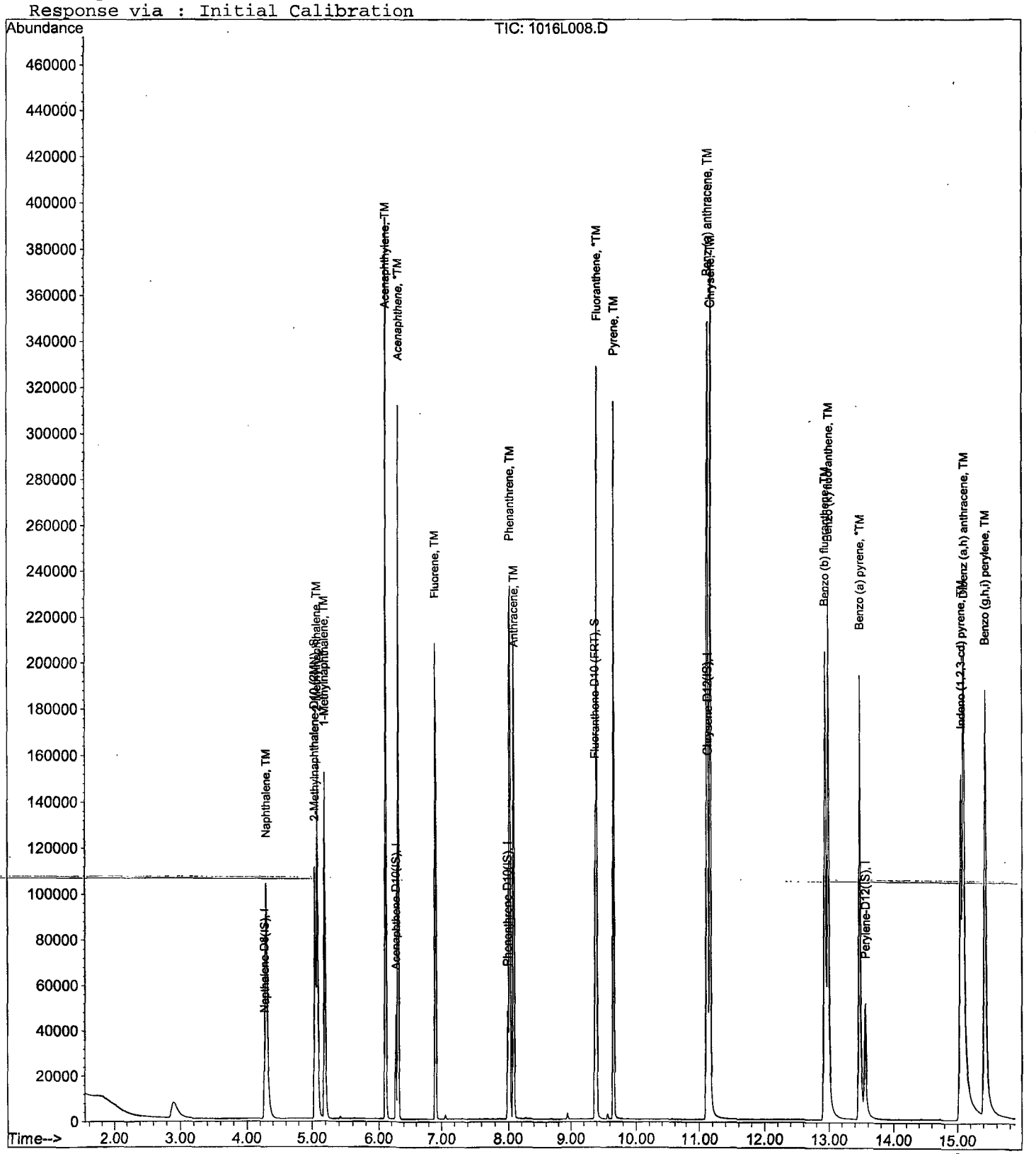
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L008.D Vial: 8
Acq On : 16 Oct 20 12:27 Operator: MA
Sample : 10 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L009.D Vial: 9
Acq On : 16 Oct 20 12:50 Operator: MA
Sample : 50 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:48 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:47:50 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	40530	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	20899	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	8.00	188	41652	2.50000	ppb		0.01
15) Chrysene-D12(IS)	11.14	240	56403	2.50000	ppb		0.01
20) Perylene-D12(IS)	13.57	264	65963	2.50000	ppb		0.01
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	447024	25.76472	ppb		0.00
Spiked Amount 5.000			Recovery = 515.300%				
13) Fluoranthene-D10 (FRT)	9.39	212	528902	27.23414	ppb		0.01
Spiked Amount 5.000			Recovery = 544.680%				
Target Compounds							Qvalue
2) Naphthalene	4.30	128	744322	48.33340	ppb		99
4) 2-Methylnaphthalene	5.08	142	491506	49.75173	ppb		99
5) 1-Methylnaphthalene	5.20	142	492889	48.67075	ppb		94
7) Acenaphthylene	6.12	152	1543648	54.17718	ppb		98
8) Acenaphthene	6.31	154	445953	49.44242	ppb		95
9) Fluorene	6.92	166	568152	52.97182	ppb		90
11) Phenanthrene	8.03	178	745533	44.79178	ppb		98
12) Anthracene	8.09	178	695926	46.99599	ppb		98
14) Fluoranthene	9.41	202	1006088	46.15032	ppb	#	92
16) Pyrene	9.67	202	1055879	46.41163	ppb	#	93
17) Benz (a) anthracene	11.13	228	1127240	50.80447	ppb		98
18) Chrysene	11.18	228	1050714	44.32875	ppb		98
19) Indeno (1,2,3-cd) pyrene	15.07	276	1423510	51.29252	ppb	#	89
21) Benzo (b) fluoranthene	12.97	252	1356281	56.88160	ppb	#	97
22) Benzo (k) fluoranthene	13.02	252	1299182	45.46088	ppb		98
23) Benzo (a) pyrene	13.50	252	1216664	54.26940	ppb		98
24) Dibenz (a,h) anthracene	15.13	278	1203467	47.47280	ppb		96
25) Benzo (g,h,i) perylene	15.47	276	1214669	46.34075	ppb		96

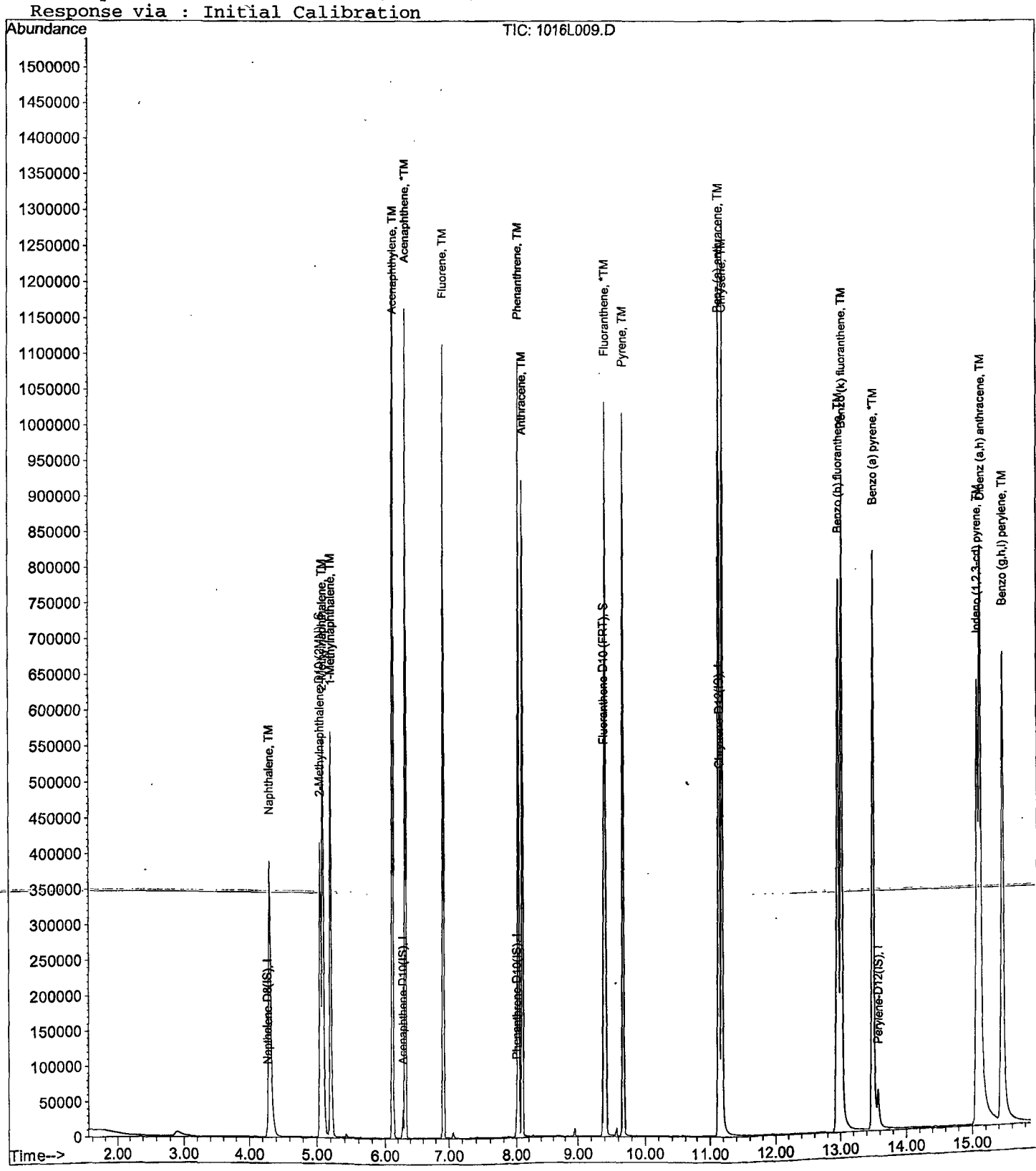
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L009.D Vial: 9
Acq On : 16 Oct 20 12:50 Operator: MA
Sample : 50 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:48 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L010.D Vial: 10
Acq On : 16 Oct 20 13:12 Operator: MA
Sample : 100 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:47 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:47:50 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	39931	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	22446	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	8.00	188	44342	2.50000	ppb		0.01
15) Chrysene-D12(IS)	11.15	240	55121	2.50000	ppb		0.02
20) Perylene-D12(IS)	13.58	264	58243	2.50000	ppb		0.02
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	890571	52.09901	ppb		0.00
Spiked Amount 5.000			Recovery	= 1041.980%			
13) Fluoranthene-D10 (FRT)	9.39	212	1112969	53.83220	ppb		0.01
Spiked Amount 5.000			Recovery	= 1076.640%			
Target Compounds							Qvalue
2) Naphthalene	4.30	128	1372540	90.46444	ppb		98
4) 2-Methylnaphthalene	5.09	142	938117	96.38352	ppb		96
5) 1-Methylnaphthalene	5.20	142	918368	92.04539	ppb		95
7) Acenaphthylene	6.12	152	2774435	90.66282	ppb		99
8) Acenaphthene	6.33	154	802774	82.86868	ppb		97
9) Fluorene	6.93	166	1111179	96.46082	ppb		85
11) Phenanthrene	8.04	178	1468903	82.89821	ppb		97
12) Anthracene	8.10	178	1342303	85.14692	ppb		96
14) Fluoranthene	9.42	202	1974317	85.06995	ppb	#	90
16) Pyrene	9.68	202	2096374	94.29019	ppb	#	94
17) Benz (a) anthracene	11.14	228	2070440	95.48460	ppb		97
18) Chrysene	11.19	228	1983840	85.64316	ppb	#	95
19) Indeno (1,2,3-cd) pyrene	15.11	276	2762426	101.85194	ppb	#	87
21) Benzo (b) fluoranthene	12.98	252	2138419	101.57143	ppb		100
22) Benzo (k) fluoranthene	13.04	252	2211086	87.62543	ppb		100
23) Benzo (a) pyrene	13.52	252	2045239	103.32017	ppb		98
24) Dibenz (a,h) anthracene	15.15	278	2331210	104.14746	ppb	#	95
25) Benzo (g,h,i) perylene	15.50	276	2288345	98.87428	ppb		97

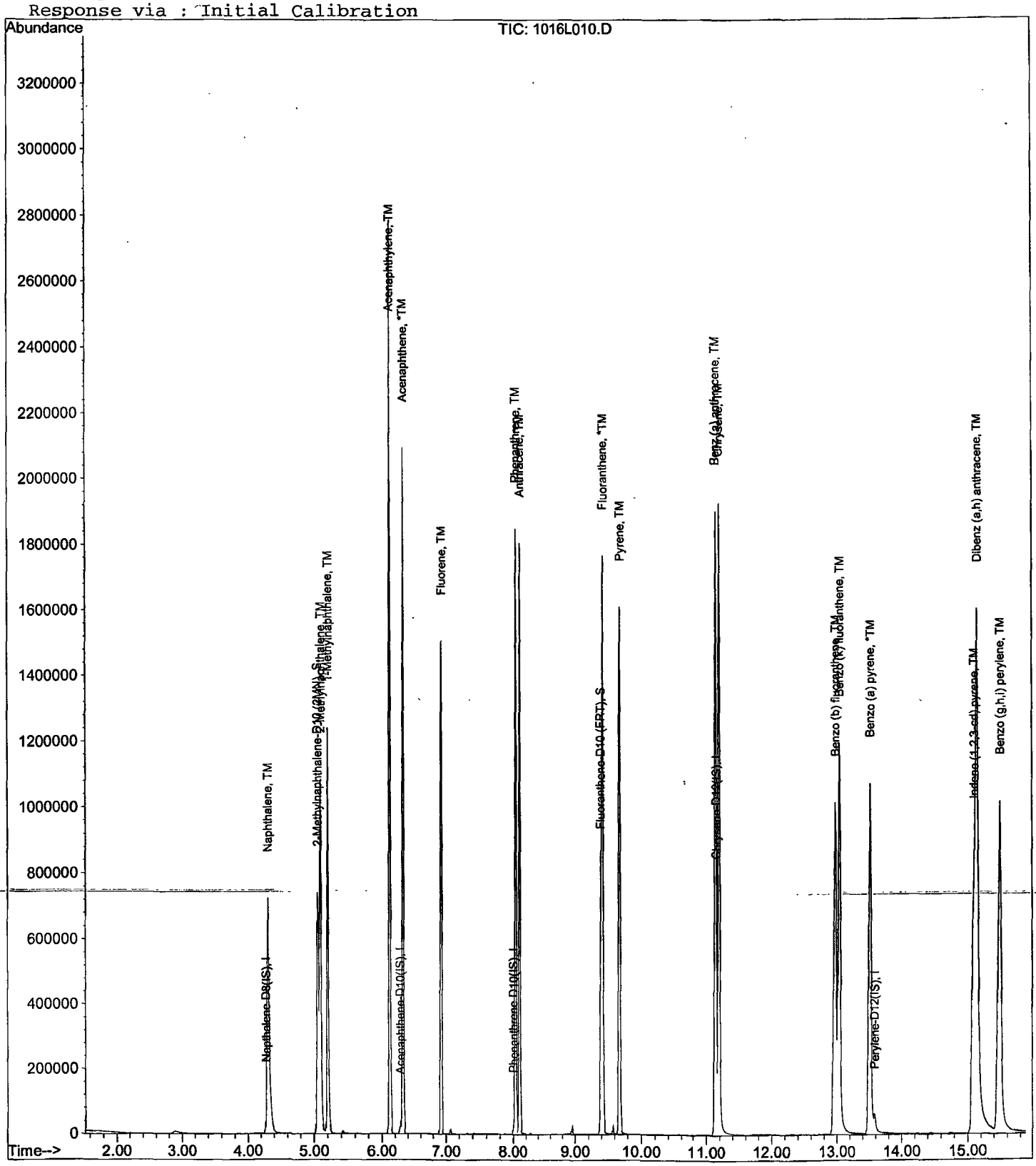
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L010.D Vial: 10
Acq On : 16 Oct 20 13:12 Operator: MA
Sample : 100 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:47 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



PAH by GCMS SIM
EPA 8270 SIM

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/16/20
Instrument: Linus
Initial Cal. Date: 10/16/20
Data File: 1016L011.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	Naphthalene	0.9600	0.9132	4.9	TM	
2	TM	2-Methylnaphthalene	0.6501	0.6497	0.06	TM	
3	TM	1-Methylnaphthalene	0.6400	0.6197	3.2	TM	
4	TM	Acenaphthylene	3.679	3.702	0.64	TM	
5	*TM	Acenaphthene	1.093	1.076	1.5	*TM	
6	TM	Fluorene	1.356	1.354	0.13	TM	
7	TM	Phenanthrene	1.018	1.058	3.9	TM	
8	TM	Anthracene	0.9311	1.069	15	TM	
9	*TM	Fluoranthene	1.380	1.519	10	*TM	
10	TM	Pyrene	1.043	1.078	3.3	TM	
11	TM	Benz (a) anthracene	1.027	1.030	0.22	TM	
12	TM	Chrysene	1.044	1.015	2.8	TM	
13	TM	Indeno (1,2,3-cd) pyrene	1.244	1.350	8.5	TM	
14	TM	Benzo (b) fluoranthene	0.9609	0.9298	3.2	TM	
15	TM	Benzo (k) fluoranthene	1.069	1.178	10	TM	
16	*TM	Benzo (a) pyrene	0.8856	0.9841	11	*TM	
17	TM	Dibenz (a,h) anthracene	0.9538	1.040	9.1	TM	
18	TM	Benzo (g,h,i) perylene	0.9868	1.050	6.4	TM	
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			5.2		

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L011.D Vial: 11
Acq On : 16 Oct 20 13:34 Operator: MA
Sample : SS SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:53 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	59322	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	30386	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	62233	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.13	240	91312	2.50000	ppb		0.00
20) Perylene-D12(IS)	13.56	264	98148	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	0.00	152	0d	0.00000	ppb		
Spiked Amount 5.000			Recovery =	0.000%			
13) Fluoranthene-D10 (FRT)	0.00	212	0d	0.00000	ppb		
Spiked Amount 5.000			Recovery =	0.000%			
Target Compounds							Qvalue
2) Naphthalene	4.30	128	108342	4.75587	ppb		99
4) 2-Methylnaphthalene	5.08	142	77085	4.99708	ppb		99
5) 1-Methylnaphthalene	5.19	142	73520	4.84127	ppb		98
7) Acenaphthylene	6.11	152	225002	5.03212	ppb		99
8) Acenaphthene	6.31	154	65388	4.92375	ppb		96
9) Fluorene	6.92	166	82291	4.99334	ppb		87
11) Phenanthrene	8.03	178	131665	5.19729	ppb		98
12) Anthracene	8.09	178	133038	5.73959	ppb		97
14) Fluoranthene	9.40	202	189096	5.50570	ppb		95
16) Pyrene	9.66	202	196781	5.16391	ppb		95
17) Benz (a) anthracene	11.12	228	188027	5.01094	ppb		98
18) Chrysene	11.16	228	185421	4.86068	ppb	#	98
19) Indeno (1,2,3-cd) pyrene	15.04	276	246499	5.42292	ppb	#	89
21) Benzo (b) fluoranthene	12.93	252	182515	4.83839	ppb		98
22) Benzo (k) fluoranthene	12.99	252	231163	5.50621	ppb		98
23) Benzo (a) pyrene	13.48	252	193170	5.55576	ppb		98
24) Dibenz (a,h) anthracene	15.10	278	204218	5.45350	ppb		99
25) Benzo (g,h,i) perylene	15.42	276	206170	5.32189	ppb		97

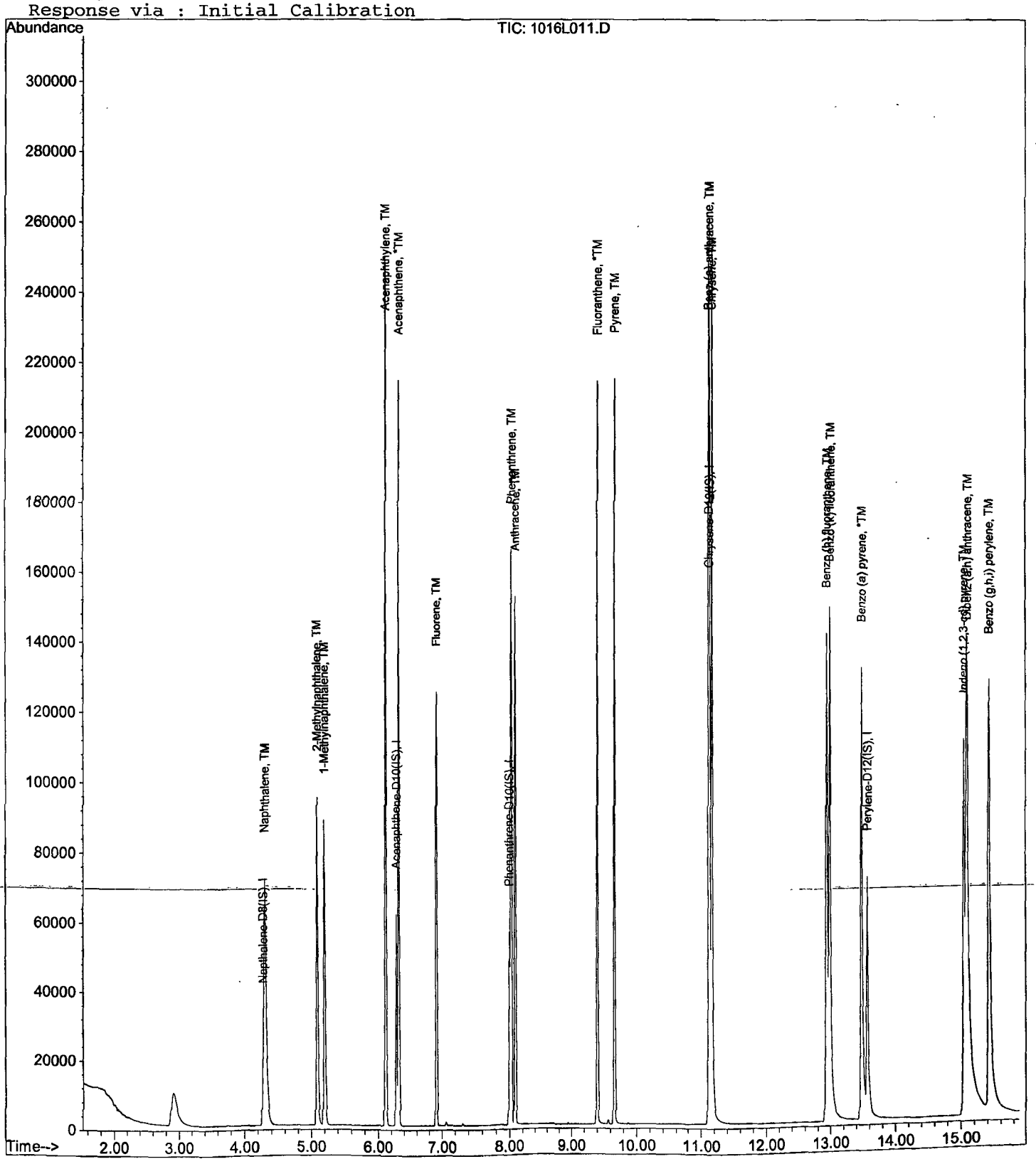
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L011.D Vial: 11
Acq On : 16 Oct 20 13:34 Operator: MA
Sample : SS SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:53 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



PAH by GCMS SIM
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/23/20
Instrument: Linus
Initial Cal. Date: 10/16/20
Data File: 1016L117.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	TM	Naphthalene	0.9600	0.9139	4.8	TM	
3	S	2-Methylnaphthalene-D10 (2MN)	1.114	1.188	6.6	S	
4	TM	2-Methylnaphthalene	0.6501	0.6361	2.2	TM	
5	TM	1-Methylnaphthalene	0.6400	0.6290	1.7	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	TM	Acenaphthylene	3.679	3.561	3.2	TM	
8	*TM	Acenaphthene	1.093	1.070	2.1	*TM	
9	TM	Fluorene	1.356	1.359	0.23	TM	
10	I	Phenanthrene-D10(IS)	ISTD			I	
11	TM	Phenanthrene	1.018	1.027	0.93	TM	
12	TM	Anthracene	0.9311	0.9592	3.0	TM	
13	S	Fluoranthene-D10 (FRT)	1.238	1.242	0.26	S	
14	*TM	Fluoranthene	1.380	1.433	3.9	*TM	
15	I	Chrysene-D12(IS)	ISTD			I	
16	TM	Pyrene	1.043	1.042	0.16	TM	
17	TM	Benz (a) anthracene	1.027	0.9719	5.4	TM	
18	TM	Chrysene	1.044	1.046	0.11	TM	
19	TM	Indeno (1,2,3-cd) pyrene	1.244	1.229	1.3	TM	
20	I	Perylene-D12(IS)	ISTD			I	
21	TM	Benzo (b) fluoranthene	0.9609	0.9347	2.7	TM	
22	TM	Benzo (k) fluoranthene	1.069	1.105	3.4	TM	
23	*TM	Benzo (a) pyrene	0.8856	0.9004	1.7	*TM	
24	TM	Dibenz (a,h) anthracene	0.9538	0.9519	0.20	TM	
25	TM	Benzo (g,h,i) perylene	0.9868	0.9664	2.1	TM	
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			2.3		

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L117.D Vial: 17
Acq On : 23 Oct 20 11:22 Operator: MA
Sample : 5 SIM 08/21/20 (1) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 23 11:44 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	46756	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	27674	2.50000 ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	50490	2.50000 ppb		0.00
15) Chrysene-D12(IS)	11.13	240	70872	2.50000 ppb		0.00
20) Perylene-D12(IS)	13.56	264	76980	2.50000 ppb		0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	55550	2.66605 ppb		0.00
Spiked Amount 5.000			Recovery	= 53.320%		
13) Fluoranthene-D10 (FRT)	9.38	212	62695	2.50661 ppb		0.00
Spiked Amount 5.000			Recovery	= 50.140%		
Target Compounds						Qvalue
2) Naphthalene	4.30	128	85459	4.75959 ppb		100
4) 2-Methylnaphthalene	5.08	142	59481	4.89218 ppb		99
5) 1-Methylnaphthalene	5.19	142	58818	4.91408 ppb		100
7) Acenaphthylene	6.11	152	197115	4.84046 ppb		100
8) Acenaphthene	6.31	154	59231	4.89721 ppb		99
9) Fluorene	6.90	166	75217	5.01137 ppb		93
11) Phenanthrene	8.03	178	103722	5.04653 ppb		97
12) Anthracene	8.09	178	96860	5.15069 ppb		96
14) Fluoranthene	9.40	202	144740	5.19438 ppb		96
16) Pyrene	9.66	202	147647	4.99199 ppb		97
17) Benz (a) anthracene	11.12	228	137759	4.73012 ppb		97
18) Chrysene	11.16	228	148197	5.00531 ppb	#	98
19) Indeno (1,2,3-cd) pyrene	15.04	276	174180	4.93707 ppb	#	85
21) Benzo (b) fluoranthene	12.93	252	143911	4.86407 ppb	#	98
22) Benzo (k) fluoranthene	12.99	252	170172	5.16804 ppb		98
23) Benzo (a) pyrene	13.48	252	138621	5.08319 ppb		98
24) Dibenz (a,h) anthracene	15.10	278	146560	4.98999 ppb		99
25) Benzo (g,h,i) perylene	15.42	276	148782	4.89659 ppb		98

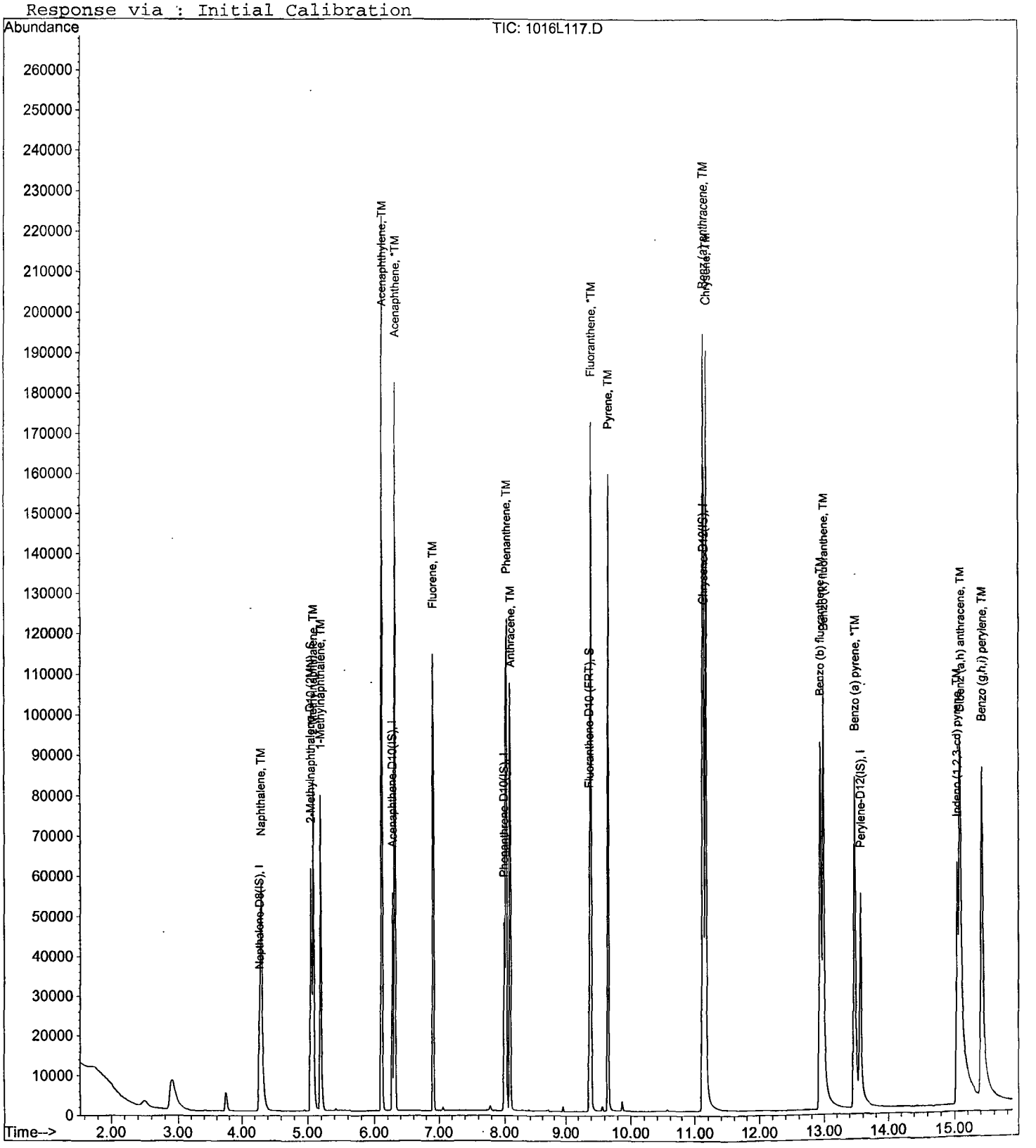
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L117.D Vial: 17
Acq On : 23 Oct 20 11:22 Operator: MA
Sample : 5 SIM 08/21/20 (1) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 23 11:44 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



PAH by GCMS SIM
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/23/20
Instrument: Linus
Initial Cal. Date: 10/16/20
Data File: 1016L123.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	TM	Naphthalene	0.9600	1.085	13	TM	
3	S	2-Methylnaphthalene-D10 (2MN)	1.114	1.194	7.2	S	
4	TM	2-Methylnaphthalene	0.6501	0.7758	19	TM	
5	TM	1-Methylnaphthalene	0.6400	0.7487	17	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	TM	Acenaphthylene	3.679	4.102	12	TM	
8	*TM	Acenaphthene	1.093	1.086	0.58	*TM	
9	TM	Fluorene	1.356	1.549	14	TM	
10	I	Phenanthrene-D10(IS)	ISTD			I	
11	TM	Phenanthrene	1.018	1.019	0.10	TM	
12	TM	Anthracene	0.9311	0.9731	4.5	TM	
13	S	Fluoranthene-D10 (FRT)	1.238	1.327	7.2	S	
14	*TM	Fluoranthene	1.380	1.498	8.6	*TM	
15	I	Chrysene-D12(IS)	ISTD			I	
16	TM	Pyrene	1.043	1.202	15	TM	
17	TM	Benz (a) anthracene	1.027	1.145	11	TM	
18	TM	Chrysene	1.044	1.190	14	TM	
19	TM	Indeno (1,2,3-cd) pyrene	1.244	1.464	18	TM	
20	I	Perylene-D12(IS)	ISTD			I	
21	TM	Benzo (b) fluoranthene	0.9609	0.9781	1.8	TM	
22	TM	Benzo (k) fluoranthene	1.069	1.234	15	TM	
23	*TM	Benzo (a) pyrene	0.8856	0.9829	11	*TM	
24	TM	Dibenz (a,h) anthracene	0.9538	1.059	11	TM	
25	TM	Benzo (g,h,i) perylene	0.9868	0.9686	1.8	TM	
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			10.1		

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L123.D Vial: 23
Acq On : 23 Oct 20 16:15 Operator: MA
Sample : 5 SIM 08/21/20 (2) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 23 16:31 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	45063	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	25522	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	56001	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.13	240	72836	2.50000	ppb		0.00
20) Perylene-D12(IS)	13.56	264	85621	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	53803	2.67922	ppb		0.00
Spiked Amount 5.000			Recovery	= 53.580%			
13) Fluoranthene-D10 (FRT)	9.38	212	74314	2.67876	ppb		0.00
Spiked Amount 5.000			Recovery	= 53.580%			
Target Compounds							Qvalue
2) Naphthalene	4.30	128	97774	5.65005	ppb		97
4) 2-Methylnaphthalene	5.08	142	69919	5.96674	ppb		92
5) 1-Methylnaphthalene	5.19	142	67473	5.84897	ppb		95
7) Acenaphthylene	6.11	152	209405	5.57585	ppb		99
8) Acenaphthene	6.31	154	55448	4.97099	ppb		100
9) Fluorene	6.90	166	79049	5.71077	ppb		88
11) Phenanthrene	8.02	178	114102	5.00524	ppb		99
12) Anthracene	8.08	178	108988	5.22527	ppb		99
14) Fluoranthene	9.40	202	167776	5.42856	ppb		99
16) Pyrene	9.66	202	175070	5.75956	ppb		99
17) Benz (a) anthracene	11.11	228	166801	5.57288	ppb		97
18) Chrysene	11.16	228	173326	5.69618	ppb		97
19) Indeno (1,2,3-cd) pyrene	15.04	276	213201	5.88016	ppb	#	89
21) Benzo (b) fluoranthene	12.93	252	167487	5.08961	ppb		99
22) Benzo (k) fluoranthene	12.99	252	211301	5.76948	ppb	#	95
23) Benzo (a) pyrene	13.48	252	168307	5.54890	ppb	#	97
24) Dibenz (a,h) anthracene	15.08	278	181284	5.54934	ppb	#	96
25) Benzo (g,h,i) perylene	15.42	276	165868	4.90799	ppb		97

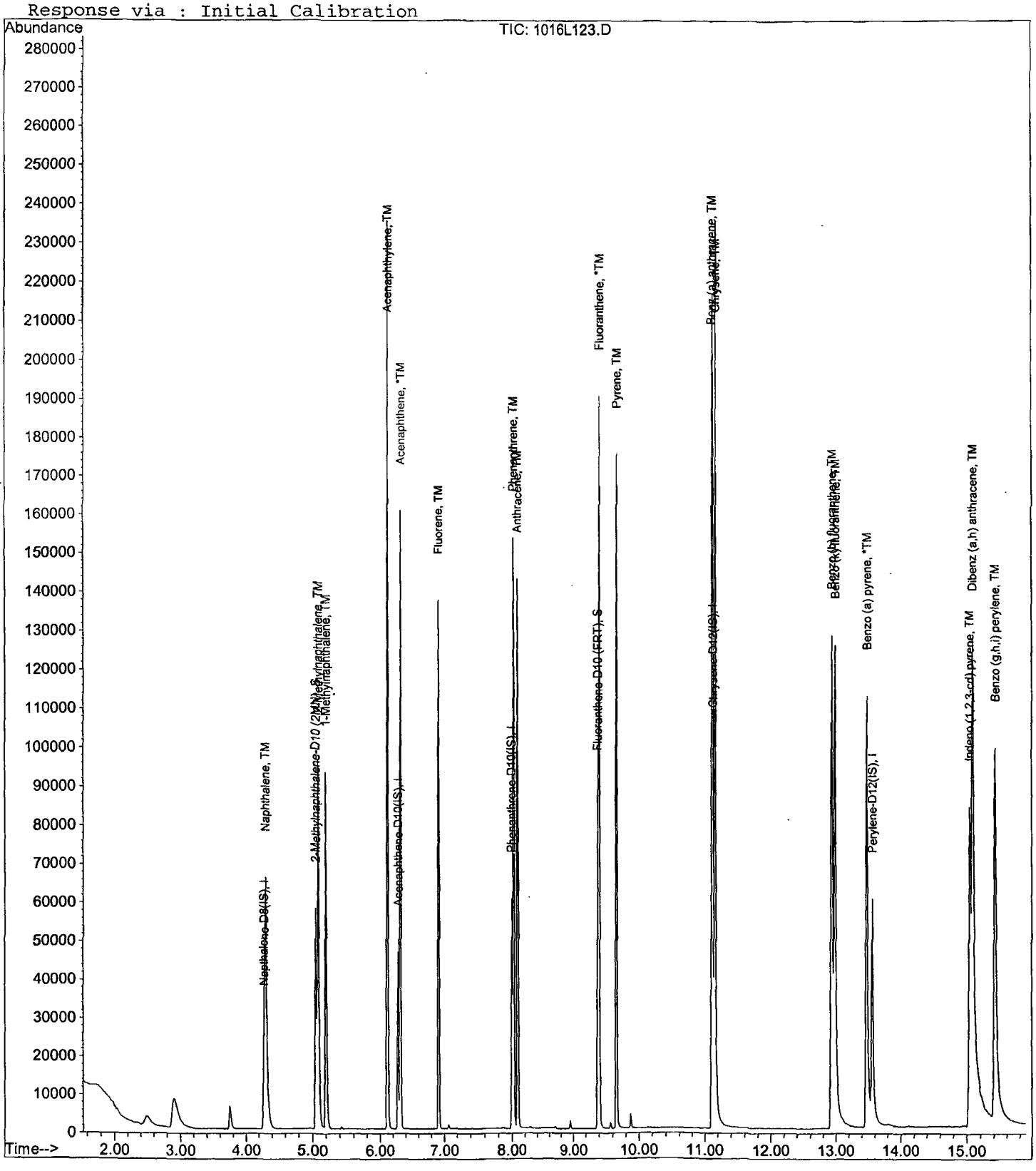
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L123.D Vial: 23
Acq On : 23 Oct 20 16:15 Operator: MA
Sample : 5 SIM 08/21/20 (2) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 23 16:31 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



PAH by GCMS SIM
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/27/20
Instrument: Linus
Initial Cal. Date: 10/16/20
Data File: 1016L126.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	TM	Naphthalene	0.9600	0.9101	5.2	TM	
3	S	2-Methylnaphthalene-D10 (2MN)	1.114	1.168	4.9	S	
4	TM	2-Methylnaphthalene	0.6501	0.6239	4.0	TM	
5	TM	1-Methylnaphthalene	0.6400	0.6149	3.9	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	TM	Acenaphthylene	3.679	3.500	4.9	TM	
8	*TM	Acenaphthene	1.093	1.038	5.0	*TM	
9	TM	Fluorene	1.356	1.323	2.4	TM	
10	I	Phenanthrene-D10(IS)	ISTD			I	
11	TM	Phenanthrene	1.018	1.047	2.9	TM	
12	TM	Anthracene	0.9311	0.9585	2.9	TM	
13	S	Fluoranthene-D10 (FRT)	1.238	1.249	0.87	S	
14	*TM	Fluoranthene	1.380	1.466	6.3	*TM	
15	I	Chrysene-D12(IS)	ISTD			I	
16	TM	Pyrene	1.043	1.053	0.91	TM	
17	TM	Benz (a) anthracene	1.027	1.006	2.1	TM	
18	TM	Chrysene	1.044	0.9868	5.5	TM	
19	TM	Indeno (1,2,3-cd) pyrene	1.244	1.149	7.7	TM	
20	I	Perylene-D12(IS)	ISTD			I	
21	TM	Benzo (b) fluoranthene	0.9609	0.8229	14	TM	
22	TM	Benzo (k) fluoranthene	1.069	1.177	10	TM	
23	*TM	Benzo (a) pyrene	0.8856	0.9068	2.4	*TM	
24	TM	Dibenz (a,h) anthracene	0.9538	0.9249	3.0	TM	
25	TM	Benzo (g,h,i) perylene	0.9868	1.005	1.9	TM	
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			4.5		

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L126.D Vial: 26
Acq On : 27 Oct 20 9:46 Operator: MA
Sample : 5 SIM 08/21/20 (1) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:07 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	48796	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.27	164	26950	2.50000	ppb		-0.01
10) Phenanthrene-D10(IS)	7.99	188	52007	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.12	240	75244	2.50000	ppb		-0.01
20) Perylene-D12(IS)	13.56	264	78270	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	57011	2.62178	ppb		0.00
Spiked Amount 5.000			Recovery = 52.440%				
13) Fluoranthene-D10 (FRT)	9.38	212	64971	2.52184	ppb		0.00
Spiked Amount 5.000			Recovery = 50.440%				
Target Compounds							Qvalue
2) Naphthalene	4.30	128	88819	4.73991	ppb		100
4) 2-Methylnaphthalene	5.08	142	60886	4.79838	ppb		98
5) 1-Methylnaphthalene	5.19	142	60009	4.80399	ppb		99
7) Acenaphthylene	6.11	152	188630	4.75653	ppb		99
8) Acenaphthene	6.30	154	55968	4.75174	ppb		88
9) Fluorene	6.90	166	71295	4.87768	ppb		92
11) Phenanthrene	8.01	178	108924	5.14504	ppb		99
12) Anthracene	8.08	178	99696	5.14686	ppb		98
14) Fluoranthene	9.40	202	152509	5.31354	ppb		98
16) Pyrene	9.65	202	158434	5.04545	ppb	#	83
17) Benz (a) anthracene	11.11	228	151425	4.89726	ppb		99
18) Chrysene	11.16	228	148499	4.72408	ppb		100
19) Indeno (1,2,3-cd) pyrene	15.04	276	172916	4.61646	ppb	#	94
21) Benzo (b) fluoranthene	12.93	252	128818	4.28218	ppb		100
22) Benzo (k) fluoranthene	12.98	252	184194	5.50168	ppb		99
23) Benzo (a) pyrene	13.46	252	141955	5.11965	ppb		99
24) Dibenz (a,h) anthracene	15.08	278	144781	4.84818	ppb		99
25) Benzo (g,h,i) perylene	15.41	276	157350	5.09323	ppb		98

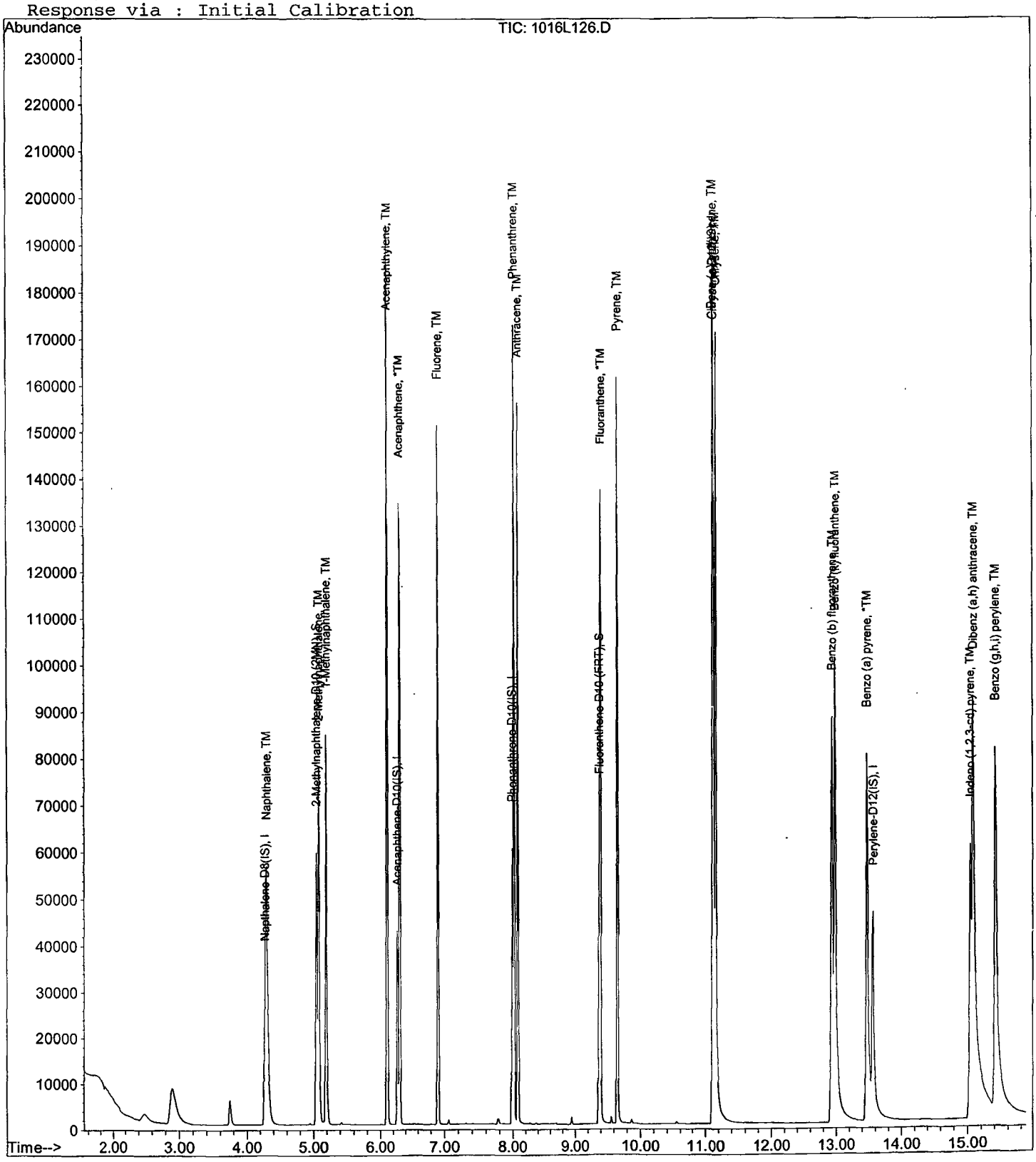
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L126.D Vial: 26
Acq On : 27 Oct 20 9:46 Operator: MA
Sample : 5 SIM 08/21/20 (1) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:07 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



PAH by GCMS SIM
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/27/20
Instrument: Linus
Initial Cal. Date: 10/16/20
Data File: 1016L151.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	TM	Naphthalene	0.9600	0.9312	3.0	TM	
3	S	2-Methylnaphthalene-D10 (2MN)	1.114	1.226	10	S	
4	TM	2-Methylnaphthalene	0.6501	0.6557	0.87	TM	
5	TM	1-Methylnaphthalene	0.6400	0.6417	0.26	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	TM	Acenaphthylene	3.679	3.753	2.0	TM	
8	*TM	Acenaphthene	1.093	1.053	3.6	*TM	
9	TM	Fluorene	1.356	1.356	0.02	TM	
10	I	Phenanthrene-D10(IS)	ISTD			I	
11	TM	Phenanthrene	1.018	1.023	0.56	TM	
12	TM	Anthracene	0.9311	0.9591	3.0	TM	
13	S	Fluoranthene-D10 (FRT)	1.238	1.348	8.8	S	
14	*TM	Fluoranthene	1.380	1.461	5.9	*TM	
15	I	Chrysene-D12(IS)	ISTD			I	
16	TM	Pyrene	1.043	1.022	2.0	TM	
17	TM	Benz (a) anthracene	1.027	1.028	0.10	TM	
18	TM	Chrysene	1.044	1.018	2.5	TM	
19	TM	Indeno (1,2,3-cd) pyrene	1.244	1.313	5.5	TM	
20	I	Perylene-D12(IS)	ISTD			I	
21	TM	Benzo (b) fluoranthene	0.9609	1.021	6.3	TM	
22	TM	Benzo (k) fluoranthene	1.069	1.009	5.6	TM	
23	*TM	Benzo (a) pyrene	0.8856	0.9084	2.6	*TM	
24	TM	Dibenz (a,h) anthracene	0.9538	0.9857	3.3	TM	
25	TM	Benzo (g,h,i) perylene	0.9868	0.9700	1.7	TM	
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			3.4		

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L151.D Vial: 51
Acq On : 27 Oct 20 19:49 Operator: MA
Sample : 5 SIM 08/21/20 (2) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 28 10:36 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	37175	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	21782	2.50000 ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	43073	2.50000 ppb		0.00
15) Chrysene-D12(IS)	11.13	240	62124	2.50000 ppb		0.00
20) Perylene-D12(IS)	13.56	264	70736	2.50000 ppb		0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	45558	2.75002 ppb		0.00
Spiked Amount 5.000			Recovery	= 55.000%		
13) Fluoranthene-D10 (FRT)	9.38	212	58060	2.72101 ppb		0.00
Spiked Amount 5.000			Recovery	= 54.420%		
Target Compounds						Qvalue
2) Naphthalene	4.30	128	69233	4.84966 ppb		99
4) 2-Methylnaphthalene	5.08	142	48753	5.04327 ppb		99
5) 1-Methylnaphthalene	5.19	142	47709	5.01325 ppb		98
7) Acenaphthylene	6.11	152	163480	5.10041 ppb		100
8) Acenaphthene	6.31	154	45872	4.81861 ppb		99
9) Fluorene	6.90	166	59081	5.00107 ppb		96
11) Phenanthrene	8.03	178	88160	5.02798 ppb		97
12) Anthracene	8.08	178	82621	5.15005 ppb		99
14) Fluoranthene	9.40	202	125876	5.29527 ppb		97
16) Pyrene	9.66	202	126986	4.89801 ppb		98
17) Benz (a) anthracene	11.12	228	127769	5.00488 ppb		97
18) Chrysene	11.16	228	126485	4.87355 ppb		99
19) Indeno (1,2,3-cd) pyrene	15.04	276	163113	5.27442 ppb	#	90
21) Benzo (b) fluoranthene	12.93	252	144441	5.31292 ppb	#	98
22) Benzo (k) fluoranthene	12.99	252	142794	4.71938 ppb	#	98
23) Benzo (a) pyrene	13.48	252	128514	5.12856 ppb		98
24) Dibenz (a,h) anthracene	15.10	278	139445	5.16684 ppb		98
25) Benzo (g,h,i) perylene	15.42	276	137226	4.91493 ppb		97

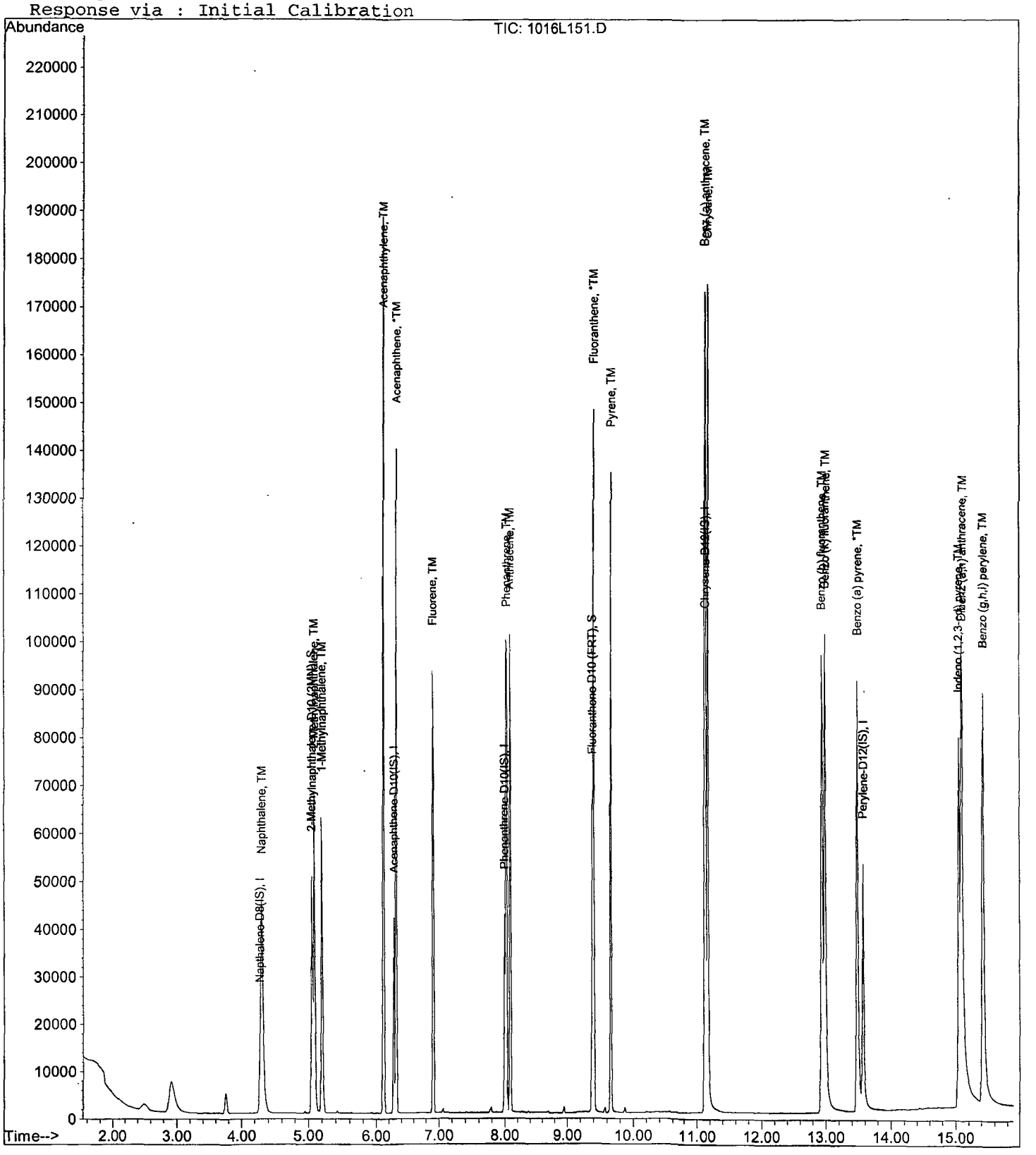
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L151.D Vial: 51
Acq On : 27 Oct 20 19:49 Operator: MA
Sample : 5 SIM 08/21/20 (2) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 28 10:36 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L129.D Vial: 29
Acq On : 27 Oct 20 10:56 Operator: MA
Sample : BA20539W34 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 27 10:48 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	4.27	136	35124	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	6.28	164	17532	2.50000	ppb	0.00
10) Phenanthrene-D10(IS)	7.99	188	35100	2.50000	ppb	0.00
15) Chrysene-D12(IS)	11.12	240	54783	2.50000	ppb	-0.01
20) Perylene-D12(IS)	13.55	264	51924	2.50000	ppb	-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	64740	5.17012	ppb	0.00
Spiked Amount 6.250			Recovery = 82.720%			
13) Fluoranthene-D10 (FRT)	9.38	212	85418	6.14061	ppb	0.00
Spiked Amount 6.250			Recovery = 98.256%			

Target Compounds Qvalue

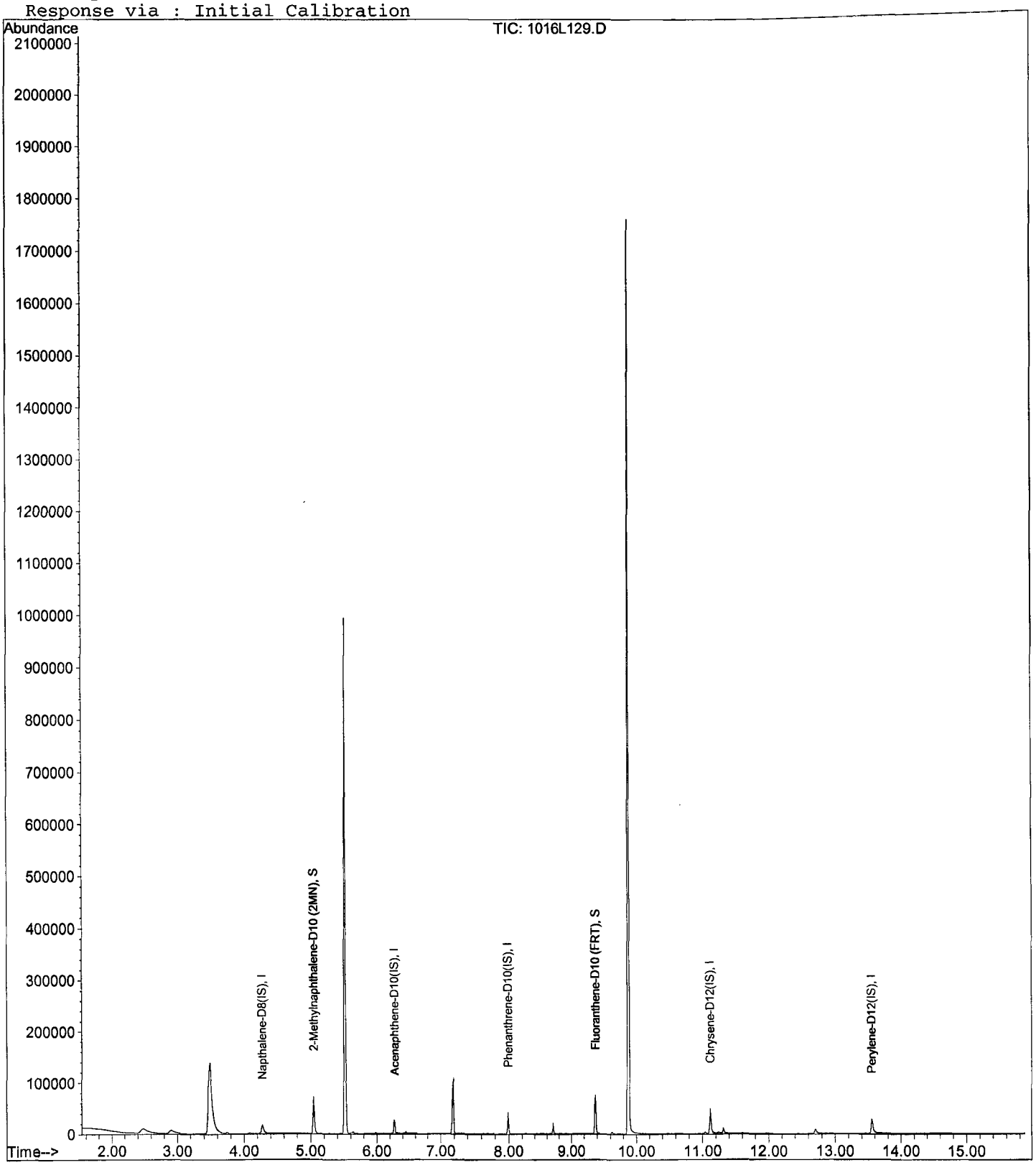
(#) = qualifier out of range (m) = manual integration
1016L129.D L1016.M Mon Nov 09 11:08:34 2020 Page 1

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L129.D Vial: 29
Acq On : 27 Oct 20 10:56 Operator: MA
Sample : BA20539W34 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 27 10:48 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L130.D Vial: 30
Acq On : 27 Oct 20 11:18 Operator: MA
Sample : BA20541W11 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 27 13:55 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	4.27	136	31878	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	6.28	164	17086	2.50000	ppb	0.00
10) Phenanthrene-D10(IS)	7.99	188	33778	2.50000	ppb	0.00
15) Chrysene-D12(IS)	11.12	240	51617	2.50000	ppb	-0.01
20) Perylene-D12(IS)	13.55	264	52754	2.50000	ppb	-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	78227	6.88332	ppb	0.00
Spiked Amount 6.250			Recovery = 110.128%			
13) Fluoranthene-D10 (FRT)	9.38	212	92510	6.91073	ppb	0.00
Spiked Amount 6.250			Recovery = 110.576%			

Target Compounds Qvalue

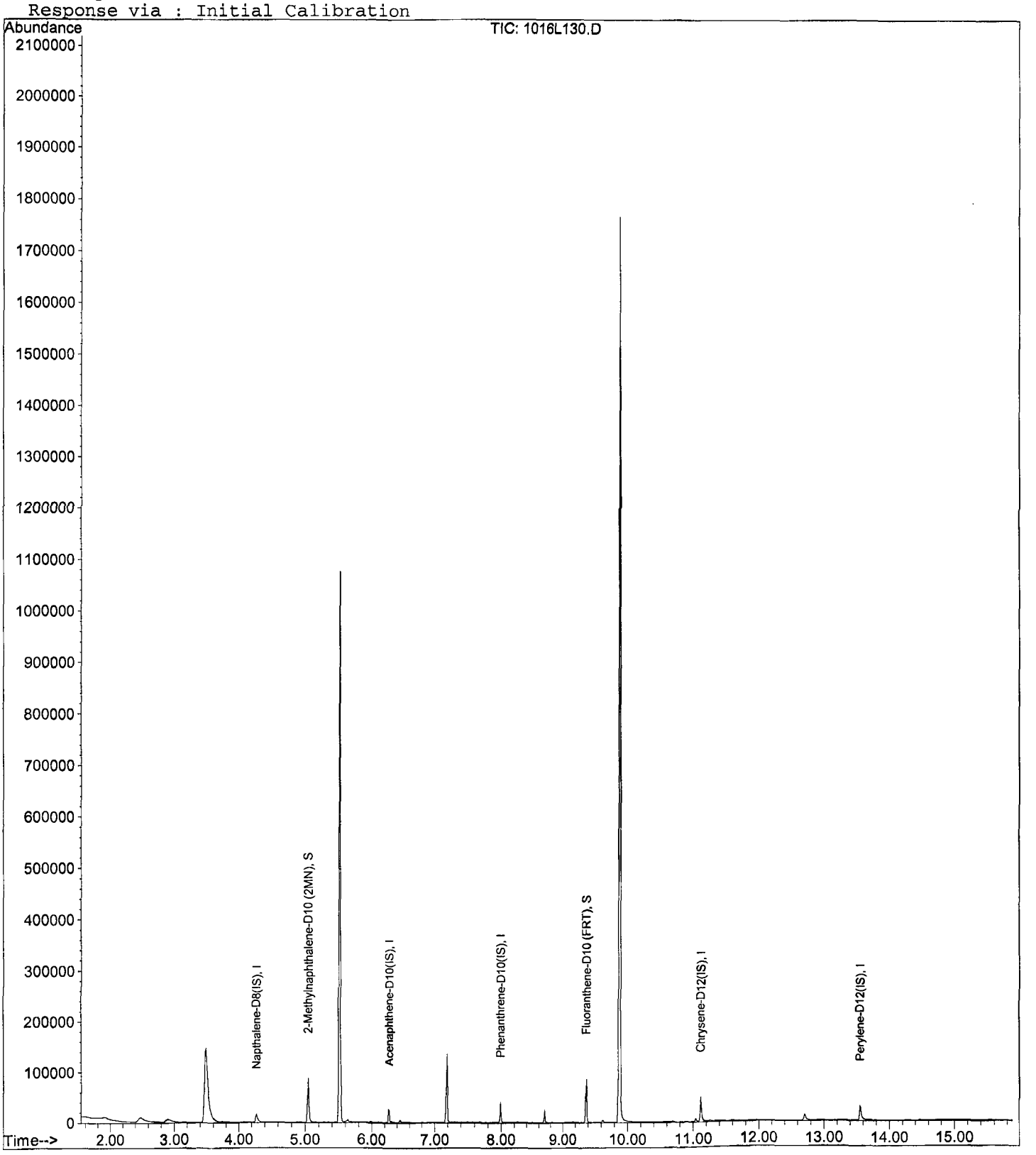
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L130.D Vial: 30
Acq On : 27 Oct 20 11:18 Operator: MA
Sample : BA20541W11 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 27 13:55 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L131.D Vial: 31
Acq On : 27 Oct 20 11:40 Operator: MA
Sample : BA20542W13 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 27 13:55 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	4.27	136	32780	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	6.27	164	18861	2.50000	ppb	-0.01
10) Phenanthrene-D10(IS)	7.99	188	38899	2.50000	ppb	0.00
15) Chrysene-D12(IS)	11.12	240	48047	2.50000	ppb	-0.01
20) Perylene-D12(IS)	13.55	264	52284	2.50000	ppb	-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	79963	6.84246	ppb	0.00
Spiked Amount 6.250			Recovery = 109.472%			
13) Fluoranthene-D10 (FRT)	9.38	212	91533	5.93756	ppb	0.00
Spiked Amount 6.250			Recovery = 95.008%			

Target Compounds	Qvalue

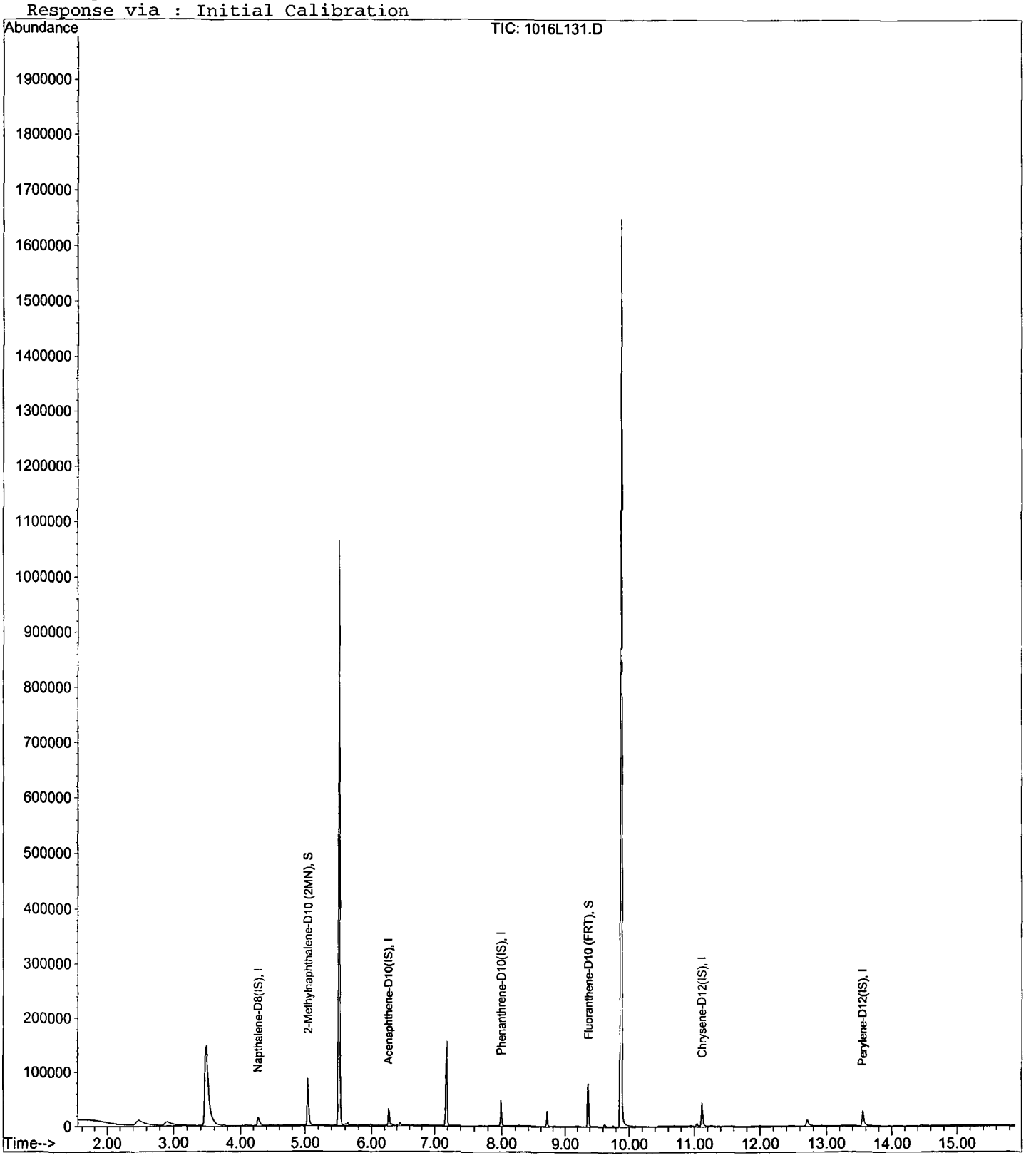
(#) = qualifier out of range (m) = manual integration
1016L131.D L1016.M Mon Nov 09 11:08:44 2020

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L131.D Vial: 31
Acq On : 27 Oct 20 11:40 Operator: MA
Sample : BA20542W13 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 27 13:55 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L132.D Vial: 32
Acq On : 27 Oct 20 12:02 Operator: MA
Sample : BA20544W15 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 27 13:56 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	4.27	136	30524	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	6.27	164	16855	2.50000	ppb	-0.01
10) Phenanthrene-D10(IS)	7.99	188	34360	2.50000	ppb	0.00
15) Chrysene-D12(IS)	11.12	240	49480	2.50000	ppb	-0.01
20) Perylene-D12(IS)	13.55	264	53206	2.50000	ppb	-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	77052	7.08068	ppb	0.00
Spiked Amount 6.250			Recovery = 113.296%			
13) Fluoranthene-D10 (FRT)	9.37	212	91285	6.70371	ppb	-0.01
Spiked Amount 6.250			Recovery = 107.264%			

Target Compounds	Qvalue

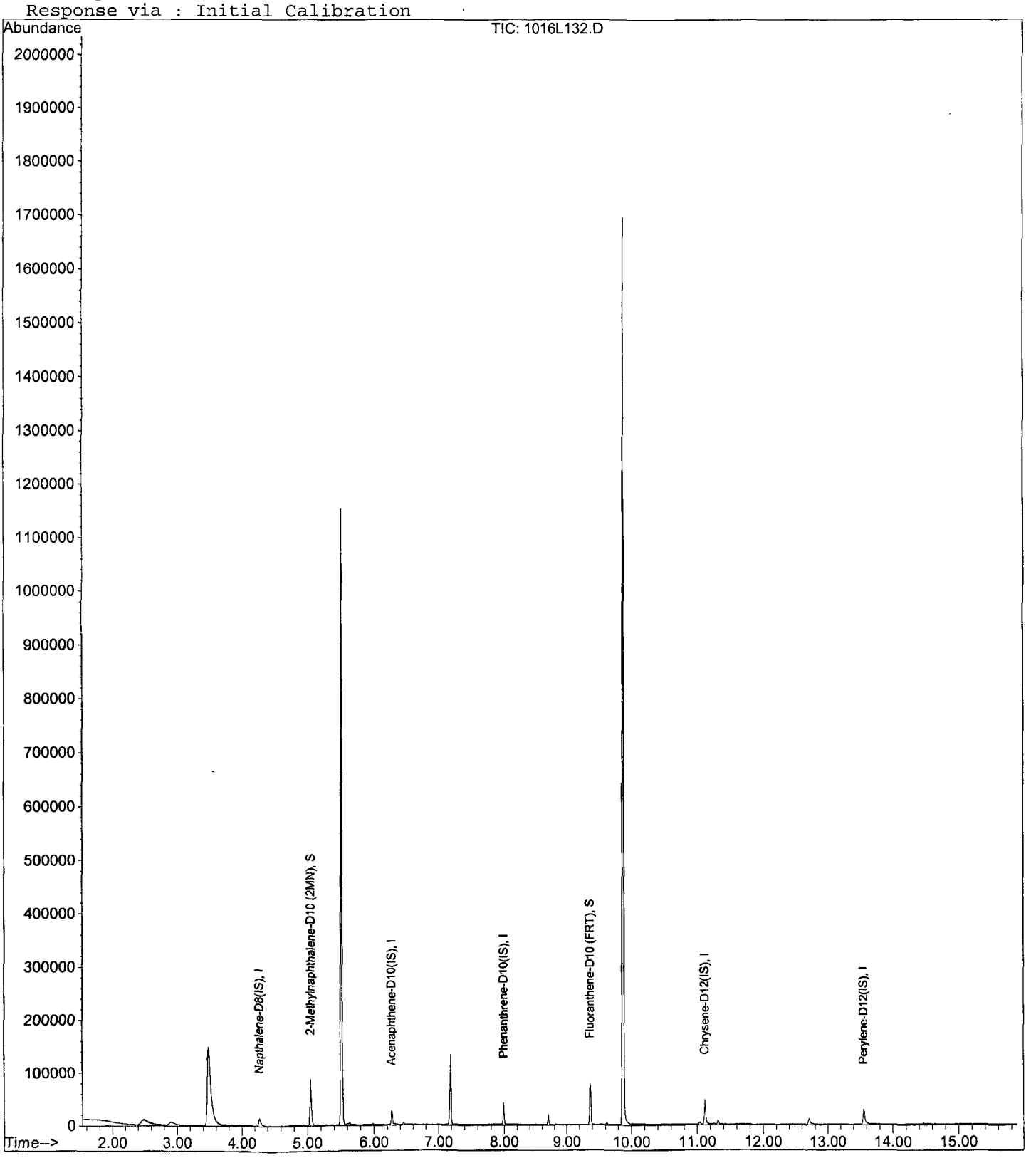
(#) = qualifier out of range (m) = manual integration
1016L132.D L1016.M Mon Nov 09 11:08:49 2020 Page 1

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L132.D Vial: 32
Acq On : 27 Oct 20 12:02 Operator: MA
Sample : BA20544W15 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 27 13:56 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L118.D Vial: 18
Acq On : 23 Oct 20 14:24 Operator: MA
Sample : 201021A BLK 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 23 14:47 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	4.27	136	36479	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	6.28	164	18826	2.50000 ppb	0.00
10) Phenanthrene-D10(IS)	7.99	188	36720	2.50000 ppb	0.00
15) Chrysene-D12(IS)	11.12	240	52875	2.50000 ppb	-0.01
20) Perylene-D12(IS)	13.56	264	57632	2.50000 ppb	0.00
System Monitoring Compounds					
3) 2-Methylnaphthalene-D10 (2	5.05	152	87512	6.72910 ppb	0.00
Spiked Amount 6.250			Recovery	= 107.664%	
13) Fluoranthene-D10 (FRT)	9.38	212	100815	6.92774 ppb	0.00
Spiked Amount 6.250			Recovery	= 110.848%	

Target Compounds Qvalue

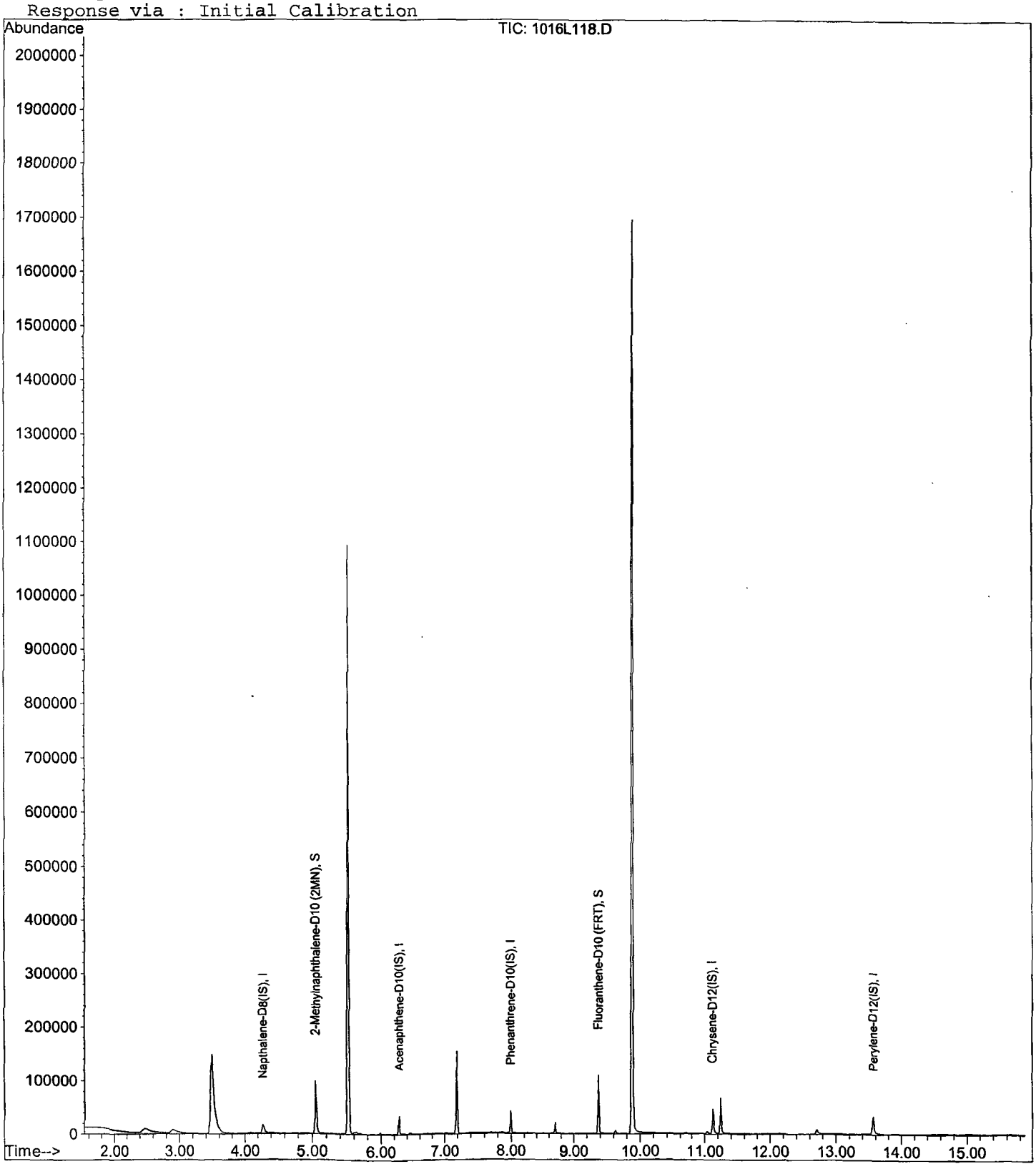
(#) = qualifier out of range (m) = manual integration
1016L118.D L1016.M Mon Nov 09 11:07:58 2020

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L118.D Vial: 18
Acq On : 23 Oct 20 14:24 Operator: MA
Sample : 201021A BLK 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 23 14:47 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L119.D Vial: 19
Acq On : 23 Oct 20 14:46 Operator: MA
Sample : 201021A LCS-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 23 14:47 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	33312	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	17203	2.50000 ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	34685	2.50000 ppb		0.00
15) Chrysene-D12(IS)	11.13	240	47498	2.50000 ppb		0.00
20) Perylene-D12(IS)	13.56	264	51583	2.50000 ppb		0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	68264	5.74809 ppb		0.00
Spiked Amount 6.250			Recovery	= 91.968%		
13) Fluoranthene-D10 (FRT)	9.38	212	86646	6.30341 ppb		0.00
Spiked Amount 6.250			Recovery	= 100.848%		
Target Compounds						Qvalue
2) Naphthalene	4.30	128	59174	5.78215 ppb		99
4) 2-Methylnaphthalene	5.08	142	37261	5.37682 ppb		99
5) 1-Methylnaphthalene	5.19	142	36552	5.35785 ppb		100
7) Acenaphthylene	6.11	152	119632	5.90734 ppb		100
8) Acenaphthene	6.31	154	35657	5.92819 ppb		100
9) Fluorene	6.90	166	49099	6.57796 ppb		95
11) Phenanthrene	8.01	178	74556	6.60052 ppb		100
12) Anthracene	8.08	178	63268	6.12179 ppb		99
14) Fluoranthene	9.40	202	93840	6.12783 ppb		99
16) Pyrene	9.66	202	95474	6.02065 ppb		100
17) Benz (a) anthracene	11.11	228	93506	5.98827 ppb		100
18) Chrysene	11.16	228	94337	5.94268 ppb		99
19) Indeno (1,2,3-cd) pyrene	15.04	276	117109	6.19114 ppb	#	95
21) Benzo (b) fluoranthene	12.93	252	90753	5.72200 ppb		99
22) Benzo (k) fluoranthene	12.98	252	118879	6.73479 ppb		100
23) Benzo (a) pyrene	13.48	252	84770	5.79870 ppb	#	97
24) Dibenz (a,h) anthracene	15.08	278	99842	6.34131 ppb		99
25) Benzo (g,h,i) perylene	15.42	276	100135	6.14767 ppb		96

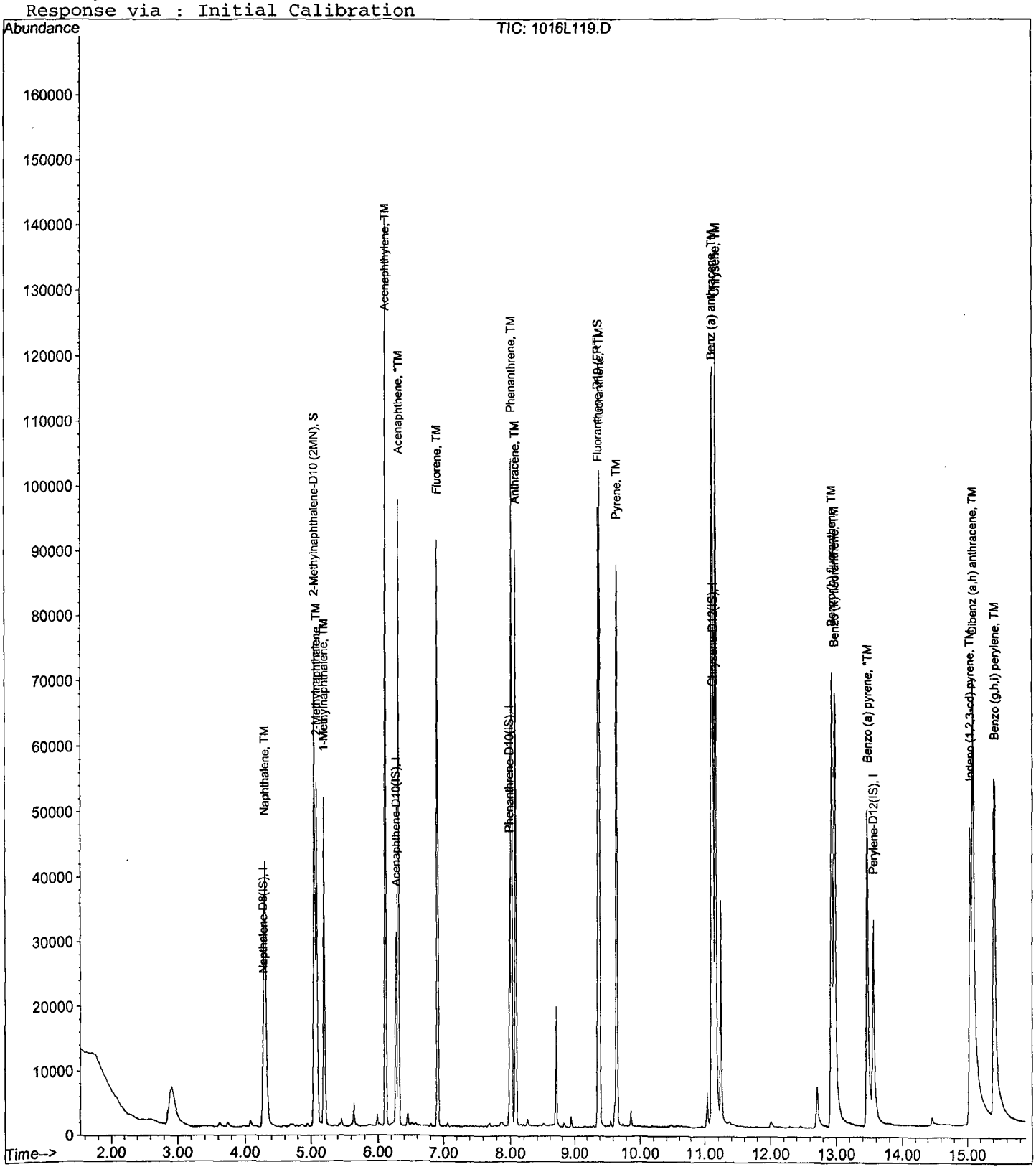
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L119.D Vial: 19
Acq On : 23 Oct 20 14:46 Operator: MA
Sample : 201021A LCS-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 23 14:47 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L120.D Vial: 20
Acq On : 23 Oct 20 15:09 Operator: MA
Sample : 201021A LCSD-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 23 14:47 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	35659	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	20111	2.50000 ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	36788	2.50000 ppb		0.00
15) Chrysene-D12(IS)	11.13	240	55255	2.50000 ppb		0.00
20) Perylene-D12(IS)	13.56	264	58690	2.50000 ppb		0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	73242	5.76134 ppb		0.00
Spiked Amount 6.250			Recovery	= 92.176%		
13) Fluoranthene-D10 (FRT)	9.38	212	95653	6.56087 ppb		0.00
Spiked Amount 6.250			Recovery	= 104.976%		
Target Compounds						Qvalue
2) Naphthalene	4.30	128	61423	5.60687 ppb		100
4) 2-Methylnaphthalene	5.08	142	39905	5.37935 ppb		100
5) 1-Methylnaphthalene	5.19	142	39232	5.37219 ppb		100
7) Acenaphthylene	6.11	152	136229	5.75419 ppb		100
8) Acenaphthene	6.31	154	44748	6.36387 ppb		98
9) Fluorene	6.90	166	57803	6.62429 ppb		95
11) Phenanthrene	8.01	178	72702	6.06844 ppb		100
12) Anthracene	8.08	178	62807	5.72978 ppb		99
14) Fluoranthene	9.40	202	103636	6.38065 ppb		99
16) Pyrene	9.66	202	105194	5.70234 ppb		99
17) Benz (a) anthracene	11.11	228	105722	5.82011 ppb		100
18) Chrysene	11.16	228	114116	6.17947 ppb		100
19) Indeno (1,2,3-cd) pyrene	15.04	276	131587	5.97994 ppb		91
21) Benzo (b) fluoranthene	12.93	252	95491	5.29166 ppb		99
22) Benzo (k) fluoranthene	12.99	252	129255	6.43589 ppb	#	98
23) Benzo (a) pyrene	13.48	252	92419	5.55639 ppb	#	97
24) Dibenz (a,h) anthracene	15.08	278	112732	6.29297 ppb		97
25) Benzo (g,h,i) perylene	15.42	276	113426	6.12040 ppb		97

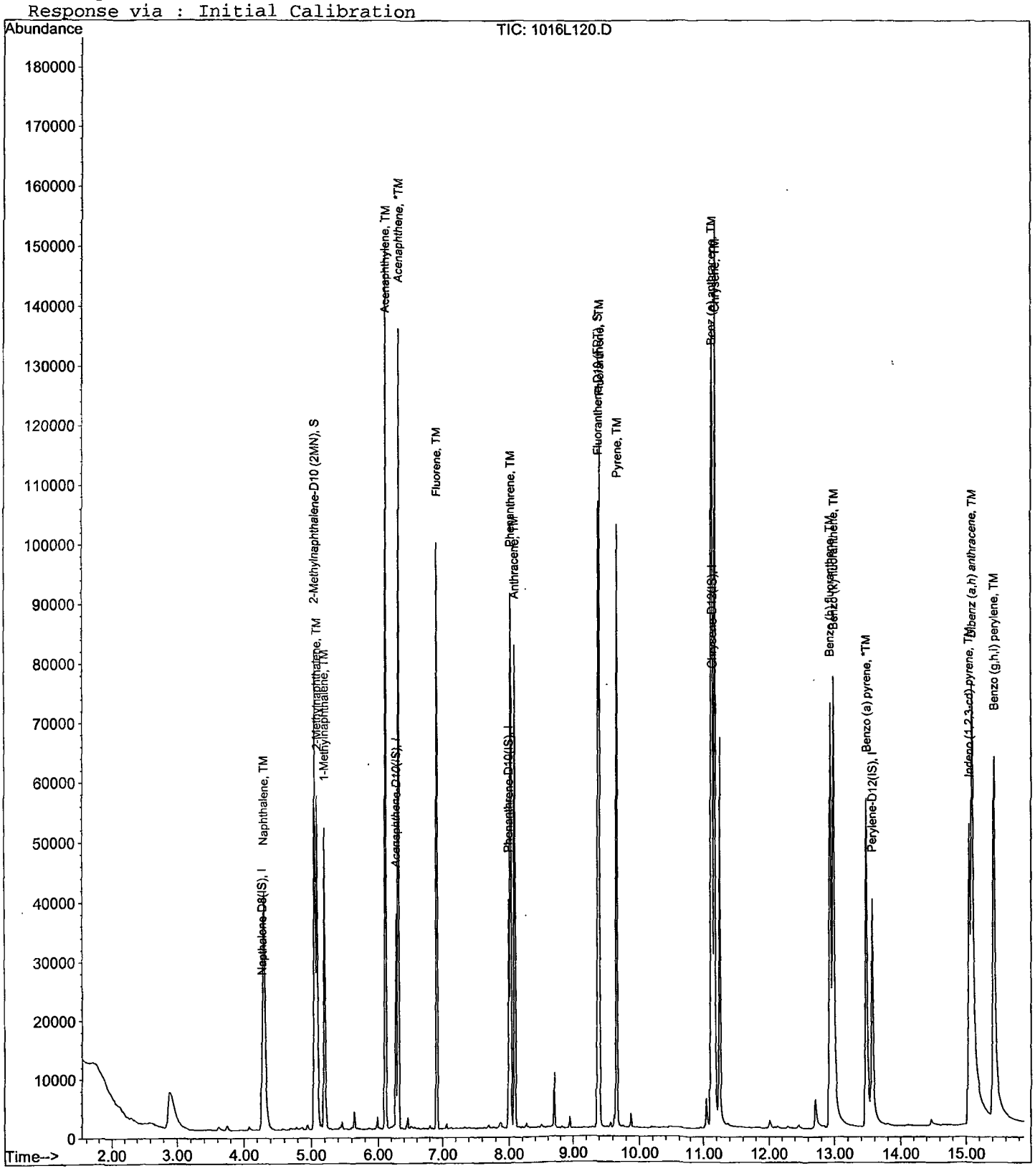
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L120.D Vial: 20
Acq On : 23 Oct 20 15:09 Operator: MA
Sample : 201021A LCSD-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 23 14:47 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L127.D Vial: 27
Acq On : 27 Oct 20 10:12 Operator: MA
Sample : BA20539W26 MS-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 27 10:08 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	37319	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	20175	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	33919	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.13	240	52976	2.50000	ppb		0.00
20) Perylene-D12(IS)	13.56	264	55812	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	79632	5.98536	ppb		0.00
Spiked Amount 6.250			Recovery	= 95.760%			
13) Fluoranthene-D10 (FRT)	9.38	212	90495	6.73210	ppb		0.00
Spiked Amount 6.250			Recovery	= 107.712%			
Target Compounds							Qvalue
2) Naphthalene	4.30	128	67106	5.85316	ppb		100
4) 2-Methylnaphthalene	5.08	142	44019	5.66999	ppb		98
5) 1-Methylnaphthalene	5.19	142	42043	5.50102	ppb		100
7) Acenaphthylene	6.11	152	122661	5.16466	ppb		99
8) Acenaphthene	6.31	154	40475	5.73792	ppb		96
9) Fluorene	6.90	166	53486	6.11011	ppb		94
11) Phenanthrene	8.01	178	67028	6.06807	ppb		99
12) Anthracene	8.08	178	59594	5.89652	ppb		99
14) Fluoranthene	9.40	202	97190	6.48992	ppb		98
16) Pyrene	9.65	202	97462	5.51048	ppb	#	82
17) Benz (a) anthracene	11.11	228	101374	5.82083	ppb		98
18) Chrysene	11.16	228	104128	5.88118	ppb		100
19) Indeno (1,2,3-cd) pyrene	15.04	276	112809	5.34713	ppb	#	96
21) Benzo (b) fluoranthene	12.93	252	96837	5.64296	ppb		97
22) Benzo (k) fluoranthene	12.98	252	134831	7.05972	ppb		99
23) Benzo (a) pyrene	13.48	252	88378	5.58743	ppb	#	97
24) Dibenz (a,h) anthracene	15.08	278	95577	5.61046	ppb		99
25) Benzo (g,h,i) perylene	15.41	276	98186	5.57126	ppb		99

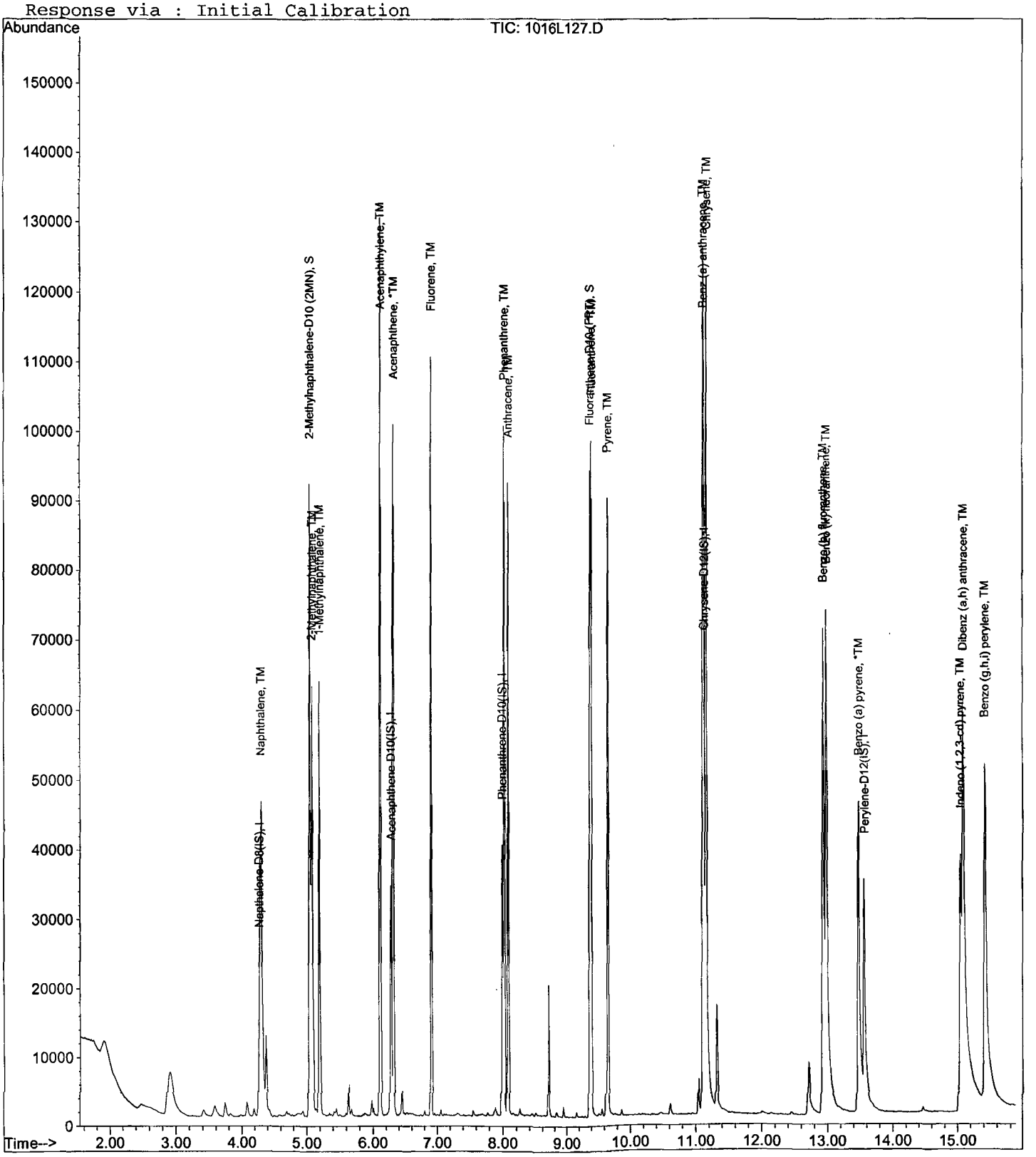
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L127.D Vial: 27
Acq On : 27 Oct 20 10:12 Operator: MA
Sample : BA20539W26 MS-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 27 10:08 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L128.D Vial: 28
Acq On : 27 Oct 20 10:34 Operator: MA
Sample : BA20539W24 MSD-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 27 10:08 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	35212	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	16841	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	33282	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.12	240	52406	2.50000	ppb		-0.01
20) Perylene-D12(IS)	13.55	264	52644	2.50000	ppb		-0.01
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	76166	6.06740	ppb		0.00
Spiked Amount 6.250			Recovery	= 97.072%			
13) Fluoranthene-D10 (FRT)	9.38	212	92012	6.97596	ppb		0.00
Spiked Amount 6.250			Recovery	= 111.616%			
Target Compounds							Qvalue
2) Naphthalene	4.30	128	55999	5.17665	ppb		100
4) 2-Methylnaphthalene	5.08	142	40884	5.58129	ppb		100
5) 1-Methylnaphthalene	5.19	142	41628	5.77264	ppb		98
7) Acenaphthylene	6.11	152	117656	5.93465	ppb		99
8) Acenaphthene	6.31	154	34534	5.86490	ppb		95
9) Fluorene	6.90	166	47010	6.43347	ppb		92
11) Phenanthrene	8.01	178	70628	6.51635	ppb		99
12) Anthracene	8.08	178	60149	6.06534	ppb		99
14) Fluoranthene	9.40	202	105788	7.19926	ppb		97
16) Pyrene	9.65	202	106871	6.10819	ppb	#	86
17) Benz (a) anthracene	11.11	228	98663	5.72678	ppb		99
18) Chrysene	11.16	228	108225	6.17906	ppb		98
19) Indeno (1,2,3-cd) pyrene	15.04	276	126010	6.03781	ppb	#	99
21) Benzo (b) fluoranthene	12.93	252	95428	5.89550	ppb		99
22) Benzo (k) fluoranthene	12.98	252	122506	6.80039	ppb		98
23) Benzo (a) pyrene	13.46	252	87366	5.85584	ppb		99
24) Dibenz (a,h) anthracene	15.08	278	106868	6.65076	ppb		98
25) Benzo (g,h,i) perylene	15.41	276	111844	6.72815	ppb		99

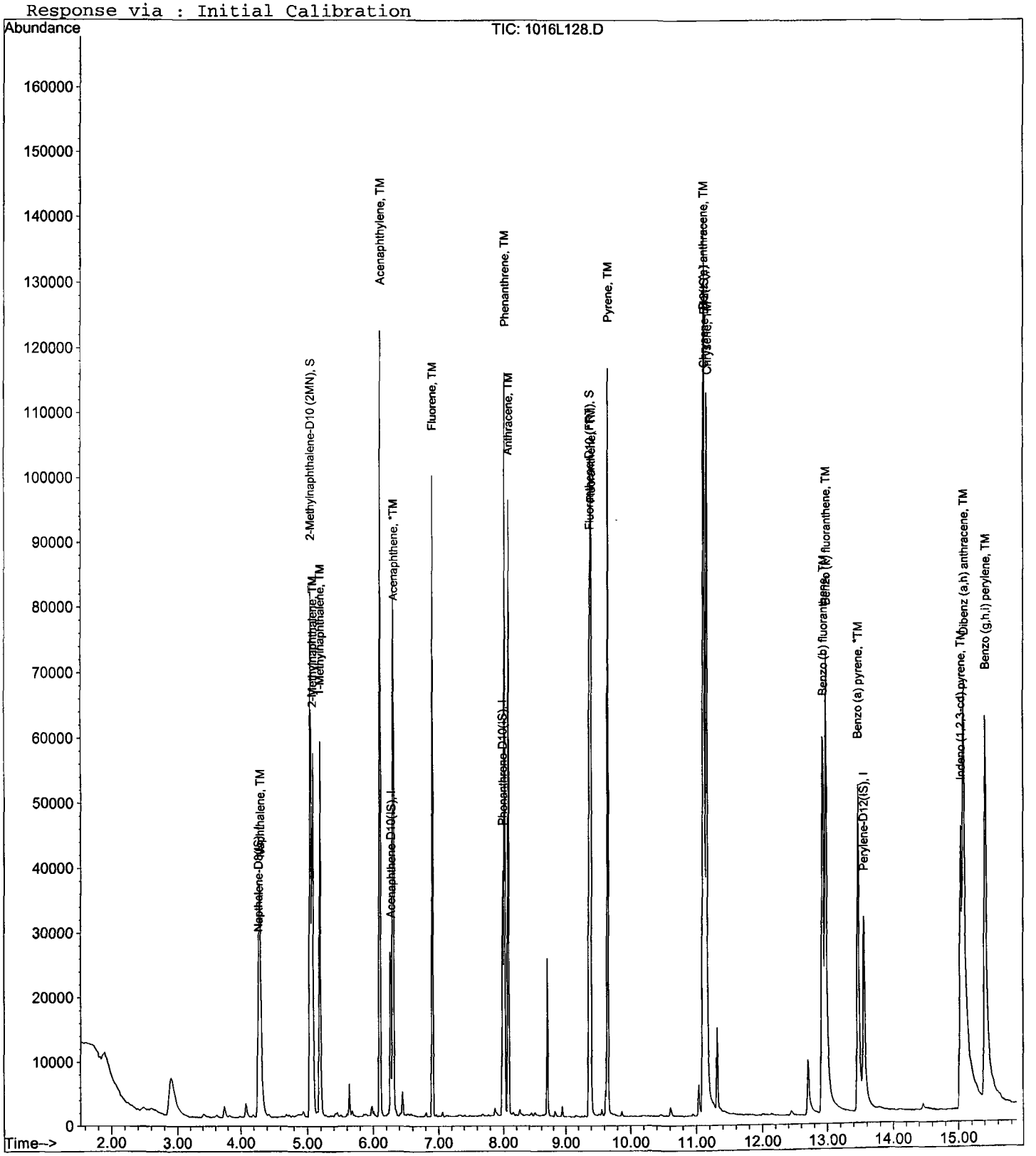
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L128.D Vial: 28
Acq On : 27 Oct 20 10:34 Operator: MA
Sample : BA20539W24 MSD-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 27 10:08 2020 Quant Results File: L1016.RES

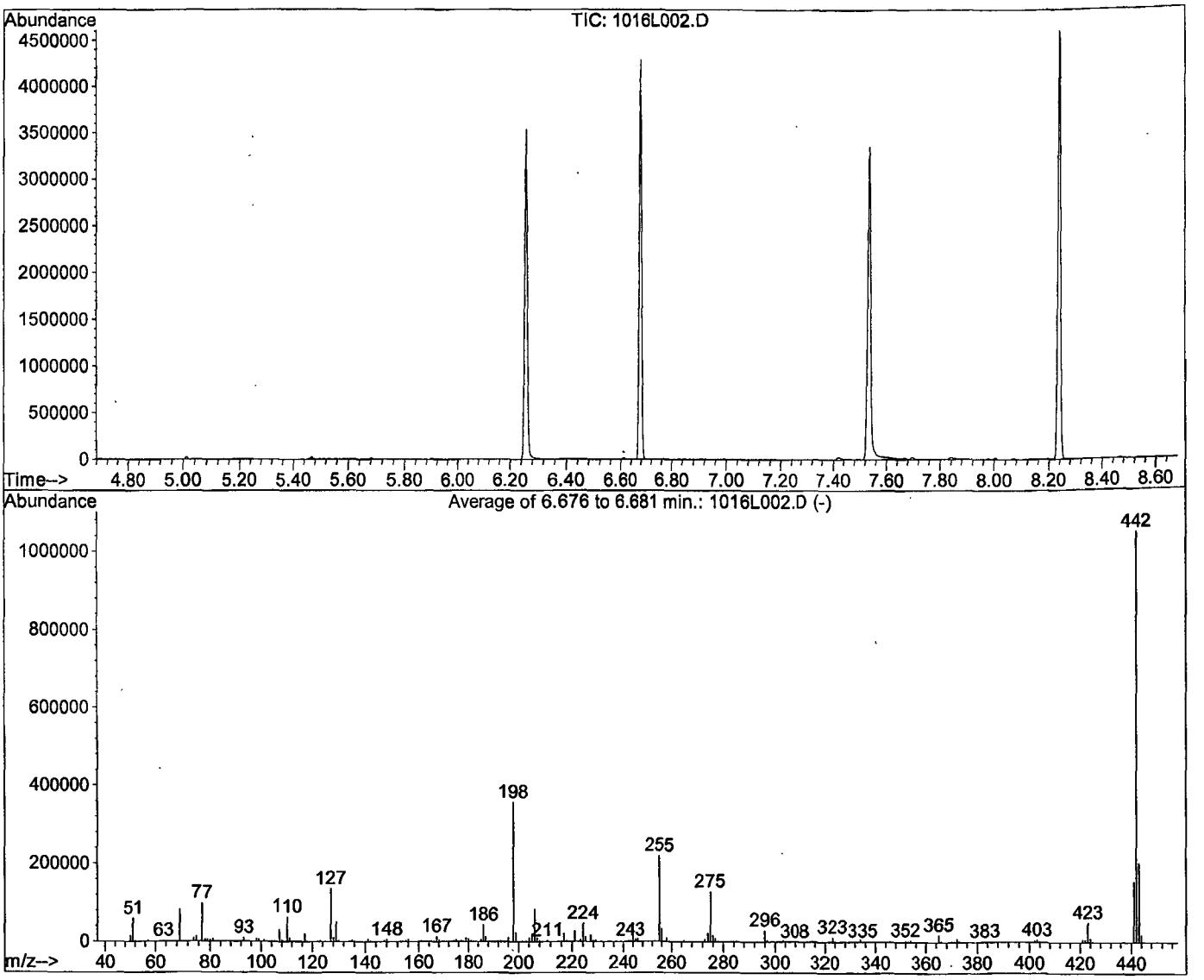
Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



DFTPP

Data File : M:\LINUS\DATA\L201016\1016L002.D Vial: 2
Acq On : 16 Oct 20 10:21 Operator: MA
Sample : SV Tune 10/01/19 Inst : Linus
Misc : Multiplr: 1.00

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270



AutoFind: Scans 1643, 1644, 1645; Background Corrected with Scan 1634

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	16.6	59205	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	502	PASS
127	198	10	80	38.1	135989	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	357205	PASS
199	198	5	9	6.7	23979	PASS
275	198	10	60	35.8	127832	PASS
365	198	1	100	5.1	18325	PASS
441	442	0.01	24	14.9	155691	PASS
442	198	50	500	293.3	1047637	PASS
443	442	15	24	19.2	201045	PASS

1016L002.D L1016.M Fri Oct 16 14:23:20 2020

Data File Name:	**1016L002.D**
Data File Path:	**M:\LINUS\DATA\L201016**
Operator:	**MA**
Date Acquired:	**16 Oct 2020 10:21**
Method File:	**DFTPP2.M**
Sample Name:	**SV Tune 10/01/19**
Vial Number:	**2**
Instrument Name:	**Linus**

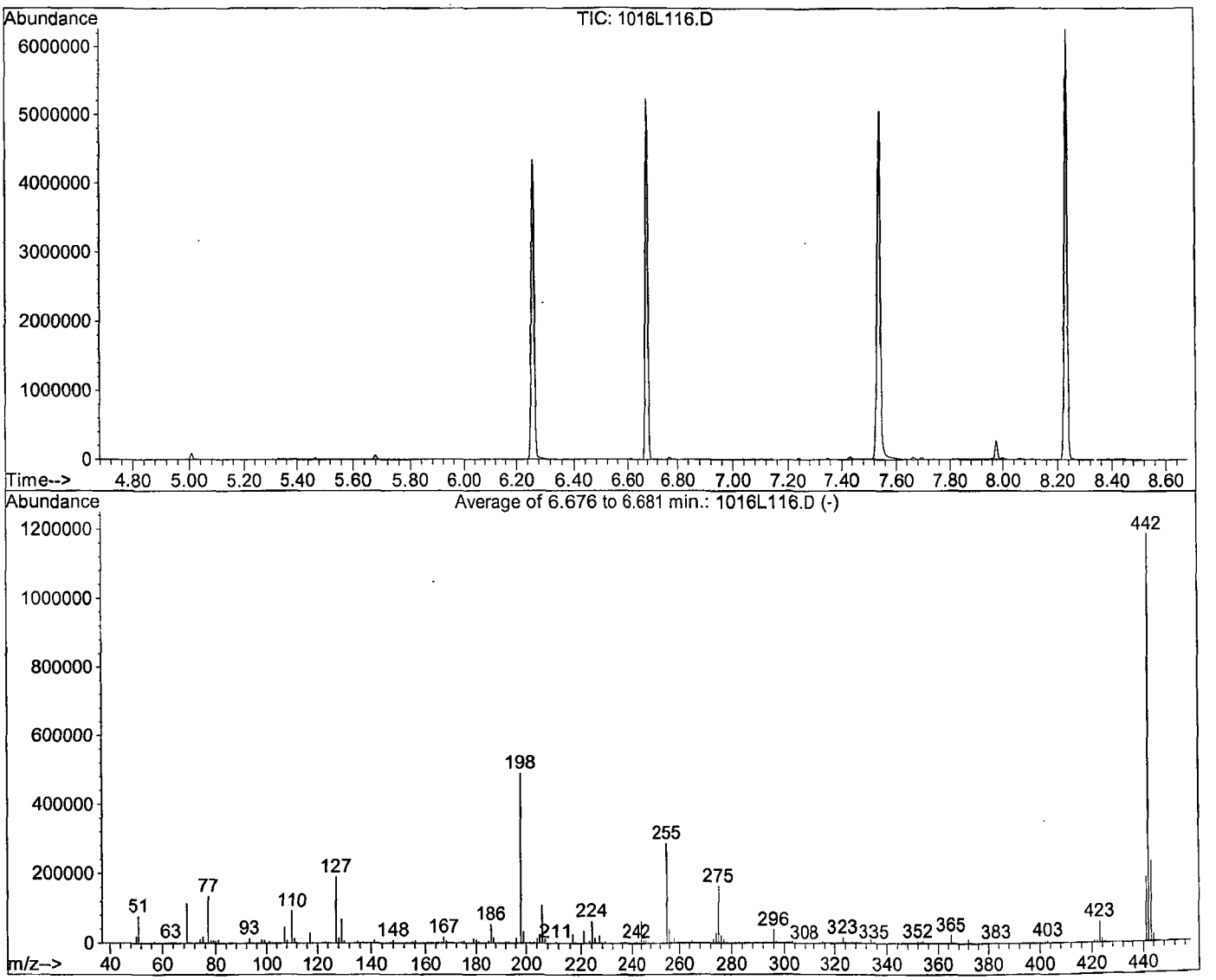
#	Name	Ret Time	Target Response
1)	DDT	8.24	32904900
2)	DDD	7.98	120213
3)	DDE	6.84	0

Breakdown **0.36**

DFTPP

Data File : M:\LINUS\DATA\L201016\1016L116.D Vial: 74
Acq On : 23 Oct 20 10:31 Operator: MA
Sample : SV TUNE 10/02/20 Inst : Linus
Misc : Multiplr: 1.00

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270



AutoFind: Scans 1643, 1644, 1645; Background Corrected with Scan 1634

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	15.9	77943	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	658	PASS
127	198	10	80	38.9	191211	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	491712	PASS
199	198	5	9	6.7	32912	PASS
275	198	10	60	33.1	162773	PASS
365	198	1	100	4.9	23893	PASS
441	442	0.01	24	15.9	189227	PASS
442	198	50	500	241.9	1189611	PASS
443	442	15	24	19.6	232619	PASS

Data File Name:	**1016L116.D**
Data File Path:	**M:\LINUS\DATA\L201016**
Operator:	**MA**
Date Acquired:	**23 Oct 2020 10:31**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/02/20**
Vial Number:	**74**
Instrument Name:	**Linus**

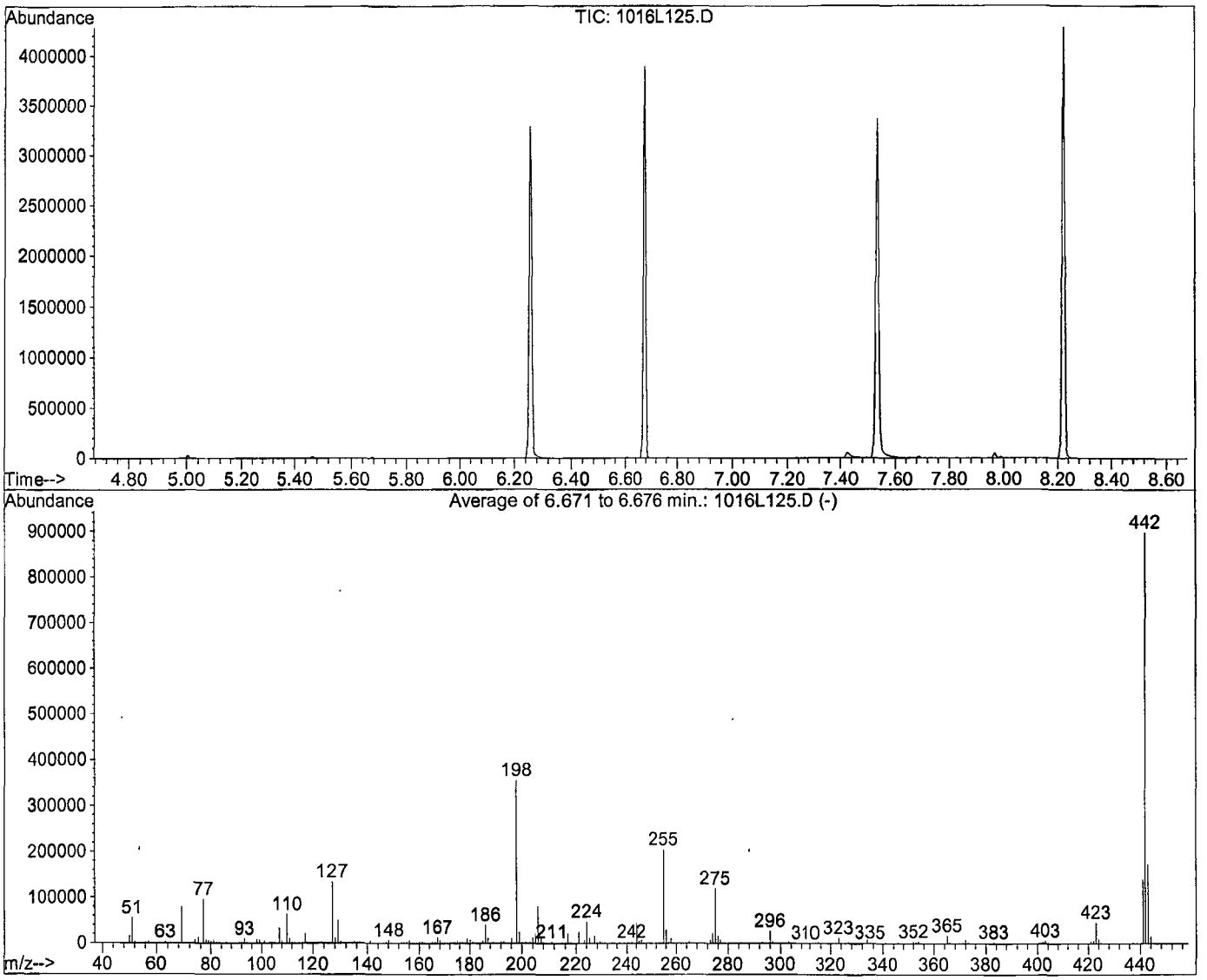
#	Name	Ret Time	Target Response
1)	DDT	8.24	44661600
2)	DDD	7.98	1802880
3)	DDE	7.69	179906

Breakdown **4.25**

DFTPP

Data File : M:\LINUS\DATA\L201016\1016L125.D Vial: 25
Acq On : 27 Oct 20 9:31 Operator: MA
Sample : SV TUNE 10/02/20 Inst : Linus
Misc : Multiplr: 1.00

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270



AutoFind: Scans 1641, 1642, 1643; Background Corrected with Scan 1633

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	15.6	55205	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	485	PASS
127	198	10	80	37.8	134221	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	354667	PASS
199	198	5	9	6.6	23440	PASS
275	198	10	60	33.7	119387	PASS
365	198	1	100	4.8	16946	PASS
441	442	0.01	24	15.6	140173	PASS
442	198	50	500	253.1	897771	PASS
443	442	15	24	19.2	172581	PASS

1016L125.D L1016.M Tue Oct 27 10:07:22 2020

Data File Name:	**1016L125.D**
Data File Path:	**M:\LINUS\DATA\L201016**
Operator:	**MA**
Date Acquired:	**27 Oct 2020 09:31**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/02/20**
Vial Number:	**25**
Instrument Name:	**Linus**

#	Name	Ret Time	Target Response
1)	DDT	8.24	30414400
2)	DDD	7.98	289251
3)	DDE	7.69	79848

Breakdown **1.20**

Standard	**SIM Curve**	**Prep'd By (Initials)**	**MA**
Prep Date	**08/21/20**		
Exp Date	**06/19/21**		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1.0 ug/mL SIM	APPL	1.0 ug/mL SIM	1.0 ug/mL	**08/21/20**	**06/19/21**	10 uL	100uL	MC 59130 90uL	0.1 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	2 uL			2.5ug/mL
1.0 ug/mL SIM	APPL	1.0 ug/mL SIM	1.0 ug/mL	**08/21/20**	**06/19/21**	20 uL	100uL	MC 59130 80uL	0.2 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	2 uL			2.5ug/mL
5.0 ug/mL SIM	APPL	5.0 ug/mL SIM	5.0 ug/mL	**08/21/20**	**06/19/21**	10 uL	100uL	MC 59130 90uL	0.5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	2 uL			2.5ug/mL
5.0 ug/mL SIM	APPL	5.0 ug/mL SIM	5.0 ug/mL	**08/21/20**	**06/19/21**	20 uL	100uL	MC 59130 80 uL	1.0 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	2 uL			2.5ug/mL
SIM STOCK	APPL	SIM STOCK	200 ug/mL	**08/20/20**	**08/20/21**	5 uL	200uL	MC 59130 190 uL	5.0 ug/mL
SIM SURROGATE	APPL	SIM SURR	100 ug/mL	**08/11/20**	**08/11/21**	5 uL			2.5ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	4 uL			2.5ug/mL
SIM STOCK	APPL	SIM STOCK	200 ug/mL	**08/20/20**	**08/20/21**	5 uL	100 uL	MC 59130 80 uL	10 ug/mL
SIM SURROGATE	APPL	SIM SURR	100 ug/mL	**08/11/20**	**08/11/21**	5 uL			5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	2 uL			2.5ug/mL
SIM STOCK	APPL	SIM STOCK	200	**08/20/20**	**08/20/21**	25 uL	100uL	MC 59130 50 uL	50 ug/mL
SIM SURROGATE	APPL	SIM SURR	100 ug/mL	**08/11/20**	**08/11/21**	25 uL			25 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	2 uL			2.5ug/mL
SIM STOCK	APPL	SIM STOCK	200 ug/mL	**08/20/20**	**08/20/21**	50 uL	100uL	na	100 ug/mL
SIM SURROGATE	APPL	SIM SURR	100 ug/mL	**08/11/20**	**08/11/21**	50 uL			50 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	2 uL			2.5ug/mL

Name of Final Standard	**8270 PAH SIM Second Source**	**Prep'd By (Initials)**	**MA**
Prep Date	**08/21/20**		
Exp Date	**06/19/21**		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
PAH SIM SS Stock	Phenova	AL0-130490	200 ug/mL	**CL13117-40623. Open 7/24/19**	**12/31/22**	5 uL	200uL	MC 59130 195uL	5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	4 uL			2.5ug/mL

Name of Final Standard	**PAH SIM Stock (Ampule)**
Prep Date	**08/20/20**
Exp Date	**08/20/21**

Prep'd By (I **MA**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Custom PAH SIM Mix	Phenova	ALO-130490	200 ug/mL	**CL13121-41383**	**12/31/22**	1000 uL	1mL	**NA**	200ug/mL

Name of Final Standard	SIM Surrogate	Prep'd By (Initials)	CD
Prep Date	08/11/20		
Exp Date	04/01/21		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Sim Surrogate Deuterated	Restek	33913	2000 ug/mL	A0154854-49995,49992,50255,50256,50257	10/01/25	5mL	100 mL	Acetone #0234320	100 ug/mL

Name of Final Standard	**8270 SIM PAH Internal Standard**	**Prep'd By (Initials)**	**CD**
Prep Date	**06/19/20**		
Exp Date	**06/19/21**		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
SV Internal Standard	Restek	31206	2000 ug/mL	**A0157142-49875**	**12/31/25**	625uL	10mL	**MC DW717**	125 ug/mL

Name of Final Standard	SIM Spike	Prep'd By (Initials)	MA
Prep Date	09/11/20		
Exp Date	09/11/21		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Custom PAH Sim Mix	Phenova	AL0-130490	200 ug/mL	CL13121- 41545 41546 41547 49548	12/31/22	5 mL	25 mL	Acetone 0246130	40 ug/mL

_LIQ003

Organic Extraction Worksheet

Method	Continuous Liquid/Liquid SVOC 3520C	Extraction Set	201021A	Extraction Method	LIQ003	Units	mL

Spiked ID 1	8270T Spike 10/6/20 ex 10/6/21		Surrogate ID 1	8270 Surrogate 10/6/20 ex 10/6/21	
Spiked ID 2	Sim Spike 9/11/20 ex 9/11/21		Surrogate ID 2	SIM Surrogate 8/11/20 ex 8/11/21	
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	YES	
Spiked ID 7			Ext. Start Time:	10/21/20 12:00	
Spiked ID 8			Ext. End Time:	10/23/20 10:35	
			GC Requires Extract By:		

pH1	2	10/21/20 12:10	Water Bath Temp 1 °C	EWB5 75/74.1 °
pH2	14	10/22/20 11:05	Water Bath Temp 2 °C	
pH3			Water Bath Temp 3 °C	

Spiked By: **Date** 10/21/20 12:00:00 PM **Witnessed By:** 10/21/20 12:00 **Date** 10/23/20 1:59:16 PM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201021A Blk				0.2,0.05	1,2	800	1	2/1	10/21/20 12:00	
						equip	EWB5				
2	201021A LCS-1		1	1	0.2	1	800	1	2/1	10/21/20 12:00	
						equip	EWB5				
3	201021A LCS-2		0.125	2	0.050	2	800	1	2/1	10/21/20 12:00	
						equip	EWB5				
4	201021A LCSD-1		1	1	0.2	1	800	1	2/1	10/21/20 12:00	
						equip	EWB5				
5	201021A LCSD-2		0.125	2	0.050	2	800	1	2/1	10/21/20 12:00	
						equip	EWB5				
6	BA20268	BA20268W15			0.2,0.05	1,2	800	1	2/1	10/21/20 12:00	93765
						equip	EWB5				
7	BA20486	BA20486W13			0.2,0.05	1,2	800	1	2/1	10/22/20 10:35	93803
						equip	EWB5				
8	BA20539 MS-1	BA20539W28	1	1	0.2	1	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				
9	BA20539 MSD-1	BA20539W27	1	1	0.2	1	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				
10	BA20539 MS-2	BA20539W26	0.125	2	0.05	2	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				
11	BA20539 MSD-2	BA20539W24	0.125	2	0.05	2	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				
12	BA20539	BA20539W34			0.2,0.05	1,2	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				
13	BA20541	BA20541W11			0.2,0.05	1,2	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				
14	BA20542	BA20542W13			0.2,0.05	1,2	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				
15	BA20544	BA20544W15			0.2,0.05	1,2	800	1	2/1	10/22/20 10:35	93818
						equip	EWB5				

Solvent and Lot#	
PH Strips	.HC904495
Dichloromethane (DCM)	.60127
1+1 H2SO4	.231834
10N NaOH	.10/22/20
Filter Paper	.400178
Na2SO4	.2019070279

Extraction COC Transfer	
Extraction lab employee Initials	DL
GC analyst's initials	MA
Date	10/26/20
Time	12:06
Refrigerator	GC_C

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL

Modified	10/26/20 12:41:37 PM

Reviewed By: MA **Date** 10/26/20

Injection Log

Directory: M:\LINUS\DATA\L201016\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	1016L002.D	1	SV Tune 10/01/19		16 Oct 20 10:21
3	1016L003.D	1	0.1 SIM 08/21/20		16 Oct 20 10:37
4	1016L004.D	1	0.2 SIM 08/21/20		16 Oct 20 10:59
5	1016L005.D	1	0.5 SIM 08/21/20		16 Oct 20 11:21
6	1016L006.D	1	1 SIM 08/21/20		16 Oct 20 11:43
7	1016L007.D	1	5 SIM 08/21/20		16 Oct 20 12:05
8	1016L008.D	1	10 SIM 08/21/20		16 Oct 20 12:27
9	1016L009.D	1	50 SIM 08/21/20		16 Oct 20 12:50
10	1016L010.D	1	100 SIM 08/21/20		16 Oct 20 13:12
11	1016L011.D	1	SS SIM 08/21/20		16 Oct 20 13:34
74	1016L116.D	1	SV TUNE 10/02/20		23 Oct 20 10:31
17	1016L117.D	1	5 SIM 08/21/20 (1)		23 Oct 20 11:22
18	1016L118.D	1.25	201021A BLK 1/800		23 Oct 20 14:24
19	1016L119.D	1.25	201021A LCS-2 1/800		23 Oct 20 14:46
20	1016L120.D	1.25	201021A LCSD-2 1/800		23 Oct 20 15:09
23	1016L123.D	1	5 SIM 08/21/20 (2)		23 Oct 20 16:15
25	1016L125.D	1	SV TUNE 10/02/20		27 Oct 20 9:31
26	1016L126.D	1	5 SIM 08/21/20 (1)		27 Oct 20 9:46
27	1016L127.D	1.25	BA20539W26 MS-2 1/800		27 Oct 20 10:12
28	1016L128.D	1.25	BA20539W24 MSD-2 1/800		27 Oct 20 10:34
29	1016L129.D	1.25	BA20539W34 1/800		27 Oct 20 10:56
30	1016L130.D	1.25	BA20541W11 1/800		27 Oct 20 11:18
31	1016L131.D	1.25	BA20542W13 1/800		27 Oct 20 11:40
32	1016L132.D	1.25	BA20544W15 1/800		27 Oct 20 12:02
51	1016L151.D	1	5 SIM 08/21/20 (2)		27 Oct 20 19:49

ORGANICS

Calibration Data

2MEE
EPA 8270

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 05/01/20
Matrix: Instrument: Yoda Initials: MA

			0501Y003.D	0501Y004.D	0501Y006 D	0501Y007.D	0501Y008.D	0501Y009.D	0501Y010.D	0501Y011.D								
		Compound	1	2	3	4	5	6	7	8			Avg	%RSD	Type	r^2	Q	MRF
1	I	1,4-dichlorobenzene-D4(IS)																
2	TM	2-(2-Methoxyethoxy)ethanol	0.1264	0.1827	0.1475	0.1625	0.1354	0.1644	0.1592	0.1806			0.16	13	TM			
3																		
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Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y003.D Vial: 39
Acq On : 1 May 20 9:39 Operator: MA,SS
Sample : 50ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:24 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	428206	40.00000	ppb	-0.01
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.28	45	67679	26.91018	ppb	95

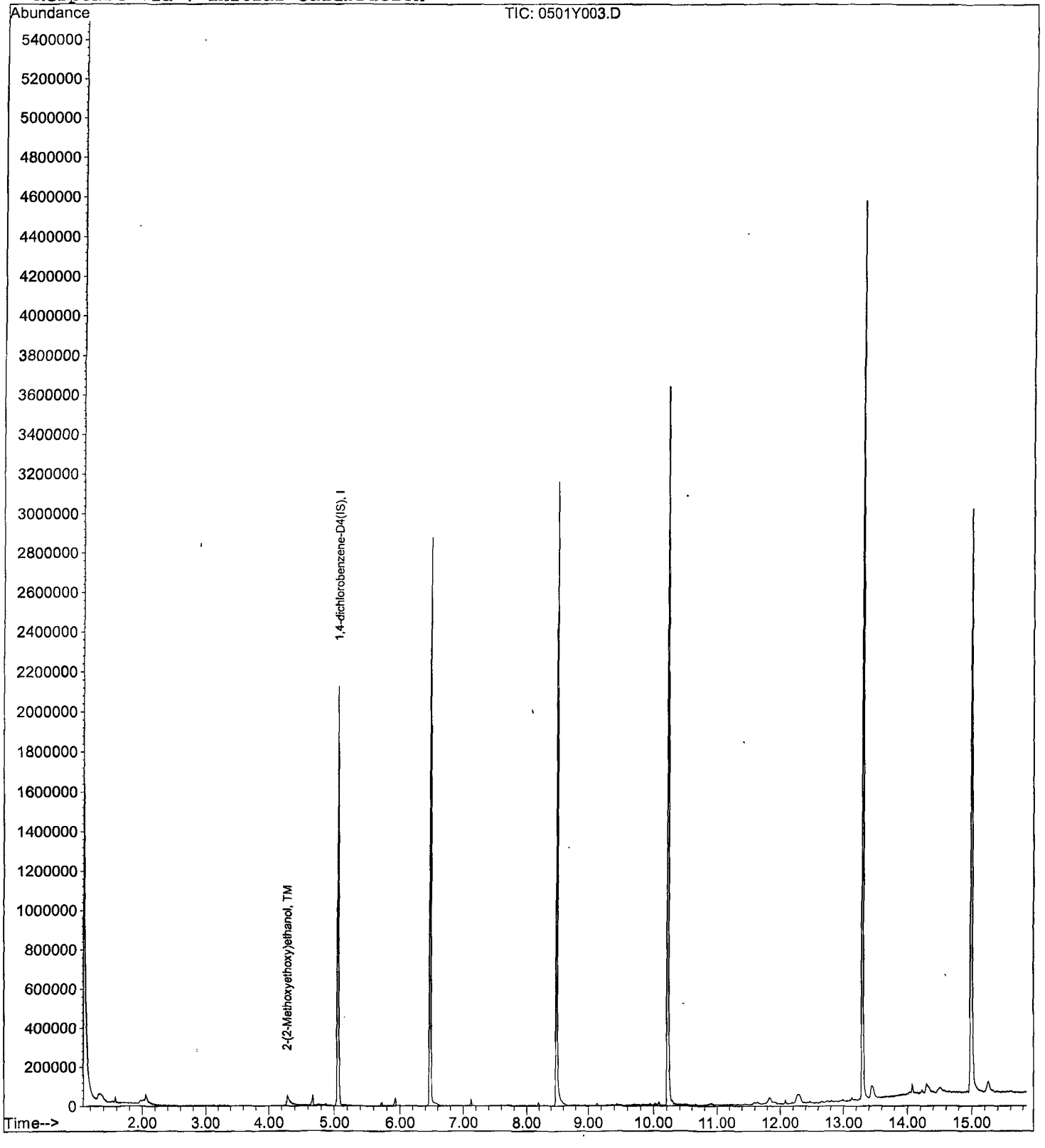
(#) = qualifier out of range (m) = manual integration
0501Y003.D YMEE0501.M Fri May 01 14:33:06 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y003.D Vial: 39
Acq On : 1 May 20 9:39 Operator: MA,SS
Sample : 50ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y004.D Vial: 40
Acq On : 1 May 20 10:03 Operator: MA,SS
Sample : 100ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:44 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	358512	40.00000 ppb	-0.01
System Monitoring Compounds					
Target Compounds					Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.26	45	163785	77.78322 ppb	99

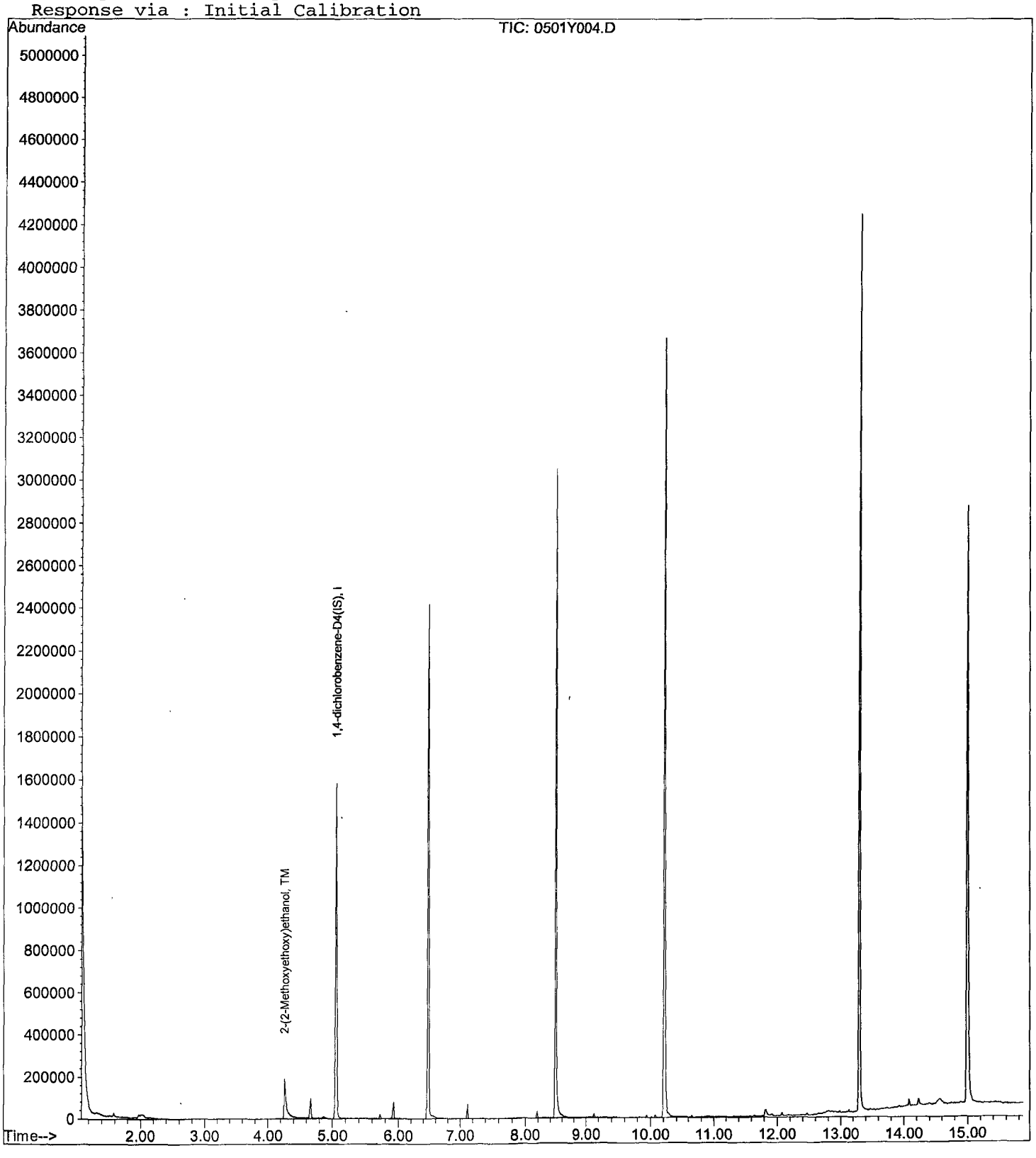
(#) = qualifier out of range (m) = manual integration
0501Y004.D YMEE0501.M Fri May 01 14:33:11 2020

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y004.D Vial: 40
Acq On : 1 May 20 10:03 Operator: MA,SS
Sample : 100ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y006.D Vial: 42
Acq On : 1 May 20 10:51 Operator: MA,SS
Sample : 200ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:44 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	431824	40.00000	ppb	-0.01
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.26	45	318364	125.52571	ppb	98

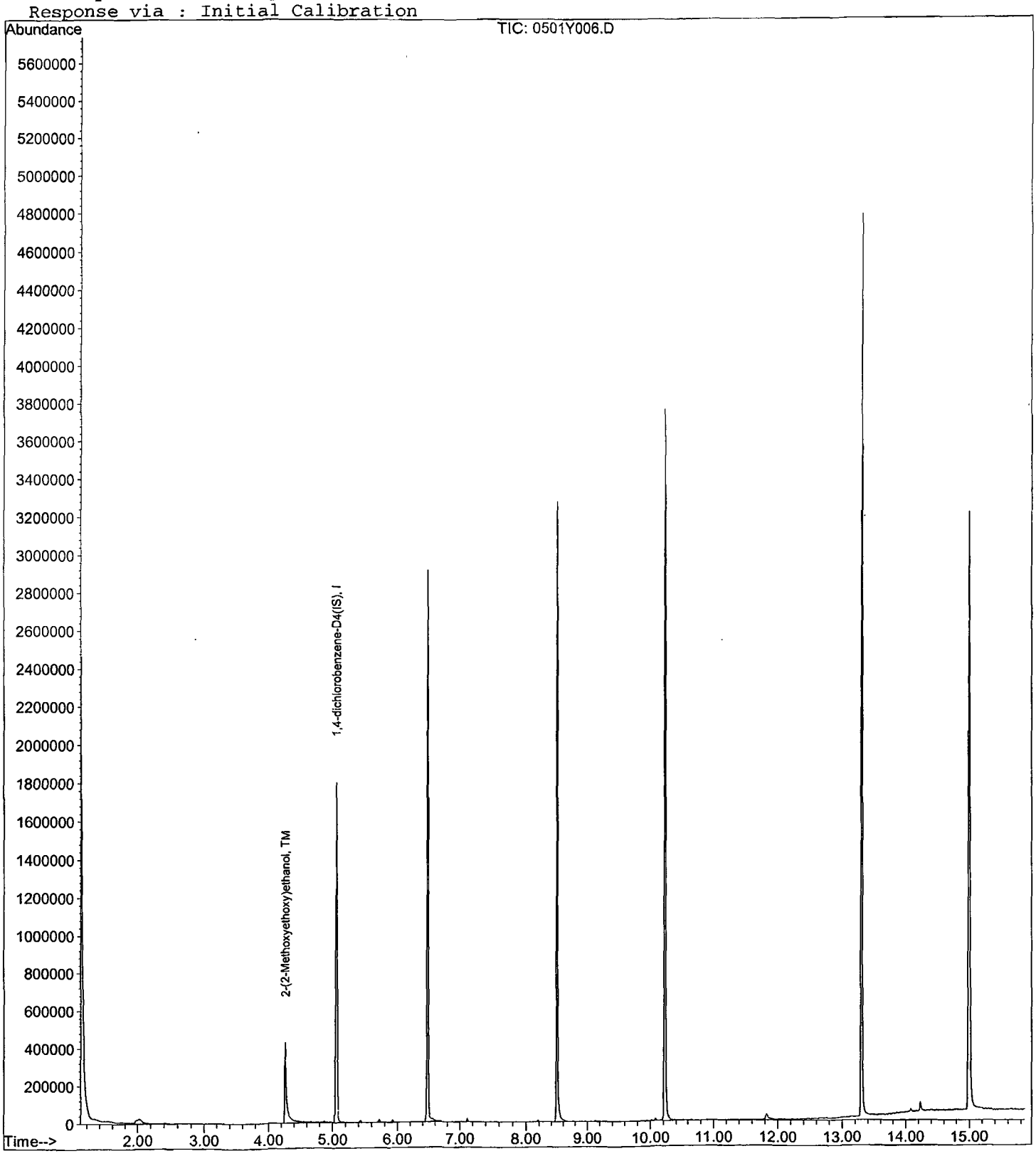
(#) = qualifier out of range (m) = manual integration
0501Y006.D YMEE0501.M Fri May 01 14:33:15 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y006.D Vial: 42
Acq On : 1 May 20 10:51 Operator: MA,SS
Sample : 200ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y007.D Vial: 7
Acq On : 1 May 20 11:24 Operator: MA,SS
Sample : 400ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:44 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	425852	40.00000 ppb	-0.01

System Monitoring Compounds

Target Compounds					Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.26	45	692148	276.72970 ppb	99

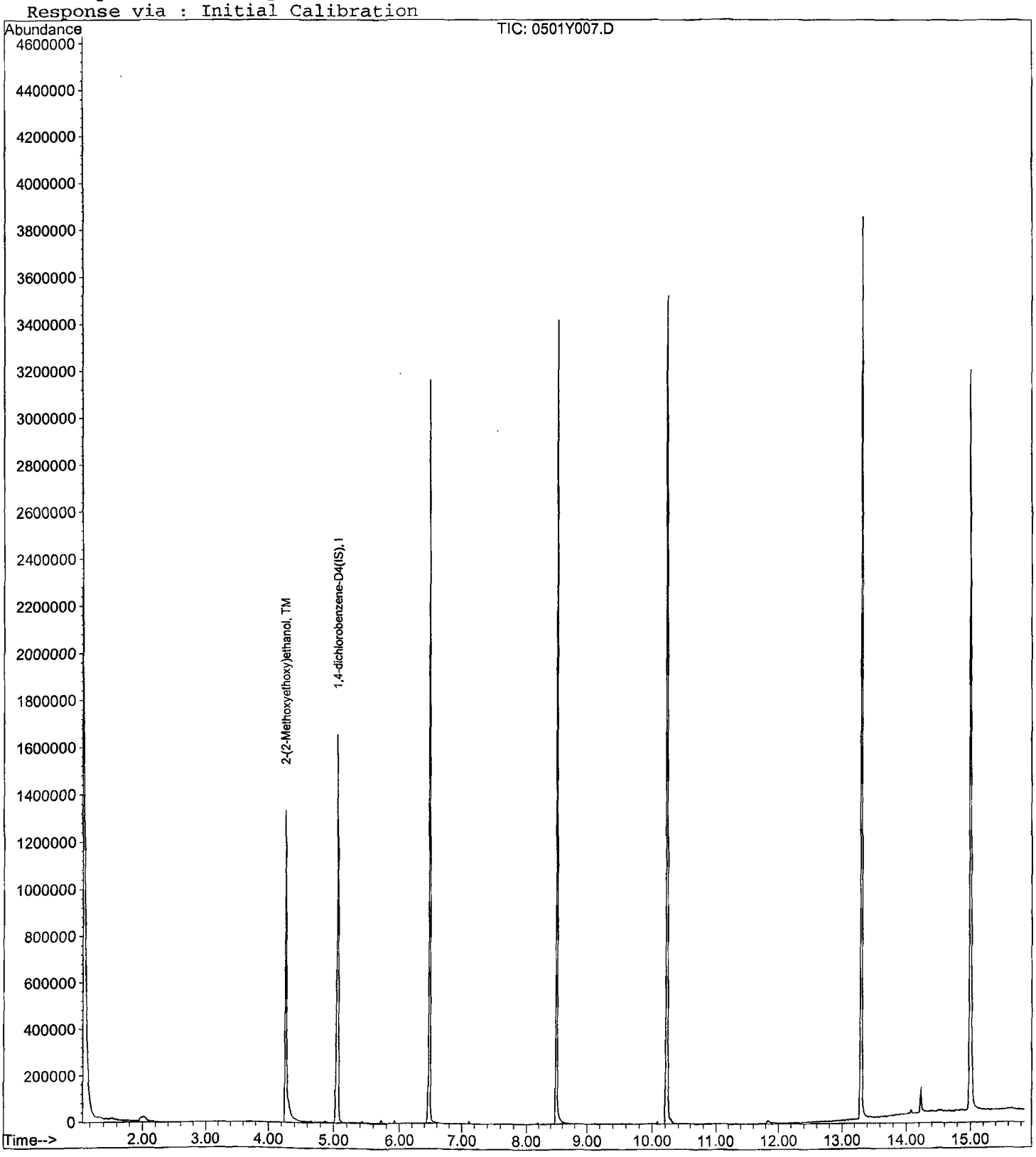
(#) = qualifier out of range (m) = manual integration
0501Y007.D YMEE0501.M Fri May 01 14:33:20 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y007.D Vial: 7
Acq On : 1 May 20 11:24 Operator: MA,SS
Sample : 400ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y008.D Vial: 8
Acq On : 1 May 20 11:48 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:16 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 12:15:50 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.07	152	483204	40.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.28	45	818058	442.11333	ppb	100

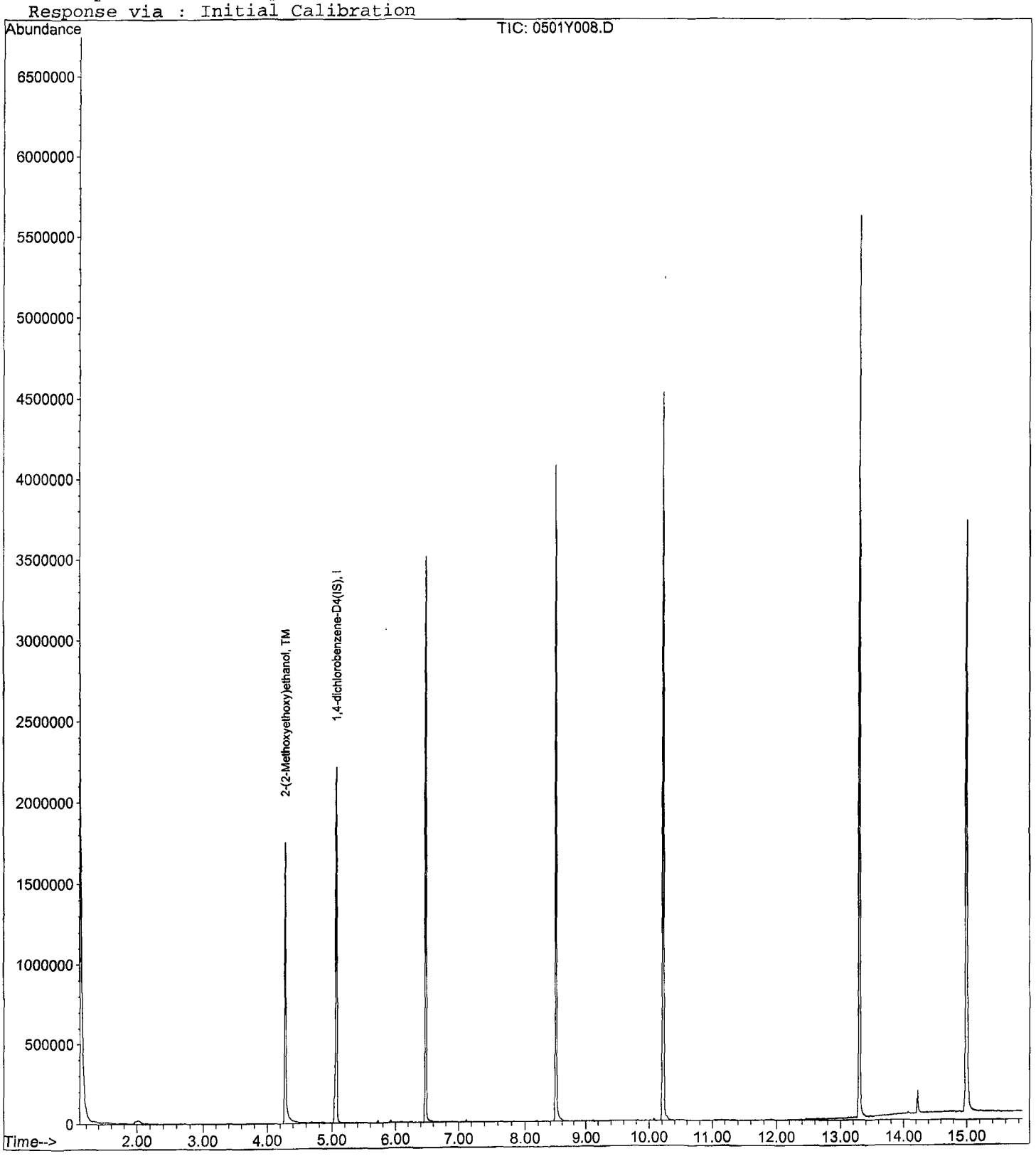
(#) = qualifier out of range (m) = manual integration
0501Y008.D YMEE0501.M Fri May 01 14:33:24 2020

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y008.D Vial: 8
Acq On : 1 May 20 11:48 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:16 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y009.D Vial: 9
Acq On : 1 May 20 12:13 Operator: MA,SS
Sample : 600ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:14 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:44 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	445147	40.00000	ppb	-0.01
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.27	45	1097935	518.98742	ppb	99

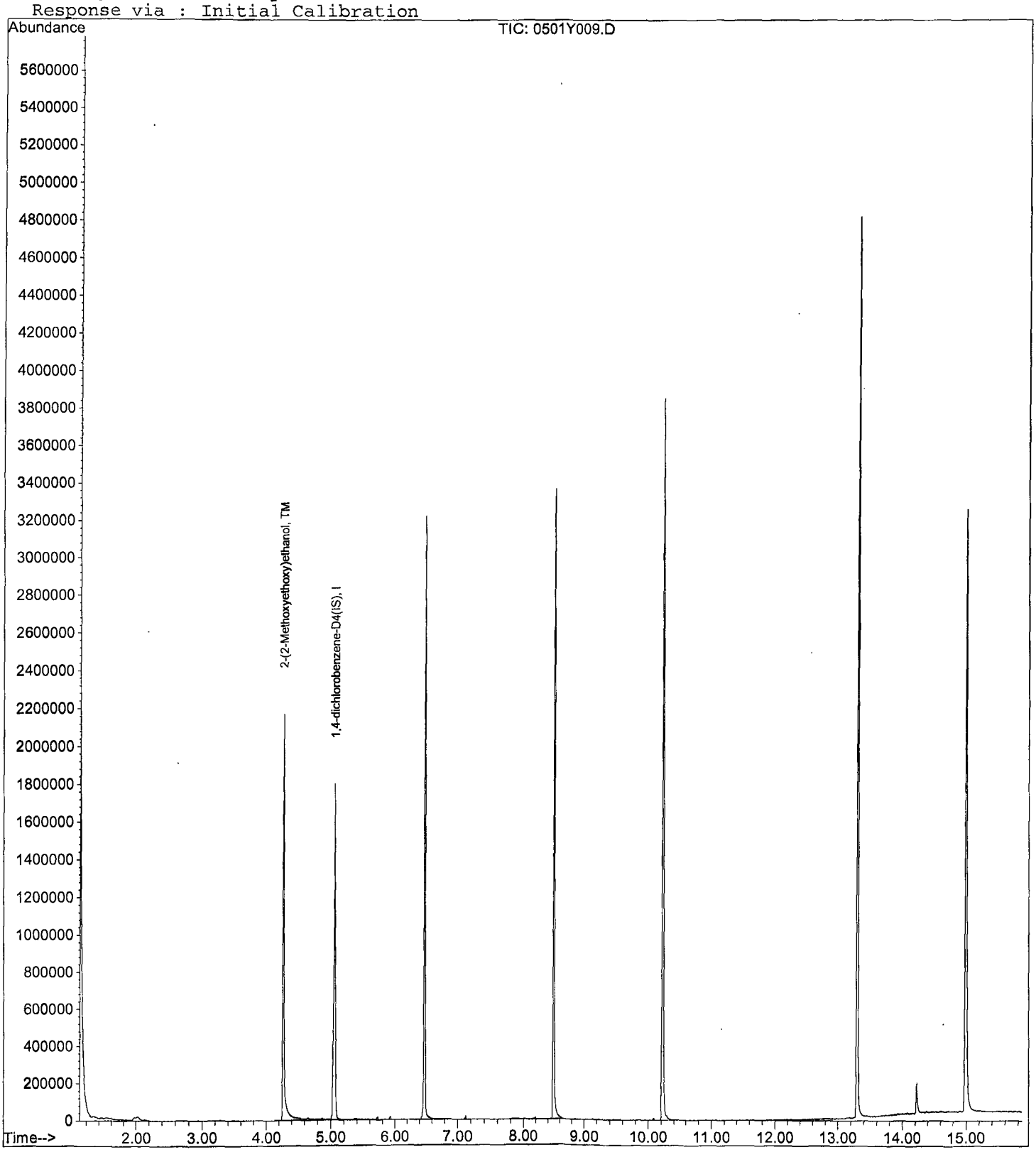
(#) = qualifier out of range (m) = manual integration
0501Y009.D YMEE0501.M Fri May 01 14:33:29 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y009.D Vial: 9
Acq On : 1 May 20 12:13 Operator: MA,SS
Sample : 600ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:14 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y010.D Vial: 10
Acq On : 1 May 20 12:37 Operator: MA,SS
Sample : 800ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:36 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 12:15:50 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.07	152	461483	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.30	45	1469246	831.41690	ppb	99

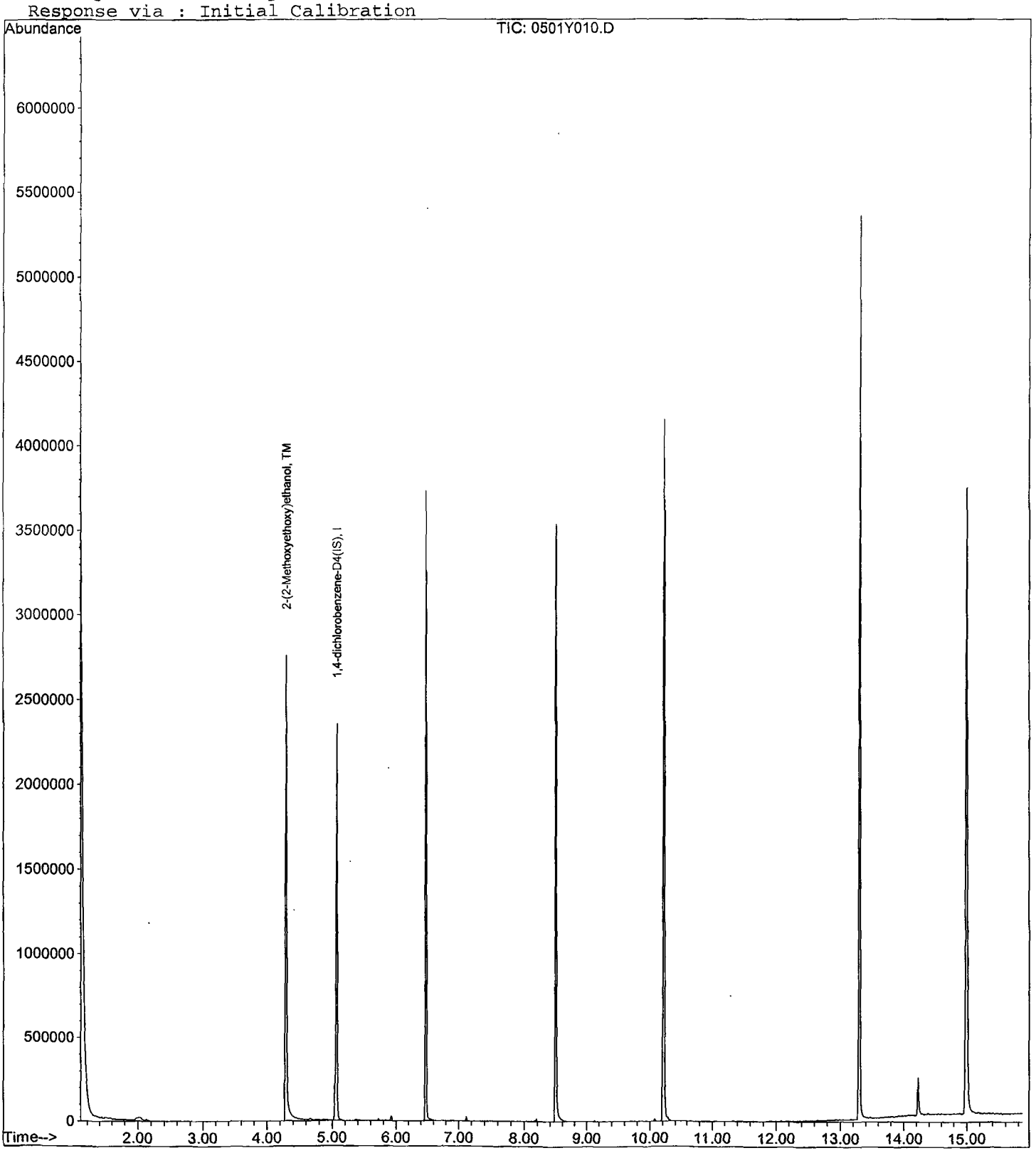
(#) = qualifier out of range (m) = manual integration
0501Y010.D YMEE0501.M Fri May 01 14:33:33 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y010.D Vial: 10
Acq On : 1 May 20 12:37 Operator: MA,SS
Sample : 800ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:36 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y011.D Vial: 11
Acq On : 1 May 20 13:01 Operator: MA,SS
Sample : 1000ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 13:03 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 12:15:50 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	445958	40.00000	ppb	-0.01

System Monitoring Compounds

Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.29	45	2014018	1172.78870	ppb	100

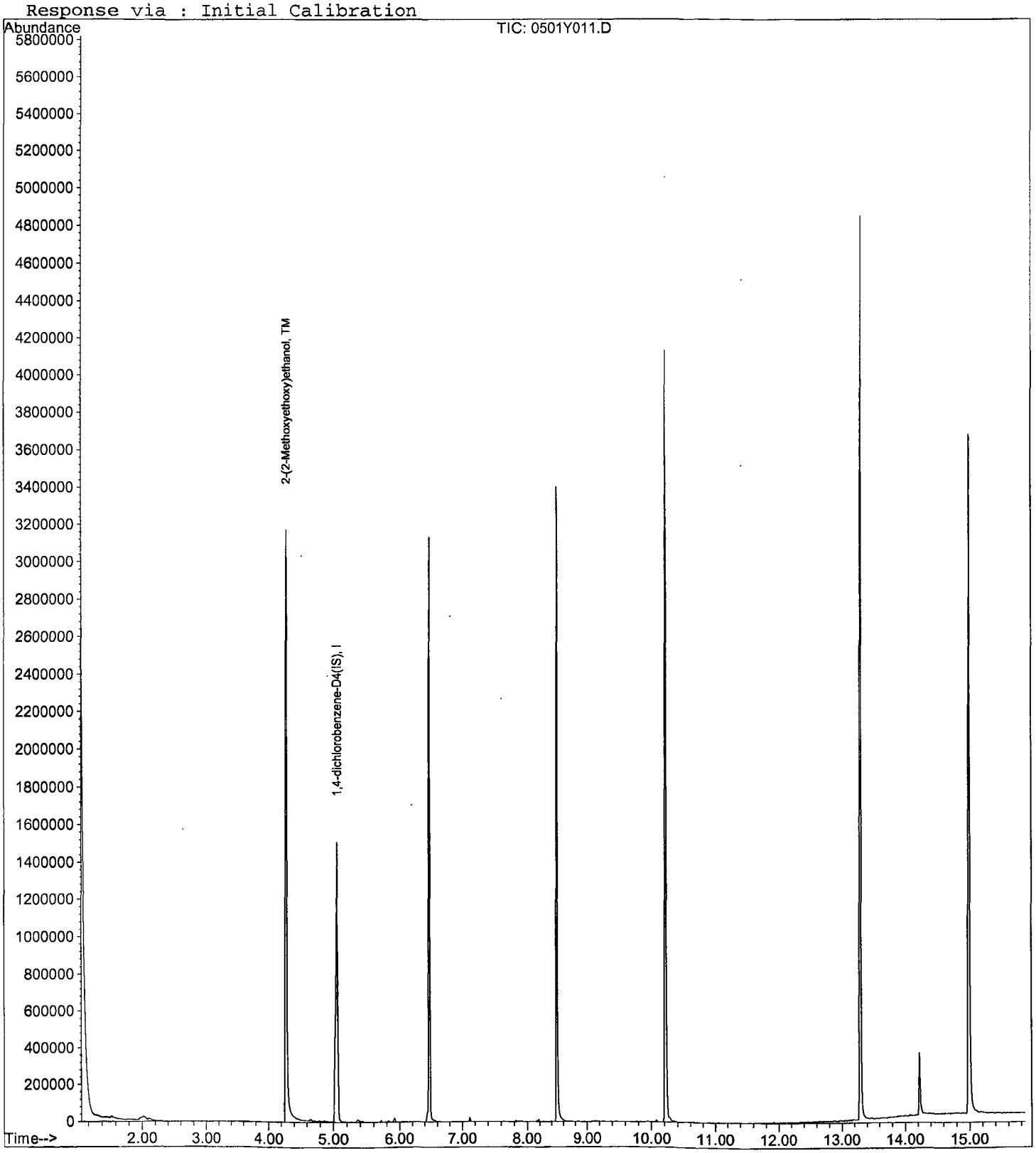
(#) = qualifier out of range (m) = manual integration
0501Y011.D YMEE0501.M Fri May 01 14:33:38 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y011.D Vial: 11
Acq On : 1 May 20 13:01 Operator: MA,SS
Sample : 1000ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 13:03 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



2MEE
EPA 8270

Form 7

Second Source

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 1 May 20 13:50
Instrument: Yoda
Initial Cal. Date: 05/01/20
Data File: 0501Y013.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	TM	2-(2-Methoxyethoxy)ethanol	0.1574	0.1794	14	TM	
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
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28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			14.0		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y013.D Vial: 13
Acq On : 1 May 20 13:50 Operator: MA,SS
Sample : SSug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 14:30 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	461050	40.00000 ppb	-0.01
System Monitoring Compounds					
Target Compounds					Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.26	45	1033684	569.91471 ppb	100

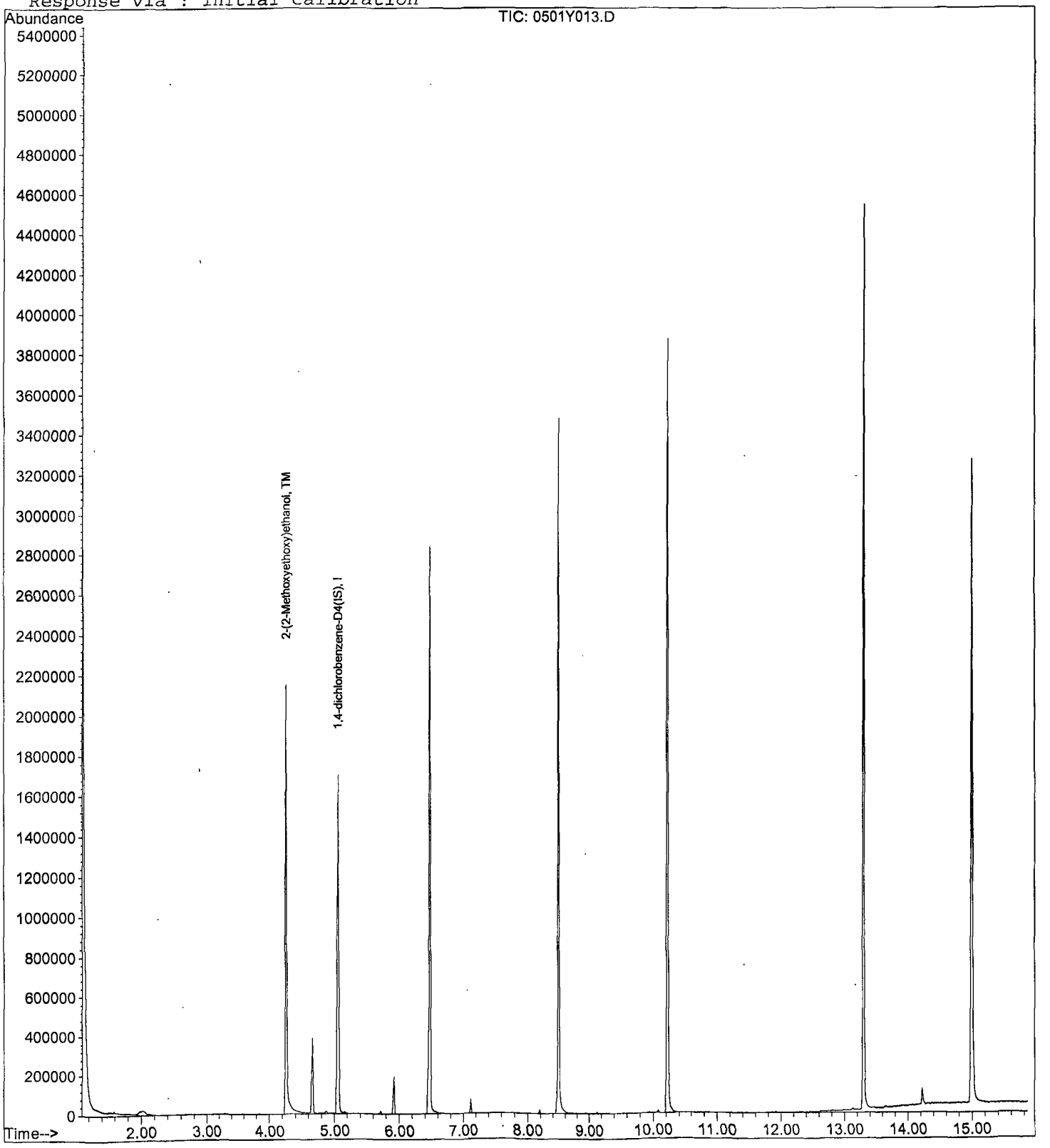
(#) = qualifier out of range (m) = manual integration
0501Y013.D YMEE0501.M Fri May 01 14:33:42 2020

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y013.D Vial: 13
Acq On : 1 May 20 13:50 Operator: MA,SS
Sample : SSug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 14:30 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



2MEE
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/27/20
Instrument: Yoda
Initial Cal. Date: 05/01/20
Data File: 0501Y131.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	TM	2-(2-Methoxyethoxy)ethanol	0.1574	0.1503	4.5	TM	
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
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28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			4.5		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y131.D Vial: 31
Acq On : 27 Oct 20 10:42 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:39 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 21 09:09:54 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.37	152	179268	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.57	45	336817	477.59672	ppb	95

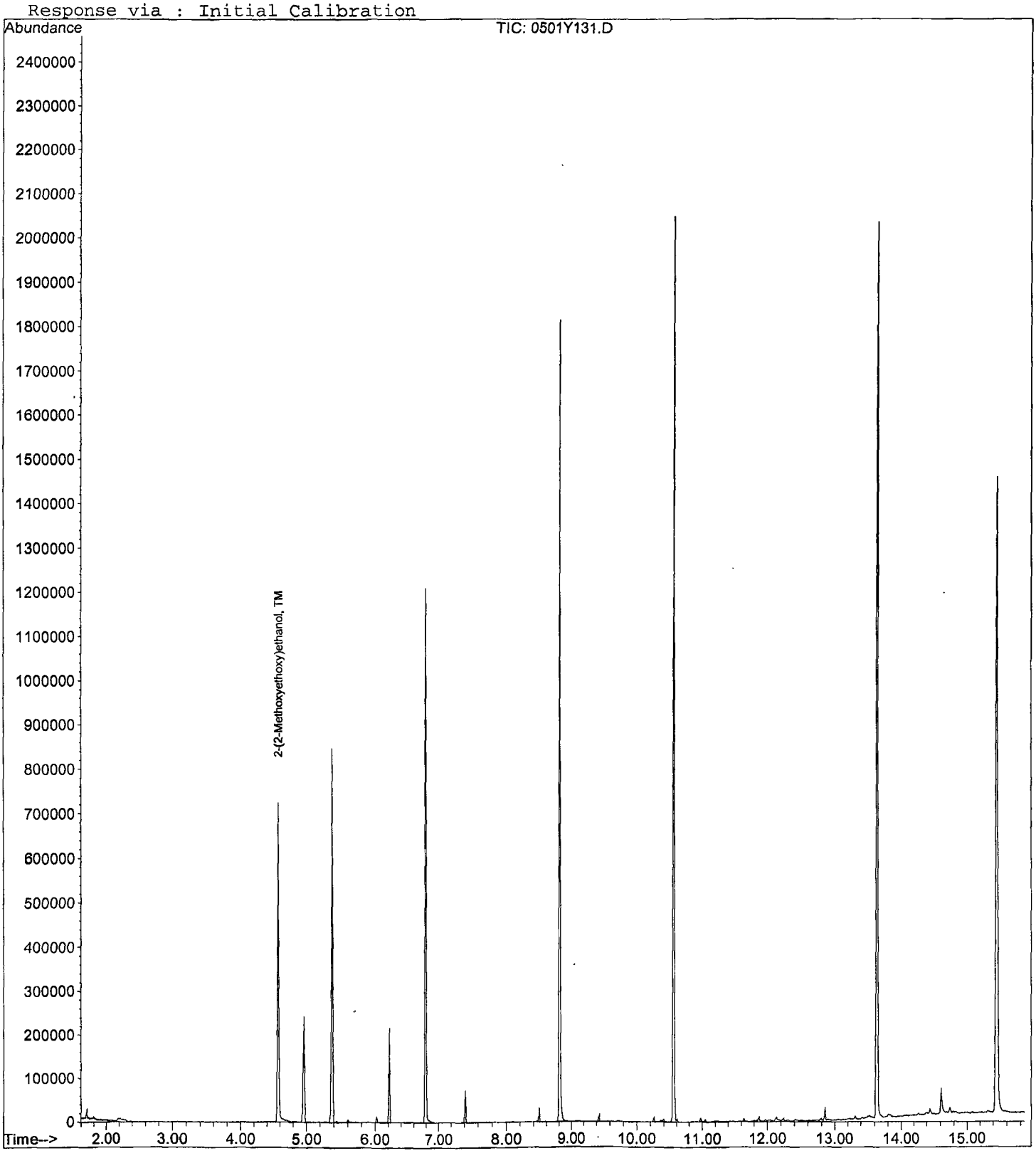
(#) = qualifier out of range (m) = manual integration
0501Y131.D YMEE0501.M Tue Oct 27 10:45:22 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y131.D Vial: 31
Acq On : 27 Oct 20 10:42 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:39 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 21 09:09:54 2020
Response via : Initial Calibration



2MEE
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/27/20
Instrument: Yoda
Initial Cal. Date: 05/01/20
Data File: 0501Y141.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	TM	2-(2-Methoxyethoxy)ethanol	0.1574	0.1707	8.5	TM	
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
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26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			8.5		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y141.D Vial: 41
Acq On : 27 Oct 20 14:38 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 14:57 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:57:12 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.37	152	143100	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

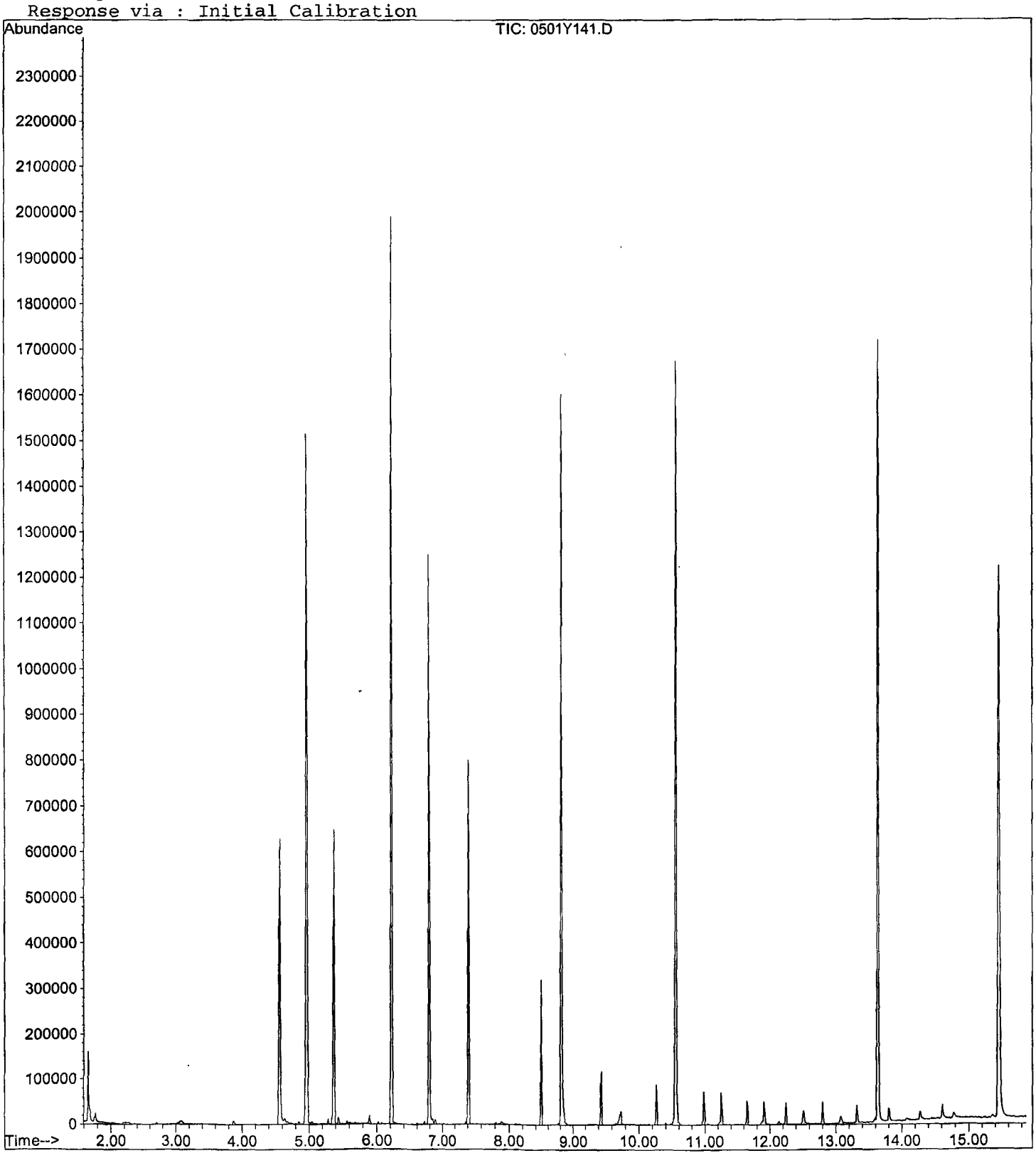
Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y141.D
Acq On : 27 Oct 20 14:38
Sample : 500ug/ml MEE 05/01/20 (2)
Misc :

Vial: 41
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: Oct 27 14:57 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:57:12 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y135.D Vial: 35
Acq On : 27 Oct 20 12:16 Operator: MA,SS
Sample : BA20539W22 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:24 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 21 09:09:54 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.37	152	163588	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

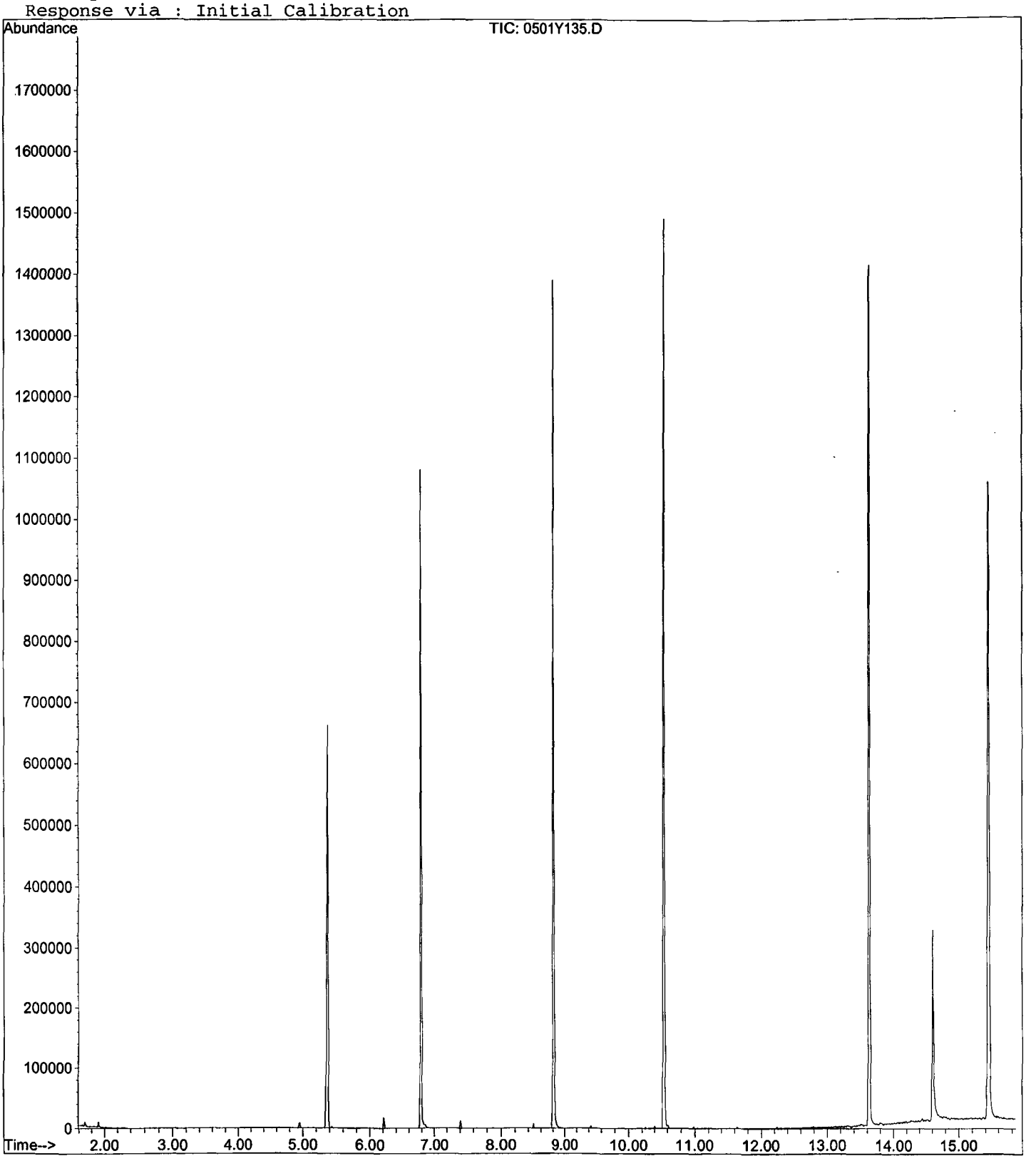
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y135.D Vial: 35
Acq On : 27 Oct 20 12:16 Operator: MA,SS
Sample : BA20539W22 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:24 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y138.D Vial: 38
Acq On : 27 Oct 20 13:27 Operator: MA,SS
Sample : BA20541W07 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:57 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:57:12 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.36	152	170533	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

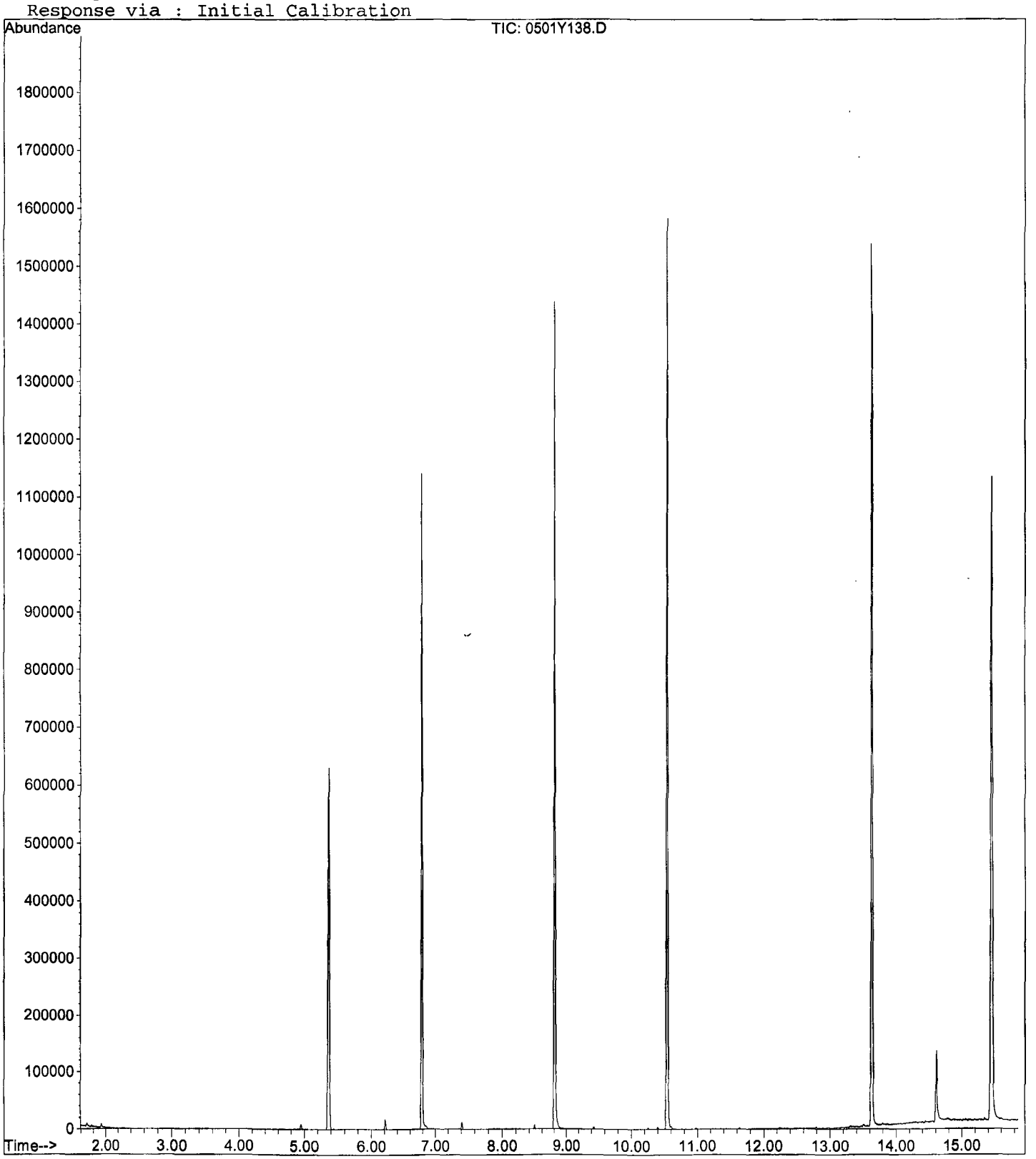
(#) = qualifier out of range (m) = manual integration
0501Y138.D YMEE0501.M Mon Nov 09 16:24:08 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y138.D Vial: 38
Acq On : 27 Oct 20 13:27 Operator: MA,SS
Sample : BA20541W07 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:57 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y139.D Vial: 39
Acq On : 27 Oct 20 13:51 Operator: MA,SS
Sample : BA20542W08 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:57 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:57:12 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.37	152	172581	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

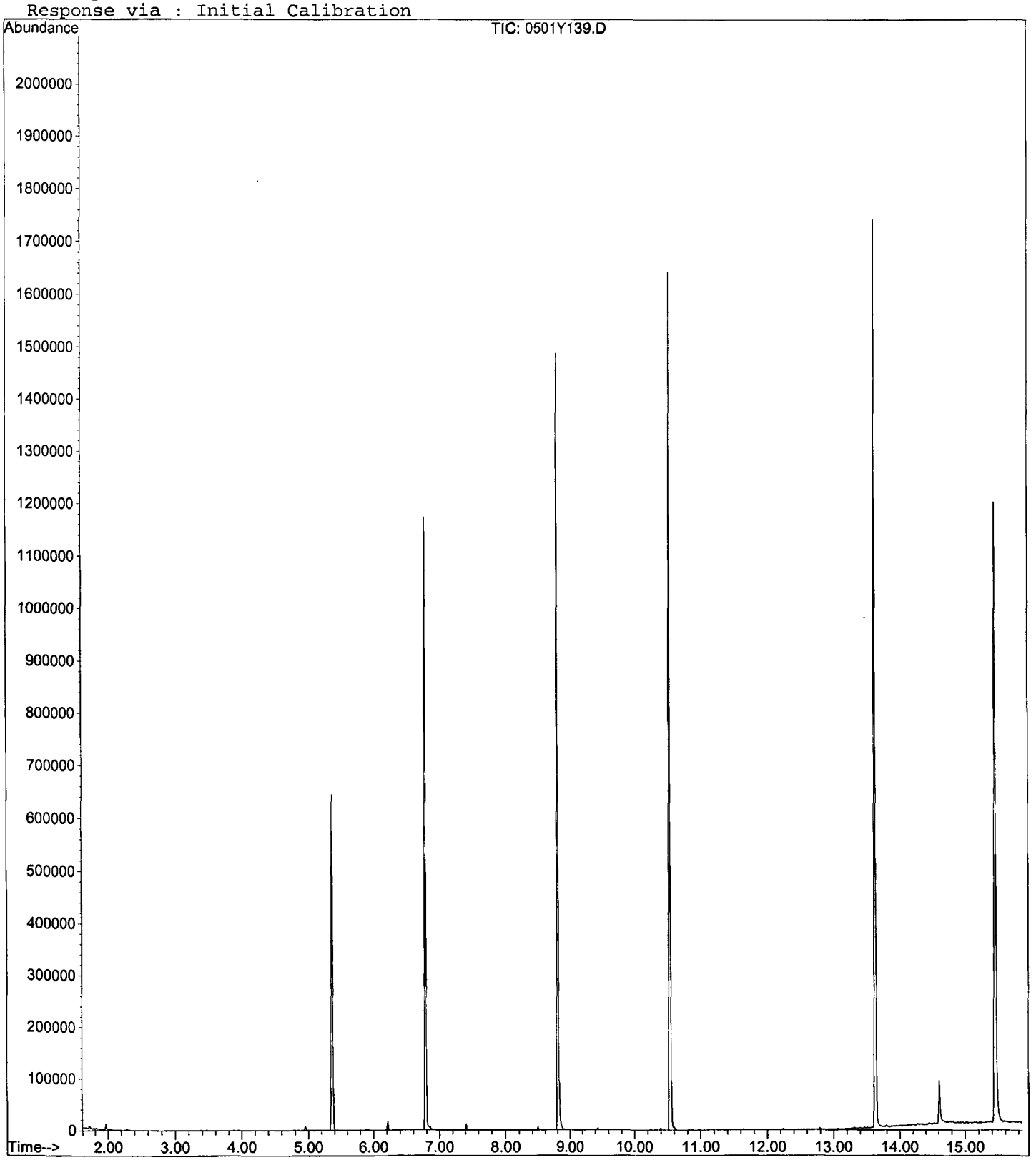
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y139.D Vial: 39
Acq On : 27 Oct 20 13:51 Operator: MA,SS
Sample : BA20542W08 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:57 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y140.D Vial: 40
Acq On : 27 Oct 20 14:15 Operator: MA,SS
Sample : BA20544W10 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:57 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:57:12 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.37	152	200863	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

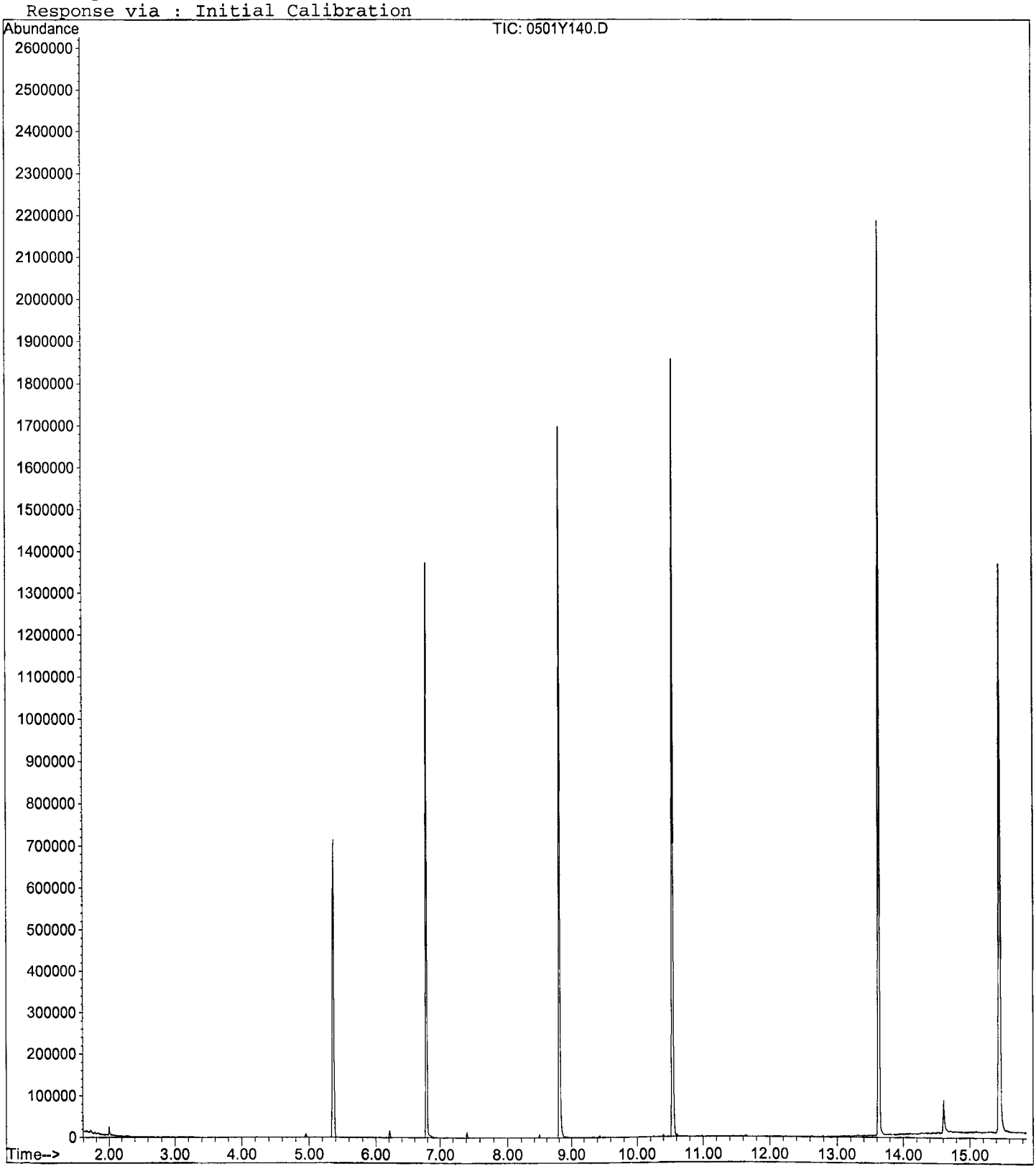
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y140.D Vial: 40
Acq On : 27 Oct 20 14:15 Operator: MA,SS
Sample : BA20544W10 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:57 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y132.D Vial: 32
Acq On : 27 Oct 20 11:06 Operator: MA,SS
Sample : 201026A BLK 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:09 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 21 09:09:54 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.36	152	175209	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

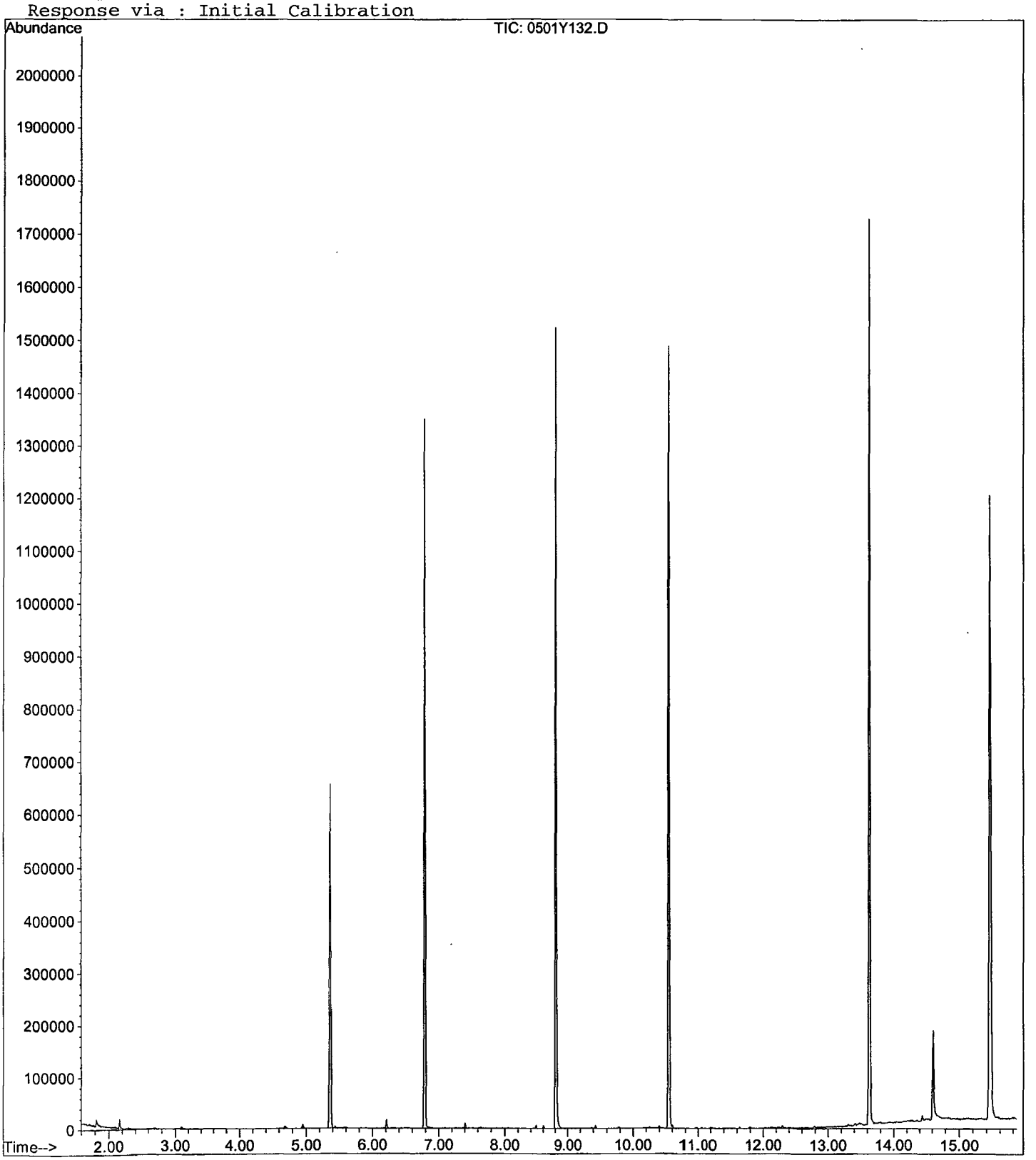
(#) = qualifier out of range (m) = manual integration
0501Y132.D YMEE0501.M Mon Nov 09 16:26:01 2020

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y132.D Vial: 32
Acq On : 27 Oct 20 11:06 Operator: MA,SS
Sample : 201026A BLK 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:09 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y133.D Vial: 33
Acq On : 27 Oct 20 11:30 Operator: MA,SS
Sample : 201026A LCS-1 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:48 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 21 09:09:54 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.36	152	187647	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.64	45	48205	65.30111	ppb	96

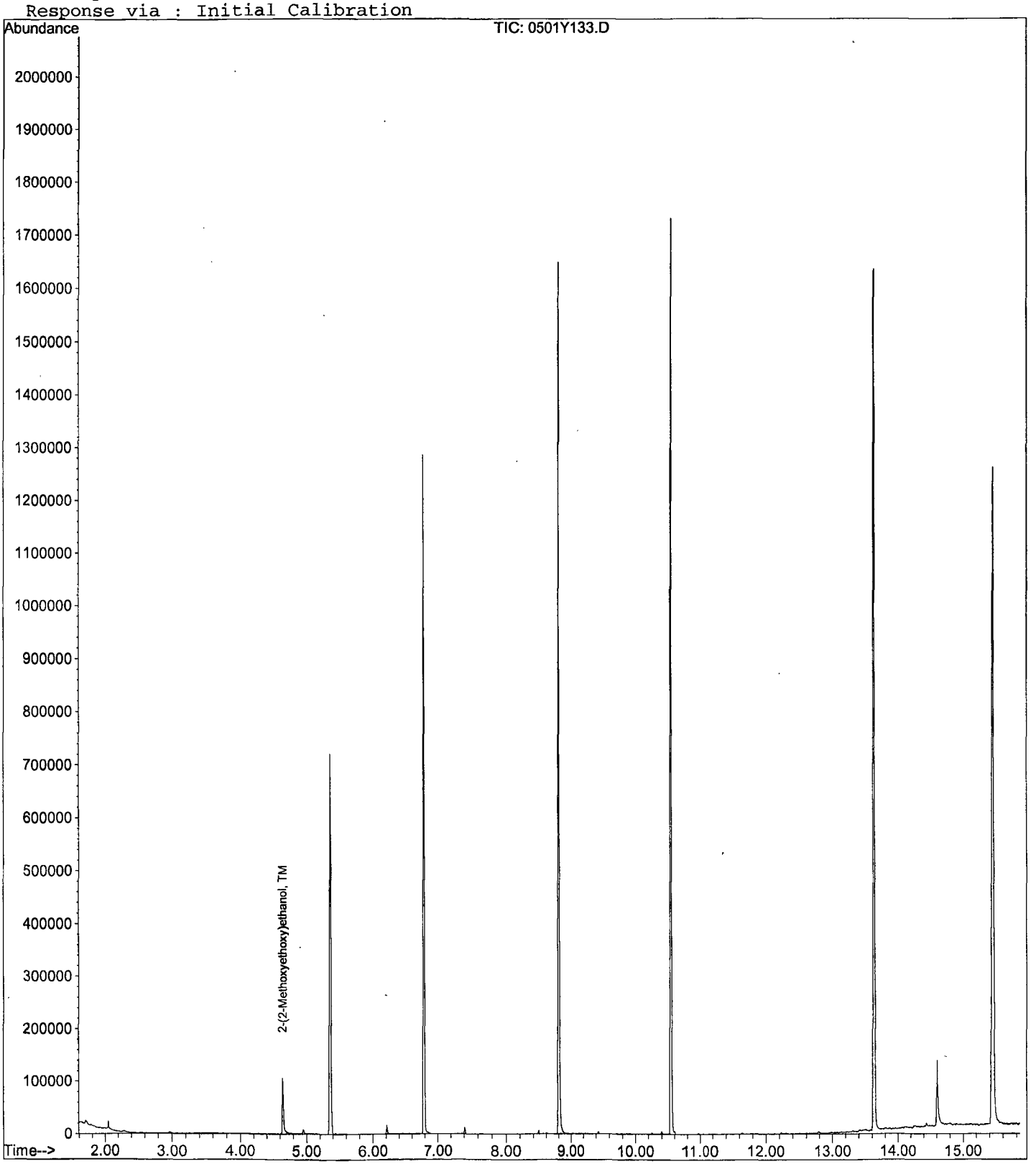
(#) = qualifier out of range (m) = manual integration
0501Y133.D YMEE0501.M Mon Nov 09 16:26:06 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y133.D Vial: 33
Acq On : 27 Oct 20 11:30 Operator: MA,SS
Sample : 201026A LCS-1 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:48 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y136.D Vial: 36
Acq On : 27 Oct 20 12:40 Operator: MA,SS
Sample : BA20539W15 MS-1 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:57 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:57:12 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.35	152	140732	40.00000	ppb	-0.02

System Monitoring Compounds

Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.75	45	47904	86.52648	ppb	100

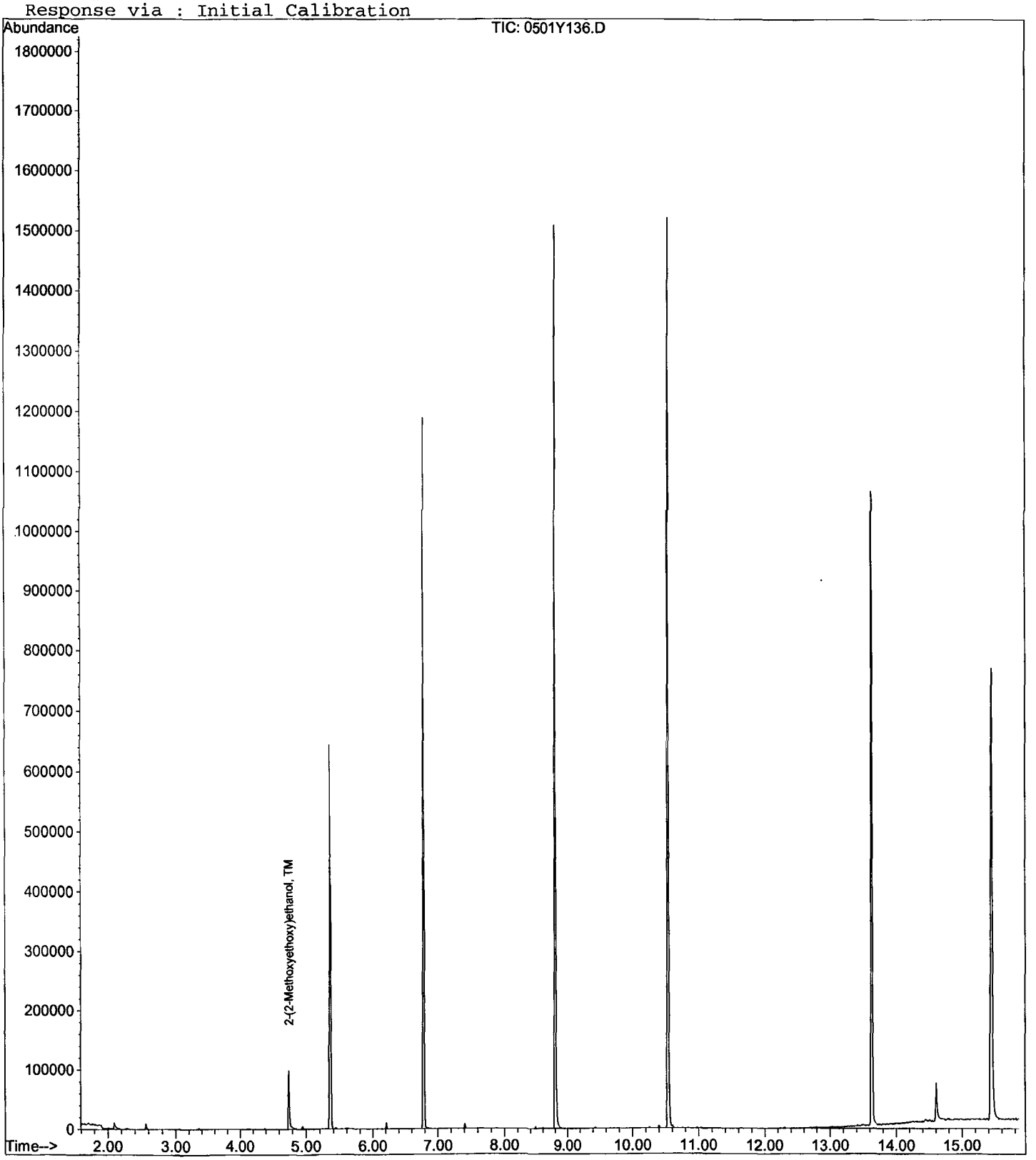
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y136.D Vial: 36
Acq On : 27 Oct 20 12:40 Operator: MA,SS
Sample : BA20539W15 MS-1 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:57 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y137.D Vial: 37
Acq On : 27 Oct 20 13:04 Operator: MA,SS
Sample : BA20539W14 MSD-1 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:57 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:57:12 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.36	152	199159	40.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.65	45	44390	56.65723	ppb	98

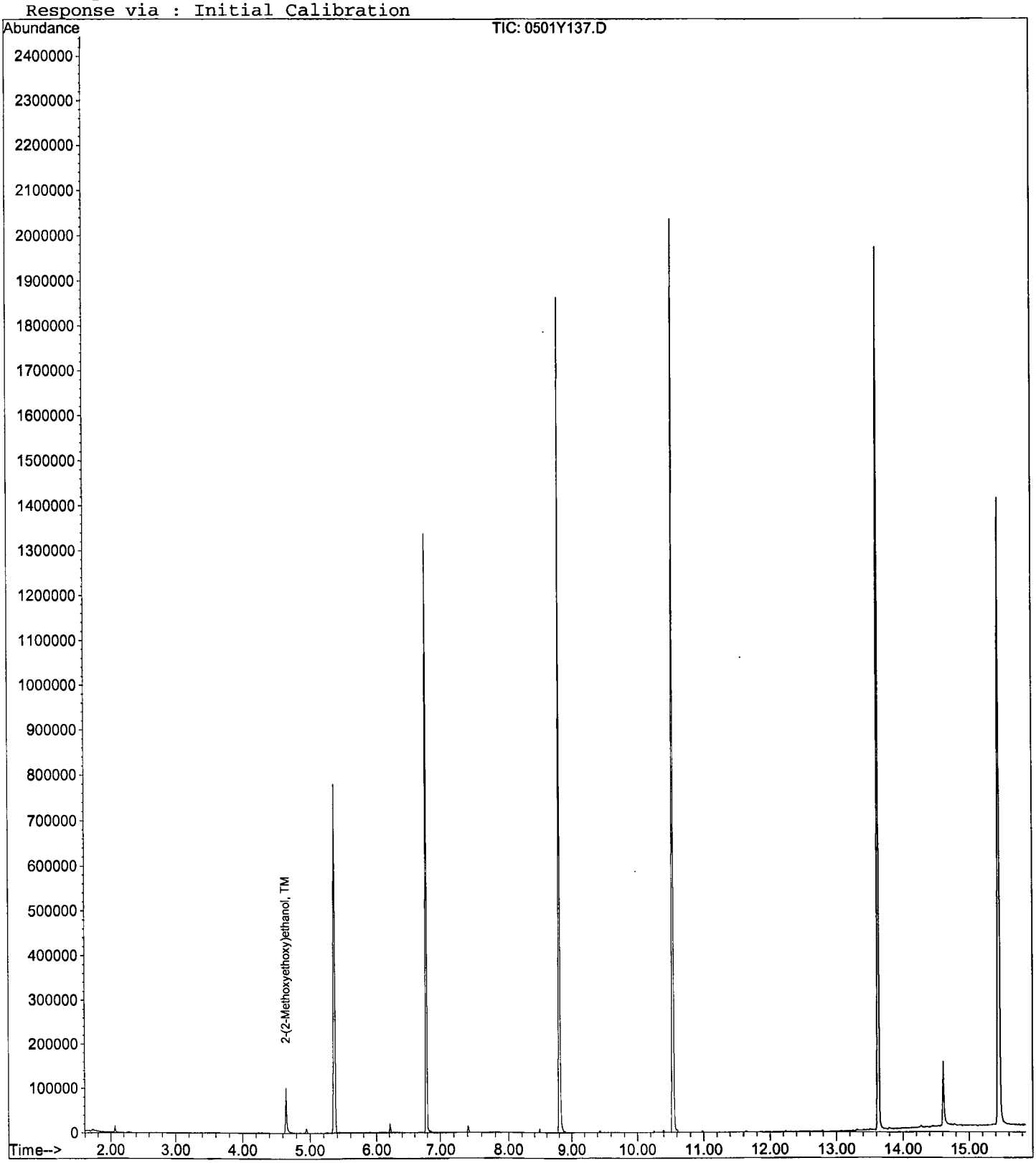
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y137.D Vial: 37
Acq On : 27 Oct 20 13:04 Operator: MA,SS
Sample : BA20539W14 MSD-1 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:57 2020 Quant Results File: YMEE0501.RES

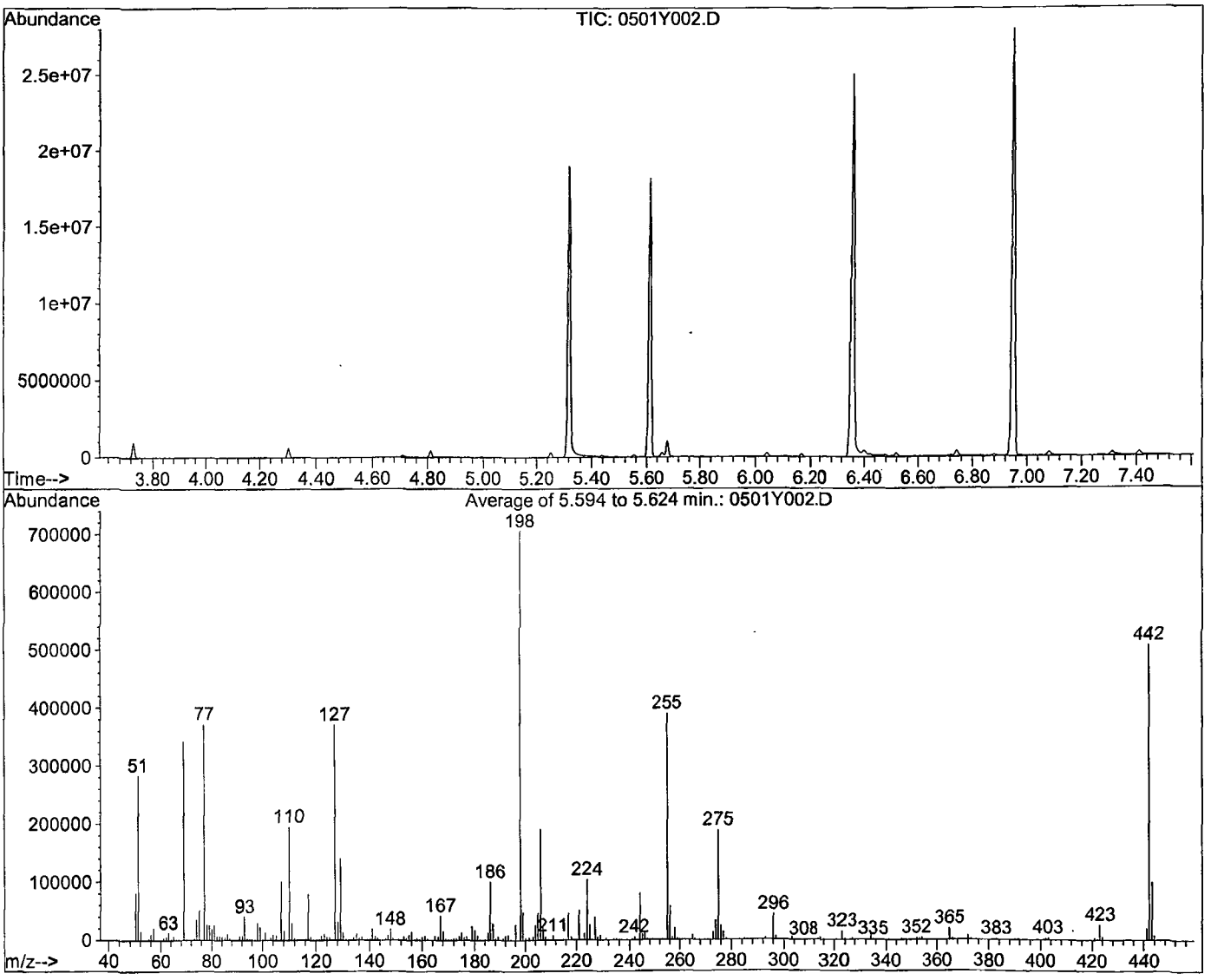
Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



DFTPP

Data File : M:\YODA\DATA\Y200501M\0501Y002.D Vial: 38
Acq On : 1 May 20 9:23 Operator: MA,SS
Sample : SV TUNE 10/01/19 Inst : Yoda
Misc : soil Multiplr: 1.00

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C



Spectrum Information: Average of 5.594 to 5.624 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	40.1	283365	PASS
68	69	0.00	2	0.0	30	PASS
70	69	0.00	2	0.5	1711	PASS
127	198	10	80	52.5	370953	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	706767	PASS
199	198	5	9	6.8	48387	PASS
275	198	10	60	26.7	188525	PASS
365	198	1	100	2.8	20013	PASS
441	442	0.01	24	3.9	19955	PASS
442	198	50	500	71.6	506304	PASS
443	442	15	24	19.8	100283	PASS

0501Y002.D YMEE0501.M Fri May 01 11:47:21 2020

Data File Name:	**0501Y002.D**
Data File Path:	**M:\YODA\DATA\Y200501M**
Operator:	**MA,SS**
Date Acquired:	**1 May 20 9:23**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/01/19**
Vial Number:	**38**
Instrument Name:	**Yoda**

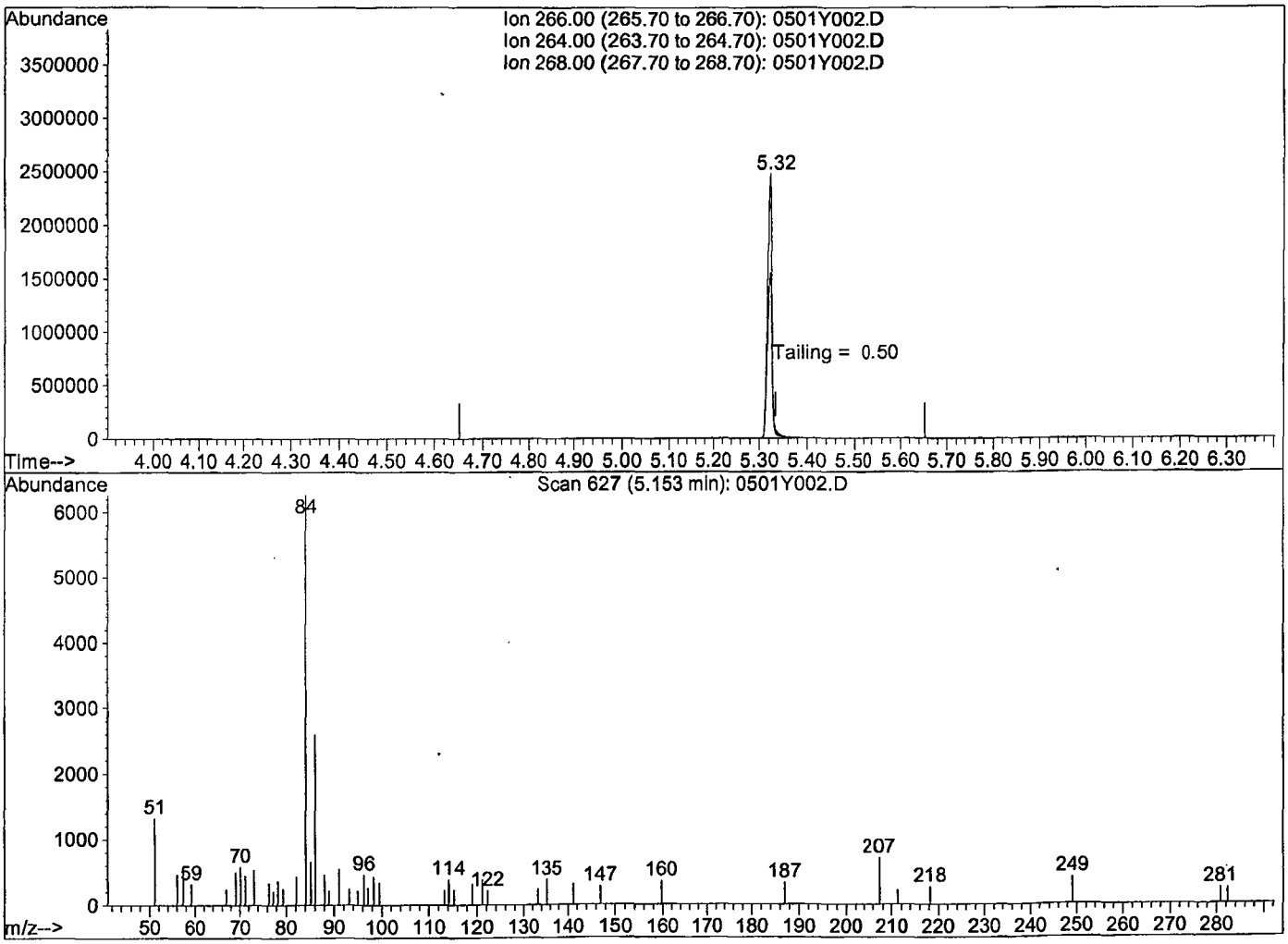
#	Name	Ret Time	Target Response
1)	DDT	6.95	212314000
2)	DDD	6.72	691986
3)	DDE	6.31	0

Breakdown **0.32**

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y002.D Vial: 38
Acq On : 1 May 20 9:23 Operator: MA,SS
Sample : SV TUNE 10/01/19 Inst : Yoda
Misc : soil Multiplr: 1.00
Quant Time: Aug 7 11:03 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y200501M\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Wed Jul 22 08:17:43 2020
Response via : Single Level Calibration



TIC: 0501Y002.D

(5) Pentachlorophenol

5.15min 0.0000

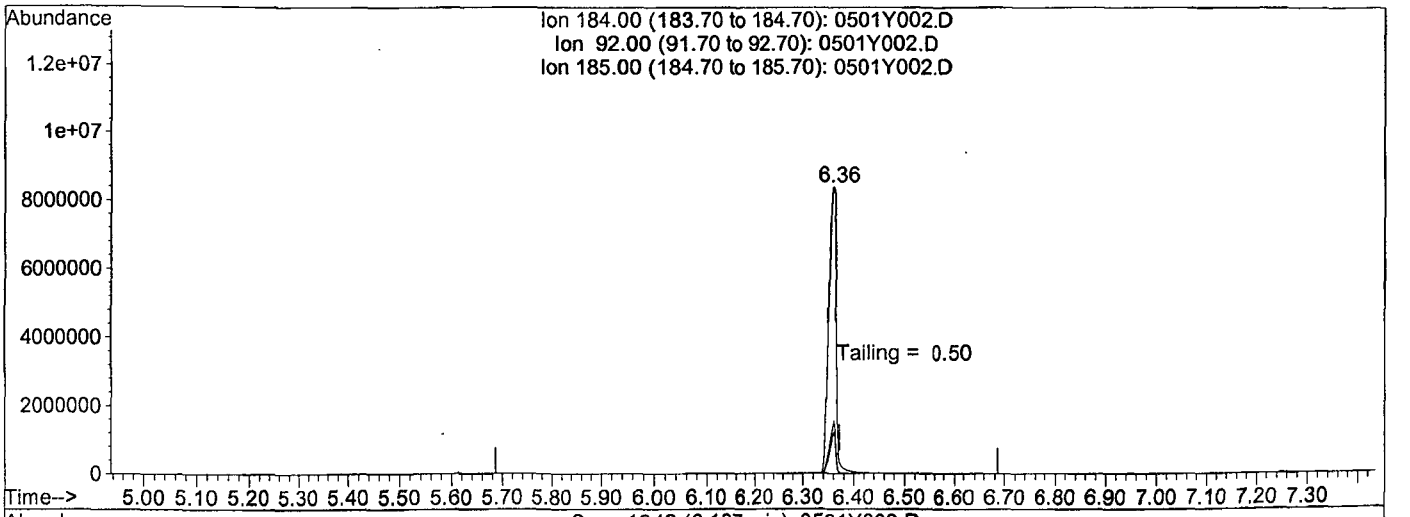
response 0

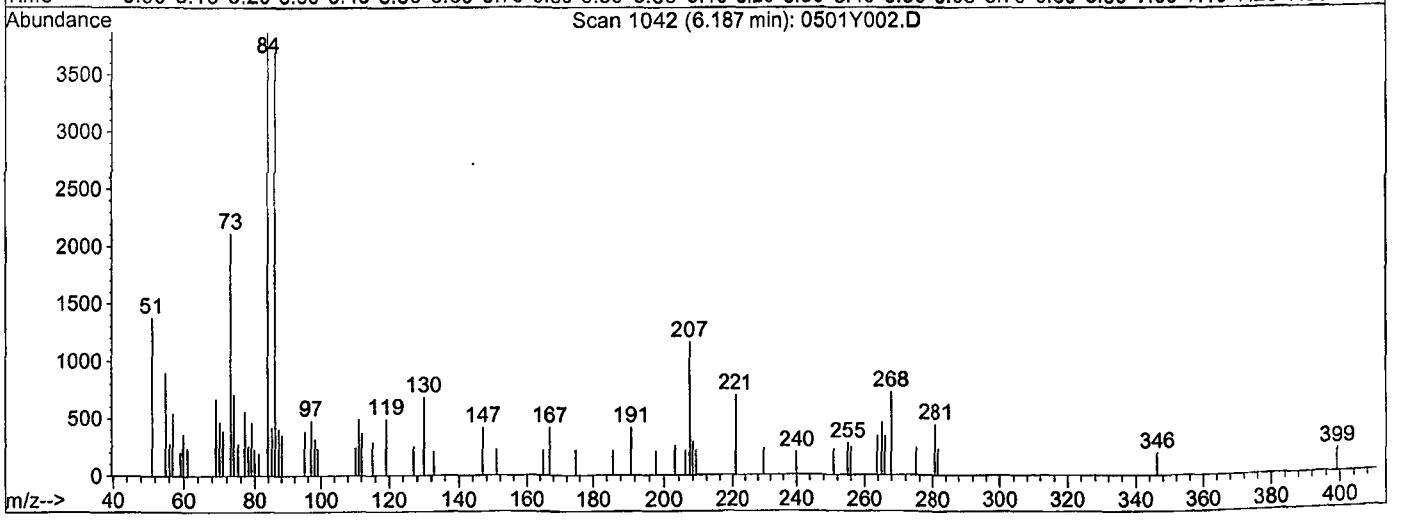
Ion	Exp%	Act%
266.00	100	0.00
264.00	63.90	0.00#
268.00	65.20	0.00#
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y002.D Vial: 38
Acq On : 1 May 20 9:23 Operator: MA,SS
Sample : SV TUNE 10/01/19 Inst : Yoda
Misc : soil Multiplr: 1.00
Quant Time: Aug 7 11:03 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y200501M\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Wed Jul 22 08:17:43 2020
Response via : Single Level Calibration





TIC: 0501Y002.D

(6) Benzidine

6.19min 0.0000

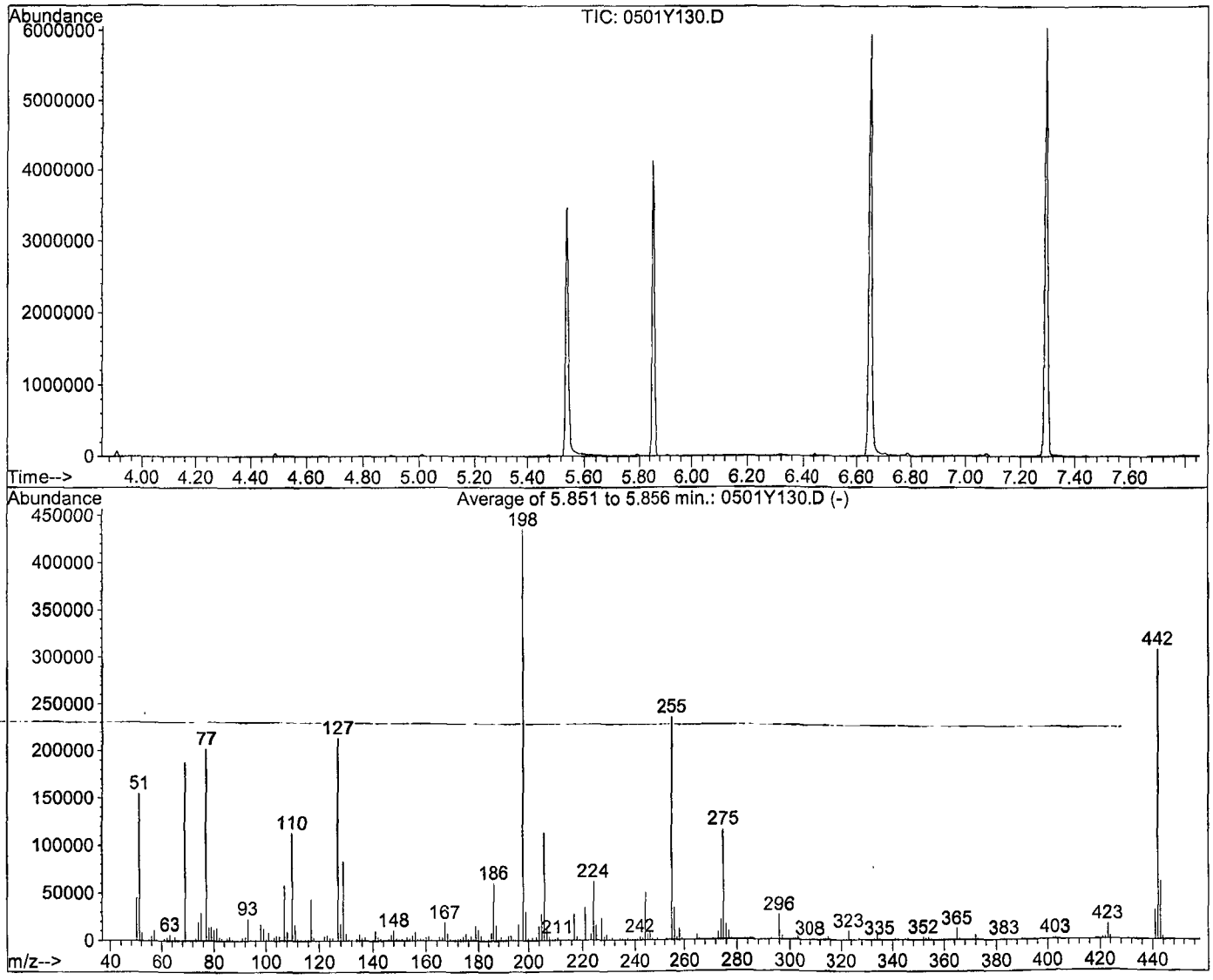
response 0

Ion	Exp%	Act%
184.00	100	0.00
92.00	10.00	0.00#
185.00	14.30	0.00#
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y200501M\0501Y130.D
Acq On : 27 Oct 20 10:27
Sample : SV TUNE 10/02/20
Misc :

Vial: 30
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 907, 908, 909; Background Corrected with Scan 897

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	35.6	154901	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.3	525	PASS
127	198	10	80	49.1	213632	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	435072	PASS
199	198	5	9	6.9	30229	PASS
275	198	10	60	26.6	115739	PASS
365	198	1	100	2.7	11719	PASS
441	442	0.01	24	10.1	31128	PASS
442	198	50	500	70.8	308203	PASS
443	442	15	24	19.9	61299	PASS

0501Y130.D YMEE0501.M Tue Oct 27 10:23:09 2020

Data File Name:	**0501Y130.D**
Data File Path:	**M:\YODA\DATA\Y200501M**
Operator:	**MA,SS**
Date Acquired:	**27 Oct 2020 10:27**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/02/20**
Vial Number:	**30**
Instrument Name:	**Yoda**

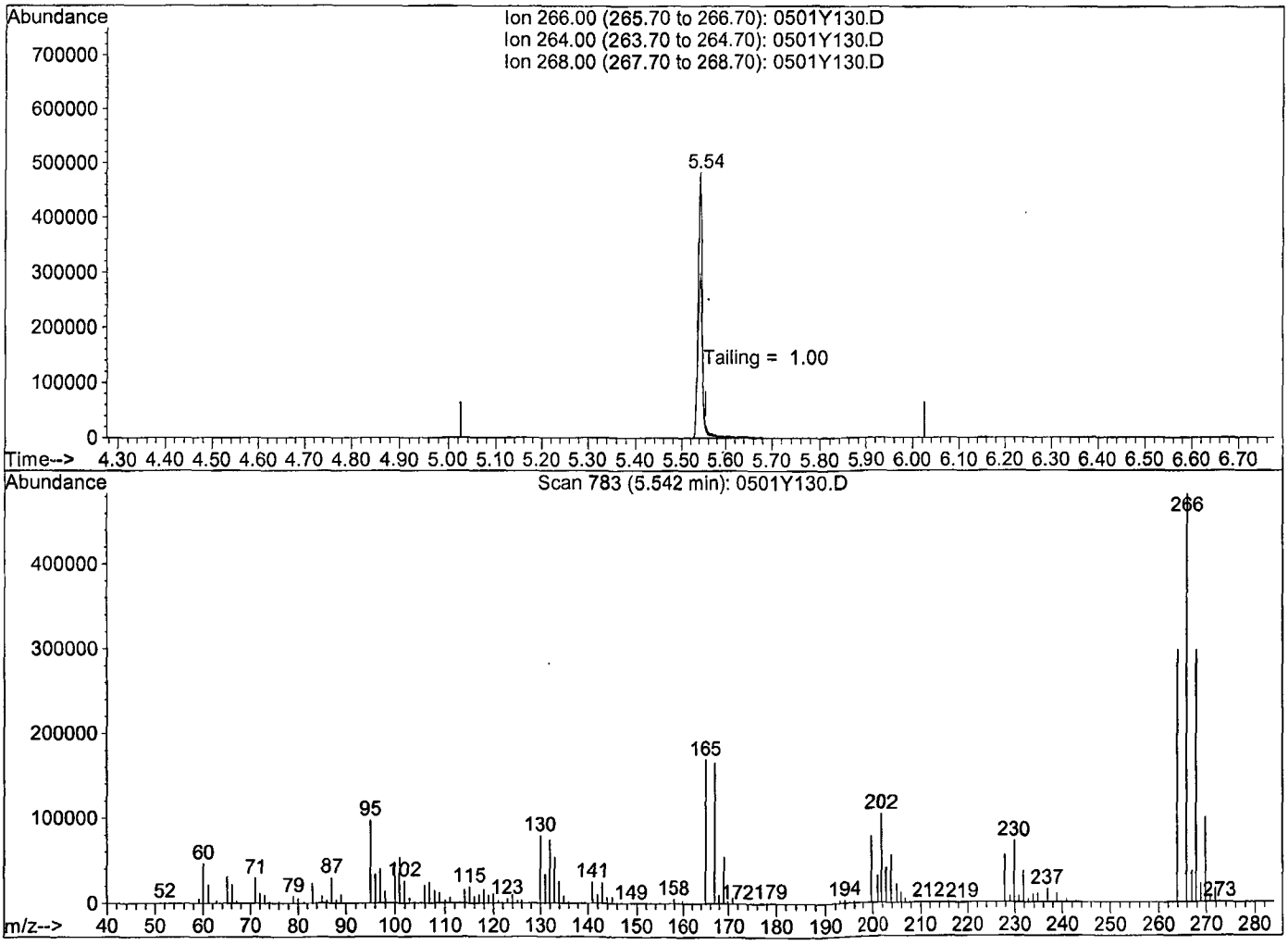
#	Name	Ret Time	Target Response
1)	DDT	7.26	43718800
2)	DDD	7.02	171303
3)	DDE	5.93	110298

Breakdown **0.64**

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y130.D Vial: 30
Acq On : 27 Oct 20 10:27 Operator: MA,SS
Sample : SV TUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 27 10:23 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y200501M\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration



TIC: 0501Y130.D

(5) Pentachlorophenol

5.54min 0.0000

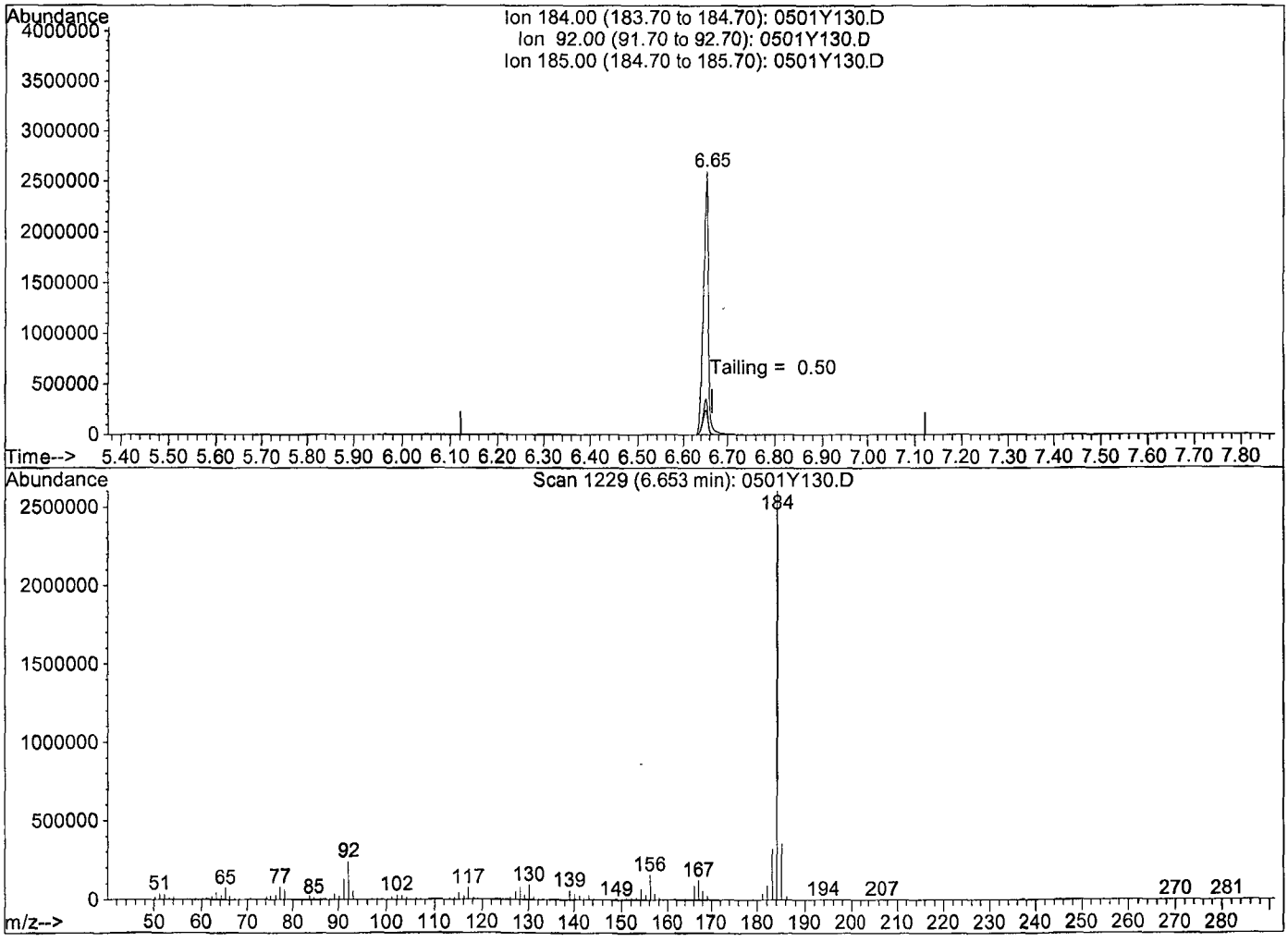
response 3260744

Ion	Exp%	Act%
266.00	100	100
264.00	63.10	60.14
268.00	65.40	62.42
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y130.D Vial: 30
Acq On : 27 Oct 20 10:27 Operator: MA,SS
Sample : SV TUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 27 10:23 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y200501M\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration



TIC: 0501Y130.D

(6) Benzidine

6.65min 0.0000

response 20586609

Ion	Exp%	Act%
184.00	100	100
92.00	8.50	9.73
185.00	13.80	14.28
0.00	0.00	0.00

Name of Final Standard MEE Curve

Prep Date 05/01/20

Exp Date 11/06/20

Prep'd By (Initials) CD

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	5 uL	200uL	Methanol 195uL Lot# 235140	50 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	5 uL	100uL	Methanol 95uL Lot# 235140	100 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	10 uL	100uL	Methanol 90uL Lot# 235140	200 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	20 uL	100uL	Methanol 80 uL Lot# 235140	400 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	50 uL	200 uL	Methanol 150 uL Lot# 235140	500 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	30 uL	100uL	Methanol 70 uL Lot# 235140	600 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	40 uL	100uL	Methanol 60 uL Lot# 235140	800 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	50 uL	100uL	Methanol 50uL Lot# 235140	1000 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*

Name of Final Standard MEE Second Source

Prep Date 05/01/20

Exp Date 11/06/20

Prep'd By (Initials) MA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE SS	APPL		2000 ug/mL	11/06/19	11/06/20	50 uL	200uL	Methanol 150uL Lot# 235140	500 ug/mL
SV Internal Standard	APPL	8277 Internal Standard	2000 ug/mL	03/03/20	03/03/21	4 uL	*	*	*

Name of Final Standard	Diethylene Glycol
Prep Date	**11/05/19**
Exp Date	**11/05/20**

Prep'd By (Initials) **MA**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc.(range)
Diethylene glycol methyl ether	AccuStandard	S-72273	2000 ug/mL	**218101558-39890**	**12/01/20**	1.0 mL	2 mL	Methanol #208858	1000 ug/mL

Given to Extraction to do **MEE M STD Stock** (used for ICAL) Final concentration 2000ug/L

Name of Final Standard 2MEE Second Source Stock **Prep'd By (Initials)** JP

Prep Date 10/28/19
Exp Date 10/28/20

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Methoxyethanol-Neat	Chem Service	N-12404-1G	Neat 99.5%	**7079100 - 39417**	**07/31/22**	0.1022g	10 mL	**MC #56258**	10220 ug/mL

Given to Extraction to do **MEE SS** (used for ICAL SS)
0.097ml were spiked in 500ml of water and extracted on 04/29/19 . Final concentration is 2000ug/L

Name of Final Standard **8270 Internal Standard Ampules (2)**

Prep'd By (Initials) **MA**

Prep Date	11/20/19
Exp Date	11/20/20

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Semivolatile Internal Standard	Restek	31206	2000 ug/mL	**AO157142-49871,872,873**	**07/31/25**	3 mL	3 mL	**NA**	2000ug/mL

_MWE2MEE

Organic Extraction Worksheet

Method	Solid Phase Extraction of 2MEE in Water	Extraction Set	201026A	Extraction Method	MWE2MEE	Units	mL

Spiked ID 1	Diethylene Glycol 04/29/20 ex 12/1/20		Surrogate ID 1				
Spiked ID 2			Surrogate ID 2				
Spiked ID 3			Surrogate ID 3				
Spiked ID 4			Surrogate ID 4				
Spiked ID 5			Surrogate ID 5				
Spiked ID 6			Sufficient Vol for Matrix QC:	YES			
Spiked ID 7			Ext. Start Time:	10/26/20 8:25			
Spiked ID 8			Ext. End Time:	10/27/20 10:45			
			GC Requires Extract By:				
			pH1			Water Bath Temp 1 °C	
			pH2			Water Bath Temp 2 °C	
			pH3			Water Bath Temp 3 °C	

Spiked By: DL **Date** 10/27/20 10:50:08 AM **Witnessed By:** CFM **Date** 10/27/20 10:50:15 AM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201026A Blk				NA	NA equip	500	2	7	10/26/20 8:25	
2	201026A LCS-1		0.040	1	NA	NA equip	500	2	7	10/26/20 8:25	
3	BA20486	BA20486W12			NA	NA equip	500	2	7	10/26/20 8:25	93803
4	BA20539 MS-1	BA20539W15	0.040	1	NA	NA equip	500	2	7	10/26/20 8:25	93818
5	BA20539 MSD-1	BA20539W14	0.040	1	NA	NA equip	500	2	7	10/26/20 8:25	93818
6	BA20539	BA20539W22			NA	NA equip	500	2	7	10/26/20 8:25	93818
7	BA20541	BA20541W07			NA	NA equip	500	2	7	10/26/20 8:25	93818
8	BA20542	BA20542W08			NA	NA equip	500	2	7	10/26/20 8:25	93818
9	BA20544	BA20544W10			NA	NA equip	500	2	7	10/26/20 8:25	93818
10	BA20716	BA20716W12			NA	NA equip		2	7Y		93873
11	BA20718	BA20718W15			NA	NA equip		2	7Y		93873
12	BA20719	BA20719W10			NA	NA equip		2	7Y		93873

Solvent and Lot#	
ENVIRO-CLEAN CARTRIDGE	8501193-EY
PH Strip	.HC904495
Di Water	.10-27-20
Methanol:DCM 80:20 PREP	.8/4/20

Extraction COC Transfer	
Extraction lab employee Initials	DL
GC analyst's initials	MA
Date	10/27/20
Time	11:00
Refrigerator	GC_C

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL

Modified	10/27/20 11:04:55 AM

Reviewed By: MA **Date** 10/27/20

Injection Log

Directory: M:\YODA\DATA\Y200501M\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
38	0501Y002.D	1	SV TUNE 10/01/19	soil	1 May 20 9:23
39	0501Y003.D	1	50ug/ml MEE 05/01/20	soil	1 May 20 9:39
40	0501Y004.D	1	100ug/ml MEE 05/01/20	soil	1 May 20 10:03
42	0501Y006.D	1	200ug/ml MEE 05/01/20	soil	1 May 20 10:51
7	0501Y007.D	1	400ug/ml MEE 05/01/20	soil	1 May 20 11:24
8	0501Y008.D	1	500ug/ml MEE 05/01/20	soil	1 May 20 11:48
9	0501Y009.D	1	600ug/ml MEE 05/01/20	soil	1 May 20 12:13
10	0501Y010.D	1	800ug/ml MEE 05/01/20	soil	1 May 20 12:37
11	0501Y011.D	1	1000ug/ml MEE 05/01/20	soil	1 May 20 13:01
13	0501Y013.D	1	SSug/ml MEE 05/01/20	soil	1 May 20 13:50
30	0501Y130.D	1	SV TUNE 10/02/20		27 Oct 20 10:27
31	0501Y131.D	1	500ug/ml MEE 05/01/20 (2)		27 Oct 20 10:42
32	0501Y132.D	1	201026A BLK 2/500		27 Oct 20 11:06
33	0501Y133.D	1	201026A LCS-1 2/500		27 Oct 20 11:30
35	0501Y135.D	1	BA20539W22 2/500		27 Oct 20 12:16
36	0501Y136.D	1	BA20539W15 MS-1 2/500		27 Oct 20 12:40
37	0501Y137.D	1	BA20539W14 MSD-1 2/500		27 Oct 20 13:04
38	0501Y138.D	1	BA20541W07 2/500		27 Oct 20 13:27
39	0501Y139.D	1	BA20542W08 2/500		27 Oct 20 13:51
40	0501Y140.D	1	BA20544W10 2/500		27 Oct 20 14:15
41	0501Y141.D	1	500ug/ml MEE 05/01/20 (2)		27 Oct 20 14:38

ORGANICS

Calibration Data

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No. Initial Cal Date: 10/23/20
Matrix: water Instrument: ZEUS Initials: DG

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type	r^2	Q	MRF
			1023Z12.D	1023Z13 D	1023Z14.D	1023Z15.D	1023Z16.D	1023Z17 D	1023Z18.D	1023Z19.D	1023Z20 D							
1	I	*Fluorobenzene (IS)*																
2	TM	Chlorotrifluoroethene													TM			
3	TM	Dichlorodifluoromethane		0 0283	0.0375	0.0434	0.0336	0.0373	0.0371	0.0375	0.0355		0.04	12	TM			
4	TM	Freon 114		0.0377	0.0544	0.0513	0.0366	0.0425	0.0431	0.0434	0.0387		0.04	15	TM			
5	TM**	Chloromethane		0.2432	0.2103	0.2018	0.1776	0.1815	0.1746	0.1677	0.1589		0.19	15	TM**			
6	TM*	Vinyl chloride		0.1752	0.1756	0.1795	0.1659	0.1685	0.1612	0.1565	0.1447		0.17	7.0	TM*			
7		Butane																
8	TM	2-Chloro-1,1,1-trifluoroethane													TM			
9	TML	Bromomethane		0.0523	0.0496	0.0365	0.0332	0.0321	0.0291	0.0280	0 0251		0.04	28	TM	0.998		
10	TMQ	Chloroethane		0.0696	0.0871	0.0790	0.0606	0.0462	0.0279	0.0261	0.0225		0.05	48	TM	0.993		
11	TM	Dichlorofluoromethane		0.2677	0.2740	0.2602	0.2391	0.2415	0.2236	0.2153			0.25	9.0	TM			
12	TM	Trichlorofluoromethane		0.1550	0.2133	0.1937	0.1798	0.1998	0.1991	0.1897			0.19	9.8	TM			
13	TM	Pentane													TM			
14	TM	Diethyl ether													TM			
15	TM	1,2 Dichlorotrifluoroethane													TM			
16	TM	Acrolein		0.0115	0.0115	0.0109	0.0108	0.0113	0.0113	0.0115	0 0097		0.01	5.8	TM			
17	TM	Acetone	0.0476	0.0411	0.0394	0.0364	0.0362	0.0374	0.0372				0.04	10	TM			
18	TM	Freon-113		0.0895	0.1098	0.1184	0.0816	0.0979	0.1012	0.1053	0.1113		0.10	12	TM			
19	TM*	1,1-DCE		0.1654	0.1731	0.1711	0.1482	0.1541	0.1587	0.1612	0.1672		0.16	5.2	TM*			
20	TM	2-Propanol													TM			
21	TM	Acetonitrile		0.0046	0.0048	0.0045	0.0047	0.0043	0.0040	0.0038			0.00	8.2	TM			
22	TM	t-Butanol	0.0061	0.0062	0.0066	0.0063	0.0058	0.0061	0.0060	0.0058	0.0038		0.01	14	TM			
23	TM	Methyl Acetate		0.1129	0.1021	0.0924	0.0926	0.0907	0.0930	0.0950	0.1008		0.10	7.7	TM			
24	TML	Iodomethane		0.0631	0.0714	0.0785	0.0894	0.1152	0.1310	0.1497	0.1466		0.11	33	TM	0.999		
25	TM	Acrylonitrile		0.0484	0.0443	0.0466	0.0457	0.0444	0.0454	0.0452	0.0462		0.05	2.9	TM			
26	TML	Methylene chloride		0.2395	0.2054	0.1672	0.1371	0.1332	0.1333	0.1294	0.1276		0.16	26	TM	1 00		
27	TM	Carbon disulfide		0.2084	0.2046	0.2100	0.1701	0.1707	0.1698	0.1734	0.1634		0.18	11	TM			
28	TM	Methyl t-butyl ether (MtBE)		0.2826	0.2974	0.2895	0.2835	0.2853	0.2976	0.2964	0.3100		0.29	3.2	TM			
29	TM	Trans-1,2-DCE		0.1652	0.1727	0.1679	0.1509	0.1564	0.1560	0.1570	0.1614		0.16	4.5	TM			
30	TM	Hexane													TM			
31	TM	Diisopropyl Ether		0.3502	0.3647	0.3240	0.3300	0.3360	0.3511	0.3566	0.3797		0.35	5.3	TM			
32	TM**	2,2-Dichloro-1,1,1-trifluoroethane													TM**			
33	TM**	1,1-DCA		0.2186	0.2118	0.2122	0 1998	0.2001	0.1998	0.1993	0.2052		0.21	3.6	TM**			
34	TM	Vinyl Acetate		0.1614	0.1573	0.1403	0.1518	0.1429	0.1611	0.1825	0.1795		0.16	9.6	TM			
35	TM	Ethyl tert Butyl Ether		0.3201	0.3125	0.3076	0.3048	0.3124	0.3253	0.3314	0.3528		0.32	4.9	TM			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/23/20
Matrix: water Instrument: ZEUS Initials: DG

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type		Q	MRF
36	TM	MEK (2-Butanone)	0.0565	0.0522	0.0551	0.0529	0.0519	0.0550	0.0578	0.0596			0.06	5.0	TM			
37	TM	Cis-1,2-DCE		0.2050	0.1987	0.1949	0.1837	0.1836	0.1834	0.1852	0 1919		0.19	4.3	TM			
38	TM	2,2-Dichloropropane		0.1875	0.1732	0.1696	0.1547	0.1560	0.1578	0.1602	0.1655		0.17	6.7	TM			
39	TM	2-Methylpentane													TM			
40	TM	3-Methylpentane													TM			
41	TM*	Chloroform		0.2277	0.2182	0.2162	0.2061	0.2055	0.2027	0.2020	0.2074		0.21	4.3	TM*			
42	TM	Bromochloromethane		0.1028	0.1070	0.1068	0 0986	0.0965	0.0968	0.0941	0.0959		0.10	5.0	TM			
43	S	Dibromofluoromethane(S)	0.2144	0.2808	0.2561	0.2513	0.2717	0.2663	0.2757	0.2702	0.2750		0.26	7.7	S			
44	TM	1,1,1-TCA		0.1918	0.1836	0.1833	0.1731	0.1742	0.1755	0.1766	0.1810		0.18	3.5	TM			
45	TM	Cyclohexane		0.1943	0.2290	0.2149	0.1574	0.1763	0.1788	0.1873	0.1995		0.19	12	TM			
46	TM	1,1-Dichloropropene		0.1507	0.1619	0.1642	0.1428	0.1522	0.1545	0.1564	0.1611		0.16	4.5	TM			
47	TM	2,2,4-Trimethylpentane		0.3248	0.4039	0.4227	0.2760	0.3546	0.3714	0.4018	0.4347		0.37	14	TM			
48	S	1,2-DCA-D4(S)	0.2008	0.2667	0.2371	0.2352	0.2519	0.2514	0.2632	0.2556	0.2731		0.25	8.8	S			
49	TM	Carbon Tetrachloride		0.1511	0.1584	0.1607	0.1387	0.1457	0.1490	0.1522	0.1578		0.15	4.8	TM			
50	TM	Tert Amyl Methyl Ether		0.2803	0.2885	0.2766	0.2804	0.2865	0.3016	0.3040	0.3214		0.29	5.2	TM			
51	TM	Methylcyclopentane													TM			
52	TM	1,2-DCA		0.1874	0.1521	0.1490	0.1439	0.1390	0.1402	0.1392	0.1474		0.15	11	TM			
53	TM	Benzene		0.5246	0.5258	0.5174	0.4826	0.4864	0.4860	0.4912	0.4947		0.50	3.7	TM			
54	TM	TCE		0.1565	0.1663	0.1647	0.1537	0.1603	0.1568	0.1557	0.1563		0.16	2.9	TM			
55	TM	2-Pentanone		0.0788	0.0824	0.0785	0.0794	0.0858	0.0937	0.0999	0.1155		0.09	15	TM			
56	TM*	1,2-Dichloropropane		0.1221	0.1310	0.1279	0.1214	0.1209	0.1204	0.1209	0.1264		0.12	3.2	TM*			
57	TM	Bromodichloromethane		0.1557	0.1495	0.1478	0.1439	0.1447	0.1470	0.1481	0.1552		0.15	2.9	TM			
58	TM	Methyl Cyclohexane		0.1861	0.2138	0.2256	0.1546	0.1856	0.1935	0.2034	0 2187		0.20	12	TM			
59	TM	Dibromomethane		0.1022	0.1077	0.1076	0.1038	0.1036	0.1023	0.1008	0.1013		0.10	2.6	TM			
60	TM	MIBK (methyl isobutyl ketone	0.1037	0.1024	0.1042	0.1004	0.0999	0.1068	0.1131	0.1182			0.11	6.0	TM			
61	TM	1-Bromo-2-chloroethane		0.0259	0.0246	0.0244	0.0226	0.0238	0.0230	0.0229	0.0237		0.02	4.5	TM			
62	TM	2-Chloroethyl vinyl ether													TM			
63	TM	Cis-1,3-Dichloropropene		0.1896	0.1867	0 1808	0.1821	0 1864	0.1904	0.1921	0.2004		0.19	3.3	TM			
64	TM*	Toluene		0.6092	0.5626	0.5435	0.5149	0.5219	0.5249	0.5326	0.5452		0.54	5.6	TM*			
65	TM	Trans-1,3-Dichloropropene		0.1534	0.1520	0.1499	0.1461	0.1524	0.1591	0.1633	0.1715		0.16	5.3	TM			
66	TM	1,1,2-TCA		0.1156	0.1134	0.1073	0.1044	0.1071	0.1080	0.1088	0.1123		0.11	3.5	TM			
67	TM	2-Hexanone	0.0791	0.0733	0.0756	0.0733	0.0715	0.0743	0.0785	0.0814			0.08	4.5	TM			
68	I	Chlorobenzene-D5 (IS)																
69	S	Toluene-D8(S)	0.9932	1.352	1.185	1.197	1.302	1.290	1.339	1.340	1.340		1.3	9.3	S			
70	TM	1,2-EDB		0.1511	0.1530	0.1479	0 1487	0.1494	0.1534	0.1529	0.1563		0.15	1.9	TM			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/23/20
Matrix: water Instrument: ZEUS Initials: DG

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type		Q	MRF
71	TM	Tetrachloroethene		0.2237	0.2325	0.2303	0.2109	0.2165	0.2182	0.2168	0.2102		0.22	3.8	TM			
72	TML	1-Chlorohexane		0.3709	0.3008	0.2801	0.2286	0.2238	0.2309	0.2343	0.2443		0.26	19	TM	1.000		
73	TM	1,1,1,2-Tetrachloroethane		0.1589	0.1538	0.1537	0.1563	0.1604	0.1682	0.1679	0.1710		0.16	4.3	TM			
74	TM	m&p-Xylene		0.6268	0.6273	0.6246	0.5957	0.5825	0.5914	0.5871	0.5923		0.60	3.2	TM			
75	TM	o-Xylene		0.6722	0.6511	0.6444	0.6067	0.6079	0.6116	0 6048	0.6316		0.63	4.0	TM			
76	TM	Styrene		0.5482	0.5292	0.5347	0.5331	0.5201	0.5316	0.5228	0.5377		0.53	1.6	TM			
77	S	4-Bromofluorobenzene(S)	0.3948	0.5128	0.4550	0.4585	0.4892	0.4760	0.5033	0.4955	0.5289		0.48	8.3	S			
78	TM	1,3-Dichloropropane		0.2372	0.2370	0.2340	0.2327	0.2345	0.2383	0.2357	0.2426		0.24	1.3	TM			
79	TM	Dibromochloromethane		0.1503	0.1603	0 1518	0.1543	0.1560	0.1623	0.1661	0.1724		0.16	4.7	TM			
80	TM**	Chlorobenzene		0.5055	0.5001	0.5016	0.4843	0.4747	0 4875	0.4793	0.4825		0.49	2.3	TM**			
81	TM*	Ethylbenzene		0.8434	0.7904	0.7843	0.7653	0.7606	0.7696	0.7680	0.7771		0.78	3.4	TM*			
82	TM**	Bromoform		0.1216	0.1091	0.1061	0.1114	0.1136	0.1243	0.1294	0.1368		0.12	9.0	TM**			
83	I	1,4-Dichlorobenzene-D (IS)																
84	TM	Isopropylbenzene		1.436	1.317	1.366	1.329	1.324	1.359	1.392	1.472		1.4	4.1	TM			
85	TM**	1,1,2,2-Tetrachloroethane		0.3038	0.2874	0.2749	0 2863	0.2922	0.3158	0.3389	0.3753		0.31	11	TM**			
86	TM	1,2,3-Trichloropropane		0.1035	0.0949	0.0922	0.0971	0.1009	0.1037	0.1089	0.1168		0.10	7.8	TM			
87	TM	t-1,4-Dichloro-2-Butene		0.0871	0.0764	0.0636	0.0663	0.0701	0.0754	0.0792	0.0893		0.08	12	TM			
88	TM	Bromobenzene		0.6034	0.5901	0.5671	0.5607	0.5585	0.5836	0.6033	0.6715		0.59	6.2	TM			
89	TM	n-Propylbenzene		1.583	1.586	1.617	1.550	1.550	1.594	1.638	1.720		1.6	3.4	TM			
90	TM	4-Ethyltoluene		1.334	1.408	1.420	1.353	1.359	1 387	1.398	1.459		1.4	2.9	TM			
91	TM	2-Chlorotoluene		1.102	1.078	0.9250	0.9100	0.9135	1.042	0.9513	1.015		0.99	7.8	TM			
92	TM	1,3,5-Trimethylbenzene		1.176	1.182	1.174	1.142	1.146	1.170	1.204	1.283		1.2	3.8	TM			
93	TM	4-Chlorotoluene		1.112	1.092	1.103	1.052	1.053	1.074	1.107	1.221		1.1	4.9	TM			
94	TM	Tert-Butylbenzene		1.039	1.051	1.054	1.030	1.014	1.048	1.071	1.112		1.1	2.8	TM			
95	TM	1,2,4-Trimethylbenzene		1.193	1.162	1.168	1.149	1.146	1.188	1.213	1.283		1.2	3.8	TM			
96	TM	Sec-Butylbenzene		1.537	1.560	1.578	1.527	1.511	1.557	1.597	1.660		1 6	3.0	TM			
97	TM	p-Isopropyltoluene		1.287	1.340	1.345	1.318	1.325	1.346	1.387	1.424		1.3	3.1	TM			
98	TM	Benzyl Chloride		0.5507	0.5074	0.4850	0.4946	0.5132	0.5528	0.5833	0.6280		0.54	9.1	TM			
99	TM	1,3-DCB		0.7272	0.7638	0.7625	0.7325	0.7318	0.7471	0.7439	0.7651		0.75	2.1	TM			
100	TM	1,4-DCB		0.7691	0.7532	0.7520	0.7463	0.7375	0.7498	0.7510	0.7597		0.75	1.2	TM			
101	TM	n-Butylbenzene		1.196	1.163	1.138	1.125	1.157	1.212	1.264	1.349		1.2	6.2	TM			
102	TM	1,2-DCB		0.7262	0.7059	0.6970	0.6915	0.6818	0.6970	0.6947	0.6982		0.70	1.8	TM			
103	TML	Hexachloroethane		0.1665	0.1617	0.1706	0.1816	0.1955	0.2130	0.2302	0.2454		0.20	16	TM	0.999		
104	TM	1,2-Dibromo-3-chloropropane		0.0797	0.0806	0.0791	0.0800	0.0832	0.0908	0.0960	0.1052		0.09	11	TM			
105	TM	1,2,4-Trichlorobenzene		0.5076	0.5178	0.5102	0.5011	0.5087	0.5413	0.5336	0.5292		0.52	2.8	TM			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/23/20
Matrix: water Instrument: ZEUS Initials: DG

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type		Q	MRF
106	TM	Hexachlorobutadiene		0.2339	0.2346	0.2306	0.2215	0.2262	0.2404	0.2444	0.2402		0.23	3.3	TM			
107	TM	Naphthalene		1.192	1.195	1.168	1.173	1.181	1.240	1.240	1.254		1.2	2.8	TM			
108	TM	1,2,3-Trichlorobenzene		0 4365	0.4733	0.4455	0.4570	0.4520	0.4787	0.4746	0.4703		0.46	3.4	TM			
109																		
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Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z12.D Vial: 7
Acq On : 23 Oct 20 16:16 Operator: LP,DG,CH
Sample : 0.3ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:02 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 11:57:51 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2356083	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1791294	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	1110019	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.44	111	101039	4.13	ppb		0.00
Spiked Amount 25.000			Recovery =	16.516%			
48) 1,2-DCA-D4(S)	4.72	65	94632	3.65	ppb		0.00
Spiked Amount 25.000			Recovery =	14.616%			
69) Toluene-D8(S)	6.38	98	355821	4.02	ppb		0.00
Spiked Amount 25.000			Recovery =	16.064%			
77) 4-Bromofluorobenzene(S)	8.77	95	141456	4.34	ppb		0.00
Spiked Amount 25.000			Recovery =	17.344%			
Target Compounds							Qvalue
17) Acetone	2.54	43	22428	5.08	ppb		98
22) t-Butanol	3.06	59	5727	13.09	ppb	#	91
36) MEK (2-Butanone)	4.06	43	26601	4.49	ppb		98
60) MIBK (methyl isobutyl ket	6.29	43	48879	4.59	ppb		97
67) 2-Hexanone	7.03	43	37294	5.16	ppb		97

(#) = qualifier out of range (m) = manual integration

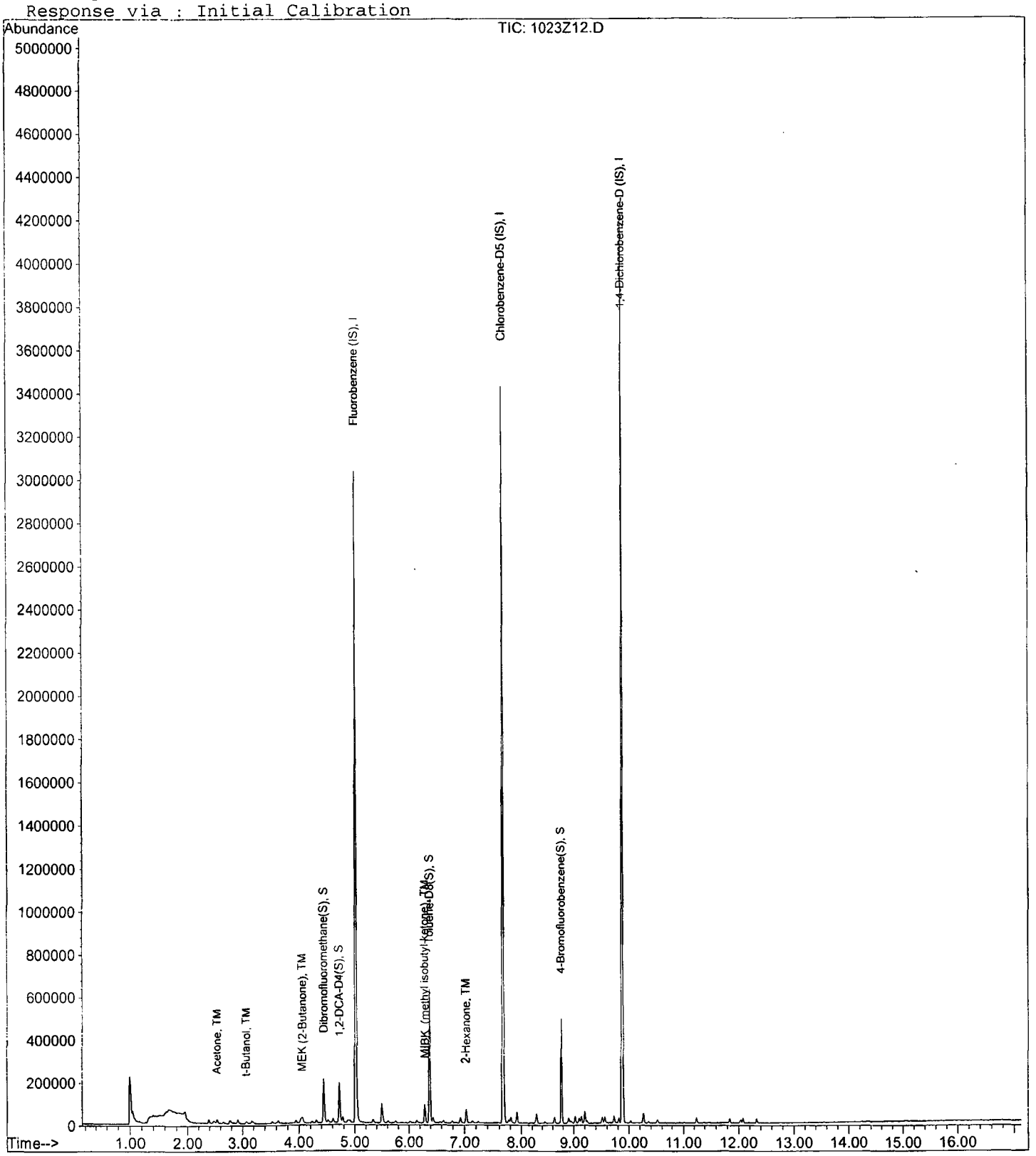
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z12.D
Acq On : 23 Oct 20 16:16
Sample : 0.3ug/L VOC STD 10/23/20
Misc :

Vial: 7
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 26 12:02 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z13.D Vial: 8
Acq On : 23 Oct 20 16:39 Operator: LP,DG,CH
Sample : 0.5ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2341446	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1753907	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	1082115	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.44	111	657513	26.75	ppb		0.00
Spiked Amount 25.000			Recovery = 107.016%				
48) 1,2-DCA-D4(S)	4.72	65	624435	26.85	ppb		0.00
Spiked Amount 25.000			Recovery = 107.392%				
69) Toluene-D8(S)	6.39	98	2370729	26.83	ppb		0.00
Spiked Amount 25.000			Recovery = 107.308%				
77) 4-Bromofluorobenzene(S)	8.77	95	899469	26.75	ppb		0.00
Spiked Amount 25.000			Recovery = 106.988%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.16	87	1324	0.39	ppb		83
4) Freon 114	1.26	85	1765	0.43	ppb		89
5) Chloromethane	1.34	50	11388	0.64	ppb		92
6) Vinyl chloride	1.39	62	8205	0.53	ppb		91
9) Bromomethane	1.66	94	2449	-0.90	ppb		99
10) Chloroethane	1.75	64	3258	579.36	ppb		91
11) Dichlorofluoromethane	1.95	67	12534	0.54	ppb		99
12) Trichlorofluoromethane	1.99	101	7257	0.41	ppb		96
16) Acrolein	2.39	55	27040	26.10	ppb		96
17) Acetone	2.54	43	38454	10.44	ppb		99
18) Freon-113	2.50	101	4193	0.44	ppb		93
19) 1,1-DCE	2.47	61	7746	0.51	ppb		95
21) Acetonitrile	2.77	40	10753	26.19	ppb		97
22) t-Butanol	3.07	59	14536	26.55	ppb		99
23) Methyl Acetate	2.85	43	5285	0.58	ppb	#	88
24) Iodomethane	2.59	142	2953	1.40	ppb		95
25) Acrylonitrile	3.13	52	2266	0.53	ppb	#	83
26) Methylene chloride	2.91	84	11217	0.34	ppb		98
27) Carbon disulfide	2.65	76	9759	0.57	ppb		98
28) Methyl t-butyl ether (MtBE	3.20	73	13236	0.48	ppb		96
29) Trans-1,2-DCE	3.17	61	7737	0.51	ppb		95
31) Diisopropyl Ether	3.63	45	17104	0.52	ppb		97
33) 1,1-DCA	3.53	63	10235	0.53	ppb	#	98
34) Vinyl Acetate	3.60	43	7559	0.51	ppb		96
35) Ethyl tert Butyl Ether	3.95	59	14989	0.50	ppb		95
36) MEK (2-Butanone)	4.06	43	48919	9.48	ppb		96
37) Cis-1,2-DCE	4.04	61	9599	0.54	ppb		92
38) 2,2-Dichloropropane	4.04	77	8782	0.57	ppb		98
41) Chloroform	4.31	83	10665	0.54	ppb		95
42) Bromochloromethane	4.23	49	4815	0.52	ppb		93
44) 1,1,1-TCA	4.47	97	8980	0.53	ppb		92
45) Cyclohexane	4.52	56	9098	0.51	ppb		88
46) 1,1-Dichloropropene	4.61	75	7056	0.48	ppb		95
47) 2,2,4-Trimethylpentane	4.87	57	15209	0.43	ppb		97
49) Carbon Tetrachloride	4.61	117	7078	0.50	ppb		91
50) Tert Amyl Methyl Ether	4.91	73	13127	0.48	ppb		93
52) 1,2-DCA	4.79	62	8778	0.63	ppb		97
53) Benzene	4.78	78	24567	0.52	ppb		97
54) TCE	5.33	130	7329	0.49	ppb		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z13.D
Acq On : 23 Oct 20 16:39
Sample : 0.5ug/L VOC STD 10/23/20
Misc :

Vial: 8
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.49	43	184547	22.08	ppb		99
56)	1,2-Dichloropropane	5.52	63	5720	0.49	ppb		99
57)	Bromodichloromethane	5.75	83	7291	0.52	ppb		90
58)	Methyl Cyclohexane	5.51	83	8717	0.47	ppb		95
59)	Dibromomethane	5.62	174	4784	0.49	ppb		97
60)	MIBK (methyl isobutyl ket	6.29	43	95889	9.65	ppb		99
61)	1-Bromo-2-chloroethane	6.01	144	1211	0.54	ppb		96
63)	Cis-1,3-Dichloropropene	6.14	75	8878	0.50	ppb		96
64)	Toluene	6.44	91	28527	0.56	ppb		96
65)	Trans-1,3-Dichloropropene	6.63	75	7184	0.49	ppb		94
66)	1,1,2-TCA	6.78	97	5414	0.53	ppb		88
67)	2-Hexanone	7.03	43	68671	9.66	ppb		98
70)	1,2-EDB	7.24	107	5301	0.50	ppb		100
71)	Tetrachloroethene	6.93	166	7846	0.51	ppb		93
72)	1-Chlorohexane	7.69	91	13012	1.08	ppb		93
73)	1,1,1,2-Tetrachloroethane	7.78	131	5573	0.49	ppb		92
74)	m&p-Xylene	7.92	91	43976	1.04	ppb		98
75)	o-Xylene	8.28	91	23579	0.53	ppb		97
76)	Styrene	8.29	104	19230	0.52	ppb		93
78)	1,3-Dichloropropane	6.94	76	8322	0.50	ppb		96
79)	Dibromochloromethane	7.14	129	5272	0.47	ppb		92
80)	Chlorobenzene	7.70	112	17731	0.52	ppb		96
81)	Ethylbenzene	7.81	91	29585	0.54	ppb		100
82)	Bromoform	8.45	173	4266	0.51	ppb		93
84)	Isopropylbenzene	8.64	105	31084	0.52	ppb		96
85)	1,1,2,2-Tetrachloroethane	8.90	83	6574	0.49	ppb	#	92
86)	1,2,3-Trichloropropane	8.94	110	2240	0.51	ppb		89
87)	t-1,4-Dichloro-2-Butene	8.96	53	1885	0.57	ppb		85
88)	Bromobenzene	8.91	77	13060	0.51	ppb		97
89)	n-Propylbenzene	9.03	91	34257	0.49	ppb		97
90)	4-Ethyltoluene	9.14	105	28878	0.48	ppb		99
91)	2-Chlorotoluene	9.10	91	23854	0.56	ppb		95
92)	1,3,5-Trimethylbenzene	9.20	105	25456	0.50	ppb		100
93)	4-Chlorotoluene	9.20	91	24075	0.50	ppb		92
94)	Tert-Butylbenzene	9.52	119	22488	0.49	ppb		87
95)	1,2,4-Trimethylbenzene	9.56	105	25809	0.50	ppb		99
96)	Sec-Butylbenzene	9.73	105	33269	0.49	ppb		97
97)	p-Isopropyltoluene	9.87	119	27858	0.48	ppb		98
98)	Benzyl Chloride	10.03	91	11919	0.51	ppb	#	97
99)	1,3-DCB	9.81	146	15739	0.49	ppb		96
100)	1,4-DCB	9.90	146	16646	0.51	ppb		94
101)	n-Butylbenzene	10.27	91	25876	0.50	ppb		100
102)	1,2-DCB	10.26	146	15717	0.52	ppb		99
103)	Hexachloroethane	10.52	201	3604	1.62	ppb	#	80
104)	1,2-Dibromo-3-chloropropan	11.02	157	1725	0.46	ppb		86
105)	1,2,4-Trichlorobenzene	11.84	180	10985	0.49	ppb		95
106)	Hexachlorobutadiene	12.03	225	5062	0.50	ppb		93
107)	Naphthalene	12.07	128	25793	0.49	ppb		97
108)	1,2,3-Trichlorobenzene	12.32	180	9446	0.47	ppb		98

(#) = qualifier out of range (m) = manual integration

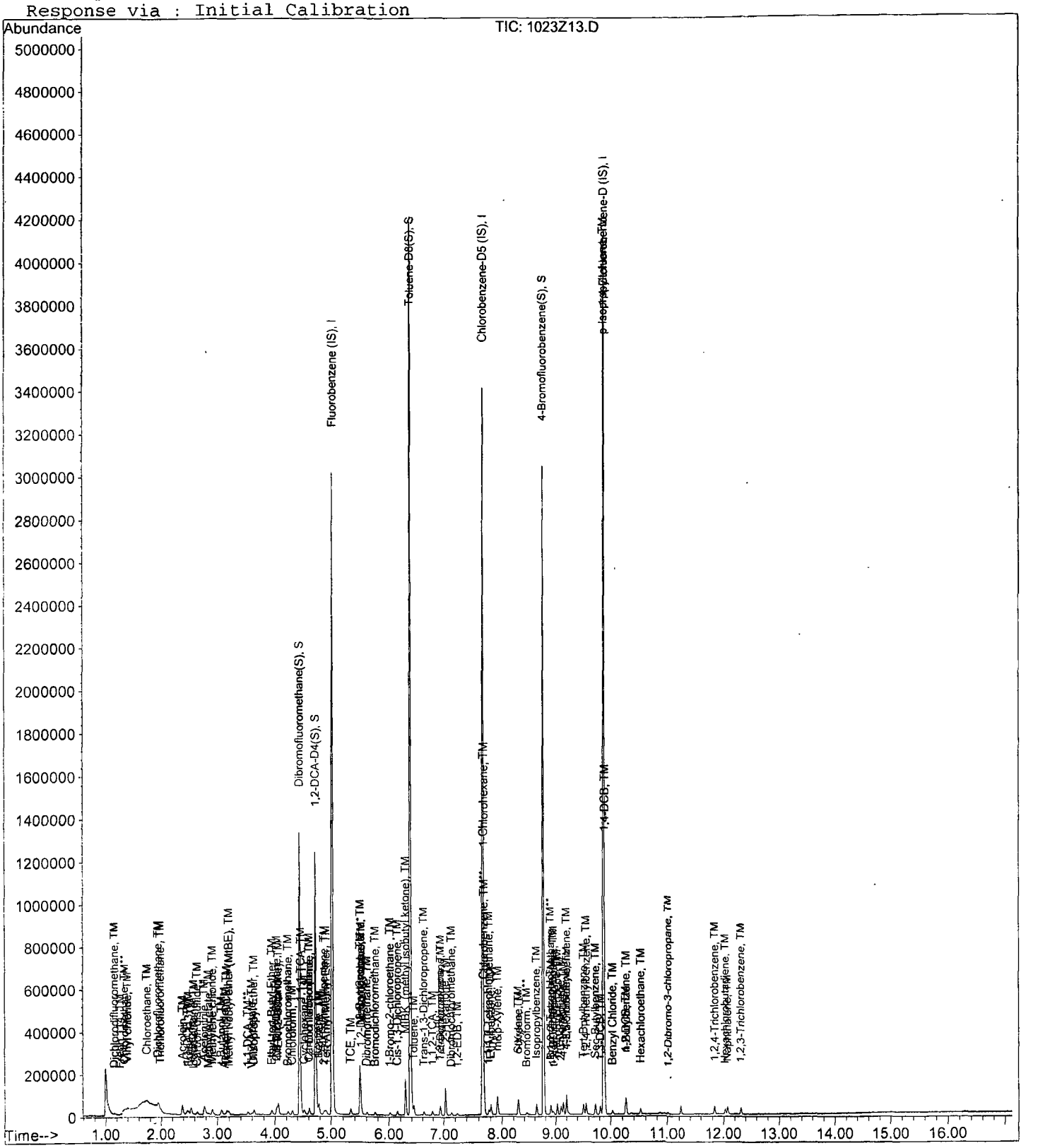
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z13.D
Acq On : 23 Oct 20 16:39
Sample : 0.5ug/L VOC STD 10/23/20
Misc :

Vial: 8
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z14.D Vial: 9
Acq On : 23 Oct 20 17:02 Operator: LP,DG,CH
Sample : 1ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2316688	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1762926	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	1084727	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.44	111	237342	9.76	ppb		0.00
Spiked Amount 25.000			Recovery =	39.044%			
48) 1,2-DCA-D4(S)	4.72	65	219710	9.55	ppb		0.00
Spiked Amount 25.000			Recovery =	38.192%			
69) Toluene-D8(S)	6.39	98	835305	9.40	ppb		0.00
Spiked Amount 25.000			Recovery =	37.616%			
77) 4-Bromofluorobenzene(S)	8.77	95	320853	9.49	ppb		0.00
Spiked Amount 25.000			Recovery =	37.968%			
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.16	87	3475	1.03	ppb		95
4) Freon 114	1.26	85	5040	1.25	ppb	#	74
5) Chloromethane	1.34	50	19489	1.11	ppb		93
6) Vinyl chloride	1.39	62	16274	1.06	ppb		98
10) Chloroethane	1.75	64	8070	577.36	ppb	#	85
11) Dichlorofluoromethane	1.95	67	25393	1.11	ppb		99
12) Trichlorofluoromethane	1.99	101	19762	1.12	ppb		100
16) Acrolein	2.38	55	53504	52.20	ppb		99
17) Acetone	2.54	43	72993	20.03	ppb		99
18) Freon-113	2.49	101	10177	1.08	ppb		97
19) 1,1-DCE	2.47	61	16037	1.07	ppb		100
21) Acetonitrile	2.77	40	22219	54.70	ppb		98
22) t-Butanol	3.07	59	30352	56.04	ppb		94
23) Methyl Acetate	2.85	43	9461	1.05	ppb		94
24) Iodomethane	2.60	142	6612	1.67	ppb		93
25) Acrylonitrile	3.13	52	4107	0.97	ppb		86
26) Methylene chloride	2.92	84	19035	1.02	ppb		96
27) Carbon disulfide	2.65	76	18960	1.11	ppb		99
28) Methyl t-butyl ether (MtBE	3.19	73	27557	1.02	ppb		93
29) Trans-1,2-DCE	3.17	61	16002	1.07	ppb		97
31) Diisopropyl Ether	3.63	45	33797	1.04	ppb		94
33) 1,1-DCA	3.53	63	19630	1.03	ppb		94
34) Vinyl Acetate	3.60	43	14574	0.99	ppb		97
35) Ethyl tert Butyl Ether	3.95	59	28959	0.97	ppb		96
36) MEK (2-Butanone)	4.06	43	102145	20.00	ppb		99
37) Cis-1,2-DCE	4.03	61	18414	1.04	ppb		95
38) 2,2-Dichloropropane	4.04	77	16049	1.05	ppb		96
41) Chloroform	4.31	83	20219	1.04	ppb		95
42) Bromochloromethane	4.23	49	9915	1.07	ppb		99
44) 1,1,1-TCA	4.47	97	17014	1.02	ppb		94
45) Cyclohexane	4.52	56	21222	1.19	ppb		90
46) 1,1-Dichloropropene	4.61	75	15006	1.04	ppb		95
47) 2,2,4-Trimethylpentane	4.88	57	37425	1.08	ppb		98
49) Carbon Tetrachloride	4.61	117	14680	1.04	ppb		94
50) Tert Amyl Methyl Ether	4.90	73	26734	0.99	ppb		99
52) 1,2-DCA	4.79	62	14092	1.02	ppb		95
53) Benzene	4.78	78	48728	1.05	ppb		98
54) TCE	5.33	130	15415	1.05	ppb		98
55) 2-Pentanone	5.49	43	382009	46.19	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z14.D Vial: 9
Acq On : 23 Oct 20 17:02 Operator: LP,DG,CH
Sample : 1ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
56)	1,2-Dichloropropane	5.52	63	12135	1.06	ppb	#	96
57)	Bromodichloromethane	5.75	83	13858	1.00	ppb		100
58)	Methyl Cyclohexane	5.51	83	19814	1.08	ppb		88
59)	Dibromomethane	5.62	174	9976	1.04	ppb		93
60)	MIBK (methyl isobutyl ket	6.29	43	193155	19.65	ppb		98
61)	1-Bromo-2-chloroethane	6.02	144	2280	1.03	ppb		84
63)	Cis-1,3-Dichloropropene	6.14	75	17303	0.99	ppb		97
64)	Toluene	6.44	91	52134	1.03	ppb		98
65)	Trans-1,3-Dichloropropene	6.63	75	14081	0.97	ppb		93
66)	1,1,2-TCA	6.79	97	10513	1.03	ppb		98
67)	2-Hexanone	7.03	43	140152	19.93	ppb		98
70)	1,2-EDB	7.24	107	10788	1.01	ppb		99
71)	Tetrachloroethene	6.93	166	16396	1.06	ppb		98
72)	1-Chlorohexane	7.69	91	21211	1.55	ppb		97
73)	1,1,1,2-Tetrachloroethane	7.77	131	10842	0.95	ppb		94
74)	m&p-Xylene	7.92	91	88470	2.08	ppb		98
75)	o-Xylene	8.28	91	45911	1.04	ppb		94
76)	Styrene	8.29	104	37319	0.99	ppb		95
78)	1,3-Dichloropropane	6.94	76	16715	1.00	ppb		90
79)	Dibromochloromethane	7.14	129	11303	1.01	ppb		96
80)	Chlorobenzene	7.70	112	35263	1.02	ppb		98
81)	Ethylbenzene	7.81	91	55738	1.01	ppb		99
82)	Bromoform	8.45	173	7690	0.92	ppb		96
84)	Isopropylbenzene	8.64	105	57138	0.96	ppb		94
85)	1,1,2,2-Tetrachloroethane	8.90	83	12471	0.93	ppb		86
86)	1,2,3-Trichloropropane	8.94	110	4116	0.93	ppb		95
87)	t-1,4-Dichloro-2-Butene	8.96	53	3315	1.01	ppb	#	79
88)	Bromobenzene	8.90	77	25602	1.00	ppb		90
89)	n-Propylbenzene	9.03	91	68807	0.99	ppb		96
90)	4-Ethyltoluene	9.14	105	61081	1.01	ppb		96
91)	2-Chlorotoluene	9.10	91	46780	1.09	ppb		99
92)	1,3,5-Trimethylbenzene	9.20	105	51287	1.00	ppb		99
93)	4-Chlorotoluene	9.20	91	47397	0.99	ppb		100
94)	Tert-Butylbenzene	9.51	119	45616	1.00	ppb		94
95)	1,2,4-Trimethylbenzene	9.56	105	50411	0.98	ppb		100
96)	Sec-Butylbenzene	9.73	105	67687	1.00	ppb		97
97)	p-Isopropyltoluene	9.87	119	58142	1.00	ppb		98
98)	Benzyl Chloride	10.04	91	22017	0.94	ppb		97
99)	1,3-DCB	9.81	146	33141	1.02	ppb		96
100)	1,4-DCB	9.90	146	32682	1.00	ppb		96
101)	n-Butylbenzene	10.27	91	50483	0.97	ppb		98
102)	1,2-DCB	10.26	146	30628	1.01	ppb		96
103)	Hexachloroethane	10.52	201	7015	1.94	ppb	#	86
104)	1,2-Dibromo-3-chloropropan	11.02	157	3497	0.93	ppb		96
105)	1,2,4-Trichlorobenzene	11.84	180	22465	1.00	ppb		93
106)	Hexachlorobutadiene	12.03	225	10180	1.00	ppb		91
107)	Naphthalene	12.07	128	51831	0.99	ppb		98
108)	1,2,3-Trichlorobenzene	12.32	180	20535	1.03	ppb		84

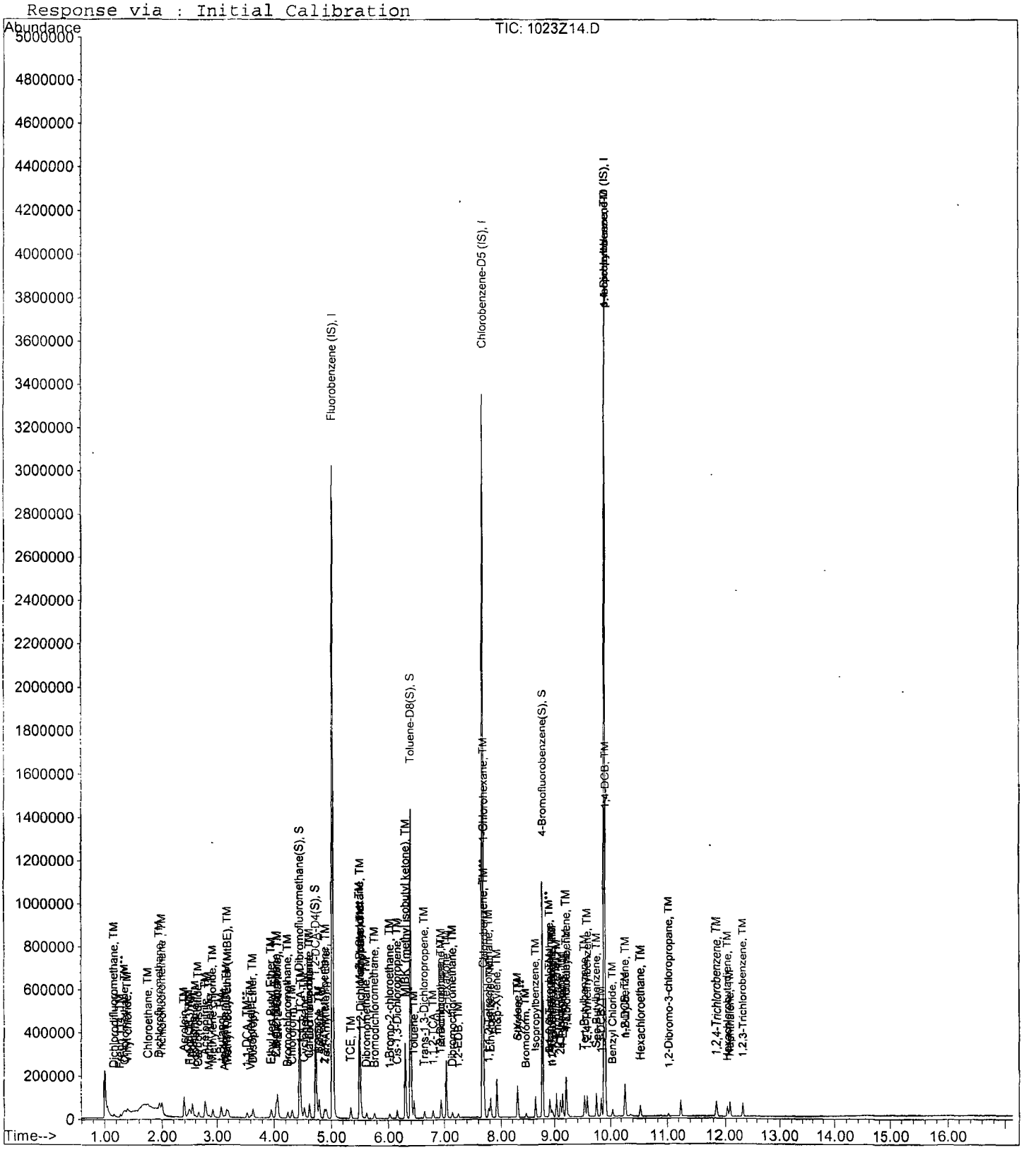
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z14.D Vial: 9
Acq On : 23 Oct 20 17:02 Operator: LP,DG,CH
Sample : 1ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z15.D Vial: 10
Acq On : 23 Oct 20 17:26 Operator: LP,DG,CH
Sample : 2ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2327405	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1752454	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	1076444	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.44	111	233948	9.58	ppb		0.00
Spiked Amount 25.000			Recovery = 38.308%				
48) 1,2-DCA-D4(S)	4.72	65	218992	9.47	ppb		0.00
Spiked Amount 25.000			Recovery = 37.892%				
69) Toluene-D8(S)	6.39	98	839127	9.50	ppb		0.00
Spiked Amount 25.000			Recovery = 38.012%				
77) 4-Bromofluorobenzene(S)	8.77	95	321402	9.57	ppb		0.00
Spiked Amount 25.000			Recovery = 38.260%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.16	87	8075	2.39	ppb		75
4) Freon 114	1.27	85	9554	2.36	ppb		93
5) Chloromethane	1.34	50	37571	2.13	ppb		93
6) Vinyl chloride	1.39	62	33421	2.16	ppb		94
9) Bromomethane	1.66	94	6799	0.97	ppb		94
10) Chloroethane	1.75	64	14709	2.17	ppb		92
11) Dichlorofluoromethane	1.95	67	48450	2.12	ppb		97
12) Trichlorofluoromethane	1.99	101	36062	2.04	ppb		99
16) Acrolein	2.39	55	76231	74.03	ppb		100
17) Acetone	2.54	43	101659	27.77	ppb		97
18) Freon-113	2.50	101	22053	2.33	ppb		94
19) 1,1-DCE	2.47	61	31859	2.11	ppb		99
21) Acetonitrile	2.77	40	31267	76.62	ppb		98
22) t-Butanol	3.07	59	43672	80.26	ppb		99
23) Methyl Acetate	2.85	43	17207	1.90	ppb		96
24) Iodomethane	2.59	142	14610	2.24	ppb		92
25) Acrylonitrile	3.13	52	8672	2.04	ppb	#	83
26) Methylene chloride	2.91	84	31140	2.04	ppb		95
27) Carbon disulfide	2.65	76	39096	2.28	ppb		99
28) Methyl t-butyl ether (MtBE	3.19	73	53901	1.98	ppb		96
29) Trans-1,2-DCE	3.17	61	31256	2.09	ppb		97
31) Diisopropyl Ether	3.63	45	61809	1.90	ppb		99
33) 1,1-DCA	3.53	63	39502	2.06	ppb		96
34) Vinyl Acetate	3.60	43	26121	1.76	ppb		98
35) Ethyl tert Butyl Ether	3.94	59	57279	1.92	ppb		98
36) MEK (2-Butanone)	4.06	43	147644	28.77	ppb		97
37) Cis-1,2-DCE	4.03	61	36284	2.04	ppb		97
38) 2,2-Dichloropropane	4.04	77	31571	2.05	ppb		97
41) Chloroform	4.31	83	40259	2.05	ppb		99
42) Bromochloromethane	4.23	49	19879	2.14	ppb		98
44) 1,1,1-TCA	4.47	97	34127	2.04	ppb		97
45) Cyclohexane	4.52	56	40008	2.24	ppb		93
46) 1,1-Dichloropropene	4.61	75	30573	2.11	ppb		99
47) 2,2,4-Trimethylpentane	4.88	57	78704	2.26	ppb		98
49) Carbon Tetrachloride	4.61	117	29930	2.12	ppb		94
50) Tert Amyl Methyl Ether	4.90	73	51506	1.89	ppb		99
52) 1,2-DCA	4.79	62	27741	1.99	ppb		99
53) Benzene	4.78	78	96329	2.06	ppb		99
54) TCE	5.33	130	30663	2.07	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z15.D Vial: 10
Acq On : 23 Oct 20 17:26 Operator: LP,DG,CH
Sample : 2ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.49	43	547962	65.95	ppb		99
56)	1,2-Dichloropropane	5.52	63	23805	2.06	ppb		99
57)	Bromodichloromethane	5.75	83	27515	1.98	ppb		99
58)	Methyl Cyclohexane	5.51	83	42010	2.28	ppb		99
59)	Dibromomethane	5.61	174	20037	2.08	ppb		96
60)	MIBK (methyl isobutyl ket	6.29	43	280420	28.39	ppb		99
61)	1-Bromo-2-chloroethane	6.02	144	4544	2.04	ppb	#	80
63)	Cis-1,3-Dichloropropene	6.14	75	33657	1.92	ppb		94
64)	Toluene	6.44	91	101190	2.00	ppb		94
65)	Trans-1,3-Dichloropropene	6.63	75	27908	1.92	ppb		95
66)	1,1,2-TCA	6.79	97	19982	1.96	ppb		96
67)	2-Hexanone	7.03	43	204636	28.97	ppb		99
70)	1,2-EDB	7.24	107	20737	1.95	ppb	#	96
71)	Tetrachloroethene	6.93	166	32283	2.09	ppb		96
72)	1-Chlorohexane	7.69	91	39262	2.62	ppb		97
73)	1,1,1,2-Tetrachloroethane	7.78	131	21555	1.91	ppb		98
74)	m&p-Xylene	7.92	91	175127	4.14	ppb		99
75)	o-Xylene	8.28	91	90347	2.05	ppb		98
76)	Styrene	8.29	104	74959	2.01	ppb		98
78)	1,3-Dichloropropane	6.94	76	32810	1.98	ppb		98
79)	Dibromochloromethane	7.14	129	21284	1.91	ppb		99
80)	Chlorobenzene	7.70	112	70320	2.05	ppb		98
81)	Ethylbenzene	7.81	91	109959	2.01	ppb		93
82)	Bromoform	8.45	173	14870	1.78	ppb		99
84)	Isopropylbenzene	8.64	105	117672	1.99	ppb		98
85)	1,1,2,2-Tetrachloroethane	8.90	83	23673	1.78	ppb		99
86)	1,2,3-Trichloropropane	8.94	110	7942	1.80	ppb		95
87)	t-1,4-Dichloro-2-Butene	8.96	53	5480	1.68	ppb		87
88)	Bromobenzene	8.91	77	48839	1.92	ppb		97
89)	n-Propylbenzene	9.03	91	139221	2.02	ppb		100
90)	4-Ethyltoluene	9.14	105	122321	2.04	ppb		98
91)	2-Chlorotoluene	9.10	91	79660	1.86	ppb		94
92)	1,3,5-Trimethylbenzene	9.20	105	101142	1.98	ppb		98
93)	4-Chlorotoluene	9.20	91	94977	2.00	ppb		98
94)	Tert-Butylbenzene	9.52	119	90793	2.00	ppb		95
95)	1,2,4-Trimethylbenzene	9.56	105	100613	1.97	ppb		97
96)	Sec-Butylbenzene	9.73	105	135896	2.02	ppb		99
97)	p-Isopropyltoluene	9.87	119	115803	2.00	ppb		96
98)	Benzyl Chloride	10.03	91	41766	1.80	ppb		98
99)	1,3-DCB	9.81	146	65663	2.04	ppb		97
100)	1,4-DCB	9.90	146	64758	2.00	ppb		97
101)	n-Butylbenzene	10.27	91	97988	1.90	ppb		97
102)	1,2-DCB	10.26	146	60021	1.99	ppb		98
103)	Hexachloroethane	10.52	201	14693	2.67	ppb	#	84
104)	1,2-Dibromo-3-chloropropan	11.02	157	6810	1.82	ppb	#	83
105)	1,2,4-Trichlorobenzene	11.84	180	43932	1.97	ppb		95
106)	Hexachlorobutadiene	12.03	225	19855	1.97	ppb		99
107)	Naphthalene	12.07	128	100576	1.94	ppb		99
108)	1,2,3-Trichlorobenzene	12.32	180	38366	1.93	ppb		98

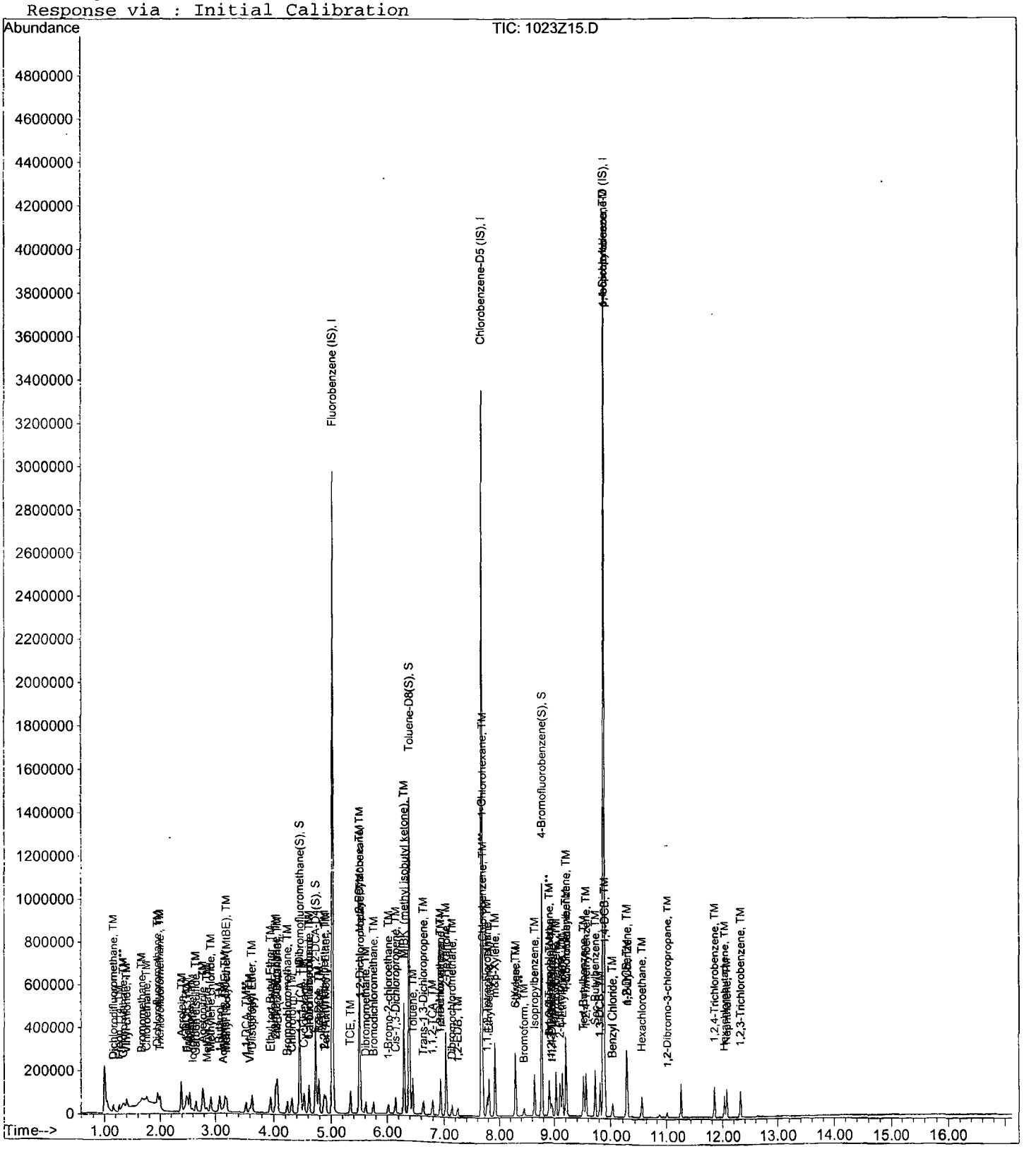
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z15.D Vial: 10
Acq On : 23 Oct 20 17:26 Operator: LP,DG,CH
Sample : 2ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z16.D Vial: 11
Acq On : 23 Oct 20 17:49 Operator: LP,DG,CH
Sample : 5ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2262889	25.00 ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1703750	25.00 ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	1027534	25.00 ppb	0.00
System Monitoring Compounds					
43) Dibromofluoromethane(S)	4.44	111	614749	25.88 ppb	0.00
Spiked Amount 25.000			Recovery =	103.528%	
48) 1,2-DCA-D4(S)	4.72	65	570075	25.36 ppb	0.00
Spiked Amount 25.000			Recovery =	101.448%	
69) Toluene-D8(S)	6.39	98	2218123	25.84 ppb	0.00
Spiked Amount 25.000			Recovery =	103.356%	
77) 4-Bromofluorobenzene(S)	8.77	95	833433	25.51 ppb	0.00
Spiked Amount 25.000			Recovery =	102.052%	
Target Compounds					Qvalue
3) Dichlorodifluoromethane	1.16	87	15189	4.63 ppb	99
4) Freon 114	1.26	85	16568	4.21 ppb	90
5) Chloromethane	1.35	50	80392	4.69 ppb	96
6) Vinyl chloride	1.39	62	75104	5.00 ppb	99
9) Bromomethane	1.66	94	15005	4.69 ppb	94
10) Chloroethane	1.75	64	27428	7.87 ppb	97
11) Dichlorofluoromethane	1.95	67	108207	4.86 ppb	97
12) Trichlorofluoromethane	1.99	101	81356	4.73 ppb	99
16) Acrolein	2.38	55	97374	97.26 ppb	98
17) Acetone	2.54	43	130940	36.79 ppb	97
18) Freon-113	2.49	101	36926	4.00 ppb	97
19) 1,1-DCE	2.47	61	67085	4.56 ppb	94
21) Acetonitrile	2.77	40	42401	106.87 ppb	94
22) t-Butanol	3.07	59	52920	100.03 ppb	99
23) Methyl Acetate	2.85	43	41907	4.75 ppb	99
24) Iodomethane	2.60	142	40470	4.19 ppb	98
25) Acrylonitrile	3.13	52	20671	4.99 ppb	96
26) Methylene chloride	2.92	84	62062	4.80 ppb	100
27) Carbon disulfide	2.65	76	76984	4.63 ppb	99
28) Methyl t-butyl ether (MtBE	3.19	73	128314	4.84 ppb	98
29) Trans-1,2-DCE	3.16	61	68293	4.69 ppb	97
31) Diisopropyl Ether	3.63	45	152480	4.83 ppb	100
33) 1,1-DCA	3.53	63	90424	4.85 ppb	98
34) Vinyl Acetate	3.60	43	68682	4.75 ppb	94
35) Ethyl tert Butyl Ether	3.94	59	137961	4.75 ppb	99
36) MEK (2-Butanone)	4.06	43	187909	37.66 ppb	100
37) Cis-1,2-DCE	4.03	61	83134	4.81 ppb	96
38) 2,2-Dichloropropane	4.04	77	70033	4.67 ppb	95
41) Chloroform	4.31	83	93282	4.89 ppb	97
42) Bromochloromethane	4.23	49	44605	4.94 ppb	96
44) 1,1,1-TCA	4.47	97	78323	4.81 ppb	97
45) Cyclohexane	4.52	56	71256	4.10 ppb	96
46) 1,1-Dichloropropene	4.61	75	64640	4.59 ppb	99
47) 2,2,4-Trimethylpentane	4.87	57	124907	3.69 ppb	98
49) Carbon Tetrachloride	4.61	117	62764	4.57 ppb	98
50) Tert Amyl Methyl Ether	4.90	73	126913	4.79 ppb	98
52) 1,2-DCA	4.79	62	65124	4.80 ppb	98
53) Benzene	4.78	78	218427	4.82 ppb	99
54) TCE	5.33	130	69545	4.84 ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z16.D Vial: 11
Acq On : 23 Oct 20 17:49 Operator: LP,DG,CH
Sample : 5ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55)	2-Pentanone	5.49	43	718925	88.99	ppb	98
56)	1,2-Dichloropropane	5.52	63	54942	4.90	ppb	98
57)	Bromodichloromethane	5.75	83	65141	4.83	ppb	96
58)	Methyl Cyclohexane	5.51	83	69975	3.91	ppb	98
59)	Dibromomethane	5.61	174	46993	5.01	ppb	95
60)	MIBK (methyl isobutyl ket	6.29	43	361814	37.68	ppb	100
61)	1-Bromo-2-chloroethane	6.02	144	10245	4.74	ppb	94
63)	Cis-1,3-Dichloropropene	6.14	75	82405	4.83	ppb	96
64)	Toluene	6.44	91	233054	4.73	ppb	98
65)	Trans-1,3-Dichloropropene	6.63	75	66133	4.68	ppb	98
66)	1,1,2-TCA	6.79	97	47251	4.76	ppb	97
67)	2-Hexanone	7.03	43	258948	37.70	ppb	99
70)	1,2-EDB	7.24	107	50671	4.90	ppb	94
71)	Tetrachloroethene	6.93	166	71875	4.80	ppb	97
72)	1-Chlorohexane	7.69	91	77909	5.01	ppb	99
73)	1,1,1,2-Tetrachloroethane	7.77	131	53255	4.85	ppb	98
74)	m&p-Xylene	7.92	91	406001	9.87	ppb	98
75)	o-Xylene	8.28	91	206741	4.82	ppb	98
76)	Styrene	8.29	104	181638	5.01	ppb	98
78)	1,3-Dichloropropane	6.94	76	79277	4.92	ppb	98
79)	Dibromochloromethane	7.14	129	52590	4.85	ppb	97
80)	Chlorobenzene	7.70	112	165031	4.95	ppb	98
81)	Ethylbenzene	7.81	91	260768	4.89	ppb	99
82)	Bromoform	8.45	173	37972	4.68	ppb	99
84)	Isopropylbenzene	8.64	105	273128	4.83	ppb	100
85)	1,1,2,2-Tetrachloroethane	8.90	83	58841	4.63	ppb	97
86)	1,2,3-Trichloropropane	8.94	110	19960	4.75	ppb	96
87)	t-1,4-Dichloro-2-Butene	8.96	53	13615	4.36	ppb	90
88)	Bromobenzene	8.90	77	115228	4.73	ppb	91
89)	n-Propylbenzene	9.03	91	318576	4.83	ppb	99
90)	4-Ethyltoluene	9.14	105	277993	4.87	ppb	98
91)	2-Chlorotoluene	9.10	91	187005	4.59	ppb	99
92)	1,3,5-Trimethylbenzene	9.20	105	234657	4.82	ppb	99
93)	4-Chlorotoluene	9.20	91	216149	4.77	ppb	99
94)	Tert-Butylbenzene	9.51	119	211732	4.89	ppb	95
95)	1,2,4-Trimethylbenzene	9.56	105	236223	4.84	ppb	100
96)	Sec-Butylbenzene	9.73	105	313720	4.87	ppb	99
97)	p-Isopropyltoluene	9.87	119	270845	4.89	ppb	98
98)	Benzyl Chloride	10.03	91	101646	4.58	ppb	99
99)	1,3-DCB	9.82	146	150529	4.90	ppb	99
100)	1,4-DCB	9.90	146	153374	4.96	ppb	100
101)	n-Butylbenzene	10.27	91	231198	4.69	ppb	99
102)	1,2-DCB	10.26	146	142107	4.95	ppb	99
103)	Hexachloroethane	10.52	201	37325	4.97	ppb	94
104)	1,2-Dibromo-3-chloropropan	11.01	157	16448	4.61	ppb	99
105)	1,2,4-Trichlorobenzene	11.84	180	102978	4.83	ppb	99
106)	Hexachlorobutadiene	12.03	225	45529	4.73	ppb	97
107)	Naphthalene	12.07	128	241079	4.87	ppb	98
108)	1,2,3-Trichlorobenzene	12.32	180	93919	4.96	ppb	93

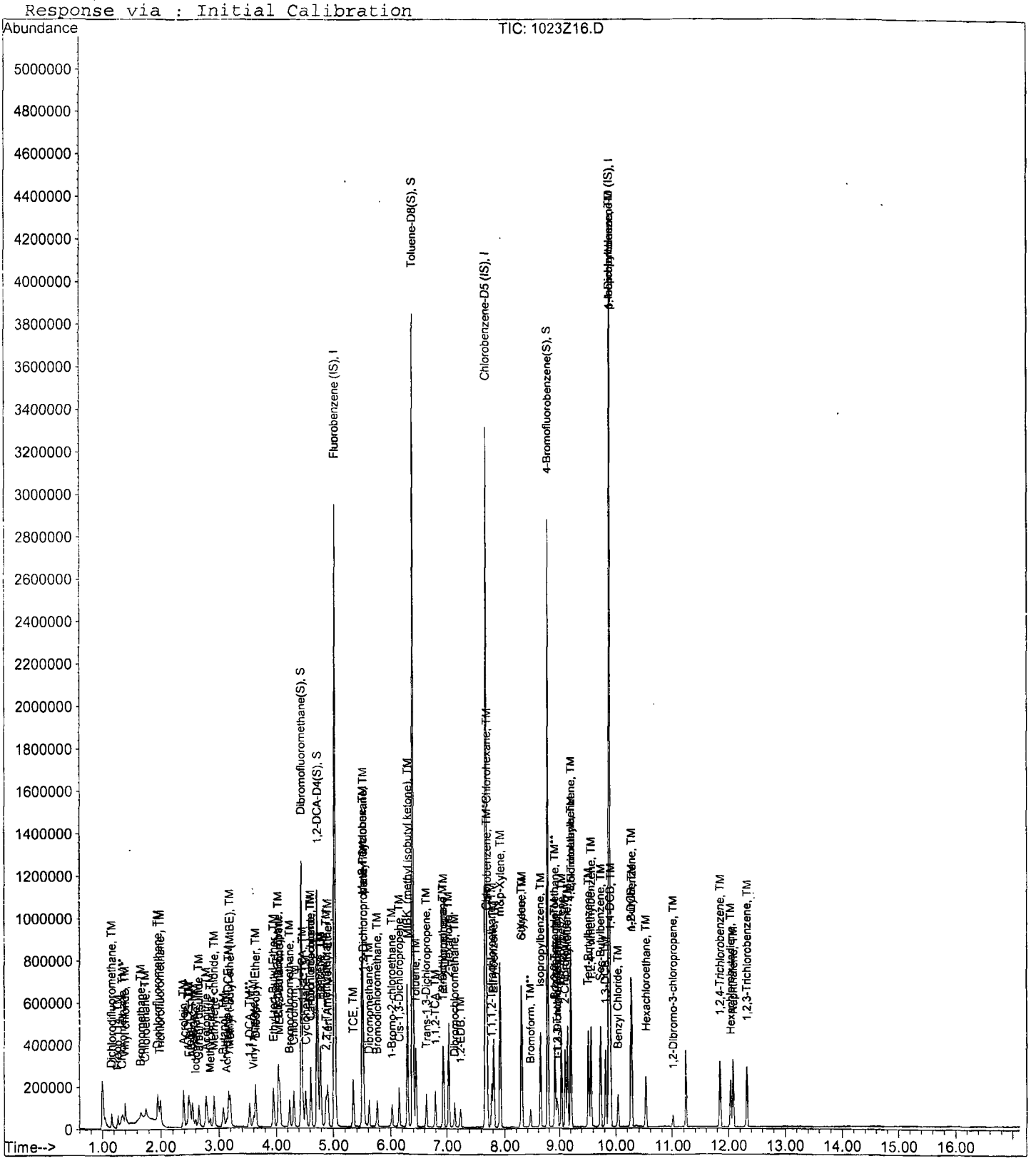
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z16.D Vial: 11
Acq On : 23 Oct 20 17:49 Operator: LP,DG,CH
Sample : 5ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z17.D Vial: 12
Acq On : 23 Oct 20 18:12 Operator: LP,DG,CH
Sample : 10ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2263169	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1720200	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	1020669	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.44	111	602681	25.37	ppb	0.00
Spiked Amount 25.000			Recovery =	101.484%		
48) 1,2-DCA-D4(S)	4.72	65	568939	25.31	ppb	0.00
Spiked Amount 25.000			Recovery =	101.232%		
69) Toluene-D8(S)	6.39	98	2218898	25.60	ppb	0.00
Spiked Amount 25.000			Recovery =	102.404%		
77) 4-Bromofluorobenzene(S)	8.77	95	818873	24.83	ppb	0.00
Spiked Amount 25.000			Recovery =	99.308%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.16	87	33722	10.28	ppb	100
4) Freon 114	1.26	85	38507	9.78	ppb	100
5) Chloromethane	1.34	50	164347	9.58	ppb	100
6) Vinyl chloride	1.39	62	152565	10.16	ppb	100
9) Bromomethane	1.66	94	29074	10.90	ppb	100
10) Chloroethane	1.75	64	41814	14.24	ppb	100
11) Dichlorofluoromethane	1.94	67	218662	9.82	ppb	100
12) Trichlorofluoromethane	1.98	101	180837	10.51	ppb	100
16) Acrolein	2.38	55	127358	127.19	ppb	100
17) Acetone	2.54	43	169329	47.58	ppb	100
18) Freon-113	2.49	101	88607	9.61	ppb	100
19) 1,1-DCE	2.46	61	139478	9.49	ppb	100
21) Acetonitrile	2.77	40	48763	122.89	ppb	100
22) t-Butanol	3.07	59	68848	130.12	ppb	100
23) Methyl Acetate	2.85	43	82078	9.31	ppb	100
24) Iodomethane	2.60	142	104307	8.94	ppb	100
25) Acrylonitrile	3.13	52	40180	9.70	ppb	100
26) Methylene chloride	2.91	84	120547	9.89	ppb	100
27) Carbon disulfide	2.65	76	154496	9.29	ppb	100
28) Methyl t-butyl ether (MtBE	3.19	73	258257	9.74	ppb	100
29) Trans-1,2-DCE	3.16	61	141603	9.72	ppb	100
31) Diisopropyl Ether	3.63	45	307452	9.73	ppb	98
33) 1,1-DCA	3.53	63	181141	9.72	ppb	100
34) Vinyl Acetate	3.60	43	129362	8.95	ppb	100
35) Ethyl tert Butyl Ether	3.94	59	282777	9.74	ppb	100
36) MEK (2-Butanone)	4.06	43	248754	49.85	ppb	100
37) Cis-1,2-DCE	4.03	61	166191	9.62	ppb	100
38) 2,2-Dichloropropane	4.03	77	141232	9.42	ppb	100
41) Chloroform	4.31	83	186068	9.75	ppb	100
42) Bromochloromethane	4.23	49	87400	9.67	ppb	100
44) 1,1,1-TCA	4.47	97	157690	9.68	ppb	100
45) Cyclohexane	4.52	56	159563	9.17	ppb	100
46) 1,1-Dichloropropene	4.61	75	137758	9.79	ppb	100
47) 2,2,4-Trimethylpentane	4.87	57	321050	9.49	ppb	100
49) Carbon Tetrachloride	4.61	117	131869	9.60	ppb	100
50) Tert Amyl Methyl Ether	4.90	73	259385	9.80	ppb	100
52) 1,2-DCA	4.79	62	125803	9.28	ppb	100
53) Benzene	4.78	78	440333	9.71	ppb	100
54) TCE	5.33	130	145147	10.10	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z17.D Vial: 12
Acq On : 23 Oct 20 18:12 Operator: LP,DG,CH
Sample : 10ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55)	2-Pentanone	5.49	43	971005	120.18	ppb	100
56)	1,2-Dichloropropane	5.52	63	109440	9.76	ppb	100
57)	Bromodichloromethane	5.75	83	131037	9.71	ppb	100
58)	Methyl Cyclohexane	5.51	83	168041	9.39	ppb	100
59)	Dibromomethane	5.61	174	93810	10.00	ppb	100
60)	MIBK (methyl isobutyl ket	6.29	43	483459	50.34	ppb	100
61)	1-Bromo-2-chloroethane	6.02	144	21583	9.99	ppb	100
63)	Cis-1,3-Dichloropropene	6.14	75	168770	9.89	ppb	100
64)	Toluene	6.44	91	472483	9.59	ppb	100
65)	Trans-1,3-Dichloropropene	6.63	75	137976	9.77	ppb	100
66)	1,1,2-TCA	6.79	97	96936	9.77	ppb	100
67)	2-Hexanone	7.03	43	336432	48.98	ppb	100
70)	1,2-EDB	7.24	107	102821	9.86	ppb	100
71)	Tetrachloroethene	6.93	166	148960	9.85	ppb	100
72)	1-Chlorohexane	7.69	91	154013	9.51	ppb	100
73)	1,1,1,2-Tetrachloroethane	7.78	131	110391	9.95	ppb	100
74)	m&p-Xylene	7.92	91	801581	19.30	ppb	100
75)	o-Xylene	8.28	91	418273	9.67	ppb	100
76)	Styrene	8.29	104	357846	9.77	ppb	100
78)	1,3-Dichloropropane	6.94	76	161321	9.91	ppb	100
79)	Dibromochloromethane	7.14	129	107335	9.80	ppb	100
80)	Chlorobenzene	7.70	112	326646	9.70	ppb	100
81)	Ethylbenzene	7.81	91	523325	9.72	ppb	100
82)	Bromoform	8.45	173	78168	9.54	ppb	100
84)	Isopropylbenzene	8.64	105	540501	9.63	ppb	100
85)	1,1,2,2-Tetrachloroethane	8.90	83	119316	9.45	ppb	100
86)	1,2,3-Trichloropropane	8.94	110	41181	9.87	ppb	100
87)	t-1,4-Dichloro-2-Butene	8.96	53	28635	9.24	ppb	100
88)	Bromobenzene	8.91	77	228032	9.43	ppb	100
89)	n-Propylbenzene	9.03	91	632841	9.66	ppb	100
90)	4-Ethyltoluene	9.14	105	554725	9.78	ppb	100
91)	2-Chlorotoluene	9.10	91	372958	9.21	ppb	100
92)	1,3,5-Trimethylbenzene	9.20	105	467984	9.67	ppb	100
93)	4-Chlorotoluene	9.20	91	429866	9.56	ppb	100
94)	Tert-Butylbenzene	9.51	119	414008	9.63	ppb	100
95)	1,2,4-Trimethylbenzene	9.56	105	467984	9.65	ppb	100
96)	Sec-Butylbenzene	9.73	105	617090	9.65	ppb	100
97)	p-Isopropyltoluene	9.87	119	540838	9.84	ppb	100
98)	Benzyl Chloride	10.04	91	209541	9.52	ppb	100
99)	1,3-DCB	9.81	146	298784	9.80	ppb	100
100)	1,4-DCB	9.90	146	301103	9.80	ppb	100
101)	n-Butylbenzene	10.27	91	472240	9.64	ppb	100
102)	1,2-DCB	10.26	146	278362	9.75	ppb	100
103)	Hexachloroethane	10.52	201	79800	9.21	ppb	100
104)	1,2-Dibromo-3-chloropropan	11.02	157	33965	9.58	ppb	100
105)	1,2,4-Trichlorobenzene	11.84	180	207672	9.81	ppb	100
106)	Hexachlorobutadiene	12.03	225	92346	9.67	ppb	100
107)	Naphthalene	12.08	128	482083	9.80	ppb	100
108)	1,2,3-Trichlorobenzene	12.32	180	184537	9.81	ppb	100

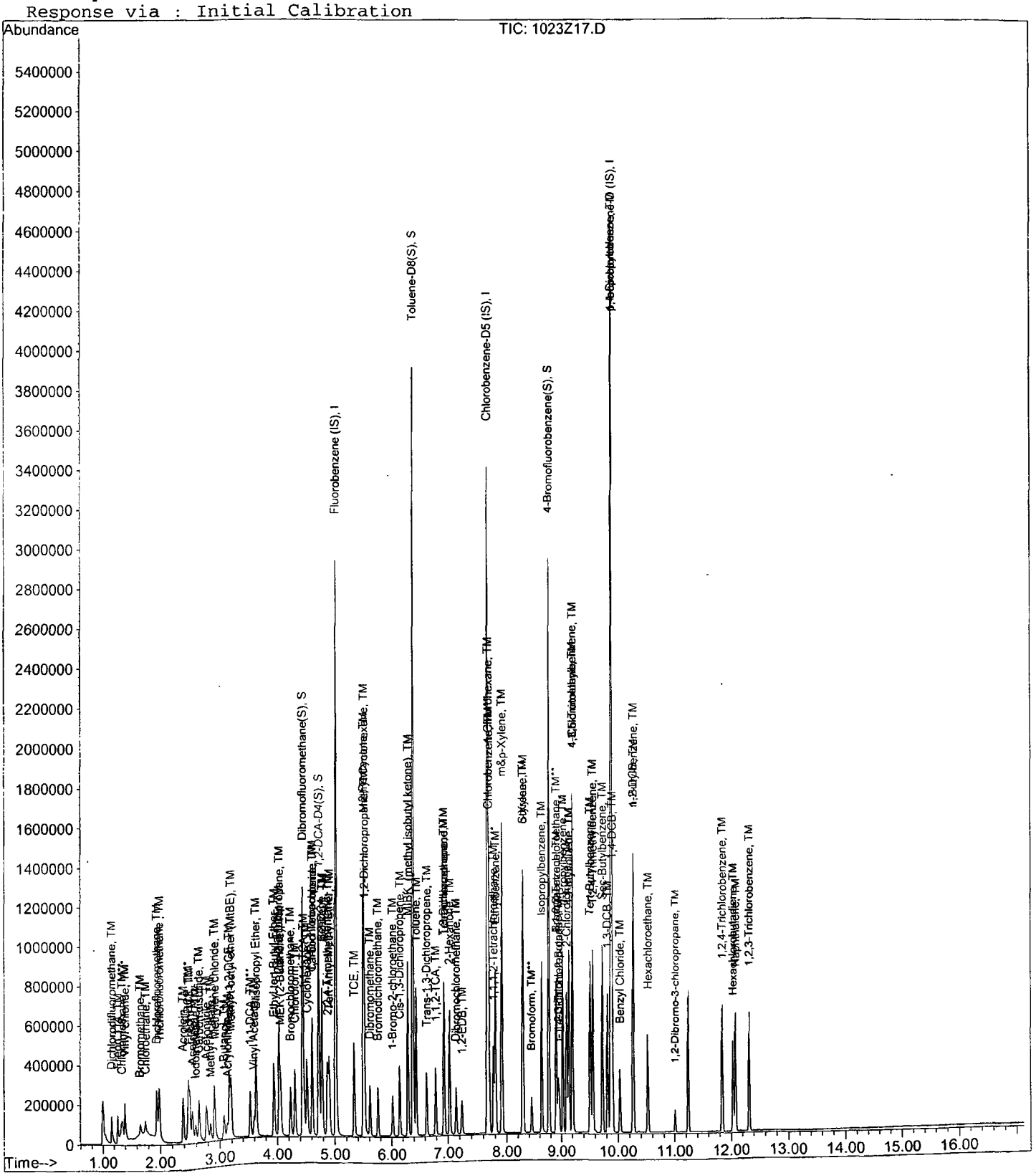
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z17.D Vial: 12
Acq On : 23 Oct 20 18:12 Operator: LP,DG,CH
Sample : 10ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z18.D Vial: 13
Acq On : 23 Oct 20 18:35 Operator: LP,DG,CH
Sample : 20ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2267294	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.68	117	1710493	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	1008889	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.44	111	1250381	52.54	ppb	0.00
Spiked Amount 25.000			Recovery = 210.168%			
48) 1,2-DCA-D4(S)	4.72	65	1193346	52.99	ppb	0.00
Spiked Amount 25.000			Recovery = 211.948%			
69) Toluene-D8(S)	6.39	98	4579966	53.14	ppb	0.00
Spiked Amount 25.000			Recovery = 212.564%			
77) 4-Bromofluorobenzene(S)	8.77	95	1721761	52.50	ppb	0.00
Spiked Amount 25.000			Recovery = 209.992%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.16	87	67231	20.45	ppb	98
4) Freon 114	1.26	85	78120	19.81	ppb	97
5) Chloromethane	1.35	50	316719	18.43	ppb	100
6) Vinyl chloride	1.39	62	292416	19.43	ppb	99
9) Bromomethane	1.66	94	52854	21.37	ppb	100
10) Chloroethane	1.74	64	50593	18.16	ppb	98
11) Dichlorofluoromethane	1.94	67	405591	18.19	ppb	98
12) Trichlorofluoromethane	1.98	101	361080	20.95	ppb	99
16) Acrolein	2.39	55	153767	153.29	ppb	99
17) Acetone	2.54	43	202422	56.77	ppb	99
18) Freon-113	2.49	101	183479	19.86	ppb	97
19) 1,1-DCE	2.46	61	287902	19.55	ppb	98
21) Acetonitrile	2.78	40	54266	136.51	ppb	95
22) t-Butanol	3.08	59	82008	154.71	ppb	98
23) Methyl Acetate	2.85	43	168692	19.09	ppb	99
24) Iodomethane	2.59	142	237608	18.81	ppb	97
25) Acrylonitrile	3.14	52	82363	19.84	ppb	94
26) Methylene chloride	2.91	84	241695	20.39	ppb	96
27) Carbon disulfide	2.65	76	307968	18.48	ppb	100
28) Methyl t-butyl ether (MtBE	3.19	73	539798	20.33	ppb	98
29) Trans-1,2-DCE	3.16	61	282908	19.38	ppb	99
31) Diisopropyl Ether	3.63	45	640263	20.23	ppb	99
33) 1,1-DCA	3.53	63	362345	19.41	ppb	98
34) Vinyl Acetate	3.60	43	292195	20.19	ppb	98
35) Ethyl tert Butyl Ether	3.95	59	590038	20.28	ppb	98
36) MEK (2-Butanone)	4.06	43	314570	62.93	ppb	100
37) Cis-1,2-DCE	4.03	61	332687	19.23	ppb	98
38) 2,2-Dichloropropane	4.04	77	286267	19.06	ppb	98
41) Chloroform	4.31	83	367651	19.24	ppb	97
42) Bromochloromethane	4.23	49	175650	19.40	ppb	99
44) 1,1,1-TCA	4.47	97	318396	19.52	ppb	97
45) Cyclohexane	4.52	56	324383	18.61	ppb	99
46) 1,1-Dichloropropene	4.61	75	280265	19.88	ppb	99
47) 2,2,4-Trimethylpentane	4.87	57	673677	19.88	ppb	99
49) Carbon Tetrachloride	4.61	117	270282	19.65	ppb	100
50) Tert Amyl Methyl Ether	4.90	73	547072	20.63	ppb	98
52) 1,2-DCA	4.79	62	254231	18.72	ppb	100
53) Benzene	4.78	78	881594	19.40	ppb	97
54) TCE	5.33	130	284432	19.75	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z18.D
Acq On : 23 Oct 20 18:35
Sample : 20ug/L VOC STD 10/23/20
Misc :

Vial: 13
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55)	2-Pentanone	5.49	43	1275073	157.52	ppb	99
56)	1,2-Dichloropropane	5.52	63	218307	19.43	ppb	100
57)	Bromodichloromethane	5.75	83	266641	19.73	ppb	99
58)	Methyl Cyclohexane	5.51	83	350977	19.58	ppb	99
59)	Dibromomethane	5.61	174	185501	19.73	ppb	94
60)	MIBK (methyl isobutyl ket	6.29	43	615394	63.96	ppb	98
61)	1-Bromo-2-chloroethane	6.02	144	41667	19.24	ppb	92
63)	Cis-1,3-Dichloropropene	6.14	75	345426	20.20	ppb	98
64)	Toluene	6.44	91	952101	19.29	ppb	99
65)	Trans-1,3-Dichloropropene	6.63	75	288590	20.40	ppb	97
66)	1,1,2-TCA	6.79	97	195823	19.70	ppb	98
67)	2-Hexanone	7.03	43	426932	62.04	ppb	99
70)	1,2-EDB	7.24	107	209845	20.23	ppb	99
71)	Tetrachloroethene	6.93	166	298577	19.85	ppb	98
72)	1-Chlorohexane	7.69	91	316025	19.28	ppb	95
73)	1,1,1,2-Tetrachloroethane	7.78	131	230146	20.86	ppb	98
74)	m&p-Xylene	7.92	91	1618496	39.20	ppb	99
75)	o-Xylene	8.28	91	836861	19.45	ppb	99
76)	Styrene	8.29	104	727434	19.98	ppb	98
78)	1,3-Dichloropropane	6.94	76	326127	20.15	ppb	99
79)	Dibromochloromethane	7.14	129	222028	20.39	ppb	99
80)	Chlorobenzene	7.70	112	667054	19.92	ppb	98
81)	Ethylbenzene	7.81	91	1053055	19.67	ppb	100
82)	Bromoform	8.45	173	170028	20.88	ppb	100
84)	Isopropylbenzene	8.64	105	1096733	19.77	ppb	99
85)	1,1,2,2-Tetrachloroethane	8.91	83	254912	20.42	ppb	99
86)	1,2,3-Trichloropropane	8.94	110	83664	20.28	ppb	98
87)	t-1,4-Dichloro-2-Butene	8.97	53	60822	19.85	ppb	95
88)	Bromobenzene	8.91	77	470995	19.71	ppb	97
89)	n-Propylbenzene	9.03	91	1286454	19.87	ppb	100
90)	4-Ethyltoluene	9.14	105	1119286	19.96	ppb	100
91)	2-Chlorotoluene	9.10	91	840799	21.00	ppb	98
92)	1,3,5-Trimethylbenzene	9.21	105	944065	19.74	ppb	99
93)	4-Chlorotoluene	9.21	91	866489	19.49	ppb	98
94)	Tert-Butylbenzene	9.52	119	846237	19.92	ppb	98
95)	1,2,4-Trimethylbenzene	9.56	105	959064	20.01	ppb	99
96)	Sec-Butylbenzene	9.73	105	1256648	19.89	ppb	100
97)	p-Isopropyltoluene	9.88	119	1086230	19.99	ppb	99
98)	Benzyl Chloride	10.04	91	446182	20.50	ppb	99
99)	1,3-DCB	9.82	146	602991	20.01	ppb	98
100)	1,4-DCB	9.91	146	605190	19.93	ppb	97
101)	n-Butylbenzene	10.28	91	977876	20.19	ppb	99
102)	1,2-DCB	10.27	146	562541	19.94	ppb	100
103)	Hexachloroethane	10.52	201	171949	18.57	ppb	99
104)	1,2-Dibromo-3-chloropropan	11.02	157	73271	20.91	ppb	97
105)	1,2,4-Trichlorobenzene	11.85	180	436890	20.87	ppb	98
106)	Hexachlorobutadiene	12.04	225	194035	20.55	ppb	96
107)	Naphthalene	12.09	128	1000717	20.57	ppb	99
108)	1,2,3-Trichlorobenzene	12.33	180	386359	20.77	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

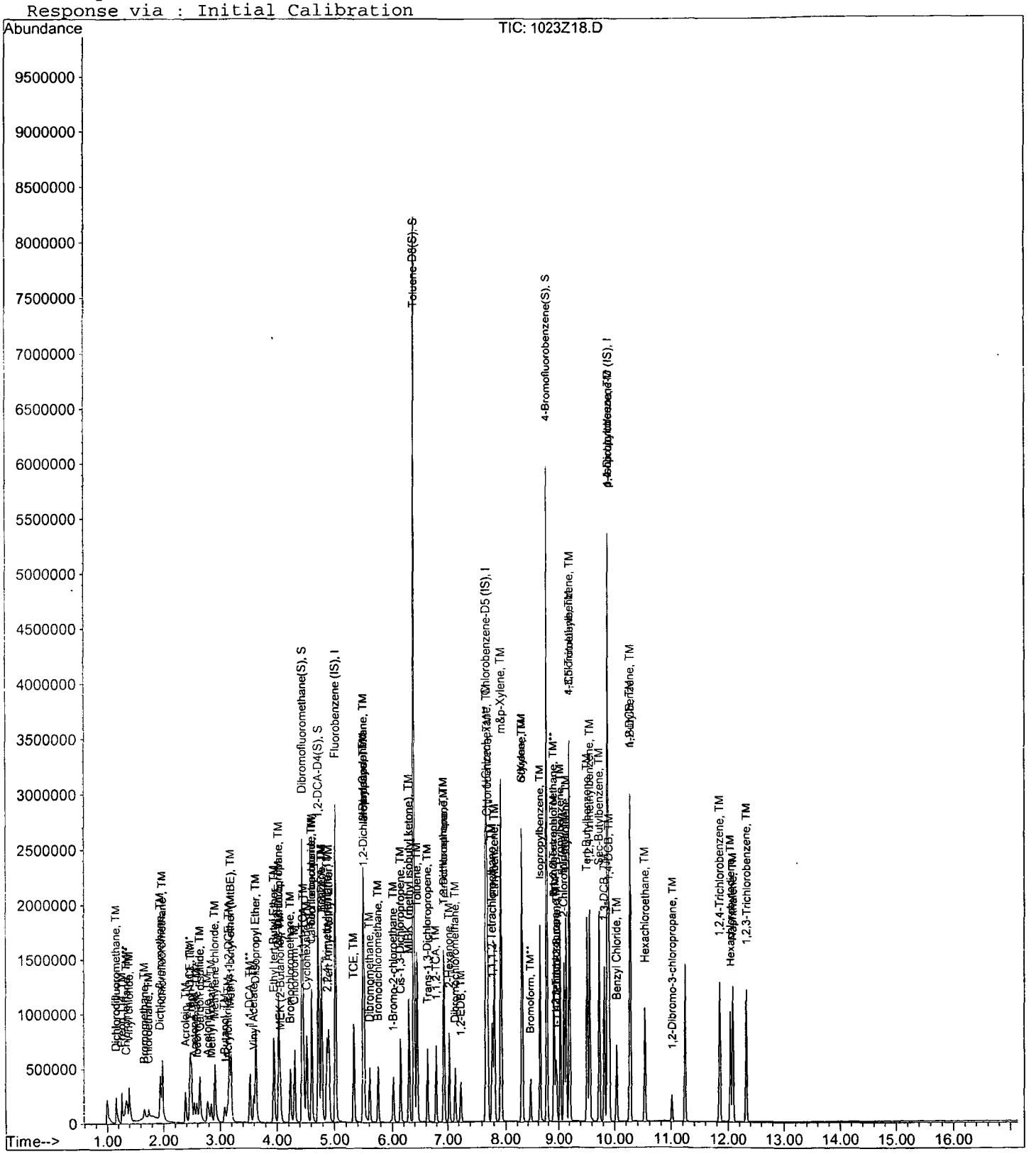
Data File : M:\ZEUS\DATA\201023\1023Z18.D
Acq On : 23 Oct 20 18:35
Sample : 20ug/L VOC STD 10/23/20
Misc :

Vial: 13
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 26 12:13 2020

Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z19.D Vial: 14
Acq On : 23 Oct 20 18:58 Operator: LP,DG,CH
Sample : 40ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2320328	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1767155	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	1007559	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.44	111	1254122	51.49	ppb	0.00
Spiked Amount 25.000			Recovery =	205.976%		
48) 1,2-DCA-D4(S)	4.72	65	1186014	51.46	ppb	0.00
Spiked Amount 25.000			Recovery =	205.832%		
69) Toluene-D8(S)	6.39	98	4735021	53.18	ppb	0.00
Spiked Amount 25.000			Recovery =	212.716%		
77) 4-Bromofluorobenzene(S)	8.77	95	1751274	51.69	ppb	0.00
Spiked Amount 25.000			Recovery =	206.744%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.16	87	139098	41.35	ppb	97
4) Freon 114	1.26	85	161224	39.96	ppb	99
5) Chloromethane	1.35	50	622457	35.40	ppb	99
6) Vinyl chloride	1.39	62	580976	37.73	ppb	99
9) Bromomethane	1.66	94	104064	42.91	ppb	97
10) Chloroethane	1.74	64	97070	39.05	ppb	97
11) Dichlorofluoromethane	1.93	67	799166	35.01	ppb	97
12) Trichlorofluoromethane	1.97	101	704201	39.93	ppb	98
16) Acrolein	2.39	55	186824	181.98	ppb	97
17) Acetone	2.54	43	278174	76.23	ppb	98
18) Freon-113	2.49	101	390780	41.33	ppb	98
19) 1,1-DCE	2.46	61	598417	39.71	ppb	99
21) Acetonitrile	2.78	40	62265	153.05	ppb	94
22) t-Butanol	3.09	59	93632	172.60	ppb	100
23) Methyl Acetate	2.85	43	352661	39.00	ppb	98
24) Iodomethane	2.59	142	555877	41.47	ppb	99
25) Acrylonitrile	3.14	52	167794	39.50	ppb	97
26) Methylene chloride	2.91	84	480232	40.14	ppb	99
27) Carbon disulfide	2.64	76	643904	37.75	ppb	99
28) Methyl t-butyl ether (MtBE	3.19	73	1100223	40.49	ppb	98
29) Trans-1,2-DCE	3.16	61	582981	39.03	ppb	96
31) Diisopropyl Ether	3.63	45	1334860	41.20	ppb	99
33) 1,1-DCA	3.53	63	739927	38.73	ppb	99
34) Vinyl Acetate	3.60	43	677698	45.75	ppb	98
35) Ethyl tert Butyl Ether	3.95	59	1230172	41.31	ppb	98
36) MEK (2-Butanone)	4.06	43	442715	86.54	ppb	99
37) Cis-1,2-DCE	4.03	61	687373	38.82	ppb	97
38) 2,2-Dichloropropane	4.03	77	594766	38.70	ppb	96
41) Chloroform	4.31	83	749760	38.33	ppb	99
42) Bromochloromethane	4.23	49	349433	37.72	ppb	99
44) 1,1,1-TCA	4.47	97	655468	39.26	ppb	99
45) Cyclohexane	4.52	56	695495	38.99	ppb	100
46) 1,1-Dichloropropene	4.61	75	580656	40.24	ppb	100
47) 2,2,4-Trimethylpentane	4.87	57	1491759	43.01	ppb	99
49) Carbon Tetrachloride	4.61	117	564914	40.12	ppb	98
50) Tert Amyl Methyl Ether	4.90	73	1128750	41.59	ppb	99
52) 1,2-DCA	4.79	62	516651	37.17	ppb	100
53) Benzene	4.78	78	1823702	39.21	ppb	99
54) TCE	5.33	130	578097	39.22	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z19.D Vial: 14
Acq On : 23 Oct 20 18:58 Operator: LP,DG,CH
Sample : 40ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
55)	2-Pentanone	5.49	43	1621883	195.79 ppb	99
56)	1,2-Dichloropropane	5.52	63	448939	39.05 ppb	99
57)	Bromodichloromethane	5.75	83	549991	39.77 ppb	100
58)	Methyl Cyclohexane	5.51	83	754998	41.15 ppb	98
59)	Dibromomethane	5.61	174	374177	38.89 ppb	95
60)	MIBK (methyl isobutyl ket	6.29	43	877295	89.10 ppb	99
61)	1-Bromo-2-chloroethane	6.02	144	85193	38.45 ppb	94
63)	Cis-1,3-Dichloropropene	6.14	75	712995	40.74 ppb	98
64)	Toluene	6.44	91	1977294	39.14 ppb	98
65)	Trans-1,3-Dichloropropene	6.63	75	606417	41.89 ppb	99
66)	1,1,2-TCA	6.79	97	403759	39.69 ppb	98
67)	2-Hexanone	7.03	43	604224	85.79 ppb	100
70)	1,2-EDB	7.24	107	432390	40.35 ppb	97
71)	Tetrachloroethene	6.93	166	612926	39.43 ppb	98
72)	1-Chlorohexane	7.69	91	662467	38.81 ppb	98
73)	1,1,1,2-Tetrachloroethane	7.78	131	474672	41.64 ppb	97
74)	m&p-Xylene	7.92	91	3319714	77.82 ppb	100
75)	o-Xylene	8.28	91	1709921	38.47 ppb	99
76)	Styrene	8.29	104	1478077	39.29 ppb	97
78)	1,3-Dichloropropane	6.94	76	666316	39.86 ppb	100
79)	Dibromochloromethane	7.14	129	469508	41.73 ppb	98
80)	Chlorobenzene	7.70	112	1355253	39.17 ppb	99
81)	Ethylbenzene	7.81	91	2171440	39.27 ppb	100
82)	Bromoform	8.45	173	365963	43.50 ppb	100
84)	Isopropylbenzene	8.64	105	2244353	40.52 ppb	99
85)	1,1,2,2-Tetrachloroethane	8.90	83	546403	43.83 ppb	96
86)	1,2,3-Trichloropropane	8.94	110	175502	42.59 ppb	97
87)	t-1,4-Dichloro-2-Butene	8.96	53	127712	41.74 ppb	94
88)	Bromobenzene	8.91	77	972561	40.74 ppb	98
89)	n-Propylbenzene	9.03	91	2640136	40.82 ppb	98
90)	4-Ethyltoluene	9.14	105	2253901	40.24 ppb	100
91)	2-Chlorotoluene	9.10	91	1533597	38.35 ppb	98
92)	1,3,5-Trimethylbenzene	9.20	105	1941488	40.66 ppb	98
93)	4-Chlorotoluene	9.21	91	1784498	40.19 ppb	97
94)	Tert-Butylbenzene	9.52	119	1726004	40.69 ppb	98
95)	1,2,4-Trimethylbenzene	9.56	105	1955696	40.85 ppb	99
96)	Sec-Butylbenzene	9.73	105	2573819	40.78 ppb	99
97)	p-Isopropyltoluene	9.87	119	2235302	41.19 ppb	100
98)	Benzyl Chloride	10.04	91	940344	43.26 ppb	99
99)	1,3-DCB	9.82	146	1199174	39.85 ppb	98
100)	1,4-DCB	9.90	146	1210697	39.93 ppb	98
101)	n-Butylbenzene	10.27	91	2037255	42.11 ppb	100
102)	1,2-DCB	10.26	146	1119926	39.75 ppb	99
103)	Hexachloroethane	10.52	201	371033	38.65 ppb	92
104)	1,2-Dibromo-3-chloropropan	11.02	157	154773	44.23 ppb	96
105)	1,2,4-Trichlorobenzene	11.84	180	860264	41.15 ppb	99
106)	Hexachlorobutadiene	12.04	225	393918	41.77 ppb	97
107)	Naphthalene	12.08	128	1999191	41.16 ppb	100
108)	1,2,3-Trichlorobenzene	12.32	180	765066	41.18 ppb	95

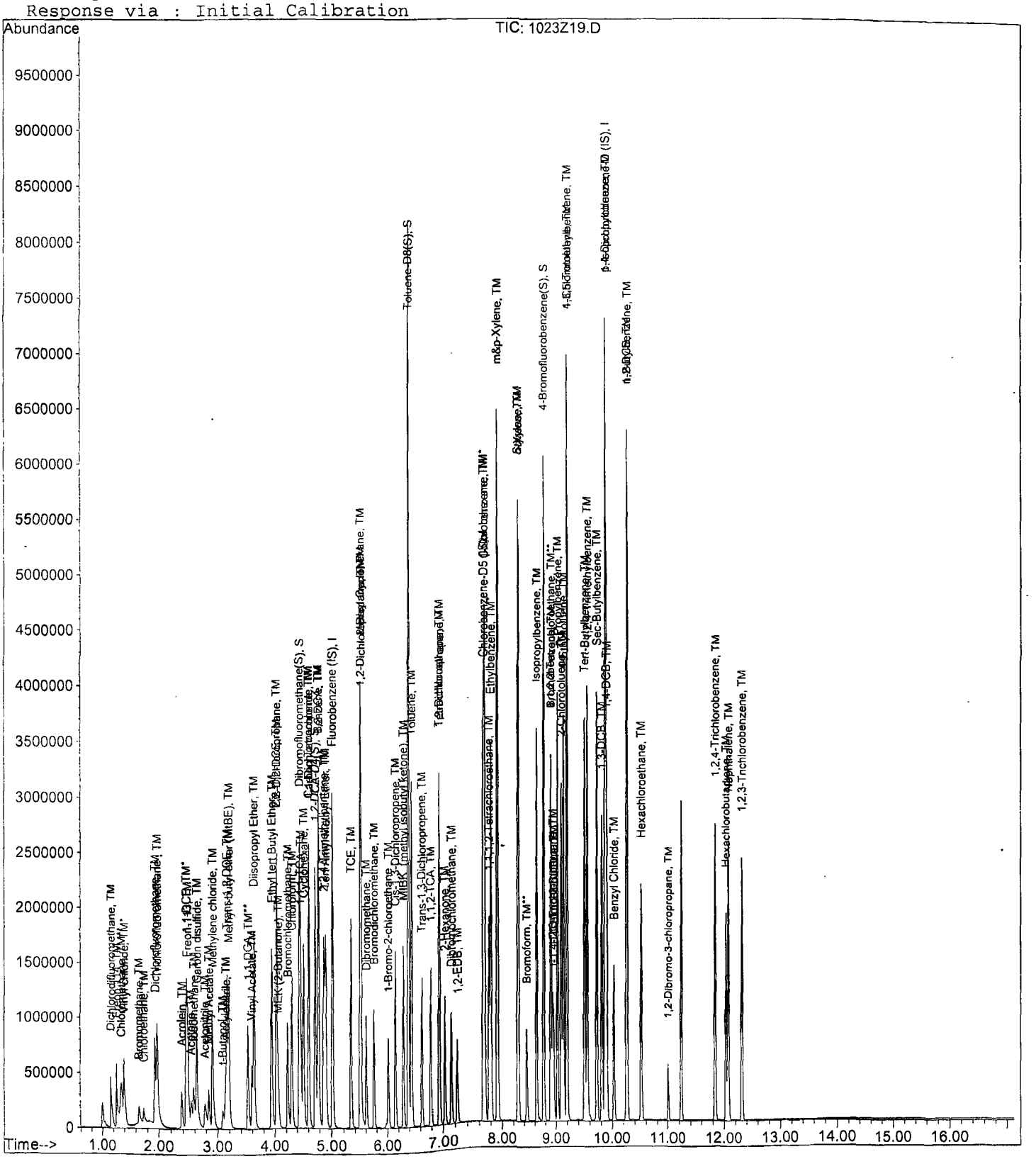
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z19.D Vial: 14
Acq On : 23 Oct 20 18:58 Operator: LP,DG,CH
Sample : 40ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z20.D Vial: 15
Acq On : 23 Oct 20 19:21 Operator: LP,DG,CH
Sample : 100ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2370785	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1827598	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	995518	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.44	111	2608129	104.81	ppb	0.00
Spiked Amount 25.000			Recovery =	419.244%		
48) 1,2-DCA-D4(S)	4.72	65	2589719	109.97	ppb	0.00
Spiked Amount 25.000			Recovery =	439.876%		
69) Toluene-D8(S)	6.39	98	9795857	106.38	ppb	0.00
Spiked Amount 25.000			Recovery =	425.512%		
77) 4-Bromofluorobenzene(S)	8.77	95	3866481	110.34	ppb	0.00
Spiked Amount 25.000			Recovery =	441.356%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.15	87	336607	97.92	ppb	93
4) Freon 114	1.26	85	367431	89.13	ppb	97
5) Chloromethane	1.35	50	1507171	83.89	ppb	99
6) Vinyl chloride	1.39	62	1372241	87.22	ppb	100
9) Bromomethane	1.65	94	238162	98.53	ppb	99
10) Chloroethane	1.74	64	213285	100.23	ppb	95
11) Dichlorofluoromethane	1.92	67	355426	15.24	ppb	97
12) Trichlorofluoromethane	1.96	101	948217	52.62	ppb	99
16) Acrolein	2.39	55	206004	196.40	ppb	99
17) Acetone	2.55	43	701899	188.26	ppb	98
18) Freon-113	2.47	101	1055252	109.23	ppb	99
19) 1,1-DCE	2.45	61	1585721	102.98	ppb	98
21) Acetonitrile	2.79	40	48358	116.34	ppb	99
22) t-Butanol	3.11	59	71846	129.62	ppb	98
23) Methyl Acetate	2.85	43	956007	103.47	ppb	99
24) Iodomethane	2.58	142	1390007	99.78	ppb	100
25) Acrylonitrile	3.14	52	438474	101.01	ppb	97
26) Methylene chloride	2.90	84	1210199	99.89	ppb	98
27) Carbon disulfide	2.63	76	1549312	88.89	ppb	99
28) Methyl t-butyl ether (MtBE	3.20	73	2939622	105.88	ppb	98
29) Trans-1,2-DCE	3.16	61	1530805	100.30	ppb	99
31) Diisopropyl Ether	3.64	45	3615396	109.22	ppb	98
33) 1,1-DCA	3.52	63	1945573	99.67	ppb	98
34) Vinyl Acetate	3.60	43	1702657	112.50	ppb	97
35) Ethyl tert Butyl Ether	3.95	59	3346039	109.97	ppb	99
36) MEK (2-Butanone)	4.07	43	1196186	228.85	ppb	99
37) Cis-1,2-DCE	4.03	61	1820040	100.59	ppb	96
38) 2,2-Dichloropropane	4.03	77	1569357	99.95	ppb	95
41) Chloroform	4.31	83	1967059	98.43	ppb	99
42) Bromochloromethane	4.23	49	909805	96.11	ppb	99
44) 1,1,1-TCA	4.46	97	1716745	100.64	ppb	98
45) Cyclohexane	4.51	56	1891717	103.79	ppb	97
46) 1,1-Dichloropropene	4.61	75	1527674	103.61	ppb	98
47) 2,2,4-Trimethylpentane	4.87	57	4122465	116.31	ppb	99
49) Carbon Tetrachloride	4.61	117	1496307	104.01	ppb	100
50) Tert Amyl Methyl Ether	4.91	73	3047991	109.91	ppb	99
52) 1,2-DCA	4.79	62	1397890	98.43	ppb	99
53) Benzene	4.78	78	4691369	98.72	ppb	98
54) TCE	5.33	130	1482021	98.42	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z20.D Vial: 15
Acq On : 23 Oct 20 19:21 Operator: LP,DG,CH
Sample : 100ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
55)	2-Pentanone	5.50	43	2190063	258.75 ppb	95
56)	1,2-Dichloropropane	5.52	63	1198261	102.02 ppb	100
57)	Bromodichloromethane	5.75	83	1472223	104.18 ppb	100
58)	Methyl Cyclohexane	5.51	83	2074185	110.65 ppb	99
59)	Dibromomethane	5.61	174	960495	97.71 ppb	93
60)	MIBK (methyl isobutyl ket	6.30	43	2423018	240.84 ppb	100
61)	1-Bromo-2-chloroethane	6.02	144	225034	99.39 ppb	95
63)	Cis-1,3-Dichloropropene	6.14	75	1900108	106.26 ppb	95
64)	Toluene	6.44	91	5170336	100.16 ppb	98
65)	Trans-1,3-Dichloropropene	6.63	75	1626091	109.94 ppb	98
66)	1,1,2-TCA	6.79	97	1065258	102.48 ppb	98
67)	2-Hexanone	7.03	43	1657205	230.30 ppb	97
70)	1,2-EDB	7.24	107	1142419	103.09 ppb	99
71)	Tetrachloroethene	6.93	166	1536824	95.61 ppb	99
72)	1-Chlorohexane	7.69	91	1785957	100.65 ppb	89
73)	1,1,1,2-Tetrachloroethane	7.78	131	1250066	106.03 ppb	98
74)	m&p-Xylene	7.92	91	8660061	196.31 ppb	99
75)	o-Xylene	8.28	91	4617223	100.45 ppb	98
76)	Styrene	8.29	104	3931029	101.05 ppb	92
78)	1,3-Dichloropropane	6.94	76	1773458	102.58 ppb	99
79)	Dibromochloromethane	7.14	129	1260484	108.32 ppb	98
80)	Chlorobenzene	7.70	112	3527531	98.59 ppb	95
81)	Ethylbenzene	7.81	91	5680956	99.33 ppb	99
82)	Bromoform	8.45	173	999881	114.91 ppb	98
84)	Isopropylbenzene	8.64	105	5862253	107.11 ppb	99
85)	1,1,2,2-Tetrachloroethane	8.90	83	1494431	121.32 ppb	97
86)	1,2,3-Trichloropropane	8.94	110	465247	114.27 ppb	95
87)	t-1,4-Dichloro-2-Butene	8.97	53	355548	117.60 ppb	89
88)	Bromobenzene	8.91	77	2674043	113.38 ppb	87
89)	n-Propylbenzene	9.03	91	6848668	107.18 ppb	97
90)	4-Ethyltoluene	9.14	105	5811686	105.01 ppb	99
91)	2-Chlorotoluene	9.10	91	4042926	102.33 ppb	97
92)	1,3,5-Trimethylbenzene	9.20	105	5110929	108.33 ppb	96
93)	4-Chlorotoluene	9.21	91	4862593	110.83 ppb	93
94)	Tert-Butylbenzene	9.52	119	4427839	105.65 ppb	99
95)	1,2,4-Trimethylbenzene	9.56	105	5108668	108.00 ppb	97
96)	Sec-Butylbenzene	9.73	105	6611211	106.03 ppb	99
97)	p-Isopropyltoluene	9.87	119	5670507	105.77 ppb	99
98)	Benzyl Chloride	10.04	91	2500873	116.43 ppb	99
99)	1,3-DCB	9.82	146	3046607	102.46 ppb	99
100)	1,4-DCB	9.90	146	3025080	100.98 ppb	99
101)	n-Butylbenzene	10.27	91	5369898	112.35 ppb	98
102)	1,2-DCB	10.26	146	2780086	99.87 ppb	97
103)	Hexachloroethane	10.52	201	977165	100.88 ppb	90
104)	1,2-Dibromo-3-chloropropan	11.02	157	418743	121.12 ppb	94
105)	1,2,4-Trichlorobenzene	11.84	180	2107121	102.02 ppb	100
106)	Hexachlorobutadiene	12.03	225	956539	102.67 ppb	97
107)	Naphthalene	12.08	128	4994744	104.07 ppb	100
108)	1,2,3-Trichlorobenzene	12.32	180	1872788	102.02 ppb	97

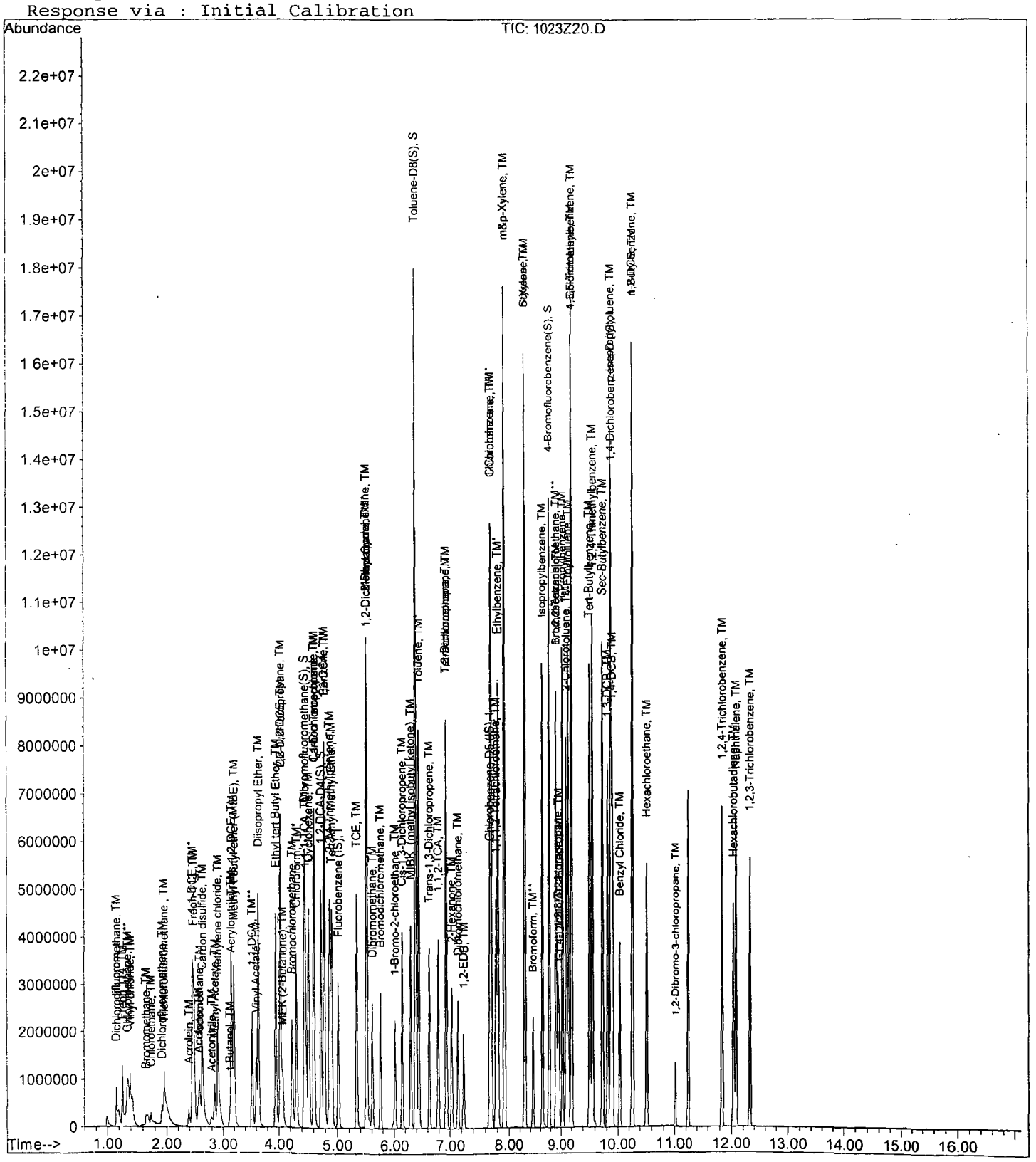
(#) = qualifier out of range (m) = manual integration

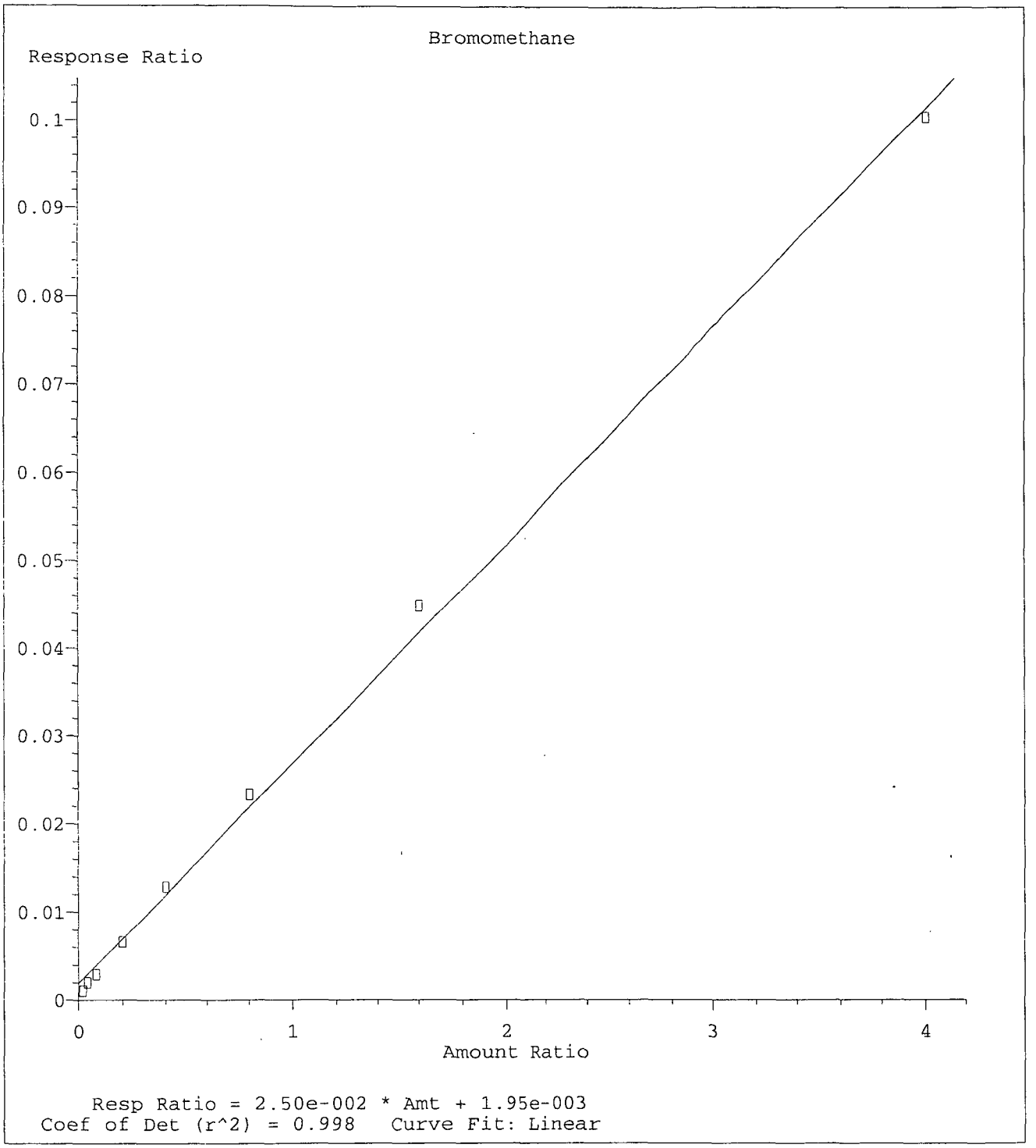
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z20.D Vial: 15
Acq On : 23 Oct 20 19:21 Operator: LP,DG,CH
Sample : 100ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

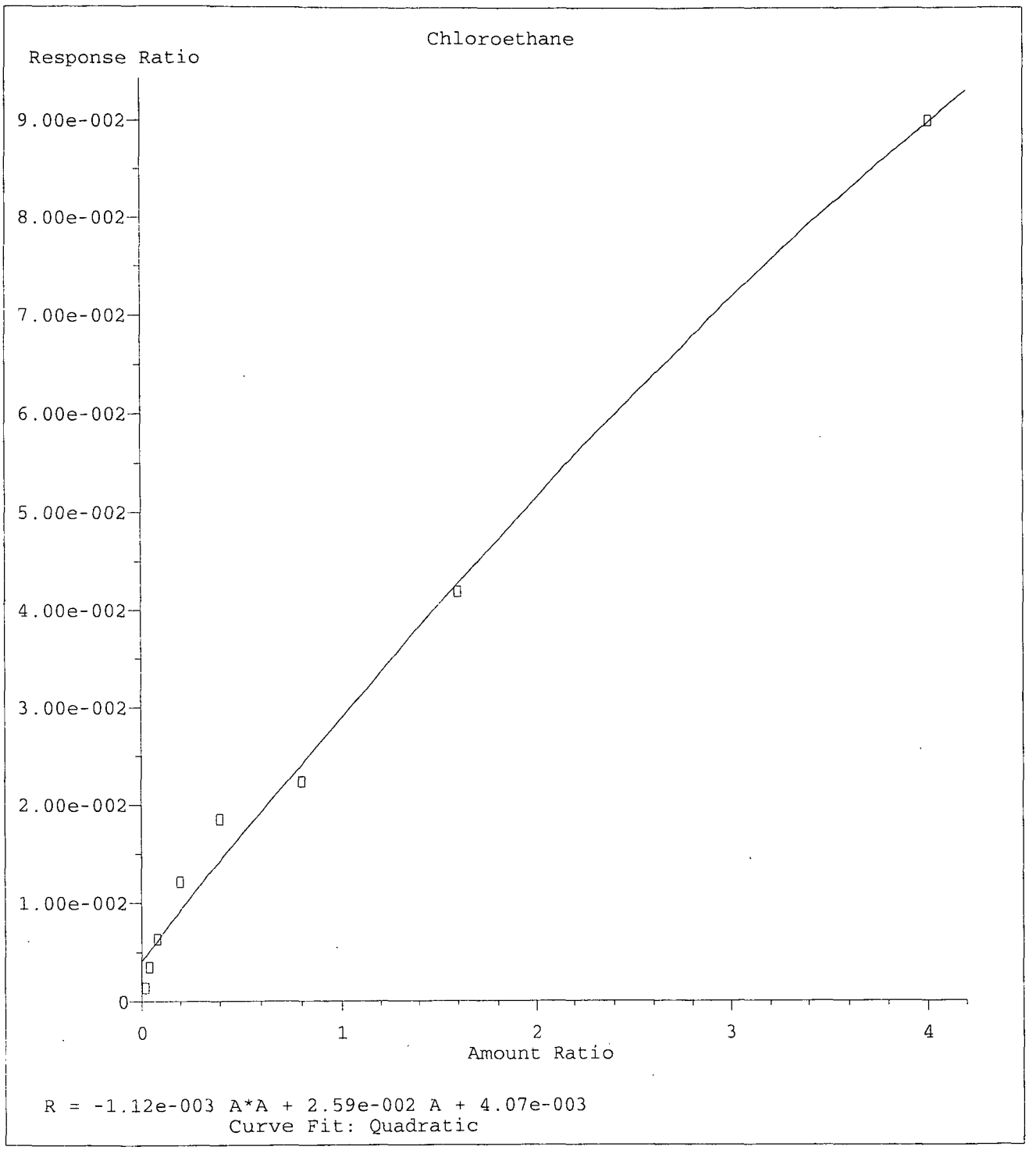
Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration

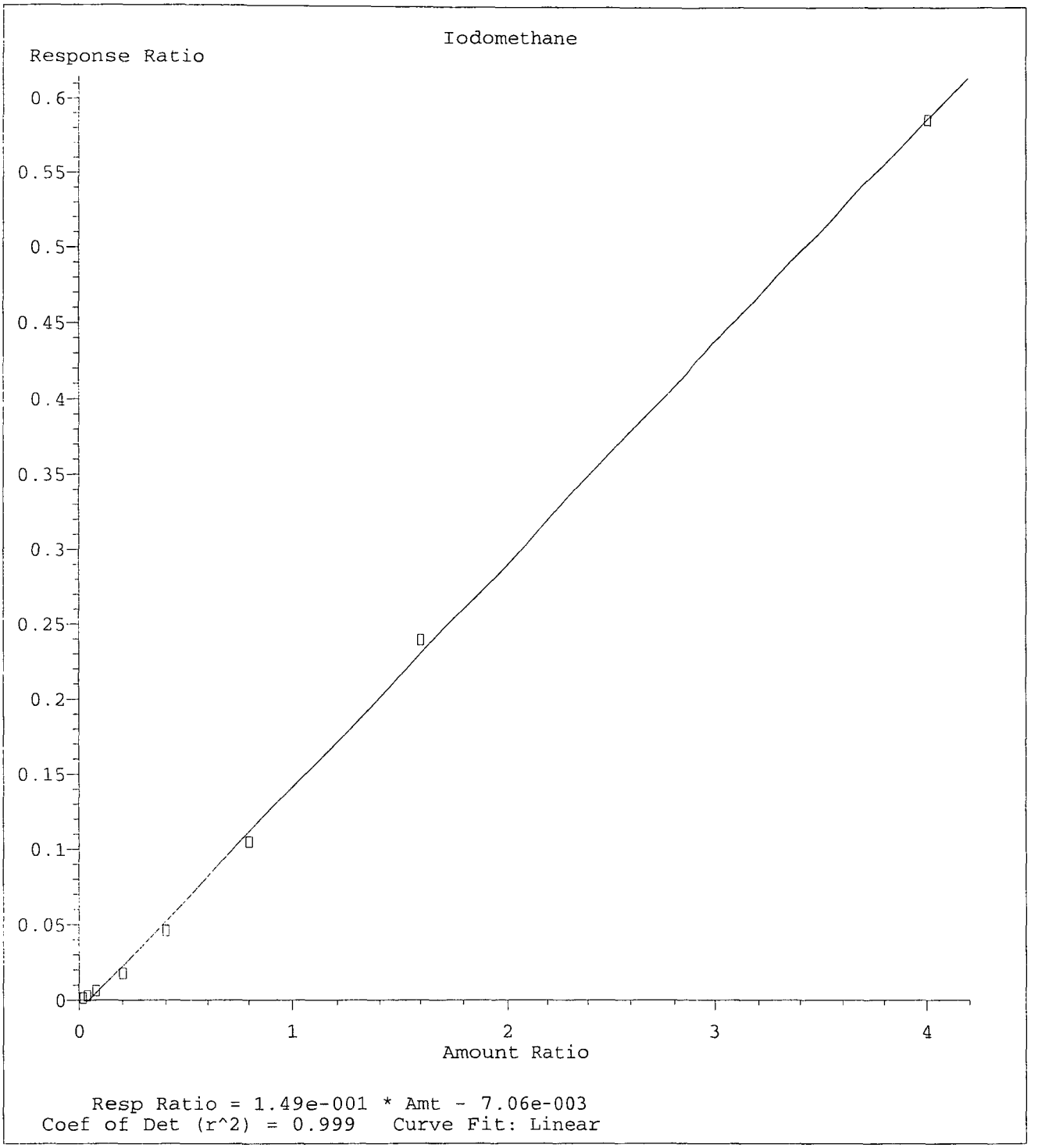




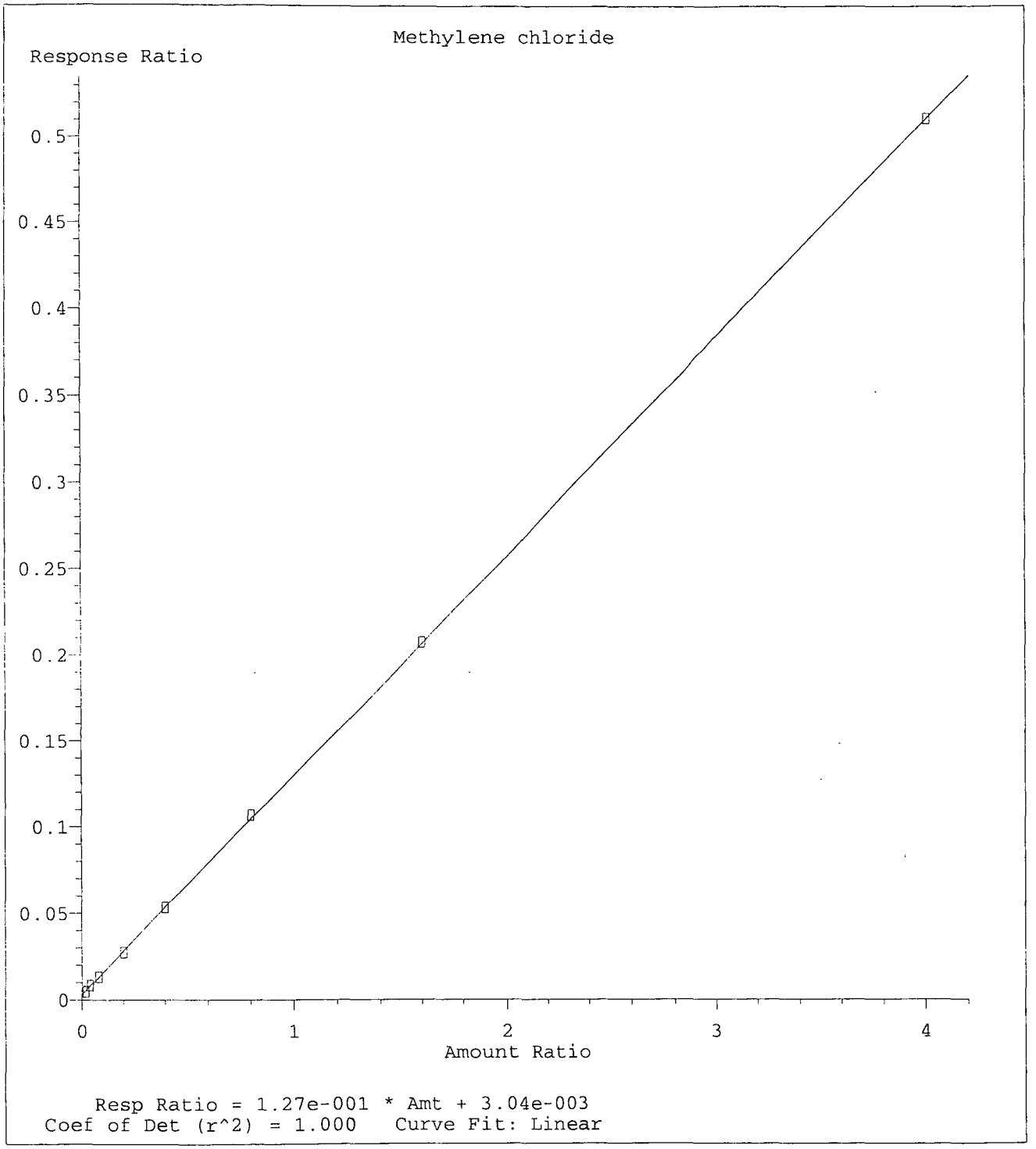
Method Name: M:\ZEUS\DATA\201023\Z1023W.M
Calibration Table Last Updated: Mon Oct 26 12:12:53 2020



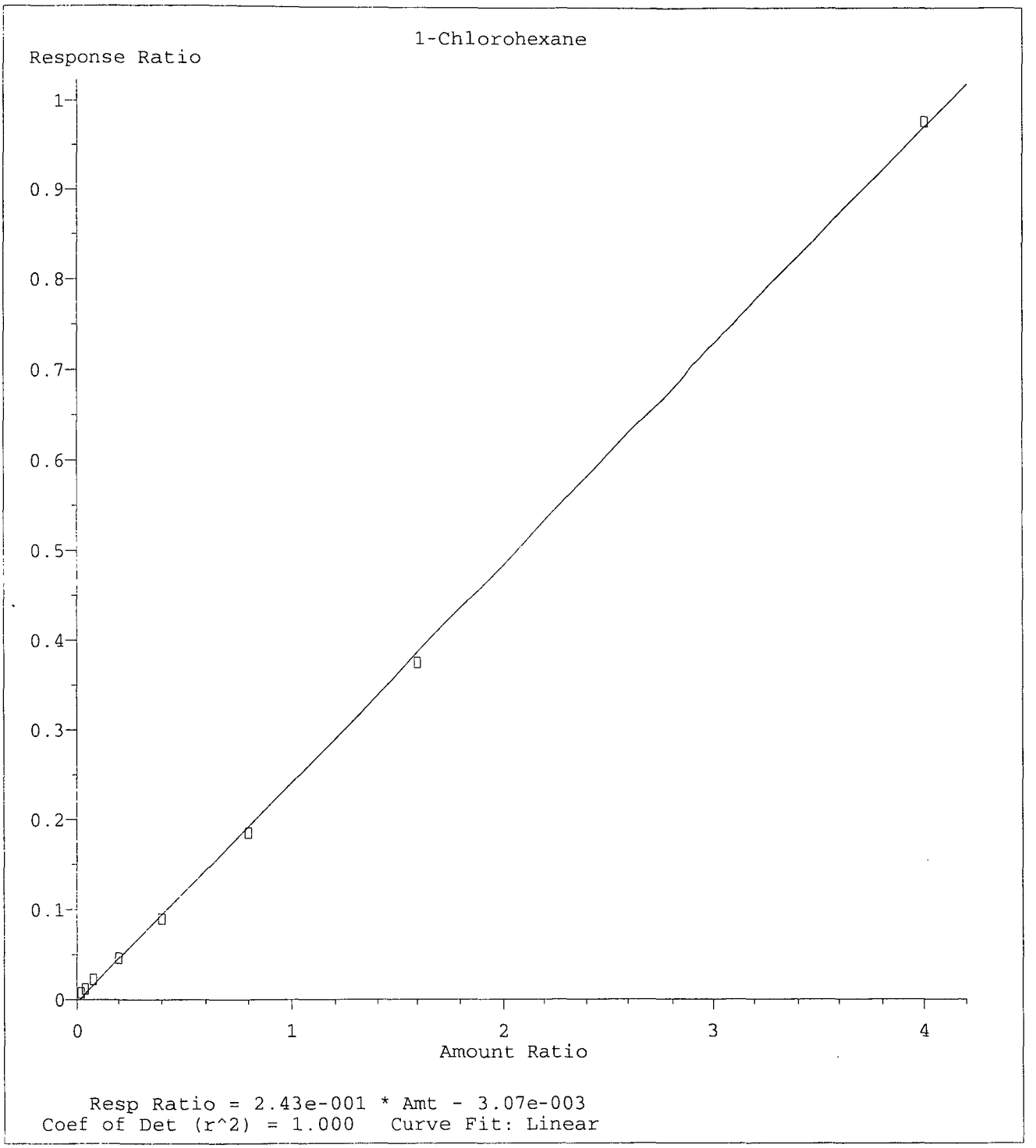
Method Name: M:\ZEUS\DATA\201023\Z1023W.M
Calibration Table Last Updated: Mon Oct 26 12:12:53 2020



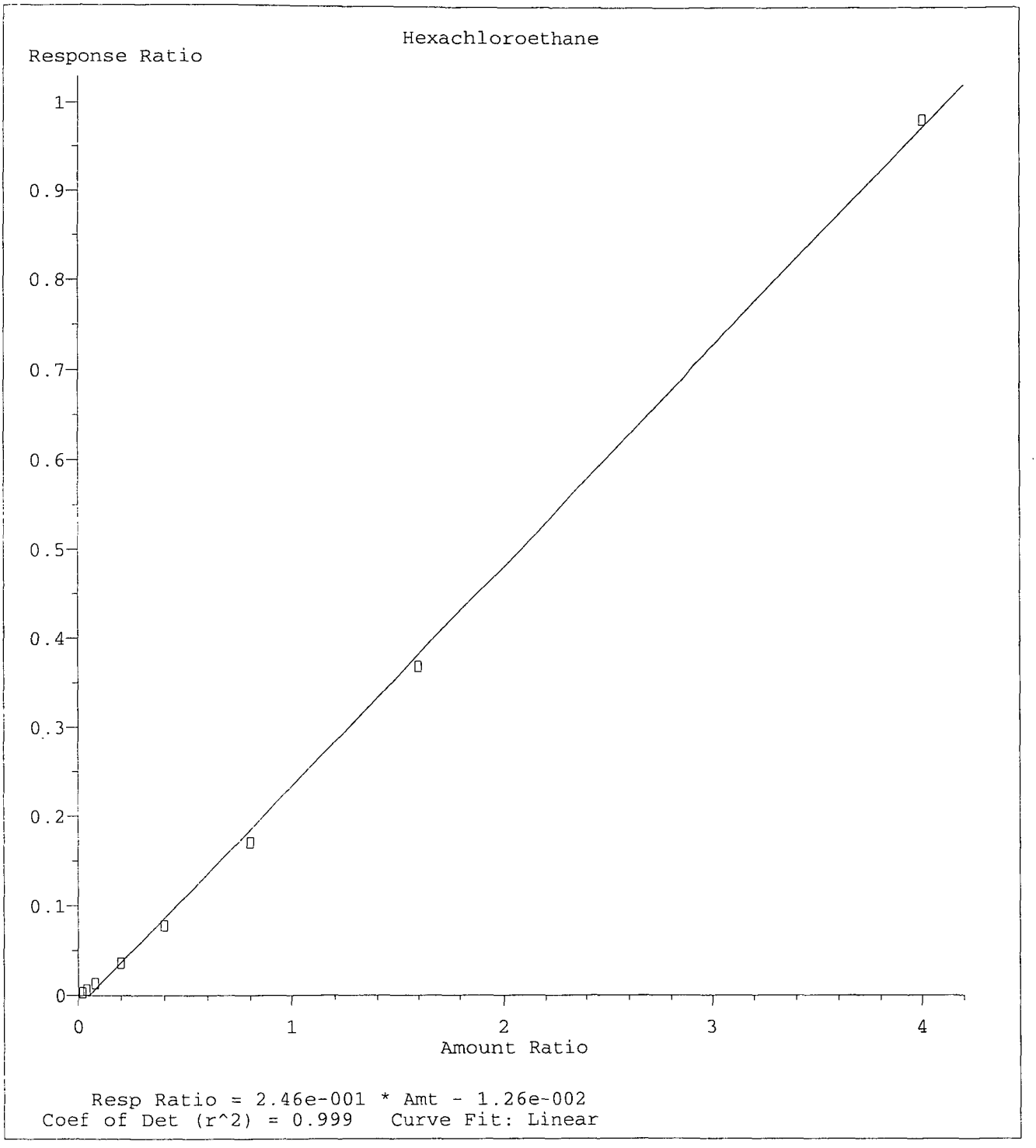
Method Name: M:\ZEUS\DATA\201023\Z1023W.M
Calibration Table Last Updated: Mon Oct 26 12:12:53 2020



Method Name: M:\ZEUS\DATA\201023\Z1023W.M
Calibration Table Last Updated: Mon Oct 26 12:12:53 2020



Method Name: M:\ZEUS\DATA\201023\Z1023W.M
Calibration Table Last Updated: Mon Oct 26 12:12:53 2020



Method Name: M:\ZEUS\DATA\201023\Z1023W.M
Calibration Table Last Updated: Mon Oct 26 12:12:53 2020

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/23/20
Instrument: ZEUS
Initial Cal. Date: 10/23/20
Data File: 1023Z22.D

		Compound	MEAN	CCRF	%D		%Drift	
1	TM	Dichlorodifluoromethane	0.0362	0.0322	11	TM		
2	TM	Freon 114	0.0435	0.0506	16	TM		
3	TM**	Chloromethane	0.1895	0.1516	20	TM**		
4	TM*	Vinyl chloride	0.1659	0.1465	12	TM*		
5		Butane	0.0000	0.0003	0.00			
6	TML	Bromomethane	0.0357	0.0330	7.6	TML	13	
7	TMQ	Chloroethane	0.0524	0.0353	33	TMQ	1.3	
8	TM	Dichlorofluoromethane	0.2459	0.2130	13	TM		
9	TM	Trichlorofluoromethane	0.1900	0.1584	17	TM		
10	TM	Pentane	0.0000	0.0014	0.00	TM		
11	TM	1,2 Dichlorotrifluoroethane	0.0000	0.0003	0.00	TM		
12	TM	Acrolein	0.0111	0.0111	0.67	TM		
13	TM	Acetone	0.0393	0.0382	2.9	TM		
14	TM	Freon-113	0.1019	0.0901	12	TM		
15	TM*	1,1-DCE	0.1624	0.1584	2.4	TM*		
16	TM	2-Propanol	0.0000	0.0002	0.00	TM		
17	TM	Acetonitrile	0.0044	0.0044	0.94	TM		
18	TM	t-Butanol	0.0058	0.0065	12	TM		
19	TM	Methyl Acetate	0.0974	0.0849	13	TM		
20	TML	Iodomethane	0.1056	0.0820	22	TML	33	*NT
21	TM	Acrylonitrile	0.0458	0.0418	8.7	TM		
22	TML	Methylene chloride	0.1591	0.1375	14	TML	2.3	
23	TM	Carbon disulfide	0.1838	0.1757	4.4	TM		
24	TM	Methyl t-butyl ether (MtBE)	0.2928	0.2659	9.2	TM		
25	TM	Trans-1,2-DCE	0.1609	0.1594	0.94	TM		
26	TM	Hexane	0.0000	0.0008	0.00	TM		
27	TM	Diisopropyl Ether	0.3491	0.3138	10	TM		
28	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.0000	0.0001	0.00	TM**		
29	TM**	1,1-DCA	0.2058	0.2086	1.3	TM**		
30	TM	Vinyl Acetate	0.1596	0.2145	34	TM		*NT
31	TM	Ethyl tert Butyl Ether	0.3209	0.2860	11	TM		
32	TM	MEK (2-Butanone)	0.0551	0.0585	6.1	TM		
33	TM	Cis-1,2-DCE	0.1908	0.1828	4.2	TM		
34	TM	2,2-Dichloropropane	0.1656	0.1500	9.4	TM		
35	TM	2-Methylpentane	0.0000	0.0228	0.00	TM		
36	TM	3-Methylpentane	0.0000	0.0607	0.00	TM		
37	TM*	Chloroform	0.2107	0.2047	2.9	TM*		
38	TM	Bromochloromethane	0.0998	0.0974	2.4	TM		
39	TM	1,1,1-TCA	0.1799	0.1747	2.9	TM		
40	TM	Cyclohexane	0.1922	0.1681	13	TM		
		Average			8.2			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/23/20
Matrix: water Instrument: ZEUS
Cal. Date: 10/23/20
Data File: 1023Z22.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	1,1-Dichloropropene	0.1555	0.1568	0.86	TM	
42	TM	2,2,4-Trimethylpentane	0.3737	0.3131	16	TM	
43	TM	Carbon Tetrachloride	0.1517	0.1457	4.0	TM	
44	TM	Tert Amyl Methyl Ether	0.2924	0.2665	8.9	TM	
45	TM	Methylcyclopentane	0.0000	0.0161	0.00	TM	
46	TM	1,2-DCA	0.1498	0.1420	5.2	TM	
47	TM	Benzene	0.5011	0.4933	1.6	TM	
48	TM	TCE	0.1588	0.1598	0.62	TM	
49	TM	2-Pentanone	0.0893	0.0906	1.5	TM	
50	TM*	1,2-Dichloropropane	0.1239	0.1210	2.3	TM*	
51	TM	Bromodichloromethane	0.1490	0.1417	4.9	TM	
52	TM	Methyl Cyclohexane	0.1977	0.1779	10.0	TM	
53	TM	Dibromomethane	0.1037	0.1019	1.7	TM	
54	TM	MIBK (methyl isobutyl ketone)	0.1061	0.1094	3.1	TM	
55	TM	1-Bromo-2-chloroethane	0.0239	0.0214	10	TM	
56	TM	2-Chloroethyl vinyl ether	0.0000	0.0001	0.00	TM	
57	TM	Cis-1,3-Dichloropropene	0.1886	0.1871	0.77	TM	
58	TM*	Toluene	0.5444	0.5312	2.4	TM*	
59	TM	Trans-1,3-Dichloropropene	0.1560	0.1543	1.1	TM	
60	TM	1,1,2-TCA	0.1096	0.1086	0.93	TM	
61	TM	2-Hexanone	0.0759	0.0774	2.0	TM	
62	TM	1,2-EDB	0.1516	0.1561	3.0	TM	
63	TM	Tetrachloroethene	0.2199	0.2184	0.67	TM	
64	TML	1-Chlorohexane	0.2642	0.2125	20	TML	9.6
65	TM	1,1,1,2-Tetrachloroethane	0.1613	0.1621	0.51	TM	
66	TM	m&p-Xylene	0.6035	0.5898	2.3	TM	
67	TM	o-Xylene	0.6288	0.6032	4.1	TM	
68	TM	Styrene	0.5322	0.5204	2.2	TM	
69	TM	1,3-Dichloropropane	0.2365	0.2355	0.44	TM	
70	TM	Dibromochloromethane	0.1592	0.1565	1.7	TM	
71	TM**	Chlorobenzene	0.4894	0.4819	1.5	TM**	
72	TM*	Ethylbenzene	0.7823	0.7638	2.4	TM*	
73	TM**	Bromoform	0.1190	0.1127	5.3	TM**	
74	TM	Isopropylbenzene	1.374	1.342	2.4	TM	
75	TM**	1,1,2,2-Tetrachloroethane	0.3093	0.3101	0.25	TM**	
76	TM	1,2,3-Trichloropropane	0.1022	0.1023	0.05	TM	
77	TM	t-1,4-Dichloro-2-Butene	0.0759	0.0633	17	TM	
78	TM	Bromobenzene	0.5923	0.5717	3.5	TM	
79	TM	n-Propylbenzene	1.605	1.564	2.5	TM	
80	TM	4-Ethyltoluene	1.390	1.245	10	TM	
		Average			3.9		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/23/20
Instrument: ZEUS
Cal. Date: 10/23/20
Data File: 1023Z22.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	2-Chlorotoluene	0.9921	0.9184	7.4	TM	
82	TM	1,3,5-Trimethylbenzene	1.185	1.161	2.0	TM	
83	TM	4-Chlorotoluene	1.102	1.067	3.1	TM	
84	TM	Tert-Butylbenzene	1.053	1.025	2.6	TM	
85	TM	1,2,4-Trimethylbenzene	1.188	1.165	2.0	TM	
86	TM	Sec-Butylbenzene	1.566	1.513	3.4	TM	
87	TM	p-Isopropyltoluene	1.346	1.340	0.48	TM	
88	TM	Benzyl Chloride	0.5394	0.4519	16	TM	
89	TM	1,3-DCB	0.7467	0.7319	2.0	TM	
90	TM	1,4-DCB	0.7523	0.7449	0.99	TM	
91	TM	n-Butylbenzene	1.200	1.148	4.4	TM	
92	TM	1,2-DCB	0.6990	0.6860	1.9	TM	
93	TML	Hexachloroethane	0.1956	0.1761	10.0	TML	16
94	TM	1,2-Dibromo-3-chloropropane	0.0868	0.0858	1.1	TM	
95	TM	1,2,4-Trichlorobenzene	0.5187	0.5165	0.42	TM	
96	TM	Hexachlorobutadiene	0.2340	0.2249	3.9	TM	
97	TM	Naphthalene	1.205	1.228	1.9	TM	
98	TM	1,2,3-Trichlorobenzene	0.4610	0.4625	0.33	TM	
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			3.6		

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z22.D Vial: 17
Acq On : 23 Oct 20 20:07 Operator: LP,DG,CH
Sample : (SS)10ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2348020	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1771923	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	1042867	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.45	111	630334	25.58	ppb	0.00
Spiked Amount 25.000			Recovery =	102.304%		
48) 1,2-DCA-D4(S)	4.72	65	592332	25.40	ppb	0.00
Spiked Amount 25.000			Recovery =	101.584%		
69) Toluene-D8(S)	6.39	98	2302660	25.79	ppb	0.00
Spiked Amount 25.000			Recovery =	103.164%		
77) 4-Bromofluorobenzene(S)	8.77	95	860714	25.33	ppb	0.00
Spiked Amount 25.000			Recovery =	101.336%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.16	87	30200	8.87	ppb	97
4) Freon 114	1.26	85	47522	11.64	ppb	93
5) Chloromethane	1.34	50	142366	8.00	ppb	100
6) Vinyl chloride	1.39	62	137577	8.83	ppb	99
9) Bromomethane	1.66	94	31021	11.27	ppb	98
10) Chloroethane	1.74	64	33185	9.87	ppb	92
11) Dichlorofluoromethane	1.94	67	200040	8.66	ppb	98
12) Trichlorofluoromethane	1.98	101	148728	8.33	ppb	99
16) Acrolein	2.39	55	130730	125.84	ppb	100
17) Acetone	2.54	43	179328	48.56	ppb	98
18) Freon-113	2.49	101	84654	8.85	ppb	95
19) 1,1-DCE	2.47	61	148778	9.76	ppb	94
21) Acetonitrile	2.77	40	51940	126.17	ppb	97
22) t-Butanol	3.08	59	76864	140.02	ppb	100
23) Methyl Acetate	2.85	43	79783	8.72	ppb	100
24) Iodomethane	2.59	142	76974	6.70	ppb	96
25) Acrylonitrile	3.13	52	39252	9.13	ppb	96
26) Methylene chloride	2.91	84	129171	10.23	ppb	99
27) Carbon disulfide	2.65	76	164992	9.56	ppb	100
28) Methyl t-butyl ether (MtBE	3.19	73	249705	9.08	ppb	100
29) Trans-1,2-DCE	3.16	61	149728	9.91	ppb	98
31) Diisopropyl Ether	3.63	45	294719	8.99	ppb	97
33) 1,1-DCA	3.53	63	195892	10.13	ppb	97
34) Vinyl Acetate	3.60	43	201494	13.44	ppb	99
35) Ethyl tert Butyl Ether	3.95	59	268589	8.91	ppb	97
36) MEK (2-Butanone)	4.06	43	274594	53.04	ppb	100
37) Cis-1,2-DCE	4.03	61	171708	9.58	ppb	98
38) 2,2-Dichloropropane	4.03	77	140869	9.06	ppb	94
41) Chloroform	4.31	83	192227	9.71	ppb	98
42) Bromochloromethane	4.23	49	91487	9.76	ppb	95
44) 1,1,1-TCA	4.47	97	164110	9.71	ppb	99
45) Cyclohexane	4.52	56	157883	8.75	ppb	97
46) 1,1-Dichloropropene	4.61	75	147288	10.09	ppb	97
47) 2,2,4-Trimethylpentane	4.88	57	294035	8.38	ppb	99
49) Carbon Tetrachloride	4.61	117	136841	9.60	ppb	98
50) Tert Amyl Methyl Ether	4.90	73	250273	9.11	ppb	99
52) 1,2-DCA	4.79	62	133342	9.48	ppb	98
53) Benzene	4.78	78	463312	9.84	ppb	99
54) TCE	5.33	130	150062	10.06	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z22.D Vial: 17
Acq On : 23 Oct 20 20:07 Operator: LP,DG,CH
Sample : (SS)10ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
55)	2-Pentanone	5.49	43	1063184	126.83 ppb	100
56)	1,2-Dichloropropane	5.52	63	113676	9.77 ppb	99
57)	Bromodichloromethane	5.75	83	133108	9.51 ppb	96
58)	Methyl Cyclohexane	5.51	83	167114	9.00 ppb	95
59)	Dibromomethane	5.61	174	95731	9.83 ppb	92
60)	MIBK (methyl isobutyl ket	6.29	43	513821	51.57 ppb	100
61)	1-Bromo-2-chloroethane	6.02	144	20082	8.96 ppb	91
63)	Cis-1,3-Dichloropropene	6.14	75	175720	9.92 ppb	97
64)	Toluene	6.44	91	498893	9.76 ppb	100
65)	Trans-1,3-Dichloropropene	6.63	75	144943	9.89 ppb	99
66)	1,1,2-TCA	6.79	97	101997	9.91 ppb	99
67)	2-Hexanone	7.03	43	363308	50.98 ppb	98
70)	1,2-EDB	7.24	107	110672	10.30 ppb	97
71)	Tetrachloroethene	6.93	166	154802	9.93 ppb	97
72)	1-Chlorohexane	7.69	91	150581	9.04 ppb	99
73)	1,1,1,2-Tetrachloroethane	7.78	131	114881	10.05 ppb	97
74)	m&p-Xylene	7.92	91	835998	19.55 ppb	99
75)	o-Xylene	8.28	91	427504	9.59 ppb	98
76)	Styrene	8.29	104	368847	9.78 ppb	100
78)	1,3-Dichloropropane	6.94	76	166883	9.96 ppb	98
79)	Dibromochloromethane	7.14	129	110891	9.83 ppb	99
80)	Chlorobenzene	7.70	112	341567	9.85 ppb	100
81)	Ethylbenzene	7.81	91	541355	9.76 ppb	99
82)	Bromoform	8.45	173	79876	9.47 ppb	100
84)	Isopropylbenzene	8.64	105	559806	9.76 ppb	99
85)	1,1,2,2-Tetrachloroethane	8.90	83	129359	10.02 ppb	99
86)	1,2,3-Trichloropropane	8.94	110	42670	10.00 ppb	97
87)	t-1,4-Dichloro-2-Butene	8.96	53	26401	8.34 ppb	95
88)	Bromobenzene	8.91	77	238496	9.65 ppb	98
89)	n-Propylbenzene	9.03	91	652458	9.75 ppb	99
90)	4-Ethyltoluene	9.14	105	519200	8.96 ppb	100
91)	2-Chlorotoluene	9.10	91	383093	9.26 ppb	98
92)	1,3,5-Trimethylbenzene	9.20	105	484231	9.80 ppb	100
93)	4-Chlorotoluene	9.20	91	445291	9.69 ppb	98
94)	Tert-Butylbenzene	9.52	119	427510	9.74 ppb	94
95)	1,2,4-Trimethylbenzene	9.56	105	485802	9.80 ppb	99
96)	Sec-Butylbenzene	9.73	105	631296	9.66 ppb	99
97)	p-Isopropyltoluene	9.87	119	558947	9.95 ppb	99
98)	Benzyl Chloride	10.03	91	188515	8.38 ppb	98
99)	1,3-DCB	9.82	146	305326	9.80 ppb	99
100)	1,4-DCB	9.90	146	310717	9.90 ppb	98
101)	n-Butylbenzene	10.27	91	478789	9.56 ppb	99
102)	1,2-DCB	10.26	146	286176	9.81 ppb	99
103)	Hexachloroethane	10.52	201	73450	8.43 ppb	91
104)	1,2-Dibromo-3-chloropropan	11.01	157	35811	9.89 ppb	97
105)	1,2,4-Trichlorobenzene	11.84	180	215451	9.96 ppb	100
106)	Hexachlorobutadiene	12.03	225	93826	9.61 ppb	98
107)	Naphthalene	12.07	128	512422	10.19 ppb	100
108)	1,2,3-Trichlorobenzene	12.32	180	192939	10.03 ppb	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

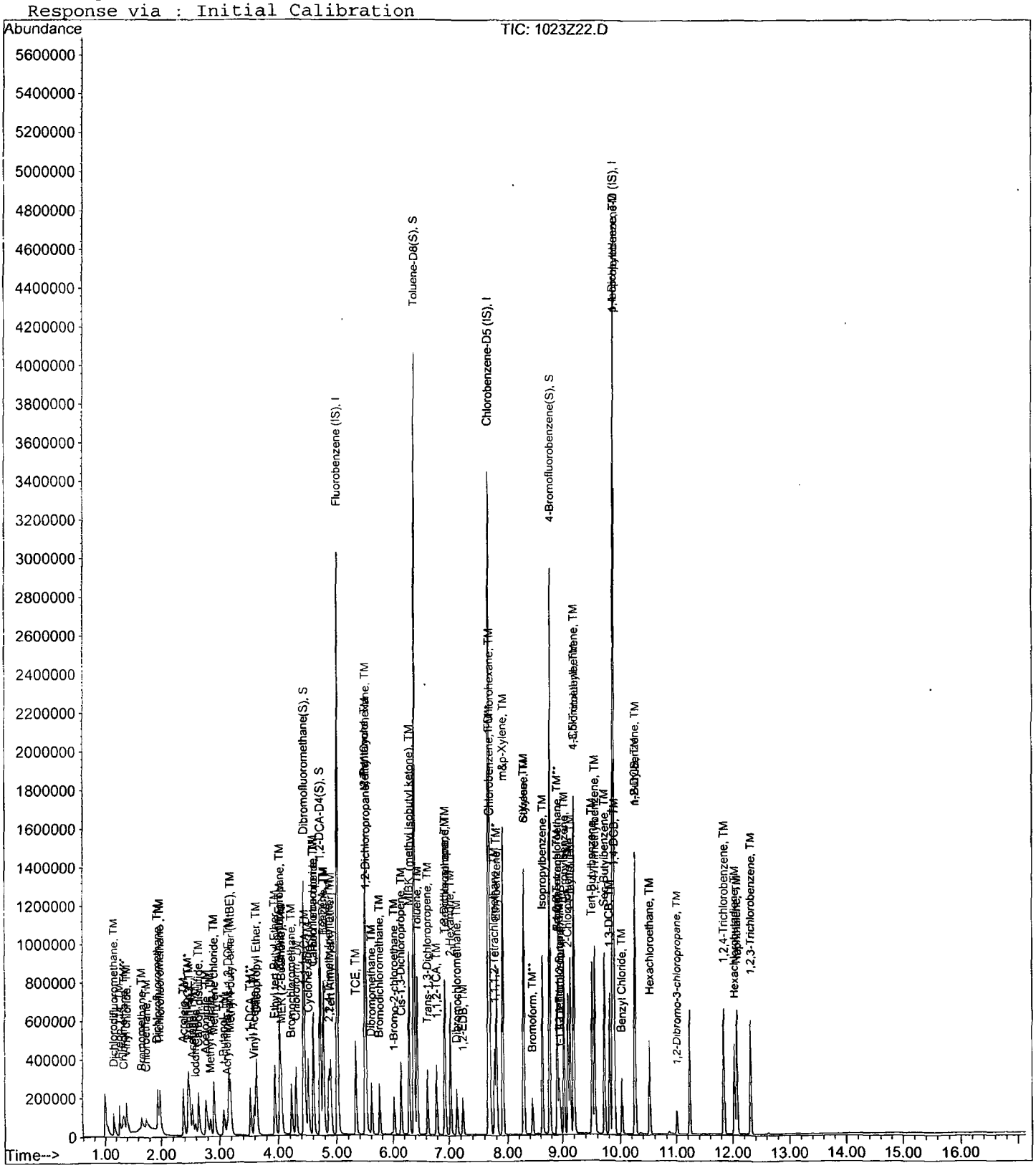
Data File : M:\ZEUS\DATA\201023\1023Z22.D
Acq On : 23 Oct 20 20:07
Sample : (SS)10ug/L VOC STD 10/23/20
Misc :

Vial: 17
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 26 12:13 2020

Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/24/20
Instrument: ZEUS
Initial Cal. Date: 10/23/20
Data File: 1023Z32.D

		Compound	MEAN	CCRF	%D		%Drift	
1	I	Fluorobenzene (IS)	ISTD			I		
2	TM	Dichiorodifluoromethane	0.0362	0.0370	2.0	TM		
3	TM	Freon 114	0.0435	0.0445	2.3	TM		
4	TM**	Chloromethane	0.1895	0.1697	10	TM**		
5	TM*	Vinyl chloride	0.1659	0.1601	3.5	TM*		
6		Butane	0.0000	0.0003	0.00			
7	TML	Bromomethane	0.0357	0.0396	11	TML	39	*NT
8	TMQ	Chloroethane	0.0524	0.0484	7.7	TMQ	51	*NT
9	TM	Dichlorofluoromethane	0.2459	0.2575	4.7	TM		
10	TM	Trichlorofluoromethane	0.1900	0.1978	4.1	TM		
11	TM	Pentane	0.0000	0.0022	0.00	TM		
12	TM	1,2 Dichlorotrifluoroethane	0.0000	0.0001	0.00	TM		
13	TM	Acrolein	0.0111	0.0101	8.9	TM		
14	TM	Acetone	0.0393	0.0347	12	TM		
15	TM	Freon-113	0.1019	0.0997	2.1	TM		
16	TM*	1,1-DCE	0.1624	0.1536	5.4	TM*		
17	TM	2-Propanol	0.0000	0.0001	0.00	TM		
18	TM	Acetonitrile	0.0044	0.0041	5.8	TM		
19	TM	t-Butanol	0.0058	0.0055	5.6	TM		
20	TM	Methyl Acetate	0.0974	0.0869	11	TM		
21	TML	Iodomethane	0.1056	0.0857	19	TML	31	*NT
22	TM	Acrylonitrile	0.0458	0.0424	7.3	TM		
23	TML	Methylene chloride	0.1591	0.1383	13	TML	2.9	
24	TM	Carbon disulfide	0.1838	0.1716	6.6	TM		
25	TM	Methyl t-butyl ether (MtBE)	0.2928	0.2840	3.0	TM		
26	TM	Trans-1,2-DCE	0.1609	0.1527	5.1	TM		
27	TM	Hexane	0.0000	0.0008	0.00	TM		
28	TM	Diisopropyl Ether	0.3491	0.3353	3.9	TM		
29	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.0000	0.0001	0.00	TM**		
30	TM**	1,1-DCA	0.2058	0.2004	2.6	TM**		
31	TM	Vinyl Acetate	0.1596	0.1264	21	TM		*NT
32	TM	Ethyl tert Butyl Ether	0.3209	0.3080	4.0	TM		
33	TM	MEK (2-Butanone)	0.0551	0.0522	5.3	TM		
34	TM	Cis-1,2-DCE	0.1908	0.1793	6.0	TM		
35	TM	2,2-Dichloropropane	0.1656	0.1357	18	TM		
36	TM	2-Methylpentane	0.0000	0.0192	0.00	TM		
37	TM	3-Methylpentane	0.0000	0.0659	0.00	TM		
38	TM*	Chloroform	0.2107	0.2063	2.1	TM*		
39	TM	Bromochloromethane	0.0998	0.0961	3.7	TM		
40	S	Dibromofluoromethane(S)	0.2624	0.2708	3.2	S		
		Average			5.6			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/24/20
Matrix: water Instrument: ZEUS
Cal. Date: 10/23/20
Data File: 1023Z32.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	1,1,1-TCA	0.1799	0.1734	3.6	TM	
42	TM	Cyclohexane	0.1922	0.1763	8.3	TM	
43	TM	1,1-Dichloropropene	0.1555	0.1472	5.3	TM	
44	TM	2,2,4-Trimethylpentane	0.3737	0.3418	8.5	TM	
45	S	1,2-DCA-D4(S)	0.2483	0.2497	0.54	S	
46	TM	Carbon Tetrachloride	0.1517	0.1427	6.0	TM	
47	TM	Tert Amyl Methyl Ether	0.2924	0.2807	4.0	TM	
48	TM	Methylcyclopentane	0.0000	0.0168	0.00	TM	
49	TM	1,2-DCA	0.1498	0.1379	7.9	TM	
50	TM	Benzene	0.5011	0.4918	1.8	TM	
51	TM	TCE	0.1588	0.1583	0.33	TM	
52	TM	2-Pentanone	0.0893	0.0806	9.7	TM	
53	TM*	1,2-Dichloropropane	0.1239	0.1207	2.6	TM*	
54	TM	Bromodichloromethane	0.1490	0.1413	5.2	TM	
55	TM	Methyl Cyclohexane	0.1977	0.1872	5.3	TM	
56	TM	Dibromomethane	0.1037	0.0959	7.5	TM	
57	TM	MIBK (methyl isobutyl ketone)	0.1061	0.1008	5.0	TM	
58	TM	1-Bromo-2-chloroethane	0.0239	0.0225	5.7	TM	
59	TM	2-Chloroethyl vinyl ether	0.0000	0.0001	0.00	TM	
60	TM	Cis-1,3-Dichloropropene	0.1886	0.1796	4.8	TM	
61	TM*	Toluene	0.5444	0.5271	3.2	TM*	
62	TM	Trans-1,3-Dichloropropene	0.1560	0.1459	6.4	TM	
63	TM	1,1,2-TCA	0.1096	0.1079	1.6	TM	
64	TM	2-Hexanone	0.0759	0.0699	7.8	TM	
65	I	Chlorobenzene-D5 (IS)	ISTD			I	
66	S	Toluene-D8(S)	1.260	1.307	3.7	S	
67	TM	1,2-EDB	0.1516	0.1510	0.38	TM	
68	TM	Tetrachloroethene	0.2199	0.2036	7.4	TM	
69	TML	1-Chlorohexane	0.2642	0.2228	16	TML	5.3
70	TM	1,1,1,2-Tetrachloroethane	0.1613	0.1581	2.0	TM	
71	TM	m&p-Xylene	0.6035	0.5886	2.5	TM	
72	TM	o-Xylene	0.6288	0.6036	4.0	TM	
73	TM	Styrene	0.5322	0.5295	0.50	TM	
74	S	4-Bromofluorobenzene(S)	0.4793	0.4819	0.54	S	
75	TM	1,3-Dichloropropane	0.2365	0.2326	1.6	TM	
76	TM	Dibromochloromethane	0.1592	0.1502	5.6	TM	
77	TM**	Chlorobenzene	0.4894	0.4895	0.01	TM**	
78	TM*	Ethylbenzene	0.7823	0.7580	3.1	TM*	
79	TM**	Bromoform	0.1190	0.1011	15	TM**	
80	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
		Average			4.6		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/24/20
Matrix: water Instrument: ZEUS
Cal. Date: 10/23/20
Data File: 1023Z32.D

		Compound	MEAN	CCRF	%D		%Drift	
81	TM	Isopropylbenzene	1.374	1.373	0.11	TM		
82	TM**	1,1,2,2-Tetrachloroethane	0.3093	0.2930	5.3	TM**		
83	TM	1,2,3-Trichloropropane	0.1022	0.1005	1.7	TM		
84	TM	t-1,4-Dichloro-2-Butene	0.0759	0.0640	16	TM		
85	TM	Bromobenzene	0.5923	0.5753	2.9	TM		
86	TM	n-Propylbenzene	1.605	1.597	0.45	TM		
87	TM	4-Ethyltoluene	1.390	1.397	0.49	TM		
88	TM	2-Chlorotoluene	0.9921	0.9473	4.5	TM		
89	TM	1,3,5-Trimethylbenzene	1.185	1.178	0.53	TM		
90	TM	4-Chlorotoluene	1.102	1.088	1.2	TM		
91	TM	Tert-Butylbenzene	1.053	1.055	0.26	TM		
92	TM	1,2,4-Trimethylbenzene	1.188	1.186	0.18	TM		
93	TM	Sec-Butylbenzene	1.566	1.562	0.28	TM		
94	TM	p-Isopropyltoluene	1.346	1.351	0.33	TM		
95	TM	Benzyl Chloride	0.5394	0.3963	27	TM		*NT
96	TM	1,3-DCB	0.7467	0.7424	0.59	TM		
97	TM	1,4-DCB	0.7523	0.7566	0.56	TM		
98	TM	n-Butylbenzene	1.200	1.161	3.2	TM		
99	TM	1,2-DCB	0.6990	0.7030	0.57	TM		
100	TML	Hexachloroethane	0.1956	0.1656	15	TML	20	
101	TM	1,2-Dibromo-3-chloropropane	0.0868	0.0771	11	TM		
102	TM	1,2,4-Trichlorobenzene	0.5187	0.4866	6.2	TM		
103	TM	Hexachlorobutadiene	0.2340	0.2027	13	TM		
104	TM	Naphthalene	1.205	1.194	0.97	TM		
105	TM	1,2,3-Trichlorobenzene	0.4610	0.4321	6.3	TM		
106								
107								
108								
109								
110								
111								
112								
113								
114								
115								
116								
117								
118								
119								
120								
		Average			4.7			

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z32.D Vial: 27
Acq On : 24 Oct 20 00:00 Operator: LP,DG,CH
Sample : 201023A CCV 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:21 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2156062	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1625822	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	938089	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.44	111	583875	25.80	ppb	0.00
Spiked Amount 25.000			Recovery =	103.200%		
48) 1,2-DCA-D4(S)	4.72	65	538297	25.13	ppb	0.00
Spiked Amount 25.000			Recovery =	100.540%		
69) Toluene-D8(S)	6.38	98	2124155	25.93	ppb	0.00
Spiked Amount 25.000			Recovery =	103.720%		
77) 4-Bromofluorobenzene(S)	8.77	95	783517	25.13	ppb	0.00
Spiked Amount 25.000			Recovery =	100.536%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.16	87	31881	10.20	ppb	99
4) Freon 114	1.26	85	38363	10.23	ppb	89
5) Chloromethane	1.35	50	146312	8.95	ppb	98
6) Vinyl chloride	1.39	62	138047	9.65	ppb	98
9) Bromomethane	1.66	94	34178	13.91	ppb	92
10) Chloroethane	1.75	64	41704	15.12	ppb	93
11) Dichlorofluoromethane	1.95	67	222041	10.47	ppb	96
12) Trichlorofluoromethane	1.98	101	170621	10.41	ppb	98
16) Acrolein	2.39	55	108654	113.90	ppb	97
17) Acetone	2.54	43	149702	44.15	ppb	99
18) Freon-113	2.49	101	86012	9.79	ppb	98
19) 1,1-DCE	2.47	61	132478	9.46	ppb	97
21) Acetonitrile	2.77	40	44529	117.80	ppb	95
22) t-Butanol	3.07	59	59464	117.97	ppb	97
23) Methyl Acetate	2.85	43	74962	8.92	ppb	96
24) Iodomethane	2.59	142	73890	6.95	ppb	99
25) Acrylonitrile	3.13	52	36579	9.27	ppb	98
26) Methylene chloride	2.91	84	119272	10.29	ppb	96
27) Carbon disulfide	2.65	76	148032	9.34	ppb	99
28) Methyl t-butyl ether (MtBE	3.19	73	244962	9.70	ppb	99
29) Trans-1,2-DCE	3.16	61	131709	9.49	ppb	97
31) Diisopropyl Ether	3.63	45	289197	9.61	ppb	97
33) 1,1-DCA	3.53	63	172869	9.74	ppb	98
34) Vinyl Acetate	3.60	43	108973	7.92	ppb	97
35) Ethyl tert Butyl Ether	3.94	59	265637	9.60	ppb	97
36) MEK (2-Butanone)	4.06	43	224974	47.33	ppb	99
37) Cis-1,2-DCE	4.03	61	154630	9.40	ppb	94
38) 2,2-Dichloropropane	4.04	77	117009	8.19	ppb	99
41) Chloroform	4.31	83	177958	9.79	ppb	99
42) Bromochloromethane	4.23	49	82902	9.63	ppb	95
44) 1,1,1-TCA	4.47	97	149528	9.64	ppb	98
45) Cyclohexane	4.52	56	152066	9.17	ppb	99
46) 1,1-Dichloropropene	4.61	75	126980	9.47	ppb	98
47) 2,2,4-Trimethylpentane	4.88	57	294770	9.15	ppb	99
49) Carbon Tetrachloride	4.61	117	123031	9.40	ppb	100
50) Tert Amyl Methyl Ether	4.90	73	242116	9.60	ppb	98
52) 1,2-DCA	4.79	62	118961	9.21	ppb	94
53) Benzene	4.78	78	424169	9.82	ppb	98
54) TCE	5.33	130	136496	9.97	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z32.D Vial: 27
Acq On : 24 Oct 20 00:00 Operator: LP,DG,CH
Sample : 201023A CCV 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:21 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.49	43	869138	112.91	ppb		98
56)	1,2-Dichloropropane	5.52	63	104067	9.74	ppb		100
57)	Bromodichloromethane	5.75	83	121891	9.48	ppb		99
58)	Methyl Cyclohexane	5.51	83	161464	9.47	ppb		98
59)	Dibromomethane	5.61	174	82675	9.25	ppb		86
60)	MIBK (methyl isobutyl ket	6.29	43	434593	47.50	ppb		99
61)	1-Bromo-2-chloroethane	6.02	144	19409	9.43	ppb		94
63)	Cis-1,3-Dichloropropene	6.14	75	154886	9.52	ppb		98
64)	Toluene	6.44	91	454579	9.68	ppb		99
65)	Trans-1,3-Dichloropropene	6.63	75	125851	9.36	ppb		98
66)	1,1,2-TCA	6.79	97	93064	9.84	ppb		99
67)	2-Hexanone	7.03	43	301620	46.09	ppb		100
70)	1,2-EDB	7.24	107	98206	9.96	ppb		98
71)	Tetrachloroethene	6.93	166	132395	9.26	ppb		97
72)	1-Chlorohexane	7.69	91	144921	9.47	ppb		98
73)	1,1,1,2-Tetrachloroethane	7.78	131	102831	9.80	ppb		100
74)	m&p-Xylene	7.92	91	765529	19.51	ppb		98
75)	o-Xylene	8.28	91	392542	9.60	ppb		96
76)	Styrene	8.29	104	344340	9.95	ppb		98
78)	1,3-Dichloropropane	6.94	76	151284	9.84	ppb		100
79)	Dibromochloromethane	7.14	129	97699	9.44	ppb		96
80)	Chlorobenzene	7.70	112	318332	10.00	ppb		98
81)	Ethylbenzene	7.81	91	492930	9.69	ppb		99
82)	Bromoform	8.45	173	65731	8.49	ppb		97
84)	Isopropylbenzene	8.64	105	515176	9.99	ppb		97
85)	1,1,2,2-Tetrachloroethane	8.90	83	109948	9.47	ppb		97
86)	1,2,3-Trichloropropane	8.94	110	37708	9.83	ppb		97
87)	t-1,4-Dichloro-2-Butene	8.96	53	24009	8.43	ppb		99
88)	Bromobenzene	8.91	77	215882	9.71	ppb		99
89)	n-Propylbenzene	9.03	91	599429	9.96	ppb		100
90)	4-Ethyltoluene	9.14	105	524057	10.05	ppb		98
91)	2-Chlorotoluene	9.10	91	355478	9.55	ppb		98
92)	1,3,5-Trimethylbenzene	9.20	105	442212	9.95	ppb		100
93)	4-Chlorotoluene	9.20	91	408288	9.88	ppb		99
94)	Tert-Butylbenzene	9.51	119	395989	10.03	ppb		95
95)	1,2,4-Trimethylbenzene	9.56	105	444940	9.98	ppb		99
96)	Sec-Butylbenzene	9.73	105	585952	9.97	ppb		98
97)	p-Isopropyltoluene	9.87	119	506887	10.03	ppb		99
98)	Benzyl Chloride	10.03	91	148700	7.35	ppb		99
99)	1,3-DCB	9.82	146	278557	9.94	ppb		100
100)	1,4-DCB	9.90	146	283891	10.06	ppb		99
101)	n-Butylbenzene	10.27	91	435811	9.68	ppb		100
102)	1,2-DCB	10.26	146	263792	10.06	ppb		100
103)	Hexachloroethane	10.52	201	62156	8.00	ppb	#	87
104)	1,2-Dibromo-3-chloropropan	11.02	157	28929	8.88	ppb		94
105)	1,2,4-Trichlorobenzene	11.84	180	182592	9.38	ppb		99
106)	Hexachlorobutadiene	12.03	225	76062	8.66	ppb		99
107)	Naphthalene	12.07	128	447904	9.90	ppb		99
108)	1,2,3-Trichlorobenzene	12.32	180	162121	9.37	ppb		99

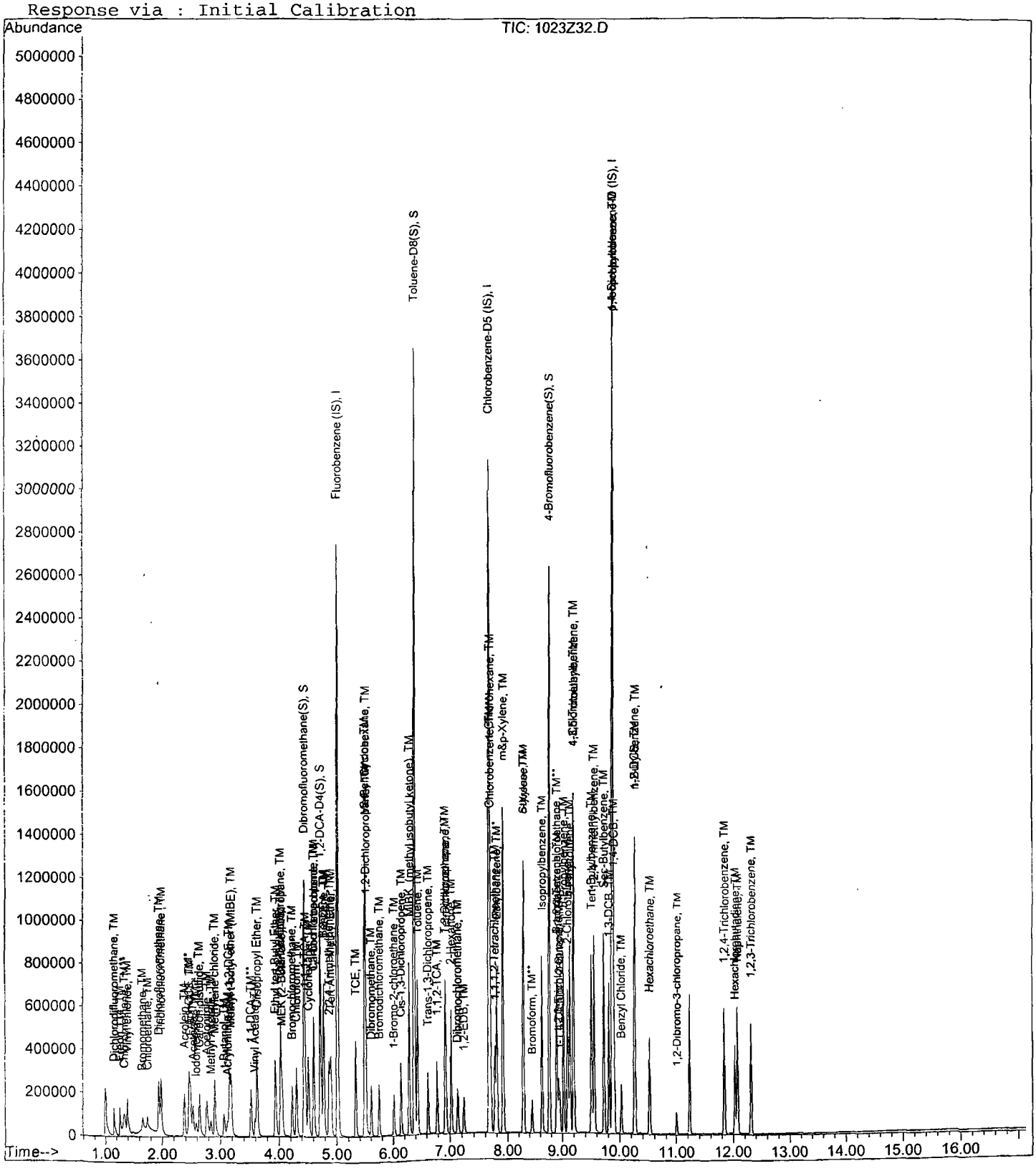
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z32.D Vial: 27
Acq On : 24 Oct 20 00:00 Operator: LP,DG,CH
Sample : 201023A CCV 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:21 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/24/20
Matrix: water Instrument: ZEUS
Initial Cal. Date: 10/23/20
Data File: 1023Z52.D

		Compound	MEAN	CCRF	%D		%Drift	
1	I	Fluorobenzene (IS)	ISTD			I		
2	TM	Dichlorodifluoromethane	0.0362	0.0322	11	TM		
3	TM	Freon 114	0.0435	0.0389	11	TM		
4	TM**	Chloromethane	0.1895	0.1499	21	TM**		
5	TM*	Vinyl chloride	0.1659	0.1422	14	TM*		
6		Butane	0.0000	0.0003	0.00			
7	TML	Bromomethane	0.0357	0.0411	15	TML	45	
8	TMQ	Chloroethane	0.0524	0.0685	31	TMQ	134	*NT
9	TM	Dichlorofluoromethane	0.2459	0.2345	4.6	TM		
10	TM	Trichlorofluoromethane	0.1900	0.1800	5.3	TM		
11	TM	Pentane	0.0000	0.0020	0.00	TM		
12	TM	Acrolein	0.0111	0.0079	28	TM		
13	TM	Acetone	0.0393	0.0293	26	TM		
14	TM	Freon-113	0.1019	0.0862	15	TM		
15	TM*	1,1-DCE	0.1624	0.1409	13	TM*		
16	TM	2-Propanol	0.0000	0.0001	0.00	TM		
17	TM	Acetonitrile	0.0044	0.0037	16	TM		
18	TM	t-Butanol	0.0058	0.0038	34	TM		
19	TM	Methyl Acetate	0.0974	0.0725	26	TM		
20	TML	Iodomethane	0.1056	0.0862	18	TML	30	
21	TM	Acrylonitrile	0.0458	0.0372	19	TM		
22	TML	Methylene chloride	0.1591	0.1270	20	TML	6.0	
23	TM	Carbon disulfide	0.1838	0.1613	12	TM		
24	TM	Methyl t-butyl ether (MtBE)	0.2928	0.2453	16	TM		
25	TM	Trans-1,2-DCE	0.1609	0.1392	14	TM		
26	TM	Hexane	0.0000	0.0003	0.00	TM		
27	TM	Diisopropyl Ether	0.3491	0.2919	16	TM		
28	TM**	1,1-DCA	0.2058	0.1841	11	TM**		
29	TM	Vinyl Acetate	0.1596	0.0701	56	TM		*NT
30	TM	Ethyl tert Butyl Ether	0.3209	0.2627	18	TM		
31	TM	MEK (2-Butanone)	0.0551	0.0407	26	TM		
32	TM	Cis-1,2-DCE	0.1908	0.1632	14	TM		
33	TM	2,2-Dichloropropane	0.1656	0.1061	36	TM		
34	TM	2-Methylpentane	0.0000	0.0136	0.00	TM		
35	TM	3-Methylpentane	0.0000	0.0568	0.00	TM		
36	TM*	Chloroform	0.2107	0.1915	9.1	TM*		
37	TM	Bromochloromethane	0.0998	0.0885	11	TM		
38	S	Dibromofluoromethane(S)	0.2624	0.2583	1.6	S		
39	TM	1,1,1-TCA	0.1799	0.1510	16	TM		
40	TM	Cyclohexane	0.1922	0.1555	19	TM		
		Average			15.5			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/24/20
Matrix: water Instrument: ZEUS
Cal. Date: 10/23/20
Data File: 1023Z52.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	1,1-Dichloropropene	0.1555	0.1330	14	TM	
42	TM	2,2,4-Trimethylpentane	0.3737	0.2741	27	TM	
43	S	1,2-DCA-D4(S)	0.2483	0.2444	1.6	S	
44	TM	Carbon Tetrachloride	0.1517	0.1131	25	TM	
45	TM	Tert Amyl Methyl Ether	0.2924	0.2404	18	TM	
46	TM	Methylcyclopentane	0.0000	0.0146	0.00	TM	
47	TM	1,2-DCA	0.1498	0.1253	16	TM	
48	TM	Benzene	0.5011	0.4512	10.0	TM	
49	TM	TCE	0.1588	0.1318	17	TM	
50	TM	2-Pentanone	0.0893	0.0636	29	TM	
51	TM*	1,2-Dichloropropane	0.1239	0.1082	13	TM*	
52	TM	Bromodichloromethane	0.1490	0.1210	19	TM	
53	TM	Methyl Cyclohexane	0.1977	0.1634	17	TM	
54	TM	Dibromomethane	0.1037	0.0687	34	TM	
55	TM	MIBK (methyl isobutyl ketone)	0.1061	0.0810	24	TM	
56	TM	1-Bromo-2-chloroethane	0.0239	0.0173	28	TM	
57	TM	2-Chloroethyl vinyl ether	0.0000	0.0001	0.00	TM	
58	TM	Cis-1,3-Dichloropropene	0.1886	0.1515	20	TM	
59	TM*	Toluene	0.5444	0.4818	11	TM*	
60	TM	Trans-1,3-Dichloropropene	0.1560	0.1239	21	TM	
61	TM	1,1,2-TCA	0.1096	0.0959	13	TM	
62	TM	2-Hexanone	0.0759	0.0557	27	TM	
63	I	Chlorobenzene-D5 (IS)	ISTD			I	
64	S	Toluene-D8(S)	1.260	1.367	8.6	S	
65	TM	1,2-EDB	0.1516	0.1345	11	TM	
66	TM	Tetrachloroethene	0.2199	0.1516	31	TM	
67	TML	1-Chlorohexane	0.2642	0.2079	21	TML	11
68	TM	1,1,1,2-Tetrachloroethane	0.1613	0.1275	21	TM	
69	TM	m&p-Xylene	0.6035	0.5690	5.7	TM	
70	TM	o-Xylene	0.6288	0.5891	6.3	TM	
71	TM	Styrene	0.5322	0.4896	8.0	TM	
72	S	4-Bromofluorobenzene(S)	0.4793	0.4990	4.1	S	
73	TM	1,3-Dichloropropane	0.2365	0.2209	6.6	TM	
74	TM	Dibromochloromethane	0.1592	0.1185	26	TM	
75	TM**	Chlorobenzene	0.4894	0.4480	8.5	TM**	
76	TM*	Ethylbenzene	0.7823	0.7422	5.1	TM*	
77	TM**	Bromoform	0.1190	0.0658	45	TM**	
78	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
79	TM	Isopropylbenzene	1.374	1.345	2.1	TM	
80	TM**	1,1,2,2-Tetrachloroethane	0.3093	0.2637	15	TM**	
		Average			16.0		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/24/20
Instrument: ZEUS
Cal. Date: 10/23/20
Data File: 1023Z52.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	1,2,3-Trichloropropane	0.1022	0.0932	8.8	TM	
82	TM	t-1,4-Dichloro-2-Butene	0.0759	0.0553	27	TM	
83	TM	Bromobenzene	0.5923	0.5746	3.0	TM	
84	TM	n-Propylbenzene	1.605	1.632	1.7	TM	
85	TM	4-Ethyltoluene	1.390	1.380	0.69	TM	
86	TM	2-Chlorotoluene	0.9921	0.9508	4.2	TM	
87	TM	1,3,5-Trimethylbenzene	1.185	1.162	1.9	TM	
88	TM	4-Chlorotoluene	1.102	1.093	0.75	TM	
89	TM	Tert-Butylbenzene	1.053	0.9957	5.4	TM	
90	TM	1,2,4-Trimethylbenzene	1.188	1.160	2.4	TM	
91	TM	Sec-Butylbenzene	1.566	1.527	2.5	TM	
92	TM	p-Isopropyltoluene	1.346	1.306	3.0	TM	
93	TM	Benzyl Chloride	0.5394	0.2930	46	TM	
94	TM	1,3-DCB	0.7467	0.6490	13	TM	
95	TM	1,4-DCB	0.7523	0.6681	11	TM	
96	TM	n-Butylbenzene	1.200	1.140	5.0	TM	
97	TM	1,2-DCB	0.6990	0.6055	13	TM	
98	TML	Hexachloroethane	0.1956	0.1142	42	TML	41
99	TM	1,2-Dibromo-3-chloropropane	0.0868	0.0537	38	TM	
100	TM	1,2,4-Trichlorobenzene	0.5187	0.3488	33	TM	
101	TM	Hexachlorobutadiene	0.2340	0.1326	43	TM	
102	TM	Naphthalene	1.205	1.010	16	TM	
103	TM	1,2,3-Trichlorobenzene	0.4610	0.3145	32	TM	
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			15.4		

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z52.D Vial: 47
Acq On : 24 Oct 20 07:41 Operator: LP,DG,CH
Sample : Ending CCV 10ug/L 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:14 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1846547	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1311033	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	722561	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.44	111	477030	24.61	ppb		0.00
Spiked Amount 25.000			Recovery =	98.448%			
48) 1,2-DCA-D4(S)	4.72	65	451348	24.61	ppb		0.00
Spiked Amount 25.000			Recovery =	98.428%			
69) Toluene-D8(S)	6.38	98	1792726	27.14	ppb		0.00
Spiked Amount 25.000			Recovery =	108.556%			
77) 4-Bromofluorobenzene(S)	8.77	95	654210	26.03	ppb		0.00
Spiked Amount 25.000			Recovery =	104.100%			
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.16	87	23792	8.89	ppb		87
4) Freon 114	1.26	85	28728	8.95	ppb	#	81
5) Chloromethane	1.34	50	110702	7.91	ppb		98
6) Vinyl chloride	1.39	62	105003	8.57	ppb		100
9) Bromomethane	1.66	94	30325	14.48	ppb		95
10) Chloroethane	1.75	64	50586	23.44	ppb		91
11) Dichlorofluoromethane	1.95	67	173210	9.54	ppb		99
12) Trichlorofluoromethane	1.99	101	132921	9.47	ppb		99
16) Acrolein	2.38	55	73118	89.50	ppb		94
17) Acetone	2.53	43	108085	37.22	ppb		96
18) Freon-113	2.50	101	63649	8.46	ppb		87
19) 1,1-DCE	2.47	61	104087	8.68	ppb		97
21) Acetonitrile	2.77	40	34183	105.58	ppb		99
22) t-Butanol	3.07	59	35352	81.89	ppb		94
23) Methyl Acetate	2.84	43	53526	7.44	ppb		99
24) Iodomethane	2.60	142	63641	6.98	ppb		98
25) Acrylonitrile	3.13	52	27470	8.13	ppb		98
26) Methylene chloride	2.91	84	93804	9.40	ppb		96
27) Carbon disulfide	2.65	76	119104	8.77	ppb		98
28) Methyl t-butyl ether (MtBE	3.19	73	181194	8.38	ppb		99
29) Trans-1,2-DCE	3.16	61	102803	8.65	ppb		97
31) Diisopropyl Ether	3.63	45	215637	8.36	ppb		99
33) 1,1-DCA	3.53	63	135994	8.94	ppb		98
34) Vinyl Acetate	3.59	43	51766	4.39	ppb		96
35) Ethyl tert Butyl Ether	3.94	59	194017	8.19	ppb		97
36) MEK (2-Butanone)	4.06	43	150292	36.92	ppb		97
37) Cis-1,2-DCE	4.03	61	120518	8.55	ppb		97
38) 2,2-Dichloropropane	4.03	77	78356	6.41	ppb		100
41) Chloroform	4.31	83	141465	9.09	ppb		99
42) Bromochloromethane	4.23	49	65401	8.87	ppb		88
44) 1,1,1-TCA	4.47	97	111538	8.40	ppb		97
45) Cyclohexane	4.52	56	114818	8.09	ppb		98
46) 1,1-Dichloropropene	4.61	75	98231	8.55	ppb		99
47) 2,2,4-Trimethylpentane	4.87	57	202446	7.33	ppb		99
49) Carbon Tetrachloride	4.61	117	83550	7.46	ppb		99
50) Tert Amyl Methyl Ether	4.90	73	177590	8.22	ppb		97
52) 1,2-DCA	4.79	62	92583	8.37	ppb		100
53) Benzene	4.78	78	333242	9.00	ppb		98
54) TCE	5.33	130	97361	8.30	ppb		90

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z52.D Vial: 47
Acq On : 24 Oct 20 07:41 Operator: LP,DG,CH
Sample : Ending CCV 10ug/L 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:14 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.49	43	586832	89.02	ppb		100
56)	1,2-Dichloropropane	5.52	63	79893	8.73	ppb	#	97
57)	Bromodichloromethane	5.75	83	89393	8.12	ppb		98
58)	Methyl Cyclohexane	5.51	83	120678	8.27	ppb		92
59)	Dibromomethane	5.61	174	50772	6.63	ppb	#	75
60)	MIBK (methyl isobutyl ket	6.29	43	299150	38.18	ppb		100
61)	1-Bromo-2-chloroethane	6.01	144	12746	7.23	ppb		99
63)	Cis-1,3-Dichloropropene	6.14	75	111911	8.04	ppb		96
64)	Toluene	6.44	91	355899	8.85	ppb		99
65)	Trans-1,3-Dichloropropene	6.63	75	91525	7.95	ppb		96
66)	1,1,2-TCA	6.79	97	70809	8.75	ppb		99
67)	2-Hexanone	7.03	43	205701	36.70	ppb		99
70)	1,2-EDB	7.24	107	70532	8.87	ppb	#	96
71)	Tetrachloroethene	6.93	166	79478	6.89	ppb		89
72)	1-Chlorohexane	7.69	91	109041	8.85	ppb		96
73)	1,1,1,2-Tetrachloroethane	7.78	131	66849	7.90	ppb		96
74)	m&p-Xylene	7.92	91	596747	18.86	ppb		100
75)	o-Xylene	8.28	91	308945	9.37	ppb		97
76)	Styrene	8.29	104	256757	9.20	ppb		100
78)	1,3-Dichloropropane	6.94	76	115820	9.34	ppb		99
79)	Dibromochloromethane	7.14	129	62160	7.45	ppb		94
80)	Chlorobenzene	7.70	112	234956	9.15	ppb		98
81)	Ethylbenzene	7.81	91	389240	9.49	ppb		98
82)	Bromoform	8.45	173	34493	5.53	ppb		93
84)	Isopropylbenzene	8.64	105	388883	9.79	ppb		97
85)	1,1,2,2-Tetrachloroethane	8.90	83	76222	8.53	ppb	#	95
86)	1,2,3-Trichloropropane	8.94	110	26945	9.12	ppb		97
87)	t-1,4-Dichloro-2-Butene	8.96	53	15969	7.28	ppb		99
88)	Bromobenzene	8.91	77	166063	9.70	ppb		83
89)	n-Propylbenzene	9.03	91	471737	10.17	ppb		94
90)	4-Ethyltoluene	9.14	105	398927	9.93	ppb		98
91)	2-Chlorotoluene	9.10	91	274808	9.58	ppb		99
92)	1,3,5-Trimethylbenzene	9.20	105	335873	9.81	ppb		98
93)	4-Chlorotoluene	9.20	91	316030	9.92	ppb		93
94)	Tert-Butylbenzene	9.52	119	287792	9.46	ppb		98
95)	1,2,4-Trimethylbenzene	9.56	105	335197	9.76	ppb		98
96)	Sec-Butylbenzene	9.73	105	441244	9.75	ppb		94
97)	p-Isopropyltoluene	9.87	119	377475	9.70	ppb		98
98)	Benzyl Chloride	10.04	91	84671	5.43	ppb		97
99)	1,3-DCB	9.81	146	187578	8.69	ppb		96
100)	1,4-DCB	9.90	146	193092	8.88	ppb		97
101)	n-Butylbenzene	10.27	91	329487	9.50	ppb		100
102)	1,2-DCB	10.26	146	175002	8.66	ppb		98
103)	Hexachloroethane	10.52	201	33011	5.92	ppb	#	68
104)	1,2-Dibromo-3-chloropropan	11.02	157	15532	6.19	ppb		88
105)	1,2,4-Trichlorobenzene	11.84	180	100809	6.72	ppb		98
106)	Hexachlorobutadiene	12.04	225	38330	5.67	ppb		95
107)	Naphthalene	12.08	128	291798	8.38	ppb		99
108)	1,2,3-Trichlorobenzene	12.32	180	90896	6.82	ppb		91

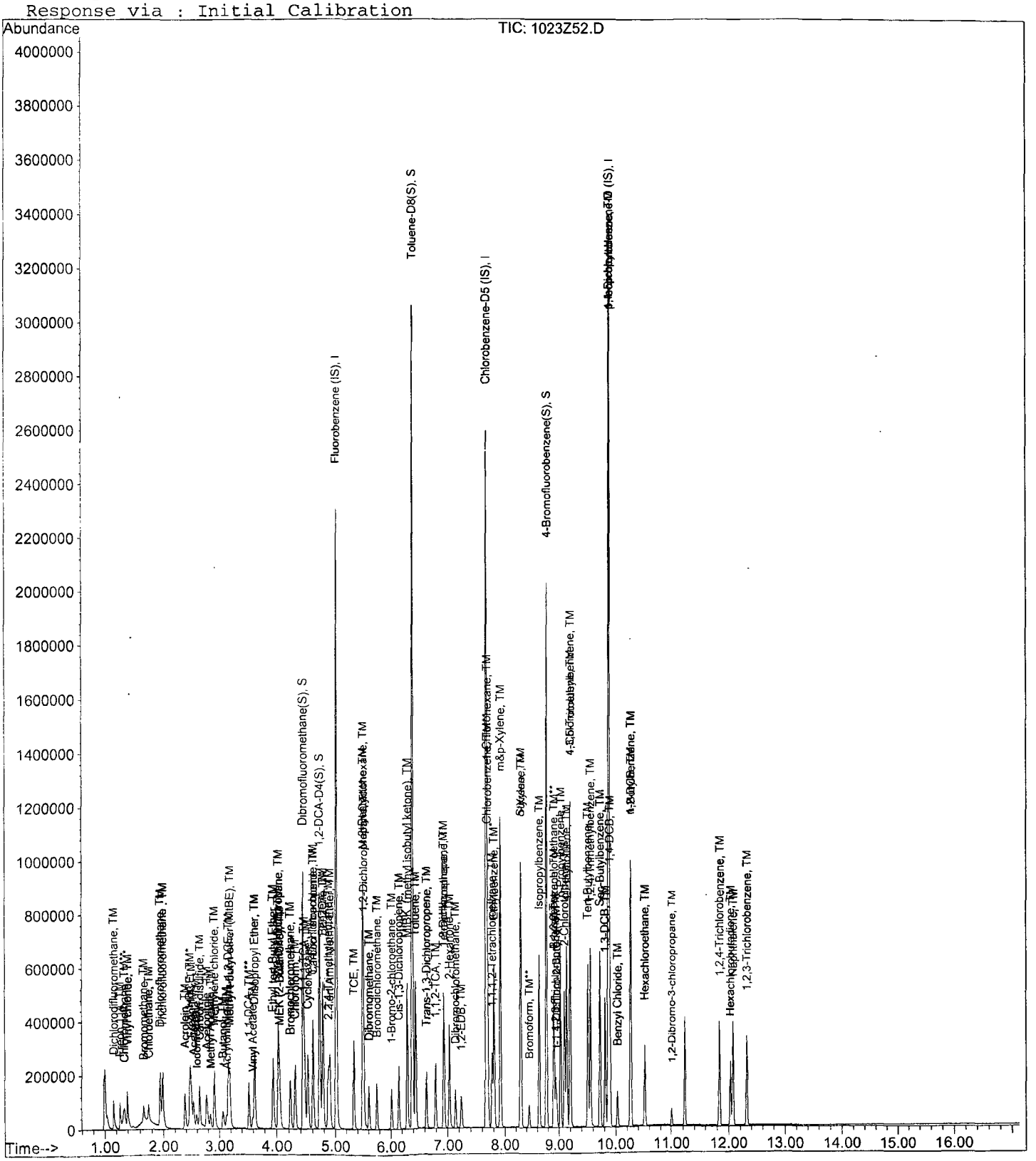
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z52.D Vial: 47
Acq On : 24 Oct 20 07:41 Operator: LP,DG,CH
Sample : Ending CCV 10ug/L 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:14 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z39.D Vial: 34
Acq On : 24 Oct 20 02:42 Operator: LP,DG,CH
Sample : BA20538W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:12 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1997069	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1508044	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	855446	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.44	111	550257	26.25	ppb	0.00
Spiked Amount 25.000			Recovery = 105.004%			
48) 1,2-DCA-D4(S)	4.72	65	502381	25.33	ppb	0.00
Spiked Amount 25.000			Recovery = 101.300%			
69) Toluene-D8(S)	6.38	98	1969446	25.92	ppb	0.00
Spiked Amount 25.000			Recovery = 103.676%			
77) 4-Bromofluorobenzene(S)	8.77	95	736975	25.49	ppb	0.00
Spiked Amount 25.000			Recovery = 101.952%			

Target Compounds Qvalue

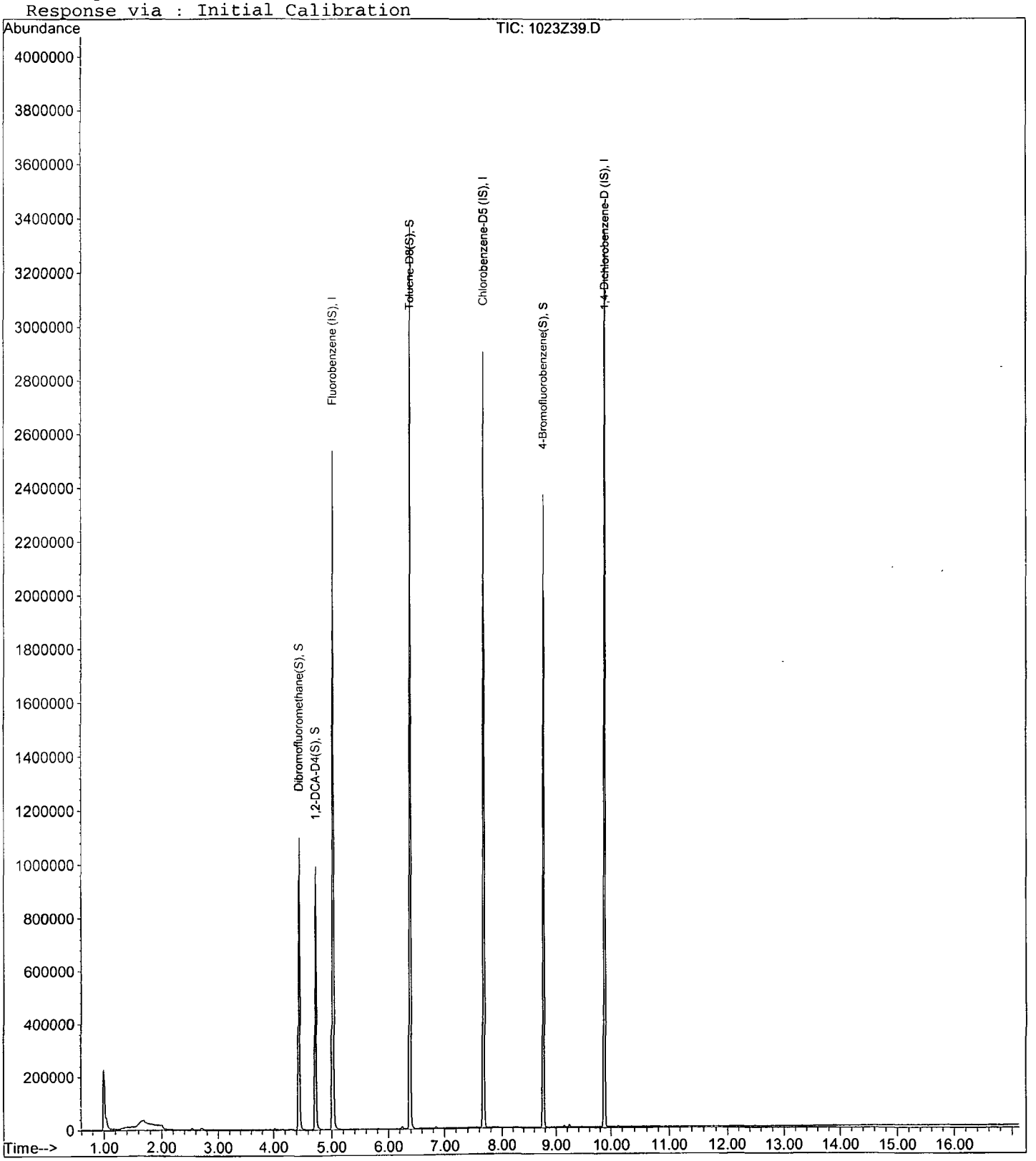
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z39.D Vial: 34
Acq On : 24 Oct 20 02:42 Operator: LP,DG,CH
Sample : BA20538W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:12 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z40.D Vial: 35
Acq On : 24 Oct 20 03:05 Operator: LP,DG,CH
Sample : BA20539W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1935351	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1460050	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	829030	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.44	111	539097	26.54	ppb	0.00
Spiked Amount 25.000			Recovery = 106.152%			
48) 1,2-DCA-D4(S)	4.72	65	488120	25.39	ppb	0.00
Spiked Amount 25.000			Recovery = 101.564%			
69) Toluene-D8(S)	6.38	98	1914146	26.02	ppb	0.00
Spiked Amount 25.000			Recovery = 104.076%			
77) 4-Bromofluorobenzene(S)	8.77	95	715918	25.57	ppb	0.00
Spiked Amount 25.000			Recovery = 102.292%			

Target Compounds Qvalue

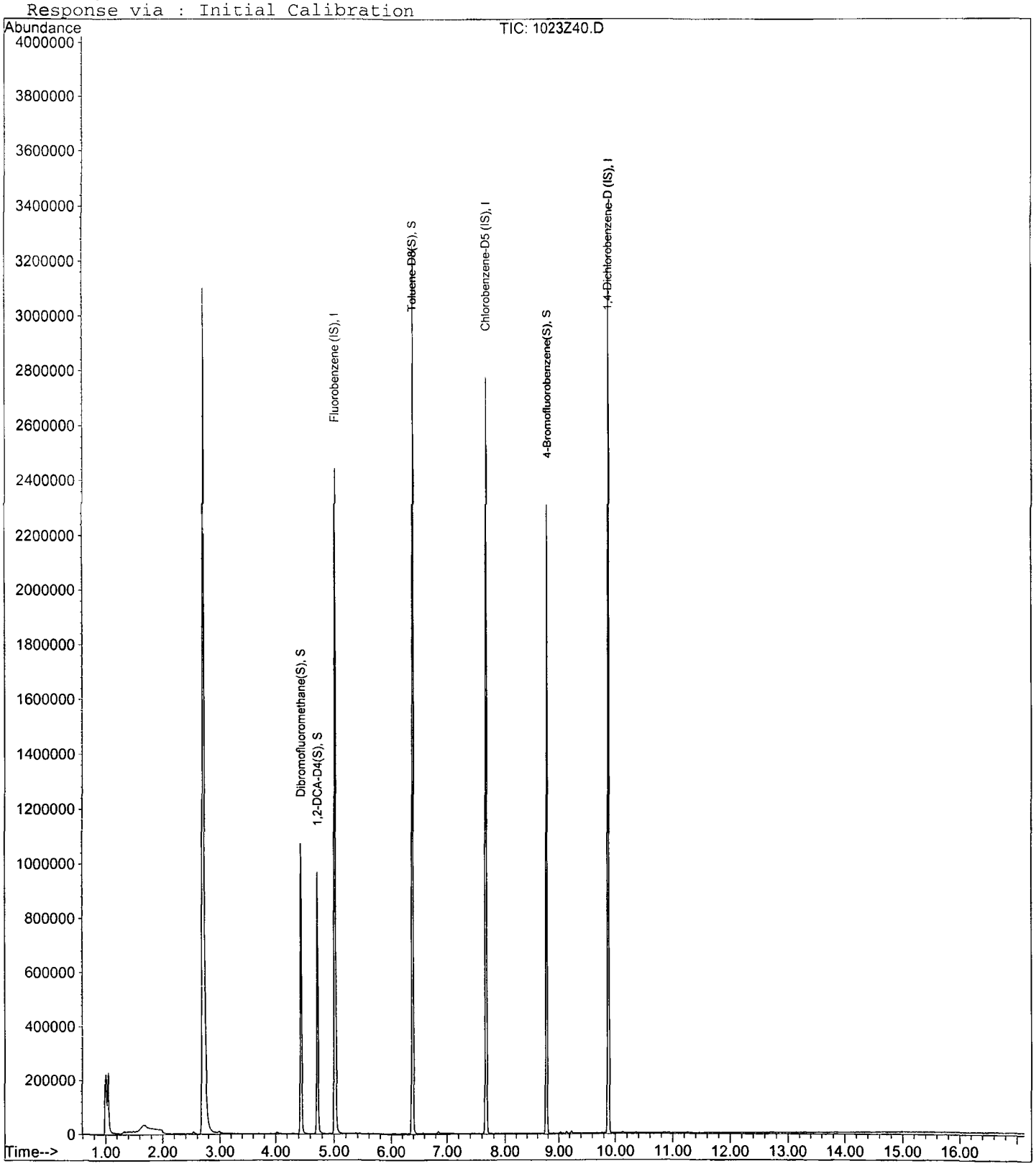
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z40.D Vial: 35
Acq On : 24 Oct 20 03:05 Operator: LP,DG,CH
Sample : BA20539W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:13 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z41.D Vial: 36
Acq On : 24 Oct 20 03:28 Operator: LP,DG,CH
Sample : BA20540W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:15 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1971333	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1473818	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	820646	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.44	111	537792	25.99	ppb	0.00
Spiked Amount 25.000			Recovery = 103.964%			
48) 1,2-DCA-D4(S)	4.72	65	491797	25.12	ppb	0.00
Spiked Amount 25.000			Recovery = 100.460%			
69) Toluene-D8(S)	6.38	98	1940429	26.13	ppb	0.00
Spiked Amount 25.000			Recovery = 104.520%			
77) 4-Bromofluorobenzene(S)	8.77	95	720544	25.50	ppb	0.00
Spiked Amount 25.000			Recovery = 101.992%			

Target Compounds Qvalue

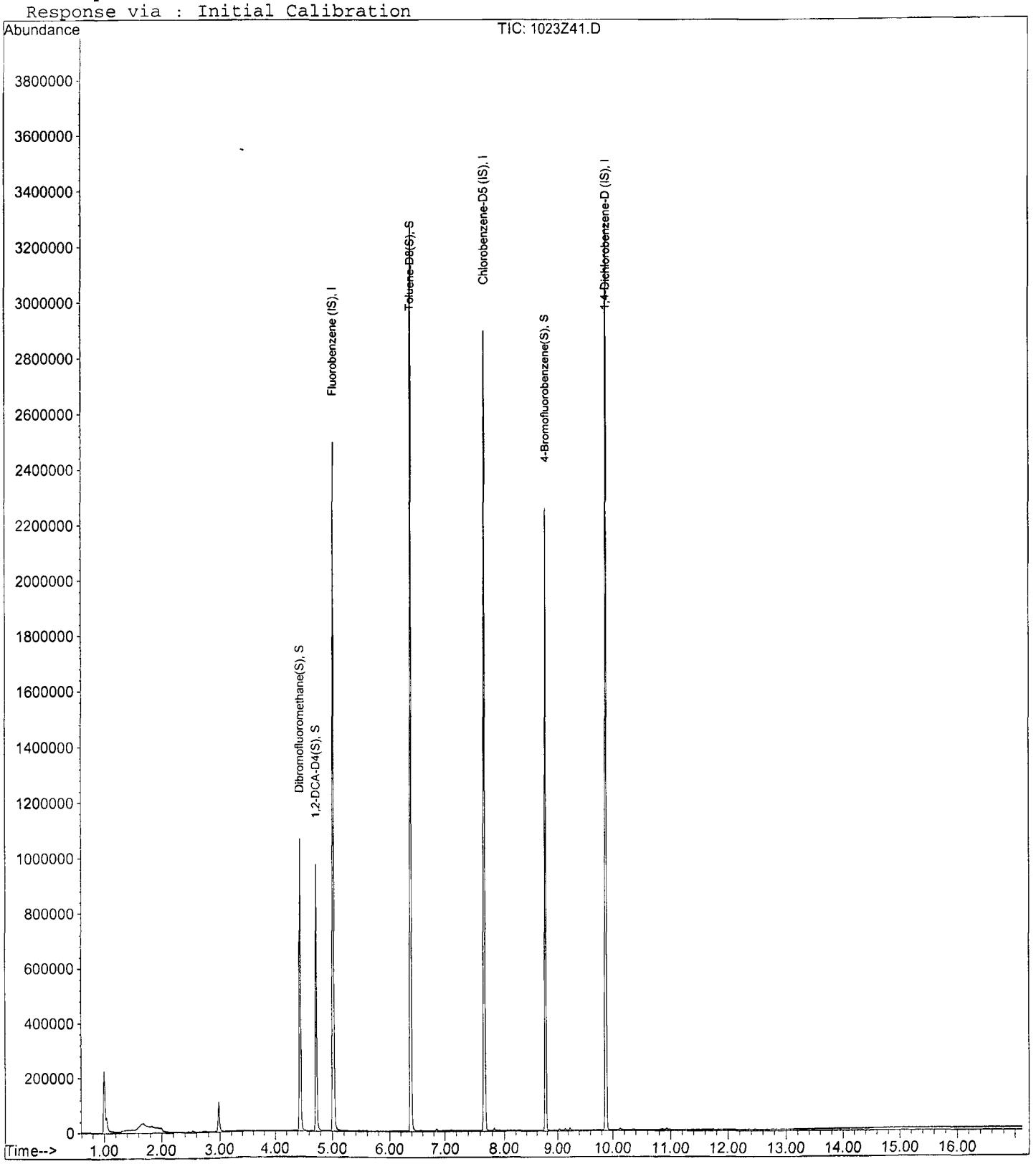
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z41.D Vial: 36
Acq On : 24 Oct 20 03:28 Operator: LP,DG,CH
Sample : BA20540W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:15 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z42.D Vial: 37
Acq On : 24 Oct 20 03:51 Operator: LP,DG,CH
Sample : BA20541W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:16 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1921643	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1427326	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	790488	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.44	111	520980	25.83	ppb	0.00
Spiked Amount 25.000			Recovery = 103.320%			
48) 1,2-DCA-D4(S)	4.72	65	474321	24.85	ppb	0.00
Spiked Amount 25.000			Recovery = 99.396%			
69) Toluene-D8(S)	6.38	98	1880060	26.14	ppb	0.00
Spiked Amount 25.000			Recovery = 104.568%			
77) 4-Bromofluorobenzene(S)	8.77	95	703462	25.70	ppb	0.00
Spiked Amount 25.000			Recovery = 102.820%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

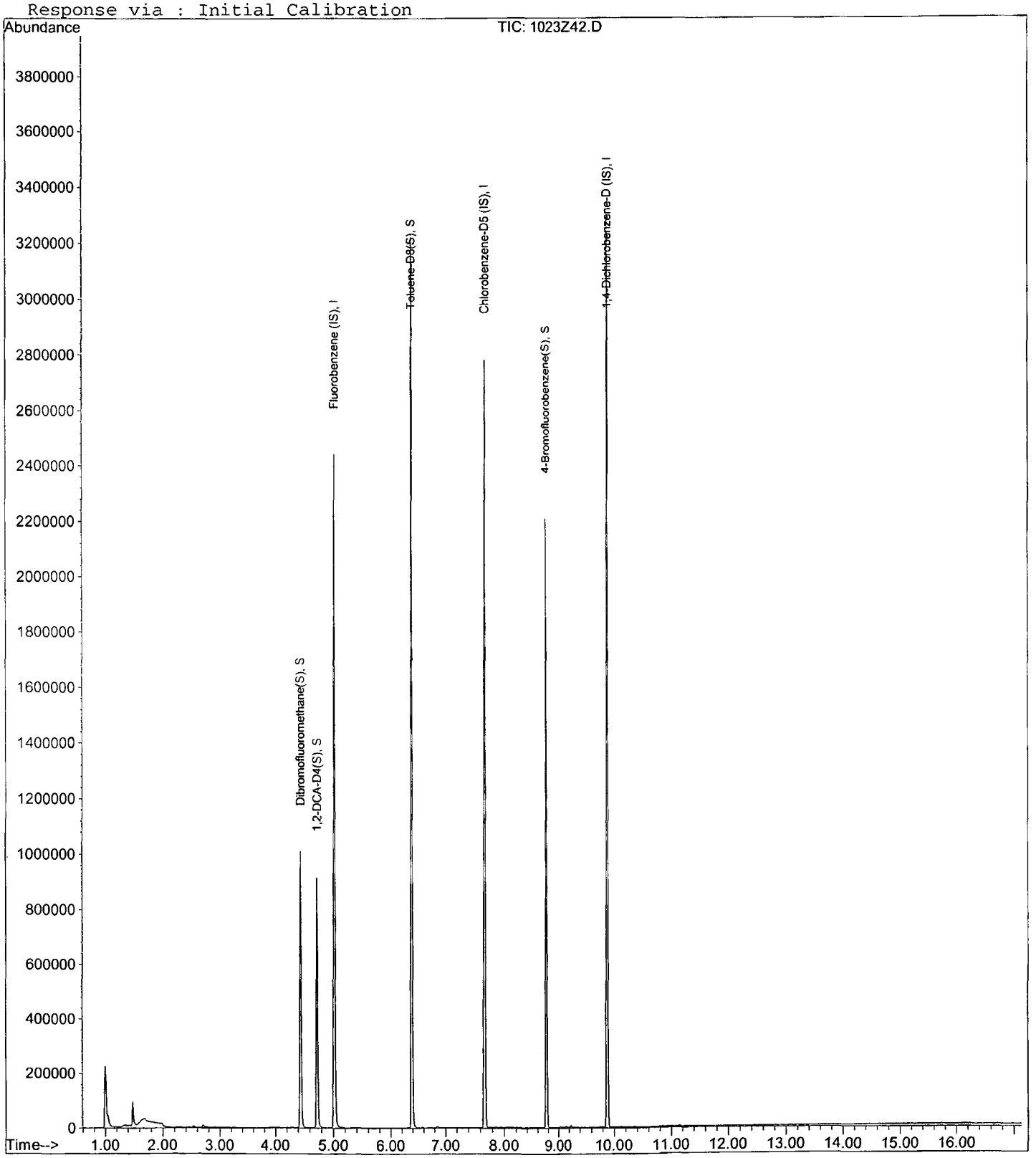
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z42.D
Acq On : 24 Oct 20 03:51
Sample : BA20541W01
Misc :

Vial: 37
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 13:16 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z43.D Vial: 38
Acq On : 24 Oct 20 04:14 Operator: LP,DG,CH
Sample : BA20542W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:17 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1917352	25.00 ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1432819	25.00 ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	787056	25.00 ppb	0.00
System Monitoring Compounds					
43) Dibromofluoromethane(S)	4.44	111	520441	25.86 ppb	0.00
Spiked Amount 25.000			Recovery =	103.444%	
48) 1,2-DCA-D4(S)	4.72	65	474138	24.90 ppb	0.00
Spiked Amount 25.000			Recovery =	99.580%	
69) Toluene-D8(S)	6.39	98	1889898	26.18 ppb	0.00
Spiked Amount 25.000			Recovery =	104.712%	
77) 4-Bromofluorobenzene(S)	8.77	95	703149	25.59 ppb	0.00
Spiked Amount 25.000			Recovery =	102.380%	

Target Compounds Qvalue

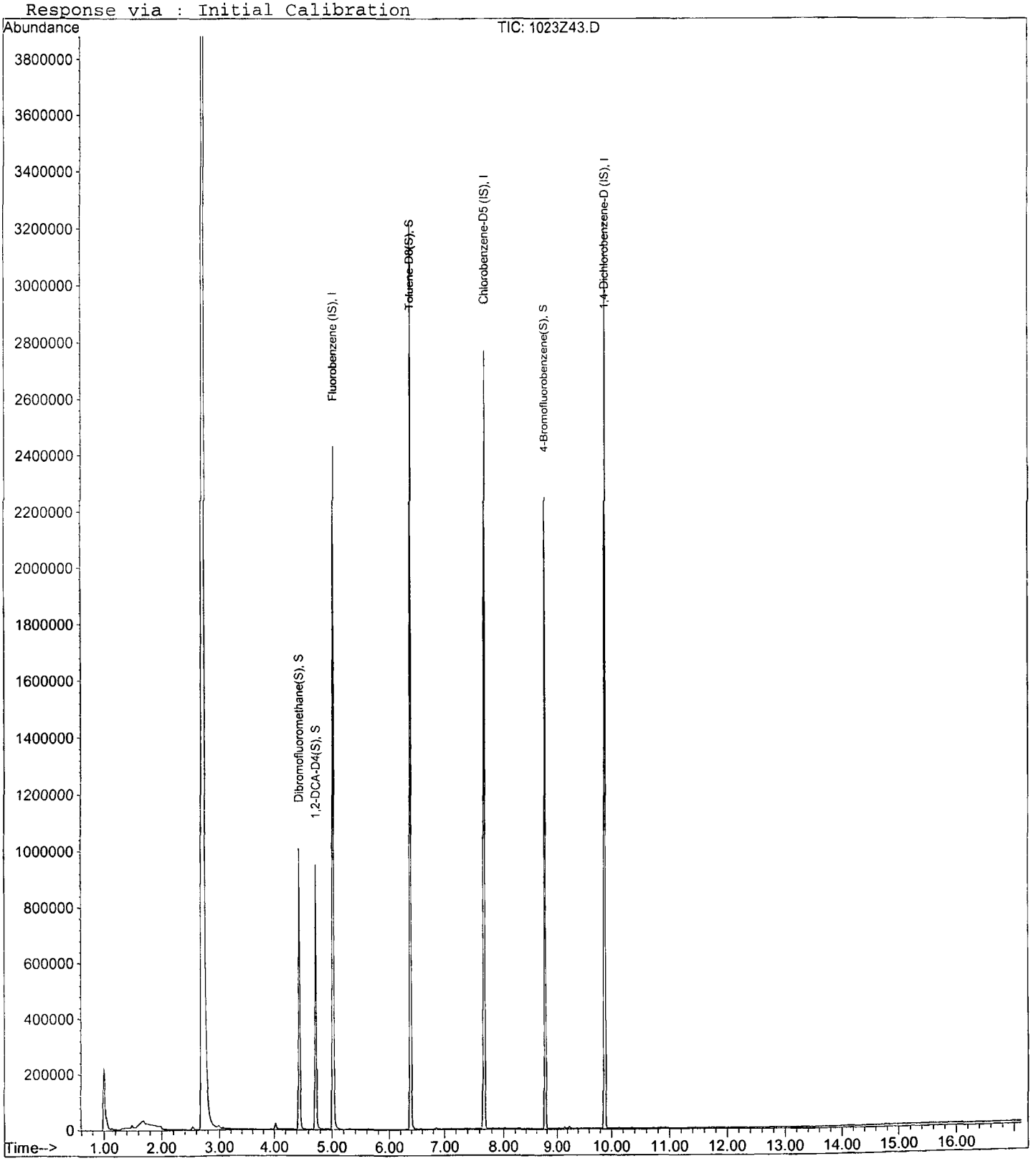
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z43.D Vial: 38
Acq On : 24 Oct 20 04:14 Operator: LP,DG,CH
Sample : BA20542W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:17 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z44.D Vial: 39
Acq On : 24 Oct 20 04:37 Operator: LP,DG,CH
Sample : BA20543W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:18 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1938190	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1431667	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	778955	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.44	111	525438	25.83	ppb	0.00
Spiked Amount 25.000			Recovery = 103.312%			
48) 1,2-DCA-D4(S)	4.72	65	485356	25.21	ppb	0.00
Spiked Amount 25.000			Recovery = 100.840%			
69) Toluene-D8(S)	6.39	98	1928331	26.73	ppb	0.00
Spiked Amount 25.000			Recovery = 106.928%			
77) 4-Bromofluorobenzene(S)	8.77	95	714708	26.04	ppb	0.00
Spiked Amount 25.000			Recovery = 104.144%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

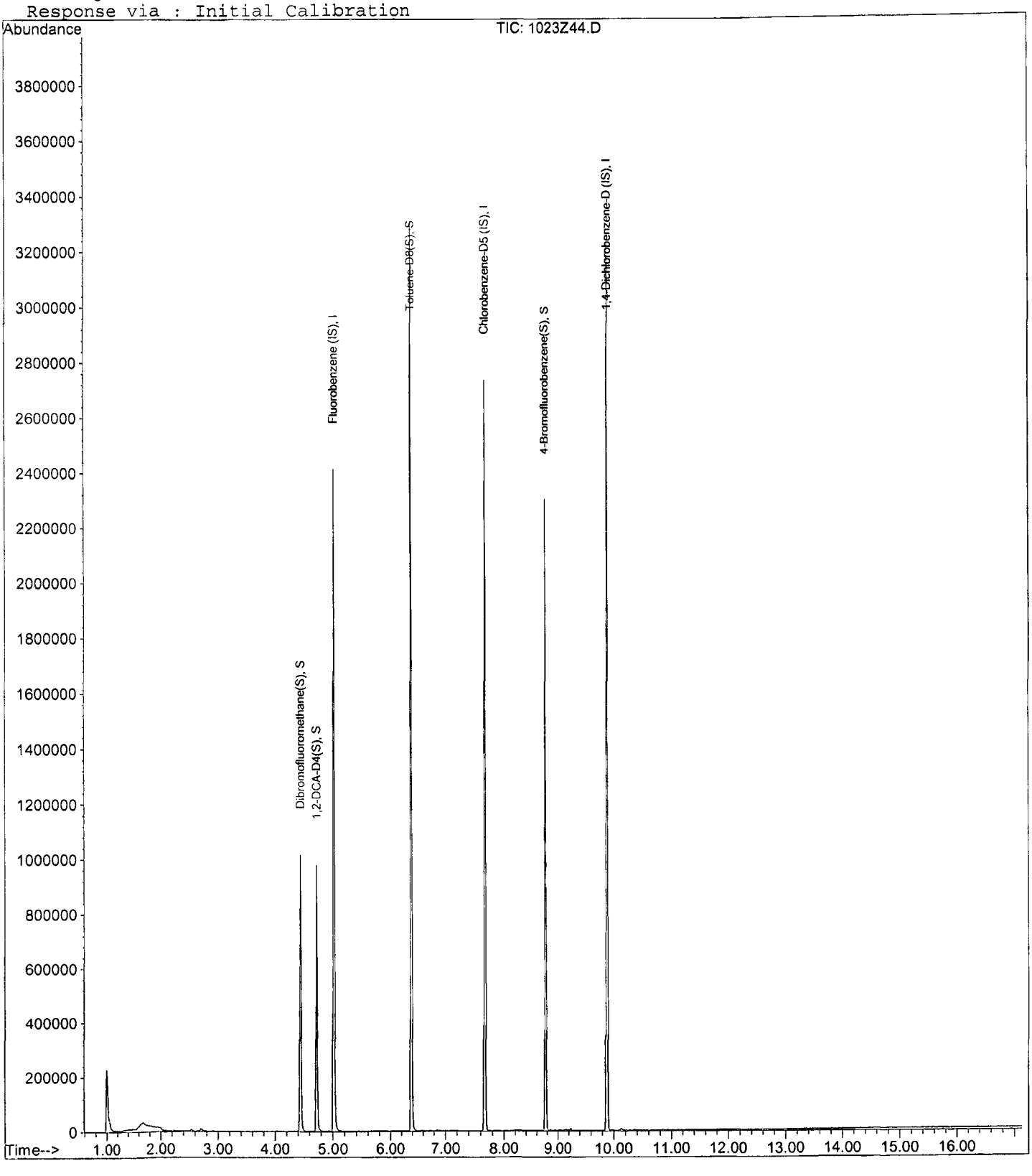
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z44.D
Acq On : 24 Oct 20 04:37
Sample : BA20543W01
Misc :

Vial: 39
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 13:18 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z45.D Vial: 40
Acq On : 24 Oct 20 05:00 Operator: LP,DG,CH
Sample : BA20544W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:19 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1839033	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1357331	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	727076	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.44	111	498242	25.81	ppb	0.00
Spiked Amount 25.000			Recovery = 103.248%			
48) 1,2-DCA-D4(S)	4.72	65	463028	25.35	ppb	0.00
Spiked Amount 25.000			Recovery = 101.388%			
69) Toluene-D8(S)	6.38	98	1840402	26.91	ppb	0.00
Spiked Amount 25.000			Recovery = 107.640%			
77) 4-Bromofluorobenzene(S)	8.77	95	681838	26.20	ppb	0.00
Spiked Amount 25.000			Recovery = 104.796%			

Target Compounds Qvalue

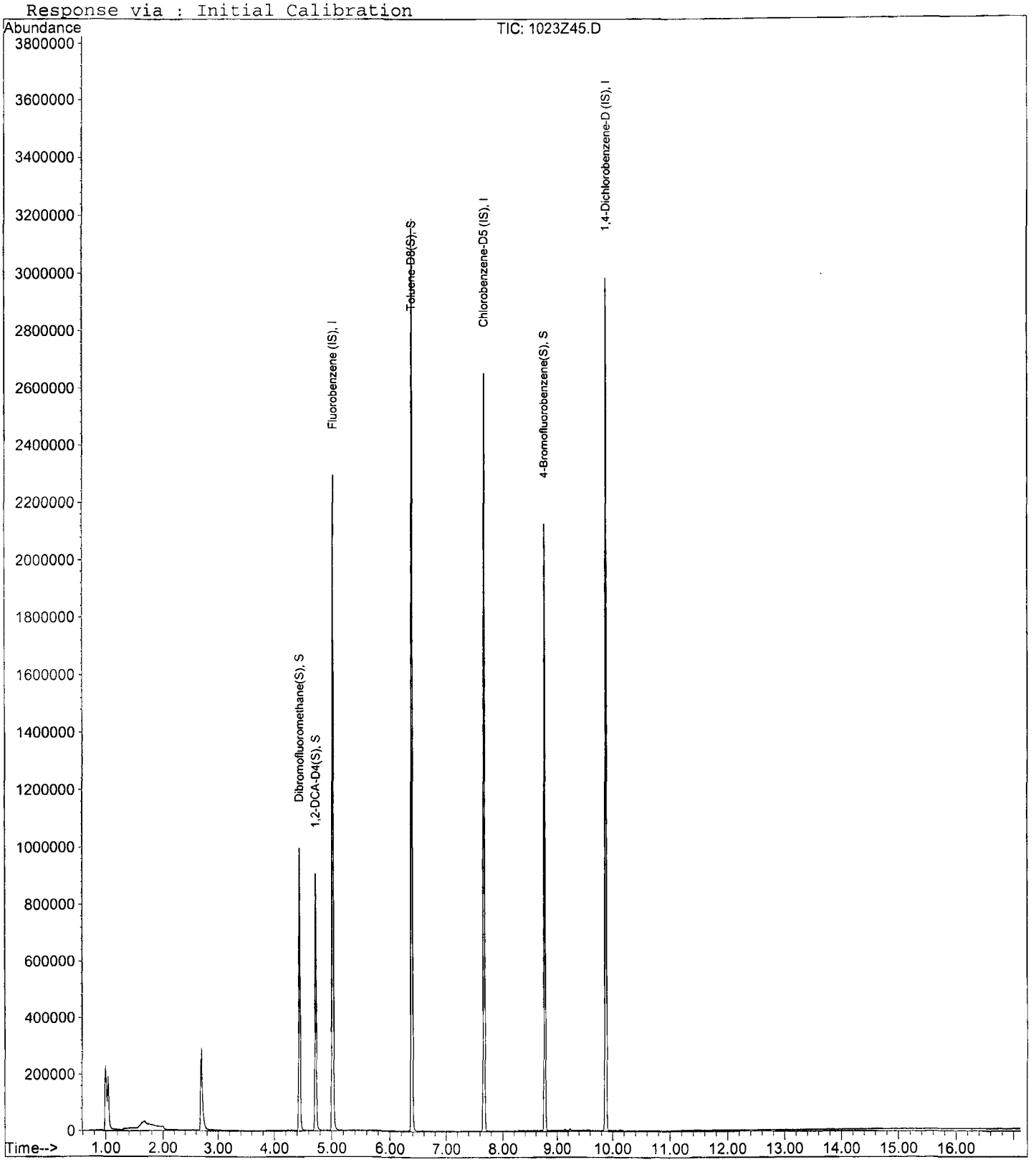
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z45.D Vial: 40
Acq On : 24 Oct 20 05:00 Operator: LP,DG,CH
Sample : BA20544W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:19 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z38.D Vial: 33
Acq On : 24 Oct 20 02:18 Operator: LP,DG,CH
Sample : 201023A BLK Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 13:10 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2010663	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1515461	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	869793	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.44	111	556307	26.36	ppb	0.00
Spiked Amount 25.000			Recovery =	105.440%		
48) 1,2-DCA-D4(S)	4.72	65	505704	25.32	ppb	0.00
Spiked Amount 25.000			Recovery =	101.280%		
69) Toluene-D8(S)	6.38	98	1985688	26.01	ppb	0.00
Spiked Amount 25.000			Recovery =	104.020%		
77) 4-Bromofluorobenzene(S)	8.77	95	749243	25.79	ppb	0.00
Spiked Amount 25.000			Recovery =	103.140%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

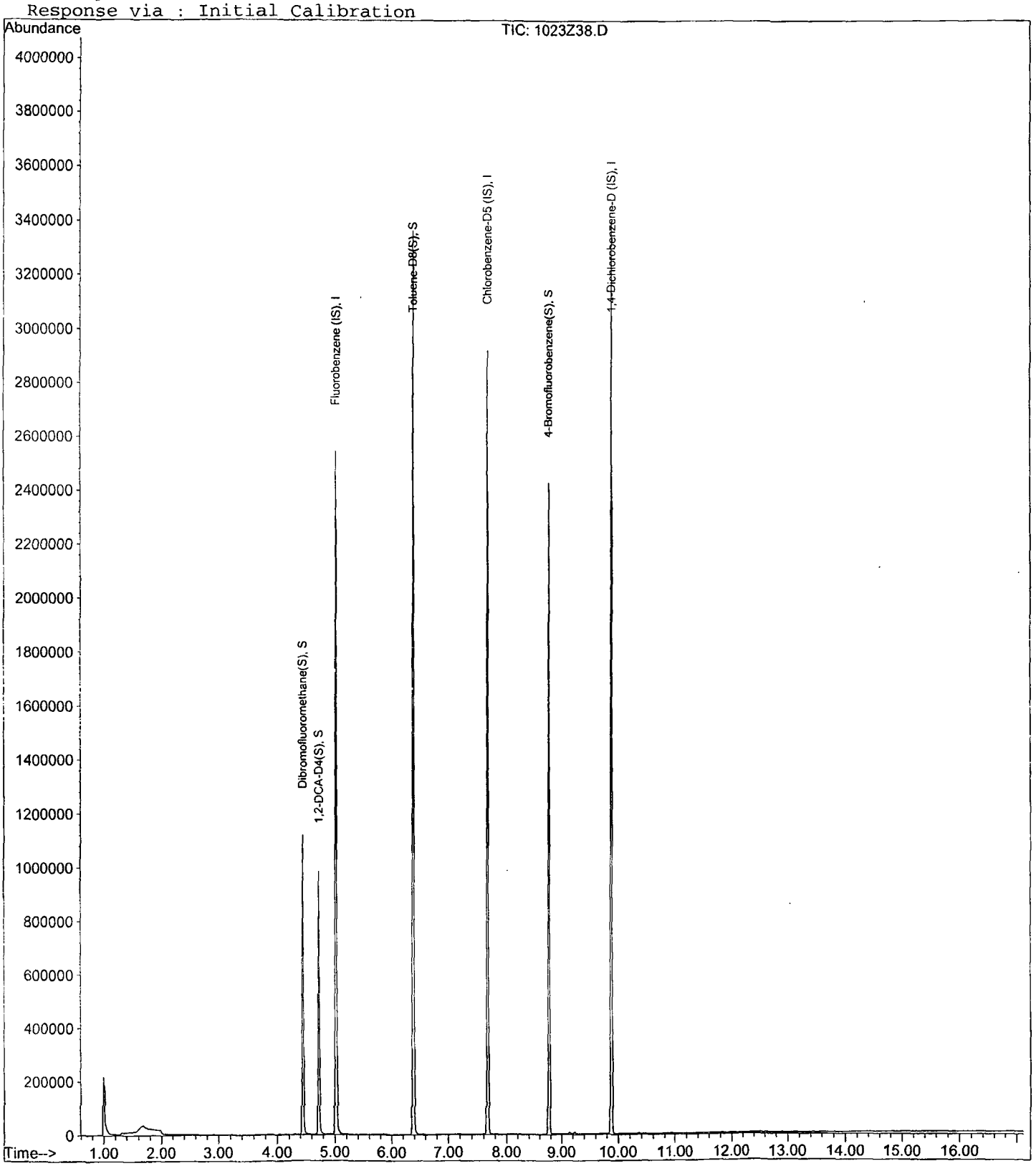
Data File : M:\ZEUS\DATA\201023\1023Z38.D
Acq On : 24 Oct 20 02:18
Sample : 201023A BLK
Misc :

Vial: 33
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 13:10 2020

Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z33.D Vial: 28
Acq On : 24 Oct 20 00:23 Operator: LP,DG,CH
Sample : 201023A LCS 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 11:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2146753	25.0000 ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1614288	25.0000 ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	938690	25.0000 ppb	0.00
System Monitoring Compounds					
43) Dibromofluoromethane(S)	4.44	111	582160	25.8362 ppb	0.00
Spiked Amount 25.000			Recovery	= 103.344%	
48) 1,2-DCA-D4(S)	4.72	65	538219	25.2398 ppb	0.00
Spiked Amount 25.000			Recovery	= 100.960%	
69) Toluene-D8(S)	6.39	98	2128215	26.1653 ppb	0.00
Spiked Amount 25.000			Recovery	= 104.660%	
77) 4-Bromofluorobenzene(S)	8.77	95	775654	25.0599 ppb	0.00
Spiked Amount 25.000			Recovery	= 100.240%	
Target Compounds					Qvalue
3) Dichlorodifluoromethane	1.16	87	29302	9.4140 ppb	100
4) Freon 114	1.26	85	33961	9.0976 ppb	91
5) Chloromethane	1.35	50	139463	8.5724 ppb	99
6) Vinyl chloride	1.39	62	128046	8.9882 ppb	96
9) Bromomethane	1.66	94	32969	13.4132 ppb	99
10) Chloroethane	1.75	64	39733	14.2713 ppb	92
11) Dichlorofluoromethane	1.94	67	211383	10.0102 ppb	96
12) Trichlorofluoromethane	1.99	101	155036	9.5012 ppb	100
16) Acrolein	2.39	55	109431	115.2153 ppb	99
17) Acetone	2.54	43	149490	44.2793 ppb	100
18) Freon-113	2.49	101	82122	9.3879 ppb	93
19) 1,1-DCE	2.47	61	125146	8.9754 ppb	96
21) Acetonitrile	2.77	40	45269	120.2737 ppb	96
22) t-Butanol	3.07	59	60680	120.9042 ppb	99
23) Methyl Acetate	2.85	43	72633	8.6816 ppb	94
24) Iodomethane	2.60	142	82104	7.6180 ppb	98
25) Acrylonitrile	3.13	52	35143	8.9410 ppb	93
26) Methylene chloride	2.91	84	115550	9.9968 ppb	95
27) Carbon disulfide	2.65	76	137280	8.6983 ppb	100
28) Methyl t-butyl ether (MtBE	3.19	73	238448	9.4844 ppb	99
29) Trans-1,2-DCE	3.16	61	125070	9.0500 ppb	98
31) Diisopropyl Ether	3.63	45	282279	9.4177 ppb	97
33) 1,1-DCA	3.53	63	163364	9.2426 ppb	99
34) Vinyl Acetate	3.60	43	132491	9.6673 ppb	100
35) Ethyl tert Butyl Ether	3.94	59	256551	9.3113 ppb	97
36) MEK (2-Butanone)	4.06	43	220077	46.4977 ppb	100
37) Cis-1,2-DCE	4.03	61	147962	9.0313 ppb	97
38) 2,2-Dichloropropane	4.04	77	108281	7.6160 ppb	100
41) Chloroform	4.31	83	169489	9.3662 ppb	100
42) Bromochloromethane	4.23	49	81033	9.4534 ppb	100
44) 1,1,1-TCA	4.47	97	140414	9.0905 ppb	97
45) Cyclohexane	4.52	56	138921	8.4177 ppb	100
46) 1,1-Dichloropropene	4.61	75	121418	9.0944 ppb	96
47) 2,2,4-Trimethylpentane	4.87	57	272808	8.5005 ppb	100
49) Carbon Tetrachloride	4.61	117	113237	8.6927 ppb	100
50) Tert Amyl Methyl Ether	4.90	73	236647	9.4240 ppb	100
52) 1,2-DCA	4.79	62	114996	8.9420 ppb	97
53) Benzene	4.78	78	404859	9.4088 ppb	98
54) TCE	5.33	130	124046	9.0972 ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z33.D Vial: 28
Acq On : 24 Oct 20 00:23 Operator: LP,DG,CH
Sample : 201023A LCS 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 11:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.49	43	866246	113.0236	ppb		98
56)	1,2-Dichloropropane	5.52	63	98004	9.2145	ppb		99
57)	Bromodichloromethane	5.75	83	116372	9.0946	ppb		97
58)	Methyl Cyclohexane	5.51	83	149445	8.8040	ppb		97
59)	Dibromomethane	5.61	174	79583	8.9411	ppb		88
60)	MIBK (methyl isobutyl ket	6.29	43	424949	46.6464	ppb		99
61)	1-Bromo-2-chloroethane	6.02	144	18808	9.1741	ppb		98
63)	Cis-1,3-Dichloropropene	6.14	75	145532	8.9883	ppb		99
64)	Toluene	6.44	91	427707	9.1500	ppb		99
65)	Trans-1,3-Dichloropropene	6.63	75	122879	9.1751	ppb		97
66)	1,1,2-TCA	6.79	97	90863	9.6534	ppb		99
67)	2-Hexanone	7.03	43	295081	45.2869	ppb		98
70)	1,2-EDB	7.24	107	96913	9.9009	ppb		95
71)	Tetrachloroethene	6.93	166	122490	8.6271	ppb		97
72)	1-Chlorohexane	7.69	91	135485	8.9325	ppb		98
73)	1,1,1,2-Tetrachloroethane	7.78	131	99076	9.5142	ppb		96
74)	m&p-Xylene	7.92	91	725299	18.6135	ppb		99
75)	o-Xylene	8.28	91	376555	9.2745	ppb		97
76)	Styrene	8.29	104	327636	9.5347	ppb		98
78)	1,3-Dichloropropane	6.94	76	144813	9.4828	ppb		100
79)	Dibromochloromethane	7.14	129	92978	9.0458	ppb		98
80)	Chlorobenzene	7.70	112	301598	9.5432	ppb		99
81)	Ethylbenzene	7.81	91	471622	9.3361	ppb		99
82)	Bromoform	8.45	173	63292	8.2348	ppb		95
84)	Isopropylbenzene	8.64	105	482333	9.3461	ppb		99
85)	1,1,2,2-Tetrachloroethane	8.90	83	110723	9.5328	ppb		96
86)	1,2,3-Trichloropropane	8.94	110	36471	9.5002	ppb		93
87)	t-1,4-Dichloro-2-Butene	8.96	53	22932	8.0442	ppb		99
88)	Bromobenzene	8.91	77	207097	9.3125	ppb		97
89)	n-Propylbenzene	9.03	91	561849	9.3252	ppb		99
90)	4-Ethyltoluene	9.14	105	496501	9.5146	ppb		99
91)	2-Chlorotoluene	9.10	91	375017	10.0668	ppb		98
92)	1,3,5-Trimethylbenzene	9.20	105	422215	9.4909	ppb		100
93)	4-Chlorotoluene	9.20	91	386104	9.3334	ppb		98
94)	Tert-Butylbenzene	9.51	119	374771	9.4832	ppb		94
95)	1,2,4-Trimethylbenzene	9.56	105	420126	9.4197	ppb		98
96)	Sec-Butylbenzene	9.73	105	552738	9.4010	ppb		100
97)	p-Isopropyltoluene	9.87	119	476821	9.4321	ppb		98
98)	Benzyl Chloride	10.04	91	147526	7.2841	ppb		100
99)	1,3-DCB	9.81	146	266587	9.5080	ppb		100
100)	1,4-DCB	9.90	146	271668	9.6171	ppb		99
101)	n-Butylbenzene	10.27	91	405132	8.9892	ppb		99
102)	1,2-DCB	10.26	146	251618	9.5866	ppb		97
103)	Hexachloroethane	10.52	201	60797	7.8524	ppb	#	85
104)	1,2-Dibromo-3-chloropropan	11.02	157	28158	8.6378	ppb		95
105)	1,2,4-Trichlorobenzene	11.84	180	172917	8.8791	ppb		99
106)	Hexachlorobutadiene	12.03	225	71205	8.1052	ppb		94
107)	Naphthalene	12.07	128	433589	9.5807	ppb		100
108)	1,2,3-Trichlorobenzene	12.32	180	157320	9.0891	ppb		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

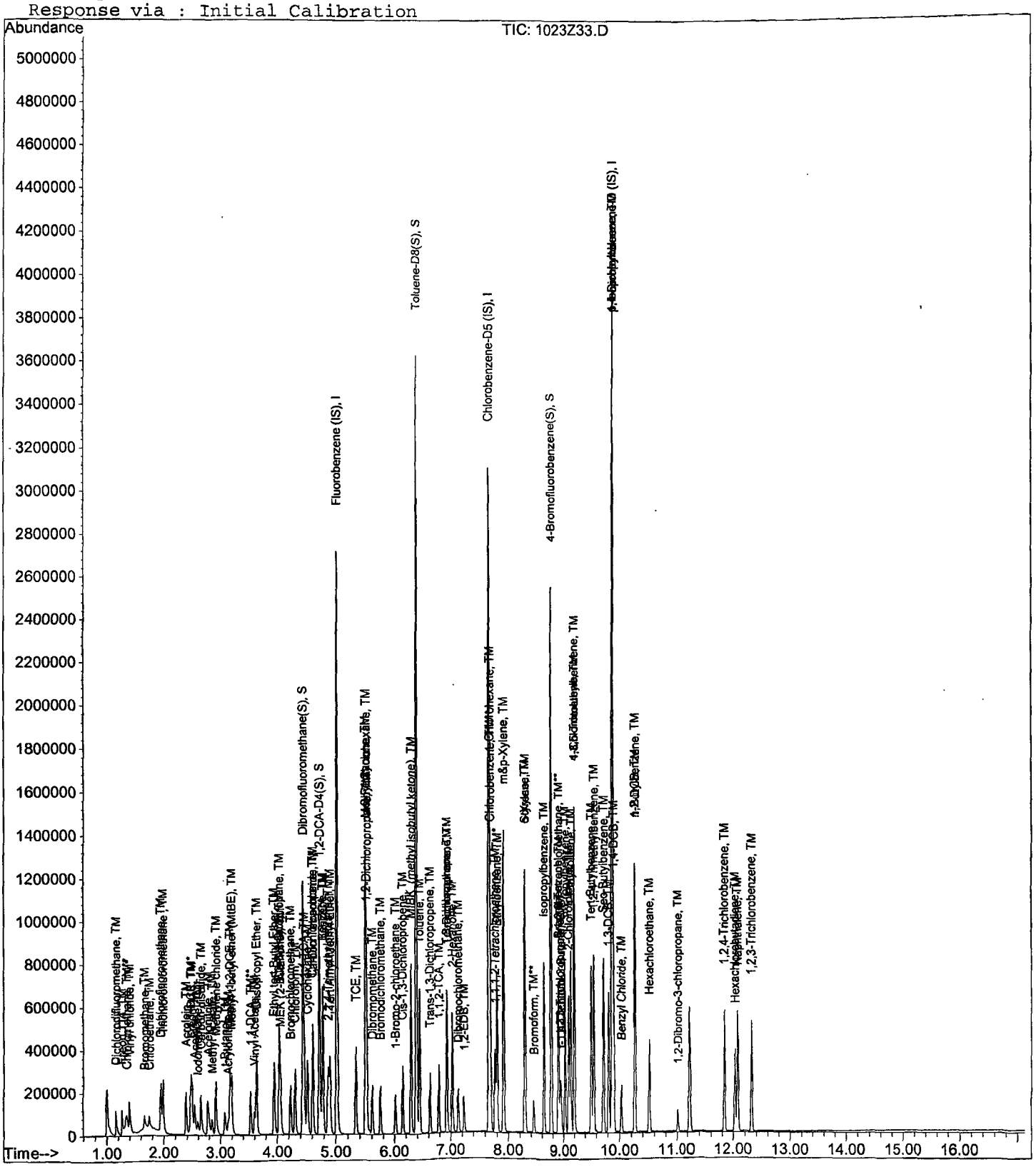
Data File : M:\ZEUS\DATA\201023\1023Z33.D
Acq On : 24 Oct 20 00:23
Sample : 201023A LCS 10ug/L
Misc :

Vial: 28
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 26 11:13 2020

Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z34.D Vial: 29
Acq On : 24 Oct 20 00:46 Operator: LP,DG,CH
Sample : 201023A LCSD 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 11:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2159388	25.0000 ppb	0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1623517	25.0000 ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	942459	25.0000 ppb	0.00
System Monitoring Compounds					
43) Dibromofluoromethane(S)	4.44	111	582621	25.7054 ppb	0.00
Spiked Amount 25.000			Recovery	= 102.820%	
48) 1,2-DCA-D4(S)	4.72	65	539301	25.1426 ppb	0.00
Spiked Amount 25.000			Recovery	= 100.572%	
69) Toluene-D8(S)	6.39	98	2118252	25.8948 ppb	0.00
Spiked Amount 25.000			Recovery	= 103.580%	
77) 4-Bromofluorobenzene(S)	8.77	95	781873	25.1173 ppb	0.00
Spiked Amount 25.000			Recovery	= 100.468%	
Target Compounds					Qvalue
3) Dichlorodifluoromethane	1.16	87	28871	9.2213 ppb	98
4) Freon 114	1.26	85	28648	7.6294 ppb	97
5) Chloromethane	1.35	50	137806	8.4210 ppb	100
6) Vinyl chloride	1.39	62	134438	9.3817 ppb	97
9) Bromomethane	1.66	94	32419	13.0686 ppb	100
10) Chloroethane	1.75	64	45015	16.6531 ppb	89
11) Dichlorofluoromethane	1.95	67	209683	9.8716 ppb	95
12) Trichlorofluoromethane	1.99	101	168197	10.2474 ppb	99
16) Acrolein	2.39	55	101332	106.0640 ppb	100
17) Acetone	2.54	43	116310	34.2497 ppb	99
18) Freon-113	2.49	101	74709	8.4905 ppb	96
19) 1,1-DCE	2.47	61	124871	8.9032 ppb	94
21) Acetonitrile	2.77	40	42513	112.2905 ppb	98
22) t-Butanol	3.07	59	56608	112.1308 ppb	95
23) Methyl Acetate	2.85	43	72562	8.6224 ppb	99
24) Iodomethane	2.59	142	87486	7.9995 ppb	99
25) Acrylonitrile	3.13	52	35107	8.8796 ppb	95
26) Methylene chloride	2.91	84	116969	10.0642 ppb	99
27) Carbon disulfide	2.65	76	137728	8.6757 ppb	100
28) Methyl t-butyl ether (MtBE	3.19	73	232535	9.1951 ppb	97
29) Trans-1,2-DCE	3.16	61	124335	8.9442 ppb	98
31) Diisopropyl Ether	3.63	45	274375	9.1004 ppb	98
33) 1,1-DCA	3.53	63	162785	9.1560 ppb	98
34) Vinyl Acetate	3.60	43	110841	8.0403 ppb	98
35) Ethyl tert Butyl Ether	3.94	59	252302	9.1035 ppb	98
36) MEK (2-Butanone)	4.06	43	167777	35.2404 ppb	96
37) Cis-1,2-DCE	4.03	61	146181	8.8704 ppb	96
38) 2,2-Dichloropropane	4.03	77	111854	7.8213 ppb	97
41) Chloroform	4.31	83	170316	9.3568 ppb	96
42) Bromochloromethane	4.23	49	78179	9.0671 ppb	96
44) 1,1,1-TCA	4.47	97	144970	9.3306 ppb	96
45) Cyclohexane	4.52	56	132677	7.9923 ppb	98
46) 1,1-Dichloropropene	4.61	75	123791	9.2178 ppb	98
47) 2,2,4-Trimethylpentane	4.87	57	244594	7.5768 ppb	99
49) Carbon Tetrachloride	4.61	117	116000	8.8527 ppb	97
50) Tert Amyl Methyl Ether	4.90	73	230843	9.1391 ppb	98
52) 1,2-DCA	4.79	62	114042	8.8159 ppb	97
53) Benzene	4.78	78	399448	9.2287 ppb	99
54) TCE	5.33	130	130295	9.4996 ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z34.D Vial: 29
Acq On : 24 Oct 20 00:46 Operator: LP,DG,CH
Sample : 201023A LCSD 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 11:13 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
55)	2-Pentanone	5.49	43	824731	106.9773 ppb		98
56)	1,2-Dichloropropane	5.52	63	96846	9.0523 ppb		99
57)	Bromodichloromethane	5.75	83	114805	8.9197 ppb		100
58)	Methyl Cyclohexane	5.51	83	137878	8.0751 ppb		95
59)	Dibromomethane	5.61	174	77964	8.7080 ppb		90
60)	MIBK (methyl isobutyl ket	6.29	43	324655	35.4287 ppb		99
61)	1-Bromo-2-chloroethane	6.01	144	18132	8.7926 ppb		94
63)	Cis-1,3-Dichloropropene	6.14	75	145453	8.9309 ppb		99
64)	Toluene	6.44	91	430005	9.1454 ppb		96
65)	Trans-1,3-Dichloropropene	6.63	75	120380	8.9359 ppb		94
66)	1,1,2-TCA	6.79	97	88804	9.3794 ppb		99
67)	2-Hexanone	7.03	43	226150	34.5048 ppb		99
70)	1,2-EDB	7.24	107	93196	9.4671 ppb		95
71)	Tetrachloroethene	6.93	166	125202	8.7680 ppb		98
72)	1-Chlorohexane	7.69	91	138966	9.1036 ppb		98
73)	1,1,1,2-Tetrachloroethane	7.78	131	96025	9.1688 ppb		99
74)	m&p-Xylene	7.92	91	732803	18.6992 ppb		98
75)	o-Xylene	8.28	91	376957	9.2316 ppb		97
76)	Styrene	8.29	104	325355	9.4145 ppb		98
78)	1,3-Dichloropropane	6.94	76	144282	9.3943 ppb		100
79)	Dibromochloromethane	7.14	129	91752	8.8757 ppb		97
80)	Chlorobenzene	7.70	112	296823	9.3387 ppb		99
81)	Ethylbenzene	7.81	91	475456	9.3585 ppb		99
82)	Bromoform	8.45	173	61654	7.9761 ppb		96
84)	Isopropylbenzene	8.64	105	496664	9.5853 ppb		98
85)	1,1,2,2-Tetrachloroethane	8.90	83	105592	9.0547 ppb		97
86)	1,2,3-Trichloropropane	8.94	110	36856	9.5621 ppb		99
87)	t-1,4-Dichloro-2-Butene	8.96	53	22509	7.8642 ppb		93
88)	Bromobenzene	8.91	77	205225	9.1914 ppb		98
89)	n-Propylbenzene	9.03	91	576390	9.5283 ppb		99
90)	4-Ethyltoluene	9.14	105	502081	9.5830 ppb		100
91)	2-Chlorotoluene	9.10	91	341178	9.1218 ppb		98
92)	1,3,5-Trimethylbenzene	9.20	105	425093	9.5174 ppb		99
93)	4-Chlorotoluene	9.20	91	385222	9.2748 ppb		100
94)	Tert-Butylbenzene	9.51	119	383374	9.6621 ppb		97
95)	1,2,4-Trimethylbenzene	9.56	105	422391	9.4326 ppb		99
96)	Sec-Butylbenzene	9.73	105	569425	9.6461 ppb		100
97)	p-Isopropyltoluene	9.87	119	489107	9.6364 ppb		98
98)	Benzyl Chloride	10.03	91	142591	7.0123 ppb		96
99)	1,3-DCB	9.82	146	265866	9.4444 ppb		99
100)	1,4-DCB	9.90	146	268141	9.4543 ppb		97
101)	n-Butylbenzene	10.27	91	416319	9.2004 ppb		99
102)	1,2-DCB	10.26	146	247604	9.3959 ppb		99
103)	Hexachloroethane	10.52	201	59347	7.6700 ppb	#	82
104)	1,2-Dibromo-3-chloropropan	11.02	157	27435	8.3823 ppb		93
105)	1,2,4-Trichlorobenzene	11.84	180	169020	8.6443 ppb		100
106)	Hexachlorobutadiene	12.03	225	71534	8.1101 ppb		100
107)	Naphthalene	12.07	128	425415	9.3625 ppb		100
108)	1,2,3-Trichlorobenzene	12.32	180	151558	8.7212 ppb		99

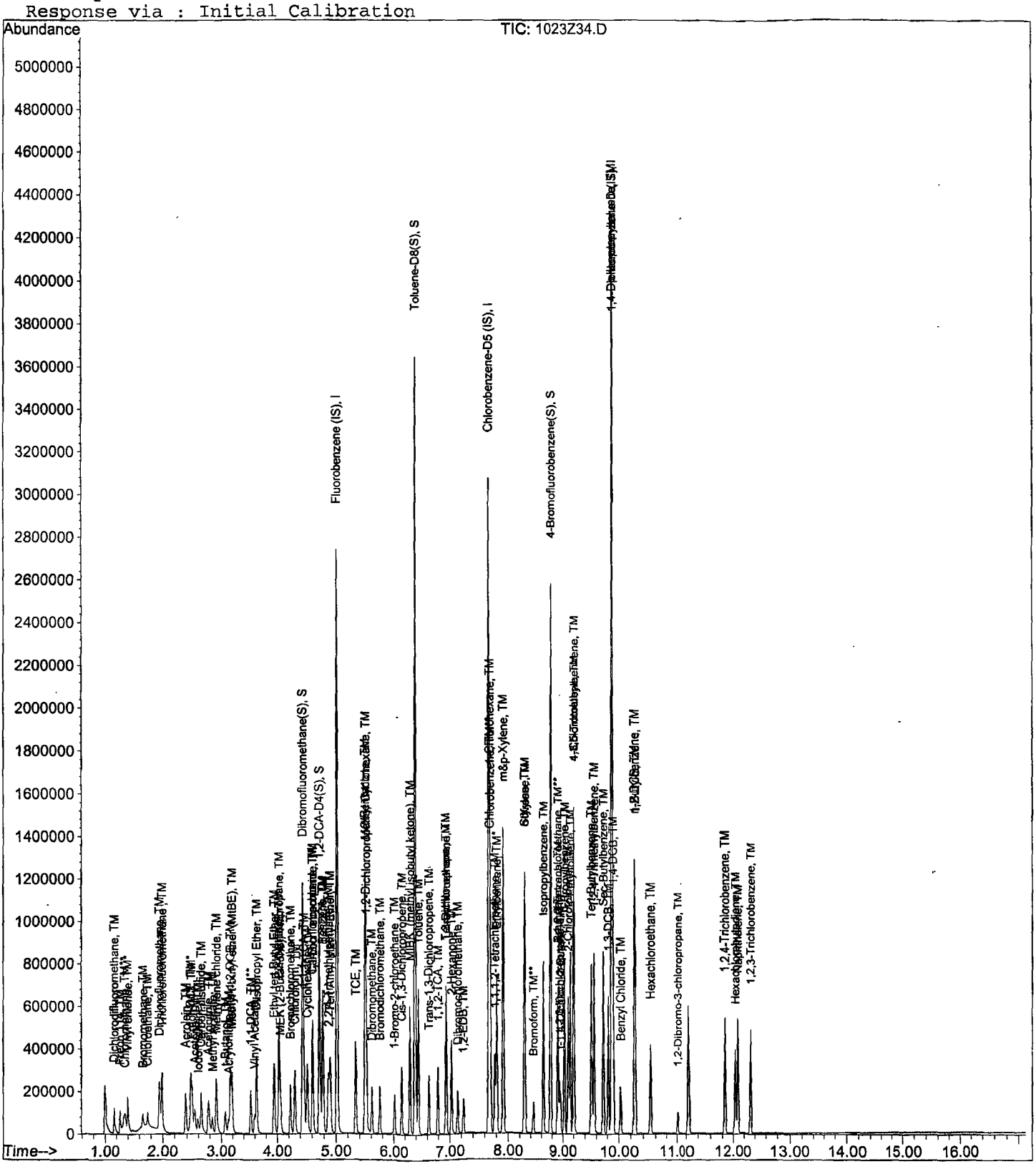
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z34.D Vial: 29
Acq On : 24 Oct 20 00:46 Operator: LP,DG,CH
Sample : 201023A LCSD 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 11:13 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z48.D Vial: 43
Acq On : 24 Oct 20 06:09 Operator: LP,DG,CH
Sample : BA20539W02,3,6 MS 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:14 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1852558	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1343958	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	735008	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.44	111	482055	24.79	ppb		0.00
Spiked Amount 25.000			Recovery = 99.164%				
48) 1,2-DCA-D4(S)	4.72	65	449466	24.43	ppb		0.00
Spiked Amount 25.000			Recovery = 97.700%				
69) Toluene-D8(S)	6.38	98	1812122	26.76	ppb		0.00
Spiked Amount 25.000			Recovery = 107.040%				
77) 4-Bromofluorobenzene(S)	8.77	95	657708	25.52	ppb		0.00
Spiked Amount 25.000			Recovery = 102.092%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.16	87	26533	9.88	ppb		99
4) Freon 114	1.26	85	30711	9.53	ppb		83
5) Chloromethane	1.34	50	112948	8.05	ppb		98
6) Vinyl chloride	1.39	62	106040	8.63	ppb		99
9) Bromomethane	1.66	94	29984	14.24	ppb		100
10) Chloroethane	1.75	64	50780	23.46	ppb		98
11) Dichlorofluoromethane	1.94	67	193186	10.60	ppb		95
12) Trichlorofluoromethane	1.99	101	139218	9.89	ppb		98
16) Acrolein	2.38	55	72421	88.36	ppb		98
17) Acetone	2.53	43	121313	41.64	ppb		99
18) Freon-113	2.49	101	70936	9.40	ppb		89
19) 1,1-DCE	2.47	61	110990	9.22	ppb		96
21) Acetonitrile	2.77	40	35610	109.64	ppb	#	59
22) t-Butanol	3.07	59	36552	84.40	ppb		96
23) Methyl Acetate	2.84	43	65511	9.07	ppb		91
24) Iodomethane	2.59	142	58709	6.52	ppb		99
25) Acrylonitrile	3.13	52	25998	7.66	ppb		99
26) Methylene chloride	2.91	84	93029	9.29	ppb		94
27) Carbon disulfide	2.65	76	124400	9.13	ppb		100
28) Methyl t-butyl ether (MtBE	3.19	73	184062	8.48	ppb		98
29) Trans-1,2-DCE	3.16	61	109805	9.21	ppb		97
31) Diisopropyl Ether	3.63	45	229060	8.86	ppb		97
33) 1,1-DCA	3.53	63	142782	9.36	ppb		98
34) Vinyl Acetate	3.59	43	91927	7.77	ppb		97
35) Ethyl tert Butyl Ether	3.94	59	201647	8.48	ppb		98
36) MEK (2-Butanone)	4.06	43	145170	35.54	ppb		98
37) Cis-1,2-DCE	4.03	61	128499	9.09	ppb		98
38) 2,2-Dichloropropane	4.03	77	93508	7.62	ppb		95
41) Chloroform	4.31	83	151038	9.67	ppb		97
42) Bromochloromethane	4.23	49	67289	9.10	ppb		97
44) 1,1,1-TCA	4.47	97	123473	9.26	ppb		97
45) Cyclohexane	4.52	56	126310	8.87	ppb		98
46) 1,1-Dichloropropene	4.61	75	107233	9.31	ppb		97
47) 2,2,4-Trimethylpentane	4.87	57	226333	8.17	ppb		100
49) Carbon Tetrachloride	4.61	117	95057	8.46	ppb		98
50) Tert Amyl Methyl Ether	4.90	73	182086	8.40	ppb		99
52) 1,2-DCA	4.79	62	95261	8.58	ppb		98
53) Benzene	4.78	78	355399	9.57	ppb		97
54) TCE	5.33	130	101070	8.59	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z48.D Vial: 43
Acq On : 24 Oct 20 06:09 Operator: LP,DG,CH
Sample : BA20539W02,3,6 MS 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:14 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.49	43	575430	87.00	ppb		99
56)	1,2-Dichloropropane	5.52	63	85671	9.33	ppb	#	96
57)	Bromodichloromethane	5.75	83	95131	8.62	ppb		96
58)	Methyl Cyclohexane	5.51	83	135157	9.23	ppb		91
59)	Dibromomethane	5.61	174	54742	7.13	ppb	#	73
60)	MIBK (methyl isobutyl ket	6.29	43	292290	37.18	ppb		95
61)	1-Bromo-2-chloroethane	6.02	144	13634	7.71	ppb		94
63)	Cis-1,3-Dichloropropene	6.14	75	117561	8.41	ppb		98
64)	Toluene	6.44	91	380630	9.44	ppb		98
65)	Trans-1,3-Dichloropropene	6.63	75	94400	8.17	ppb		96
66)	1,1,2-TCA	6.79	97	72616	8.94	ppb		97
67)	2-Hexanone	7.03	43	200689	35.69	ppb		98
70)	1,2-EDB	7.24	107	73061	8.97	ppb	#	92
71)	Tetrachloroethene	6.93	166	91365	7.73	ppb		92
72)	1-Chlorohexane	7.69	91	119922	9.48	ppb		97
73)	1,1,1,2-Tetrachloroethane	7.78	131	72853	8.40	ppb		98
74)	m&p-Xylene	7.92	91	640847	19.75	ppb		100
75)	o-Xylene	8.28	91	327975	9.70	ppb		100
76)	Styrene	8.29	104	246963	8.63	ppb		98
78)	1,3-Dichloropropane	6.94	76	119933	9.43	ppb		98
79)	Dibromochloromethane	7.14	129	66243	7.74	ppb		95
80)	Chlorobenzene	7.70	112	255435	9.71	ppb		99
81)	Ethylbenzene	7.81	91	418373	9.95	ppb		98
82)	Bromoform	8.45	173	35694	5.58	ppb		97
84)	Isopropylbenzene	8.64	105	427289	10.57	ppb		98
85)	1,1,2,2-Tetrachloroethane	8.90	83	86585	9.52	ppb		97
86)	1,2,3-Trichloropropane	8.94	110	28097	9.35	ppb		98
87)	t-1,4-Dichloro-2-Butene	8.96	53	16141	7.23	ppb		99
88)	Bromobenzene	8.90	77	174084	10.00	ppb	#	77
89)	n-Propylbenzene	9.03	91	513024	10.87	ppb		99
90)	4-Ethyltoluene	9.14	105	433016	10.60	ppb		97
91)	2-Chlorotoluene	9.10	91	296444	10.16	ppb		95
92)	1,3,5-Trimethylbenzene	9.20	105	363025	10.42	ppb		98
93)	4-Chlorotoluene	9.20	91	340033	10.50	ppb		95
94)	Tert-Butylbenzene	9.51	119	320170	10.35	ppb		98
95)	1,2,4-Trimethylbenzene	9.56	105	352664	10.10	ppb		97
96)	Sec-Butylbenzene	9.73	105	493044	10.71	ppb		96
97)	p-Isopropyltoluene	9.87	119	411573	10.40	ppb		98
98)	Benzyl Chloride	10.03	91	88111	5.56	ppb		97
99)	1,3-DCB	9.81	146	201212	9.17	ppb		97
100)	1,4-DCB	9.90	146	206420	9.33	ppb		96
101)	n-Butylbenzene	10.27	91	364647	10.33	ppb		100
102)	1,2-DCB	10.26	146	189385	9.22	ppb		96
103)	Hexachloroethane	10.52	201	34368	6.03	ppb	#	72
104)	1,2-Dibromo-3-chloropropan	11.02	157	16980	6.65	ppb		90
105)	1,2,4-Trichlorobenzene	11.84	180	111961	7.34	ppb		96
106)	Hexachlorobutadiene	12.03	225	43917	6.38	ppb		94
107)	Naphthalene	12.07	128	294158	8.30	ppb		99
108)	1,2,3-Trichlorobenzene	12.32	180	97067	7.16	ppb		99

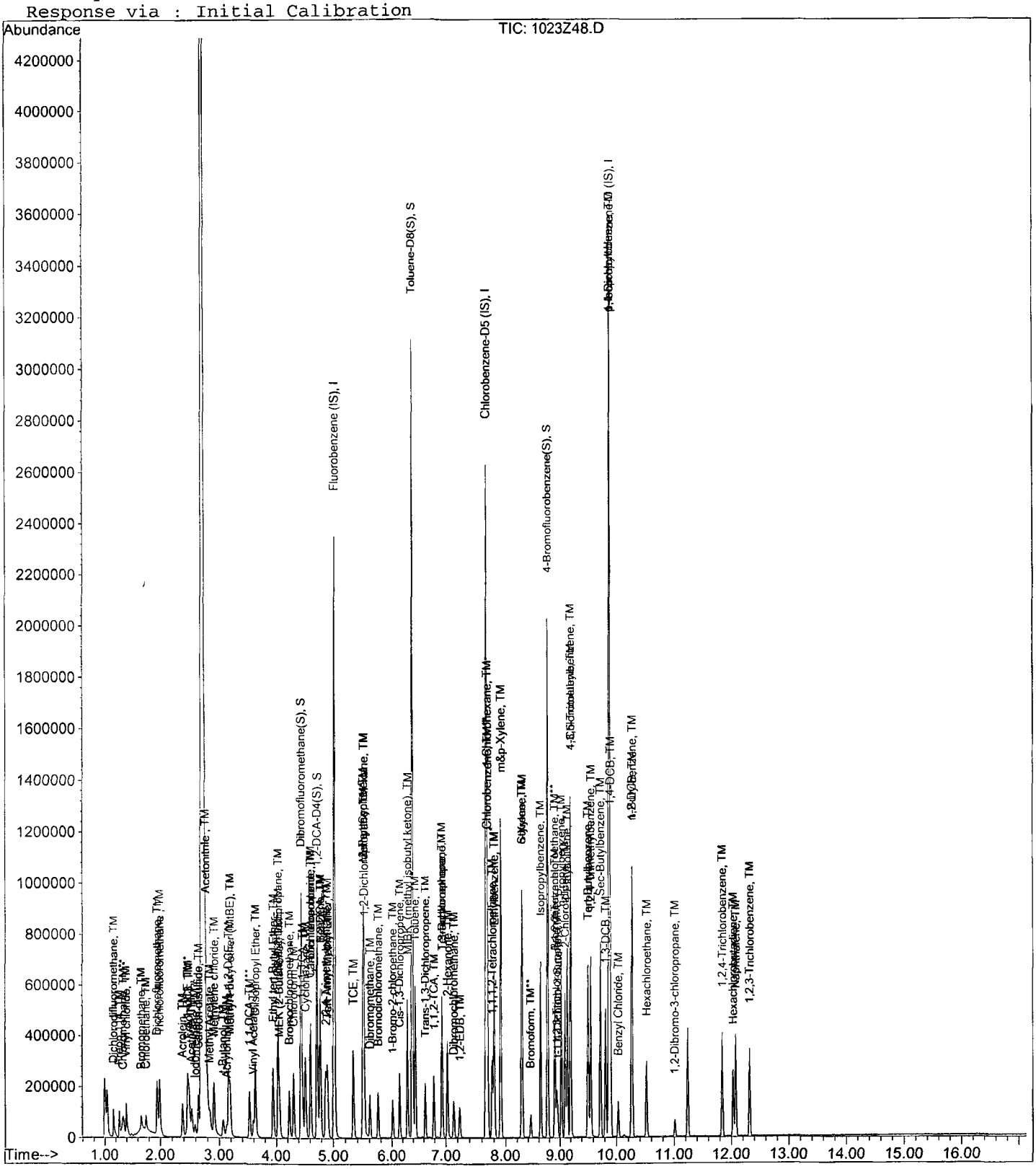
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z48.D Vial: 43
Acq On : 24 Oct 20 06:09 Operator: LP,DG,CH
Sample : BA20539W02,3,6 MS 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:14 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z49.D Vial: 44
Acq On : 24 Oct 20 06:32 Operator: LP,DG,CH
Sample : BA20539W03,2,6 MSD 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:14 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1841035	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.67	117	1337437	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.88	152	728874	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.44	111	482804	24.98	ppb		0.00
Spiked Amount 25.000			Recovery = 99.940%				
48) 1,2-DCA-D4(S)	4.72	65	454716	24.86	ppb		0.00
Spiked Amount 25.000			Recovery = 99.460%				
69) Toluene-D8(S)	6.38	98	1820380	27.01	ppb		0.00
Spiked Amount 25.000			Recovery = 108.052%				
77) 4-Bromofluorobenzene(S)	8.77	95	659405	25.71	ppb		0.00
Spiked Amount 25.000			Recovery = 102.856%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.16	87	25471	9.54	ppb		97
4) Freon 114	1.26	85	30416	9.50	ppb	#	80
5) Chloromethane	1.34	50	108372	7.77	ppb		99
6) Vinyl chloride	1.39	62	102021	8.35	ppb		100
9) Bromomethane	1.66	94	30272	14.50	ppb		95
10) Chloroethane	1.75	64	47795	21.94	ppb		98
11) Dichlorofluoromethane	1.95	67	181576	10.03	ppb		97
12) Trichlorofluoromethane	1.99	101	134567	9.62	ppb		98
16) Acrolein	2.38	55	73255	89.93	ppb		98
17) Acetone	2.53	43	127495	44.04	ppb		98
18) Freon-113	2.49	101	67559	9.01	ppb		88
19) 1,1-DCE	2.47	61	105893	8.86	ppb		96
21) Acetonitrile	2.77	40	37231	115.34	ppb	#	62
22) t-Butanol	3.07	59	38112	88.55	ppb		97
23) Methyl Acetate	2.84	43	70384	9.81	ppb	#	88
24) Iodomethane	2.60	142	65662	7.18	ppb		94
25) Acrylonitrile	3.13	52	25354	7.52	ppb		97
26) Methylene chloride	2.91	84	86692	8.67	ppb		99
27) Carbon disulfide	2.65	76	118160	8.73	ppb		99
28) Methyl t-butyl ether (MtBE	3.19	73	177727	8.24	ppb		96
29) Trans-1,2-DCE	3.16	61	103138	8.70	ppb		96
31) Diisopropyl Ether	3.63	45	215314	8.38	ppb		99
33) 1,1-DCA	3.53	63	136378	9.00	ppb		97
34) Vinyl Acetate	3.60	43	79819	6.79	ppb		100
35) Ethyl tert Butyl Ether	3.94	59	193220	8.18	ppb		96
36) MEK (2-Butanone)	4.06	43	150046	36.97	ppb		98
37) Cis-1,2-DCE	4.03	61	121757	8.67	ppb		94
38) 2,2-Dichloropropane	4.03	77	86434	7.09	ppb		99
41) Chloroform	4.31	83	141821	9.14	ppb		100
42) Bromochloromethane	4.23	49	63705	8.67	ppb		96
44) 1,1,1-TCA	4.47	97	115412	8.71	ppb		99
45) Cyclohexane	4.52	56	118476	8.37	ppb		99
46) 1,1-Dichloropropene	4.61	75	103688	9.06	ppb		99
47) 2,2,4-Trimethylpentane	4.87	57	208201	7.56	ppb		99
49) Carbon Tetrachloride	4.61	117	87573	7.84	ppb		100
50) Tert Amyl Methyl Ether	4.90	73	174815	8.12	ppb		96
52) 1,2-DCA	4.79	62	90990	8.25	ppb		98
53) Benzene	4.78	78	335415	9.09	ppb		100
54) TCE	5.33	130	96836	8.28	ppb		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z49.D Vial: 44
Acq On : 24 Oct 20 06:32 Operator: LP,DG,CH
Sample : BA20539W03,2,6 MSD 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:14 2020 Quant Results File: Z1023W.RES

Quant Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.49	43	592869	90.20	ppb		99
56)	1,2-Dichloropropane	5.52	63	80821	8.86	ppb		100
57)	Bromodichloromethane	5.75	83	91514	8.34	ppb		100
58)	Methyl Cyclohexane	5.51	83	123015	8.45	ppb		93
59)	Dibromomethane	5.61	174	52021	6.82	ppb	#	70
60)	MIBK (methyl isobutyl ket	6.29	43	305477	39.10	ppb		98
61)	1-Bromo-2-chloroethane	6.01	144	12980	7.38	ppb		95
63)	Cis-1,3-Dichloropropene	6.14	75	113098	8.15	ppb		98
64)	Toluene	6.44	91	360670	9.00	ppb		99
65)	Trans-1,3-Dichloropropene	6.63	75	89964	7.83	ppb		95
66)	1,1,2-TCA	6.79	97	68566	8.49	ppb		98
67)	2-Hexanone	7.03	43	210697	37.71	ppb		97
70)	1,2-EDB	7.24	107	71199	8.78	ppb		100
71)	Tetrachloroethene	6.93	166	84432	7.18	ppb		91
72)	1-Chlorohexane	7.69	91	113911	9.06	ppb		97
73)	1,1,1,2-Tetrachloroethane	7.78	131	68913	7.99	ppb		98
74)	m&p-Xylene	7.92	91	606527	18.79	ppb		100
75)	o-Xylene	8.28	91	312555	9.29	ppb		98
76)	Styrene	8.29	104	231824	8.14	ppb		99
78)	1,3-Dichloropropane	6.94	76	116199	9.18	ppb		99
79)	Dibromochloromethane	7.14	129	64176	7.54	ppb		99
80)	Chlorobenzene	7.70	112	240388	9.18	ppb		99
81)	Ethylbenzene	7.81	91	396285	9.47	ppb		99
82)	Bromoform	8.45	173	34680	5.45	ppb		95
84)	Isopropylbenzene	8.64	105	401084	10.01	ppb		98
85)	1,1,2,2-Tetrachloroethane	8.90	83	84082	9.32	ppb		98
86)	1,2,3-Trichloropropane	8.94	110	26130	8.77	ppb		90
87)	t-1,4-Dichloro-2-Butene	8.96	53	16690	7.54	ppb		88
88)	Bromobenzene	8.90	77	166098	9.62	ppb	#	77
89)	n-Propylbenzene	9.03	91	480027	10.26	ppb		98
90)	4-Ethyltoluene	9.14	105	406518	10.03	ppb		98
91)	2-Chlorotoluene	9.10	91	315546	10.91	ppb		92
92)	1,3,5-Trimethylbenzene	9.20	105	337533	9.77	ppb		99
93)	4-Chlorotoluene	9.20	91	319982	9.96	ppb		97
94)	Tert-Butylbenzene	9.51	119	301717	9.83	ppb		96
95)	1,2,4-Trimethylbenzene	9.56	105	331378	9.57	ppb		99
96)	Sec-Butylbenzene	9.73	105	462227	10.12	ppb		96
97)	p-Isopropyltoluene	9.87	119	387581	9.87	ppb		96
98)	Benzyl Chloride	10.03	91	92694	5.89	ppb		96
99)	1,3-DCB	9.82	146	191522	8.80	ppb		98
100)	1,4-DCB	9.90	146	195835	8.93	ppb		95
101)	n-Butylbenzene	10.27	91	339898	9.71	ppb		100
102)	1,2-DCB	10.26	146	177220	8.70	ppb		97
103)	Hexachloroethane	10.52	201	33829	5.99	ppb	#	68
104)	1,2-Dibromo-3-chloropropan	11.01	157	16998	6.72	ppb		85
105)	1,2,4-Trichlorobenzene	11.84	180	104421	6.91	ppb		100
106)	Hexachlorobutadiene	12.03	225	41200	6.04	ppb		97
107)	Naphthalene	12.07	128	287406	8.18	ppb		99
108)	1,2,3-Trichlorobenzene	12.32	180	93136	6.93	ppb		98

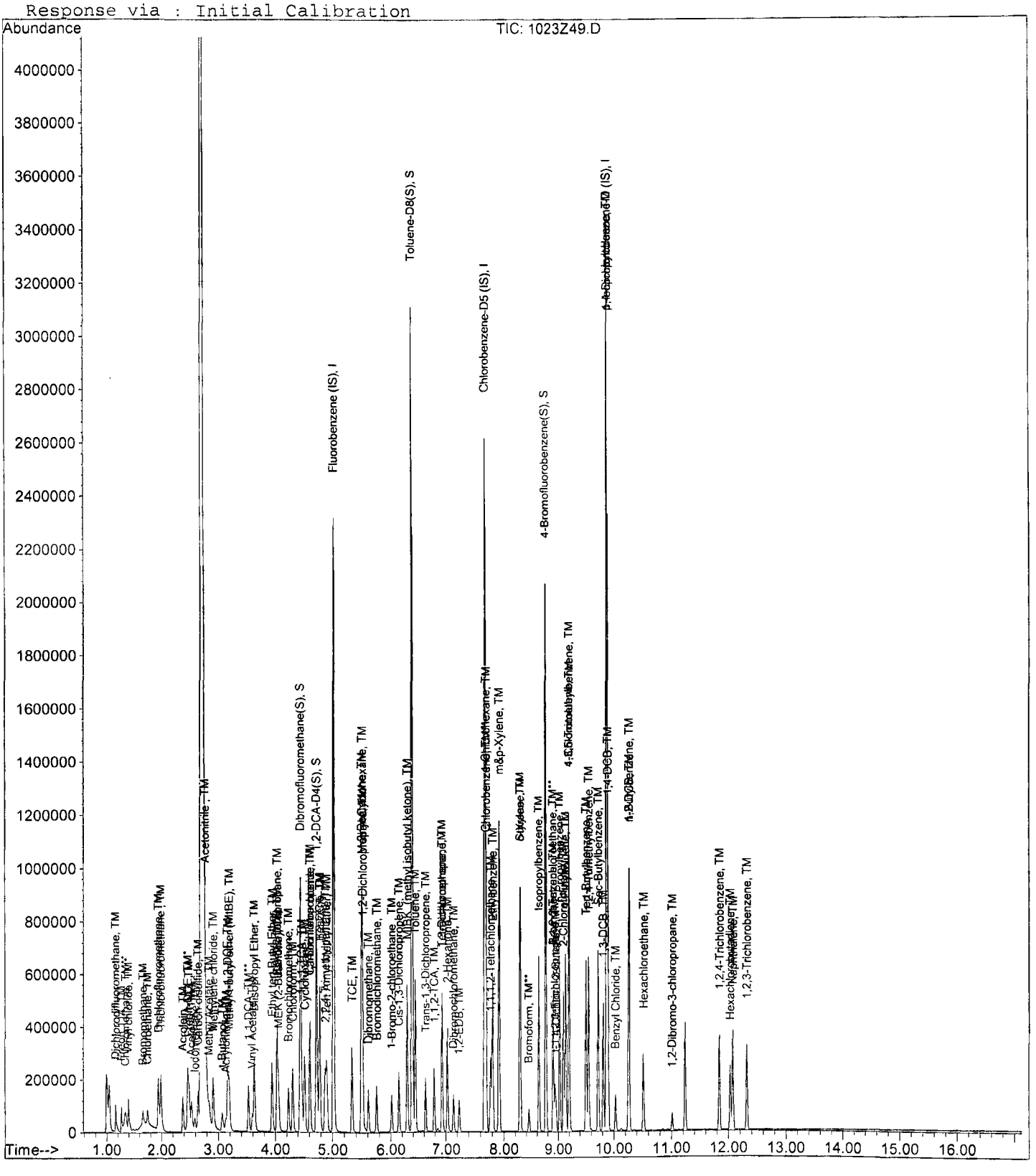
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z49.D Vial: 44
Acq On : 24 Oct 20 06:32 Operator: LP,DG,CH
Sample : BA20539W03,2,6 MSD 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:14 2020 Quant Results File: Z1023W.RES

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration

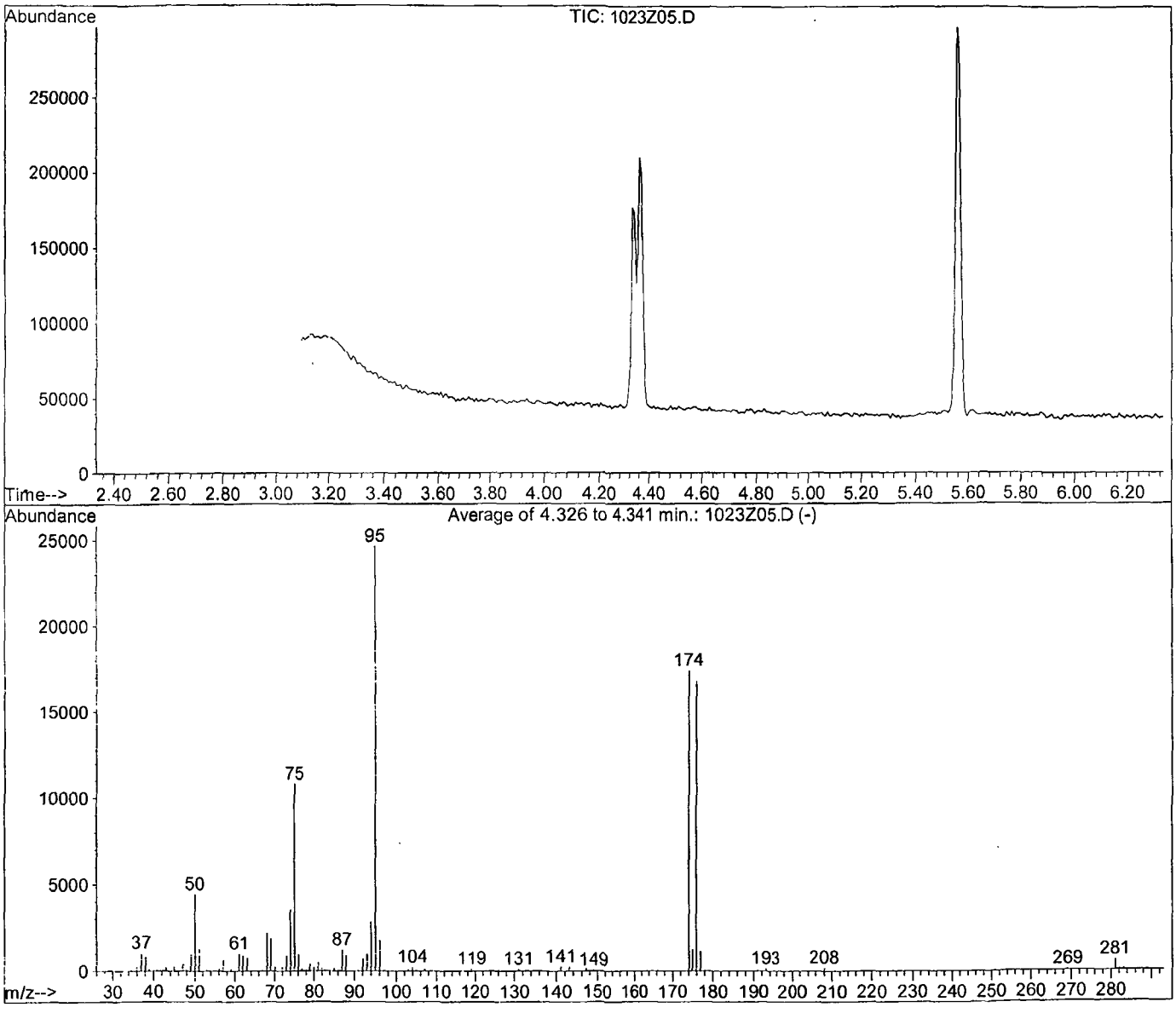


BFB

Data File : M:\ZEUS\DATA\201023\1023Z05.D
Acq On : 23 Oct 20 13:28
Sample : 25ug/L BFB STD 9/30/20
Misc :

Vial: 1
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B



AutoFind: Scans 173, 174, 175; Background Corrected with Scan 168

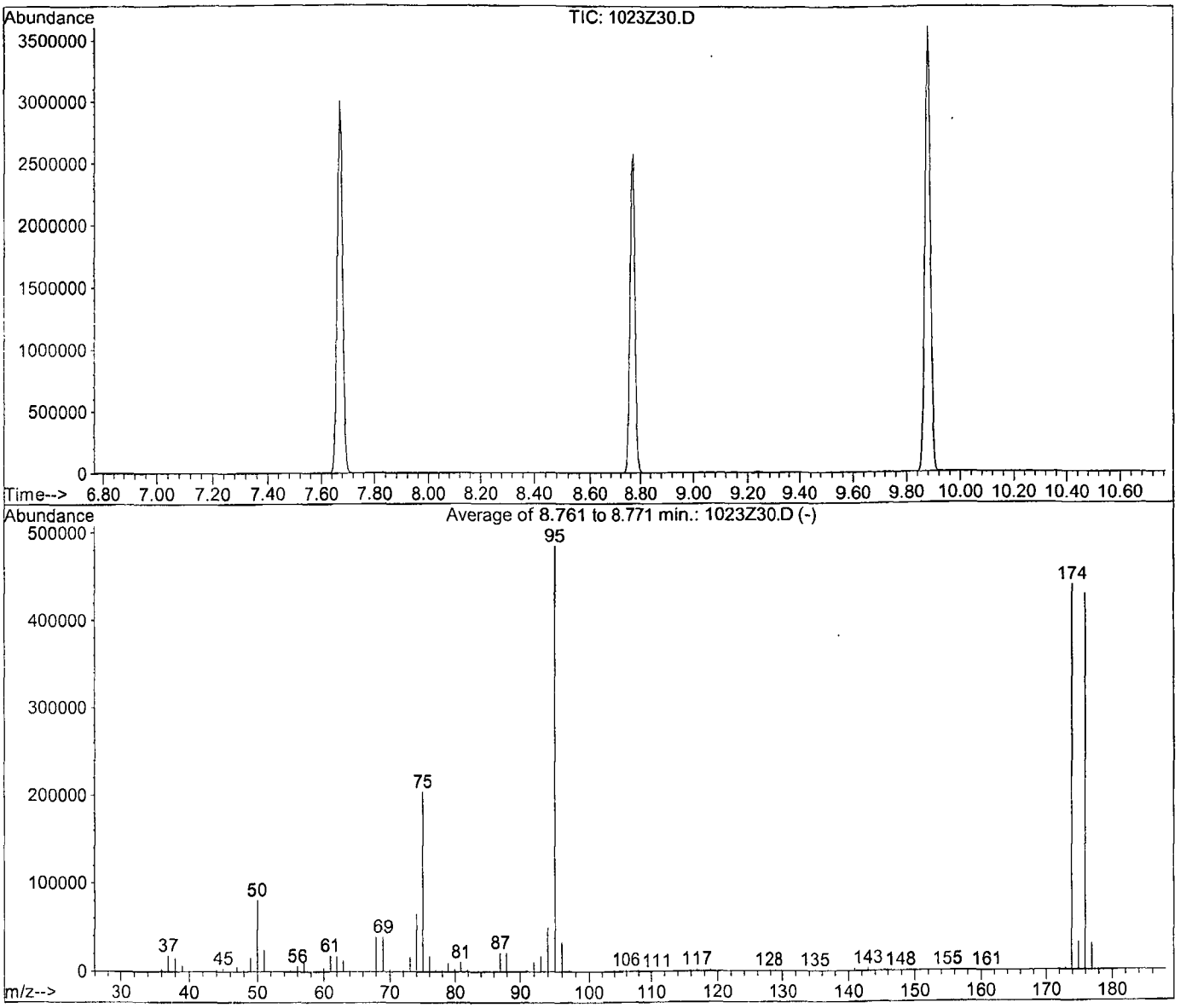
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	4446	PASS
75	95	30	60	43.9	10822	PASS
95	95	100	100	100.0	24632	PASS
96	95	5	9	7.2	1771	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	200	70.6	17397	PASS
175	174	5	9	7.2	1248	PASS
176	174	95	101	96.5	16782	PASS
177	176	5	9	6.8	1139	PASS

BFB

Data File : M:\ZEUS\DATA\201023\1023Z30.D
Acq On : 23 Oct 20 23:13
Sample : 25ug/L BFB STD 9/30/20
Misc :

Vial: 25
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Method : M:\ZEUS\DATA\201023\Z1023W.M (RTE Integrator)
Title : METHOD 8260B



AutoFind: Scans 1559, 1560, 1561; Background Corrected with Scan 1551

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.7	80808	PASS
75	95	30	60	42.1	203669	PASS
95	95	100	100	100.0	483755	PASS
96	95	5	9	6.8	33035	PASS
173	174	0.00	2	0.5	2165	PASS
174	95	50	200	90.6	438421	PASS
175	174	5	9	7.2	31541	PASS
176	174	95	101	97.7	428160	PASS
177	176	5	9	6.9	29451	PASS

1023Z30.D Z1023W.M Tue Oct 27 13:06:46 2020

Zeus 8260 Water Calibration Curve

0.3ug/L

Prepared By (Initials): CH

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	0.3ug/L	5	Prepared 10/18/20	12/17/20	N/A	3uL	50mL	P&T Water	0.3
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	5uL			5
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	2.5uL			5
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	2uL			10

0.5ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	0.5ug/L	5	Prepared 10/18/20	12/17/20	N/A	5uL	50mL	P&T Water	0.5
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	10uL			10
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	5uL			10
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	5uL			25

1.0ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	1.0ug/L	5	Prepared 10/18/20	12/17/20	N/A	10uL	50mL	P&T Water	1
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	20uL			20
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	10uL			20
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	10uL			50

2.0ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	2.0ug/L	5	Prepared 10/18/20	12/17/20	N/A	20uL	50mL	P&T Water	2
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	30uL			30
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	15uL			30
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	15uL			75

5ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	5ug/L	50	Prepared 10/18/20	12/17/20	N/A	5uL	50mL	P&T Water	5
VOA STD. 8	Phenova		50	Prepared 10/18/20	11/04/20	N/A	5uL			5
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	40uL			40
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	20uL			20
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	20uL			100

10ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	10ug/L	50	Prepared 10/18/20	12/17/20	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 10/18/20	11/04/20	N/A	10uL			10
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	50uL			50
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	25uL			50
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	25uL			125

20ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	20ug/L	50	Prepared 10/18/20	12/17/20	N/A	20uL	50mL	P&T Water	20
VOA STD. 8	Phenova		50	Prepared 10/18/20	11/04/20	N/A	20uL			20
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	60uL			60
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	30uL			60
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	30uL			150

40ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	40ug/L	50	Prepared 10/18/20	12/17/20	N/A	40uL	50mL	P&T Water	40
VOA STD. 8	Phenova		50	Prepared 10/18/20	11/04/20	N/A	40uL			40
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	80uL			80
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	40uL			80
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	35uL			175

100ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	100ug/L	50	Prepared 10/18/20	12/17/20	N/A	100uL	50mL	P&T Water	100
VOA STD. 8	Phenova		50	Prepared 10/18/20	11/04/20	N/A	100uL			100
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	100uL			100
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	50uL			100
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	40uL			200

Zeus 8260 Water Second Source (SS)

Prepared: 10/23/20

Expires: 11/04/20

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 3	Phenova	8260 Water SS	100	Prepared 10/18/20	12/17/20	N/A	25uL	50mL	P&T Water	50
VOA STD. GASES	Phenova	8260 Water SS	50	Prepared 10/18/20	12/17/20	N/A	10uL			10
VOA STD. 0	Phenova	8260 Water SS	50	Prepared 10/18/20	12/17/20	N/A	10uL			10
VOA STD. 2-CEVE	Absolute	8260 Water SS	50	Prepared 10/18/20	10/18/20	N/A	50uL			50
VOA STD. 6	Various	8260 Water SS	50	Prepared 10/18/20	11/04/20	N/A	10uL			10
Voa STD. TBA	Various	8260 Water SS	250	Prepared 10/18/20	11/04/20	N/A	25uL			250

8260 Water Continuing Calibrations (CCV)/ Lab Control Spikes (LCS)

Prepared: 10/23/20

Expires: 10/24/20

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	CCV/ LCS	50	Prepared 10/18/20	12/17/20	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova	CCV/ LCS	50	Prepared 10/18/20	11/04/20	N/A	10uL			10
VOA STD. 1	Absolute	CCV/ LCS	50	Prepared 10/18/20	12/17/20	N/A	50uL			50
VOA STD. 2	Phenova	CCV/ LCS	100	Prepared 10/18/20	12/17/20	N/A	25uL			50
VOA STD. TBA	Various	CCV/ LCS	250	Prepared 10/18/20	11/04/20	N/A	25uL			125

Primary and Secondary Working Standards

Primary Standards

VOA STD 7

Prepared: 10/18/20 A
Expires: 12/17/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses STD	Phenova	ALO-101206	2,000	CL14506-50819	10/18/21	10/31/24	100uL	4mL	Methanol	50
Hexachloroethane	Absolute	70199	1,000	091818-50780	10/18/21	09/18/23	200uL			50
Benzyl Chloride	Accusta	M-8010-01	1,000	042420-50798	10/18/21	04/24/21	200uL			50

VOA STD 8

Prepared: 10/18/20 B
Expires: 11/04/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Additions STD	Phenova	ALO-130175	2,000	CL15724-50830	10/18/21	09/30/22	100uL	4mL	Methanol	50
502.2 Cal. Std.	Phenova	ALO-101200	2,000	CL14379-50556	10/18/21	10/31/24	100uL			50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL15886-50944	10/10/21	11/04/20	100uL			50

VOA STD TBA

Prepared: 10/18/20 C
Expires: 11/04/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOC Mix	Phenova	ALO-130176	2,000	CL15725-50774	10/18/21	09/30/23	500uL	4mL	Methanol	250
Acrolein	Phenova	ALO-130549	10,000	CL15890-50946	10/10/21	11/04/20	100uL			250

VOA STD 1

Prepared: 10/18/20 D
Expires: 12/17/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE	Absolute	82408	2,000	121119-50901	10/18/21	12/11/22	50	2mL	Methanol	50

VOA STD 2

Prepared: 10/18/20 E
Expires: 12/17/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Std.	Phenova	ALO-109211	2,000	CL12730-50632	10/18/21	08/31/28	100	4mL	Methanol	50

VOA STD 9

Prepared: 10/18/20 F
Expires: 12/17/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 7		VOA STD. 9	50	Prepared 10/18/20	10/18/21	N/A	200uL	2mL	Methanol	5
VOA STD. 8			50	Prepared 10/18/20	10/18/21	N/A	200uL			5

VOA STD. 10

Prepared: 10/18/20 G
Expires: 12/17/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 1		VOA STD. 10	50	Prepared 10/18/20	10/18/21	N/A	200uL	2mL	Methanol	5

VOA STD. 12

Prepared: 10/18/20 H
Expires: 12/17/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 2		VOA STD. 12	50	Prepared 10/18/20	10/18/21	N/A	200uL	2mL	Methanol	5

Second Source (SS) Standards

VOA STD. 3

Prepared: 10/18/20 I
Expires: 12/17/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Standard	Phenova	ALO-101211	2,000	CL13994-50636	10/18/21	08/31/29	50uL	2mL	Methanol	50

VOA STD. Gases

Prepared: 10/18/20 J
Expires: 12/17/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260 Gases (SS)	Phenova	ALO-101206	2,000	CL14505-50824	10/18/21	10/31/24	50uL	2mL	Methanol	50

VOA STD. 6

Prepared: 10/18/20 K
Expires: 11/04/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
502.2 Calibration STD. (54-compounds)	Phenova	ALO-101200	2,000	CL14381-50562	10/18/21	10/31/24	50uL	2mL	Methanol	50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL15886-50945	10/10/21	11/04/20	50uL			50
Hexachloroethane	Accustan	AS-E0011	1,000	219061767-50955	10/18/21	06/28/29	100uL			50
Benzyl Chloride	Accustan	M-8010-01	200	219111303-50803	10/18/21	12/25/21	500uL			50

VOA STD. TBA

Prepared: 10/18/20 L
Expires: 11/04/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOA Mix (4-3)	Phenova	ALO-130176	2,000	CL12929-50567	10/18/21	11/30/20	250uL	2mL	Methanol	250
Acrolein	Phenova	ALO-101224	10,000	CL15890-50947	10/10/21	11/04/20	50uL			250

VOA STD. 0

Prepared: 10/18/20 M
Expires: 12/17/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Addition STD.	Phenova	ALO-130175	2,000	CL14058-50580	10/18/21	08/31/21	50uL	2mL	Methanol	50

VOA STD. 2-CEVE

Prepared: 10/18/20 N
Expires: 12/17/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE (SS)	Absolute	82408	2,000	011320-50896	10/18/21	01/13/23	50uL	2mL	Methanol	50

Injection Log

Directory: M:\ZEUS\DATA\201023\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1023Z05.D	1	25ug/L BFB STD 9/30/20		23 Oct 20 13:28
2	7	1023Z12.D	1	0.3ug/L VOC STD 10/23/20		23 Oct 20 16:16
3	8	1023Z13.D	1	0.5ug/L VOC STD 10/23/20		23 Oct 20 16:39
4	9	1023Z14.D	1	1ug/L VOC STD 10/23/20		23 Oct 20 17:02
5	10	1023Z15.D	1	2ug/L VOC STD 10/23/20		23 Oct 20 17:26
6	11	1023Z16.D	1	5ug/L VOC STD 10/23/20		23 Oct 20 17:49
7	12	1023Z17.D	1	10ug/L VOC STD 10/23/20		23 Oct 20 18:12
8	13	1023Z18.D	1	20ug/L VOC STD 10/23/20		23 Oct 20 18:35
9	14	1023Z19.D	1	40ug/L VOC STD 10/23/20		23 Oct 20 18:58
10	15	1023Z20.D	1	100ug/L VOC STD 10/23/20		23 Oct 20 19:21
11	17	1023Z22.D	1	(SS)10ug/L VOC STD 10/23/20		23 Oct 20 20:07
12	25	1023Z30.D	1	25ug/L BFB STD 9/30/20		23 Oct 20 23:13
13	27	1023Z32.D	1	201023A CCV 10ug/L		24 Oct 20 00:00
14	28	1023Z33.D	1	201023A LCS 10ug/L		24 Oct 20 00:23
15	29	1023Z34.D	1	201023A LCSD 10ug/L		24 Oct 20 00:46
16	33	1023Z38.D	1	201023A BLK		24 Oct 20 02:18
17	34	1023Z39.D	1	BA20538W01		24 Oct 20 02:42
18	35	1023Z40.D	1	BA20539W01		24 Oct 20 03:05
19	36	1023Z41.D	1	BA20540W01		24 Oct 20 03:28
20	37	1023Z42.D	1	BA20541W01		24 Oct 20 03:51
21	38	1023Z43.D	1	BA20542W01		24 Oct 20 04:14
22	39	1023Z44.D	1	BA20543W01		24 Oct 20 04:37
23	40	1023Z45.D	1	BA20544W01		24 Oct 20 05:00
24	43	1023Z48.D	1	BA20539W02,3,6 MS 10ug/L		24 Oct 20 06:09
25	44	1023Z49.D	1	BA20539W03,2,6 MSD 10ug/L		24 Oct 20 06:32
26	47	1023Z52.D	1	Ending CCV 10ug/L 10/23/20		24 Oct 20 07:41

ORGANICS

Calibration Data

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/23/20
Matrix: water Instrument: ZEUS
Initials: DG

			1023Z12 D	1023Z13 D	1023Z14 D	1023Z15 D	1023Z16.D	1023Z17 D	1023Z18 D	1023Z19.D	1023Z20 D							
		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type	r^2	Q	MRF
1	I	Fluorobenzene (IS)																
2	S	Dibromofluoromethane(S)	0.2144	0.2808	0.2561	0.2513	0.2717	0.2663	0.2757	0.2702	0.2750		0.26	7.7	S			
3	S	1,2-DCA-D4(S)	0.2008	0.2667	0.2371	0.2352	0.2519	0.2514	0.2632	0.2556	0.2731		0.25	8.8	S			
4	I	Chlorobenzene-D5 (IS)																
5	S	Toluene-D8(S)	0.9932	1.352	1.185	1.197	1.302	1.290	1.339	1.340	1.340		1.3	9.3	S			
6	S	4-Bromofluorobenzene(S)	0.3948	0.5128	0.4550	0.4585	0.4892	0.4760	0.5033	0.4955	0.5289		0.48	8.3	S			
7	I	1,4-Dichlorobenzene-D (IS)																
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Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z12.D Vial: 7
Acq On : 23 Oct 20 16:16 Operator: LP,DG,CH
Sample : 0.3ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2356083	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1791294	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	1110019	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	101039	4.09	ppb	0.00
Spiked Amount 25.000			Recovery =	16.344%		
3) 1,2-DCA-D4(S)	4.72	65	94632	4.04	ppb	0.00
Spiked Amount 25.000			Recovery =	16.172%		
5) Toluene-D8(S)	6.38	98	355821	3.94	ppb	0.00
Spiked Amount 25.000			Recovery =	15.768%		
6) 4-Bromofluorobenzene(S)	8.77	95	141456	4.12	ppb	0.00
Spiked Amount 25.000			Recovery =	16.476%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

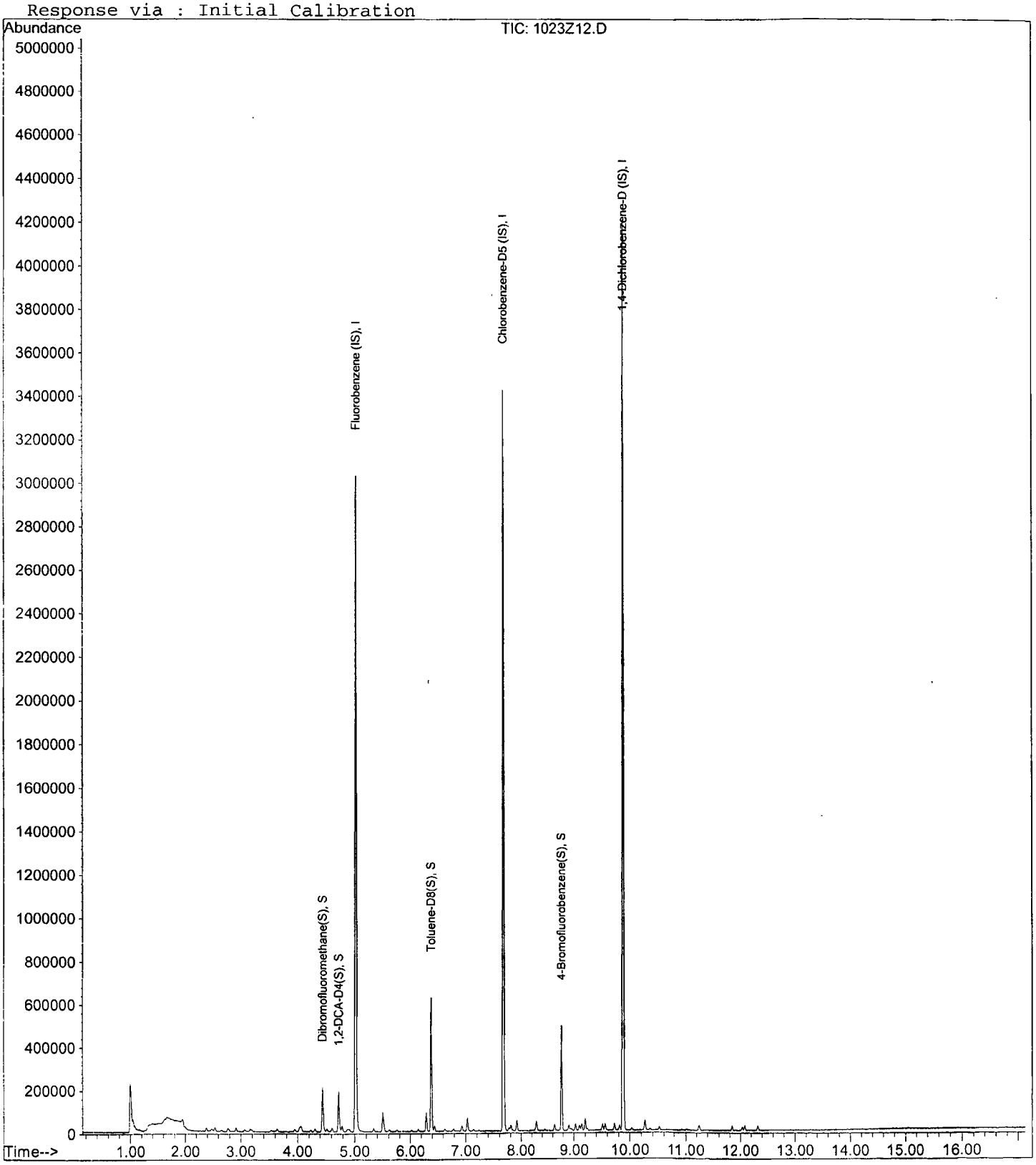
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z12.D
Acq On : 23 Oct 20 16:16
Sample : 0.3ug/L VOC STD 10/23/20
Misc :

Vial: 7
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z13.D Vial: 8
Acq On : 23 Oct 20 16:39 Operator: LP,DG,CH
Sample : 0.5ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2341446	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1753907	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	1082115	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	657513	26.75	ppb	0.00
Spiked Amount 25.000			Recovery =	107.016%		
3) 1,2-DCA-D4(S)	4.72	65	624435	26.85	ppb	0.00
Spiked Amount 25.000			Recovery =	107.392%		
5) Toluene-D8(S)	6.39	98	2370729	26.83	ppb	0.00
Spiked Amount 25.000			Recovery =	107.308%		
6) 4-Bromofluorobenzene(S)	8.77	95	899469	26.75	ppb	0.00
Spiked Amount 25.000			Recovery =	106.988%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

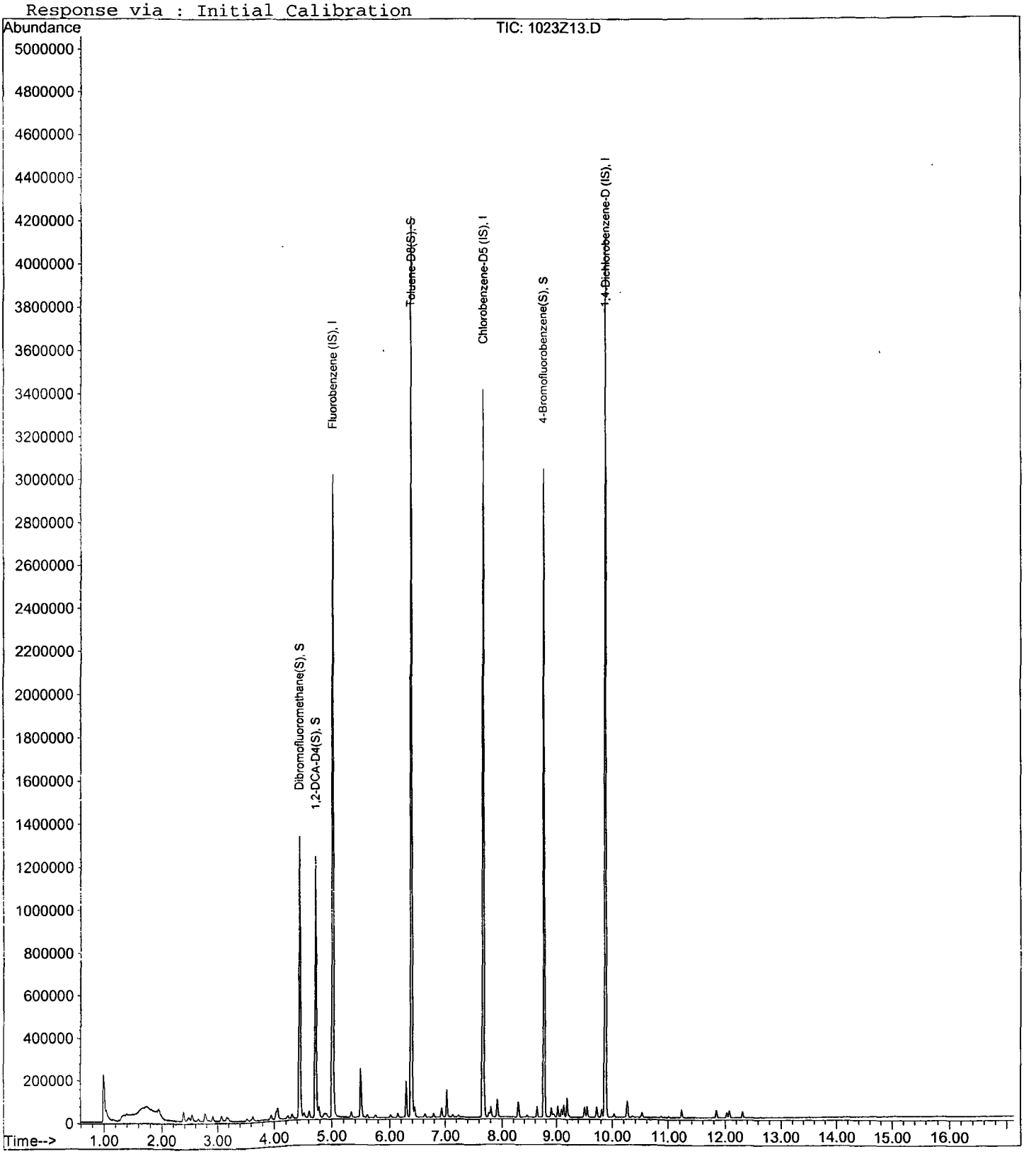
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z13.D
Acq On : 23 Oct 20 16:39
Sample : 0.5ug/L VOC STD 10/23/20
Misc :

Vial: 8
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z14.D Vial: 9
Acq On : 23 Oct 20 17:02 Operator: LP,DG,CH
Sample : 1ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2316688	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1762926	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	1084727	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	237342	9.76	ppb	0.00
Spiked Amount 25.000			Recovery =	39.044%		
3) 1,2-DCA-D4(S)	4.72	65	219710	9.55	ppb	0.00
Spiked Amount 25.000			Recovery =	38.192%		
5) Toluene-D8(S)	6.39	98	835305	9.40	ppb	0.00
Spiked Amount 25.000			Recovery =	37.616%		
6) 4-Bromofluorobenzene(S)	8.77	95	320853	9.49	ppb	0.00
Spiked Amount 25.000			Recovery =	37.968%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

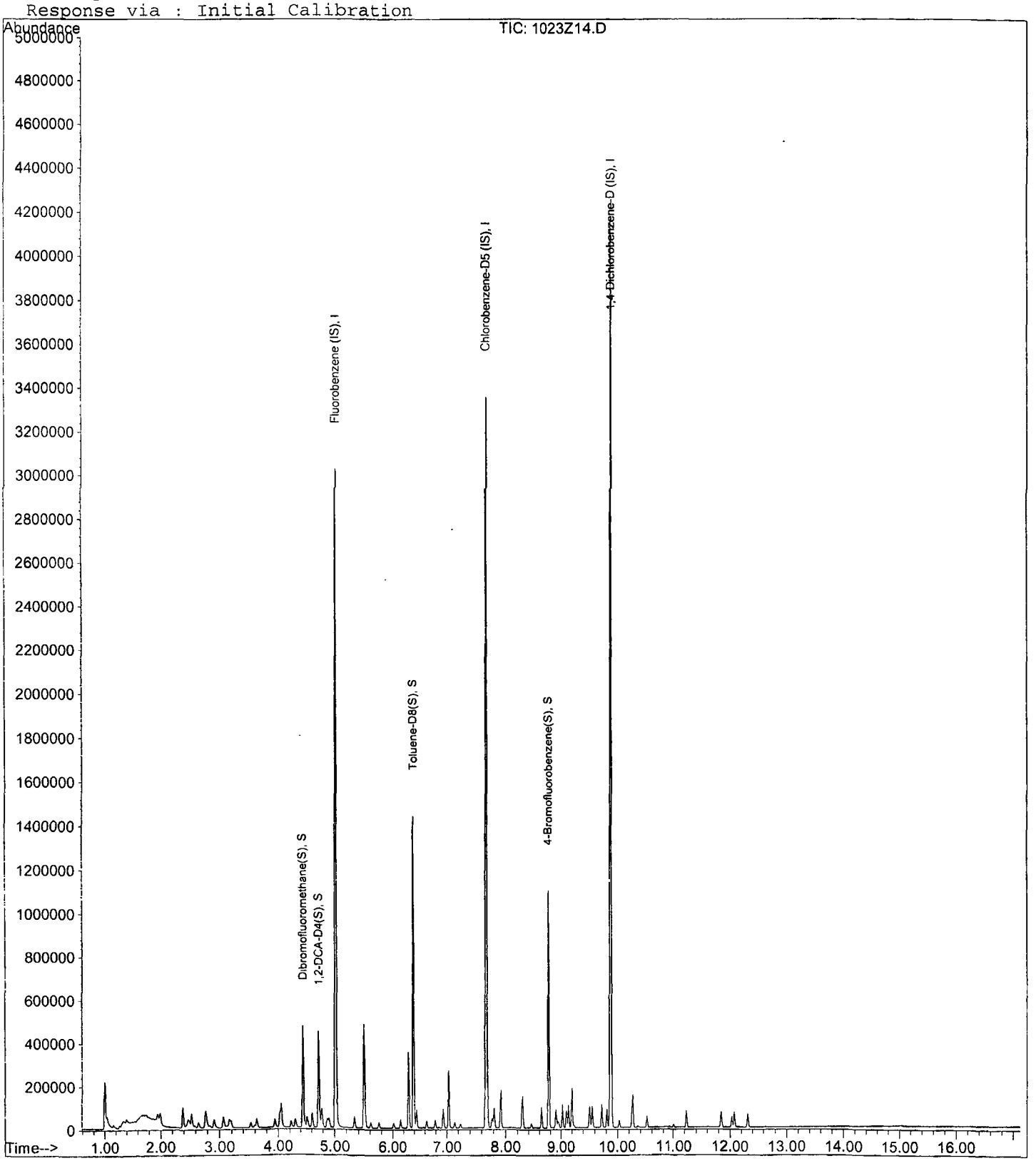
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z14.D
Acq On : 23 Oct 20 17:02
Sample : 1ug/L VOC STD 10/23/20
Misc :

Vial: 9
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z15.D Vial: 10
Acq On : 23 Oct 20 17:26 Operator: LP,DG,CH
Sample : 2ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2327405	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1752454	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	1076444	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	233948	9.58	ppb	0.00
Spiked Amount 25.000			Recovery =	38.308%		
3) 1,2-DCA-D4(S)	4.72	65	218992	9.47	ppb	0.00
Spiked Amount 25.000			Recovery =	37.892%		
5) Toluene-D8(S)	6.39	98	839127	9.50	ppb	0.00
Spiked Amount 25.000			Recovery =	38.012%		
6) 4-Bromofluorobenzene(S)	8.77	95	321402	9.57	ppb	0.00
Spiked Amount 25.000			Recovery =	38.260%		

Target Compounds Qvalue

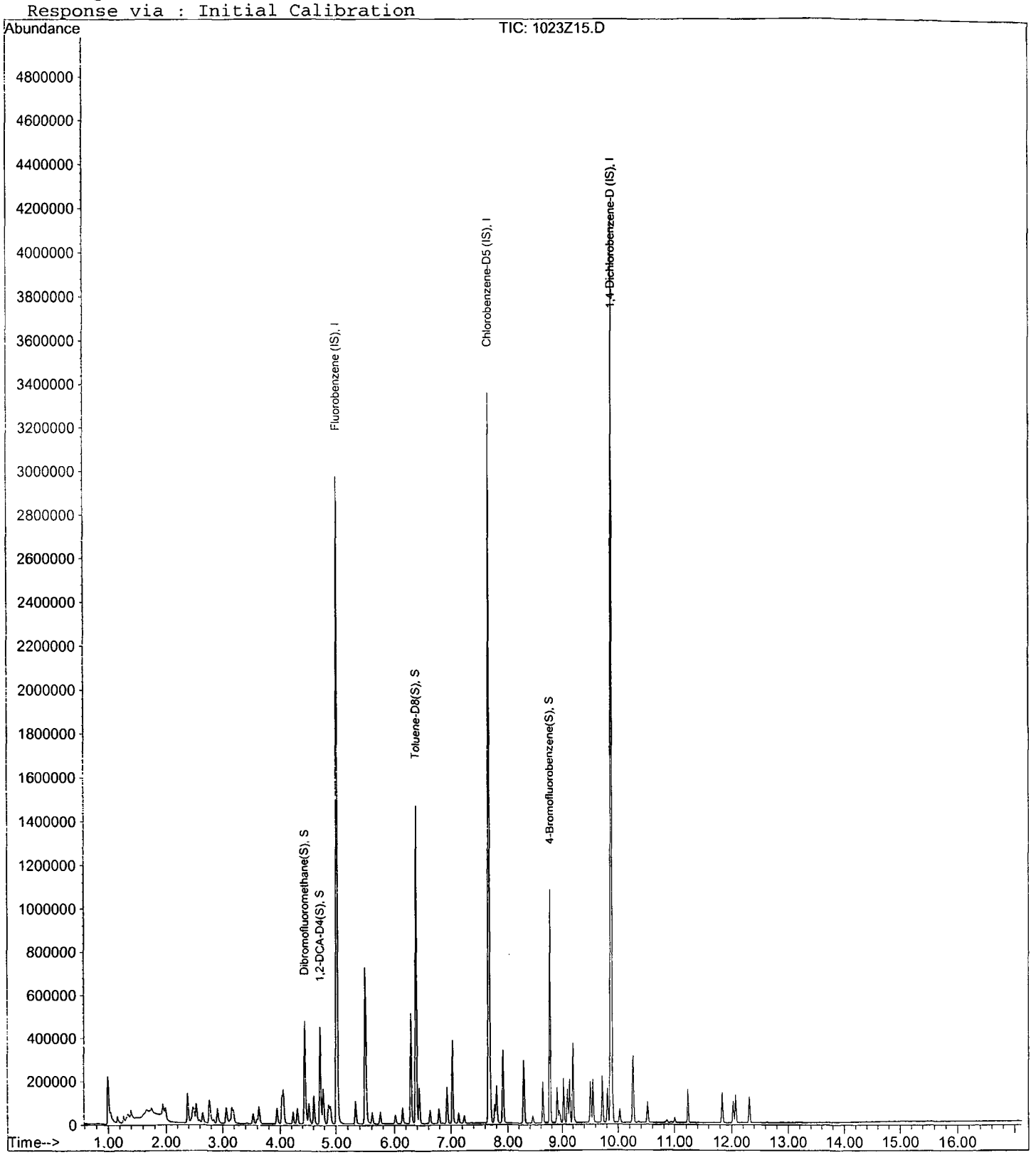
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z15.D Vial: 10
Acq On : 23 Oct 20 17:26 Operator: LP,DG,CH
Sample : 2ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z16.D Vial: 11
Acq On : 23 Oct 20 17:49 Operator: LP,DG,CH
Sample : 5ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2262889	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1703750	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	1027534	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	614749	25.88	ppb	0.00
Spiked Amount 25.000			Recovery = 103.528%			
3) 1,2-DCA-D4(S)	4.72	65	570075	25.36	ppb	0.00
Spiked Amount 25.000			Recovery = 101.448%			
5) Toluene-D8(S)	6.39	98	2218123	25.84	ppb	0.00
Spiked Amount 25.000			Recovery = 103.356%			
6) 4-Bromofluorobenzene(S)	8.77	95	833433	25.51	ppb	0.00
Spiked Amount 25.000			Recovery = 102.052%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

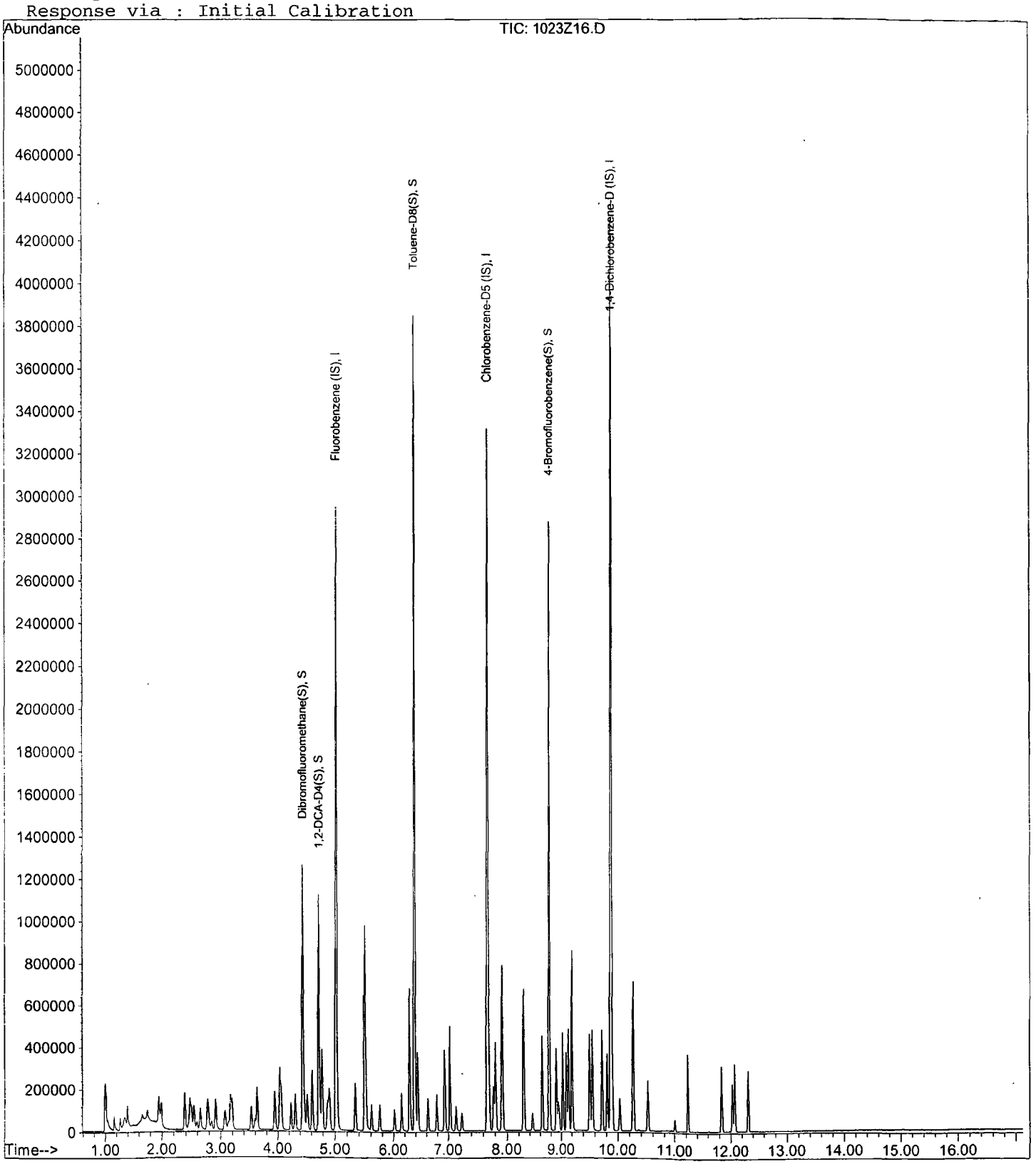
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z16.D
Acq On : 23 Oct 20 17:49
Sample : 5ug/L VOC STD 10/23/20
Misc :

Vial: 11
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z17.D Vial: 12
Acq On : 23 Oct 20 18:12 Operator: LP,DG,CH
Sample : 10ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2263169	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1720200	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	1020669	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	602681	25.37	ppb	0.00
Spiked Amount 25.000			Recovery =	101.484%		
3) 1,2-DCA-D4(S)	4.72	65	568939	25.31	ppb	0.00
Spiked Amount 25.000			Recovery =	101.232%		
5) Toluene-D8(S)	6.39	98	2218898	25.60	ppb	0.00
Spiked Amount 25.000			Recovery =	102.404%		
6) 4-Bromofluorobenzene(S)	8.77	95	818873	24.83	ppb	0.00
Spiked Amount 25.000			Recovery =	99.308%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

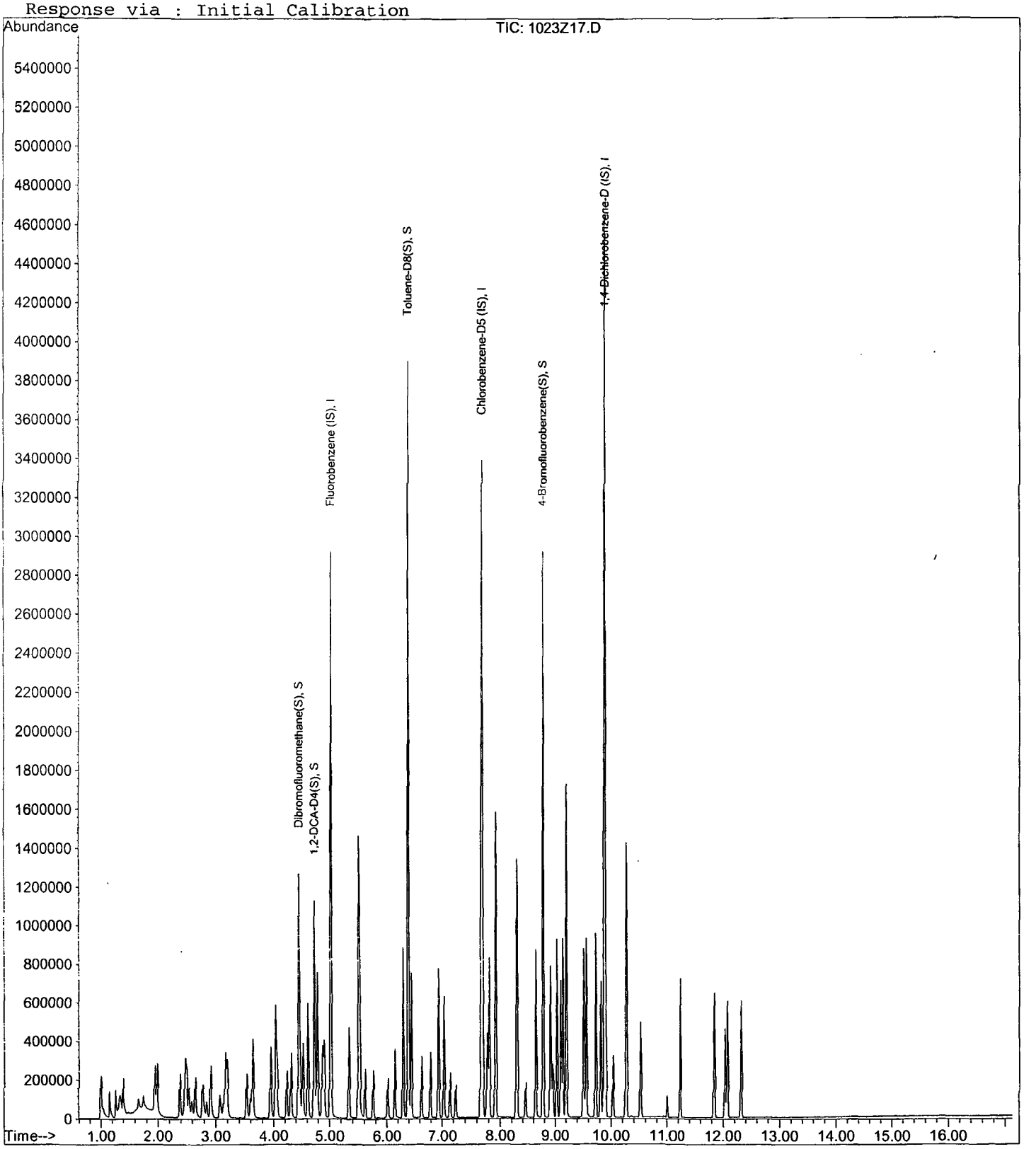
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z17.D
Acq On : 23 Oct 20 18:12
Sample : 10ug/L VOC STD 10/23/20
Misc :

Vial: 12
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z18.D Vial: 13
Acq On : 23 Oct 20 18:35 Operator: LP,DG,CH
Sample : 20ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2267294	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.68	117	1710493	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	1008889	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	1250381	52.54	ppb	0.00
Spiked Amount 25.000			Recovery = 210.168%			
3) 1,2-DCA-D4(S)	4.72	65	1193346	52.99	ppb	0.00
Spiked Amount 25.000			Recovery = 211.948%			
5) Toluene-D8(S)	6.39	98	4579966	53.14	ppb	0.00
Spiked Amount 25.000			Recovery = 212.564%			
6) 4-Bromofluorobenzene(S)	8.77	95	1721761	52.50	ppb	0.00
Spiked Amount 25.000			Recovery = 209.992%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

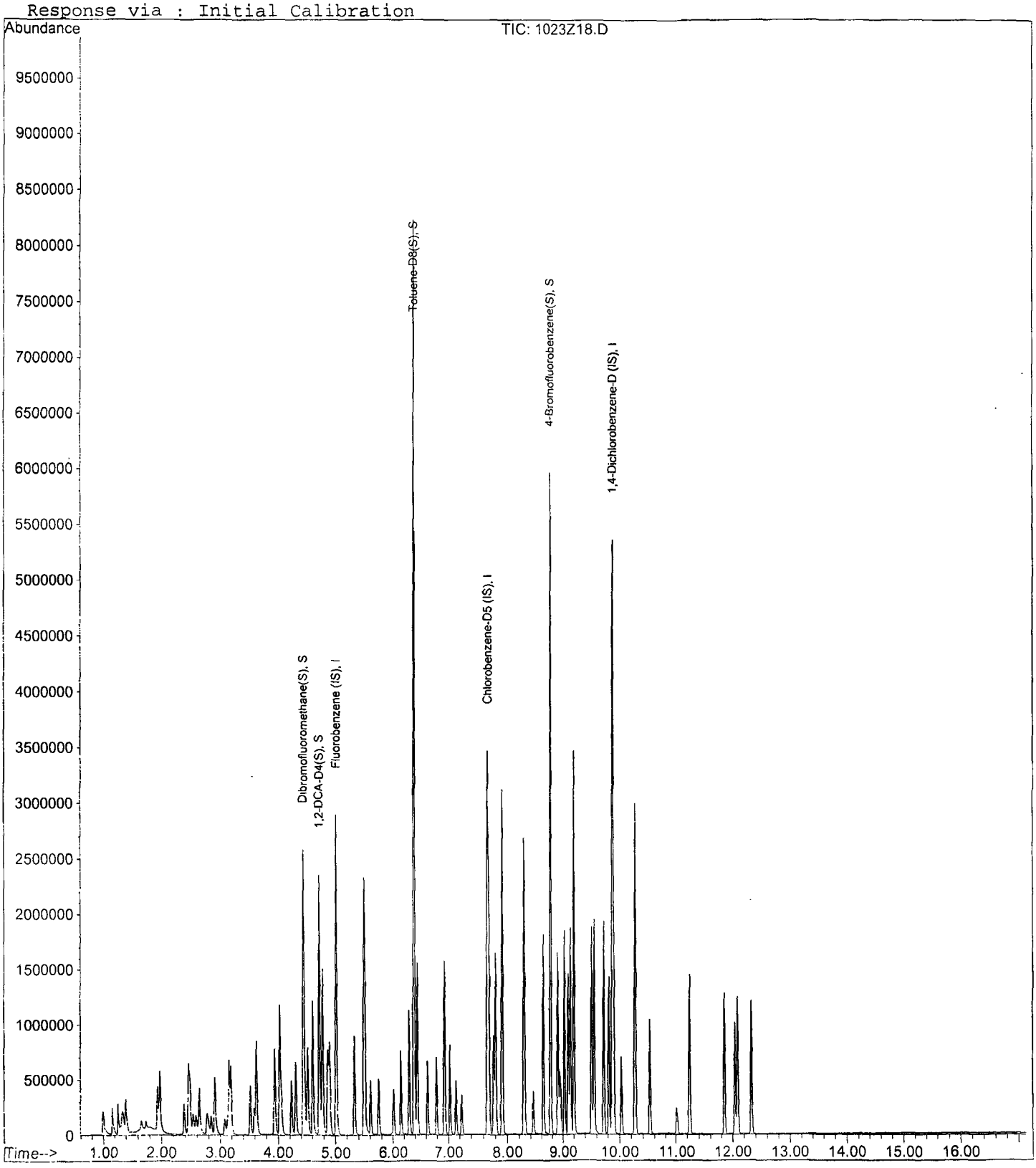
Data File : M:\ZEUS\DATA\201023\1023Z18.D
Acq On : 23 Oct 20 18:35
Sample : 20ug/L VOC STD 10/23/20
Misc :

Vial: 13
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 26 12:30 2020

Quant Results File: ZSUR23.RES

Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z19.D Vial: 14
Acq On : 23 Oct 20 18:58 Operator: LP,DG,CH
Sample : 40ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2320328	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1767155	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	1007559	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	1254122	51.49	ppb	0.00
Spiked Amount 25.000			Recovery =	205.976%		
3) 1,2-DCA-D4(S)	4.72	65	1186014	51.46	ppb	0.00
Spiked Amount 25.000			Recovery =	205.832%		
5) Toluene-D8(S)	6.39	98	4735021	53.18	ppb	0.00
Spiked Amount 25.000			Recovery =	212.716%		
6) 4-Bromofluorobenzene(S)	8.77	95	1751274	51.69	ppb	0.00
Spiked Amount 25.000			Recovery =	206.744%		

Target Compounds Qvalue

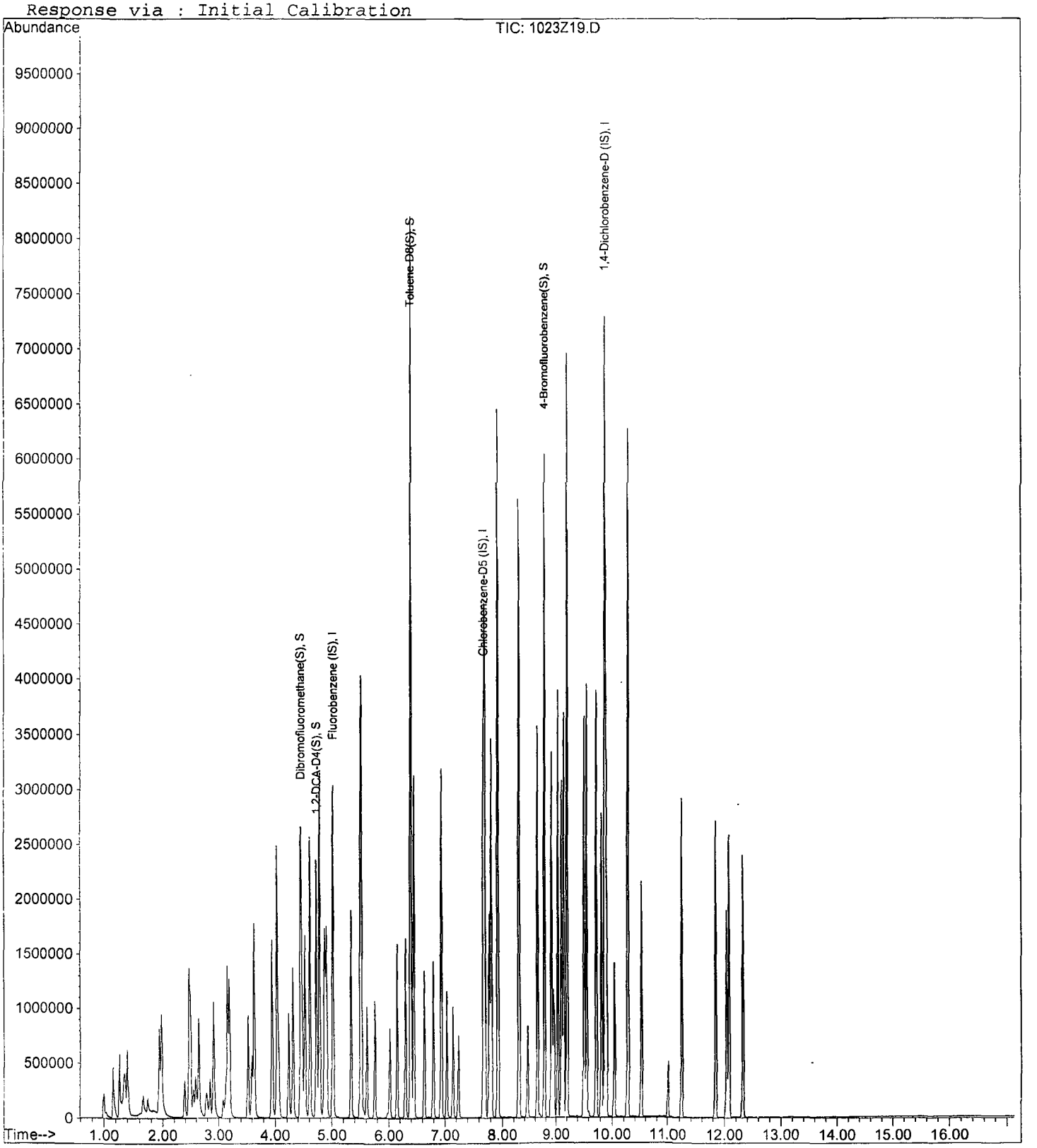
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z19.D Vial: 14
Acq On : 23 Oct 20 18:58 Operator: LP,DG,CH
Sample : 40ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z20.D Vial: 15
Acq On : 23 Oct 20 19:21 Operator: LP,DG,CH
Sample : 100ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2370785	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1827598	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	995518	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	2608129	104.81	ppb	0.00
Spiked Amount 25.000			Recovery =	419.244%		
3) 1,2-DCA-D4(S)	4.72	65	2589719	109.97	ppb	0.00
Spiked Amount 25.000			Recovery =	439.876%		
5) Toluene-D8(S)	6.39	98	9795857	106.38	ppb	0.00
Spiked Amount 25.000			Recovery =	425.512%		
6) 4-Bromofluorobenzene(S)	8.77	95	3866481	110.34	ppb	0.00
Spiked Amount 25.000			Recovery =	441.356%		

Target Compounds Qvalue

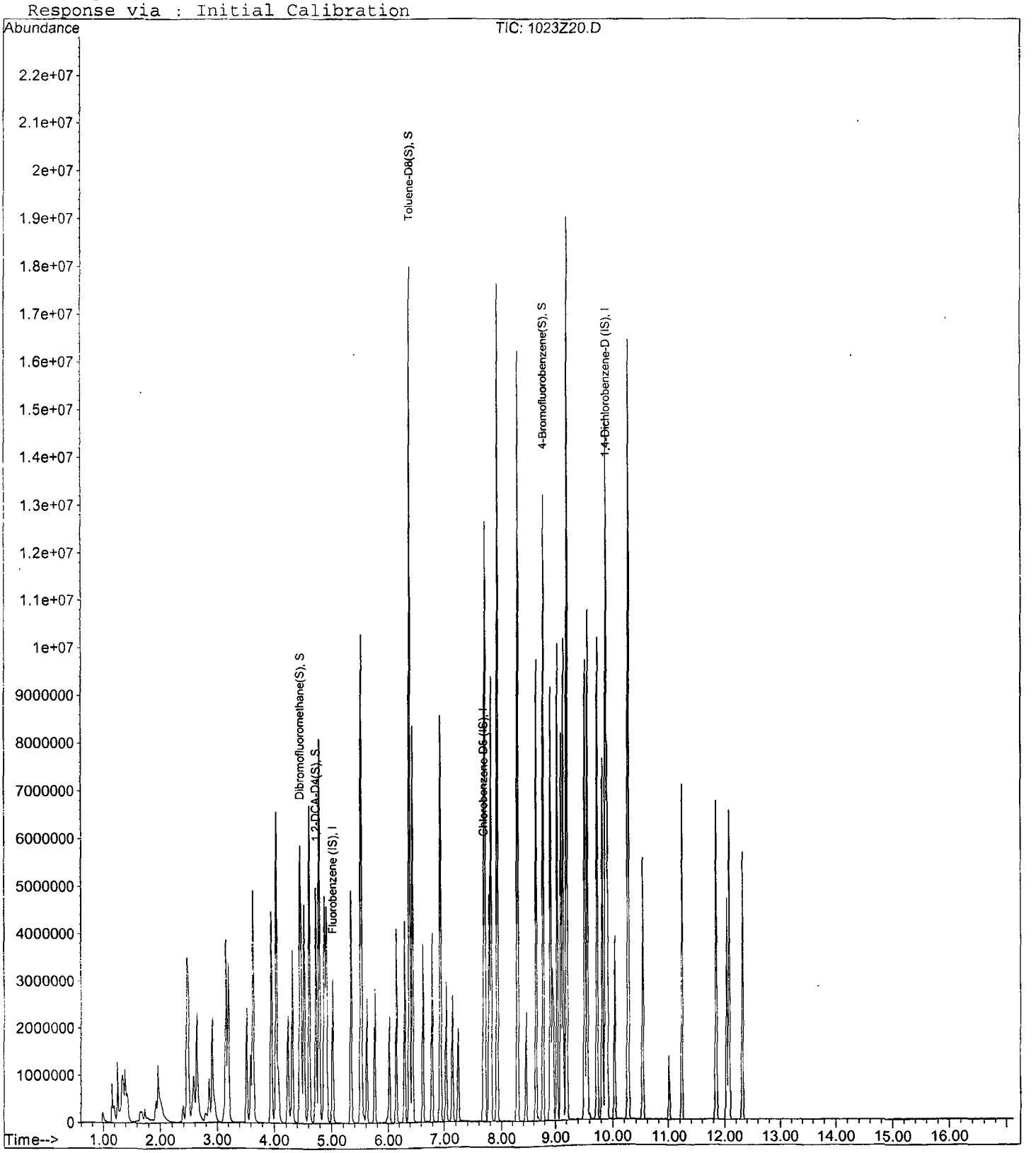
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z20.D Vial: 15
Acq On : 23 Oct 20 19:21 Operator: LP,DG,CH
Sample : 100ug/L VOC STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 26 12:30 2020 Quant Results File: ZSUR23.RES

Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/23/20
Matrix: water Instrument: ZEUS
Initials: DG

			1023Z23.D	1023Z24.D	1023Z25.D	1023Z26.D	1023Z27.D	1023Z28.D	1023Z29.D										
		Compound	1	2	3	4	5	6	7				Avg	%RSD	Type	r^2	Q	MRF
1	I	Fluorobenzene (IS)																
2	TMHBL	Gasoline C6-C10	10.6	4.435	2.410	1.041	0.7778	0.6681	0.6407				2.9	124	TMHB	0.997		
3	I	Chlorobenzene-D5 (IS)																
4	I	1,4-Dichlorobenzene-D (IS)																
5																		
6																		
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Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z23.D Vial: 18
Acq On : 23 Oct 20 20:31 Operator: LP,DG,CH
Sample : 20ug/L GAS STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:14 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 15:15:47 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2904485	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3922986	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3922986	25.00 ppb	0.00
System Monitoring Compounds					
Target Compounds					Qvalue
2) Gasoline C6-C10	6.39	TIC	24514726m	39.27 ppb	100

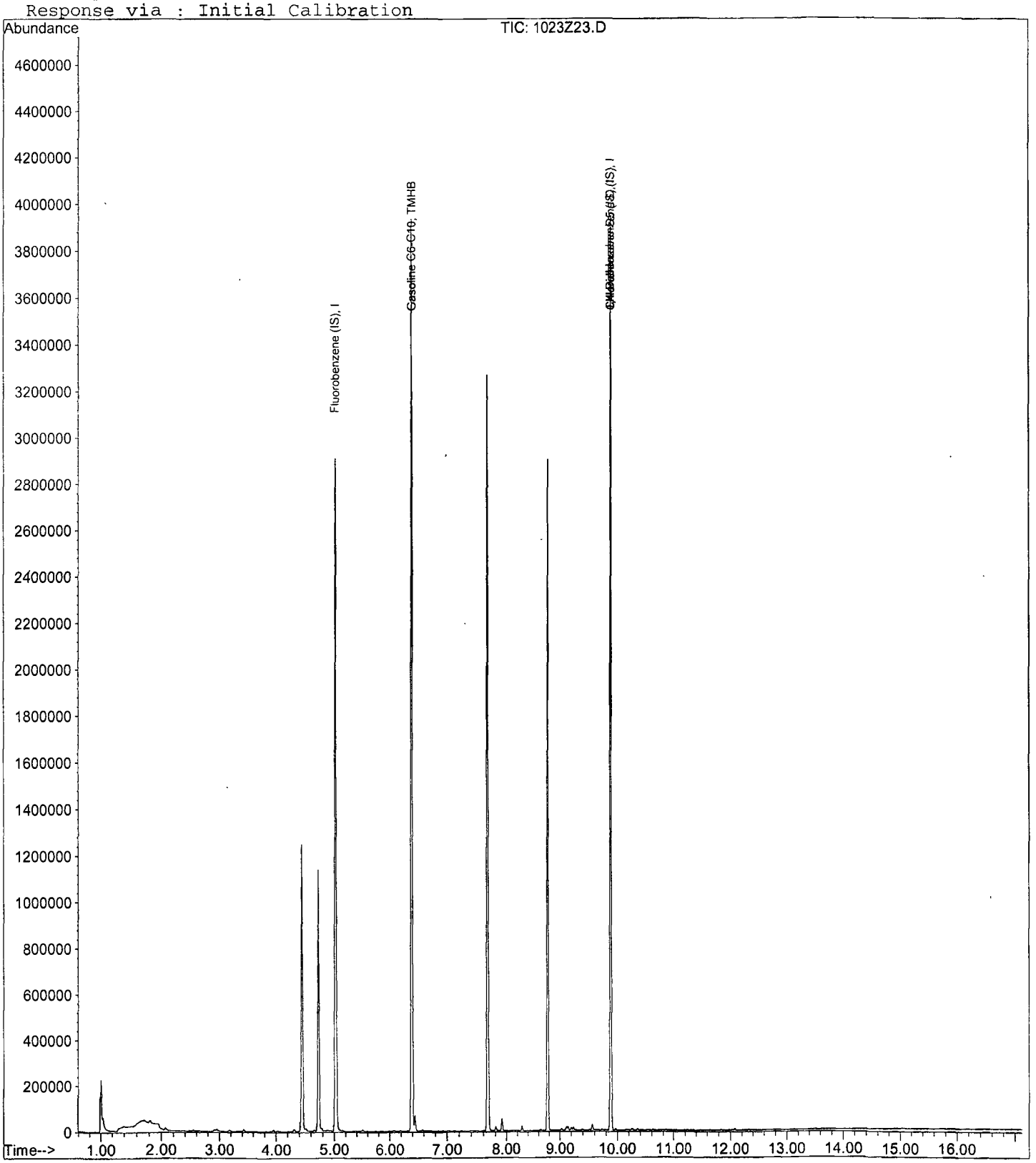
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z23.D Vial: 18
Acq On : 23 Oct 20 20:31 Operator: LP,DG,CH
Sample : 20ug/L GAS STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:14 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z24.D Vial: 19
Acq On : 23 Oct 20 20:54 Operator: LP,DG,CH
Sample : 50ug/L GAS STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:15 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 15:15:47 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2838365	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3857198	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3857198	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.39	TIC	25176050m	63.64	ppb	100

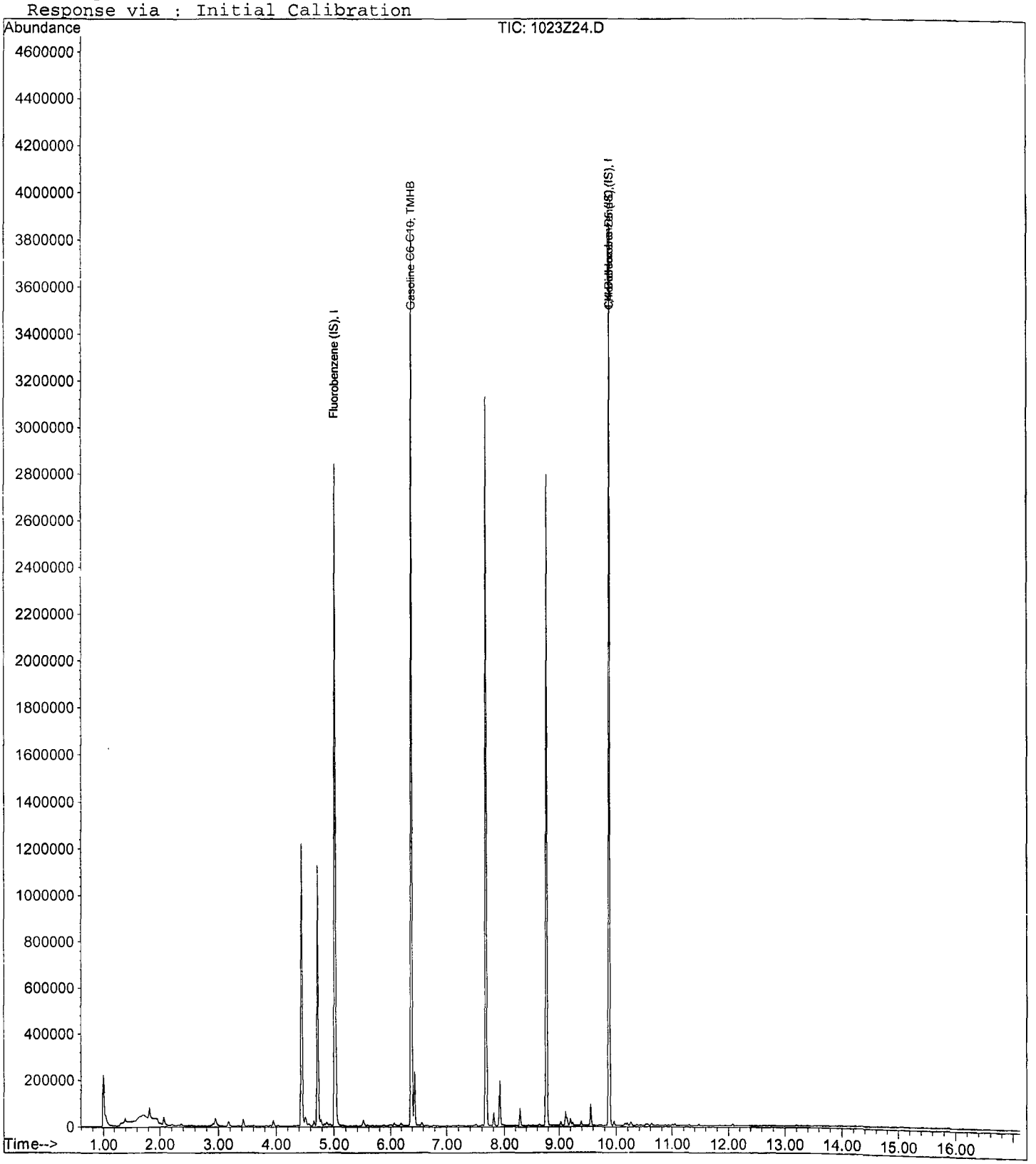
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z24.D Vial: 19
Acq On : 23 Oct 20 20:54 Operator: LP,DG,CH
Sample : 50ug/L GAS STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:15 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z25.D Vial: 20
Acq On : 23 Oct 20 21:18 Operator: LP,DG,CH
Sample : 100ug/L GAS STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:16 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 15:15:47 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2959111	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3702387	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3702387	25.00	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) Gasoline C6-C10	6.39	TIC	28529124m	107.38	ppb	100

(#) = qualifier out of range (m) = manual integration

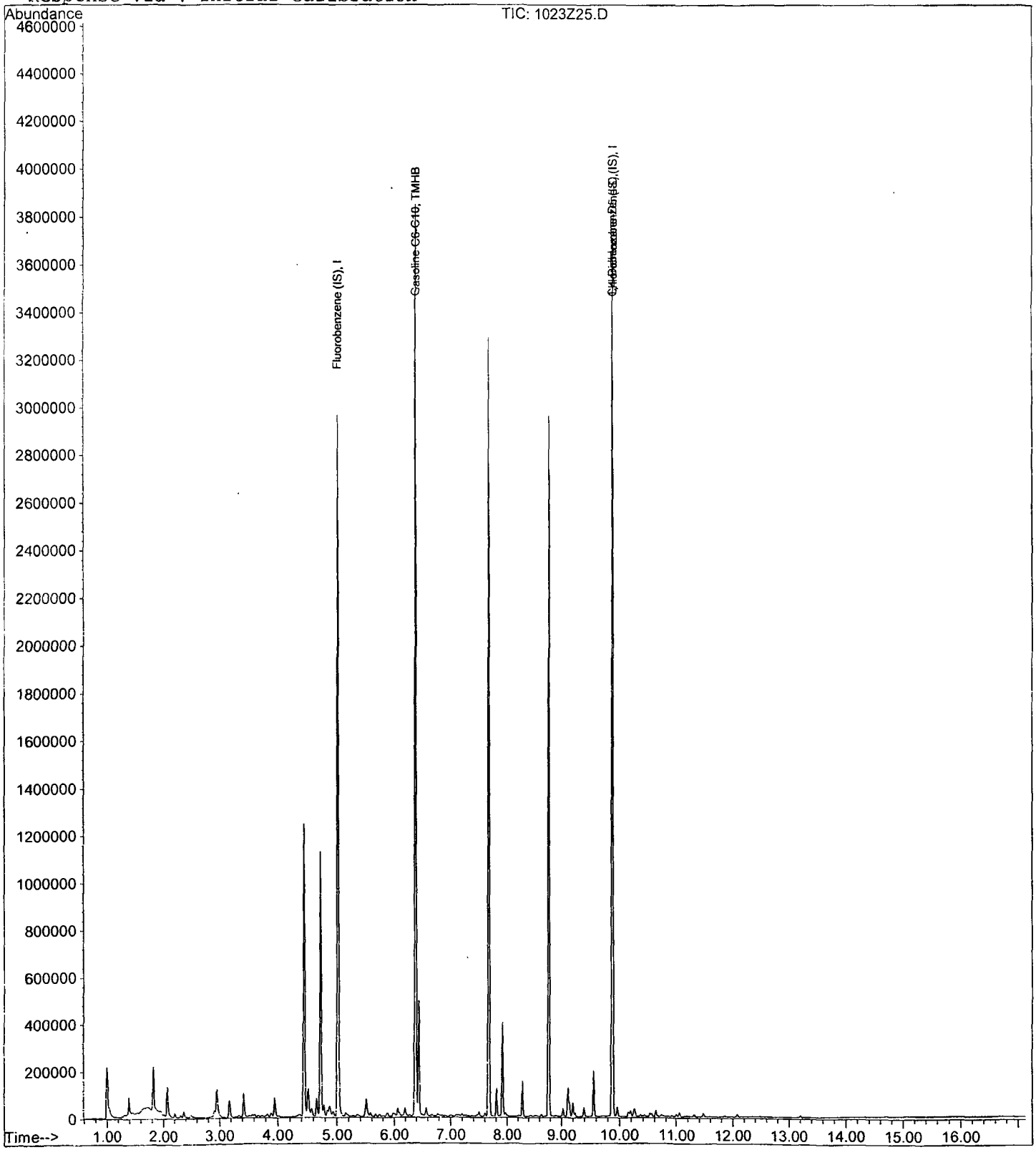
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z25.D
Acq On : 23 Oct 20 21:18
Sample : 100ug/L GAS STD 10/23/20
Misc :

Vial: 20
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 10:16 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z26.D
Acq On : 23 Oct 20 21:41
Sample : 300ug/L GAS STD 10/23/20
Misc :

Vial: 21
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 10:16 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 15:15:47 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2861301	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3706543	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3706543	25.00	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) Gasoline C6-C10	6.39	TIC	35733665m	268.88	ppb	100

(#) = qualifier out of range (m) = manual integration

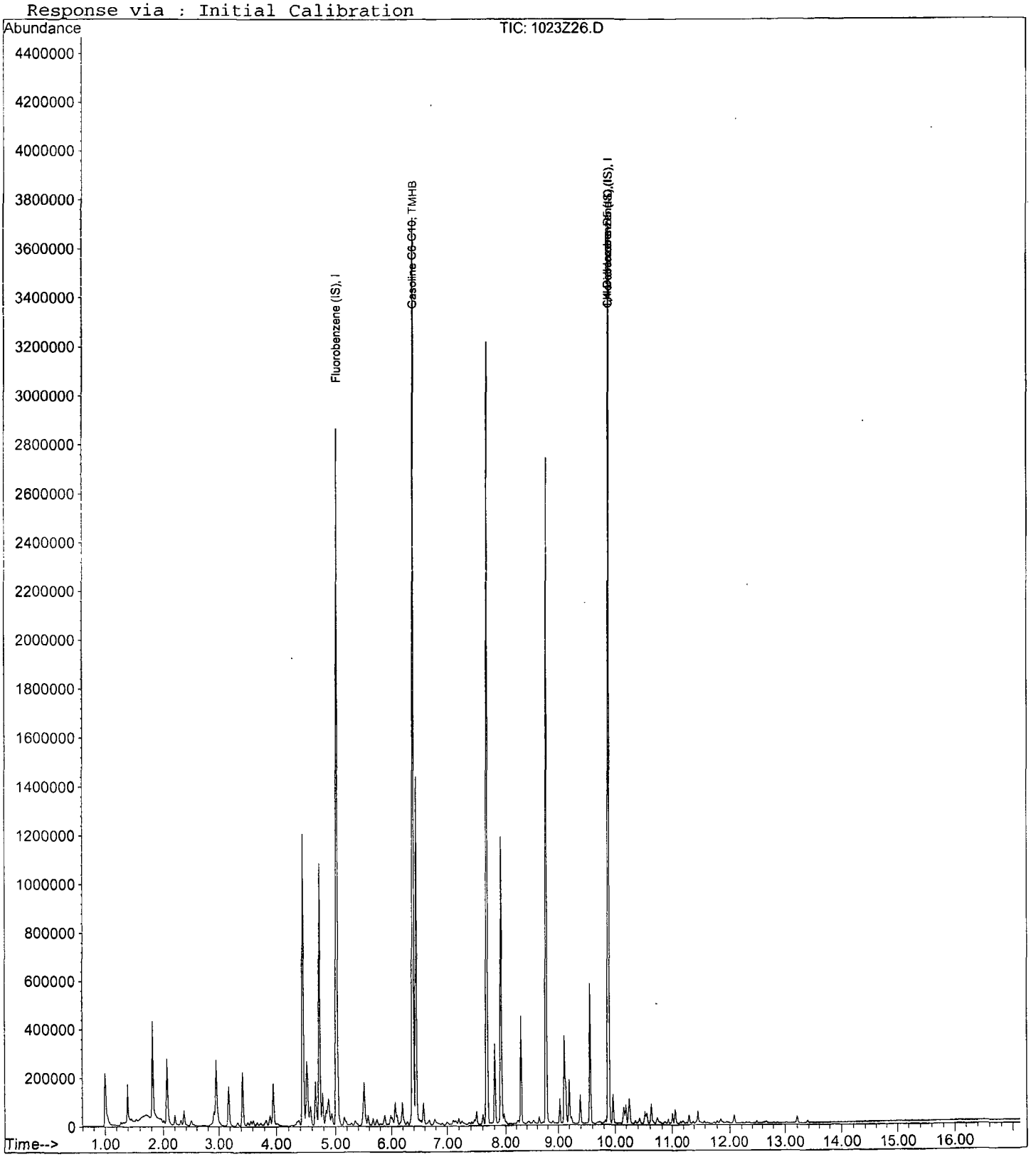
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z26.D
Acq On : 23 Oct 20 21:41
Sample : 300ug/L GAS STD 10/23/20
Misc :

Vial: 21
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 10:16 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z27.D Vial: 22
Acq On : 23 Oct 20 22:04 Operator: LP,DG,CH
Sample : 600ug/L GAS STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:17 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 15:15:47 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2851219	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3742479	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3742479	25.00	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) Gasoline C6-C10	6.39	TIC	53222358m	619.28	ppb	100

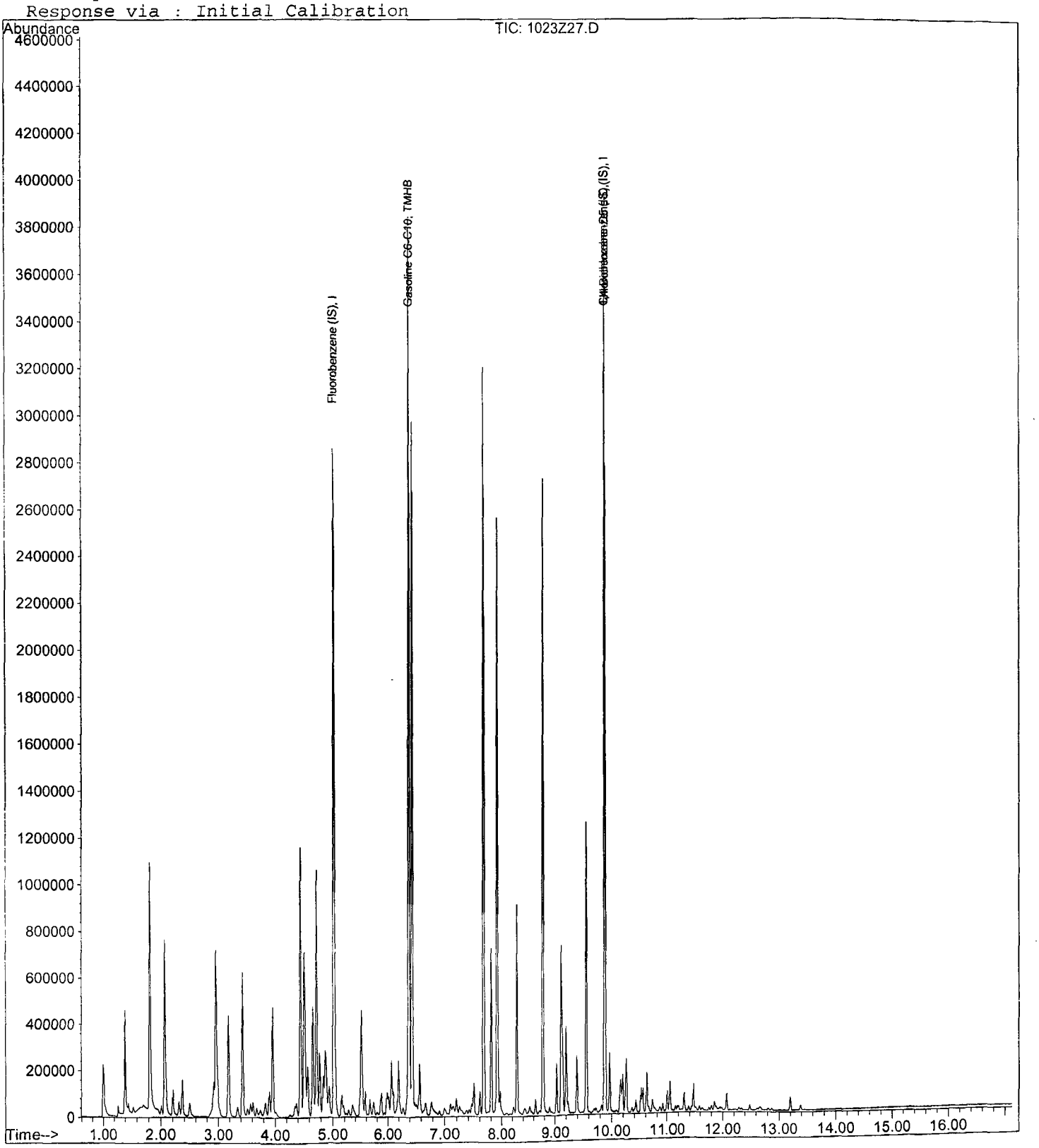
(#) = qualifier out of range (m) = manual integration
1023Z27.D ZGAS1023.M Tue Oct 27 10:25:57 2020

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z27.D Vial: 22
Acq On : 23 Oct 20 22:04 Operator: LP,DG,CH
Sample : 600ug/L GAS STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:17 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z28.D Vial: 23
Acq On : 23 Oct 20 22:27 Operator: LP,DG,CH
Sample : 800ug/L GAS STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:17 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 15:15:47 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2865326	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3625510	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3625510	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.44	TIC	61256286m	773.10	ppb	100

(#) = qualifier out of range (m) = manual integration

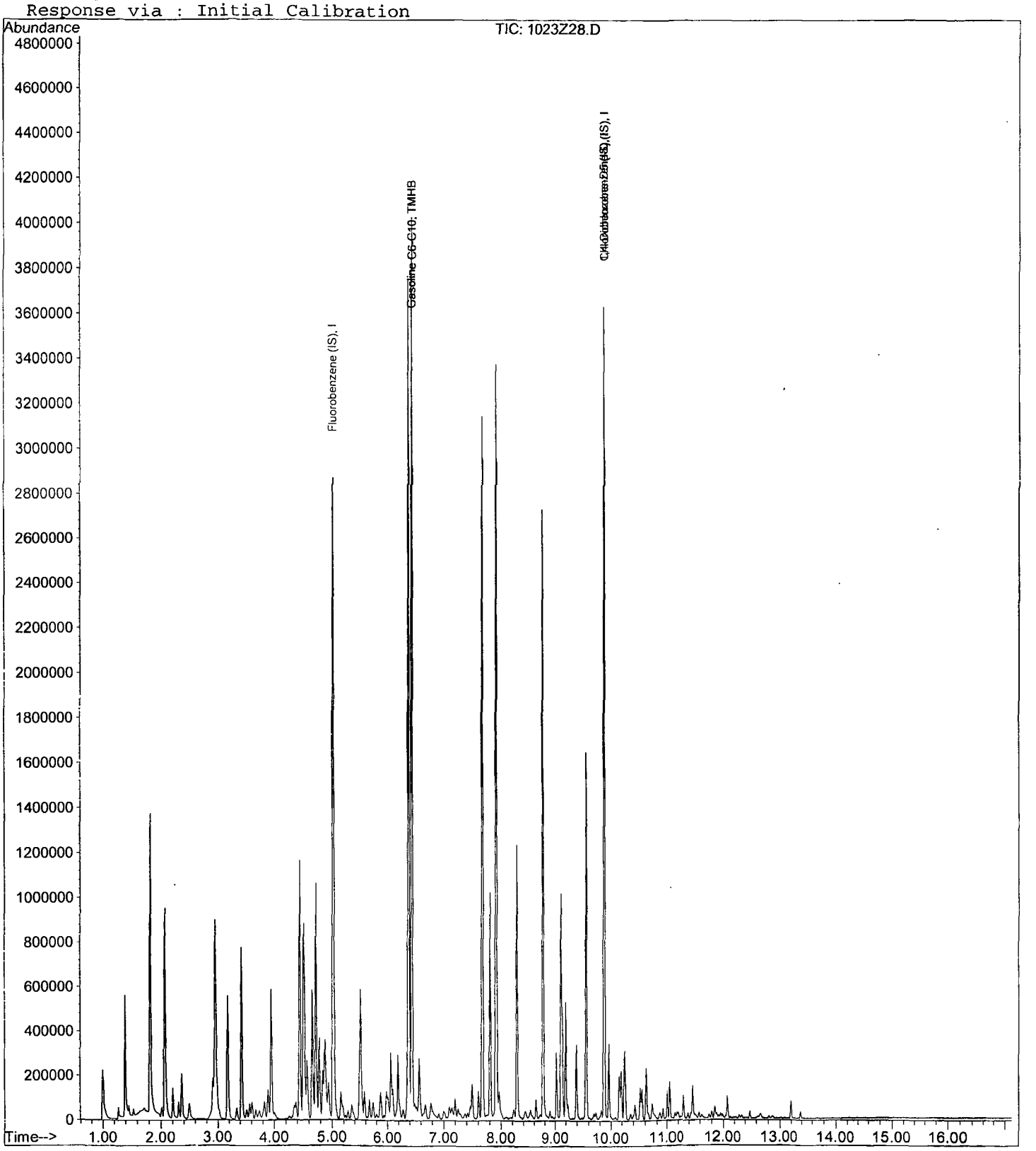
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z28.D
Acq On : 23 Oct 20 22:27
Sample : 800ug/L GAS STD 10/23/20
Misc :

Vial: 23
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 10:17 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z29.D
Acq On : 23 Oct 20 22:50
Sample : 1000ug/L GAS STD 10/23/20
Misc :

Vial: 24
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 10:18 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 15:15:47 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2826146	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3463693	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3463693	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.44	TIC	72423631m	1014.03	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

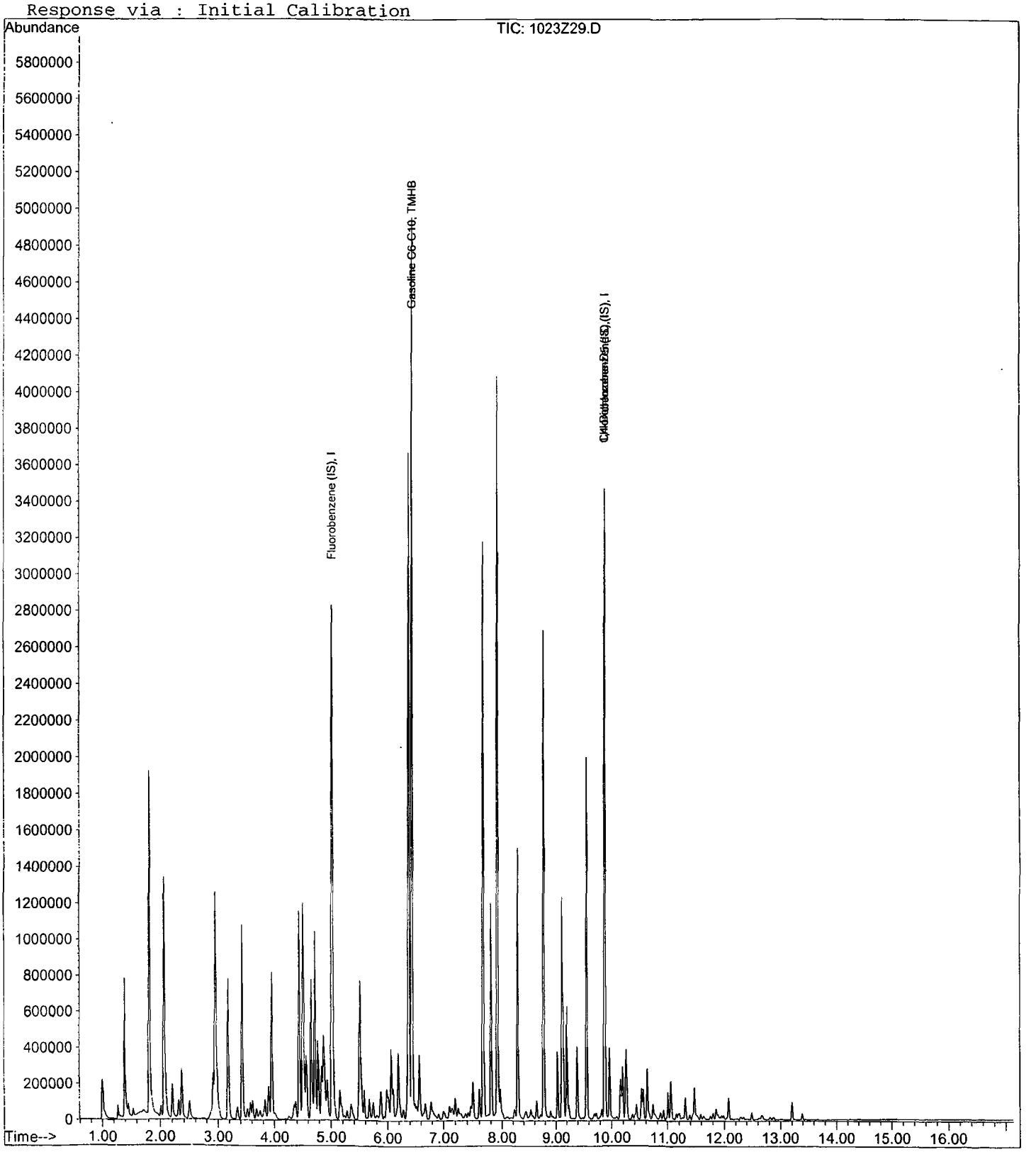
Data File : M:\ZEUS\DATA\201023\1023Z29.D
Acq On : 23 Oct 20 22:50
Sample : 1000ug/L GAS STD 10/23/20
Misc :

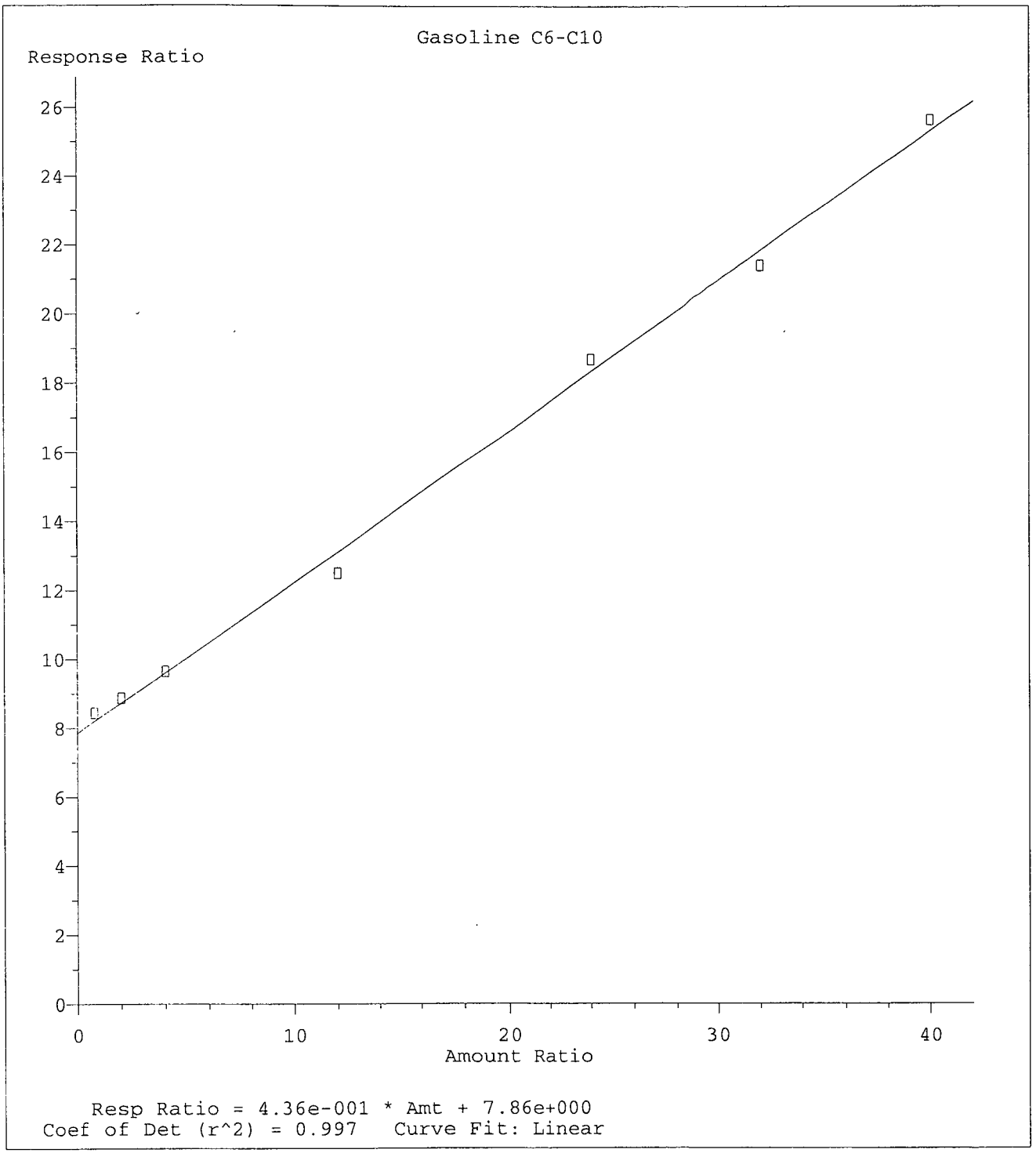
Vial: 24
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 10:18 2020

Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration





Method Name: M:\ZEUS\DATA\201023\ZGAS1023.M
Calibration Table Last Updated: Tue Oct 27 10:18:06 2020

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/23/20
Instrument: ZEUS
Initial Cal. Date: 10/23/20
Data File: 1023Z31.D

		Compound	MEAN	CCRF	%D		%Drift
1	TMHB	Gasoline C6-C10	2.932	1.028	65	TMHBL	15
2							
3							
4							
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39							
40							
		Average			65.0		

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z31.D Vial: 26
Acq On : 23 Oct 20 23:37 Operator: LP,DG,CH
Sample : (SS)300ug/L GAS STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:22 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2786509	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3549371	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3549371	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.39	TIC	34364919m	256.17	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z31.D Vial: 26
Acq On : 23 Oct 20 23:37 Operator: LP,DG,CH
Sample : (SS)300ug/L GAS STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:27 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2149662	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1612576	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	938355	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	577013	25.57	ppb	0.00
Spiked Amount 25.000			Recovery =	102.292%		
3) 1,2-DCA-D4(S)	4.72	65	525834	24.63	ppb	0.00
Spiked Amount 25.000			Recovery =	98.504%		
5) Toluene-D8(S)	6.39	98	2096440	25.80	ppb	0.00
Spiked Amount 25.000			Recovery =	103.208%		
6) 4-Bromofluorobenzene(S)	8.77	95	770613	24.92	ppb	0.00
Spiked Amount 25.000			Recovery =	99.692%		

Target Compounds Qvalue

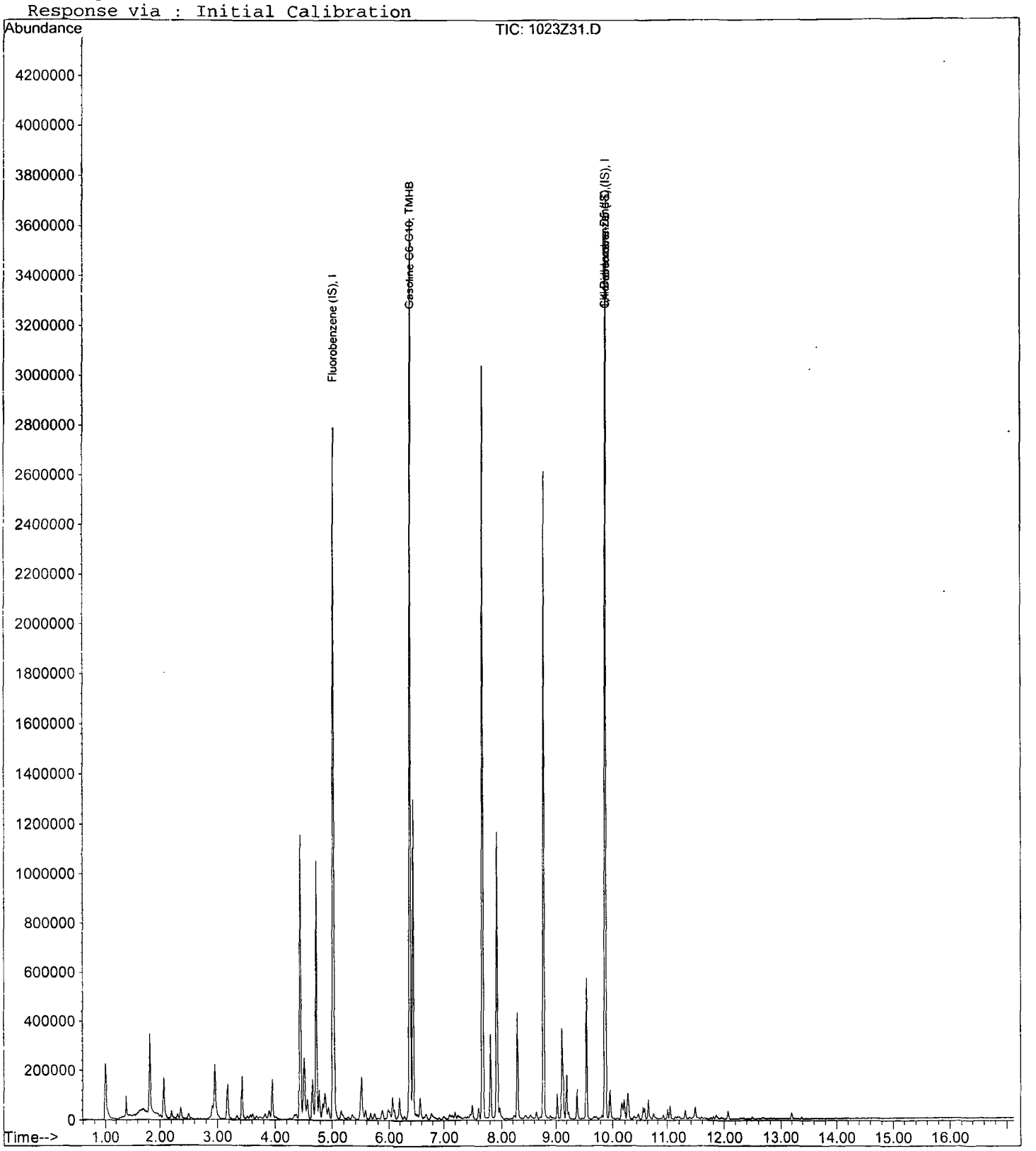
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z31.D Vial: 26
Acq On : 23 Oct 20 23:37 Operator: LP,DG,CH
Sample : (SS)300ug/L GAS STD 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:22 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/24/20
Instrument: ZEUS
Initial Cal. Date: 10/23/20
Data File: 1023Z35.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline C6-C10	2.932	1.075	63	TMHBL	3.8
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
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39							
40							
		Average			63.0		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/24/20
Instrument: ZEUS
Initial Cal. Date: 10/23/20
Data File: 1023Z35.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	Fluorobenzene (IS)	ISTD			I	
2	S	Dibromofluoromethane(S)	0.2624	0.2678	2.1	S	
3	S	1,2-DCA-D4(S)	0.2483	0.2434	2.0	S	
4	I	Chlorobenzene-D5 (IS)	ISTD			I	
5	S	Toluene-D8(S)	1.260	1.315	4.4	S	
6	S	4-Bromofluorobenzene(S)	0.4793	0.4824	0.64	S	
7	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
8							
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40							
		Average			2.3		

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z35.D Vial: 30
Acq On : 24 Oct 20 01:09 Operator: LP,DG,CH
Sample : 201023A CCV 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:31 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2749052	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3593324	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3593324	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.39	TIC	35460307m	288.65	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z35.D Vial: 30
Acq On : 24 Oct 20 01:09 Operator: LP,DG,CH
Sample : 201023A CCV 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:27 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2160006	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1612762	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	934516	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	578422	25.51	ppb	0.00
Spiked Amount 25.000			Recovery = 102.052%			
3) 1,2-DCA-D4(S)	4.72	65	525656	24.50	ppb	0.00
Spiked Amount 25.000			Recovery = 97.996%			
5) Toluene-D8(S)	6.39	98	2121462	26.11	ppb	0.00
Spiked Amount 25.000			Recovery = 104.428%			
6) 4-Bromofluorobenzene(S)	8.77	95	778025	25.16	ppb	0.00
Spiked Amount 25.000			Recovery = 100.640%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

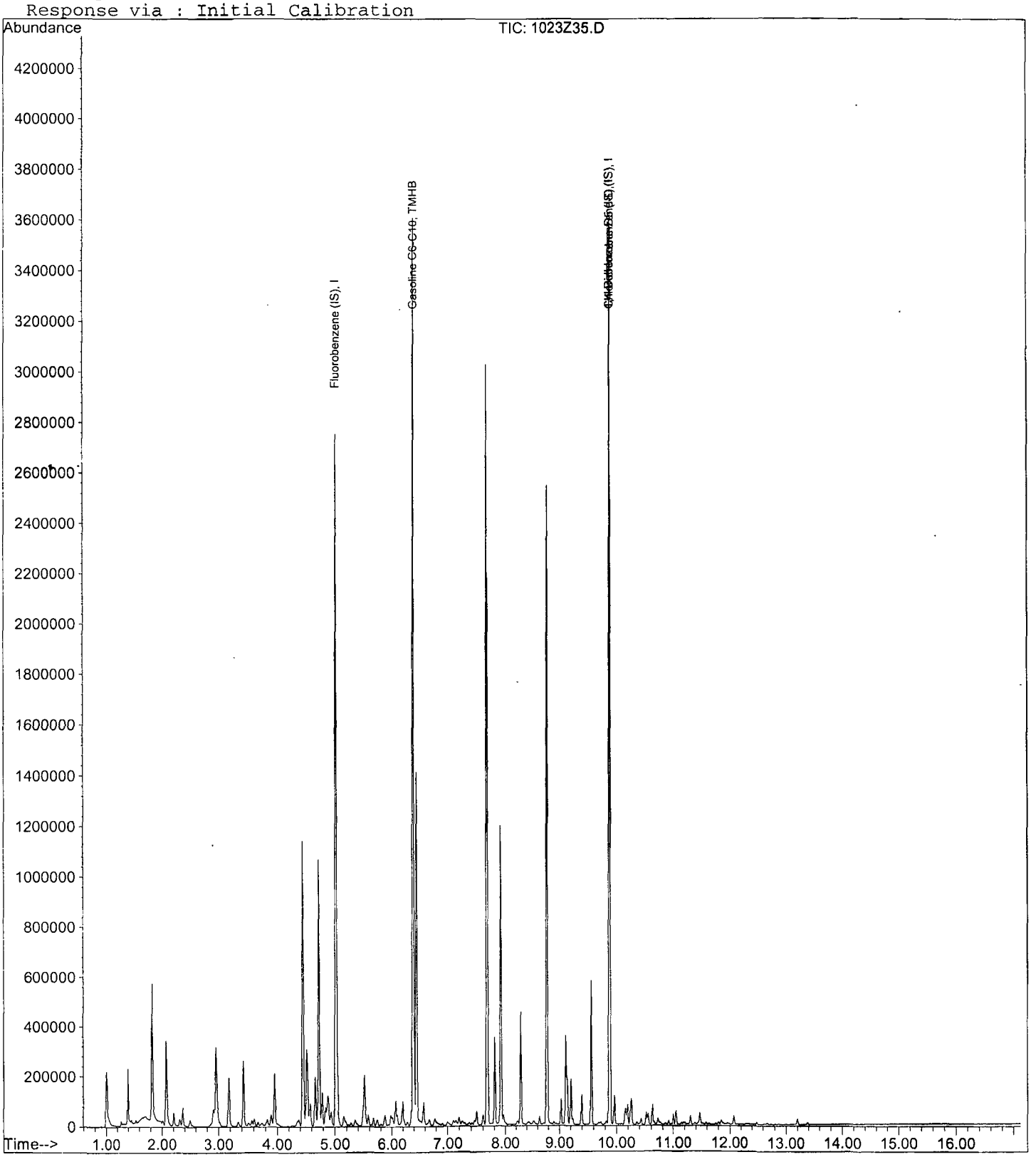
Data File : M:\ZEUS\DATA\201023\1023Z35.D
Acq On : 24 Oct 20 01:09
Sample : 201023A CCV 300ug/L
Misc :

Vial: 30
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 10:31 2020

Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z36.D Vial: 31
Acq On : 24 Oct 20 01:32 Operator: LP,DG,CH
Sample : 201023A LCS 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:33 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2706800	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3481092	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3481092	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.39	TIC	34378539m	277.28	ppb	100

(#) = qualifier out of range (m) = manual integration

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/24/20
Instrument: ZEUS
Initial Cal. Date: 10/23/20
Data File: 1023Z53.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline C6-C10	2.932	1.055	64	TMHBL	8.3
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
6							
7							
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36							
37							
38							
39							
40							
		Average			64.0		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/24/20
Instrument: ZEUS
Initial Cal. Date: 10/23/20
Data File: 1023Z53.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	S	Dibromofluoromethane(S)	0.2624	0.2548	2.9	S	
3	S	1,2-DCA-D4(S)	0.2483	0.2468	0.63	S	
4	I	Chlorobenzene-D5 (IS)	ISTD			I	
5	S	Toluene-D8(S)	1.260	1.377	9.3	S	
6	S	4-Bromofluorobenzene(S)	0.4793	0.5078	5.9	S	
7	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
8							
9							
10							
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40							
		Average			4.7		

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z53.D Vial: 48
Acq On : 24 Oct 20 08:04 Operator: LP,DG,CH
Sample : Ending CCV 300ug/L 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:27 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2260598	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	2783621	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	2783621	25.00 ppb	0.00
System Monitoring Compounds					
Target Compounds					Qvalue
2) Gasoline C6-C10	6.38	TIC	28627308m	275.15 ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z53.D Vial: 48
Acq On : 24 Oct 20 08:04 Operator: LP,DG,CH
Sample : Ending CCV 300ug/L 10/23/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:28 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1799560	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1279223	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	672720	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	458477	24.27	ppb	0.00
Spiked Amount 25.000			Recovery =	97.092%		
3) 1,2-DCA-D4(S)	4.72	65	444091	24.84	ppb	0.00
Spiked Amount 25.000			Recovery =	99.376%		
5) Toluene-D8(S)	6.38	98	1761631	27.33	ppb	0.00
Spiked Amount 25.000			Recovery =	109.324%		
6) 4-Bromofluorobenzene(S)	8.77	95	649570	26.48	ppb	0.00
Spiked Amount 25.000			Recovery =	105.932%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

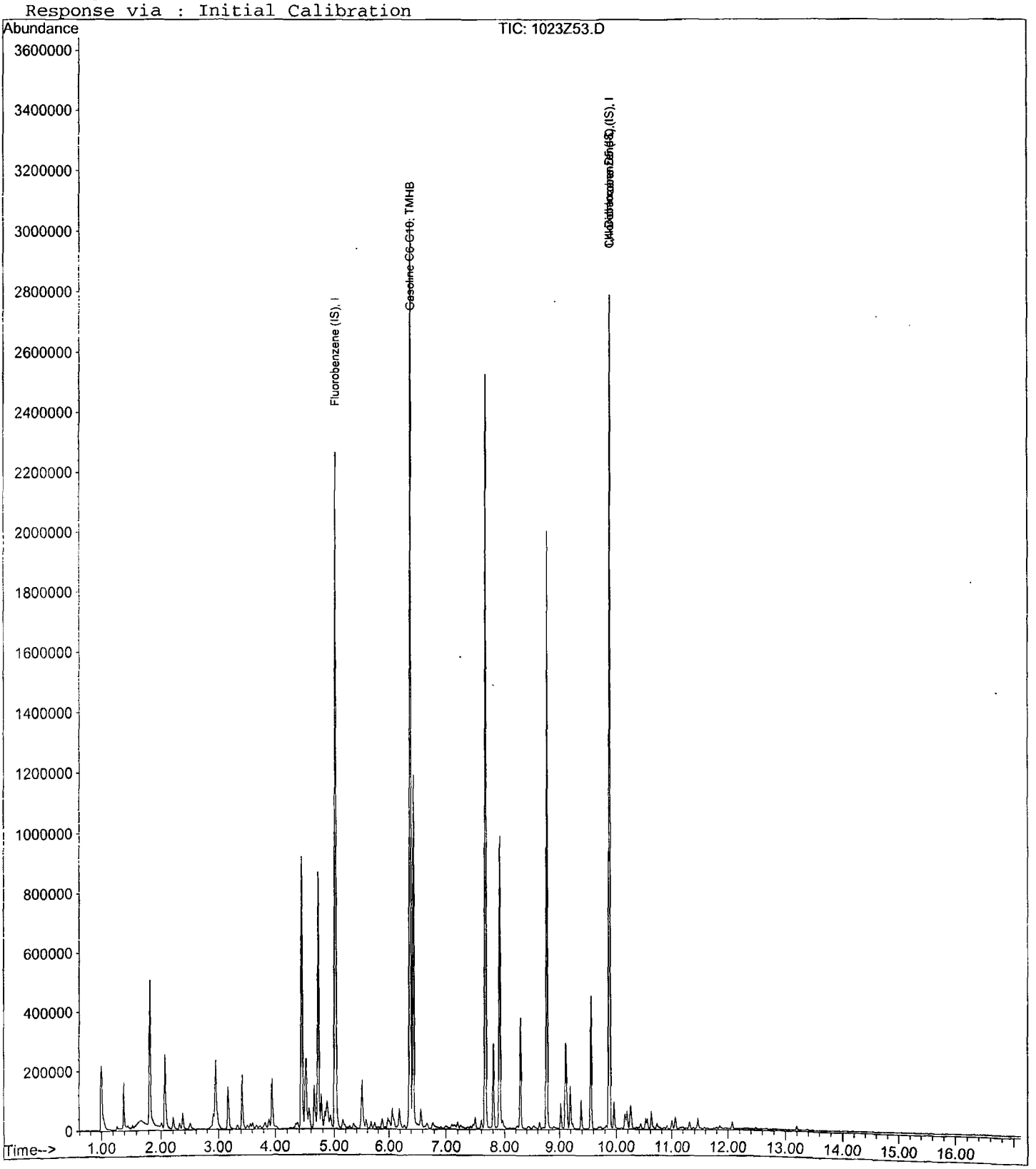
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z53.D
Acq On : 24 Oct 20 08:04
Sample : Ending CCV 300ug/L 10/23/20
Misc :

Vial: 48
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 11:27 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z39.D Vial: 34
Acq On : 24 Oct 20 02:42 Operator: LP,DG,CH
Sample : BA20538W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:24 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2532419	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3349121	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3349121	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z39.D Vial: 34
Acq On : 24 Oct 20 02:42 Operator: LP,DG,CH
Sample : BA20538W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:27 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1997069	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1508044	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	855446	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	550257	26.25	ppb	0.00
Spiked Amount 25.000			Recovery =	105.004%		
3) 1,2-DCA-D4(S)	4.72	65	502381	25.33	ppb	0.00
Spiked Amount 25.000			Recovery =	101.300%		
5) Toluene-D8(S)	6.38	98	1969446	25.92	ppb	0.00
Spiked Amount 25.000			Recovery =	103.676%		
6) 4-Bromofluorobenzene(S)	8.77	95	736975	25.49	ppb	0.00
Spiked Amount 25.000			Recovery =	101.952%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

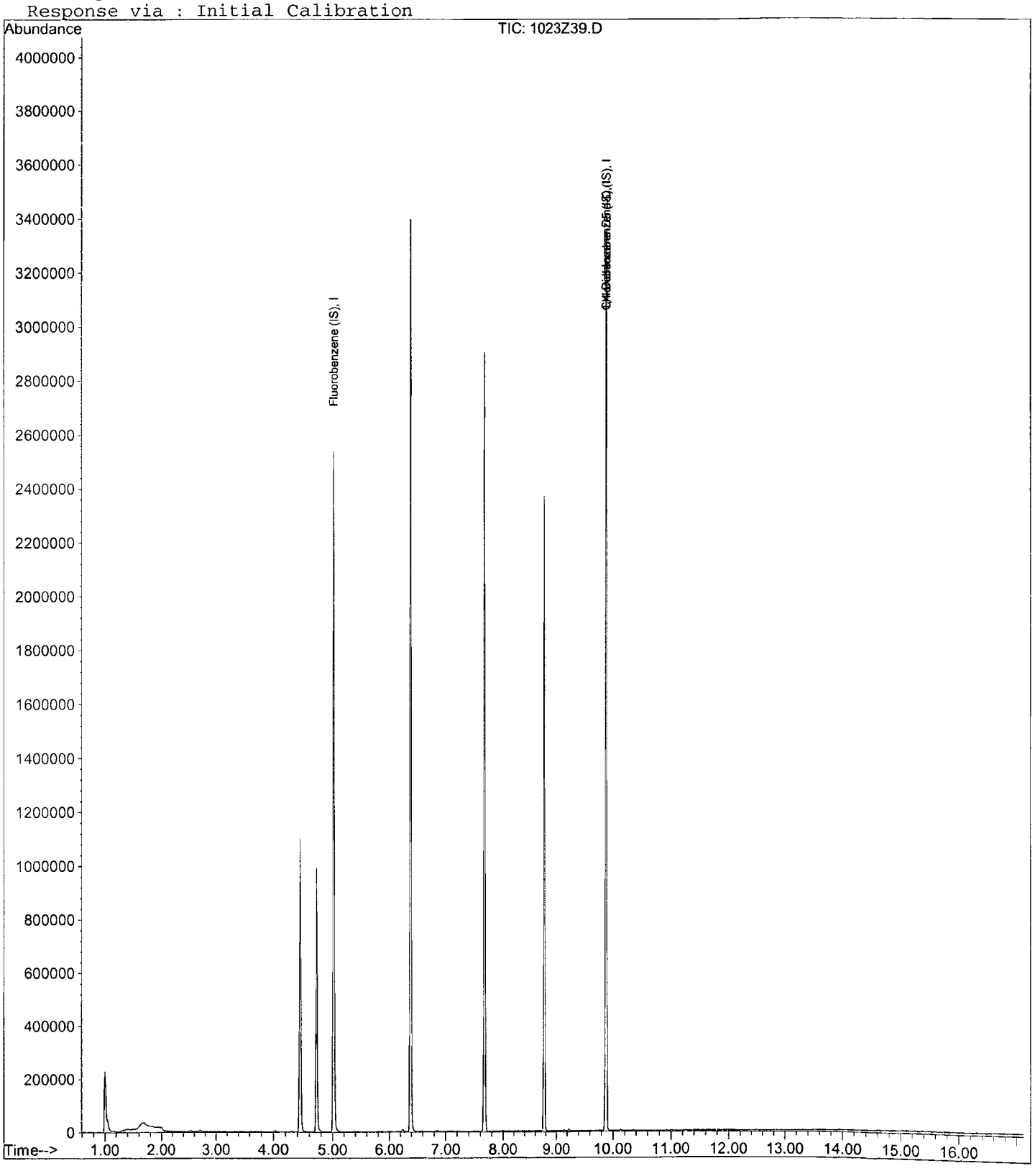
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z39.D
Acq On : 24 Oct 20 02:42
Sample : BA20538W01
Misc :

Vial: 34
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 11:24 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z40.D Vial: 35
Acq On : 24 Oct 20 03:05 Operator: LP,DG,CH
Sample : BA20539W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:24 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2438866	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3347791	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3347791	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z40.D Vial: 35
Acq On : 24 Oct 20 03:05 Operator: LP,DG,CH
Sample : BA20539W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:27 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1935351	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1460050	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	829030	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	539097	26.54	ppb	0.00
Spiked Amount 25.000			Recovery =	106.152%		
3) 1,2-DCA-D4(S)	4.72	65	488120	25.39	ppb	0.00
Spiked Amount 25.000			Recovery =	101.564%		
5) Toluene-D8(S)	6.38	98	1914146	26.02	ppb	0.00
Spiked Amount 25.000			Recovery =	104.076%		
6) 4-Bromofluorobenzene(S)	8.77	95	715918	25.57	ppb	0.00
Spiked Amount 25.000			Recovery =	102.292%		

Target Compounds Qvalue

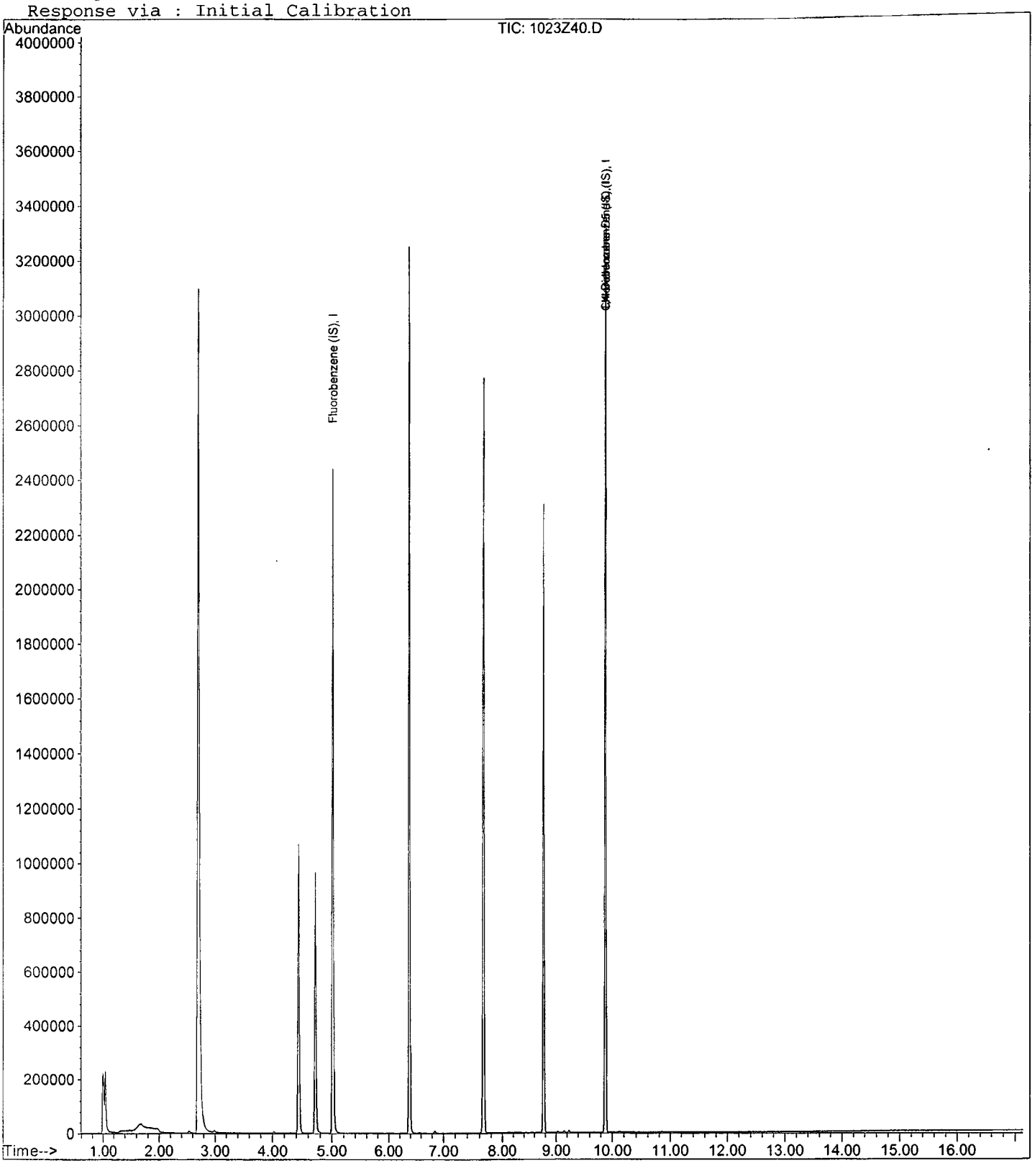
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z40.D Vial: 35
Acq On : 24 Oct 20 03:05 Operator: LP,DG,CH
Sample : BA20539W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:24 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z41.D
Acq On : 24 Oct 20 03:28
Sample : BA20540W01
Misc :

Vial: 36
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 11:24 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2493524	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3281099	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3281099	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z41.D Vial: 36
Acq On : 24 Oct 20 03:28 Operator: LP,DG,CH
Sample : BA20540W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:27 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1971333	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1473818	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	820646	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	537792	25.99	ppb	0.00
Spiked Amount 25.000			Recovery =	103.964%		
3) 1,2-DCA-D4(S)	4.72	65	491797	25.12	ppb	0.00
Spiked Amount 25.000			Recovery =	100.460%		
5) Toluene-D8(S)	6.38	98	1940429	26.13	ppb	0.00
Spiked Amount 25.000			Recovery =	104.520%		
6) 4-Bromofluorobenzene(S)	8.77	95	720544	25.50	ppb	0.00
Spiked Amount 25.000			Recovery =	101.992%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

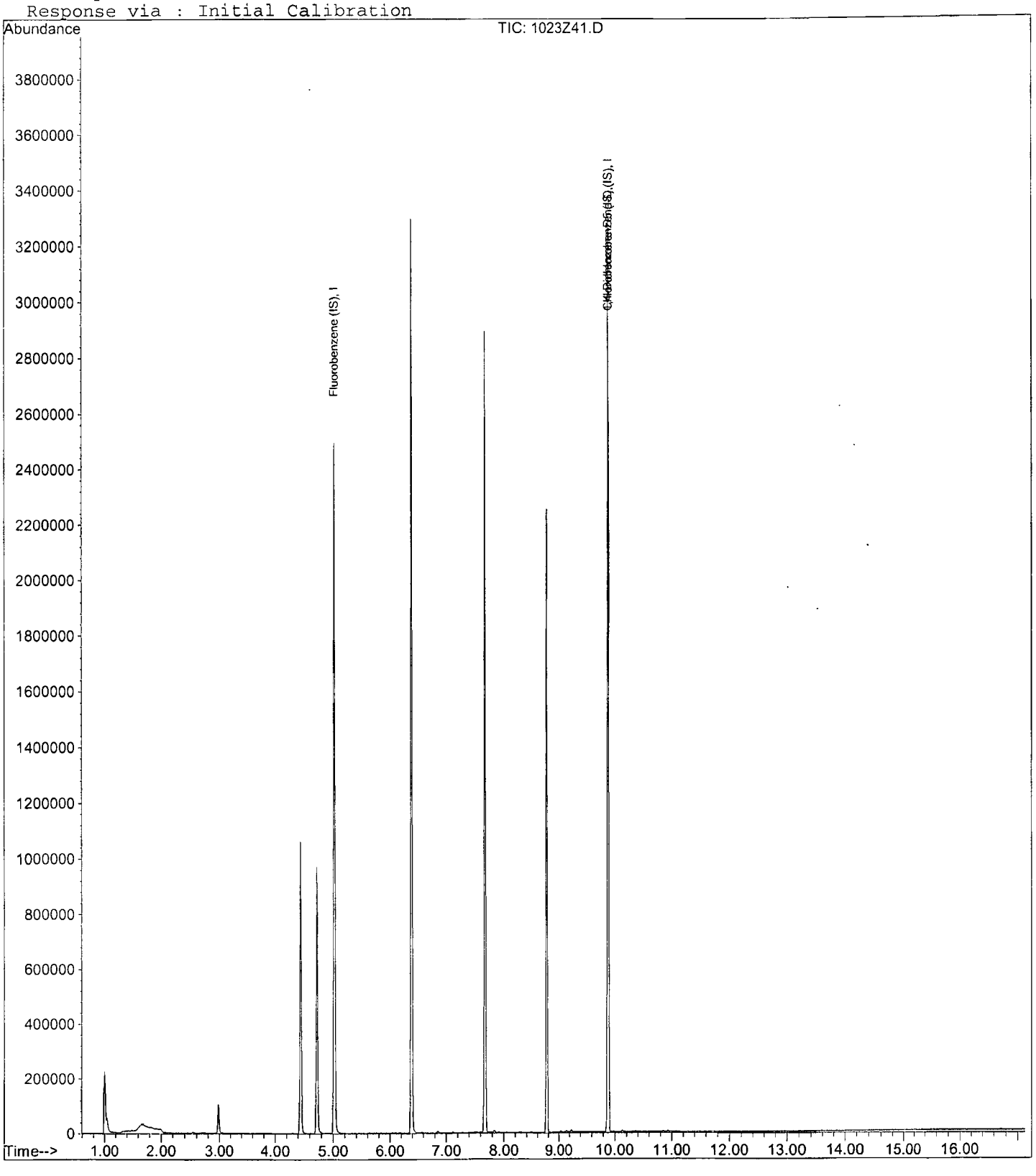
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z41.D
Acq On : 24 Oct 20 03:28
Sample : BA20540W01
Misc :

Vial: 36
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 11:24 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z42.D Vial: 37
Acq On : 24 Oct 20 03:51 Operator: LP,DG,CH
Sample : BA20541W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:25 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2437442	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3287507	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3287507	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z42.D Vial: 37
Acq On : 24 Oct 20 03:51 Operator: LP,DG,CH
Sample : BA20541W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:28 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1921643	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1427326	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	790488	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	520980	25.83	ppb	0.00
Spiked Amount 25.000			Recovery =	103.320%		
3) 1,2-DCA-D4(S)	4.72	65	474321	24.85	ppb	0.00
Spiked Amount 25.000			Recovery =	99.396%		
5) Toluene-D8(S)	6.38	98	1880060	26.14	ppb	0.00
Spiked Amount 25.000			Recovery =	104.568%		
6) 4-Bromofluorobenzene(S)	8.77	95	703462	25.70	ppb	0.00
Spiked Amount 25.000			Recovery =	102.820%		

Target Compounds Qvalue

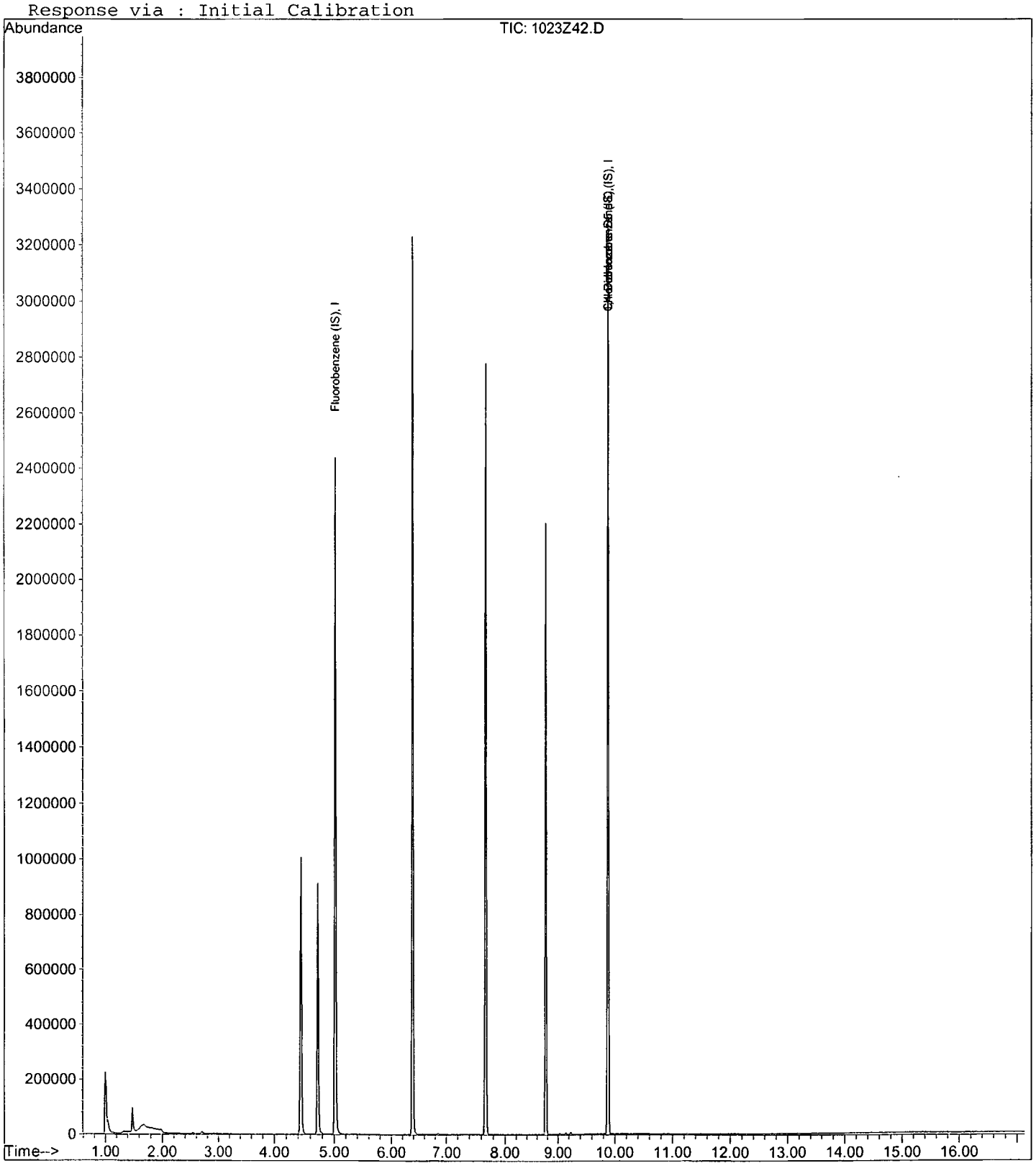
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z42.D Vial: 37
Acq On : 24 Oct 20 03:51 Operator: LP,DG,CH
Sample : BA20541W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:25 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z43.D Vial: 38
Acq On : 24 Oct 20 04:14 Operator: LP,DG,CH
Sample : BA20542W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:25 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2427429	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3234286	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3234286	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z43.D Vial: 38
Acq On : 24 Oct 20 04:14 Operator: LP,DG,CH
Sample : BA20542W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:28 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1917352	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1432819	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	787056	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	520441	25.86	ppb	0.00
Spiked Amount 25.000			Recovery =	103.444%		
3) 1,2-DCA-D4(S)	4.72	65	474138	24.90	ppb	0.00
Spiked Amount 25.000			Recovery =	99.580%		
5) Toluene-D8(S)	6.39	98	1889898	26.18	ppb	0.00
Spiked Amount 25.000			Recovery =	104.712%		
6) 4-Bromofluorobenzene(S)	8.77	95	703149	25.59	ppb	0.00
Spiked Amount 25.000			Recovery =	102.380%		

Target Compounds Qvalue

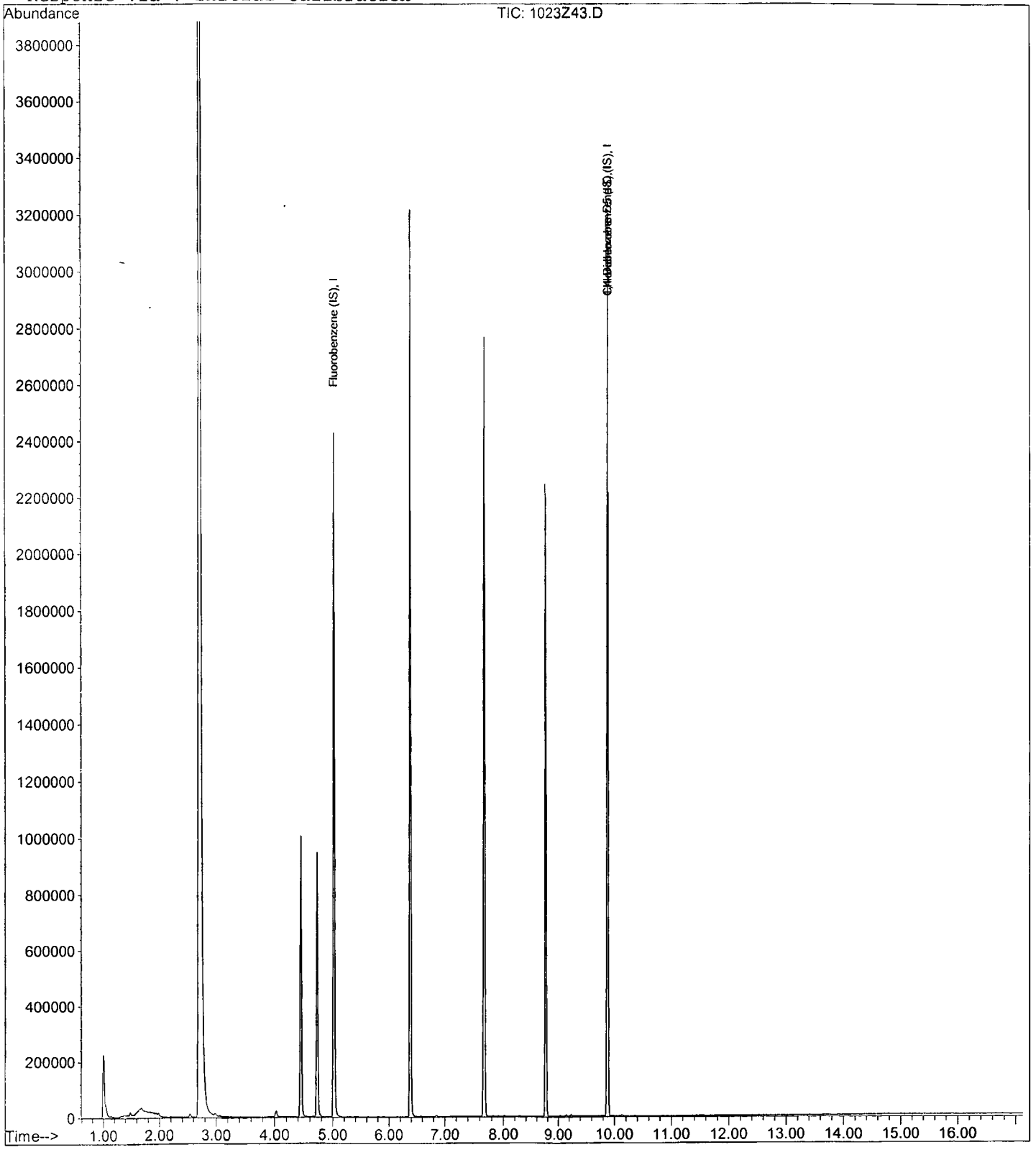
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z43.D Vial: 38
Acq On : 24 Oct 20 04:14 Operator: LP,DG,CH
Sample : BA20542W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:25 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z44.D Vial: 39
Acq On : 24 Oct 20 04:37 Operator: LP,DG,CH
Sample : BA20543W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:25 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2407963	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3222720	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3222720	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z44.D Vial: 39
Acq On : 24 Oct 20 04:37 Operator: LP,DG,CH
Sample : BA20543W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:28 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1938190	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1431667	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	778955	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	525438	25.83	ppb	0.00
Spiked Amount 25.000			Recovery =	103.312%		
3) 1,2-DCA-D4(S)	4.72	65	485356	25.21	ppb	0.00
Spiked Amount 25.000			Recovery =	100.840%		
5) Toluene-D8(S)	6.39	98	1928331	26.73	ppb	0.00
Spiked Amount 25.000			Recovery =	106.928%		
6) 4-Bromofluorobenzene(S)	8.77	95	714708	26.04	ppb	0.00
Spiked Amount 25.000			Recovery =	104.144%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

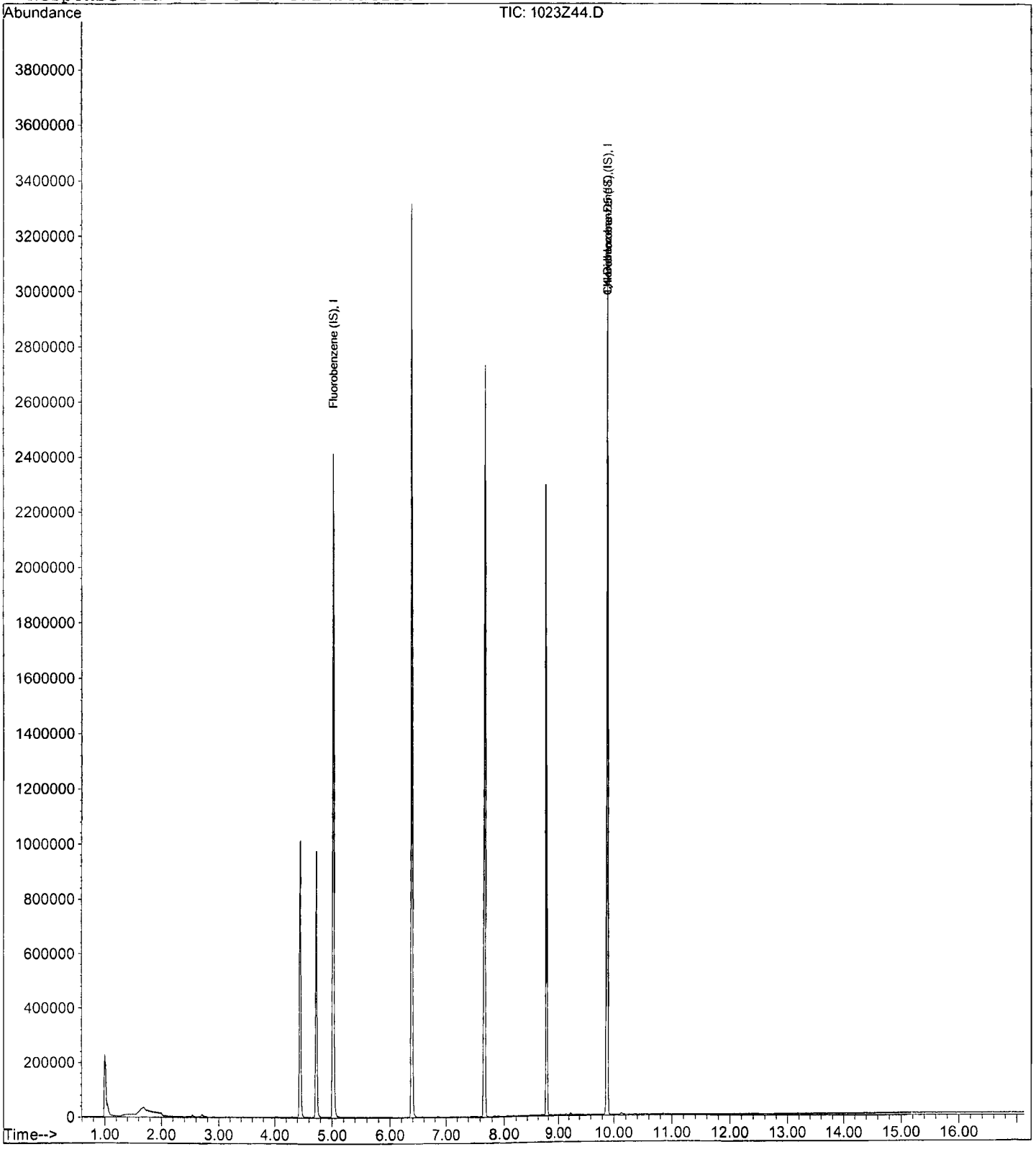
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z44.D
Acq On : 24 Oct 20 04:37
Sample : BA20543W01
Misc :

Vial: 39
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 11:25 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z45.D Vial: 40
Acq On : 24 Oct 20 05:00 Operator: LP,DG,CH
Sample : BA20544W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:25 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2293473	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	2981250	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	2981250	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z45.D Vial: 40
Acq On : 24 Oct 20 05:00 Operator: LP,DG,CH
Sample : BA20544W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:28 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1839033	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1357331	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	727076	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	498242	25.81	ppb	0.00
Spiked Amount 25.000			Recovery =	103.248%		
3) 1,2-DCA-D4(S)	4.72	65	463028	25.35	ppb	0.00
Spiked Amount 25.000			Recovery =	101.388%		
5) Toluene-D8(S)	6.38	98	1840402	26.91	ppb	0.00
Spiked Amount 25.000			Recovery =	107.640%		
6) 4-Bromofluorobenzene(S)	8.77	95	681838	26.20	ppb	0.00
Spiked Amount 25.000			Recovery =	104.796%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

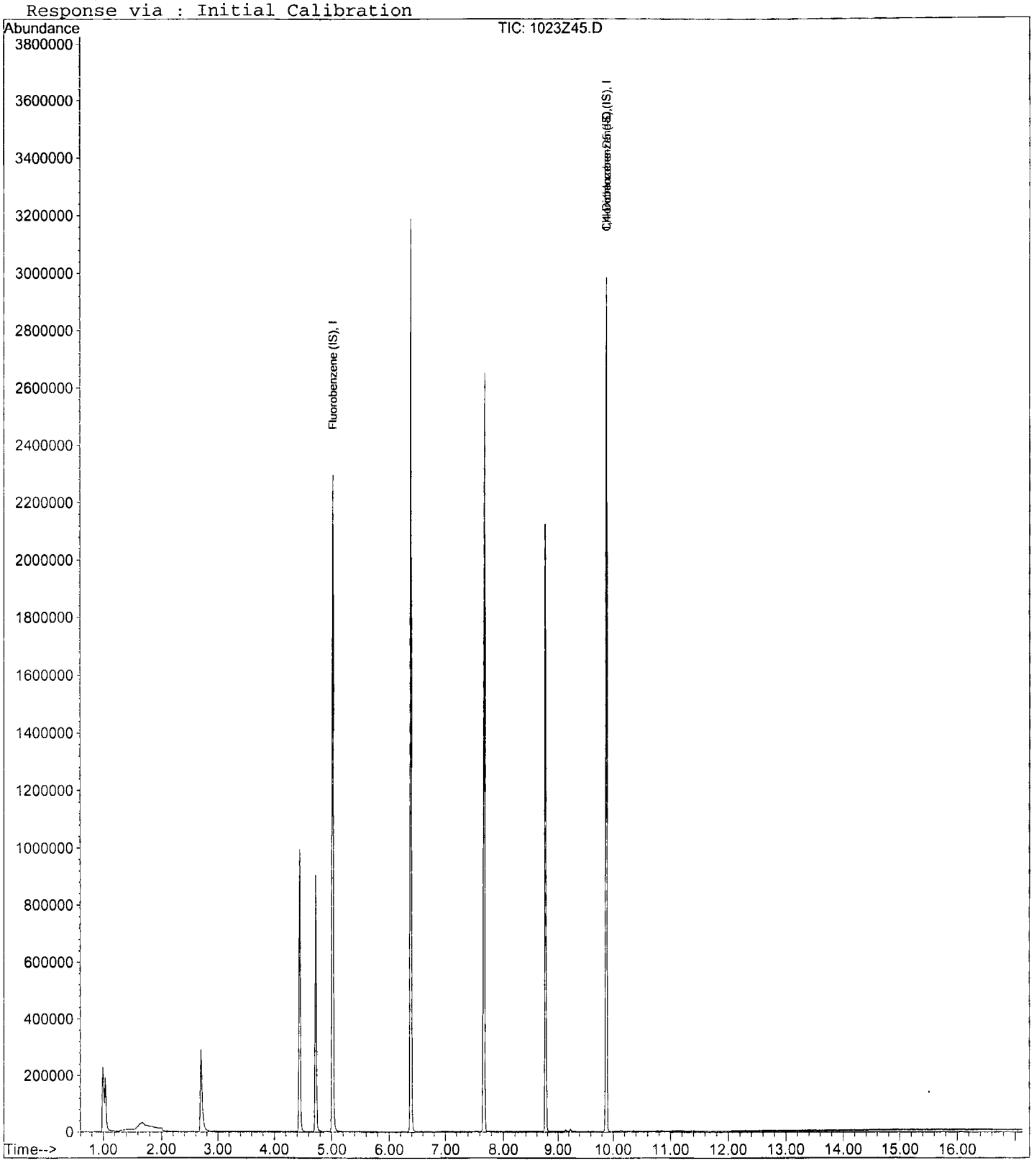
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z45.D
Acq On : 24 Oct 20 05:00
Sample : BA20544W01
Misc :

Vial: 40
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 11:25 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z38.D Vial: 33
Acq On : 24 Oct 20 02:18 Operator: LP,DG,CH
Sample : 201023A BLK Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:24 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2539722	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3393779	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3393779	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z38.D Vial: 33
Acq On : 24 Oct 20 02:18 Operator: LP,DG,CH
Sample : 201023A BLK Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:27 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2010663	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1515461	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	869793	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	556307	26.36	ppb	0.00
Spiked Amount 25.000			Recovery = 105.440%			
3) 1,2-DCA-D4(S)	4.72	65	505704	25.32	ppb	0.00
Spiked Amount 25.000			Recovery = 101.280%			
5) Toluene-D8(S)	6.38	98	1985688	26.01	ppb	0.00
Spiked Amount 25.000			Recovery = 104.020%			
6) 4-Bromofluorobenzene(S)	8.77	95	749243	25.79	ppb	0.00
Spiked Amount 25.000			Recovery = 103.140%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

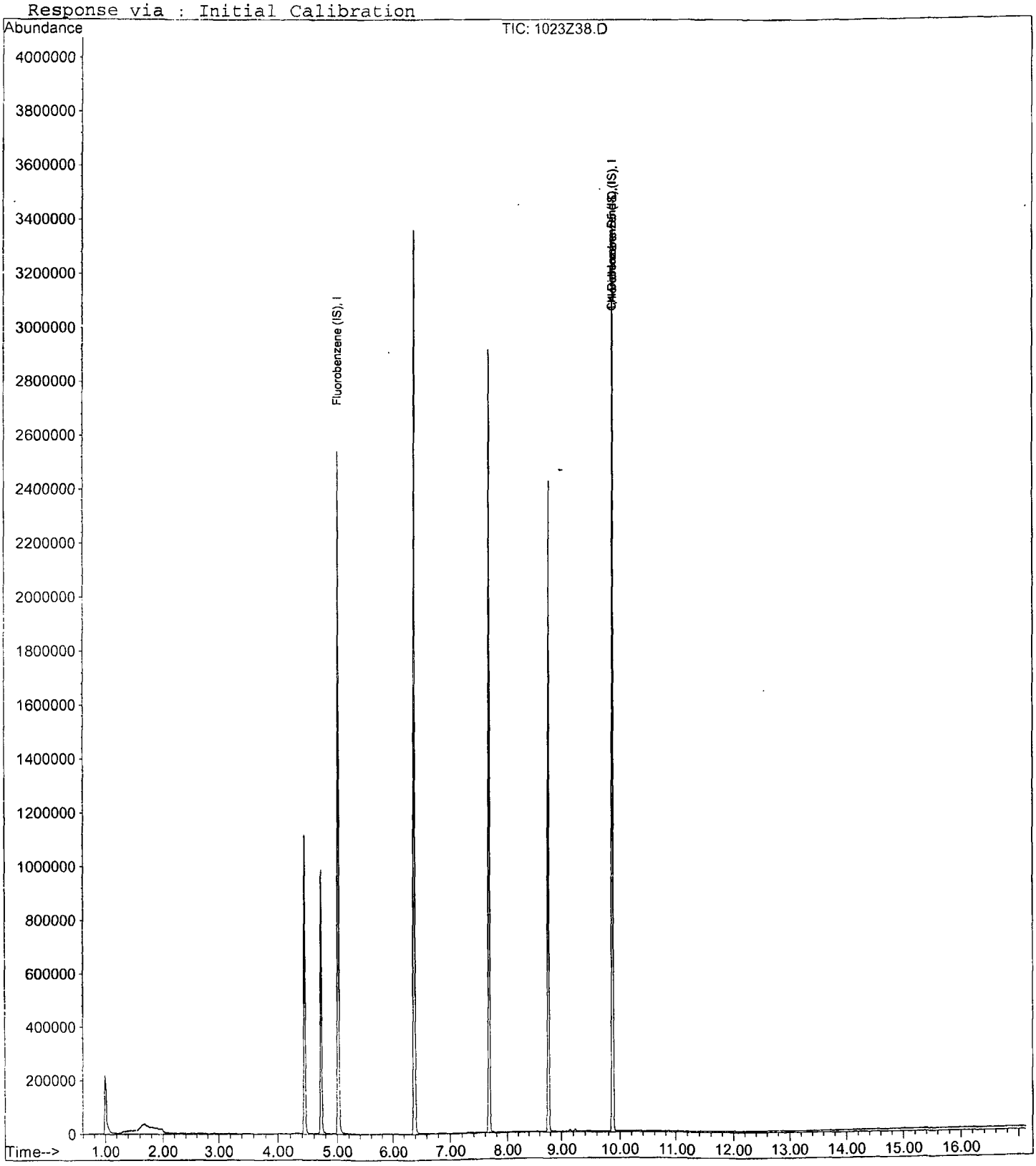
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z38.D
Acq On : 24 Oct 20 02:18
Sample : 201023A BLK
Misc :

Vial: 33
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 11:24 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z36.D Vial: 31
Acq On : 24 Oct 20 01:32 Operator: LP,DG,CH
Sample : 201023A LCS 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:27 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2109141	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1579945	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	906449	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	561057	25.34	ppb	0.00
Spiked Amount 25.000			Recovery =	101.376%		
3) 1,2-DCA-D4(S)	4.72	65	515538	24.61	ppb	0.00
Spiked Amount 25.000			Recovery =	98.428%		
5) Toluene-D8(S)	6.39	98	2062166	25.90	ppb	0.00
Spiked Amount 25.000			Recovery =	103.616%		
6) 4-Bromofluorobenzene(S)	8.77	95	763674	25.21	ppb	0.00
Spiked Amount 25.000			Recovery =	100.836%		

Target Compounds Qvalue

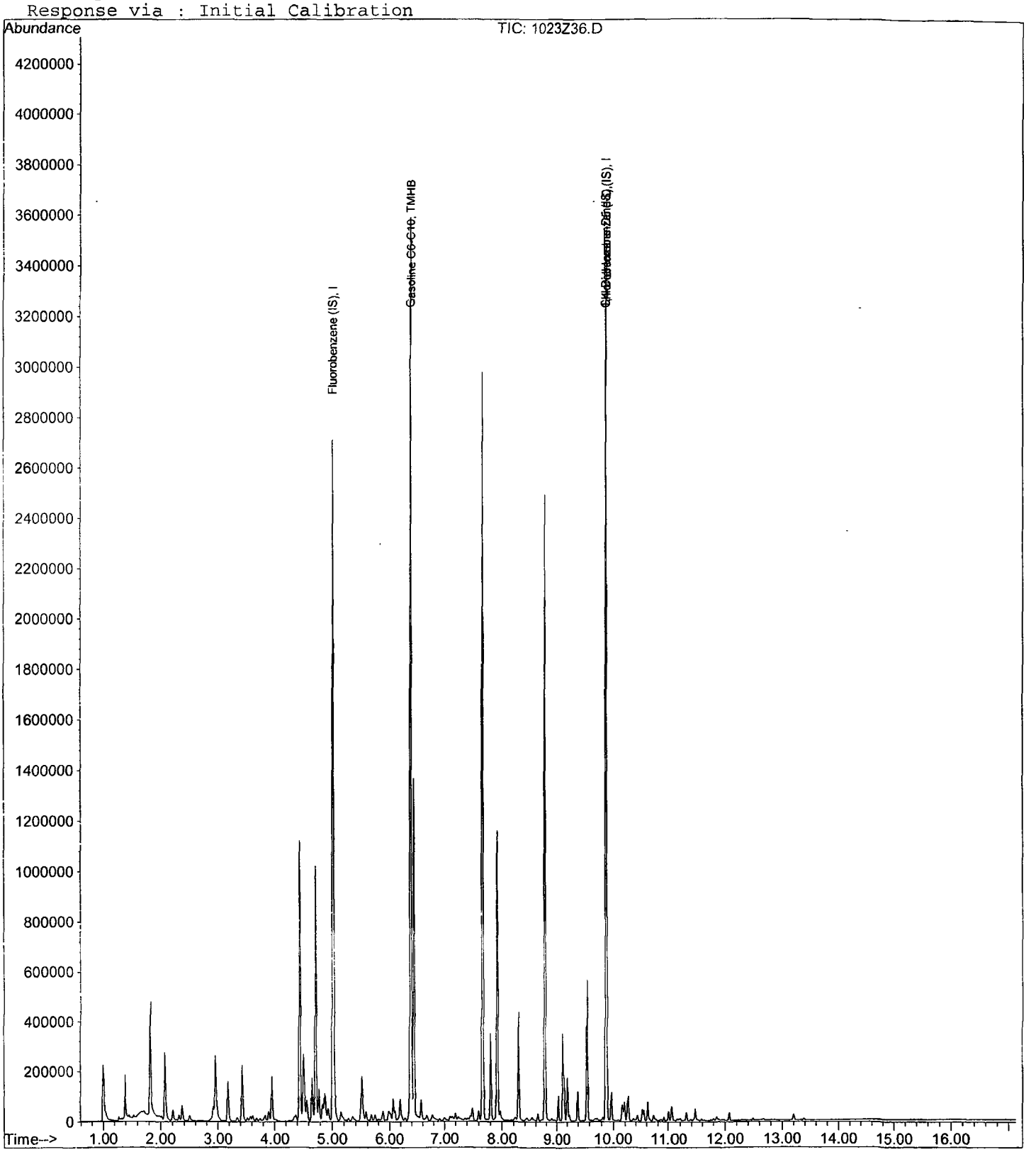
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z36.D Vial: 31
Acq On : 24 Oct 20 01:32 Operator: LP,DG,CH
Sample : 201023A LCS 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:33 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z37.D Vial: 32
Acq On : 24 Oct 20 01:55 Operator: LP,DG,CH
Sample : 201023A LCSD 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:34 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2674172	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	3484767	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	3484767	25.00	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) Gasoline C6-C10	6.38	TIC	34018495m	278.45	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z37.D Vial: 32
Acq On : 24 Oct 20 01:55 Operator: LP,DG,CH
Sample : 201023A LCSD 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:27 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	2080916	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1553499	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	891433	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	556440	25.48	ppb	0.00
Spiked Amount 25.000			Recovery =	101.904%		
3) 1,2-DCA-D4(S)	4.72	65	507860	24.57	ppb	0.00
Spiked Amount 25.000			Recovery =	98.280%		
5) Toluene-D8(S)	6.38	98	2035402	26.00	ppb	0.00
Spiked Amount 25.000			Recovery =	104.012%		
6) 4-Bromofluorobenzene(S)	8.77	95	749456	25.16	ppb	0.00
Spiked Amount 25.000			Recovery =	100.644%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

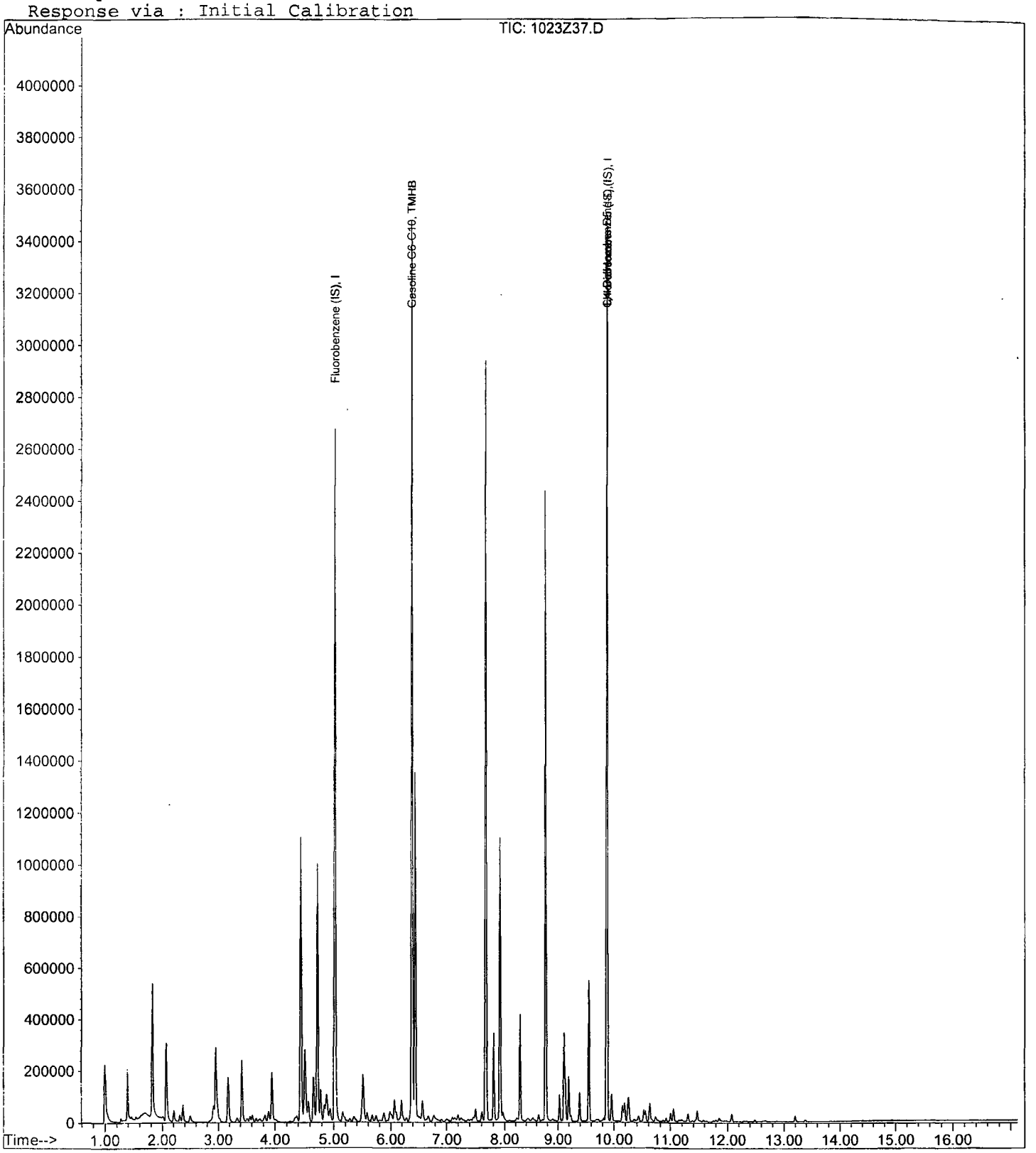
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z37.D
Acq On : 24 Oct 20 01:55
Sample : 201023A LCSD 300ug/L
Misc :

Vial: 32
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 11:34 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z50.D Vial: 45
Acq On : 24 Oct 20 06:55 Operator: LP,DG,CH
Sample : BA20539W04,5,6 MS 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:26 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2333968	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	2836250	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	2836250	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.38	TIC	30372588m	295.20	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z50.D Vial: 45
Acq On : 24 Oct 20 06:55 Operator: LP,DG,CH
Sample : BA20539W04,5,6 MS 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:28 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1831881	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1313076	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	697505	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	465791	24.22	ppb	0.00
Spiked Amount 25.000			Recovery =	96.900%		
3) 1,2-DCA-D4(S)	4.72	65	441306	24.25	ppb	0.00
Spiked Amount 25.000			Recovery =	97.008%		
5) Toluene-D8(S)	6.38	98	1790072	27.06	ppb	0.00
Spiked Amount 25.000			Recovery =	108.228%		
6) 4-Bromofluorobenzene(S)	8.77	95	657151	26.10	ppb	0.00
Spiked Amount 25.000			Recovery =	104.408%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

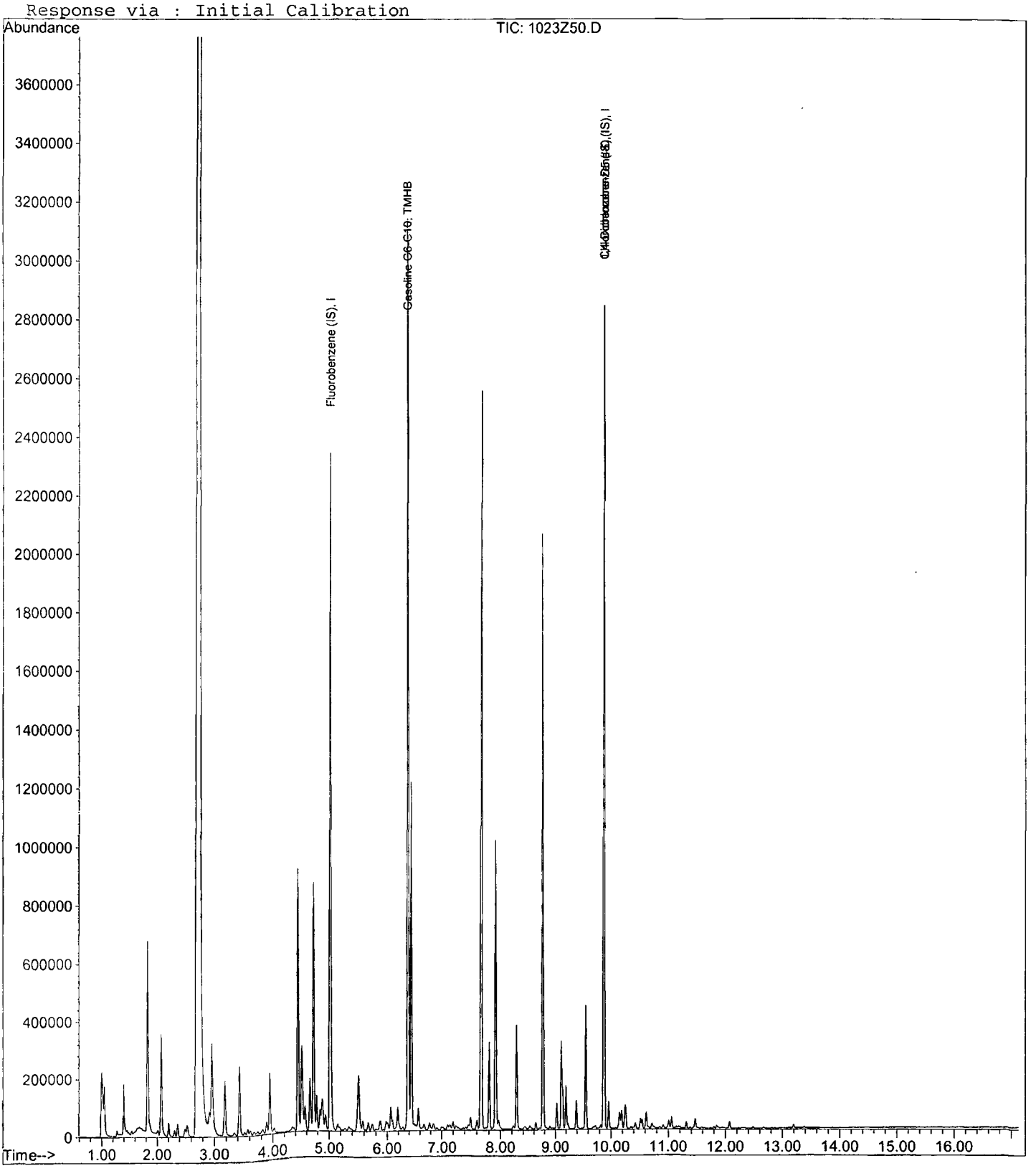
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z50.D
Acq On : 24 Oct 20 06:55
Sample : BA20539W04,5,6 MS 300ug/L
Misc :

Vial: 45
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 11:26 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z51.D Vial: 46
Acq On : 24 Oct 20 07:18 Operator: LP,DG,CH
Sample : BA20539W05,4,6 MSD 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:26 2020 Quant Results File: ZGAS1023.RES

Quant Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	TIC	2292448	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.88	TIC	2774035	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.88	TIC	2774035	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Gasoline C6-C10	6.38	TIC	29472219m	286.19 ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201023\1023Z51.D Vial: 46
Acq On : 24 Oct 20 07:18 Operator: LP,DG,CH
Sample : BA20539W05,4,6 MSD 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 27 11:28 2020 Quant Results File: ZSUR23.RES

Quant Method : M:\ZEUS\DATA\201023\ZSUR23.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 26 12:12:53 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.02	96	1804117	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.67	117	1291777	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.88	152	677461	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.44	111	457205	24.14	ppb	0.00
Spiked Amount 25.000			Recovery =	96.576%		
3) 1,2-DCA-D4(S)	4.72	65	435879	24.32	ppb	0.00
Spiked Amount 25.000			Recovery =	97.292%		
5) Toluene-D8(S)	6.38	98	1764618	27.11	ppb	0.00
Spiked Amount 25.000			Recovery =	108.448%		
6) 4-Bromofluorobenzene(S)	8.77	95	646951	26.12	ppb	0.00
Spiked Amount 25.000			Recovery =	104.480%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

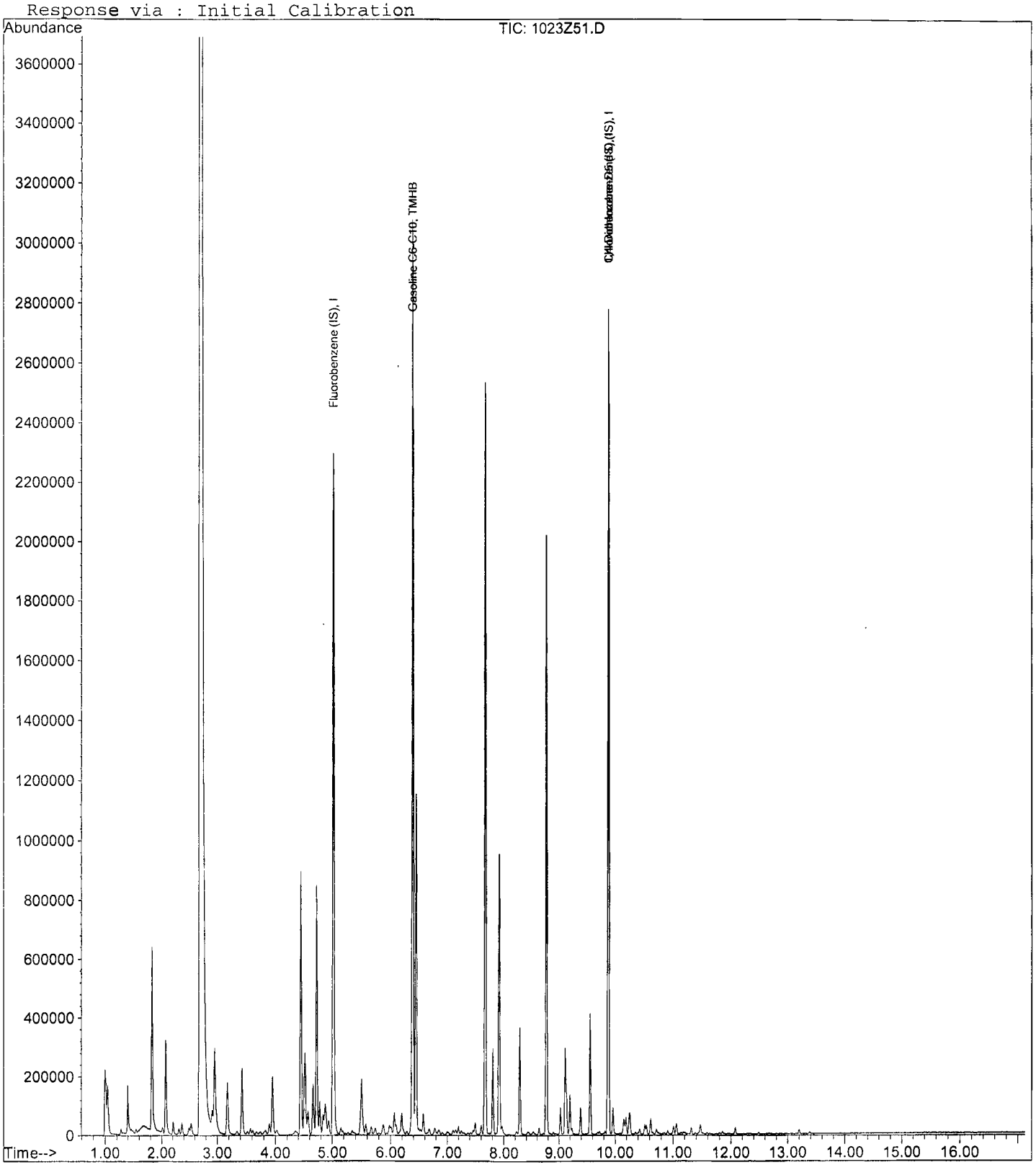
Quantitation Report

Data File : M:\ZEUS\DATA\201023\1023Z51.D
Acq On : 24 Oct 20 07:18
Sample : BA20539W05,4,6 MSD 300ug/L
Misc :

Vial: 46
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 27 11:26 2020 Quant Results File: ZGAS1023.RES

Method : M:\ZEUS\DATA\201023\ZGAS1023.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Oct 27 10:18:06 2020
Response via : Initial Calibration



Zeus 8260 Water Calibration Curve

0.3ug/L

Prepared: 10/23/20

Expires: 11/04/20

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	0.3ug/L	5	Prepared 10/18/20	12/17/20	N/A	3uL	50mL	P&T Water	0.3
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	5uL			5
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	2.5uL			5
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	2uL			10

0.5ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	0.5ug/L	5	Prepared 10/18/20	12/17/20	N/A	5uL	50mL	P&T Water	0.5
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	10uL			10
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	5uL			10
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	5uL			25

1.0ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	1.0ug/L	5	Prepared 10/18/20	12/17/20	N/A	10uL	50mL	P&T Water	1
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	20uL			20
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	10uL			20
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	10uL			50

2.0ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	2.0ug/L	5	Prepared 10/18/20	12/17/20	N/A	20uL	50mL	P&T Water	2
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	30uL			30
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	15uL			30
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	15uL			75

5ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	5ug/L	50	Prepared 10/18/20	12/17/20	N/A	5uL	50mL	P&T Water	5
VOA STD. 8	Phenova		50	Prepared 10/18/20	11/04/20	N/A	5uL			5
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	40uL			40
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	20uL			20
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	20uL			100

10ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	10ug/L	50	Prepared 10/18/20	12/17/20	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 10/18/20	11/04/20	N/A	10uL			10
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	50uL			50
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	25uL			50
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	25uL			125

20ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	20ug/L	50	Prepared 10/18/20	12/17/20	N/A	20uL	50mL	P&T Water	20
VOA STD. 8	Phenova		50	Prepared 10/18/20	11/04/20	N/A	20uL			20
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	60uL			60
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	30uL			60
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	30uL			150

40ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	40ug/L	50	Prepared 10/18/20	12/17/20	N/A	40uL	50mL	P&T Water	40
VOA STD. 8	Phenova		50	Prepared 10/18/20	11/04/20	N/A	40uL			40
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	80uL			80
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	40uL			80
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	35uL			175

100ug/L

Prepared: 10/23/20

Expires: 11/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	100ug/L	50	Prepared 10/18/20	12/17/20	N/A	100uL	50mL	P&T Water	100
VOA STD. 8	Phenova		50	Prepared 10/18/20	11/04/20	N/A	100uL			100
VOA STD. 1	Absolute		50	Prepared 10/18/20	12/17/20	N/A	100uL			100
VOA STD. 2	Phenova		100	Prepared 10/18/20	12/17/20	N/A	50uL			100
VOA STD. TBA	Various		250	Prepared 10/18/20	11/04/20	N/A	40uL			200

Zeus 8260 Water Second Source (SS)

Prepared: 10/23/20

Expires: 11/04/20

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 3	Phenova	8260 Water SS	100	Prepared 10/18/20	12/17/20	N/A	25uL	50mL	P&T Water	50
VOA STD. GASES	Phenova	8260 Water SS	50	Prepared 10/18/20	12/17/20	N/A	10uL			10
VOA STD. 0	Phenova	8260 Water SS	50	Prepared 10/18/20	12/17/20	N/A	10uL			10
VOA STD. 2-CEVE	Absolute	8260 Water SS	50	Prepared 10/18/20	10/18/20	N/A	50uL			50
VOA STD. 6	Various	8260 Water SS	50	Prepared 10/18/20	11/04/20	N/A	10uL			10
Voa STD. TBA	Various	8260 Water SS	250	Prepared 10/18/20	11/04/20	N/A	25uL			250

8260 Water Continuing Calibrations (CCV)/ Lab Control Spikes (LCS)

Prepared: 10/23/20

Expires: 10/24/20

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	CCV/ LCS	50	Prepared 10/18/20	12/17/20	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova	CCV/ LCS	50	Prepared 10/18/20	11/04/20	N/A	10uL			10
VOA STD. 1	Absolute	CCV/ LCS	50	Prepared 10/18/20	12/17/20	N/A	50uL			50
VOA STD. 2	Phenova	CCV/ LCS	100	Prepared 10/18/20	12/17/20	N/A	25uL			50
VOA STD. TBA	Various	CCV/ LCS	250	Prepared 10/18/20	11/04/20	N/A	25uL			125

Primary and Secondary Working Standards

Primary Standards

VOA STD 7

Prepared: 10/18/20 A
Expires: 12/17/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses STD	Phenova	ALO-101206	2,000	CL14506-50819	10/18/21	10/31/24	100uL	4mL	Methanol	50
Hexachloroethane	Absolute	70199	1,000	091818-50780	10/18/21	09/18/23	200uL			50
Benzyl Chloride	Accusta	M-8010-01	1,000	042420-50798	10/18/21	04/24/21	200uL			50

VOA STD 8

Prepared: 10/18/20 B
Expires: 11/04/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Additions STD	Phenova	ALO-130175	2,000	CL15724-50830	10/18/21	09/30/22	100uL	4mL	Methanol	50
502.2 Cal. Std.	Phenova	ALO-101200	2,000	CL14379-50556	10/18/21	10/31/24	100uL			50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL15886-50944	10/10/21	11/04/20	100uL			50

VOA STD TBA

Prepared: 10/18/20 C
Expires: 11/04/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOC Mix	Phenova	ALO-130176	2,000	CL15725-50774	10/18/21	09/30/23	500uL	4mL	Methanol	250
Acrolein	Phenova	ALO-130549	10,000	CL15890-50946	10/10/21	11/04/20	100uL			250

VOA STD 1

Prepared: 10/18/20 D
Expires: 12/17/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE	Absolute	82408	2,000	121119-50901	10/18/21	12/11/22	50	2mL	Methanol	50

VOA STD 2

Prepared: 10/18/20 E
Expires: 12/17/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Std.	Phenova	ALO-109211	2,000	CL12730-50632	10/18/21	08/31/28	100	4mL	Methanol	50

VOA STD 9

Prepared: 10/18/20 F
Expires: 12/17/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 7		VOA STD. 9	50	Prepared 10/18/20	10/18/21	N/A	200uL	2mL	Methanol	5
VOA STD. 8			50	Prepared 10/18/20	10/18/21	N/A	200uL			5

VOA STD. 10

Prepared: 10/18/20 G
Expires: 12/17/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 1		VOA STD. 10	50	Prepared 10/18/20	10/18/21	N/A	200uL	2mL	Methanol	5

VOA STD. 12

Prepared: 10/18/20 H
Expires: 12/17/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 2		VOA STD. 12	50	Prepared 10/18/20	10/18/21	N/A	200uL	2mL	Methanol	5

Second Source (SS) Standards

VOA STD. 3

Prepared: 10/18/20 I

Expires: 12/17/20

Prepared By (Initials): CH

Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Standard	Phenova	ALO-101211	2,000	CL13994-50636	10/18/21	08/31/29	50uL	2mL	Methanol	50

VOA STD. Gases

Prepared: 10/18/20 J

Expires: 12/17/20

Prepared By (Initials): CH

Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260 Gases (SS)	Phenova	ALO-101206	2,000	CL14505-50824	10/18/21	10/31/24	50uL	2mL	Methanol	50

VOA STD. 6

Prepared: 10/18/20 K

Expires: 11/04/20

Prepared By (Initials): CH

Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
502.2 Calibration STD. (54-compounds)	Phenova	ALO-101200	2,000	CL14381-50562	10/18/21	10/31/24	50uL	2mL	Methanol	50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL15886-50945	10/10/21	11/04/20	50uL			50
Hexachloroethane	Accustan	AS-E0011	1,000	219061767-50955	10/18/21	06/28/29	100uL			50
Benzyl Chloride	Accustan	M-8010-01	200	219111303-50803	10/18/21	12/25/21	500uL			50

VOA STD. TBA

Prepared: 10/18/20 L

Expires: 11/04/20

Prepared By (Initials): CH

Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOA Mix (4-3)	Phenova	ALO-130176	2,000	CL12929-50567	10/18/21	11/30/20	250uL	2mL	Methanol	250
Acrolein	Phenova	ALO-101224	10,000	CL15890-50947	10/10/21	11/04/20*	50uL			250

VOA STD. 0

Prepared: 10/18/20 M

Expires: 12/17/20

Prepared By (Initials): CH

Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Addition STD.	Phenova	ALO-130175	2,000	CL14058-50580	10/18/21	08/31/21	50uL	2mL	Methanol	50

VOA STD. 2-CEVE

Prepared: 10/18/20 N

Expires: 12/17/20

Prepared By (Initials): CH

Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE (SS)	Absolute	82408	2,000	011320-50896	10/18/21	01/13/23	50uL	2mL	Methanol	50

Zeus Gas Standard Prep

Gas Primary Working Standard

Prepared: 10/16/20 — Prepared By (Initials): CH

Expires: 01/06/21

Methanol Lot No.

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
50,000ug/mL Gas STD	Restek	30205	50,000	A0132443-39859	01/06/21	12/31/24	80uL	2mL	Methanol	2,000

Gas Second Source (SS) Working Standard

Prepared: 08/20/20 — Prepared By (Initials): CH

Expires: 10/13/20

Methanol Lot No.

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Gasoline (50,000ppm)	Phenova	ALO-101543	50,000	CL11750-40998	10/13/20	02/28/27	800uL	2mL	Methanol	2,000

Zeus Gas Calibration Curve

Prepared: 10/23/20 — Prepared By (Initials): CH

Expires: 12/22/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA Gasses Standards	Phenova	20ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	1uL	100mL	P&T Water	20
VOA Gasses Standards	Phenova	50ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	2.5uL	100mL	P&T Water	50
VOA Gasses Standards	Phenova	100ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	5uL	100mL	P&T Water	100
VOA Gasses Standards	Phenova	300ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	15uL	100mL	P&T Water	300
VOA Gasses Standards	Phenova	600ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	30uL	100mL	P&T Water	600
VOA Gasses Standards	Phenova	800ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	40uL	100mL	P&T Water	800
VOA Gasses Standards	Phenova	1,000ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	50uL	100mL	P&T Water	1,000

Zeus Gas Second Source

Prepared: 10/23/20 — Prepared By (Initials): CH

Expires: 12/22/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
50,000ug/mL Gas STD	Phenova	SS 300ug/L	2,000	Prepared 08/20/20	10/13/20	N/A	15uL	100mL	P&T Water	300

Zeus Gas Continuing Calibrations/Lab Control Spikes

Prepared: 10/23/20 — Prepared By (Initials): CH

Expires: 10/24/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses Standards	Phenova	300ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	15uL	100mL	P&T Water	300

Injection Log

Directory: M:\ZEUS\DATA\201023\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	7	1023Z12.D	1	0.3ug/L VOC STD 10/23/20		23 Oct 20 16:16
2	8	1023Z13.D	1	0.5ug/L VOC STD 10/23/20		23 Oct 20 16:39
3	9	1023Z14.D	1	1ug/L VOC STD 10/23/20		23 Oct 20 17:02
4	10	1023Z15.D	1	2ug/L VOC STD 10/23/20		23 Oct 20 17:26
5	11	1023Z16.D	1	5ug/L VOC STD 10/23/20		23 Oct 20 17:49
6	12	1023Z17.D	1	10ug/L VOC STD 10/23/20		23 Oct 20 18:12
7	13	1023Z18.D	1	20ug/L VOC STD 10/23/20		23 Oct 20 18:35
8	14	1023Z19.D	1	40ug/L VOC STD 10/23/20		23 Oct 20 18:58
9	15	1023Z20.D	1	100ug/L VOC STD 10/23/20		23 Oct 20 19:21
10	18	1023Z23.D	1	20ug/L GAS STD 10/23/20		23 Oct 20 20:31
11	19	1023Z24.D	1	50ug/L GAS STD 10/23/20		23 Oct 20 20:54
12	20	1023Z25.D	1	100ug/L GAS STD 10/23/20		23 Oct 20 21:18
13	21	1023Z26.D	1	300ug/L GAS STD 10/23/20		23 Oct 20 21:41
14	22	1023Z27.D	1	600ug/L GAS STD 10/23/20		23 Oct 20 22:04
15	23	1023Z28.D	1	800ug/L GAS STD 10/23/20		23 Oct 20 22:27
16	24	1023Z29.D	1	1000ug/L GAS STD 10/23/20		23 Oct 20 22:50
17	26	1023Z31.D	1	(SS)300ug/L GAS STD 10/23/20		23 Oct 20 23:37
18	30	1023Z35.D	1	201023A CCV 300ug/L		24 Oct 20 01:09
19	31	1023Z36.D	1	201023A LCS 300ug/L		24 Oct 20 01:32
20	32	1023Z37.D	1	201023A LCSD 300ug/L		24 Oct 20 01:55
21	33	1023Z38.D	1	201023A BLK		24 Oct 20 02:18
22	34	1023Z39.D	1	BA20538W01		24 Oct 20 02:42
23	35	1023Z40.D	1	BA20539W01		24 Oct 20 03:05
24	36	1023Z41.D	1	BA20540W01		24 Oct 20 03:28
25	37	1023Z42.D	1	BA20541W01		24 Oct 20 03:51
26	38	1023Z43.D	1	BA20542W01		24 Oct 20 04:14
27	39	1023Z44.D	1	BA20543W01		24 Oct 20 04:37
28	40	1023Z45.D	1	BA20544W01		24 Oct 20 05:00
29	45	1023Z50.D	1	BA20539W04,5,6 MS 300ug/L		24 Oct 20 06:55
30	46	1023Z51.D	1	BA20539W05,4,6 MSD 300ug/L		24 Oct 20 07:18
31	48	1023Z53.D	1	Ending CCV 300ug/L 10/23/20		24 Oct 20 08:04

ORGANICS

Calibration Data

RSK 175
RSK 175

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 09/14/20
Matrix: Instrument: 7890

Initials: CD

			0914R07.D	0914R08.D	0914R09.D	0914R10.D	0914R11.D	0914R12.D	0914R13.D								
		Compound	1	2	3	4	5	6	7				Avg	%RSD	Type	r^2	Q
1	ATML	Methane	31176	26056	25996	23232	23337	25358	24640				25685	10	ATM	1.000	
2	ATML	Ethane	21362	19532	19181	17082	17815	18853	18215				18863	7.3	ATM	1.000	
3	ATML	Ethene	16420	15064	15131	13510	13711	15061	14685				14797	6.6	ATM	1.000	
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0.696467

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R07.D Vial: 1
Acq On : 14 Sep 20 12:06 Operator: CD
Sample : RSK STD1 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

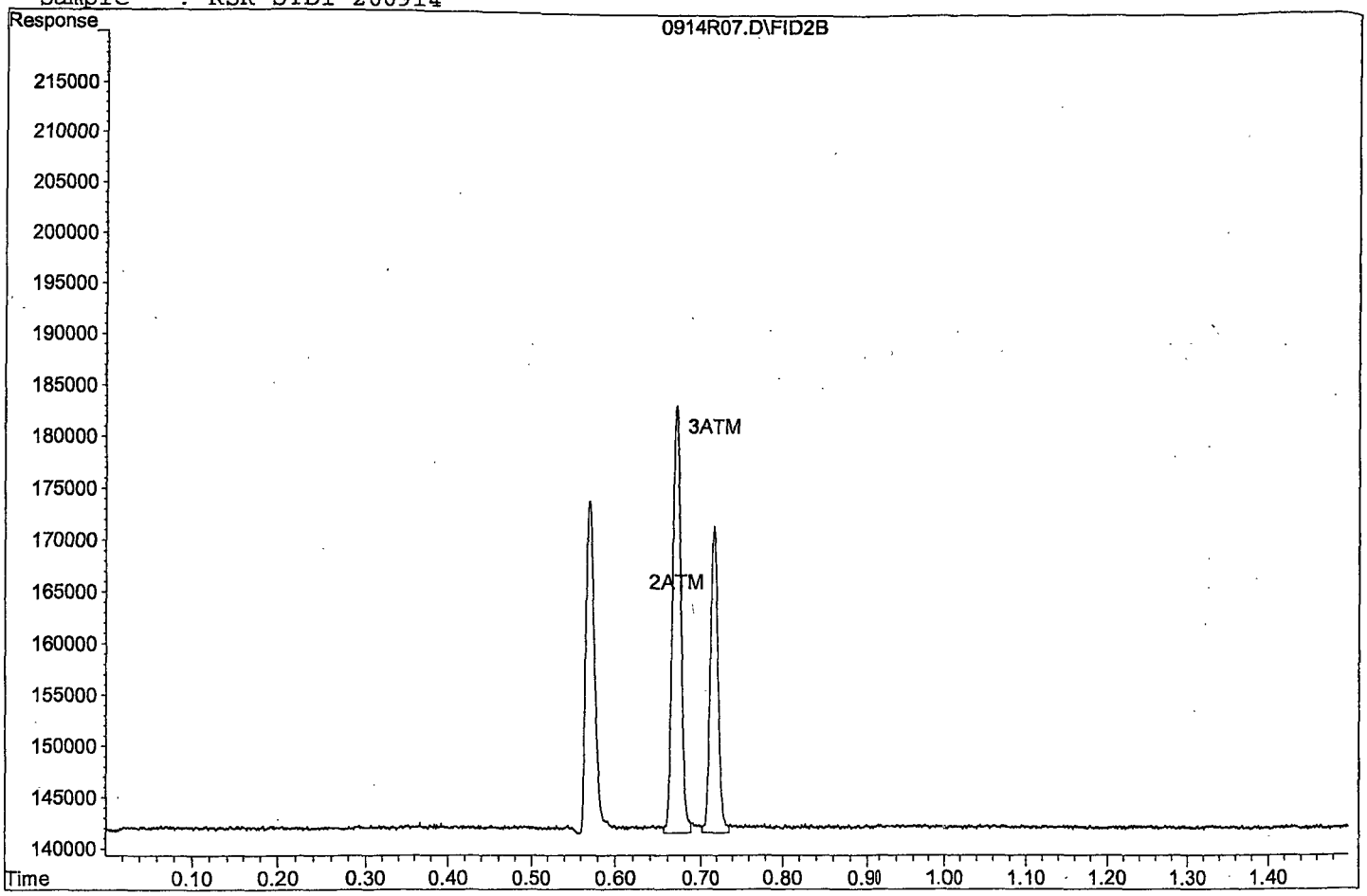
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
2) ATM Ethane	0.67	41762	102628.492	ppb
3) ATM Ethene	0.72	29966	4.139	ppb
Target Compounds				
1) ATM Methane	0.57	32423	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R07.D
Sample : RSK STD1 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R08.D Vial: 1
Acq On : 14 Sep 20 12:10 Operator: CD
Sample : RSK STD2 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

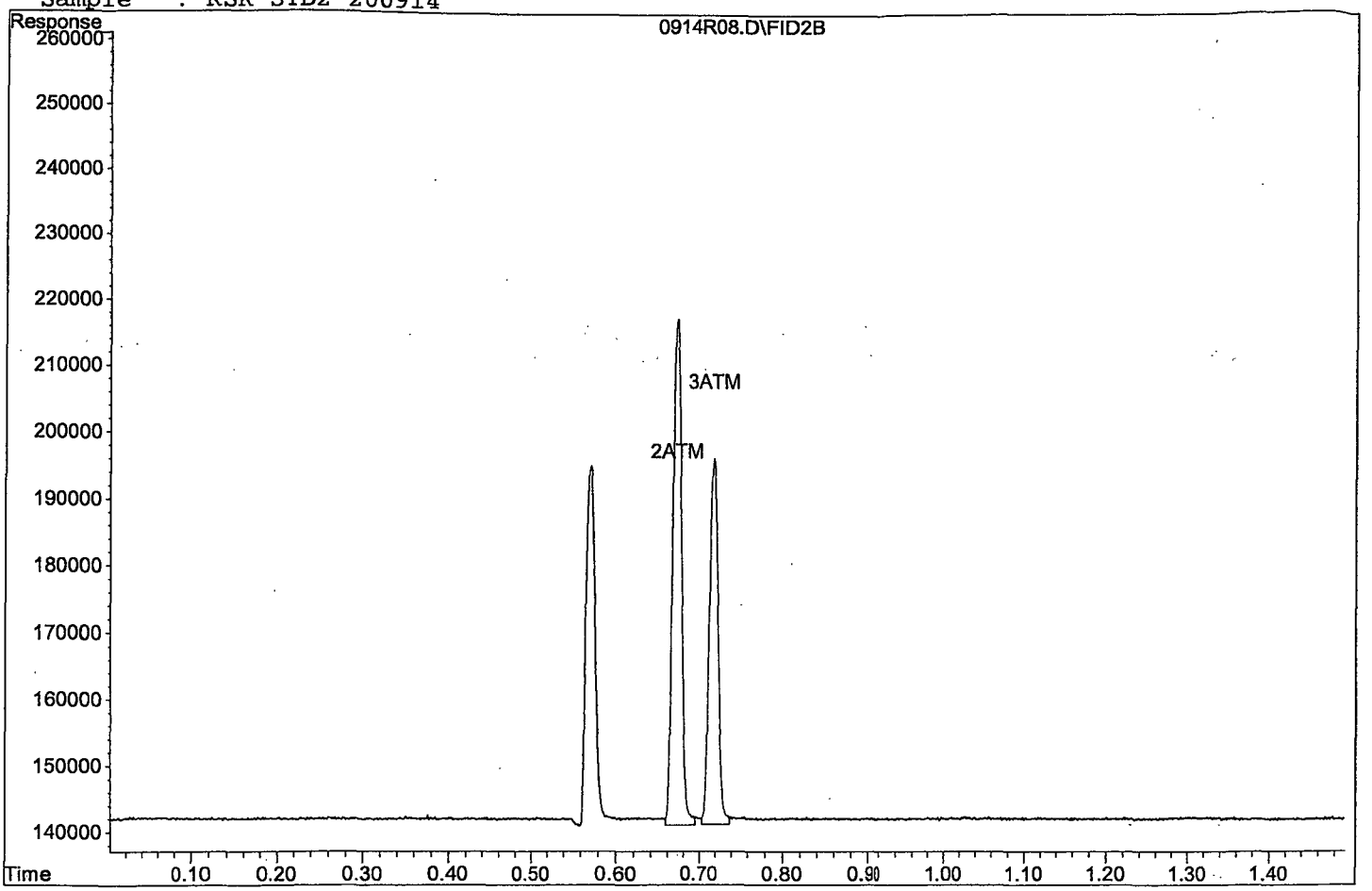
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
2) ATM Ethane	0.67	76271	190289.144	ppb
3) ATM Ethene	0.72	54983	7.686	ppb
Target Compounds				
1) ATM Methane	0.57	54196	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File: G:\ROCKY\DATA\200914RS\0914R08.D
Sample : RSK STD2 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R09.D Vial: 1
Acq On : 14 Sep 20 12:13 Operator: CD
Sample : RSK STD3 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

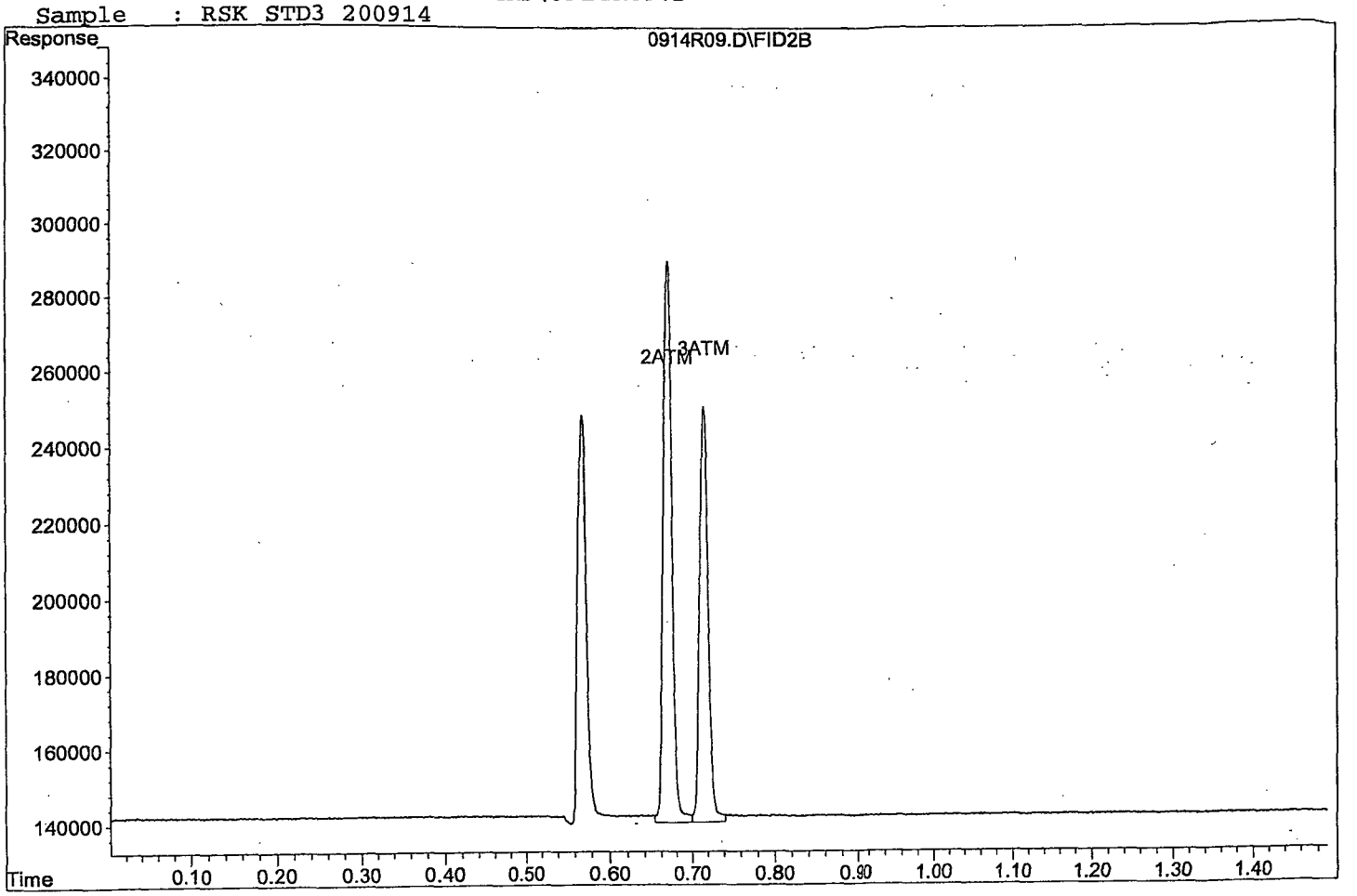
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
2) ATM Ethane	0.67	149612	376595.524 ppb
3) ATM Ethene	0.72	110455	15.551 ppb
Target Compounds			
1) ATM Methane	0.57	108403	N.D. ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R09.D
Sample : RSK STD3 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R10.D Vial: 1
Acq On : 14 Sep 20 12:18 Operator: CD
Sample : RSK STD4 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

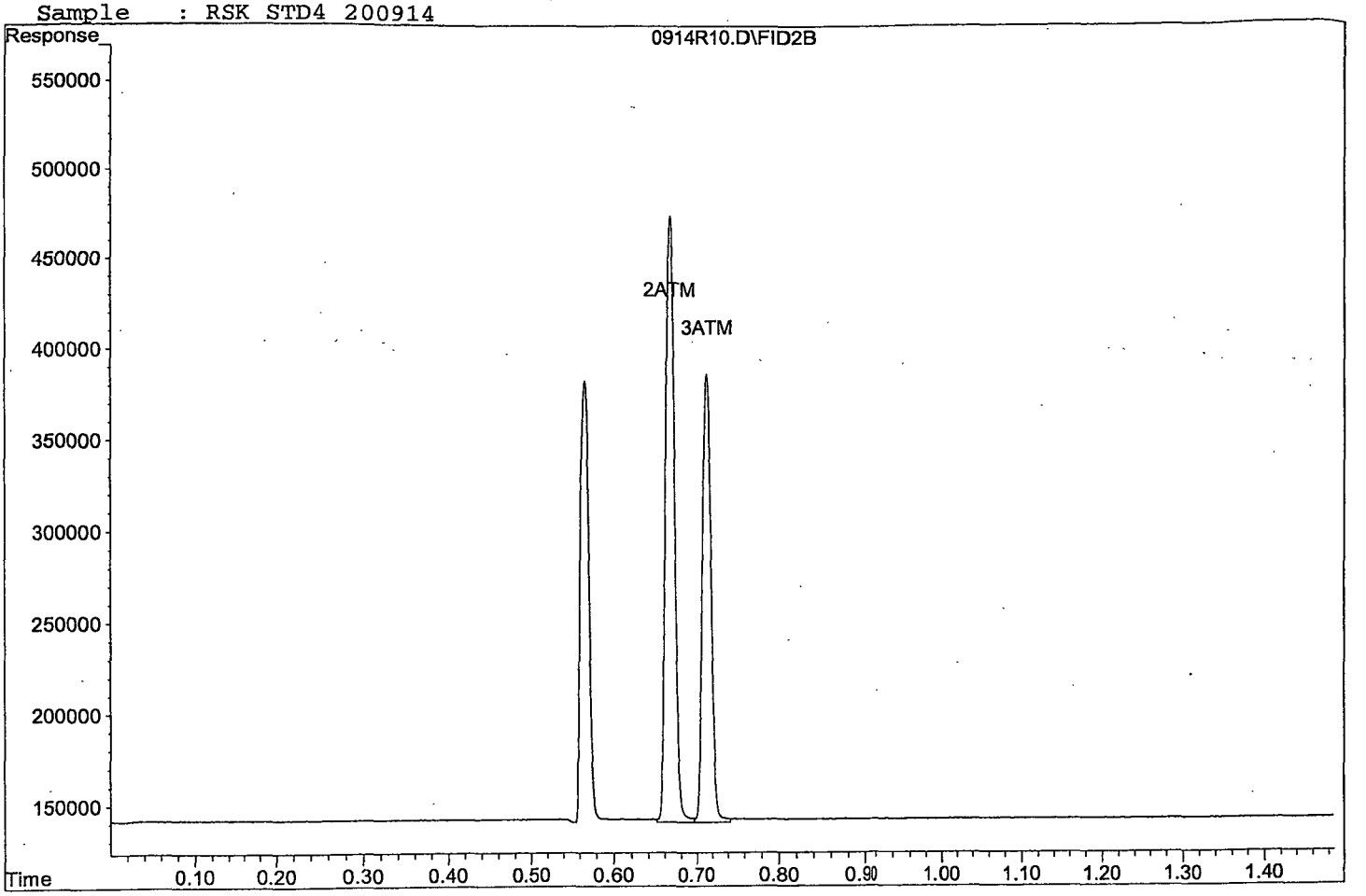
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
2) ATM Ethane	0.67	333873	844667.853	ppb
3) ATM Ethene	0.71	246286	34.810	ppb
Target Compounds				
1) ATM Methane	0.57	242197	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R10.D
Sample : RSK STD4 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R11.D Vial: 1
Acq On : 14 Sep 20 12:21 Operator: CD
Sample : RSK STD5 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

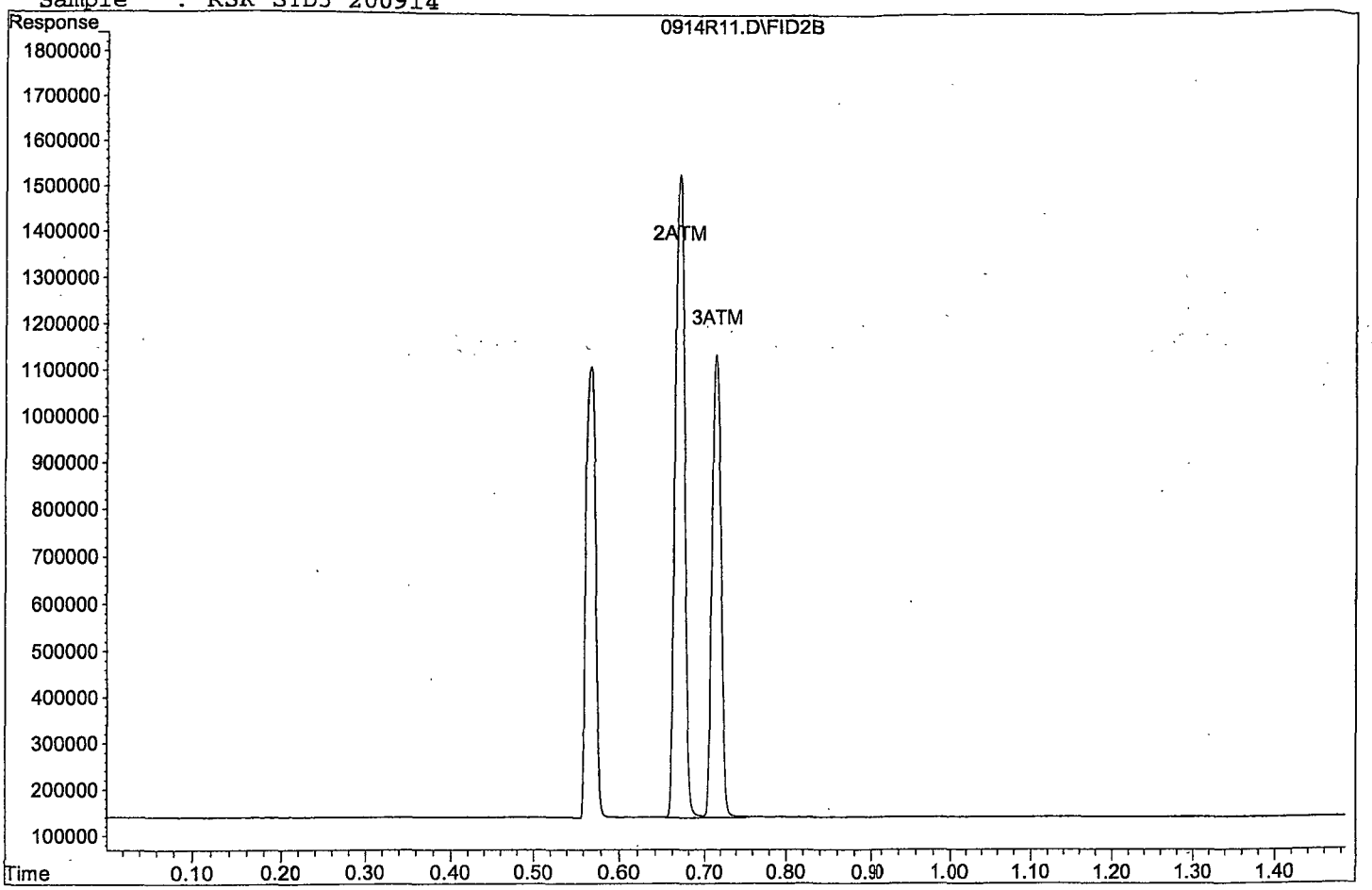
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
2) ATM Ethane	0.67	1392673	353402.847 ppb
3) ATM Ethene	0.71	999836	141.654 ppb
Target Compounds			
1) ATM Methane	0.57	973152	N.D. ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File: G:\ROCKY\DATA\200914RS\0914R11.D
Sample : RSK STD5 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R12.D Vial: 1
Acq On : 14 Sep 20 12:25 Operator: CD
Sample : RSK STD6 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

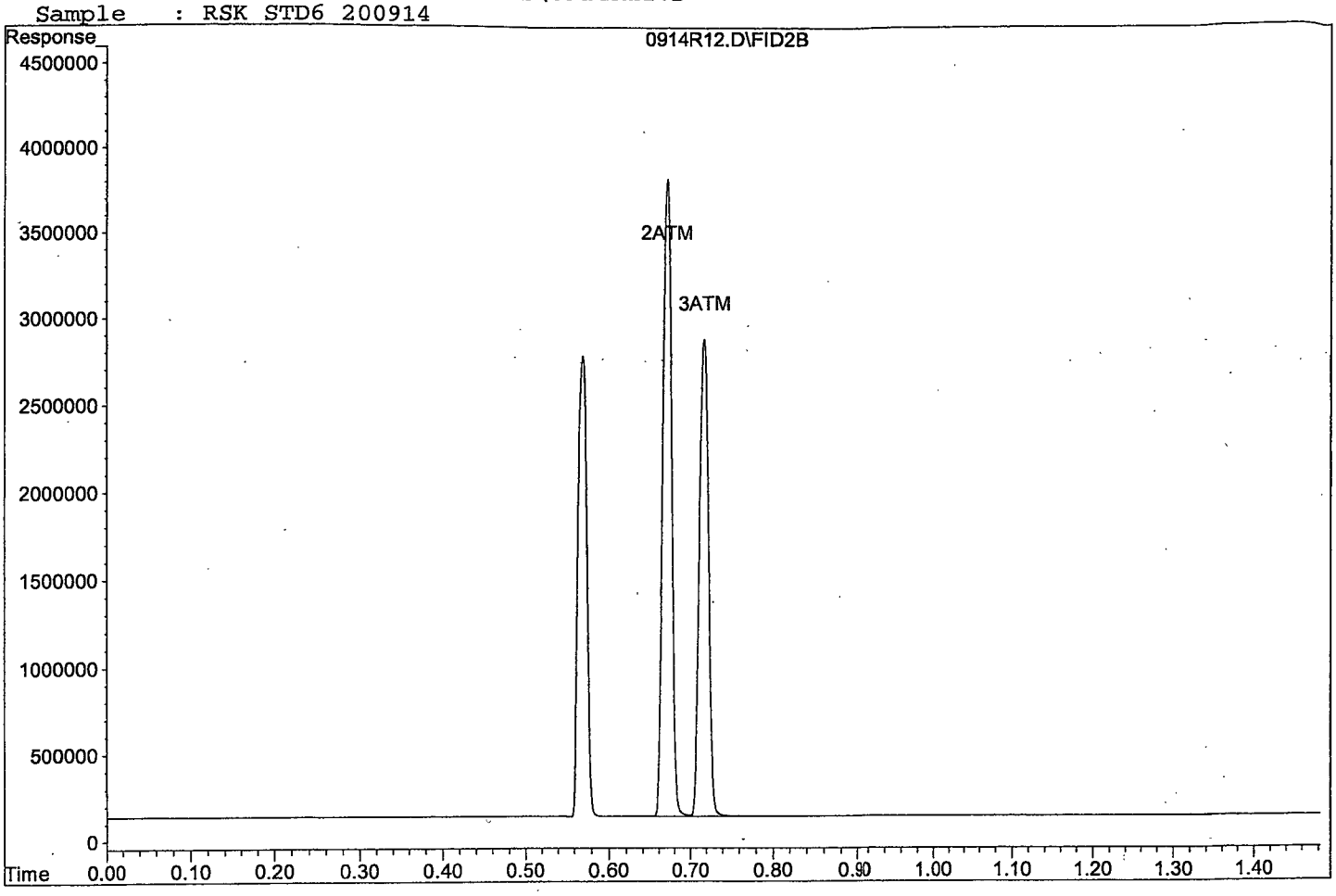
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
2) ATM Ethane	0.67	3684845	9357031.284	ppb
3) ATM Ethene	0.72	2745673	389.192	ppb
Target Compounds				
1) ATM Methane	0.57	2643568	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R12.D
Sample : RSK STD6 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R13.D Vial: 1
Acq On : 14 Sep 20 12:28 Operator: CD
Sample : RSK STD7 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

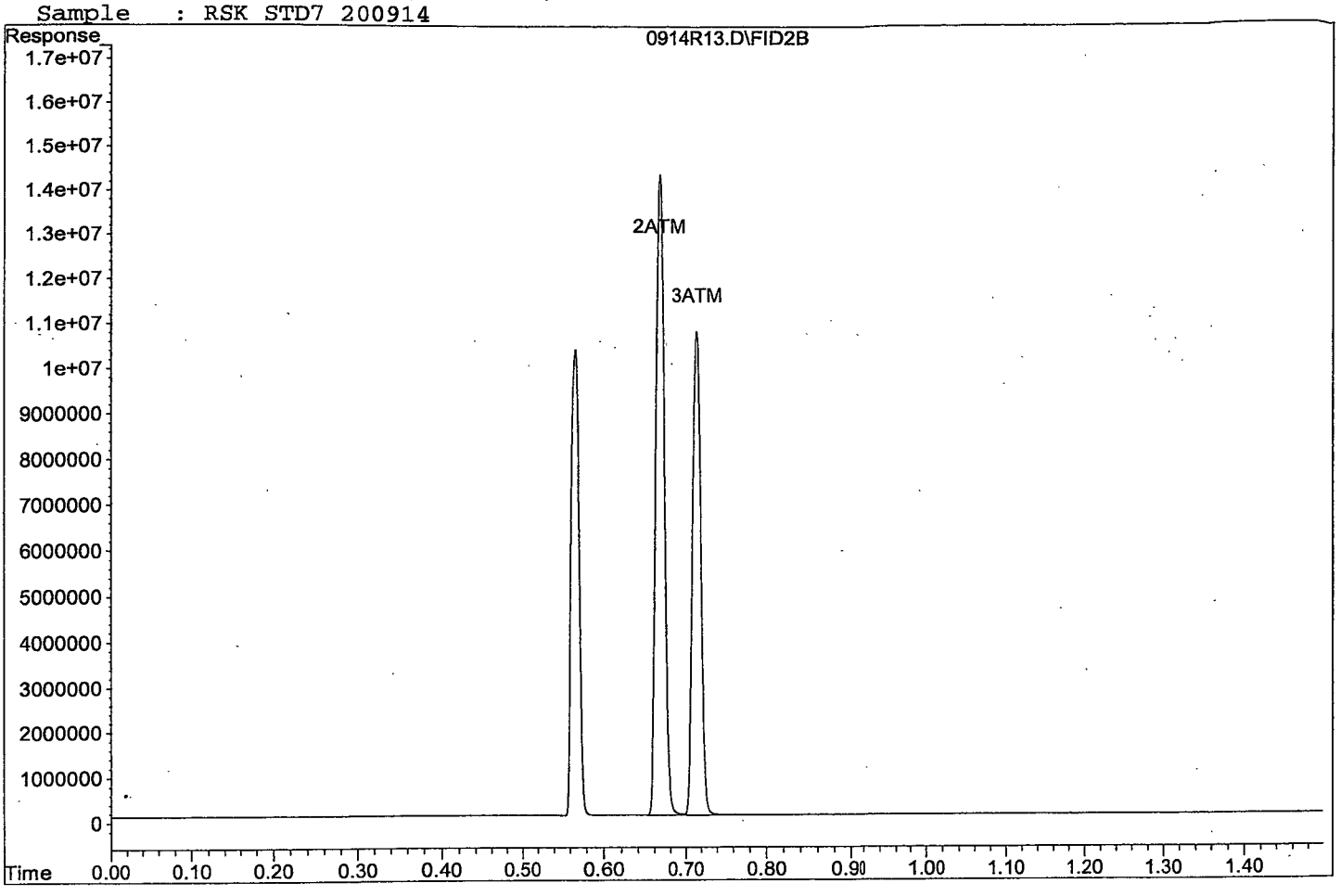
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
2) ATM Ethane	0.67	14239394	3616.8407.278	ppb
3) ATM Ethene	0.71	10708428	1518.210	ppb
Target Compounds				
1) ATM Methane	0.57	10274710	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R13.D
Sample : RSK STD7 200914



Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 09/14/20
Instrument: 7890
Initial Cal. Date: 09/14/20
Data File: 0914R14.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATML	Methane	25685	23394	8.9	ATML	5.2
2	ATML	Ethane	18863	17545	7.0	ATML	4.5
3	ATML	Ethene	14798	13693	7.5	ATML	6.4
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			7.8		

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R14.D Vial: 1
Acq On : 14 Sep 20 12:32 Operator: CD
Sample : SS RSK STD5 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:48 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

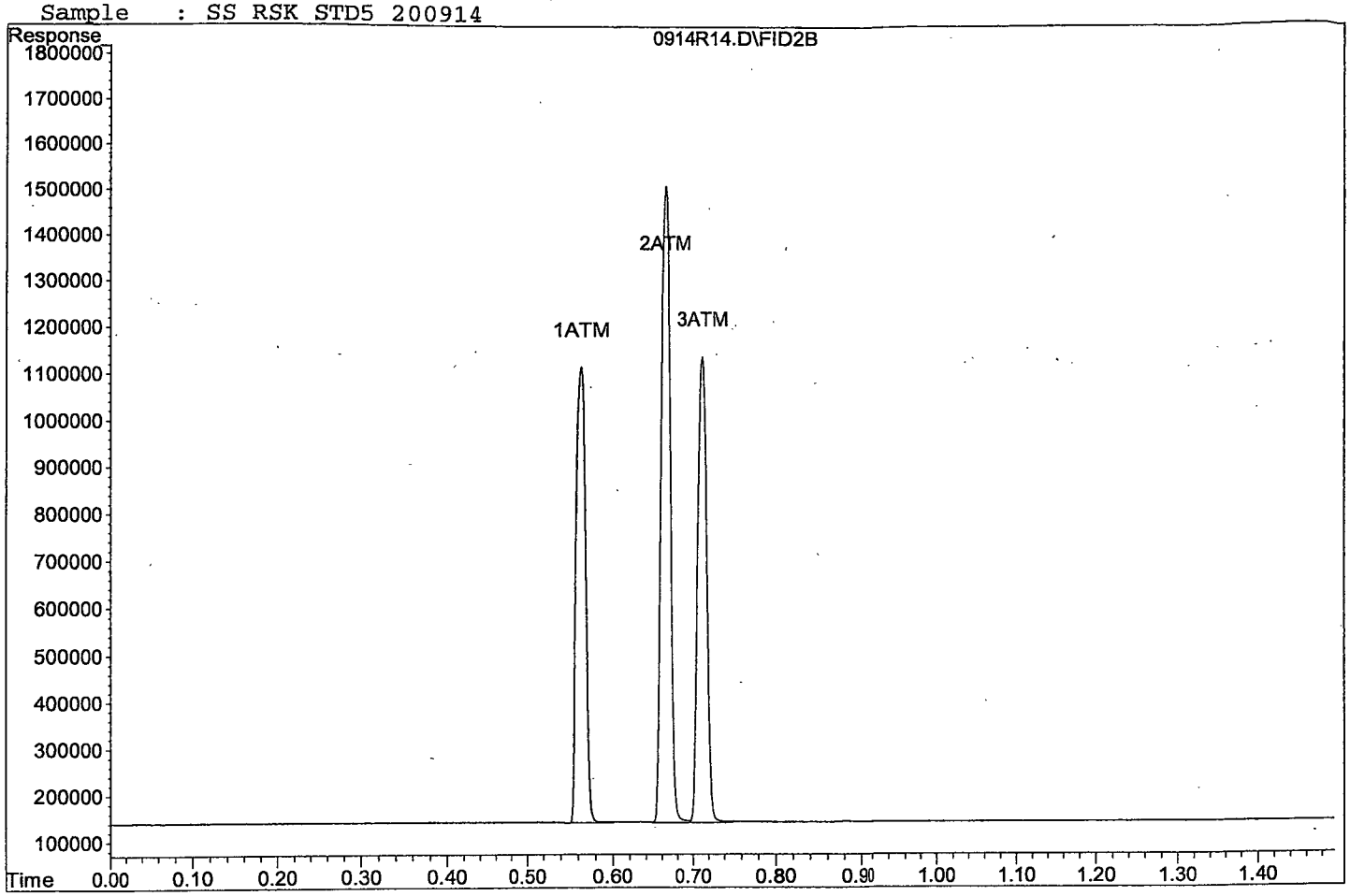
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

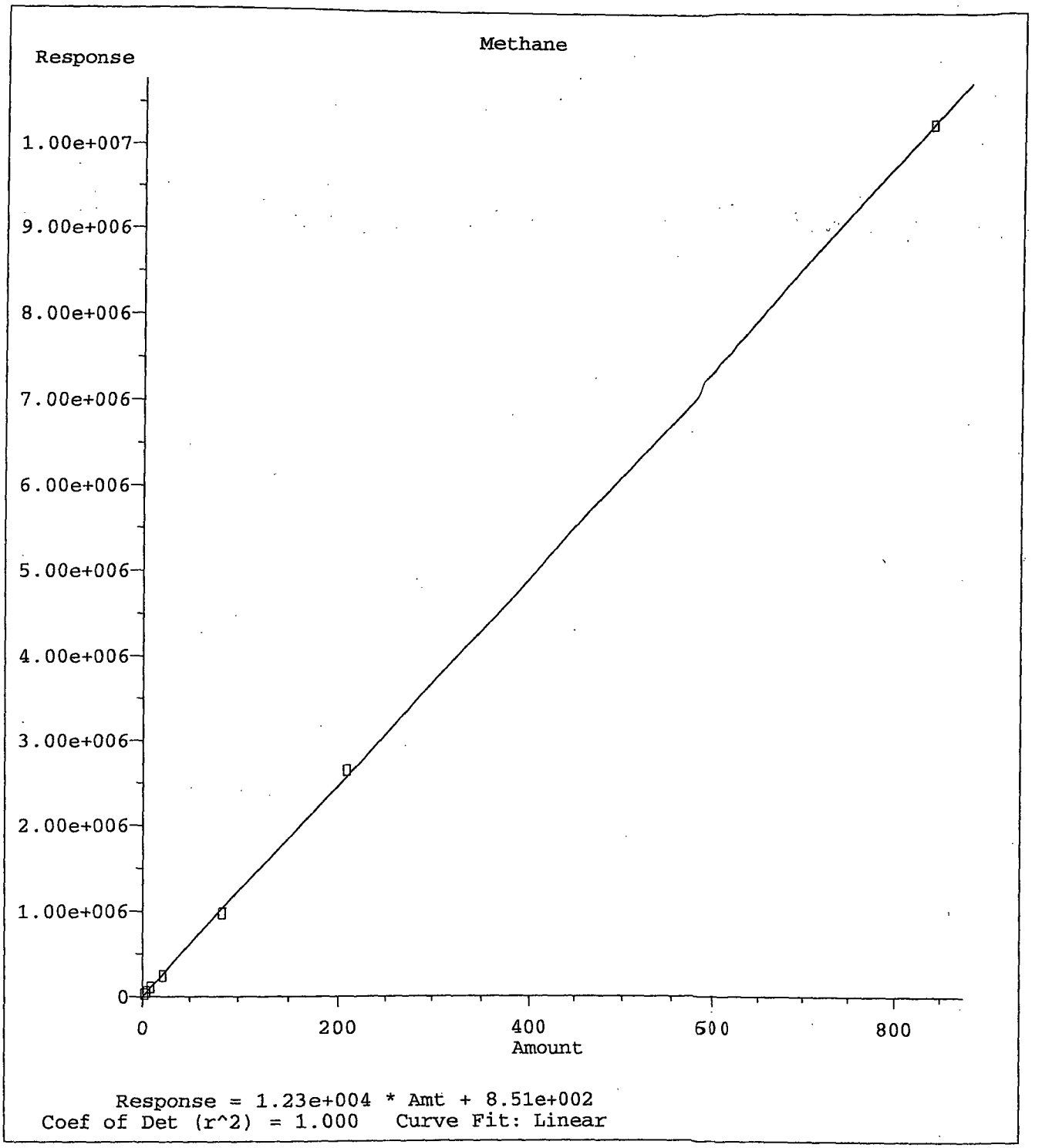
Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	0.56	975516	79.029 ppb
2) ATM Ethane	0.66	1371570	149.323 ppb
3) ATM Ethene	0.71	998467	136.525 ppb

Target Compounds

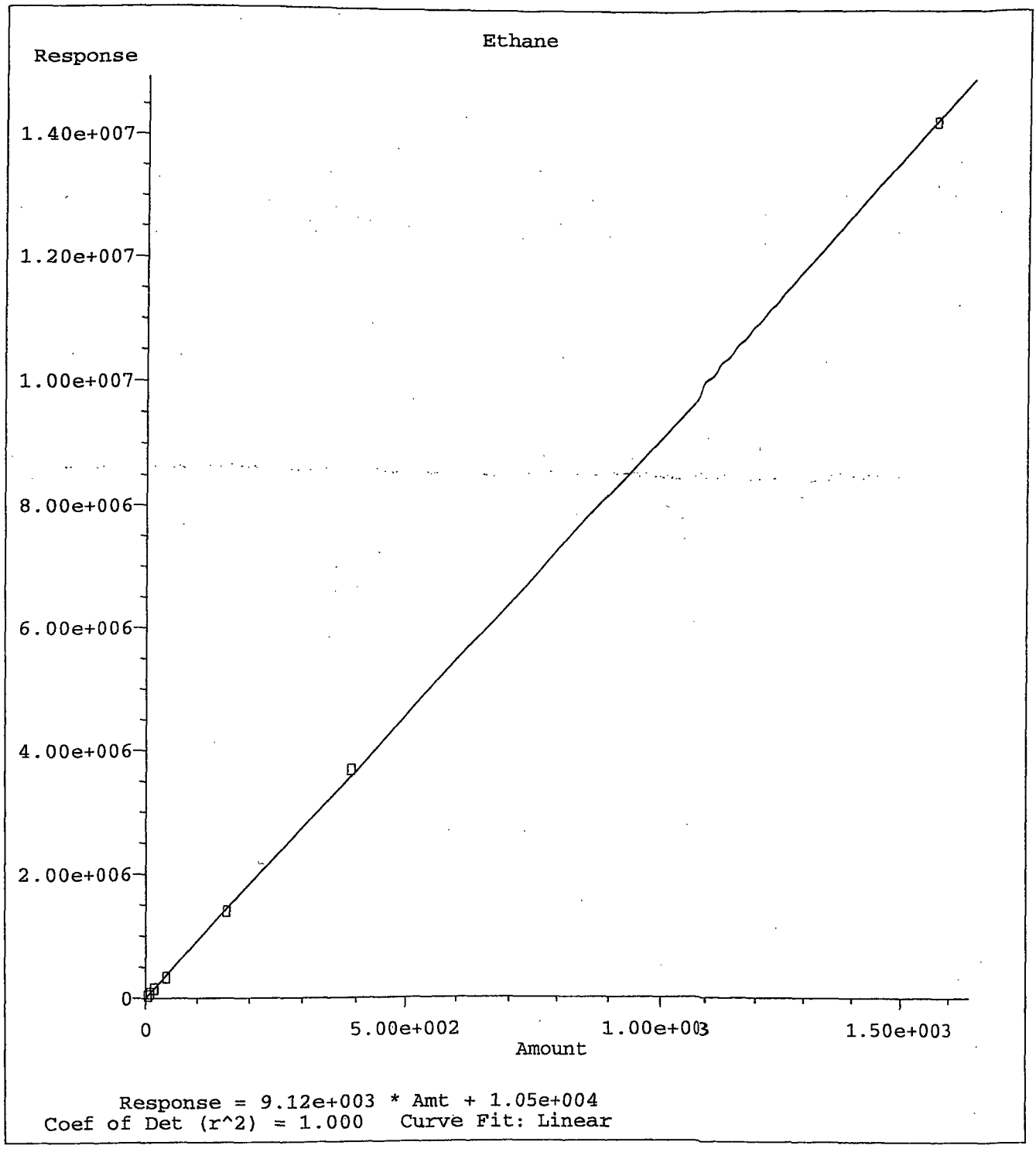
(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R14.D
Sample : SS RSK STD5 200914

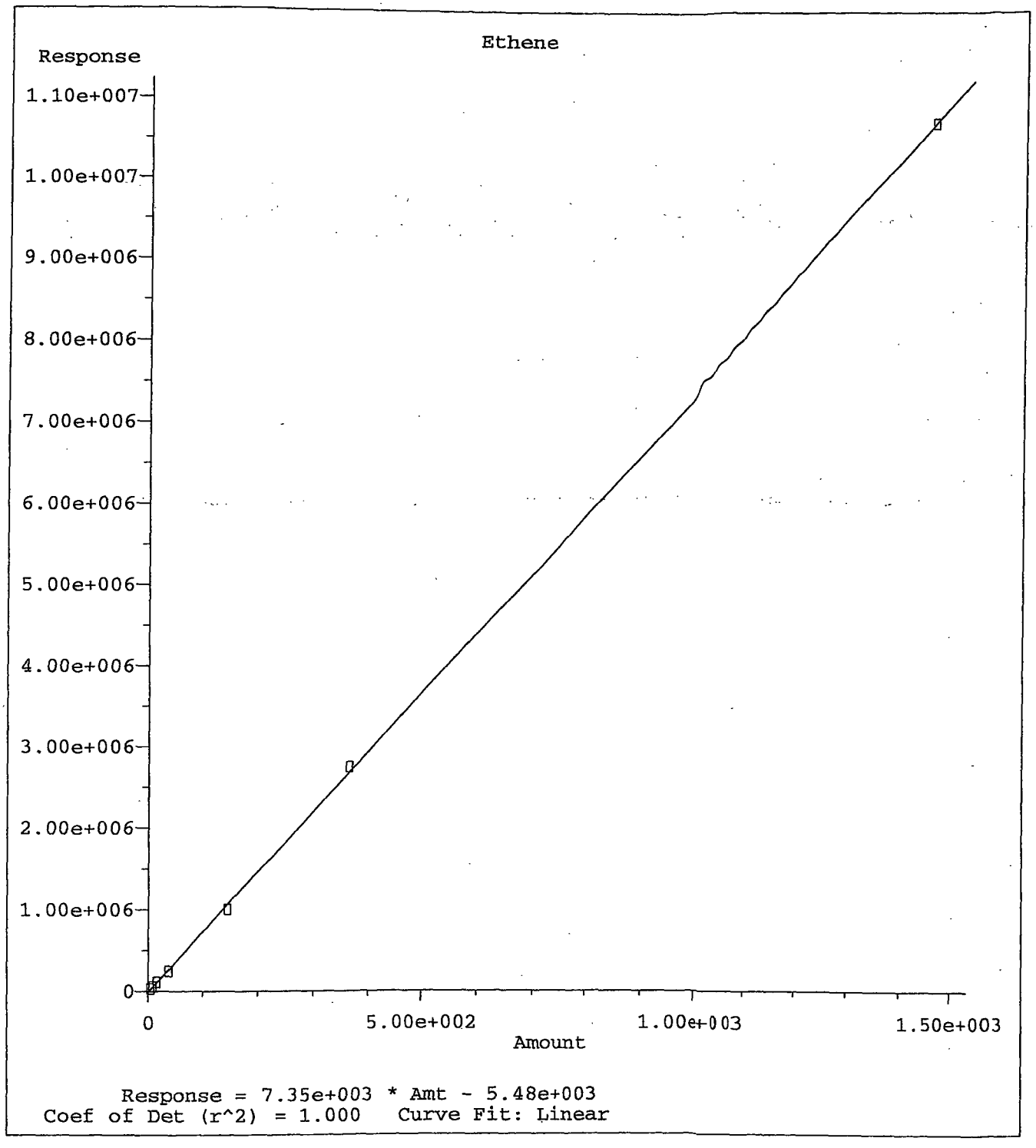




Method Name: G:\ROCKY\DATA\200624RS\RSK0914A.M
Calibration Table Last Updated: Mon Sep 14 12:40:32 2020



Method Name: G:\ROCKY\DATA\200624RS\RSK0914A.M
Calibration Table Last Updated: Mon Sep 14 12:40:32 2020



Method Name: G:\ROCKY\DATA\200624RS\RSK0914A.M
Calibration Table Last Updated: Mon Sep 14 12:40:32 2020

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/27/20
Instrument: 7890
Initial Cal. Date: 09/14/20
Data File: 1027R02.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATML	Methane	25685	21677	16	ATML	12
2	ATML	Ethane	18863	18120	3.9	ATML	1.3
3	ATML	Ethene	14798	15499	4.7	ATML	5.9
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
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33							
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35							
36							
37							
38							
39							
40							
		Average			8.2		

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R02.D Vial: 2
Acq On : 27 Oct 20 15:55 Operator: GA
Sample : 201027A LCS/CCV Inst : 7890
Misc : RSK STD 5 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 15:57 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

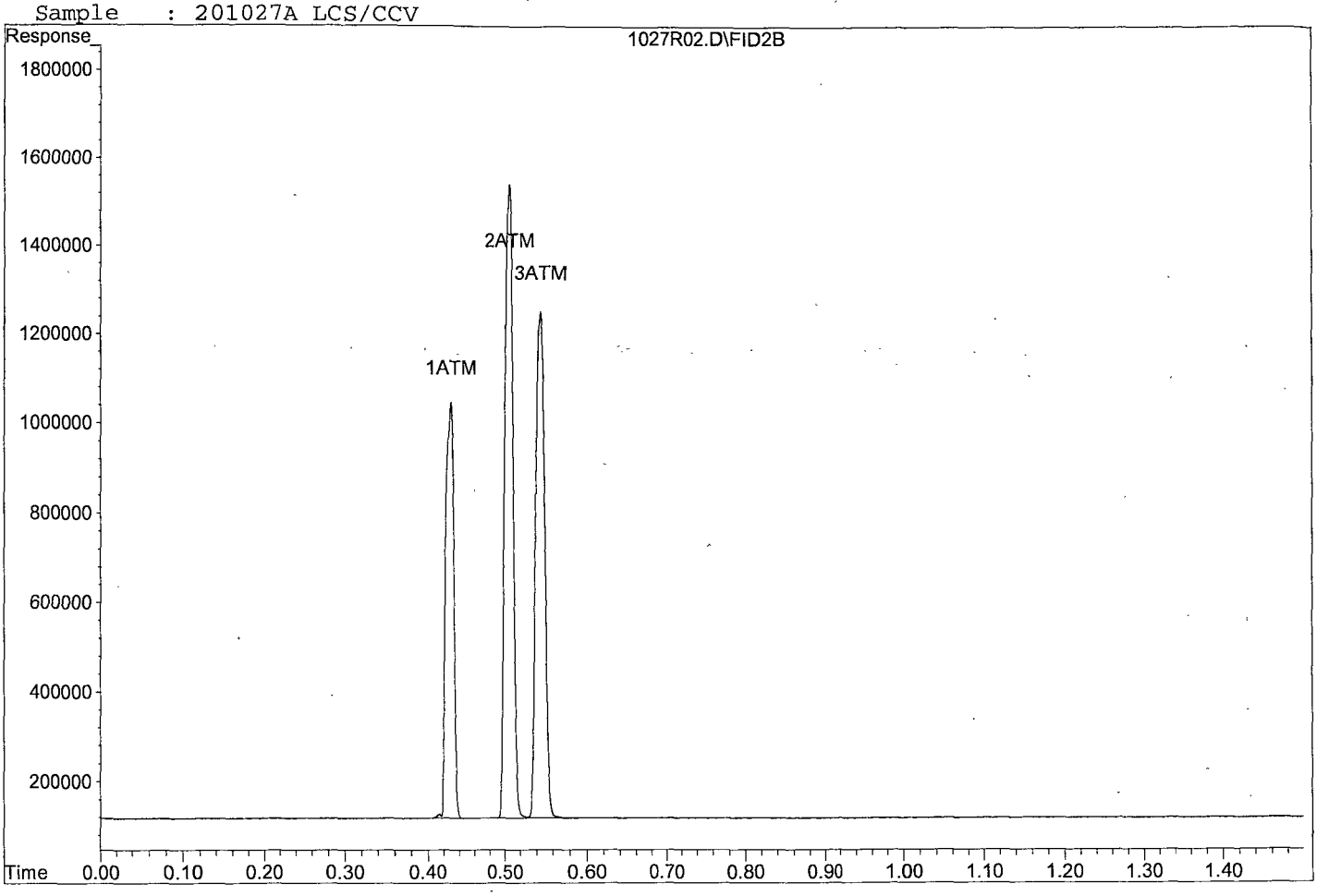
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	0.43	903932	73.225 ppb
2) ATM Ethane	0.51	1416526	154.255 ppb
3) ATM Ethene	0.55	1130156	154.433 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R02.D
Sample : 201027A LCS/CCV



RSK 175
RSK 175

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/27/20
Instrument: 7890
Initial Cal. Date: 09/14/20
Data File: 1027R18.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATML	Methane	25685	19852	23	ATML	20
2	ATML	Ethane	18863	16490	13	ATML	10
3	ATML	Ethene	14798	13971	5.6	ATML	4.5
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
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28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			13.9		

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R18.D Vial: 18
Acq On : 27 Oct 20 16:37 Operator: GA
Sample : 201027A LCSD/CCV Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:39 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

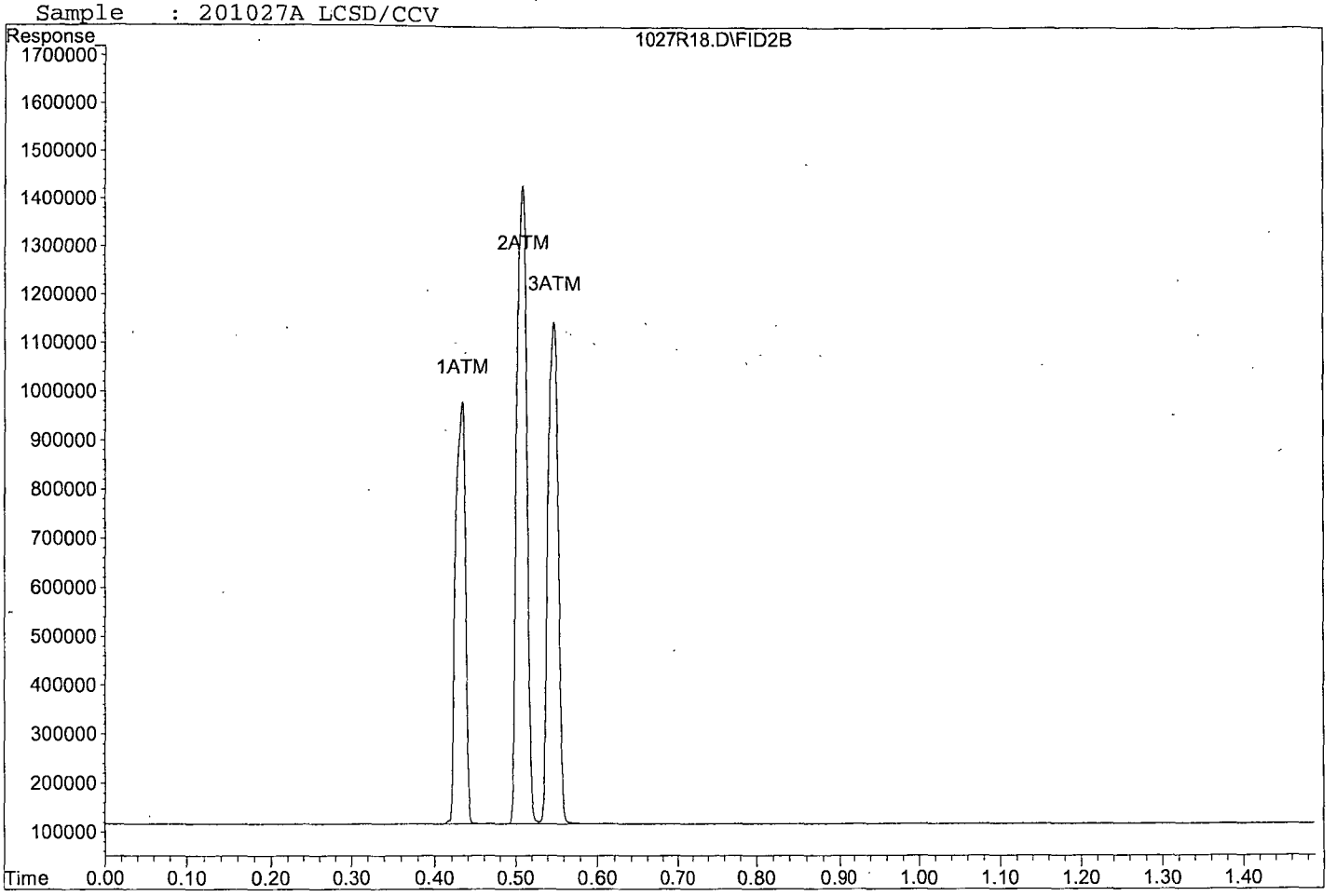
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	0.43	827834	67.054 ppb
2) ATM Ethane	0.51	1289126	140.278 ppb
3) ATM Ethene	0.55	1018770	139.286 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R18.D
Sample : 201027A LCSD/CCV



ORGANICS

Raw Data

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R06.D Vial: 6
Acq On : 27 Oct 20 16:08 Operator: GA
Sample : BA20538W04 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:10 2020 Quant Results File: RSK0914A.RES

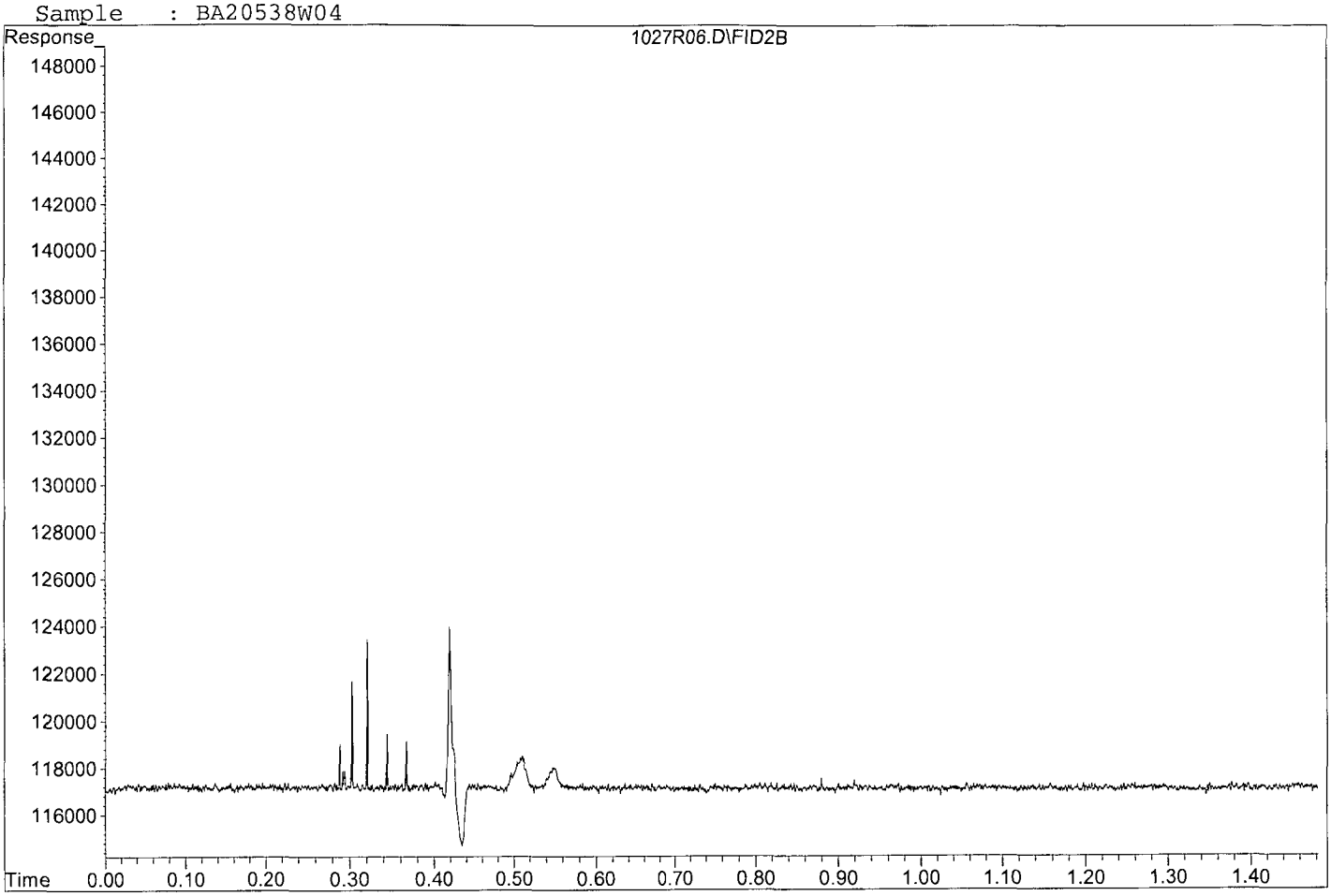
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
Target Compounds				
1) ATM Methane	0.00	0	N.D.	ppb
2) ATM Ethane	0.00	0	N.D.	ppb
3) ATM Ethene	0.00	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R06.D
Sample : BA20538W04



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R07.D Vial: 7
Acq On : 27 Oct 20 16:11 Operator: GA
Sample : BA20539W07 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:13 2020 Quant Results File: RSK0914A.RES

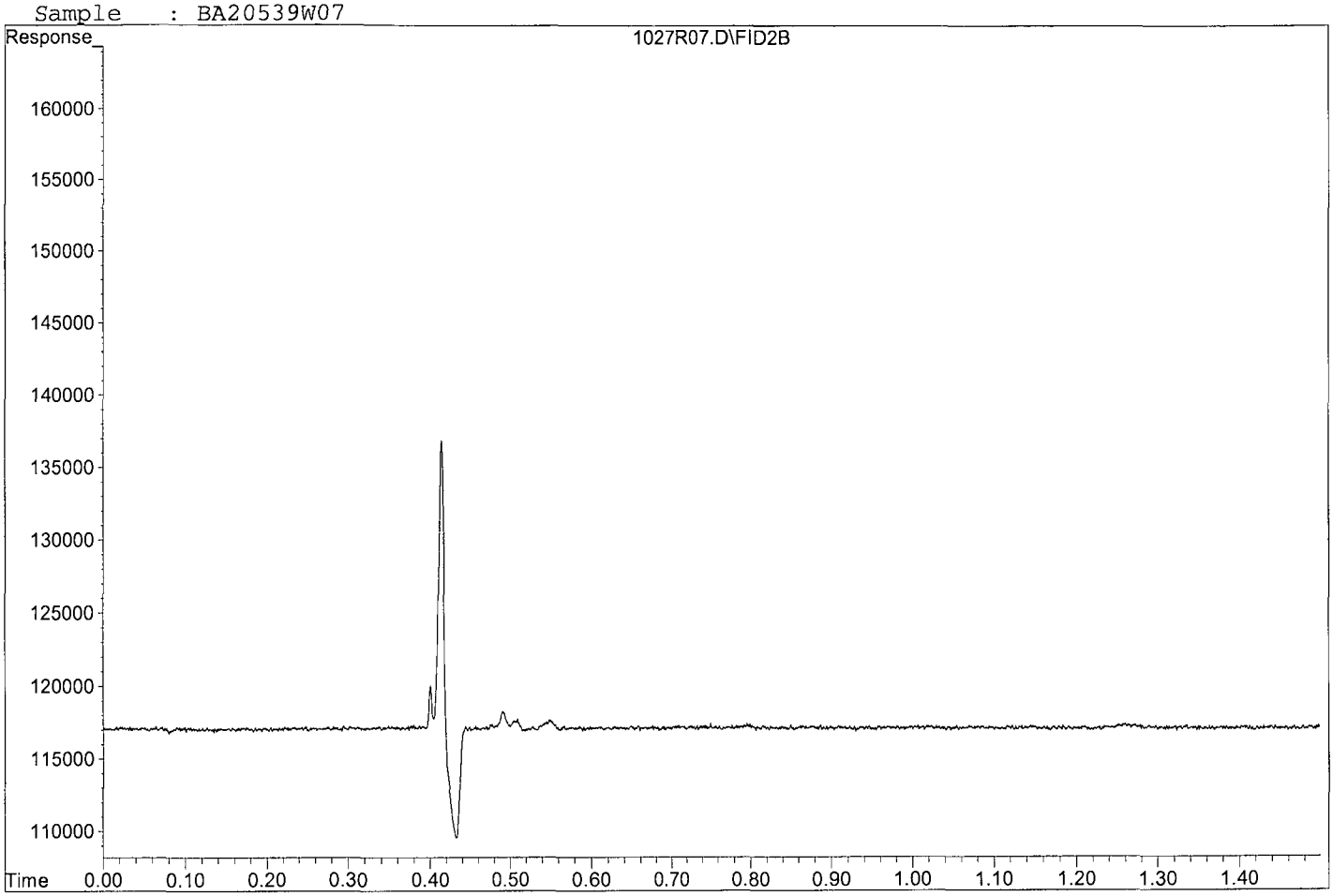
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
Target Compounds				
1) ATM Methane	0.00	0	N.D.	ppb
2) ATM Ethane	0.00	0	N.D.	ppb
3) ATM Ethene	0.00	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R07.D
Sample : BA20539W07



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R11.D Vial: 11
Acq On : 27 Oct 20 16:21 Operator: GA
Sample : BA20543W04 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:24 2020 Quant Results File: RSK0914A.RES

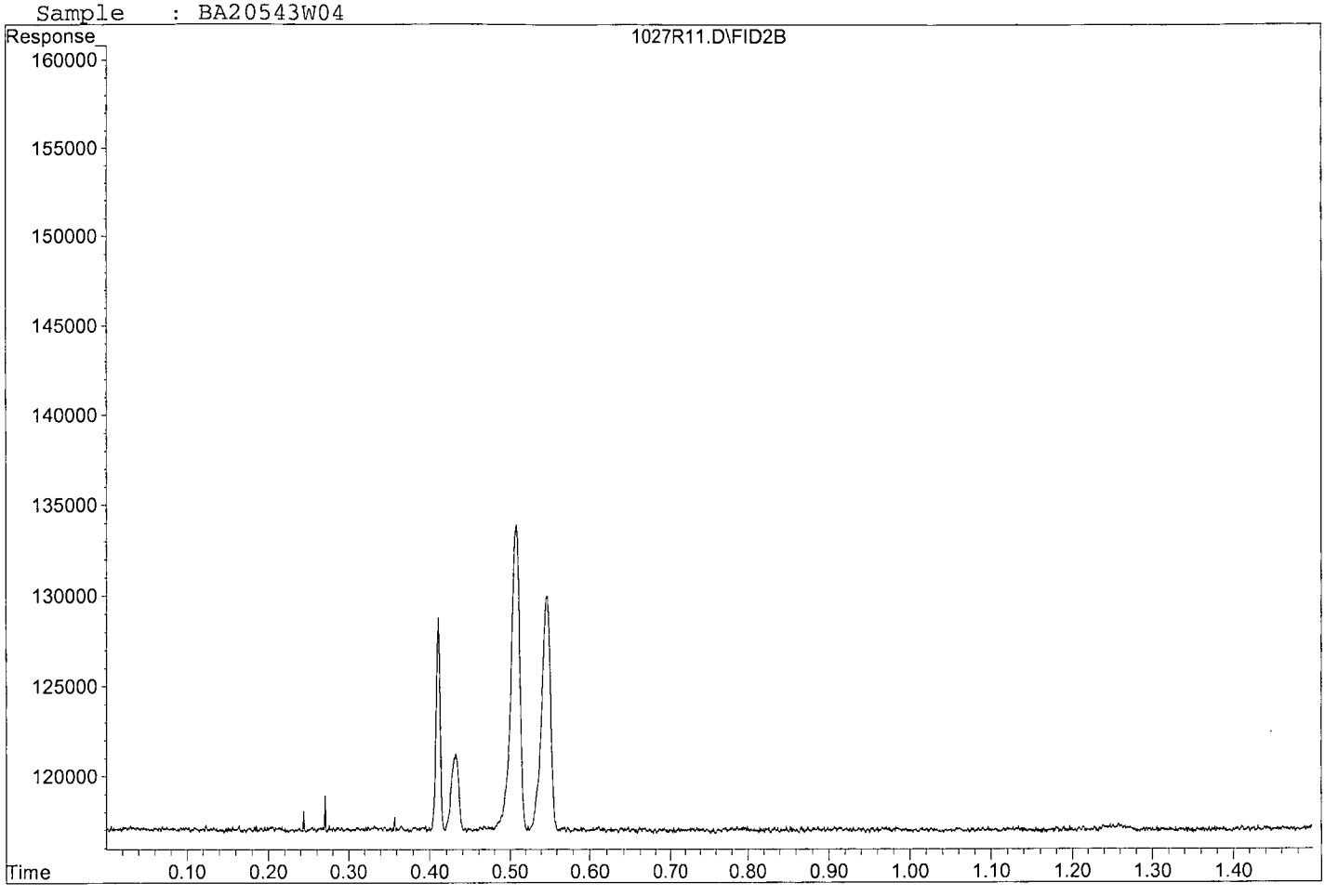
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
Target Compounds				
1) ATM Methane	0.00	0	N.D.	ppb
2) ATM Ethane	0.00	0	N.D.	ppb
3) ATM Ethene	0.00	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R11.D
Sample : BA20543W04



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R12.D Vial: 12
Acq On : 27 Oct 20 16:23 Operator: GA
Sample : BA20544W04 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:26 2020 Quant Results File: RSK0914A.RES

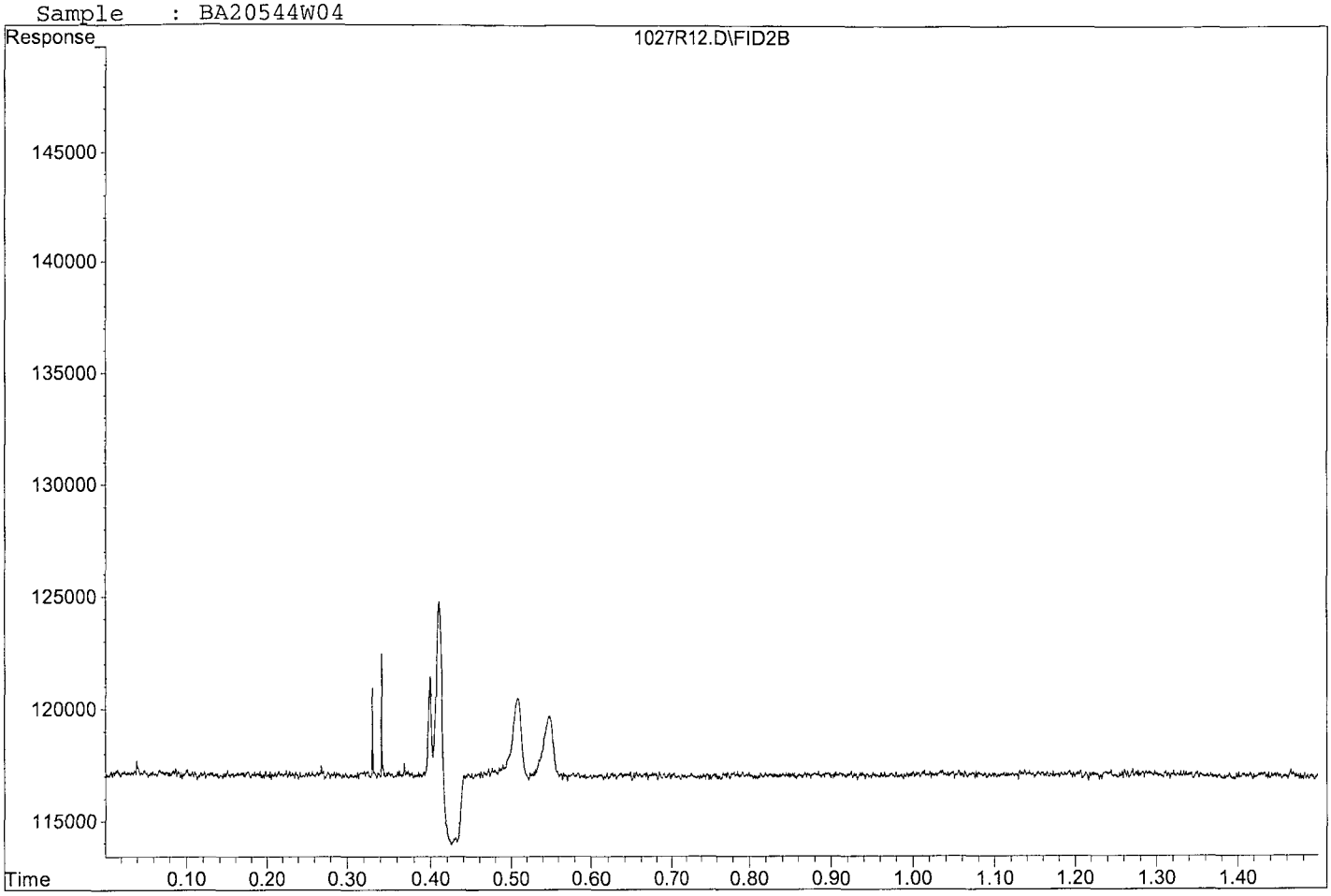
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
Target Compounds				
1) ATM Methane	0.00	0	N.D.	ppb
2) ATM Ethane	0.00	0	N.D.	ppb
3) ATM Ethene	0.00	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R12.D
Sample : BA20544W04



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R03.D Vial: 3
Acq On : 27 Oct 20 15:58 Operator: GA
Sample : 201027A BLK Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:00 2020 Quant Results File: RSK0914A.RES

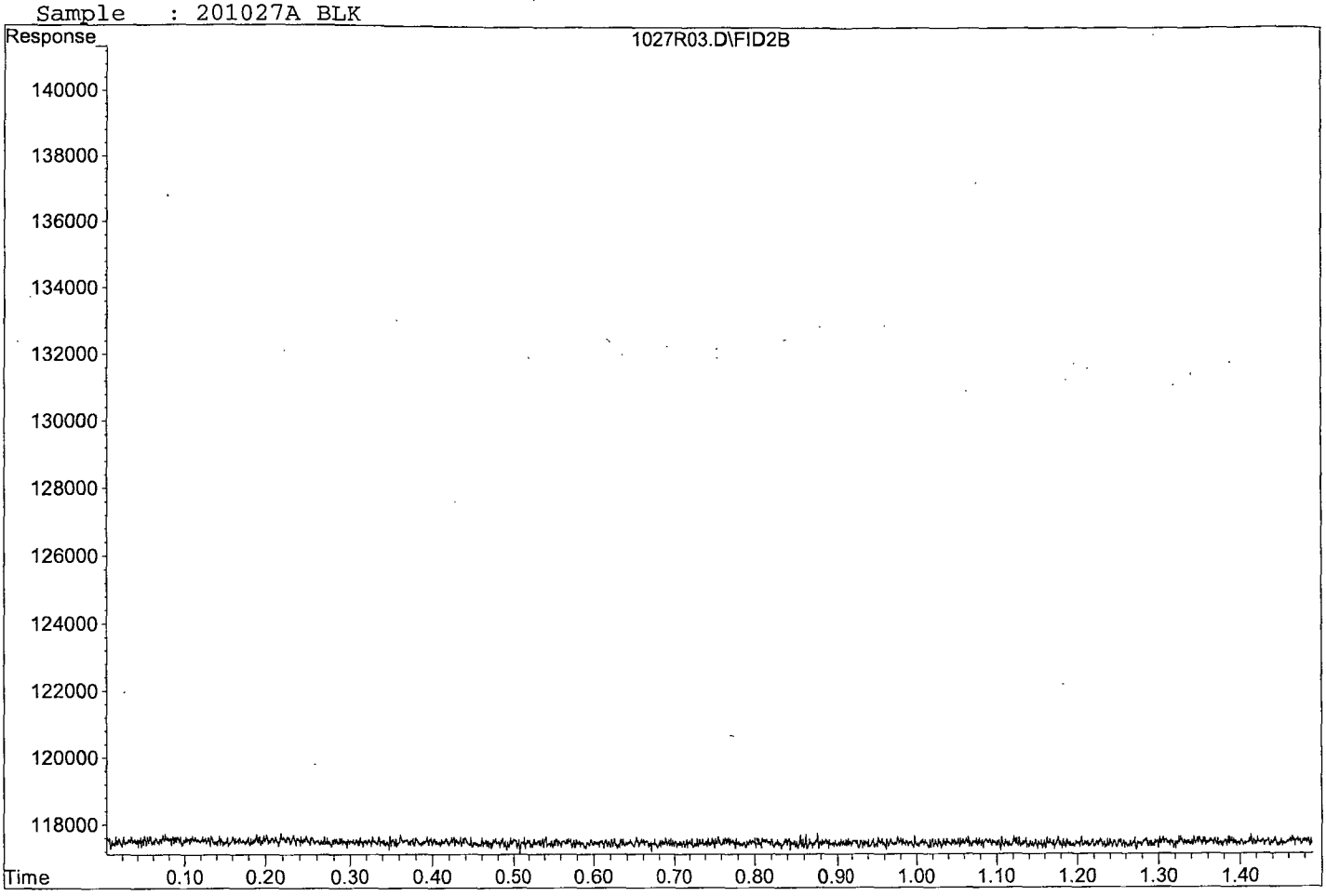
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
Target Compounds				
1) ATM Methane	0.00	0	N.D.	ppb
2) ATM Ethane	0.00	0	N.D.	ppb
3) ATM Ethene	0.00	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R03.D
Sample : 201027A BLK



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R02.D Vial: 2
Acq On : 27 Oct 20 15:55 Operator: GA
Sample : 201027A LCS/CCV Inst : 7890
Misc : RSK STD 5 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 15:57 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

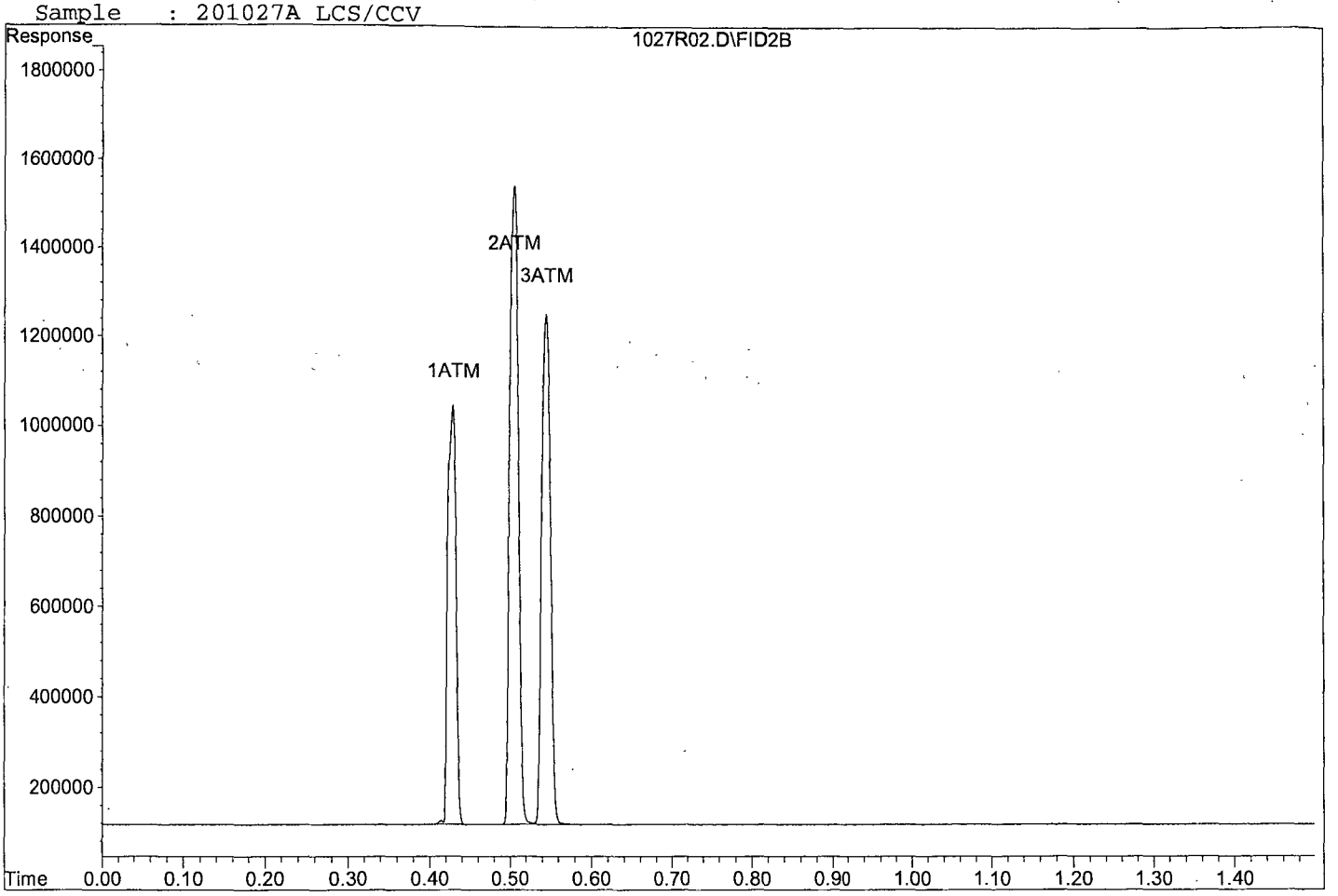
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) ATM Methane	0.43	903932	73.225	ppb
2) ATM Ethane	0.51	1416526	154.255	ppb
3) ATM Ethene	0.55	1130156	154.433	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R02.D
Sample : 201027A LCS/CCV



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R18.D Vial: 18
Acq On : 27 Oct 20 16:37 Operator: GA
Sample : 201027A LCSD/CCV Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:39 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

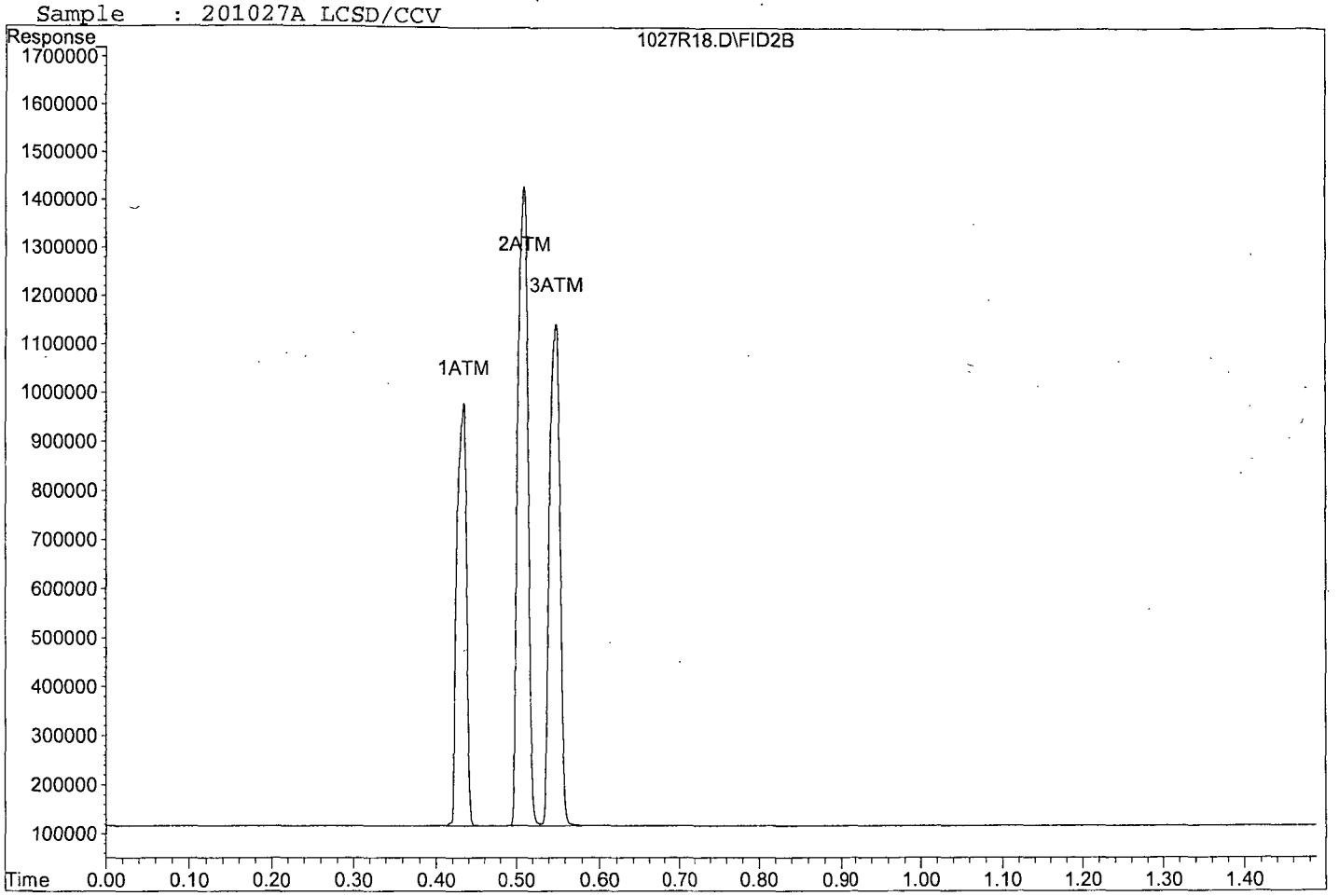
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	0.43	827834	67.054 ppb
2) ATM Ethane	0.51	1289126	140.278 ppb
3) ATM Ethene	0.55	1018770	139.286 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R18.D
Sample : 201027A LCSD/CCV



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R08.D Vial: 8
Acq On : 27 Oct 20 16:13 Operator: GA
Sample : BA20539W08 MS Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:16 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

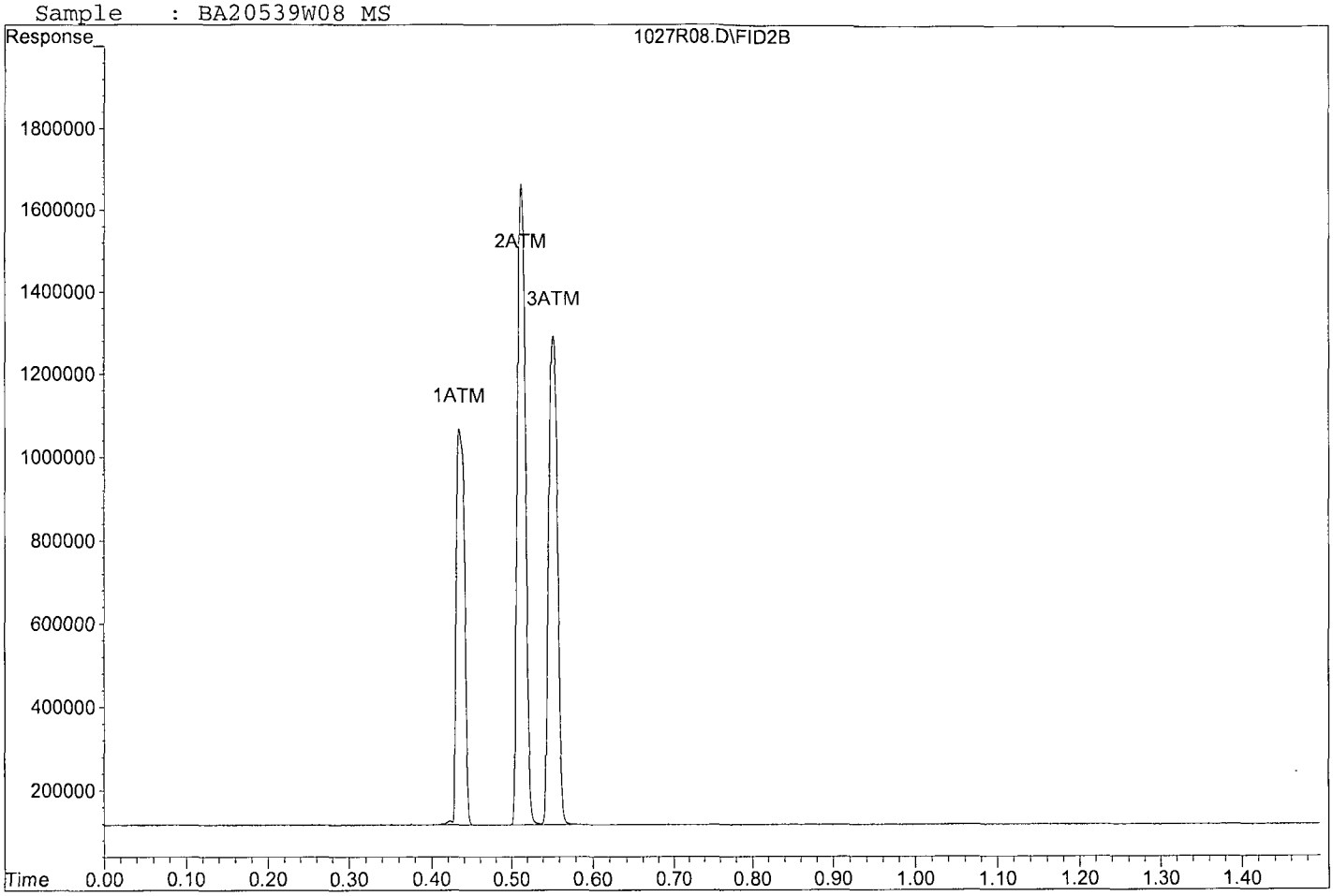
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) ATM Methane	0.44	967908	78.412	ppb
2) ATM Ethane	0.51	1475112	160.682	ppb
3) ATM Ethene	0.55	1191847	162.823	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R08.D
Sample : BA20539W08 MS



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R10.D Vial: 10
Acq On : 27 Oct 20 16:19 Operator: GA
Sample : BA20539W08 MSD Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:21 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

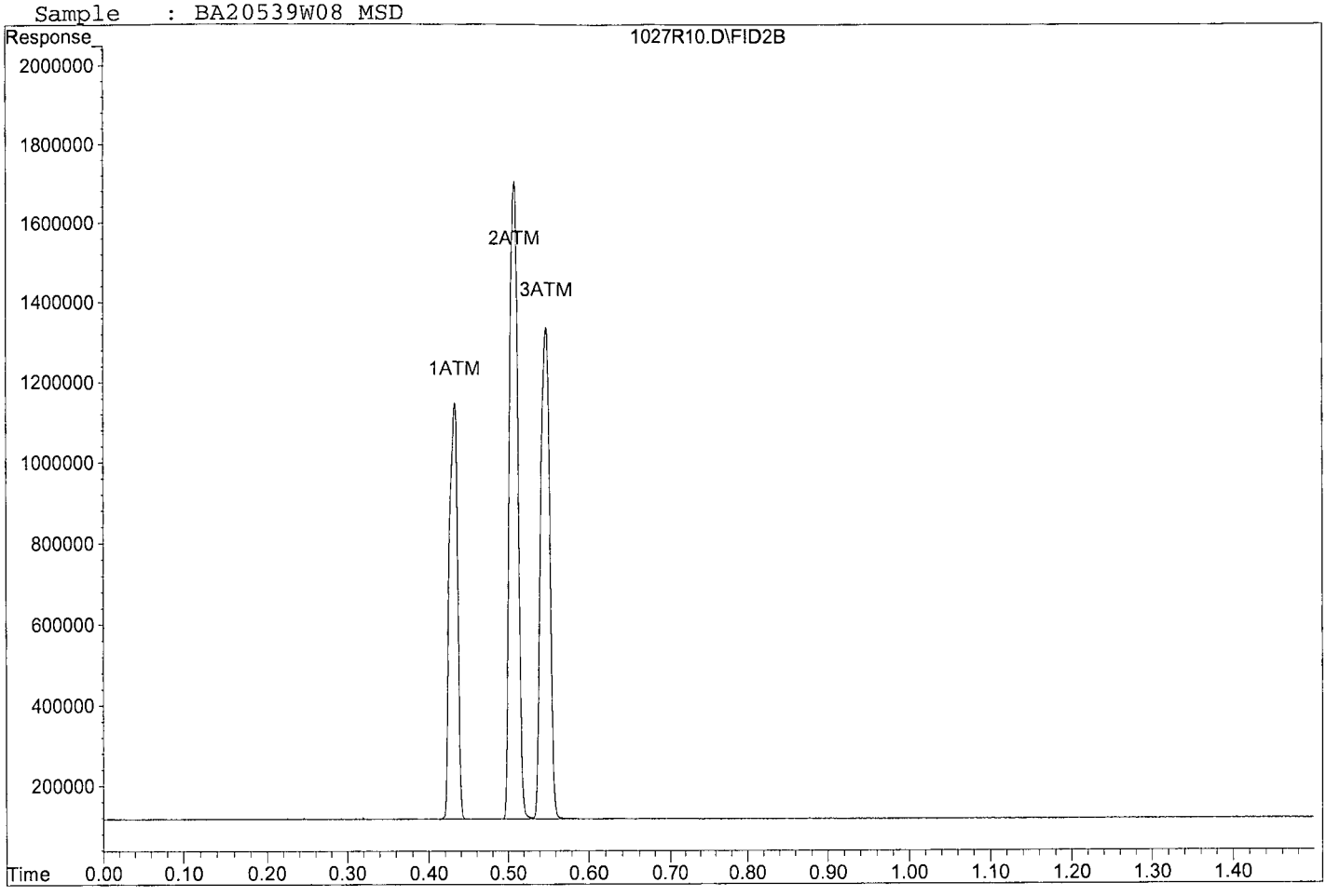
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	0.43	996248	80.710 ppb
2) ATM Ethane	0.51	1572609	171.379 ppb
3) ATM Ethene	0.55	1212721	165.661 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R10.D
Sample : BA20539W08 MSD



Primary Stock Source

10,000ppmV **Manufacture Expiration:** 09/21/21

RSK Gas Mix (Scott Specialty Gas) CAT#X04NI97CP140001 LOT#160-401558175-1

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

RSK Calibration Curve

Analyte	Conc Std 1 (1/2 = LOD) (ug/L)	Conc Std 2 (LOQ Chk) (ug/L)	Conc Std 3 (ug/L)	Conc Std 4 (ug/L)	Conc Std 5 (ug/L)	Conc Std 6 (ug/L)	Conc Std 7 (ug/L)
Methane (MW 16.04)	2.08	4.16	8.34	20.85	83.40	208.5	834.0
Ethane (MW 30.07)	3.91	7.81	15.6	39.09	156.35	390.9	1563.5
Ethene (MW 28.05)	3.65	7.30	14.6	36.46	145.84	364.6	1458.4
Stock Source	160-401558175-1	160-401558175-1	160-401558175-1	160-401558175-1	160-401558175-1	160-401558175-1	160-401558175-1
Stock Conc (ppmv)	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV
Stock Aliquot (mL)	0.010	0.020	0.040	0.100	0.400	1.00	4.00
Final Volume P&T Water	32 mL	32 mL	32 mL	32 mL	32 mL	32 mL	32 mL
Curve Prep:	09/14/20						
Expiration Date	09/15/20						
Analyst	CD						

Second Source Stock Standard 10,000ppmV **Manufacturer Exp date 9-21-2021**

RSK Gas Mix (Scott Specialty Gas) Cat.# 23452, Lot # 160-401303032-1-39774

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

Second Source **Expires 06/25/2020** **CD 09/14/20**

Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace

final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene

CCV/LCS/LCSD **GA 10/27/20**

Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace
final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene

BA20539W08 MS MSD **GA 10/27/20**

Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace
final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene

Injection Log

Directory: G:\ROCKY\DATA\200914RS\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0914R07.D	1	RSK STD1 200914		14 Sep 20 12:06
2	1	0914R08.D	1	RSK STD2 200914		14 Sep 20 12:10
3	1	0914R09.D	1	RSK STD3 200914		14 Sep 20 12:13
4	1	0914R10.D	1	RSK STD4 200914		14 Sep 20 12:18
5	1	0914R11.D	1	RSK STD5 200914		14 Sep 20 12:21
6	1	0914R12.D	1	RSK STD6 200914		14 Sep 20 12:25
7	1	0914R13.D	1	RSK STD7 200914		14 Sep 20 12:28
8	1	0914R14.D	1	SS RSK STD5 200914		14 Sep 20 12:32
9	2	1027R02.D	1	201027A LCS/CCV	RSK STD 5	27 Oct 20 15:55
10	3	1027R03.D	1	201027A BLK		27 Oct 20 15:58
13	6	1027R06.D	1	BA20538W04		27 Oct 20 16:08
14	7	1027R07.D	1	BA20539W07		27 Oct 20 16:11
15	8	1027R08.D	1	BA20539W08 MS		27 Oct 20 16:13
17	10	1027R10.D	1	BA20539W08 MSD		27 Oct 20 16:19
18	11	1027R11.D	1	BA20543W04		27 Oct 20 16:21
19	12	1027R12.D	1	BA20544W04		27 Oct 20 16:23
23	18	1027R18.D	1	201027A LCSD/CCV		27 Oct 20 16:37

INORGANIC ANALYSIS
Calibration Data

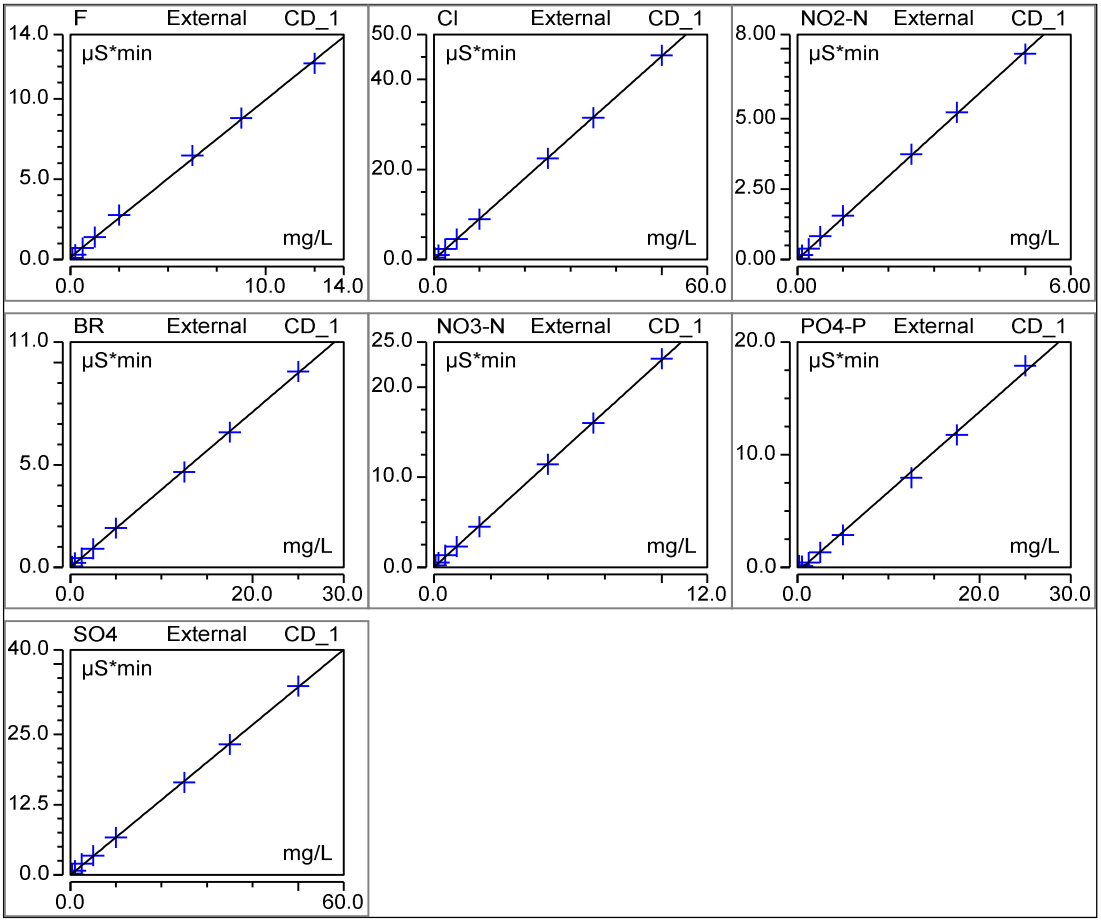
Calibration Batch Report

Sequence:	**200914**	*Injection Volume:*	**100.00**
Instrument Method:	**Anions IM**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:14**	*Run Time:*	**11.3**

Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
F	Area	Lin, WithOffset	8.000	0.145	0.979	0.000	99.9001
Cl	Area	Lin	8.000	0.000	0.903	0.000	99.9935
NO2-N	Area	Lin	8.000	0.000	1.479	0.000	99.9464
BR	Area	Lin	8.000	0.000	0.380	0.000	99.9760
NO3-N	Area	Lin	8.000	0.000	2.303	0.000	99.9829
PO4-P	Area	Lin, WithOffset	8.000	-0.422	0.712	0.000	99.6941
SO4	Area	Lin	8.000	0.000	0.668	0.000	99.9749

Injection Name	Amount mg/L CD_1 F	Amount mg/L CD_1 Cl	Amount mg/L CD_1 NO2-N	Amount mg/L CD_1 BR	Amount mg/L CD_1 NO3-N	Amount mg/L CD_1 PO4-P	Amount mg/L CD_1 SO4
Cal 1 2020.09.14	n.a.	0.4466	0.0267	0.1154	0.0851	0.8392	0.3384
Cal 2 2020.09.14	0.156	1.0882	0.1103	0.5719	0.2207	0.7580	1.0968
Cal 3 2020.09.14	0.579	2.5688	0.2608	1.1951	0.5851	1.1858	3.0282
Cal 6 2020.09.14	6.454	24.8384	2.5325	12.2607	4.9590	11.7563	24.6682
Cal 7 2020.09.14	8.833	34.8728	3.5379	17.3849	6.9578	17.1045	34.7367
Cal 8 2020.09.14	12.309	50.1817	4.9401	25.2082	10.0551	25.7199	50.3133
Cal 4 2020.09.14	1.274	5.0060	0.5579	2.3764	0.9968	2.4551	5.1734
Cal 5 2020.09.14	2.674	9.9066	1.0533	5.0316	1.9525	4.6312	9.9586

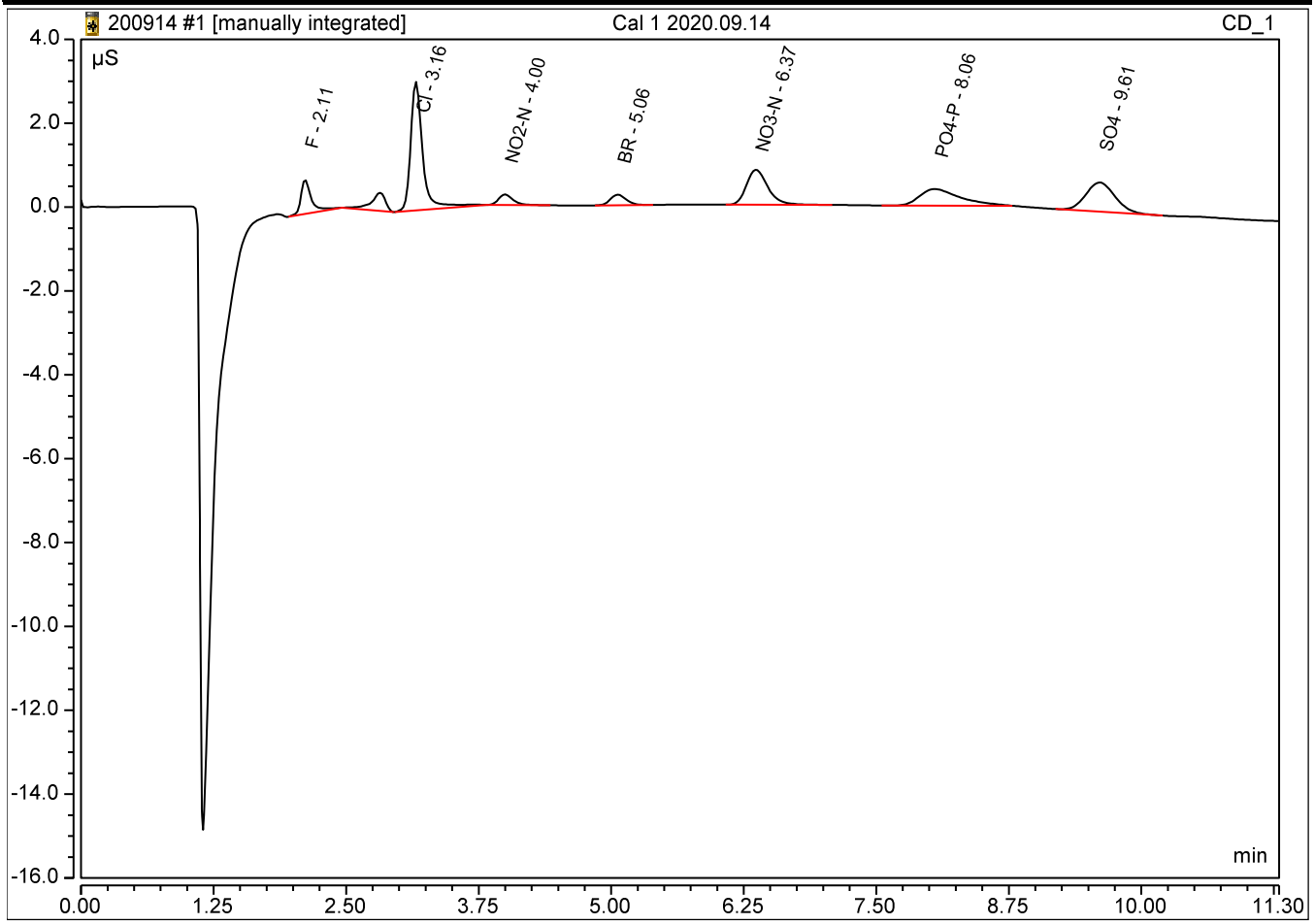


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 1 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:17**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.11	**F**	BMB	0.093	0.817	n.a.	0.1	951224067 c
3	3.16	**Cl**	BMB	0.403	3.072	0.45	0.2	223.3%
4	4.00	**NO2-N**	BMB	0.039	0.250	0.03	0.04	66.7%
5	5.06	**BR**	BMB	0.044	0.253	0.12	0.2	57.7%
6	6.37	**NO3-N**	BMB	0.196	0.837	0.09	0.08	106.4%
7	8.06	**PO4-P**	BMB*	0.176	0.398	0.84	0.2	419.6%
8	9.61	**SO4**	BMB	0.226	0.700	0.34	0.4	84.6%



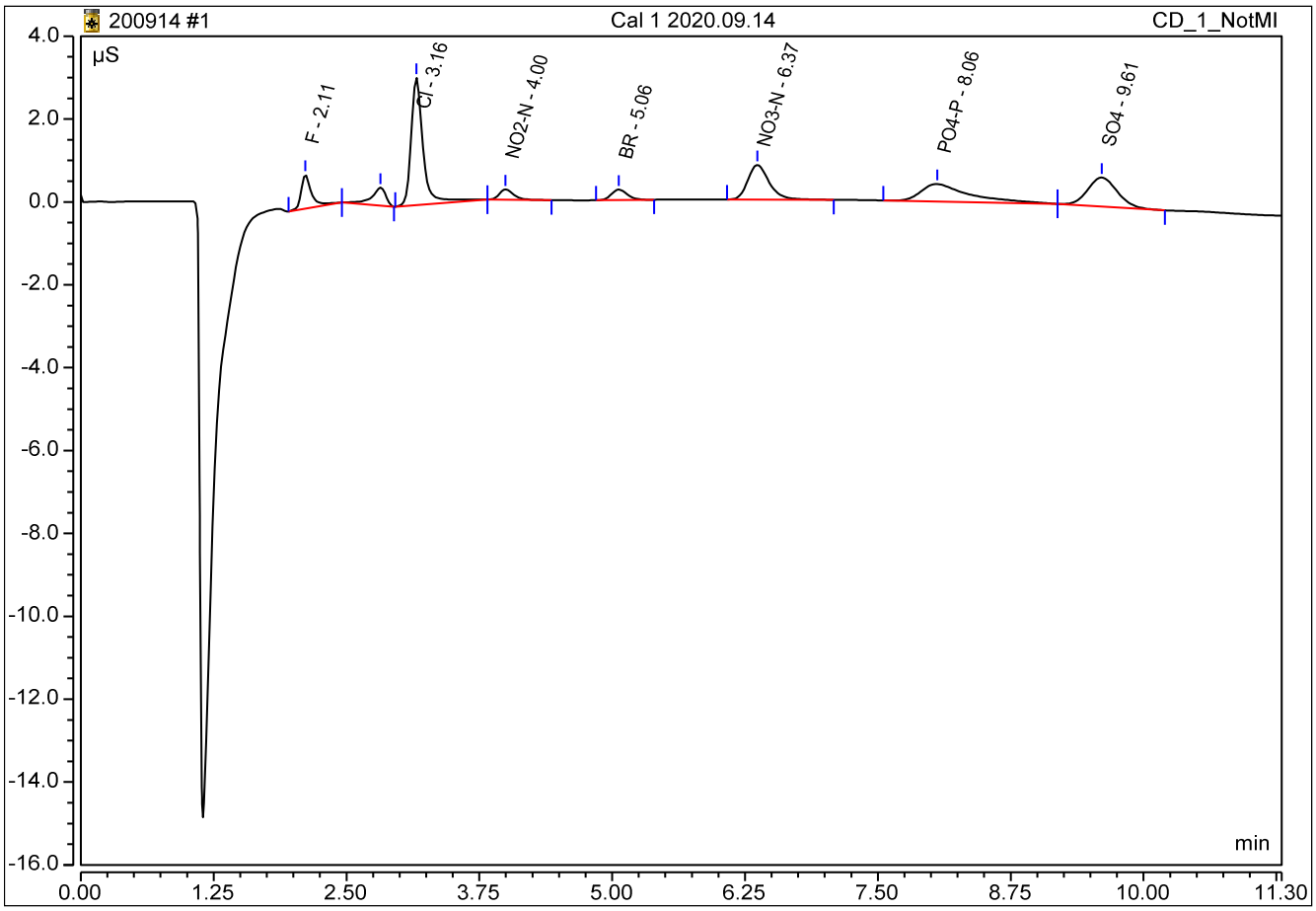
MI 5 PO4 GA 9/14/20

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Not Manipulated Peak Integration Report

Sample Name:	**Cal 1 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:17**	*Run Time:*	**11.30**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Ammount mg/L
1	2.11	**F**	BMB	0.093	0.817	-0.0531
3	3.16	**Cl**	BMB	0.403	3.072	0.4466
4	4.00	**NO2-N**	BMB	0.039	0.250	0.0267
5	5.06	**BR**	BMB	0.044	0.253	0.1154
6	6.37	**NO3-N**	BMB	0.196	0.837	0.0849
7	8.06	**PO4-P**	BMB*	0.223	0.422	0.8905
8	9.61	**SO4**	BMB	0.226	0.700	0.3383

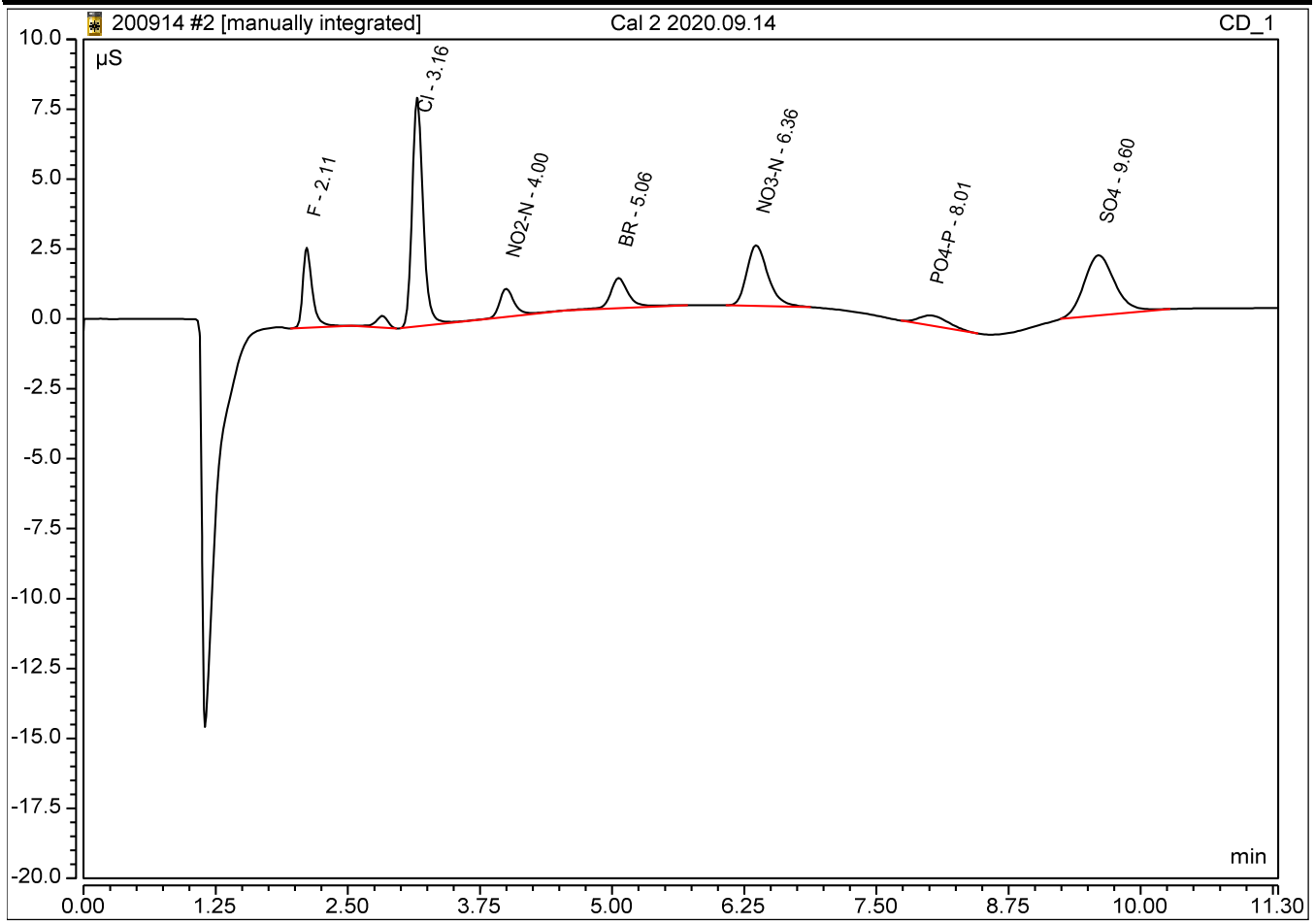


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 2 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:31**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.11	**F**	BMB	0.298	2.857	0.16	0.25	62.4%
3	3.16	**Cl**	BMB	0.983	8.183	1.09	1	108.8%
4	4.00	**NO2-N**	BMB	0.163	1.007	0.11	0.1	110.3%
5	5.06	**BR**	BMB	0.217	1.077	0.57	0.5	114.4%
6	6.36	**NO3-N**	BMB*	0.508	2.172	0.22	0.2	110.4%
7	8.01	**PO4-P**	BMB	0.118	0.358	0.76	0.5	151.6%
8	9.60	**SO4**	BMB*	0.732	2.158	1.10	1	109.7%



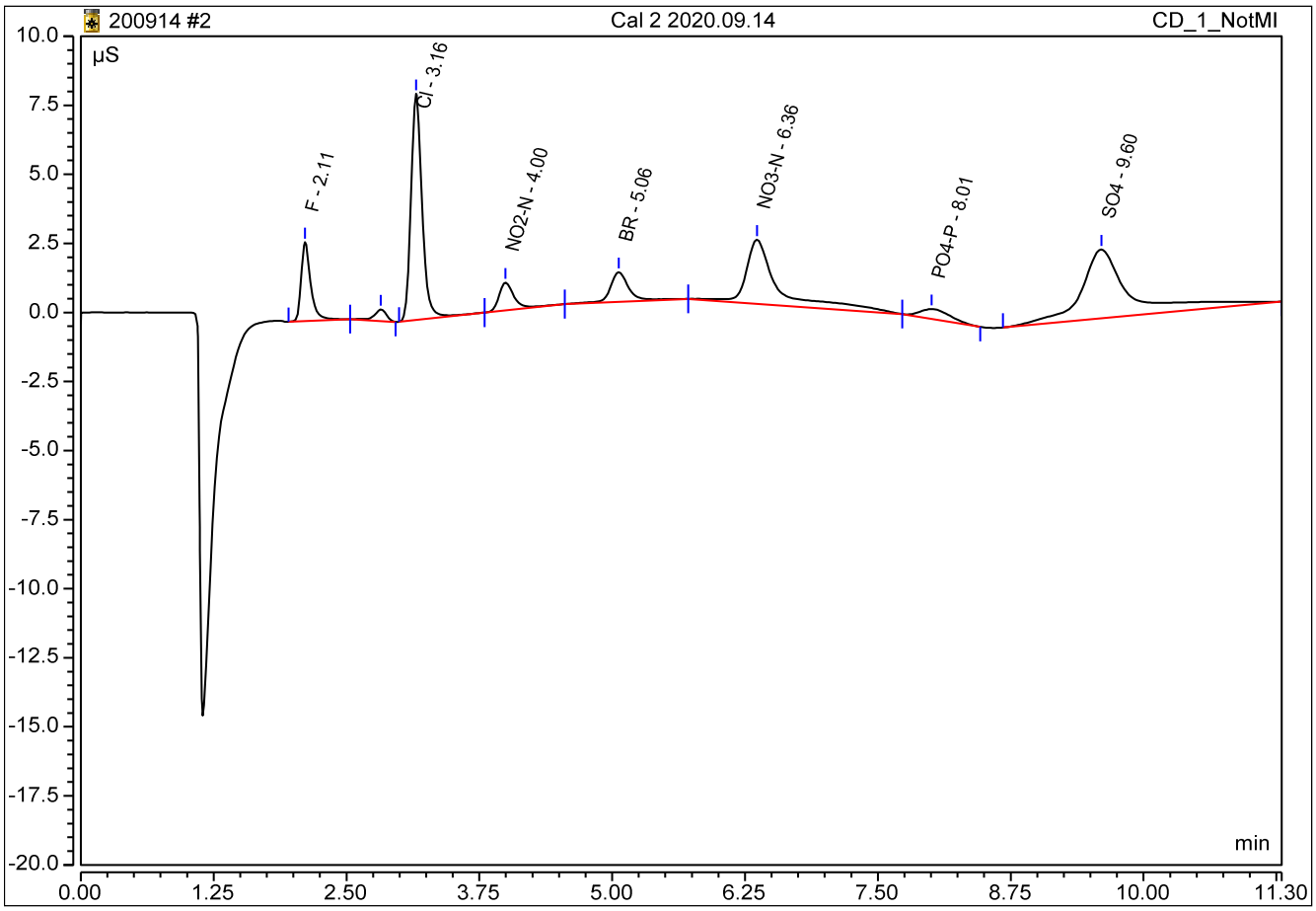
MI 5 F GA 9/14/20

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Not Manipulated Peak Integration Report

Sample Name:	**Cal 2 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:31**	*Run Time:*	**11.30**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Ammount mg/L
1	2.11	**F**	BMB	0.298	2.857	0.1559
3	3.16	**Cl**	BMB	0.983	8.183	1.0882
4	4.00	**NO2-N**	BMB	0.163	1.007	0.1103
5	5.06	**BR**	BMB	0.217	1.077	0.5719
6	6.36	**NO3-N**	BMB*	0.803	2.321	0.3480
7	8.01	**PO4-P**	BMB	0.118	0.358	0.7435
8	9.60	**SO4**	BMB*	1.336	2.496	2.0007

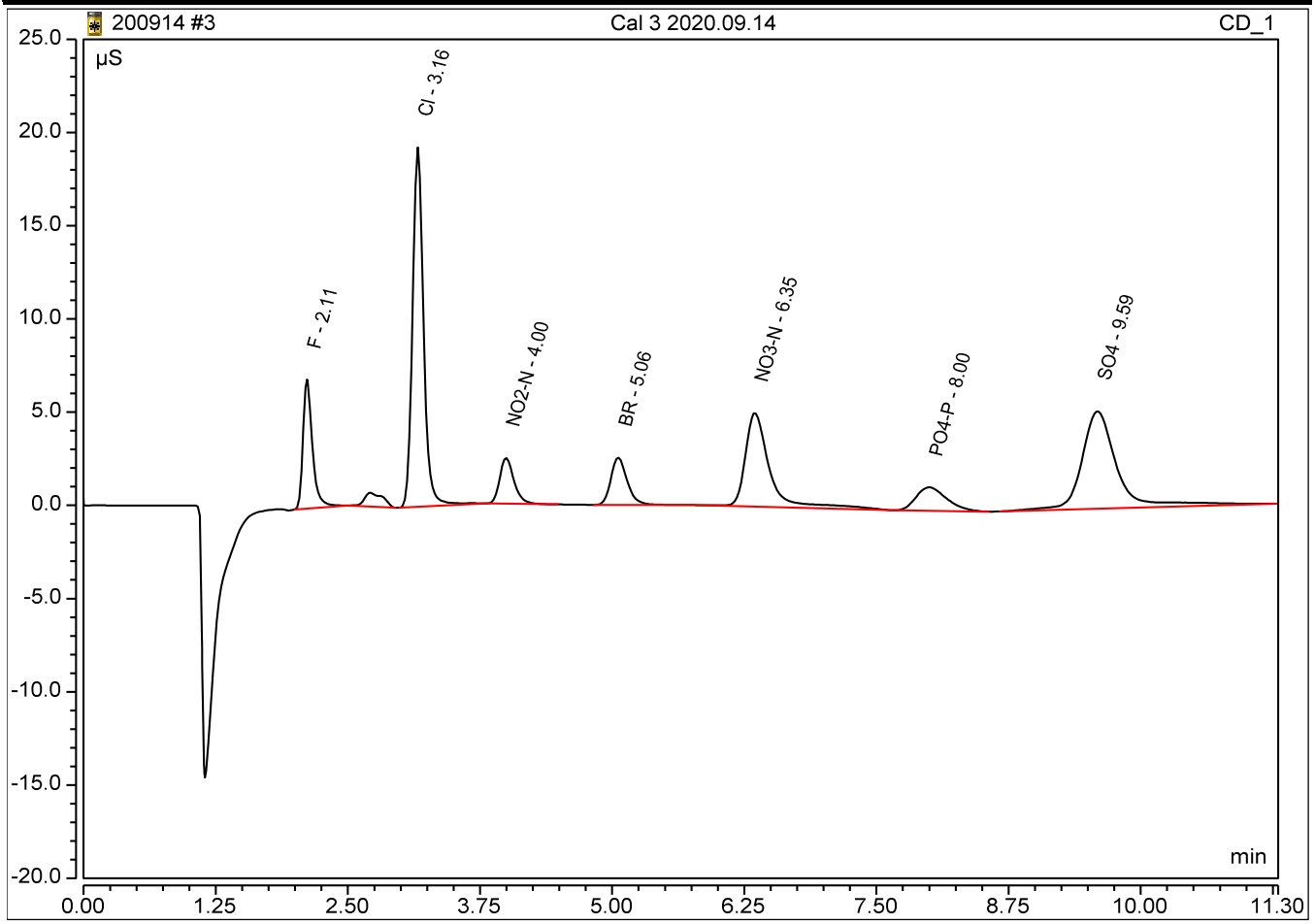


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 3 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:46**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.11	**F**	BMB	0.712	6.920	0.58	0.625	92.6%
3	3.16	**Cl**	BMB	2.321	19.279	2.57	2.5	102.8%
4	4.00	**NO2-N**	BMB	0.386	2.457	0.26	0.25	104.3%
5	5.06	**BR**	BMB	0.454	2.538	1.20	1.25	95.6%
6	6.35	**NO3-N**	BMB	1.347	5.037	0.59	0.5	117.0%
7	8.00	**PO4-P**	BMB	0.423	1.261	1.19	1.25	94.9%
8	9.59	**SO4**	BMB	2.022	5.227	3.03	2.5	121.1%



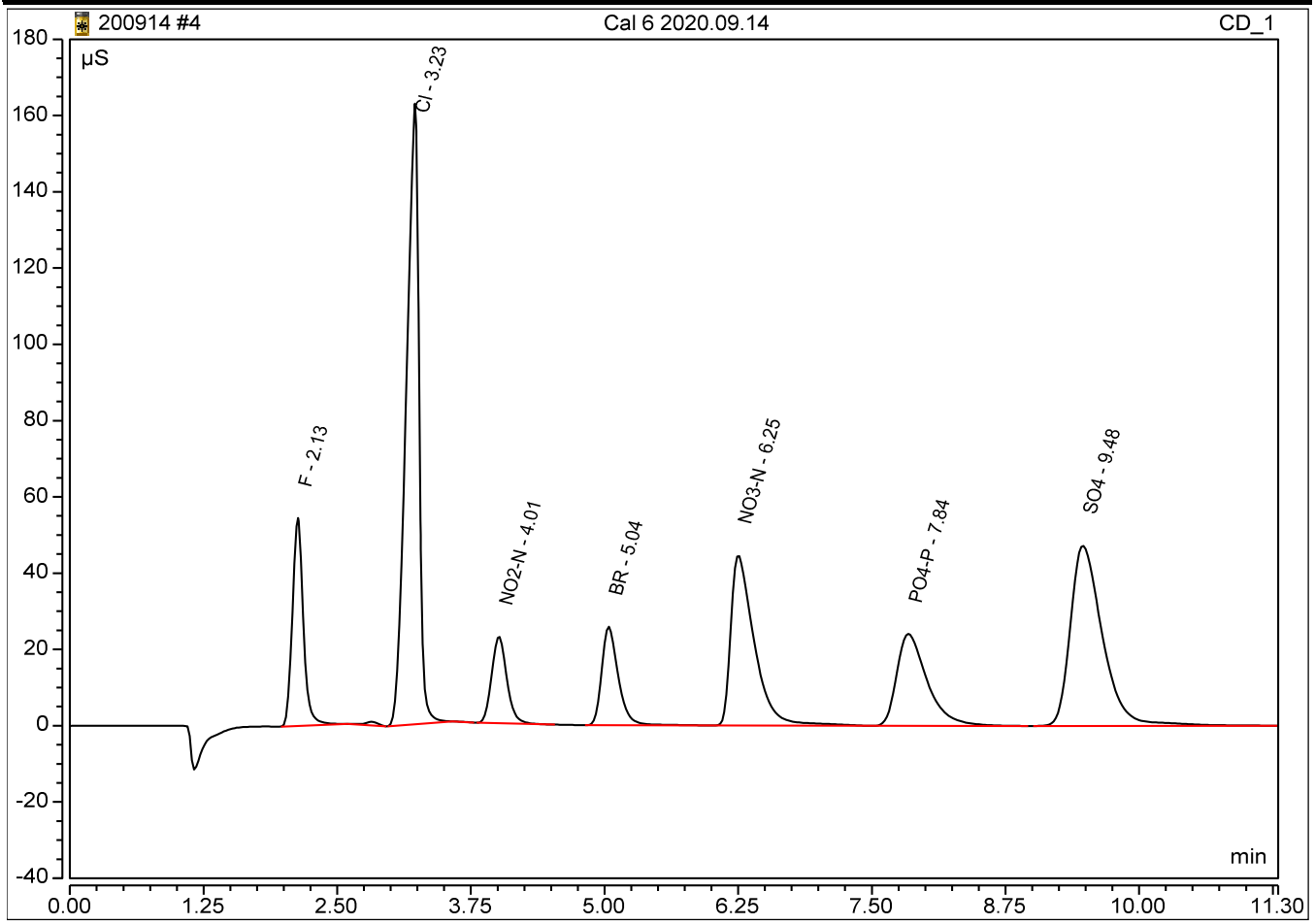
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 6 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 12:30**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.13	**F**	BMB	6.464	54.477	6.45	6.25	103.3%
3	3.23	**Cl**	BMB	22.440	162.678	24.84	25	99.4%
5	4.01	**NO2-N**	BMB	3.747	22.824	2.53	2.5	101.3%
6	5.04	**BR**	BMB	4.656	25.839	12.26	12.5	98.1%
7	6.25	**NO3-N**	BMB	11.419	44.646	4.96	5	99.2%
8	7.84	**PO4-P**	BMB	7.951	24.149	11.76	12.5	94.1%
9	9.48	**SO4**	BMB	16.472	47.232	24.67	25	98.7%



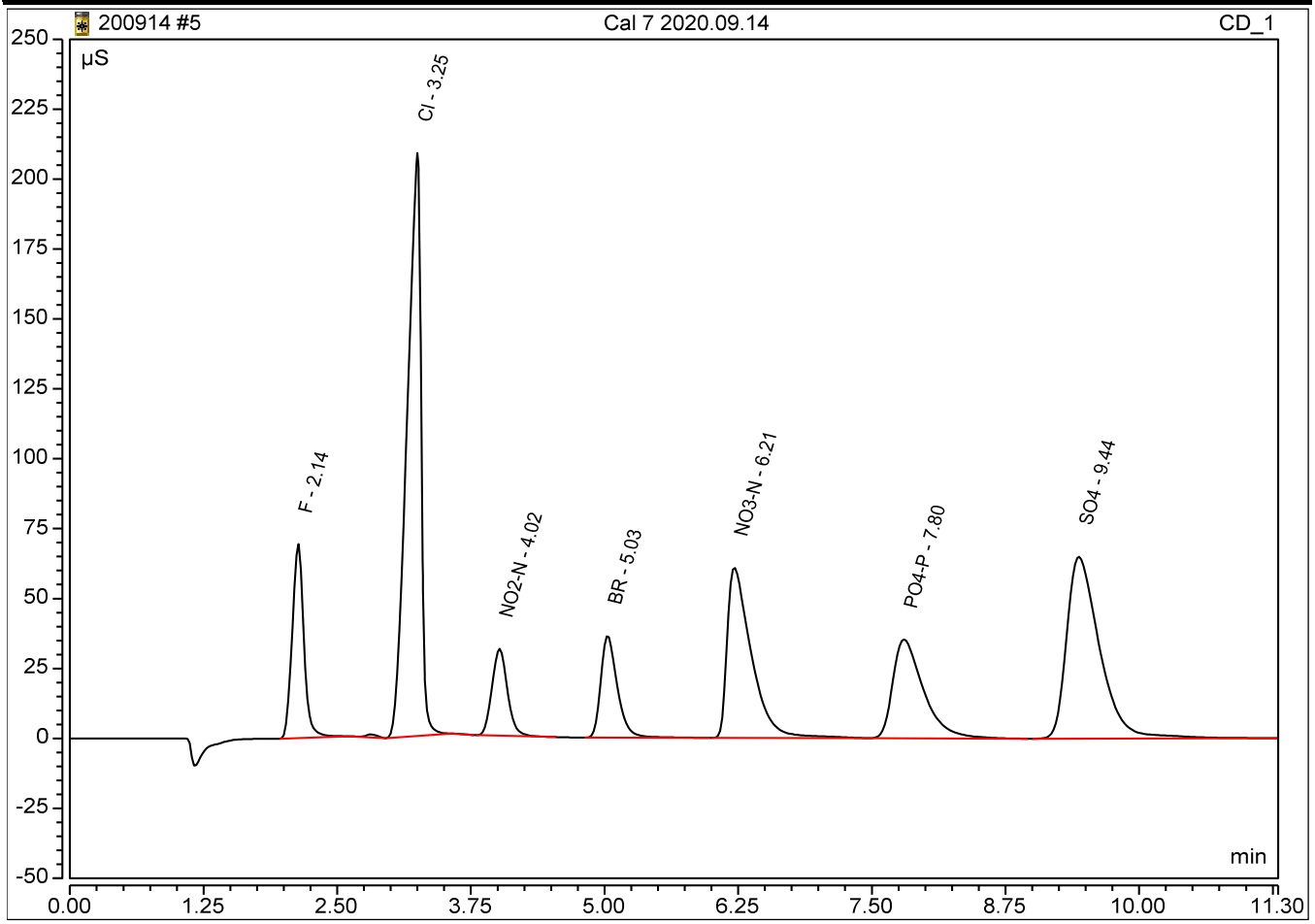
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 7 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 12:44**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.14	**F**	BMB	8.794	69.377	8.83	8.75	100.9%
3	3.25	**Cl**	BMB	31.505	208.470	34.87	35	99.6%
5	4.02	**NO2-N**	BMB	5.234	31.143	3.54	3.5	101.1%
6	5.03	**BR**	BMB	6.602	36.544	17.38	17.5	99.3%
7	6.21	**NO3-N**	BMB	16.022	60.982	6.96	7	99.4%
8	7.80	**PO4-P**	BMB	11.759	35.362	17.10	17.5	97.7%
9	9.44	**SO4**	BMB	23.196	65.073	34.74	35	99.2%



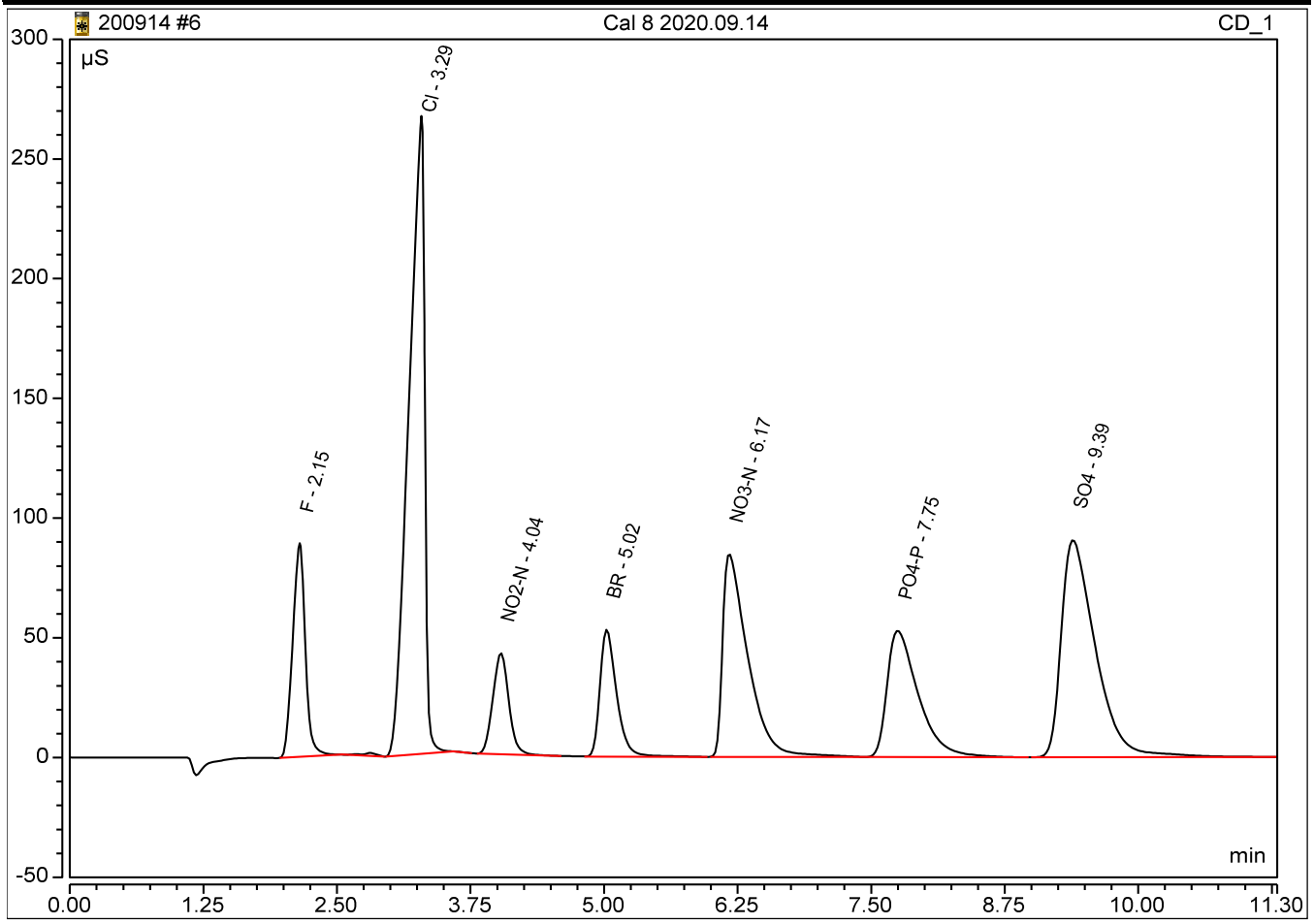
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 8 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 12:59**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.15	**F**	BMB	12.197	89.244	12.31	12.5	98.5%
3	3.29	**Cl**	BMB	45.336	266.470	50.18	50	100.4%
5	4.04	**NO2-N**	BMB	7.309	42.267	4.94	5	98.8%
6	5.02	**BR**	BMB	9.573	52.969	25.21	25	100.8%
7	6.17	**NO3-N**	BMB	23.155	84.819	10.06	10	100.6%
8	7.75	**PO4-P**	BMB	17.895	52.746	25.72	25	102.9%
9	9.39	**SO4**	BMB	33.597	90.716	50.31	50	100.6%



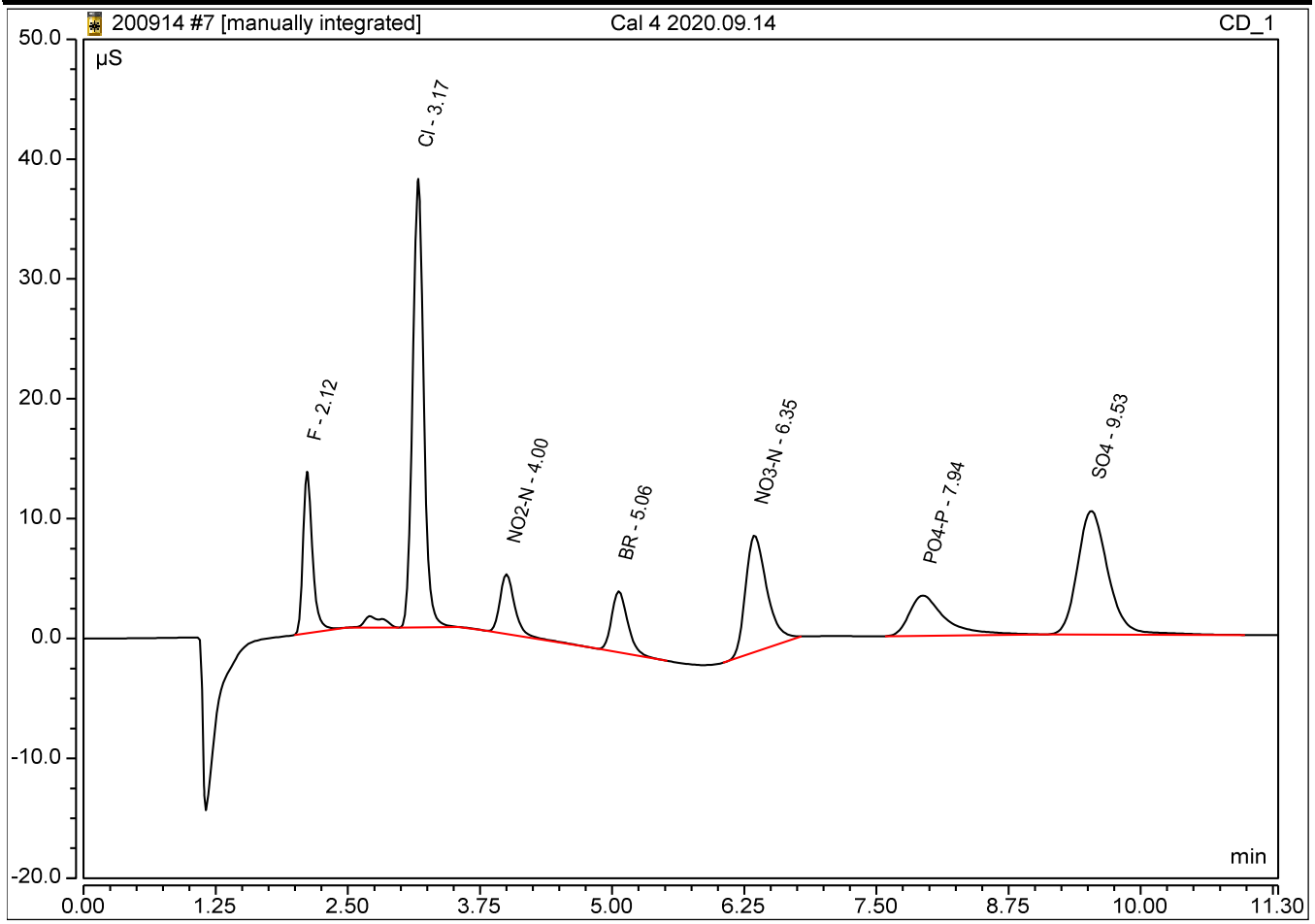
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 4 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 14:59**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.12	**F**	BMB	1.393	13.483	1.27	1.25	101.9%
3	3.17	**Cl**	BMB	4.523	37.438	5.01	5	100.1%
5	4.00	**NO2-N**	BMB	0.825	4.993	0.56	0.5	111.6%
6	5.06	**BR**	BMB	0.902	5.100	2.38	2.5	95.1%
7	6.35	**NO3-N**	BMB*	2.295	9.746	1.00	1	99.7%
8	7.94	**PO4-P**	BMB	1.327	3.365	2.46	2.5	98.2%
9	9.53	**SO4**	BMB	3.455	10.323	5.17	5	103.5%



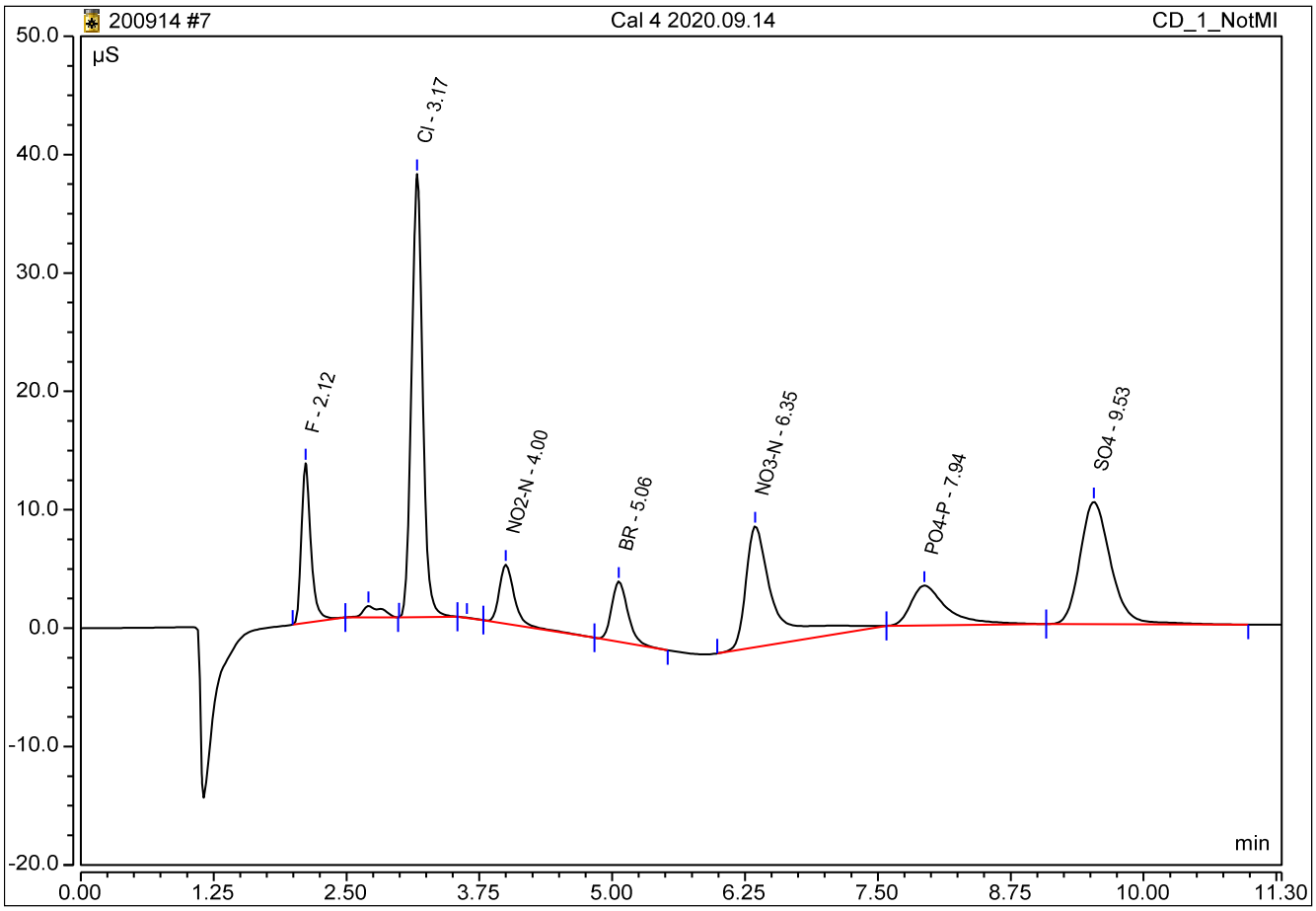
MI 5 NO3 GA 9/14/20

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Not Manipulated Peak Integration Report

Sample Name:	**Cal 4 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 14:59**	*Run Time:*	**11.30**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Ammount mg/L
1	2.12	**F**	BMB	1.393	13.483	1.2743
3	3.17	**Cl**	BMB	4.523	37.438	5.0060
5	4.00	**NO2-N**	BMB	0.825	4.993	0.5579
6	5.06	**BR**	BMB	0.902	5.100	2.3764
7	6.35	**NO3-N**	BMB*	3.185	10.217	1.3799
8	7.94	**PO4-P**	BMB	1.327	3.365	2.4421
9	9.53	**SO4**	BMB	3.455	10.323	5.1723

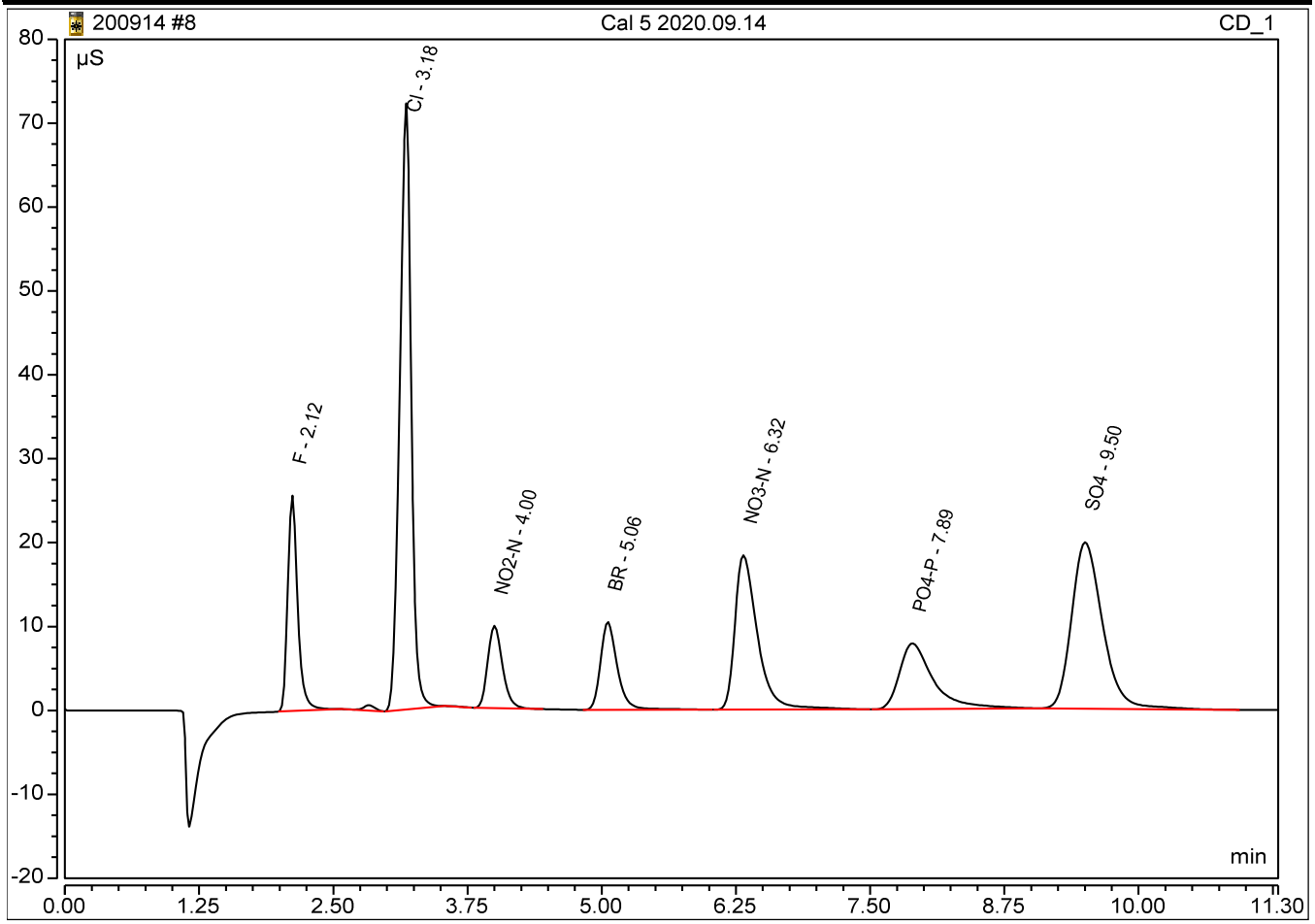


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 5 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:14**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.12	**F**	BMB	2.764	25.690	2.67	2.5	107.0%
3	3.18	**Cl**	BMB	8.950	72.239	9.91	10	99.1%
5	4.00	**NO2-N**	BMB	1.558	9.806	1.05	1	105.3%
6	5.06	**BR**	BMB	1.911	10.461	5.03	5	100.6%
7	6.32	**NO3-N**	BMB	4.496	18.415	1.95	2	97.6%
8	7.89	**PO4-P**	BMB	2.876	7.859	4.63	5	92.6%
9	9.50	**SO4**	BMB	6.650	19.846	9.96	10	99.6%



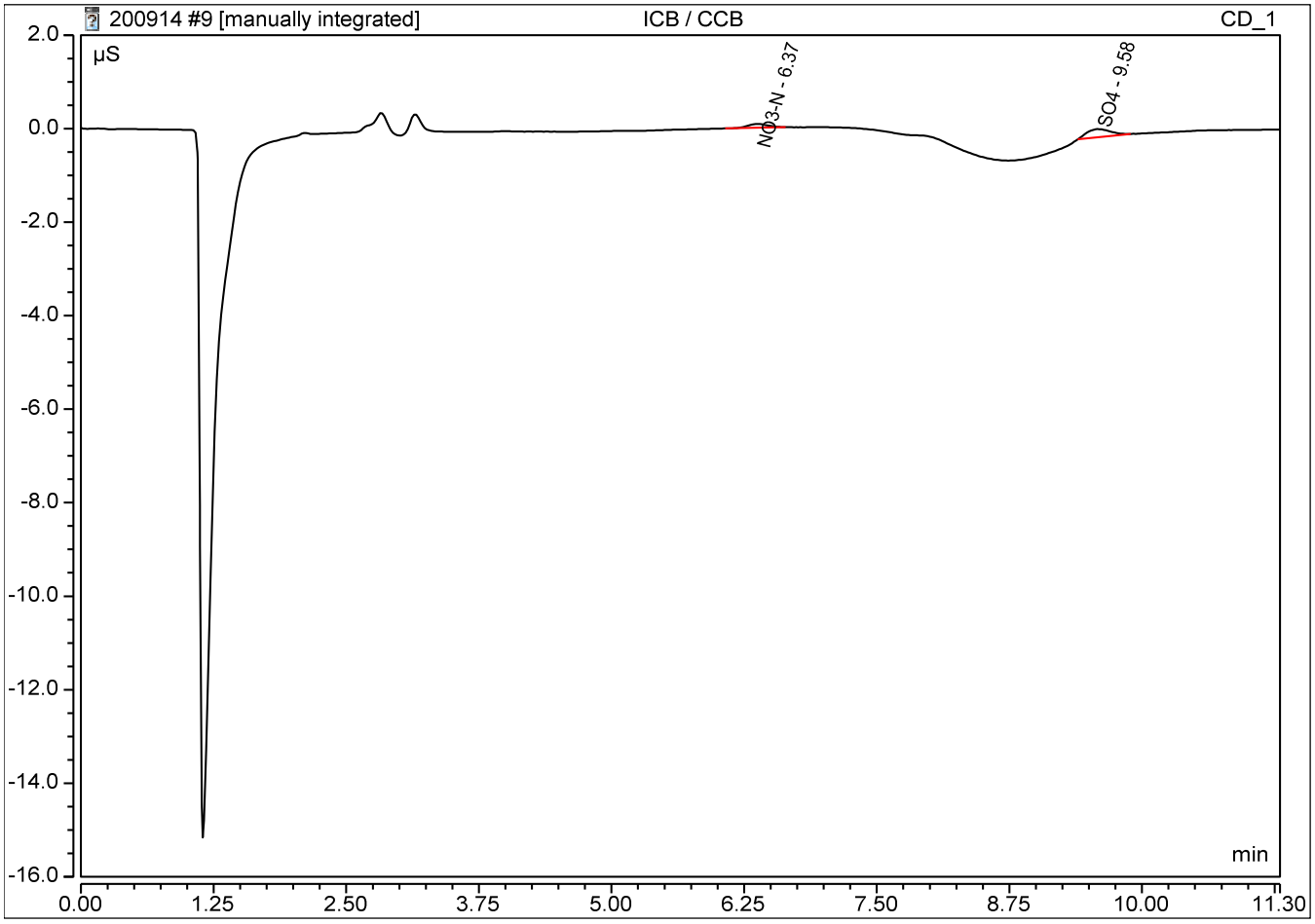
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**ICB / CCB**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:29**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	6.37	**NO3-N**	BMB*	0.017	0.081	0.01		
2	9.58	**SO4**	BMB*	0.046	0.175	0.07		



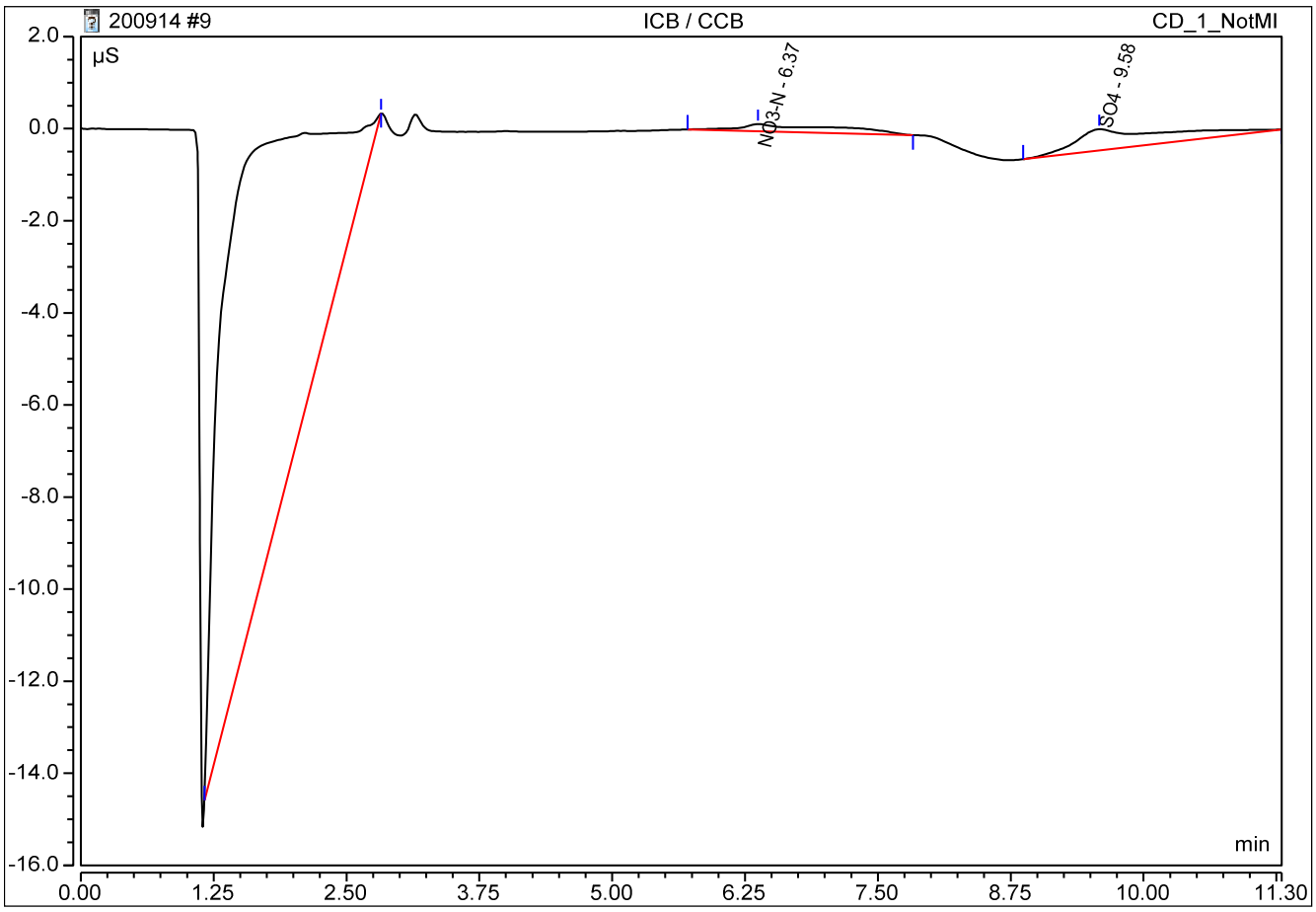
MI 5 F SO4 GA 9/14/20

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Not Manipulated Peak Integration Report

Sample Name:	**ICB / CCB**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:29**	*Run Time:*	**11.30**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Ammount mg/L
1	6.37	**NO3-N**	BMB*	0.177	0.155	0.0769
2	9.58	**SO4**	BMB*	0.456	0.464	0.6832

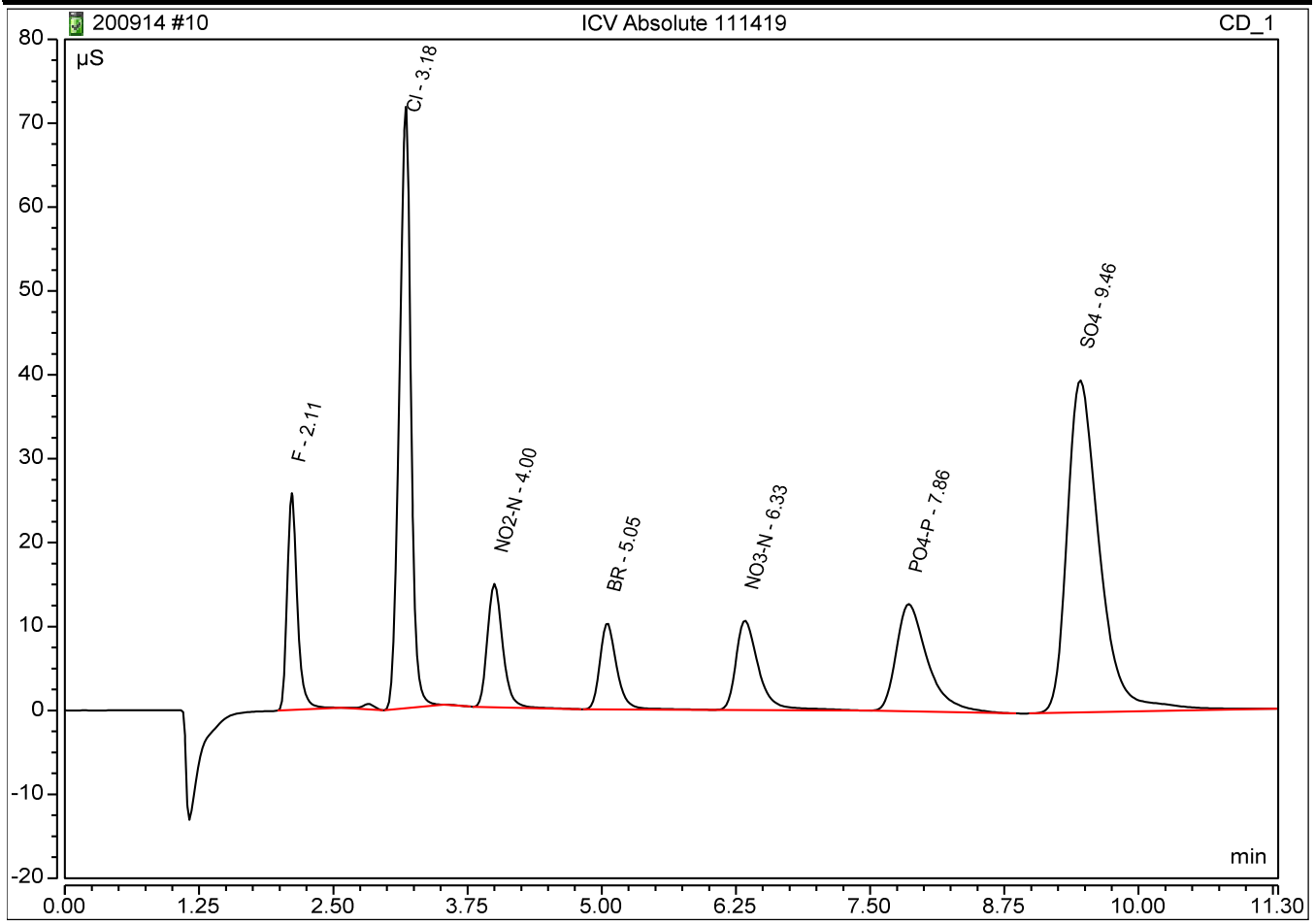


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**ICV Absolute 111419**	*Inj. Vol.:*	**100uL**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:43**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.11	**F**	BMB	2.829	25.835	2.74	2.5	109.6%
3	3.18	**Cl**	BMB	8.963	71.696	9.92	10	99.2%
5	4.00	**NO2-N**	BMB	2.425	14.715	1.64	1.522334	107.7%
6	5.05	**BR**	BMB	1.878	10.287	4.95	5	98.9%
7	6.33	**NO3-N**	BMB	2.618	10.656	1.14	1.129525	100.7%
8	7.86	**PO4-P**	BMB	4.336	12.817	6.68	6.522	102.4%
9	9.46	**SO4**	BMB	13.880	39.594	20.79	20	103.9%



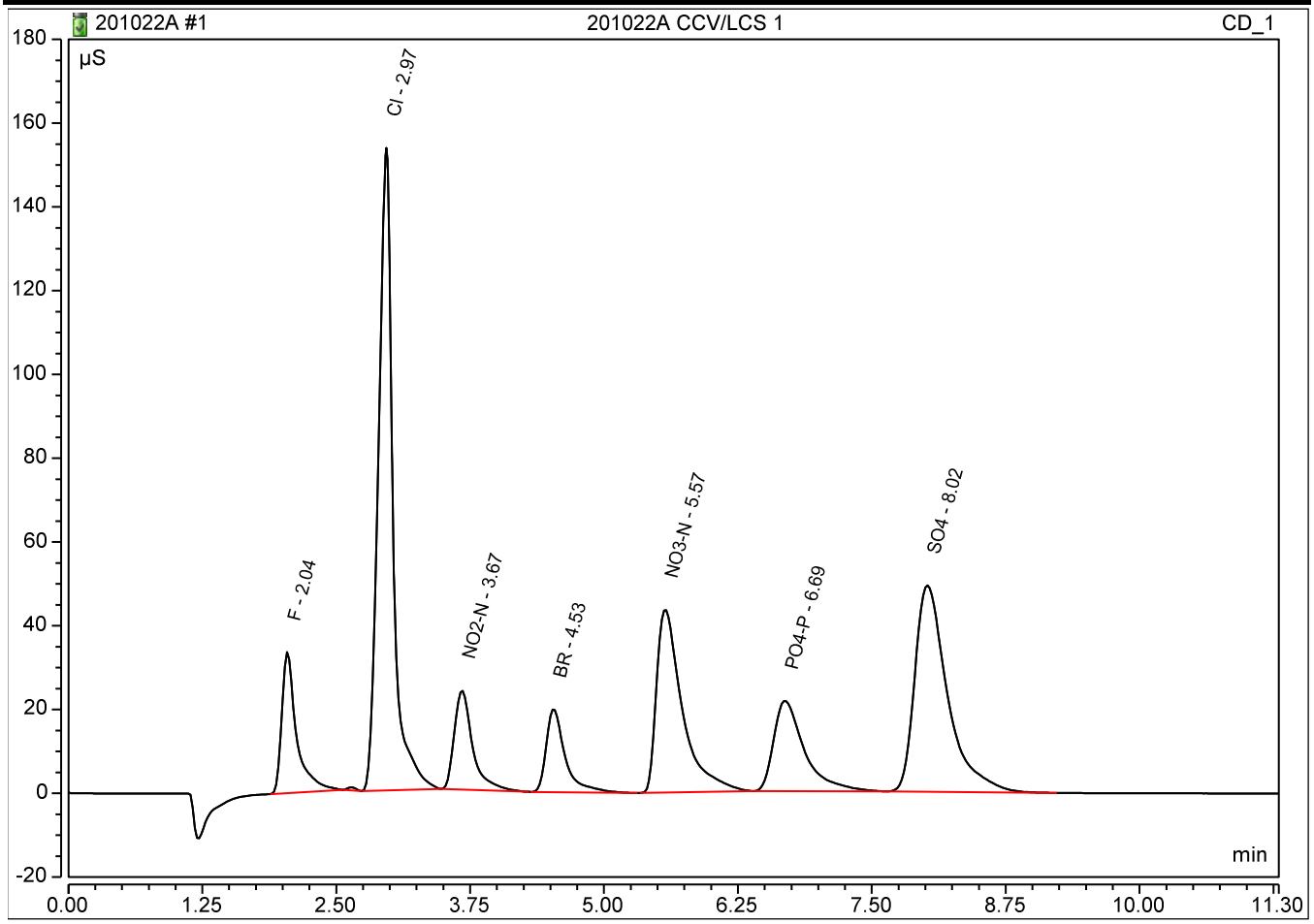
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201022A

Peak Integration Report

Sample Name:	**201022A CCV/LCS 1**	*Inj. Vol.:*	**100uL**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**22-Oct-2020 / 10:02**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.04	**F**	BMB	5.378	33.746	5.34	5	106.9%
3	2.97	**Cl**	BMB	24.072	153.386	26.65	25	106.6%
4	3.67	**NO2-N**	BMB	4.692	23.669	3.17	3.04	104.3%
5	4.53	**BR**	BMB	4.061	19.850	10.69	10	106.9%
6	5.57	**NO3-N**	BMB	12.206	43.744	5.30	5	106.0%
7	6.69	**PO4-P**	BMB	7.178	21.580	10.67	10	106.7%
8	8.02	**SO4**	BMB	17.484	49.256	26.18	25	104.7%



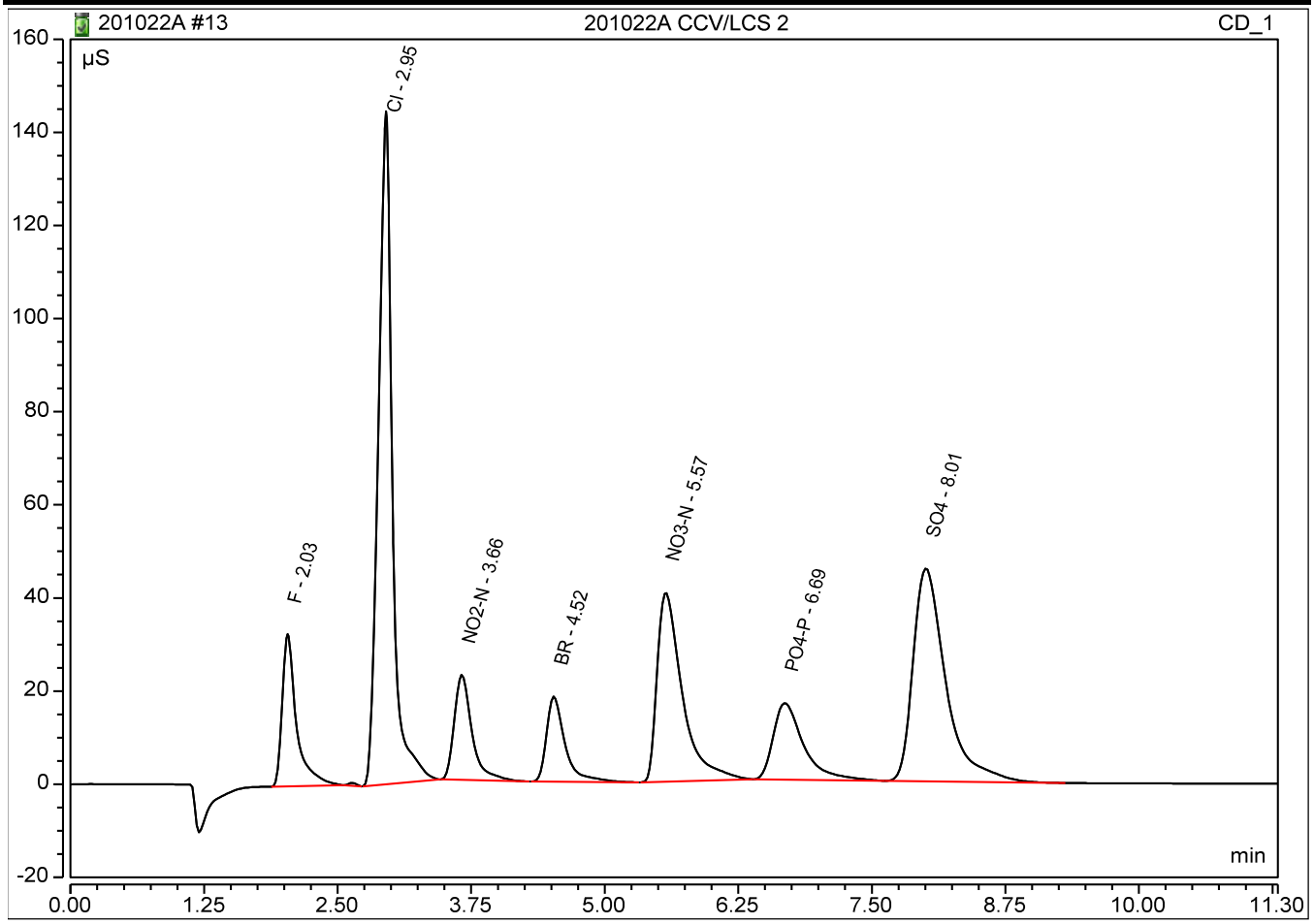
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201022A

Peak Integration Report

Sample Name:	**201022A CCV/LCS 2**	*Inj. Vol.:*	**100uL**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**22-Oct-2020 / 13:24**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.03	**F**	BMB	5.047	32.701	5.01	5	100.1%
3	2.95	**Cl**	BMB	21.847	144.571	24.18	25	96.7%
4	3.66	**NO2-N**	BMB	4.368	22.623	2.95	3.04	97.1%
5	4.52	**BR**	BMB	3.695	18.312	9.73	10	97.3%
6	5.57	**NO3-N**	BMB	11.097	40.644	4.82	5	96.4%
7	6.69	**PO4-P**	BMB	5.395	16.412	8.17	10	81.7%
8	8.01	**SO4**	BMB	16.201	45.719	24.26	25	97.0%



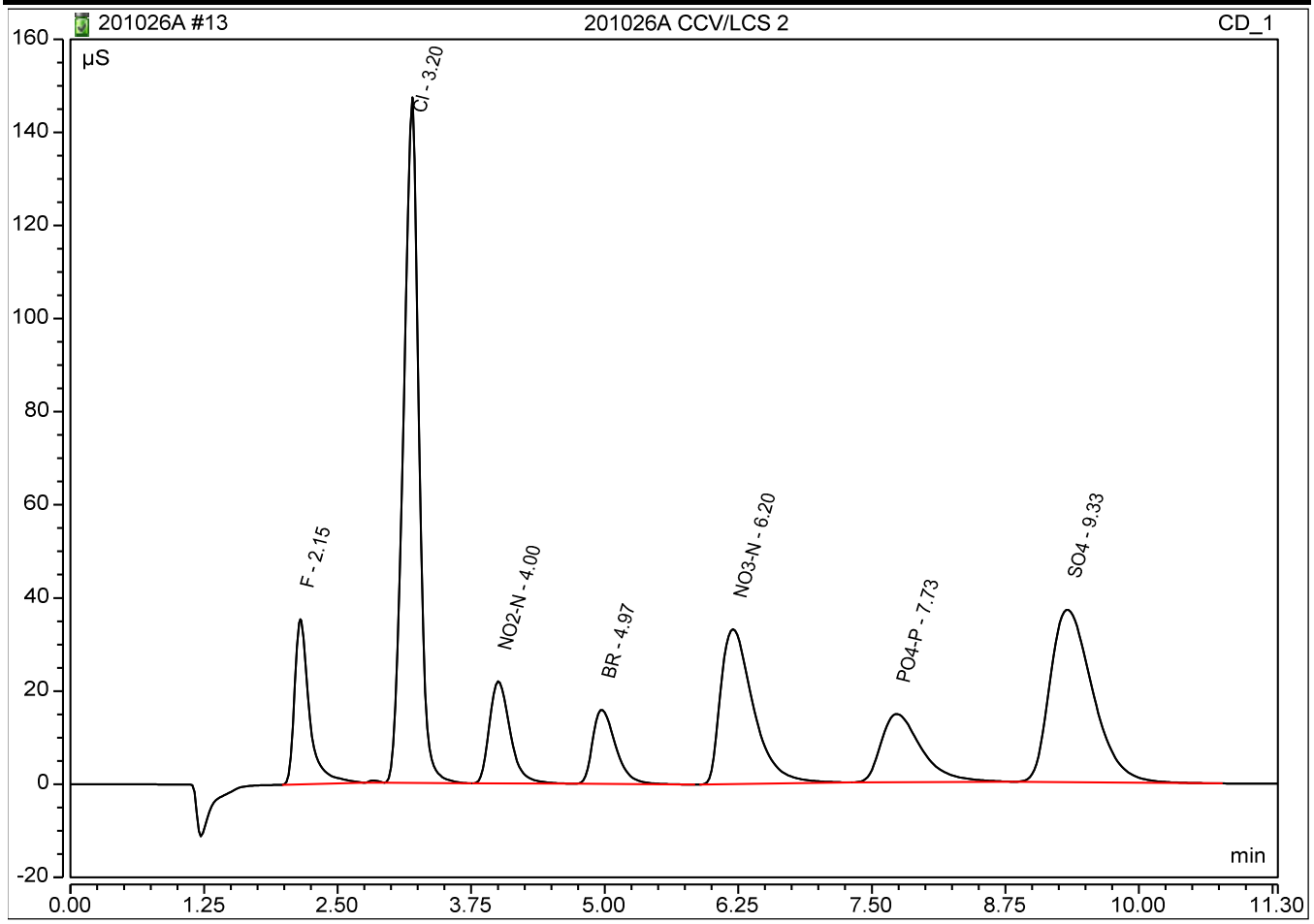
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**201026A CCV/LCS 2**	*Inj. Vol.:*	**100uL**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**26-Oct-2020 / 20:09**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.15	**F**	BMB	5.734	35.497	5.71	5	114.1%
3	3.20	**Cl**	BMB	24.454	147.220	27.07	25	108.3%
4	4.00	**NO2-N**	BMB	4.961	21.972	3.35	3.04	110.3%
5	4.97	**BR**	BMB	3.979	15.932	10.48	10	104.8%
6	6.20	**NO3-N**	BMB	11.840	33.272	5.14	5	102.8%
7	7.73	**PO4-P**	BMB	6.394	14.651	9.57	10	95.7%
8	9.33	**SO4**	BMB	17.163	37.031	25.70	25	102.8%



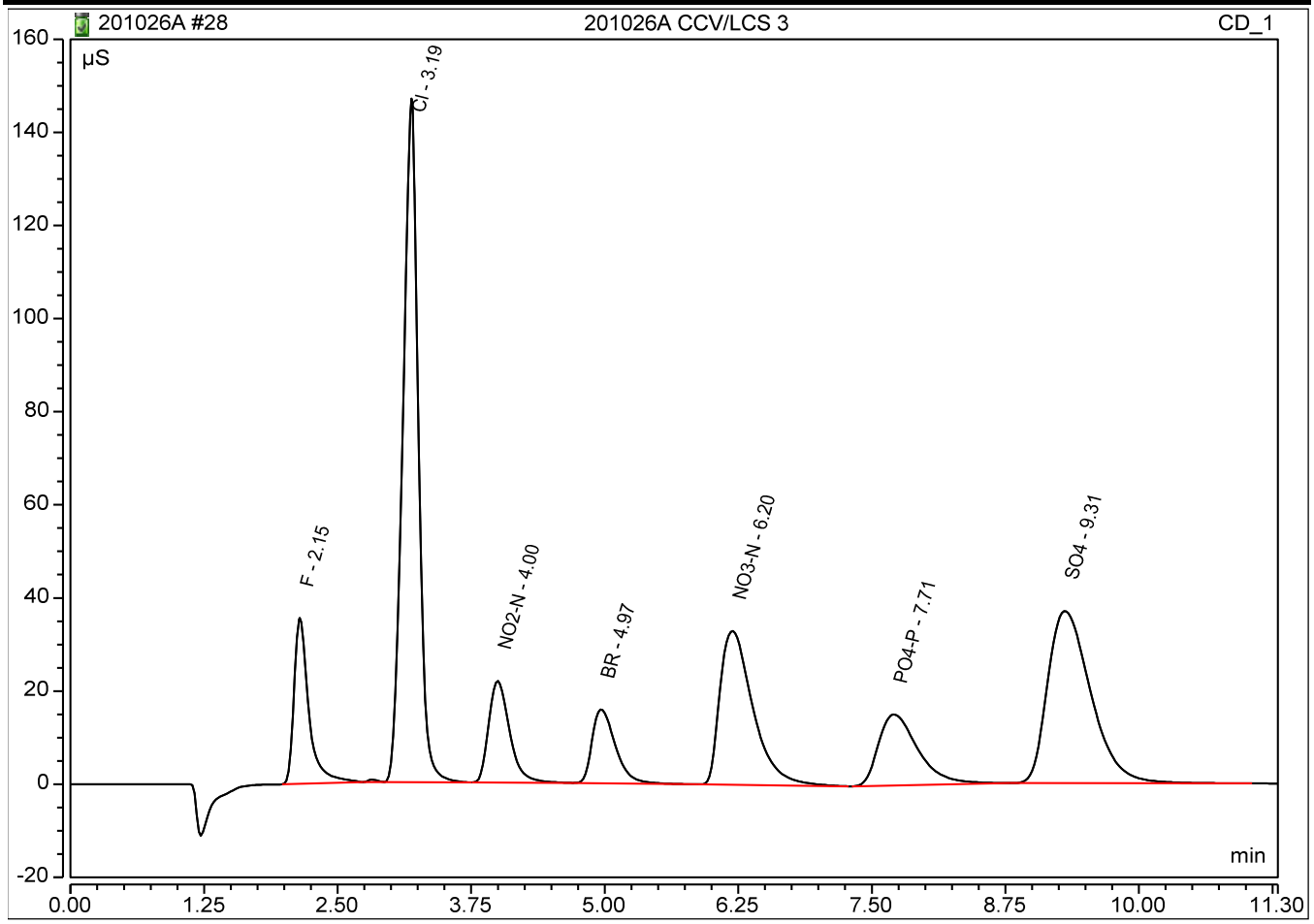
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**201026A CCV/LCS 3**	*Inj. Vol.:*	**100uL**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**26-Oct-2020 / 23:48**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.15	**F**	BMB	5.732	35.603	5.71	5	114.1%
3	3.19	**Cl**	BMB	24.475	146.830	27.09	25	108.4%
4	4.00	**NO2-N**	BMB	4.962	21.813	3.35	3.04	110.3%
5	4.97	**BR**	BMB	4.006	15.854	10.55	10	105.5%
6	6.20	**NO3-N**	BMB	11.885	33.055	5.16	5	103.2%
7	7.71	**PO4-P**	BMB	6.562	15.259	9.81	10	98.1%
8	9.31	**SO4**	BMB	17.345	36.967	25.97	25	103.9%



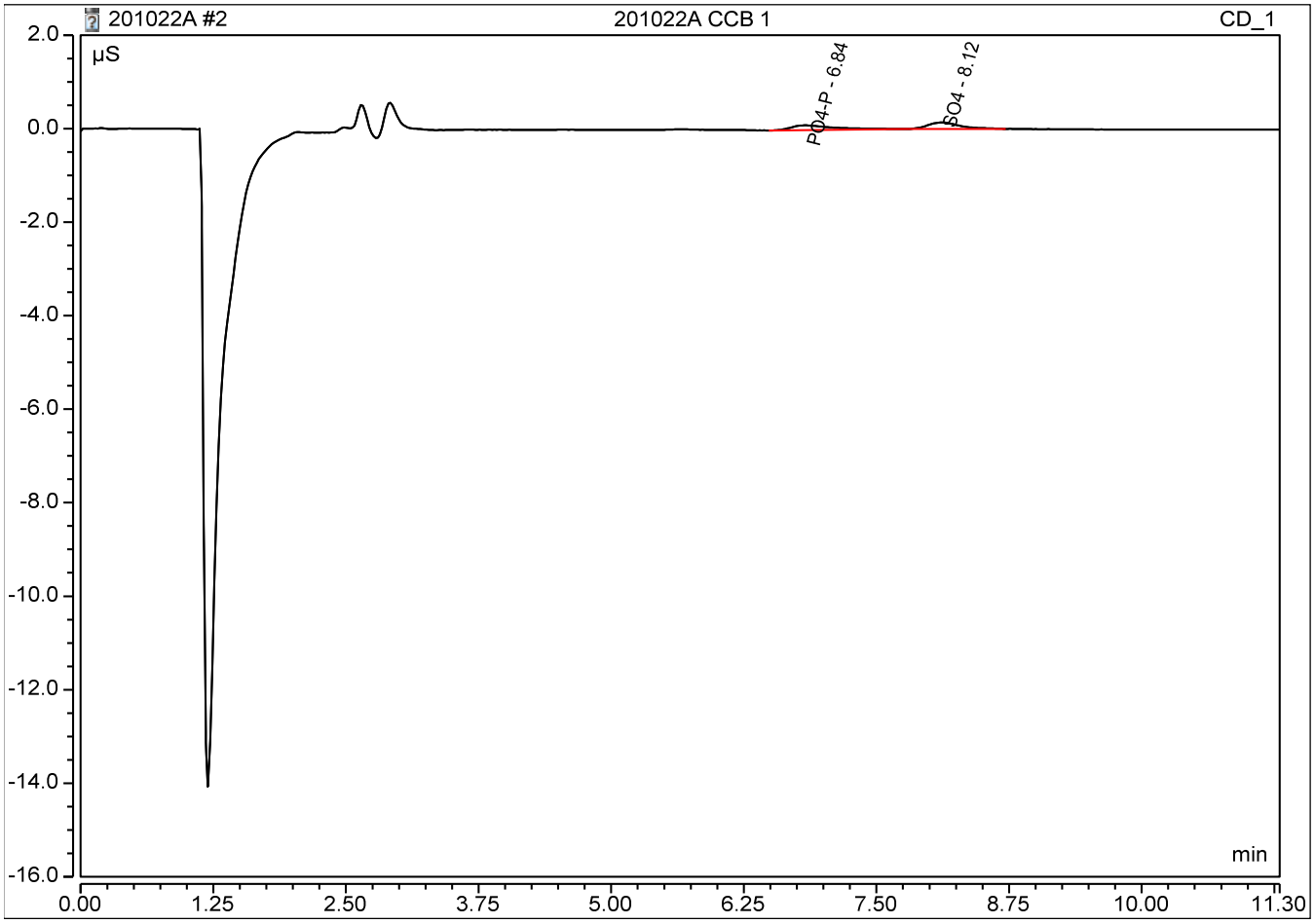
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201022A

Peak Integration Report

Sample Name:	**201022A CCB 1**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**22-Oct-2020 / 10:17**	*Run Time:*	**11.30**

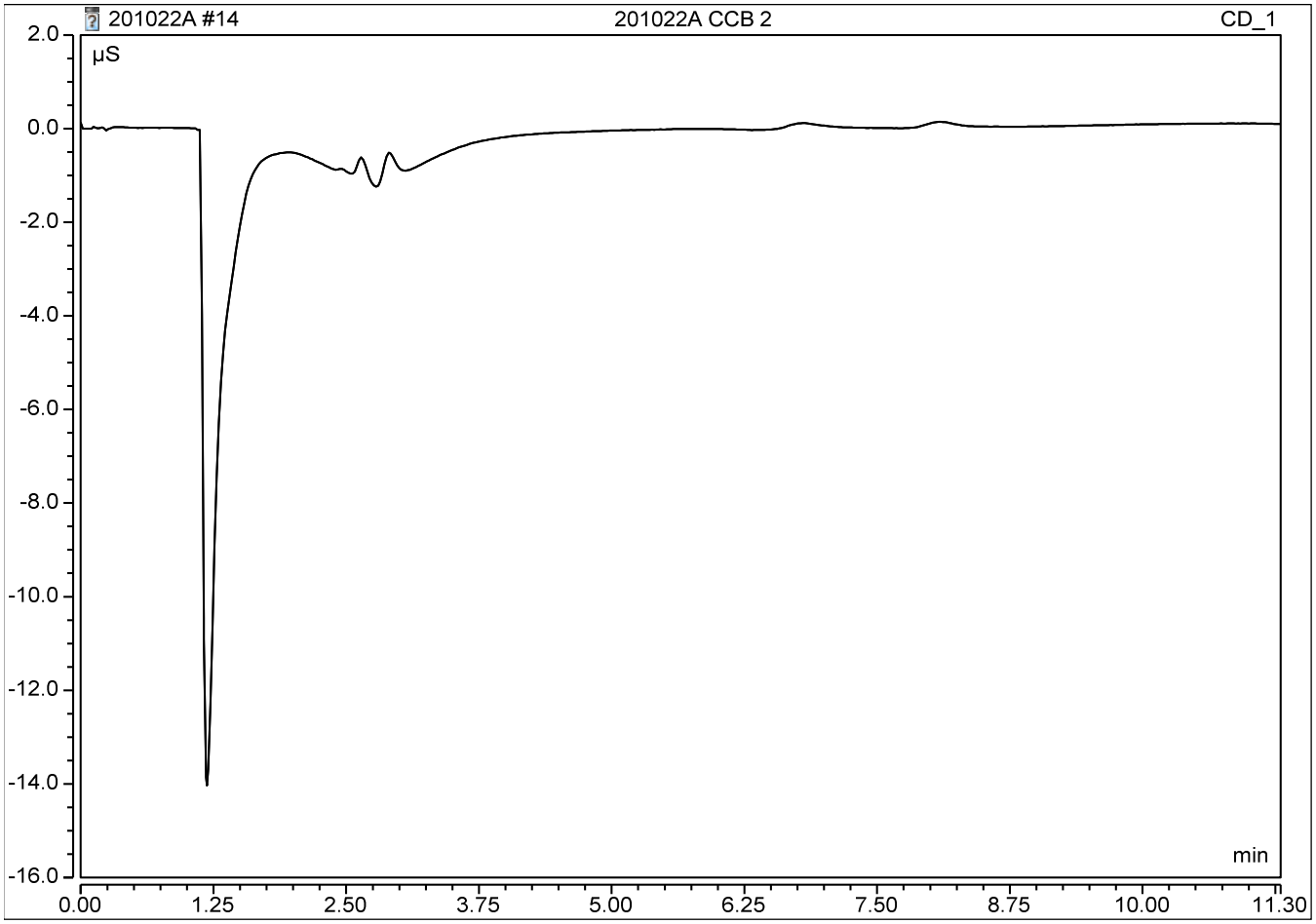
No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	6.84	**PO4-P**	BMB	0.050	0.105	0.66		
2	8.12	**SO4**	BMB	0.050	0.144	0.07		



Peak Integration Report

Sample Name:	**201022A CCB 2**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**22-Oct-2020 / 13:39**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery

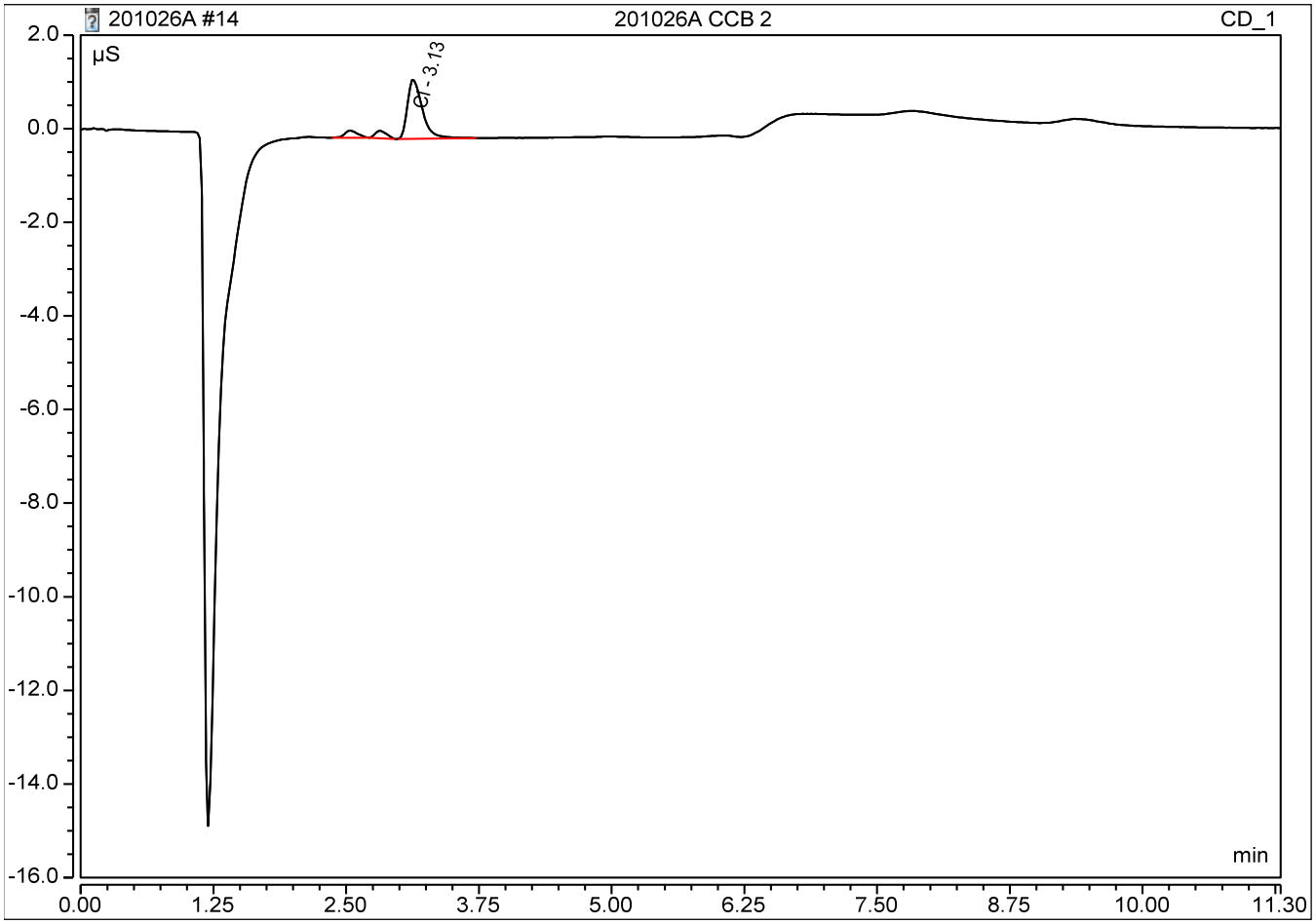


Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**201026A CCB 2**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**26-Oct-2020 / 20:23**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
3	3.13	**Cl**	BMB	0.206	1.268	0.23		



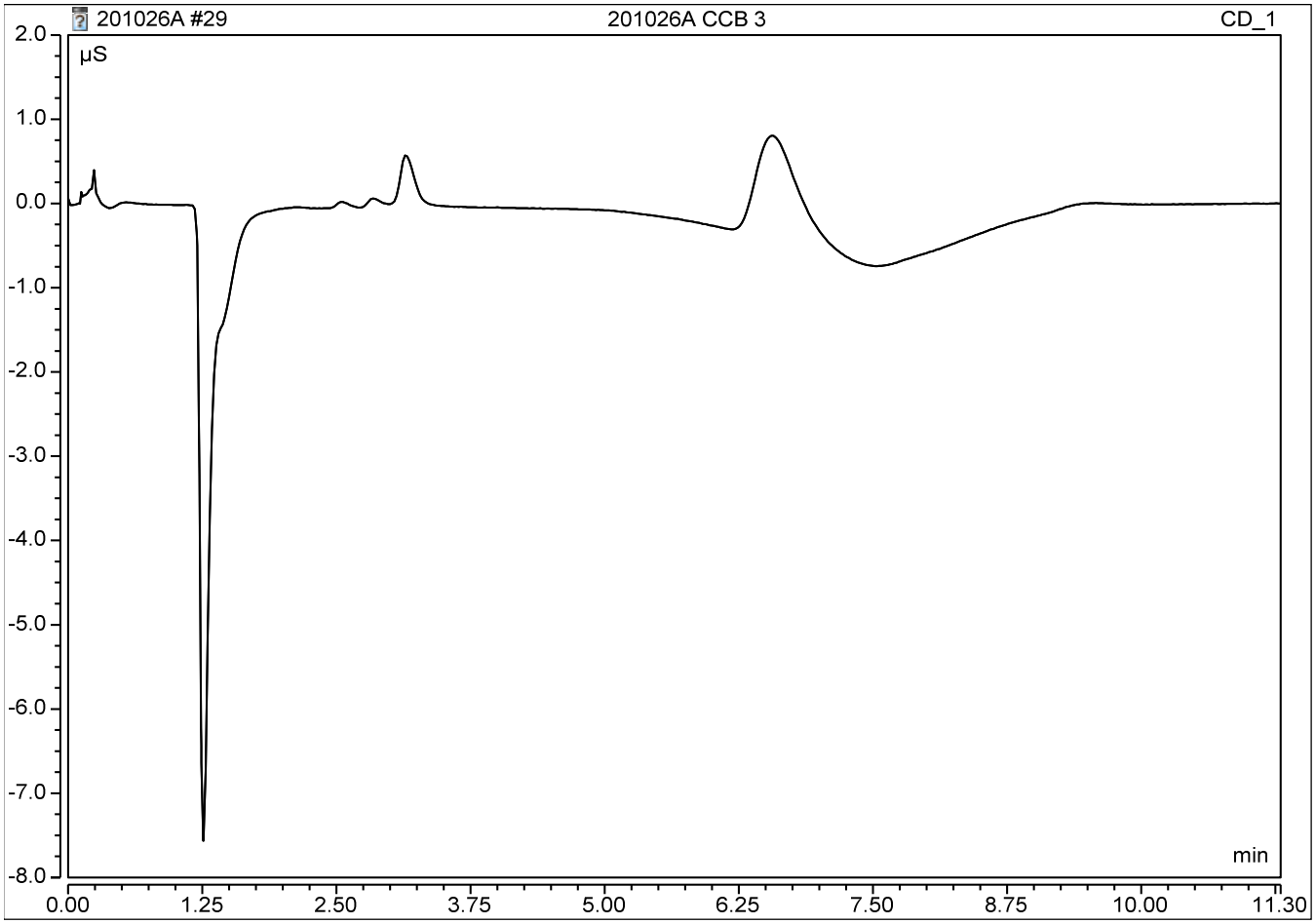
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**201026A CCB 3**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**27-Oct-2020 / 00:03**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery



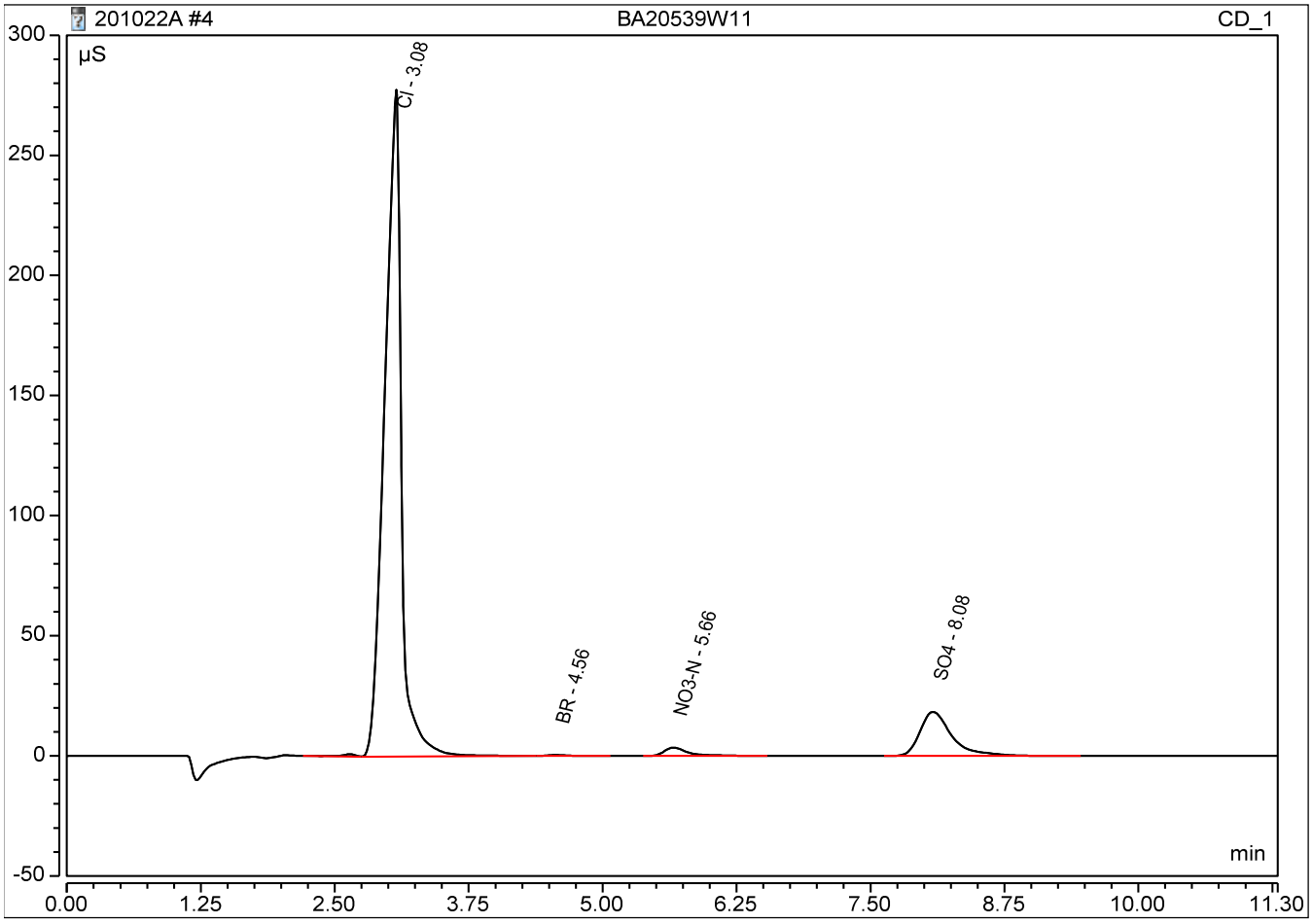
INORGANIC ANALYSIS
Raw Data

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201022A

Peak Integration Report

Sample Name:	**BA20539W11**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**22-Oct-2020 / 11:12**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
2	3.08	**Cl**	BMB	49.756	277.607	55.07		
3	4.56	**BR**	BMB	0.068	0.355	0.18		
4	5.66	**NO3-N**	BMB	0.897	3.452	0.39		
5	8.08	**SO4**	BMB	6.309	18.340	9.45		



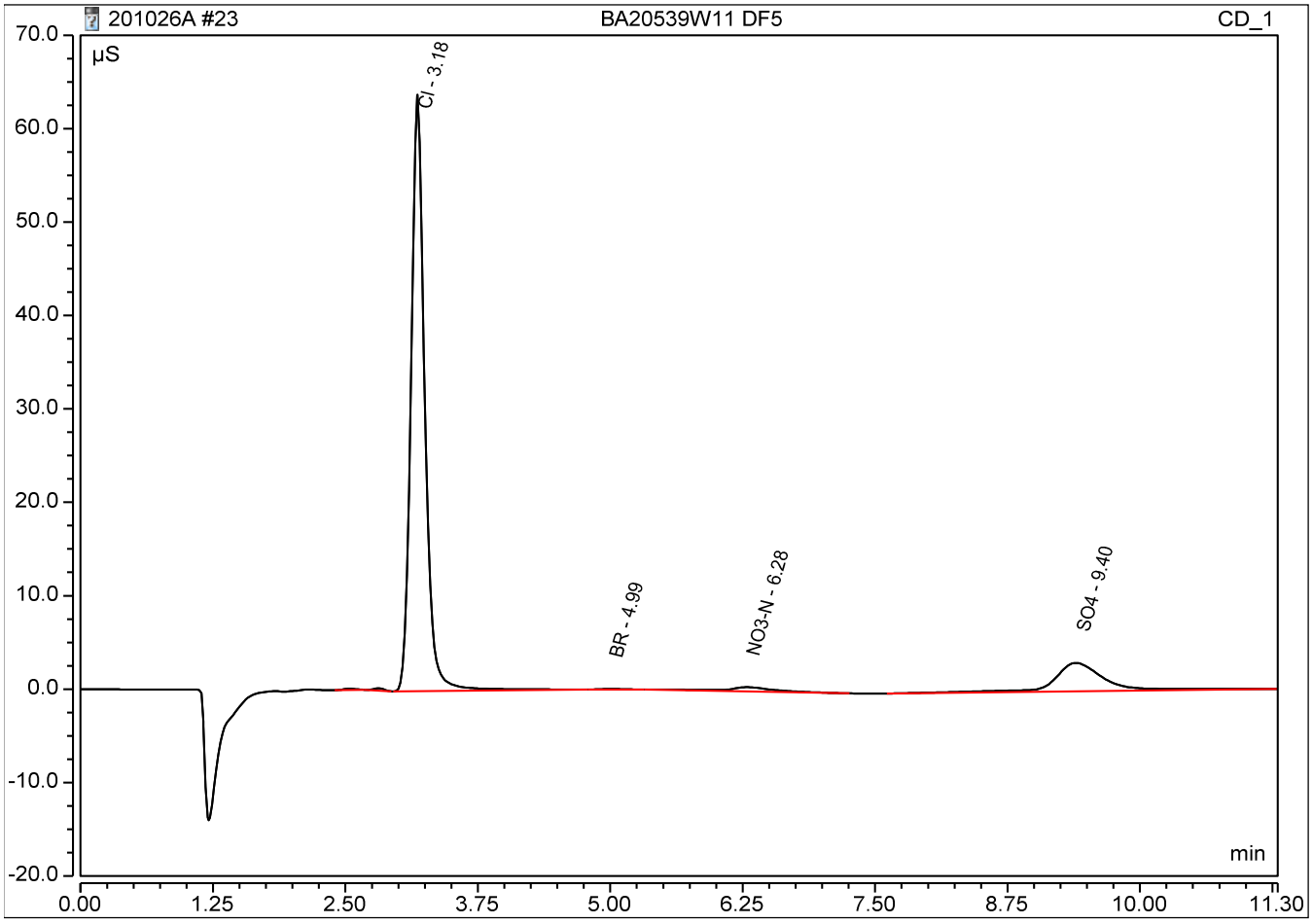
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**BA20539W11 DF5**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**5.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**26-Oct-2020 / 22:35**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
3	3.18	**Cl**	BMB	9.550	63.859	52.86		
4	4.99	**BR**	BMB	0.014	0.060	0.18		
5	6.28	**NO3-N**	BMB	0.252	0.465	0.55		
6	9.40	**SO4**	BMB	1.680	3.038	12.58		



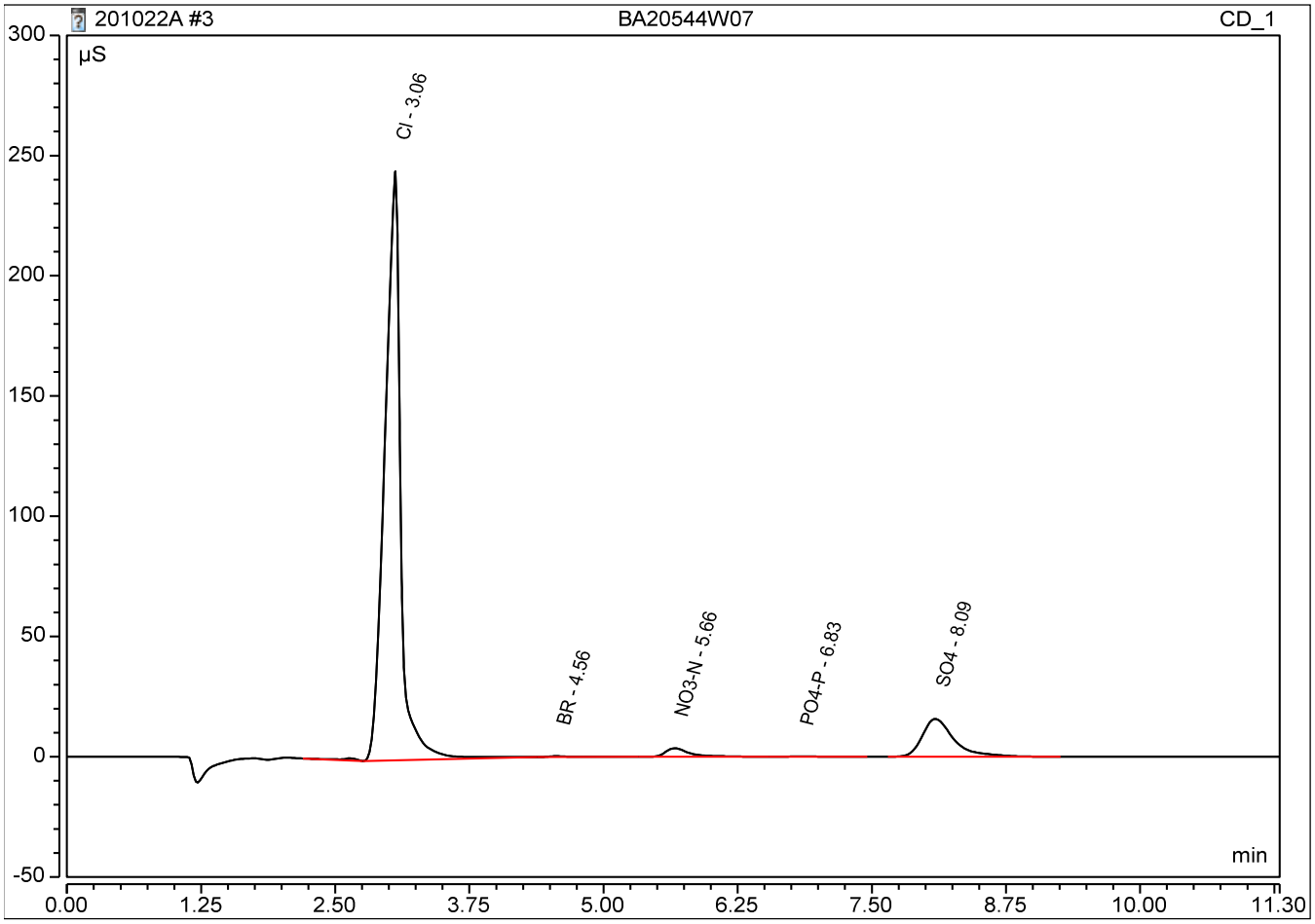
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201022A

Peak Integration Report

Sample Name:	**BA20544W07**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**22-Oct-2020 / 10:32**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
2	3.06	**Cl**	BMB	41.924	244.966	46.41		
3	4.56	**BR**	BMB	0.069	0.318	0.18		
4	5.66	**NO3-N**	BMB	0.930	3.554	0.40		
5	6.83	**PO4-P**	BMB	0.037	0.093	0.64		
6	8.09	**SO4**	BMB	5.377	15.691	8.05		



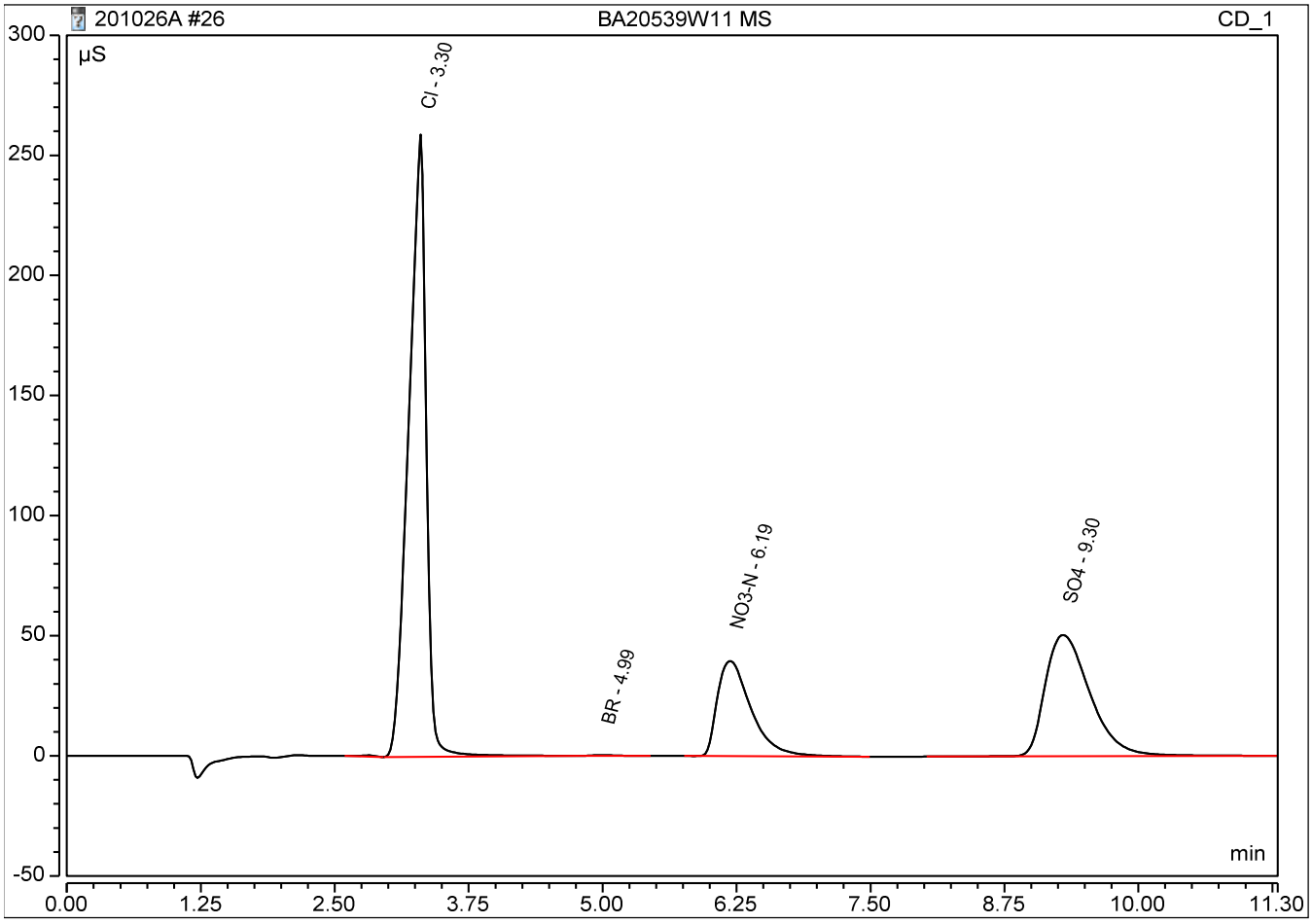
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**BA20539W11 MS**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**26-Oct-2020 / 23:19**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
2	3.30	**Cl**	BMB	48.948	258.976	54.18		
3	4.99	**BR**	BMB	0.069	0.287	0.18		
4	6.19	**NO3-N**	BMB	14.510	39.677	6.30		
5	9.30	**SO4**	BMB	24.470	50.480	36.65		



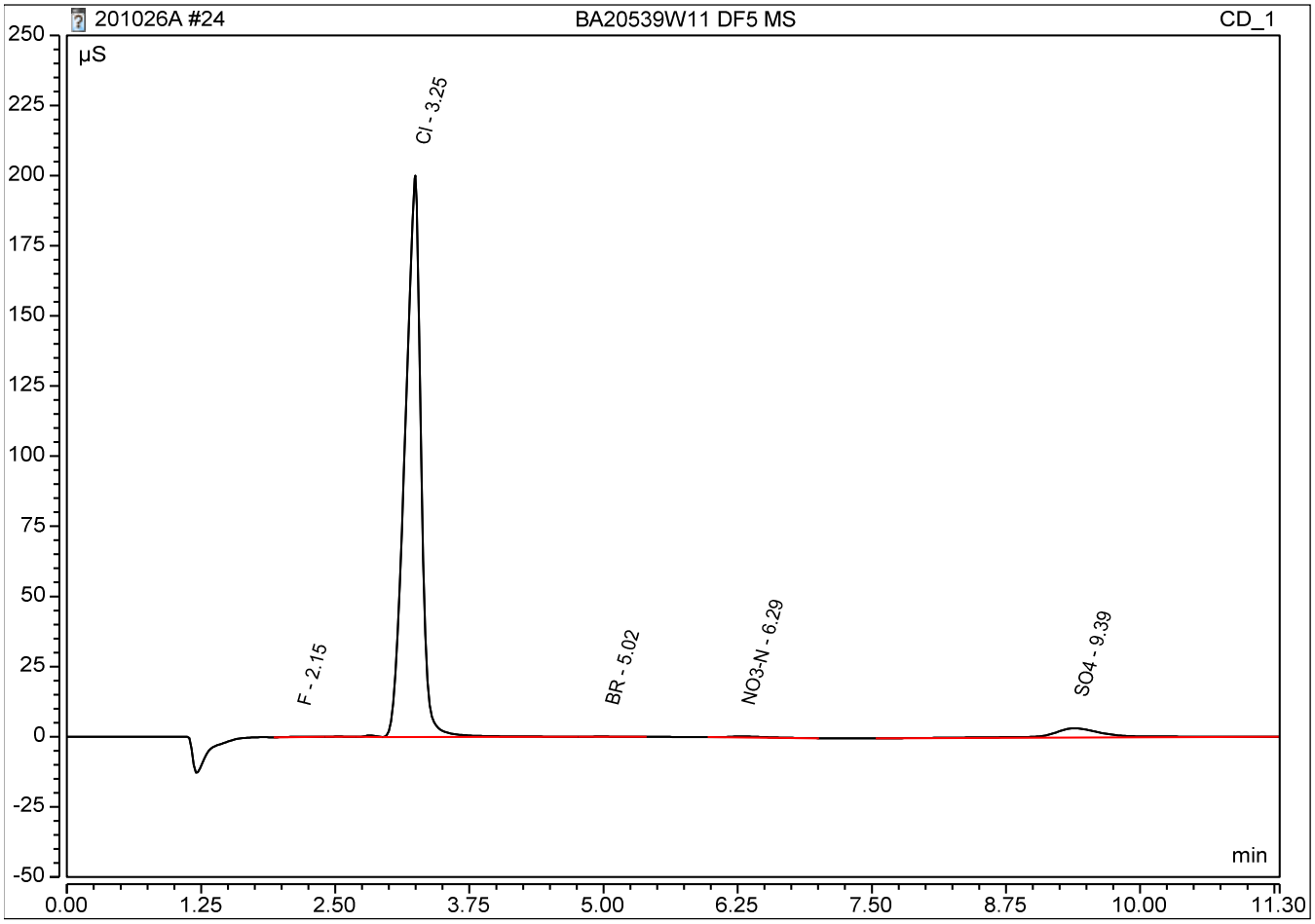
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**BA20539W11 DF5 MS**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**5.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**26-Oct-2020 / 22:50**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.15	**F**	BMB	0.031	0.149	n.a.		
4	3.25	**Cl**	BMB	34.228	200.021	189.43		
5	5.02	**BR**	BMB	0.017	0.065	0.22		
6	6.29	**NO3-N**	BMB	0.136	0.352	0.29		
7	9.39	**SO4**	BMB	1.923	3.279	14.40		

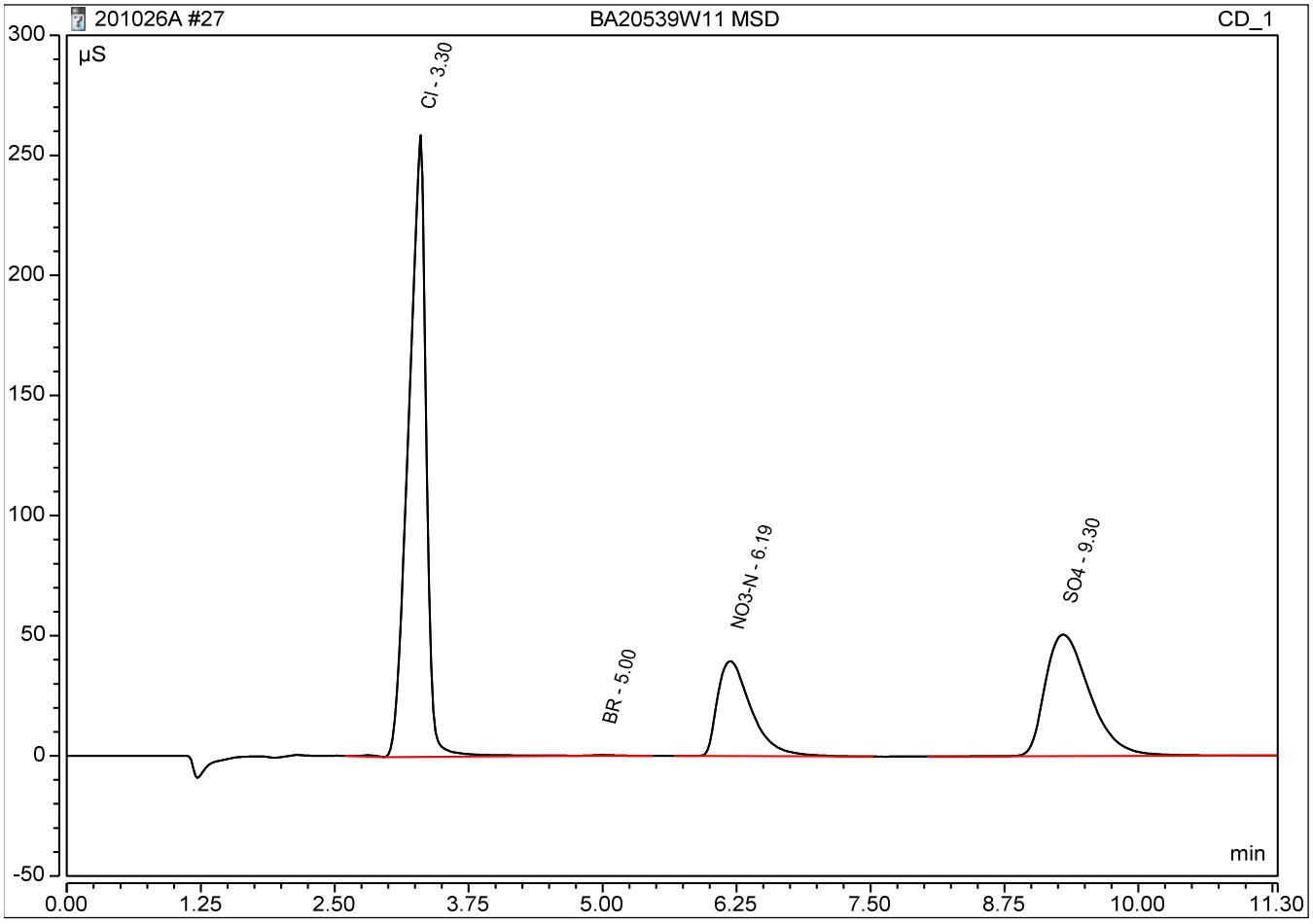


Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**BA20539W11 MSD**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**26-Oct-2020 / 23:34**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
2	3.30	**Cl**	BMB	48.967	258.730	54.20		
3	5.00	**BR**	BMB	0.068	0.285	0.18		
4	6.19	**NO3-N**	BMB	14.469	39.546	6.28		
5	9.30	**SO4**	BMB	24.581	50.637	36.81		



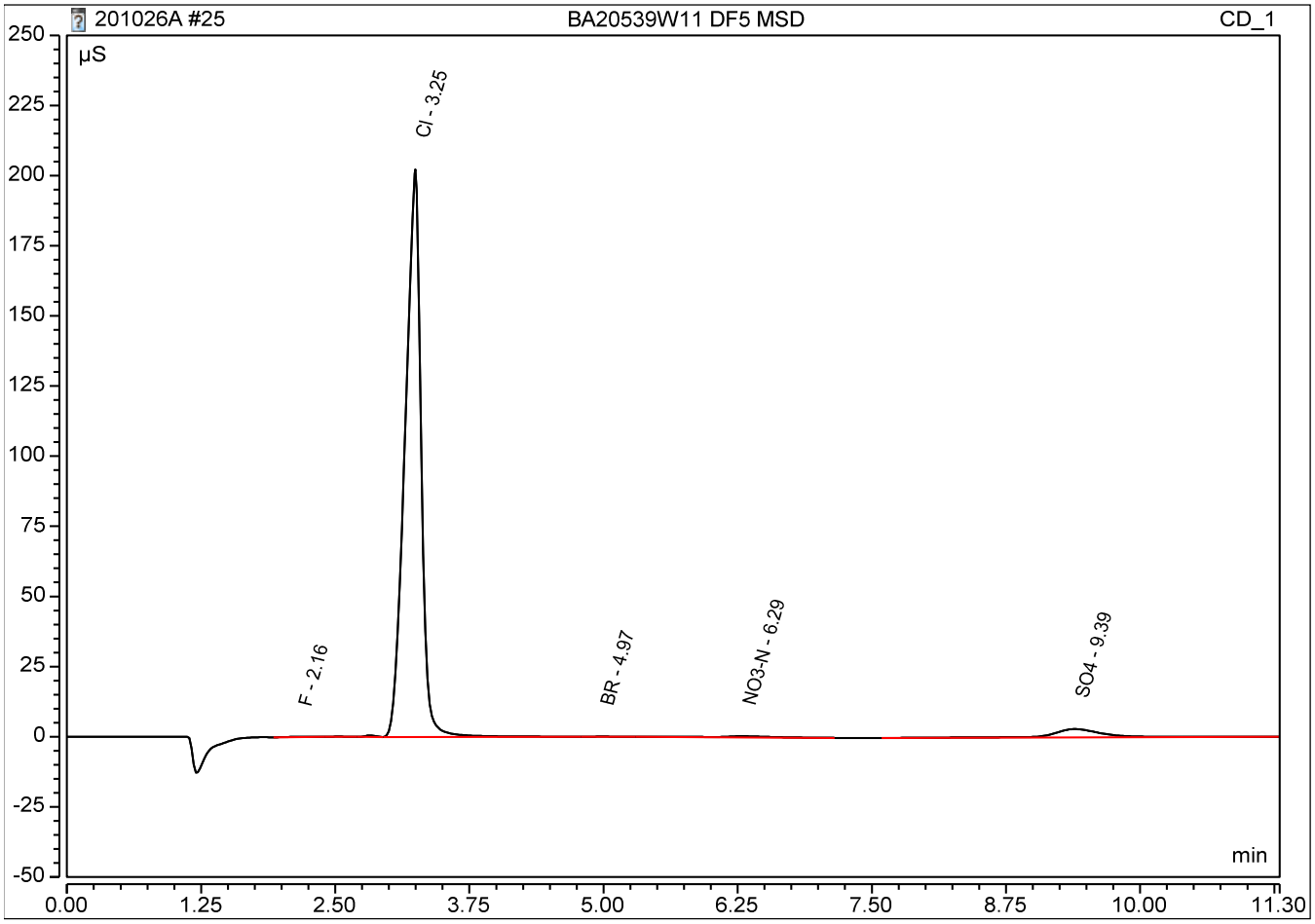
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**BA20539W11 DF5 MSD**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**5.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**26-Oct-2020 / 23:04**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.16	**F**	BMB	0.032	0.149	n.a.		
4	3.25	**Cl**	BMB	34.736	202.307	192.24		
5	4.97	**BR**	BMB	0.014	0.058	0.18		
6	6.29	**NO3-N**	BMB	0.225	0.414	0.49		
7	9.39	**SO4**	BMB	1.596	2.947	11.95		



Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Anion Chromatography Working Standard

Prep Date: 08/25/20

Exp Date: 08/26/20

Prep'd By (Initials): GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (µg/mL)
Ion Chromatography Standard Fluoride 1000 µg/mL in H2O	o2si	O2SI-062002-01-01	1000	**687393-38-40744**	**10/30/20**	312.5 µL	25 mL	Millipore Water	12.5
Ion Chromatography Standard Nitrite 1000 µg/mL in H2O	Inorganic Ventures	ICCL1	1000	**P2-CL675597-41353**	**01/15/23**	411 µL	25 mL	Millipore Water	5 as NO2-N
Ion Chromatography Standard Chloride 5000 µg/mL in H2O	Inorganic Ventures	ICNO21	1000	**N2-NOX672889-49601**	**01/30/23**	1250 µL	25 mL	Millipore Water	50
Ortho-Phosphate as P Standard	Agilent	ICC-005A	1000	**G34-CP-3323-49590**	**05/31/25**	625 µL	25 mL	Millipore Water	25
Ion Chromatography Standard Nitrate as N 1000 µg/mL in H2O	Inorganic Ventures	P2-NOX675324	1000	**P2-NOX675324-49391**	**02/14/23**	250 µL	25 mL	Millipore Water	10
Bromide Standard	CPI international	4400-IC8M	1000	**1011817-12-49602**	**06/04/21**	625 µL	25 mL	Millipore Water	25
Sulfate Standard	Inorganic Ventures	ICS041	1000	**P2-SOX677315**	**04/03/23**	1250 µL	25 mL	Millipore Water	50

Anion Chromatography Calibration Curve

Prep Date: 09/14/20

Exp Date: 09/15/20

Prep'd By (Initials): GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. Range (ug/mL)	Reference To APPL Prep Date	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc. Range (µg/mL)
Anion Chromatography Working Standard	Varies	ICal1A	5.0-50.0	Prepared 08/25/20	09/15/20	2 µL	1000 µL	Millipore Water	0.02-0.20
Anion Chromatography Working Standard	Varies	ICal1	5.0-50.0	Prepared 08/25/20	09/15/20	4 µL	1000 µL	Millipore Water	0.04-0.40
Anion Chromatography Working Standard	Varies	ICal2	5.0-50.0	Prepared 08/25/20	09/15/20	20 µL	1000 µL	Millipore Water	0.1-1.0
Anion Chromatography Working Standard	Varies	ICal3	5.0-50.0	Prepared 08/25/20	09/15/20	50 µL	1000 µL	Millipore Water	0.25-2.5
Anion Chromatography Working Standard	Varies	ICal4	5.0-50.0	Prepared 08/25/20	09/15/20	100 µL	1000 µL	Millipore Water	0.5-5.0
Anion Chromatography Working Standard	Varies	ICal5	5.0-50.0	Prepared 08/25/20	09/15/20	200 µL	1000 µL	Millipore Water	1.0-10.0
Anion Chromatography Working Standard	Varies	ICal6	5.0-50.0	Prepared 08/25/20	09/15/20	500 µL	1000 µL	Millipore Water	2.5-25.0
Anion Chromatography Working Standard	Varies	ICal7	5.0-50.0	Prepared 08/25/20	09/15/20	700 µL	1000 µL	Millipore Water	3.5-35.0
Anion Chromatography Working Standard	Varies	ICal8	5.0-50.0	Prepared 08/25/20	09/15/20	1000 µL	1000 µL	Millipore Water	5.0-50.0

Anion Chromatography ICV Absolute COA 49866

Prep Date: See injection Log

Exp Date: 24 hours after prep

Prep'd By (Initials): Absolute

Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. Range (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (µg/mL)
Flouride	Absolute	50021	2.5	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	2.5
Nitrite	Absolute	50021	1.522334	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	1.522334
Chloride	Absolute	50021	1.522334	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	1.522334
O-Phosphate as P	Absolute	50021	6.522	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	6.522
Nitrate as N	Absolute	50021	1.129525	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	1.129525
Ion Chromatography Standard Bromide, 1000 µg/mL in H2O	Absolute	50021	5	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	5
Sulfate	Absolute	50021	20	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	20

Anion Chromatography CCV / LCS

Prep Date: See injection Log

Exp Date: 24 hours after prep

Prep'd By (Initials): GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (µg/mL)
Ion Chromatography Standard Fluoride 1000 µg/mL in H2O	o2si	O2SI-062002-01-01	1000	**687393-38-40744**	**10/30/20**	125 µL	25 mL	Millipore Water	5
Ion Chromatography Standard Nitrite 1000 µg/mL in H2O	Inorganic Ventures	ICCL1	1000	**P2-CL675597-41353**	**01/15/23**	250 µL	25 mL	Millipore Water	10
Ion Chromatography Standard Chloride 5000 µg/mL in H2O	Inorganic Ventures	ICNO21	1000	**N2-NOX672889-49601**	**01/30/23**	125 µL	25 mL	Millipore Water	25
Ortho-Phosphate as P Standard	Agilent	ICC-005A	1000	**G34-CP-3323-49590**	**05/31/25**	250 µL	25 mL	Millipore Water	10
Ion Chromatography Standard Nitrate as N 1000 µg/mL in H2O	Inorganic Ventures	P2-NOX675324	1000	**P2-NOX675324-49391**	**02/14/23**	125 µL	25 mL	Millipore Water	5
Bromide Standard	CPI international	4400-IC8M	1000	**1011817-12-49602**	**06/04/21**	250 µL	25 mL	Millipore Water	10
Sulfate Standard	Inorganic Ventures	ICS041	1000	**P2-SOX677315**	**04/03/23**	625 µL	25 mL	Millipore Water	25

Method 300 and 9056 Injection Log

No.	Position	Injection Description	Inject Time		Type	Comment
1	BC1	Cal 1 2020.09.14	14/Sep/2020	11:17	Calibration Standard	
2	BC2	Cal 2 2020.09.14	14/Sep/2020	11:31	Calibration Standard	
3	BC3	Cal 3 2020.09.14	14/Sep/2020	11:46	Calibration Standard	
4	BC6	Cal 6 2020.09.14	14/Sep/2020	12:30	Calibration Standard	
5	BC7	Cal 7 2020.09.14	14/Sep/2020	12:44	Calibration Standard	
6	BC8	Cal 8 2020.09.14	14/Sep/2020	12:59	Calibration Standard	
7	BC4	Cal 4 2020.09.14	14/Sep/2020	14:59	Calibration Standard	
8	BC5	Cal 5 2020.09.14	14/Sep/2020	15:14	Calibration Standard	
9	R1	ICB / CCB	14/Sep/2020	15:29	Unknown	
10	BD1	ICV Absolute 111419	14/Sep/2020	15:43	Check Standard	

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Method 300 and 9056 Injection Log

No.	Position	Injection Description	Inject Time		Type	Comment
1	R2	201022A CCV/LCS 1	22/Oct/2020	10:02	Check Standard	
2	R1	201022A CCB 1	22/Oct/2020	10:17	Unknown	
3	BE5	BA20544W07	22/Oct/2020	10:32	Unknown	
4	BE6	BA20539W11	22/Oct/2020	11:12	Unknown	
5	BE7	BA20579W01	22/Oct/2020	11:27	Unknown	93825 McCall
6	BE8	BA20641W01	22/Oct/2020	11:42	Unknown	93831 Supply Well
7	RA1	BA20580W01	22/Oct/2020	11:56	Unknown	93826 Kings Canyon
8	RA2	BA20575W01	22/Oct/2020	12:11	Unknown	93822 CCDOIVRY
9	RA3	BA20576W01	22/Oct/2020	12:26	Unknown	93822 CCLACFLAM
10	RA4	BA20577W01	22/Oct/2020	12:40	Unknown	93822 CCMADCHAN
11	RA5	BA20578W01	22/Oct/2020	12:55	Unknown	93823 PAR4CHAN
12	RA6	BA20571W01	22/Oct/2020	13:10	Unknown	93816 1ST WELL
13	R2	201022A CCV/LCS 2	22/Oct/2020	13:24	Check Standard	
14	R1	201022A CCB 2	22/Oct/2020	13:39	Unknown	
15	RA7	93816 2ND WELL	22/Oct/2020	13:54	Unknown	xxx
16	RA8	93815 HOUSE WELL	22/Oct/2020	14:08	Unknown	xxx
17	RB1	93824 CASE316 DRILL 320	22/Oct/2020	14:23	Unknown	xxx
18	RB2	93825 McCall DF5	22/Oct/2020	14:38	Unknown	xxx
19	RB3	93822 CCDOIVRY DF5	22/Oct/2020	14:52	Unknown	xxx
20	RC7	93814 WELL SAMPLE	22/Oct/2020	15:07	Unknown	xxx
21	RC8	93847 HOUSE/SW	22/Oct/2020	15:22	Unknown	xxx
22	RD1	93848 STANDING	22/Oct/2020	15:36	Unknown	xxx
23	RD2	93849 AIR343 DRILL346	22/Oct/2020	15:51	Unknown	xxx
24	RD3	BA19987W03	22/Oct/2020	16:06	Unknown	
25	R2	201022A CCV/LCS 3	22/Oct/2020	16:20	Check Standard	BAD INJECTION
26	R1	201022A CCB 3	22/Oct/2020	16:35	Unknown	xxx
27	RB4	BA19887W09 DF20	22/Oct/2020	16:50	Unknown	xxx
28	RB5	BA19889W09 DF20	22/Oct/2020	17:04	Unknown	xxx
29	RB6	BA19891W09 DF20	22/Oct/2020	17:19	Unknown	xxx
30	RB7	BA19892W09 DF20	22/Oct/2020	17:33	Unknown	xxx
31	R2	201022A CCV/LCS 3	22/Oct/2020	17:48	Check Standard	
32	R1	201022A CCB 3	22/Oct/2020	18:03	Unknown	
33	RB8	BA19893W09 DF20	22/Oct/2020	18:17	Unknown	
34	RC1	BA19894W09 DF20	22/Oct/2020	18:32	Unknown	
35	RC2	BA19895W09 DF20	22/Oct/2020	18:47	Unknown	
36	RC3	BA19896W09 DF20	22/Oct/2020	19:01	Unknown	
37	RC4	BA19897W09 DF20	22/Oct/2020	19:16	Unknown	
38	RC5	BA19898W09 DF20	22/Oct/2020	19:31	Unknown	
39	R2	201022A CCV/LCS 4	22/Oct/2020	19:45	Check Standard	
40	R1	201022A CCB 4	22/Oct/2020	20:00	Unknown	11 samples inj, OK by SD
41	RC6	BA19899W09 DF20	22/Oct/2020	20:15	Unknown	
42	RA7	BA20572W01	22/Oct/2020	20:29	Unknown	
43	RA8	BA20574W01	22/Oct/2020	20:44	Unknown	
44	RB1	BA20612W01	22/Oct/2020	20:59	Unknown	93824 CASE316 DRILL 320
45	RB2	BA20579W01 DF5	22/Oct/2020	21:13	Unknown	93825 McCall DF5
46	RB3	BA20575W01 DF5	22/Oct/2020	21:28	Unknown	93822 CCDOIVRY DF5
47	RC7	BA20573W01	22/Oct/2020	21:43	Unknown	93814 WELL SAMPLE
48	RC8	BA20581W01	22/Oct/2020	21:57	Unknown	93847 HOUSE/SW
49	RD1	BA20679W01	22/Oct/2020	22:12	Unknown	93848 STANDING
50	RD2	BA20678W01	22/Oct/2020	22:27	Unknown	93849 AIR343 DRILL346
51	RD3	BA19987W03	22/Oct/2020	22:41	Unknown	
52	R2	201022A CCV/LCS 3	22/Oct/2020	22:56	Check Standard	11 samples inj, OK by SD
53	R1	201022A CCB 3	22/Oct/2020	23:11	Unknown	
54	RB4	BA19887W09 DF20	22/Oct/2020	23:25	Unknown	
55	RB5	BA19889W09 DF20	22/Oct/2020	23:40	Unknown	
56	RB6	BA19891W09 DF20	22/Oct/2020	23:55	Unknown	
57	RB7	BA19892W09 DF20	23/Oct/2020	00:09	Unknown	
58	R2	201022A CCV/LCS 3	23/Oct/2020	00:24	Check Standard	
59	R1	201022A CCB 3	23/Oct/2020	00:38	Unknown	

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Method 300 and 9056 Injection Log

No.	Position	Injection Description	Inject Time		Type	Comment
1	R2	201026A CCV/LCS 1	26/Oct/2020	17:13	Check Standard	
2	R1	201026A CCB 1	26/Oct/2020	17:28	Unknown	
3	BC5	93885 WELL	26/Oct/2020	17:42	Unknown	
4	BE1	BA20652W01	26/Oct/2020	17:57	Unknown	
5	BE2	93892 WELL	26/Oct/2020	18:12	Unknown	
6	BA1	BA20084W06	26/Oct/2020	18:26	Unknown	
7	BA2	BA20079W12	26/Oct/2020	18:41	Unknown	
8	BA3	BA20080W34	26/Oct/2020	18:55	Unknown	
9	BA4	BA20081W12	26/Oct/2020	19:10	Unknown	
10	BA5	BA20040W09	26/Oct/2020	19:25	Unknown	
11	BA6	BA20041W09	26/Oct/2020	19:39	Unknown	
12	BA7	BA20042W09	26/Oct/2020	19:54	Unknown	
13	R2	201026A CCV/LCS 2	26/Oct/2020	20:09	Check Standard	F fails
14	R1	201026A CCB 2	26/Oct/2020	20:23	Unknown	
15	BA8	BA20327W07	26/Oct/2020	20:38	Unknown	
16	BB1	BA20328W07	26/Oct/2020	20:53	Unknown	
17	BB2	BA20476W12	26/Oct/2020	21:07	Unknown	
18	BB3	BA20477W12	26/Oct/2020	21:22	Unknown	
19	BB4	BA20478W34	26/Oct/2020	21:37	Unknown	
20	BB5	93873 ERH 1187 DF5	26/Oct/2020	21:51	Unknown	
21	BB6	93873 ERH 1185 DF5	26/Oct/2020	22:06	Unknown	
22	BB7	BA20588W01 DF5	26/Oct/2020	22:21	Unknown	
23	BB8	BA20539W11 DF5	26/Oct/2020	22:35	Unknown	
24	BC1	BA20539W11 DF5 MS	26/Oct/2020	22:50	Unknown	
25	BC2	BA20539W11 DF5 MSD	26/Oct/2020	23:04	Unknown	
26	BC3	BA20539W11 MS	26/Oct/2020	23:19	Unknown	
27	BC4	BA20539W11 MSD	26/Oct/2020	23:34	Unknown	
28	R2	201026A CCV/LCS 3	26/Oct/2020	23:48	Check Standard	F fails
29	R1	201026A CCB 3	27/Oct/2020	00:03	Unknown	
30	BC6	BA20130W01 PT	27/Oct/2020	00:18	Unknown	
31	BC7	BA20131W01 PT	27/Oct/2020	00:32	Unknown	
32	BC8	BA20133W01 PT	27/Oct/2020	00:47	Unknown	
33	BD1	BA20655W12	27/Oct/2020	01:02	Unknown	
34	BD2	BA20655W12 DF20	27/Oct/2020	01:16	Unknown	
35	BD3	BA20656W35	27/Oct/2020	01:31	Unknown	
36	BD4	BA20656W35 DF20	27/Oct/2020	01:46	Unknown	
37	BD5	BA20657W06	27/Oct/2020	02:00	Unknown	
38	BD6	BA20657W06 DF20	27/Oct/2020	02:15	Unknown	
39	BD7	BA20658W06	27/Oct/2020	02:29	Unknown	
40	BD8	BA20658W06 DF20	27/Oct/2020	02:44	Unknown	
41	BE3	BA20659W06	27/Oct/2020	02:59	Unknown	
42	BE4	BA20659W06 DF20	27/Oct/2020	03:13	Unknown	
43	R2	201026A CCV/LCS 1	27/Oct/2020	03:28	Check Standard	
44	R1	201026A CCB 1	27/Oct/2020	03:43	Unknown	
45	BE5	BA20660W06	27/Oct/2020	03:57	Unknown	
46	BE6	BA20660W06 DF20	27/Oct/2020	04:12	Unknown	
47	BE7	BA20661W06	27/Oct/2020	04:27	Unknown	
48	BE8	BA20661W06 DF20	27/Oct/2020	04:41	Unknown	
49	R2	201026A CCV/LCS 1	27/Oct/2020	04:56	Check Standard	
50	R1	201026A CCB 1	27/Oct/2020	05:11	Unknown	
51	R2	stop 1026	27/Oct/2020	05:22	Unknown	

INORGANIC ANALYSIS
Calibration and Raw Data

Ferrous Iron — Rev 2, 04-05-19

Method SM3500Fe | Units mg/L | Instrument: Genisis Spectrometer
Analyte Fe2+ | QCG: 201023 | Wavelength: 510 nm
Analyist fjr | Final Volume: 50mL | Units: mg/L

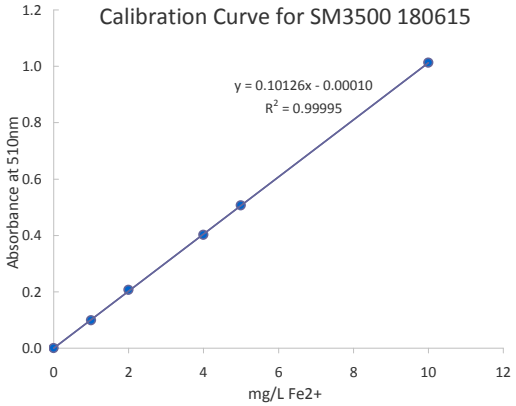
Date	Time	Appl ID	[Fe2+]	Absorbance	% Recovery
06/26/20	10:49	ICB	0.00	0.000	
06/26/20	10:49	Ical 1	1.00	0.099	97.9%
06/26/20	10:50	Ical 2	2.00	0.207	102.3%
06/26/20	10:51	Ical 3	4.00	0.402	99.3%
06/26/20	10:51	Ical 4	5.00	0.506	100.0%
06/26/20	10:52	Ical 5	10.00	1.013	100.1%
06/26/20	10:52	ICV	3.00	0.313	103.1%
06/26/20	10:53	ICB	0.00	0.000	

Slope	0.101255102
Intercept	-0.000102041
Coefficient of Determination	0.999948376

Algortithm Check:	Appl ID	Absorbance	Result
	LCS A201023	0.305	3.01

Result = (Absorbance-Raw Blk-Intercept)/ Slope

Test:	FJR	10/23/20	3.01



Date	Time	Appl ID	DF	Raw Result	SubSample Amount	Raw BLK	Calc Conc	Result	QC True	% Recovery
10/23/20	18:43	CCV 4.0 A201023	1	0.408	25mL		4.03	4.03	4.00	100.8%
10/23/20	18:42	CCB A201023	1	0.000	25mL		0.00	0.00		
10/23/20	18:43	LCS A201023	1	0.305	25mL		3.01	3.01	3.00	100.4%
10/23/20	18:44	LCSD A201023	1	0.311	25mL		3.07	3.07	3.00	102.4%
10/23/20	18:44	BA19198W01 PT	1	0.082	25mL		0.81	0.81		
10/23/20	18:45	BA20268W09	1	0.077	25mL		0.76	0.76		
10/23/20	19:46	BA20486W09	1	0.028	25mL		0.28	0.28		
10/23/20	18:59	BA20539W13	1	0.018	25mL		0.18	0.18		
10/23/20	19:00	BA20544W09	1	0.012	25mL		0.12	0.12		
10/23/20	19:03	BA20544W09 MS	1	0.324	25mL		3.20	3.20		
10/23/20	19:04	BA20544W09 MSD	1	0.325	25mL		3.21	3.21		
10/23/20	19:49	CCV 4.0 A201023	1	0.413	25mL		4.08	4.08	4.00	102.0%
10/23/20	19:49	CCB A201023	1	0.003	25mL		0.03	0.03		

Standard Prep

	Ferrous Iron Standards		Prep'd By (Initials)		FJR		
Prep Date	06/26/20						
Exp Date	06/26/21						
Stock Label	Supplier	Batch Number	Exp Date	Aliquot from Stock	Final Volume	Solvent	Ferrous Iron Concentration
Ferrous Ammonium Sulfate	J.T.Baker	0000184592	08/21/20	0.351	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Sulfate	Mallinckrodt	Lot 5056 KDRX	NA	0.250	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Iron CCV/LCS/MS/ICV			Prep'd By (Initials)		FJR		
Prep Date	See Injection Log						
Exp Date	24 Hours						
Initial Standard Information	Supplier	Batch Number	Exp Date	Final Standard Information			
Ferrous Iron CCV	J.T.Baker	0000184592	Prep Daily	500uL	25mL	Deionized water	4mg/L
Ferrous Iron ICV/LCS	Mallinckrodt	Lot 5056 KDRX	Prep Daily	375uL	25mL	Deionized water	3mg/L
	Ferrous Iron Calibration Curve		Prep'd By (Initials)		FJR		
Prep Date	06/26/20						
Exp Date	06/26/21						
Final Standard Information							
Point Label	Supplier	Batch Number	Exp Date	Aliquot from Stock (mL)	Final Volume	Solvent	Ferrous Iron Concentration
CCB	J.T.Baker	0000184592	06/26/21	0	25mL	Deionized water	0mg/L
Ical 1	J.T.Baker	0000184592	06/26/21	0.125	25mL	Deionized water	1mg/L
Ical 2	J.T.Baker	0000184592	06/26/21	0.25	25mL	Deionized water	2mg/L
Ical 3	J.T.Baker	0000184592	06/26/21	0.5	25mL	Deionized water	4mg/L
Ical 4	J.T.Baker	0000184592	06/26/21	0.625	25mL	Deionized water	5mg/L
Ical 5	J.T.Baker	0000184592	06/26/21	1.25	25mL	Deionized water	10mg/L
ICV	Mallinckrodt	Lot 5056 KDRX	06/26/21	0.375	25mL	Deionized water	3mg/L

Reagent Prep

Reagent	Chemical Lot #	Chemical	Chemical Expiration Date	Amount	Date Prep
Colorizer	0747C107	1,10-phenanthroline	na	0.2056	07/28/20
		HCL conc	na	enough to dissolve	
Buffer	Z28B018	Ammonia Acetate	na	249.2	04/29/20
	2018071399	Glacial Acetic Acid	na	700mL	

A.P.P.L. INC.
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM
ARF No: 93818 SDG: 93818
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 10/22/20

Analyte	Calibration Verification									M
	True CCV1	Found 20:12	%R(1)	True ICV	Found 20:16	%R(1)	True CCV1	Found 20:38	%R(1)	
TOXN	3	3.0702	102	3	3.03	101	3	2.995	99.8	

(1) Control Limits: 90-110

A.P.P.L. INC.
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM
ARF No: 93818 SDG: 93818
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 10/22/20

Analyte	Calibration Verification									M
	True CCV1	Found 21:01	%R(1)	True CCV1	Found 21:06	%R(1)	True	Found	%R(1)	
TOXN	3	3.1001	103	3	3.1733	106				

(1) Control Limits: 90-110

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No.: 93818 SDG: 93818

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 10/22/20 20:14	C	ICB 10/22/20 20:18	C	CCB 10/22/20 20:41	C	CCB 10/22/20 21:02	C	CCB 10/22/20 21:07	C	
TOXN	.100	U	.100	U	.100	U	.100	U	.1000	U	

AQ2 Tray Report

Serial Number:	190170
Software Version:	2.1.0
Report Requested By:	Eric RR
Date & Time:	2020-10-27 12:04:03
Tray Number:	2
Tray Name:	201022A NO2 NO3 TOXN PT

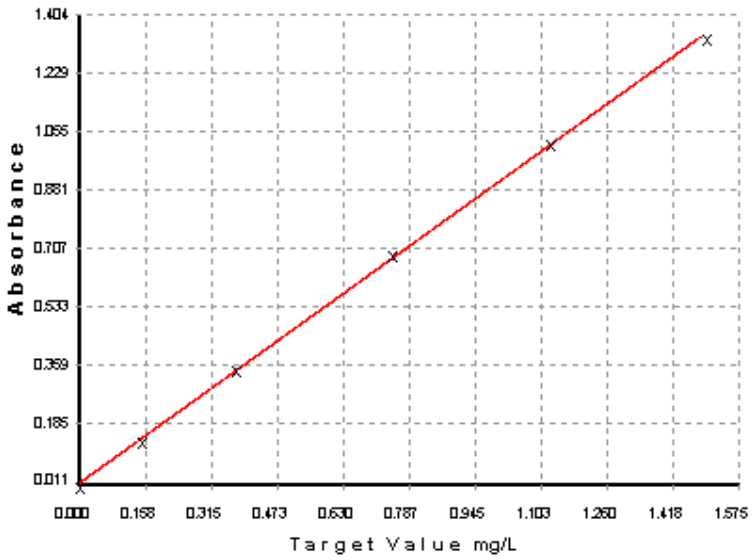
Nitrite-N

Calibration Chart

Type	Absorbance	Calc mg/L	Target mg/L	% Error
S1	0.0109	-0.0048	0.0000	
S90	0.1417	0.1424	0.1500	-5.07
S91	0.3525	0.3795	0.3750	1.21
S92	0.6924	0.7618	0.7500	1.57
S93	1.0237	1.1345	1.1250	0.84
S94	1.3367	1.4866	1.5000	-0.89
S0	0.0216	0.0072	0.0000	

Polynomial Order:	1
Correlation Coefficient:	0.9999
Carryover(%):	0.8
Calibration equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured absorbance
a =:	-1.704065E-002
b =:	1.124898E+000
Date & Time:	2020-10-22 18:56:36

Calibration Graph



Test Results

Cup	Type	ID	Result	Units	QC Pro	Raw Data	Auto Dil.	Man Dil.	User	Time/Date
	S1	Standard 1	0.0109			0.010855				2020-10-22 18:49:15
	S90	Standard 90	0.1417			0.141738				2020-10-22 18:50:28
	S91	Standard 91	0.3525			0.352546				2020-10-22 18:51:41
	S92	Standard 92	0.6924			0.692366				2020-10-22 18:52:55
	S93	Standard 93	1.0237			1.023652				2020-10-22 18:54:08
	S94	Standard 94	1.3367			1.336715				2020-10-22 18:55:22
	S0	Standard 0	0.0216			0.021590				2020-10-22 18:56:36
	CCV	CCV .75	0.7664	mg/L		0.696490				2020-10-22 18:57:49
	CCB	CCB	0.0017	mg/L		0.016695				2020-10-22 18:59:03
3	U1	ICV NO2	0.7272	mg/L		0.661640				2020-10-22 19:00:17
4	U2	ICV NO3 TOXN	0.0003	mg/L		0.015450				2020-10-22 19:01:31
5	U3	ICB NO2 NO3 TOXN	-0.0054ELL	mg/L		0.010338				2020-10-22 19:02:44
6	U4	201022A Blk NO2 NO3 TOXN	-0.0054ELL	mg/L		0.010338				2020-10-22 19:04:00
7	U5	201022A LCS NO2	0.7249	mg/L		0.659560				2020-10-22 19:05:14
8	U6	201022A LCSD NO2	0.7354	mg/L		0.668885				2020-10-22 19:06:28
9	U7	201022A LCS NO3 TOXN	0.0003	mg/L		0.015450				2020-10-22 19:07:42
10	U8	201022A LCSD NO3 TOXN	-0.0057ELL	mg/L		0.010079				2020-10-22 19:08:57
11	U9	1 ppm NO2	1.0342	mg/L		0.934519				2020-10-22 19:10:11
12	U10	1 ppm NO3	0.0016	mg/L		0.016576				2020-10-22 19:11:26
	CCV	CCV .75	0.7824	mg/L		0.710655				2020-10-22 19:12:40
	CCB	CCB	0.0007	mg/L		0.015790				2020-10-22 19:13:54
13	U11	BA20486W08 pH 5.80	-0.0054ELL	mg/L		0.010364				2020-10-22 19:15:09
14	U12	BA20539W12 pH 6.94	-0.0059ELL	mg/L		0.009924				2020-10-22 19:16:23
15	U13	BA20539W12 MS pH 6.94	0.7648	mg/L		0.695048				2020-10-22 19:17:36

16	U14	BA20539W12 MSD pH 6.94	0.7537	mg/L	0.685151		2020-10-22 19:18:52
17	U15	BA20544W08 pH 6.27	-0.0005	mg/L	0.014731		2020-10-22 19:20:06
18	U16	BA20655W12	-0.0050ELL	mg/L	0.010687		2020-10-22 19:21:20
19	U17	BA20656W34	-0.0045	mg/L	0.011153		2020-10-22 19:22:33
20	U18	BA20657W06	-0.0060ELL	mg/L	0.009847		2020-10-22 19:23:47
21	U19	BA20658W06	-0.0049ELL	mg/L	0.010778		2020-10-22 19:25:00
22	U20	BA20659W08	-0.0061ELL	mg/L	0.009769		2020-10-22 19:26:13
	CCV	CCV .75	0.7852	mg/L	0.713126		2020-10-22 19:27:27
	CCB	CCB	0.0005	mg/L	0.015620		2020-10-22 19:28:40
23	U21	BA20660W06	-0.0048	mg/L	0.010855		2020-10-22 19:29:54
24	U22	BA20661W06	0.0007	mg/L	0.015803		2020-10-22 19:31:09
25	U23	BA20710W12	-0.0048	mg/L	0.010855		2020-10-22 19:33:43
26	U24	BA20711W06	0.0001	mg/L	0.015227		2020-10-22 19:35:56
27	U25	BA20712W06	0.0018	mg/L	0.016773		2020-10-22 19:38:14
28	U26	BA20713W06	-0.0004	mg/L	0.014757		2020-10-22 19:40:33
29	U27	BA20131W01 PT NO2	2.1250	mg/L	0.487407	x4.0000	2020-10-22 21:26:49
29	U27	BA20131W01 PT NO2	2.0950	mg/L	1.877505		2020-10-22 19:42:53
30	U28	BA20133W01 PT NO3 TOXN	0.0078	mg/L	0.022055		2020-10-22 19:45:13
	CCV	CCV .75	0.7269	mg/L	0.661351		2020-10-22 19:47:26
	CCB	CCB	-0.0009	mg/L	0.014339		2020-10-22 19:49:43
	CCV	CCV .75	0.7485	mg/L	0.680527		2020-10-22 21:22:05
	CCB	CCB	0.0002	mg/L	0.015345		2020-10-22 21:24:30
	CCV	CCV .75	0.7280	mg/L	0.662278		2020-10-22 21:29:09
	CCB	CCB	-0.0006	mg/L	0.014626		2020-10-22 21:30:17

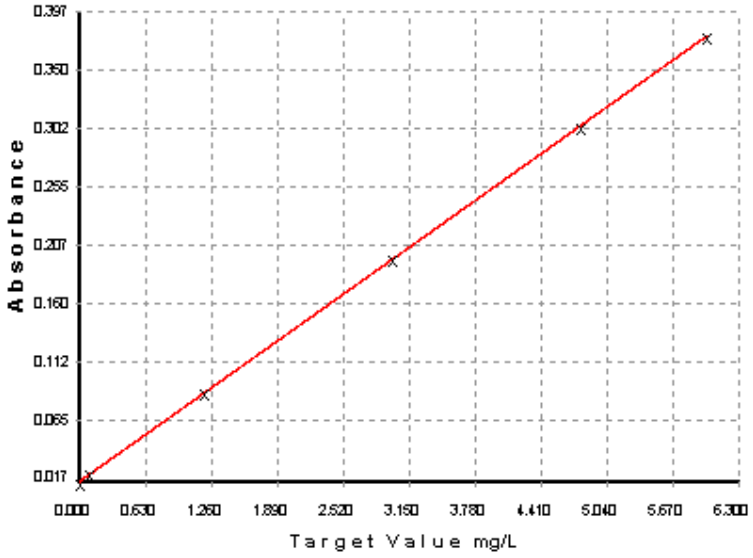
TOXN

Calibration Chart

Type	Absorbance	Calc mg/L	Target mg/L	% Error
S1	0.0172	-0.0167	0.0000	
S90	0.0253	0.1190	0.1000	18.97
S91	0.0902	1.2030	1.2000	0.25
S92	0.1976	2.9944	3.0000	-0.19
S93	0.3053	4.7924	4.8000	-0.16
S94	0.3781	6.0080	6.0000	0.13
S0	0.0178	-0.0057	0.0000	

Polynomial Order:	1
Correlation Coefficient:	1.0000
Carryover(%):	0.2
Calibration equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured absorbance
a =:	-3.032165E-001
b =:	1.669021E+001
Date & Time:	2020-10-22 20:07:56

Calibration Graph



Test Results

Cup	Type	ID	Result	Units	QC Pro	Raw Data	Auto Dil.	Man Dil.	User	Time/Date
	S1	Standard 1	0.0172			0.017167				2020-10-22 19:54:46
	S90	Standard 90	0.0253			0.025296				2020-10-22 19:56:58
	S91	Standard 91	0.0902			0.090244				2020-10-22 19:59:10
	S92	Standard 92	0.1976			0.197576				2020-10-22 20:01:22
	S93	Standard 93	0.3053			0.305306				2020-10-22 20:03:33
	S94	Standard 94	0.3781			0.378138				2020-10-22 20:05:45
	S0	Standard 0	0.0178			0.017825				2020-10-22 20:07:56
	CCV	CCV	3.0702	mg/L		0.202117				2020-10-22 20:12:09
	CCB	CCB	-0.0154	mg/L		0.017246				2020-10-22 20:14:22
4	U2	ICV NO3 TOXN	3.0300	mg/L		0.199710				2020-10-22 20:16:36
5	U3	ICB NO2 NO3 TOXN	-0.0195ELL	mg/L		0.016996				2020-10-22 20:18:51
6	U4	201022A Blk NO2 NO3 TOXN	-0.0239ELL	mg/L		0.016734				2020-10-22 20:21:06
9	U7	201022A LCS NO3 TOXN	2.9977	mg/L		0.197775				2020-10-22 20:23:20
10	U8	201022A LCSD NO3 TOXN	2.9954	mg/L		0.197635				2020-10-22 20:25:34
12	U10	1 ppm NO3	0.9807	mg/L		0.076927				2020-10-22 20:27:48
13	U11	BA20486W08 pH 5.80	0.4799	mg/L		0.046919				2020-10-22 20:30:02
14	U12	BA20539W12 pH 6.94	0.3727	mg/L		0.040496				2020-10-22 20:32:16
15	U13	BA20539W12 MS pH 6.94	3.6202	mg/L		0.235071				2020-10-22 20:34:30
16	U14	BA20539W12 MSD pH 6.94	3.4775	mg/L		0.226521				2020-10-22 20:36:44
	CCV	CCV	2.9950	mg/L		0.197615				2020-10-22 20:38:59
	CCB	CCB	0.0094	mg/L		0.018733				2020-10-22 20:41:14
17	U15	BA20544W08 pH 6.27	0.3852	mg/L		0.041245				2020-10-22 20:43:29
18	U16	BA20655W12	4.5665	mg/L		0.291772				2020-10-22 20:45:43
19	U17	BA20656W34	4.5760	mg/L		0.292341				2020-10-22 20:47:58
20	U18	BA20657W06	0.0864	mg/L		0.023346				2020-10-22 20:50:14
21	U19	BA20658W06	5.1892	mg/L		0.329078				2020-10-22 20:52:28
22	U20	BA20659W08	4.6378	mg/L		0.296046				2020-10-22 20:54:43
23	U21	BA20660W06	5.2565	mg/L		0.333111				2020-10-22 20:56:57
24	U22	BA20661W06	2.2677	mg/L		0.154039				2020-10-22 20:59:12
25	U23	BA20710W12	4.4418	mg/L		0.284297				2020-10-22 20:59:50
26	U24	BA20711W06	1.5925	mg/L		0.113585				2020-10-22 21:00:55
	CCV	CCV	3.1001	mg/L		0.203910				2020-10-22 21:01:51
	CCB	CCB	-0.0015	mg/L		0.018075				2020-10-22 21:02:47
27	U25	BA20712W06	1.2178	mg/L		0.091131				2020-10-22 21:03:44
28	U26	BA20713W06	0.0789	mg/L		0.022893				2020-10-22 21:04:40
30	U28	BA20133W01 PT NO3 TOXN	22.9693	mg/L		0.155789	x10.0000			2020-10-22 21:35:51
30	U28	BA20133W01 PT NO3 TOXN	21.6366	mg/L		1.314534				2020-10-22 21:05:36
	CCV	CCV	3.1733	mg/L		0.208294				2020-10-22 21:06:33
	CCB	CCB	-0.0064	mg/L		0.017785				2020-10-22 21:07:29
	CCV	CCV	3.0681	mg/L		0.201996				2020-10-22 21:33:58

CCB	CCB	-0.0053	mg/L	0.017851	2020-10-22 21:34:55
CCV	CCV	3.2016	mg/L	0.209991	2020-10-22 21:36:48
CCB	CCB	0.0050	mg/L	0.018470	2020-10-22 21:37:44

Nitrate-N

Test Results

Cup	Type	ID	Result	Units	QC Pro	Raw Data	Auto Dil.	Man Dil.	User	Time/Date
4	U2	ICV NO3 TOXN	3.0296	mg/L		0.000000				2020-10-22 20:16:36
4	U2	ICV NO3 TOXN				0.000000				2020-10-22 20:16:36
5	U3	ICB NO2 NO3 TOXN	-0.0141	mg/L		0.000000				2020-10-22 20:18:51
5	U3	ICB NO2 NO3 TOXN				0.000000				2020-10-22 20:18:51
6	U4	201022A Blk NO2 NO3 TOXN	-0.0185	mg/L		0.000000				2020-10-22 20:21:06
6	U4	201022A Blk NO2 NO3 TOXN				0.000000				2020-10-22 20:21:06
9	U7	201022A LCS NO3 TOXN	2.9973	mg/L		0.000000				2020-10-22 20:23:20
9	U7	201022A LCS NO3 TOXN				0.000000				2020-10-22 20:23:20
10	U8	201022A LCSD NO3 TOXN	3.0011	mg/L		0.000000				2020-10-22 20:25:34
10	U8	201022A LCSD NO3 TOXN				0.000000				2020-10-22 20:25:34
12	U10	1 ppm NO3	0.9791	mg/L		0.000000				2020-10-22 20:27:48
12	U10	1 ppm NO3				0.000000				2020-10-22 20:27:48
13	U11	BA20486W08 pH 5.80	0.4853	mg/L		0.000000				2020-10-22 20:30:02
13	U11	BA20486W08 pH 5.80				0.000000				2020-10-22 20:30:02
14	U12	BA20539W12 pH 6.94	0.3785	mg/L		0.000000				2020-10-22 20:32:16
14	U12	BA20539W12 pH 6.94				0.000000				2020-10-22 20:32:16
15	U13	BA20539W12 MS pH 6.94	2.8554	mg/L		0.000000				2020-10-22 20:34:30
15	U13	BA20539W12 MS pH 6.94				0.000000				2020-10-22 20:34:30
16	U14	BA20539W12 MSD pH 6.94	2.7238	mg/L		0.000000				2020-10-22 20:36:44
16	U14	BA20539W12 MSD pH 6.94				0.000000				2020-10-22 20:36:44
17	U15	BA20544W08 pH 6.27	0.3856	mg/L		0.000000				2020-10-22 20:43:29
17	U15	BA20544W08 pH 6.27				0.000000				2020-10-22 20:43:29
18	U16	BA20655W12	4.5715	mg/L		0.000000				2020-10-22 20:45:43
18	U16	BA20655W12				0.000000				2020-10-22 20:45:43
19	U17	BA20656W34	4.5805	mg/L		0.000000				2020-10-22 20:47:58
19	U17	BA20656W34				0.000000				2020-10-22 20:47:58
20	U18	BA20657W06	0.0924	mg/L		0.000000				2020-10-22 20:50:14
20	U18	BA20657W06				0.000000				2020-10-22 20:50:14
21	U19	BA20658W06	5.1941	mg/L		0.000000				2020-10-22 20:52:28
21	U19	BA20658W06				0.000000				2020-10-22 20:52:28
22	U20	BA20659W08	4.6439	mg/L		0.000000				2020-10-22 20:54:43
22	U20	BA20659W08				0.000000				2020-10-22 20:54:43
23	U21	BA20660W06	5.2613	mg/L		0.000000				2020-10-22 20:56:57
23	U21	BA20660W06				0.000000				2020-10-22 20:56:57
24	U22	BA20661W06	2.2670	mg/L		0.000000				2020-10-22 20:59:12
24	U22	BA20661W06				0.000000				2020-10-22 20:59:12
25	U23	BA20710W12	4.4466	mg/L		0.000000				2020-10-22 20:59:50
25	U23	BA20710W12				0.000000				2020-10-22 20:59:50
26	U24	BA20711W06	1.5925	mg/L		0.000000				2020-10-22 21:00:55
26	U24	BA20711W06				0.000000				2020-10-22 21:00:55
27	U25	BA20712W06	1.2159	mg/L		0.000000				2020-10-22 21:03:44
27	U25	BA20712W06				0.000000				2020-10-22 21:03:44
28	U26	BA20713W06	0.0793	mg/L		0.000000				2020-10-22 21:04:40
28	U26	BA20713W06				0.000000				2020-10-22 21:04:40
30	U28	BA20133W01 PT NO3 TOXN	22.9615	mg/L		0.000000				2020-10-22 21:35:51
30	U28	BA20133W01 PT NO3 TOXN				0.000000				2020-10-22 21:35:51

Nitrite

High Point @ 1.5 mg/L
0.2463 mL NO2 Inorganic Ventures lot N2-NOX672889-40759 exp: 05/01/20
50 mL DI Water

CCV @ 0.75 mg/L
0.1232 mL NO2 Inorganic Ventures lot N2-NOX672889-40759 exp: 05/01/20
50 mL DI Water

ICV/LCS @ 0.73 mg/L
0.120 mL NO2 Inorganic Ventures lot M2-NOX660562-40468 exp: 08/25/21
50 mL DI Water

1 mg/L NO2
400 uL of High point and 200 uL of DI made directly into a sample cup

Prep 10/15/20
Exp 10/29/20
ERR

Nitrate/TOXN

High Point @ 6 mg/L
0.300 mL NO3 O2Si lot 880117-4-39577 exp: 2/21/20
50 mL DI Water

CCV @ 3.0 mg/L
0.150 mL NO3 O2Si lot 880117-4-39577 exp: 2/21/20
50 mL DI Water

ICV/LCS @ 3.0 mg/L
0.150 mL NO3 Inorganic Ventures lot P2-NOX675324-49391 exp: 02/14/23
50 mL DI Water

1 mg/L NO3
100 uL of High point and 500 uLof DI made directly into a sample cup

MS @ 0.73 mg/L NO2 and 2.5 mg/L NO3
0.120 mL NO2 Inorganic Ventures lot M2-NOX660562-40468 exp: 08/25/21and
0.125 mL NO3 Inorganic Ventures lot P2-NOX675324-49391 exp: 02/14/23
Final volume 50 mL of sample

Prep 10/15/20
Exp 10/29/20
ERR

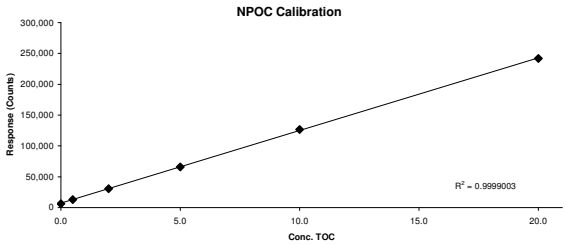
TOTAL ORGANIC CARBON

Method: WetChem | Units mg/L | Instrument: Tic Toc

Analyte: TOC | QCG: 201026A

Analyist: AAR | Final Volume: 40mL

Date	Time	Appl ID	[TOC]	Raw	% Recovery
06/11/20	0:01	QC blank	0.00	6172	
06/11/20	0:41	Ical 1	0.50	13120	
06/11/20	1:19	Ical 2	2.00	30622	
06/11/20	1:58	Ical 3	5.00	66151	
06/11/20	2:37	Ical 4	10.00	126505	
06/11/20	3:16	Ical 5	20.00	241922	
06/11/20	18:06	ICB	0.00	6336	
06/11/20	18:46	ICV	4.99	65817	99.8%



Date	Time	Appl ID	DF	Raw Result	SubSample Amount	Filter Blank Subtract	Calc Conc	Result	Range (mg/L)	QC True	% Recovery
2020-10-27	04:38 AM	CCV	1	57910	40mL	0.000	4.553	4.55	0.04	5.00	91.1%
2020-10-27	05:18 AM	CCB	1	2804	40mL	0.000	0	0.00	0.00		
2020-10-27	05:57 AM	201026A LCS	1	59614	40mL	0.000	4.697	4.70	0.02	5.00	93.9%
2020-10-27	06:38 AM	201026A LCSD	1	58005	40mL	0.000	4.561	4.56	0.02	5.00	91.2%
2020-10-27	07:19 AM	BA20135W04	1	18408	40mL	0.000	1.419	1.42	0.05		
2020-10-27	07:57 AM	BA20539W09	1	20763	40mL	0.000	1.619	1.62	0.02		
2020-10-27	08:34 AM	BA20544W05	1	265110	40mL	0.000	22.36	22.36	0.71		
2020-10-27	09:13 AM	BA20655W08	1	5201	40mL	0.000	0.298	0.30	0.01		
2020-10-27	09:49 AM	BA20656W19	1	4137	40mL	0.000	0.208	0.21	0.00		
2020-10-27	10:24 AM	BA20656W19 DUP	1	3809	40mL	0.000	0.18	0.18	0.01		
2020-10-27	11:01 AM	BA20656W25 MS	1	55231	40mL	0.000	4.545	4.55	1.12		
2020-10-27	11:38 AM	BA20656W25 MSD	1	58301	40mL	0.000	4.805	4.81	0.03		
2020-10-27	12:16 PM	CCV	1	59150	40mL	0.000	4.658	4.66	0.09	5.00	93.2%
2020-10-27	12:56 PM	CCB	1	2859	40mL	0.000	0	0.00	0.00		

Name of Final Standard **TOC Calibration Curve** **Prep'd By (Initials)** **AR**

Prep Date **06/11/20**

Exp Date **06/11/21**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	20 uL	40 mL	**DI Water**	0.5 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	100 uL	40 mL	**DI Water**	2 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	250 uL	40 mL	**DI Water**	5 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	500 uL	40 mL	**DI Water**	10 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	1000 uL	40 mL	**DI Water**	20 ppm

Name of Final Standard **ICV (TOC)** **Prep'd By (Initials)** **AR**

Prep Date **06/11/20**

Exp Date **06/11/21**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1000 PPM ICV TOC Intermediate	APPL Inc.	Prep: 2/11/19	1000 mg/L	**6465171-49409**	**06/30/21**	500 uL	40mL	**DI Water**	10 ppm

Name of Final Standard **CCV (TOC)** **Prep'd By (Initials)** **AR**

Prep Date **See Data**

Exp Date **1 year**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**6465171-49409**	**06/30/21**	200 uL	40 mL	**DI Water**	5 ppm

Name of Final Standard **TOC_LCS/LCSD** **Prep'd By (Initials)** **AR**

Prep Date **See Data**

Exp Date **1 year**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	ULTRA Scientific	IQC-106-5	1000 mg/L	**6465171-49409**	**06/30/21**	200 uL	40 mL	**DI Water**	5 ppm

Name of Final Standard **TOC_MS/MSD** **Prep'd By (Initials)** **AR**

Prep Date **See Data**

Exp Date **1 year**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	ULTRA Scientific	IQC-106-5	1000 mg/L	**6465171-49409**	**06/30/21**	200 uL	40 mL	**sample**	5 ppm

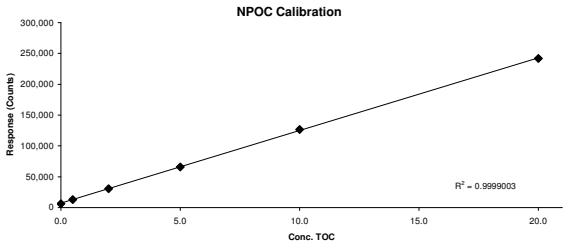
TOTAL ORGANIC CARBON

Method: WetChem | Units mg/L | Instrument: Tic Toc

Analyte: TOC | QCG: 201028A

Analyist: AAR | Final Volume: 40mL

Date	Time	Appl ID	[TOC]	Raw	% Recovery
06/11/20	0:01	QC blank	0.00	6172	
06/11/20	0:41	Ical 1	0.50	13120	
06/11/20	1:19	Ical 2	2.00	30622	
06/11/20	1:58	Ical 3	5.00	66151	
06/11/20	2:37	Ical 4	10.00	126505	
06/11/20	3:16	Ical 5	20.00	241922	
06/11/20	18:06	ICB	0.00	6336	
06/11/20	18:46	ICV	4.99	65817	99.8%



Date	Time	Appl ID	DF	Raw Result	SubSample Amount	Filter Blank Subtract	Calc Conc	Result	Range (mg/L)	QC True	% Recovery
2020-10-29	12:49 AM	CCV	1	56304	40mL	0.000	4.467	4.47	0.05	5.00	89.3%
2020-10-29	01:29 AM	CCB	1	3002	40mL	0.000	0	0.00	0.00		
2020-10-29	02:08 AM	201028A LCS	1	59206	40mL	0.000	4.713	4.71	0.00	5.00	94.3%
2020-10-29	02:48 AM	201028A LCSD	1	56071	40mL	0.000	4.447	4.45	0.03	5.00	88.9%
2020-10-29	03:29 AM	BA20544W05 DF 2	1	141223	40mL	0.000	11.844	11.84	0.07		
2020-10-29	04:07 AM	BA20716W06	1	88350	40mL	0.000	7.356	7.36	0.04		
2020-10-29	04:46 AM	BA20718W09	1	65014	40mL	0.000	5.375	5.38	0.01		
2020-10-29	05:24 AM	BA20710W10	1	4417	40mL	0.000	0.232	0.23	0.04		
2020-10-29	06:00 AM	BA20710W10 DUP	1	4140	40mL	0.000	0.208	0.21	0.01		
2020-10-29	06:36 AM	CCV	1	58193	40mL	0.000	4.627	4.63	0.01	5.00	92.5%
2020-10-29	07:16 AM	CCB	1	2917	40mL	0.000	0	0.00	0.00		

Name of Final Standard **TOC Calibration Curve** **Prep'd By (Initials)** **AR**

Prep Date **06/11/20**

Exp Date **06/11/21**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	20 uL	40 mL	**DI Water**	0.5 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	100 uL	40 mL	**DI Water**	2 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	250 uL	40 mL	**DI Water**	5 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	500 uL	40 mL	**DI Water**	10 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	1000 uL	40 mL	**DI Water**	20 ppm

Name of Final Standard **ICV (TOC)** **Prep'd By (Initials)** **AR**

Prep Date **06/11/20**

Exp Date **06/11/21**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1000 PPM ICV TOC Intermediate	APPL Inc.	Prep: 2/11/19	1000 mg/L	**6465171-49409**	**06/30/21**	500 uL	40mL	**DI Water**	10 ppm

Name of Final Standard **CCV (TOC)** **Prep'd By (Initials)** **AR**

Prep Date **See Data**

Exp Date **1 year**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**6465171-49409**	**06/30/21**	200 uL	40 mL	**DI Water**	5 ppm

Name of Final Standard **TOC_LCS/LCSD** **Prep'd By (Initials)** **AR**

Prep Date **See Data**

Exp Date **1 year**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	ULTRA Scientific	IQC-106-5	1000 mg/L	**6465171-49409**	**06/30/21**	200 uL	40 mL	**DI Water**	5 ppm

Name of Final Standard **TOC_MS/MSD** **Prep'd By (Initials)** **AR**

Prep Date **See Data**

Exp Date **1 year**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	ULTRA Scientific	IQC-106-5	1000 mg/L	**6465171-49409**	**06/30/21**	200 uL	40 mL	**sample**	5 ppm

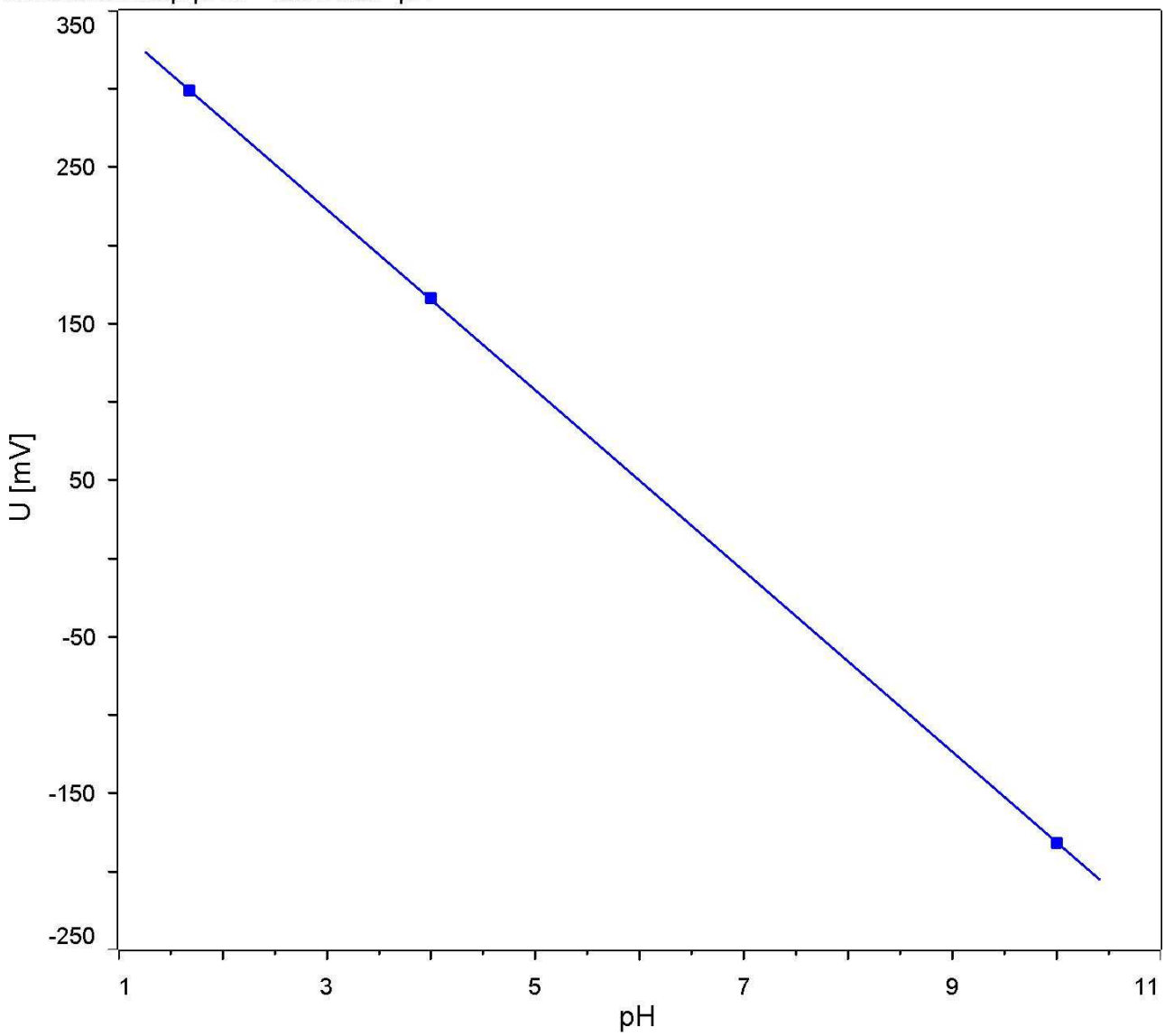
Timao Calibration Curve

2020-10-21 14:30:22

Calculations

Buffer 7	6.99	
Formula	'MEAS pH.EME'	
MEAS pH.EME	6.9929	
Slope	99.60	
Formula	'Calibration loop pH.SLO'	
Calibration loop pH.SLO	99.6	
pH(as)	6.86	
Formula	'Calibration loop pH.ENP'	
Calibration loop pH.ENP	6.863	
Res19	19.1	°C
Formula	'CAL MEAS pH.ETE'	
CAL MEAS pH.ETE	19.0843	

Calibration loop pH.1 - CAL LOOP pH



Metrohm 814/809 Titrando Data

Sample ID	Analysis Date/Time	Method	Titration Volume (to 8.3)	Titration Volume (total)	OH	CO3	HCO3	Total Alk	Unit	Sample Vol	N	Batch	Initials
BA20544W11	2020-10-22 19:10:49 UTC-7	Alkalinity	0.000	1.504	0.00	0.00	61.06	61.06	mg/L	25 mL	0.0203	201022A	AR
BA20539W07	2020-10-22 18:42:38 UTC-7	Alkalinity	0.000	1.578	0.00	0.00	64.07	64.07	mg/L	25 mL	0.0203	201022A	AR
201022A LCSD	2020-10-22 18:34:05 UTC-7	Alkalinity	0.288	6.186	0.00	23.39	227.77	251.15	mg/L	25 mL	0.0203	201022A	AR
201022A LCS	2020-10-22 18:24:45 UTC-7	Alkalinity	0.296	6.414	0.00	24.04	236.37	260.41	mg/L	25 mL	0.0203	201022A	AR
201022A BLK	2020-10-22 18:22:06 UTC-7	Alkalinity	0.000	0.094	0.00	0.00	3.82	3.82	mg/L	25 mL	0.0203	201022A	AR

Tiamo Alkalinity Standard Prep

Prep'd By (Initials): AR

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Unit	Conc	Lot Number - QA Number	Prep/Opened	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc
Sulfuric Acid (H2SO4)	J.T.Baker	NA	NA	**167828**	**NA**	**NA**	PURCHASED	NA	NA	NA
0.10N Sulfuric Acid (H2SO4)	J.T.Baker	Normality	0.1N	**167828**	**03/06/20**	**03/06/21**	3ml	1L	DI	0.10N
0.02N Sulfuric Acid (H2SO4)	J.T.Baker	Normality	0.02N	**167828**	**03/06/20**	**03/06/21**	200mL	1L	DI	0.02N
Inorganic Spike(NaHCO3)	BDH	NA	NA	**19K0856189**	**04/09/20**	**NA**	PURCHASED	NA	NA	NA
Inorganic Spike Solution	BDH	Milligrams/Liters	250mg/L	**1575C510**	**07/27/20**	**01/27/21**	3.5g	500mL	DI	250mg/L
Standarizing Solution(NaCO3)	J.T.Baker	Normality	1N	**223443**	**07/02/20**	**03/11/21**	PURCHASED	NA	NA	NA

Tiamo Electroconductivity Standard Prep

Prep'd By (Initials): AR

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Units	Conc	Lot Number	Prep/Opened	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc. Range (µg/mL)
EC Spike(KCl)	Mallinckrodt AR	Na	NA	**6858 KHMV**	**NA**	**NA**	PURCHASED	NA	NA	NA
EC Spike Solution	Mallinckrodt AR	Moles/Conductivity	0.01M	**6858 KHMV**	**04/23/20**	4/23/21	0.7456g	1L	DI	1412umos
EC Daily LCS Solution	Mallinckrodt AR	Moles/Conductivity	0.0070824M	**6858 KHMV**	05/25/20	5/25/21	0.5280g	1L	DI	1000umos
Storage Solution EC Probe	APPL	NA	NA	NA	NA	NA	NA	NA	DI	NA

Tiamo pH Buffer Reference Standards

Prep Date: Daily

Exp Date: Daily

Prep'd By (Initials): AR **AR**

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Units	pH	Lot Number - QA Number	Opened	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (µg/mL)
pH 1.68 Buffer	VWR	pH Units	1.68	**1006705**	**07/02/20**	**11/27/20**	NA	NA	NA	NA
pH 4.00 Buffer	VWR	pH Units	4	**1901A35-40706**	**01/19/19**	**01/13/21**	NA	NA	NA	NA
pH 10.01 Buffer	VWR	pH Units	10.01	**1004B81**	**07/02/20**	**10/12/21**	NA	NA	NA	NA
pH 7.00 Buffer	Ricca	pH Units	7	**1912A15**	**07/02/20**	**12/01/21**	NA	NA	NA	NA

908 North Temperance Ave. ∇ Clovis, CA 93611 ∇ Phone 559-275-2175 ∇ Fax 559-275-4422

Certification Number: CA1312
NELAP Certification number: CA00046
DoD-ELAP Certificate number: 4064.01

Data Validatable Report

November 25, 2020

AECOM
1001 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

Attn: Brooke Gottmeier

Title: Report of Data: Case 93873-rev

Project: 60571032 CV18F0126 Red Hill Fuel Storage, HI

Contract #: Prime contract # for DoD: NAVY CLEAN N62742-17-F-1800, CV18F0126
Subcontract: 18S-22209-HI27

Dear Ms. Gottmeier:

Five water samples were received October 23, 2020. Written results for the requested analyses are being provided on this November 25, 2020. **Revision 11-25-20:** For samples ERH1185 and ERH1187, B-flags were added to the diesel results.

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

If you have any questions or require further information, please contact your APPL Project Manager, Libby Cheeseborough, libby@applinc.com, at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC and DoD QSM. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.

Paula McCartney

Paula McCartney, Laboratory Director
APPL, Inc.

PM/lac
Enclosure
cc: File

Data Validation Package
for
60571032 CV18F0126 Red Hill Fuel Storage
APPL SDG 93873
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CASE NARRATIVE

Case Narrative

ARF: 93873

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

Sample Receipt Information:

Five water samples were received October 23, 2020, at 6.0°C, 6.0°C, and 6.0°C. The sample group was assigned Analytical Request Form (ARF) number 93873.

Sample Preparation and Analysis Information:

For the EPA 8011 analysis, the samples were extracted according to APPL SOP method MWE012.

For the EPA 8015B analysis, the sample was extracted according to EPA method 3520C. The sample extracts were silica gel cleaned according to APPL's SOP CLN004 and placed on hold.

For the EPA 8270D Phenol analysis, the sample was extracted according to EPA method 3520C.

For the EPA 8270D SIM analysis, the sample was extracted according to EPA method 3520C.

For the APPL SOP ANA2MEE analysis, the sample was extracted according to EPA method 3535.

For the EPA 8260B analysis, the samples were purged according to EPA method 5030B.

For the RSK-175 analysis, the sample was allowed to equilibrate for 10 minutes at 40°C and a portion of the headspace was analyzed.

For the EPA 9060A, 300.0, 353.2, SM 2320B, and SM 3500FeB analyses, the sample was prepared according to the methods.

Only the portion of the injection log relative to these samples is included. A full sequence log is available upon request. Measurement uncertainty can be reported upon request.

Analytical Exceptions, Deviations and Abnormalities.

SOP ANA2MEE: One RPD exceeded the 20% control limit.

SDG	Received	Client ID	APPL ID	Collected DateTime	Matrix	Method	Method Description	Prep DateTime	Analysis DateTime
93873	10/23/20	ERH1184	BA20715	10/22/20 8:00:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER	10/28/20 3:19:00 PM	10/28/20 3:19:00 PM
93873	10/23/20	ERH1184	BA20715	10/22/20 8:00:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER	10/28/20 3:19:00 PM	10/28/20 3:19:00 PM
93873	10/23/20	ERH1184	BA20715	10/22/20 8:00:00 AM	WATER	RSK 175	METHANE BY RSK 175	10/27/20 4:25:00 PM	10/27/20 4:25:00 PM
93873	10/23/20	ERH1185	BA20716	10/22/20 9:50:00 AM	WATER	SM 2320B	Wetlab 2320B - Water	10/28/20 9:43:00 PM	10/28/20 9:43:00 PM
93873	10/23/20	ERH1185	BA20716	10/22/20 9:50:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water	10/23/20 6:36:59 PM	10/23/20 6:36:59 PM
93873	10/23/20	ERH1185	BA20716	10/22/20 9:50:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water	10/26/20 10:06:22 PM	10/26/20 10:06:22 PM
93873	10/23/20	ERH1185	BA20716	10/22/20 9:50:00 AM	WATER	EPA 353.2	WETLAB 353.2 TOXN- WATER	10/27/20 4:16:42 PM	10/27/20 4:16:42 PM
93873	10/23/20	ERH1185	BA20716	10/22/20 9:50:00 AM	WATER	SM3500FeB	Ferrous Iron	10/28/20 4:14:00 PM	10/28/20 4:14:00 PM
93873	10/23/20	ERH1185	BA20716	10/22/20 9:50:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER	10/28/20 3:42:00 PM	10/28/20 3:42:00 PM
93873	10/23/20	ERH1185	BA20716	10/22/20 9:50:00 AM	WATER	EPA 8270D	EPA 8270D WATER	10/27/20 12:15:00 PM	10/29/20 2:04:00 PM
93873	10/23/20	ERH1185	BA20716	10/22/20 9:50:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER	10/27/20 7:00:00 AM	10/29/20 10:32:00 AM
93873	10/23/20	ERH1185	BA20716	10/22/20 9:50:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC	10/26/20 12:45:00 PM	11/04/20 1:36:00 PM
93873	10/23/20	ERH1185	BA20716	10/22/20 9:50:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ	10/26/20 12:45:00 PM	10/28/20 7:05:00 PM
93873	10/23/20	ERH1185	BA20716	10/22/20 9:50:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER	10/28/20 3:42:00 PM	10/28/20 3:42:00 PM
93873	10/23/20	ERH1185	BA20716	10/22/20 9:50:00 AM	WATER	RSK 175	METHANE BY RSK 175	10/27/20 4:28:00 PM	10/27/20 4:28:00 PM
93873	10/23/20	ERH1185	BA20716	10/22/20 9:50:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ	10/27/20 12:15:00 PM	10/29/20 1:51:00 PM
93873	10/23/20	ERH1185	BA20716	10/22/20 9:50:00 AM	WATER	SW846 9060A	9060A TOC	10/29/20 4:07:00 AM	10/29/20 4:07:00 AM
93873	10/23/20	ERH1186	BA20717	10/21/20 8:55:00 AM	WATER	8011	EPA 8011	10/27/20 12:40:00 PM	10/28/20 10:59:00 PM
93873	10/23/20	ERH1186	BA20717	10/21/20 8:55:00 AM	WATER	EPA 8260B	EPA 8260B BTEX & 1,2-DCA WATER	10/28/20 4:05:00 PM	10/28/20 4:05:00 PM
93873	10/23/20	ERH1186	BA20717	10/21/20 8:55:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER	10/28/20 4:05:00 PM	10/28/20 4:05:00 PM
93873	10/23/20	ERH1186	BA20717	10/21/20 8:55:00 AM	WATER	RSK 175	METHANE BY RSK 175	11/02/20 2:18:00 PM	11/02/20 2:18:00 PM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	SM 2320B	Wetlab 2320B - Water	10/28/20 9:48:02 PM	10/28/20 9:48:02 PM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water	10/23/20 6:22:16 PM	10/23/20 6:22:16 PM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water	10/26/20 9:51:43 PM	10/26/20 9:51:43 PM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	EPA 353.2	WETLAB 353.2 TOXN- WATER	10/27/20 4:17:46 PM	10/27/20 4:17:46 PM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	SM3500FeB	Ferrous Iron	10/28/20 4:15:00 PM	10/28/20 4:15:00 PM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	8011	EPA 8011	10/27/20 12:40:00 PM	10/28/20 11:19:00 PM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	EPA 8260B	EPA 8260B BTEX & 1,2-DCA WATER	10/28/20 4:28:00 PM	10/28/20 4:28:00 PM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	EPA 8270D	EPA 8270D WATER	10/27/20 12:15:00 PM	10/29/20 2:29:00 PM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER	10/27/20 7:00:00 AM	10/29/20 10:55:00 AM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC	10/26/20 12:45:00 PM	11/04/20 2:04:00 PM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ	10/26/20 12:45:00 PM	10/28/20 7:33:00 PM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER	10/28/20 4:28:00 PM	10/28/20 4:28:00 PM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	RSK 175	METHANE BY RSK 175	10/27/20 4:30:00 PM	10/27/20 4:30:00 PM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ	10/27/20 12:15:00 PM	10/29/20 2:13:00 PM
93873	10/23/20	ERH1187	BA20718	10/21/20 9:35:00 AM	WATER	SW846 9060A	9060A TOC	10/29/20 4:46:00 AM	10/29/20 4:46:00 AM
93873	10/23/20	ERH1188	BA20719	10/21/20 9:35:00 AM	WATER	8011	EPA 8011	10/27/20 12:40:00 PM	10/28/20 11:39:00 PM
93873	10/23/20	ERH1188	BA20719	10/21/20 9:35:00 AM	WATER	EPA 8260B	EPA 8260B BTEX & 1,2-DCA WATER	10/28/20 4:51:00 PM	10/28/20 4:51:00 PM

93873	10/23/20	ERH1188	BA20719	10/21/20 9:35:00 AM	WATER	EPA 8270D	EPA 8270D WATER	10/27/20 12:15:00 PM	10/29/20 2:55:00 PM
93873	10/23/20	ERH1188	BA20719	10/21/20 9:35:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER	10/27/20 7:00:00 AM	10/29/20 11:18:00 AM
93873	10/23/20	ERH1188	BA20719	10/21/20 9:35:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ	10/26/20 12:45:00 PM	10/28/20 8:01:00 PM
93873	10/23/20	ERH1188	BA20719	10/21/20 9:35:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER	10/28/20 4:51:00 PM	10/28/20 4:51:00 PM
93873	10/23/20	ERH1188	BA20719	10/21/20 9:35:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ	10/27/20 12:15:00 PM	10/29/20 2:35:00 PM

APPL Inc.
Abbreviations and Flags

FLAG	DESCRIPTION
#	Recovery or RPD outside control limits
*	Recovery or RPD outside control limits
B	Analyte detected in associated method blank
C1	Reason for correction: wrote incorrect response
C2	Reason for correction: calculated incorrectly
C3	Reason for correction: needs to be rechecked
C4	Reason for correction: data not usable
DO	Diluted out
E	Exceeds linear range
F	Estimated value
G1	Includes a wide range of hydrocarbons which does not match our gasoline standard
G10	Includes a match to hydrocarbon profiles within the range of mineral spirits
G11	Includes a match to hydrocarbon profiles within the range of JP-4
G12	Pattern does not match the gasoline standard; the carbon range for this sample is consistent with JP8
G13	Closely resembles the hydrocarbon profile of aviation gasoline
G14	Analyte concentration may be biased due to carry over
G2	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G3	Includes higher boiling hydrocarbons
G4	Includes dominant peak(s) not indicative of petroleum hydrocarbons
G5	Is mainly dominant peak(s) not indicative of petroleum hydrocarbons
G6	Contains recognizable contaminant peak(s) which has been removed from quantitation
G7	Is mainly a match to hydrocarbons within the range of gasoline
G8	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G9	Includes hydrocarbons within the range of kerosene
J	Estimated value
M	Matrix effect
MI1	Manual integration: integration does not follow baseline
MI2	Manual integration: non-target peak interference
MI3	Manual integration: to split a peak that was integrated as one peak by the computer.
MI4	Manual integration: to integrate a split peak
MI5	Manual integration: the whole peak or part of the peak was not integrated
MI6	Manual integration: computer integrated wrong peak
MI7	Manual integration: other – (See case narrative)
MDL	Method detection limit
ND	Not detected
NT	Non-target
Q	Acceptance criteria not met
T1 I	Includes wide range of hydrocarbons not indicative of diesel
T1 M	Is mainly wide range of hydrocarbons not necessarily indicative of diesel
T2 I	Includes lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T2 M	Is mainly lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T3 I	Includes higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T3 M	Is mainly higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T4 I	Includes dominant peak(s) not indicative of hydrocarbons
T4 M	Is mainly dominant peak(s) not indicative of hydrocarbons
T5	Contains recognizable contaminant peak(s) which has been removed from quantitation
T6	Is mainly a match to hydrocarbons within range of diesel fuel
T7	Closely resembles the boiling point hydrocarbon profile consistent with diesel fuel
T8	Includes a match to hydrocarbon profiles within range of diesel and kerosene fuel
T9 I	Includes non-diesel hydrocarbons within boiling point range of diesel fuel
T9 M	Is mainly non-diesel hydrocarbons within boiling point range of diesel fuel
U	Not detected
Y	Percent difference between primary and confirmation column > 40%

SAMPLE RECORDS MANAGEMENT

CHAIN OF CUSTODY,

ARF, CRF, AND

CLIENT COMMUNICATION

APPL - Analysis Request Form 93873

Client: AECOM
Address: 1001 Bishop Street, Suite 1600
Honolulu, HI 96813
Attn: Brooke Gottmeier
Phone: 808-954-4536 Fax: 808-523-8950
Job: 60571032 CV18F0126 Red Hill Fuel Storage
PO #: 18S-22209-HI27 PO# 102604
Chain of Custody (Y/N): Y # 114,124,125
RAD Screen (Y/N): Y pH (Y/N): Y
Turn Around Type: 1 WEEK

Received by: AAR
Date Received: 10/23/20 Time: 10:00
Delivered by: FEDEX
Shuttle Custody Seals (Y/N): Y Time Zone: -10
Chest Temp(s): 6.0X3°C
Color: VFRG/H-PurGrn
Samples Chilled until Placed in Refrig/Freezer: Y
Project Manager: Libby Cheesebor
QC Report Type: DVP4DOD/EQUIS/HI
Due Date: 10/30/20

Comments:
PM: login and F1s to Margie.Pascua@aecom.com & brooke.gottmeier@aecom.com
AN: 7 day TAT for Form 1s; 21 day TAT for PKG STYLE 1; DOD v5.1; DOD Forms: LOD database
Report MS/MSD/DUPs when AECOM sample used
Wetlab: EPA 300 (NO3,CL,SO4). EPA 353.2 (TOXN).
8260: BTEX & TPH-G only; 8270 SIM: 1-methylnaphthalene, 2-methylnaphthalene & naphthalene only.
TPH D & O both with and w/o SGC, reverse surrogate for the SGC; analyze SGC if detections
RSK: Methane only; 8011: EDB only; $87DC53W5: report phenol
FR: email ftp info to Margie, Stella, trommelfanger@lab-data.com & jcanlas@lab-data.com
EDD: AECOM EQuIS EDD 2.5.3 Red Hill 87DMEE->3535A to brooke.gottmeier@, Margie.Pascua@aec

Sample Distribution:
GC: 3-$87DC53W5, 3-$87DMEEW5, 3-$DOC53W5LIQ, 3-$SIM53LIQ51, 3-$8011
Extractions: 3-_LIQ003, 3-_LIQ005, 3-_MWE2MEE, 3-_MWE012
VOA: 2-$86BTOTXDOD5W, 5-$GASBL, 5-$GRO86BW, 3-$RSKMETH, 3-$86BTOTXDCAW
Wetlab: 2-$232W(HCO3,CO3,ALK), 2-$300W, 2-$353TOXNW, 2-$35FE, 2-$TOCW53

Charges:

Invoice To:
ACCOUNTS PAYABLE
1001 Bishop Street, Ste 1600
USAPImaging@aecom.com
mary.basano@aecom.com

	Client ID	APPL ID	Sampled		Analyses Requested
1.	ERH1184	LCSD BA20715W	10/22/20	08:00	$86BTOTXDOD5W, $GASBL, $GRO86BW, $RSKMETH -- See Comments
2.	ERH1185	LCSD BA20716W	10/22/20	09:50	$232W(HCO3,CO3,ALK), $300W, $353TOXNW, $35FE, $86BTOTXDOD5W, $87DC53W5, $87DMEEW5, $DOC53W5LIQ, $GASBL, $GRO86BW, $RSKMETH, $SIM53LIQ51, $TOCW53 -- See Comments
3.	ERH1186	LCSD BA20717W	10/21/20	08:55	$8011, $86BTOTXDCAW, $GASBL, $GRO86BW -- See Comments

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

4.	ERH1187	LCSD	BA20718W	10/21/20 09:35	$232W(HCO3,CO3,ALK), $300W, $353TOXNW, $35FE, $8011, $86BTOTXDCAW, $87DC53W5, $87DMEEW5, $DOC53W5LIQ, $GASBL, $GRO86BW, $RSKMETH, $SIM53LIQ51, $TOCW53 -- See Comments
5.	ERH1188	LCSD	BA20719W	10/21/20 09:35	$8011, $86BTOTXDCAW, $87DC53W5, $87DMEEW5, $DOC53W5LIQ, $GASBL, $GRO86BW, $SIM53LIQ51 -- See Comments

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

APPL Sample Receipt Form

ARF# **93873**

Sample	Container Type	Count	p
BA20715	[13] VOAs - HCL	4	NA
BA20716	[3] PL 250mL	1	NA
	[10] PL 250mL - H2SO4	1	1.3
	[13] VOAs - HCL	4	NA
	[17] Amber Liter	4	NA
	[32] Clear VOA - H2SO4	2	NA
	[38] 250mL brn poly, HCl prsvd	1	1.6
	[40] 500mL Amber, unprsrvd	3	NA
BA20717	[13] VOAs - HCL	4	NA
	[15] VOAs - NP	3	NA
BA20718	[3] PL 250mL	1	NA
	[10] PL 250mL - H2SO4	1	1.3
	[13] VOAs - HCL	4	NA
	[15] VOAs - NP	3	NA
	[17] Amber Liter	4	NA
	[32] Clear VOA - H2SO4	2	NA
	[38] 250mL brn poly, HCl prsvd	1	1.6
	[40] 500mL Amber, unprsrvd	3	NA
BA20719	[13] VOAs - HCL	4	NA
	[15] VOAs - NP	3	NA
	[17] Amber Liter	4	NA
	[40] 500mL Amber, unprsrvd	3	NA

Sample	Container Type	Count	p

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
www.applinc.com

Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 114

Report to: PLEASE PRINT

Company Name: AECOM Phone: 808-954-4536

Address: 1001 Bishop St, Suite 1600
Honolulu, HI 96813 Fax: 808-523-8950

Attn: Brooke Gottmeier

Email: brooke.gottmeier@aecom.com

Invoice to: PLEASE PRINT

Company Name: AECOM Phone: 512-419-6709

Address: 1001 Bishop St, Suite 1600
Honolulu, HI 96813 Fax: 808-523-8950

Attn: Sheree Smith

Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number: CV18F0126 / 60571032

Purchase Order Number: 102604

Sampler (Print): EB, WL, GM, EC

Sampler (Signature):

Date Shipped: 10/22/20

Carrier: FedEx

Waybill No.:

Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC
ERH1184	Trip Blank	10/22/20	0800	HST	4	X			X							X						
ERH1185	RHMW11-05	10/22/20	0950	HST	16	X			X		X	X*	X	X	X	X	X	X	X		X	

10/22/20

*Analyze TPH w/SGT only if TPH-d/o detected.

** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM

TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature:

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other:

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler: (AECOM)	Date 10/22/20	Time 19:00	Received by:	Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date 10/23/20	Time 12:30	Received at lab by:

See page 2 for Container Preservative and Sampling Information

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
www.applinc.com
Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 124

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM Phone: 808-954-4536	Company Name: AECOM Phone: 512-419-6709
Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950	Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950
Attn: Brooke Gottmeier	Attn: Sheree Smith
Email: brooke.gottmeier@aecom.com	Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number: CV18F0126 / 60571032
Purchase Order Number: 102604
Sampler (Print): EB, SP, DM, GM
Sampler (Signature):

Date Shipped: 10/22/20
Carrier: FedEx
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkelinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC
ERH1186	Trip Blank	10/21/20	0855	HST	0	X			X	X						X						
ERH1187	RHMW13-05	10/21/20	0935	HST	10	X			X	X	X	X*	X	X	X	X	X	X	X		X		
ERH1188	RHMW13-05	10/21/20	0935	HST	1	X			X	X	X	X*	X	X	X								

10/22/20

*Analyze TPH w/SGT only if TPH-d/o detected.

** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM

TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature:

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other: _____

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
(AECOM)	10/22/20	1400					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
					10/23/20	10:00	

See page 1 for Container Preservative and Sampling Information

93873

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
www.applinc.com
Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 125

Report to: PLEASE PRINT
Company Name: AECOM Phone: 808-954-4536
Address: 1001 Bishop St, Suite 1600 Fax: 808-523-8950
Honolulu, HI 96813
Attn: Brooke Gottmeier
Email: brooke.gottmeier@aecom.com

Invoice to: PLEASE PRINT
Company Name: AECOM Phone: 512-419-6709
Address: 1001 Bishop St, Suite 1600 Fax: 808-523-8950
Honolulu, HI 96813
Attn: Sheree Smith
Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number: CV18F0126 / 60571032
Purchase Order Number: 102604
Sampler (Print): EB, SP, DM, GM
Sampler (Signature):

Date Shipped: 10/22/20
Carrier: FedEx
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC
ERH1186	Trip Blank	10/21/20	0855	HST	7	X			X	X												
ERH1187	RHMW13-05	10/21/20	0935	HST	9	X			X	X	X	X*	X	X	X	X	X	X	X		X	
ERH1188	RHMW13-05	10/21/20	0935	HST	13	X			X	X	X	X*	X	X	X							

10/22/20

*Analyze TPH w/SGT only if TPH-d/o detected.
** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM
TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature: 6.0/6.0 RH +0.0C 6.0/6.0 6.0/6.0

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other:

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
(AECOM)	10/22/20	1400					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
					10/23/20	10:00	

See page 2 for Container Preservative and Sampling Information

COOLER RECEIPT FORM **ARF: 93873**

1) Project: 60571032 CV18F0126 Red Hill Fuel Storage Date Received: 10/23/20

2) Coolers: Number of Coolers: 3

3) YES Were custody seals present and intact?
How many? 6 Name/Date on seal? SEE BELOW

4) YES Was there a shipping slip? Carrier name: FEDEX

5) Type of packing in cooler: X bubble wrap __ popcorn __ foam X plastic bags __ other
X wet ice __ dry ice __ no ice __ gel ice

6) YES Were cooler temperatures acceptable?

7) Serial number of calibrated thermometer used: R4 CF:+0.0°C

8) Cooler temp(s): In °C. Thermometer Temp / Corrected Temp
1: 6.0/6.0 2: 6.0/6.0 3: 6.0/6.0 4: _____ 5: _____ 6: _____
7: _____ 8: _____ 9: _____ 10: _____ 11: _____ 12: _____

Chain of custody:

9) YES Was a chain of custody received?

10) YES Were the custody papers complete/signed in the appropriate places?

Sample Labels:

11) YES Were all sample labels complete (sample ID, date/time of sampling, etc.)?

12) YES Did all container labels agree with custody papers?

Sample Containers:

13) YES Were all containers sealed in separate bags?

14) YES Did all containers arrive in good condition:(unbroken, no leakage, no cracked/broken lids)?

15) YES Were correct containers and preservatives used for the tests indicated?

16) YES Was a sufficient amount of sample sent for tests indicated?

17) Yes Were bubbles present in volatile samples?
If yes, the following were received with air bubbles:
Larger than a pea: BA20715all, BA20717all
Smaller than a pea: _____

Preservation Hold time:

18) Yes Was a sufficient amount of holding time remaining to analyze the samples?

19) Yes Was the pH taken of all non-VOA preserved samples and written on the sample container?

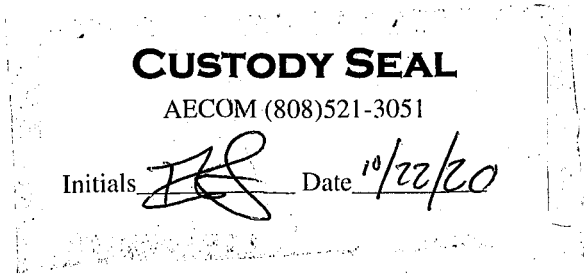
20) Yes Was the pH of acid preserved non-VOA samples < 2?

21) NA Was the pH of the "basic" preserved samples for Cyanide > 12, Sulfide >9, Hexchrom >9?

22) NO Were unpreserved VOA Vials received for VOA Dept analysis?

23) NA If "yes", are the unpreserved VOA vials noted in the ADD TEST FIELD on the ARF?
pH strip lot number: HC908519
Lab notified if pH was not adequate: _____

Notes/Deficiencies:



Personnel receiving samples: AD Second reviewer: AA
Personnel labeling samples: MS
Project manager notified: MD Date/Time of notification 10/23/20
Name of client notified: _____ Date/Time of notification _____

SAMPLE RESULTS

EPA 8011

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1186

APPL ID: BA20717

Sample Collection Date: 10/21/20

QCG: #8011-201027A1-257976

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8011	EDB	0.019 U	0.02	0.019	0.010	ug/L	10/27/20	10/28/20
8011	SURROGATE: 1,3-DIBROMOPROPANE	105	70-132			%	10/27/20	10/28/20

Quant Method:	80111027.M
Run #:	1023055
Instrument:	HERBIE
Sequence:	201023
Dilution Factor:	1
Initials:	SSE

Printed: 11/09/20 1:07:41 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8011

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1187

APPL ID: BA20718

Sample Collection Date: 10/21/20

QCG: #8011-201027A1-257976

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8011	EDB	0.019 U	0.02	0.019	0.010	ug/L	10/27/20	10/28/20
8011	SURROGATE: 1,3-DIBROMOPROPANE	103	70-132			%	10/27/20	10/28/20

Quant Method:	80111027.M
Run #:	1023056
Instrument:	HERBIE
Sequence:	201023
Dilution Factor:	1
Initials:	SSE

Printed: 11/09/20 1:07:41 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8011

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1188

APPL ID: BA20719

Sample Collection Date: 10/21/20

QCG: #8011-201027A1-257976

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8011	EDB	0.019 U	0.02	0.019	0.010	ug/L	10/27/20	10/28/20
8011	SURROGATE: 1,3-DIBROMOPROPANE	110	70-132			%	10/27/20	10/28/20

Quant Method:	80111027.M
Run #:	1023057
Instrument:	HERBIE
Sequence:	201023
Dilution Factor:	1
Initials:	SSE

Printed: 11/09/20 1:07:41 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH WATER L-L SGC

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1185

APPL ID: BA20716

Sample Collection Date: 10/22/20

QCG: #DOC53-201026A2-258283

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/26/20	11/04/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/26/20	11/04/20
EPA 8015B-e	SURROGATE: (R) DECANOIC ACID (S)	0.0	0-1			%	10/26/20	11/04/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	61.9	60-142			%	10/26/20	11/04/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	56.0	56-125			%	10/26/20	11/04/20

Quant Method:	DOC0905.M
Run #:	1028135
Instrument:	Apollo
Sequence:	201028
Dilution Factor:	1
Initials:	SSE

Printed: 11/11/20 1:28:28 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1185

APPL ID: BA20716

Sample Collection Date: 10/22/20

QCG: #DOC53-201026A-257938

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	150 B J	320	300.0	150.0	ug/L	10/26/20	10/28/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/26/20	10/28/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	88.6	60-142			%	10/26/20	10/28/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	82.7	56-125			%	10/26/20	10/28/20

J = Estimated value.
B = The analyte was found in a method blank, as well as in the sample.

Quant Method: DOC0905.M
Run #: 1028015
Instrument: Apollo
Sequence: 201028
Dilution Factor: 1
Initials: SSE

Printed: 11/23/20 12:42:59 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH WATER L-L SGC

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1187

APPL ID: BA20718

Sample Collection Date: 10/21/20

QCG: #DOC53-201026A2-258283

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/26/20	11/04/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/26/20	11/04/20
EPA 8015B-e	SURROGATE: (R) DECANOIC ACID (S)	0.0	0-1			%	10/26/20	11/04/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	68.5	60-142			%	10/26/20	11/04/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	62.0	56-125			%	10/26/20	11/04/20

Quant Method:	DOC0905.M
Run #:	1028136
Instrument:	Apollo
Sequence:	201028
Dilution Factor:	1
Initials:	SSE

Printed: 11/11/20 1:28:28 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH1187

Sample Collection Date: 10/21/20

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 93873

APPL ID: BA20718

QCG: #DOC53-201026A-257938

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	180 B J	320	300.0	150.0	ug/L	10/26/20	10/28/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/26/20	10/28/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	91.7	60-142			%	10/26/20	10/28/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	86.1	56-125			%	10/26/20	10/28/20

J = Estimated value.
B = The analyte was found in a method blank, as well as in the sample.

Quant Method:	DOC0905.M
Run #:	1028016
Instrument:	Apollo
Sequence:	201028
Dilution Factor:	1
Initials:	SSE

Printed: 11/23/20 12:42:59 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1188

APPL ID: BA20719

Sample Collection Date: 10/21/20

QCG: #DOC53-201026A-257938

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/26/20	10/28/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/26/20	10/28/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	89.9	60-142			%	10/26/20	10/28/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	83.5	56-125			%	10/26/20	10/28/20

Quant Method:	DOC0905.M
Run #:	1028017
Instrument:	Apollo
Sequence:	201028
Dilution Factor:	1
Initials:	SSE

Printed: 11/11/20 1:28:28 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8270D WATER

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1185

APPL ID: BA20716

Sample Collection Date: 10/22/20

QCG: #87DC5-201027A-258092

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	10/27/20	10/29/20
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	96.1	43-140			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	84.5	44-119			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	80.0	19-119			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	89.5	44-120			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: PHENOL-D6 (S)	79.6	10-115			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	104	50-134			%	10/27/20	10/29/20

Quant Method: Y1009.M
Run #: 1009Y298
Instrument: Yoda
Sequence: Y201009
Dilution Factor: 1
Initials: MA

Printed: 10/30/20 4:07:28 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8270D WATER

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1187

APPL ID: BA20718

Sample Collection Date: 10/21/20

QCG: #87DC5-201027A-258092

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	10/27/20	10/29/20
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	93.1	43-140			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	80.5	44-119			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	71.0	19-119			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	83.0	44-120			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: PHENOL-D6 (S)	72.9	10-115			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	107	50-134			%	10/27/20	10/29/20

Quant Method: Y1009.M
Run #: 1009Y299
Instrument: Yoda
Sequence: Y201009
Dilution Factor: 1
Initials: MA

Printed: 10/30/20 4:07:28 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8270D WATER

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1188

APPL ID: BA20719

Sample Collection Date: 10/21/20

QCG: #87DC5-201027A-258092

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	10/27/20	10/29/20
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	97.0	43-140			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	88.5	44-119			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	80.7	19-119			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	89.8	44-120			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: PHENOL-D6 (S)	79.6	10-115			%	10/27/20	10/29/20
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	110	50-134			%	10/27/20	10/29/20

Quant Method: Y1009.M
Run #: 1009Y300
Instrument: Yoda
Sequence: Y201009
Dilution Factor: 1
Initials: MA

Printed: 10/30/20 4:07:28 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8270D SIM LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1185

APPL ID: BA20716

Sample Collection Date: 10/22/20

QCG: #SIM53-201027A-258096

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/27/20	10/29/20
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/27/20	10/29/20
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/27/20	10/29/20
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	97.7	39-114			%	10/27/20	10/29/20
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	103	58-120			%	10/27/20	10/29/20

Quant Method: L1016.M
Run #: 1016L158
Instrument: Linus
Sequence: L201016
Dilution Factor: 1
Initials: MA

Printed: 10/30/20 4:16:22 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8270D SIM LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1187

APPL ID: BA20718

Sample Collection Date: 10/21/20

QCG: #SIM53-201027A-258096

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/27/20	10/29/20
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/27/20	10/29/20
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/27/20	10/29/20
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	90.5	39-114			%	10/27/20	10/29/20
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	113	58-120			%	10/27/20	10/29/20

Quant Method: L1016.M
Run #: 1016L159
Instrument: Linus
Sequence: L201016
Dilution Factor: 1
Initials: MA

Printed: 10/30/20 4:16:22 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8270D SIM LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1188

APPL ID: BA20719

Sample Collection Date: 10/21/20

QCG: #SIM53-201027A-258096

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/27/20	10/29/20
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/27/20	10/29/20
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/27/20	10/29/20
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	92.4	39-114			%	10/27/20	10/29/20
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	118	58-120			%	10/27/20	10/29/20

Quant Method: L1016.M
Run #: 1016L160
Instrument: Linus
Sequence: L201016
Dilution Factor: 1
Initials: MA

Printed: 10/30/20 4:16:22 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8270D MODIFIED WATER

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1185

APPL ID: BA20716

Sample Collection Date: 10/22/20

QCG: #87DME-201026A-257898

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	10/27/20	10/29/20

Quant Method:	YMEE0501.M
Run #:	0501Y145
Instrument:	Yoda
Sequence:	Y200501M
Dilution Factor:	1
Initials:	MA

Printed: 11/09/20 4:12:39 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8270D MODIFIED WATER

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1187

APPL ID: BA20718

Sample Collection Date: 10/21/20

QCG: #87DME-201026A-257898

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	10/27/20	10/29/20

Quant Method:	YMEE0501.M
Run #:	0501Y146
Instrument:	Yoda
Sequence:	Y200501M
Dilution Factor:	1
Initials:	MA

Printed: 11/09/20 4:12:39 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8270D MODIFIED WATER

AECOM
1001 Bishop Street, Suite 1600
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APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1188

APPL ID: BA20719

Sample Collection Date: 10/21/20

QCG: #87DME-201026A-257898

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	10/27/20	10/29/20

Quant Method:	YMEE0501.M
Run #:	0501Y147
Instrument:	Yoda
Sequence:	Y200501M
Dilution Factor:	1
Initials:	MA

Printed: 11/09/20 4:12:39 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8260B BTEX WATER

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1184

APPL ID: BA20715

Sample Collection Date: 10/22/20

QCG: #86BTO-201028AZ-257995

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	10/28/20	10/28/20
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	115	81-118			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	111	85-114			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	111	80-119			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	108	89-112			%	10/28/20	10/28/20

Quant Method: Z1027W.M
Run #: 1028Z19
Instrument: ZEUS
Sequence: 201027
Dilution Factor: 1
Initials: DG

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APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8260B BTEX WATER

AECOM
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Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1185

APPL ID: BA20716

Sample Collection Date: 10/22/20

QCG: #86BTO-201028AZ-257995

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	10/28/20	10/28/20
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	115	81-118			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	110	85-114			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	109	80-119			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	107	89-112			%	10/28/20	10/28/20

Quant Method: Z1027W.M
Run #: 1028Z20
Instrument: ZEUS
Sequence: 201027
Dilution Factor: 1
Initials: DG

Printed: 10/30/20 8:59:13 AM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8260B BTEX & 1,2-DCA WATER

AECOM
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Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1186

APPL ID: BA20717

Sample Collection Date: 10/21/20

QCG: #86BTO-201028AZ1-258053

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-DICHLOROETHANE	0.30 U	1.0	0.30	0.14	ug/L	10/28/20	10/28/20
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	10/28/20	10/28/20
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	113	81-118			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	108	85-114			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	108	80-119			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	106	89-112			%	10/28/20	10/28/20

Quant Method: Z1027W.M
Run #: 1028Z21
Instrument: ZEUS
Sequence: 201027
Dilution Factor: 1
Initials: DG

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APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8260B BTEX & 1,2-DCA WATER

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Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1187

APPL ID: BA20718

Sample Collection Date: 10/21/20

QCG: #86BTO-201028AZ1-258053

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-DICHLOROETHANE	0.30 U	1.0	0.30	0.14	ug/L	10/28/20	10/28/20
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	10/28/20	10/28/20
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	112	81-118			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	106	85-114			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	108	80-119			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	105	89-112			%	10/28/20	10/28/20

Quant Method: Z1027W.M
Run #: 1028Z22
Instrument: ZEUS
Sequence: 201027
Dilution Factor: 1
Initials: DG

Printed: 10/30/20 8:59:13 AM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8260B BTEX & 1,2-DCA WATER

AECOM
1001 Bishop Street, Suite 1600
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908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1188

APPL ID: BA20719

Sample Collection Date: 10/21/20

QCG: #86BTO-201028AZ1-258053

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-DICHLOROETHANE	0.30 U	1.0	0.30	0.14	ug/L	10/28/20	10/28/20
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	10/28/20	10/28/20
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	10/28/20	10/28/20
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	113	81-118			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	106	85-114			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	110	80-119			%	10/28/20	10/28/20
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	105	89-112			%	10/28/20	10/28/20

Quant Method: Z1027W.M
Run #: 1028Z23
Instrument: ZEUS
Sequence: 201027
Dilution Factor: 1
Initials: DG

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APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8260B GRO WATER

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Honolulu, HI 96813

APPL Inc.
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Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1184

APPL ID: BA20715

Sample Collection Date: 10/22/20

QCG: #GRO86-201028AZ-257989

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	10/28/20	10/28/20
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	111	85-114			%	10/28/20	10/28/20

Quant Method:	ZSUR1027.M
Run #:	1028Z19
Instrument:	ZEUS
Sequence:	201027
Dilution Factor:	1
Initials:	DG

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APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8260B GRO WATER

AECOM
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908 North Temperance Avenue
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Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1185

APPL ID: BA20716

Sample Collection Date: 10/22/20

QCG: #GRO86-201028AZ-257989

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	10/28/20	10/28/20
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	110	85-114			%	10/28/20	10/28/20

Quant Method:	ZSUR1027.M
Run #:	1028Z20
Instrument:	ZEUS
Sequence:	201027
Dilution Factor:	1
Initials:	DG

Printed: 10/29/20 1:31:51 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8260B GRO WATER

AECOM
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APPL Inc.
908 North Temperance Avenue
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Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1186

APPL ID: BA20717

Sample Collection Date: 10/21/20

QCG: #GRO86-201028AZ-257989

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	10/28/20	10/28/20
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	108	85-114			%	10/28/20	10/28/20

Quant Method:	ZSUR1027.M
Run #:	1028Z21
Instrument:	ZEUS
Sequence:	201027
Dilution Factor:	1
Initials:	DG

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APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8260B GRO WATER

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Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1187

APPL ID: BA20718

Sample Collection Date: 10/21/20

QCG: #GRO86-201028AZ-257989

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	10/28/20	10/28/20
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	106	85-114			%	10/28/20	10/28/20

Quant Method:	ZSUR1027.M
Run #:	1028Z22
Instrument:	ZEUS
Sequence:	201027
Dilution Factor:	1
Initials:	DG

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APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8260B GRO WATER

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APPL Inc.
908 North Temperance Avenue
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Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1188

APPL ID: BA20719

Sample Collection Date: 10/21/20

QCG: #GRO86-201028AZ-257989

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	10/28/20	10/28/20
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	106	85-114			%	10/28/20	10/28/20

Quant Method:	ZSUR1027.M
Run #:	1028Z23
Instrument:	ZEUS
Sequence:	201027
Dilution Factor:	1
Initials:	DG

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APPL-F1-SC-NoMC-REG MDLs-DOD

METHANE

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908 North Temperance Avenue
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Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1184

APPL ID: BA20715

Sample Collection Date: 10/22/20

QCG: #RSKME-201027A-257902

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	10/27/20	10/27/20

Quant Method:	RSK0914A.M
Run #:	1027R13
Instrument:	Rocky
Sequence:	200914
Dilution Factor:	1
Initials:	GAG

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APPL-F1-SC-NoMC-REG MDLs-DOD

METHANE

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APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1185

APPL ID: BA20716

Sample Collection Date: 10/22/20

QCG: #RSKME-201027A-257902

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	10/27/20	10/27/20

Quant Method:	RSK0914A.M
Run #:	1027R14
Instrument:	Rocky
Sequence:	200914
Dilution Factor:	1
Initials:	GAG

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APPL-F1-SC-NoMC-REG MDLs-DOD

METHANE

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Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1186

APPL ID: BA20717

Sample Collection Date: 10/21/20

QCG: #RSKME-201102A-258253

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	11/02/20	11/02/20

Quant Method:	RSK0914A.M
Run #:	1102R07
Instrument:	Rocky
Sequence:	200914
Dilution Factor:	1
Initials:	GAG

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APPL-F1-SC-NoMC-REG MDLs-DOD

METHANE

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Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93873

Sample ID: ERH1187

APPL ID: BA20718

Sample Collection Date: 10/21/20

QCG: #RSKME-201027A-257902

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	38	5.0	1.00	0.25	ug/L	10/27/20	10/27/20

Quant Method:	RSK0914A.M
Run #:	1027R15
Instrument:	Rocky
Sequence:	200914
Dilution Factor:	1
Initials:	GAG

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APPL-F1-SC-NoMC-REG MDLs-DOD

Wet Lab Analysis

AECOM
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APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH1185

APPL ID: BA20716

Sample Collection Date: 10/22/20

ARF: 93873

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	53.2	5.0	1.00	0.40	mg/L	5	10/26/20	10/26/20
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	1	10/23/20	10/23/20
EPA 300.0	SULFATE	11.3	1.0	0.20	0.09	mg/L	1	10/23/20	10/23/20

Wet Lab Analysis

AECOM
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APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH1187

APPL ID: BA20718

Sample Collection Date: 10/21/20

ARF: 93873

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	57.9	5.0	1.00	0.40	mg/L	5	10/26/20	10/26/20
EPA 300.0	NITRATE	0.11 J	0.5	0.18	0.04	mg/L	1	10/23/20	10/23/20
EPA 300.0	SULFATE	28.4	1.0	0.20	0.09	mg/L	1	10/23/20	10/23/20

J = Estimated value.

Printed: 11/06/20 3:55:04 PM

APPL-F1-SC-NoMC-REG MDLs

Wet Lab Analysis

AECOM
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908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH1185

APPL ID: BA20716

Sample Collection Date: 10/22/20

ARF: 93873

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 353.2	NITRATE-NITRITE AS N	0.086 J	0.10	0.090	0.028	mg/L	1	10/27/20	10/27/20
SM 2320B	BICARBONATE AS CACO3	115	2.0	1.70	0.85	mg/L	1	10/28/20	10/28/20
SM 2320B	CARBONATE AS CACO3	1.70 U	2.0	1.70	0.85	mg/L	1	10/28/20	10/28/20
SM 2320B	TOTAL ALKALINITY AS CACO	115	2.0	1.70	0.85	mg/L	1	10/28/20	10/28/20
SM3500FeB	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	1	10/28/20	10/28/20
SW846 9060A	TOTAL ORGANIC CARBON	7.4	0.93	0.350	0.130	mg/L	1	10/29/20	10/29/20

J = Estimated value.

Printed: 11/03/20 2:35:00 PM

APPL-F1-SC-NoMC-REG MDLs

Wet Lab Analysis

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Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH1187 **APPL ID: BA20718**

Sample Collection Date: 10/21/20 ARF: 93873

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 353.2	NITRATE-NITRITE AS N	0.031 J	0.10	0.090	0.028	mg/L	1	10/27/20	10/27/20
SM 2320B	BICARBONATE AS CACO3	78.7	2.0	1.70	0.85	mg/L	1	10/28/20	10/28/20
SM 2320B	CARBONATE AS CACO3	1.70 U	2.0	1.70	0.85	mg/L	1	10/28/20	10/28/20
SM 2320B	TOTAL ALKALINITY AS CACO	78.7	2.0	1.70	0.85	mg/L	1	10/28/20	10/28/20
SM3500FeB	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	1	10/28/20	10/28/20
SW846 9060A	TOTAL ORGANIC CARBON	5.4	0.93	0.350	0.130	mg/L	1	10/29/20	10/29/20

J = Estimated value.

Printed: 11/03/20 2:35:00 PM

APPL-F1-SC-NoMC-REG MDLs

QC FORMS

8011

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/28/20

Matrix: WATER Instrument: HERBIE

APPL ID.	Client Sample No.	SURROGATE: 1,3-DIBROMOPROPANE (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
201027A1-BLK	Blank	70-132	104				
201027A1-LCS	Lab Control Spike	70-132	103				
201027A1-LCSD	Lab Control SpikeD	70-132	102				
BA20717	ERH1186	70-132	105				
BA20718	ERH1187	70-132	103				
BA20719	ERH1188	70-132	110				

Comments: Batch: #8011-201027A1

8011

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/28/20
Matrix:	WATER	Instrument:	HERBIE
Blank ID:	201027A1-BLK	Time Analyzed:	1651

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201027A1-BLK	Blank	1023037	10/28/20 1651
201027A1-LCS	Lab Control Spike	1023038	10/28/20 1711
201027A1-LCSD	Lab Control SpikeD	1023039	10/28/20 1732
BA20717	ERH1186	1023055	10/28/20 2259
BA20718	ERH1187	1023056	10/28/20 2319
BA20719	ERH1188	1023057	10/28/20 2339

Comments: Batch: #8011-201027A1

Method Blank
EPA 8011

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201027W-20717 - 257976**
Batch ID: #8011-201027A1

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	EDB	0.019 U	0.02	0.019	0.010	ug/L	10/27/20	10/28/20
BLANK	SURROGATE: 1,3-DIBROMOPRO	104	70-132			%	10/27/20	10/28/20

Quant Method:80111027.M
Run #:1023037
Instrument:HERBIE
Sequence:201023
Initials:SSE

GC SC-Blank-REG MDLs-DOD
Printed: 11/09/20 1:07:45 PM

8011

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/28/20
Matrix:	WATER	Instrument:	HERBIE
LCS ID:	201027A1-LCS	Time Analyzed:	1711

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201027A1-BLK	Blank	1023037	10/28/20 1651
201027A1-LCS	Lab Control Spike	1023038	10/28/20 1711
201027A1-LCSD	Lab Control SpikeD	1023039	10/28/20 1732
BA20717	ERH1186	1023055	10/28/20 2259
BA20718	ERH1187	1023056	10/28/20 2319
BA20719	ERH1188	1023057	10/28/20 2339

Comments: Batch: #8011-201027A1

Laboratory Control Spike Recoveries
EPA 8011

APPL ID: **201027W-20717 LCS - 257976**
Batch ID: #8011-201027A1

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
EDB	0.250	0.255	0.254	102	102	60-140	0.39	25
SURROGATE: 1,3-DIBROMOPROPANE (	0.250	0.258	0.255	103	102	70-132		

Comments:

Primary	SPK	DUP
Quant Method :	80111027.M	80111027.M
Extraction Date :	10/27/20	10/27/20
Analysis Date :	10/28/20	10/28/20
Instrument :	HERBIE	HERBIE
Run :	1023038	1023039
Initials :	SSE	

EPA 8015B-eHL

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/28/20

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201026A-BLK	Blank	60-142	92.1		56-125	87.0	
201026A-LCS	Lab Control Spike	60-142	91.5		56-125	95.9	
201026A-LCSD	Lab Control SpikeD	60-142	91.2		56-125	96.0	
BA20716	ERH1185	60-142	88.6		56-125	82.7	
BA20718	ERH1187	60-142	91.7		56-125	86.1	
BA20719	ERH1188	60-142	89.9		56-125	83.5	

Comments: Batch: #DOC53-201026A

EPA 8015B-eHL

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 11/04/20

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: (R) DECANOIC ACID (S)			SURROGATE: OCTACOSANE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201026A2-BLK	Blank	0-1	0.0		60-142	78.4	
201026A2-LCS	Lab Control Spike	0-1	0.0		60-142	78.4	
201026A2-LCSD	Lab Control SpikeD	0-1	0.0		60-142	73.7	
BA20716	ERH1185	0-1	0.0		60-142	61.9	
BA20718	ERH1187	0-1	0.0		60-142	68.5	

Comments: Batch: #DOC53-201026A2

EPA 8015B-eHL

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 11/04/20

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: ORTHO-TERPHENYL (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
201026A2-BLK	Blank	56-125	71.2				
201026A2-LCS	Lab Control Spike	56-125	75.7				
201026A2-LCSD	Lab Control SpikeD	56-125	73.5				
BA20716	ERH1185	56-125	56.0				
BA20718	ERH1187	56-125	62.0				

Comments: Batch: #DOC53-201026A2

EPA 8015B-eH

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/28/20
Matrix:	WATER	Instrument:	Apollo
Blank ID:	201026A-BLK	Time Analyzed:	1300

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201026A-BLK	Blank	1028002	10/28/20 1300
201026A-LCS	Lab Control Spike	1028007	10/28/20 1520
201026A-LCSD	Lab Control SpikeD	1028008	10/28/20 1548
BA20716	ERH1185	1028015	10/28/20 1905
BA20718	ERH1187	1028016	10/28/20 1933
BA20719	ERH1188	1028017	10/28/20 2001

Comments: Batch: #DOC53-201026A

EPA 8015B-eH

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	11/04/20
Matrix:	WATER	Instrument:	Apollo
Blank ID:	201026A2-BLK	Time Analyzed:	1212

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201026A2-BLK	Blank	1028132	11/04/20 1212
201026A2-LCS	Lab Control Spike	1028133	11/04/20 1240
201026A2-LCSD	Lab Control SpikeD	1028134	11/04/20 1308
BA20716	ERH1185	1028135	11/04/20 1336
BA20718	ERH1187	1028136	11/04/20 1404

Comments: Batch: #DOC53-201026A2

Method Blank
EPA 8015B TPH LIQ-LIQ

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201026W-20539 - 257938**
Batch ID: #DOC53-201026A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/26/20	10/28/20
BLANK	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/26/20	10/28/20
BLANK	SURROGATE: OCTACOSANE (S)	92.1	60-142			%	10/26/20	10/28/20
BLANK	SURROGATE: ORTHO-TERPHEN	87.0	56-125			%	10/26/20	10/28/20

Quant Method: DOC0905.M
Run #: 1028002
Instrument: Apollo
Sequence: 201028
Initials: SSE

GC SC-Blank-REG MDLs-DOD
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Method Blank
EPA 8015B TPH WATER L-L SGC

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201026W-20716 - 258283**
Batch ID: #DOC53-201026A2

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/26/20	11/04/20
BLANK	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/26/20	11/04/20
BLANK	SURROGATE: (R) DECANOIC AC	0.0	0-1			%	10/26/20	11/04/20
BLANK	SURROGATE: OCTACOSANE (S)	78.4	60-142			%	10/26/20	11/04/20
BLANK	SURROGATE: ORTHO-TERPHEN	71.2	56-125			%	10/26/20	11/04/20

Quant Method: DOC0905.M
Run #: 1028132
Instrument: Apollo
Sequence: 201028
Initials: SSE

GC SC-Blank-REG MDLs-DOD
Printed: 11/11/20 1:28:34 PM

EPA 8015B-eH

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/28/20
Matrix:	WATER	Instrument:	Apollo
LCS ID:	201026A-LCS	Time Analyzed:	1520

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201026A-BLK	Blank	1028002	10/28/20 1300
201026A-LCS	Lab Control Spike	1028007	10/28/20 1520
201026A-LCSD	Lab Control SpikeD	1028008	10/28/20 1548
BA20716	ERH1185	1028015	10/28/20 1905
BA20718	ERH1187	1028016	10/28/20 1933
BA20719	ERH1188	1028017	10/28/20 2001

Comments: Batch: #DOC53-201026A

EPA 8015B-eH

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	11/04/20
Matrix:	WATER	Instrument:	Apollo
LCS ID:	201026A2-LCS	Time Analyzed:	1240

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201026A2-BLK	Blank	1028132	11/04/20 1212
201026A2-LCS	Lab Control Spike	1028133	11/04/20 1240
201026A2-LCSD	Lab Control SpikeD	1028134	11/04/20 1308
BA20716	ERH1185	1028135	11/04/20 1336
BA20718	ERH1187	1028136	11/04/20 1404

Comments: Batch: #DOC53-201026A2

Laboratory Control Spike Recoveries
EPA 8015B TPH LIQ-LIQ

APPL ID: **201026W-20539 LCS - 257938**
Batch ID: #DOC53-201026A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1170	1120	93.6	89.6	36-132	4.4	30
OIL (C24-C40)	1250	1120	1100	89.6	88.0	41-113	1.8	30
SURROGATE: OCTACOSANE (S)	75.0	68.6	68.4	91.5	91.2	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	71.9	72.0	95.9	96.0	56-125		

Comments:

Primary	SPK	DUP
Quant Method :	DOC0905.M	DOC0905.M
Extraction Date :	10/26/20	10/26/20
Analysis Date :	10/28/20	10/28/20
Instrument :	Apollo	Apollo
Run :	1028007	1028008
Initials :	SSE	

Printed: 11/11/20 1:28:21 PM
APPL Standard LCSD

Laboratory Control Spike Recoveries
EPA 8015B TPH WATER L-L SGC

APPL ID: **201026W-20716 LCS - 258283**
Batch ID: #DOC53-201026A2

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	918	868	73.4	69.4	36-132	5.6	30
OIL (C24-C40)	1250	927	861	74.2	68.9	41-113	7.4	30
SURROGATE: (R) DECANOIC ACID (S)	10.00	0	0	0.0	0.0	0-1		
SURROGATE: OCTACOSANE (S)	75.0	58.8	55.3	78.4	73.7	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	56.8	55.1	75.7	73.5	56-125		

Comments:

Primary	SPK	DUP
Quant Method :	DOC0905.M	DOC0905.M
Extraction Date :	10/26/20	10/26/20
Analysis Date :	11/04/20	11/04/20
Instrument :	Apollo	Apollo
Run :	1028133	1028134
Initials :	SSE	

EPA 8270D

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/29/20

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2,4,6-TRIBROMOPHENOL (S)			SURROGATE: 2-FLUORBIPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201027A-BLK	Blank	43-140	95.5		44-119	84.0	
201027A-LCS	Lab Control Spike	43-140	90.0		44-119	81.6	
201027A-LCSD	Lab Control SpikeD	43-140	97.6		44-119	89.6	
BA20716	ERH1185	43-140	96.1		44-119	84.5	
BA20718	ERH1187	43-140	93.1		44-119	80.5	
BA20719	ERH1188	43-140	97.0		44-119	88.5	

Comments: Batch: #87DC5-201027A

EPA 8270D

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/29/20

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201027A-BLK	Blank	19-119	85.1		44-120	93.9	
201027A-LCS	Lab Control Spike	19-119	82.0		44-120	83.2	
201027A-LCSD	Lab Control SpikeD	19-119	89.2		44-120	92.8	
BA20716	ERH1185	19-119	80.0		44-120	89.5	
BA20718	ERH1187	19-119	71.0		44-120	83.0	
BA20719	ERH1188	19-119	80.7		44-120	89.8	

Comments: Batch: #87DC5-201027A

EPA 8270D

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/29/20

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL-D6 (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201027A-BLK	Blank	10-115	85.3		50-134	110	
201027A-LCS	Lab Control Spike	10-115	80.0		50-134	97.6	
201027A-LCSD	Lab Control SpikeD	10-115	88.4		50-134	107	
BA20716	ERH1185	10-115	79.6		50-134	104	
BA20718	ERH1187	10-115	72.9		50-134	107	
BA20719	ERH1188	10-115	79.6		50-134	110	

Comments: Batch: #87DC5-201027A

EPA 8270D

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/29/20

Matrix: WATER Instrument: Yoda

Blank ID: 201027A-BLK Time Analyzed: 1247

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201027A-BLK	Blank	1009Y295	10/29/20 1247
201027A-LCS	Lab Control Spike	1009Y296	10/29/20 1312
201027A-LCSD	Lab Control SpikeD	1009Y297	10/29/20 1338
BA20716	ERH1185	1009Y298	10/29/20 1404
BA20718	ERH1187	1009Y299	10/29/20 1429
BA20719	ERH1188	1009Y300	10/29/20 1455

Comments: Batch: #87DC5-201027A

Method Blank
EPA 8270D WATER

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201027W-20716 - 258092**
Batch ID: #87DC5-201027A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	10/27/20	10/29/20
BLANK	SURROGATE: 2,4,6-TRIBROMOP	95.5	43-140			%	10/27/20	10/29/20
BLANK	SURROGATE: 2-FLUORBIPHENY	84.0	44-119			%	10/27/20	10/29/20
BLANK	SURROGATE: 2-FLUOROPHENO	85.1	19-119			%	10/27/20	10/29/20
BLANK	SURROGATE: NITROBENZENE-	93.9	44-120			%	10/27/20	10/29/20
BLANK	SURROGATE: PHENOL-D6 (S)	85.3	10-115			%	10/27/20	10/29/20
BLANK	SURROGATE: TERPHENYL-D14 (	110	50-134			%	10/27/20	10/29/20

Quant Method: Y1009.M
Run #: 1009Y295
Instrument: Yoda
Sequence: Y201009
Initials: MA

GC SC-Blank-REG MDLs-DOD
Printed: 10/30/20 4:07:34 PM

EPA 8270D

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/29/20
Matrix:	WATER	Instrument:	Yoda
LCS ID:	201027A-LCS	Time Analyzed:	1312

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201027A-BLK	Blank	1009Y295	10/29/20 1247
201027A-LCS	Lab Control Spike	1009Y296	10/29/20 1312
201027A-LCSD	Lab Control SpikeD	1009Y297	10/29/20 1338
BA20716	ERH1185	1009Y298	10/29/20 1404
BA20718	ERH1187	1009Y299	10/29/20 1429
BA20719	ERH1188	1009Y300	10/29/20 1455

Comments: Batch: #87DC5-201027A

Laboratory Control Spike Recoveries
EPA 8270D WATER

APPL ID: **201027W-20716 LCS - 258092**
Batch ID: #87DC5-201027A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
PHENOL	62.5	48.2	54.2	77.1	86.7	10-115	11.7	20
SURROGATE: 2,4,6-TRIBROMOPHENOL	250	225	244	90.0	97.6	43-140		
SURROGATE: 2-FLUORBIPHENYL (S)	125	102	112	81.6	89.6	44-119		
SURROGATE: 2-FLUOROPHENOL (S)	250	205	223	82.0	89.2	19-119		
SURROGATE: NITROBENZENE-D5 (S)	125	104	116	83.2	92.8	44-120		
SURROGATE: PHENOL-D6 (S)	250	200	221	80.0	88.4	10-115		
SURROGATE: TERPHENYL-D14 (S)	125	122	134	97.6	107	50-134		

Comments:

Primary	SPK	DUP
Quant Method :	Y1009.M	Y1009.M
Extraction Date :	10/27/20	10/27/20
Analysis Date :	10/29/20	10/29/20
Instrument :	Yoda	Yoda
Run :	1009Y296	1009Y297
Initials :	MA	

Printed: 10/30/20 4:07:18 PM
APPL Standard LCSD

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No:
Matrix: Soil
ID: 1009Y002.D

SDG No:
Date Analyzed: 10/09/20
Instrument: Yoda
Time Analyzed: 10:55

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		4ug/mL 8270 7/22/20	1009Y003.D	10/09/20 11:14
2		5ug/mL 8270 7/22/20	1009Y004.D	10/09/20 11:40
3		10ug/mL 8270 7/22/20	1009Y005.D	10/09/20 12:05
4		20ug/mL 8270 7/22/20	1009Y006.D	10/09/20 12:31
5		40ug/mL 8270 7/22/20	1009Y007.D	10/09/20 12:56
6		50ug/mL 8270 7/22/20	1009Y008.D	10/09/20 13:22
7		60ug/mL 8270 7/22/20	1009Y009.D	10/09/20 13:48
8		80ug/mL 8270 7/22/20	1009Y010.D	10/09/20 14:13
9		100ug/mL 8270 7/22/2	1009Y011.D	10/09/20 14:38
10		SS 50ug/mL 8270 7/22	1009Y012.D	10/09/20 15:04
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	9.95 - 80.04% of mass 198	30.7
68	0 - 2% of mass 69	0.0
70	0 - 2% of mass 69	0.2
127	10 - 80% of mass 198	45.8
197	0 - 2% of mass 198	0.0
198	100 - 100% of mass 197.95	100.0
199	5 - 9% of mass 198	6.9
275	10 - 60% of mass 198	27.3
365	1 - 100% of mass 198	2.7
441	0.01 - 24% of mass 442	16.5
442	50 - 500% of mass 197.95	76.1
443	15 - 24% of mass 442	19.4

Form 5
Tune Summary

Lab Name: APPL Inc. SDG No: 93873
Case No: 93873 Date Analyzed: 10/29/20
Matrix: Water Instrument: Yoda
ID: 1009Y293.D Time Analyzed: 12:06

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		50ug/mL 8270 7/22/20	1009Y294.D	10/29/20 12:21
2	Blank	201027A BLK 1/800	1009Y295.D	10/29/20 12:47
3	Lab Control Spike	201027A LCS-1 1/800	1009Y296.D	10/29/20 13:12
4	Lab Control SpikeD	201027A LCSD-1 1/800	1009Y297.D	10/29/20 13:38
5	ERH1185	BA20716W14 1/800	1009Y298.D	10/29/20 14:04
6	ERH1187	BA20718W17 1/800	1009Y299.D	10/29/20 14:29
7	ERH1188	BA20719W13 1/800	1009Y300.D	10/29/20 14:55
8		50ug/mL 8270 7/22/20	1009Y303.D	10/29/20 15:58
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	9.95 - 80.04% of mass 198	32.5
68	0 - 2% of mass 69	0.0
70	0 - 2% of mass 69	0.4
127	10 - 80% of mass 198	48.6
197	0 - 2% of mass 198	0.0
198	100 - 100% of mass 197.95	100.0
199	5 - 9% of mass 198	6.8
275	10 - 60% of mass 198	27.4
365	1 - 100% of mass 198	2.8
441	0.01 - 24% of mass 442	10.4
442	50 - 500% of mass 197.95	75.3
443	15 - 24% of mass 442	19.3

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract:

Lab Code: SDG No.:

Lab File ID (Standard): 1009Y294.D Date Analyzed: 10/29/20

Instrument ID: Yoda Time Analyzed: 12:21

GC Column: ID: Heated Purge: (Y/N)

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	178593	5.11	712817	6.52	427217	8.55
	UPPER LIMIT	357186	5.28	1425634	6.69	854434	8.72
	LOWER LIMIT	89297	4.94	356409	6.35	213609	8.38
	SAMPLE NO.						
01	201027A BLK 1/800	153100	5.11	612797	6.52	378746	8.54
02	201027A LCS-1 1/800	171087	5.11	673879	6.52	403793	8.55
03	201027A LCSD-1 1/800	162294	5.11	624761	6.52	378796	8.55
04	BA20716W14 1/800	167185	5.11	654334	6.52	388286	8.55
05	BA20718W17 1/800	164869	5.11	637587	6.52	382696	8.55
06	BA20719W13 1/800	161560	5.11	645152	6.52	379730	8.55
07	50ug/mL 8270 7/22/20 (	172668	5.11	688389	6.53	418439	8.54
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.17 minutes of internal standard RT
RT LOWER LIMIT = -0.17 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract:

Lab Code: SDG No.:

Lab File ID (Standard): 1009Y294.D Date Analyzed: 10/29/20

Instrument ID: Yoda Time Analyzed: 12:21

GC Column: ID: Heated Purge: (Y/N)

		Phenanthrene-D10(IS)		Chrysene-D12(IS)		Perylene-D12(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	839951	10.27	866779	13.36	851524	15.06
	UPPER LIMIT	1679902	10.44	1733558	13.53	1703048	15.23
	LOWER LIMIT	419976	10.10	433390	13.19	425762	14.89
	SAMPLE NO.						
01	201027A BLK 1/800	752782	10.27	755549	13.36	737785	15.06
02	201027A LCS-1 1/800	790226	10.27	801529	13.36	805982	15.06
03	201027A LCSD-1 1/800	733651	10.27	742470	13.36	740261	15.06
04	BA20716W14 1/800	746659	10.27	772972	13.36	744366	15.06
05	BA20718W17 1/800	734197	10.27	749575	13.36	731547	15.06
06	BA20719W13 1/800	739495	10.27	755714	13.36	745132	15.06
07	50ug/mL 8270 7/22/20 (	822983	10.28	839965	13.36	826569	15.07
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.17 minutes of internal standard RT
RT LOWER LIMIT = -0.17 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8270D-SIM

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/29/20

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-METHYLNAPHTHALENE-D10 (S)			SURROGATE: FLUORANTHENE-D10 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201027A-BLK	Blank	39-114	91.3		58-120	117	
201027A-LCS	Lab Control Spike	39-114	86.4		58-120	117	
201027A-LCSD	Lab Control SpikeD	39-114	92.6		58-120	105	
BA20716	ERH1185	39-114	97.7		58-120	103	
BA20718	ERH1187	39-114	90.5		58-120	113	
BA20719	ERH1188	39-114	92.4		58-120	118	

Comments: Batch: #SIM53-201027A

8270D-SIM

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/29/20

Matrix: WATER Instrument: Linus

Blank ID: 201027A-BLK Time Analyzed: 1245

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201027A-BLK	Blank	1016L155	10/29/20 1245
201027A-LCS	Lab Control Spike	1016L156	10/29/20 1307
201027A-LCSD	Lab Control SpikeD	1016L157	10/29/20 1329
BA20716	ERH1185	1016L158	10/29/20 1351
BA20718	ERH1187	1016L159	10/29/20 1413
BA20719	ERH1188	1016L160	10/29/20 1435

Comments: Batch: #SIM53-201027A

Method Blank
EPA 8270D SIM LIQ-LIQ

Blank Name/QCG: **201027W-20716 - 258096**
Batch ID: #SIM53-201027A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/27/20	10/29/20
BLANK	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/27/20	10/29/20
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/27/20	10/29/20
BLANK	SURROGATE: 2-METHYLNAPHT	91.3	39-114			%	10/27/20	10/29/20
BLANK	SURROGATE: FLUORANTHENE-	117	58-120			%	10/27/20	10/29/20

Quant Method:L1016.M
Run #:1016L155
Instrument:Linus
Sequence:L201016
Initials:MA

GC SC-Blank-REG MDLs-DOD
Printed: 10/30/20 4:16:26 PM

8270D-SIM

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/29/20
Matrix:	WATER	Instrument:	Linus
LCS ID:	201027A-LCS	Time Analyzed:	1307

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201027A-BLK	Blank	1016L155	10/29/20 1245
201027A-LCS	Lab Control Spike	1016L156	10/29/20 1307
201027A-LCSD	Lab Control SpikeD	1016L157	10/29/20 1329
BA20716	ERH1185	1016L158	10/29/20 1351
BA20718	ERH1187	1016L159	10/29/20 1413
BA20719	ERH1188	1016L160	10/29/20 1435

Comments: Batch: #SIM53-201027A

Laboratory Control Spike Recoveries
EPA 8270D SIM LIQ-LIQ

APPL ID: **201027W-20716 LCS - 258096**
Batch ID: #SIM53-201027A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	6.25	5.47	4.83	87.5	77.3	41-115	12.4	20
2-METHYLNAPHTHALENE	6.25	5.51	5.23	88.2	83.7	39-114	5.2	20
NAPHTHALENE	6.25	5.52	5.23	88.3	83.7	43-114	5.4	20
SURROGATE: 2-METHYLNAPHTHALEN	6.25	5.40	5.79	86.4	92.6	39-114		
SURROGATE: FLUORANTHENE-D10 (S)	6.25	7.29	6.57	117	105	58-120		

Comments:

Primary	SPK	DUP
Quant Method :	L1016.M	L1016.M
Extraction Date :	10/27/20	10/27/20
Analysis Date :	10/29/20	10/29/20
Instrument :	Linus	Linus
Run :	1016L156	1016L157
Initials :	MA	

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No:
Matrix: Water
ID: 1016L002.D

SDG No:
Date Analyzed: 10/16/20
Instrument: Linus
Time Analyzed: 10:21

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		0.1 SIM 08/21/20	1016L003.D	10/16/20 10:37
2		0.2 SIM 08/21/20	1016L004.D	10/16/20 10:59
3		0.5 SIM 08/21/20	1016L005.D	10/16/20 11:21
4		1 SIM 08/21/20	1016L006.D	10/16/20 11:43
5		5 SIM 08/21/20	1016L007.D	10/16/20 12:05
6		10 SIM 08/21/20	1016L008.D	10/16/20 12:27
7		50 SIM 08/21/20	1016L009.D	10/16/20 12:50
8		100 SIM 08/21/20	1016L010.D	10/16/20 13:12
9		SS SIM 08/21/20	1016L011.D	10/16/20 13:34
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	9.95 - 80.1% of mass 198	16.6
68	0 - 2.05% of mass 69	0.0
70	0 - 2% of mass 69	0.6
127	10 - 80% of mass 198	38.1
197	0 - 2% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.7
275	10 - 60% of mass 198	35.8
365	1 - 100% of mass 198	5.1
441	0.01 - 24% of mass 442	14.9
442	50 - 500% of mass 198	293.3
443	15 - 24% of mass 442	19.2

Form 5
Tune Summary

Lab Name: APPL Inc. SDG No: 93873
Case No: 93873 Date Analyzed: 10/29/20
Matrix: Water Instrument: Linus
ID: 1016L153.D Time Analyzed: 12:07

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		5 SIM 08/21/20 (1)	1016L154.D	10/29/20 12:23
2	Blank	201027A BLK 1/800	1016L155.D	10/29/20 12:45
3	Lab Control Spike	201027A LCS-2 1/800	1016L156.D	10/29/20 13:07
4	Lab Control SpikeD	201027A LCSD-2 1/800	1016L157.D	10/29/20 13:29
5	ERH1185	BA20716W14 1/800	1016L158.D	10/29/20 13:51
6	ERH1187	BA20718W17 1/800	1016L159.D	10/29/20 14:13
7	ERH1188	BA20719W13 1/800	1016L160.D	10/29/20 14:35
8		5 SIM 08/21/20 (2)	1016L161.D	10/29/20 14:58
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	9.95 - 80.1% of mass 198	14.7
68	0 - 2.05% of mass 69	0.0
70	0 - 2% of mass 69	0.6
127	10 - 80% of mass 198	36.1
197	0 - 2% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.9
275	10 - 60% of mass 198	34.7
365	1 - 100% of mass 198	4.9
441	0.01 - 24% of mass 442	15.5
442	50 - 500% of mass 198	263.8
443	15 - 24% of mass 442	19.4

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract:

Lab Code: SDG No.:

Lab File ID (Standard): 1016L154.D Date Analyzed: 10/29/20

Instrument ID: Linus Time Analyzed: 12:23

GC Column: ID: Heated Purge: (Y/N)

		Napthalene-D8(IS)		Acenaphthene-D10(IS)		Phenanthrene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	35741	4.27	21037	6.28	41622	7.99
	UPPER LIMIT	71482	4.44	42074	6.45	83244	8.16
	LOWER LIMIT	17871	4.10	10519	6.11	20811	7.82
	SAMPLE NO.						
01	201027A BLK 1/800	33103	4.27	15378	6.28	30399	7.99
02	201027A LCS-2 1/800	34255	4.27	17732	6.28	31259	7.99
03	201027A LCSD-2 1/800	32719	4.27	16149	6.28	31884	7.99
04	BA20716W14 1/800	31442	4.27	16550	6.28	34756	7.99
05	BA20718W17 1/800	29423	4.27	14936	6.28	29507	7.99
06	BA20719W13 1/800	32918	4.27	17290	6.28	31392	7.99
07	5 SIM 08/21/20 (2)	37112	4.27	21447	6.28	43242	7.99
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.17 minutes of internal standard RT
RT LOWER LIMIT = -0.17 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract:

Lab Code: SDG No.:

Lab File ID (Standard): 1016L154.D Date Analyzed: 10/29/20

Instrument ID: Linus Time Analyzed: 12:23

GC Column: ID: Heated Purge: (Y/N)

		Chrysene-D12(IS)		Perylene-D12(IS)			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	60180	11.13	69389	13.56		
	UPPER LIMIT	120360	11.30	138778	13.73		
	LOWER LIMIT	30090	10.96	34695	13.39		
	SAMPLE NO.						
01	201027A BLK 1/800	44205	11.12	49228	13.56		
02	201027A LCS-2 1/800	51747	11.13	55954	13.56		
03	201027A LCSD-2 1/800	42225	11.13	47069	13.56		
04	BA20716W14 1/800	47431	11.13	52607	13.56		
05	BA20718W17 1/800	43131	11.13	48929	13.56		
06	BA20719W13 1/800	51478	11.13	50877	13.56		
07	5 SIM 08/21/20 (2)	67051	11.13	70454	13.56		
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.17 minutes of internal standard RT
RT LOWER LIMIT = -0.17 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

EPA 8270D

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/27/20

Matrix: WATER Instrument: Yoda

Blank ID: 201026A-BLK Time Analyzed: 1106

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201026A-BLK	Blank	0501Y132	10/27/20 1106
201026A-LCS	Lab Control Spike	0501Y133	10/27/20 1130
BA20716	ERH1185	0501Y145	10/29/20 1032
BA20718	ERH1187	0501Y146	10/29/20 1055
BA20719	ERH1188	0501Y147	10/29/20 1118

Comments: Batch: #87DME-201026A

Method Blank
EPA 8270D MODIFIED WATER

Blank Name/QCG: **201026W-20539 - 257898**
Batch ID: #87DME-201026A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2-(2-METHOXYETHOXY)-ETHAN	80.0 U	100	80.0	40.0	ug/L	10/26/20	10/27/20

Quant Method: YMEE0501.M
Run #: 0501Y132
Instrument: Yoda
Sequence: Y200501M
Initials: MA

GC SC-Blank-REG MDLs-DOD
Printed: 11/09/20 4:12:44 PM

EPA 8270D

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/27/20
Matrix:	WATER	Instrument:	Yoda
LCS ID:	201026A-LCS	Time Analyzed:	1130

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201026A-BLK	Blank	0501Y132	10/27/20 1106
201026A-LCS	Lab Control Spike	0501Y133	10/27/20 1130
BA20716	ERH1185	0501Y145	10/29/20 1032
BA20718	ERH1187	0501Y146	10/29/20 1055
BA20719	ERH1188	0501Y147	10/29/20 1118

Comments: Batch: #87DME-201026A

Laboratory Control Spike Recovery
EPA 8270D MODIFIED WATER

APPL ID: **201026W-20539 LCS - 257898**
Batch ID: #87DME-201026A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
2-(2-METHOXYETHOXY)-ETHANOL	80.0	65.3	81.6	30-130

Comments:

Primary	SPK
Quant Method :	YMEE0501.M
Extraction Date :	10/26/20
Analysis Date :	10/27/20
Instrument :	Yoda
Run :	0501Y133
Initials :	MA

Printed: 11/09/20 4:12:29 PM
APPL Standard LCS

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No:
Matrix: Soil
ID: 0501Y002.D

SDG No:
Date Analyzed: 05/01/20
Instrument: Yoda
Time Analyzed: 9:23

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		50ug/ml MEE 05/01/20	0501Y003.D	05/01/20 9:39
2		100ug/ml MEE 05/01/2	0501Y004.D	05/01/20 10:03
3		200ug/ml MEE 05/01/2	0501Y006.D	05/01/20 10:51
4		400ug/ml MEE 05/01/2	0501Y007.D	05/01/20 11:24
5		500ug/ml MEE 05/01/2	0501Y008.D	05/01/20 11:48
6		600ug/ml MEE 05/01/2	0501Y009.D	05/01/20 12:13
7		800ug/ml MEE 05/01/2	0501Y010.D	05/01/20 12:37
8		1000ug/ml MEE 05/01/	0501Y011.D	05/01/20 13:01
9		SSug/ml MEE 05/01/20	0501Y013.D	05/01/20 13:50
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	10 - 80% of mass 198	40.1
68	0 - 2% of mass 69	0.0
70	0 - 2% of mass 69	0.5
127	10 - 80% of mass 198	52.5
197	0 - 2% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.8
275	10 - 60% of mass 198	26.7
365	1 - 100% of mass 198	2.8
441	0.01 - 24% of mass 442	3.9
442	50 - 500% of mass 198	71.6
443	15 - 24% of mass 442	19.8

Form 5
Tune Summary

Lab Name: APPL Inc. SDG No:
Case No: Date Analyzed: 10/27/20
Matrix: Water Instrument: Yoda
ID: 0501Y130.D Time Analyzed: 10:27

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		500ug/ml MEE 05/01/2	0501Y131.D	10/27/20 10:42
2	Blank	201026A BLK 2/500	0501Y132.D	10/27/20 11:06
3	Lab Control Spike	201026A LCS-1 2/500	0501Y133.D	10/27/20 11:30
4		500ug/ml MEE 05/01/2	0501Y141.D	10/27/20 14:38
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	9.95 - 80.04% of mass 198	35.6
68	0 - 2.04% of mass 69	0.0
70	0 - 2.04% of mass 69	0.3
127	10 - 80% of mass 198	49.1
197	0 - 2% of mass 198	0.0
198	100 - 100% of mass 197.95	100.0
199	5 - 9% of mass 198	6.9
275	10 - 60% of mass 198	26.6
365	1 - 100% of mass 198	2.7
441	0.01 - 24% of mass 442	10.1
442	50 - 500% of mass 197.95	70.8
443	15 - 24% of mass 442	19.9

Form 5
Tune Summary

Lab Name: APPL Inc. SDG No: 93873
Case No: 93873 Date Analyzed: 10/29/20
Matrix: Water Instrument: Yoda
ID: 0501Y143.D Time Analyzed: 9:53

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		500ug/ml MEE 05/01/2	0501Y144.D	10/29/20 10:08
2	ERH1185	BA20716W12 2/500	0501Y145.D	10/29/20 10:32
3	ERH1187	BA20718W15 2/500	0501Y146.D	10/29/20 10:55
4	ERH1188	BA20719W10 2/500	0501Y147.D	10/29/20 11:18
5		500ug/ml MEE 05/01/2	0501Y148.D	10/29/20 11:42
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	9.95 - 80.04% of mass 198	30.1
68	0 - 2.04% of mass 69	0.0
70	0 - 2.04% of mass 69	0.8
127	10 - 80% of mass 198	47.0
197	0 - 2% of mass 198	0.0
198	100 - 100% of mass 197.95	100.0
199	5 - 9% of mass 198	7.0
275	10 - 60% of mass 198	28.3
365	1 - 100% of mass 198	3.0
441	0.01 - 24% of mass 442	16.7
442	50 - 500% of mass 197.95	83.7
443	15 - 24% of mass 442	19.1

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract:

Lab Code: SDG No.:

Lab File ID (Standard): 0501Y131.D Date Analyzed: 10/27/20

Instrument ID: Yoda Time Analyzed: 10:42

GC Column: ID: Heated Purge: (Y/N)

	1,4-dichlorobenzene-D4(IS)							
		AREA #	RT #	AREA #	RT #	AREA #	RT #	
	12 HOUR STD	179268	5.37					
	UPPER LIMIT	358536	5.54					
	LOWER LIMIT	89634	5.20					
	SAMPLE NO.							
01	201026A BLK 2/500	175209	5.36					
02	201026A LCS-1 2/500	187647	5.36					
03	500ug/ml MEE 05/01/20	143100	5.37					
04								
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.17 minutes of internal standard RT
RT LOWER LIMIT = -0.17 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract:

Lab Code: SDG No.:

Lab File ID (Standard): 0501Y144.D Date Analyzed: 10/29/20

Instrument ID: Yoda Time Analyzed: 10:08

GC Column: ID: Heated Purge: (Y/N)

	1,4-dichlorobenzene-D4(IS)							
		AREA #	RT #	AREA #	RT #	AREA #	RT #	
	12 HOUR STD	147724	5.36					
	UPPER LIMIT	295448	5.53					
	LOWER LIMIT	73862	5.19					
	SAMPLE NO.							
01	BA20716W12 2/500	160080	5.37					
02	BA20718W15 2/500	201704	5.35					
03	BA20719W10 2/500	158396	5.36					
04	500ug/ml MEE 05/01/20	139396	5.37					
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.17 minutes of internal standard RT
RT LOWER LIMIT = -0.17 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

EPA 8260B

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/28/20

Matrix: WATER Instrument: ZEUS

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201028AZ-LCS	Lab Control Spike	81-118	114		85-114	112	
201028AZ-LCSD	Lab Control SpikeD	81-118	115		85-114	114	
201028AZ-BLK	Blank	81-118	114		85-114	112	
BA20715	ERH1184	81-118	115		85-114	111	
BA20716	ERH1185	81-118	115		85-114	110	

Comments: Batch: #86BTO-201028AZ

EPA 8260B

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/28/20

Matrix: WATER Instrument: ZEUS

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201028AZ-LCS	Lab Control Spike	80-119	110		89-112	111	
201028AZ-LCSD	Lab Control SpikeD	80-119	111		89-112	112	
201028AZ-BLK	Blank	80-119	110		89-112	110	
BA20715	ERH1184	80-119	111		89-112	108	
BA20716	ERH1185	80-119	109		89-112	107	

Comments: Batch: #86BTO-201028AZ

EPA 8260B

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/28/20

Matrix: WATER Instrument: ZEUS

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201028AZ1-LCS	Lab Control Spike	81-118	114		85-114	112	
201028AZ1-LCSD	Lab Control SpikeD	81-118	115		85-114	114	
201028AZ1-BLK	Blank	81-118	114		85-114	112	
BA20717	ERH1186	81-118	113		85-114	108	
BA20718	ERH1187	81-118	112		85-114	106	
BA20719	ERH1188	81-118	113		85-114	106	

Comments: Batch: #86BTO-201028AZ

EPA 8260B

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/28/20

Matrix: WATER Instrument: ZEUS

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201028AZ1-LCS	Lab Control Spike	80-119	110		89-112	111	
201028AZ1-LCSD	Lab Control SpikeD	80-119	111		89-112	112	
201028AZ1-BLK	Blank	80-119	110		89-112	110	
BA20717	ERH1186	80-119	108		89-112	106	
BA20718	ERH1187	80-119	108		89-112	105	
BA20719	ERH1188	80-119	110		89-112	105	

Comments: Batch: #86BTO-201028AZ

EPA 8260B

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/28/20
Matrix:	WATER	Instrument:	ZEUS
Blank ID:	201028AZ-BLK	Time Analyzed:	1456

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201028AZ-LCS	Lab Control Spike	1028Z13	10/28/20 1259
201028AZ-LCSD	Lab Control SpikeD	1028Z14	10/28/20 1323
201028AZ-BLK	Blank	1028Z18	10/28/20 1456
BA20715	ERH1184	1028Z19	10/28/20 1519
BA20716	ERH1185	1028Z20	10/28/20 1542

Comments: Batch: #86BTO-201028AZ

EPA 8260B

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/28/20
Matrix:	WATER	Instrument:	ZEUS
Blank ID:	201028AZ1-BLK	Time Analyzed:	1457

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201028AZ1-LCS	Lab Control Spike	1028Z13	10/28/20 1300
201028AZ1-LCSD	Lab Control SpikeD	1028Z14	10/28/20 1324
201028AZ1-BLK	Blank	1028Z18	10/28/20 1457
BA20717	ERH1186	1028Z21	10/28/20 1605
BA20718	ERH1187	1028Z22	10/28/20 1628
BA20719	ERH1188	1028Z23	10/28/20 1651

Comments: Batch: #86BTO-201028AZ

Method Blank
EPA 8260B BTEX WATER

Blank Name/QCG: **201028W-20715 - 257995**
Batch ID: #86BTO-201028AZ

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	10/28/20	10/28/20
BLANK	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	10/28/20	10/28/20
BLANK	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	10/28/20	10/28/20
BLANK	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	10/28/20	10/28/20
BLANK	SURROGATE: 1,2-DICHLOROET	114	81-118			%	10/28/20	10/28/20
BLANK	SURROGATE: 4-BROMOFLUORO	112	85-114			%	10/28/20	10/28/20
BLANK	SURROGATE: DIBROMOFLUOR	110	80-119			%	10/28/20	10/28/20
BLANK	SURROGATE: TOLUENE-D8 (S)	110	89-112			%	10/28/20	10/28/20

Quant Method: Z1027W.M
Run #: 1028Z18
Instrument: ZEUS
Sequence: 201027
Initials: DG

GC SC-Blank-REG MDLs-DOD
Printed: 10/30/20 8:59:18 AM

Method Blank
EPA 8260B BTEX & 1,2-DCA WATER

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201028W-20717 - 258053**
Batch ID: #86BTO-201028AZ1

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1,2-DICHLOROETHANE	0.30 U	1.0	0.30	0.14	ug/L	10/28/20	10/28/20
BLANK	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	10/28/20	10/28/20
BLANK	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	10/28/20	10/28/20
BLANK	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	10/28/20	10/28/20
BLANK	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	10/28/20	10/28/20
BLANK	SURROGATE: 1,2-DICHLOROET	114	81-118			%	10/28/20	10/28/20
BLANK	SURROGATE: 4-BROMOFLUORO	112	85-114			%	10/28/20	10/28/20
BLANK	SURROGATE: DIBROMOFLUOR	110	80-119			%	10/28/20	10/28/20
BLANK	SURROGATE: TOLUENE-D8 (S)	110	89-112			%	10/28/20	10/28/20

Quant Method:Z1027W.M
Run #:1028Z18
Instrument:ZEUS
Sequence:201027
Initials:DG

GC SC-Blank-REG MDLs-DOD
Printed: 10/30/20 8:59:18 AM

EPA 8260B

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/28/20
Matrix:	WATER	Instrument:	ZEUS
LCS ID:	201028AZ-LCS	Time Analyzed:	1259

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201028AZ-LCS	Lab Control Spike	1028Z13	10/28/20 1259
201028AZ-LCSD	Lab Control SpikeD	1028Z14	10/28/20 1323
201028AZ-BLK	Blank	1028Z18	10/28/20 1456
BA20715	ERH1184	1028Z19	10/28/20 1519
BA20716	ERH1185	1028Z20	10/28/20 1542

Comments: Batch: #86BTO-201028AZ

EPA 8260B

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/28/20
Matrix:	WATER	Instrument:	ZEUS
LCS ID:	201028AZ1-LCS	Time Analyzed:	1300

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201028AZ1-LCS	Lab Control Spike	1028Z13	10/28/20 1300
201028AZ1-LCSD	Lab Control SpikeD	1028Z14	10/28/20 1324
201028AZ1-BLK	Blank	1028Z18	10/28/20 1457
BA20717	ERH1186	1028Z21	10/28/20 1605
BA20718	ERH1187	1028Z22	10/28/20 1628
BA20719	ERH1188	1028Z23	10/28/20 1651

Comments: Batch: #86BTO-201028AZ

Laboratory Control Spike Recoveries
EPA 8260B BTEX WATER

APPL ID: **201028W-20715 LCS - 257995**
Batch ID: #86BTO-201028AZ

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BENZENE	10.00	10.2	10.5	102	105	79-120	2.9	20
ETHYLBENZENE	10.00	10.3	10.6	103	106	79-121	2.9	20
TOLUENE	10.00	10.2	10.6	102	106	80-121	3.8	20
XYLENES (TOTAL)	30.0	31.6	32.6	105	109	79-121	3.1	20
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	28.4	28.7	114	115	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	27.9	28.4	112	114	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	27.5	27.8	110	111	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	27.7	27.9	111	112	89-112		

Comments:

Primary	SPK	DUP
Quant Method :	Z1027W.M	Z1027W.M
Extraction Date :	10/28/20	10/28/20
Analysis Date :	10/28/20	10/28/20
Instrument :	ZEUS	ZEUS
Run :	1028Z13	1028Z14
Initials :	DG	

Laboratory Control Spike Recoveries
EPA 8260B BTEX & 1,2-DCA WATER

APPL ID: **201028W-20717 LCS - 258053**
Batch ID: #86BTO-201028AZ1

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1,2-DICHLOROETHANE	10.00	10.8	10.8	108	108	73-128	0.0	20
BENZENE	10.00	10.2	10.5	102	105	79-120	2.9	20
ETHYLBENZENE	10.00	10.3	10.6	103	106	79-121	2.9	20
TOLUENE	10.00	10.2	10.6	102	106	80-121	3.8	20
XYLENES (TOTAL)	30.0	31.6	32.6	105	109	79-121	3.1	20
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	28.4	28.7	114	115	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	27.9	28.4	112	114	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	27.5	27.8	110	111	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	27.7	27.9	111	112	89-112		

Comments:

Primary	SPK	DUP
Quant Method :	Z1027W.M	Z1027W.M
Extraction Date :	10/28/20	10/28/20
Analysis Date :	10/28/20	10/28/20
Instrument :	ZEUS	ZEUS
Run :	1028Z13	1028Z14
Initials :	DG	

Printed: 10/30/20 8:58:59 AM
APPL Standard LCSD

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No:
Matrix: Water
ID: 1027Z14.D

SDG No:
Date Analyzed: 10/27/20
Instrument: ZEUS
Time Analyzed: 12:27

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		0.3ug/L VOC STD 10/2	1027Z18.D	10/27/20 14:00
2		0.5ug/L VOC STD 10/2	1027Z19.D	10/27/20 14:23
3		1ug/L VOC STD 10/27/	1027Z20.D	10/27/20 14:46
4		2ug/L VOC STD 10/27/	1027Z21.D	10/27/20 15:09
5		5ug/L VOC STD 10/27/	1027Z22.D	10/27/20 15:33
6		10ug/L VOC STD 10/27	1027Z23.D	10/27/20 15:56
7		20ug/L VOC STD 10/27	1027Z24.D	10/27/20 16:19
8		40ug/L VOC STD 10/27	1027Z25.D	10/27/20 16:42
9		100ug/L VOC STD 10/2	1027Z26.D	10/27/20 17:06
10		(SS)10ug/L VOC STD 1	1027Z28.D	10/27/20 17:52
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	15 - 40% of mass 95	18.0
75	30 - 60% of mass 95	44.5
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	6.6
173	0 - 2.05% of mass 174	0.7
174	50 - 200% of mass 95	83.7
175	5 - 9% of mass 174	7.4
176	95 - 101% of mass 174	98.0
177	5 - 9% of mass 176	6.6

Form 5
Tune Summary

Lab Name: APPL Inc. SDG No: 93873
Case No: 93873 Date Analyzed: 10/28/20
Matrix: Water Instrument: ZEUS
ID: 1028Z10.D Time Analyzed: 11:44

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		201028A CCV 10 ug/L	1028Z12.D	10/28/20 12:36
2	Lab Control Spike	201028A LCS 10 ug/L	1028Z13.D	10/28/20 12:59
3	Lab Control SpikeD	201028A LCSD 10 ug/L	1028Z14.D	10/28/20 13:23
4	Blank	201028A BLK	1028Z18.D	10/28/20 14:56
5	ERH1184	BA20715W01	1028Z19.D	10/28/20 15:19
6	ERH1185	BA20716W01	1028Z20.D	10/28/20 15:42
7	ERH1186	BA20717W01	1028Z21.D	10/28/20 16:05
8	ERH1187	BA20718W01	1028Z22.D	10/28/20 16:28
9	ERH1188	BA20719W01	1028Z23.D	10/28/20 16:51
10		Ending CCV 10ug/L 10	1028Z24.D	10/28/20 17:14
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	15 - 40% of mass 95	17.8
75	30 - 60% of mass 95	45.1
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	6.6
173	0 - 2.05% of mass 174	0.3
174	50 - 200% of mass 95	89.6
175	5 - 9% of mass 174	7.1
176	95 - 101% of mass 174	96.7
177	5 - 9% of mass 176	6.0

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract:

Lab Code: SDG No.:

Lab File ID (Standard): 1028Z12.D Date Analyzed: 10/28/20

Instrument ID: ZEUS Time Analyzed: 12:36

GC Column: ID: Heated Purge: (Y/N)

		Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	644187	5.00	456537	7.65	240735	9.87
	UPPER LIMIT	1288374	5.17	913074	7.82	481470	10.04
	LOWER LIMIT	322094	4.83	228269	7.48	120368	9.70
	SAMPLE NO.						
01	201028A LCS 10 ug/L	658652	5.00	468538	7.65	246428	9.87
02	201028A LCSD 10 ug/L	657009	5.00	464306	7.65	246878	9.87
03	201028A BLK	673135	5.00	470124	7.65	254416	9.87
04	BA20715W01	646891	5.00	458923	7.65	251653	9.87
05	BA20716W01	628322	5.00	446414	7.65	241962	9.87
06	BA20717W01	629117	5.00	445256	7.65	240084	9.87
07	BA20718W01	618144	5.00	440348	7.65	237450	9.87
08	BA20719W01	594194	5.00	422786	7.65	229464	9.87
09	Ending CCV 10ug/L 10/2	618145	5.00	439662	7.65	234522	9.87
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.17 minutes of internal standard RT
RT LOWER LIMIT = -0.17 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

EPA 8260B

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/28/20

Matrix: WATER Instrument: ZEUS

APPL ID.	Client Sample No.	SURROGATE: 4-BROMOFLUOROBENZENE (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
201028AZ-LCS	Lab Control Spike	85-114	110				
201028AZ-LCSD	Lab Control SpikeD	85-114	111				
201028AZ-BLK	Blank	85-114	112				
BA20715	ERH1184	85-114	111				
BA20716	ERH1185	85-114	110				
BA20717	ERH1186	85-114	108				
BA20718	ERH1187	85-114	106				
BA20719	ERH1188	85-114	106				

Comments: Batch: #GRO86-201028AZ

EPA 8260B

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/28/20
Matrix:	WATER	Instrument:	ZEUS
Blank ID:	201028AZ-BLK	Time Analyzed:	1456

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201028AZ-LCS	Lab Control Spike	1028Z16	10/28/20 1409
201028AZ-LCSD	Lab Control SpikeD	1028Z17	10/28/20 1432
201028AZ-BLK	Blank	1028Z18	10/28/20 1456
BA20715	ERH1184	1028Z19	10/28/20 1519
BA20716	ERH1185	1028Z20	10/28/20 1542
BA20717	ERH1186	1028Z21	10/28/20 1605
BA20718	ERH1187	1028Z22	10/28/20 1628
BA20719	ERH1188	1028Z23	10/28/20 1651

Comments: Batch: #GRO86-201028AZ

Method Blank
EPA 8260B GRO WATER

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201028W-20715 - 257989**
Batch ID: #GRO86-201028AZ

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	10/28/20	10/28/20
BLANK	SURROGATE: 4-BROMOFLUORO	112	85-114			%	10/28/20	10/28/20

Quant Method:ZSUR1027.M
Run #:1028Z18
Instrument:ZEUS
Sequence:201027
Initials:DG

GC SC-Blank-REG MDLs-DOD
Printed: 10/29/20 1:31:56 PM

EPA 8260B

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/28/20
Matrix:	WATER	Instrument:	ZEUS
LCS ID:	201028AZ-LCS	Time Analyzed:	1409

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201028AZ-LCS	Lab Control Spike	1028Z16	10/28/20 1409
201028AZ-LCSD	Lab Control SpikeD	1028Z17	10/28/20 1432
201028AZ-BLK	Blank	1028Z18	10/28/20 1456
BA20715	ERH1184	1028Z19	10/28/20 1519
BA20716	ERH1185	1028Z20	10/28/20 1542
BA20717	ERH1186	1028Z21	10/28/20 1605
BA20718	ERH1187	1028Z22	10/28/20 1628
BA20719	ERH1188	1028Z23	10/28/20 1651

Comments: Batch: #GRO86-201028AZ

Laboratory Control Spike Recoveries
EPA 8260B GRO WATER

APPL ID: **201028W-20715 LCS - 257989**
Batch ID: #GRO86-201028AZ

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
GASOLINE RANGE ORGANICS	300	321	309	107	103	78-122	3.8	20
SURROGATE: 4-BROMOFLUOROBENZE	25.0	27.5	27.8	110	111	85-114		

Comments:

Primary	SPK	DUP
Quant Method :	ZSUR1027.M	ZSUR1027.M
Extraction Date :	10/28/20	10/28/20
Analysis Date :	10/28/20	10/28/20
Instrument :	ZEUS	ZEUS
Run :	1028Z16	1028Z17
Initials :	DG	

RSK 175

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/27/20
Matrix:	WATER	Instrument:	Rocky
Blank ID:	201027A-BLK	Time Analyzed:	1558

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201027A-LCS	Lab Control Spike	1027R02	10/27/20 1555
201027A-BLK	Blank	1027R03	10/27/20 1558
BA20715	ERH1184	1027R13	10/27/20 1625
BA20716	ERH1185	1027R14	10/27/20 1628
BA20718	ERH1187	1027R15	10/27/20 1630
201027A-LCSD	Lab Control SpikeD	1027R18	10/27/20 1637

Comments: Batch: #RSKME-201027A

RSK 175

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	11/02/20
Matrix:	WATER	Instrument:	Rocky
Blank ID:	201102A-BLK	Time Analyzed:	1407

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201102A-LCS	Lab Control Spike	1102R01	11/02/20 1400
201102A-BLK	Blank	1102R04	11/02/20 1407
BA20717	ERH1186	1102R07	11/02/20 1418
201102A-LCSD	Lab Control SpikeD	1102R08	11/02/20 1429

Comments: Batch: #RSKME-201102A

Method Blank
METHANE

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201027W-20539 - 257902**
Batch ID: #RSKME-201027A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	METHANE	1.00 U	5.0	1.00	0.25	ug/L	10/27/20	10/27/20

Quant Method: RSK0914A.M
Run #: 1027R03
Instrument: Rocky
Sequence: 200914
Initials: GAG

GC SC-Blank-REG MDLs-DOD
Printed: 11/04/20 2:52:53 PM

Method Blank
METHANE

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201102W-20717 - 258253**
Batch ID: #RSKME-201102A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	METHANE	1.00 U	5.0	1.00	0.25	ug/L	11/02/20	11/02/20

Quant Method: RSK0914A.M
Run #: 1102R04
Instrument: Rocky
Sequence: 200914
Initials: GAG

GC SC-Blank-REG MDLs-DOD
Printed: 11/04/20 2:52:53 PM

RSK 175

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/27/20
Matrix:	WATER	Instrument:	Rocky
LCS ID:	201027A-LCS	Time Analyzed:	1555

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201027A-LCS	Lab Control Spike	1027R02	10/27/20 1555
201027A-BLK	Blank	1027R03	10/27/20 1558
BA20715	ERH1184	1027R13	10/27/20 1625
BA20716	ERH1185	1027R14	10/27/20 1628
BA20718	ERH1187	1027R15	10/27/20 1630
201027A-LCSD	Lab Control SpikeD	1027R18	10/27/20 1637

Comments: Batch: #RSKME-201027A

RSK 175

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	11/02/20
Matrix:	WATER	Instrument:	Rocky
LCS ID:	201102A-LCS	Time Analyzed:	1400

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201102A-LCS	Lab Control Spike	1102R01	11/02/20 1400
201102A-BLK	Blank	1102R04	11/02/20 1407
BA20717	ERH1186	1102R07	11/02/20 1418
201102A-LCSD	Lab Control SpikeD	1102R08	11/02/20 1429

Comments: Batch: #RSKME-201102A

Laboratory Control Spike Recoveries
METHANE

APPL ID: **201027W-20539 LCS - 257902**
Batch ID: #RSKME-201027A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
METHANE	83.4	73.2	67.1	87.8	80.5	72-125	8.7	30

Comments:

Primary	SPK	DUP
Quant Method :	RSK0914A.M	RSK0914A.M
Extraction Date :	10/27/20	10/27/20
Analysis Date :	10/27/20	10/27/20
Instrument :	Rocky	Rocky
Run :	1027R02	1027R18
Initials :	GAG	

Laboratory Control Spike Recoveries
METHANE

APPL ID: **201102W-20717 LCS - 258253**
Batch ID: #RSKME-201102A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
METHANE	83.4	80.9	89.0	97.0	107	72-125	9.5	30

Comments:

Primary	SPK	DUP
Quant Method :	RSK0914A.M	RSK0914A.M
Extraction Date :	11/02/20	11/02/20
Analysis Date :	11/02/20	11/02/20
Instrument :	Rocky	Rocky
Run :	1102R01	1102R08
Initials :	GAG	

EPA 300.0

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/23/20
Matrix:	WATER	Instrument:	Charlie
Blank ID:	201023A1-BLK	Time Analyzed:	1700

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201023A1-LCS	Lab Control Spike	13	10/23/20 1645
201023A1-BLK	Blank	14	10/23/20 1700
BA20718	ERH1187	16	10/23/20 1822
BA20716	ERH1185	17	10/23/20 1836
201023A1-LCSD	Lab Control SpikeD	24	10/23/20 2019

Comments: Batch: #300W-201023A1

EPA 300.0

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/26/20
Matrix:	WATER	Instrument:	Charlie
Blank ID:	201026A1-BLK	Time Analyzed:	2023

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201026A1-LCS	Lab Control Spike	13	10/26/20 2009
201026A1-BLK	Blank	14	10/26/20 2023
BA20718	ERH1187	20	10/26/20 2151
BA20716	ERH1185	21	10/26/20 2206
201026A1-LCSD	Lab Control SpikeD	28	10/26/20 2348

Comments: Batch: #300WD-201026A1

WETLAB BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	0.63 J	1.0	0.20	0.08	mg/L	10/23/20	10/23/20	#300W-201023A1-BA20716
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	10/23/20	10/23/20	#300W-201023A1-BA20716
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	10/23/20	10/23/20	#300W-201023A1-BA20716
EPA 300.0	CHLORIDE	0.23 J	1.0	0.20	0.08	mg/L	10/26/20	10/26/20	#300WD-201026A1-BA20716

J = Estimated value.

Wetlab SC-Blank-REG MDLs
Printed: 11/06/20 3:55:03 PM

EPA 300.0

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/23/20
Matrix:	WATER	Instrument:	Charlie
LCS ID:	201023A1-LCS	Time Analyzed:	1645

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201023A1-LCS	Lab Control Spike	13	10/23/20 1645
201023A1-BLK	Blank	14	10/23/20 1700
BA20718	ERH1187	16	10/23/20 1822
BA20716	ERH1185	17	10/23/20 1836
201023A1-LCSD	Lab Control SpikeD	24	10/23/20 2019

Comments: Batch: #300W-201023A1

EPA 300.0

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/26/20
Matrix:	WATER	Instrument:	Charlie
LCS ID:	201026A1-LCS	Time Analyzed:	2009

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201026A1-LCS	Lab Control Spike	13	10/26/20 2009
201026A1-BLK	Blank	14	10/26/20 2023
BA20718	ERH1187	20	10/26/20 2151
BA20716	ERH1185	21	10/26/20 2206
201026A1-LCSD	Lab Control SpikeD	28	10/26/20 2348

Comments: Batch: #300WD-201026A1

Laboratory Control Spike Recoveries

WETLAB

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 300.0	CHLORIDE	25.0	27.1	27.1	108	108	0.0	20	90-110	10/26/20	10/26/20	10/26/20	10/26/20	#300WD-201026A1-BA207
EPA 300.0	CHLORIDE	25.0	26.1	25.9	104	104	0.77	20	90-110	10/23/20	10/23/20	10/23/20	10/23/20	#300W-201023A1-BA2071
EPA 300.0	NITRATE	22.1	22.5	22.2	102	100	1.3	20	90-110	10/23/20	10/23/20	10/23/20	10/23/20	#300W-201023A1-BA2071
EPA 300.0	SULFATE	25.0	25.0	24.9	100	99.6	0.40	20	90-110	10/23/20	10/23/20	10/23/20	10/23/20	#300W-201023A1-BA2071

Comments:

EPA 353.2

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/27/20

Matrix: WATER Instrument: EVE

Blank ID: 201027A-BLK Time Analyzed: 1604

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201027A-BLK	Blank	12	10/27/20 1604
201027A-LCS	Lab Control Spike	13	10/27/20 1607
201027A-LCSD	Lab Control SpikeD	14	10/27/20 1609
BA20716	ERH1185	16	10/27/20 1616
BA20718	ERH1187	17	10/27/20 1617

Comments: Batch: #353TO-201027A

SM 2320B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/28/20

Matrix: WATER Instrument: Tiamo

Blank ID: 201028A1-BLK Time Analyzed: 2026

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201028A1-BLK	Blank	1	10/28/20 2026
BA20718	ERH1187	10	10/28/20 2148
201028A1-LCSD	Lab Control SpikeD	15	10/29/20 1902
201028A1-LCS	Lab Control Spike	16	10/29/20 1925
BA20716	ERH1185	9	10/28/20 2143

Comments: Batch: #232W-201028A1

SM3500FeB

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/28/20

Matrix: WATER Instrument: Manual Spec

Blank ID: A201028-BLK Time Analyzed: 1612

APPL ID.	Client Sample No.	File ID.	Date Analyzed
A201028-BLK	Blank	31	10/28/20 1612
A201028-LCSD	Lab Control SpikeD	33	10/28/20 1614
BA20716	ERH1185	34	10/28/20 1614
A201028-LCS	Lab Control Spike	35	10/28/20 1614
A201028-MS	Matrix Spike	36	10/28/20 1615
BA20718	ERH1187	37	10/28/20 1615
A201028-MSD	Matrix SpikeD	38	10/28/20 1616

Comments: Batch: #35FE-A201028

SW846 9060A

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/29/20
Matrix:	WATER	Instrument:	TICTOC
Blank ID:	201028A-BLK	Time Analyzed:	0129

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201028A-BLK	Blank	31	10/29/20 0129
201028A-LCS	Lab Control Spike	32	10/29/20 0208
201028A-LCSD	Lab Control SpikeD	33	10/29/20 0248
BA20716	ERH1185	35	10/29/20 0407
BA20718	ERH1187	36	10/29/20 0446

Comments: Batch: #TOCW5-201028A

WETLAB BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SM 2320B	BICARBONATE AS	2.2	2.0	1.70	0.85	mg/L	10/28/20	10/28/20	#232W-201028A1-BA20693
SM 2320B	CARBONATE AS C	1.70 U	2.0	1.70	0.85	mg/L	10/28/20	10/28/20	#232W-201028A1-BA20693
SM 2320B	TOTAL ALKALINITY	2.2	2.0	1.70	0.85	mg/L	10/28/20	10/28/20	#232W-201028A1-BA20693
EPA 353.2	NITRATE-NITRITE A	0.16	0.10	0.090	0.028	mg/L	10/27/20	10/27/20	#353TO-201027A-BA20716
SW846 90	TOTAL ORGANIC C	0.350 U	0.93	0.350	0.130	mg/L	10/29/20	10/29/20	#TOCW5-201028A-BA20544
SM3500Fe	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	10/28/20	10/28/20	#35FE-A201028-BA20718

Wetlab SC-Blank-REG MDLs
Printed: 11/03/20 2:33:21 PM

EPA 353.2

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/27/20
Matrix:	WATER	Instrument:	EVE
LCS ID:	201027A-LCS	Time Analyzed:	1607

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201027A-BLK	Blank	12	10/27/20 1604
201027A-LCS	Lab Control Spike	13	10/27/20 1607
201027A-LCSD	Lab Control SpikeD	14	10/27/20 1609
BA20716	ERH1185	16	10/27/20 1616
BA20718	ERH1187	17	10/27/20 1617

Comments: Batch: #353TO-201027A

SM 2320B

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/29/20
Matrix:	WATER	Instrument:	Tiamo
LCS ID:	201028A1-LCS	Time Analyzed:	1925

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201028A1-BLK	Blank	1	10/28/20 2026
BA20718	ERH1187	10	10/28/20 2148
201028A1-LCSD	Lab Control SpikeD	15	10/29/20 1902
201028A1-LCS	Lab Control Spike	16	10/29/20 1925
BA20716	ERH1185	9	10/28/20 2143

Comments: Batch: #232W-201028A1

SM3500FeB

Form 4

LCS Summary

Lab Name: APPL, Inc. SDG No: 93873

Case No: 93873 Date Analyzed: 10/28/20

Matrix: WATER Instrument: Manual Spec

LCS ID: A201028-LCS Time Analyzed: 1614

APPL ID.	Client Sample No.	File ID.	Date Analyzed
A201028-BLK	Blank	31	10/28/20 1612
A201028-LCSD	Lab Control SpikeD	33	10/28/20 1614
BA20716	ERH1185	34	10/28/20 1614
A201028-LCS	Lab Control Spike	35	10/28/20 1614
A201028-MS	Matrix Spike	36	10/28/20 1615
BA20718	ERH1187	37	10/28/20 1615
A201028-MSD	Matrix SpikeD	38	10/28/20 1616

Comments: Batch: #35FE-A201028

SW846 9060A

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93873
Case No:	93873	Date Analyzed:	10/29/20
Matrix:	WATER	Instrument:	TICTOC
LCS ID:	201028A-LCS	Time Analyzed:	0208

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201028A-BLK	Blank	31	10/29/20 0129
201028A-LCS	Lab Control Spike	32	10/29/20 0208
201028A-LCSD	Lab Control SpikeD	33	10/29/20 0248
BA20716	ERH1185	35	10/29/20 0407
BA20718	ERH1187	36	10/29/20 0446

Comments: Batch: #TOCW5-201028A

Laboratory Control Spike Recoveries

WETLAB

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 353.2	NITRATE-NITRITE AS N	3.00	3.03	3.15	101	105	3.9	20	90-110	10/27/20	10/27/20	10/27/20	10/27/20	#353TO-201027A-BA2071
SM 2320B	BICARBONATE AS CACO3	250	249	226	99.6	90.4	9.7	20	90-110	10/29/20	10/29/20	10/29/20	10/29/20	#232W-201028A1-BA2069
SM 2320B	TOTAL ALKALINITY AS CA	250	249	259	99.6	104	3.9	20	90-110	10/29/20	10/29/20	10/29/20	10/29/20	#232W-201028A1-BA2069
SW846 90	TOTAL ORGANIC CARBO	5.00	4.71	4.45	94.2	89.0	5.7	20	80-120	10/29/20	10/29/20	10/29/20	10/29/20	#TOCW5-201028A-BA205

Comments:

Laboratory Control Spike Recoveries

WETLAB

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
SM3500Fe	FERROUS IRON	3.00	3.06	3.11	102	104	1.6	20	80-120	10/28/20	10/28/20	10/28/20	10/28/20	#35FE-A201028-BA20718

Comments:

Matrix Spike Recoveries

WETLAB

APPL ID: **201028W-20718 MS - 257946**

Sample ID: BA20718

Client ID: ERH1187

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	Matrix Res mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recovery	DUP % Recovery	RPD	RPD Max	Recovery Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group	QC Sample
SM3500Fe	FERROUS IRON	3.00	0.15	3.30	3.32	105	106	0.60	20	80-120	10/28/20	10/28/20	10/28/20	10/28/20	257946	BA20718

Comments:

Printed: 11/03/20 2:33:40 PM
APPL MSD SCII

ORGANICS

Calibration Data

DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/27/20
Matrix: Water Instrument: HERBIE Initials: SS

		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
			1023029.D	1023030 D	1023031 D	1023032 D	1023033 D	1023034.D									
1	TM	EDB	33100	29370	27132	26236	25914	25594					27891	10	TM		
2	TM	1,2,3-TCP	9525	7240	6934	6534	6529	6290					7175	17	TM		
3	S	1,3-DIBROMOPROPANE(S)	34275	29560	27380	25348	25353	24188					27684	14	S		
4	TM	DBCP	106175	88945	88856	85817	87851	84541					90364	8.8	TM		
5		Signal #2											0	0			
6																	
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35																	

1.411683

DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/27/20
Matrix: Water Instrument: HERBIE Initials: SS

			1023029.D	1023030.D	1023031.D	1023032.D	1023033.D	1023034.D									
		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
36	TM	EDB #2	129300	118810	114250	109340	108653	107950					114717	7.2	TM		
37	TM	1,2,3-TCP #2	22075	22410	21660	20666	20118	19881					21135	5.0	TM		
38	S	1,3-DIBROMOPROPANE(S) #2	94450	83890	81286	76654	76003	73107					80898	9.5	S		
39	TM	DBCP #2	381425	356705	360978	357479	377209	355173					364828	3.1	TM		
40																	
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0.710188

Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023029.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 2:05 pm
Operator : SS
Sample : 8011-1 10/2720
Misc : water
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:17 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

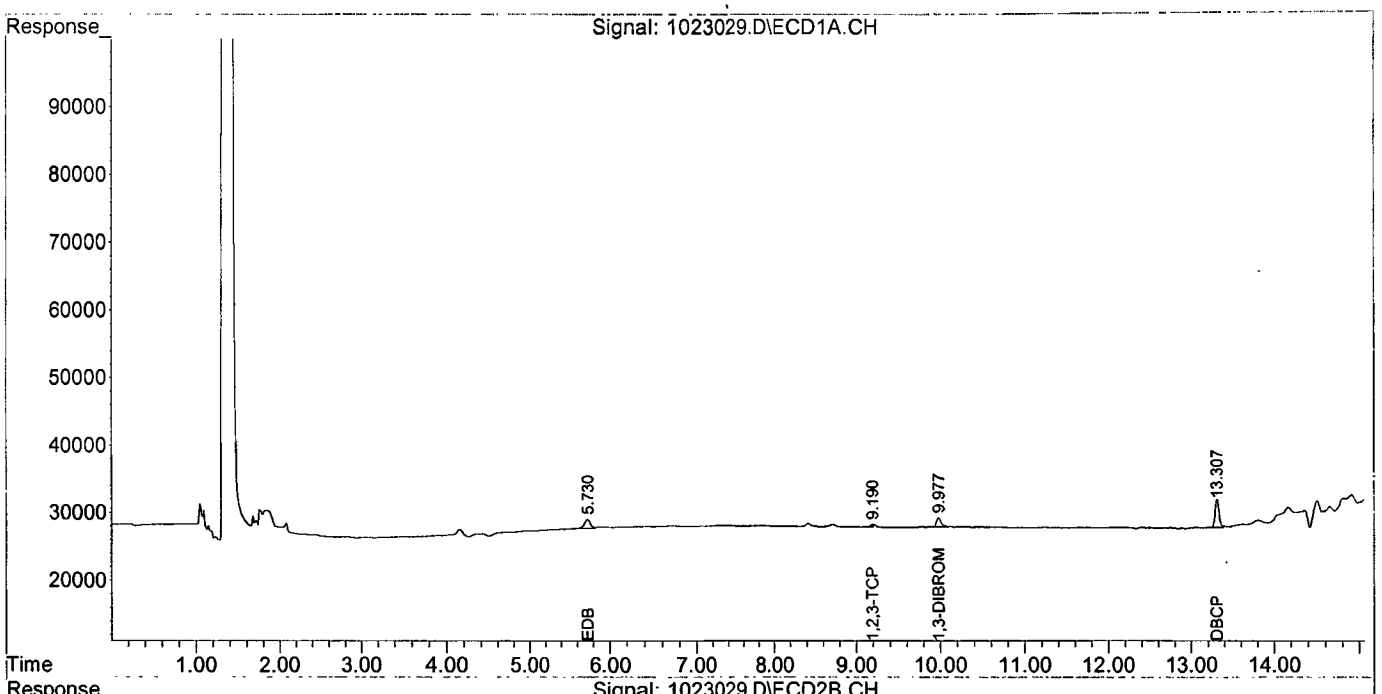
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.977	10.996	1371	3778	0.025	0.023
Spiked Amount 0.350			Recovery	=	7.14%	6.57%
Target Compounds						
1) TM EDB	5.730	7.169	1324	5172	0.024	0.023
2) TM 1,2,3-TCP	9.190	10.409	381	883	0.027	0.021
4) TM DBCP	13.307	14.059	4247	15257	0.023	0.021

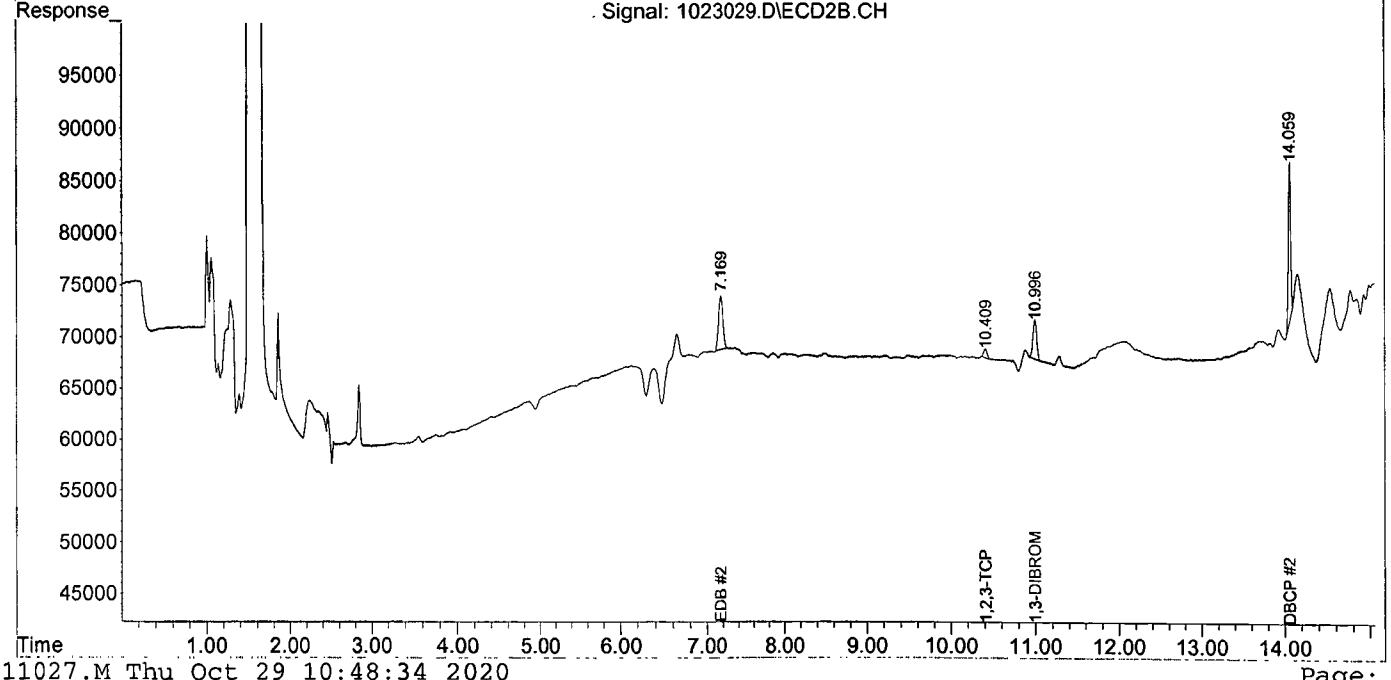
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023029.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 2:05 pm
Operator : SS
Sample : 8011-1 10/2720
Misc : water
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:17 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023030.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 2:26 pm
Operator : SS
Sample : 8011-2 10/2720
Misc : water
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:20 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
3) S	1,3-DIBRO...	9.975	10.998	5912	16778	0.107	0.104
	Spiked Amount 0.350			Recovery =		30.57%	29.71%
	Target Compounds						
1) TM	EDB	5.725	7.171	5874	23762	0.105	0.104
2) TM	1,2,3-TCP	9.212	10.408	1448	4482	0.101	0.106
4) TM	DBCP	13.308	14.061	17789	71341	0.098	0.098

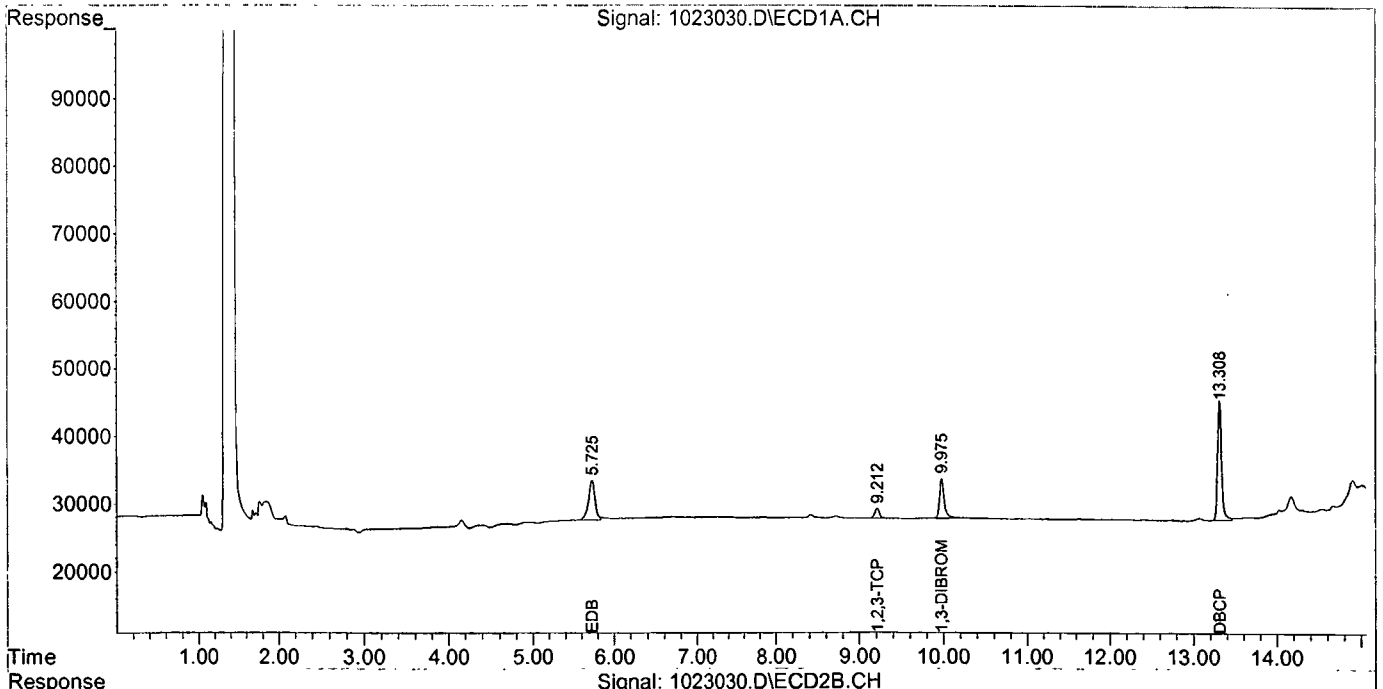
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

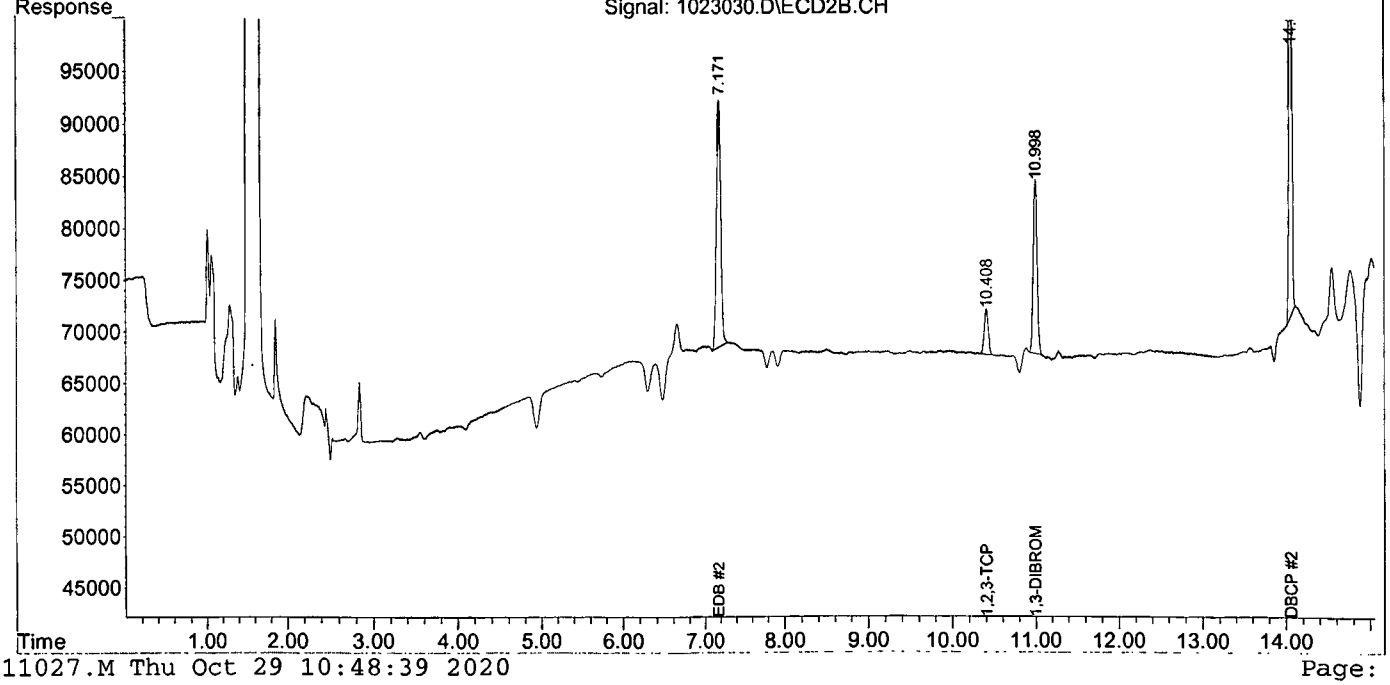
Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023030.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 2:26 pm
Operator : SS
Sample : 8011-2 10/2720
Misc : water
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:20 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023031.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 2:47 pm
Operator : SS
Sample : 8011-3 10/2720
Misc : water
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:24 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.976	10.996	13690	40643	0.247	0.251
Spiked Amount 0.350			Recovery =		70.57%	71.71%
Target Compounds						
1) TM EDB	5.723	7.169	13566	57125	0.243	0.249
2) TM 1,2,3-TCP	9.210	10.409	3467	10830	0.242	0.256
4) TM DBCP	13.306	14.059	44428	180489	0.246	0.247

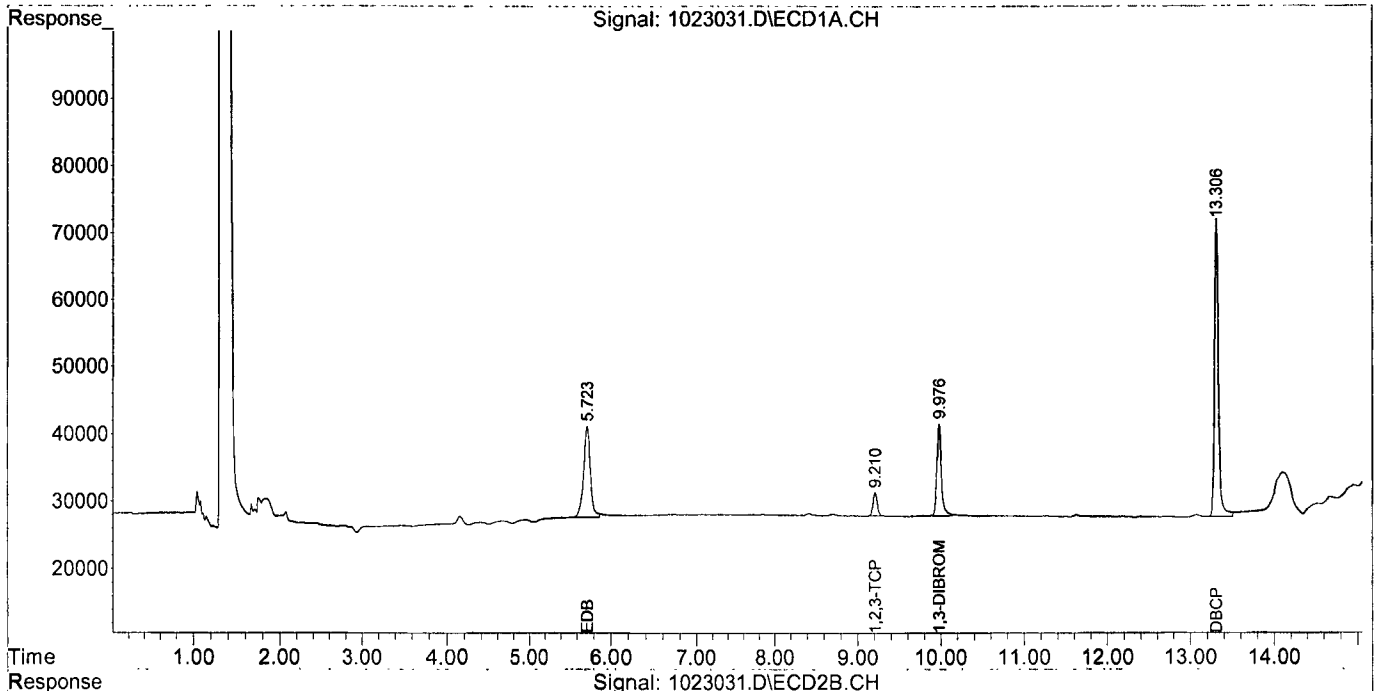
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

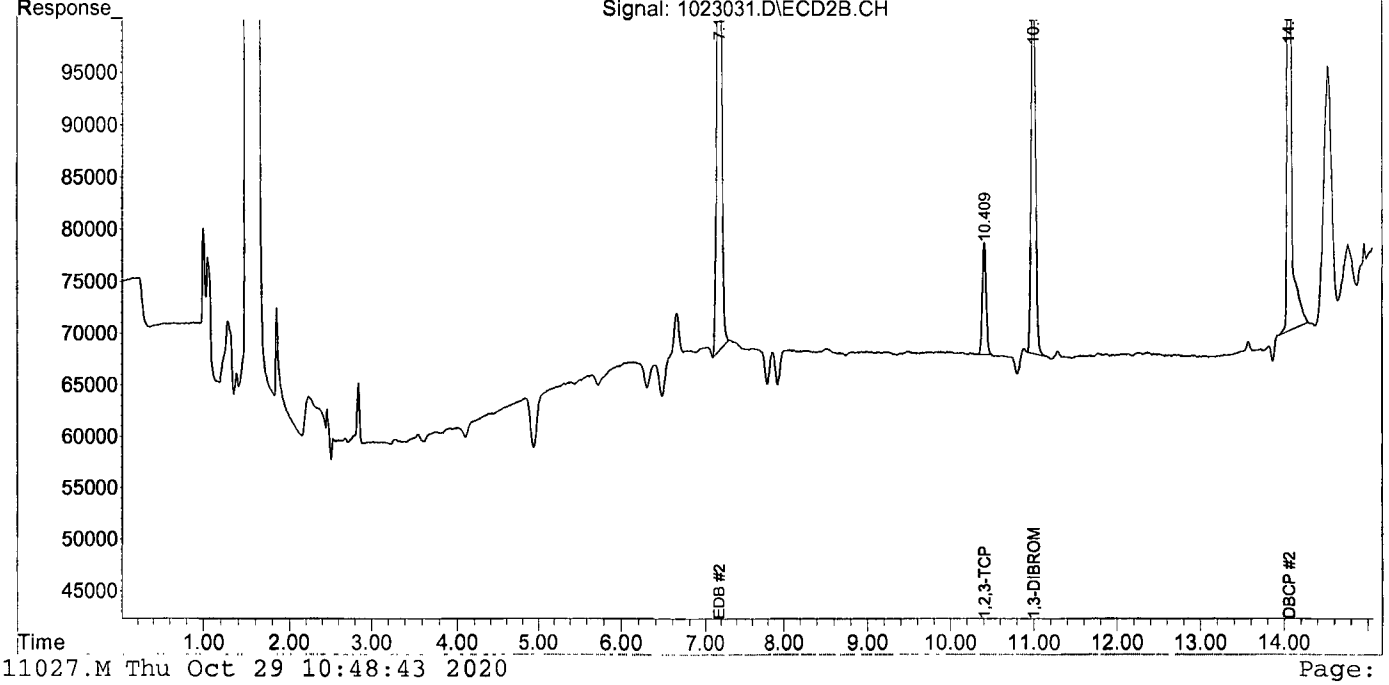
Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023031.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 2:47 pm
Operator : SS
Sample : 8011-3 10/2720
Misc : water
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:24 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023032.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 3:07 pm
Operator : SS
Sample : 8011-4 10/2720
Misc : water
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:29 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.978	10.997	25348	76654	0.458	0.474
Spiked Amount 0.350			Recovery =		130.86%	135.43%
Target Compounds						
1) TM EDB	5.725	7.171	26236	109340	0.470	0.477
2) TM 1,2,3-TCP	9.211	10.407	6534	20666	0.455	0.489
4) TM DBCP	13.308	14.061	85817	357479	0.475	0.490

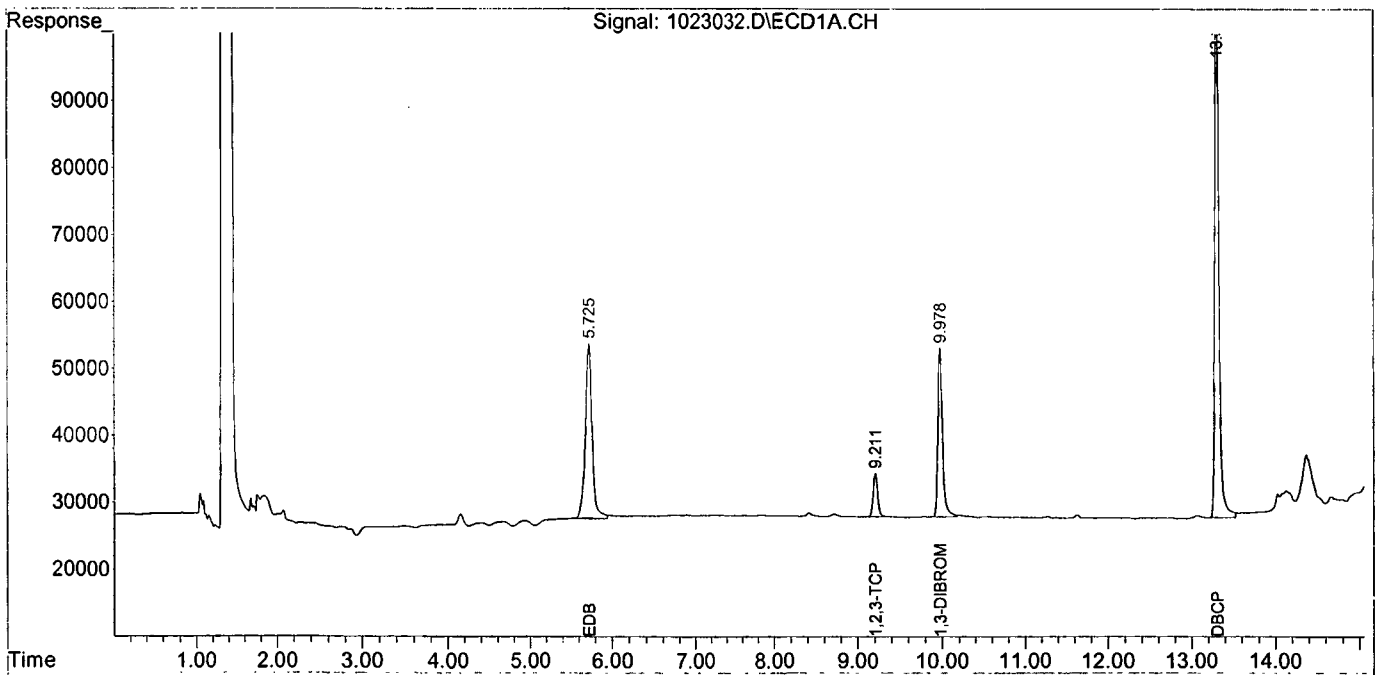
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

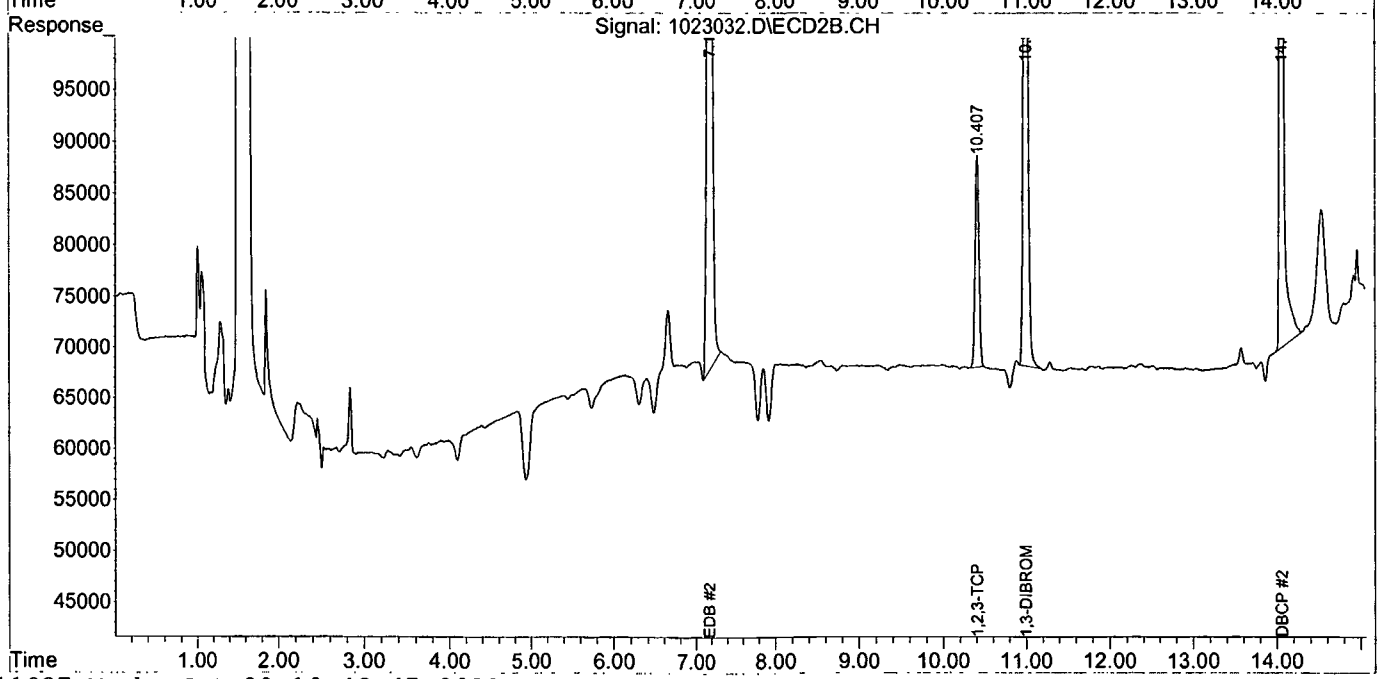
Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023032.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 3:07 pm
Operator : SS
Sample : 8011-4 10/2720
Misc : water
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:29 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 3:28 pm
Operator : SS
Sample : 8011-5 10/2720
Misc : water
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:32 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
3) S	1,3-DIBRO...	9.976	10.998	38029	114004	0.687	0.705
	Spiked Amount 0.350			Recovery =		196.29%	201.43%
	Target Compounds						
1) TM	EDB	5.726	7.168	38871	162979	0.697	0.710
2) TM	1,2,3-TCP	9.212	10.408	9793	30177	0.682	0.714
4) TM	DBCP	13.309	14.062	131776	565813	0.729	0.775

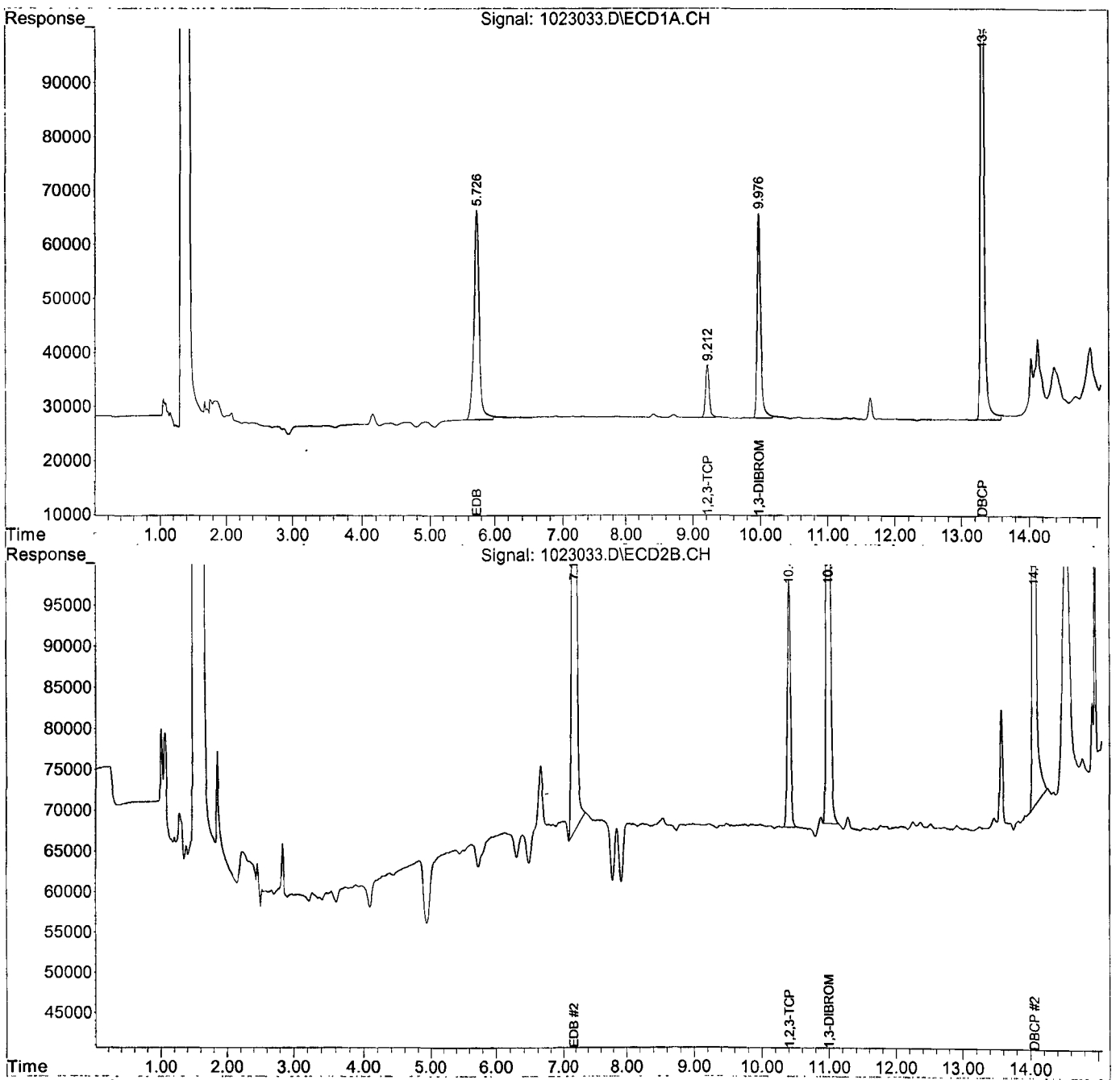
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 3:28 pm
Operator : SS
Sample : 8011-5 10/2720
Misc : water
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:32 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50



Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023034.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 3:49 pm
Operator : SS
Sample : 8011-6 10/2720
Misc : water
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:36 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.974	10.997	48375	146214	0.874	0.904
Spiked Amount 0.350			Recovery =		249.71%	258.29%
Target Compounds						
1) TM EDB	5.724	7.170	51188	215899	0.918	0.941
2) TM 1,2,3-TCP	9.211	10.407	12579	39761	0.877	0.941
4) TM DBCP	13.307	14.060	169082	710345	0.936	0.974

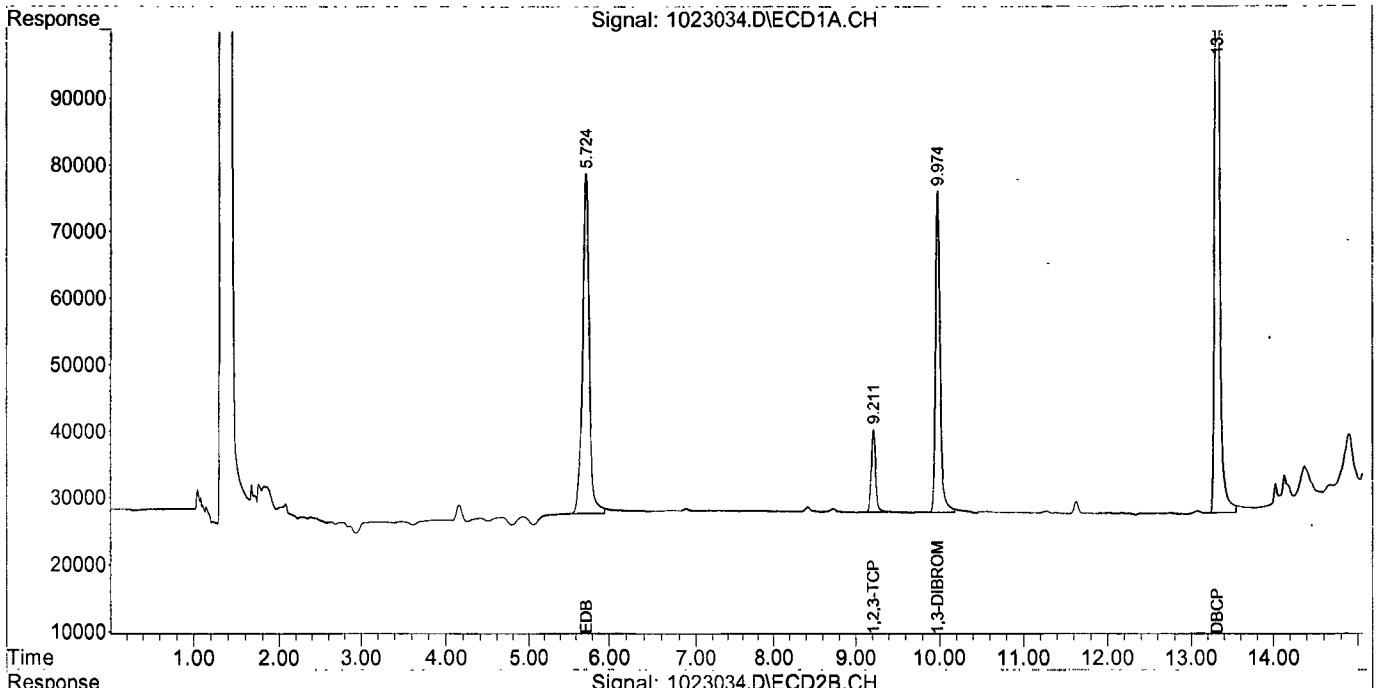
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

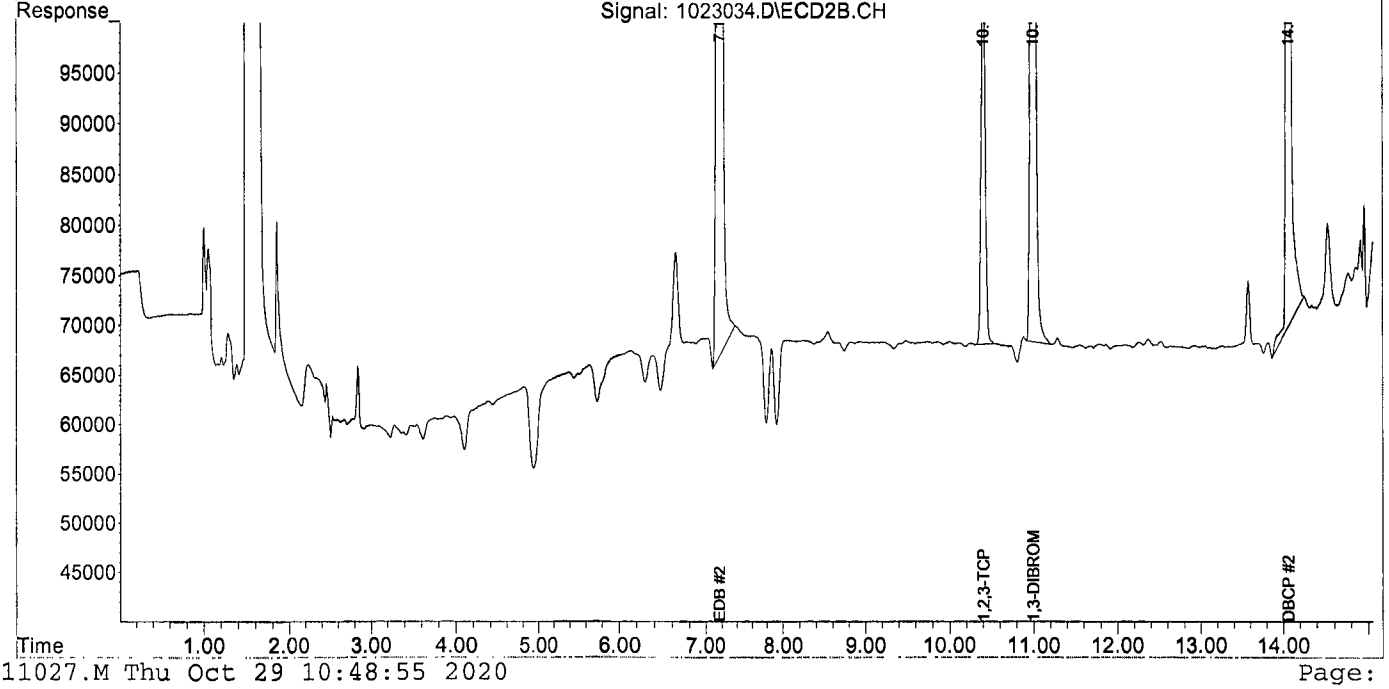
Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023034.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 3:49 pm
Operator : SS
Sample : 8011-6 10/2720
Misc : water
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:36 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/28/20
Instrument: HERBIE
Initial Cal. Date: 10/27/20
Data File: 1023035.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	EDB	27891	29175	4.6	TM	
2	TM	1,2,3-TCP	7175	6780	5.5	TM	
3	TM	DBCP	90364	84140	6.9	TM	
4							
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37							
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39							
40							
		Average			#REF!		

DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/28/20
Instrument: HERBIE
Cal. Date: 10/27/20
Data File: 1023035.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	EDB	114717	113730	0.86	TM	
42	TM	1,2,3-TCP	21135	21020	0.54	TM	
43	TM	DBCP	364828	334725	8.3	TM	
44							
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80							
		Average			#REF!		

Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023035.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 4:09 pm
Operator : SS
Sample : 8011-SS 10/2720
Misc : water
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:40 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.975	10.998	20328	60855	0.367	0.376
Spiked Amount 0.350			Recovery =		104.86%	107.43%
Target Compounds						
1) TM EDB	5.725	7.168	5835	22746	0.105	0.099
2) TM 1,2,3-TCP	9.212	10.408	1356	4204	0.094	0.099
4) TM DBCP	13.309	14.061	16828	66945	0.093	0.092

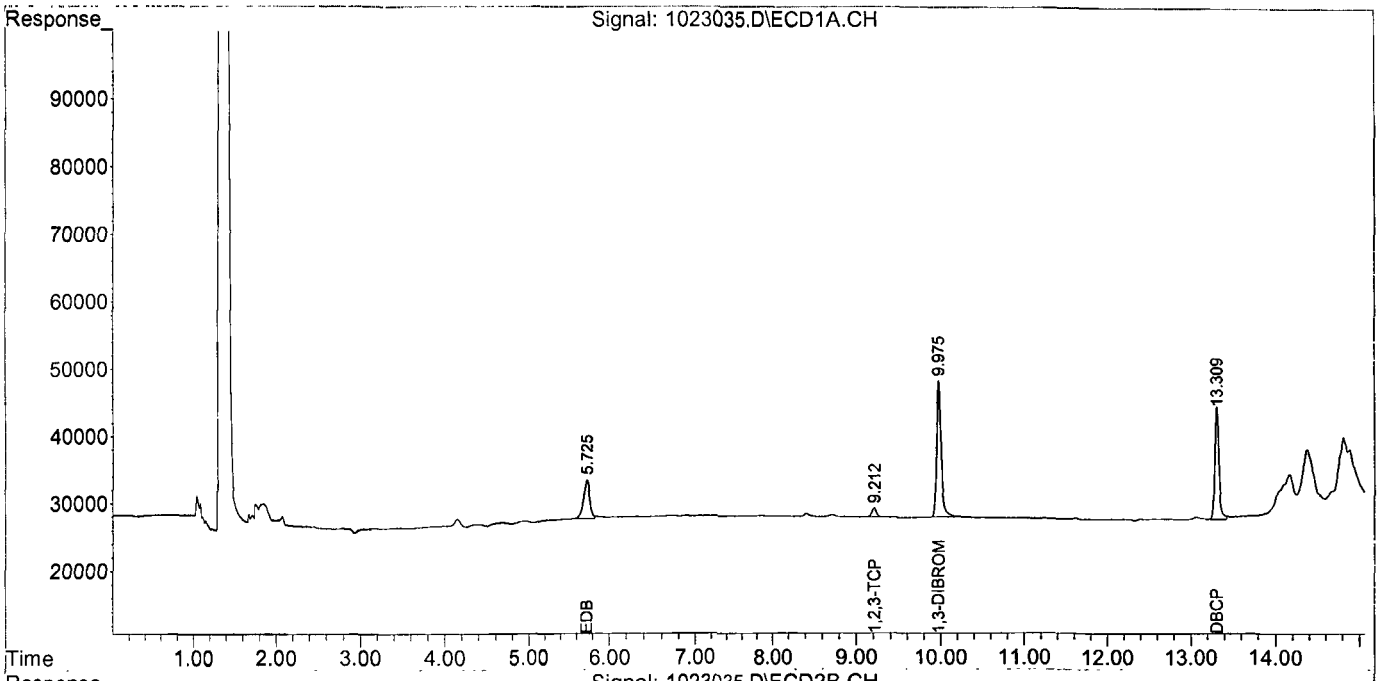
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

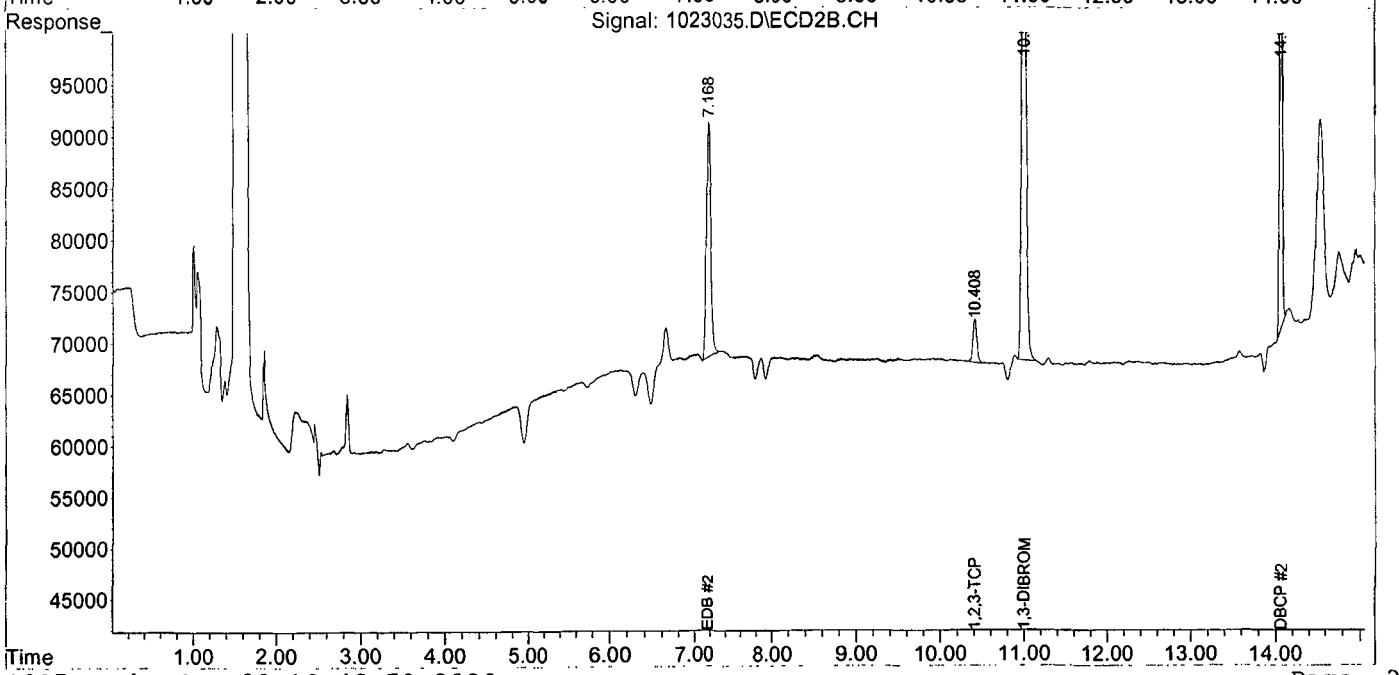
Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023035.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 4:09 pm
Operator : SS
Sample : 8011-SS 10/2720
Misc : water
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:40 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/28/20
Instrument: HERBIE
Initial Cal. Date: 10/27/20
Data File: 1023036.D

		Compound	MEAN	CCRF	%D	%Drift	
1	TM	EDB	27891	27440	1.6	TM	
2	TM	1,2,3-TCP	7175	7152	0.32	TM	
3	S	1,3-DIBROMOPROPANE(S)	27684	27494	0.69	S	
4	TM	DBCP	90364	91902	1.7	TM	
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39							
40							
		Average			1.1		

DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 7

Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/28/20
Matrix: Water Instrument: HERBIE
Cal. Date: 10/27/20
Data File: 1023036.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	EDB	114717	116308	1.4	TM	
42	TM	1,2,3-TCP	21135	22134	4.7	TM	
43	S	1,3-DIBROMOPROPANE(S)	80898	83212	2.9	S	
44	TM	DBCP	364828	366288	0.40	TM	
45							
46							
47							
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79							
80							
		Average			2.4		

Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023036.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 4:30 pm
Operator : SS
Sample : 8011-3 10/2720
Misc : water
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:44 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.975	10.997	13747	41606	0.248	0.257
Spiked Amount 0.350			Recovery =		70.86%	73.43%
Target Compounds						
1) TM EDB	5.725	7.171	13720	58154	0.246	0.253
2) TM 1,2,3-TCP	9.211	10.407	3576	11067	0.249	0.262
4) TM DBCP	13.308	14.061	45951	183144	0.254	0.251

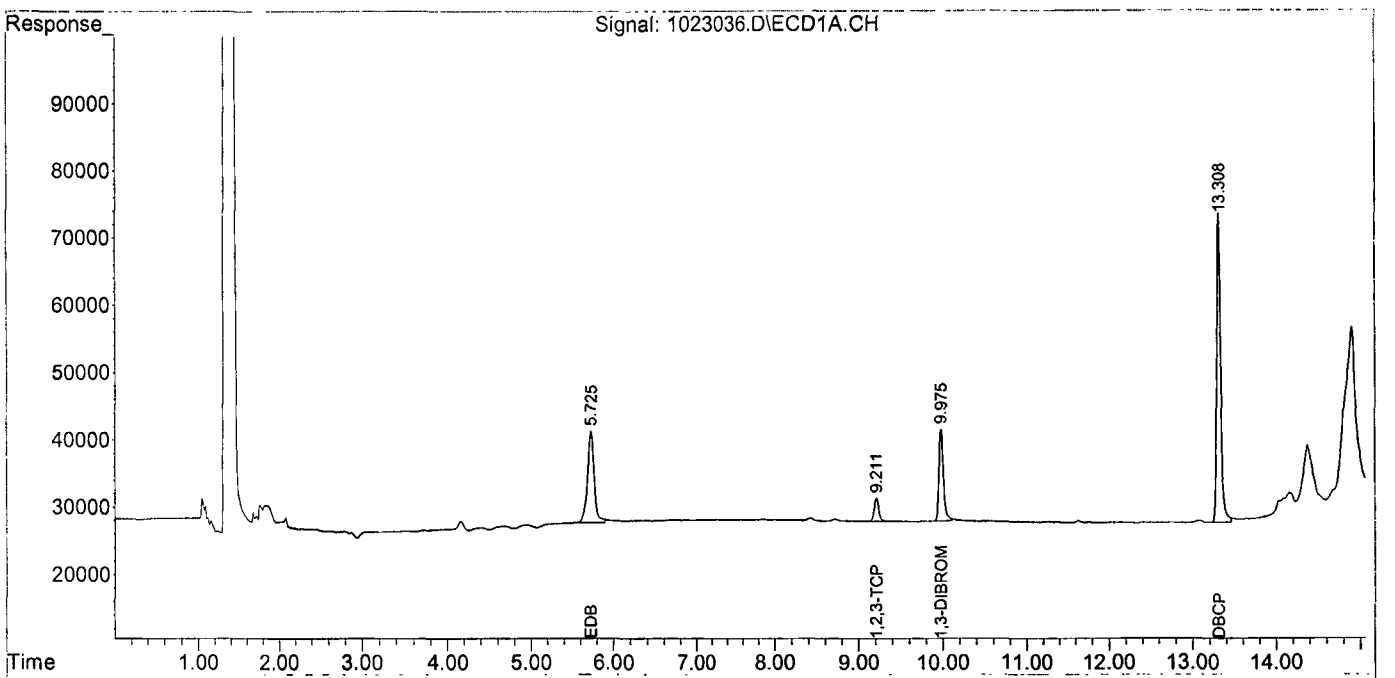
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

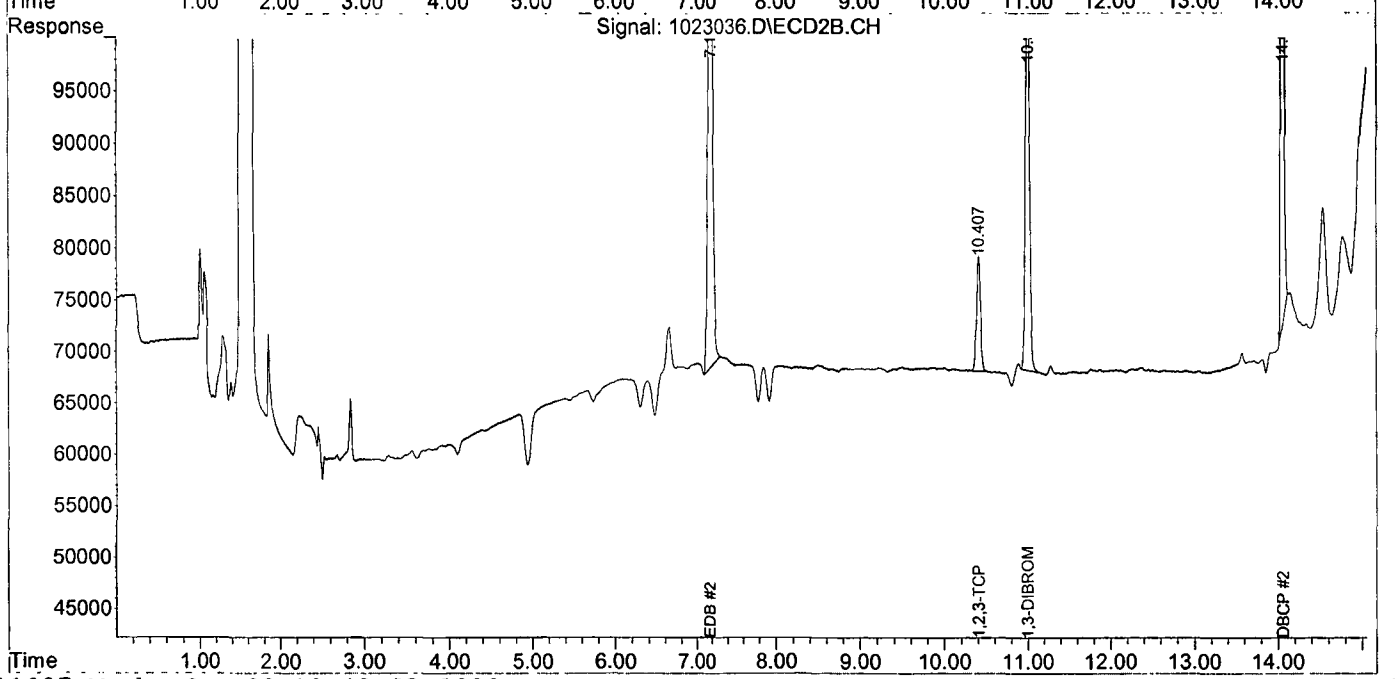
Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023036.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 4:30 pm
Operator : SS
Sample : 8011-3 10/2720
Misc : water
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:44 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/28/20
Instrument: HERBIE
Initial Cal. Date: 10/27/20
Data File: 1023050.D

		Compound	MEAN	CCRF	%D	%Drift	
1	TM	EDB	27891	27856	0.13	TM	
2	TM	1,2,3-TCP	7175	7084	1.3	TM	
3	S	1,3-DIBROMOPROPANE(S)	27684	28934	4.5	S	
4	TM	DBCP	90364	93612	3.6	TM	
5							
6							
7							
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38							
39							
40							
		Average			2.4		

DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/28/20
Instrument: HERBIE
Cal. Date: 10/27/20
Data File: 1023050.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	EDB	114717	115904	1.0	TM	
42	TM	1,2,3-TCP	21135	22258	5.3	TM	
43	S	1,3-DIBROMOPROPANE(S)	80898	84212	4.1	S	
44	TM	DBCP	364828	375714	3.0	TM	
45							
46							
47							
48							
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		Average			3.4		

Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023050.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 9:17 pm
Operator : SS
Sample : 8011-3 10/2720
Misc : water
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:14:37 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
3)	S 1,3-DIBRO...	9.977	10.996	14467	42106	0.261	0.260
	Spiked Amount 0.350			Recovery =		74.57%	74.29%
	Target Compounds						
1)	TM EDB	5.727	7.173	13928	57952	0.250	0.253
2)	TM 1,2,3-TCP	9.210	10.409	3542	11129	0.247	0.263
4)	TM DBCP	13.307	14.059	46806	187857	0.259	0.257

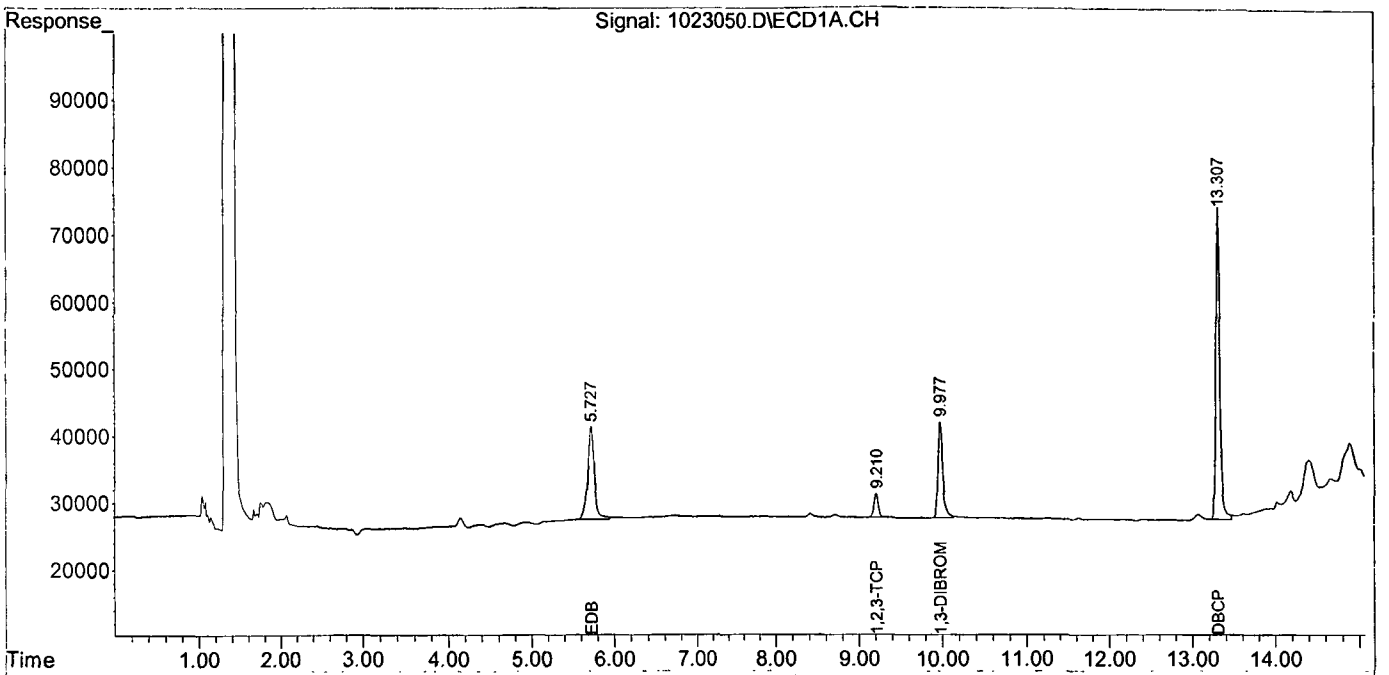
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

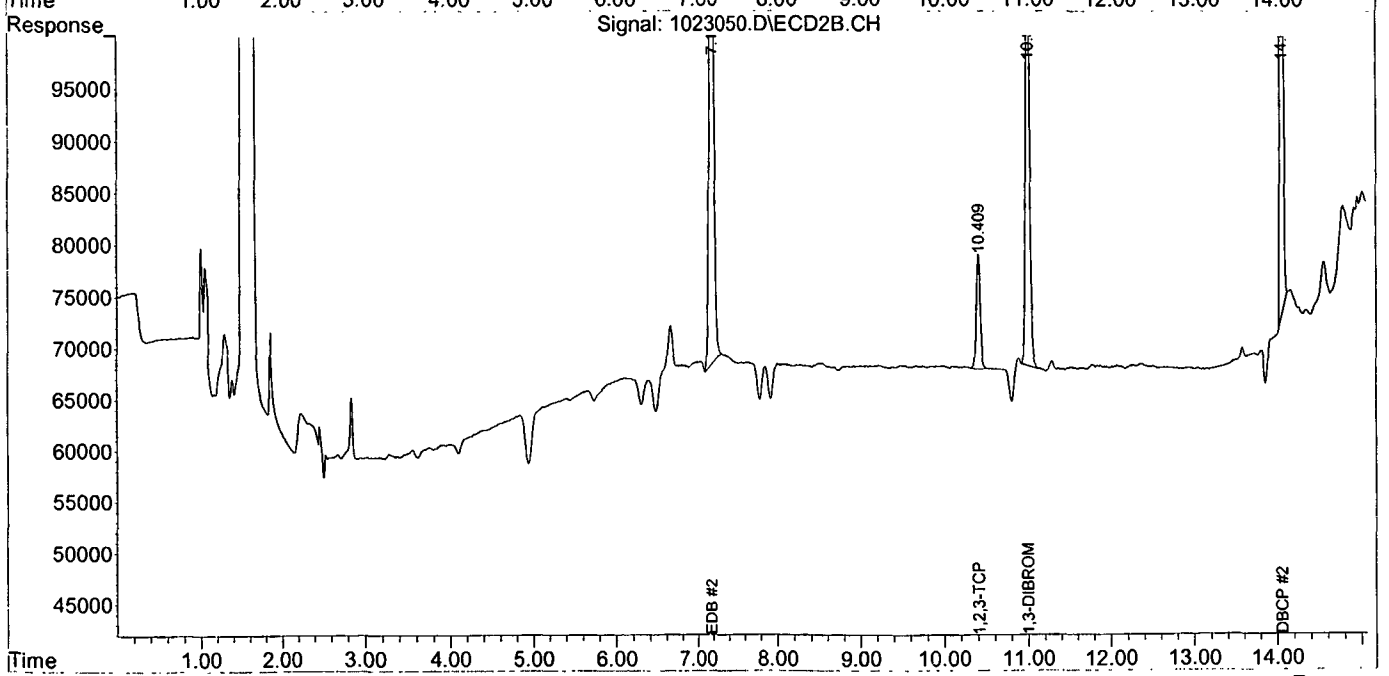
Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023050.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 9:17 pm
Operator : SS
Sample : 8011-3 10/2720
Misc : water
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:14:37 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/28/20
Instrument: HERBIE
Initial Cal. Date: 10/27/20
Data File: 1023058.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	EDB	27891	27566	1.2	TM	
2	TM	1,2,3-TCP	7175	7100	1.0	TM	
3	S	1,3-DIBROMOPROPANE(S)	27684	28966	4.6	S	
4	TM	DBCP	90364	93452	3.4	TM	
5							
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39							
40							
		Average			2.6		

DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/28/20
Instrument: HERBIE
Cal. Date: 10/27/20
Data File: 1023058.D

		Compound	MEAN	CCRF	%D	%Drift	
41	TM	EDB	114717	116022	1.1	TM	
42	TM	1,2,3-TCP	21135	22330	5.7	TM	
43	S	1,3-DIBROMOPROPANE(S)	80898	83674	3.4	S	
44	TM	DBCP	364828	370528	1.6	TM	
45							
46							
47							
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80							
		Average			3.0		

Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023058.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 11:59 pm
Operator : SS
Sample : 8011-3 10/2720
Misc : water
ALS Vial : 58 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:15:03 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.977	10.996	14483	41837	0.262	0.259
Spiked Amount 0.350			Recovery =		74.86%	74.00%
Target Compounds						
1) TM EDB	5.730	7.173	13783	58011	0.247	0.253
2) TM 1,2,3-TCP	9.213	10.409	3550	11165	0.247	0.264
4) TM DBCP	13.310	14.059	46726	185264	0.259	0.254

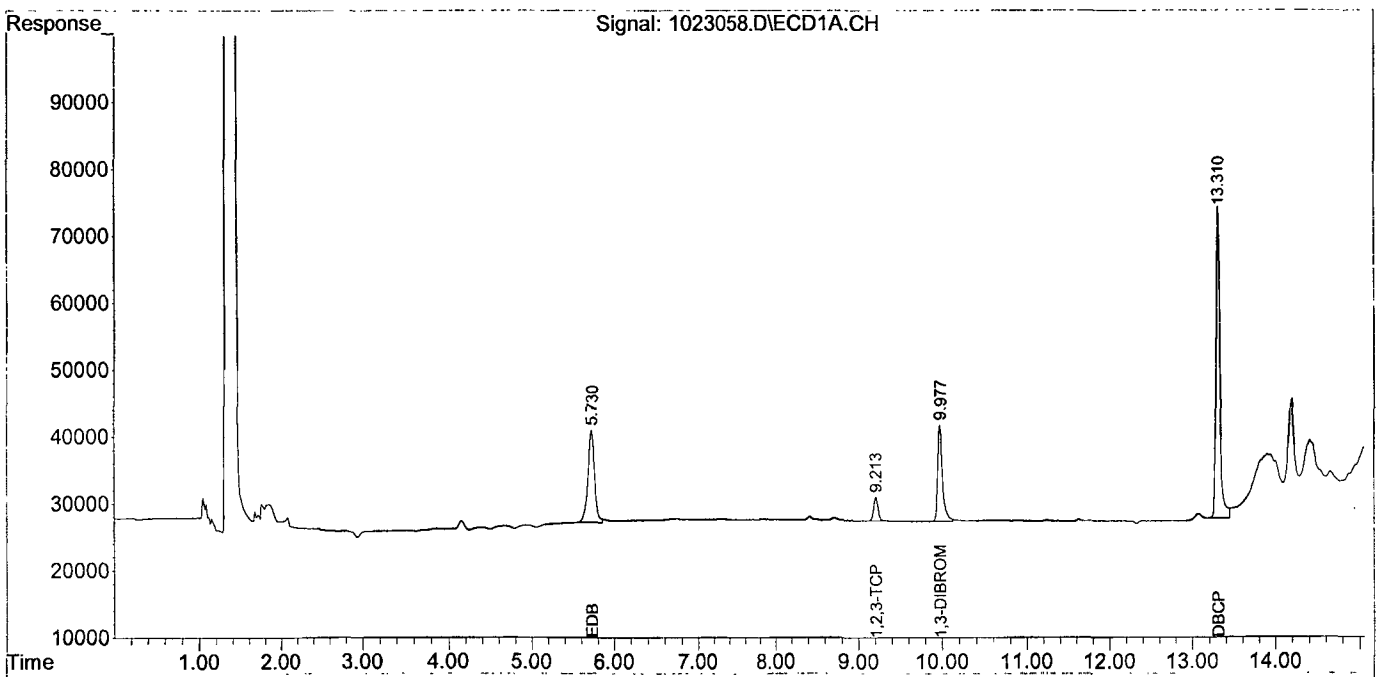
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

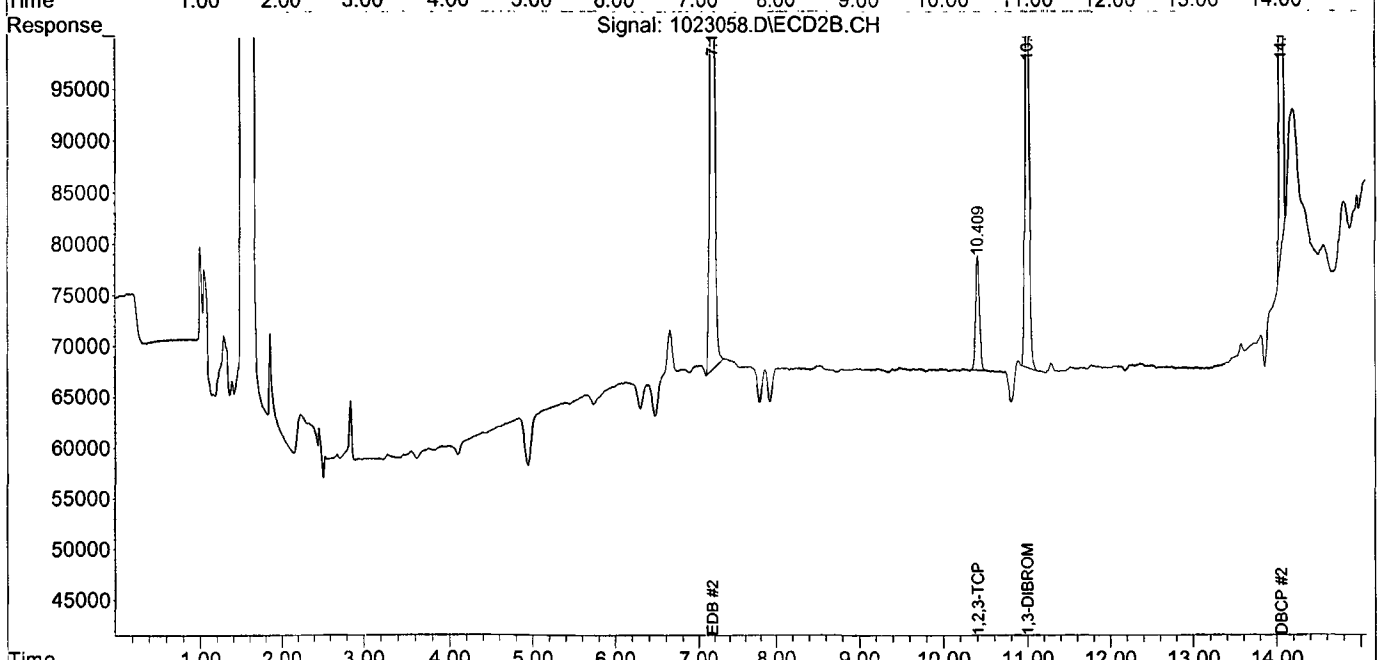
Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023058.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 11:59 pm
Operator : SS
Sample : 8011-3 10/2720
Misc : water
ALS Vial : 58 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:15:03 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023055.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 10:59 pm
Operator : SS
Sample : BA20717W05 2/35.40
Misc : water
ALS Vial : 55 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 10:13:45 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

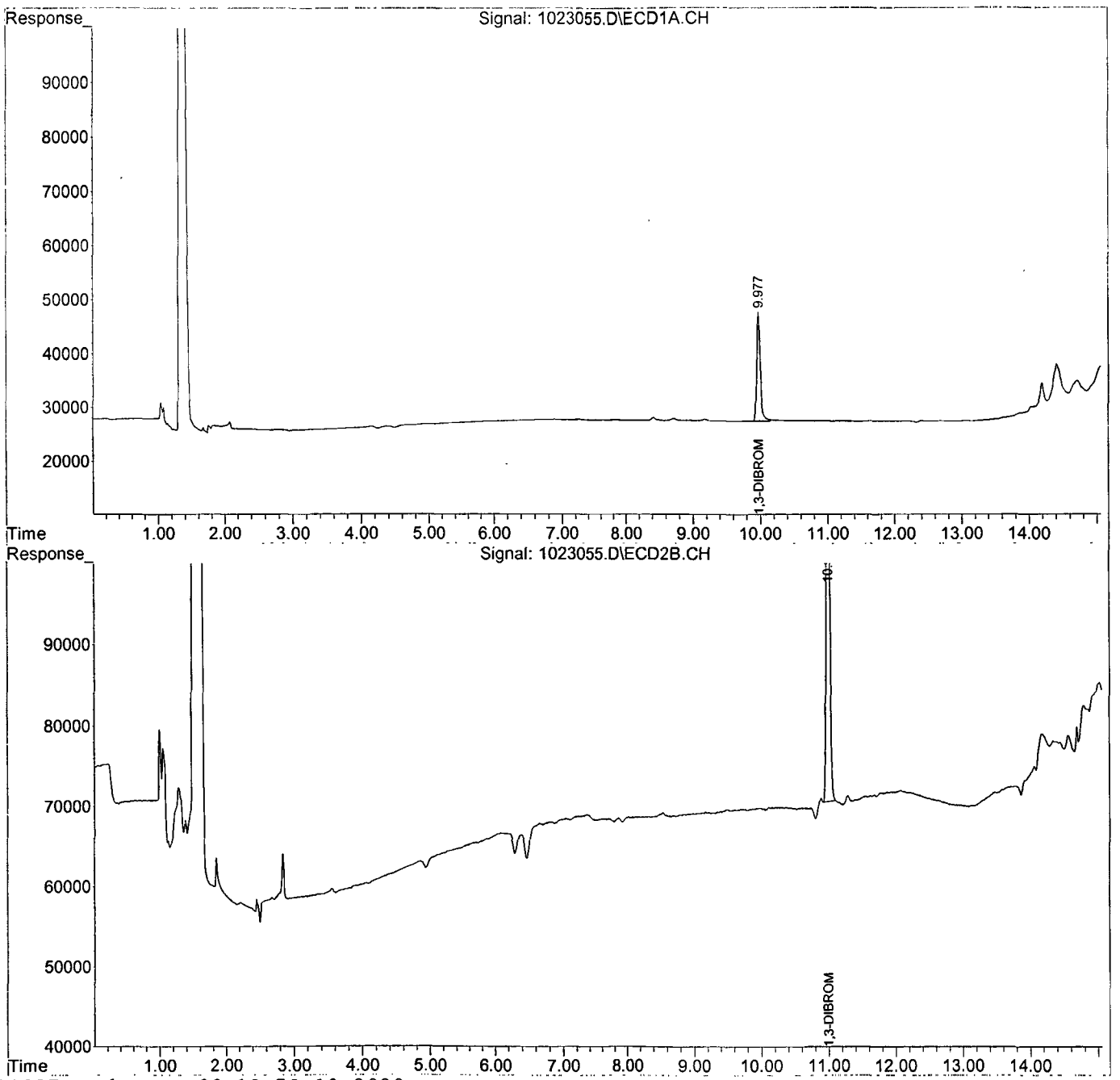
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.977	10.997	20299	60750	0.367	0.375
Spiked Amount 0.350			Recovery =		104.86%	107.14%
Target Compounds						
1) TM EDB	0.000	0.000	0	0	N.D. d	N.D. d
2) TM 1,2,3-TCP	0.000	0.000	0	0	N.D. d	N.D. d
4) TM DBCP	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023055.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 10:59 pm
Operator : SS
Sample : BA20717W05 2/35.40
Misc : water
ALS Vial : 55 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 10:13:45 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50



Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023056.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 11:19 pm
Operator : SS
Sample : BA20718W05 2/35.10
Misc : water
ALS Vial : 56 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 10:13:59 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.977	10.996	19908	60224	0.360	0.372
Spiked Amount 0.350			Recovery =		102.86%	106.29%
Target Compounds						
1) TM EDB	0.000	0.000	0	0	N.D. d	N.D. d
2) TM 1,2,3-TCP	0.000	0.000	0	0	N.D. d	N.D. d
4) TM DBCP	0.000	0.000	0	0	N.D. d	N.D. d

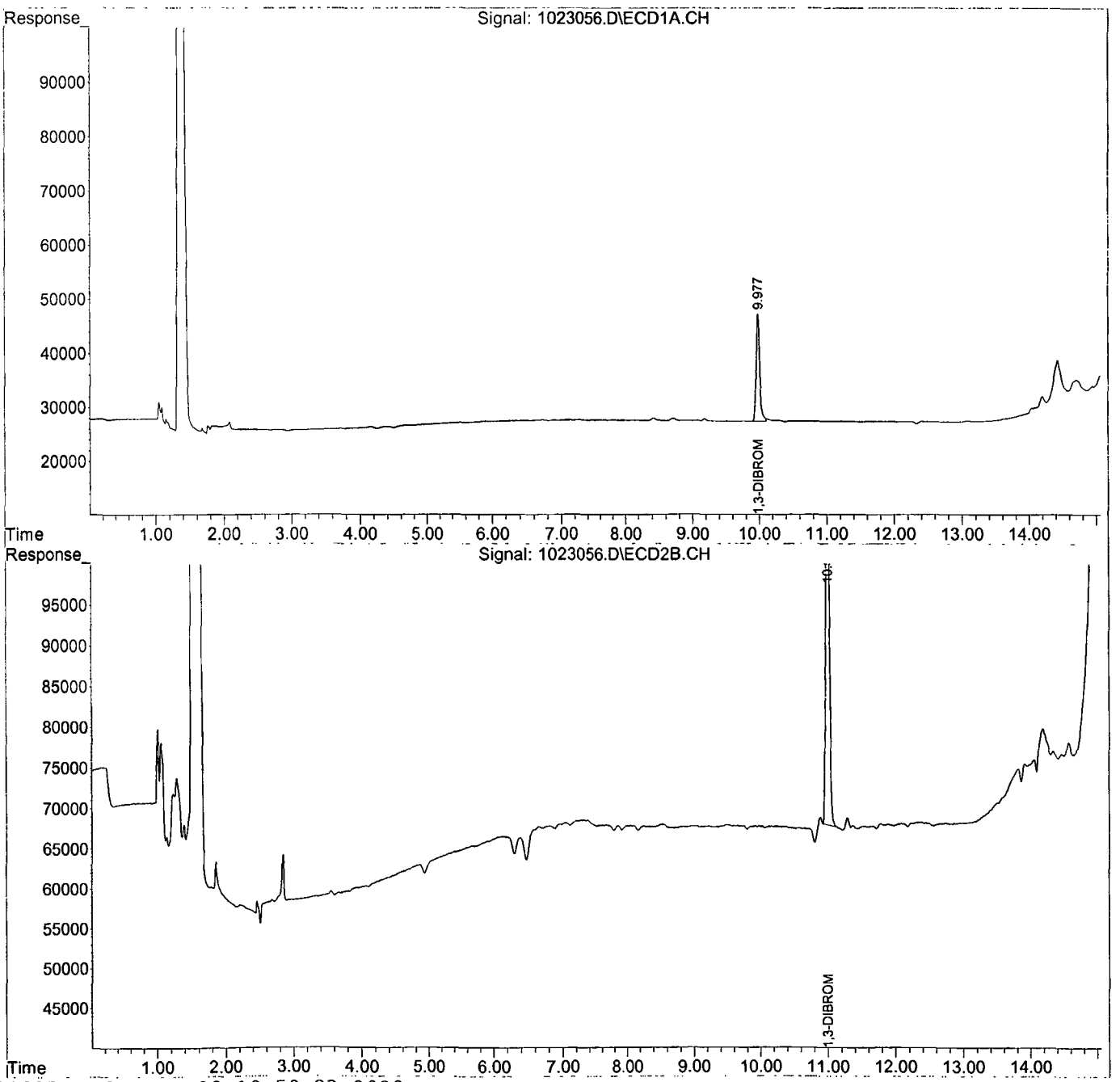
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023056.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 11:19 pm
Operator : SS
Sample : BA20718W05 2/35.10
Misc : water
ALS Vial : 56 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 10:13:59 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50



Data Path : G:\HERBIE\DATA\201023\
Data File : 1023057.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 11:39 pm
Operator : SS
Sample : BA20719W05 2/35.41
Misc : water
ALS Vial : 57 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 10:14:14 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

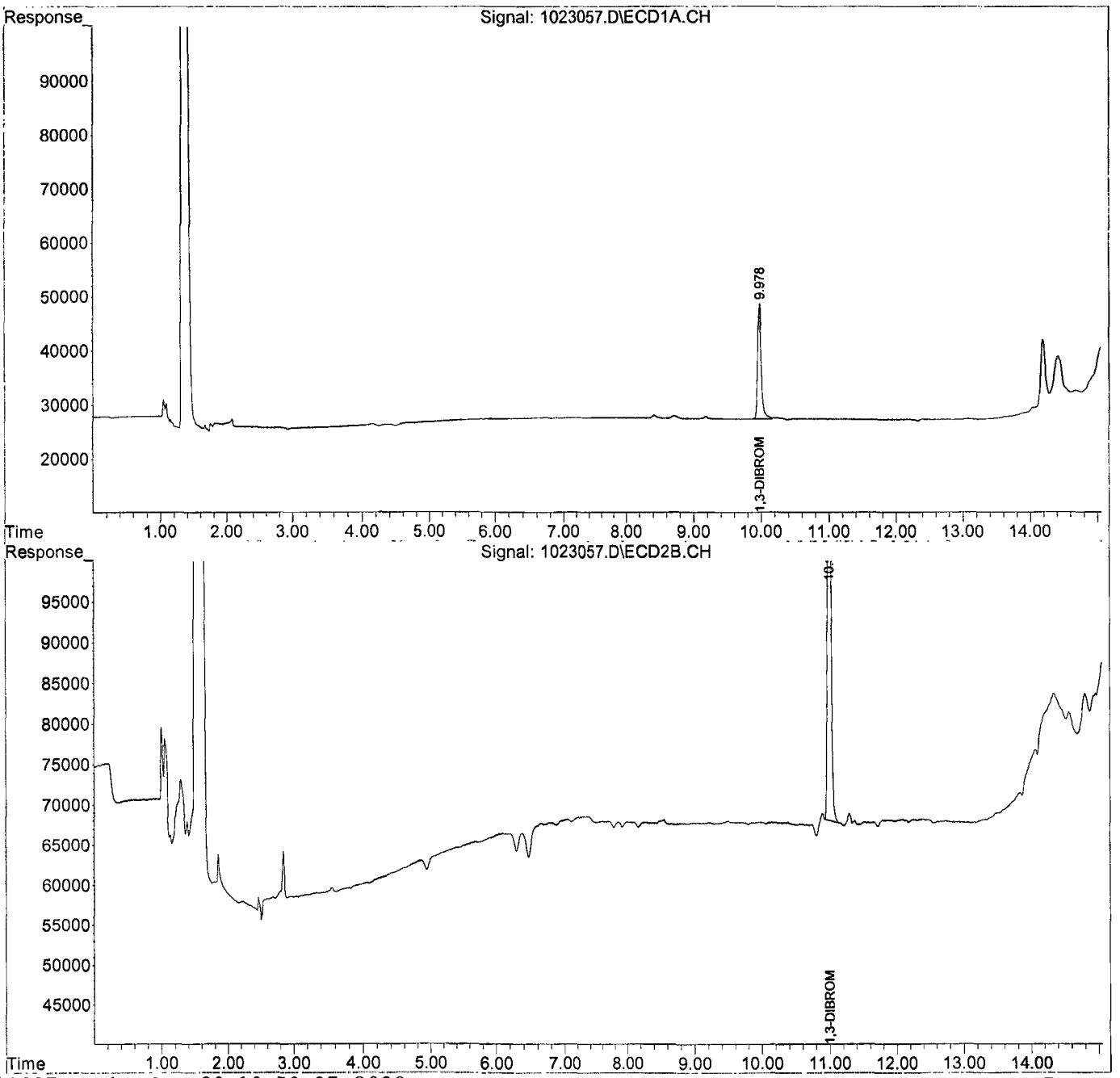
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.978	10.998	21310	64884	0.385	0.401
Spiked Amount 0.350			Recovery =		110.00%	114.57%
Target Compounds						
1) TM EDB	0.000	0.000	0	0	N.D. d	N.D. d
2) TM 1,2,3-TCP	0.000	0.000	0	0	N.D. d	N.D. d
4) TM DBCP	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023057.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 11:39 pm
Operator : SS
Sample : BA20719W05 2/35.41
Misc : water
ALS Vial : 57 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 10:14:14 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50



Data Path : G:\HERBIE\DATA\201023\
Data File : 1023037.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 4:51 pm
Operator : SS
Sample : 201027A BLK 2/35.10
Misc : water
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:39:56 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
3) S	1,3-DIBRO...	9.974	10.997	20149	60592	0.364	0.374
	Spiked Amount 0.350			Recovery	=	104.00%	106.86%
	Target Compounds						
1) TM	EDB	0.000	0.000	0	0	N.D. d	N.D. d
2) TM	1,2,3-TCP	0.000	0.000	0	0	N.D. d	N.D. d
4) TM	DBCP	0.000	0.000	0	0	N.D. d	N.D. d

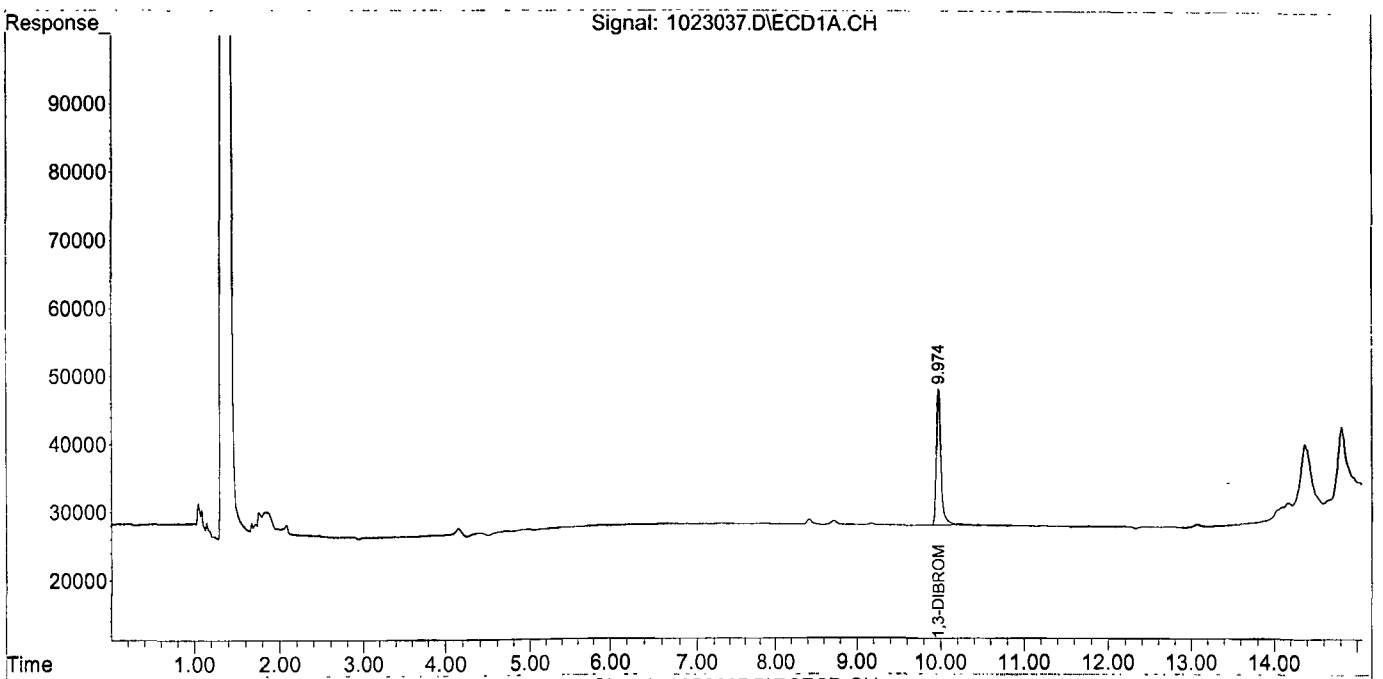
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

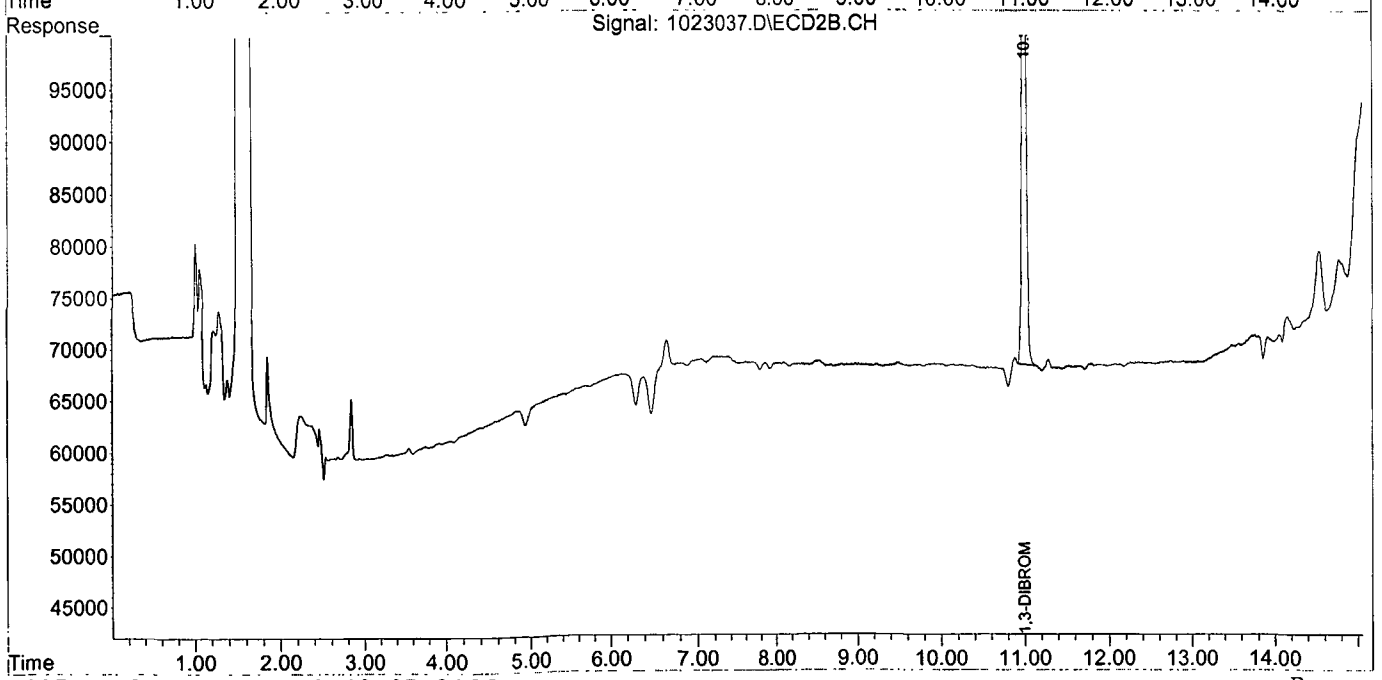
Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023037.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 4:51 pm
Operator : SS
Sample : 201027A BLK 2/35.10
Misc : water
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:39:56 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





Data Path : G:\HERBIE\DATA\201023\
Data File : 1023038.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 5:11 pm
Operator : SS
Sample : 201027A LCS-1 2/35.08
Misc : water
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:52 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.981	11.000	14258	41875	0.258	0.259
Spiked Amount 0.350			Recovery =		73.71%	74.00%
Target Compounds						
1) TM EDB	5.731	7.174	14207	59892	0.255	0.261
2) TM 1,2,3-TCP	9.214	10.410	3633	11369	0.253	0.269
4) TM DBCP	13.311	14.064	47147	191903	0.261	0.263

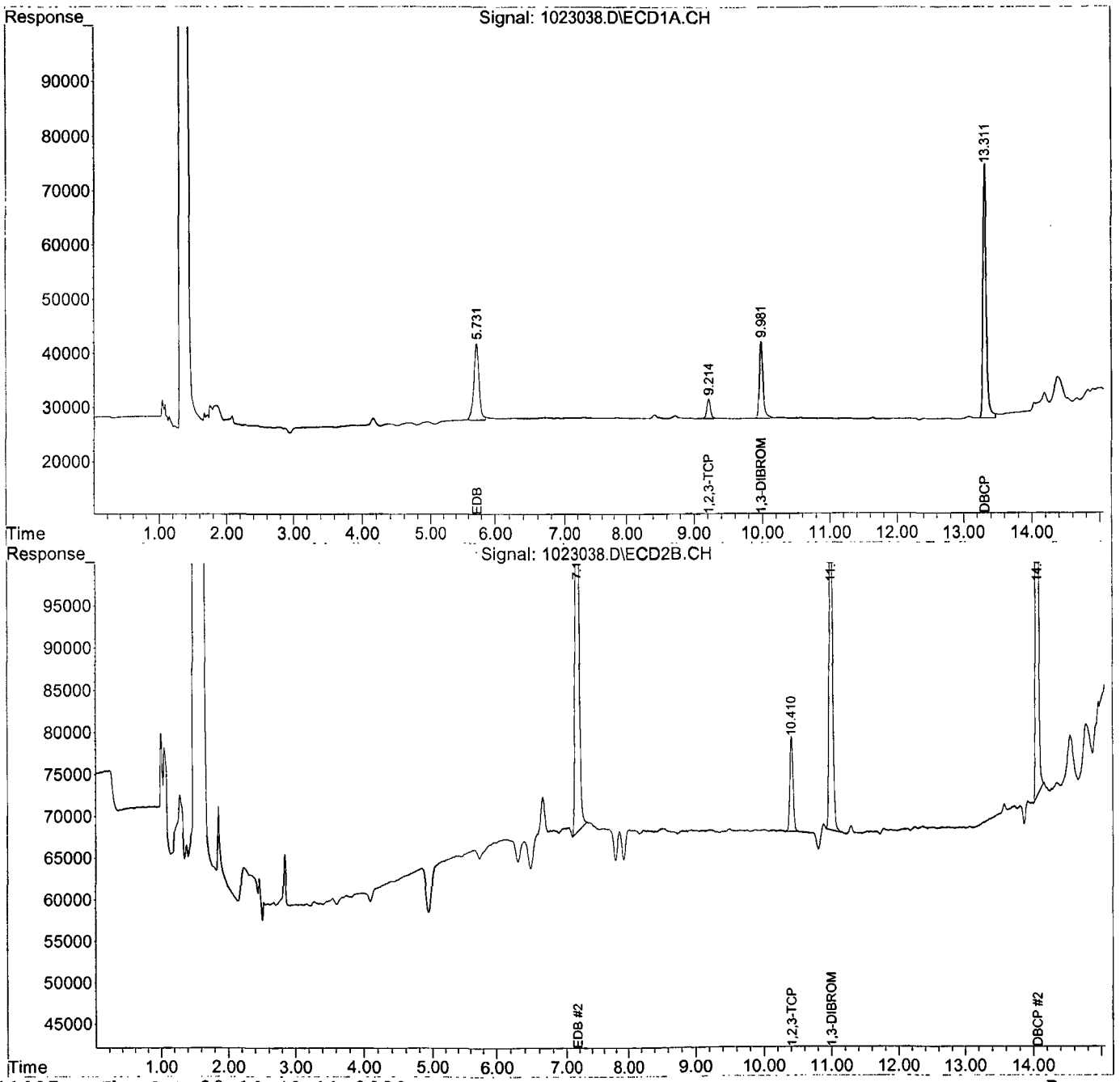
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023038.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 5:11 pm
Operator : SS
Sample : 201027A LCS-1 2/35.08
Misc : water
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:52 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50



Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023039.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 5:32 pm
Operator : SS
Sample : 201027A LCSD-1 2/35.10
Misc : water
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:56 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
3) S	1,3-DIBRO...	9.979	11.001	14135	42174	0.255	0.261
	Spiked Amount 0.350			Recovery	=	72.86%	74.57%
	Target Compounds						
1) TM	EDB	5.732	7.175	14157	59562	0.254	0.260
2) TM	1,2,3-TCP	9.215	10.411	3621	11372	0.252	0.269
4) TM	DBCP	13.312	14.065	46966	191391	0.260	0.262

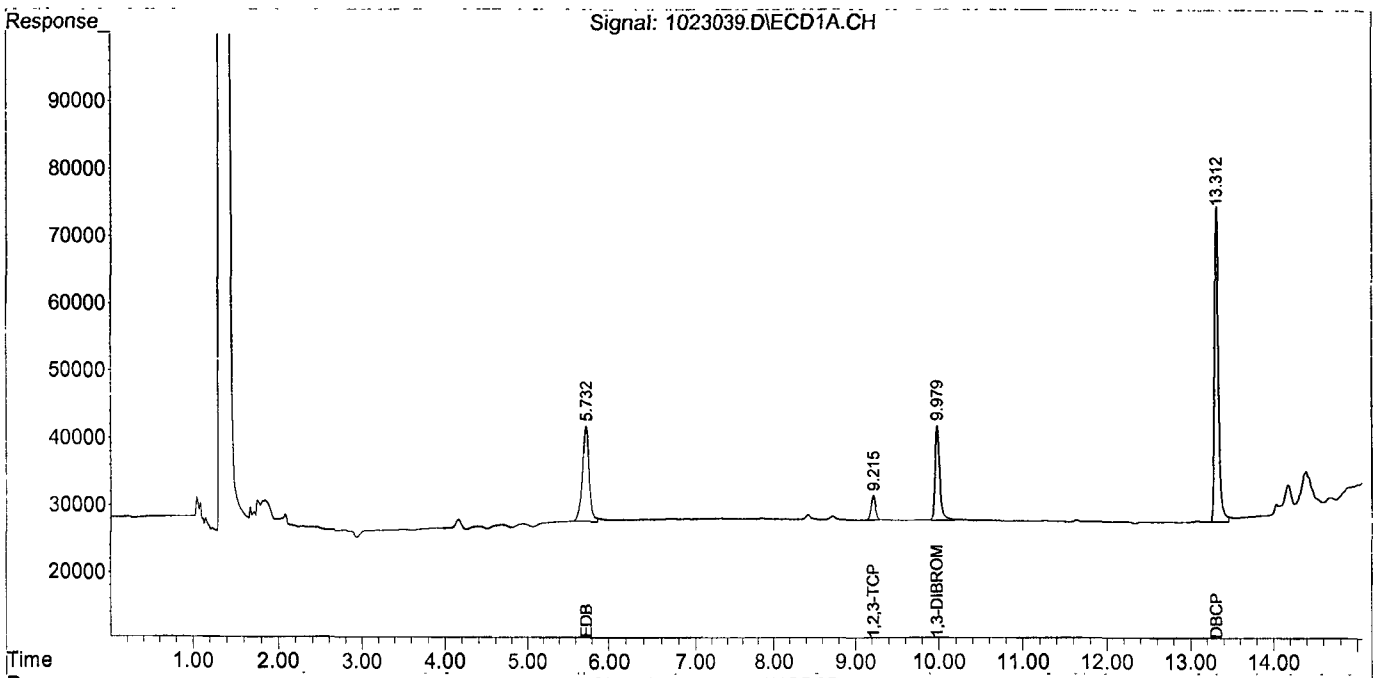
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

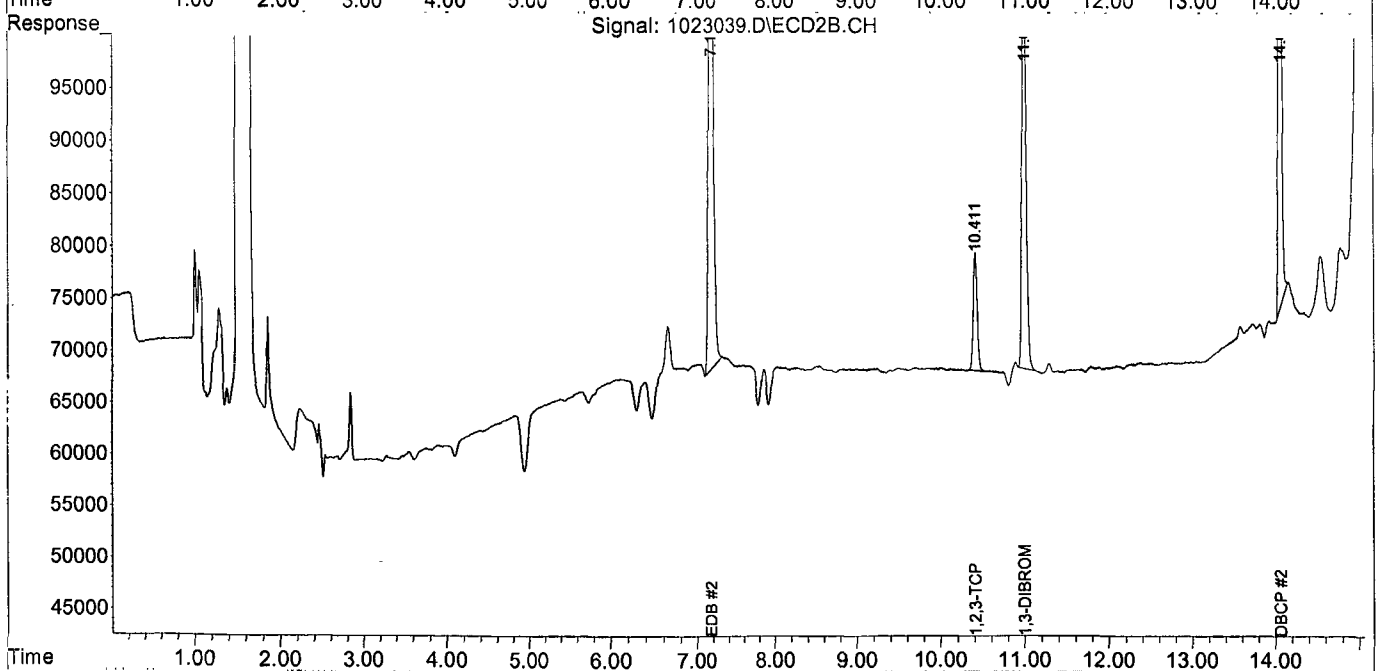
Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201023\
Data File : 1023039.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Oct 2020 5:32 pm
Operator : SS
Sample : 201027A LCSD-1 2/35.10
Misc : water
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 29 09:13:56 2020
Quant Method : G:\HERBIE\DATA\201023\80111027.M
Quant Title : 504.1 OR 8011
QLast Update : Thu Oct 29 09:12:38 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





Name of Final Standard: 504/8011 Surrogate
Prep Date: 10/19/20
Exp Date: 01/07/21
Prep'd By (Initials): SS

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1,3 DBP Stock	APPL	1,3 DBP Stock	100 ug/mL	01/07/20	01/07/21	35 uL	10 mL	Methanol #0235140	0.35ug/ml

Name of Final Standard: 504/8011 Spike
Prep Date: 10/19/20
Exp Date: 01/07/21
Prep'd By (Initials): SS

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
504/8011 Stock	APPL	504/8011 Stock	0.35 ug/mL	06/17/20	01/07/21	1000 uL	10 mL	Methanol #0235140	0.035 ug/mL

Name of Final Standard: 504/8011 SS SPK
Prep Date: 10/19/20
Exp Date: 02/19/21
Prep'd By (Initials): SS

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
504/8011 SS Stock	APPL	504/8011 SS Stock	0.35 ug/mL	04/27/20	04/27/21	1000 uL	10 mL	Methanol #0235140	0.035 ug/mL

Name of Final Standard: 504/8011 Spike

Prep'd By (Initials): SS

Prep Date: 10/27/20

Exp Date: 01/07/21

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
504/8011 Stock	APPL	504/8011 Stock	0.35 ug/mL	06/17/20	01/07/21	1000 uL	10 mL	Methanol #0235140	0.035 ug/mL

Name of Final Standard 504/8011 SS SPK **Prep'd By (Initials)** SS

Prep Date 04/27/20

Exp Date 04/27/21

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
504/8011 SS Stock	APPL	504/8011 SS Stock	0.35 ug/mL	**04/27/20**	**04/27/21**	1000 uL	10 mL	**Methanol #042317C**	0.035 ug/mL

Name of Final Standard 504/8011 SS Stock **Prep'd By (Initials)** SS

Prep Date 04/27/20

Exp Date 04/27/21

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
EDB TCP DBCP	Absolute	30096	200 ug/mL	**031218-49750**	**03/12/23**	44 uL	25 mL	**Methanol #042317C**	0.35 ug/mL

Name of Final Standard 504/8011 Surrogate **Prep'd By (Initials)** CD

Prep Date 06/17/20

Exp Date 01/07/21

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1,3 DBP Stock	APPL	1,3 DBP Stock	100 ug/mL	01/07/20	01/07/21	35 uL	10 mL	Methanol #0235140	0.35ug/ml

Name of Final Standard 504/8011 Stock **Prep'd By (Initials)** CD

Prep Date 06/17/20

Exp Date 01/07/21

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
504/DOHS Stock	APPL	504/DOHS Stock	20 ug/mL	01/07/20	01/07/21	438 uL	25 mL	Methanol #0235140	0.35 ug/mL
1,3 DBP Stock	APPL	1,3 DBP Stock	100 ug/mL	01/07/20	01/07/21	88 uL	*	*	*

Organic Extraction Worksheet

Method	EPA Method 8011 DBCP/EDB	Extraction Set	201027A	Extraction Method	MWE012	Units	mL

Spiked ID 1	504.1 Spike 10/19/20-1/7/21		Surrogate ID 1	504.1 Surrogate 10/19/20-1/7/21	
Spiked ID 2	504.1 SS Spike 10/19/20-2/19/21		Surrogate ID 2		
Spiked ID 3	504.1 Spike 10/27/20-1/7/21		Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	YES	
Spiked ID 7			Ext. Start Time:	10/27/20 12:40	
Spiked ID 8			Ext. End Time:	10/27/20 14:30	
			GC Requires Extract By:		

pH1			Water Bath Temp 1 °C	
pH2			Water Bath Temp 2 °C	
pH3			Water Bath Temp 3 °C	

Spiked By: KY **Date** 10/27/20 **Witnessed By:** DL **Date** 10/27/20

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201027A Blk				0.035	1 equip	35.10	2	7	10/27/20 12:40	
2	201027A LCS-1		0.250	1	NA	NA equip	35.08	2	7	10/27/20 12:40	
3	201027A LCSD-1		0.250	1	NA	NA equip	35.10	2	7	10/27/20 12:40	
4	BA20662	BA20662W03			0.035	1 equip	35.20	2	7	10/27/20 12:40	93884
5	BA20663 MS-1	BA20663W14	0.250	1	NA	NA equip	35.38	2	7	10/27/20 12:40	93884
6	BA20663 MSD-1	BA20663W15	0.250	1	NA	NA equip	35.41	2	7	10/27/20 12:40	93884
7	BA20663	BA20663W13			0.035	1 equip	35.26	2	7	10/27/20 12:40	93884
8	BA20664	BA20664W05			0.035	1 equip	35.89	2	7	10/27/20 12:40	93884
9	BA20665	BA20665W05			0.035	1 equip	35.75	2	7	10/27/20 12:40	93884
10	BA20666	BA20666W05			0.035	1 equip	35.12	2	7	10/27/20 12:40	93884
11	BA20667	BA20667W05			0.035	1 equip	35.27	2	7	10/27/20 12:40	93884
12	BA20668	BA20668W05			0.035	1 equip	35.21	2	7	10/27/20 12:40	93884
13	BA20669	BA20669W05			0.035	1 equip	35.11	2	7	10/27/20 12:40	93884
14	BA20670	BA20670W05			0.035	1 equip	35.80	2	7	10/27/20 12:40	93884
15	BA20671	BA20671W05			0.035	1 equip	35.18	2	7	10/27/20 12:40	93884
16	BA20672	BA20672W05			0.035	1 equip	35.20	2	7	10/27/20 12:40	93884

Solvent and Lot#	
Scale Blance ID	EB1
pH strip	HC904495
Sod. Thiosulfate	1016C241
NaCL	19J145201
GC2 Hexane (2mLs)	DY768

Extraction COC Transfer	
Extraction lab employee Initials	SS
GC analyst's initials	SS
Date	10/27/20
Time	16:25
Refrigerator	HOBART

	Technician's Initials
Scanned By	SR
Sample Preparation	SR,KY
Extraction	KY
Concentration	------

Modified	11/09/20 1:10:42 PM

Reviewed By: SS **Date** 11/09/20

Organic Extraction Worksheet

Method	EPA Method 8011 DBCP/EDB	Extraction Set	201027A	Extraction Method	MWE012	Units	mL

Spiked ID 1	504.1 Spike 10/19/20-1/7/21		Surrogate ID 1	504.1 Surrogate 10/19/20-1/7/21	
Spiked ID 2	504.1 SS Spike 10/19/20-2/19/21		Surrogate ID 2		
Spiked ID 3	504.1 Spike 10/27/20-1/7/21		Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	YES	
Spiked ID 7			Ext. Start Time:	10/27/20 12:40	
Spiked ID 8			Ext. End Time:	10/27/20 14:30	
			GC Requires Extract By:		

pH1			Water Bath Temp 1 °C	
pH2			Water Bath Temp 2 °C	
pH3			Water Bath Temp 3 °C	

Spiked By: KY **Date** 10/27/20 **Witnessed By:** DL **Date** 10/27/20

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	BA20673	BA20673W05			0.035	1 equip	35.17	2	7	10/27/20 12:40	93884
18	BA20717	BA20717W05			0.035	1 equip	35.40	2	7	10/27/20 12:40	93873
19	BA20718	BA20718W05			0.035	1 equip	35.10	2	7	10/27/20 12:40	93873
20	BA20719	BA20719W05			0.035	1 equip	35.41	2	7	10/27/20 12:40	93873
21	M STD 1		0.020	1	NA	NA equip	35.25	2	7	10/27/20 12:40	
22	M STD 2		0.1	1	NA	NA equip	35.40	2	7	10/27/20 12:40	
23	M STD 3		0.250	1	NA	NA equip	35.22	2	7	10/27/20 12:40	
24	M STD 4		0.5	1	NA	NA equip	35.48	2	7	10/27/20 12:40	
25	M STD 5		0.750	1	NA	NA equip	35.98	2	7	10/27/20 12:40	
26	M STD 6		1	3	NA	NA equip	35.16	2	7	10/27/20 12:40	
27	SS		0.1	2	0.035	1 equip	35.10	2	7	10/27/20 12:40	

Solvent and Lot#	
Scale Blance ID	EB1
pH strip	HC904495
Sod. Thiosulfate	1016C241
NaCL	19J145201
GC2 Hexane (2mLs)	DY768

Extraction COC Transfer	
Extraction lab employee Initials	SS
GC analyst's initials	SS
Date	
Time	
Refrigerator	HOBART

	Technician's Initials
Scanned By	SR
Sample Preparation	SR,KY
Extraction	KY
Concentration	-----

Modified	11/09/20 1:10:42 PM

Reviewed By: SS **Date** 11/09/20

Injection Log

Directory: G:\HERBIE\DATA\201023

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	29	1023029.D	1	8011-1 10/2720	water	10/28/20 14:05
2	30	1023030.D	1	8011-2 10/2720	water	10/28/20 14:26
3	31	1023031.D	1	8011-3 10/2720	water	10/28/20 14:47
4	32	1023032.D	1	8011-4 10/2720	water	10/28/20 15:07
5	33	1023033.D	1	8011-5 10/2720	water	10/28/20 15:28
6	34	1023034.D	1	8011-6 10/2720	water	10/28/20 15:49
7	35	1023035.D	1	8011-SS 10/2720	water	10/28/20 16:09
8	36	1023036.D	1	8011-3 10/2720	water	10/28/20 16:30
9	37	1023037.D	1	201027A BLK 2/35.10	water	10/28/20 16:51
10	38	1023038.D	1	201027A LCS-1 2/35.08	water	10/28/20 17:11
11	39	1023039.D	1	201027A LCSD-1 2/35.10	water	10/28/20 17:32
12	50	1023050.D	1	8011-3 10/2720	water	10/28/20 21:17
13	55	1023055.D	1	BA20717W05 2/35.40	water	10/28/20 22:59
14	56	1023056.D	1	BA20718W05 2/35.10	water	10/28/20 23:19
15	57	1023057.D	1	BA20719W05 2/35.41	water	10/28/20 23:39
16	58	1023058.D	1	8011-3 10/2720	water	10/28/20 23:59

ORGANICS

Calibration Data

TPH Extractables
DOC0905

Form 6
Initial Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Initial Cal. Date: 09/05/20
Instrument: Apollo

Initials: SS/TM

			905007.D	905008 D	905009.D	905010.D	905011.D	905012.D									
		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
1	HATML	Diesel (C10-C24)	3520375	2214378	2281032	2080486	2123388	2190073					2401622	23	HATM	0.999	
2	HBTM	Motor Oil (C24-C40)		1596138	1576848	1430288	1467043	1498633					1513790	4.7	HBTM		
3	SA	Ortho-Terphenyl(S)		2811060	2679862	2349319	2368660	2417877					2525355	8.2	SA		
4	SA	Octacosane(S)		2182984	2114335	1968540	2003128	2024026					2058603	4.3	SA		
5																	
6																	
7																	
8																	
9																	
10																	
11																	
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35																	

1.148404

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905007.D Vial: 7
Acq On : 9-5-20 17:04:35 Operator:
Sample : Diesel Motor Oil-1 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 8 8:21 2020 Quant Results File: DOC0905.RES

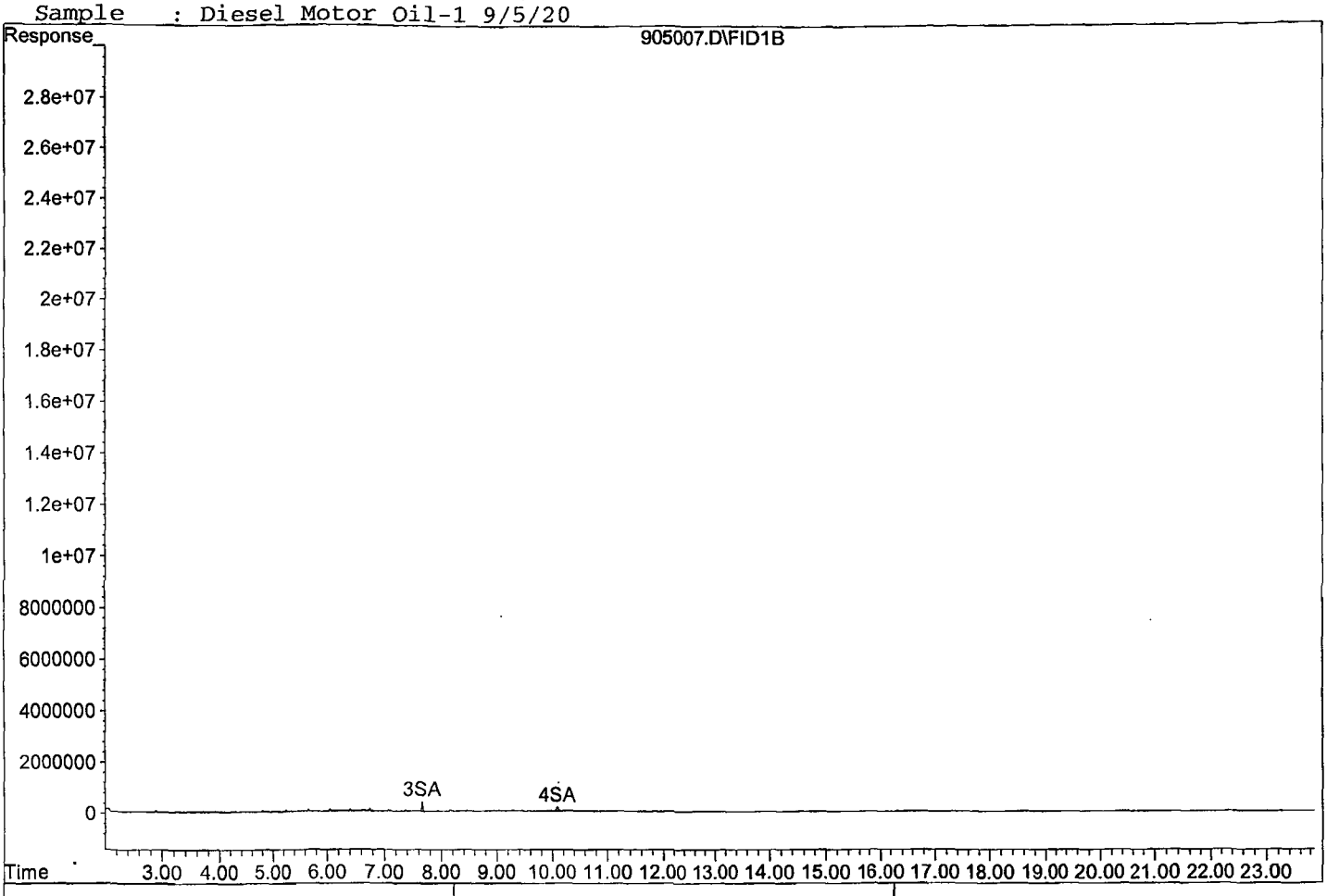
Method : G:\APOLLO\DATA\200905\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Sep 09 09:10:41 2020
Response via : Multiple Level Calibration

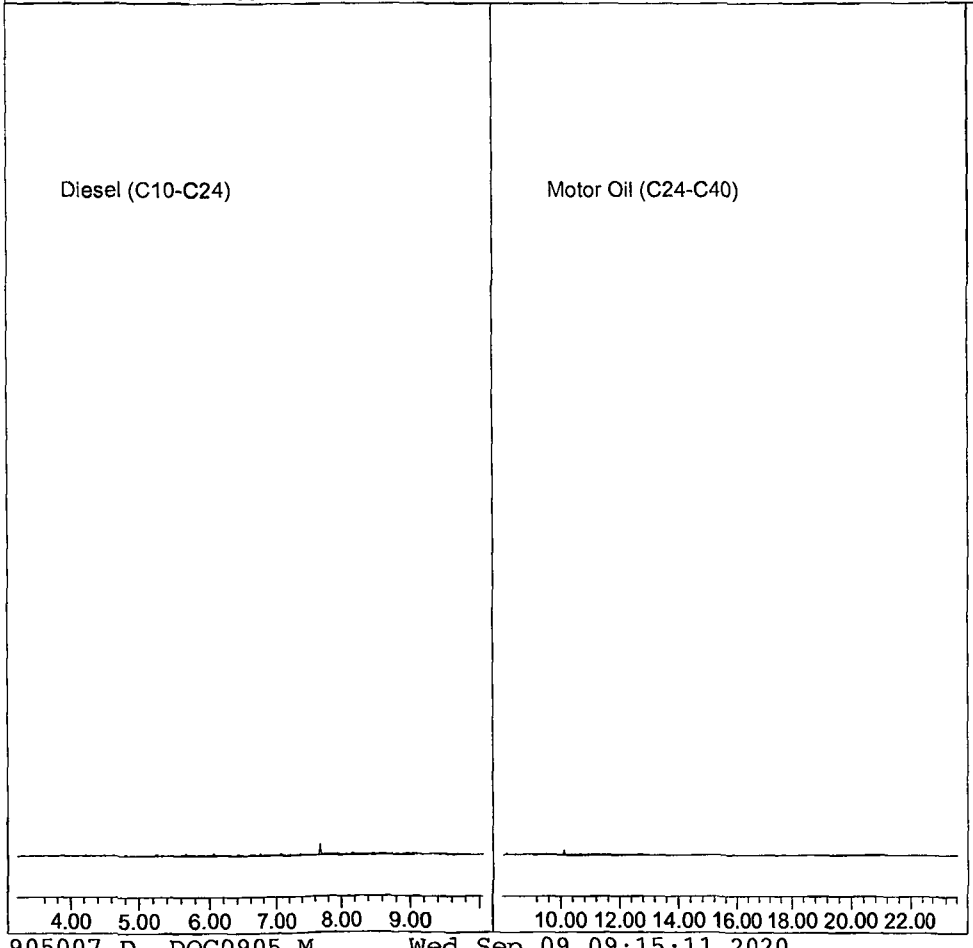
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	4755108	0.463 ppb
Surrogate Spike 30.000	Recovery =		1.54%
4) SA Octacosane(S)	10.09	3753150	0.722 ppb
Surrogate Spike 30.000	Recovery =		2.41%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	70407491	17.223 ppb
2) HBTM Motor Oil (C24-C40)	15.82	77569840	21.354 ppb

Target Compounds

Data File: G:\APOLLO\DATA\200905\905007.D
Sample : Diesel Motor Oil-1 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905008.D Vial: 8
Acq On : 9-5-20 17:32:40 Operator:
Sample : Diesel Motor Oil-2 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 8 8:21 2020 Quant Results File: DOC0905.RES

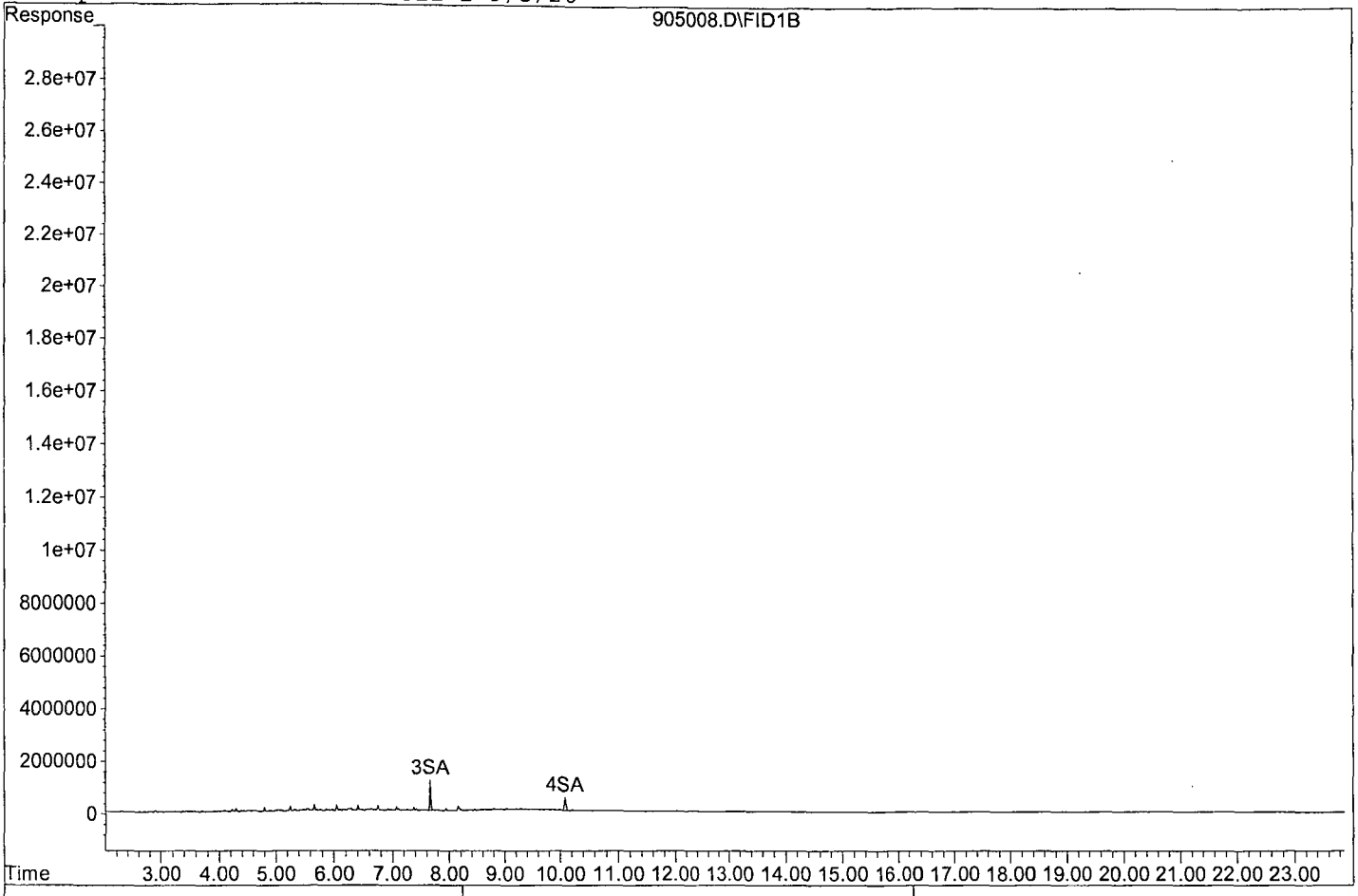
Method : G:\APOLLO\DATA\200905\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Sep 09 09:10:41 2020
Response via : Multiple Level Calibration

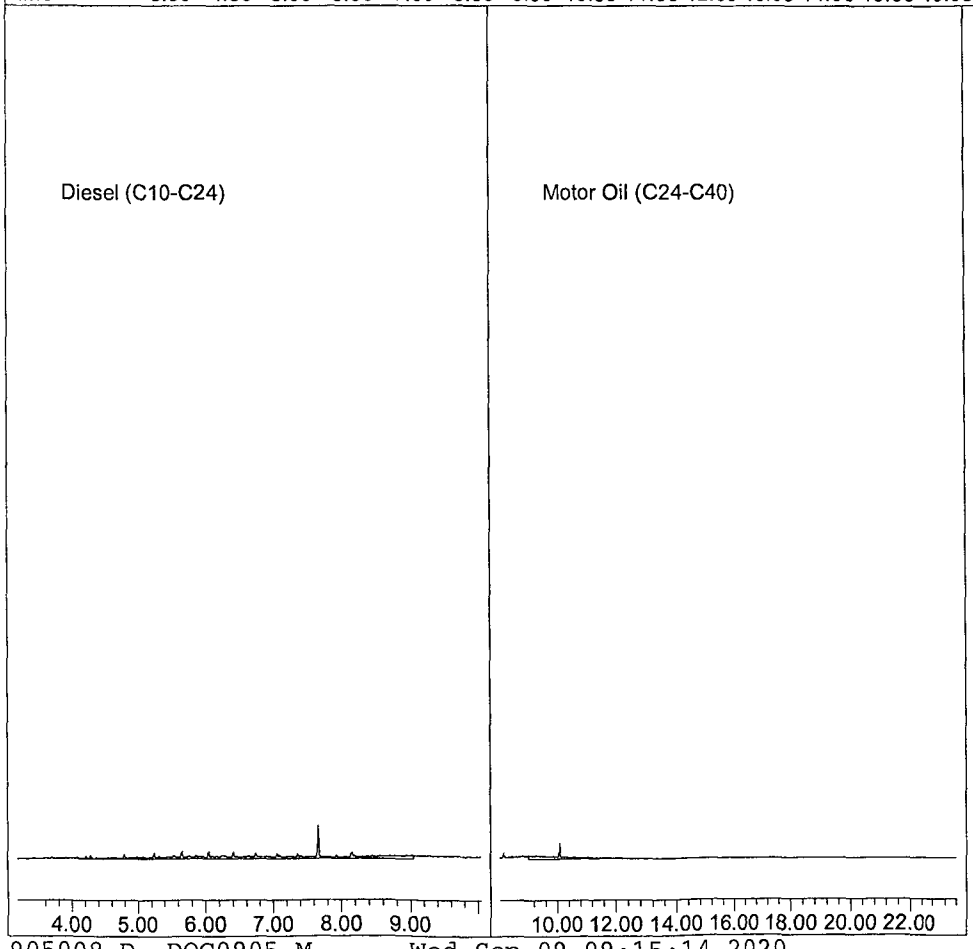
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	14055300	2.417 ppb
Surrogate Spike 30.000	Recovery =		8.06%
4) SA Octacosane(S)	10.08	10914920	2.508 ppb
Surrogate Spike 30.000	Recovery =		8.36%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	221437795	52.238 ppb
2) HBTM Motor Oil (C24-C40)	15.82	159613804	49.156 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905008.D
Sample : Diesel Motor Oil-2 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905009.D Vial: 9
Acq On : 9-5-20 18:00:45 Operator:
Sample : Diesel Motor Oil-3 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 8 8:21 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\200905\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Sep 09 09:10:41 2020
Response via : Multiple Level Calibration

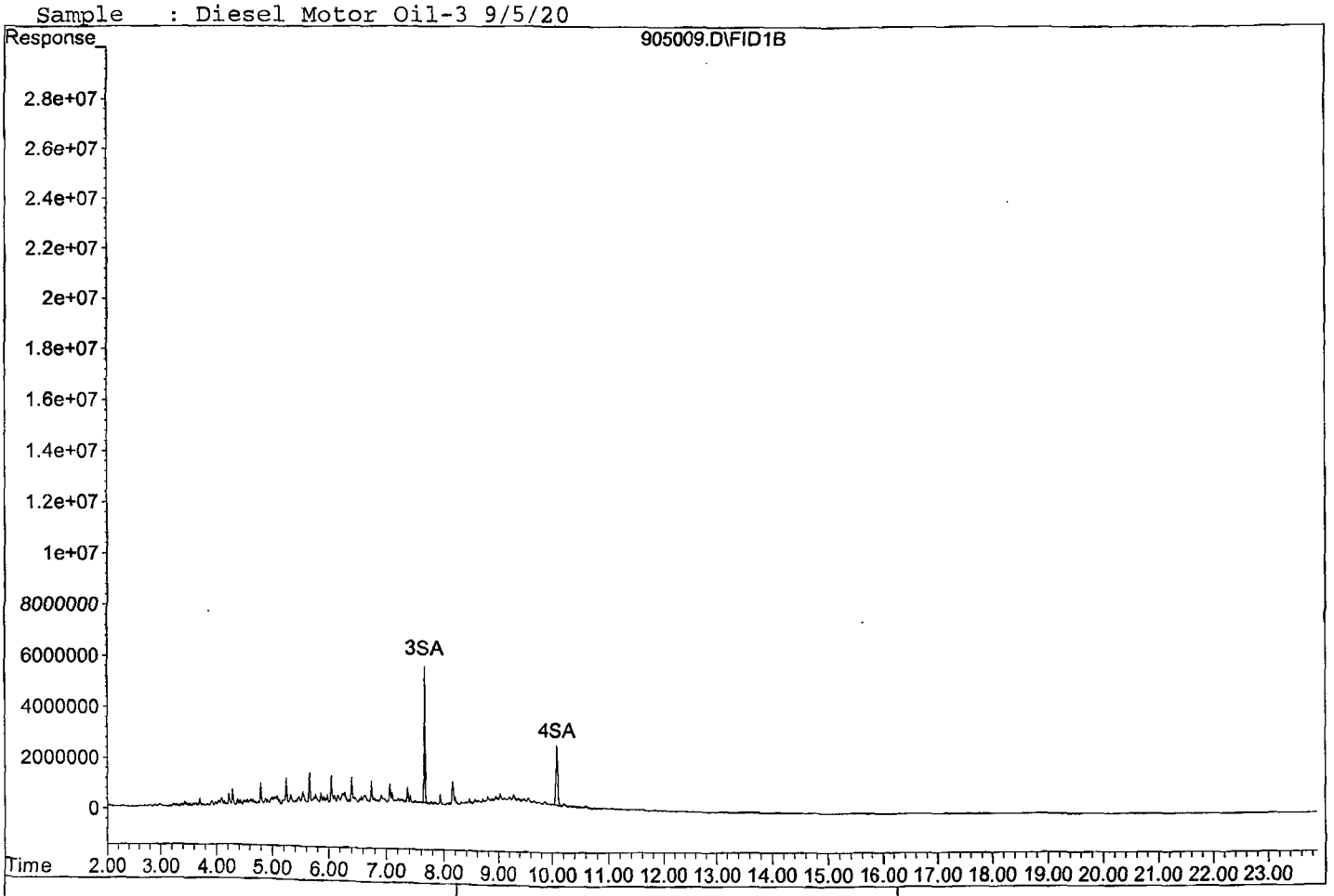
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

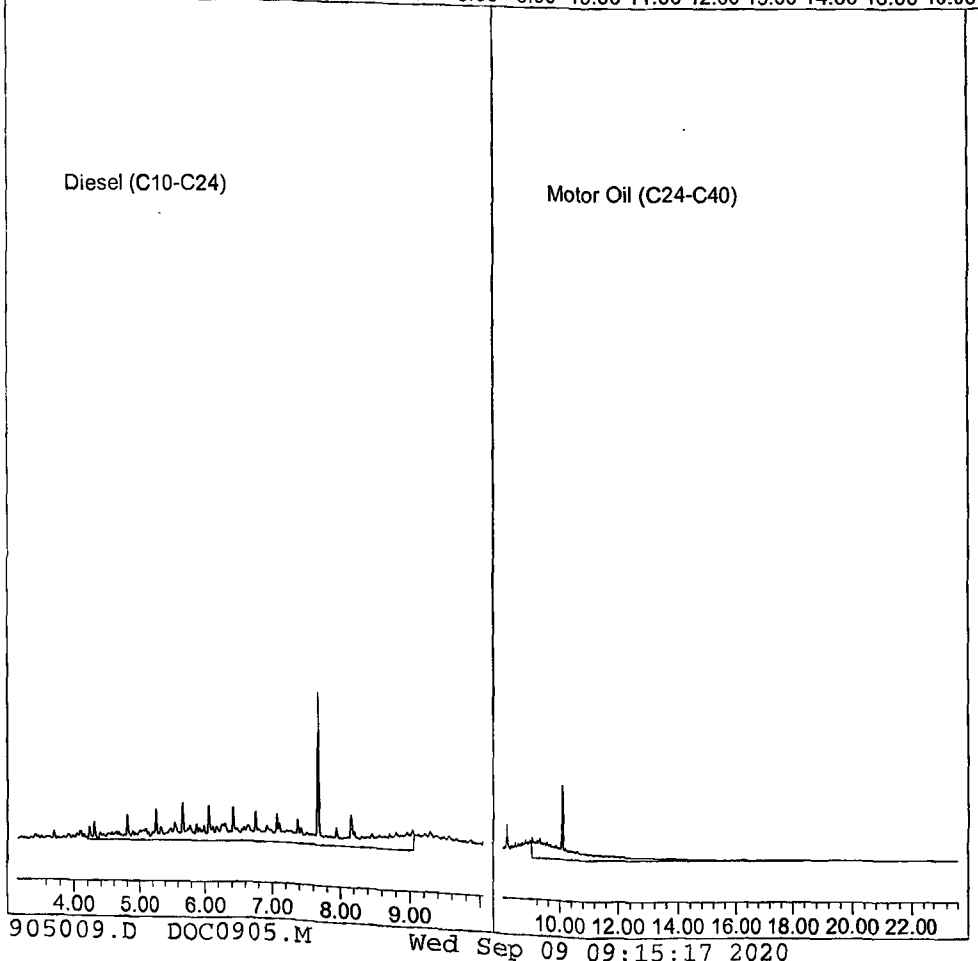
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	66996540	13.544 ppb
Surrogate Spike 30.000	Recovery =		45.15%
4) SA Octacosane(S)	10.09	52858376	12.967 ppb
Surrogate Spike 30.000	Recovery =		43.22%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1140515960	265.317 ppb
2) HBTM Motor Oil (C24-C40)	15.82	788424096	262.237 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905009.D
Sample : Diesel Motor Oil-3 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905010.D Vial: 10
Acq On : 9-5-20 18:28:54 Operator:
Sample : Diesel Motor Oil-4 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 8 8:21 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\200905\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Sep 09 09:10:41 2020
Response via : Multiple Level Calibration

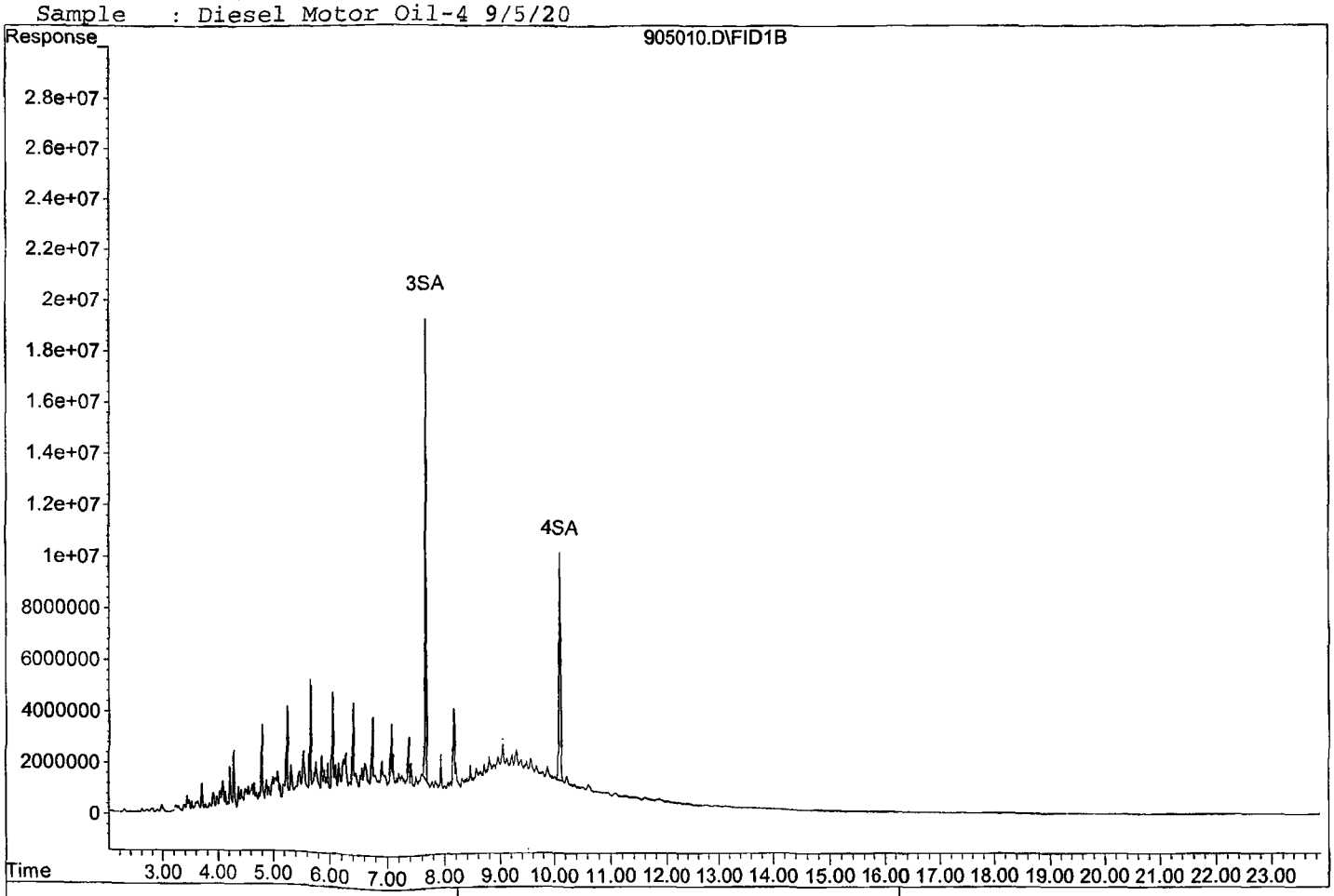
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

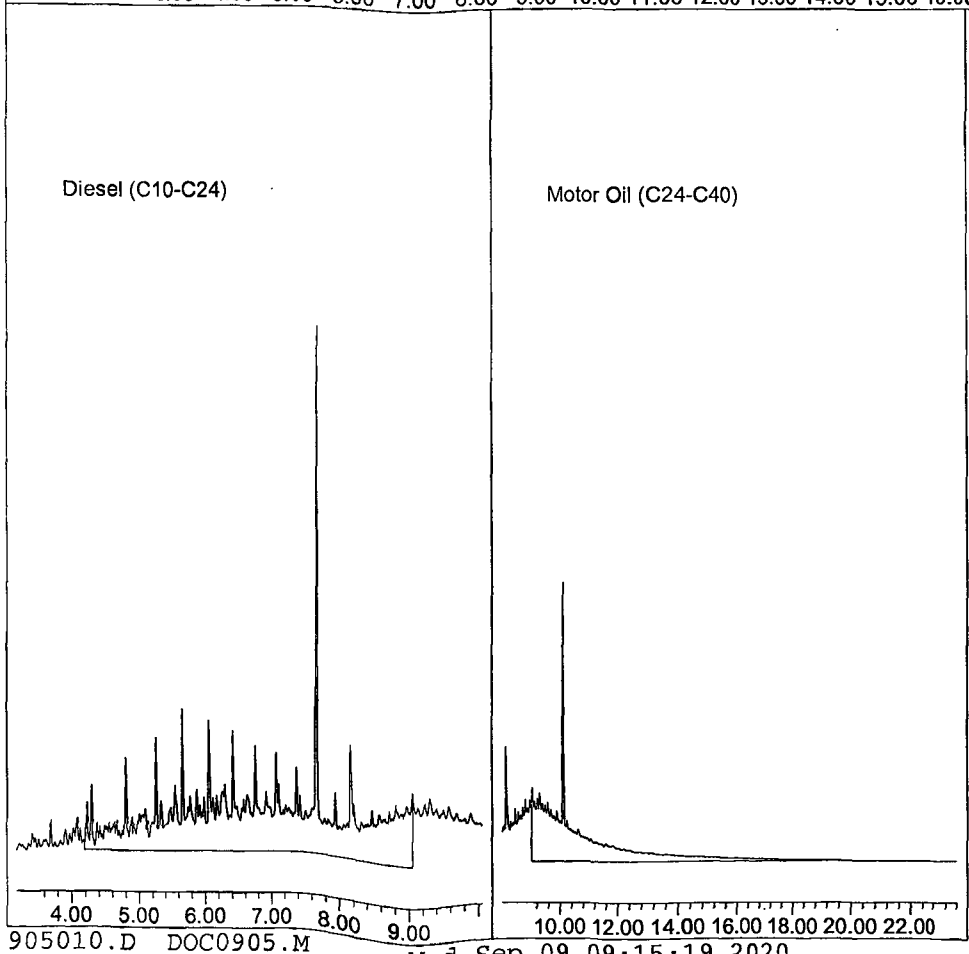
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.67	234931900	48.840	ppb
Surrogate Spike 30.000	Recovery =		162.80%	
4) SA Octacosane(S)	10.11	196853973	48.872	ppb
Surrogate Spike 30.000	Recovery =		162.91%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	4160972977	965.579	ppb
2) HBTM Motor Oil (C24-C40)	15.82	2860576922	964.412	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905010.D
Sample : Diesel Motor Oil-4 9/5/20





905010.D DOC0905.M Wed Sep 09 09:15:19 2020

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905011.D Vial: 11
Acq On : 9-5-20 18:56:54 Operator:
Sample : Diesel Motor Oil-5 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 8 8:21 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\200905\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Sep 09 09:10:41 2020
Response via : Multiple Level Calibration

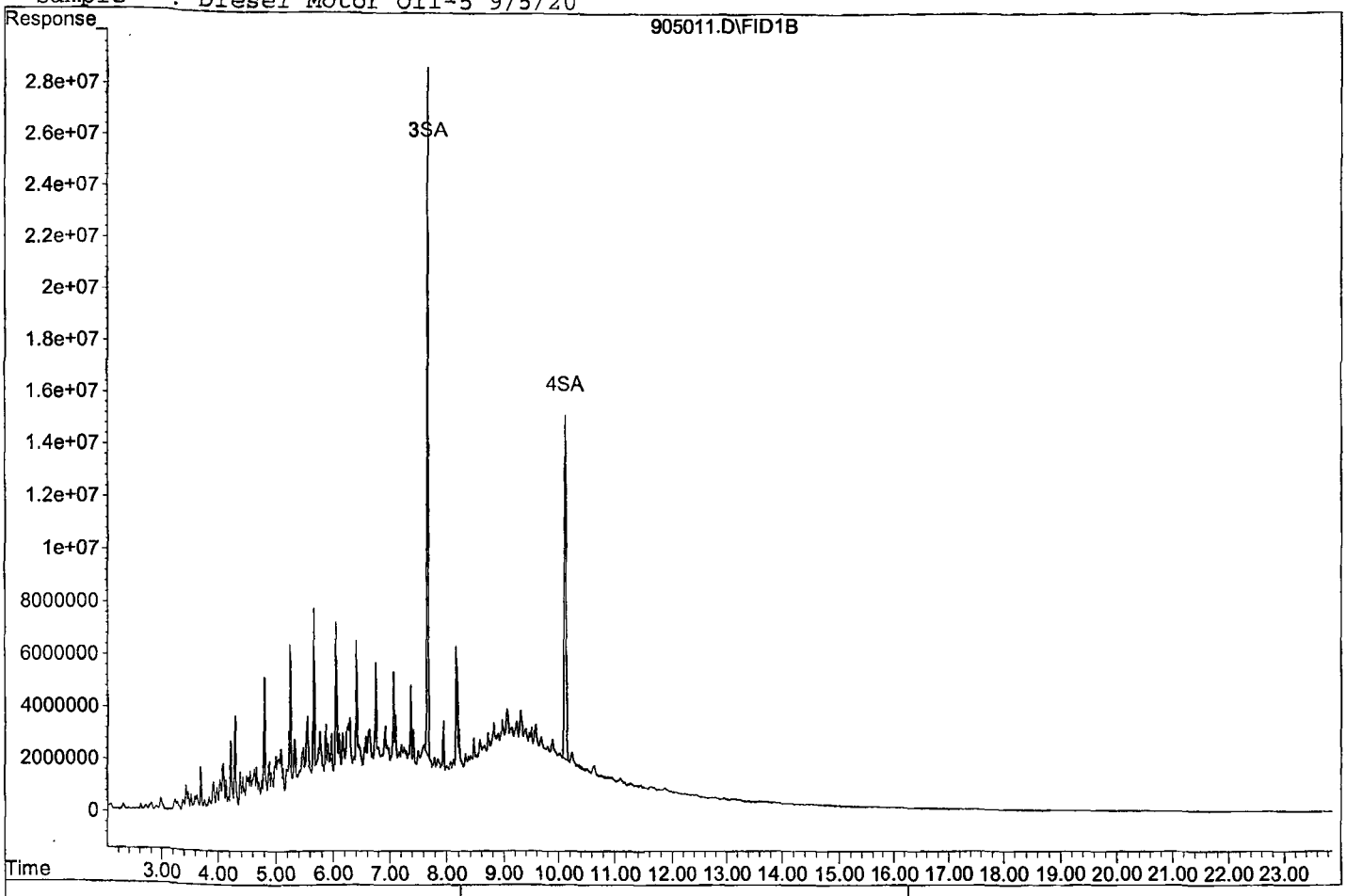
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

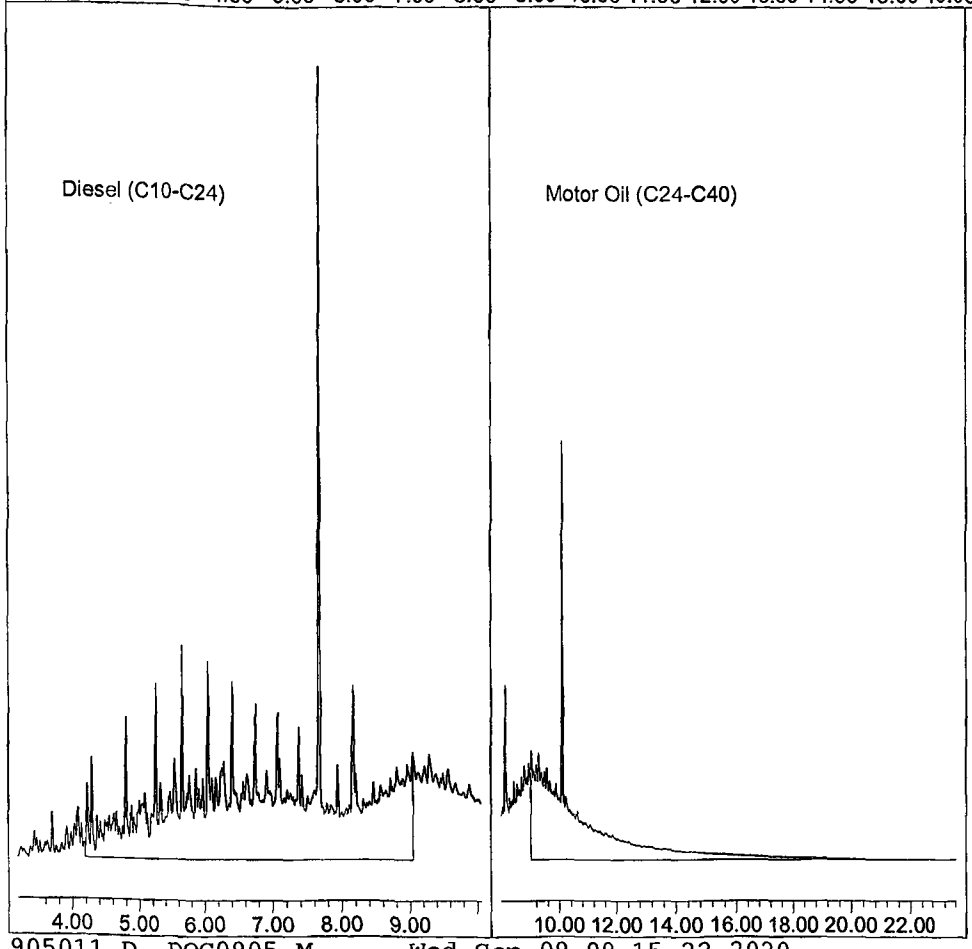
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	355298964	74.138 ppb
Surrogate Spike 30.000		Recovery =	247.13%
4) SA Octacosane(S)	10.12	300469164	74.708 ppb
Surrogate Spike 30.000		Recovery =	249.03%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	6370162550	1477.758 ppb
2) HBTM Motor Oil (C24-C40)	15.82	4401128474	1486.448 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905011.D
Sample : Diesel Motor Oil-5 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905012.D Vial: 12
Acq On : 9-5-20 19:24:55 Operator:
Sample : Diesel Motor Oil-6 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 8 8:21 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\200905\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Sep 09 09:10:41 2020
Response via : Multiple Level Calibration

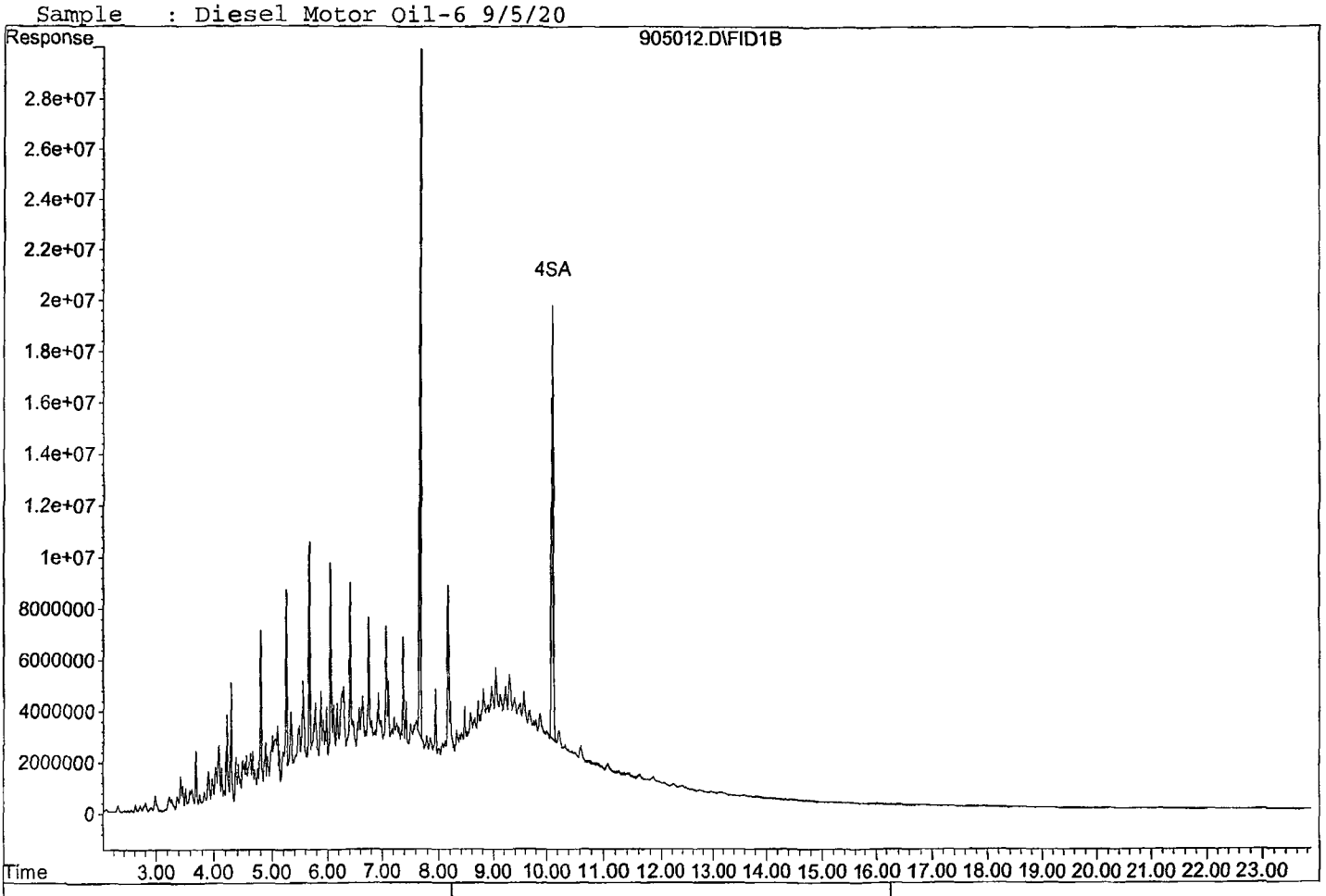
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

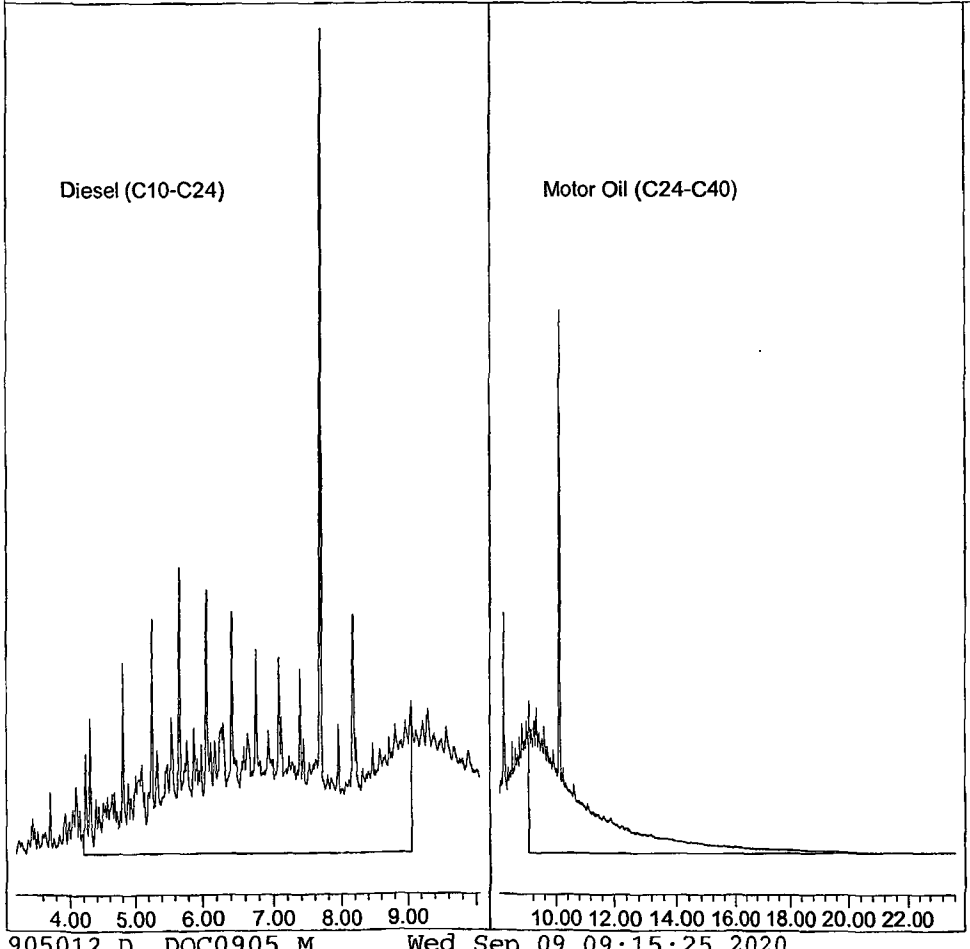
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.68	483575307	101.098 ppb
Surrogate Spike 30.000	Recovery =		336.99%
4) SA Octacosane(S)	10.11	404805297	100.724 ppb
Surrogate Spike 30.000	Recovery =		335.75%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	8760292310	2031.885 ppb
2) HBTM Motor Oil (C24-C40)	15.82	5994530170	2026.393 ppb

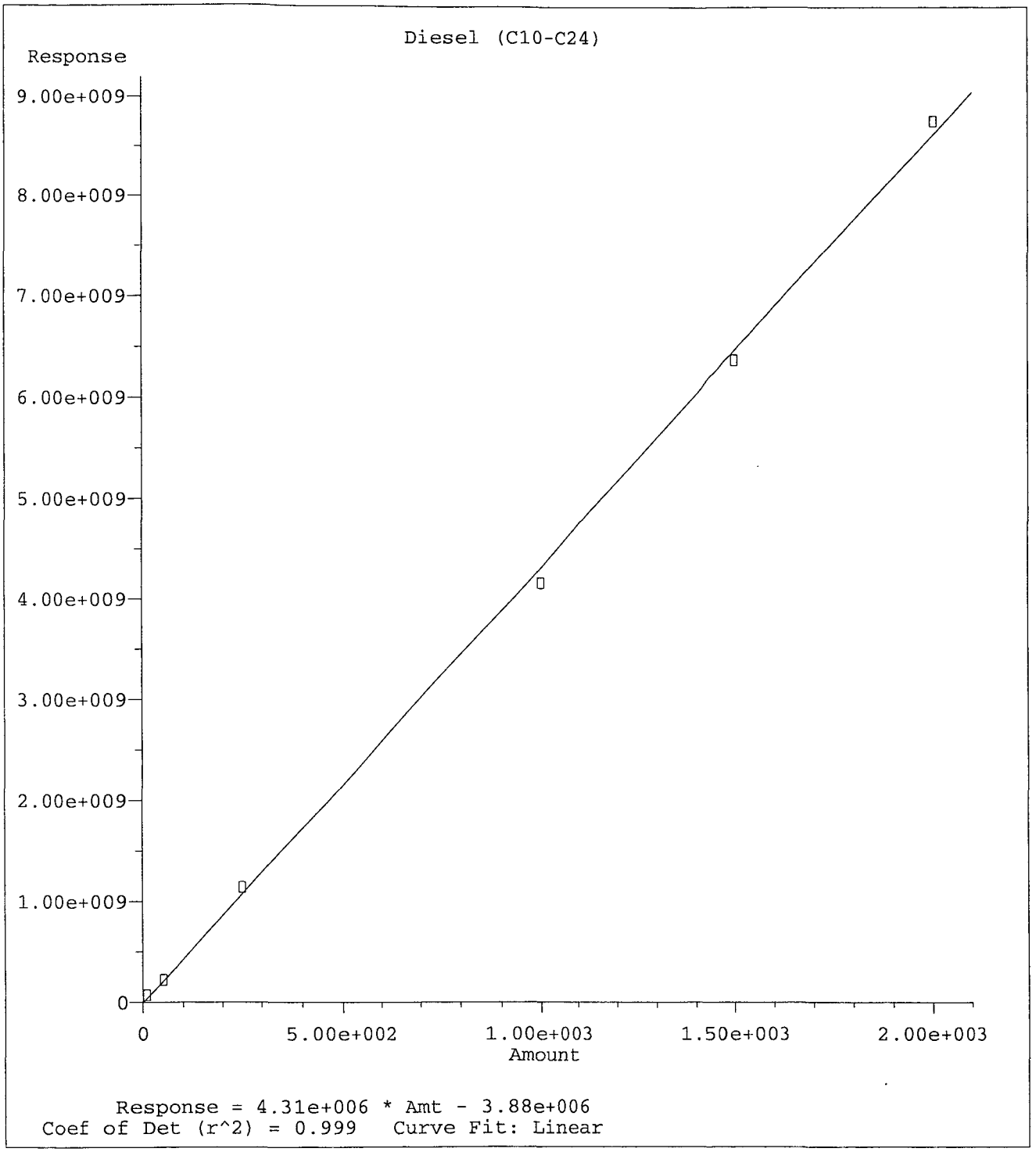
Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905012.D
Sample : Diesel Motor Oil-6 9/5/20







Method Name: G:\APOLLO\DATA\200905\DOC0905.M
Calibration Table Last Updated: Wed Sep 09 09:10:41 2020

TPH Extractables
DOC0905

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 09/05/20
Instrument: Apollo
Initial Cal. Date: 09/05/20
Data File: 905013.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2384790	0.70	HATML	11
2	HBTM	Motor Oil (C24-C40)	1513790	1737490	15	HBTM	
3							
4							
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36							
37							
38							
39							
40							
		Average			7.9		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905013.D Vial: 13
Acq On : 9-5-20 19:52:52 Operator:
Sample : Diesel Motor Oil-SS 7/21/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 8 8:21 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\200905\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Sep 09 09:10:41 2020
Response via : Multiple Level Calibration

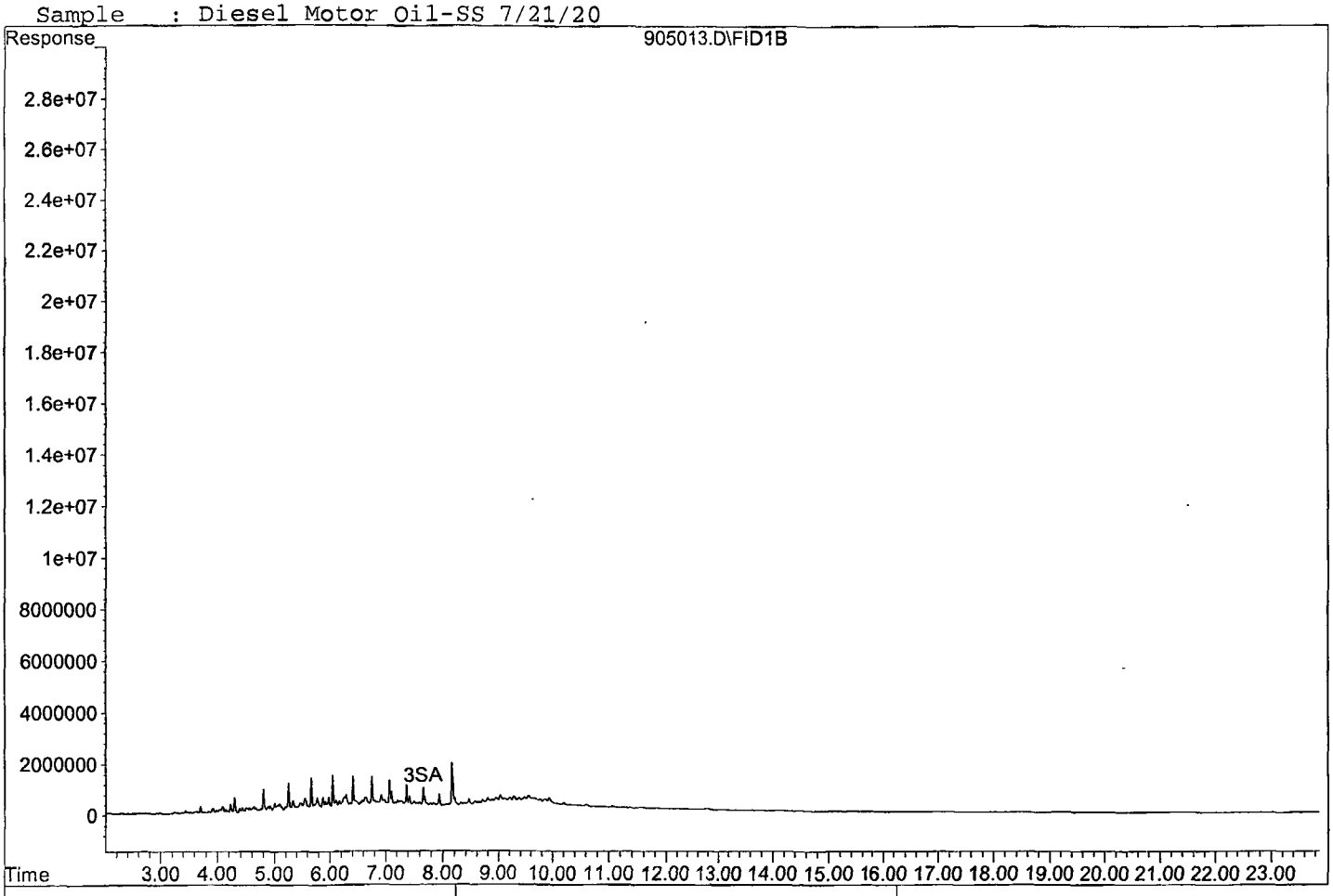
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

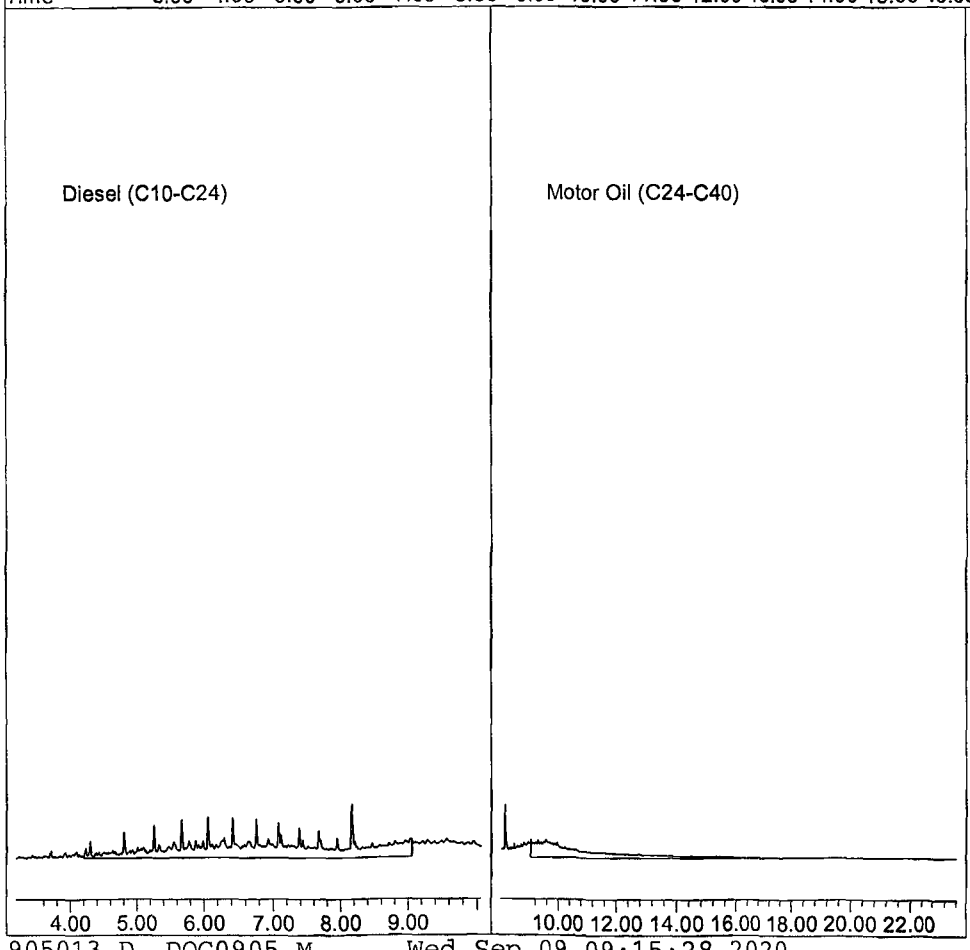
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.66	4757925	0.463 ppb
Surrogate Spike 30.000	Recovery =		1.54%
4) SA Octacosane(S)	10.06	-2131	N.D. ppb
Surrogate Spike 30.000	Recovery =		0.00%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1192394512	277.344 ppb
2) HBTM Motor Oil (C24-C40)	15.82	868745074	289.454 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905013.D
Sample : Diesel Motor Oil-SS 7/21/20





905013.D DOC0905.M Wed Sep 09 09:15:28 2020

TPH Extractables
DEC0914

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 09/14/20
Matrix: Water Instrument: Apollo
Initials: SS

			914004.D	914005.D	914006.D	914007.D	914008.D	914009.D									
		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
1	SC	Decanoic Acid(S)	1032713	1038468	1205026	1249387	1259834	1291198					1179438	9.7	SC		
2																	
3																	
4																	
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0.278114

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914004.D Vial: 4
Acq On : 9-14-20 10:24:43 Operator:
Sample : Decanoic Acid-1 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 16:45 2020 Quant Results File: DEC0914.RES

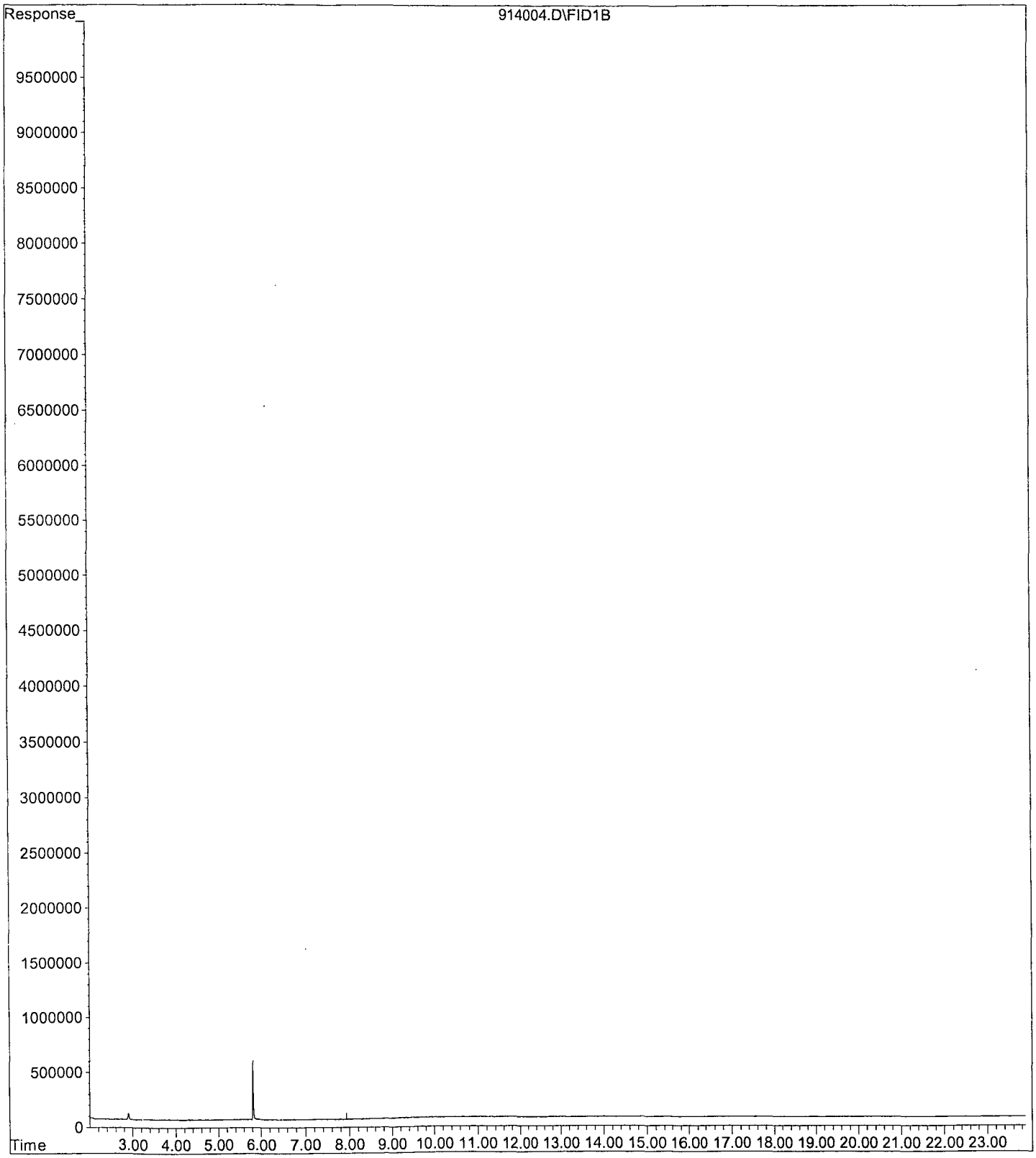
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Mon Sep 14 13:05:45 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.82	6196276	2.627 ppb
Surrogate Spike 24.000	Recovery =		10.95%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914004.D
Operator :
Acquired : 9-14-20 10:24:43 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-1 9/14/20
Misc Info : water
Vial Number: 4



Quantitation Report (Not Reviewed)

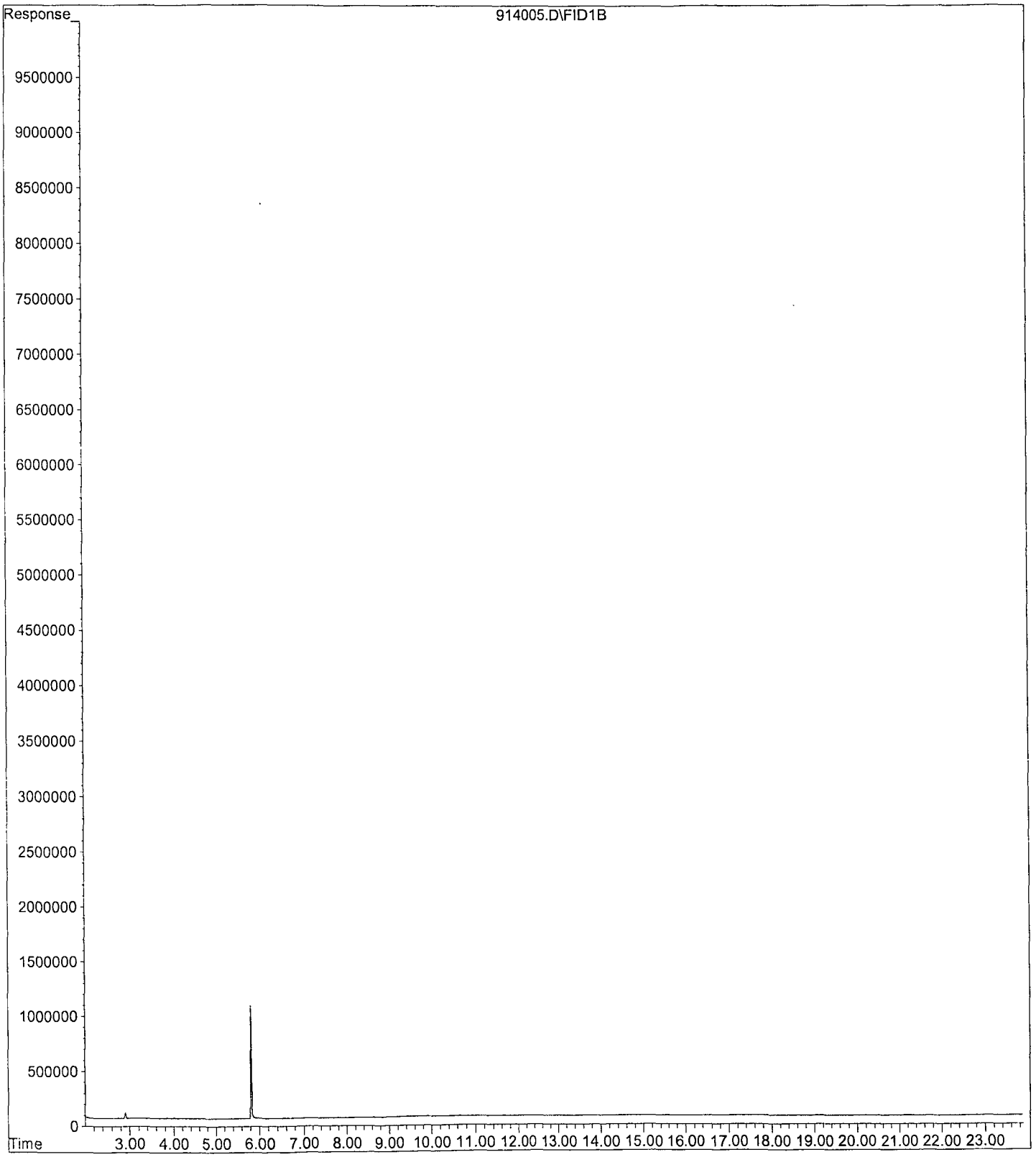
Data File : G:\APOLLO\DATA\200914\914005.D Vial: 5
Acq On : 9-14-20 10:52:47 Operator:
Sample : Decanoic Acid-2 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 16:45 2020 Quant Results File: DEC0914.RES

Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Mon Sep 14 13:05:45 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.82	12461617	5.283 ppb
Surrogate Spike 24.000		Recovery =	22.01%
Target Compounds			
Target Compounds			

File : G:\APOLLO\DATA\200914\914005.D
Operator :
Acquired : 9-14-20 10:52:47 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-2 9/14/20
Misc Info : water
Vial Number: 5



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914006.D Vial: 6
Acq On : 9-14-20 11:20:51 Operator:
Sample : Decanoic Acid-3 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 16:45 2020 Quant Results File: DEC0914.RES

Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Mon Sep 14 13:05:45 2020
Response via : Multiple Level Calibration

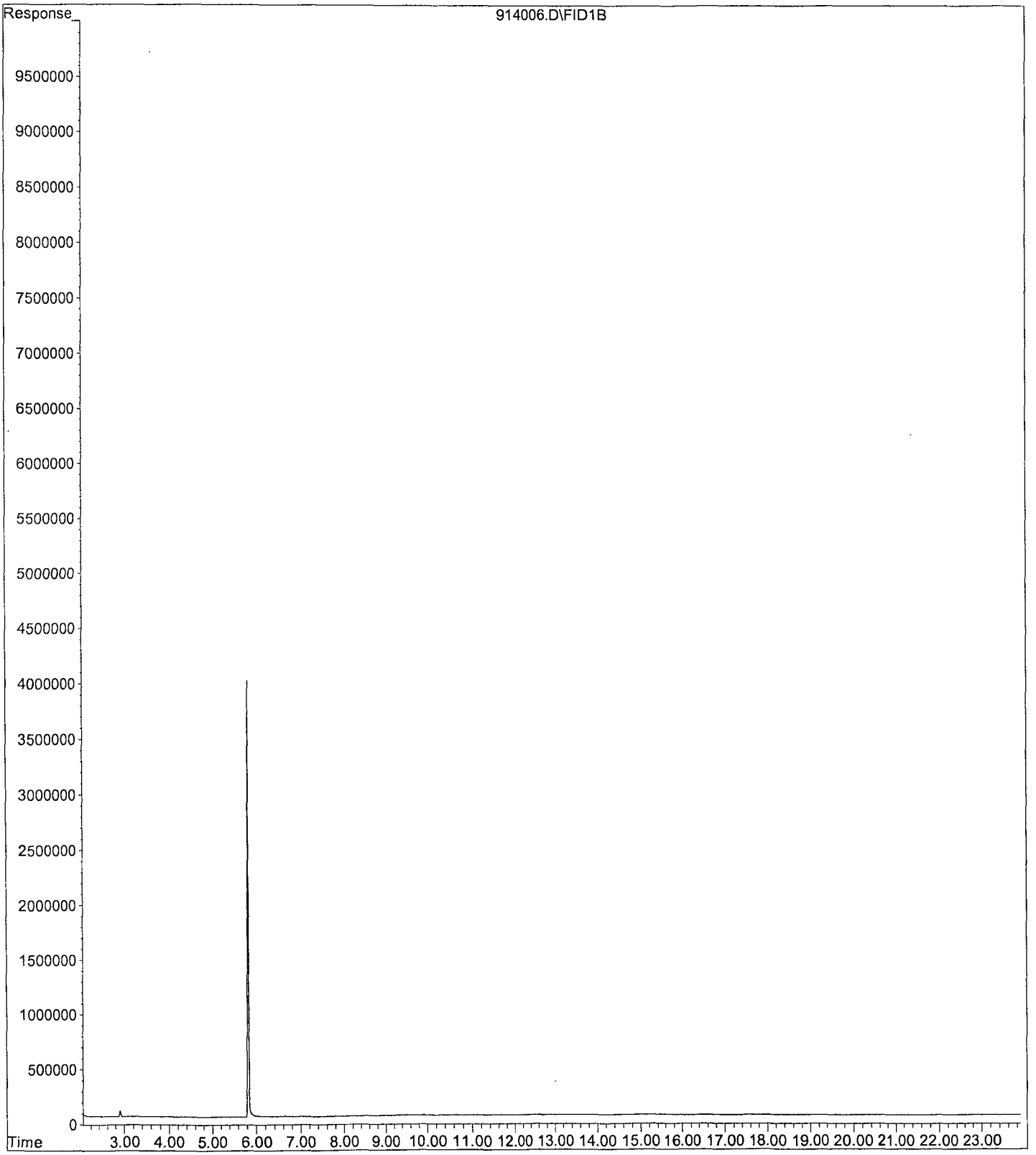
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.83	57841244	24.521 ppb
Surrogate Spike 24.000		Recovery =	102.17%
Target Compounds			

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914006.D
Operator :
Acquired : 9-14-20 11:20:51 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-3 9/14/20
Misc Info : water
Vial Number: 6



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914007.D Vial: 7
Acq On : 9-14-20 11:48:52 Operator:
Sample : Decanoic Acid-4 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 16:45 2020 Quant Results File: DEC0914.RES

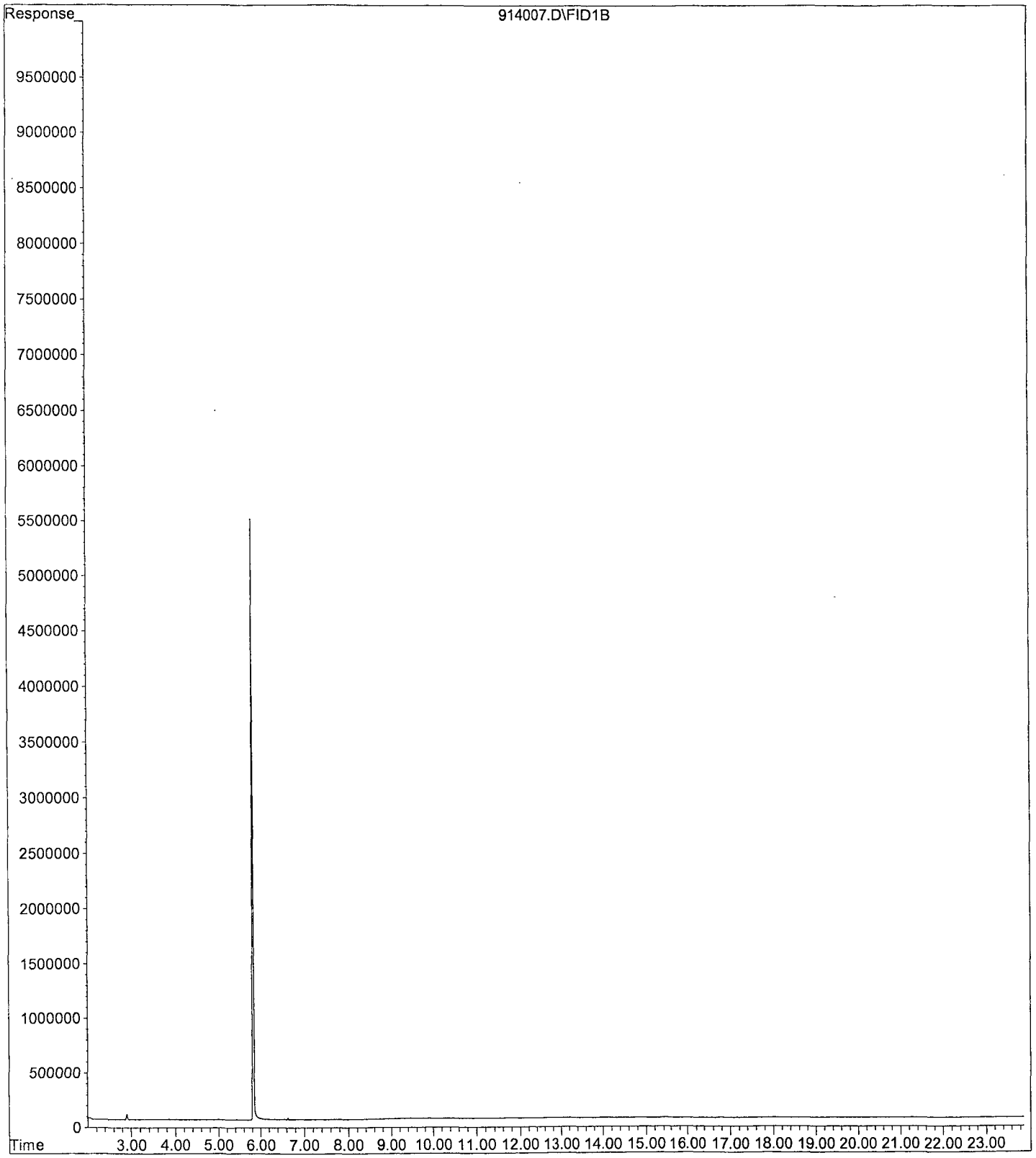
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Mon Sep 14 13:05:45 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.84	89955859	38.135 ppb
Surrogate Spike 24.000		Recovery =	158.90%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914007.D
Operator :
Acquired : 9-14-20 11:48:52 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-4 9/14/20
Misc Info : water
Vial Number: 7



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914008.D Vial: 8
Acq On : 9-14-20 12:16:53 Operator:
Sample : Decanoic Acid-5 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 16:45 2020 Quant Results File: DEC0914.RES

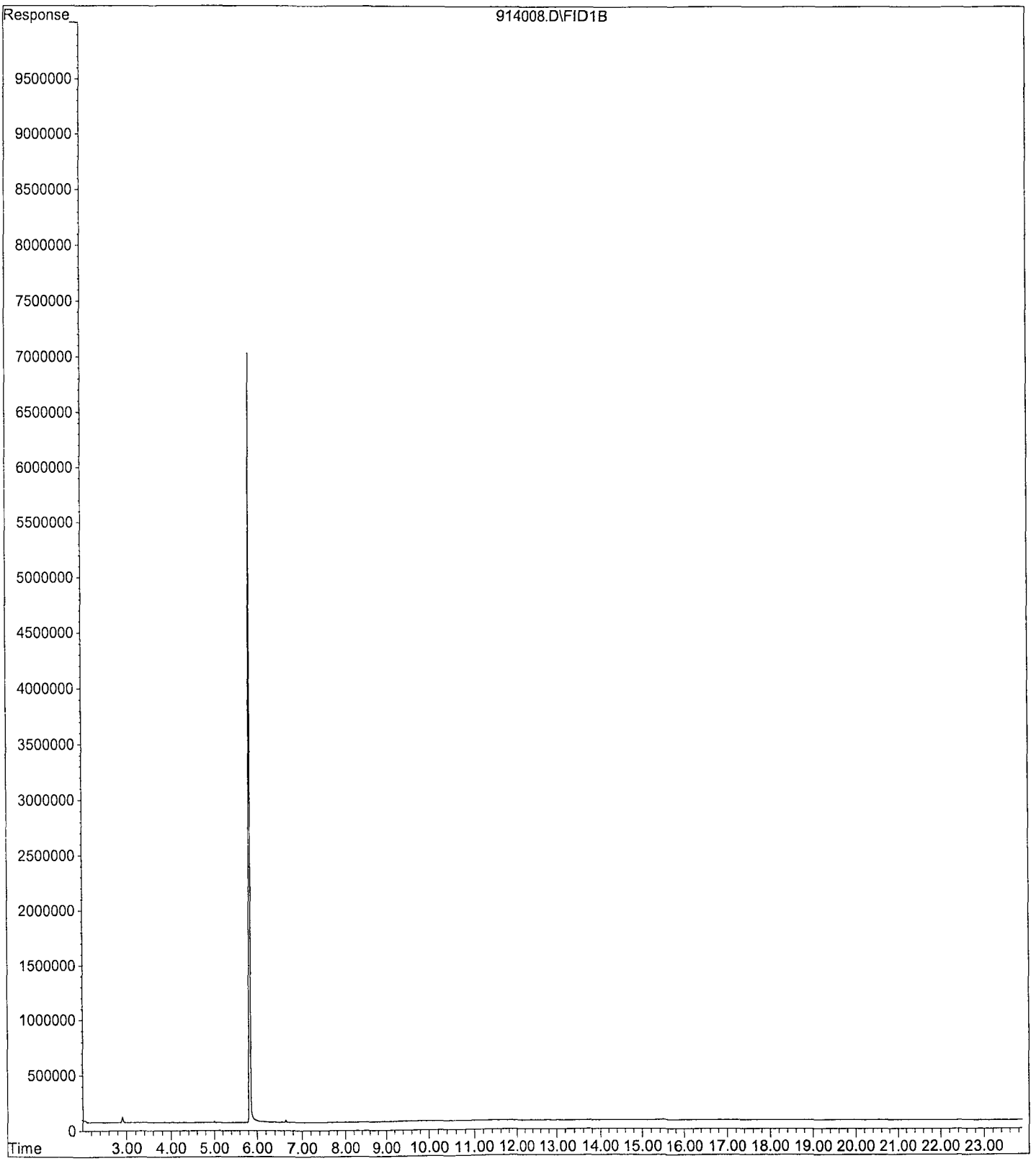
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Mon Sep 14 13:05:45 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.85	120944103	51.272 ppb
Surrogate Spike 24.000		Recovery =	213.63%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914008.D
Operator :
Acquired : 9-14-20 12:16:53 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-5 9/14/20
Misc Info : water
Vial Number: 8



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914009.D Vial: 9
Acq On : 9-14-20 12:44:57 Operator:
Sample : Decanoic Acid-6 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 16:45 2020 Quant Results File: DEC0914.RES

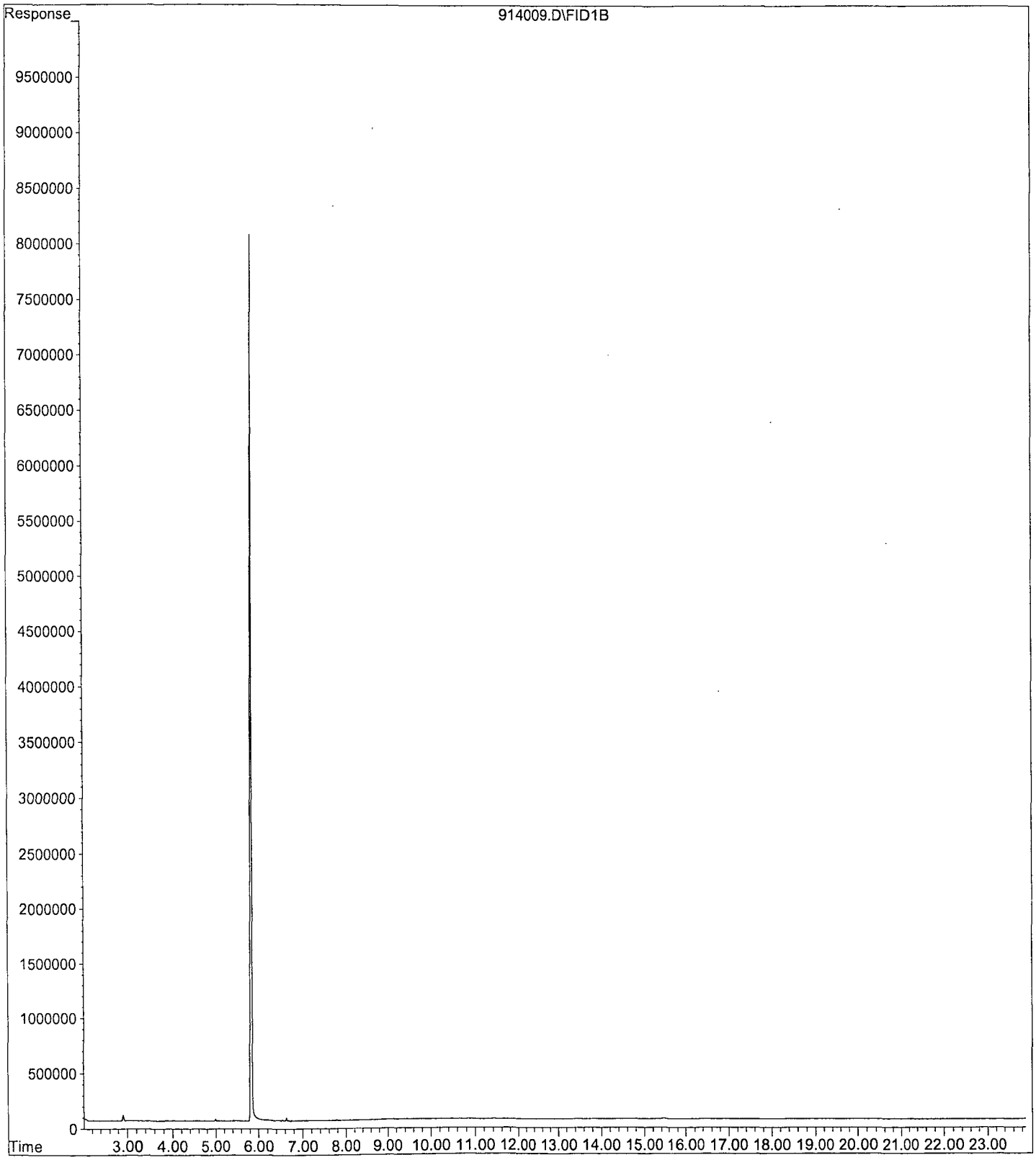
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Mon Sep 14 13:05:45 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.85	154943704	65.685 ppb
Surrogate Spike 24.000		Recovery =	273.69%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914009.D
Operator :
Acquired : 9-14-20 12:44:57 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-6 9/14/20
Misc Info : water
Vial Number: 9



TPH Extractables
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/28/20
Instrument: Apollo
Initial Cal. Date: 09/05/20
Data File: 1019275.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2059160	14	HATML	4.2
2	HBTM	Motor Oil (C24-C40)	1513790	1343200	11	HBTM	
3	SA	Ortho-Terphenyl(S)	2525360	2516270	0.36	SA	
4	SA	Octacosane(S)	2058600	1999730	2.9	SA	
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		Average			7.1		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201019\1019275.D Vial: 75
Acq On : 10-28-20 11:43:07 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 11 14:25 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

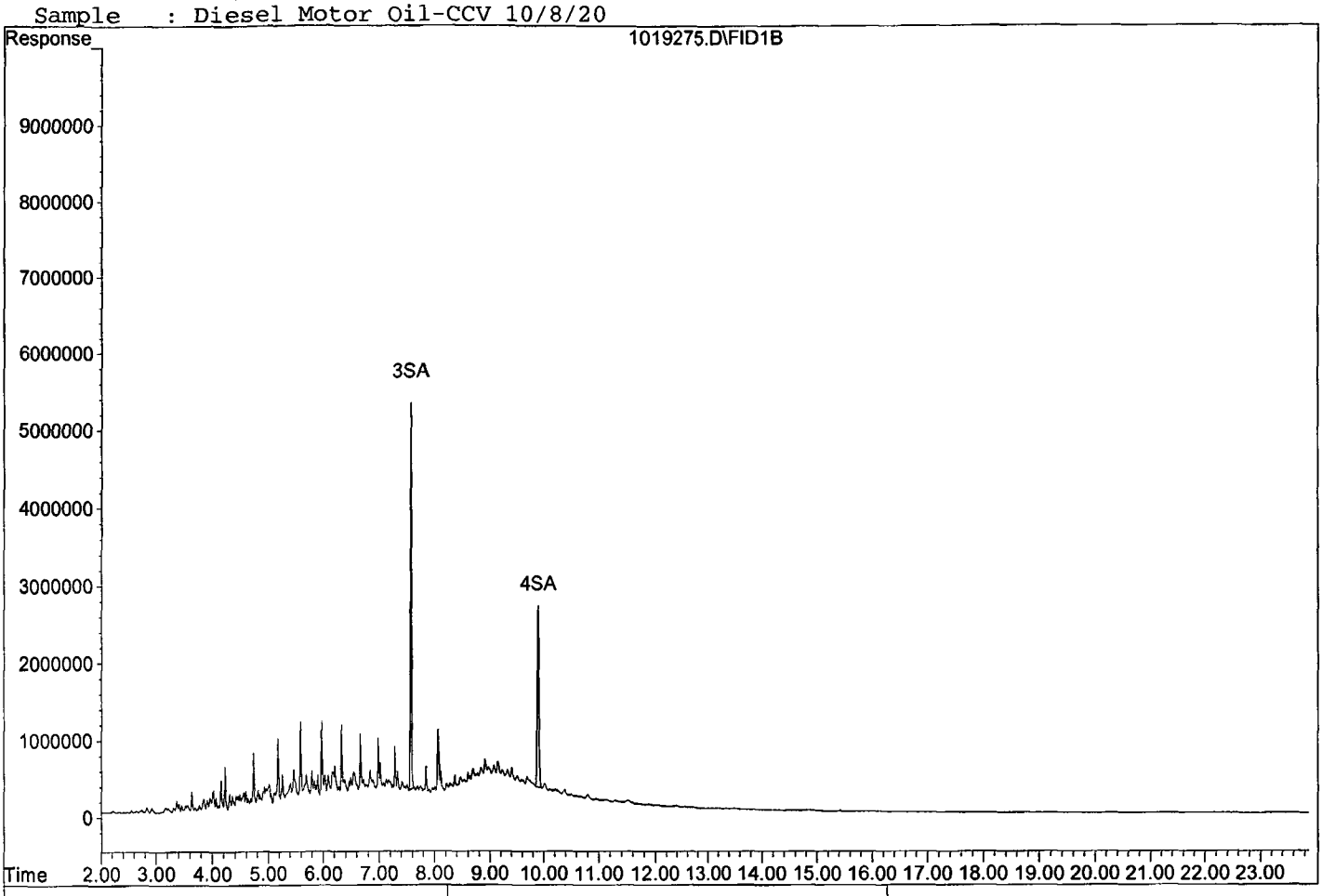
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

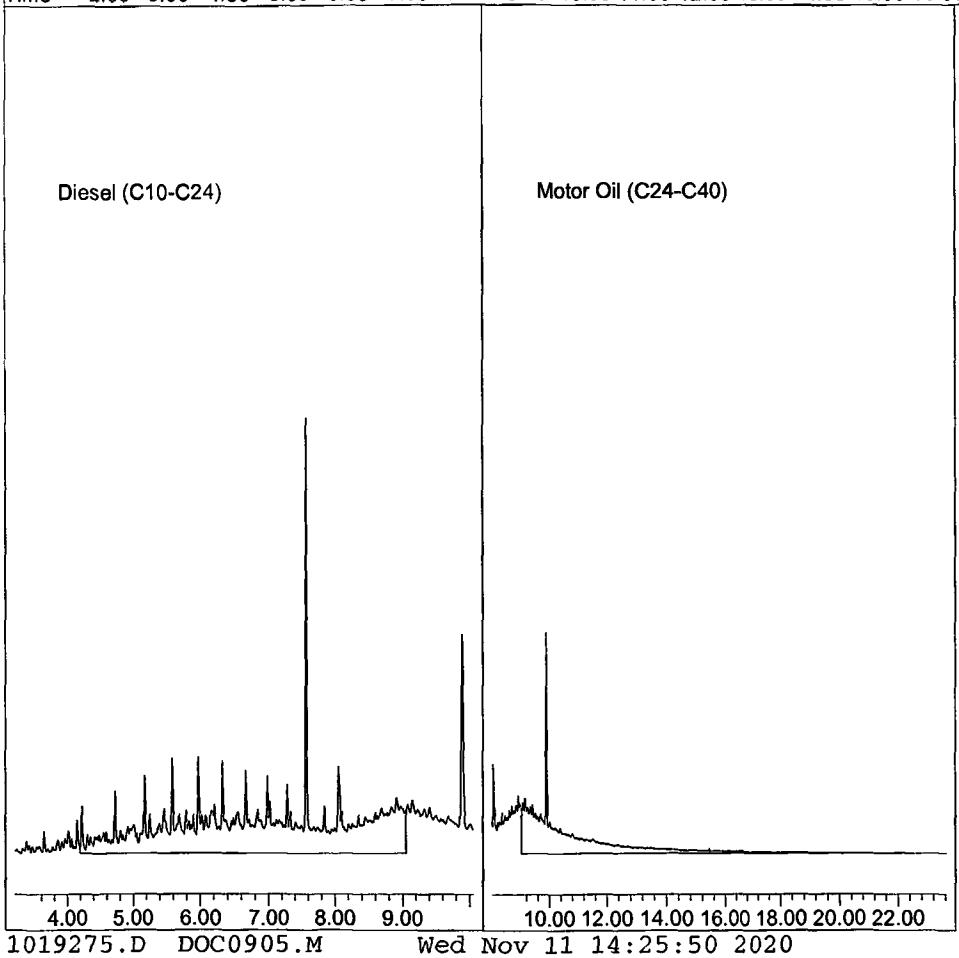
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.57	62906750	12.455	ppb
Surrogate Spike 12.000	Recovery =		103.79%	
4) SA Octacosane(S)	9.89	49993187	12.143	ppb
Surrogate Spike 12.000	Recovery =		101.19%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	1029581232	239.598	ppb
2) HBTM Motor Oil (C24-C40)	15.82	671598528	221.827	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201019\1019275.D
Sample : Diesel Motor Oil-CCV 10/8/20





TPH Extractables
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/28/20
Instrument: Apollo
Initial Cal. Date: 09/05/20
Data File: 1028011.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2109680	12	HATML	1.8
2	HBTM	Motor Oil (C24-C40)	1513790	1387540	8.3	HBTM	
3	SA	Ortho-Terphenyl(S)	2525360	2567430	1.7	SA	
4	SA	Octacosane(S)	2058600	2022960	1.7	SA	
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		Average			5.9		

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028011.D Vial: 11
Acq On : 10-28-20 17:13:07 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Oct 29 7:17 2020 Quant Results File: DOC0905.RES

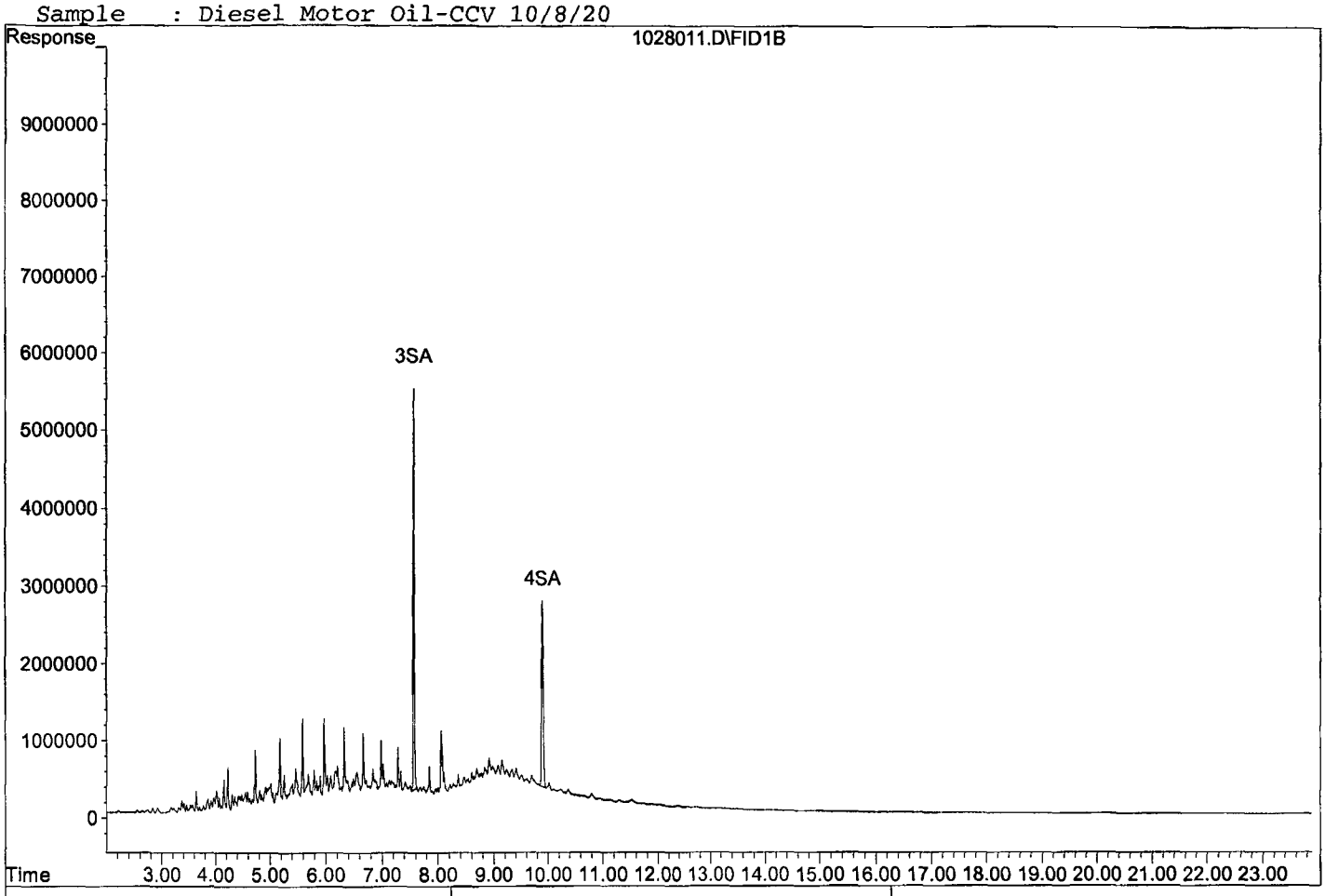
Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

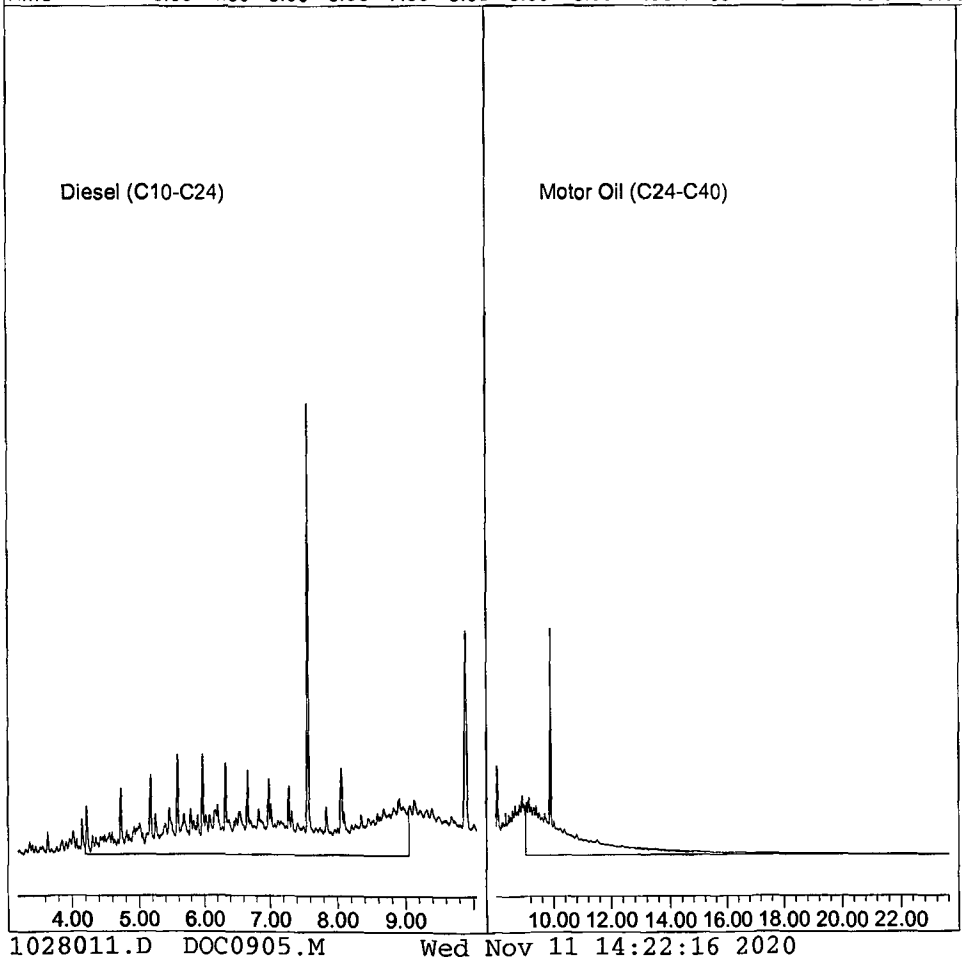
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	64185809	12.708 ppb
Surrogate Spike 12.000	Recovery =		105.90%
4) SA Octacosane(S)	9.89	50574103	12.284 ppb
Surrogate Spike 12.000	Recovery =		102.37%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1054838077	245.453 ppb
2) HBTM Motor Oil (C24-C40)	15.82	693770184	229.150 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028011.D
Sample : Diesel Motor Oil-CCV 10/8/20





TPH Extractables
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/28/20
Instrument: Apollo
Initial Cal. Date: 09/05/20
Data File: 1028018.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2290970	4.6	HATML	6.6
2	HBTM	Motor Oil (C24-C40)	1513790	1495160	1.2	HBTM	
3	SA	Ortho-Terphenyl(S)	2525360	2796710	11	SA	
4	SA	Octacosane(S)	2058600	2231350	8.4	SA	
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		Average			6.3		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028018.D Vial: 18
Acq On : 10-28-20 20:29:25 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Oct 29 7:18 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

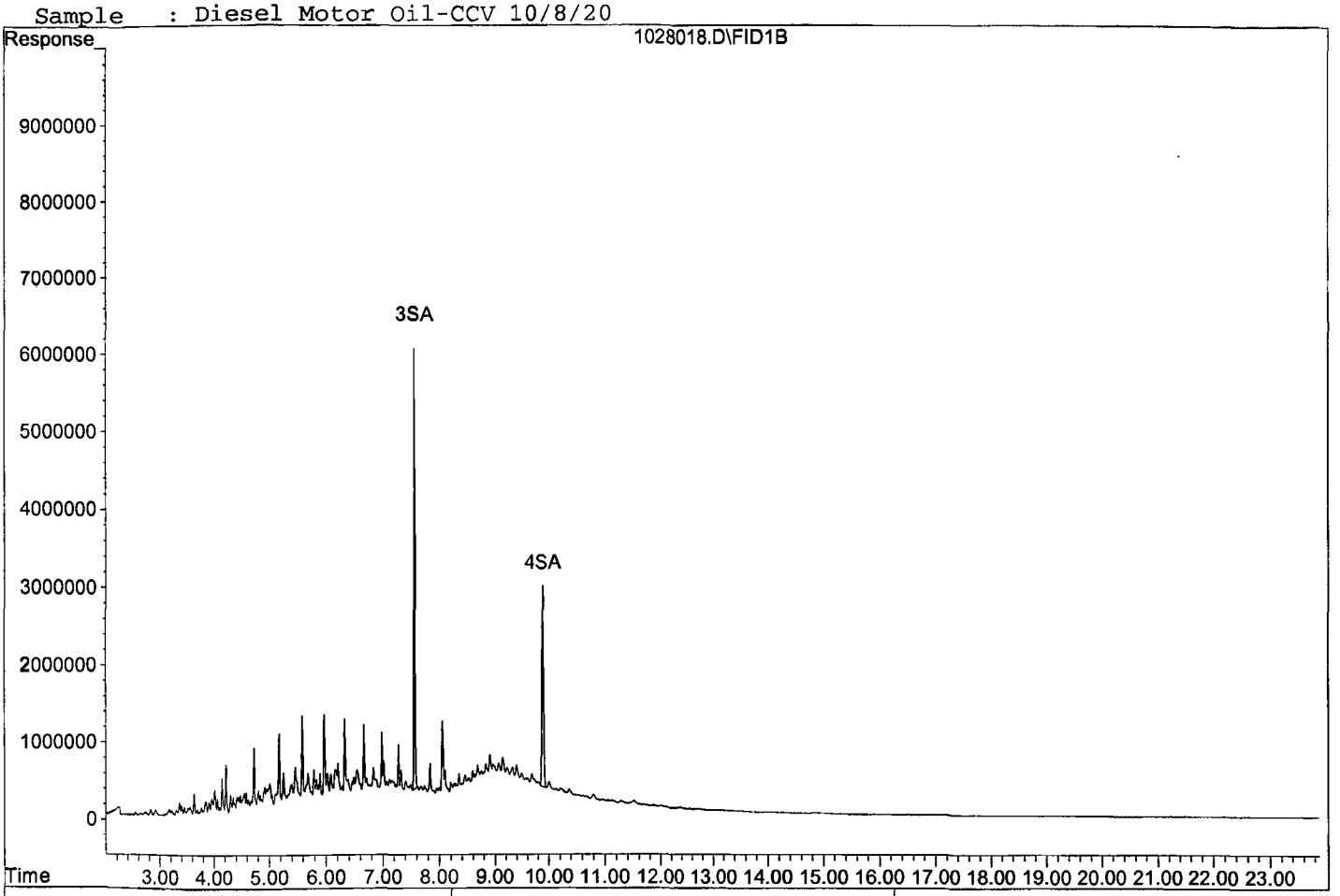
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

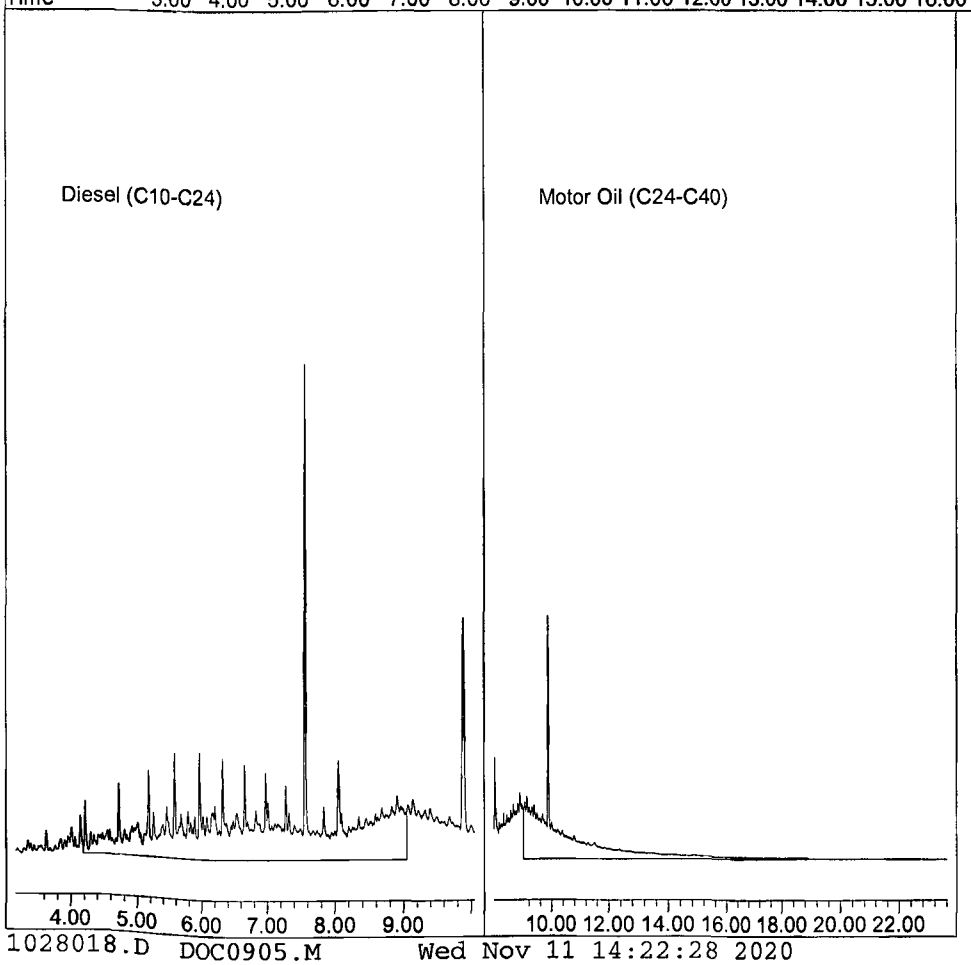
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	69917682	13.843 ppb
Surrogate Spike 12.000	Recovery =		115.36%
4) SA Octacosane(S)	9.89	55783701	13.549 ppb
Surrogate Spike 12.000	Recovery =		112.91%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1145483543	266.468 ppb
2) HBTM Motor Oil (C24-C40)	15.82	747579264	246.923 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028018.D
Sample : Diesel Motor Oil-CCV 10/8/20





1028018.D DOC0905.M Wed Nov 11 14:22:28 2020

TPH Extractables
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 11/04/20
Instrument: Apollo
Initial Cal. Date: 09/05/20
Data File: 1028130.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2112650	12	HATML	1.7
2	HBTM	Motor Oil (C24-C40)	1513790	1323960	13	HBTM	
3	SA	Ortho-Terphenyl(S)	2525360	2541480	0.64	SA	
4	SA	Octacosane(S)	2058600	1948330	5.4	SA	
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		Average			7.8		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028130.D Vial: 30
Acq On : 11-4-20 9:54:39 Operator:
Sample : Diesel Motor Oil-CCV 11/03/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 4 11:41 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

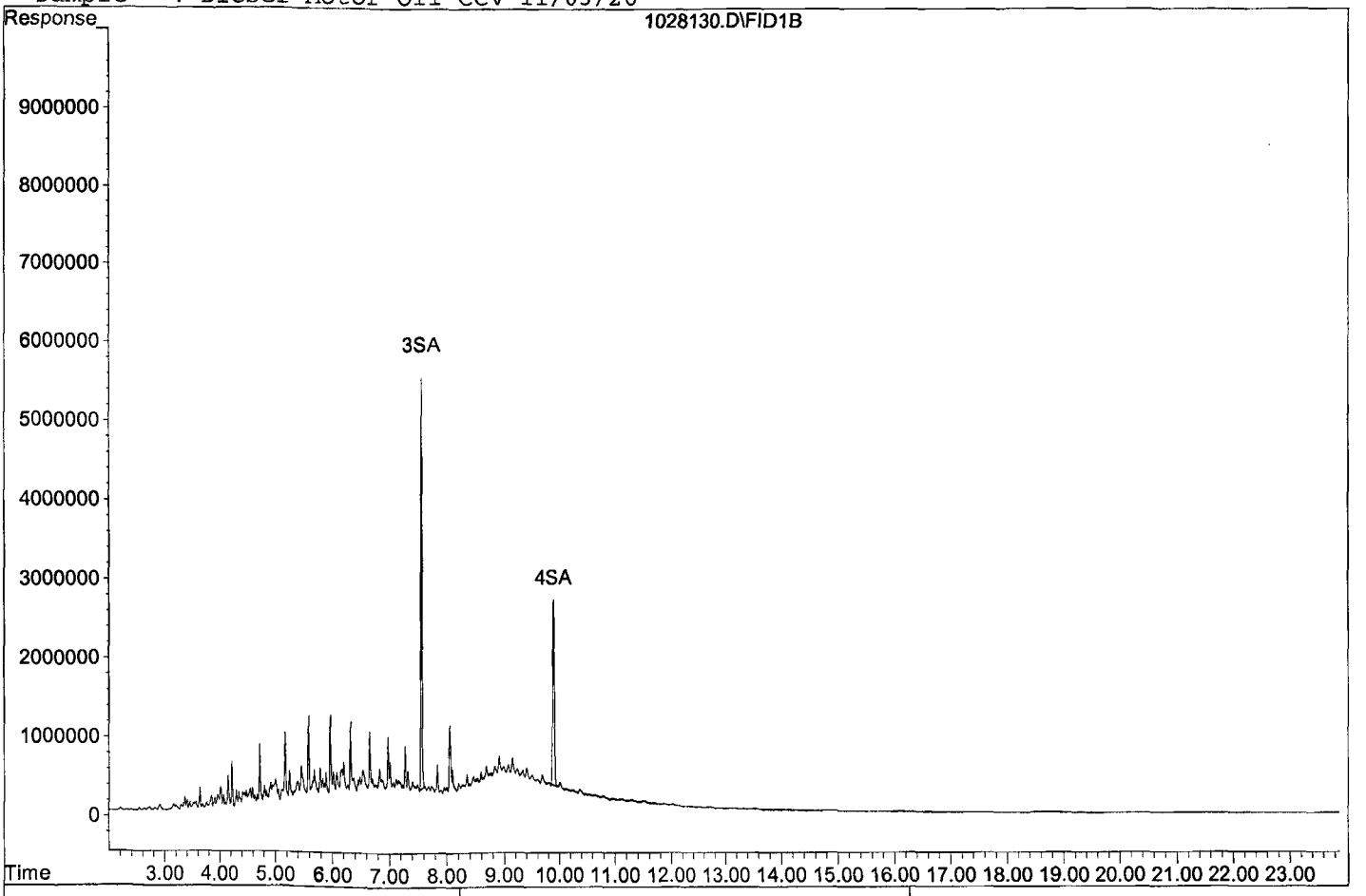
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

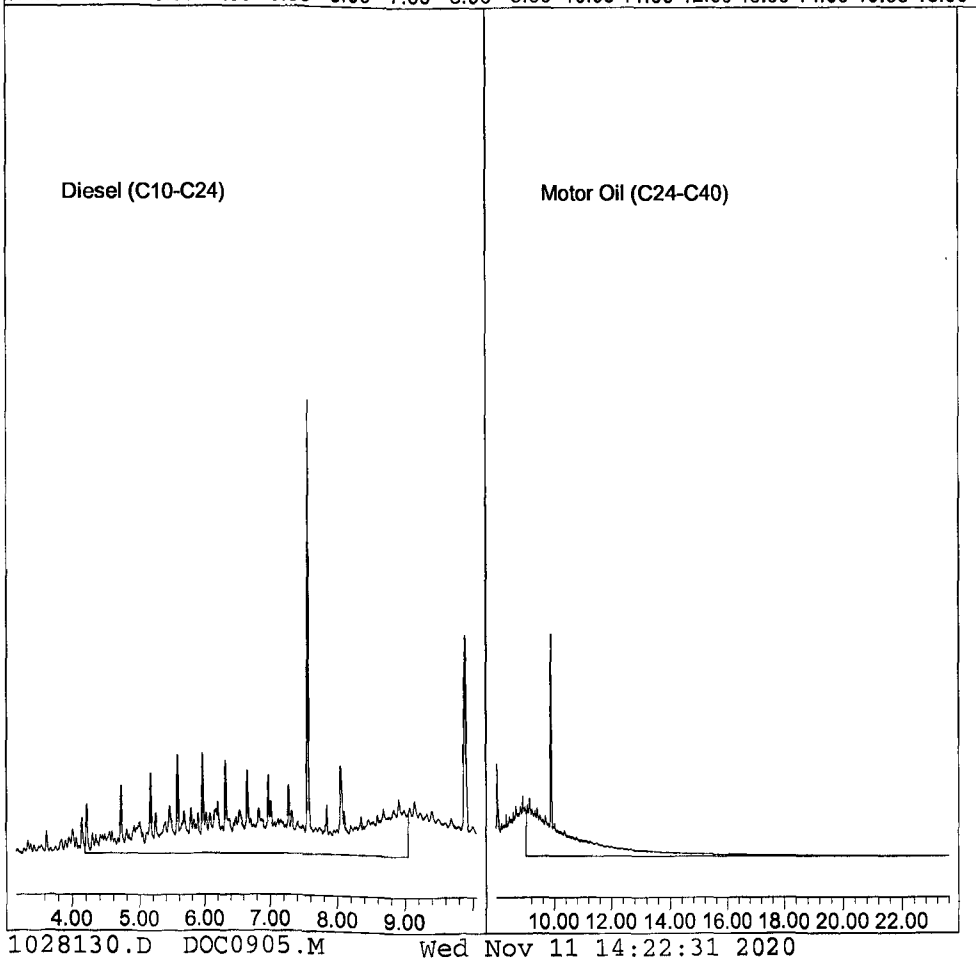
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	63536977	12.580 ppb
Surrogate Spike 12.000	Recovery =		104.83%
4) SA Octacosane(S)	9.89	48708290	11.830 ppb
Surrogate Spike 12.000	Recovery =		98.58%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1056326614	245.798 ppb
2) HBTM Motor Oil (C24-C40)	15.82	661979697	218.650 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028130.D
Sample : Diesel Motor Oil-CCV 11/03/20





TPH Extractables
DEC0914

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 11/04/20
Instrument: Apollo
Initial Cal. Date: 09/14/20
Data File: 1028131.D

		Compound	MEAN	CCRF	%D	%Drift	
1	SC	Decanoic Acid(S)	1179440	1068050	9.4	SC	
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		Average			9.4		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028131.D Vial: 31
Acq On : 11-4-20 11:44:16 Operator:
Sample : Decanoic Acid-CCV 7/28/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 5 9:09 2020 Quant Results File: DEC0914.RES

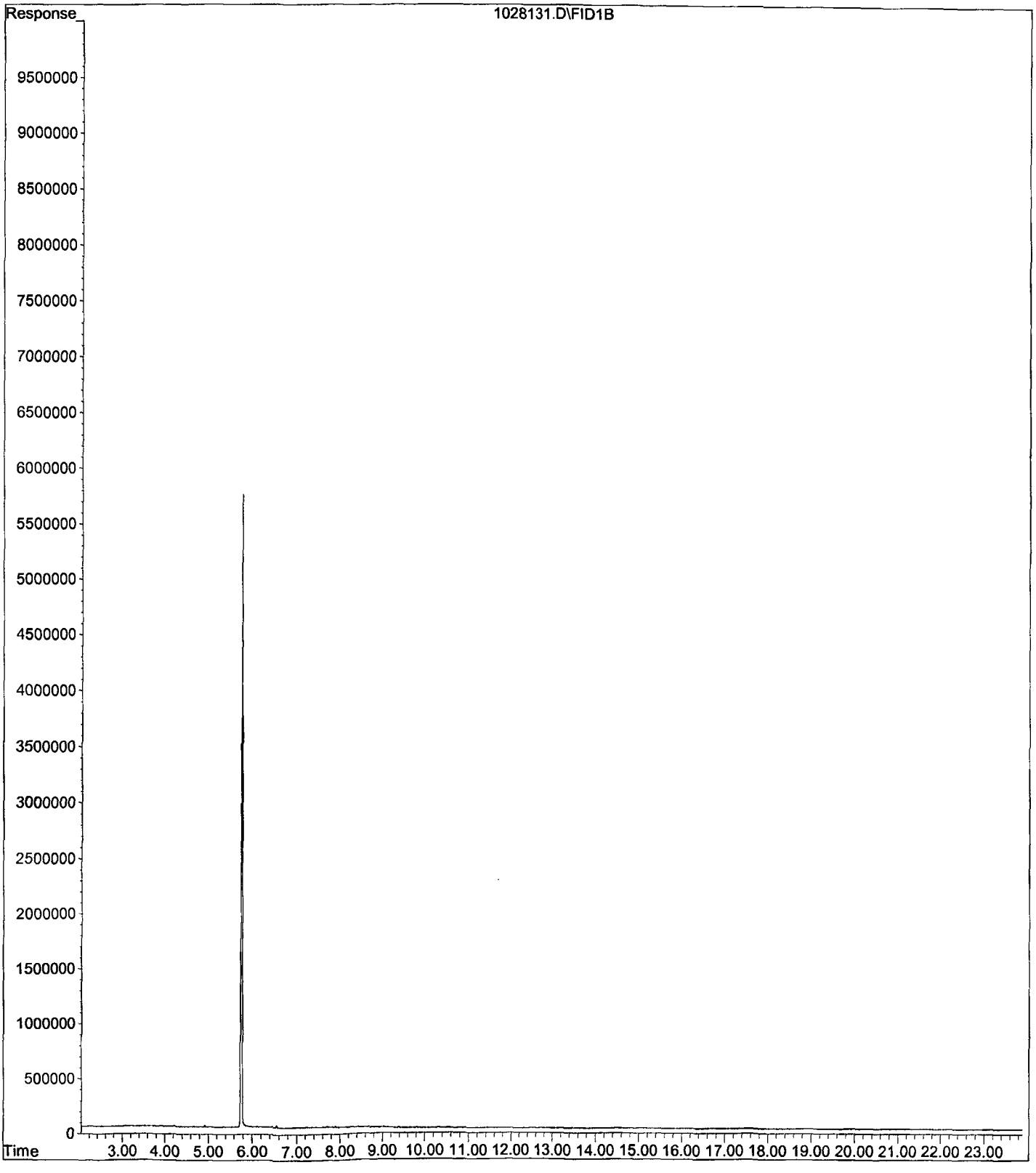
Method : G:\APOLLO\DATA\201028\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.76	102532514	43.467 ppb
Surrogate Spike 24.000		Recovery =	181.11%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\201028\1028131.D
Operator :
Acquired : 11-4-20 11:44:16 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-CCV 7/28/20
Misc Info : water
Vial Number: 31



TPH Extractables
DEC0914

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 11/04/20
Instrument: Apollo
Initial Cal. Date: 09/14/20
Data File: 1028137.D

		Compound	MEAN	CCRF	%D	%Drift	
1	SC	Decanoic Acid(S)	1179440	1109660	5.9	SC	
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		Average			5.9		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028137.D Vial: 37
Acq On : 11-4-20 14:32:21 Operator:
Sample : Decanoic Acid-CCV 7/28/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 5 9:09 2020 Quant Results File: DEC0914.RES

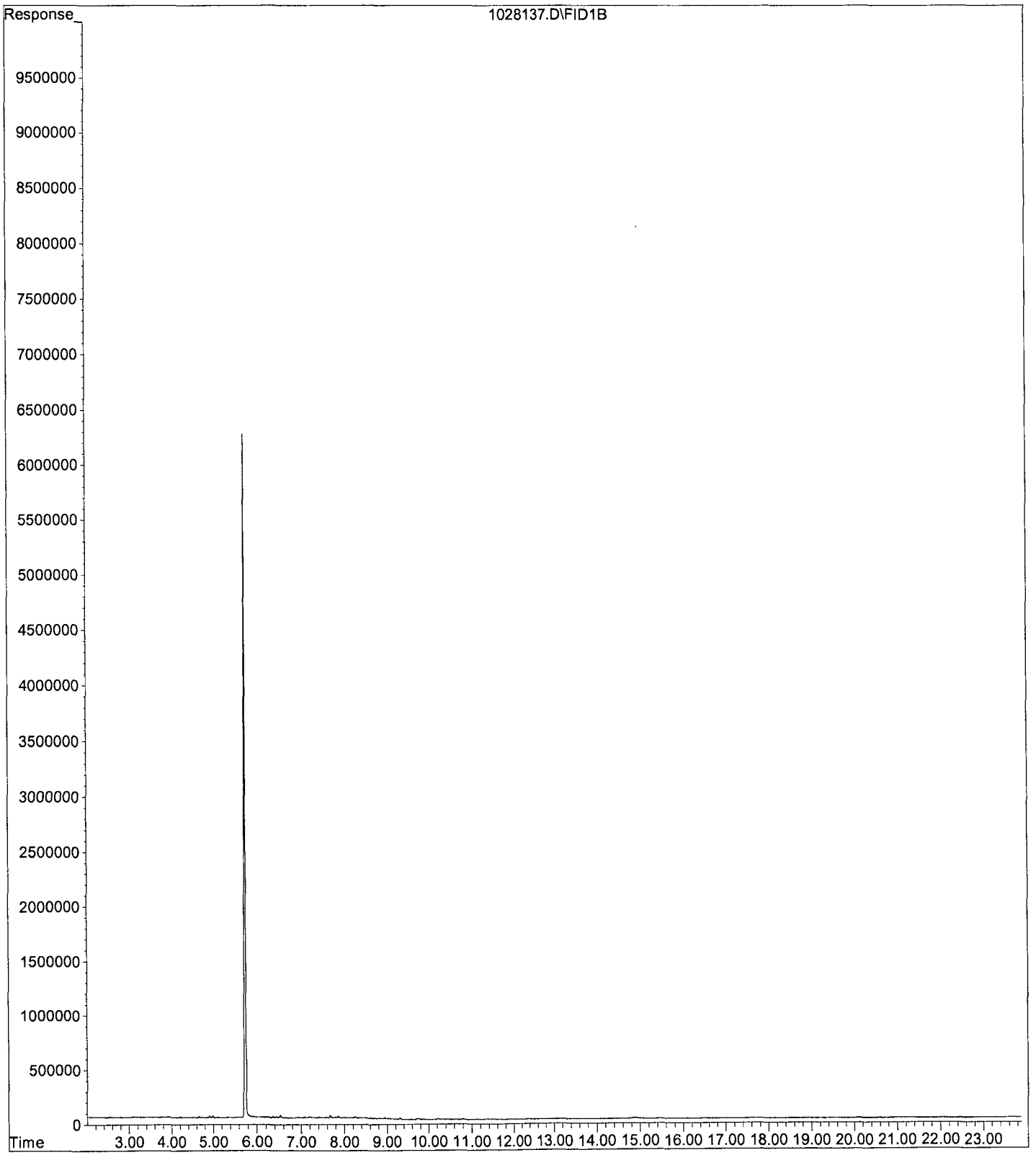
Method : G:\APOLLO\DATA\201028\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.76	106527725	45.160 ppb
Surrogate Spike 24.000	Recovery =		188.17%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\201028\1028137.D
Operator :
Acquired : 11-4-20 14:32:21 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-CCV 7/28/20
Misc Info : water
Vial Number: 37



TPH Extractables
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 11/04/20
Instrument: Apollo
Initial Cal. Date: 09/05/20
Data File: 1028138.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C24)	2401620	2127790	11	HATML	0.98
2	HBTM	Motor Oil (C24-C40)	1513790	1318170	13	HBTM	
3	SA	Ortho-Terphenyl(S)	2525360	2558920	1.3	SA	
4	SA	Octacosane(S)	2058600	1988770	3.4	SA	
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
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28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			7.2		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028138.D Vial: 38
Acq On : 11-4-20 15:00:25 Operator:
Sample : Diesel Motor Oil-CCV 11/03/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 4 15:44 2020 Quant Results File: DOC0905.RES

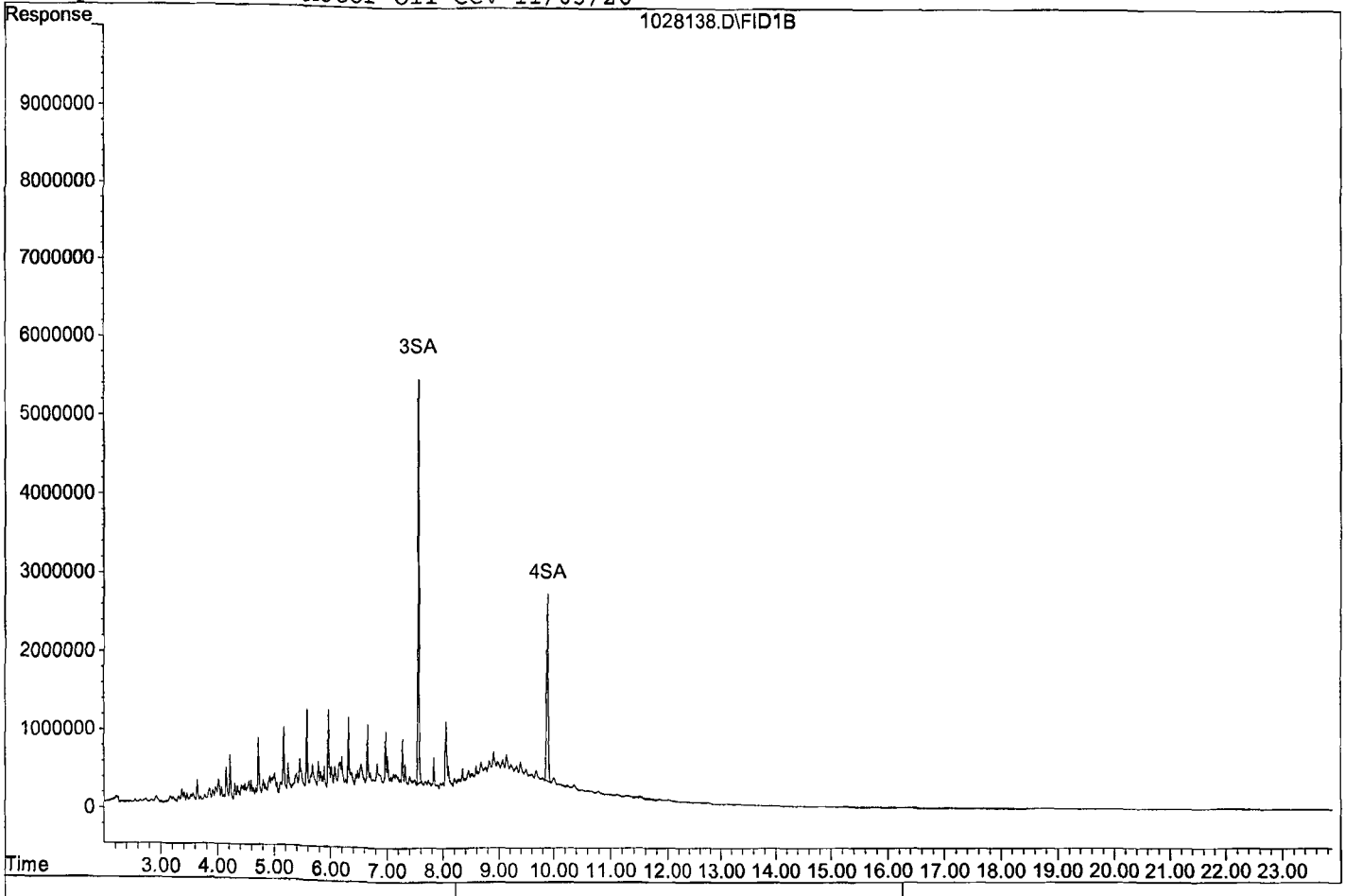
Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

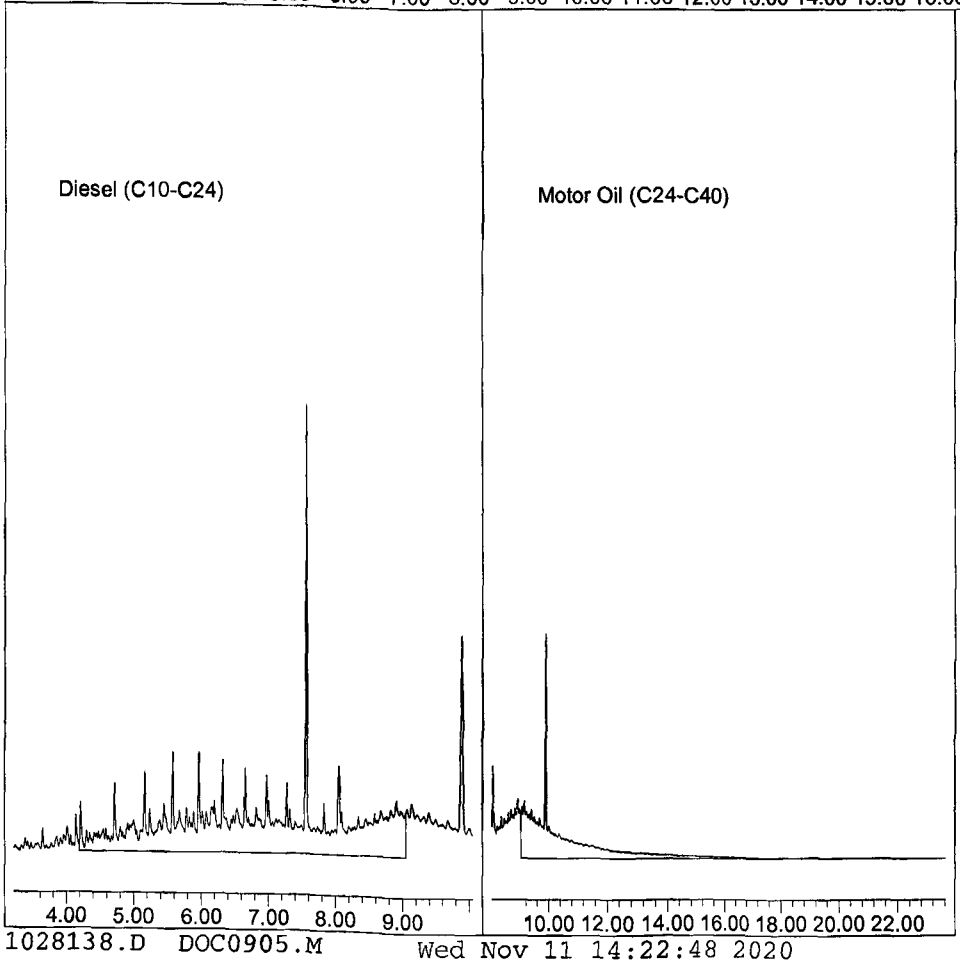
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.56	63972979	12.666 ppb
Surrogate Spike 12.000	Recovery =		105.55%
4) SA Octacosane(S)	9.89	49719184	12.076 ppb
Surrogate Spike 12.000	Recovery =		100.63%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1063894280	247.553 ppb
2) HBTM Motor Oil (C24-C40)	15.82	659086263	217.694 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028138.D
Sample : Diesel Motor Oil-CCV 11/03/20





ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028015.D Vial: 15
Acq On : 10-28-20 19:05:22 Operator:
Sample : BA20716W13 5/800 Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Oct 29 15:07 2020 Quant Results File: DOC0905.RES

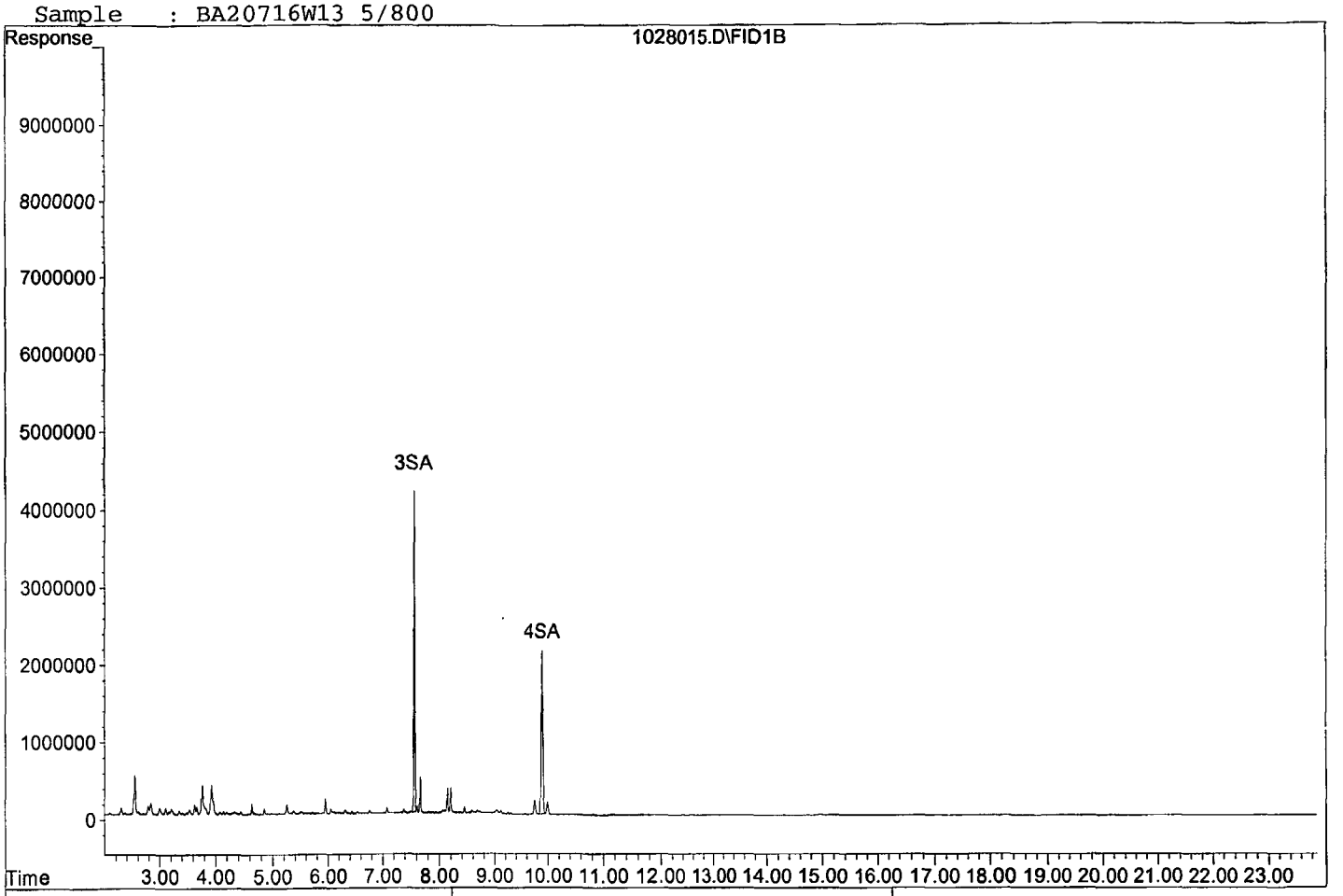
Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

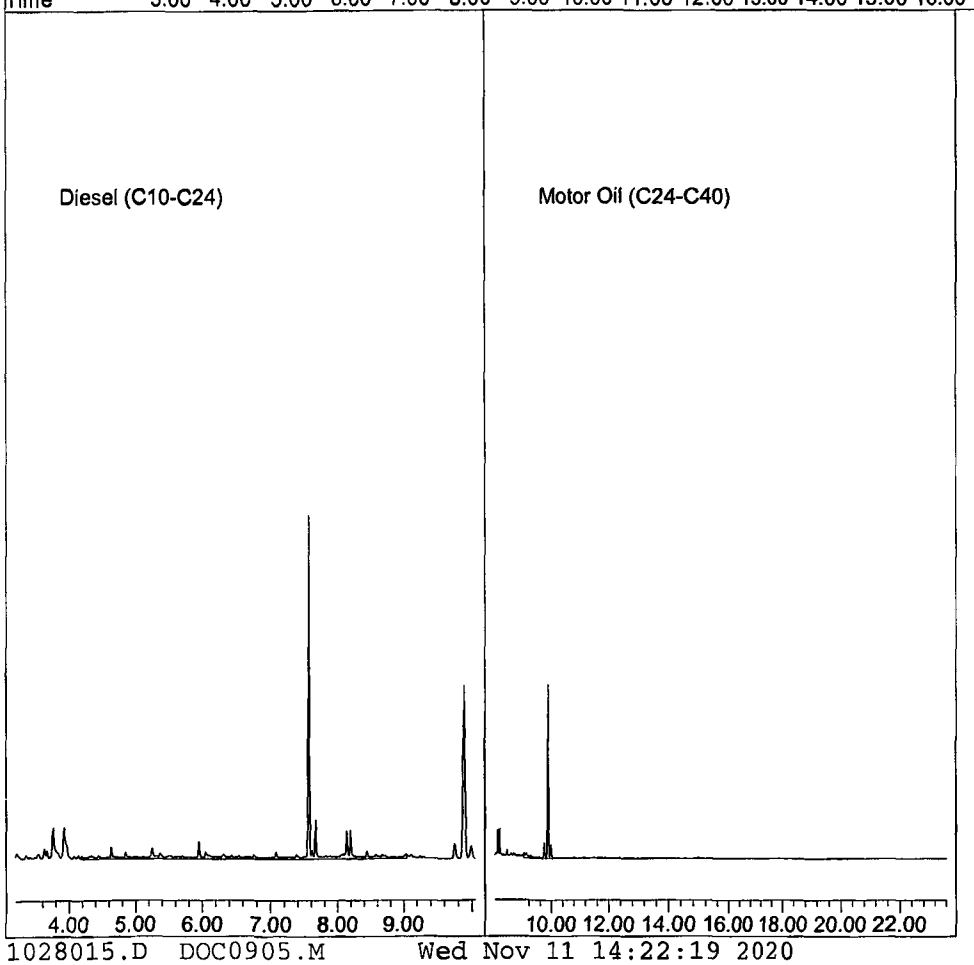
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	50101911	61.999 ppb
Surrogate Spike 75.000	Recovery =		82.67%
4) SA Octacosane(S)	9.89	43790978	66.476 ppb
Surrogate Spike 75.000	Recovery =		88.63%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	101031768	152.018 ppb
2) HBTM Motor Oil (C24-C40)	15.82	40038817	82.654 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028015.D
Sample : BA20716W13 5/800





Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028135.D Vial: 35
Acq On : 11-4-20 13:36:16 Operator:
Sample : BA20716W13 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 5 9:07 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.56	33955117	42.018 ppb
Surrogate Spike 75.000		Recovery =	56.02%
4) SA Octacosane(S)	9.88	30595358	46.444 ppb
Surrogate Spike 75.000		Recovery =	61.93%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	61167263	94.254 ppb
2) HBTM Motor Oil (C24-C40)	15.82	18542910	38.279 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028135.D Vial: 35
Acq On : 11-4-20 13:36:16 Operator:
Sample : BA20716W13 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 5 9:09 2020 Quant Results File: DEC0914.RES

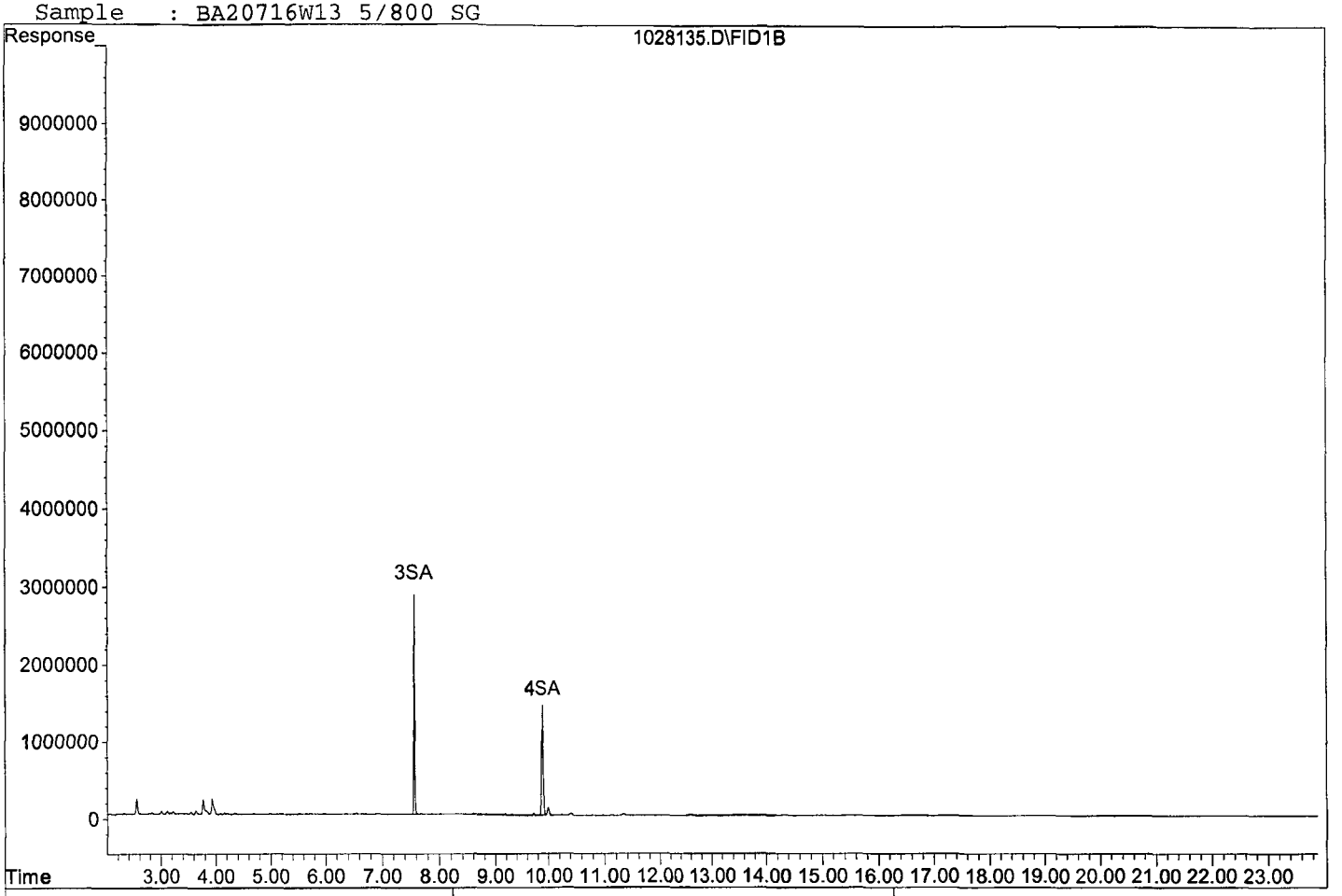
Method : G:\APOLLO\DATA\201028\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

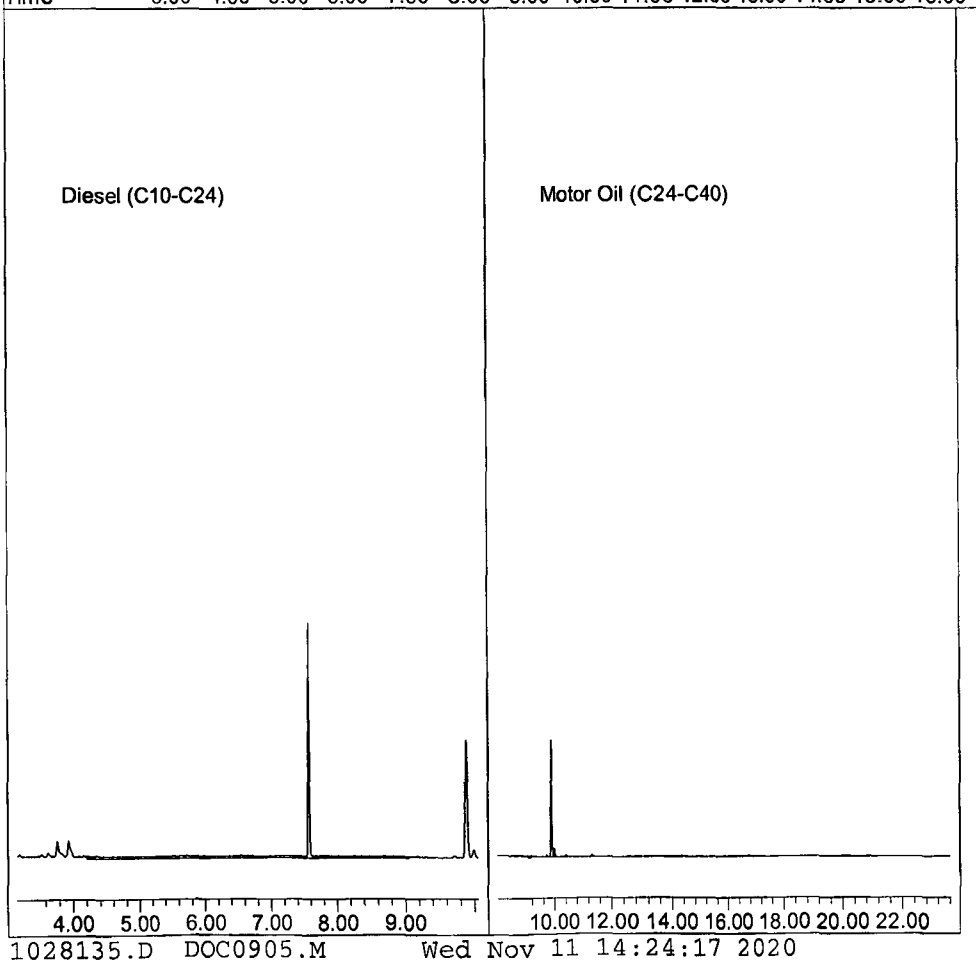
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	0.00	0	N.D. ppb
Surrogate Spike 150.000		Recovery =	0.00%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028135.D
Sample : BA20716W13 5/800 SG





Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028016.D Vial: 16
Acq On : 10-28-20 19:33:25 Operator:
Sample : BA20718W16 5/800 Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Oct 29 15:07 2020 Quant Results File: DOC0905.RES

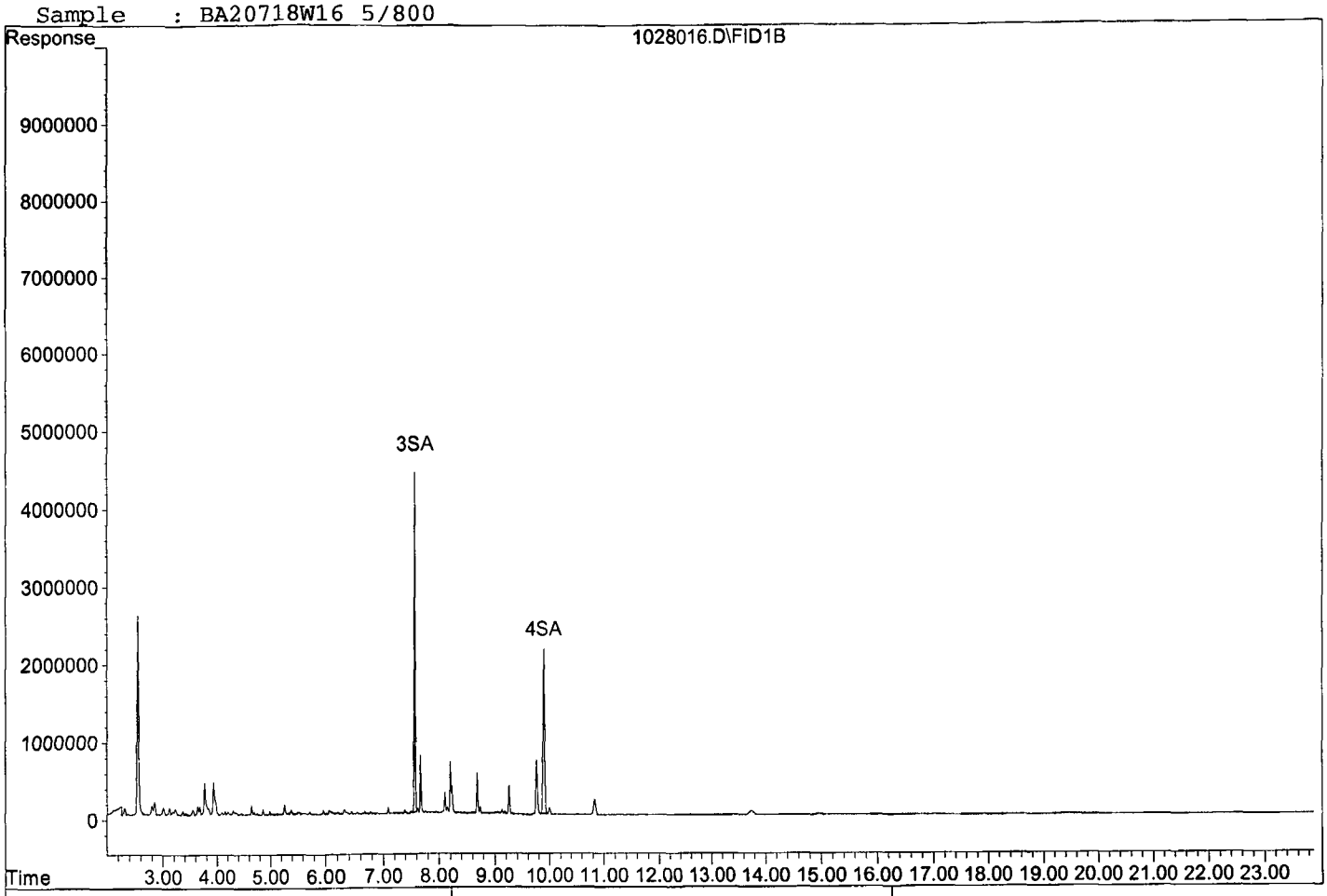
Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

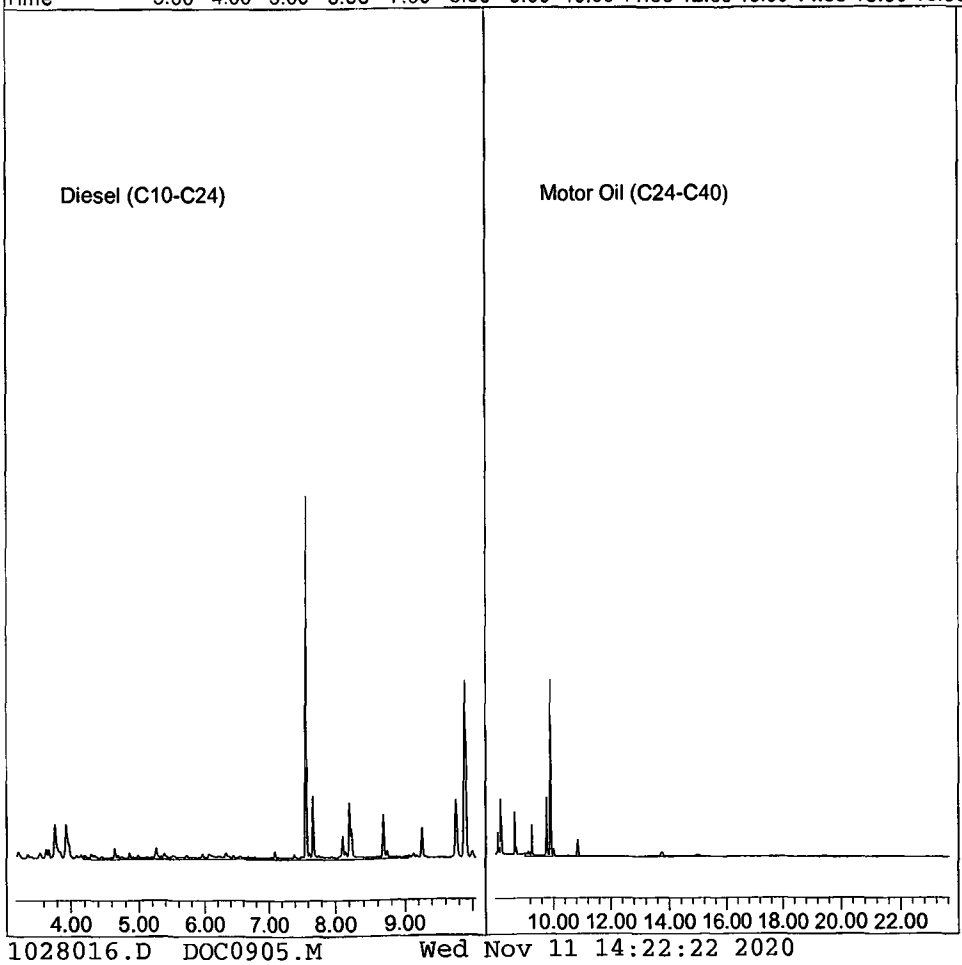
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.57	52195417	64.589	ppb
Surrogate Spike 75.000	Recovery =		86.12%	
4) SA Octacosane(S)	9.89	45319257	68.796	ppb
Surrogate Spike 75.000	Recovery =		91.73%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	118710651	177.635	ppb
2) HBTM Motor Oil (C24-C40)	15.82	63496027	131.078	ppb
Target Compounds				

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028016.D
Sample : BA20718W16 5/800





Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028136.D Vial: 36
Acq On : 11-4-20 14:04:17 Operator:
Sample : BA20718W16 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 5 9:08 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.56	37585608	46.510	ppb
Surrogate Spike 75.000		Recovery =	62.01%	
4) SA Octacosane(S)	9.88	33863520	51.406	ppb
Surrogate Spike 75.000		Recovery =	68.54%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	63036449	96.963	ppb
2) HBTM Motor Oil (C24-C40)	15.82	17601500	36.336	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028136.D Vial: 36
Acq On : 11-4-20 14:04:17 Operator:
Sample : BA20718W16 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 5 9:09 2020 Quant Results File: DEC0914.RES

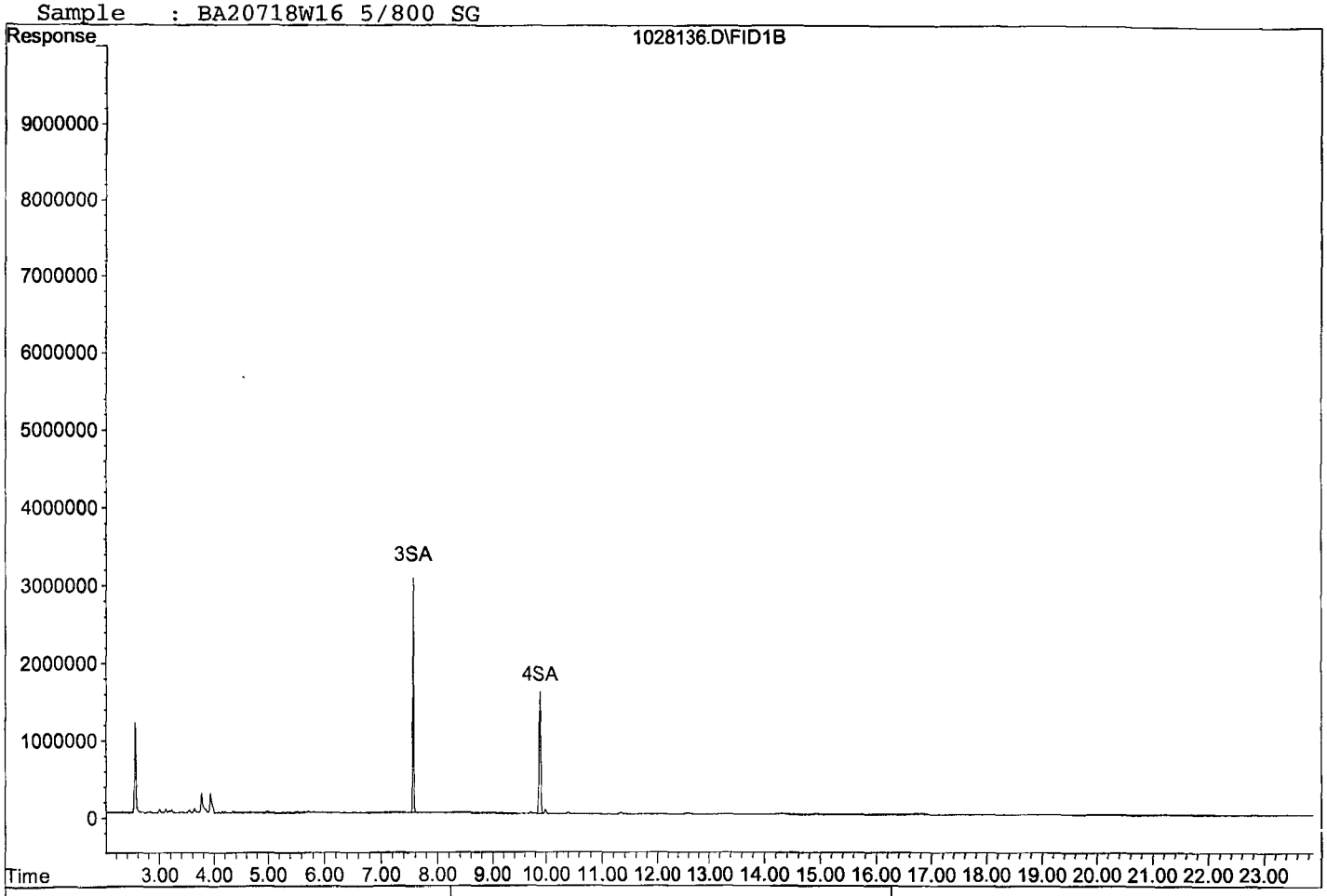
Method : G:\APOLLO\DATA\201028\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

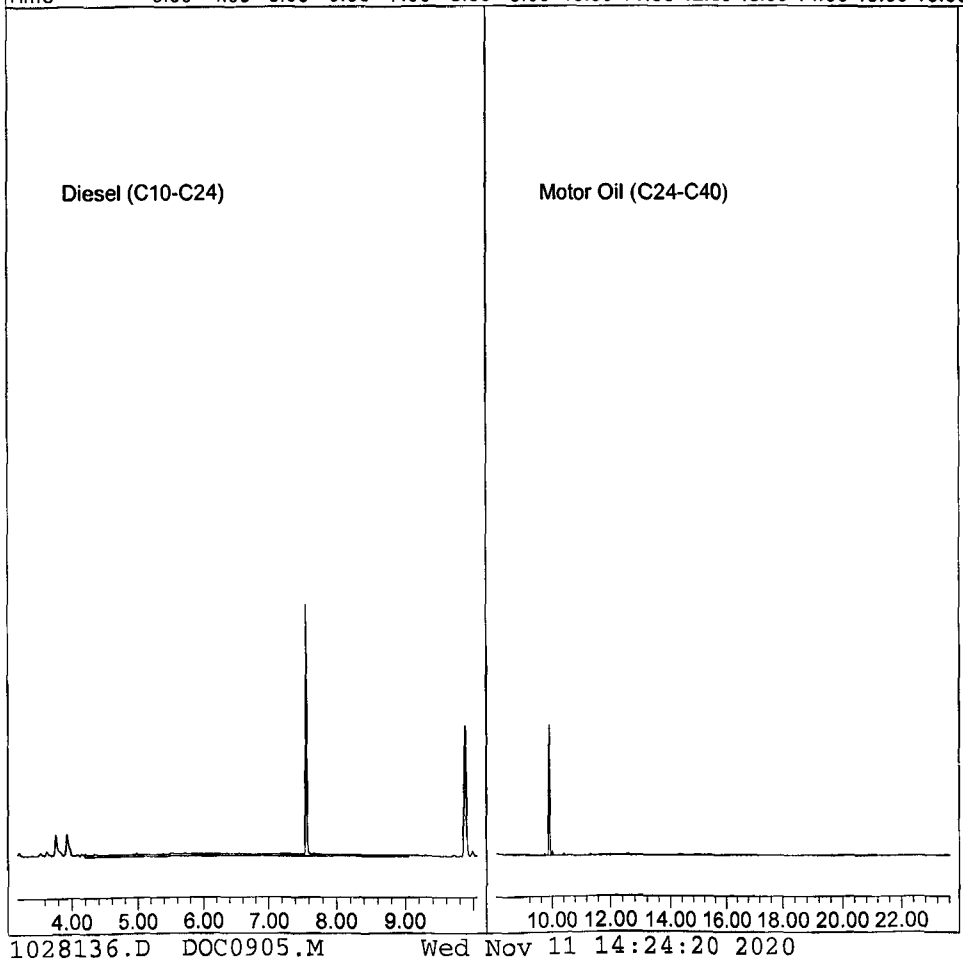
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	0.00	0	N.D. ppb
Surrogate Spike 150.000		Recovery =	0.00%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028136.D
Sample : BA20718W16 5/800 SG





Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028017.D Vial: 17
Acq On : 10-28-20 20:01:25 Operator:
Sample : BA20719W11 5/800 Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Oct 29 15:07 2020 Quant Results File: DOC0905.RES

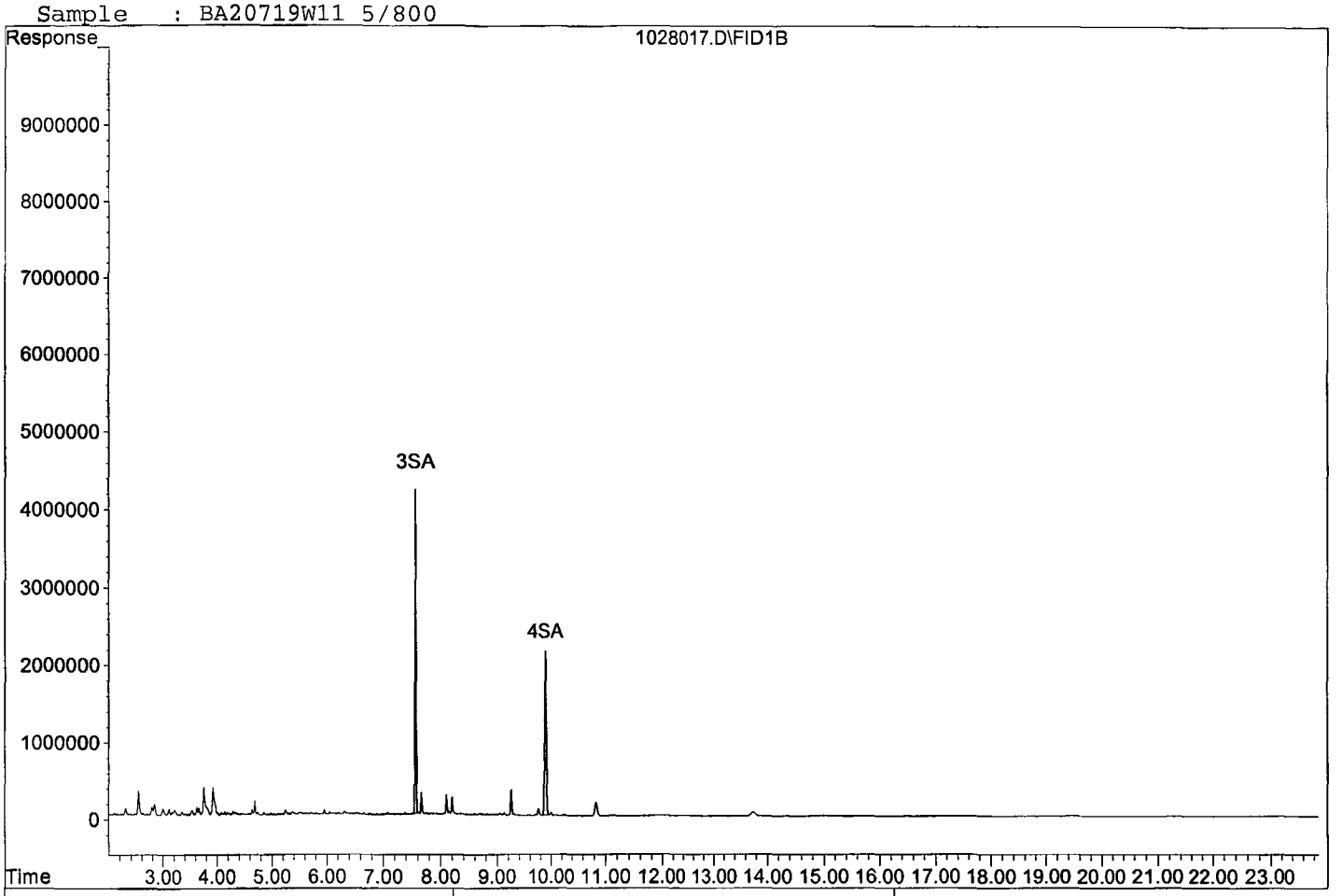
Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

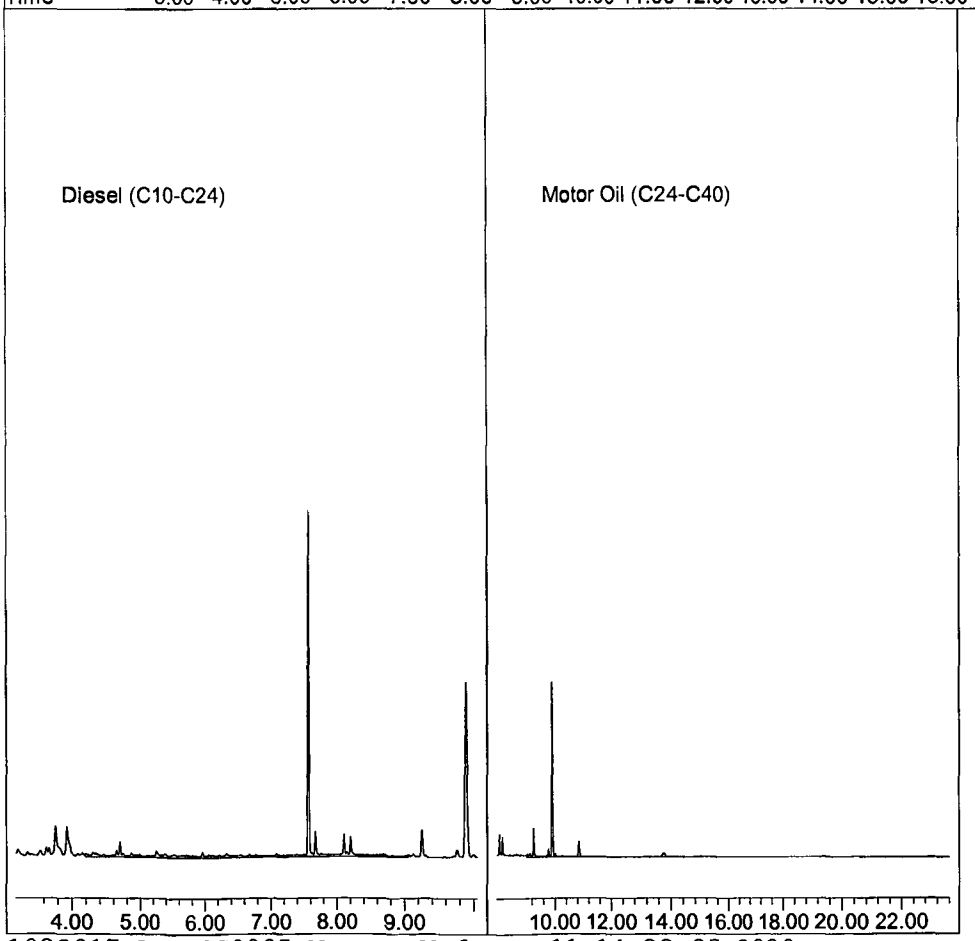
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	50609490	62.627 ppb
Surrogate Spike 75.000	Recovery =		83.50%
4) SA Octacosane(S)	9.89	44423674	67.436 ppb
Surrogate Spike 75.000	Recovery =		89.91%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	85124963	128.969 ppb
2) HBTM Motor Oil (C24-C40)	15.82	40356551	83.310 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028017.D
Sample : BA20719W11 5/800





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028002.D Vial: 2
Acq On : 10-28-20 13:00:12 Operator:
Sample : 201026A BLK 5/800 Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Oct 28 14:01 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

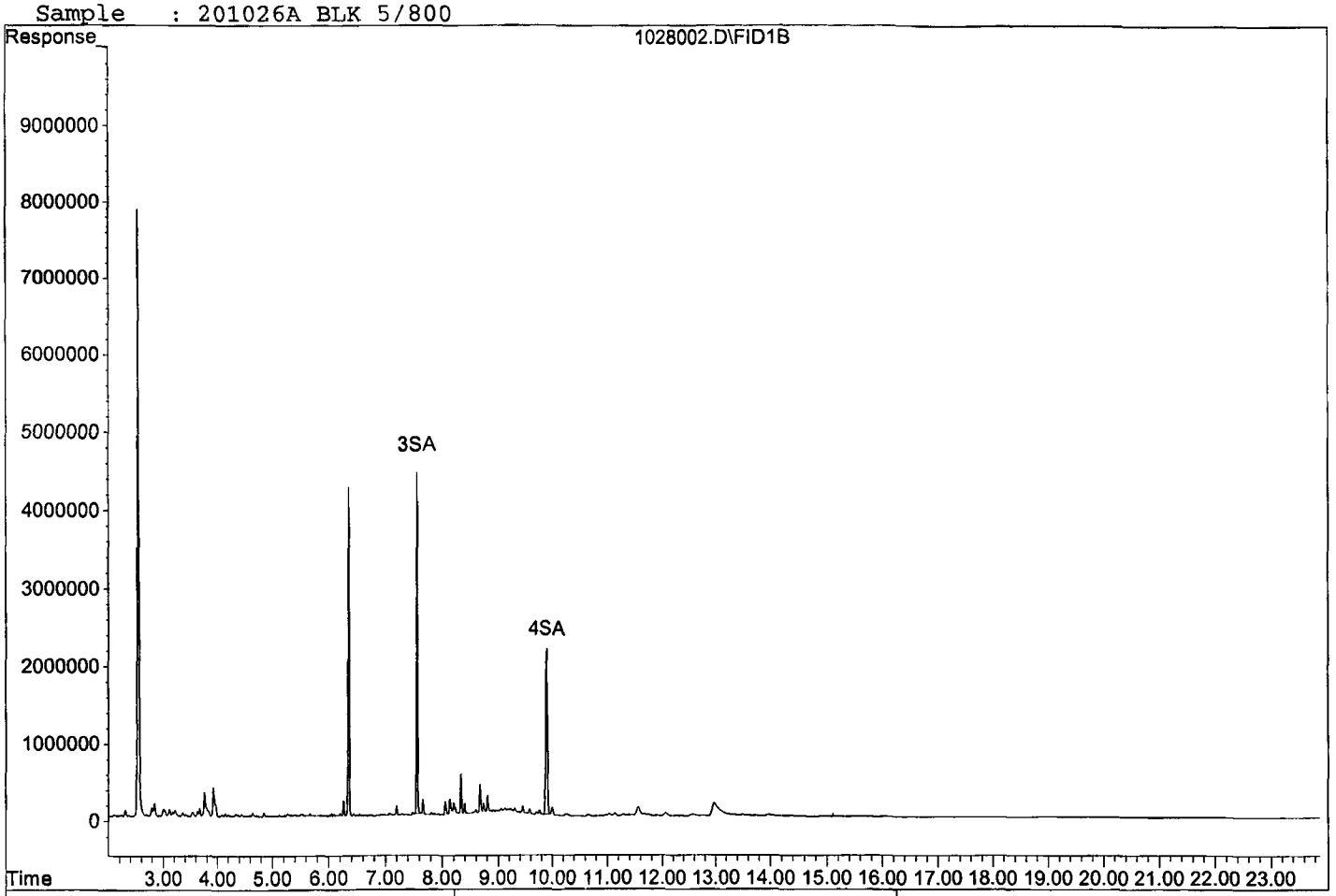
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

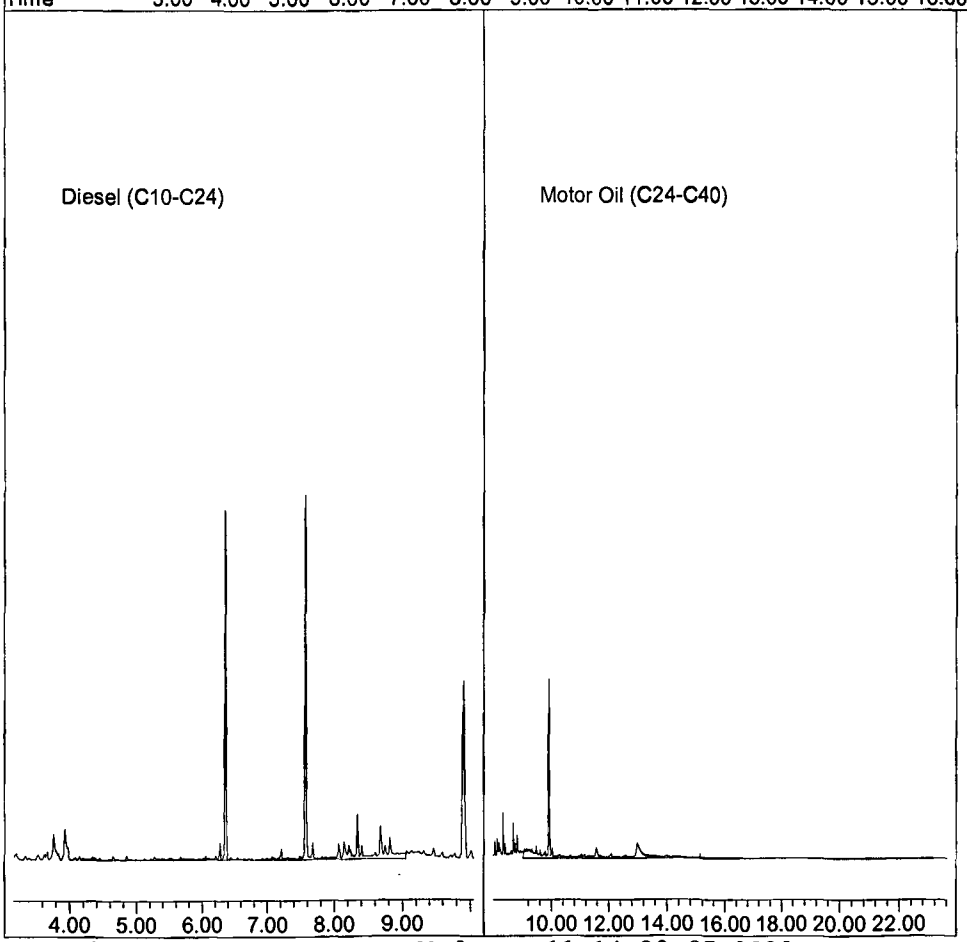
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	52705099	65.220 ppb
Surrogate Spike 75.000	Recovery =		86.96%
4) SA Octacosane(S)	9.90	45497445	69.066 ppb
Surrogate Spike 75.000	Recovery =		92.09%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	143664056	213.792 ppb
2) HBTM Motor Oil (C24-C40)	15.82	133121688	274.810 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028002.D
Sample : 201026A BLK 5/800





1028002.D DOC0905.M Wed Nov 11 14:22:07 2020

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028132.D Vial: 32
Acq On : 11-4-20 12:12:08 Operator:
Sample : 201026A BLK 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 5 9:07 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	43177235	53.430 ppb
Surrogate Spike 75.000	Recovery =		71.24%
4) SA Octacosane(S)	9.90	38753921	58.829 ppb
Surrogate Spike 75.000	Recovery =		78.44%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	104188980	156.593 ppb
2) HBTM Motor Oil (C24-C40)	15.82	25257979	52.141 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028132.D Vial: 32
Acq On : 11-4-20 12:12:08 Operator:
Sample : 201026A BLK 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 5 9:09 2020 Quant Results File: DEC0914.RES

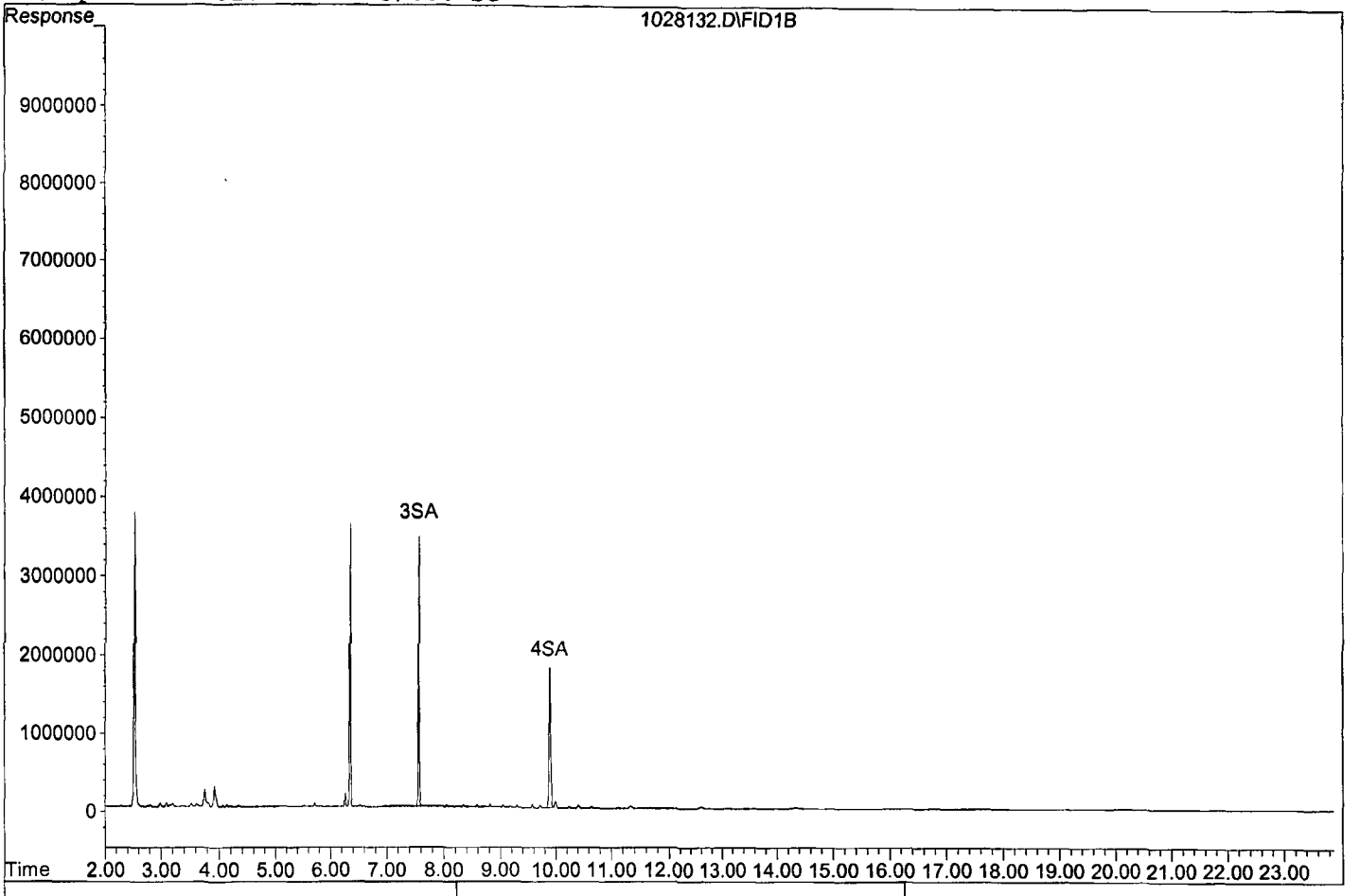
Method : G:\APOLLO\DATA\201028\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

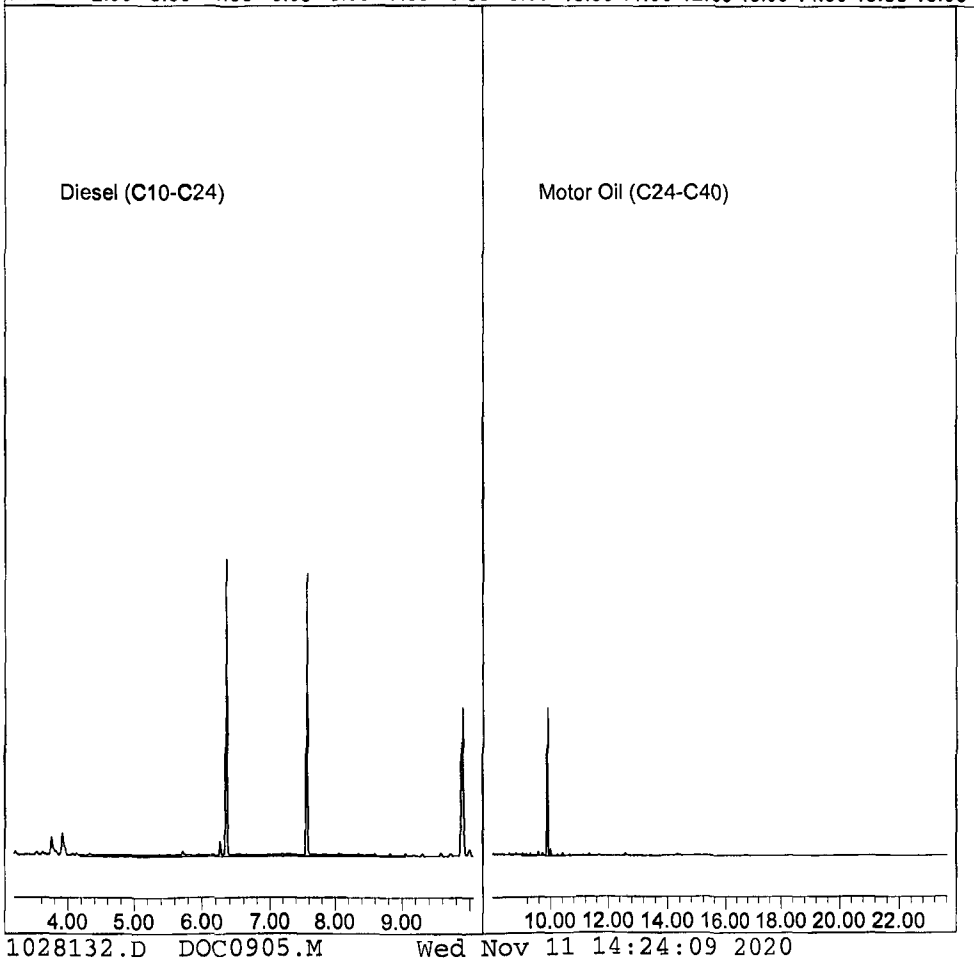
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	0.00	0	N.D. ppb
Surrogate Spike 150.000		Recovery =	0.00%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028132.D
Sample : 201026A BLK 5/800 SG





Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028007.D Vial: 7
Acq On : 10-28-20 15:20:44 Operator:
Sample : 201026A LCS-1 5/800 Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Oct 29 15:07 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

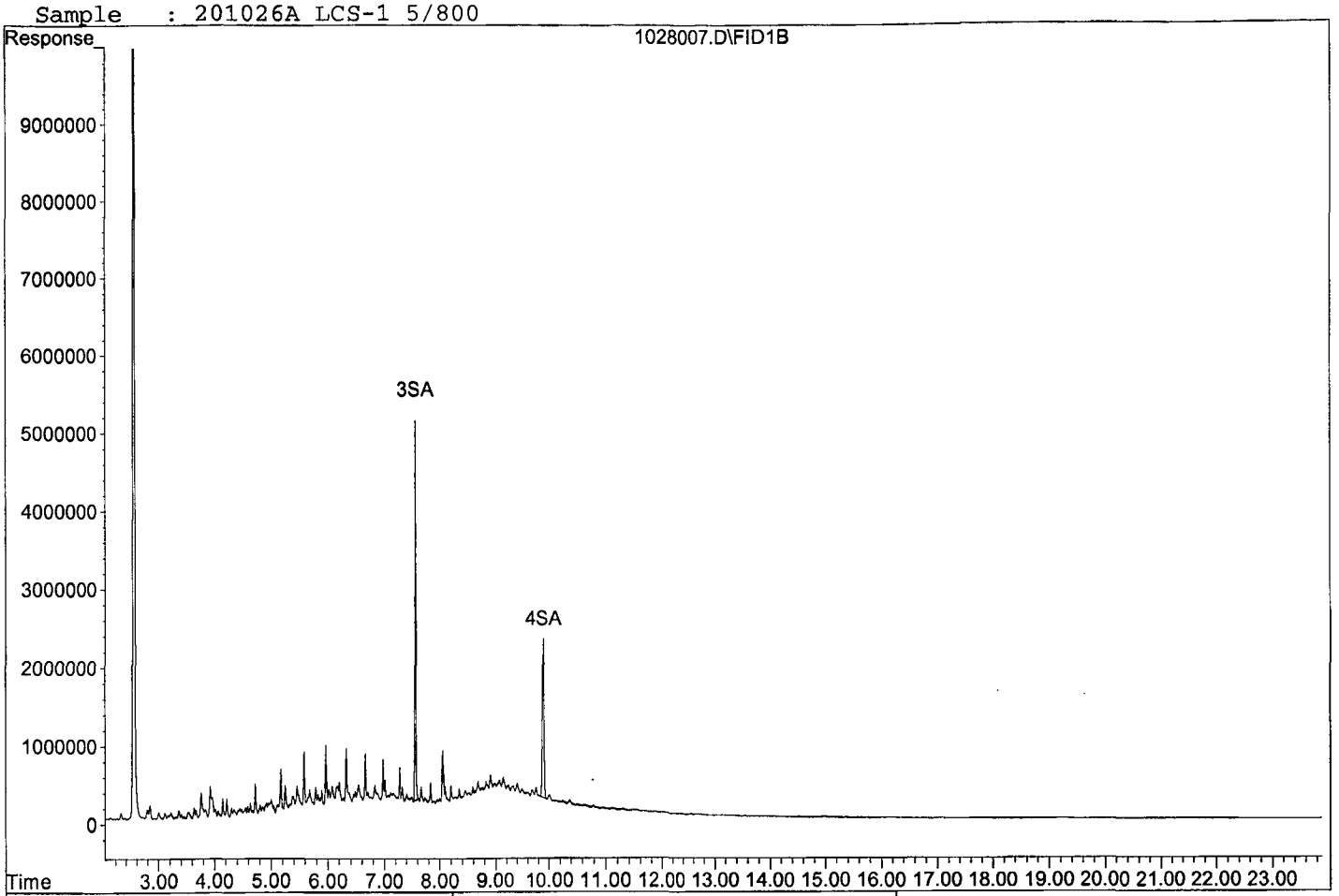
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.57	58086314	71.879	ppb
Surrogate Spike 75.000	Recovery =		95.84%	
4) SA Octacosane(S)	9.89	45165040	68.561	ppb
Surrogate Spike 75.000	Recovery =		91.41%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	800672107	1165.796	ppb
2) HBTM Motor Oil (C24-C40)	15.82	544846227	1124.756	ppb

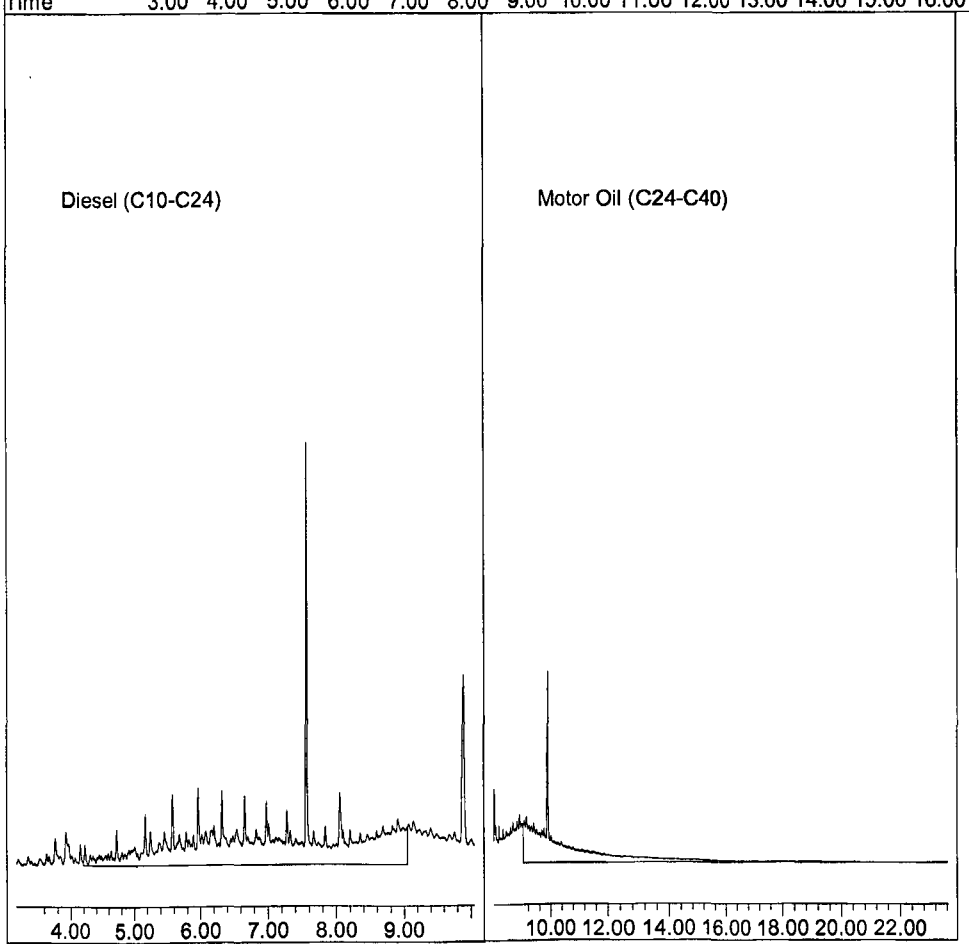
Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

265 of 750

Data File: G:\APOLLO\DATA\201028\1028007.D
Sample : 201026A LCS-1 5/800





Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028133.D Vial: 33
Acq On : 11-4-20 12:40:08 Operator:
Sample : 201026A LCS-1 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 5 9:07 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	45878465	56.772 ppb
Surrogate Spike 75.000	Recovery =		75.70%
4) SA Octacosane(S)	9.89	38759513	58.838 ppb
Surrogate Spike 75.000	Recovery =		78.45%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	629609374	917.927 ppb
2) HBTM Motor Oil (C24-C40)	15.82	449105595	927.113 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028133.D Vial: 33
Acq On : 11-4-20 12:40:08 Operator:
Sample : 201026A LCS-1 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 5 9:10 2020 Quant Results File: DEC0914.RES

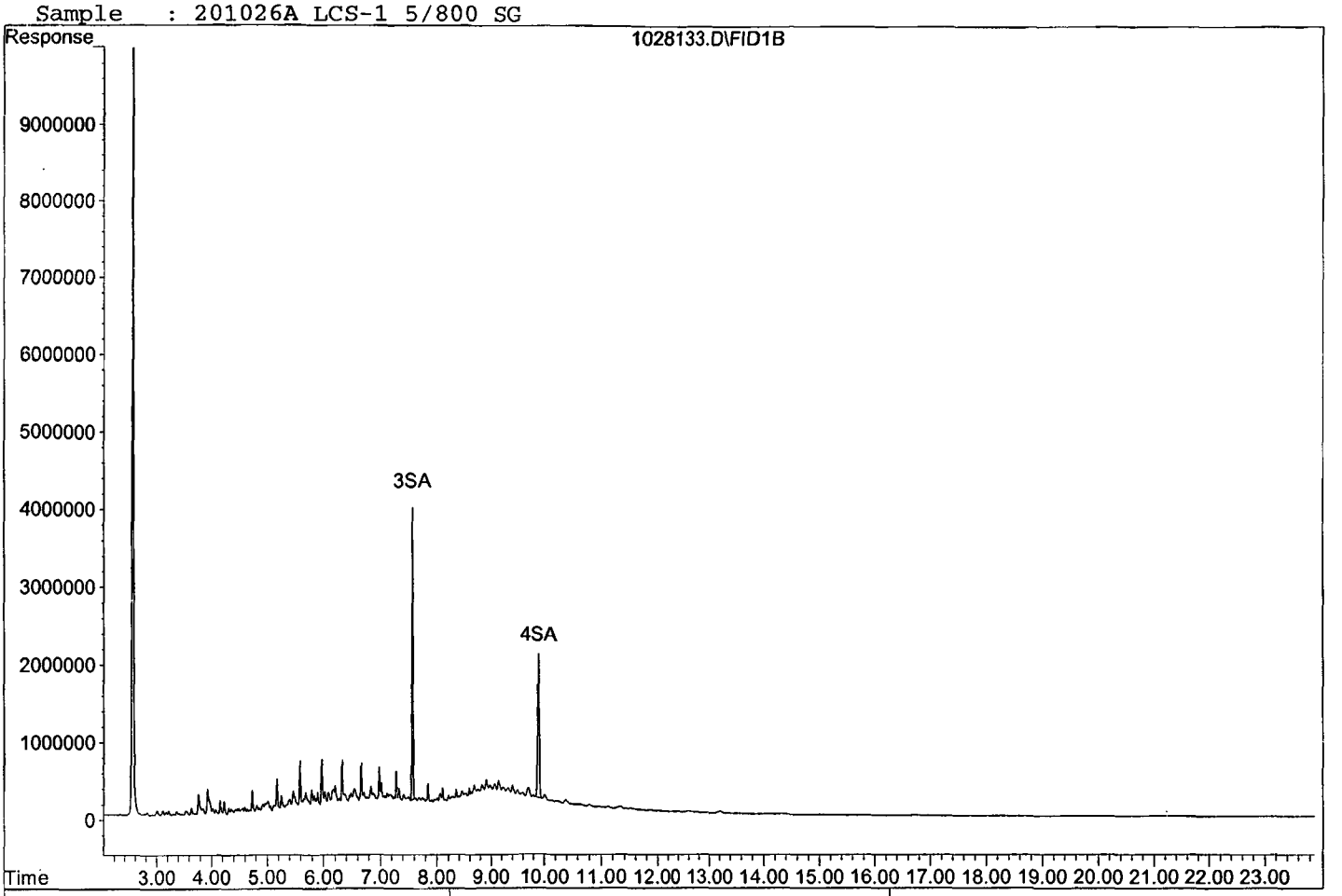
Method : G:\APOLLO\DATA\201028\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

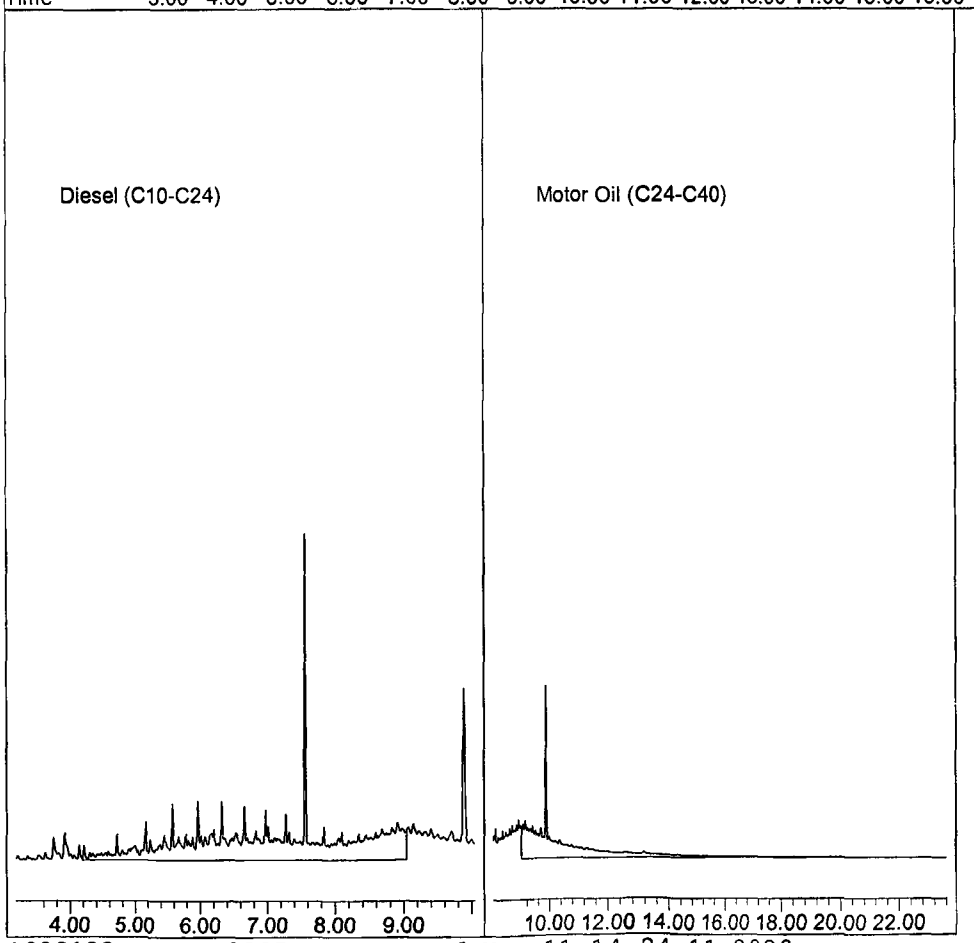
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) SC Decanoic Acid(S)	0.00	0	N.D.	ppb	d
Surrogate Spike 150.000	Recovery =		0.00%		
Target Compounds					
Target Compounds					

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028133.D
Sample : 201026A LCS-1 5/800 SG





Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028008.D Vial: 8
Acq On : 10-28-20 15:48:52 Operator:
Sample : 201026A LCSD-1 5/800 Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Oct 29 15:07 2020 Quant Results File: DOC0905.RES

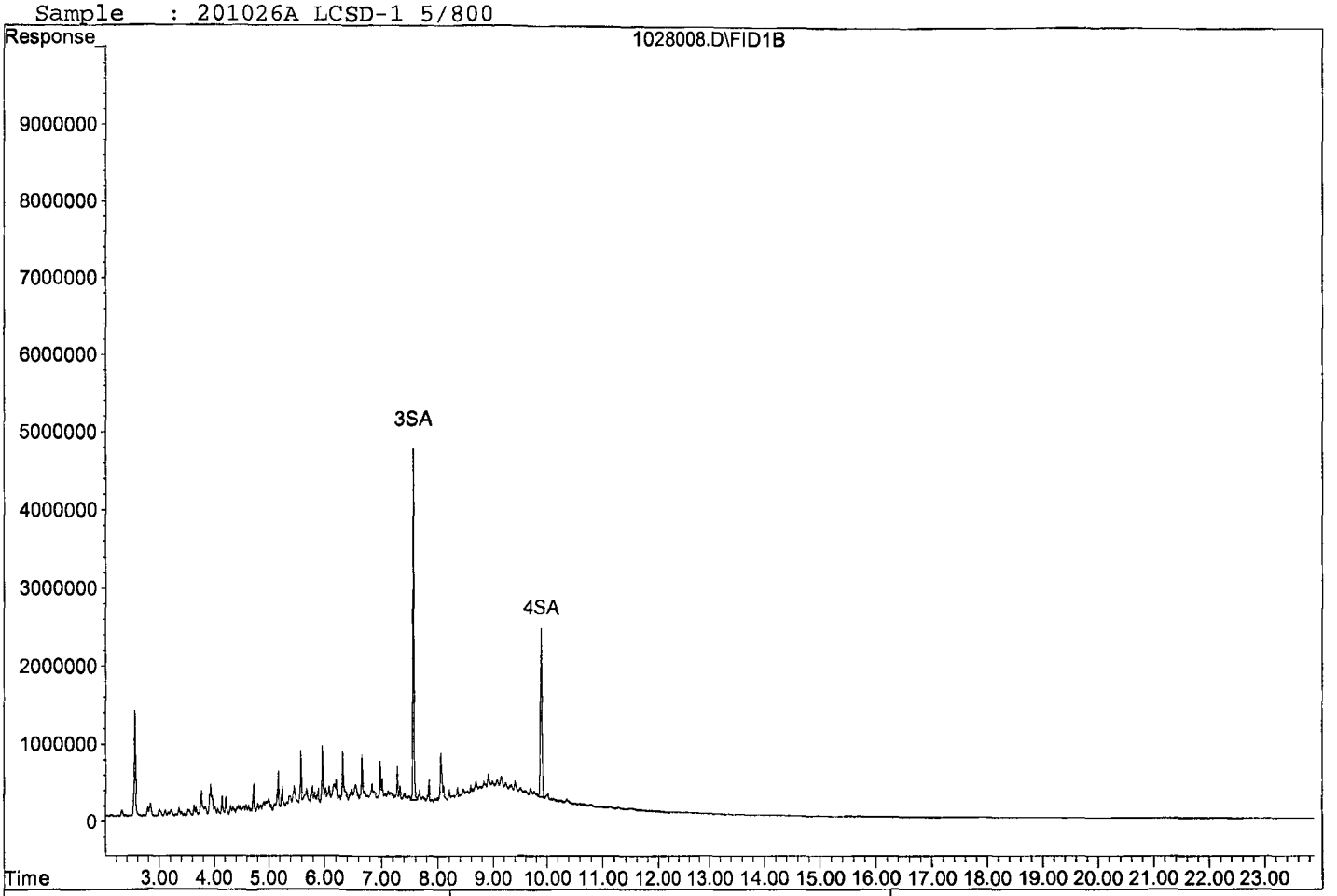
Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

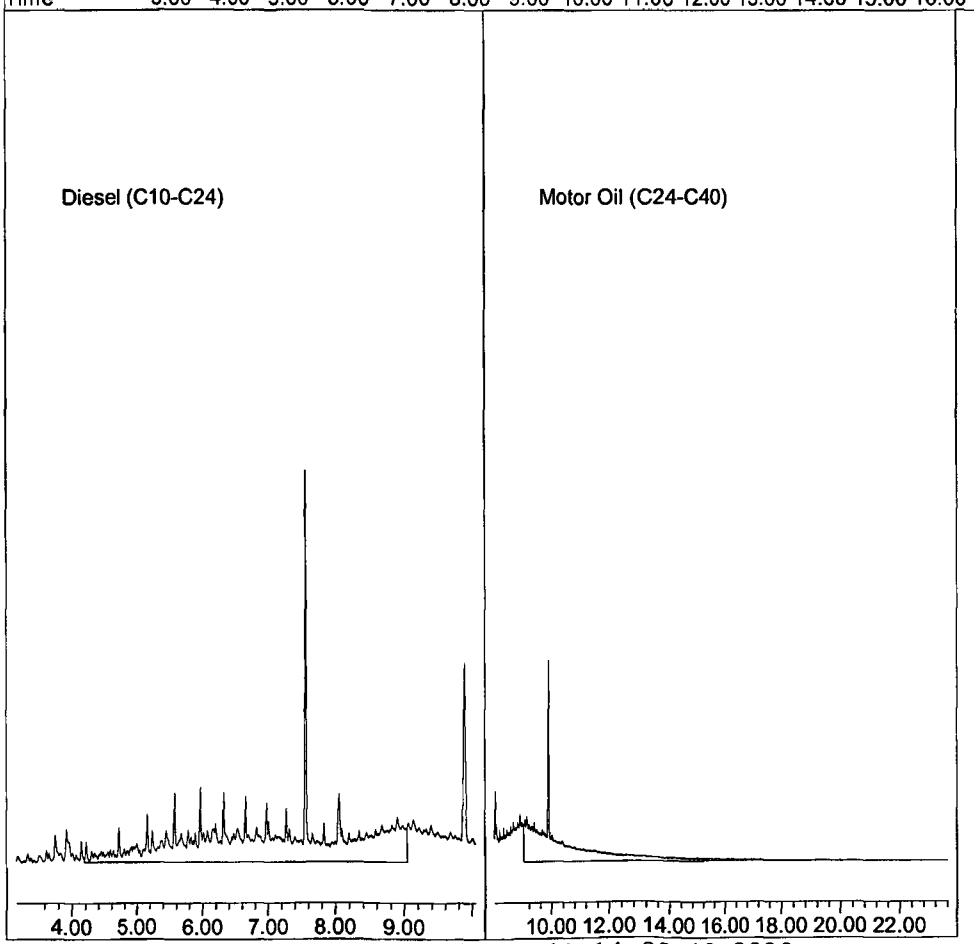
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	58198035	72.017 ppb
Surrogate Spike 75.000	Recovery =		96.02%
4) SA Octacosane(S)	9.89	45067629	68.414 ppb
Surrogate Spike 75.000	Recovery =		91.22%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	772134596	1124.446 ppb
2) HBTM Motor Oil (C24-C40)	15.82	533634441	1101.611 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028008.D
Sample : 201026A LCSD-1 5/800





Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028134.D Vial: 34
Acq On : 11-4-20 13:08:11 Operator:
Sample : 201026A LCSD-1 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 5 9:07 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.56	44529315	55.103 ppb
Surrogate Spike 75.000	Recovery =		73.47%
4) SA Octacosane(S)	9.89	36446936	55.327 ppb
Surrogate Spike 75.000	Recovery =		73.77%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	595346244	868.279 ppb
2) HBTM Motor Oil (C24-C40)	15.82	417217471	861.285 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028134.D Vial: 34
Acq On : 11-4-20 13:08:11 Operator:
Sample : 201026A LCSD-1 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 5 9:10 2020 Quant Results File: DEC0914.RES

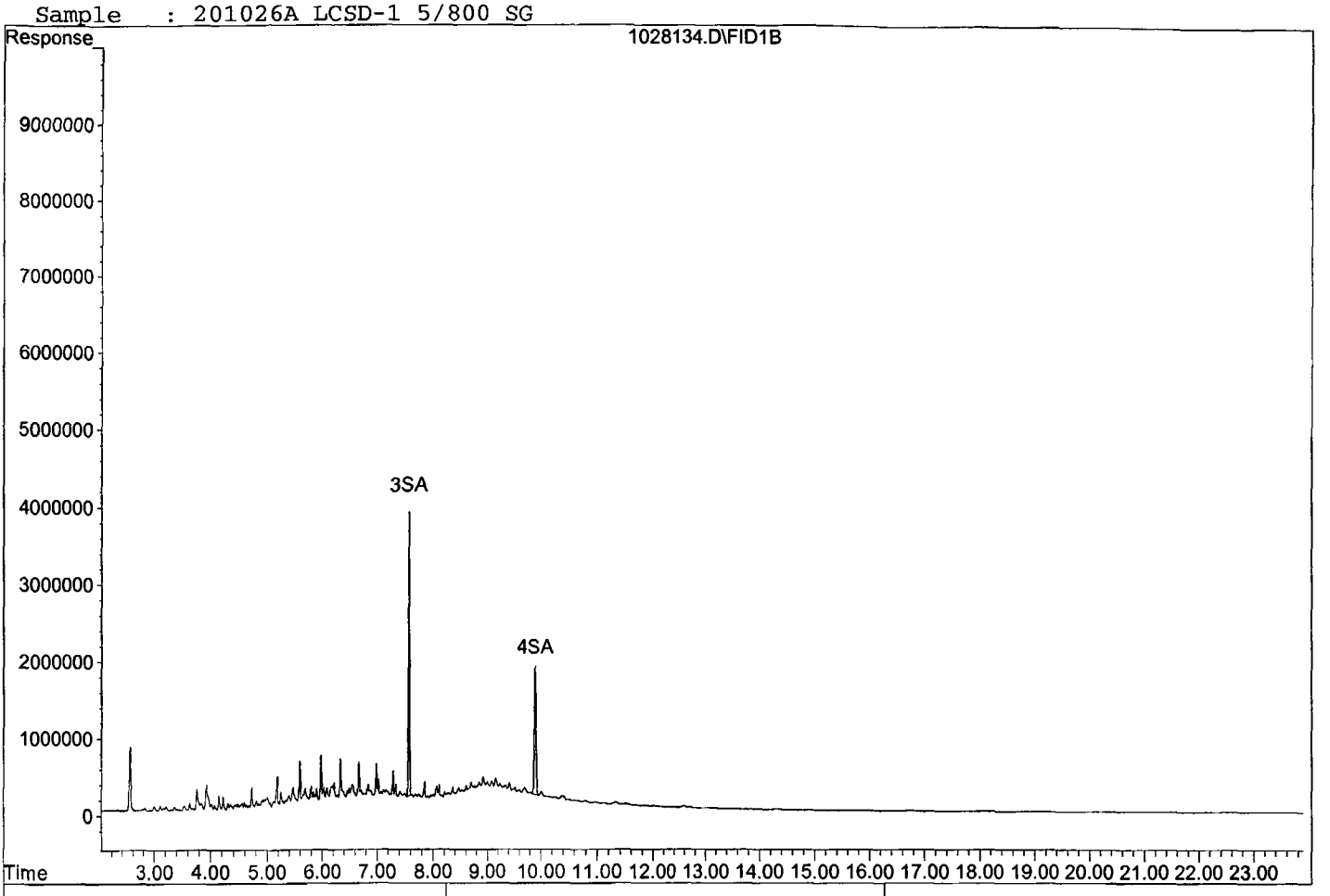
Method : G:\APOLLO\DATA\201028\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

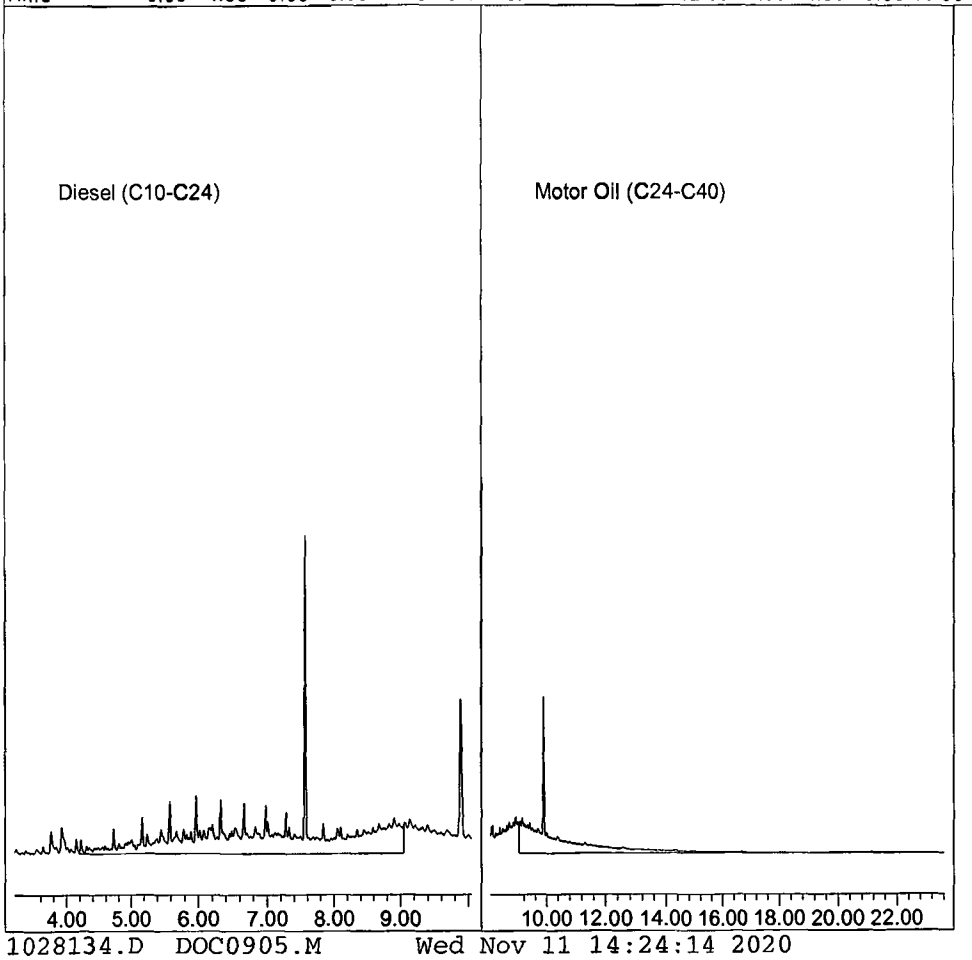
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) SC Decanoic Acid(S)	0.00	0	N.D.	ppb d
Surrogate Spike 150.000	Recovery	=	0.00%	
Target Compounds				
Target Compounds				

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028134.D
Sample : 201026A LCSD-1 5/800 SG





Decanoic Acid Standard

Prepared: 09/14/20

Expires: 09/14/21

Prepared By (Initials): SS

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Decanoic Acid	O2SI	011729-01-05-5PAK	1,000	**397380-50547**	**09/14/21**	**12/30/21**	600uL	10mL	MC	60

Decanoic Acid Calibration Curve

Prepared: 09/14/20

Expires: 09/14/20

Prepared By (Initials): SS

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Decanoic Acid STD	O2SI	Decanoic Acid-1	60	Prepared 09/14/20	09/14/21	N/A	50uL	1mL	MC	3
Decanoic Acid STD	O2SI	Decanoic Acid-2	60	Prepared 09/14/20	09/14/21	N/A	100uL	1mL	MC	6
Decanoic Acid STD	O2SI	Decanoic Acid-3	60	Prepared 09/14/20	09/14/21	N/A	400uL	1mL	MC	24
Decanoic Acid STD	O2SI	Decanoic Acid-4	60	Prepared 09/14/20	09/14/21	N/A	600uL	1mL	MC	36
Decanoic Acid STD	O2SI	Decanoic Acid-5	60	Prepared 09/14/20	09/14/21	N/A	800uL	1mL	MC	48
Decanoic Acid STD	O2SI	Decanoic Acid-6	60	Prepared 09/14/20	09/14/21	N/A	100uL	100uL	N/A	60

Decanoic Acid Spike

Prepared: 09/11/20 **Prepared By (Initials): SS**

Expires: 09/11/21

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Decanoic Acid Spike	O2SI	011729-01-05-5PAK	1,000	**397380-50547**	**09/11/21**	**12/30/21**	N/A	N/A	N/A	1,000

THC Surrogate

Prepared: 10/15/20 **Prepared By (Initials): SS**

Expires: 10/15/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
O-terphenyl / Octacosane Mix	Phenova	ALO-130161	600	**CL15440-50426**	**10/15/21**	**06/30/25**	N/A	N/A	N/A	600

Diesel Motor Oil Mix

Prepared: 09/29/20 **Prepared By (Initials): SS**

Expires: 09/29/21

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Restek	31258	50,000	A0154201-50382.50523,50524	09/29/21	11/30/26	1.35 mL	2.7 mL	NA	25,000
Motor Oil Composite	Restek	31464	50,000	A0155668-50516,50517,50520	09/29/21	01/31/27	1.35 mL			25,000

Diesel / Motor Oil Calibration Curve

Prepared: 09/05/20

Expires: 08/05/21

Prepared By (Initials): SS

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date and Lot #'s	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 1	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	5uL	1mL	MC	10
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil -2	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	25uL	1mL	MC	50
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 3	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	125uL	1mL	MC	250
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 4	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	500uL	1mL	MC	1000
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 5	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	750uL	1mL	MC	1500
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 6	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	100uL	100uL	N/A	2,000

Diesel / Motor Oil Calibration Standard

Prepared: 09/05/20

Expires: 08/05/21

Prepared By (Initials): SS

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Restek	31258	50,000	A0154201-50381,50522,50526	08/11/21	11/30/26	400uL	10mL	MC	2000
Motor Oil	Restek	31464	50,000	A0155668-50515,50518,50519	08/11/21	01/31/27	400uL			2000
THC Surrogate	Phenova	ALO-130161	600	CL15440-50421	08/05/21	06/30/25	1666uL			100

_LIQ005

Organic Extraction Worksheet

Method	Continuous Liq/Liq TPH-Diesel/MO 3520C	Extraction Set	201026A	Extraction Method	LIQ005	Units	mL

Spiked ID 1	Diesel Motor Oil Mix 9-29-20 9-29-21		Surrogate ID 1	THC Surrogate 10-15-20 10-15-21	
Spiked ID 2	Decanoic 1000ug/mL Acid Solution		Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	yes	
Spiked ID 7			Ext. Start Time:	10/26/20 14:30	
Spiked ID 8			Ext. End Time:	10/27/20 8:30	
			GC Requires Extract By:		

pH1	2	10/26/20 12:30	Water Bath Temp 1 °C	36/34.5 WB1 °C
pH2			Water Bath Temp 2 °C	35/38.1 WB2
pH3			Water Bath Temp 3 °C	34/33.5 WB3 °C

Spiked By: DL **Date** 10/26/20 **Witnessed By:** RP **Date** 10/26/20

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201026A Blk				0.1	1 equip	800 E-WB2 E-HP26	5	2	10/26/20 12:45	
2	201026A LCS-1		0.04	1	0.1	1 equip	800 E-WB1 E-HP7	5	2	10/26/20 12:45	
3	201026A LCSD-1		0.04	1	0.1	1 equip	800 E-WB1 E-HP28	5	2	10/26/20 12:45	
4	BA20507	BA20507W10			0.1	1 equip	800 E-WB3 E-HP9	5	2	10/26/20 12:45	93813
5	BA20508	BA20508W10			0.1	1 equip	800 E-WB2 E-HP30	5	2	10/26/20 12:45	93813
6	BA20509	BA20509W09			0.1	1 equip	800 E-WB1 E-HP16	5	2	10/26/20 12:45	93813
7	BA20539 MS-1	BA20539W29	0.040	1	0.1	1 equip	800 E-WB2 E-HP15	5	2	10/26/20 12:45	93818
8	BA20539 MSD-1	BA20539W31	0.040	1	0.1	1 equip	800 E-WB1 E-HP14	5	2	10/26/20 12:45	93818
9	BA20539	BA20539W23			0.1	1 equip	800 E-WB2 E-HP13	5	2	10/26/20 12:45	93818
10	BA20541	BA20541W10			0.1	1 equip	800 E-WB3 E-HP12	5	2	10/26/20 12:45	93818
11	BA20542	BA20542W10			0.1	1 equip	800 E-WB1 E-HP11	5	2	10/26/20 12:45	93818
12	BA20544	BA20544W16			0.1	1 equip	800 E-WB3 E-HP10	5	2	10/26/20 12:45	93818
13	BA20716	BA20716W13			0.1	1 equip	800 E-WB1 E-HP29	5	2	10/27/20 10:55	93873
14	BA20718	BA20718W16			0.1	1 equip	800 E-WB2 E-HP30	5	2	10/27/20 10:55	93873
15	BA20719	BA20719W11			0.1	1 equip	800 E-WB3 E-HP16	5	2	10/27/20 10:55	93873

Solvent and Lot#	
1+1 HCL Amber Liter	9-28-20
PH Strips	hc904495
Dicholormethane	60127
Filter Paper	400178
B. Sodium Sulfate	2019070279
Silica Gel (*)	050627t

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	SS
Date	10/27/20
Time	16:25
Refrigerator	HOBART

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	MP,DS

Modified	11/09/20 1:07:32 PM

Reviewed By: KY **Date** 11/09/20

Injection Log

Directory: G:\APOLLO\DATA\200914\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	7	905007.D	1	Diesel Motor Oil-1 9/5/20	Water	9-5-20 17:04:35
2	8	905008.D	1	Diesel Motor Oil-2 9/5/20	Water	9-5-20 17:32:40
3	9	905009.D	1	Diesel Motor Oil-3 9/5/20	Water	9-5-20 18:00:45
4	10	905010.D	1	Diesel Motor Oil-4 9/5/20	Water	9-5-20 18:28:54
5	11	905011.D	1	Diesel Motor Oil-5 9/5/20	Water	9-5-20 18:56:54
6	12	905012.D	1	Diesel Motor Oil-6 9/5/20	Water	9-5-20 19:24:55
7	13	905013.D	1	Diesel Motor Oil-SS 7/21/20	Water	9-5-20 19:52:52
8	4	914004.D	1	Decanoic Acid-1 9/14/20	water	9-14-20 10:24:43
9	5	914005.D	1	Decanoic Acid-2 9/14/20	water	9-14-20 10:52:47
10	6	914006.D	1	Decanoic Acid-3 9/14/20	water	9-14-20 11:20:51
11	7	914007.D	1	Decanoic Acid-4 9/14/20	water	9-14-20 11:48:52
12	8	914008.D	1	Decanoic Acid-5 9/14/20	water	9-14-20 12:16:53
13	9	914009.D	1	Decanoic Acid-6 9/14/20	water	9-14-20 12:44:57
14	75	1019275.D	1	Diesel Motor Oil-CCV 10/8/20	Water	10-28-20 11:43:07
15	2	1028002.D	6.25	201026A BLK 5/800	water	10-28-20 13:00:12
16	7	1028007.D	6.25	201026A LCS-1 5/800	water	10-28-20 15:20:44
17	8	1028008.D	6.25	201026A LCSD-1 5/800	water	10-28-20 15:48:52
18	11	1028011.D	1	Diesel Motor Oil-CCV 10/8/20	water	10-28-20 17:13:07
19	15	1028015.D	6.25	BA20716W13 5/800	water	10-28-20 19:05:22
20	16	1028016.D	6.25	BA20718W16 5/800	water	10-28-20 19:33:25
21	17	1028017.D	6.25	BA20719W11 5/800	water	10-28-20 20:01:25
22	18	1028018.D	1	Diesel Motor Oil-CCV 10/8/20	water	10-28-20 20:29:25
23	30	1028130.D	1	Diesel Motor Oil-CCV 11/03/20	water	11-4-20 9:54:39
24	31	1028131.D	1	Decanoic Acid-CCV 7/28/20	water	11-4-20 11:44:16
	32	1028132.D	6.25	201026A BLK 5/800 SG	water	11-4-20 12:12:08
	33	1028133.D	6.25	201026A LCS-1 5/800 SG	water	11-4-20 12:40:08
	34	1028134.D	6.25	201026A LCSD-1 5/800 SG	water	11-4-20 13:08:11
	35	1028135.D	6.25	BA20716W13 5/800 SG	water	11-4-20 13:36:16
	36	1028136.D	6.25	BA20718W16 5/800 SG	water	11-4-20 14:04:17
	37	1028137.D	1	Decanoic Acid-CCV 7/28/20	water	11-4-20 14:32:21
	38	1028138.D	1	Diesel Motor Oil-CCV 11/03/20	water	11-4-20 15:00:25

ORGANICS

Calibration Data

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/09/20
Matrix: Instrument: Yoda
Initials:

			1009Y003.D	1009Y004.D	1009Y005.D	1009Y006.D	1009Y007.D	1009Y008.D	1009Y009.D	1009Y010.D	1009Y011.D							
		Compound	4	5	10	20	40	50	60	80	100		Avg	%RSD	Type	r^2	Q	MRF
1	I	1,4-dichlorobenzene-D4(IS)	ISTD															
2		1,4-Dioxane		0.4293	0.2691	0.3927	0.3603	0.3512	0.3539	0.4027	0.3108		0.36	14				
3	TM	n-Nitrosodimethylamine		0.4601	0.4992	0.6181	0.5207	0.5543	0.5902	0.6145	0.5794		0.55	10	TM			
4	TM	Pyridine		1.424	1.491	1.667	1.446	1.524	1.596	1.687	1.573		1.6	6.3	TM			
5	S	2-Fluorophenol (S)		1.455	1.483	1.631	1.495	1.498	1.551	1.635	1.654		1.6	5.1	S			
6	S	Phenol-D6 (S)		1.797	1.868	2.054	1.867	1.902	1.969	2.087	2.093		2.0	5.8	S			
7	*TM	Phenol		1.996	2.089	2.364	2.187	2.245	2.303	2.368	2.356		2.2	6.2	*TM			0.800
8	TM	Aniline			2.127	2.017	1.586	1.710	1.599	1.490			1.8	15	TM			
9	TM	Bis (2-chloroethyl) ether		0.8751	0.8838	0.9222	0.8720	0.8863	0.9151	0.9548	0.9270		0.90	3.3	TM			0.700
10	TM	2-Chlorophenol		1.797	1.850	1.900	1.784	1.819	1.894	1.944	1.920		1.9	3.2	TM			0.800
11	TM	1,3-DCB		1.959	2.030	2.076	1.862	1.999	1.964	2.061	1.983		2.0	3.4	TM			
12	*TM	1,4-DCB		2.009	2.071	2.127	1.902	2.014	2.011	2.092	2.038		2.0	3.3	*TM			
13	TM	Benzyl alcohol		0.9932	1.034	1.074	0.9800	1.024	1.055	1.089	1.088		1.0	4.0	TM			
14	TM	1,2-DCB		1.897	1.944	1.988	1.783	1.882	1.917	1.950	1.922		1.9	3.2	TM			
15	TM	2-Methylphenol		1.326	1.372	1.416	1.291	1.363	1.390	1.443	1.433		1.4	3.8	TM			0.700
16	TM	Bis (2-chloroisopropyl) ether		1.199	1.203	1.247	1.119	1.150	1.170	1.210	1.190		1.2	3.3	TM			0.010
17	TM	Acetophenone		2.283	2.370	2.477	2.256	2.375	2.440	2.512	2.533		2.4	4.3	TM			0.010
18	TM	3&4-Methylphenol		1.796	1.847	1.938	1.787	1.935	1.958	2.035	2.027		1.9	5.0	TM			0.600
19	**TM	n-Nitrosodi-n-propylamine		1.157	1.201	1.268	1.164	1.194	1.229	1.262	1.219		1.2	3.4	**TM			0.500
20	TM	Hexachloroethane		0.6621	0.7138	0.7479	0.6836	0.7204	0.7221	0.7537	0.7274		0.72	4.3	TM			0.300
21	I	Napthalene-D8(IS)	ISTD															
22	S	Nitrobenzene-D5(S)		0.3767	0.4074	0.4318	0.4120	0.4200	0.4234	0.4403	0.4357		0.42	4.8	S			
23	TM	Nitrobenzene		0.4108	0.4279	0.4399	0.4112	0.4365	0.4323	0.4523	0.4361		0.43	3.3	TM			0.200
24	TM	Isophorone		0.6918	0.7326	0.7384	0.7019	0.7582	0.7470	0.7728	0.7603		0.74	3.9	TM			0.400
25	*TM	2-Nitrophenol		0.2358	0.2392	0.2587	0.2505	0.2695	0.2709	0.2804	0.2707		0.26	6.3	*TM			0.100
26	TM	2,4-Dimethylphenol		0.3810	0.3932	0.4195	0.3865	0.4122	0.4134	0.4182	0.4186		0.41	3.9	TM			0.200
27	TML	Benzoic acid			0.1193	0.1498	0.2422	0.2790	0.2926	0.2859			0.23	33	TM	0.993		
28	TM	Bis (2-chloroethoxy) methane		0.4454	0.4740	0.4680	0.4452	0.4729	0.4766	0.4874	0.4781		0.47	3.3	TM			0.300
29	*TM	2,4-Dichlorophenol		0.3839	0.3979	0.4018	0.3824	0.4047	0.4130	0.4248	0.4176		0.40	3.8	*TM			0.200
30	TM	1,2,4-Trichlorobenzene		0.4381	0.4478	0.4551	0.4234	0.4545	0.4539	0.4605	0.4619		0.45	2.9	TM			
31	TM	3,4-Dimethylphenol		0.5549	0.5582	0.5619	0.5484	0.5620	0.5782	0.5937	0.5729		0.57	2.6	TM			
32	TM	Naphthalene		1.272	1.316	1.315	1.246	1.324	1.312	1.367	1.341		1.3	2.9	TM			0.700
33	TM	4-Chloroaniline		0.5356	0.5604	0.5691	0.5429	0.5561	0.5720	0.5577	0.5208		0.55	3.2	TM			0.010
34	TM	2,6-Dichlorophenol		0.3741	0.3930	0.3912	0.3802	0.3944	0.4109	0.4193	0.4162		0.40	4.2	TM			
35	TM	Hexachloropropene		0.2941	0.3053	0.3231	0.3090	0.3436	0.3393	0.3505	0.3515		0.33	6.8	TM			

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/09/20
Matrix: Instrument: Yoda Initials:

		Compound	4	5	10	20	40	50	60	80	100		Avg	%RSD	Type		Q	
36	*TM	Hexachlorobutadiene		0.2686	0.2726	0.2757	0.2652	0.2782	0.2804	0.2850	0.2824		0.28	2.5	*TM			0.010
37	TM	Caprolactum		0.1172	0.1242	0.1338	0.1295	0.1320	0.1375	0.1387	0.1377		0.13	5.7	TM			0.010
38	*TM	4-Chloro-3-methylphenol		0.3876	0.4049	0.4120	0.3888	0.4162	0.4246	0.4340	0.4291		0.41	4.2	*TM			0.200
39	TM	2-Methylnaphthalene		0.8441	0.8754	0.8763	0.8333	0.8987	0.8935	0.9456	0.9148		0.89	4.1	TM			0.400
40	TM	1-Methylnaphthalene		0.8711	0.9149	0.9056	0.8746	0.9322	0.9362	0.9541	0.9452		0.92	3.4	TM			
41	I	Acenaphthene-D10(IS)	ISTD															
42	**TM	Hexachlorocyclopentadiene		0.4926	0.5473	0.5729	0.5151	0.5557	0.6434	0.4714	0.6605		0.56	12	**TM			0.050
43	TM	1,2,4,5-Tetrachlorobenzene		0.7596	0.7959	0.7832	0.7668	0.8143	0.8333	0.8326	0.8706		0.81	4.7	TM			0.010
44	*TM	2,4,6-Trichlorophenol		0.4985	0.5116	0.5220	0.5159	0.5513	0.5494	0.5668	0.5702		0.54	5.1	*TM			0.200
45	TM	2,4,5-Trichlorophenol		0.5301	0.5339	0.5572	0.5423	0.5568	0.5860	0.5824	0.6014		0.56	4.7	TM			0.200
46	S	2-Fluorobiphenyl(S)		1.653	1.647	1.683	1.637	1.666	1.701	1.734	1.765		1.7	2.7	S			
47	TM	1,1'-Biphenyl		1.884	1.868	1.885	1.850	1.903	1.984	1.962	2.056		1.9	3.7	TM			0.010
48	TM	2-Chloronaphthalene		1.488	1.505	1.490	1.465	1.531	1.552	1.546	1.597		1.5	2.8	TM			0.800
49	TM	2-Nitroaniline		0.3404	0.3547	0.3797	0.3680	0.3869	0.3939	0.4013	0.4122		0.38	6.4	TM			0.010
50	TM	Dimethyl phthalate		1.778	1.792	1.808	1.739	1.813	1.845	1.896	1.896		1.8	3.0	TM			0.010
51	TM	2,6-DNT		0.3595	0.3691	0.3940	0.3898	0.4194	0.4362	0.4303	0.4376		0.40	7.6	TM			0.200
52	TM	Acenaphthylene		2.272	2.270	2.301	2.239	2.369	2.346	2.427	2.452		2.3	3.3	TM			0.900
53	TM	3-Nitroaniline		0.4354	0.4701	0.4891	0.4850	0.5162	0.5277	0.5306	0.5569		0.50	7.8	TM			0.010
54	*TM	Acenaphthene		1.513	1.515	1.526	1.475	1.601	1.634	1.562	1.583		1.6	3.4	*TM			0.900
55	**TML	2,4-Dinitrophenol				0.1026	0.1597	0.1980	0.2280	0.2394	0.2642		0.20	30	**TM	0.993		0.010
56	**TM	4-Nitrophenol			0.2263	0.2559	0.2676	0.2931	0.3073	0.3053	0.3217		0.28	12	**TM			0.010
57	TM	Dibenzofuran		2.146	2.151	2.189	2.113	2.192	2.258	2.260	2.368		2.2	3.7	TM			0.800
58	TM	2,4-DNT		0.4874	0.5258	0.5675	0.5631	0.5872	0.6207	0.6214	0.6309		0.58	8.8	TM			0.200
59	TM	2,3,4,6-Tetrachlorophenol		0.4226	0.4326	0.4568	0.4521	0.4802	0.4931	0.5021	0.5103		0.47	6.9	TM			0.010
60	TM	Diethyl phthalate		1.717	1.750	1.774	1.700	1.785	1.821	1.822	1.856		1.8	3.0	TM			0.010
61	TM	4-Chlorophenyl phenyl ether		0.9642	0.9787	1.003	0.9777	1.022	1.052	1.077	1.128		1.0	5.6	TM			0.400
62	TM	Fluorene		1.723	1.752	1.766	1.748	1.849	1.876	1.915	1.993		1.8	5.3	TM			0.900
63	TM	4-Nitroaniline		0.3881	0.4161	0.4217	0.4161	0.4232	0.4331	0.4350	0.4238		0.42	3.5	TM			0.010
64	S	2,4,6-Tribromophenol(S)		0.2499	0.2577	0.2753	0.2746	0.2881	0.2924	0.3250	0.3519		0.29	12	S			
65	I	Phenanthrene-D10(IS)	ISTD															
66	TM	4,6-Dinitro-2-methylphenol				0.1512	0.1746	0.1987	0.2095	0.2163	0.2173		0.19	14	TM			0.010
67	TM	Diphenyl amine		0.7260	0.7313	0.7409	0.7221	0.7714	0.7734	0.7988	0.7939		0.76	4.1	TM			
68	*TM	n-Nitrosodiphenylamine		0.7260	0.7313	0.7409	0.7221	0.7714	0.7734	0.7988	0.7939		0.76	4.1	*TM			0.010
69	TM	1,2-Diphenylhydrazine		0.7088	0.7296	0.7363	0.7005	0.7390	0.7439	0.7625	0.7442		0.73	2.7	TM			
70	TM	4-Bromophenyl phenyl ether		0.2867	0.2841	0.2901	0.2822	0.3029	0.3102	0.3219	0.3181		0.30	5.3	TM			0.100

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/09/20
Matrix: Instrument: Yoda Initials:

		Compound	4	5	10	20	40	50	60	80	100		Avg	%RSD	Type		Q	
71	TM	Hexachlorobenzene		0.3059	0.3129	0.3147	0.2992	0.3297	0.3289	0.3449	0.3390		0.32	5.0	TM			0.100
72	TM	Atrazine		0.2523	0.2730	0.2788	0.2709	0.2853	0.2901	0.2889	0.2868		0.28	4.6	TM			0.010
73	*TM	Pentachlorophenol			0.1760	0.2025	0.2048	0.2235	0.2348	0.2427	0.2490		0.22	12	*TM			0.050
74	TM	Phenanthrene		1.345	1.323	1.369	1.279	1.372	1.374	1.412	1.391		1.4	3.1	TM			0.700
75	TM	Anthracene		1.365	1.358	1.392	1.361	1.421	1.466	1.469	1.460		1.4	3.5	TM			0.700
76	TM	Carbazol		1.228	1.242	1.281	1.206	1.271	1.283	1.350	1.297		1.3	3.5	TM			0.010
77	TM	Di-n-butylphthalate		1.399	1.446	1.519	1.477	1.547	1.637	1.617	1.650		1.5	6.1	TM			0.010
78	*TM	Fluoranthene		1.492	1.509	1.526	1.496	1.593	1.632	1.639	1.676		1.6	4.7	*TM			0.600
79	I	Chrysene-D12(IS)	ISTD															
80	TM	Benzidine		0.3875	0.4488	0.4755	0.4544	0.4661	0.4881	0.4328	0.4334		0.45	7.0	TM			
81	TM	Pyrene		1.580	1.594	1.611	1.508	1.589	1.612	1.662	1.608		1.6	2.7	TM			0.600
82	S	Terphenyl-D14(S)		1.093	1.106	1.133	1.100	1.146	1.167	1.246	1.233		1.2	5.1	S			
83	TM	Butyl benzylphthalate		0.5836	0.6098	0.6584	0.6252	0.6819	0.6870	0.7124	0.7012		0.66	7.1	TM			0.010
84	TM	3,3'-Dichlorobenzidine		0.4764	0.5012	0.5358	0.5200	0.5374	0.5593	0.5590	0.5373		0.53	5.4	TM			0.010
85	TM	Benz (a) anthracene		1.520	1.560	1.589	1.516	1.620	1.658	1.688	1.703		1.6	4.5	TM			0.800
86	TM	Bis (2-ethylhexyl) phthalate		0.8281	0.8665	0.9124	0.8825	0.9508	0.9571	0.9995	0.9787		0.92	6.5	TM			0.010
87	TM	Chrysene		1.533	1.530	1.547	1.443	1.537	1.539	1.633	1.608		1.5	3.7	TM			0.700
88	*TM	Di-n-octylphthalate		1.194	1.328	1.474	1.479	1.579	1.648	1.693	1.683		1.5	12	*TM			0.010
89	I	Perylene-D12(IS)	ISTD															
90	TM	Benzo (b) fluoranthene		1.322	1.387	1.529	1.433	1.628	1.753	1.644	1.720		1.6	10	TM			0.700
91	TM	Benzo (k) fluoranthene		1.522	1.563	1.485	1.475	1.477	1.420	1.570	1.516		1.5	3.3	TM			0.700
92	*TM	Benzo (a) pyrene	1.198	1.279	1.346	1.442	1.386	1.499	1.524	1.536	1.563		1.4	8.9	*TM			0.700
93	TM	Indeno (1,2,3-cd) pyrene		1.425	1.508	1.567	1.530	1.657	1.696	1.717	1.718		1.6	6.9	TM			0.500
94	TM	Dibenz (a,h) anthracene	1.199	1.284	1.331	1.382	1.359	1.465	1.487	1.513	1.542		1.4	8.2	TM			0.400
95	TM	Benzo (g,h,i) perylene		1.295	1.328	1.376	1.316	1.428	1.458	1.469	1.465		1.4	5.2	TM			0.500
96																		
97																		
98																		
99																		
100																		
101																		
102																		
103																		
104																		
105																		

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y003.D Vial: 3
Acq On : 9 Oct 20 11:14 Operator: MA
Sample : 4ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:32 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:28:56 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	227533	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	901223	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	551168	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	1043970	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	1064432	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.06	264	1050083	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	0.00	112	0d	0.00000 ppb	
Spiked Amount 200.000			Recovery =	0.000%	
6) Phenol-D6 (S)	0.00	99	0d	0.00000 ppb	
Spiked Amount 200.000			Recovery =	0.000%	
22) Nitrobenzene-D5(S)	0.00	82	0d	0.00000 ppb	
Spiked Amount 100.000			Recovery =	0.000%	
46) 2-Fluorobiphenyl(S)	0.00	172	0d	0.00000 ppb	
Spiked Amount 100.000			Recovery =	0.000%	
64) 2,4,6-Tribromophenol(S)	0.00	330	0d	0.00000 ppb	
Spiked Amount 200.000			Recovery =	0.000%	
82) Terphenyl-D14(S)	0.00	244	0d	0.00000 ppb	
Spiked Amount 100.000			Recovery =	0.000%	
Target Compounds					Qvalue
92) Benzo (a) pyrene	14.99	252	125828	3.28617 ppb	97
94) Dibenz (a,h) anthracene	16.77	278	125879	3.24970 ppb	96

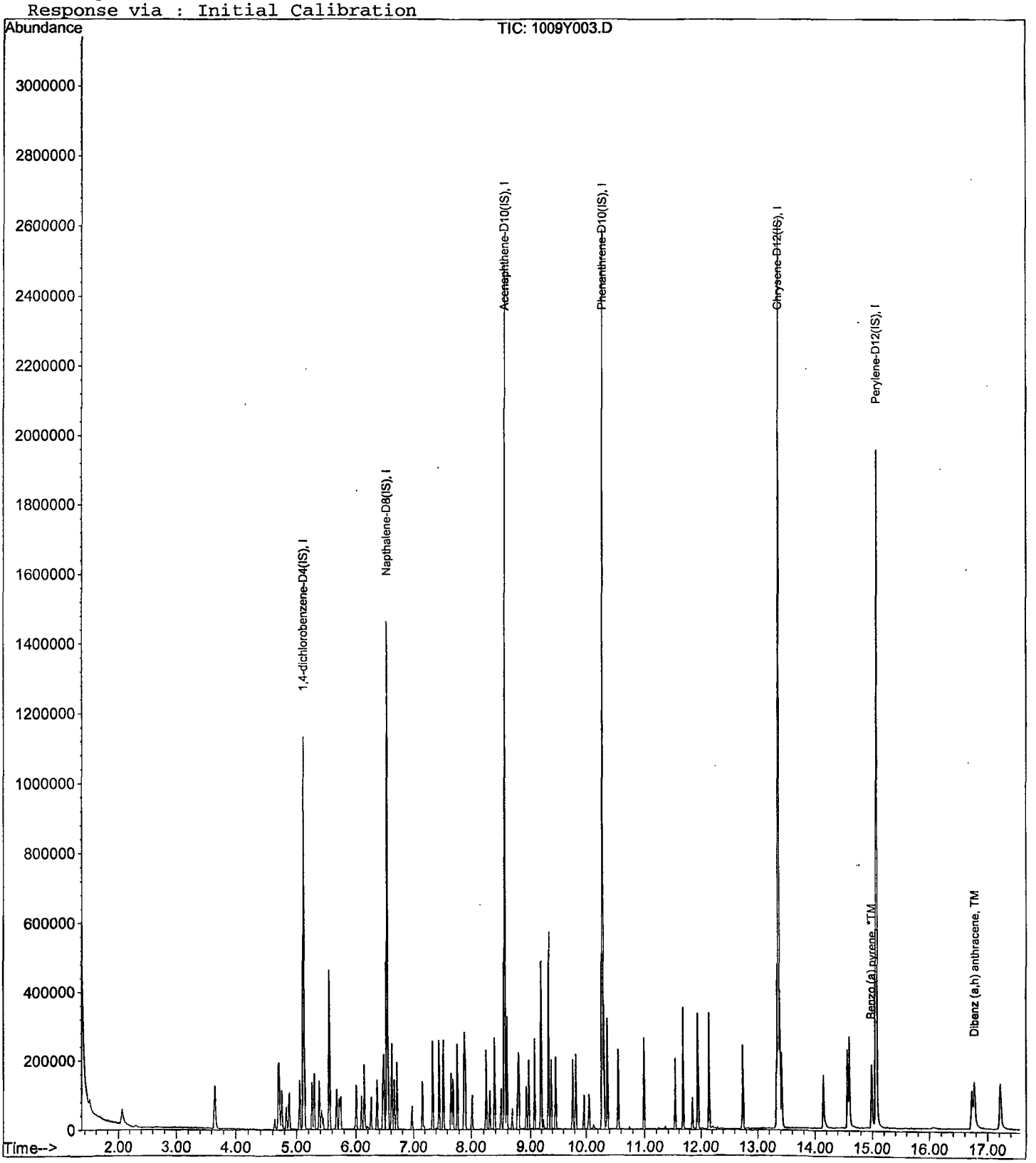
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y003.D Vial: 3
Acq On : 9 Oct 20 11:14 Operator: MA
Sample : 4ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:32 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y004.D Vial: 4
Acq On : 9 Oct 20 11:40 Operator: MA
Sample : 5ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	295573	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	1198634	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	717733	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	1396730	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	1400451	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.06	264	1378494	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.65	112	107548	9.79493 ppb	0.00
Spiked Amount 200.000			Recovery =	4.898%	
6) Phenol-D6 (S)	4.69	99	132793	9.54853 ppb	-0.02
Spiked Amount 200.000			Recovery =	4.775%	
22) Nitrobenzene-D5(S)	5.72	82	56448	4.47844 ppb	0.00
Spiked Amount 100.000			Recovery =	4.478%	
46) 2-Fluorobiphenyl(S)	7.77	172	148324	4.95989 ppb	0.00
Spiked Amount 100.000			Recovery =	4.960%	
64) 2,4,6-Tribromophenol(S)	9.46	330	44842	8.88855 ppb	-0.02
Spiked Amount 200.000			Recovery =	4.445%	
82) Terphenyl-D14(S)	12.15	244	191253	4.79704 ppb	0.00
Spiked Amount 100.000			Recovery =	4.797%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.81	58	1586	0.58537	88
3) n-Nitrosodimethylamine	2.04	42	17000	4.74480 ppb	88
4) Pyridine	2.06	79	52628	4.74569 ppb	100
7) Phenol	4.71	94	73745	4.41786 ppb	96
8) Aniline	4.75	93	74912	6.48908 ppb	100
9) Bis (2-chloroethyl) ether	4.82	63	32333	4.91887 ppb	93
10) 2-Chlorophenol	4.88	128	66407	4.92247 ppb	98
11) 1,3-DCB	5.05	146	72396	4.92865 ppb	96
12) 1,4-DCB	5.13	146	74215	4.97605 ppb	96
13) Benzyl alcohol	5.26	108	36696	4.98304 ppb	99
14) 1,2-DCB	5.30	146	70078	5.02008 ppb	97
15) 2-Methylphenol	5.38	107	48979	4.71409 ppb	99
16) Bis (2-chloroisopropyl) et	5.42	45	44300	5.18894 ppb	96
17) Acetophenone	5.56	105	84332	5.12230 ppb	72
18) 3&4-Methylphenol	5.55	107	132686	10.04745 ppb	97
19) n-Nitrosodi-n-propylamine	5.56	70	42735	4.95123 ppb	96
20) Hexachloroethane	5.67	117	24461	4.63665 ppb	85
23) Nitrobenzene	5.74	77	61553	4.77890 ppb	97
24) Isophorone	6.00	82	103656	4.63891 ppb	94
25) 2-Nitrophenol	6.10	139	35327	4.48123 ppb	90
26) 2,4-Dimethylphenol	6.14	122	57085	4.80390 ppb	99
27) Benzoic acid	6.21	105	13240	6.32470 ppb	93
28) Bis (2-chloroethoxy) metha	6.26	93	66732	4.75525 ppb	97
29) 2,4-Dichlorophenol	6.36	162	57519	4.80776 ppb	98
30) 1,2,4-Trichlorobenzene	6.47	180	65647	4.84104 ppb	96
31) 3,4-Dimethylphenol	6.48	107	83137	4.94914 ppb	97
32) Naphthalene	6.55	128	190633	4.82985 ppb	99
33) 4-Chloroaniline	6.61	127	80253	5.17102 ppb	99
34) 2,6-Dichlorophenol	6.62	162	56054	4.70900 ppb	99
35) Hexachloropropene	6.65	213	44063	4.33691 ppb	94
36) Hexachlorobutadiene	6.70	225	40246	4.85135 ppb	97
37) Caprolactum	6.97	55	17565	4.41965 ppb	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y004.D Vial: 4
Acq On : 9 Oct 20 11:40 Operator: MA
Sample : 5ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.15	107	58070	4.81778	ppb		86
39)	2-Methylnaphthalene	7.34	142	126478	4.76950	ppb		99
40)	1-Methylnaphthalene	7.45	142	130512	4.78713	ppb		99
42)	Hexachlorocyclopentadiene	7.53	237	44192	6.59964	ppb		98
43)	1,2,4,5-Tetrachlorobenzene	7.53	216	68146	4.75873	ppb		98
44)	2,4,6-Trichlorophenol	7.66	196	44724	4.91186	ppb		99
45)	2,4,5-Trichlorophenol	7.70	196	47561	4.90189	ppb		98
47)	1,1'-Biphenyl	7.89	154	169036	4.95293	ppb		98
48)	2-Chloronaphthalene	7.90	162	133473	4.96496	ppb		98
49)	2-Nitroaniline	8.02	65	30540	4.51608	ppb		99
50)	Dimethyl phthalate	8.24	163	159491	4.99723	ppb		100
51)	2,6-DNT	8.31	165	32251	4.37339	ppb		96
52)	Acenaphthylene	8.38	152	203875	4.96211	ppb		99
53)	3-Nitroaniline	8.02	138	39061	4.35954	ppb		97
54)	Acenaphthene	8.58	154	135729	5.12585	ppb		99
55)	2,4-Dinitrophenol	8.61	184	2676	14.40545	ppb	#	76
56)	4-Nitrophenol	8.68	65	16620	3.63593	ppb		100
57)	Dibenzofuran	8.78	168	192534	5.04183	ppb		97
58)	2,4-DNT	8.77	165	43731	4.32291	ppb		88
59)	2,3,4,6-Tetrachlorophenol	8.93	232	37911	4.90306	ppb	#	88
60)	Diethyl phthalate	9.07	149	154007	4.98862	ppb		96
61)	4-Chlorophenyl phenyl ethe	9.20	204	86504	4.89026	ppb		90
62)	Fluorene	9.18	166	154595	4.80618	ppb		98
63)	4-Nitroaniline	8.49	138	34823	4.65461	ppb		88
66)	4,6-Dinitro-2-methylphenol	9.23	198	13188	1.91548	ppb	#	75
67)	Diphenyl amine	9.33	169	253502	9.63821	ppb		98
68)	n-Nitrosodiphenylamine	9.33	169	253502	9.63821	ppb		98
69)	1,2-Diphenylhydrazine	9.37	77	123757	4.50039	ppb		98
70)	4-Bromophenyl phenyl ether	9.76	248	50055	4.67893	ppb	#	89
71)	Hexachlorobenzene	9.82	284	53411	4.68093	ppb		95
72)	Atrazine	9.96	200	22023	2.25969	ppb		96
73)	Pentachlorophenol	10.05	266	26716	4.28442	ppb		96
74)	Phenanthrene	10.30	178	234788	4.95281	ppb		99
75)	Anthracene	10.36	178	238324	4.86048	ppb		100
76)	Carbazol	10.54	167	214401	4.85351	ppb		99
77)	Di-n-butylphthalate	10.99	149	244243	4.57482	ppb		99
78)	Fluoranthene	11.68	202	260481	4.74656	ppb		98
80)	Benzidine	11.85	184	67831	9.77949	ppb	#	98
81)	Pyrene	11.94	202	276641	5.01631	ppb		100
83)	Butyl benzylphthalate	12.73	149	102157	4.37279	ppb		88
84)	3,3'-Dichlorobenzidine	13.33	252	83398	4.54517	ppb	#	97
85)	Benz (a) anthracene	13.35	228	266101	4.65566	ppb		99
86)	Bis (2-ethylhexyl) phthala	13.41	149	144972	4.51925	ppb	#	93
87)	Chrysene	13.38	228	268306	5.11347	ppb		99
88)	Di-n-octylphthalate	14.14	149	208993	3.83482	ppb		96
90)	Benzo (b) fluoranthene	14.57	252	227849	3.97078	ppb		98
91)	Benzo (k) fluoranthene	14.60	252	262261	5.45232	ppb		98
92)	Benzo (a) pyrene	14.98	252	220313	4.38300	ppb		97
93)	Indeno (1,2,3-cd) pyrene	16.73	276	245585	4.86013	ppb		96
94)	Dibenz (a,h) anthracene	16.77	278	221214	4.35032	ppb		97
95)	Benzo (g,h,i) perylene	17.22	276	223157	4.50748	ppb		99

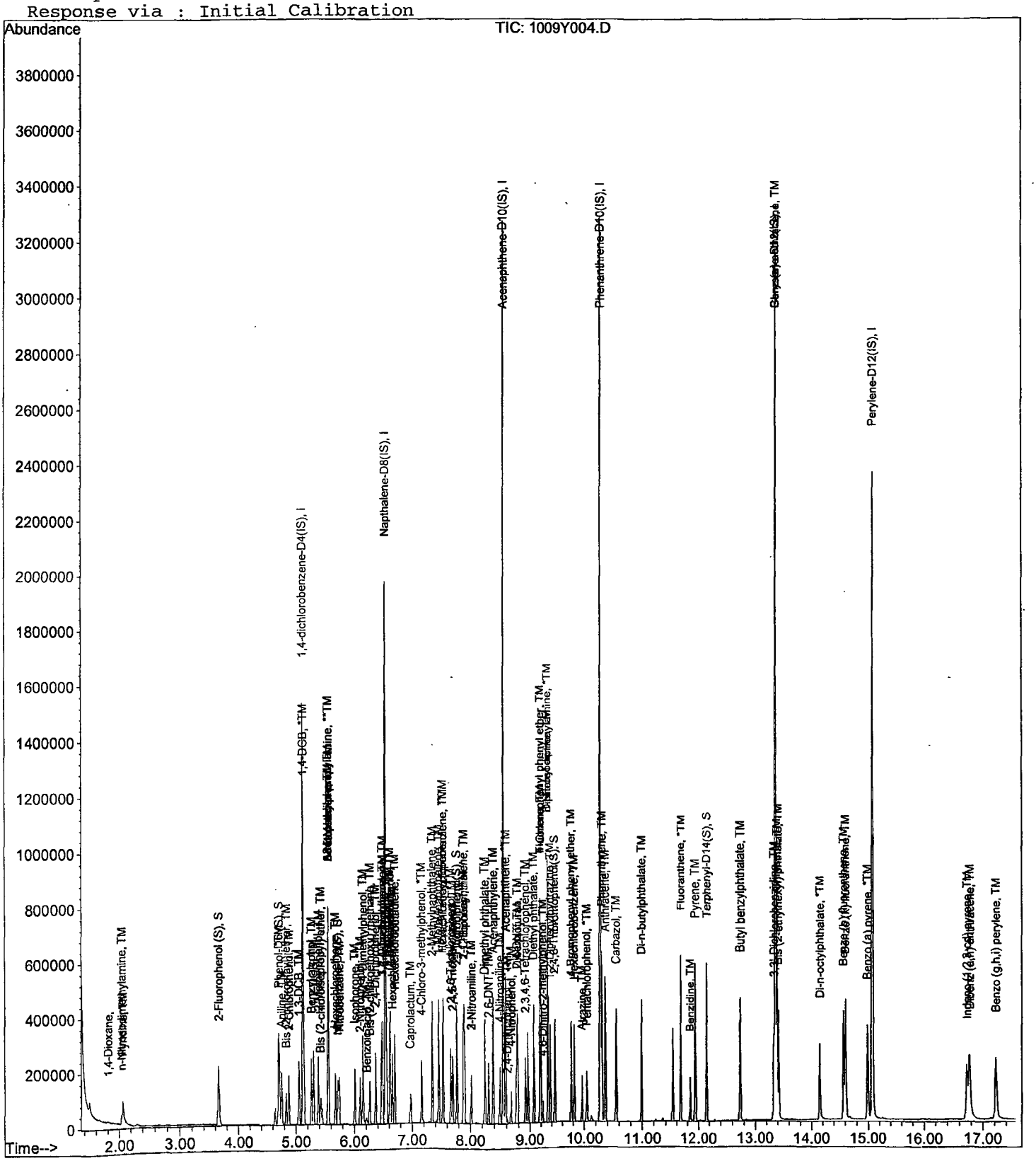
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y004.D Vial: 4
Acq On : 9 Oct 20 11:40 Operator: MA
Sample : 5ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y005.D Vial: 5
Acq On : 9 Oct 20 12:05 Operator: MA
Sample : 10ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:38 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	211409	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.52	136	859818	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	520738	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	1015162	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	1017473	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.06	264	991671	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.66	112	156796	19.96527 ppb	0.00
Spiked Amount 200.000			Recovery =	9.983%	
6) Phenol-D6 (S)	4.70	99	197438	19.84875 ppb	0.00
Spiked Amount 200.000			Recovery =	9.925%	
22) Nitrobenzene-D5(S)	5.72	82	87568	9.68508 ppb	0.00
Spiked Amount 100.000			Recovery =	9.685%	
46) 2-Fluorobiphenyl(S)	7.77	172	214475	9.88509 ppb	0.00
Spiked Amount 100.000			Recovery =	9.885%	
64) 2,4,6-Tribromophenol(S)	9.46	330	67086	18.32827 ppb	-0.02
Spiked Amount 200.000			Recovery =	9.164%	
82) Terphenyl-D14(S)	12.15	244	281289	9.71097 ppb	0.00
Spiked Amount 100.000			Recovery =	9.711%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.81	58	1422m	0.73378	60
3) n-Nitrosodimethylamine	2.04	42	26386	10.29636 ppb	98
4) Pyridine	2.06	79	78803	9.93497 ppb	95
7) Phenol	4.71	94	110411	9.24768 ppb	94
8) Aniline	4.75	93	112408	13.61351 ppb	99
9) Bis (2-chloroethyl) ether	4.83	63	46713	9.93571 ppb	83
10) 2-Chlorophenol	4.88	128	97782	10.13374 ppb	99
11) 1,3-DCB	5.05	146	107275	10.21065 ppb	96
12) 1,4-DCB	5.13	146	109450	10.26007 ppb	96
13) Benzyl alcohol	5.26	108	54672	10.37964 ppb	98
14) 1,2-DCB	5.30	146	102762	10.29207 ppb	98
15) 2-Methylphenol	5.38	107	72503	9.75630 ppb	99
16) Bis (2-chloroisopropyl) et	5.42	45	63573	10.41092 ppb	95
17) Acetophenone	5.56	105	125252	10.63650 ppb	75
18) 3&4-Methylphenol	5.55	107	195207	20.66653 ppb	97
19) n-Nitrosodi-n-propylamine	5.56	70	63491	10.28449 ppb	97
20) Hexachloroethane	5.67	117	37728	9.99851 ppb	77
23) Nitrobenzene	5.74	77	91971	9.95428 ppb	98
24) Isophorone	6.01	82	157472	9.82437 ppb	94
25) 2-Nitrophenol	6.10	139	51426	9.09397 ppb	90
26) 2,4-Dimethylphenol	6.14	122	84524	9.91589 ppb	97
27) Benzoic acid	6.22	105	25651	8.90070 ppb	93
28) Bis (2-chloroethoxy) metha	6.26	93	101899	10.12253 ppb	98
29) 2,4-Dichlorophenol	6.36	162	85540	9.96738 ppb	97
30) 1,2,4-Trichlorobenzene	6.47	180	96262	9.89599 ppb	95
31) 3,4-Dimethylphenol	6.48	107	119988	9.95758 ppb	98
32) Naphthalene	6.55	128	282779	9.98765 ppb	99
33) 4-Chloroaniline	6.61	127	120459	10.82017 ppb	98
34) 2,6-Dichlorophenol	6.62	162	84470	9.89248 ppb	97
35) Hexachloropropene	6.65	213	65625	9.00443 ppb	95
36) Hexachlorobutadiene	6.70	225	58596	9.84663 ppb	98
37) Caprolactum	6.98	55	26692	9.36269 ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y005.D Vial: 5
Acq On : 9 Oct 20 12:05 Operator: MA
Sample : 10ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:38 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.16	107	87025	10.06512	ppb		99
39)	2-Methylnaphthalene	7.34	142	188174	9.89230	ppb		100
40)	1-Methylnaphthalene	7.45	142	196666	10.05622	ppb		99
42)	Hexachlorocyclopentadiene	7.53	237	71256	12.98649	ppb		98
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	103616	9.97288	ppb		97
44)	2,4,6-Trichlorophenol	7.67	196	66602	10.08176	ppb		99
45)	2,4,5-Trichlorophenol	7.70	196	69510	9.87424	ppb		99
47)	1,1'-Biphenyl	7.89	154	243153	9.81989	ppb		98
48)	2-Chloronaphthalene	7.90	162	195930	10.04539	ppb		97
49)	2-Nitroaniline	8.02	65	46170	9.41015	ppb		99
50)	Dimethyl phthalate	8.24	163	233303	10.07527	ppb		100
51)	2,6-DNT	8.31	165	48055	8.98168	ppb		97
52)	Acenaphthylene	8.38	152	295539	9.91427	ppb		99
53)	3-Nitroaniline	8.02	138	61198	9.41409	ppb		98
54)	Acenaphthene	8.58	154	197234	10.26642	ppb		99
55)	2,4-Dinitrophenol	8.61	184	7249	15.73076	ppb		95
56)	4-Nitrophenol	8.68	65	29458	8.88242	ppb		94
57)	Dibenzofuran	8.79	168	280021	10.10682	ppb		94
58)	2,4-DNT	8.77	165	68450	9.32618	ppb		86
59)	2,3,4,6-Tetrachlorophenol	8.93	232	56312	10.03798	ppb	#	91
60)	Diethyl phthalate	9.07	149	227834	10.17189	ppb		96
61)	4-Chlorophenyl phenyl ethe	9.20	204	127415	9.92795	ppb		93
62)	Fluorene	9.18	166	228130	9.77532	ppb		98
63)	4-Nitroaniline	8.49	138	54164	9.97864	ppb		86
66)	4,6-Dinitro-2-methylphenol	9.23	198	26610	5.31765	ppb	#	89
67)	Diphenyl amine	9.33	169	371199	19.41774	ppb		99
68)	n-Nitrosodiphenylamine	9.33	169	371199	19.41774	ppb		99
69)	1,2-Diphenylhydrazine	9.37	77	185164	9.26434	ppb		96
70)	4-Bromophenyl phenyl ether	9.76	248	72113	9.27448	ppb	#	91
71)	Hexachlorobenzene	9.82	284	79404	9.57461	ppb		93
72)	Atrazine	9.96	200	34643	4.89062	ppb		98
73)	Pentachlorophenol	10.05	266	44666	9.85541	ppb		97
74)	Phenanthrene	10.30	178	335804	9.74628	ppb		99
75)	Anthracene	10.36	178	344578	9.66888	ppb		100
76)	Carbazol	10.55	167	315150	9.81574	ppb		96
77)	Di-n-butylphthalate	10.99	149	366967	9.45705	ppb		99
78)	Fluoranthene	11.69	202	383069	9.60410	ppb		98
80)	Benzidine	11.85	184	114148	14.70810	ppb		98
81)	Pyrene	11.95	202	405458	10.11950	ppb		99
83)	Butyl benzylphthalate	12.73	149	155110	9.13850	ppb		86
84)	3,3'-Dichlorobenzidine	13.33	252	127488	9.56333	ppb	#	97
85)	Benz (a) anthracene	13.35	228	396810	9.55571	ppb		99
86)	Bis (2-ethylhexyl) phthala	13.41	149	220414	9.45728	ppb	#	93
87)	Chrysene	13.38	228	389144	10.20800	ppb		99
88)	Di-n-octylphthalate	14.15	149	337683	8.52839	ppb		96
90)	Benzo (b) fluoranthene	14.57	252	343740	8.32714	ppb		98
91)	Benzo (k) fluoranthene	14.60	252	387493	11.19822	ppb	#	98
92)	Benzo (a) pyrene	14.98	252	333690	9.22810	ppb		97
93)	Indeno (1,2,3-cd) pyrene	16.73	276	373809	10.28332	ppb		98
94)	Dibenz (a,h) anthracene	16.77	278	330018	9.02161	ppb		98
95)	Benzo (g,h,i) perylene	17.22	276	329165	9.24218	ppb		99

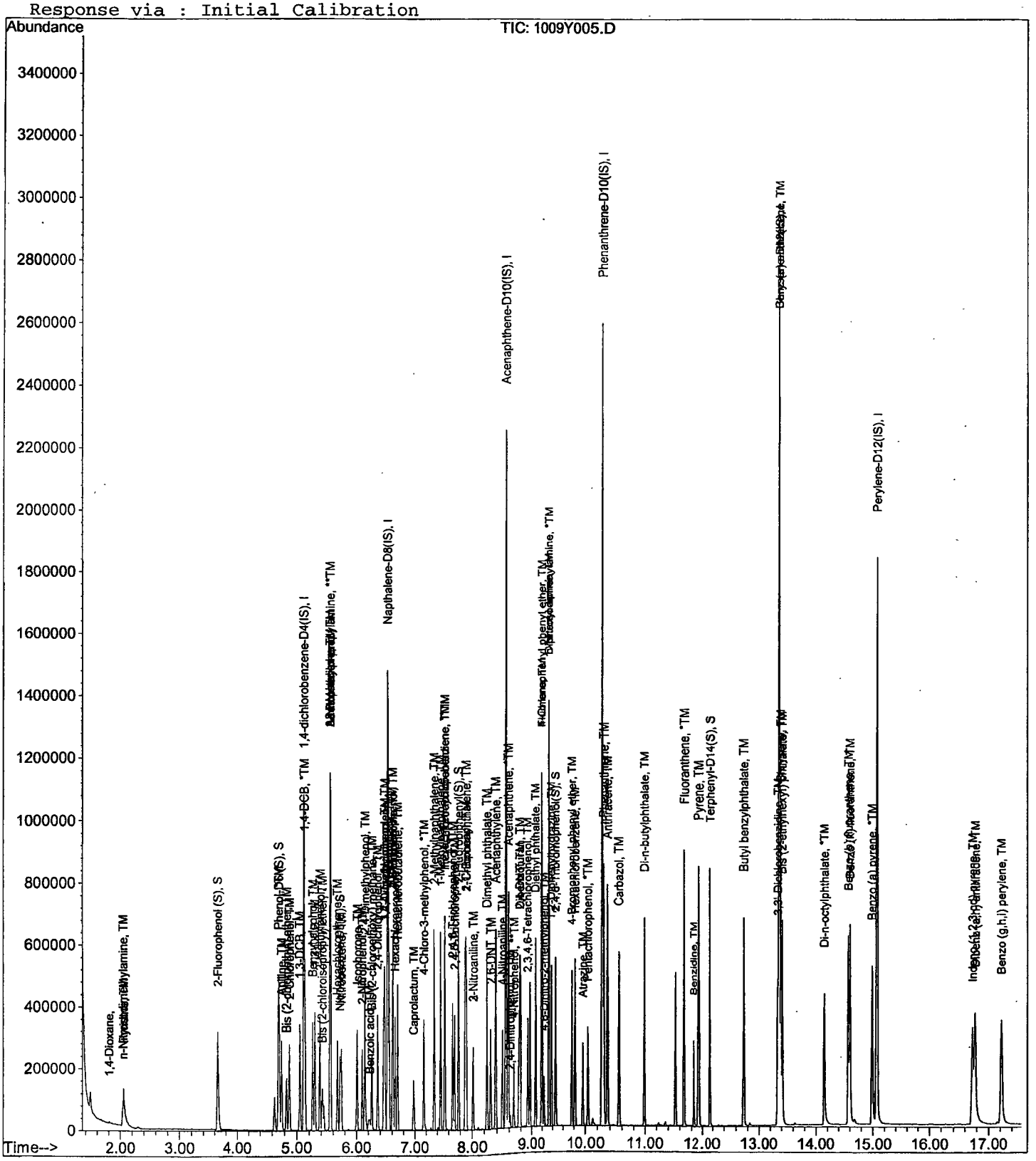
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y005.D Vial: 5
Acq On : 9 Oct 20 12:05 Operator: MA
Sample : 10ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:38 2020 Quant Results File: Y1009.RES

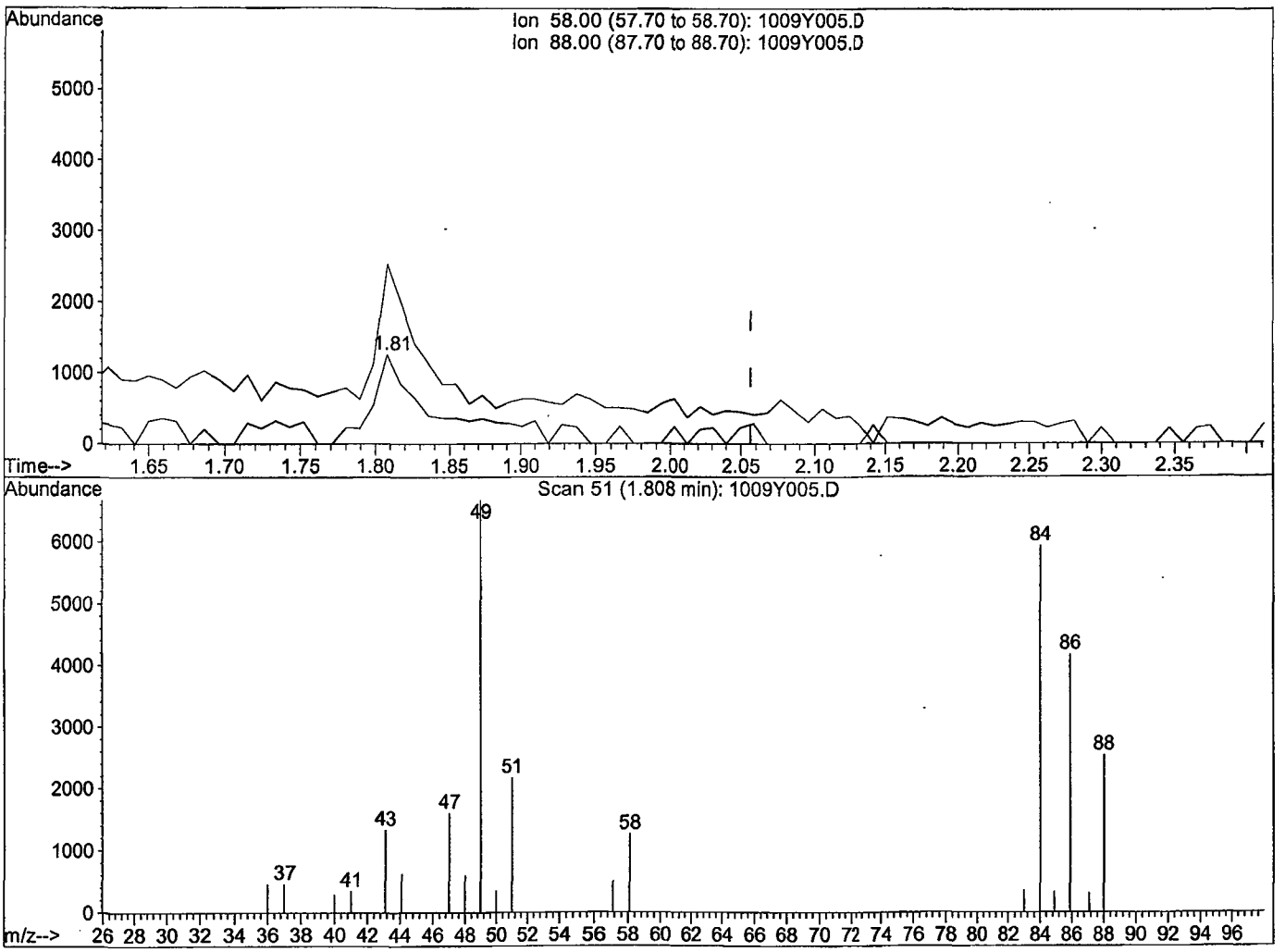
Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y005.D Vial: 5
Acq On : 9 Oct 20 12:05 Operator: MA
Sample : 10ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 14:30 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:32:33 2020
Response via : Multiple Level Calibration



TIC: 1009Y005.D

(2) 1,4-Dioxane

1.81min 1.9222

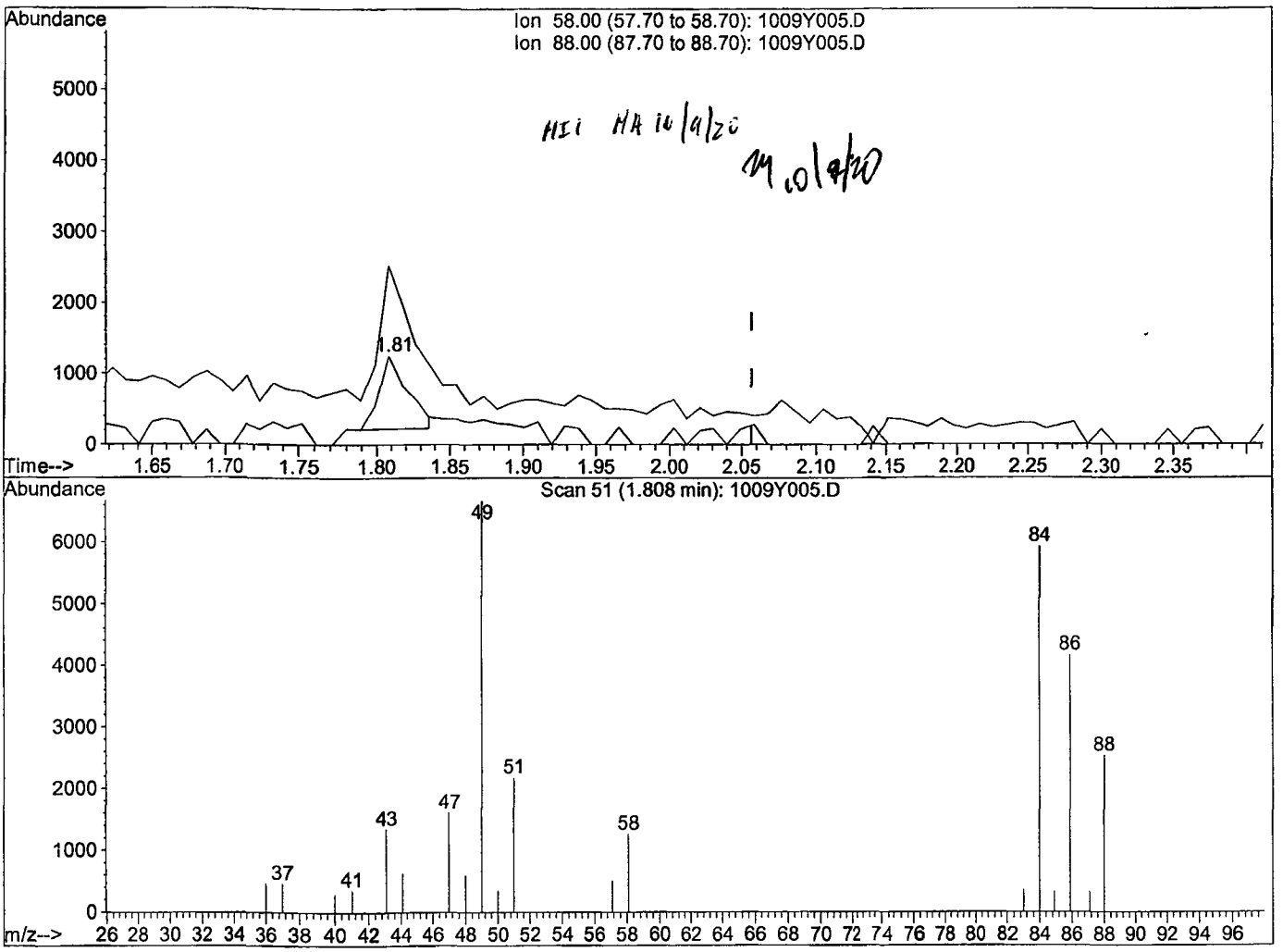
response 3725

Ion	Exp%	Act%
58.00	100	100
88.00	166.30	112.21
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y005.D Vial: 5
Acq On : 9 Oct 20 12:05 Operator: MA
Sample : 10ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 14:38 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:32:33 2020
Response via : Multiple Level Calibration



TIC: 1009Y005.D

(2) 1,4-Dioxane

1.81min 0.7338 m

response 1422

Ion	Exp%	Act%
58.00	100	100
88.00	166.30	293.95#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y006.D Vial: 6
Acq On : 9 Oct 20 12:31 Operator: MA
Sample : 20ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	192915	40.00000 ppb		0.00
21) Napthalene-D8(IS)	6.53	136	808395	40.00000 ppb		0.00
41) Acenaphthene-D10(IS)	8.55	164	497350	40.00000 ppb		0.00
65) Phenanthrene-D10(IS)	10.27	188	966917	40.00000 ppb		0.00
79) Chrysene-D12(IS)	13.36	240	984198	40.00000 ppb		0.00
89) Perylene-D12(IS)	15.06	264	957201	40.00000 ppb		0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.66	112	314553	43.89261 ppb		0.00
Spiked Amount 200.000			Recovery = 21.947%			
6) Phenol-D6 (S)	4.70	99	396252	43.65473 ppb		0.00
Spiked Amount 200.000			Recovery = 21.828%			
22) Nitrobenzene-D5(S)	5.73	82	174518	20.52963 ppb		0.00
Spiked Amount 100.000			Recovery = 20.530%			
46) 2-Fluorobiphenyl(S)	7.77	172	418559	20.19844 ppb		0.00
Spiked Amount 100.000			Recovery = 20.198%			
64) 2,4,6-Tribromophenol(S)	9.47	330	136914	39.16469 ppb		0.00
Spiked Amount 200.000			Recovery = 19.583%			
82) Terphenyl-D14(S)	12.15	244	557548	19.89906 ppb		0.00
Spiked Amount 100.000			Recovery = 19.899%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.81	58	3788	2.14207		89
3) n-Nitrosodimethylamine	2.03	42	59620	25.49526 ppb		95
4) Pyridine	2.05	79	160790	22.21470 ppb		95
7) Phenol	4.71	94	227978	20.92525 ppb		88
8) Aniline	4.75	93	194560	25.82165 ppb		98
9) Bis (2-chloroethyl) ether	4.83	63	88955	20.73427 ppb		85
10) 2-Chlorophenol	4.88	128	183288	20.81624 ppb		97
11) 1,3-DCB	5.05	146	200236	20.88597 ppb		97
12) 1,4-DCB	5.13	146	205197	21.07963 ppb		97
13) Benzyl alcohol	5.26	108	103551	21.54414 ppb		99
14) 1,2-DCB	5.30	146	191770	21.04788 ppb		97
15) 2-Methylphenol	5.38	107	136626	20.14745 ppb		97
16) Bis (2-chloroisopropyl) et	5.42	45	120266	21.58325 ppb		98
17) Acetophenone	5.56	105	238947	22.23684 ppb		86
18) 3&4-Methylphenol	5.55	107	373935	43.38362 ppb		92
19) n-Nitrosodi-n-propylamine	5.56	70	122321	21.71346 ppb		91
20) Hexachloroethane	5.67	117	72139	20.95073 ppb		76
23) Nitrobenzene	5.74	77	177791	20.46688 ppb		94
24) Isophorone	6.01	82	298471	19.80553 ppb		98
25) 2-Nitrophenol	6.10	139	104580	19.66992 ppb		91
26) 2,4-Dimethylphenol	6.14	122	169548	21.15570 ppb		98
27) Benzoic acid	6.24	105	60551	15.08044 ppb		97
28) Bis (2-chloroethoxy) metha	6.26	93	189163	19.98658 ppb		98
29) 2,4-Dichlorophenol	6.37	162	162407	20.12793 ppb		94
30) 1,2,4-Trichlorobenzene	6.47	180	183956	20.11413 ppb		97
31) 3,4-Dimethylphenol	6.48	107	227135	20.04854 ppb		96
32) Naphthalene	6.55	128	531374	19.96178 ppb		99
33) 4-Chloroaniline	6.62	127	230010	21.97478 ppb	#	93
34) 2,6-Dichlorophenol	6.62	162	158102	19.69350 ppb		97
35) Hexachloropropene	6.65	213	130609	19.06088 ppb		98
36) Hexachlorobutadiene	6.70	225	111431	19.91630 ppb		98
37) Caprolactum	7.00	55	54071	20.17283 ppb		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y006.D Vial: 6
Acq On : 9 Oct 20 12:31 Operator: MA
Sample : 20ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.16	107	166541	20.48704	ppb		99
39)	2-Methylnaphthalene	7.34	142	354209	19.80525	ppb		100
40)	1-Methylnaphthalene	7.45	142	366039	19.90745	ppb		99
42)	Hexachlorocyclopentadiene	7.53	237	142464	25.68209	ppb		97
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	194757	19.62656	ppb		98
44)	2,4,6-Trichlorophenol	7.67	196	129817	20.57491	ppb		99
45)	2,4,5-Trichlorophenol	7.70	196	138553	20.60769	ppb		97
47)	1,1'-Biphenyl	7.89	154	468875	19.82627	ppb		97
48)	2-Chloronaphthalene	7.91	162	370608	19.89472	ppb		96
49)	2-Nitroaniline	8.02	65	94429	20.15112	ppb		93
50)	Dimethyl phthalate	8.25	163	449533	20.32615	ppb		97
51)	2,6-DNT	8.31	165	97966	19.17130	ppb		95
52)	Acenaphthylene	8.38	152	572109	20.09471	ppb		99
53)	3-Nitroaniline	8.02	138	121616	19.58794	ppb		98
54)	Acenaphthene	8.58	154	379587	20.68739	ppb		99
55)	2,4-Dinitrophenol	8.61	184	25517	20.59204	ppb		85
56)	4-Nitrophenol	8.68	65	63627	20.08752	ppb		88
57)	Dibenzofuran	8.79	168	544443	20.57471	ppb		95
58)	2,4-DNT	8.77	165	141115	20.13078	ppb		95
59)	2,3,4,6-Tetrachlorophenol	8.93	232	113602	21.20257	ppb		92
60)	Diethyl phthalate	9.08	149	441192	20.62377	ppb		99
61)	4-Chlorophenyl phenyl ethe	9.20	204	249437	20.34966	ppb		93
62)	Fluorene	9.19	166	439128	19.70139	ppb		100
63)	4-Nitroaniline	8.49	138	104872	20.22914	ppb		95
66)	4,6-Dinitro-2-methylphenol	9.24	198	73122	15.34155	ppb		93
67)	Diphenyl amine	9.34	169	716408	39.34581	ppb		99
68)	n-Nitrosodiphenylamine	9.34	169	716408	39.34581	ppb		99
69)	1,2-Diphenylhydrazine	9.37	77	355993	18.70017	ppb		92
70)	4-Bromophenyl phenyl ether	9.76	248	140233	18.93532	ppb	#	88
71)	Hexachlorobenzene	9.82	284	152151	19.26192	ppb	#	90
72)	Atrazine	9.96	200	67395	9.98901	ppb		99
73)	Pentachlorophenol	10.05	266	97914	22.68238	ppb		97
74)	Phenanthrene	10.30	178	661795	20.16614	ppb		99
75)	Anthracene	10.36	178	672912	19.82408	ppb		100
76)	Carbazol	10.55	167	619232	20.24909	ppb		96
77)	Di-n-butylphthalate	10.99	149	734338	19.86876	ppb		99
78)	Fluoranthene	11.69	202	737851	19.42202	ppb		97
80)	Benzidine	11.85	184	233994	24.41519	ppb	#	98
81)	Pyrene	11.95	202	792842	20.45692	ppb		99
83)	Butyl benzylphthalate	12.73	149	323994	19.73389	ppb		84
84)	3,3'-Dichlorobenzidine	13.33	252	263658	20.44660	ppb	#	97
85)	Benz (a) anthracene	13.35	228	782163	19.47233	ppb		100
86)	Bis (2-ethylhexyl) phthala	13.41	149	448969	19.91516	ppb	#	93
87)	Chrysene	13.39	228	761218	20.64333	ppb		99
88)	Di-n-octylphthalate	14.15	149	725589	18.94475	ppb		95
90)	Benzo (b) fluoranthene	14.57	252	731637	18.36224	ppb		99
91)	Benzo (k) fluoranthene	14.61	252	710650	21.27676	ppb		100
92)	Benzo (a) pyrene	14.99	252	689928	19.76683	ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.74	276	749939	21.37342	ppb		99
94)	Dibenz (a,h) anthracene	16.78	278	661450	18.73302	ppb		97
95)	Benzo (g,h,i) perylene	17.24	276	658600	19.15786	ppb		98

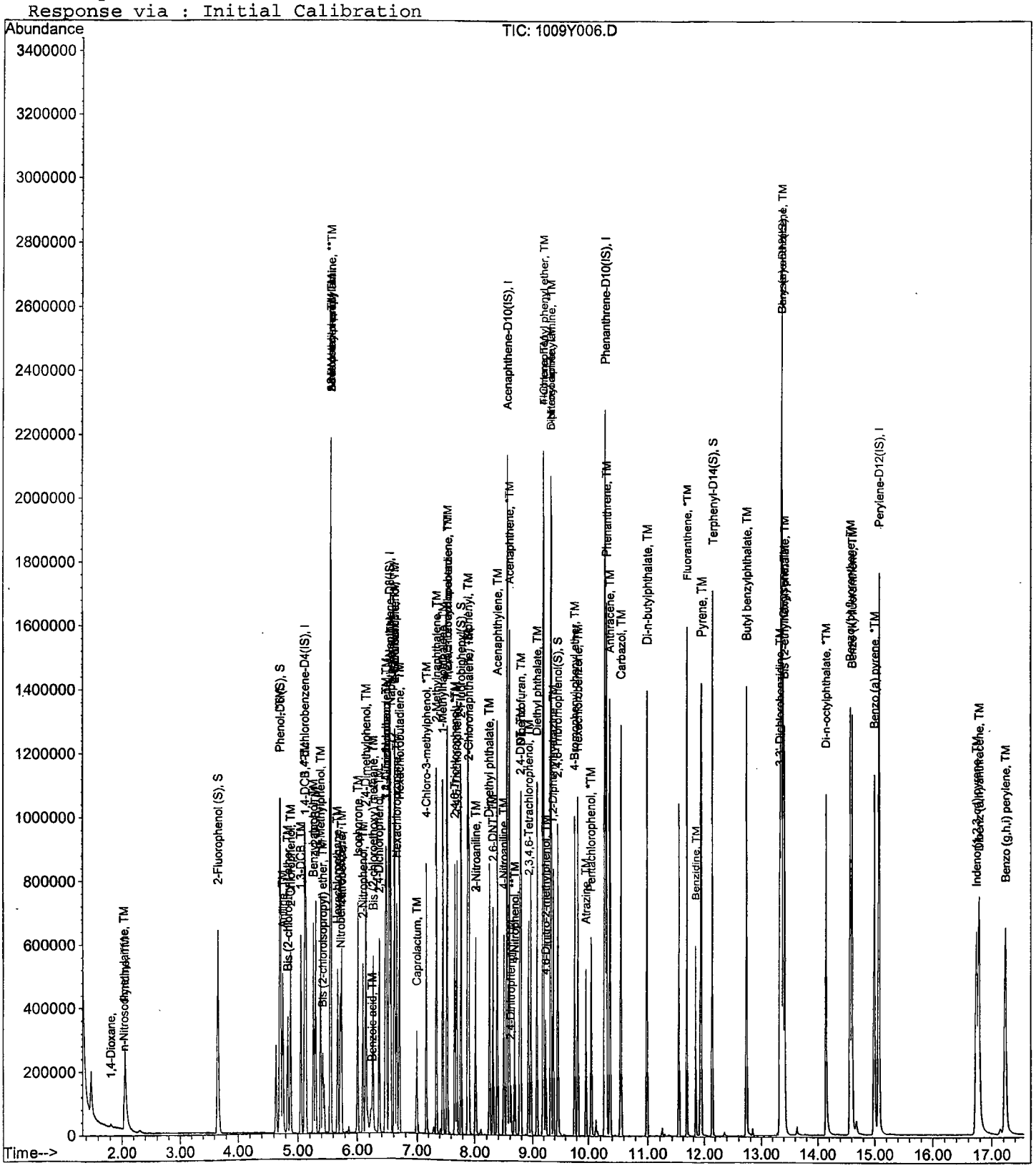
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y006.D Vial: 6
Acq On : 9 Oct 20 12:31 Operator: MA
Sample : 20ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y007.D Vial: 7
Acq On : 9 Oct 20 12:56 Operator: MA
Sample : 40ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:40 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	212035	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	854538	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	517005	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.28	188	1018808	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.37	240	1051031	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.07	264	1020267	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.66	112	634034	80.49494 ppb	0.00
Spiked Amount 200.000			Recovery = 40.248%		
6) Phenol-D6 (S)	4.71	99	791612	79.34703 ppb	0.00
Spiked Amount 200.000			Recovery = 39.674%		
22) Nitrobenzene-D5(S)	5.73	82	352039	39.17634 ppb	0.00
Spiked Amount 100.000			Recovery = 39.176%		
46) 2-Fluorobiphenyl(S)	7.78	172	846283	39.28656 ppb	0.00
Spiked Amount 100.000			Recovery = 39.287%		
64) 2,4,6-Tribromophenol(S)	9.47	330	283940	78.13413 ppb	0.00
Spiked Amount 200.000			Recovery = 39.067%		
82) Terphenyl-D14(S)	12.15	244	1156658	38.65648 ppb	0.00
Spiked Amount 100.000			Recovery = 38.656%		
Target Compounds					Qvalue
2) 1,4-Dioxane	1.81	58	7640	3.93075	90
3) n-Nitrosodimethylamine	2.03	42	110402	42.95393 ppb	98
4) Pyridine	2.05	79	306592	38.53901 ppb	99
7) Phenol	4.72	94	463809	38.73249 ppb	96
8) Aniline	4.76	93	336320	40.61080 ppb	98
9) Bis (2-chloroethyl) ether	4.84	63	184887	39.20878 ppb	93
10) 2-Chlorophenol	4.88	128	378288	39.08852 ppb	95
11) 1,3-DCB	5.06	146	394833	37.47005 ppb	99
12) 1,4-DCB	5.13	146	403302	37.69475 ppb	97
13) Benzyl alcohol	5.26	108	207791	39.33326 ppb	92
14) 1,2-DCB	5.30	146	377953	37.74192 ppb	98
15) 2-Methylphenol	5.38	107	273697	36.72106 ppb	97
16) Bis (2-chloroisopropyl) et	5.42	45	237348	38.75413 ppb	95
17) Acetophenone	5.56	105	478394	40.50566 ppb	93
18) 3&4-Methylphenol	5.56	107	757832	79.99466 ppb	97
19) n-Nitrosodi-n-propylamine	5.57	70	246849	39.86740 ppb	98
20) Hexachloroethane	5.67	117	144939	38.29770 ppb	76
23) Nitrobenzene	5.74	77	351360	38.26364 ppb	91
24) Isophorone	6.01	82	599785	37.65063 ppb	97
25) 2-Nitrophenol	6.10	139	214038	38.08351 ppb #	86
26) 2,4-Dimethylphenol	6.14	122	330250	38.98251 ppb	96
27) Benzoic acid	6.23	105	206981m	38.02135 ppb	98
28) Bis (2-chloroethoxy) metha	6.26	93	380455	38.02750 ppb	99
29) 2,4-Dichlorophenol	6.37	162	326752	38.30937 ppb	95
30) 1,2,4-Trichlorobenzene	6.47	180	361788	37.42257 ppb	97
31) 3,4-Dimethylphenol	6.49	107	468655	39.13310 ppb	99
32) Naphthalene	6.55	128	1064880	37.84355 ppb	99
33) 4-Chloroaniline	6.62	127	463963	41.93276 ppb	96
34) 2,6-Dichlorophenol	6.63	162	324881	38.28265 ppb	97
35) Hexachloropropene	6.65	213	264065	36.45632 ppb	97
36) Hexachlorobutadiene	6.70	225	226657	38.32340 ppb	99
37) Caprolactum	7.03	55	110677	39.06178 ppb	95

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y201009\1009Y007.D Vial: 7
Acq On : 9 Oct 20 12:56 Operator: MA
Sample : 40ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:40 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.17	107	332232	38.66266	ppb		93
39)	2-Methylnaphthalene	7.34	142	712074	37.66500	ppb		99
40)	1-Methylnaphthalene	7.46	142	747350	38.45072	ppb		98
42)	Hexachlorocyclopentadiene	7.53	237	266304	45.08437	ppb		97
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	396423	38.43061	ppb		99
44)	2,4,6-Trichlorophenol	7.67	196	266713	40.66473	ppb		96
45)	2,4,5-Trichlorophenol	7.70	196	280347	40.11223	ppb		93
47)	1,1'-Biphenyl	7.89	154	956404	38.90387	ppb		97
48)	2-Chloronaphthalene	7.91	162	757162	39.10021	ppb		97
49)	2-Nitroaniline	8.02	65	190271	39.06014	ppb		83
50)	Dimethyl phthalate	8.25	163	899127	39.10948	ppb		98
51)	2,6-DNT	8.31	165	201507	37.93445	ppb	#	81
52)	Acenaphthylene	8.38	152	1157318	39.10418	ppb		100
53)	3-Nitroaniline	8.02	138	250735	38.84905	ppb		94
54)	Acenaphthene	8.59	154	762724	39.98796	ppb		100
55)	2,4-Dinitrophenol	8.61	184	82583	34.69107	ppb		85
56)	4-Nitrophenol	8.69	65	138343	42.01550	ppb		91
57)	Dibenzofuran	8.79	168	1092529	39.71747	ppb		97
58)	2,4-DNT	8.77	165	291100	39.94817	ppb		93
59)	2,3,4,6-Tetrachlorophenol	8.93	232	233724	41.96365	ppb		94
60)	Diethyl phthalate	9.08	149	879121	39.53270	ppb		98
61)	4-Chlorophenyl phenyl ethe	9.20	204	505486	39.67096	ppb		94
62)	Fluorene	9.19	166	903585	38.99799	ppb		99
63)	4-Nitroaniline	8.50	138	215127	39.91904	ppb	#	79
66)	4,6-Dinitro-2-methylphenol	9.24	198	177892	35.42211	ppb		92
67)	Diphenyl amine	9.34	169	1471327	76.69095	ppb		100
68)	n-Nitrosodiphenylamine	9.34	169	1471327	76.69095	ppb		100
69)	1,2-Diphenylhydrazine	9.38	77	713667	35.57923	ppb	#	89
70)	4-Bromophenyl phenyl ether	9.76	248	287510	36.84446	ppb	#	87
71)	Hexachlorobenzene	9.82	284	304827	36.62479	ppb	#	84
72)	Atrazine	9.97	200	138004	19.41258	ppb		96
73)	Pentachlorophenol	10.05	266	208610	45.86440	ppb		99
74)	Phenanthrene	10.30	178	1303520	37.69762	ppb		99
75)	Anthracene	10.37	178	1387082	38.78232	ppb		99
76)	Carbazol	10.55	167	1228289	38.11970	ppb		98
77)	Di-n-butylphthalate	10.99	149	1504720	38.63913	ppb		99
78)	Fluoranthene	11.70	202	1524460	38.08366	ppb		98
80)	Benzidine	11.85	184	477549	41.16107	ppb	#	97
81)	Pyrene	11.96	202	1584435	38.28203	ppb		99
83)	Butyl benzylphthalate	12.74	149	657082	37.47677	ppb	#	79
84)	3,3'-Dichlorobenzidine	13.33	252	546556	39.69005	ppb		99
85)	Benz (a) anthracene	13.35	228	1593023	37.13724	ppb		99
86)	Bis (2-ethylhexyl) phthala	13.41	149	927574	38.52858	ppb	#	93
87)	Chrysene	13.39	228	1516346	38.50666	ppb		99
88)	Di-n-octylphthalate	14.15	149	1554499	38.00631	ppb		97
90)	Benzo (b) fluoranthene	14.57	252	1462171	34.42845	ppb		98
91)	Benzo (k) fluoranthene	14.61	252	1504454	42.25888	ppb		98
92)	Benzo (a) pyrene	14.99	252	1413745	38.00089	ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.75	276	1561010	41.73909	ppb		98
94)	Dibenz (a,h) anthracene	16.79	278	1386808	36.84822	ppb		97
95)	Benzo (g,h,i) perylene	17.25	276	1342256	36.63110	ppb		99

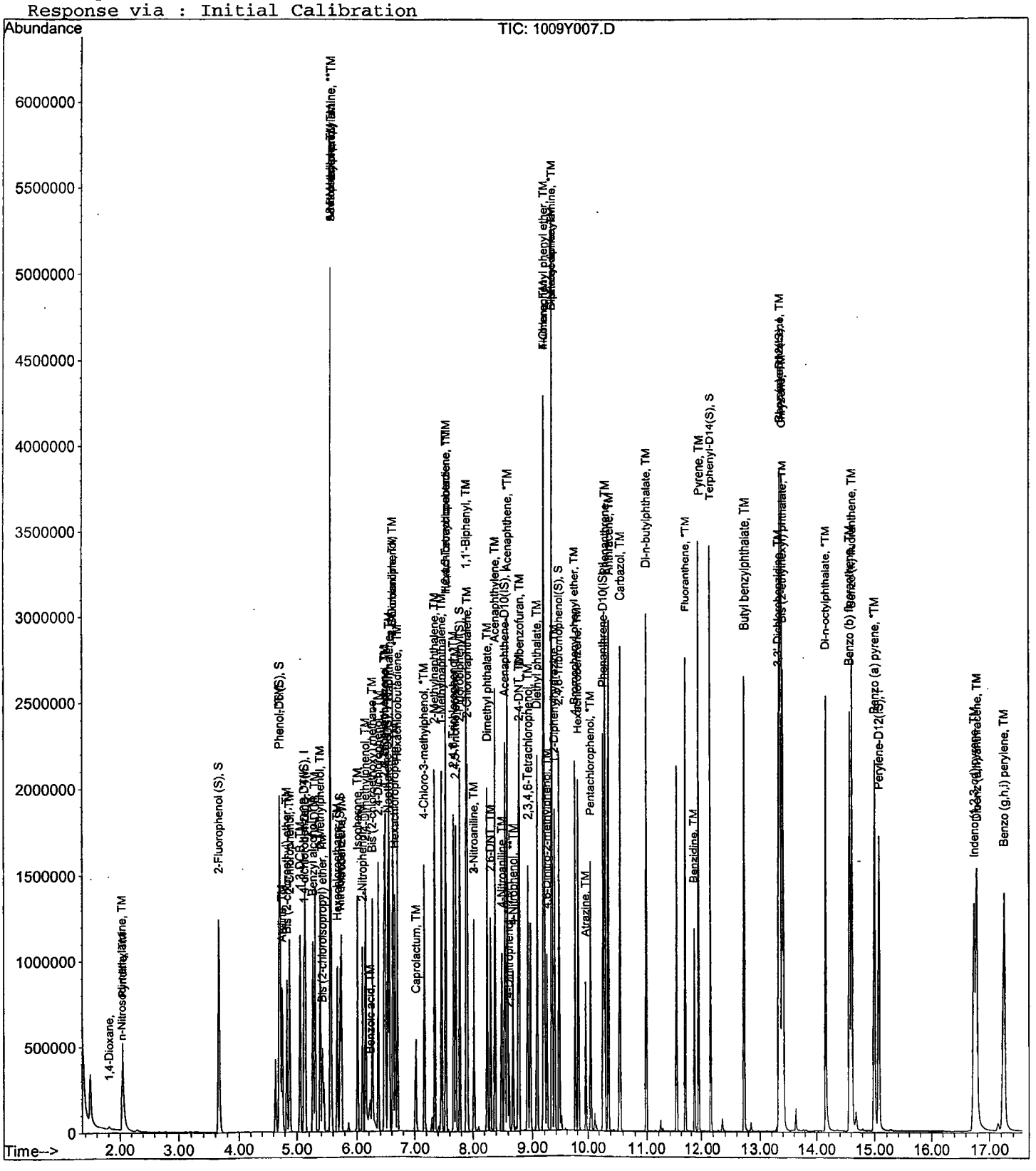
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y007.D Vial: 7
Acq On : 9 Oct 20 12:56 Operator: MA
Sample : 40ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:40 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration

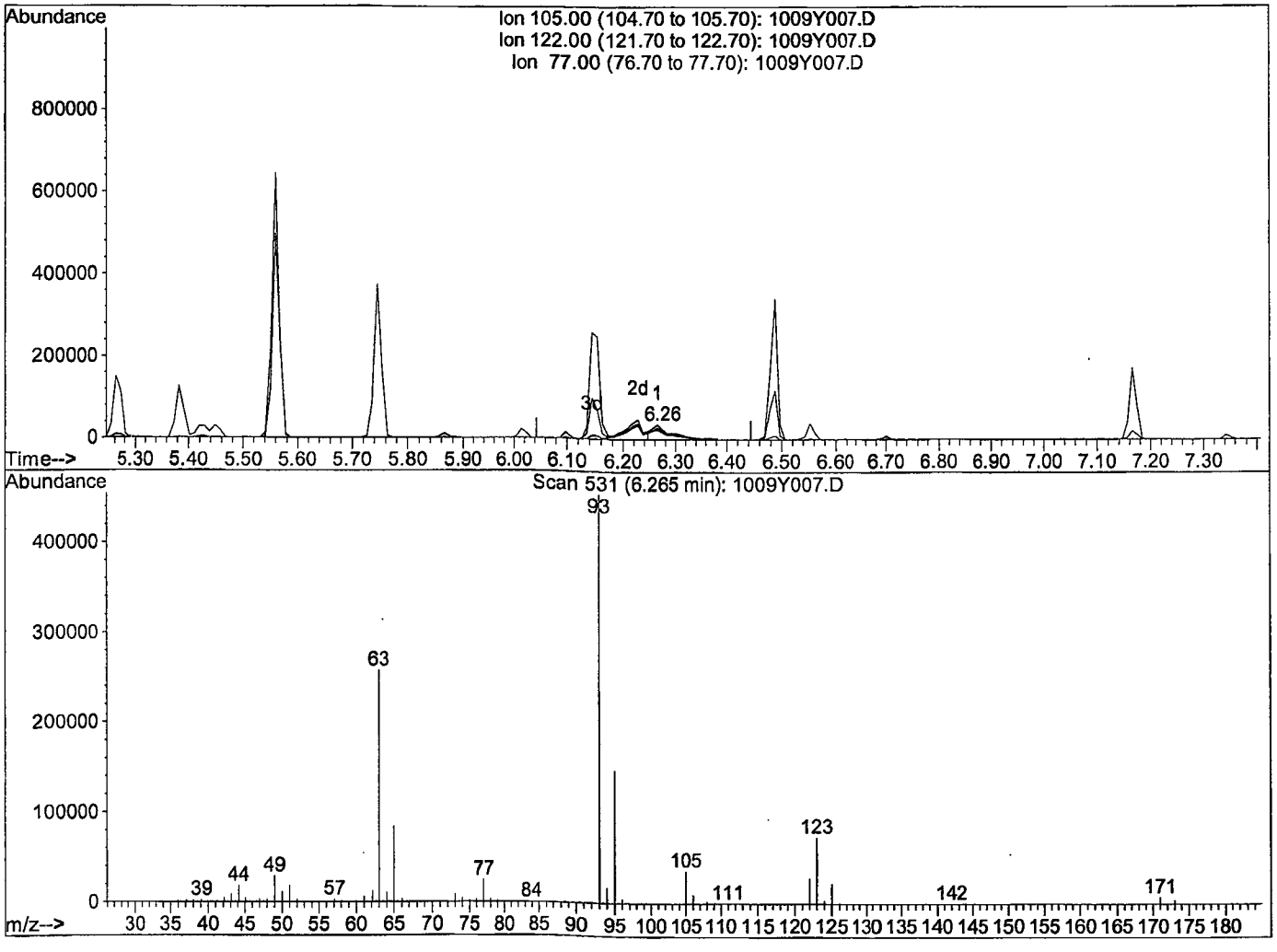


3032 of 750

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y007.D Vial: 7
Acq On : 9 Oct 20 12:56 Operator: MA
Sample : 40ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 14:30 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:32:33 2020
Response via : Multiple Level Calibration



TIC: 1009Y007.D

(27) Benzoic acid (TM)

6.26min 19.3185ppb

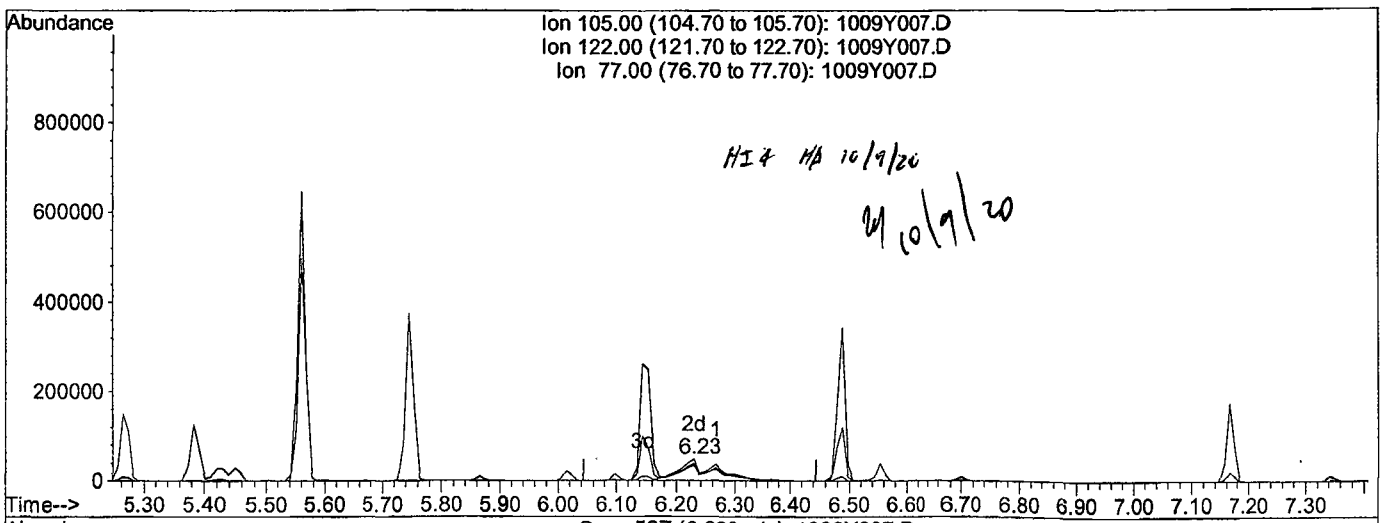
response 90420

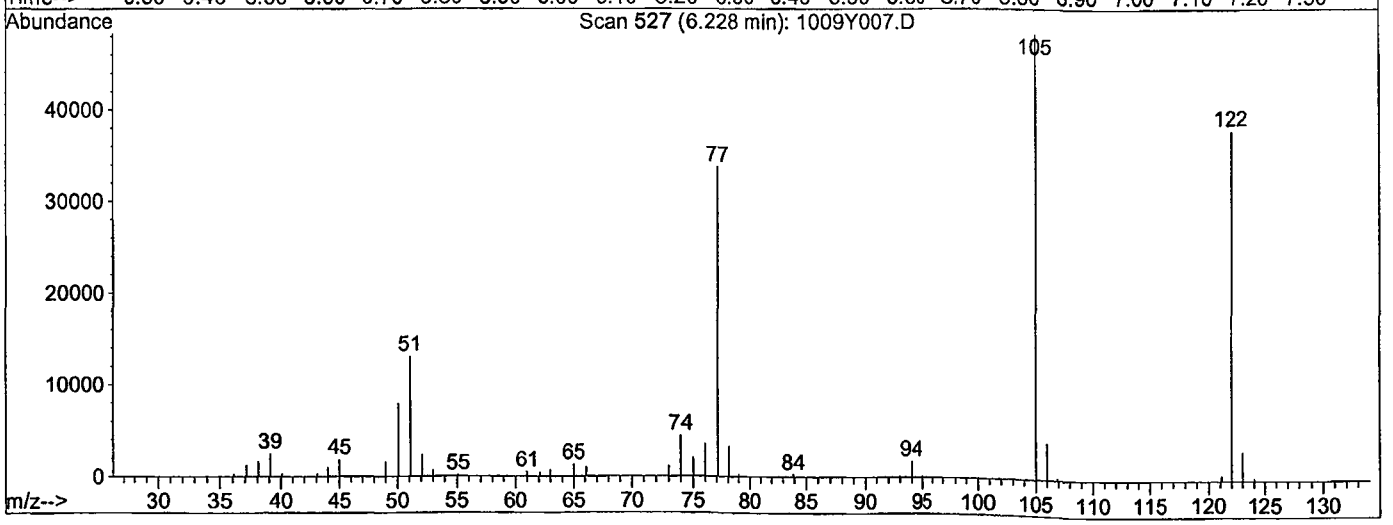
Ion	Exp%	Act%
105.00	100	100
122.00	78.10	80.14
77.00	70.50	68.43
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y007.D Vial: 7
Acq On : 9 Oct 20 12:56 Operator: MA
Sample : 40ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 14:40 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:32:33 2020
Response via : Multiple Level Calibration





TIC: 1009Y007.D

(27) Benzoic acid (TM)

6.23min 38.0214ppb m

response 206981

Ion	Exp%	Act%
105.00	100	100
122.00	78.10	78.47
77.00	70.50	69.98
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y008.D Vial: 8
Acq On : 9 Oct 20 13:22 Operator: MA
Sample : 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.12	152	216487	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	858051	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	523185	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.28	188	1022290	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	1056215	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.07	264	1013157	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.66	112	810719	100.80965 ppb	0.00
Spiked Amount 200.000			Recovery =	50.405%	
6) Phenol-D6 (S)	4.71	99	1029543	101.07379 ppb	0.00
Spiked Amount 200.000			Recovery =	50.537%	
22) Nitrobenzene-D5(S)	5.72	82	450529	49.93145 ppb	0.00
Spiked Amount 100.000			Recovery =	49.931%	
46) 2-Fluorobiphenyl(S)	7.78	172	1089455	49.97781 ppb	0.00
Spiked Amount 100.000			Recovery =	49.978%	
64) 2,4,6-Tribromophenol(S)	9.47	330	376831	102.47083 ppb	0.00
Spiked Amount 200.000			Recovery =	51.236%	
82) Terphenyl-D14(S)	12.16	244	1512475	50.30009 ppb	0.00
Spiked Amount 100.000			Recovery =	50.300%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.81	58	9503	4.78871	100
3) n-Nitrosodimethylamine	2.03	42	149986	57.15476 ppb	100
4) Pyridine	2.05	79	412325	50.76392 ppb	100
7) Phenol	4.73	94	607510	49.68959 ppb	100
8) Aniline	4.76	93	462784	54.73220 ppb	100
9) Bis (2-chloroethyl) ether	4.83	63	239837	49.81600 ppb	100
10) 2-Chlorophenol	4.89	128	492229	49.81609 ppb	100
11) 1,3-DCB	5.06	146	540948	50.28079 ppb	100
12) 1,4-DCB	5.14	146	544897	49.88162 ppb	100
13) Benzyl alcohol	5.27	108	277085	51.37147 ppb	100
14) 1,2-DCB	5.30	146	509402	49.82216 ppb	100
15) 2-Methylphenol	5.39	107	368851	48.46987 ppb	100
16) Bis (2-chloroisopropyl) et	5.43	45	311077	49.74805 ppb	100
17) Acetophenone	5.57	105	642698	53.29821 ppb	100
18) 3&4-Methylphenol	5.57	107	1047328	108.27957 ppb	100
19) n-Nitrosodi-n-propylamine	5.58	70	323078	51.10573 ppb	100
20) Hexachloroethane	5.68	117	194952	50.45345 ppb	100
23) Nitrobenzene	5.75	77	468128	50.77114 ppb	100
24) Isophorone	6.02	82	813175	50.83689 ppb	100
25) 2-Nitrophenol	6.10	139	289105	51.22948 ppb	100
26) 2,4-Dimethylphenol	6.15	122	442162	51.97885 ppb	100
27) Benzoic acid	6.24	105	299244	52.62886 ppb	100
28) Bis (2-chloroethoxy) metha	6.26	93	507198	50.48824 ppb	100
29) 2,4-Dichlorophenol	6.36	162	434049	50.68083 ppb	100
30) 1,2,4-Trichlorobenzene	6.47	180	487464	50.21579 ppb	100
31) 3,4-Dimethylphenol	6.49	107	602770	50.12575 ppb	100
32) Naphthalene	6.56	128	1419716	50.24709 ppb	100
33) 4-Chloroaniline	6.62	127	596438	53.68509 ppb	100
34) 2,6-Dichlorophenol	6.62	162	423025	49.64346 ppb	100
35) Hexachloropropene	6.66	213	368550	50.67301 ppb	100
36) Hexachlorobutadiene	6.70	225	298371	50.24233 ppb	100
37) Caprolactum	7.03	55	141614	49.77590 ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y008.D Vial: 8
Acq On : 9 Oct 20 13:22 Operator: MA
Sample : 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38)	4-Chloro-3-methylphenol	7.17	107	446433	51.73981	ppb	100
39)	2-Methylnaphthalene	7.35	142	963880	50.77549	ppb	100
40)	1-Methylnaphthalene	7.46	142	999858	51.23150	ppb	100
42)	Hexachlorocyclopentadiene	7.53	237	363392	60.31529	ppb	100
43)	1,2,4,5-Tetrachlorobenzene	7.53	216	532541	51.01654	ppb	100
44)	2,4,6-Trichlorophenol	7.67	196	360572	54.32568	ppb	100
45)	2,4,5-Trichlorophenol	7.71	196	364113	51.48213	ppb	100
47)	1,1'-Biphenyl	7.89	154	1244453	50.02296	ppb	100
48)	2-Chloronaphthalene	7.91	162	1001133	51.08831	ppb	100
49)	2-Nitroaniline	8.03	65	253004	51.32489	ppb	100
50)	Dimethyl phthalate	8.25	163	1185465	50.95528	ppb	100
51)	2,6-DNT	8.31	165	274265	51.02153	ppb	100
52)	Acenaphthylene	8.39	152	1549108	51.72394	ppb	100
53)	3-Nitroaniline	8.03	138	337593	51.68903	ppb	100
54)	Acenaphthene	8.59	154	1047109	54.24918	ppb	100
55)	2,4-Dinitrophenol	8.62	184	129461	46.09672	ppb	100
56)	4-Nitrophenol	8.69	65	191680	57.52659	ppb	100
57)	Dibenzofuran	8.79	168	1433529	51.49850	ppb	100
58)	2,4-DNT	8.78	165	384010	52.07589	ppb	100
59)	2,3,4,6-Tetrachlorophenol	8.93	232	314021	55.71448	ppb	100
60)	Diethyl phthalate	9.08	149	1167645	51.88694	ppb	100
61)	4-Chlorophenyl phenyl ethe	9.20	204	668203	51.82168	ppb	100
62)	Fluorene	9.19	166	1209118	51.56812	ppb	100
63)	4-Nitroaniline	8.50	138	276752	50.74759	ppb	100
66)	4,6-Dinitro-2-methylphenol	9.25	198	253948	50.39425	ppb	100
67)	Diphenyl amine	9.34	169	1971388	102.40596	ppb	100
68)	n-Nitrosodiphenylamine	9.34	169	1971388	102.40596	ppb	100
69)	1,2-Diphenylhydrazine	9.38	77	944276	46.91569	ppb	100
70)	4-Bromophenyl phenyl ether	9.77	248	387104	49.43848	ppb	100
71)	Hexachlorobenzene	9.83	284	421290	50.44535	ppb	100
72)	Atrazine	9.97	200	182289	25.55467	ppb	100
73)	Pentachlorophenol	10.05	266	285558	62.56813	ppb	100
74)	Phenanthrene	10.31	178	1753039	50.52497	ppb	100
75)	Anthracene	10.37	178	1815340	50.58338	ppb	100
76)	Carbazol	10.55	167	1623543	50.21471	ppb	100
77)	Di-n-butylphthalate	10.99	149	1976453	50.57972	ppb	100
78)	Fluoranthene	11.69	202	2036242	50.69560	ppb	100
80)	Benzidine	11.86	184	615350	51.07485	ppb	100
81)	Pyrene	11.95	202	2097962	50.44072	ppb	100
83)	Butyl benzylphthalate	12.74	149	900332	51.09854	ppb	100
84)	3,3'-Dichlorobenzidine	13.33	252	709576	51.27541	ppb	100
85)	Benz (a) anthracene	13.36	228	2138614	49.61159	ppb	100
86)	Bis (2-ethylhexyl) phthala	13.42	149	1255280	51.88457	ppb	100
87)	Chrysene	13.39	228	2029488	51.28463	ppb	100
88)	Di-n-octylphthalate	14.14	149	2084175	50.70638	ppb	100
90)	Benzo (b) fluoranthene	14.58	252	2061658	48.88471	ppb	100
91)	Benzo (k) fluoranthene	14.62	252	1871096	52.92638	ppb	100
92)	Benzo (a) pyrene	15.00	252	1897839	51.37113	ppb	100
93)	Indeno (1,2,3-cd) pyrene	16.75	276	2098572	56.50648	ppb	100
94)	Dibenz (a,h) anthracene	16.79	278	1855050	49.63555	ppb	100
95)	Benzo (g,h,i) perylene	17.25	276	1809092	49.71785	ppb	100

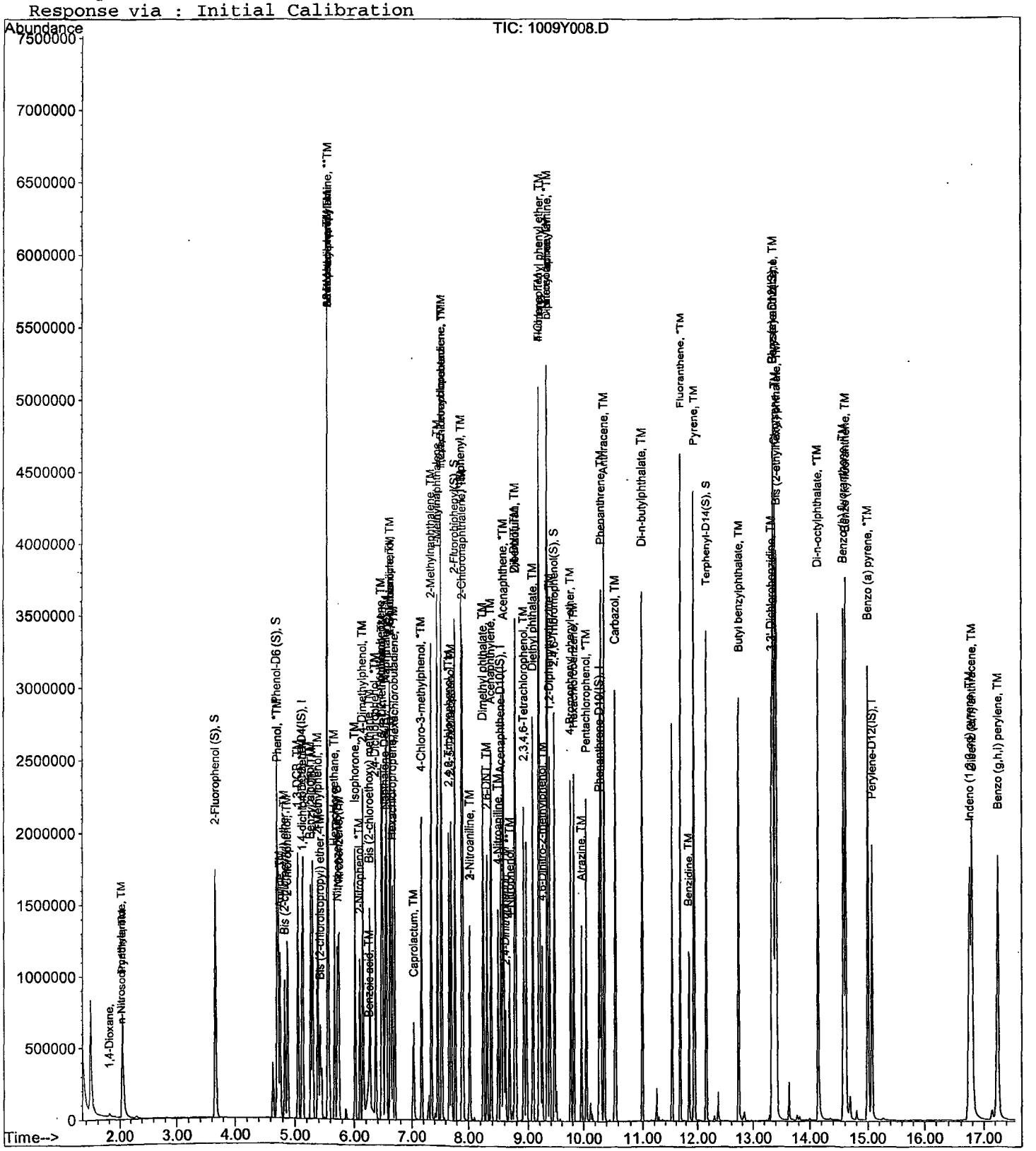
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y008.D Vial: 8
Acq On : 9 Oct 20 13:22 Operator: MA
Sample : 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y009.D Vial: 9
Acq On : 9 Oct 20 13:48 Operator: MA
Sample : 60ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.12	152	216571	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.54	136	878795	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	534725	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.28	188	1053468	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.37	240	1089141	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.07	264	1050067	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.66	112	1008016	125.29412 ppb	0.00
Spiked Amount 200.000			Recovery =	62.647%	
6) Phenol-D6 (S)	4.72	99	1279112	125.52613 ppb	0.00
Spiked Amount 200.000			Recovery =	62.763%	
22) Nitrobenzene-D5(S)	5.73	82	558172	60.40112 ppb	0.00
Spiked Amount 100.000			Recovery =	60.401%	
46) 2-Fluorobiphenyl(S)	7.78	172	1364427	61.24110 ppb	0.00
Spiked Amount 100.000			Recovery =	61.241%	
64) 2,4,6-Tribromophenol(S)	9.47	330	469118	124.81321 ppb	0.00
Spiked Amount 200.000			Recovery =	62.407%	
82) Terphenyl-D14(S)	12.15	244	1907032	61.50448 ppb	0.00
Spiked Amount 100.000			Recovery =	61.504%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.80	58	11498	5.79178	97
3) n-Nitrosodimethylamine	2.03	42	191741	73.03789 ppb	92
4) Pyridine	2.05	79	518538	63.81571 ppb	97
7) Phenol	4.73	94	748099	61.16494 ppb	90
8) Aniline	4.75	93	519488	61.41460 ppb	100
9) Bis (2-chloroethyl) ether	4.84	63	297281	61.72361 ppb	93
10) 2-Chlorophenol	4.88	128	615188	62.23602 ppb	97
11) 1,3-DCB	5.05	146	637943	59.27342 ppb	97
12) 1,4-DCB	5.13	146	653294	59.78144 ppb	97
13) Benzyl alcohol	5.26	108	342612	63.49552 ppb	94
14) 1,2-DCB	5.30	146	622802	60.88965 ppb	95
15) 2-Methylphenol	5.38	107	451461	59.30246 ppb	97
16) Bis (2-chloroisopropyl) et	5.42	45	380207	60.77988 ppb	99
17) Acetophenone	5.56	105	792795	65.72008 ppb	97
18) 3&4-Methylphenol	5.56	107	1271853	131.44142 ppb	95
19) n-Nitrosodi-n-propylamine	5.57	70	399356	63.14718 ppb	92
20) Hexachloroethane	5.67	117	234581	60.68586 ppb	87
23) Nitrobenzene	5.75	77	569847	60.34427 ppb	90
24) Isophorone	6.02	82	984676	60.10545 ppb	98
25) 2-Nitrophenol	6.10	139	357079	61.78090 ppb	89
26) 2,4-Dimethylphenol	6.15	122	544911	62.54555 ppb	97
27) Benzoic acid	6.27	105	385661	64.98344 ppb	95
28) Bis (2-chloroethoxy) metha	6.27	93	628272	61.06410 ppb	98
29) 2,4-Dichlorophenol	6.37	162	544386	62.06367 ppb	97
30) 1,2,4-Trichlorobenzene	6.47	180	598326	60.18124 ppb	96
31) 3,4-Dimethylphenol	6.49	107	762165	61.88477 ppb	99
32) Naphthalene	6.55	128	1729992	59.78318 ppb	99
33) 4-Chloroaniline	6.62	127	754065	66.27087 ppb	96
34) 2,6-Dichlorophenol	6.63	162	541705	62.07037 ppb	97
35) Hexachloropropene	6.66	213	447295	60.04818 ppb	99
36) Hexachlorobutadiene	6.70	225	369578	60.76379 ppb	99
37) Caprolactum	7.04	55	181238	62.19962 ppb	99

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y201009\1009Y009.D Vial: 9
Acq On : 9 Oct 20 13:48 Operator: MA
Sample : 60ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.18	107	559643	63.32936	ppb		95
39)	2-Methylnaphthalene	7.34	142	1177796	60.57965	ppb		99
40)	1-Methylnaphthalene	7.45	142	1234148	61.74353	ppb		99
42)	Hexachlorocyclopentadiene	7.53	237	516096	83.27665	ppb		99
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	668403	62.65001	ppb		98
44)	2,4,6-Trichlorophenol	7.67	196	440643	64.95683	ppb		97
45)	2,4,5-Trichlorophenol	7.71	196	470012	65.02106	ppb	#	91
47)	1,1'-Biphenyl	7.89	154	1591238	62.58220	ppb		98
48)	2-Chloronaphthalene	7.91	162	1245206	62.17213	ppb		97
49)	2-Nitroaniline	8.02	65	315928	62.70664	ppb		81
50)	Dimethyl phthalate	8.25	163	1479647	62.22764	ppb		99
51)	2,6-DNT	8.32	165	349882	63.68387	ppb		86
52)	Acenaphthylene	8.38	152	1881817	61.47692	ppb		99
53)	3-Nitroaniline	8.02	138	423264	63.40756	ppb		92
54)	Acenaphthene	8.59	154	1310275	66.41842	ppb		99
55)	2,4-Dinitrophenol	8.62	184	182908	58.39930	ppb		91
56)	4-Nitrophenol	8.70	65	246481	72.37691	ppb		96
57)	Dibenzofuran	8.79	168	1811009	63.65514	ppb		97
58)	2,4-DNT	8.78	165	497859	66.05799	ppb		95
59)	2,3,4,6-Tetrachlorophenol	8.93	232	395509	68.65791	ppb		96
60)	Diethyl phthalate	9.08	149	1460883	63.51663	ppb		97
61)	4-Chlorophenyl phenyl ethe	9.20	204	843816	64.02884	ppb		92
62)	Fluorene	9.19	166	1504737	62.79109	ppb		100
63)	4-Nitroaniline	8.50	138	347408	62.32887	ppb		92
66)	4,6-Dinitro-2-methylphenol	9.26	198	331067	63.75362	ppb		96
67)	Diphenyl amine	9.34	169	2444378	123.21803	ppb		99
68)	n-Nitrosodiphenylamine	9.34	169	2444378	123.21803	ppb		99
69)	1,2-Diphenylhydrazine	9.39	77	1175442	56.67260	ppb		91
70)	4-Bromophenyl phenyl ether	9.77	248	490153	60.74659	ppb	#	88
71)	Hexachlorobenzene	9.82	284	519777	60.39622	ppb	#	83
72)	Atrazine	9.97	200	229178	31.17709	ppb		96
73)	Pentachlorophenol	10.05	266	370963	78.87552	ppb		97
74)	Phenanthrene	10.30	178	2171501	60.73335	ppb		100
75)	Anthracene	10.37	178	2316830	62.64649	ppb		99
76)	Carbazol	10.56	167	2027916	60.86531	ppb		98
77)	Di-n-butylphthalate	10.99	149	2587194	64.24978	ppb		99
78)	Fluoranthene	11.70	202	2578280	62.29077	ppb		98
80)	Benzidine	11.85	184	797359	62.63243	ppb	#	98
81)	Pyrene	11.96	202	2633995	61.41393	ppb		99
83)	Butyl benzylphthalate	12.74	149	1122344	61.77318	ppb	#	81
84)	3,3'-Dichlorobenzidine	13.33	252	913703	64.03000	ppb		98
85)	Benz (a) anthracene	13.35	228	2708309	60.92803	ppb		100
86)	Bis (2-ethylhexyl) phthala	13.41	149	1563586	62.67403	ppb	#	94
87)	Chrysene	13.40	228	2513650	61.59902	ppb		99
88)	Di-n-octylphthalate	14.15	149	2692154	63.51796	ppb		96
90)	Benzo (b) fluoranthene	14.58	252	2761032	63.16662	ppb		99
91)	Benzo (k) fluoranthene	14.62	252	2236355	61.03467	ppb		99
92)	Benzo (a) pyrene	15.00	252	2399690	62.67216	ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.76	276	2670757	69.38547	ppb		99
94)	Dibenz (a,h) anthracene	16.80	278	2342060	60.46373	ppb		97
95)	Benzo (g,h,i) perylene	17.26	276	2296516	60.89490	ppb		100

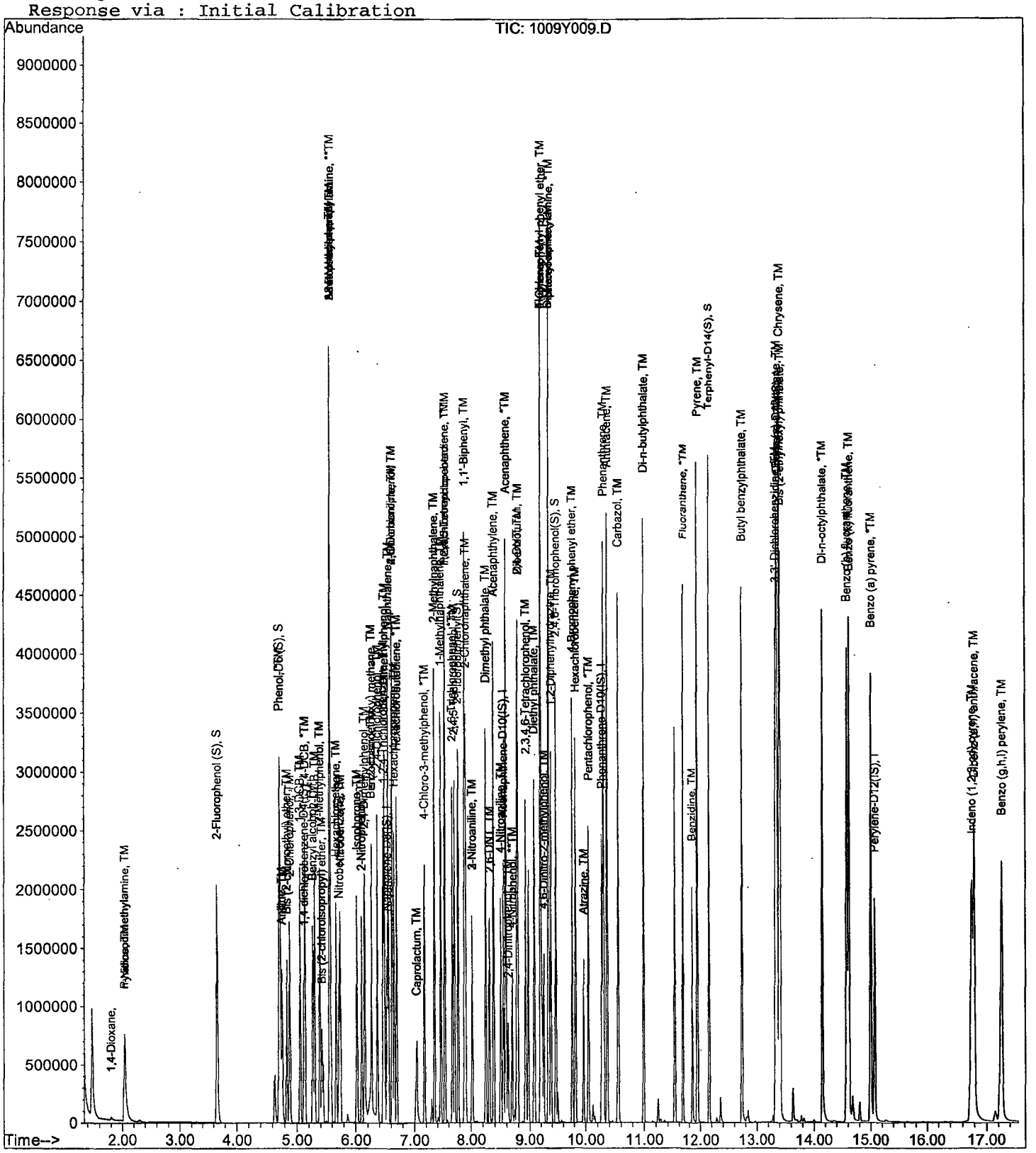
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y009.D Vial: 9
Acq On : 9 Oct 20 13:48 Operator: MA
Sample : 60ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y010.D Vial: 10
Acq On : 9 Oct 20 14:13 Operator: MA
Sample : 80ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:31 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	199908	40.00000 ppb		0.00
21) Napthalene-D8(IS)	6.53	136	822746	40.00000 ppb		0.00
41) Acenaphthene-D10(IS)	8.55	164	511195	40.00000 ppb		0.00
65) Phenanthrene-D10(IS)	10.27	188	992166	40.00000 ppb		0.00
79) Chrysene-D12(IS)	13.37	240	1029591	40.00000 ppb		0.00
89) Perylene-D12(IS)	15.07	264	1003036	40.00000 ppb		0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.66	112	1307580	176.07661 ppb		0.00
Spiked Amount 200.000			Recovery	= 88.039%		
6) Phenol-D6 (S)	4.72	99	1668447	177.38141 ppb		0.01
Spiked Amount 200.000			Recovery	= 88.691%		
22) Nitrobenzene-D5(S)	5.73	82	724439	83.73375 ppb		0.00
Spiked Amount 100.000			Recovery	= 83.734%		
46) 2-Fluorobiphenyl(S)	7.78	172	1772965	83.24089 ppb		0.00
Spiked Amount 100.000			Recovery	= 83.241%		
64) 2,4,6-Tribromophenol(S)	9.48	330	664642	184.97376 ppb		0.00
Spiked Amount 200.000			Recovery	= 92.487%		
82) Terphenyl-D14(S)	12.16	244	2566414	87.55780 ppb		0.00
Spiked Amount 100.000			Recovery	= 87.558%		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.80	58	16101	8.78643		93
3) n-Nitrosodimethylamine	2.03	42	245706	101.39560 ppb		98
4) Pyridine	2.05	79	674374	89.91207 ppb		97
7) Phenol	4.73	94	946942	83.87586 ppb		94
8) Aniline	4.76	93	595648	76.28794 ppb		100
9) Bis (2-chloroethyl) ether	4.83	63	381747	85.86772 ppb		97
10) 2-Chlorophenol	4.88	128	777140	85.17327 ppb		94
11) 1,3-DCB	5.06	146	823911	82.93322 ppb		99
12) 1,4-DCB	5.14	146	836229	82.89972 ppb		99
13) Benzyl alcohol	5.27	108	435239	87.38531 ppb		97
14) 1,2-DCB	5.30	146	779749	82.58828 ppb		98
15) 2-Methylphenol	5.39	107	577025	82.11400 ppb		97
16) Bis (2-chloroisopropyl) et	5.43	45	483628	83.75703 ppb		99
17) Acetophenone	5.57	105	1004527	90.21296 ppb		97
18) 3&4-Methylphenol	5.57	107	1626995	182.15944 ppb		97
19) n-Nitrosodi-n-propylamine	5.60	70	504518	86.42523 ppb		97
20) Hexachloroethane	5.67	117	301343	84.45510 ppb		76
23) Nitrobenzene	5.75	77	744324	84.19022 ppb		97
24) Isophorone	6.02	82	1271610	82.90795 ppb		96
25) 2-Nitrophenol	6.11	139	461361	85.26142 ppb		98
26) 2,4-Dimethylphenol	6.15	122	688220	84.37619 ppb		97
27) Benzoic acid	6.28	105	470524	83.22559 ppb		92
28) Bis (2-chloroethoxy) metha	6.26	93	802093	83.26927 ppb		100
29) 2,4-Dichlorophenol	6.37	162	698975	85.11654 ppb		98
30) 1,2,4-Trichlorobenzene	6.47	180	757691	81.40239 ppb		97
31) 3,4-Dimethylphenol	6.49	107	976963	84.72951 ppb		99
32) Naphthalene	6.56	128	2249726	83.03981 ppb		100
33) 4-Chloroaniline	6.63	127	917641	86.14072 ppb	#	92
34) 2,6-Dichlorophenol	6.63	162	689918	84.43855 ppb		99
35) Hexachloropropene	6.65	213	576739	82.70026 ppb		98
36) Hexachlorobutadiene	6.70	225	468931	82.35111 ppb		99
37) Caprolactum	7.05	55	228208	83.65485 ppb		99

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y201009\1009Y010.D Vial: 10
Acq On : 9 Oct 20 14:13 Operator: MA
Sample : 80ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:31 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.17	107	714169	86.32107	ppb		93
39)	2-Methylnaphthalene	7.35	142	1555911	85.47975	ppb		100
40)	1-Methylnaphthalene	7.46	142	1569961	83.89477	ppb		100
42)	Hexachlorocyclopentadiene	7.54	237	481920	81.37334	ppb		98
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	851260	83.46201	ppb		99
44)	2,4,6-Trichlorophenol	7.67	196	579509	89.35977	ppb		96
45)	2,4,5-Trichlorophenol	7.71	196	595401	86.15859	ppb		96
47)	1,1'-Biphenyl	7.89	154	2005696	82.51344	ppb		99
48)	2-Chloronaphthalene	7.91	162	1580519	82.54641	ppb		98
49)	2-Nitroaniline	8.03	65	410286	85.18361	ppb		93
50)	Dimethyl phthalate	8.26	163	1938212	85.26492	ppb		98
51)	2,6-DNT	8.32	165	439964	83.76622	ppb		92
52)	Acenaphthylene	8.39	152	2480932	84.78001	ppb		100
53)	3-Nitroaniline	8.03	138	542486	85.00846	ppb		97
54)	Acenaphthene	8.59	154	1597192	84.68902	ppb		99
55)	2,4-Dinitrophenol	8.62	184	244773	76.18312	ppb		92
56)	4-Nitrophenol	8.70	65	312094	95.86188	ppb		90
57)	Dibenzofuran	8.79	168	2310205	84.93903	ppb		99
58)	2,4-DNT	8.78	165	635264	88.16924	ppb		90
59)	2,3,4,6-Tetrachlorophenol	8.93	232	513386	93.22279	ppb		99
60)	Diethyl phthalate	9.09	149	1863223	84.73850	ppb		98
61)	4-Chlorophenyl phenyl ethe	9.20	204	1101504	87.42947	ppb		97
62)	Fluorene	9.19	166	1957666	85.45154	ppb		99
63)	4-Nitroaniline	8.51	138	444753	83.46650	ppb	#	73
66)	4,6-Dinitro-2-methylphenol	9.26	198	429156	87.74880	ppb	#	87
67)	Diphenyl amine	9.35	169	3170279	169.68381	ppb		100
68)	n-Nitrosodiphenylamine	9.35	169	3170279	169.68381	ppb		100
69)	1,2-Diphenylhydrazine	9.38	77	1513036	77.45656	ppb		100
70)	4-Bromophenyl phenyl ether	9.77	248	638815	84.06251	ppb		98
71)	Hexachlorobenzene	9.83	284	684444	84.44378	ppb		99
72)	Atrazine	9.97	200	286672	41.40806	ppb		99
73)	Pentachlorophenol	10.05	266	481637	108.73478	ppb		99
74)	Phenanthrene	10.31	178	2802193	83.21513	ppb		100
75)	Anthracene	10.37	178	2915092	83.69353	ppb		100
76)	Carbazol	10.56	167	2679776	85.39951	ppb		96
77)	Di-n-butylphthalate	10.99	149	3209640	84.63227	ppb		100
78)	Fluoranthene	11.69	202	3251828	83.41770	ppb		99
80)	Benzidine	11.85	184	891315	72.96077	ppb	#	96
81)	Pyrene	11.95	202	3422797	84.42138	ppb		100
83)	Butyl benzylphthalate	12.74	149	1466865	85.40504	ppb		99
84)	3,3'-Dichlorobenzidine	13.34	252	1151082	85.33046	ppb	#	95
85)	Benz (a) anthracene	13.36	228	3475329	82.70547	ppb		100
86)	Bis (2-ethylhexyl) phthala	13.42	149	2058241	87.27331	ppb		98
87)	Chrysene	13.40	228	3362601	87.16933	ppb		100
88)	Di-n-octylphthalate	14.15	149	3486511	87.01760	ppb		99
90)	Benzo (b) fluoranthene	14.58	252	3298763	79.00740	ppb		98
91)	Benzo (k) fluoranthene	14.62	252	3148776	89.96594	ppb		98
92)	Benzo (a) pyrene	15.01	252	3081952	84.26473	ppb		98
93)	Indeno (1,2,3-cd) pyrene	16.76	276	3443782	93.66348	ppb		100
94)	Dibenz (a,h) anthracene	16.81	278	3035076	82.02892	ppb		96
95)	Benzo (g,h,i) perylene	17.27	276	2946677	81.79833	ppb		97

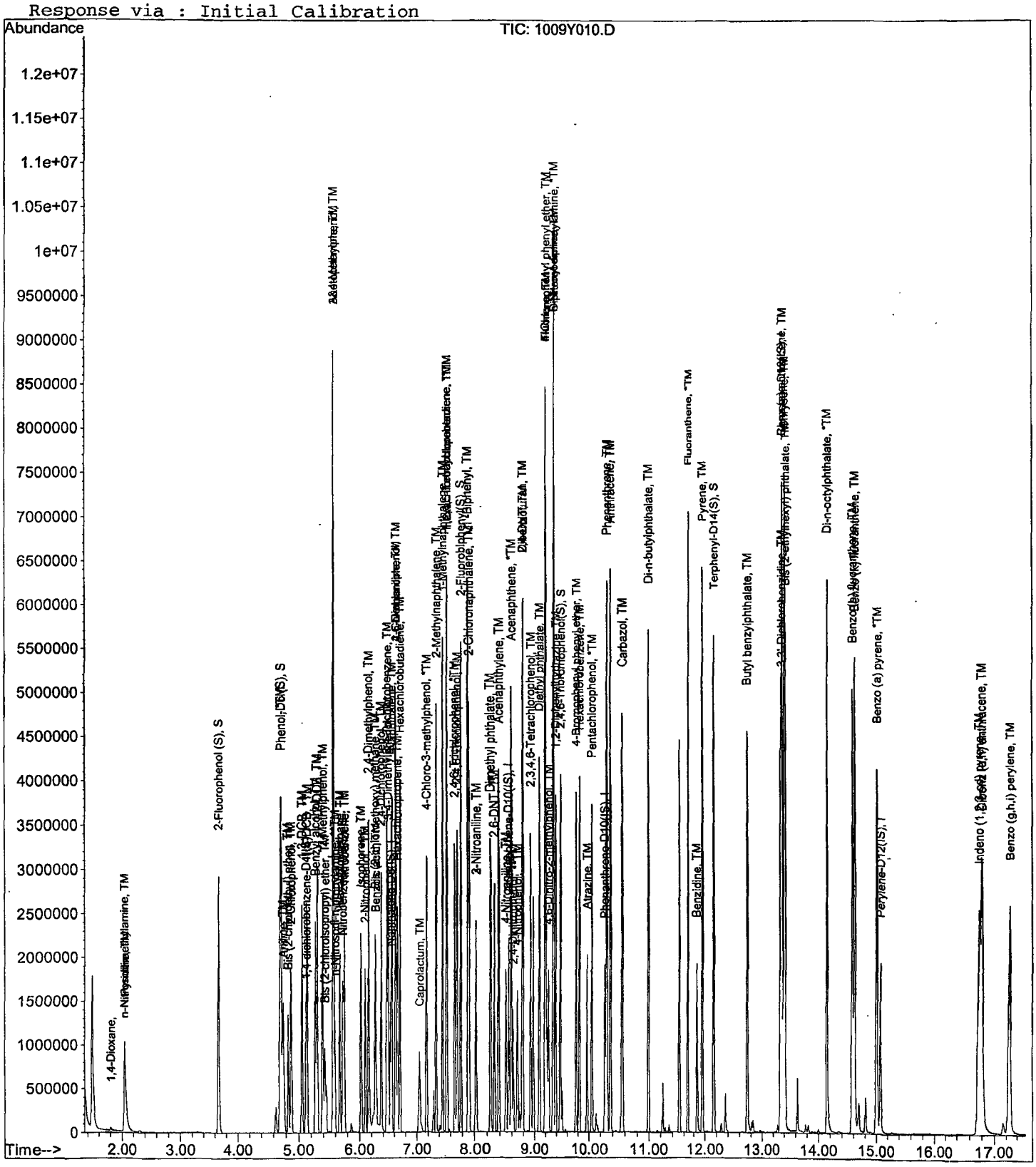
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y010.D Vial: 10
Acq On : 9 Oct 20 14:13 Operator: MA
Sample : 80ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:31 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y011.D Vial: 11
Acq On : 9 Oct 20 14:38 Operator: MA
Sample : 100ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:48 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:48:37 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.12	152	234180	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	972023	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.56	164	590025	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.28	188	1196320	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.38	240	1245991	40.00000 ppb	0.02
89) Perylene-D12(IS)	15.08	264	1198755	40.00000 ppb	0.02
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.67	112	1936097	213.31149 ppb	0.01
Spiked Amount 200.000			Recovery	= 106.656%	
6) Phenol-D6 (S)	4.73	99	2450115	214.12626 ppb	0.02
Spiked Amount 200.000			Recovery	= 107.063%	
22) Nitrobenzene-D5(S)	5.73	82	1058683	104.12375 ppb	0.01
Spiked Amount 100.000			Recovery	= 104.124%	
46) 2-Fluorobiphenyl(S)	7.78	172	2603920	104.70949 ppb	0.00
Spiked Amount 100.000			Recovery	= 104.709%	
64) 2,4,6-Tribromophenol(S)	9.49	330	1038078	243.20617 ppb	0.01
Spiked Amount 200.000			Recovery	= 121.603%	
82) Terphenyl-D14(S)	12.16	244	3840871	106.94020 ppb	0.00
Spiked Amount 100.000			Recovery	= 106.940%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.81	58	18198	8.66444	96
3) n-Nitrosodimethylamine	2.03	42	339228	104.48193 ppb	99
4) Pyridine	2.05	79	921056	101.43260 ppb	98
7) Phenol	4.74	94	1379601	105.26624 ppb	88
8) Aniline	4.76	93	764224	75.33429 ppb	100
9) Bis (2-chloroethyl) ether	4.84	63	542689	102.47863 ppb	97
10) 2-Chlorophenol	4.89	128	1124033	103.02814 ppb	97
11) 1,3-DCB	5.06	146	1160721	99.54557 ppb	97
12) 1,4-DCB	5.14	146	1193185	100.25418 ppb	98
13) Benzyl alcohol	5.28	108	637158	104.43694 ppb	97
14) 1,2-DCB	5.30	146	1125378	100.61606 ppb	99
15) 2-Methylphenol	5.39	107	839012	103.90643 ppb	97
16) Bis (2-chloroisopropyl) et	5.43	45	696813	100.35717 ppb	100
17) Acetophenone	5.57	105	1482877	105.28115 ppb	89
18) 3&4-Methylphenol	5.58	107	2373694	211.68938 ppb	96
19) n-Nitrosodi-n-propylamine	5.60	70	713820	100.61361 ppb	96
20) Hexachloroethane	5.68	117	425851	101.53827 ppb	93
23) Nitrobenzene	5.75	77	1059867	101.22529 ppb	90
24) Isophorone	6.04	82	1847460	103.03444 ppb	98
25) 2-Nitrophenol	6.11	139	657732	104.31740 ppb	89
26) 2,4-Dimethylphenol	6.16	122	1017298	103.28111 ppb	98
27) Benzoic acid	6.32	105	647906	90.40887 ppb	95
28) Bis (2-chloroethoxy) metha	6.27	93	1161742	102.05205 ppb	98
29) 2,4-Dichlorophenol	6.38	162	1014783	103.55586 ppb	98
30) 1,2,4-Trichlorobenzene	6.47	180	1122465	102.78304 ppb	99
31) 3,4-Dimethylphenol	6.50	107	1392083	101.16261 ppb	99
32) Naphthalene	6.56	128	3258921	102.24622 ppb	99
33) 4-Chloroaniline	6.63	127	1265642	94.38186 ppb	98
34) 2,6-Dichlorophenol	6.64	162	1011491	104.73826 ppb	97
35) Hexachloropropene	6.66	213	854165	107.47308 ppb	99
36) Hexachlorobutadiene	6.70	225	686312	102.32413 ppb	99
37) Caprolactum	7.08	55	334644	104.86032 ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y011.D Vial: 11
Acq On : 9 Oct 20 14:38 Operator: MA
Sample : 100ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:48 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:48:37 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.18	107	1042700	104.11119 ppb		94
39)	2-Methylnaphthalene	7.35	142	2223045	103.34364 ppb		100
40)	1-Methylnaphthalene	7.46	142	2296876	103.10412 ppb		99
42)	Hexachlorocyclopentadiene	7.54	237	974336	110.88585 ppb		99
43)	1,2,4,5-Tetrachlorobenzene	7.55	216	1284262	107.88153 ppb		98
44)	2,4,6-Trichlorophenol	7.68	196	841149	106.44387 ppb		98
45)	2,4,5-Trichlorophenol	7.72	196	887080	107.15160 ppb		96
47)	1,1'-Biphenyl	7.90	154	3032625	106.85905 ppb		99
48)	2-Chloronaphthalene	7.92	162	2355156	104.92684 ppb		98
49)	2-Nitroaniline	8.03	65	608089	108.58922 ppb		81
50)	Dimethyl phthalate	8.26	163	2796128	104.11497 ppb		99
51)	2,6-DNT	8.32	165	645515	108.19239 ppb		98
52)	Acenaphthylene	8.39	152	3616990	105.04111 ppb		100
53)	3-Nitroaniline	8.04	138	821534	111.08507 ppb		96
54)	Acenaphthene	8.59	154	2335278	102.06025 ppb		99
55)	2,4-Dinitrophenol	8.63	184	389765	105.34252 ppb		95
56)	4-Nitrophenol	8.71	65	474507	119.01514 ppb		97
57)	Dibenzofuran	8.80	168	3493296	107.17658 ppb		96
58)	2,4-DNT	8.79	165	930649	109.63231 ppb		89
59)	2,3,4,6-Tetrachlorophenol	8.94	232	752679	108.86610 ppb		94
60)	Diethyl phthalate	9.10	149	2737766	104.37047 ppb		100
61)	4-Chlorophenyl phenyl ethe	9.21	204	1664349	110.03777 ppb		87
62)	Fluorene	9.20	166	2940280	109.05817 ppb		100
63)	4-Nitroaniline	8.51	138	625089	100.98447 ppb		96
66)	4,6-Dinitro-2-methylphenol	9.27	198	649905	128.95708 ppb		99
67)	Diphenyl amine	9.36	169	4748951	209.69183 ppb		100
68)	n-Nitrosodiphenylamine	9.36	169	4748951	209.69183 ppb		100
69)	1,2-Diphenylhydrazine	9.39	77	2225656	101.51080 ppb		90
70)	4-Bromophenyl phenyl ether	9.77	248	951261	106.18835 ppb	#	90
71)	Hexachlorobenzene	9.83	284	1013970	105.31842 ppb	#	85
72)	Atrazine	9.98	200	428874	51.53333 ppb		98
73)	Pentachlorophenol	10.06	266	744723	118.13417 ppb		98
74)	Phenanthrene	10.31	178	4159271	102.39611 ppb		99
75)	Anthracene	10.38	178	4367316	103.45209 ppb		99
76)	Carbazol	10.56	167	3878089	102.12814 ppb		99
77)	Di-n-butylphthalate	11.00	149	4933775	107.36559 ppb		99
78)	Fluoranthene	11.70	202	5012062	106.71067 ppb		98
80)	Benzidine	11.86	184	1349972	97.67324 ppb	#	98
81)	Pyrene	11.96	202	5009915	100.79799 ppb		100
83)	Butyl benzylphthalate	12.74	149	2184357	106.66433 ppb		88
84)	3,3'-Dichlorobenzidine	13.34	252	1673720	101.70510 ppb		98
85)	Benz (a) anthracene	13.36	228	5304645	105.99160 ppb		100
86)	Bis (2-ethylhexyl) phthala	13.42	149	3048518	106.15141 ppb		99
87)	Chrysene	13.40	228	5009685	104.01725 ppb		99
88)	Di-n-octylphthalate	14.15	149	5241077	111.45361 ppb	#	93
90)	Benzo (b) fluoranthene	14.59	252	5155192	110.83607 ppb		99
91)	Benzo (k) fluoranthene	14.63	252	4542937	100.83056 ppb		98
92)	Benzo (a) pyrene	15.02	252	4685422	110.17104 ppb		98
93)	Indeno (1,2,3-cd) pyrene	16.77	276	5149976	107.25377 ppb		97
94)	Dibenz (a,h) anthracene	16.83	278	4621429	110.48379 ppb		95
95)	Benzo (g,h,i) perylene	17.29	276	4391087	105.26855 ppb		98

(#) = qualifier out of range (m) = manual integration

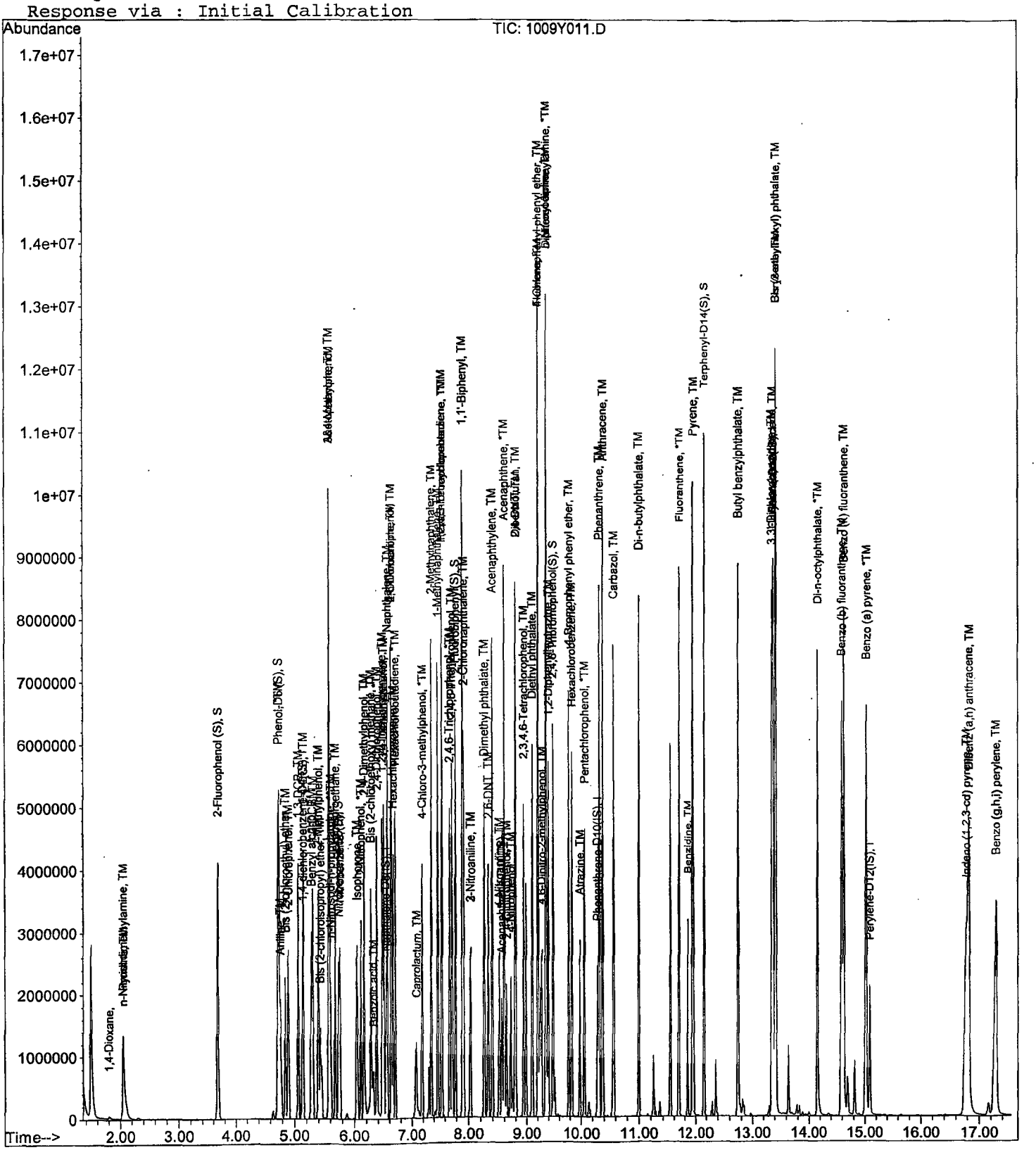
Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y011.D
Acq On : 9 Oct 20 14:38
Sample : 100ug/mL 8270 7/22/20
Misc :

Vial: 11
Operator: MA
Inst : Yoda
Multiplr: 1.00

Quant Time: Oct 9 14:48 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 9 Oct 20 15:04
Instrument: Yoda
Initial Cal. Date: 10/09/20
Data File: 1009Y012.D

		Compound	MEAN	CCRF	%D		%Drift
1		1,4-Dioxane	0.3588	0.3840	7.0		
2	TM	n-Nitrosodimethylamine	0.5546	0.6000	8.2	TM	
3	TM	Pyridine	1.551	1.511	2.6	TM	
4	*TM	Phenol	2.239	2.219	0.88	*TM	
5	TM	Aniline	1.755	1.852	5.5	TM	
6	TM	Bis (2-chloroethyl) ether	0.9045	0.8733	3.4	TM	
7	TM	2-Chlorophenol	1.864	1.873	0.51	TM	
8	TM	1,3-DCB	1.992	2.059	3.4	TM	
9	*TM	1,4-DCB	2.033	2.070	1.8	*TM	
10	TM	Benzyl alcohol	1.042	1.029	1.2	TM	
11	TM	1,2-DCB	1.910	1.941	1.6	TM	
12	TM	2-Methylphenol	1.379	1.341	2.8	TM	
13	TM	Bis (2-chloroisopropyl) ether	1.186	1.133	4.5	TM	
14	TM	Acetophenone	2.406	2.331	3.1	TM	
15	TM	3&4-Methylphenol	1.915	1.919	0.18	TM	
16	**TM	n-Nitrosodi-n-propylamine	1.212	1.184	2.3	**TM	
17	TM	Hexachloroethane	0.7164	0.7439	3.8	TM	
18	TM	Nitrobenzene	0.4309	0.4428	2.8	TM	
19	TM	Isophorone	0.7379	0.7698	4.3	TM	
20	*TM	2-Nitrophenol	0.2595	0.2685	3.5	*TM	
21	TM	2,4-Dimethylphenol	0.4053	0.4011	1.0	TM	
22	TML	Benzoic acid	0.2281	0.3005	32	TML	9.1
23	TM	Bis (2-chloroethoxy) methane	0.4685	0.4517	3.6	TM	
24	*TM	2,4-Dichlorophenol	0.4033	0.4044	0.27	*TM	
25	TM	1,2,4-Trichlorobenzene	0.4494	0.4623	2.9	TM	
26	TM	3,4-Dimethylphenol	0.5663	0.5509	2.7	TM	
27	TM	Naphthalene	1.312	1.311	0.02	TM	
28	TM	4-Chloroaniline	0.5518	0.5476	0.77	TM	
29	TM	2,6-Dichlorophenol	0.3974	0.3950	0.60	TM	
30	TM	Hexachloropropene	0.3271	0.3385	3.5	TM	
31	*TM	Hexachlorobutadiene	0.2760	0.2880	4.3	*TM	
32	TM	Caprolactum	0.1313	0.1297	1.2	TM	
33	*TM	4-Chloro-3-methylphenol	0.4121	0.4175	1.3	*TM	
34	TM	2-Methylnaphthalene	0.8852	0.9660	9.1	TM	
35	TM	1-Methylnaphthalene	0.9167	0.9017	1.6	TM	
36	**TM	Hexachlorocyclopentadiene	0.5574	0.5527	0.84	**TM	
37	TM	1,2,4,5-Tetrachlorobenzene	0.8070	0.7867	2.5	TM	
38	*TM	2,4,6-Trichlorophenol	0.5357	0.5317	0.76	*TM	
39	TM	2,4,5-Trichlorophenol	0.5612	0.5730	2.1	TM	
40	TM	1,1'-Biphenyl	1.924	1.880	2.3	TM	
		Average			3.4		

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: 0

SDG No:
Date Analyzed: 9 Oct 20 15:04
Instrument: Yoda
Cal. Date: 10/09/20
Data File: 1009Y012.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	2-Chloronaphthalene	1.522	1.530	0.52	TM	
42	TM	2-Nitroaniline	0.3796	0.3919	3.2	TM	
43	TM	Dimethyl phthalate	1.821	1.754	3.7	TM	
44	TM	2,6-DNT	0.4045	0.4267	5.5	TM	
45	TM	Acenaphthylene	2.334	2.281	2.3	TM	
46	TM	3-Nitroaniline	0.5014	0.5212	4.0	TM	
47	*TM	Acenaphthene	1.551	1.552	0.05	*TM	
48	**TML	2,4-Dinitrophenol	0.1987	0.2081	4.7	**TML	0.27
49	**TM	4-Nitrophenol	0.2824	0.2943	4.2	**TM	
50	TM	Dibenzofuran	2.210	2.160	2.3	TM	
51	TM	2,4-DNT	0.5755	0.6014	4.5	TM	
52	TM	2,3,4,6-Tetrachlorophenol	0.4687	0.4860	3.7	TM	
53	TM	Diethyl phthalate	1.778	1.698	4.5	TM	
54	TM	4-Chlorophenyl phenyl ether	1.025	0.9806	4.4	TM	
55	TM	Fluorene	1.828	1.777	2.8	TM	
56	TM	4-Nitroaniline	0.4196	0.4194	0.06	TM	
57	TM	4,6-Dinitro-2-methylphenol	0.1946	0.2041	4.9	TM	
58	TM	Diphenyl amine	0.7572	0.7578	0.07	TM	
59	*TM	n-Nitrosodiphenylamine	0.7572	0.7578	0.07	*TM	
60	TM	1,2-Diphenylhydrazine	0.7331	0.7678	4.7	TM	
61	TM	4-Bromophenyl phenyl ether	0.2995	0.2940	1.8	TM	
62	TM	Hexachlorobenzene	0.3219	0.3228	0.27	TM	
63	TM	Atrazine	0.2783	0.2851	2.5	TM	
64	*TM	Pentachlorophenol	0.2190	0.2289	4.5	*TM	
65	TM	Phenanthrene	1.358	1.342	1.2	TM	
66	TM	Anthracene	1.412	1.409	0.20	TM	
67	TM	Carbazol	1.270	1.264	0.43	TM	
68	TM	Di-n-butylphthalate	1.536	1.511	1.7	TM	
69	*TM	Fluoranthene	1.570	1.560	0.67	*TM	
70	TM	Benzidine	0.4483	0.5235	17	TM	
71	TM	Pyrene	1.596	1.586	0.61	TM	
72	TM	Butyl benzylphthalate	0.6574	0.6699	1.9	TM	
73	TM	3,3'-Dichlorobenzidine	0.5283	0.5702	7.9	TM	
74	TM	Benz (a) anthracene	1.607	1.576	1.9	TM	
75	TM	Bis (2-ethylhexyl) phthalate	0.9220	0.9398	1.9	TM	
76	TM	Chrysene	1.546	1.515	2.0	TM	
77	*TM	Di-n-octylphthalate	1.510	1.579	4.6	*TM	
78	TM	Benzo (b) fluoranthene	1.552	1.621	4.4	TM	
79	TM	Benzo (k) fluoranthene	1.503	1.517	0.88	TM	
80	*TM	Benzo (a) pyrene	1.419	1.463	3.1	*TM	
		Average			3.0		

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: 0

SDG No:
Date Analyzed: 9 Oct 20 15:04
Instrument: Yoda
Cal. Date: 10/09/20
Data File: 1009Y012.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	Indeno (1,2,3-cd) pyrene	1.602	1.568	2.1	TM	
82	TM	Dibenz (a,h) anthracene	1.396	1.434	2.7	TM	
83	TM	Benzo (g,h,i) perylene	1.392	1.406	1.00	TM	
84							
85							
86							
87							
88							
89							
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110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			1.9		

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y012.D Vial: 12
Acq On : 9 Oct 20 15:04 Operator: MA
Sample : SS 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 15:03 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.12	152	216183	40.00000	ppb		0.00
21) Napthalene-D8(IS)	6.53	136	873280	40.00000	ppb		0.00
41) Acenaphthene-D10(IS)	8.55	164	536403	40.00000	ppb		0.00
65) Phenanthrene-D10(IS)	10.27	188	1035458	40.00000	ppb		0.00
79) Chrysene-D12(IS)	13.37	240	1061772	40.00000	ppb		0.00
89) Perylene-D12(IS)	15.07	264	1035051	40.00000	ppb		0.00
System Monitoring Compounds							
5) 2-Fluorophenol (S)	0.00	112	0	0.00000	ppb		
Spiked Amount 200.000			Recovery	=	0.000%		
6) Phenol-D6 (S)	0.00	99	0	0.00000	ppb		
Spiked Amount 200.000			Recovery	=	0.000%		
22) Nitrobenzene-D5(S)	5.68	82	44035	4.82064	ppb		-0.05
Spiked Amount 100.000			Recovery	=	4.821%		
46) 2-Fluorobiphenyl(S)	7.71	172	695	0.03074	ppb		-0.06
Spiked Amount 100.000			Recovery	=	0.031%		
64) 2,4,6-Tribromophenol(S)	9.47	330	157	0.04046	ppb		0.00
Spiked Amount 200.000			Recovery	=	0.020%		
82) Terphenyl-D14(S)	0.00	244	0	0.00000	ppb		
Spiked Amount 100.000			Recovery	=	0.000%		
Target Compounds							Qvalue
2) 1,4-Dioxane	1.81	58	10377	5.35201			83
3) n-Nitrosodimethylamine	2.03	42	162139	54.09601	ppb		99
4) Pyridine	2.05	79	408244	48.70119	ppb		100
7) Phenol	4.72	94	599636	49.56231	ppb		94
8) Aniline	4.76	93	500352	52.75609	ppb		97
9) Bis (2-chloroethyl) ether	4.83	63	236003	48.27565	ppb		97
10) 2-Chlorophenol	4.88	128	506162	50.25677	ppb		95
11) 1,3-DCB	5.06	146	556468	51.69667	ppb		98
12) 1,4-DCB	5.14	146	559251	50.90140	ppb		100
13) Benzyl alcohol	5.27	108	278105	49.37920	ppb		98
14) 1,2-DCB	5.30	146	524514	50.79889	ppb		99
15) 2-Methylphenol	5.39	107	362346	48.61004	ppb		99
16) Bis (2-chloroisopropyl) et	5.43	45	306191	47.76973	ppb		97
17) Acetophenone	5.57	105	629817	48.43822	ppb		97
18) 3&4-Methylphenol	5.57	107	1037012	100.18123	ppb		97
19) n-Nitrosodi-n-propylamine	5.57	70	320028	48.86346	ppb		91
20) Hexachloroethane	5.68	117	201028	51.92266	ppb		95
23) Nitrobenzene	5.74	77	483369	51.38537	ppb		89
24) Isophorone	6.02	82	840280	52.16202	ppb		98
25) 2-Nitrophenol	6.10	139	293131	51.74788	ppb	#	81
26) 2,4-Dimethylphenol	6.15	122	437860	49.48015	ppb		98
27) Benzoic acid	6.24	105	327995m	54.56581	ppb		97
28) Bis (2-chloroethoxy) metha	6.26	93	493099	48.21356	ppb		100
29) 2,4-Dichlorophenol	6.37	162	441395	50.13626	ppb		99
30) 1,2,4-Trichlorobenzene	6.47	180	504605	51.43079	ppb		98
31) 3,4-Dimethylphenol	6.49	107	601322	48.63904	ppb		98
32) Naphthalene	6.56	128	1431422	49.98782	ppb		100
33) 4-Chloroaniline	6.62	127	597741	49.61508	ppb		100
34) 2,6-Dichlorophenol	6.63	162	431213	49.70021	ppb		99
35) Hexachloropropene	6.66	213	369517	51.75060	ppb		98
36) Hexachlorobutadiene	6.70	225	314356	52.16765	ppb		99
37) Caprolactum	7.03	55	141607	49.38964	ppb		95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y012.D Vial: 12
Acq On : 9 Oct 20 15:04 Operator: MA
Sample : SS 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 15:03 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.17	107	455719	50.64752 ppb		99
39)	2-Methylnaphthalene	7.35	142	1054475	54.56257 ppb		100
40)	1-Methylnaphthalene	7.46	142	984333	49.18170 ppb		100
42)	Hexachlorocyclopentadiene	7.54	237	370560	49.57797 ppb		99
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	527503	48.74136 ppb		100
44)	2,4,6-Trichlorophenol	7.66	196	356488	49.62173 ppb		96
45)	2,4,5-Trichlorophenol	7.71	196	384178	51.04434 ppb		99
47)	1,1'-Biphenyl	7.89	154	1260850	48.86920 ppb		99
48)	2-Chloronaphthalene	7.91	162	1025569	50.25867 ppb		99
49)	2-Nitroaniline	8.02	65	262797	51.62014 ppb		76
50)	Dimethyl phthalate	8.25	163	1175916	48.16279 ppb		99
51)	2,6-DNT	8.31	165	286088	52.74354 ppb		98
52)	Acenaphthylene	8.38	152	1529580	48.86112 ppb		99
53)	3-Nitroaniline	8.03	138	349489	51.98079 ppb		95
54)	Acenaphthene	8.58	154	1040624	50.02546 ppb		99
55)	2,4-Dinitrophenol	8.62	184	139500	50.13590 ppb		98
56)	4-Nitrophenol	8.70	65	197361	52.10820 ppb		93
57)	Dibenzofuran	8.79	168	1448178	48.87263 ppb		99
58)	2,4-DNT	8.78	165	403252	52.25266 ppb		98
59)	2,3,4,6-Tetrachlorophenol	8.93	232	325882	51.84686 ppb		99
60)	Diethyl phthalate	9.08	149	1138241	47.73036 ppb		97
61)	4-Chlorophenyl phenyl ethe	9.20	204	657483	47.81467 ppb		97
62)	Fluorene	9.19	166	1191367	48.60649 ppb		99
63)	4-Nitroaniline	8.50	138	281204	49.97047 ppb		95
66)	4,6-Dinitro-2-methylphenol	9.25	198	264110	52.42572 ppb		91
67)	Diphenyl amine	9.34	169	1961662	100.07437 ppb		99
68)	n-Nitrosodiphenylamine	9.34	169	1961662	100.07437 ppb		99
69)	1,2-Diphenylhydrazine	9.38	77	993810	52.36878 ppb		97
70)	4-Bromophenyl phenyl ether	9.76	248	380543	49.07901 ppb	#	81
71)	Hexachlorobenzene	9.83	284	417763	50.13304 ppb		95
72)	Atrazine	9.97	200	184523	25.61674 ppb		98
73)	Pentachlorophenol	10.05	266	296210	52.24180 ppb		99
74)	Phenanthrene	10.31	178	1736593	49.39457 ppb		99
75)	Anthracene	10.37	178	1823356	49.90120 ppb		100
76)	Carbazol	10.55	167	1636229	49.78363 ppb		100
77)	Di-n-butylphthalate	10.99	149	1955769	49.17204 ppb		100
78)	Fluoranthene	11.69	202	2019048	49.66528 ppb		99
80)	Benzidine	11.85	184	694739	58.38120 ppb	#	96
81)	Pyrene	11.95	202	2104725	49.69360 ppb		100
83)	Butyl benzylphthalate	12.73	149	889142	50.95072 ppb	#	77
84)	3,3'-Dichlorobenzidine	13.33	252	756835	53.96905 ppb		100
85)	Benz (a) anthracene	13.36	228	2092220	49.05758 ppb		99
86)	Bis (2-ethylhexyl) phthala	13.42	149	1247309	50.96766 ppb		99
87)	Chrysene	13.39	228	2011174	49.00363 ppb		99
88)	Di-n-octylphthalate	14.14	149	2096116	52.30853 ppb		99
90)	Benzo (b) fluoranthene	14.58	252	2096677	52.20793 ppb		99
91)	Benzo (k) fluoranthene	14.62	252	1962159	50.43806 ppb		100
92)	Benzo (a) pyrene	15.00	252	1893209	51.55680 ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.75	276	2028571	48.92899 ppb		98
94)	Dibenz (a,h) anthracene	16.79	278	1855439	51.37332 ppb		99
95)	Benzo (g,h,i) perylene	17.25	276	1818788	50.49837 ppb		99

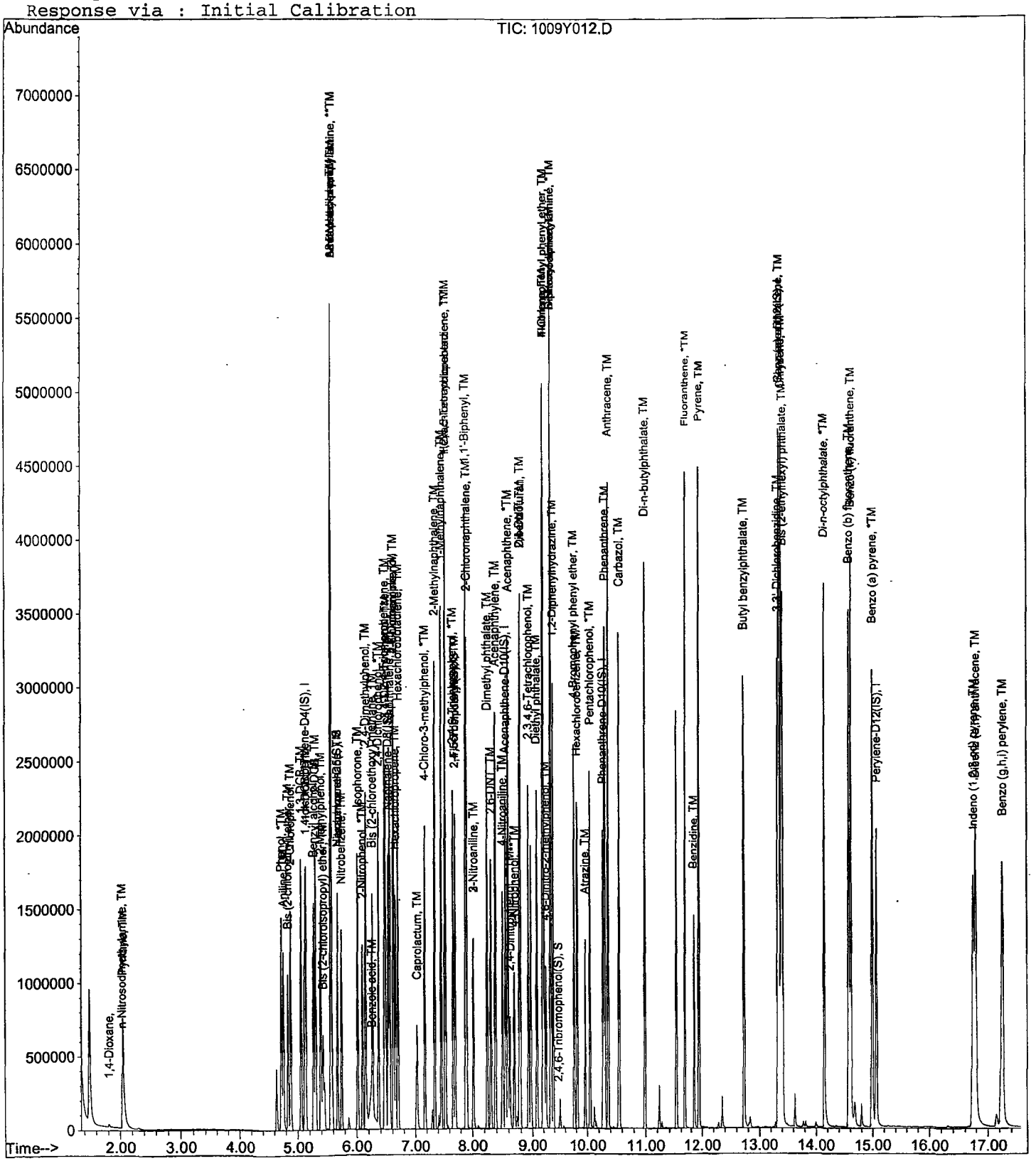
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y012.D Vial: 12
Acq On : 9 Oct 20 15:04 Operator: MA
Sample : SS 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 15:03 2020 Quant Results File: Y1009.RES

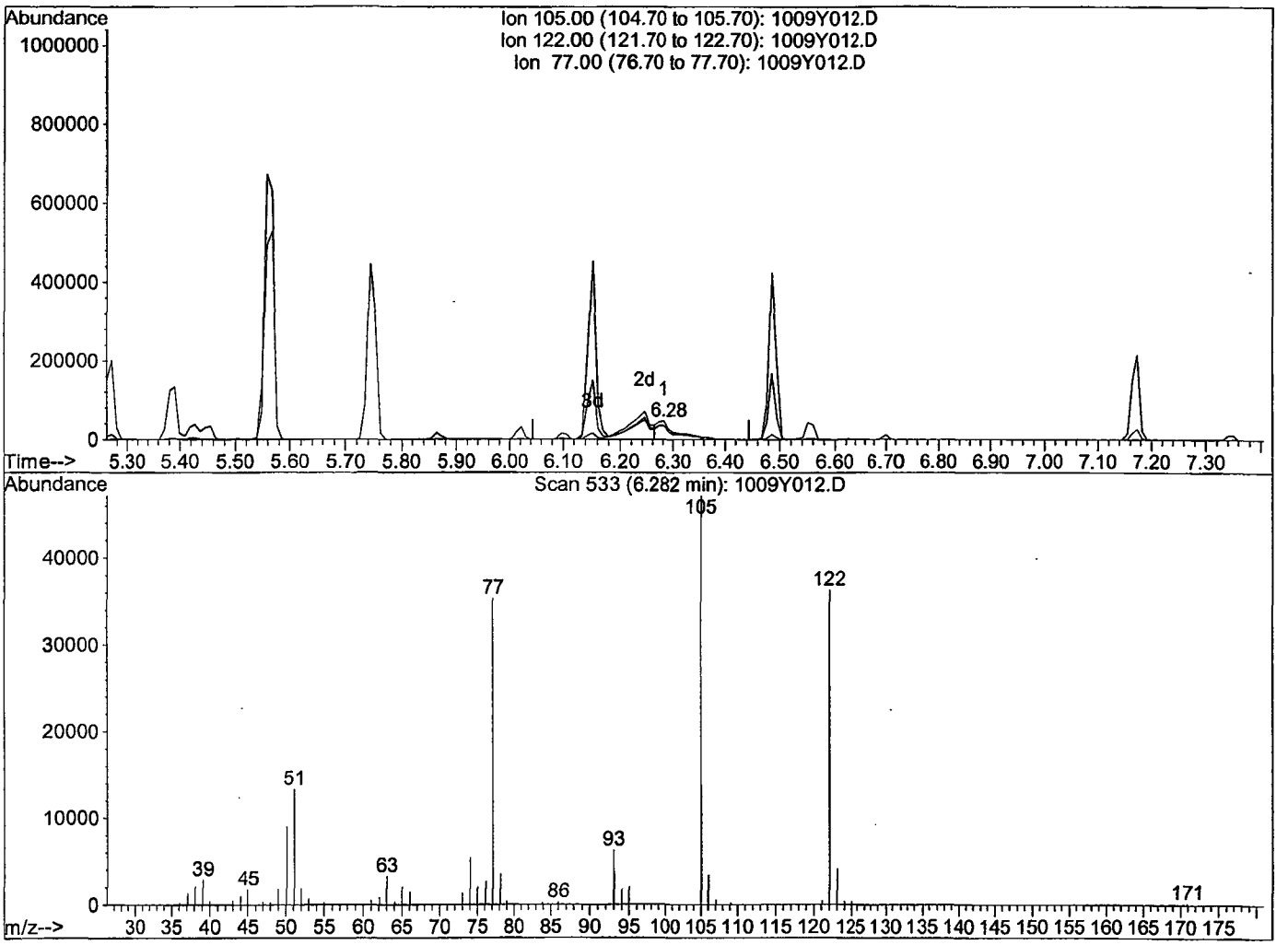
Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y012.D Vial: 12
Acq On : 9 Oct 20 15:04 Operator: MA
Sample : SS 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 15:03 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Multiple Level Calibration



TIC: 1009Y012.D

(27) Benzoic acid (TM)

6.28min 25.1987ppb

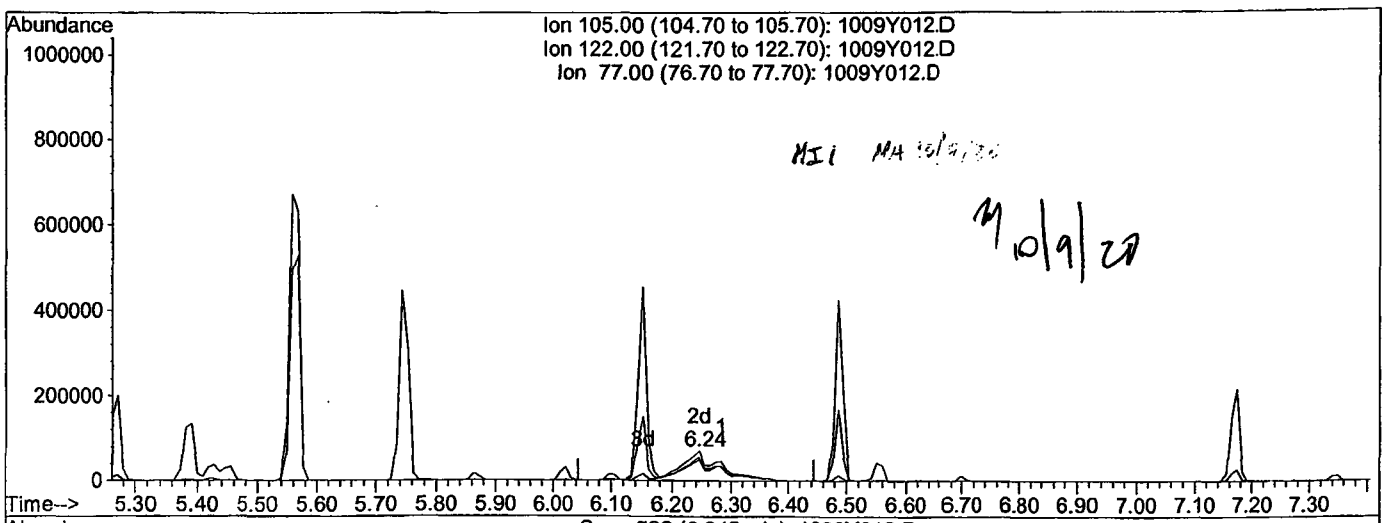
response 119810

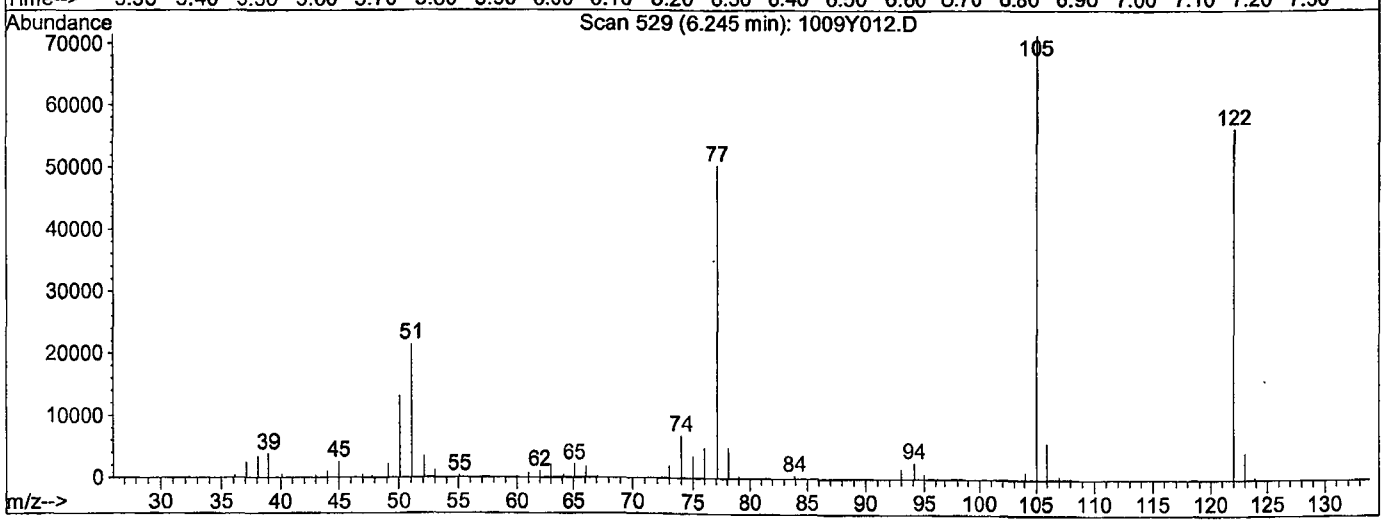
Ion	Exp%	Act%
105.00	100	100
122.00	78.10	76.27
77.00	70.50	74.55
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y012.D Vial: 12
Acq On : 9 Oct 20 15:04 Operator: MA
Sample : SS 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 15:03 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Multiple Level Calibration





TIC: 1009Y012.D

(27) Benzoic acid (TM)

6.24min 54.5658ppb m

response 327995

Ion	Exp%	Act%
105.00	100	100
122.00	78.10	78.87
77.00	70.50	70.48
0.00	0.00	0.00

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/29/20
Matrix: Instrument: Yoda
Initial Cal. Date: 10/09/20
Data File: 1009Y294.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2		1,4-Dioxane	0.3588	0.4151	16		
3	TM	n-Nitrosodimethylamine	0.5546	0.6212	12	TM	
4	TM	Pyridine	1.551	1.760	13	TM	
5	S	2-Fluorophenol (S)	1.550	1.547	0.24	S	
6	S	Phenol-D6 (S)	1.954	1.970	0.81	S	
7	*TM	Phenol	2.239	2.250	0.52	*TM	
8	TM	Aniline	1.755	1.427	19	TM	
9	TM	Bis (2-chloroethyl) ether	0.9045	0.8791	2.8	TM	
10	TM	2-Chlorophenol	1.864	1.901	2.0	TM	
11	TM	1,3-DCB	1.992	2.026	1.7	TM	
12	*TM	1,4-DCB	2.033	2.051	0.90	*TM	
13	TM	Benzyl alcohol	1.042	1.041	0.11	TM	
14	TM	1,2-DCB	1.910	1.927	0.87	TM	
15	TM	2-Methylphenol	1.379	1.368	0.84	TM	
16	TM	Bis (2-chloroisopropyl) ether	1.186	1.157	2.4	TM	
17	TM	Acetophenone	2.406	2.350	2.3	TM	
18	TM	3&4-Methylphenol	1.915	1.944	1.5	TM	
19	**TM	n-Nitrosodi-n-propylamine	1.212	1.210	0.16	**TM	
20	TM	Hexachloroethane	0.7164	0.7072	1.3	TM	
21	I	Napthalene-D8(IS)	ISTD			I	
22	S	Nitrobenzene-D5(S)	0.4184	0.4229	1.1	S	
23	TM	Nitrobenzene	0.4309	0.4267	0.97	TM	
24	TM	Isophorone	0.7379	0.7320	0.79	TM	
25	*TM	2-Nitrophenol	0.2595	0.2646	2.0	*TM	
26	TM	2,4-Dimethylphenol	0.4053	0.4084	0.76	TM	
27	TML	Benzoic acid	0.2281	0.2927	28	TML	6.7
28	TM	Bis (2-chloroethoxy) methane	0.4685	0.4744	1.3	TM	
29	*TM	2,4-Dichlorophenol	0.4033	0.4094	1.5	*TM	
30	TM	1,2,4-Trichlorobenzene	0.4494	0.4532	0.85	TM	
31	TM	3,4-Dimethylphenol	0.5663	0.5689	0.47	TM	
32	TM	Naphthalene	1.312	1.328	1.2	TM	
33	TM	4-Chloroaniline	0.5518	0.5036	8.7	TM	
34	TM	2,6-Dichlorophenol	0.3974	0.4004	0.76	TM	
35	TM	Hexachloropropene	0.3271	0.3296	0.79	TM	
36	*TM	Hexachlorobutadiene	0.2760	0.2801	1.5	*TM	
37	TM	Caprolactum	0.1313	0.1291	1.7	TM	
38	*TM	4-Chloro-3-methylphenol	0.4121	0.4069	1.3	*TM	
39	TM	2-Methylnaphthalene	0.8852	0.8944	1.0	TM	
40	TM	1-Methylnaphthalene	0.9167	0.9263	1.0	TM	
		Average			3.5		

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: 0

SDG No:
Date Analyzed: 10/29/20
Instrument: Yoda
Cal. Date: 10/09/20
Data File: 1009Y294.D

		Compound	MEAN	CCRF	%D		%Drift
41	I	Acenaphthene-D10(IS)	ISTD			I	
42	**TM	Hexachlorocyclopentadiene	0.5574	0.5343	4.1	**TM	
43	TM	1,2,4,5-Tetrachlorobenzene	0.8070	0.8368	3.7	TM	
44	*TM	2,4,6-Trichlorophenol	0.5357	0.5477	2.2	*TM	
45	TM	2,4,5-Trichlorophenol	0.5612	0.5860	4.4	TM	
46	S	2-Fluorobiphenyl(S)	1.686	1.763	4.6	S	
47	TM	1,1'-Biphenyl	1.924	1.972	2.5	TM	
48	TM	2-Chloronaphthalene	1.522	1.581	3.9	TM	
49	TM	2-Nitroaniline	0.3796	0.3819	0.61	TM	
50	TM	Dimethyl phthalate	1.821	1.860	2.1	TM	
51	TM	2,6-DNT	0.4045	0.4333	7.1	TM	
52	TM	Acenaphthylene	2.334	2.445	4.8	TM	
53	TM	3-Nitroaniline	0.5014	0.5301	5.7	TM	
54	*TM	Acenaphthene	1.551	1.541	0.63	*TM	
55	**TML	2,4-Dinitrophenol	0.1987	0.1619	19	**TML	15
56	**TM	4-Nitrophenol	0.2824	0.2919	3.3	**TM	
57	TM	Dibenzofuran	2.210	2.249	1.8	TM	
58	TM	2,4-DNT	0.5755	0.6078	5.6	TM	
59	TM	2,3,4,6-Tetrachlorophenol	0.4687	0.4852	3.5	TM	
60	TM	Diethyl phthalate	1.778	1.798	1.1	TM	
61	TM	4-Chlorophenyl phenyl ether	1.025	1.042	1.6	TM	
62	TM	Fluorene	1.828	1.908	4.4	TM	
63	TM	4-Nitroaniline	0.4196	0.4370	4.1	TM	
64	S	2,4,6-Tribromophenol(S)	0.2894	0.3044	5.2	S	
65	I	Phenanthrene-D10(IS)	ISTD			I	
66	TM	4,6-Dinitro-2-methylphenol	0.1946	0.1905	2.1	TM	
67	TM	Diphenyl amine	0.7572	0.7901	4.3	TM	
68	*TM	n-Nitrosodiphenylamine	0.7572	0.7901	4.3	*TM	
69	TM	1,2-Diphenylhydrazine	0.7331	0.7313	0.25	TM	
70	TM	4-Bromophenyl phenyl ether	0.2995	0.3137	4.7	TM	
71	TM	Hexachlorobenzene	0.3219	0.3393	5.4	TM	
72	TM	Atrazine	0.2783	0.2797	0.51	TM	
73	*TM	Pentachlorophenol	0.2190	0.2259	3.1	*TM	
74	TM	Phenanthrene	1.358	1.404	3.4	TM	
75	TM	Anthracene	1.412	1.473	4.4	TM	
76	TM	Carbazol	1.270	1.292	1.7	TM	
77	TM	Di-n-butylphthalate	1.536	1.616	5.2	TM	
78	*TM	Fluoranthene	1.570	1.627	3.6	*TM	
79	I	Chrysene-D12(IS)	ISTD			I	
80	TM	Benzidine	0.4483	0.4566	1.9	TM	
		Average			3.8		

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: 0

SDG No:
Date Analyzed: 10/29/20
Instrument: Yoda
Cal. Date: 10/09/20
Data File: 1009Y294.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	Pyrene	1.596	1.658	3.9	TM	
82	S	Terphenyl-D14(S)	1.153	1.216	5.5	S	
83	TM	Butyl benzylphthalate	0.6574	0.6887	4.8	TM	
84	TM	3,3'-Dichlorobenzidine	0.5283	0.6103	16	TM	
85	TM	Benz (a) anthracene	1.607	1.645	2.4	TM	
86	TM	Bis (2-ethylhexyl) phthalate	0.9220	0.9852	6.9	TM	
87	TM	Chrysene	1.546	1.658	7.2	TM	
88	*TM	Di-n-octylphthalate	1.510	1.659	9.9	*TM	
89	I	Perylene-D12(IS)	ISTD			I	
90	TM	Benzo (b) fluoranthene	1.552	1.600	3.1	TM	
91	TM	Benzo (k) fluoranthene	1.503	1.534	2.0	TM	
92	*TM	Benzo (a) pyrene	1.419	1.529	7.7	*TM	
93	TM	Indeno (1,2,3-cd) pyrene	1.602	1.692	5.6	TM	
94	TM	Dibenz (a,h) anthracene	1.396	1.495	7.1	TM	
95	TM	Benzo (g,h,i) perylene	1.392	1.456	4.6	TM	
96							
97							
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			6.2		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y294.D Vial: 94
Acq On : 29 Oct 20 12:21 Operator: MA
Sample : 50ug/mL 8270 7/22/20 (6) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:19 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	178593	40.00000 ppb		0.00
21) Napthalene-D8(IS)	6.52	136	712817	40.00000 ppb		0.00
41) Acenaphthene-D10(IS)	8.55	164	427217	40.00000 ppb		0.00
65) Phenanthrene-D10(IS)	10.27	188	839951	40.00000 ppb		0.00
79) Chrysene-D12(IS)	13.36	240	866779	40.00000 ppb		0.00
89) Perylene-D12(IS)	15.06	264	851524	40.00000 ppb		0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.67	112	690564	99.76460 ppb		0.01
Spiked Amount 200.000			Recovery =	49.883%		
6) Phenol-D6 (S)	4.72	99	879658	100.80514 ppb		0.01
Spiked Amount 200.000			Recovery =	50.403%		
22) Nitrobenzene-D5(S)	5.73	82	376779	50.53230 ppb		0.00
Spiked Amount 100.000			Recovery =	50.532%		
46) 2-Fluorobiphenyl(S)	7.77	172	941638	52.29550 ppb		0.00
Spiked Amount 100.000			Recovery =	52.295%		
64) 2,4,6-Tribromophenol(S)	9.47	330	325121	105.19897 ppb		0.00
Spiked Amount 200.000			Recovery =	52.600%		
82) Terphenyl-D14(S)	12.15	244	1317822	52.74418 ppb		0.00
Spiked Amount 100.000			Recovery =	52.744%		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.81	58	9266	5.78488		94
3) n-Nitrosodimethylamine	2.03	42	138671	56.00419 ppb		95
4) Pyridine	2.06	79	392934	56.74094 ppb		96
7) Phenol	4.74	94	502327	50.25826 ppb		91
8) Aniline	4.75	93	318592	40.66201 ppb		94
9) Bis (2-chloroethyl) ether	4.83	63	196244	48.59192 ppb		90
10) 2-Chlorophenol	4.89	128	424304	50.99637 ppb		97
11) 1,3-DCB	5.05	146	452279	50.86112 ppb		99
12) 1,4-DCB	5.13	146	457894	50.44812 ppb		98
13) Benzyl alcohol	5.27	108	232376	49.94404 ppb		94
14) 1,2-DCB	5.30	146	430223	50.43684 ppb		95
15) 2-Methylphenol	5.39	107	305313	49.57982 ppb		98
16) Bis (2-chloroisopropyl) et	5.42	45	258336	48.78681 ppb		97
17) Acetophenone	5.56	105	524677	48.84531 ppb		87
18) 3&4-Methylphenol	5.57	107	867854	101.48605 ppb		98
19) n-Nitrosodi-n-propylamine	5.57	70	270111	49.92242 ppb		98
20) Hexachloroethane	5.67	117	157884	49.36232 ppb		94
23) Nitrobenzene	5.74	77	380187	49.51461 ppb		93
24) Isophorone	6.01	82	652270	49.60589 ppb		96
25) 2-Nitrophenol	6.10	139	235782	50.99375 ppb	#	89
26) 2,4-Dimethylphenol	6.15	122	363910	50.38081 ppb		98
27) Benzoic acid	6.27	105	260784	53.36598 ppb		98
28) Bis (2-chloroethoxy) metha	6.26	93	422696	50.63359 ppb		98
29) 2,4-Dichlorophenol	6.38	162	364809	50.76513 ppb		94
30) 1,2,4-Trichlorobenzene	6.47	180	403819	50.42360 ppb		95
31) 3,4-Dimethylphenol	6.50	107	506928	50.23422 ppb		92
32) Naphthalene	6.55	128	1182884	50.60741 ppb		99
33) 4-Chloroaniline	6.62	127	448756	45.63378 ppb		97
34) 2,6-Dichlorophenol	6.63	162	356779	50.37802 ppb		99
35) Hexachloropropene	6.65	213	293710	50.39357 ppb		99
36) Hexachlorobutadiene	6.70	225	249555	50.73659 ppb		100
37) Caprolactum	7.04	55	115039	49.15546 ppb		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y294.D Vial: 94
Acq On : 29 Oct 20 12:21 Operator: MA
Sample : 50ug/mL 8270 7/22/20 (6) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:19 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.18	107	362562	49.36496	ppb		97
39)	2-Methylnaphthalene	7.34	142	796965	50.52115	ppb		98
40)	1-Methylnaphthalene	7.45	142	825344	50.52100	ppb		99
42)	Hexachlorocyclopentadiene	7.53	237	285312	47.92840	ppb		99
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	446879	51.84481	ppb		97
44)	2,4,6-Trichlorophenol	7.67	196	292465	51.11443	ppb		97
45)	2,4,5-Trichlorophenol	7.72	196	312939	52.20565	ppb		98
47)	1,1'-Biphenyl	7.88	154	1052915	51.23984	ppb		99
48)	2-Chloronaphthalene	7.91	162	844427	51.95782	ppb		95
49)	2-Nitroaniline	8.03	65	203963	50.30288	ppb		98
50)	Dimethyl phthalate	8.25	163	993162	51.07379	ppb		97
51)	2,6-DNT	8.32	165	231367	53.55669	ppb		82
52)	Acenaphthylene	8.38	152	1305921	52.37823	ppb		99
53)	3-Nitroaniline	8.03	138	283087	52.86545	ppb		98
54)	Acenaphthene	8.58	154	823174	49.68572	ppb		99
55)	2,4-Dinitrophenol	8.62	184	86448	42.65728	ppb		95
56)	4-Nitrophenol	8.72	65	155865	51.66971	ppb		95
57)	Dibenzofuran	8.79	168	1201090	50.89346	ppb		93
58)	2,4-DNT	8.78	165	324574	52.80661	ppb		94
59)	2,3,4,6-Tetrachlorophenol	8.93	232	259125	51.76236	ppb		97
60)	Diethyl phthalate	9.07	149	960137	50.55177	ppb		97
61)	4-Chlorophenyl phenyl ethe	9.19	204	556545	50.81823	ppb		99
62)	Fluorene	9.19	166	1018669	52.18245	ppb		99
63)	4-Nitroaniline	8.50	138	233351	52.06481	ppb		98
66)	4,6-Dinitro-2-methylphenol	9.25	198	200006	48.94194	ppb	#	85
67)	Diphenyl amine	9.34	169	1659123	104.34120	ppb		99
68)	n-Nitrosodiphenylamine	9.34	169	1659123	104.34120	ppb		99
69)	1,2-Diphenylhydrazine	9.37	77	767814	49.87738	ppb		99
70)	4-Bromophenyl phenyl ether	9.76	248	329377	52.36775	ppb		99
71)	Hexachlorobenzene	9.82	284	356222	52.69791	ppb		95
72)	Atrazine	9.96	200	146827	25.12799	ppb		99
73)	Pentachlorophenol	10.05	266	237200	51.57172	ppb		98
74)	Phenanthrene	10.30	178	1474461	51.70029	ppb		99
75)	Anthracene	10.36	178	1546550	52.17735	ppb		99
76)	Carbazol	10.55	167	1356170	50.86689	ppb		98
77)	Di-n-butylphthalate	10.98	149	1696955	52.59561	ppb		99
78)	Fluoranthene	11.69	202	1708486	51.80793	ppb		97
80)	Benzidine	11.86	184	494734	50.92675	ppb		99
81)	Pyrene	11.95	202	1796322	51.95319	ppb		99
83)	Butyl benzylphthalate	12.73	149	746218	52.38028	ppb		87
84)	3,3'-Dichlorobenzidine	13.33	252	661230	57.75891	ppb		98
85)	Benz (a) anthracene	13.35	228	1782144	51.18756	ppb		100
86)	Bis (2-ethylhexyl) phthala	13.39	149	1067394	53.42792	ppb	#	94
87)	Chrysene	13.39	228	1796165	53.61023	ppb		99
88)	Di-n-octylphthalate	14.13	149	1797536	54.94874	ppb	#	94
90)	Benzo (b) fluoranthene	14.57	252	1702802	51.53876	ppb		98
91)	Benzo (k) fluoranthene	14.61	252	1632297	51.00212	ppb		99
92)	Benzo (a) pyrene	14.99	252	1627488	53.87286	ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.74	276	1800633	52.79176	ppb		98
94)	Dibenz (a,h) anthracene	16.78	278	1591425	53.56018	ppb		99
95)	Benzo (g,h,i) perylene	17.25	276	1549929	52.30846	ppb		100

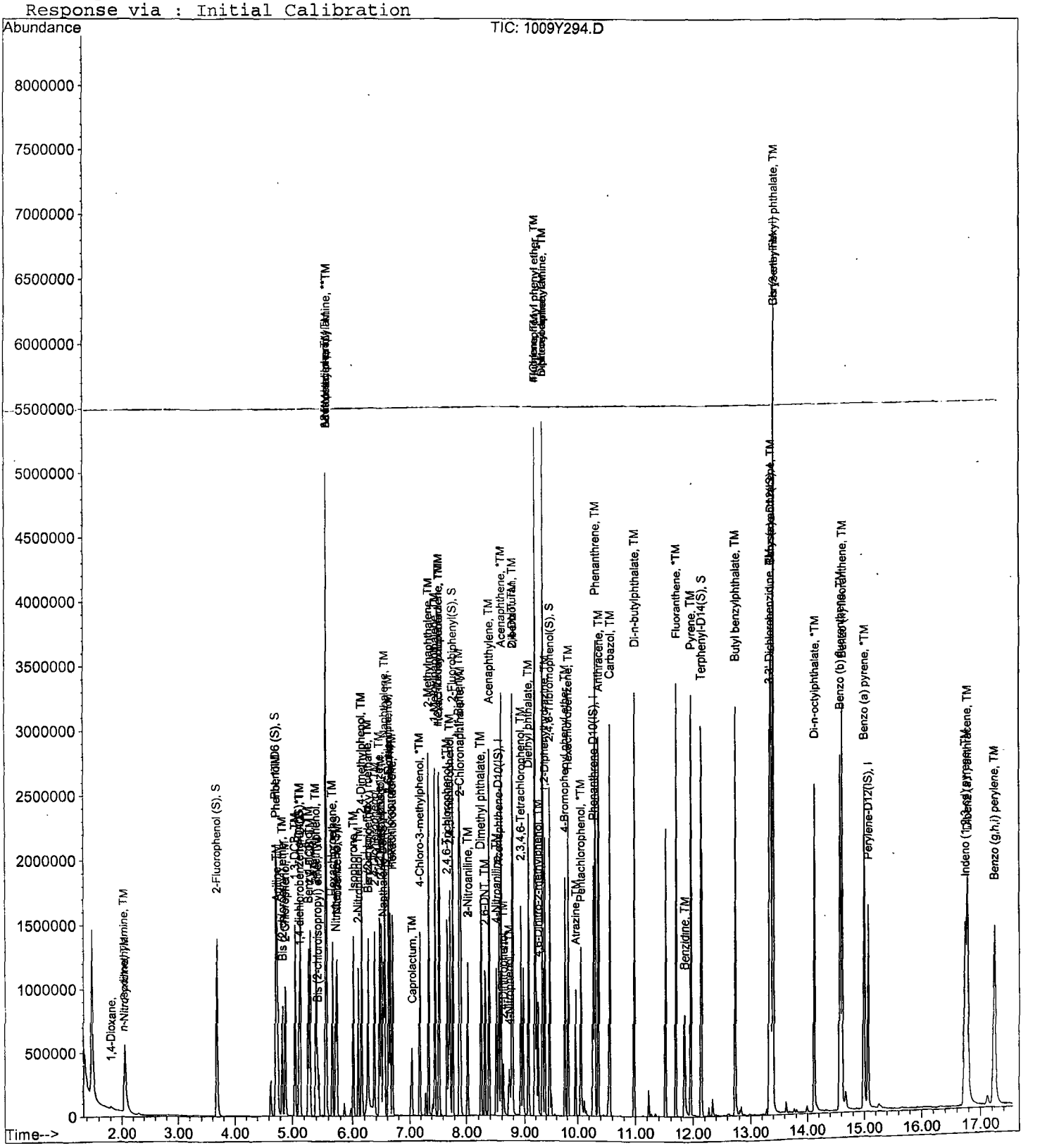
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y294.D Vial: 94
Acq On : 29 Oct 20 12:21 Operator: MA
Sample : 50ug/mL 8270 7/22/20 (6) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:19 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/29/20
Matrix: Instrument: Yoda
Initial Cal. Date: 10/09/20
Data File: 1009Y303.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2		1,4-Dioxane	0.3588	0.4016	12		
3	TM	n-Nitrosodimethylamine	0.5546	0.5564	0.33	TM	
4	TM	Pyridine	1.551	1.638	5.6	TM	
5	S	2-Fluorophenol (S)	1.550	1.545	0.35	S	
6	S	Phenol-D6 (S)	1.954	1.972	0.92	S	
7	*TM	Phenol	2.239	2.226	0.57	*TM	
8	TM	Aniline	1.755	1.681	4.2	TM	
9	TM	Bis (2-chloroethyl) ether	0.9045	0.8784	2.9	TM	
10	TM	2-Chlorophenol	1.864	1.870	0.37	TM	
11	TM	1,3-DCB	1.992	2.013	1.1	TM	
12	*TM	1,4-DCB	2.033	2.050	0.85	*TM	
13	TM	Benzyl alcohol	1.042	1.041	0.10	TM	
14	TM	1,2-DCB	1.910	1.925	0.77	TM	
15	TM	2-Methylphenol	1.379	1.389	0.72	TM	
16	TM	Bis (2-chloroisopropyl) ether	1.186	1.177	0.73	TM	
17	TM	Acetophenone	2.406	2.371	1.4	TM	
18	TM	3&4-Methylphenol	1.915	1.969	2.8	TM	
19	**TM	n-Nitrosodi-n-propylamine	1.212	1.197	1.2	**TM	
20	TM	Hexachloroethane	0.7164	0.7024	1.9	TM	
21	I	Napthalene-D8(IS)	ISTD			I	
22	S	Nitrobenzene-D5(S)	0.4184	0.4236	1.2	S	
23	TM	Nitrobenzene	0.4309	0.4224	2.0	TM	
24	TM	Isophorone	0.7379	0.7365	0.19	TM	
25	*TM	2-Nitrophenol	0.2595	0.2719	4.8	*TM	
26	TM	2,4-Dimethylphenol	0.4053	0.4189	3.4	TM	
27	TML	Benzoic acid	0.2281	0.2858	25	TML	4.6
28	TM	Bis (2-chloroethoxy) methane	0.4685	0.4673	0.26	TM	
29	*TM	2,4-Dichlorophenol	0.4033	0.4113	2.0	*TM	
30	TM	1,2,4-Trichlorobenzene	0.4494	0.4525	0.70	TM	
31	TM	3,4-Dimethylphenol	0.5663	0.5578	1.5	TM	
32	TM	Naphthalene	1.312	1.336	1.8	TM	
33	TM	4-Chloroaniline	0.5518	0.5208	5.6	TM	
34	TM	2,6-Dichlorophenol	0.3974	0.4034	1.5	TM	
35	TM	Hexachloropropene	0.3271	0.3274	0.10	TM	
36	*TM	Hexachlorobutadiene	0.2760	0.2714	1.7	*TM	
37	TM	Caprolactum	0.1313	0.1338	1.9	TM	
38	*TM	4-Chloro-3-methylphenol	0.4121	0.4049	1.8	*TM	
39	TM	2-Methylnaphthalene	0.8852	0.9112	2.9	TM	
40	TM	1-Methylnaphthalene	0.9167	0.9309	1.5	TM	
		Average			2.6		

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: 0

SDG No:
Date Analyzed: 10/29/20
Instrument: Yoda
Cal. Date: 10/09/20
Data File: 1009Y303.D

		Compound	MEAN	CCRF	%D	%Drift	
41	I	Acenaphthene-D10(IS)	ISTD			I	
42	**TM	Hexachlorocyclopentadiene	0.5574	0.4422	21	**TM	*NT
43	TM	1,2,4,5-Tetrachlorobenzene	0.8070	0.8085	0.17	TM	
44	*TM	2,4,6-Trichlorophenol	0.5357	0.5353	0.08	*TM	
45	TM	2,4,5-Trichlorophenol	0.5612	0.5747	2.4	TM	
46	S	2-Fluorobiphenyl(S)	1.686	1.745	3.5	S	
47	TM	1,1'-Biphenyl	1.924	1.932	0.40	TM	
48	TM	2-Chloronaphthalene	1.522	1.536	0.94	TM	
49	TM	2-Nitroaniline	0.3796	0.3716	2.1	TM	
50	TM	Dimethyl phthalate	1.821	1.833	0.70	TM	
51	TM	2,6-DNT	0.4045	0.4295	6.2	TM	
52	TM	Acenaphthylene	2.334	2.412	3.3	TM	
53	TM	3-Nitroaniline	0.5014	0.5276	5.2	TM	
54	*TM	Acenaphthene	1.551	1.541	0.68	*TM	
55	**TML	2,4-Dinitrophenol	0.1987	0.2311	16	**TML	7.7
56	**TM	4-Nitrophenol	0.2824	0.2318	18	**TM	
57	TM	Dibenzofuran	2.210	2.219	0.43	TM	
58	TM	2,4-DNT	0.5755	0.6000	4.3	TM	
59	TM	2,3,4,6-Tetrachlorophenol	0.4687	0.4838	3.2	TM	
60	TM	Diethyl phthalate	1.778	1.788	0.53	TM	
61	TM	4-Chlorophenyl phenyl ether	1.025	1.010	1.5	TM	
62	TM	Fluorene	1.828	1.872	2.4	TM	
63	TM	4-Nitroaniline	0.4196	0.4348	3.6	TM	
64	S	2,4,6-Tribromophenol(S)	0.2894	0.3047	5.3	S	
65	I	Phenanthrene-D10(IS)	ISTD			I	
66	TM	4,6-Dinitro-2-methylphenol	0.1946	0.2026	4.1	TM	
67	TM	Diphenyl amine	0.7572	0.7877	4.0	TM	
68	*TM	n-Nitrosodiphenylamine	0.7572	0.7877	4.0	*TM	
69	TM	1,2-Diphenylhydrazine	0.7331	0.7191	1.9	TM	
70	TM	4-Bromophenyl phenyl ether	0.2995	0.3066	2.4	TM	
71	TM	Hexachlorobenzene	0.3219	0.3403	5.7	TM	
72	TM	Atrazine	0.2783	0.2796	0.49	TM	
73	*TM	Pentachlorophenol	0.2190	0.2138	2.4	*TM	
74	TM	Phenanthrene	1.358	1.408	3.7	TM	
75	TM	Anthracene	1.412	1.448	2.6	TM	
76	TM	Carbazol	1.270	1.285	1.2	TM	
77	TM	Di-n-butylphthalate	1.536	1.577	2.6	TM	
78	*TM	Fluoranthene	1.570	1.613	2.7	*TM	
79	I	Chrysene-D12(IS)	ISTD			I	
80	TM	Benzidine	0.4483	0.4383	2.2	TM	
		Average			3.8		

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: 0

SDG No:
Date Analyzed: 10/29/20
Instrument: Yoda
Cal. Date: 10/09/20
Data File: 1009Y303.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	Pyrene	1.596	1.631	2.2	TM	
82	S	Terphenyl-D14(S)	1.153	1.202	4.2	S	
83	TM	Butyl benzylphthalate	0.6574	0.6967	6.0	TM	
84	TM	3,3'-Dichlorobenzidine	0.5283	0.6111	16	TM	
85	TM	Benz (a) anthracene	1.607	1.633	1.7	TM	
86	TM	Bis (2-ethylhexyl) phthalate	0.9220	0.9642	4.6	TM	
87	TM	Chrysene	1.546	1.619	4.7	TM	
88	*TM	Di-n-octylphthalate	1.510	1.627	7.8	*TM	
89	I	Perylene-D12(IS)	ISTD			I	
90	TM	Benzo (b) fluoranthene	1.552	1.657	6.7	TM	
91	TM	Benzo (k) fluoranthene	1.503	1.483	1.4	TM	
92	*TM	Benzo (a) pyrene	1.419	1.502	5.8	*TM	
93	TM	Indeno (1,2,3-cd) pyrene	1.602	1.689	5.4	TM	
94	TM	Dibenz (a,h) anthracene	1.396	1.496	7.2	TM	
95	TM	Benzo (g,h,i) perylene	1.392	1.432	2.9	TM	
96							
97							
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			5.5		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y303.D Vial: 3
Acq On : 29 Oct 20 15:58 Operator: MA
Sample : 50ug/mL 8270 7/22/20 (6) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 15:55 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	172668	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	688389	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.54	164	418439	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.28	188	822983	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	839965	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.07	264	826569	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.67	112	666855	99.64523 ppb	0.00
Spiked Amount 200.000			Recovery = 49.823%		
6) Phenol-D6 (S)	4.72	99	851437	100.91923 ppb	0.01
Spiked Amount 200.000			Recovery = 50.460%		
22) Nitrobenzene-D5(S)	5.73	82	364498	50.61994 ppb	0.00
Spiked Amount 100.000			Recovery = 50.620%		
46) 2-Fluorobiphenyl(S)	7.77	172	912797	51.75721 ppb	0.00
Spiked Amount 100.000			Recovery = 51.757%		
64) 2,4,6-Tribromophenol(S)	9.47	330	318754	105.30245 ppb	0.00
Spiked Amount 200.000			Recovery = 52.651%		
82) Terphenyl-D14(S)	12.14	244	1261867	52.11690 ppb	-0.02
Spiked Amount 100.000			Recovery = 52.117%		
Target Compounds					Qvalue
2) 1,4-Dioxane	1.80	58	8669	5.59788	75
3) n-Nitrosodimethylamine	2.03	42	120094	50.16592 ppb	95
4) Pyridine	2.05	79	353540	52.80414 ppb	97
7) Phenol	4.73	94	480406	49.71437 ppb	94
8) Aniline	4.75	93	362752	47.88687 ppb	98
9) Bis (2-chloroethyl) ether	4.84	63	189579	48.55238 ppb	83
10) 2-Chlorophenol	4.88	128	403715	50.18681 ppb	97
11) 1,3-DCB	5.05	146	434425	50.52971 ppb	99
12) 1,4-DCB	5.13	146	442498	50.42477 ppb	99
13) Benzyl alcohol	5.27	108	224689	49.94900 ppb	88
14) 1,2-DCB	5.30	146	415528	50.38568 ppb	95
15) 2-Methylphenol	5.39	107	299843	50.36236 ppb	98
16) Bis (2-chloroisopropyl) et	5.42	45	254096	49.63270 ppb	99
17) Acetophenone	5.56	105	511798	49.28129 ppb	89
18) 3&4-Methylphenol	5.57	107	850024	102.81192 ppb	99
19) n-Nitrosodi-n-propylamine	5.57	70	258386	49.39408 ppb	99
20) Hexachloroethane	5.67	117	151613	49.02826 ppb	94
23) Nitrobenzene	5.75	77	363509	49.02250 ppb	98
24) Isophorone	6.01	82	633706	49.90428 ppb	100
25) 2-Nitrophenol	6.10	139	233980	52.39974 ppb	94
26) 2,4-Dimethylphenol	6.15	122	360490	51.67834 ppb	96
27) Benzoic acid	6.28	105	245942	52.30928 ppb	98
28) Bis (2-chloroethoxy) metha	6.26	93	402069	49.87182 ppb	99
29) 2,4-Dichlorophenol	6.37	162	353937	50.99999 ppb	98
30) 1,2,4-Trichlorobenzene	6.46	180	389408	50.34961 ppb	99
31) 3,4-Dimethylphenol	6.49	107	479949	49.24846 ppb	100
32) Naphthalene	6.55	128	1149403	50.92000 ppb	100
33) 4-Chloroaniline	6.62	127	448178	47.19226 ppb	95
34) 2,6-Dichlorophenol	6.63	162	347154	50.75842 ppb	97
35) Hexachloropropene	6.66	213	281701	50.04825 ppb	99
36) Hexachlorobutadiene	6.69	225	233530	49.16338 ppb	99
37) Caprolactum	7.04	55	115101	50.92721 ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y303.D Vial: 3
Acq On : 29 Oct 20 15:58 Operator: MA
Sample : 50ug/mL 8270 7/22/20 (6) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 15:55 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.18	107	348421	49.12301 ppb		94
39)	2-Methylnaphthalene	7.34	142	784048	51.46604 ppb		100
40)	1-Methylnaphthalene	7.45	142	801001	50.77082 ppb		100
42)	Hexachlorocyclopentadiene	7.53	237	231296	39.66956 ppb		99
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	422859	50.08727 ppb		97
44)	2,4,6-Trichlorophenol	7.67	196	279990	49.96070 ppb		96
45)	2,4,5-Trichlorophenol	7.72	196	300579	51.19562 ppb		96
47)	1,1'-Biphenyl	7.88	154	1010339	50.19933 ppb		100
48)	2-Chloronaphthalene	7.90	162	803392	50.46993 ppb		99
49)	2-Nitroaniline	8.02	65	194390	48.94764 ppb		81
50)	Dimethyl phthalate	8.24	163	958950	50.34894 ppb		100
51)	2,6-DNT	8.31	165	224661	53.09533 ppb		92
52)	Acenaphthylene	8.38	152	1261373	51.65279 ppb		100
53)	3-Nitroaniline	8.03	138	275982	52.61980 ppb		90
54)	Acenaphthene	8.59	154	805864	49.66129 ppb		98
55)	2,4-Dinitrophenol	8.62	184	120862	53.86451 ppb		99
56)	4-Nitrophenol	8.73	65	121244	41.03591 ppb		90
57)	Dibenzofuran	8.78	168	1160736	50.21532 ppb		99
58)	2,4-DNT	8.77	165	313840	52.13138 ppb		94
59)	2,3,4,6-Tetrachlorophenol	8.93	232	253051	51.60945 ppb		95
60)	Diethyl phthalate	9.07	149	935040	50.26315 ppb		99
61)	4-Chlorophenyl phenyl ethe	9.19	204	528441	49.26428 ppb		95
62)	Fluorene	9.18	166	978936	51.19907 ppb		100
63)	4-Nitroaniline	8.50	138	227417	51.80526 ppb		86
66)	4,6-Dinitro-2-methylphenol	9.25	198	208462	52.06287 ppb	#	86
67)	Diphenyl amine	9.34	169	1620617	104.02093 ppb		100
68)	n-Nitrosodiphenylamine	9.34	169	1620617	104.02093 ppb		100
69)	1,2-Diphenylhydrazine	9.38	77	739775	49.04677 ppb		94
70)	4-Bromophenyl phenyl ether	9.76	248	315425	51.18348 ppb	#	83
71)	Hexachlorobenzene	9.82	284	350039	52.85087 ppb		99
72)	Atrazine	9.96	200	143832	25.12294 ppb		98
73)	Pentachlorophenol	10.05	266	219930	48.80278 ppb		99
74)	Phenanthrene	10.30	178	1448623	51.84157 ppb		99
75)	Anthracene	10.36	178	1489245	51.27991 ppb		99
76)	Carbazol	10.55	167	1321451	50.58657 ppb		96
77)	Di-n-butylphthalate	10.98	149	1622034	51.31002 ppb		98
78)	Fluoranthene	11.69	202	1659031	51.34550 ppb		99
80)	Benzidine	11.85	184	460246	48.88903 ppb	#	97
81)	Pyrene	11.95	202	1711966	51.09405 ppb		100
83)	Butyl benzylphthalate	12.73	149	731539	52.98913 ppb		94
84)	3,3'-Dichlorobenzidine	13.33	252	641638	57.83673 ppb	#	96
85)	Benz (a) anthracene	13.35	228	1714870	50.82765 ppb		100
86)	Bis (2-ethylhexyl) phthala	13.40	149	1012360	52.29085 ppb		95
87)	Chrysene	13.39	228	1700179	52.36526 ppb		99
88)	Di-n-octylphthalate	14.12	149	1708013	53.87887 ppb		98
90)	Benzo (b) fluoranthene	14.57	252	1711551	53.36757 ppb		99
91)	Benzo (k) fluoranthene	14.61	252	1531759	49.30571 ppb		100
92)	Benzo (a) pyrene	14.99	252	1551640	52.91283 ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.75	276	1745568	52.72244 ppb		98
94)	Dibenz (a,h) anthracene	16.78	278	1546090	53.60538 ppb		98
95)	Benzo (g,h,i) perylene	17.25	276	1479608	51.44280 ppb		99

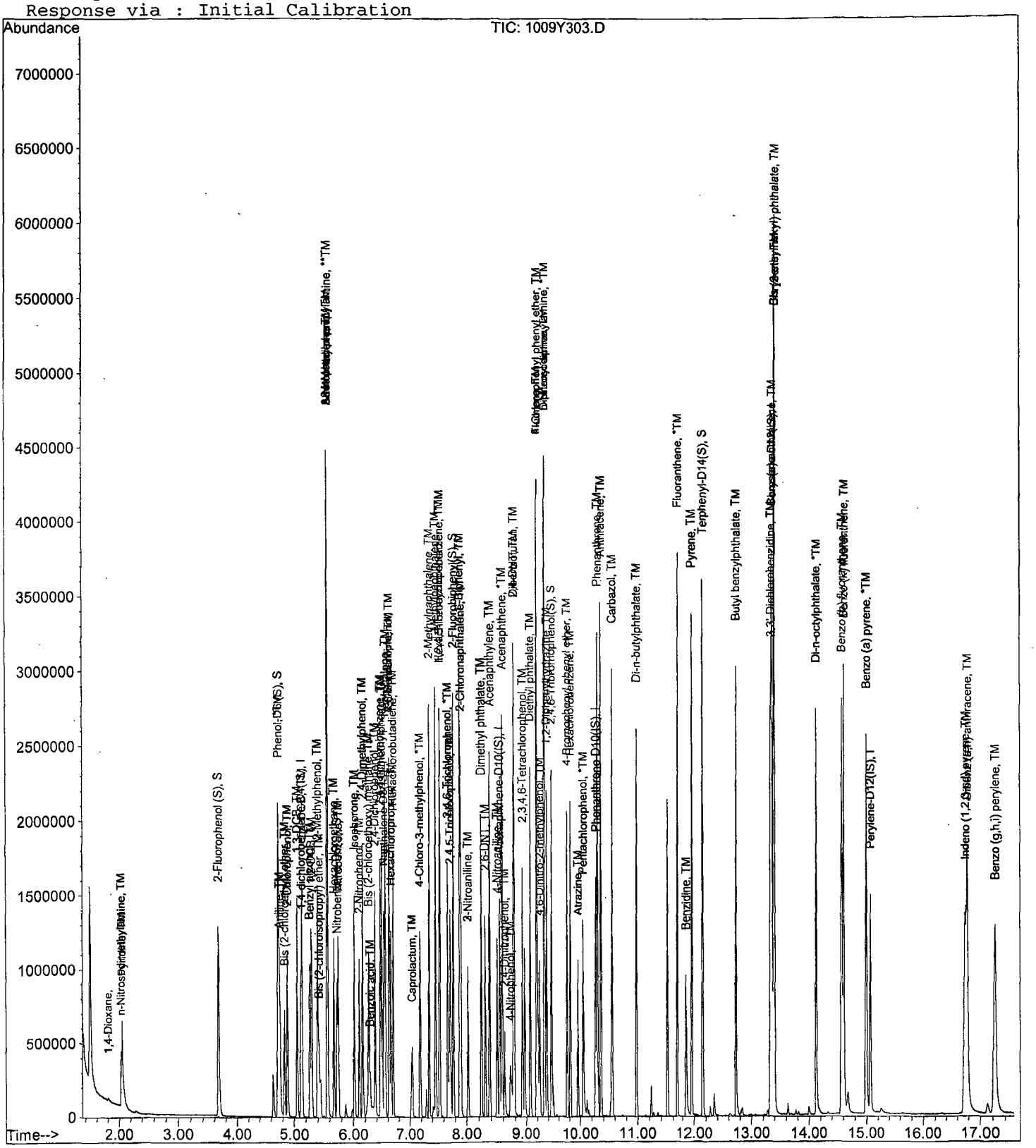
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y303.D Vial: 3
Acq On : 29 Oct 20 15:58 Operator: MA
Sample : 50ug/mL 8270 7/22/20 (6) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 15:55 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y298.D Vial: 98
Acq On : 29 Oct 20 14:04 Operator: MA
Sample : BA20716W14 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 29 13:50 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	167185	40.00000	ppb	0.00
21) Napthalene-D8(IS)	6.52	136	654334	40.00000	ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	388286	40.00000	ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	746659	40.00000	ppb	0.00
79) Chrysene-D12(IS)	13.36	240	772972	40.00000	ppb	0.00
89) Perylene-D12(IS)	15.06	264	744366	40.00000	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.67	112	1036370	199.92379	ppb	0.01
Spiked Amount 250.000			Recovery = 79.970%			
6) Phenol-D6 (S)	4.72	99	1301003	199.07846	ppb	0.01
Spiked Amount 250.000			Recovery = 79.631%			
22) Nitrobenzene-D5(S)	5.73	82	612608	111.88029	ppb	0.00
Spiked Amount 125.000			Recovery = 89.504%			
46) 2-Fluorobiphenyl(S)	7.77	172	1382950	105.63154	ppb	0.00
Spiked Amount 125.000			Recovery = 84.506%			
64) 2,4,6-Tribromophenol(S)	9.47	330	539658	240.15515	ppb	0.00
Spiked Amount 250.000			Recovery = 96.062%			
82) Terphenyl-D14(S)	12.15	244	2312492	129.73366	ppb	0.00
Spiked Amount 125.000			Recovery = 103.787%			

Target Compounds Qvalue

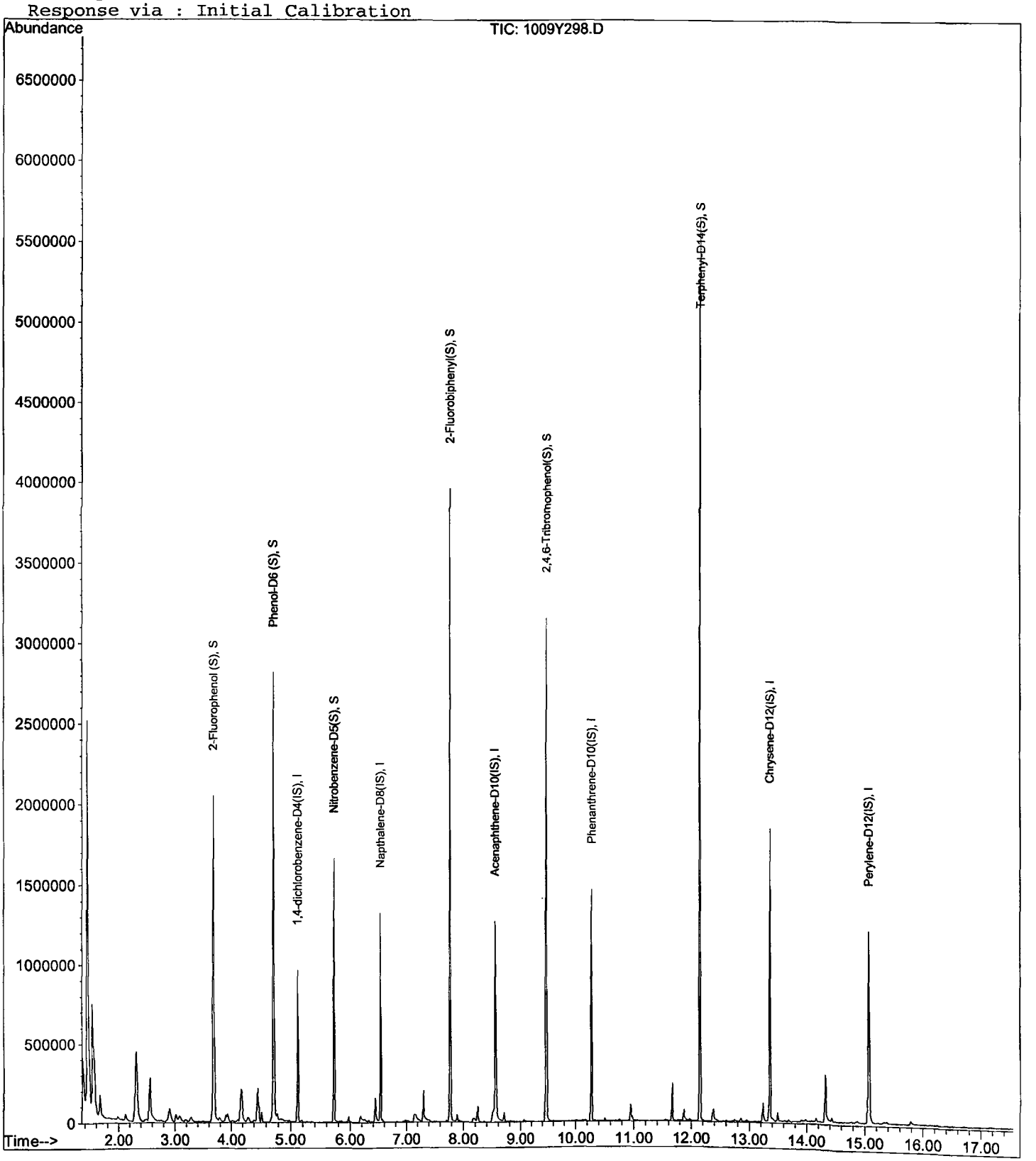
(#) = qualifier out of range (m) = manual integration
1009Y298.D Y1009.M Tue Nov 10 15:26:30 2020

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y298.D Vial: 98
Acq On : 29 Oct 20 14:04 Operator: MA
Sample : BA20716W14 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 29 13:50 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y299.D Vial: 99
Acq On : 29 Oct 20 14:29 Operator: MA
Sample : BA20718W17 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 29 13:52 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	164869	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.52	136	637587	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	382696	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	734197	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	749575	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.06	264	731547	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.67	112	907982	177.61727 ppb	0.00
Spiked Amount 250.000			Recovery	= 71.047%	
6) Phenol-D6 (S)	4.72	99	1175135	182.34424 ppb	0.00
Spiked Amount 250.000			Recovery	= 72.938%	
22) Nitrobenzene-D5(S)	5.72	82	553792	103.79529 ppb	0.00
Spiked Amount 125.000			Recovery	= 83.036%	
46) 2-Fluorobiphenyl(S)	7.77	172	1298561	100.63459 ppb	0.00
Spiked Amount 125.000			Recovery	= 80.508%	
64) 2,4,6-Tribromophenol(S)	9.47	330	515268	232.65065 ppb	0.00
Spiked Amount 250.000			Recovery	= 93.060%	
82) Terphenyl-D14(S)	12.15	244	2306331	133.42669 ppb	0.00
Spiked Amount 125.000			Recovery	= 106.742%	

Target Compounds Qvalue

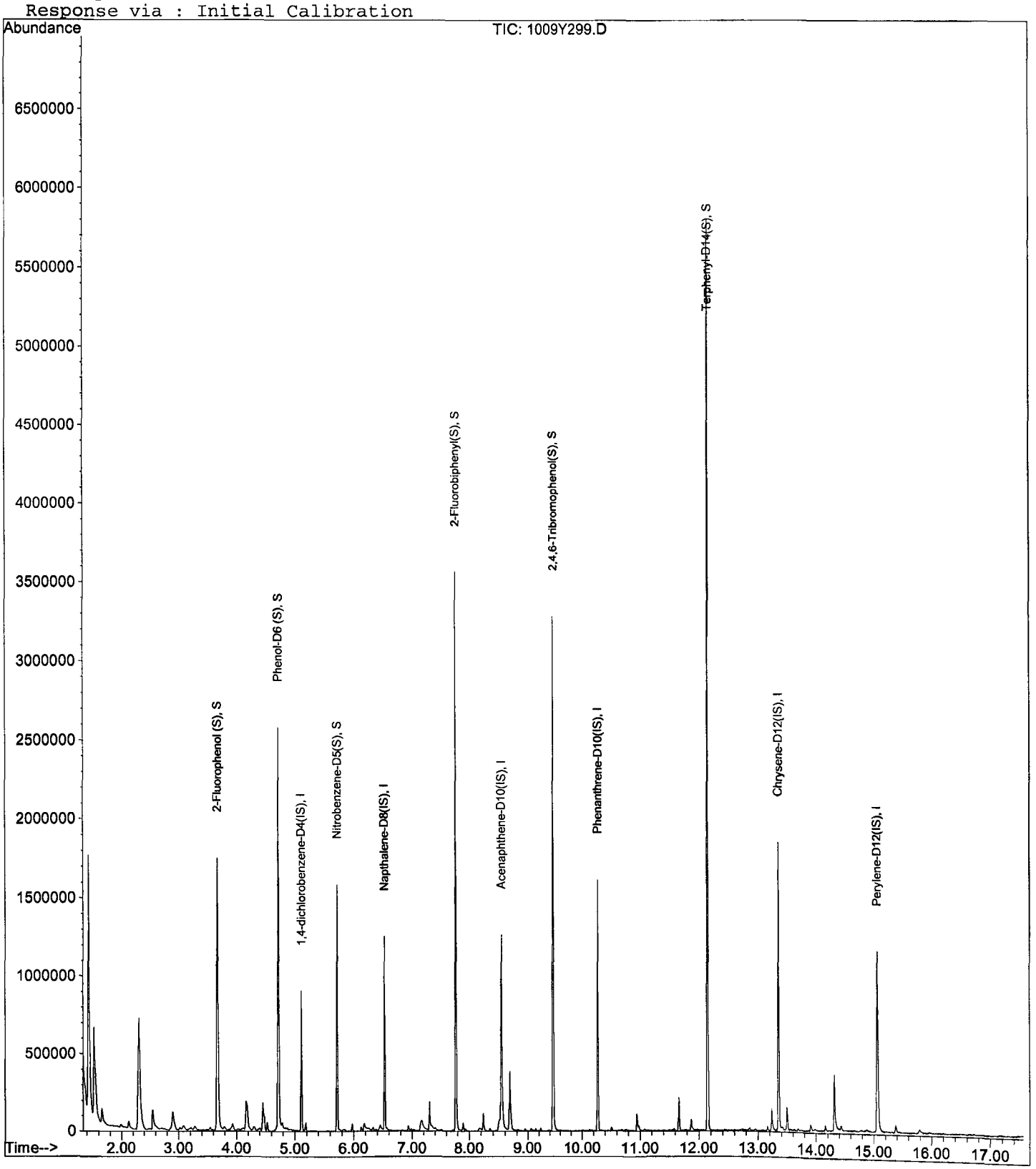
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y299.D Vial: 99
Acq On : 29 Oct 20 14:29 Operator: MA
Sample : BA20718W17 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 29 13:52 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y300.D Vial: 100
Acq On : 29 Oct 20 14:55 Operator: MA
Sample : BA20719W13 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 29 13:53 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	161560	40.00000	ppb	0.00
21) Napthalene-D8(IS)	6.52	136	645152	40.00000	ppb	-0.01
41) Acenaphthene-D10(IS)	8.55	164	379730	40.00000	ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	739495	40.00000	ppb	0.00
79) Chrysene-D12(IS)	13.36	240	755714	40.00000	ppb	0.00
89) Perylene-D12(IS)	15.06	264	745132	40.00000	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.67	112	1010287	201.67770	ppb	0.00
Spiked Amount 250.000			Recovery =	80.671%		
6) Phenol-D6 (S)	4.72	99	1256918	199.02901	ppb	0.00
Spiked Amount 250.000			Recovery =	79.612%		
22) Nitrobenzene-D5(S)	5.72	82	606276	112.29974	ppb	0.00
Spiked Amount 125.000			Recovery =	89.840%		
46) 2-Fluorobiphenyl(S)	7.77	172	1416463	110.62905	ppb	0.00
Spiked Amount 125.000			Recovery =	88.503%		
64) 2,4,6-Tribromophenol(S)	9.47	330	532901	242.49157	ppb	0.00
Spiked Amount 250.000			Recovery =	96.997%		
82) Terphenyl-D14(S)	12.15	244	2390241	137.15777	ppb	0.00
Spiked Amount 125.000			Recovery =	109.726%		

Target Compounds Qvalue

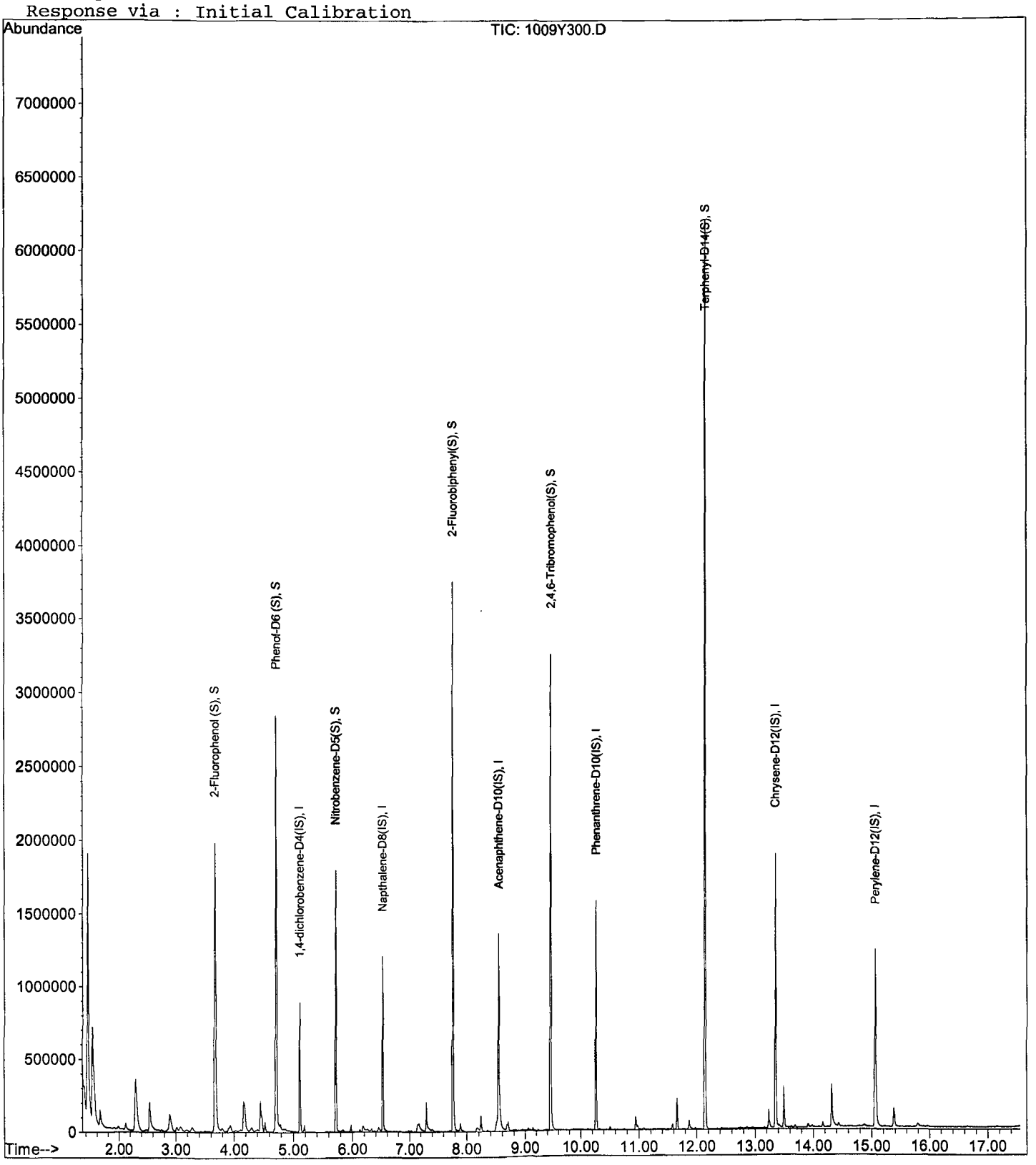
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y300.D Vial: 100
Acq On : 29 Oct 20 14:55 Operator: MA
Sample : BA20719W13 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 29 13:53 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y295.D Vial: 95
Acq On : 29 Oct 20 12:47 Operator: MA
Sample : 201027A BLK 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 29 12:01 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	153100	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.52	136	612797	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.54	164	378746	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	752782	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	755549	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.06	264	737785	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.66	112	1009711	212.70067 ppb	0.00
Spiked Amount 250.000			Recovery	= 85.080%	
6) Phenol-D6 (S)	4.72	99	1275947	213.20664 ppb	0.00
Spiked Amount 250.000			Recovery	= 85.283%	
22) Nitrobenzene-D5(S)	5.72	82	602206	117.43536 ppb	0.00
Spiked Amount 125.000			Recovery	= 93.948%	
46) 2-Fluorobiphenyl(S)	7.77	172	1340625	104.97795 ppb	0.00
Spiked Amount 125.000			Recovery	= 83.982%	
64) 2,4,6-Tribromophenol(S)	9.47	330	523532	238.84722 ppb	0.00
Spiked Amount 250.000			Recovery	= 95.539%	
82) Terphenyl-D14(S)	12.15	244	2391644	137.26824 ppb	0.00
Spiked Amount 125.000			Recovery	= 109.814%	
Target Compounds					Qvalue

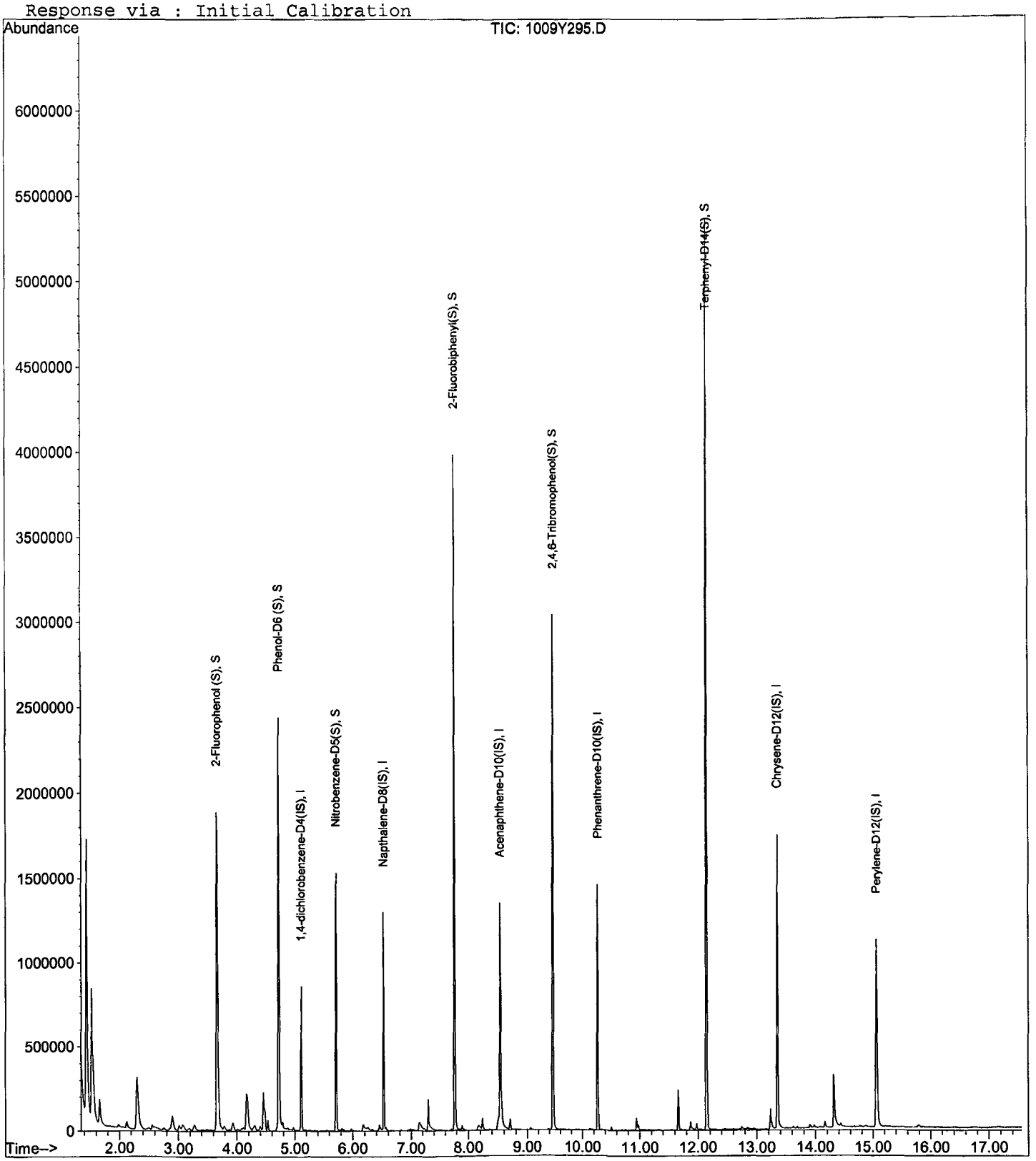
(#) = qualifier out of range (m) = manual integration
1009Y295.D Y1009.M Tue Nov 10 15:27:16 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y295.D Vial: 95
Acq On : 29 Oct 20 12:47 Operator: MA
Sample : 201027A BLK 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 29 12:01 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y296.D Vial: 96
Acq On : 29 Oct 20 13:12 Operator: MA
Sample : 201027A LCS-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 29 12:44 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	171087	40.00000	ppb		0.00
21) Napthalene-D8(IS)	6.52	136	673879	40.00000	ppb		0.00
41) Acenaphthene-D10(IS)	8.55	164	403793	40.00000	ppb		0.00
65) Phenanthrene-D10(IS)	10.27	188	790226	40.00000	ppb		0.00
79) Chrysene-D12(IS)	13.36	240	801529	40.00000	ppb		0.00
89) Perylene-D12(IS)	15.06	264	805982	40.00000	ppb		0.00
System Monitoring Compounds							
5) 2-Fluorophenol (S)	3.68	112	1085873	204.69582	ppb		0.02
Spiked Amount 250.000			Recovery = 81.878%				
6) Phenol-D6 (S)	4.73	99	1335075	199.63282	ppb		0.02
Spiked Amount 250.000			Recovery = 79.853%				
22) Nitrobenzene-D5(S)	5.72	82	588291	104.32315	ppb		0.00
Spiked Amount 125.000			Recovery = 83.458%				
46) 2-Fluorobiphenyl(S)	7.77	172	1388897	102.01173	ppb		0.00
Spiked Amount 125.000			Recovery = 81.610%				
64) 2,4,6-Tribromophenol(S)	9.47	330	525722	224.96885	ppb		0.00
Spiked Amount 250.000			Recovery = 89.988%				
82) Terphenyl-D14(S)	12.15	244	2262494	122.40647	ppb		0.00
Spiked Amount 125.000			Recovery = 97.925%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.81	58	6495	5.29101			98
3) n-Nitrosodimethylamine	2.04	42	109107	57.49696	ppb		91
4) Pyridine	2.06	79	122467	23.07562	ppb		99
7) Phenol	4.74	94	369357	48.21973	ppb		94
8) Aniline	4.75	93	132736	22.10549	ppb	#	79
9) Bis (2-chloroethyl) ether	4.83	63	151504	48.94961	ppb		93
10) 2-Chlorophenol	4.89	128	312674	49.03558	ppb		99
11) 1,3-DCB	5.05	146	273346	40.10972	ppb		98
12) 1,4-DCB	5.13	146	285011	40.97313	ppb		98
13) Benzyl alcohol	5.27	108	169134	47.43302	ppb		92
14) 1,2-DCB	5.30	146	274299	41.96004	ppb		96
15) 2-Methylphenol	5.39	107	231024	48.95242	ppb		99
16) Bis (2-chloroisopropyl) et	5.42	45	197411	48.64591	ppb		98
17) Acetophenone	5.56	105	376872	45.78067	ppb		86
18) 3&4-Methylphenol	5.57	107	646738	98.68372	ppb		99
19) n-Nitrosodi-n-propylamine	5.57	70	201281	48.54154	ppb		96
20) Hexachloroethane	5.67	117	83547	34.08362	ppb		92
23) Nitrobenzene	5.74	77	287982	49.59154	ppb		93
24) Isophorone	6.01	82	497395	50.01652	ppb		97
25) 2-Nitrophenol	6.10	139	178360	51.00466	ppb		89
26) 2,4-Dimethylphenol	6.15	122	273181	50.00666	ppb		98
27) Benzoic acid	6.27	105	219742	60.58437	ppb		99
28) Bis (2-chloroethoxy) metha	6.26	93	321384	50.90271	ppb		96
29) 2,4-Dichlorophenol	6.37	162	272592	50.15558	ppb		94
30) 1,2,4-Trichlorobenzene	6.47	180	262407	43.32401	ppb		96
31) 3,4-Dimethylphenol	6.49	107	386259	50.61021	ppb		100
32) Naphthalene	6.55	128	851008	48.14062	ppb		99
33) 4-Chloroaniline	6.62	127	177153	23.81940	ppb		96
34) 2,6-Dichlorophenol	6.62	162	269869	50.38497	ppb		97
35) Hexachloropropene	6.65	213	148481	33.68476	ppb		100
36) Hexachlorobutadiene	6.70	225	142591	38.33127	ppb		99
37) Caprolactum	7.03	55	92626	52.33180	ppb		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y296.D Vial: 96
Acq On : 29 Oct 20 13:12 Operator: MA
Sample : 201027A LCS-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 29 12:44 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.18	107	276463	49.77138 ppb		100
39)	2-Methylnaphthalene	7.34	142	609284	51.06930 ppb		100
40)	1-Methylnaphthalene	7.45	142	598351	48.42829 ppb		99
42)	Hexachlorocyclopentadiene	7.53	237	63888	14.19358 ppb		98
43)	1,2,4,5-Tetrachlorobenzene	7.53	216	326154	50.04237 ppb		96
44)	2,4,6-Trichlorophenol	7.67	196	219170	50.65829 ppb		99
45)	2,4,5-Trichlorophenol	7.72	196	234950	51.83618 ppb		97
47)	1,1'-Biphenyl	7.88	154	788374	50.73954 ppb		99
48)	2-Chloronaphthalene	7.91	162	603019	49.07039 ppb		95
49)	2-Nitroaniline	8.02	65	149190	48.66099 ppb		79
50)	Dimethyl phthalate	8.24	163	802576	54.58382 ppb		100
51)	2,6-DNT	8.31	165	174179	53.32217 ppb		88
52)	Acenaphthylene	8.38	152	940680	49.89713 ppb		99
53)	3-Nitroaniline	8.03	138	211523	52.24075 ppb		95
54)	Acenaphthene	8.58	154	620493	49.53094 ppb		99
55)	2,4-Dinitrophenol	8.62	184	92506	57.65301 ppb		99
56)	4-Nitrophenol	8.72	65	123272	54.04452 ppb		87
57)	Dibenzofuran	8.79	168	896208	50.22211 ppb		91
58)	2,4-DNT	8.77	165	246179	52.96943 ppb		93
59)	2,3,4,6-Tetrachlorophenol	8.93	232	197066	52.06145 ppb		97
60)	Diethyl phthalate	9.07	149	734210	51.12381 ppb		99
61)	4-Chlorophenyl phenyl ethe	9.19	204	408958	49.38530 ppb		100
62)	Fluorene	9.18	166	755602	51.18990 ppb		99
63)	4-Nitroaniline	8.50	138	108795	32.10283 ppb	#	78
66)	4,6-Dinitro-2-methylphenol	9.24	198	152587	49.60990 ppb	#	86
67)	Diphenyl amine	9.34	169	1089656	91.04987 ppb		99
68)	n-Nitrosodiphenylamine	9.34	169	1089656	91.04987 ppb		99
69)	1,2-Diphenylhydrazine	9.37	77	565536	48.81132 ppb		97
70)	4-Bromophenyl phenyl ether	9.76	248	249852	52.77960 ppb		97
71)	Hexachlorobenzene	9.82	284	263543	51.80084 ppb		96
72)	Atrazine	9.96	200	98628	22.42667 ppb		98
73)	Pentachlorophenol	10.05	266	174881	50.51871 ppb		98
74)	Phenanthrene	10.30	178	1131860	52.73088 ppb		98
75)	Anthracene	10.36	178	1136008	50.92278 ppb		99
76)	Carbazol	10.55	167	1026429	51.15200 ppb		97
77)	Di-n-butylphthalate	10.98	149	1296991	53.41076 ppb		98
78)	Fluoranthene	11.68	202	1284052	51.73448 ppb		98
80)	Benzidine	11.88	184	6456	0.89833 ppb	#	36
81)	Pyrene	11.95	202	1355389	52.98966 ppb		99
83)	Butyl benzylphthalate	12.72	149	563655	53.48286 ppb		89
84)	3,3'-Dichlorobenzidine	13.33	252	118263	13.96415 ppb	#	98
85)	Benz (a) anthracene	13.35	228	1309052	50.82504 ppb		99
86)	Bis (2-ethylhexyl) phthala	13.40	149	813335	55.03160 ppb	#	95
87)	Chrysene	13.39	228	1317231	53.14502 ppb		99
88)	Di-n-octylphthalate	14.13	149	1381745	57.09620 ppb	#	94
90)	Benzo (b) fluoranthene	14.57	252	1307824	52.27580 ppb		99
91)	Benzo (k) fluoranthene	14.61	252	1274697	52.59901 ppb		100
92)	Benzo (a) pyrene	14.99	252	1159485	50.68728 ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.73	276	1288710	49.89737 ppb		96
94)	Dibenz (a,h) anthracene	16.78	278	1189608	52.87389 ppb		98
95)	Benzo (g,h,i) perylene	17.24	276	1154027	51.43487 ppb		98

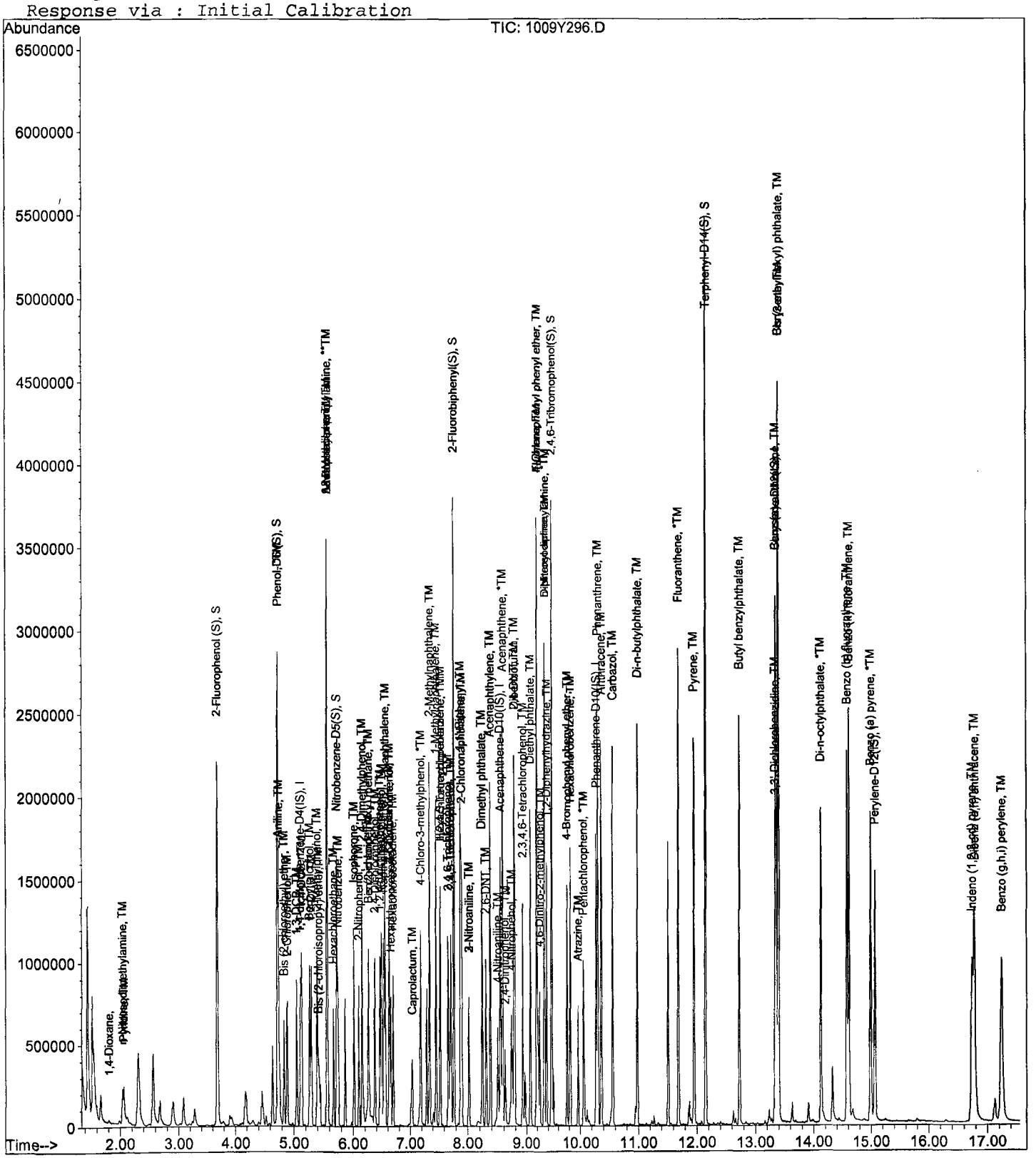
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y296.D Vial: 96
Acq On : 29 Oct 20 13:12 Operator: MA
Sample : 201027A LCS-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 29 12:44 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y297.D Vial: 97
Acq On : 29 Oct 20 13:38 Operator: MA
Sample : 201027A LCSD-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 29 12:45 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	162294	40.00000	ppb	0.00
21) Napthalene-D8(IS)	6.52	136	624761	40.00000	ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	378796	40.00000	ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	733651	40.00000	ppb	0.00
79) Chrysene-D12(IS)	13.36	240	742470	40.00000	ppb	0.00
89) Perylene-D12(IS)	15.06	264	740261	40.00000	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.68	112	1120535	222.67421	ppb	0.02
Spiked Amount 250.000			Recovery	= 89.070%		
6) Phenol-D6 (S)	4.73	99	1399741	220.64216	ppb	0.02
Spiked Amount 250.000			Recovery	= 88.257%		
22) Nitrobenzene-D5(S)	5.73	82	608749	116.43801	ppb	0.00
Spiked Amount 125.000			Recovery	= 93.150%		
46) 2-Fluorobiphenyl(S)	7.77	172	1424584	111.53766	ppb	0.00
Spiked Amount 125.000			Recovery	= 89.230%		
64) 2,4,6-Tribromophenol(S)	9.47	330	535793	244.40871	ppb	0.00
Spiked Amount 250.000			Recovery	= 97.764%		
82) Terphenyl-D14(S)	12.15	244	2298411	134.24093	ppb	0.00
Spiked Amount 125.000			Recovery	= 107.393%		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.81	58	6588	5.65754		92
3) n-Nitrosodimethylamine	2.04	42	109102	60.60934	ppb	83
4) Pyridine	2.06	79	250204	49.69848	ppb	99
7) Phenol	4.74	94	393581	54.16604	ppb	93
8) Aniline	4.76	93	199616	35.04462	ppb	99
9) Bis (2-chloroethyl) ether	4.83	63	154979	52.78524	ppb	93
10) 2-Chlorophenol	4.89	128	320416	52.97224	ppb	99
11) 1,3-DCB	5.05	146	285568	44.17342	ppb	97
12) 1,4-DCB	5.13	146	297585	45.09860	ppb	97
13) Benzyl alcohol	5.27	108	174929	51.71615	ppb	95
14) 1,2-DCB	5.30	146	289476	46.68085	ppb	96
15) 2-Methylphenol	5.39	107	235776	52.66610	ppb	99
16) Bis (2-chloroisopropyl) et	5.42	45	205340	53.34123	ppb	98
17) Acetophenone	5.56	105	389473	49.87469	ppb	88
18) 3&4-Methylphenol	5.57	107	669178	107.63991	ppb	100
19) n-Nitrosodi-n-propylamine	5.57	70	206950	52.61272	ppb	98
20) Hexachloroethane	5.67	117	89726	38.58760	ppb	94
23) Nitrobenzene	5.74	77	304561	56.56979	ppb	92
24) Isophorone	6.01	82	506297	54.91429	ppb	98
25) 2-Nitrophenol	6.10	139	188868	58.25575	ppb	90
26) 2,4-Dimethylphenol	6.15	122	270024	53.31479	ppb	97
27) Benzoic acid	6.27	105	231352	67.39347	ppb	99
28) Bis (2-chloroethoxy) metha	6.26	93	335757	57.36008	ppb	97
29) 2,4-Dichlorophenol	6.37	162	283149	56.19390	ppb	94
30) 1,2,4-Trichlorobenzene	6.47	180	274200	48.83023	ppb	94
31) 3,4-Dimethylphenol	6.49	107	391299	55.30142	ppb	98
32) Naphthalene	6.55	128	895781	54.65727	ppb	99
33) 4-Chloroaniline	6.62	127	232520	33.72179	ppb	96
34) 2,6-Dichlorophenol	6.63	162	282675	56.92505	ppb	96
35) Hexachloropropene	6.65	213	148438	36.32249	ppb	99
36) Hexachlorobutadiene	6.70	225	146623	42.51393	ppb	97
37) Caprolactum	7.03	55	96877	59.03662	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y297.D Vial: 97
Acq On : 29 Oct 20 13:38 Operator: MA
Sample : 201027A LCSD-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 29 12:45 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.18	107	285751	55.48792	ppb		97
39)	2-Methylnaphthalene	7.34	142	634264	57.34271	ppb		99
40)	1-Methylnaphthalene	7.45	142	606938	52.98531	ppb		99
42)	Hexachlorocyclopentadiene	7.53	237	53064	12.56684	ppb		100
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	331683	54.24900	ppb		97
44)	2,4,6-Trichlorophenol	7.67	196	224151	55.22853	ppb		99
45)	2,4,5-Trichlorophenol	7.72	196	243752	57.32699	ppb		98
47)	1,1'-Biphenyl	7.88	154	815276	55.93354	ppb		99
48)	2-Chloronaphthalene	7.91	162	631075	54.74229	ppb		95
49)	2-Nitroaniline	8.03	65	154723	53.79594	ppb		89
50)	Dimethyl phthalate	8.24	163	819448	59.40904	ppb		100
51)	2,6-DNT	8.31	165	179290	58.50884	ppb		89
52)	Acenaphthylene	8.38	152	964046	54.51108	ppb		99
53)	3-Nitroaniline	8.03	138	217249	57.19565	ppb		96
54)	Acenaphthene	8.58	154	644762	54.86464	ppb		99
55)	2,4-Dinitrophenol	8.62	184	95160	61.23661	ppb		98
56)	4-Nitrophenol	8.72	65	129910	60.71321	ppb		86
57)	Dibenzofuran	8.79	168	911683	54.46073	ppb		91
58)	2,4-DNT	8.77	165	250457	57.44614	ppb		92
59)	2,3,4,6-Tetrachlorophenol	8.93	232	199884	56.29061	ppb		96
60)	Diethyl phthalate	9.07	149	756913	56.18266	ppb		99
61)	4-Chlorophenyl phenyl ethe	9.19	204	426735	54.93267	ppb		97
62)	Fluorene	9.18	166	775983	56.03982	ppb		99
63)	4-Nitroaniline	8.50	138	149430	47.00300	ppb		83
66)	4,6-Dinitro-2-methylphenol	9.24	198	158552	55.52446	ppb	#	86
67)	Diphenyl amine	9.34	169	1222554	110.03219	ppb		99
68)	n-Nitrosodiphenylamine	9.34	169	1222554	110.03219	ppb		99
69)	1,2-Diphenylhydrazine	9.37	77	589564	54.80915	ppb		94
70)	4-Bromophenyl phenyl ether	9.76	248	253840	57.75706	ppb		99
71)	Hexachlorobenzene	9.82	284	271210	57.41862	ppb		97
72)	Atrazine	9.96	200	108622	26.60383	ppb		100
73)	Pentachlorophenol	10.05	266	176914	55.04699	ppb		99
74)	Phenanthrene	10.30	178	1124054	56.40548	ppb		99
75)	Anthracene	10.36	178	1153584	55.69827	ppb		99
76)	Carbazol	10.55	167	1052927	56.51891	ppb		97
77)	Di-n-butylphthalate	10.98	149	1321859	58.63255	ppb		98
78)	Fluoranthene	11.69	202	1309658	56.83517	ppb		99
80)	Benzidine	11.86	184	115043	17.28120	ppb		95
81)	Pyrene	11.95	202	1392018	58.75061	ppb		99
83)	Butyl benzylphthalate	12.72	149	603071	61.77462	ppb		91
84)	3,3'-Dichlorobenzidine	13.33	252	103417	13.18250	ppb	#	98
85)	Benz (a) anthracene	13.35	228	1316982	55.20024	ppb		99
86)	Bis (2-ethylhexyl) phthala	13.39	149	831220	60.71542	ppb	#	94
87)	Chrysene	13.38	228	1339496	58.34214	ppb		100
88)	Di-n-octylphthalate	14.12	149	1435792	64.04882	ppb		99
90)	Benzo (b) fluoranthene	14.57	252	1342460	58.42426	ppb		99
91)	Benzo (k) fluoranthene	14.61	252	1297875	58.31012	ppb		99
92)	Benzo (a) pyrene	14.99	252	1194102	56.83498	ppb		100
93)	Indeno (1,2,3-cd) pyrene	16.74	276	1318025	55.56312	ppb		97
94)	Dibenz (a,h) anthracene	16.78	278	1209831	58.54672	ppb		98
95)	Benzo (g,h,i) perylene	17.24	276	1182861	57.40053	ppb		98

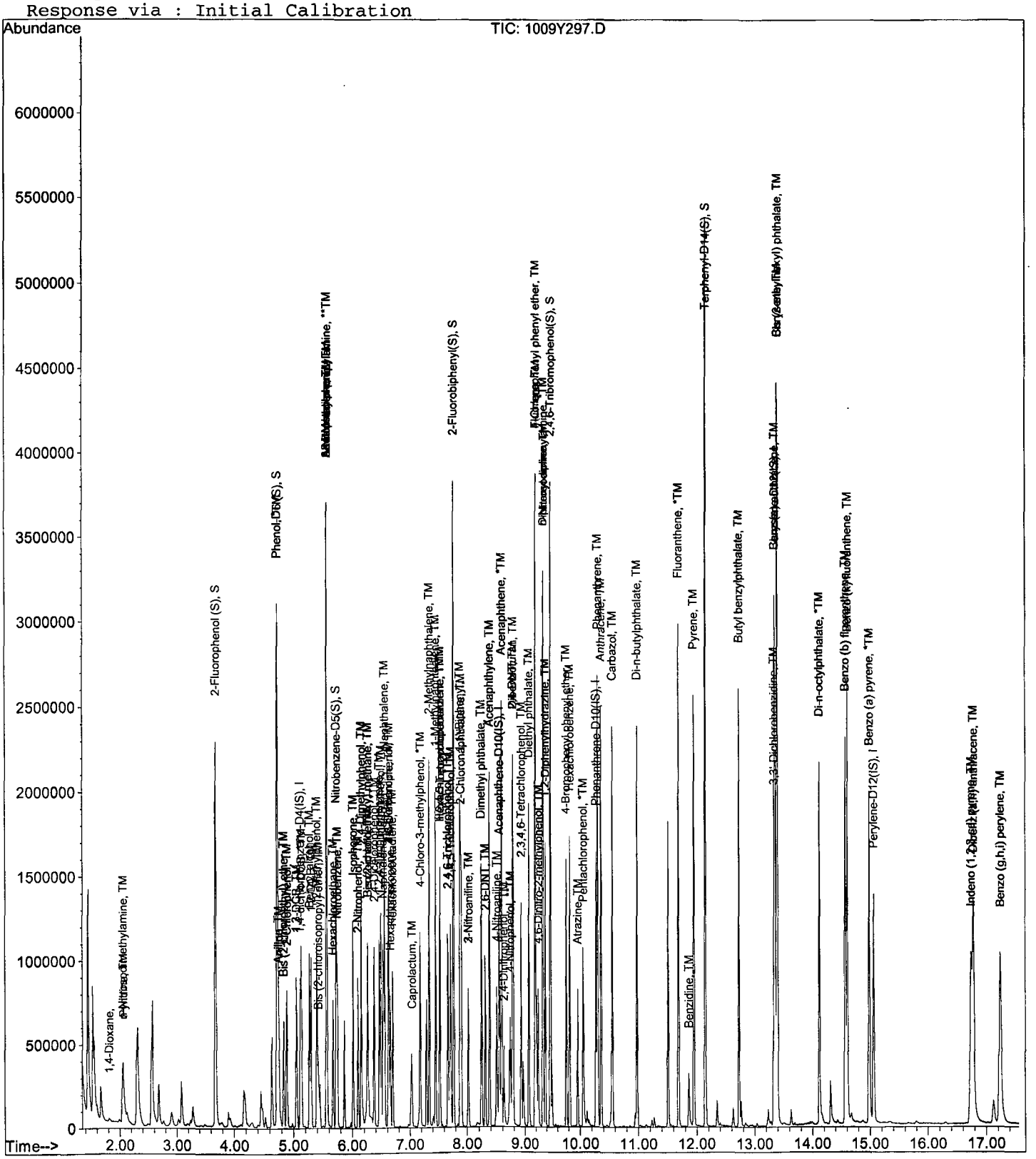
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y297.D Vial: 97
Acq On : 29 Oct 20 13:38 Operator: MA
Sample : 201027A LCSD-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 29 12:45 2020 Quant Results File: Y1009.RES

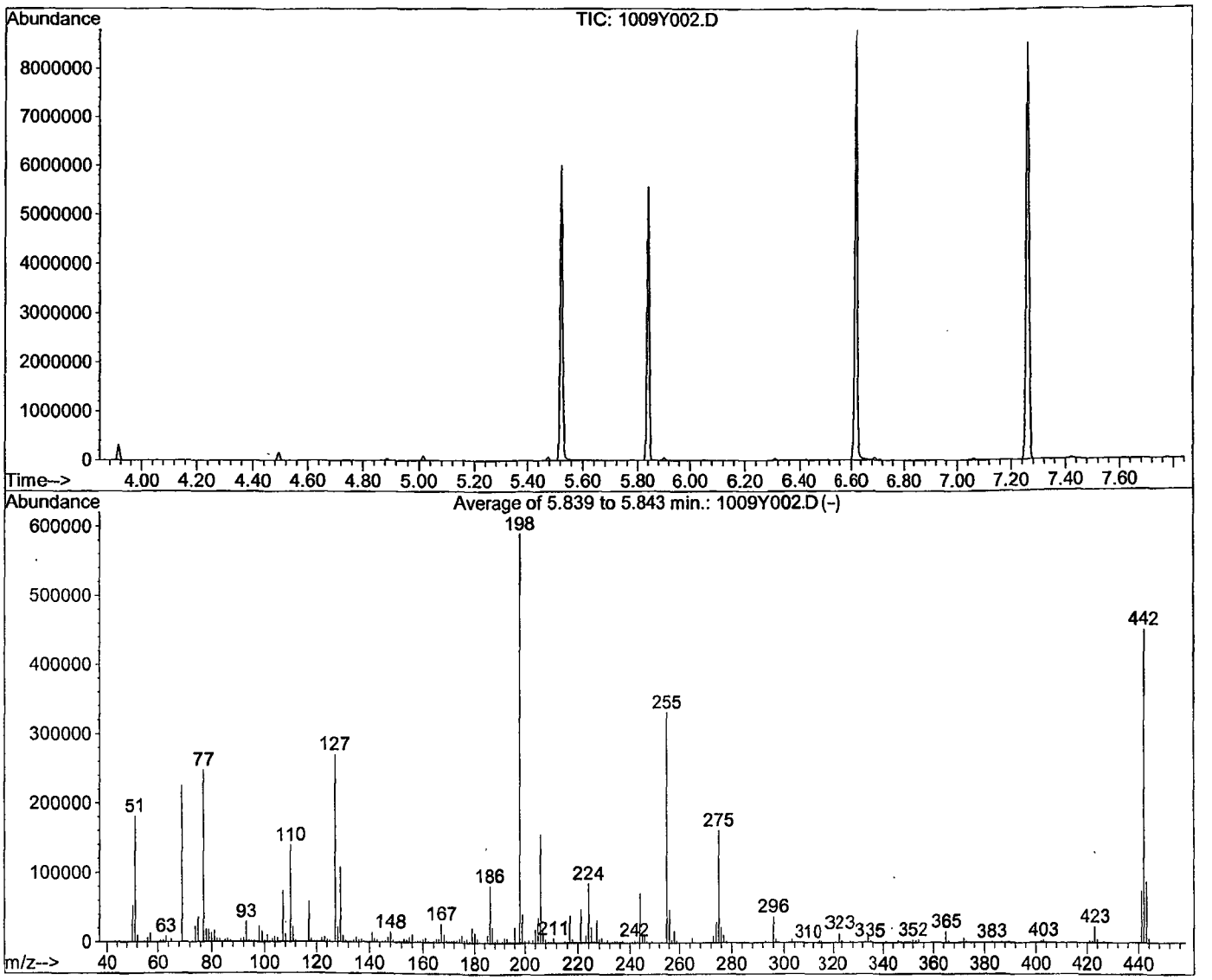
Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



DFTPP

Data File : M:\YODA\DATA\Y201009\1009Y002.D Vial: 2
Acq On : 9 Oct 20 10:55 Operator: MA
Sample : SV TUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 902, 903, 904; Background Corrected with Scan 893

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	30.7	181099	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.2	468	PASS
127	198	10	80	45.8	270485	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	590528	PASS
199	198	5	9	6.9	40837	PASS
275	198	10	60	27.3	160981	PASS
365	198	1	100	2.7	15871	PASS
441	442	0.01	24	16.5	74272	PASS
442	198	50	500	76.1	449344	PASS
443	442	15	24	19.4	86981	PASS

1009Y002.D Y1009.M Sat Oct 10 15:02:25 2020

Data File Name:	**1009Y002.D**
Data File Path:	**M:\YODA\DATA\Y201009**
Operator:	**MA**
Date Acquired:	**9 Oct 20 10:55**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/02/20**
Vial Number:	**2**
Instrument Name:	**Yoda**

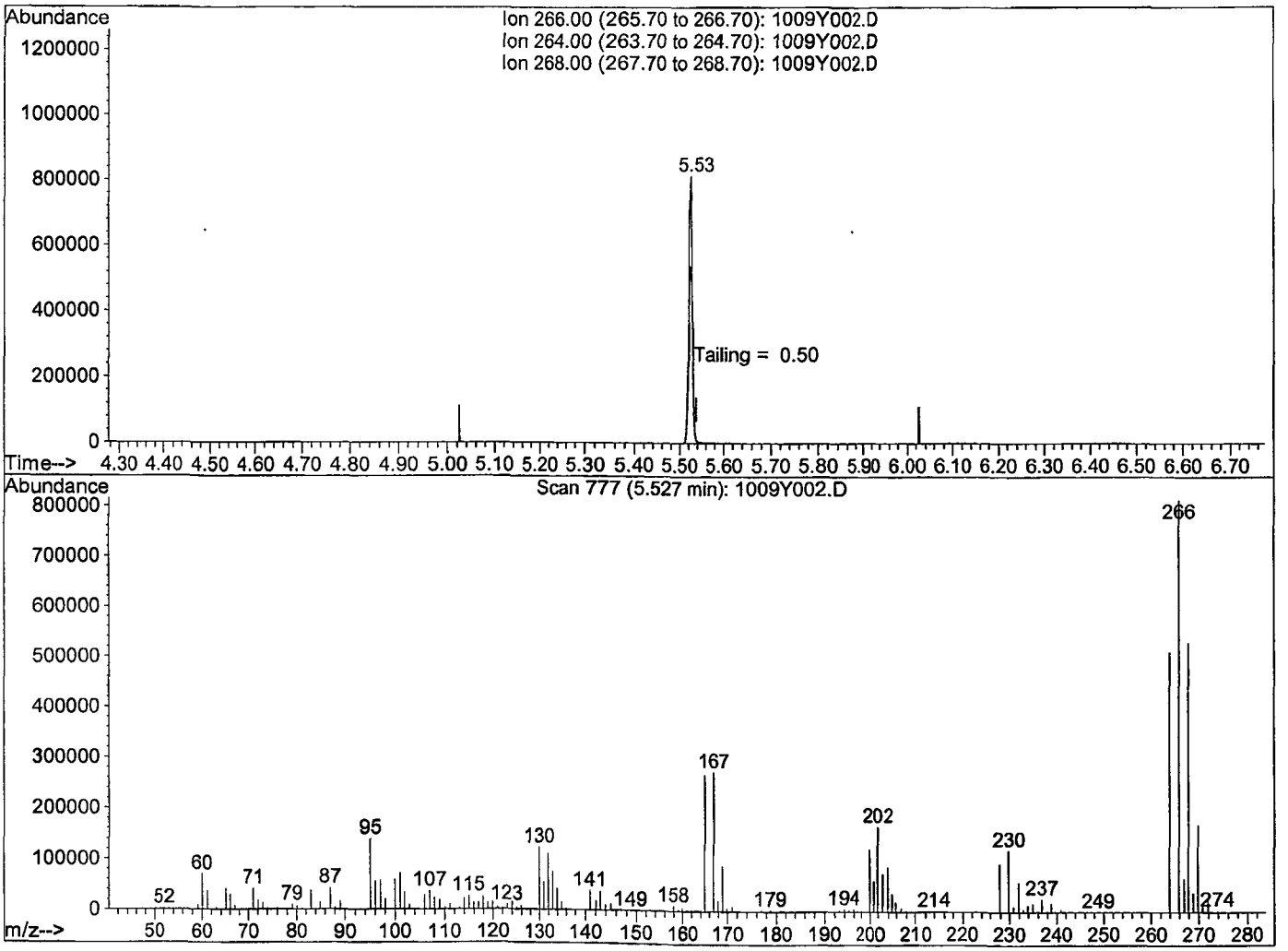
#	Name	Ret Time	Target Response
1)	DDT	7.26	61419600
2)	DDD	7.02	151178
3)	DDE	5.93	385231

Breakdown **0.87**

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y002.D Vial: 2
Acq On : 9 Oct 20 10:55 Operator: MA
Sample : SV TUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 10:49 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration



TIC: 1009Y002.D

(5) Pentachlorophenol

5.53min 0.0000

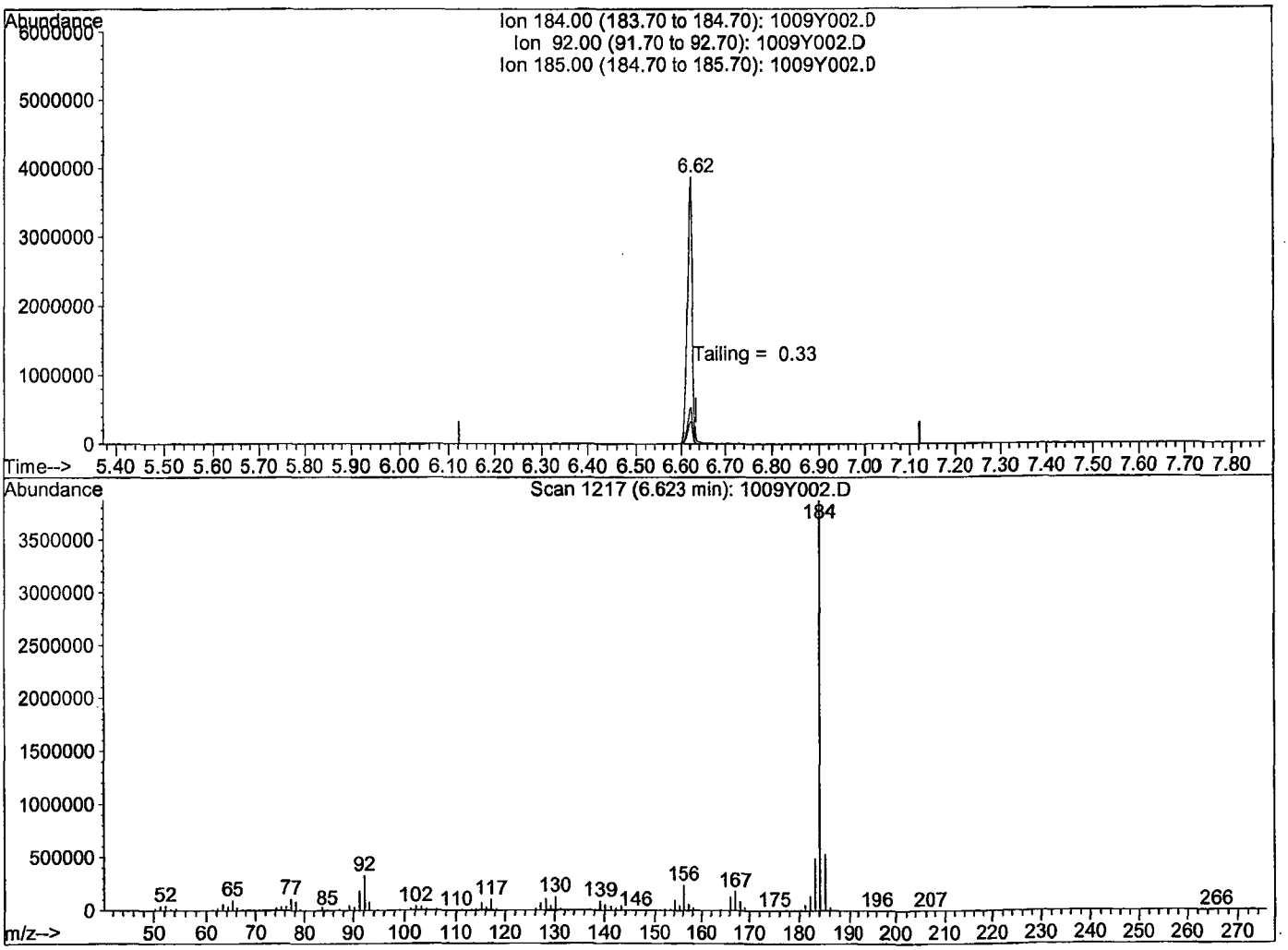
response 5042204

Ion	Exp%	Act%
266.00	100	100
264.00	63.10	64.09
268.00	65.40	65.83
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y002.D Vial: 2
Acq On : 9 Oct 20 10:55 Operator: MA
Sample : SV TUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 10:49 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration



TIC: 1009Y002.D

(6) Benzidine

6.62min 0.0000

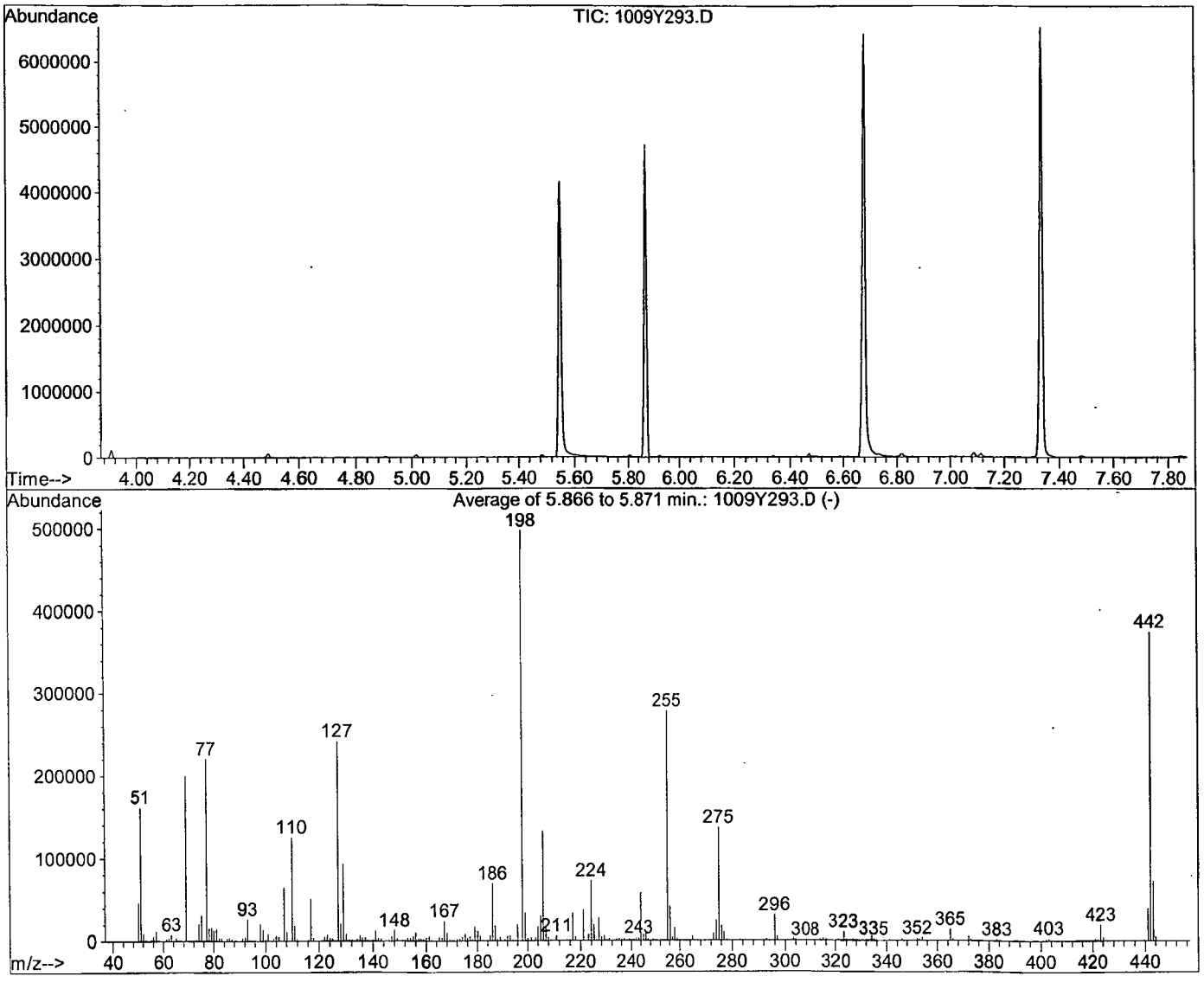
response 29089801

Ion	Exp%	Act%
184.00	100	100
92.00	8.50	8.82
185.00	13.80	13.96
0.00	0.00	0.00

DFTPP

Data File : M:\YODA\DATA\Y201009\1009Y293.D Vial: 93
Acq On : 29 Oct 20 12:06 Operator: MA
Sample : SV TUNE 10/2/20 Inst : Yoda
Misc : Multiplr: 1.00

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 912, 913, 914; Background Corrected with Scan 903

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	32.5	161551	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	825	PASS
127	198	10	80	48.6	241664	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	497707	PASS
199	198	5	9	6.8	33651	PASS
275	198	10	60	27.4	136568	PASS
365	198	1	100	2.8	13687	PASS
441	442	0.01	24	10.4	38936	PASS
442	198	50	500	75.3	374613	PASS
443	442	15	24	19.3	72389	PASS

Data File Name:	**1009Y293.D**
Data File Path:	**M:\YODA\DATA\Y201009**
Operator:	**MA**
Date Acquired:	**29 Oct 2020 12:06**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/2/20**
Vial Number:	**93**
Instrument Name:	**Yoda**

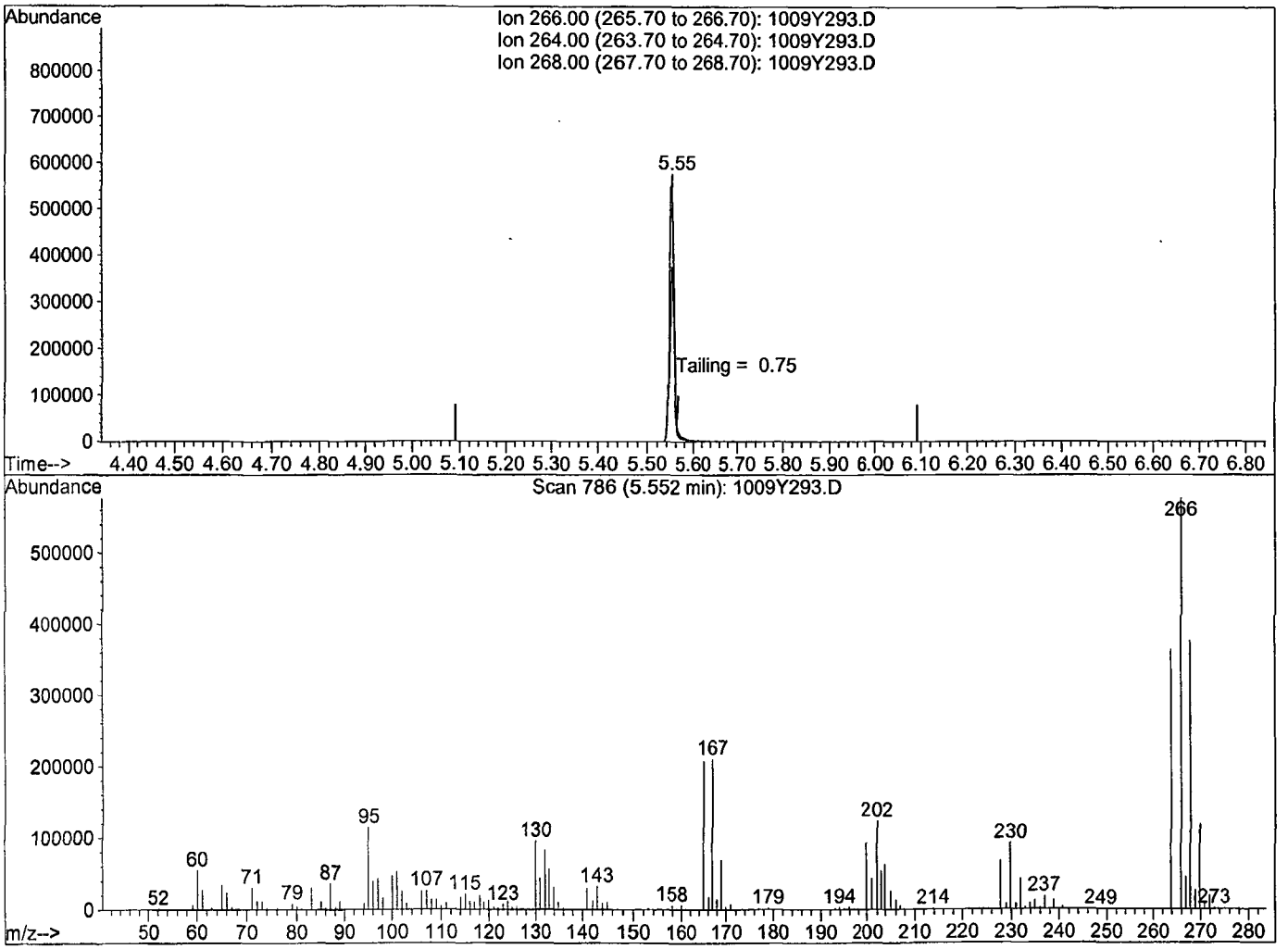
#	Name	Ret Time	Target Response
1)	DDT	7.25	50457100
2)	DDD	7.01	419823
3)	DDE	6.21	0

Breakdown **0.83**

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y293.D Vial: 93
Acq On : 29 Oct 20 12:06 Operator: MA
Sample : SV TUNE 10/2/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 29 12:18 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Mon Oct 26 10:44:41 2020
Response via : Single Level Calibration



TIC: 1009Y293.D

(5) Pentachlorophenol

5.55min 0.0000

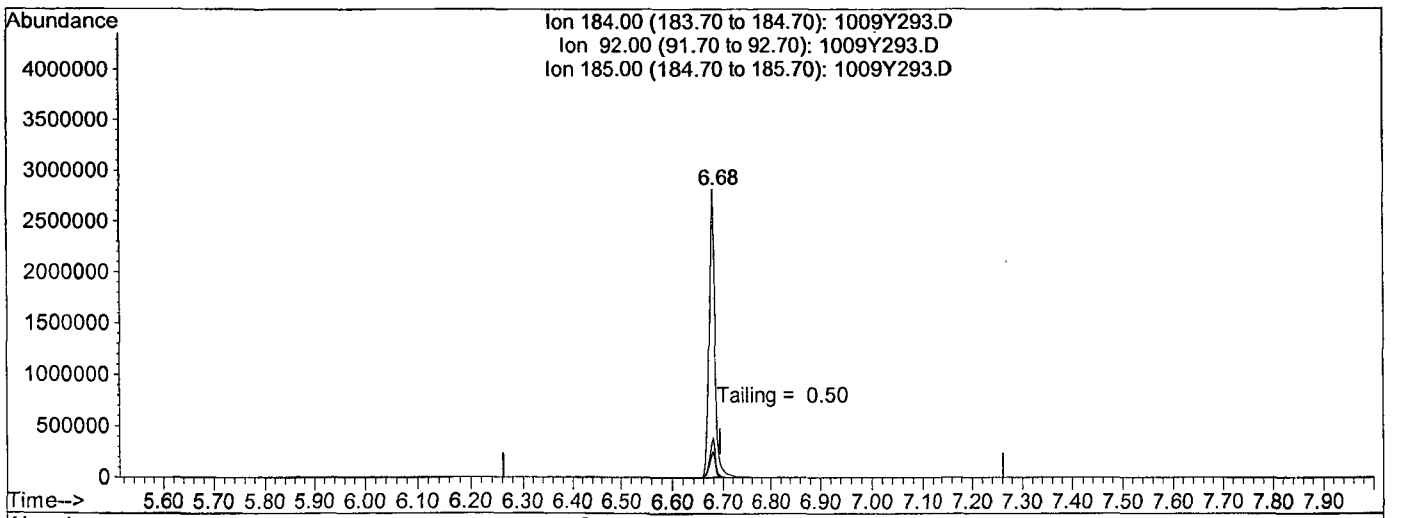
response 4011659

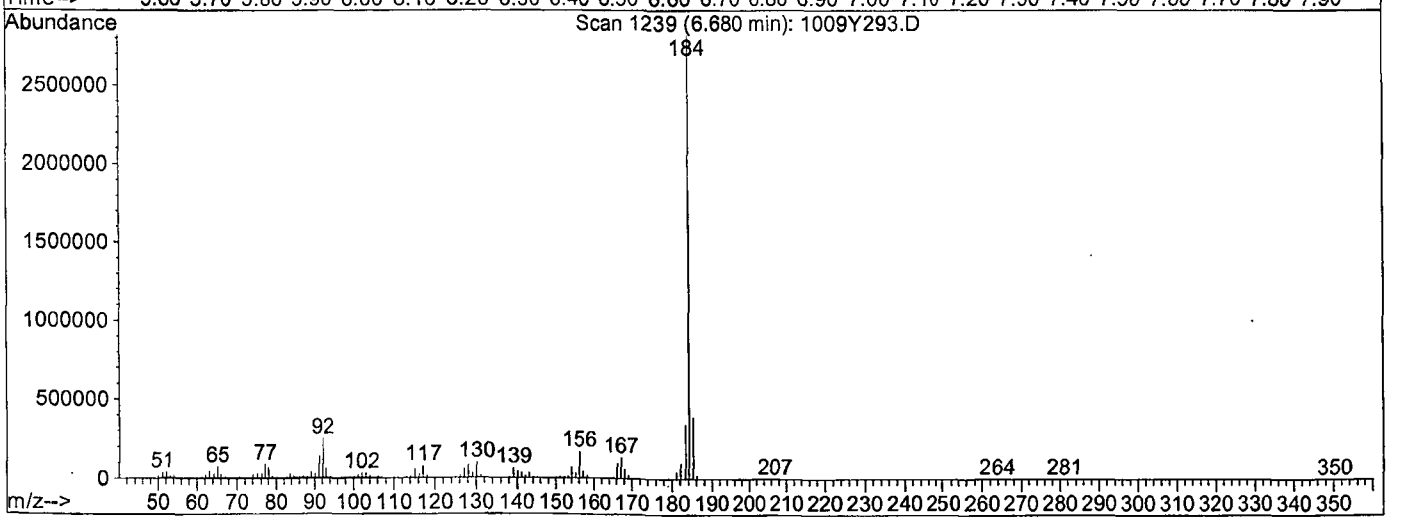
Ion	Exp%	Act%
266.00	100	100
264.00	61.70	62.06
268.00	63.80	61.73
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y293.D Vial: 93
Acq On : 29 Oct 20 12:06 Operator: MA
Sample : SV TUNE 10/2/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 29 12:18 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Mon Oct 26 10:44:41 2020
Response via : Single Level Calibration





TIC: 1009Y293.D

(6) Benzidine

6.68min 0.0000

response 23502495

Ion	Exp%	Act%
184.00	100	100
92.00	9.70	9.10
185.00	14.10	14.15
0.00	0.00	0.00

_LIQ003

Organic Extraction Worksheet

Method	Continuous Liquid/Liquid SVOC 3520C	Extraction Set	201027A	Extraction Method	LIQ003	Units	mL

Spiked ID 1	8270T Spike 10/6/20 ex 10/6/21		Surrogate ID 1	8270 Surrogate 10/6/20 ex 10/6/21	
Spiked ID 2	Sim Spike 9/11/20 ex 9/11/21		Surrogate ID 2	SIM Surrogate 8/11/20 ex 8/11/21	
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NO	
Spiked ID 7			Ext. Start Time:	10/27/20 12:15	
Spiked ID 8			Ext. End Time:	10/29/20 11:15	
			GC Requires Extract By:		

pH1	2	10/27/20 13:15	Water Bath Temp 1 °C	EWB6 70/67 °C
pH2	14	10/28/20 13:00	Water Bath Temp 2 °C	
pH3			Water Bath Temp 3 °C	

Spiked By: DL **Date** 10/29/20 1:27:23 PM **Witnessed By:** **Date** 10/27/20 12:15:00 PM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201027A Blk				0.2,0.05	1,2	800	1	2/1	10/27/20 12:15	
						equip	EWB6				
2	201027A LCS-1		1	1	0.2	1	800	1	2/1	10/27/20 12:15	
						equip	EWB6				
3	201027A LCS-2		0.125	2	0.050	2	800	1	2/1	10/27/20 12:15	
						equip	EWB6				
4	201027A LCSD-1		1	1	0.2	1	800	1	2/1	10/27/20 12:15	
						equip	EWB6				
5	201027A LCSD-2		0.125	2	0.0250	2	800	1	2/1	10/27/20 12:15	
						equip	EWB6				
6	BA20716	BA20716W14			0.2,0.05	1,2	800	1	2/1	10/27/20 12:15	93873
						equip	EWB6				
7	BA20718	BA20718W17			0.2,0.05	1,2	800	1	2/1	10/27/20 12:15	93873
						equip	EWB6				
8	BA20719	BA20719W13			0.2,0.05	1,2	800	1	2/1	10/27/20 12:15	93873
						equip	EWB6				

Solvent and Lot#	
PH Strips	HC904495
Dichloromethane (DCM)	60182
1+1 H2SO4	231834
10N NaOH	10-06-20
Filter Paper	400178
Na2SO4	2019070279

Extraction COC Transfer	
Extraction lab employee Initials	DL
GC analyst's initials	MA
Date	10/29/20
Time	11:15
Refrigerator	GC_C

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	YL,DL,KY

Modified	10/29/20 1:34:56 PM

Reviewed By: MA **Date** 10/29/20

Injection Log

Directory: M:\YODA\DATA\Y201009\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	1009Y002.D	1	SV TUNE 10/02/20		9 Oct 20 10:55
2	3	1009Y003.D	1	4ug/mL 8270 7/22/20		9 Oct 20 11:14
3	4	1009Y004.D	1	5ug/mL 8270 7/22/20		9 Oct 20 11:40
4	5	1009Y005.D	1	10ug/mL 8270 7/22/20		9 Oct 20 12:05
5	6	1009Y006.D	1	20ug/mL 8270 7/22/20		9 Oct 20 12:31
6	7	1009Y007.D	1	40ug/mL 8270 7/22/20		9 Oct 20 12:56
7	8	1009Y008.D	1	50ug/mL 8270 7/22/20		9 Oct 20 13:22
8	9	1009Y009.D	1	60ug/mL 8270 7/22/20		9 Oct 20 13:48
9	10	1009Y010.D	1	80ug/mL 8270 7/22/20		9 Oct 20 14:13
10	11	1009Y011.D	1	100ug/mL 8270 7/22/20		9 Oct 20 14:38
11	12	1009Y012.D	1	SS 50ug/mL 8270 7/22/20		9 Oct 20 15:04
12	93	1009Y293.D	1	SV TUNE 10/2/20		29 Oct 20 12:06
13	94	1009Y294.D	1	50ug/mL 8270 7/22/20 (6)		29 Oct 20 12:21
14	95	1009Y295.D	1.25	201027A BLK 1/800		29 Oct 20 12:47
15	96	1009Y296.D	1.25	201027A LCS-1 1/800		29 Oct 20 13:12
16	97	1009Y297.D	1.25	201027A LCSD-1 1/800		29 Oct 20 13:38
17	98	1009Y298.D	1.25	BA20716W14 1/800		29 Oct 20 14:04
18	99	1009Y299.D	1.25	BA20718W17 1/800		29 Oct 20 14:29
19	100	1009Y300.D	1.25	BA20719W13 1/800		29 Oct 20 14:55
20	3	1009Y303.D	1	50ug/mL 8270 7/22/20 (6)		29 Oct 20 15:58

ORGANICS

Calibration Data

PAH by GCMS SIM
EPA 8270 SIM

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/16/20
Matrix: Instrument: Linus
Initials: HA

			1016L003.D	1016L004.D	1016L005.D	1016L006.D	1016L007.D	1016L008.D	1016L009.D	1016L010.D								
		Compound	0.1	0.2	0.5	1	5	10	50	100			Avg	%RSD	Type	r^2	Q	MRF
1	I	Napthalene-D8(IS)																
2	TM	Naphthalene	1.072	1.011	0.9676	1.022	0.9167	0.9139	0.9182	0.8593			0.96	7.4	TM			0.700
3	S	2-Methylnaphthalene-D10 (2M	1.176	1.100	1.058	1.081	1.179	1.100	1.103	1.115			1.1	3.9	S			
4	TM	2-Methylnaphthalene	0.7140	0.6668	0.6549	0.6735	0.6684	0.6295	0.6063	0.5873			0.65	6.2	TM			0.400
5	TM	1-Methylnaphthalene	0.7055	0.6769	0.6442	0.6665	0.6278	0.6160	0.6081	0.5750			0.64	6.6	TM			
6	I	Acenaphthene-D10(IS)																
7	TM	Acenaphthylene	4.020	3.698	3.609	3.849	3.853	3.617	3.693	3.090			3.7	7.5	TM			0.900
8	*TM	Acenaphthene	1.255	1.178	1.070	1.129	1.081	1.066	1.067	0.8941			1.1	9.6	*TM			0.900
9	TM	Fluorene	1.425	1.326	1.361	1.398	1.361	1.378	1.359	1.238			1.4	4.1	TM			0.900
10	I	Phenanthrene-D10(IS)																
11	TM	Phenanthrene	1.106	1.072	1.058	1.094	1.014	1.075	0.8950	0.8282			1.0	10.0	TM			0.700
12	TM	Anthracene	1.004	0.9774	0.9456	0.9873	0.9650	0.9772	0.8354	0.7568			0.93	9.4	TM			0.700
13	S	Fluoranthene-D10 (FRT)	1.325	1.172	1.200	1.205	1.196	1.284	1.270	1.255			1.2	4.3	S			
14	*TM	Fluoranthene	1.487	1.413	1.446	1.478	1.433	1.459	1.208	1.113			1.4	10	*TM			0.600
15	I	Chrysene-D12(IS)																
16	TM	Pyrene	1.113	1.074	1.065	1.102	1.058	1.049	0.9360	0.9508			1.0	6.3	TM			0.600
17	TM	Benz (a) anthracene	1.122	1.058	1.018	1.026	1.036	1.020	0.9993	0.9390			1.0	5.0	TM			0.800
18	TM	Chrysene	1.164	1.114	1.105	1.100	1.015	1.027	0.9314	0.8998			1.0	8.9	TM			0.700
19	TM	Indeno (1,2,3-cd) pyrene	1.282	1.197	1.190	1.247	1.262	1.263	1.262	1.253			1.2	2.7	TM			0.500
20	I	Perylene-D12(IS)																
21	TM	Benzo (b) fluoranthene	0.9987	0.9431	0.8304	0.8853	0.9907	1.093	1.028	0.9179			0.96	8.7	TM			0.700
22	TM	Benzo (k) fluoranthene	1.083	1.006	1.104	1.167	1.140	1.122	0.9848	0.9491			1.1	7.4	TM			0.700
23	*TM	Benzo (a) pyrene	0.8612	0.7892	0.8030	0.9158	0.9626	0.9531	0.9222	0.8779			0.89	7.3	*TM			0.700
24	TM	Dibenz (a,h) anthracene	0.9238	0.8974	0.9091	0.9540	1.001	1.033	0.9122	1.001			0.95	5.4	TM			0.400
25	TM	Benzo (g,h,i) perylene	1.019	0.9534	0.9591	0.9979	1.017	1.046	0.9207	0.9822			0.99	4.2	TM			0.500
26																		
27																		
28																		
29																		
30																		
31																		
32																		
33																		
34																		
35																		

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L003.D Vial: 3
Acq On : 16 Oct 20 10:37 Operator: MA
Sample : 0.1 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:49:24 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	44084	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	24595	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	48782	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.12	240	67228	2.50000	ppb		-0.01
20) Perylene-D12(IS)	13.56	264	75125	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	1037	0.05495	ppb		0.00
Spiked Amount 5.000			Recovery = 1.100%				
13) Fluoranthene-D10 (FRT)	9.38	212	1293	0.05685	ppb		0.00
Spiked Amount 5.000			Recovery = 1.140%				
Target Compounds							Qvalue
2) Naphthalene	4.30	128	1890	0.11284	ppb		99
4) 2-Methylnaphthalene	5.08	142	1259	0.11717	ppb		99
5) 1-Methylnaphthalene	5.19	142	1244	0.11294	ppb		100
7) Acenaphthylene	6.11	152	3955	0.11795	ppb		99
8) Acenaphthene	6.31	154	1235	0.11635	ppb		99
9) Fluorene	6.90	166	1402	0.11107	ppb		99
11) Phenanthrene	8.02	178	2158	0.11070	ppb		99
12) Anthracene	8.08	178	1960	0.11301	ppb		99
14) Fluoranthene	9.40	202	2902	0.11366	ppb		98
16) Pyrene	9.65	202	2993	0.11038	ppb	#	82
17) Benz (a) anthracene	11.11	228	3017	0.11408	ppb		100
18) Chrysene	11.16	228	3131	0.11082	ppb		98
19) Indeno (1,2,3-cd) pyrene	15.03	276	3448	0.10423	ppb	#	93
21) Benzo (b) fluoranthene	12.92	252	3001	0.11051	ppb	#	98
22) Benzo (k) fluoranthene	12.98	252	3253	0.09995	ppb		98
23) Benzo (a) pyrene	13.46	252	2588	0.10136	ppb		98
24) Dibenz (a,h) anthracene	15.07	278	2776	0.09615	ppb	#	96
25) Benzo (g,h,i) perylene	15.40	276	3061	0.10254	ppb		98

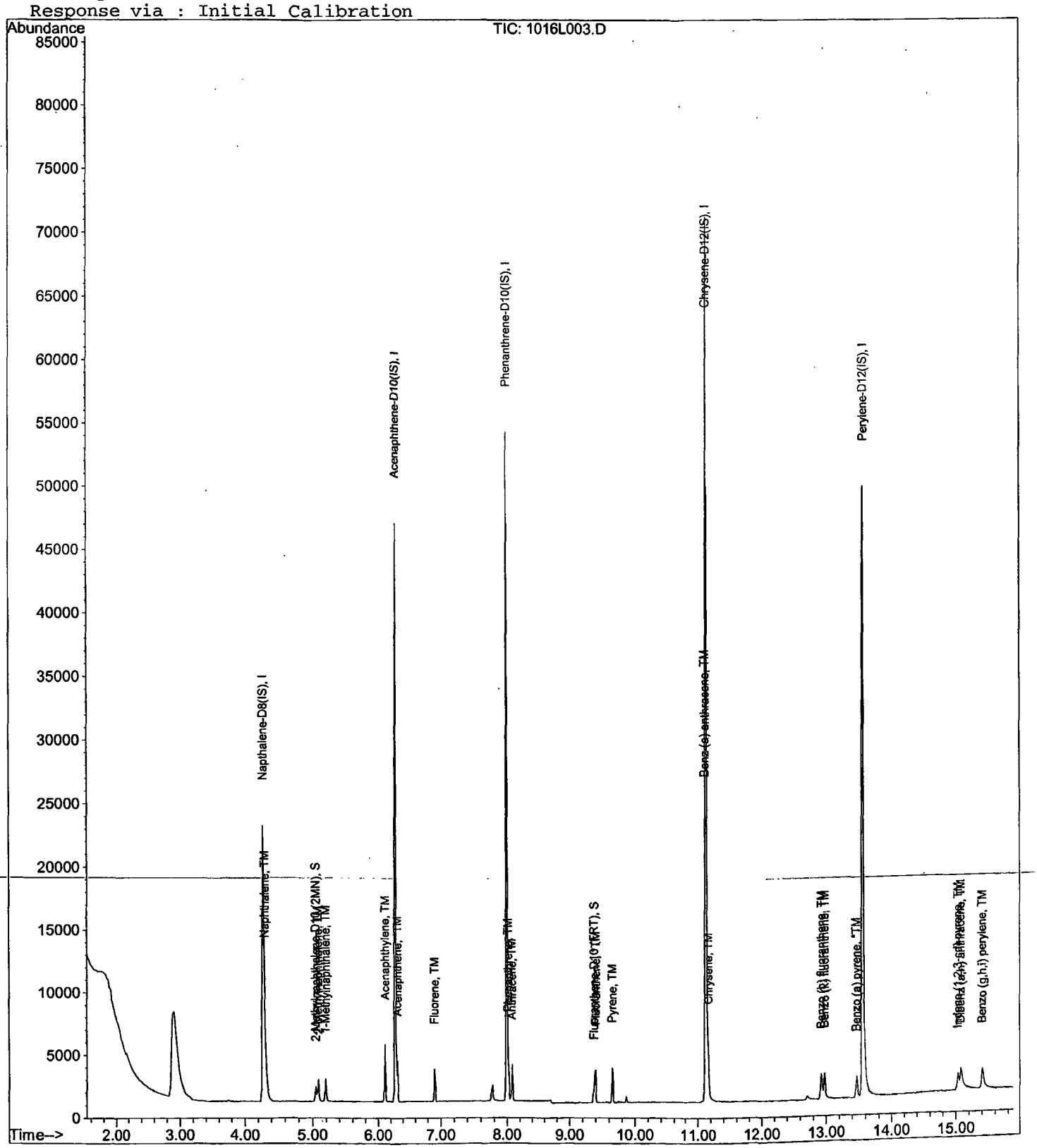
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L003.D Vial: 3
Acq On : 16 Oct 20 10:37 Operator: MA
Sample : 0.1 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L004.D Vial: 4
Acq On : 16 Oct 20 10:59 Operator: MA
Sample : 0.2 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:49:24 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	58321	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	32526	2.50000 ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	62347	2.50000 ppb		0.00
15) Chrysene-D12(IS)	11.12	240	83952	2.50000 ppb		-0.01
20) Perylene-D12(IS)	13.56	264	93534	2.50000 ppb		0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	2566	0.10278 ppb		0.00
Spiked Amount 5.000			Recovery =	2.060%		
13) Fluoranthene-D10 (FRT)	9.38	212	2923	0.10055 ppb		0.00
Spiked Amount 5.000			Recovery =	2.020%		
Target Compounds						Qvalue
2) Naphthalene	4.30	128	4715	0.21277 ppb		99
4) 2-Methylnaphthalene	5.08	142	3111	0.21884 ppb		99
5) 1-Methylnaphthalene	5.19	142	3158	0.21671 ppb		100
7) Acenaphthylene	6.11	152	9622	0.21698 ppb		100
8) Acenaphthene	6.31	154	3066	0.21841 ppb		99
9) Fluorene	6.90	166	3451	0.20674 ppb		96
11) Phenanthrene	8.01	178	5348	0.21466 ppb		100
12) Anthracene	8.08	178	4875	0.21993 ppb		99
14) Fluoranthene	9.40	202	7047	0.21596 ppb		98
16) Pyrene	9.66	202	7210	0.21292 ppb		99
17) Benz (a) anthracene	11.11	228	7107	0.21520 ppb		99
18) Chrysene	11.16	228	7480	0.21202 ppb		99
19) Indeno (1,2,3-cd) pyrene	15.03	276	8042	0.19468 ppb	#	90
21) Benzo (b) fluoranthene	12.92	252	7057	0.20872 ppb		99
22) Benzo (k) fluoranthene	12.98	252	7525	0.18570 ppb		98
23) Benzo (a) pyrene	13.46	252	5905	0.18575 ppb		98
24) Dibenz (a,h) anthracene	15.07	278	6715	0.18680 ppb	#	97
25) Benzo (g,h,i) perylene	15.40	276	7134	0.19194 ppb		96

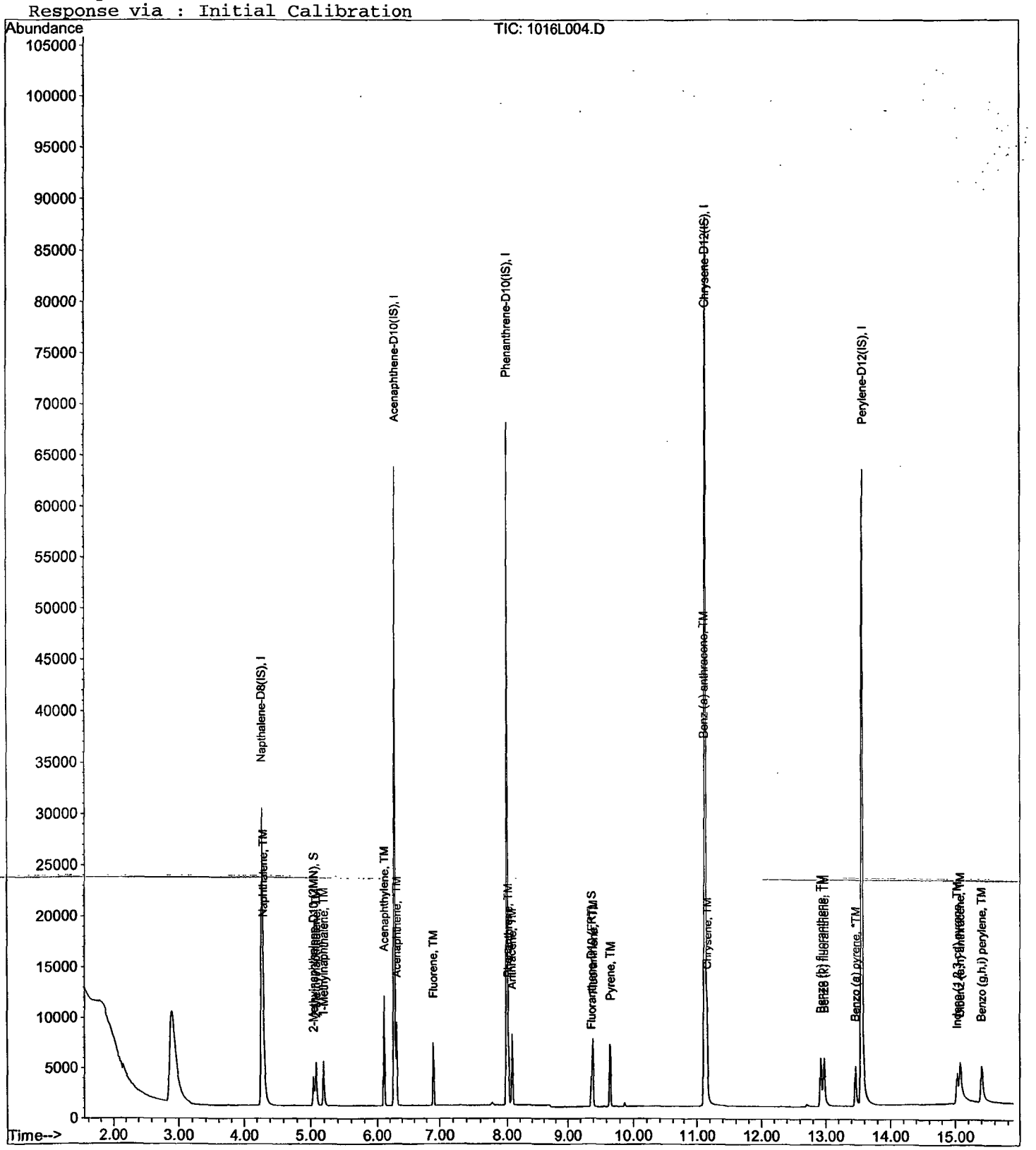
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L004.D Vial: 4
Acq On : 16 Oct 20 10:59 Operator: MA
Sample : 0.2 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L005.D Vial: 5
Acq On : 16 Oct 20 11:21 Operator: MA
Sample : 0.5 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:49:24 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	44248	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	24849	2.50000 ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	46124	2.50000 ppb		0.00
15) Chrysene-D12(IS)	11.12	240	63984	2.50000 ppb		-0.01
20) Perylene-D12(IS)	13.55	264	70650	2.50000 ppb		-0.01
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	4681	0.24712 ppb		0.00
Spiked Amount 5.000			Recovery =	4.940%		
13) Fluoranthene-D10 (FRT)	9.38	212	5535	0.25737 ppb		0.00
Spiked Amount 5.000			Recovery =	5.140%		
Target Compounds						Qvalue
2) Naphthalene	4.30	128	8563	0.50933 ppb		99
4) 2-Methylnaphthalene	5.08	142	5796	0.53739 ppb		100
5) 1-Methylnaphthalene	5.19	142	5701	0.51565 ppb		98
7) Acenaphthylene	6.11	152	17937	0.52946 ppb		100
8) Acenaphthene	6.31	154	5316	0.49569 ppb		100
9) Fluorene	6.90	166	6766	0.53055 ppb		96
11) Phenanthrene	8.01	178	9757	0.52937 ppb		99
12) Anthracene	8.08	178	8723	0.53195 ppb		99
14) Fluoranthene	9.40	202	13338	0.55251 ppb		98
16) Pyrene	9.65	202	13623	0.52786 ppb	#	82
17) Benz (a) anthracene	11.11	228	13025	0.51748 ppb		99
18) Chrysene	11.15	228	14146	0.52610 ppb	#	95
19) Indeno (1,2,3-cd) pyrene	15.03	276	15224	0.48356 ppb		92
21) Benzo (b) fluoranthene	12.92	252	11733	0.45943 ppb		98
22) Benzo (k) fluoranthene	12.98	252	15599	0.50963 ppb		98
23) Benzo (a) pyrene	13.46	252	11347	0.47256 ppb		99
24) Dibenz (a,h) anthracene	15.07	278	12845	0.47308 ppb	#	97
25) Benzo (g,h,i) perylene	15.40	276	13552	0.48272 ppb		98

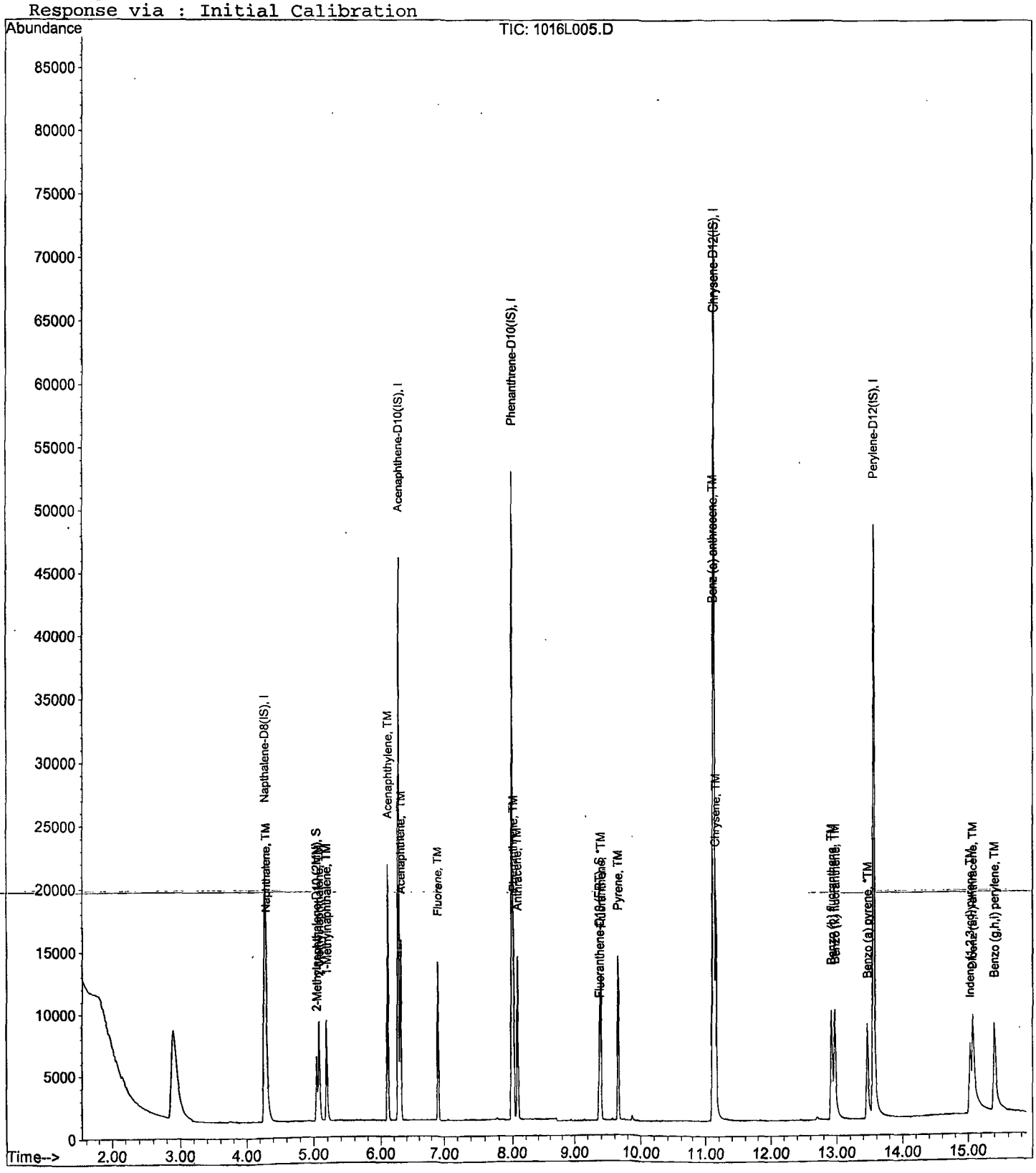
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L005.D Vial: 5
Acq On : 16 Oct 20 11:21 Operator: MA
Sample : 0.5 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L006.D Vial: 6
Acq On : 16 Oct 20 11:43 Operator: MA
Sample : 1 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:49:24 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	49012	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	26755	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	54274	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.12	240	71691	2.50000	ppb		-0.01
20) Perylene-D12(IS)	13.55	264	78644	2.50000	ppb		-0.01
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	10597	0.50507	ppb		0.00
Spiked Amount 5.000			Recovery = 10.100%				
13) Fluoranthene-D10 (FRT)	9.38	212	13081	0.51692	ppb		0.00
Spiked Amount 5.000			Recovery = 10.340%				
Target Compounds							Qvalue
2) Naphthalene	4.30	128	20041	1.07617	ppb		100
4) 2-Methylnaphthalene	5.08	142	13203	1.10516	ppb		99
5) 1-Methylnaphthalene	5.19	142	13067	1.06701	ppb		100
7) Acenaphthylene	6.11	152	41197	1.12942	ppb		100
8) Acenaphthene	6.31	154	12084	1.04651	ppb		98
9) Fluorene	6.90	166	14961	1.08959	ppb		95
11) Phenanthrene	8.01	178	23742	1.09469	ppb		100
12) Anthracene	8.08	178	21433	1.11077	ppb		99
14) Fluoranthene	9.40	202	32091	1.12971	ppb		98
16) Pyrene	9.65	202	31599	1.09276	ppb	#	84
17) Benz (a) anthracene	11.11	228	29434	1.04369	ppb		99
18) Chrysene	11.15	228	31530	1.04656	ppb	#	96
19) Indeno (1,2,3-cd) pyrene	15.03	276	35770	1.01403	ppb	#	93
21) Benzo (b) fluoranthene	12.92	252	27848	0.97960	ppb		98
22) Benzo (k) fluoranthene	12.98	252	36719	1.07769	ppb		98
23) Benzo (a) pyrene	13.46	252	28808	1.07779	ppb		98
24) Dibenz (a,h) anthracene	15.07	278	30010	0.99291	ppb	#	96
25) Benzo (g,h,i) perylene	15.40	276	31391	1.00449	ppb		98

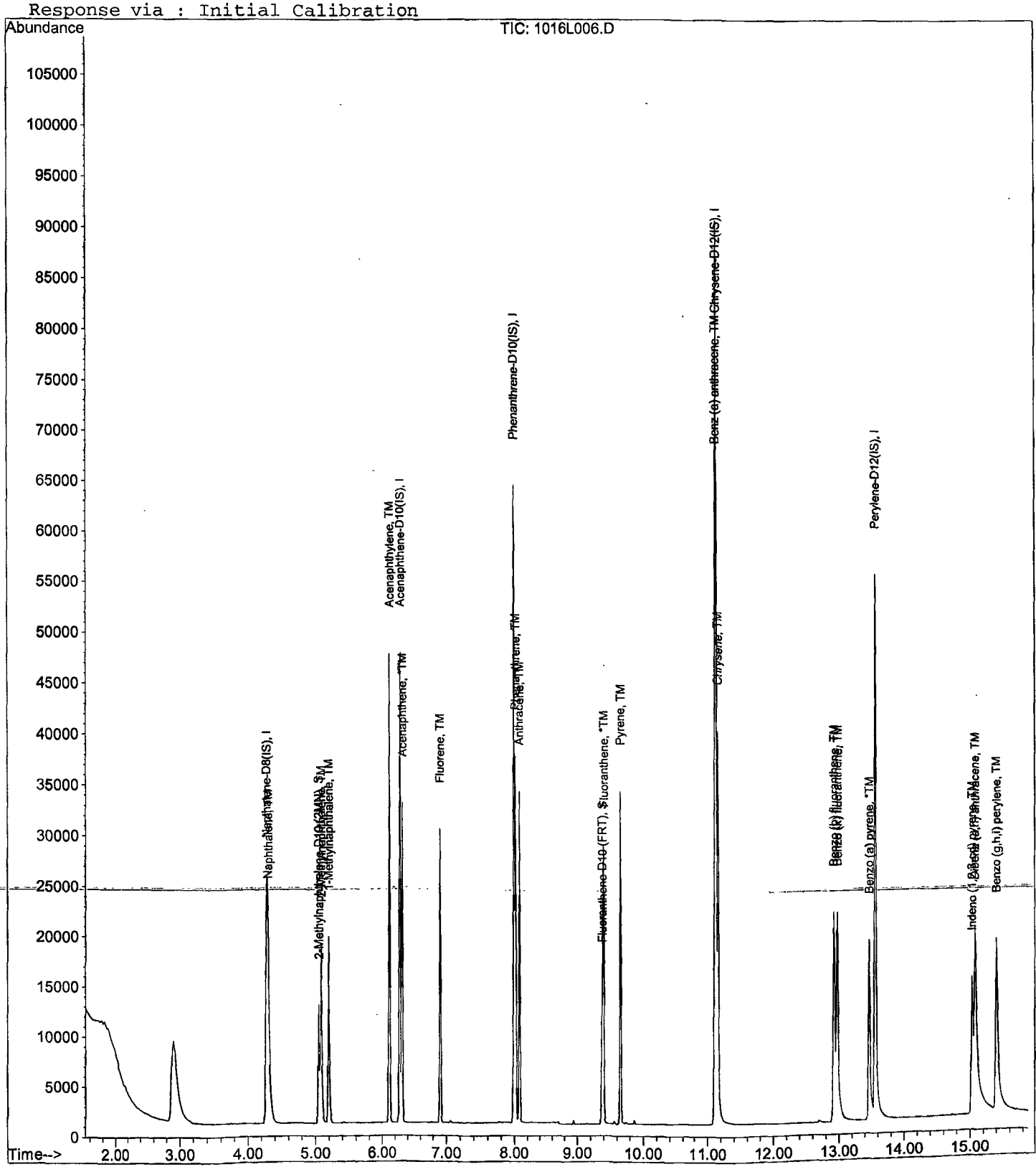
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L006.D Vial: 6
Acq On : 16 Oct 20 11:43 Operator: MA
Sample : 1 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L007.D Vial: 7
Acq On : 16 Oct 20 12:05 Operator: MA
Sample : 5 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:49:24 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	49866	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	26363	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	52853	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.13	240	72201	2.50000	ppb		0.00
20) Perylene-D12(IS)	13.56	264	77115	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	58812	2.75507	ppb		0.00
Spiked Amount 5.000			Recovery	= 55.100%			
13) Fluoranthene-D10 (FRT)	9.38	212	63208	2.56494	ppb		0.00
Spiked Amount 5.000			Recovery	= 51.300%			
Target Compounds							Qvalue
2) Naphthalene	4.30	128	91420	4.82503	ppb		100
4) 2-Methylnaphthalene	5.08	142	66664	5.48457	ppb		100
5) 1-Methylnaphthalene	5.19	142	62616	5.02547	ppb		100
7) Acenaphthylene	6.11	152	203147	5.65209	ppb		100
8) Acenaphthene	6.31	154	57006	5.01028	ppb		100
9) Fluorene	6.90	166	71772	5.30476	ppb		100
11) Phenanthrene	8.01	178	107223	5.07675	ppb		100
12) Anthracene	8.08	178	102004	5.42852	ppb		100
14) Fluoranthene	9.40	202	151517	5.47730	ppb		100
16) Pyrene	9.66	202	152720	5.24406	ppb		100
17) Benz (a) anthracene	11.11	228	149635	5.26839	ppb		100
18) Chrysene	11.16	228	146496	4.82821	ppb		100
19) Indeno (1,2,3-cd) pyrene	15.04	276	182195	5.12848	ppb	#	100
21) Benzo (b) fluoranthene	12.93	252	152793	5.48134	ppb		100
22) Benzo (k) fluoranthene	12.98	252	175807	5.26218	ppb		100
23) Benzo (a) pyrene	13.46	252	148467	5.66469	ppb		100
24) Dibenz (a,h) anthracene	15.08	278	154350	5.20809	ppb		100
25) Benzo (g,h,i) perylene	15.41	276	156806	5.11716	ppb		100

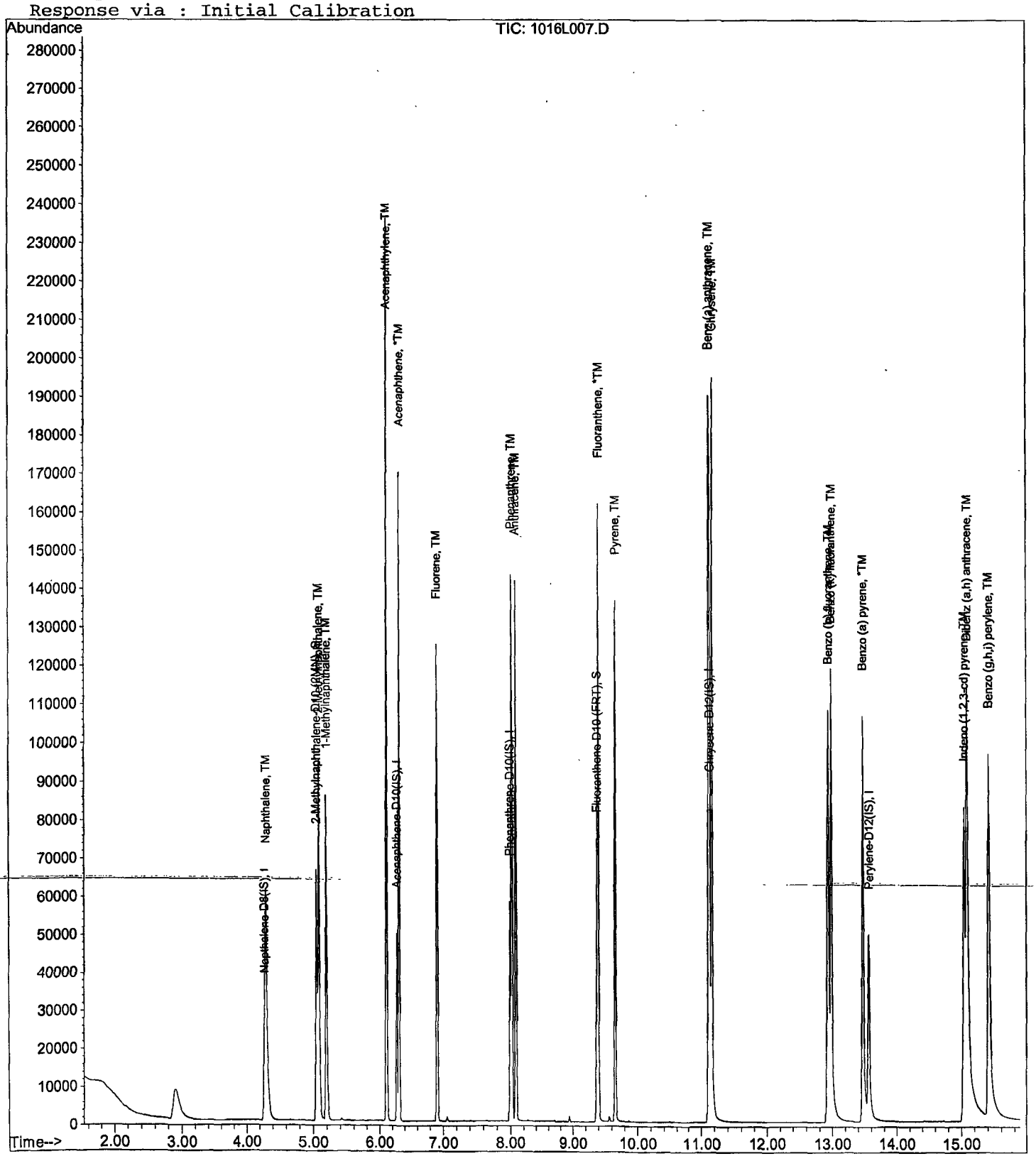
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L007.D Vial: 7
Acq On : 16 Oct 20 12:05 Operator: MA
Sample : 5 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L008.D Vial: 8
Acq On : 16 Oct 20 12:27 Operator: MA
Sample : 10 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:49:24 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	46239	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	24174	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	47454	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.13	240	66927	2.50000	ppb		0.00
20) Perylene-D12(IS)	13.56	264	68921	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	101736	5.13969	ppb		0.00
Spiked Amount 5.000			Recovery = 102.800%				
13) Fluoranthene-D10 (FRT)	9.38	212	121907	5.50973	ppb		0.00
Spiked Amount 5.000			Recovery = 110.200%				
Target Compounds							Qvalue
2) Naphthalene	4.30	128	169029	9.62090	ppb		100
4) 2-Methylnaphthalene	5.08	142	116429	10.33020	ppb		100
5) 1-Methylnaphthalene	5.19	142	113925	9.86066	ppb		100
7) Acenaphthylene	6.11	152	349784	10.61317	ppb		100
8) Acenaphthene	6.31	154	103108	9.88280	ppb		100
9) Fluorene	6.90	166	133281	10.74300	ppb		96
11) Phenanthrene	8.03	178	203962	10.75583	ppb		97
12) Anthracene	8.09	178	185489	10.99459	ppb		96
14) Fluoranthene	9.40	202	277003	11.15286	ppb		95
16) Pyrene	9.66	202	280854	10.40385	ppb		95
17) Benz (a) anthracene	11.12	228	272999	10.36925	ppb		97
18) Chrysene	11.16	228	274840	9.77196	ppb	#	97
19) Indeno (1,2,3-cd) pyrene	15.05	276	338064	10.26581	ppb	#	97
21) Benzo (b) fluoranthene	12.93	252	301266	12.09264	ppb	#	98
22) Benzo (k) fluoranthene	12.99	252	309244	10.35662	ppb		98
23) Benzo (a) pyrene	13.48	252	262761	11.21745	ppb		98
24) Dibenz (a,h) anthracene	15.10	278	284747	10.75025	ppb		99
25) Benzo (g,h,i) perylene	15.42	276	288237	10.52455	ppb		99

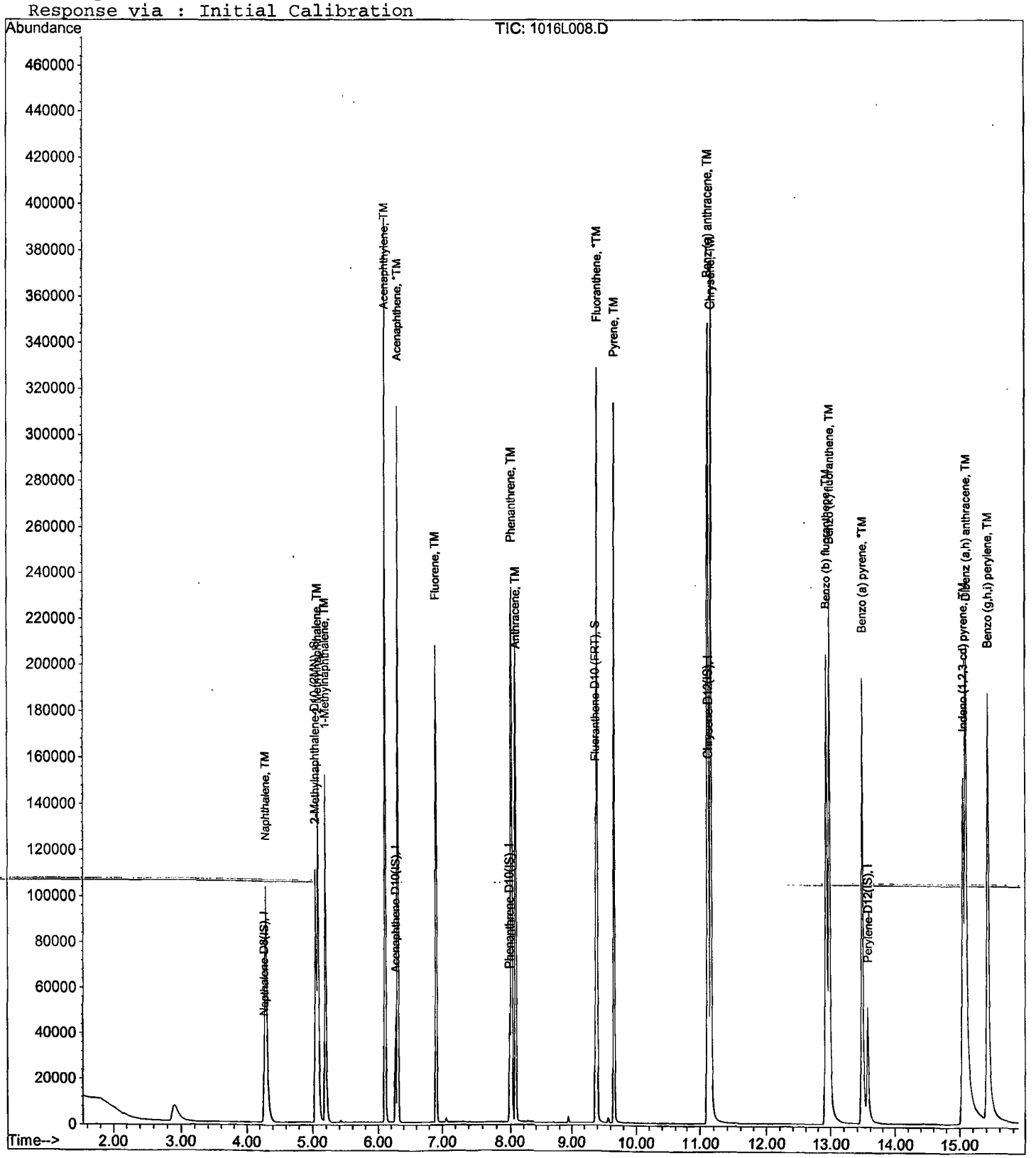
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L008.D Vial: 8
Acq On : 16 Oct 20 12:27 Operator: MA
Sample : 10 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:49 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L009.D Vial: 9
Acq On : 16 Oct 20 12:50 Operator: MA
Sample : 50 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:48 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:47:50 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	40530	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	20899	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	8.00	188	41652	2.50000	ppb		0.01
15) Chrysene-D12(IS)	11.14	240	56403	2.50000	ppb		0.01
20) Perylene-D12(IS)	13.57	264	65963	2.50000	ppb		0.01
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	447024	25.76472	ppb		0.00
Spiked Amount 5.000			Recovery = 515.300%				
13) Fluoranthene-D10 (FRT)	9.39	212	528902	27.23414	ppb		0.01
Spiked Amount 5.000			Recovery = 544.680%				
Target Compounds							Qvalue
2) Naphthalene	4.30	128	744322	48.33340	ppb		99
4) 2-Methylnaphthalene	5.08	142	491506	49.75173	ppb		99
5) 1-Methylnaphthalene	5.20	142	492889	48.67075	ppb		94
7) Acenaphthylene	6.12	152	1543648	54.17718	ppb		98
8) Acenaphthene	6.31	154	445953	49.44242	ppb		95
9) Fluorene	6.92	166	568152	52.97182	ppb		90
11) Phenanthrene	8.03	178	745533	44.79178	ppb		98
12) Anthracene	8.09	178	695926	46.99599	ppb		98
14) Fluoranthene	9.41	202	1006088	46.15032	ppb	#	92
16) Pyrene	9.67	202	1055879	46.41163	ppb	#	93
17) Benz (a) anthracene	11.13	228	1127240	50.80447	ppb		98
18) Chrysene	11.18	228	1050714	44.32875	ppb		98
19) Indeno (1,2,3-cd) pyrene	15.07	276	1423510	51.29252	ppb	#	89
21) Benzo (b) fluoranthene	12.97	252	1356281	56.88160	ppb	#	97
22) Benzo (k) fluoranthene	13.02	252	1299182	45.46088	ppb		98
23) Benzo (a) pyrene	13.50	252	1216664	54.26940	ppb		98
24) Dibenz (a,h) anthracene	15.13	278	1203467	47.47280	ppb		96
25) Benzo (g,h,i) perylene	15.47	276	1214669	46.34075	ppb		96

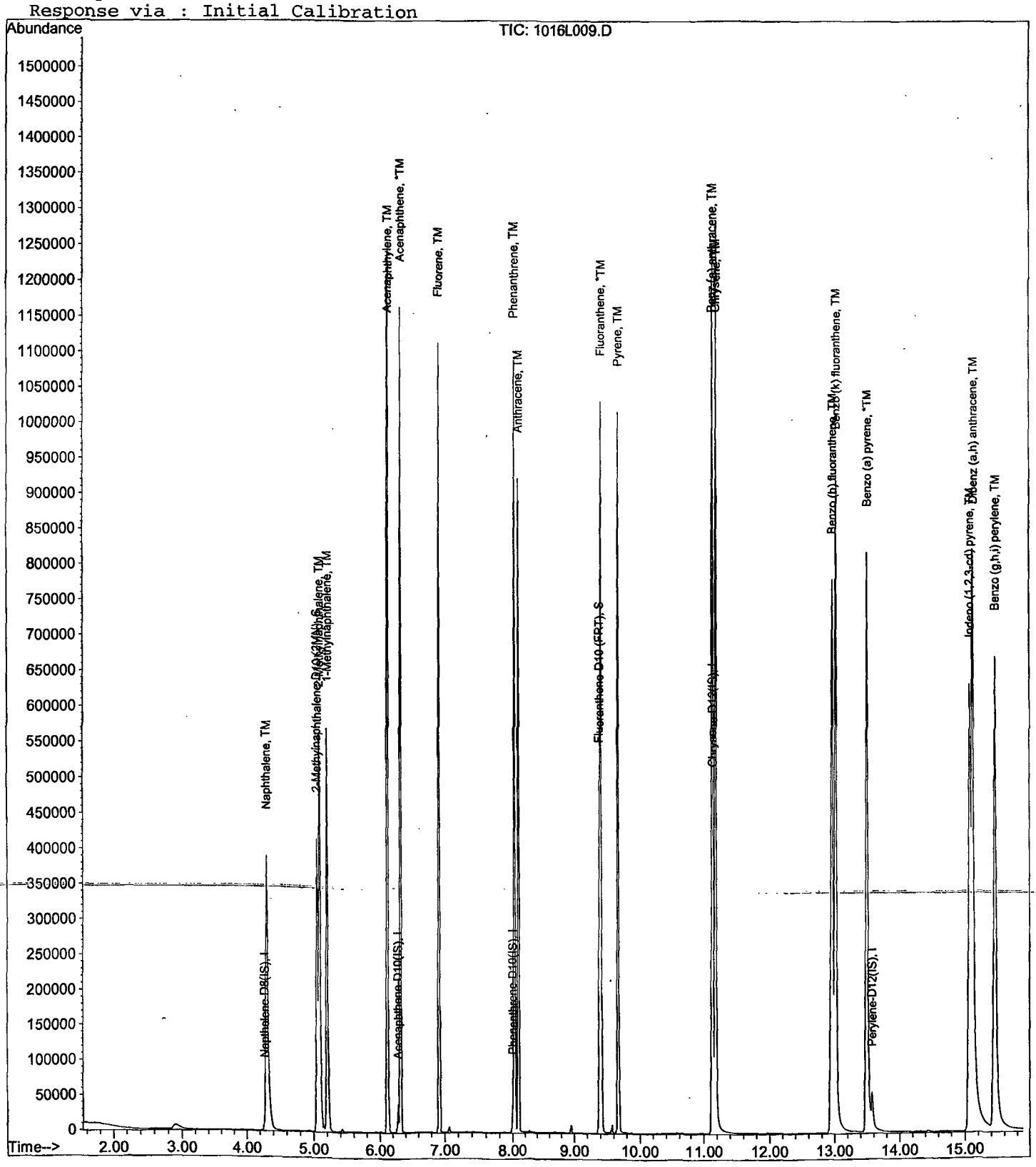
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L009.D Vial: 9
Acq On : 16 Oct 20 12:50 Operator: MA
Sample : 50 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:48 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L010.D Vial: 10
Acq On : 16 Oct 20 13:12 Operator: MA
Sample : 100 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:47 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:47:50 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	39931	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	22446	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	8.00	188	44342	2.50000	ppb		0.01
15) Chrysene-D12(IS)	11.15	240	55121	2.50000	ppb		0.02
20) Perylene-D12(IS)	13.58	264	58243	2.50000	ppb		0.02
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	890571	52.09901	ppb		0.00
Spiked Amount 5.000			Recovery	= 1041.980%			
13) Fluoranthene-D10 (FRT)	9.39	212	1112969	53.83220	ppb		0.01
Spiked Amount 5.000			Recovery	= 1076.640%			
Target Compounds							Qvalue
2) Naphthalene	4.30	128	1372540	90.46444	ppb		98
4) 2-Methylnaphthalene	5.09	142	938117	96.38352	ppb		96
5) 1-Methylnaphthalene	5.20	142	918368	92.04539	ppb		95
7) Acenaphthylene	6.12	152	2774435	90.66282	ppb		99
8) Acenaphthene	6.33	154	802774	82.86868	ppb		97
9) Fluorene	6.93	166	1111179	96.46082	ppb		85
11) Phenanthrene	8.04	178	1468903	82.89821	ppb		97
12) Anthracene	8.10	178	1342303	85.14692	ppb		96
14) Fluoranthene	9.42	202	1974317	85.06995	ppb	#	90
16) Pyrene	9.68	202	2096374	94.29019	ppb	#	94
17) Benz (a) anthracene	11.14	228	2070440	95.48460	ppb		97
18) Chrysene	11.19	228	1983840	85.64316	ppb	#	95
19) Indeno (1,2,3-cd) pyrene	15.11	276	2762426	101.85194	ppb	#	87
21) Benzo (b) fluoranthene	12.98	252	2138419	101.57143	ppb		100
22) Benzo (k) fluoranthene	13.04	252	2211086	87.62543	ppb		100
23) Benzo (a) pyrene	13.52	252	2045239	103.32017	ppb		98
24) Dibenz (a,h) anthracene	15.15	278	2331210	104.14746	ppb	#	95
25) Benzo (g,h,i) perylene	15.50	276	2288345	98.87428	ppb		97

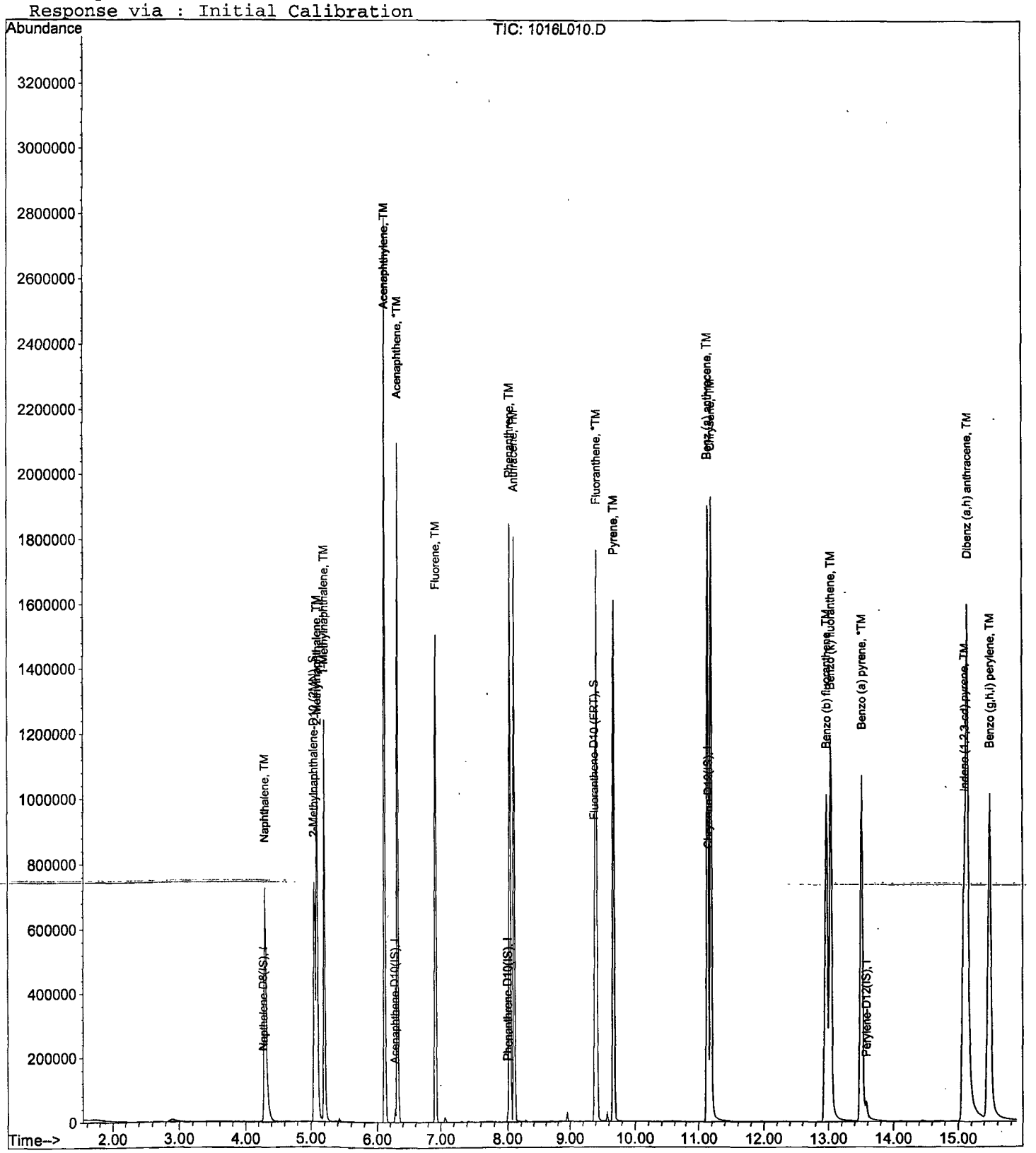
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L010.D Vial: 10
Acq On : 16 Oct 20 13:12 Operator: MA
Sample : 100 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:47 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



PAH by GCMS SIM
EPA 8270 SIM

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/16/20
Instrument: Linus
Initial Cal. Date: 10/16/20
Data File: 1016L011.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	Naphthalene	0.9600	0.9132	4.9	TM	
2	TM	2-Methylnaphthalene	0.6501	0.6497	0.06	TM	
3	TM	1-Methylnaphthalene	0.6400	0.6197	3.2	TM	
4	TM	Acenaphthylene	3.679	3.702	0.64	TM	
5	*TM	Acenaphthene	1.093	1.076	1.5	*TM	
6	TM	Fluorene	1.356	1.354	0.13	TM	
7	TM	Phenanthrene	1.018	1.058	3.9	TM	
8	TM	Anthracene	0.9311	1.069	15	TM	
9	*TM	Fluoranthene	1.380	1.519	10	*TM	
10	TM	Pyrene	1.043	1.078	3.3	TM	
11	TM	Benz (a) anthracene	1.027	1.030	0.22	TM	
12	TM	Chrysene	1.044	1.015	2.8	TM	
13	TM	Indeno (1,2,3-cd) pyrene	1.244	1.350	8.5	TM	
14	TM	Benzo (b) fluoranthene	0.9609	0.9298	3.2	TM	
15	TM	Benzo (k) fluoranthene	1.069	1.178	10	TM	
16	*TM	Benzo (a) pyrene	0.8856	0.9841	11	*TM	
17	TM	Dibenz (a,h) anthracene	0.9538	1.040	9.1	TM	
18	TM	Benzo (g,h,i) perylene	0.9868	1.050	6.4	TM	
19							
20							
21							
22							
23							
24							
25							
26							
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28							
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31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			5.2		

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L011.D Vial: 11
Acq On : 16 Oct 20 13:34 Operator: MA
Sample : SS SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:53 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	59322	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	30386	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	62233	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.13	240	91312	2.50000	ppb		0.00
20) Perylene-D12(IS)	13.56	264	98148	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	0.00	152	0d	0.00000	ppb		
Spiked Amount 5.000			Recovery =	0.000%			
13) Fluoranthene-D10 (FRT)	0.00	212	0d	0.00000	ppb		
Spiked Amount 5.000			Recovery =	0.000%			
Target Compounds							Qvalue
2) Naphthalene	4.30	128	108342	4.75587	ppb		99
4) 2-Methylnaphthalene	5.08	142	77085	4.99708	ppb		99
5) 1-Methylnaphthalene	5.19	142	73520	4.84127	ppb		98
7) Acenaphthylene	6.11	152	225002	5.03212	ppb		99
8) Acenaphthene	6.31	154	65388	4.92375	ppb		96
9) Fluorene	6.92	166	82291	4.99334	ppb		87
11) Phenanthrene	8.03	178	131665	5.19729	ppb		98
12) Anthracene	8.09	178	133038	5.73959	ppb		97
14) Fluoranthene	9.40	202	189096	5.50570	ppb		95
16) Pyrene	9.66	202	196781	5.16391	ppb		95
17) Benz (a) anthracene	11.12	228	188027	5.01094	ppb		98
18) Chrysene	11.16	228	185421	4.86068	ppb	#	98
19) Indeno (1,2,3-cd) pyrene	15.04	276	246499	5.42292	ppb	#	89
21) Benzo (b) fluoranthene	12.93	252	182515	4.83839	ppb		98
22) Benzo (k) fluoranthene	12.99	252	231163	5.50621	ppb		98
23) Benzo (a) pyrene	13.48	252	193170	5.55576	ppb		98
24) Dibenz (a,h) anthracene	15.10	278	204218	5.45350	ppb		99
25) Benzo (g,h,i) perylene	15.42	276	206170	5.32189	ppb		97

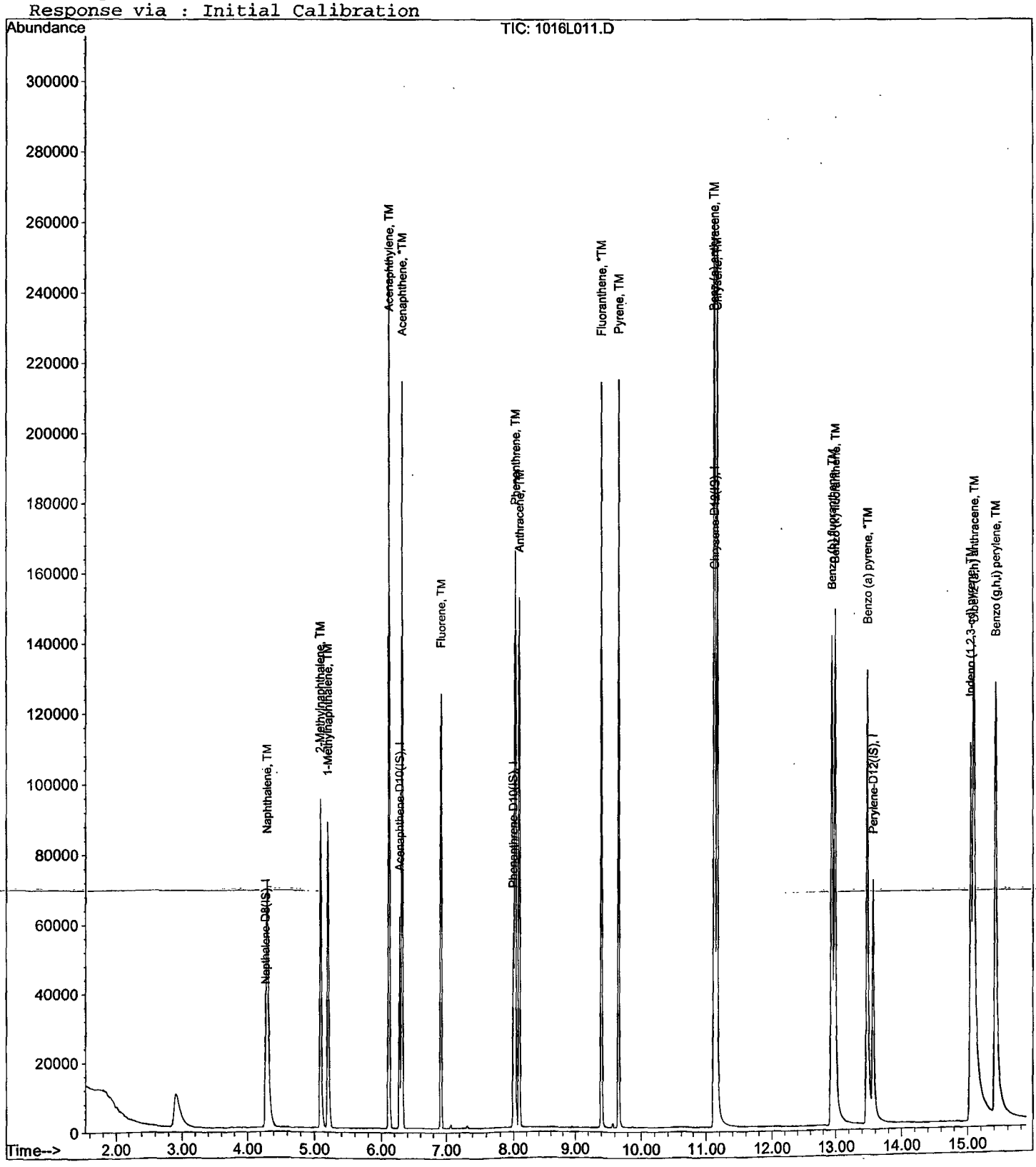
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L011.D Vial: 11
Acq On : 16 Oct 20 13:34 Operator: MA
Sample : SS SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 16 13:53 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



PAH by GCMS SIM
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/29/20
Instrument: Linus
Initial Cal. Date: 10/16/20
Data File: 1016L154.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	TM	Naphthalene	0.9600	0.9254	3.6	TM	
3	S	2-Methylnaphthalene-D10 (2MN)	1.114	1.249	12	S	
4	TM	2-Methylnaphthalene	0.6501	0.6595	1.4	TM	
5	TM	1-Methylnaphthalene	0.6400	0.6497	1.5	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	TM	Acenaphthylene	3.679	3.727	1.3	TM	
8	*TM	Acenaphthene	1.093	1.028	5.9	*TM	
9	TM	Fluorene	1.356	1.358	0.18	TM	
10	I	Phenanthrene-D10(IS)	ISTD			I	
11	TM	Phenanthrene	1.018	1.021	0.30	TM	
12	TM	Anthracene	0.9311	0.9608	3.2	TM	
13	S	Fluoranthene-D10 (FRT)	1.238	1.334	7.7	S	
14	*TM	Fluoranthene	1.380	1.473	6.7	*TM	
15	I	Chrysene-D12(IS)	ISTD			I	
16	TM	Pyrene	1.043	1.029	1.3	TM	
17	TM	Benz (a) anthracene	1.027	1.041	1.3	TM	
18	TM	Chrysene	1.044	0.9986	4.4	TM	
19	TM	Indeno (1,2,3-cd) pyrene	1.244	1.407	13	TM	
20	I	Perylene-D12(IS)	ISTD			I	
21	TM	Benzo (b) fluoranthene	0.9609	0.9174	4.5	TM	
22	TM	Benzo (k) fluoranthene	1.069	1.105	3.4	TM	
23	*TM	Benzo (a) pyrene	0.8856	0.9056	2.3	*TM	
24	TM	Dibenz (a,h) anthracene	0.9538	1.047	9.7	TM	
25	TM	Benzo (g,h,i) perylene	0.9868	1.046	6.0	TM	
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			4.5		

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L154.D Vial: 54
Acq On : 29 Oct 20 12:23 Operator: MA
Sample : 5 SIM 08/21/20 (1) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 29 13:08 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	35741	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	21037	2.50000 ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	41622	2.50000 ppb		0.00
15) Chrysene-D12(IS)	11.13	240	60180	2.50000 ppb		0.00
20) Perylene-D12(IS)	13.56	264	69389	2.50000 ppb		0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	44629	2.80203 ppb		0.00
Spiked Amount 5.000			Recovery	= 56.040%		
13) Fluoranthene-D10 (FRT)	9.38	212	55504	2.69191 ppb		0.00
Spiked Amount 5.000			Recovery	= 53.840%		
Target Compounds						Qvalue
2) Naphthalene	4.30	128	66153	4.81983 ppb		99
4) 2-Methylnaphthalene	5.08	142	47143	5.07239 ppb		99
5) 1-Methylnaphthalene	5.19	142	46445	5.07624 ppb		99
7) Acenaphthylene	6.11	152	156822	5.06596 ppb		99
8) Acenaphthene	6.31	154	43272	4.70646 ppb		97
9) Fluorene	6.90	166	57151	5.00902 ppb		95
11) Phenanthrene	8.02	178	84970	5.01499 ppb		100
12) Anthracene	8.08	178	79978	5.15910 ppb		99
14) Fluoranthene	9.40	202	122583	5.33652 ppb		99
16) Pyrene	9.66	202	123886	4.93280 ppb		99
17) Benz (a) anthracene	11.11	228	125274	5.06566 ppb		100
18) Chrysene	11.16	228	120196	4.78084 ppb		100
19) Indeno (1,2,3-cd) pyrene	15.04	276	169348	5.65293 ppb	#	92
21) Benzo (b) fluoranthene	12.93	252	127309	4.77366 ppb		99
22) Benzo (k) fluoranthene	12.99	252	153400	5.16833 ppb	#	97
23) Benzo (a) pyrene	13.48	252	125679	5.11278 ppb	#	97
24) Dibenz (a,h) anthracene	15.08	278	145235	5.48584 ppb		98
25) Benzo (g,h,i) perylene	15.42	276	145211	5.30189 ppb		97

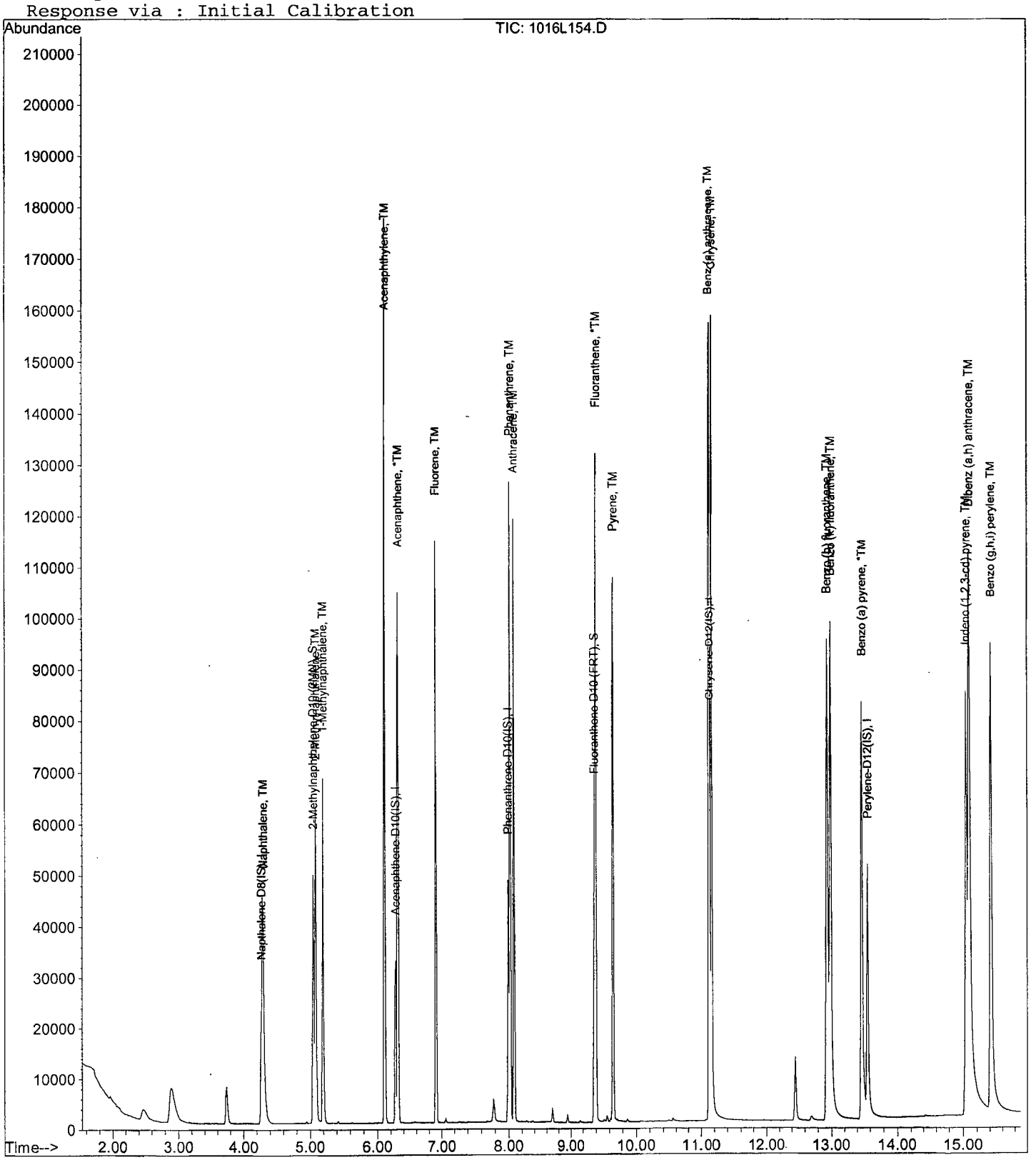
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L154.D Vial: 54
Acq On : 29 Oct 20 12:23 Operator: MA
Sample : 5 SIM 08/21/20 (1) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 29 13:08 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



1016L154.D L1016.M Thu Oct 29 13:08:19 2020 Page 2

PAH by GCMS SIM
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/29/20
Instrument: Linus
Initial Cal. Date: 10/16/20
Data File: 1016L161.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	TM	Naphthalene	0.9600	0.9093	5.3	TM	
3	S	2-Methylnaphthalene-D10 (2MN)	1.114	1.260	13	S	
4	TM	2-Methylnaphthalene	0.6501	0.6293	3.2	TM	
5	TM	1-Methylnaphthalene	0.6400	0.6730	5.2	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	TM	Acenaphthylene	3.679	3.609	1.9	TM	
8	*TM	Acenaphthene	1.093	1.022	6.5	*TM	
9	TM	Fluorene	1.356	1.312	3.2	TM	
10	I	Phenanthrene-D10(IS)	ISTD			I	
11	TM	Phenanthrene	1.018	0.9823	3.5	TM	
12	TM	Anthracene	0.9311	0.9230	0.87	TM	
13	S	Fluoranthene-D10 (FRT)	1.238	1.456	18	S	
14	*TM	Fluoranthene	1.380	1.573	14	*TM	
15	I	Chrysene-D12(IS)	ISTD			I	
16	TM	Pyrene	1.043	1.004	3.7	TM	
17	TM	Benz (a) anthracene	1.027	0.9535	7.2	TM	
18	TM	Chrysene	1.044	1.037	0.70	TM	
19	TM	Indeno (1,2,3-cd) pyrene	1.244	1.287	3.4	TM	
20	I	Perylene-D12(IS)	ISTD			I	
21	TM	Benzo (b) fluoranthene	0.9609	0.9670	0.64	TM	
22	TM	Benzo (k) fluoranthene	1.069	0.9718	9.1	TM	
23	*TM	Benzo (a) pyrene	0.8856	0.8792	0.73	*TM	
24	TM	Dibenz (a,h) anthracene	0.9538	1.067	12	TM	
25	TM	Benzo (g,h,i) perylene	0.9868	1.082	9.7	TM	
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			6.1		

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L161.D Vial: 61
Acq On : 29 Oct 20 14:58 Operator: MA
Sample : 5 SIM 08/21/20 (2) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 29 15:14 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	37112	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	21447	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	43242	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.13	240	67051	2.50000	ppb		0.00
20) Perylene-D12(IS)	13.56	264	70454	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	46747	2.82658	ppb		0.00
Spiked Amount 5.000			Recovery = 56.540%				
13) Fluoranthene-D10 (FRT)	9.38	212	62977	2.93992	ppb		0.00
Spiked Amount 5.000			Recovery = 58.800%				
Target Compounds							Qvalue
2) Naphthalene	4.30	128	67489	4.73552	ppb		100
4) 2-Methylnaphthalene	5.08	142	46711	4.84024	ppb		100
5) 1-Methylnaphthalene	5.19	142	49951	5.25775	ppb		100
7) Acenaphthylene	6.11	152	154823	4.90577	ppb		99
8) Acenaphthene	6.31	154	43821	4.67506	ppb		100
9) Fluorene	6.90	166	56292	4.83942	ppb		96
11) Phenanthrene	8.03	178	84951	4.82603	ppb		97
12) Anthracene	8.09	178	79824	4.95626	ppb		96
14) Fluoranthene	9.40	202	136071	5.70178	ppb		96
16) Pyrene	9.66	202	134681	4.81310	ppb		96
17) Benz (a) anthracene	11.12	228	127861	4.64045	ppb		97
18) Chrysene	11.16	228	139073	4.96482	ppb		97
19) Indeno (1,2,3-cd) pyrene	15.05	276	172535	5.16913	ppb	#	98
21) Benzo (b) fluoranthene	12.93	252	136258	5.03199	ppb	#	98
22) Benzo (k) fluoranthene	12.99	252	136937	4.54392	ppb		98
23) Benzo (a) pyrene	13.48	252	123888	4.96374	ppb		98
24) Dibenz (a,h) anthracene	15.10	278	150405	5.59524	ppb		99
25) Benzo (g,h,i) perylene	15.42	276	152508	5.48414	ppb		98

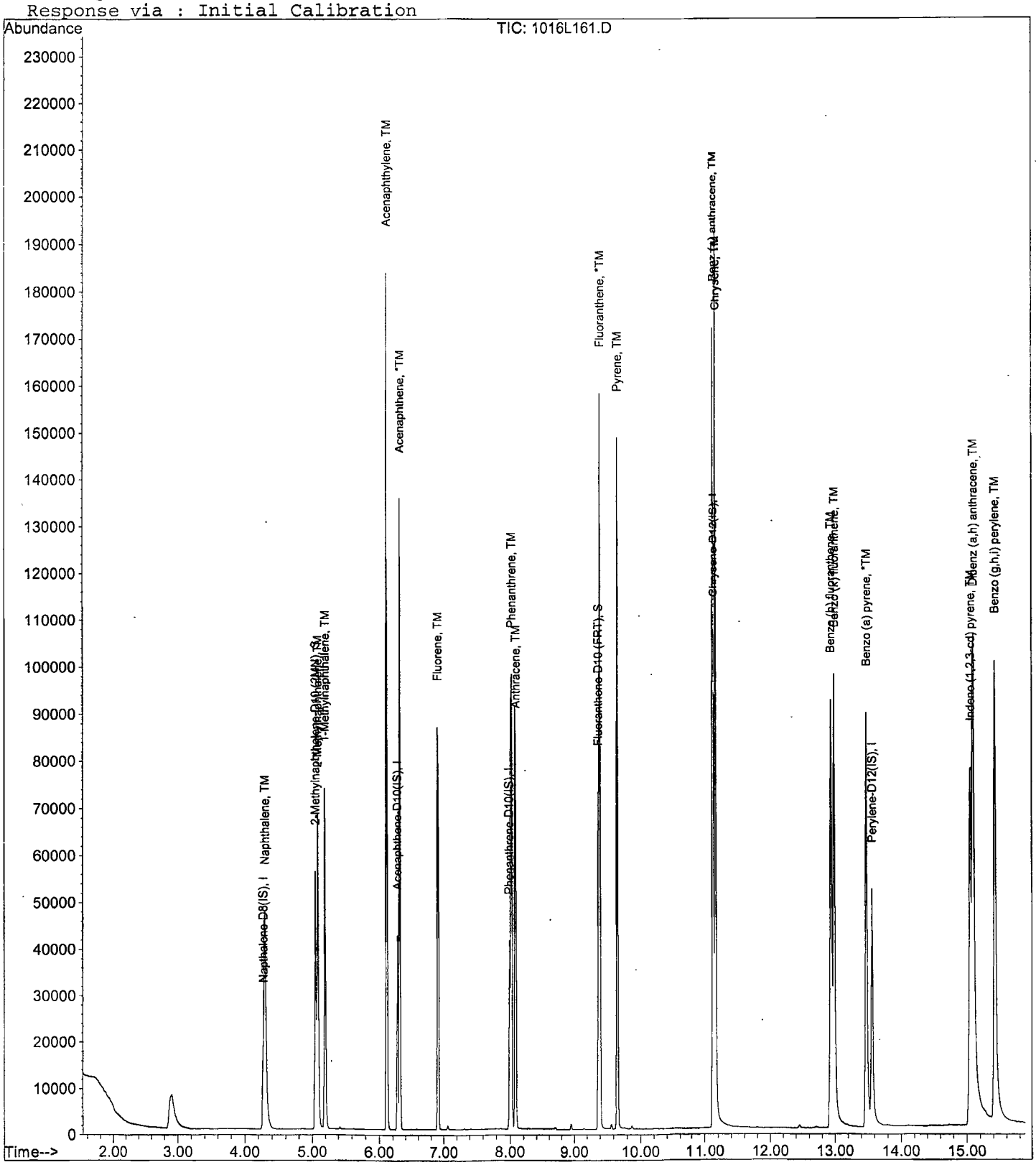
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L161.D Vial: 61
Acq On : 29 Oct 20 14:58 Operator: MA
Sample : 5 SIM 08/21/20 (2) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 29 15:14 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L158.D Vial: 58
Acq On : 29 Oct 20 13:51 Operator: MA
Sample : BA20716W14 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 29 13:47 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	4.27	136	31442	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	6.28	164	16550	2.50000 ppb	0.00
10) Phenanthrene-D10(IS)	7.99	188	34756	2.50000 ppb	0.00
15) Chrysene-D12(IS)	11.13	240	47431	2.50000 ppb	0.00
20) Perylene-D12(IS)	13.56	264	52607	2.50000 ppb	0.00
System Monitoring Compounds					
3) 2-Methylnaphthalene-D10 (2	5.05	152	68472	6.10851 ppb	0.00
Spiked Amount 6.250			Recovery	= 97.744%	
13) Fluoranthene-D10 (FRT)	9.38	212	88808	6.44750 ppb	0.00
Spiked Amount 6.250			Recovery	= 103.152%	

Target Compounds Qvalue

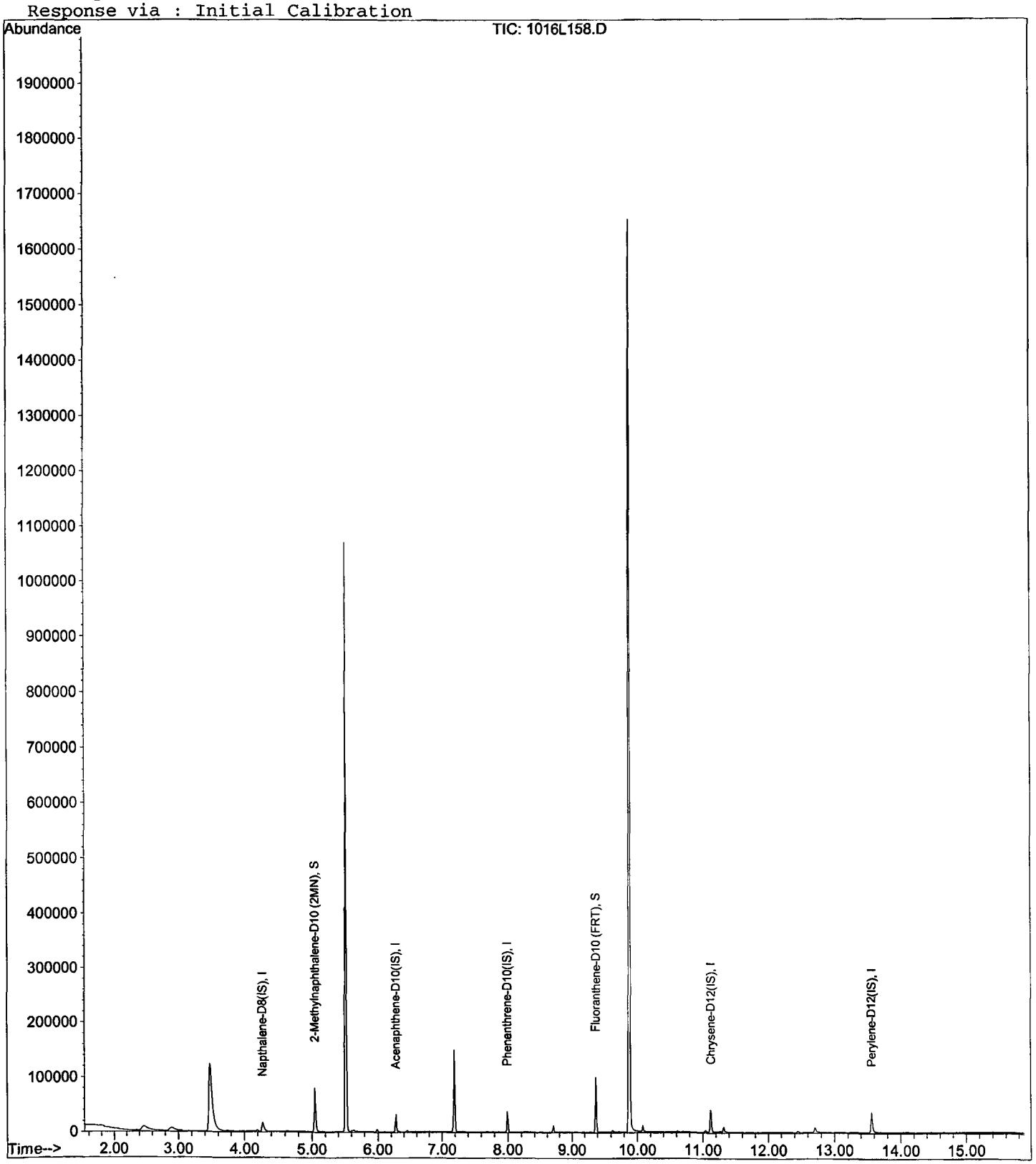
(#) = qualifier out of range (m) = manual integration
1016L158.D L1016.M Tue Nov 10 15:43:03 2020 Page 1

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L158.D Vial: 58
Acq On : 29 Oct 20 13:51 Operator: MA
Sample : BA20716W14 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 29 13:47 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L159.D Vial: 59
Acq On : 29 Oct 20 14:13 Operator: MA
Sample : BA20718W17 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 29 13:49 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	4.27	136	29423	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	6.28	164	14936	2.50000	ppb	0.00
10) Phenanthrene-D10(IS)	7.99	188	29507	2.50000	ppb	0.00
15) Chrysene-D12(IS)	11.13	240	43131	2.50000	ppb	0.00
20) Perylene-D12(IS)	13.56	264	48929	2.50000	ppb	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	59357	5.65871	ppb	0.00
Spiked Amount 6.250			Recovery = 90.544%			
13) Fluoranthene-D10 (FRT)	9.38	212	82870	7.08665	ppb	0.00
Spiked Amount 6.250			Recovery = 113.392%			

Target Compounds	Qvalue

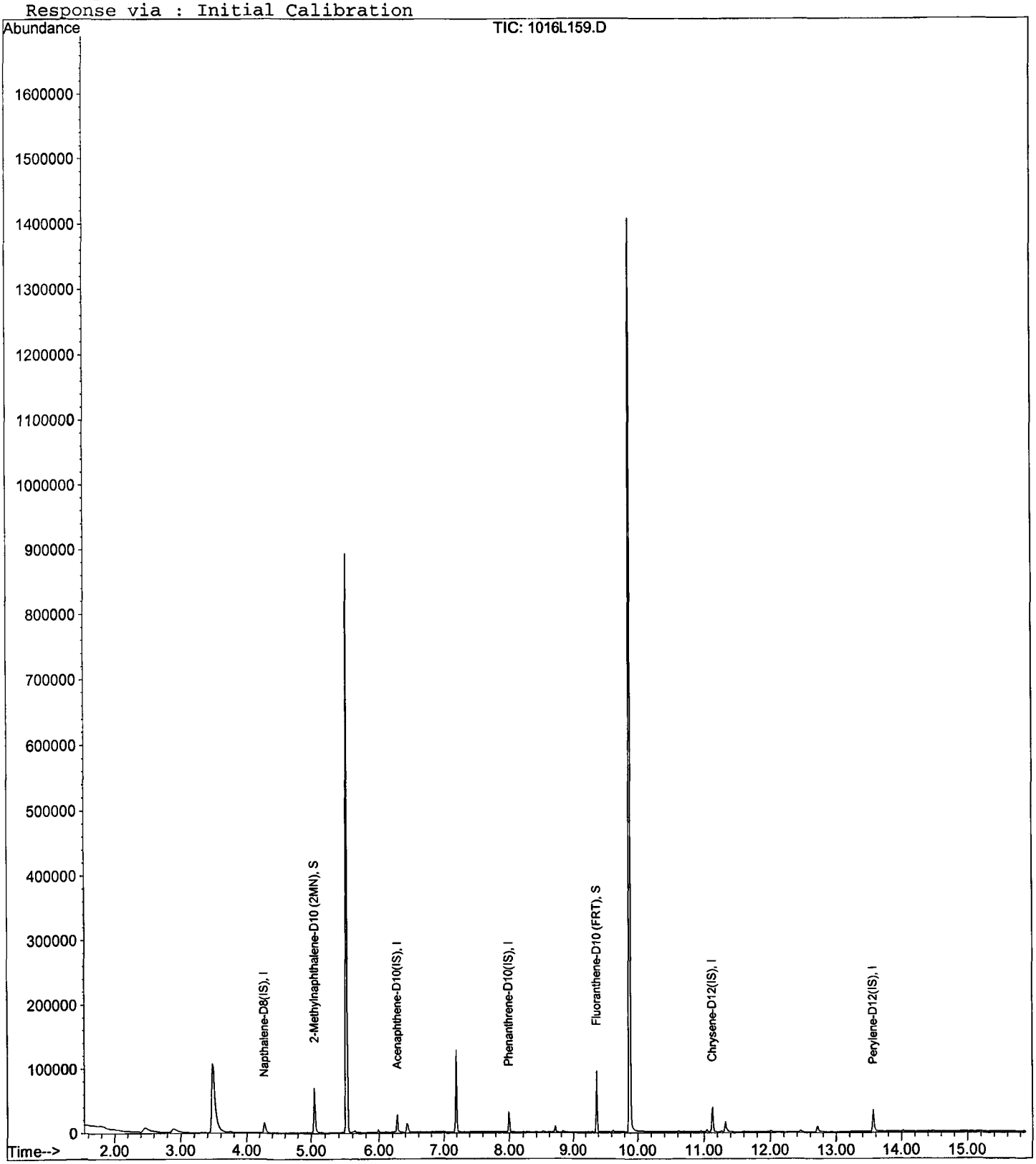
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L159.D Vial: 59
Acq On : 29 Oct 20 14:13 Operator: MA
Sample : BA20718W17 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 29 13:49 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L160.D Vial: 60
Acq On : 29 Oct 20 14:35 Operator: MA
Sample : BA20719W13 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 29 13:53 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	4.27	136	32918	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	6.28	164	17290	2.50000 ppb	0.00
10) Phenanthrene-D10(IS)	7.99	188	31392	2.50000 ppb	0.00
15) Chrysene-D12(IS)	11.13	240	51478	2.50000 ppb	0.00
20) Perylene-D12(IS)	13.56	264	50877	2.50000 ppb	0.00
System Monitoring Compounds					
3) 2-Methylnaphthalene-D10 (2	5.05	152	67755	5.77351 ppb	0.00
Spiked Amount 6.250			Recovery	= 92.384%	
13) Fluoranthene-D10 (FRT)	9.38	212	91546	7.35850 ppb	0.00
Spiked Amount 6.250			Recovery	= 117.744%	

Target Compounds Qvalue

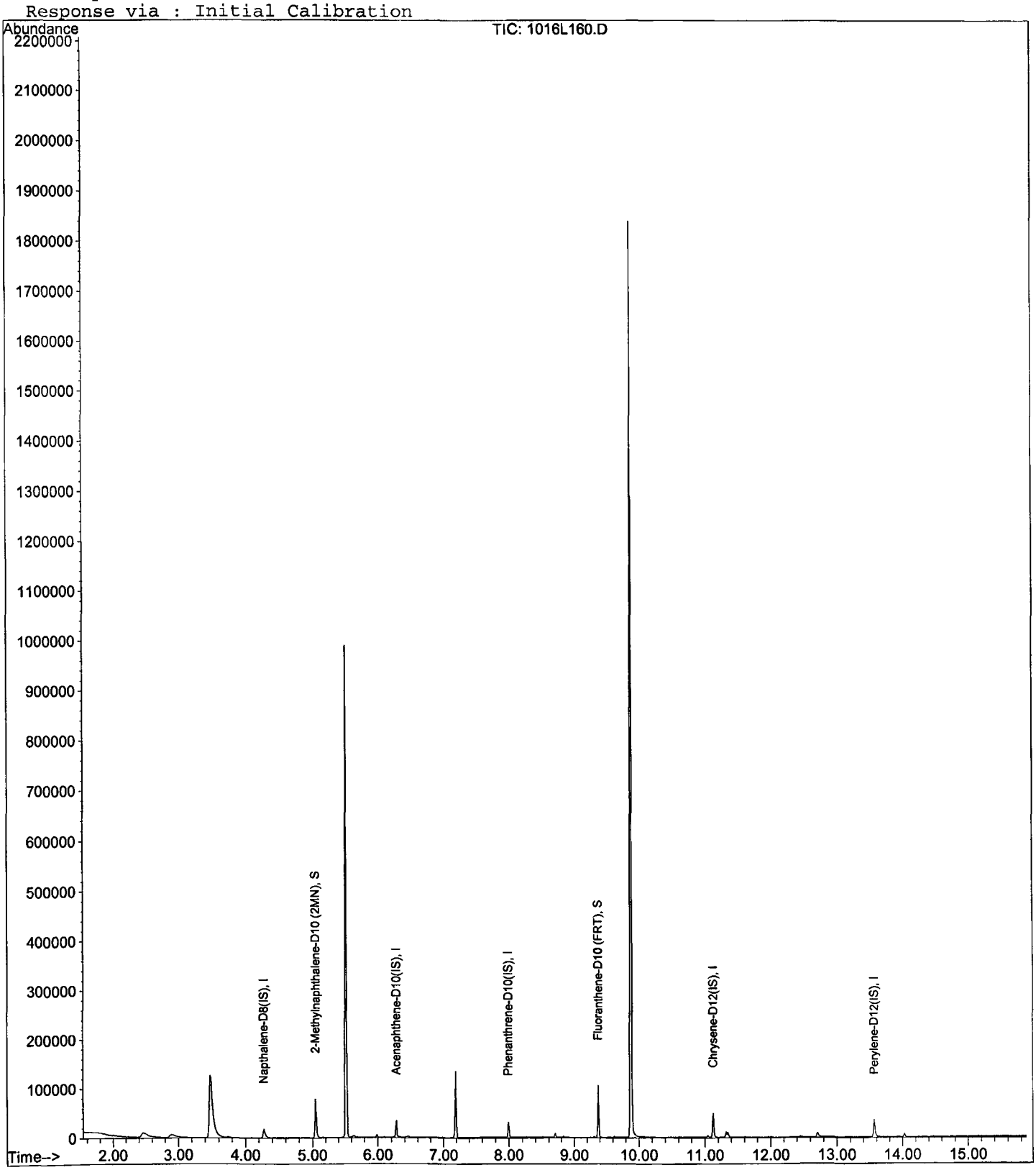
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L160.D Vial: 60
Acq On : 29 Oct 20 14:35 Operator: MA
Sample : BA20719W13 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 29 13:53 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L155.D Vial: 55
Acq On : 29 Oct 20 12:45 Operator: MA
Sample : 201027A BLK 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 30 10:25 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	4.27	136	33103	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	6.28	164	15378	2.50000	ppb	0.00
10) Phenanthrene-D10(IS)	7.99	188	30399	2.50000	ppb	0.00
15) Chrysene-D12(IS)	11.12	240	44205	2.50000	ppb	-0.01
20) Perylene-D12(IS)	13.56	264	49228	2.50000	ppb	0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	67333	5.70549	ppb	0.00
Spiked Amount 6.250			Recovery = 91.280%			
13) Fluoranthene-D10 (FRT)	9.38	212	87745	7.28336	ppb	0.00
Spiked Amount 6.250			Recovery = 116.528%			

Target Compounds Qvalue

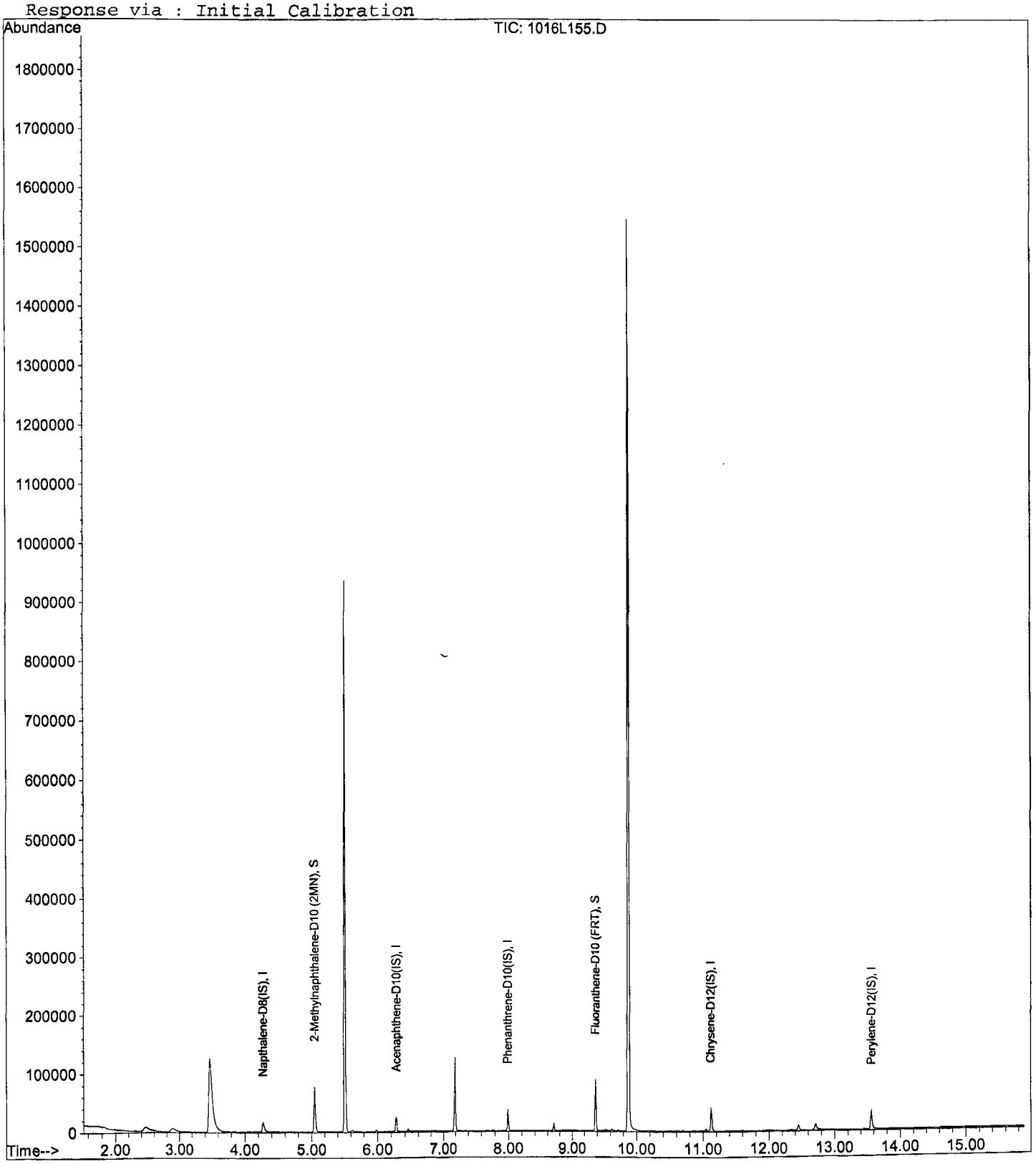
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L155.D Vial: 55
Acq On : 29 Oct 20 12:45 Operator: MA
Sample : 201027A BLK 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 30 10:25 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L156.D Vial: 56
Acq On : 29 Oct 20 13:07 Operator: MA
Sample : 201027A LCS-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 29 12:45 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	34255	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	17732	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	31259	2.50000	ppb		0.00
15) Chrysene-D12(IS)	11.13	240	51747	2.50000	ppb		0.00
20) Perylene-D12(IS)	13.56	264	55954	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	5.05	152	65922	5.39807	ppb		0.00
Spiked Amount 6.250			Recovery	= 86.368%			
13) Fluoranthene-D10 (FRT)	9.38	212	90329	7.29157	ppb		0.00
Spiked Amount 6.250			Recovery	= 116.672%			
Target Compounds							Qvalue
2) Naphthalene	4.30	128	58121	5.52291	ppb		100
4) 2-Methylnaphthalene	5.08	142	39251	5.50806	ppb		99
5) 1-Methylnaphthalene	5.19	142	38403	5.47420	ppb		97
7) Acenaphthylene	6.11	152	123186	5.90136	ppb		100
8) Acenaphthene	6.31	154	37869	6.10812	ppb		98
9) Fluorene	6.90	166	43771	5.68920	ppb		95
11) Phenanthrene	8.01	178	67214	6.60270	ppb		99
12) Anthracene	8.08	178	62215	6.67969	ppb		99
14) Fluoranthene	9.40	202	97166	7.04044	ppb		99
16) Pyrene	9.66	202	98992	5.72992	ppb		100
17) Benz (a) anthracene	11.11	228	109147	6.41599	ppb		100
18) Chrysene	11.16	228	107737	6.22954	ppb		99
19) Indeno (1,2,3-cd) pyrene	15.04	276	134086	6.50660	ppb	#	90
21) Benzo (b) fluoranthene	12.93	252	108337	6.29708	ppb		99
22) Benzo (k) fluoranthene	12.99	252	124443	6.49927	ppb		98
23) Benzo (a) pyrene	13.48	252	97710	6.16174	ppb	#	97
24) Dibenz (a,h) anthracene	15.10	278	115455	6.76011	ppb		98
25) Benzo (g,h,i) perylene	15.42	276	117103	6.62779	ppb		97

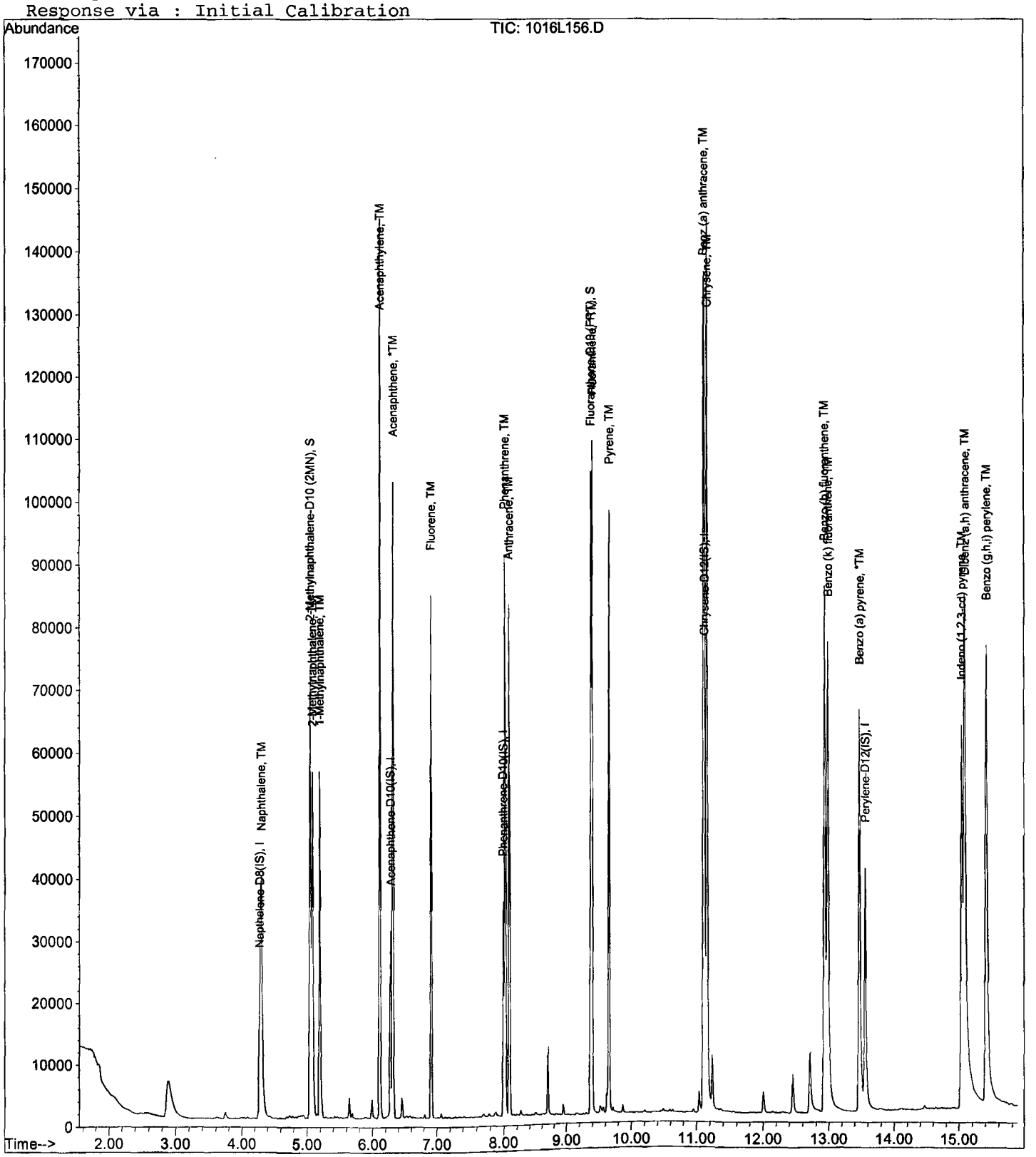
(#) = qualifier out of range (m) = manual integration
1016L156.D L1016.M Tue Nov 10 15:44:05 2020 Page 1

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L156.D Vial: 56
Acq On : 29 Oct 20 13:07 Operator: MA
Sample : 201027A LCS-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 29 12:45 2020 Quant Results File: L1016.RES

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L201016\1016L157.D Vial: 57
Acq On : 29 Oct 20 13:29 Operator: MA
Sample : 201027A LCSD-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 29 12:46 2020 Quant Results File: L1016.RES

Quant Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	4.27	136	32719	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	6.28	164	16149	2.50000 ppb		0.00
10) Phenanthrene-D10(IS)	7.99	188	31884	2.50000 ppb		0.00
15) Chrysene-D12(IS)	11.13	240	42225	2.50000 ppb		0.00
20) Perylene-D12(IS)	13.56	264	47069	2.50000 ppb		0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	5.05	152	67559	5.79183 ppb		0.00
Spiked Amount 6.250			Recovery	= 92.672%		
13) Fluoranthene-D10 (FRT)	9.38	212	82993	6.56807 ppb		0.00
Spiked Amount 6.250			Recovery	= 105.088%		
Target Compounds						Qvalue
2) Naphthalene	4.30	128	52612	5.23412 ppb		100
4) 2-Methylnaphthalene	5.08	142	35598	5.22995 ppb		100
5) 1-Methylnaphthalene	5.19	142	32356	4.82875 ppb		99
7) Acenaphthylene	6.11	152	123776	6.51088 ppb		100
8) Acenaphthene	6.31	154	32778	5.80522 ppb		98
9) Fluorene	6.90	166	45502	6.49393 ppb		97
11) Phenanthrene	8.01	178	69693	6.71202 ppb		100
12) Anthracene	8.08	178	63195	6.65190 ppb		99
14) Fluoranthene	9.40	202	88158	6.26253 ppb		98
16) Pyrene	9.66	202	89447	6.34497 ppb		98
17) Benz (a) anthracene	11.11	228	90142	6.49374 ppb		99
18) Chrysene	11.16	228	89451	6.33857 ppb		99
19) Indeno (1,2,3-cd) pyrene	15.04	276	120129	7.14388 ppb	#	92
21) Benzo (b) fluoranthene	12.93	252	100655	6.95495 ppb		98
22) Benzo (k) fluoranthene	12.99	252	101671	6.31230 ppb	#	98
23) Benzo (a) pyrene	13.48	252	82931	6.21695 ppb		98
24) Dibenz (a,h) anthracene	15.10	278	104144	7.24889 ppb		98
25) Benzo (g,h,i) perylene	15.42	276	103568	6.96823 ppb		96

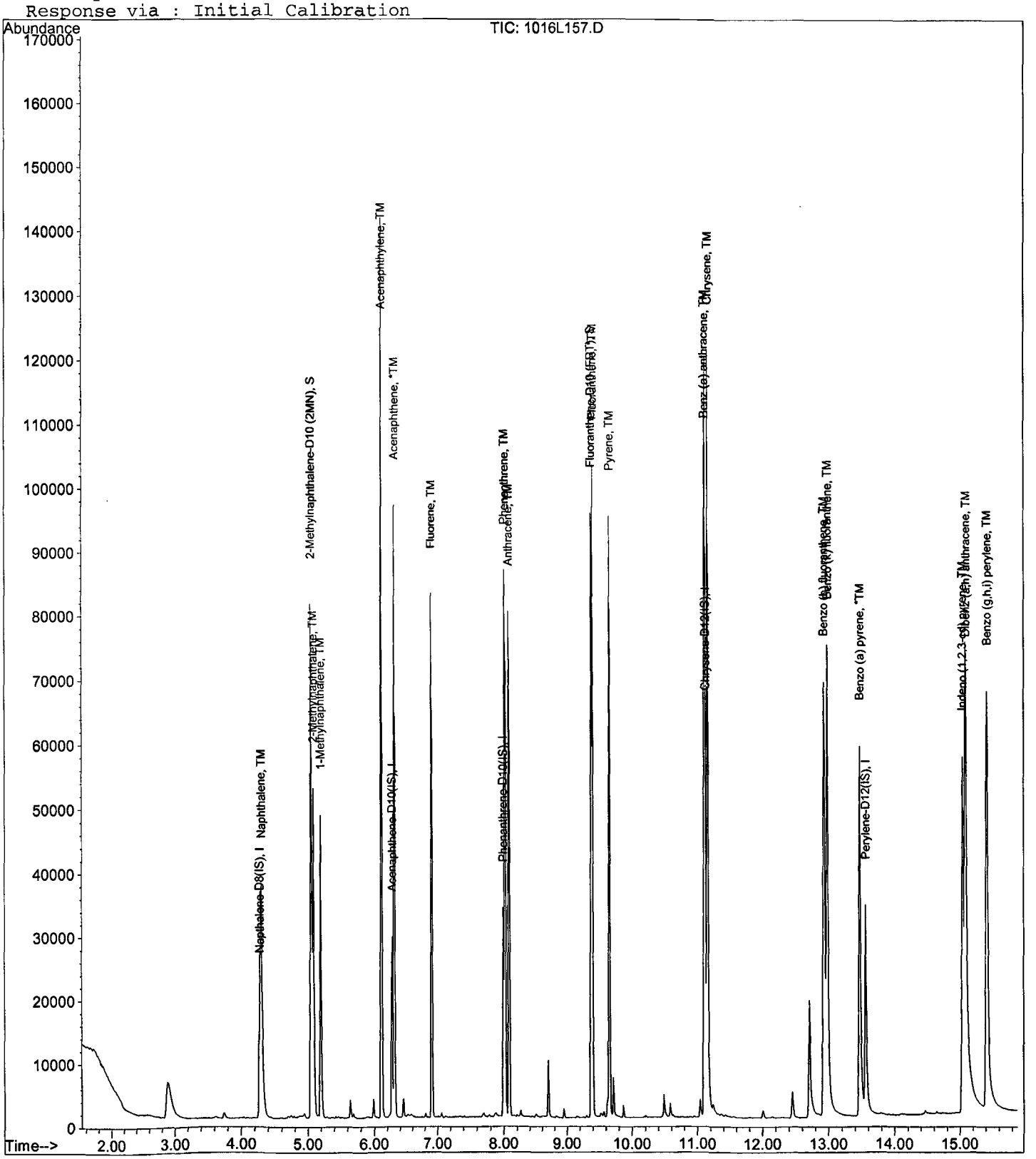
(#) = qualifier out of range (m) = manual integration
1016L157.D L1016.M Tue Nov 10 15:44:10 2020 Page 1

Quantitation Report

Data File : M:\LINUS\DATA\L201016\1016L157.D Vial: 57
Acq On : 29 Oct 20 13:29 Operator: MA
Sample : 201027A LCSD-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 29 12:46 2020 Quant Results File: L1016.RES

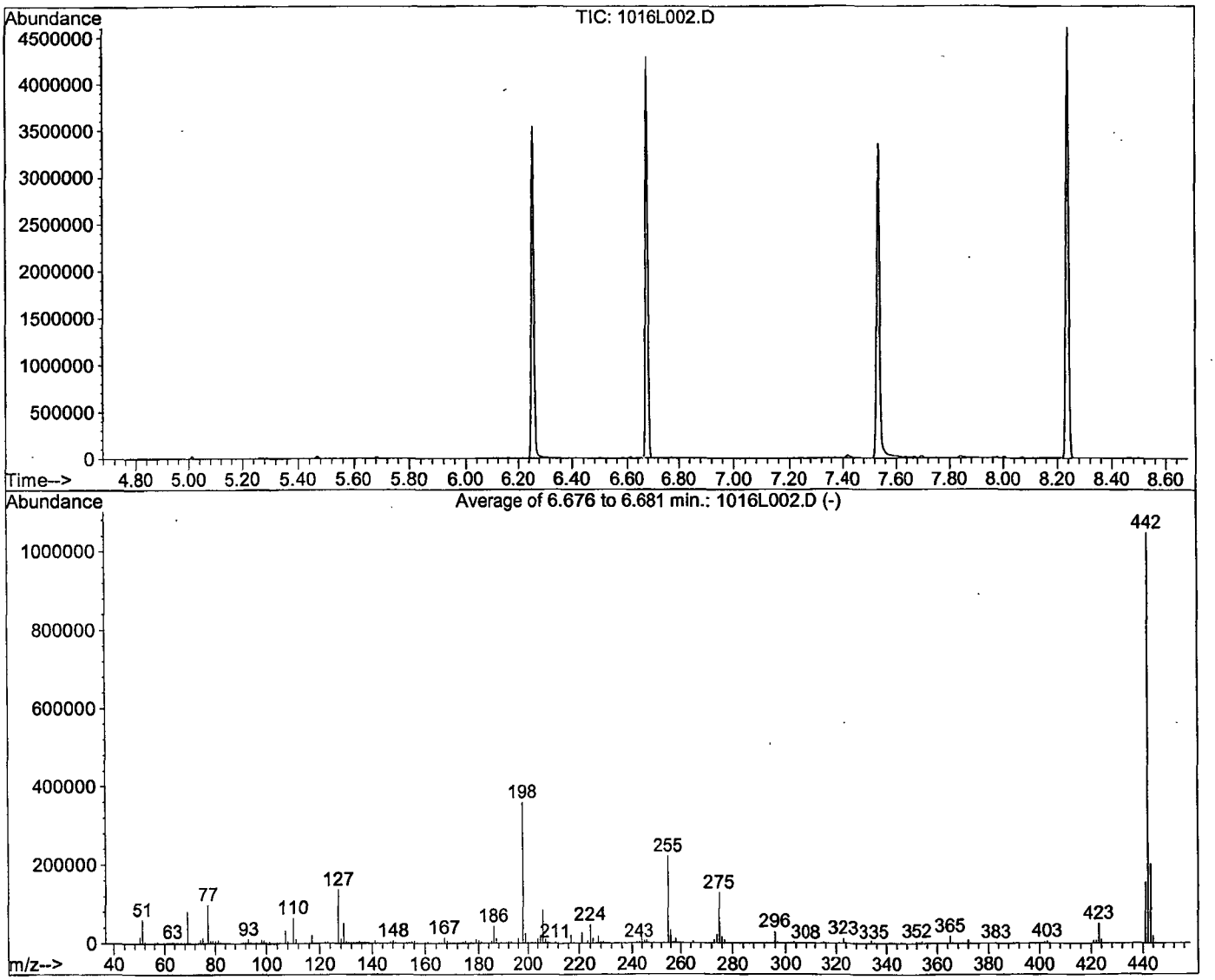
Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Oct 16 13:50:55 2020
Response via : Initial Calibration



DFTPP

Data File : M:\LINUS\DATA\L201016\1016L002.D Vial: 2
Acq On : 16 Oct 20 10:21 Operator: MA
Sample : SV Tune 10/01/19 Inst : Linus
Misc : Multiplr: 1.00

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270



AutoFind: Scans 1643, 1644, 1645; Background Corrected with Scan 1634

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	16.6	59205	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	502	PASS
127	198	10	80	38.1	135989	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	357205	PASS
199	198	5	9	6.7	23979	PASS
275	198	10	60	35.8	127832	PASS
365	198	1	100	5.1	18325	PASS
441	442	0.01	24	14.9	155691	PASS
442	198	50	500	293.3	1047637	PASS
443	442	15	24	19.2	201045	PASS

1016L002.D L1016.M Fri Oct 16 14:23:20 2020

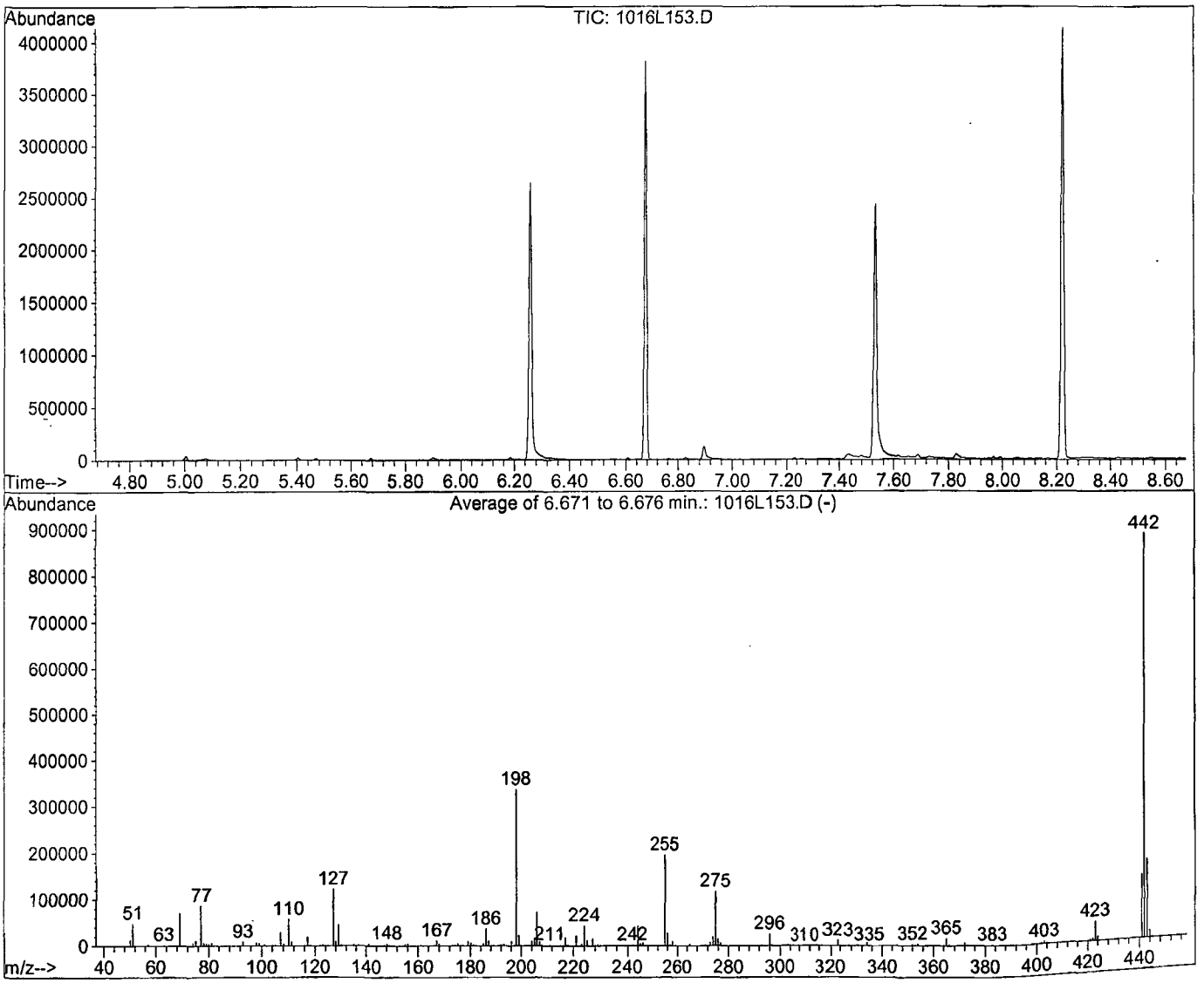
Data File Name:	**1016L002.D**
Data File Path:	**M:\LINUS\DATA\L201016**
Operator:	**MA**
Date Acquired:	**16 Oct 2020 10:21**
Method File:	**DFTPP2.M**
Sample Name:	**SV Tune 10/01/19**
Vial Number:	**2**
Instrument Name:	**Linus**

#	Name	Ret Time	Target Response
1)	DDT	8.24	32904900
2)	DDD	7.98	120213
3)	DDE	6.84	0

Breakdown **0.36**

Data File : M:\LINUS\DATA\L201016\1016L153.D Vial: 53
Acq On : 29 Oct 20 12:07 Operator: MA
Sample : SV TUNE 10/2/20 Inst : Linus
Misc : Multiplr: 1.00

Method : M:\LINUS\DATA\L201016\L1016.M (RTE Integrator)
Title : EPA 8270



AutoFind: Scans 1641, 1642, 1643; Background Corrected with Scan 1633

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	14.7	49651	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	445	PASS
127	198	10	80	36.1	121880	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	337301	PASS
199	198	5	9	6.9	23299	PASS
275	198	10	60	34.7	116917	PASS
365	198	1	100	4.9	16360	PASS
441	442	0.01	24	15.5	138149	PASS
442	198	50	500	263.8	889728	PASS
443	442	15	24	19.4	172643	PASS

1016L153.D L1016.M Thu Oct 29 13:07:20 2020

Data File Name:	**1016L153.D**
Data File Path:	**M:\LINUS\DATA\L201016**
Operator:	**MA**
Date Acquired:	**29 Oct 2020 12:07**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/2/20**
Vial Number:	**53**
Instrument Name:	**Linus**

#	Name	Ret Time	Target Response
1)	DDT	8.24	28979800
2)	DDD	7.98	116236
3)	DDE	7.69	197752

Breakdown **1.07**

Standard	**SIM Curve**	**Prep'd By (Initials)**	**MA**
Prep Date	**08/21/20**		
Exp Date	**06/19/21**		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1.0 ug/mL SIM	APPL	1.0 ug/mL SIM	1.0 ug/mL	08/21/20	06/19/21	10 uL	100uL	MC 59130 90uL	0.1 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/19/20	06/19/21	2 uL	"	"	2.5ug/mL
1.0 ug/mL SIM	APPL	1.0 ug/mL SIM	1.0 ug/mL	08/21/20	06/19/21	20 uL	100uL	MC 59130 80uL	0.2 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/19/20	06/19/21	2 uL	"	"	2.5ug/mL
5.0 ug/mL SIM	APPL	5.0 ug/mL SIM	5.0 ug/mL	08/21/20	06/19/21	10 uL	100uL	MC 59130 90uL	0.5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/19/20	06/19/21	2 uL	"	"	2.5ug/mL
5.0 ug/mL SIM	APPL	5.0 ug/mL SIM	5.0 ug/mL	08/21/20	06/19/21	20 uL	100uL	MC 59130 80 uL	1.0 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/19/20	06/19/21	2 uL	"	"	2.5ug/mL
SIM STOCK	APPL	SIM STOCK	200 ug/mL	08/20/20	08/20/21	5 uL	200uL	MC 59130 190 uL	5.0 ug/mL
SIM SURROGATE	APPL	SIM SURR	100 ug/mL	08/11/20	08/11/21	5 uL	"	"	2.5ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/19/20	06/19/21	4 uL	"	"	2.5ug/mL
SIM STOCK	APPL	SIM STOCK	200 ug/mL	08/20/20	08/20/21	5 uL	100 uL	MC 59130 80 uL	10 ug/mL
SIM SURROGATE	APPL	SIM SURR	100 ug/mL	08/11/20	08/11/21	5 uL	"	"	5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/19/20	06/19/21	2 uL	"	"	2.5ug/mL
SIM STOCK	APPL	SIM STOCK	200	08/20/20	08/20/21	25 uL	100uL	MC 59130 50 uL	50 ug/mL
SIM SURROGATE	APPL	SIM SURR	100 ug/mL	08/11/20	08/11/21	25 uL	"	"	25 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/19/20	06/19/21	2 uL	"	"	2.5ug/mL
SIM STOCK	APPL	SIM STOCK	200 ug/mL	08/20/20	08/20/21	50 uL	100uL	na	100 ug/mL
SIM SURROGATE	APPL	SIM SURR	100 ug/mL	08/11/20	08/11/21	50 uL	"	"	50 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/19/20	06/19/21	2 uL	"	"	2.5ug/mL

Name of Final Standard	**8270 PAH SIM Second Source**	**Prep'd By (Initials)**	**MA**
Prep Date	**08/21/20**		
Exp Date	**06/19/21**		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
PAH SIM SS Stock	Phenova	AL0-130490	200 ug/mL	CL13117-40623. Open 7/24/19	12/31/22	5 uL	200uL	MC 59130 195uL	5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	06/19/20	06/19/21	4 uL	"	"	2.5ug/mL

Name of Final Standard	**PAH SIM Stock (Ampule)**
Prep Date	**08/20/20**
Exp Date	**08/20/21**

Prep'd By (I **MA**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Custom PAH SIM Mix	Phenova	ALO-130490	200 ug/mL	**CL13121-41383**	**12/31/22**	1000 uL	1mL	**NA**	200ug/mL

Name of Final Standard	SIM Surrogate
Prep Date	08/11/20
Exp Date	04/01/21

Prep'd By (Initials) CD

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Sim Surrogate Deuterated	Restek	33913	2000 ug/mL	A0154854-49995,49992,50255,50256,50257	10/01/25	5mL	100 mL	Acetone #0234320	100 ug/mL

Name of Final Standard	**8270 SIM PAH Internal Standard**	**Prep'd By (Initials)**	**CD**
Prep Date	**06/19/20**		
Exp Date	**06/19/21**		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
SV Internal Standard	Restek	31206	2000 ug/mL	**A0157142-49875**	**12/31/25**	625uL	10mL	**MC DW717**	125 ug/mL

Name of Final Standard	SIM Spike
Prep Date	09/11/20
Exp Date	09/11/21

Prep'd By (Initials) MA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc.(range)
Custom PAH Sim Mix	Phenova	AL0-130490	200 ug/mL	CL13121- 41545 41546 41547 49548	12/31/22	5 mL	25 mL	Acetone 0246130	40 ug/mL

_LIQ003

Organic Extraction Worksheet

Method	Continuous Liquid/Liquid SVOC 3520C	Extraction Set	201027A	Extraction Method	LIQ003	Units	mL

Spiked ID 1	8270T Spike 10/6/20 ex 10/6/21		Surrogate ID 1	8270 Surrogate 10/6/20 ex 10/6/21	
Spiked ID 2	Sim Spike 9/11/20 ex 9/11/21		Surrogate ID 2	SIM Surrogate 8/11/20 ex 8/11/21	
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NO	
Spiked ID 7			Ext. Start Time:	10/27/20 12:15	
Spiked ID 8			Ext. End Time:	10/29/20 11:15	
			GC Requires Extract By:		

pH1	2	10/27/20 13:15	Water Bath Temp 1 °C	EWB6 70/67 °C
pH2	14	10/28/20 13:00	Water Bath Temp 2 °C	
pH3			Water Bath Temp 3 °C	

Spiked By: DL **Date** 10/29/20 1:27:23 PM **Witnessed By:** **Date** 10/27/20 12:15:00 PM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201027A Blk				0.2,0.05	1,2	800	1	2/1	10/27/20 12:15	
						equip	EWB6				
2	201027A LCS-1		1	1	0.2	1	800	1	2/1	10/27/20 12:15	
						equip	EWB6				
3	201027A LCS-2		0.125	2	0.050	2	800	1	2/1	10/27/20 12:15	
						equip	EWB6				
4	201027A LCSD-1		1	1	0.2	1	800	1	2/1	10/27/20 12:15	
						equip	EWB6				
5	201027A LCSD-2		0.125	2	0.0250	2	800	1	2/1	10/27/20 12:15	
						equip	EWB6				
6	BA20716	BA20716W14			0.2,0.05	1,2	800	1	2/1	10/27/20 12:15	93873
						equip	EWB6				
7	BA20718	BA20718W17			0.2,0.05	1,2	800	1	2/1	10/27/20 12:15	93873
						equip	EWB6				
8	BA20719	BA20719W13			0.2,0.05	1,2	800	1	2/1	10/27/20 12:15	93873
						equip	EWB6				

Solvent and Lot#	
PH Strips	HC904495
Dichloromethane (DCM)	60182
1+1 H2SO4	231834
10N NaOH	10-06-20
Filter Paper	400178
Na2SO4	2019070279

Extraction COC Transfer	
Extraction lab employee Initials	DL
GC analyst's initials	MA
Date	10/29/20
Time	11:15
Refrigerator	GC_C

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	YL,DL,KY

Modified	10/29/20 1:34:56 PM

Reviewed By: MA **Date** 10/29/20

Injection Log

Directory: M:\LINUS\DATA\L201016\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	1016L002.D	1	SV Tune 10/01/19		16 Oct 20 10:21
2	3	1016L003.D	1	0.1 SIM 08/21/20		16 Oct 20 10:37
3	4	1016L004.D	1	0.2 SIM 08/21/20		16 Oct 20 10:59
4	5	1016L005.D	1	0.5 SIM 08/21/20		16 Oct 20 11:21
5	6	1016L006.D	1	1 SIM 08/21/20		16 Oct 20 11:43
6	7	1016L007.D	1	5 SIM 08/21/20		16 Oct 20 12:05
7	8	1016L008.D	1	10 SIM 08/21/20		16 Oct 20 12:27
8	9	1016L009.D	1	50 SIM 08/21/20		16 Oct 20 12:50
9	10	1016L010.D	1	100 SIM 08/21/20		16 Oct 20 13:12
10	11	1016L011.D	1	SS SIM 08/21/20		16 Oct 20 13:34
11	53	1016L153.D	1	SV TUNE 10/2/20		29 Oct 20 12:07
12	54	1016L154.D	1	5 SIM 08/21/20 (1)		29 Oct 20 12:23
13	55	1016L155.D	1.25	201027A BLK 1/800		29 Oct 20 12:45
14	56	1016L156.D	1.25	201027A LCS-2 1/800		29 Oct 20 13:07
15	57	1016L157.D	1.25	201027A LCSD-2 1/800		29 Oct 20 13:29
16	58	1016L158.D	1.25	BA20716W14 1/800		29 Oct 20 13:51
17	59	1016L159.D	1.25	BA20718W17 1/800		29 Oct 20 14:13
18	60	1016L160.D	1.25	BA20719W13 1/800		29 Oct 20 14:35
19	61	1016L161.D	1	5 SIM 08/21/20 (2)		29 Oct 20 14:58

ORGANICS

Calibration Data

2MEE
EPA 8270

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 05/01/20
Matrix: Instrument: Yoda Initials: MA

		Compound	0501Y003.D	0501Y004.D	0501Y006.D	0501Y007.D	0501Y008.D	0501Y009.D	0501Y010.D	0501Y011.D			Avg	%RSD	Type	r^2	Q	MRF
1	I	1,4-dichlorobenzene-D4(IS)																
2	TM	2-(2-Methoxyethoxy)ethanol	0.1264	0.1827	0.1475	0.1625	0.1354	0.1644	0.1592	0.1806			0.16	13	TM			
3																		
4																		
5																		
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7																		
8																		
9																		
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35																		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y003.D Vial: 39
Acq On : 1 May 20 9:39 Operator: MA,SS
Sample : 50ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:24 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	428206	40.00000 ppb	-0.01

System Monitoring Compounds

Target Compounds					Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.28	45	67679	26.91018 ppb	95

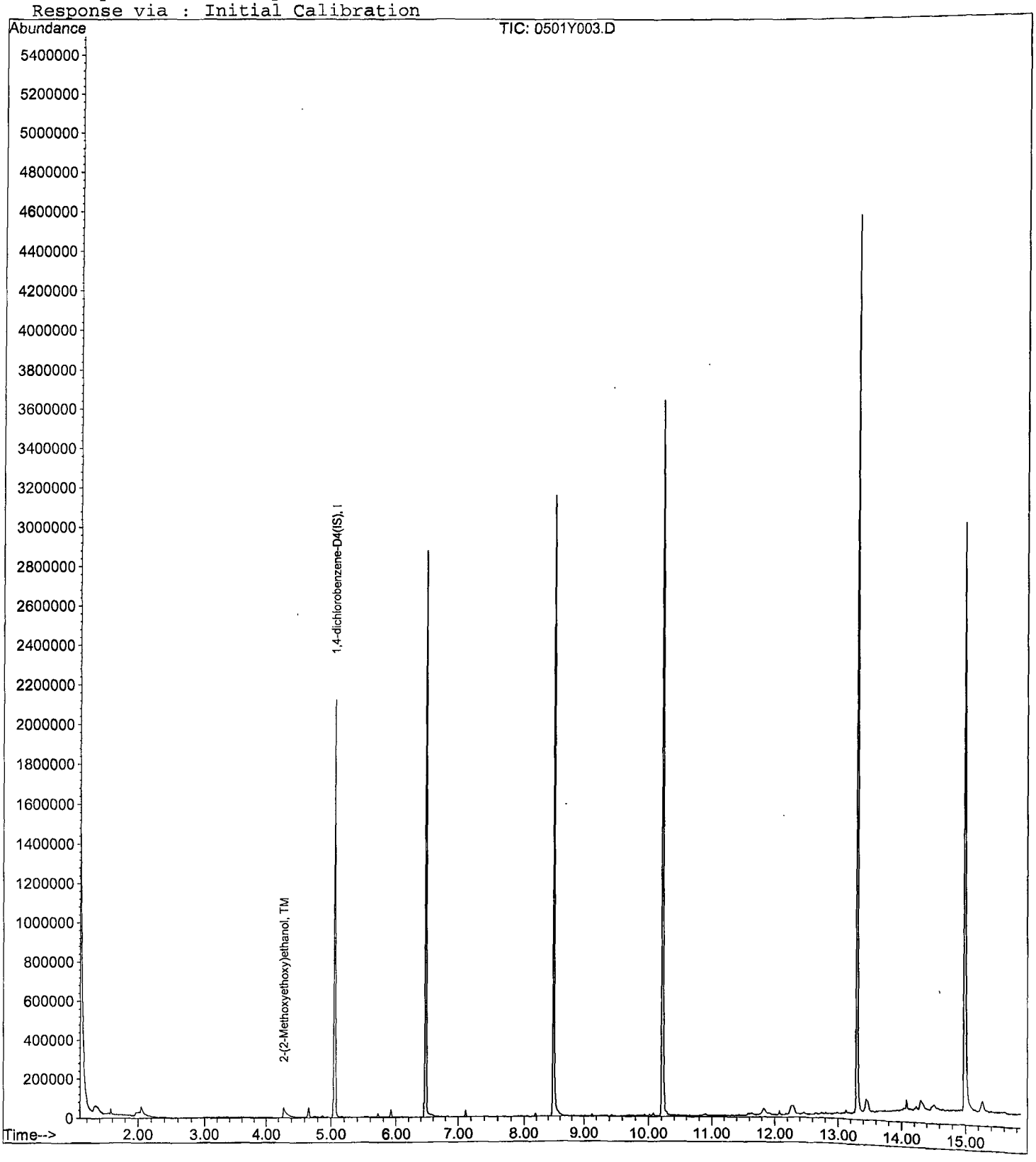
(#) = qualifier out of range (m) = manual integration
0501Y003.D YMEE0501.M Fri May 01 14:33:06 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y003.D Vial: 39
Acq On : 1 May 20 9:39 Operator: MA,SS
Sample : 50ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y004.D Vial: 40
Acq On : 1 May 20 10:03 Operator: MA,SS
Sample : 100ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:44 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	358512	40.00000	ppb	-0.01
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.26	45	163785	77.78322	ppb	99

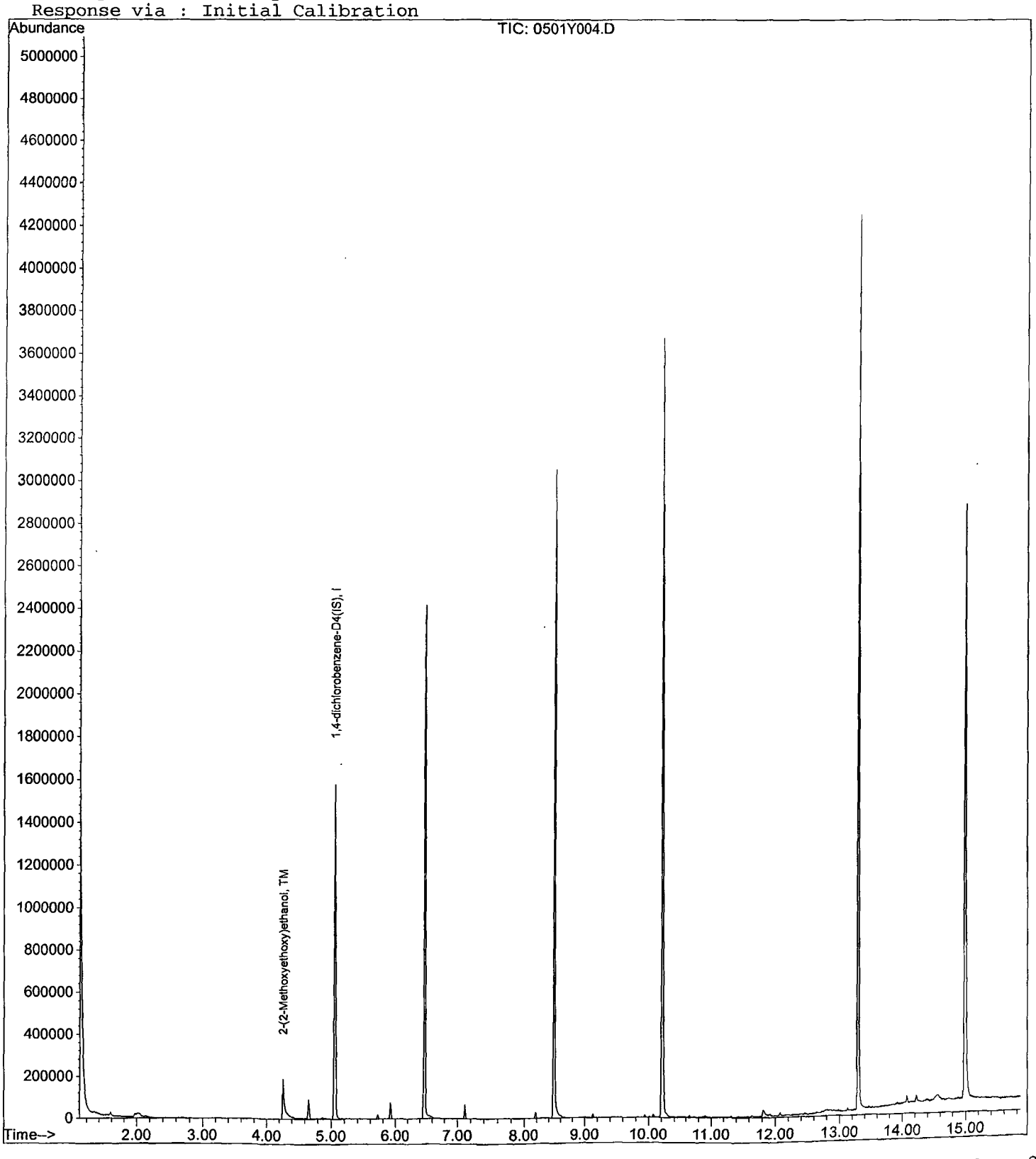
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y004.D Vial: 40
Acq On : 1 May 20 10:03 Operator: MA,SS
Sample : 100ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y006.D Vial: 42
Acq On : 1 May 20 10:51 Operator: MA,SS
Sample : 200ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:44 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	431824	40.00000	ppb	-0.01

System Monitoring Compounds

Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.26	45	318364	125.52571	ppb	98

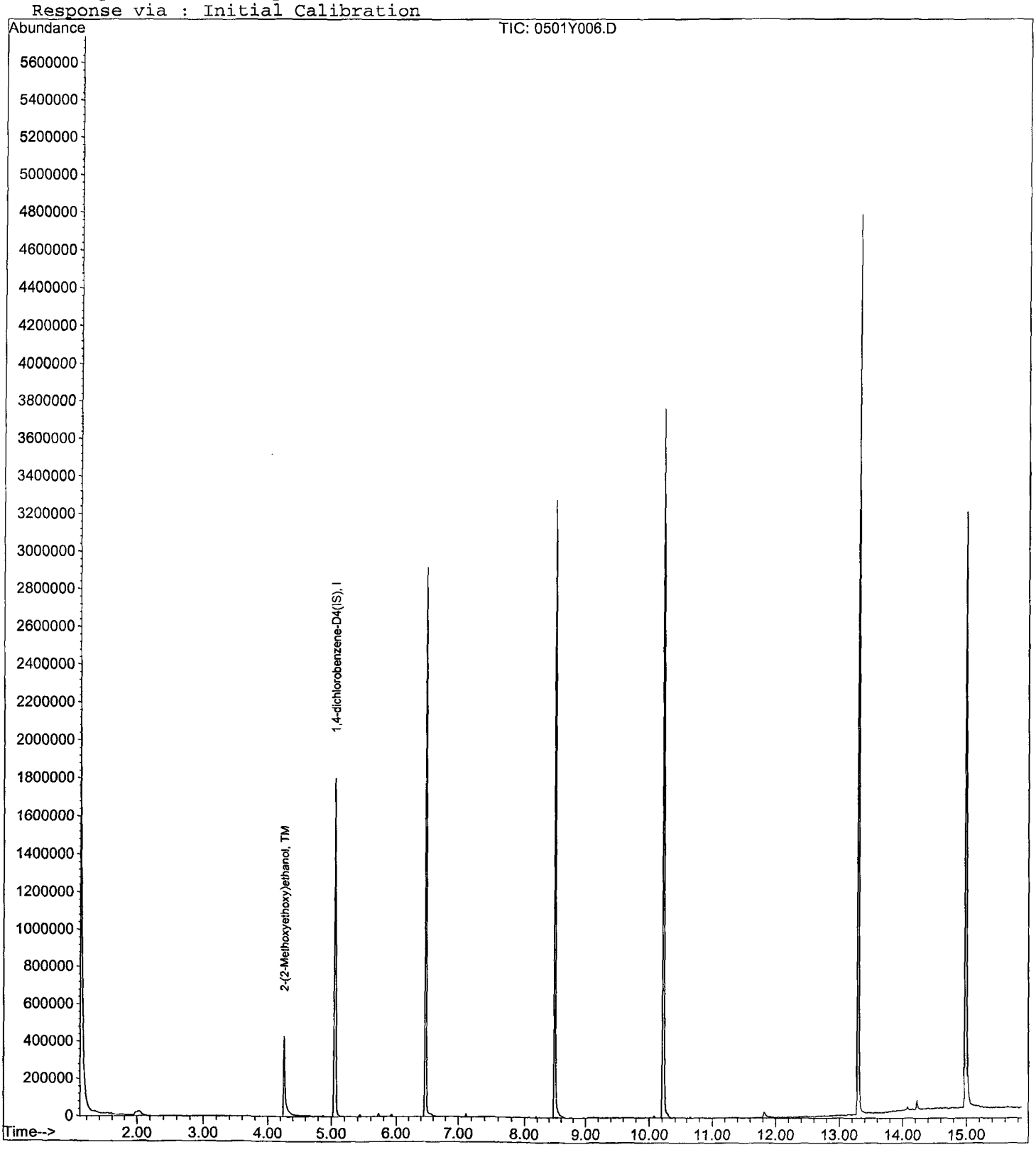
(#) = qualifier out of range (m) = manual integration
0501Y006.D YMEE0501.M Fri May 01 14:33:15 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y006.D Vial: 42
Acq On : 1 May 20 10:51 Operator: MA,SS
Sample : 200ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y007.D Vial: 7
Acq On : 1 May 20 11:24 Operator: MA,SS
Sample : 400ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:44 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	425852	40.00000 ppb	-0.01

System Monitoring Compounds

Target Compounds					Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.26	45	692148	276.72970 ppb	99

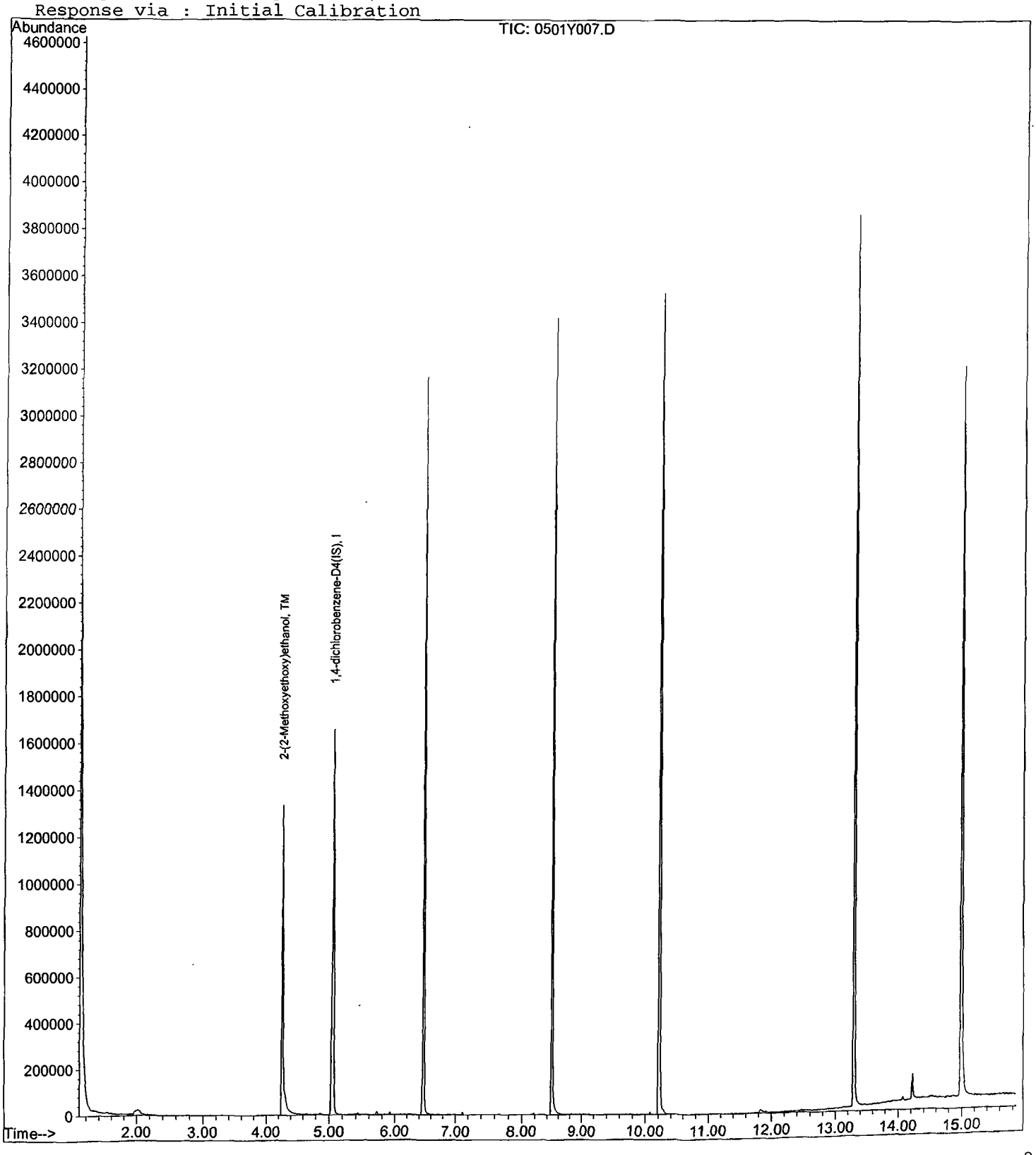
(#) = qualifier out of range (m) = manual integration
0501Y007.D YMEE0501.M Fri May 01 14:33:20 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y007.D Vial: 7
Acq On : 1 May 20 11:24 Operator: MA,SS
Sample : 400ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y008.D Vial: 8
Acq On : 1 May 20 11:48 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:16 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 12:15:50 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.07	152	483204	40.00000 ppb	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.28	45	818058	442.11333 ppb	100

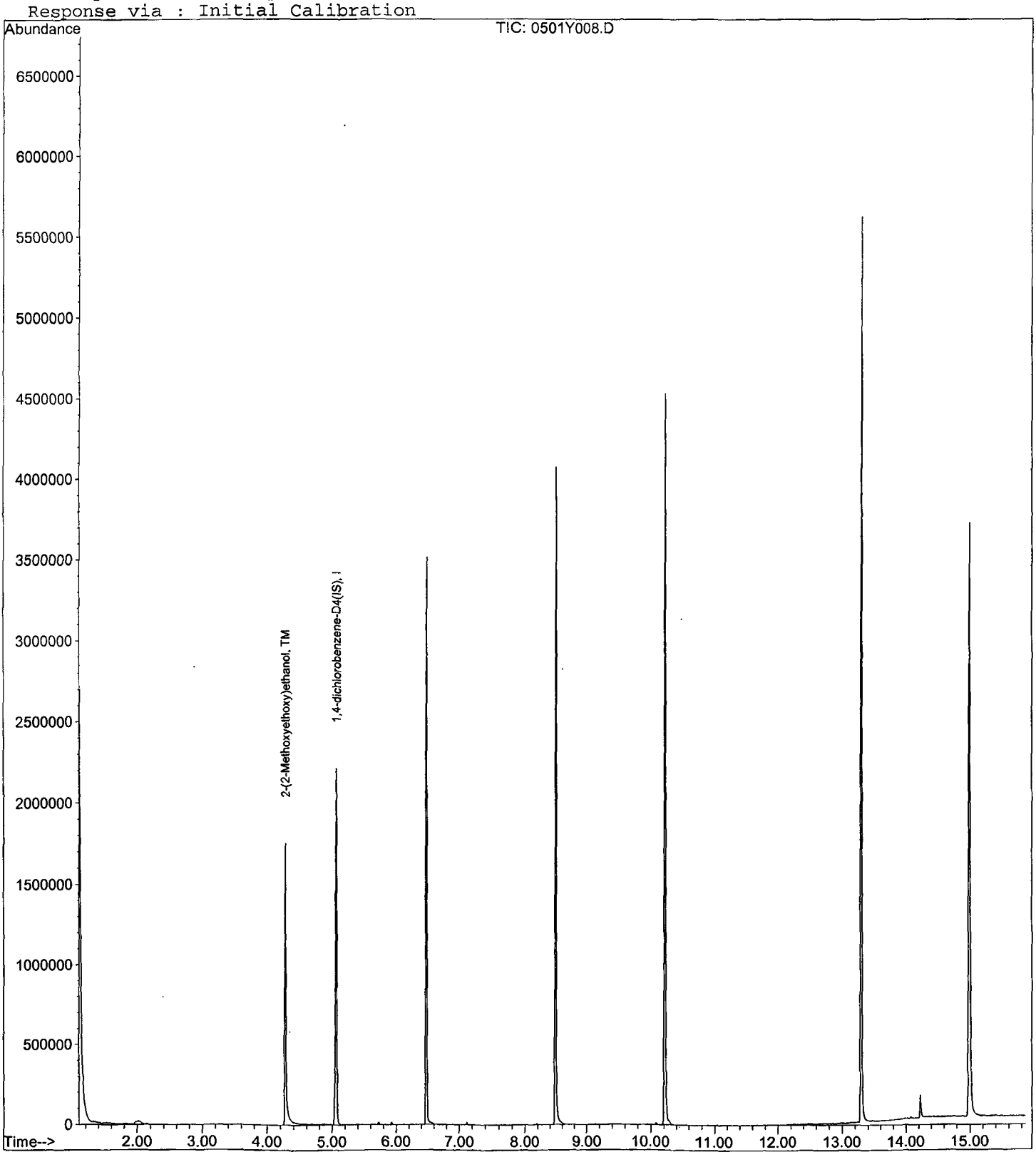
(#) = qualifier out of range (m) = manual integration
0501Y008.D YMEE0501.M Fri May 01 14:33:24 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y008.D Vial: 8
Acq On : 1 May 20 11:48 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:16 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y009.D Vial: 9
Acq On : 1 May 20 12:13 Operator: MA,SS
Sample : 600ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:14 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:44 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	445147	40.00000	ppb	-0.01

System Monitoring Compounds

Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.27	45	1097935	518.98742	ppb	99

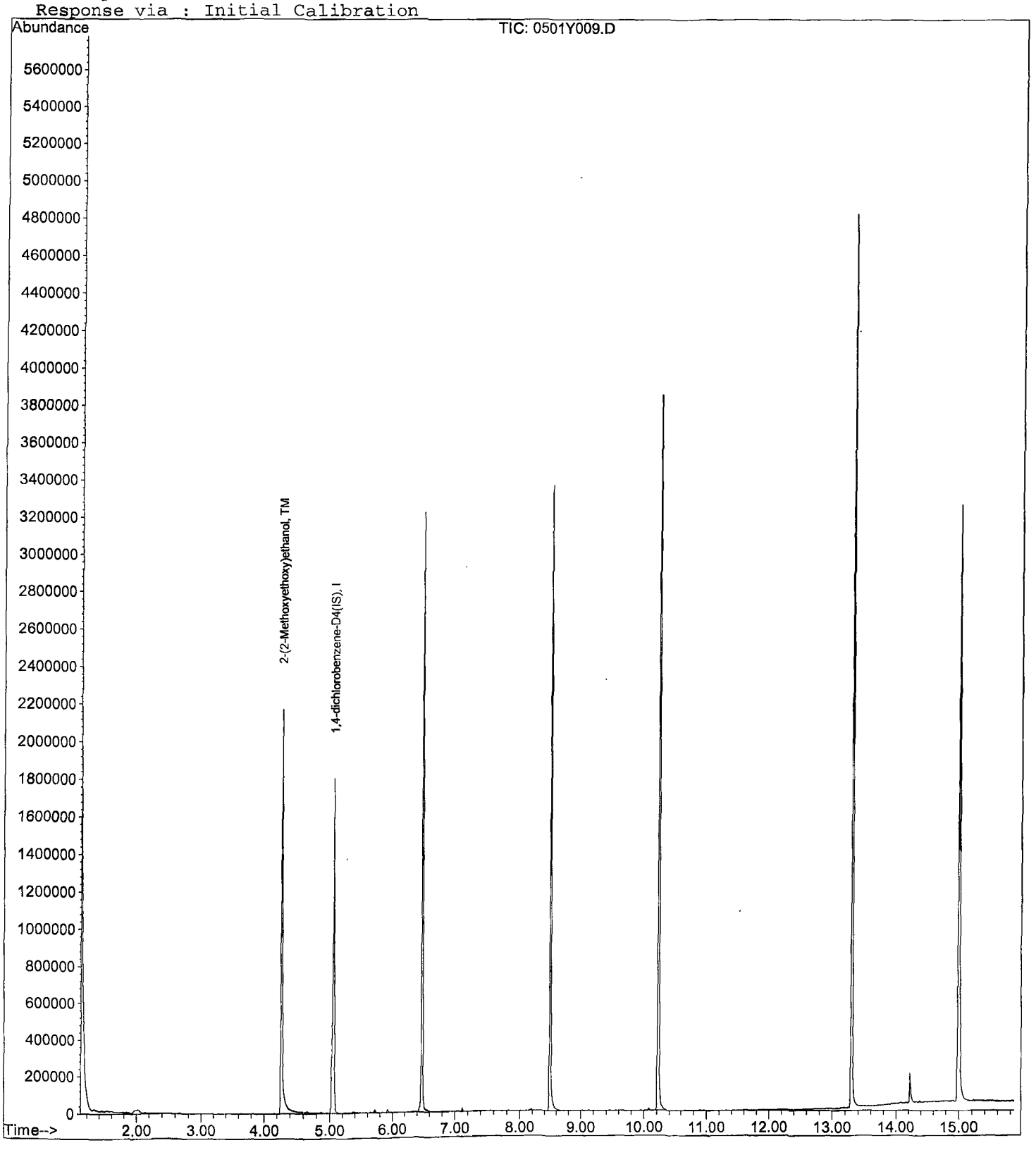
(#) = qualifier out of range (m) = manual integration
0501Y009.D YMEE0501.M Fri May 01 14:33:29 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y009.D Vial: 9
Acq On : 1 May 20 12:13 Operator: MA,SS
Sample : 600ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:14 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y010.D Vial: 10
Acq On : 1 May 20 12:37 Operator: MA,SS
Sample : 800ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:36 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 12:15:50 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.07	152	461483	40.00000 ppb	0.00
System Monitoring Compounds					
Target Compounds					Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.30	45	1469246	831.41690 ppb	99

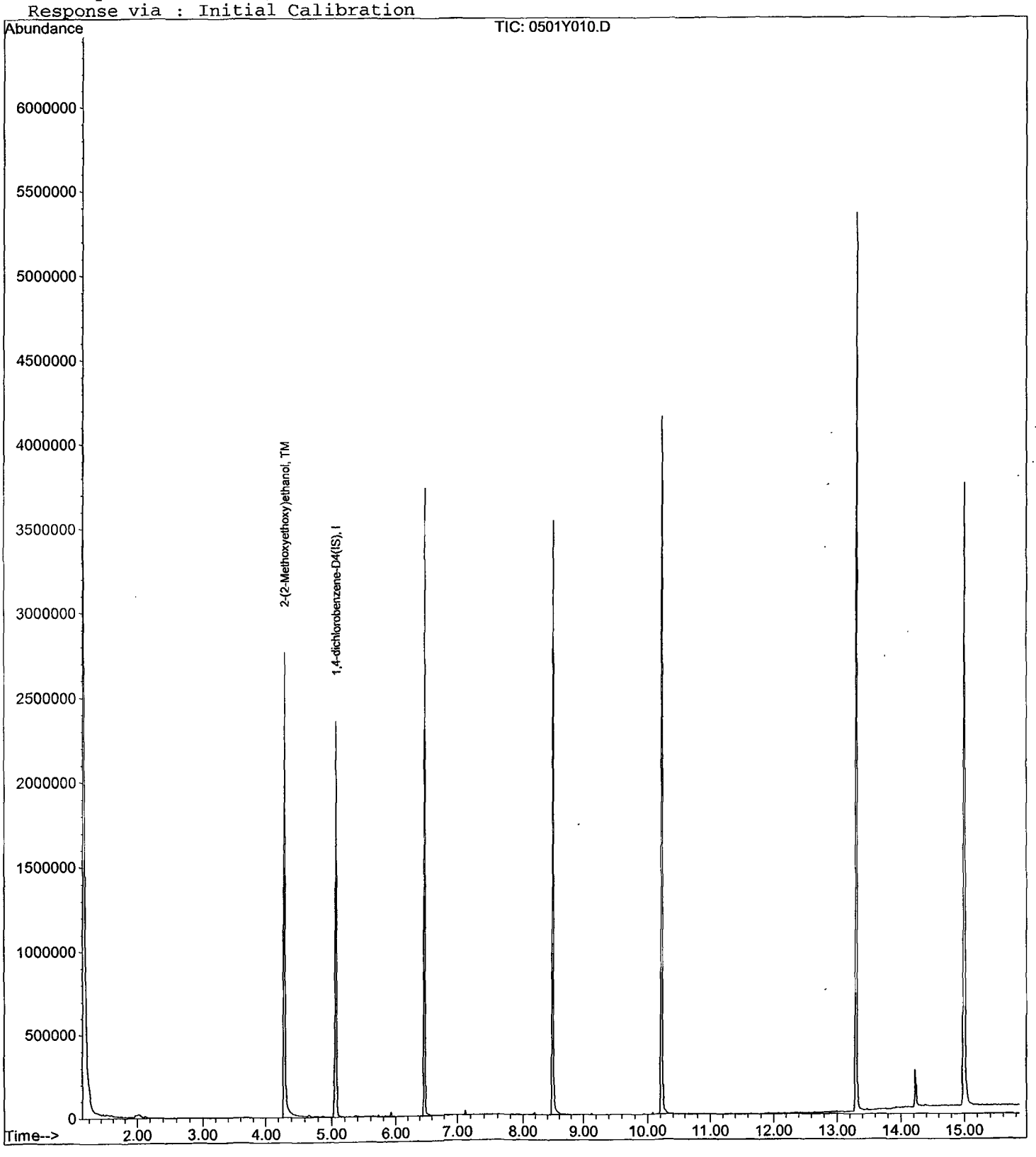
(#) = qualifier out of range (m) = manual integration
0501Y010.D YMEE0501.M Fri May 01 14:33:33 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y010.D Vial: 10
Acq On : 1 May 20 12:37 Operator: MA,SS
Sample : 800ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:36 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y011.D Vial: 11
Acq On : 1 May 20 13:01 Operator: MA,SS
Sample : 1000ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 13:03 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 12:15:50 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	445958	40.00000	ppb	-0.01

System Monitoring Compounds

Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.29	45	2014018	1172.78870	ppb	100

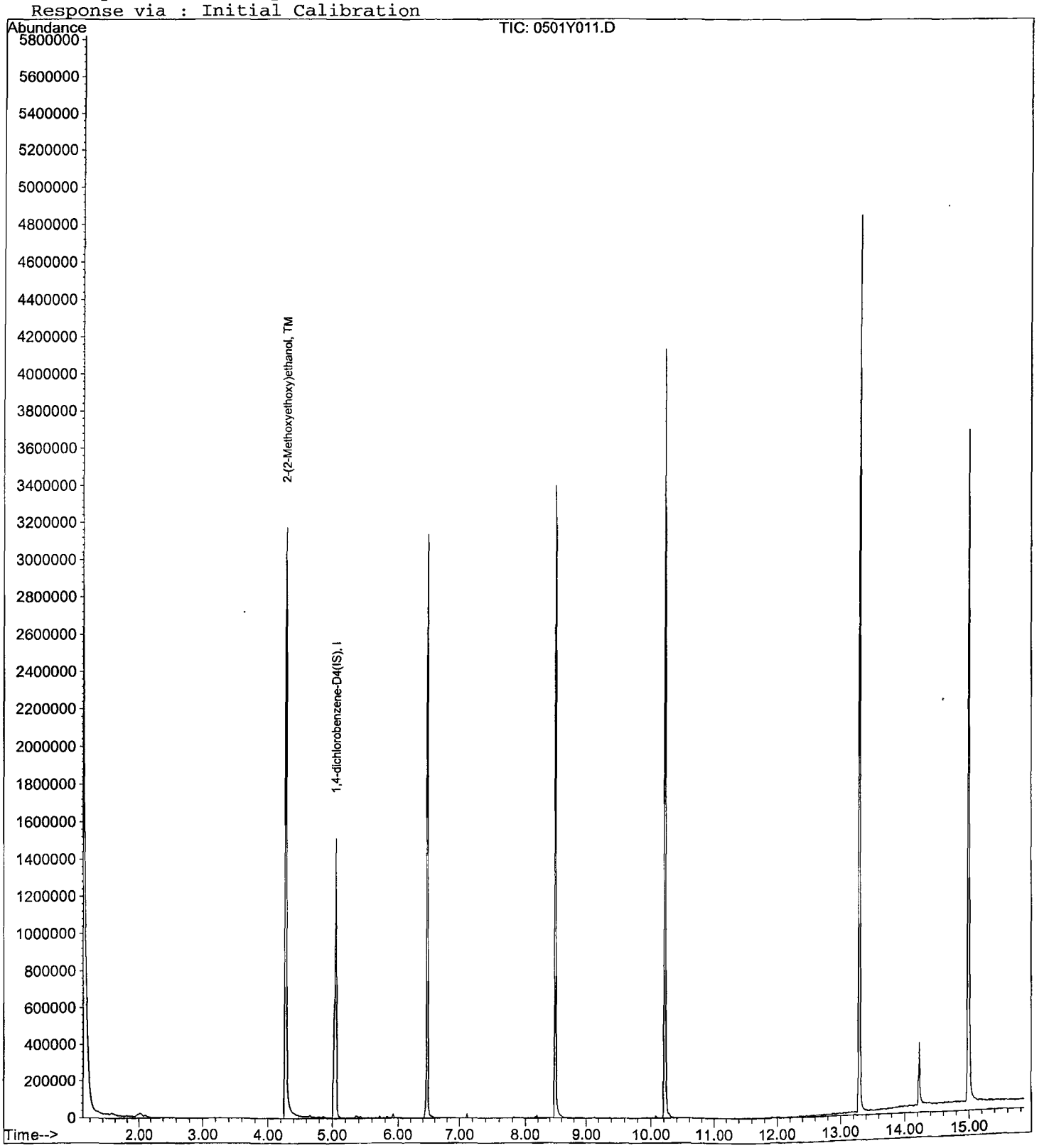
(#) = qualifier out of range (m) = manual integration
0501Y011.D YMEE0501.M Fri May 01 14:33:38 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y011.D Vial: 11
Acq On : 1 May 20 13:01 Operator: MA,SS
Sample : 1000ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 13:03 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



2MEE
EPA 8270

Form 7

Second Source

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 1 May 20 13:50
Instrument: Yoda
Initial Cal. Date: 05/01/20
Data File: 0501Y013.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	TM	2-(2-Methoxyethoxy)ethanol	0.1574	0.1794	14	TM	
3							
4							
5							
6							
7							
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18							
19							
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23							
24							
25							
26							
27							
28							
29							
30							
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32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			14.0		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y013.D Vial: 13
Acq On : 1 May 20 13:50 Operator: MA,SS
Sample : SSug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 14:30 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	461050	40.00000 ppb	-0.01

System Monitoring Compounds

Target Compounds					Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.26	45	1033684	569.91471 ppb	100

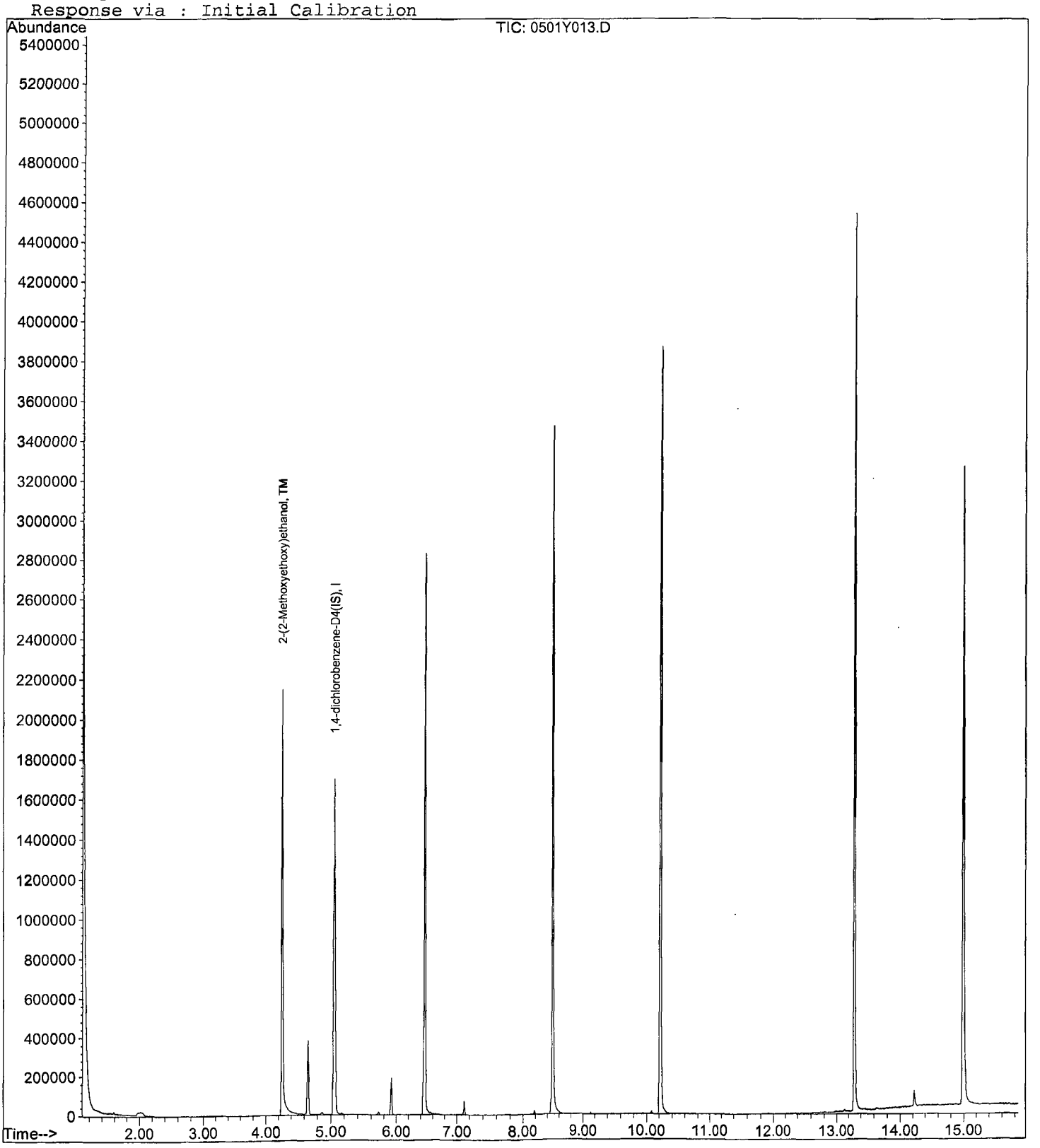
(#) = qualifier out of range (m) = manual integration
0501Y013.D YMEE0501.M Fri May 01 14:33:42 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y013.D Vial: 13
Acq On : 1 May 20 13:50 Operator: MA,SS
Sample : SSug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 14:30 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



2MEE
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/27/20
Instrument: Yoda
Initial Cal. Date: 05/01/20
Data File: 0501Y131.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	TM	2-(2-Methoxyethoxy)ethanol	0.1574	0.1503	4.5	TM	
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
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28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			4.5		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y131.D Vial: 31
Acq On : 27 Oct 20 10:42 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:39 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 21 09:09:54 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.37	152	179268	40.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.57	45	336817	477.59672	ppb	95

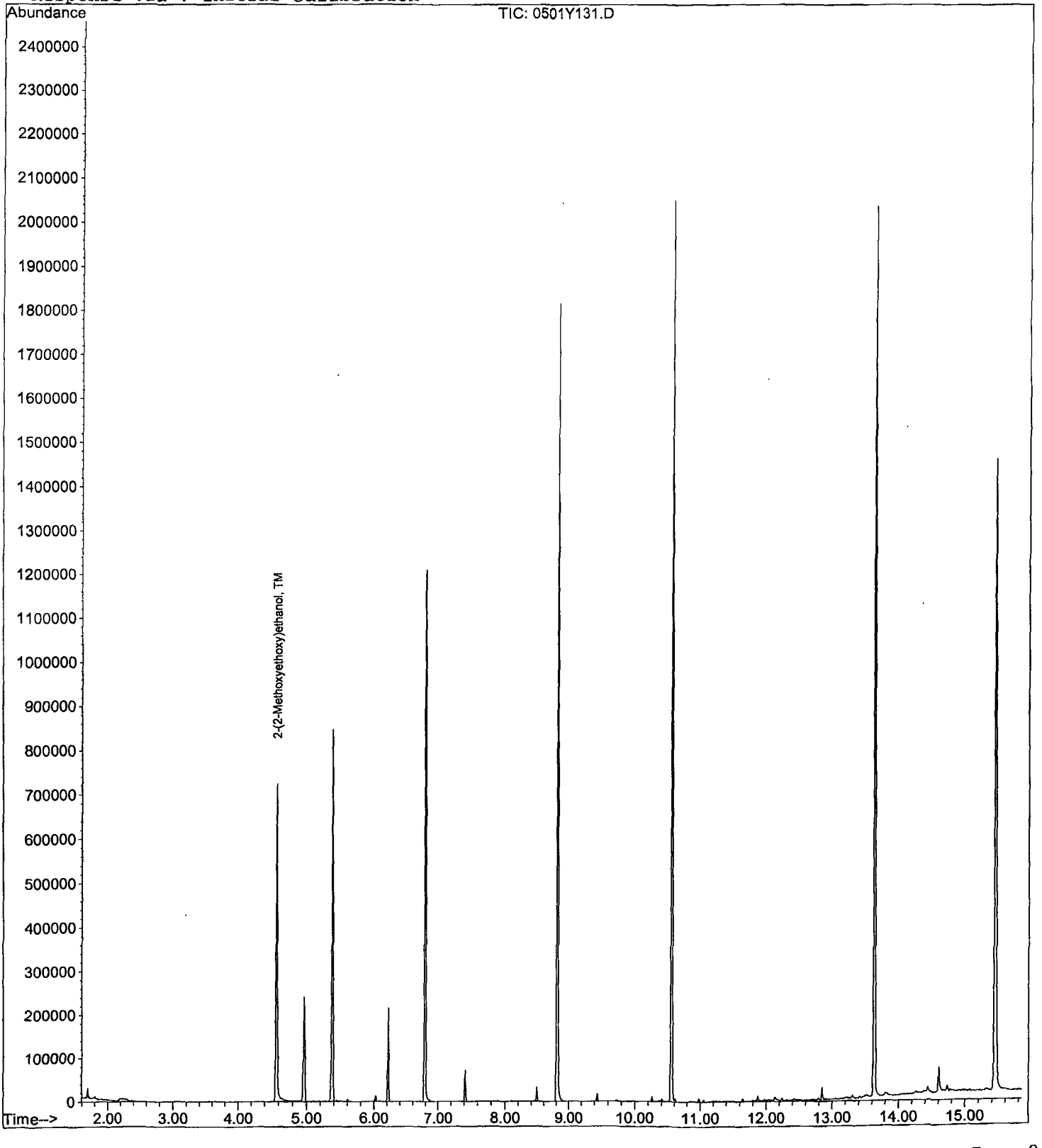
(#) = qualifier out of range (m) = manual integration
0501Y131.D YMEE0501.M Tue Oct 27 10:45:22 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y131.D Vial: 31
Acq On : 27 Oct 20 10:42 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:39 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 21 09:09:54 2020
Response via : Initial Calibration



2MEE
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/27/20
Instrument: Yoda
Initial Cal. Date: 05/01/20
Data File: 0501Y141.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	TM	2-(2-Methoxyethoxy)ethanol	0.1574	0.1707	8.5	TM	
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
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31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			8.5		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y141.D Vial: 41
Acq On : 27 Oct 20 14:38 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 14:57 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:57:12 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.37	152	143100	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

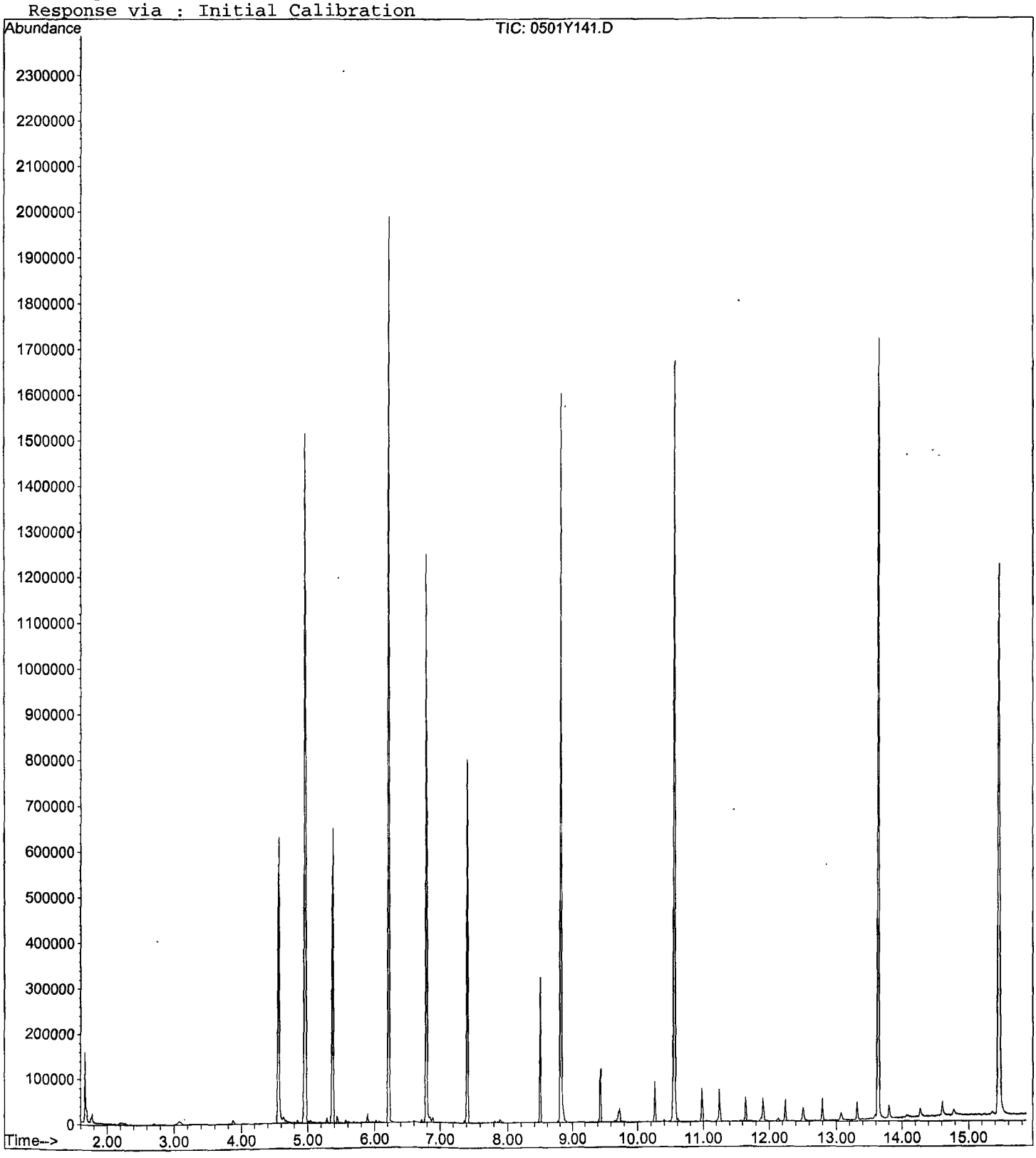
(#) = qualifier out of range (m) = manual integration
0501Y141.D YMEE0501.M Tue Oct 27 14:57:59 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y141.D Vial: 41
Acq On : 27 Oct 20 14:38 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 14:57 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:57:12 2020
Response via : Initial Calibration



2MEE
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/29/20
Instrument: Yoda
Initial Cal. Date: 05/01/20
Data File: 0501Y144.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	TM	2-(2-Methoxyethoxy)ethanol	0.1574	0.1396	11	TM	
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
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31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			11.0		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y144.D Vial: 44
Acq On : 29 Oct 20 10:08 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 9:04 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.36	152	147724	40.00000 ppb	0.00
System Monitoring Compounds					
Target Compounds					Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.56	45	257728	443.48675 ppb	96

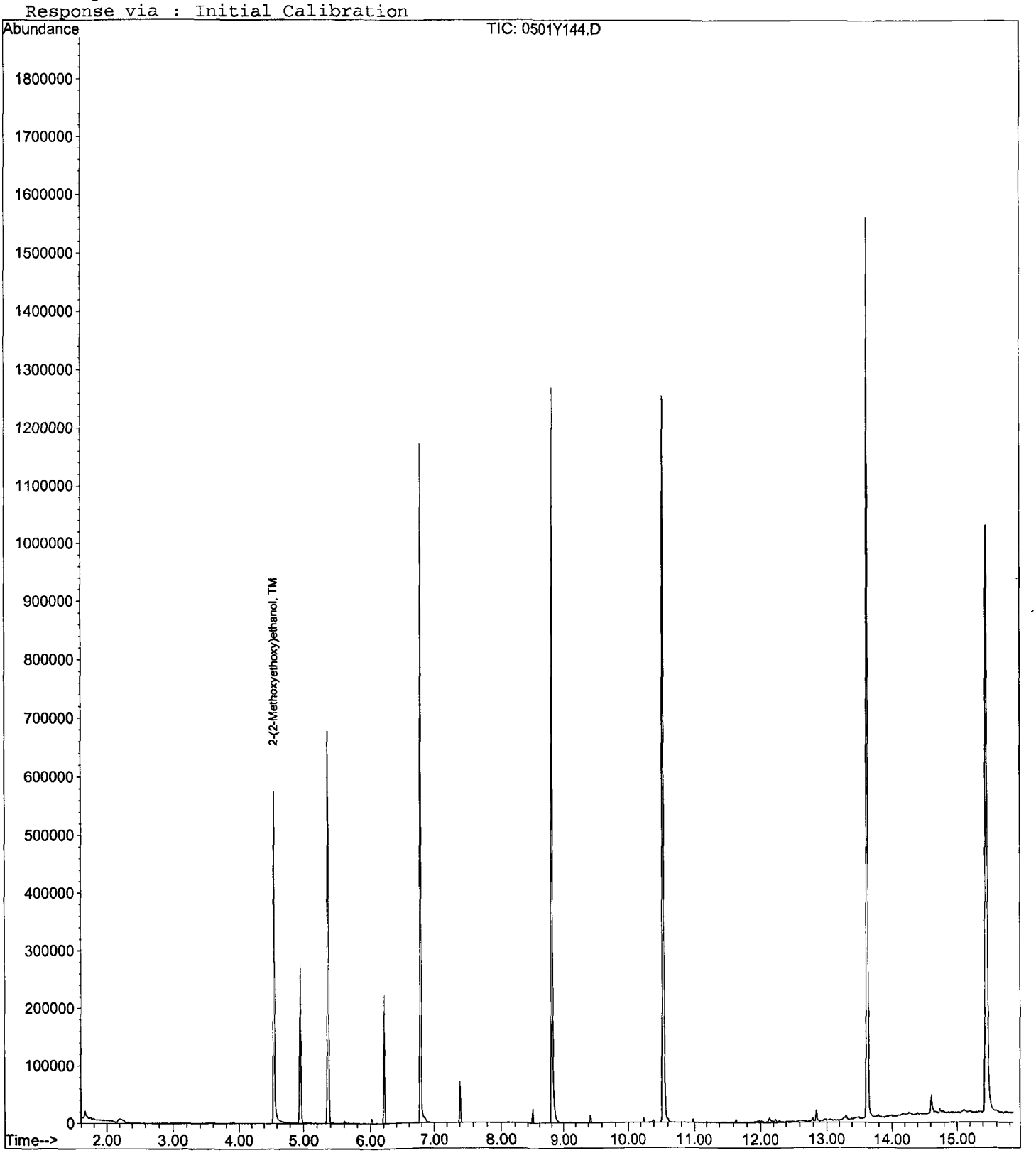
(#) = qualifier out of range (m) = manual integration
0501Y144.D YMEE0501.M Mon Nov 09 16:41:54 2020

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y144.D Vial: 44
Acq On : 29 Oct 20 10:08 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 9:04 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



2MEE
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/29/20
Instrument: Yoda
Initial Cal. Date: 05/01/20
Data File: 0501Y148.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	TM	2-(2-Methoxyethoxy)ethanol	0.1574	0.1664	5.7	TM	
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
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33							
34							
35							
36							
37							
38							
39							
40							
		Average			5.7		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y148.D Vial: 48
Acq On : 29 Oct 20 11:42 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 10:39 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.37	152	139396	40.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.56	45	289890	528.63148	ppb	99

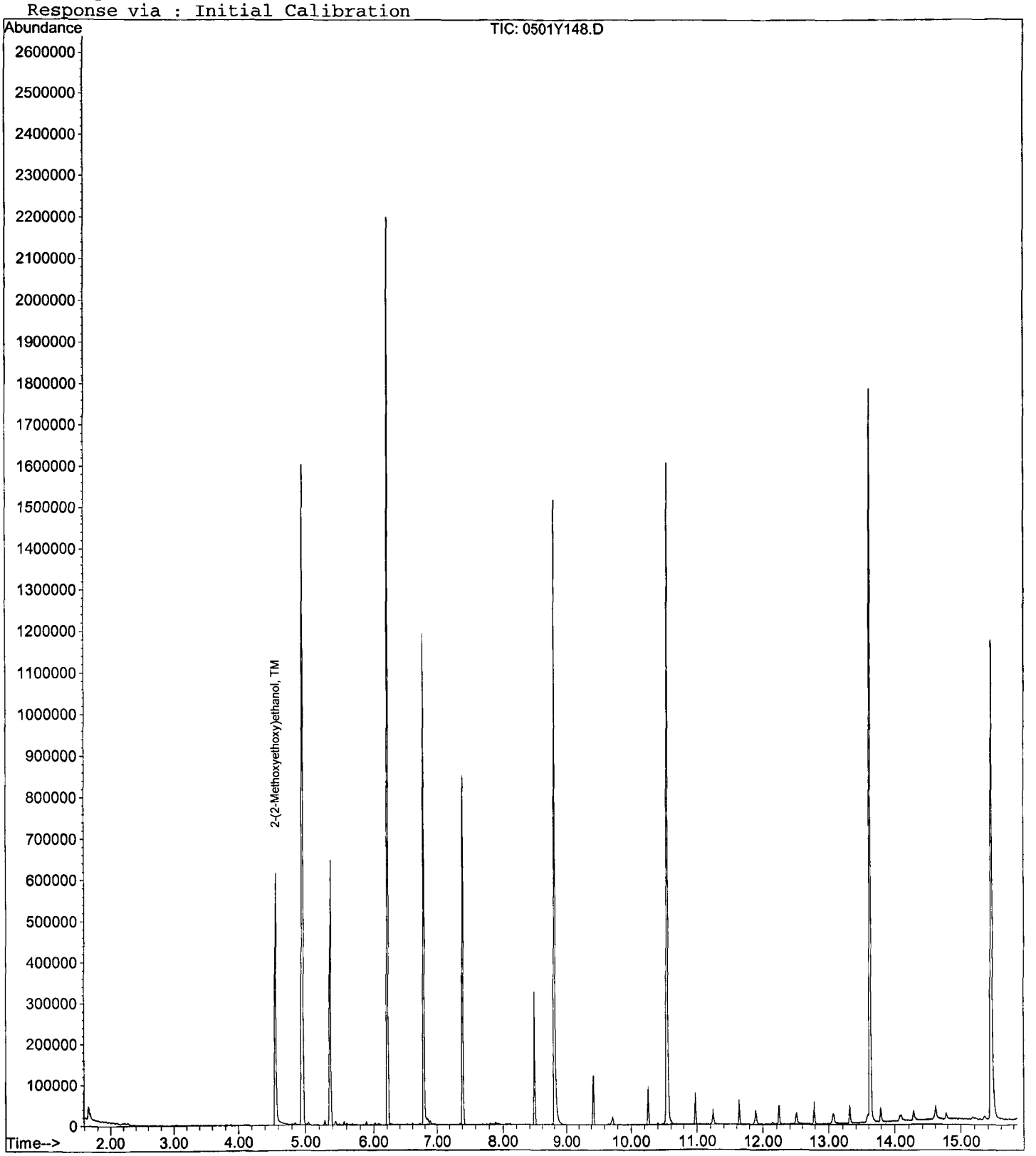
(#) = qualifier out of range (m) = manual integration
0501Y148.D YMEE0501.M Mon Nov 09 16:41:58 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y148.D Vial: 48
Acq On : 29 Oct 20 11:42 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 10:39 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y145.D Vial: 45
Acq On : 29 Oct 20 10:32 Operator: MA,SS
Sample : BA20716W12 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 9:35 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.37	152	160080	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

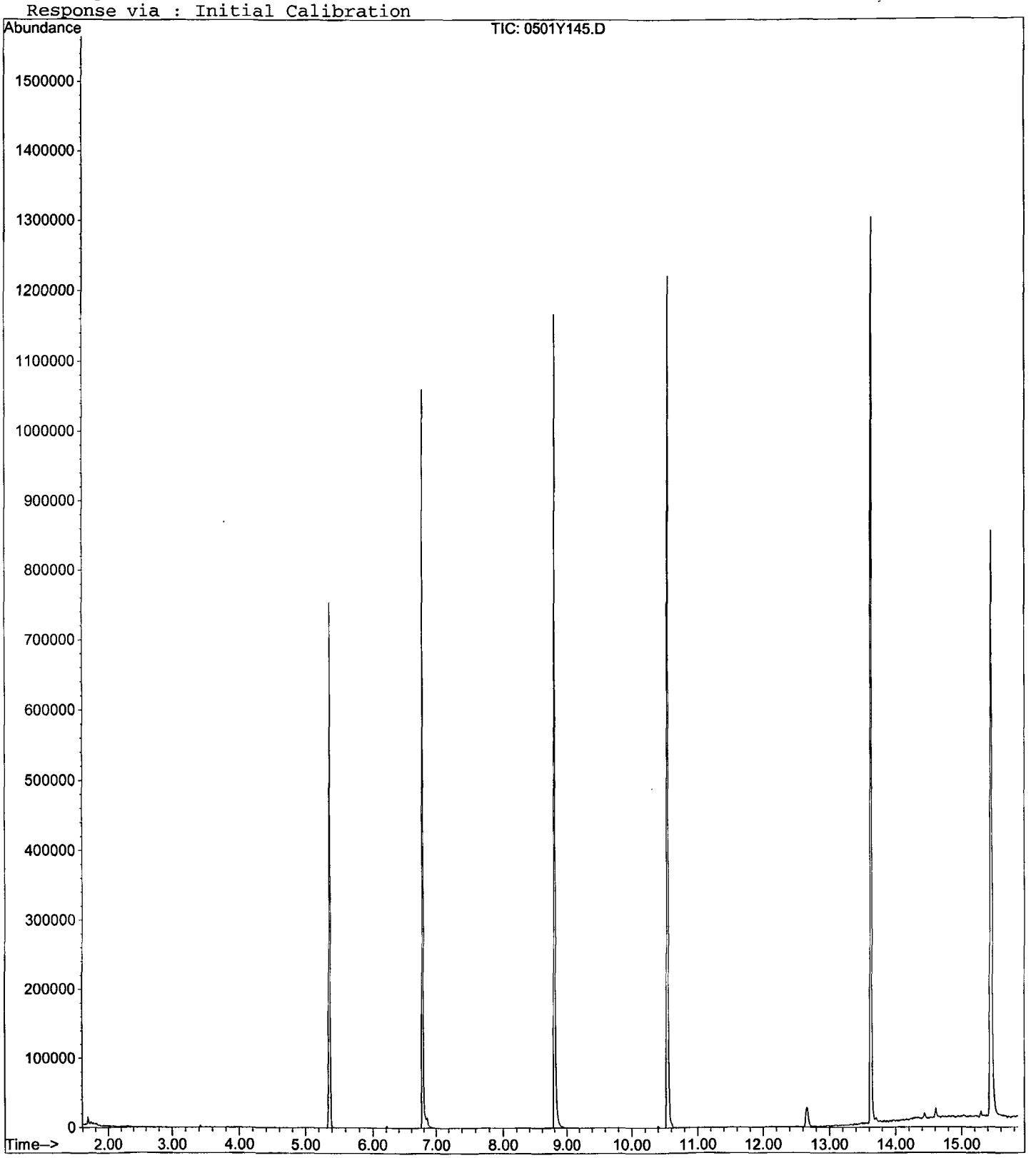
(#) = qualifier out of range (m) = manual integration
0501Y145.D YMEE0501.M Mon Nov 09 16:24:45 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y145.D Vial: 45
Acq On : 29 Oct 20 10:32 Operator: MA,SS
Sample : BA20716W12 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 9:35 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y146.D Vial: 46
Acq On : 29 Oct 20 10:55 Operator: MA,SS
Sample : BA20718W15 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 9:53 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.35	152	201704	40.00000	ppb	-0.02

System Monitoring Compounds

Target Compounds Qvalue

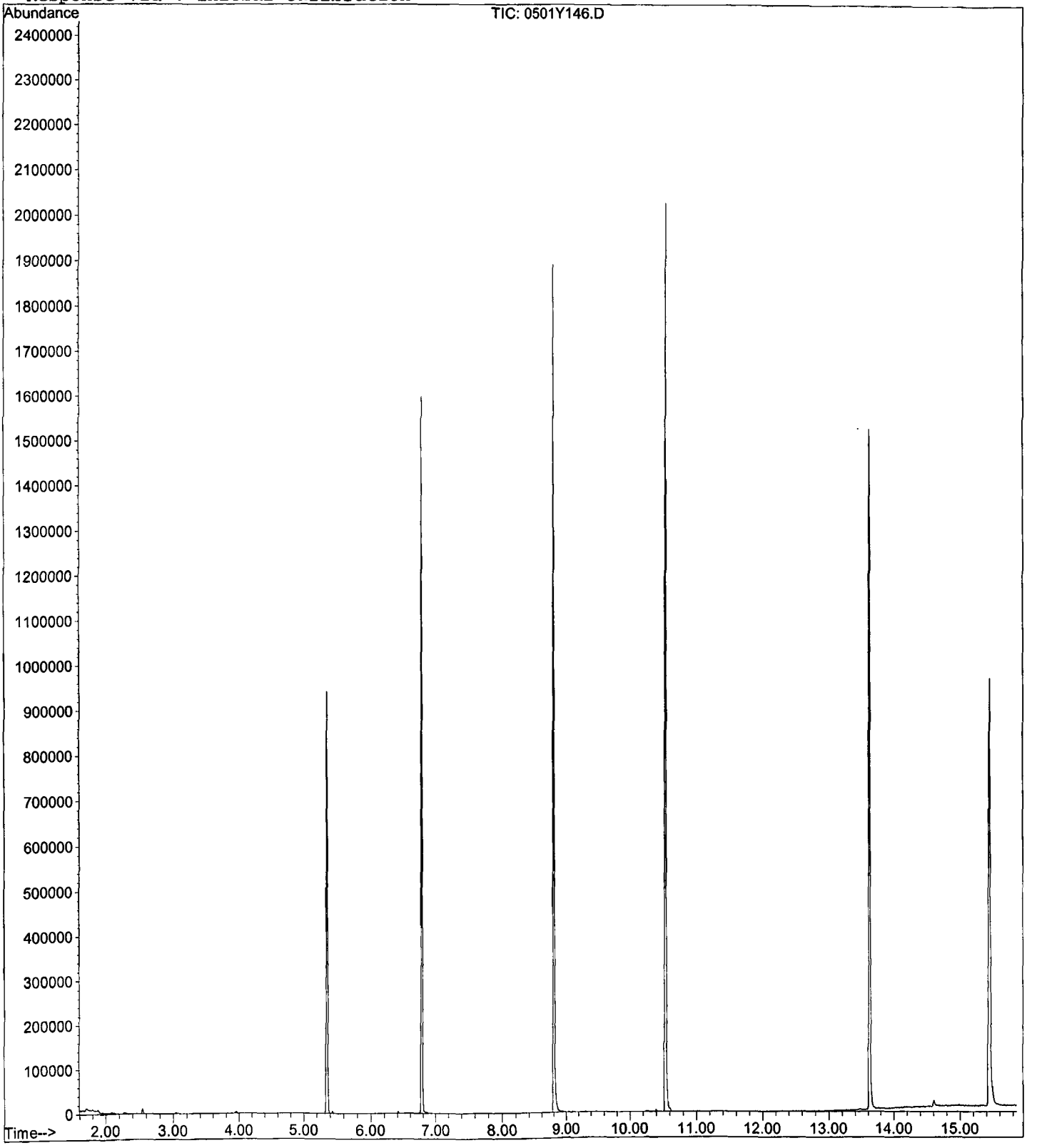
(#) = qualifier out of range (m) = manual integration
0501Y146.D YMEE0501.M Mon Nov 09 16:24:55 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y146.D Vial: 46
Acq On : 29 Oct 20 10:55 Operator: MA,SS
Sample : BA20718W15 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 9:53 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y147.D Vial: 47
Acq On : 29 Oct 20 11:18 Operator: MA,SS
Sample : BA20719W10 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 10:31 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.36	152	158396	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

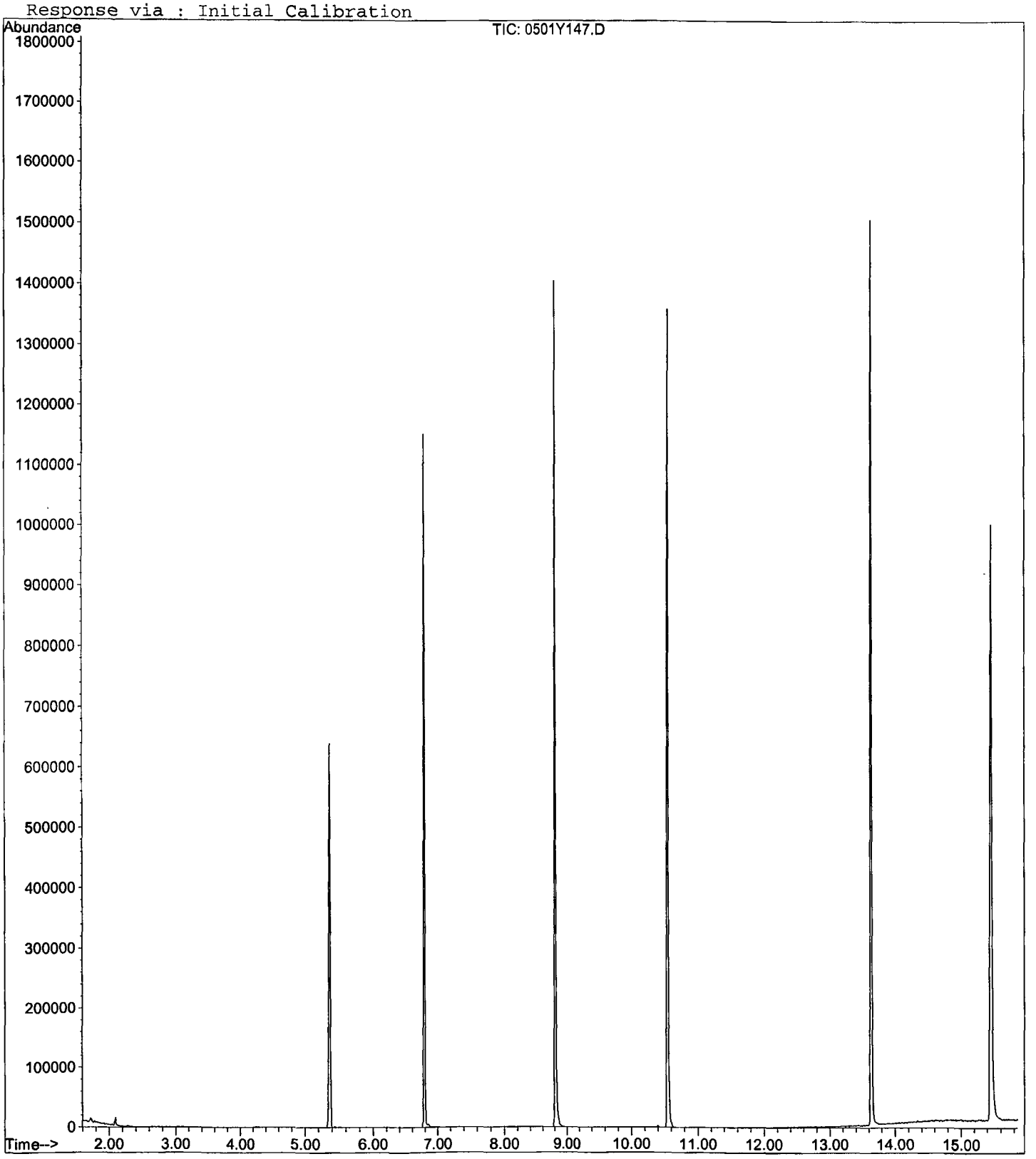
(#) = qualifier out of range (m) = manual integration
0501Y147.D YMEE0501.M Mon Nov 09 16:25:03 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y147.D Vial: 47
Acq On : 29 Oct 20 11:18 Operator: MA,SS
Sample : BA20719W10 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 29 10:31 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y132.D Vial: 32
Acq On : 27 Oct 20 11:06 Operator: MA,SS
Sample : 201026A BLK 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:09 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 21 09:09:54 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.36	152	175209	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

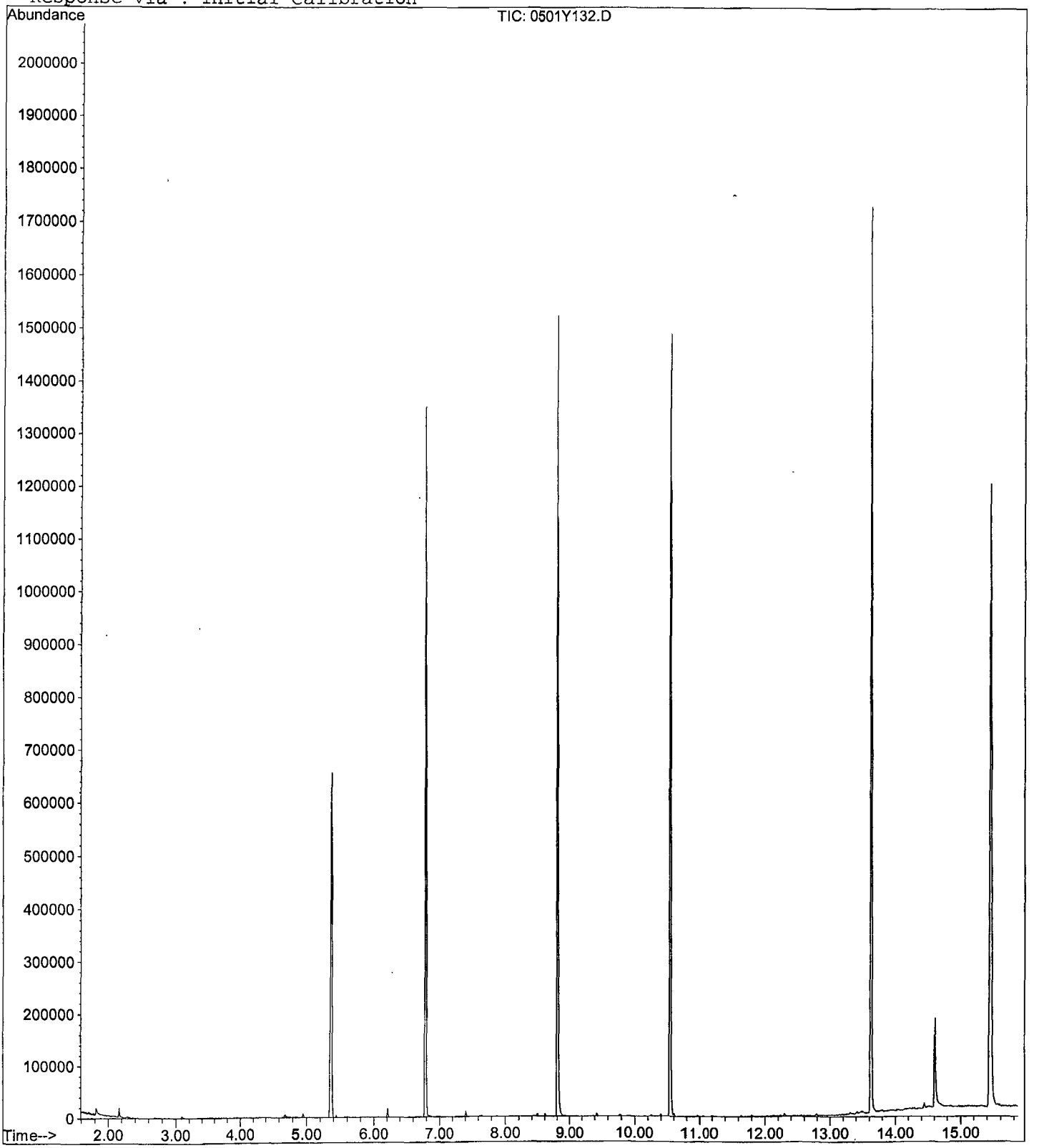
(#) = qualifier out of range (m) = manual integration
0501Y132.D YMEE0501.M Mon Nov 09 16:26:01 2020

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y132.D Vial: 32
Acq On : 27 Oct 20 11:06 Operator: MA,SS
Sample : 201026A BLK 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:09 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y133.D Vial: 33
Acq On : 27 Oct 20 11:30 Operator: MA,SS
Sample : 201026A LCS-1 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:48 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 21 09:09:54 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.36	152	187647	40.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.64	45	48205	65.30111	ppb	96

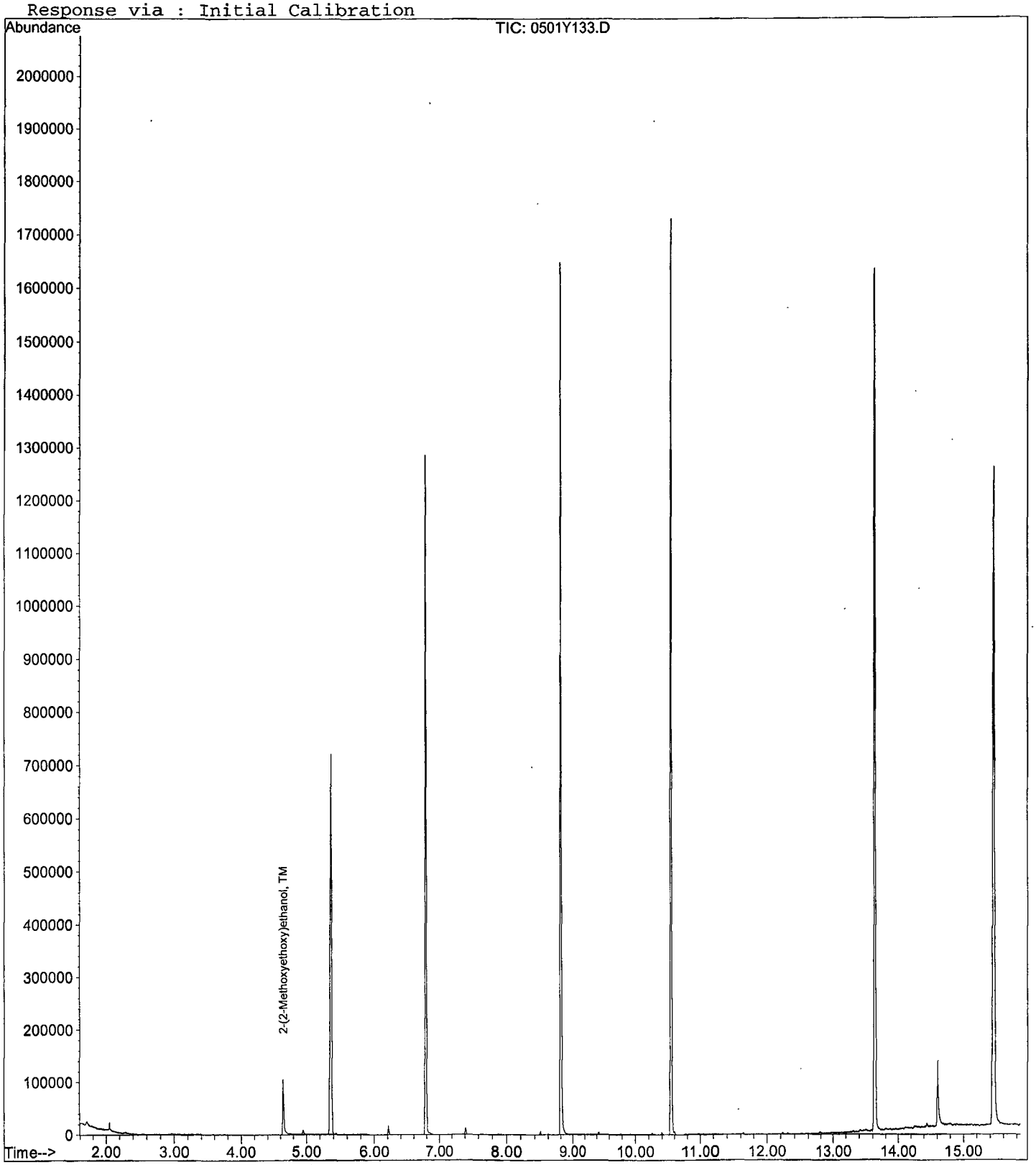
(#) = qualifier out of range (m) = manual integration
0501Y133.D YMEE0501.M Mon Nov 09 16:26:06 2020

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y133.D Vial: 33
Acq On : 27 Oct 20 11:30 Operator: MA,SS
Sample : 201026A LCS-1 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 27 10:48 2020 Quant Results File: YMEE0501.RES

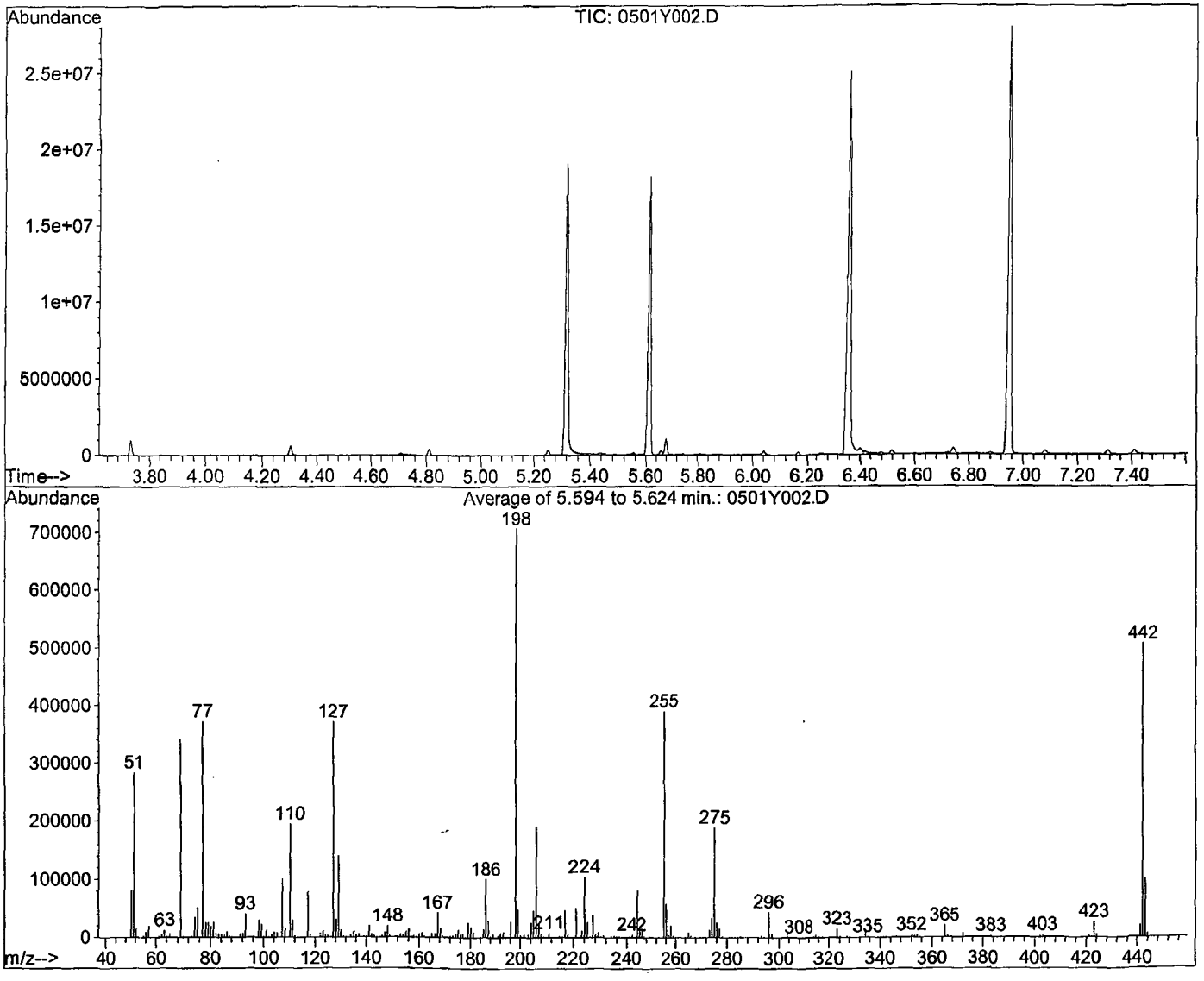
Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Oct 27 14:58:10 2020
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y200501M\0501Y002.D
Acq On : 1 May 20 9:23
Sample : SV TUNE 10/01/19
Misc : soil

Vial: 38
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C



Spectrum Information: Average of 5.594 to 5.624 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	40.1	283365	PASS
68	69	0.00	2	0.0	30	PASS
70	69	0.00	2	0.5	1711	PASS
127	198	10	80	52.5	370953	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	706767	PASS
199	198	5	9	6.8	48387	PASS
275	198	10	60	26.7	188525	PASS
365	198	1	100	2.8	20013	PASS
441	442	0.01	24	3.9	19955	PASS
442	198	50	500	71.6	506304	PASS
443	442	15	24	19.8	100283	PASS

0501Y002.D YMEE0501.M Fri May 01 11:47:21 2020

Data File Name:	**0501Y002.D**
Data File Path:	**M:\YODA\DATA\Y200501M**
Operator:	**MA,SS**
Date Acquired:	**1 May 20 9:23**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/01/19**
Vial Number:	**38**
Instrument Name:	**Yoda**

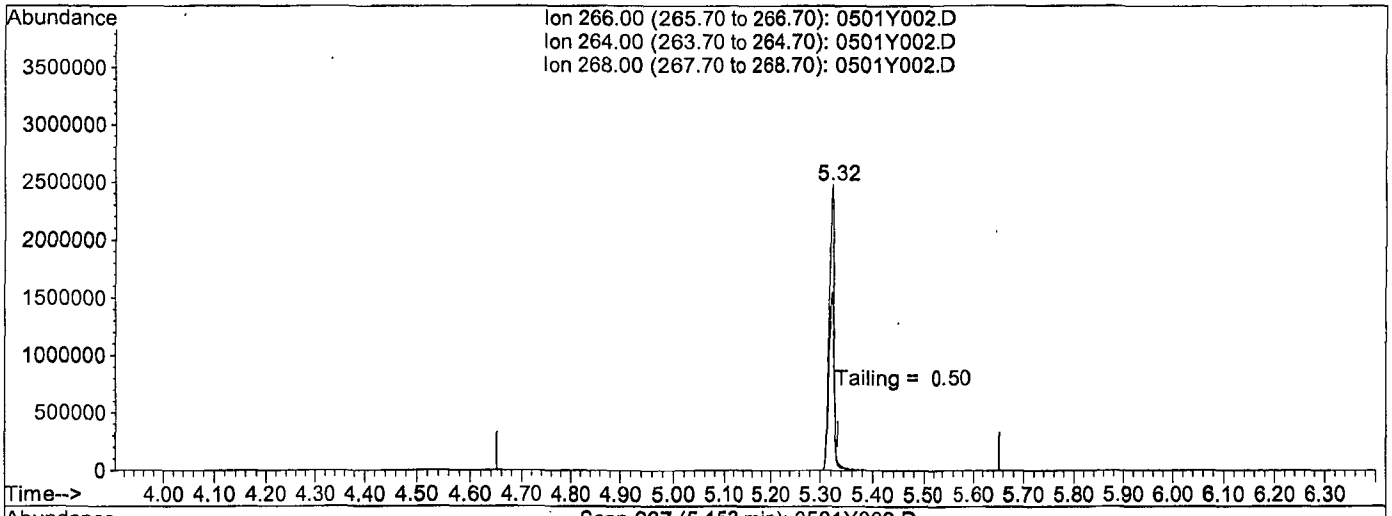
#	Name	Ret Time	Target Response
1)	DDT	6.95	212314000
2)	DDD	6.72	691986
3)	DDE	6.31	0

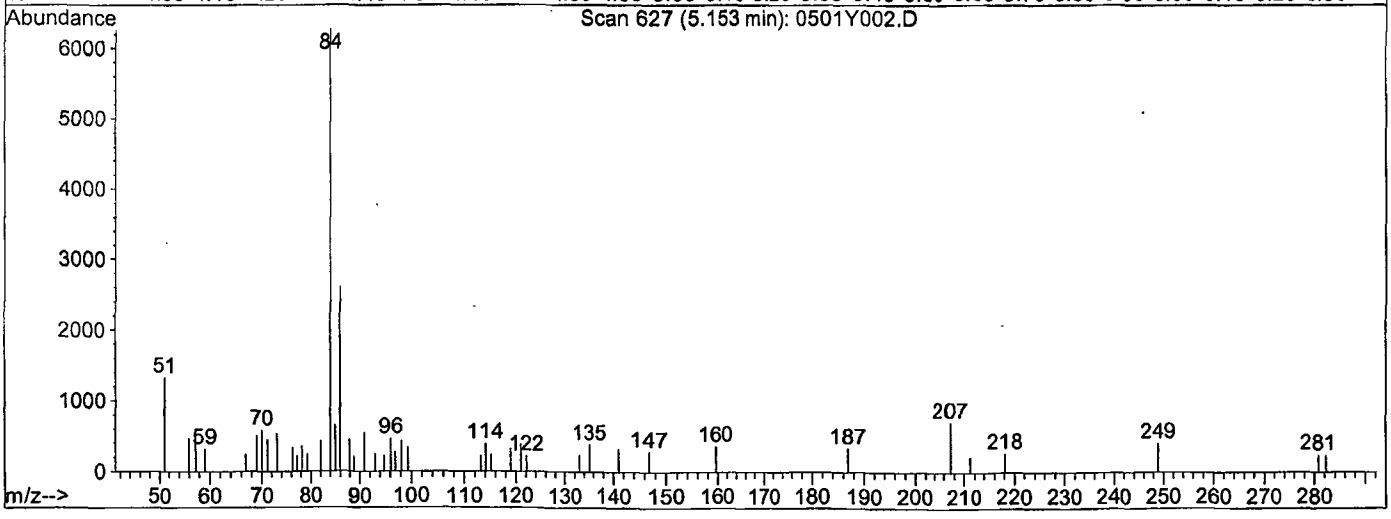
Breakdown **0.32**

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y002.D Vial: 38
Acq On : 1 May 20 9:23 Operator: MA,SS
Sample : SV TUNE 10/01/19 Inst : Yoda
Misc : soil Multiplr: 1.00
Quant Time: Aug 7 11:03 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y200501M\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Wed Jul 22 08:17:43 2020
Response via : Single Level Calibration





TIC: 0501Y002.D

(5) Pentachlorophenol

5.15min 0.0000

response 0

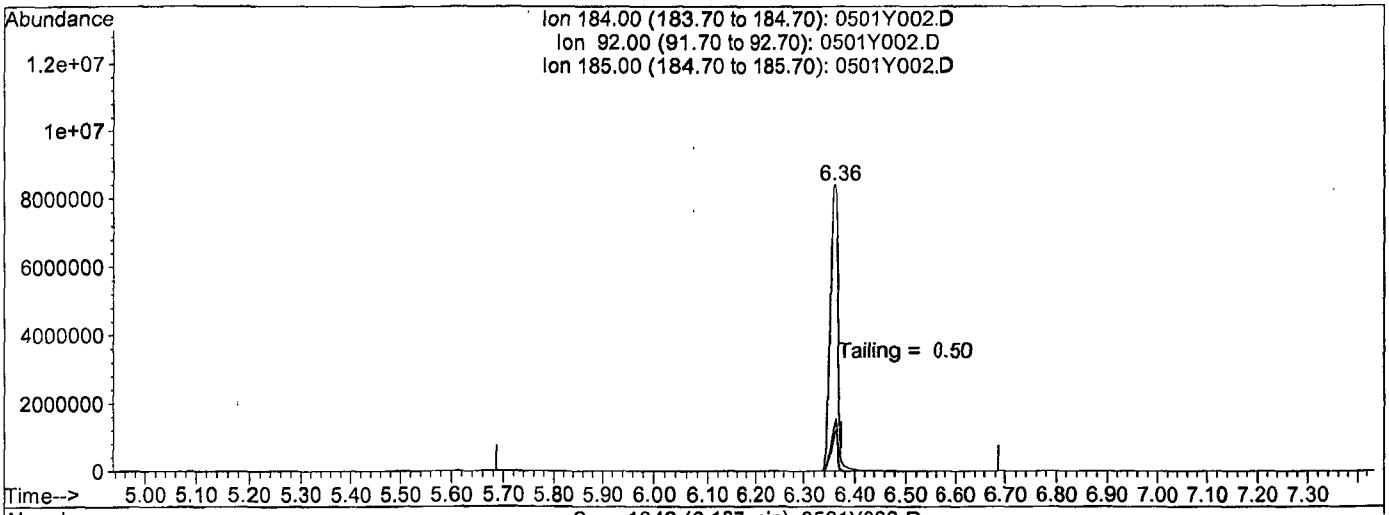
Ion	Exp%	Act%
266.00	100	0.00
264.00	63.90	0.00#
268.00	65.20	0.00#
0.00	0.00	0.00

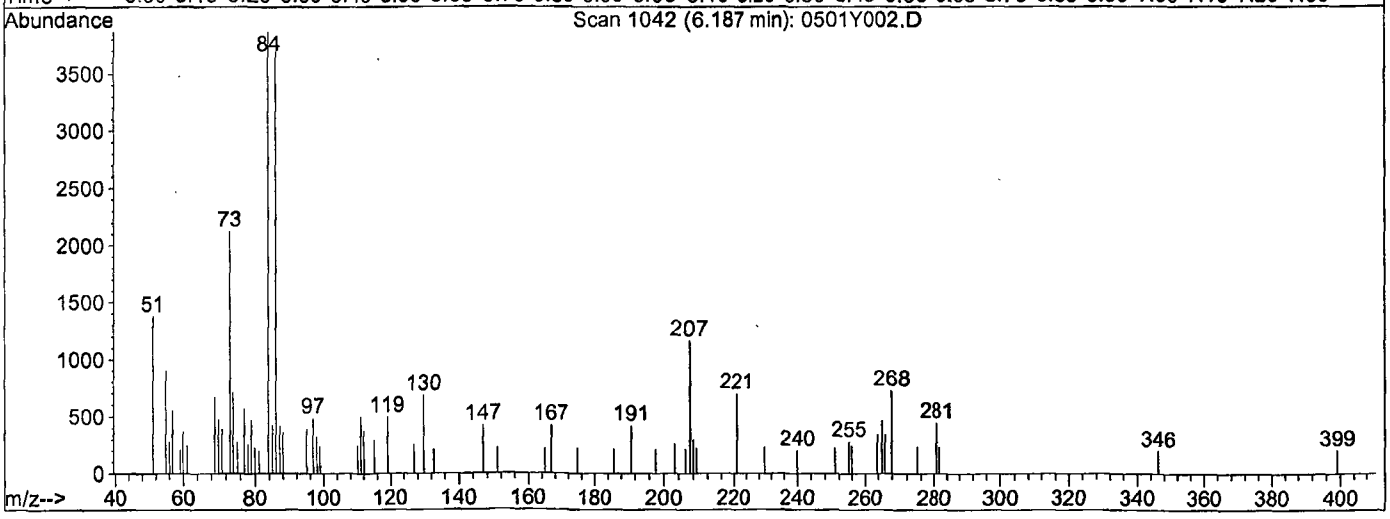
0501Y002.D DFTPP2.M Fri Aug 07 11:04:14 2020

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y002.D Vial: 38
Acq On : 1 May 20 9:23 Operator: MA,SS
Sample : SV TUNE 10/01/19 Inst : Yoda
Misc : soil Multiplr: 1.00
Quant Time: Aug 7 11:03 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y200501M\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Wed Jul 22 08:17:43 2020
Response via : Single Level Calibration





TIC: 0501Y002.D

(6) Benzidine

6.19min 0.0000

response 0

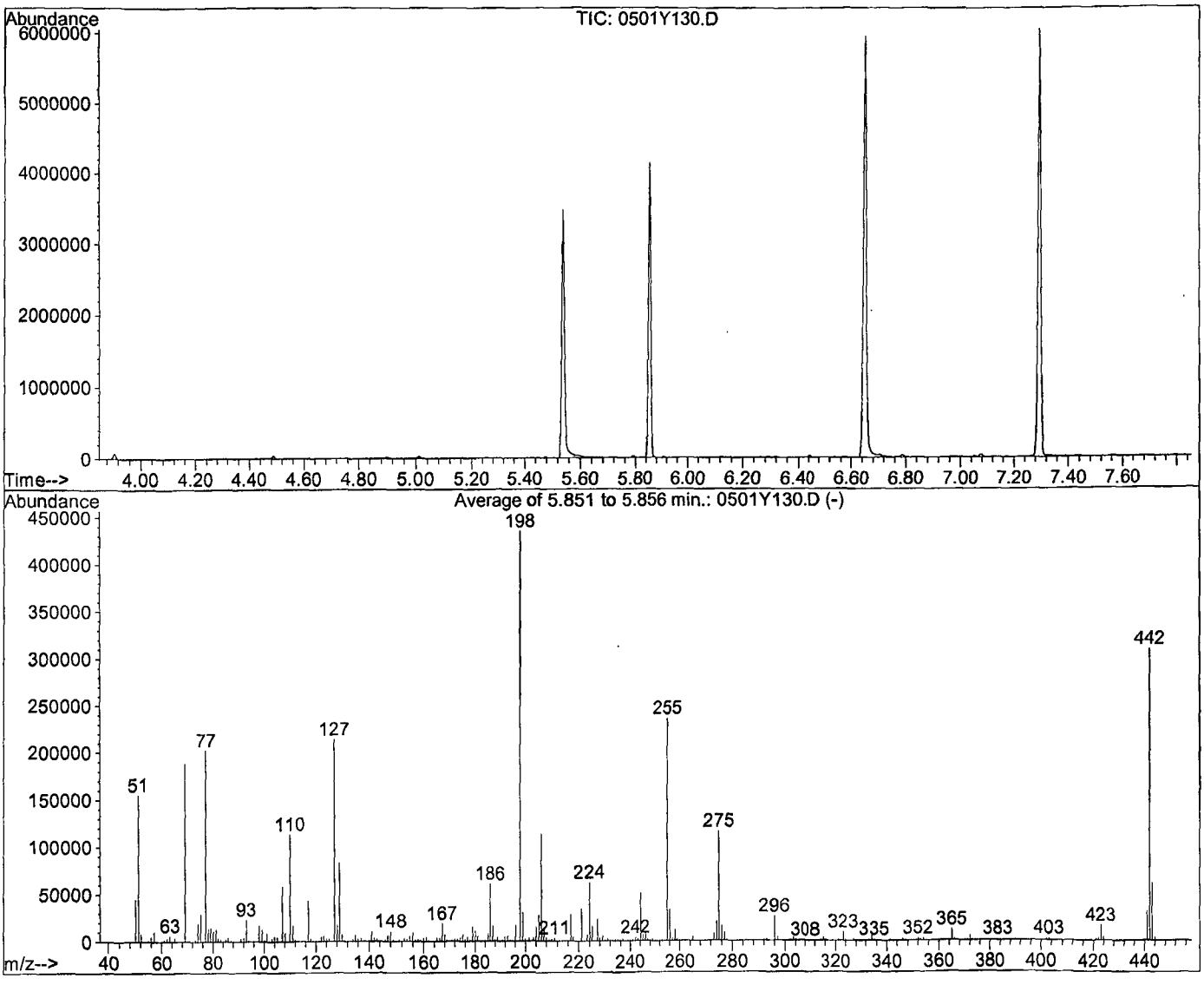
Ion	Exp%	Act%
184.00	100	0.00
92.00	10.00	0.00#
185.00	14.30	0.00#
0.00	0.00	0.00

0501Y002.D DFTPP2.M Fri Aug 07 11:04:24 2020

Data File : M:\YODA\DATA\Y200501M\0501Y130.D
Acq On : 27 Oct 20 10:27
Sample : SV TUNE 10/02/20
Misc :

Vial: 30
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 907, 908, 909; Background Corrected with Scan 897

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	35.6	154901	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.3	525	PASS
127	198	10	80	49.1	213632	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	435072	PASS
199	198	5	9	6.9	30229	PASS
275	198	10	60	26.6	115739	PASS
365	198	1	100	2.7	11719	PASS
441	442	0.01	24	10.1	31128	PASS
442	198	50	500	70.8	308203	PASS
443	442	15	24	19.9	61299	PASS

Data File Name:	**0501Y130.D**
Data File Path:	**M:\YODA\DATA\Y200501M**
Operator:	**MA,SS**
Date Acquired:	**27 Oct 2020 10:27**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/02/20**
Vial Number:	**30**
Instrument Name:	**Yoda**

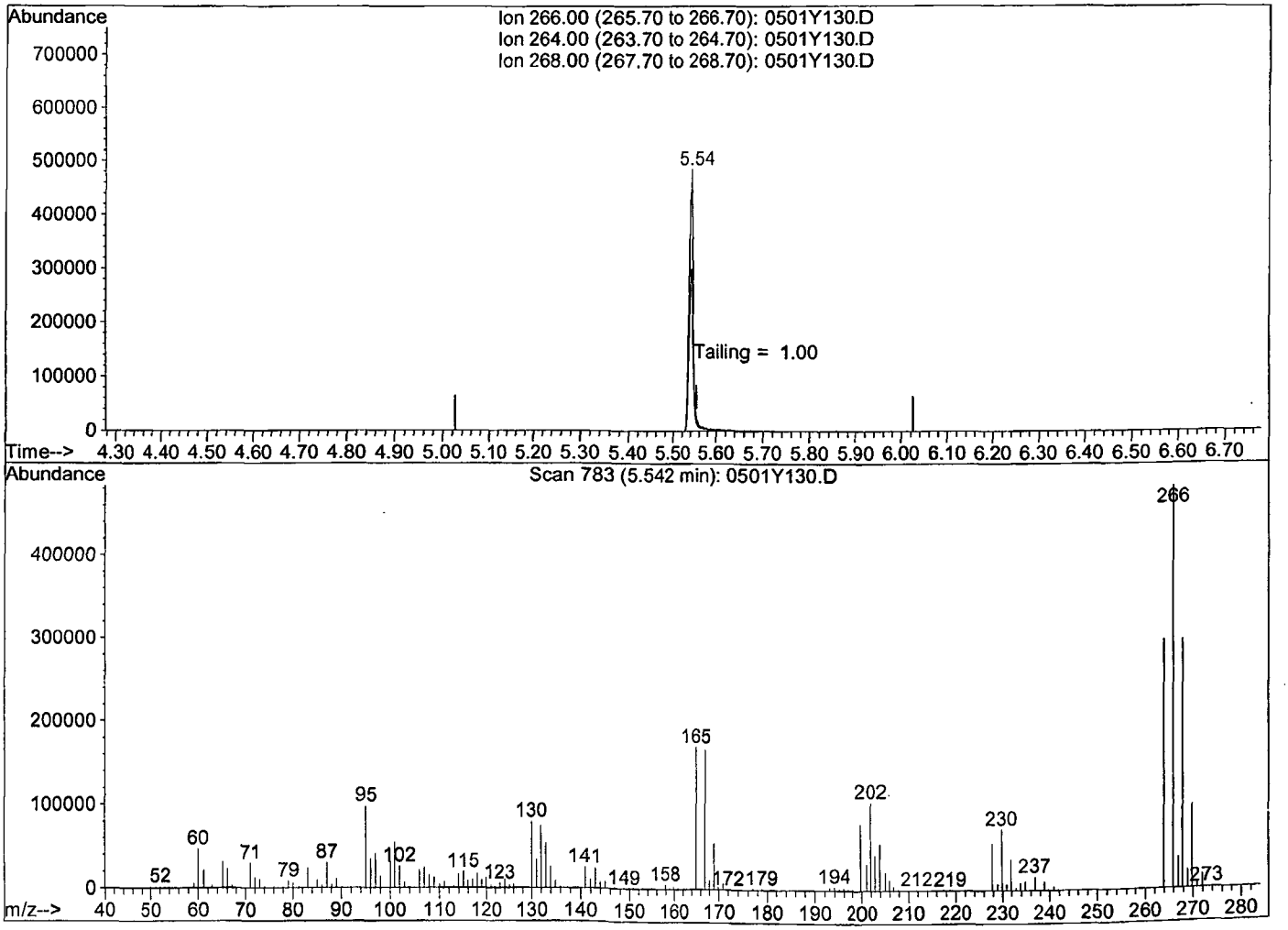
#	Name	Ret Time	Target Response
1)	DDT	7.26	43718800
2)	DDD	7.02	171303
3)	DDE	5.93	110298

Breakdown **0.64**

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y130.D Vial: 30
Acq On : 27 Oct 20 10:27 Operator: MA,SS
Sample : SV TUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 27 10:23 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y200501M\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration



TIC: 0501Y130.D

(5) Pentachlorophenol

5.54min 0.0000

response 3260744

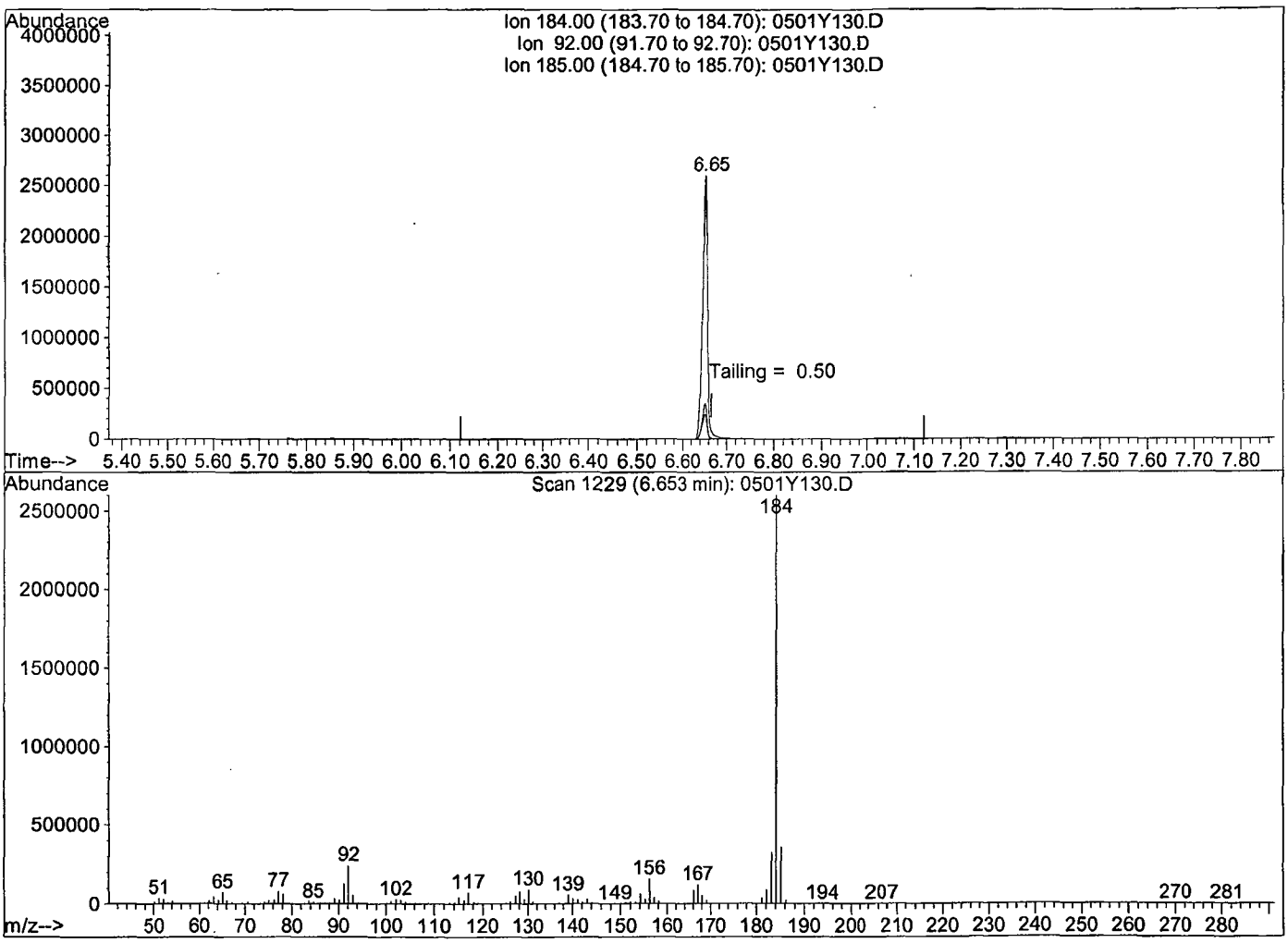
Ion	Exp%	Act%
266.00	100	100
264.00	63.10	60.14
268.00	65.40	62.42
0.00	0.00	0.00

0501Y130.D DFTPP2.M Tue Oct 27 10:27:25 2020

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y130.D Vial: 30
Acq On : 27 Oct 20 10:27 Operator: MA,SS
Sample : SV TUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 27 10:23 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y200501M\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration



TIC: 0501Y130.D

(6) Benzidine

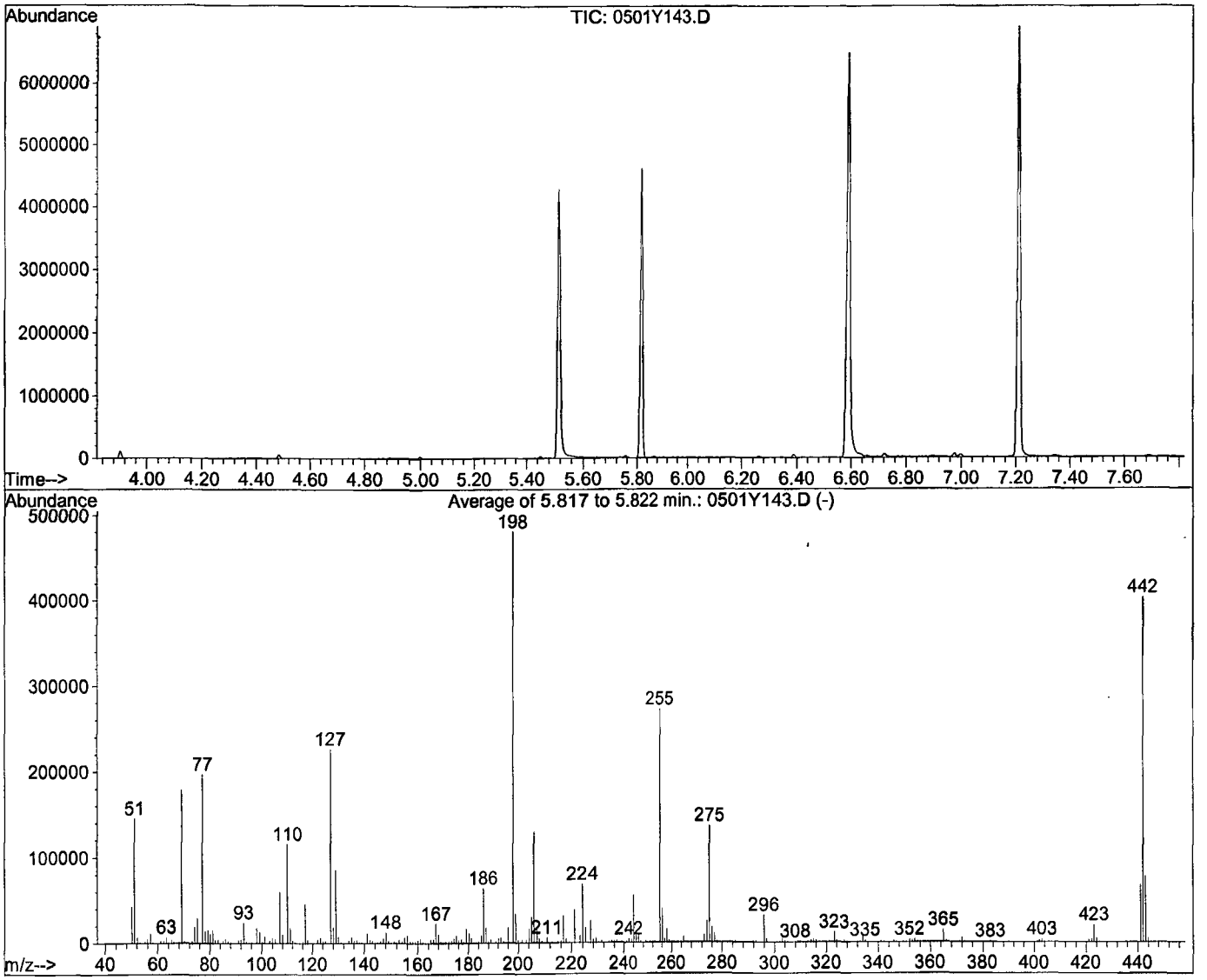
6.65min 0.0000

response 20586609

Ion	Exp%	Act%
184.00	100	100
92.00	8.50	9.73
185.00	13.80	14.28
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y200501M\0501Y143.D Vial: 43
Acq On : 29 Oct 20 9:53 Operator: MA,SS
Sample : SV TUNE 10/2/20 Inst : Yoda
Misc : Multiplr: 1.00

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 893, 894, 895; Background Corrected with Scan 884

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	30.1	144930	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.8	1493	PASS
127	198	10	80	47.0	226112	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	481045	PASS
199	198	5	9	7.0	33461	PASS
275	198	10	60	28.3	136067	PASS
365	198	1	100	3.0	14271	PASS
441	442	0.01	24	16.7	67069	PASS
442	198	50	500	83.7	402560	PASS
443	442	15	24	19.1	77029	PASS

Data File Name:	**0501Y143.D**
Data File Path:	**M:\YODA\DATA\Y200501M**
Operator:	**MA,SS**
Date Acquired:	**29 Oct 2020 09:53**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/2/20**
Vial Number:	**43**
Instrument Name:	**Yoda**

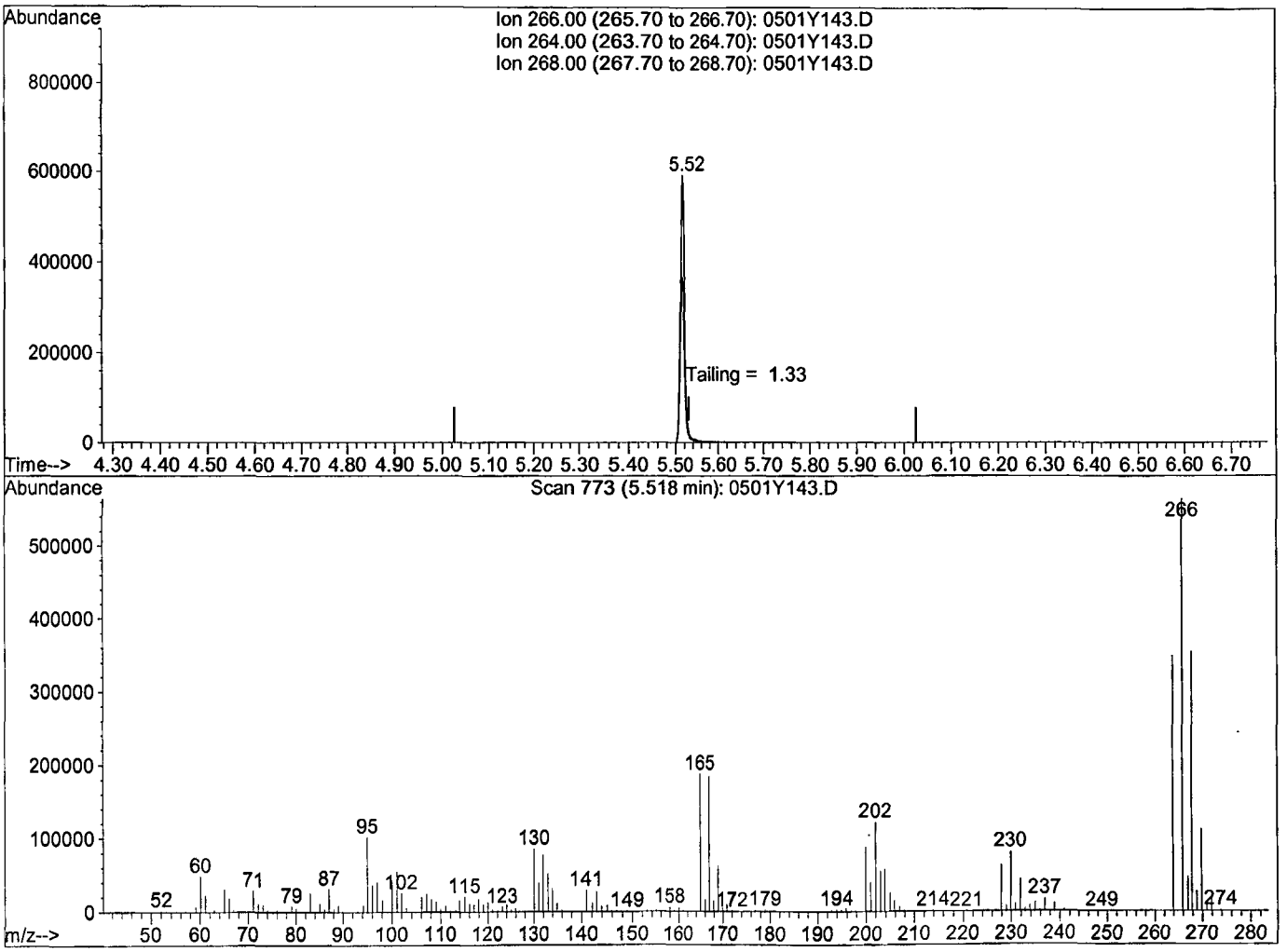
#	Name	Ret Time	Target Response
1)	DDT	7.26	50810000
2)	DDD	7.02	382388
3)	DDE	5.93	0

Breakdown **0.75**

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y143.D Vial: 43
Acq On : 29 Oct 20 9:53 Operator: MA,SS
Sample : SV TUNE 10/2/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 29 8:57 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y200501M\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration



TIC: 0501Y143.D

(5) Pentachlorophenol

5.52min 0.0000

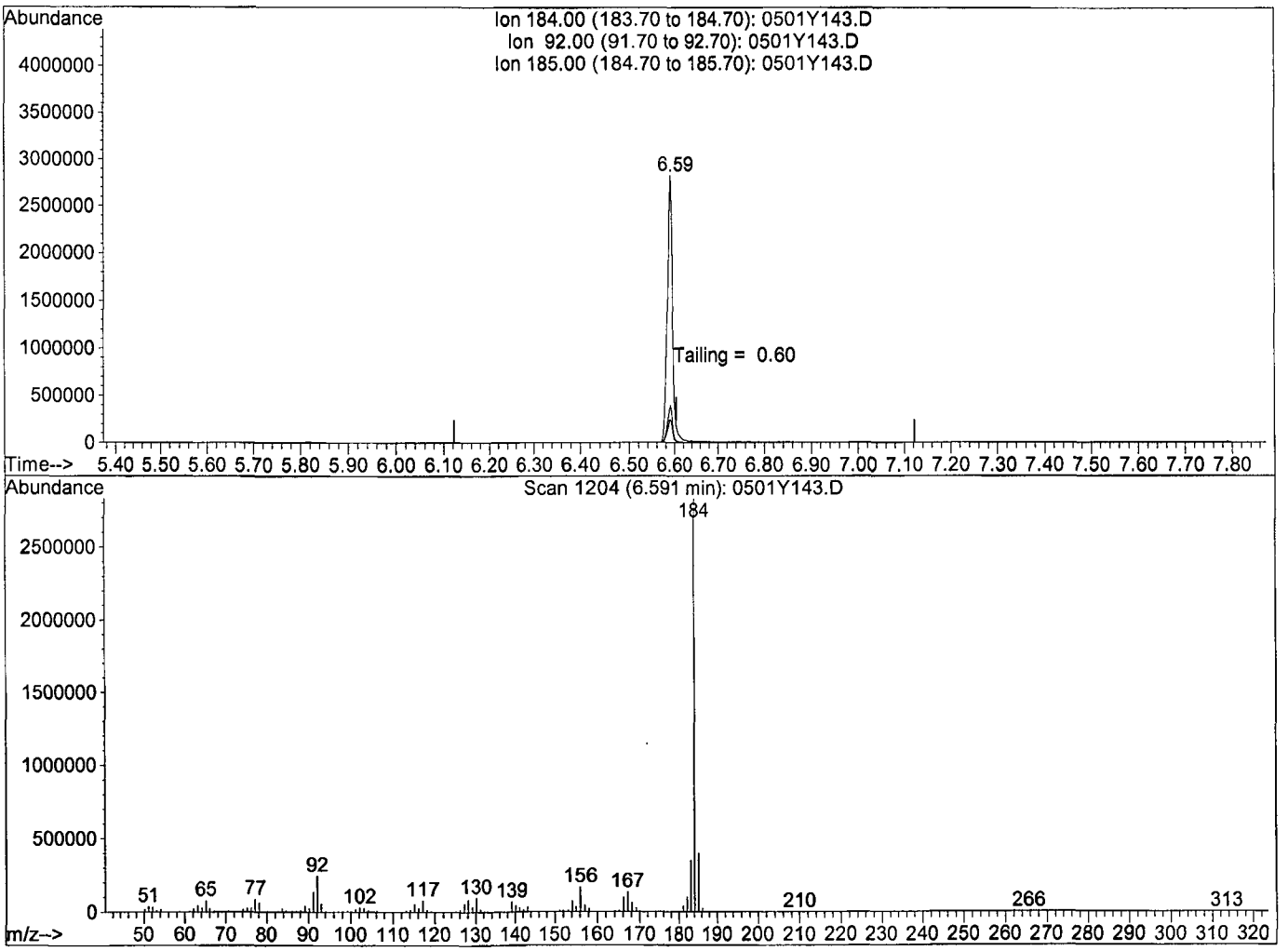
response 4025286

Ion	Exp%	Act%
266.00	100	100
264.00	63.10	61.15
268.00	65.40	62.10
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y143.D Vial: 43
Acq On : 29 Oct 20 9:53 Operator: MA,SS
Sample : SV TUNE 10/2/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 29 8:57 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y200501M\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration



TIC: 0501Y143.D

(6) Benzidine

6.59min 0.0000

response 23913738

Ion	Exp%	Act%
184.00	100	100
92.00	8.50	8.87
185.00	13.80	13.86
0.00	0.00	0.00

Name of Final Standard: MEE Curve
Prep Date: 05/01/20
Exp Date: 11/06/20
Prep'd By (Initials): CD

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	5 uL	200uL	Methanol 195uL Lot# 235140	50 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	5 uL	100uL	Methanol 95uL Lot# 235140	100 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	10 uL	100uL	Methanol 90uL Lot# 235140	200 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	20 uL	100uL	Methanol 80 uL Lot# 235140	400 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	50 uL	200 uL	Methanol 150 uL Lot# 235140	500 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	30 uL	100uL	Methanol 70 uL Lot# 235140	600 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	40 uL	100uL	Methanol 60 uL Lot# 235140	800 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	50 uL	100uL	Methanol 50uL Lot# 235140	1000 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*

Name of Final Standard: MEE Second Source
Prep Date: 05/01/20
Exp Date: 11/06/20
Prep'd By (Initials): MA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE SS	APPL		2000 ug/mL	11/06/19	11/06/20	50 uL	200uL	Methanol 150uL Lot# 235140	500 ug/mL
SV Internal Standard	APPL	8277 Internal Standard	2000 ug/mL	03/03/20	03/03/21	4 uL	*	*	*

Name of Final Standard Diethylene Glycol

Prep'd By (Initials) MA

Prep Date 11/05/19

Exp Date 11/05/20

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Diethylene glycol methyl ether	AccuStandard	S-72273	2000 ug/mL	**218101558-39890**	**12/01/20**	1.0 mL	2 mL	Methanol #208858	1000 ug/mL

Given to Extraction to do **MEE M STD Stock** (used for ICAL) Final concentration 2000ug/L

Name of Final Standard 2MEE Second Source Stock **Prep'd By (Initials)** JP

Prep Date 10/28/19
Exp Date 10/28/20

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Methoxyethanol-Neat	Chem Service	N-12404-1G	Neat 99.5%	**7079100 - 39417**	**07/31/22**	0.1022g	10 mL	**MC #56258**	10220 ug/mL

Given to Extraction to do **MEE SS** (used for ICAL SS)
0.097ml were spiked in 500ml of water and extracted on 04/29/19 . Final concentration is 2000ug/L

Name of Final Standard	8270 Internal Standard Ampules (2)	Prep'd By (Initials)	MA
Prep Date	11/20/19		
Exp Date	11/20/20		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Semivolatile Internal Standard	Restek	31206	2000 ug/mL	**AO157142-49871,872,873**	**07/31/25**	3 mL	3 mL	**NA**	2000ug/mL

Organic Extraction Worksheet

Method	Solid Phase Extraction of 2MEE in Water	Extraction Set	201026A	Extraction Method	MWE2MEE	Units	mL

Spiked ID 1	Diethylene Glycol 04/29/20 ex 12/1/20		Surrogate ID 1		
Spiked ID 2			Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	YES	
Spiked ID 7			Ext. Start Time:	10/26/20 8:25	
Spiked ID 8			Ext. End Time:	10/27/20 10:45	
			GC Requires Extract By:		

pH1			Water Bath Temp 1 °C	
pH2			Water Bath Temp 2 °C	
pH3			Water Bath Temp 3 °C	

Spiked By: DL **Date** 10/27/20 10:50:08 AM **Witnessed By:** CFM **Date** 10/27/20 10:50:15 AM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201026A Blk				NA	NA equip	500	2	7	10/26/20 8:25	
2	201026A LCS-1		0.040	1	NA	NA equip	500	2	7	10/26/20 8:25	
3	BA20486	BA20486W12			NA	NA equip	500	2	7	10/26/20 8:25	93803
4	BA20539 MS-1	BA20539W15	0.040	1	NA	NA equip	500	2	7	10/26/20 8:25	93818
5	BA20539 MSD-1	BA20539W14	0.040	1	NA	NA equip	500	2	7	10/26/20 8:25	93818
6	BA20539	BA20539W22			NA	NA equip	500	2	7	10/26/20 8:25	93818
7	BA20541	BA20541W07			NA	NA equip	500	2	7	10/26/20 8:25	93818
8	BA20542	BA20542W08			NA	NA equip	500	2	7	10/26/20 8:25	93818
9	BA20544	BA20544W10			NA	NA equip	500	2	7	10/26/20 8:25	93818
10	BA20716	BA20716W12			NA	NA equip	500	2	7	10/27/20 7:00	93873
11	BA20718	BA20718W15			NA	NA equip	500	2	7	10/27/20 7:00	93873
12	BA20719	BA20719W10			NA	NA equip	500	2	7	10/27/20 7:00	93873

Solvent and Lot#	
ENVIRO-CLEAN CARTRIDGE	9501193-EY
PH Strip	.HC904495
Di Water	.10-27-20
Methanol:DCM 80:20 PREP	.8/4/20

Extraction COC Transfer	
Extraction lab employee Initials	DL
GC analyst's initials	MA
Date	
Time	
Refrigerator	GC_C

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL

Modified	10/29/20 10:37:23 AM

Reviewed By: MA **Date** 10/27/20

Injection Log

Directory: M:\YODA\DATA\Y200501M\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
38	0501Y002.D	1	SV TUNE 10/01/19	soil	1 May 20 9:23
39	0501Y003.D	1	50ug/ml MEE 05/01/20	soil	1 May 20 9:39
40	0501Y004.D	1	100ug/ml MEE 05/01/20	soil	1 May 20 10:03
42	0501Y006.D	1	200ug/ml MEE 05/01/20	soil	1 May 20 10:51
7	0501Y007.D	1	400ug/ml MEE 05/01/20	soil	1 May 20 11:24
8	0501Y008.D	1	500ug/ml MEE 05/01/20	soil	1 May 20 11:48
9	0501Y009.D	1	600ug/ml MEE 05/01/20	soil	1 May 20 12:13
10	0501Y010.D	1	800ug/ml MEE 05/01/20	soil	1 May 20 12:37
11	0501Y011.D	1	1000ug/ml MEE 05/01/20	soil	1 May 20 13:01
13	0501Y013.D	1	SSug/ml MEE 05/01/20	soil	1 May 20 13:50
30	0501Y130.D	1	SV TUNE 10/02/20		27 Oct 20 10:27
31	0501Y131.D	1	500ug/ml MEE 05/01/20 (2)		27 Oct 20 10:42
32	0501Y132.D	1	201026A BLK 2/500		27 Oct 20 11:06
33	0501Y133.D	1	201026A LCS-1 2/500		27 Oct 20 11:30
41	0501Y141.D	1	500ug/ml MEE 05/01/20 (2)		27 Oct 20 14:38
43	0501Y143.D	1	SV TUNE 10/2/20		29 Oct 20 9:53
44	0501Y144.D	1	500ug/ml MEE 05/01/20 (2)		29 Oct 20 10:08
45	0501Y145.D	1	BA20716W12 2/500		29 Oct 20 10:32
46	0501Y146.D	1	BA20718W15 2/500		29 Oct 20 10:55
47	0501Y147.D	1	BA20719W10 2/500		29 Oct 20 11:18
48	0501Y148.D	1	500ug/ml MEE 05/01/20 (2)		29 Oct 20 11:42

ORGANICS

Calibration Data

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/27/20
Matrix: Water Instrument: ZEUS Initials: CH

			1027Z18.D	1027Z19 D	1027Z20 D	1027Z21.D	1027Z22 D	1027Z23 D	1027Z24 D	1027Z25.D	1027Z26 D							
		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type	r^2	Q	MRF
1	I	Fluorobenzene (IS)																
2	TM	Chlorotrifluoroethene													TM			
3	TM	Dichlorodifluoromethane			0.0335	0.0374	0.0323	0.0349	0 0368	0.0372	0.0371		0.04	5.8	TM			
4	TM	Freon 114			0.0368	0.0415	0.0303	0.0420	0.0388	0.0397	0.0352		0.04	11	TM			
5	TM**	Chloromethane		0.1918	0.1880	0.1812	0.1763	0.1726	0.1660	0.1699	0 1572		0.18	6.5	TM**			
6	TM*	Vinyl chloride		0.1512	0.1626	0.1531	0.1471	0.1522	0 1467	0.1544	0.1496		0.15	3.3	TM*			
7		Butane																
8	TM	2-Chloro-1,1,1-trifluoroethane													TM			
9	TM	Bromomethane			0.0472	0.0451	0.0422	0 0410	0.0347	0.0337	0.0316		0.04	15	TM			
10	TML	Chloroethane		0.0770	0.0788	0.0687	0.0426	0.0367	0.0310	0.0304	0.0263		0.05	45	TM	0.997		
11	TM	Dichlorofluoromethane		0.2666	0.2608	0.2460	0.2176	0.2244	0.1954	0.1939			0.23	13	TM			
12	TM	Trichlorofluoromethane		0.1852	0.1719	0.1952	0.1821	0.1795	0.1593	0.1583			0.18	7.7	TM			
13	TM	Pentane													TM			
14	TM	Diethyl ether													TM			
15	TM	1,2 Dichlorotrifluoroethane													TM			
16	TM	Acrolein	0.0116	0.0097	0.0105	0.0101	0.0109	0.0107	0.0107	0.0115	0.0097		0.01	6.5	TM			
17	TML	Acetone	0.0859	0.0646	0.0552	0.0508	0.0504	0.0487	0.0511	0.0504	0.0501		0.06	21	TM	0.999		
18	TM	Freon-113	0.0798	0.0991	0.0911	0.0914	0.0775	0.0950	0.0970	0.1015	0.1048		0.09	10.0	TM			
19	TM*	1,1-DCE	0.2546	0.1986	0.2013	0.1950	0.1757	0.1927	0.1930	0 2093	0.2064		0.20	11	TM*			
20	TM	2-Propanol													TM			
21	TML	Acetonitrile	0.0069	0.0058	0.0053	0.0055	0.0052	0.0048	0.0042				0.01	16	TM	0.991		
22	TM	t-Butanol	0.0070	0.0056	0.0058	0.0058	0.0060	0.0062	0.0060	0.0059	0.0040		0.01	14	TM			
23	TM	Methyl Acetate		0.1335	0.1208	0.1156	0.1031	0.1098	0.1114	0.1197	0.1260		0.12	8.2	TM			
24	TMQ	Iodomethane	0.0933	0.0578	0.0631	0.0675	0.0702	0.0966	0.1117	0.1419	0.1453		0.09	35	TM	0.998		
25	TM	Acrylonitrile	0.0550	0.0377	0.0447	0 0441	0.0443	0.0495	0.0502	0 0521	0.0530		0.05	12	TM			
26	TML	Methylene chloride			0.2333	0.1775	0.1387	0.1442	0.1391	0.1467	0.1450		0.16	22	TM	1.000		
27	TM	Carbon disulfide			0.2383	0.2194	0.1865	0.2021	0.1984	0 2197	0.2005		0.21	8.3	TM			
28	TM	Methyl t-butyl ether (MtBE)		0.3023	0.3029	0.3005	0.2831	0.3184	0.3180	0.3519	0.3681		0.32	8.9	TM			
29	TM	Trans-1,2-DCE		0.1817	0.1855	0.1871	0.1707	0.1873	0.1856	0.2009	0.1973		0.19	4.9	TM			
30	TM	Hexane													TM			
31	TM	Diisopropyl Ether		0.3404	0.3521	0.3588	0.3489	0.3925	0.3998	0.4336	0.4225		0.38	9.4	TM			
32	TM**	2,2-Dichloro-1,1,1-trifluoroethane													TM**			
33	TM**	1,1-DCA			0.2343	0.2275	0.2088	0.2281	0.2237	0.2429	0.2397		0.23	5.0	TM**			
34	TM	Vinyl Acetate			0.1465	0.2044	0.1430	0.1499	0.1683	0.1802	0.1863		0.17	14	TM			
35	TM	Ethyl tert Butyl Ether		0.3051	0.3098	0.3120	0.3081	0.3490	0.3594	0.4010	0.4065		0.34	12	TM			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/27/20
Matrix: Water Instrument: ZEUS Initials: CH

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type		Q	MRF
36	TM	MEK (2-Butanone)	0.0629	0.0615	0.0611	0.0617	0.0653	0.0670	0.0735	0.0744	0.0763		0.07	9.1	TM			
37	TM	Cis-1,2-DCE		0.2141	0.2190	0.2210	0.1955	0.2112	0.2113	0.2272	0.2197		0.21	4.4	TM			
38	TM	2,2-Dichloropropane		0.1657	0.1651	0.1656	0 1494	0.1672	0.1721	0.1913	0.1934		0.17	8.5	TM			
39	TM	2-Methylpentane													TM			
40	TM	3-Methylpentane													TM			
41	TM*	Chloroform		0.2258	0.2249	0.2228	0 1999	0.2234	0.2215	0.2404	0.2388		0.22	5.5	TM*			
42	TM	Bromochloromethane		0.1059	0.1115	0.1104	0.1018	0.1112	0 1084	0.1159	0.1123		0.11	3.9	TM			
43	S	Dibromofluoromethane(S)	0.2046	0.2102	0.2477	0.2394	0.2756	0.2748	0.2801	0.2845	0.2816		0.26	12	S			
44	TM	1,1,1-TCA	0.2389	0.1825	0.1819	0.1814	0.1736	0.1893	0.1911	0.2069	0.2092		0.19	10	TM			
45	TM	Cyclohexane	0.2005	0.2047	0.1943	0.1952	0.1689	0.1951	0.1976	0 2074	0.2042		0.20	5.8	TM			
46	TM	1,1-Dichloropropene	0.2464	0.1678	0.1720	0.1793	0.1619	0 1777	0.1782	0 1916	0.1833		0.18	13	TM			
47	TM	2,2,4-Trimethylpentane	0 3322	0.3710	0.3123	0.3361	0.2653	0 3565	0.3795	0.3929	0.4114		0.35	13	TM			
48	S	1,2-DCA-D4(S)	0 2426	0.2440	0.2920	0 2827	0.3206	0.3218	0.3309	0 3327	0.3323		0.30	12	S			
49	TM	Carbon Tetrachloride	0.1783	0.1332	0.1337	0.1359	0.1299	0.1461	0.1498	0.1656	0.1713		0.15	12	TM			
50	TM	Tert Amyl Methyl Ether		0.2471	0.2696	0.2796	0.2644	0.3033	0.3108	0.3473	0.3593		0.30	13	TM			
51	TM	Methylcyclopentane													TM			
52	TM	1,2-DCA		0.1770	0.1814	0.1739	0.1619	0.1744	0.1707	0.1855	0.1853		0.18	4.5	TM			
53	TM	Benzene		0.5632	0.5541	0.5650	0.4939	0.5415	0.5325	0.5643	0.5272		0.54	4.5	TM			
54	TM	TCE		0.1387	0.1426	0.1433	0.1333	0 1481	0.1450	0.1556	0.1488		0.14	4.7	TM			
55	TM	2-Pentanone		0.0821	0.0866	0.0901	0.0984	0 1056	0.1107	0.1190	0.1228		0.10	15	TM			
56	TM*	1,2-Dichloropropane		0.1294	0.1400	0.1373	0.1199	0 1344	0 1305	0.1392	0.1297		0.13	5.0	TM*			
57	TM	Bromodichloromethane		0.1163	0.1329	0.1372	0.1291	0.1464	0.1480	0.1680	0.1747		0.14	14	TM			
58	TM	Methyl Cyclohexane	0.1847	0.1959	0.1806	0.1873	0.1541	0.1889	0.1953	0.2023	0.1965		0.19	7.6	TM			
59	TM	Dibromomethane			0.0817	0.0766	0.0727	0.0792	0.0774	0.0839	0.0843		0.08	5.3	TM			
60	TM	MIBK (methyl isobutyl ketone	0 0973	0.1030	0.1085	0.1105	0.1197	0 1263	0.1378	0.1415	0.1491		0.12	15	TM			
61	TM	1-Bromo-2-chloroethane			0.0147	0.0172	0.0171	0.0201	0.0194	0.0207	0.0206		0.02	12	TM			
62	TM	2-Chloroethyl vinyl ether	0.0476	0.0473	0.0509	0.0506	0.0561	0.0585	0.0602	0.0669	0.0661		0.06	13	TM			
63	TM	Cis-1,3-Dichloropropene		0.1634	0 1660	0.1683	0.1645	0.1896	0 1949	0.2179	0.2228		0.19	13	TM			
64	TM*	Toluene		0.5973	0.5726	0.5701	0.5143	0 5659	0.5716	0.6065	0.5636		0.57	4.8	TM*			
65	TML	Trans-1,3-Dichloropropene			0.1275	0.1318	0.1340	0 1592	0.1674	0.1906	0.1973		0.16	18	TM	0.999		
66	TM	1,1,2-TCA			0.0989	0.1047	0.0975	0 1099	0.1083	0.1161	0.1181		0.11	7.3	TM			
67	TM	2-Hexanone	0.0684	0.0735	0.0768	0.0788	0.0842	0.0888	0.0964	0.0978	0.1037		0.09	14	TM			
68	I	Chlorobenzene-D5 (IS)																
69	S	Toluene-D8(S)	1.118	1.125	1.343	1.333	1.489	1.500	1.531	1.513	1.401		1.4	12	S			
70	TM	1,2-EDB		0.1324	0.1389	0.1479	0.1391	0.1591	0.1561	0.1715	0.1784		0.15	11	TM			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/27/20
Matrix: Water Instrument: ZEUS Initials: CH

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type		Q	MRF
71	TM	Tetrachloroethene	0.2602	0.1959	0.2026	0.2016	0.1839	0.1992	0.1970	0.2054	0.1925		0.20	11	TM			
72	TM	1-Chlorohexane		0.3356	0.2966	0.2742	0.2379	0.2564	0.2588	0 2701	0.2495		0.27	11	TM			
73	TM	1,1,1,2-Tetrachloroethane			0.1223	0.1274	0.1275	0.1500	0.1541	0.1709	0.1769		0.15	15	TM			
74	TM	m&p-Xylene		0.6621	0.6787	0.6885	0.6287	0.6865	0.6906	0 7139	0.6481		0.67	4.0	TM			
75	TM	o-Xylene		0.6737	0.6667	0.6841	0.6252	0.6903	0.6910	0.7267	0.6755		0.68	4.2	TM			
76	TM	Styrene		0.4400	0.4768	0 4966	0.4768	0.5407	0.5435	0 5830	0.5409		0.51	9.2	TM			
77	S	4-Bromofluorobenzene(S)	0.4247	0.4162	0.4998	0.4974	0.5651	0.5725	0.5936	0.5859	0.5600		0.52	13	S			
78	TM	1,3-Dichloropropane		0.2536	0.2644	0.2608	0.2481	0.2748	0.2694	0.2893	0.2857		0.27	5.4	TM			
79	TM	Dibromochloromethane			0 1177	0.1194	0.1136	0.1386	0.1432	0.1676			0.13	15	TM			
80	TM**	Chlorobenzene		0.5216	0.5151	0 4956	0.4665	0.5076	0.4974	0.5237	0.4881		0.50	3.8	TM**			
81	TM*	Ethylbenzene		0.8895	0 8717	0.8895	0.7949	0.8809	0.8802	0.9309	0.8989		0.88	4.4	TM*			
82	TM**L	Bromoform			0.0616	0.0623	0.0663	0 0839	0.0895	0 1072	0.1246		0.09	28	TM**	0.996		
83	I	1,4-Dichlorobenzene-D (IS)																
84	TM	Isopropylbenzene		1.457	1.487	1.581	1.450	1.619	1.669	1.837	1.844		1.6	9.7	TM			
85	TM**L	1,1,2,2-Tetrachloroethane		0.3039	0.2973	0.3228	0.3098	0.3627	0.3829	0.4253	0.4533		0 36	17	TM**	0.999		
86	TML	1,2,3-Trichloropropane			0.1039	0.1081	0.1068	0.1181	0.1269	0 1421	0.1559		0.12	16	TM	0.998		
87	TML	t-1,4-Dichloro-2-Butene			0.0619	0.0738	0.0770	0.0918	0.1013	0.1181	0.1354		0.09	28	TM	0.997		
88	TM	Bromobenzene		0.6668	0.7131	0.6977	0.6616	0.7441	0.7586	0.8454	0.8772		0.75	11	TM			
89	TM	n-Propylbenzene	2.771	1.856	1.911	1.964	1.832	2.042	2.077	2.243	2.238		2.1	14	TM			
90	TM	4-Ethyltoluene	2.299	1.495	1,510	1.591	1.508	1.683	1.708	1.834	1.825		1.7	15	TM			
91	TM	2-Chlorotoluene		1.106	1.140	1.148	1.061	1.179	1.202	1.293	1.331		1.2	7.7	TM			
92	TM	1,3,5-Trimethylbenzene		1.178	1.288	1.336	1.284	1.438	1.471	1.547	1.514		1.4	9.4	TM			
93	TM	4-Chlorotoluene		1.244	1.315	1.351	1.230	1.388	1.407	1.475	1.463		1 4	6.8	TM			
94	TM	Tert-Butylbenzene		1.102	1.152	1.161	1.071	1.195	1.216	1.334	1.331		1.2	8.1	TM			
95	TM	1,2,4-Trimethylbenzene		1.145	1.262	1.330	1.249	1.425	1.459	1.584	1.589		1.4	12	TM			
96	TM	Sec-Butylbenzene	2.358	1.679	1 727	1.823	1 677	1.889	1.927	2.063	2.048		1.9	12	TM			
97	TM	p-Isopropyltoluene	2.118	1.434	1.438	1.518	1.430	1.604	1.606	1.696	1.693		1.6	13	TM			
98	TML	Benzyl Chloride			0.3404	0.3697	0 4167	0.5174	0 5780	0.7021	0.8337		0.54	34	TM	0.995		
99	TM	1,3-DCB			0.7369	0.7690	0 6945	0.7637	0.7554	0.8175	0.8323		0 77	6.1	TM			
100	TM	1,4-DCB			0.7652	0.7860	0.7178	0.7754	0.7665	0.8203	0.8327		0.78	4.9	TM			
101	TM	n-Butylbenzene	1.795	1.242	1.294	1.378	1.336	1.552	1.576	1.680	1.639		1.5	13	TM			
102	TM	1,2-DCB			0.6857	0.6986	0.6271	0.6967	0.6910	0.7477	0.7503		0.70	6.0	TM			
103	TML	Hexachloroethane			0.0891	0.1053	0.1197	0.1416	0.1600	0.1937	0.2378		0.15	35	TM	0.994		
104	TML	1,2-Dibromo-3-chloropropane			0.0385	0.0554	0.0568	0.0692	0.0782	0.0914	0.1081		0.07	33	TM	0.996		
105	TM	1,2,4-Trichlorobenzene		0.4189	0.4424	0.4557	0.4128	0.4712	0.4754	0.5224	0.5479		0.47	10	TM			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal Date: 10/27/20
Matrix: Water Instrument: ZEUS Initials: CH

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type		Q	MRF
106	TM	Hexachlorobutadiene	0.2384	0.1947	0.2149	0 1979	0.1952	0.2166	0.2270	0.2457	0.2526		0.22	10	TM			
107	TM	Naphthalene		0.9986	1.040	1.090	1.055	1.214	1.254	1.377	1.498		1.2	15	TM			
108	TM	1,2,3-Trichlorobenzene		0.3754	0 3946	0.3901	0.3749	0.4239	0.4296	0.4642	0.4867		0.42	9.9	TM			
109																		
110																		
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Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z18.D Vial: 4
Acq On : 27 Oct 20 14:00 Operator: LP,DG,CH
Sample : 0.3ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.00	96	616305	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.65	117	438473	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	242266	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.42	111	25213	4.00	ppb		0.00
Spiked Amount 25.000			Recovery =	16.020%			
48) 1,2-DCA-D4(S)	4.70	65	29904	4.04	ppb		0.00
Spiked Amount 25.000			Recovery =	16.176%			
69) Toluene-D8(S)	6.36	98	98064	4.07	ppb		0.00
Spiked Amount 25.000			Recovery =	16.296%			
77) 4-Bromofluorobenzene(S)	8.75	95	37247	4.05	ppb		0.00
Spiked Amount 25.000			Recovery =	16.212%			
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.15	87	131	0.15	ppb		71
4) Freon 114	1.26	85	411	0.44	ppb		95
5) Chloromethane	1.33	50	2407	0.56	ppb	#	86
6) Vinyl chloride	1.39	62	1555	0.41	ppb		89
9) Bromomethane	1.65	94	896	0.92	ppb	#	81
10) Chloroethane	1.75	64	748	-2.13	ppb	#	86
11) Dichlorofluoromethane	1.93	67	3174	0.56	ppb		91
12) Trichlorofluoromethane	1.98	101	1382	0.32	ppb		96
16) Acrolein	2.37	55	2859	10.95	ppb		92
17) Acetone	2.52	43	10586	6.30	ppb		98
18) Freon-113	2.48	101	590	0.26	ppb	#	84
19) 1,1-DCE	2.45	61	1883	0.38	ppb		98
21) Acetonitrile	2.76	40	1712	9.81	ppb		89
22) t-Butanol	3.05	59	1721	12.03	ppb		100
23) Methyl Acetate	2.83	43	1539	0.53	ppb	#	88
24) Iodomethane	2.58	142	690	1.44	ppb	#	83
25) Acrylonitrile	3.11	52	407	0.34	ppb	#	55
26) Methylene chloride	2.89	84	4668	1.21	ppb		99
27) Carbon disulfide	2.64	76	2901	0.56	ppb		98
28) Methyl t-butyl ether (MtBE	3.17	73	3964	0.51	ppb		92
29) Trans-1,2-DCE	3.15	61	2360	0.51	ppb		98
31) Diisopropyl Ether	3.62	45	4765	0.51	ppb		95
33) 1,1-DCA	3.51	63	3020	0.53	ppb		98
34) Vinyl Acetate	3.58	43	2744	0.66	ppb	#	70
35) Ethyl tert Butyl Ether	3.93	59	4007	0.47	ppb		97
36) MEK (2-Butanone)	4.04	43	7748	4.69	ppb		94
37) Cis-1,2-DCE	4.01	61	2854	0.54	ppb		97
38) 2,2-Dichloropropane	4.02	77	1824	0.43	ppb		99
41) Chloroform	4.29	83	3031	0.55	ppb		99
42) Bromochloromethane	4.21	49	1500	0.55	ppb		98
44) 1,1,1-TCA	4.45	97	1767	0.37	ppb	#	90
45) Cyclohexane	4.50	56	1483	0.31	ppb		91
46) 1,1-Dichloropropene	4.59	75	1822	0.40	ppb		94
47) 2,2,4-Trimethylpentane	4.85	57	2457	0.28	ppb		98
49) Carbon Tetrachloride	4.59	117	1319	0.36	ppb		89
50) Tert Amyl Methyl Ether	4.89	73	3568	0.49	ppb	#	88
52) 1,2-DCA	4.77	62	2551	0.59	ppb	#	74
53) Benzene	4.76	78	7417	0.55	ppb		98
54) TCE	5.31	130	1629	0.46	ppb		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z18.D Vial: 4
Acq On : 27 Oct 20 14:00 Operator: LP,DG,CH
Sample : 0.3ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.47	43	23992	9.55	ppb		99
56)	1,2-Dichloropropane	5.49	63	1860	0.57	ppb	#	87
57)	Bromodichloromethane	5.73	83	1821	0.51	ppb		94
58)	Methyl Cyclohexane	5.48	83	1366	0.30	ppb		89
59)	Dibromomethane	5.59	174	1064	0.54	ppb		94
60)	MIBK (methyl isobutyl ket	6.27	43	11990	4.00	ppb		95
61)	1-Bromo-2-chloroethane	6.00	144	118	0.26	ppb	#	11
62)	2-Chloroethyl vinyl ether	6.00	43	5873	4.25	ppb		94
63)	Cis-1,3-Dichloropropene	6.12	75	2185	0.48	ppb		97
64)	Toluene	6.42	91	7316	0.52	ppb		99
65)	Trans-1,3-Dichloropropene	6.61	75	1786	1.90	ppb		97
66)	1,1,2-TCA	6.77	97	1271	0.48	ppb	#	86
67)	2-Hexanone	7.02	43	8427	4.00	ppb		94
70)	1,2-EDB	7.22	107	1196	0.45	ppb	#	76
71)	Tetrachloroethene	6.92	166	1369	0.38	ppb	#	89
72)	1-Chlorohexane	7.67	91	2494	0.52	ppb		94
73)	1,1,1,2-Tetrachloroethane	7.76	131	1111	0.43	ppb		92
74)	m&p-Xylene	7.90	91	11594	0.98	ppb		100
75)	o-Xylene	8.26	91	6029	0.51	ppb		96
76)	Styrene	8.27	104	4671	0.52	ppb		99
78)	1,3-Dichloropropane	6.92	76	2521	0.54	ppb		97
79)	Dibromochloromethane	7.12	129	945	0.40	ppb		87
80)	Chlorobenzene	7.68	112	4970	0.56	ppb		98
81)	Ethylbenzene	7.79	91	7470	0.48	ppb		98
82)	Bromoform	8.43	173	479	3.08	ppb	#	83
84)	Isopropylbenzene	8.62	105	6591	0.42	ppb		96
85)	1,1,2,2-Tetrachloroethane	8.89	83	1277	1.67	ppb	#	85
86)	1,2,3-Trichloropropane	8.93	110	460	2.23	ppb	#	58
87)	t-1,4-Dichloro-2-Butene	8.95	53	204	2.82	ppb	#	24
88)	Bromobenzene	8.89	77	3422	0.47	ppb		90
89)	n-Propylbenzene	9.01	91	8055	0.40	ppb		98
90)	4-Ethyltoluene	9.13	105	6685	0.40	ppb		98
91)	2-Chlorotoluene	9.09	91	5817	0.51	ppb		90
92)	1,3,5-Trimethylbenzene	9.19	105	5731	0.43	ppb		98
93)	4-Chlorotoluene	9.19	91	6501	0.49	ppb		96
94)	Tert-Butylbenzene	9.50	119	4568	0.39	ppb		98
95)	1,2,4-Trimethylbenzene	9.55	105	5713	0.43	ppb		94
96)	Sec-Butylbenzene	9.72	105	6855	0.37	ppb		95
97)	p-Isopropyltoluene	9.86	119	6157	0.39	ppb		100
98)	Benzyl Chloride	10.02	91	1602	3.38	ppb	#	95
99)	1,3-DCB	9.80	146	3810	0.51	ppb		93
100)	1,4-DCB	9.89	146	4318	0.57	ppb		97
101)	n-Butylbenzene	10.27	91	5218	0.36	ppb		100
102)	1,2-DCB	10.26	146	3644	0.54	ppb		93
103)	Hexachloroethane	10.51	201	431	3.60	ppb	#	79
104)	1,2-Dibromo-3-chloropropan	11.02	157	63	3.06	ppb	#	8
105)	1,2,4-Trichlorobenzene	11.85	180	2496	0.55	ppb		94
106)	Hexachlorobutadiene	12.05	225	693	0.32	ppb		97
107)	Naphthalene	12.09	128	5007	0.43	ppb		97
108)	1,2,3-Trichlorobenzene	12.34	180	1993	0.49	ppb		95

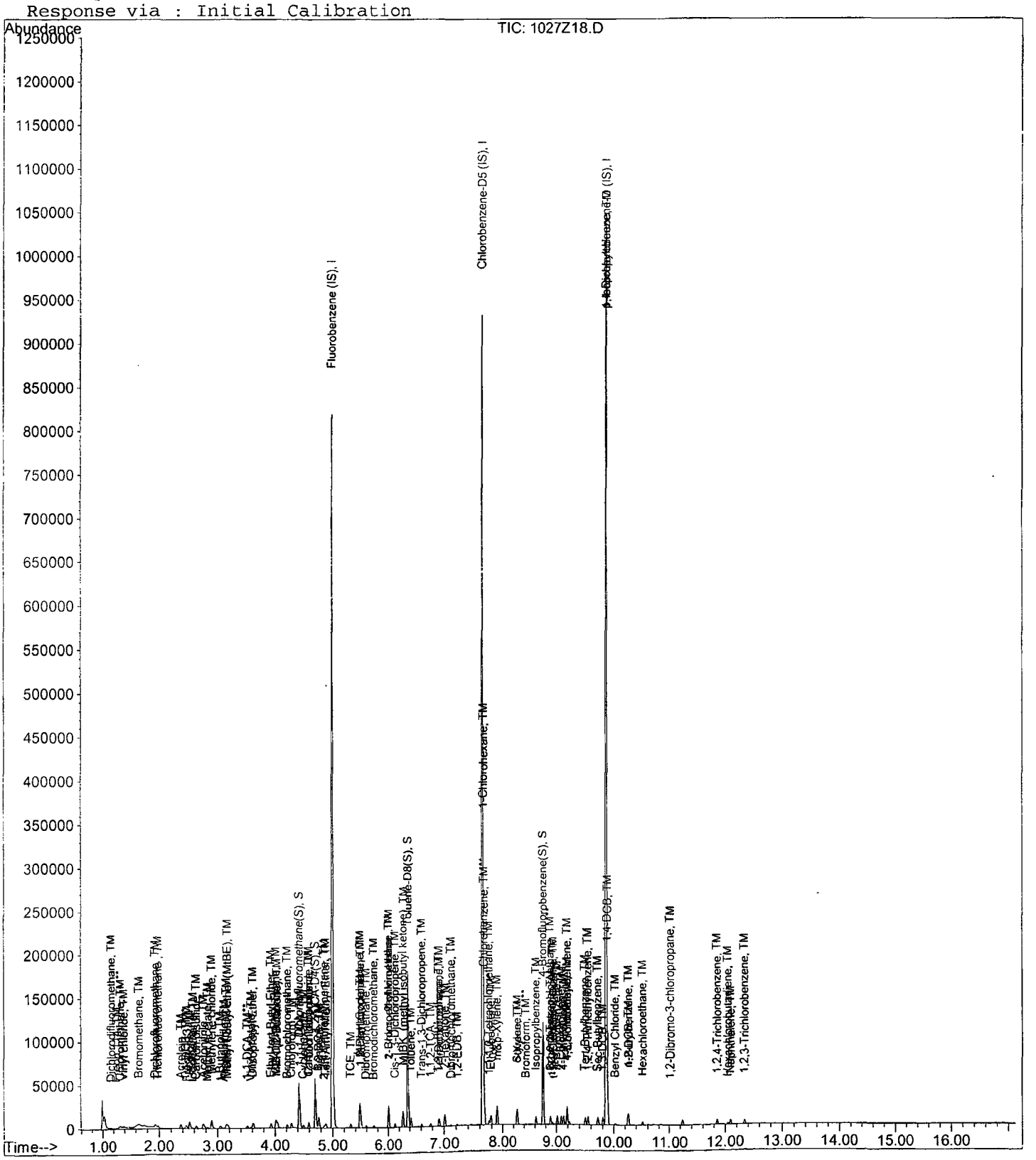
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z18.D Vial: 4
Acq On : 27 Oct 20 14:00 Operator: LP,DG,CH
Sample : 0.3ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z19.D Vial: 5
Acq On : 27 Oct 20 14:23 Operator: LP,DG,CH
Sample : 0.5ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.00	96	609419	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.65	117	433898	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	240389	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.42	111	25620	4.12	ppb		0.00
Spiked Amount 25.000			Recovery = 16.460%				
48) 1,2-DCA-D4(S)	4.70	65	29745	4.07	ppb		0.00
Spiked Amount 25.000			Recovery = 16.272%				
69) Toluene-D8(S)	6.36	98	97634	4.10	ppb		0.00
Spiked Amount 25.000			Recovery = 16.396%				
77) 4-Bromofluorobenzene(S)	8.75	95	36121	3.97	ppb		0.00
Spiked Amount 25.000			Recovery = 15.888%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.15	87	228	0.26	ppb		80
4) Freon 114	1.25	85	580	0.63	ppb	#	79
5) Chloromethane	1.33	50	2338	0.55	ppb		90
6) Vinyl chloride	1.38	62	1843	0.50	ppb		93
9) Bromomethane	1.65	94	685	0.71	ppb		96
10) Chloroethane	1.74	64	938	-1.82	ppb		93
11) Dichlorofluoromethane	1.93	67	3249	0.58	ppb	#	79
12) Trichlorofluoromethane	1.98	101	2257	0.53	ppb		84
16) Acrolein	2.37	55	5902	22.85	ppb		97
17) Acetone	2.52	43	15751	10.77	ppb		99
18) Freon-113	2.47	101	1208	0.53	ppb		99
19) 1,1-DCE	2.45	61	2420	0.49	ppb		98
21) Acetonitrile	2.75	40	3515	25.50	ppb		89
22) t-Butanol	3.05	59	3438	24.30	ppb		99
23) Methyl Acetate	2.83	43	1627	0.57	ppb	#	90
24) Iodomethane	2.57	142	704	1.44	ppb	#	83
25) Acrylonitrile	3.11	52	460	0.39	ppb	#	74
26) Methylene chloride	2.89	84	4027	1.04	ppb		94
27) Carbon disulfide	2.63	76	2840	0.56	ppb		99
28) Methyl t-butyl ether (MtBE	3.18	73	3685	0.48	ppb		95
29) Trans-1,2-DCE	3.15	61	2215	0.49	ppb		95
31) Diisopropyl Ether	3.61	45	4149	0.45	ppb		89
33) 1,1-DCA	3.51	63	2739	0.49	ppb		99
34) Vinyl Acetate	3.58	43	1963	0.48	ppb	#	70
35) Ethyl tert Butyl Ether	3.93	59	3719	0.44	ppb		89
36) MEK (2-Butanone)	4.04	43	14982	9.16	ppb		100
37) Cis-1,2-DCE	4.01	61	2609	0.50	ppb		95
38) 2,2-Dichloropropane	4.01	77	2020	0.48	ppb		98
41) Chloroform	4.29	83	2752	0.50	ppb		98
42) Bromochloromethane	4.22	49	1291	0.48	ppb		93
44) 1,1,1-TCA	4.45	97	2224	0.47	ppb		96
45) Cyclohexane	4.50	56	2495	0.52	ppb		96
46) 1,1-Dichloropropene	4.59	75	2045	0.46	ppb		96
47) 2,2,4-Trimethylpentane	4.85	57	4522	0.53	ppb		98
49) Carbon Tetrachloride	4.60	117	1623	0.45	ppb		93
50) Tert Amyl Methyl Ether	4.89	73	3012	0.42	ppb		97
52) 1,2-DCA	4.77	62	2157	0.50	ppb	#	74
53) Benzene	4.76	78	6865	0.52	ppb	#	89
54) TCE	5.32	130	1690	0.48	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z19.D Vial: 5
Acq On : 27 Oct 20 14:23 Operator: LP,DG,CH
Sample : 0.5ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.47	43	50055	20.15	ppb		99
56)	1,2-Dichloropropane	5.50	63	1577	0.49	ppb	#	87
57)	Bromodichloromethane	5.73	83	1417	0.40	ppb		85
58)	Methyl Cyclohexane	5.49	83	2388	0.52	ppb		94
59)	Dibromomethane	5.59	174	929	0.48	ppb		87
60)	MIBK (methyl isobutyl ket	6.28	43	25106	8.48	ppb		99
61)	1-Bromo-2-chloroethane	6.00	144	114	0.25	ppb	#	11
62)	2-Chloroethyl vinyl ether	6.00	43	11523	8.44	ppb		95
63)	Cis-1,3-Dichloropropene	6.12	75	1991	0.44	ppb		97
64)	Toluene	6.42	91	7280	0.52	ppb		100
65)	Trans-1,3-Dichloropropene	6.61	75	1490	1.85	ppb	#	87
66)	1,1,2-TCA	6.77	97	1228	0.47	ppb		90
67)	2-Hexanone	7.02	43	17906	8.60	ppb		99
70)	1,2-EDB	7.22	107	1149	0.43	ppb	#	96
71)	Tetrachloroethene	6.92	166	1700	0.48	ppb		85
72)	1-Chlorohexane	7.67	91	2912	0.62	ppb	#	81
73)	1,1,1,2-Tetrachloroethane	7.75	131	1034	0.41	ppb		93
74)	m&p-Xylene	7.90	91	11491	0.98	ppb		98
75)	o-Xylene	8.26	91	5846	0.50	ppb		99
76)	Styrene	8.28	104	3818	0.43	ppb		89
78)	1,3-Dichloropropane	6.92	76	2201	0.47	ppb	#	88
79)	Dibromochloromethane	7.12	129	873	0.38	ppb		98
80)	Chlorobenzene	7.68	112	4526	0.52	ppb		91
81)	Ethylbenzene	7.79	91	7719	0.51	ppb		95
82)	Bromoform	8.43	173	469	3.08	ppb		96
84)	Isopropylbenzene	8.62	105	7007	0.45	ppb		97
85)	1,1,2,2-Tetrachloroethane	8.89	83	1461	1.71	ppb	#	95
86)	1,2,3-Trichloropropane	8.93	110	385	2.19	ppb		93
87)	t-1,4-Dichloro-2-Butene	8.94	53	212	2.83	ppb	#	24
88)	Bromobenzene	8.89	77	3206	0.45	ppb		97
89)	n-Propylbenzene	9.01	91	8924	0.44	ppb		100
90)	4-Ethyltoluene	9.13	105	7187	0.44	ppb		98
91)	2-Chlorotoluene	9.09	91	5316	0.47	ppb		100
92)	1,3,5-Trimethylbenzene	9.19	105	5665	0.43	ppb		97
93)	4-Chlorotoluene	9.19	91	5979	0.46	ppb		99
94)	Tert-Butylbenzene	9.51	119	5299	0.46	ppb		98
95)	1,2,4-Trimethylbenzene	9.55	105	5504	0.41	ppb		95
96)	Sec-Butylbenzene	9.72	105	8072	0.44	ppb		97
97)	p-Isopropyltoluene	9.86	119	6893	0.44	ppb		98
98)	Benzyl Chloride	10.02	91	1695	3.40	ppb	#	83
99)	1,3-DCB	9.81	146	3694	0.50	ppb		92
100)	1,4-DCB	9.89	146	3887	0.52	ppb		98
101)	n-Butylbenzene	10.27	91	5971	0.41	ppb		98
102)	1,2-DCB	10.26	146	3376	0.50	ppb		95
103)	Hexachloroethane	10.52	201	383	3.58	ppb	#	66
104)	1,2-Dibromo-3-chloropropan	11.02	157	55	3.05	ppb	#	44
105)	1,2,4-Trichlorobenzene	11.86	180	2014	0.45	ppb		91
106)	Hexachlorobutadiene	12.05	225	936	0.44	ppb		97
107)	Naphthalene	12.09	128	4801	0.42	ppb	#	93
108)	1,2,3-Trichlorobenzene	12.34	180	1805	0.45	ppb		98

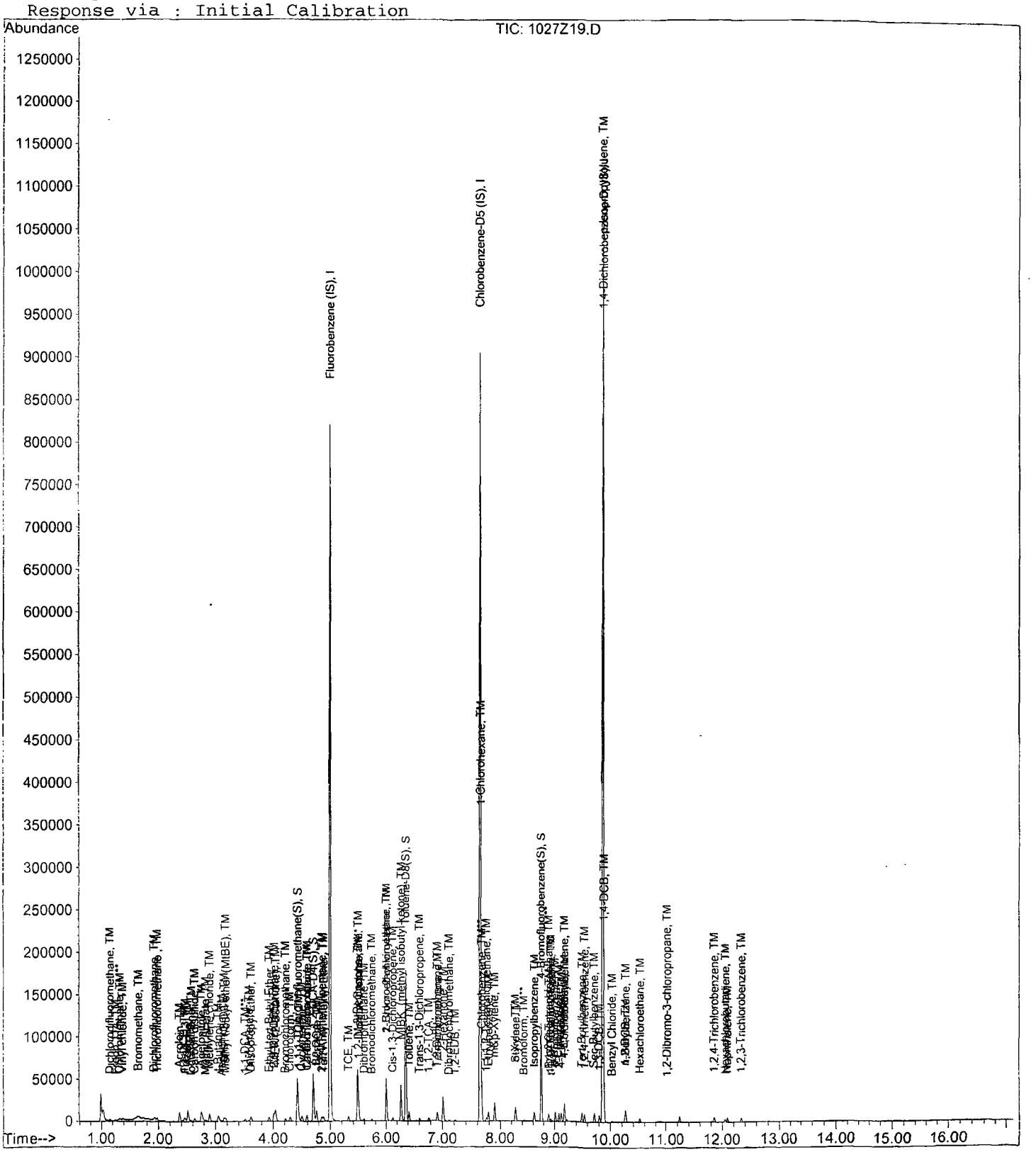
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z19.D Vial: 5
Acq On : 27 Oct 20 14:23 Operator: LP,DG,CH
Sample : 0.5ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z20.D Vial: 6
Acq On : 27 Oct 20 14:46 Operator: LP,DG,CH
Sample : 1ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.00	96	615733	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.65	117	434626	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	238062	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.43	111	61009	9.70	ppb		0.00
Spiked Amount 25.000			Recovery =	38.796%			
48) 1,2-DCA-D4(S)	4.70	65	71916	9.73	ppb		0.00
Spiked Amount 25.000			Recovery =	38.940%			
69) Toluene-D8(S)	6.37	98	233484	9.78	ppb		0.00
Spiked Amount 25.000			Recovery =	39.140%			
77) 4-Bromofluorobenzene(S)	8.75	95	86892	9.54	ppb		0.00
Spiked Amount 25.000			Recovery =	38.160%			
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.15	87	825	0.94	ppb	#	65
4) Freon 114	1.26	85	906	0.97	ppb	#	62
5) Chloromethane	1.33	50	4631	1.07	ppb		96
6) Vinyl chloride	1.38	62	4005	1.07	ppb		95
9) Bromomethane	1.65	94	1163	1.20	ppb		88
10) Chloroethane	1.74	64	1940	-0.26	ppb		92
11) Dichlorofluoromethane	1.93	67	6424	1.14	ppb		96
12) Trichlorofluoromethane	1.98	101	4234	0.98	ppb		97
16) Acrolein	2.37	55	12973	49.71	ppb		87
17) Acetone	2.52	43	27197	20.23	ppb		98
18) Freon-113	2.47	101	2243	0.98	ppb		93
19) 1,1-DCE	2.45	61	4958	0.99	ppb		98
21) Acetonitrile	2.76	40	6584	51.34	ppb		99
22) t-Butanol	3.05	59	7186	50.27	ppb		94
23) Methyl Acetate	2.83	43	2974	1.03	ppb		91
24) Iodomethane	2.57	142	1553	1.70	ppb	#	90
25) Acrylonitrile	3.11	52	1102	0.93	ppb		89
26) Methylene chloride	2.90	84	5746	1.51	ppb		92
27) Carbon disulfide	2.63	76	5869	1.14	ppb		97
28) Methyl t-butyl ether (MtBE	3.18	73	7460	0.95	ppb		98
29) Trans-1,2-DCE	3.15	61	4568	0.99	ppb		96
31) Diisopropyl Ether	3.61	45	8671	0.92	ppb		99
33) 1,1-DCA	3.51	63	5770	1.02	ppb		95
34) Vinyl Acetate	3.58	43	3608	0.87	ppb	#	89
35) Ethyl tert Butyl Ether	3.93	59	7629	0.90	ppb		92
36) MEK (2-Butanone)	4.04	43	30092	18.22	ppb		99
37) Cis-1,2-DCE	4.01	61	5394	1.02	ppb		97
38) 2,2-Dichloropropane	4.02	77	4067	0.96	ppb		93
41) Chloroform	4.29	83	5539	1.00	ppb		98
42) Bromochloromethane	4.21	49	2747	1.02	ppb		94
44) 1,1,1-TCA	4.45	97	4480	0.93	ppb		97
45) Cyclohexane	4.50	56	4786	0.99	ppb		99
46) 1,1-Dichloropropene	4.59	75	4237	0.93	ppb		93
47) 2,2,4-Trimethylpentane	4.86	57	7691	0.89	ppb		97
49) Carbon Tetrachloride	4.59	117	3294	0.90	ppb		99
50) Tert Amyl Methyl Ether	4.89	73	6641	0.91	ppb		94
52) 1,2-DCA	4.77	62	4467	1.03	ppb	#	91
53) Benzene	4.76	78	13647	1.02	ppb		98
54) TCE	5.32	130	3512	0.99	ppb		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z20.D
Acq On : 27 Oct 20 14:46
Sample : 1ug/L VOC STD 10/27/20
Misc :

Vial: 6
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.47	43	106629	42.48	ppb		100
56)	1,2-Dichloropropane	5.49	63	3448	1.06	ppb	#	87
57)	Bromodichloromethane	5.73	83	3272	0.92	ppb		98
58)	Methyl Cyclohexane	5.49	83	4449	0.96	ppb		100
59)	Dibromomethane	5.59	174	2013	1.03	ppb		98
60)	MIBK (methyl isobutyl ket	6.28	43	53437	17.85	ppb		99
61)	1-Bromo-2-chloroethane	6.00	144	363	0.79	ppb	#	75
62)	2-Chloroethyl vinyl ether	6.00	43	25073	18.17	ppb		97
63)	Cis-1,3-Dichloropropene	6.12	75	4089	0.89	ppb		98
64)	Toluene	6.42	91	14102	1.00	ppb		99
65)	Trans-1,3-Dichloropropene	6.61	75	3140	2.18	ppb		91
66)	1,1,2-TCA	6.77	97	2435	0.92	ppb	#	88
67)	2-Hexanone	7.01	43	37823	17.99	ppb		99
70)	1,2-EDB	7.22	107	2414	0.91	ppb	#	98
71)	Tetrachloroethene	6.91	166	3522	0.99	ppb		95
72)	1-Chlorohexane	7.67	91	5157	1.09	ppb		98
73)	1,1,1,2-Tetrachloroethane	7.75	131	2126	0.83	ppb		97
74)	m&p-Xylene	7.90	91	23599	2.01	ppb		98
75)	o-Xylene	8.26	91	11590	0.98	ppb		98
76)	Styrene	8.28	104	8290	0.93	ppb		92
78)	1,3-Dichloropropane	6.92	76	4596	0.99	ppb		92
79)	Dibromochloromethane	7.12	129	2046	0.88	ppb		98
80)	Chlorobenzene	7.68	112	8955	1.03	ppb		98
81)	Ethylbenzene	7.79	91	15154	0.99	ppb		97
82)	Bromoform	8.43	173	1071	3.35	ppb		86
84)	Isopropylbenzene	8.62	105	14163	0.92	ppb		99
85)	1,1,2,2-Tetrachloroethane	8.89	83	2831	2.03	ppb	#	94
86)	1,2,3-Trichloropropane	8.93	110	989	2.59	ppb	#	72
87)	t-1,4-Dichloro-2-Butene	8.94	53	589	3.12	ppb		88
88)	Bromobenzene	8.89	77	6790	0.96	ppb		93
89)	n-Propylbenzene	9.01	91	18194	0.91	ppb		98
90)	4-Ethyltoluene	9.13	105	14381	0.88	ppb		99
91)	2-Chlorotoluene	9.09	91	10859	0.96	ppb		99
92)	1,3,5-Trimethylbenzene	9.19	105	12266	0.93	ppb		98
93)	4-Chlorotoluene	9.19	91	12522	0.97	ppb		95
94)	Tert-Butylbenzene	9.51	119	10968	0.96	ppb		92
95)	1,2,4-Trimethylbenzene	9.55	105	12017	0.91	ppb		99
96)	Sec-Butylbenzene	9.72	105	16445	0.90	ppb		99
97)	p-Isopropyltoluene	9.87	119	13694	0.89	ppb		97
98)	Benzyl Chloride	10.03	91	3241	3.59	ppb		97
99)	1,3-DCB	9.81	146	7017	0.96	ppb		95
100)	1,4-DCB	9.89	146	7287	0.98	ppb		92
101)	n-Butylbenzene	10.27	91	12322	0.86	ppb		100
102)	1,2-DCB	10.26	146	6530	0.98	ppb		99
103)	Hexachloroethane	10.52	201	848	3.78	ppb	#	41
104)	1,2-Dibromo-3-chloropropan	11.02	157	367	3.35	ppb	#	86
105)	1,2,4-Trichlorobenzene	11.85	180	4213	0.94	ppb		99
106)	Hexachlorobutadiene	12.05	225	2046	0.98	ppb		90
107)	Naphthalene	12.10	128	9905	0.87	ppb		97
108)	1,2,3-Trichlorobenzene	12.34	180	3758	0.95	ppb		98

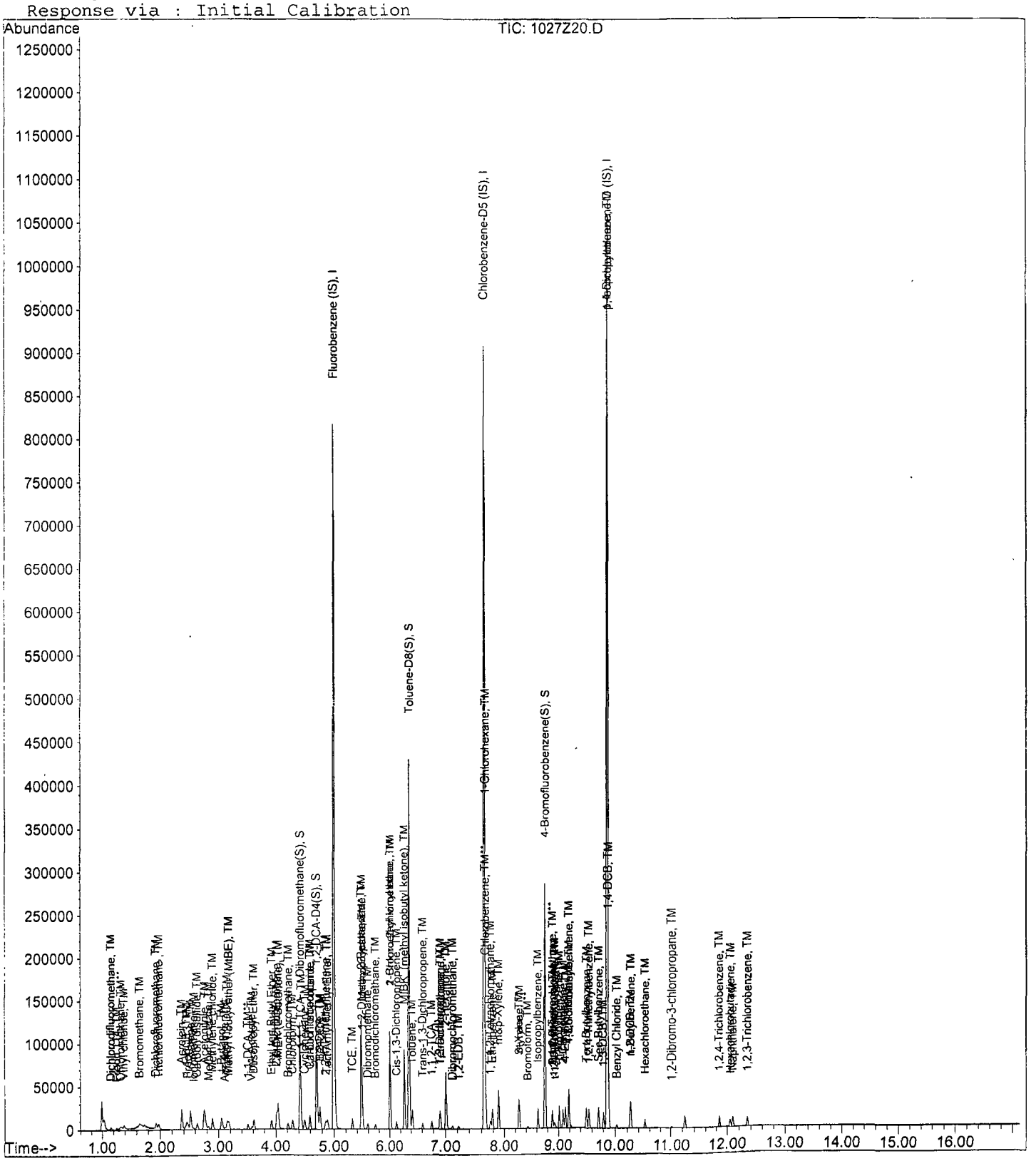
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z20.D Vial: 6
Acq On : 27 Oct 20 14:46 Operator: LP,DG,CH
Sample : 1ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z21.D Vial: 7
Acq On : 27 Oct 20 15:09 Operator: LP,DG,CH
Sample : 2ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.00	96	625508	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.65	117	437775	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	236856	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.43	111	59906	9.37	ppb		0.00
Spiked Amount 25.000			Recovery = 37.500%				
48) 1,2-DCA-D4(S)	4.70	65	70731	9.42	ppb		0.00
Spiked Amount 25.000			Recovery = 37.700%				
69) Toluene-D8(S)	6.37	98	233418	9.71	ppb		0.00
Spiked Amount 25.000			Recovery = 38.848%				
77) 4-Bromofluorobenzene(S)	8.75	95	87105	9.49	ppb		0.00
Spiked Amount 25.000			Recovery = 37.976%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.15	87	1869	2.10	ppb		84
4) Freon 114	1.26	85	2077	2.20	ppb	#	82
5) Chloromethane	1.34	50	9068	2.07	ppb		98
6) Vinyl chloride	1.38	62	7661	2.01	ppb		95
9) Bromomethane	1.65	94	2258	2.29	ppb		86
10) Chloroethane	1.74	64	3440	2.02	ppb		98
11) Dichlorofluoromethane	1.93	67	12311	2.15	ppb		98
12) Trichlorofluoromethane	1.98	101	9770	2.22	ppb		93
16) Acrolein	2.37	55	18955	71.50	ppb		100
17) Acetone	2.52	43	38144	28.90	ppb		99
18) Freon-113	2.47	101	4575	1.97	ppb		88
19) 1,1-DCE	2.45	61	9760	1.92	ppb		97
21) Acetonitrile	2.76	40	10364	82.16	ppb		98
22) t-Butanol	3.06	59	10850	74.72	ppb		98
23) Methyl Acetate	2.83	43	5785	1.97	ppb		97
24) Iodomethane	2.57	142	3376	2.24	ppb		97
25) Acrylonitrile	3.11	52	2205	1.84	ppb		93
26) Methylene chloride	2.89	84	8882	2.36	ppb		95
27) Carbon disulfide	2.63	76	10980	2.10	ppb		98
28) Methyl t-butyl ether (MtBE	3.17	73	15038	1.89	ppb		95
29) Trans-1,2-DCE	3.15	61	9361	2.00	ppb		97
31) Diisopropyl Ether	3.62	45	17953	1.88	ppb		97
33) 1,1-DCA	3.51	63	11384	1.98	ppb		98
34) Vinyl Acetate	3.58	43	10230	2.43	ppb		97
35) Ethyl tert Butyl Ether	3.93	59	15615	1.81	ppb		93
36) MEK (2-Butanone)	4.04	43	46302	27.59	ppb		99
37) Cis-1,2-DCE	4.02	61	11058	2.06	ppb		97
38) 2,2-Dichloropropane	4.02	77	8288	1.93	ppb		97
41) Chloroform	4.29	83	11148	1.98	ppb		100
42) Bromochloromethane	4.21	49	5525	2.01	ppb	#	89
44) 1,1,1-TCA	4.45	97	9077	1.86	ppb		97
45) Cyclohexane	4.50	56	9769	1.99	ppb		98
46) 1,1-Dichloropropene	4.59	75	8970	1.95	ppb		95
47) 2,2,4-Trimethylpentane	4.86	57	16821	1.92	ppb		99
49) Carbon Tetrachloride	4.59	117	6798	1.82	ppb		98
50) Tert Amyl Methyl Ether	4.89	73	13991	1.88	ppb		95
52) 1,2-DCA	4.77	62	8701	1.97	ppb		95
53) Benzene	4.76	78	28272	2.08	ppb		98
54) TCE	5.32	130	7171	1.98	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z21.D Vial: 7
Acq On : 27 Oct 20 15:09 Operator: LP,DG,CH
Sample : 2ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.47	43	169077	66.31	ppb		97
56)	1,2-Dichloropropane	5.49	63	6869	2.07	ppb		99
57)	Bromodichloromethane	5.73	83	6866	1.90	ppb		93
58)	Methyl Cyclohexane	5.48	83	9373	2.00	ppb		98
59)	Dibromomethane	5.59	174	3833	1.93	ppb		91
60)	MIBK (methyl isobutyl ket	6.27	43	82950	27.28	ppb		98
61)	1-Bromo-2-chloroethane	6.00	144	860	1.85	ppb		93
62)	2-Chloroethyl vinyl ether	6.00	43	37993	27.10	ppb		100
63)	Cis-1,3-Dichloropropene	6.12	75	8424	1.81	ppb		96
64)	Toluene	6.42	91	28528	2.00	ppb		100
65)	Trans-1,3-Dichloropropene	6.61	75	6593	2.86	ppb		94
66)	1,1,2-TCA	6.77	97	5239	1.95	ppb		97
67)	2-Hexanone	7.01	43	59171	27.70	ppb		99
70)	1,2-EDB	7.22	107	5181	1.93	ppb	#	95
71)	Tetrachloroethene	6.91	166	7060	1.97	ppb		96
72)	1-Chlorohexane	7.67	91	9604	2.01	ppb		98
73)	1,1,1,2-Tetrachloroethane	7.75	131	4463	1.73	ppb		94
74)	m&p-Xylene	7.90	91	48225	4.08	ppb		99
75)	o-Xylene	8.26	91	23958	2.01	ppb		98
76)	Styrene	8.27	104	17391	1.94	ppb		96
78)	1,3-Dichloropropane	6.92	76	9134	1.94	ppb		99
79)	Dibromochloromethane	7.11	129	4183	1.79	ppb		96
80)	Chlorobenzene	7.68	112	17356	1.97	ppb		96
81)	Ethylbenzene	7.79	91	31152	2.02	ppb		99
82)	Bromoform	8.43	173	2181	3.85	ppb	#	80
84)	Isopropylbenzene	8.62	105	29955	1.95	ppb		98
85)	1,1,2,2-Tetrachloroethane	8.89	83	6116	2.80	ppb		97
86)	1,2,3-Trichloropropane	8.93	110	2049	3.31	ppb		89
87)	t-1,4-Dichloro-2-Butene	8.94	53	1399	3.75	ppb	#	74
88)	Bromobenzene	8.89	77	13220	1.87	ppb		91
89)	n-Propylbenzene	9.01	91	37211	1.87	ppb		99
90)	4-Ethyltoluene	9.13	105	30154	1.85	ppb		94
91)	2-Chlorotoluene	9.09	91	21758	1.94	ppb		97
92)	1,3,5-Trimethylbenzene	9.19	105	25315	1.93	ppb		99
93)	4-Chlorotoluene	9.19	91	25593	1.99	ppb		99
94)	Tert-Butylbenzene	9.50	119	21992	1.94	ppb		99
95)	1,2,4-Trimethylbenzene	9.55	105	25204	1.93	ppb		99
96)	Sec-Butylbenzene	9.72	105	34536	1.91	ppb		99
97)	p-Isopropyltoluene	9.87	119	28757	1.88	ppb		99
98)	Benzyl Chloride	10.03	91	7006	4.07	ppb		95
99)	1,3-DCB	9.80	146	14571	2.01	ppb		96
100)	1,4-DCB	9.89	146	14894	2.01	ppb		97
101)	n-Butylbenzene	10.27	91	26105	1.84	ppb		97
102)	1,2-DCB	10.26	146	13238	2.00	ppb		98
103)	Hexachloroethane	10.52	201	1995	4.29	ppb	#	75
104)	1,2-Dibromo-3-chloropropan	11.02	157	1049	4.01	ppb		91
105)	1,2,4-Trichlorobenzene	11.86	180	8635	1.95	ppb		89
106)	Hexachlorobutadiene	12.05	225	3749	1.80	ppb		93
107)	Naphthalene	12.10	128	20659	1.83	ppb		99
108)	1,2,3-Trichlorobenzene	12.34	180	7392	1.87	ppb		92

(#) = qualifier out of range (m) = manual integration

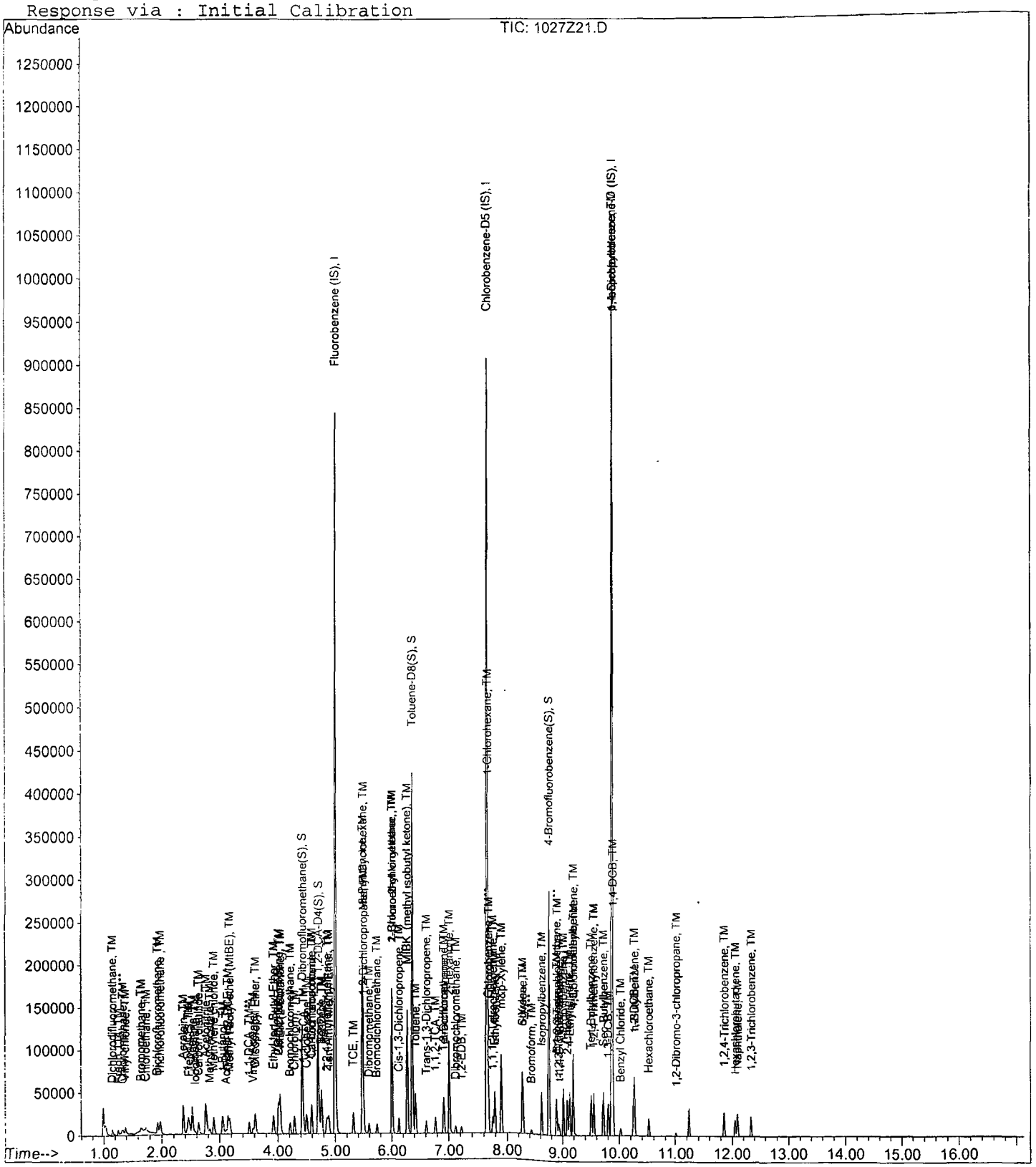
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z21.D
Acq On : 27 Oct 20 15:09
Sample : 2ug/L VOC STD 10/27/20
Misc :

Vial: 7
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z22.D Vial: 8
Acq On : 27 Oct 20 15:33 Operator: LP,DG,CH
Sample : 5ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	640114	25.00 ppb	0.00
68) Chlorobenzene-D5 (IS)	7.65	117	448845	25.00 ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	240793	25.00 ppb	0.00
System Monitoring Compounds					
43) Dibromofluoromethane(S)	4.43	111	176438	26.98 ppb	0.00
Spiked Amount 25.000			Recovery =	107.924%	
48) 1,2-DCA-D4(S)	4.70	65	205204	26.72 ppb	0.00
Spiked Amount 25.000			Recovery =	106.876%	
69) Toluene-D8(S)	6.37	98	668434	27.13 ppb	0.00
Spiked Amount 25.000			Recovery =	108.500%	
77) 4-Bromofluorobenzene(S)	8.75	95	253647	26.96 ppb	0.00
Spiked Amount 25.000			Recovery =	107.860%	
Target Compounds					Qvalue
3) Dichlorodifluoromethane	1.15	87	4136	4.54 ppb	88
4) Freon 114	1.25	85	3882	4.02 ppb	89
5) Chloromethane	1.34	50	22576	5.03 ppb	100
6) Vinyl chloride	1.38	62	18836	4.84 ppb	98
9) Bromomethane	1.65	94	5399	5.36 ppb	95
10) Chloroethane	1.73	64	5454	4.94 ppb	96
11) Dichlorofluoromethane	1.92	67	27864	4.75 ppb	97
12) Trichlorofluoromethane	1.97	101	23319	5.18 ppb	99
16) Acrolein	2.37	55	27828	102.58 ppb	94
17) Acetone	2.52	43	51573	39.00 ppb	99
18) Freon-113	2.47	101	9920	4.16 ppb	97
19) 1,1-DCE	2.45	61	22495	4.33 ppb	98
21) Acetonitrile	2.76	40	13301	104.25 ppb	98
22) t-Butanol	3.06	59	15358	103.35 ppb	100
23) Methyl Acetate	2.83	43	13204	4.39 ppb	97
24) Iodomethane	2.57	142	8990	3.86 ppb	96
25) Acrylonitrile	3.11	52	5671	4.63 ppb	94
26) Methylene chloride	2.89	84	17756	4.69 ppb	99
27) Carbon disulfide	2.63	76	23880	4.46 ppb	98
28) Methyl t-butyl ether (MtBE	3.18	73	36244	4.45 ppb	99
29) Trans-1,2-DCE	3.15	61	21848	4.56 ppb	98
31) Diisopropyl Ether	3.61	45	44661	4.58 ppb	99
33) 1,1-DCA	3.51	63	26734	4.55 ppb	99
34) Vinyl Acetate	3.58	43	18303	4.25 ppb	99
35) Ethyl tert Butyl Ether	3.93	59	39440	4.48 ppb	98
36) MEK (2-Butanone)	4.04	43	66831	38.91 ppb	100
37) Cis-1,2-DCE	4.02	61	25033	4.55 ppb	96
38) 2,2-Dichloropropane	4.02	77	19127	4.36 ppb	99
41) Chloroform	4.29	83	25592	4.45 ppb	98
42) Bromochloromethane	4.21	49	13033	4.64 ppb	99
44) 1,1,1-TCA	4.45	97	22222	4.45 ppb	99
45) Cyclohexane	4.50	56	21617	4.30 ppb	98
46) 1,1-Dichloropropene	4.59	75	20725	4.39 ppb	99
47) 2,2,4-Trimethylpentane	4.86	57	33960	3.78 ppb	98
49) Carbon Tetrachloride	4.59	117	16632	4.35 ppb	97
50) Tert Amyl Methyl Ether	4.89	73	33843	4.44 ppb	95
52) 1,2-DCA	4.77	62	20721	4.59 ppb	97
53) Benzene	4.76	78	63229	4.55 ppb	98
54) TCE	5.32	130	17060	4.61 ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z22.D Vial: 8
Acq On : 27 Oct 20 15:33 Operator: LP,DG,CH
Sample : 5ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
55)	2-Pentanone	5.47	43	251928	96.54 ppb	99
56)	1,2-Dichloropropane	5.49	63	15348	4.52 ppb	100
57)	Bromodichloromethane	5.73	83	16528	4.48 ppb	99
58)	Methyl Cyclohexane	5.48	83	19725	4.11 ppb	97
59)	Dibromomethane	5.59	174	9313	4.58 ppb	99
60)	MIBK (methyl isobutyl ket	6.27	43	122562	39.39 ppb	98
61)	1-Bromo-2-chloroethane	6.00	144	2192	4.62 ppb	86
62)	2-Chloroethyl vinyl ether	6.00	43	57501	40.08 ppb	98
63)	Cis-1,3-Dichloropropene	6.12	75	21064	4.42 ppb	93
64)	Toluene	6.42	91	65837	4.51 ppb	98
65)	Trans-1,3-Dichloropropene	6.61	75	17154	4.90 ppb	98
66)	1,1,2-TCA	6.77	97	12484	4.53 ppb	95
67)	2-Hexanone	7.01	43	86251	39.45 ppb	97
70)	1,2-EDB	7.22	107	12488	4.55 ppb	95
71)	Tetrachloroethene	6.91	166	16508	4.50 ppb	99
72)	1-Chlorohexane	7.67	91	21356	4.37 ppb	98
73)	1,1,1,2-Tetrachloroethane	7.75	131	11449	4.34 ppb	94
74)	m&p-Xylene	7.90	91	112869	9.32 ppb	99
75)	o-Xylene	8.26	91	56124	4.60 ppb	98
76)	Styrene	8.27	104	42802	4.65 ppb	97
78)	1,3-Dichloropropane	6.92	76	22274	4.62 ppb	98
79)	Dibromochloromethane	7.12	129	10195	4.26 ppb	100
80)	Chlorobenzene	7.68	112	41877	4.65 ppb	98
81)	Ethylbenzene	7.79	91	71353	4.52 ppb	99
82)	Bromoform	8.43	173	5953	5.50 ppb	93
84)	Isopropylbenzene	8.62	105	69837	4.48 ppb	99
85)	1,1,2,2-Tetrachloroethane	8.89	83	14920	4.78 ppb	96
86)	1,2,3-Trichloropropane	8.93	110	5142	5.33 ppb	98
87)	t-1,4-Dichloro-2-Butene	8.95	53	3710	5.48 ppb	90
88)	Bromobenzene	8.89	77	31861	4.44 ppb	99
89)	n-Propylbenzene	9.01	91	88240	4.35 ppb	97
90)	4-Ethyltoluene	9.13	105	72637	4.39 ppb	98
91)	2-Chlorotoluene	9.09	91	51091	4.49 ppb	97
92)	1,3,5-Trimethylbenzene	9.19	105	61853	4.65 ppb	99
93)	4-Chlorotoluene	9.19	91	59221	4.52 ppb	99
94)	Tert-Butylbenzene	9.51	119	51593	4.48 ppb	97
95)	1,2,4-Trimethylbenzene	9.55	105	60146	4.52 ppb	99
96)	Sec-Butylbenzene	9.72	105	80785	4.39 ppb	98
97)	p-Isopropyltoluene	9.87	119	68861	4.43 ppb	100
98)	Benzyl Chloride	10.03	91	20068	5.66 ppb	99
99)	1,3-DCB	9.81	146	33446	4.53 ppb	98
100)	1,4-DCB	9.89	146	34568	4.60 ppb	97
101)	n-Butylbenzene	10.27	91	64335	4.46 ppb	100
102)	1,2-DCB	10.26	146	30200	4.48 ppb	97
103)	Hexachloroethane	10.52	201	5765	5.90 ppb	89
104)	1,2-Dibromo-3-chloropropan	11.02	157	2737	5.60 ppb	95
105)	1,2,4-Trichlorobenzene	11.86	180	19882	4.41 ppb	98
106)	Hexachlorobutadiene	12.05	225	9401	4.43 ppb	96
107)	Naphthalene	12.10	128	50820	4.43 ppb	98
108)	1,2,3-Trichlorobenzene	12.34	180	18055	4.49 ppb	100

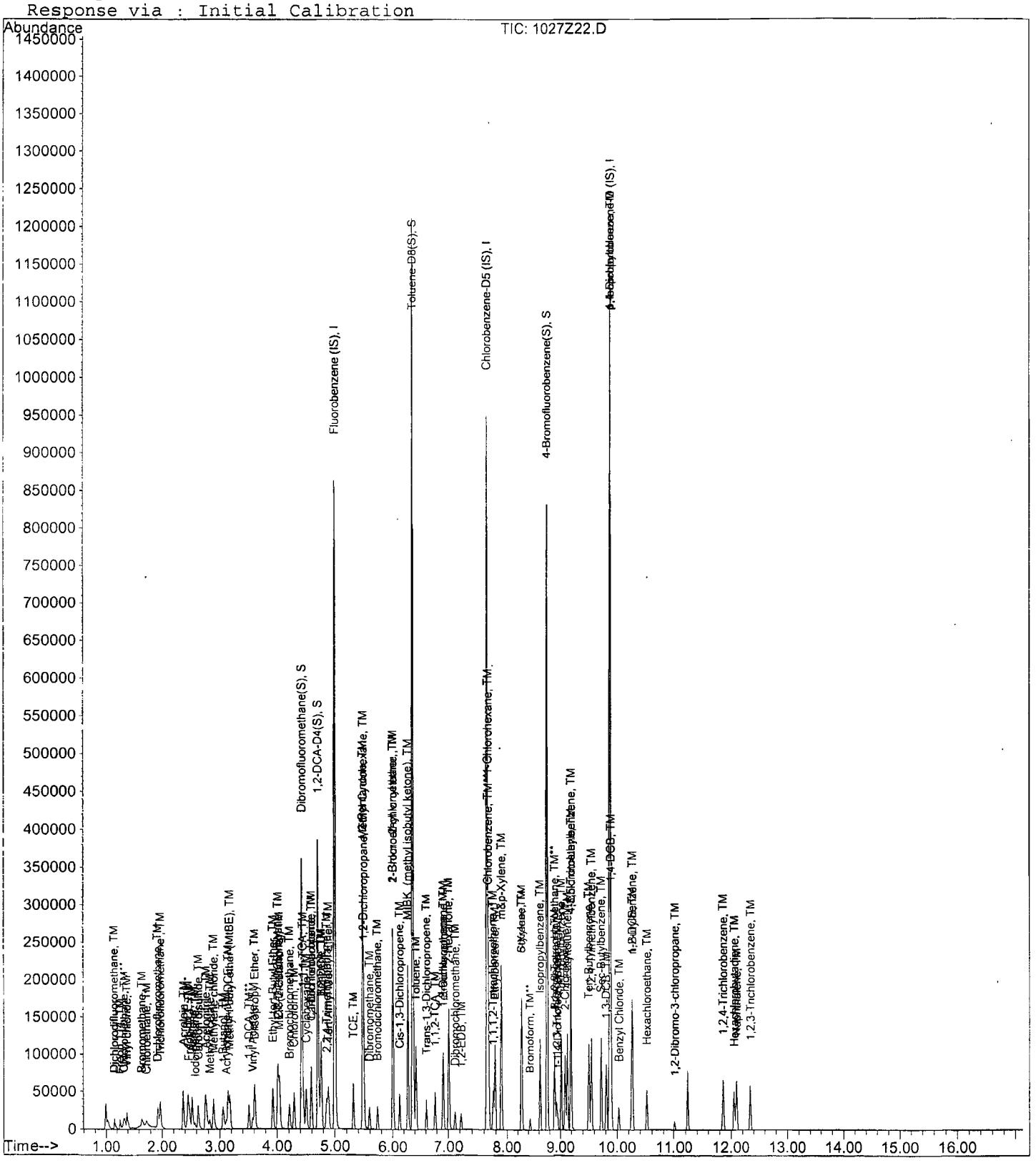
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z22.D Vial: 8
Acq On : 27 Oct 20 15:33 Operator: LP,DG,CH
Sample : 5ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z23.D Vial: 9
Acq On : 27 Oct 20 15:56 Operator: LP,DG,CH
Sample : 10ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	659735	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.65	117	464103	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	248900	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.43	111	181321	26.90	ppb	0.00
Spiked Amount 25.000			Recovery = 107.612%			
48) 1,2-DCA-D4(S)	4.70	65	212300	26.82	ppb	0.00
Spiked Amount 25.000			Recovery = 107.284%			
69) Toluene-D8(S)	6.37	98	696016	27.32	ppb	0.00
Spiked Amount 25.000			Recovery = 109.264%			
77) 4-Bromofluorobenzene(S)	8.75	95	265719	27.32	ppb	0.00
Spiked Amount 25.000			Recovery = 109.280%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.15	87	9210	9.80	ppb	100
4) Freon 114	1.25	85	11078	11.12	ppb	100
5) Chloromethane	1.34	50	45547	9.84	ppb	100
6) Vinyl chloride	1.38	62	40162	10.00	ppb	100
9) Bromomethane	1.65	94	10829	10.43	ppb	100
10) Chloroethane	1.73	64	9680	10.89	ppb	100
11) Dichlorofluoromethane	1.92	67	59206	9.79	ppb	100
12) Trichlorofluoromethane	1.97	101	47365	10.20	ppb	100
16) Acrolein	2.37	55	35182	125.83	ppb	100
17) Acetone	2.53	43	64253	47.68	ppb	100
18) Freon-113	2.47	101	25078	10.22	ppb	100
19) 1,1-DCE	2.45	61	50862	9.50	ppb	100
21) Acetonitrile	2.76	40	15988	122.38	ppb	100
22) t-Butanol	3.06	59	20320	132.67	ppb	100
23) Methyl Acetate	2.83	43	28972	9.35	ppb	100
24) Iodomethane	2.57	142	25491	8.44	ppb	100
25) Acrylonitrile	3.11	52	13075	10.35	ppb	100
26) Methylene chloride	2.89	84	38057	9.86	ppb	100
27) Carbon disulfide	2.63	76	53328	9.66	ppb	100
28) Methyl t-butyl ether (MtBE	3.17	73	84022	10.01	ppb	100
29) Trans-1,2-DCE	3.15	61	49418	10.01	ppb	100
31) Diisopropyl Ether	3.62	45	103572	10.30	ppb	100
33) 1,1-DCA	3.51	63	60190	9.95	ppb	100
34) Vinyl Acetate	3.58	43	39565	8.90	ppb	100
35) Ethyl tert Butyl Ether	3.93	59	92102	10.15	ppb	100
36) MEK (2-Butanone)	4.04	43	88452	49.97	ppb	100
37) Cis-1,2-DCE	4.01	61	55746	9.83	ppb	100
38) 2,2-Dichloropropane	4.02	77	44110	9.76	ppb	100
41) Chloroform	4.29	83	58959	9.94	ppb	100
42) Bromochloromethane	4.21	49	29334	10.14	ppb	100
44) 1,1,1-TCA	4.45	97	49965	9.71	ppb	100
45) Cyclohexane	4.50	56	51474	9.93	ppb	100
46) 1,1-Dichloropropene	4.59	75	46895	9.65	ppb	100
47) 2,2,4-Trimethylpentane	4.86	57	94085	10.16	ppb	100
49) Carbon Tetrachloride	4.59	117	38550	9.78	ppb	100
50) Tert Amyl Methyl Ether	4.89	73	80031	10.19	ppb	100
52) 1,2-DCA	4.77	62	46016	9.89	ppb	100
53) Benzene	4.76	78	142898	9.98	ppb	100
54) TCE	5.32	130	39080	10.25	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z23.D Vial: 9
Acq On : 27 Oct 20 15:56 Operator: LP,DG,CH
Sample : 10ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
55)	2-Pentanone	5.47	43	348390	129.54 ppb	100
56)	1,2-Dichloropropane	5.49	63	35471	10.14 ppb	100
57)	Bromodichloromethane	5.73	83	38623	10.16 ppb	100
58)	Methyl Cyclohexane	5.48	83	49858	10.09 ppb	100
59)	Dibromomethane	5.59	174	20905	9.98 ppb	100
60)	MIBK (methyl isobutyl ket	6.27	43	166683	51.98 ppb	100
61)	1-Bromo-2-chloroethane	6.00	144	5307	10.84 ppb	100
62)	2-Chloroethyl vinyl ether	6.00	43	77167	52.18 ppb	97
63)	Cis-1,3-Dichloropropene	6.12	75	50043	10.20 ppb	100
64)	Toluene	6.42	91	149343	9.92 ppb	100
65)	Trans-1,3-Dichloropropene	6.61	75	42019	9.52 ppb	100
66)	1,1,2-TCA	6.77	97	29007	10.21 ppb	100
67)	2-Hexanone	7.01	43	117230	52.03 ppb	100
70)	1,2-EDB	7.22	107	29527	10.40 ppb	100
71)	Tetrachloroethene	6.91	166	36988	9.75 ppb	100
72)	1-Chlorohexane	7.67	91	47598	9.41 ppb	100
73)	1,1,1,2-Tetrachloroethane	7.75	131	27838	10.20 ppb	100
74)	m&p-Xylene	7.90	91	254871	20.35 ppb	100
75)	o-Xylene	8.26	91	128145	10.16 ppb	100
76)	Styrene	8.27	104	100369	10.55 ppb	100
78)	1,3-Dichloropropane	6.92	76	51013	10.24 ppb	100
79)	Dibromochloromethane	7.12	129	25737	10.40 ppb	100
80)	Chlorobenzene	7.68	112	94231	10.11 ppb	100
81)	Ethylbenzene	7.79	91	163524	10.01 ppb	100
82)	Bromoform	8.43	173	15572	9.52 ppb	100
84)	Isopropylbenzene	8.62	105	161161	10.00 ppb	100
85)	1,1,2,2-Tetrachloroethane	8.89	83	36115	9.34 ppb	100
86)	1,2,3-Trichloropropane	8.93	110	11756	9.44 ppb	100
87)	t-1,4-Dichloro-2-Butene	8.95	53	9141	9.38 ppb	100
88)	Bromobenzene	8.89	77	74086	9.98 ppb	100
89)	n-Propylbenzene	9.01	91	203337	9.71 ppb	100
90)	4-Ethyltoluene	9.13	105	167592	9.80 ppb	100
91)	2-Chlorotoluene	9.09	91	117396	9.97 ppb	100
92)	1,3,5-Trimethylbenzene	9.19	105	143166	10.41 ppb	100
93)	4-Chlorotoluene	9.19	91	138180	10.21 ppb	100
94)	Tert-Butylbenzene	9.50	119	118985	10.00 ppb	100
95)	1,2,4-Trimethylbenzene	9.55	105	141898	10.33 ppb	100
96)	Sec-Butylbenzene	9.72	105	188109	9.89 ppb	100
97)	p-Isopropyltoluene	9.87	119	159733	9.93 ppb	100
98)	Benzyl Chloride	10.03	91	51517	9.32 ppb	100
99)	1,3-DCB	9.81	146	76030	9.96 ppb	100
100)	1,4-DCB	9.89	146	77195	9.93 ppb	100
101)	n-Butylbenzene	10.27	91	154493	10.35 ppb	100
102)	1,2-DCB	10.26	146	69364	9.96 ppb	100
103)	Hexachloroethane	10.52	201	14098	9.30 ppb	100
104)	1,2-Dibromo-3-chloropropan	11.02	157	6885	9.33 ppb	100
105)	1,2,4-Trichlorobenzene	11.86	180	46913	10.06 ppb	100
106)	Hexachlorobutadiene	12.05	225	21561	9.83 ppb	100
107)	Naphthalene	12.10	128	120898	10.20 ppb	100
108)	1,2,3-Trichlorobenzene	12.34	180	42199	10.15 ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

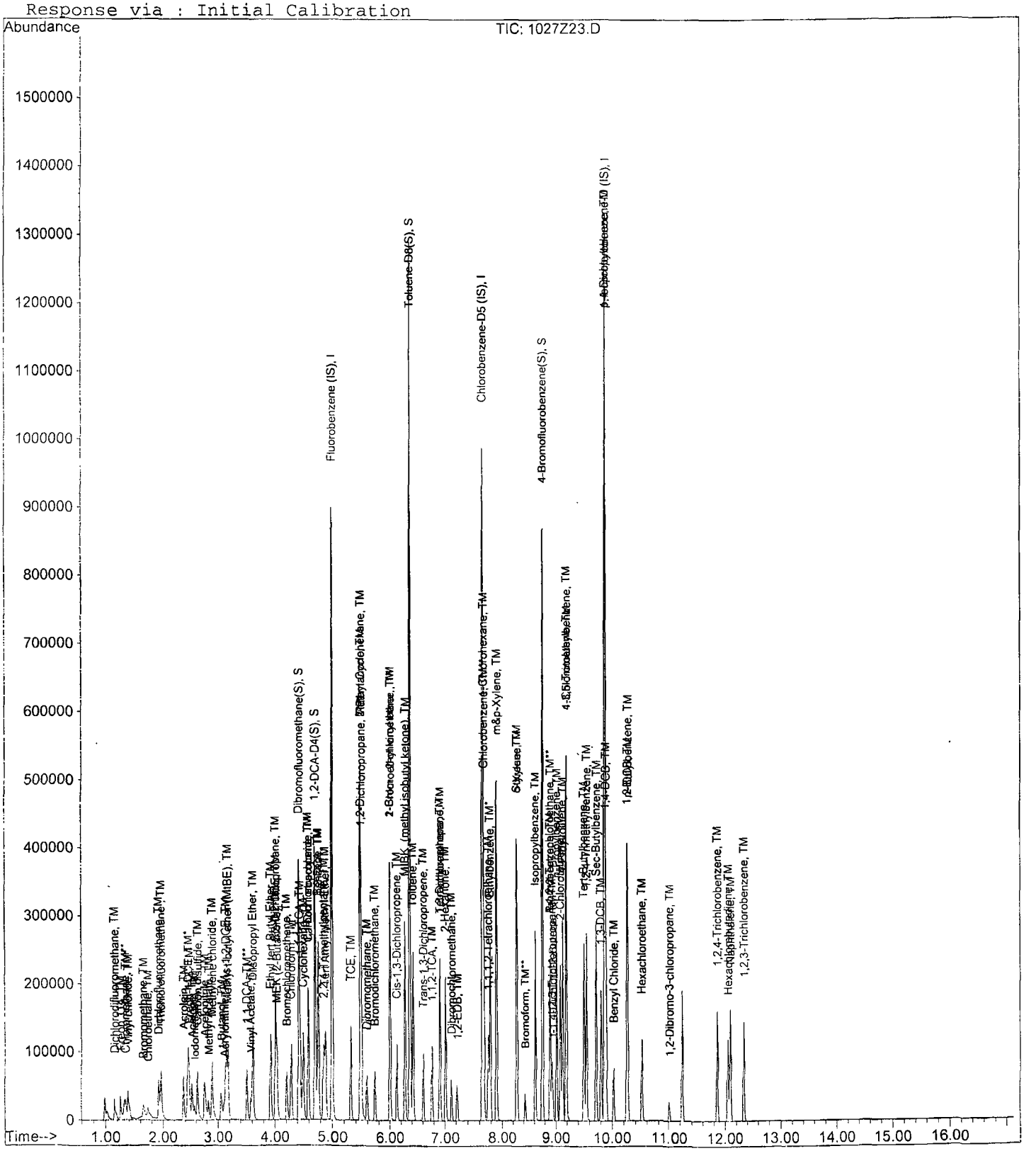
Data File : M:\ZEUS\DATA\201027\1027Z23.D
Acq On : 27 Oct 20 15:56
Sample : 10ug/L VOC STD 10/27/20
Misc :

Vial: 9
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 28 9:57 2020

Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z24.D Vial: 10
Acq On : 27 Oct 20 16:19 Operator: LP,DG,CH
Sample : 20ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	680960	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.65	117	480414	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	253382	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.43	111	381531	54.84	ppb	0.00
Spiked Amount 25.000			Recovery =	219.376%		
48) 1,2-DCA-D4(S)	4.70	65	450609	55.15	ppb	0.00
Spiked Amount 25.000			Recovery =	220.616%		
69) Toluene-D8(S)	6.36	98	1471152	55.78	ppb	0.00
Spiked Amount 25.000			Recovery =	223.108%		
77) 4-Bromofluorobenzene(S)	8.76	95	570392	56.65	ppb	0.00
Spiked Amount 25.000			Recovery =	226.612%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.15	87	20061	20.68	ppb	91
4) Freon 114	1.25	85	21117	20.54	ppb	91
5) Chloromethane	1.34	50	90404	18.92	ppb	98
6) Vinyl chloride	1.38	62	79920	19.29	ppb	99
9) Bromomethane	1.65	94	18895	17.63	ppb	99
10) Chloroethane	1.73	64	16881	20.69	ppb	92
11) Dichlorofluoromethane	1.92	67	106439	17.05	ppb	99
12) Trichlorofluoromethane	1.96	101	86805	18.11	ppb	99
16) Acrolein	2.37	55	43682	151.36	ppb	97
17) Acetone	2.53	43	83586	60.76	ppb	99
18) Freon-113	2.47	101	52857	20.86	ppb	99
19) 1,1-DCE	2.44	61	105166	19.02	ppb	97
21) Acetonitrile	2.77	40	17272	128.31	ppb	99
22) t-Butanol	3.07	59	24560	155.35	ppb	95
23) Methyl Acetate	2.83	43	60667	18.96	ppb	97
24) Iodomethane	2.57	142	60849	17.75	ppb	99
25) Acrylonitrile	3.12	52	27333	20.97	ppb	95
26) Methylene chloride	2.89	84	75775	19.12	ppb	100
27) Carbon disulfide	2.63	76	108080	18.96	ppb	100
28) Methyl t-butyl ether (MtBE	3.18	73	173246	19.99	ppb	99
29) Trans-1,2-DCE	3.14	61	101089	19.85	ppb	96
31) Diisopropyl Ether	3.62	45	217798	20.98	ppb	97
33) 1,1-DCA	3.51	63	121860	19.51	ppb	100
34) Vinyl Acetate	3.58	43	91695	19.99	ppb	96
35) Ethyl tert Butyl Ether	3.93	59	195809	20.91	ppb	99
36) MEK (2-Butanone)	4.04	43	120118	65.75	ppb	98
37) Cis-1,2-DCE	4.01	61	115104	19.67	ppb	98
38) 2,2-Dichloropropane	4.02	77	93734	20.10	ppb	97
41) Chloroform	4.29	83	120640	19.71	ppb	99
42) Bromochloromethane	4.21	49	59056	19.77	ppb	97
44) 1,1,1-TCA	4.45	97	104120	19.60	ppb	99
45) Cyclohexane	4.50	56	107665	20.12	ppb	96
46) 1,1-Dichloropropene	4.59	75	97098	19.35	ppb	98
47) 2,2,4-Trimethylpentane	4.85	57	206733	21.64	ppb	99
49) Carbon Tetrachloride	4.59	117	81624	20.07	ppb	99
50) Tert Amyl Methyl Ether	4.89	73	169306	20.88	ppb	97
52) 1,2-DCA	4.77	62	92997	19.37	ppb	100
53) Benzene	4.76	78	290105	19.62	ppb	98
54) TCE	5.32	130	79001	20.08	ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z24.D Vial: 10
Acq On : 27 Oct 20 16:19 Operator: LP,DG,CH
Sample : 20ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55)	2-Pentanone	5.48	43	452469	162.99	ppb	99
56)	1,2-Dichloropropane	5.49	63	71106	19.69	ppb	100
57)	Bromodichloromethane	5.74	83	80624	20.55	ppb	98
58)	Methyl Cyclohexane	5.48	83	106419	20.86	ppb	94
59)	Dibromomethane	5.59	174	42183	19.50	ppb	94
60)	MIBK (methyl isobutyl ket	6.28	43	225278	68.06	ppb	99
61)	1-Bromo-2-chloroethane	6.00	144	10570	20.92	ppb	95
62)	2-Chloroethyl vinyl ether	6.00	43	98411	64.48	ppb	99
63)	Cis-1,3-Dichloropropene	6.12	75	106148	20.96	ppb	99
64)	Toluene	6.42	91	311380	20.05	ppb	98
65)	Trans-1,3-Dichloropropene	6.61	75	91218	18.33	ppb	98
66)	1,1,2-TCA	6.77	97	58971	20.12	ppb	97
67)	2-Hexanone	7.02	43	157489	67.72	ppb	99
70)	1,2-EDB	7.22	107	59983	20.41	ppb	100
71)	Tetrachloroethene	6.92	166	75715	19.29	ppb	94
72)	1-Chlorohexane	7.67	91	99448	19.00	ppb	98
73)	1,1,1,2-Tetrachloroethane	7.75	131	59230	20.96	ppb	98
74)	m&p-Xylene	7.90	91	530809	40.95	ppb	99
75)	o-Xylene	8.27	91	265567	20.35	ppb	100
76)	Styrene	8.28	104	208887	21.22	ppb	95
78)	1,3-Dichloropropane	6.92	76	103543	20.09	ppb	96
79)	Dibromochloromethane	7.12	129	55046	21.48	ppb	98
80)	Chlorobenzene	7.68	112	191154	19.82	ppb	98
81)	Ethylbenzene	7.79	91	338273	20.01	ppb	99
82)	Bromoform	8.43	173	34385	17.07	ppb	97
84)	Isopropylbenzene	8.62	105	338411	20.63	ppb	100
85)	1,1,2,2-Tetrachloroethane	8.89	83	77615	18.19	ppb	100
86)	1,2,3-Trichloropropane	8.93	110	25733	18.08	ppb	98
87)	t-1,4-Dichloro-2-Butene	8.95	53	20535	17.48	ppb	91
88)	Bromobenzene	8.89	77	153772	20.35	ppb	97
89)	n-Propylbenzene	9.02	91	420988	19.74	ppb	99
90)	4-Ethyltoluene	9.13	105	346206	19.89	ppb	100
91)	2-Chlorotoluene	9.09	91	243601	20.32	ppb	100
92)	1,3,5-Trimethylbenzene	9.19	105	298124	21.28	ppb	99
93)	4-Chlorotoluene	9.19	91	285254	20.71	ppb	97
94)	Tert-Butylbenzene	9.51	119	246495	20.35	ppb	99
95)	1,2,4-Trimethylbenzene	9.55	105	295755	21.14	ppb	99
96)	Sec-Butylbenzene	9.72	105	390532	20.17	ppb	98
97)	p-Isopropyltoluene	9.87	119	325451	19.88	ppb	100
98)	Benzyl Chloride	10.03	91	117156	16.89	ppb	98
99)	1,3-DCB	9.81	146	153116	19.70	ppb	99
100)	1,4-DCB	9.90	146	155379	19.64	ppb	99
101)	n-Butylbenzene	10.27	91	319409	21.02	ppb	98
102)	1,2-DCB	10.26	146	140073	19.75	ppb	98
103)	Hexachloroethane	10.52	201	32429	16.72	ppb	87
104)	1,2-Dibromo-3-chloropropan	11.02	157	15849	17.31	ppb	96
105)	1,2,4-Trichlorobenzene	11.86	180	96357	20.30	ppb	96
106)	Hexachlorobutadiene	12.06	225	46006	20.60	ppb	96
107)	Naphthalene	12.10	128	254211	21.06	ppb	98
108)	1,2,3-Trichlorobenzene	12.35	180	87091	20.58	ppb	97

(#) = qualifier out of range (m) = manual integration

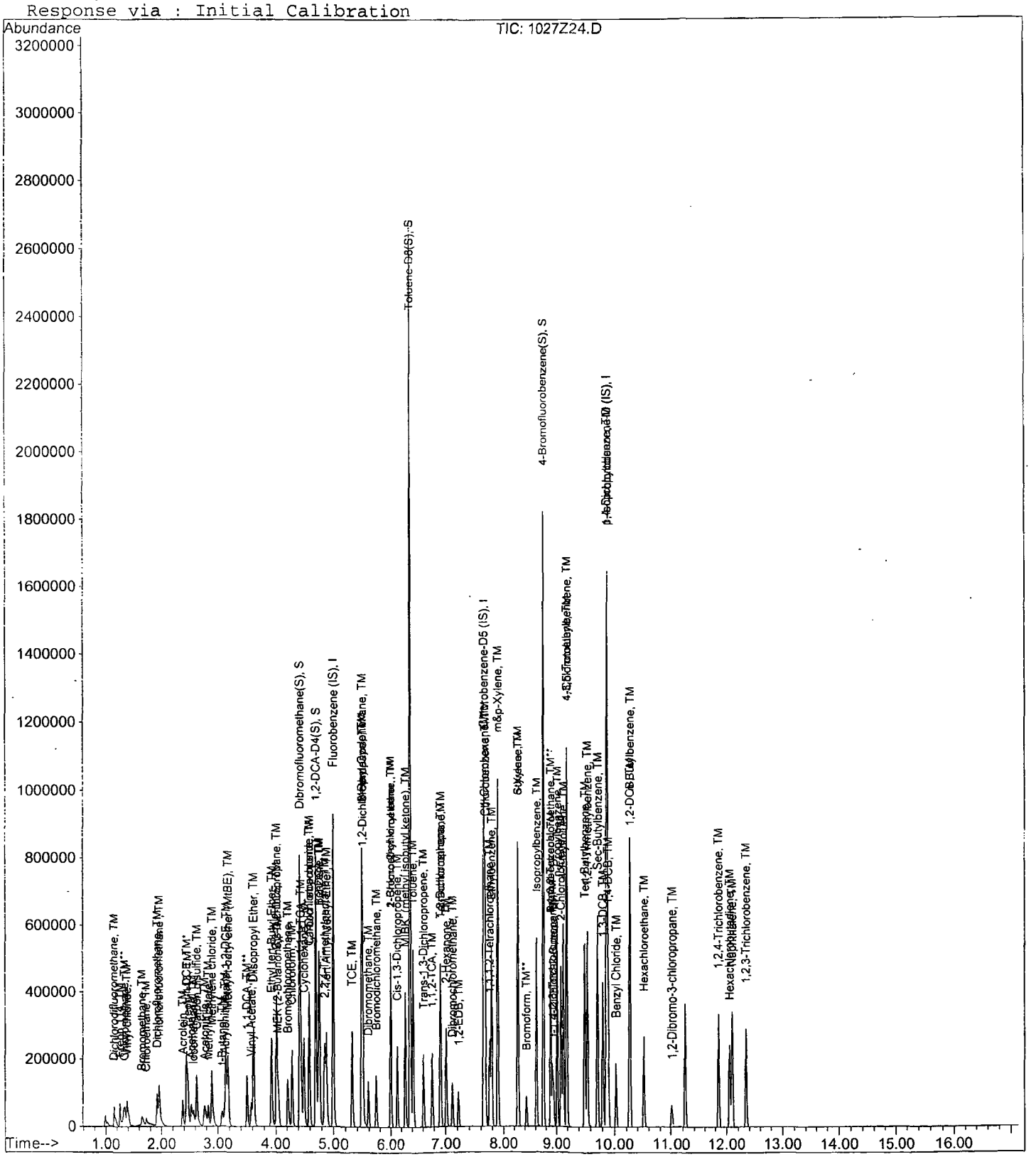
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z24.D
Acq On : 27 Oct 20 16:19
Sample : 20ug/L VOC STD 10/27/20
Misc :

Vial: 10
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z25.D Vial: 11
Acq On : 27 Oct 20 16:42 Operator: LP,DG,CH
Sample : 40ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	681286	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.65	117	486618	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	247111	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.43	111	387643	55.70	ppb	0.00
Spiked Amount 25.000			Recovery =	222.784%		
48) 1,2-DCA-D4(S)	4.70	65	453260	55.45	ppb	0.00
Spiked Amount 25.000			Recovery =	221.808%		
69) Toluene-D8(S)	6.37	98	1472478	55.12	ppb	0.00
Spiked Amount 25.000			Recovery =	220.464%		
77) 4-Bromofluorobenzene(S)	8.76	95	570200	55.91	ppb	0.00
Spiked Amount 25.000			Recovery =	223.648%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.15	87	40597	41.84	ppb	94
4) Freon 114	1.25	85	43226	42.03	ppb	86
5) Chloromethane	1.34	50	185173	38.74	ppb	99
6) Vinyl chloride	1.38	62	168290	40.60	ppb	99
9) Bromomethane	1.65	94	36714	34.23	ppb	90
10) Chloroethane	1.72	64	33103	43.72	ppb	92
11) Dichlorofluoromethane	1.92	67	211388	33.84	ppb	97
12) Trichlorofluoromethane	1.95	101	172505	35.98	ppb	100
16) Acrolein	2.38	55	54920	190.21	ppb	97
17) Acetone	2.53	43	109818	80.59	ppb	99
18) Freon-113	2.46	101	110617	43.64	ppb	98
19) 1,1-DCE	2.44	61	228101	41.24	ppb	97
21) Acetonitrile	2.77	40	19648	146.54	ppb	97
22) t-Butanol	3.08	59	27976	176.88	ppb	95
23) Methyl Acetate	2.83	43	130474	40.75	ppb	98
24) Iodomethane	2.57	142	154687	42.11	ppb	99
25) Acrylonitrile	3.12	52	56833	43.58	ppb	97
26) Methylene chloride	2.89	84	159949	40.44	ppb	95
27) Carbon disulfide	2.62	76	239488	41.99	ppb	100
28) Methyl t-butyl ether (MtBE	3.18	73	383612	44.24	ppb	99
29) Trans-1,2-DCE	3.14	61	218963	42.97	ppb	98
31) Diisopropyl Ether	3.62	45	472677	45.52	ppb	98
33) 1,1-DCA	3.51	63	264795	42.38	ppb	100
34) Vinyl Acetate	3.58	43	196467	42.82	ppb	97
35) Ethyl tert Butyl Ether	3.93	59	437085	46.64	ppb	98
36) MEK (2-Butanone)	4.05	43	162298	88.79	ppb	100
37) Cis-1,2-DCE	4.01	61	247686	42.30	ppb	98
38) 2,2-Dichloropropane	4.02	77	208506	44.69	ppb	99
41) Chloroform	4.29	83	262005	42.79	ppb	100
42) Bromochloromethane	4.21	49	126322	42.27	ppb	99
44) 1,1,1-TCA	4.45	97	225558	42.45	ppb	99
45) Cyclohexane	4.50	56	226120	42.24	ppb	98
46) 1,1-Dichloropropene	4.59	75	208818	41.59	ppb	98
47) 2,2,4-Trimethylpentane	4.86	57	428308	44.80	ppb	100
49) Carbon Tetrachloride	4.59	117	180515	44.36	ppb	96
50) Tert Amyl Methyl Ether	4.89	73	378522	46.66	ppb	97
52) 1,2-DCA	4.77	62	202177	42.10	ppb	99
53) Benzene	4.76	78	615143	41.59	ppb	99
54) TCE	5.31	130	169566	43.09	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z25.D Vial: 11
Acq On : 27 Oct 20 16:42 Operator: LP,DG,CH
Sample : 40ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.48	43	567409	204.30	ppb		99
56)	1,2-Dichloropropane	5.49	63	151787	42.02	ppb		99
57)	Bromodichloromethane	5.73	83	183152	46.65	ppb		99
58)	Methyl Cyclohexane	5.48	83	220501	43.20	ppb		96
59)	Dibromomethane	5.59	174	91448	42.26	ppb		95
60)	MIBK (methyl isobutyl ket	6.28	43	308486	93.16	ppb		99
61)	1-Bromo-2-chloroethane	6.00	144	22533	44.58	ppb		100
62)	2-Chloroethyl vinyl ether	6.00	43	145857	95.52	ppb		100
63)	Cis-1,3-Dichloropropene	6.12	75	237515	46.88	ppb		98
64)	Toluene	6.42	91	661133	42.55	ppb		98
65)	Trans-1,3-Dichloropropene	6.61	75	207789	39.76	ppb		99
66)	1,1,2-TCA	6.77	97	126505	43.13	ppb		97
67)	2-Hexanone	7.01	43	213288	91.67	ppb		98
70)	1,2-EDB	7.22	107	133510	44.86	ppb		99
71)	Tetrachloroethene	6.91	166	159925	40.22	ppb		98
72)	1-Chlorohexane	7.67	91	210330	39.67	ppb		96
73)	1,1,1,2-Tetrachloroethane	7.75	131	133086	46.50	ppb		98
74)	m&p-Xylene	7.90	91	1111602	84.65	ppb		99
75)	o-Xylene	8.26	91	565794	42.80	ppb		98
76)	Styrene	8.28	104	453897	45.52	ppb		97
78)	1,3-Dichloropropane	6.92	76	225256	43.14	ppb		100
79)	Dibromochloromethane	7.12	129	130474	50.26	ppb		99
80)	Chlorobenzene	7.68	112	407754	41.74	ppb		98
81)	Ethylbenzene	7.79	91	724814	42.34	ppb		100
82)	Bromoform	8.43	173	83496	36.92	ppb		100
84)	Isopropylbenzene	8.62	105	726408	45.42	ppb		98
85)	1,1,2,2-Tetrachloroethane	8.89	83	168165	38.74	ppb		100
86)	1,2,3-Trichloropropane	8.93	110	56193	38.10	ppb		95
87)	t-1,4-Dichloro-2-Butene	8.95	53	46686	37.19	ppb	#	84
88)	Bromobenzene	8.89	77	334250	45.36	ppb		96
89)	n-Propylbenzene	9.02	91	886704	42.64	ppb		99
90)	4-Ethyltoluene	9.13	105	725161	42.72	ppb		99
91)	2-Chlorotoluene	9.09	91	511394	43.75	ppb		97
92)	1,3,5-Trimethylbenzene	9.19	105	611517	44.77	ppb		98
93)	4-Chlorotoluene	9.19	91	583290	43.42	ppb		97
94)	Tert-Butylbenzene	9.51	119	527429	44.64	ppb		98
95)	1,2,4-Trimethylbenzene	9.55	105	626335	45.91	ppb		99
96)	Sec-Butylbenzene	9.72	105	815799	43.21	ppb		100
97)	p-Isopropyltoluene	9.87	119	670702	42.01	ppb		100
98)	Benzyl Chloride	10.03	91	277580	36.47	ppb		98
99)	1,3-DCB	9.81	146	323231	42.63	ppb		98
100)	1,4-DCB	9.89	146	324347	42.04	ppb		98
101)	n-Butylbenzene	10.27	91	664078	44.82	ppb		99
102)	1,2-DCB	10.26	146	295638	42.75	ppb		99
103)	Hexachloroethane	10.52	201	76603	35.66	ppb	#	79
104)	1,2-Dibromo-3-chloropropan	11.02	157	36157	36.47	ppb		95
105)	1,2,4-Trichlorobenzene	11.86	180	206561	44.62	ppb		97
106)	Hexachlorobutadiene	12.05	225	97157	44.62	ppb		97
107)	Naphthalene	12.10	128	544469	46.25	ppb		98
108)	1,2,3-Trichlorobenzene	12.34	180	183548	44.48	ppb		97

(#) = qualifier out of range (m) = manual integration

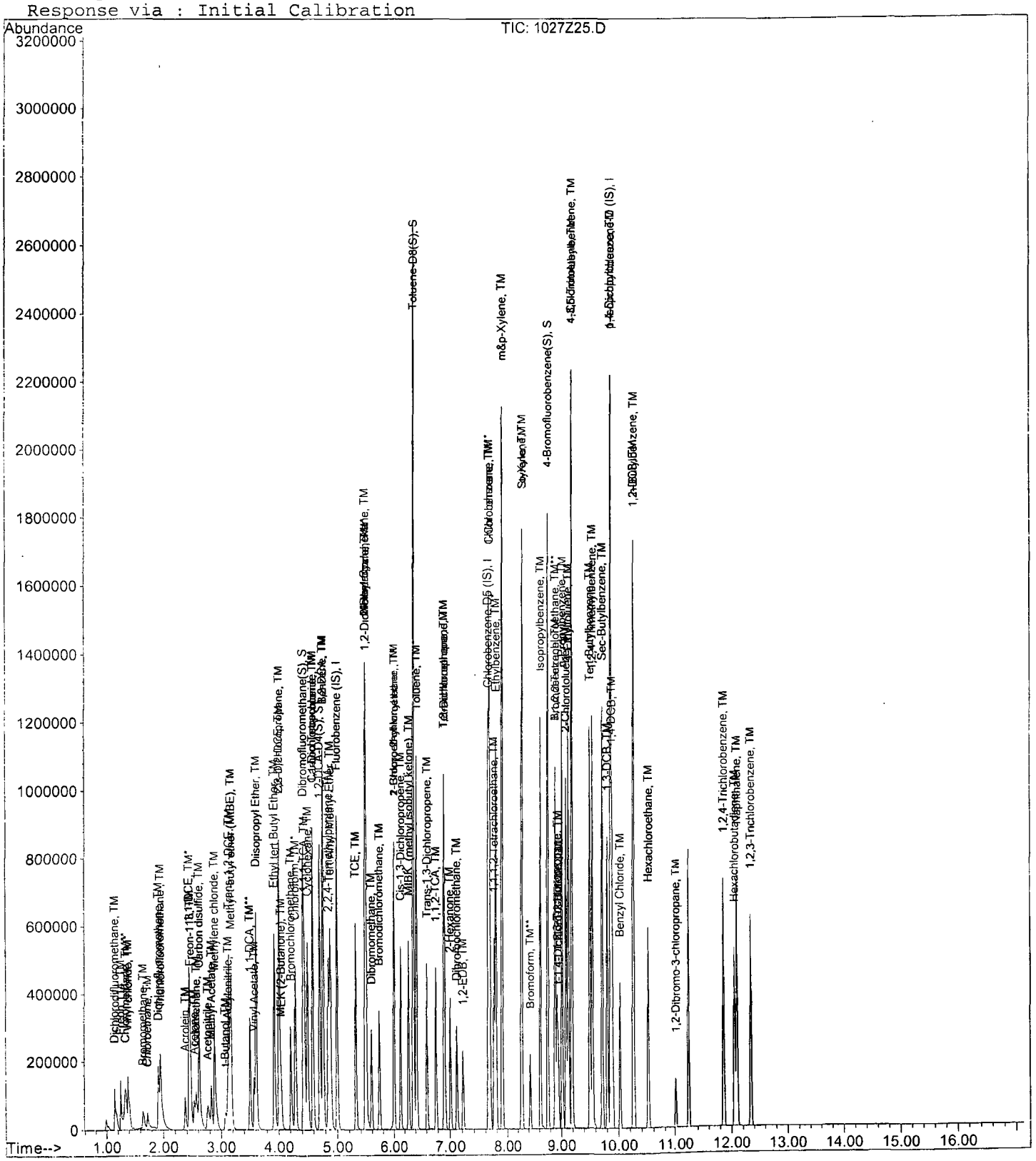
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z25.D
Acq On : 27 Oct 20 16:42
Sample : 40ug/L VOC STD 10/27/20
Misc :

Vial: 11
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z26.D Vial: 12
Acq On : 27 Oct 20 17:06 Operator: LP,DG,CH
Sample : 100ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.00	96	724651	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.65	117	511197	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	241777	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.43	111	816243	110.26	ppb		0.00
Spiked Amount 25.000			Recovery = 441.032%				
48) 1,2-DCA-D4(S)	4.70	65	963173	110.78	ppb		0.00
Spiked Amount 25.000			Recovery = 443.132%				
69) Toluene-D8(S)	6.37	98	2863740	102.04	ppb		0.00
Spiked Amount 25.000			Recovery = 408.152%				
77) 4-Bromofluorobenzene(S)	8.76	95	1145046	106.88	ppb		0.00
Spiked Amount 25.000			Recovery = 427.524%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.15	87	107600	104.26	ppb		91
4) Freon 114	1.25	85	101973	93.21	ppb	#	81
5) Chloromethane	1.34	50	455684	89.64	ppb		99
6) Vinyl chloride	1.38	62	433613	98.34	ppb		100
9) Bromomethane	1.67	94	91548	80.25	ppb		94
10) Chloroethane	1.72	64	76088	98.31	ppb		93
11) Dichlorofluoromethane	1.91	67	188704	28.40	ppb		98
12) Trichlorofluoromethane	1.98	101	39068	7.66	ppb		95
16) Acrolein	2.38	55	63255	205.96	ppb		96
17) Acetone	2.55	43	145175	100.78	ppb		100
18) Freon-113	2.45	101	303729	112.65	ppb		98
19) 1,1-DCE	2.43	61	598178	101.68	ppb		98
21) Acetonitrile	2.78	40	16952	117.97	ppb		99
22) t-Butanol	3.10	59	22960	136.48	ppb		93
23) Methyl Acetate	2.84	43	365212	107.25	ppb		98
24) Iodomethane	2.56	142	421179	99.79	ppb		99
25) Acrylonitrile	3.12	52	153618	110.74	ppb		97
26) Methylene chloride	2.89	84	420185	100.02	ppb		98
27) Carbon disulfide	2.61	76	581120	95.80	ppb		100
28) Methyl t-butyl ether (MtBE	3.18	73	1067115	115.71	ppb		99
29) Trans-1,2-DCE	3.14	61	571953	105.52	ppb		97
31) Diisopropyl Ether	3.62	45	1224605	110.87	ppb		98
33) 1,1-DCA	3.51	63	694792	104.54	ppb		99
34) Vinyl Acetate	3.58	43	540063	110.65	ppb		98
35) Ethyl tert Butyl Ether	3.93	59	1178338	118.22	ppb		95
36) MEK (2-Butanone)	4.05	43	221303	113.83	ppb		100
37) Cis-1,2-DCE	4.01	61	636788	102.24	ppb		97
38) 2,2-Dichloropropane	4.01	77	560607	112.96	ppb		100
41) Chloroform	4.29	83	692248	106.30	ppb		100
42) Bromochloromethane	4.21	49	325405	102.36	ppb		98
44) 1,1,1-TCA	4.45	97	606473	107.30	ppb		98
45) Cyclohexane	4.49	56	591859	103.95	ppb		99
46) 1,1-Dichloropropene	4.59	75	531227	99.48	ppb		98
47) 2,2,4-Trimethylpentane	4.85	57	1192383	117.26	ppb		99
49) Carbon Tetrachloride	4.59	117	496391	114.70	ppb		97
50) Tert Amyl Methyl Ether	4.89	73	1041395	120.70	ppb		93
52) 1,2-DCA	4.77	62	536992	105.12	ppb		99
53) Benzene	4.76	78	1528180	97.14	ppb		99
54) TCE	5.31	130	431272	103.03	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z26.D Vial: 12
Acq On : 27 Oct 20 17:06 Operator: LP,DG,CH
Sample : 100ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.48	43	711707	240.92	ppb		99
56)	1,2-Dichloropropane	5.49	63	376004	97.86	ppb		100
57)	Bromodichloromethane	5.73	83	506264	121.24	ppb		100
58)	Methyl Cyclohexane	5.48	83	569564	104.91	ppb		95
59)	Dibromomethane	5.59	174	244244	106.11	ppb		92
60)	MIBK (methyl isobutyl ket	6.28	43	432053	122.66	ppb		99
61)	1-Bromo-2-chloroethane	6.00	144	59682	111.02	ppb		100
62)	2-Chloroethyl vinyl ether	6.00	43	191698	118.02	ppb		99
63)	Cis-1,3-Dichloropropene	6.12	75	645818	119.83	ppb		98
64)	Toluene	6.42	91	1633507	98.83	ppb		97
65)	Trans-1,3-Dichloropropene	6.61	75	571950	100.45	ppb		98
66)	1,1,2-TCA	6.77	97	342255	109.71	ppb		99
67)	2-Hexanone	7.02	43	300621	121.47	ppb		98
70)	1,2-EDB	7.22	107	364701	116.64	ppb		99
71)	Tetrachloroethene	6.91	166	393711	94.26	ppb		98
72)	1-Chlorohexane	7.67	91	510114	91.59	ppb		98
73)	1,1,1,2-Tetrachloroethane	7.75	131	361742	120.33	ppb		99
74)	m&p-Xylene	7.90	91	2650254	192.13	ppb		97
75)	o-Xylene	8.27	91	1381280	99.47	ppb		99
76)	Styrene	8.28	104	1106068	105.59	ppb		100
78)	1,3-Dichloropropane	6.92	76	584137	106.49	ppb		98
79)	Dibromochloromethane	7.12	129	372138	136.47	ppb		100
80)	Chlorobenzene	7.68	112	998062	97.24	ppb		100
81)	Ethylbenzene	7.79	91	1838141	102.20	ppb		100
82)	Bromoform	8.43	173	254719	101.78	ppb		100
84)	Isopropylbenzene	8.62	105	1782985	113.94	ppb		99
85)	1,1,2,2-Tetrachloroethane	8.89	83	438359	100.91	ppb		99
86)	1,2,3-Trichloropropane	8.93	110	150813	101.14	ppb		97
87)	t-1,4-Dichloro-2-Butene	8.95	53	130920	101.61	ppb	#	82
88)	Bromobenzene	8.89	77	848299	117.65	ppb		96
89)	n-Propylbenzene	9.02	91	2164332	106.38	ppb		99
90)	4-Ethyltoluene	9.13	105	1764892	106.28	ppb		99
91)	2-Chlorotoluene	9.09	91	1287359	112.56	ppb		97
92)	1,3,5-Trimethylbenzene	9.19	105	1463929	109.53	ppb		97
93)	4-Chlorotoluene	9.19	91	1414707	107.64	ppb		94
94)	Tert-Butylbenzene	9.51	119	1287161	111.35	ppb		99
95)	1,2,4-Trimethylbenzene	9.55	105	1536383	115.09	ppb		100
96)	Sec-Butylbenzene	9.72	105	1980954	107.23	ppb		100
97)	p-Isopropyltoluene	9.87	119	1637064	104.81	ppb		99
98)	Benzyl Chloride	10.03	91	806250	102.00	ppb		98
99)	1,3-DCB	9.81	146	804889	108.51	ppb		98
100)	1,4-DCB	9.90	146	805279	106.67	ppb		99
101)	n-Butylbenzene	10.27	91	1584947	109.34	ppb		100
102)	1,2-DCB	10.26	146	725667	107.25	ppb		99
103)	Hexachloroethane	10.52	201	229942	102.34	ppb	#	72
104)	1,2-Dibromo-3-chloropropan	11.02	157	104549	101.92	ppb		96
105)	1,2,4-Trichlorobenzene	11.86	180	529860	116.98	ppb		96
106)	Hexachlorobutadiene	12.05	225	244254	114.64	ppb		97
107)	Naphthalene	12.10	128	1448323	125.75	ppb		98
108)	1,2,3-Trichlorobenzene	12.34	180	470709	116.60	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

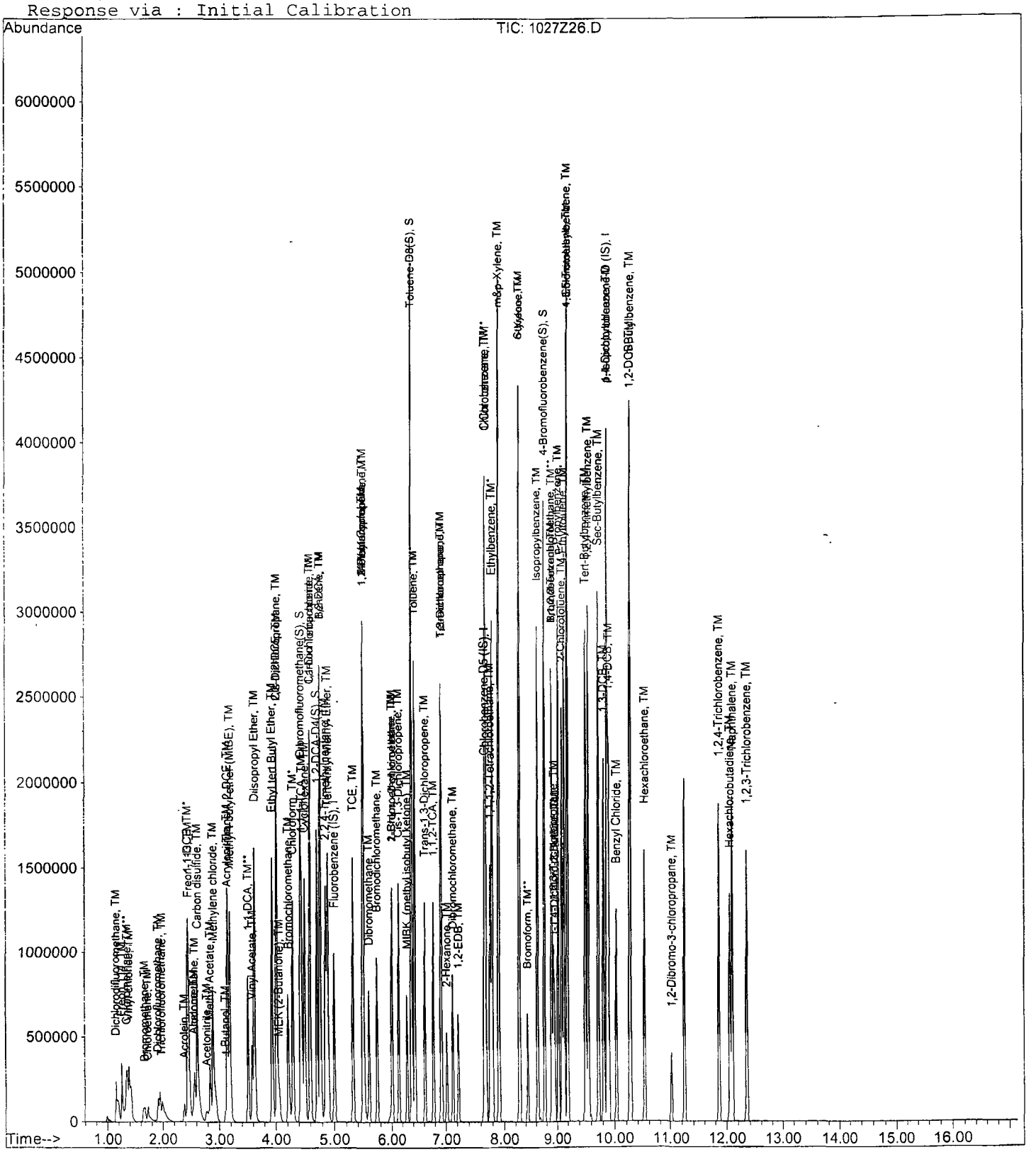
Data File : M:\ZEUS\DATA\201027\1027Z26.D
Acq On : 27 Oct 20 17:06
Sample : 100ug/L VOC STD 10/27/20
Misc :

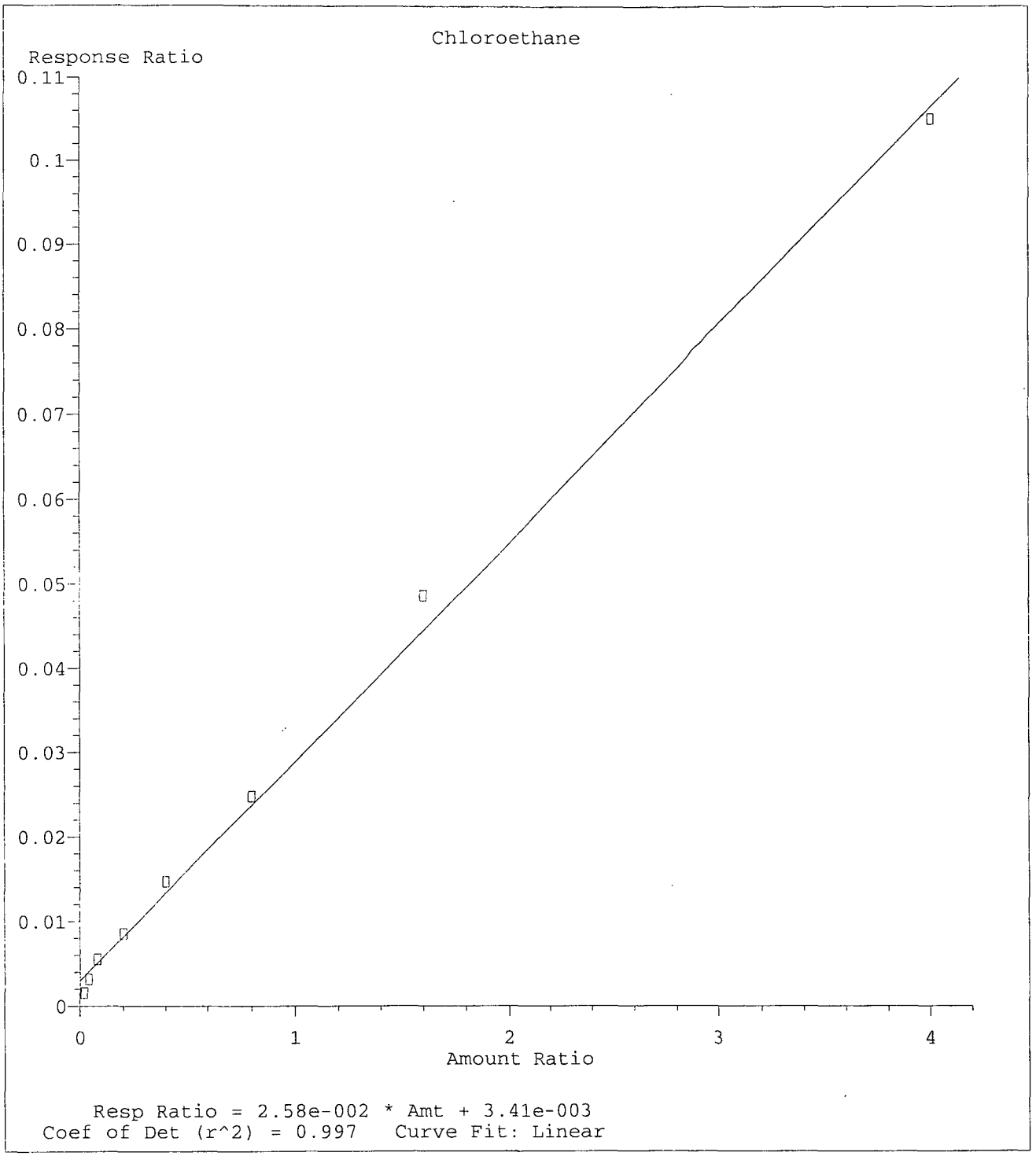
Vial: 12
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 28 9:57 2020

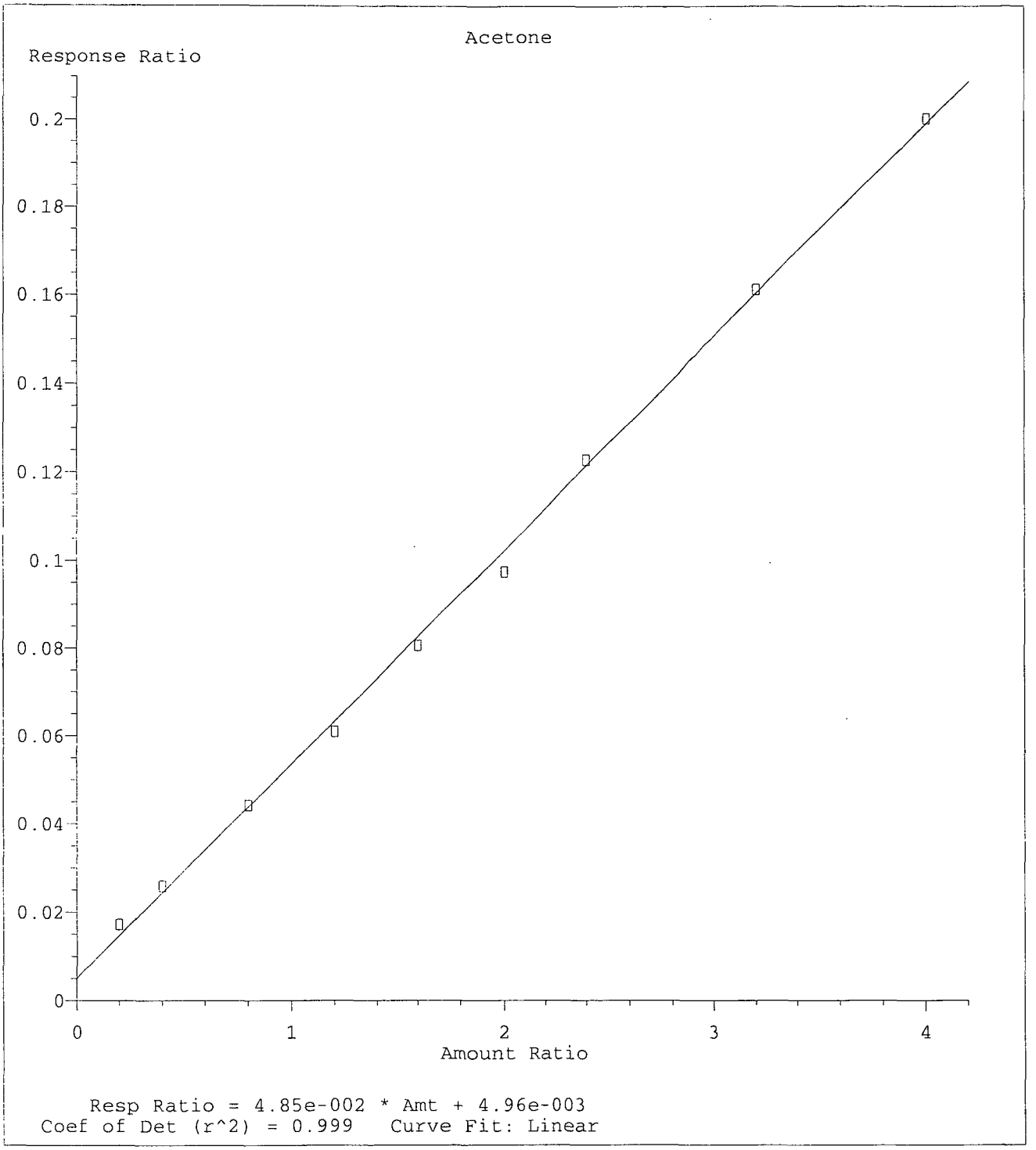
Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration

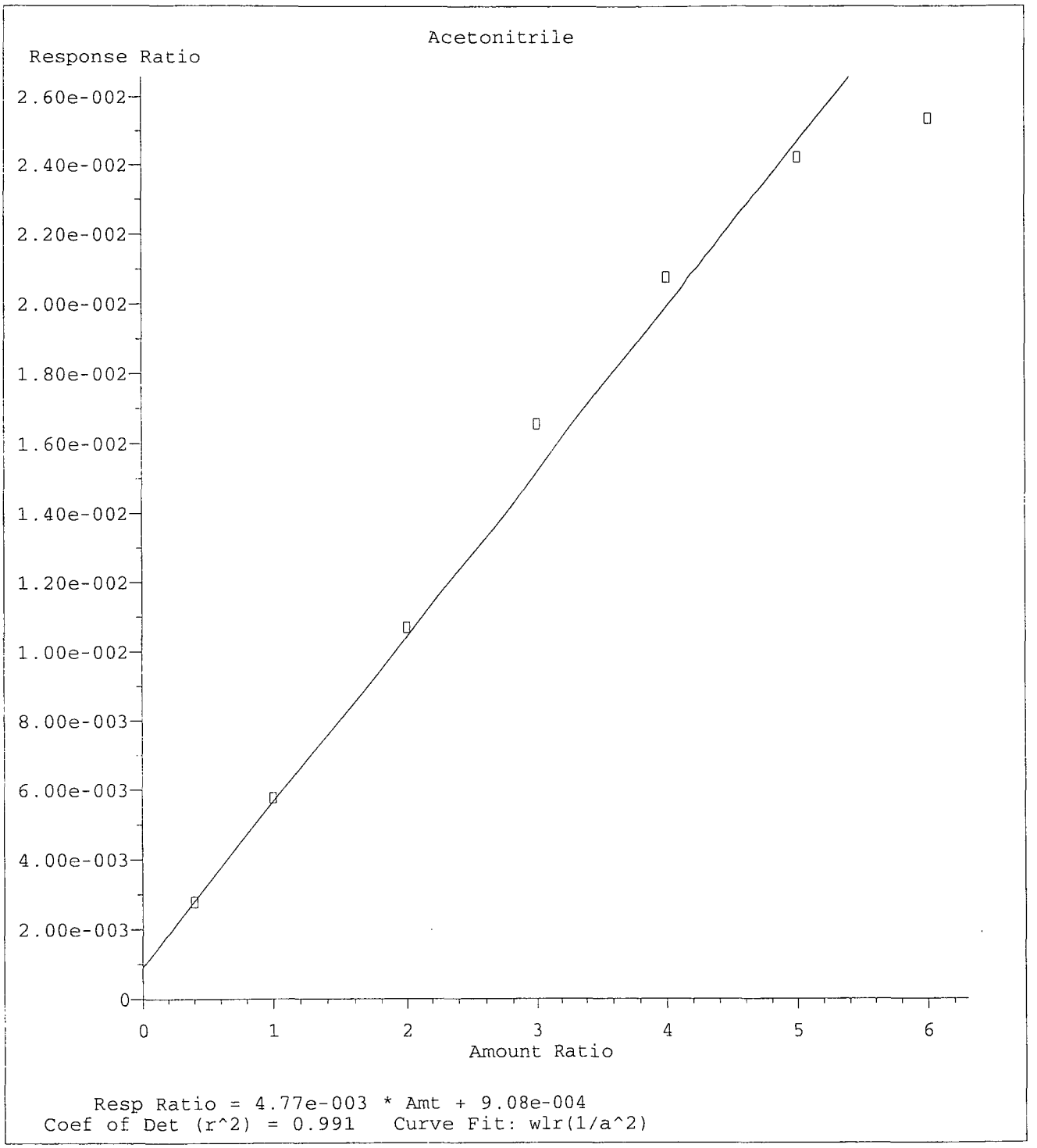




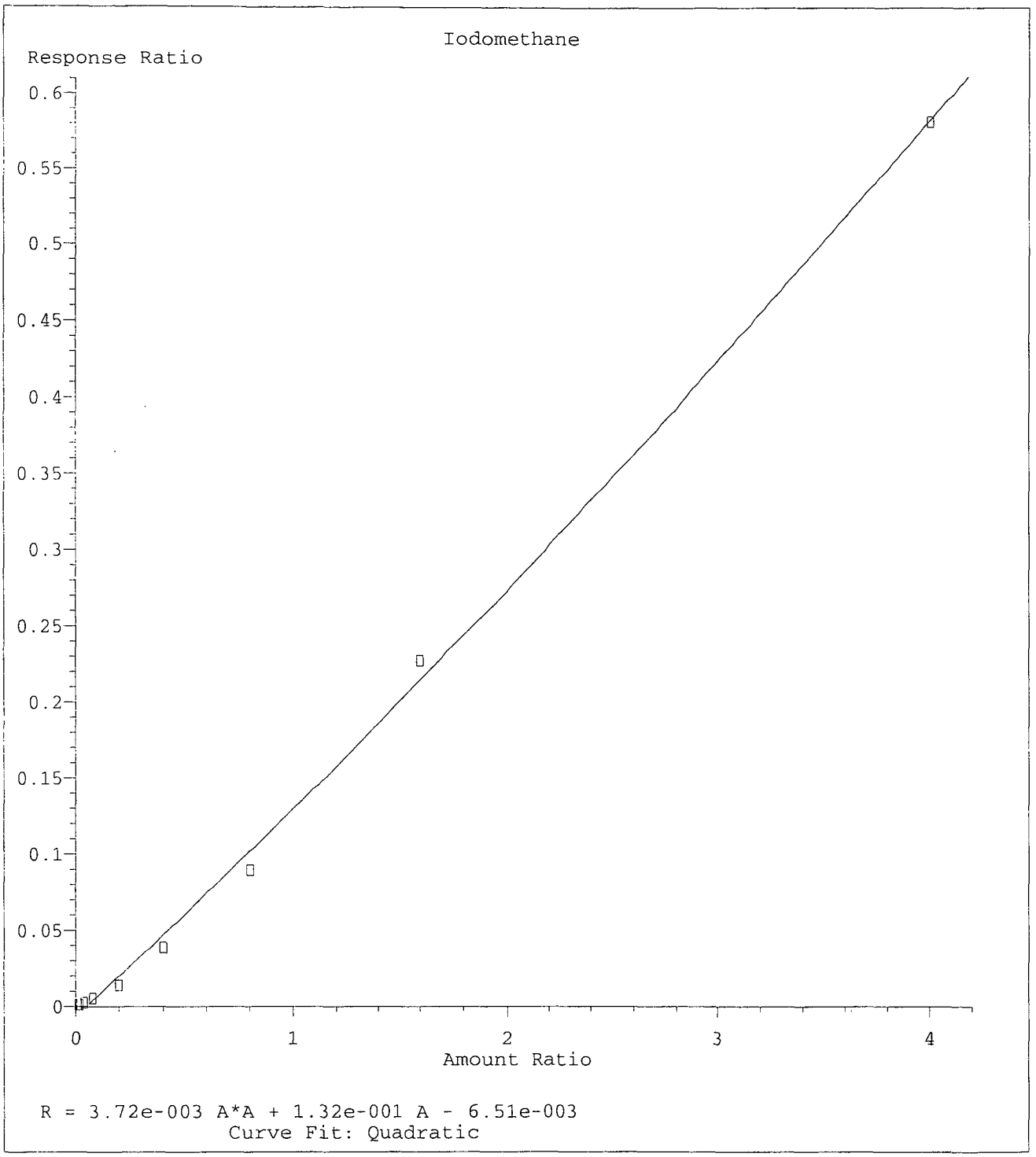
Method Name: M:\ZEUS\DATA\201027\Z1027W.M
Calibration Table Last Updated: Wed Oct 28 09:56:41 2020



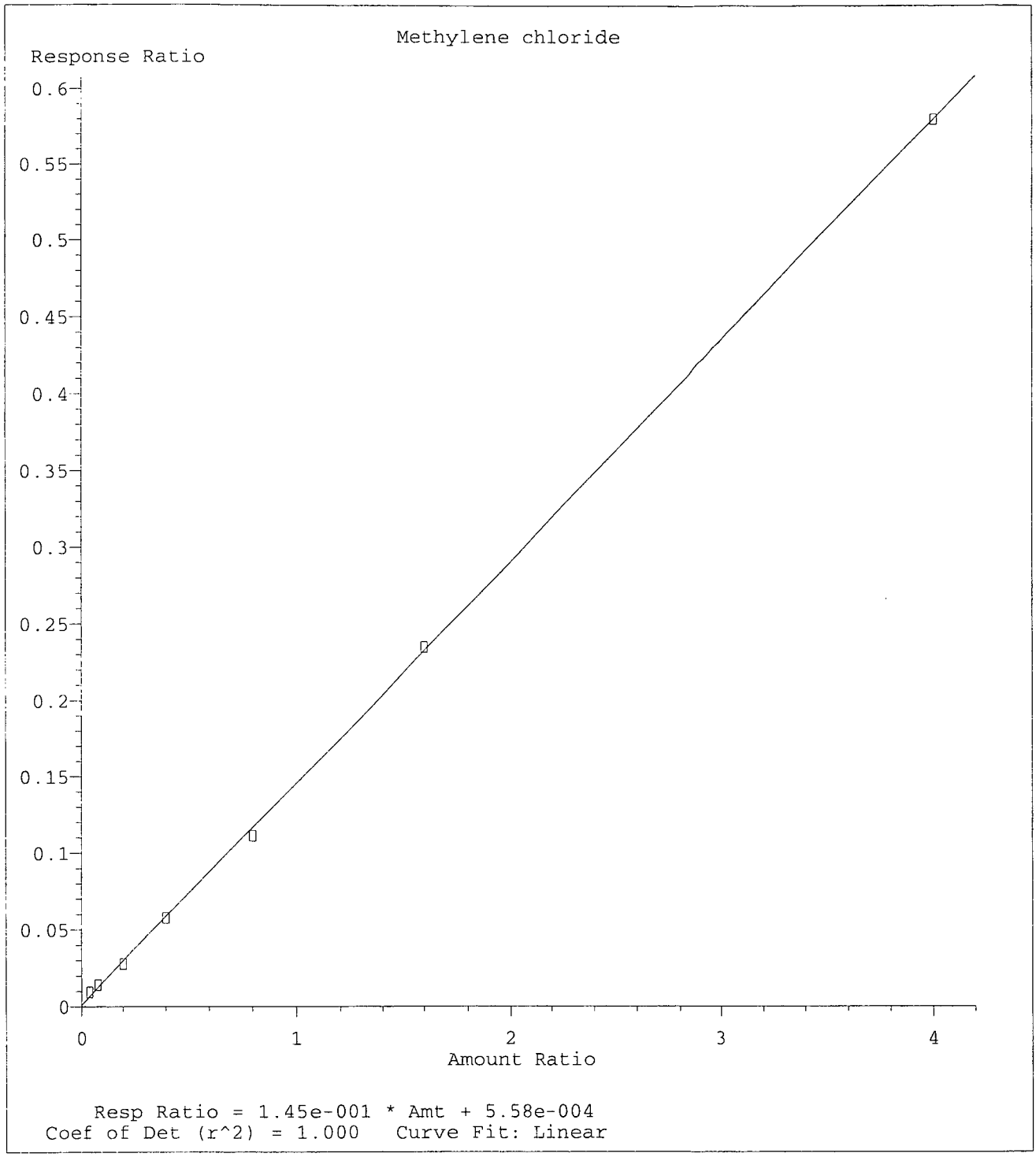
Method Name: M:\ZEUS\DATA\201027\Z1027W.M
Calibration Table Last Updated: Wed Oct 28 09:56:41 2020



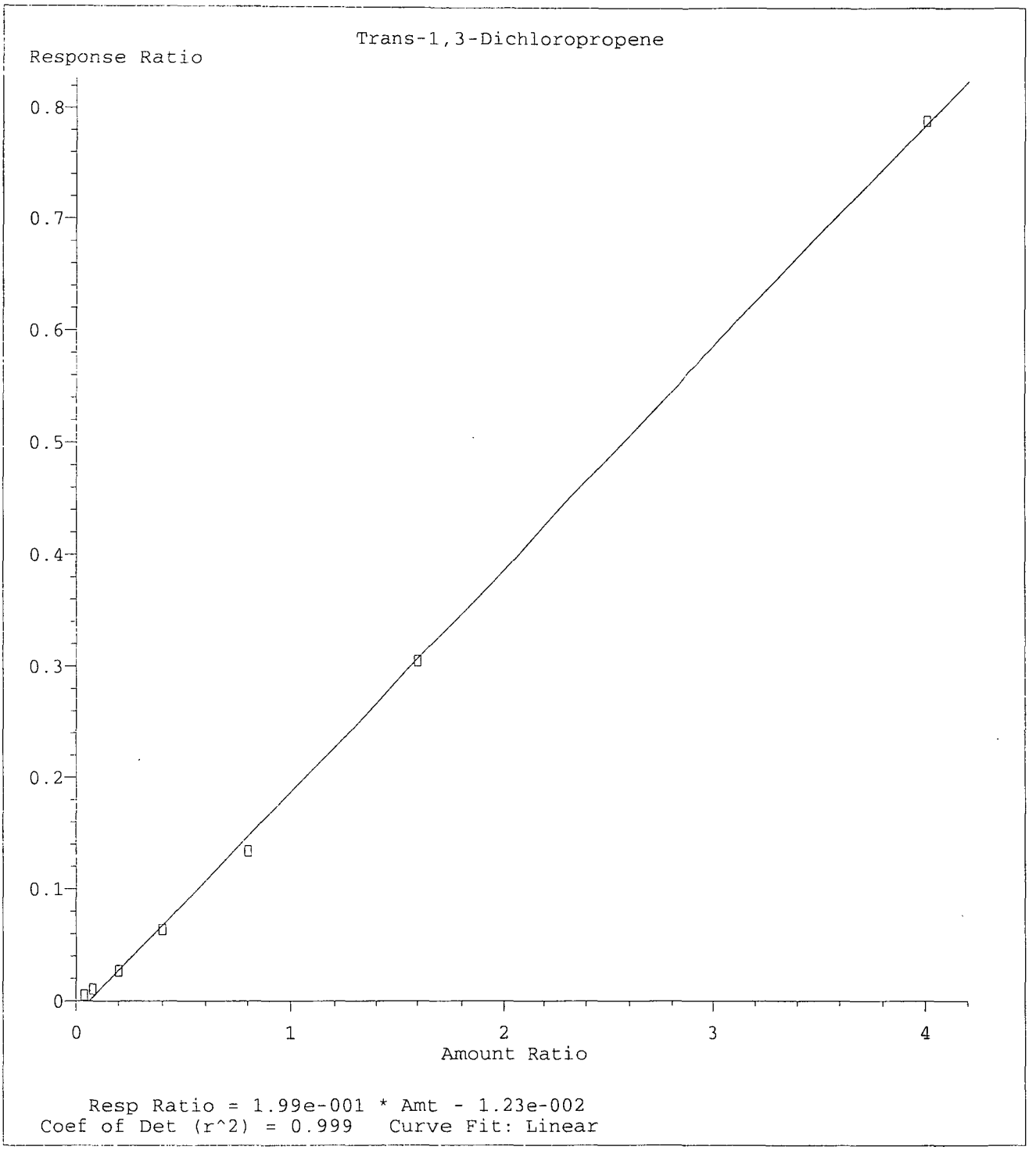
Method Name: M:\ZEUS\DATA\201027\Z1027W.M
Calibration Table Last Updated: Wed Oct 28 09:56:41 2020



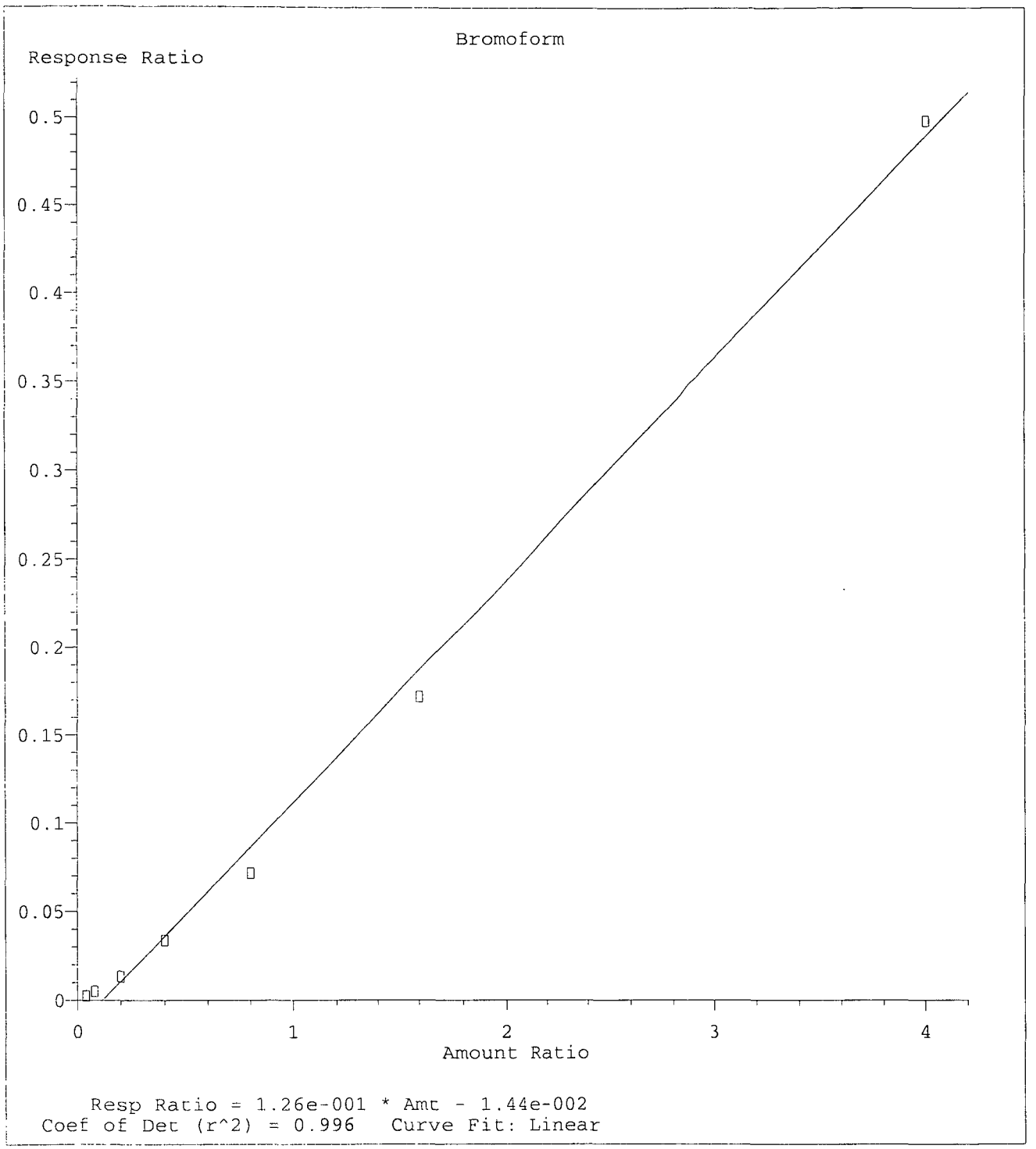
Method Name: M:\ZEUS\DATA\201027\Z1027W.M
Calibration Table Last Updated: Wed Oct 28 09:56:41 2020



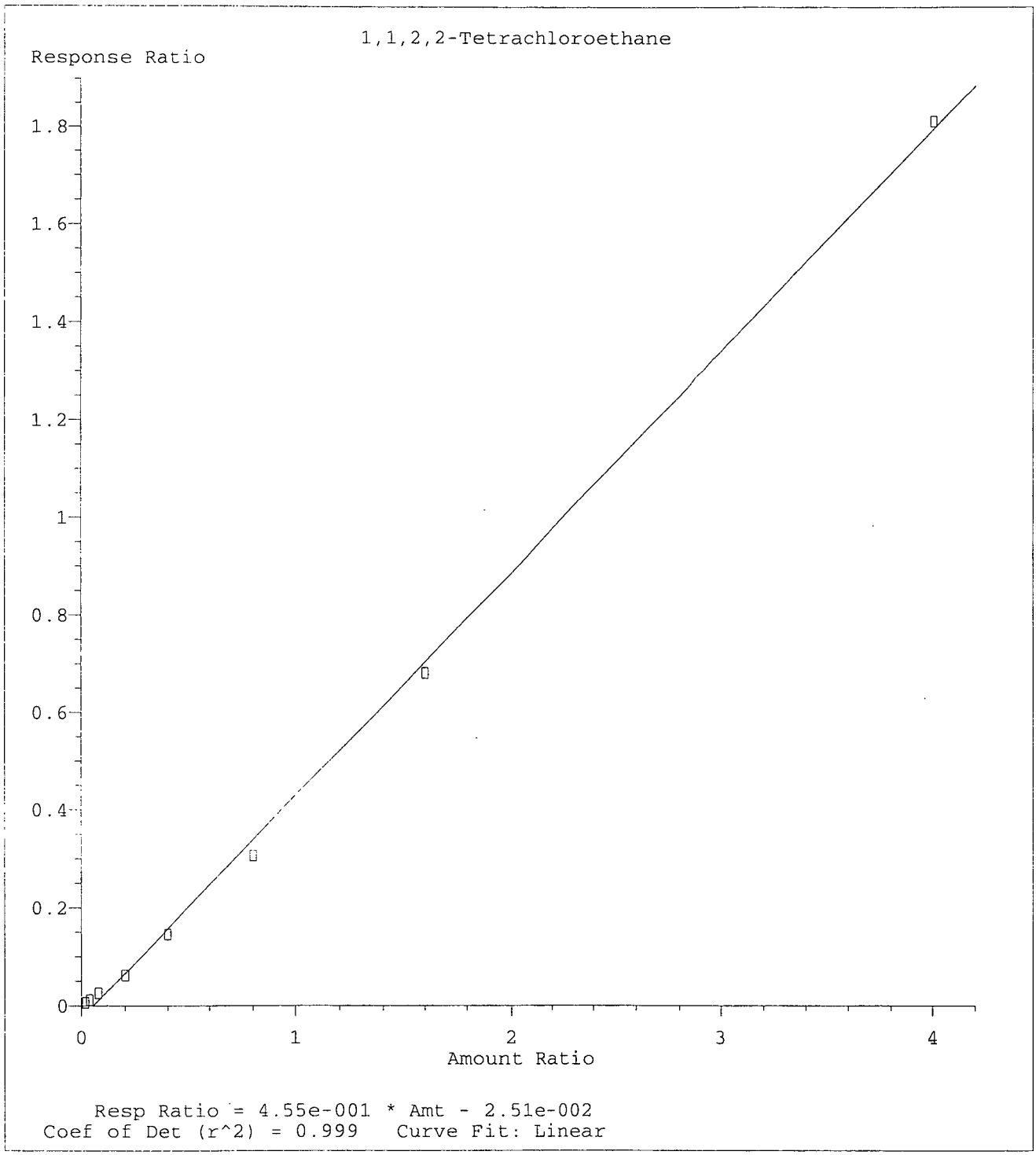
Method Name: M:\ZEUS\DATA\201027\Z1027W.M
Calibration Table Last Updated: Wed Oct 28 09:56:41 2020



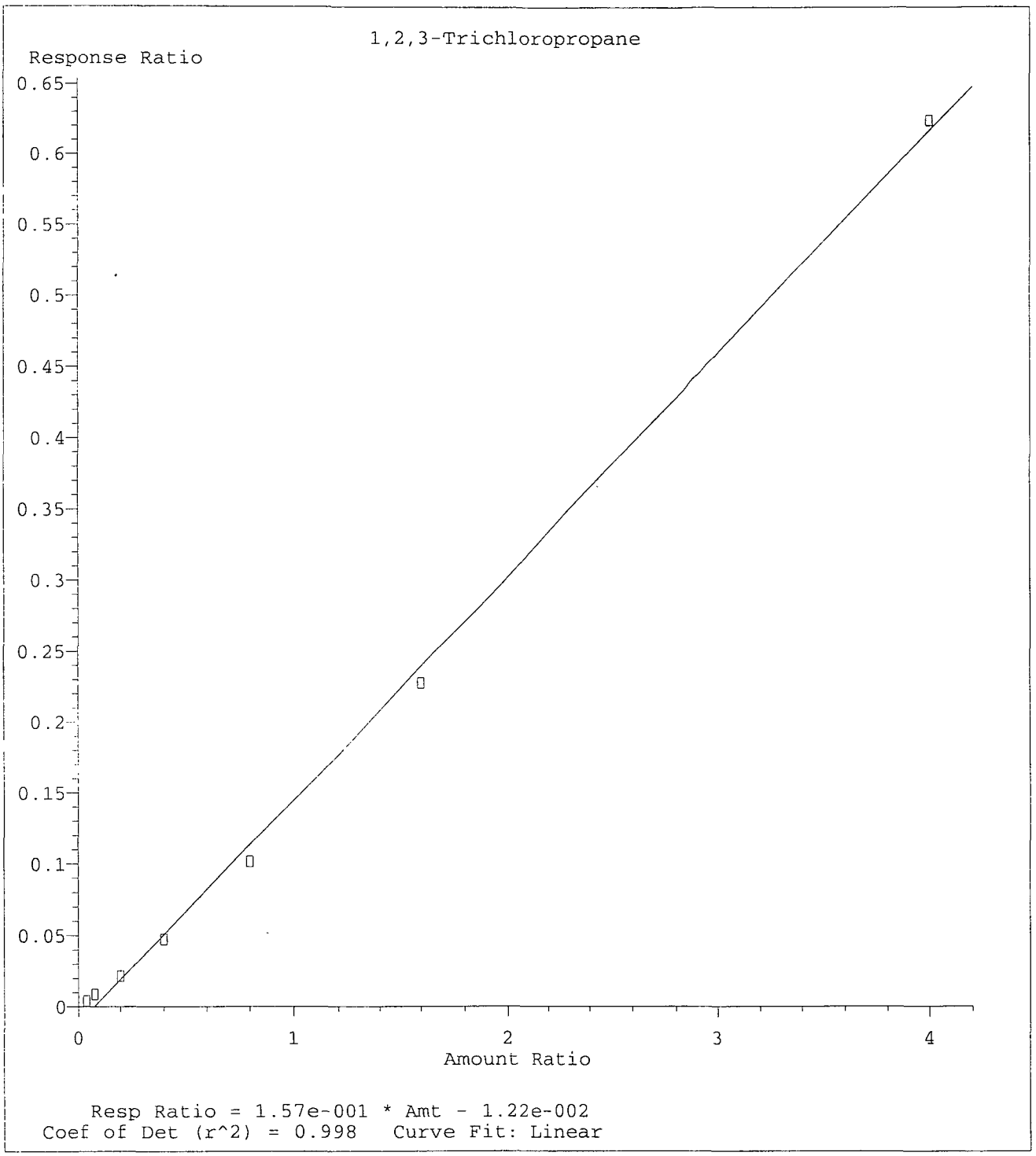
Method Name: M:\ZEUS\DATA\201027\Z1027W.M
Calibration Table Last Updated: Wed Oct 28 09:56:41 2020



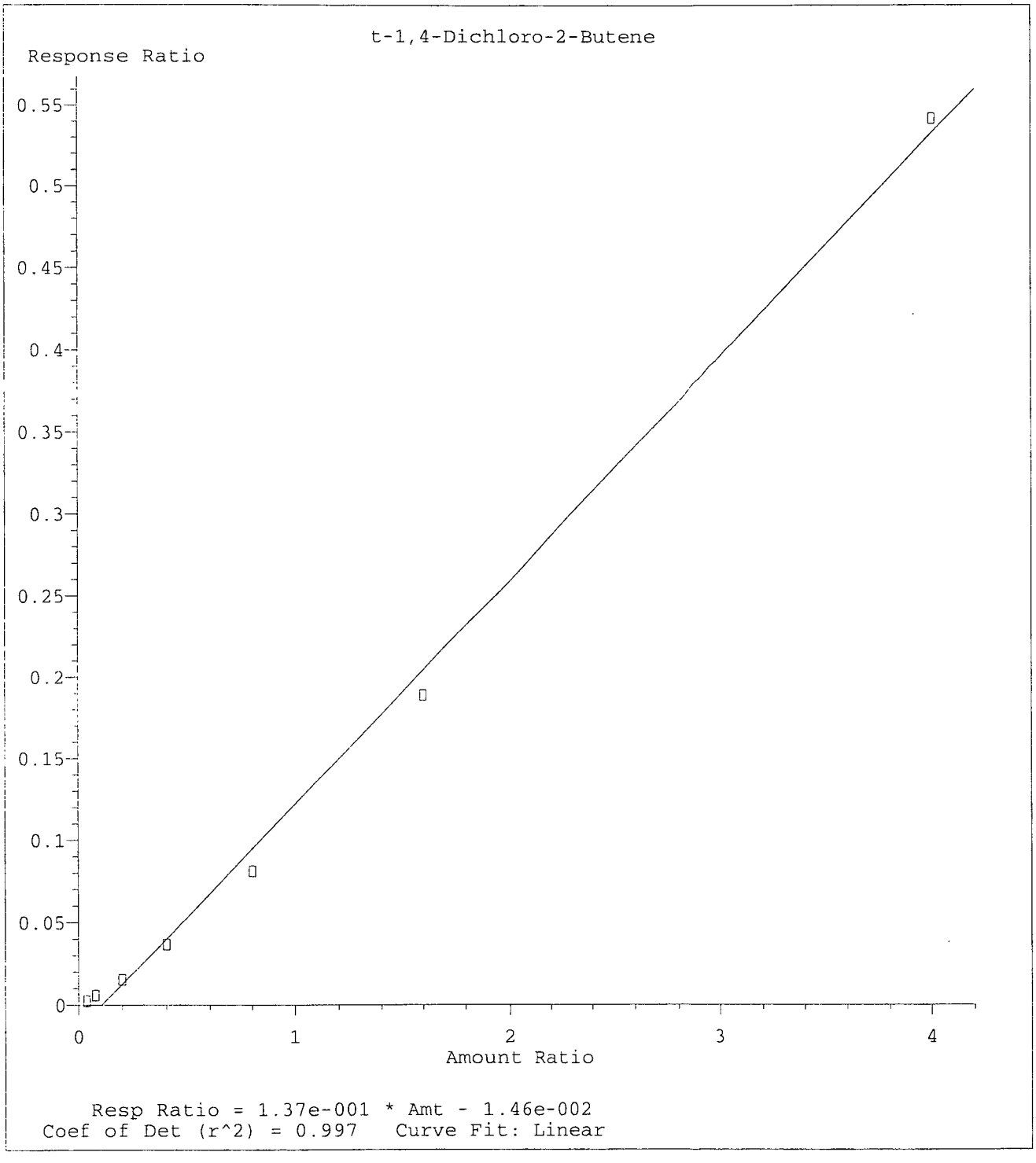
Method Name: M:\ZEUS\DATA\201027\Z1027W.M
Calibration Table Last Updated: Wed Oct 28 09:56:41 2020



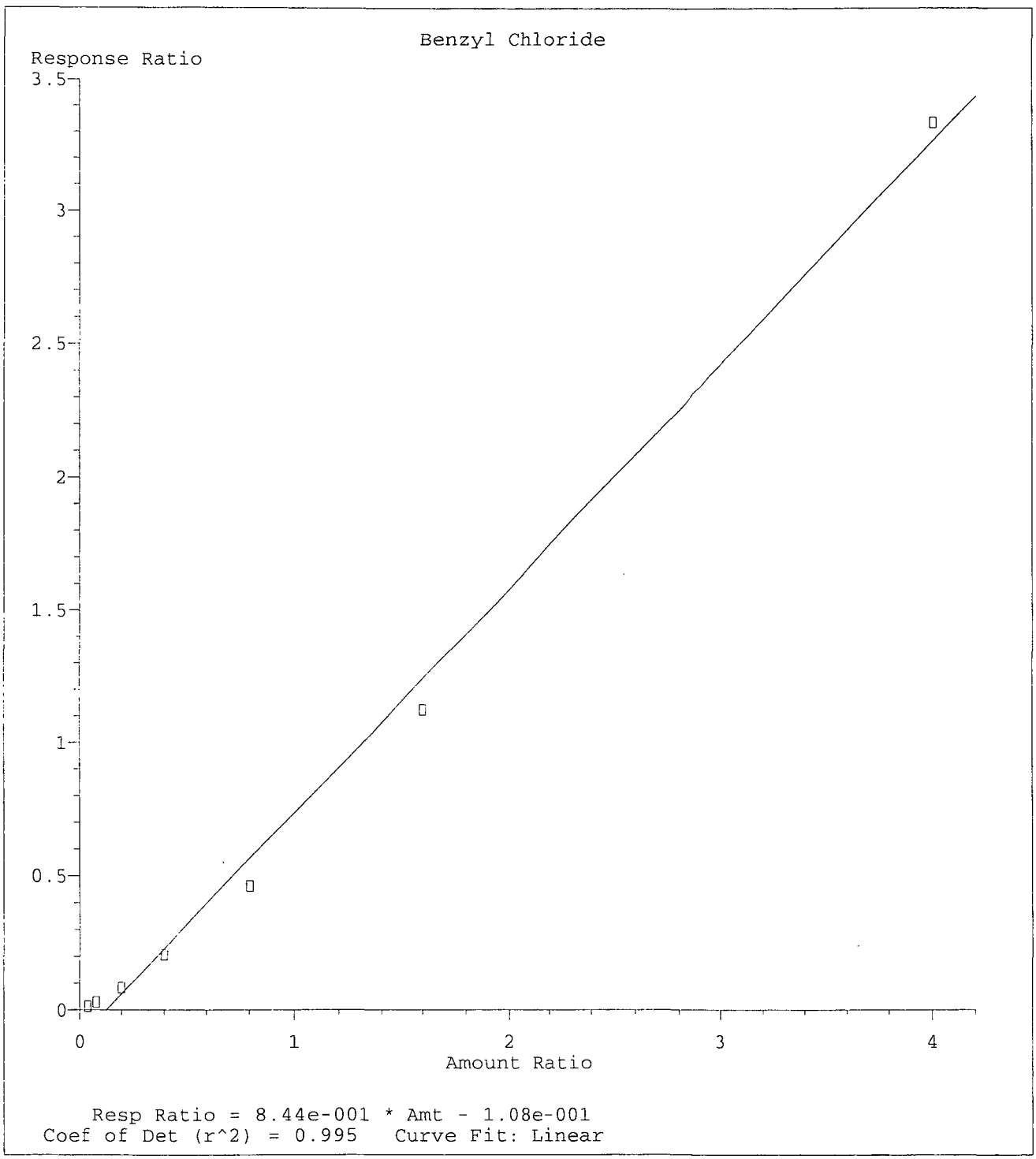
Method Name: M:\ZEUS\DATA\201027\Z1027W.M
Calibration Table Last Updated: Wed Oct 28 09:56:41 2020



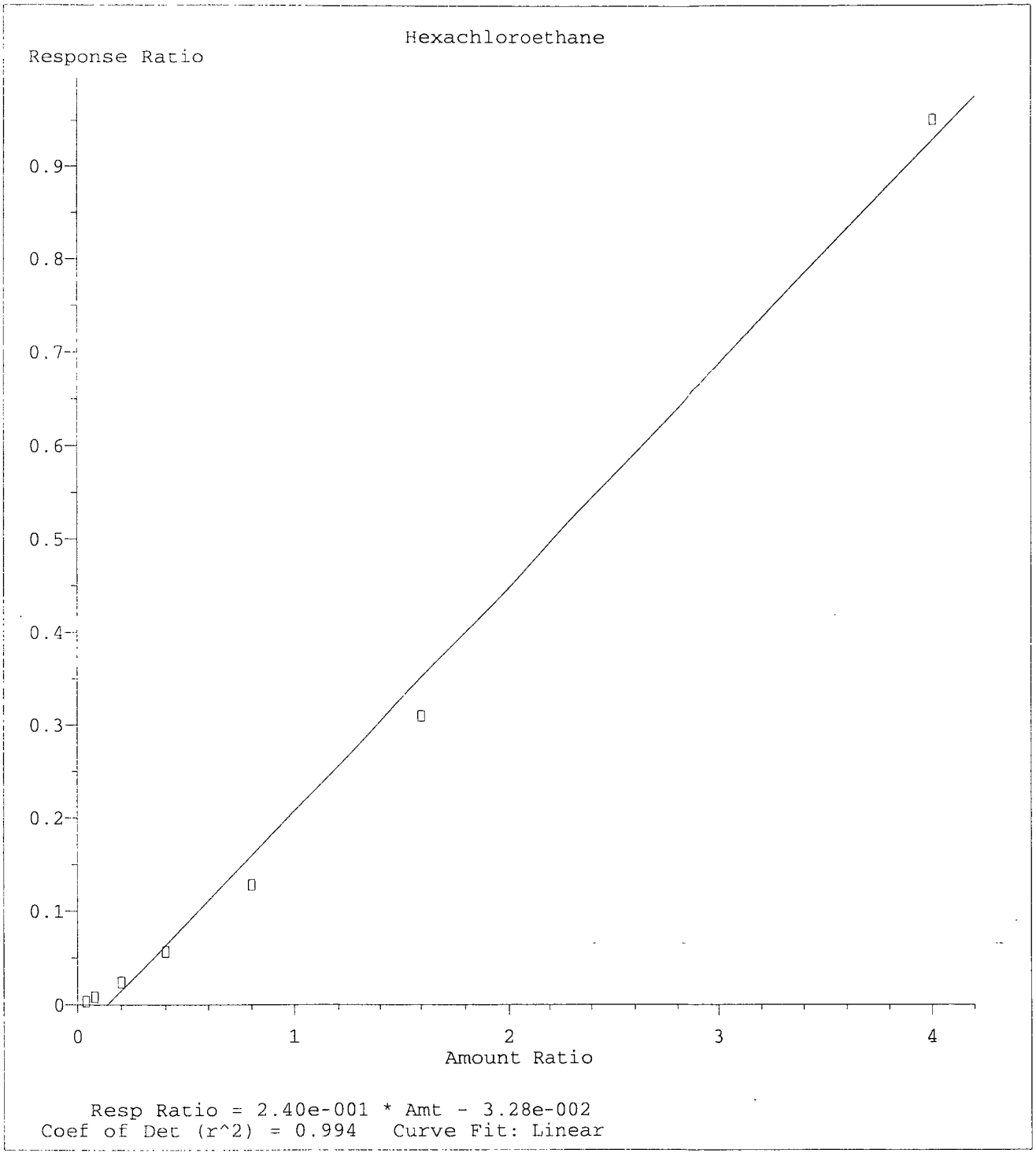
Method Name: M:\ZEUS\DATA\201027\Z1027W.M
Calibration Table Last Updated: Wed Oct 28 09:56:41 2020



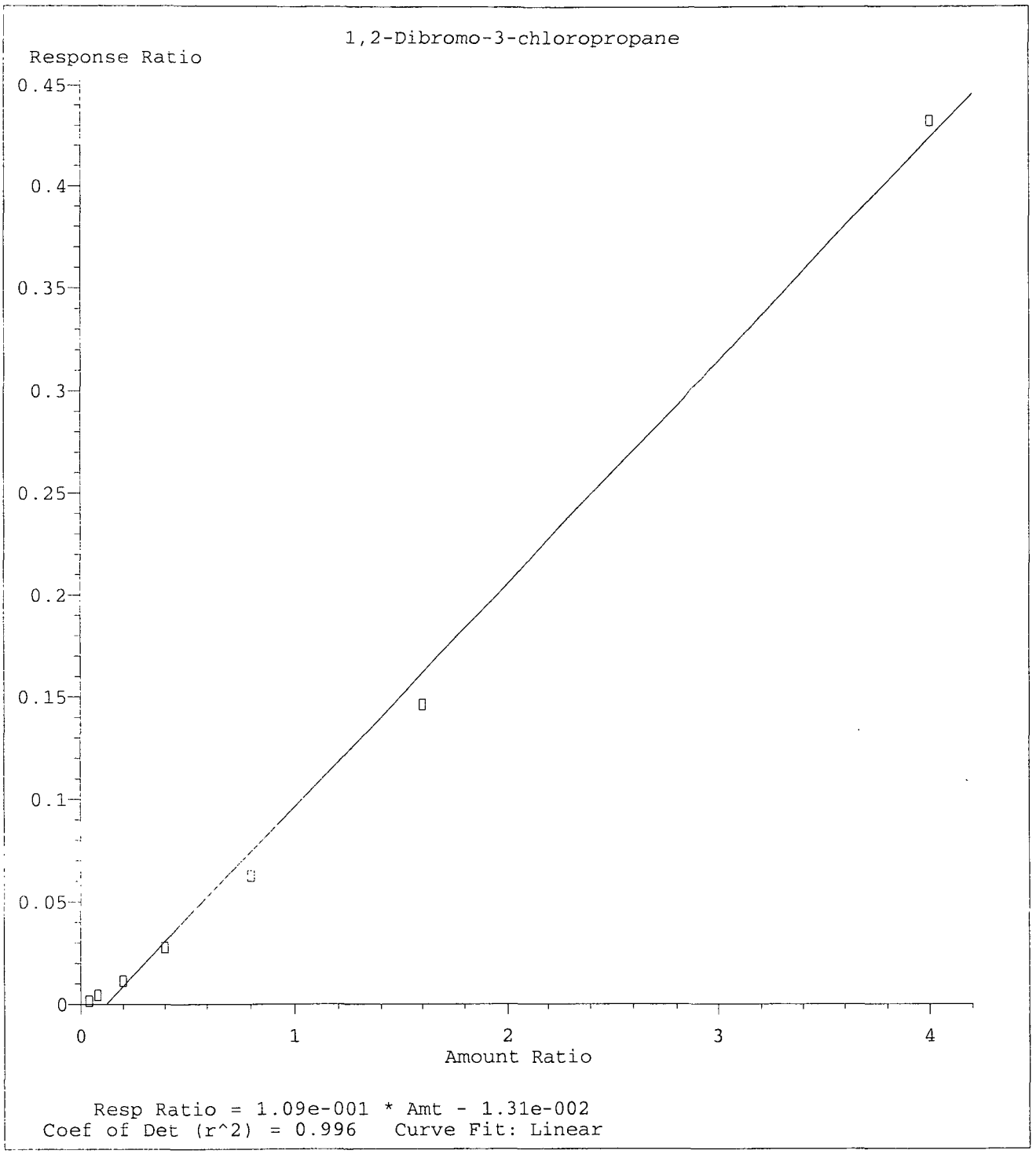
Method Name: M:\ZEUS\DATA\201027\Z1027W.M
Calibration Table Last Updated: Wed Oct 28 09:56:41 2020



Method Name: M:\ZEUS\DATA\201027\Z1027W.M
Calibration Table Last Updated: Wed Oct 28 09:56:41 2020



Method Name: M:\ZEUS\DATA\201027\Z1027W.M
Calibration Table Last Updated: Wed Oct 28 09:56:41 2020



Method Name: M:\ZEUS\DATA\201027\Z1027W.M
Calibration Table Last Updated: Wed Oct 28 09:56:41 2020

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/27/20
Instrument: ZEUS
Initial Cal. Date: 10/27/20
Data File: 1027Z28.D

		Compound	MEAN	CCRF	%D		%Drift	
1	TM	Dichlorodifluoromethane	0.0356	0.0335	5.8	TM		
2	TM	Freon 114	0.0377	0.0484	28	TM		*NT
3	TM**	Chloromethane	0.1754	0.1424	19	TM**		
4	TM*	Vinyl chloride	0.1521	0.1347	11	TM*		
5		Butane	0.0000	0.0004	0.00			
6	TM	Bromomethane	0.0394	0.0432	9.7	TM		
7	TML	Chloroethane	0.0489	0.0359	27	TML	6.1	
8	TM	Dichlorofluoromethane	0.2292	0.2204	3.9	TM		
9	TM	Trichlorofluoromethane	0.1759	0.1735	1.4	TM		
10	TM	Pentane	0.0000	0.0016	0.00	TM		
11	TM	Acrolein	0.0106	0.0107	0.86	TM		
12	TML	Acetone	0.0564	0.0472	16	TML	7.8	
13	TM	Freon-113	0.0930	0.1003	7.8	TM		
14	TM*	1,1-DCE	0.2030	0.1969	3.0	TM*		
15	TM	2-Propanol	0.0000	0.0001	0.00	TM		
16	TML	Acetonitrile	0.0054	0.0048	12	TML	3.9	
17	TM	t-Butanol	0.0058	0.0063	8.8	TM		
18	TM	Methyl Acetate	0.1175	0.1101	6.3	TM		
19	TMQ	Iodomethane	0.0941	0.0854	9.3	TMQ	24	*NT
20	TM	Acrylonitrile	0.0479	0.0498	4.1	TM		
21	TML	Methylene chloride	0.1606	0.1483	7.7	TML	1.5	
22	TM	Carbon disulfide	0.2093	0.2089	0.17	TM		
23	TM	Methyl t-butyl ether (MtBE)	0.3182	0.3339	5.0	TM		
24	TM	Trans-1,2-DCE	0.1870	0.1923	2.9	TM		
25	TM	Diisopropyl Ether	0.3811	0.4052	6.3	TM		
26	TM**	1,1-DCA	0.2293	0.2417	5.4	TM**		
27	TM	Vinyl Acetate	0.1684	0.1396	17	TM		
28	TM	Ethyl tert Butyl Ether	0.3439	0.3735	8.6	TM		
29	TM	MEK (2-Butanone)	0.0671	0.0641	4.5	TM		
30	TM	Cis-1,2-DCE	0.2149	0.2168	0.91	TM		
31	TM	2,2-Dichloropropane	0.1712	0.1734	1.3	TM		
32	TM	2-Methylpentane	0.0000	0.0271	0.00	TM		
33	TM	3-Methylpentane	0.0000	0.0787	0.00	TM		
34	TM*	Chloroform	0.2247	0.2290	1.9	TM*		
35	TM	Bromochloromethane	0.1097	0.1108	1.0	TM		
36	TM	1,1,1-TCA	0.1950	0.1938	0.62	TM		
37	TM	Cyclohexane	0.1964	0.2056	4.6	TM		
38	TM	1,1-Dichloropropene	0.1842	0.1806	2.0	TM		
39	TM	2,2,4-Trimethylpentane	0.3508	0.3649	4.0	TM		
40	TM	Carbon Tetrachloride	0.1493	0.1452	2.8	TM		
		Average			6.3			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/27/20
Matrix: Water Instrument: ZEUS
Cal. Date: 10/27/20
Data File: 1027Z28.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	Tert Amyl Methyl Ether	0.2977	0.3216	8.0	TM	
42	TM	Methylcyclopentane	0.0000	0.0193	0.00	TM	
43	TM	1,2-DCA	0.1762	0.1790	1.6	TM	
44	TM	Benzene	0.5427	0.5419	0.15	TM	
45	TM	TCE	0.1444	0.1473	2.0	TM	
46	TM	2-Pentanone	0.1019	0.0988	3.0	TM	
47	TM*	1,2-Dichloropropane	0.1326	0.1347	1.6	TM*	
48	TM	Bromodichloromethane	0.1441	0.1480	2.7	TM	
49	TM	Methyl Cyclohexane	0.1873	0.1978	5.6	TM	
50	TM	Dibromomethane	0.0794	0.0796	0.21	TM	
51	TM	MIBK (methyl isobutyl ketone)	0.1215	0.1177	3.2	TM	
52	TM	1-Bromo-2-chloroethane	0.0185	0.0202	9.0	TM	
53	TM	2-Chloroethyl vinyl ether	0.0560	0.0598	6.8	TM	
54	TM	Cis-1,3-Dichloropropene	0.1859	0.1935	4.1	TM	
55	TM*	Toluene	0.5702	0.5733	0.55	TM*	
56	TML	Trans-1,3-Dichloropropene	0.1583	0.1640	3.6	TML	2.4
57	TM	1,1,2-TCA	0.1076	0.1073	0.27	TM	
58	TM	2-Hexanone	0.0854	0.0825	3.4	TM	
59	TM	1,2-EDB	0.1529	0.1577	3.2	TM	
60	TM	Tetrachloroethene	0.2043	0.1989	2.6	TM	
61	TM	1-Chlorohexane	0.2724	0.2703	0.76	TM	
62	TM	1,1,1,2-Tetrachloroethane	0.1470	0.1506	2.5	TM	
63	TM	m&p-Xylene	0.6746	0.7064	4.7	TM	
64	TM	o-Xylene	0.6791	0.7131	5.0	TM	
65	TM	Styrene	0.5123	0.5486	7.1	TM	
66	TM	1,3-Dichloropropane	0.2683	0.2747	2.4	TM	
67	TM	Dibromochloromethane	0.1334	0.1402	5.1	TM	
68	TM**	Chlorobenzene	0.5019	0.5086	1.3	TM**	
69	TM*	Ethylbenzene	0.8796	0.9023	2.6	TM*	
70	TM**L	Bromoform	0.0851	0.0800	6.0	TM**L	7.9
71	TM	Isopropylbenzene	1.618	1.675	3.5	TM	
72	TM**L	1,1,2,2-Tetrachloroethane	0.3572	0.3424	4.2	TM**L	11
73	TML	1,2,3-Trichloropropane	0.1231	0.1208	1.9	TML	3.8
74	TML	t-1,4-Dichloro-2-Butene	0.0942	0.0937	0.46	TML	4.8
75	TM	Bromobenzene	0.7456	0.7615	2.1	TM	
76	TM	n-Propylbenzene	2.104	2.086	0.84	TM	
77	TM	4-Ethyltoluene	1.717	1.794	4.5	TM	
78	TM	2-Chlorotoluene	1.183	1.204	1.8	TM	
79	TM	1,3,5-Trimethylbenzene	1.382	1.463	5.9	TM	
80	TM	4-Chlorotoluene	1.359	1.424	4.8	TM	
		Average			3.2		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/27/20
Matrix: Water Instrument: ZEUS
Cal. Date: 10/27/20
Data File: 1027Z28.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	Tert-Butylbenzene	1.195	1.219	2.0	TM	
82	TM	1,2,4-Trimethylbenzene	1.380	1.463	6.0	TM	
83	TM	Sec-Butylbenzene	1.910	1.907	0.16	TM	
84	TM	p-Isopropyltoluene	1.615	1.590	1.6	TM	
85	TML	Benzyl Chloride	0.5368	0.4716	12	TML	12
86	TM	1,3-DCB	0.7670	0.7561	1.4	TM	
87	TM	1,4-DCB	0.7806	0.7838	0.42	TM	
88	TM	n-Butylbenzene	1.499	1.536	2.5	TM	
89	TM	1,2-DCB	0.6996	0.7055	0.84	TM	
90	TML	Hexachloroethane	0.1496	0.1368	8.5	TML	9.0
91	TML	1,2-Dibromo-3-chloropropane	0.0711	0.0652	8.3	TML	10
92	TM	1,2,4-Trichlorobenzene	0.4683	0.4702	0.40	TM	
93	TM	Hexachlorobutadiene	0.2203	0.2212	0.41	TM	
94	TM	Naphthalene	1.191	1.202	0.92	TM	
95	TM	1,2,3-Trichlorobenzene	0.4174	0.4180	0.12	TM	
96							
97							
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			3.0		

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z28.D Vial: 14
Acq On : 27 Oct 20 17:52 Operator: LP,DG,CH
Sample : (SS)10ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.00	96	706098	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.65	117	493196	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	262216	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.42	111	187785	26.03	ppb		0.00
Spiked Amount 25.000			Recovery = 104.128%				
48) 1,2-DCA-D4(S)	4.70	65	224163	26.46	ppb		0.00
Spiked Amount 25.000			Recovery = 105.840%				
69) Toluene-D8(S)	6.36	98	707242	26.12	ppb		0.00
Spiked Amount 25.000			Recovery = 104.476%				
77) 4-Bromofluorobenzene(S)	8.75	95	275995	26.70	ppb		0.00
Spiked Amount 25.000			Recovery = 106.808%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.15	87	9473	9.42	ppb		95
4) Freon 114	1.25	85	13665	12.82	ppb	#	84
5) Chloromethane	1.34	50	40233	8.12	ppb		97
6) Vinyl chloride	1.38	62	38032	8.85	ppb		96
9) Bromomethane	1.65	94	12192	10.97	ppb		94
10) Chloroethane	1.73	64	10152	10.61	ppb		90
11) Dichlorofluoromethane	1.92	67	62250	9.61	ppb		99
12) Trichlorofluoromethane	1.97	101	49008	9.86	ppb		98
16) Acrolein	2.37	55	37730	126.08	ppb		98
17) Acetone	2.52	43	66620	46.11	ppb		97
18) Freon-113	2.47	101	28331	10.78	ppb		98
19) 1,1-DCE	2.45	61	55611	9.70	ppb		99
21) Acetonitrile	2.76	40	16808	120.12	ppb		96
22) t-Butanol	3.06	59	22304	136.06	ppb		98
23) Methyl Acetate	2.83	43	31102	9.37	ppb		95
24) Iodomethane	2.57	142	24124	7.61	ppb		99
25) Acrylonitrile	3.11	52	14071	10.41	ppb		93
26) Methylene chloride	2.89	84	41890	10.15	ppb		98
27) Carbon disulfide	2.63	76	59008	9.98	ppb		100
28) Methyl t-butyl ether (MtBE	3.18	73	94311	10.50	ppb		98
29) Trans-1,2-DCE	3.15	61	54320	10.29	ppb		97
31) Diisopropyl Ether	3.61	45	114454	10.63	ppb		99
33) 1,1-DCA	3.51	63	68269	10.54	ppb		98
34) Vinyl Acetate	3.58	43	39418	8.29	ppb		99
35) Ethyl tert Butyl Ether	3.93	59	105499	10.86	ppb		98
36) MEK (2-Butanone)	4.04	43	90455	47.75	ppb		99
37) Cis-1,2-DCE	4.01	61	61244	10.09	ppb		98
38) 2,2-Dichloropropane	4.02	77	48969	10.13	ppb		99
41) Chloroform	4.29	83	64679	10.19	ppb		98
42) Bromochloromethane	4.21	49	31287	10.10	ppb		98
44) 1,1,1-TCA	4.45	97	54728	9.94	ppb		97
45) Cyclohexane	4.50	56	58057	10.46	ppb		99
46) 1,1-Dichloropropene	4.59	75	51017	9.80	ppb		97
47) 2,2,4-Trimethylpentane	4.85	57	103076	10.40	ppb		99
49) Carbon Tetrachloride	4.59	117	41008	9.72	ppb		97
50) Tert Amyl Methyl Ether	4.89	73	90835	10.80	ppb		99
52) 1,2-DCA	4.77	62	50551	10.16	ppb		100
53) Benzene	4.76	78	153057	9.99	ppb		100
54) TCE	5.32	130	41592	10.20	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z28.D Vial: 14
Acq On : 27 Oct 20 17:52 Operator: LP,DG,CH
Sample : (SS)10ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55)	2-Pentanone	5.47	43	348914	121.21	ppb	100
56)	1,2-Dichloropropane	5.49	63	38036	10.16	ppb	100
57)	Bromodichloromethane	5.73	83	41797	10.27	ppb	98
58)	Methyl Cyclohexane	5.48	83	55876	10.56	ppb	97
59)	Dibromomethane	5.59	174	22476	10.02	ppb	95
60)	MIBK (methyl isobutyl ket	6.27	43	166179	48.42	ppb	99
61)	1-Bromo-2-chloroethane	6.00	144	5707	10.90	ppb	95
62)	2-Chloroethyl vinyl ether	6.00	43	84487	53.38	ppb	100
63)	Cis-1,3-Dichloropropene	6.12	75	54641	10.41	ppb	97
64)	Toluene	6.42	91	161934	10.05	ppb	99
65)	Trans-1,3-Dichloropropene	6.61	75	46319	9.76	ppb	98
66)	1,1,2-TCA	6.77	97	30316	9.97	ppb	99
67)	2-Hexanone	7.01	43	116462	48.30	ppb	98
70)	1,2-EDB	7.22	107	31116	10.32	ppb	97
71)	Tetrachloroethene	6.91	166	39237	9.74	ppb	98
72)	1-Chlorohexane	7.67	91	53330	9.92	ppb	97
73)	1,1,1,2-Tetrachloroethane	7.75	131	29718	10.25	ppb	100
74)	m&p-Xylene	7.90	91	278711	20.94	ppb	99
75)	o-Xylene	8.26	91	140677	10.50	ppb	100
76)	Styrene	8.27	104	108227	10.71	ppb	99
78)	1,3-Dichloropropane	6.92	76	54200	10.24	ppb	96
79)	Dibromochloromethane	7.12	129	27655	10.51	ppb	98
80)	Chlorobenzene	7.68	112	100341	10.13	ppb	99
81)	Ethylbenzene	7.79	91	178014	10.26	ppb	100
82)	Bromoform	8.43	173	15773	9.21	ppb	98
84)	Isopropylbenzene	8.62	105	175632	10.35	ppb	99
85)	1,1,2,2-Tetrachloroethane	8.89	83	35911	8.90	ppb	98
86)	1,2,3-Trichloropropane	8.93	110	12674	9.62	ppb	91
87)	t-1,4-Dichloro-2-Butene	8.95	53	9833	9.52	ppb	94
88)	Bromobenzene	8.89	77	79872	10.21	ppb	99
89)	n-Propylbenzene	9.01	91	218792	9.92	ppb	98
90)	4-Ethyltoluene	9.13	105	188180	10.45	ppb	99
91)	2-Chlorotoluene	9.09	91	126272	10.18	ppb	100
92)	1,3,5-Trimethylbenzene	9.19	105	153432	10.59	ppb	99
93)	4-Chlorotoluene	9.19	91	149333	10.48	ppb	98
94)	Tert-Butylbenzene	9.51	119	127837	10.20	ppb	97
95)	1,2,4-Trimethylbenzene	9.55	105	153464	10.60	ppb	100
96)	Sec-Butylbenzene	9.72	105	200037	9.98	ppb	100
97)	p-Isopropyltoluene	9.87	119	166724	9.84	ppb	99
98)	Benzyl Chloride	10.03	91	49461	8.78	ppb	99
99)	1,3-DCB	9.81	146	79304	9.86	ppb	98
100)	1,4-DCB	9.89	146	82212	10.04	ppb	99
101)	n-Butylbenzene	10.27	91	161073	10.25	ppb	99
102)	1,2-DCB	10.26	146	73996	10.08	ppb	100
103)	Hexachloroethane	10.52	201	14352	9.10	ppb	95
104)	1,2-Dibromo-3-chloropropan	11.02	157	6835	8.96	ppb	94
105)	1,2,4-Trichlorobenzene	11.86	180	49320	10.04	ppb	95
106)	Hexachlorobutadiene	12.05	225	23202	10.04	ppb	92
107)	Naphthalene	12.10	128	126059	10.09	ppb	99
108)	1,2,3-Trichlorobenzene	12.34	180	43838	10.01	ppb	100

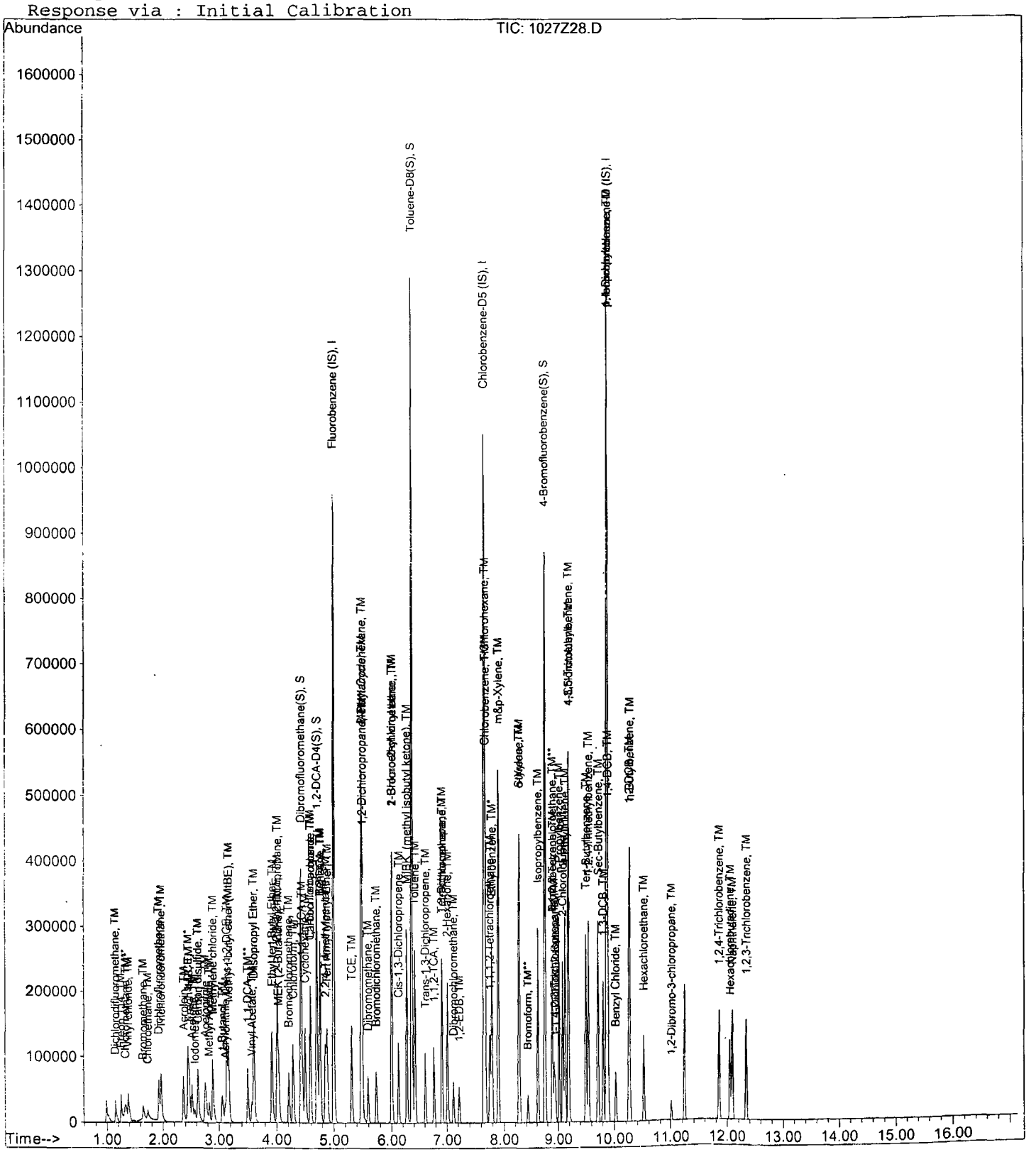
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z28.D Vial: 14
Acq On : 27 Oct 20 17:52 Operator: LP,DG,CH
Sample : (SS)10ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 28 9:57 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/28/20
Instrument: ZEUS
Initial Cal. Date: 10/27/20
Data File: 1028Z12.D

		Compound	MEAN	CCRF	%D		%Drift	
1	I	Fluorobenzene (IS)	ISTD			I		
2	TM	Dichlorodifluoromethane	0.0356	0.0505	42	TM		*NT
3	TM	Freon 114	0.0377	0.0486	29	TM		*NT
4	TM**	Chloromethane	0.1754	0.1847	5.3	TM**		
5	TM*	Vinyl chloride	0.1521	0.1622	6.6	TM*		
6		Butane	0.0000	0.0005	0.00			
7	TM	Bromomethane	0.0394	0.0477	21	TM		*NT
8	TML	Chloroethane	0.0489	0.0599	22	TML	99	*NT
9	TM	Dichlorofluoromethane	0.2292	0.2388	4.2	TM		
10	TM	Trichlorofluoromethane	0.1759	0.2082	18	TM		
11	TM	Pentane	0.0000	0.0019	0.00	TM		
12	TM	Acrolein	0.0106	0.0105	0.91	TM		
13	TML	Acetone	0.0564	0.0493	12	TML	3.3	
14	TM	Freon-113	0.0930	0.1161	25	TM		*NT
15	TM*	1,1-DCE	0.2030	0.2155	6.2	TM*		
16	TM	2-Propanol	0.0000	0.0000	0.00	TM		
17	TML	Acetonitrile	0.0054	0.0049	10	TML	1.8	
18	TM	t-Butanol	0.0058	0.0065	12	TM		
19	TM	Methyl Acetate	0.1175	0.1178	0.30	TM		
20	TMQ	Iodomethane	0.0941	0.1005	6.8	TMQ	13	
21	TM	Acrylonitrile	0.0479	0.0524	9.5	TM		
22	TML	Methylene chloride	0.1606	0.1529	4.8	TML	4.6	
23	TM	Carbon disulfide	0.2093	0.2265	8.3	TM		
24	TM	Methyl t-butyl ether (MtBE)	0.3182	0.3578	12	TM		
25	TM	Trans-1,2-DCE	0.1870	0.2078	11	TM		
26	TM	Diisopropyl Ether	0.3811	0.4374	15	TM		
27	TM**	1,1-DCA	0.2293	0.2509	9.4	TM**		
28	TM	Vinyl Acetate	0.1684	0.2432	44	TM		*NT
29	TM	Ethyl tert Butyl Ether	0.3439	0.3952	15	TM		
30	TM	MEK (2-Butanone)	0.0671	0.0710	5.9	TM		
31	TM	Cis-1,2-DCE	0.2149	0.2386	11	TM		
32	TM	2,2-Dichloropropane	0.1712	0.1956	14	TM		
33	TM	2-Methylpentane	0.0000	0.0289	0.00	TM		
34	TM	3-Methylpentane	0.0000	0.0843	0.00	TM		
35	TM*	Chloroform	0.2247	0.2483	11	TM*		
36	TM	Bromochloromethane	0.1097	0.1217	11	TM		
37	S	Dibromofluoromethane(S)	0.2554	0.2847	11	S		
38	TM	1,1,1-TCA	0.1950	0.2110	8.2	TM		
39	TM	Cyclohexane	0.1964	0.2266	15	TM		
40	TM	1,1-Dichloropropene	0.1842	0.1989	8.0	TM		
		Average			11.4			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/28/20
Matrix: water Instrument: ZEUS
Cal. Date: 10/27/20
Data File: 1028Z12.D

		Compound	MEAN	CCRF	%D	%Drift		
41	TM	2,2,4-Trimethylpentane	0.3508	0.4461	27	TM		*NT
42	S	1,2-DCA-D4(S)	0.2999	0.3459	15	S		
43	TM	Carbon Tetrachloride	0.1493	0.1647	10	TM		
44	TM	Tert Amyl Methyl Ether	0.2977	0.3408	14	TM		
45	TM	Methylcyclopentane	0.0000	0.0215	0.00	TM		
46	TM	1,2-DCA	0.1762	0.1972	12	TM		
47	TM	Benzene	0.5427	0.5931	9.3	TM		
48	TM	TCE	0.1444	0.1608	11	TM		
49	TM	2-Pentanone	0.1019	0.1083	6.3	TM		
50	TM*	1,2-Dichloropropane	0.1326	0.1477	11	TM*		
51	TM	Bromodichloromethane	0.1441	0.1658	15	TM		
52	TM	Methyl Cyclohexane	0.1873	0.2256	20	TM		
53	TM	Dibromomethane	0.0794	0.0871	9.7	TM		
54	TM	MIBK (methyl isobutyl ketone)	0.1215	0.1316	8.3	TM		
55	TM	1-Bromo-2-chloroethane	0.0185	0.0211	14	TM		
56	TM	Cis-1,3-Dichloropropene	0.1859	0.2140	15	TM		
57	TM*	Toluene	0.5702	0.6222	9.1	TM*		
58	TML	Trans-1,3-Dichloropropene	0.1583	0.1794	13	TML	5.3	
59	TM	1,1,2-TCA	0.1076	0.1185	10	TM		
60	TM	2-Hexanone	0.0854	0.0925	8.3	TM		
61	I	Chlorobenzene-D5 (IS)	ISTD			I		
62	S	Toluene-D8(S)	1.373	1.532	12	S		
63	TM	1,2-EDB	0.1529	0.1731	13	TM		
64	TM	Tetrachloroethene	0.2043	0.2134	4.5	TM		
65	TM	1-Chlorohexane	0.2724	0.2809	3.1	TM		
66	TM	1,1,1,2-Tetrachloroethane	0.1470	0.1665	13	TM		
67	TM	m&p-Xylene	0.6746	0.7570	12	TM		
68	TM	o-Xylene	0.6791	0.7635	12	TM		
69	TM	Styrene	0.5123	0.5886	15	TM		
70	S	4-Bromofluorobenzene(S)	0.5239	0.5928	13	S		
71	TM	1,3-Dichloropropane	0.2683	0.3001	12	TM		
72	TM	Dibromochloromethane	0.1334	0.1546	16	TM		
73	TM**	Chlorobenzene	0.5019	0.5511	9.8	TM**		
74	TM*	Ethylbenzene	0.8796	0.9687	10	TM*		
75	TM**L	Bromoform	0.0851	0.0904	6.2	TM**L	0.38	
76	I	1,4-Dichlorobenzene-D (IS)	ISTD			I		
77	TM	Isopropylbenzene	1.618	1.815	12	TM		
78	TM**L	1,1,2,2-Tetrachloroethane	0.3572	0.4077	14	TM**L	3.3	
79	TML	1,2,3-Trichloropropane	0.1231	0.1332	8.2	TML	4.1	
80	TML	t-1,4-Dichloro-2-Butene	0.0942	0.1043	11	TML	2.9	
		Average			11.4			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/28/20
Instrument: ZEUS
Cal. Date: 10/27/20
Data File: 1028Z12.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	Bromobenzene	0.7456	0.8294	11	TM	
82	TM	n-Propylbenzene	2.104	2.249	6.9	TM	
83	TM	4-Ethyltoluene	1.717	1.851	7.8	TM	
84	TM	2-Chlorotoluene	1.183	1.304	10	TM	
85	TM	1,3,5-Trimethylbenzene	1.382	1.591	15	TM	
86	TM	4-Chlorotoluene	1.359	1.555	14	TM	
87	TM	Tert-Butylbenzene	1.195	1.331	11	TM	
88	TM	1,2,4-Trimethylbenzene	1.380	1.587	15	TM	
89	TM	Sec-Butylbenzene	1.910	2.087	9.3	TM	
90	TM	p-Isopropyltoluene	1.615	1.759	8.9	TM	
91	TML	Benzyl Chloride	0.5368	0.5890	9.7	TML	1.7
92	TM	1,3-DCB	0.7670	0.8372	9.1	TM	
93	TM	1,4-DCB	0.7806	0.8558	9.6	TM	
94	TM	n-Butylbenzene	1.499	1.715	14	TM	
95	TM	1,2-DCB	0.6996	0.7772	11	TM	
96	TML	Hexachloroethane	0.1496	0.1544	3.2	TML	1.6
97	TML	1,2-Dibromo-3-chloropropane	0.0711	0.0733	3.0	TML	3.0
98	TM	1,2,4-Trichlorobenzene	0.4683	0.5232	12	TM	
99	TM	Hexachlorobutadiene	0.2203	0.2456	11	TM	
100	TM	Naphthalene	1.191	1.333	12	TM	
101	TM	1,2,3-Trichlorobenzene	0.4174	0.4680	12	TM	
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			10.3		

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z12.D Vial: 2
Acq On : 28 Oct 20 12:36 Operator: LP,DG,CH
Sample : 201028A CCV 10 ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:27 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.00	96	644187	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.65	117	456537	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	240735	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.42	111	183381	27.87	ppb		0.00
Spiked Amount 25.000			Recovery = 111.460%				
48) 1,2-DCA-D4(S)	4.70	65	222840	28.83	ppb		0.00
Spiked Amount 25.000			Recovery = 115.328%				
69) Toluene-D8(S)	6.36	98	699568	27.91	ppb		0.00
Spiked Amount 25.000			Recovery = 111.644%				
77) 4-Bromofluorobenzene(S)	8.75	95	270646	28.29	ppb		0.00
Spiked Amount 25.000			Recovery = 113.148%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.15	87	13016	14.19	ppb		84
4) Freon 114	1.26	85	12520	12.87	ppb	#	79
5) Chloromethane	1.33	50	47601	10.53	ppb		99
6) Vinyl chloride	1.38	62	41798	10.66	ppb		98
9) Bromomethane	1.65	94	12279	12.11	ppb		98
10) Chloroethane	1.73	64	15429	19.87	ppb		90
11) Dichlorofluoromethane	1.93	67	61541	10.42	ppb		99
12) Trichlorofluoromethane	1.98	101	53652	11.83	ppb		99
16) Acrolein	2.37	55	33816	123.86	ppb		95
17) Acetone	2.52	43	63547	48.33	ppb		100
18) Freon-113	2.47	101	29922	12.48	ppb		96
19) 1,1-DCE	2.45	61	55525	10.62	ppb		99
21) Acetonitrile	2.76	40	15656	122.74	ppb		98
22) t-Butanol	3.06	59	20872	139.56	ppb		99
23) Methyl Acetate	2.83	43	30362	10.03	ppb		99
24) Iodomethane	2.57	142	25908	8.74	ppb		99
25) Acrylonitrile	3.11	52	13507	10.95	ppb		98
26) Methylene chloride	2.89	84	39386	10.46	ppb		98
27) Carbon disulfide	2.63	76	58376	10.83	ppb		98
28) Methyl t-butyl ether (MtBE	3.17	73	92185	11.24	ppb		100
29) Trans-1,2-DCE	3.15	61	53536	11.11	ppb		98
31) Diisopropyl Ether	3.61	45	112708	11.48	ppb		100
33) 1,1-DCA	3.51	63	64649	10.94	ppb		99
34) Vinyl Acetate	3.58	43	62668	14.44	ppb		97
35) Ethyl tert Butyl Ether	3.93	59	101827	11.49	ppb		99
36) MEK (2-Butanone)	4.04	43	91504	52.94	ppb		97
37) Cis-1,2-DCE	4.02	61	61486	11.10	ppb		99
38) 2,2-Dichloropropane	4.02	77	50406	11.42	ppb		97
41) Chloroform	4.29	83	63985	11.05	ppb		98
42) Bromochloromethane	4.21	49	31364	11.10	ppb		99
44) 1,1,1-TCA	4.45	97	54375	10.82	ppb		99
45) Cyclohexane	4.50	56	58395	11.54	ppb		98
46) 1,1-Dichloropropene	4.59	75	51250	10.80	ppb		99
47) 2,2,4-Trimethylpentane	4.85	57	114940	12.72	ppb		99
49) Carbon Tetrachloride	4.59	117	42436	11.03	ppb		99
50) Tert Amyl Methyl Ether	4.89	73	87806	11.45	ppb		98
52) 1,2-DCA	4.77	62	50826	11.19	ppb		99
53) Benzene	4.76	78	152837	10.93	ppb		99
54) TCE	5.32	130	41444	11.14	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z12.D Vial: 2
Acq On : 28 Oct 20 12:36 Operator: LP,DG,CH
Sample : 201028A CCV 10 ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:27 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55)	2-Pentanone	5.47	43	348897	132.86	ppb	100
56)	1,2-Dichloropropane	5.49	63	38058	11.14	ppb	99
57)	Bromodichloromethane	5.73	83	42719	11.51	ppb	99
58)	Methyl Cyclohexane	5.48	83	58120	12.04	ppb	96
59)	Dibromomethane	5.59	174	22441	10.97	ppb	94
60)	MIBK (methyl isobutyl ket	6.27	43	169543	54.15	ppb	100
61)	1-Bromo-2-chloroethane	6.00	144	5445	11.39	ppb	99
63)	Cis-1,3-Dichloropropene	6.12	75	55144	11.51	ppb	97
64)	Toluene	6.42	91	160316	10.91	ppb	99
65)	Trans-1,3-Dichloropropene	6.61	75	46237	10.53	ppb	99
66)	1,1,2-TCA	6.77	97	30544	11.01	ppb	98
67)	2-Hexanone	7.01	43	119177	54.17	ppb	100
70)	1,2-EDB	7.22	107	31616	11.32	ppb	100
71)	Tetrachloroethene	6.91	166	38979	10.45	ppb	98
72)	1-Chlorohexane	7.67	91	51294	10.31	ppb	98
73)	1,1,1,2-Tetrachloroethane	7.75	131	30408	11.33	ppb	97
74)	m&p-Xylene	7.90	91	276489	22.44	ppb	100
75)	o-Xylene	8.26	91	139426	11.24	ppb	99
76)	Styrene	8.27	104	107494	11.49	ppb	99
78)	1,3-Dichloropropane	6.92	76	54808	11.19	ppb	97
79)	Dibromochloromethane	7.12	129	28241	11.60	ppb	98
80)	Chlorobenzene	7.68	112	100644	10.98	ppb	99
81)	Ethylbenzene	7.79	91	176895	11.01	ppb	100
82)	Bromoform	8.43	173	16500	10.04	ppb	98
84)	Isopropylbenzene	8.62	105	174732	11.21	ppb	99
85)	1,1,2,2-Tetrachloroethane	8.89	83	39261	10.33	ppb	100
86)	1,2,3-Trichloropropane	8.93	110	12825	10.41	ppb	95
87)	t-1,4-Dichloro-2-Butene	8.95	53	10046	10.29	ppb	98
88)	Bromobenzene	8.89	77	79863	11.12	ppb	94
89)	n-Propylbenzene	9.01	91	216559	10.69	ppb	99
90)	4-Ethyltoluene	9.13	105	178285	10.78	ppb	98
91)	2-Chlorotoluene	9.09	91	125613	11.03	ppb	98
92)	1,3,5-Trimethylbenzene	9.19	105	153245	11.52	ppb	100
93)	4-Chlorotoluene	9.19	91	149747	11.44	ppb	99
94)	Tert-Butylbenzene	9.50	119	128208	11.14	ppb	99
95)	1,2,4-Trimethylbenzene	9.55	105	152836	11.50	ppb	99
96)	Sec-Butylbenzene	9.72	105	200990	10.93	ppb	99
97)	p-Isopropyltoluene	9.86	119	169402	10.89	ppb	100
98)	Benzyl Chloride	10.02	91	56718	10.17	ppb	99
99)	1,3-DCB	9.80	146	80615	10.91	ppb	97
100)	1,4-DCB	9.89	146	82410	10.96	ppb	99
101)	n-Butylbenzene	10.27	91	165145	11.44	ppb	99
102)	1,2-DCB	10.26	146	74835	11.11	ppb	98
103)	Hexachloroethane	10.52	201	14868	9.84	ppb	97
104)	1,2-Dibromo-3-chloropropan	11.02	157	7054	9.70	ppb	88
105)	1,2,4-Trichlorobenzene	11.86	180	50384	11.17	ppb	97
106)	Hexachlorobutadiene	12.05	225	23653	11.15	ppb	96
107)	Naphthalene	12.10	128	128387	11.20	ppb	98
108)	1,2,3-Trichlorobenzene	12.34	180	45062	11.21	ppb	98

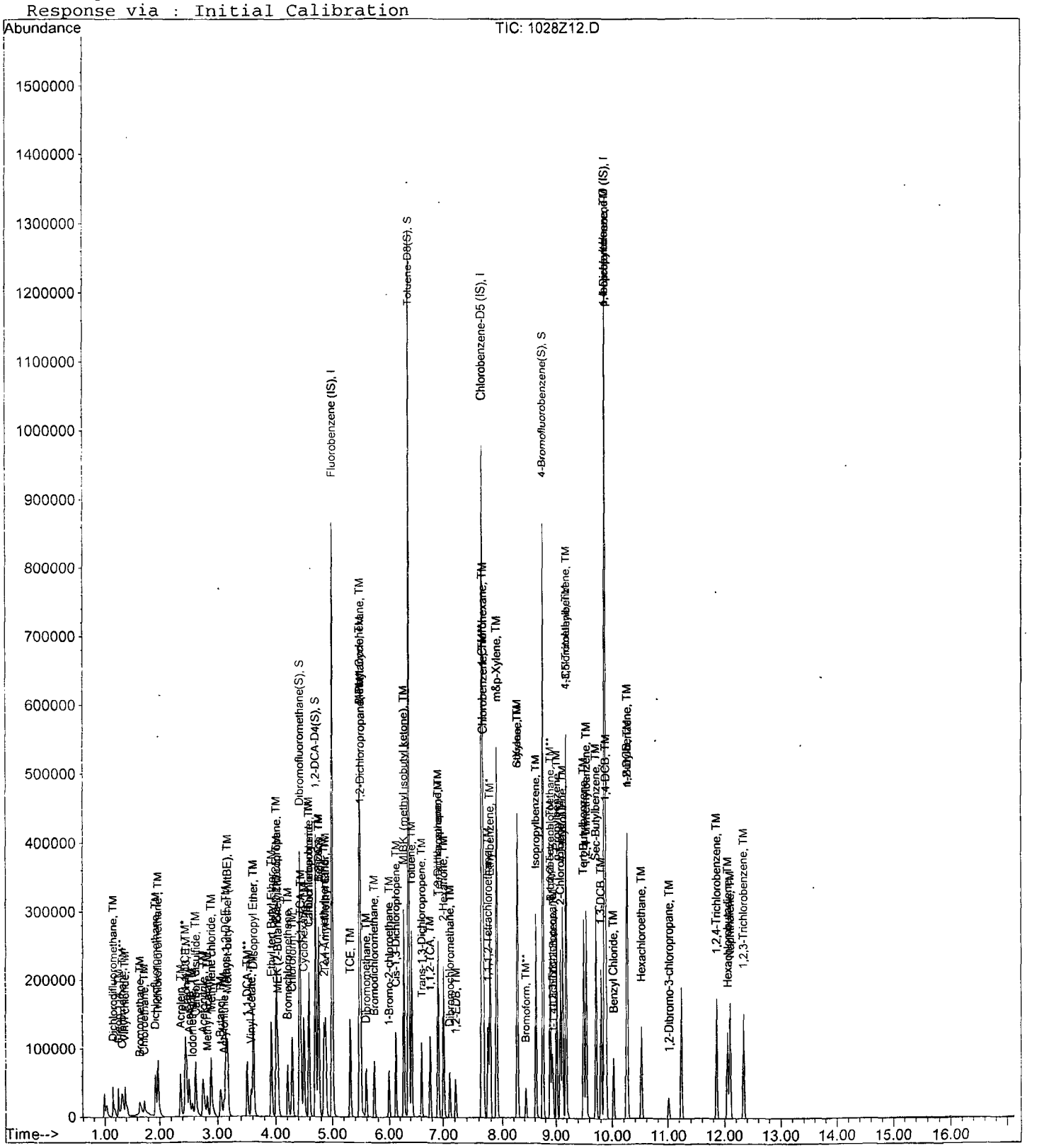
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z12.D Vial: 2
Acq On : 28 Oct 20 12:36 Operator: LP,DG,CH
Sample : 201028A CCV 10 ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:27 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/28/20
Matrix: water Instrument: ZEUS
Initial Cal. Date: 10/27/20
Data File: 1028Z24.D

		Compound	MEAN	CCRF	%D		%Drift	
1	I	Fluorobenzene (IS)	ISTD			I		
2	TM	Dichlorodifluoromethane	0.0356	0.0447	26	TM		
3	TM	Freon 114	0.0377	0.0368	2.4	TM		
4	TM**	Chloromethane	0.1754	0.1746	0.43	TM**		
5	TM*	Vinyl chloride	0.1521	0.1495	1.7	TM*		
6		Butane	0.0000	0.0003	0.00			
7	TM	Bromomethane	0.0394	0.0429	9.0	TM		
8	TML	Chloroethane	0.0489	0.0524	7.2	TML	70	*NT
9	TM	Dichlorofluoromethane	0.2292	0.2251	1.8	TM		
10	TM	Trichlorofluoromethane	0.1759	0.2131	21	TM		
11	TM	Pentane	0.0000	0.0016	0.00	TM		
12	TM	Acrolein	0.0106	0.0100	5.6	TM		
13	TML	Acetone	0.0564	0.0535	5.0	TML	5.3	
14	TM	Freon-113	0.0930	0.0928	0.21	TM		
15	TM*	1,1-DCE	0.2030	0.1853	8.7	TM*		
16	TML	Acetonitrile	0.0054	0.0053	1.3	TML	8.2	
17	TM	t-Butanol	0.0058	0.0060	3.8	TM		
18	TM	Methyl Acetate	0.1175	0.1083	7.9	TM		
19	TMQ	Iodomethane	0.0941	0.0825	12	TMQ	26	
20	TM	Acrylonitrile	0.0479	0.0493	2.9	TM		
21	TML	Methylene chloride	0.1606	0.1629	1.4	TML	12	
22	TM	Carbon disulfide	0.2093	0.1806	14	TM		
23	TM	Methyl t-butyl ether (MtBE)	0.3182	0.3247	2.1	TM		
24	TM	Trans-1,2-DCE	0.1870	0.1813	3.0	TM		
25	TM	Diisopropyl Ether	0.3811	0.3920	2.9	TM		
26	TM**	1,1-DCA	0.2293	0.2229	2.8	TM**		
27	TM	Vinyl Acetate	0.1684	0.1693	0.55	TM		
28	TM	Ethyl tert Butyl Ether	0.3439	0.3504	1.9	TM		
29	TM	MEK (2-Butanone)	0.0671	0.0652	2.8	TM		
30	TM	Cis-1,2-DCE	0.2149	0.2112	1.7	TM		
31	TM	2,2-Dichloropropane	0.1712	0.1561	8.8	TM		
32	TM	2-Methylpentane	0.0000	0.0276	0.00	TM		
33	TM	3-Methylpentane	0.0000	0.0769	0.00	TM		
34	TM*	Chloroform	0.2247	0.2261	0.63	TM*		
35	TM	Bromochloromethane	0.1097	0.1142	4.1	TM		
36	S	Dibromofluoromethane(S)	0.2554	0.2742	7.4	S		
37	TM	1,1,1-TCA	0.1950	0.1817	6.8	TM		
38	TM	Cyclohexane	0.1964	0.1852	5.7	TM		
39	TM	1,1-Dichloropropene	0.1842	0.1699	7.8	TM		
40	TM	2,2,4-Trimethylpentane	0.3508	0.3455	1.5	TM		
		Average			4.9			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/28/20
Instrument: ZEUS
Cal. Date: 10/27/20
Data File: 1028Z24.D

		Compound	MEAN	CCRF	%D		%Drift
41	S	1,2-DCA-D4(S)	0.2999	0.3318	11	S	
42	TM	Carbon Tetrachloride	0.1493	0.1373	8.1	TM	
43	TM	Tert Amyl Methyl Ether	0.2977	0.3048	2.4	TM	
44	TM	Methylcyclopentane	0.0000	0.0206	0.00	TM	
45	TM	1,2-DCA	0.1762	0.1845	4.7	TM	
46	TM	Benzene	0.5427	0.5274	2.8	TM	
47	TM	TCE	0.1444	0.1388	3.9	TM	
48	TM	2-Pentanone	0.1019	0.1001	1.8	TM	
49	TM*	1,2-Dichloropropane	0.1326	0.1327	0.14	TM*	
50	TM	Bromodichloromethane	0.1441	0.1452	0.83	TM	
51	TM	Methyl Cyclohexane	0.1873	0.1790	4.4	TM	
52	TM	Dibromomethane	0.0794	0.0803	1.2	TM	
53	TM	MIBK (methyl isobutyl ketone)	0.1215	0.1214	0.10	TM	
54	TM	1-Bromo-2-chloroethane	0.0185	0.0197	6.4	TM	
55	TM	Cis-1,3-Dichloropropene	0.1859	0.1818	2.2	TM	
56	TM*	Toluene	0.5702	0.5540	2.9	TM*	
57	TML	Trans-1,3-Dichloropropene	0.1583	0.1557	1.6	TML	6.6
58	TM	1,1,2-TCA	0.1076	0.1098	2.1	TM	
59	TM	2-Hexanone	0.0854	0.0846	0.93	TM	
60	I	Chlorobenzene-D5 (IS)	ISTD			I	
61	S	Toluene-D8(S)	1.373	1.460	6.3	S	
62	TM	1,2-EDB	0.1529	0.1570	2.7	TM	
63	TM	Tetrachloroethene	0.2043	0.1804	12	TM	
64	TM	1-Chlorohexane	0.2724	0.2410	12	TM	
65	TM	1,1,1,2-Tetrachloroethane	0.1470	0.1427	3.0	TM	
66	TM	m&p-Xylene	0.6746	0.6698	0.72	TM	
67	TM	o-Xylene	0.6791	0.6857	0.96	TM	
68	TM	Styrene	0.5123	0.5226	2.0	TM	
69	S	4-Bromofluorobenzene(S)	0.5239	0.5610	7.1	S	
70	TM	1,3-Dichloropropane	0.2683	0.2747	2.4	TM	
71	TM	Dibromochloromethane	0.1334	0.1295	2.9	TM	
72	TM**	Chlorobenzene	0.5019	0.4961	1.2	TM**	
73	TM*	Ethylbenzene	0.8796	0.8569	2.6	TM*	
74	TM**L	Bromoform	0.0851	0.0752	12	TM**L	12
75	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
76	TM	Isopropylbenzene	1.618	1.555	3.9	TM	
77	TM**L	1,1,2,2-Tetrachloroethane	0.3572	0.3630	1.6	TM**L	6.5
78	TML	1,2,3-Trichloropropane	0.1231	0.1211	1.6	TML	3.6
79	TML	t-1,4-Dichloro-2-Butene	0.0942	0.0890	5.5	TML	8.3
80	TM	Bromobenzene	0.7456	0.7459	0.04	TM	
		Average			3.6		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/28/20
Instrument: ZEUS
Cal. Date: 10/27/20
Data File: 1028Z24.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	n-Propylbenzene	2.104	1.954	7.1	TM	
82	TM	4-Ethyltoluene	1.717	1.614	6.0	TM	
83	TM	2-Chlorotoluene	1.183	1.152	2.6	TM	
84	TM	1,3,5-Trimethylbenzene	1.382	1.402	1.4	TM	
85	TM	4-Chlorotoluene	1.359	1.387	2.0	TM	
86	TM	Tert-Butylbenzene	1.195	1.159	3.1	TM	
87	TM	1,2,4-Trimethylbenzene	1.380	1.405	1.8	TM	
88	TM	Sec-Butylbenzene	1.910	1.801	5.7	TM	
89	TM	p-Isopropyltoluene	1.615	1.515	6.2	TM	
90	TML	Benzyl Chloride	0.5368	0.4527	16	TML	14
91	TM	1,3-DCB	0.7670	0.7424	3.2	TM	
92	TM	1,4-DCB	0.7806	0.7708	1.3	TM	
93	TM	n-Butylbenzene	1.499	1.443	3.8	TM	
94	TM	1,2-DCB	0.6996	0.6949	0.67	TM	
95	TML	Hexachloroethane	0.1496	0.1289	14	TML	12
96	TML	1,2-Dibromo-3-chloropropane	0.0711	0.0642	9.6	TML	11
97	TM	1,2,4-Trichlorobenzene	0.4683	0.4672	0.25	TM	
98	TM	Hexachlorobutadiene	0.2203	0.1991	9.6	TM	
99	TM	Naphthalene	1.191	1.189	0.15	TM	
100	TM	1,2,3-Trichlorobenzene	0.4174	0.4143	0.75	TM	
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			4.8		

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z24.D Vial: 14
Acq On : 28 Oct 20 17:14 Operator: LP,DG,CH
Sample : Ending CCV 10ug/L 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:27 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	618145	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.65	117	439662	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	234522	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.43	111	169480	26.84	ppb	0.00
Spiked Amount 25.000			Recovery =	107.352%		
48) 1,2-DCA-D4(S)	4.70	65	205123	27.66	ppb	0.00
Spiked Amount 25.000			Recovery =	110.632%		
69) Toluene-D8(S)	6.37	98	641691	26.58	ppb	0.00
Spiked Amount 25.000			Recovery =	106.336%		
77) 4-Bromofluorobenzene(S)	8.75	95	246632	26.77	ppb	0.00
Spiked Amount 25.000			Recovery =	107.068%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.15	87	11058	12.56	ppb	95
4) Freon 114	1.25	85	9107	9.76	ppb	96
5) Chloromethane	1.34	50	43176	9.96	ppb	97
6) Vinyl chloride	1.38	62	36967	9.83	ppb	99
9) Bromomethane	1.65	94	10608	10.90	ppb	92
10) Chloroethane	1.73	64	12961	16.99	ppb	94
11) Dichlorofluoromethane	1.93	67	55656	9.82	ppb	97
12) Trichlorofluoromethane	1.97	101	52684	12.11	ppb	97
16) Acrolein	2.36	55	30925	118.04	ppb	95
17) Acetone	2.52	43	66183	52.67	ppb	97
18) Freon-113	2.47	101	22952	9.98	ppb	99
19) 1,1-DCE	2.45	61	45811	9.13	ppb	95
21) Acetonitrile	2.76	40	16496	135.24	ppb	98
22) t-Butanol	3.06	59	18616	129.72	ppb	96
23) Methyl Acetate	2.83	43	26766	9.21	ppb	98
24) Iodomethane	2.57	142	20404	7.40	ppb	99
25) Acrylonitrile	3.11	52	12181	10.29	ppb	91
26) Methylene chloride	2.89	84	40274	11.15	ppb	97
27) Carbon disulfide	2.63	76	44648	8.63	ppb	100
28) Methyl t-butyl ether (MtBE	3.17	73	80294	10.21	ppb	98
29) Trans-1,2-DCE	3.15	61	44835	9.70	ppb	98
31) Diisopropyl Ether	3.61	45	96923	10.29	ppb	99
33) 1,1-DCA	3.51	63	55109	9.72	ppb	99
34) Vinyl Acetate	3.58	43	41864	10.06	ppb	98
35) Ethyl tert Butyl Ether	3.93	59	86643	10.19	ppb	98
36) MEK (2-Butanone)	4.04	43	80633	48.62	ppb	99
37) Cis-1,2-DCE	4.01	61	52226	9.83	ppb	95
38) 2,2-Dichloropropane	4.02	77	38598	9.12	ppb	99
41) Chloroform	4.29	83	55901	10.06	ppb	99
42) Bromochloromethane	4.21	49	28234	10.41	ppb	98
44) 1,1,1-TCA	4.45	97	44922	9.32	ppb	99
45) Cyclohexane	4.50	56	45781	9.43	ppb	98
46) 1,1-Dichloropropene	4.59	75	42016	9.22	ppb	99
47) 2,2,4-Trimethylpentane	4.86	57	85420	9.85	ppb	100
49) Carbon Tetrachloride	4.59	117	33939	9.19	ppb	100
50) Tert Amyl Methyl Ether	4.89	73	75360	10.24	ppb	100
52) 1,2-DCA	4.77	62	45614	10.47	ppb	100
53) Benzene	4.76	78	130397	9.72	ppb	98
54) TCE	5.31	130	34311	9.61	ppb	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z24.D Vial: 14
Acq On : 28 Oct 20 17:14 Operator: LP,DG,CH
Sample : Ending CCV 10ug/L 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:27 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55)	2-Pentanone	5.47	43	309355	122.76	ppb	100
56)	1,2-Dichloropropane	5.49	63	32820	10.01	ppb	100
57)	Bromodichloromethane	5.73	83	35914	10.08	ppb	100
58)	Methyl Cyclohexane	5.48	83	44268	9.56	ppb	96
59)	Dibromomethane	5.59	174	19862	10.12	ppb	95
60)	MIBK (methyl isobutyl ket	6.27	43	150076	49.95	ppb	100
61)	1-Bromo-2-chloroethane	6.00	144	4877	10.64	ppb	95
63)	Cis-1,3-Dichloropropene	6.12	75	44944	9.78	ppb	98
64)	Toluene	6.42	91	136971	9.71	ppb	100
65)	Trans-1,3-Dichloropropene	6.61	75	38501	9.34	ppb	96
66)	1,1,2-TCA	6.77	97	27157	10.21	ppb	99
67)	2-Hexanone	7.01	43	104573	49.54	ppb	100
70)	1,2-EDB	7.22	107	27614	10.27	ppb	97
71)	Tetrachloroethene	6.91	166	31727	8.83	ppb	98
72)	1-Chlorohexane	7.67	91	42376	8.85	ppb	96
73)	1,1,1,2-Tetrachloroethane	7.75	131	25090	9.70	ppb	99
74)	m&p-Xylene	7.90	91	235581	19.86	ppb	98
75)	o-Xylene	8.26	91	120588	10.10	ppb	99
76)	Styrene	8.27	104	91908	10.20	ppb	98
78)	1,3-Dichloropropane	6.92	76	48317	10.24	ppb	98
79)	Dibromochloromethane	7.12	129	22772	9.71	ppb	100
80)	Chlorobenzene	7.68	112	87250	9.88	ppb	98
81)	Ethylbenzene	7.79	91	150701	9.74	ppb	98
82)	Bromoform	8.43	173	13228	8.84	ppb	100
84)	Isopropylbenzene	8.62	105	145909	9.61	ppb	99
85)	1,1,2,2-Tetrachloroethane	8.89	83	34053	9.35	ppb	98
86)	1,2,3-Trichloropropane	8.92	110	11360	9.64	ppb	98
87)	t-1,4-Dichloro-2-Butene	8.95	53	8353	9.17	ppb	99
88)	Bromobenzene	8.89	77	69970	10.00	ppb	93
89)	n-Propylbenzene	9.01	91	183299	9.29	ppb	100
90)	4-Ethyltoluene	9.13	105	151449	9.40	ppb	97
91)	2-Chlorotoluene	9.09	91	108026	9.74	ppb	99
92)	1,3,5-Trimethylbenzene	9.19	105	131515	10.14	ppb	95
93)	4-Chlorotoluene	9.19	91	130069	10.20	ppb	98
94)	Tert-Butylbenzene	9.50	119	108686	9.69	ppb	99
95)	1,2,4-Trimethylbenzene	9.55	105	131779	10.18	ppb	99
96)	Sec-Butylbenzene	9.72	105	168955	9.43	ppb	98
97)	p-Isopropyltoluene	9.87	119	142149	9.38	ppb	100
98)	Benzyl Chloride	10.02	91	42464	8.55	ppb	99
99)	1,3-DCB	9.80	146	69641	9.68	ppb	98
100)	1,4-DCB	9.89	146	72304	9.87	ppb	99
101)	n-Butylbenzene	10.27	91	135321	9.62	ppb	99
102)	1,2-DCB	10.26	146	65192	9.93	ppb	100
103)	Hexachloroethane	10.52	201	12095	8.78	ppb	98
104)	1,2-Dibromo-3-chloropropan	11.02	157	6026	8.88	ppb	96
105)	1,2,4-Trichlorobenzene	11.85	180	43825	9.97	ppb	98
106)	Hexachlorobutadiene	12.05	225	18676	9.04	ppb	96
107)	Naphthalene	12.09	128	111549	9.98	ppb	98
108)	1,2,3-Trichlorobenzene	12.34	180	38866	9.92	ppb	93

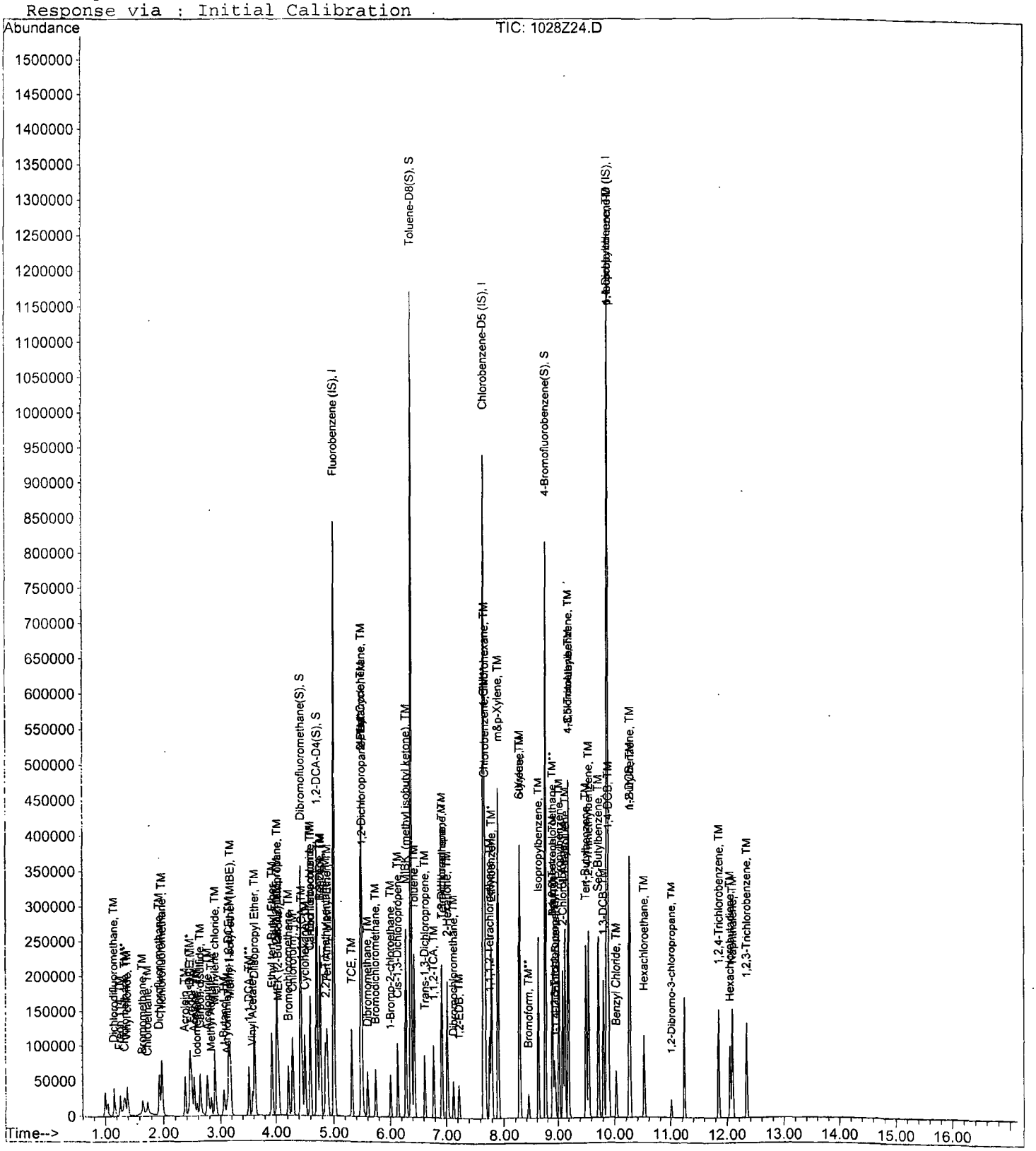
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z24.D Vial: 14
Acq On : 28 Oct 20 17:14 Operator: LP,DG,CH
Sample : Ending CCV 10ug/L 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:27 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z19.D Vial: 9
Acq On : 28 Oct 20 15:19 Operator: LP,DG,CH
Sample : BA20715W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 13:18 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	646891	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.65	117	458923	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	251653	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.43	111	183988	27.84	ppb	0.00
Spiked Amount 25.000			Recovery =	111.364%		
48) 1,2-DCA-D4(S)	4.70	65	223453	28.79	ppb	0.00
Spiked Amount 25.000			Recovery =	115.164%		
69) Toluene-D8(S)	6.37	98	678964	26.95	ppb	0.00
Spiked Amount 25.000			Recovery =	107.792%		
77) 4-Bromofluorobenzene(S)	8.75	95	265711	27.63	ppb	0.00
Spiked Amount 25.000			Recovery =	110.508%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

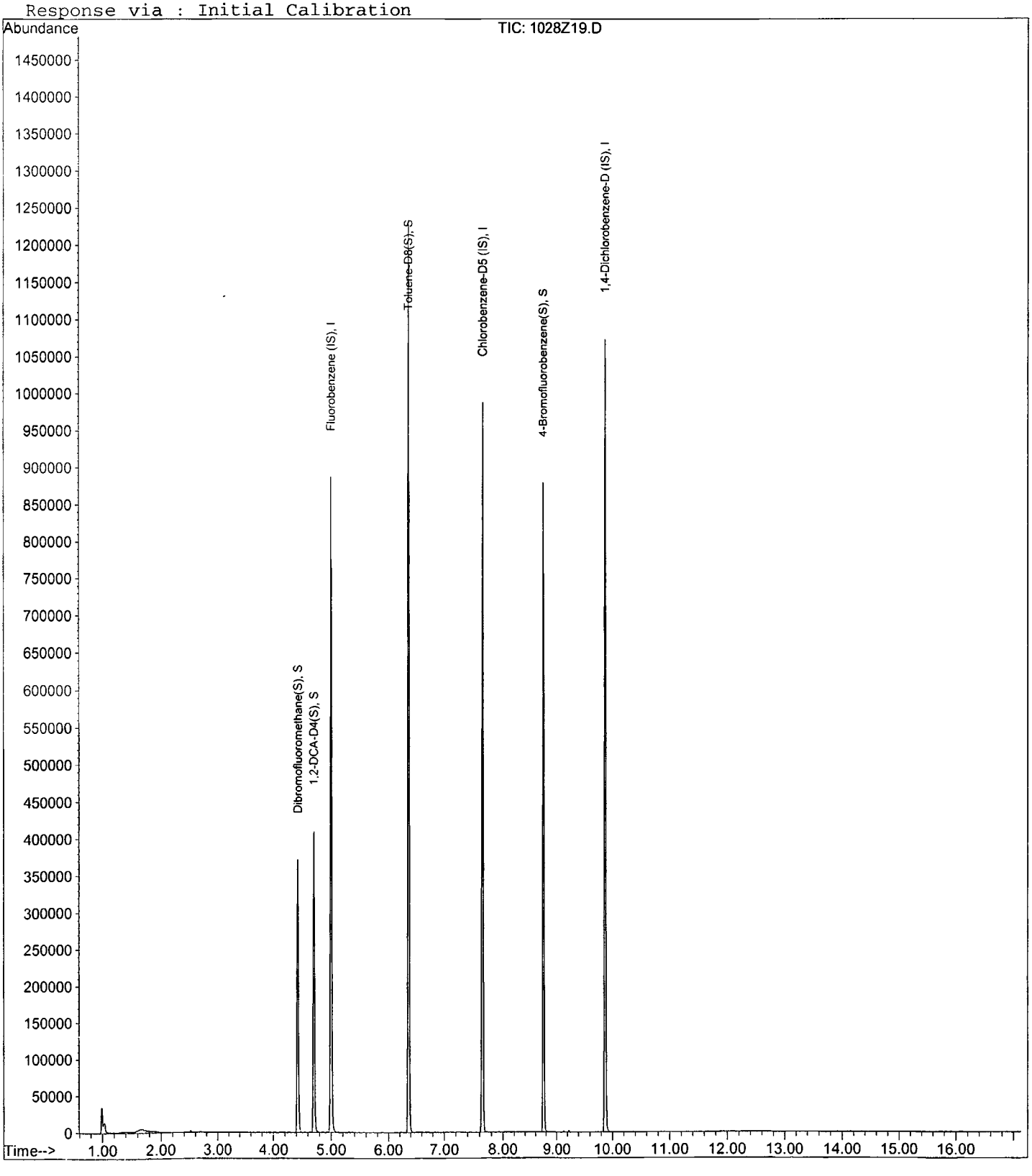
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z19.D
Acq On : 28 Oct 20 15:19
Sample : BA20715W01
Misc :

Vial: 9
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 13:18 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z20.D Vial: 10
Acq On : 28 Oct 20 15:42 Operator: LP,DG,CH
Sample : BA20716W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 13:19 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	628322	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.65	117	446414	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	241962	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.43	111	175302	27.31	ppb	0.00
Spiked Amount 25.000			Recovery = 109.240%			
48) 1,2-DCA-D4(S)	4.70	65	216463	28.71	ppb	0.00
Spiked Amount 25.000			Recovery = 114.856%			
69) Toluene-D8(S)	6.37	98	654376	26.70	ppb	0.00
Spiked Amount 25.000			Recovery = 106.800%			
77) 4-Bromofluorobenzene(S)	8.75	95	257425	27.52	ppb	0.00
Spiked Amount 25.000			Recovery = 110.064%			

Target Compounds Qvalue

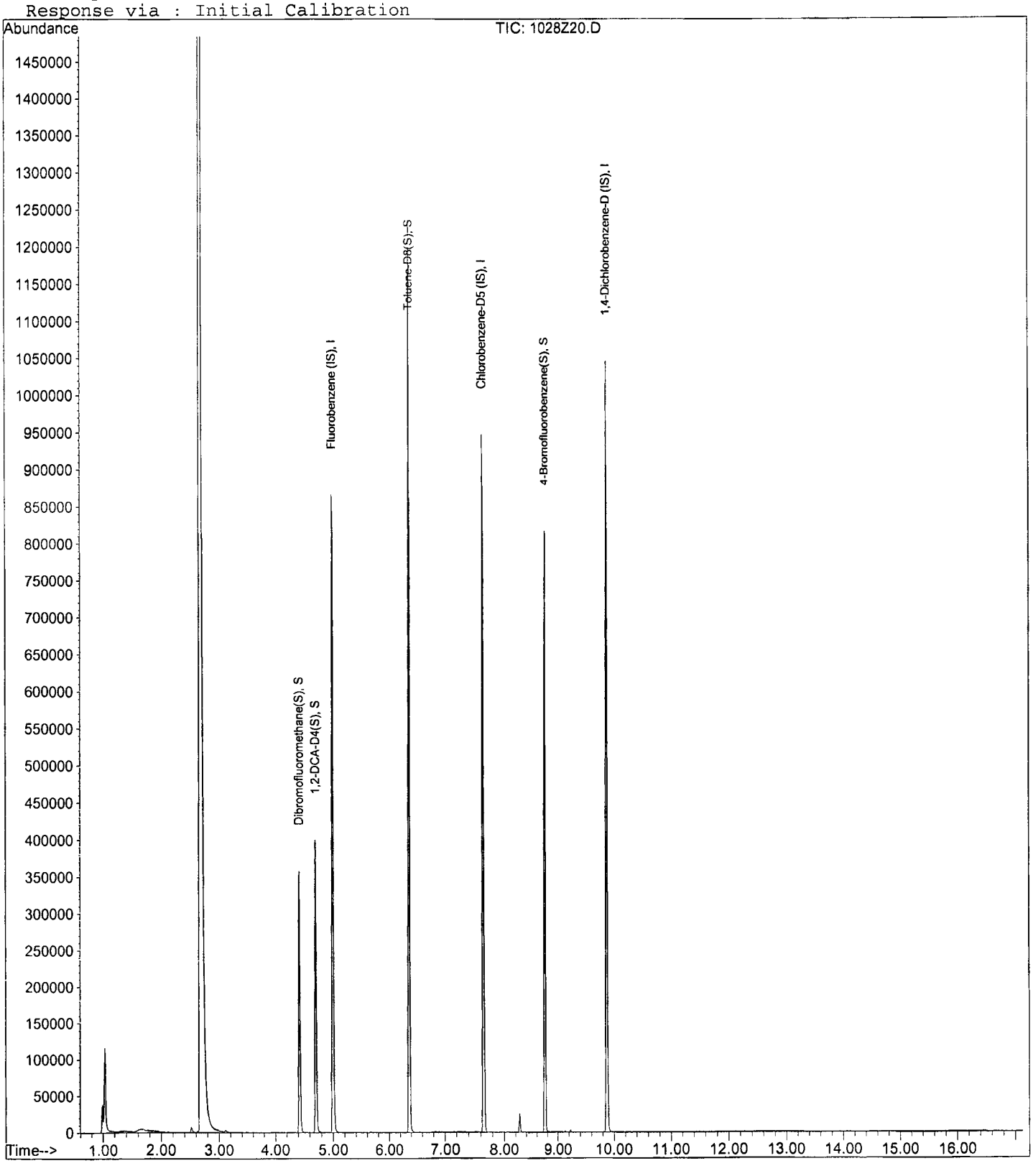
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z20.D Vial: 10
Acq On : 28 Oct 20 15:42 Operator: LP,DG,CH
Sample : BA20716W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 13:19 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z21.D Vial: 11
Acq On : 28 Oct 20 16:05 Operator: LP,DG,CH
Sample : BA20717W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 13:20 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	629117	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.65	117	445256	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	240084	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.43	111	172753	26.88	ppb	0.00
Spiked Amount 25.000			Recovery = 107.516%			
48) 1,2-DCA-D4(S)	4.70	65	212286	28.12	ppb	0.00
Spiked Amount 25.000			Recovery = 112.500%			
69) Toluene-D8(S)	6.37	98	647873	26.50	ppb	0.00
Spiked Amount 25.000			Recovery = 106.012%			
77) 4-Bromofluorobenzene(S)	8.75	95	250935	26.89	ppb	0.00
Spiked Amount 25.000			Recovery = 107.568%			

Target Compounds Qvalue

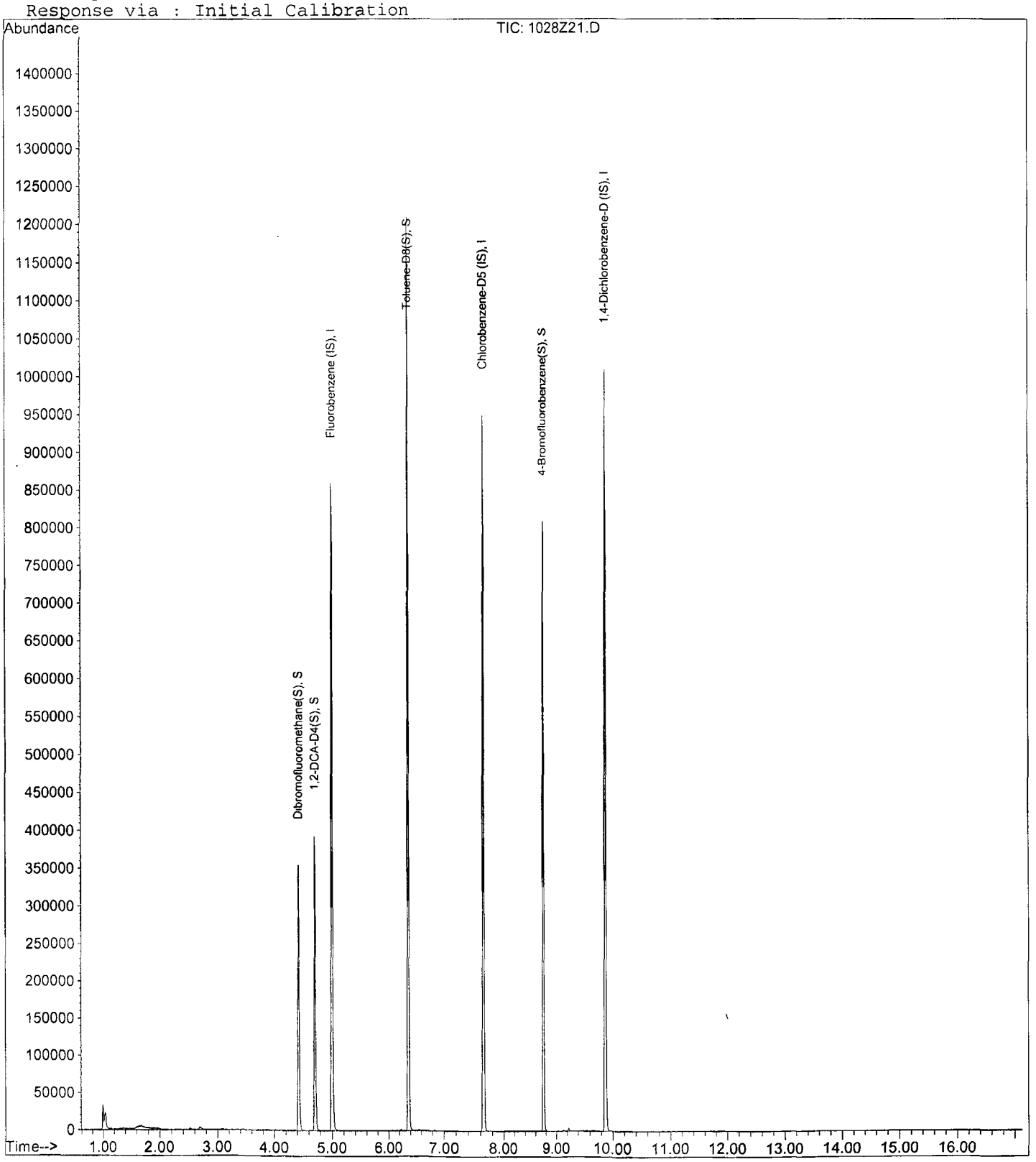
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z21.D Vial: 11
Acq On : 28 Oct 20 16:05 Operator: LP,DG,CH
Sample : BA20717W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 13:20 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z22.D Vial: 12
Acq On : 28 Oct 20 16:28 Operator: LP,DG,CH
Sample : BA20718W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 13:20 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	618144	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.65	117	440348	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	237450	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.42	111	170776	27.04	ppb	0.00
Spiked Amount 25.000			Recovery = 108.172%			
48) 1,2-DCA-D4(S)	4.70	65	207907	28.03	ppb	0.00
Spiked Amount 25.000			Recovery = 112.132%			
69) Toluene-D8(S)	6.36	98	632684	26.17	ppb	0.00
Spiked Amount 25.000			Recovery = 104.680%			
77) 4-Bromofluorobenzene(S)	8.75	95	244517	26.50	ppb	0.00
Spiked Amount 25.000			Recovery = 105.984%			

Target Compounds Qvalue

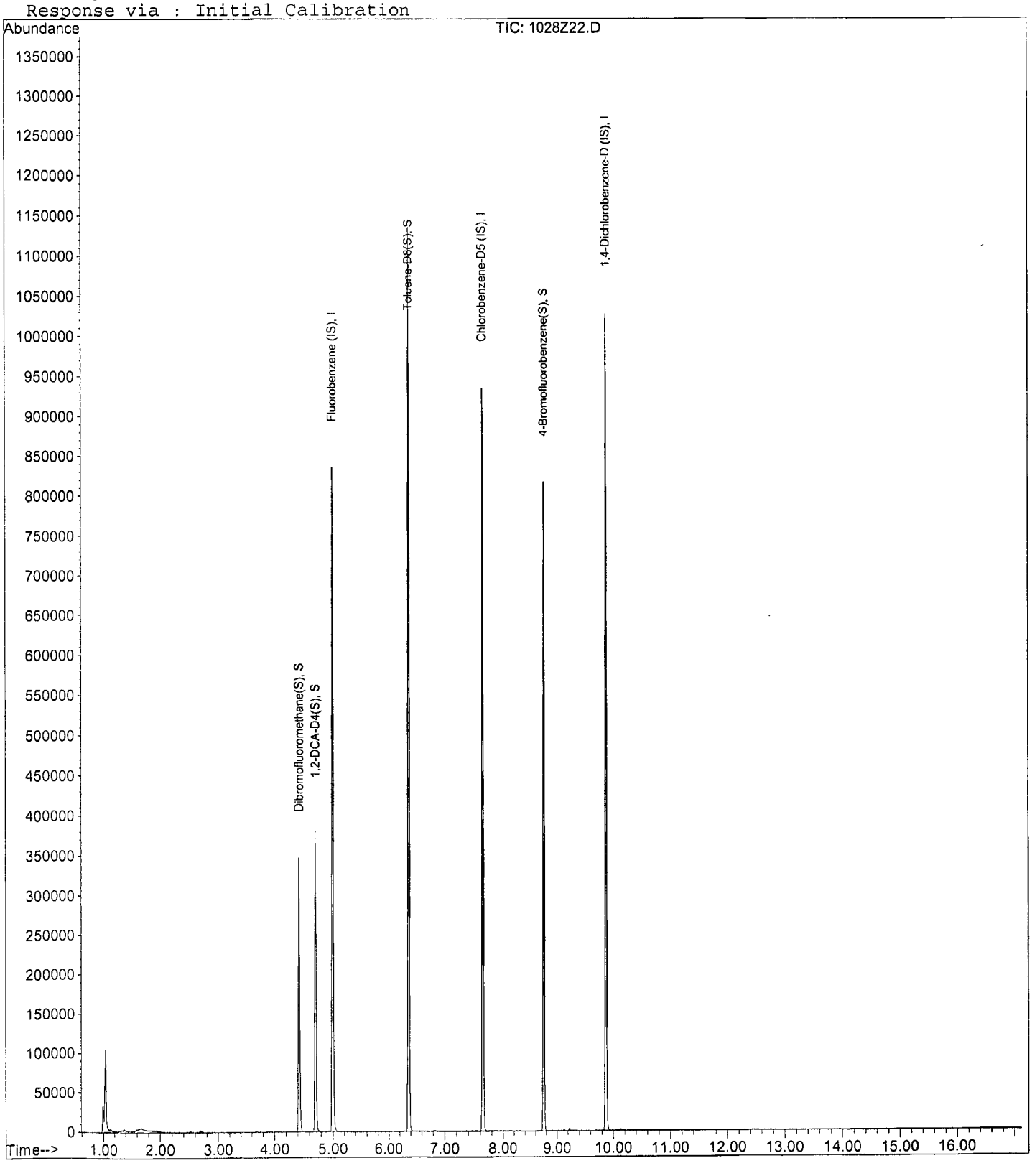
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z22.D Vial: 12
Acq On : 28 Oct 20 16:28 Operator: LP,DG,CH
Sample : BA20718W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 13:20 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z23.D Vial: 13
Acq On : 28 Oct 20 16:51 Operator: LP,DG,CH
Sample : BA20719W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 13:21 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	594194	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.65	117	422786	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	229464	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.42	111	166482	27.43	ppb	0.00
Spiked Amount 25.000			Recovery =	109.704%		
48) 1,2-DCA-D4(S)	4.70	65	201036	28.20	ppb	0.00
Spiked Amount 25.000			Recovery =	112.800%		
69) Toluene-D8(S)	6.36	98	610467	26.30	ppb	0.00
Spiked Amount 25.000			Recovery =	105.200%		
77) 4-Bromofluorobenzene(S)	8.75	95	235806	26.61	ppb	0.00
Spiked Amount 25.000			Recovery =	106.452%		

Target Compounds Qvalue

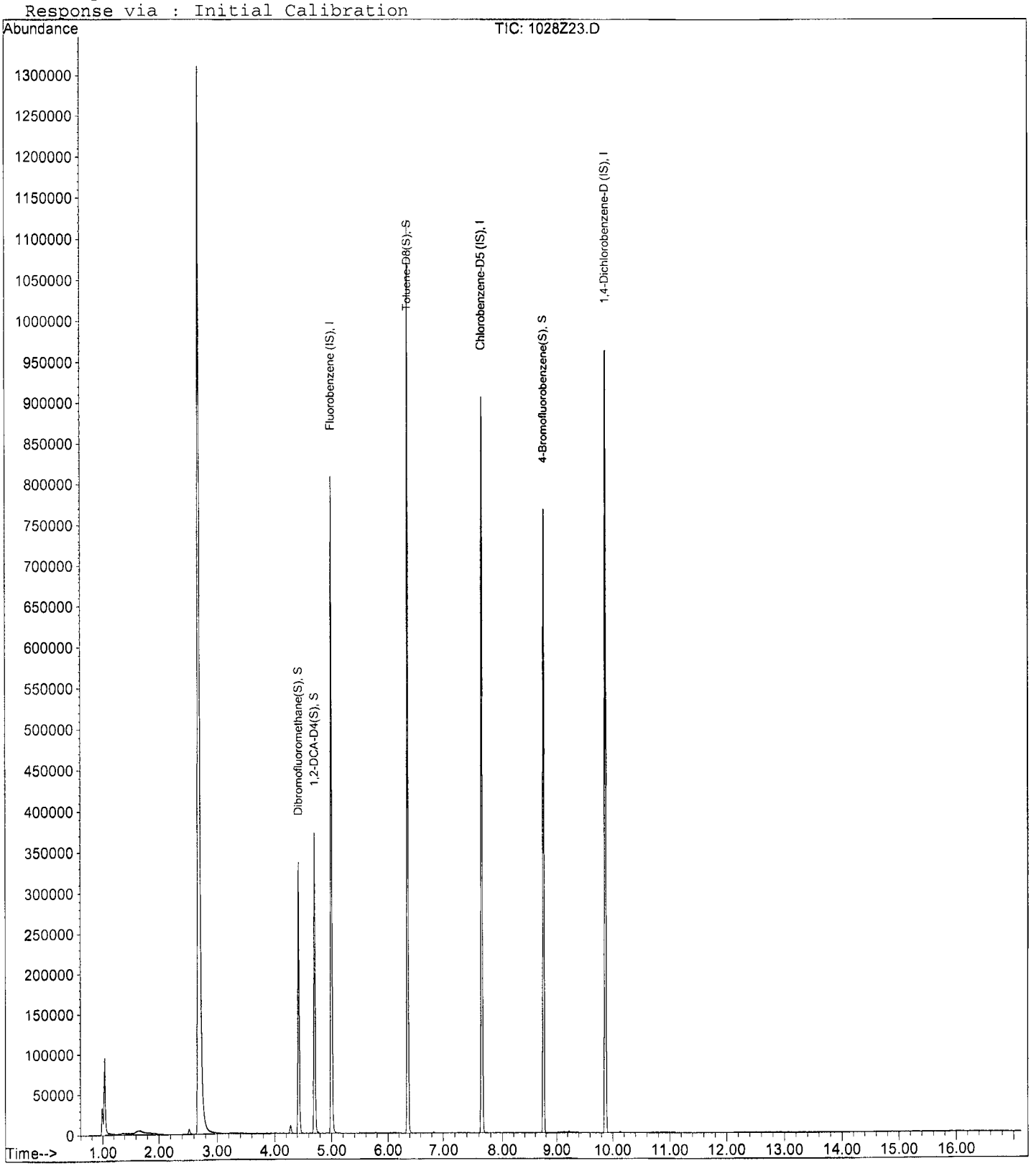
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z23.D Vial: 13
Acq On : 28 Oct 20 16:51 Operator: LP,DG,CH
Sample : BA20719W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 13:21 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z18.D
Acq On : 28 Oct 20 14:56
Sample : 201028A BLK
Misc :

Vial: 8
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 13:17 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	673135	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.65	117	470124	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	254416	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.42	111	188589	27.42	ppb	0.00
Spiked Amount 25.000			Recovery =	109.696%		
48) 1,2-DCA-D4(S)	4.70	65	230289	28.51	ppb	0.00
Spiked Amount 25.000			Recovery =	114.060%		
69) Toluene-D8(S)	6.36	98	711400	27.56	ppb	0.00
Spiked Amount 25.000			Recovery =	110.248%		
77) 4-Bromofluorobenzene(S)	8.75	95	275097	27.92	ppb	0.00
Spiked Amount 25.000			Recovery =	111.688%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

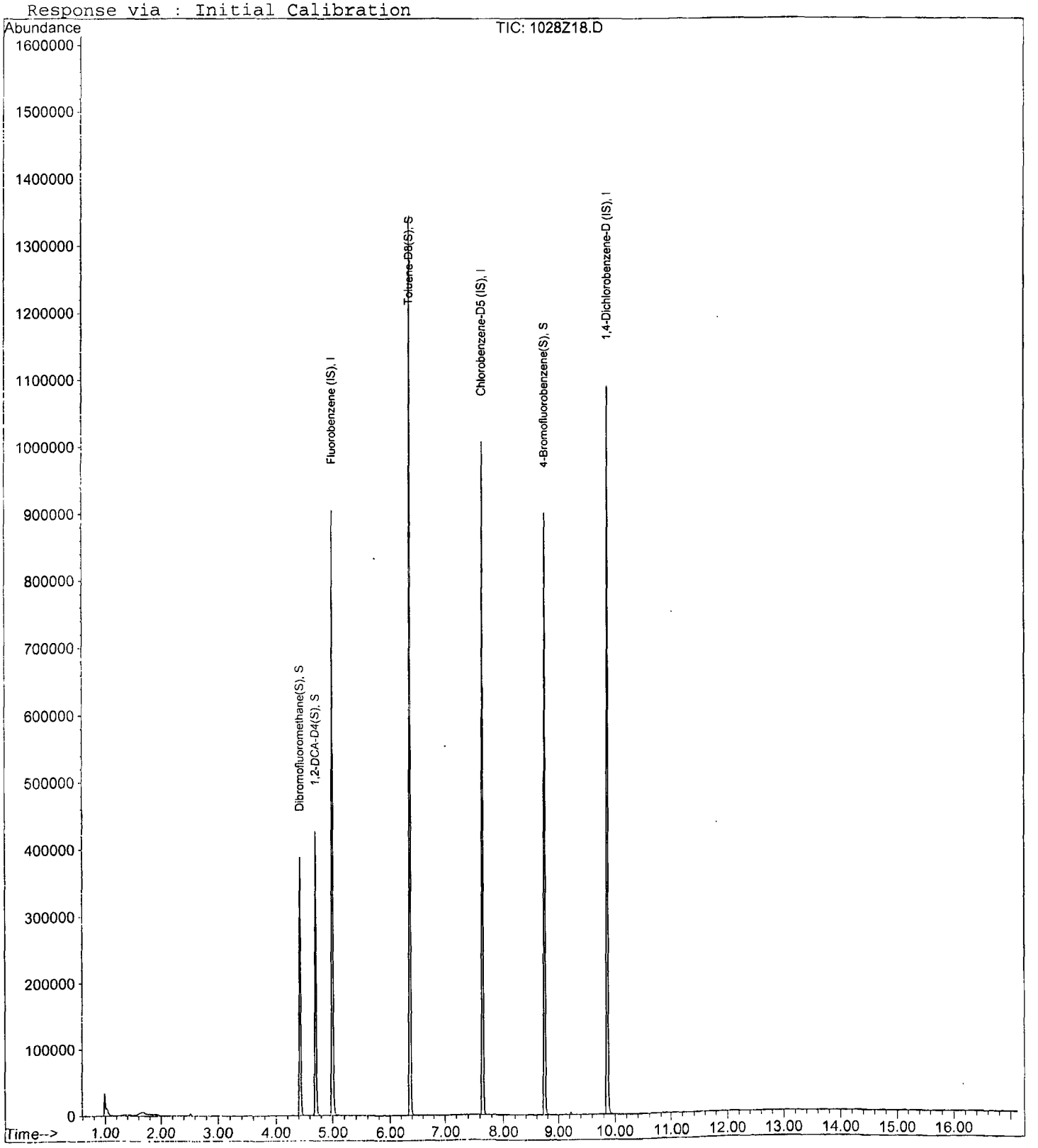
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z18.D
Acq On : 28 Oct 20 14:56
Sample : 201028A BLK
Misc :

Vial: 8
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 13:17 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z13.D Vial: 3
Acq On : 28 Oct 20 12:59 Operator: LP,DG,CH
Sample : 201028A LCS 10 ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:27 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	658652	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.65	117	468538	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	246428	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.43	111	184801	27.46	ppb	0.00
Spiked Amount 25.000			Recovery =	109.856%		
48) 1,2-DCA-D4(S)	4.70	65	224041	28.35	ppb	0.00
Spiked Amount 25.000			Recovery =	113.404%		
69) Toluene-D8(S)	6.36	98	711408	27.66	ppb	0.00
Spiked Amount 25.000			Recovery =	110.624%		
77) 4-Bromofluorobenzene(S)	8.75	95	273591	27.86	ppb	0.00
Spiked Amount 25.000			Recovery =	111.452%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.15	87	12371	13.19	ppb	98
4) Freon 114	1.25	85	10396	10.46	ppb	91
5) Chloromethane	1.34	50	45847	9.92	ppb	98
6) Vinyl chloride	1.38	62	40044	9.99	ppb	98
9) Bromomethane	1.65	94	11792	11.37	ppb	93
10) Chloroethane	1.73	64	11692	13.87	ppb	96
11) Dichlorofluoromethane	1.93	67	59085	9.78	ppb	97
12) Trichlorofluoromethane	1.97	101	52304	11.28	ppb	97
16) Acrolein	2.37	55	34679	124.23	ppb	92
17) Acetone	2.52	43	71203	53.20	ppb	99
18) Freon-113	2.47	101	25940	10.58	ppb	99
19) 1,1-DCE	2.45	61	51378	9.61	ppb	98
21) Acetonitrile	2.76	40	16608	127.52	ppb	96
22) t-Butanol	3.06	59	23296	152.35	ppb	99
23) Methyl Acetate	2.83	43	31227	10.09	ppb	96
24) Iodomethane	2.57	142	28047	9.17	ppb	98
25) Acrylonitrile	3.11	52	13546	10.74	ppb	98
26) Methylene chloride	2.89	84	43840	11.40	ppb	95
27) Carbon disulfide	2.63	76	52488	9.52	ppb	100
28) Methyl t-butyl ether (MtBE	3.17	73	91556	10.92	ppb	98
29) Trans-1,2-DCE	3.15	61	50721	10.30	ppb	96
31) Diisopropyl Ether	3.61	45	111076	11.06	ppb	99
33) 1,1-DCA	3.51	63	62885	10.41	ppb	98
34) Vinyl Acetate	3.58	43	66783	15.05	ppb	97
35) Ethyl tert Butyl Ether	3.93	59	100019	11.04	ppb	100
36) MEK (2-Butanone)	4.04	43	94125	53.26	ppb	97
37) Cis-1,2-DCE	4.01	61	59896	10.58	ppb	98
38) 2,2-Dichloropropane	4.02	77	48770	10.81	ppb	98
41) Chloroform	4.29	83	61925	10.46	ppb	98
42) Bromochloromethane	4.21	49	31005	10.73	ppb	96
44) 1,1,1-TCA	4.45	97	51958	10.11	ppb	98
45) Cyclohexane	4.50	56	51168	9.89	ppb	99
46) 1,1-Dichloropropene	4.59	75	47031	9.69	ppb	99
47) 2,2,4-Trimethylpentane	4.85	57	102861	11.13	ppb	100
49) Carbon Tetrachloride	4.59	117	38895	9.89	ppb	99
50) Tert Amyl Methyl Ether	4.89	73	86915	11.08	ppb	100
52) 1,2-DCA	4.77	62	50211	10.81	ppb	99
53) Benzene	4.76	78	146295	10.23	ppb	98
54) TCE	5.31	130	38855	10.21	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z13.D Vial: 3
Acq On : 28 Oct 20 12:59 Operator: LP,DG,CH
Sample : 201028A LCS 10 ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:27 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.47	43	355433	132.37	ppb		99
56)	1,2-Dichloropropane	5.49	63	36479	10.45	ppb		99
57)	Bromodichloromethane	5.73	83	41248	10.87	ppb		100
58)	Methyl Cyclohexane	5.48	83	51619	10.46	ppb		97
59)	Dibromomethane	5.59	174	21955	10.49	ppb		93
60)	MIBK (methyl isobutyl ket	6.27	43	173963	54.34	ppb		98
61)	1-Bromo-2-chloroethane	6.00	144	5252	10.75	ppb		92
63)	Cis-1,3-Dichloropropene	6.12	75	53953	11.01	ppb		96
64)	Toluene	6.42	91	152545	10.15	ppb		100
65)	Trans-1,3-Dichloropropene	6.61	75	45953	10.28	ppb		99
66)	1,1,2-TCA	6.77	97	29837	10.52	ppb		97
67)	2-Hexanone	7.01	43	121427	53.98	ppb		100
70)	1,2-EDB	7.22	107	31313	10.93	ppb	#	99
71)	Tetrachloroethene	6.91	166	36690	9.58	ppb		99
72)	1-Chlorohexane	7.67	91	48201	9.44	ppb		95
73)	1,1,1,2-Tetrachloroethane	7.75	131	29014	10.53	ppb		99
74)	m&p-Xylene	7.90	91	266216	21.06	ppb		97
75)	o-Xylene	8.26	91	134716	10.58	ppb		99
76)	Styrene	8.27	104	105122	10.95	ppb		100
78)	1,3-Dichloropropane	6.92	76	54592	10.86	ppb		98
79)	Dibromochloromethane	7.12	129	27019	10.81	ppb		97
80)	Chlorobenzene	7.68	112	97616	10.38	ppb		99
81)	Ethylbenzene	7.79	91	169356	10.27	ppb		100
82)	Bromoform	8.43	173	15971	9.63	ppb		97
84)	Isopropylbenzene	8.62	105	165792	10.39	ppb		99
85)	1,1,2,2-Tetrachloroethane	8.89	83	39611	10.20	ppb		99
86)	1,2,3-Trichloropropane	8.93	110	12925	10.27	ppb		97
87)	t-1,4-Dichloro-2-Butene	8.94	53	10259	10.27	ppb		98
88)	Bromobenzene	8.89	77	78106	10.63	ppb		93
89)	n-Propylbenzene	9.01	91	207482	10.01	ppb		98
90)	4-Ethyltoluene	9.13	105	173214	10.23	ppb		99
91)	2-Chlorotoluene	9.09	91	121714	10.44	ppb		100
92)	1,3,5-Trimethylbenzene	9.19	105	148255	10.88	ppb		98
93)	4-Chlorotoluene	9.19	91	145494	10.86	ppb		98
94)	Tert-Butylbenzene	9.50	119	121778	10.34	ppb		97
95)	1,2,4-Trimethylbenzene	9.55	105	147179	10.82	ppb		100
96)	Sec-Butylbenzene	9.72	105	190408	10.11	ppb		98
97)	p-Isopropyltoluene	9.86	119	160801	10.10	ppb		99
98)	Benzyl Chloride	10.02	91	59324	10.32	ppb		98
99)	1,3-DCB	9.80	146	79012	10.45	ppb		97
100)	1,4-DCB	9.89	146	80714	10.49	ppb		100
101)	n-Butylbenzene	10.27	91	158297	10.71	ppb		99
102)	1,2-DCB	10.26	146	72733	10.55	ppb		98
103)	Hexachloroethane	10.51	201	14314	9.45	ppb		92
104)	1,2-Dibromo-3-chloropropan	11.02	157	7313	9.79	ppb		92
105)	1,2,4-Trichlorobenzene	11.85	180	49853	10.80	ppb		97
106)	Hexachlorobutadiene	12.05	225	21889	10.08	ppb		94
107)	Naphthalene	12.09	128	129853	11.06	ppb		100
108)	1,2,3-Trichlorobenzene	12.34	180	44711	10.87	ppb		98

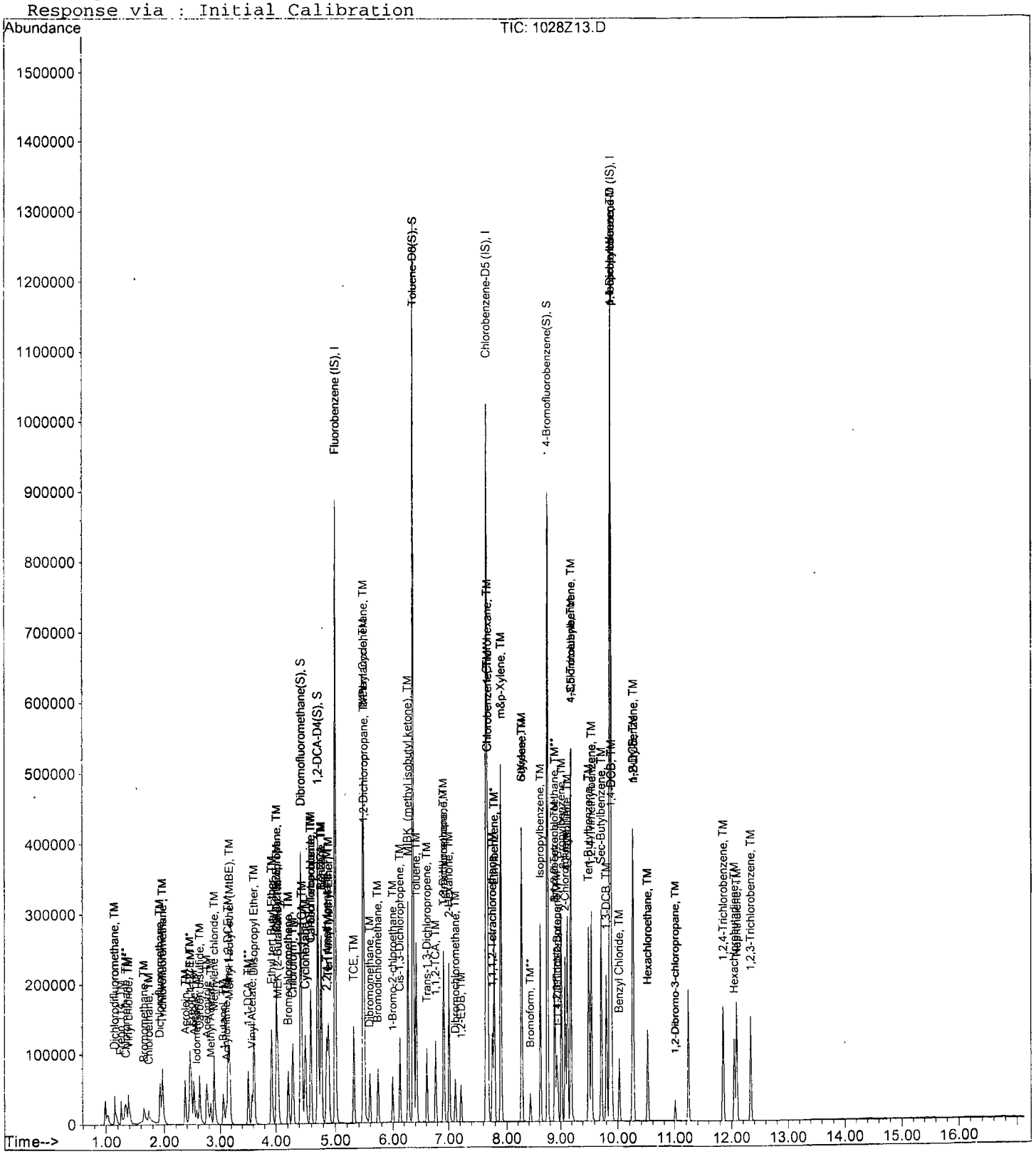
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z13.D Vial: 3
Acq On : 28 Oct 20 12:59 Operator: LP,DG,CH
Sample : 201028A LCS 10 ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:27 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z14.D Vial: 4
Acq On : 28 Oct 20 13:23 Operator: LP,DG,CH
Sample : 201028A LCSD 10 ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:40 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	657009	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.65	117	464306	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.87	152	246878	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.42	111	186694	27.81	ppb	0.00
Spiked Amount 25.000			Recovery =	111.260%		
48) 1,2-DCA-D4(S)	4.70	65	226384	28.72	ppb	0.00
Spiked Amount 25.000			Recovery =	114.876%		
69) Toluene-D8(S)	6.36	98	711644	27.92	ppb	0.00
Spiked Amount 25.000			Recovery =	111.668%		
77) 4-Bromofluorobenzene(S)	8.75	95	276096	28.37	ppb	0.00
Spiked Amount 25.000			Recovery =	113.496%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.15	87	12259	13.10	ppb	95
4) Freon 114	1.25	85	13877	13.99	ppb	90
5) Chloromethane	1.34	50	45375	9.84	ppb	98
6) Vinyl chloride	1.38	62	40211	10.06	ppb	99
9) Bromomethane	1.65	94	11459	11.08	ppb	94
10) Chloroethane	1.73	64	11779	14.05	ppb	95
11) Dichlorofluoromethane	1.93	67	63324	10.51	ppb	99
12) Trichlorofluoromethane	1.97	101	57958	12.54	ppb	98
16) Acrolein	2.36	55	33559	120.52	ppb	94
17) Acetone	2.52	43	68816	51.47	ppb	99
18) Freon-113	2.47	101	29082	11.90	ppb	98
19) 1,1-DCE	2.45	61	53527	10.04	ppb	98
21) Acetonitrile	2.76	40	17528	135.20	ppb	99
22) t-Butanol	3.06	59	21528	141.14	ppb	98
23) Methyl Acetate	2.83	43	29635	9.60	ppb	93
24) Iodomethane	2.57	142	30845	9.98	ppb	98
25) Acrylonitrile	3.11	52	13627	10.83	ppb	93
26) Methylene chloride	2.89	84	44926	11.71	ppb	98
27) Carbon disulfide	2.63	76	53456	9.72	ppb	100
28) Methyl t-butyl ether (MtBE	3.17	73	89829	10.74	ppb	100
29) Trans-1,2-DCE	3.15	61	51812	10.54	ppb	99
31) Diisopropyl Ether	3.61	45	109823	10.97	ppb	99
33) 1,1-DCA	3.51	63	63698	10.57	ppb	98
34) Vinyl Acetate	3.58	43	52505	11.86	ppb	97
35) Ethyl tert Butyl Ether	3.93	59	99337	10.99	ppb	99
36) MEK (2-Butanone)	4.04	43	89014	50.50	ppb	96
37) Cis-1,2-DCE	4.01	61	61149	10.83	ppb	97
38) 2,2-Dichloropropane	4.02	77	50942	11.32	ppb	99
41) Chloroform	4.29	83	63317	10.72	ppb	98
42) Bromochloromethane	4.21	49	31174	10.82	ppb	99
44) 1,1,1-TCA	4.45	97	52978	10.34	ppb	98
45) Cyclohexane	4.50	56	57490	11.14	ppb	95
46) 1,1-Dichloropropene	4.59	75	49618	10.25	ppb	99
47) 2,2,4-Trimethylpentane	4.85	57	116730	12.66	ppb	100
49) Carbon Tetrachloride	4.59	117	40549	10.33	ppb	100
50) Tert Amyl Methyl Ether	4.88	73	85789	10.97	ppb	99
52) 1,2-DCA	4.77	62	50134	10.82	ppb	99
53) Benzene	4.76	78	149241	10.46	ppb	99
54) TCE	5.32	130	39423	10.39	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z14.D Vial: 4
Acq On : 28 Oct 20 13:23 Operator: LP,DG,CH
Sample : 201028A LCSD 10 ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:40 2020 Quant Results File: Z1027W.RES

Quant Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
55)	2-Pentanone	5.47	43	334352	124.83 ppb	99
56)	1,2-Dichloropropane	5.49	63	36981	10.62 ppb	99
57)	Bromodichloromethane	5.73	83	41743	11.03 ppb	98
58)	Methyl Cyclohexane	5.48	83	57227	11.63 ppb	95
59)	Dibromomethane	5.59	174	22306	10.69 ppb	93
60)	MIBK (methyl isobutyl ket	6.27	43	163981	51.35 ppb	99
61)	1-Bromo-2-chloroethane	6.00	144	5330	10.94 ppb	99
63)	Cis-1,3-Dichloropropene	6.12	75	54061	11.06 ppb	100
64)	Toluene	6.42	91	158282	10.56 ppb	99
65)	Trans-1,3-Dichloropropene	6.61	75	46124	10.34 ppb	99
66)	1,1,2-TCA	6.77	97	30044	10.62 ppb	98
67)	2-Hexanone	7.01	43	114950	51.23 ppb	99
70)	1,2-EDB	7.22	107	30945	10.90 ppb	99
71)	Tetrachloroethene	6.91	166	37837	9.97 ppb	98
72)	1-Chlorohexane	7.67	91	49951	9.87 ppb	98
73)	1,1,1,2-Tetrachloroethane	7.75	131	29304	10.73 ppb	95
74)	m&p-Xylene	7.90	91	271774	21.69 ppb	96
75)	o-Xylene	8.26	91	137545	10.90 ppb	98
76)	Styrene	8.27	104	105765	11.12 ppb	97
78)	1,3-Dichloropropane	6.92	76	53841	10.81 ppb	98
79)	Dibromochloromethane	7.12	129	27342	11.04 ppb	96
80)	Chlorobenzene	7.68	112	99487	10.67 ppb	99
81)	Ethylbenzene	7.79	91	173575	10.63 ppb	98
82)	Bromoform	8.43	173	15579	9.52 ppb	98
84)	Isopropylbenzene	8.62	105	170600	10.68 ppb	99
85)	1,1,2,2-Tetrachloroethane	8.89	83	39097	10.07 ppb	98
86)	1,2,3-Trichloropropane	8.93	110	12582	10.04 ppb	98
87)	t-1,4-Dichloro-2-Butene	8.95	53	9850	9.96 ppb	89
88)	Bromobenzene	8.89	77	78774	10.70 ppb	89
89)	n-Propylbenzene	9.01	91	213119	10.26 ppb	99
90)	4-Ethyltoluene	9.13	105	176289	10.40 ppb	97
91)	2-Chlorotoluene	9.09	91	124121	10.63 ppb	100
92)	1,3,5-Trimethylbenzene	9.19	105	152465	11.17 ppb	98
93)	4-Chlorotoluene	9.19	91	148943	11.10 ppb	98
94)	Tert-Butylbenzene	9.50	119	125000	10.59 ppb	99
95)	1,2,4-Trimethylbenzene	9.55	105	151562	11.12 ppb	99
96)	Sec-Butylbenzene	9.72	105	196658	10.43 ppb	98
97)	p-Isopropyltoluene	9.86	119	165580	10.38 ppb	98
98)	Benzyl Chloride	10.03	91	57022	10.03 ppb	99
99)	1,3-DCB	9.81	146	79745	10.53 ppb	98
100)	1,4-DCB	9.89	146	81699	10.60 ppb	99
101)	n-Butylbenzene	10.27	91	160716	10.86 ppb	99
102)	1,2-DCB	10.26	146	73955	10.70 ppb	99
103)	Hexachloroethane	10.52	201	13933	9.28 ppb	93
104)	1,2-Dibromo-3-chloropropan	11.02	157	6943	9.43 ppb	94
105)	1,2,4-Trichlorobenzene	11.85	180	49231	10.64 ppb	95
106)	Hexachlorobutadiene	12.05	225	22612	10.39 ppb	93
107)	Naphthalene	12.09	128	127232	10.82 ppb	97
108)	1,2,3-Trichlorobenzene	12.34	180	44360	10.76 ppb	98

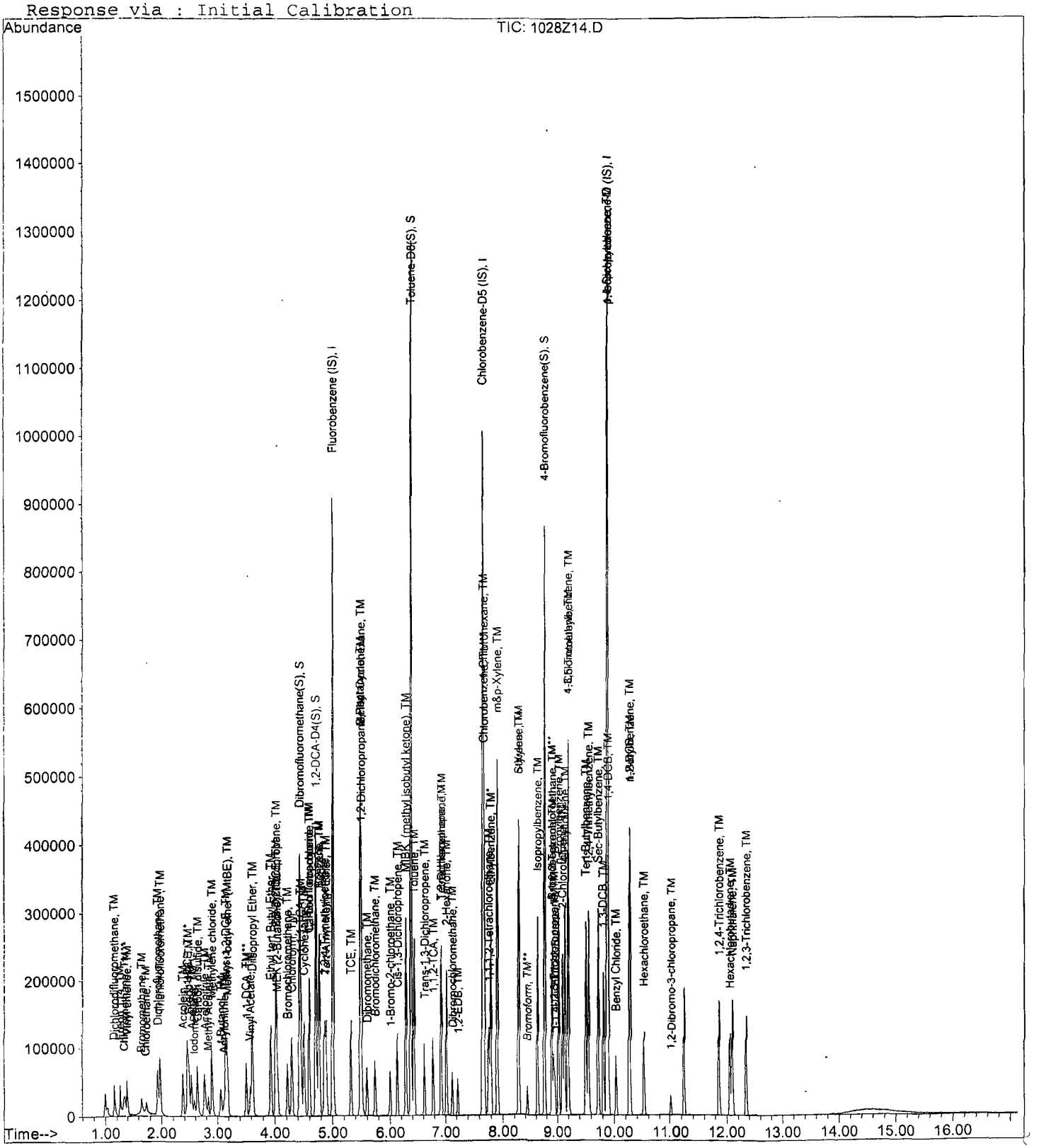
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z14.D Vial: 4
Acq On : 28 Oct 20 13:23 Operator: LP,DG,CH
Sample : 201028A LCSD 10 ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 12:40 2020 Quant Results File: Z1027W.RES

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration

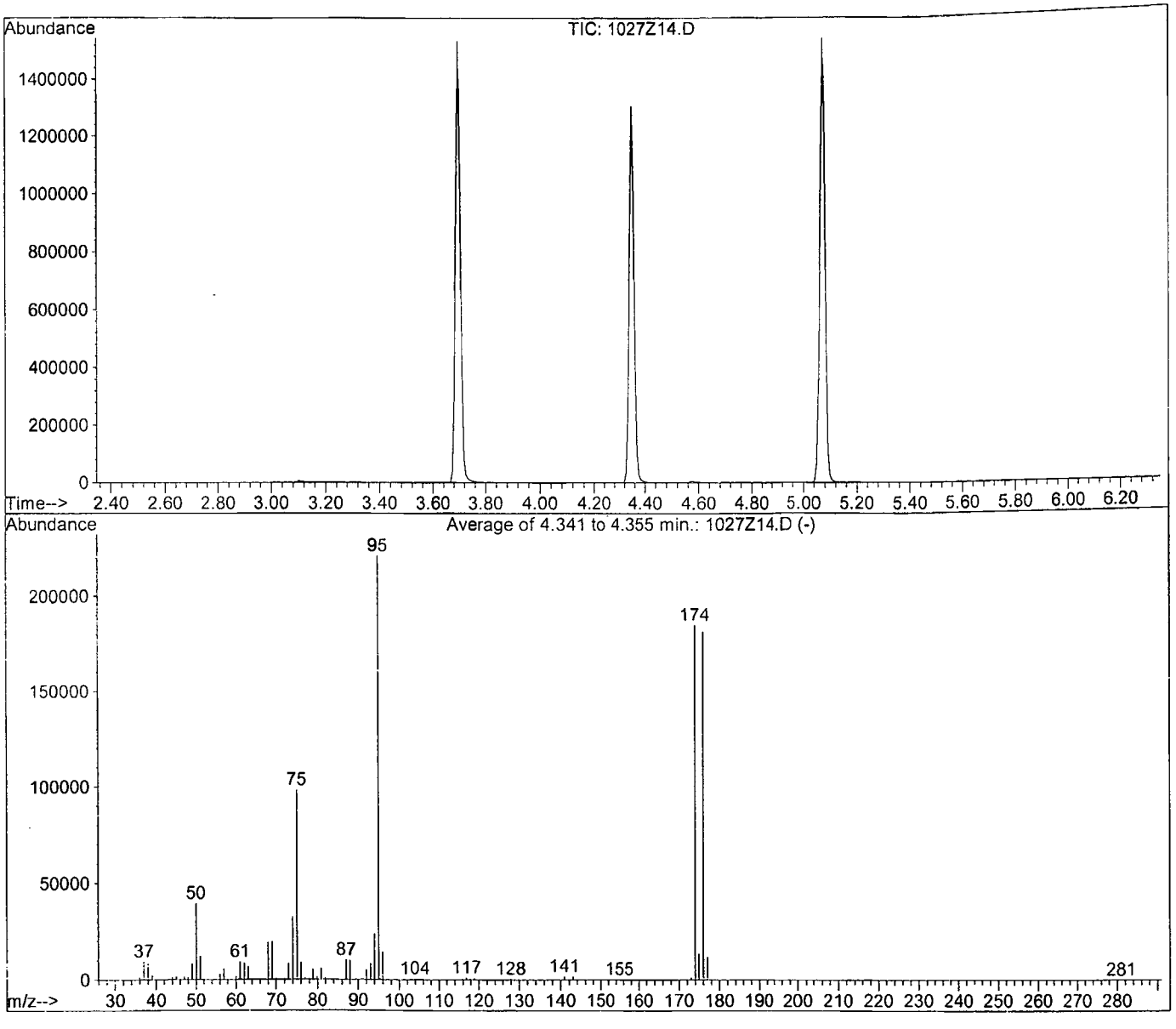


BFB

Data File : M:\ZEUS\DATA\201027\1027Z14.D
Acq On : 27 Oct 20 12:27
Sample : 25ug/L BFB STD 9/30/20
Misc :

Vial: 1
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B



AutoFind: Scans 175, 176, 177; Background Corrected with Scan 169

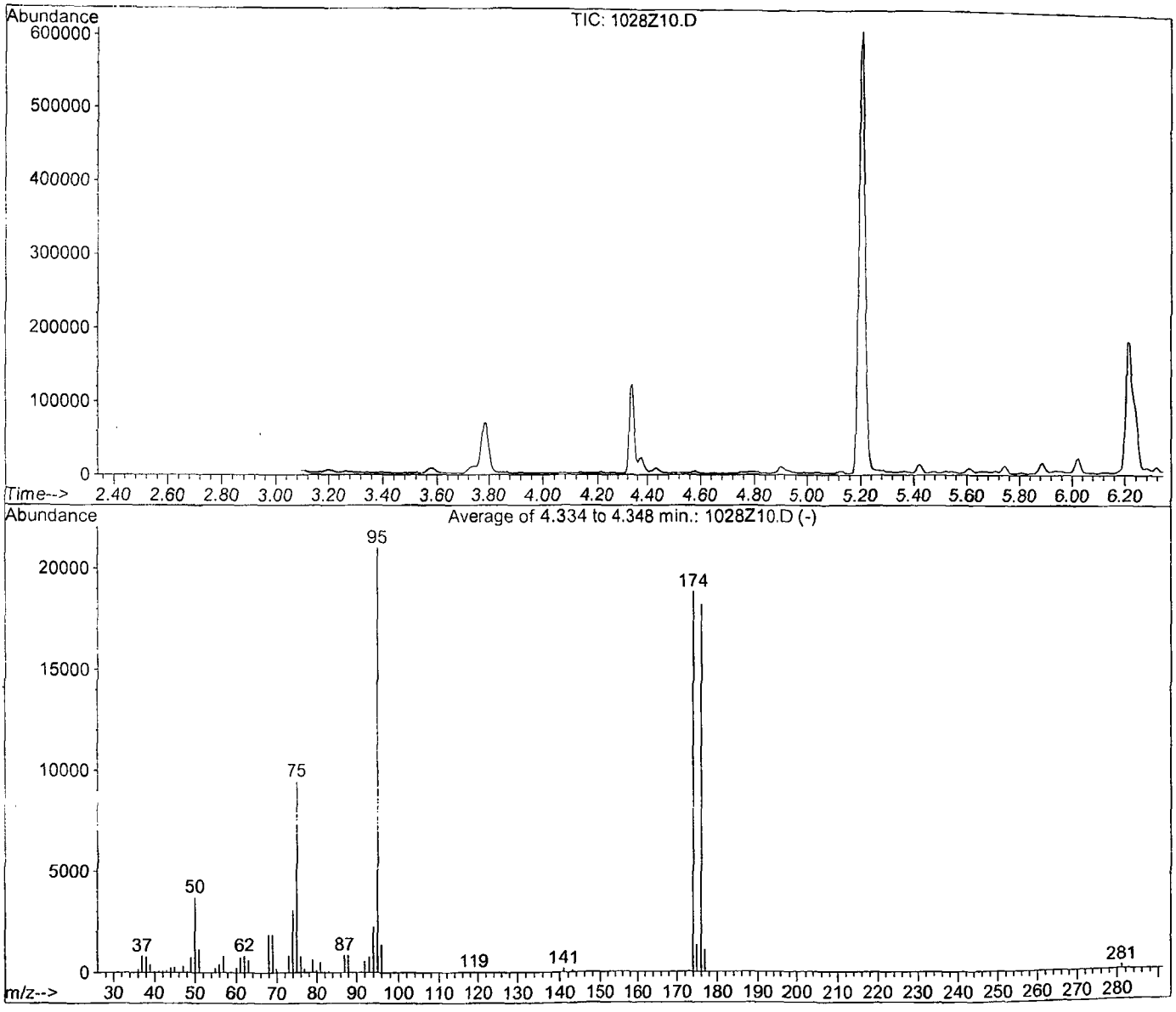
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	39752	PASS
75	95	30	60	44.5	98435	PASS
95	95	100	100	100.0	221269	PASS
96	95	5	9	6.6	14543	PASS
173	174	0.00	2	0.7	1348	PASS
174	95	50	200	83.7	185253	PASS
175	174	5	9	7.4	13624	PASS
176	174	95	101	98.0	181571	PASS
177	176	5	9	6.6	12025	PASS

BFB

Data File : M:\ZEUS\DATA\201027\1028Z10.D
Acq On : 28 Oct 20 11:44
Sample : 25ug/L BFB STD 9/30/20
Misc :

Vial: 1
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Method : M:\ZEUS\DATA\201027\Z1027W.M (RTE Integrator)
Title : METHOD 8260B



Spectrum Information: Average of 4.334 to 4.348 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	3747	PASS
75	95	30	60	45.1	9483	PASS
95	95	100	100	100.0	21043	PASS
96	95	5	9	6.6	1394	PASS
173	174	0.00	2	0.3	63	PASS
174	95	50	200	89.6	18858	PASS
175	174	5	9	7.1	1331	PASS
176	174	95	101	96.7	18238	PASS
177	176	5	9	6.0	1099	PASS

Primary and Secondary Working Standards

Primary Standards

VOA STD 7

Prepared: 10/26/20 A
Expires: 12/25/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses STD	Phenova	ALO-101206	2,000	CL14506-50820	10/26/21	10/31/24	100uL	4mL	Methanol	50
Hexachloroethane	Absolute	70199	1,000	091818-50782	10/26/21	09/18/23	200uL			50
Benzyl Chloride	Accusta	M-8010-01	1,000	042420-50797	10/26/21	04/24/21	200uL			50

VOA STD 8

Prepared: 10/26/20 B
Expires: 11/18/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Additions STD	Phenova	ALO-130175	2,000	CL15724-50830	10/18/21	09/30/22	100uL	4mL	Methanol	50
502.2 Cal. Std.	Phenova	ALO-101200	2,000	CL14379-50556	10/18/21	10/31/24	100uL			50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL15933-51014	10/26/21	11/18/20	100uL			50

VOA STD TBA

Prepared: 10/26/20 C
Expires: 11/18/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOC Mix	Phenova	ALO-130176	2,000	CL15725-50775	10/26/21	09/30/23	500uL	4mL	Methanol	250
Acrolein	Phenova	ALO-130549	10,000	CL15937-51016	10/26/21	11/18/20	100uL			250

VOA STD 1

Prepared: 10/26/20 D
Expires: 12/25/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE	Absolute	82408	2,000	121119-50902	10/26/21	12/11/22	50	2mL	Methanol	50

VOA STD 2

Prepared: 10/26/20 E
Expires: 12/25/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Std.	Phenova	AL0-109211	2,000	CL12730-50631	10/26/21	08/31/28	100	4mL	Methanol	50

VOA STD 9

Prepared: 10/26/20 F
Expires: 12/25/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 7		VOA STD. 9	50	Prepared 10/26/20	10/26/21	N/A	200uL	2mL	Methanol	5
VOA STD. 8			50	Prepared 10/26/20	10/26/21	N/A	200uL			5

VOA STD. 10

Prepared: 10/26/20 G
Expires: 12/25/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 1		VOA STD. 10	50	Prepared 10/26/20	10/26/21	N/A	200uL	2mL	Methanol	5

VOA STD. 12

Prepared: 10/26/20 H
Expires: 12/25/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 2		VOA STD. 12	50	Prepared 10/26/20	10/26/21	N/A	200uL	2mL	Methanol	5

Second Source (SS) Standards

VOA STD. 3

Prepared: 10/26/20 I
Expires: 12/25/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Standard	Phenova	ALO-101211	2,000	CL13994-50635	10/26/21	08/31/29	50uL	2mL	Methanol	50

VOA STD. Gases

Prepared: 10/26/20 J
Expires: 12/25/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260 Gases (SS)	Phenova	ALO-101206	2,000	CL14505-50825	10/26/21	10/31/24	50uL	2mL	Methanol	50

VOA STD. 6

Prepared: 10/26/20 K
Expires: 11/18/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
502.2 Calibration STD. (54-compounds)	Phenova	ALO-101200	2,000	CL14381-50562	10/18/21	10/31/24	50uL	2mL	Methanol	50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL15933-51015	10/26/21	11/18/20	50uL			50
Hexachloroethane	Accustan	AS-E0011	1,000	219061767-50956	10/26/21	06/28/29	100uL			50
Benzyl Chloride	Accustan	M-8010-01	200	219111303-50804	10/26/21	12/25/21	500uL			50

VOA STD. TBA

Prepared: 10/26/20 L
Expires: 11/18/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOA Mix (4-3)	Phenova	ALO-130176	2,000	CL12929-50566	10/26/21	11/30/20	250uL	2mL	Methanol	250
Acrolein	Phenova	ALO-101224	10,000	CL15937-51017	10/26/21	11/18/20	50uL			250

VOA STD. 0

Prepared: 10/26/20 M
Expires: 12/25/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Addition STD.	Phenova	ALO-130175	2,000	CL14058-50580	10/18/21	08/31/21	50uL	2mL	Methanol	50

VOA STD. 2-CEVE

Prepared: 10/26/20 N
Expires: 12/25/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE (SS)	Absolute	82408	2,000	011320-50897	10/26/21	01/13/23	50uL	2mL	Methanol	50

ZEUS 8260 Water Calibration Curve

Prepared By (Initials): CH

0.3ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	0.3ug/L	5	Prepared 10/26/20	12/25/20	N/A	3uL	50mL	P&T Water	0.3
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	5uL			5
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	2.5uL			5
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	2uL			10

0.5ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	0.5ug/L	5	Prepared 10/26/20	12/25/20	N/A	5uL	50mL	P&T Water	0.5
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	10uL			10
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	5uL			10
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	5uL			25

1.0ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	1.0ug/L	5	Prepared 10/26/20	12/25/20	N/A	10uL	50mL	P&T Water	1
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	20uL			20
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	10uL			20
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	10uL			50

2.0ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	2.0ug/L	5	Prepared 10/26/20	12/25/20	N/A	20uL	50mL	P&T Water	2
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	30uL			30
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	15uL			30
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	15uL			75

5ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	5ug/L	50	Prepared 10/26/20	12/25/20	N/A	5uL	50mL	P&T Water	5
VOA STD. 8	Phenova		50	Prepared 10/26/20	11/18/20	N/A	5uL			5
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	40uL			40
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	20uL			20
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	20uL			100

10ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	10ug/L	50	Prepared 10/26/20	12/25/20	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 10/26/20	11/18/20	N/A	10uL			10
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	50uL			50
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	25uL			50
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	25uL			125

20ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	20ug/L	50	Prepared 10/26/20	12/25/20	N/A	20uL	50mL	P&T Water	20
VOA STD. 8	Phenova		50	Prepared 10/26/20	11/18/20	N/A	20uL			20
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	60uL			60
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	30uL			60
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	30uL			150

40ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	40ug/L	50	Prepared 10/26/20	12/25/20	N/A	40uL	50mL	P&T Water	40
VOA STD. 8	Phenova		50	Prepared 10/26/20	11/18/20	N/A	40uL			40
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	80uL			80
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	40uL			80
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	35uL			175

100ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	100ug/L	50	Prepared 10/26/20	12/25/20	N/A	100uL	50mL	P&T Water	100
VOA STD. 8	Phenova		50	Prepared 10/26/20	11/18/20	N/A	100uL			100
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	100uL			100
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	50uL			100
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	40uL			200

ZEUS 8260 Water Second Source (SS)

Prepared: 10/27/20

Expires: 11/18/20

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 3	Phenova	8260 Water SS	100	Prepared 10/26/20	12/25/20	N/A	25uL	50mL	P&T Water	50
VOA STD. GASES	Phenova	8260 Water SS	50	Prepared 10/26/20	12/25/20	N/A	10uL			10
VOA STD. 0	Phenova	8260 Water SS	50	Prepared 10/26/20	12/25/20	N/A	10uL			10
VOA STD. 2-CEVE	Absolute	8260 Water SS	50	Prepared 10/26/20	10/26/20	N/A	50uL			50
VOA STD. 6	Various	8260 Water SS	50	Prepared 10/26/20	11/18/20	N/A	10uL			10
Voa STD. TBA	Various	8260 Water SS	250	Prepared 10/26/20	11/18/20	N/A	25uL			250

8260 Water Continuing Calibrations (CCV)/ Lab Control Spikes (LCS)

Prepared: 10/27/20

Expires: 10/28/20

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	CCV/ LCS	50	Prepared 10/26/20	12/25/20	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova	CCV/ LCS	50	Prepared 10/26/20	11/18/20	N/A	10uL			10
VOA STD. 1	Absolute	CCV/ LCS	50	Prepared 10/26/20	12/25/20	N/A	50uL			50
VOA STD. 2	Phenova	CCV/ LCS	100	Prepared 10/26/20	12/25/20	N/A	25uL			50
VOA STD. TBA	Various	CCV/ LCS	250	Prepared 10/26/20	11/18/20	N/A	25uL			125

Injection Log

Directory: M:\ZEUS\DATA\201027\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1027Z14.D	1	25ug/L BFB STD 9/30/20		27 Oct 20 12:27
2	4	1027Z18.D	1	0.3ug/L VOC STD 10/27/20		27 Oct 20 14:00
3	5	1027Z19.D	1	0.5ug/L VOC STD 10/27/20		27 Oct 20 14:23
4	6	1027Z20.D	1	1ug/L VOC STD 10/27/20		27 Oct 20 14:46
5	7	1027Z21.D	1	2ug/L VOC STD 10/27/20		27 Oct 20 15:09
6	8	1027Z22.D	1	5ug/L VOC STD 10/27/20		27 Oct 20 15:33
7	9	1027Z23.D	1	10ug/L VOC STD 10/27/20		27 Oct 20 15:56
8	10	1027Z24.D	1	20ug/L VOC STD 10/27/20		27 Oct 20 16:19
9	11	1027Z25.D	1	40ug/L VOC STD 10/27/20		27 Oct 20 16:42
10	12	1027Z26.D	1	100ug/L VOC STD 10/27/20		27 Oct 20 17:06
11	14	1027Z28.D	1	(SS)10ug/L VOC STD 10/27/20		27 Oct 20 17:52
12	1	1028Z10.D	1	25ug/L BFB STD 9/30/20		28 Oct 20 11:44
13	2	1028Z12.D	1	201028A CCV 10 ug/L		28 Oct 20 12:36
14	3	1028Z13.D	1	201028A LCS 10 ug/L		28 Oct 20 12:59
15	4	1028Z14.D	1	201028A LCSD 10 ug/L		28 Oct 20 13:23
16	8	1028Z18.D	1	201028A BLK		28 Oct 20 14:56
17	9	1028Z19.D	1	BA20715W01		28 Oct 20 15:19
18	10	1028Z20.D	1	BA20716W01		28 Oct 20 15:42
19	11	1028Z21.D	1	BA20717W01		28 Oct 20 16:05
20	12	1028Z22.D	1	BA20718W01		28 Oct 20 16:28
21	13	1028Z23.D	1	BA20719W01		28 Oct 20 16:51
22	14	1028Z24.D	1	Ending CCV 10ug/L 10/27/20		28 Oct 20 17:14

ORGANICS

Calibration Data

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/28/20
Matrix: water Instrument: ZEUS Initials: DG

			1027Z51.D	1027Z52 D	1027Z53 D	1027Z54 D	1027Z55.D	1027Z56 D	1027Z57 D										
		Compound	1	2	3	4	5	6	7				Avg	%RSD	Type	r^2	Q	MRF
1	I	Fluorobenzene (IS)																
2	TMHBL	Gasoline C6-C10	10 1	4.270	2.276	1.024	0.7321	0.6555	0.6142				2.8	123	TMHB	0.999		
3	I	Chlorobenzene-D5 (IS)																
4	I	1,4-Dichlorobenzene-D (IS)																
5																		
6																		
7																		
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Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z51.D
Acq On : 28 Oct 20 02:41
Sample : 20ug/L GAS STD 10/27/20
Misc :

Vial: 37
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:21 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:11:07 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	784722	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	1015038	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	1015038	25.00 ppb	0.00
System Monitoring Compounds					
Target Compounds					Qvalue
2) Gasoline C6-C10	6.36	TIC	6309737m	30.64 ppb	100

(#) = qualifier out of range (m) = manual integration
1027Z51.D ZGAS1027.M Thu Oct 29 11:27:16 2020

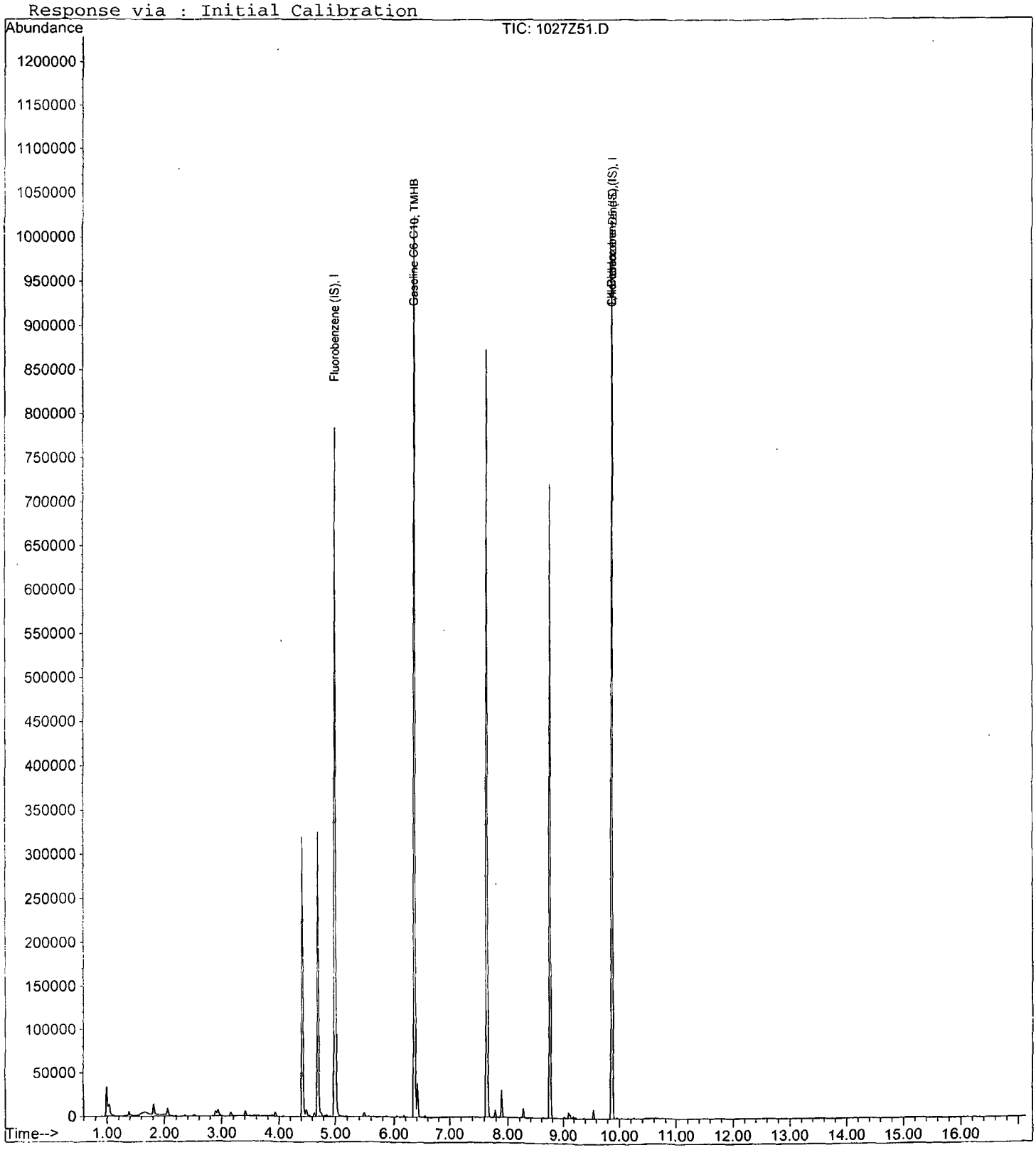
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z51.D
Acq On : 28 Oct 20 02:41
Sample : 20ug/L GAS STD 10/27/20
Misc :

Vial: 37
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:21 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z52.D Vial: 38
Acq On : 28 Oct 20 03:04 Operator: LP,DG,CH
Sample : 50ug/L GAS STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:20 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:11:07 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	785066	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	985530	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	985530	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.37	TIC	6703878m	60.16	ppb	100

(#) = qualifier out of range (m) = manual integration

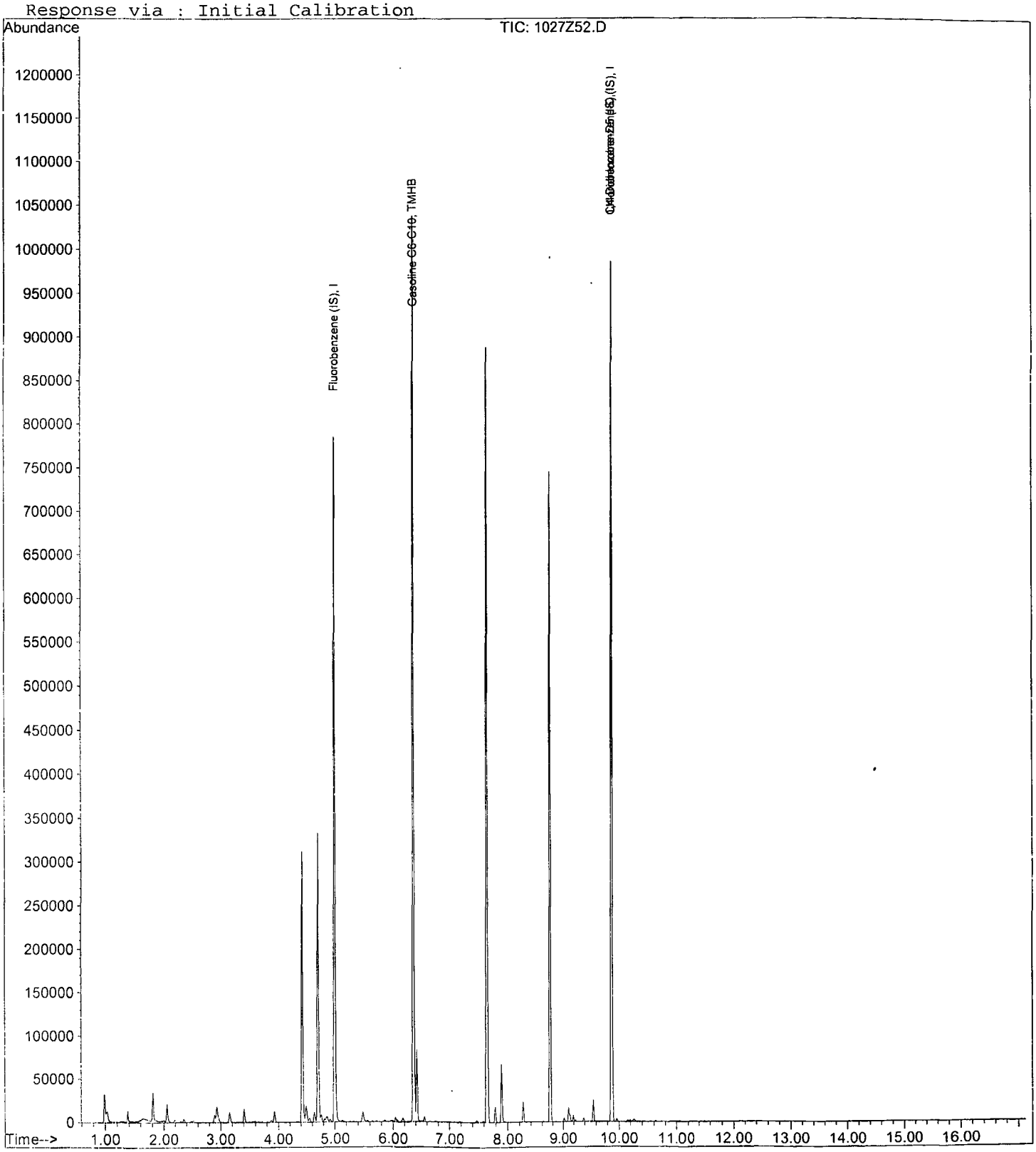
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z52.D
Acq On : 28 Oct 20 03:04
Sample : 50ug/L GAS STD 10/27/20
Misc :

Vial: 38
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:20 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z53.D
Acq On : 28 Oct 20 03:27
Sample : 100ug/L GAS STD 10/27/20
Misc :

Vial: 39
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:21 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:11:07 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	806265	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	988284	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	988284	25.00 ppb	0.00
System Monitoring Compounds					
Target Compounds					Qvalue
2) Gasoline C6-C10	6.36	TIC	7338841m	93.51 ppb	100

(#) = qualifier out of range (m) = manual integration
1027Z53.D ZGAS1027.M Thu Oct 29 11:27:20 2020

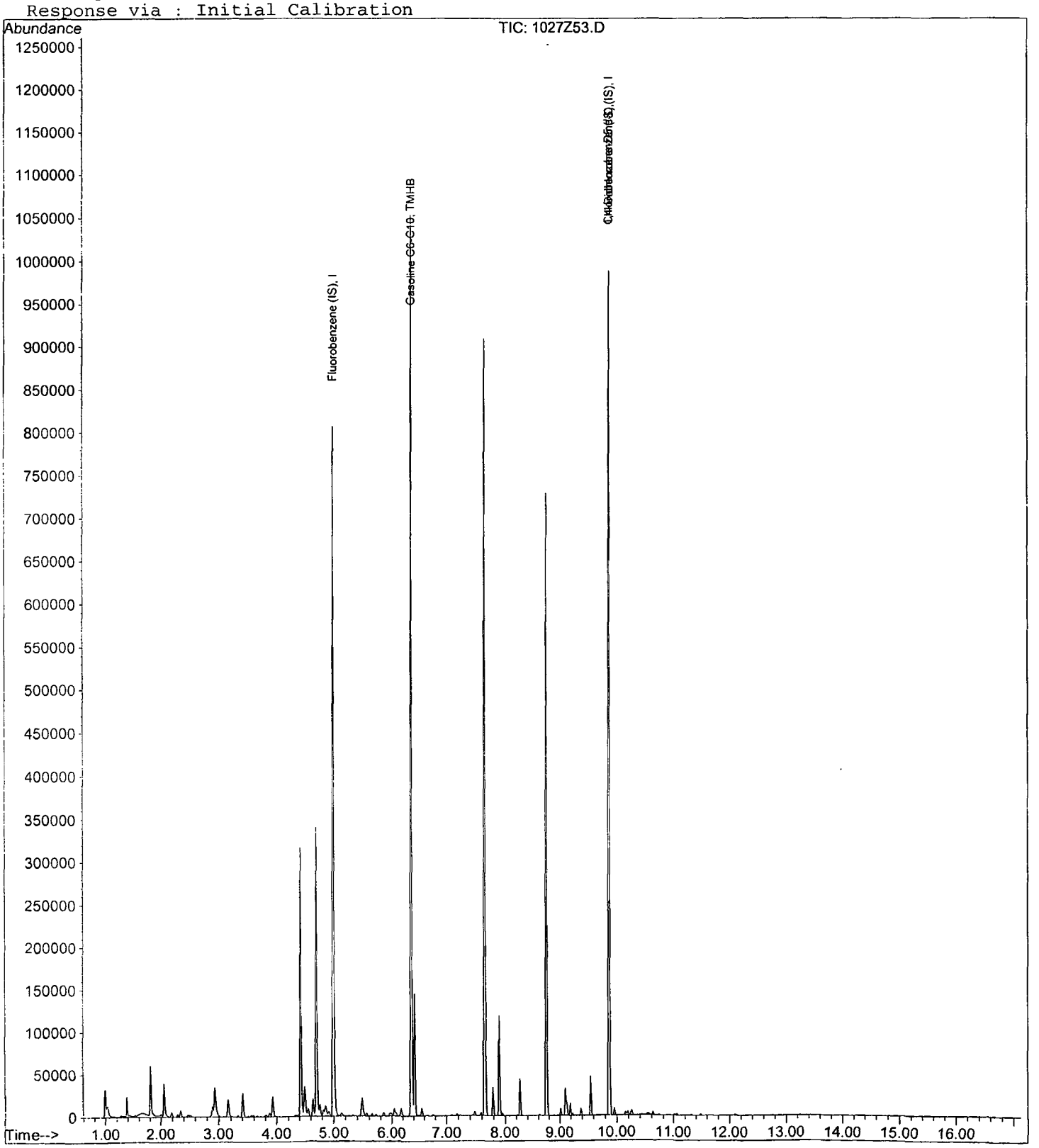
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z53.D
Acq On : 28 Oct 20 03:27
Sample : 100ug/L GAS STD 10/27/20
Misc :

Vial: 39
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:21 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z54.D Vial: 40
Acq On : 28 Oct 20 03:50 Operator: LP,DG,CH
Sample : 300ug/L GAS STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:22 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:11:07 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	827690	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	1002046	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	1002046	25.00	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) Gasoline C6-C10	6.36	TIC	10167054m	281.95	ppb	100

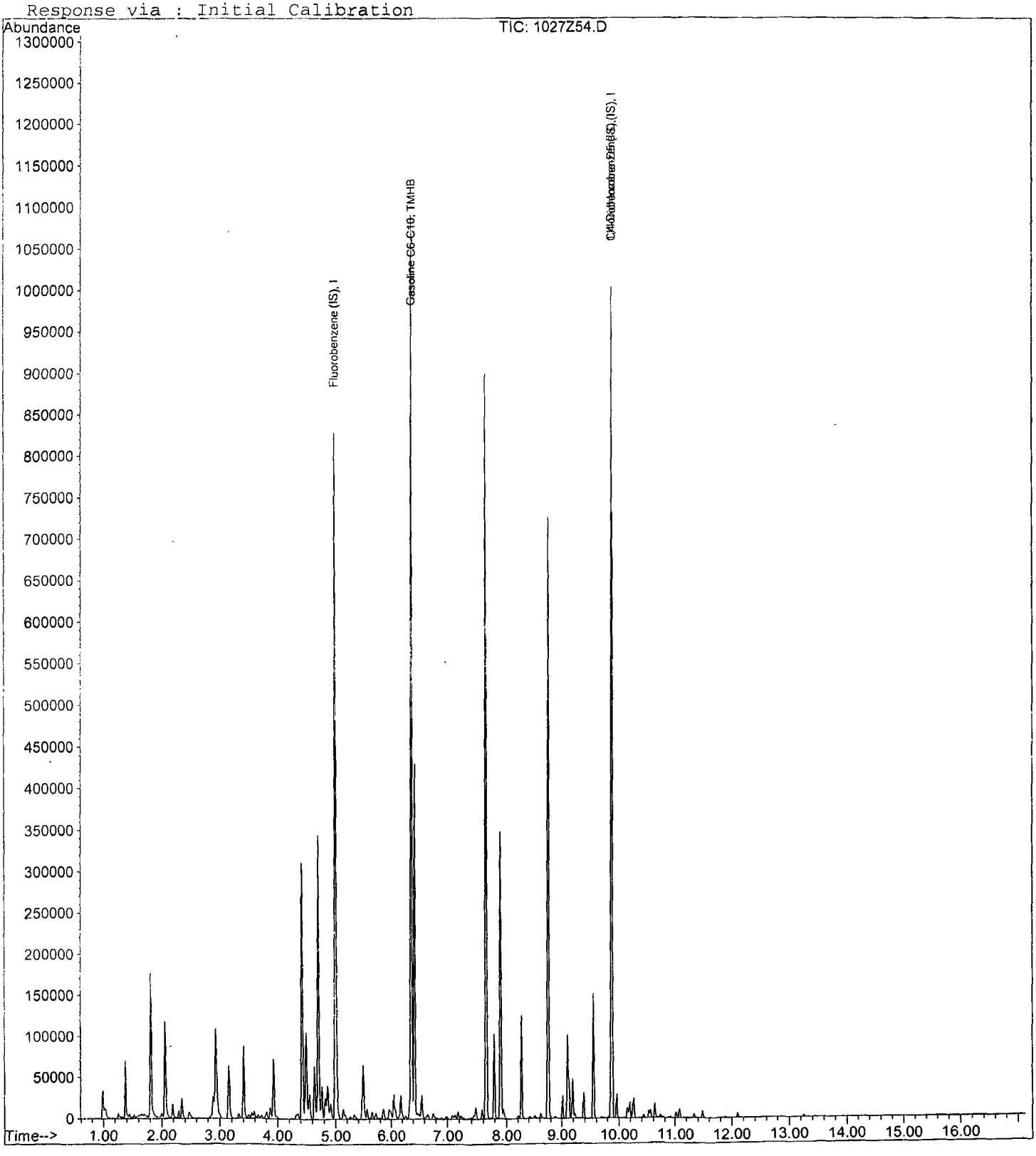
(#) = qualifier out of range (m) = manual integration
1027Z54.D ZGAS1027.M Thu Oct 29 11:27:22 2020 Page 1

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z54.D Vial: 40
Acq On : 28 Oct 20 03:50 Operator: LP,DG,CH
Sample : 300ug/L GAS STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:22 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z55.D Vial: 41
Acq On : 28 Oct 20 04:13 Operator: LP,DG,CH
Sample : 600ug/L GAS STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:22 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:11:07 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	822031	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	979289	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	979289	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Gasoline C6-C10	6.36	TIC	14443367m	595.09 ppb	100

(#) = qualifier out of range (m) = manual integration
1027Z55.D ZGAS1027.M Thu Oct 29 11:27:24 2020 Page 1

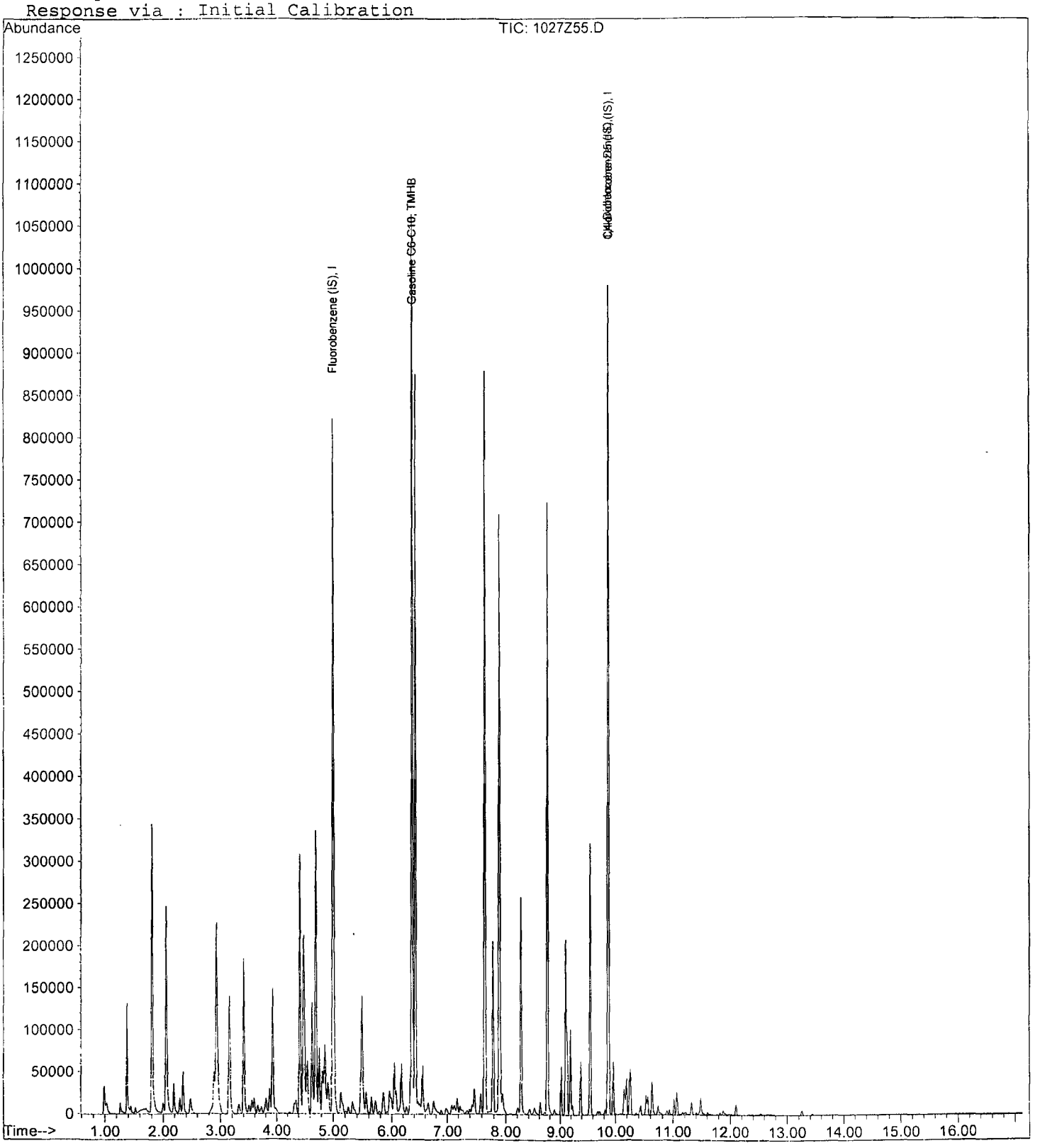
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z55.D
Acq On : 28 Oct 20 04:13
Sample : 600ug/L GAS STD 10/27/20
Misc :

Vial: 41
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:22 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z56.D Vial: 42
Acq On : 28 Oct 20 04:36 Operator: LP,DG,CH
Sample : 800ug/L GAS STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:22 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:11:07 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	862364	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	1028416	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	1028416	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.42	TIC	18088895m	796.81	ppb	100

(#) = qualifier out of range (m) = manual integration
1027Z56.D ZGAS1027.M Thu Oct 29 11:27:25 2020 Page 1

Quantitation Report

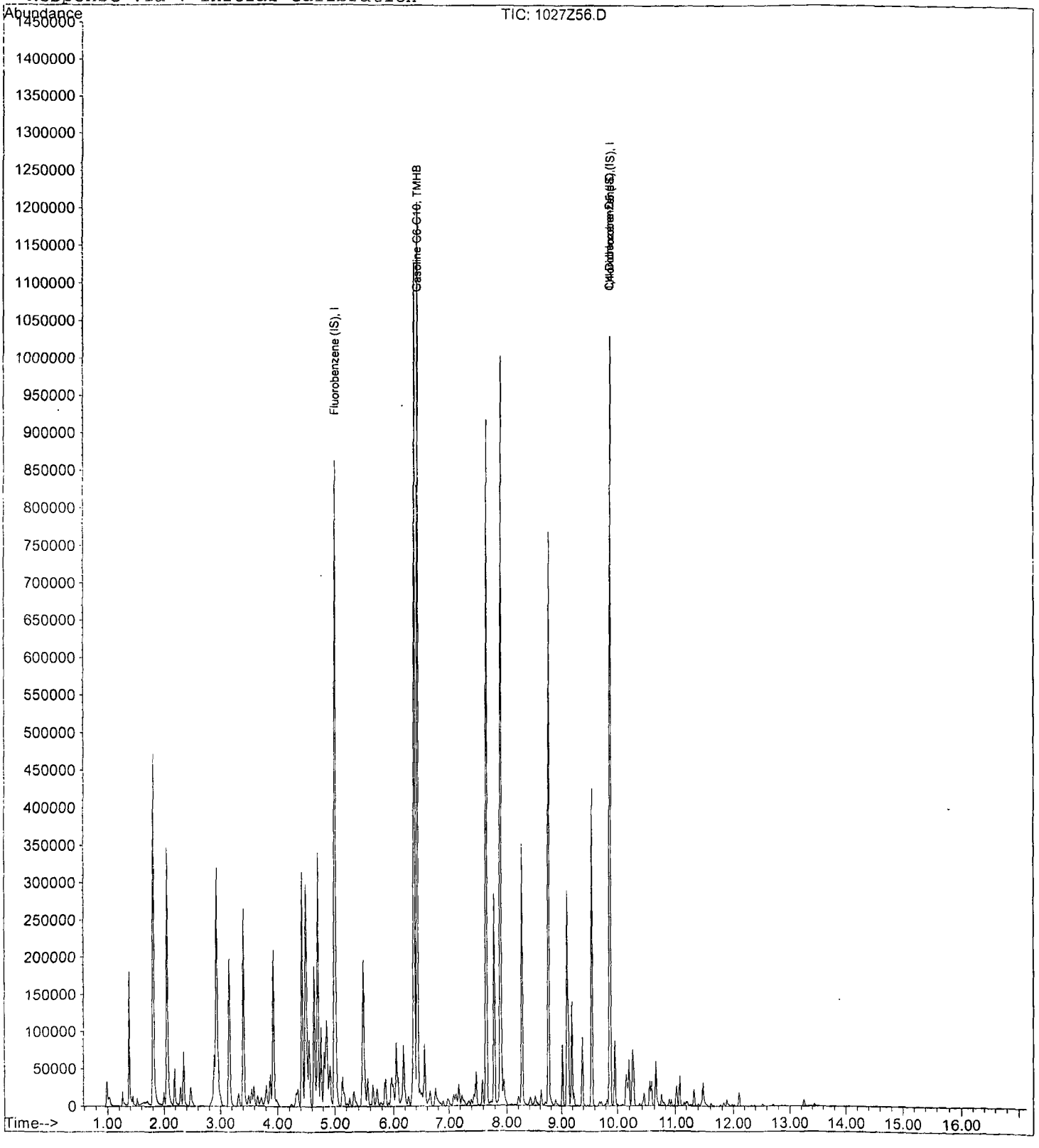
Data File : M:\ZEUS\DATA\201027\1027Z56.D
Acq On : 28 Oct 20 04:36
Sample : 800ug/L GAS STD 10/27/20
Misc :

Vial: 42
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:22 2020

Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z57.D Vial: 43
Acq On : 28 Oct 20 04:59 Operator: LP,DG,CH
Sample : 1000ug/L GAS STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:23 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:11:07 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	864338	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	1013009	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	1013009	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.42	TIC	21234922m	1009.56	ppb	100

(#) = qualifier out of range (m) = manual integration
1027Z57.D ZGAS1027.M Thu Oct 29 11:27:27 2020 Page 1

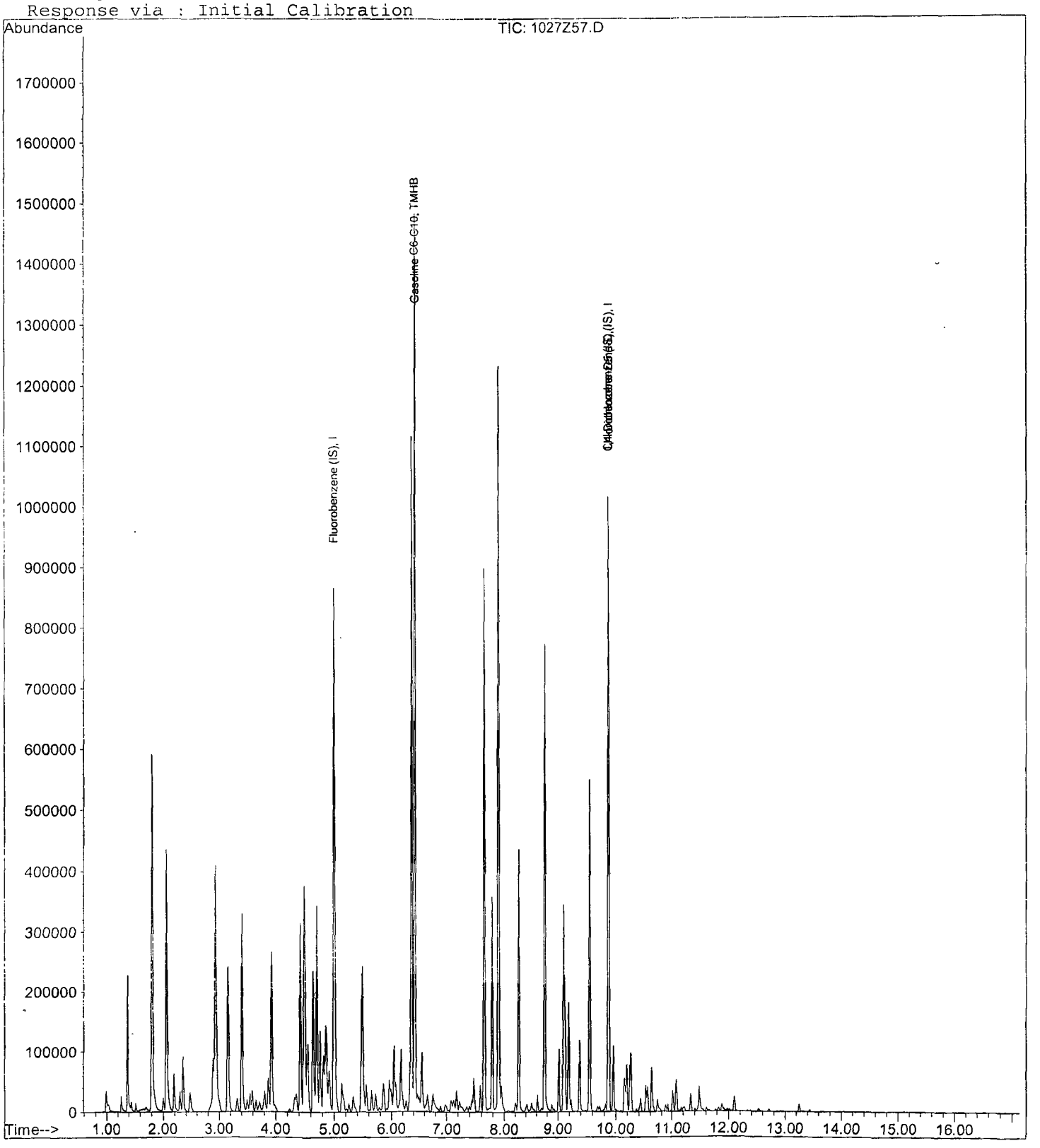
Quantitation Report

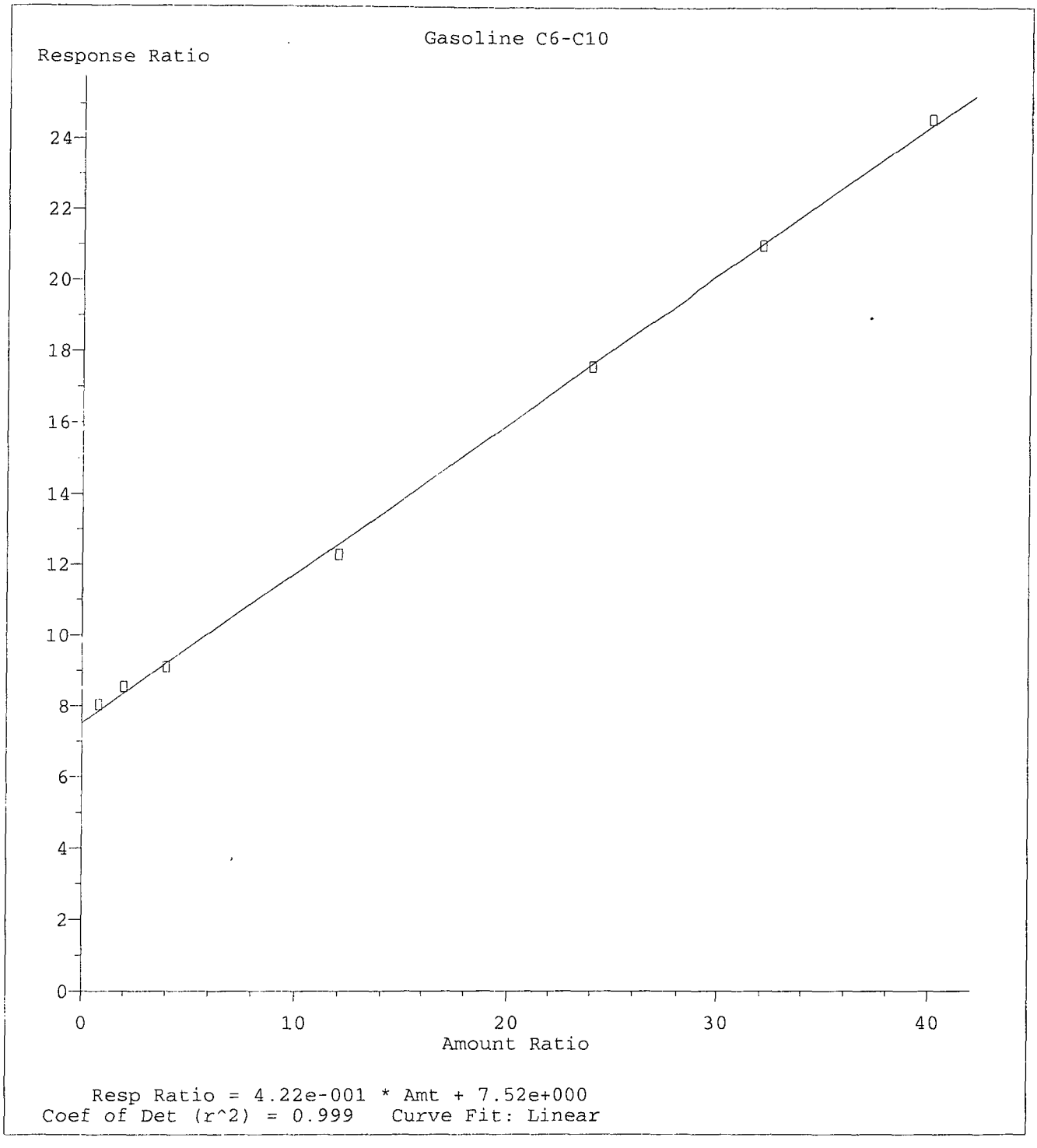
Data File : M:\ZEUS\DATA\201027\1027Z57.D
Acq On : 28 Oct 20 04:59
Sample : 1000ug/L GAS STD 10/27/20
Misc :

Vial: 43
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:23 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration





Method Name: M:\ZEUS\DATA\201027\ZGAS1027.M
Calibration Table Last Updated: Thu Oct 29 11:23:13 2020

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/28/20
Instrument: ZEUS
Initial Cal. Date: 10/28/20
Data File: 1027Z59.D

		Compound	MEAN	CCRF	%D		%Drift
1	TMHB	Gasoline C6-C10	2.803	1.014	64	TMHBL	8.3
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
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30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			64.0		

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z59.D
Acq On : 28 Oct 20 05:45
Sample : (SS)300ug/L GAS STD 10/27/20
Misc :

Vial: 45
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:26 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	831997	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	1004648	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	1004648	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.36	TIC	10119289m	275.06	ppb	100

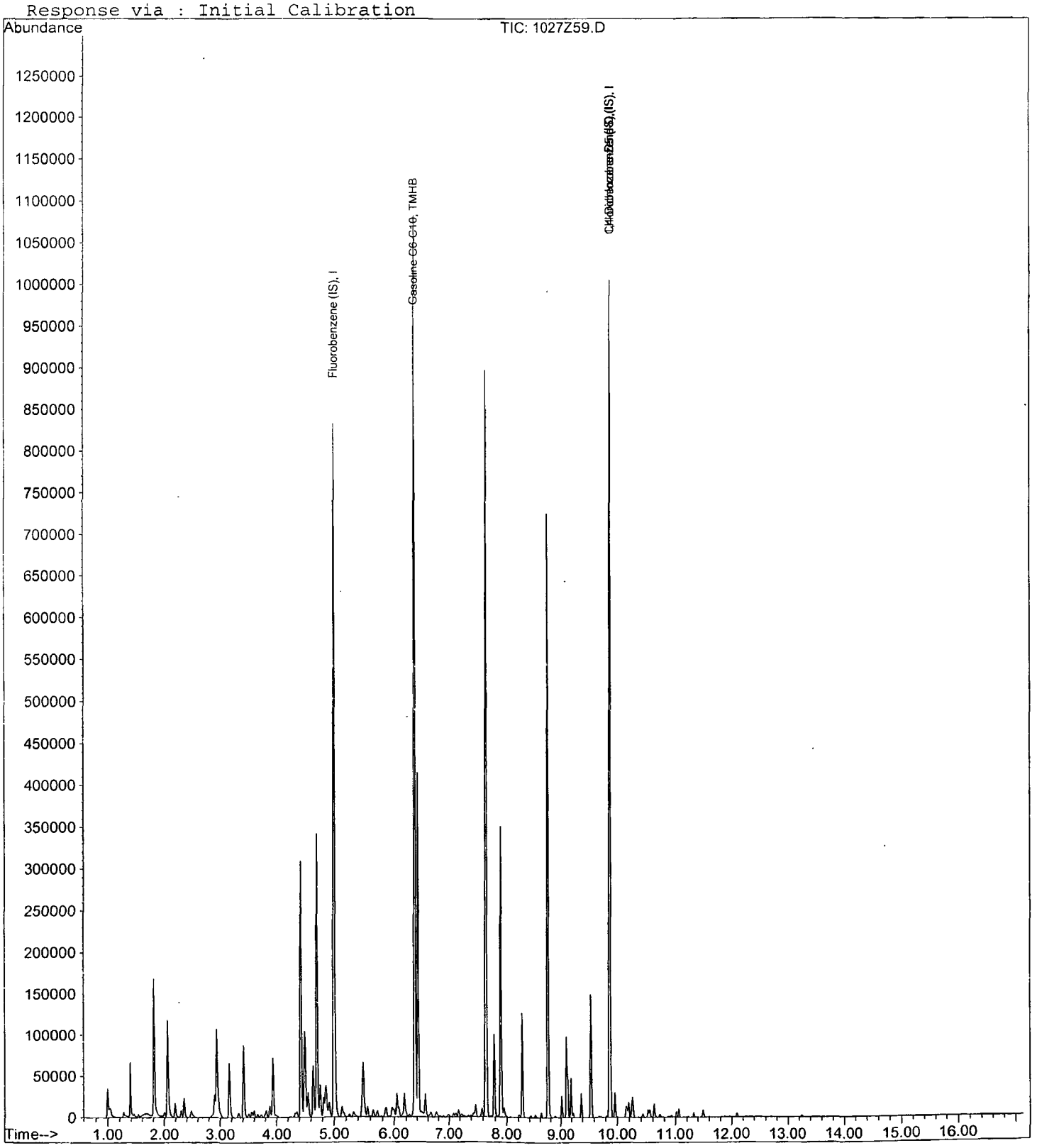
(#) = qualifier out of range (m) = manual integration
1027Z59.D ZGAS1027.M Thu Oct 29 11:26:39 2020

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z59.D Vial: 45
Acq On : 28 Oct 20 05:45 Operator: LP,DG,CH
Sample : (SS)300ug/L GAS STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:26 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/27/20
Matrix: water Instrument: ZEUS
Initials: DG

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type	r^2	Q	MRF
			1027Z18.D	1027Z19.D	1027Z20.D	1027Z21.D	1027Z22.D	1027Z23.D	1027Z24.D	1027Z25.D	1027Z26.D							
1	I	Fluorobenzene (IS)																
2	S	Dibromofluoromethane(S)	0.2046	0.2102	0.2477	0.2394	0.2756	0.2748	0.2801	0 2845	0.2816		0.26	12	S			
3	S	1,2-DCA-D4(S)	0.2426	0.2440	0.2920	0.2827	0.3206	0.3218	0.3309	0.3327	0.3323		0.30	12	S			
4	I	Chlorobenzene-D5 (IS)																
5	S	Toluene-D8(S)	1.118	1.125	1.343	1.333	1.489	1.500	1.531	1.513	1.401		1.4	12	S			
6	S	4-Bromofluorobenzene(S)	0.4247	0.4162	0.4998	0.4974	0.5651	0.5725	0.5936	0.5859	0.5600		0.52	13	S			
7	I	1,4-Dichlorobenzene-D (IS)																
8																		
9																		
10																		
11																		
12																		
13																		
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Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z18.D Vial: 4
Acq On : 27 Oct 20 14:00 Operator: LP,DG,CH
Sample : 0.3ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	616305	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	438473	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	242266	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.42	111	25213	4.00	ppb	0.00
Spiked Amount 25.000			Recovery = 16.020%			
3) 1,2-DCA-D4(S)	4.70	65	29904	4.04	ppb	0.00
Spiked Amount 25.000			Recovery = 16.176%			
5) Toluene-D8(S)	6.36	98	98064	4.07	ppb	0.00
Spiked Amount 25.000			Recovery = 16.296%			
6) 4-Bromofluorobenzene(S)	8.75	95	37247	4.05	ppb	0.00
Spiked Amount 25.000			Recovery = 16.212%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

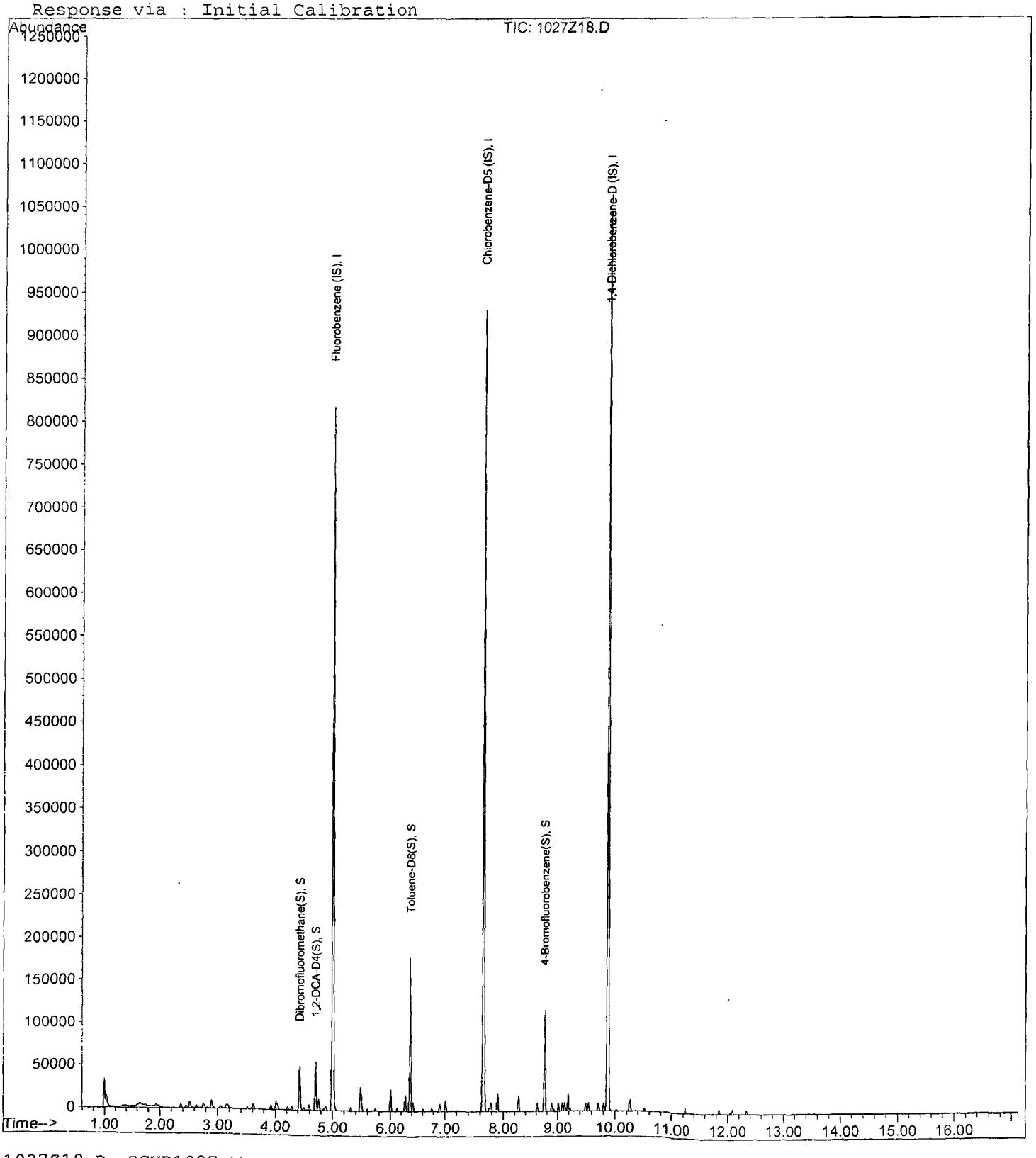
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z18.D
Acq On : 27 Oct 20 14:00
Sample : 0.3ug/L VOC STD 10/27/20
Misc :

Vial: 4
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z19.D Vial: 5
Acq On : 27 Oct 20 14:23 Operator: LP,DG,CH
Sample : 0.5ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	609419	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	433898	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	240389	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.42	111	25620	4.12	ppb	0.00
Spiked Amount 25.000			Recovery = 16.460%			
3) 1,2-DCA-D4(S)	4.70	65	29745	4.07	ppb	0.00
Spiked Amount 25.000			Recovery = 16.272%			
5) Toluene-D8(S)	6.36	98	97634	4.10	ppb	0.00
Spiked Amount 25.000			Recovery = 16.396%			
6) 4-Bromofluorobenzene(S)	8.75	95	36121	3.97	ppb	0.00
Spiked Amount 25.000			Recovery = 15.888%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

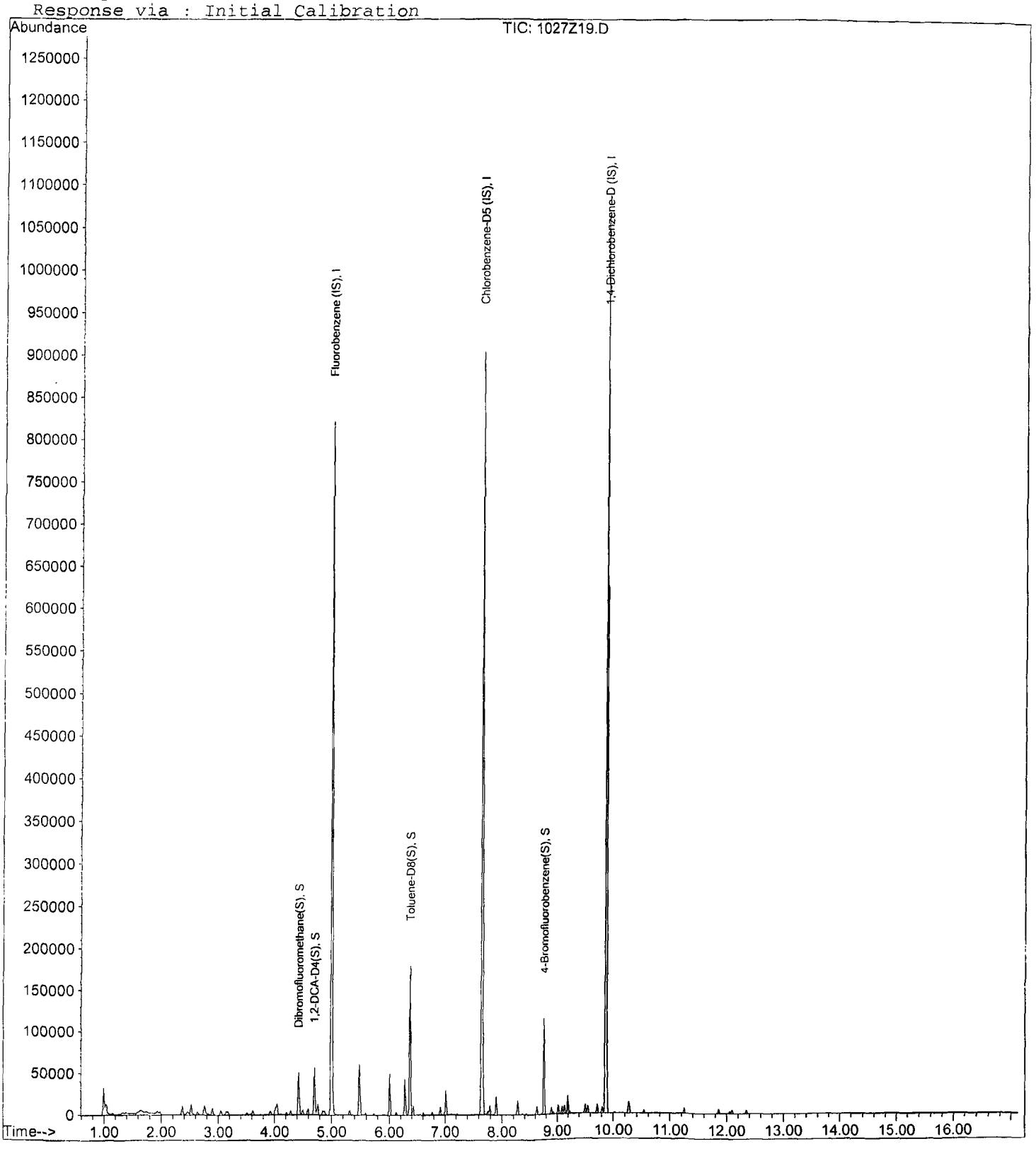
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z19.D
Acq On : 27 Oct 20 14:23
Sample : 0.5ug/L VOC STD 10/27/20
Misc :

Vial: 5
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z20.D Vial: 6
Acq On : 27 Oct 20 14:46 Operator: LP,DG,CH
Sample : 1ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	615733	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	434626	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	238062	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.43	111	61009	9.70	ppb	0.00
Spiked Amount 25.000			Recovery =	38.796%		
3) 1,2-DCA-D4(S)	4.70	65	71916	9.73	ppb	0.00
Spiked Amount 25.000			Recovery =	38.940%		
5) Toluene-D8(S)	6.37	98	233484	9.78	ppb	0.00
Spiked Amount 25.000			Recovery =	39.140%		
6) 4-Bromofluorobenzene(S)	8.75	95	86892	9.54	ppb	0.00
Spiked Amount 25.000			Recovery =	38.160%		

Target Compounds Qvalue

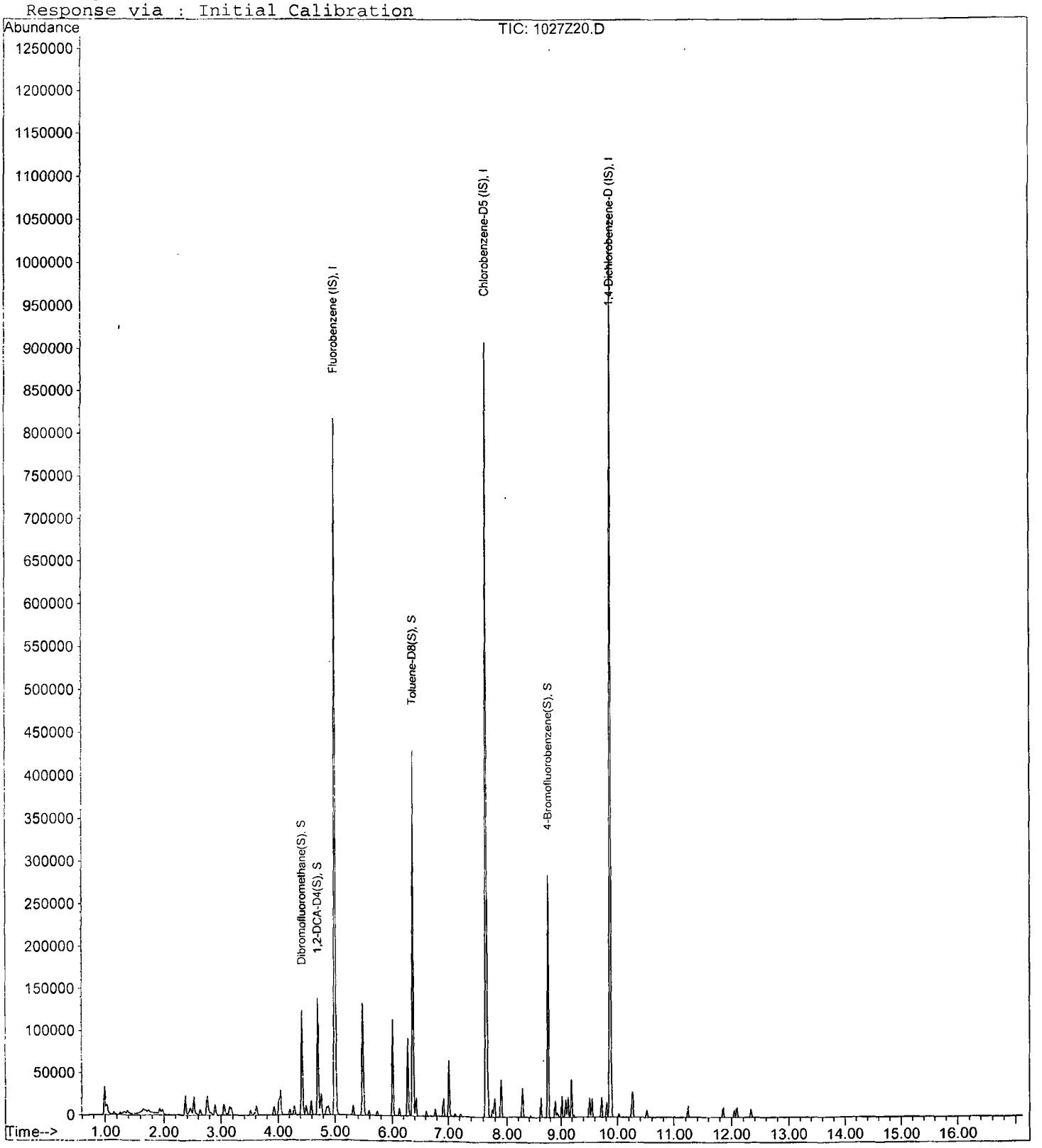
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z20.D Vial: 6
Acq On : 27 Oct 20 14:46 Operator: LP,DG,CH
Sample : 1ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z21.D Vial: 7
Acq On : 27 Oct 20 15:09 Operator: LP,DG,CH
Sample : 2ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	625508	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	437775	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	236856	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.43	111	59906	9.37	ppb	0.00
Spiked Amount 25.000			Recovery =	37.500%		
3) 1,2-DCA-D4(S)	4.70	65	70731	9.42	ppb	0.00
Spiked Amount 25.000			Recovery =	37.700%		
5) Toluene-D8(S)	6.37	98	233418	9.71	ppb	0.00
Spiked Amount 25.000			Recovery =	38.848%		
6) 4-Bromofluorobenzene(S)	8.75	95	87105	9.49	ppb	0.00
Spiked Amount 25.000			Recovery =	37.976%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

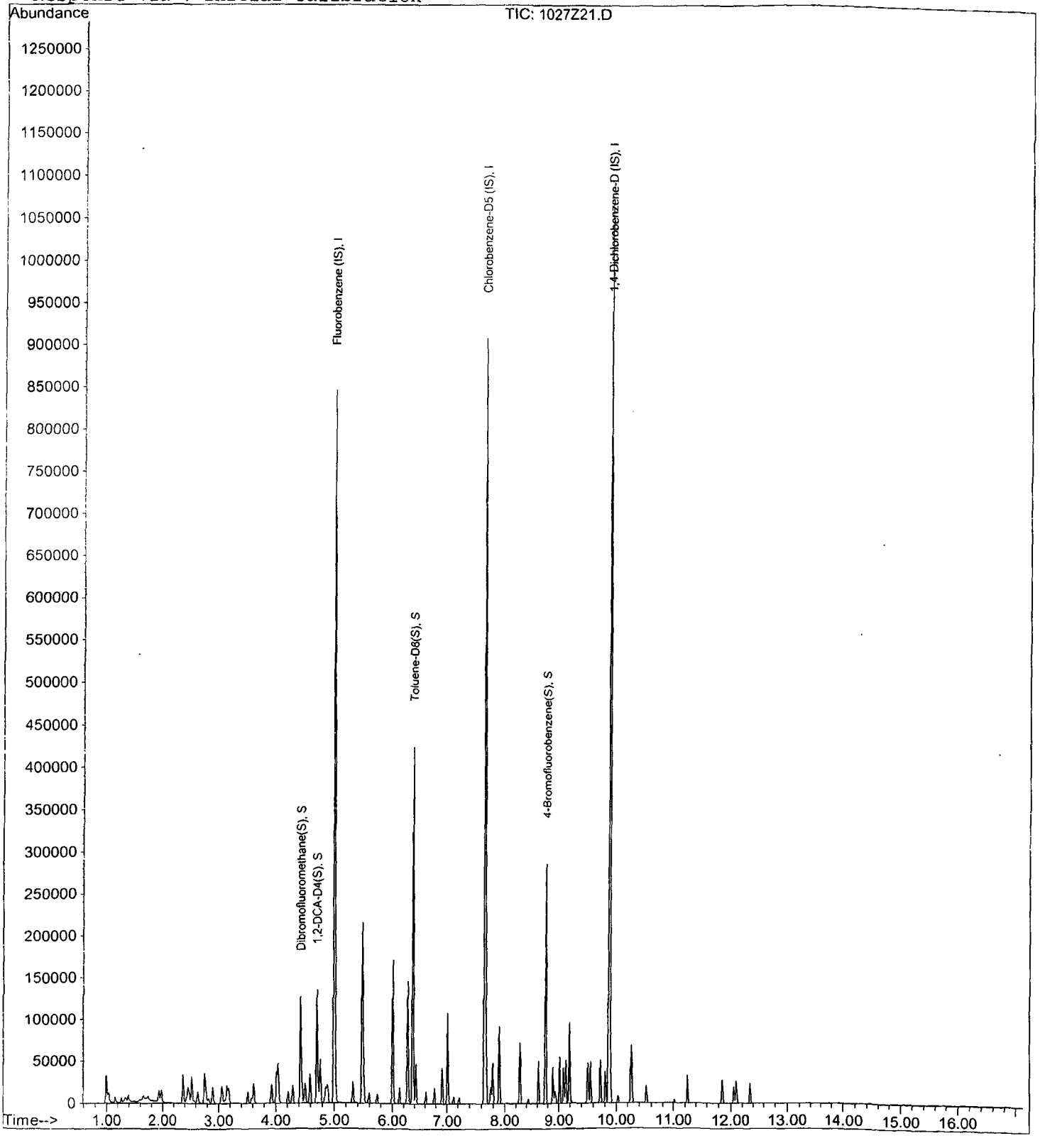
Data File : M:\ZEUS\DATA\201027\1027Z21.D
Acq On : 27 Oct 20 15:09
Sample : 2ug/L VOC STD 10/27/20
Misc :

Vial: 7
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:45 2020

Quant Results File: ZSUR1027.RES

Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z22.D Vial: 8
Acq On : 27 Oct 20 15:33 Operator: LP,DG,CH
Sample : 5ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	640114	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	448845	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	240793	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.43	111	176438	26.98	ppb	0.00
Spiked Amount 25.000			Recovery =	107.924%		
3) 1,2-DCA-D4(S)	4.70	65	205204	26.72	ppb	0.00
Spiked Amount 25.000			Recovery =	106.876%		
5) Toluene-D8(S)	6.37	98	668434	27.13	ppb	0.00
Spiked Amount 25.000			Recovery =	108.500%		
6) 4-Bromofluorobenzene(S)	8.75	95	253647	26.96	ppb	0.00
Spiked Amount 25.000			Recovery =	107.860%		

Target Compounds Qvalue

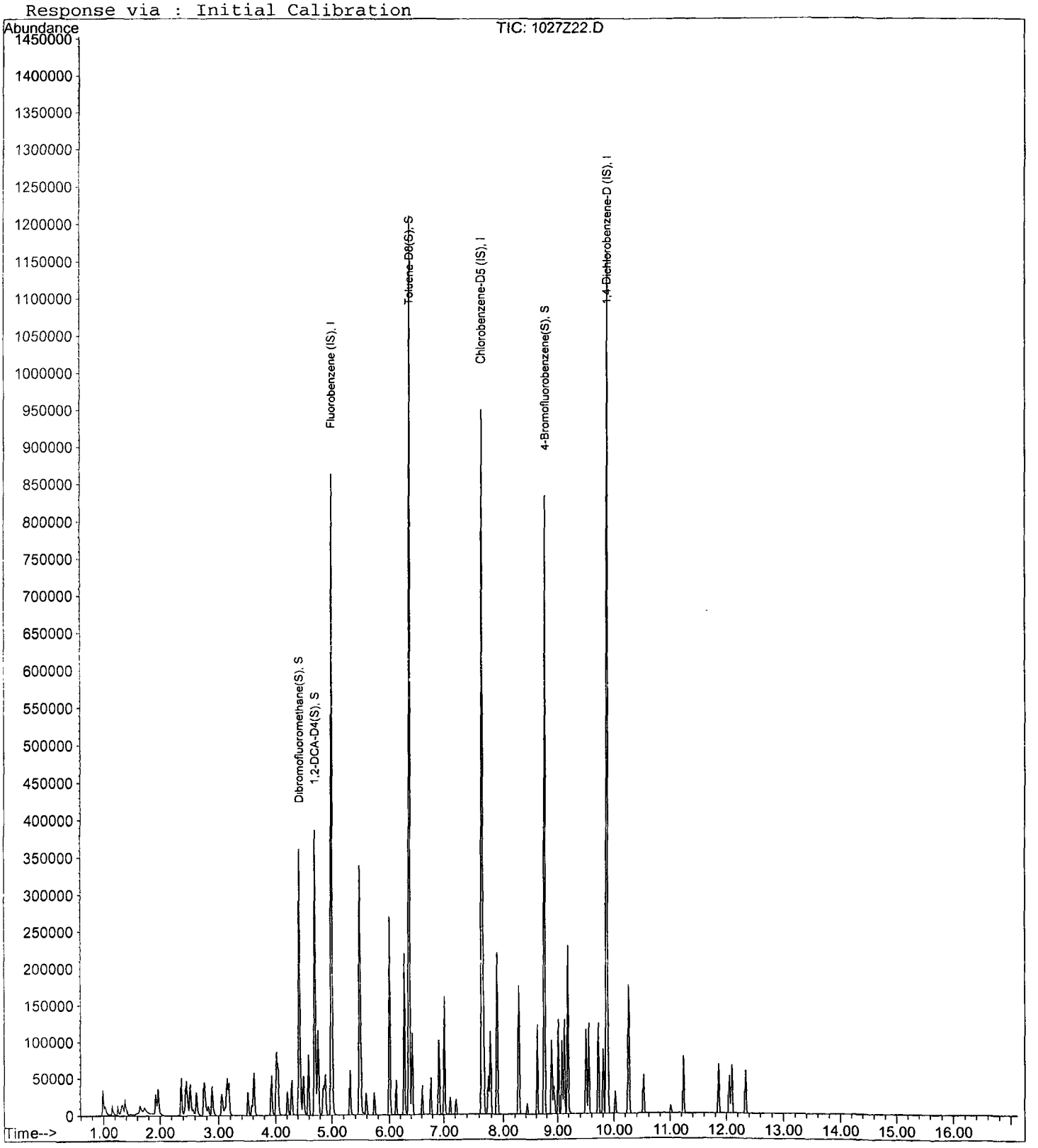
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z22.D Vial: 8
Acq On : 27 Oct 20 15:33 Operator: LP,DG,CH
Sample : 5ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z23.D Vial: 9
Acq On : 27 Oct 20 15:56 Operator: LP,DG,CH
Sample : 10ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	659735	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	464103	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	248900	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.43	111	181321	26.90	ppb	0.00
Spiked Amount 25.000			Recovery = 107.612%			
3) 1,2-DCA-D4(S)	4.70	65	212300	26.82	ppb	0.00
Spiked Amount 25.000			Recovery = 107.284%			
5) Toluene-D8(S)	6.37	98	696016	27.32	ppb	0.00
Spiked Amount 25.000			Recovery = 109.264%			
6) 4-Bromofluorobenzene(S)	8.75	95	265719	27.32	ppb	0.00
Spiked Amount 25.000			Recovery = 109.280%			

Target Compounds Qvalue

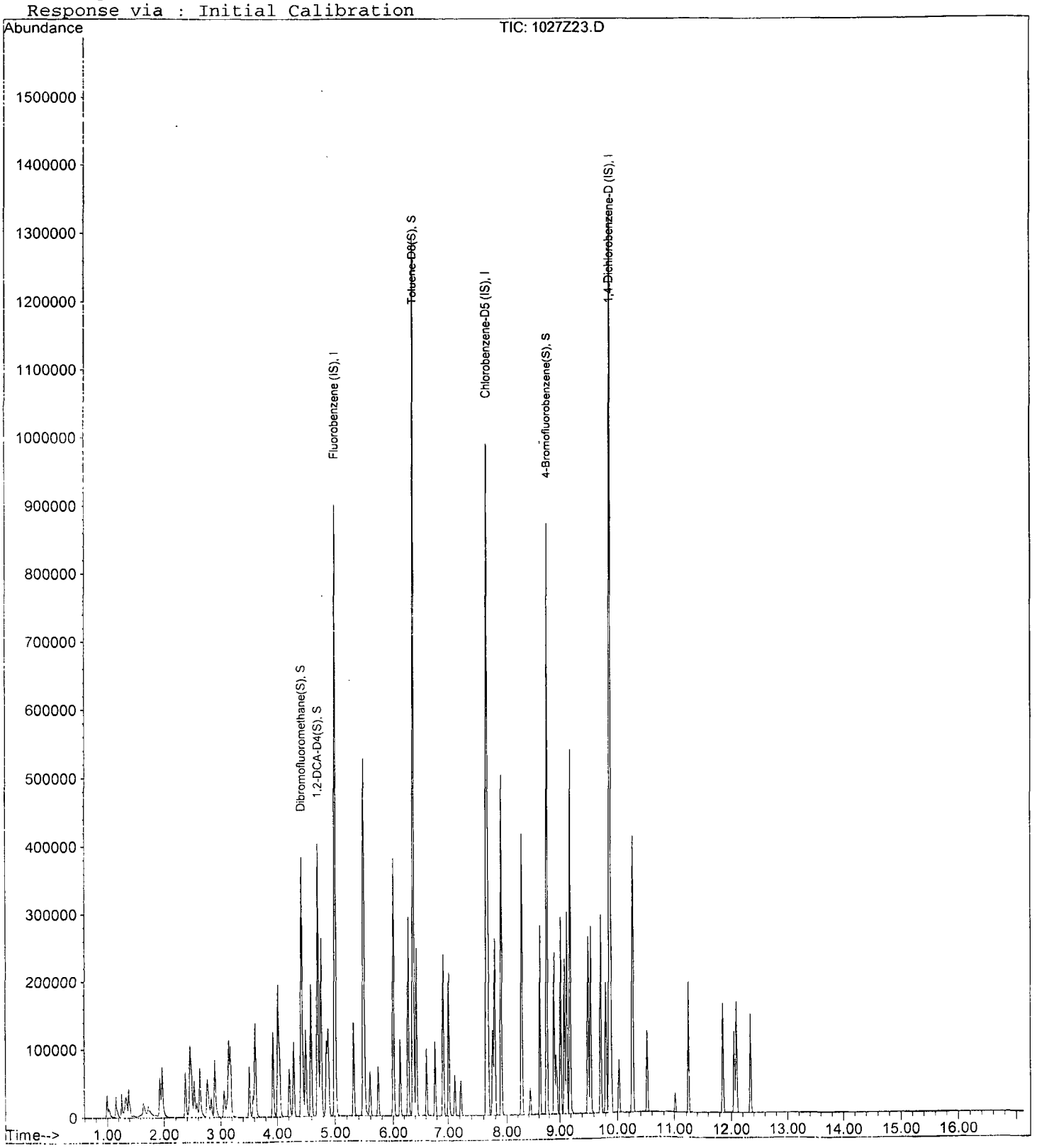
(#) = qualifier out of range (m) = manual integration
1027Z23.D ZSUR1027.M Thu Oct 29 11:45:59 2020

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z23.D Vial: 9
Acq On : 27 Oct 20 15:56 Operator: LP,DG,CH
Sample : 10ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z24.D Vial: 10
Acq On : 27 Oct 20 16:19 Operator: LP,DG,CH
Sample : 20ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	680960	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	480414	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	253382	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.43	111	381531	54.84	ppb	0.00
Spiked Amount 25.000			Recovery = 219.376%			
3) 1,2-DCA-D4(S)	4.70	65	450609	55.15	ppb	0.00
Spiked Amount 25.000			Recovery = 220.616%			
5) Toluene-D8(S)	6.36	98	1471152	55.78	ppb	0.00
Spiked Amount 25.000			Recovery = 223.108%			
6) 4-Bromofluorobenzene(S)	8.76	95	570392	56.65	ppb	0.00
Spiked Amount 25.000			Recovery = 226.612%			

Target Compounds Qvalue

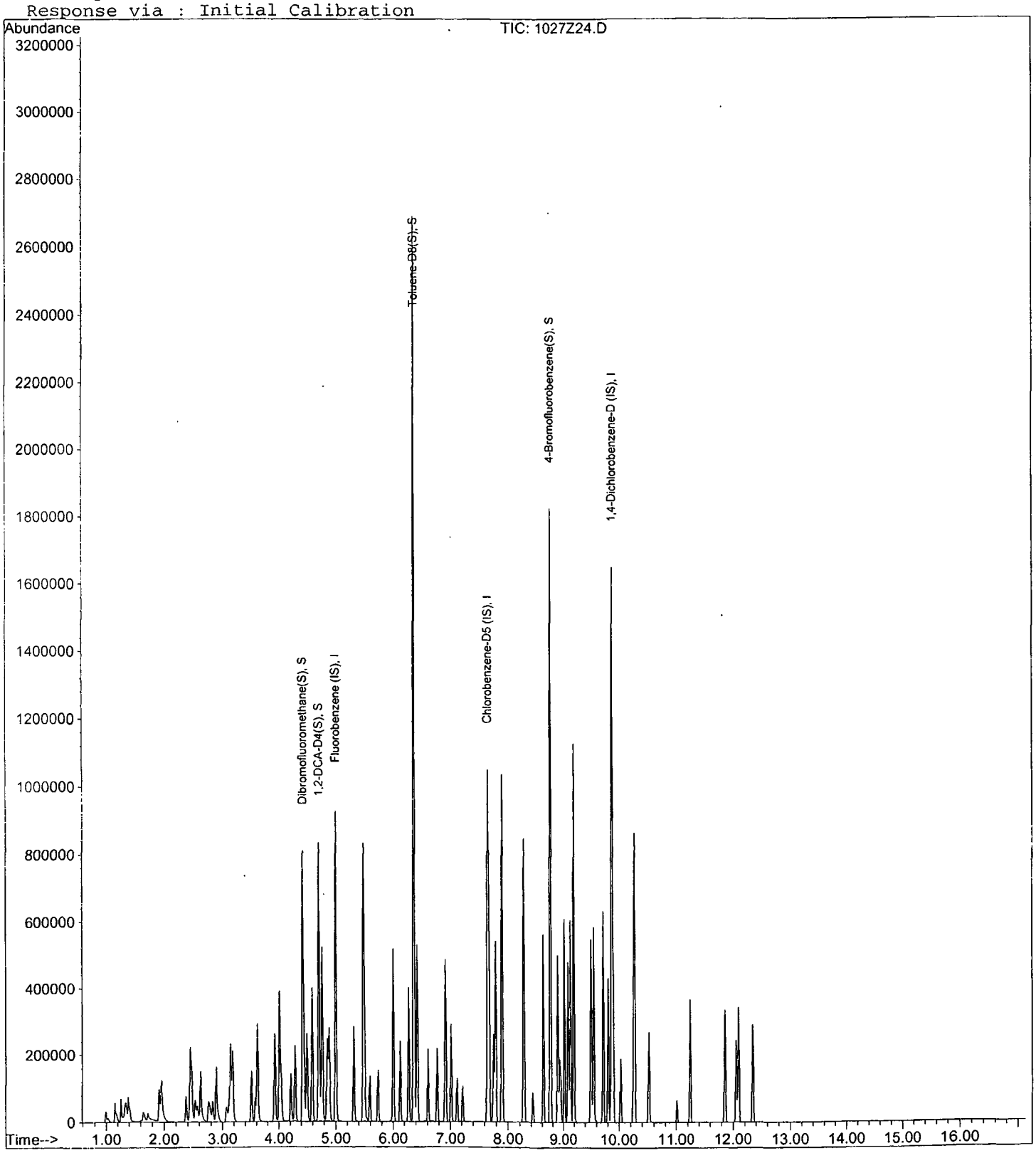
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z24.D Vial: 10
Acq On : 27 Oct 20 16:19 Operator: LP,DG,CH
Sample : 20ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z25.D Vial: 11
Acq On : 27 Oct 20 16:42 Operator: LP,DG,CH
Sample : 40ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	681286	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	486618	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	247111	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.43	111	387643	55.70	ppb	0.00
Spiked Amount 25.000			Recovery =	222.784%		
3) 1,2-DCA-D4(S)	4.70	65	453260	55.45	ppb	0.00
Spiked Amount 25.000			Recovery =	221.808%		
5) Toluene-D8(S)	6.37	98	1472478	55.12	ppb	0.00
Spiked Amount 25.000			Recovery =	220.464%		
6) 4-Bromofluorobenzene(S)	8.76	95	570200	55.91	ppb	0.00
Spiked Amount 25.000			Recovery =	223.648%		

Target Compounds Qvalue

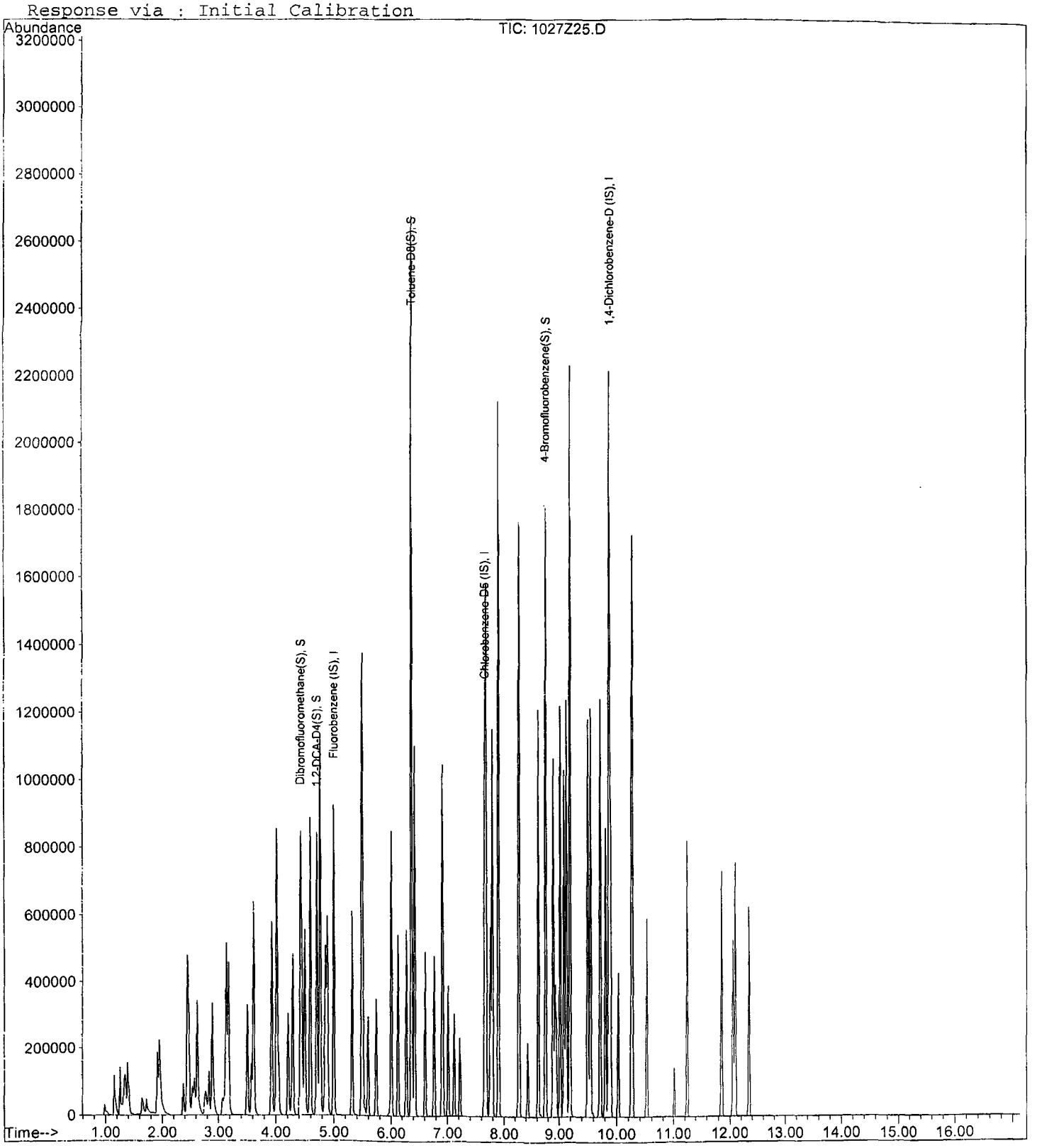
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1027Z25.D Vial: 11
Acq On : 27 Oct 20 16:42 Operator: LP,DG,CH
Sample : 40ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1027Z26.D Vial: 12
Acq On : 27 Oct 20 17:06 Operator: LP,DG,CH
Sample : 100ug/L VOC STD 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:45 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	724651	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	511197	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	241777	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.43	111	816243	110.26	ppb	0.00
Spiked Amount 25.000			Recovery =	441.032%		
3) 1,2-DCA-D4(S)	4.70	65	963173	110.78	ppb	0.00
Spiked Amount 25.000			Recovery =	443.132%		
5) Toluene-D8(S)	6.37	98	2863740	102.04	ppb	0.00
Spiked Amount 25.000			Recovery =	408.152%		
6) 4-Bromofluorobenzene(S)	8.76	95	1145046	106.88	ppb	0.00
Spiked Amount 25.000			Recovery =	427.524%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

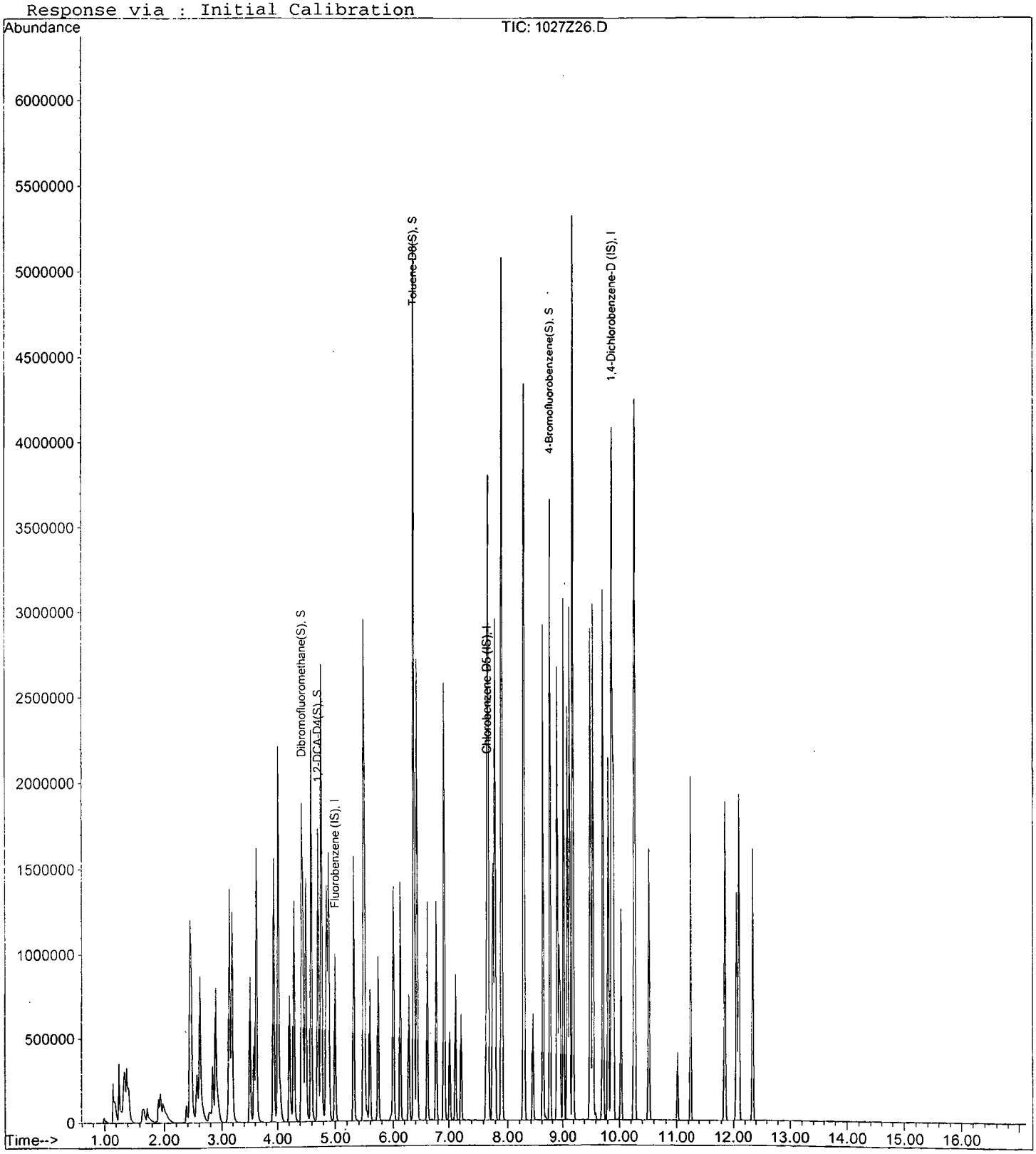
Data File : M:\ZEUS\DATA\201027\1027Z26.D
Acq On : 27 Oct 20 17:06
Sample : 100ug/L VOC STD 10/27/20
Misc :

Vial: 12
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:45 2020

Quant Results File: ZSUR1027.RES

Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/28/20
Instrument: ZEUS
Initial Cal. Date: 10/28/20
Data File: 1028Z15.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline C6-C10	2.803	1.070	62	TMHBL	5.0
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
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37							
38							
39							
40							
		Average			62.0		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/28/20
Instrument: ZEUS
Initial Cal. Date: 10/27/20
Data File: 1028Z15.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	S	Dibromofluoromethane(S)	0.2554	0.2785	9.1	S	
3	S	1,2-DCA-D4(S)	0.2999	0.3374	12	S	
4	I	Chlorobenzene-D5 (IS)	ISTD			I	
5	S	Toluene-D8(S)	1.373	1.513	10	S	
6	S	4-Bromofluorobenzene(S)	0.5239	0.5791	11	S	
7	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
8							
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40							
		Average			10.5		

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z15.D Vial: 5
Acq On : 28 Oct 20 13:46 Operator: LP,DG,CH
Sample : 201028A CCV 300 ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:30 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	947949	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	1086162	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	1086162	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Gasoline C6-C10	6.36	TIC	12168944m	315.02 ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z15.D Vial: 5
Acq On : 28 Oct 20 13:46 Operator: LP,DG,CH
Sample : 201028A CCV 300 ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:46 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	688362	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	487614	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	258849	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.42	111	191719	27.26	ppb	0.00
Spiked Amount 25.000			Recovery = 109.052%			
3) 1,2-DCA-D4(S)	4.70	65	232249	28.12	ppb	0.00
Spiked Amount 25.000			Recovery = 112.484%			
5) Toluene-D8(S)	6.36	98	737648	27.55	ppb	0.00
Spiked Amount 25.000			Recovery = 110.216%			
6) 4-Bromofluorobenzene(S)	8.75	95	282376	27.63	ppb	0.00
Spiked Amount 25.000			Recovery = 110.528%			

Target Compounds Qvalue

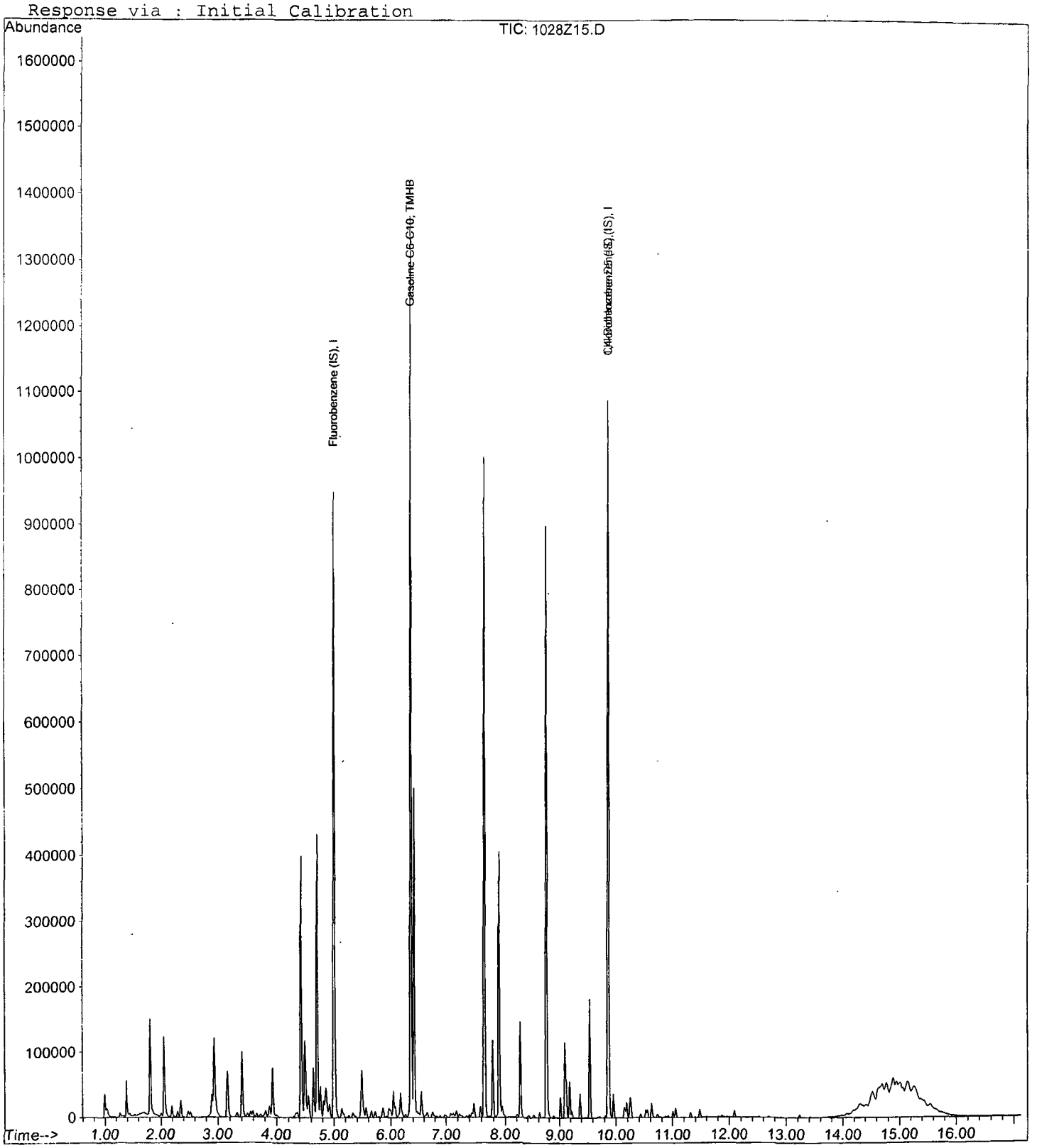
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z15.D Vial: 5
Acq On : 28 Oct 20 13:46 Operator: LP,DG,CH
Sample : 201028A CCV 300 ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:30 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/28/20
Instrument: ZEUS
Initial Cal. Date: 10/28/20
Data File: 1028Z25.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline C6-C10	2.803	1.076	62	TMHBL	6.4
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
6							
7							
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35							
36							
37							
38							
39							
40							
		Average			62.0		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/28/20
Instrument: ZEUS
Initial Cal. Date: 10/27/20
Data File: 1028Z25.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	S	Dibromofluoromethane(S)	0.2554	0.2681	5.0	S	
3	S	1,2-DCA-D4(S)	0.2999	0.3272	9.1	S	
4	I	Chlorobenzene-D5 (IS)	ISTD			I	
5	S	Toluene-D8(S)	1.373	1.444	5.2	S	
6	S	4-Bromofluorobenzene(S)	0.5239	0.5549	5.9	S	
7	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
8							
9							
10							
11							
12							
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39							
40							
		Average			6.3		

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z25.D Vial: 15
Acq On : 28 Oct 20 17:37 Operator: LP,DG,CH
Sample : Ending CCV 300ug/L 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:40 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	840657	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	1015875	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	1015875	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.36	TIC	10851252m	319.23	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z25.D Vial: 15
Acq On : 28 Oct 20 17:37 Operator: LP,DG,CH
Sample : Ending CCV 300ug/L 10/27/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:46 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	620319	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	437501	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	235834	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.43	111	166303	26.24	ppb	0.00
Spiked Amount 25.000			Recovery = 104.968%			
3) 1,2-DCA-D4(S)	4.70	65	202964	27.27	ppb	0.00
Spiked Amount 25.000			Recovery = 109.084%			
5) Toluene-D8(S)	6.36	98	631752	26.30	ppb	0.00
Spiked Amount 25.000			Recovery = 105.208%			
6) 4-Bromofluorobenzene(S)	8.75	95	242768	26.48	ppb	0.00
Spiked Amount 25.000			Recovery = 105.912%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

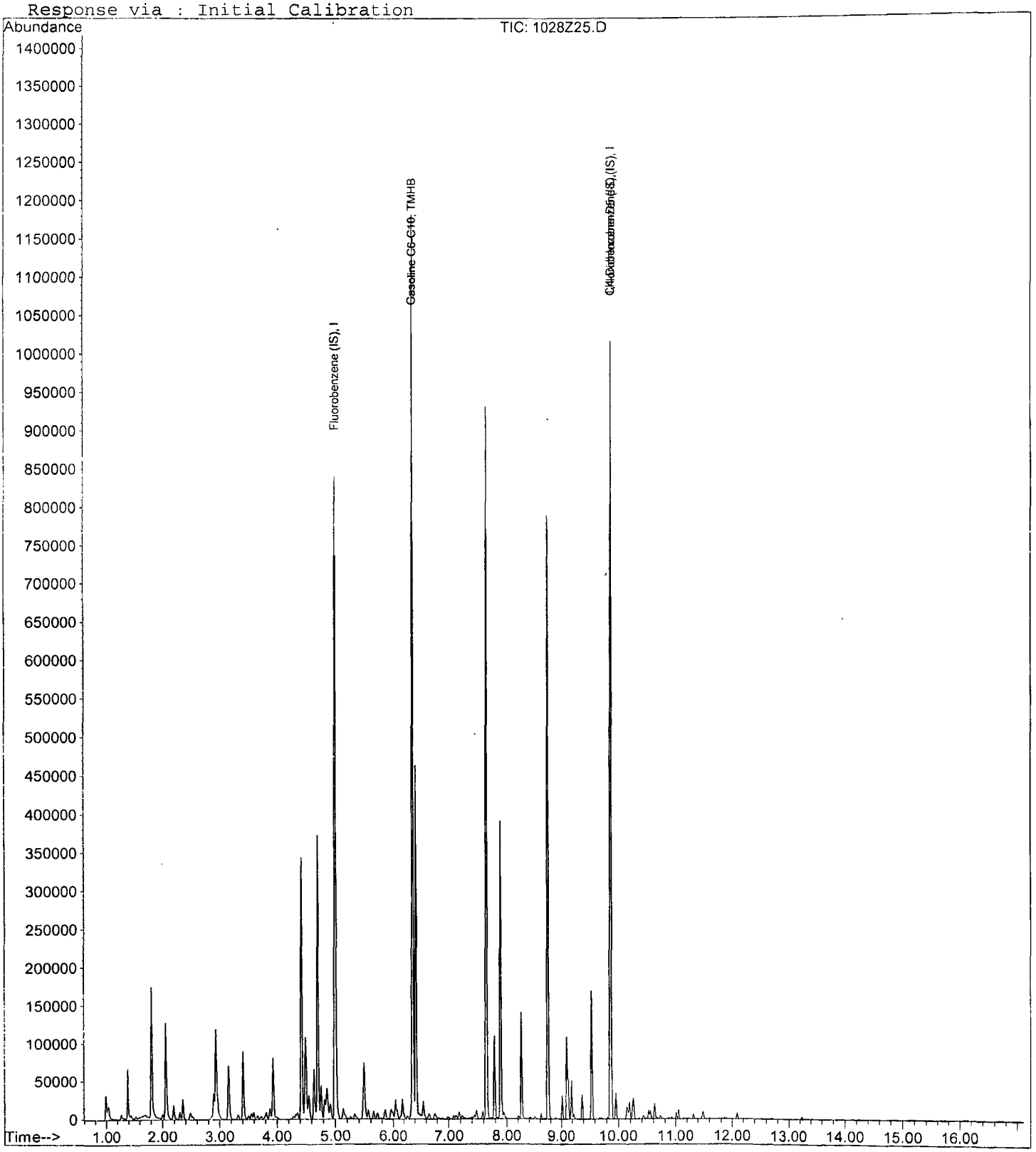
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z25.D
Acq On : 28 Oct 20 17:37
Sample : Ending CCV 300ug/L 10/27/20
Misc :

Vial: 15
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:40 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z19.D Vial: 9
Acq On : 28 Oct 20 15:19 Operator: LP,DG,CH
Sample : BA20715W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:41 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	887045	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	1072784	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	1072784	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z19.D Vial: 9
Acq On : 28 Oct 20 15:19 Operator: LP,DG,CH
Sample : BA20715W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:46 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	646891	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	458923	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	251653	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.43	111	183988	27.84	ppb	0.00
Spiked Amount 25.000			Recovery = 111.364%			
3) 1,2-DCA-D4(S)	4.70	65	223453	28.79	ppb	0.00
Spiked Amount 25.000			Recovery = 115.164%			
5) Toluene-D8(S)	6.37	98	678964	26.95	ppb	0.00
Spiked Amount 25.000			Recovery = 107.792%			
6) 4-Bromofluorobenzene(S)	8.75	95	265711	27.63	ppb	0.00
Spiked Amount 25.000			Recovery = 110.508%			

Target Compounds Qvalue

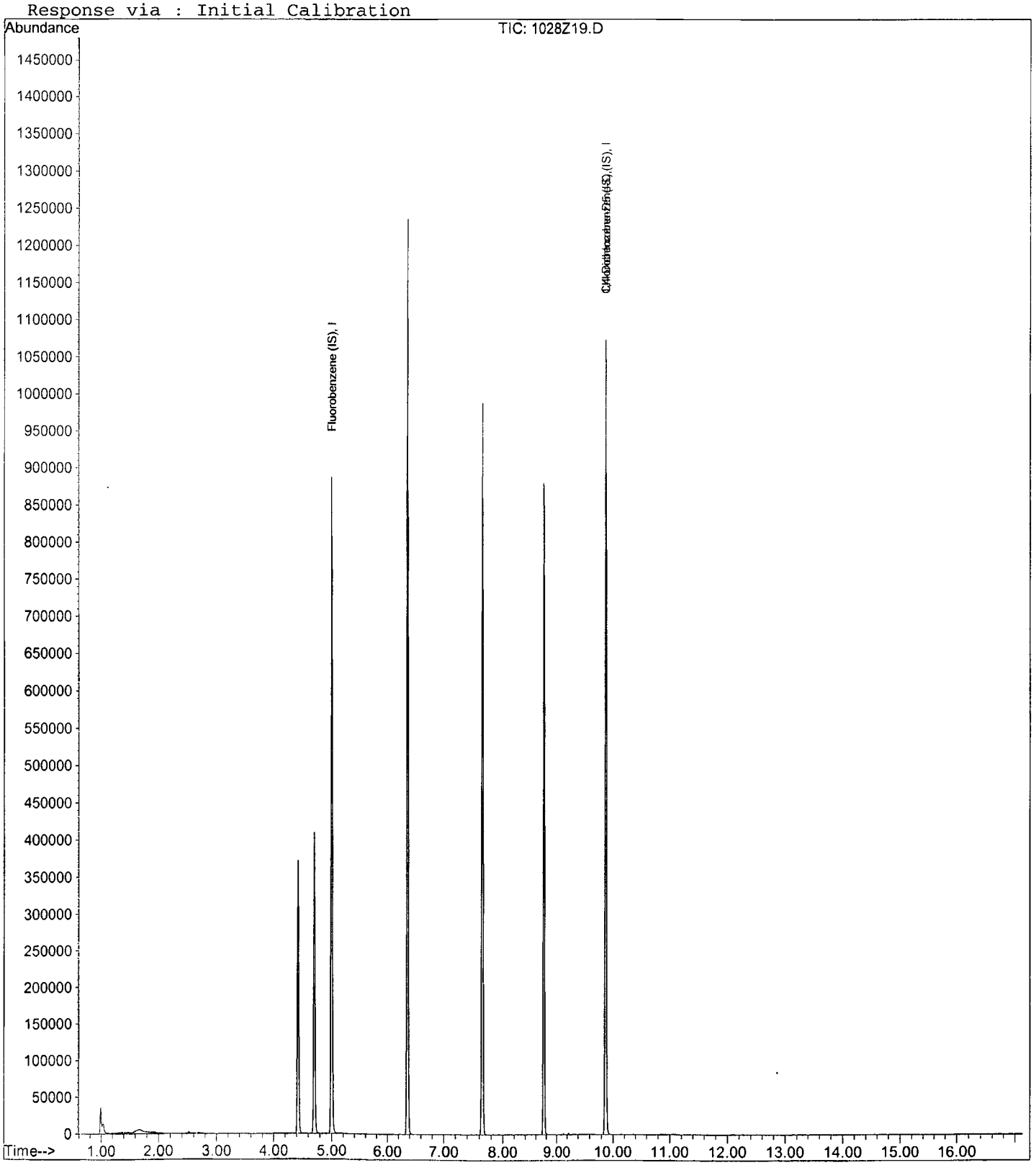
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z19.D Vial: 9
Acq On : 28 Oct 20 15:19 Operator: LP,DG,CH
Sample : BA20715W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:41 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z20.D
Acq On : 28 Oct 20 15:42
Sample : BA20716W01
Misc :

Vial: 10
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:41 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	865034	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	1044570	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	1044570	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z20.D Vial: 10
Acq On : 28 Oct 20 15:42 Operator: LP,DG,CH
Sample : BA20716W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:46 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	628322	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	446414	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	241962	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.43	111	175302	27.31	ppb	0.00
Spiked Amount 25.000			Recovery = 109.240%			
3) 1,2-DCA-D4(S)	4.70	65	216463	28.71	ppb	0.00
Spiked Amount 25.000			Recovery = 114.856%			
5) Toluene-D8(S)	6.37	98	654376	26.70	ppb	0.00
Spiked Amount 25.000			Recovery = 106.800%			
6) 4-Bromofluorobenzene(S)	8.75	95	257425	27.52	ppb	0.00
Spiked Amount 25.000			Recovery = 110.064%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

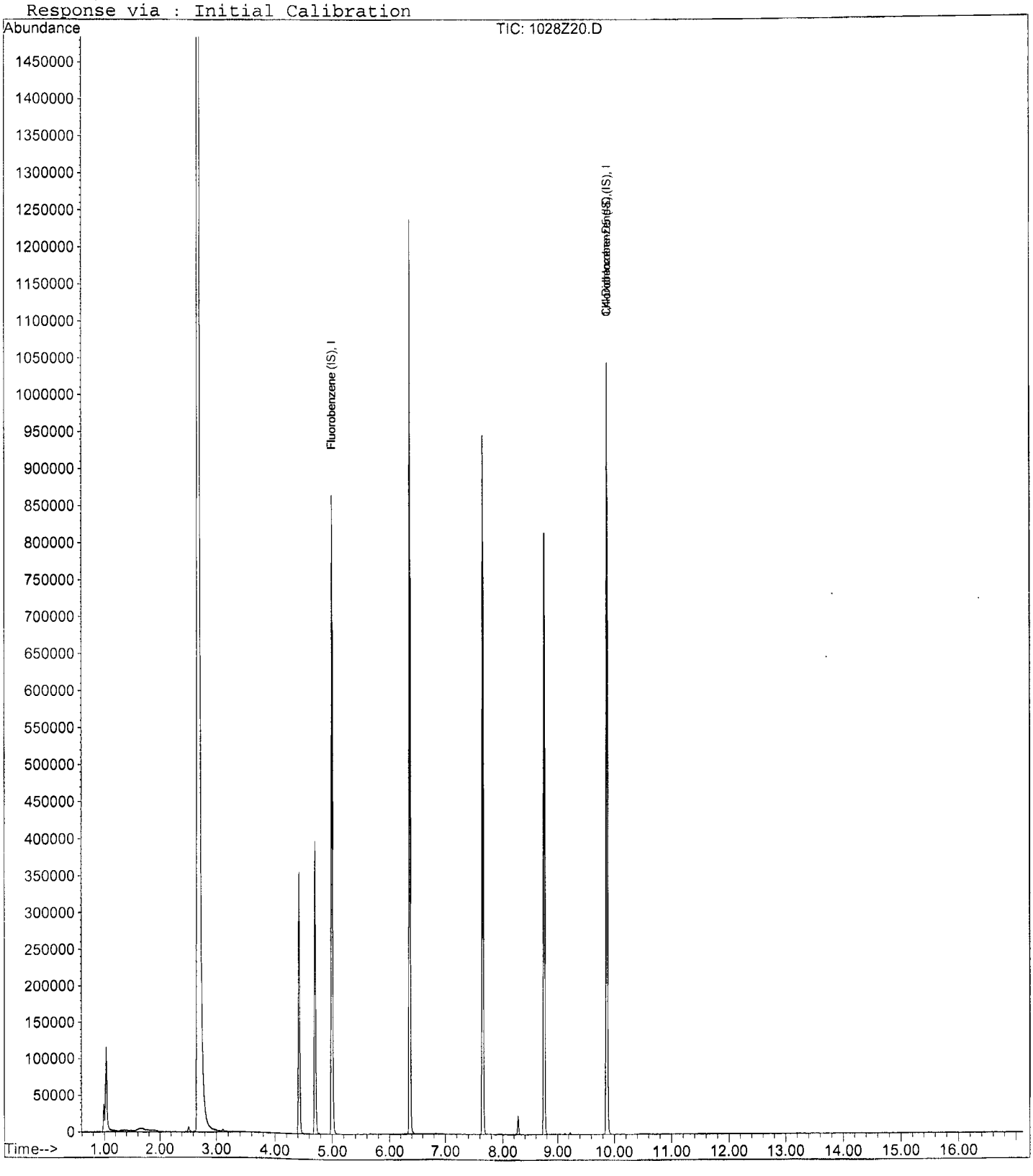
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z20.D
Acq On : 28 Oct 20 15:42
Sample : BA20716W01
Misc :

Vial: 10
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:41 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z21.D Vial: 11
Acq On : 28 Oct 20 16:05 Operator: LP,DG,CH
Sample : BA20717W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:41 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	858279	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	1008769	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	1008769	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z21.D Vial: 11
Acq On : 28 Oct 20 16:05 Operator: LP,DG,CH
Sample : BA20717W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:46 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	629117	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	445256	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	240084	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.43	111	172753	26.88	ppb	0.00
Spiked Amount 25.000			Recovery = 107.516%			
3) 1,2-DCA-D4(S)	4.70	65	212286	28.12	ppb	0.00
Spiked Amount 25.000			Recovery = 112.500%			
5) Toluene-D8(S)	6.37	98	647873	26.50	ppb	0.00
Spiked Amount 25.000			Recovery = 106.012%			
6) 4-Bromofluorobenzene(S)	8.75	95	250935	26.89	ppb	0.00
Spiked Amount 25.000			Recovery = 107.568%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

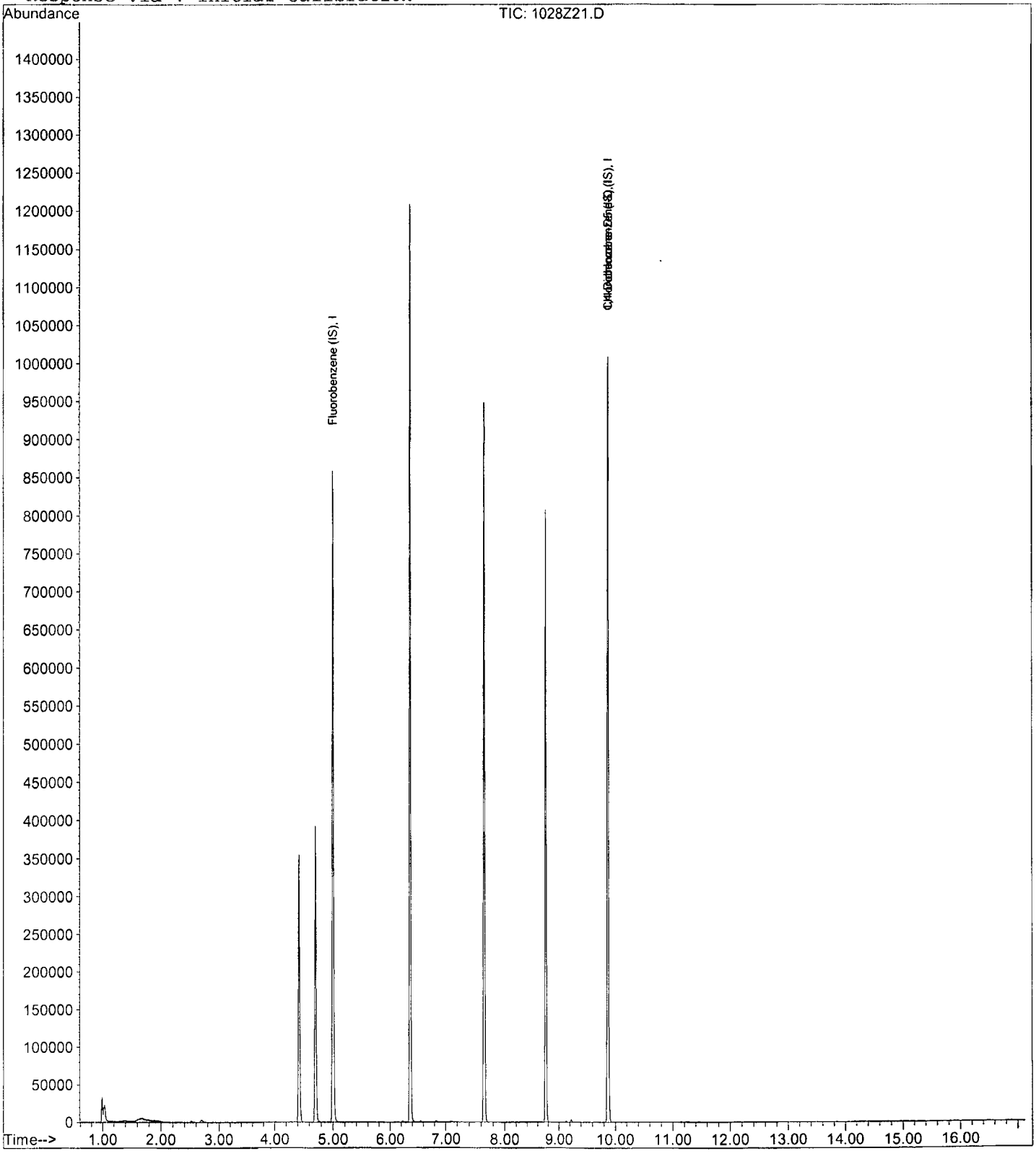
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z21.D
Acq On : 28 Oct 20 16:05
Sample : BA20717W01
Misc :

Vial: 11
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:41 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z22.D Vial: 12
Acq On : 28 Oct 20 16:28 Operator: LP,DG,CH
Sample : BA20718W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:41 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	835543	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	1026782	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	1026782	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z22.D Vial: 12
Acq On : 28 Oct 20 16:28 Operator: LP,DG,CH
Sample : BA20718W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:46 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	618144	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	440348	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	237450	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.42	111	170776	27.04	ppb	0.00
Spiked Amount 25.000			Recovery =	108.172%		
3) 1,2-DCA-D4(S)	4.70	65	207907	28.03	ppb	0.00
Spiked Amount 25.000			Recovery =	112.132%		
5) Toluene-D8(S)	6.36	98	632684	26.17	ppb	0.00
Spiked Amount 25.000			Recovery =	104.680%		
6) 4-Bromofluorobenzene(S)	8.75	95	244517	26.50	ppb	0.00
Spiked Amount 25.000			Recovery =	105.984%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

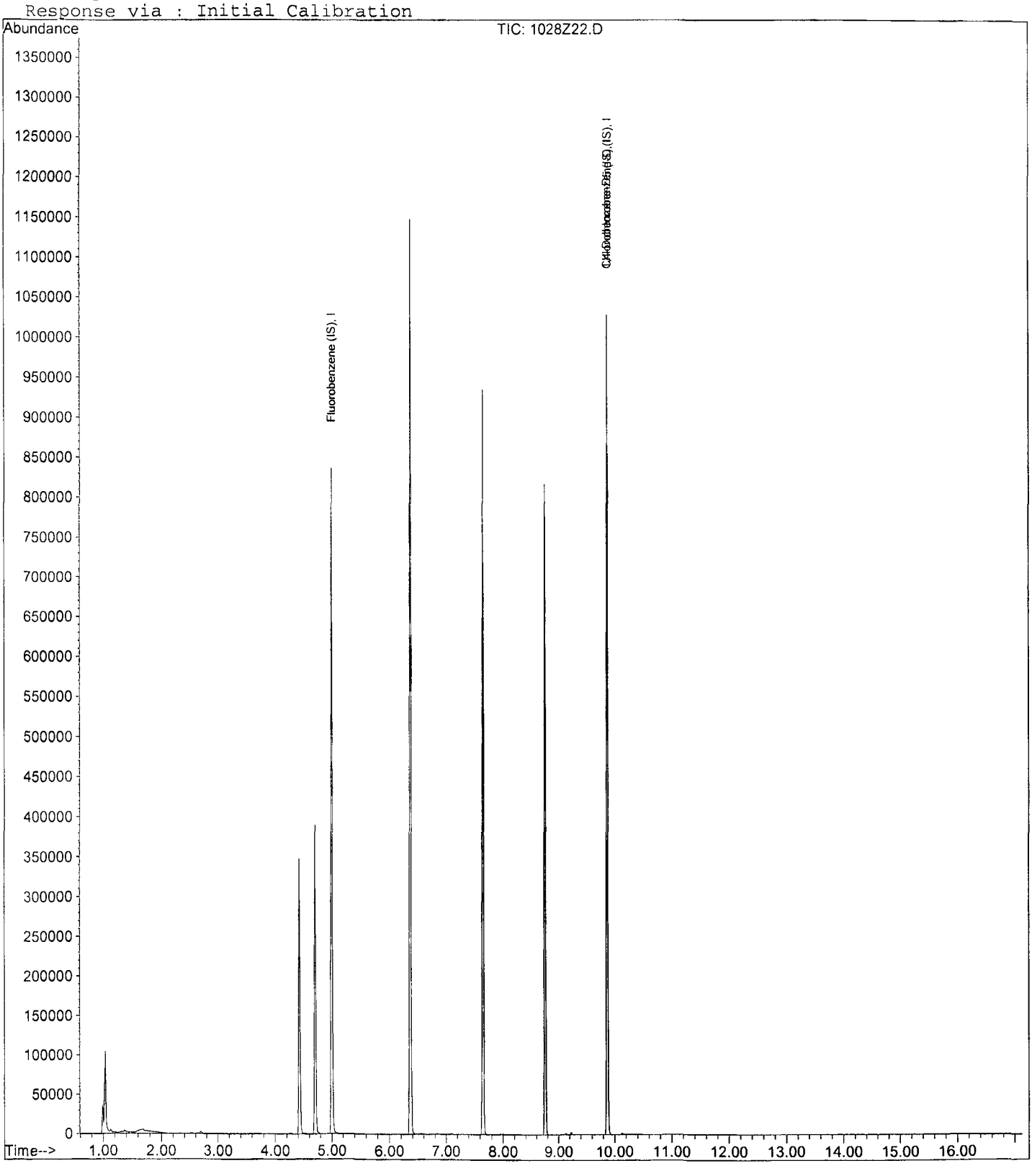
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z22.D
Acq On : 28 Oct 20 16:28
Sample : BA20718W01
Misc :

Vial: 12
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:41 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z23.D Vial: 13
Acq On : 28 Oct 20 16:51 Operator: LP,DG,CH
Sample : BA20719W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:41 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	808386	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	963179	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	963179	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z23.D Vial: 13
Acq On : 28 Oct 20 16:51 Operator: LP,DG,CH
Sample : BA20719W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:46 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	594194	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	422786	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	229464	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.42	111	166482	27.43	ppb	0.00
Spiked Amount 25.000			Recovery = 109.704%			
3) 1,2-DCA-D4(S)	4.70	65	201036	28.20	ppb	0.00
Spiked Amount 25.000			Recovery = 112.800%			
5) Toluene-D8(S)	6.36	98	610467	26.30	ppb	0.00
Spiked Amount 25.000			Recovery = 105.200%			
6) 4-Bromofluorobenzene(S)	8.75	95	235806	26.61	ppb	0.00
Spiked Amount 25.000			Recovery = 106.452%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

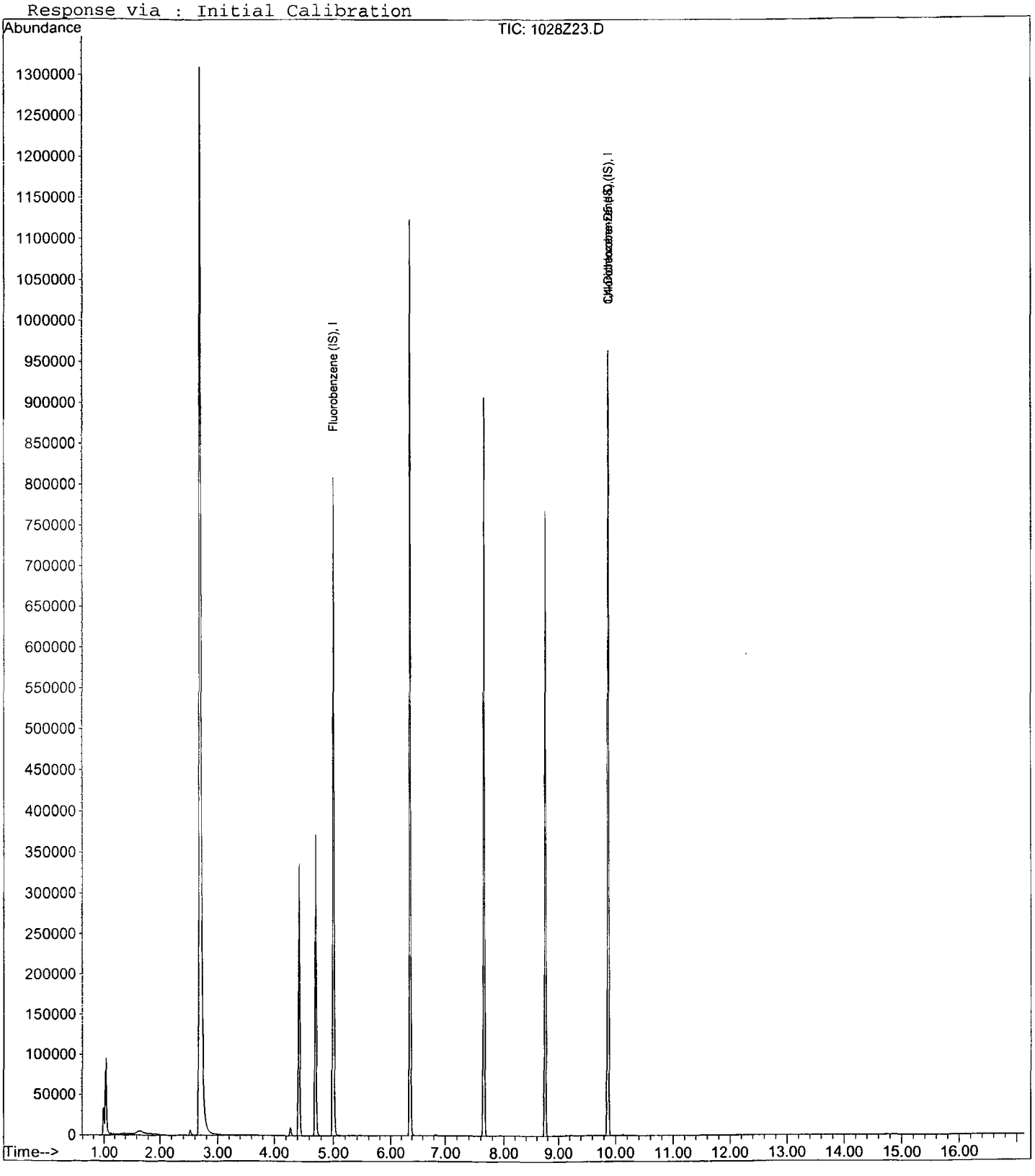
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z23.D
Acq On : 28 Oct 20 16:51
Sample : BA20719W01
Misc :

Vial: 13
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:41 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z18.D
Acq On : 28 Oct 20 14:56
Sample : 201028A BLK
Misc :

Vial: 8
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:41 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	905378	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	1088916	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	1088916	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z18.D Vial: 8
Acq On : 28 Oct 20 14:56 Operator: LP,DG,CH
Sample : 201028A BLK Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:46 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	673135	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	470124	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	254416	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.42	111	188589	27.42	ppb	0.00
Spiked Amount 25.000			Recovery = 109.696%			
3) 1,2-DCA-D4(S)	4.70	65	230289	28.51	ppb	0.00
Spiked Amount 25.000			Recovery = 114.060%			
5) Toluene-D8(S)	6.36	98	711400	27.56	ppb	0.00
Spiked Amount 25.000			Recovery = 110.248%			
6) 4-Bromofluorobenzene(S)	8.75	95	275097	27.92	ppb	0.00
Spiked Amount 25.000			Recovery = 111.688%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

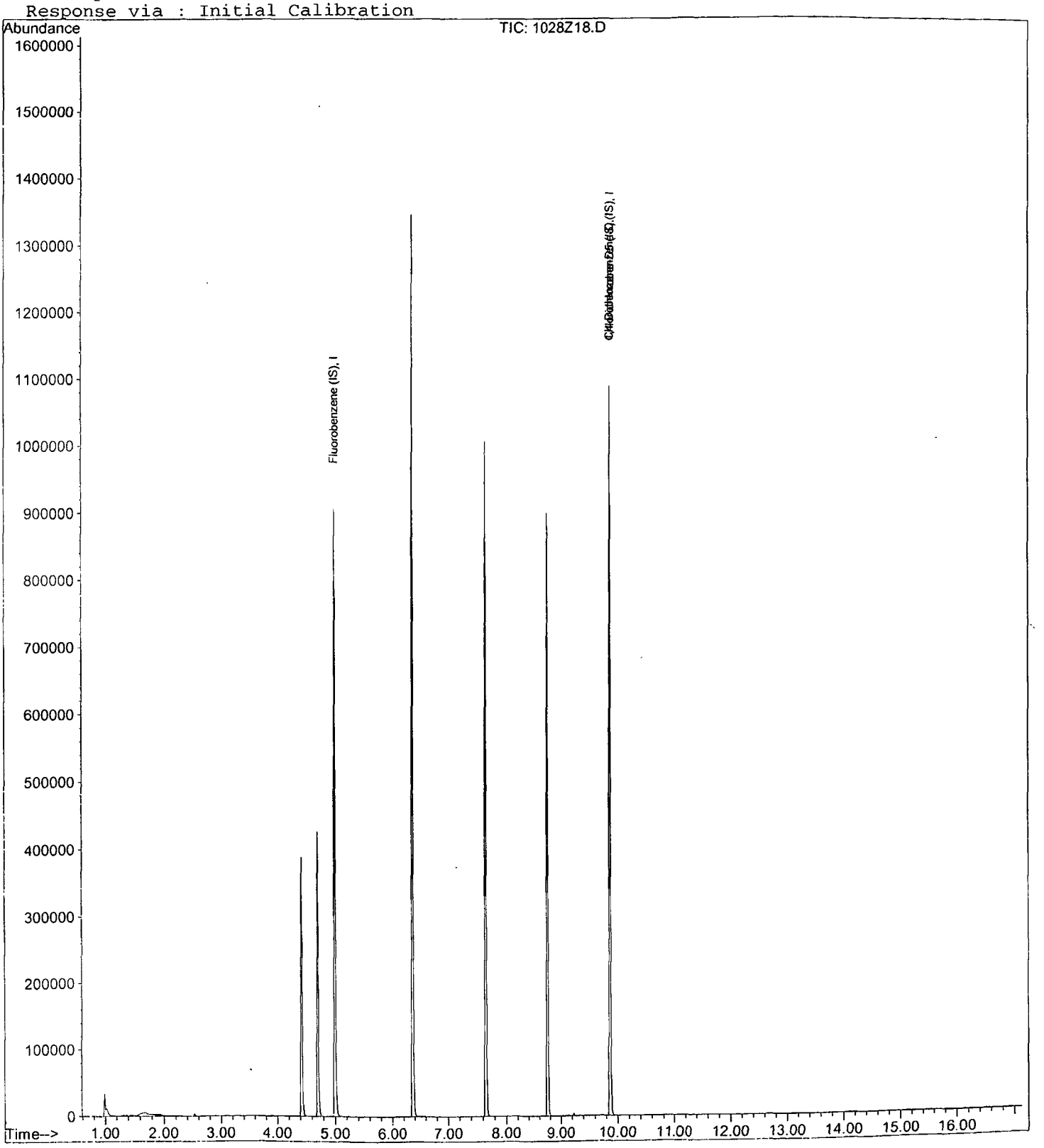
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z18.D
Acq On : 28 Oct 20 14:56
Sample : 201028A BLK
Misc :

Vial: 8
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:41 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z16.D Vial: 6
Acq On : 28 Oct 20 14:09 Operator: LP,DG,CH
Sample : 201028A LCS 300 ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:36 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	922651	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	1118640	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	1118640	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Gasoline C6-C10	6.37	TIC	11933598m	320.77 ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z16.D Vial: 6
Acq On : 28 Oct 20 14:09 Operator: LP,DG,CH
Sample : 201028A LCS 300 ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 29 11:46 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	684685	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	481263	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	257823	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.43	111	188313	26.92	ppb	0.00
Spiked Amount 25.000			Recovery = 107.688%			
3) 1,2-DCA-D4(S)	4.70	65	231303	28.16	ppb	0.00
Spiked Amount 25.000			Recovery = 112.628%			
5) Toluene-D8(S)	6.37	98	719405	27.23	ppb	0.00
Spiked Amount 25.000			Recovery = 108.908%			
6) 4-Bromofluorobenzene(S)	8.76	95	277286	27.49	ppb	0.00
Spiked Amount 25.000			Recovery = 109.968%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

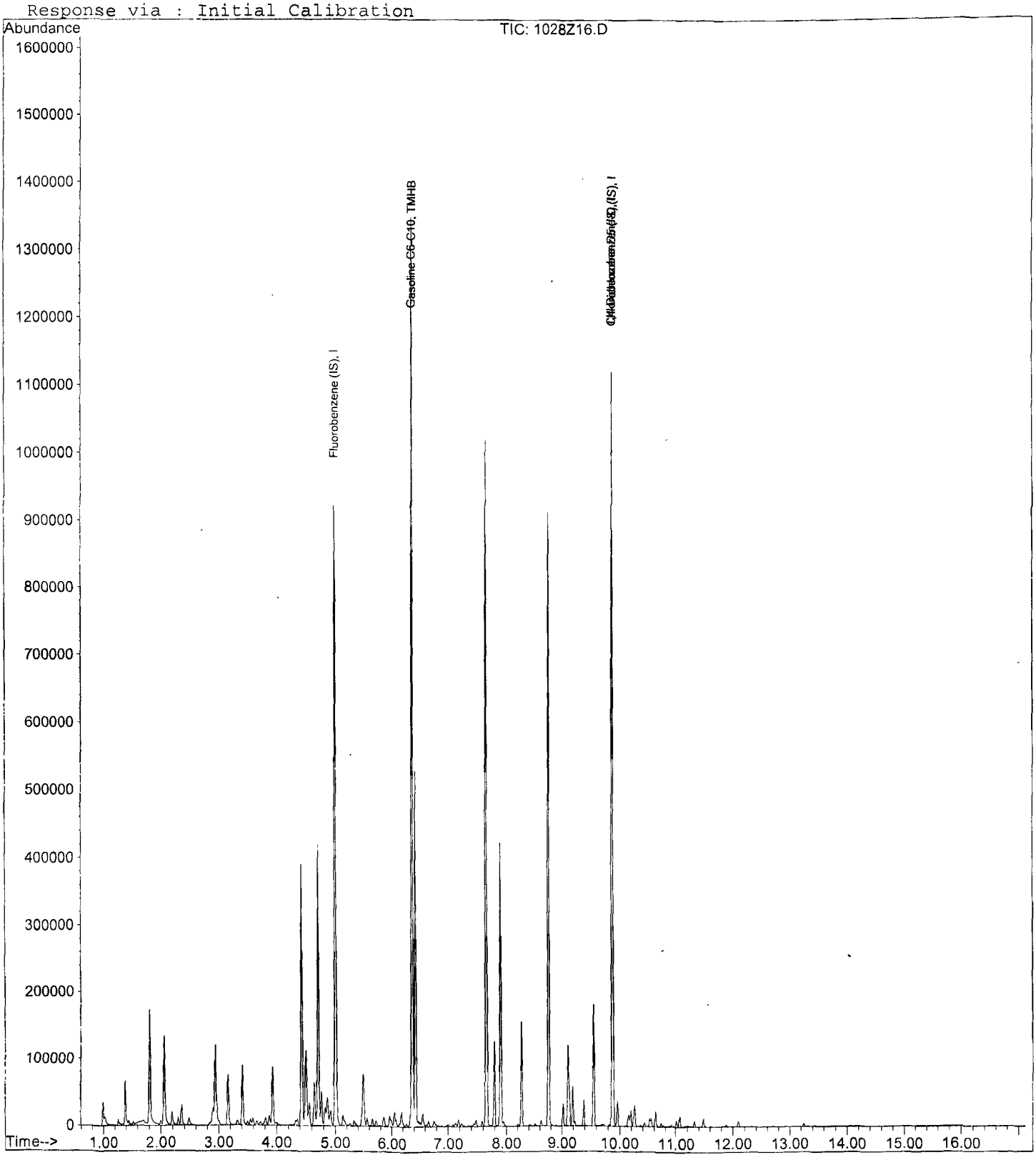
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z16.D
Acq On : 28 Oct 20 14:09
Sample : 201028A LCS 300 ug/L
Misc :

Vial: 6
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:36 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z17.D
Acq On : 28 Oct 20 14:32
Sample : 201028A LCSD 300 ug/L
Misc :

Vial: 7
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:38 2020 Quant Results File: ZGAS1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	TIC	922788	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	9.87	TIC	1049759	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.87	TIC	1049759	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.37	TIC	11752132m	309.00	ppb	100

(#) = qualifier out of range (m) = manual integration
1028Z17.D ZGAS1027.M Thu Oct 29 11:39:00 2020

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201027\1028Z17.D
Acq On : 28 Oct 20 14:32
Sample : 201028A LCSD 300 ug/L
Misc :

Vial: 7
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:46 2020 Quant Results File: ZSUR1027.RES

Quant Method : M:\ZEUS\DATA\201027\ZSUR1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 28 09:56:41 2020
Response via : Initial Calibration
DataAcq Meth : 102320_EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.00	96	677299	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.65	117	477544	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.87	152	254116	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.43	111	189082	27.33	ppb	0.00
Spiked Amount 25.000			Recovery =	109.308%		
3) 1,2-DCA-D4(S)	4.70	65	232436	28.60	ppb	0.00
Spiked Amount 25.000			Recovery =	114.416%		
5) Toluene-D8(S)	6.37	98	725717	27.68	ppb	0.00
Spiked Amount 25.000			Recovery =	110.720%		
6) 4-Bromofluorobenzene(S)	8.75	95	278175	27.80	ppb	0.00
Spiked Amount 25.000			Recovery =	111.180%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

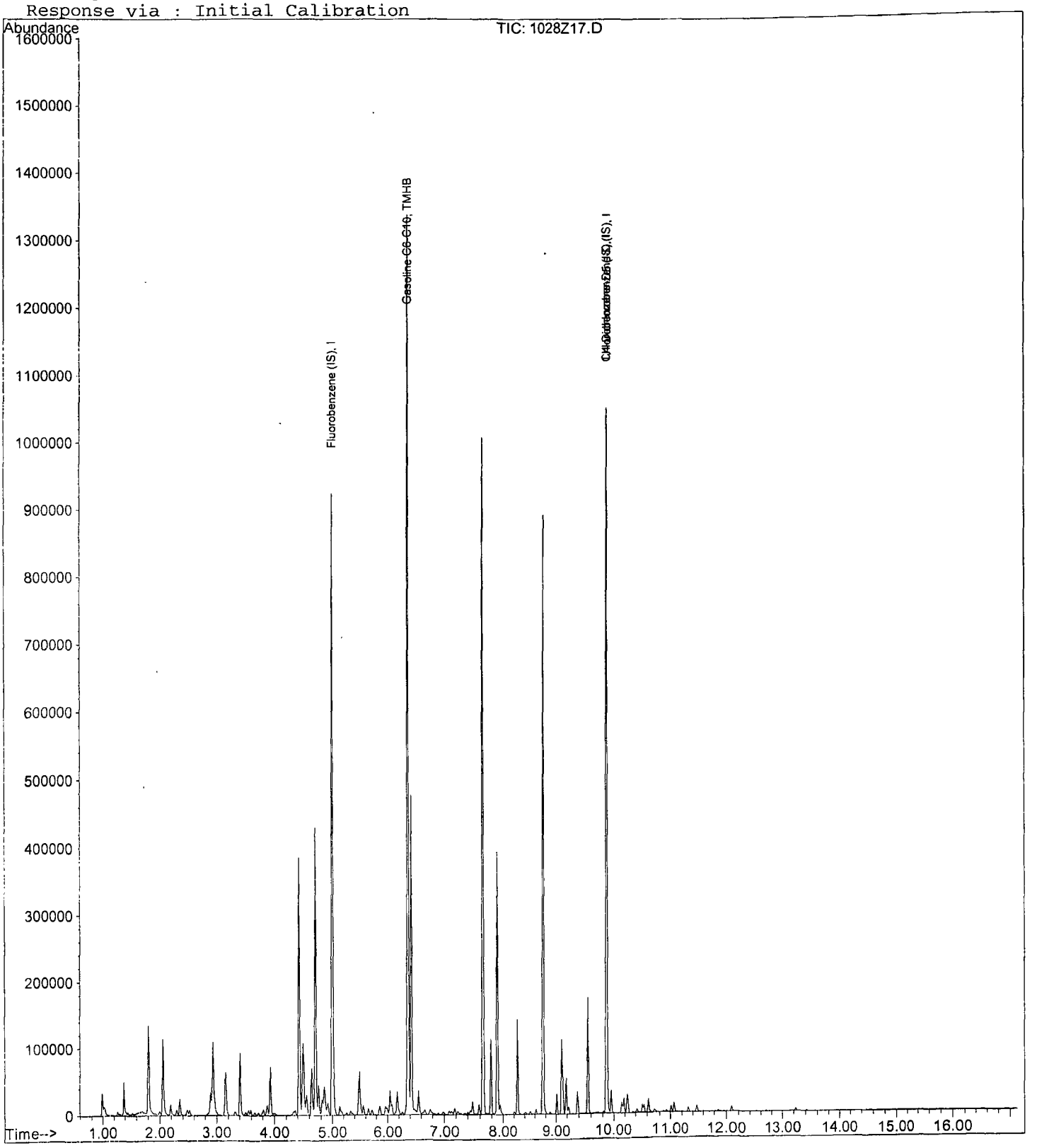
Quantitation Report

Data File : M:\ZEUS\DATA\201027\1028Z17.D
Acq On : 28 Oct 20 14:32
Sample : 201028A LCSD 300 ug/L
Misc :

Vial: 7
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 29 11:38 2020 Quant Results File: ZGAS1027.RES

Method : M:\ZEUS\DATA\201027\ZGAS1027.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Oct 29 11:23:13 2020
Response via : Initial Calibration



Primary and Secondary Working Standards

Primary Standards

VOA STD 7

Prepared: 10/26/20 A
Expires: 12/25/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses STD	Phenova	ALO-101206	2,000	CL14506-50820	10/26/21	10/31/24	100uL	4mL	Methanol	50
Hexachloroethane	Absolute	70199	1,000	091818-50782	10/26/21	09/18/23	200uL			50
Benzyl Chloride	Accusta	M-8010-01	1,000	042420-50797	10/26/21	04/24/21	200uL			50

VOA STD 8

Prepared: 10/26/20 B
Expires: 11/18/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Additions STD	Phenova	ALO-130175	2,000	CL15724-50830	10/18/21	09/30/22	100uL	4mL	Methanol	50
502.2 Cal. Std.	Phenova	ALO-101200	2,000	CL14379-50556	10/18/21	10/31/24	100uL			50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL15933-51014	10/26/21	11/18/20	100uL			50

VOA STD TBA

Prepared: 10/26/20 C
Expires: 11/18/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOC Mix	Phenova	ALO-130176	2,000	CL15725-50775	10/26/21	09/30/23	500uL	4mL	Methanol	250
Acrolein	Phenova	ALO-130549	10,000	CL15937-51016	10/26/21	11/18/20	100uL			250

VOA STD 1

Prepared: 10/26/20 D
Expires: 12/25/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE	Absolute	82408	2,000	121119-50902	10/26/21	12/11/22	50	2mL	Methanol	50

VOA STD 2

Prepared: 10/26/20 E
Expires: 12/25/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Std.	Phenova	ALO-109211	2,000	CL12730-50631	10/26/21	08/31/28	100	4mL	Methanol	50

VOA STD 9

Prepared: 10/26/20 F
Expires: 12/25/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 7		VOA STD. 9	50	Prepared 10/26/20	10/26/21	N/A	200uL	2mL	Methanol	5
VOA STD. 8			50	Prepared 10/26/20	10/26/21	N/A	200uL			5

VOA STD. 10

Prepared: 10/26/20 G
Expires: 12/25/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 1		VOA STD. 10	50	Prepared 10/26/20	10/26/21	N/A	200uL	2mL	Methanol	5

VOA STD. 12

Prepared: 10/26/20 H
Expires: 12/25/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 2		VOA STD. 12	50	Prepared 10/26/20	10/26/21	N/A	200uL	2mL	Methanol	5

Second Source (SS) Standards

VOA STD. 3

Prepared: 10/26/20 I
Expires: 12/25/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Standard	Phenova	ALO-101211	2,000	**CL13994-50635**	**10/26/21**	**08/31/29**	50uL	2mL	Methanol	50

VOA STD. Gases

Prepared: 10/26/20 J
Expires: 12/25/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260 Gases (SS)	Phenova	ALO-101206	2,000	**CL14505-50825**	**10/26/21**	**10/31/24**	50uL	2mL	Methanol	50

VOA STD. 6

Prepared: **10/26/20 K**
Expires: 11/18/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
502.2 Calibration STD. (54-compounds)	Phenova	ALO-101200	2,000	**CL14381-50562**	**10/18/21**	**10/31/24**	50uL	2mL	Methanol	50
Vinyl Acetate	Phenova	ALO-101228	2,000	**CL15933-51015**	**10/26/21**	**11/18/20**	50uL			50
Hexachloroethane	Accustan	AS-E0011	1,000	**219061767-50956**	**10/26/21**	**06/28/29**	100uL			50
Benzyl Chloride	Accustan	M-8010-01	200	**219111303-50804**	**10/26/21**	**12/25/21**	500uL			50

VOA STD. TBA

Prepared: 10/26/20 L
Expires: 11/18/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOA Mix (4-3)	Phenova	ALO-130176	2,000	**CL12929-50566**	**10/26/21**	**11/30/20**	250uL	2mL	Methanol	250
Acrolein	Phenova	ALO-101224	10,000	**CL15937-51017**	**10/26/21**	**11/18/20**	50uL			250

VOA STD. 0

Prepared: 10/26/20 M
Expires: 12/25/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Addition STD.	Phenova	ALO-130175	2,000	**CL14058-50580**	**10/18/21**	**08/31/21**	50uL	2mL	Methanol	50

VOA STD. 2-CEVE

Prepared: 10/26/20 N
Expires: 12/25/20
Methanol Lot No. DW117-US-0095

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE (SS)	Absolute	82408	2,000	**011320-50897**	**10/26/21**	**01/13/23**	50uL	2mL	Methanol	50

ZEUS 8260 Water Calibration Curve

Prepared By (Initials): CH

0.3ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	0.3ug/L	5	Prepared 10/26/20	12/25/20	N/A	3uL	50mL	P&T Water	0.3
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	5uL			5
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	2.5uL			5
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	2uL			10

0.5ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	0.5ug/L	5	Prepared 10/26/20	12/25/20	N/A	5uL	50mL	P&T Water	0.5
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	10uL			10
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	5uL			10
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	5uL			25

1.0ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	1.0ug/L	5	Prepared 10/26/20	12/25/20	N/A	10uL	50mL	P&T Water	1
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	20uL			20
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	10uL			20
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	10uL			50

2.0ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	2.0ug/L	5	Prepared 10/26/20	12/25/20	N/A	20uL	50mL	P&T Water	2
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	30uL			30
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	15uL			30
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	15uL			75

5ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	5ug/L	50	Prepared 10/26/20	12/25/20	N/A	5uL	50mL	P&T Water	5
VOA STD. 8	Phenova		50	Prepared 10/26/20	11/18/20	N/A	5uL			5
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	40uL			40
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	20uL			20
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	20uL			100

10ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	10ug/L	50	Prepared 10/26/20	12/25/20	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 10/26/20	11/18/20	N/A	10uL			10
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	50uL			50
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	25uL			50
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	25uL			125

20ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	20ug/L	50	Prepared 10/26/20	12/25/20	N/A	20uL	50mL	P&T Water	20
VOA STD. 8	Phenova		50	Prepared 10/26/20	11/18/20	N/A	20uL			20
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	60uL			60
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	30uL			60
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	30uL			150

40ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	40ug/L	50	Prepared 10/26/20	12/25/20	N/A	40uL	50mL	P&T Water	40
VOA STD. 8	Phenova		50	Prepared 10/26/20	11/18/20	N/A	40uL			40
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	80uL			80
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	40uL			80
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	35uL			175

100ug/L

Prepared: 10/27/20

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	100ug/L	50	Prepared 10/26/20	12/25/20	N/A	100uL	50mL	P&T Water	100
VOA STD. 8	Phenova		50	Prepared 10/26/20	11/18/20	N/A	100uL			100
VOA STD. 1	Absolute		50	Prepared 10/26/20	12/25/20	N/A	100uL			100
VOA STD. 2	Phenova		100	Prepared 10/26/20	12/25/20	N/A	50uL			100
VOA STD. TBA	Various		250	Prepared 10/26/20	11/18/20	N/A	40uL			200

ZEUS 8260 Water Second Source (SS)

Prepared: 10/27/20

Prepared By (Initials): CH

Expires: 11/18/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 3	Phenova	8260 Water SS	100	Prepared 10/26/20	12/25/20	N/A	25uL	50mL	P&T Water	50
VOA STD. GASES	Phenova	8260 Water SS	50	Prepared 10/26/20	12/25/20	N/A	10uL			10
VOA STD. 0	Phenova	8260 Water SS	50	Prepared 10/26/20	12/25/20	N/A	10uL			10
VOA STD. 2-CEVE	Absolute	8260 Water SS	50	Prepared 10/26/20	10/26/20	N/A	50uL			50
VOA STD. 6	Various	8260 Water SS	50	Prepared 10/26/20	11/18/20	N/A	10uL			10
Voa STD. TBA	Various	8260 Water SS	250	Prepared 10/26/20	11/18/20	N/A	25uL			250

8260 Water Continuing Calibrations (CCV)/ Lab Control Spikes (LCS)

Prepared: 10/27/20

Prepared By (Initials): CH

Expires: 10/28/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	CCV/ LCS	50	Prepared 10/26/20	12/25/20	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova	CCV/ LCS	50	Prepared 10/26/20	11/18/20	N/A	10uL			10
VOA STD. 1	Absolute	CCV/ LCS	50	Prepared 10/26/20	12/25/20	N/A	50uL			50
VOA STD. 2	Phenova	CCV/ LCS	100	Prepared 10/26/20	12/25/20	N/A	25uL			50
VOA STD. TBA	Various	CCV/ LCS	250	Prepared 10/26/20	11/18/20	N/A	25uL			125

ZEUS Gas Standard Prep

Gas Primary Working Standard

Prepared: 10/16/20 — **Prepared By (Initials):** CH

Expires: 01/06/21

Methanol Lot No.

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
50,000ug/mL Gas STD	Restek	30205	50,000	A0132443-39859	01/06/21	12/31/24	80uL	2mL	Methanol	2,000

Gas Second Source (SS) Working Standard

Prepared: 08/20/20 — **Prepared By (Initials):** CH

Expires: 10/13/20

Methanol Lot No.

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Gasoline (50,000ppm)	Phenova	ALO-101543	50,000	CL11750-40998	10/13/20	02/28/27	800uL	2mL	Methanol	2,000

ZEUS Gas Calibration Curve

Prepared: 10/27/20 — **Prepared By (Initials):** CH

Expires: 12/26/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA Gasses Standards	Phenova	20ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	1uL	100mL	P&T Water	20
VOA Gasses Standards	Phenova	50ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	2.5uL	100mL	P&T Water	50
VOA Gasses Standards	Phenova	100ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	5uL	100mL	P&T Water	100
VOA Gasses Standards	Phenova	300ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	15uL	100mL	P&T Water	300
VOA Gasses Standards	Phenova	600ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	30uL	100mL	P&T Water	600
VOA Gasses Standards	Phenova	800ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	40uL	100mL	P&T Water	800
VOA Gasses Standards	Phenova	1,000ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	50uL	100mL	P&T Water	1,000

ZEUS Gas Second Source

Prepared: 10/27/20 — **Prepared By (Initials):** CH

Expires: 12/26/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
50,000ug/mL Gas STD	Phenova	SS 300ug/L	2,000	Prepared 08/20/20	10/13/20	N/A	15uL	100mL	P&T Water	300

ZEUS Gas Continuing Calibrations/Lab Control Spikes

Prepared: 10/27/20 — **Prepared By (Initials):** CH

Expires: 10/28/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses Standards	Phenova	300ug/L	2,000	Prepared 10/16/20	01/06/21	N/A	15uL	100mL	P&T Water	300

Injection Log

Directory: M:\ZEUS\DATA\201027\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	4	1027Z18.D	1	0.3ug/L VOC STD 10/27/20		27 Oct 20 14:00
2	5	1027Z19.D	1	0.5ug/L VOC STD 10/27/20		27 Oct 20 14:23
3	6	1027Z20.D	1	1ug/L VOC STD 10/27/20		27 Oct 20 14:46
4	7	1027Z21.D	1	2ug/L VOC STD 10/27/20		27 Oct 20 15:09
5	8	1027Z22.D	1	5ug/L VOC STD 10/27/20		27 Oct 20 15:33
6	9	1027Z23.D	1	10ug/L VOC STD 10/27/20		27 Oct 20 15:56
7	10	1027Z24.D	1	20ug/L VOC STD 10/27/20		27 Oct 20 16:19
8	11	1027Z25.D	1	40ug/L VOC STD 10/27/20		27 Oct 20 16:42
9	12	1027Z26.D	1	100ug/L VOC STD 10/27/20		27 Oct 20 17:06
10	37	1027Z51.D	1	20ug/L GAS STD 10/27/20		28 Oct 20 02:41
11	38	1027Z52.D	1	50ug/L GAS STD 10/27/20		28 Oct 20 03:04
12	39	1027Z53.D	1	100ug/L GAS STD 10/27/20		28 Oct 20 03:27
13	40	1027Z54.D	1	300ug/L GAS STD 10/27/20		28 Oct 20 03:50
14	41	1027Z55.D	1	600ug/L GAS STD 10/27/20		28 Oct 20 04:13
15	42	1027Z56.D	1	800ug/L GAS STD 10/27/20		28 Oct 20 04:36
16	43	1027Z57.D	1	1000ug/L GAS STD 10/27/20		28 Oct 20 04:59
17	45	1027Z59.D	1	(SS)300ug/L GAS STD 10/27/20		28 Oct 20 05:45
18	5	1028Z15.D	1	201028A CCV 300 ug/L		28 Oct 20 13:46
19	6	1028Z16.D	1	201028A LCS 300 ug/L		28 Oct 20 14:09
20	7	1028Z17.D	1	201028A LCSD 300 ug/L		28 Oct 20 14:32
21	8	1028Z18.D	1	201028A BLK		28 Oct 20 14:56
22	9	1028Z19.D	1	BA20715W01		28 Oct 20 15:19
23	10	1028Z20.D	1	BA20716W01		28 Oct 20 15:42
24	11	1028Z21.D	1	BA20717W01		28 Oct 20 16:05
25	12	1028Z22.D	1	BA20718W01		28 Oct 20 16:28
26	13	1028Z23.D	1	BA20719W01		28 Oct 20 16:51
27	15	1028Z25.D	1	Ending CCV 300ug/L 10/27/20		28 Oct 20 17:37

ORGANICS

Calibration Data

RSK 175

Form 6
Initial Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:
SDG No:
Initial Cal. Date: 09/14/20
Instrument: 7890
Initials: CD

0914R07.D 0914R08.D 0914R09.D 0914R10.D 0914R11.D 0914R12.D 0914R13.D

		Compound	1	2	3	4	5	6	7				Avg	%RSD	Type	r^2	Q
1	ATML	Methane	31176	26056	25996	23232	23337	25358	24640				25685	10	ATM	1.000	
2	ATML	Ethane	21362	19532	19181	17082	17815	18853	18215				18863	7.3	ATM	1.000	
3	ATML	Ethene	16420	15064	15131	13510	13711	15061	14685				14797	6.6	ATM	1.000	
4																	
5																	
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35																	

0.696467

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R07.D Vial: 1
Acq On : 14 Sep 20 12:06 Operator: CD
Sample : RSK STD1 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

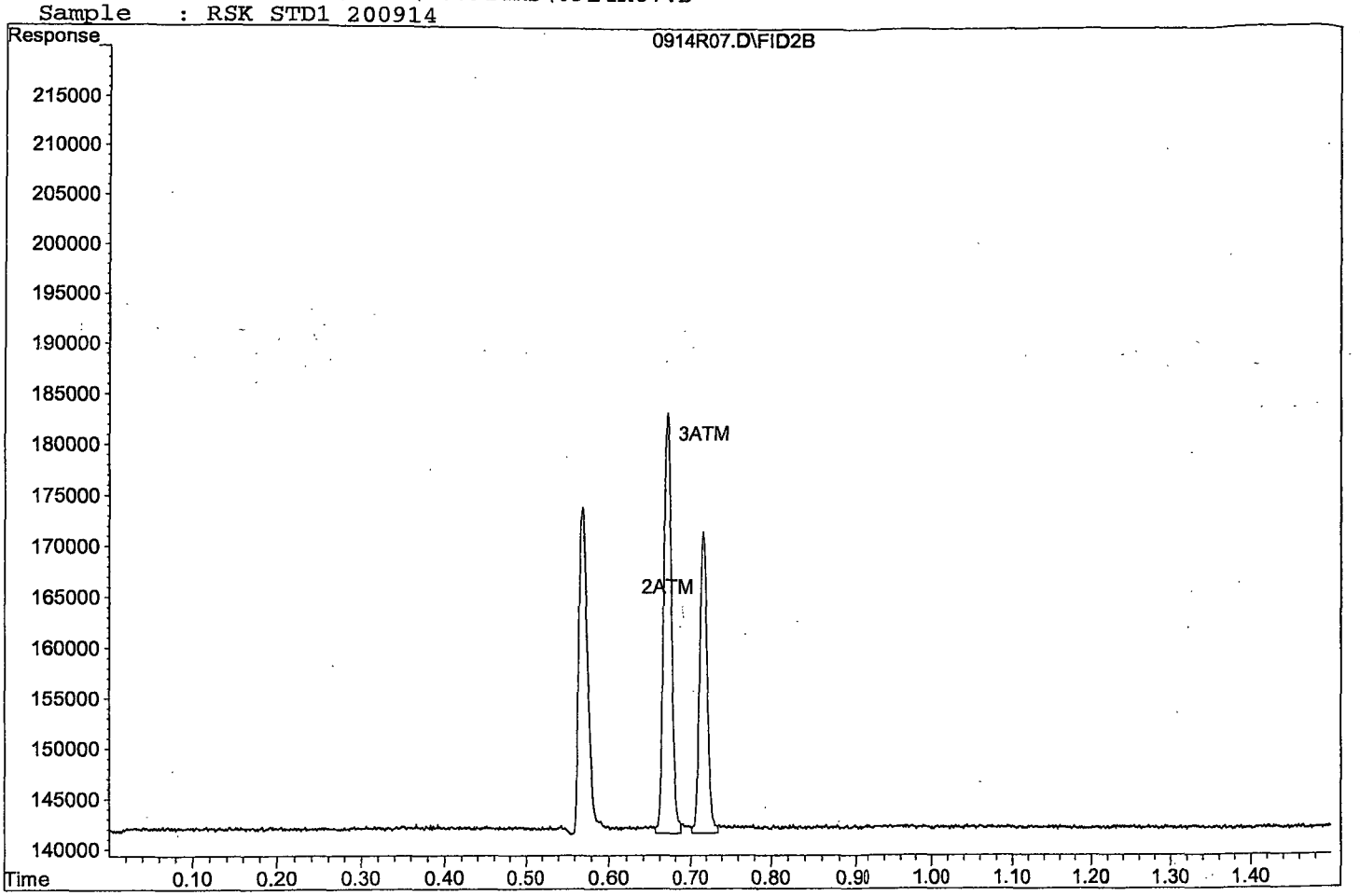
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
2) ATM Ethane	0.67	41762	102628.492	ppb
3) ATM Ethene	0.72	29966	4.139	ppb
Target Compounds				
1) ATM Methane	0.57	32423	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R07.D
Sample : RSK STD1 200914



648 of 750

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R08.D Vial: 1
Acq On : 14 Sep 20 12:10 Operator: CD
Sample : RSK STD2 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

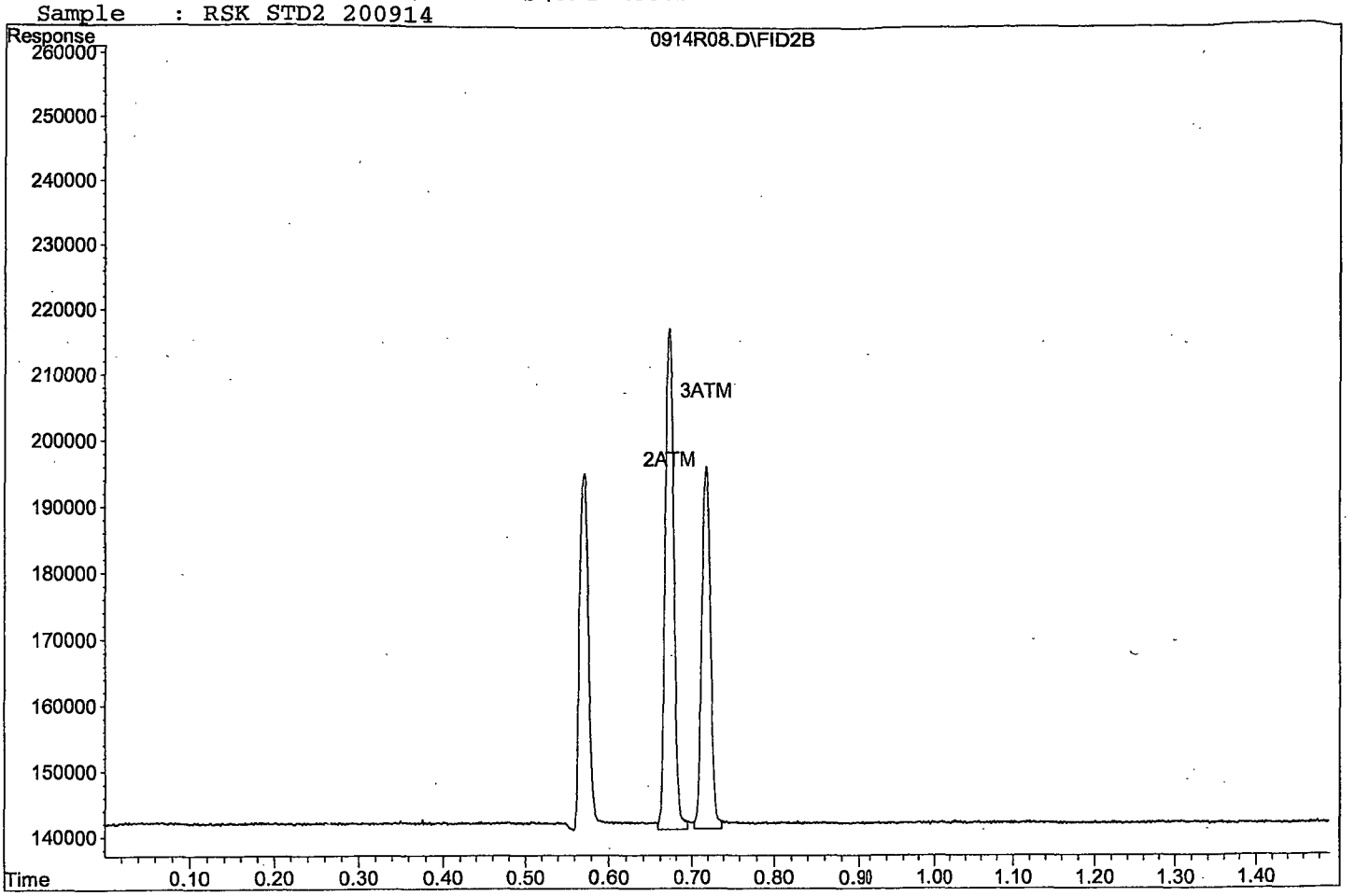
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
2) ATM Ethane	0.67	76271	190289.144 ppb
3) ATM Ethene	0.72	54983	7.686 ppb
Target Compounds			
1) ATM Methane	0.57	54196	N.D. ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R08.D
Sample : RSK STD2 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R09.D Vial: 1
Acq On : 14 Sep 20 12:13 Operator: CD
Sample : RSK STD3 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

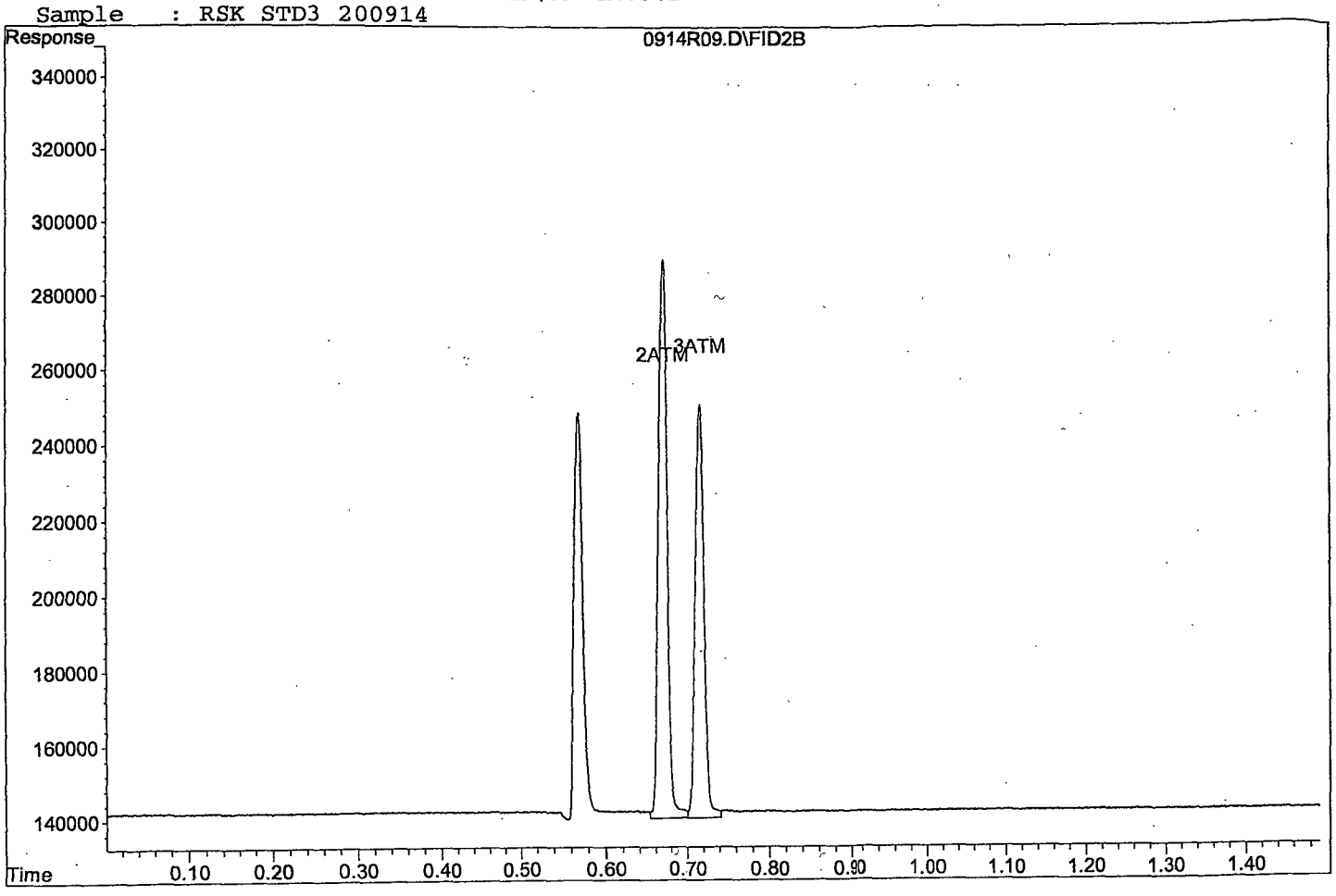
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
2) ATM Ethane	0.67	149612	376595.524 ppb
3) ATM Ethene	0.72	110455	15.551 ppb
Target Compounds			
1) ATM Methane	0.57	108403	N.D. ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File: G:\ROCKY\DATA\200914RS\0914R09.D
Sample : RSK STD3 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R10.D Vial: 1
Acq On : 14 Sep 20 12:18 Operator: CD
Sample : RSK STD4 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

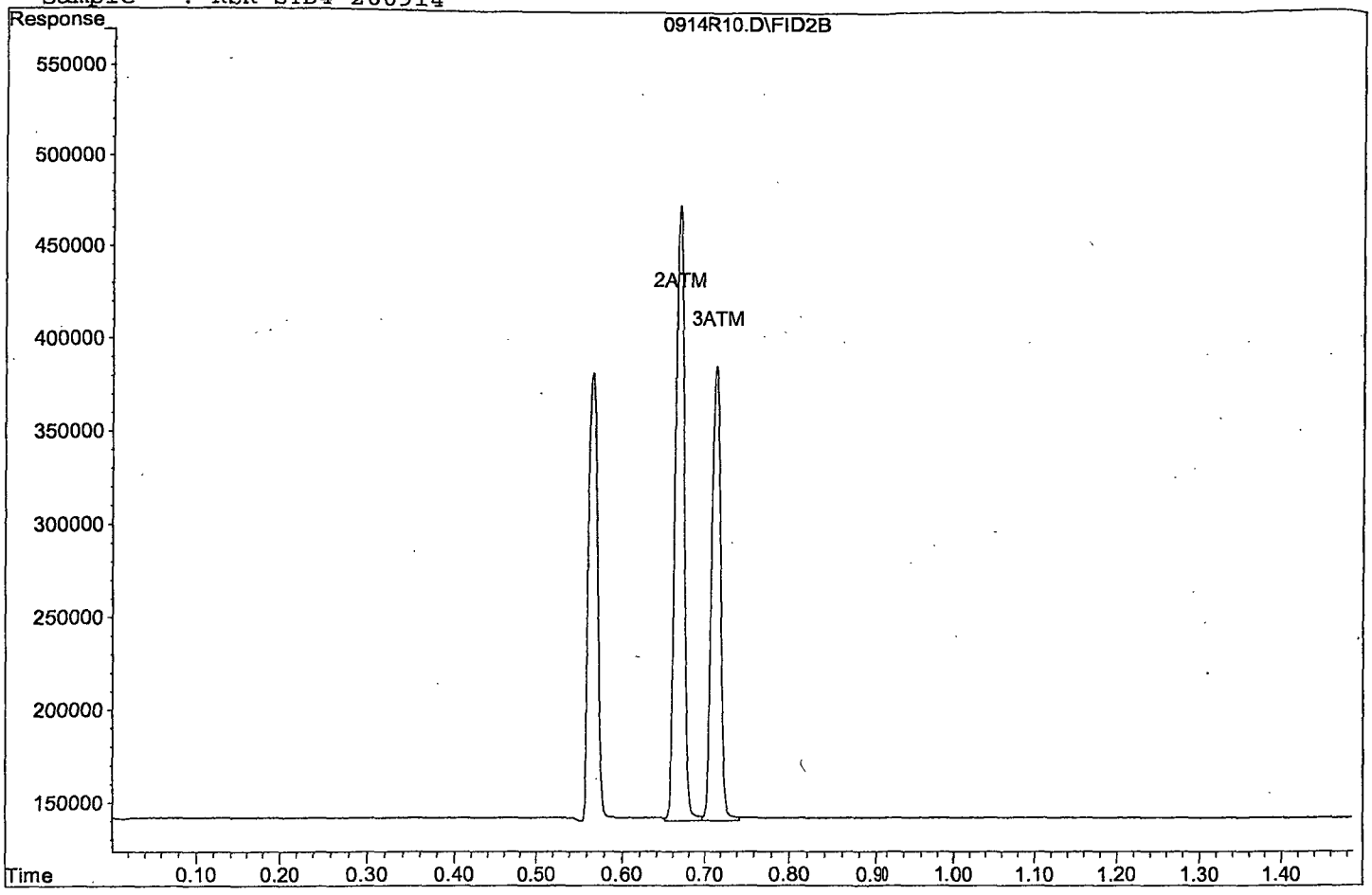
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
2) ATM Ethane	0.67	333873	844667.853 ppb
3) ATM Ethene	0.71	246286	34.810 ppb
Target Compounds			
1) ATM Methane	0.57	242197	N.D. ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File: G:\ROCKY\DATA\200914RS\0914R10.D
Sample : RSK STD4 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R11.D Vial: 1
Acq On : 14 Sep 20 12:21 Operator: CD
Sample : RSK STD5 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

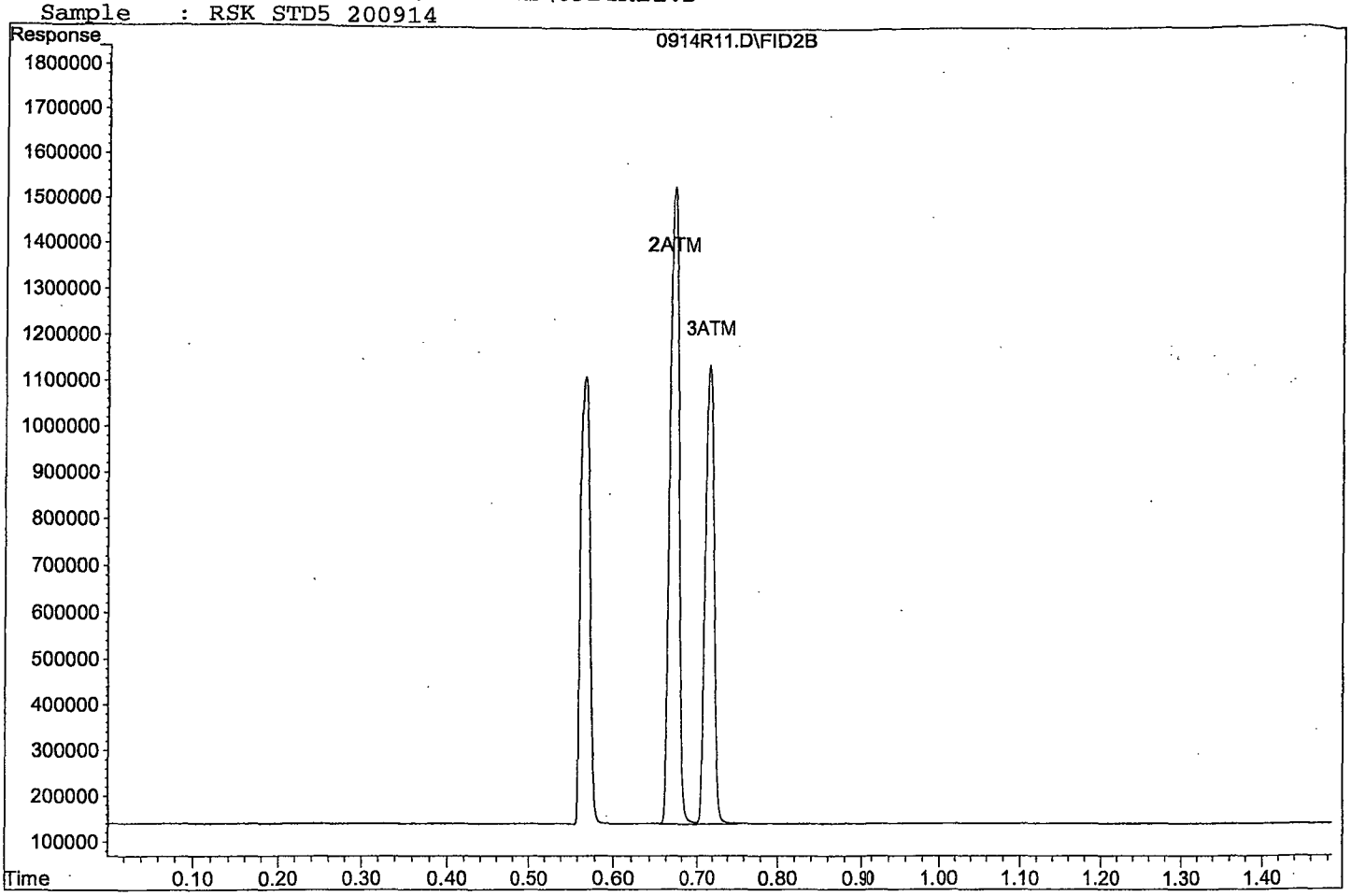
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
2) ATM Ethane	0.67	1392673	3534302.847	ppb
3) ATM Ethene	0.71	999836	141.654	ppb
Target Compounds				
1) ATM Methane	0.57	973152	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R11.D
Sample : RSK STD5 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R12.D Vial: 1
Acq On : 14 Sep 20 12:25 Operator: CD
Sample : RSK STD6 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

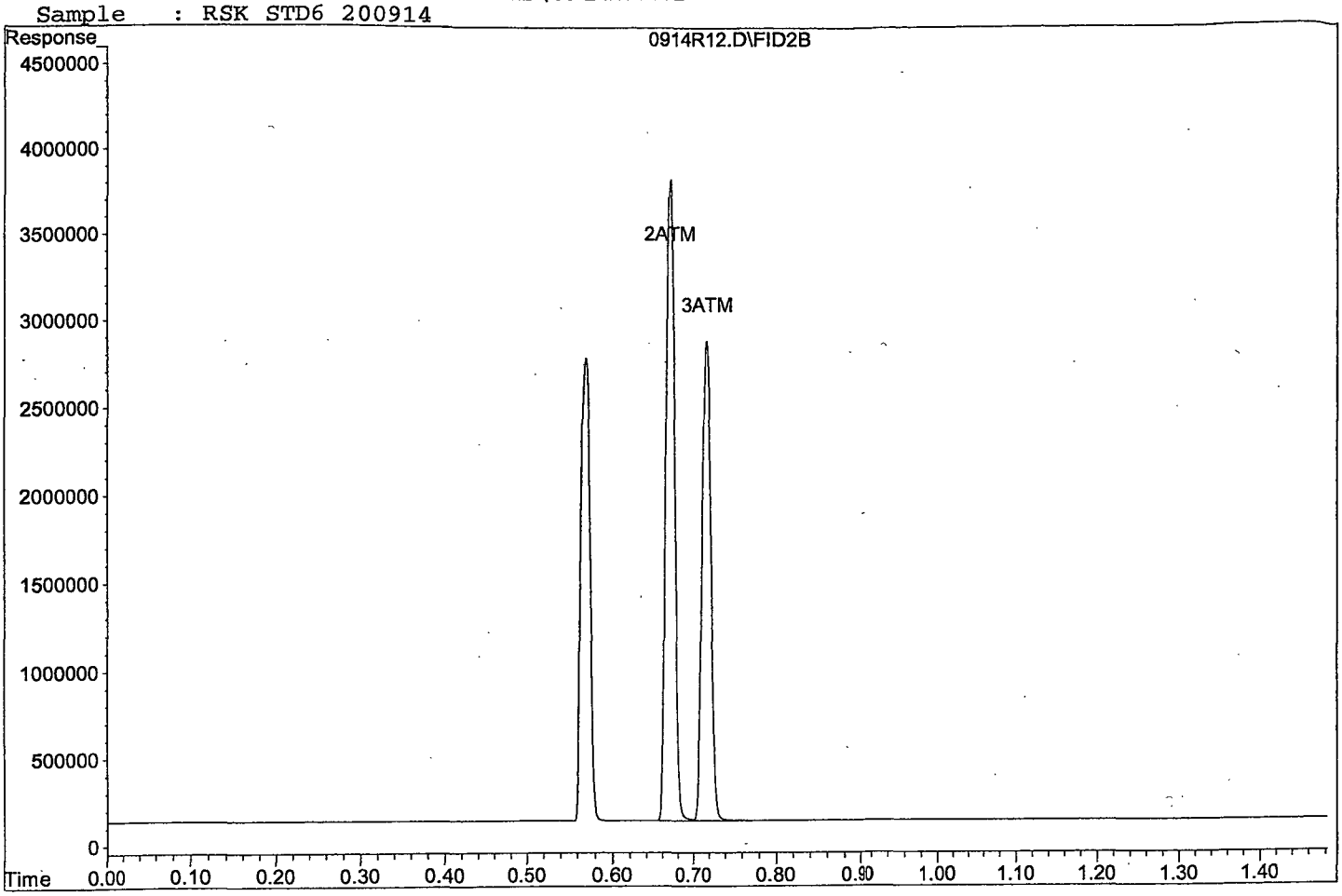
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
2) ATM Ethane	0.67	3684845	9357031.284	ppb
3) ATM Ethene	0.72	2745673	389.192	ppb
Target Compounds				
1) ATM Methane	0.57	2643568	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R12.D
Sample : RSK STD6 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R13.D Vial: 1
Acq On : 14 Sep 20 12:28 Operator: CD
Sample : RSK STD7 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

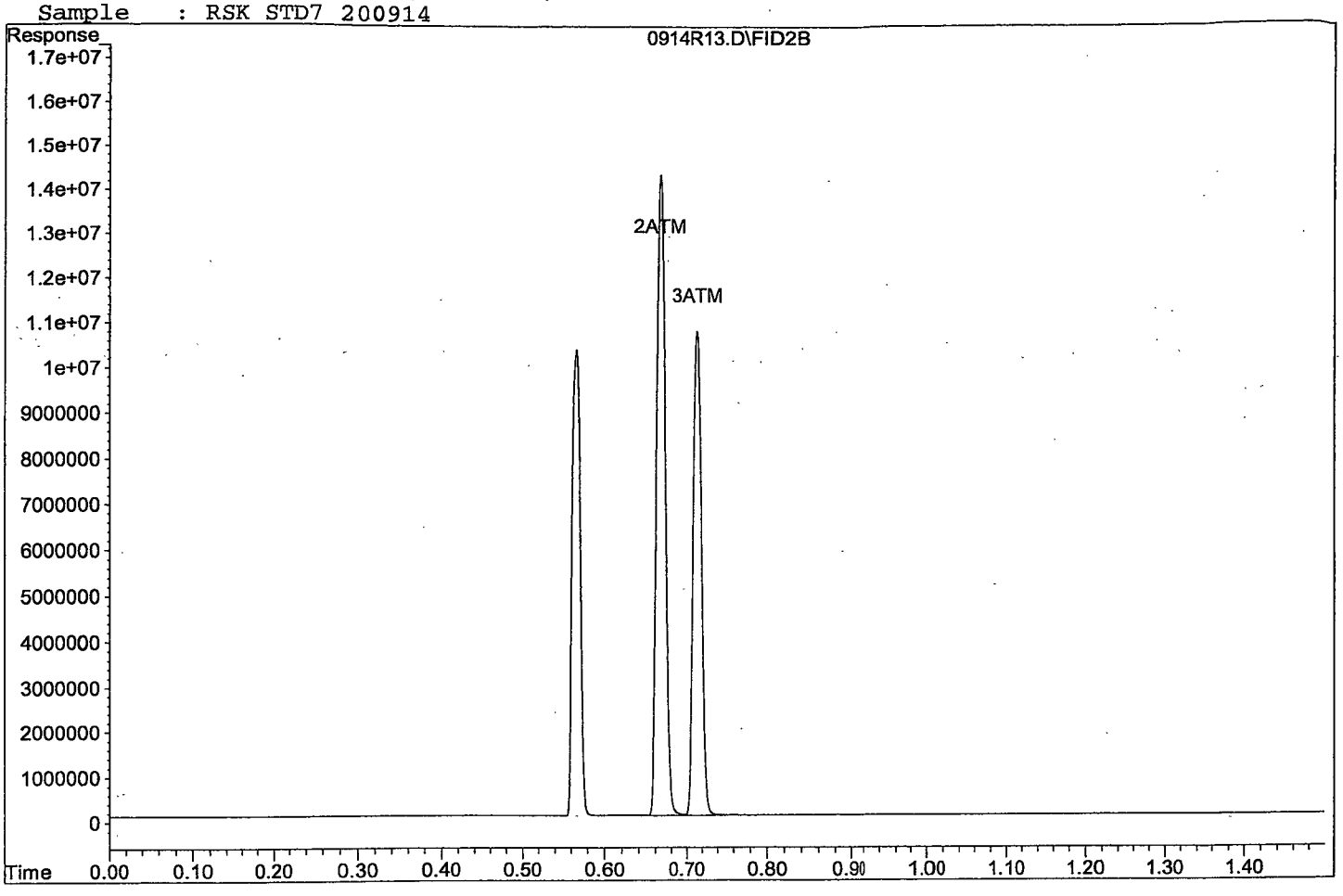
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
2) ATM Ethane	0.67	14239394	3616 8407.278	ppb
3) ATM Ethene	0.71	10708428	1518.210	ppb
Target Compounds				
1) ATM Methane	0.57	10274710	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R13.D
Sample : RSK STD7 200914



Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 09/14/20
Instrument: 7890
Initial Cal. Date: 09/14/20
Data File: 0914R14.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATML	Methane	25685	23394	8.9	ATML	5.2
2	ATML	Ethane	18863	17545	7.0	ATML	4.5
3	ATML	Ethene	14798	13693	7.5	ATML	6.4
4							
5							
6							
7							
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39							
40							
		Average			7.8		

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R14.D Vial: 1
Acq On : 14 Sep 20 12:32 Operator: CD
Sample : SS RSK STD5 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:48 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

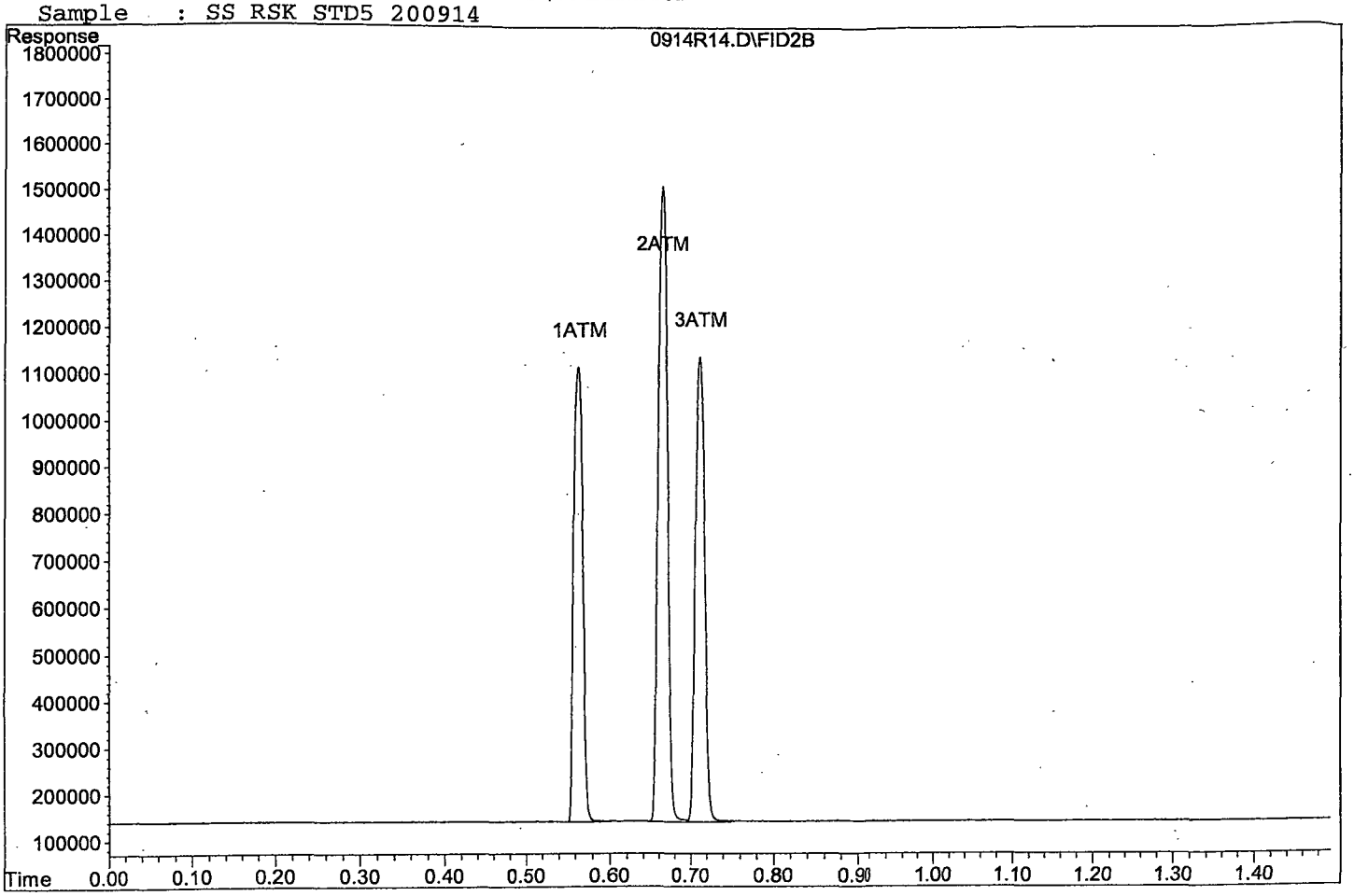
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

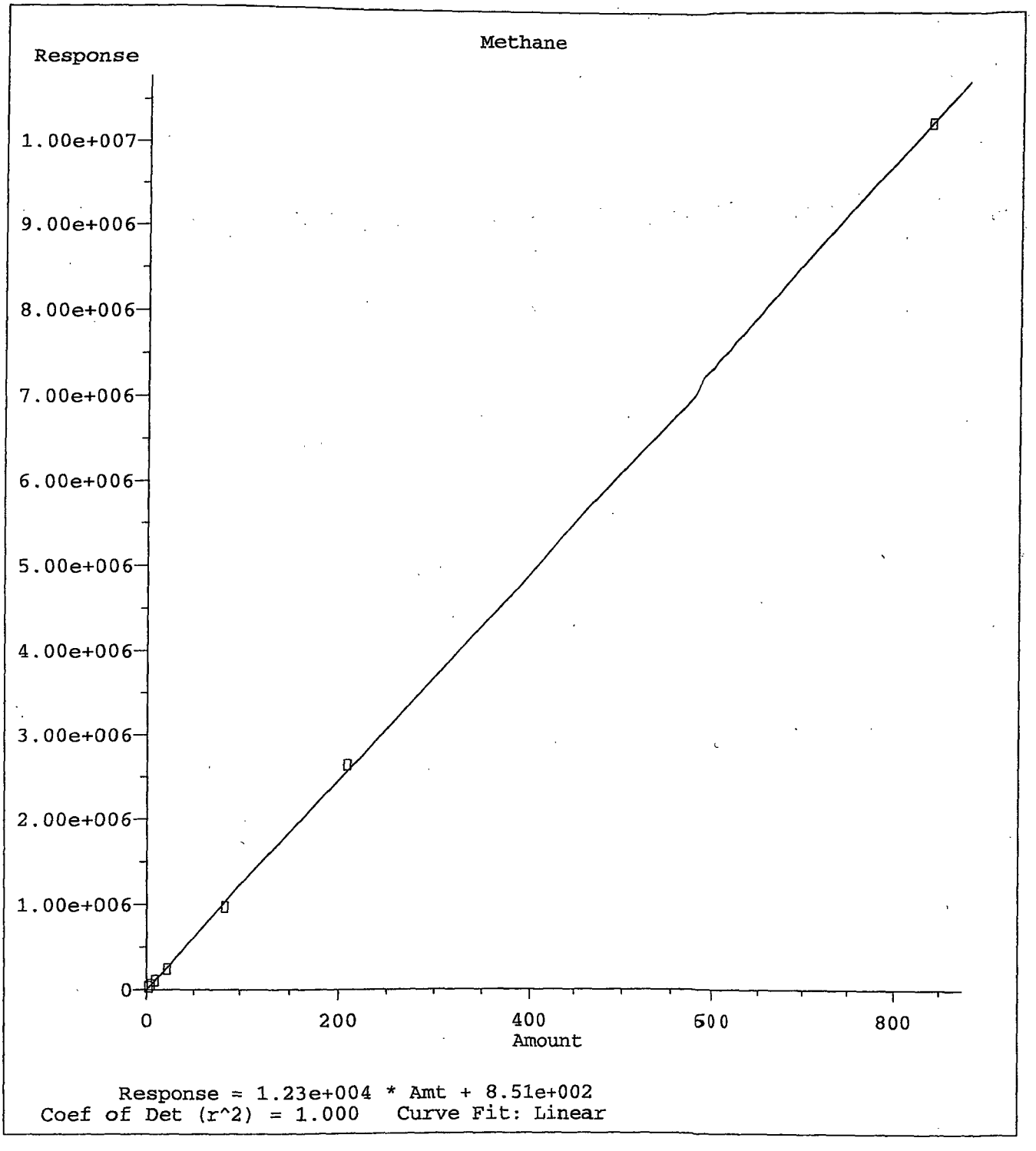
Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	0.56	975516	79.029 ppb
2) ATM Ethane	0.66	1371570	149.323 ppb
3) ATM Ethene	0.71	998467	136.525 ppb

Target Compounds

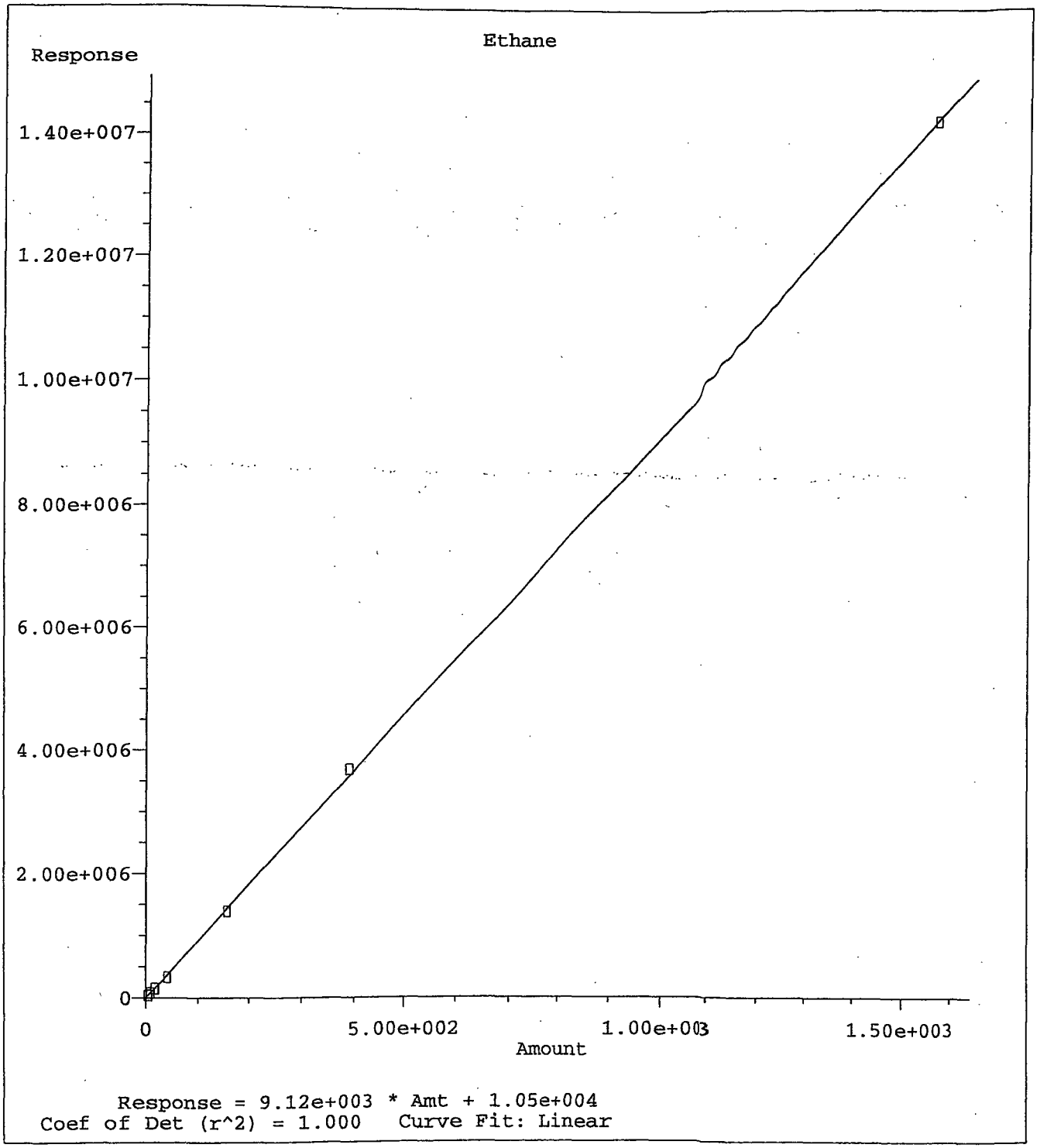
(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R14.D
Sample : SS RSK STD5 200914

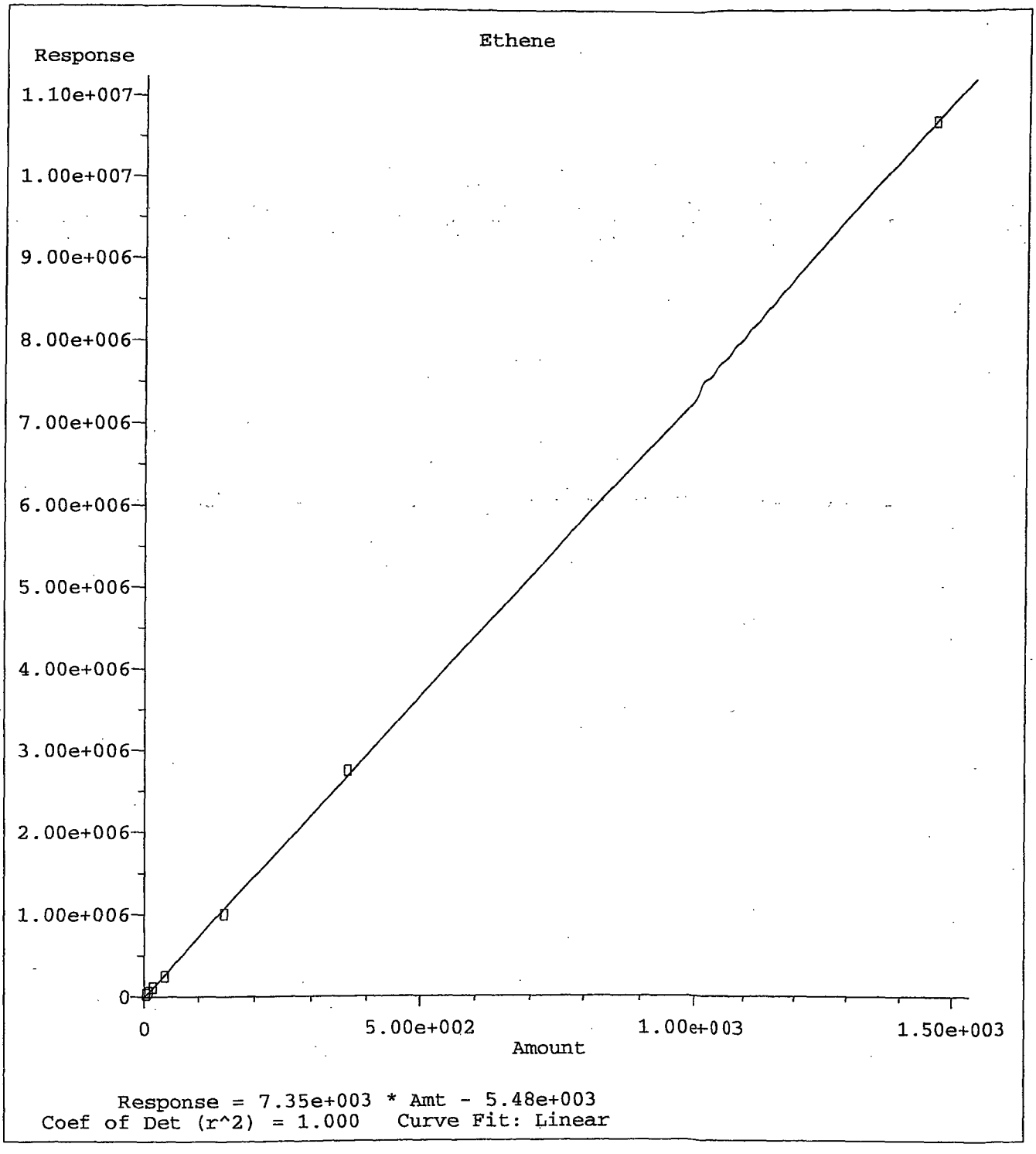




Method Name: G:\ROCKY\DATA\200624RS\RSK0914A.M
Calibration Table Last Updated: Mon Sep 14 12:40:32 2020



Method Name: G:\ROCKY\DATA\200624RS\RSK0914A.M
Calibration Table Last Updated: Mon Sep 14 12:40:32 2020



Method Name: G:\ROCKY\DATA\200624RS\RSK0914A.M
Calibration Table Last Updated: Mon Sep 14 12:40:32 2020

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/27/20
Instrument: 7890
Initial Cal. Date: 09/14/20
Data File: 1027R02.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATML	Methane	25685	21677	16	ATML	12
2	ATML	Ethane	18863	18120	3.9	ATML	1.3
3	ATML	Ethene	14798	15499	4.7	ATML	5.9
4							
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6							
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40							
		Average			8.2		

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R02.D Vial: 2
Acq On : 27 Oct 20 15:55 Operator: GA
Sample : 201027A LCS/CCV Inst : 7890
Misc : RSK STD 5 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 15:57 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

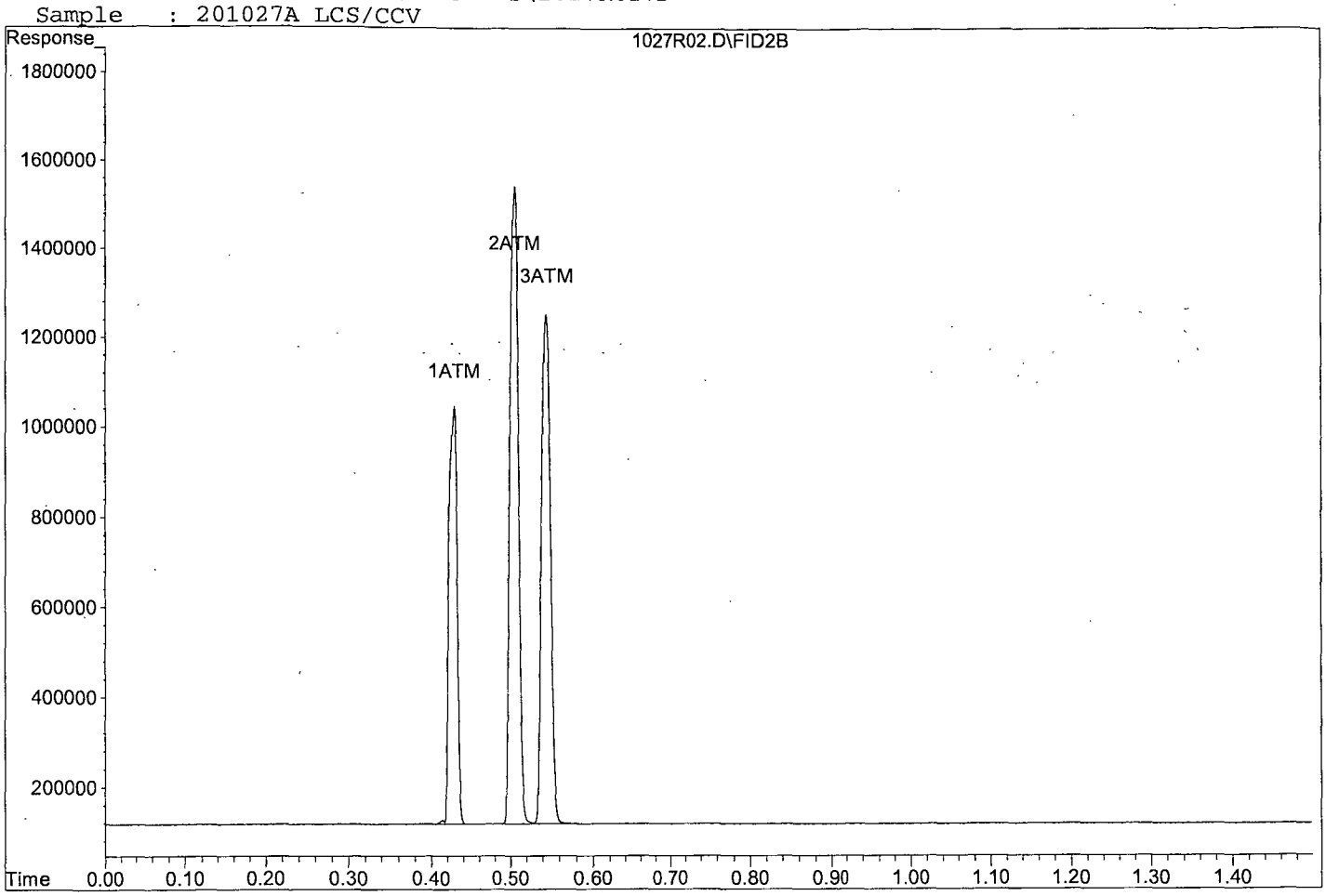
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	0.43	903932	73.225 ppb
2) ATM Ethane	0.51	1416526	154.255 ppb
3) ATM Ethene	0.55	1130156	154.433 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R02.D
Sample : 201027A LCS/CCV



Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/27/20
Instrument: 7890
Initial Cal. Date: 09/14/20
Data File: 1027R18.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATML	Methane	25685	19852	23	ATML	20
2	ATML	Ethane	18863	16490	13	ATML	10
3	ATML	Ethene	14798	13971	5.6	ATML	4.5
4							
5							
6							
7							
8							
9							
10							
11							
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36							
37							
38							
39							
40							
		Average			13.9		

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R18.D Vial: 18
Acq On : 27 Oct 20 16:37 Operator: GA
Sample : 201027A LCSD/CCV Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:39 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

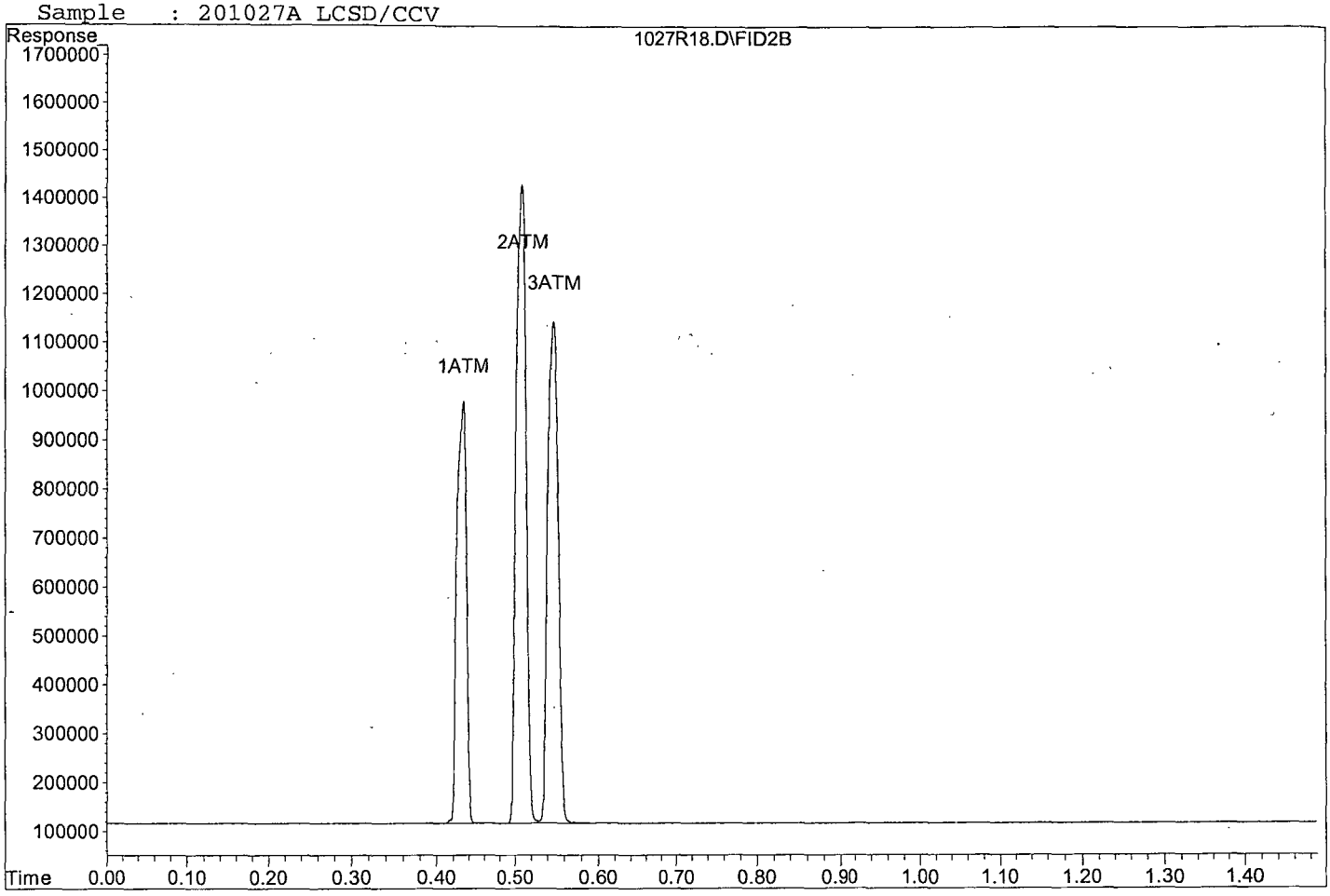
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	0.43	827834	67.054 ppb
2) ATM Ethane	0.51	1289126	140.278 ppb
3) ATM Ethene	0.55	1018770	139.286 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R18.D
Sample : 201027A LCSD/CCV



Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 2 Nov 20 14:00
Instrument: 7890
Initial Cal. Date: 09/14/20
Data File: 1102R01.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATML	Methane	25685	23955	6.7	ATML	3.0
2	ATML	Ethane	18863	18511	1.9	ATML	0.81
3	ATML	Ethene	14798	15270	3.2	ATML	4.3
4							
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39							
40							
		Average			3.9		

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1102R01.D Vial: 1
Acq On : 2 Nov 20 14:00 Operator: GA
Sample : 201102A CCV/LCS Inst : 7890
Misc : RSK STD 5 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Nov 2 14:03 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

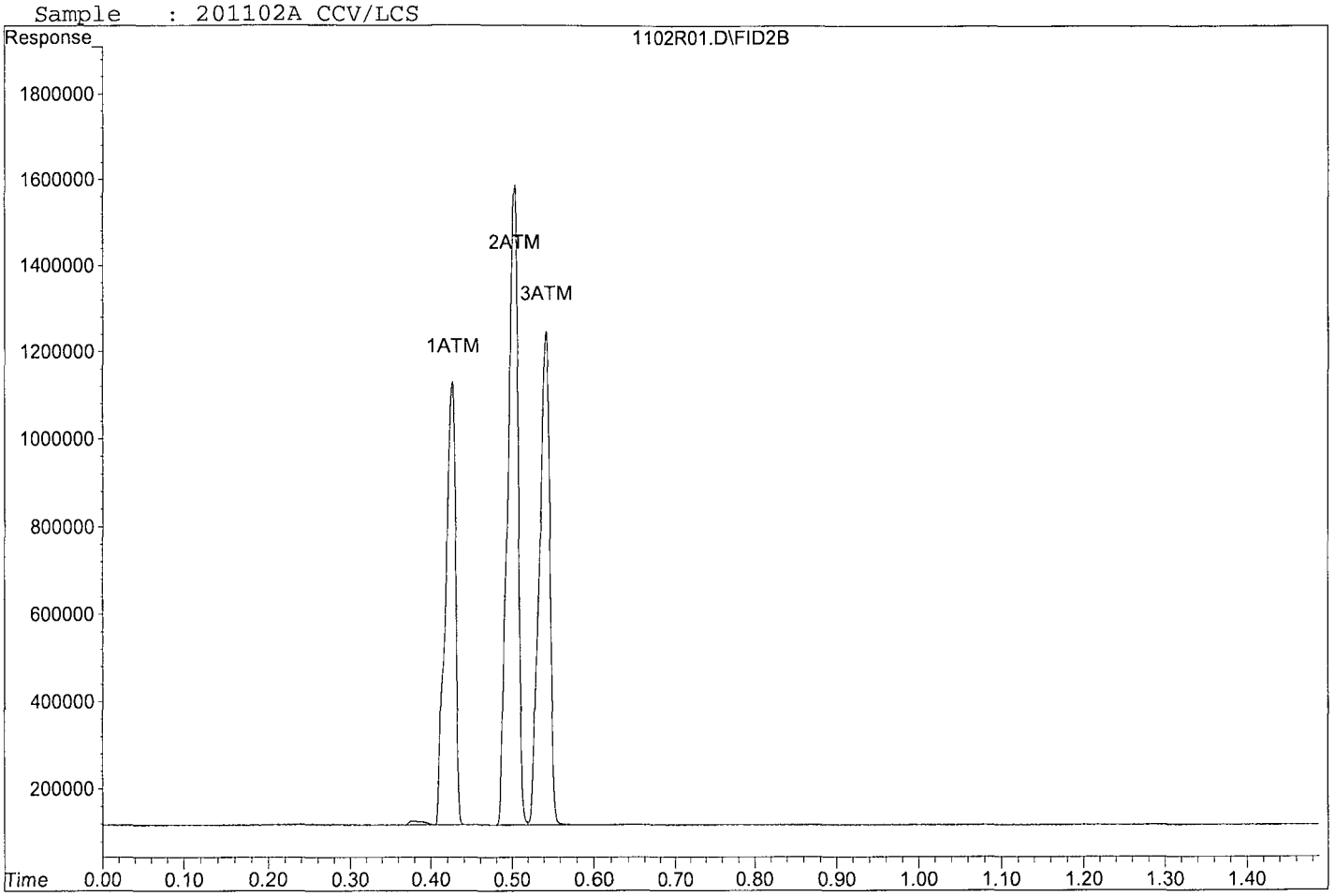
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) ATM Methane	0.42	998910	80.926	ppb
2) ATM Ethane	0.50	1447122	157.612	ppb
3) ATM Ethene	0.54	1113485	152.166	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1102R01.D
Sample : 201102A CCV/LCS



Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 2 Nov 20 14:29
Instrument: 7890
Initial Cal. Date: 09/14/20
Data File: 1102R08.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATML	Methane	25685	26355	2.6	ATML	6.8
2	ATML	Ethane	18863	21484	14	ATML	17
3	ATML	Ethene	14798	17565	19	ATML	20
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			11.9		

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1102R08.D Vial: 8
Acq On : 2 Nov 20 14:29 Operator: GA
Sample : 201102A LCSD/CCV Inst : 7890
Misc : RSK STD 5 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Nov 2 14:32 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

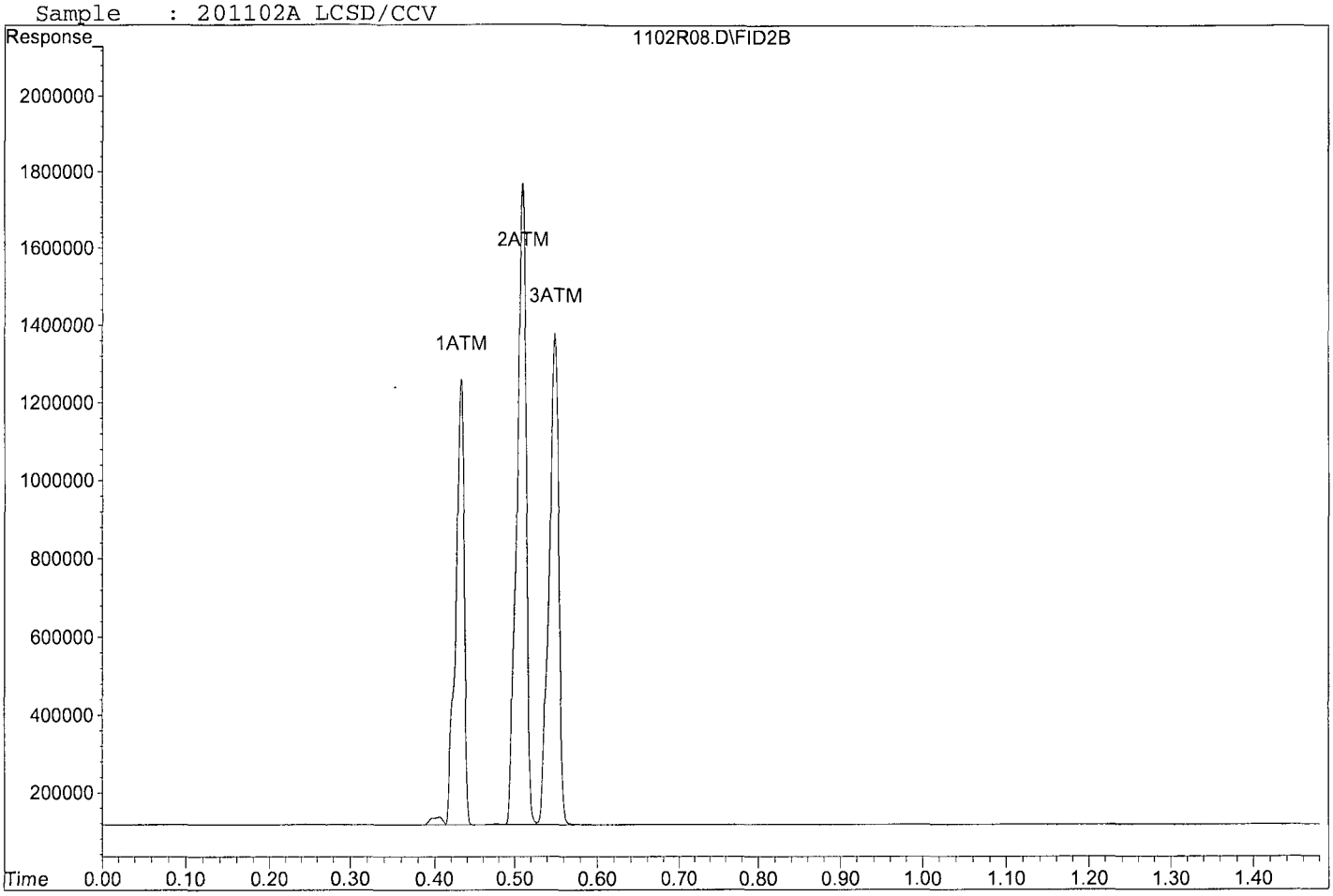
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	0.43	1099010	89.042 ppb
2) ATM Ethane	0.51	1679532	183.109 ppb
3) ATM Ethene	0.55	1280845	174.925 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1102R08.D
Sample : 201102A LCSD/CCV



ORGANICS

Raw Data

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R13.D Vial: 13
Acq On : 27 Oct 20 16:25 Operator: GA
Sample : BA20715W04 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:28 2020 Quant Results File: RSK0914A.RES

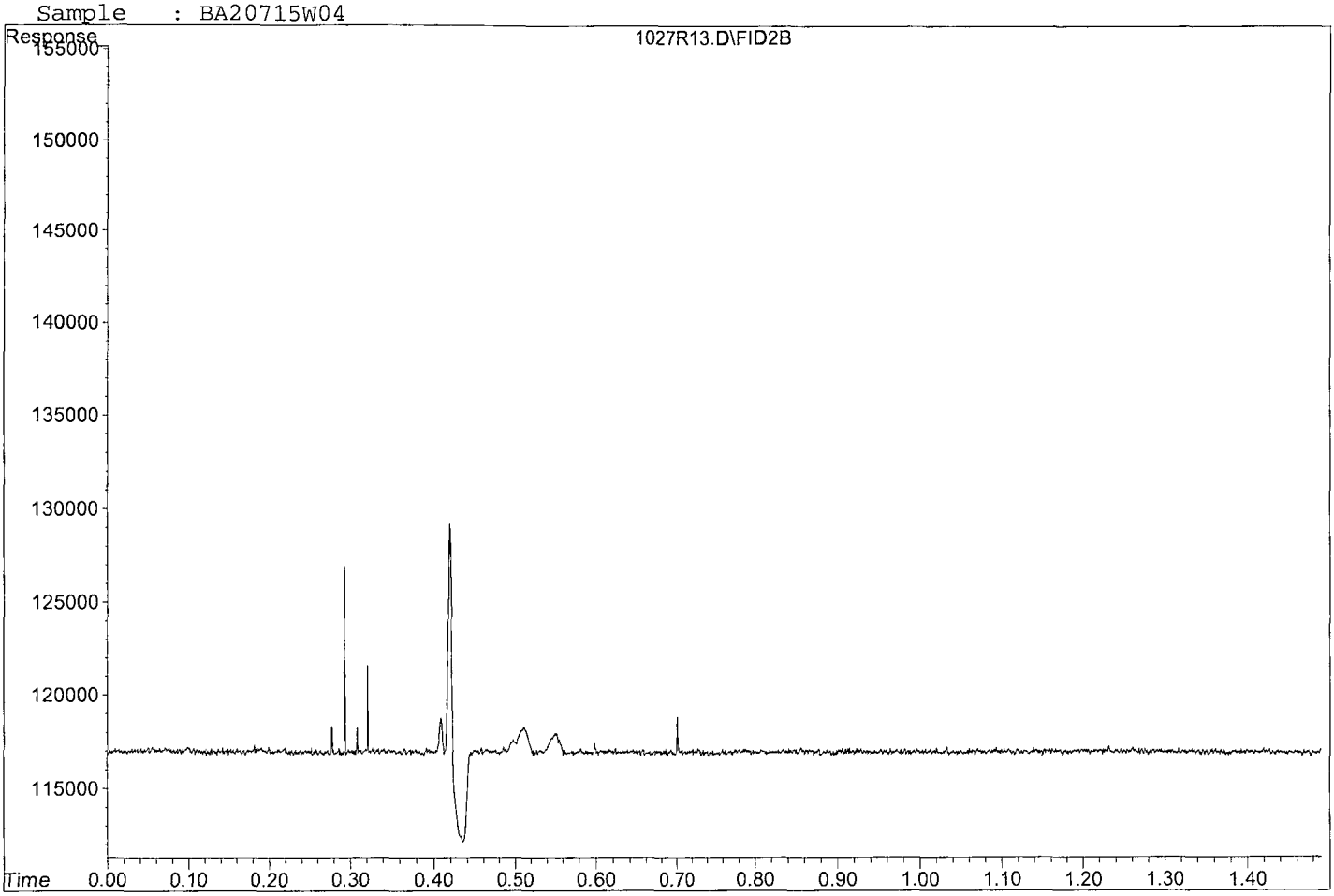
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
Target Compounds				
1) ATM Methane	0.00	0	N.D.	ppb
2) ATM Ethane	0.00	0	N.D.	ppb
3) ATM Ethene	0.00	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R13.D
Sample : BA20715W04



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R14.D Vial: 14
Acq On : 27 Oct 20 16:28 Operator: GA
Sample : BA20716W04 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:30 2020 Quant Results File: RSK0914A.RES

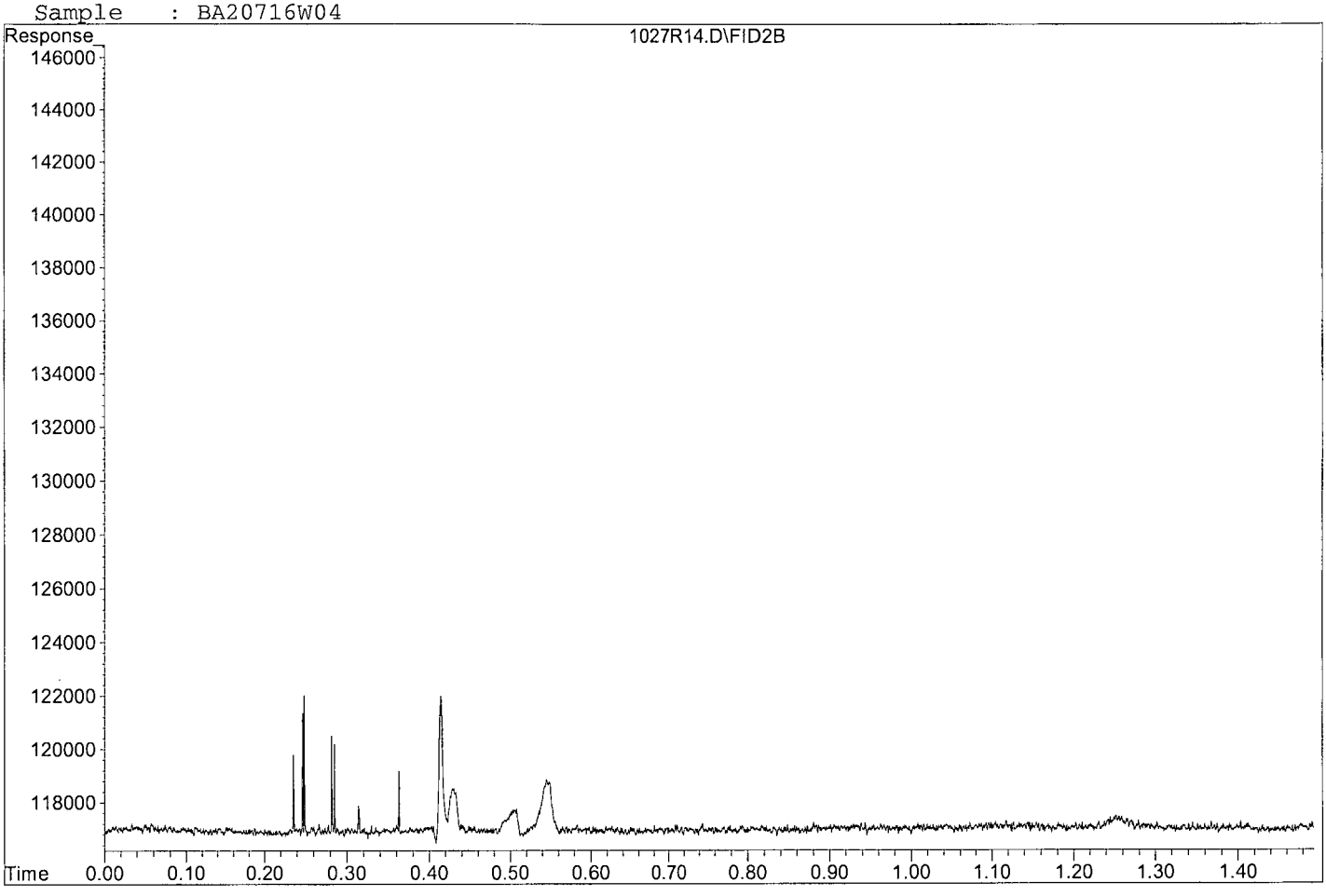
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
Target Compounds				
1) ATM Methane	0.00	0	N.D.	ppb
2) ATM Ethane	0.00	0	N.D.	ppb
3) ATM Ethene	0.00	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R14.D
Sample : BA20716W04



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1102R07.D Vial: 7
Acq On : 2 Nov 20 14:18 Operator: GA
Sample : BA20717W03 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Nov 2 14:28 2020 Quant Results File: RSK0914A.RES

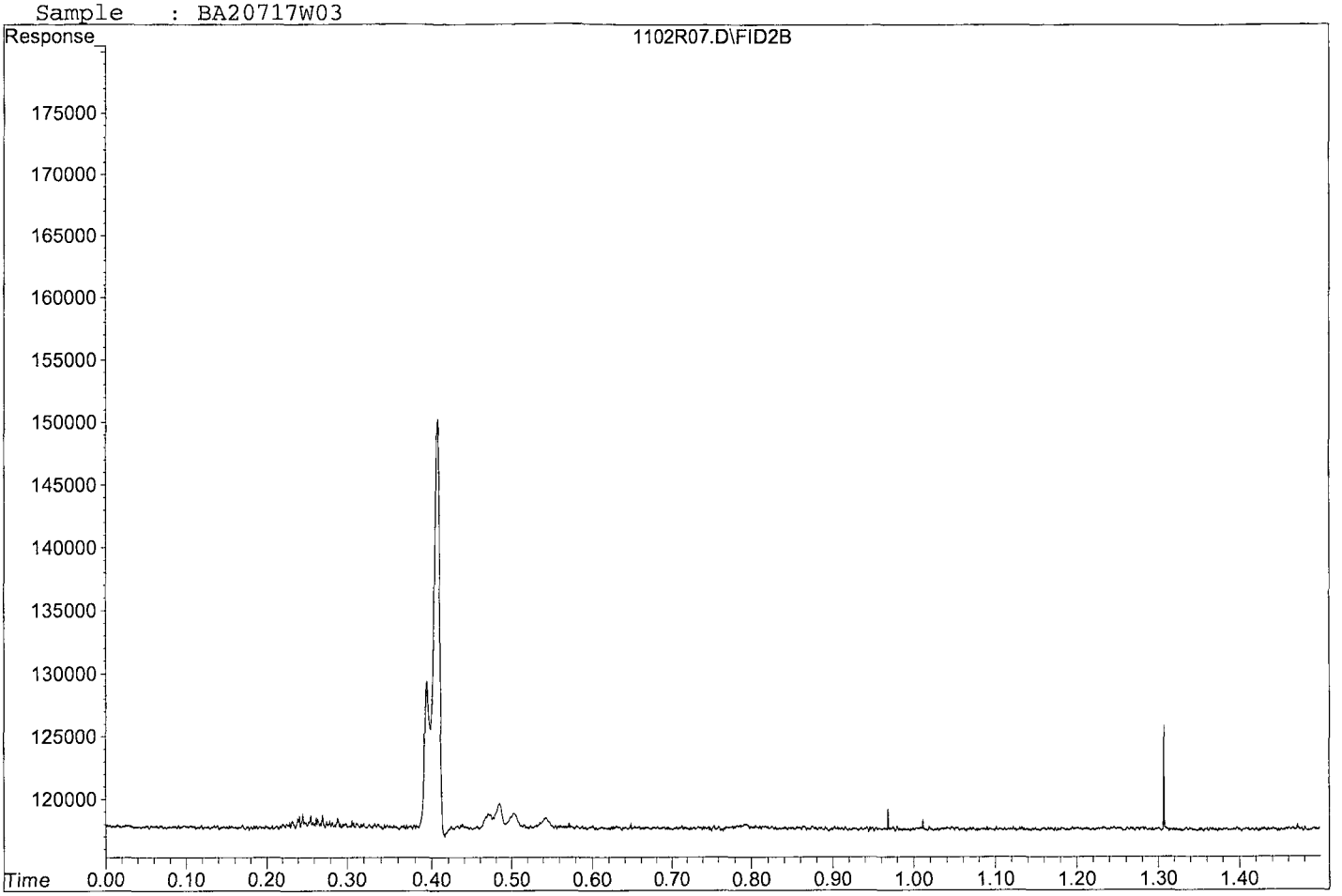
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed Nov 04 14:21:41 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
Target Compounds				
1) ATM Methane	0.00	0	N.D.	ppb
2) ATM Ethane	0.00	0	N.D.	ppb
3) ATM Ethene	0.00	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1102R07.D
Sample : BA20717W03



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R15.D Vial: 15
Acq On : 27 Oct 20 16:30 Operator: GA
Sample : BA20718W04 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:32 2020 Quant Results File: RSK0914A.RES

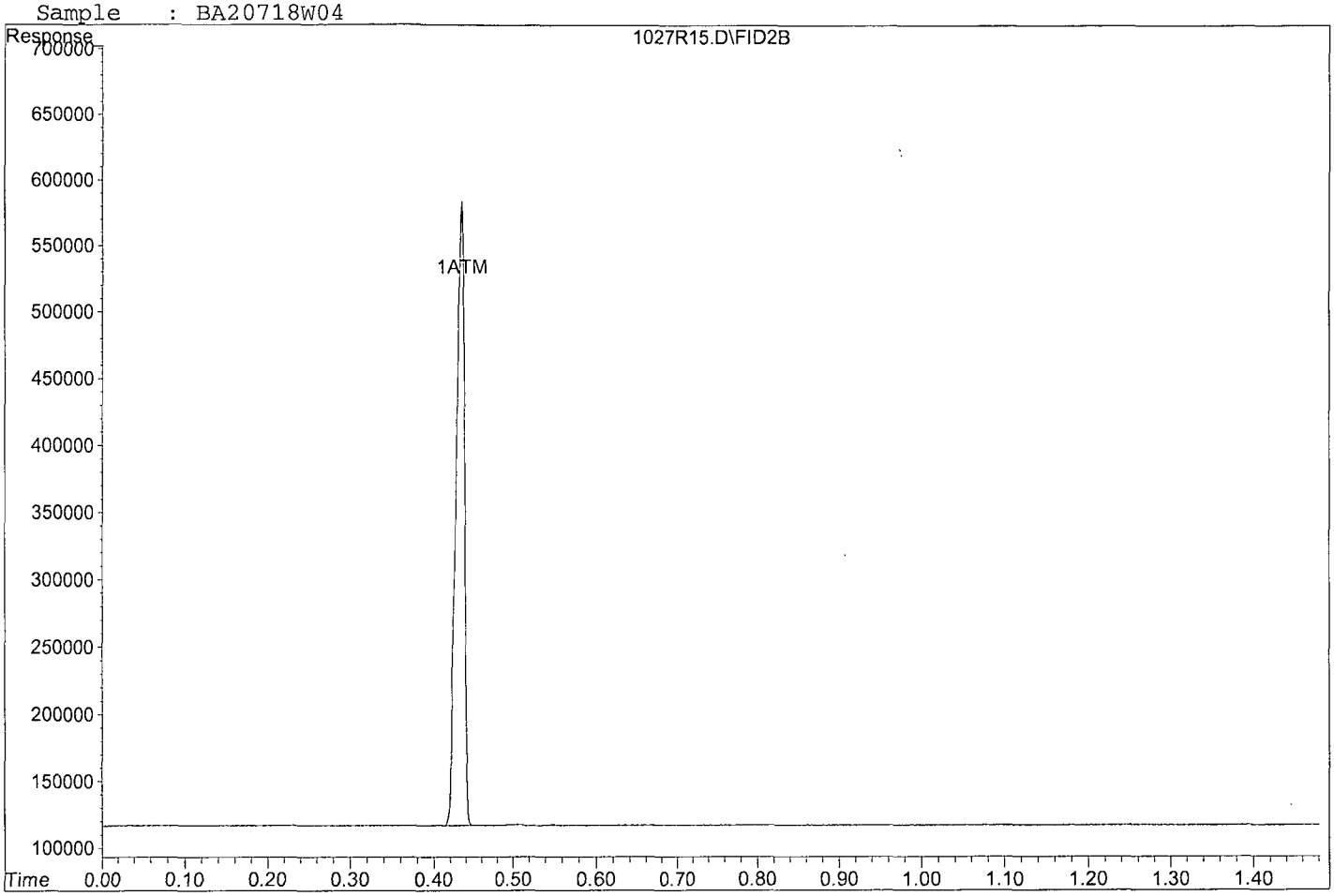
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) ATM Methane	0.43	474988	38.445	ppb
Target Compounds				
2) ATM Ethane	0.00	0	N.D.	ppb
3) ATM Ethene	0.00	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R15.D
Sample : BA20718W04



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R03.D Vial: 3
Acq On : 27 Oct 20 15:58 Operator: GA
Sample : 201027A BLK Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:00 2020 Quant Results File: RSK0914A.RES

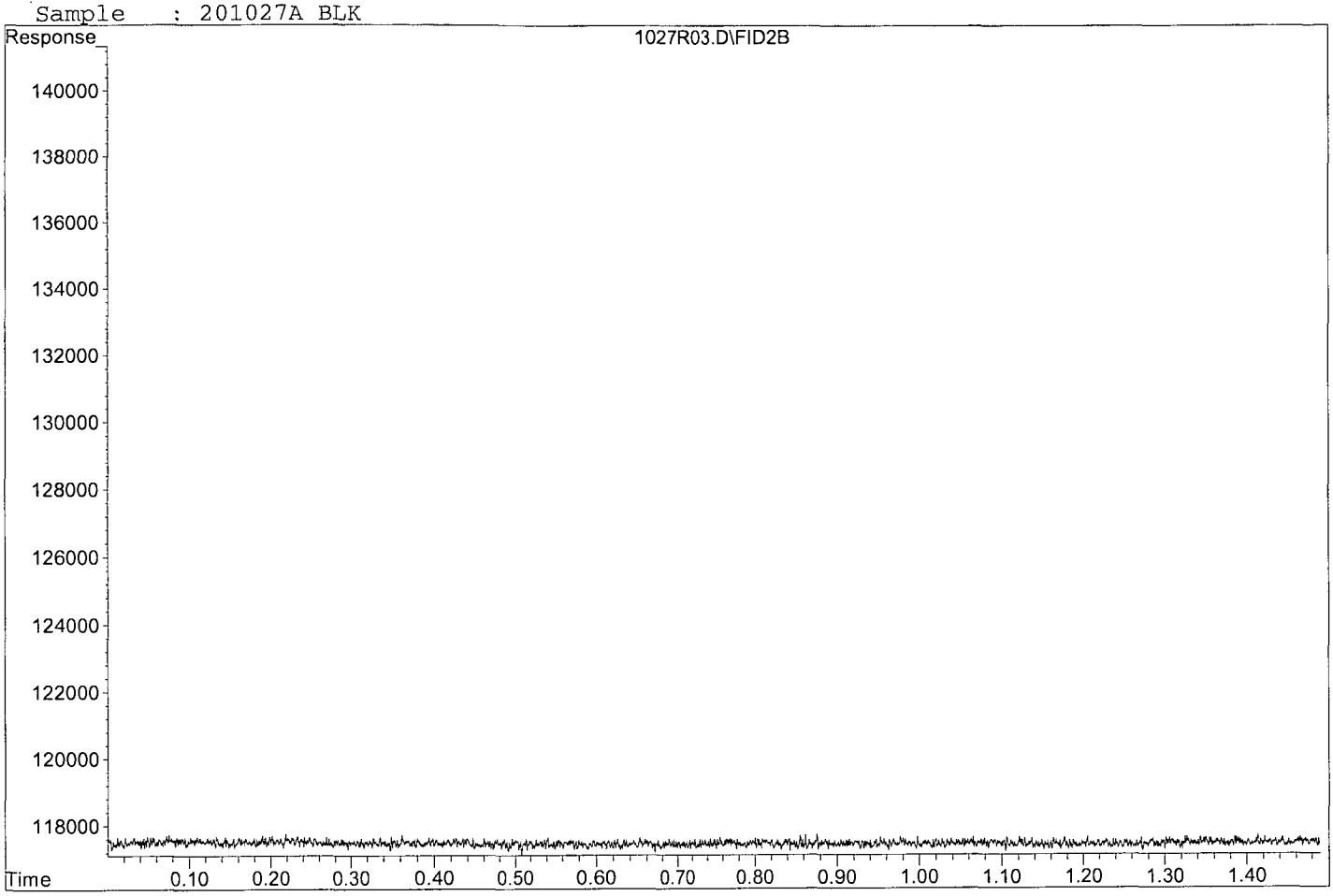
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
Target Compounds				
1) ATM Methane	0.00	0	N.D.	ppb
2) ATM Ethane	0.00	0	N.D.	ppb
3) ATM Ethene	0.00	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R03.D
Sample : 201027A BLK



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R02.D Vial: 2
Acq On : 27 Oct 20 15:55 Operator: GA
Sample : 201027A LCS/CCV Inst : 7890
Misc : RSK STD 5 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 15:57 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

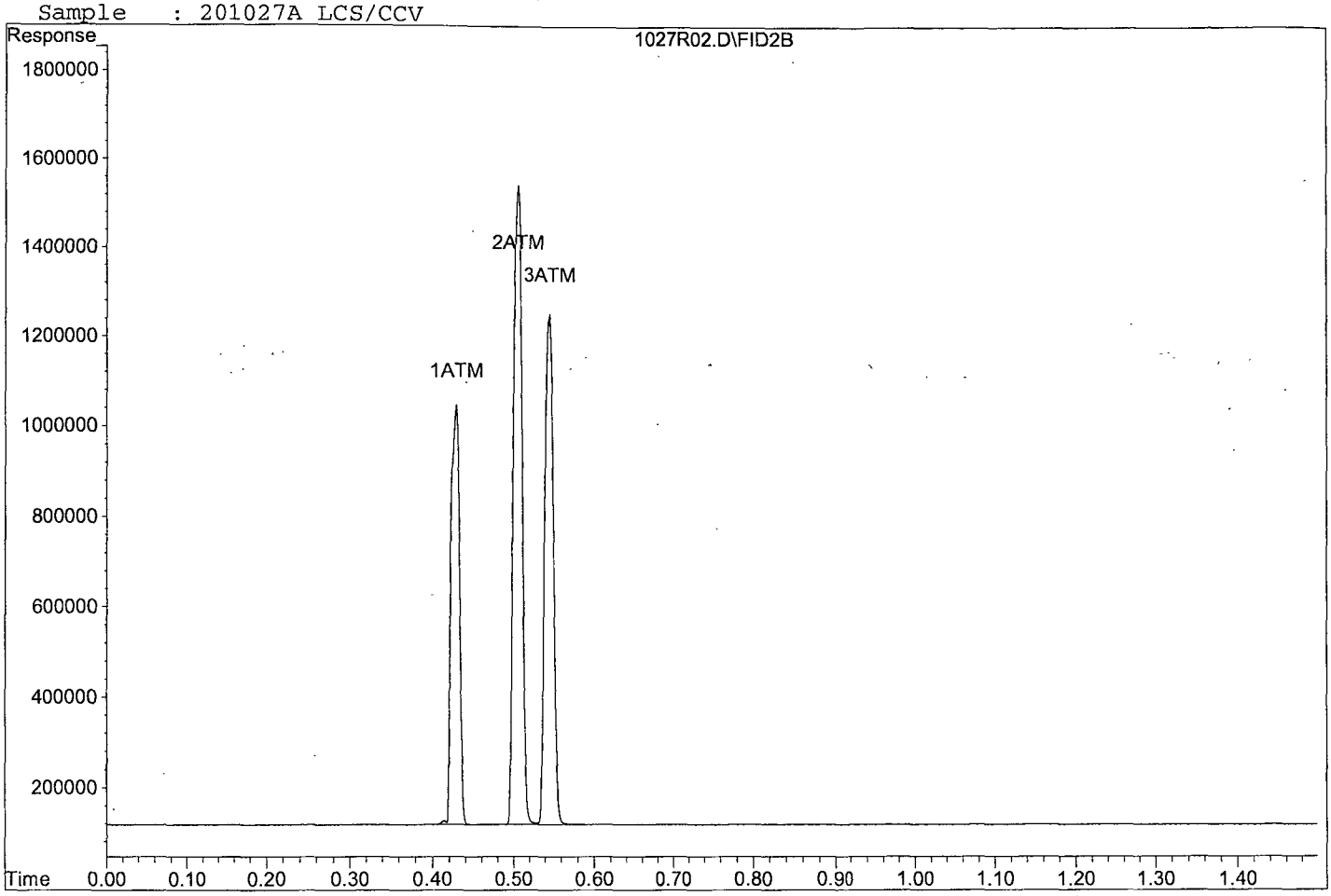
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	0.43	903932	73.225 ppb
2) ATM Ethane	0.51	1416526	154.255 ppb
3) ATM Ethene	0.55	1130156	154.433 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R02.D
Sample : 201027A LCS/CCV



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1027R18.D Vial: 18
Acq On : 27 Oct 20 16:37 Operator: GA
Sample : 201027A LCSD/CCV Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 27 16:39 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

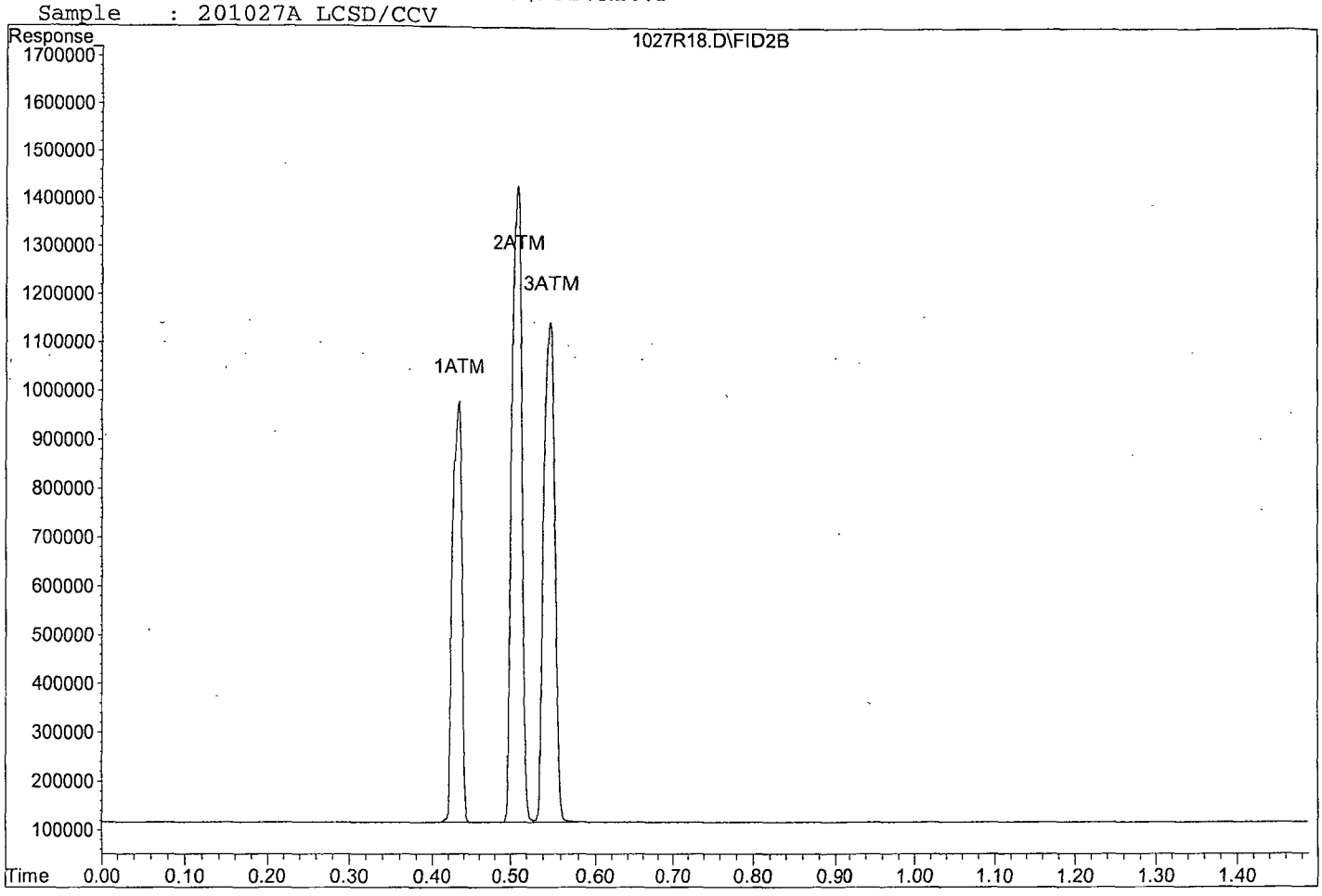
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) ATM Methane	0.43	827834	67.054	ppb
2) ATM Ethane	0.51	1289126	140.278	ppb
3) ATM Ethene	0.55	1018770	139.286	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1027R18.D
Sample : 201027A LCSD/CCV



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1102R04.D Vial: 4
Acq On : 2 Nov 20 14:07 Operator: GA
Sample : 201102A BLK Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Nov 2 14:10 2020 Quant Results File: RSK0914A.RES

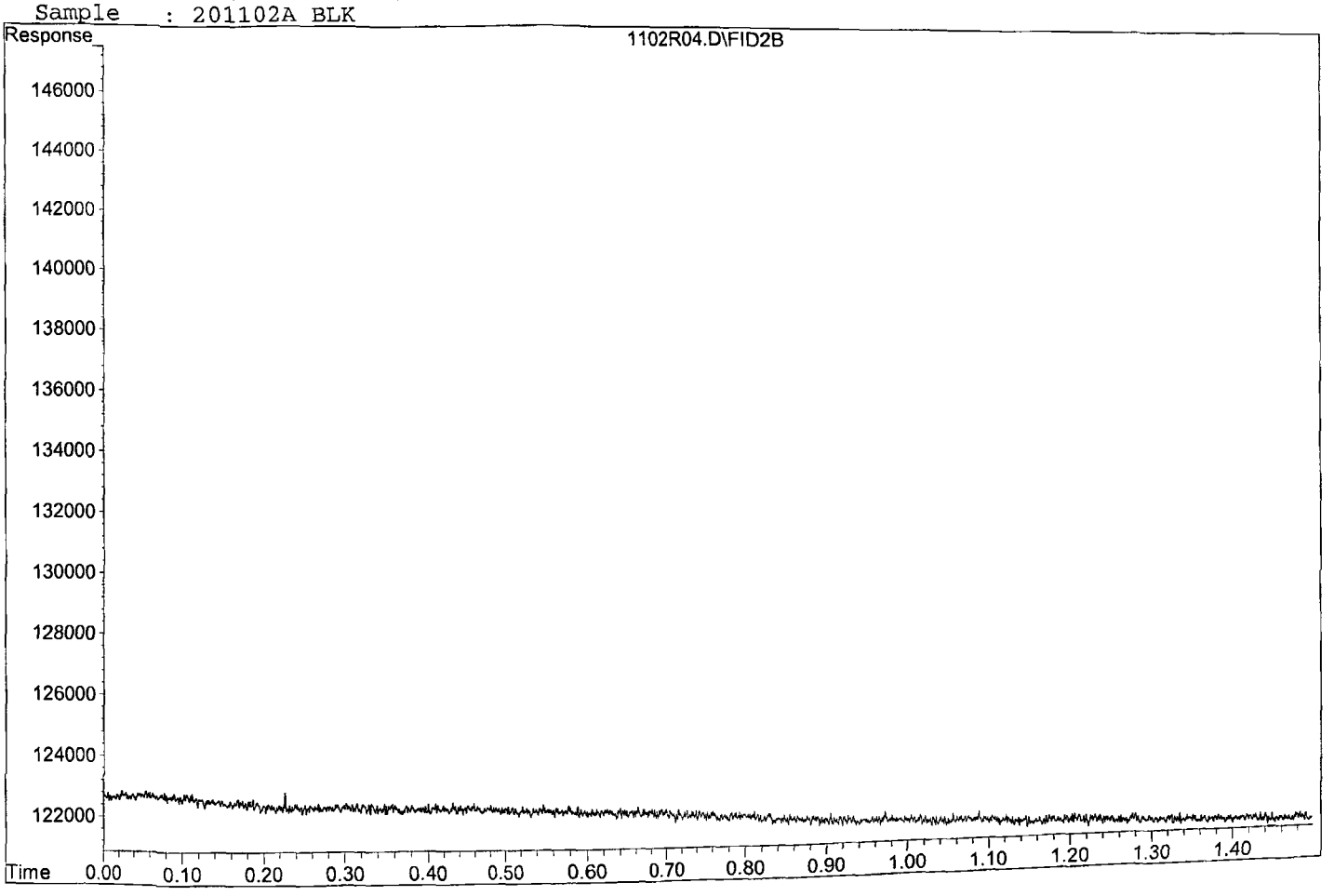
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
Target Compounds				
1) ATM Methane	0.00	0	N.D.	ppb
2) ATM Ethane	0.00	0	N.D.	ppb
3) ATM Ethene	0.00	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1102R04.D
Sample : 201102A BLK



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1102R01.D Vial: 1
Acq On : 2 Nov 20 14:00 Operator: GA
Sample : 201102A CCV/LCS Inst : 7890
Misc : RSK STD 5 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Nov 2 14:03 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

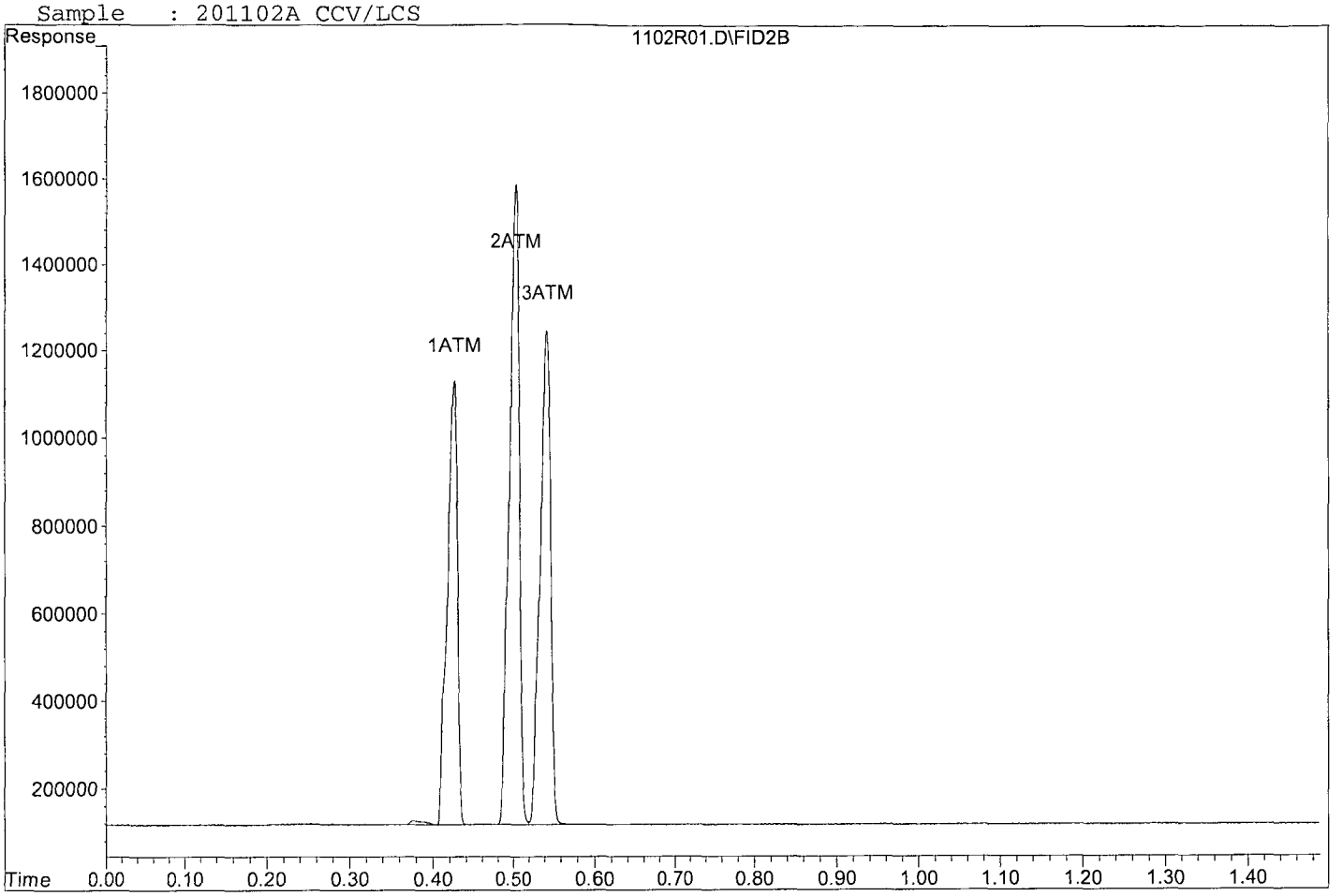
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	0.42	998910	80.926 ppb
2) ATM Ethane	0.50	1447122	157.612 ppb
3) ATM Ethene	0.54	1113485	152.166 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1102R01.D
Sample : 201102A CCV/LCS



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1102R08.D Vial: 8
Acq On : 2 Nov 20 14:29 Operator: GA
Sample : 201102A LCSD/CCV Inst : 7890
Misc : RSK STD 5 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Nov 2 14:32 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Tue Oct 27 15:54:13 2020
Response via : Multiple Level Calibration

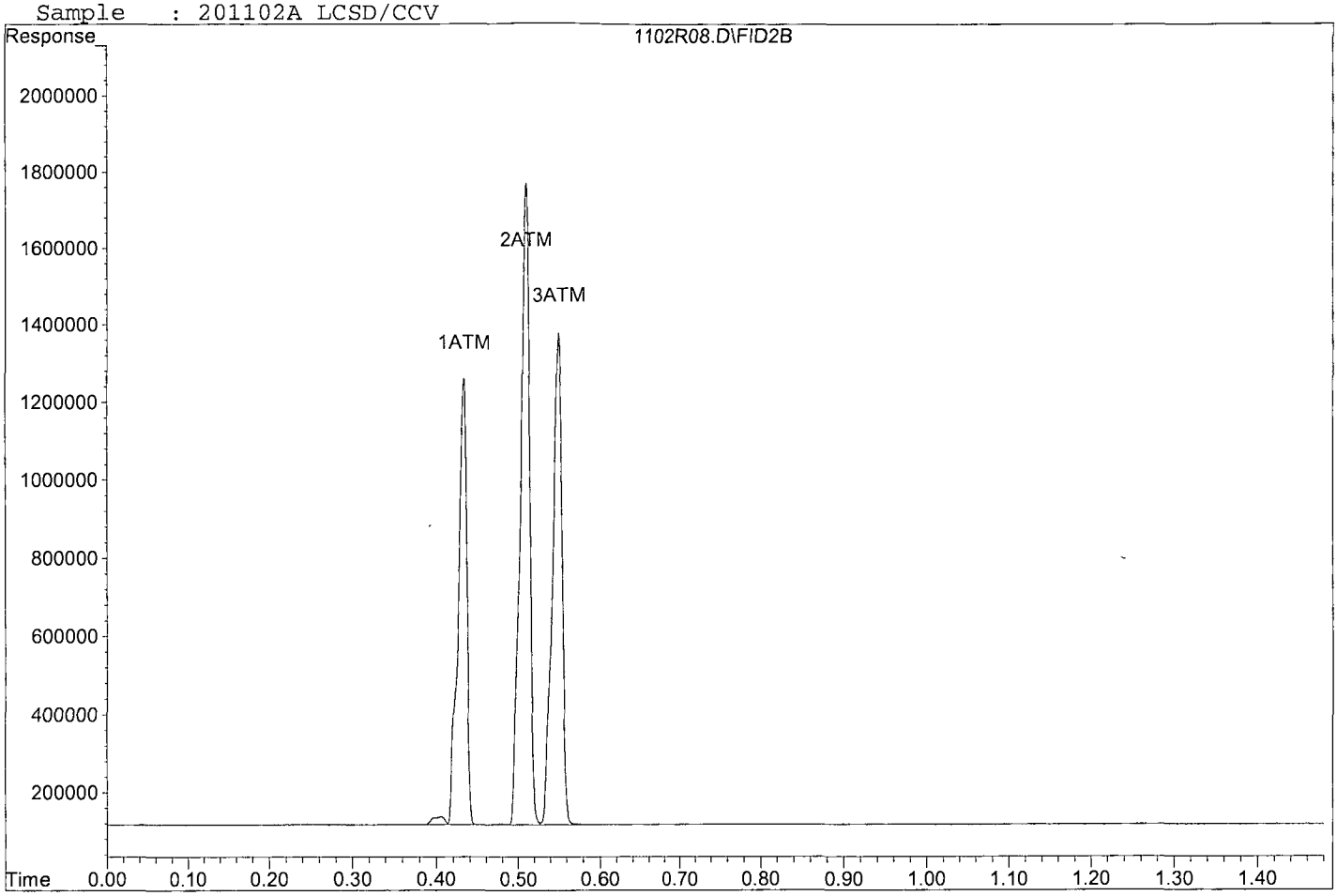
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) ATM Methane	0.43	1099010	89.042	ppb
2) ATM Ethane	0.51	1679532	183.109	ppb
3) ATM Ethene	0.55	1280845	174.925	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1102R08.D
Sample : 201102A LCSD/CCV



Primary Stock Source

10,000ppmV **Manufacture Expiration:** 09/21/21

RSK Gas Mix (Scott Specialty Gas) CAT#X04NI97CP140001 LOT#160-401558175-1

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

RSK Calibration Curve

Analyte	Conc Std 1 (1/2 = LOD) (ug/L)	Conc Std 2 (LOQ Chk) (ug/L)	Conc Std 3 (ug/L)	Conc Std 4 (ug/L)	Conc Std 5 (ug/L)	Conc Std 6 (ug/L)	Conc Std 7 (ug/L)
Methane (MW 16.04)	2.08	4.16	8.34	20.85	83.40	208.5	834.0
Ethane (MW 30.07)	3.91	7.81	15.6	39.09	156.35	390.9	1563.5
Ethene (MW 28.05)	3.65	7.30	14.6	36.46	145.84	364.6	1458.4
Stock Source	160-401558175-1	160-401558175-1	160-401558175-1	160-401558175-1	160-401558175-1	160-401558175-1	160-401558175-1
Stock Conc (ppmv)	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV
Stock Aliquot (mL)	0.010	0.020	0.040	0.100	0.400	1.00	4.00
Final Volume P&T Water	32 mL	32 mL	32 mL	32 mL	32 mL	32 mL	32 mL
Curve Prep:	09/14/20						
Expiration Date	09/15/20						
Analyst	CD						

Second Source Stock Standard 10,000ppmV **Manufacturer Exp date 9-21-2021**

RSK Gas Mix (Scott Specialty Gas) Cat.# 23452, Lot # 160-401303032-1-39774

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

Second Source **Expires 06/25/2020** **CD 09/14/20**

Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace

final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene

CCV/LCS/LCSD **GA 10/27/20**

Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace
final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene

Injection Log

Directory: G:\ROCKY\DATA\200914RS\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0914R07.D	1	RSK STD1 200914		14 Sep 20 12:06
2	1	0914R08.D	1	RSK STD2 200914		14 Sep 20 12:10
3	1	0914R09.D	1	RSK STD3 200914		14 Sep 20 12:13
4	1	0914R10.D	1	RSK STD4 200914		14 Sep 20 12:18
5	1	0914R11.D	1	RSK STD5 200914		14 Sep 20 12:21
6	1	0914R12.D	1	RSK STD6 200914		14 Sep 20 12:25
7	1	0914R13.D	1	RSK STD7 200914		14 Sep 20 12:28
8	1	0914R14.D	1	SS RSK STD5 200914		14 Sep 20 12:32
9	2	1027R02.D	1	201027A LCS/CCV	RSK STD 5	27 Oct 20 15:55
10	3	1027R03.D	1	201027A BLK		27 Oct 20 15:58
20	13	1027R13.D	1	BA20715W04		27 Oct 20 16:25
21	14	1027R14.D	1	BA20716W04		27 Oct 20 16:28
22	15	1027R15.D	1	BA20718W04		27 Oct 20 16:30
23	18	1027R18.D	1	201027A LCSD/CCV		27 Oct 20 16:37

Injection Log

Directory: G:\ROCKY\DATA\200914RS\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0914R07.D	1	RSK STD1 200914		14 Sep 20 12:06
2	1	0914R08.D	1	RSK STD2 200914		14 Sep 20 12:10
3	1	0914R09.D	1	RSK STD3 200914		14 Sep 20 12:13
4	1	0914R10.D	1	RSK STD4 200914		14 Sep 20 12:18
5	1	0914R11.D	1	RSK STD5 200914		14 Sep 20 12:21
6	1	0914R12.D	1	RSK STD6 200914		14 Sep 20 12:25
7	1	0914R13.D	1	RSK STD7 200914		14 Sep 20 12:28
8	1	0914R14.D	1	SS RSK STD5 200914		14 Sep 20 12:32
9	1	1102R01.D	1	201102A CCV/LCS	RSK STD 5	2 Nov 20 14:00
10	4	1102R04.D	1	201102A BLK		2 Nov 20 14:07
11	7	1102R07.D	1	BA20717W03		2 Nov 20 14:18
12	8	1102R08.D	1	201102A LCSD/CCV	RSK STD 5	2 Nov 20 14:29

INORGANIC ANALYSIS
Calibration Data

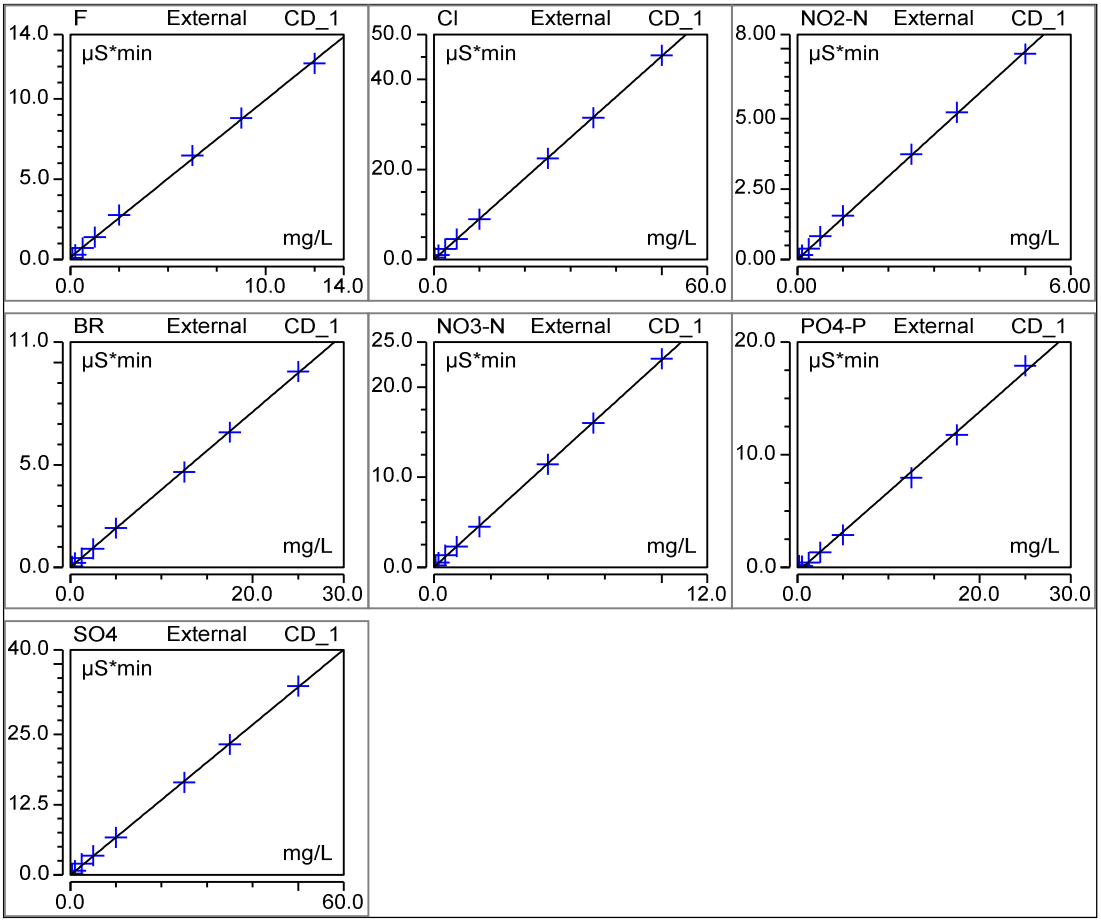
Calibration Batch Report

Sequence:	**200914**	*Injection Volume:*	**100.00**
Instrument Method:	**Anions IM**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:14**	*Run Time:*	**11.3**

Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
F	Area	Lin, WithOffset	8.000	0.145	0.979	0.000	99.9001
Cl	Area	Lin	8.000	0.000	0.903	0.000	99.9935
NO2-N	Area	Lin	8.000	0.000	1.479	0.000	99.9464
BR	Area	Lin	8.000	0.000	0.380	0.000	99.9760
NO3-N	Area	Lin	8.000	0.000	2.303	0.000	99.9829
PO4-P	Area	Lin, WithOffset	8.000	-0.422	0.712	0.000	99.6941
SO4	Area	Lin	8.000	0.000	0.668	0.000	99.9749

Injection Name	Amount mg/L CD_1 F	Amount mg/L CD_1 Cl	Amount mg/L CD_1 NO2-N	Amount mg/L CD_1 BR	Amount mg/L CD_1 NO3-N	Amount mg/L CD_1 PO4-P	Amount mg/L CD_1 SO4
Cal 1 2020.09.14	n.a.	0.4466	0.0267	0.1154	0.0851	0.8392	0.3384
Cal 2 2020.09.14	0.156	1.0882	0.1103	0.5719	0.2207	0.7580	1.0968
Cal 3 2020.09.14	0.579	2.5688	0.2608	1.1951	0.5851	1.1858	3.0282
Cal 6 2020.09.14	6.454	24.8384	2.5325	12.2607	4.9590	11.7563	24.6682
Cal 7 2020.09.14	8.833	34.8728	3.5379	17.3849	6.9578	17.1045	34.7367
Cal 8 2020.09.14	12.309	50.1817	4.9401	25.2082	10.0551	25.7199	50.3133
Cal 4 2020.09.14	1.274	5.0060	0.5579	2.3764	0.9968	2.4551	5.1734
Cal 5 2020.09.14	2.674	9.9066	1.0533	5.0316	1.9525	4.6312	9.9586

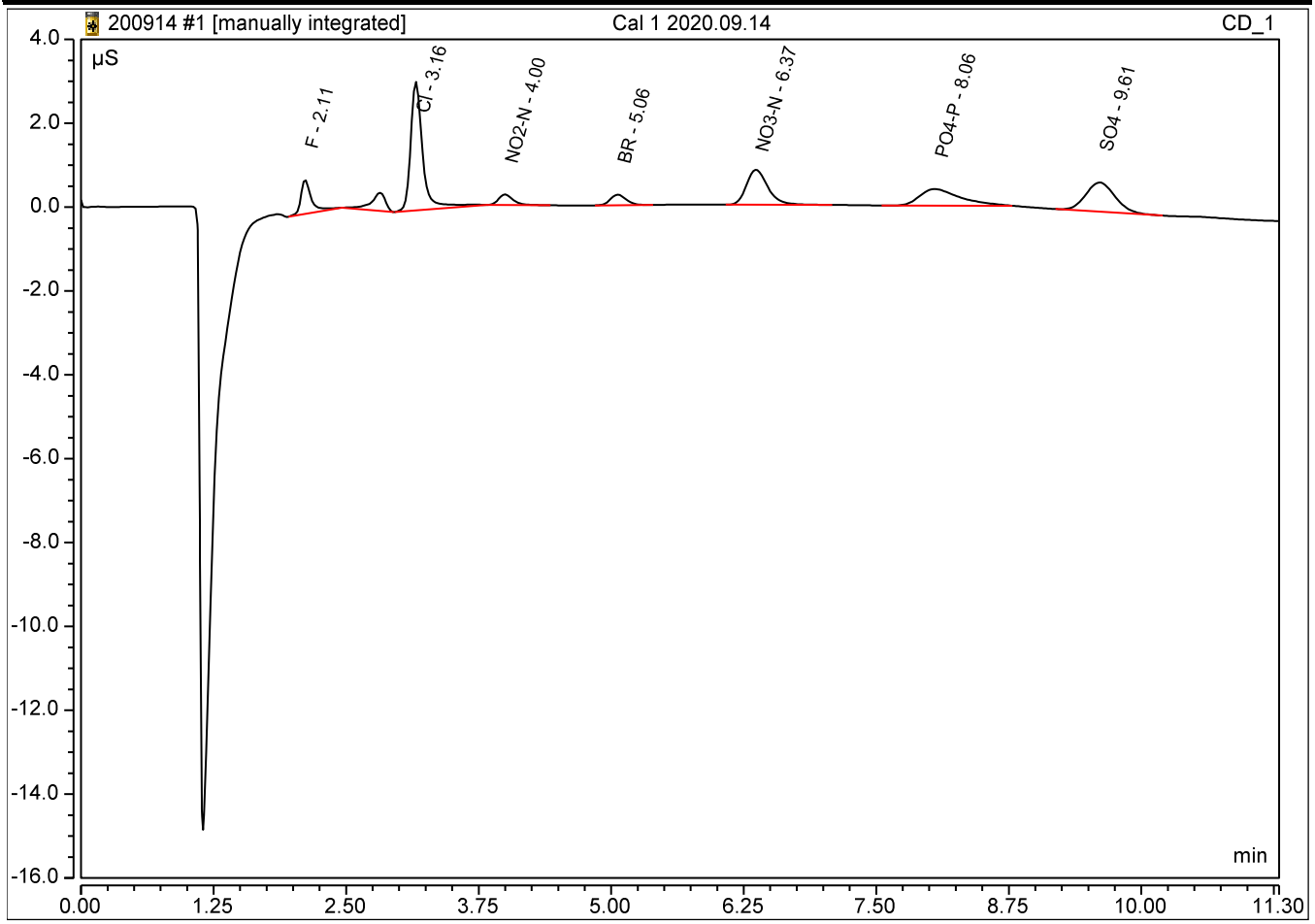


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 1 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:17**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.11	**F**	BMB	0.093	0.817	n.a.	0.1	3951224067 c
3	3.16	**Cl**	BMB	0.403	3.072	0.45	0.2	223.3%
4	4.00	**NO2-N**	BMB	0.039	0.250	0.03	0.04	66.7%
5	5.06	**BR**	BMB	0.044	0.253	0.12	0.2	57.7%
6	6.37	**NO3-N**	BMB	0.196	0.837	0.09	0.08	106.4%
7	8.06	**PO4-P**	BMB*	0.176	0.398	0.84	0.2	419.6%
8	9.61	**SO4**	BMB	0.226	0.700	0.34	0.4	84.6%



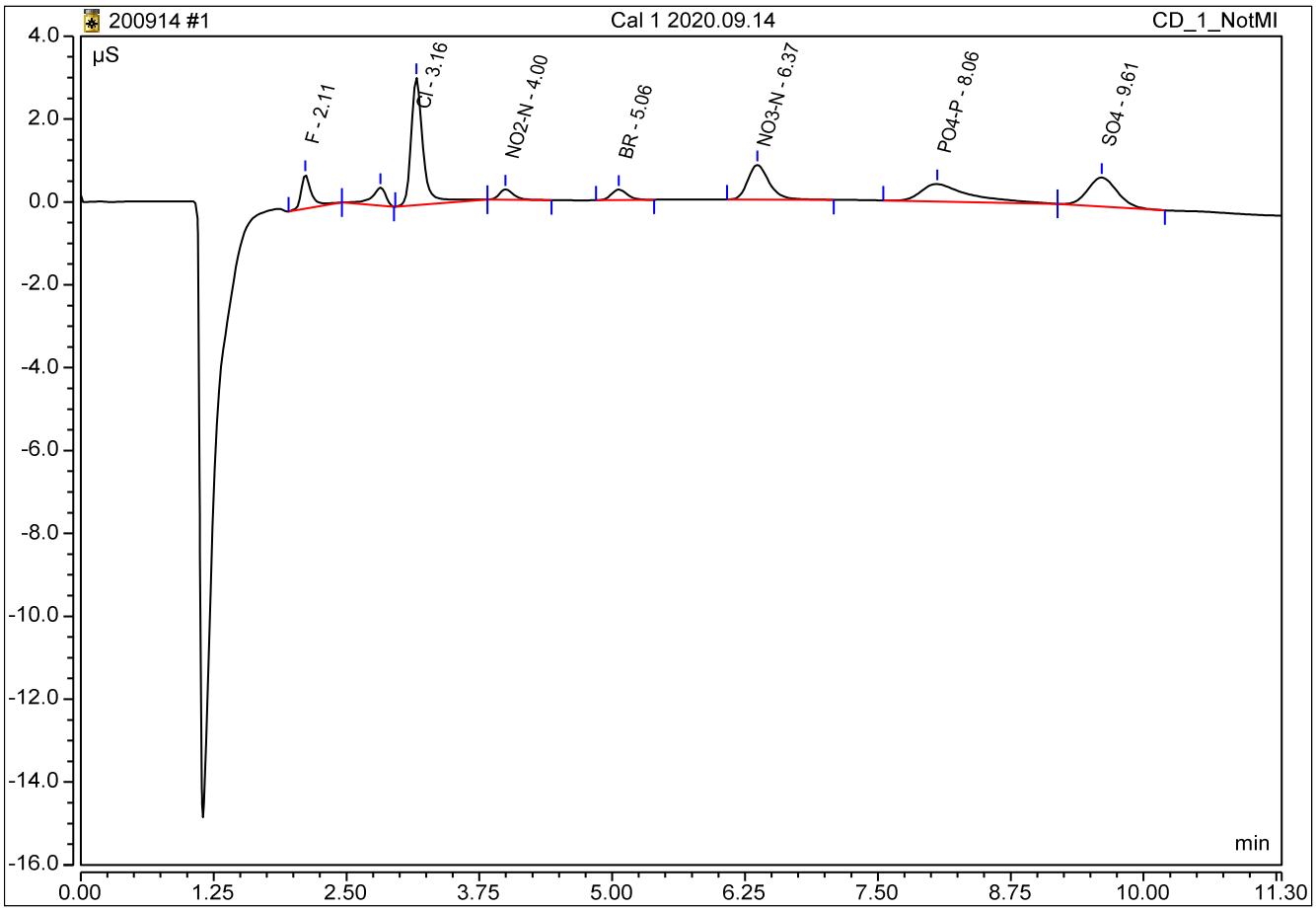
MI 5 PO4 GA 9/14/20

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Not Manipulated Peak Integration Report

Sample Name:	**Cal 1 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:17**	*Run Time:*	**11.30**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Ammount mg/L
1	2.11	**F**	BMB	0.093	0.817	-0.0531
3	3.16	**Cl**	BMB	0.403	3.072	0.4466
4	4.00	**NO2-N**	BMB	0.039	0.250	0.0267
5	5.06	**BR**	BMB	0.044	0.253	0.1154
6	6.37	**NO3-N**	BMB	0.196	0.837	0.0849
7	8.06	**PO4-P**	BMB*	0.223	0.422	0.8905
8	9.61	**SO4**	BMB	0.226	0.700	0.3383

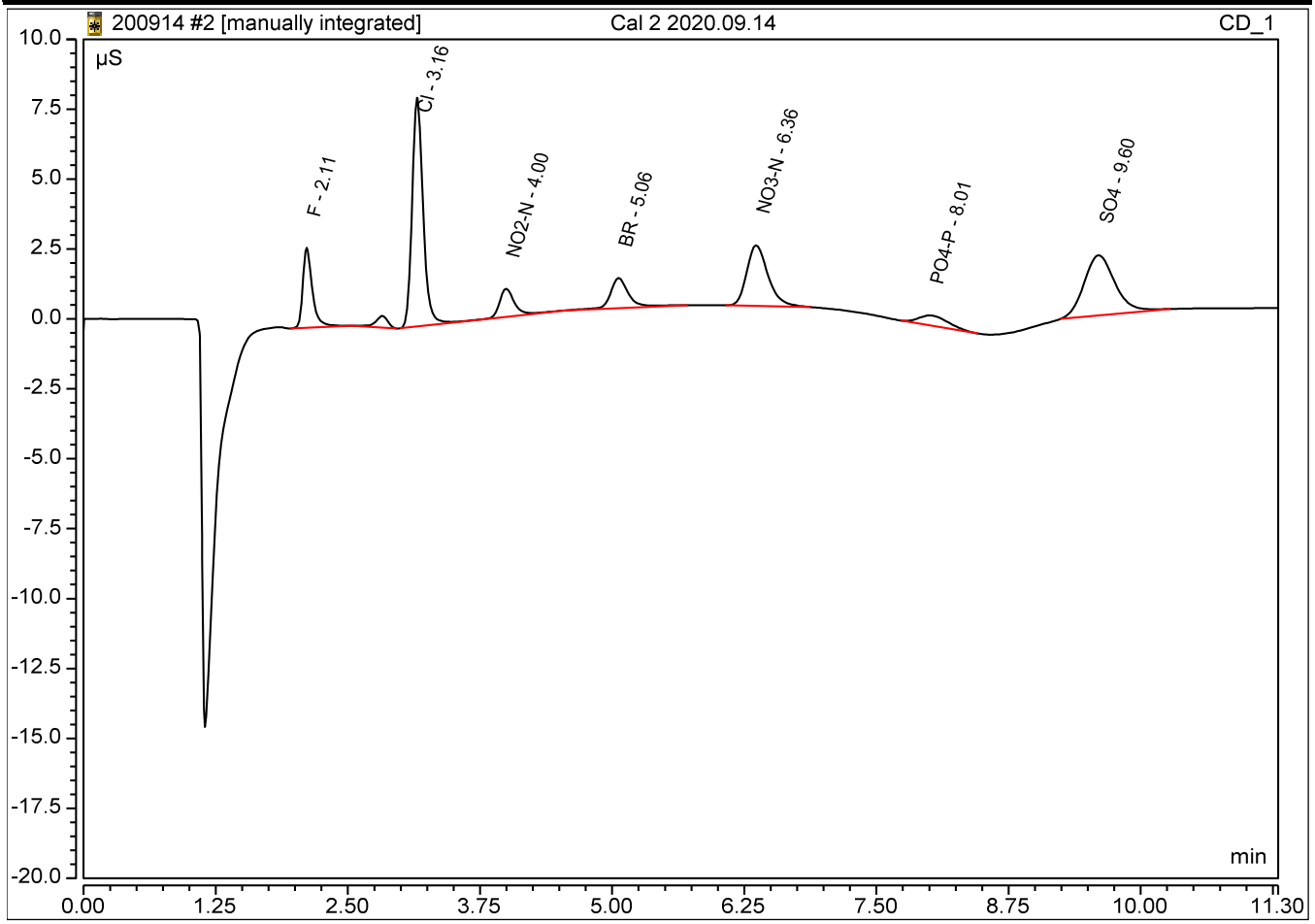


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 2 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:31**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.11	**F**	BMB	0.298	2.857	0.16	0.25	62.4%
3	3.16	**Cl**	BMB	0.983	8.183	1.09	1	108.8%
4	4.00	**NO2-N**	BMB	0.163	1.007	0.11	0.1	110.3%
5	5.06	**BR**	BMB	0.217	1.077	0.57	0.5	114.4%
6	6.36	**NO3-N**	BMB*	0.508	2.172	0.22	0.2	110.4%
7	8.01	**PO4-P**	BMB	0.118	0.358	0.76	0.5	151.6%
8	9.60	**SO4**	BMB*	0.732	2.158	1.10	1	109.7%



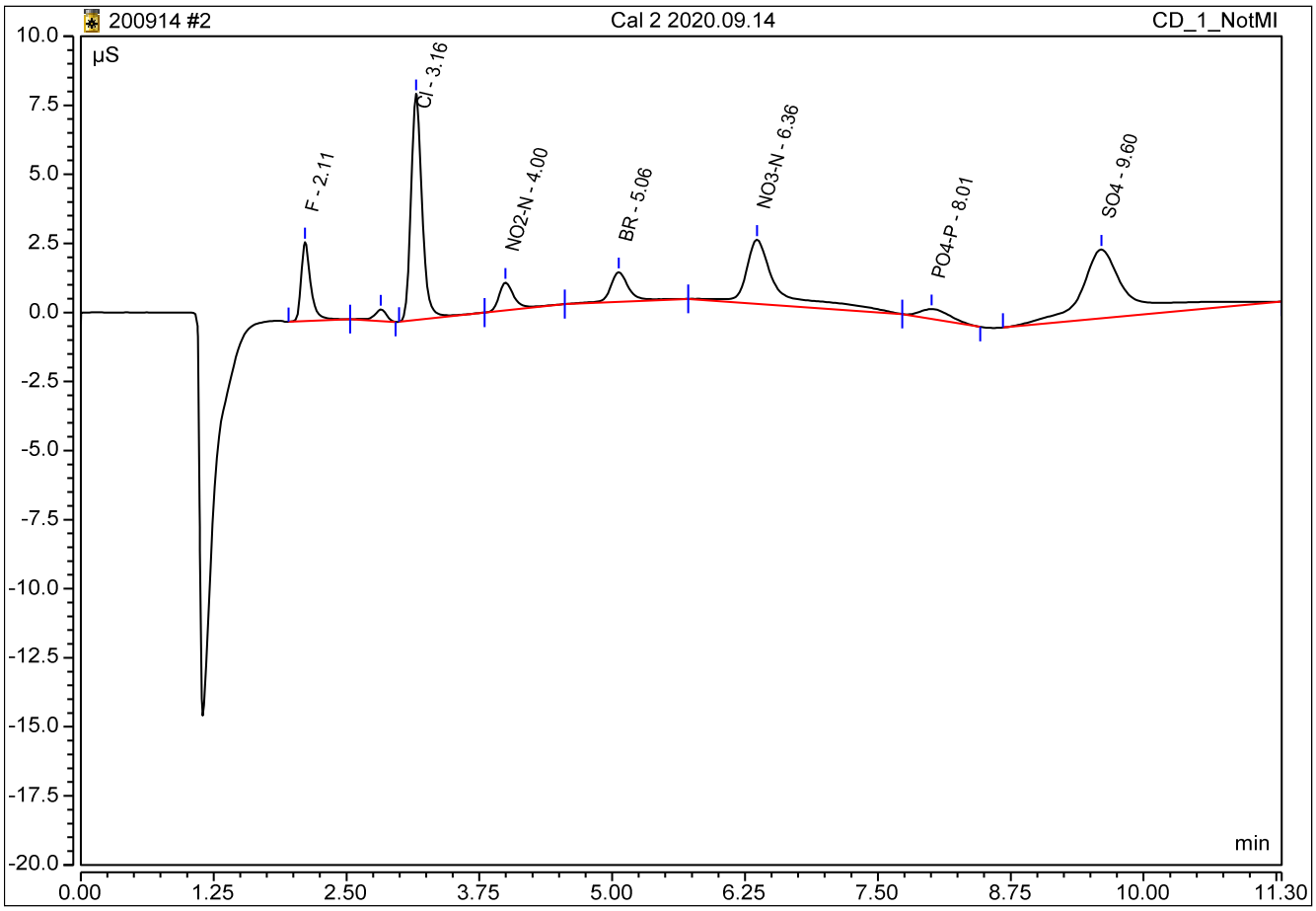
MI 5 F GA 9/14/20

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Not Manipulated Peak Integration Report

Sample Name:	**Cal 2 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:31**	*Run Time:*	**11.30**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Ammount mg/L
1	2.11	**F**	BMB	0.298	2.857	0.1559
3	3.16	**Cl**	BMB	0.983	8.183	1.0882
4	4.00	**NO2-N**	BMB	0.163	1.007	0.1103
5	5.06	**BR**	BMB	0.217	1.077	0.5719
6	6.36	**NO3-N**	BMB*	0.803	2.321	0.3480
7	8.01	**PO4-P**	BMB	0.118	0.358	0.7435
8	9.60	**SO4**	BMB*	1.336	2.496	2.0007

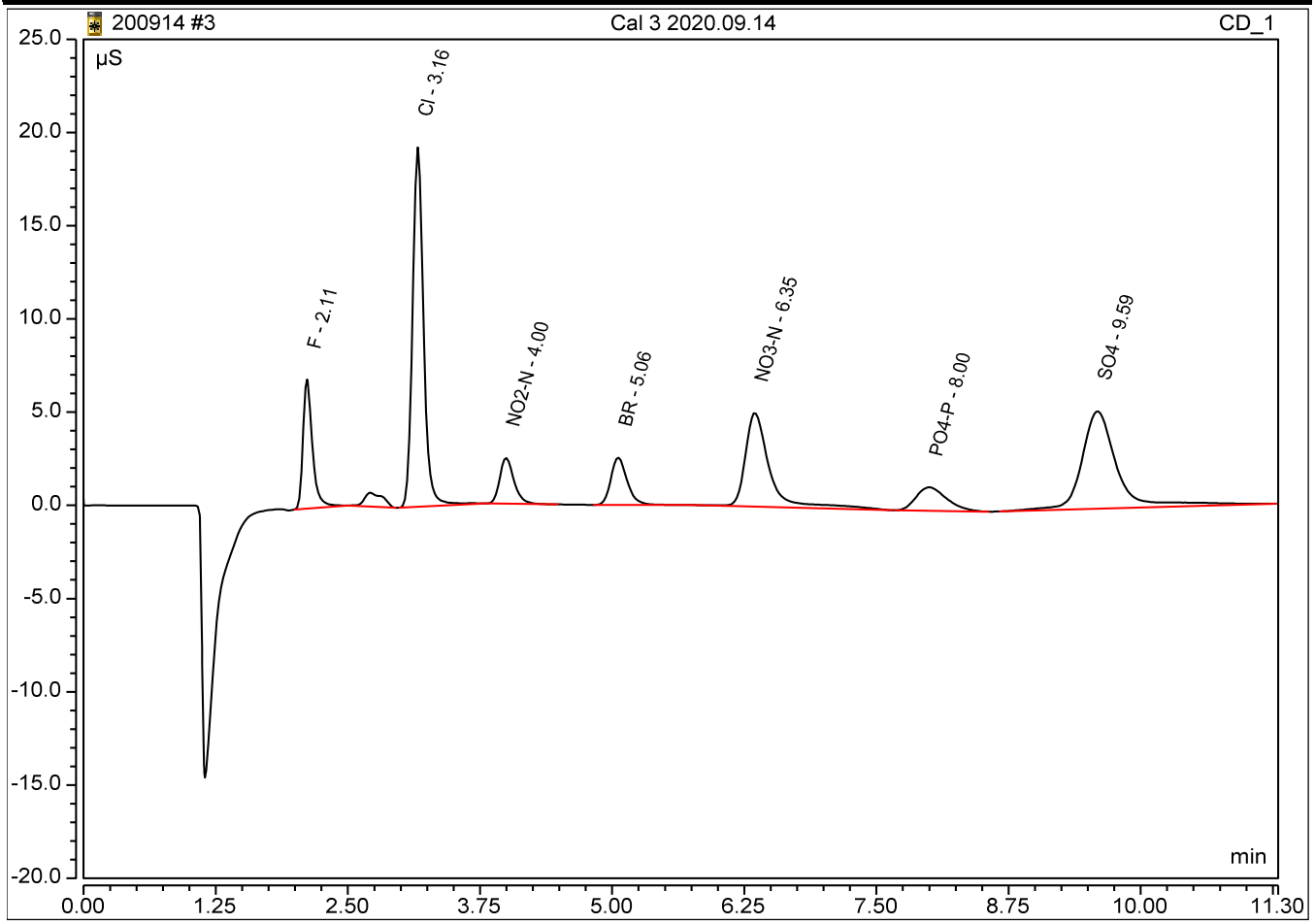


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 3 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:46**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.11	**F**	BMB	0.712	6.920	0.58	0.625	92.6%
3	3.16	**Cl**	BMB	2.321	19.279	2.57	2.5	102.8%
4	4.00	**NO2-N**	BMB	0.386	2.457	0.26	0.25	104.3%
5	5.06	**BR**	BMB	0.454	2.538	1.20	1.25	95.6%
6	6.35	**NO3-N**	BMB	1.347	5.037	0.59	0.5	117.0%
7	8.00	**PO4-P**	BMB	0.423	1.261	1.19	1.25	94.9%
8	9.59	**SO4**	BMB	2.022	5.227	3.03	2.5	121.1%



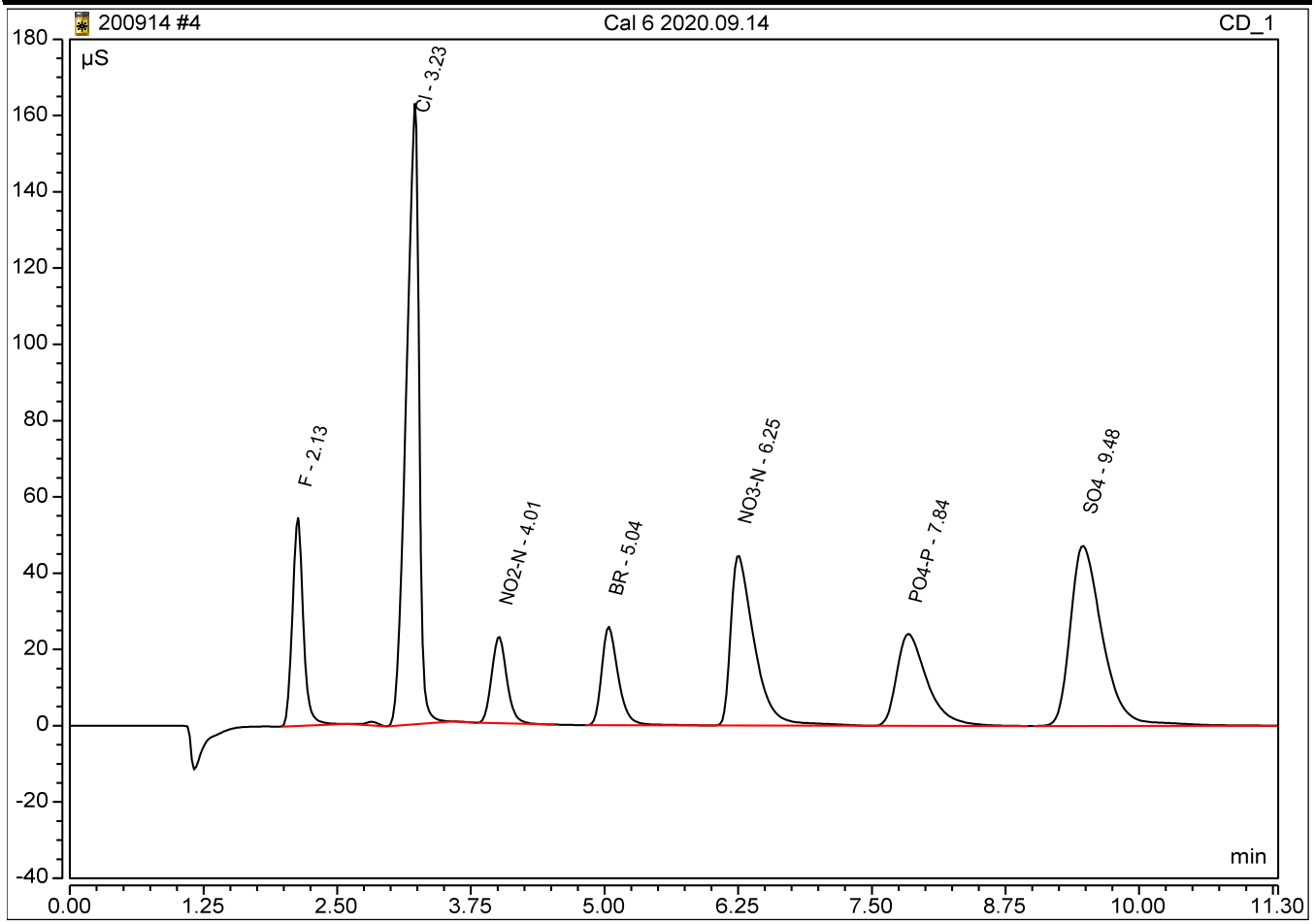
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 6 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 12:30**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.13	**F**	BMB	6.464	54.477	6.45	6.25	103.3%
3	3.23	**Cl**	BMB	22.440	162.678	24.84	25	99.4%
5	4.01	**NO2-N**	BMB	3.747	22.824	2.53	2.5	101.3%
6	5.04	**BR**	BMB	4.656	25.839	12.26	12.5	98.1%
7	6.25	**NO3-N**	BMB	11.419	44.646	4.96	5	99.2%
8	7.84	**PO4-P**	BMB	7.951	24.149	11.76	12.5	94.1%
9	9.48	**SO4**	BMB	16.472	47.232	24.67	25	98.7%



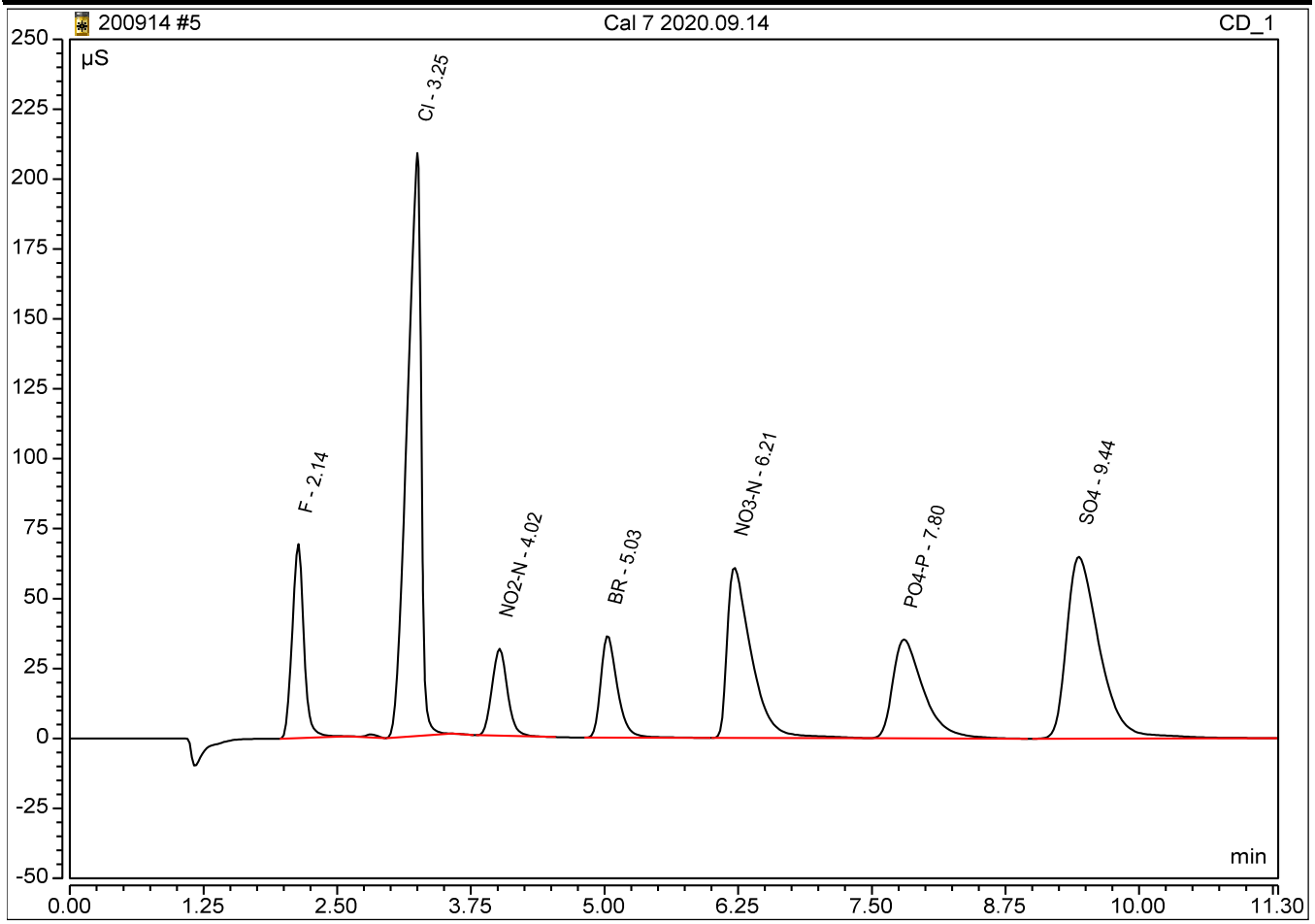
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 7 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 12:44**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.14	**F**	BMB	8.794	69.377	8.83	8.75	100.9%
3	3.25	**Cl**	BMB	31.505	208.470	34.87	35	99.6%
5	4.02	**NO2-N**	BMB	5.234	31.143	3.54	3.5	101.1%
6	5.03	**BR**	BMB	6.602	36.544	17.38	17.5	99.3%
7	6.21	**NO3-N**	BMB	16.022	60.982	6.96	7	99.4%
8	7.80	**PO4-P**	BMB	11.759	35.362	17.10	17.5	97.7%
9	9.44	**SO4**	BMB	23.196	65.073	34.74	35	99.2%



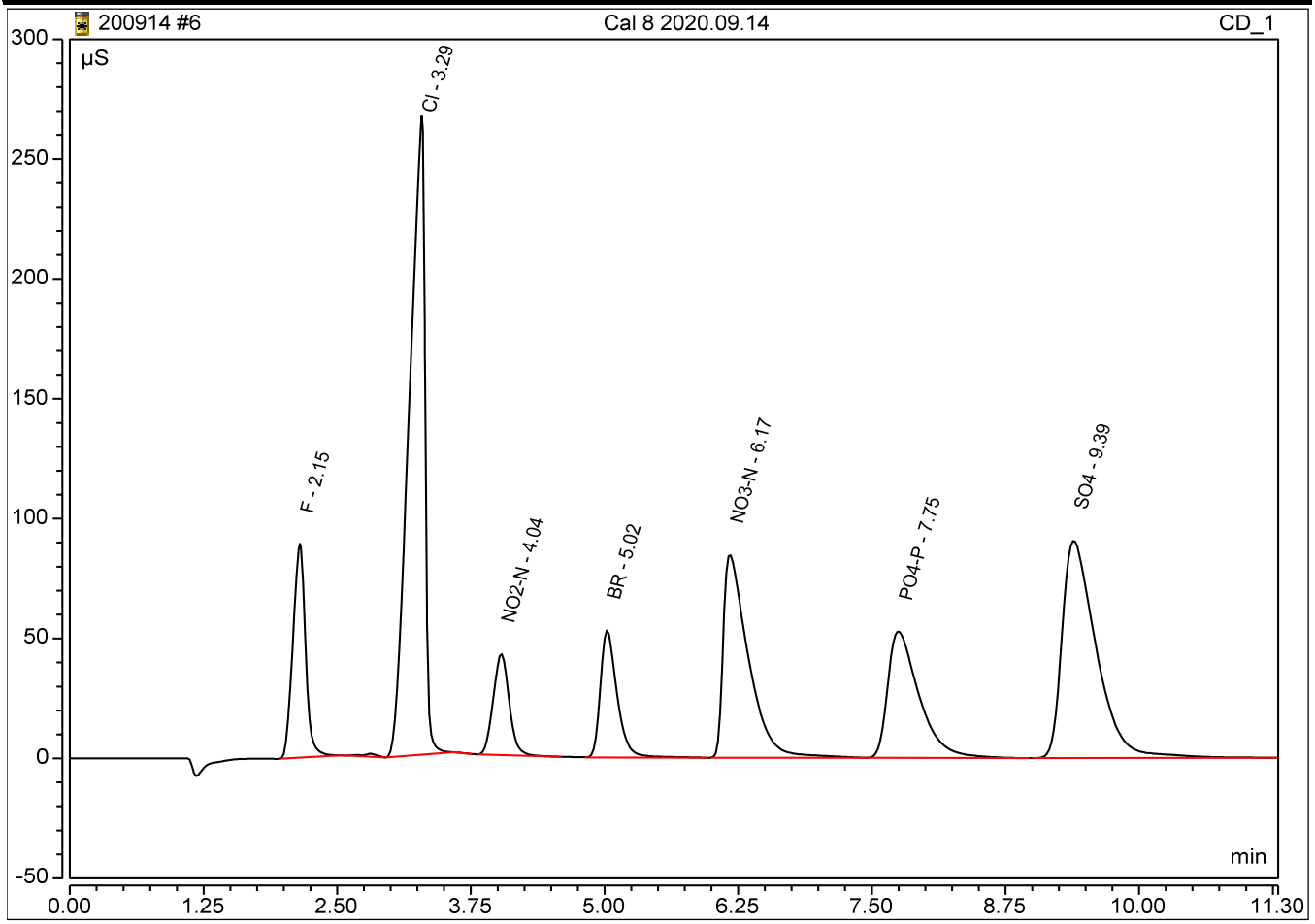
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 8 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 12:59**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.15	**F**	BMB	12.197	89.244	12.31	12.5	98.5%
3	3.29	**Cl**	BMB	45.336	266.470	50.18	50	100.4%
5	4.04	**NO2-N**	BMB	7.309	42.267	4.94	5	98.8%
6	5.02	**BR**	BMB	9.573	52.969	25.21	25	100.8%
7	6.17	**NO3-N**	BMB	23.155	84.819	10.06	10	100.6%
8	7.75	**PO4-P**	BMB	17.895	52.746	25.72	25	102.9%
9	9.39	**SO4**	BMB	33.597	90.716	50.31	50	100.6%



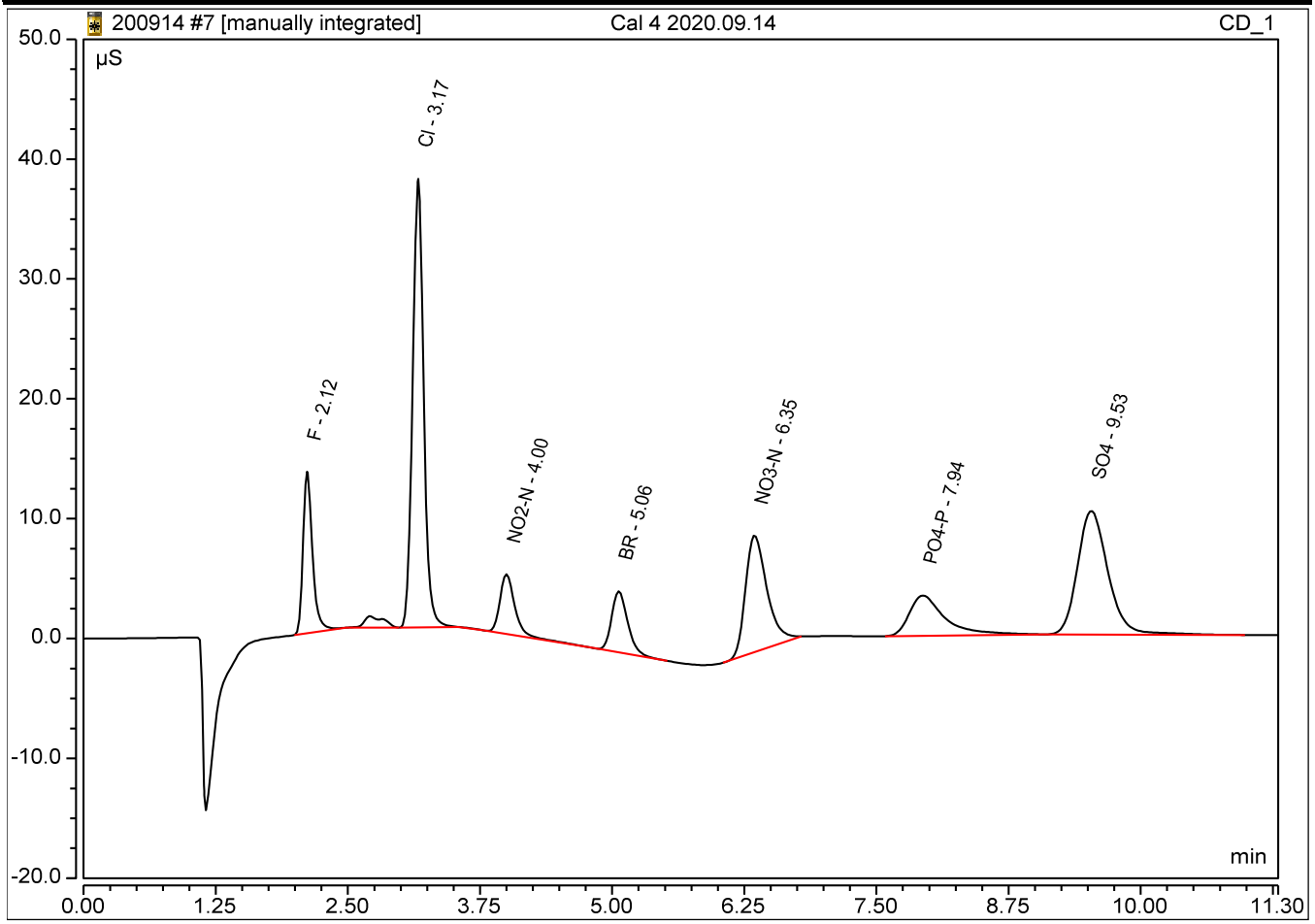
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 4 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 14:59**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.12	**F**	BMB	1.393	13.483	1.27	1.25	101.9%
3	3.17	**Cl**	BMB	4.523	37.438	5.01	5	100.1%
5	4.00	**NO2-N**	BMB	0.825	4.993	0.56	0.5	111.6%
6	5.06	**BR**	BMB	0.902	5.100	2.38	2.5	95.1%
7	6.35	**NO3-N**	BMB*	2.295	9.746	1.00	1	99.7%
8	7.94	**PO4-P**	BMB	1.327	3.365	2.46	2.5	98.2%
9	9.53	**SO4**	BMB	3.455	10.323	5.17	5	103.5%



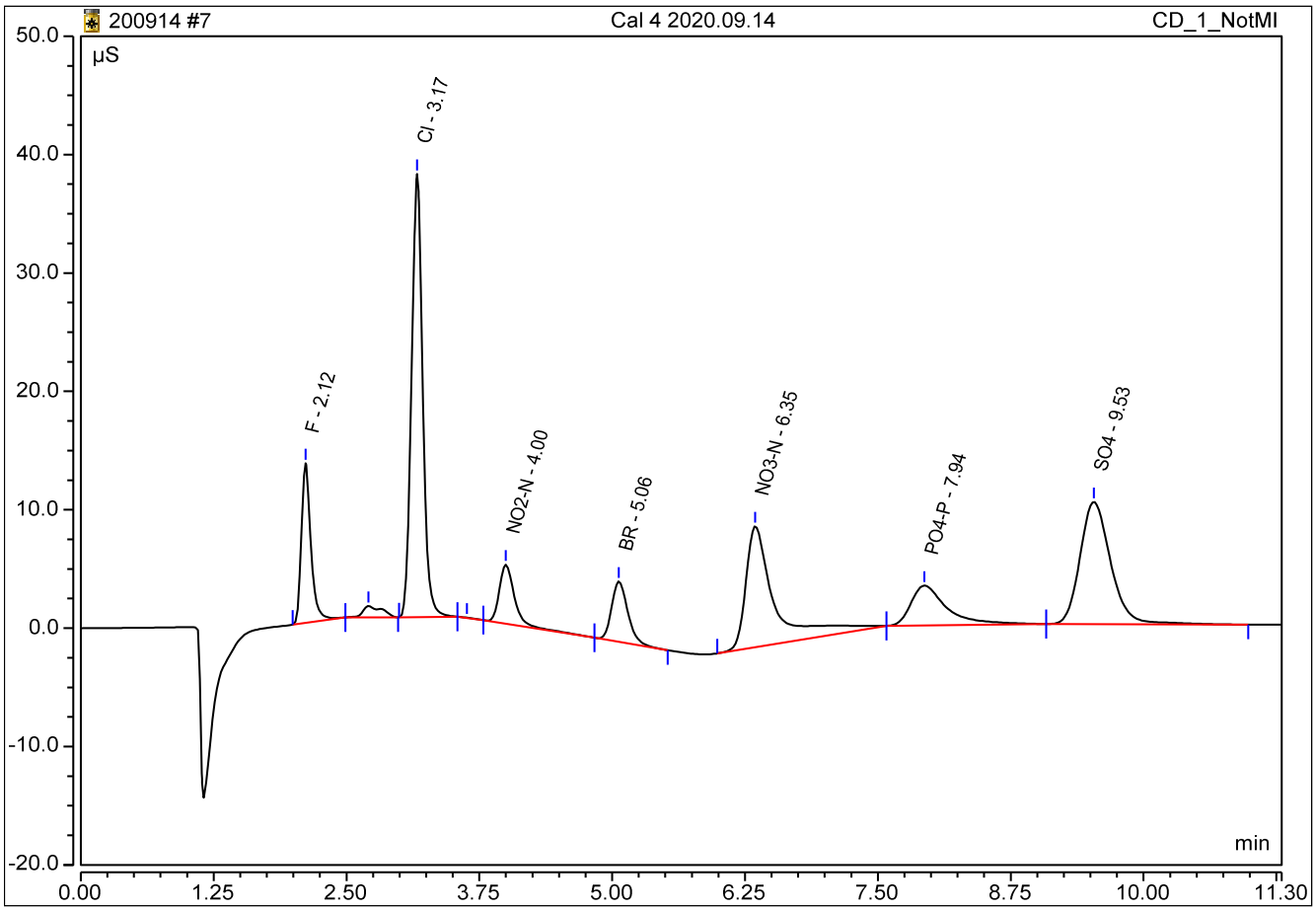
MI 5 NO3 GA 9/14/20

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Not Manipulated Peak Integration Report

Sample Name:	**Cal 4 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 14:59**	*Run Time:*	**11.30**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Ammount mg/L
1	2.12	**F**	BMB	1.393	13.483	1.2743
3	3.17	**Cl**	BMB	4.523	37.438	5.0060
5	4.00	**NO2-N**	BMB	0.825	4.993	0.5579
6	5.06	**BR**	BMB	0.902	5.100	2.3764
7	6.35	**NO3-N**	BMB*	3.185	10.217	1.3799
8	7.94	**PO4-P**	BMB	1.327	3.365	2.4421
9	9.53	**SO4**	BMB	3.455	10.323	5.1723

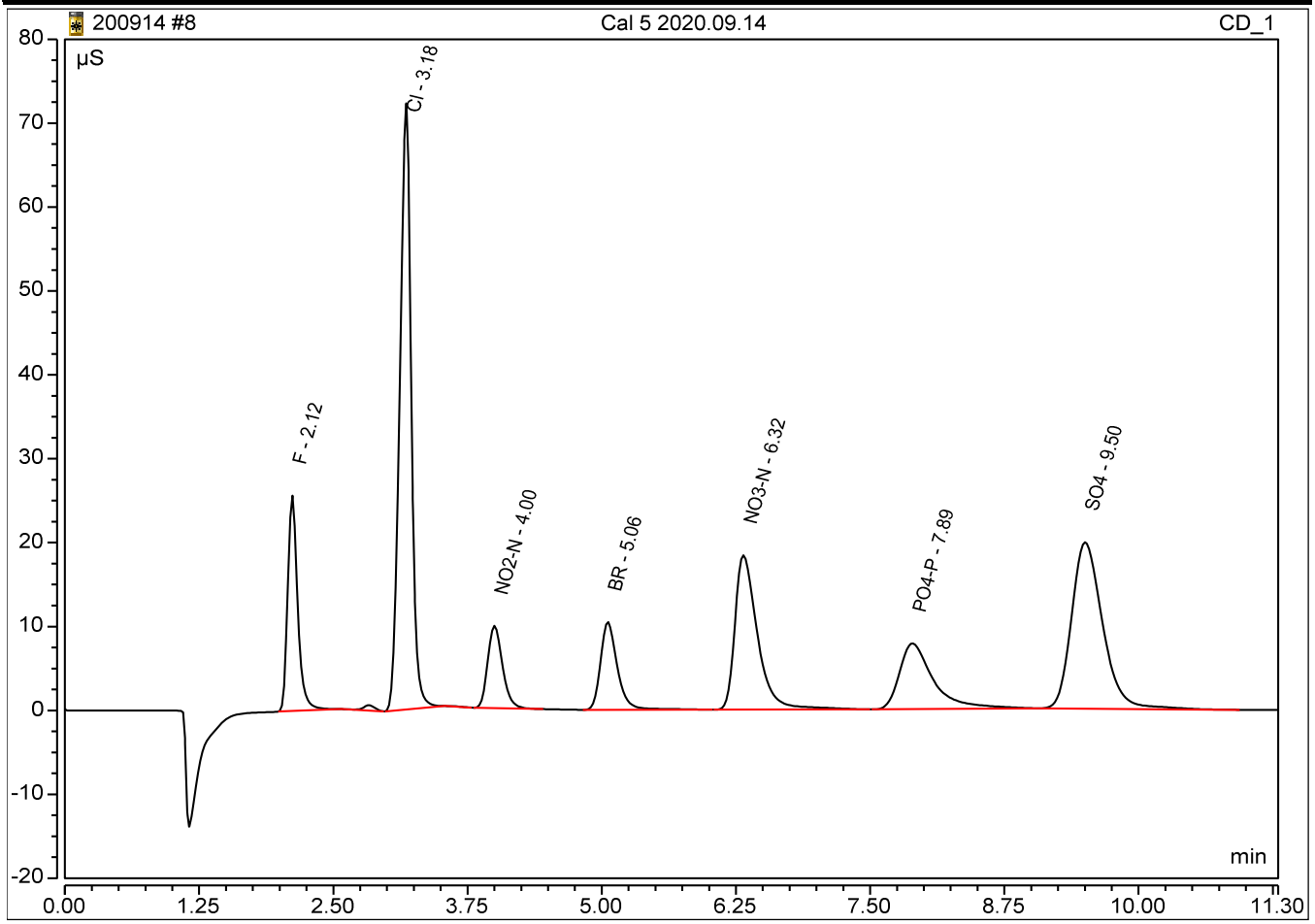


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 5 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:14**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.12	**F**	BMB	2.764	25.690	2.67	2.5	107.0%
3	3.18	**Cl**	BMB	8.950	72.239	9.91	10	99.1%
5	4.00	**NO2-N**	BMB	1.558	9.806	1.05	1	105.3%
6	5.06	**BR**	BMB	1.911	10.461	5.03	5	100.6%
7	6.32	**NO3-N**	BMB	4.496	18.415	1.95	2	97.6%
8	7.89	**PO4-P**	BMB	2.876	7.859	4.63	5	92.6%
9	9.50	**SO4**	BMB	6.650	19.846	9.96	10	99.6%



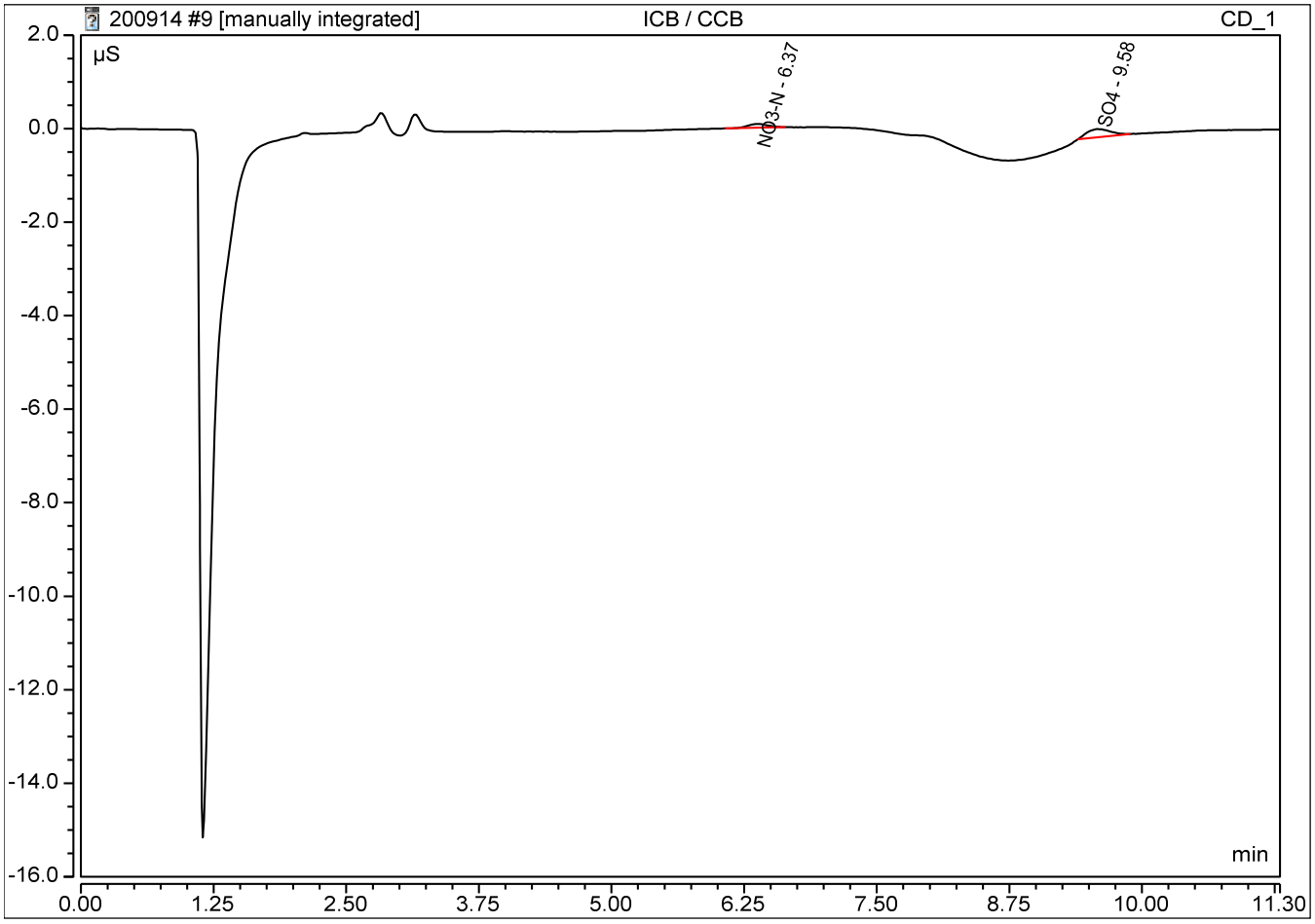
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**ICB / CCB**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:29**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	6.37	**NO3-N**	BMB*	0.017	0.081	0.01		
2	9.58	**SO4**	BMB*	0.046	0.175	0.07		



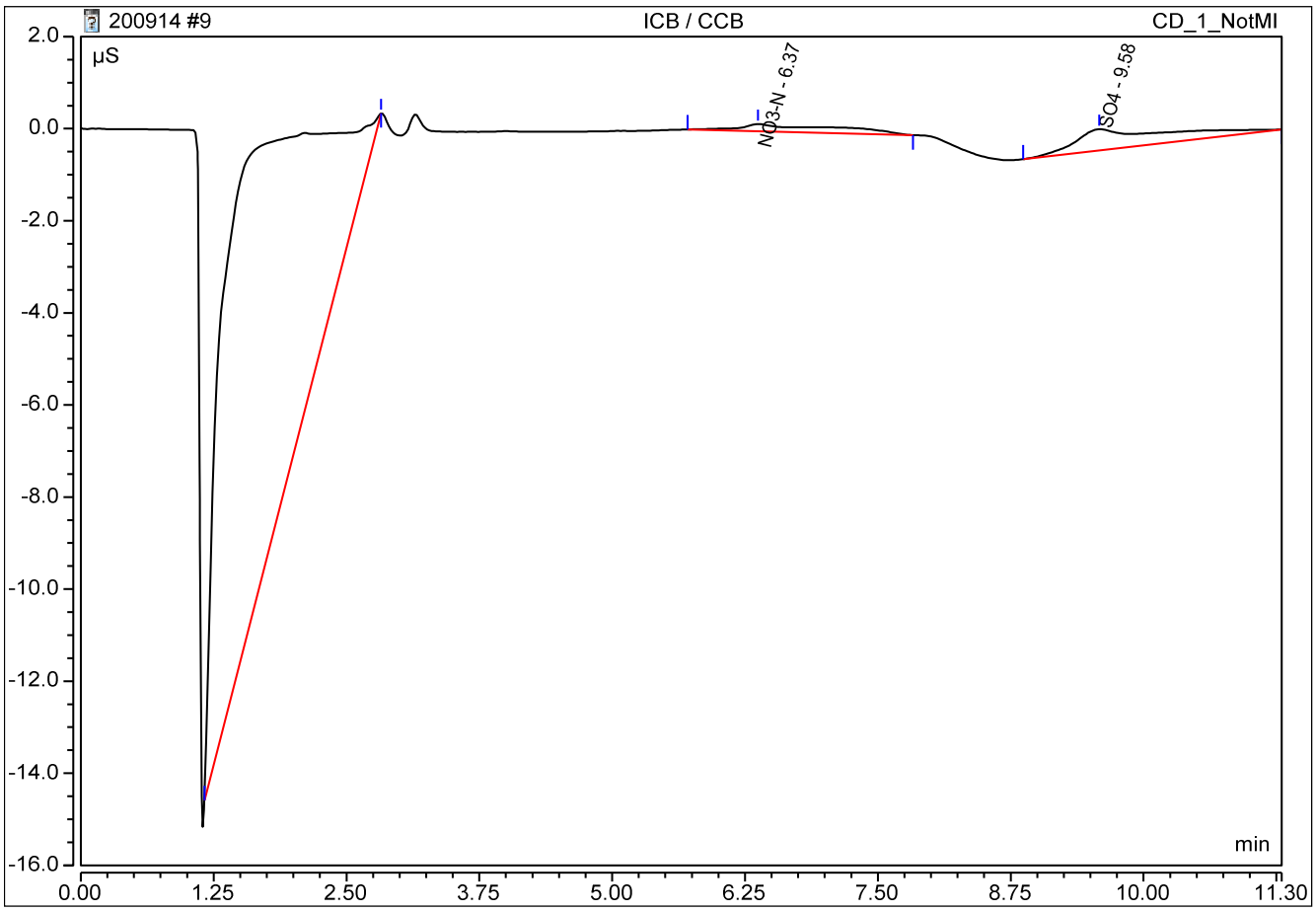
MI 5 F SO4 GA 9/14/20

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Not Manipulated Peak Integration Report

Sample Name:	**ICB / CCB**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:29**	*Run Time:*	**11.30**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Ammount mg/L
1	6.37	**NO3-N**	BMB*	0.177	0.155	0.0769
2	9.58	**SO4**	BMB*	0.456	0.464	0.6832

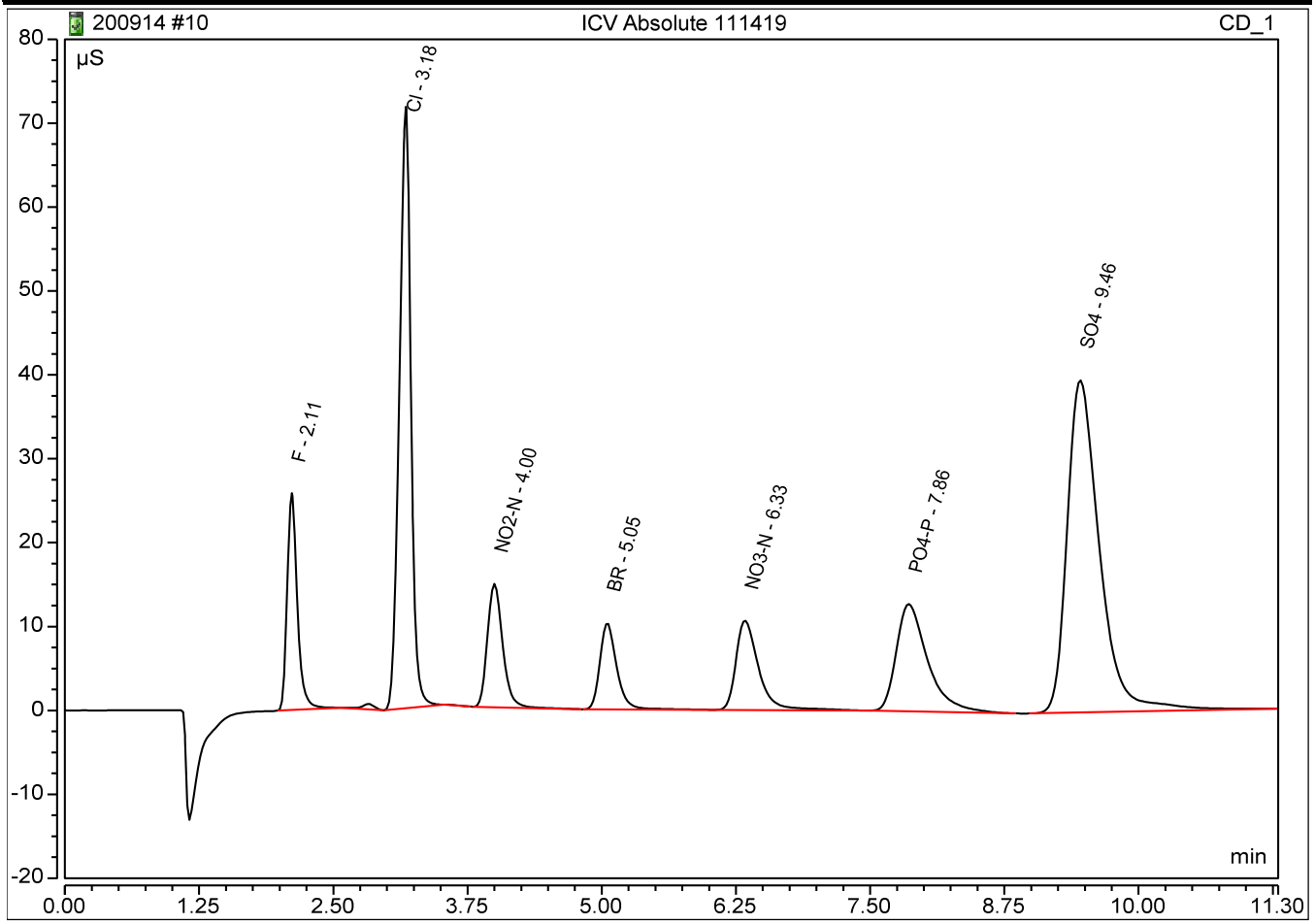


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**ICV Absolute 111419**	*Inj. Vol.:*	**100uL**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:43**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.11	**F**	BMB	2.829	25.835	2.74	2.5	109.6%
3	3.18	**Cl**	BMB	8.963	71.696	9.92	10	99.2%
5	4.00	**NO2-N**	BMB	2.425	14.715	1.64	1.522334	107.7%
6	5.05	**BR**	BMB	1.878	10.287	4.95	5	98.9%
7	6.33	**NO3-N**	BMB	2.618	10.656	1.14	1.129525	100.7%
8	7.86	**PO4-P**	BMB	4.336	12.817	6.68	6.522	102.4%
9	9.46	**SO4**	BMB	13.880	39.594	20.79	20	103.9%



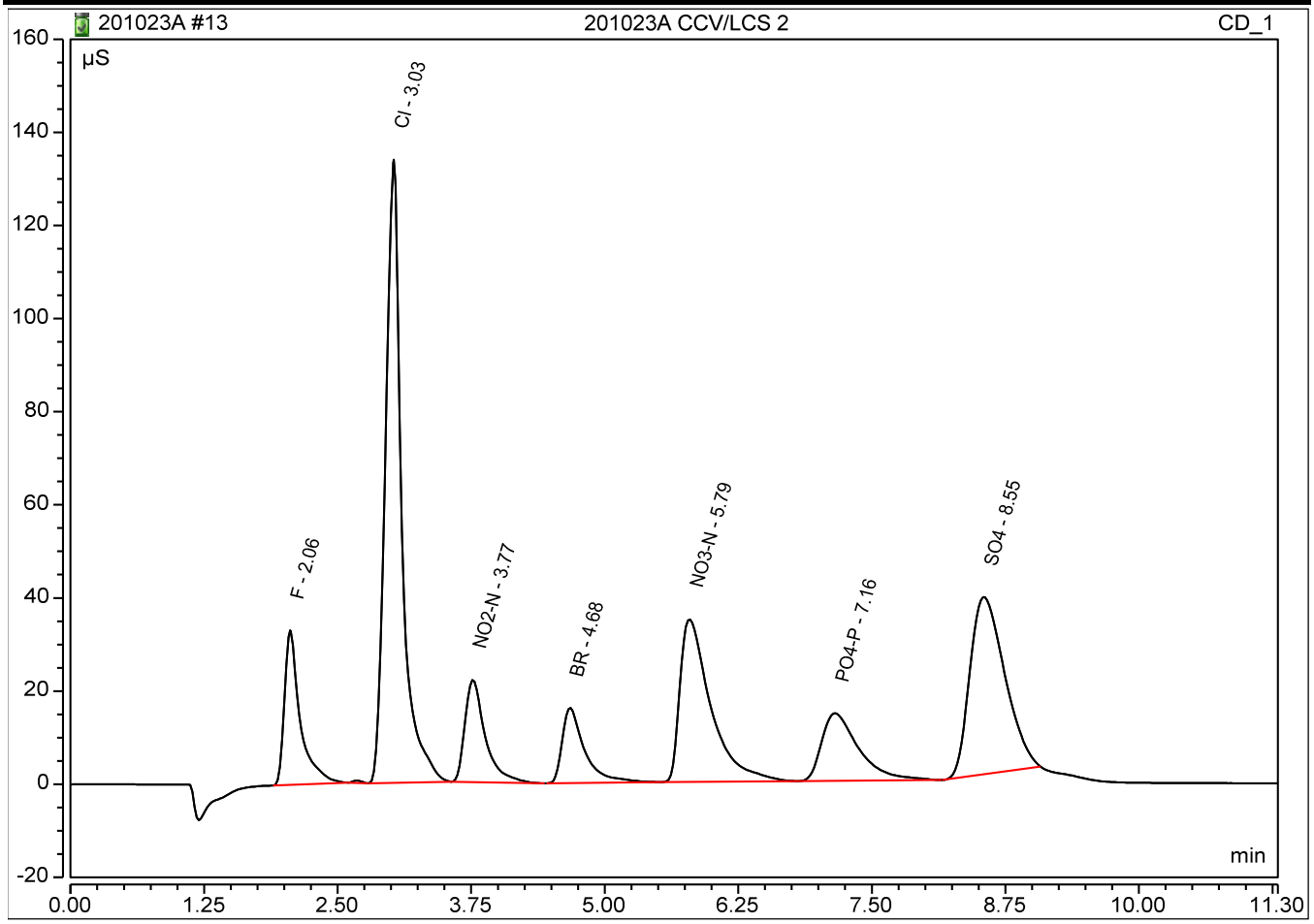
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201023A

Peak Integration Report

Sample Name:	**201023A CCV/LCS 2**	*Inj. Vol.:*	**100uL**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**23-Oct-2020 / 16:45**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.06	**F**	BMB	5.630	33.146	5.60	5	112.0%
3	3.03	**Cl**	BMB	23.615	133.871	26.14	25	104.6%
4	3.77	**NO2-N**	BMB	4.828	21.955	3.26	3.04	107.3%
5	4.68	**BR**	BMB	3.916	16.178	10.31	10	103.1%
6	5.79	**NO3-N**	BMB	11.674	34.948	5.07	5	101.4%
7	7.16	**PO4-P**	BMB	5.820	14.540	8.76	10	87.6%
8	8.55	**SO4**	BMB	14.438	38.121	21.62	25	86.5%



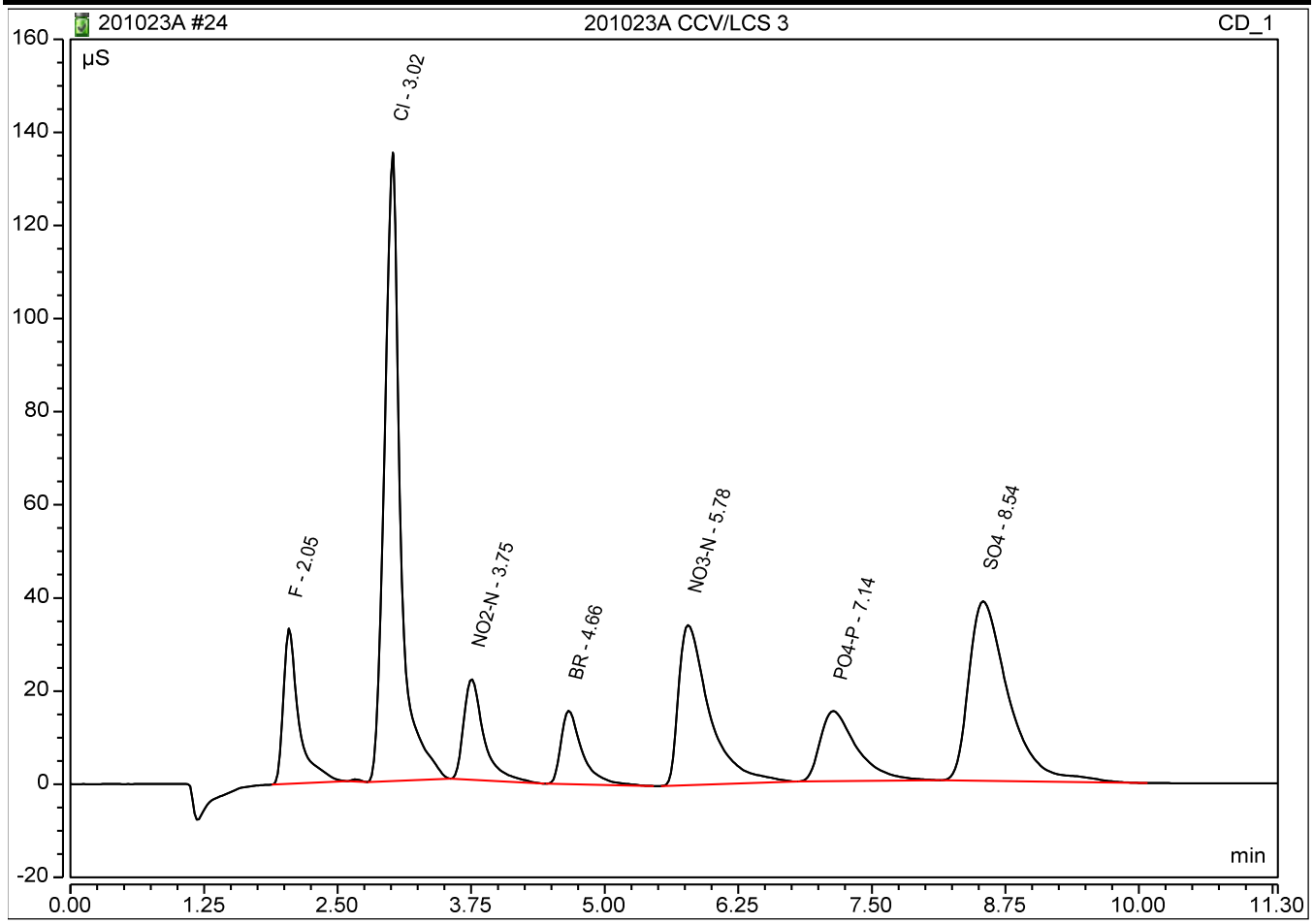
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201023A

Peak Integration Report

Sample Name:	**201023A CCV/LCS 3**	*Inj. Vol.:*	**100uL**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**23-Oct-2020 / 20:19**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.05	**F**	BMB	5.625	33.326	5.60	5	111.9%
3	3.02	**Cl**	BMB	23.417	135.012	25.92	25	103.7%
4	3.75	**NO2-N**	BMB	4.763	21.701	3.22	3.04	105.9%
5	4.66	**BR**	BMB	3.649	15.812	9.61	10	96.1%
6	5.78	**NO3-N**	BMB	11.563	34.378	5.02	5	100.4%
7	7.14	**PO4-P**	BMB	5.985	15.081	9.00	10	90.0%
8	8.54	**SO4**	BMB	16.614	38.591	24.88	25	99.5%



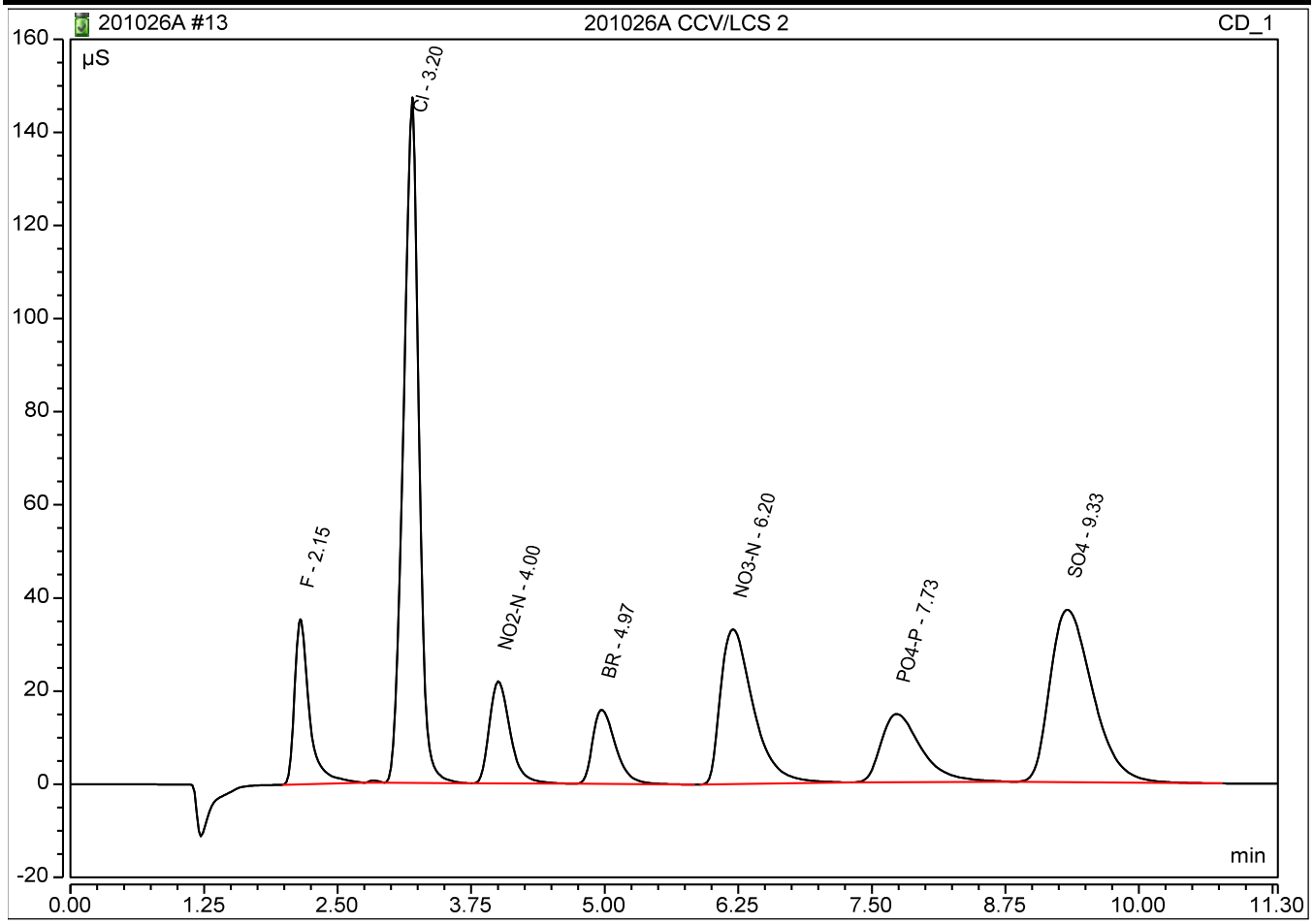
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**201026A CCV/LCS 2**	*Inj. Vol.:*	**100uL**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**26-Oct-2020 / 20:09**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.15	**F**	BMB	5.734	35.497	5.71	5	114.1%
3	3.20	**Cl**	BMB	24.454	147.220	27.07	25	108.3%
4	4.00	**NO2-N**	BMB	4.961	21.972	3.35	3.04	110.3%
5	4.97	**BR**	BMB	3.979	15.932	10.48	10	104.8%
6	6.20	**NO3-N**	BMB	11.840	33.272	5.14	5	102.8%
7	7.73	**PO4-P**	BMB	6.394	14.651	9.57	10	95.7%
8	9.33	**SO4**	BMB	17.163	37.031	25.70	25	102.8%



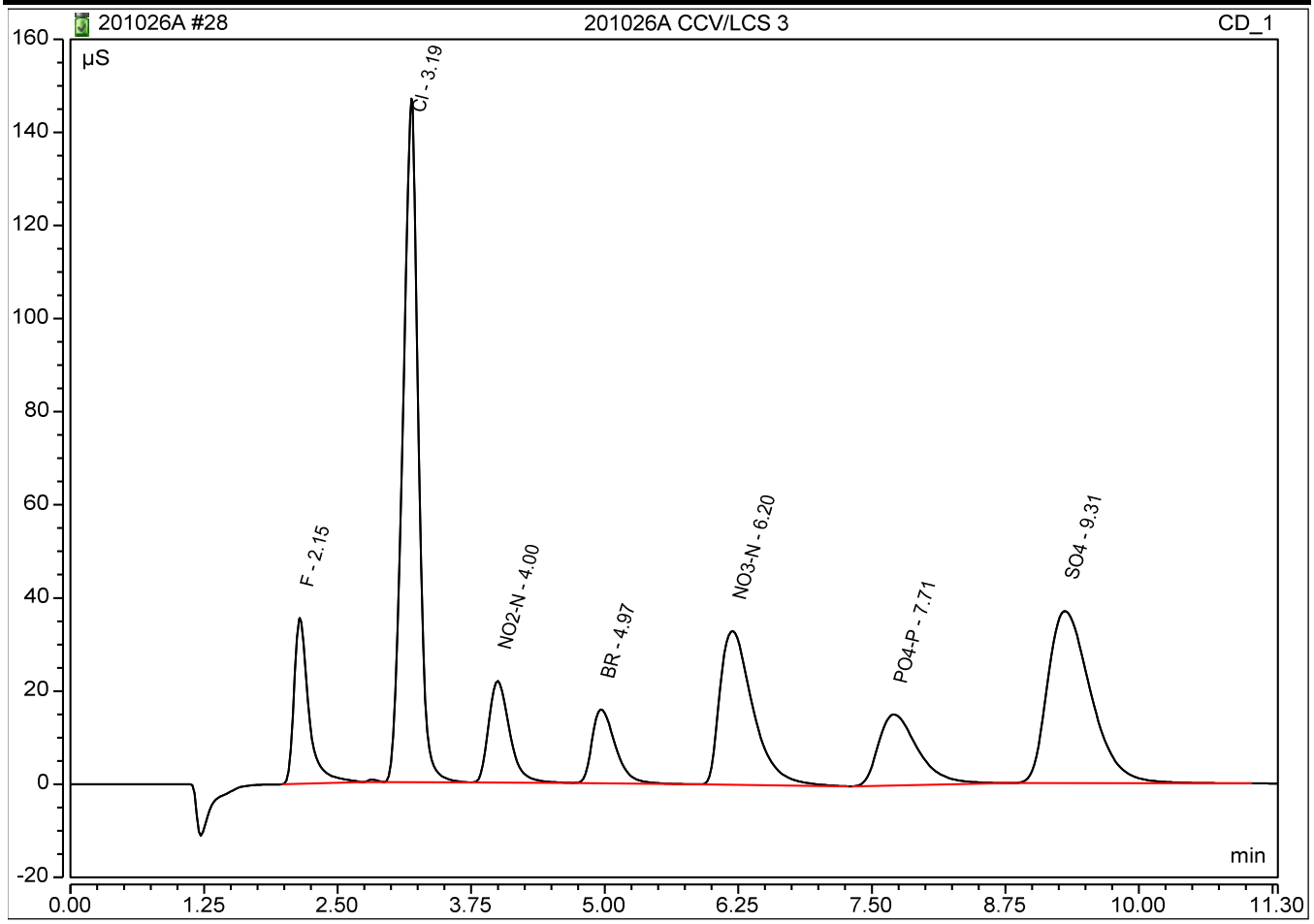
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**201026A CCV/LCS 3**	*Inj. Vol.:*	**100uL**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**26-Oct-2020 / 23:48**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.15	**F**	BMB	5.732	35.603	5.71	5	114.1%
3	3.19	**Cl**	BMB	24.475	146.830	27.09	25	108.4%
4	4.00	**NO2-N**	BMB	4.962	21.813	3.35	3.04	110.3%
5	4.97	**BR**	BMB	4.006	15.854	10.55	10	105.5%
6	6.20	**NO3-N**	BMB	11.885	33.055	5.16	5	103.2%
7	7.71	**PO4-P**	BMB	6.562	15.259	9.81	10	98.1%
8	9.31	**SO4**	BMB	17.345	36.967	25.97	25	103.9%



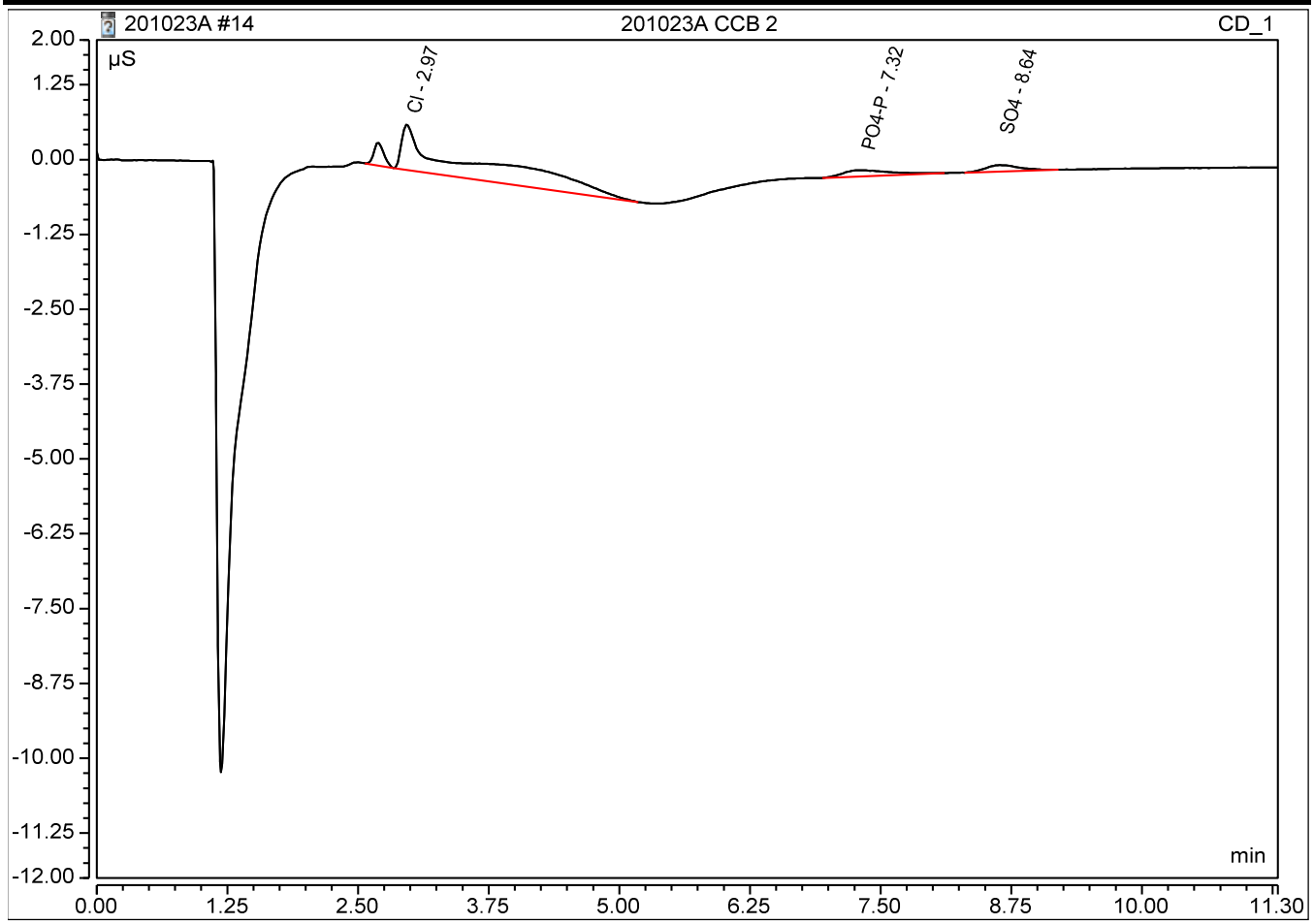
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201023A

Peak Integration Report

Sample Name:	**201023A CCB 2**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**23-Oct-2020 / 17:00**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
2	2.97	**Cl**	BMB	0.570	0.759	0.63		
3	7.32	**PO4-P**	BMB	0.053	0.103	0.67		
4	8.64	**SO4**	BMB	0.041	0.110	0.06		



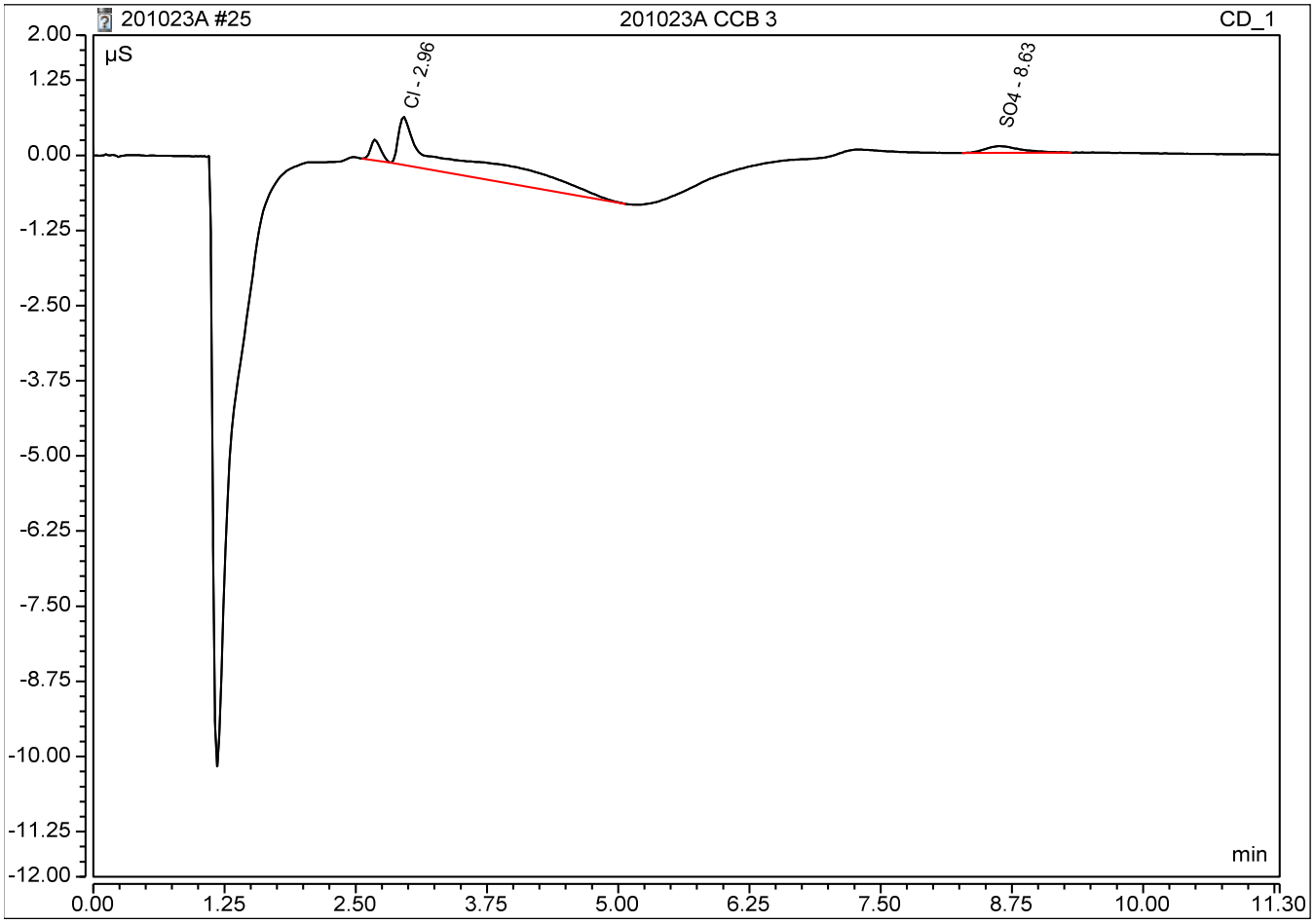
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201023A

Peak Integration Report

Sample Name:	**201023A CCB 3**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**23-Oct-2020 / 20:34**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
2	2.96	**Cl**	BMB	0.516	0.802	0.57		
3	8.63	**SO4**	BMB	0.044	0.110	0.07		



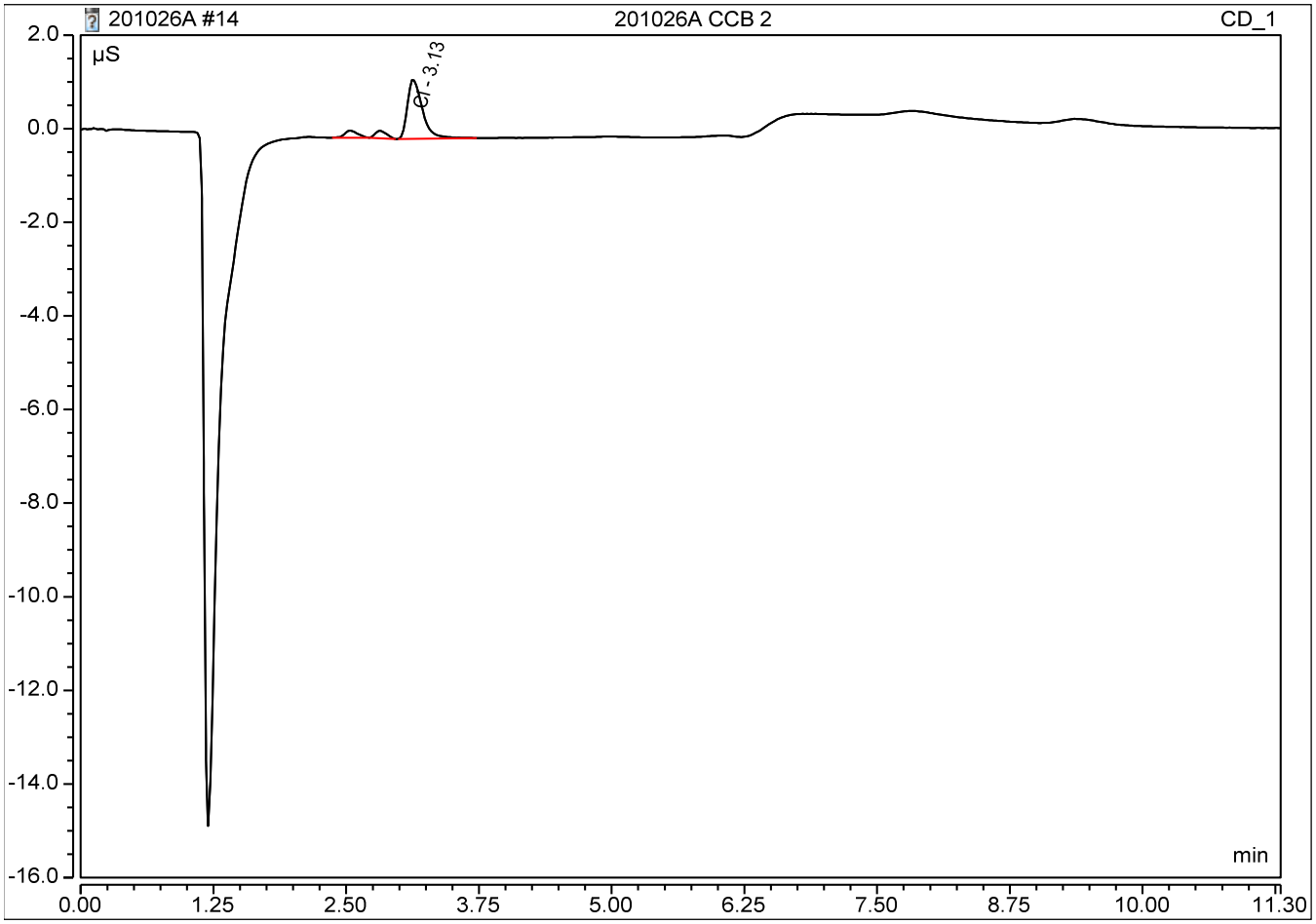
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**201026A CCB 2**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**26-Oct-2020 / 20:23**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
3	3.13	**Cl**	BMB	0.206	1.268	0.23		



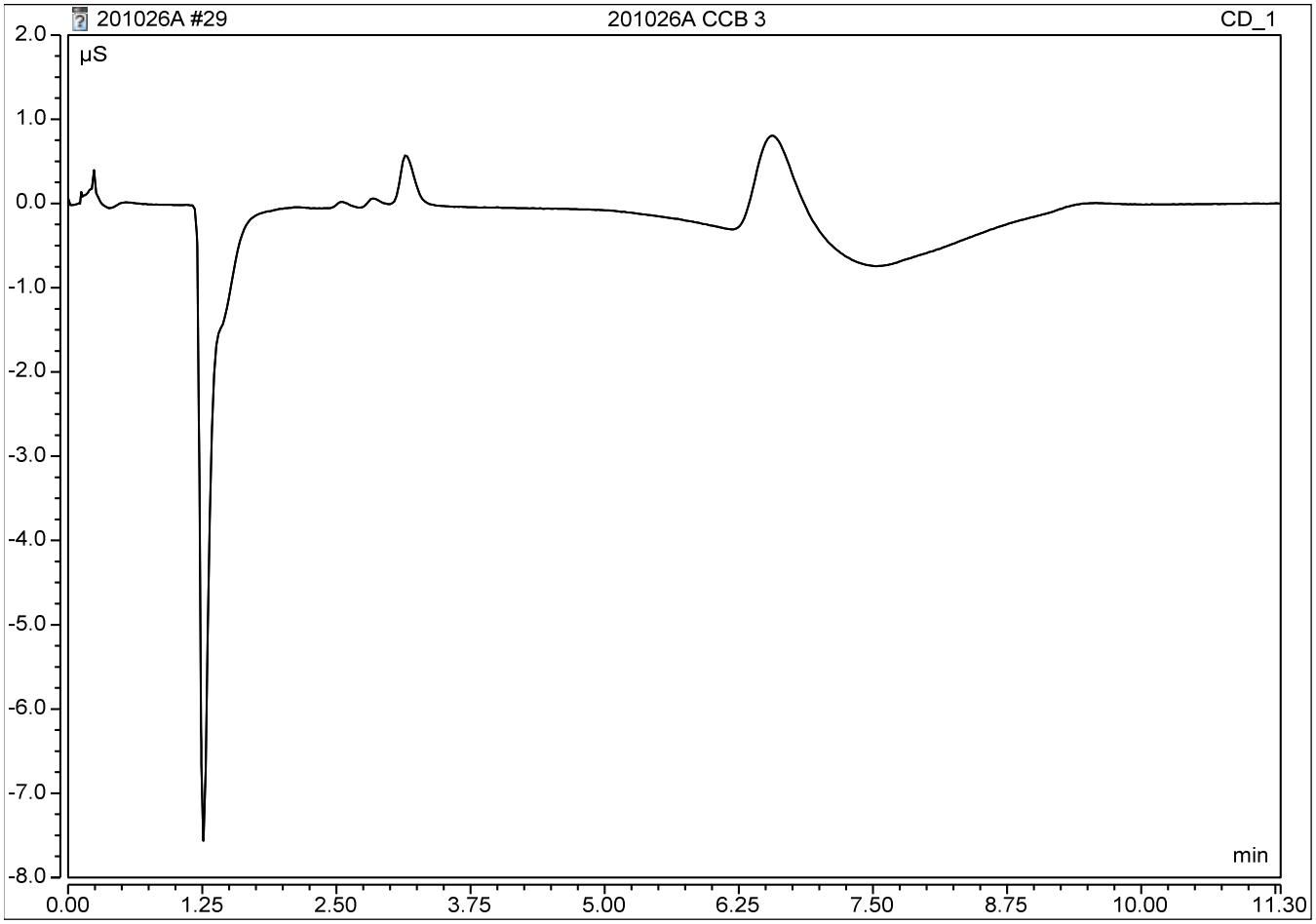
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**201026A CCB 3**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**27-Oct-2020 / 00:03**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery



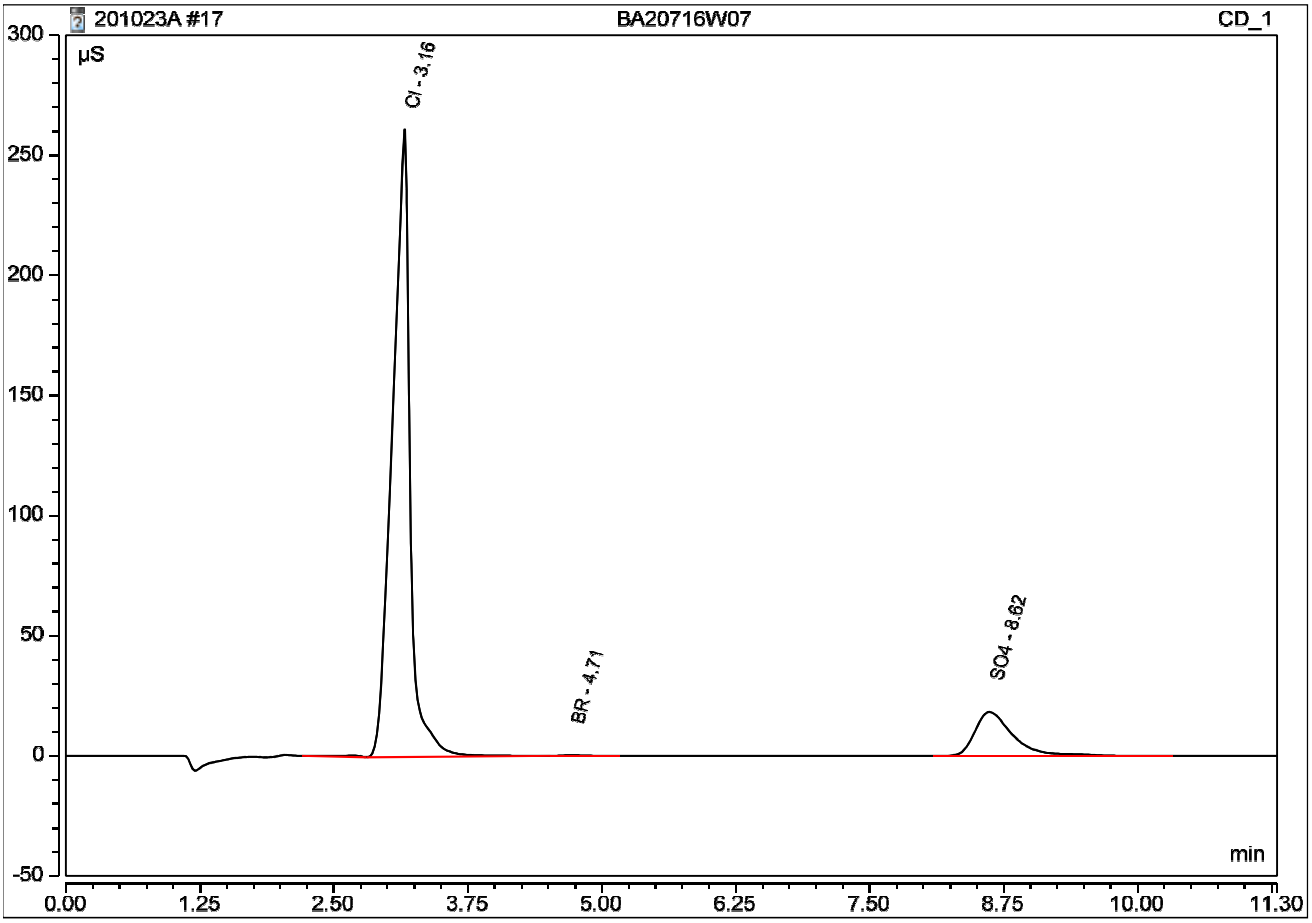
INORGANIC ANALYSIS
Raw Data

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201023A

Peak Integration Report

Sample Name:	**BA20716W07**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**23-Oct-2020 / 18:36**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
2	3.16	**Cl**	BMB	49.727	261.228	55.04		
3	4.71	**BR**	BMB	0.067	0.316	0.18		
4	8.62	**SO4**	BMB	7.536	18.283	11.29		



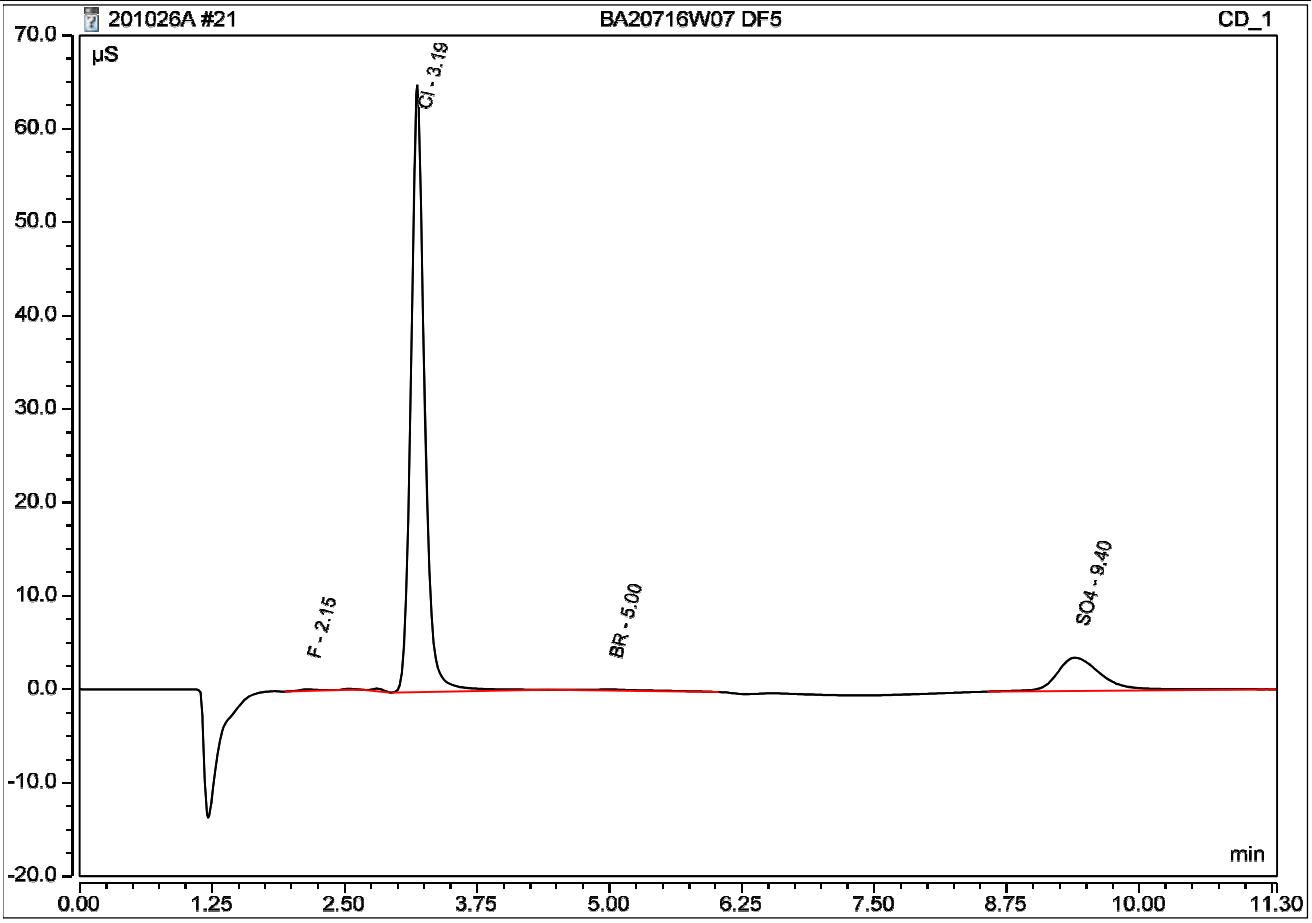
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**BA20716W07 DF5**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**5.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**26-Oct-2020 / 22:06**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.15	**F**	BMB	0.032	0.165	n.a.		
4	3.19	**Cl**	BMB	9.617	64.968	53.22		
5	5.00	**BR**	BMB	0.082	0.116	1.07		
6	9.40	**SO4**	BMB	1.750	3.559	13.11		



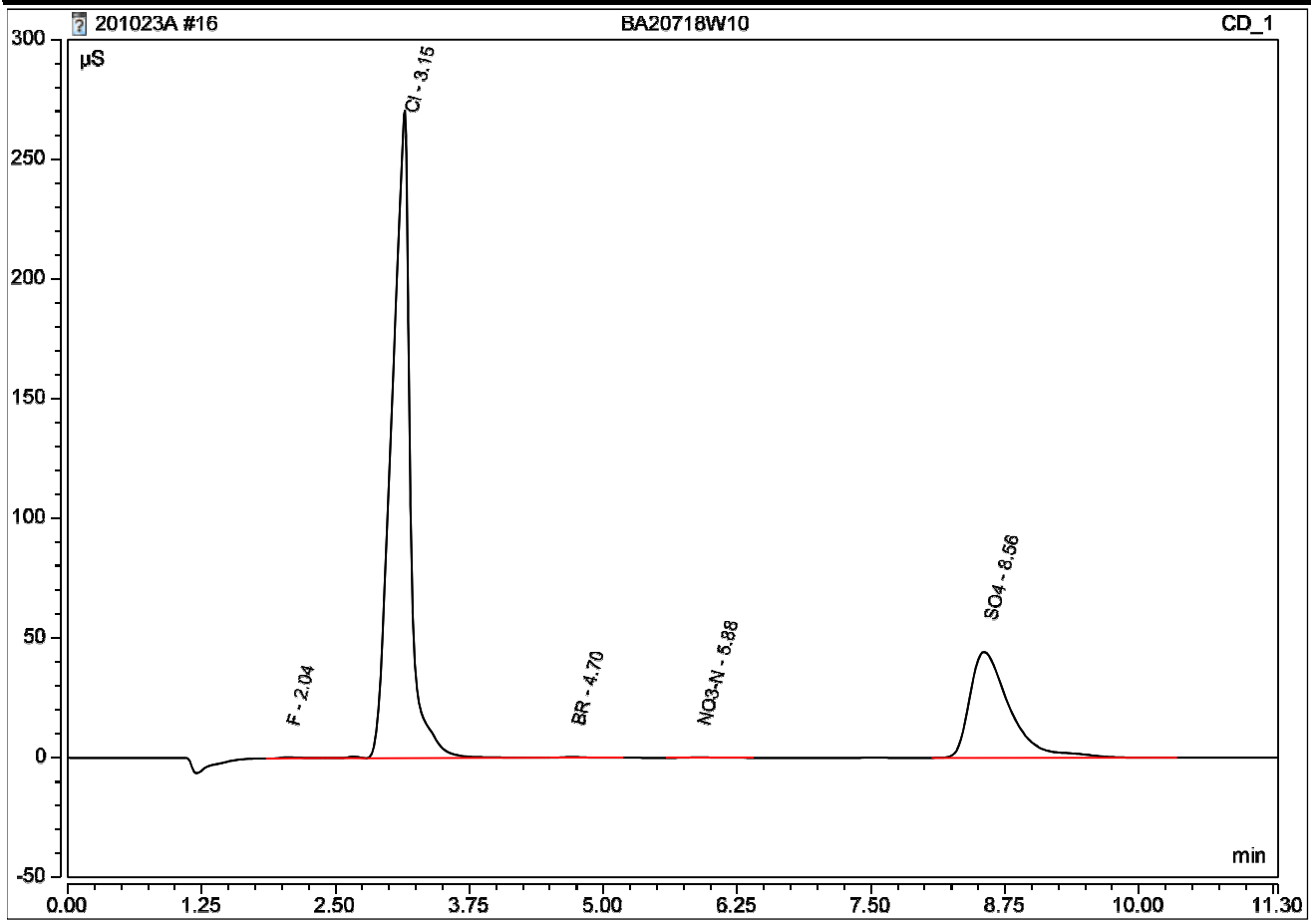
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201023A

Peak Integration Report

Sample Name:	**BA20718W10**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**23-Oct-2020 / 18:22**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.04	**F**	BMB	0.097	0.498	n.a.		
3	3.15	**Cl**	BMB	53.817	270.648	59.57		
4	4.70	**BR**	BMB	0.072	0.338	0.19		
5	5.88	**NO3-N**	BMB	0.058	0.211	0.03		
6	8.56	**SO4**	BMB	18.976	44.204	28.42		



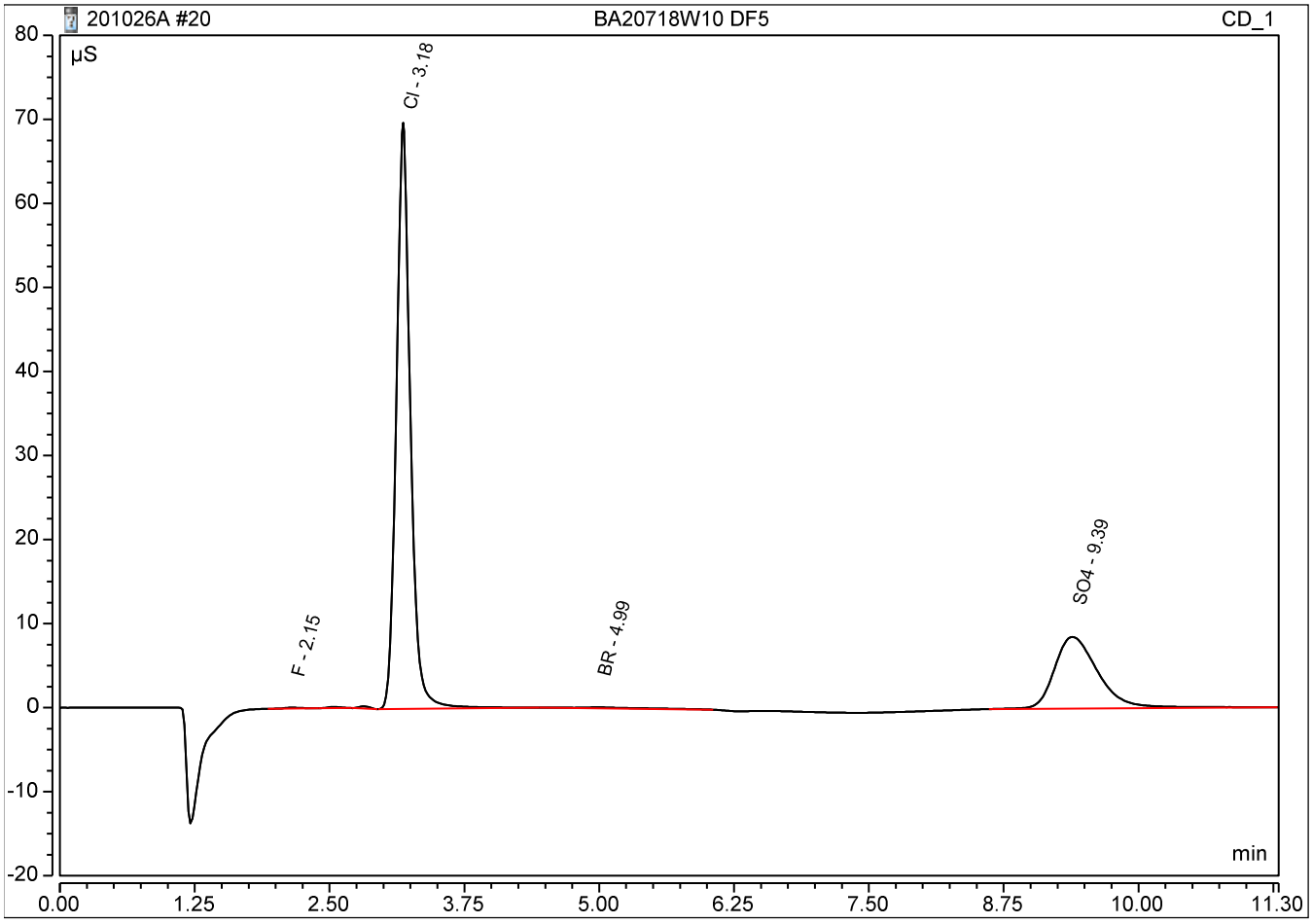
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201026A

Peak Integration Report

Sample Name:	**BA20718W10 DF5**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**5.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**26-Oct-2020 / 21:51**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.15	**F**	BMB	0.018	0.105	n.a.		
4	3.18	**Cl**	BMB	10.470	69.728	57.95		
5	4.99	**BR**	BMB	0.090	0.122	1.19		
6	9.39	**SO4**	BMB	3.993	8.531	29.90		



Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Anion Chromatography Working Standard

Prep Date: 08/25/20

Exp Date: 08/26/20

Prep'd By (Initials): GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (µg/mL)
Ion Chromatography Standard Fluoride 1000 µg/mL in H2O	o2si	O2SI-062002-01-01	1000	**687393-38-40744**	**10/30/20**	312.5 µL	25 mL	Millipore Water	12.5
Ion Chromatography Standard Nitrite 1000 µg/mL in H2O	Inorganic Ventures	ICCL1	1000	**P2-CL675597-41353**	**01/15/23**	411 µL	25 mL	Millipore Water	5 as NO2-N
Ion Chromatography Standard Chloride 5000 µg/mL in H2O	Inorganic Ventures	ICNO21	1000	**N2-NOX672889-49601**	**01/30/23**	1250 µL	25 mL	Millipore Water	50
Ortho-Phosphate as P Standard	Agilent	ICC-005A	1000	**G34-CP-3323-49590**	**05/31/25**	625 µL	25 mL	Millipore Water	25
Ion Chromatography Standard Nitrate as N 1000 µg/mL in H2O	Inorganic Ventures	P2-NOX675324	1000	**P2-NOX675324-49391**	**02/14/23**	250 µL	25 mL	Millipore Water	10
Bromide Standard	CPI international	4400-IC8M	1000	**1011817-12-49602**	**06/04/21**	625 µL	25 mL	Millipore Water	25
Sulfate Standard	Inorganic Ventures	ICS041	1000	**P2-SOX677315**	**04/03/23**	1250 µL	25 mL	Millipore Water	50

Anion Chromatography Calibration Curve

Prep Date: 09/14/20

Exp Date: 09/15/20

Prep'd By (Initials): GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. Range (ug/mL)	Reference To APPL Prep Date	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc. Range (µg/mL)
Anion Chromatography Working Standard	Varies	ICal1A	5.0-50.0	Prepared 08/25/20	09/15/20	2 µL	1000 µL	Millipore Water	0.02-0.20
Anion Chromatography Working Standard	Varies	ICal1	5.0-50.0	Prepared 08/25/20	09/15/20	4 µL	1000 µL	Millipore Water	0.04-0.40
Anion Chromatography Working Standard	Varies	ICal2	5.0-50.0	Prepared 08/25/20	09/15/20	20 µL	1000 µL	Millipore Water	0.1-1.0
Anion Chromatography Working Standard	Varies	ICal3	5.0-50.0	Prepared 08/25/20	09/15/20	50 µL	1000 µL	Millipore Water	0.25-2.5
Anion Chromatography Working Standard	Varies	ICal4	5.0-50.0	Prepared 08/25/20	09/15/20	100 µL	1000 µL	Millipore Water	0.5-5.0
Anion Chromatography Working Standard	Varies	ICal5	5.0-50.0	Prepared 08/25/20	09/15/20	200 µL	1000 µL	Millipore Water	1.0-10.0
Anion Chromatography Working Standard	Varies	ICal6	5.0-50.0	Prepared 08/25/20	09/15/20	500 µL	1000 µL	Millipore Water	2.5-25.0
Anion Chromatography Working Standard	Varies	ICal7	5.0-50.0	Prepared 08/25/20	09/15/20	700 µL	1000 µL	Millipore Water	3.5-35.0
Anion Chromatography Working Standard	Varies	ICal8	5.0-50.0	Prepared 08/25/20	09/15/20	1000 µL	1000 µL	Millipore Water	5.0-50.0

Anion Chromatography ICV Absolute COA 49866

Prep Date: See injection Log

Exp Date: 24 hours after prep

Prep'd By (Initials): Absolute

Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. Range (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (µg/mL)
Flouride	Absolute	50021	2.5	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	2.5
Nitrite	Absolute	50021	1.522334	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	1.522334
Chloride	Absolute	50021	1.522334	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	1.522334
O-Phosphate as P	Absolute	50021	6.522	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	6.522
Nitrate as N	Absolute	50021	1.129525	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	1.129525
Ion Chromatography Standard Bromide, 1000 µg/mL in H2O	Absolute	50021	5	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	5
Sulfate	Absolute	50021	20	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	20

Anion Chromatography CCV / LCS

Prep Date: See injection Log

Exp Date: 24 hours after prep

Prep'd By (Initials): GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (µg/mL)
Ion Chromatography Standard Fluoride 1000 µg/mL in H2O	o2si	O2SI-062002-01-01	1000	**687393-38-40744**	**10/30/20**	125 µL	25 mL	Millipore Water	5
Ion Chromatography Standard Nitrite 1000 µg/mL in H2O	Inorganic Ventures	ICCL1	1000	**P2-CL675597-41353**	**01/15/23**	250 µL	25 mL	Millipore Water	10
Ion Chromatography Standard Chloride 5000 µg/mL in H2O	Inorganic Ventures	ICNO21	1000	**N2-NOX672889-49601**	**01/30/23**	125 µL	25 mL	Millipore Water	25
Ortho-Phosphate as P Standard	Agilent	ICC-005A	1000	**G34-CP-3323-49590**	**05/31/25**	250 µL	25 mL	Millipore Water	10
Ion Chromatography Standard Nitrate as N 1000 µg/mL in H2O	Inorganic Ventures	P2-NOX675324	1000	**P2-NOX675324-49391**	**02/14/23**	125 µL	25 mL	Millipore Water	5
Bromide Standard	CPI international	4400-IC8M	1000	**1011817-12-49602**	**06/04/21**	250 µL	25 mL	Millipore Water	10
Sulfate Standard	Inorganic Ventures	ICS041	1000	**P2-SOX677315**	**04/03/23**	625 µL	25 mL	Millipore Water	25

Method 300 and 9056 Injection Log

No.	Position	Injection Description	Inject Time		Type	Comment
1	BC1	Cal 1 2020.09.14	14/Sep/2020	11:17	Calibration Standard	
2	BC2	Cal 2 2020.09.14	14/Sep/2020	11:31	Calibration Standard	
3	BC3	Cal 3 2020.09.14	14/Sep/2020	11:46	Calibration Standard	
4	BC6	Cal 6 2020.09.14	14/Sep/2020	12:30	Calibration Standard	
5	BC7	Cal 7 2020.09.14	14/Sep/2020	12:44	Calibration Standard	
6	BC8	Cal 8 2020.09.14	14/Sep/2020	12:59	Calibration Standard	
7	BC4	Cal 4 2020.09.14	14/Sep/2020	14:59	Calibration Standard	
8	BC5	Cal 5 2020.09.14	14/Sep/2020	15:14	Calibration Standard	
9	R1	ICB / CCB	14/Sep/2020	15:29	Unknown	
10	BD1	ICV Absolute 111419	14/Sep/2020	15:43	Check Standard	

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Method 300 and 9056 Injection Log

No.	Position	Injection Description	Inject Time		Type	Comment
1	R2	201023A CCV/LCS 1	23/Oct/2020	11:11	Check Standard	
2	R1	201023A CCB 1	23/Oct/2020	11:26	Unknown	
3	RB4	BA19887W09	23/Oct/2020	14:19	Unknown	
4	RB5	BA19889W09	23/Oct/2020	14:33	Unknown	
5	RB6	BA19891W09	23/Oct/2020	14:48	Unknown	
6	RB7	BA19892W09	23/Oct/2020	15:02	Unknown	
7	RB8	BA19893W09	23/Oct/2020	15:17	Unknown	
8	RC1	BA19894W09	23/Oct/2020	15:32	Unknown	
9	RC2	BA19895W09	23/Oct/2020	15:46	Unknown	
10	RC3	BA19896W09	23/Oct/2020	16:01	Unknown	
11	RC4	BA19897W09	23/Oct/2020	16:16	Unknown	
12	RC5	BA19898W09 DF20	23/Oct/2020	16:30	Unknown	
13	R2	201023A CCV/LCS 2	23/Oct/2020	16:45	Check Standard	
14	R1	201023A CCB 2	23/Oct/2020	17:00	Unknown	
15	RC6	BA19899W09	23/Oct/2020	17:14	Unknown	
16	RB5	93873 ERH 1187	23/Oct/2020	18:22	Unknown	
17	RB6	93873 ERH 1185	23/Oct/2020	18:36	Unknown	
18	RB7	93879 Airlift	23/Oct/2020	18:51	Unknown	
19	RB8	93879 Pumped	23/Oct/2020	19:06	Unknown	
20	RC1	BA20587W01	23/Oct/2020	19:20	Unknown	
21	RC2	BA20588W01	23/Oct/2020	19:35	Unknown	
22	RC3	BA20646W01	23/Oct/2020	19:50	Unknown	
23	RC4	BA20647W01	23/Oct/2020	20:04	Unknown	
24	R2	201023A CCV/LCS 3	23/Oct/2020	20:19	Check Standard	
25	R1	201023A CCB 3	23/Oct/2020	20:34	Unknown	
26	BA1	BA20084W06 DF20	23/Oct/2020	20:48	Unknown	
27	BA2	BA20085W06 DF20	23/Oct/2020	21:03	Unknown	
28	BA3	BA20086W06 DF20	23/Oct/2020	21:18	Unknown	
29	BA4	BA20087W06 DF20	23/Oct/2020	21:32	Unknown	
30	BA5	BA20088W06 DF20	23/Oct/2020	21:47	Unknown	
31	BA6	BA20089W06 DF20	23/Oct/2020	22:02	Unknown	
32	BA7	BA20090W06 DF20	23/Oct/2020	22:16	Unknown	
33	BA8	BA20091W06 DF20	23/Oct/2020	22:31	Unknown	
34	BB1	BA20092W06 DF20	23/Oct/2020	22:46	Unknown	
35	BB2	BA20079W12 DF20	23/Oct/2020	23:00	Unknown	
36	R2	201023A CCV/LCS 4	23/Oct/2020	23:15	Check Standard	
37	R1	201023A CCB 4	23/Oct/2020	23:29	Unknown	
38	BB3	BA20080W34 DF20	23/Oct/2020	23:44	Unknown	
39	BB4	BA20081W12 DF20	23/Oct/2020	23:59	Unknown	
40	BB5	BA20040W09 DF20	24/Oct/2020	00:13	Unknown	
41	BB6	BA20041W09 DF20	24/Oct/2020	00:28	Unknown	
42	BB7	BA20042W09 DF20	24/Oct/2020	00:43	Unknown	
43	BB8	BA20327W07 DF20	24/Oct/2020	00:57	Unknown	
44	BC8	BA20328W07 DF20	24/Oct/2020	01:12	Unknown	
45	BE5	BA20476W12 DF20	24/Oct/2020	01:27	Unknown	
46	BE6	BA20477W12 DF20	24/Oct/2020	01:41	Unknown	
47	BE7	BA20478W34 DF20	24/Oct/2020	01:56	Unknown	
48	R2	201023A CCV/LCS 5	24/Oct/2020	02:11	Check Standard	
49	R1	201023A CCB 5	24/Oct/2020	02:25	Unknown	
50	R2	STOP	24/Oct/2020	02:37	Unknown	

Method 300 and 9056 Injection Log

No.	Position	Injection Description	Inject Time		Type	Comment
1	R2	201026A CCV/LCS 1	26/Oct/2020	17:13	Check Standard	
2	R1	201026A CCB 1	26/Oct/2020	17:28	Unknown	
3	BC5	93885 WELL	26/Oct/2020	17:42	Unknown	
4	BE1	BA20652W01	26/Oct/2020	17:57	Unknown	
5	BE2	93892 WELL	26/Oct/2020	18:12	Unknown	
6	BA1	BA20084W06	26/Oct/2020	18:26	Unknown	
7	BA2	BA20079W12	26/Oct/2020	18:41	Unknown	
8	BA3	BA20080W34	26/Oct/2020	18:55	Unknown	
9	BA4	BA20081W12	26/Oct/2020	19:10	Unknown	
10	BA5	BA20040W09	26/Oct/2020	19:25	Unknown	
11	BA6	BA20041W09	26/Oct/2020	19:39	Unknown	
12	BA7	BA20042W09	26/Oct/2020	19:54	Unknown	
13	R2	201026A CCV/LCS 2	26/Oct/2020	20:09	Check Standard	F fails
14	R1	201026A CCB 2	26/Oct/2020	20:23	Unknown	
15	BA8	BA20327W07	26/Oct/2020	20:38	Unknown	
16	BB1	BA20328W07	26/Oct/2020	20:53	Unknown	
17	BB2	BA20476W12	26/Oct/2020	21:07	Unknown	
18	BB3	BA20477W12	26/Oct/2020	21:22	Unknown	
19	BB4	BA20478W34	26/Oct/2020	21:37	Unknown	
20	BB5	93873 ERH 1187 DF5	26/Oct/2020	21:51	Unknown	
21	BB6	93873 ERH 1185 DF5	26/Oct/2020	22:06	Unknown	
22	BB7	BA20588W01 DF5	26/Oct/2020	22:21	Unknown	
23	BB8	BA20539W11 DF5	26/Oct/2020	22:35	Unknown	
24	BC1	BA20539W11 DF5 MS	26/Oct/2020	22:50	Unknown	
25	BC2	BA20539W11 DF5 MSD	26/Oct/2020	23:04	Unknown	
26	BC3	BA20539W11 MS	26/Oct/2020	23:19	Unknown	
27	BC4	BA20539W11 MSD	26/Oct/2020	23:34	Unknown	
28	R2	201026A CCV/LCS 3	26/Oct/2020	23:48	Check Standard	F fails
29	R1	201026A CCB 3	27/Oct/2020	00:03	Unknown	
30	BC6	BA20130W01 PT	27/Oct/2020	00:18	Unknown	
31	BC7	BA20131W01 PT	27/Oct/2020	00:32	Unknown	
32	BC8	BA20133W01 PT	27/Oct/2020	00:47	Unknown	
33	BD1	BA20655W12	27/Oct/2020	01:02	Unknown	
34	BD2	BA20655W12 DF20	27/Oct/2020	01:16	Unknown	
35	BD3	BA20656W35	27/Oct/2020	01:31	Unknown	
36	BD4	BA20656W35 DF20	27/Oct/2020	01:46	Unknown	
37	BD5	BA20657W06	27/Oct/2020	02:00	Unknown	
38	BD6	BA20657W06 DF20	27/Oct/2020	02:15	Unknown	
39	BD7	BA20658W06	27/Oct/2020	02:29	Unknown	
40	BD8	BA20658W06 DF20	27/Oct/2020	02:44	Unknown	
41	BE3	BA20659W06	27/Oct/2020	02:59	Unknown	
42	BE4	BA20659W06 DF20	27/Oct/2020	03:13	Unknown	
43	R2	201026A CCV/LCS 1	27/Oct/2020	03:28	Check Standard	
44	R1	201026A CCB 1	27/Oct/2020	03:43	Unknown	
45	BE5	BA20660W06	27/Oct/2020	03:57	Unknown	
46	BE6	BA20660W06 DF20	27/Oct/2020	04:12	Unknown	
47	BE7	BA20661W06	27/Oct/2020	04:27	Unknown	
48	BE8	BA20661W06 DF20	27/Oct/2020	04:41	Unknown	
49	R2	201026A CCV/LCS 1	27/Oct/2020	04:56	Check Standard	
50	R1	201026A CCB 1	27/Oct/2020	05:11	Unknown	
51	R2	stop 1026	27/Oct/2020	05:22	Unknown	

INORGANIC ANALYSIS
Calibration and Raw Data

Ferrous Iron — Rev 2, 04-05-19

Method SM3500Fe | Units mg/L | Instrument: Genisis Spectrometer
Analyte Fe2+ | QCG: 201028 | Wavelength: 510 nm
Analyist fjr | Final Volume: 50mL | Units: mg/L

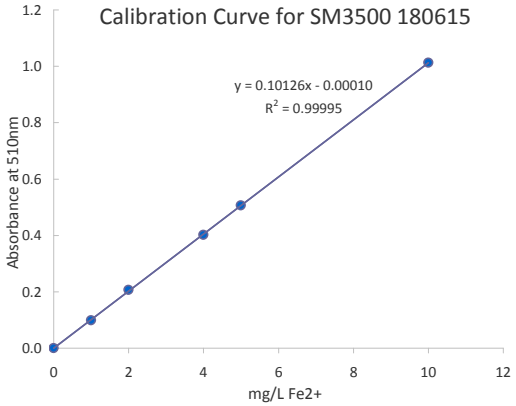
Date	Time	Appl ID	[Fe2+]	Absorbance	% Recovery
06/26/20	10:49	ICB	0.00	0.000	
06/26/20	10:49	Ical 1	1.00	0.099	97.9%
06/26/20	10:50	Ical 2	2.00	0.207	102.3%
06/26/20	10:51	Ical 3	4.00	0.402	99.3%
06/26/20	10:51	Ical 4	5.00	0.506	100.0%
06/26/20	10:52	Ical 5	10.00	1.013	100.1%
06/26/20	10:52	ICV	3.00	0.313	103.1%
06/26/20	10:53	ICB	0.00	0.000	

Slope	0.101255102
Intercept	-0.000102041
Coefficient of Determination	0.999948376

Algortithm Check:	Appl ID	Absorbance	Result
	LCS A201028	0.310	3.06

Result = (Absorbance-Raw Blk-Intercept)/ Slope

Test:	FJR	10/28/20	3.06



Date	Time	Appl ID	DF	Raw Result	SubSample Amount	Raw BLK	Calc Conc	Result	QC True	% Recovery
10/28/20	16:12	CCV 4.0 A201028	1	0.416	25mL		4.11	4.11	4.00	102.7%
10/28/20	16:12	CCB A201028	1	0.000	25mL		0.00	0.00		
10/28/20	16:14	LCS A201028	1	0.310	25mL		3.06	3.06	3.00	102.1%
10/28/20	16:14	LCSD A201028	1	0.315	25mL		3.11	3.11	3.00	103.7%
10/28/20	16:14	BA20716W09		0.019	25mL		0.19	0.00		
10/28/20	16:15	BA20718W12	1	0.015	25mL		0.15	0.15		
10/28/20	16:15	BA20718W12 MS	1	0.334	25mL		3.30	3.30		
10/28/20	16:16	BA20718W12 MSD	1	0.336	25mL		3.32	3.32		
10/28/20	16:16	CCV 4.0 A201028	1	0.420	25mL		4.15	4.15	4.00	103.7%
10/28/20	16:17	CCB A201028	1	0.002	25mL		0.02	0.02		

Standard Prep

	Ferrous Iron Standards		Prep'd By (Initials)		FJR		
Prep Date	06/26/20						
Exp Date	06/26/21						
Stock Label	Supplier	Batch Number	Exp Date	Aliquot from Stock	Final Volume	Solvent	Ferrous Iron Concentration
Ferrous Ammonium Sulfate	J.T.Baker	0000184592	08/21/20	0.351	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Sulfate	Mallinckrodt	Lot 5056 KDRX	NA	0.250	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Iron CCV/LCS/MS/ICV			Prep'd By (Initials)		FJR		
Prep Date	See Injection Log						
Exp Date	24 Hours						
Initial Standard Information	Supplier	Batch Number	Exp Date	Final Standard Information			
Ferrous Iron CCV	J.T.Baker	0000184592	Prep Daily	500uL	25mL	Deionized water	4mg/L
Ferrous Iron ICV/LCS	Mallinckrodt	Lot 5056 KDRX	Prep Daily	375uL	25mL	Deionized water	3mg/L
	Ferrous Iron Calibration Curve		Prep'd By (Initials)		FJR		
Prep Date	06/26/20						
Exp Date	06/26/21						
Final Standard Information							
Point Label	Supplier	Batch Number	Exp Date	Aliquot from Stock (mL)	Final Volume	Solvent	Ferrous Iron Concentration
CCB	J.T.Baker	0000184592	06/26/21	0	25mL	Deionized water	0mg/L
Ical 1	J.T.Baker	0000184592	06/26/21	0.125	25mL	Deionized water	1mg/L
Ical 2	J.T.Baker	0000184592	06/26/21	0.25	25mL	Deionized water	2mg/L
Ical 3	J.T.Baker	0000184592	06/26/21	0.5	25mL	Deionized water	4mg/L
Ical 4	J.T.Baker	0000184592	06/26/21	0.625	25mL	Deionized water	5mg/L
Ical 5	J.T.Baker	0000184592	06/26/21	1.25	25mL	Deionized water	10mg/L
ICV	Mallinckrodt	Lot 5056 KDRX	06/26/21	0.375	25mL	Deionized water	3mg/L

Reagent Prep

Reagent	Chemical Lot #	Chemical	Chemical Expiration Date	Amount	Date Prep
Colorizer	0747C107	1,10-phenanthroline	na	0.2056	07/28/20
		HCL conc	na	enough to dissolve	
Buffer	Z28B018	Ammonia Acetate	na	249.2	04/29/20
	2018071399	Glacial Acetic Acid	na	700mL	

A.P.P.L. INC.
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM
ARF No: 93873 SDG: 93873
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 10/27/20

Analyte	Calibration Verification									M
	True CCV1	Found 15:55	%R(1)	True ICV	Found 16:00	%R(1)	True CCV1	Found 16:18	%R(1)	
TOXN	3	3.1339	104	3	3.1179	104	3	3.1543	105	

(1) Control Limits: 90-110

ILM02.0

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No.: 93873 SDG: 93873

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 10/27/20 15:58	C	ICB 10/27/20 16:02	C	CCB 10/27/20 16:19	C		C		C	
TOXN	.100	U	.100	U	.100	U					

AQ2 Tray Report

Serial Number:	190170
Software Version:	2.1.0
Report Requested By:	Eric RR
Date & Time:	2020-10-29 15:51:46
Tray Number:	3
Tray Name:	201027A NO2 NO3 TOXN

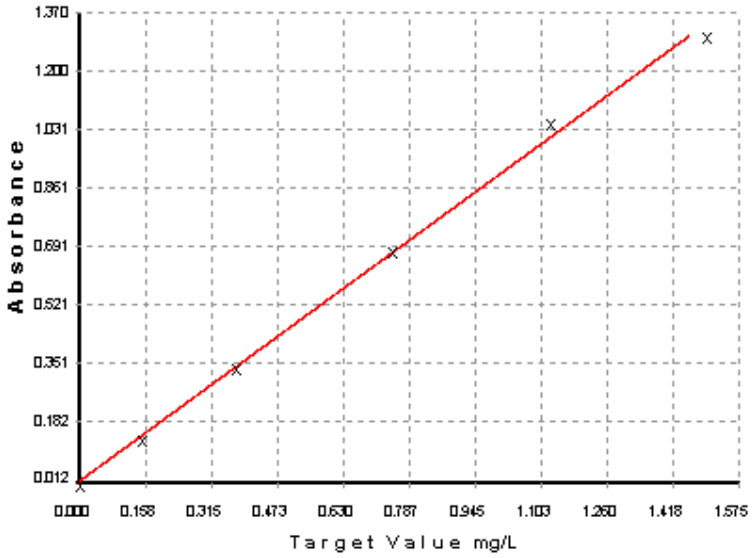
Nitrite-N

Calibration Chart

Type	Absorbance	Calc mg/L	Target mg/L	% Error
S1	0.0118	-0.0097	0.0000	
S90	0.1449	0.1414	0.1500	-5.75
S91	0.3524	0.3769	0.3750	0.50
S92	0.6862	0.7557	0.7500	0.76
S93	1.0580	1.1777	1.1250	4.69
S94	1.3050	1.4580	1.5000	-2.80
S0	0.0230	0.0031	0.0000	

Polynomial Order:	1
Correlation Coefficient:	0.9986
Carryover(%):	0.9
Calibration equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured absorbance
a =:	-2.304389E-002
b =:	1.134894E+000
Date & Time:	2020-10-27 15:01:21

Calibration Graph



Test Results

Cup	Type	ID	Result	Units	QC Pro	Raw Data	Auto Dil.	Man Dil.	User	Time/Date
	S1	Standard 1	0.0118			0.011775			ERR	2020-10-27 14:53:35
	S90	Standard 90	0.1449			0.144882			ERR	2020-10-27 14:54:52
	S91	Standard 91	0.3524			0.352375			ERR	2020-10-27 14:56:10
	S92	Standard 92	0.6862			0.686191			ERR	2020-10-27 14:57:27
	S93	Standard 93	1.0580			1.058048			ERR	2020-10-27 14:58:45
	S94	Standard 94	1.3050			1.305000			ERR	2020-10-27 15:00:03
	S0	Standard 0	0.0230			0.023039			ERR	2020-10-27 15:01:21
	CCV	CCV .75	0.7392	mg/L		0.671662			ERR	2020-10-27 15:02:38
	CCB	CCB	-0.0025	mg/L		0.018127			ERR	2020-10-27 15:03:57
3	U1	ICV NO2	0.7160	mg/L		0.651222			ERR	2020-10-27 15:05:15
4	U2	ICV NO3 TOXN	-0.0054	mg/L		0.015515			ERR	2020-10-27 15:06:33
5	U3	ICB NO2 NO3 TOXN	-0.0106ELL	mg/L		0.010959			ERR	2020-10-27 15:07:51
6	U4	201027A Blk	-0.0118ELL	mg/L		0.009885			ERR	2020-10-27 15:09:10
7	U5	201027A LCS NO2	0.7353	mg/L		0.668178			ERR	2020-10-27 15:10:28
8	U6	201027A LCS NO3 TOXN	-0.0047	mg/L		0.016196			ERR	2020-10-27 15:11:47
9	U7	201027A LCSD NO3 TOXN	-0.0110ELL	mg/L		0.010583			ERR	2020-10-27 15:13:04
10	U8	1 ppm NO2	1.0151	mg/L		0.914775			ERR	2020-10-27 15:14:23
11	U9	1 ppm NO3	-0.0036	mg/L		0.017154			ERR	2020-10-27 15:15:03
16	U14	BA20863W12	-0.0102ELL	mg/L		0.011347			ERR	2020-10-27 15:17:18
	CCV	CCV .75	0.7909	mg/L		0.717189			ERR	2020-10-27 15:19:38
	CCB	CCB	-0.0031	mg/L		0.017535			ERR	2020-10-27 15:22:02
17	U15	BA20864W06	-0.0107ELL	mg/L		0.010868			ERR	2020-10-27 15:24:27
18	U16	BA20865W06	-0.0111ELL	mg/L		0.010532			ERR	2020-10-27 15:26:51
	CCV	CCV .75	0.7354	mg/L		0.668296			ERR	2020-10-27 15:29:15

CCB	CCB	-0.0041	mg/L	0.016734	ERR	2020-10-27 15:31:33

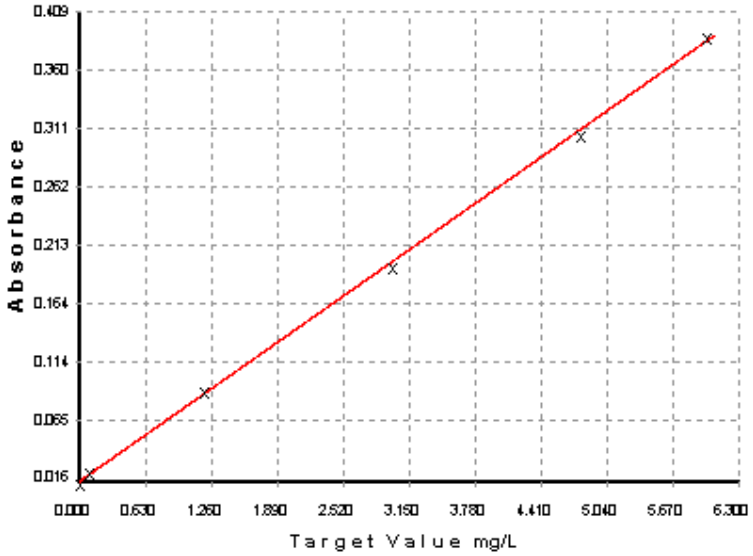
TOXN

Calibration Chart

Type	Absorbance	Calc mg/L	Target mg/L	% Error
S1	0.0162	-0.0185	0.0000	
S90	0.0252	0.1287	0.1000	28.71
S91	0.0933	1.2390	1.2000	3.25
S92	0.1978	2.9452	3.0000	-1.83
S93	0.3074	4.7323	4.8000	-1.41
S94	0.3895	6.0733	6.0000	1.22
S0	0.0196	0.0369	0.0000	

Polynomial Order:	1
Correlation Coefficient:	0.9998
Carryover(%):	0.9
Calibration equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured absorbance
a =:	-2.829601E-001
b =:	1.631754E+001
Date & Time:	2020-10-27 15:53:45

Calibration Graph



Test Results

Cup	Type	ID	Result	Units	QC Pro	Raw Data	Auto Dil.	Man Dil.	User	Time/Date
	S1	Standard 1	0.0162			0.016209			ERR	2020-10-27 15:40:27
	S90	Standard 90	0.0252			0.025229			ERR	2020-10-27 15:42:41
	S91	Standard 91	0.0933			0.093270			ERR	2020-10-27 15:44:54
	S92	Standard 92	0.1978			0.197834			ERR	2020-10-27 15:47:08
	S93	Standard 93	0.3074			0.307352			ERR	2020-10-27 15:49:21
	S94	Standard 94	0.3895			0.389536			ERR	2020-10-27 15:51:34
	S0	Standard 0	0.0196			0.019604			ERR	2020-10-27 15:53:45
	CCV	CCV	3.1339	mg/L		0.209397			ERR	2020-10-27 15:55:57
	CCB	CCB	0.0109	mg/L		0.018009			ERR	2020-10-27 15:58:09
4	U2	ICV NO3 TOXN	3.1179	mg/L		0.208417			ERR	2020-10-27 16:00:22
5	U3	ICB NO2 NO3 TOXN	0.0012	mg/L		0.017417			ERR	2020-10-27 16:02:37
6	U4	201027A Blk	0.1596	mg/L		0.027120			ERR	2020-10-27 16:04:52
8	U6	201027A LCS NO3 TOXN	3.0253	mg/L		0.202741			ERR	2020-10-27 16:07:06
9	U7	201027A LCSD NO3 TOXN	3.1456	mg/L		0.210114			ERR	2020-10-27 16:09:19
11	U9	1 ppm NO3	1.0284	mg/L		0.080362			ERR	2020-10-27 16:11:34
12	U10	BA20656W36 MS	8.5980	mg/L		0.070032	x10.0000		ERR	2020-10-27 16:47:45
12	U10	BA20656W36 MS	7.9696	mg/L		0.505749			ERR	2020-10-27 16:13:48
13	U11	BA20656W36 MSD	8.5883	mg/L		0.069973	x10.0000		ERR	2020-10-27 16:48:41
13	U11	BA20656W36 MSD	7.9974	mg/L		0.507452			ERR	2020-10-27 16:16:03
14	U12	BA20716W08 pH7.56	0.0863	mg/L		0.022627			ERR	2020-10-27 16:16:42
15	U13	BA20718W11 pH 6.91	0.0313	mg/L		0.019261			ERR	2020-10-27 16:17:46
	CCV	CCV	3.1543	mg/L		0.210647			ERR	2020-10-27 16:18:42
	CCB	CCB	-0.0090	mg/L		0.016786			ERR	2020-10-27 16:19:39
16	U14	BA20863W12	7.1340	mg/L		0.061060	x10.0000		ERR	2020-10-27 16:49:37
16	U14	BA20863W12	7.1736	mg/L		0.456963			ERR	2020-10-27 16:20:35
17	U15	BA20864W06	0.0133	mg/L		0.018154			ERR	2020-10-27 16:21:31
18	U16	BA20865W06	8.5036	mg/L		0.069454	x10.0000		ERR	2020-10-27 16:50:33
18	U16	BA20865W06	8.2594	mg/L		0.523506			ERR	2020-10-27 16:22:27
	CCV	CCV	3.1902	mg/L		0.212847			ERR	2020-10-27 16:23:23
	CCB	CCB	-0.0026	mg/L		0.017180			ERR	2020-10-27 16:24:20
	CCV	CCV	2.9157	mg/L		0.196026				2020-10-27 16:45:52
	CCB	CCB	0.0139	mg/L		0.018193				2020-10-27 16:46:48
	CCV	CCV	3.0072	mg/L		0.201634				2020-10-27 16:51:29
	CCB	CCB	-0.0041	mg/L		0.017088				2020-10-27 16:52:25

Nitrate-N

Test Results

Cup	Type	ID	Result	Units	QC Pro	Raw Data	Auto Dil.	Man Dil.	User	Time/Date
4	U2	ICV NO3 TOXN	3.1233	mg/L		0.000000			ERR	2020-10-27 16:00:22
4	U2	ICV NO3 TOXN				0.000000			ERR	2020-10-27 16:00:22
5	U3	ICB NO2 NO3 TOXN	0.0118	mg/L		0.000000			ERR	2020-10-27 16:02:37
5	U3	ICB NO2 NO3 TOXN				0.000000			ERR	2020-10-27 16:02:37
6	U4	201027A Blk	0.1714	mg/L		0.000000			ERR	2020-10-27 16:04:52
6	U4	201027A Blk				0.000000			ERR	2020-10-27 16:04:52
8	U6	201027A LCS NO3 TOXN	3.0299	mg/L		0.000000			ERR	2020-10-27 16:07:06
8	U6	201027A LCS NO3 TOXN				0.000000			ERR	2020-10-27 16:07:06
9	U7	201027A LCSD NO3 TOXN	3.1566	mg/L		0.000000			ERR	2020-10-27 16:09:19
9	U7	201027A LCSD NO3 TOXN				0.000000			ERR	2020-10-27 16:09:19
11	U9	1 ppm NO3	1.0319	mg/L		0.000000			ERR	2020-10-27 16:11:34
11	U9	1 ppm NO3				0.000000			ERR	2020-10-27 16:11:34
16	U14	BA20863W12	7.1441	mg/L		0.000000			ERR	2020-10-27 16:49:37
16	U14	BA20863W12				0.000000			ERR	2020-10-27 16:49:37
17	U15	BA20864W06	0.0240	mg/L		0.000000			ERR	2020-10-27 16:21:31
17	U15	BA20864W06				0.000000			ERR	2020-10-27 16:21:31
18	U16	BA20865W06	8.5147	mg/L		0.000000			ERR	2020-10-27 16:50:33
18	U16	BA20865W06				0.000000			ERR	2020-10-27 16:50:33

Nitrite

High Point @ 1.5 mg/L
0.2463 mL NO2 Inorganic Ventures lot N2-NOX672889-40759 exp: 05/01/20
50 mL DI Water

CCV @ 0.75 mg/L
0.1232 mL NO2 Inorganic Ventures lot N2-NOX672889-40759 exp: 05/01/20
50 mL DI Water

ICV/LCS @ 0.73 mg/L
0.120 mL NO2 Inorganic Ventures lot M2-NOX660562-40468 exp: 08/25/21
50 mL DI Water

1 mg/L NO2
400 uL of High point and 200 uL of DI made directly into a sample cup

Prep 10/15/20
Exp 10/29/20
ERR

Nitrate/TOXN

High Point @ 6 mg/L
0.300 mL NO3 O2Si lot 880117-4-39577 exp: 2/21/20
50 mL DI Water

CCV @ 3.0 mg/L
0.150 mL NO3 O2Si lot 880117-4-39577 exp: 2/21/20
50 mL DI Water

ICV/LCS @ 3.0 mg/L
0.150 mL NO3 Inorganic Ventures lot P2-NOX675324-49391 exp: 02/14/23
50 mL DI Water

1 mg/L NO3
100 uL of High point and 500 uLof DI made directly into a sample cup

MS @ 0.73 mg/L NO2 and 2.5 mg/L NO3
0.120 mL NO2 Inorganic Ventures lot M2-NOX660562-40468 exp: 08/25/21and
0.125 mL NO3 Inorganic Ventures lot P2-NOX675324-49391 exp: 02/14/23
Final volume 50 mL of sample

Prep 10/15/20
Exp 10/29/20
ERR

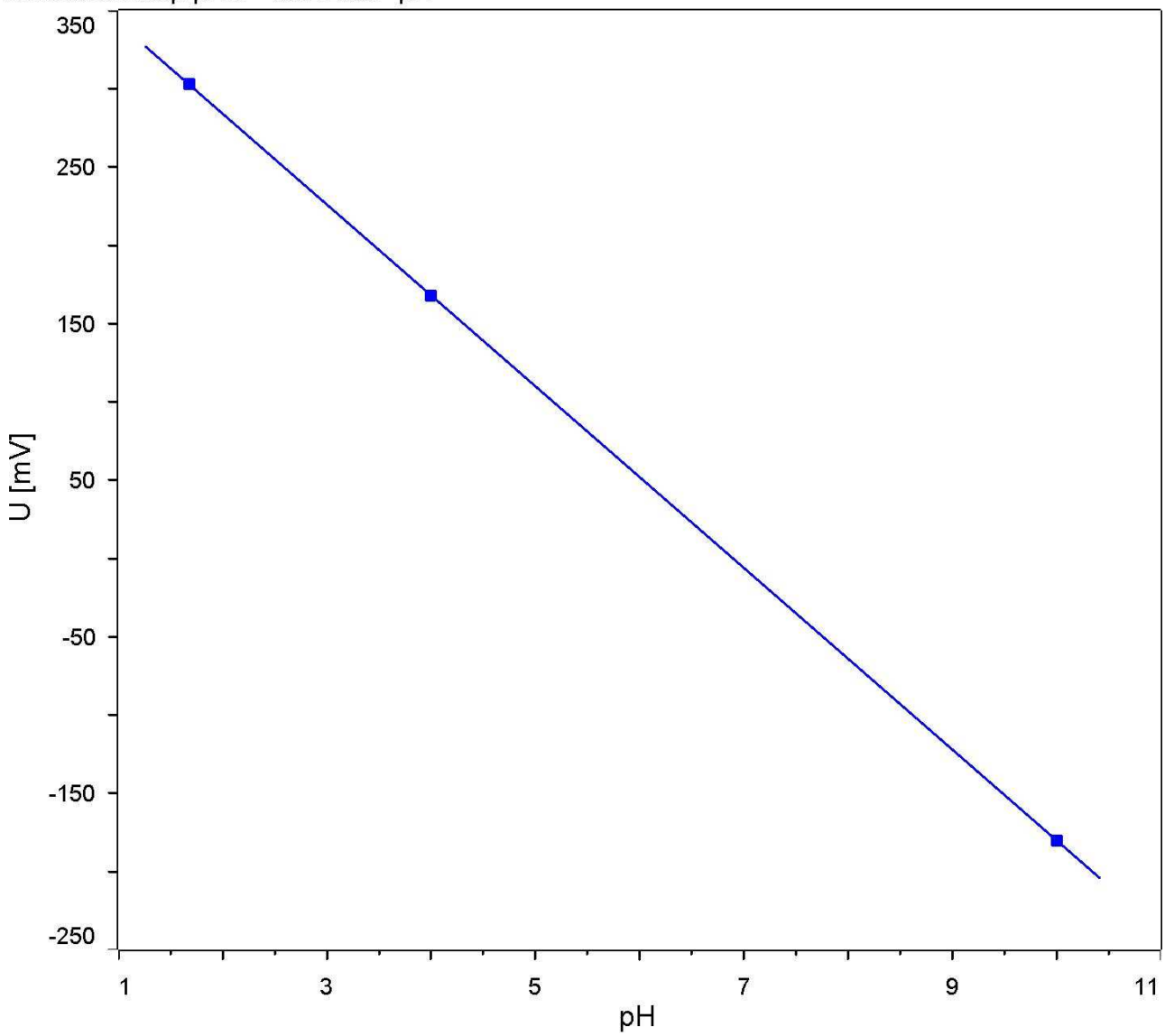
Timao Calibration Curve

2020-10-28 17:10:29

Calculations

Buffer 7	7.02	
Formula	'MEAS pH.EME'	
MEAS pH.EME	7.0204	
Slope	99.80	
Formula	'Calibration loop pH.SLO'	
Calibration loop pH.SLO	99.8	
pH(as)	6.89	
Formula	'Calibration loop pH.ENP'	
Calibration loop pH.ENP	6.894	
Res19	19.9	°C
Formula	'CAL MEAS pH.ETE'	
CAL MEAS pH.ETE	19.8587	

Calibration loop pH.1 - CAL LOOP pH



Metrohm 814/809 Titrando Data

Sample ID	Analysis Date/Time	Method	Titration Volume (to 8.3)	Titration Volume (total)	OH	CO3	HCO3	Total Alk	Unit	Sample Vol	N	Batch	Initials
BA20718W10	2020-10-28 21:48:02 UTC-8	Alkalinity	0.000	1.968	0.00	0.00	78.72	78.72	mg/L	25 mL	0.0200	201028A	AR
BA20716W07	2020-10-28 21:43:00 UTC-8	Alkalinity	0.000	2.880	0.00	0.00	115.20	115.20	mg/L	25 mL	0.0200	201028A	AR
201028A LCSD	2020-10-28 20:38:37 UTC-8	Alkalinity	0.330	6.210	0.00	26.40	222.00	248.40	mg/L	25 mL	0.0200	201028A	AR
201028A LCS	2020-10-28 20:29:09 UTC-8	Alkalinity	0.522	6.242	0.00	41.76	207.92	249.68	mg/L	25 mL	0.0200	201028A	AR
201028A BLK	2020-10-28 20:26:13 UTC-8	Alkalinity	0.000	0.056	0.00	0.00	2.24	2.24	mg/L	25 mL	0.0200	201028A	AR

Tiamo Alkalinity Standard Prep

Prep'd By (Initials): AR

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Unit	Conc	Lot Number - QA Number	Prep/Opened	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc
Sulfuric Acid (H2SO4)	J.T.Baker	NA	NA	**167828**	**NA**	**NA**	PURCHASED	NA	NA	NA
0.10N Sulfuric Acid (H2SO4)	J.T.Baker	Normality	0.1N	**167828**	**03/06/20**	**03/06/21**	3ml	1L	DI	0.10N
0.02N Sulfuric Acid (H2SO4)	J.T.Baker	Normality	0.02N	**167828**	**03/06/20**	**03/06/21**	200mL	1L	DI	0.02N
Inorganic Spike(NaHCO3)	BDH	NA	NA	**19K0856189**	**04/09/20**	**NA**	PURCHASED	NA	NA	NA
Inorganic Spike Solution	BDH	Milligrams/Liters	250mg/L	**1575C510**	**07/27/20**	**01/27/21**	3.5g	500mL	DI	250mg/L
Standarizing Solution(NaCO3)	J.T.Baker	Normality	1N	**223443**	**07/02/20**	**03/11/21**	PURCHASED	NA	NA	NA

Tiamo Electroconductivity Standard Prep

Prep'd By (Initials): AR

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Units	Conc	Lot Number	Prep/Opened	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc. Range (µg/mL)
EC Spike(KCl)	Mallinckrodt AR	Na	NA	**6858 KHMV**	**NA**	**NA**	PURCHASED	NA	NA	NA
EC Spike Solution	Mallinckrodt AR	Moles/Conductivity	0.01M	**6858 KHMV**	**04/23/20**	4/23/21	0.7456g	1L	DI	1412umos
EC Daily LCS Solution	Mallinckrodt AR	Moles/Conductivity	0.0070824M	**6858 KHMV**	05/25/20	5/25/21	0.5280g	1L	DI	1000umos
Storage Solution EC Probe	APPL	NA	NA	NA	NA	NA	NA	NA	DI	NA

Tiamo pH Buffer Reference Standards

Prep Date: Daily

Exp Date: Daily

Prep'd By (Initials): AR **AR**

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Units	pH	Lot Number - QA Number	Opened	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (µg/mL)
pH 1.68 Buffer	VWR	pH Units	1.68	**1006705**	**07/02/20**	**11/27/20**	NA	NA	NA	NA
pH 4.00 Buffer	VWR	pH Units	4	**1901A35-40706**	**01/19/19**	**01/13/21**	NA	NA	NA	NA
pH 10.01 Buffer	VWR	pH Units	10.01	**1004B81**	**07/02/20**	**10/12/21**	NA	NA	NA	NA
pH 7.00 Buffer	Ricca	pH Units	7	**1912A15**	**07/02/20**	**12/01/21**	NA	NA	NA	NA

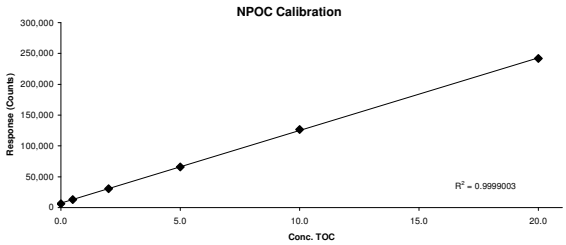
TOTAL ORGANIC CARBON

Method: WetChem | Units mg/L | Instrument: Tic Toc

Analyte: TOC | QCG: 201028A

Analyist: AAR | Final Volume: 40mL

Date	Time	Appl ID	[TOC]	Raw	% Recovery
06/11/20	0:01	QC blank	0.00	6172	
06/11/20	0:41	Ical 1	0.50	13120	
06/11/20	1:19	Ical 2	2.00	30622	
06/11/20	1:58	Ical 3	5.00	66151	
06/11/20	2:37	Ical 4	10.00	126505	
06/11/20	3:16	Ical 5	20.00	241922	
06/11/20	18:06	ICB	0.00	6336	
06/11/20	18:46	ICV	4.99	65817	99.8%



Date	Time	Appl ID	DF	Raw Result	SubSample Amount	Filter Blank Subtract	Calc Conc	Result	Range (mg/L)	QC True	% Recovery
2020-10-29	12:49 AM	CCV	1	56304	40mL	0.000	4.467	4.47	0.05	5.00	89.3%
2020-10-29	01:29 AM	CCB	1	3002	40mL	0.000	0	0.00	0.00		
2020-10-29	02:08 AM	201028A LCS	1	59206	40mL	0.000	4.713	4.71	0.00	5.00	94.3%
2020-10-29	02:48 AM	201028A LCSD	1	56071	40mL	0.000	4.447	4.45	0.03	5.00	88.9%
2020-10-29	03:29 AM	BA20544W05 DF 2	1	141223	40mL	0.000	11.844	11.84	0.07		
2020-10-29	04:07 AM	BA20716W06	1	88350	40mL	0.000	7.356	7.36	0.04		
2020-10-29	04:46 AM	BA20718W09	1	65014	40mL	0.000	5.375	5.38	0.01		
2020-10-29	05:24 AM	BA20710W10	1	4417	40mL	0.000	0.232	0.23	0.04		
2020-10-29	06:00 AM	BA20710W10 DUP	1	4140	40mL	0.000	0.208	0.21	0.01		
2020-10-29	06:36 AM	CCV	1	58193	40mL	0.000	4.627	4.63	0.01	5.00	92.5%
2020-10-29	07:16 AM	CCB	1	2917	40mL	0.000	0	0.00	0.00		

Name of Final Standard **TOC Calibration Curve** **Prep'd By (Initials)** **AR**

Prep Date **06/11/20**

Exp Date **06/11/21**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	20 uL	40 mL	**DI Water**	0.5 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	100 uL	40 mL	**DI Water**	2 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	250 uL	40 mL	**DI Water**	5 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	500 uL	40 mL	**DI Water**	10 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	1000 uL	40 mL	**DI Water**	20 ppm

Name of Final Standard **ICV (TOC)** **Prep'd By (Initials)** **AR**

Prep Date **06/11/20**

Exp Date **06/11/21**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1000 PPM ICV TOC Intermediate	APPL Inc.	Prep: 2/11/19	1000 mg/L	**6465171-49409**	**06/30/21**	500 uL	40mL	**DI Water**	10 ppm

Name of Final Standard **CCV (TOC)** **Prep'd By (Initials)** **AR**

Prep Date **See Data**

Exp Date **1 year**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**6465171-49409**	**06/30/21**	200 uL	40 mL	**DI Water**	5 ppm

Name of Final Standard **TOC_LCS/LCSD** **Prep'd By (Initials)** **AR**

Prep Date **See Data**

Exp Date **1 year**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	ULTRA Scientific	IQC-106-5	1000 mg/L	**6465171-49409**	**06/30/21**	200 uL	40 mL	**DI Water**	5 ppm

Name of Final Standard **TOC_MS/MSD** **Prep'd By (Initials)** **AR**

Prep Date **See Data**

Exp Date **1 year**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	ULTRA Scientific	IQC-106-5	1000 mg/L	**6465171-49409**	**06/30/21**	200 uL	40 mL	**sample**	5 ppm

908 North Temperance Ave. ∇ Clovis, CA 93611 ∇ Phone 559-275-2175 ∇ Fax 559-275-4422

Certification Number: CA1312
NELAP Certification number: CA00046
DoD-ELAP Certificate number: 4064.01

Data Validatable Report

December 9, 2020

AECOM
1001 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

Attn: Brooke Gottmeier

Title: Report of Data: Case 93659 Addendum

Project: 60571032 CV18F0126 Red Hill Fuel Storage, HI

Contract #: Prime contract # for DoD: NAVY CLEAN N62742-17-F-1800, CV18F0126
Subcontract: 18S-22209-HI27

Dear Ms. Gottmeier:

Two water samples were received October 8, 2020. Written results for the requested analyses are being provided on this December 9, 2020.

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Addendum 12/9/2020: The low point for motor oil was included in the ICAL. The motor oil ICAL model was changed from average response factor to linear regression. The samples were calculated against the new curve and the data is reported in this package. These results supercedes all data for this quarter.

If you have any questions or require further information, please contact your APPL Project Manager, Libby Cheeseborough, libby@applinc.com, at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC and DoD QSM. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.

Sharon Dedmon SD for PM

Paula McCartney, Laboratory Director
APPL, Inc.

PM/lac
Enclosure
cc: File

Data Validation Package
for
60571032 CV18F0126 Red Hill Fuel Storage
APPL SDG 93659 Addendum
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CASE NARRATIVE

Case Narrative

ARF: 93659 Addendum

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

Sample Receipt Information:

Two water samples were received October 8, 2020, at 3.5°C. The sample group was assigned Analytical Request Form (ARF) number 93659.

Sample Preparation and Analysis Information:

For the EPA 8015B analysis, the sample was extracted according to EPA method 3520C. The sample extracts were silica gel cleaned according to APPL's SOP CLN004 and placed on hold.

The blanks are reported as U to the LOD for extracts that calculate below and 160ppb which is ½ the LOQ and follows QSM 5.3. Samples that calculate between 150ppb and 160 ppb are compared to the cgram of the blank. If it is similar to the blank pattern, the sample is reported as U to the LOD as specified in the EPA 8015B method. If the pattern is not the same as the blank, the sample is reported at that level as a J value.

Only the portion of the injection log relative to these samples is included. A full sequence log is available upon request. Measurement uncertainty can be reported upon request.

Analytical Exceptions, Deviations and Abnormalities.

EPA 8015: None

SDG	Received	Client ID	APPL ID	Collected DateTime	Matrix	Method	Method Description
93659	10/08/20	ERH1154	BA19639	10/07/20 10:15:00 AM	WATER	8011	EPA 8011
93659	10/08/20	ERH1154	BA19639	10/07/20 10:15:00 AM	WATER	EPA 8260B	EPA 8260B BTEX & 1,2-DCA WATER
93659	10/08/20	ERH1154	BA19639	10/07/20 10:15:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
93659	10/08/20	ERH1154	BA19639	10/07/20 10:15:00 AM	WATER	RSK 175	METHANE BY RSK 175
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 353.2	WETLAB 353.2 TOXN- WATER
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	SM3500FeB	Ferrous Iron
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	8011	EPA 8011
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 8260B	EPA 8260B BTEX & 1,2-DCA WATER
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 8270D	EPA 8270D WATER
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	RSK 175	METHANE BY RSK 175
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	SW846 9060A	9060A TOC

APPL Inc.
Abbreviations and Flags

FLAG	DESCRIPTION
#	Recovery or RPD outside control limits
*	Recovery or RPD outside control limits
B	Analyte detected in associated method blank
C1	Reason for correction: wrote incorrect response
C2	Reason for correction: calculated incorrectly
C3	Reason for correction: needs to be rechecked
C4	Reason for correction: data not usable
DO	Diluted out
E	Exceeds linear range
F	Estimated value
G1	Includes a wide range of hydrocarbons which does not match our gasoline standard
G10	Includes a match to hydrocarbon profiles within the range of mineral spirits
G11	Includes a match to hydrocarbon profiles within the range of JP-4
G12	Pattern does not match the gasoline standard; the carbon range for this sample is consistent with JP8
G13	Closely resembles the hydrocarbon profile of aviation gasoline
G14	Analyte concentration may be biased due to carry over
G2	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G3	Includes higher boiling hydrocarbons
G4	Includes dominant peak(s) not indicative of petroleum hydrocarbons
G5	Is mainly dominant peak(s) not indicative of petroleum hydrocarbons
G6	Contains recognizable contaminant peak(s) which has been removed from quantitation
G7	Is mainly a match to hydrocarbons within the range of gasoline
G8	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G9	Includes hydrocarbons within the range of kerosene
J	Estimated value
M	Matrix effect
MI1	Manual integration: integration does not follow baseline
MI2	Manual integration: non-target peak interference
MI3	Manual integration: to split a peak that was integrated as one peak by the computer.
MI4	Manual integration: to integrate a split peak
MI5	Manual integration: the whole peak or part of the peak was not integrated
MI6	Manual integration: computer integrated wrong peak
MI7	Manual integration: other – (See case narrative)
MDL	Method detection limit
ND	Not detected
NT	Non-target
Q	Acceptance criteria not met
T1 I	Includes wide range of hydrocarbons not indicative of diesel
T1 M	Is mainly wide range of hydrocarbons not necessarily indicative of diesel
T2 I	Includes lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T2 M	Is mainly lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T3 I	Includes higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T3 M	Is mainly higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T4 I	Includes dominant peak(s) not indicative of hydrocarbons
T4 M	Is mainly dominant peak(s) not indicative of hydrocarbons
T5	Contains recognizable contaminant peak(s) which has been removed from quantitation
T6	Is mainly a match to hydrocarbons within range of diesel fuel
T7	Closely resembles the boiling point hydrocarbon profile consistent with diesel fuel
T8	Includes a match to hydrocarbon profiles within range of diesel and kerosene fuel
T9 I	Includes non-diesel hydrocarbons within boiling point range of diesel fuel
T9 M	Is mainly non-diesel hydrocarbons within boiling point range of diesel fuel
U	Not detected
Y	Percent difference between primary and confirmation column > 40%

SAMPLE RECORDS MANAGEMENT

CHAIN OF CUSTODY,

ARF, CRF, AND

CLIENT COMMUNICATION

APPL - Analysis Request Form 93659

Client: **AECOM**
Address: **1001 Bishop Street, Suite 1600**
Honolulu, HI 96813
Attn: **Brooke Gottmeier**
Phone: **808-954-4536** Fax: **808-523-8950**
Job: **60571032 CV18F0126 Red Hill Fuel Storage**
PO #: **18S-22209-HI27 PO# 102604**
Chain of Custody (Y/N): **Y** # **100**
RAD Screen (Y/N): **Y** pH (Y/N): **Y**
Turn Around Type: **1 WEEK**

Received by: **AAR**
Date Received: **10/08/20** Time: **10:10**
Delivered by: **FEDEX**
Shuttle Custody Seals (Y/N): **Y** Time Zone: **-10**
Chest Temp(s): **3.5°C**
Color: **VFRG/B-Red**
Samples Chilled until Placed in Refrig/Freezer: **Y**
Project Manager: **Libby Cheesebor**
QC Report Type: **DVP4DOD/EQUIS/HI**
Due Date: **10/15/20**

Comments:
PM: login and F1s to Margie.Pascua@aecom.com & brooke.gottmeier@aecom.com
AN: 7 day TAT for Form 1s; 21 day TAT for PKG STYLE 1; DOD v5.1; DOD Forms: LOD database
Report MS/MSD/DUPs when AECOM sample used
Wetlab: EPA 300 (NO3,CL,SO4). EPA 353.2 (TOXN).
8260: BTEX & TPH-G only; 8270 SIM: 1-methylnaphthalene, 2-methylnaphthalene & naphthalene only.
TPH D & O both with and w/o SGC, reverse surrogate for the SGC; analyze SGC if detections
RSK: Methane only; 8011: EDB only; $87DC53W5: report phenol
FR: email ftp info to Margie, Stella, trommelfanger@lab-data.com & jcanlas@lab-data.com
EDD: AECOM EQuIS EDD 2.5.3 Red Hill 87DMEE->3535A to brooke.gottmeier@, Margie.Pascua@aecom.com

Sample Distribution:
GC: 2-$8011, 1-$87DC53W5, 1-$87DMEEW5, 1-$DOC53W5LIQ, 1-$SIM53LIQ51
Extractions: 2-_MWE012, 1-_LIQ003, 1-_LIQ005, 1-_MWE2MEE
VOA: 2-$86BTOTXDCAW, 2-$GASBL, 2-$GRO86BW, 2-$RSKMETH
Wetlab: 1-$232W(HCO3,CO3,ALK), 1-$300W, 1-$353TOXNW, 1-$35FE, 1-$TOCW53

Charges:

Invoice To:
ACCOUNTS PAYABLE
1001 Bishop Street, Ste 1600
USAPImaging@aecom.com
mary.basano@aecom.com

	Client ID	APPL ID	Sampled		Analyses Requested
1.	ERH1154	LCSD BA19639W	10/07/20	10:15	$8011, $86BTOTXDCAW, $GASBL, $GRO86BW, $RSKMETH -- See Comments
2.	ERH1155	LCSD BA19640W	10/07/20	10:45	$232W(HCO3,CO3,ALK), $300W, $353TOXNW, $35FE, $8011, $86BTOTXDCAW, $87DC53W5, $87DMEEW5, $DOC53W5LIQ, $GASBL, $GRO86BW, $RSKMETH, $SIM53LIQ51, $TOCW53 -- See Comments

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

93659

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
www.applinc.com
Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 100

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM Phone: 808-954-4536	Company Name: AECOM Phone: 512-419-6709
Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950	Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950
Attn: Brooke Gottmeier	Attn: Sheree Smith
Email: brooke.gottmeier@aecom.com	Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number	Sampler (Print)	Date Shipped: 10/7/20
CV18F0126 / 60571032	GM, JV, RS, EC	Carrier: FedEx
Purchase Order Number	Sampler (Signature)	Waybill No.:
102604		Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC
ERH1154	Trip Blank	10/7/20	10:15	HST	7	X			X	X						X						
ERH1155	RHMW19	10/7/20	1045	HST	19	X			X	X	X	X*	X	X	X	X	X	X	X		X	

*Analyze TPH w/SGT only if TPH-d/o detected.

** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM

TPH-d/o & PAHs need liquid-liquid extraction.

10/7/20

Shuttle Temperature: RS: 3.5/3.5

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other: _____

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
(AECOM)	10/7/20	1400					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
					10/8/20	10/0	

COOLER RECEIPT FORM **ARF: 93659**

1) Project: 60571032 CV18F0126 Red Hill Fuel Storage Date Received: 10/08/20

2) Coolers: Number of Coolers: 1

3) YES Were custody seals present and intact?
How many? 2 Name/Date on seal? SEE BELOW

4) YES Was there a shipping slip? Carrier name: FEDEX

5) Type of packing in cooler: X bubble wrap __ popcorn __ foam X plastic bags __ other
X wet ice __ dry ice __ no ice __ gel ice

6) YES Were cooler temperatures acceptable?

7) Serial number of calibrated thermometer used: R5 CF: +0.0°C

8) Cooler temp(s): In °C. Thermometer Temp / Corrected Temp
1: 3.5/3.5 2: ____ 3: ____ 4: ____ 5: ____ 6: ____
7: ____ 8: ____ 9: ____ 10: ____ 11: ____ 12: ____

Chain of custody:

9) YES Was a chain of custody received?

10) YES Were the custody papers complete/signed in the appropriate places?

Sample Labels:

11) YES Were all sample labels complete (sample ID, date/time of sampling, etc.)?

12) YES Did all container labels agree with custody papers?

Sample Containers:

13) YES Were all containers sealed in separate bags?

14) YES Did all containers arrive in good condition:(unbroken, no leakage, no cracked/broken lids)?

15) YES Were correct containers and preservatives used for the tests indicated?

16) YES Was a sufficient amount of sample sent for tests indicated?

17) Yes Were bubbles present in volatile samples?
If yes, the following were received with air bubbles:
Larger than a pea: BA19639W01-04
Smaller than a pea: BA19640W03-04

Preservation Hold time:

18) Yes Was a sufficient amount of holding time remaining to analyze the samples?

19) Yes Was the pH taken of all non-VOA preserved samples and written on the sample container?

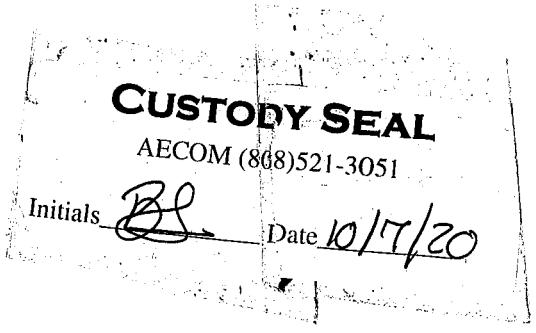
20) Yes Was the pH of acid preserved non-VOA samples < 2?

21) NA Was the pH of the "basic" preserved samples for Cyanide > 12, Sulfide >9, Hexchrom >9?

22) NO Were unpreserved VOA Vials received for VOA Dept analysis?

23) NA If "yes", are the unpreserved VOA vials noted in the ADD TEST FIELD on the ARF?
pH strip lot number: HC908519
Lab notified if pH was not adequate: ____

Notes/Deficiencies:
Custody seal torn while being removed from cooler



Personnel receiving samples: AA Second reviewer: AK
Personnel labeling samples: MS
Project manager notified: AA Date/Time of notification 10/08/20
Name of client notified: ____ Date/Time of notification ____

SAMPLE RESULTS

EPA 8015B TPH LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93659

Sample ID: ERH1155

APPL ID: BA19640

Sample Collection Date: 10/07/20

QCG: #DOC53-201009A2-259388

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/09/20	10/13/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/09/20	10/13/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	97.6	60-142			%	10/09/20	10/13/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	92.0	56-125			%	10/09/20	10/13/20

Quant Method:	LRDOC905.M
Run #:	1003130
Instrument:	Apollo
Sequence:	201003
Dilution Factor:	1
Initials:	LA

Printed: 12/09/20 10:05:57 AM

APPL-F1-SC-NoMC-REG MDLs-DOD

QC FORMS

EPA 8015B-eHL

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/13/20

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201009A2-BLK	Blank	60-142	94.3		56-125	90.0	
201009A2-LCS	Lab Control Spike	60-142	93.1		56-125	94.1	
201009A2-LCSD	Lab Control SpikeD	60-142	92.3		56-125	96.4	
BA19640	ERH1155	60-142	97.6		56-125	92.0	

Comments: Batch: #DOC53-201009A2

EPA 8015B-eH

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/13/20
Matrix:	WATER	Instrument:	Apollo
Blank ID:	201009A2-BLK	Time Analyzed:	1632

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201009A2-BLK	Blank	1003127	10/13/20 1632
201009A2-LCS	Lab Control Spike	1003128	10/13/20 1700
201009A2-LCSD	Lab Control SpikeD	1003129	10/13/20 1728
BA19640	ERH1155	1003130	10/13/20 1756

Comments: Batch: #DOC53-201009A2

Method Blank
EPA 8015B TPH LIQ-LIQ

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201009W-19640 - 259388**
Batch ID: #DOC53-201009A2

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/09/20	10/13/20
BLANK	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/09/20	10/13/20
BLANK	SURROGATE: OCTACOSANE (S)	94.3	60-142			%	10/09/20	10/13/20
BLANK	SURROGATE: ORTHO-TERPHEN	90.0	56-125			%	10/09/20	10/13/20

Quant Method: LRDOC905.
Run #: 1003127
Instrument: Apollo
Sequence: 201003
Initials: LA

GC SC-Blank-REG MDLs-DOD
Printed: 12/09/20 10:06:01 AM

EPA 8015B-eH

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/13/20
Matrix:	WATER	Instrument:	Apollo
LCS ID:	201009A2-LCS	Time Analyzed:	1700

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201009A2-BLK	Blank	1003127	10/13/20 1632
201009A2-LCS	Lab Control Spike	1003128	10/13/20 1700
201009A2-LCSD	Lab Control SpikeD	1003129	10/13/20 1728
BA19640	ERH1155	1003130	10/13/20 1756

Comments: Batch: #DOC53-201009A2

Laboratory Control Spike Recoveries
EPA 8015B TPH LIQ-LIQ

APPL ID: **201009W-19640 LCS - 259388**
Batch ID: #DOC53-201009A2

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1170	1170	93.6	93.6	36-132	0.0	30
OIL (C24-C40)	1250	1190	1230	95.2	98.4	41-113	3.3	30
SURROGATE: OCTACOSANE (S)	75.0	69.8	69.2	93.1	92.3	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	70.6	72.3	94.1	96.4	56-125		

Comments:

Primary	SPK	DUP
Quant Method :	LRDOC905.M	LRDOC905.M
Extraction Date :	10/09/20	10/09/20
Analysis Date :	10/13/20	10/13/20
Instrument :	Apollo	Apollo
Run :	1003128	1003129
Initials :	LA	

Printed: 12/09/20 10:05:54 AM
APPL Standard LCSD

ORGANICS

Calibration Data

TPH Extractables
LRDOC905

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 9/5/2020
Matrix: Water Instrument: Apollo Initials:

		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
			905007.D	905008.D	905009.D	905010.D	905011.D	905012.D									
1	HATML	Diesel (C10-C24)	3520375	2214378	2281032	2080486	2123388	2190073					2401622	23	HATM	0.999	
2	HBTML	Motor Oil (C24-C40)	3878492	1596138	1576848	1430288	1467043	1498633					1907907	51	HBTM	0.999	
3	SA	Ortho-Terphenyl(S)		2811060	2679862	2349319	2368660	2417877					2525355	8.2	SA		
4	SA	Octacosane(S)		2182984	2114335	1968540	2003128	2024026					2058603	4.3	SA		
5																	
6																	
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2.463274

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905007.D Vial: 7
Acq On : 9-5-20 17:04:35 Operator:
Sample : Diesel Motor Oil-1 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:45 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

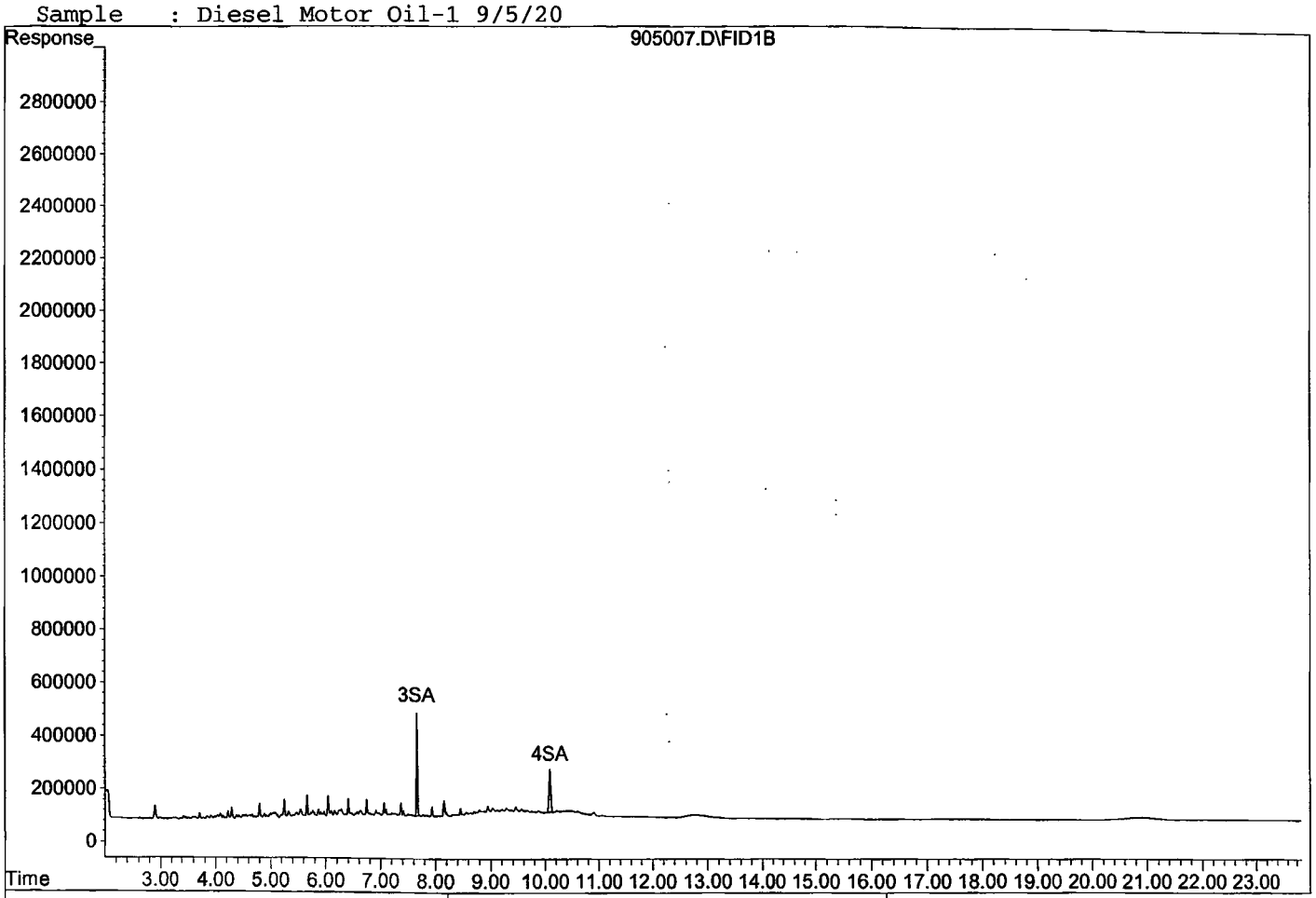
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

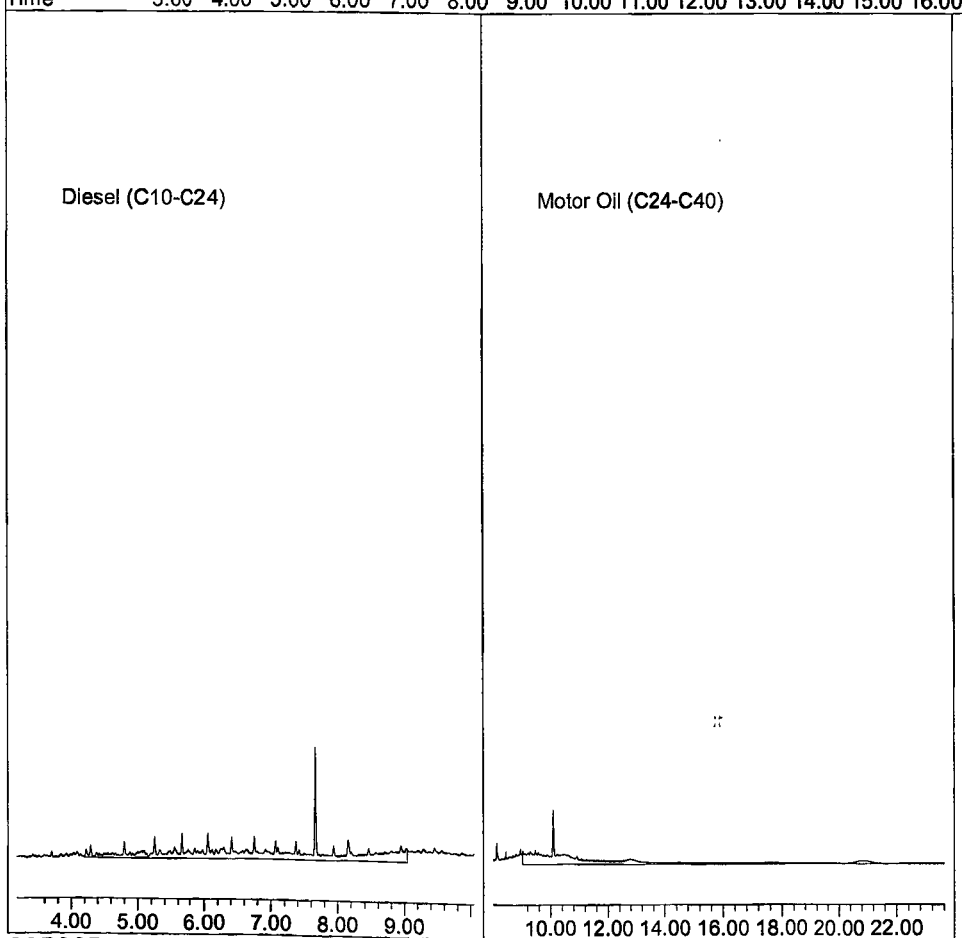
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	4755108	0.977 ppb
Surrogate Spike 30.000	Recovery =		3.26%
4) SA Octacosane(S)	10.09	3753150	0.943 ppb
Surrogate Spike 30.000	Recovery =		3.14%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	70407491	16.135 ppb
2) HBTM Motor Oil (C24-C40)	15.82	77569840	20.150 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905007.D
Sample : Diesel Motor Oil-1 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905008.D Vial: 8
Acq On : 9-5-20 17:32:40 Operator:
Sample : Diesel Motor Oil-2 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:45 2020 Quant Results File: LRDOC905.RES

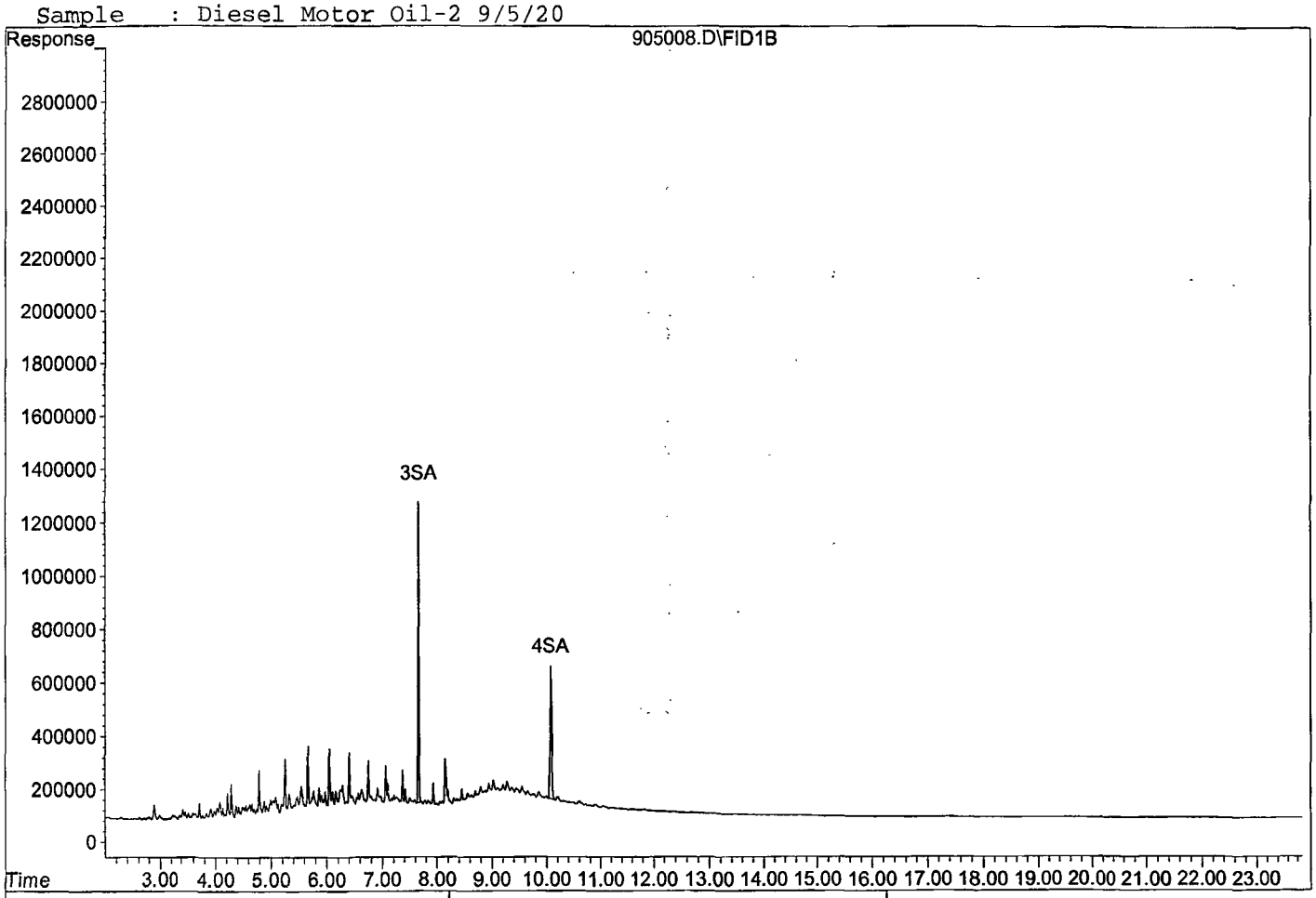
Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

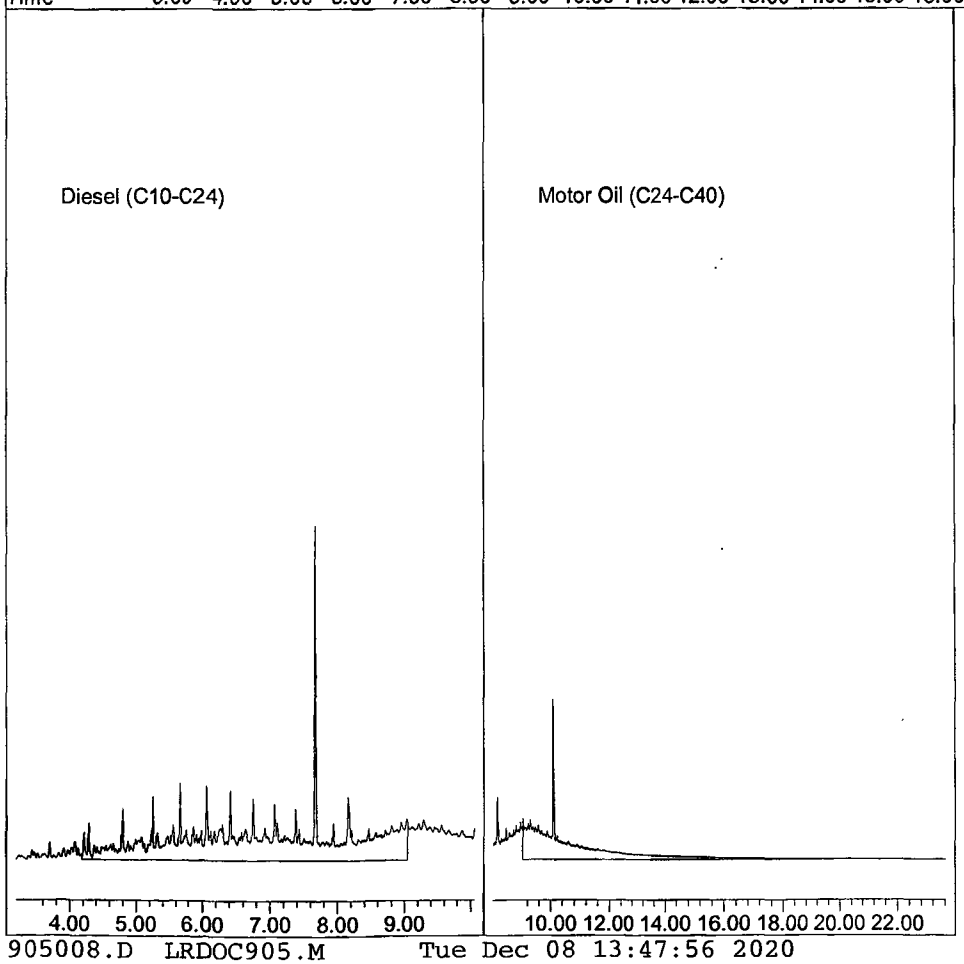
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.67	14055300	2.888	ppb
Surrogate Spike 30.000	Recovery =		9.63%	
4) SA Octacosane(S)	10.08	10914920	2.744	ppb
Surrogate Spike 30.000	Recovery =		9.15%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	221437795	51.175	ppb
2) HBTM Motor Oil (C24-C40)	15.82	159613804	47.973	ppb
Target Compounds				

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905008.D
Sample : Diesel Motor Oil-2 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905009.D Vial: 9
Acq On : 9-5-20 18:00:45 Operator:
Sample : Diesel Motor Oil-3 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:45 2020 Quant Results File: LRDOC905.RES

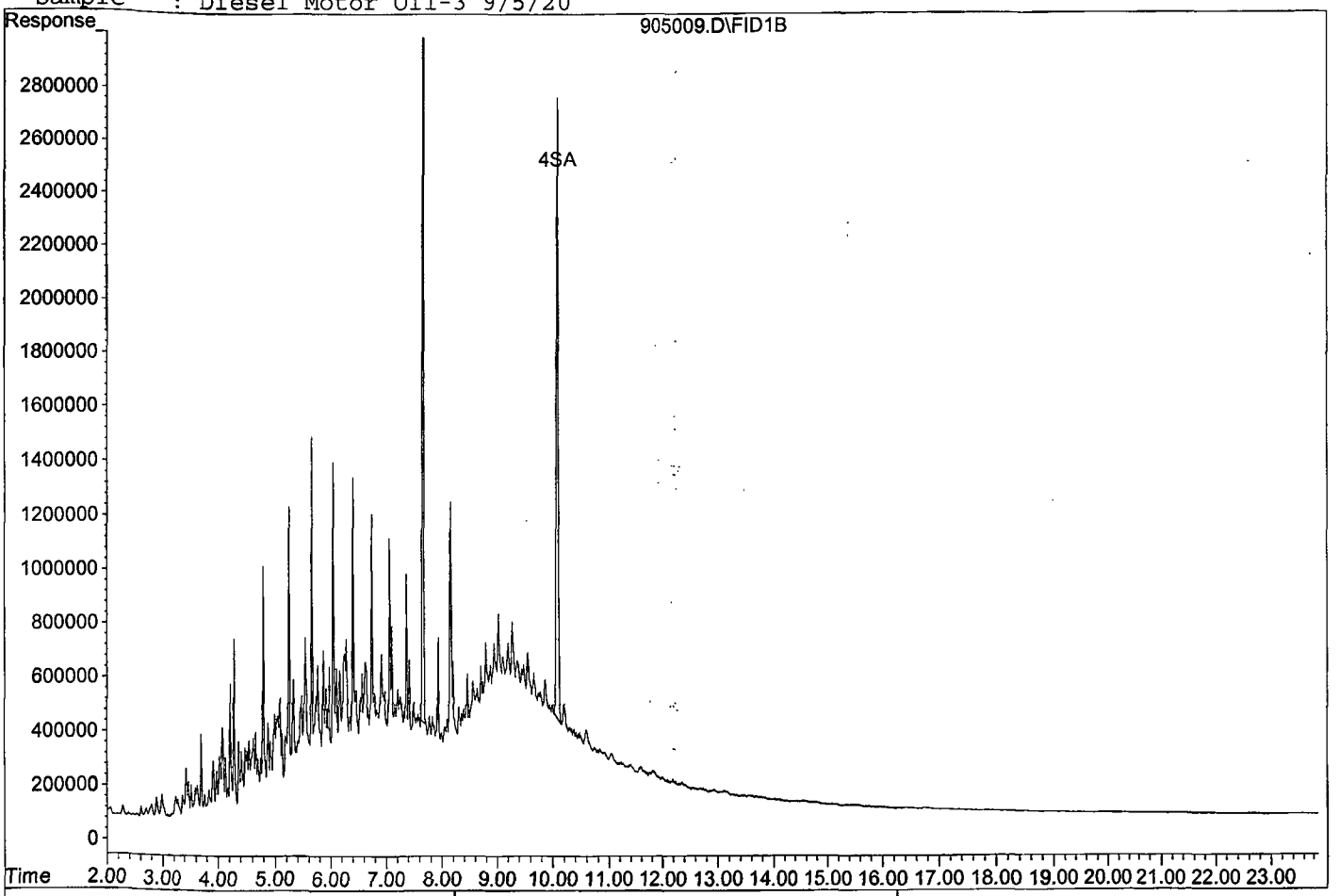
Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

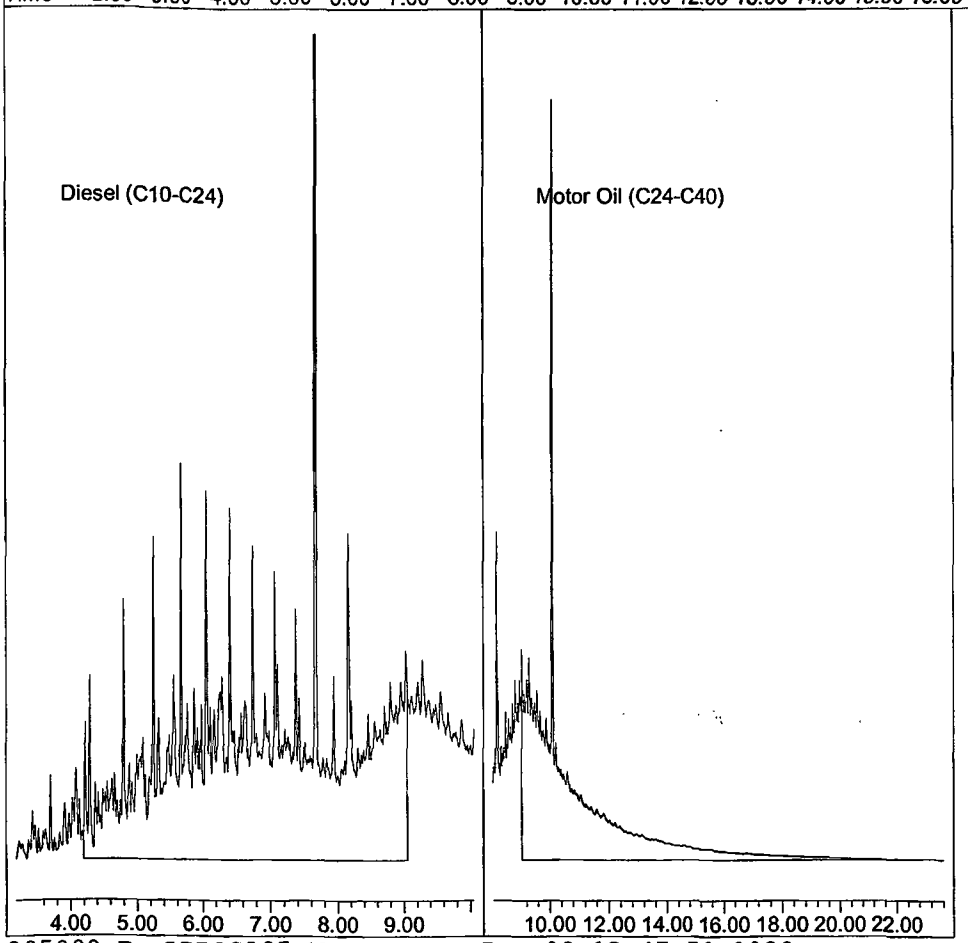
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	66996540	13.765 ppb
Surrogate Spike 30.000	Recovery =		45.88%
4) SA Octacosane(S)	10.09	52858376	13.288 ppb
Surrogate Spike 30.000	Recovery =		44.29%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1140515960	264.403 ppb
2) HBTM Motor Oil (C24-C40)	15.82	788424096	261.220 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905009.D
Sample : Diesel Motor Oil-3 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905010.D Vial: 10
Acq On : 9-5-20 18:28:54 Operator:
Sample : Diesel Motor Oil-4 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:46 2020 Quant Results File: LRDOC905.RES

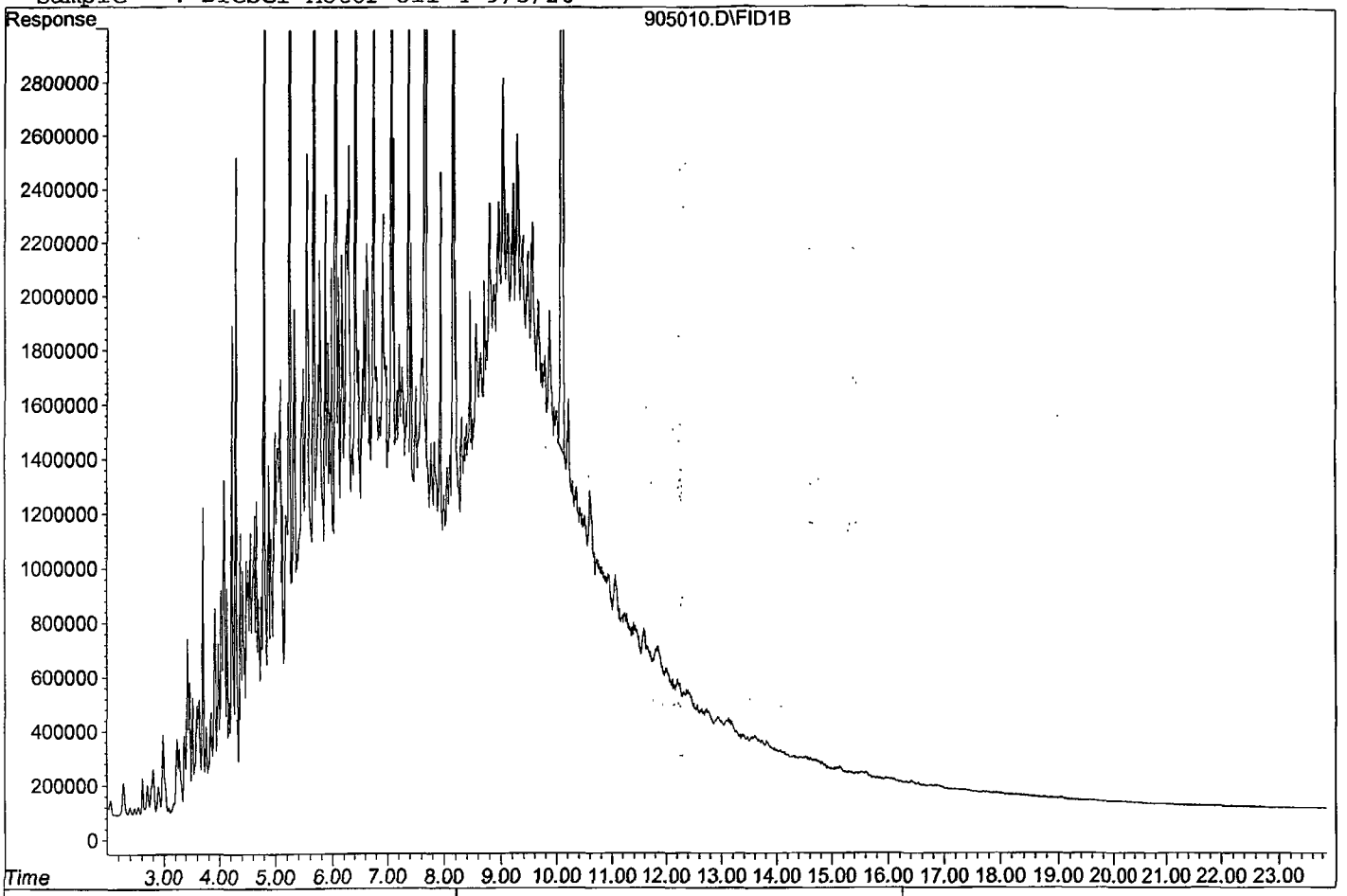
Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

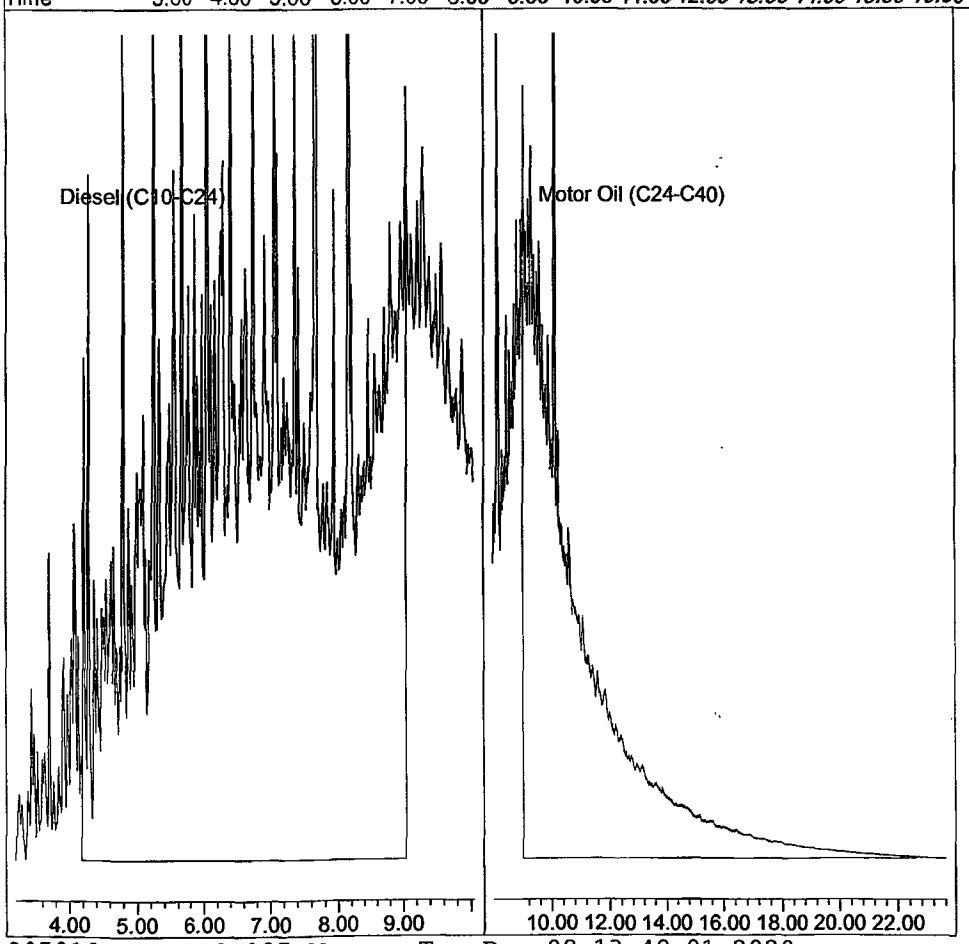
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.67	234931900	48.270	ppb
Surrogate Spike 30.000		Recovery =	160.90%	
4) SA Octacosane(S)	10.11	196853973	49.487	ppb
Surrogate Spike 30.000		Recovery =	164.96%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	4160972977	965.157	ppb
2) HBTM Motor Oil (C24-C40)	15.82	2860576922	963.942	ppb
Target Compounds				

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905010.D
Sample : Diesel Motor Oil-4 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905011.D Vial: 11
Acq On : 9-5-20 18:56:54 Operator:
Sample : Diesel Motor Oil-5 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:46 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

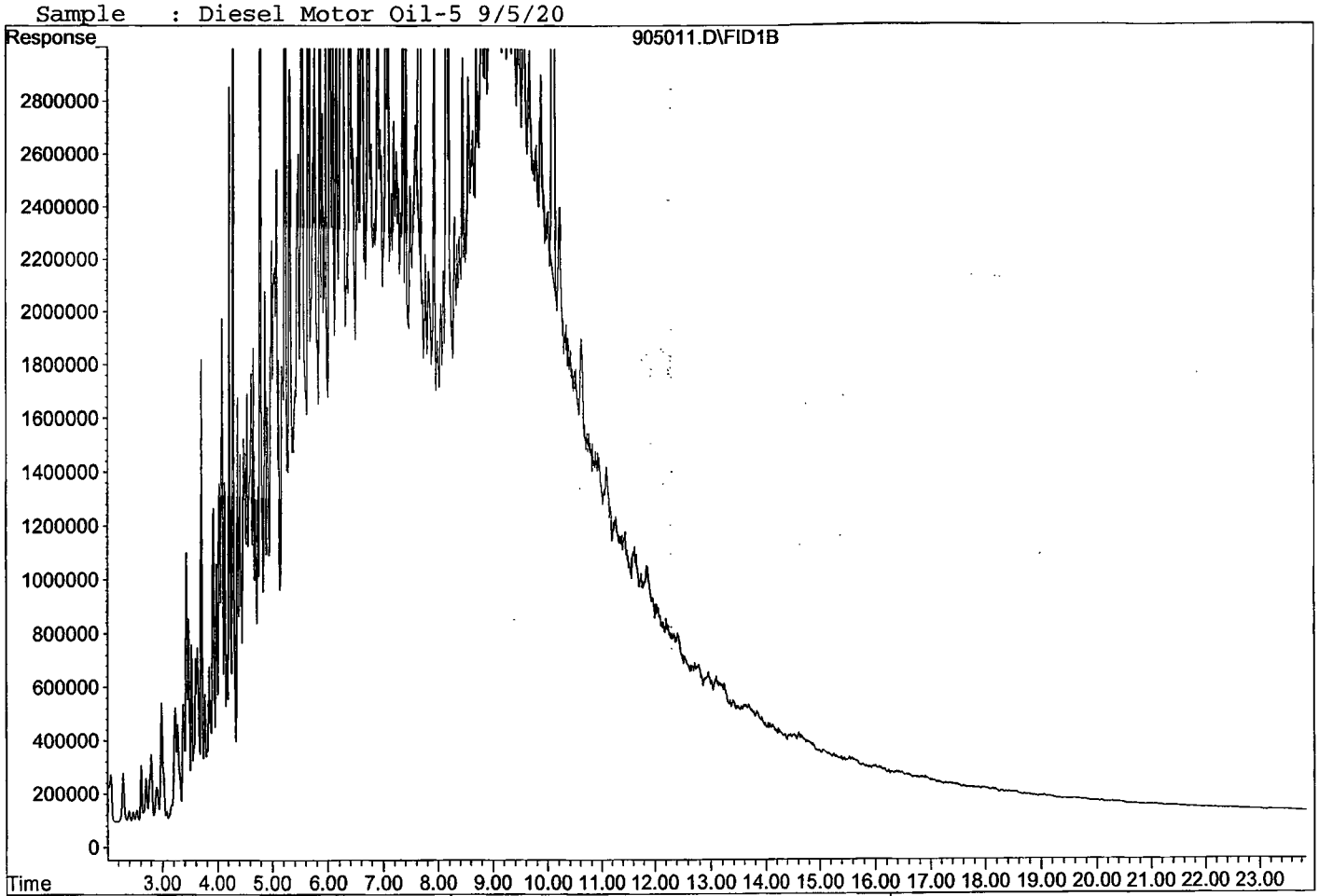
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

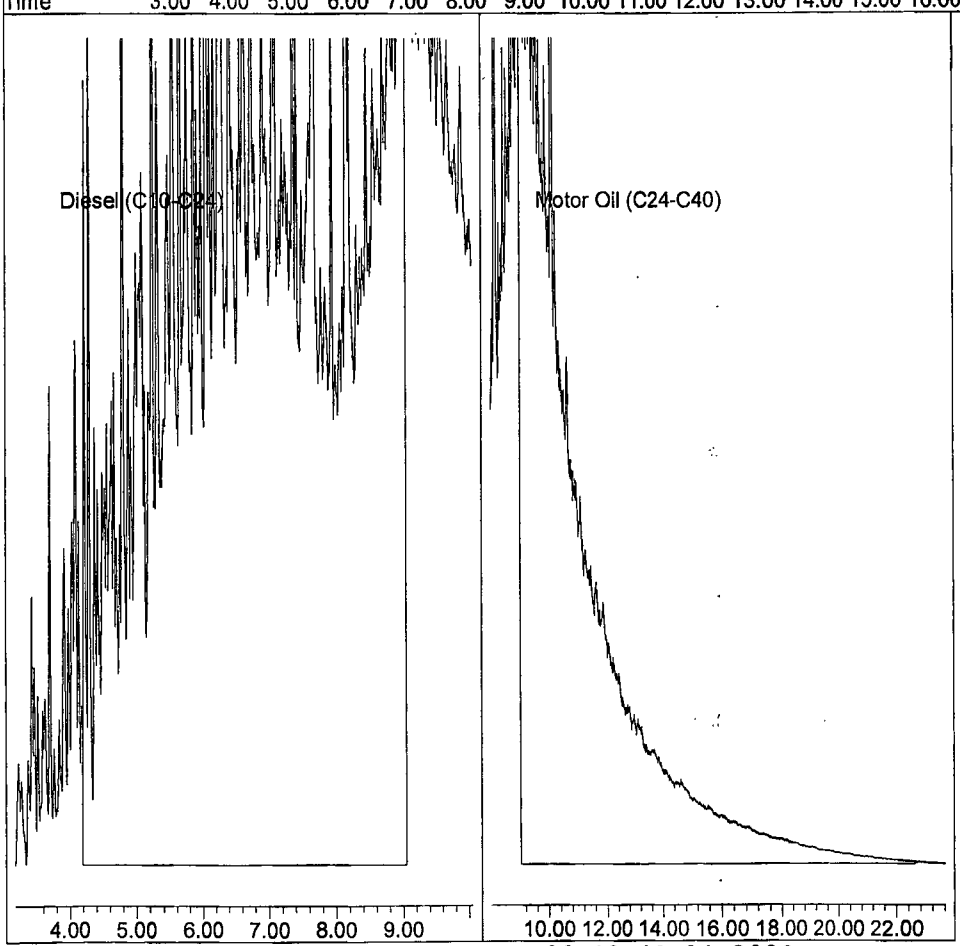
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.67	355298964	73.002	ppb
Surrogate Spike 30.000		Recovery =	243.34%	
4) SA Octacosane(S)	10.12	300469164	75.534	ppb
Surrogate Spike 30.000		Recovery =	251.78%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	6370162550	1477.694	ppb
2) HBTM Motor Oil (C24-C40)	15.82	4401128474	1486.384	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905011.D
Sample : Diesel Motor Oil-5 9/5/20





905011.D LRDOC905.M Tue Dec 08 13:48:04 2020

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905012.D Vial: 12
Acq On : 9-5-20 19:24:55 Operator:
Sample : Diesel Motor Oil-6 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:46 2020 Quant Results File: LRDOC905.RES

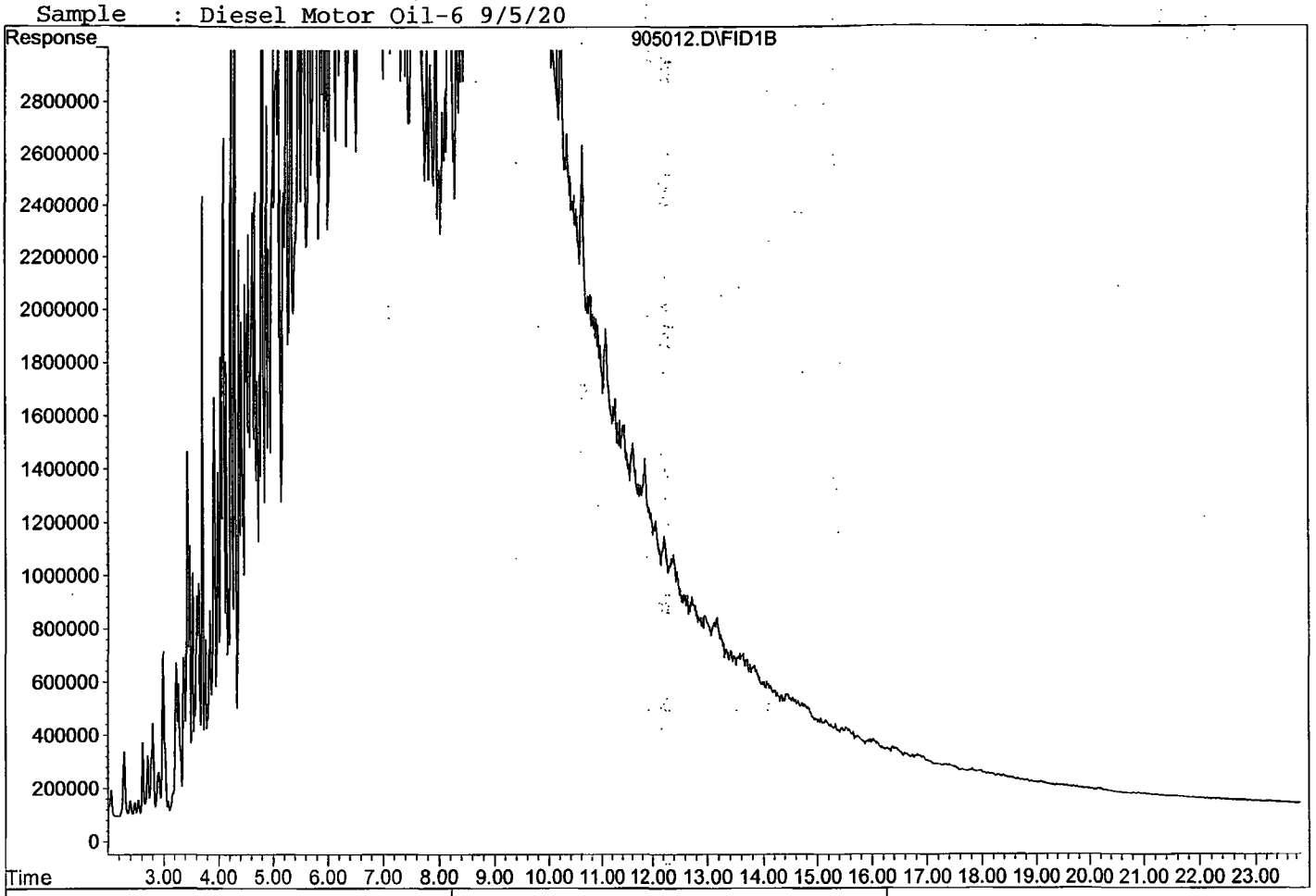
Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

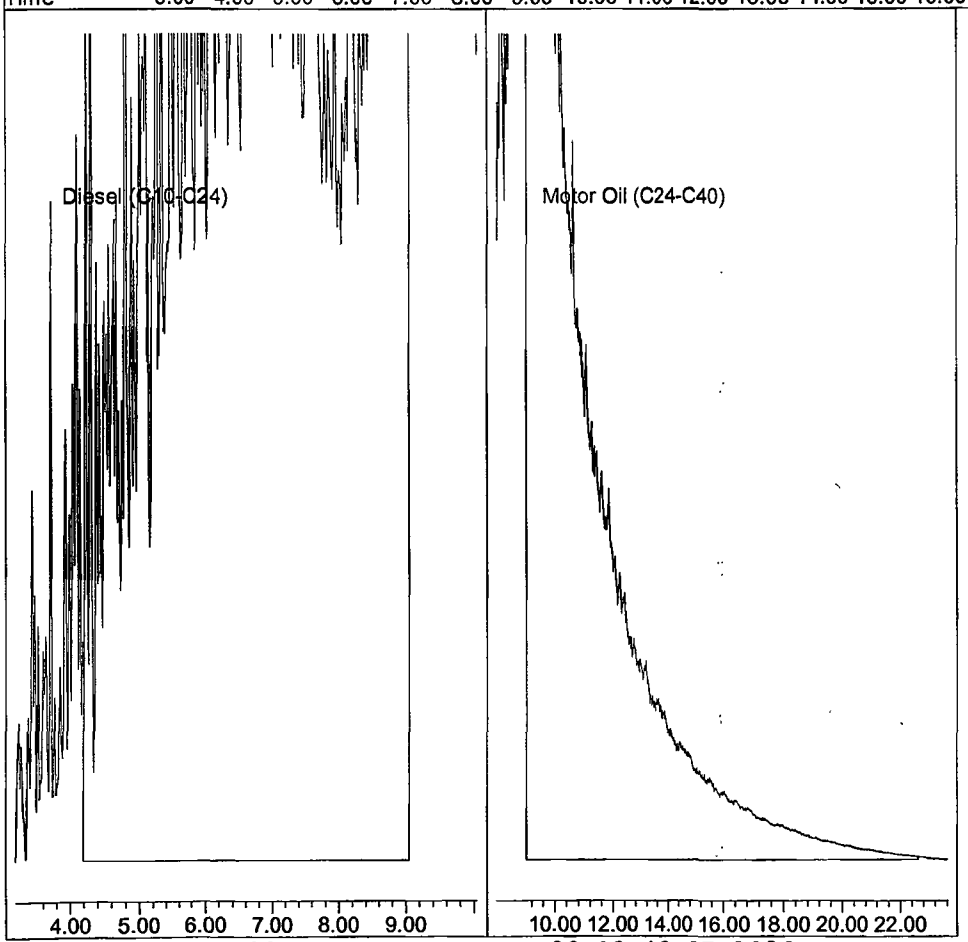
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.68	483575307	99.358	ppb
Surrogate Spike 30.000		Recovery =	331.19%	
4) SA Octacosane(S)	10.11	404805297	101.763	ppb
Surrogate Spike 30.000		Recovery =	339.21%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	8760292310	2032.210	ppb
2) HBTM Motor Oil (C24-C40)	15.82	5994530170	2026.749	ppb
Target Compounds				

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905012.D
Sample : Diesel Motor Oil-6 9/5/20





TPH Extractables
LRDOC905

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 9/5/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 905013.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2384790	0.70	HATML	11
2	HBTM	Motor Oil (C24-C40)	1907910	1737110	9.0	HBTML	16
3							
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40							
		Average			4.9		

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\200905\905013.D Vial: 13
Acq On : 9-5-20 19:52:52 Operator:
Sample : Diesel Motor Oil-SS 7/21/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:58 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:55:54 2020
Response via : Multiple Level Calibration

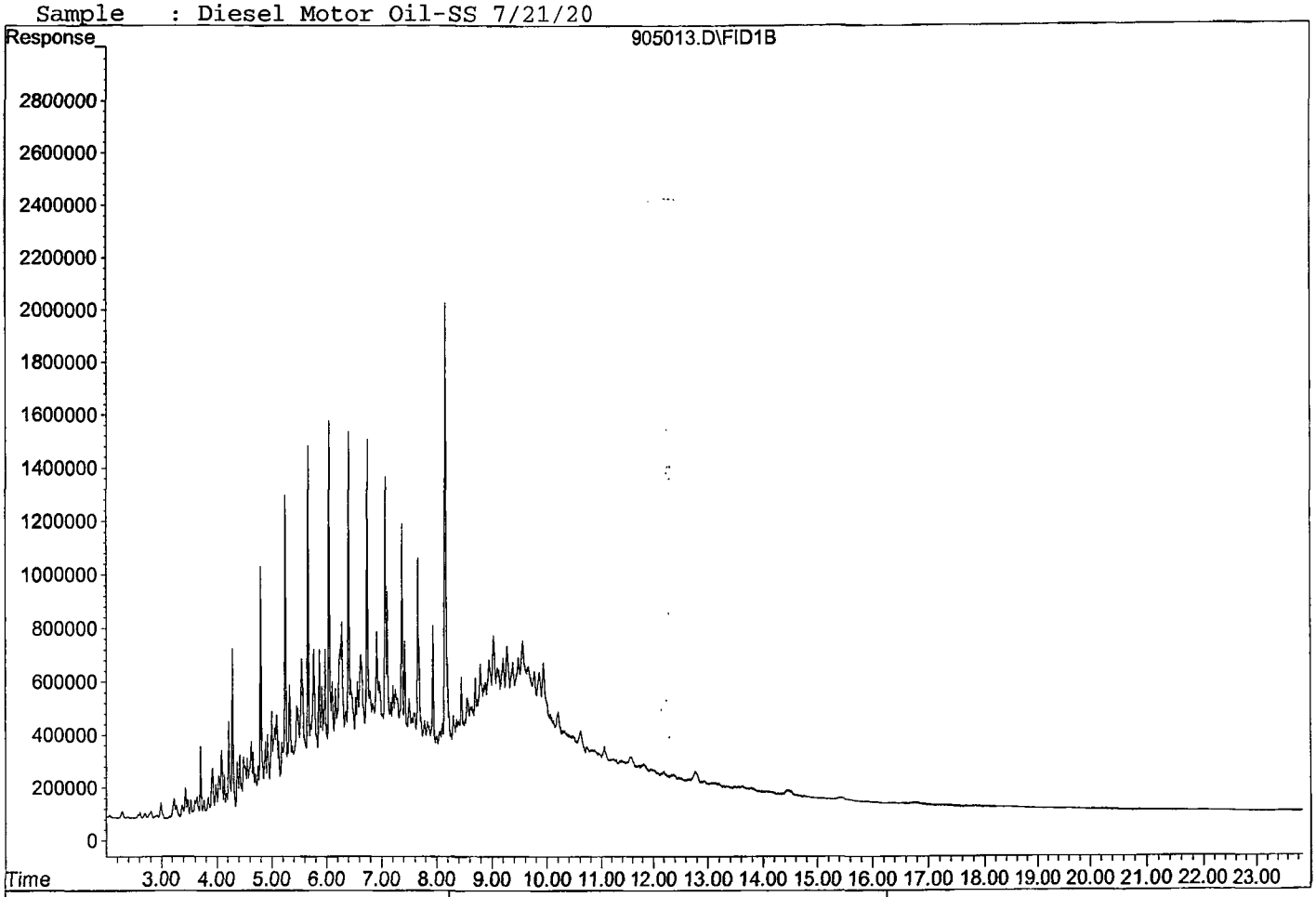
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

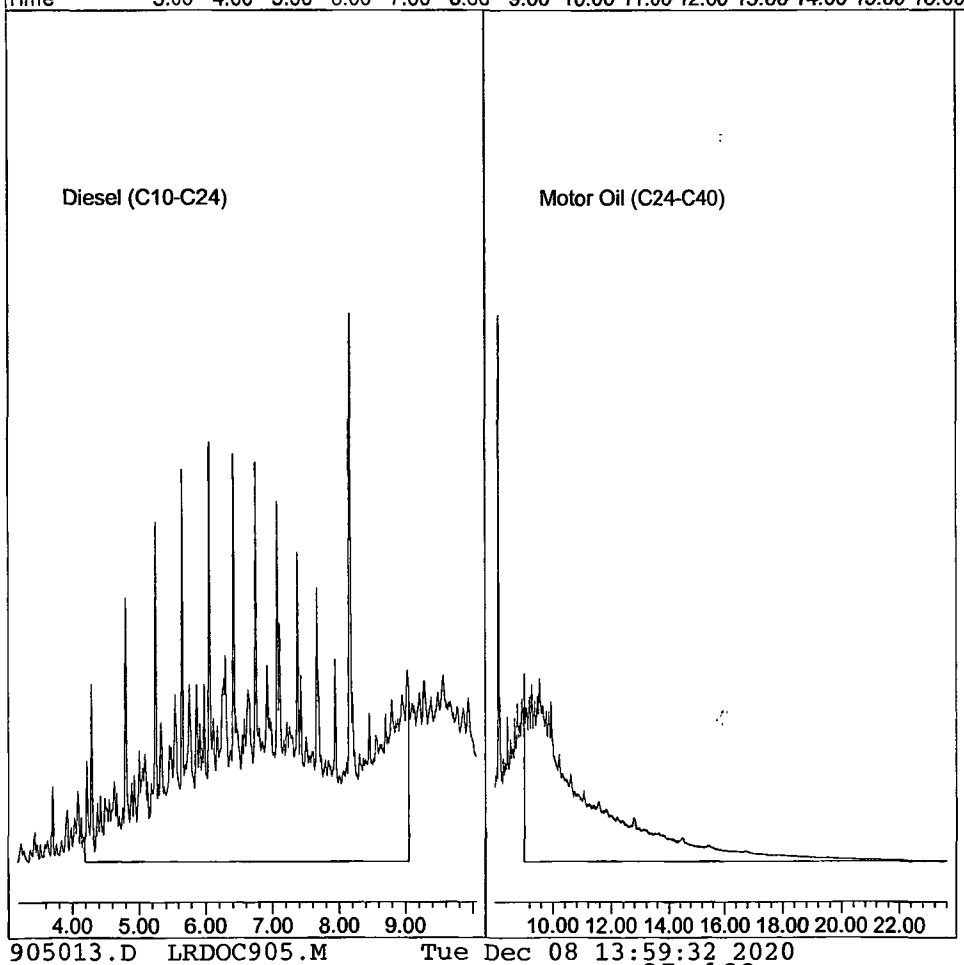
Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
3) SA Ortho-Terphenyl(S)	0.00	0	N.D.	ppb	d
Surrogate Spike 30.000	Recovery	=	0.00%		
4) SA Octacosane(S)	0.00	0	N.D.	ppb	d
Surrogate Spike 30.000	Recovery	=	0.00%		
Target Compounds					
1) HATM Diesel (C10-C24)	6.62	1192394512	277.344	ppb	
2) HBTM Motor Oil (C24-C40)	15.82	868552578	289.389	ppb	

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905013.D
Sample : Diesel Motor Oil-SS 7/21/20





TPH Extractables
LRDOC905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/13/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 1003123.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2265740	5.7	HATML	5.4
2	HBTM	Motor Oil (C24-C40)	1907910	1475100	23	HBTML	2.0
3	SA	Ortho-Terphenyl(S)	2525360	2655760	5.2	SA	
4	SA	Octacosane(S)	2058600	2124130	3.2	SA	
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40							
		Average			9.3		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201003\1003123.D Vial: 23
Acq On : 10-13-20 11:50:40 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 14:01 2020 Quant Results File: LRDOC905.RES

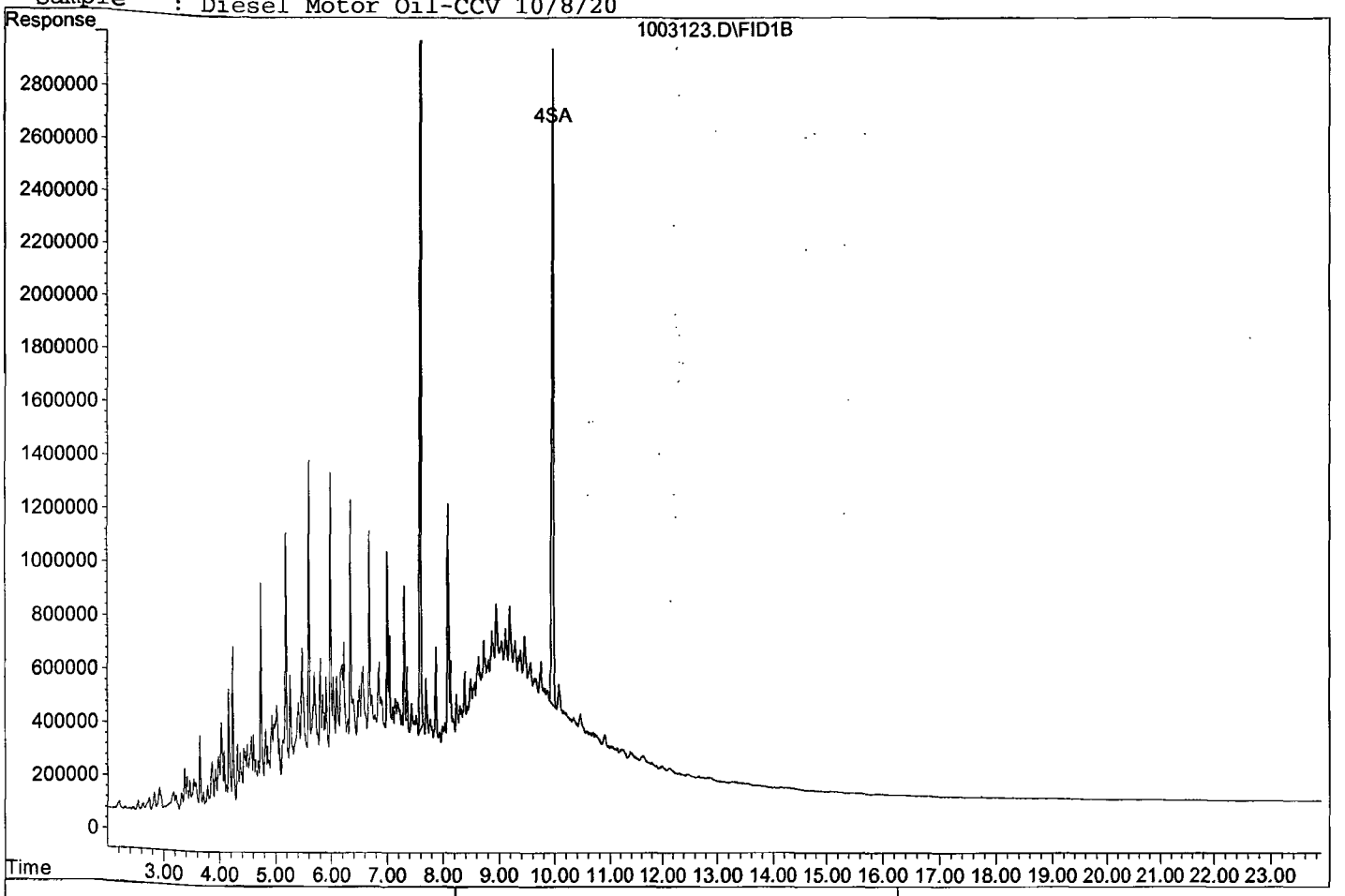
Method : G:\APOLLO\DATA\201003\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:01:38 2020
Response via : Multiple Level Calibration

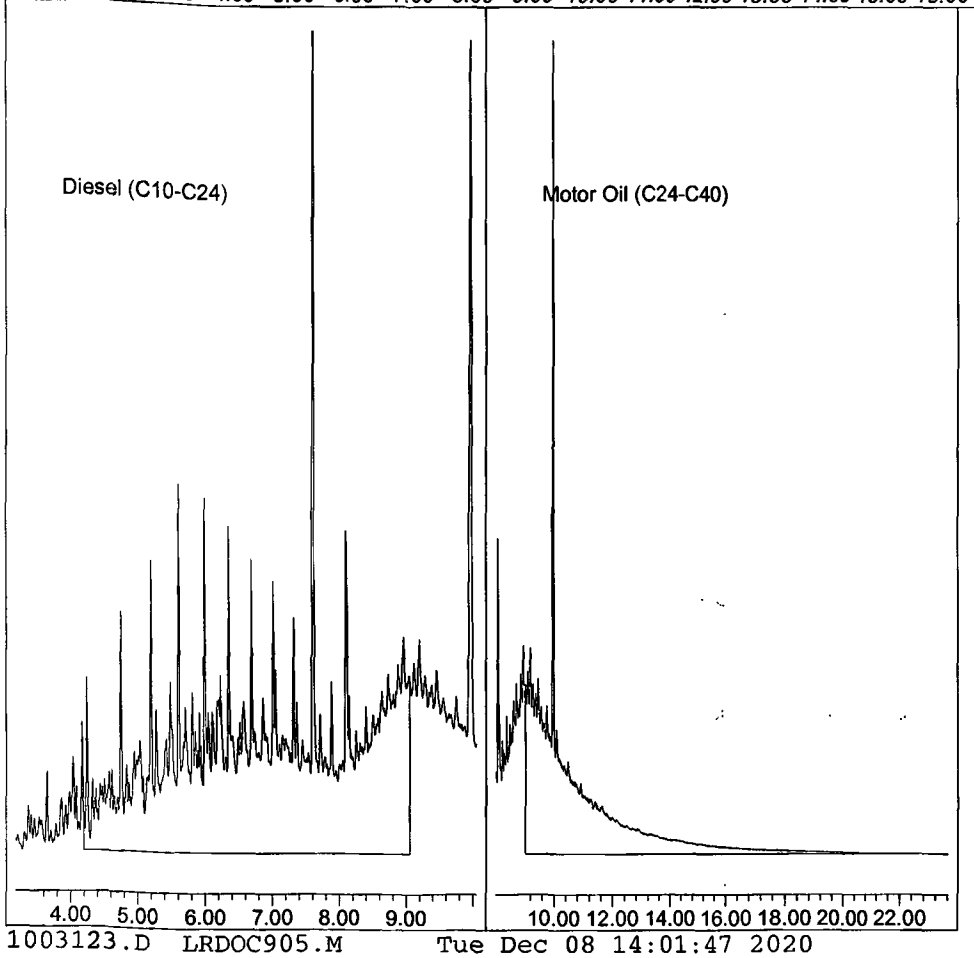
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.60	66394056	13.145 ppb
Surrogate Spike 30.000		Recovery =	43.82%
4) SA Octacosane(S)	9.96	53103295	12.898 ppb
Surrogate Spike 30.000		Recovery =	42.99%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1132870431	263.544 ppb
2) HBTM Motor Oil (C24-C40)	15.82	737548663	244.997 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201003\1003123.D
Sample : Diesel Motor Oil-CCV 10/8/20





1003123.D LRDOC905.M Tue Dec 08 14:01:47 2020

TPH Extractables
LRDOC905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/13/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 1003131.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2233390	7.0	HATML	3.9
2	HBTM	Motor Oil (C24-C40)	1907910	1469050	23	HBTML	2.4
3	SA	Ortho-Terphenyl(S)	2525360	2696480	6.8	SA	
4	SA	Octacosane(S)	2058600	2038600	0.97	SA	
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39							
40							
		Average			9.4		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201003\1003131.D Vial: 31
Acq On : 10-13-20 18:25:00 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 14:04 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\201003\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:01:38 2020
Response via : Multiple Level Calibration

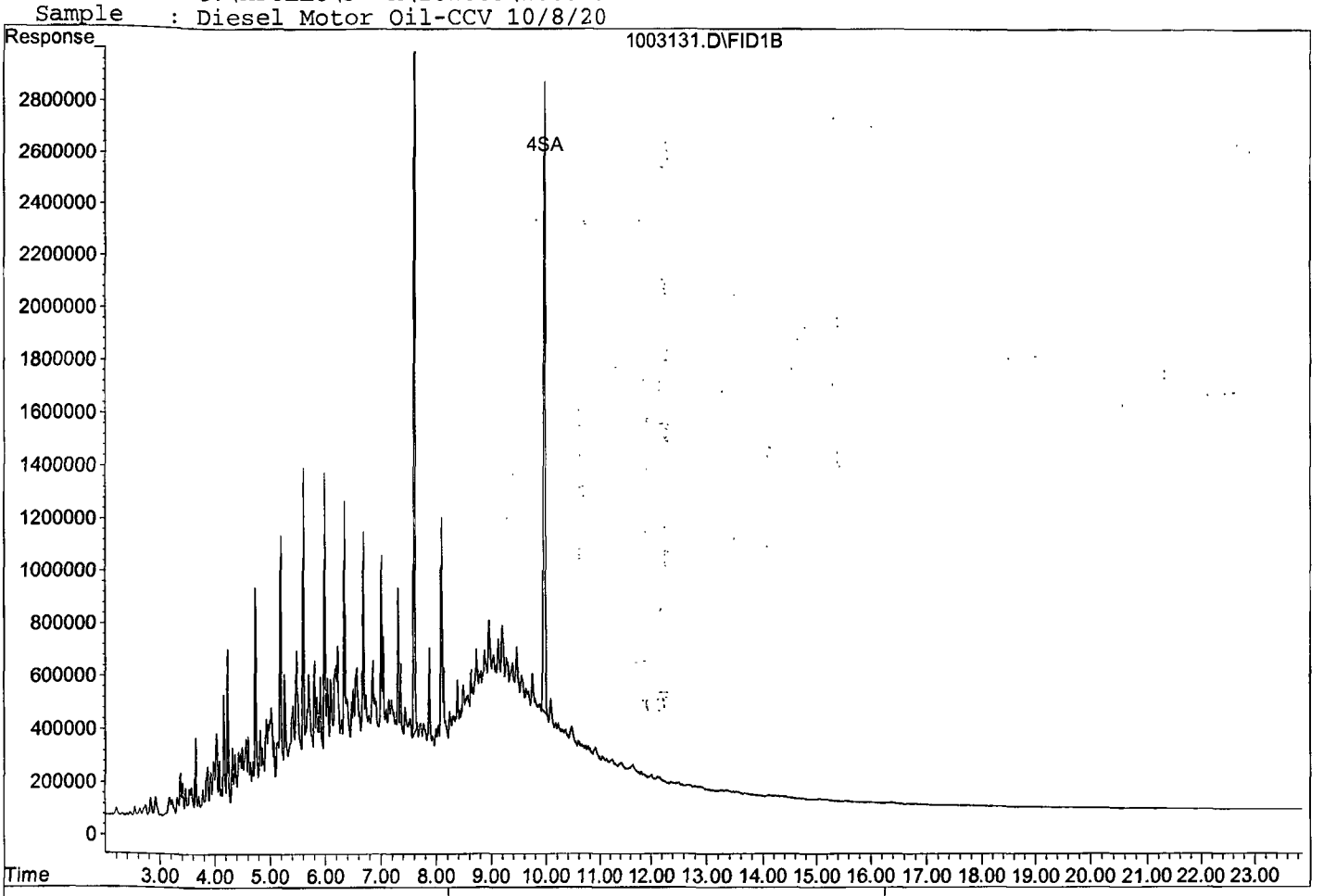
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

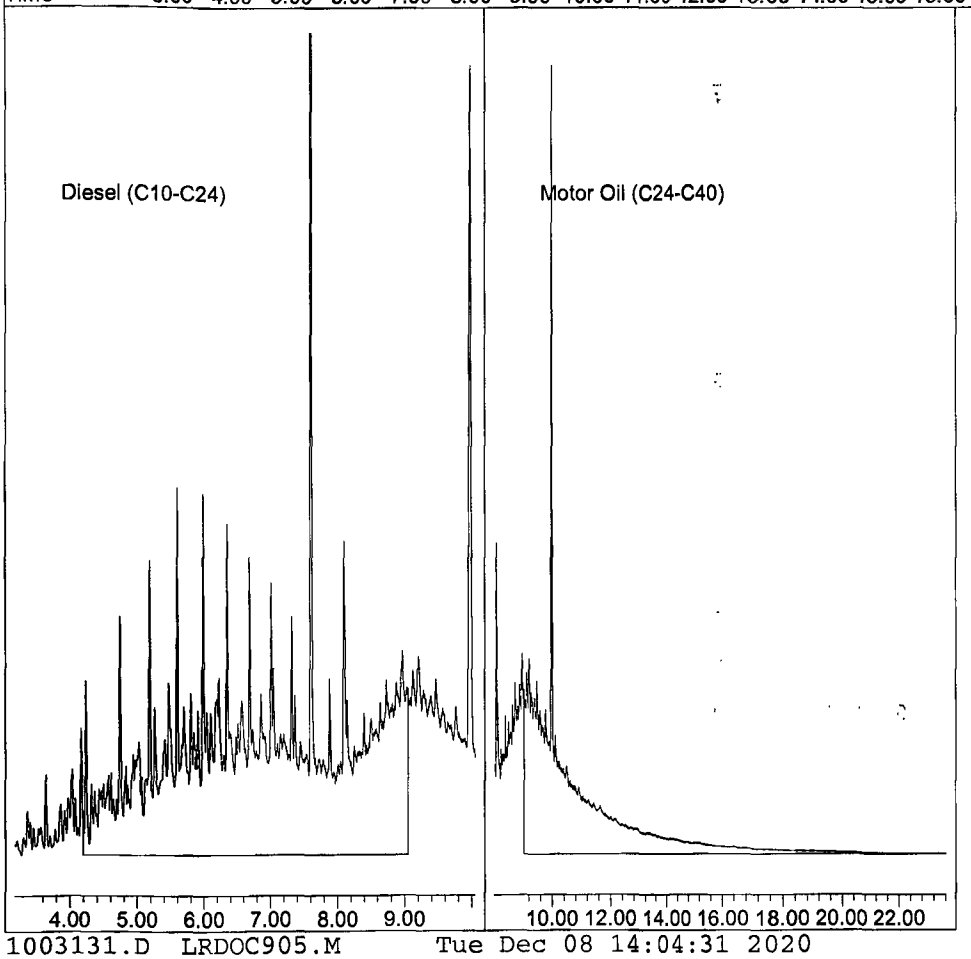
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.60	67412053	13.347 ppb
Surrogate Spike 30.000		Recovery =	44.49%
4) SA Octacosane(S)	9.97	50964997	12.379 ppb
Surrogate Spike 30.000		Recovery =	41.26%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1116694035	259.794 ppb
2) HBTM Motor Oil (C24-C40)	15.82	734523838	243.972 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File: G:\APOLLO\DATA\201003\1003131.D
Sample : Diesel Motor Oil-CCV 10/8/20





1003131.D LRDOC905.M Tue Dec 08 14:04:31 2020

ORGANICS

Raw Data

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201003\1003130.D Vial: 30
Acq On : 10-13-20 17:56:57 Operator:
Sample : BA19640W19 5/800 Inst : Apollo
Misc : Water Multiplr: 6.25
IntFile : events.e
Quant Time: Dec 8 14:43 2020 Quant Results File: LRDOC905.RES

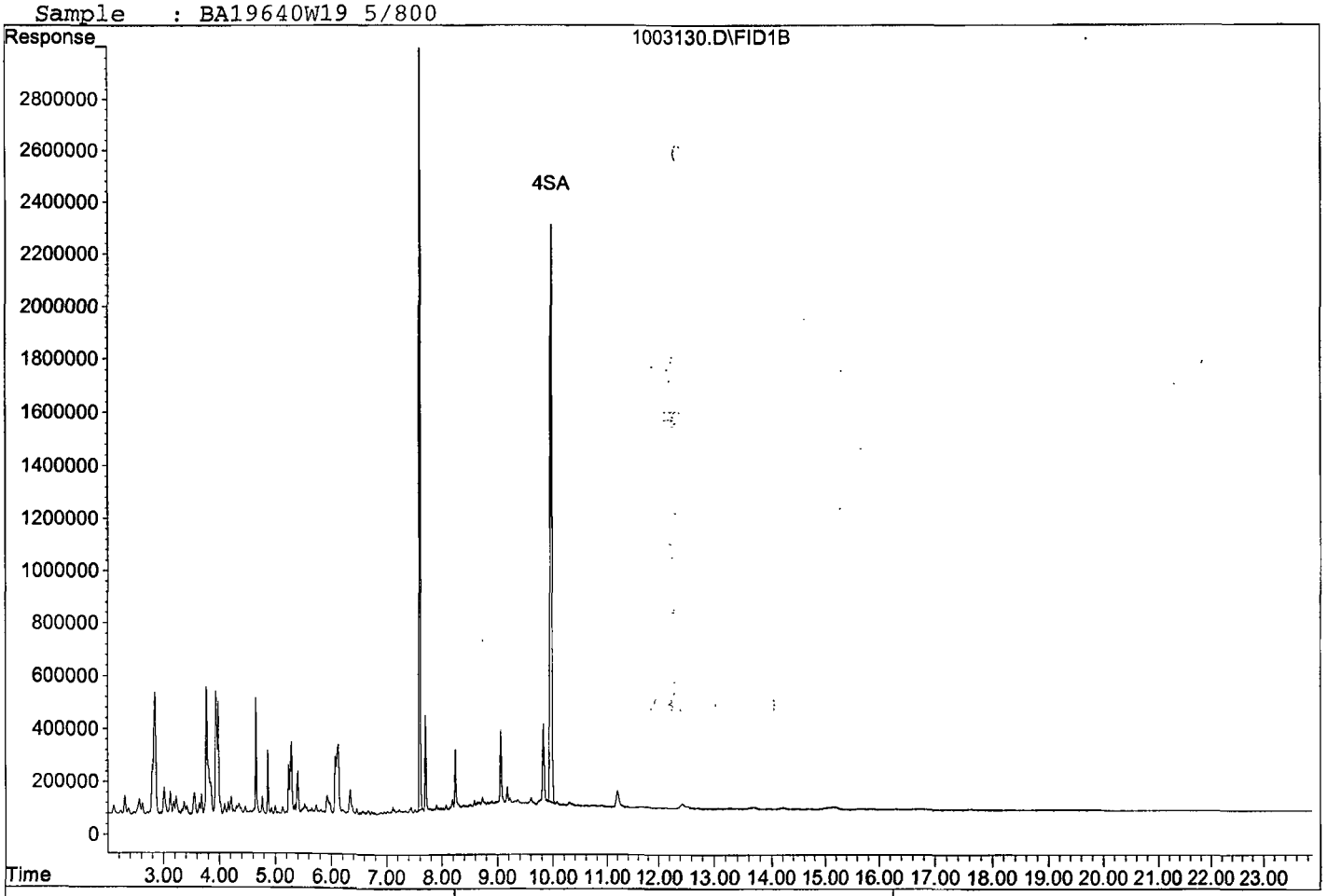
Method : G:\APOLLO\DATA\201028\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:43:03 2020
Response via : Multiple Level Calibration

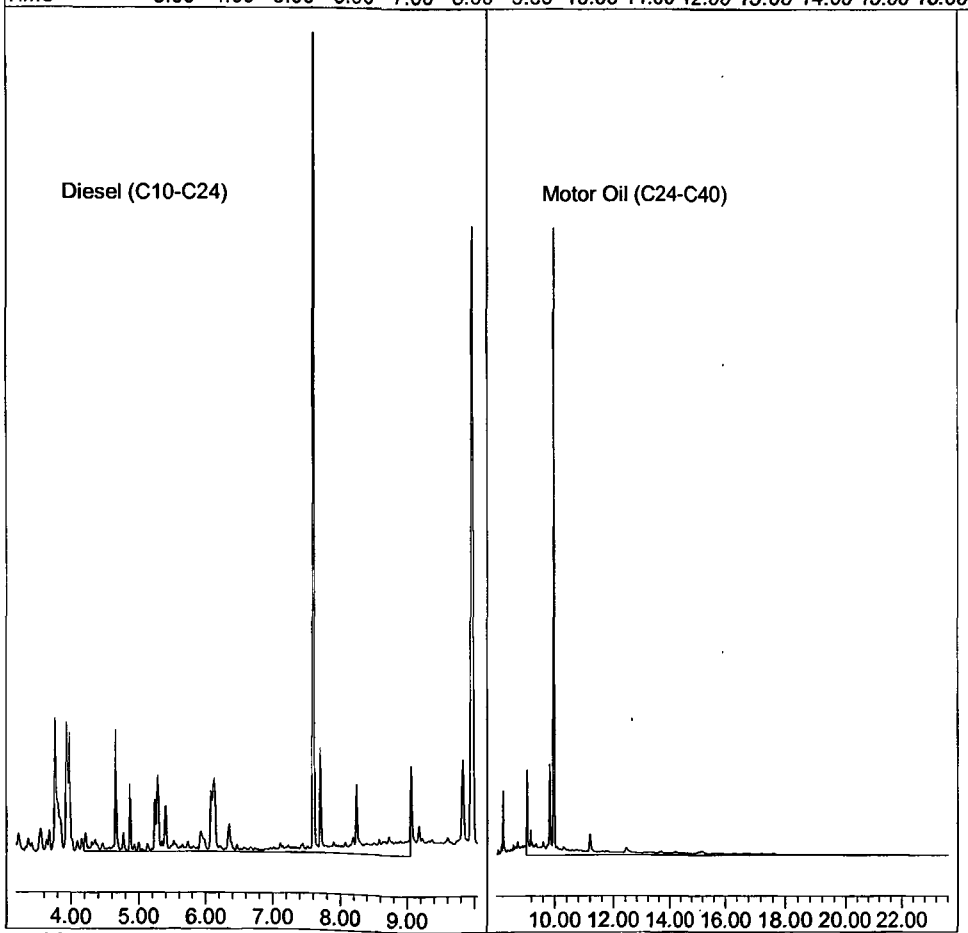
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.60	55741238	68.977 ppb
Surrogate Spike 75.000	Recovery =		91.97%
4) SA Octacosane(S)	9.97	48219562	73.198 ppb
Surrogate Spike 75.000	Recovery =		97.60%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	104254071	156.687 ppb
2) HBTM Motor Oil (C24-C40)	15.82	81263998	141.289 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201003\1003130.D
Sample : BA19640W19 5/800





Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201003\1003127.D Vial: 27
Acq On : 10-13-20 16:32:42 Operator:
Sample : 201009A BLK 5/800 Inst : Apollo
Misc : Water Multiplr: 6.25
IntFile : events.e
Quant Time: Dec 8 14:42 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\201028\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:37:31 2020
Response via : Multiple Level Calibration

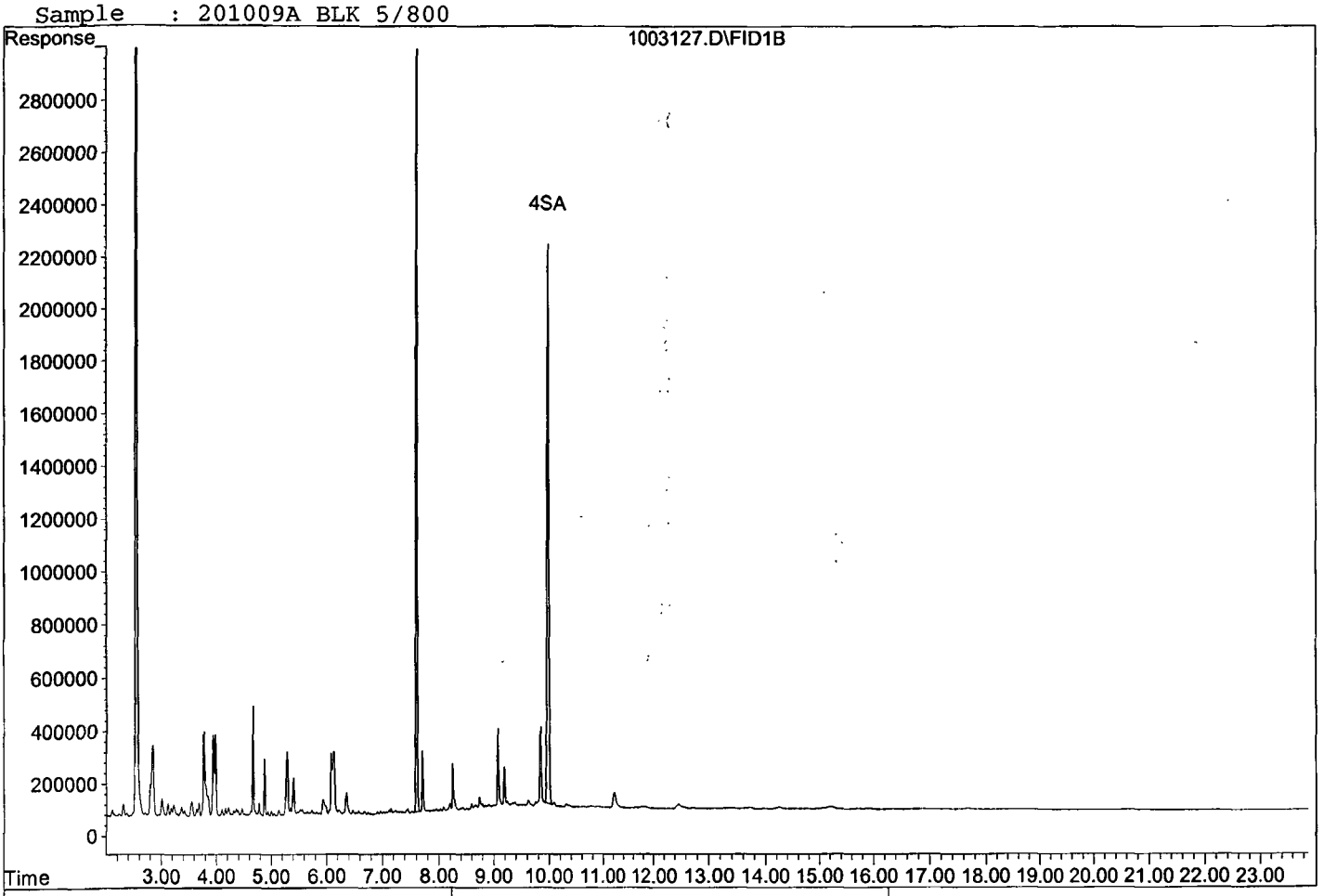
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

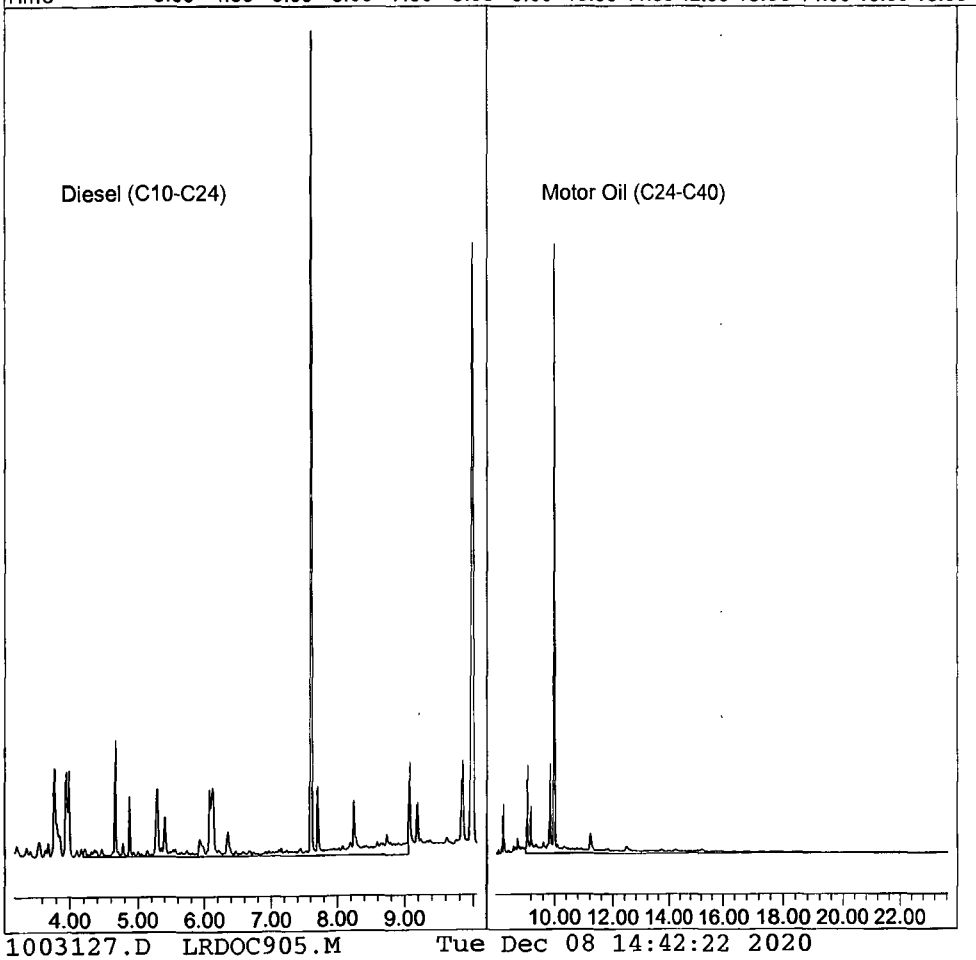
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.60	54564620	67.521 ppb
Surrogate Spike 75.000	Recovery =		90.03%
4) SA Octacosane(S)	9.98f	46575155	70.702 ppb
Surrogate Spike 75.000	Recovery =		94.27%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	85452497	129.444 ppb
2) HBTM Motor Oil (C24-C40)	15.82	81659559	142.127 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201003\1003127.D
Sample : 201009A BLK 5/800





1003127.D LRDOC905.M Tue Dec 08 14:42:22 2020

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201003\1003128.D Vial: 28
Acq On : 10-13-20 17:00:46 Operator:
Sample : 201009A LCS-1 5/800 Inst : Apollo
Misc : Water Multiplr: 6.25
IntFile : events.e
Quant Time: Dec 8 14:43 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\201028\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:43:03 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

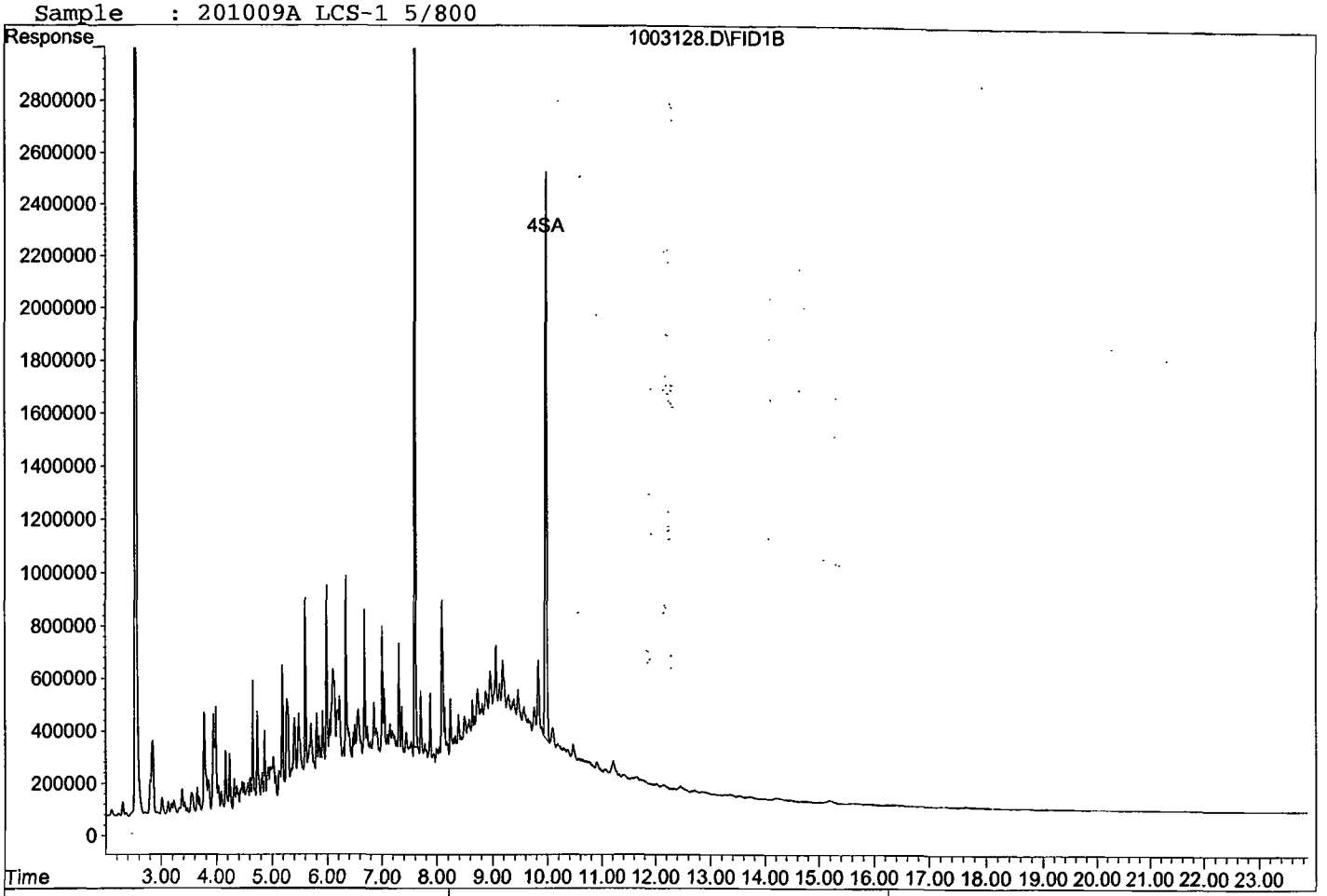
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.60	57025221	70.566	ppb
Surrogate Spike 75.000		Recovery =	94.09%	
4) SA Octacosane(S)	9.97	45998959	69.827	ppb
Surrogate Spike 75.000		Recovery =	93.10%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	806950324	1174.894	ppb
2) HBTM Motor Oil (C24-C40)	15.82	577195649	1191.619	ppb

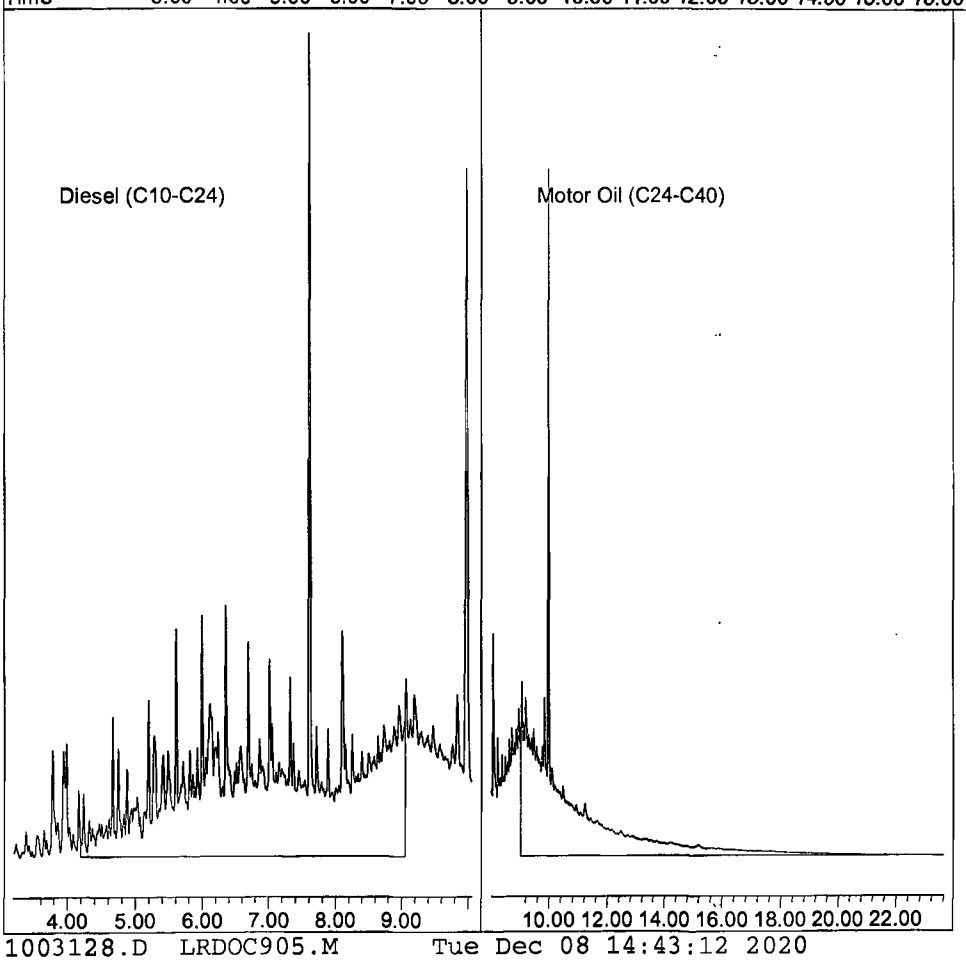
Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File: G:\APOLLO\DATA\201003\1003128.D
Sample : 201009A LCS-1 5/800





1003128.D LRDOC905.M Tue Dec 08 14:43:12 2020

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201003\1003129.D Vial: 29
Acq On : 10-13-20 17:28:49 Operator:
Sample : 201009A LCSD-1 5/800 Inst : Apollo
Misc : Water Multiplr: 6.25
IntFile : events.e
Quant Time: Dec 8 14:43 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\201028\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:43:03 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

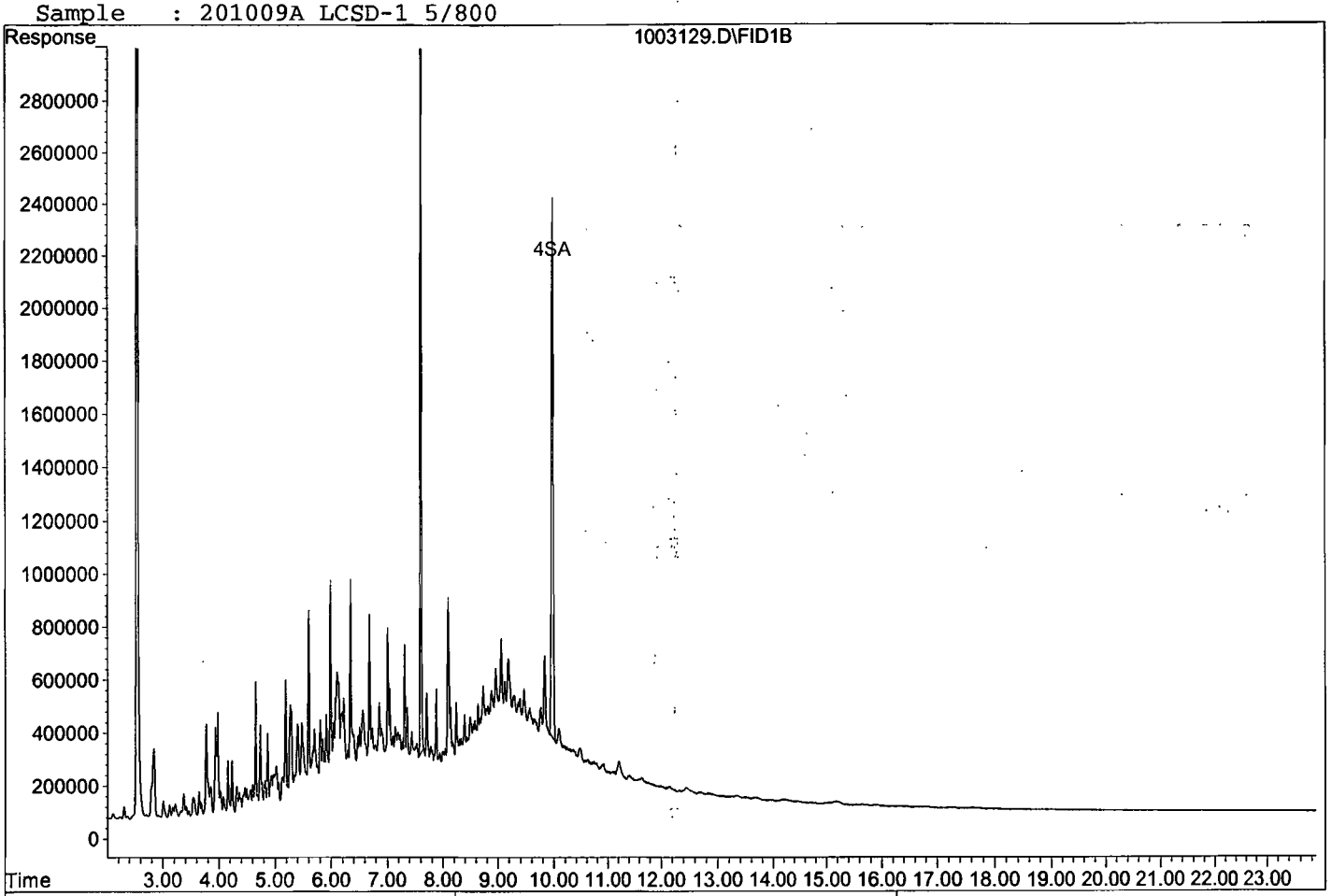
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.60	58436644	72.312	ppb
Surrogate Spike 75.000		Recovery =	96.42%	
4) SA Octacosane(S)	9.97	45618439	69.250	ppb
Surrogate Spike 75.000		Recovery =	92.33%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	803124254	1169.350	ppb
2) HBTM Motor Oil (C24-C40)	15.82	595167830	1229.682	ppb

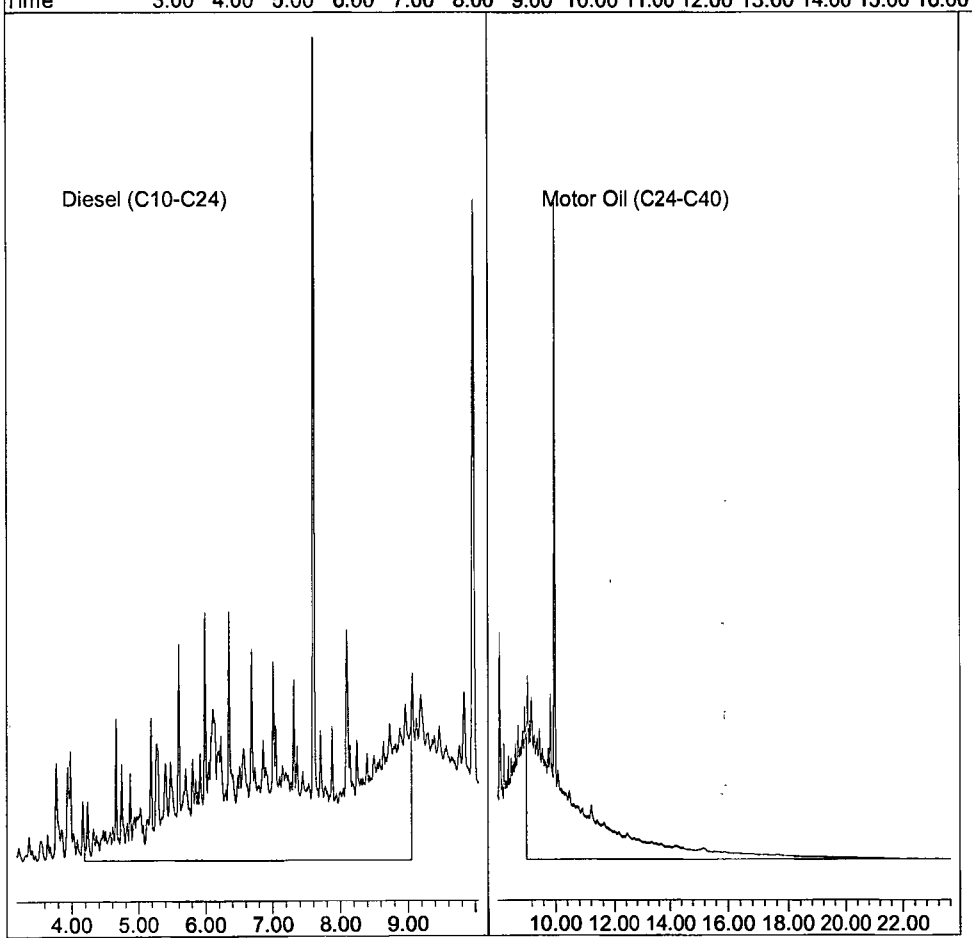
Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File: G:\APOLLO\DATA\201003\1003129.D
Sample : 201009A LCSD-1 5/800





1003129.D LRDOC905.M Tue Dec 08 14:43:31 2020

Decanoic Acid Standard

Prepared: 09/14/20

Expires: 09/14/21

Prepared By (Initials): SS

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Decanoic Acid	O2SI	011729-01-05-5PAK	1,000	**397380-50547**	09/14/21	**12/30/21**	600uL	10mL	MC	60

Decanoic Acid Calibration Curve

Prepared: 09/14/20

Expires: 09/14/20

Prepared By (Initials): SS

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Decanoic Acid STD	O2SI	Decanoic Acid-1	60	Prepared 09/14/20	09/14/21	N/A	50uL	1mL	MC	3
Decanoic Acid STD	O2SI	Decanoic Acid-2	60	Prepared 09/14/20	09/14/21	N/A	100uL	1mL	MC	6
Decanoic Acid STD	O2SI	Decanoic Acid-3	60	Prepared 09/14/20	09/14/21	N/A	400uL	1mL	MC	24
Decanoic Acid STD	O2SI	Decanoic Acid-4	60	Prepared 09/14/20	09/14/21	N/A	600uL	1mL	MC	36
Decanoic Acid STD	O2SI	Decanoic Acid-5	60	Prepared 09/14/20	09/14/21	N/A	800uL	1mL	MC	48
Decanoic Acid STD	O2SI	Decanoic Acid-6	60	Prepared 09/14/20	09/14/21	N/A	100uL	100uL	N/A	60

Diesel / Motor Oil Calibration Standard

Prepared: 09/05/20

Prepared By (Initials): SS

Expires: 08/05/21

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Restek	31258	50,000	**A0154201-50381,50522,50526**	**08/11/21**	**11/30/26**	400uL	10mL	MC	2000
Motor Oil	Restek	31464	50,000	**A0155668-50515,50518,50519**	**08/11/21**	**01/31/27**	400uL			2000
THC Surrogate	Phenova	ALO-130161	600	**CL15440-50421**	**08/05/21**	**06/30/25**	1666uL			100

Diesel / Motor Oil Calibration Curve

Prepared: 09/05/20

Expires: 08/05/21

Prepared By (Initials): **SS**

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date and Lot #'s	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 1	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	5uL	1mL	MC	10
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil -2	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	25uL	1mL	MC	50
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 3	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	125uL	1mL	MC	250
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 4	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	500uL	1mL	MC	1000
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 5	2,000	Perp'd. 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	750uL	1mL	MC	1500
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 6	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	100uL	100uL	N/A	2,000

THC Surrogate

Prepared: 09/30/20

Expires: 09/30/21

Prepared By (Initials): SS

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
O-terphenyl / Octacosane Mix	Phenova	ALO-130161	600	**CL15440-50423**	**09/30/21**	**06/30/25**	N/A	N/A	N/A	600

Decanoic Acid Spike

Prepared: 09/11/20

Expires: 09/11/21

Prepared By (Initials): SS

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Decanoic Acid Spike	O2SI	011729-01-05-5PAK	1,000	**397380-50547**	**09/11/21**	**12/30/21**	N/A	N/A	N/A	1,000

Diesel Motor Oil Mix

Prepared: 09/29/20 **Prepared By (Initials): SS**

Expires: 09/29/21

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Restek	31258	50,000	**A0154201-50382.50523,50524**	**09/29/21**	**11/30/26**	1.35 mL	2.7 mL	NA	25,000
Motor Oil Composite	Restek	31464	50,000	**A0155668-50516,50517,50520**	**09/29/21**	**01/31/27**	1.35 mL			25,000

Organic Extraction Worksheet

Method	Continuous Liq/Liq TPH-Diesel/MO 3520C	Extraction Set	201009A	Extraction Method	LIQ005	Units	mL

Spiked ID 1	Diesel Motor Oil Mix 9/29/20-9/29/21		Surrogate ID 1	THC Surrogate 9/30/20-9/30/21	
Spiked ID 2	Decanoic Acid Spike 9/11/20-9/11/21		Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NO	
Spiked ID 7			Ext. Start Time:	10/09/20 13:10	
Spiked ID 8			Ext. End Time:	10/10/20 7:30	
			GC Requires Extract By:		

pH1			Water Bath Temp 1 °C	37/35.5 °C
pH2			Water Bath Temp 2 °C	37/40.1
pH3			Water Bath Temp 3 °C	36/35.5 °C

Spiked By: DL **Date** 10/09/20 **Witnessed By:** CFM **Date** 10/09/20

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201009A Blk		0.050	2	0.100	1	800	5	2	10/09/20 10:40	*
						equip	E-HP51 E-WB1				
2	201009A LCS-1		0.040,0.050	1,2	0.100	1	800	5	2	10/09/20 10:40	*
						equip	E-HP50 E-WB2				
3	201009A LCSD-1		0.040,0.050	1,2	0.100	1	800	5	2	10/09/20 10:40	*
						equip	E-HP49 E-WB3				
4	BA19475	BA19475W15			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP48 E-WB1				
5	BA19476	BA19476W15			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP47 E-WB2				
6	BA19477	BA19477W13			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP25 E-WB3				
7	BA19478	BA19478W14			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP26 E-WB1				
8	BA19479	BA19479W09			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP27 E-WB2				
9	BA19480	BA19480W07			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP28 E-WB3				
10	BA19481	BA19481W08			0.100	1	800	5	2	10/09/20 10:40	93607
						equip	E-HP29 E-WB1				
11	BA19482	BA19482W09			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP30 E-WB2				
12	BA19483	BA19483W15			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP16 E-WB3				
13	BA19591	BA19591W07			0.100	1	800	5	2	10/09/20 10:40	93644*
						equip	E-HP15 E-WB1				
14	BA19592	BA19592W08			0.100	1	800	5	2	10/09/20 10:40	93644*
						equip	E-HP14 E-WB2				
15	BA19593	BA19593W08			0.100	1	800	5	2	10/09/20 10:40	93644*
						equip	E-HP13 E-WB3				
16	BA19594	BA19594W08			0.100	1	800	5	2	10/09/20 10:40	93644*
						equip	E-HP12 E-WB1				

Solvent and Lot#	
1+1 HCL Amber Liter	59072
PH Strips	HC094495
Dicholormethane	60127
Filter Paper	400178
B. Sodium Sulfate	2019070279
Silica Gel (*)	050627T

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	SS
Date	10/13/20
Time	9:00
Refrigerator	HOBART

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DS

Modified	11/09/20 1:10:55 PM

Reviewed By: KY **Date** 11/09/20

Organic Extraction Worksheet

Method	Continuous Liq/Liq TPH-Diesel/MO 3520C	Extraction Set	201009A	Extraction Method	LIQ005	Units	mL

Spiked ID 1	Diesel Motor Oil Mix 9/29/20-9/29/21		Surrogate ID 1	THC Surrogate 9/30/20-9/30/21	
Spiked ID 2	Decanoic Acid Spike 9/11/20-9/11/21		Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NO	
Spiked ID 7			Ext. Start Time:	10/09/20 13:10	
Spiked ID 8			Ext. End Time:	10/10/20 7:30	
			GC Requires Extract By:		

pH1			Water Bath Temp 1 °C	37/35.5 °C
pH2			Water Bath Temp 2 °C	37/40.1
pH3			Water Bath Temp 3 °C	36/35.5 °C

Spiked By: DL **Date** 10/09/20 **Witnessed By:** CFM **Date** 10/09/20

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	BA19595	BA19595W07			0.100	1	800	5	2	10/09/20 10:40	93644*
						equip	E-HP11 E-WB2				
18	BA19596	BA19596W07			0.100	1	800	5	2	10/09/20 10:40	93644*
						equip	E-HP10 E-WB3				
19	BA19597	BA19597W08			0.100	1	800	5	2	10/09/20 10:40	93644*
						equip	E-HP9 E-WB1				
20	BA19640	BA19640W19	0.050	1,2	0.100	1	800	5	2	10/09/20 13:10	93659*
						equip	E-HP8 E-WB2				

Solvent and Lot#	
1+1 HCL Amber Liter	59072
PH Strips	HC094495
Dicholormethane	60127
Filter Paper	400178
B. Sodium Sulfate	2019070279
Silica Gel (*)	050627T

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	SS
Date	
Time	
Refrigerator	HOBART

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DS

Modified	11/09/20 1:10:55 PM

Reviewed By: KY **Date** 11/09/20

Injection Log

Directory: G:\APOLLO\DATA\200905\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	7	905007.D	1	Diesel Motor Oil-1 9/5/20	Water	9-5-20 17:04:35
2	8	905008.D	1	Diesel Motor Oil-2 9/5/20	Water	9-5-20 17:32:40
3	9	905009.D	1	Diesel Motor Oil-3 9/5/20	Water	9-5-20 18:00:45
4	10	905010.D	1	Diesel Motor Oil-4 9/5/20	Water	9-5-20 18:28:54
5	11	905011.D	1	Diesel Motor Oil-5 9/5/20	Water	9-5-20 18:56:54
6	12	905012.D	1	Diesel Motor Oil-6 9/5/20	Water	9-5-20 19:24:55
7	13	905013.D	1	Diesel Motor Oil-SS 7/21/20	Water	9-5-20 19:52:52
1	23	1003123.D	1	Diesel Motor Oil-CCV 10/8/20	Water	10-13-20 11:50:40
2	27	1003127.D	6.25	201009A BLK 5/800	Water	10-13-20 16:32:42
3	28	1003128.D	6.25	201009A LCS-1 5/800	Water	10-13-20 17:00:46
4	29	1003129.D	6.25	201009A LCSD-1 5/800	Water	10-13-20 17:28:49
5	30	1003130.D	6.25	BA19640W19 5/800	Water	10-13-20 17:56:57
6	31	1003131.D	1	Diesel Motor Oil-CCV 10/8/20	Water	10-13-20 18:25:00

908 North Temperance Ave. ∇ Clovis, CA 93611 ∇ Phone 559-275-2175 ∇ Fax 559-275-4422

Certification Number: CA1312
NELAP Certification number: CA00046
DoD-ELAP Certificate number: 4064.01

Data Validatable Report

November 25, 2020

AECOM
1001 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

Attn: Brooke Gottmeier

Title: Report of Data: Case 93659 Revision

Project: 60571032 CV18F0126 Red Hill Fuel Storage, HI

Contract #: Prime contract # for DoD: NAVY CLEAN N62742-17-F-1800, CV18F0126
Subcontract: 18S-22209-HI27

Dear Ms. Gottmeier:

Two water samples were received October 8, 2020. Written results for the requested analyses are being provided on this November 25, 2020.

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Revision 11/17/20: For sample ERH1155, the client requested the EPA 8015B Form 1 to be revised to include a B-flag for Oil (C24-C40), due to the detection in the method blank above ½ LOQ. **Revision 11/25/20:** The Method Blank form was revised to include the J-value detection for Oil (C24-C40).

If you have any questions or require further information, please contact your APPL Project Manager, Libby Cheeseborough, libby@applinc.com, at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC and DoD QSM. Release of the hard copy has been Manager or her designee, as verified by the following signature.

Paula McCartney for PM

Paula McCartney, Laboratory Director
APPL, Inc.

PM/lac
Enclosure
cc: File

Data Validation Package
for
60571032 CV18F0126 Red Hill Fuel Storage
APPL SDG 93659
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CASE NARRATIVE

Case Narrative

ARF: 93659

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

Sample Receipt Information:

Two water samples were received October 8, 2020, at 3.5°C. The sample group was assigned Analytical Request Form (ARF) number 93659.

Sample Preparation and Analysis Information:

For the EPA 8011 analysis, the samples were extracted according to APPL SOP method MWE012.

For the EPA 8015B analysis, the sample was extracted according to EPA method 3520C. The sample extracts were silica gel cleaned according to APPL's SOP CLN004 and placed on hold.

For the EPA 8270D Phenol analysis, the sample was extracted according to EPA method 3520C.

For the EPA 8270D SIM analysis, the sample was extracted according to EPA method 3520C.

For the APPL SOP ANA2MEE analysis, the sample was extracted according to EPA method 3535.

For the EPA 8260B analysis, the samples were purged according to EPA method 5030B.

For the RSK-175 analysis, the sample was allowed to equilibrate for 10 minutes at 40°C and a portion of the headspace was analyzed.

For the EPA 9060A, 300.0, 353.2, SM 2320B, and SM 3500FeB analyses, the sample was prepared according to the methods.

Only the portion of the injection log relative to these samples is included. A full sequence log is available upon request. Measurement uncertainty can be reported upon request.

Analytical Exceptions, Deviations and Abnormalities.

SOP 2-MEE: One RPD exceeded the 20% limit.

Inorganics: In the MS/MSD performed on sample ERH1155, TOXN recovered outside of control limits. Corrective action: the client was notified

SDG	Received	Client ID	APPL ID	Collected DateTime	Matrix	Method	Method Description
93659	10/08/20	ERH1154	BA19639	10/07/20 10:15:00 AM	WATER	8011	EPA 8011
93659	10/08/20	ERH1154	BA19639	10/07/20 10:15:00 AM	WATER	EPA 8260B	EPA 8260B BTEX & 1,2-DCA WATER
93659	10/08/20	ERH1154	BA19639	10/07/20 10:15:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
93659	10/08/20	ERH1154	BA19639	10/07/20 10:15:00 AM	WATER	RSK 175	METHANE BY RSK 175
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 353.2	WETLAB 353.2 TOXN- WATER
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	SM3500FeB	Ferrous Iron
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	8011	EPA 8011
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 8260B	EPA 8260B BTEX & 1,2-DCA WATER
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 8270D	EPA 8270D WATER
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	RSK 175	METHANE BY RSK 175
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
93659	10/08/20	ERH1155	BA19640	10/07/20 10:45:00 AM	WATER	SW846 9060A	9060A TOC

Abbreviations and Flags

FLAG	DESCRIPTION
#	Recovery or RPD outside control limits
*	Recovery or RPD outside control limits
B	Analyte detected in associated method blank
C1	Reason for correction: wrote incorrect response
C2	Reason for correction: calculated incorrectly
C3	Reason for correction: needs to be rechecked
C4	Reason for correction: data not usable
DO	Diluted out
E	Exceeds linear range
F	Estimated value
G1	Includes a wide range of hydrocarbons which does not match our gasoline standard
G10	Includes a match to hydrocarbon profiles within the range of mineral spirits
G11	Includes a match to hydrocarbon profiles within the range of JP-4
G12	Pattern does not match the gasoline standard; the carbon range for this sample is consistent with JP8
G13	Closely resembles the hydrocarbon profile of aviation gasoline
G14	Analyte concentration may be biased due to carry over
G2	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G3	Includes higher boiling hydrocarbons
G4	Includes dominant peak(s) not indicative of petroleum hydrocarbons
G5	Is mainly dominant peak(s) not indicative of petroleum hydrocarbons
G6	Contains recognizable contaminant peak(s) which has been removed from quantitation
G7	Is mainly a match to hydrocarbons within the range of gasoline
G8	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G9	Includes hydrocarbons within the range of kerosene
J	Estimated value
M	Matrix effect
MI1	Manual integration: integration does not follow baseline
MI2	Manual integration: non-target peak interference
MI3	Manual integration: to split a peak that was integrated as one peak by the computer
MI4	Manual integration: to integrate a split peak
MI5	Manual integration: the whole peak or part of the peak was not integrated
MI6	Manual integration: computer integrated wrong peak
MI7	Manual integration: other - explain
MDL	Method detection limit
ND	Not detected
NT	Non-target
Q	Acceptance criteria not met
T1 I	Includes wide range of hydrocarbons not indicative of diesel
T1 M	Is mainly wide range of hydrocarbons not necessarily indicative of diesel
T2 I	Includes lower boiling hydrocarbons, i.e. mineral spirits, kerosene, stoddard solvent, white gas
T2 M	Is mainly lower boiling hydrocarbons, i.e. mineral spirits, kerosene, stoddard solvent, white gas
T3 I	Includes higher boiling hydrocarbons, i.e. asphaltene, waster oil, motor oil, or weathered diesel fuel
T3 M	Is mainly higher boiling hydrocarbons, i.e. asphaltene, waster oil, motor oil, or weathered diesel fuel
T4 I	Includes dominant peak(s) not indicative of hydrocarbons
T4 M	Is mainly dominant peak(s) not indicative of hydrocarbons
T5	Contains recognizable contaminant peak(s) which has been removed from quantitation
T6	Is mainly a match to hydrocarbons within range of diesel fuel
T7	Closely resembles the boiling point hydrocarbon profile consistent with diesel fuel
T8	Includes a match to hydrocarbon profiles within range of diesel and kerosene fuel
T9 I	Includes non-diesel hydrocarbons within boiling point range of diesel fuel
T9 M	Is mainly non-diesel hydrocarbons within boiling point range of diesel fuel.
Y	Percent difference between primary and confirmation column > 40%

SAMPLE RECORDS MANAGEMENT

CHAIN OF CUSTODY,

ARF, CRF, AND

CLIENT COMMUNICATION

APPL - Analysis Request Form 93659

Client: **AECOM**
Address: **1001 Bishop Street, Suite 1600**
Honolulu, HI 96813
Attn: **Brooke Gottmeier**
Phone: **808-954-4536** Fax: **808-523-8950**
Job: **60571032 CV18F0126 Red Hill Fuel Storage**
PO #: **18S-22209-HI27 PO# 102604**
Chain of Custody (Y/N): **Y** # **100**
RAD Screen (Y/N): **Y** pH (Y/N): **Y**
Turn Around Type: **1 WEEK**

Received by: **AAR**
Date Received: **10/08/20** Time: **10:10**
Delivered by: **FEDEX**
Shuttle Custody Seals (Y/N): **Y** Time Zone: **-10**
Chest Temp(s): **3.5°C**
Color: **VFRG/B-Red**
Samples Chilled until Placed in Refrig/Freezer: **Y**
Project Manager: **Libby Cheesebor**
QC Report Type: **DVP4DOD/EQUIS/HI**
Due Date: **10/15/20**

Comments:
PM: login and F1s to Margie.Pascua@aecom.com & brooke.gottmeier@aecom.com
AN: 7 day TAT for Form 1s; 21 day TAT for PKG STYLE 1; DOD v5.1; DOD Forms: LOD database
Report MS/MSD/DUPs when AECOM sample used
Wetlab: EPA 300 (NO3,CL,SO4). EPA 353.2 (TOXN).
8260: BTEX & TPH-G only; 8270 SIM: 1-methylnaphthalene, 2-methylnaphthalene & naphthalene only.
TPH D & O both with and w/o SGC, reverse surrogate for the SGC; analyze SGC if detections
RSK: Methane only; 8011: EDB only; $87DC53W5: report phenol
FR: email ftp info to Margie, Stella, trommelfanger@lab-data.com & jcanlas@lab-data.com
EDD: AECOM EQuIS EDD 2.5.3 Red Hill 87DMEE->3535A to brooke.gottmeier@, Margie.Pascua@aecom.com

Sample Distribution:
GC: 2-$8011, 1-$87DC53W5, 1-$87DMEEW5, 1-$DOC53W5LIQ, 1-$SIM53LIQ51
Extractions: 2-_MWE012, 1-_LIQ003, 1-_LIQ005, 1-_MWE2MEE
VOA: 2-$86BTOTXDCAW, 2-$GASBL, 2-$GRO86BW, 2-$RSKMETH
Wetlab: 1-$232W(HCO3,CO3,ALK), 1-$300W, 1-$353TOXNW, 1-$35FE, 1-$TOCW53

Charges:

Invoice To:
ACCOUNTS PAYABLE
1001 Bishop Street, Ste 1600
USAPImaging@aecom.com
mary.basano@aecom.com

	Client ID	APPL ID	Sampled	Analyses Requested
1.	ERH1154	LCSD BA19639W	10/07/20 10:15	$8011, $86BTOTXDCAW, $GASBL, $GRO86BW, $RSKMETH -- See Comments
2.	ERH1155	LCSD BA19640W	10/07/20 10:45	$232W(HCO3,CO3,ALK), $300W, $353TOXNW, $35FE, $8011, $86BTOTXDCAW, $87DC53W5, $87DMEEW5, $DOC53W5LIQ, $GASBL, $GRO86BW, $RSKMETH, $SIM53LIQ51, $TOCW53 -- See Comments

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

93659

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
www.applinc.com
Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 100

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM Phone: 808-954-4536	Company Name: AECOM Phone: 512-419-6709
Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950	Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950
Attn: Brooke Gottmeier	Attn: Sheree Smith
Email: brooke.gottmeier@aecom.com	Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
CV18F0126 / 60571032	GM, JV, RS, EC	102604	

Date Shipped: 10/7/20
Carrier: FedEx
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Matrix: Sed.	Matrix: Soil	8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC
ERH1154	Trip Blank	10/7/20	10:15	HST	7	X			X	X						X						
ERH1155	RHMW19	10/7/20	1045	HST	19	X			X	X	X	X*	X	X	X	X	X	X	X		X	

*Analyze TPH w/SGT only if TPH-d/o detected.

** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM

TPH-d/o & PAHs need liquid-liquid extraction.

10/7/20

Shuttle Temperature: RS: 3.5/3.5

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other:

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
(AECOM)	10/7/20	1400					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
					10/8/20	10/0	

See page 2 for Container Preservative and Sampling Information

COOLER RECEIPT FORM **ARF: 93659**

1) Project: 60571032 CV18F0126 Red Hill Fuel Storage Date Received: 10/08/20

2) Coolers: Number of Coolers: 1

3) YES Were custody seals present and intact?
How many? 2 Name/Date on seal? SEE BELOW

4) YES Was there a shipping slip? Carrier name: FEDEX

5) Type of packing in cooler: X bubble wrap __ popcorn __ foam X plastic bags __ other
X wet ice __ dry ice __ no ice __ gel ice

6) YES Were cooler temperatures acceptable?

7) Serial number of calibrated thermometer used: R5 CF: +0.0°C

8) Cooler temp(s): In °C. Thermometer Temp / Corrected Temp
1: 3.5/3.5 2: ____ 3: ____ 4: ____ 5: ____ 6: ____
7: ____ 8: ____ 9: ____ 10: ____ 11: ____ 12: ____

Chain of custody:

9) YES Was a chain of custody received?

10) YES Were the custody papers complete/signed in the appropriate places?

Sample Labels:

11) YES Were all sample labels complete (sample ID, date/time of sampling, etc.)?

12) YES Did all container labels agree with custody papers?

Sample Containers:

13) YES Were all containers sealed in separate bags?

14) YES Did all containers arrive in good condition:(unbroken, no leakage, no cracked/broken lids)?

15) YES Were correct containers and preservatives used for the tests indicated?

16) YES Was a sufficient amount of sample sent for tests indicated?

17) Yes Were bubbles present in volatile samples?
If yes, the following were received with air bubbles:
Larger than a pea: BA19639W01-04
Smaller than a pea: BA19640W03-04

Preservation Hold time:

18) Yes Was a sufficient amount of holding time remaining to analyze the samples?

19) Yes Was the pH taken of all non-VOA preserved samples and written on the sample container?

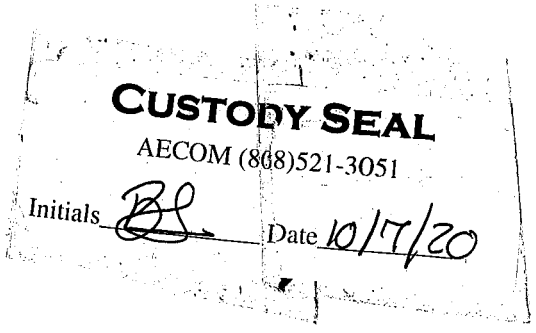
20) Yes Was the pH of acid preserved non-VOA samples < 2?

21) NA Was the pH of the "basic" preserved samples for Cyanide > 12, Sulfide >9, Hexchrom >9?

22) NO Were unpreserved VOA Vials received for VOA Dept analysis?

23) NA If "yes", are the unpreserved VOA vials noted in the ADD TEST FIELD on the ARF?
pH strip lot number: HC908519
Lab notified if pH was not adequate: ____

Notes/Deficiencies:
Custody seal torn while being removed from cooler



Personnel receiving samples: AA Second reviewer: AK
Personnel labeling samples: MS
Project manager notified: AA Date/Time of notification 10/08/20
Name of client notified: ____ Date/Time of notification ____

SAMPLE RESULTS

EPA 8011

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93659

Sample ID: ERH1154

APPL ID: BA19639

Sample Collection Date: 10/07/20

QCG: #8011-201013A-257435

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8011	EDB	0.019 U	0.02	0.019	0.010	ug/L	10/13/20	10/13/20
8011	SURROGATE: 1,3-DIBROMOPROPANE	103	70-132			%	10/13/20	10/13/20

Quant Method: 80111007.M
Run #: 1001130
Instrument: HERBIE
Sequence: 201001
Dilution Factor: 1
Initials: SSE

Printed: 10/15/20 1:03:29 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8011

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93659

Sample ID: ERH1155

APPL ID: BA19640

Sample Collection Date: 10/07/20

QCG: #8011-201013A-257435

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8011	EDB	0.019 U	0.02	0.019	0.010	ug/L	10/13/20	10/13/20
8011	SURROGATE: 1,3-DIBROMOPROPANE	105	70-132			%	10/13/20	10/13/20

Quant Method:	80111007.M
Run #:	1001131
Instrument:	HERBIE
Sequence:	201001
Dilution Factor:	1
Initials:	SSE

Printed: 10/15/20 1:03:29 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH WATER L-L SGC

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93659

Sample ID: ERH1155

APPL ID: BA19640

Sample Collection Date: 10/07/20

QCG: #DOC53-201009A1-258443

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/09/20	11/06/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/09/20	11/06/20
EPA 8015B-e	SURROGATE: (R) DECANOIC ACID (S)	0.0	0-1			%	10/09/20	11/06/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	93.8	60-142			%	10/09/20	11/06/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	84.4	56-125			%	10/09/20	11/06/20

Quant Method:	DOC0905.M
Run #:	1105032
Instrument:	Apollo
Sequence:	201105
Dilution Factor:	1
Initials:	SSE

Printed: 11/09/20 2:58:42 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93659

Sample ID: ERH1155

APPL ID: BA19640

Sample Collection Date: 10/07/20

QCG: #DOC53-201009A-257439

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	160 J	320	300.0	150.0	ug/L	10/09/20	10/13/20
EPA 8015B-e	OIL (C24-C40)	170 B J	320	300.0	150.0	ug/L	10/09/20	10/13/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	98.0	60-142			%	10/09/20	10/13/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	92.0	56-125			%	10/09/20	10/13/20

J = Estimated value.
B = The analyte was found in a method blank, as well as in the sample.

Amended Results.

Quant Method:	DOC0905.M
Run #:	1003130
Instrument:	Apollo
Sequence:	201003
Dilution Factor:	1
Initials:	SSE

Printed: 11/16/20 3:19:30 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8270D WATER

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93659

Sample ID: ERH1155

APPL ID: BA19640

Sample Collection Date: 10/07/20

QCG: #87DC5-201012A-257404

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	10/12/20	10/14/20
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHENO	101	43-140			%	10/12/20	10/14/20
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	93.2	44-119			%	10/12/20	10/14/20
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	89.6	19-119			%	10/12/20	10/14/20
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	94.9	44-120			%	10/12/20	10/14/20
EPA 8270D	SURROGATE: PHENOL-D6 (S)	90.6	10-115			%	10/12/20	10/14/20
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	113	50-134			%	10/12/20	10/14/20

Quant Method: Y1009.M
Run #: 1009Y067
Instrument: Yoda
Sequence: Y201009
Dilution Factor: 1
Initials: MA

Printed: 10/15/20 3:47:08 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8270D SIM LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93659

Sample ID: ERH1155

APPL ID: BA19640

Sample Collection Date: 10/07/20

QCG: #SIM53-201012A-257403

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/12/20	10/14/20
8270D-SIM	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/12/20	10/14/20
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/12/20	10/14/20
8270D-SIM	SURROGATE: 2-METHYLNAPHTHALEN	101	39-114			%	10/12/20	10/14/20
8270D-SIM	SURROGATE: FLUORANTHENE-D10 (S	108	58-120			%	10/12/20	10/14/20

Quant Method: L0821.M
Run #: 0929L175
Instrument: Linus
Sequence: L200929
Dilution Factor: 1
Initials: MA

Printed: 10/15/20 4:02:02 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8270D MODIFIED WATER

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93659

Sample ID: ERH1155

APPL ID: BA19640

Sample Collection Date: 10/07/20

QCG: #87DME-201013A-257397

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	2-(2-METHOXYETHOXY)-ETHANOL	80.0 U	100	80.0	40.0	ug/L	10/13/20	10/14/20

Quant Method:	YMEE0501.M
Run #:	0501Y101
Instrument:	Yoda
Sequence:	Y200501M
Dilution Factor:	1
Initials:	MA

Printed: 10/14/20 2:39:53 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8260B BTEX & 1,2-DCA WATER

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH1154

Sample Collection Date: 10/07/20

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 93659

APPL ID: BA19639

QCG: #86BTO-201008AZ-257399

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-DICHLOROETHANE	0.30 U	1.0	0.30	0.14	ug/L	10/09/20	10/09/20
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	10/09/20	10/09/20
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	10/09/20	10/09/20
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	10/09/20	10/09/20
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	10/09/20	10/09/20
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	114	81-118			%	10/09/20	10/09/20
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	103	85-114			%	10/09/20	10/09/20
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	110	80-119			%	10/09/20	10/09/20
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	101	89-112			%	10/09/20	10/09/20

Quant Method: Z1006W.M
Run #: 1009Z25
Instrument: ZEUS
Sequence: 201006
Dilution Factor: 1
Initials: CHE

Printed: 10/14/20 3:50:13 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8260B BTEX & 1,2-DCA WATER

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

Attn: Brooke Gottmeier

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93659

Sample ID: ERH1155

APPL ID: BA19640

Sample Collection Date: 10/07/20

QCG: #86BTO-201008AZ-257399

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	1,2-DICHLOROETHANE	0.30 U	1.0	0.30	0.14	ug/L	10/09/20	10/09/20
EPA 8260B	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	10/09/20	10/09/20
EPA 8260B	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	10/09/20	10/09/20
EPA 8260B	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	10/09/20	10/09/20
EPA 8260B	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	10/09/20	10/09/20
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	116	81-118			%	10/09/20	10/09/20
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	102	85-114			%	10/09/20	10/09/20
EPA 8260B	SURROGATE: DIBROMOFLUOROMETH	110	80-119			%	10/09/20	10/09/20
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	100	89-112			%	10/09/20	10/09/20

Quant Method: ZGAS1003.M
Run #: 1009Z26
Instrument: ZEUS
Sequence: 201006
Dilution Factor: 1
Initials: CHE

Printed: 10/14/20 3:50:13 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8260B GRO WATER

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93659

Sample ID: ERH1154

APPL ID: BA19639

Sample Collection Date: 10/07/20

QCG: #GRO86-201009AZ-257400

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	10/09/20	10/09/20
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	103	85-114			%	10/09/20	10/09/20

Quant Method:	ZGAS1003.M
Run #:	1009Z25
Instrument:	ZEUS
Sequence:	201006
Dilution Factor:	1
Initials:	CHE

Printed: 10/14/20 3:59:07 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8260B GRO WATER

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93659

Sample ID: ERH1155

APPL ID: BA19640

Sample Collection Date: 10/07/20

QCG: #GRO86-201009AZ-257400

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	10/09/20	10/09/20
EPA 8260B	SURROGATE: 4-BROMOFLUOROBENZ	102	85-114			%	10/09/20	10/09/20

Quant Method:	ZGAS1003.M
Run #:	1009Z26
Instrument:	ZEUS
Sequence:	201006
Dilution Factor:	1
Initials:	CHE

Printed: 10/14/20 3:59:07 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

METHANE

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93659

Sample ID: ERH1154

APPL ID: BA19639

Sample Collection Date: 10/07/20

QCG: #RSKME-201014A-257418

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	10/14/20	10/14/20

Quant Method:	RSK0914A.M
Run #:	1014R04
Instrument:	Rocky
Sequence:	200914
Dilution Factor:	1
Initials:	GAG

Printed: 10/15/20 11:26:20 AM

APPL-F1-SC-NoMC-REG MDLs-DOD

METHANE

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93659

Sample ID: ERH1155

APPL ID: BA19640

Sample Collection Date: 10/07/20

QCG: #RSKME-201014A-257418

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	METHANE	1.00 U	5.0	1.00	0.25	ug/L	10/14/20	10/14/20

Quant Method:	RSK0914A.M
Run #:	1014R05
Instrument:	Rocky
Sequence:	200914
Dilution Factor:	1
Initials:	GAG

Printed: 10/15/20 11:26:20 AM

APPL-F1-SC-NoMC-REG MDLs-DOD

Wet Lab Analysis

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH1155

APPL ID: BA19640

Sample Collection Date: 10/07/20

ARF: 93659

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	30.5	1.0	0.20	0.08	mg/L	1	10/08/20	10/08/20
EPA 300.0	NITRATE	1.2	0.5	0.18	0.04	mg/L	1	10/08/20	10/08/20
EPA 300.0	SULFATE	4.9	1.0	0.20	0.09	mg/L	1	10/08/20	10/08/20

Printed: 10/14/20 10:18:04 AM

APPL-F1-SC-NoMC-REG MDLs

Wet Lab Analysis

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

Sample ID: ERH1155

APPL ID: BA19640

Sample Collection Date: 10/07/20

ARF: 93659

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 353.2	NITRATE-NITRITE AS N	0.38	0.10	0.090	0.028	mg/L	1	10/12/20	10/12/20
SM 2320B	BICARBONATE AS CACO3	66.9	2.0	1.70	0.85	mg/L	1	10/12/20	10/12/20
SM 2320B	CARBONATE AS CACO3	1.70 U	2.0	1.70	0.85	mg/L	1	10/12/20	10/12/20
SM 2320B	TOTAL ALKALINITY AS CACO	66.9	2.0	1.70	0.85	mg/L	1	10/12/20	10/12/20
SM3500FeB	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	1	10/09/20	10/09/20
SW846 9060A	TOTAL ORGANIC CARBON	0.61 J	0.93	0.350	0.130	mg/L	1	10/13/20	10/13/20

J = Estimated value.

Printed: 10/15/20 3:23:27 PM

APPL-F1-SC-NoMC-REG MDLs

QC FORMS

8011

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/13/20

Matrix: WATER Instrument: HERBIE

APPL ID.	Client Sample No.	SURROGATE: 1,3-DIBROMOPROPANE (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
201013A-BLK	Blank	70-132	93.1				
201013A-LCS	Lab Control Spike	70-132	96.0				
201013A-LCSD	Lab Control SpikeD	70-132	97.2				
BA19639	ERH1154	70-132	103				
BA19640	ERH1155	70-132	105				

Comments: Batch: #8011-201013A

8011

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/13/20

Matrix: WATER Instrument: HERBIE

Blank ID: 201013A-BLK Time Analyzed: 1411

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201013A-BLK	Blank	1001127	10/13/20 1411
201013A-LCS	Lab Control Spike	1001128	10/13/20 1431
201013A-LCSD	Lab Control SpikeD	1001129	10/13/20 1452
BA19639	ERH1154	1001130	10/13/20 1512
BA19640	ERH1155	1001131	10/13/20 1533

Comments: Batch: #8011-201013A

Method Blank
EPA 8011

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201013W-19639 - 257435**
Batch ID: #8011-201013A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	EDB	0.019 U	0.02	0.019	0.010	ug/L	10/13/20	10/13/20
BLANK	SURROGATE: 1,3-DIBROMOPRO	93.1	70-132			%	10/13/20	10/13/20

Quant Method:80111007.M
Run #:1001127
Instrument:HERBIE
Sequence:201001
Initials:SSE

GC SC-Blank-REG MDLs-DOD
Printed: 10/15/20 1:03:11 PM

8011

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/13/20
Matrix:	WATER	Instrument:	HERBIE
LCS ID:	201013A-LCS	Time Analyzed:	1431

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201013A-BLK	Blank	1001127	10/13/20 1411
201013A-LCS	Lab Control Spike	1001128	10/13/20 1431
201013A-LCSD	Lab Control SpikeD	1001129	10/13/20 1452
BA19639	ERH1154	1001130	10/13/20 1512
BA19640	ERH1155	1001131	10/13/20 1533

Comments: Batch: #8011-201013A

Laboratory Control Spike Recoveries
EPA 8011

APPL ID: **201013W-19639 LCS - 257435**
Batch ID: #8011-201013A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
EDB	0.250	0.244	0.248	97.6	99.2	60-140	1.6	25
SURROGATE: 1,3-DIBROMOPROPANE (	0.250	0.240	0.243	96.0	97.2	70-132		

Comments:

Primary	SPK	DUP
Quant Method :	80111007.M	80111007.M
Extraction Date :	10/13/20	10/13/20
Analysis Date :	10/13/20	10/13/20
Instrument :	HERBIE	HERBIE
Run :	1001128	1001129
Initials :	SSE	

EPA 8015B-eHL

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/13/20

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201009A-BLK	Blank	60-142	95.3		56-125	90.0	
201009A-LCS	Lab Control Spike	60-142	93.1		56-125	94.1	
201009A-LCSD	Lab Control SpikeD	60-142	92.3		56-125	96.4	
BA19640	ERH1155	60-142	98.0		56-125	92.0	

Comments: Batch: #DOC53-201009A

EPA 8015B-eHL

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 11/06/20

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: (R) DECANOIC ACID (S)			SURROGATE: OCTACOSANE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201009A1-BLK	Blank	0-1	0.0		60-142	95.5	
201009A1-LCS	Lab Control Spike	0-1	0.0		60-142	92.7	
201009A1-LCSD	Lab Control SpikeD	0-1	0.0		60-142	103	
BA19640	ERH1155	0-1	0.0		60-142	93.8	

Comments: Batch: #DOC53-201009A1

EPA 8015B-eHL

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 11/06/20

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: ORTHO-TERPHENYL (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
201009A1-BLK	Blank	56-125	84.6				
201009A1-LCS	Lab Control Spike	56-125	91.5				
201009A1-LCSD	Lab Control SpikeD	56-125	102				
BA19640	ERH1155	56-125	84.4				

Comments: Batch: #DOC53-201009A1

EPA 8015B-eH

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/13/20
Matrix:	WATER	Instrument:	Apollo
Blank ID:	201009A-BLK	Time Analyzed:	1632

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201009A-BLK	Blank	1003127	10/13/20 1632
201009A-LCS	Lab Control Spike	1003128	10/13/20 1700
201009A-LCSD	Lab Control SpikeD	1003129	10/13/20 1728
BA19640	ERH1155	1003130	10/13/20 1756

Comments: Batch: #DOC53-201009A

EPA 8015B-eH

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	11/06/20
Matrix:	WATER	Instrument:	Apollo
Blank ID:	201009A1-BLK	Time Analyzed:	2002

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201009A1-BLK	Blank	1105029	11/06/20 2002
201009A1-LCS	Lab Control Spike	1105030	11/06/20 2029
201009A1-LCSD	Lab Control SpikeD	1105031	11/06/20 2057
BA19640	ERH1155	1105032	11/06/20 2125

Comments: Batch: #DOC53-201009A1

Method Blank
EPA 8015B TPH LIQ-LIQ

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201009W-19640 - 257439**
Batch ID: #DOC53-201009A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/09/20	10/13/20
BLANK	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/09/20	10/13/20
BLANK	SURROGATE: OCTACOSANE (S)	95.3	60-142			%	10/09/20	10/13/20
BLANK	SURROGATE: ORTHO-TERPHEN	90.0	56-125			%	10/09/20	10/13/20

Quant Method: DOC0905.M
Run #: 1003127
Instrument: Apollo
Sequence: 201003
Initials: SSE

GC SC-Blank-REG MDLs-DOD
Printed: 11/09/20 2:58:49 PM

Method Blank
EPA 8015B TPH WATER L-L SGC

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201009W-19640 - 258443**
Batch ID: #DOC53-201009A1

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/09/20	11/06/20
BLANK	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/09/20	11/06/20
BLANK	SURROGATE: (R) DECANOIC AC	0.0	0-1			%	10/09/20	11/06/20
BLANK	SURROGATE: OCTACOSANE (S)	95.5	60-142			%	10/09/20	11/06/20
BLANK	SURROGATE: ORTHO-TERPHEN	84.6	56-125			%	10/09/20	11/06/20

Quant Method: DOC0905.M
Run #: 1105029
Instrument: Apollo
Sequence: 201105
Initials: SSE

GC SC-Blank-REG MDLs-DOD
Printed: 11/09/20 2:58:49 PM

EPA 8015B-eH

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/13/20
Matrix:	WATER	Instrument:	Apollo
LCS ID:	201009A-LCS	Time Analyzed:	1700

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201009A-BLK	Blank	1003127	10/13/20 1632
201009A-LCS	Lab Control Spike	1003128	10/13/20 1700
201009A-LCSD	Lab Control SpikeD	1003129	10/13/20 1728
BA19640	ERH1155	1003130	10/13/20 1756

Comments: Batch: #DOC53-201009A

EPA 8015B-eH

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	11/06/20
Matrix:	WATER	Instrument:	Apollo
LCS ID:	201009A1-LCS	Time Analyzed:	2029

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201009A1-BLK	Blank	1105029	11/06/20 2002
201009A1-LCS	Lab Control Spike	1105030	11/06/20 2029
201009A1-LCSD	Lab Control SpikeD	1105031	11/06/20 2057
BA19640	ERH1155	1105032	11/06/20 2125

Comments: Batch: #DOC53-201009A1

Laboratory Control Spike Recoveries
EPA 8015B TPH LIQ-LIQ

APPL ID: **201009W-19640 LCS - 257439**
Batch ID: #DOC53-201009A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1170	1170	93.6	93.6	36-132	0.0	30
OIL (C24-C40)	1250	1190	1230	95.2	98.4	41-113	3.3	30
SURROGATE: OCTACOSANE (S)	75.0	69.8	69.2	93.1	92.3	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	70.6	72.3	94.1	96.4	56-125		

Comments:

Primary	SPK	DUP
Quant Method :	DOC0905.M	DOC0905.M
Extraction Date :	10/09/20	10/09/20
Analysis Date :	10/13/20	10/13/20
Instrument :	Apollo	Apollo
Run :	1003128	1003129
Initials :	SSE	

Laboratory Control Spike Recoveries
EPA 8015B TPH WATER L-L SGC

APPL ID: **201009W-19640 LCS - 258443**
Batch ID: #DOC53-201009A1

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	876	1040	70.1	83.2	36-132	17.1	30
OIL (C24-C40)	1250	1140	1260	91.2	101	41-113	10.0	30
SURROGATE: (R) DECANOIC ACID (S)	10.00	0	0	0.0	0.0	0-1		
SURROGATE: OCTACOSANE (S)	75.0	69.5	77.3	92.7	103	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	68.6	76.6	91.5	102	56-125		

Comments:

Primary	SPK	DUP
Quant Method :	DOC0905.M	DOC0905.M
Extraction Date :	10/09/20	10/09/20
Analysis Date :	11/06/20	11/06/20
Instrument :	Apollo	Apollo
Run :	1105030	1105031
Initials :	SSE	

EPA 8270D

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/14/20

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2,4,6-TRIBROMOPHENOL (S)			SURROGATE: 2-FLUORBIPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201012A-BLK	Blank	43-140	86.0		44-119	80.8	
201012A-LCS	Lab Control Spike	43-140	97.2		44-119	87.2	
201012A-LCSD	Lab Control SpikeD	43-140	108		44-119	96.8	
BA19640	ERH1155	43-140	101		44-119	93.2	

Comments: Batch: #87DC5-201012A

EPA 8270D

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/14/20

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201012A-BLK	Blank	19-119	71.5		44-120	84.8	
201012A-LCS	Lab Control Spike	19-119	88.0		44-120	91.2	
201012A-LCSD	Lab Control SpikeD	19-119	101		44-120	102	
BA19640	ERH1155	19-119	89.6		44-120	94.9	

Comments: Batch: #87DC5-201012A

EPA 8270D

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/14/20

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL-D6 (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201012A-BLK	Blank	10-115	76.7		50-134	97.3	
201012A-LCS	Lab Control Spike	10-115	86.8		50-134	100	
201012A-LCSD	Lab Control SpikeD	10-115	97.6		50-134	113	
BA19640	ERH1155	10-115	90.6		50-134	113	

Comments: Batch: #87DC5-201012A

EPA 8270D

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/14/20
Matrix:	WATER	Instrument:	Yoda
Blank ID:	201012A-BLK	Time Analyzed:	1514

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201012A-BLK	Blank	1009Y064	10/14/20 1514
201012A-LCS	Lab Control Spike	1009Y065	10/14/20 1539
201012A-LCSD	Lab Control SpikeD	1009Y066	10/14/20 1605
BA19640	ERH1155	1009Y067	10/14/20 1630

Comments: Batch: #87DC5-201012A

Method Blank
EPA 8270D WATER

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201012W-19640 - 257404**
Batch ID: #87DC5-201012A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	PHENOL	4.00 U	5.0	4.00	1.00	ug/L	10/12/20	10/14/20
BLANK	SURROGATE: 2,4,6-TRIBROMOP	86.0	43-140			%	10/12/20	10/14/20
BLANK	SURROGATE: 2-FLUORBIPHENY	80.8	44-119			%	10/12/20	10/14/20
BLANK	SURROGATE: 2-FLUOROPHENO	71.5	19-119			%	10/12/20	10/14/20
BLANK	SURROGATE: NITROBENZENE-	84.8	44-120			%	10/12/20	10/14/20
BLANK	SURROGATE: PHENOL-D6 (S)	76.7	10-115			%	10/12/20	10/14/20
BLANK	SURROGATE: TERPHENYL-D14 (	97.3	50-134			%	10/12/20	10/14/20

Quant Method: Y1009.M
Run #: 1009Y064
Instrument: Yoda
Sequence: Y201009
Initials: MA

GC SC-Blank-REG MDLs-DOD
Printed: 10/15/20 3:47:15 PM

EPA 8270D

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/14/20
Matrix:	WATER	Instrument:	Yoda
LCS ID:	201012A-LCS	Time Analyzed:	1539

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201012A-BLK	Blank	1009Y064	10/14/20 1514
201012A-LCS	Lab Control Spike	1009Y065	10/14/20 1539
201012A-LCSD	Lab Control SpikeD	1009Y066	10/14/20 1605
BA19640	ERH1155	1009Y067	10/14/20 1630

Comments: Batch: #87DC5-201012A

Laboratory Control Spike Recoveries
EPA 8270D WATER

APPL ID: **201012W-19640 LCS - 257404**
Batch ID: #87DC5-201012A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
PHENOL	62.5	56.1	62.8	89.8	100	10-115	11.3	20
SURROGATE: 2,4,6-TRIBROMOPHENOL	250	243	269	97.2	108	43-140		
SURROGATE: 2-FLUORBIPHENYL (S)	125	109	121	87.2	96.8	44-119		
SURROGATE: 2-FLUOROPHENOL (S)	250	220	252	88.0	101	19-119		
SURROGATE: NITROBENZENE-D5 (S)	125	114	127	91.2	102	44-120		
SURROGATE: PHENOL-D6 (S)	250	217	244	86.8	97.6	10-115		
SURROGATE: TERPHENYL-D14 (S)	125	125	141	100	113	50-134		

Comments:

Primary	SPK	DUP
Quant Method :	Y1009.M	Y1009.M
Extraction Date :	10/12/20	10/12/20
Analysis Date :	10/14/20	10/14/20
Instrument :	Yoda	Yoda
Run :	1009Y065	1009Y066
Initials :	MA	

Printed: 10/15/20 3:46:57 PM
APPL Standard LCSD

Form 5
Tune Summary

Lab Name: APPL Inc. SDG No:
Case No: Date Analyzed: 10/09/20
Matrix: Soil Instrument: Yoda
ID: 1009Y002.D Time Analyzed: 10:55

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		4ug/mL 8270 7/22/20	1009Y003.D	10/09/20 11:14
2		5ug/mL 8270 7/22/20	1009Y004.D	10/09/20 11:40
3		10ug/mL 8270 7/22/20	1009Y005.D	10/09/20 12:05
4		20ug/mL 8270 7/22/20	1009Y006.D	10/09/20 12:31
5		40ug/mL 8270 7/22/20	1009Y007.D	10/09/20 12:56
6		50ug/mL 8270 7/22/20	1009Y008.D	10/09/20 13:22
7		60ug/mL 8270 7/22/20	1009Y009.D	10/09/20 13:48
8		80ug/mL 8270 7/22/20	1009Y010.D	10/09/20 14:13
9		100ug/mL 8270 7/22/2	1009Y011.D	10/09/20 14:38
10		SS 50ug/mL 8270 7/22	1009Y012.D	10/09/20 15:04
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	9.95 - 80.04% of mass 198	30.7
68	0 - 2% of mass 69	0.0
70	0 - 2% of mass 69	0.2
127	10 - 80% of mass 198	45.8
197	0 - 2% of mass 198	0.0
198	100 - 100% of mass 197.95	100.0
199	5 - 9% of mass 198	6.9
275	10 - 60% of mass 198	27.3
365	1 - 100% of mass 198	2.7
441	0.01 - 24% of mass 442	16.5
442	50 - 500% of mass 197.95	76.1
443	15 - 24% of mass 442	19.4

Form 5
Tune Summary

Lab Name: APPL Inc. SDG No: 93659
Case No: 93659 Date Analyzed: 10/14/20
Matrix: Water Instrument: Yoda
ID: 1009Y062.D Time Analyzed: 14:32

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		50ug/mL 8270 7/22/20	1009Y063.D	10/14/20 14:47
2	Blank	201012A BLK 1/800	1009Y064.D	10/14/20 15:14
3	Lab Control Spike	201012A LCS-1 1/800	1009Y065.D	10/14/20 15:39
4	Lab Control SpikeD	201012A LCSD-1 1/800	1009Y066.D	10/14/20 16:05
5	ERH1155	BA19640W17 1/800	1009Y067.D	10/14/20 16:30
6		50ug/mL 8270 8/13/20	1009Y083.D	10/14/20 23:20
7				
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10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	9.95 - 80.04% of mass 198	29.7
68	0 - 2% of mass 69	0.0
70	0 - 2% of mass 69	0.0
127	10 - 80% of mass 198	44.8
197	0 - 2% of mass 198	0.0
198	100 - 100% of mass 197.95	100.0
199	5 - 9% of mass 198	6.6
275	10 - 60% of mass 198	28.4
365	1 - 100% of mass 198	2.9
441	0.01 - 24% of mass 442	16.5
442	50 - 500% of mass 197.95	83.2
443	15 - 24% of mass 442	19.4

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract:

Lab Code: SDG No.:

Lab File ID (Standard): 1009Y063.D Date Analyzed: 10/14/20

Instrument ID: Yoda Time Analyzed: 14:47

GC Column: ID: Heated Purge: (Y/N)

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	219480	5.12	730683	6.53	447386	8.55
	UPPER LIMIT	438960	5.29	1461366	6.70	894772	8.72
	LOWER LIMIT	109740	4.95	365342	6.36	223693	8.38
	SAMPLE NO.						
01	201012A BLK 1/800	231431	5.11	933066	6.53	573770	8.55
02	201012A LCS-1 1/800	216845	5.12	861834	6.54	528577	8.55
03	201012A LCSD-1 1/800	206182	5.12	836241	6.53	512559	8.55
04	BA19640W17 1/800	218131	5.12	874559	6.53	527087	8.55
05	50ug/mL 8270 8/13/20 (	204116	5.12	829831	6.53	507825	8.55
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.17 minutes of internal standard RT
RT LOWER LIMIT = -0.17 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract:

Lab Code: SDG No.:

Lab File ID (Standard): 1009Y063.D Date Analyzed: 10/14/20

Instrument ID: Yoda Time Analyzed: 14:47

GC Column: ID: Heated Purge: (Y/N)

		Phenanthrene-D10(IS)		Chrysene-D12(IS)		Perylene-D12(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	877882	10.28	904146	13.37	888903	15.07
	UPPER LIMIT	1755764	10.45	1808292	13.54	1777806	15.24
	LOWER LIMIT	438941	10.11	452073	13.20	444452	14.90
	SAMPLE NO.						
01	201012A BLK 1/800	1092090	10.28	1103380	13.36	1091810	15.07
02	201012A LCS-1 1/800	1028750	10.28	1043040	13.36	1035180	15.07
03	201012A LCSD-1 1/800	990309	10.27	1017810	13.37	996956	15.06
04	BA19640W17 1/800	1012050	10.27	1024380	13.36	1007320	15.06
05	50ug/mL 8270 8/13/20 (	984797	10.28	974303	13.37	967490	15.07
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.17 minutes of internal standard RT
RT LOWER LIMIT = -0.17 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8270D-SIM

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/14/20

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-METHYLNAPHTHALENE-D10 (S)			SURROGATE: FLUORANTHENE-D10 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201012A-BLK	Blank	39-114	89.2		58-120	96.1	
201012A-LCS	Lab Control Spike	39-114	96.2		58-120	105	
201012A-LCSD	Lab Control SpikeD	39-114	91.2		58-120	102	
BA19640	ERH1155	39-114	101		58-120	108	

Comments: Batch: #SIM53-201012A

8270D-SIM

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/14/20
Matrix:	WATER	Instrument:	Linus
Blank ID:	201012A-BLK	Time Analyzed:	1411

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201012A-BLK	Blank	0929L172	10/14/20 1411
201012A-LCS	Lab Control Spike	0929L173	10/14/20 1433
201012A-LCSD	Lab Control SpikeD	0929L174	10/14/20 1455
BA19640	ERH1155	0929L175	10/14/20 1517

Comments: Batch: #SIM53-201012A

Method Blank
EPA 8270D SIM LIQ-LIQ

Blank Name/QCG: **201012W-19640 - 257403**
Batch ID: #SIM53-201012A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/12/20	10/14/20
BLANK	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/12/20	10/14/20
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.04	ug/L	10/12/20	10/14/20
BLANK	SURROGATE: 2-METHYLNAPHT	89.2	39-114			%	10/12/20	10/14/20
BLANK	SURROGATE: FLUORANTHENE-	96.1	58-120			%	10/12/20	10/14/20

Quant Method:L0821.M
Run #:0929L172
Instrument:Linus
Sequence:L200929
Initials:MA

GC SC-Blank-REG MDLs-DOD
Printed: 10/15/20 4:02:06 PM

8270D-SIM

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/14/20
Matrix:	WATER	Instrument:	Linus
LCS ID:	201012A-LCS	Time Analyzed:	1433

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201012A-BLK	Blank	0929L172	10/14/20 1411
201012A-LCS	Lab Control Spike	0929L173	10/14/20 1433
201012A-LCSD	Lab Control SpikeD	0929L174	10/14/20 1455
BA19640	ERH1155	0929L175	10/14/20 1517

Comments: Batch: #SIM53-201012A

Laboratory Control Spike Recoveries
EPA 8270D SIM LIQ-LIQ

APPL ID: **201012W-19640 LCS - 257403**
Batch ID: #SIM53-201012A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	6.25	5.77	5.90	92.3	94.4	41-115	2.2	20
2-METHYLNAPHTHALENE	6.25	5.95	5.88	95.2	94.1	39-114	1.2	20
NAPHTHALENE	6.25	5.64	5.75	90.2	92.0	43-114	1.9	20
SURROGATE: 2-METHYLNAPHTHALEN	6.25	6.01	5.70	96.2	91.2	39-114		
SURROGATE: FLUORANTHENE-D10 (S)	6.25	6.56	6.39	105	102	58-120		

Comments:

Primary	SPK	DUP
Quant Method :	L0821.M	L0821.M
Extraction Date :	10/12/20	10/12/20
Analysis Date :	10/14/20	10/14/20
Instrument :	Linus	Linus
Run :	0929L173	0929L174
Initials :	MA	

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 93088
Matrix:
ID: 0821L002.D

SDG No: 93088
Date Analyzed: 08/21/20
Instrument: Linus
Time Analyzed: 10:27

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		0.1 SIM 08/21/20	0821L003.D	08/21/20 10:46
2		0.2 SIM 08/21/20	0821L004.D	08/21/20 11:08
3		0.5 SIM 08/21/20	0821L005.D	08/21/20 11:30
4		1 SIM 08/21/20	0821L006.D	08/21/20 11:53
5		5 SIM 08/21/20	0821L007.D	08/21/20 12:15
6		10 SIM 08/21/20	0821L008.D	08/21/20 12:37
7		50 SIM 08/21/20	0821L009.D	08/21/20 12:59
8		100 SIM 08/21/20	0821L010.D	08/21/20 13:21
9		SS SIM 08/21/20	0821L011.D	08/21/20 14:18
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	9.95 - 80.1% of mass 198	15.9
68	0 - 2.05% of mass 69	0.0
70	0 - 2% of mass 69	0.7
127	10 - 80% of mass 198	37.4
197	0 - 2% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.4
275	10 - 60% of mass 198	34.4
365	1 - 100% of mass 198	5.0
441	0.01 - 24% of mass 442	15.6
442	50 - 500% of mass 198	262.6
443	15 - 24% of mass 442	18.9

Form 5
Tune Summary

Lab Name: APPL Inc. SDG No: 93659
Case No: 93659 Date Analyzed: 10/14/20
Matrix: Water Instrument: Linus
ID: 0929L170.D Time Analyzed: 13:10

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		5 SIM 08/21/20 (1)	0929L171.D	10/14/20 13:26
2	Blank	201012A BLK 1/800	0929L172.D	10/14/20 14:11
3	Lab Control Spike	201012A LCS-2 1/800	0929L173.D	10/14/20 14:33
4	Lab Control SpikeD	201012A LCSD-2 1/800	0929L174.D	10/14/20 14:55
5	ERH1155	BA19640W17 1/800	0929L175.D	10/14/20 15:17
6		5 SIM 08/21/20 (2)	0929L191.D	10/14/20 21:23
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	9.95 - 80.1% of mass 198	18.2
68	0 - 2.05% of mass 69	0.0
70	0 - 2% of mass 69	0.4
127	10 - 80% of mass 198	38.7
197	0 - 2% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.6
275	10 - 60% of mass 198	33.6
365	1 - 100% of mass 198	4.7
441	0.01 - 24% of mass 442	15.4
442	50 - 500% of mass 198	249.2
443	15 - 24% of mass 442	19.3

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract:

Lab Code: SDG No.:

Lab File ID (Standard): 0929L171.D Date Analyzed: 10/14/20

Instrument ID: Linus Time Analyzed: 13:26

GC Column: ID: Heated Purge: (Y/N)

		Napthalene-D8(IS)		Acenaphthene-D10(IS)		Phenanthrene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	56912	3.77	29618	5.77	55369	7.48
	UPPER LIMIT	113824	3.94	59236	5.94	110738	7.65
	LOWER LIMIT	28456	3.60	14809	5.60	27685	7.31
	SAMPLE NO.						
01	201012A BLK 1/800	51965	3.77	27068	5.77	53587	7.50
02	201012A LCS-2 1/800	54764	3.77	28216	5.76	54701	7.48
03	201012A LCSD-2 1/800	52368	3.77	28124	5.76	54599	7.48
04	BA19640W17 1/800	51696	3.77	27943	5.77	55540	7.50
05	5 SIM 08/21/20 (2)	49606	3.77	33940	5.76	55761	7.48
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.17 minutes of internal standard RT
RT LOWER LIMIT = -0.17 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract:

Lab Code: SDG No.:

Lab File ID (Standard): 0929L171.D Date Analyzed: 10/14/20

Instrument ID: Linus Time Analyzed: 13:26

GC Column: ID: Heated Purge: (Y/N)

		Chrysene-D12(IS)		Perylene-D12(IS)			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	79232	10.56	84749	12.82		
	UPPER LIMIT	158464	10.73	169498	12.99		
	LOWER LIMIT	39616	10.39	42375	12.65		
	SAMPLE NO.						
01	201012A BLK 1/800	73178	10.57	81802	12.83		
02	201012A LCS-2 1/800	77599	10.56	85736	12.82		
03	201012A LCSD-2 1/800	76696	10.56	82462	12.82		
04	BA19640W17 1/800	75807	10.57	86825	12.82		
05	5 SIM 08/21/20 (2)	74026	10.56	90949	12.82		
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.17 minutes of internal standard RT
RT LOWER LIMIT = -0.17 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

EPA 8270D

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/14/20
Matrix:	WATER	Instrument:	Yoda
Blank ID:	201013A-BLK	Time Analyzed:	1141

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201013A-BLK	Blank	0501Y098	10/14/20 1141
201013A-LCS	Lab Control Spike	0501Y099	10/14/20 1204
201013A-LCSD	Lab Control SpikeD	0501Y100	10/14/20 1228
BA19640	ERH1155	0501Y101	10/14/20 1309

Comments: Batch: #87DME-201013A

Method Blank
EPA 8270D MODIFIED WATER

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201013W-19640 - 257397**
Batch ID: #87DME-201013A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2-(2-METHOXYETHOXY)-ETHAN	80.0 U	100	80.0	40.0	ug/L	10/13/20	10/14/20

Quant Method: YMEE0501.M
Run #: 0501Y098
Instrument: Yoda
Sequence: Y200501M
Initials: MA

GC SC-Blank-REG MDLs-DOD
Printed: 10/14/20 2:39:59 PM

EPA 8270D

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/14/20
Matrix:	WATER	Instrument:	Yoda
LCS ID:	201013A-LCS	Time Analyzed:	1204

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201013A-BLK	Blank	0501Y098	10/14/20 1141
201013A-LCS	Lab Control Spike	0501Y099	10/14/20 1204
201013A-LCSD	Lab Control SpikeD	0501Y100	10/14/20 1228
BA19640	ERH1155	0501Y101	10/14/20 1309

Comments: Batch: #87DME-201013A

Laboratory Control Spike Recoveries
EPA 8270D MODIFIED WATER

APPL ID: **201013W-19640 LCS - 257397**
Batch ID: #87DME-201013A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
2-(2-METHOXYETHOXY)-ETHANOL	80.0	42.7	67.4	53.4	84.3	30-130	44.9 #	20

= Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	YMEE0501.M	YMEE0501.M
Extraction Date :	10/13/20	10/13/20
Analysis Date :	10/14/20	10/14/20
Instrument :	Yoda	Yoda
Run :	0501Y099	0501Y100
Initials :	MA	

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No:
Matrix: Soil
ID: 0501Y002.D

SDG No:
Date Analyzed: 05/01/20
Instrument: Yoda
Time Analyzed: 9:23

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		50ug/ml MEE 05/01/20	0501Y003.D	05/01/20 9:39
2		100ug/ml MEE 05/01/2	0501Y004.D	05/01/20 10:03
3		200ug/ml MEE 05/01/2	0501Y006.D	05/01/20 10:51
4		400ug/ml MEE 05/01/2	0501Y007.D	05/01/20 11:24
5		500ug/ml MEE 05/01/2	0501Y008.D	05/01/20 11:48
6		600ug/ml MEE 05/01/2	0501Y009.D	05/01/20 12:13
7		800ug/ml MEE 05/01/2	0501Y010.D	05/01/20 12:37
8		1000ug/ml MEE 05/01/	0501Y011.D	05/01/20 13:01
9		SSug/ml MEE 05/01/20	0501Y013.D	05/01/20 13:50
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	10 - 80% of mass 198	40.1
68	0 - 2% of mass 69	0.0
70	0 - 2% of mass 69	0.5
127	10 - 80% of mass 198	52.5
197	0 - 2% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.8
275	10 - 60% of mass 198	26.7
365	1 - 100% of mass 198	2.8
441	0.01 - 24% of mass 442	3.9
442	50 - 500% of mass 198	71.6
443	15 - 24% of mass 442	19.8

Form 5
Tune Summary

Lab Name: APPL Inc. SDG No: 93659
Case No: 93659 Date Analyzed: 10/14/20
Matrix: Water Instrument: Yoda
ID: 0501Y096.D Time Analyzed: 10:31

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		500ug/ml MEE 05/01/2	0501Y097.D	10/14/20 11:16
2	Blank	201013A BLK 2/500	0501Y098.D	10/14/20 11:41
3	Lab Control Spike	201013A LCS-1 2/500	0501Y099.D	10/14/20 12:04
4	Lab Control SpikeD	201013A LCSD-1 2/500	0501Y100.D	10/14/20 12:28
5	ERH1155	BA19640W14 2/500	0501Y101.D	10/14/20 13:09
6		500ug/ml MEE 05/01/2	0501Y102.D	10/14/20 13:33
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	9.95 - 80.04% of mass 198	31.8
68	0 - 2.04% of mass 69	0.0
70	0 - 2.04% of mass 69	0.5
127	10 - 80% of mass 198	47.2
197	0 - 2% of mass 198	0.0
198	100 - 100% of mass 197.95	100.0
199	5 - 9% of mass 198	6.7
275	10 - 60% of mass 198	27.4
365	1 - 100% of mass 198	2.6
441	0.01 - 24% of mass 442	6.3
442	50 - 500% of mass 197.95	79.7
443	15 - 24% of mass 442	19.5

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract:

Lab Code: SDG No.:

Lab File ID (Standard): 0501Y097.D Date Analyzed: 10/14/20

Instrument ID: Yoda Time Analyzed: 11:16

GC Column: ID: Heated Purge: (Y/N)

	1,4-dichlorobenzene-D4(IS)							
		AREA #	RT #	AREA #	RT #	AREA #	RT #	
	12 HOUR STD	164308	5.37					
	UPPER LIMIT	328616	5.54					
	LOWER LIMIT	82154	5.20					
	SAMPLE NO.							
01	201013A BLK 2/500	124546	5.37					
02	201013A LCS-1 2/500	168354	5.37					
03	201013A LCSD-1 2/500	166521	5.37					
04	BA19640W14 2/500	195770	5.36					
05	500ug/ml MEE 05/01/20	189383	5.38					
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.17 minutes of internal standard RT
RT LOWER LIMIT = -0.17 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

EPA 8260B

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/09/20

Matrix: WATER Instrument: ZEUS

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201008AZ-LCS	Lab Control Spike	81-118	113		85-114	107	
201008AZ-LCSD	Lab Control SpikeD	81-118	112		85-114	106	
201008AZ-BLK	Blank	81-118	114.42		85-114	101.62	
BA19639	ERH1154	81-118	114		85-114	103	
BA19640	ERH1155	81-118	116		85-114	102	

Comments: Batch: #86BTO-201008AZ

EPA 8260B

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/09/20

Matrix: WATER Instrument: ZEUS

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201008AZ-LCS	Lab Control Spike	80-119	111		89-112	105	
201008AZ-LCSD	Lab Control SpikeD	80-119	110		89-112	106	
201008AZ-BLK	Blank	80-119	108.19		89-112	100.67	
BA19639	ERH1154	80-119	110		89-112	101	
BA19640	ERH1155	80-119	110		89-112	100	

Comments: Batch: #86BTO-201008AZ

EPA 8260B

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/09/20
Matrix:	WATER	Instrument:	ZEUS
Blank ID:	201008AZ-BLK	Time Analyzed:	1337

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201008AZ-LCS	Lab Control Spike	1009Z03	10/09/20 1027
201008AZ-LCSD	Lab Control SpikeD	1009Z04	10/09/20 1050
201008AZ-BLK	Blank	1009Z10	10/09/20 1337
BA19639	ERH1154	1009Z25	10/09/20 1925
BA19640	ERH1155	1009Z26	10/09/20 1948

Comments: Batch: #86BTO-201008AZ

Method Blank
EPA 8260B BTEX & 1,2-DCA WATER

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201008W-19639 - 257399**
Batch ID: #86BTO-201008AZ

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1,2-DICHLOROETHANE	0.30 U	1.0	0.30	0.14	ug/L	10/09/20	10/09/20
BLANK	BENZENE	0.30 U	1.0	0.30	0.15	ug/L	10/09/20	10/09/20
BLANK	ETHYLBENZENE	0.50 U	1.0	0.50	0.23	ug/L	10/09/20	10/09/20
BLANK	TOLUENE	0.30 U	1.0	0.30	0.15	ug/L	10/09/20	10/09/20
BLANK	XYLENES (TOTAL)	0.30 U	2.0	0.30	0.15	ug/L	10/09/20	10/09/20
BLANK	SURROGATE: 1,2-DICHLOROET	114.42	81-118			%	10/09/20	10/09/20
BLANK	SURROGATE: 4-BROMOFLUORO	101.62	85-114			%	10/09/20	10/09/20
BLANK	SURROGATE: DIBROMOFLUOR	108.19	80-119			%	10/09/20	10/09/20
BLANK	SURROGATE: TOLUENE-D8 (S)	100.67	89-112			%	10/09/20	10/09/20

Quant Method:ZGAS1003.M
Run #:1009Z10
Instrument:ZEUS
Sequence:201006
Initials:CHE

GC SC-Blank-REG MDLs-DOD
Printed: 10/14/20 3:50:15 PM

EPA 8260B

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/09/20
Matrix:	WATER	Instrument:	ZEUS
LCS ID:	201008AZ-LCS	Time Analyzed:	1027

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201008AZ-LCS	Lab Control Spike	1009Z03	10/09/20 1027
201008AZ-LCSD	Lab Control SpikeD	1009Z04	10/09/20 1050
201008AZ-BLK	Blank	1009Z10	10/09/20 1337
BA19639	ERH1154	1009Z25	10/09/20 1925
BA19640	ERH1155	1009Z26	10/09/20 1948

Comments: Batch: #86BTO-201008AZ

Laboratory Control Spike Recoveries
EPA 8260B BTEX & 1,2-DCA WATER

APPL ID: **201009W-19639 LCS - 257399**
Batch ID: #86BTO-201008AZ

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1,2-DICHLOROETHANE	10.00	8.98	8.85	89.8	88.5	73-128	1.5	20
BENZENE	10.00	8.72	8.64	87.2	86.4	79-120	0.92	20
ETHYLBENZENE	10.00	9.64	9.77	96.4	97.7	79-121	1.3	20
TOLUENE	10.00	8.94	9.01	89.4	90.1	80-121	0.78	20
XYLENES (TOTAL)	30.0	30.7	31.1	102	104	79-121	1.3	20
SURROGATE: 1,2-DICHLOROETHANE-D	25.0	28.2	28.1	113	112	81-118		
SURROGATE: 4-BROMOFLUOROBENZE	25.0	26.7	26.5	107	106	85-114		
SURROGATE: DIBROMOFLUOROMETH	25.0	27.8	27.6	111	110	80-119		
SURROGATE: TOLUENE-D8 (S)	25.0	26.2	26.4	105	106	89-112		

Comments:

Primary	SPK	DUP
Quant Method :	Z1006W.M	Z1006W.M
Extraction Date :	10/09/20	10/09/20
Analysis Date :	10/09/20	10/09/20
Instrument :	ZEUS	ZEUS
Run :	1009Z03	1009Z04
Initials :	CHE	

Form 5
Tune Summary

Lab Name: APPL Inc. SDG No:
Case No: Date Analyzed: 10/6/2020
Matrix: Water Instrument: ZEUS
ID: 1006Z20.D Time Analyzed: 15:00

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		0.3ug/L VOC STD10/6/	1006Z23.D	10/6/2020 16:16
2		0.5ug/L VOC STD10/6/	1006Z24.D	10/6/2020 16:39
3		1.0ug/L VOC STD10/6/	1006Z25.D	10/6/2020 17:02
4		2.0ug/L VOC STD10/6/	1006Z26.D	10/6/2020 17:26
5		5.0ug/L VOC STD10/6/	1006Z27.D	10/6/2020 17:49
6		10ug/L VOC STD10/6/2	1006Z28.D	10/6/2020 18:12
7		20ug/L VOC STD10/6/2	1006Z29.D	10/6/2020 18:36
8		40ug/L VOC STD10/6/2	1006Z30.D	10/6/2020 18:59
9		100ug/L VOC STD10/6/	1006Z31.D	10/6/2020 19:22
10		(SS)10ug/L VOC STD10	1006Z33.D	10/6/2020 20:08
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	15 - 40% of mass 95	20.0
75	30 - 60% of mass 95	52.4
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	7.4
173	0 - 2.05% of mass 174	0.0
174	50 - 200% of mass 95	88.2
175	5 - 9% of mass 174	7.2
176	95 - 101% of mass 174	95.2
177	5 - 9% of mass 176	8.3

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 93659
Matrix: Water
ID: 1009Z00.D

SDG No: 93659
Date Analyzed: 10/9/2020
Instrument: ZEUS
Time Analyzed: 9:14

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		201009A CCV 10ug/L	1009Z02.D	10/9/2020 10:04
2	Lab Control Spike	201009A LCS 10ug/L	1009Z03.D	10/9/2020 10:27
3	Lab Control SpikeD	201009A LCSD 10ug/L	1009Z04.D	10/9/2020 10:50
4	Blank	201009A BLK	1009Z10.D	10/9/2020 13:37
5	ERH1154	BA19639W01	1009Z25.D	10/9/2020 19:25
6	ERH1155	BA19640W01	1009Z26.D	10/9/2020 19:48
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	15 - 40% of mass 95	20.5
75	30 - 60% of mass 95	50.6
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	7.3
173	0 - 2.05% of mass 174	0.2
174	50 - 200% of mass 95	81.5
175	5 - 9% of mass 174	7.2
176	95 - 101% of mass 174	98.3
177	5 - 9% of mass 176	6.8

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract:

Lab Code: SDG No.:

Lab File ID (Standard): 1006Z29.D Date Analyzed: 10/06/20

Instrument ID: ZEUS Time Analyzed: 18:36

GC Column: ID: Heated Purge: (Y/N)

		Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	2623830	5.11	1851340	7.77	1002430	9.99
	UPPER LIMIT	5247660	5.28	3702680	7.94	2004860	10.16
	LOWER LIMIT	1311915	4.94	925670	7.60	501215	9.82
	SAMPLE NO.						
01	(SS)10ug/L VOC STD10	2877450	5.11	2018990	7.77	1088310	9.98
02	201009A CCV 10ug/L	3403130	5.11	2444410	7.77	1358460	9.99
03	201009A LCS 10ug/L	3639700	5.11	2614190	7.77	1438590	9.98
04	201009A LCSD 10ug/L	3437620	5.11	2461820	7.77	1350240	9.98
05	201009A BLK	3459130	5.11	2517730	7.77	1371220	9.98
06	BA19639W01	3337680	5.11	2419440	7.77	1335830	9.98
07	BA19640W01	3342260	5.11	2436720	7.77	1342810	9.99
08	Ending CCV 10ug/L 10/9	3422220	5.11	2490210	7.77	1376600	9.99
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.17 minutes of internal standard RT
RT LOWER LIMIT = -0.17 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

EPA 8260B

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/09/20

Matrix: WATER Instrument: Zeus

APPL ID.	Client Sample No.	SURROGATE: 4-BROMOFLUOROBENZENE (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
201009AZ-LCS	Lab Control Spike	85-114	105				
201009AZ-LCSD	Lab Control SpikeD	85-114	104				
201009AZ-BLK	Blank	85-114	102				
BA19639	ERH1154	85-114	103				
BA19640	ERH1155	85-114	102				

Comments: Batch: #GRO86-201009AZ

EPA 8260B

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/09/20
Matrix:	WATER	Instrument:	Zeus
Blank ID:	201009AZ-BLK	Time Analyzed:	1337

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201009AZ-LCS	Lab Control Spike	1009Z05	10/09/20 1114
201009AZ-LCSD	Lab Control SpikeD	1009Z06	10/09/20 1137
201009AZ-BLK	Blank	1009Z10	10/09/20 1337
BA19639	ERH1154	1009Z25	10/09/20 1925
BA19640	ERH1155	1009Z26	10/09/20 1948

Comments: Batch: #GRO86-201009AZ

Method Blank
EPA 8260B GRO WATER

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201009W-19639 - 257400**
Batch ID: #GRO86-201009AZ

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	GASOLINE RANGE ORGANICS	18.0 U	20	18.0	8.6	ug/L	10/09/20	10/09/20
BLANK	SURROGATE: 4-BROMOFLUORO	102	85-114			%	10/09/20	10/09/20

Quant Method:ZGAS1003.M
Run #:1009Z10
Instrument:ZEUS
Sequence:201006
Initials:CHE

GC SC-Blank-REG MDLs-DOD
Printed: 10/14/20 3:59:09 PM

EPA 8260B

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/09/20
Matrix:	WATER	Instrument:	Zeus
LCS ID:	201009AZ-LCS	Time Analyzed:	1114

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201009AZ-LCS	Lab Control Spike	1009Z05	10/09/20 1114
201009AZ-LCSD	Lab Control SpikeD	1009Z06	10/09/20 1137
201009AZ-BLK	Blank	1009Z10	10/09/20 1337
BA19639	ERH1154	1009Z25	10/09/20 1925
BA19640	ERH1155	1009Z26	10/09/20 1948

Comments: Batch: #GRO86-201009AZ

Laboratory Control Spike Recoveries
EPA 8260B GRO WATER

APPL ID: **201009W-19639 LCS - 257400**
Batch ID: #GRO86-201009AZ

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
GASOLINE RANGE ORGANICS	300	308	294	103	98.0	78-122	4.7	20
SURROGATE: 4-BROMOFLUOROBENZE	25.0	26.3	26.0	105	104	85-114		

Comments:

Primary	SPK	DUP
Quant Method :	ZGAS1003.M	ZGAS1003.M
Extraction Date :	10/09/20	10/09/20
Analysis Date :	10/09/20	10/09/20
Instrument :	Zeus	ZEUS
Run :	1009Z05	1009Z06
Initials :	CHE	

RSK 175

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/14/20

Matrix: WATER Instrument: Rocky

Blank ID: 201014A-BLK Time Analyzed: 1645

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201014A-LCS	Lab Control Spike	1014R02	10/14/20 1642
201014A-BLK	Blank	1014R03	10/14/20 1645
BA19639	ERH1154	1014R04	10/14/20 1648
BA19640	ERH1155	1014R05	10/14/20 1651
201014A-LCSD	Lab Control SpikeD	1014R06	10/14/20 1654

Comments: Batch: #RSKME-201014A

Method Blank
METHANE

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201014W-19639 - 257418**
Batch ID: #RSKME-201014A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	METHANE	1.00 U	5.0	1.00	0.25	ug/L	10/14/20	10/14/20

Quant Method: RSK0914A.M
Run #: 1014R03
Instrument: Rocky
Sequence: 200914
Initials: GAG

GC SC-Blank-REG MDLs-DOD
Printed: 10/15/20 11:26:20 AM

RSK 175

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/14/20
Matrix:	WATER	Instrument:	Rocky
LCS ID:	201014A-LCS	Time Analyzed:	1642

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201014A-LCS	Lab Control Spike	1014R02	10/14/20 1642
201014A-BLK	Blank	1014R03	10/14/20 1645
BA19639	ERH1154	1014R04	10/14/20 1648
BA19640	ERH1155	1014R05	10/14/20 1651
201014A-LCSD	Lab Control SpikeD	1014R06	10/14/20 1654

Comments: Batch: #RSKME-201014A

Laboratory Control Spike Recoveries
METHANE

APPL ID: **201014W-19639 LCS - 257418**
Batch ID: #RSKME-201014A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
METHANE	83.4	92.0	73.9	110	88.6	72-125	21.8	30

Comments:

Primary	SPK	DUP
Quant Method :	RSK0914A.M	RSK0914A.M
Extraction Date :	10/14/20	10/14/20
Analysis Date :	10/14/20	10/14/20
Instrument :	Rocky	Rocky
Run :	1014R02	1014R06
Initials :	GAG	

EPA 300.0

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/08/20
Matrix:	WATER	Instrument:	Charlie
Blank ID:	201008A1-BLK	Time Analyzed:	1550

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201008A1-LCS	Lab Control Spike	13	10/08/20 1535
201008A1-BLK	Blank	14	10/08/20 1550
BA19640	ERH1155	20	10/08/20 1718
201008A1-LCSD	Lab Control SpikeD	25	10/08/20 1831

Comments: Batch: #300W-201008A1

WETLAB BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	0.20 U	1.0	0.20	0.08	mg/L	10/08/20	10/08/20	#300W-201008A1-BA19640
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	10/08/20	10/08/20	#300W-201008A1-BA19640
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	10/08/20	10/08/20	#300W-201008A1-BA19640

Wetlab SC-Blank-REG MDLs
Printed: 10/14/20 10:18:03 AM

EPA 300.0

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/08/20
Matrix:	WATER	Instrument:	Charlie
LCS ID:	201008A1-LCS	Time Analyzed:	1535

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201008A1-LCS	Lab Control Spike	13	10/08/20 1535
201008A1-BLK	Blank	14	10/08/20 1550
BA19640	ERH1155	20	10/08/20 1718
201008A1-LCSD	Lab Control SpikeD	25	10/08/20 1831

Comments: Batch: #300W-201008A1

Laboratory Control Spike Recoveries

WETLAB

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 300.0	CHLORIDE	25.0	26.3	26.7	105	107	1.5	20	90-110	10/08/20	10/08/20	10/08/20	10/08/20	#300W-201008A1-BA1964
EPA 300.0	NITRATE	22.1	21.8	22.9	98.6	104	4.9	20	90-110	10/08/20	10/08/20	10/08/20	10/08/20	#300W-201008A1-BA1964
EPA 300.0	SULFATE	25.0	25.3	25.6	101	102	1.2	20	90-110	10/08/20	10/08/20	10/08/20	10/08/20	#300W-201008A1-BA1964

Comments:

EPA 353.2

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/12/20

Matrix: WATER Instrument: EVE

Blank ID: 201012A-BLK Time Analyzed: 1305

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201012A-BLK	Blank	12	10/12/20 1305
201012A-LCS	Lab Control Spike	13	10/12/20 1305
201012A-LCSD	Lab Control SpikeD	14	10/12/20 1306
201012A-MS	Matrix Spike	16	10/12/20 1308
201012A-MSD	Matrix SpikeD	17	10/12/20 1309
BA19640	ERH1155	18	10/12/20 1310

Comments: Batch: #353TO-201012A

SM 2320B

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/12/20
Matrix:	WATER	Instrument:	Tiamo
Blank ID:	201012A1-BLK	Time Analyzed:	1607

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201012A1-BLK	Blank	1	10/12/20 1607
BA19640	ERH1155	13	10/12/20 2037
201012A1-LCSD	Lab Control SpikeD	17	10/12/20 2158
201012A1-LCS	Lab Control Spike	2	10/12/20 1611

Comments: Batch: #232W-201012A1

SM3500FeB

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/09/20

Matrix: WATER Instrument: Manual Spec

Blank ID: A201009-BLK Time Analyzed: 1631

APPL ID.	Client Sample No.	File ID.	Date Analyzed
A201009-BLK	Blank	33	10/09/20 1631
A201009-LCS	Lab Control Spike	34	10/09/20 1632
A201009-LCSD	Lab Control SpikeD	35	10/09/20 1633
BA19640	ERH1155	36	10/09/20 1636
A201009-MS	Matrix Spike	37	10/09/20 1637
A201009-MSD	Matrix SpikeD	38	10/09/20 1638

Comments: Batch: #35FE-A201009

SW846 9060A

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/12/20
Matrix:	WATER	Instrument:	TICTOC
Blank ID:	201012A-BLK	Time Analyzed:	1728

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201012A-BLK	Blank	15	10/12/20 1728
201012A-LCS	Lab Control Spike	16	10/12/20 1808
201012A-LCSD	Lab Control SpikeD	17	10/12/20 1850
BA19640	ERH1155	35	10/13/20 0617

Comments: Batch: #TOCW5-201012A

WETLAB BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
SM 2320B	BICARBONATE AS	5.7	2.0	1.70	0.85	mg/L	10/12/20	10/12/20	#232W-201012A1-BA19640
SM 2320B	CARBONATE AS C	1.70 U	2.0	1.70	0.85	mg/L	10/12/20	10/12/20	#232W-201012A1-BA19640
SM 2320B	TOTAL ALKALINITY	5.7	2.0	1.70	0.85	mg/L	10/12/20	10/12/20	#232W-201012A1-BA19640
EPA 353.2	NITRATE-NITRITE A	0.090 U	0.10	0.090	0.028	mg/L	10/12/20	10/12/20	#353TO-201012A-BA19640
SM3500Fe	FERROUS IRON	0.32 U	1.0	0.32	0.16	mg/L	10/09/20	10/09/20	#35FE-A201009-BA19640
SW846 90	TOTAL ORGANIC C	0.350 U	0.93	0.350	0.130	mg/L	10/12/20	10/12/20	#TOCW5-201012A-BA19640

EPA 353.2

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/12/20
Matrix:	WATER	Instrument:	EVE
LCS ID:	201012A-LCS	Time Analyzed:	1305

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201012A-BLK	Blank	12	10/12/20 1305
201012A-LCS	Lab Control Spike	13	10/12/20 1305
201012A-LCSD	Lab Control SpikeD	14	10/12/20 1306
201012A-MS	Matrix Spike	16	10/12/20 1308
201012A-MSD	Matrix SpikeD	17	10/12/20 1309
BA19640	ERH1155	18	10/12/20 1310

Comments: Batch: #353TO-201012A

SM 2320B

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/12/20
Matrix:	WATER	Instrument:	Tiamo
LCS ID:	201012A1-LCS	Time Analyzed:	1611

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201012A1-BLK	Blank	1	10/12/20 1607
BA19640	ERH1155	13	10/12/20 2037
201012A1-LCSD	Lab Control SpikeD	17	10/12/20 2158
201012A1-LCS	Lab Control Spike	2	10/12/20 1611

Comments: Batch: #232W-201012A1

SM3500FeB

Form 4

LCS Summary

Lab Name: APPL, Inc. SDG No: 93659

Case No: 93659 Date Analyzed: 10/09/20

Matrix: WATER Instrument: Manual Spec

LCS ID: A201009-LCS Time Analyzed: 1632

APPL ID.	Client Sample No.	File ID.	Date Analyzed
A201009-BLK	Blank	33	10/09/20 1631
A201009-LCS	Lab Control Spike	34	10/09/20 1632
A201009-LCSD	Lab Control SpikeD	35	10/09/20 1633
BA19640	ERH1155	36	10/09/20 1636
A201009-MS	Matrix Spike	37	10/09/20 1637
A201009-MSD	Matrix SpikeD	38	10/09/20 1638

Comments: Batch: #35FE-A201009

SW846 9060A

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93659
Case No:	93659	Date Analyzed:	10/12/20
Matrix:	WATER	Instrument:	TICTOC
LCS ID:	201012A-LCS	Time Analyzed:	1808

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201012A-BLK	Blank	15	10/12/20 1728
201012A-LCS	Lab Control Spike	16	10/12/20 1808
201012A-LCSD	Lab Control SpikeD	17	10/12/20 1850
BA19640	ERH1155	35	10/13/20 0617

Comments: Batch: #TOCW5-201012A

Laboratory Control Spike Recoveries

WETLAB

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
EPA 353.2	NITRATE-NITRITE AS N	3.00	3.09	3.29	103	110	6.3	20	90-110	10/12/20	10/12/20	10/12/20	10/12/20	#353TO-201012A-BA1964
SM 2320B	BICARBONATE AS CACO3	250	233	233	93.2	93.2	0.0	20	90-110	10/12/20	10/12/20	10/12/20	10/12/20	#232W-201012A1-BA1964
SM 2320B	TOTAL ALKALINITY AS CA	250	249	252	99.6	101	1.2	20	90-110	10/12/20	10/12/20	10/12/20	10/12/20	#232W-201012A1-BA1964
SM3500Fe	FERROUS IRON	3.00	2.97	3.01	99.0	100	1.3	20	80-120	10/09/20	10/09/20	10/09/20	10/09/20	#35FE-A201009-BA19640
SW846 90	TOTAL ORGANIC CARBO	5.00	4.74	4.69	94.8	93.8	1.1	20	80-120	10/12/20	10/12/20	10/12/20	10/12/20	#TOCW5-201012A-BA196

Comments:

Matrix Spike Recoveries

WETLAB

APPL ID: **201012W-19640 MS - 257284**

Sample ID: BA19640

Client ID: ERH1155

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/L	Matrix Res mg/L	SPK Res mg/L	DUP Res mg/L	SPK % Recovery	DUP % Recovery	RPD	RPD Max	Recovery Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group	QC Sample
EPA 353.2	NITRATE-NITRITE AS	3.23	0.38	4.22	4.07	119 #	114 #	3.6	20	90-110	10/12/20	10/12/20	10/12/20	10/12/20	257284	BA19640
SM3500Fe	FERROUS IRON	3.00	0.10	3.08	3.16	99.3	102	2.6	20	80-120	10/09/20	10/09/20	10/09/20	10/09/20	257368	BA19640

= Recovery is outside QC limits.

Comments:

ORGANICS

Calibration Data

DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/07/20
Matrix: Water Instrument: HERBIE Initials: SS

			1001097.D	1001098.D	1001099.D	1001100.D	1001101.D	1001102.D									
		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
1	TM	EDB	33900	31775	29700	28227	27497	26464					29594	9.5	TM		
2	TML	1,2,3-TCP	15550	8090	7406	6744	6518	6272					8430	42	TML	0.999	
3	S	1,3-DIBROMOPROPANE(S)	35500	31015	28476	26234	25155	24280					28443	15	S		
4	TM	DBCP	103275	90270	89062	85448	84017	82955					89171	8.4	TM		
5		Signal #2											0	0			
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2.138409

DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/07/20
Matrix: Water Instrument: HERBIE
Initials: SS

			1001097 D	1001098 D	1001099.D	1001100 D	1001101.D	1001102 D									
		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
36	TM	EDB #2	153700	133605	133054	122945	119705	120227					130539	9.9	TM		
37	TM	1,2,3-TCP #2	24900	25220	24508	22265	21977	21331					23367	7.3	TM		
38	S	1,3-DIBROMOPROPANE(S) #2	106375	95825	92648	84958	81158	80409					90229	11	S		
39	TM	DBCP #2	472650	414570	407512	398958	401004	405276					416662	6.7	TM		
40																	
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0.999745

Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001097.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Oct 2020 5:00 pm
Operator : SS
Sample : 8011-1 10/7/20
Misc : water
ALS Vial : 97 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 09 09:36:21 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
3) S	1,3-DIBRO...	9.976	11.000	1420	4255	0.025	0.024	
	Spiked Amount 0.350			Recovery =		7.14%	6.86%	
	Target Compounds							
1) TM	EDB	5.730	7.176	1356	6148	0.023	0.024	
2) TM	1,2,3-TCP	9.183	10.410	622	996	0.010	0.021	#
4) TM	DBCP	13.310	14.063	4131	18906	0.023	0.023	

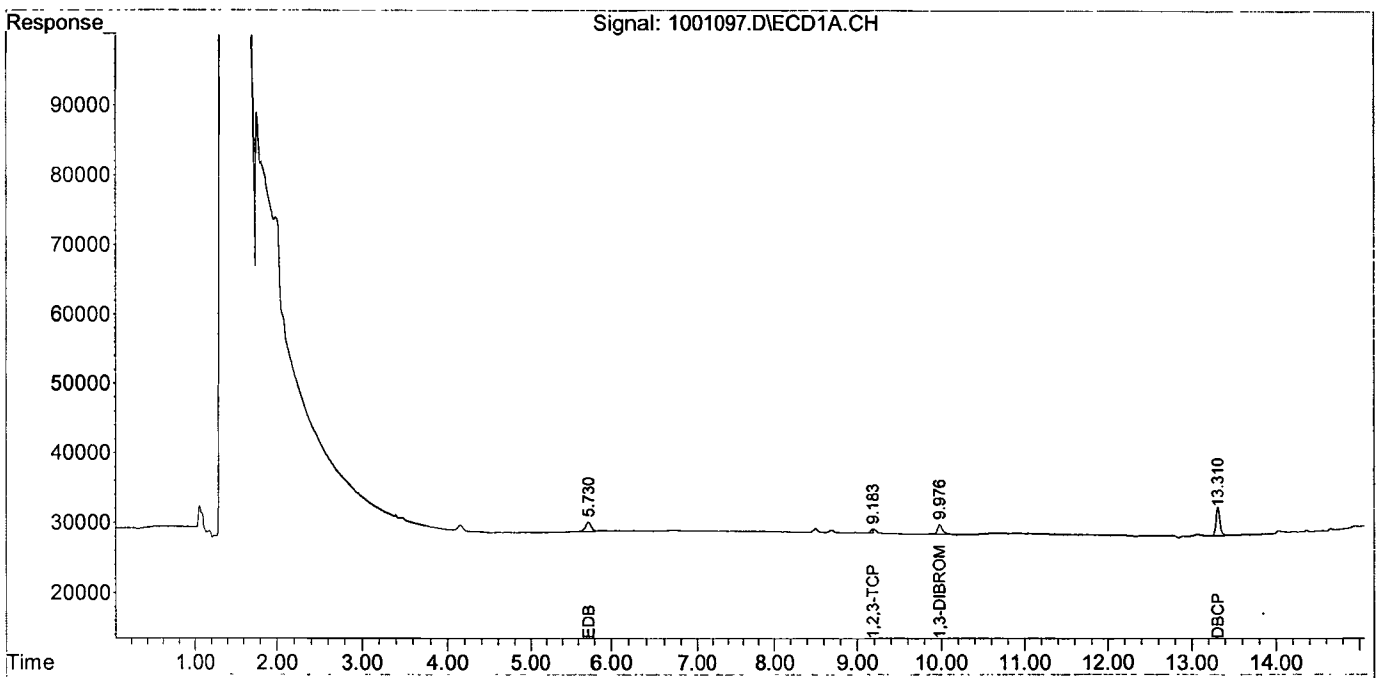
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

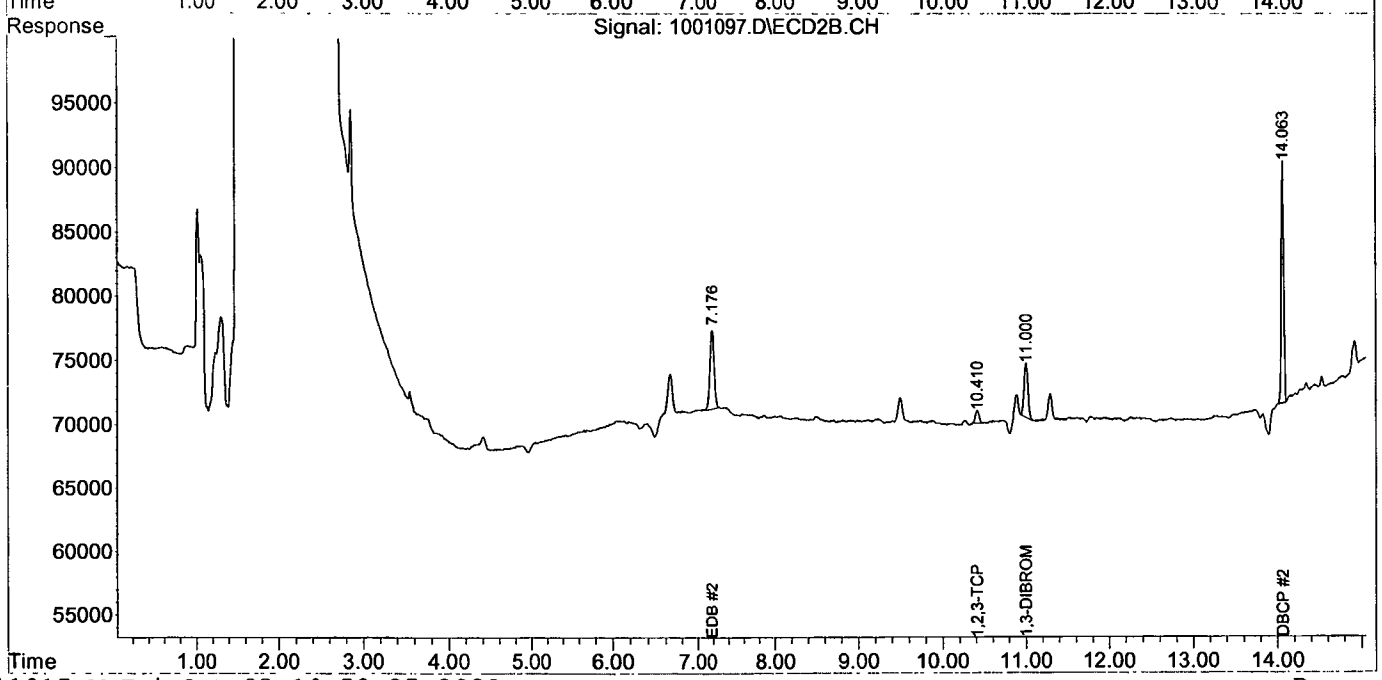
Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001097.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Oct 2020 5:00 pm
Operator : SS
Sample : 8011-1 10/7/20
Misc : water
ALS Vial : 97 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 09 09:36:21 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001098.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Oct 2020 5:20 pm
Operator : SS
Sample : 8011-2 10/7/20
Misc : water
ALS Vial : 98 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 09 09:36:26 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
3) S	1,3-DIBRO...	9.978	11.001	6203	19165	0.109	0.106
	Spiked Amount 0.350			Recovery =		31.14%	30.29%
	Target Compounds						
1) TM	EDB	5.728	7.178	6355	26721	0.107	0.102
2) TM	1,2,3-TCP	9.208	10.411	1618	5044	0.092	0.108
4) TM	DBCP	13.311	14.061	18054	82914	0.101	0.099

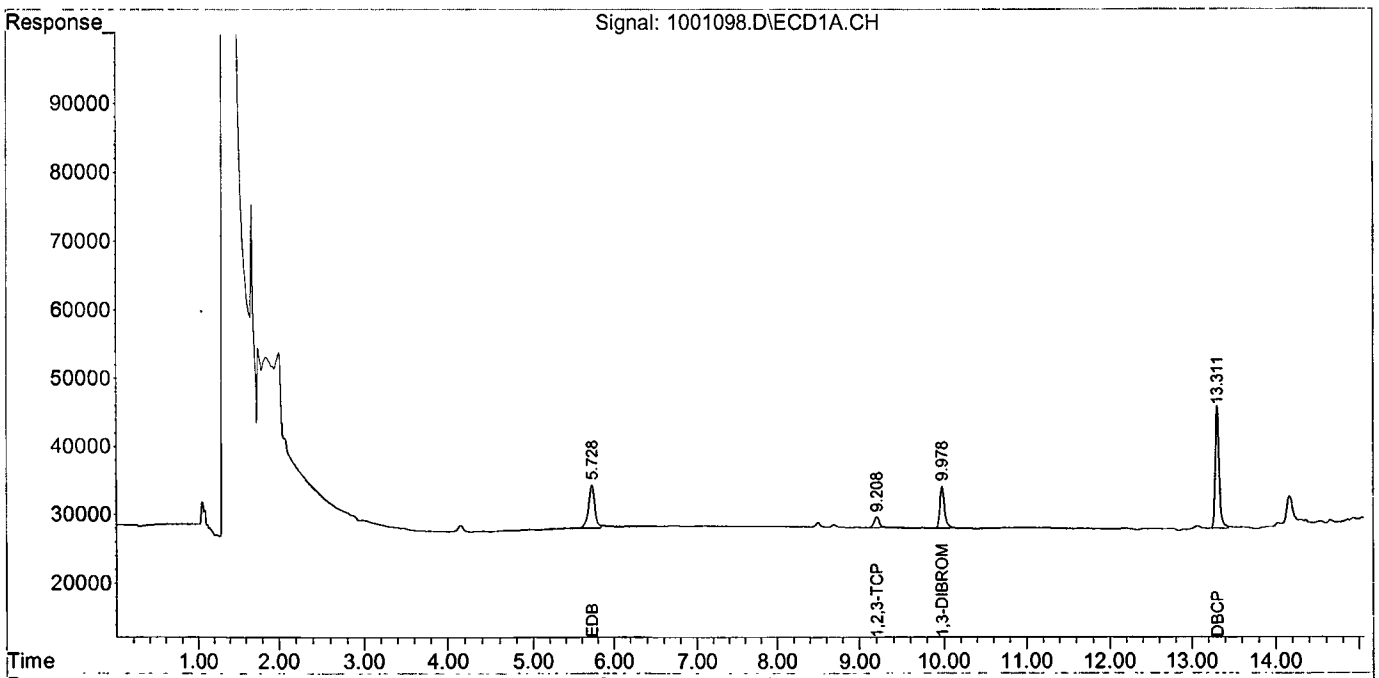
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

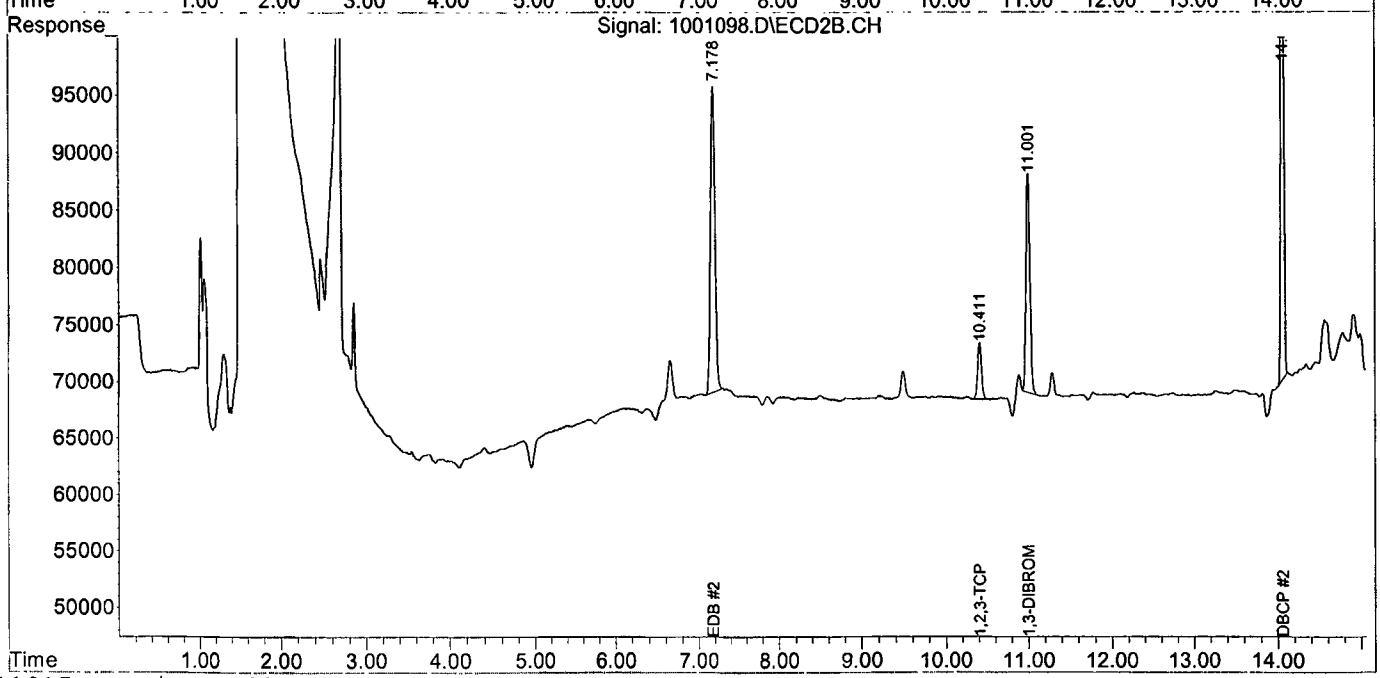
Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001098.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Oct 2020 5:20 pm
Operator : SS
Sample : 8011-2 10/7/20
Misc : water
ALS Vial : 98 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 09 09:36:26 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001099.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Oct 2020 5:41 pm
Operator : SS
Sample : 8011-3 10/7/20
Misc : water
ALS Vial : 99 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 09 09:36:32 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.979	10.999	14238	46324	0.250	0.257
Spiked Amount 0.350			Recovery =		71.43%	73.43%
Target Compounds						
1) TM EDB	5.725	7.176	14850	66527	0.251	0.255
2) TM 1,2,3-TCP	9.212	10.409	3703	12254	0.262	0.262
4) TM DBCP	13.312	14.062	44531	203756	0.250	0.245

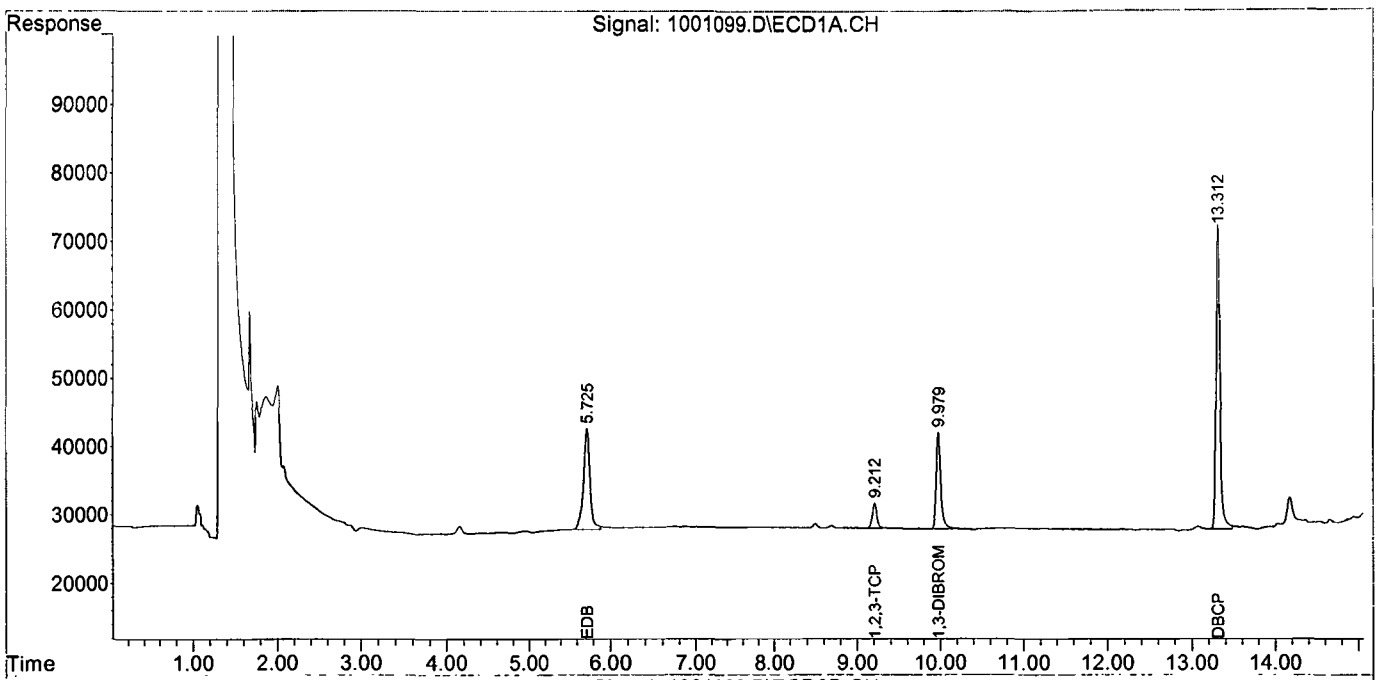
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

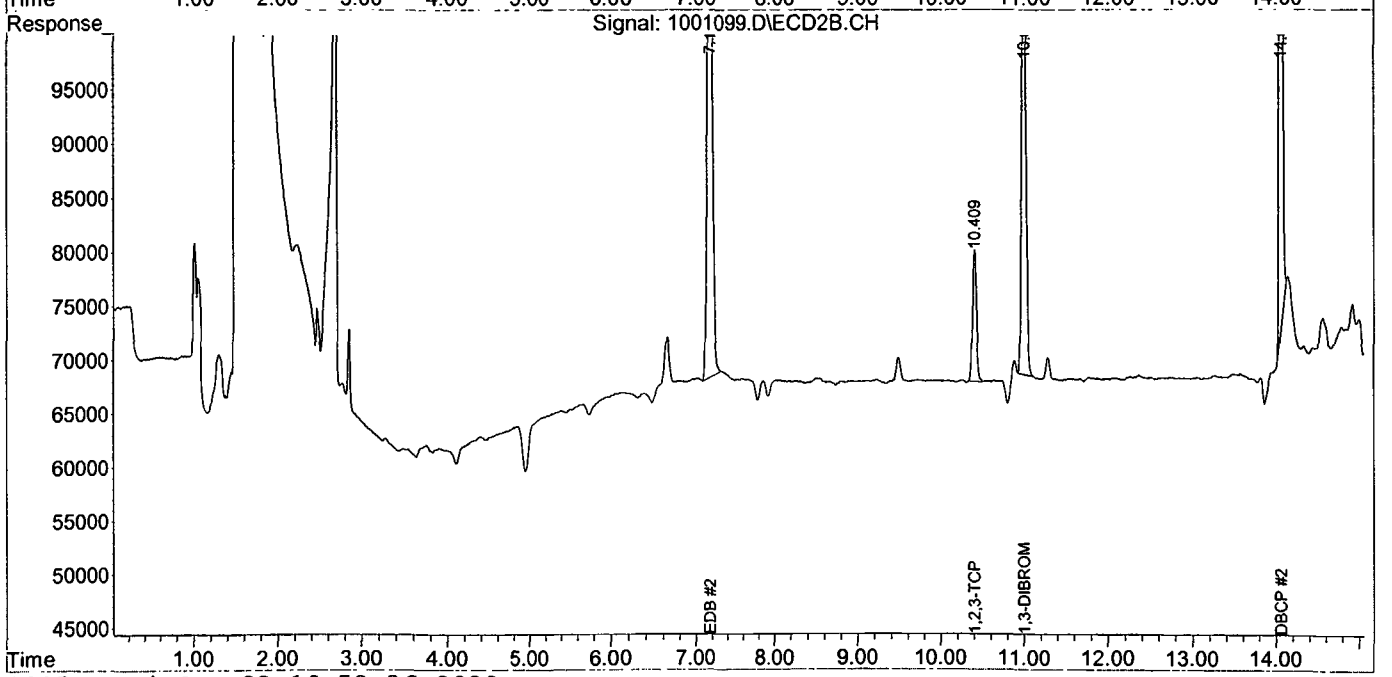
Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001099.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Oct 2020 5:41 pm
Operator : SS
Sample : 8011-3 10/7/20
Misc : water
ALS Vial : 99 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 09 09:36:32 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001100.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Oct 2020 6:02 pm
Operator : SS
Sample : 8011-4 10/7/20
Misc : water
ALS Vial : 100 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 09 09:36:37 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.977	11.001	26234	84958	0.461	0.471
Spiked Amount 0.350			Recovery =		131.71%	134.57%
Target Compounds						
1) TM EDB	5.727	7.174	28227	122945	0.477	0.471
2) TM 1,2,3-TCP	9.214	10.411	6744	22265	0.511	0.476
4) TM DBCP	13.310	14.064	85448	398958	0.479	0.479

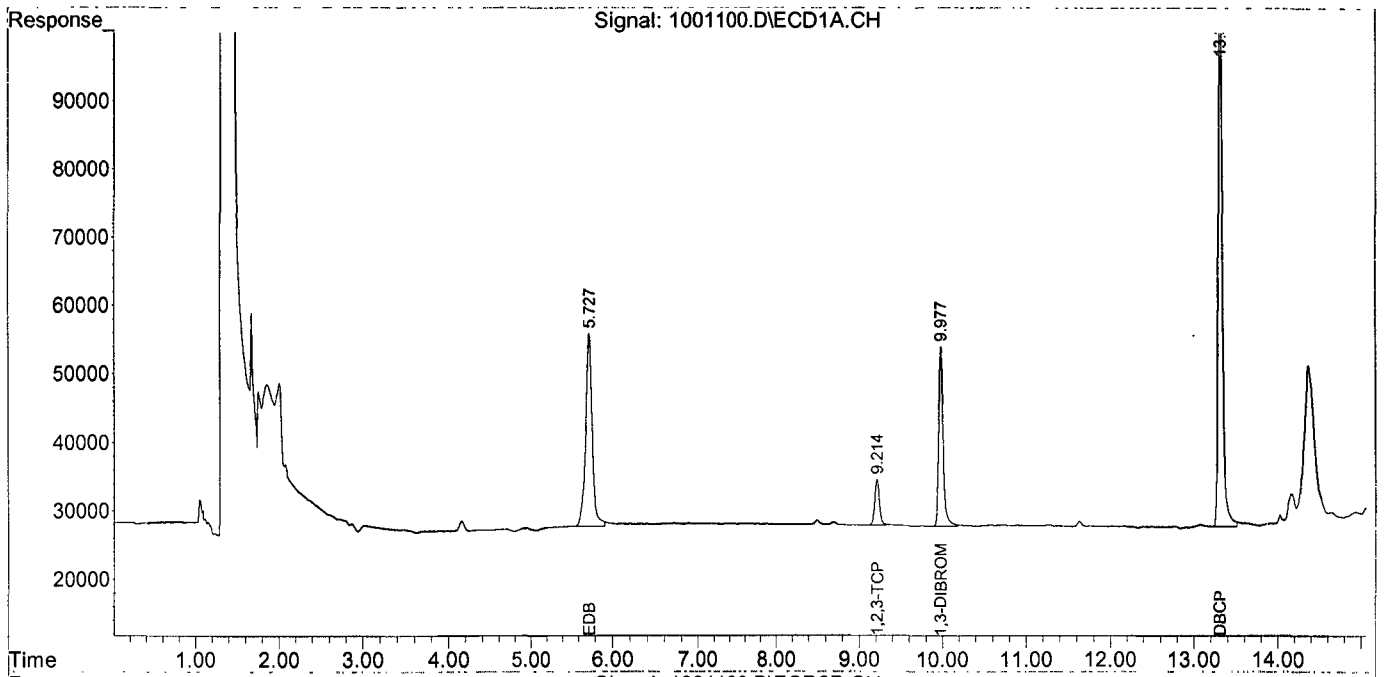
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

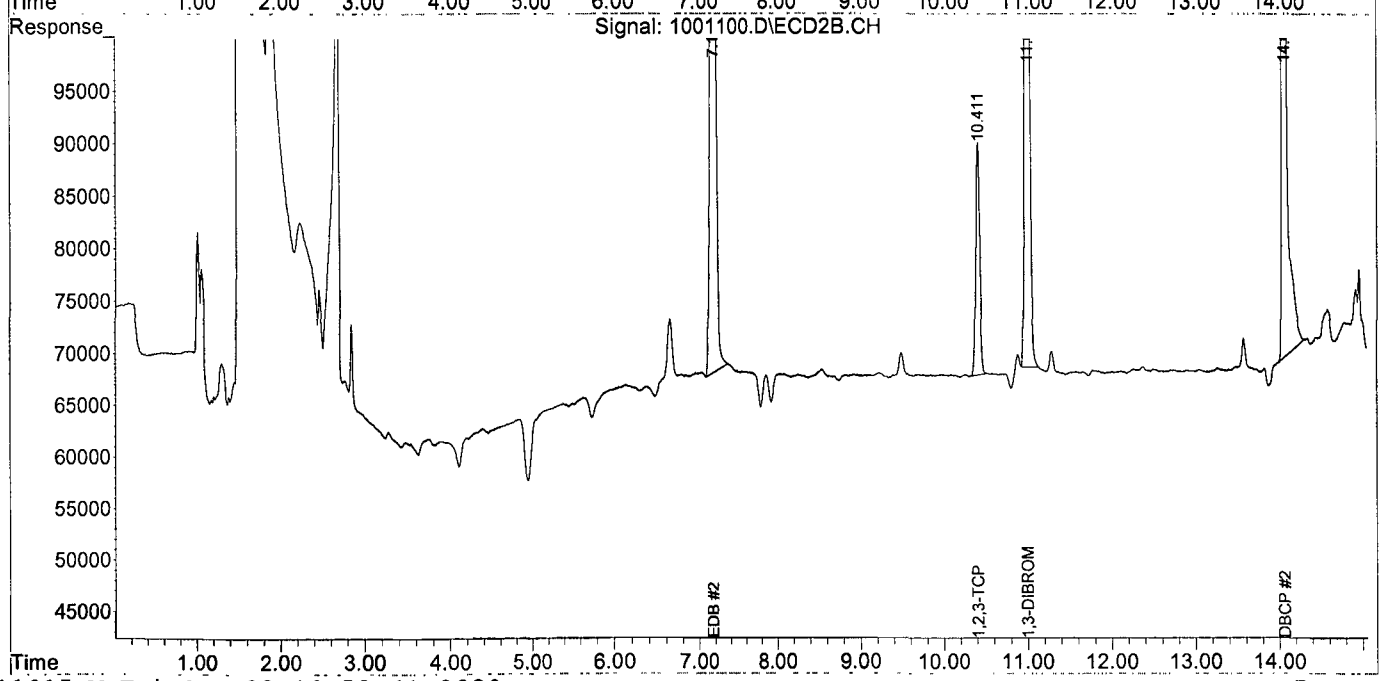
Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001100.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Oct 2020 6:02 pm
Operator : SS
Sample : 8011-4 10/7/20
Misc : water
ALS Vial : 100 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 09 09:36:37 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001101.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Oct 2020 6:22 pm
Operator : SS
Sample : 8011-5 10/7/20
Misc : water
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 09 09:36:42 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
3) S	1,3-DIBRO...	9.977	10.997	37733	121737	0.663	0.675
	Spiked Amount 0.350			Recovery =		189.43%	192.86%
	Target Compounds						
1) TM	EDB	5.727	7.173	41245	179558	0.697	0.688
2) TM	1,2,3-TCP	9.210	10.410	9777	32966	0.759	0.705
4) TM	DBCP	13.310	14.063	126025	601506	0.707	0.722

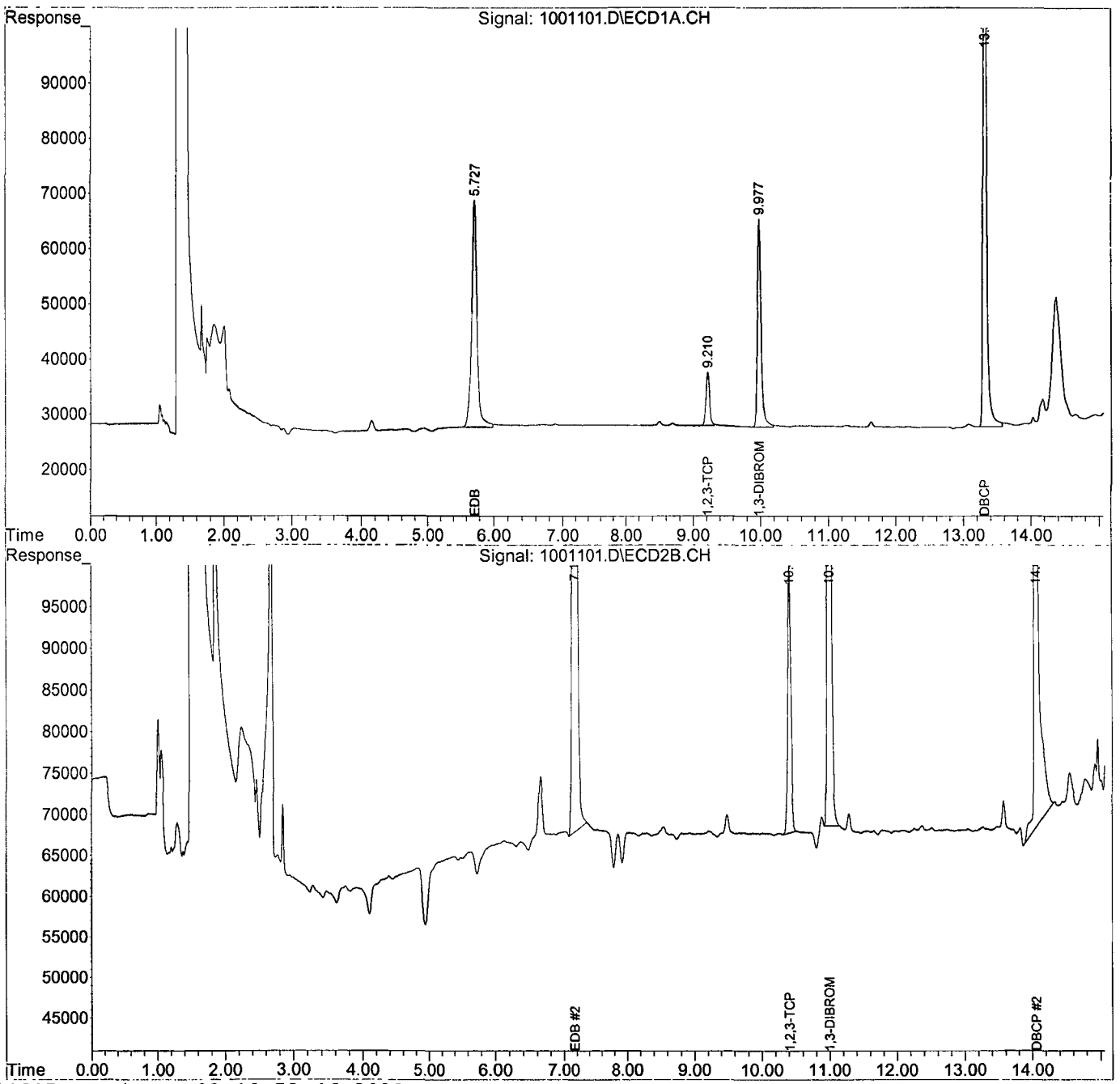
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001101.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Oct 2020 6:22 pm
Operator : SS
Sample : 8011-5 10/7/20
Misc : water
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 09 09:36:42 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50



Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001102.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Oct 2020 6:43 pm
Operator : SS
Sample : 8011-6 10/7/20
Misc : water
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 09 09:36:47 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
3) S	1,3-DIBRO...	9.978	10.998	48559	160818	0.854	0.891
	Spiked Amount 0.350			Recovery =		244.00%	254.57%
	Target Compounds						
1) TM	EDB	5.728	7.175	52928	240454	0.894	0.921
2) TM	1,2,3-TCP	9.211	10.411	12544	42662	0.986	0.913
4) TM	DBCP	13.311	14.061	165910	810552	0.930	0.973

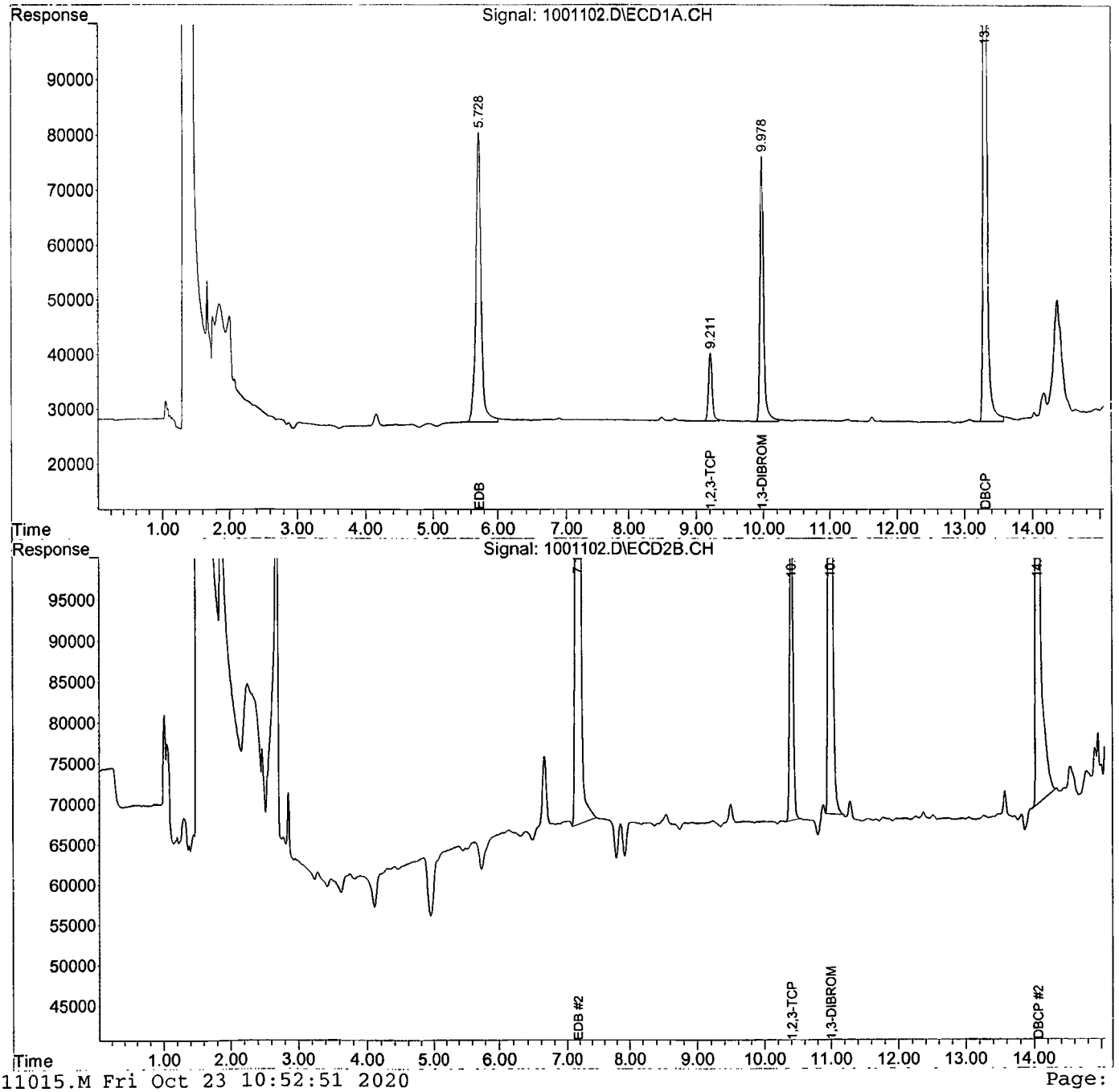
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001102.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Oct 2020 6:43 pm
Operator : SS
Sample : 8011-6 10/7/20
Misc : water
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 09 09:36:47 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50



DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/08/20
Instrument: HERBIE
Initial Cal. Date: 10/07/20
Data File: 1001103.D

		Compound	MEAN	CCRF	%D	%Drift	
1	TM	EDB	29594	28584	3.4	TM	
2	TML	1,2,3-TCP	8430	7126	15	TML	0.33
3	TM	DBCP	89171	85586	4.0	TM	
4							
5							
6							
7							
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36							
37							
38							
39							
40							
		Average			7.5		

DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/08/20
Instrument: HERBIE
Cal. Date: 10/07/20
Data File: 1001103.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	EDB	130539	129552	0.76	TM	
42	TM	1,2,3-TCP	23367	23384	0.07	TM	
43	TM	DBCP	416662	386440	7.3	TM	
44							
45							
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79							
80							
		Average			2.7		

Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001103.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Oct 2020 7:03 pm
Operator : SS
Sample : 8011-SS 10/7/20
Misc : water
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 09 09:49:44 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	0.000	0.000	0	0	N.D. d	N.D. d
Spiked Amount 0.350			Recovery =		0.00%	0.00%
Target Compounds						
1) TM EDB	5.728	7.175	14292	64776	0.241	0.248
2) TM 1,2,3-TCP	9.211	10.408	3563	11692	0.251	0.250
4) TM DBCP	13.311	14.065	42793	193220	0.240	0.232

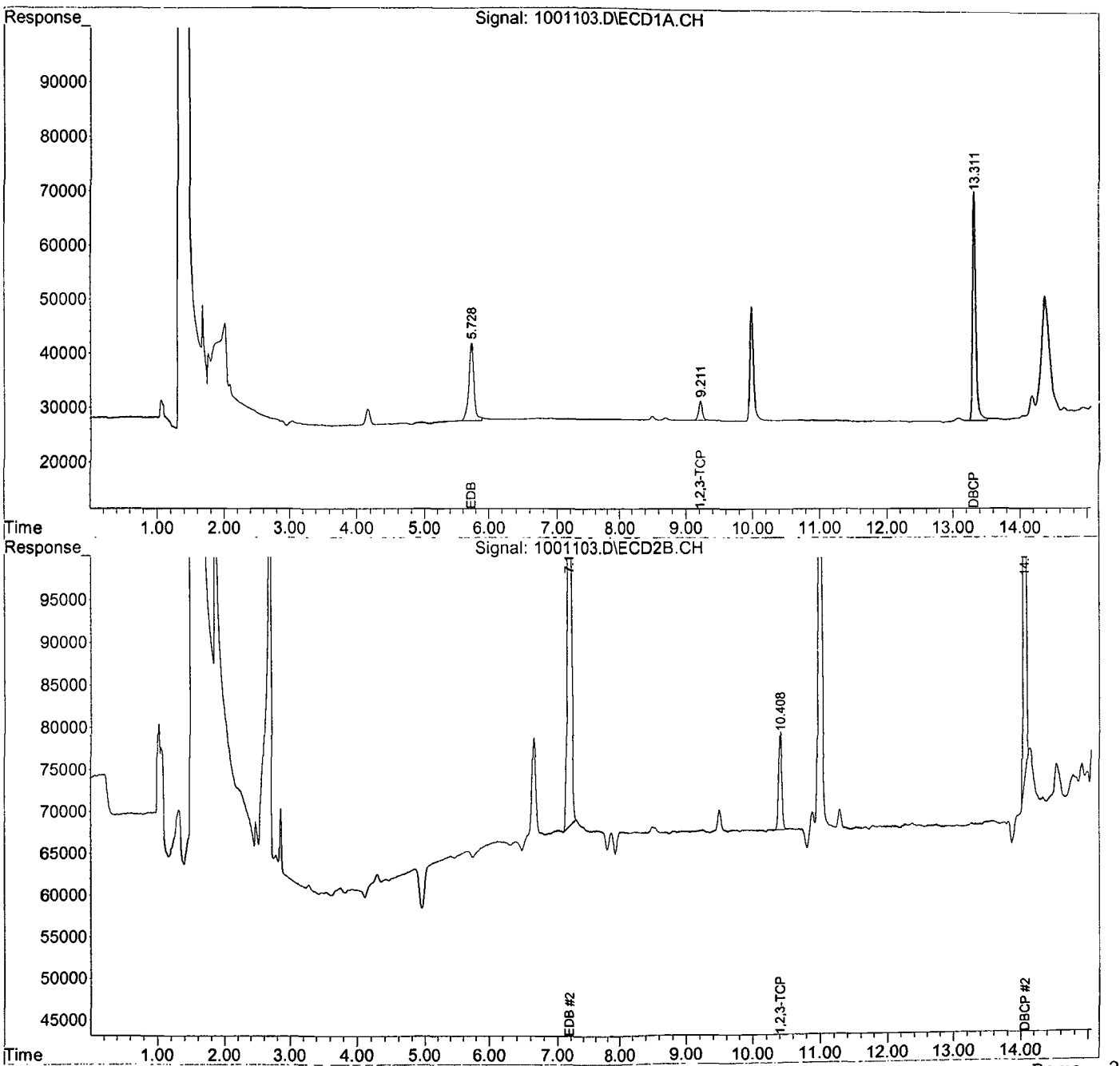
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001103.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Oct 2020 7:03 pm
Operator : SS
Sample : 8011-SS 10/7/20
Misc : water
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 09 09:49:44 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50



DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/13/20
Instrument: HERBIE
Initial Cal. Date: 10/07/20
Data File: 1001116.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	EDB	29594	29060	1.8	TM	
2	TML	1,2,3-TCP	8430	7338	13	TML	3.8
3	S	1,3-DIBROMOPROPANE(S)	28443	27344	3.9	S	
4	TM	DBCP	89171	83856	6.0	TM	
5							
6							
7							
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38							
39							
40							
		Average			6.2		

DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/13/20
Instrument: HERBIE
Cal. Date: 10/07/20
Data File: 1001116.D

		Compound	MEAN	CCRF	%D		%Drift	
41	TM	EDB	130539	123136	5.7	TM		
42	TM	1,2,3-TCP	23367	21690	7.2	TM		
43	S	1,3-DIBROMOPROPANE(S)	90229	80478	11	S		
44	TM	DBCP	416662	262354	37	TM		*see front
45								
46								
47								
48								
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80								
		Average			15.2			

Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001116.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Oct 2020 9:05 am
Operator : SS
Sample : 8011-3 10/7/20
Misc : water
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 15 11:23:14 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.978	10.998	13672	40239	0.240	0.223
Spiked Amount 0.350			Recovery =		68.57%	63.71%
Target Compounds						
1) TM EDB	5.728	7.172	14530	61568	0.245	0.236
2) TM 1,2,3-TCP	9.212	10.408	3669	10845	0.259	0.232
4) TM DBCP	13.312	14.062	41928	131177	0.235	0.157 #

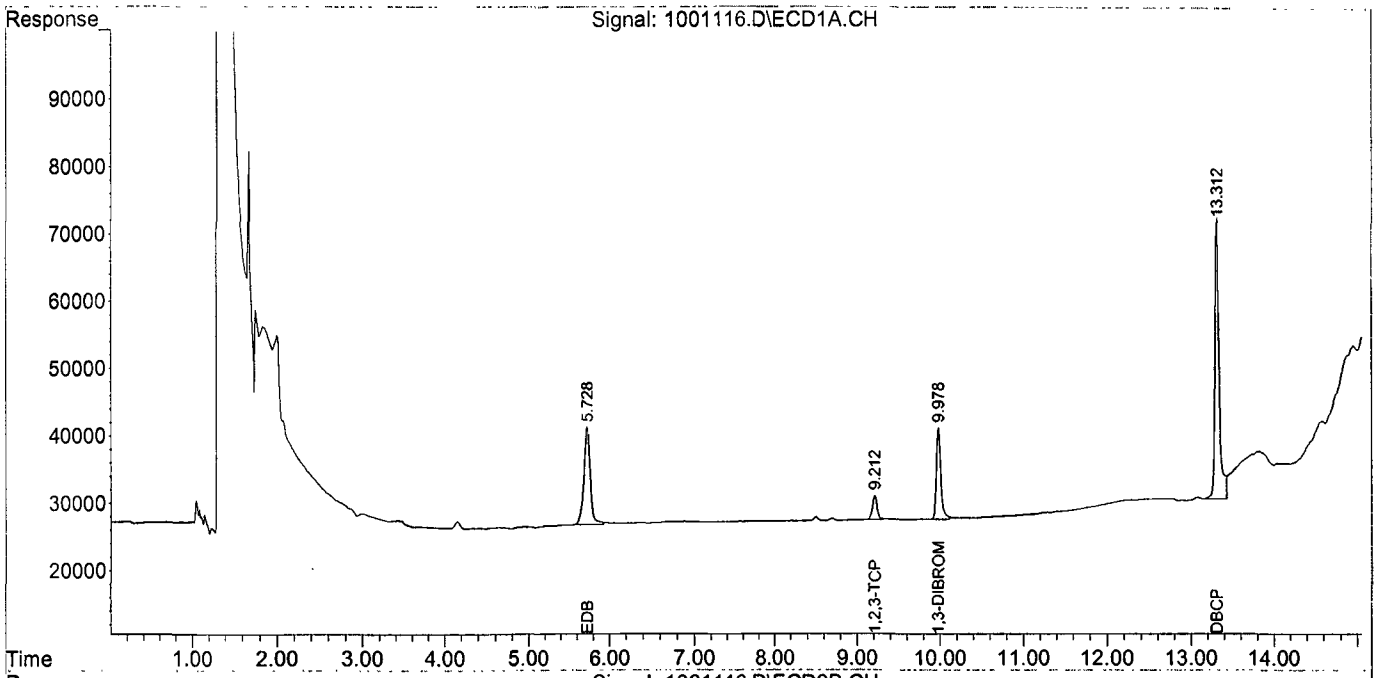
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

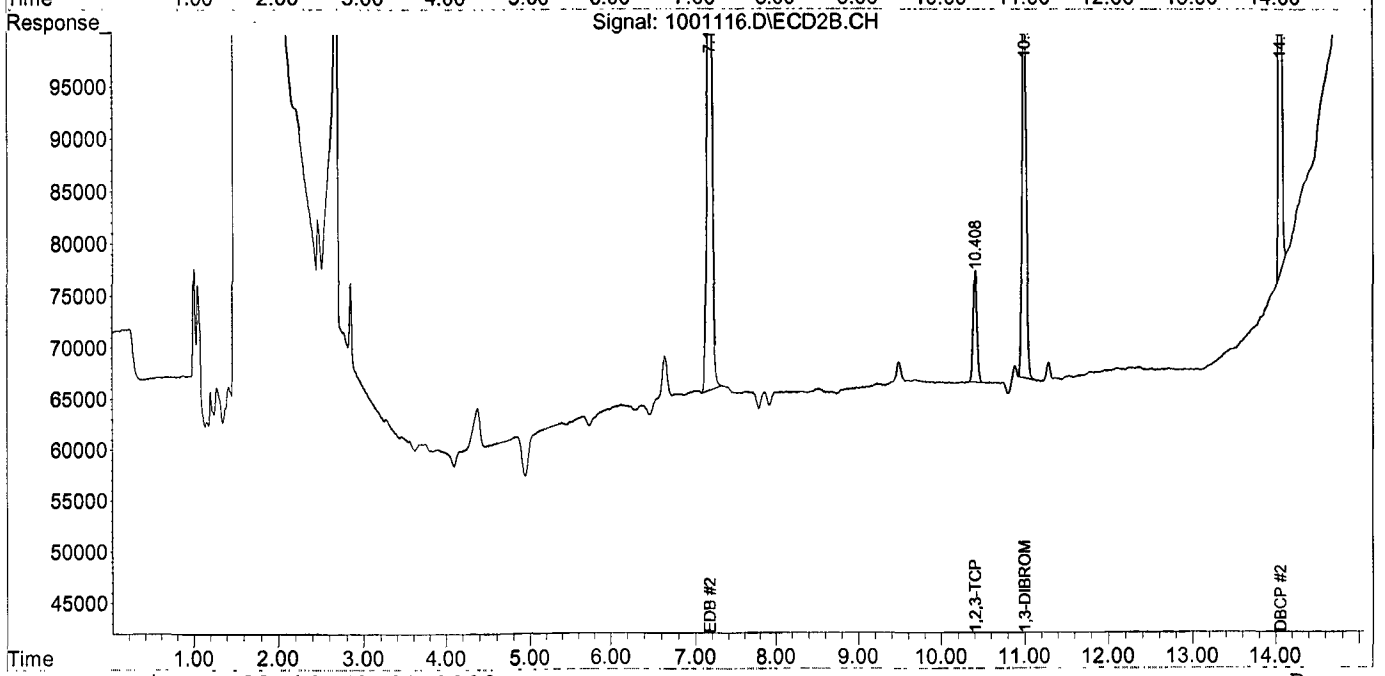
Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001116.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Oct 2020 9:05 am
Operator : SS
Sample : 8011-3 10/7/20
Misc : water
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 15 11:23:14 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/13/20
Instrument: HERBIE
Initial Cal. Date: 10/07/20
Data File: 1001132.D

		Compound	MEAN	CCRF	%D	%Drift	
1	TM	EDB	29594	29486	0.36	TM	
2	TML	1,2,3-TCP	8430	7572	10	TML	7.6
3	S	1,3-DIBROMOPROPANE(S)	28443	28900	1.6	S	
4	TM	DBCP	89171	87808	1.5	TM	
5							
6							
7							
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38							
39							
40							
		Average			3.4		

DBCP/EDB/1,2,3-TCP Analysis by
504 8011

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/13/20
Instrument: HERBIE
Cal. Date: 10/07/20
Data File: 1001132.D

		Compound	MEAN	CCRF	%D	%Drift		
41	TM	EDB	130539	125396	3.9	TM		
42	TM	1,2,3-TCP	23367	22528	3.6	TM		
43	S	1,3-DIBROMOPROPANE(S)	90229	82606	8.4	S		
44	TM	DBCP	416662	261590	37	TM		*see front
45								
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80								
		Average			13.2			

Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Oct 2020 3:53 pm
Operator : SS
Sample : 8011-3 10/7/20
Misc : water
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 15 11:24:03 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
3)	S 1,3-DIBRO...	9.977	10.997	14450	41303	0.254	0.229	
	Spiked Amount 0.350			Recovery	=	72.57%	65.43%	
	Target Compounds							
1)	TM EDB	5.724	7.170	14743	62698	0.249	0.240	
2)	TM 1,2,3-TCP	9.210	10.407	3786	11264	0.269	0.241	
4)	TM DBCP	13.307	14.060	43904	130795	0.246	0.157	#

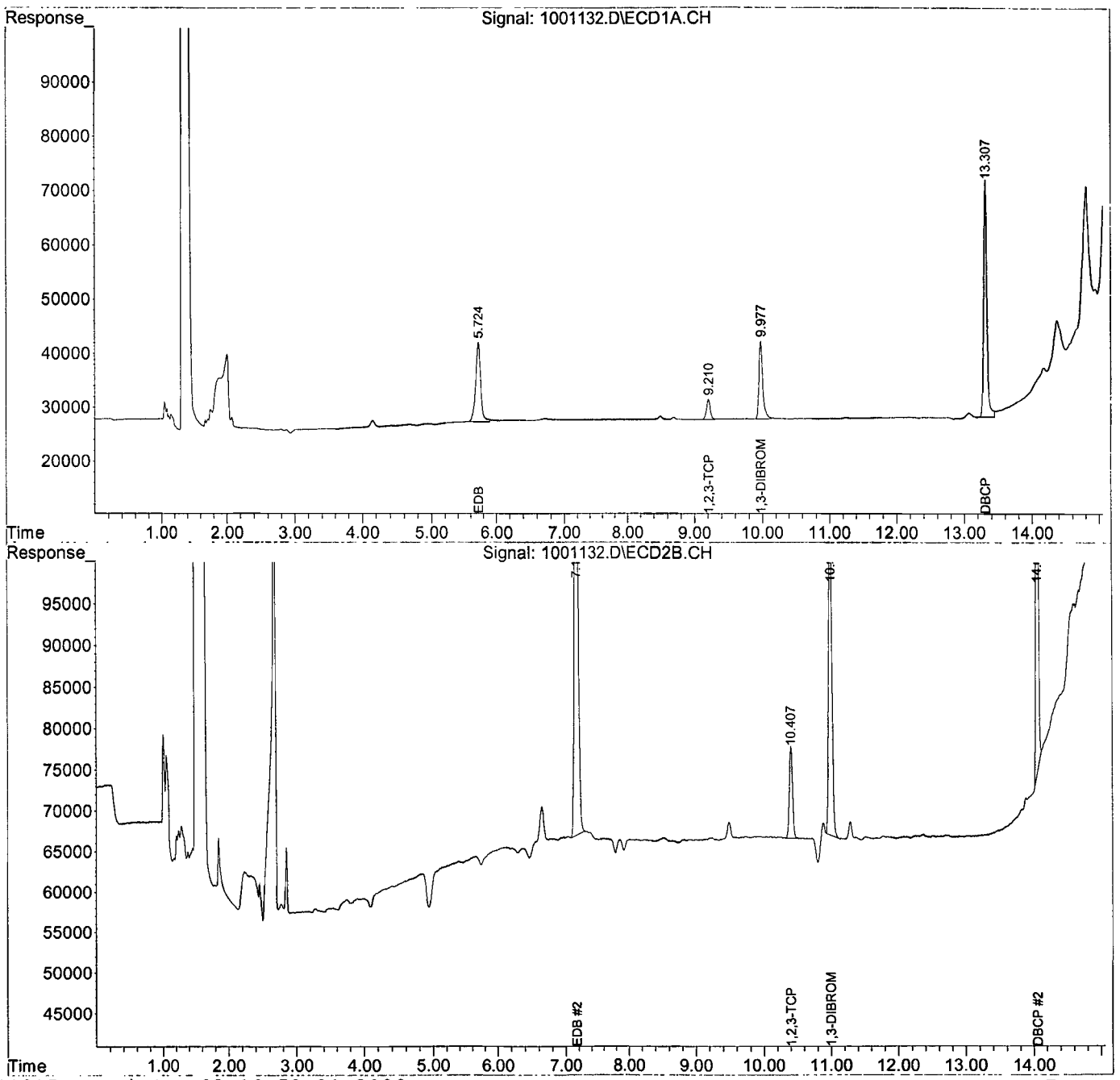
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Oct 2020 3:53 pm
Operator : SS
Sample : 8011-3 10/7/20
Misc : water
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 15 11:24:03 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50



ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Oct 2020 3:12 pm
Operator : SS
Sample : BA19639W06 2/35.89
Misc : water
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 15 11:29:00 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.977	10.998	20596	59259	0.362	0.328
Spiked Amount 0.350			Recovery =		103.43%	93.71%
Target Compounds						
1) TM EDB	0.000	0.000	0	0	N.D. d	N.D. d
2) TM 1,2,3-TCP	0.000	0.000	0	0	N.D. d	N.D. d
4) TM DBCP	0.000	0.000	0	0	N.D. d	N.D. d

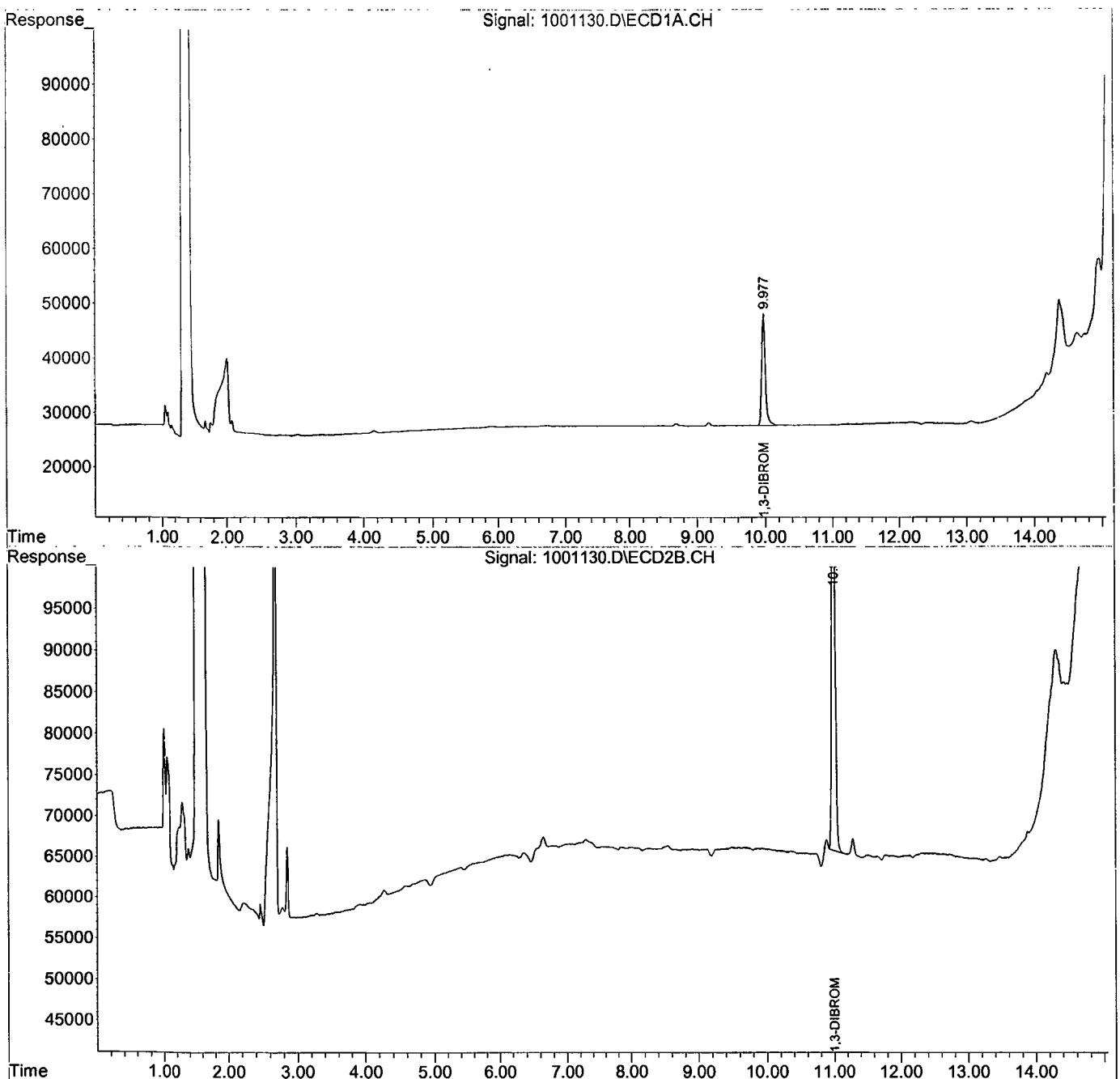
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Oct 2020 3:12 pm
Operator : SS
Sample : BA19639W06 2/35.89
Misc : water
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 15 11:29:00 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50



Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Oct 2020 3:33 pm
Operator : SS
Sample : BA19640W06 2/35.26
Misc : water
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 15 11:29:13 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.975	10.996	20972	60913	0.369	0.338
Spiked Amount 0.350			Recovery	=	105.43%	96.57%
Target Compounds						
1) TM EDB	0.000	0.000	0	0	N.D. d	N.D. d
2) TM 1,2,3-TCP	0.000	0.000	0	0	N.D. d	N.D. d
4) TM DBCP	0.000	0.000	0	0	N.D. d	N.D. d

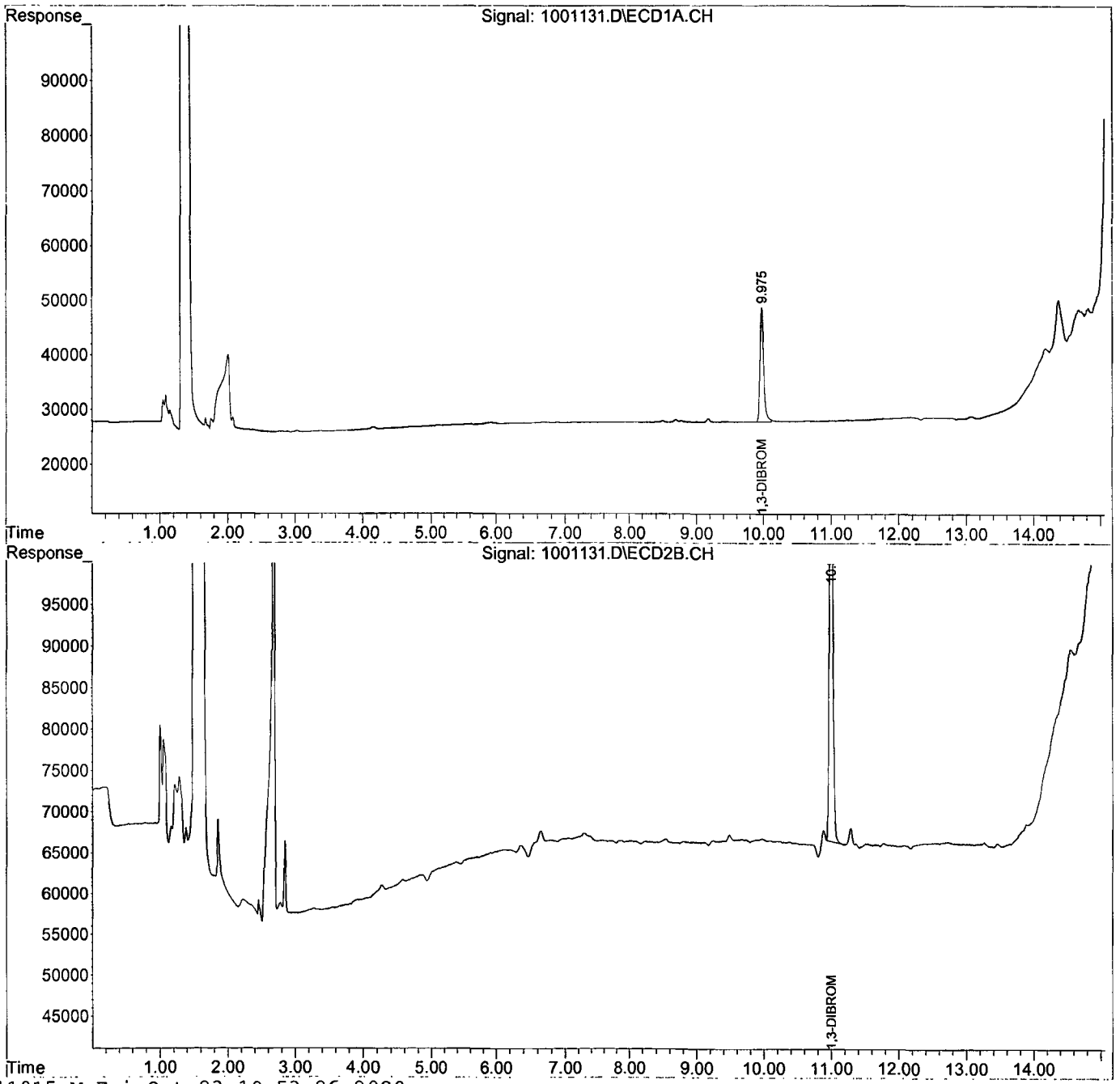
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Oct 2020 3:33 pm
Operator : SS
Sample : BA19640W06 2/35.26
Misc : water
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 15 11:29:13 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50



Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001127.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Oct 2020 2:11 pm
Operator : SS
Sample : 201013A BLK 2/35.45
Misc : water
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 15 11:28:26 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.975	10.995	18565	52339	0.326	0.290
Spiked Amount 0.350			Recovery =		93.14%	82.86%
Target Compounds						
1) TM EDB	0.000	0.000	0	0	N.D. d	N.D. d
2) TM 1,2,3-TCP	0.000	0.000	0	0	N.D. d	N.D. d
4) TM DBCP	0.000	0.000	0	0	N.D. d	N.D. d

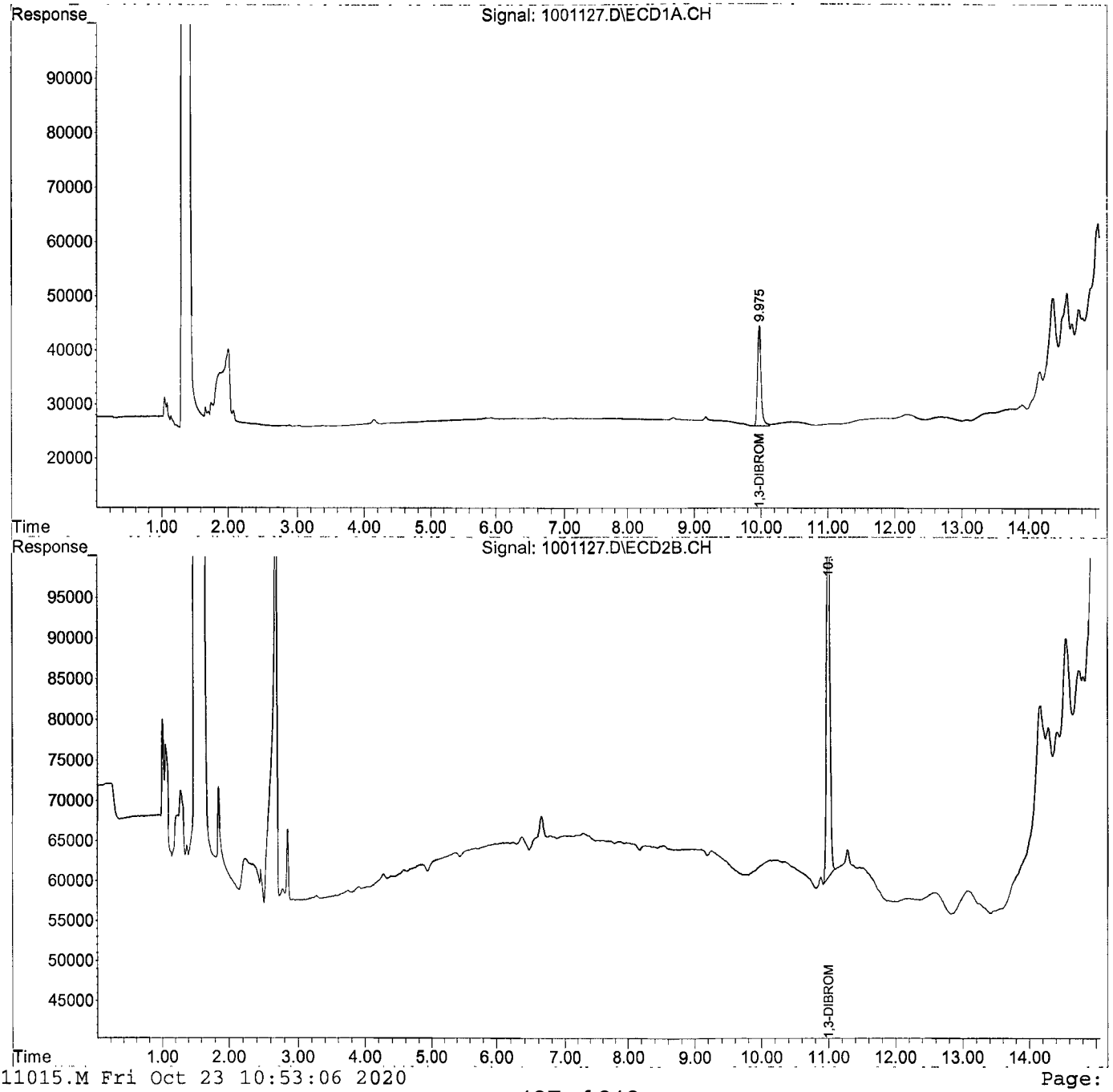
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001127.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Oct 2020 2:11 pm
Operator : SS
Sample : 201013A BLK 2/35.45
Misc : water
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 15 11:28:26 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50



Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Oct 2020 2:31 pm
Operator : SS
Sample : 201013A LCS-1 2/35.10
Misc : water
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 15 11:23:51 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
3) S 1,3-DIBRO...	9.975	10.995	13679	37797	0.240	0.209	
Spiked Amount 0.350			Recovery =		68.57%	59.71%	
Target Compounds							
1) TM EDB	5.725	7.168	14455	60914	0.244	0.233	
2) TM 1,2,3-TCP	9.208	10.405	3634	10382	0.257	0.222	
4) TM DBCP	13.308	14.062	38450	114748	0.216	0.138	#

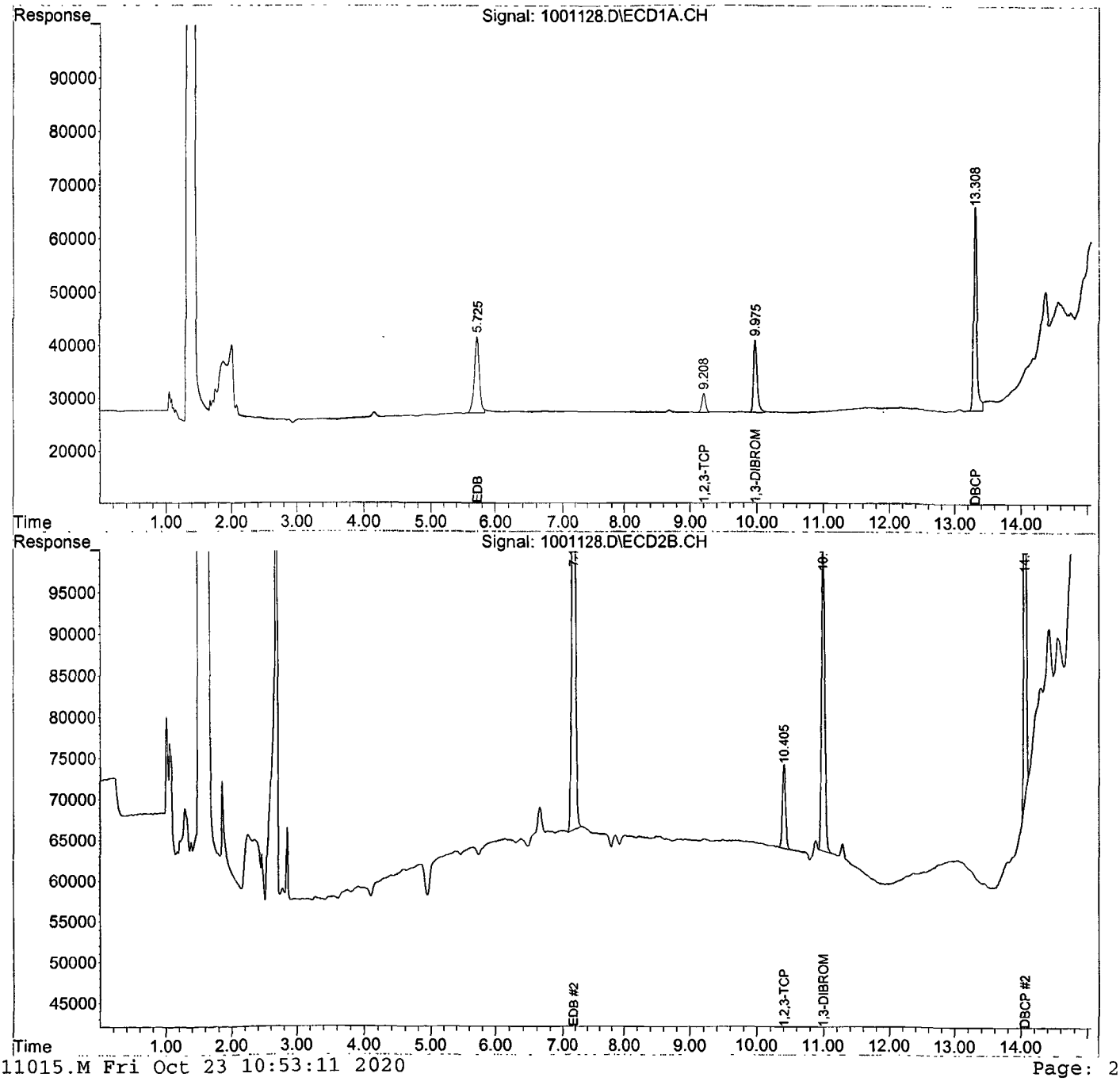
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Oct 2020 2:31 pm
Operator : SS
Sample : 201013A LCS-1 2/35.10
Misc : water
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 15 11:23:51 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50



Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001129.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Oct 2020 2:52 pm
Operator : SS
Sample : 201013A LCSD-1 2/35.13
Misc : water
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 15 11:23:54 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
3) S 1,3-DIBRO...	9.976	10.996	13819	38999	0.243	0.216
Spiked Amount 0.350			Recovery =		69.43%	61.71%
Target Compounds						
1) TM EDB	5.726	7.170	14681	60840	0.248	0.233
2) TM 1,2,3-TCP	9.210	10.406	3680	10671	0.260	0.228
4) TM DBCP	13.310	14.060	39965	117954	0.224	0.142 #

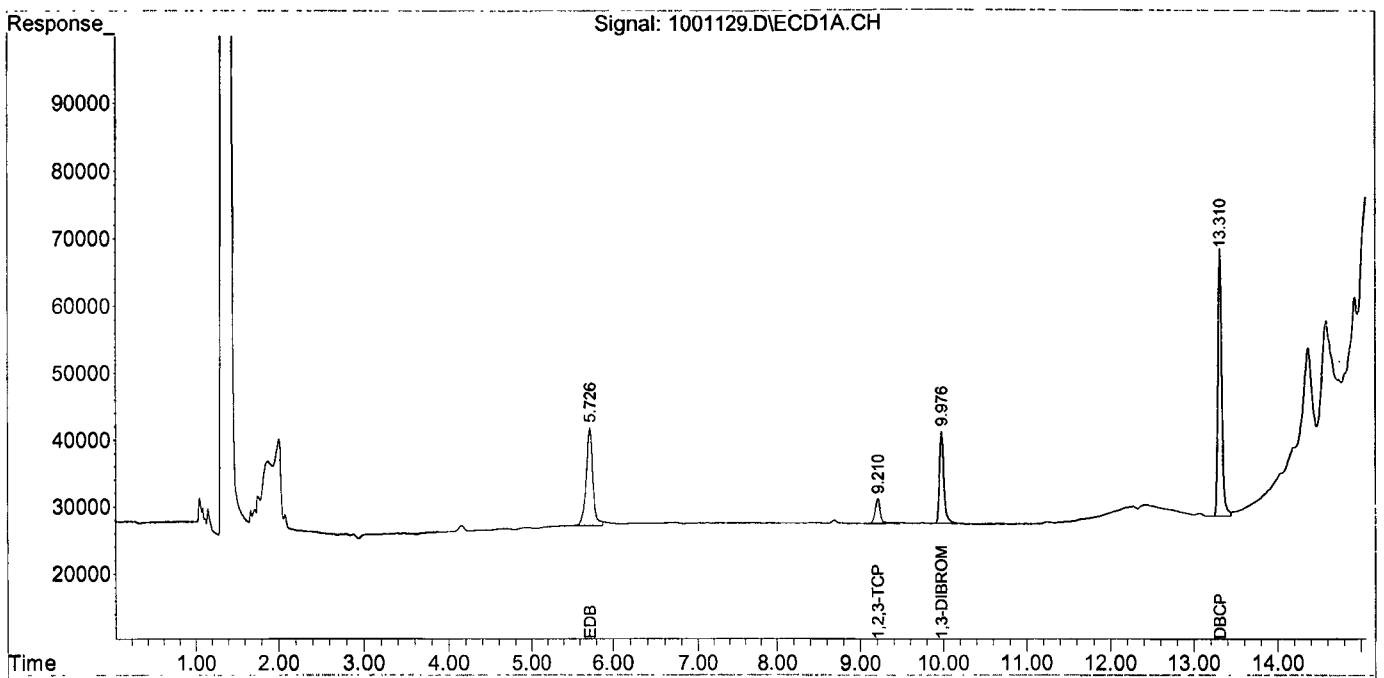
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

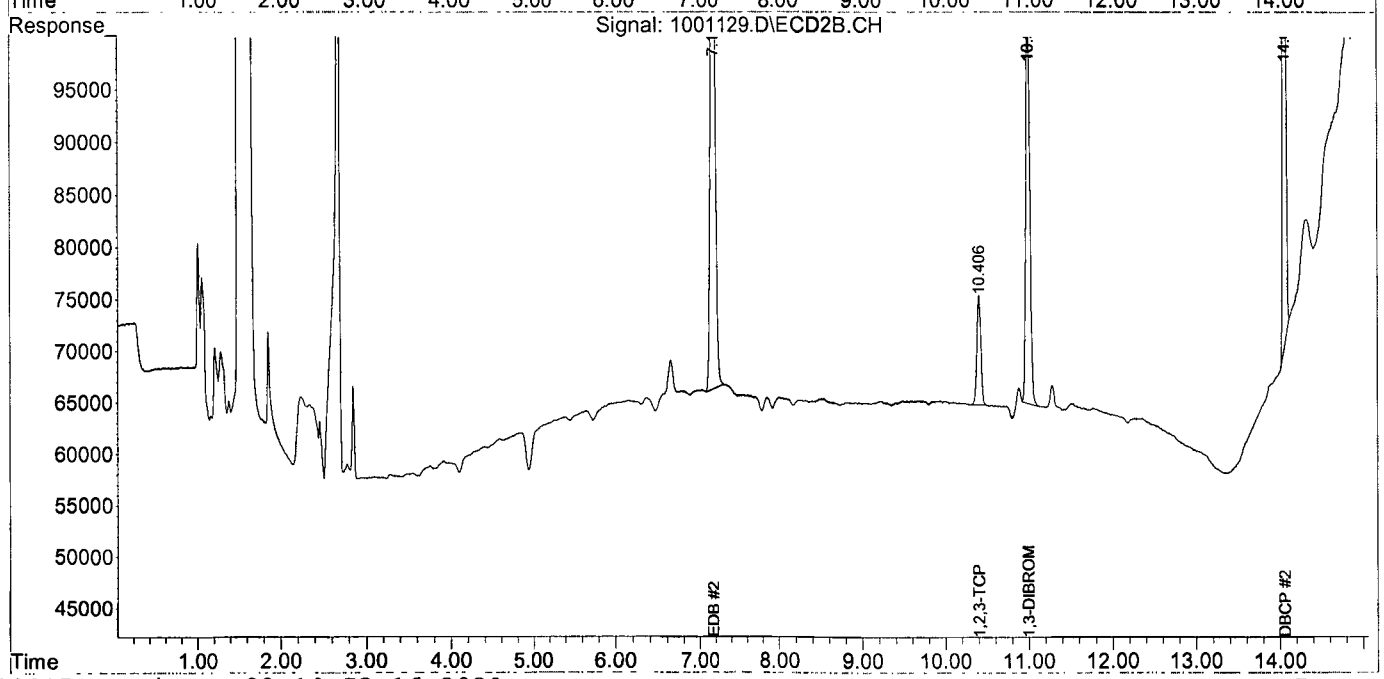
Quantitation Report (QT Reviewed)

Data Path : G:\HERBIE\DATA\201001\
Data File : 1001129.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Oct 2020 2:52 pm
Operator : SS
Sample : 201013A LCSD-1 2/35.13
Misc : water
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: rteint.p
Integration File signal 2: rteint2.p
Quant Time: Oct 15 11:23:54 2020
Quant Method : G:\HERBIE\DATA\201001\80111007.M
Quant Title : 504.1 OR 8011
QLast Update : Fri Oct 09 09:35:00 2020
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 2µL
Signal #1 Phase : DB-35MS Signal #2 Phase: DB-XLB
Signal #1 Info : 0.25 Signal #2 Info : 0.50





Name of Final Standard	504/8011 Surrogate	**Prep'd By (Initials)**	CD
Prep Date	06/17/20		
Exp Date	01/07/21		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1,3 DBP Stock	APPL	1,3 DBP Stock	100 ug/mL	**01/07/20**	01/07/21	35 uL	10 mL	**Methanol #0235140**	0.35ug/ml

Name of Final Standard	504/8011 Stock	**Prep'd By (Initials)**	CD
Prep Date	**06/17/20**		
Exp Date	**01/07/21**		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
504/DOHS Stock	APPL	504/DOHS Stock	20 ug/mL	**01/07/20**	01/07/21	438 uL	25 mL	**Methanol #0235140**	0.35 ug/mL
1,3 DBP Stock	APPL	1,3 DBP Stock	100 ug/mL	**01/07/20**	01/07/21	88 uL	*	*	*

Name of Final Standard	504/8011 Spike	**Prep'd By (Initials)**	**SS**
Prep Date	**08/31/20**		
Exp Date	**01/07/21**		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
504/8011 Stock	APPL	504/8011 Stock	0.35 ug/mL	**06/17/20**	**01/07/21**	1000 uL	10 mL	**Methanol #0235140**	0.035 ug/mL

_MWE012

Organic Extraction Worksheet

Method	EPA Method 8011 DBCP/EDB	Extraction Set	201013A	Extraction Method	MWE012	Units	mL

Spiked ID 1	504.1 Spike 8/31/20-1/7/21		Surrogate ID 1	504.1 Surrogate 6/17/20-10/17/20	
Spiked ID 2			Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:		
Spiked ID 7			Ext. Start Time:	10/13/30 9:35	
Spiked ID 8			Ext. End Time:	10/13/20 9:55	
			GC Requires Extract By:		

pH1			Water Bath Temp 1 °C	
pH2			Water Bath Temp 2 °C	
pH3			Water Bath Temp 3 °C	

Spiked By: KY **Date** 10/13/20 **Witnessed By:** CFM **Date** 10/13/20

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201013A Blk				0.035	1 equip	35.45	2	7	10/13/20 9:35	
2	201013A LCS-1		0.250	1	NA	NA equip	35.10	2	7	10/13/20 9:35	
3	201013A LCSD-1		0.250	1	NA	NA equip	35.13	2	7	10/13/20 9:35	
4	BA19639	BA19639W06			0.035	1 equip	35.89	2	7	10/13/20 9:35	93659
5	BA19640	BA19640W06			0.035	1 equip	35.26	2	7	10/13/20 9:35	93659

Solvent and Lot#	
Scale Blance ID	EB1
pH strip	HC904495
Sod. Thiosulfate	1016C241
NaCL	19J145201
GC2 Hexane (2mLs)	DV910

Extraction COC Transfer	
Extraction lab employee Initials	SS
GC analyst's initials	SS
Date	10/13/20
Time	10:00
Refrigerator	HOBART

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL

Modified	10/15/20 7:22:37 AM

Reviewed By: SS **Date** 10/23/20

Injection Log

Directory: M:\HERBIE\DATA\201001\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	97	1001097.D	1	8011-1 10/7/20	water	10/8/20 17:00
2	98	1001098.D	1	8011-2 10/7/20	water	10/8/20 17:20
3	99	1001099.D	1	8011-3 10/7/20	water	10/8/20 17:41
4	100	1001100.D	1	8011-4 10/7/20	water	10/8/20 18:02
5	101	1001101.D	1	8011-5 10/7/20	water	10/8/20 18:22
6	102	1001102.D	1	8011-6 10/7/20	water	10/8/20 18:43
7	103	1001103.D	1	8011-SS 10/7/20	water	10/8/20 19:03
8	116	1001116.D	1	8011-3 10/7/20	water	10/13/20 9:05
9	127	1001127.D	1	201013A BLK 2/35.45	water	10/13/20 14:11
10	128	1001128.D	1	201013A LCS-1 2/35.10	water	10/13/20 14:31
11	129	1001129.D	1	201013A LCSD-1 2/35.13	water	10/13/20 14:52
12	130	1001130.D	1	BA19639W06 2/35.89	water	10/13/20 15:12
13	131	1001131.D	1	BA19640W06 2/35.26	water	10/13/20 15:33
14	132	1001132.D	1	8011-3 10/7/20	water	10/13/20 15:53

ORGANICS

Calibration Data

TPH Extractables
DOC0905

Form 6
Initial Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Initial Cal. Date: 09/05/20
Instrument: Apollo

Initials: SS/

			905007.D	905008.D	905009.D	905010.D	905011.D	905012.D									
		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
1	HATML	Diesel (C10-C24)	3520375	2214378	2281032	2080486	2123388	2190073					2401622	23	HATM	0.999	
2	HBTM	Motor Oil (C24-C40)		1596138	1576848	1430288	1467043	1498633					1513790	4.7	HBTM		
3	SA	Ortho-Terphenyl(S)		2811060	2679862	2349319	2368660	2417877					2525355	8.2	SA		
4	SA	Octacosane(S)		2182984	2114335	1968540	2003128	2024026					2058603	4.3	SA		
5																	
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1.148404

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905007.D Vial: 7
Acq On : 9-5-20 17:04:35 Operator:
Sample : Diesel Motor Oil-1 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 8 8:21 2020 Quant Results File: DOC0905.RES

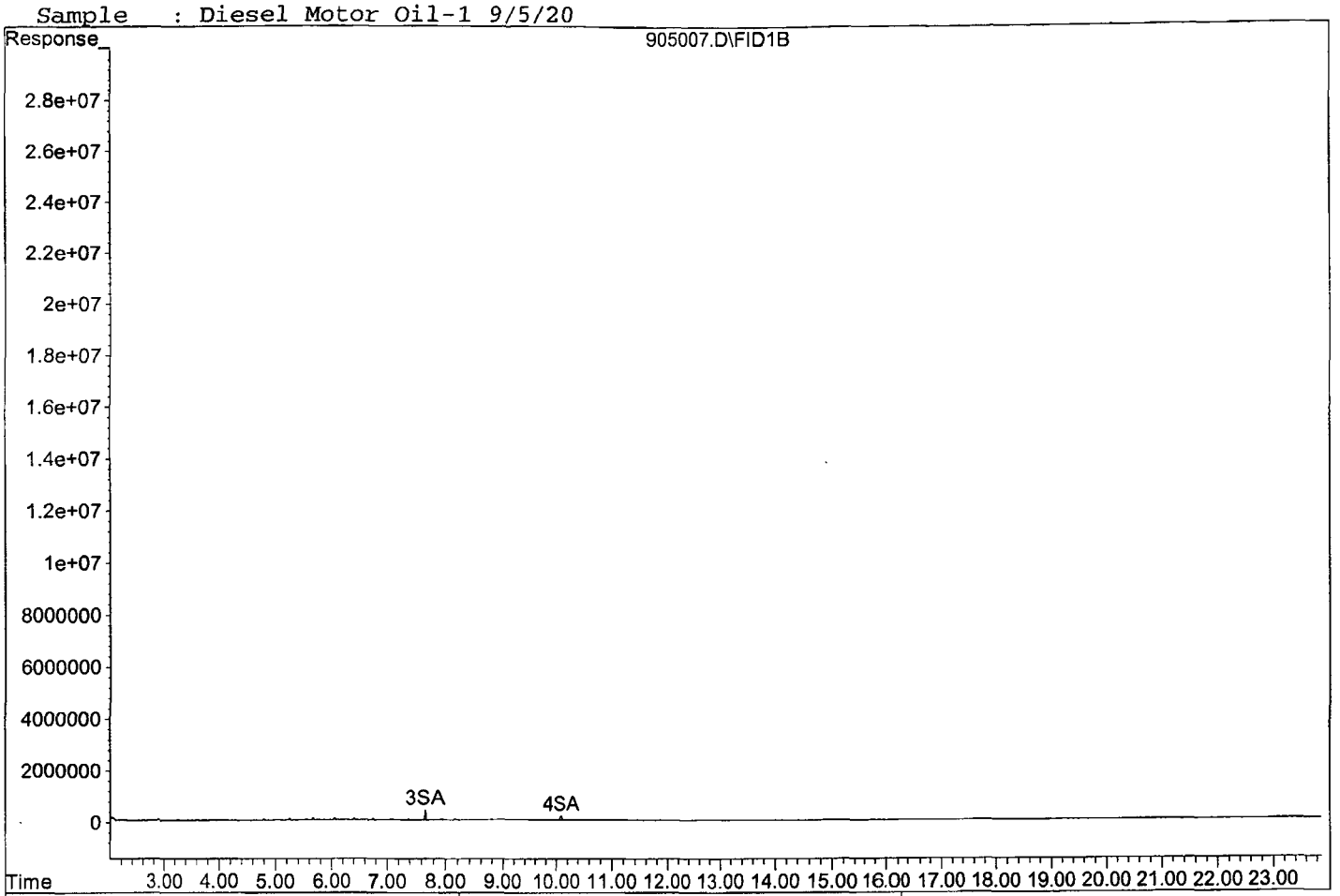
Method : G:\APOLLO\DATA\200905\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Sep 09 09:10:41 2020
Response via : Multiple Level Calibration

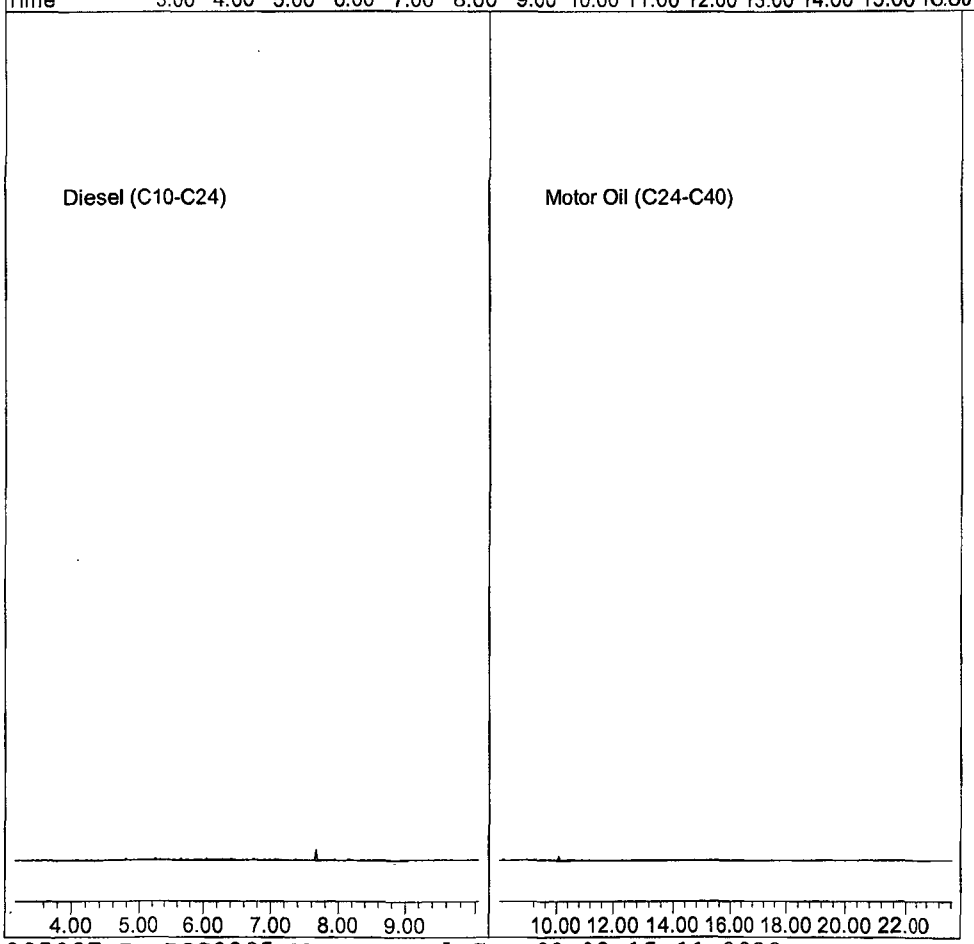
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	4755108	0.463 ppb
Surrogate Spike 30.000	Recovery =		1.54%
4) SA Octacosane(S)	10.09	3753150	0.722 ppb
Surrogate Spike 30.000	Recovery =		2.41%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	70407491	17.223 ppb
2) HBTM Motor Oil (C24-C40)	15.82	77569840	21.354 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905007.D
Sample : Diesel Motor Oil-1 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905008.D Vial: 8
Acq On : 9-5-20 17:32:40 Operator:
Sample : Diesel Motor Oil-2 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 8 8:21 2020 Quant Results File: DOC0905.RES

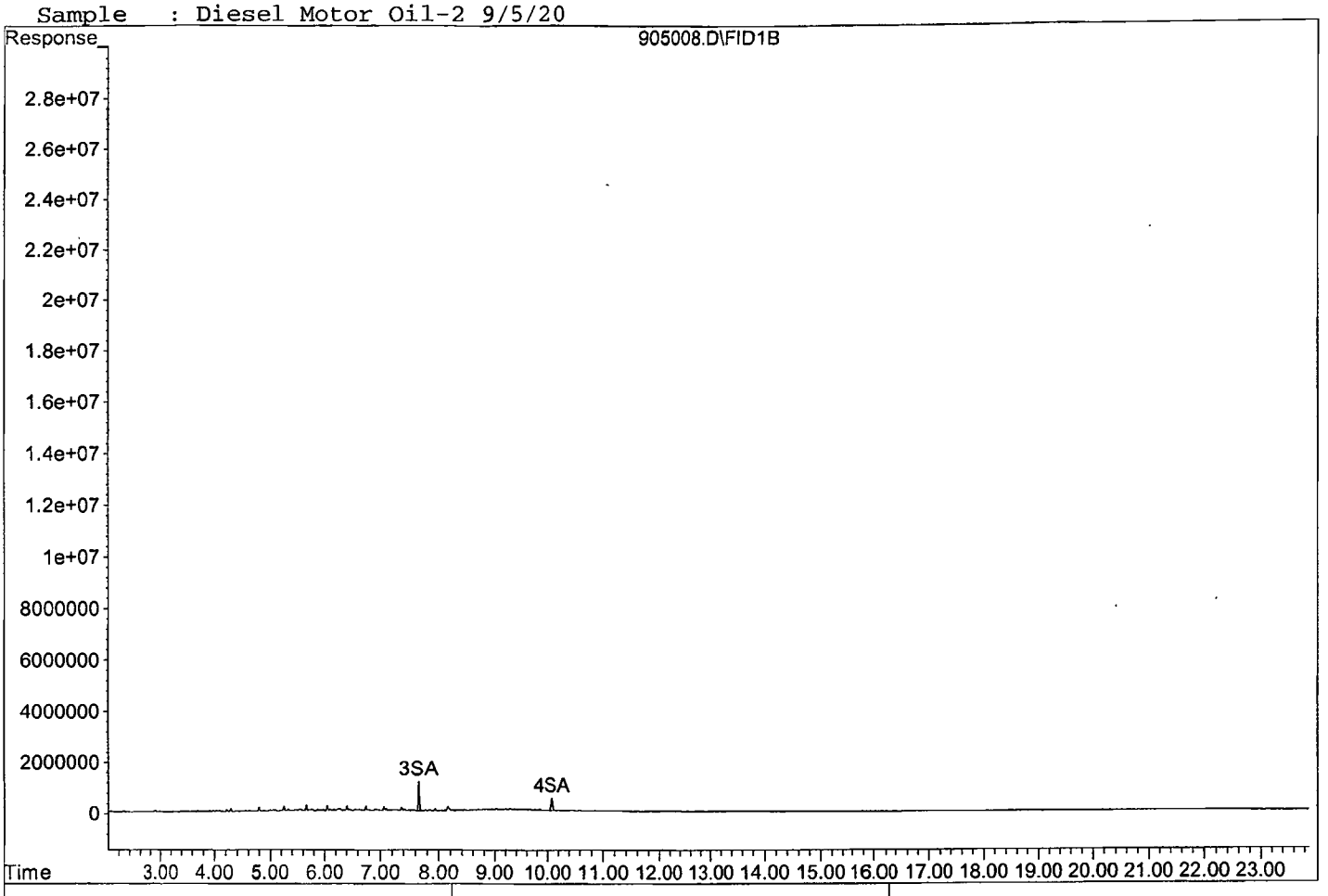
Method : G:\APOLLO\DATA\200905\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Sep 09 09:10:41 2020
Response via : Multiple Level Calibration

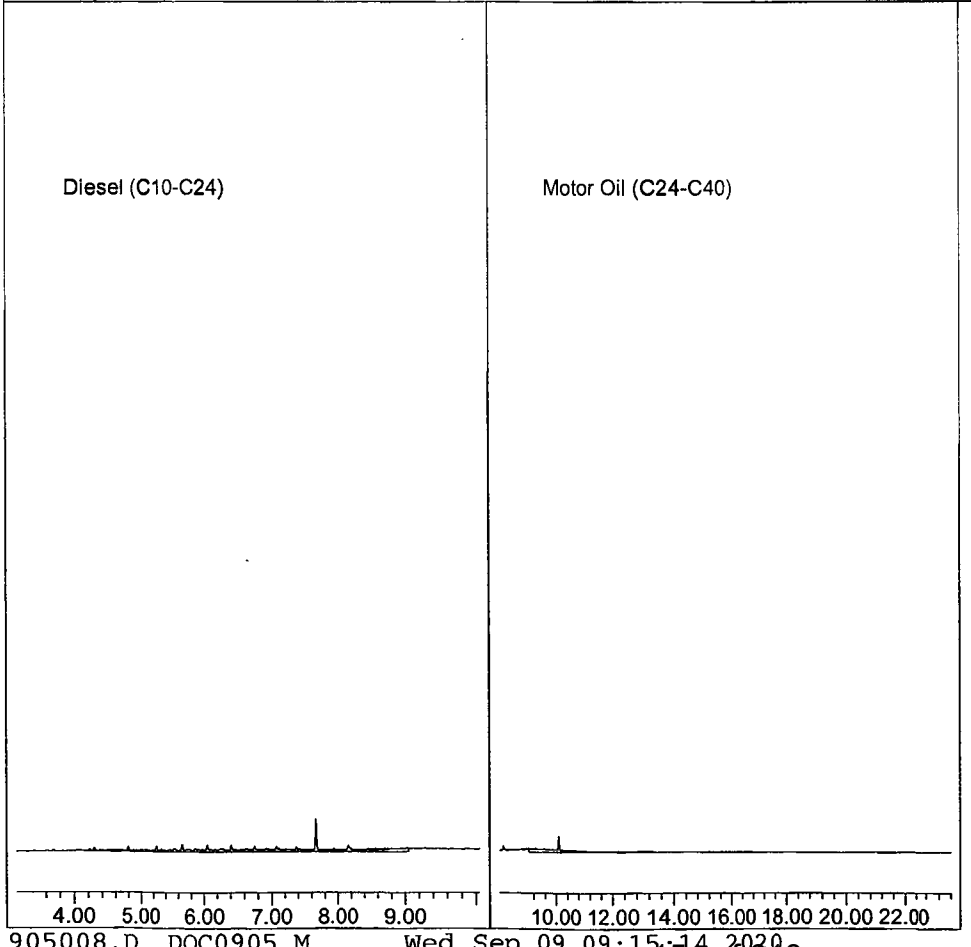
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	14055300	2.417 ppb
Surrogate Spike 30.000	Recovery =		8.06%
4) SA Octacosane(S)	10.08	10914920	2.508 ppb
Surrogate Spike 30.000	Recovery =		8.36%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	221437795	52.238 ppb
2) HBTM Motor Oil (C24-C40)	15.82	159613804	49.156 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905008.D
Sample : Diesel Motor Oil-2 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905009.D Vial: 9
Acq On : 9-5-20 18:00:45 Operator:
Sample : Diesel Motor Oil-3 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 8 8:21 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\200905\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Sep 09 09:10:41 2020
Response via : Multiple Level Calibration

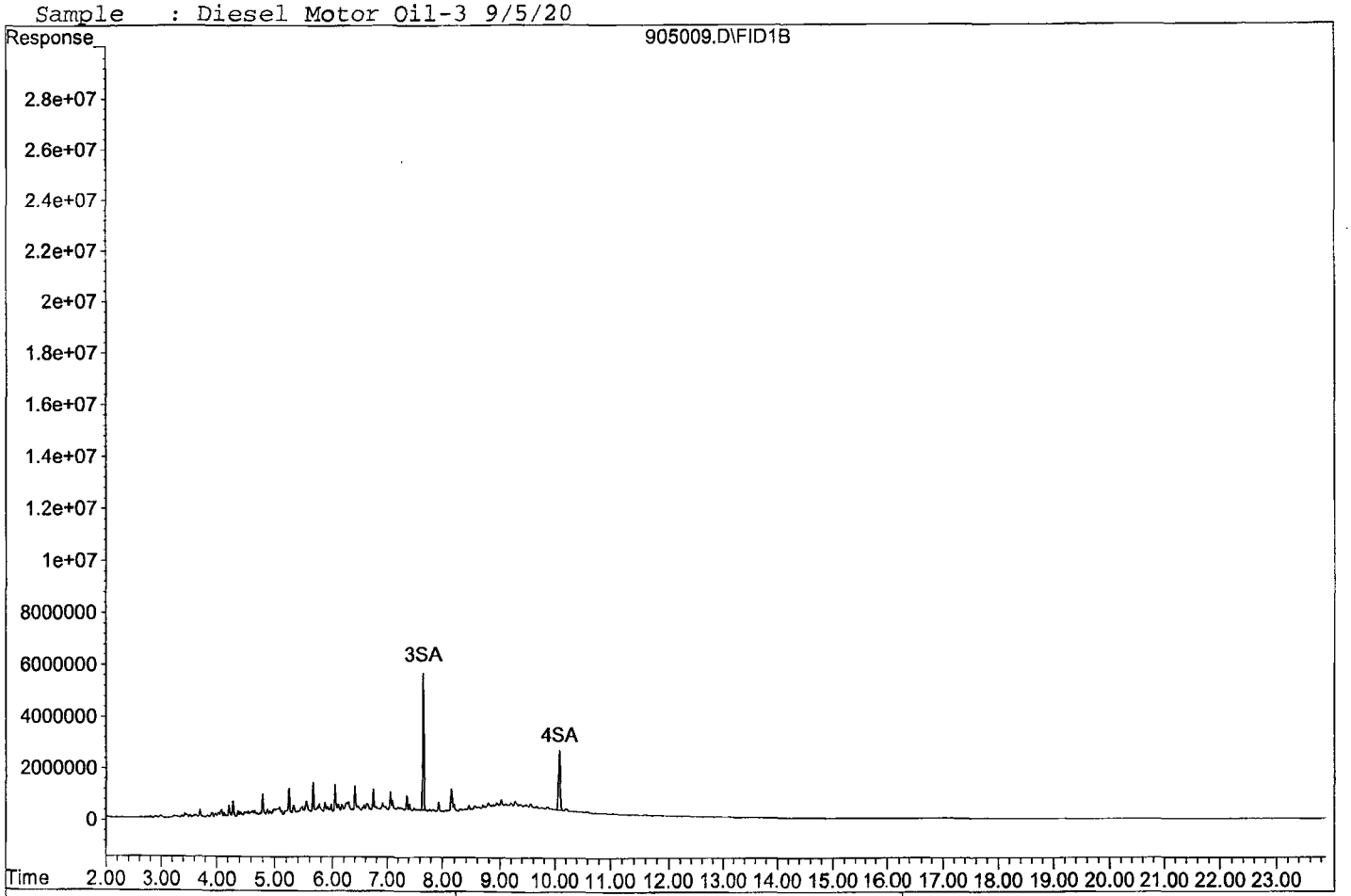
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

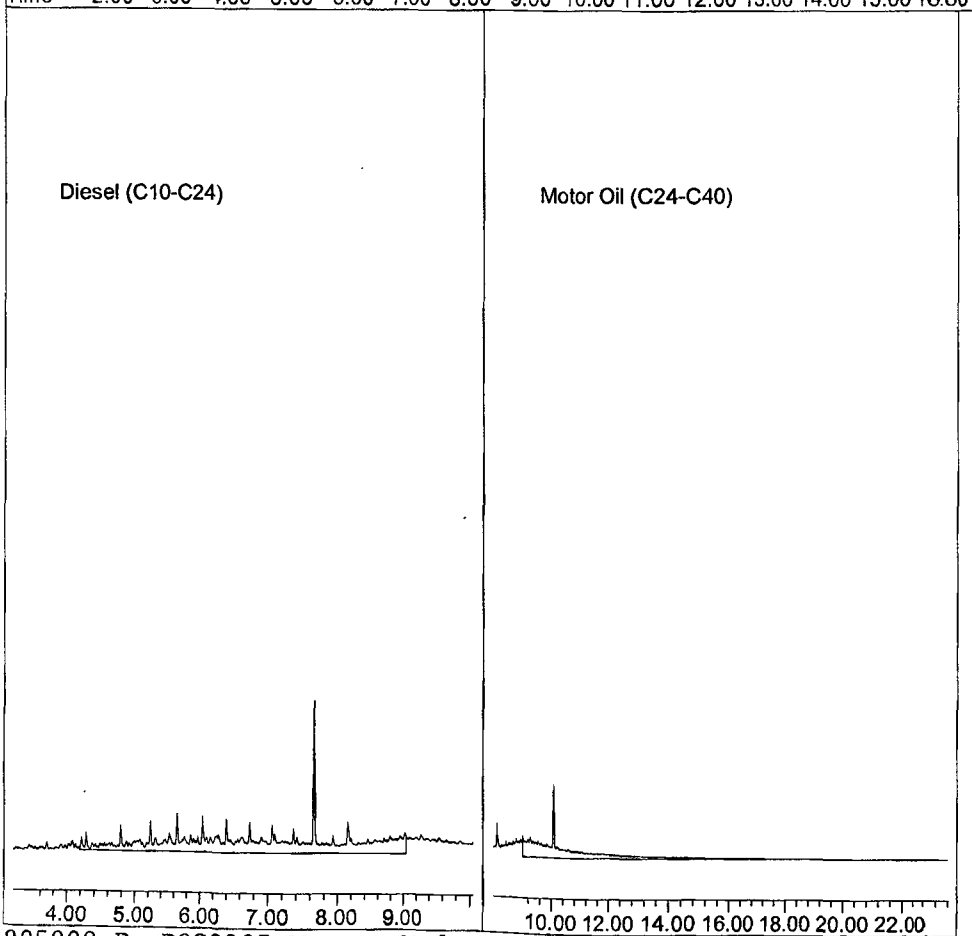
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	66996540	13.544 ppb
Surrogate Spike 30.000		Recovery =	45.15%
4) SA Octacosane(S)	10.09	52858376	12.967 ppb
Surrogate Spike 30.000		Recovery =	43.22%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1140515960	265.317 ppb
2) HBTM Motor Oil (C24-C40)	15.82	788424096	262.237 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905009.D
Sample : Diesel Motor Oil-3 9/5/20





905009.D DOC0905.M Wed Sep 09 09:15:17 2020

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905010.D Vial: 10
Acq On : 9-5-20 18:28:54 Operator:
Sample : Diesel Motor Oil-4 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 8 8:21 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\200905\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Sep 09 09:10:41 2020
Response via : Multiple Level Calibration

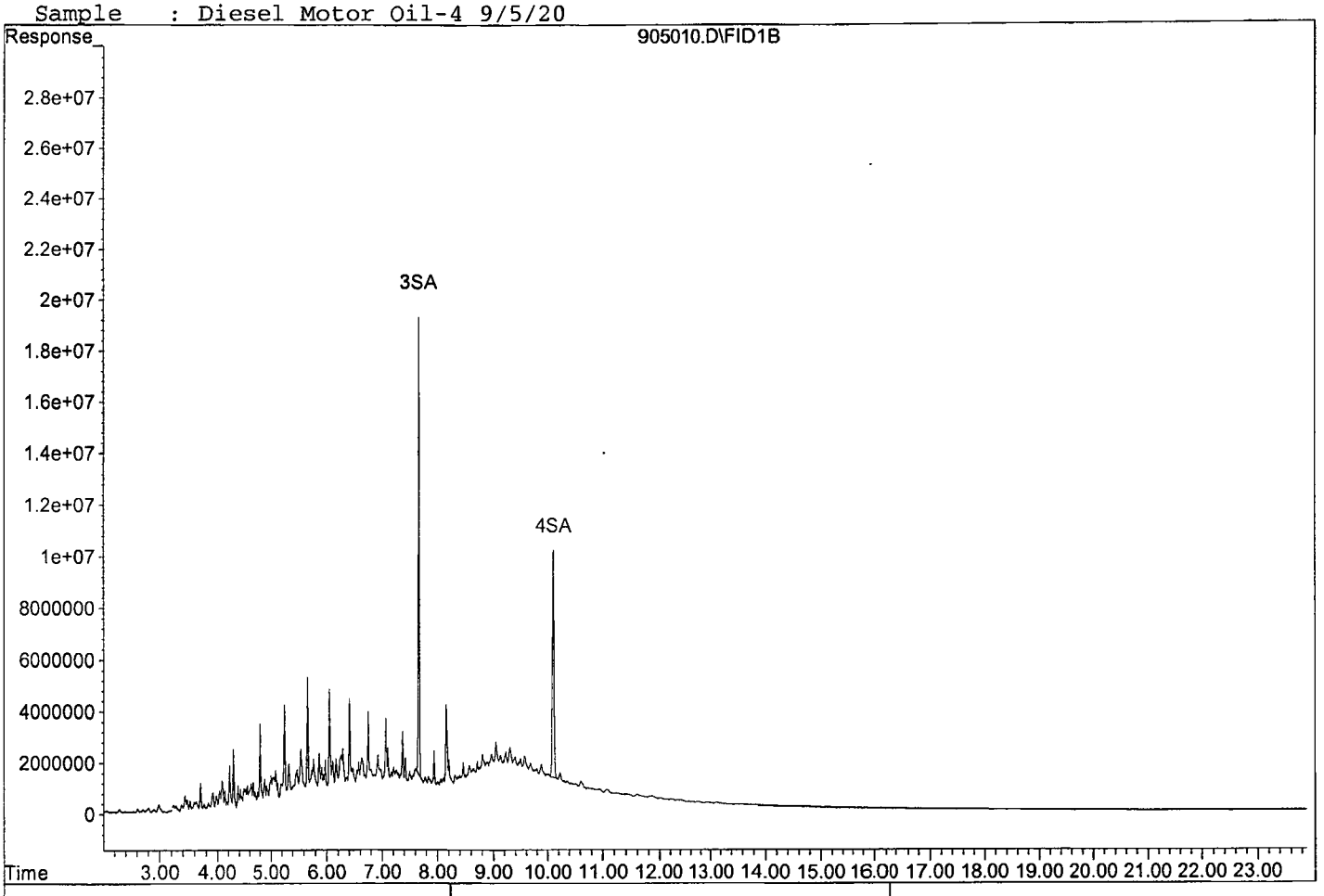
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

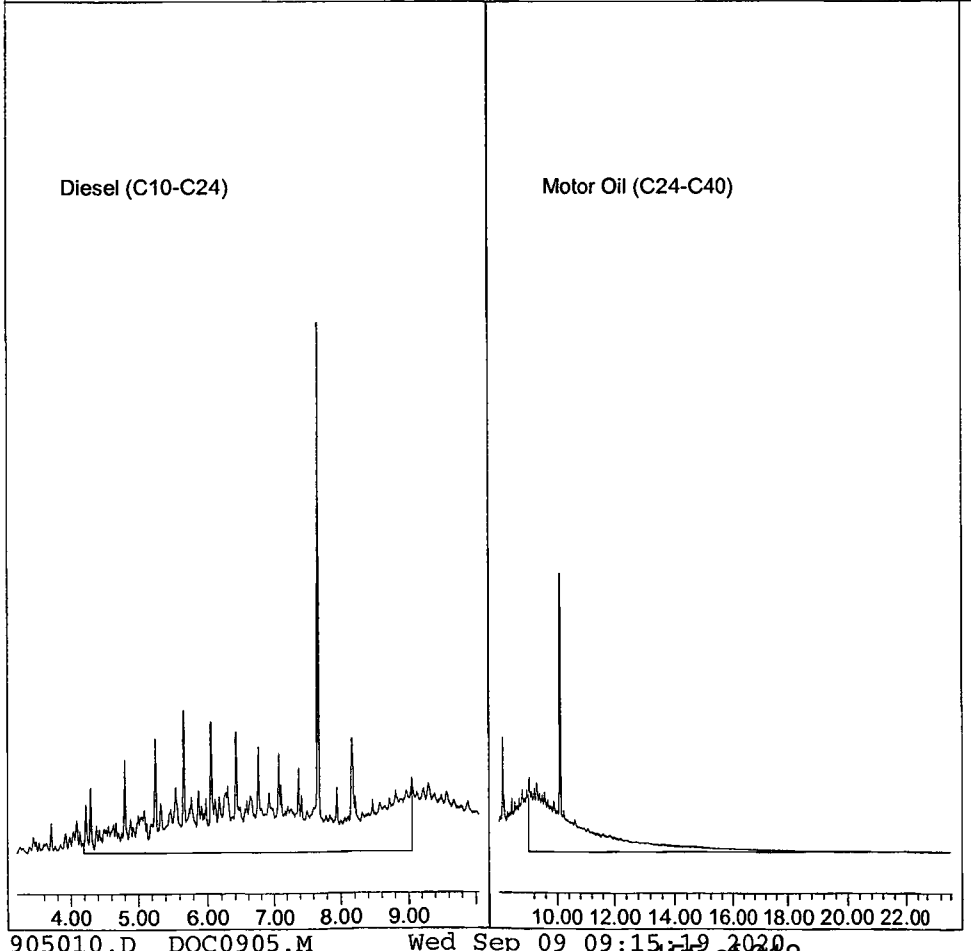
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	234931900	48.840 ppb
Surrogate Spike 30.000		Recovery =	162.80%
4) SA Octacosane(S)	10.11	196853973	48.872 ppb
Surrogate Spike 30.000		Recovery =	162.91%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	4160972977	965.579 ppb
2) HBTM Motor Oil (C24-C40)	15.82	2860576922	964.412 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905010.D
Sample : Diesel Motor Oil-4 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905011.D Vial: 11
Acq On : 9-5-20 18:56:54 Operator:
Sample : Diesel Motor Oil-5 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 8 8:21 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\200905\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Sep 09 09:10:41 2020
Response via : Multiple Level Calibration

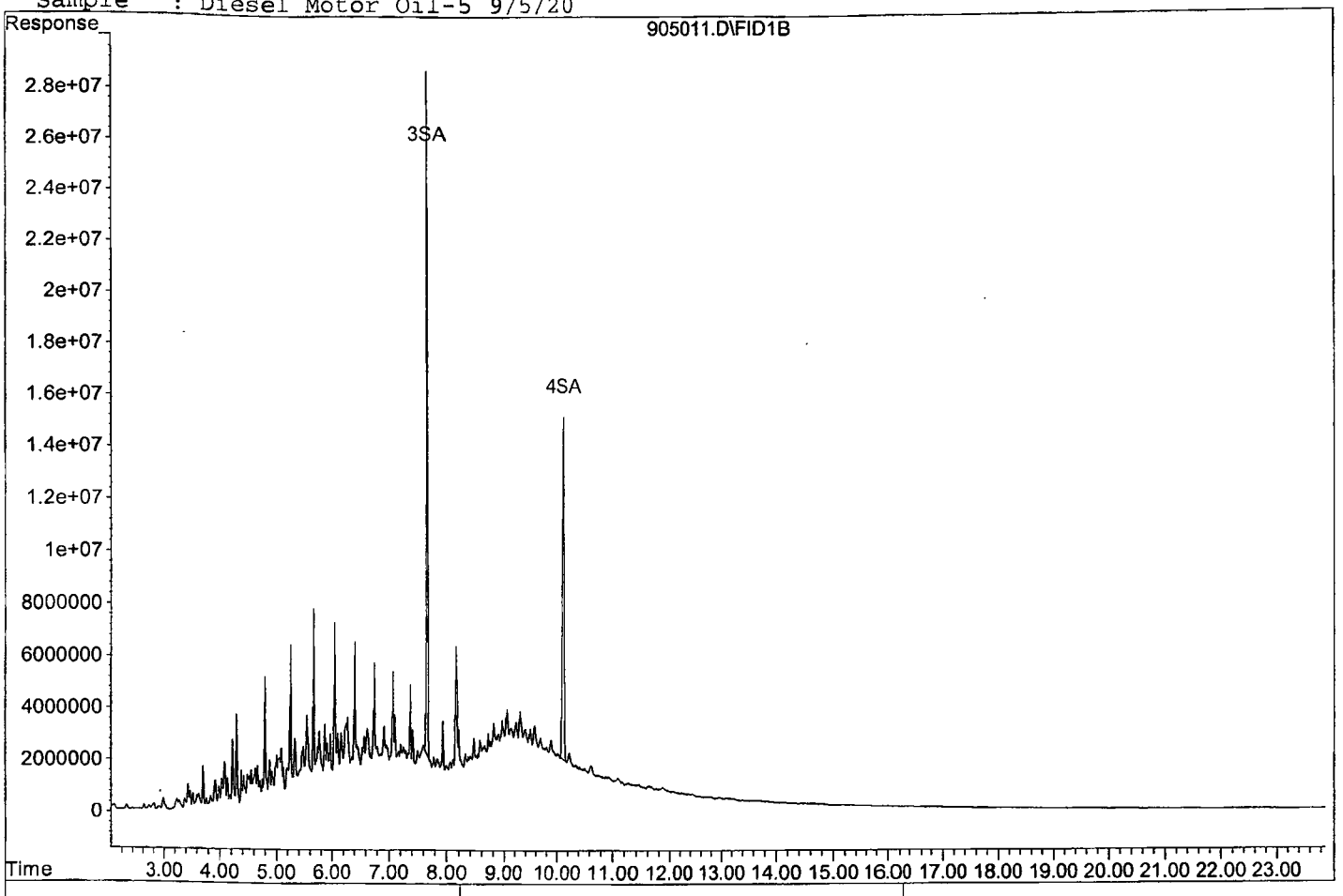
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

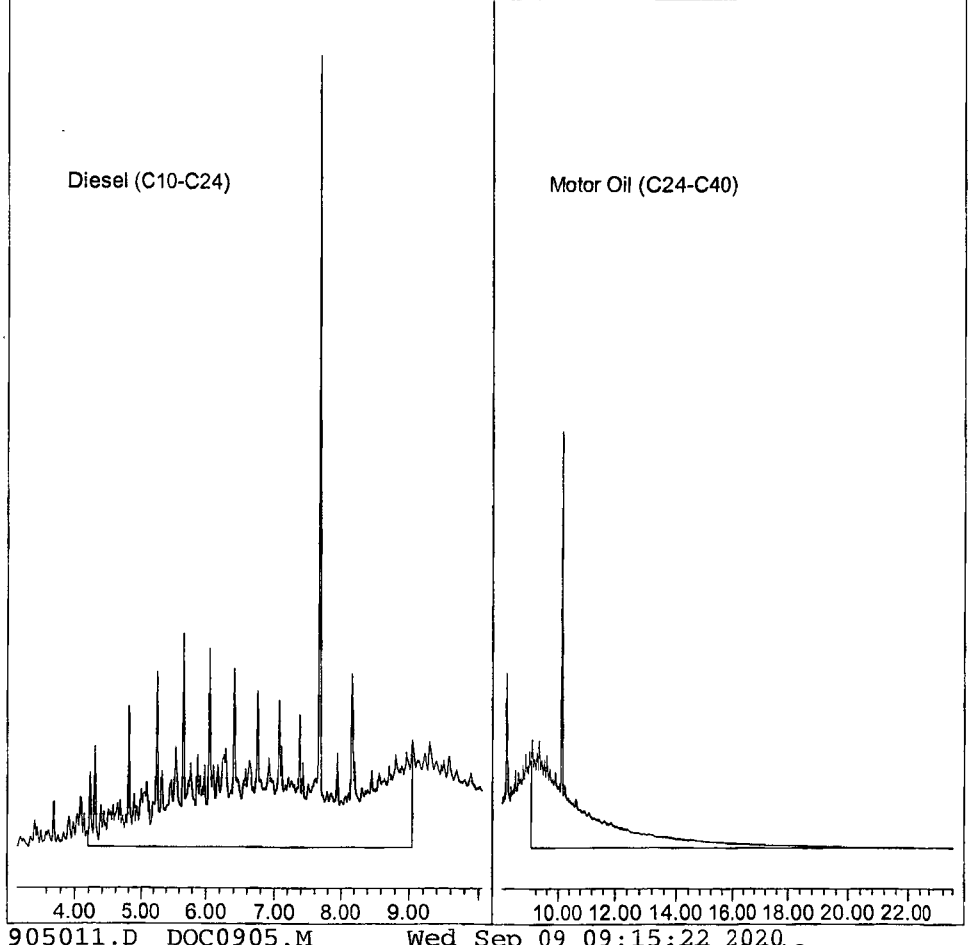
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	355298964	74.138 ppb
Surrogate Spike 30.000		Recovery =	247.13%
4) SA Octacosane(S)	10.12	300469164	74.708 ppb
Surrogate Spike 30.000		Recovery =	249.03%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	6370162550	1477.758 ppb
2) HBTM Motor Oil (C24-C40)	15.82	4401128474	1486.448 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905011.D
Sample : Diesel Motor Oil-5 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905012.D Vial: 12
Acq On : 9-5-20 19:24:55 Operator:
Sample : Diesel Motor Oil-6 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 8 8:21 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\200905\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Sep 09 09:10:41 2020
Response via : Multiple Level Calibration

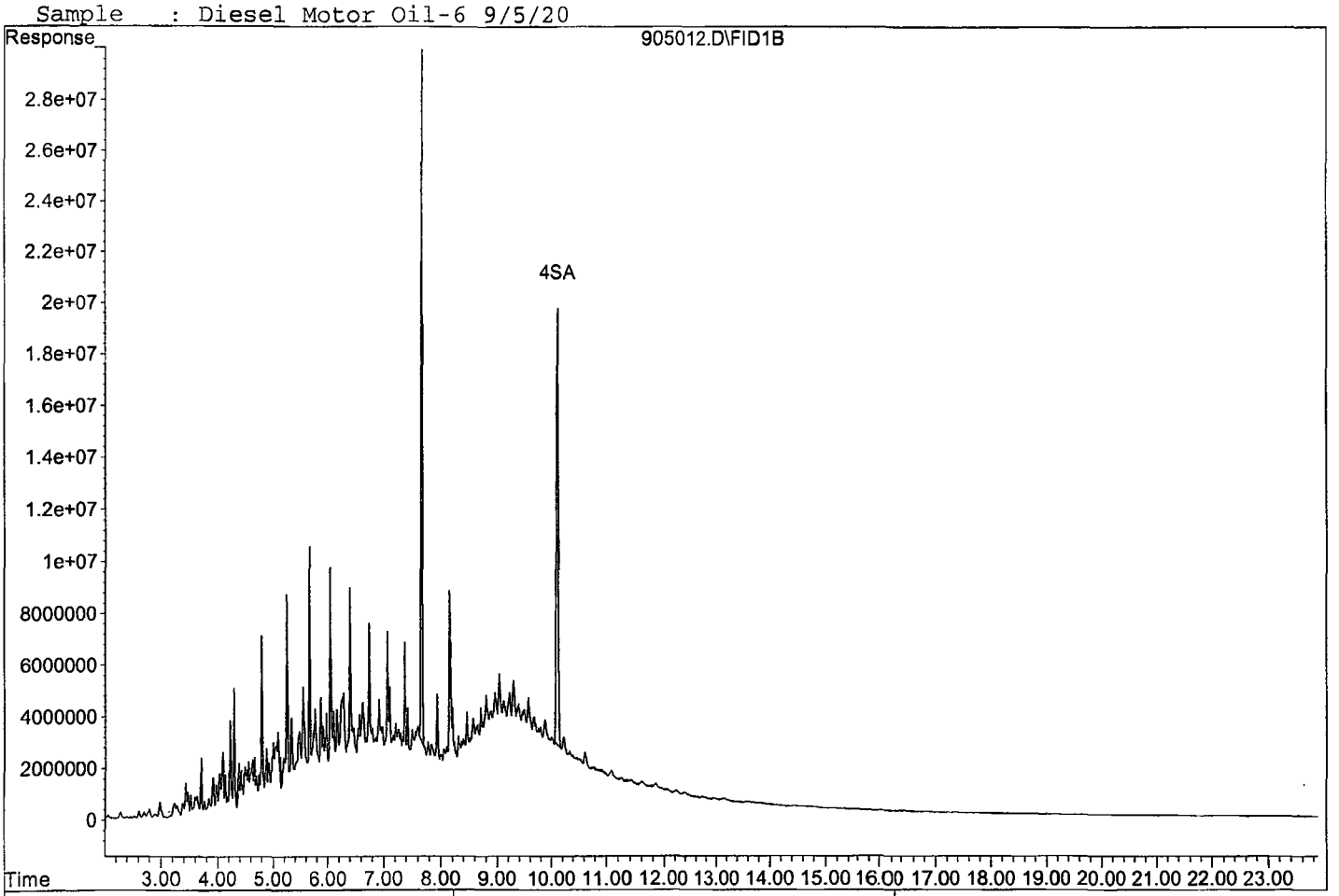
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

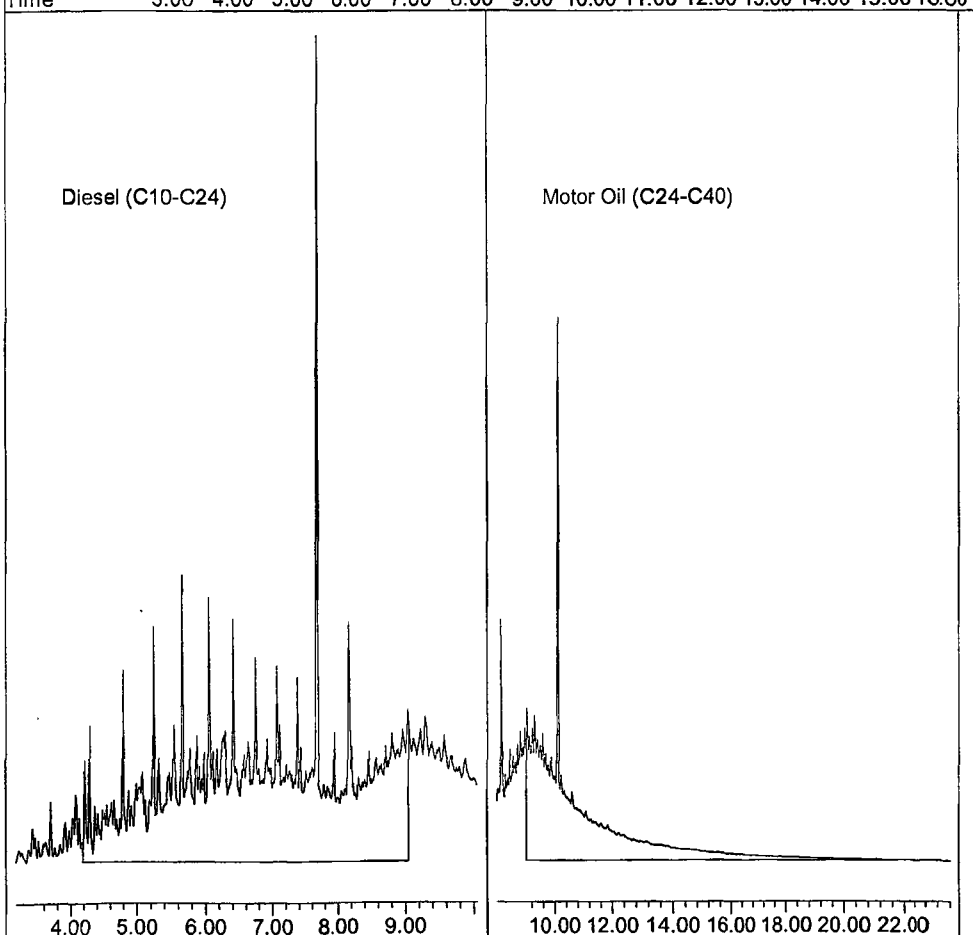
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.68	483575307	101.098 ppb
Surrogate Spike 30.000	Recovery =		336.99%
4) SA Octacosane(S)	10.11	404805297	100.724 ppb
Surrogate Spike 30.000	Recovery =		335.75%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	8760292310	2031.885 ppb
2) HBTM Motor Oil (C24-C40)	15.82	5994530170	2026.393 ppb

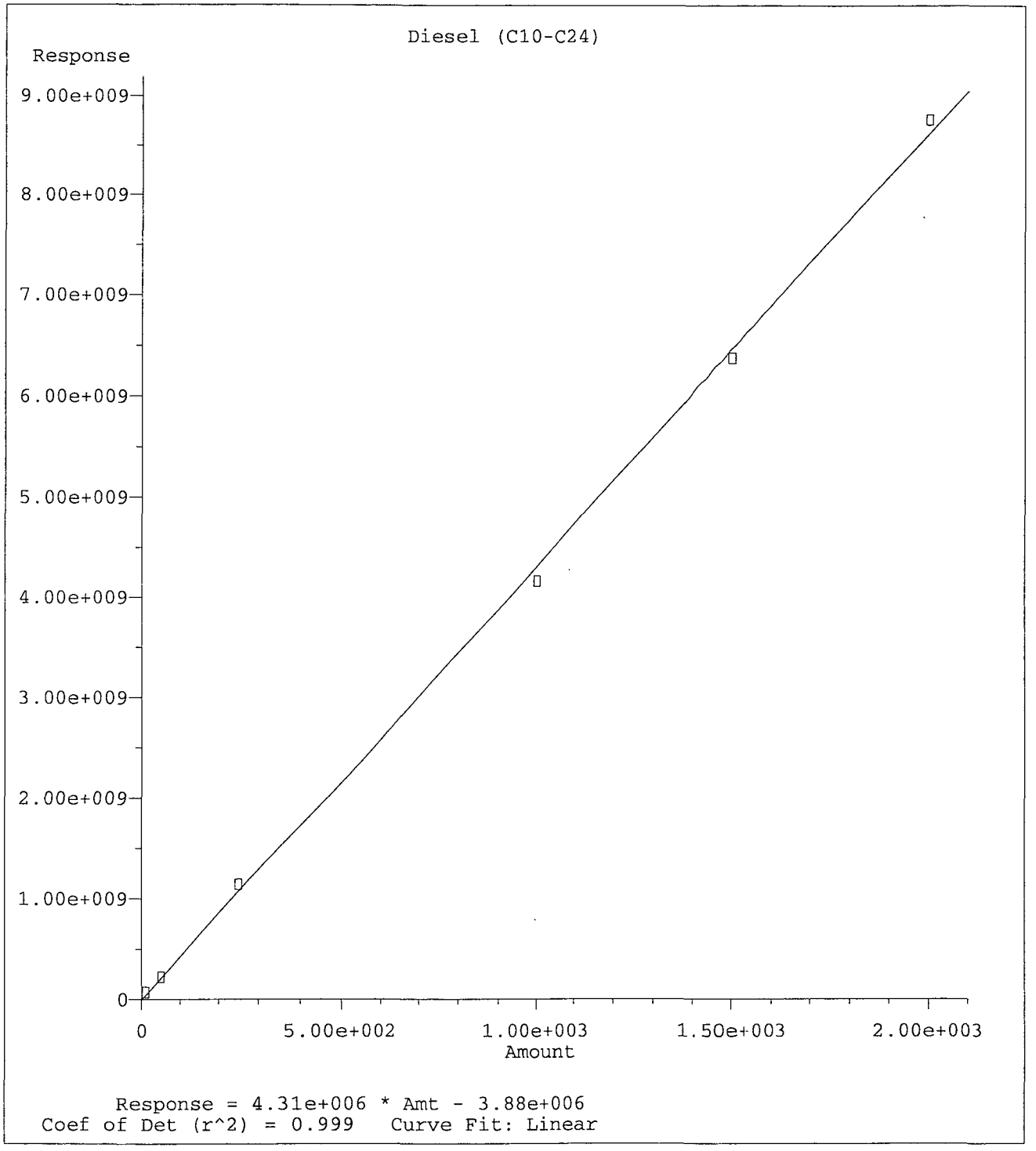
Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905012.D
Sample : Diesel Motor Oil-6 9/5/20







Method Name: G:\APOLLO\DATA\200905\DOC0905.M
Calibration Table Last Updated: Wed Sep 09 09:10:41 2020

TPH Extractables
DOC0905

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 09/05/20
Instrument: Apollo
Initial Cal. Date: 09/05/20
Data File: 905013.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2384790	0.70	HATML	11
2	HBTM	Motor Oil (C24-C40)	1513790	1737490	15	HBTM	
3							
4							
5							
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7							
8							
9							
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39							
40							
		Average			7.9		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905013.D Vial: 13
Acq On : 9-5-20 19:52:52 Operator:
Sample : Diesel Motor Oil-SS 7/21/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 8 8:21 2020 Quant Results File: DOC0905.RES

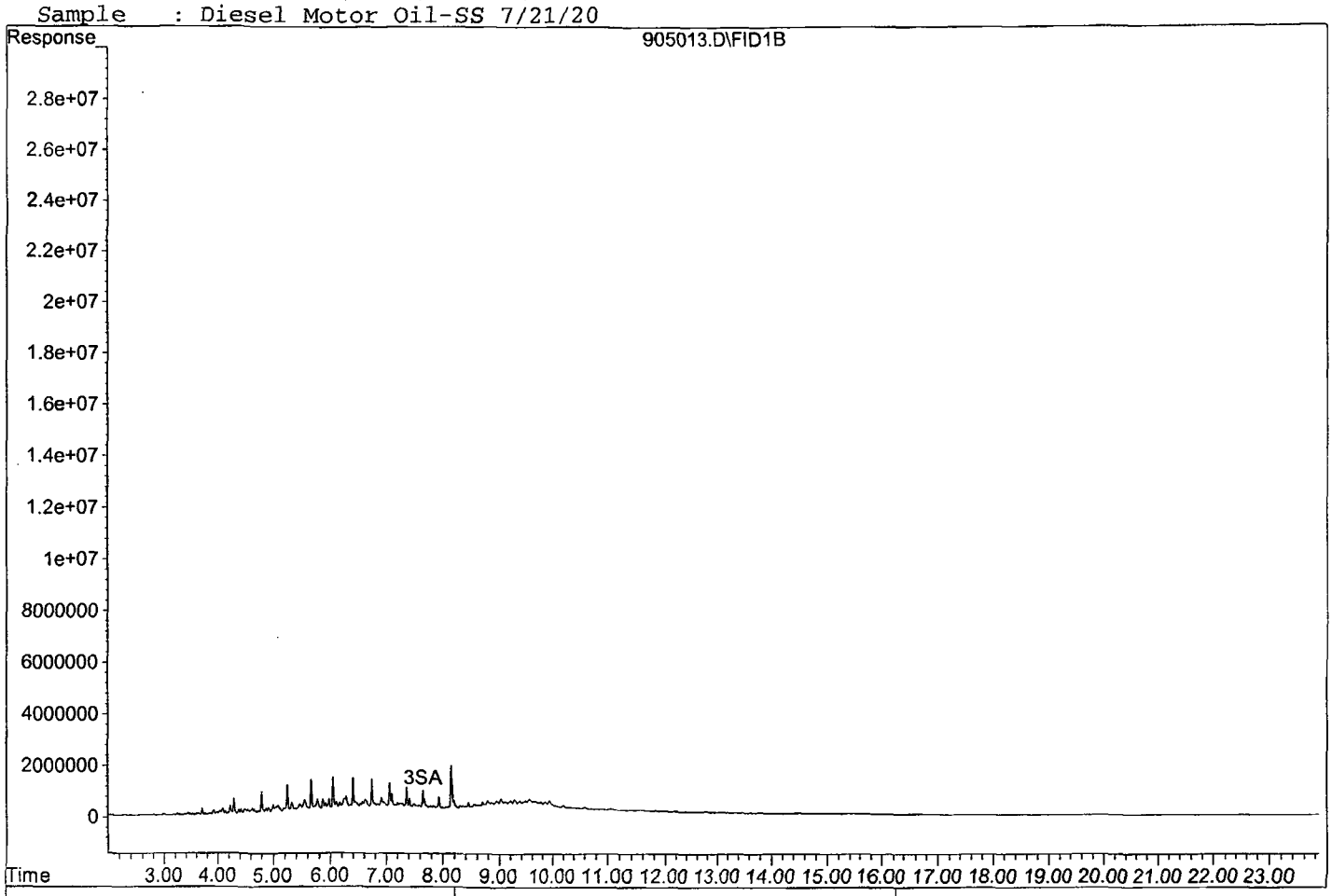
Method : G:\APOLLO\DATA\200905\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Sep 09 09:10:41 2020
Response via : Multiple Level Calibration

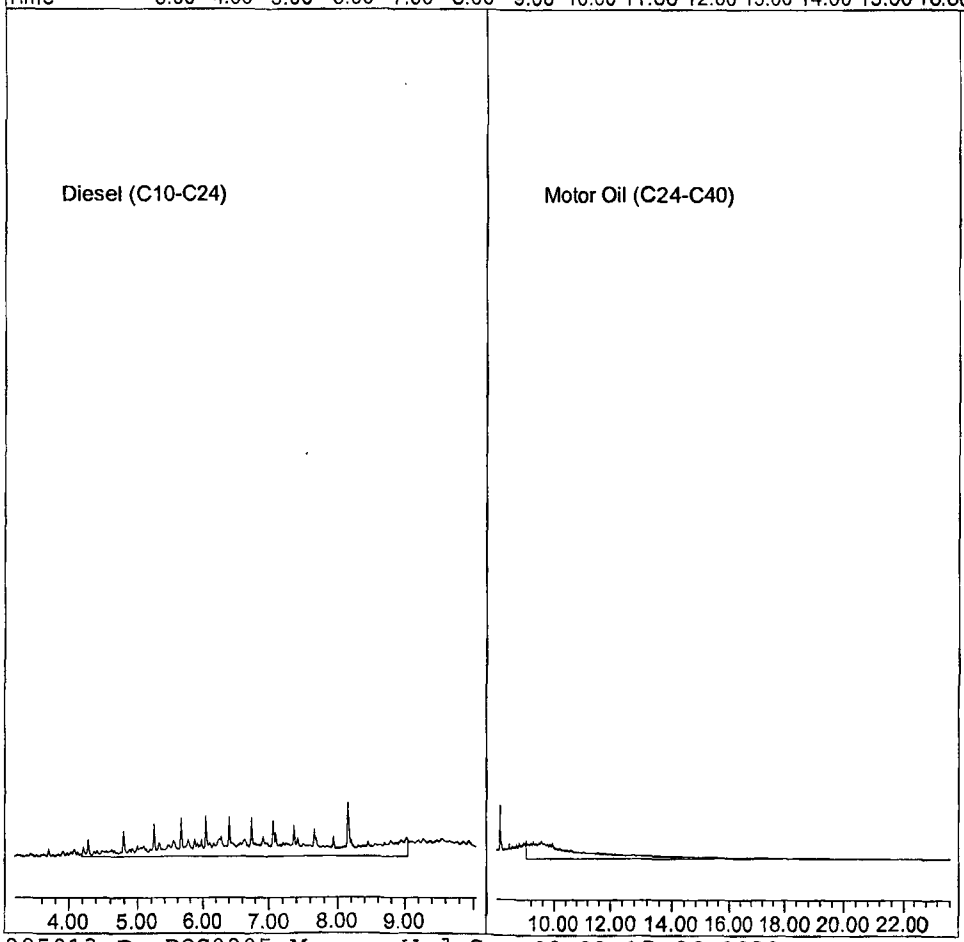
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.66	4757925	0.463 ppb
Surrogate Spike 30.000		Recovery =	1.54%
4) SA Octacosane(S)	10.06	-2131	N.D. ppb
Surrogate Spike 30.000		Recovery =	0.00%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1192394512	277.344 ppb
2) HBTM Motor Oil (C24-C40)	15.82	868745074	289.454 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905013.D
Sample : Diesel Motor Oil-SS 7/21/20





TPH Extractables
DEC0914

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 09/14/20
Matrix: Water Instrument: Apollo Initials: SS

914004.D 914005.D 914006.D 914007.D 914008.D 914009.D

		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
1	SC	Decanoic Acid(S)	1032713	1038468	1205026	1249387	1259834	1291198					1179438	9.7	SC		
2																	
3																	
4																	
5																	
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0.278114

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914004.D Vial: 4
Acq On : 9-14-20 10:24:43 Operator:
Sample : Decanoic Acid-1 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 16:45 2020 Quant Results File: DEC0914.RES

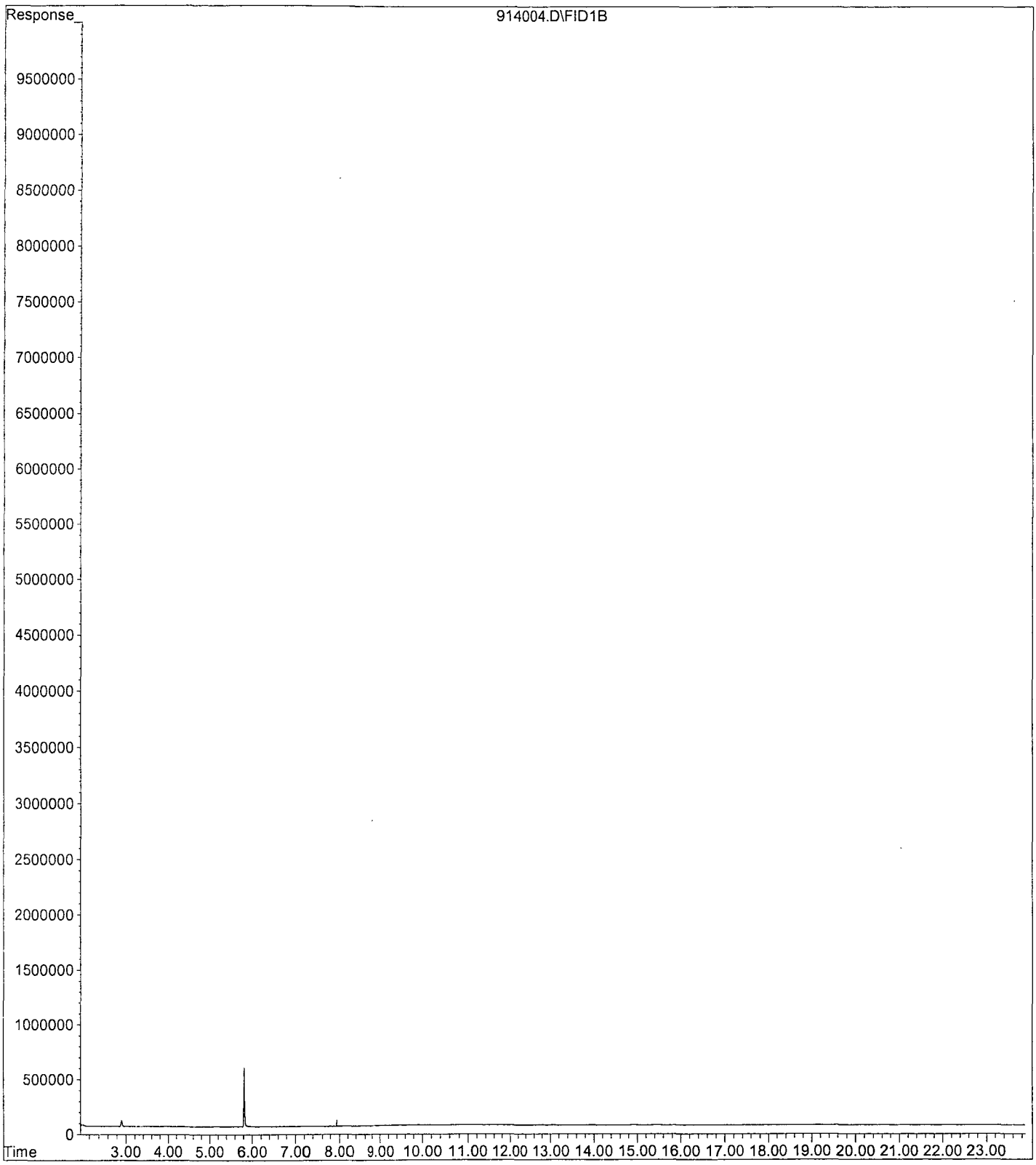
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Mon Sep 14 13:05:45 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.82	6196276	2.627 ppb
Surrogate Spike 24.000	Recovery =		10.95%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914004.D
Operator :
Acquired : 9-14-20 10:24:43 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-1 9/14/20
Misc Info : water
Vial Number: 4



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914005.D Vial: 5
Acq On : 9-14-20 10:52:47 Operator:
Sample : Decanoic Acid-2 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 16:45 2020 Quant Results File: DEC0914.RES

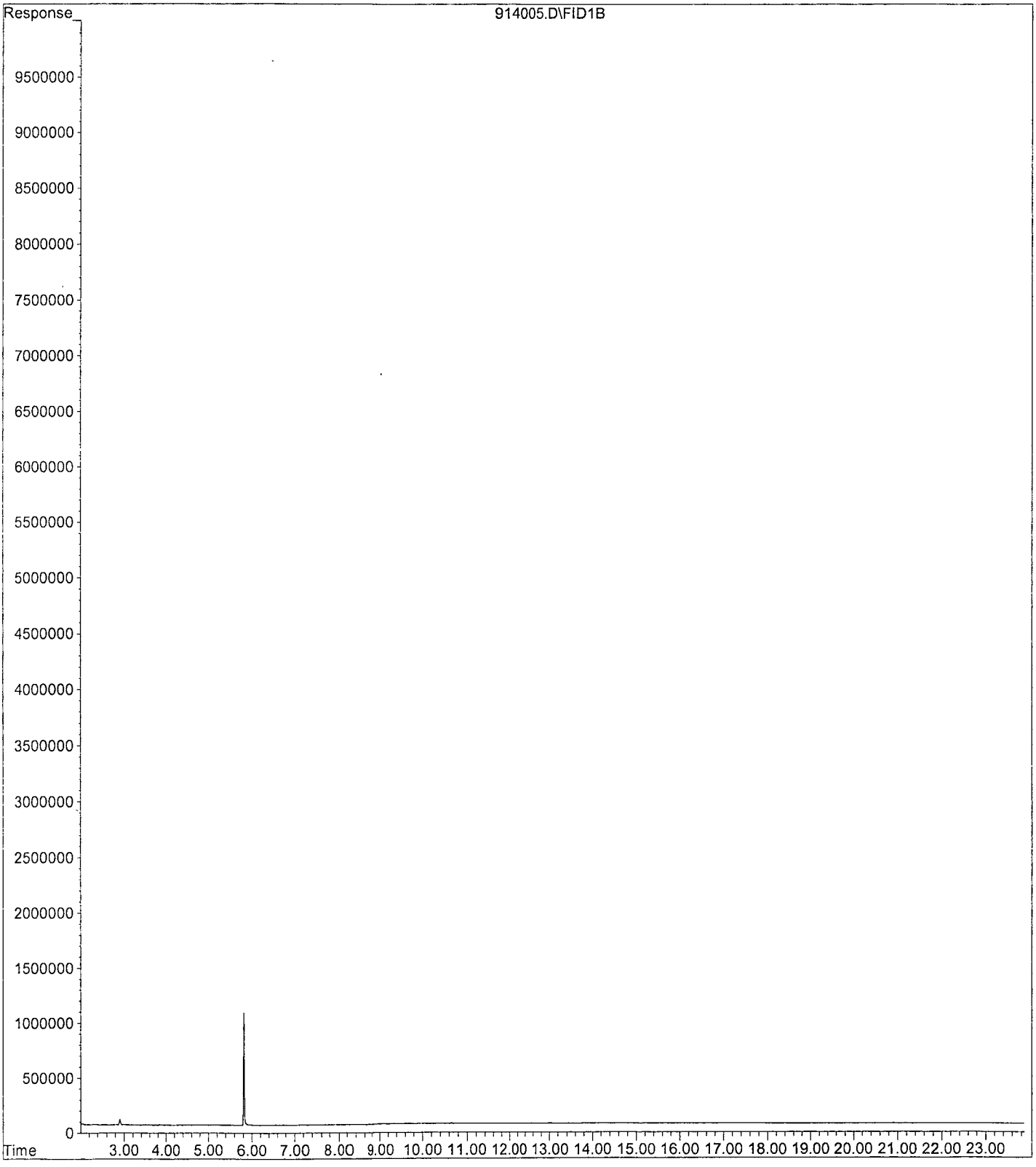
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Mon Sep 14 13:05:45 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.82	12461617	5.283 ppb
Surrogate Spike 24.000	Recovery =		22.01%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914005.D
Operator :
Acquired : 9-14-20 10:52:47 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-2 9/14/20
Misc Info : water
Vial Number: 5



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914006.D Vial: 6
Acq On : 9-14-20 11:20:51 Operator:
Sample : Decanoic Acid-3 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 16:45 2020 Quant Results File: DEC0914.RES

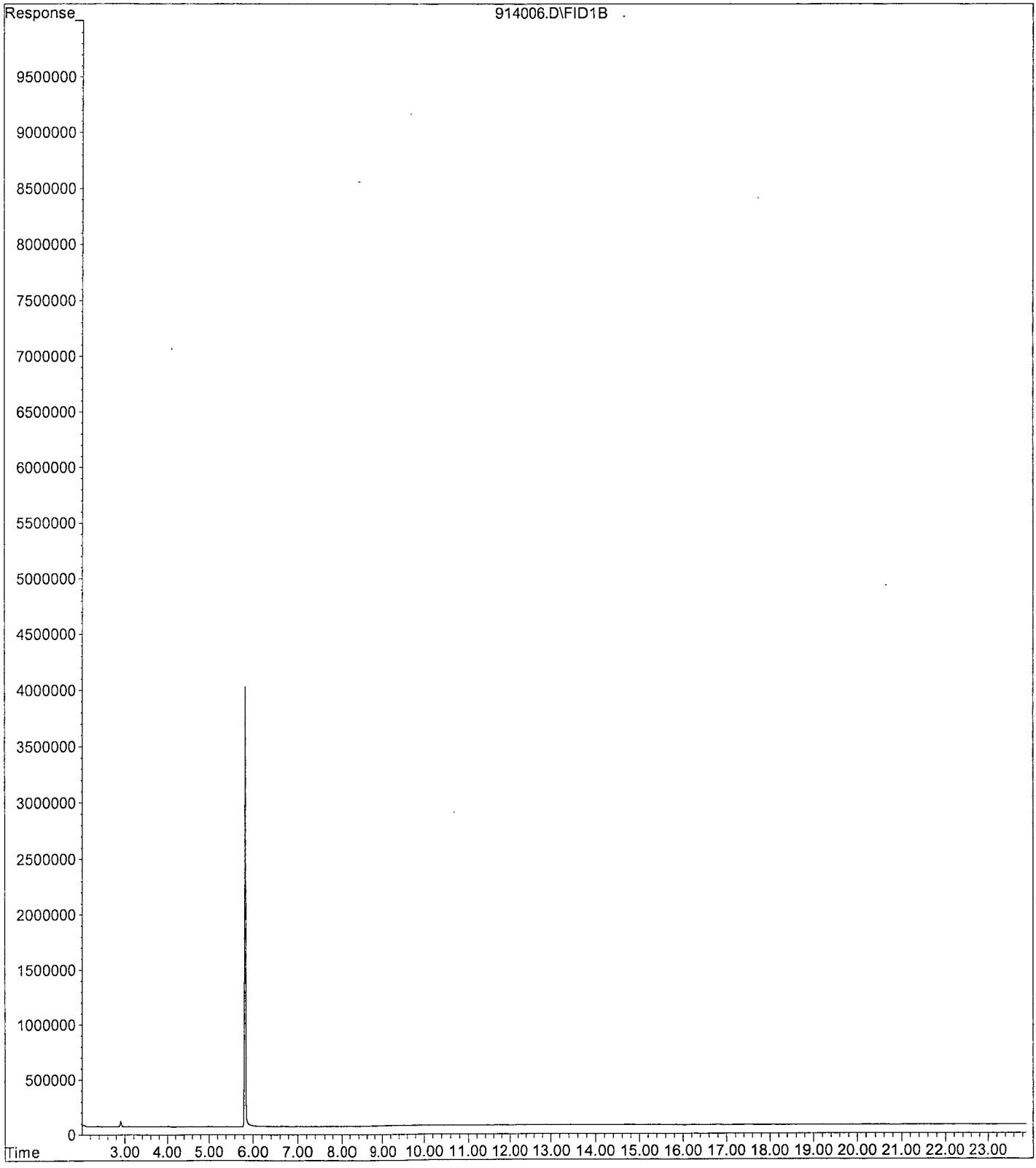
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Mon Sep 14 13:05:45 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.83	57841244	24.521 ppb
Surrogate Spike 24.000		Recovery =	102.17%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914006.D
Operator :
Acquired : 9-14-20 11:20:51 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-3 9/14/20
Misc Info : water
Vial Number: 6



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914007.D Vial: 7
Acq On : 9-14-20 11:48:52 Operator:
Sample : Decanoic Acid-4 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 16:45 2020 Quant Results File: DEC0914.RES

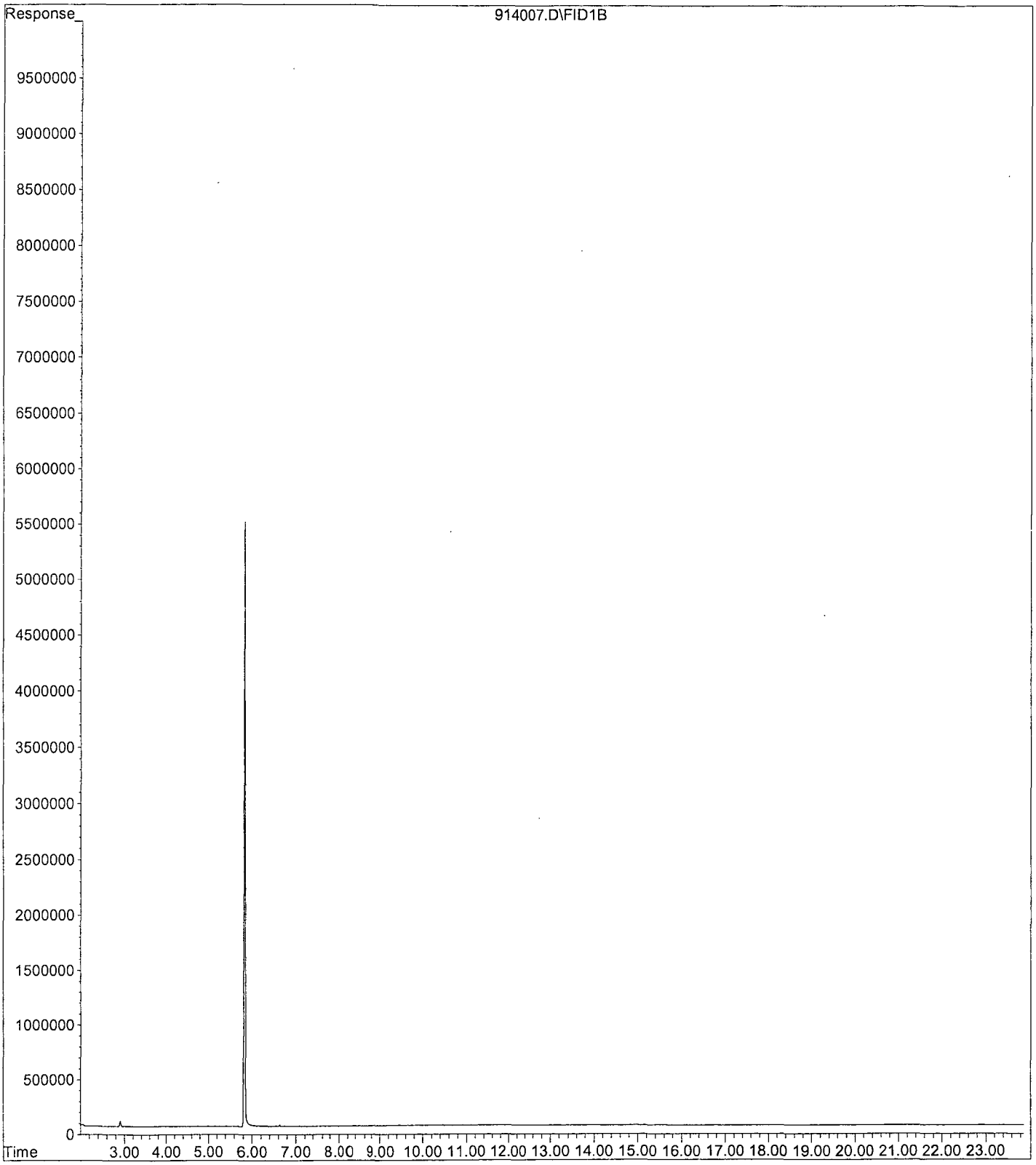
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Mon Sep 14 13:05:45 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.84	89955859	38.135 ppb
Surrogate Spike 24.000		Recovery =	158.90%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914007.D
Operator :
Acquired : 9-14-20 11:48:52 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-4 9/14/20
Misc Info : water
Vial Number: 7



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914008.D Vial: 8
Acq On : 9-14-20 12:16:53 Operator:
Sample : Decanoic Acid-5 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 16:45 2020 Quant Results File: DEC0914.RES

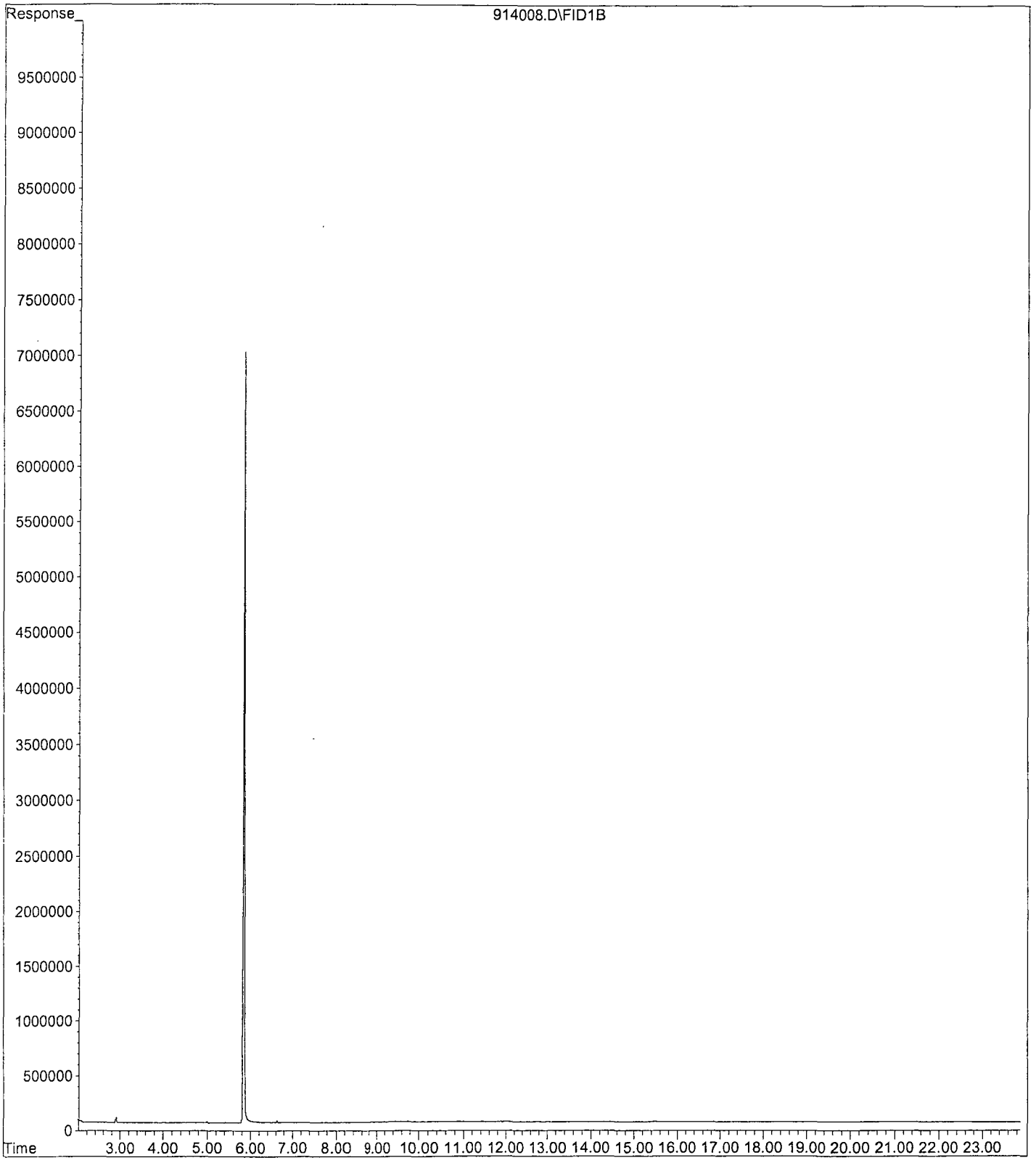
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Mon Sep 14 13:05:45 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.85	120944103	51.272 ppb
Surrogate Spike 24.000		Recovery =	213.63%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914008.D
Operator :
Acquired : 9-14-20 12:16:53 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-5 9/14/20
Misc Info : water
Vial Number: 8



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914009.D Vial: 9
Acq On : 9-14-20 12:44:57 Operator:
Sample : Decanoic Acid-6 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 16:45 2020 Quant Results File: DEC0914.RES

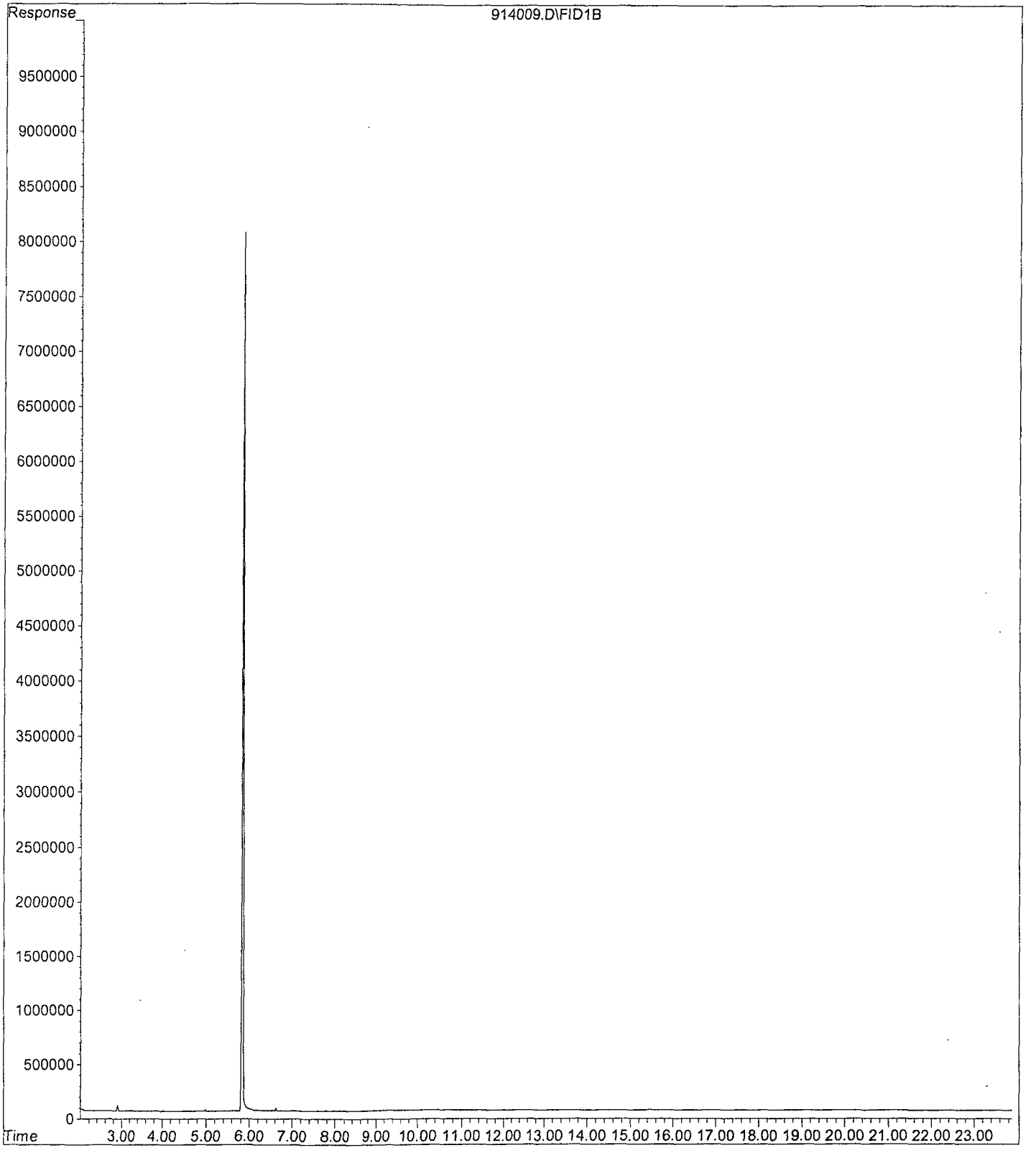
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Mon Sep 14 13:05:45 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.85	154943704	65.685 ppb
Surrogate Spike 24.000		Recovery =	273.69%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914009.D
Operator :
Acquired : 9-14-20 12:44:57 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-6 9/14/20
Misc Info : water
Vial Number: 9



TPH Extractables
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/13/20
Instrument: Apollo
Initial Cal. Date: 09/05/20
Data File: 1003123.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C24)	2401620	2265740	5.7	HATML	5.4
2	HBTM	Motor Oil (C24-C40)	1513790	1475100	2.6	HBTM	
3	SA	Ortho-Terphenyl(S)	2525360	2655760	5.2	SA	
4	SA	Octacosane(S)	2058600	2124130	3.2	SA	
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6							
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		Average			4.2		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201003\1003123.D Vial: 23
Acq On : 10-13-20 11:50:40 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Oct 13 11:21 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201105\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

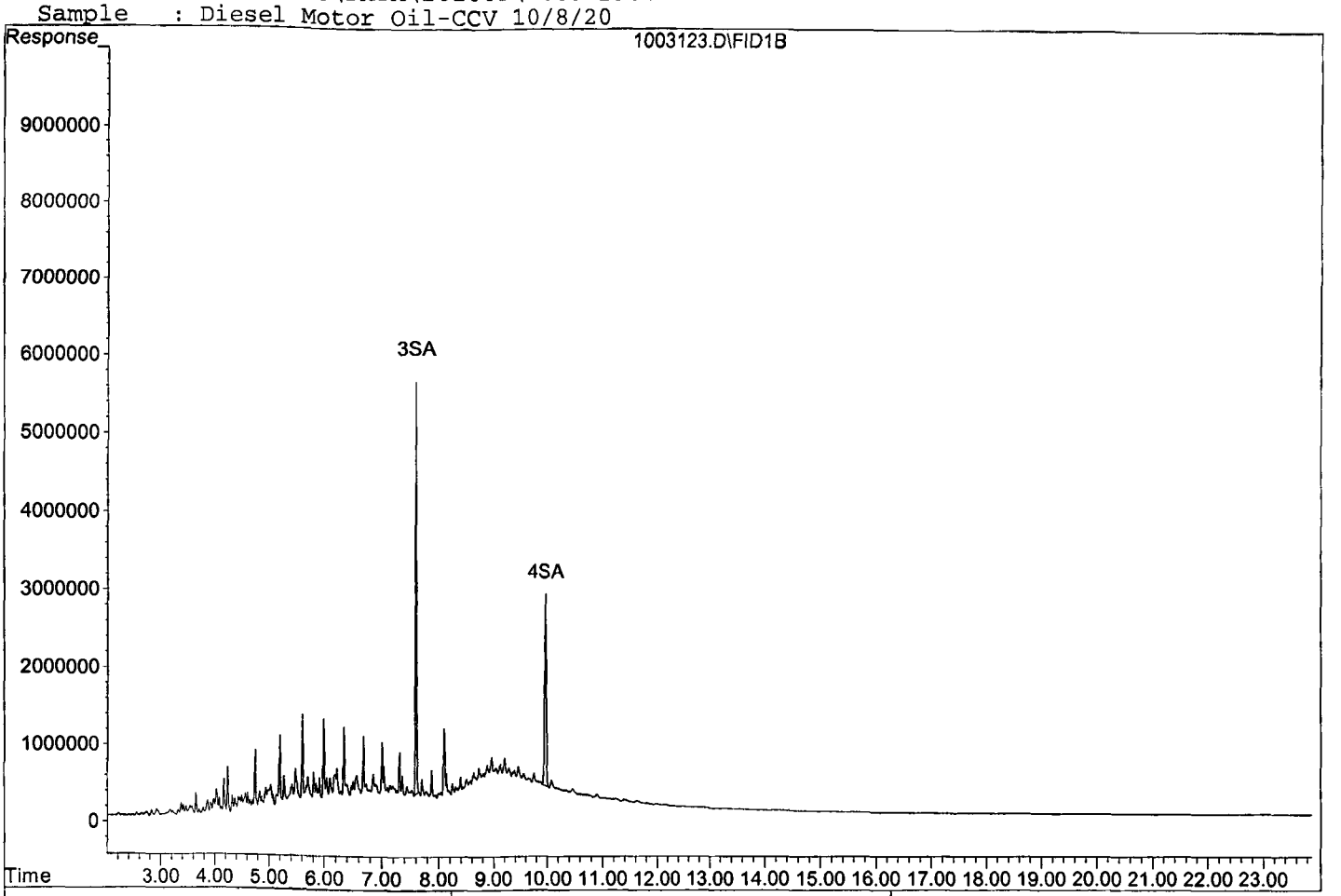
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

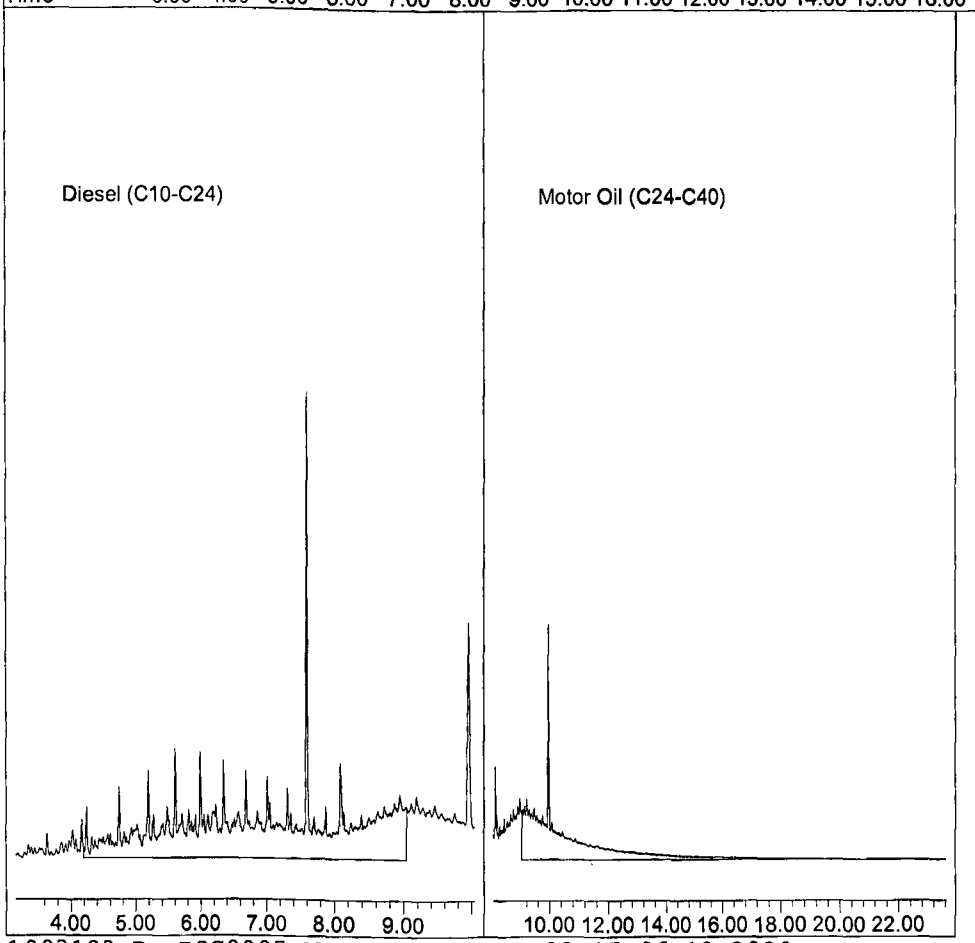
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.60	66394056	13.145 ppb
Surrogate Spike 30.000		Recovery =	43.82%
4) SA Octacosane(S)	9.96	53103295	12.898 ppb
Surrogate Spike 30.000		Recovery =	42.99%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1132870431	263.544 ppb
2) HBTM Motor Oil (C24-C40)	15.82	737548663	243.610 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201003\1003123.D
Sample : Diesel Motor Oil-CCV 10/8/20





TPH Extractables
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/13/20
Instrument: Apollo
Initial Cal. Date: 09/05/20
Data File: 1003131.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2233390	7.0	HATML	3.9
2	HBTM	Motor Oil (C24-C40)	1513790	1469050	3.0	HBTM	
3	SA	Ortho-Terphenyl(S)	2525360	2696480	6.8	SA	
4	SA	Octacosane(S)	2058600	2038600	0.97	SA	
5							
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39							
40							
		Average			4.4		

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201003\1003131.D Vial: 31
Acq On : 10-13-20 18:25:00 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Oct 14 7:39 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201105\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

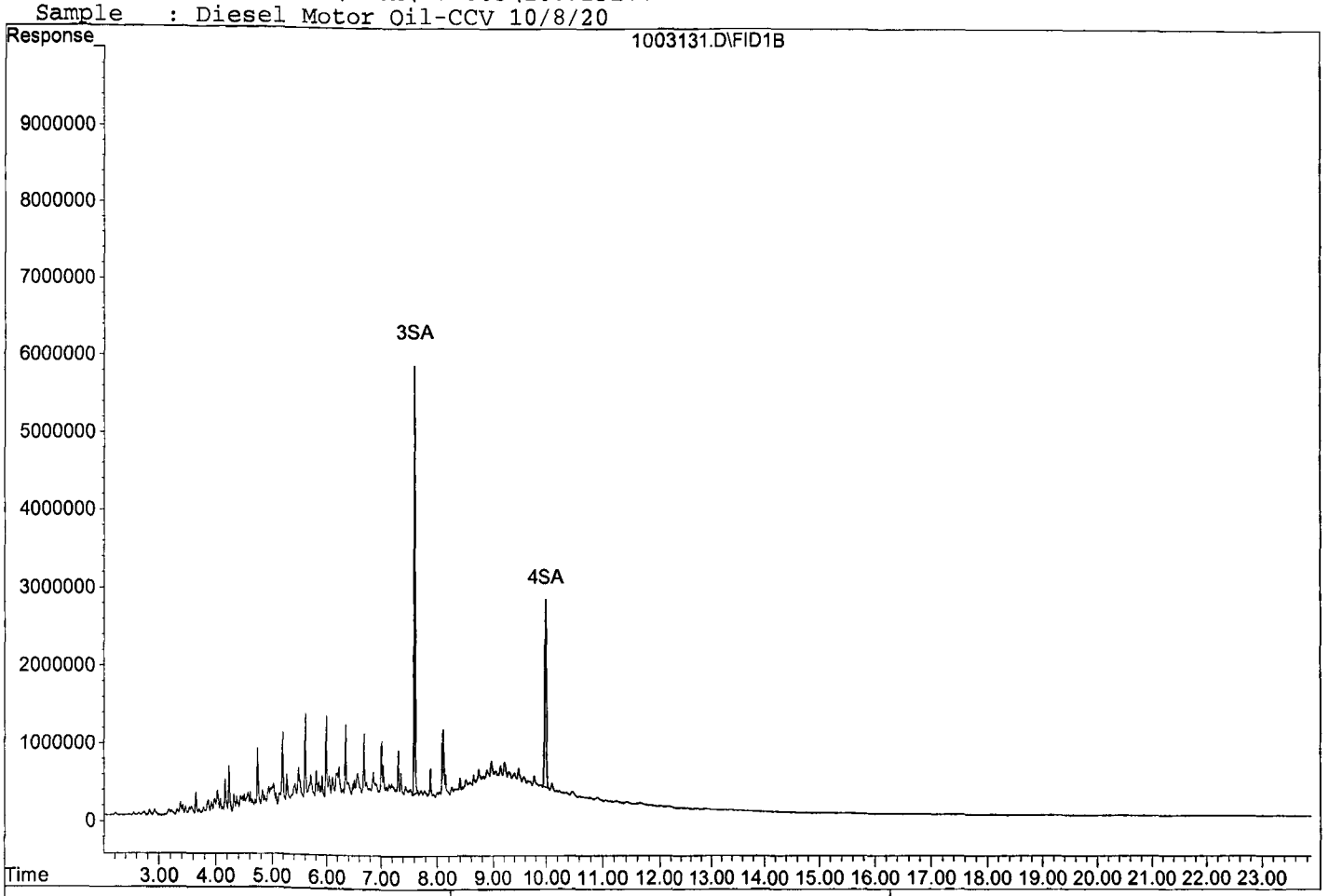
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

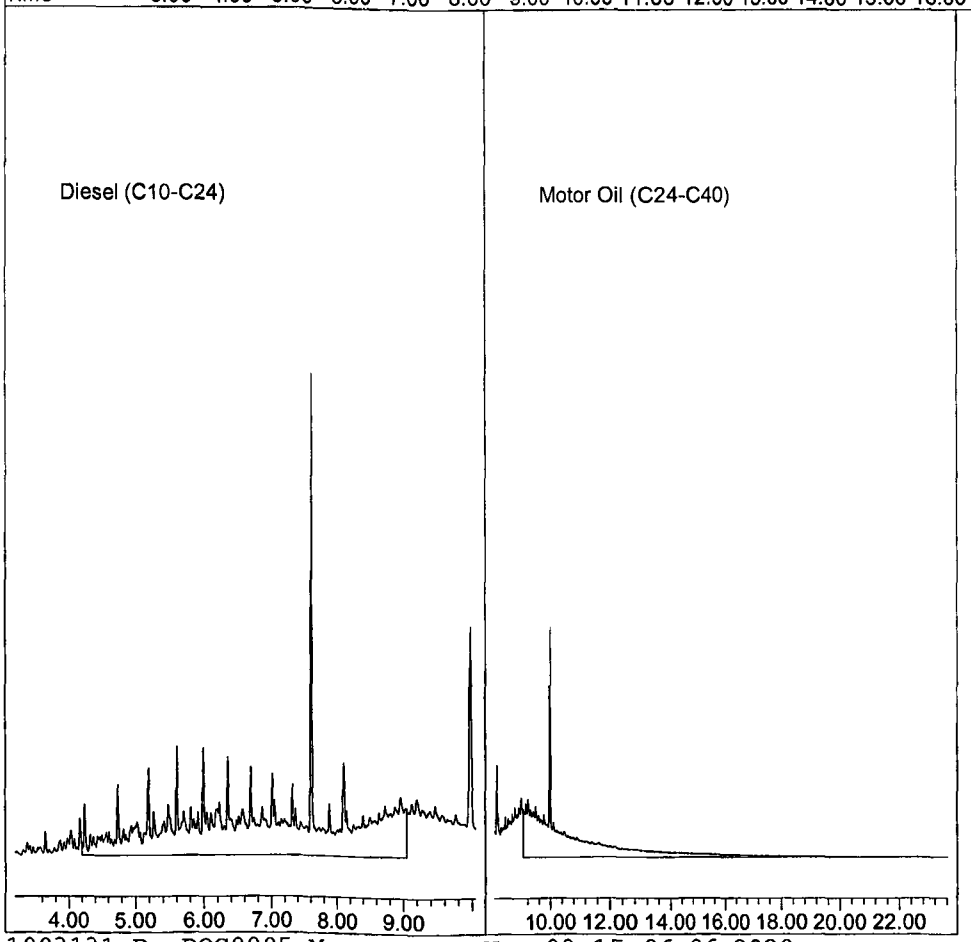
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.60	67412053	13.347 ppb
Surrogate Spike 30.000	Recovery =		44.49%
4) SA Octacosane(S)	9.97	50964997	12.379 ppb
Surrogate Spike 30.000	Recovery =		41.26%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1116694035	259.794 ppb
2) HBTM Motor Oil (C24-C40)	15.82	734523838	242.611 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201003\1003131.D
Sample : Diesel Motor Oil-CCV 10/8/20





1003131.D DOC0905.M Mon Nov 09 15:06:26 2020

TPH Extractables
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 11/06/20
Instrument: Apollo
Initial Cal. Date: 09/05/20
Data File: 1105027.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C24)	2401620	2307760	3.9	HATML	7.4
2	HBTM	Motor Oil (C24-C40)	1513790	1456210	3.8	HBTM	
3	SA	Ortho-Terphenyl(S)	2525360	2696500	6.8	SA	
4	SA	Octacosane(S)	2058600	2117290	2.9	SA	
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40							
		Average			4.4		

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201105\1105027.D Vial: 27
Acq On : 11-6-20 19:06:49 Operator:
Sample : Diesel Motor Oil-CCV 11/03/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 9 14:46 2020 Quant Results File: DOC0905.RES

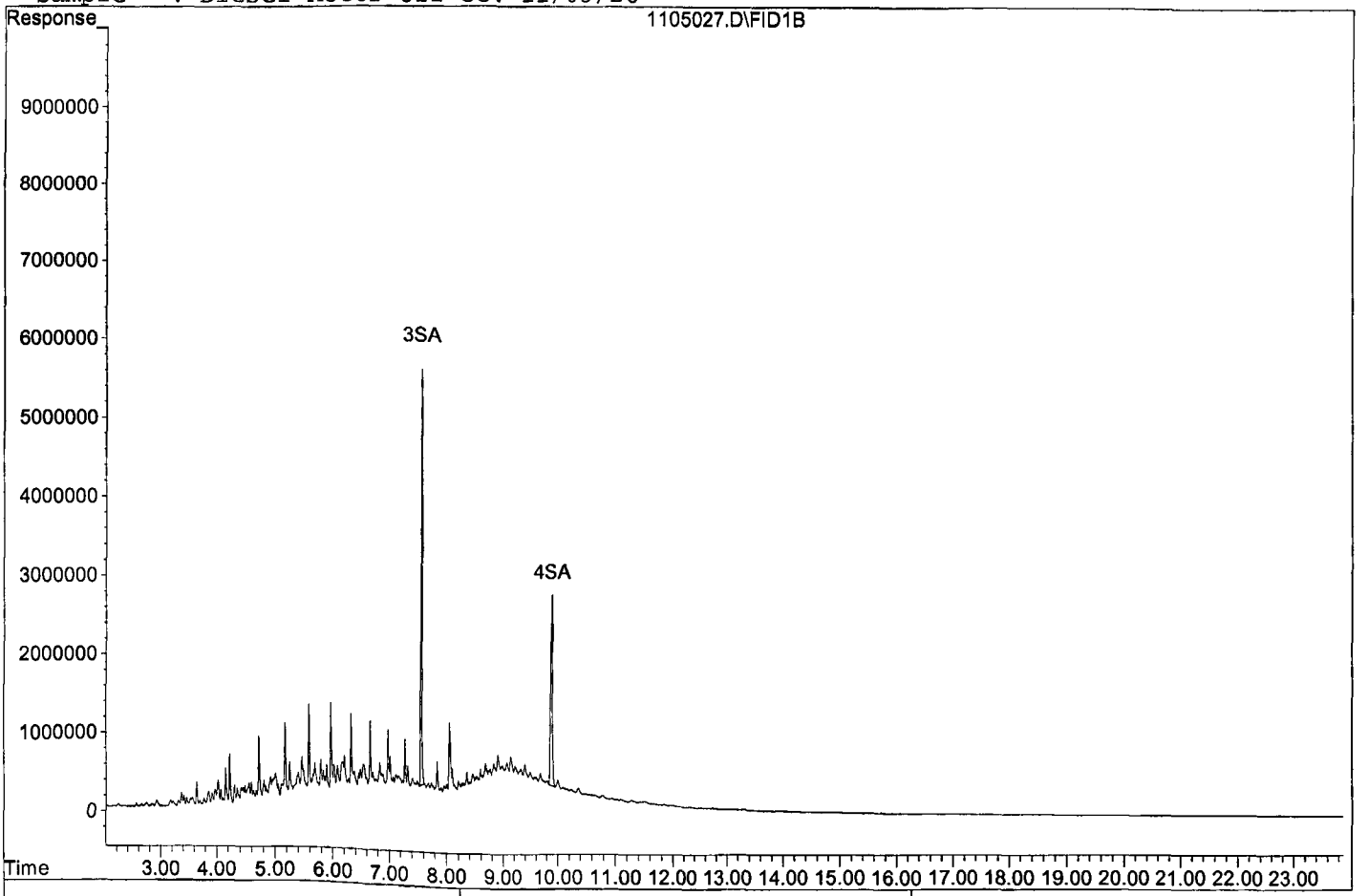
Method : G:\APOLLO\DATA\201105\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

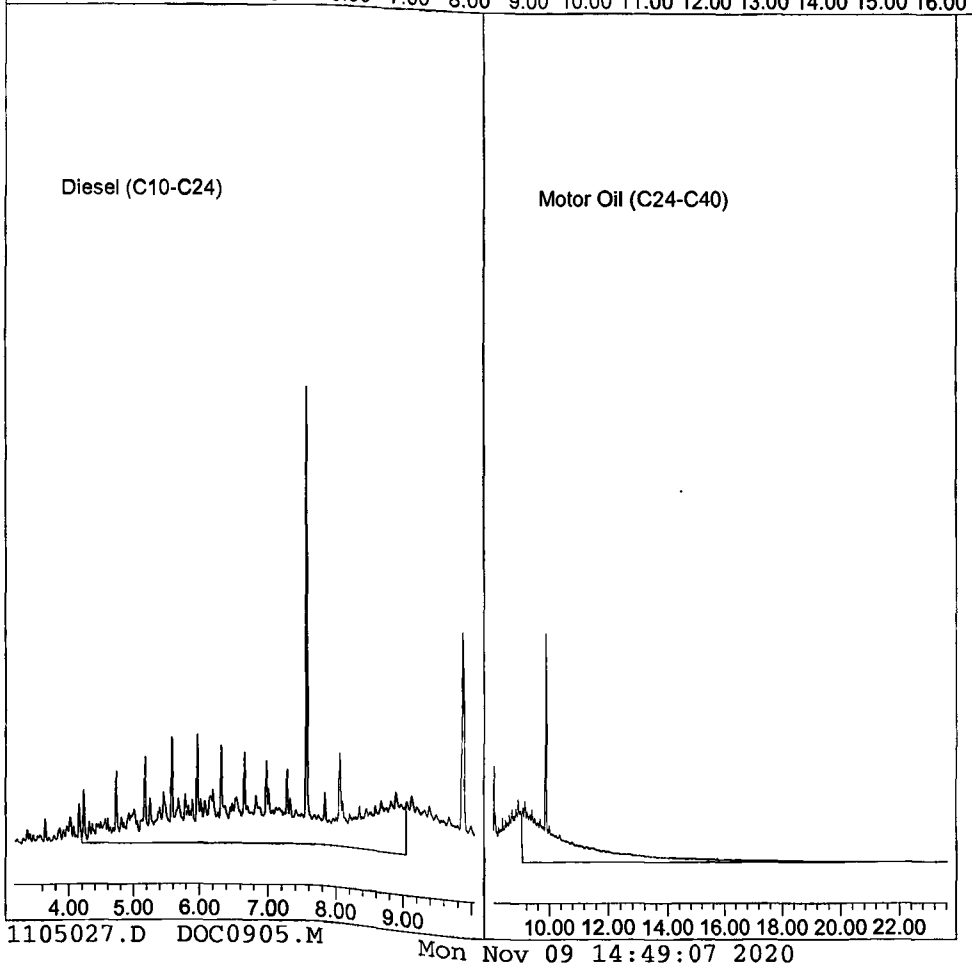
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	67412551	13.347 ppb
Surrogate Spike 12.000	Recovery =		111.23%
4) SA Octacosane(S)	9.88	52932217	12.856 ppb
Surrogate Spike 12.000	Recovery =		107.13%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1153880924	268.415 ppb
2) HBTM Motor Oil (C24-C40)	15.82	728105785	240.491 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201105\1105027.D
Sample : Diesel Motor Oil-CCV 11/03/20





1105027.D DOC0905.M Mon Nov 09 14:49:07 2020

TPH Extractables
DEC0914

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 11/06/20
Instrument: Apollo
Initial Cal. Date: 09/14/20
Data File: 1105028.D

		Compound	MEAN	CCRF	%D	%Drift	
1	SC	Decanoic Acid(S)	1179440	1294070	9.7	SC	
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39							
40							
		Average			9.7		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201105\1105028.D Vial: 28
Acq On : 11-6-20 19:34:28 Operator:
Sample : Decanoic Acid-CCV 7/28/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 9 14:44 2020 Quant Results File: DEC0914.RES

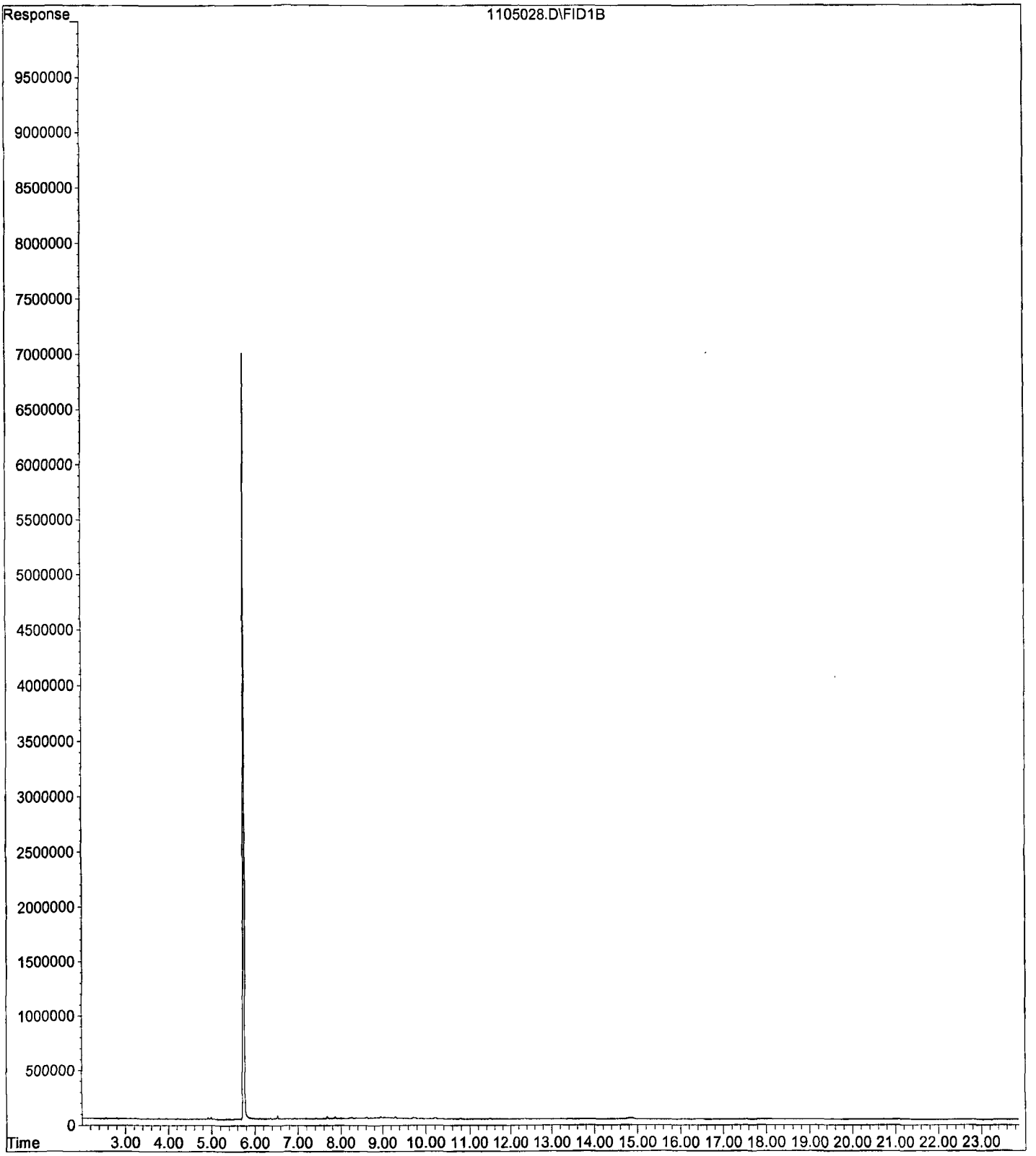
Method : G:\APOLLO\DATA\201105\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.76	124230294	52.665 ppb
Surrogate Spike 24.000		Recovery =	219.44%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\201105\1105028.D
Operator :
Acquired : 11-6-20 19:34:28 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-CCV 7/28/20
Misc Info : water
Vial Number: 28



TPH Extractables
DEC0914

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 11/06/20
Instrument: Apollo
Initial Cal. Date: 09/14/20
Data File: 1105033.D

		Compound	MEAN	CCRF	%D		%Drift
1	SC	Decanoic Acid(S)	1179440	1294390	9.7	SC	
2							
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40							
		Average			9.7		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201105\1105033.D Vial: 33
Acq On : 11-6-20 21:52:48 Operator:
Sample : Decanoic Acid-CCV 7/28/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 9 14:45 2020 Quant Results File: DEC0914.RES

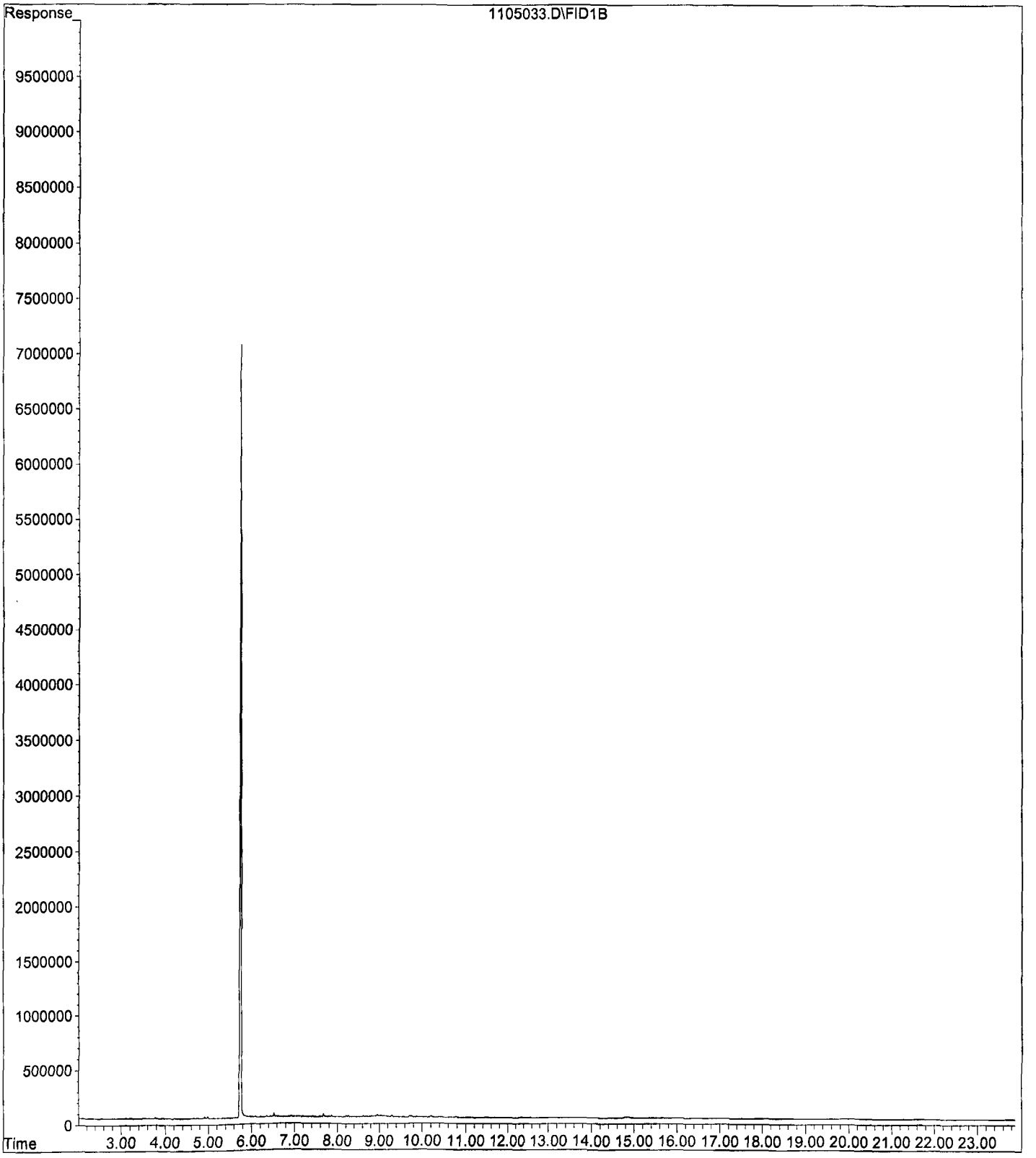
Method : G:\APOLLO\DATA\201105\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) SC Decanoic Acid(S)	5.76	124261608	52.678	ppb
Surrogate Spike 24.000	Recovery = 219.49%			
Target Compounds				
Target Compounds				

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\201105\1105033.D
Operator :
Acquired : 11-6-20 21:52:48 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-CCV 7/28/20
Misc Info : water
Vial Number: 33



TPH Extractables
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 11/06/20
Instrument: Apollo
Initial Cal. Date: 09/05/20
Data File: 1105034.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C24)	2401620	2452090	2.1	HATML	14
2	HBTM	Motor Oil (C24-C40)	1513790	1542330	1.9	HBTM	
3	SA	Ortho-Terphenyl(S)	2525360	2889700	14	SA	
4	SA	Octacosane(S)	2058600	2225690	8.1	SA	
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39							
40							
		Average			6.5		

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201105\1105034.D Vial: 34
Acq On : 11-6-20 22:20:28 Operator:
Sample : Diesel Motor Oil-CCV 11/03/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 9 14:47 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201105\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

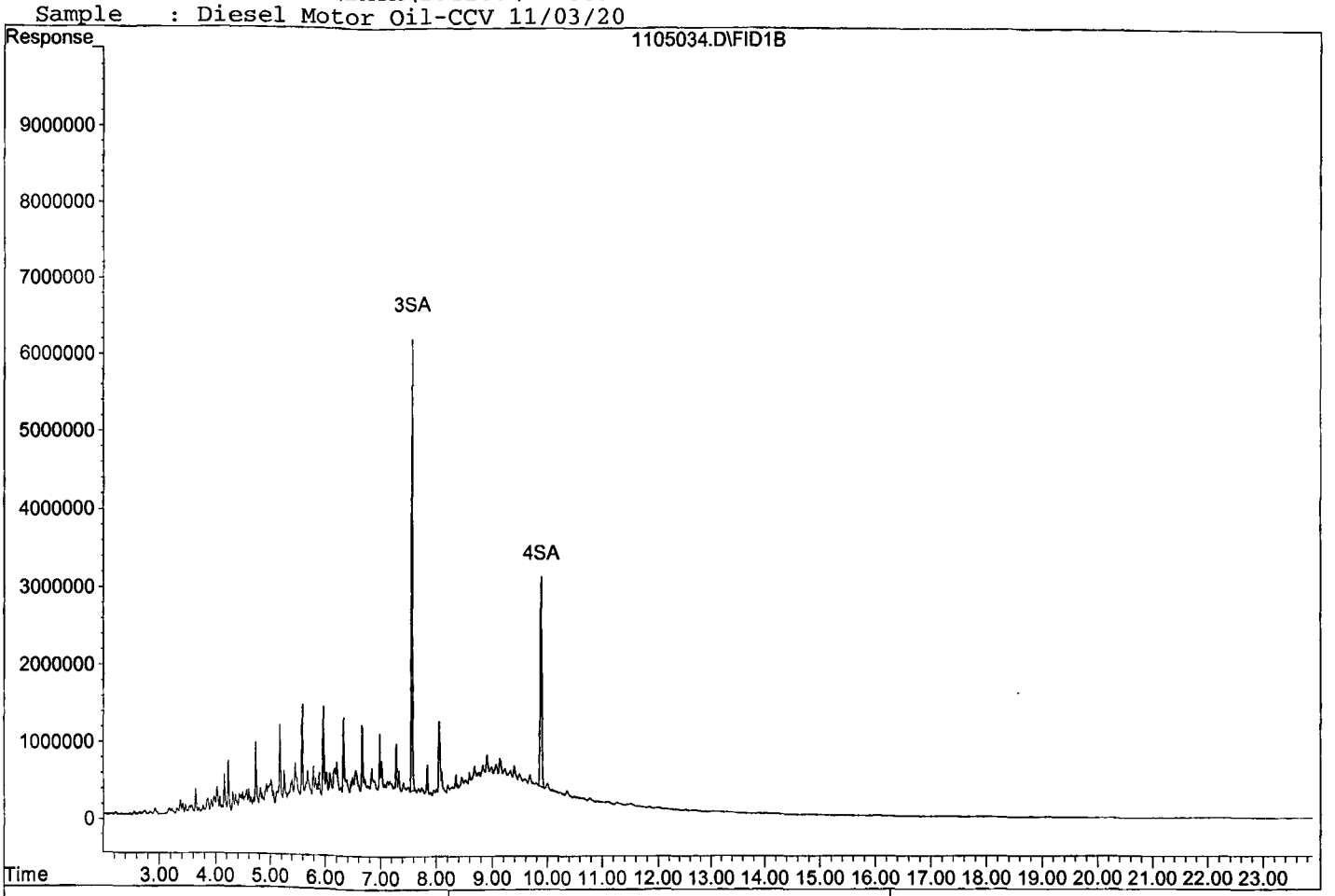
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

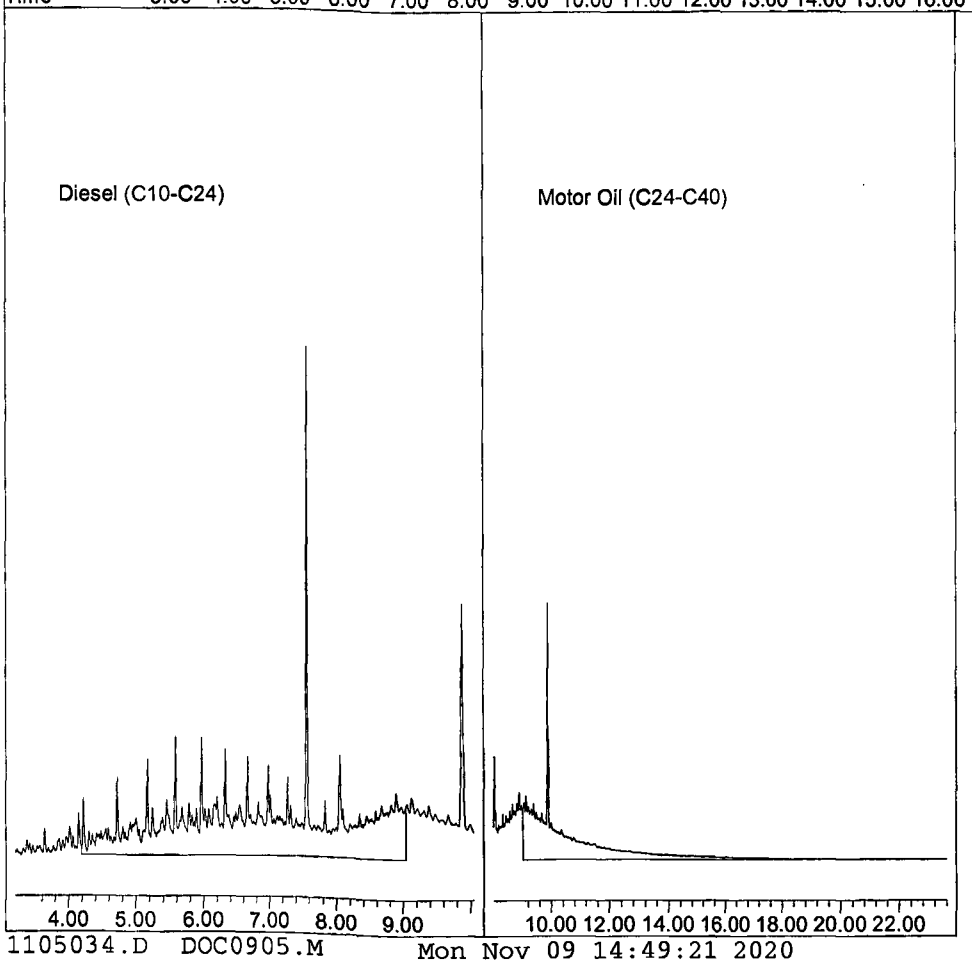
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.57	72242498	14.303	ppb
Surrogate Spike 12.000	Recovery =		119.19%	
4) SA Octacosane(S)	9.88	55642259	13.515	ppb
Surrogate Spike 12.000	Recovery =		112.63%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	1226043137	285.145	ppb
2) HBTM Motor Oil (C24-C40)	15.82	771164459	254.713	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201105\1105034.D
Sample : Diesel Motor Oil-CCV 11/03/20





ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201003\1003130.D Vial: 30
Acq On : 10-13-20 17:56:57 Operator:
Sample : BA19640W19 5/800 Inst : Apollo
Misc : Water Multiplr: 6.25
IntFile : events.e
Quant Time: Oct 15 12:47 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201105\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

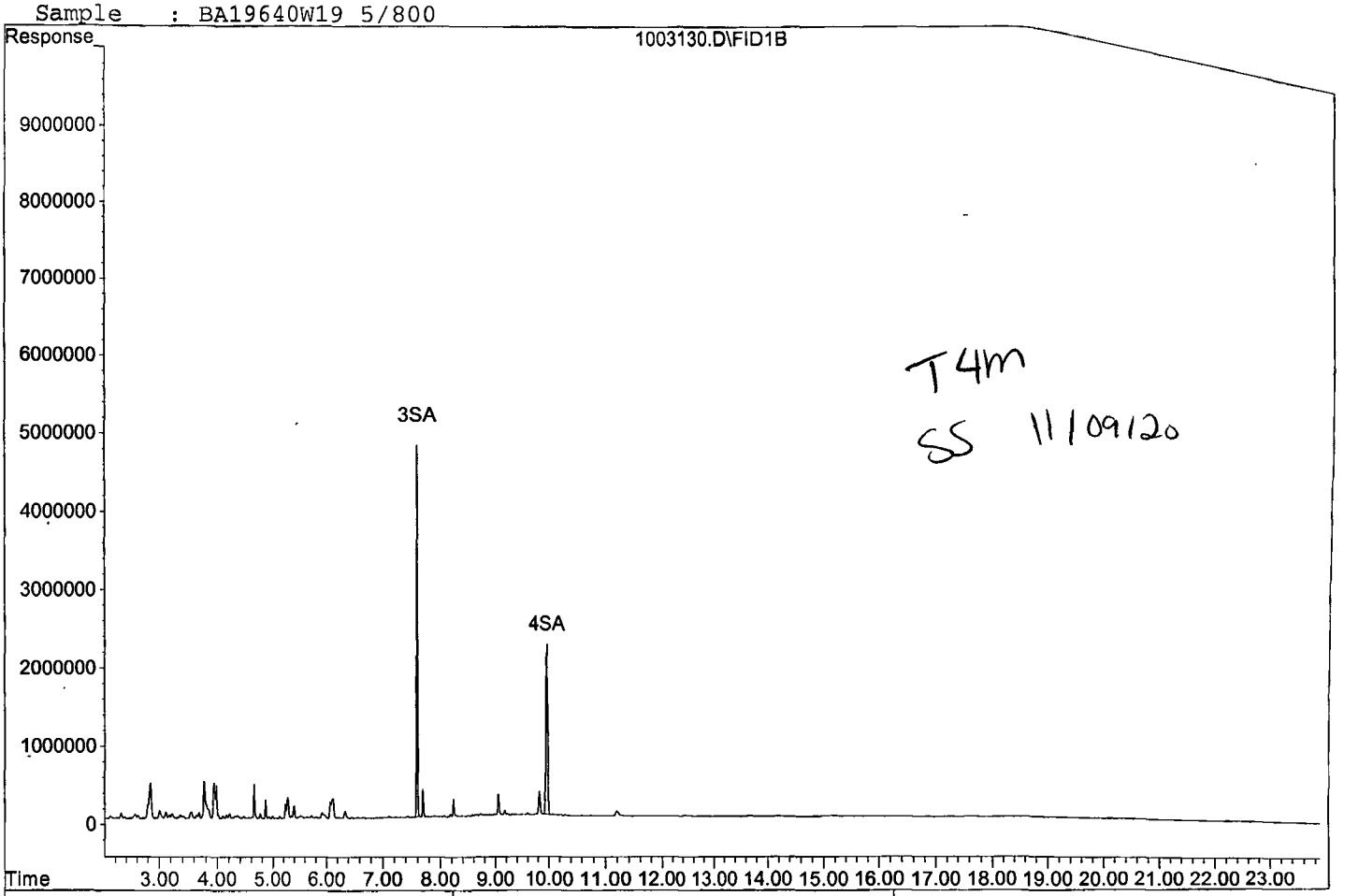
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.60	55741238	68.977 ppb
Surrogate Spike 75.000	Recovery =		91.97%
4) SA Octacosane(S)	9.97	48219562	73.198 ppb
Surrogate Spike 75.000	Recovery =		97.60%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	104254071	156.687 ppb
2) HBTM Motor Oil (C24-C40)	15.82	81263998	167.758 ppb

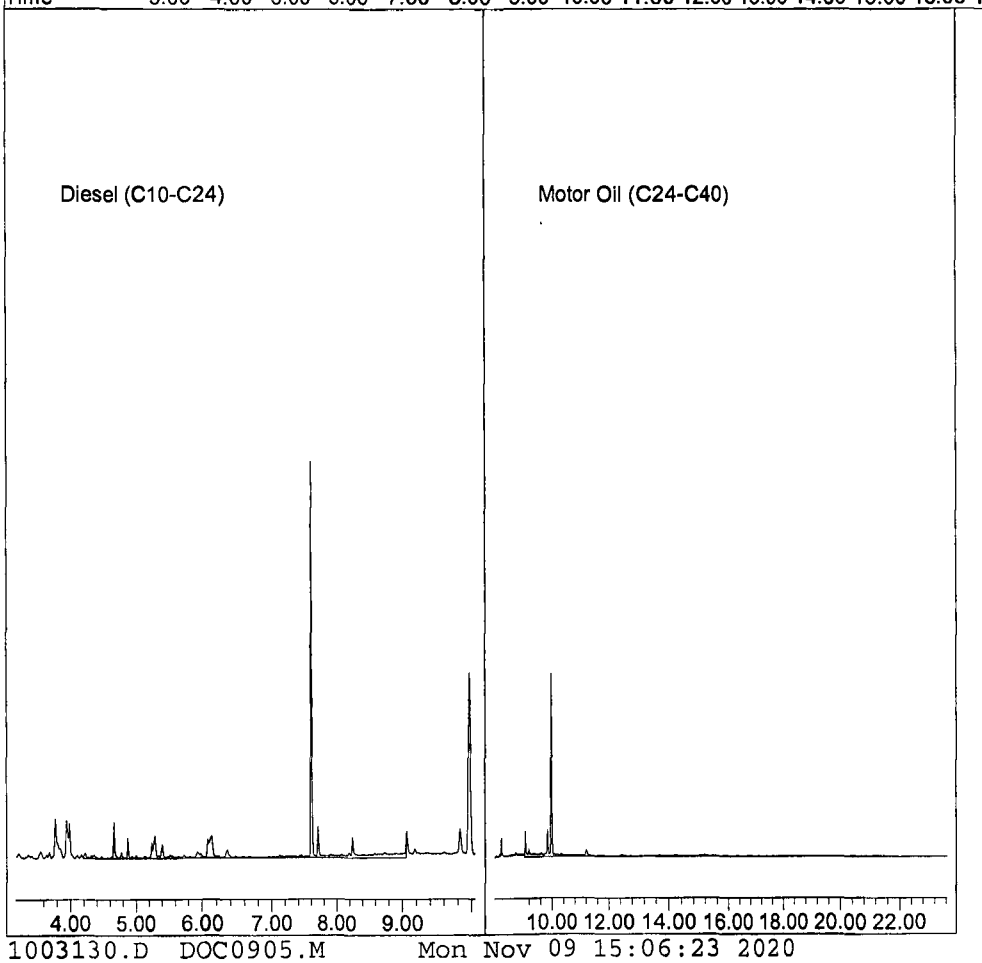
Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201003\1003130.D
Sample : BA19640W19 5/800



T4m
SS 11/09/20



1003130.D DOC0905.M Mon Nov 09 15:06:23 2020

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201105\1105032.D Vial: 32
Acq On : 11-6-20 21:25:09 Operator:
Sample : BA19640W19 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 9 14:47 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201105\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	51133964	63.276 ppb
Surrogate Spike 75.000	Recovery =		84.37%
4) SA Octacosane(S)	9.88	46356166	70.370 ppb
Surrogate Spike 75.000	Recovery =		93.83%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	21071569	36.156 ppb
2) HBTM Motor Oil (C24-C40)	15.82	47559433	98.180 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201105\1105032.D Vial: 32
Acq On : 11-6-20 21:25:09 Operator:
Sample : BA19640W19 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 9 14:45 2020 Quant Results File: DEC0914.RES

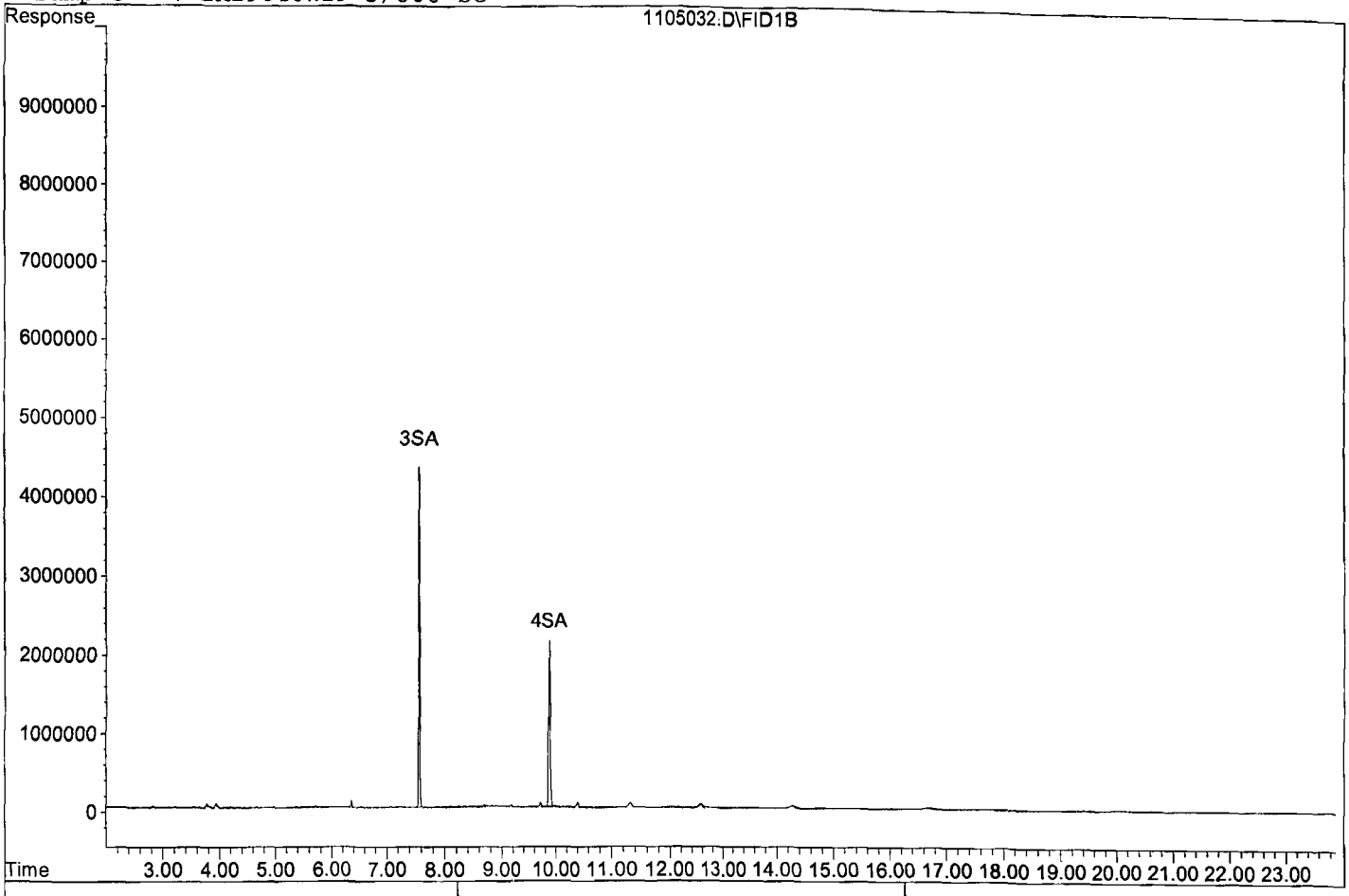
Method : G:\APOLLO\DATA\201105\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

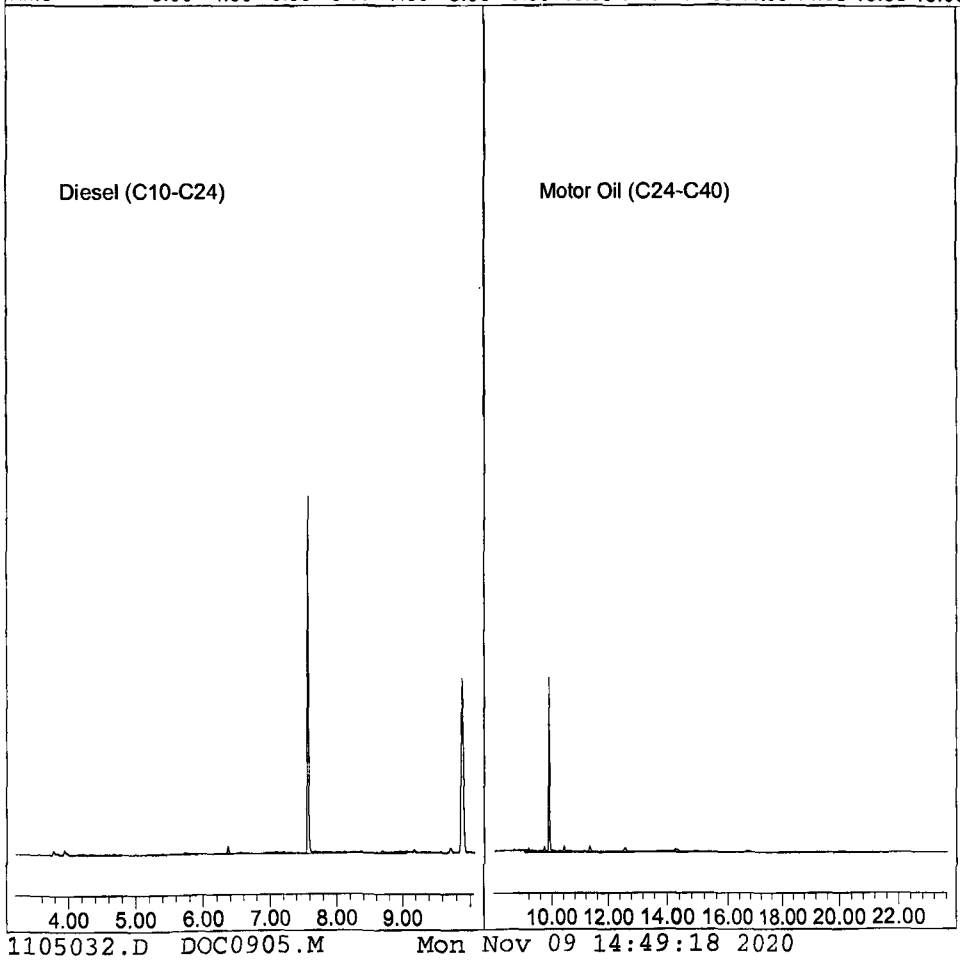
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	0.00	0	N.D. ppb
Surrogate Spike 150.000		Recovery =	0.00%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201105\1105032.D
Sample : BA19640W19 5/800 SG





1105032.D DOC0905.M Mon Nov 09 14:49:18 2020

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201003\1003127.D Vial: 27
Acq On : 10-13-20 16:32:42 Operator:
Sample : 201009A BLK 5/800 Inst : Apollo
Misc : Water Multiplr: 6.25
IntFile : events.e
Quant Time: Oct 15 12:48 2020 Quant Results File: DOC0905.RES

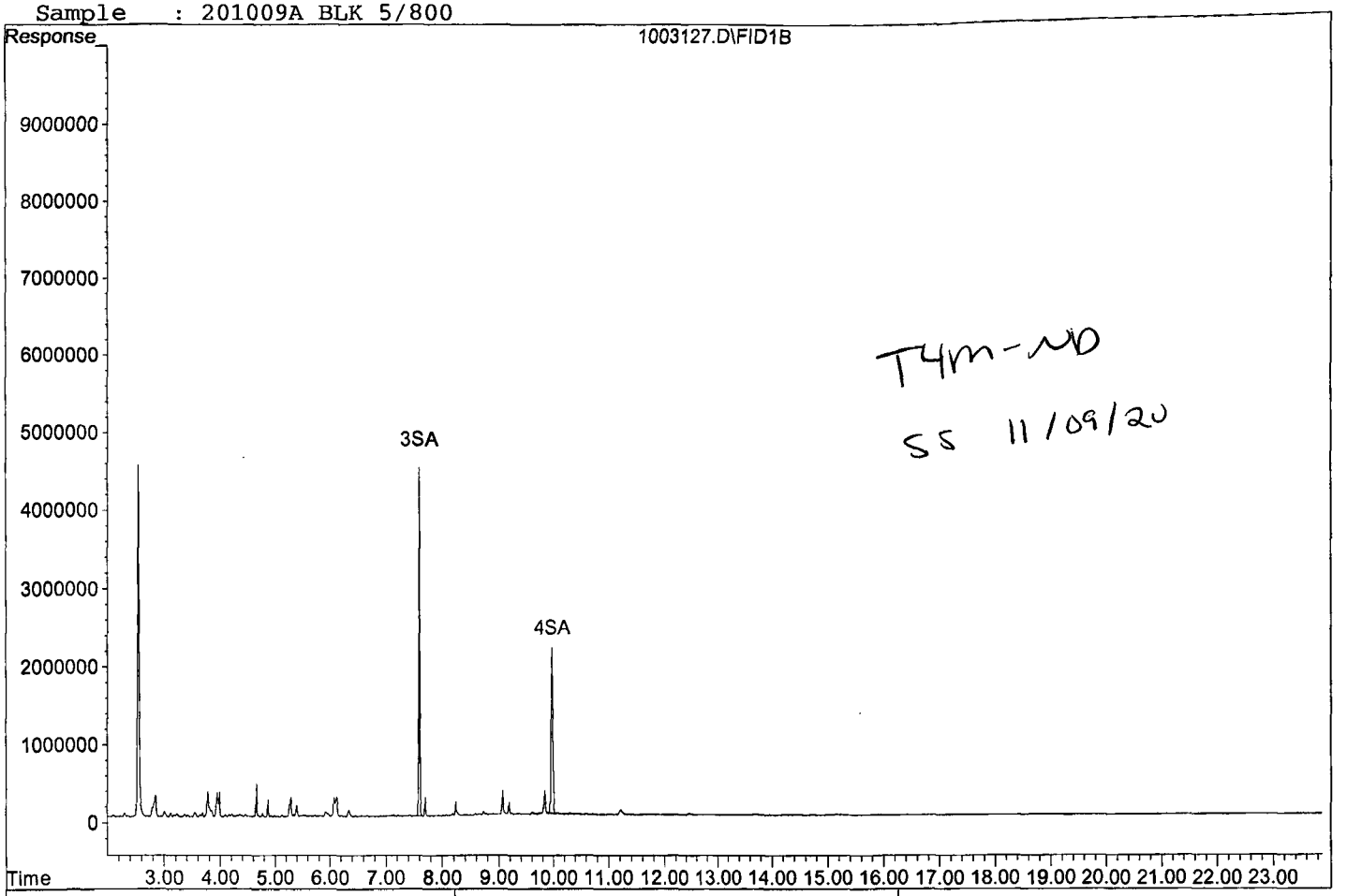
Method : G:\APOLLO\DATA\201105\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

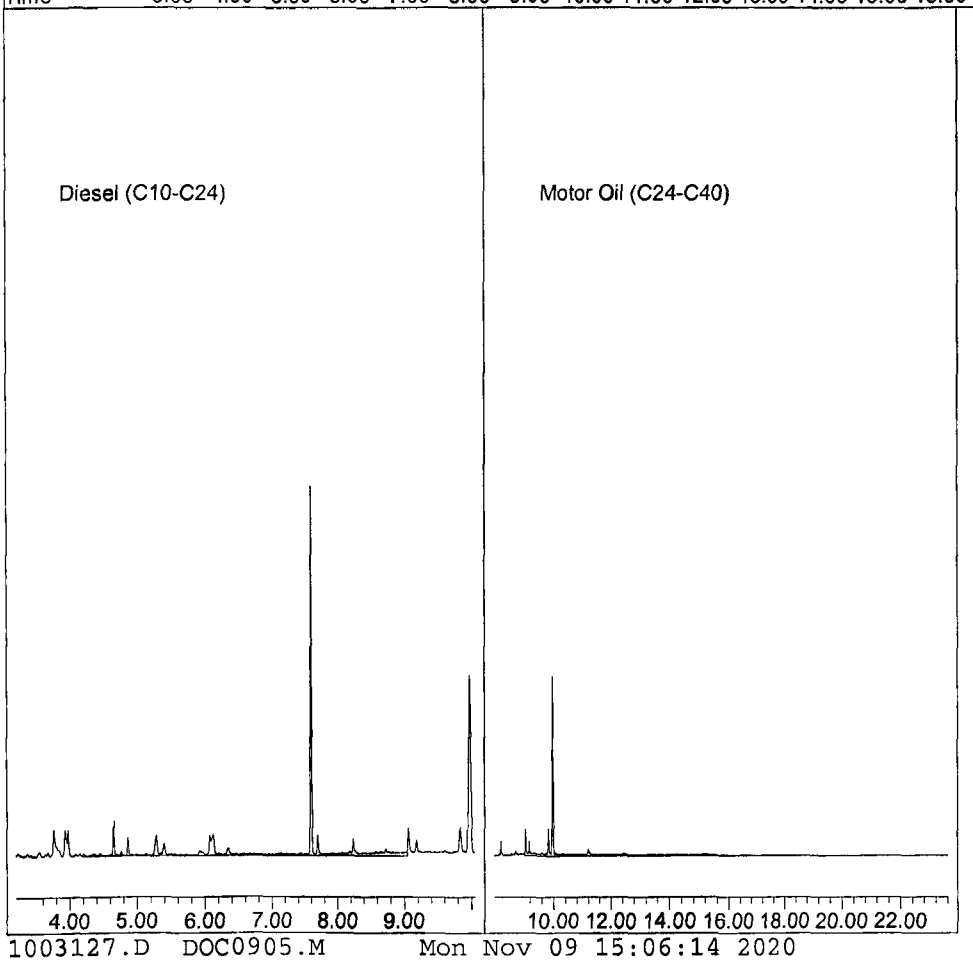
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.60	54564620	67.521 ppb
Surrogate Spike 75.000	Recovery =		90.03%
4) SA Octacosane(S)	9.98	46575155	70.702 ppb
Surrogate Spike 75.000	Recovery =		94.27%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	85452497	129.444 ppb
2) HBTM Motor Oil (C24-C40)	15.82	96376039	198.954 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201003\1003127.D
Sample : 201009A BLK 5/800



T4m-ND
SS 11/09/20



Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201105\1105029.D Vial: 29
Acq On : 11-6-20 20:02:08 Operator:
Sample : 201009A BLK 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 9 14:47 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201105\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	51272314	63.447 ppb
Surrogate Spike 75.000	Recovery =		84.60%
4) SA Octacosane(S)	9.88	47166911	71.600 ppb
Surrogate Spike 75.000	Recovery =		95.47%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	20178283	34.861 ppb
2) HBTM Motor Oil (C24-C40)	15.82	41504400	85.680 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201105\1105029.D Vial: 29
Acq On : 11-6-20 20:02:08 Operator:
Sample : 201009A BLK 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 9 14:45 2020 Quant Results File: DEC0914.RES

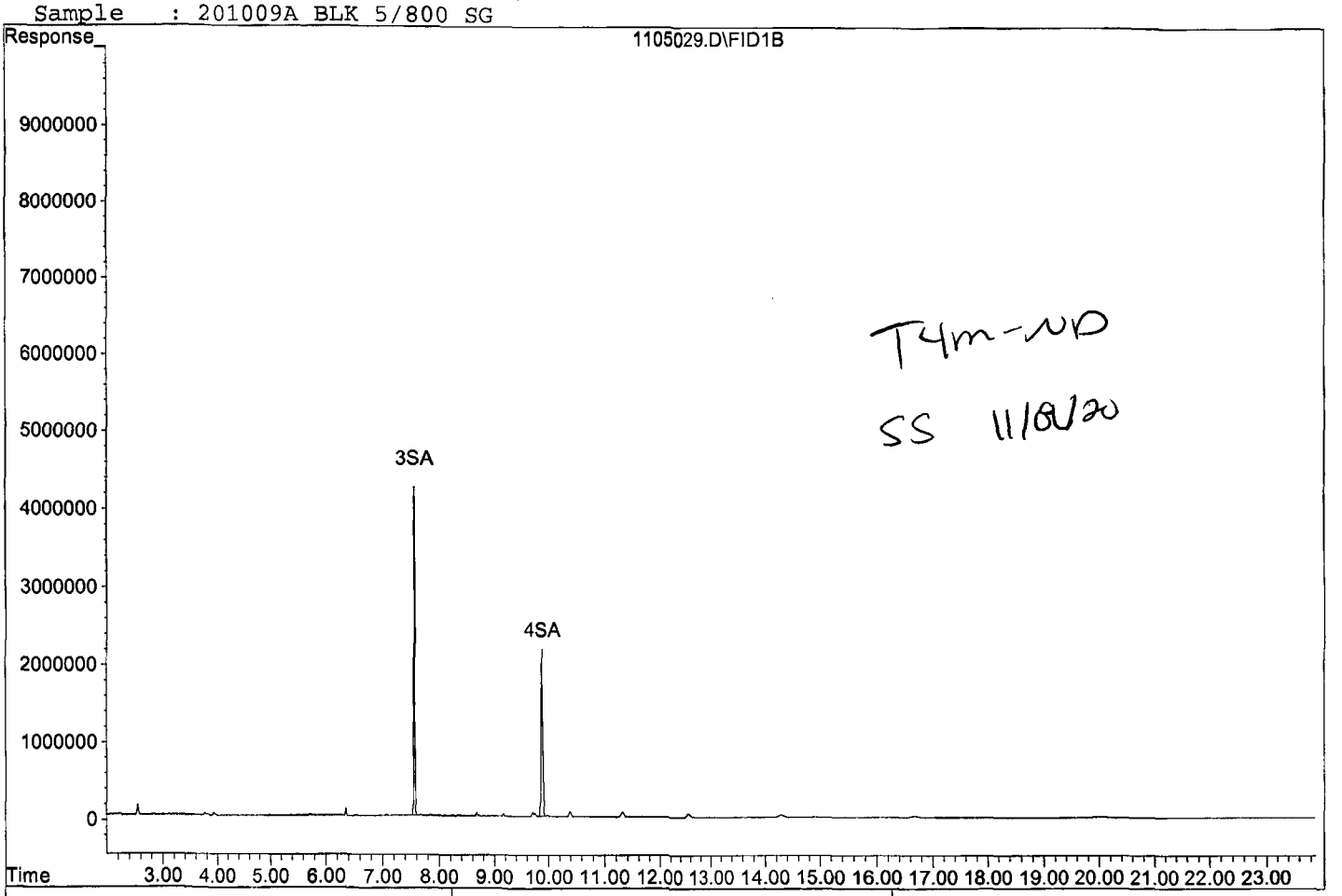
Method : G:\APOLLO\DATA\201105\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

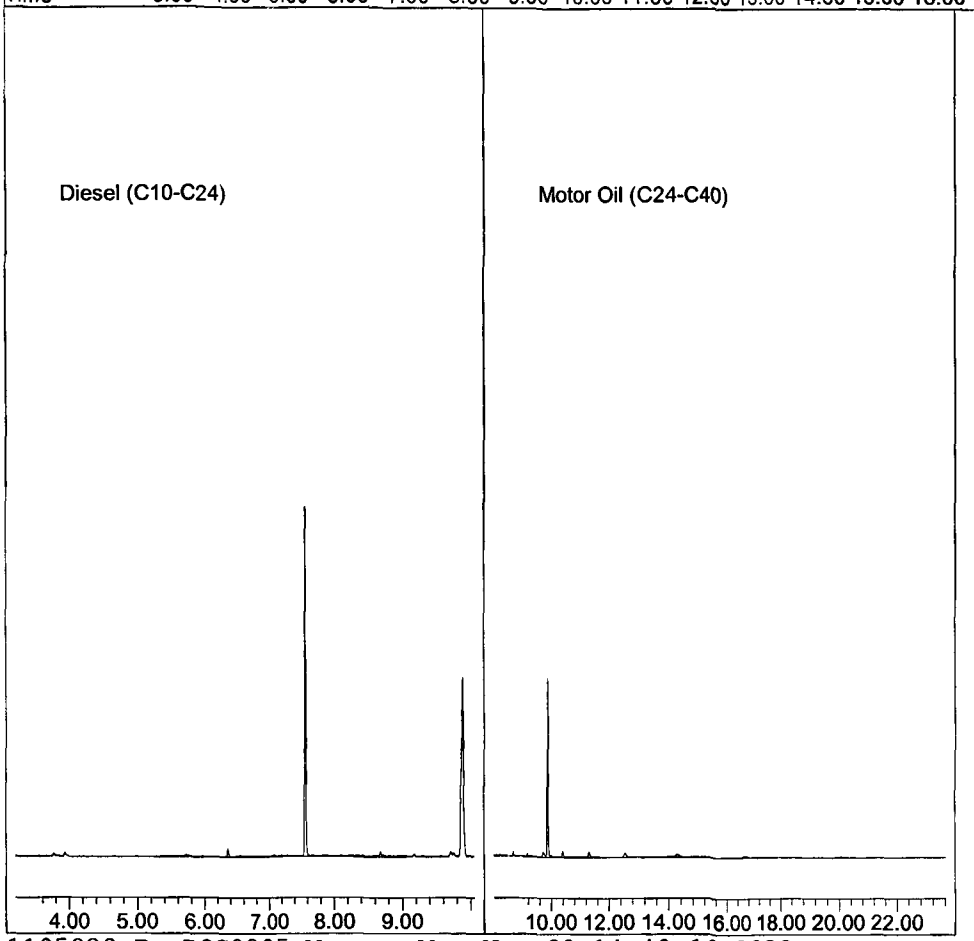
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	0.00	0	N.D. ppb
Surrogate Spike 150.000		Recovery =	0.00%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201105\1105029.D
Sample : 201009A BLK 5/800 SG



T4m-ND
SS 11/9/20



Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201003\1003128.D Vial: 28
Acq On : 10-13-20 17:00:46 Operator:
Sample : 201009A LCS-1 5/800 Inst : Apollo
Misc : Water Multiplr: 6.25
IntFile : events.e
Quant Time: Oct 15 12:48 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201105\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

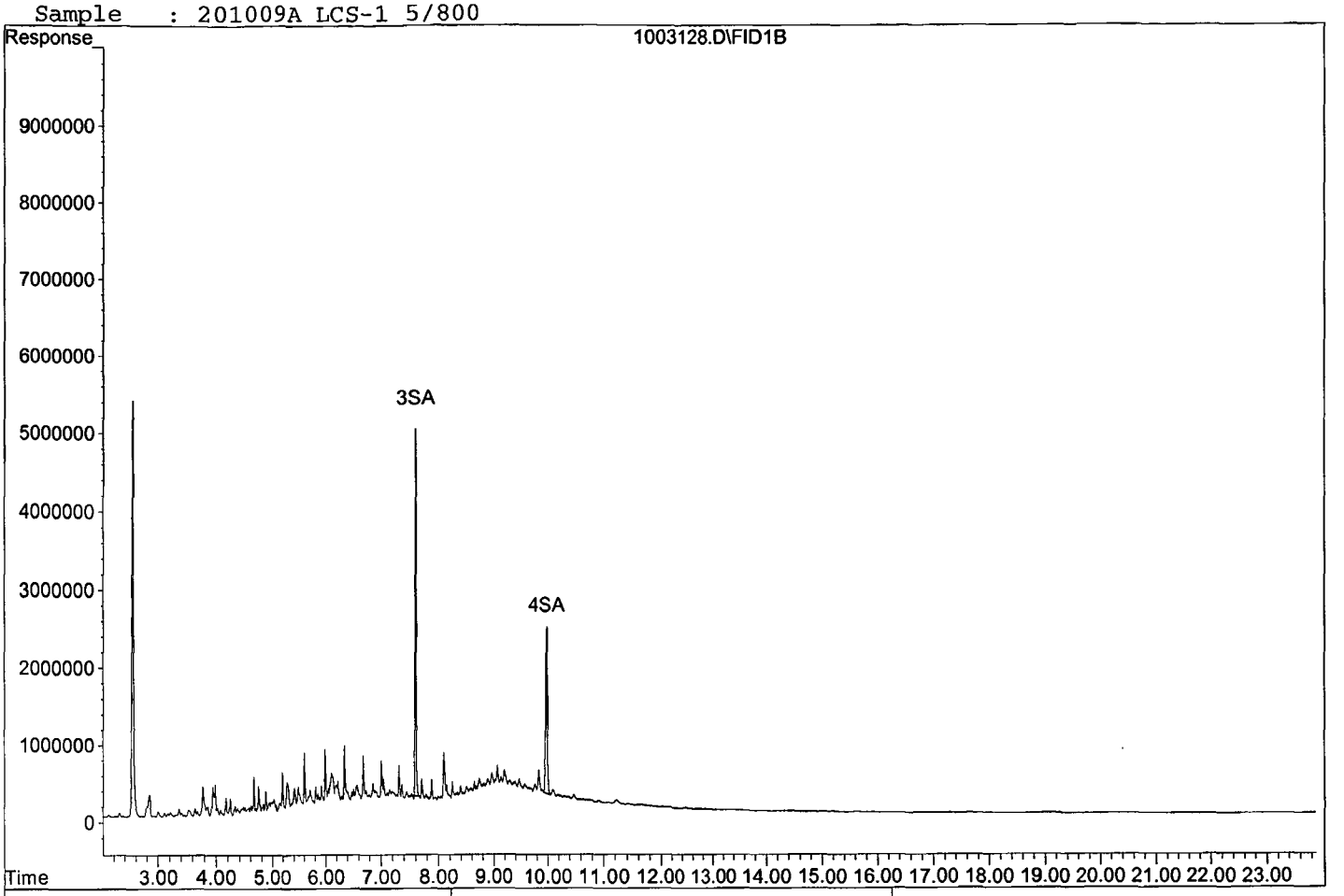
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

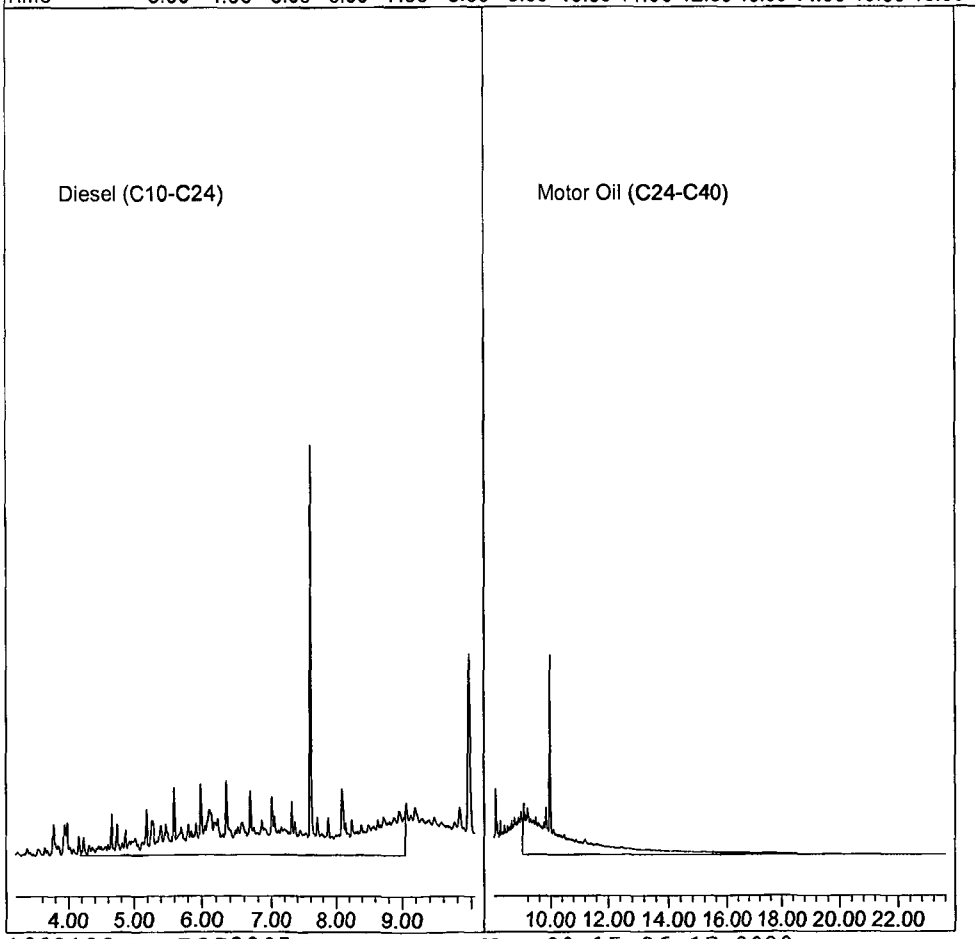
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.60	57025221	70.566 ppb
Surrogate Spike 75.000	Recovery =		94.09%
4) SA Octacosane(S)	9.97	45998959	69.827 ppb
Surrogate Spike 75.000	Recovery =		93.10%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	806950324	1174.894 ppb
2) HBTM Motor Oil (C24-C40)	15.82	577195649	1191.537 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201003\1003128.D
Sample : 201009A LCS-1 5/800





Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201105\1105030.D Vial: 30
Acq On : 11-6-20 20:29:49 Operator:
Sample : 201009A LCS-1 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 9 14:47 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201105\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.56	55426307	68.587 ppb
Surrogate Spike 75.000	Recovery =		91.45%
4) SA Octacosane(S)	9.88	45785958	69.504 ppb
Surrogate Spike 75.000	Recovery =		92.67%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	600831036	876.227 ppb
2) HBTM Motor Oil (C24-C40)	15.82	551240986	1137.957 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201105\1105030.D Vial: 30
Acq On : 11-6-20 20:29:49 Operator:
Sample : 201009A LCS-1 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 9 14:46 2020 Quant Results File: DEC0914.RES

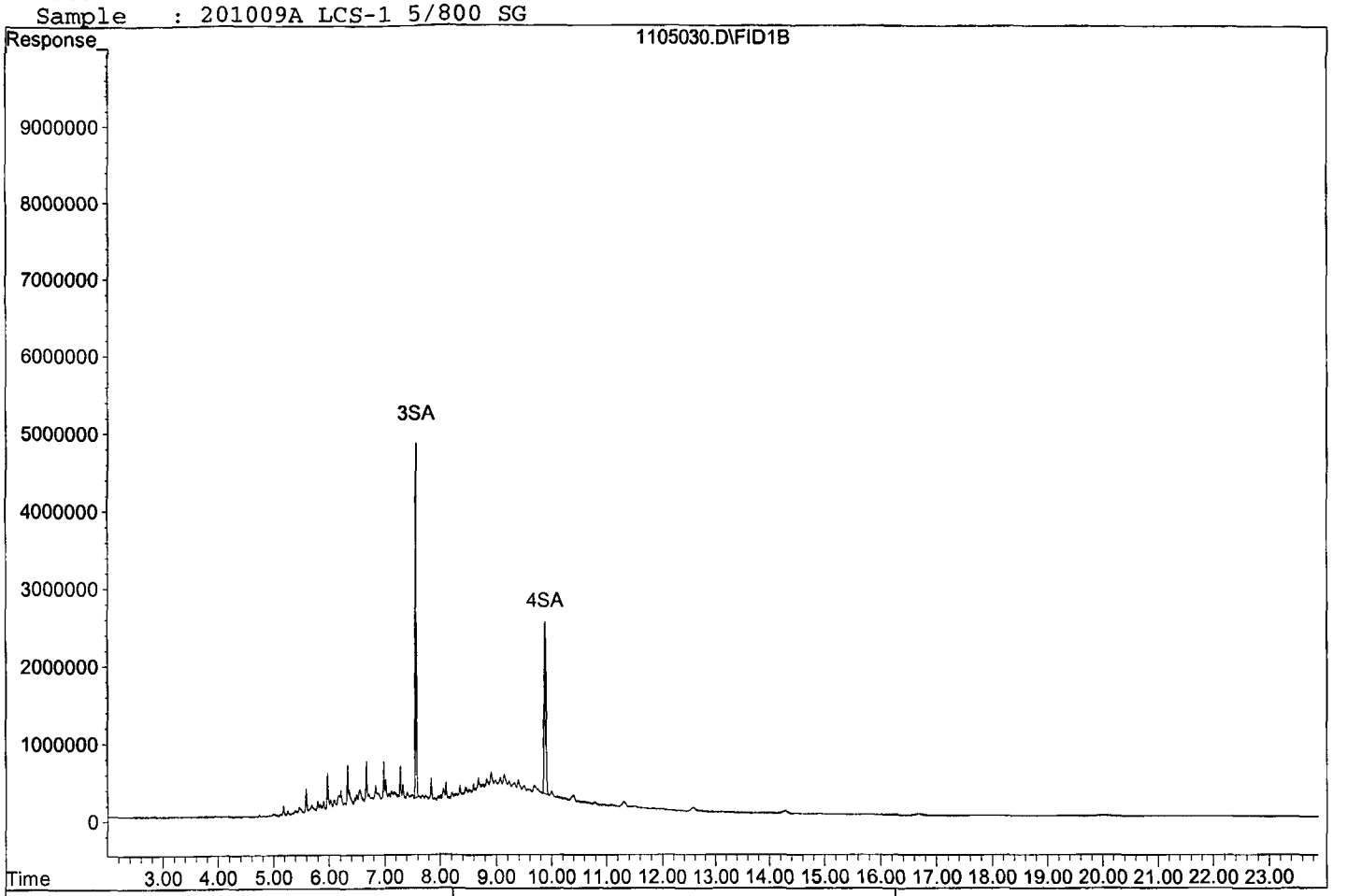
Method : G:\APOLLO\DATA\201105\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

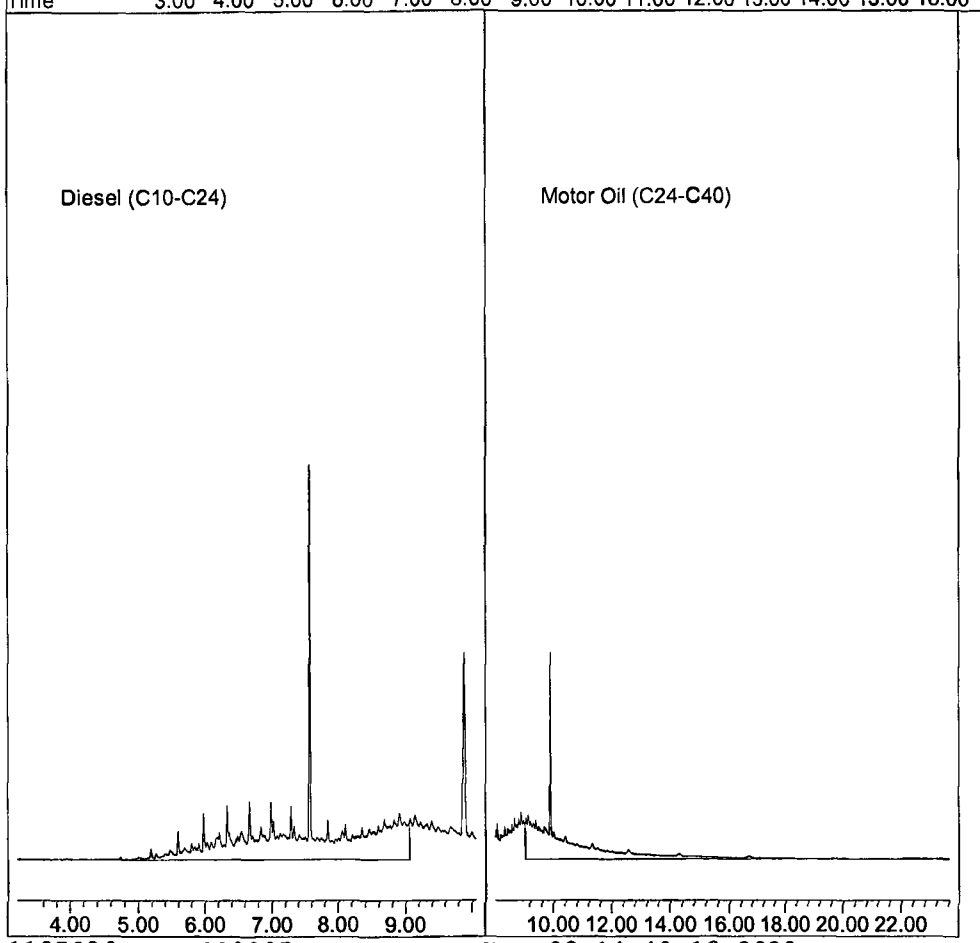
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) SC Decanoic Acid(S)	0.00	0	N.D.	ppb	d
Surrogate Spike 150.000	Recovery =		0.00%		
Target Compounds					
Target Compounds					

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201105\1105030.D
Sample : 201009A LCS-1 5/800 SG





1105030.D DOC0905.M Mon Nov 09 14:49:12 2020

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201003\1003129.D Vial: 29
Acq On : 10-13-20 17:28:49 Operator:
Sample : 201009A LCSD-1 5/800 Inst : Apollo
Misc : Water Multiplr: 6.25
IntFile : events.e
Quant Time: Oct 15 12:48 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201105\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

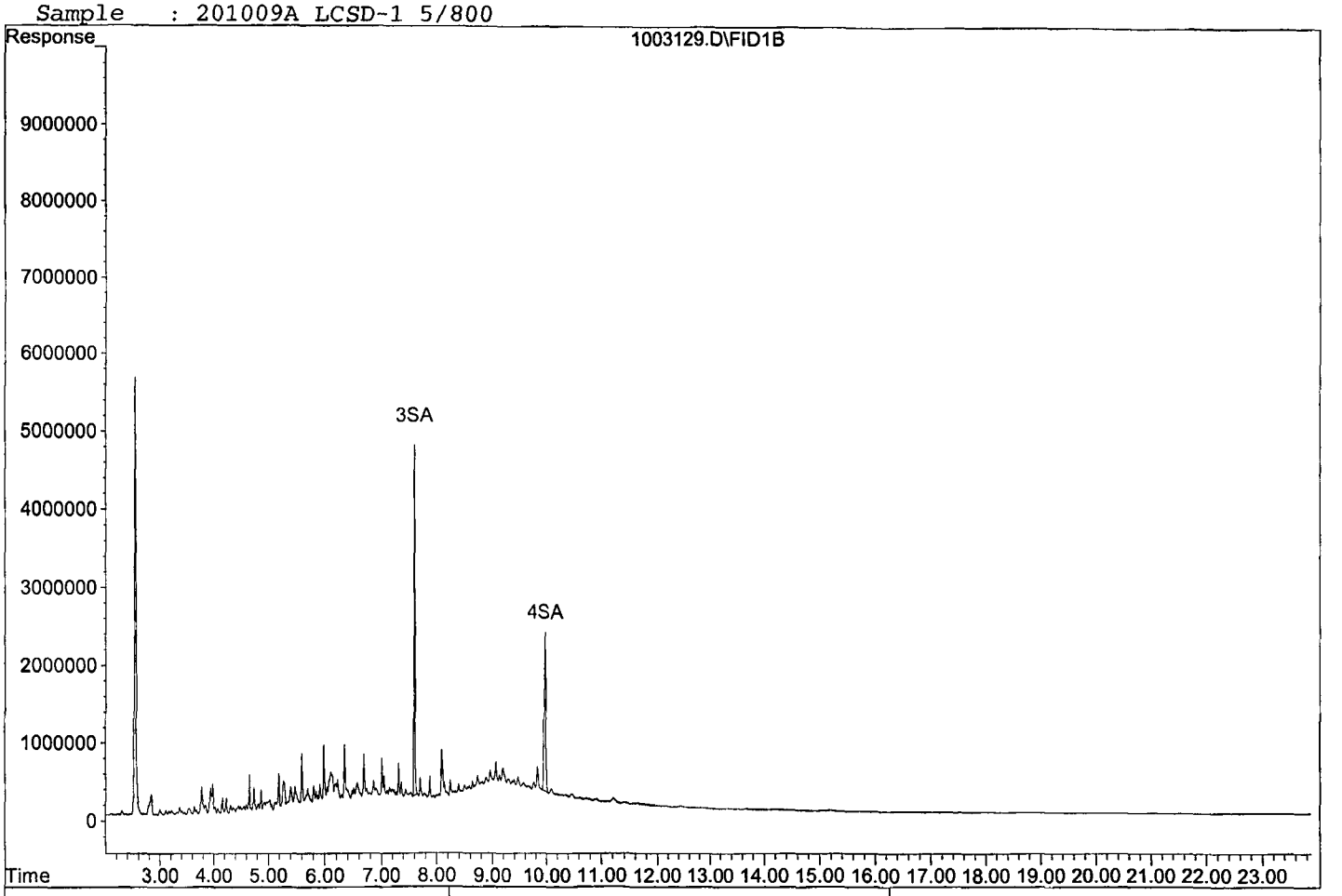
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

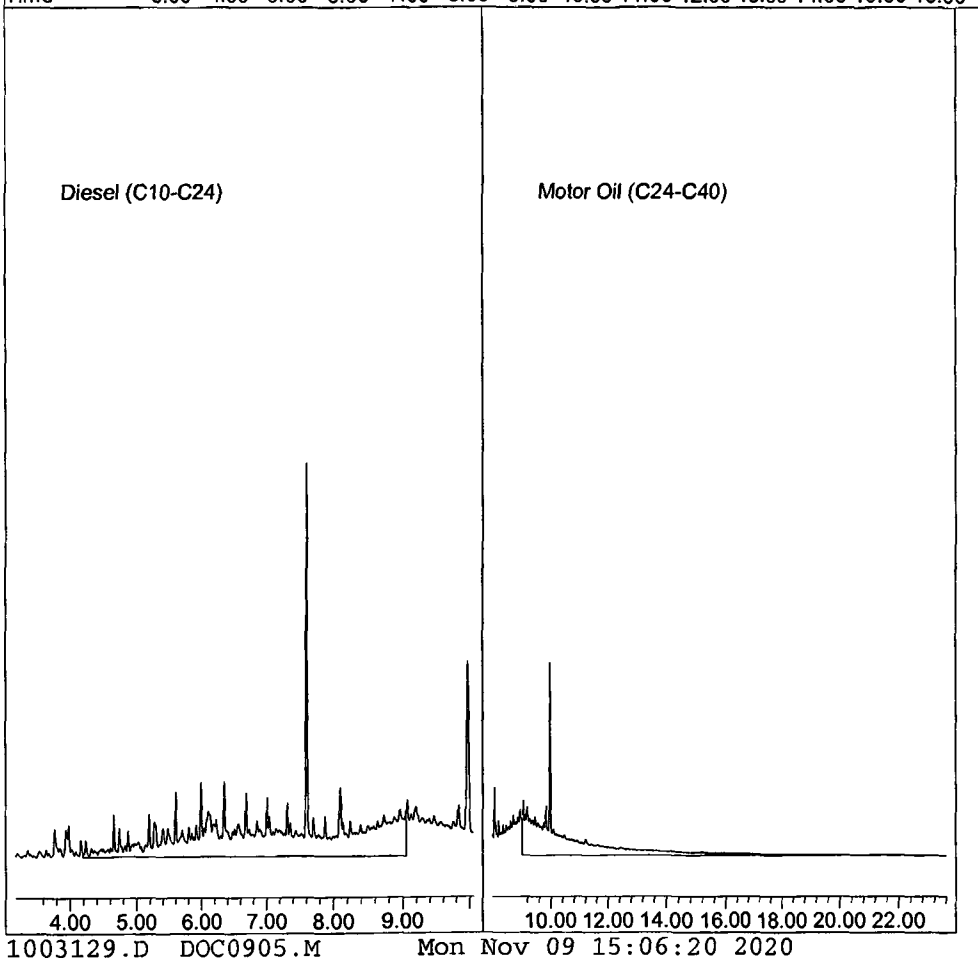
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.60	58436644	72.312	ppb
Surrogate Spike 75.000	Recovery =		96.42%	
4) SA Octacosane(S)	9.97	45618439	69.250	ppb
Surrogate Spike 75.000	Recovery =		92.33%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	803124254	1169.350	ppb
2) HBTM Motor Oil (C24-C40)	15.82	595167830	1228.638	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201003\1003129.D
Sample : 201009A LCSD-1 5/800





Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201105\1105031.D Vial: 31
Acq On : 11-6-20 20:57:31 Operator:
Sample : 201009A LCSD-1 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 9 14:47 2020 Quant Results File: DOC0905.RES

Method : G:\APOLLO\DATA\201105\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Wed Oct 21 07:15:23 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	61928449	76.633 ppb
Surrogate Spike 75.000	Recovery =		102.18%
4) SA Octacosane(S)	9.88	50915322	77.290 ppb
Surrogate Spike 75.000	Recovery =		103.05%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	713926030	1040.101 ppb
2) HBTM Motor Oil (C24-C40)	15.82	608404129	1255.962 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201105\1105031.D Vial: 31
Acq On : 11-6-20 20:57:31 Operator:
Sample : 201009A LCSD-1 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 9 14:46 2020 Quant Results File: DEC0914.RES

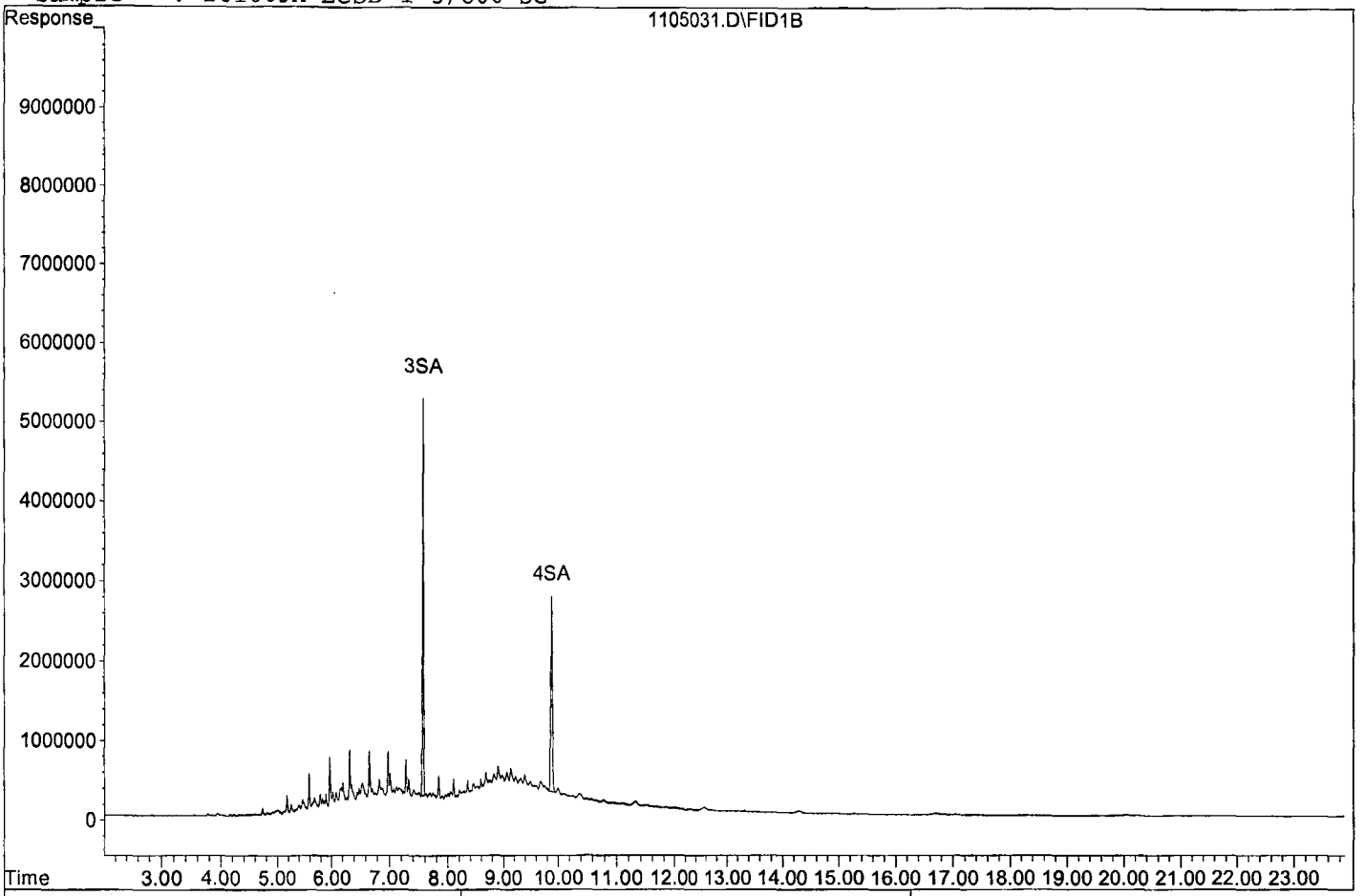
Method : G:\APOLLO\DATA\201105\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

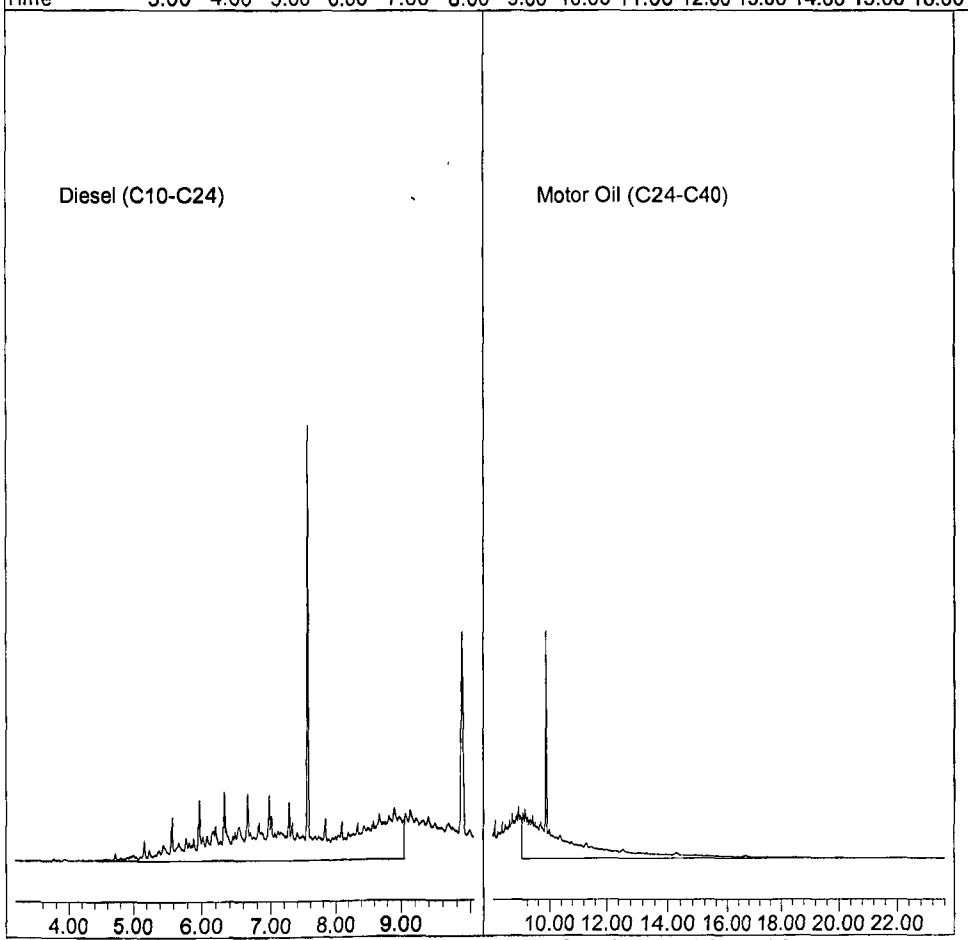
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) SC Decanoic Acid(S)	0.00	0	N.D.	ppb d
Surrogate Spike 150.000	Recovery	=	0.00%	
Target Compounds				
Target Compounds				

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201105\1105031.D
Sample : 201009A LCSD-1 5/800 SG





1105031.D DOC0905.M Mon Nov 09 14:49:15 2020

Decanoic Acid Standard

Prepared: 09/14/20

Expires: 09/14/21

Prepared By (Initials): SS

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Decanoic Acid	O2SI	011729-01-05-5PAK	1,000	**397380-50547**	09/14/21	**12/30/21**	600uL	10mL	MC	60

Decanoic Acid Calibration Curve

Prepared: 09/14/20

Expires: 09/14/20

Prepared By (Initials): SS

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Decanoic Acid STD	O2SI	Decanoic Acid-1	60	Prepared 09/14/20	09/14/21	N/A	50uL	1mL	MC	3
Decanoic Acid STD	O2SI	Decanoic Acid-2	60	Prepared 09/14/20	09/14/21	N/A	100uL	1mL	MC	6
Decanoic Acid STD	O2SI	Decanoic Acid-3	60	Prepared 09/14/20	09/14/21	N/A	400uL	1mL	MC	24
Decanoic Acid STD	O2SI	Decanoic Acid-4	60	Prepared 09/14/20	09/14/21	N/A	600uL	1mL	MC	36
Decanoic Acid STD	O2SI	Decanoic Acid-5	60	Prepared 09/14/20	09/14/21	N/A	800uL	1mL	MC	48
Decanoic Acid STD	O2SI	Decanoic Acid-6	60	Prepared 09/14/20	09/14/21	N/A	100uL	100uL	N/A	60

Diesel / Motor Oil Calibration Standard

Prepared: 09/05/20

Prepared By (Initials): SS

Expires: 08/05/21

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Restek	31258	50,000	**A0154201-50381,50522,50526**	**08/11/21**	**11/30/26**	400uL	10mL	MC	2000
Motor Oil	Restek	31464	50,000	**A0155668-50515,50518,50519**	**08/11/21**	**01/31/27**	400uL			2000
THC Surrogate	Phenova	ALO-130161	600	**CL15440-50421**	**08/05/21**	**06/30/25**	1666uL			100

Diesel / Motor Oil Calibration Curve

Prepared: 09/05/20

Expires: 08/05/21

Prepared By (Initials): SS

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date and Lot #'s	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 1	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	5uL	1mL	MC	10
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil -2	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	25uL	1mL	MC	50
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 3	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	125uL	1mL	MC	250
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 4	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	500uL	1mL	MC	1000
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 5	2,000	Perp'd. 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	750uL	1mL	MC	1500
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 6	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	100uL	100uL	N/A	2,000

THC Surrogate

Prepared: 09/30/20 **Prepared By (Initials): SS**

Expires: 09/30/21

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
O-terphenyl / Octacosane Mix	Phenova	ALO-130161	600	**CL15440-50423**	**09/30/21**	**06/30/25**	N/A	N/A	N/A	600

Decanoic Acid Spike

Prepared: 09/11/20

Expires: 09/11/21

Prepared By (Initials): SS

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Decanoic Acid Spike	O2SI	011729-01-05-5PAK	1,000	**397380-50547**	**09/11/21**	**12/30/21**	N/A	N/A	N/A	1,000

Diesel Motor Oil Mix

Prepared: 09/29/20 **Prepared By (Initials): SS**

Expires: 09/29/21

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Restek	31258	50,000	**A0154201-50382.50523,50524**	**09/29/21**	**11/30/26**	1.35 mL	2.7 mL	NA	25,000
Motor Oil Composite	Restek	31464	50,000	**A0155668-50516,50517,50520**	**09/29/21**	**01/31/27**	1.35 mL			25,000

Organic Extraction Worksheet

Method	Continuous Liq/Liq TPH-Diesel/MO 3520C	Extraction Set	201009A	Extraction Method	LIQ005	Units	mL

Spiked ID 1	Diesel Motor Oil Mix 9/29/20-9/29/21		Surrogate ID 1	THC Surrogate 9/30/20-9/30/21	
Spiked ID 2	Decanoic Acid Spike 9/11/20-9/11/21		Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NO	
Spiked ID 7			Ext. Start Time:	10/09/20 13:10	
Spiked ID 8			Ext. End Time:	10/10/20 7:30	
			GC Requires Extract By:		

pH1			Water Bath Temp 1 °C	37/35.5 °C
pH2			Water Bath Temp 2 °C	37/40.1
pH3			Water Bath Temp 3 °C	36/35.5 °C

Spiked By: DL **Date** 10/09/20 **Witnessed By:** CFM **Date** 10/09/20

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201009A Blk		0.050	2	0.100	1	800	5	2	10/09/20 10:40	*
						equip	E-HP51 E-WB1				
2	201009A LCS-1		0.040,0.050	1,2	0.100	1	800	5	2	10/09/20 10:40	*
						equip	E-HP50 E-WB2				
3	201009A LCSD-1		0.040,0.050	1,2	0.100	1	800	5	2	10/09/20 10:40	*
						equip	E-HP49 E-WB3				
4	BA19475	BA19475W15			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP48 E-WB1				
5	BA19476	BA19476W15			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP47 E-WB2				
6	BA19477	BA19477W13			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP25 E-WB3				
7	BA19478	BA19478W14			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP26 E-WB1				
8	BA19479	BA19479W09			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP27 E-WB2				
9	BA19480	BA19480W07			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP28 E-WB3				
10	BA19481	BA19481W08			0.100	1	800	5	2	10/09/20 10:40	93607
						equip	E-HP29 E-WB1				
11	BA19482	BA19482W09			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP30 E-WB2				
12	BA19483	BA19483W15			0.100	1	800	5	2	10/09/20 10:40	93607*
						equip	E-HP16 E-WB3				
13	BA19591	BA19591W07			0.100	1	800	5	2	10/09/20 10:40	93644*
						equip	E-HP15 E-WB1				
14	BA19592	BA19592W08			0.100	1	800	5	2	10/09/20 10:40	93644*
						equip	E-HP14 E-WB2				
15	BA19593	BA19593W08			0.100	1	800	5	2	10/09/20 10:40	93644*
						equip	E-HP13 E-WB3				
16	BA19594	BA19594W08			0.100	1	800	5	2	10/09/20 10:40	93644*
						equip	E-HP12 E-WB1				

Solvent and Lot#	
1+1 HCL Amber Liter	59072
PH Strips	HC094495
Dicholormethane	60127
Filter Paper	400178
B. Sodium Sulfate	2019070279
Silica Gel (*)	050627T

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	SS
Date	10/13/20
Time	9:00
Refrigerator	HOBART

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DS

Modified	11/09/20 1:10:55 PM

Reviewed By: KY **Date** 11/09/20

Organic Extraction Worksheet

Method	Continuous Liq/Liq TPH-Diesel/MO 3520C	Extraction Set	201009A	Extraction Method	LIQ005	Units	mL

Spiked ID 1	Diesel Motor Oil Mix 9/29/20-9/29/21		Surrogate ID 1	THC Surrogate 9/30/20-9/30/21	
Spiked ID 2	Decanoic Acid Spike 9/11/20-9/11/21		Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NO	
Spiked ID 7			Ext. Start Time:	10/09/20 13:10	
Spiked ID 8			Ext. End Time:	10/10/20 7:30	
			GC Requires Extract By:		

pH1			Water Bath Temp 1 °C	37/35.5 °C
pH2			Water Bath Temp 2 °C	37/40.1
pH3			Water Bath Temp 3 °C	36/35.5 °C

Spiked By: DL **Date** 10/09/20 **Witnessed By:** CFM **Date** 10/09/20

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	BA19595	BA19595W07			0.100	1	800	5	2	10/09/20 10:40	93644*
						equip	E-HP11 E-WB2				
18	BA19596	BA19596W07			0.100	1	800	5	2	10/09/20 10:40	93644*
						equip	E-HP10 E-WB3				
19	BA19597	BA19597W08			0.100	1	800	5	2	10/09/20 10:40	93644*
						equip	E-HP9 E-WB1				
20	BA19640	BA19640W19	0.050	1,2	0.100	1	800	5	2	10/09/20 13:10	93659*
						equip	E-HP8 E-WB2				

Solvent and Lot#	
1+1 HCL Amber Liter	59072
PH Strips	HC094495
Dicholormethane	60127
Filter Paper	400178
B. Sodium Sulfate	2019070279
Silica Gel (*)	050627T

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	SS
Date	
Time	
Refrigerator	HOBART

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DS

Modified	11/09/20 1:10:55 PM

Reviewed By: KY **Date** 11/09/20

Injection Log

Directory: G:\APOLLO\DATA\200905\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	7	905007.D	1	Diesel Motor Oil-1 9/5/20	Water	9-5-20 17:04:35
2	8	905008.D	1	Diesel Motor Oil-2 9/5/20	Water	9-5-20 17:32:40
3	9	905009.D	1	Diesel Motor Oil-3 9/5/20	Water	9-5-20 18:00:45
4	10	905010.D	1	Diesel Motor Oil-4 9/5/20	Water	9-5-20 18:28:54
5	11	905011.D	1	Diesel Motor Oil-5 9/5/20	Water	9-5-20 18:56:54
6	12	905012.D	1	Diesel Motor Oil-6 9/5/20	Water	9-5-20 19:24:55
7	13	905013.D	1	Diesel Motor Oil-SS 7/21/20	Water	9-5-20 19:52:52
8	4	914004.D	1	Decanoic Acid-1 9/14/20	water	9-14-20 10:24:43
9	5	914005.D	1	Decanoic Acid-2 9/14/20	water	9-14-20 10:52:47
10	6	914006.D	1	Decanoic Acid-3 9/14/20	water	9-14-20 11:20:51
11	7	914007.D	1	Decanoic Acid-4 9/14/20	water	9-14-20 11:48:52
12	8	914008.D	1	Decanoic Acid-5 9/14/20	water	9-14-20 12:16:53
13	9	914009.D	1	Decanoic Acid-6 9/14/20	water	9-14-20 12:44:57
14	23	1003123.D	1	Diesel Motor Oil-CCV 10/8/20	Water	10-13-20 11:50:40
15	27	1003127.D	6.25	201009A BLK 5/800	Water	10-13-20 16:32:42
16	28	1003128.D	6.25	201009A LCS-1 5/800	Water	10-13-20 17:00:46
17	29	1003129.D	6.25	201009A LCSD-1 5/800	Water	10-13-20 17:28:49
18	30	1003130.D	6.25	BA19640W19 5/800	Water	10-13-20 17:56:57
19	31	1003131.D	1	Diesel Motor Oil-CCV 10/8/20	Water	10-13-20 18:25:00
20	27	1105027.D	1	Diesel Motor Oil-CCV 11/03/20	water	11-6-20 19:06:49
21	28	1105028.D	1	Decanoic Acid-CCV 7/28/20	water	11-6-20 19:34:28
22	29	1105029.D	6.25	201009A BLK 5/800 SG	water	11-6-20 20:02:08
23	30	1105030.D	6.25	201009A LCS-1 5/800 SG	water	11-6-20 20:29:49
24	31	1105031.D	6.25	201009A LCSD-1 5/800 SG	water	11-6-20 20:57:31
25	32	1105032.D	6.25	BA19640W19 5/800 SG	water	11-6-20 21:25:09
26	33	1105033.D	1	Decanoic Acid-CCV 7/28/20	water	11-6-20 21:52:48
27	34	1105034.D	1	Diesel Motor Oil-CCV 11/03/20	water	11-6-20 22:20:28

ORGANICS

Calibration Data

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/09/20
Matrix: Instrument: Yoda Initials: MA

1009Y003.D 1009Y004.D 1009Y005.D 1009Y006.D 1009Y007.D 1009Y008.D 1009Y009.D 1009Y010.D 1009Y011.D

		Compound	4	5	10	20	40	50	60	80	100		Avg	%RSD	Type	r^2	Q	MRF
1	I	1,4-dichlorobenzene-D4(IS)	ISTD															
2		1,4-Dioxane		0.4293	0.2691	0.3927	0.3603	0.3512	0.3539	0.4027	0.3108		0.36	14				
3	TM	n-Nitrosodimethylamine		0.4601	0.4992	0.6181	0.5207	0.5543	0.5902	0.6145	0.5794		0.55	10	TM			
4	TM	Pyridine		1.424	1.491	1.667	1.446	1.524	1.596	1.687	1.573		1.6	6.3	TM			
5	S	2-Fluorophenol (S)		1.455	1.483	1.631	1.495	1.498	1.551	1.635	1.654		1.6	5.1	S			
6	S	Phenol-D6 (S)		1.797	1.868	2.054	1.867	1.902	1.969	2.087	2.093		2.0	5.8	S			
7	*TM	Phenol		1.996	2.089	2.364	2.187	2.245	2.303	2.368	2.356		2.2	6.2	*TM			0.800
8	TM	Aniline			2.127	2.017	1.586	1.710	1.599	1.490			1.8	15	TM			
9	TM	Bis (2-chloroethyl) ether		0.8751	0.8838	0.9222	0.8720	0.8863	0.9151	0.9548	0.9270		0.90	3.3	TM			0.700
10	TM	2-Chlorophenol		1.797	1.850	1.900	1.784	1.819	1.894	1.944	1.920		1.9	3.2	TM			0.800
11	TM	1,3-DCB		1.959	2.030	2.076	1.862	1.999	1.964	2.061	1.983		2.0	3.4	TM			
12	*TM	1,4-DCB		2.009	2.071	2.127	1.902	2.014	2.011	2.092	2.038		2.0	3.3	*TM			
13	TM	Benzyl alcohol		0.9932	1.034	1.074	0.9800	1.024	1.055	1.089	1.088		1.0	4.0	TM			
14	TM	1,2-DCB		1.897	1.944	1.988	1.783	1.882	1.917	1.950	1.922		1.9	3.2	TM			
15	TM	2-Methylphenol		1.326	1.372	1.416	1.291	1.363	1.390	1.443	1.433		1.4	3.8	TM			0.700
16	TM	Bis (2-chloroisopropyl) ether		1.199	1.203	1.247	1.119	1.150	1.170	1.210	1.190		1.2	3.3	TM			0.010
17	TM	Acetophenone		2.283	2.370	2.477	2.256	2.375	2.440	2.512	2.533		2.4	4.3	TM			0.010
18	TM	3&4-Methylphenol		1.796	1.847	1.938	1.787	1.935	1.958	2.035	2.027		1.9	5.0	TM			0.600
19	**TM	n-Nitrosodi-n-propylamine		1.157	1.201	1.268	1.164	1.194	1.229	1.262	1.219		1.2	3.4	**TM			0.500
20	TM	Hexachloroethane		0.6621	0.7138	0.7479	0.6836	0.7204	0.7221	0.7537	0.7274		0.72	4.3	TM			0.300
21	I	Napthalene-D8(IS)	ISTD															
22	S	Nitrobenzene-D5(S)		0.3767	0.4074	0.4318	0.4120	0.4200	0.4234	0.4403	0.4357		0.42	4.8	S			
23	TM	Nitrobenzene		0.4108	0.4279	0.4399	0.4112	0.4365	0.4323	0.4523	0.4361		0.43	3.3	TM			0.200
24	TM	Isophorone		0.6918	0.7326	0.7384	0.7019	0.7582	0.7470	0.7728	0.7603		0.74	3.9	TM			0.400
25	*TM	2-Nitrophenol		0.2358	0.2392	0.2587	0.2505	0.2695	0.2709	0.2804	0.2707		0.26	6.3	*TM			0.100
26	TM	2,4-Dimethylphenol		0.3810	0.3932	0.4195	0.3865	0.4122	0.4134	0.4182	0.4186		0.41	3.9	TM			0.200
27	TML	Benzoic acid			0.1193	0.1498	0.2422	0.2790	0.2926	0.2859			0.23	33	TM	0.993		
28	TM	Bis (2-chloroethoxy) methane		0.4454	0.4740	0.4680	0.4452	0.4729	0.4766	0.4874	0.4781		0.47	3.3	TM			0.300
29	*TM	2,4-Dichlorophenol		0.3839	0.3979	0.4018	0.3824	0.4047	0.4130	0.4248	0.4176		0.40	3.8	*TM			0.200
30	TM	1,2,4-Trichlorobenzene		0.4381	0.4478	0.4551	0.4234	0.4545	0.4539	0.4605	0.4619		0.45	2.9	TM			
31	TM	3,4-Dimethylphenol		0.5549	0.5582	0.5619	0.5484	0.5620	0.5782	0.5937	0.5729		0.57	2.6	TM			
32	TM	Naphthalene		1.272	1.316	1.315	1.246	1.324	1.312	1.367	1.341		1.3	2.9	TM			0.700
33	TM	4-Chloroaniline		0.5356	0.5604	0.5691	0.5429	0.5561	0.5720	0.5577	0.5208		0.55	3.2	TM			0.010
34	TM	2,6-Dichlorophenol		0.3741	0.3930	0.3912	0.3802	0.3944	0.4109	0.4193	0.4162		0.40	4.2	TM			
35	TM	Hexachloropropene		0.2941	0.3053	0.3231	0.3090	0.3436	0.3393	0.3505	0.3515		0.33	6.8	TM			

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 6
Initial Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Initial Cal. Date: 10/09/20
Instrument: Yoda

Initials:

		Compound	4	5	10	20	40	50	60	80	100		Avg	%RSD	Type		Q	
36	*TM	Hexachlorobutadiene		0.2686	0.2726	0.2757	0.2652	0.2782	0.2804	0.2850	0.2824		0.28	2.5	*TM			0.010
37	TM	Caprolactum		0.1172	0.1242	0.1338	0.1295	0.1320	0.1375	0.1387	0.1377		0.13	5.7	TM			0.010
38	*TM	4-Chloro-3-methylphenol		0.3876	0.4049	0.4120	0.3888	0.4162	0.4246	0.4340	0.4291		0.41	4.2	*TM			0.200
39	TM	2-Methylnaphthalene		0.8441	0.8754	0.8763	0.8333	0.8987	0.8935	0.9456	0.9148		0.89	4.1	TM			0.400
40	TM	1-Methylnaphthalene		0.8711	0.9149	0.9056	0.8746	0.9322	0.9362	0.9541	0.9452		0.92	3.4	TM			
41	I	Acenaphthene-D10(IS)	ISTD															
42	**TM	Hexachlorocyclopentadiene		0.4926	0.5473	0.5729	0.5151	0.5557	0.6434	0.4714	0.6605		0.56	12	**TM			0.050
43	TM	1,2,4,5-Tetrachlorobenzene		0.7596	0.7959	0.7832	0.7668	0.8143	0.8333	0.8326	0.8706		0.81	4.7	TM			0.010
44	*TM	2,4,6-Trichlorophenol		0.4985	0.5116	0.5220	0.5159	0.5513	0.5494	0.5668	0.5702		0.54	5.1	*TM			0.200
45	TM	2,4,5-Trichlorophenol		0.5301	0.5339	0.5572	0.5423	0.5568	0.5860	0.5824	0.6014		0.56	4.7	TM			0.200
46	S	2-Fluorobiphenyl(S)		1.653	1.647	1.683	1.637	1.666	1.701	1.734	1.765		1.7	2.7	S			
47	TM	1,1'-Biphenyl		1.884	1.868	1.885	1.850	1.903	1.984	1.962	2.056		1.9	3.7	TM			0.010
48	TM	2-Chloronaphthalene		1.488	1.505	1.490	1.465	1.531	1.552	1.546	1.597		1.5	2.8	TM			0.800
49	TM	2-Nitroaniline		0.3404	0.3547	0.3797	0.3680	0.3869	0.3939	0.4013	0.4122		0.38	6.4	TM			0.010
50	TM	Dimethyl phthalate		1.778	1.792	1.808	1.739	1.813	1.845	1.896	1.896		1.8	3.0	TM			0.010
51	TM	2,6-DNT		0.3595	0.3691	0.3940	0.3898	0.4194	0.4362	0.4303	0.4376		0.40	7.6	TM			0.200
52	TM	Acenaphthylene		2.272	2.270	2.301	2.239	2.369	2.346	2.427	2.452		2.3	3.3	TM			0.900
53	TM	3-Nitroaniline		0.4354	0.4701	0.4891	0.4850	0.5162	0.5277	0.5306	0.5569		0.50	7.8	TM			0.010
54	*TM	Acenaphthene		1.513	1.515	1.526	1.475	1.601	1.634	1.562	1.583		1.6	3.4	*TM			0.900
55	**TML	2,4-Dinitrophenol				0.1026	0.1597	0.1980	0.2280	0.2394	0.2642		0.20	30	**TM	0.993		0.010
56	**TM	4-Nitrophenol			0.2263	0.2559	0.2676	0.2931	0.3073	0.3053	0.3217		0.28	12	**TM			0.010
57	TM	Dibenzofuran		2.146	2.151	2.189	2.113	2.192	2.258	2.260	2.368		2.2	3.7	TM			0.800
58	TM	2,4-DNT		0.4874	0.5258	0.5675	0.5631	0.5872	0.6207	0.6214	0.6309		0.58	8.8	TM			0.200
59	TM	2,3,4,6-Tetrachlorophenol		0.4226	0.4326	0.4568	0.4521	0.4802	0.4931	0.5021	0.5103		0.47	6.9	TM			0.010
60	TM	Diethyl phthalate		1.717	1.750	1.774	1.700	1.785	1.821	1.822	1.856		1.8	3.0	TM			0.010
61	TM	4-Chlorophenyl phenyl ether		0.9642	0.9787	1.003	0.9777	1.022	1.052	1.077	1.128		1.0	5.6	TM			0.400
62	TM	Fluorene		1.723	1.752	1.766	1.748	1.849	1.876	1.915	1.993		1.8	5.3	TM			0.900
63	TM	4-Nitroaniline		0.3881	0.4161	0.4217	0.4161	0.4232	0.4331	0.4350	0.4238		0.42	3.5	TM			0.010
64	S	2,4,6-Tribromophenol(S)		0.2499	0.2577	0.2753	0.2746	0.2881	0.2924	0.3250	0.3519		0.29	12	S			
65	I	Phenanthrene-D10(IS)	ISTD															
66	TM	4,6-Dinitro-2-methylphenol				0.1512	0.1746	0.1987	0.2095	0.2163	0.2173		0.19	14	TM			0.010
67	TM	Diphenyl amine		0.7260	0.7313	0.7409	0.7221	0.7714	0.7734	0.7988	0.7939		0.76	4.1	TM			
68	*TM	n-Nitrosodiphenylamine		0.7260	0.7313	0.7409	0.7221	0.7714	0.7734	0.7988	0.7939		0.76	4.1	*TM			0.010
69	TM	1,2-Diphenylhydrazine		0.7088	0.7296	0.7363	0.7005	0.7390	0.7439	0.7625	0.7442		0.73	2.7	TM			
70	TM	4-Bromophenyl phenyl ether		0.2867	0.2841	0.2901	0.2822	0.3029	0.3102	0.3219	0.3181		0.30	5.3	TM			0.100

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/09/20
Matrix: Instrument: Yoda Initials:

		Compound	4	5	10	20	40	50	60	80	100		Avg	%RSD	Type		Q	
71	TM	Hexachlorobenzene		0.3059	0.3129	0.3147	0.2992	0.3297	0.3289	0.3449	0.3390		0.32	5.0	TM			0.100
72	TM	Atrazine		0.2523	0.2730	0.2788	0.2709	0.2853	0.2901	0.2889	0.2868		0.28	4.6	TM			0.010
73	*TM	Pentachlorophenol			0.1760	0.2025	0.2048	0.2235	0.2348	0.2427	0.2490		0.22	12	*TM			0.050
74	TM	Phenanthrene		1.345	1.323	1.369	1.279	1.372	1.374	1.412	1.391		1.4	3.1	TM			0.700
75	TM	Anthracene		1.365	1.358	1.392	1.361	1.421	1.466	1.469	1.460		1.4	3.5	TM			0.700
76	TM	Carbazol		1.228	1.242	1.281	1.206	1.271	1.283	1.350	1.297		1.3	3.5	TM			0.010
77	TM	Di-n-butylphthalate		1.399	1.446	1.519	1.477	1.547	1.637	1.617	1.650		1.5	6.1	TM			0.010
78	*TM	Fluoranthene		1.492	1.509	1.526	1.496	1.593	1.632	1.639	1.676		1.6	4.7	*TM			0.600
79	I	Chrysene-D12(IS)	ISTD															
80	TM	Benzidine		0.3875	0.4488	0.4755	0.4544	0.4661	0.4881	0.4328	0.4334		0.45	7.0	TM			
81	TM	Pyrene		1.580	1.594	1.611	1.508	1.589	1.612	1.662	1.608		1.6	2.7	TM			0.600
82	S	Terphenyl-D14(S)		1.093	1.106	1.133	1.100	1.146	1.167	1.246	1.233		1.2	5.1	S			
83	TM	Butyl benzylphthalate		0.5836	0.6098	0.6584	0.6252	0.6819	0.6870	0.7124	0.7012		0.66	7.1	TM			0.010
84	TM	3,3'-Dichlorobenzidine		0.4764	0.5012	0.5358	0.5200	0.5374	0.5593	0.5590	0.5373		0.53	5.4	TM			0.010
85	TM	Benz (a) anthracene		1.520	1.560	1.589	1.516	1.620	1.658	1.688	1.703		1.6	4.5	TM			0.800
86	TM	Bis (2-ethylhexyl) phthalate		0.8281	0.8665	0.9124	0.8825	0.9508	0.9571	0.9995	0.9787		0.92	6.5	TM			0.010
87	TM	Chrysene		1.533	1.530	1.547	1.443	1.537	1.539	1.633	1.608		1.5	3.7	TM			0.700
88	*TM	Di-n-octylphthalate		1.194	1.328	1.474	1.479	1.579	1.648	1.693	1.683		1.5	12	*TM			0.010
89	I	Perylene-D12(IS)	ISTD															
90	TM	Benzo (b) fluoranthene		1.322	1.387	1.529	1.433	1.628	1.753	1.644	1.720		1.6	10	TM			0.700
91	TM	Benzo (k) fluoranthene		1.522	1.563	1.485	1.475	1.477	1.420	1.570	1.516		1.5	3.3	TM			0.700
92	*TM	Benzo (a) pyrene	1.198	1.279	1.346	1.442	1.386	1.499	1.524	1.536	1.563		1.4	8.9	*TM			0.700
93	TM	Indeno (1,2,3-cd) pyrene		1.425	1.508	1.567	1.530	1.657	1.696	1.717	1.718		1.6	6.9	TM			0.500
94	TM	Dibenz (a,h) anthracene	1.199	1.284	1.331	1.382	1.359	1.465	1.487	1.513	1.542		1.4	8.2	TM			0.400
95	TM	Benzo (g,h,i) perylene		1.295	1.328	1.376	1.316	1.428	1.458	1.469	1.465		1.4	5.2	TM			0.500
96																		
97																		
98																		
99																		
100																		
101																		
102																		
103																		
104																		
105																		

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y003.D Vial: 3
Acq On : 9 Oct 20 11:14 Operator: MA
Sample : 4ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:32 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:28:56 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	227533	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	901223	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	551168	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	1043970	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	1064432	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.06	264	1050083	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	0.00	112	0d	0.00000 ppb	
Spiked Amount 200.000			Recovery =	0.000%	
6) Phenol-D6 (S)	0.00	99	0d	0.00000 ppb	
Spiked Amount 200.000			Recovery =	0.000%	
22) Nitrobenzene-D5(S)	0.00	82	0d	0.00000 ppb	
Spiked Amount 100.000			Recovery =	0.000%	
46) 2-Fluorobiphenyl(S)	0.00	172	0d	0.00000 ppb	
Spiked Amount 100.000			Recovery =	0.000%	
64) 2,4,6-Tribromophenol(S)	0.00	330	0d	0.00000 ppb	
Spiked Amount 200.000			Recovery =	0.000%	
82) Terphenyl-D14(S)	0.00	244	0d	0.00000 ppb	
Spiked Amount 100.000			Recovery =	0.000%	
Target Compounds					Qvalue
92) Benzo (a) pyrene	14.99	252	125828	3.28617 ppb	97
94) Dibenz (a,h) anthracene	16.77	278	125879	3.24970 ppb	96

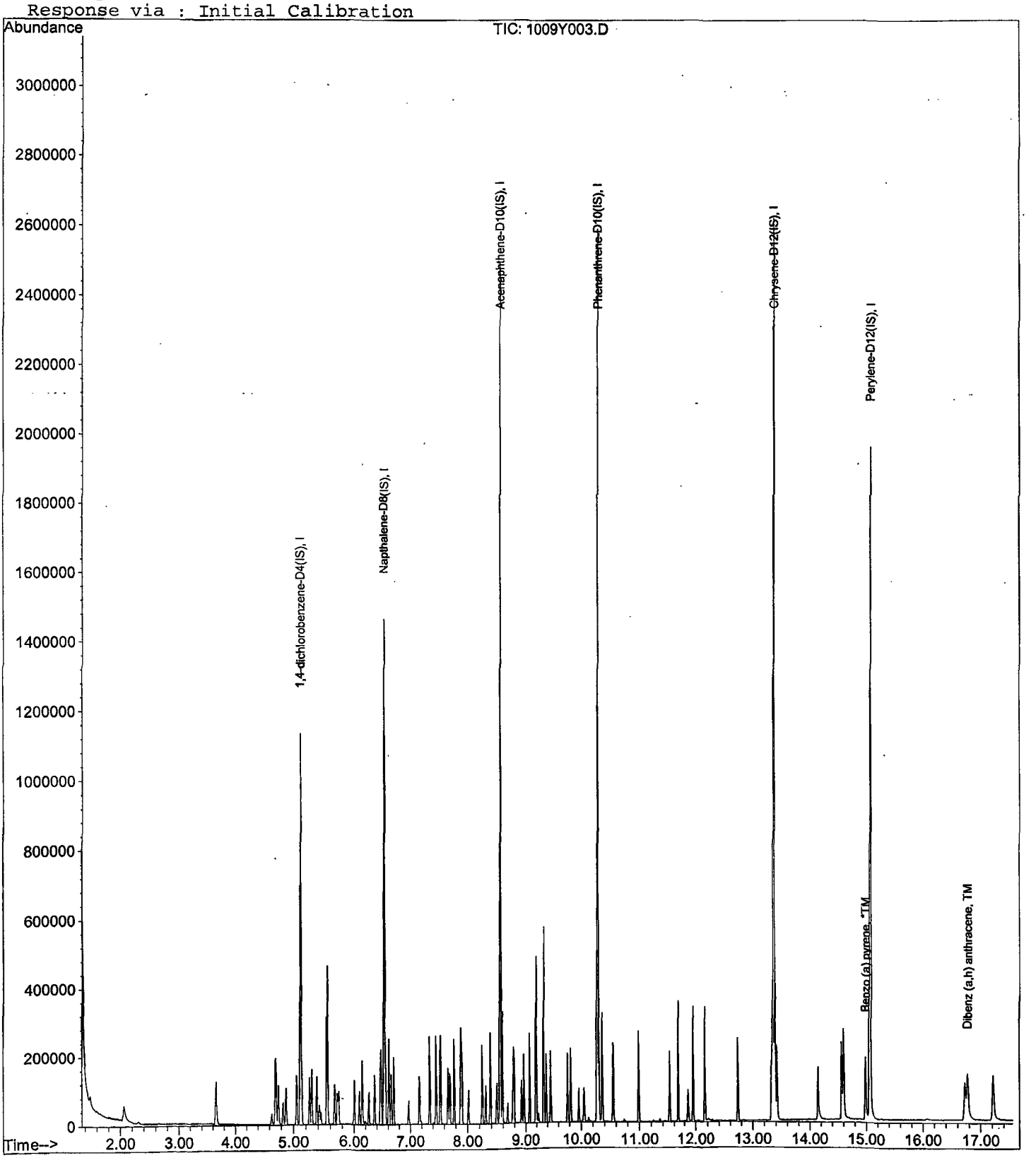
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y003.D Vial: 3
Acq On : 9 Oct 20 11:14 Operator: MA
Sample : 4ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:32 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y004.D Vial: 4
Acq On : 9 Oct 20 11:40 Operator: MA
Sample : 5ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	295573	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	1198634	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	717733	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	1396730	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	1400451	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.06	264	1378494	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.65	112	107548	9.79493 ppb	0.00
Spiked Amount 200.000			Recovery	= 4.898%	
6) Phenol-D6 (S)	4.69	99	132793	9.54853 ppb	-0.02
Spiked Amount 200.000			Recovery	= 4.775%	
22) Nitrobenzene-D5(S)	5.72	82	56448	4.47844 ppb	0.00
Spiked Amount 100.000			Recovery	= 4.478%	
46) 2-Fluorobiphenyl(S)	7.77	172	148324	4.95989 ppb	0.00
Spiked Amount 100.000			Recovery	= 4.960%	
64) 2,4,6-Tribromophenol(S)	9.46	330	44842	8.88855 ppb	-0.02
Spiked Amount 200.000			Recovery	= 4.445%	
82) Terphenyl-D14(S)	12.15	244	191253	4.79704 ppb	0.00
Spiked Amount 100.000			Recovery	= 4.797%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.81	58	1586	0.58537	88
3) n-Nitrosodimethylamine	2.04	42	17000	4.74480 ppb	88
4) Pyridine	2.06	79	52628	4.74569 ppb	100
7) Phenol	4.71	94	73745	4.41786 ppb	96
8) Aniline	4.75	93	74912	6.48908 ppb	100
9) Bis (2-chloroethyl) ether	4.82	63	32333	4.91887 ppb	93
10) 2-Chlorophenol	4.88	128	66407	4.92247 ppb	98
11) 1,3-DCB	5.05	146	72396	4.92865 ppb	96
12) 1,4-DCB	5.13	146	74215	4.97605 ppb	96
13) Benzyl alcohol	5.26	108	36696	4.98304 ppb	99
14) 1,2-DCB	5.30	146	70078	5.02008 ppb	97
15) 2-Methylphenol	5.38	107	48979	4.71409 ppb	99
16) Bis (2-chloroisopropyl) et	5.42	45	44300	5.18894 ppb	96
17) Acetophenone	5.56	105	84332	5.12230 ppb	72
18) 3&4-Methylphenol	5.55	107	132686	10.04745 ppb	97
19) n-Nitrosodi-n-propylamine	5.56	70	42735	4.95123 ppb	96
20) Hexachloroethane	5.67	117	24461	4.63665 ppb	85
23) Nitrobenzene	5.74	77	61553	4.77890 ppb	97
24) Isophorone	6.00	82	103656	4.63891 ppb	94
25) 2-Nitrophenol	6.10	139	35327	4.48123 ppb	90
26) 2,4-Dimethylphenol	6.14	122	57085	4.80390 ppb	99
27) Benzoic acid	6.21	105	13240	6.32470 ppb	93
28) Bis (2-chloroethoxy) metha	6.26	93	66732	4.75525 ppb	97
29) 2,4-Dichlorophenol	6.36	162	57519	4.80776 ppb	98
30) 1,2,4-Trichlorobenzene	6.47	180	65647	4.84104 ppb	96
31) 3,4-Dimethylphenol	6.48	107	83137	4.94914 ppb	97
32) Naphthalene	6.55	128	190633	4.82985 ppb	99
33) 4-Chloroaniline	6.61	127	80253	5.17102 ppb	99
34) 2,6-Dichlorophenol	6.62	162	56054	4.70900 ppb	99
35) Hexachloropropene	6.65	213	44063	4.33691 ppb	94
36) Hexachlorobutadiene	6.70	225	40246	4.85135 ppb	97
37) Caprolactum	6.97	55	17565	4.41965 ppb	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y004.D Vial: 4
Acq On : 9 Oct 20 11:40 Operator: MA
Sample : 5ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.15	107	58070	4.81778 ppb		86
39)	2-Methylnaphthalene	7.34	142	126478	4.76950 ppb		99
40)	1-Methylnaphthalene	7.45	142	130512	4.78713 ppb		99
42)	Hexachlorocyclopentadiene	7.53	237	44192	6.59964 ppb		98
43)	1,2,4,5-Tetrachlorobenzene	7.53	216	68146	4.75873 ppb		98
44)	2,4,6-Trichlorophenol	7.66	196	44724	4.91186 ppb		99
45)	2,4,5-Trichlorophenol	7.70	196	47561	4.90189 ppb		98
47)	1,1'-Biphenyl	7.89	154	169036	4.95293 ppb		98
48)	2-Chloronaphthalene	7.90	162	133473	4.96496 ppb		98
49)	2-Nitroaniline	8.02	65	30540	4.51608 ppb		99
50)	Dimethyl phthalate	8.24	163	159491	4.99723 ppb		100
51)	2,6-DNT	8.31	165	32251	4.37339 ppb		96
52)	Acenaphthylene	8.38	152	203875	4.96211 ppb		99
53)	3-Nitroaniline	8.02	138	39061	4.35954 ppb		97
54)	Acenaphthene	8.58	154	135729	5.12585 ppb		99
55)	2,4-Dinitrophenol	8.61	184	2676	14.40545 ppb	#	76
56)	4-Nitrophenol	8.68	65	16620	3.63593 ppb		100
57)	Dibenzofuran	8.78	168	192534	5.04183 ppb		97
58)	2,4-DNT	8.77	165	43731	4.32291 ppb		88
59)	2,3,4,6-Tetrachlorophenol	8.93	232	37911	4.90306 ppb	#	88
60)	Diethyl phthalate	9.07	149	154007	4.98862 ppb		96
61)	4-Chlorophenyl phenyl ethe	9.20	204	86504	4.89026 ppb		90
62)	Fluorene	9.18	166	154595	4.80618 ppb		98
63)	4-Nitroaniline	8.49	138	34823	4.65461 ppb		88
66)	4,6-Dinitro-2-methylphenol	9.23	198	13188	1.91548 ppb	#	75
67)	Diphenyl amine	9.33	169	253502	9.63821 ppb		98
68)	n-Nitrosodiphenylamine	9.33	169	253502	9.63821 ppb		98
69)	1,2-Diphenylhydrazine	9.37	77	123757	4.50039 ppb		98
70)	4-Bromophenyl phenyl ether	9.76	248	50055	4.67893 ppb	#	89
71)	Hexachlorobenzene	9.82	284	53411	4.68093 ppb		95
72)	Atrazine	9.96	200	22023	2.25969 ppb		96
73)	Pentachlorophenol	10.05	266	26716	4.28442 ppb		96
74)	Phenanthrene	10.30	178	234788	4.95281 ppb		99
75)	Anthracene	10.36	178	238324	4.86048 ppb		100
76)	Carbazol	10.54	167	214401	4.85351 ppb		99
77)	Di-n-butylphthalate	10.99	149	244243	4.57482 ppb		99
78)	Fluoranthene	11.68	202	260481	4.74656 ppb		98
80)	Benzidine	11.85	184	67831	9.77949 ppb	#	98
81)	Pyrene	11.94	202	276641	5.01631 ppb		100
83)	Butyl benzylphthalate	12.73	149	102157	4.37279 ppb		88
84)	3,3'-Dichlorobenzidine	13.33	252	83398	4.54517 ppb	#	97
85)	Benz (a) anthracene	13.35	228	266101	4.65566 ppb		99
86)	Bis (2-ethylhexyl) phthala	13.41	149	144972	4.51925 ppb	#	93
87)	Chrysene	13.38	228	268306	5.11347 ppb		99
88)	Di-n-octylphthalate	14.14	149	208993	3.83482 ppb		96
90)	Benzo (b) fluoranthene	14.57	252	227849	3.97078 ppb		98
91)	Benzo (k) fluoranthene	14.60	252	262261	5.45232 ppb		98
92)	Benzo (a) pyrene	14.98	252	220313	4.38300 ppb		97
93)	Indeno (1,2,3-cd) pyrene	16.73	276	245585	4.86013 ppb		96
94)	Dibenz (a,h) anthracene	16.77	278	221214	4.35032 ppb		97
95)	Benzo (g,h,i) perylene	17.22	276	223157	4.50748 ppb		99

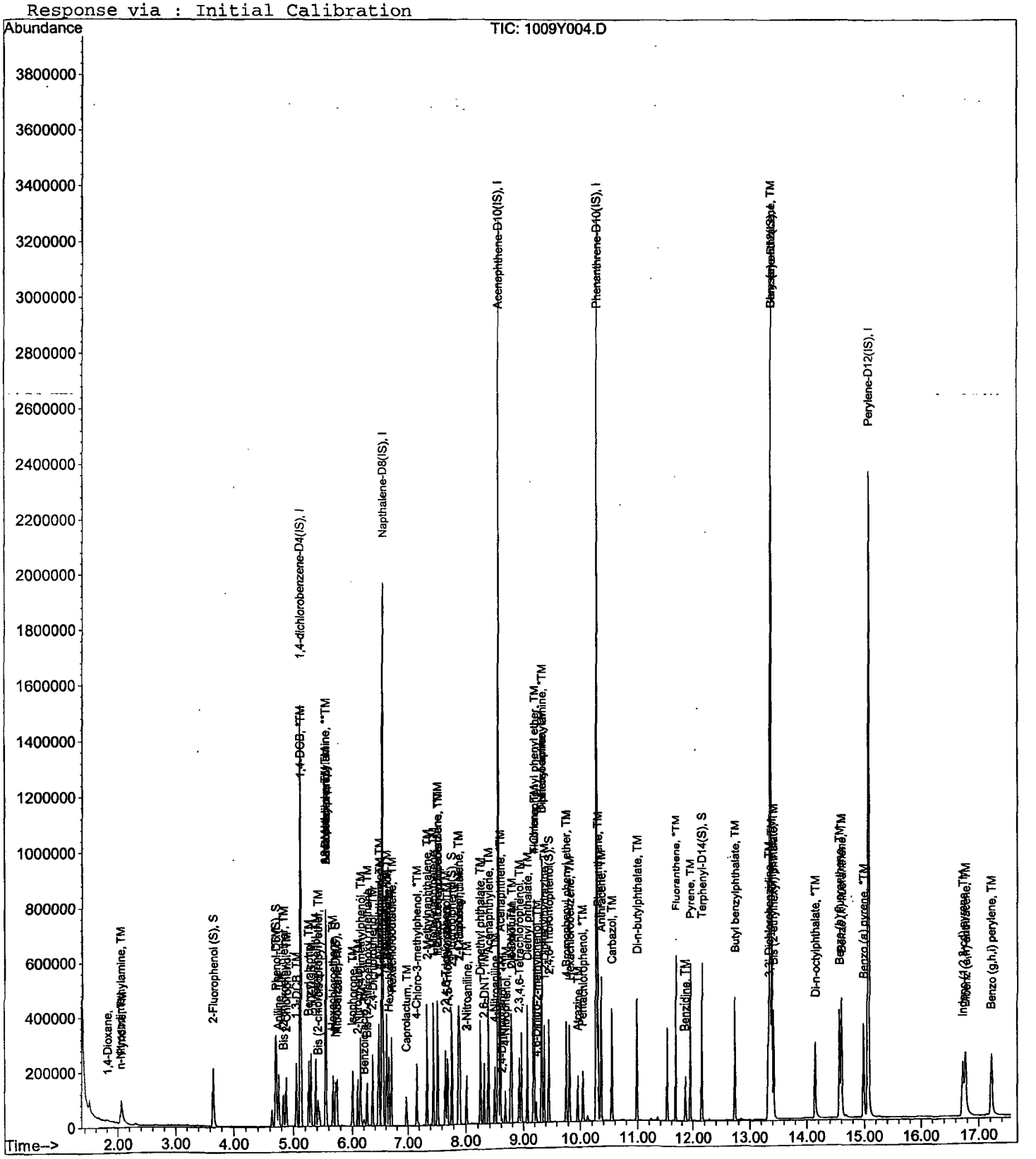
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y004.D Vial: 4
Acq On : 9 Oct 20 11:40 Operator: MA
Sample : 5ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y005.D Vial: 5
Acq On : 9 Oct 20 12:05 Operator: MA
Sample : 10ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:38 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	211409	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.52	136	859818	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	520738	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	1015162	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	1017473	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.06	264	991671	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.66	112	156796	19.96527 ppb	0.00
Spiked Amount 200.000			Recovery =	9.983%	
6) Phenol-D6 (S)	4.70	99	197438	19.84875 ppb	0.00
Spiked Amount 200.000			Recovery =	9.925%	
22) Nitrobenzene-D5(S)	5.72	82	87568	9.68508 ppb	0.00
Spiked Amount 100.000			Recovery =	9.685%	
46) 2-Fluorobiphenyl(S)	7.77	172	214475	9.88509 ppb	0.00
Spiked Amount 100.000			Recovery =	9.885%	
64) 2,4,6-Tribromophenol(S)	9.46	330	67086	18.32827 ppb	-0.02
Spiked Amount 200.000			Recovery =	9.164%	
82) Terphenyl-D14(S)	12.15	244	281289	9.71097 ppb	0.00
Spiked Amount 100.000			Recovery =	9.711%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.81	58	1422m	0.73378	60
3) n-Nitrosodimethylamine	2.04	42	26386	10.29636 ppb	98
4) Pyridine	2.06	79	78803	9.93497 ppb	95
7) Phenol	4.71	94	110411	9.24768 ppb	94
8) Aniline	4.75	93	112408	13.61351 ppb	99
9) Bis (2-chloroethyl) ether	4.83	63	46713	9.93571 ppb	83
10) 2-Chlorophenol	4.88	128	97782	10.13374 ppb	99
11) 1,3-DCB	5.05	146	107275	10.21065 ppb	96
12) 1,4-DCB	5.13	146	109450	10.26007 ppb	96
13) Benzyl alcohol	5.26	108	54672	10.37964 ppb	98
14) 1,2-DCB	5.30	146	102762	10.29207 ppb	98
15) 2-Methylphenol	5.38	107	72503	9.75630 ppb	99
16) Bis (2-chloroisopropyl) et	5.42	45	63573	10.41092 ppb	95
17) Acetophenone	5.56	105	125252	10.63650 ppb	75
18) 3&4-Methylphenol	5.55	107	195207	20.66653 ppb	97
19) n-Nitrosodi-n-propylamine	5.56	70	63491	10.28449 ppb	97
20) Hexachloroethane	5.67	117	37728	9.99851 ppb	77
23) Nitrobenzene	5.74	77	91971	9.95428 ppb	98
24) Isophorone	6.01	82	157472	9.82437 ppb	94
25) 2-Nitrophenol	6.10	139	51426	9.09397 ppb	90
26) 2,4-Dimethylphenol	6.14	122	84524	9.91589 ppb	97
27) Benzoic acid	6.22	105	25651	8.90070 ppb	93
28) Bis (2-chloroethoxy) metha	6.26	93	101899	10.12253 ppb	98
29) 2,4-Dichlorophenol	6.36	162	85540	9.96738 ppb	97
30) 1,2,4-Trichlorobenzene	6.47	180	96262	9.89599 ppb	95
31) 3,4-Dimethylphenol	6.48	107	119988	9.95758 ppb	98
32) Naphthalene	6.55	128	282779	9.98765 ppb	99
33) 4-Chloroaniline	6.61	127	120459	10.82017 ppb	98
34) 2,6-Dichlorophenol	6.62	162	84470	9.89248 ppb	97
35) Hexachloropropene	6.65	213	65625	9.00443 ppb	95
36) Hexachlorobutadiene	6.70	225	58596	9.84663 ppb	98
37) Caprolactum	6.98	55	26692	9.36269 ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y005.D Vial: 5
Acq On : 9 Oct 20 12:05 Operator: MA
Sample : 10ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:38 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.16	107	87025	10.06512	ppb		99
39)	2-Methylnaphthalene	7.34	142	188174	9.89230	ppb		100
40)	1-Methylnaphthalene	7.45	142	196666	10.05622	ppb		99
42)	Hexachlorocyclopentadiene	7.53	237	71256	12.98649	ppb		98
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	103616	9.97288	ppb		97
44)	2,4,6-Trichlorophenol	7.67	196	66602	10.08176	ppb		99
45)	2,4,5-Trichlorophenol	7.70	196	69510	9.87424	ppb		99
47)	1,1'-Biphenyl	7.89	154	243153	9.81989	ppb		98
48)	2-Chloronaphthalene	7.90	162	195930	10.04539	ppb		97
49)	2-Nitroaniline	8.02	65	46170	9.41015	ppb		99
50)	Dimethyl phthalate	8.24	163	233303	10.07527	ppb		100
51)	2,6-DNT	8.31	165	48055	8.98168	ppb		97
52)	Acenaphthylene	8.38	152	295539	9.91427	ppb		99
53)	3-Nitroaniline	8.02	138	61198	9.41409	ppb		98
54)	Acenaphthene	8.58	154	197234	10.26642	ppb		99
55)	2,4-Dinitrophenol	8.61	184	7249	15.73076	ppb		95
56)	4-Nitrophenol	8.68	65	29458	8.88242	ppb		94
57)	Dibenzofuran	8.79	168	280021	10.10682	ppb		94
58)	2,4-DNT	8.77	165	68450	9.32618	ppb		86
59)	2,3,4,6-Tetrachlorophenol	8.93	232	56312	10.03798	ppb	#	91
60)	Diethyl phthalate	9.07	149	227834	10.17189	ppb		96
61)	4-Chlorophenyl phenyl ethe	9.20	204	127415	9.92795	ppb		93
62)	Fluorene	9.18	166	228130	9.77532	ppb		98
63)	4-Nitroaniline	8.49	138	54164	9.97864	ppb		86
66)	4,6-Dinitro-2-methylphenol	9.23	198	26610	5.31765	ppb	#	89
67)	Diphenyl amine	9.33	169	371199	19.41774	ppb		99
68)	n-Nitrosodiphenylamine	9.33	169	371199	19.41774	ppb		99
69)	1,2-Diphenylhydrazine	9.37	77	185164	9.26434	ppb		96
70)	4-Bromophenyl phenyl ether	9.76	248	72113	9.27448	ppb	#	91
71)	Hexachlorobenzene	9.82	284	79404	9.57461	ppb		93
72)	Atrazine	9.96	200	34643	4.89062	ppb		98
73)	Pentachlorophenol	10.05	266	44666	9.85541	ppb		97
74)	Phenanthrene	10.30	178	335804	9.74628	ppb		99
75)	Anthracene	10.36	178	344578	9.66888	ppb		100
76)	Carbazol	10.55	167	315150	9.81574	ppb		96
77)	Di-n-butylphthalate	10.99	149	366967	9.45705	ppb		99
78)	Fluoranthene	11.69	202	383069	9.60410	ppb		98
80)	Benzidine	11.85	184	114148	14.70810	ppb		98
81)	Pyrene	11.95	202	405458	10.11950	ppb		99
83)	Butyl benzylphthalate	12.73	149	155110	9.13850	ppb		86
84)	3,3'-Dichlorobenzidine	13.33	252	127488	9.56333	ppb	#	97
85)	Benz (a) anthracene	13.35	228	396810	9.55571	ppb		99
86)	Bis (2-ethylhexyl) phthala	13.41	149	220414	9.45728	ppb	#	93
87)	Chrysene	13.38	228	389144	10.20800	ppb		99
88)	Di-n-octylphthalate	14.15	149	337683	8.52839	ppb		96
90)	Benzo (b) fluoranthene	14.57	252	343740	8.32714	ppb		98
91)	Benzo (k) fluoranthene	14.60	252	387493	11.19822	ppb	#	98
92)	Benzo (a) pyrene	14.98	252	333690	9.22810	ppb		97
93)	Indeno (1,2,3-cd) pyrene	16.73	276	373809	10.28332	ppb		98
94)	Dibenz (a,h) anthracene	16.77	278	330018	9.02161	ppb		98
95)	Benzo (g,h,i) perylene	17.22	276	329165	9.24218	ppb		99

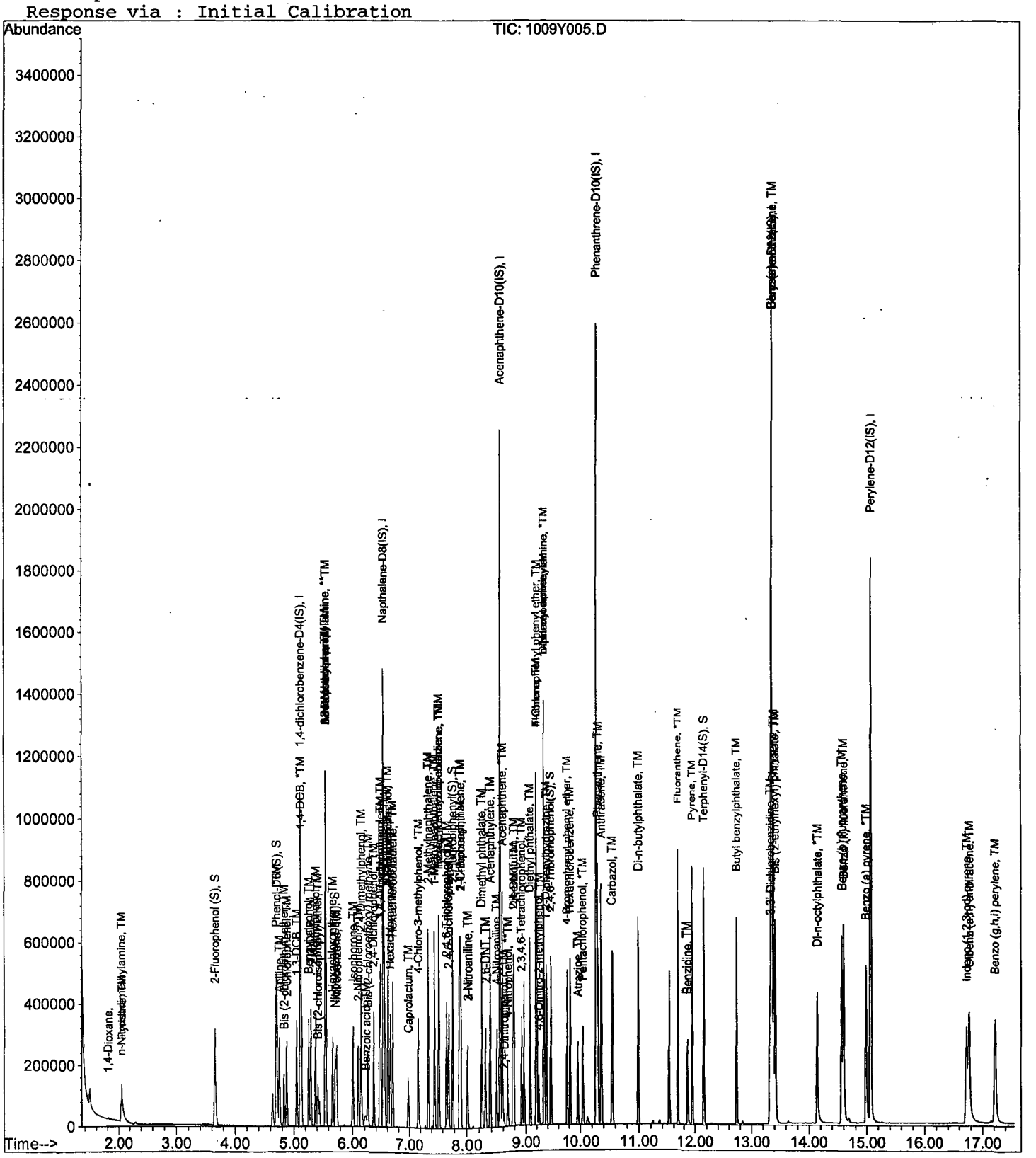
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y005.D Vial: 5
Acq On : 9 Oct 20 12:05 Operator: MA
Sample : 10ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:38 2020 Quant Results File: Y1009.RES

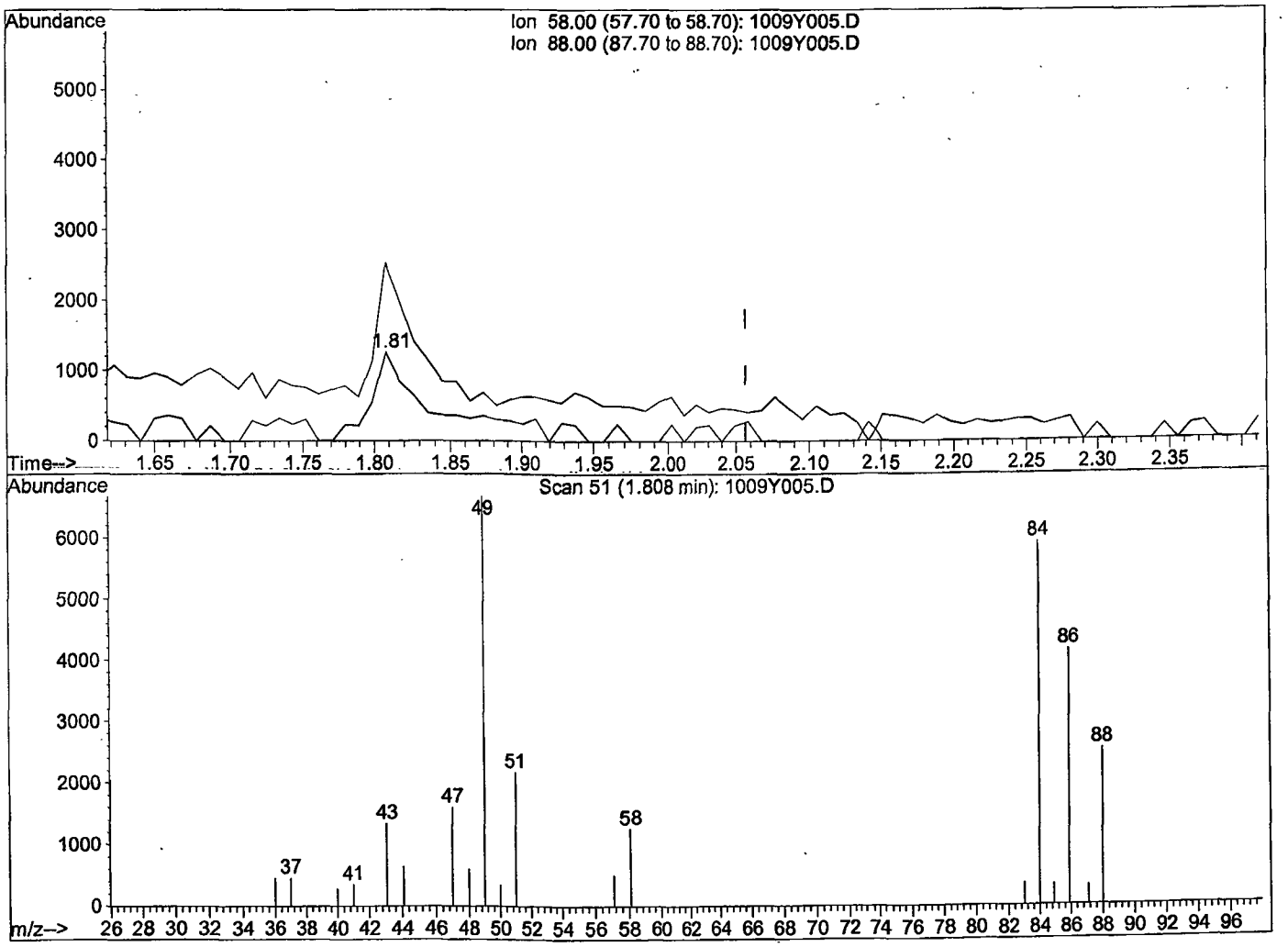
Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y005.D Vial: 5
Acq On : 9 Oct 20 12:05 Operator: MA
Sample : 10ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 14:30 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:32:33 2020
Response via : Multiple Level Calibration



TIC: 1009Y005.D

(2) 1,4-Dioxane

1.81min 1.9222

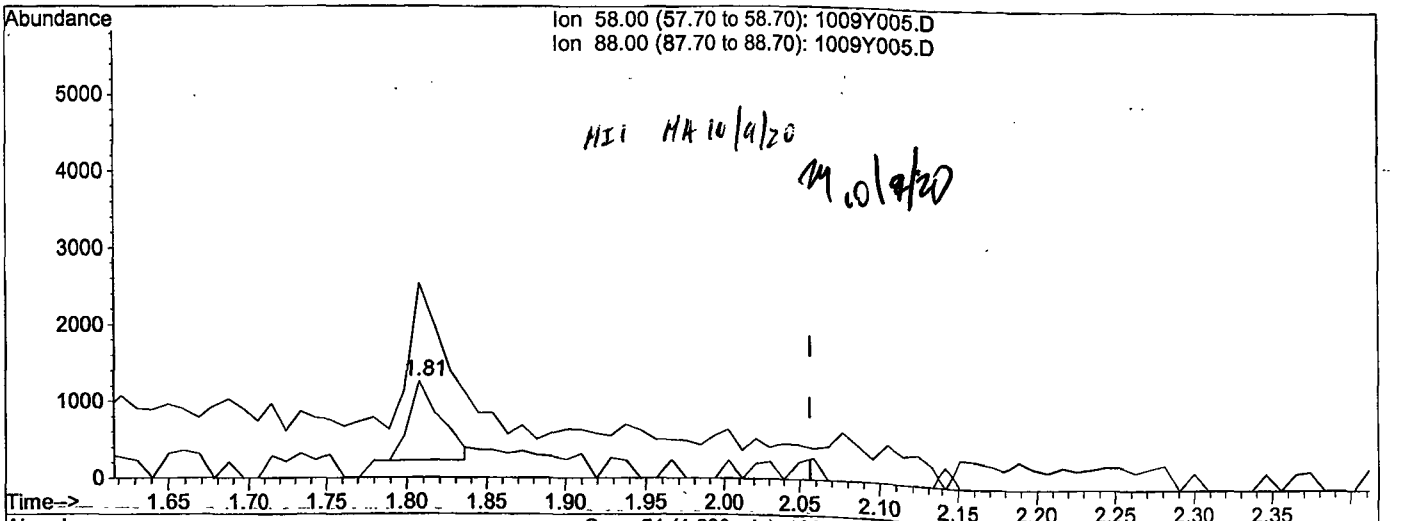
response 3725

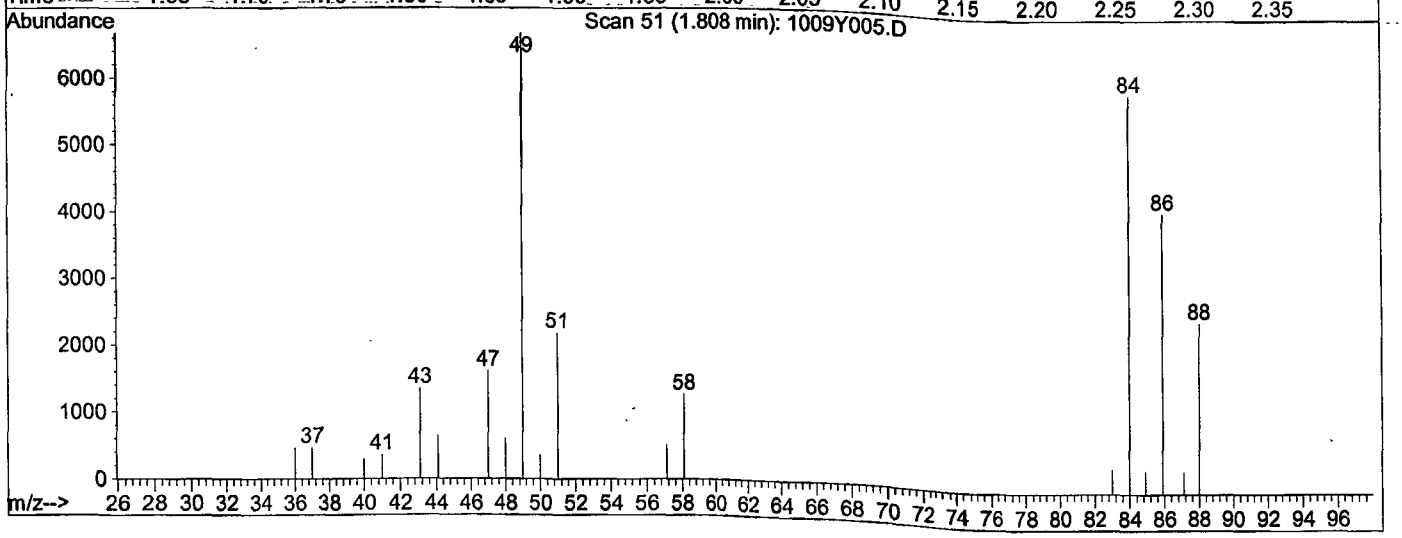
Ion	Exp%	Act%
58.00	100	100
88.00	166.30	112.21
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y005.D Vial: 5
Acq On : 9 Oct 20 12:05 Operator: MA
Sample : 10ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 14:38 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:32:33 2020
Response via : Multiple Level Calibration





TIC: 1009Y005.D

(2) 1,4-Dioxane

1.81min 0.7338 m

response 1422

Ion	Exp%	Act%
58.00	100	100
88.00	166.30	293.95#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y006.D Vial: 6
Acq On : 9 Oct 20 12:31 Operator: MA
Sample : 20ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	192915	40.00000	ppb		0.00
21) Napthalene-D8(IS)	6.53	136	808395	40.00000	ppb		0.00
41) Acenaphthene-D10(IS)	8.55	164	497350	40.00000	ppb		0.00
65) Phenanthrene-D10(IS)	10.27	188	966917	40.00000	ppb		0.00
79) Chrysene-D12(IS)	13.36	240	984198	40.00000	ppb		0.00
89) Perylene-D12(IS)	15.06	264	957201	40.00000	ppb		0.00
System Monitoring Compounds							
5) 2-Fluorophenol (S)	3.66	112	314553	43.89261	ppb		0.00
Spiked Amount 200.000			Recovery = 21.947%				
6) Phenol-D6 (S)	4.70	99	396252	43.65473	ppb		0.00
Spiked Amount 200.000			Recovery = 21.828%				
22) Nitrobenzene-D5(S)	5.73	82	174518	20.52963	ppb		0.00
Spiked Amount 100.000			Recovery = 20.530%				
46) 2-Fluorobiphenyl(S)	7.77	172	418559	20.19844	ppb		0.00
Spiked Amount 100.000			Recovery = 20.198%				
64) 2,4,6-Tribromophenol(S)	9.47	330	136914	39.16469	ppb		0.00
Spiked Amount 200.000			Recovery = 19.583%				
82) Terphenyl-D14(S)	12.15	244	557548	19.89906	ppb		0.00
Spiked Amount 100.000			Recovery = 19.899%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.81	58	3788	2.14207			89
3) n-Nitrosodimethylamine	2.03	42	59620	25.49526	ppb		95
4) Pyridine	2.05	79	160790	22.21470	ppb		95
7) Phenol	4.71	94	227978	20.92525	ppb		88
8) Aniline	4.75	93	194560	25.82165	ppb		98
9) Bis (2-chloroethyl) ether	4.83	63	88955	20.73427	ppb		85
10) 2-Chlorophenol	4.88	128	183288	20.81624	ppb		97
11) 1,3-DCB	5.05	146	200236	20.88597	ppb		97
12) 1,4-DCB	5.13	146	205197	21.07963	ppb		97
13) Benzyl alcohol	5.26	108	103551	21.54414	ppb		99
14) 1,2-DCB	5.30	146	191770	21.04788	ppb		97
15) 2-Methylphenol	5.38	107	136626	20.14745	ppb		97
16) Bis (2-chloroisopropyl) et	5.42	45	120266	21.58325	ppb		98
17) Acetophenone	5.56	105	238947	22.23684	ppb		86
18) 3&4-Methylphenol	5.55	107	373935	43.38362	ppb		92
19) n-Nitrosodi-n-propylamine	5.56	70	122321	21.71346	ppb		91
20) Hexachloroethane	5.67	117	72139	20.95073	ppb		76
23) Nitrobenzene	5.74	77	177791	20.46688	ppb		94
24) Isophorone	6.01	82	298471	19.80553	ppb		98
25) 2-Nitrophenol	6.10	139	104580	19.66992	ppb		91
26) 2,4-Dimethylphenol	6.14	122	169548	21.15570	ppb		98
27) Benzoic acid	6.24	105	60551	15.08044	ppb		97
28) Bis (2-chloroethoxy) metha	6.26	93	189163	19.98658	ppb		98
29) 2,4-Dichlorophenol	6.37	162	162407	20.12793	ppb		94
30) 1,2,4-Trichlorobenzene	6.47	180	183956	20.11413	ppb		97
31) 3,4-Dimethylphenol	6.48	107	227135	20.04854	ppb		96
32) Naphthalene	6.55	128	531374	19.96178	ppb		99
33) 4-Chloroaniline	6.62	127	230010	21.97478	ppb	#	93
34) 2,6-Dichlorophenol	6.62	162	158102	19.69350	ppb		97
35) Hexachloropropene	6.65	213	130609	19.06088	ppb		98
36) Hexachlorobutadiene	6.70	225	111431	19.91630	ppb		98
37) Caprolactum	7.00	55	54071	20.17283	ppb		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y006.D Vial: 6
Acq On : 9 Oct 20 12:31 Operator: MA
Sample : 20ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.16	107	166541	20.48704	ppb		99
39)	2-Methylnaphthalene	7.34	142	354209	19.80525	ppb		100
40)	1-Methylnaphthalene	7.45	142	366039	19.90745	ppb		99
42)	Hexachlorocyclopentadiene	7.53	237	142464	25.68209	ppb		97
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	194757	19.62656	ppb		98
44)	2,4,6-Trichlorophenol	7.67	196	129817	20.57491	ppb		99
45)	2,4,5-Trichlorophenol	7.70	196	138553	20.60769	ppb		97
47)	1,1'-Biphenyl	7.89	154	468875	19.82627	ppb		97
48)	2-Chloronaphthalene	7.91	162	370608	19.89472	ppb		96
49)	2-Nitroaniline	8.02	65	94429	20.15112	ppb		93
50)	Dimethyl phthalate	8.25	163	449533	20.32615	ppb		97
51)	2,6-DNT	8.31	165	97966	19.17130	ppb		95
52)	Acenaphthylene	8.38	152	572109	20.09471	ppb		99
53)	3-Nitroaniline	8.02	138	121616	19.58794	ppb		98
54)	Acenaphthene	8.58	154	379587	20.68739	ppb		99
55)	2,4-Dinitrophenol	8.61	184	25517	20.59204	ppb		85
56)	4-Nitrophenol	8.68	65	63627	20.08752	ppb		88
57)	Dibenzofuran	8.79	168	544443	20.57471	ppb		95
58)	2,4-DNT	8.77	165	141115	20.13078	ppb		95
59)	2,3,4,6-Tetrachlorophenol	8.93	232	113602	21.20257	ppb		92
60)	Diethyl phthalate	9.08	149	441192	20.62377	ppb		99
61)	4-Chlorophenyl phenyl ethe	9.20	204	249437	20.34966	ppb		93
62)	Fluorene	9.19	166	439128	19.70139	ppb		100
63)	4-Nitroaniline	8.49	138	104872	20.22914	ppb		95
66)	4,6-Dinitro-2-methylphenol	9.24	198	73122	15.34155	ppb		93
67)	Diphenyl amine	9.34	169	716408	39.34581	ppb		99
68)	n-Nitrosodiphenylamine	9.34	169	716408	39.34581	ppb		99
69)	1,2-Diphenylhydrazine	9.37	77	355993	18.70017	ppb		92
70)	4-Bromophenyl phenyl ether	9.76	248	140233	18.93532	ppb	#	88
71)	Hexachlorobenzene	9.82	284	152151	19.26192	ppb	#	90
72)	Atrazine	9.96	200	67395	9.98901	ppb		99
73)	Pentachlorophenol	10.05	266	97914	22.68238	ppb		97
74)	Phenanthrene	10.30	178	661795	20.16614	ppb		99
75)	Anthracene	10.36	178	672912	19.82408	ppb		100
76)	Carbazol	10.55	167	619232	20.24909	ppb		96
77)	Di-n-butylphthalate	10.99	149	734338	19.86876	ppb		99
78)	Fluoranthene	11.69	202	737851	19.42202	ppb		97
80)	Benzidine	11.85	184	233994	24.41519	ppb	#	98
81)	Pyrene	11.95	202	792842	20.45692	ppb		99
83)	Butyl benzylphthalate	12.73	149	323994	19.73389	ppb		84
84)	3,3'-Dichlorobenzidine	13.33	252	263658	20.44660	ppb	#	97
85)	Benz (a) anthracene	13.35	228	782163	19.47233	ppb		100
86)	Bis (2-ethylhexyl) phthala	13.41	149	448969	19.91516	ppb	#	93
87)	Chrysene	13.39	228	761218	20.64333	ppb		99
88)	Di-n-octylphthalate	14.15	149	725589	18.94475	ppb		95
90)	Benzo (b) fluoranthene	14.57	252	731637	18.36224	ppb		99
91)	Benzo (k) fluoranthene	14.61	252	710650	21.27676	ppb		100
92)	Benzo (a) pyrene	14.99	252	689928	19.76683	ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.74	276	749939	21.37342	ppb		99
94)	Dibenz (a,h) anthracene	16.78	278	661450	18.73302	ppb		97
95)	Benzo (g,h,i) perylene	17.24	276	658600	19.15786	ppb		98

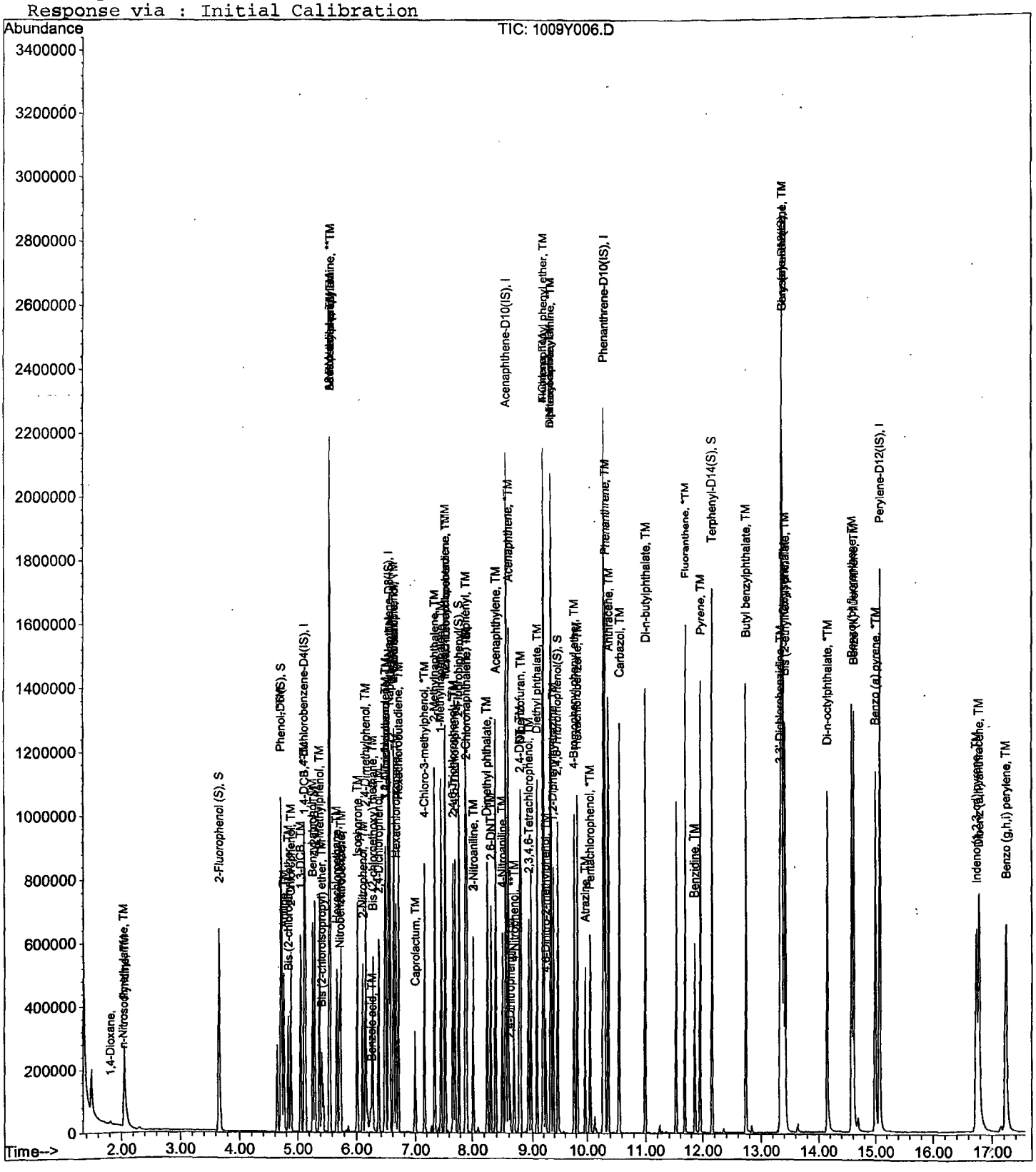
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y006.D Vial: 6
Acq On : 9 Oct 20 12:31 Operator: MA
Sample : 20ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y007.D Vial: 7
Acq On : 9 Oct 20 12:56 Operator: MA
Sample : 40ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:40 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	212035	40.00000 ppb		0.00
21) Napthalene-D8(IS)	6.53	136	854538	40.00000 ppb		0.00
41) Acenaphthene-D10(IS)	8.55	164	517005	40.00000 ppb		0.00
65) Phenanthrene-D10(IS)	10.28	188	1018808	40.00000 ppb		0.00
79) Chrysene-D12(IS)	13.37	240	1051031	40.00000 ppb		0.00
89) Perylene-D12(IS)	15.07	264	1020267	40.00000 ppb		0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.66	112	634034	80.49494 ppb		0.00
Spiked Amount 200.000			Recovery = 40.248%			
6) Phenol-D6 (S)	4.71	99	791612	79.34703 ppb		0.00
Spiked Amount 200.000			Recovery = 39.674%			
22) Nitrobenzene-D5(S)	5.73	82	352039	39.17634 ppb		0.00
Spiked Amount 100.000			Recovery = 39.176%			
46) 2-Fluorobiphenyl(S)	7.78	172	846283	39.28656 ppb		0.00
Spiked Amount 100.000			Recovery = 39.287%			
64) 2,4,6-Tribromophenol(S)	9.47	330	283940	78.13413 ppb		0.00
Spiked Amount 200.000			Recovery = 39.067%			
82) Terphenyl-D14(S)	12.15	244	1156658	38.65648 ppb		0.00
Spiked Amount 100.000			Recovery = 38.656%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.81	58	7640	3.93075		90
3) n-Nitrosodimethylamine	2.03	42	110402	42.95393 ppb		98
4) Pyridine	2.05	79	306592	38.53901 ppb		99
7) Phenol	4.72	94	463809	38.73249 ppb		96
8) Aniline	4.76	93	336320	40.61080 ppb		98
9) Bis (2-chloroethyl) ether	4.84	63	184887	39.20878 ppb		93
10) 2-Chlorophenol	4.88	128	378288	39.08852 ppb		95
11) 1,3-DCB	5.06	146	394833	37.47005 ppb		99
12) 1,4-DCB	5.13	146	403302	37.69475 ppb		97
13) Benzyl alcohol	5.26	108	207791	39.33326 ppb		92
14) 1,2-DCB	5.30	146	377953	37.74192 ppb		98
15) 2-Methylphenol	5.38	107	273697	36.72106 ppb		97
16) Bis (2-chloroisopropyl) et	5.42	45	237348	38.75413 ppb		95
17) Acetophenone	5.56	105	478394	40.50566 ppb		93
18) 3&4-Methylphenol	5.56	107	757832	79.99466 ppb		97
19) n-Nitrosodi-n-propylamine	5.57	70	246849	39.86740 ppb		98
20) Hexachloroethane	5.67	117	144939	38.29770 ppb		76
23) Nitrobenzene	5.74	77	351360	38.26364 ppb		91
24) Isophorone	6.01	82	599785	37.65063 ppb		97
25) 2-Nitrophenol	6.10	139	214038	38.08351 ppb	#	86
26) 2,4-Dimethylphenol	6.14	122	330250	38.98251 ppb		96
27) Benzoic acid	6.23	105	206981m	38.02135 ppb		98
28) Bis (2-chloroethoxy) metha	6.26	93	380455	38.02750 ppb		99
29) 2,4-Dichlorophenol	6.37	162	326752	38.30937 ppb		95
30) 1,2,4-Trichlorobenzene	6.47	180	361788	37.42257 ppb		97
31) 3,4-Dimethylphenol	6.49	107	468655	39.13310 ppb		99
32) Naphthalene	6.55	128	1064880	37.84355 ppb		99
33) 4-Chloroaniline	6.62	127	463963	41.93276 ppb		96
34) 2,6-Dichlorophenol	6.63	162	324881	38.28265 ppb		97
35) Hexachloropropene	6.65	213	264065	36.45632 ppb		97
36) Hexachlorobutadiene	6.70	225	226657	38.32340 ppb		99
37) Caprolactum	7.03	55	110677	39.06178 ppb		95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y007.D Vial: 7
Acq On : 9 Oct 20 12:56 Operator: MA
Sample : 40ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:40 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.17	107	332232	38.66266	ppb		93
39)	2-Methylnaphthalene	7.34	142	712074	37.66500	ppb		99
40)	1-Methylnaphthalene	7.46	142	747350	38.45072	ppb		98
42)	Hexachlorocyclopentadiene	7.53	237	266304	45.08437	ppb		97
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	396423	38.43061	ppb		99
44)	2,4,6-Trichlorophenol	7.67	196	266713	40.66473	ppb		96
45)	2,4,5-Trichlorophenol	7.70	196	280347	40.11223	ppb		93
47)	1,1'-Biphenyl	7.89	154	956404	38.90387	ppb		97
48)	2-Chloronaphthalene	7.91	162	757162	39.10021	ppb		97
49)	2-Nitroaniline	8.02	65	190271	39.06014	ppb		83
50)	Dimethyl phthalate	8.25	163	899127	39.10948	ppb		98
51)	2,6-DNT	8.31	165	201507	37.93445	ppb	#	81
52)	Acenaphthylene	8.38	152	1157318	39.10418	ppb		100
53)	3-Nitroaniline	8.02	138	250735	38.84905	ppb		94
54)	Acenaphthene	8.59	154	762724	39.98796	ppb		100
55)	2,4-Dinitrophenol	8.61	184	82583	34.69107	ppb		85
56)	4-Nitrophenol	8.69	65	138343	42.01550	ppb		91
57)	Dibenzofuran	8.79	168	1092529	39.71747	ppb		97
58)	2,4-DNT	8.77	165	291100	39.94817	ppb		93
59)	2,3,4,6-Tetrachlorophenol	8.93	232	233724	41.96365	ppb		94
60)	Diethyl phthalate	9.08	149	879121	39.53270	ppb		98
61)	4-Chlorophenyl phenyl ethe	9.20	204	505486	39.67096	ppb		94
62)	Fluorene	9.19	166	903585	38.99799	ppb		99
63)	4-Nitroaniline	8.50	138	215127	39.91904	ppb	#	79
66)	4,6-Dinitro-2-methylphenol	9.24	198	177892	35.42211	ppb		92
67)	Diphenyl amine	9.34	169	1471327	76.69095	ppb		100
68)	n-Nitrosodiphenylamine	9.34	169	1471327	76.69095	ppb		100
69)	1,2-Diphenylhydrazine	9.38	77	713667	35.57923	ppb	#	89
70)	4-Bromophenyl phenyl ether	9.76	248	287510	36.84446	ppb	#	87
71)	Hexachlorobenzene	9.82	284	304827	36.62479	ppb	#	84
72)	Atrazine	9.97	200	138004	19.41258	ppb		96
73)	Pentachlorophenol	10.05	266	208610	45.86440	ppb		99
74)	Phenanthrene	10.30	178	1303520	37.69762	ppb		99
75)	Anthracene	10.37	178	1387082	38.78232	ppb		99
76)	Carbazol	10.55	167	1228289	38.11970	ppb		98
77)	Di-n-butylphthalate	10.99	149	1504720	38.63913	ppb		99
78)	Fluoranthene	11.70	202	1524460	38.08366	ppb		98
80)	Benzidine	11.85	184	477549	41.16107	ppb	#	97
81)	Pyrene	11.96	202	1584435	38.28203	ppb		99
83)	Butyl benzylphthalate	12.74	149	657082	37.47677	ppb	#	79
84)	3,3'-Dichlorobenzidine	13.33	252	546556	39.69005	ppb		99
85)	Benz (a) anthracene	13.35	228	1593023	37.13724	ppb		99
86)	Bis (2-ethylhexyl) phthala	13.41	149	927574	38.52858	ppb	#	93
87)	Chrysene	13.39	228	1516346	38.50666	ppb		99
88)	Di-n-octylphthalate	14.15	149	1554499	38.00631	ppb		97
90)	Benzo (b) fluoranthene	14.57	252	1462171	34.42845	ppb		98
91)	Benzo (k) fluoranthene	14.61	252	1504454	42.25888	ppb		98
92)	Benzo (a) pyrene	14.99	252	1413745	38.00089	ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.75	276	1561010	41.73909	ppb		98
94)	Dibenz (a,h) anthracene	16.79	278	1386808	36.84822	ppb		97
95)	Benzo (g,h,i) perylene	17.25	276	1342256	36.63110	ppb		99

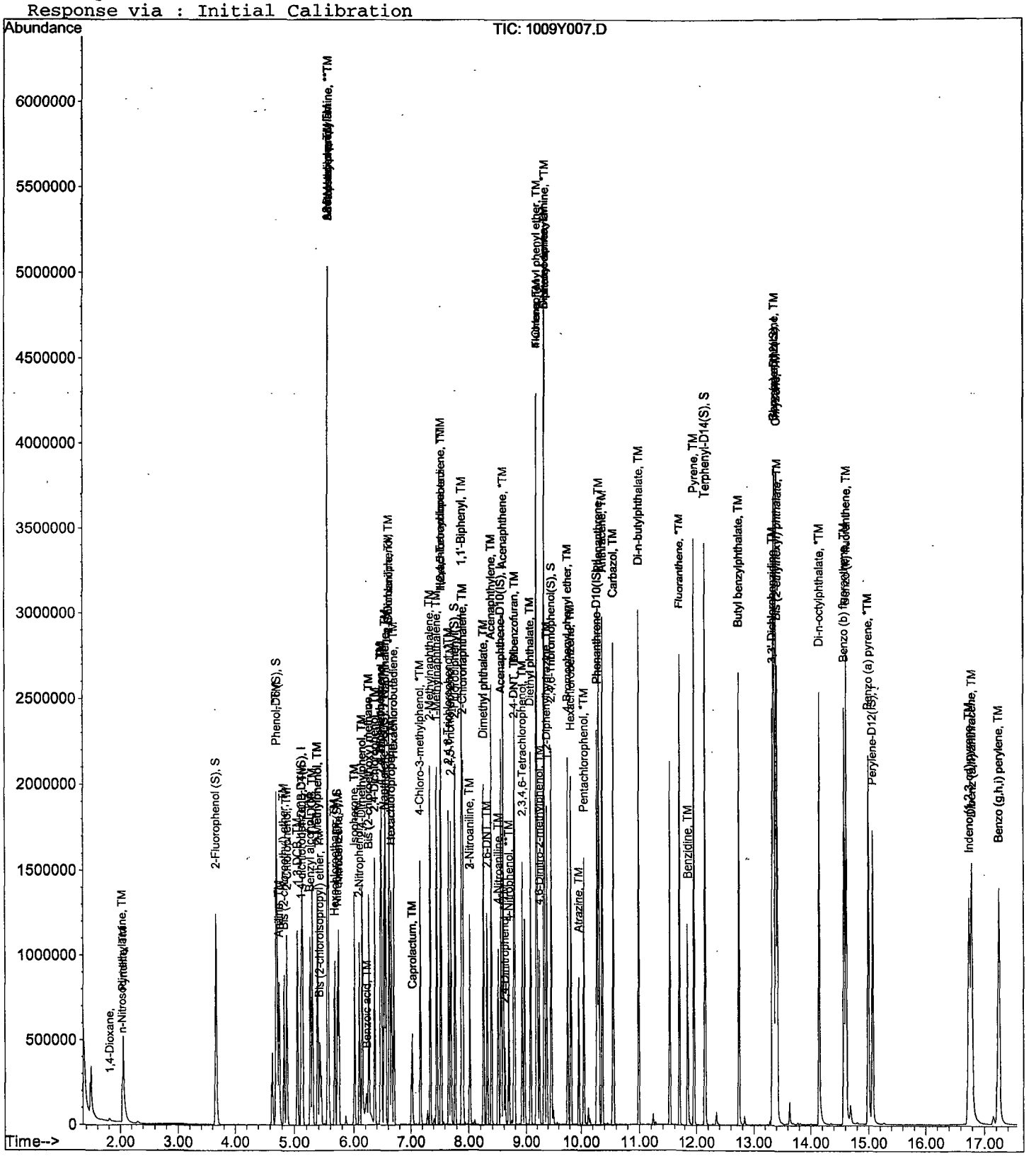
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y007.D Vial: 7
Acq On : 9 Oct 20 12:56 Operator: MA
Sample : 40ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:40 2020 Quant Results File: Y1009.RES

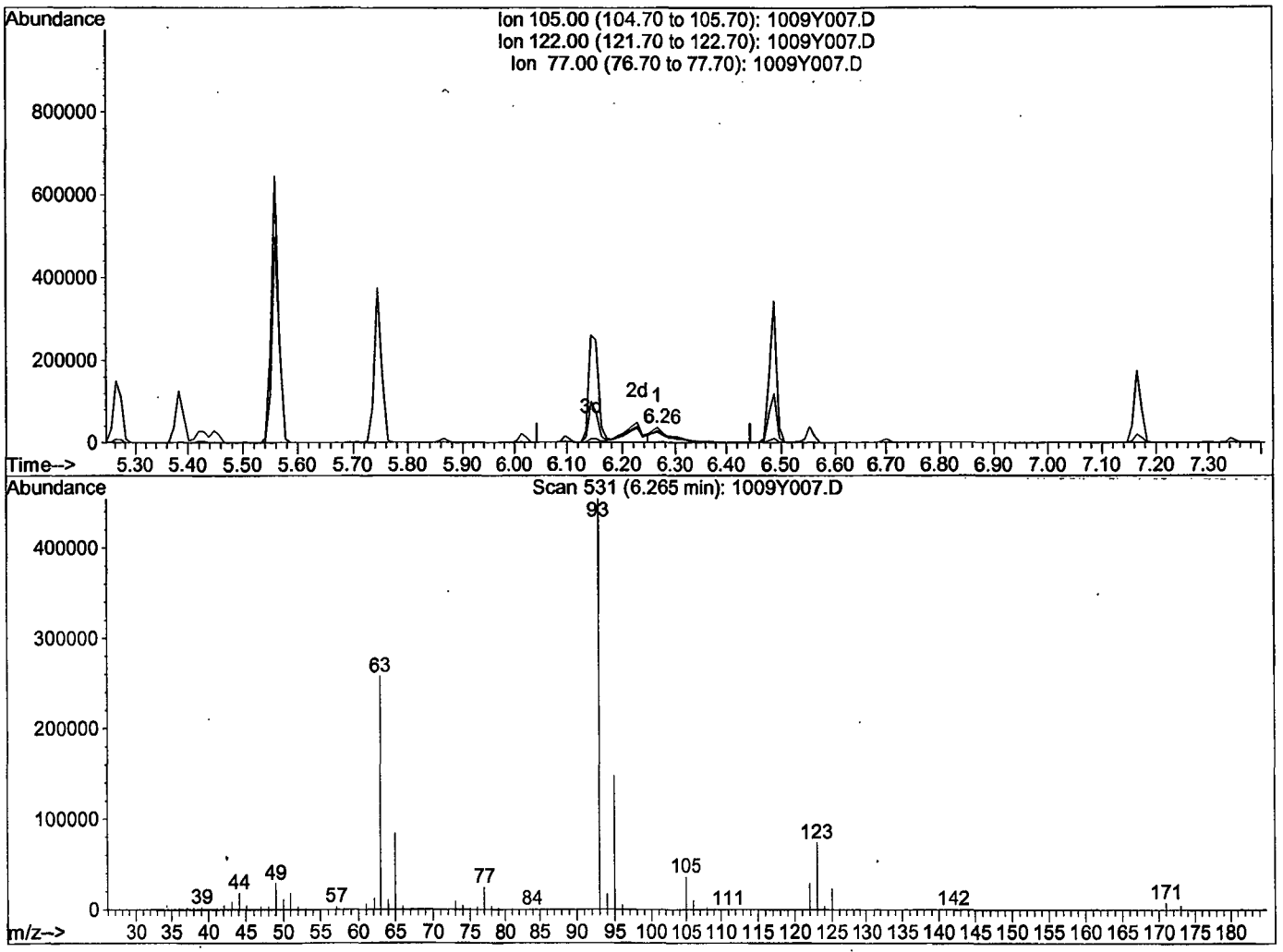
Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y007.D Vial: 7
Acq On : 9 Oct 20 12:56 Operator: MA
Sample : 40ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 14:30 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:32:33 2020
Response via : Multiple Level Calibration



TIC: 1009Y007.D

(27) Benzoic acid (TM)

6.26min 19.3185ppb

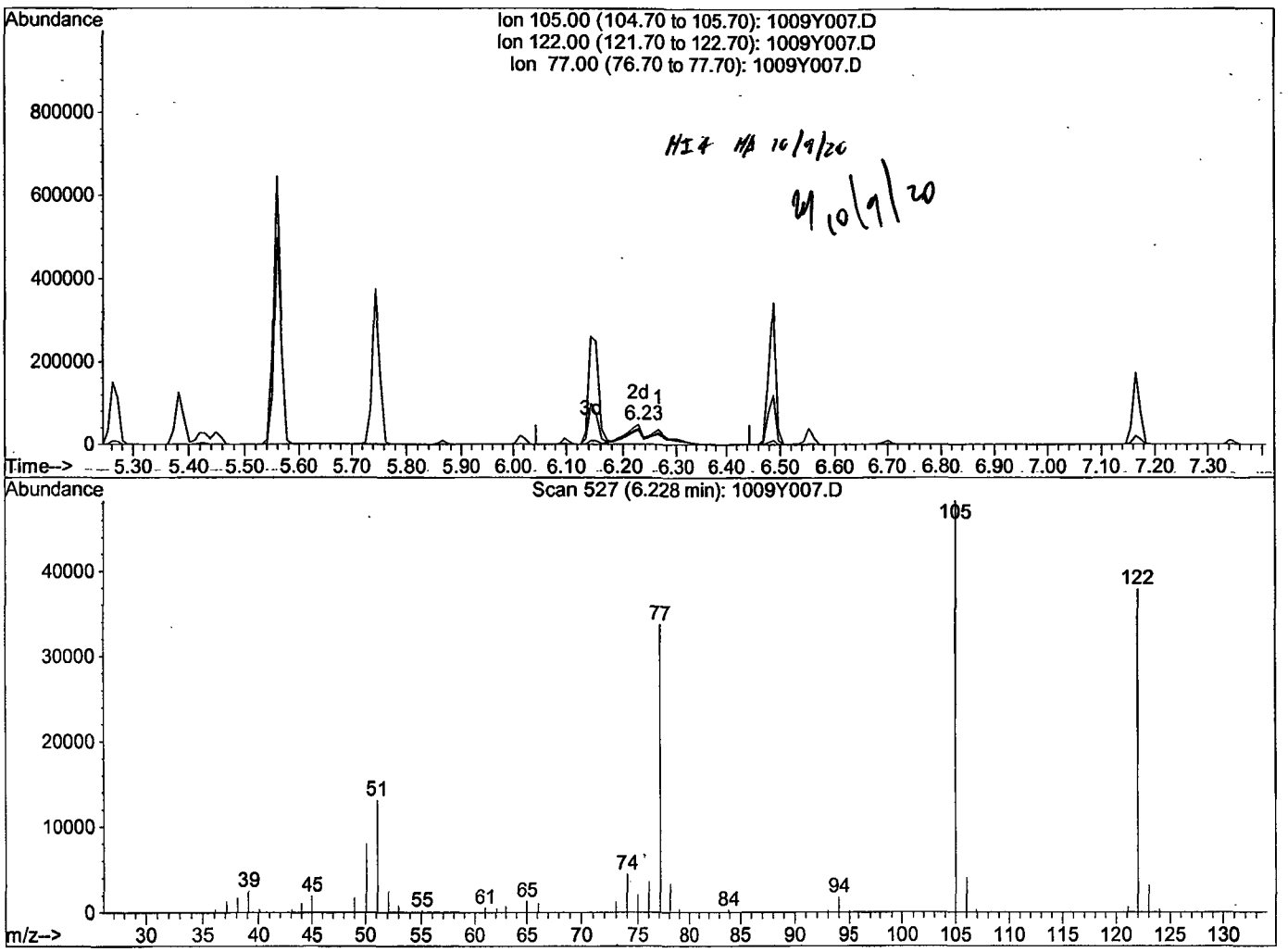
response 90420

Ion	Exp%	Act%
105.00	100	100
122.00	78.10	80.14
77.00	70.50	68.43
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y007.D Vial: 7
Acq On : 9 Oct 20 12:56 Operator: MA
Sample : 40ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 14:40 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:32:33 2020
Response via : Multiple Level Calibration



TIC: 1009Y007.D

(27) Benzoic acid (TM)

6.23min 38.0214ppb m

response 206981

Ion	Exp%	Act%
105.00	100	100
122.00	78.10	78.47
77.00	70.50	69.98
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y008.D Vial: 8
Acq On : 9 Oct 20 13:22 Operator: MA
Sample : 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.12	152	216487	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	858051	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	523185	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.28	188	1022290	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	1056215	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.07	264	1013157	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.66	112	810719	100.80965 ppb	0.00
Spiked Amount 200.000			Recovery =	50.405%	
6) Phenol-D6 (S)	4.71	99	1029543	101.07379 ppb	0.00
Spiked Amount 200.000			Recovery =	50.537%	
22) Nitrobenzene-D5(S)	5.72	82	450529	49.93145 ppb	0.00
Spiked Amount 100.000			Recovery =	49.931%	
46) 2-Fluorobiphenyl(S)	7.78	172	1089455	49.97781 ppb	0.00
Spiked Amount 100.000			Recovery =	49.978%	
64) 2,4,6-Tribromophenol(S)	9.47	330	376831	102.47083 ppb	0.00
Spiked Amount 200.000			Recovery =	51.236%	
82) Terphenyl-D14(S)	12.16	244	1512475	50.30009 ppb	0.00
Spiked Amount 100.000			Recovery =	50.300%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.81	58	9503	4.78871	100
3) n-Nitrosodimethylamine	2.03	42	149986	57.15476 ppb	100
4) Pyridine	2.05	79	412325	50.76392 ppb	100
7) Phenol	4.73	94	607510	49.68959 ppb	100
8) Aniline	4.76	93	462784	54.73220 ppb	100
9) Bis (2-chloroethyl) ether	4.83	63	239837	49.81600 ppb	100
10) 2-Chlorophenol	4.89	128	492229	49.81609 ppb	100
11) 1,3-DCB	5.06	146	540948	50.28079 ppb	100
12) 1,4-DCB	5.14	146	544897	49.88162 ppb	100
13) Benzyl alcohol	5.27	108	277085	51.37147 ppb	100
14) 1,2-DCB	5.30	146	509402	49.82216 ppb	100
15) 2-Methylphenol	5.39	107	368851	48.46987 ppb	100
16) Bis (2-chloroisopropyl) et	5.43	45	311077	49.74805 ppb	100
17) Acetophenone	5.57	105	642698	53.29821 ppb	100
18) 3&4-Methylphenol	5.57	107	1047328	108.27957 ppb	100
19) n-Nitrosodi-n-propylamine	5.58	70	323078	51.10573 ppb	100
20) Hexachloroethane	5.68	117	194952	50.45345 ppb	100
23) Nitrobenzene	5.75	77	468128	50.77114 ppb	100
24) Isophorone	6.02	82	813175	50.83689 ppb	100
25) 2-Nitrophenol	6.10	139	289105	51.22948 ppb	100
26) 2,4-Dimethylphenol	6.15	122	442162	51.97885 ppb	100
27) Benzoic acid	6.24	105	299244	52.62886 ppb	100
28) Bis (2-chloroethoxy) metha	6.26	93	507198	50.48824 ppb	100
29) 2,4-Dichlorophenol	6.36	162	434049	50.68083 ppb	100
30) 1,2,4-Trichlorobenzene	6.47	180	487464	50.21579 ppb	100
31) 3,4-Dimethylphenol	6.49	107	602770	50.12575 ppb	100
32) Naphthalene	6.56	128	1419716	50.24709 ppb	100
33) 4-Chloroaniline	6.62	127	596438	53.68509 ppb	100
34) 2,6-Dichlorophenol	6.62	162	423025	49.64346 ppb	100
35) Hexachloropropene	6.66	213	368550	50.67301 ppb	100
36) Hexachlorobutadiene	6.70	225	298371	50.24233 ppb	100
37) Caprolactum	7.03	55	141614	49.77590 ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y008.D Vial: 8
Acq On : 9 Oct 20 13:22 Operator: MA
Sample : 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
38) 4-Chloro-3-methylphenol	7.17	107	446433	51.73981 ppb	100
39) 2-Methylnaphthalene	7.35	142	963880	50.77549 ppb	100
40) 1-Methylnaphthalene	7.46	142	999858	51.23150 ppb	100
42) Hexachlorocyclopentadiene	7.53	237	363392	60.31529 ppb	100
43) 1,2,4,5-Tetrachlorobenzene	7.53	216	532541	51.01654 ppb	100
44) 2,4,6-Trichlorophenol	7.67	196	360572	54.32568 ppb	100
45) 2,4,5-Trichlorophenol	7.71	196	364113	51.48213 ppb	100
47) 1,1'-Biphenyl	7.89	154	1244453	50.02296 ppb	100
48) 2-Chloronaphthalene	7.91	162	1001133	51.08831 ppb	100
49) 2-Nitroaniline	8.03	65	253004	51.32489 ppb	100
50) Dimethyl phthalate	8.25	163	1185465	50.95528 ppb	100
51) 2,6-DNT	8.31	165	274265	51.02153 ppb	100
52) Acenaphthylene	8.39	152	1549108	51.72394 ppb	100
53) 3-Nitroaniline	8.03	138	337593	51.68903 ppb	100
54) Acenaphthene	8.59	154	1047109	54.24918 ppb	100
55) 2,4-Dinitrophenol	8.62	184	129461	46.09672 ppb	100
56) 4-Nitrophenol	8.69	65	191680	57.52659 ppb	100
57) Dibenzofuran	8.79	168	1433529	51.49850 ppb	100
58) 2,4-DNT	8.78	165	384010	52.07589 ppb	100
59) 2,3,4,6-Tetrachlorophenol	8.93	232	314021	55.71448 ppb	100
60) Diethyl phthalate	9.08	149	1167645	51.88694 ppb	100
61) 4-Chlorophenyl phenyl ethe	9.20	204	668203	51.82168 ppb	100
62) Fluorene	9.19	166	1209118	51.56812 ppb	100
63) 4-Nitroaniline	8.50	138	276752	50.74759 ppb	100
66) 4,6-Dinitro-2-methylphenol	9.25	198	253948	50.39425 ppb	100
67) Diphenyl amine	9.34	169	1971388	102.40596 ppb	100
68) n-Nitrosodiphenylamine	9.34	169	1971388	102.40596 ppb	100
69) 1,2-Diphenylhydrazine	9.38	77	944276	46.91569 ppb	100
70) 4-Bromophenyl phenyl ether	9.77	248	387104	49.43848 ppb	100
71) Hexachlorobenzene	9.83	284	421290	50.44535 ppb	100
72) Atrazine	9.97	200	182289	25.55467 ppb	100
73) Pentachlorophenol	10.05	266	285558	62.56813 ppb	100
74) Phenanthrene	10.31	178	1753039	50.52497 ppb	100
75) Anthracene	10.37	178	1815340	50.58338 ppb	100
76) Carbazol	10.55	167	1623543	50.21471 ppb	100
77) Di-n-butylphthalate	10.99	149	1976453	50.57972 ppb	100
78) Fluoranthene	11.69	202	2036242	50.69560 ppb	100
80) Benzidine	11.86	184	615350	51.07485 ppb	100
81) Pyrene	11.95	202	2097962	50.44072 ppb	100
83) Butyl benzylphthalate	12.74	149	900332	51.09854 ppb	100
84) 3,3'-Dichlorobenzidine	13.33	252	709576	51.27541 ppb	100
85) Benz (a) anthracene	13.36	228	2138614	49.61159 ppb	100
86) Bis (2-ethylhexyl) phthala	13.42	149	1255280	51.88457 ppb	100
87) Chrysene	13.39	228	2029488	51.28463 ppb	100
88) Di-n-octylphthalate	14.14	149	2084175	50.70638 ppb	100
90) Benzo (b) fluoranthene	14.58	252	2061658	48.88471 ppb	100
91) Benzo (k) fluoranthene	14.62	252	1871096	52.92638 ppb	100
92) Benzo (a) pyrene	15.00	252	1897839	51.37113 ppb	100
93) Indeno (1,2,3-cd) pyrene	16.75	276	2098572	56.50648 ppb	100
94) Dibenz (a,h) anthracene	16.79	278	1855050	49.63555 ppb	100
95) Benzo (g,h,i) perylene	17.25	276	1809092	49.71785 ppb	100

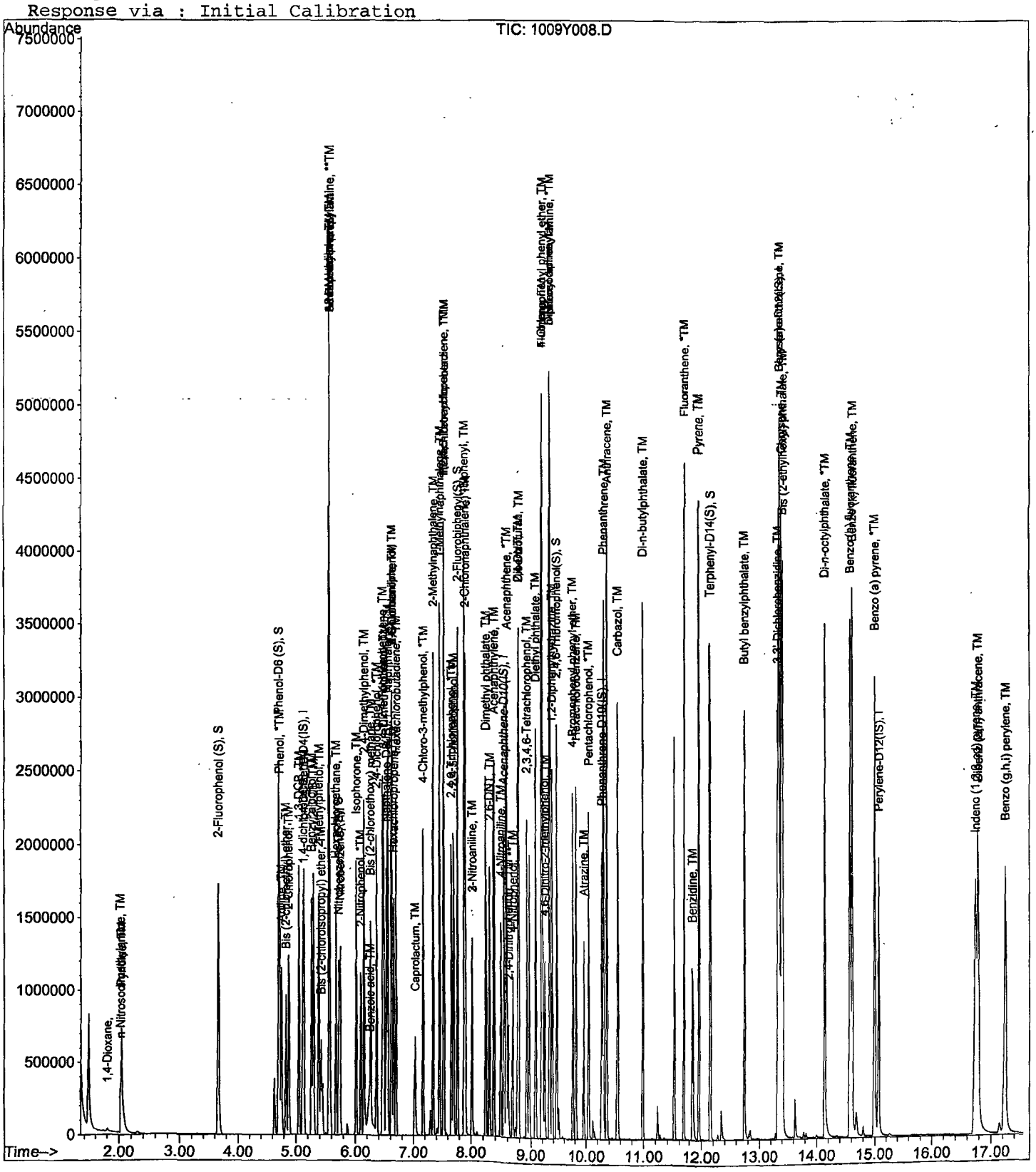
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y008.D Vial: 8
Acq On : 9 Oct 20 13:22 Operator: MA
Sample : 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y009.D Vial: 9
Acq On : 9 Oct 20 13:48 Operator: MA
Sample : 60ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.12	152	216571	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.54	136	878795	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	534725	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.28	188	1053468	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.37	240	1089141	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.07	264	1050067	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.66	112	1008016	125.29412 ppb	0.00
Spiked Amount 200.000			Recovery =	62.647%	
6) Phenol-D6 (S)	4.72	99	1279112	125.52613 ppb	0.00
Spiked Amount 200.000			Recovery =	62.763%	
22) Nitrobenzene-D5(S)	5.73	82	558172	60.40112 ppb	0.00
Spiked Amount 100.000			Recovery =	60.401%	
46) 2-Fluorobiphenyl(S)	7.78	172	1364427	61.24110 ppb	0.00
Spiked Amount 100.000			Recovery =	61.241%	
64) 2,4,6-Tribromophenol(S)	9.47	330	469118	124.81321 ppb	0.00
Spiked Amount 200.000			Recovery =	62.407%	
82) Terphenyl-D14(S)	12.15	244	1907032	61.50448 ppb	0.00
Spiked Amount 100.000			Recovery =	61.504%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.80	58	11498	5.79178	97
3) n-Nitrosodimethylamine	2.03	42	191741	73.03789 ppb	92
4) Pyridine	2.05	79	518538	63.81571 ppb	97
7) Phenol	4.73	94	748099	61.16494 ppb	90
8) Aniline	4.75	93	519488	61.41460 ppb	100
9) Bis (2-chloroethyl) ether	4.84	63	297281	61.72361 ppb	93
10) 2-Chlorophenol	4.88	128	615188	62.23602 ppb	97
11) 1,3-DCB	5.05	146	637943	59.27342 ppb	97
12) 1,4-DCB	5.13	146	653294	59.78144 ppb	97
13) Benzyl alcohol	5.26	108	342612	63.49552 ppb	94
14) 1,2-DCB	5.30	146	622802	60.88965 ppb	95
15) 2-Methylphenol	5.38	107	451461	59.30246 ppb	97
16) Bis (2-chloroisopropyl) et	5.42	45	380207	60.77988 ppb	99
17) Acetophenone	5.56	105	792795	65.72008 ppb	97
18) 3&4-Methylphenol	5.56	107	1271853	131.44142 ppb	95
19) n-Nitrosodi-n-propylamine	5.57	70	399356	63.14718 ppb	92
20) Hexachloroethane	5.67	117	234581	60.68586 ppb	87
23) Nitrobenzene	5.75	77	569847	60.34427 ppb	90
24) Isophorone	6.02	82	984676	60.10545 ppb	98
25) 2-Nitrophenol	6.10	139	357079	61.78090 ppb	89
26) 2,4-Dimethylphenol	6.15	122	544911	62.54555 ppb	97
27) Benzoic acid	6.27	105	385661	64.98344 ppb	95
28) Bis (2-chloroethoxy) metha	6.27	93	628272	61.06410 ppb	98
29) 2,4-Dichlorophenol	6.37	162	544386	62.06367 ppb	97
30) 1,2,4-Trichlorobenzene	6.47	180	598326	60.18124 ppb	96
31) 3,4-Dimethylphenol	6.49	107	762165	61.88477 ppb	99
32) Naphthalene	6.55	128	1729992	59.78318 ppb	99
33) 4-Chloroaniline	6.62	127	754065	66.27087 ppb	96
34) 2,6-Dichlorophenol	6.63	162	541705	62.07037 ppb	97
35) Hexachloropropene	6.66	213	447295	60.04818 ppb	99
36) Hexachlorobutadiene	6.70	225	369578	60.76379 ppb	99
37) Caprolactum	7.04	55	181238	62.19962 ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y009.D Vial: 9
Acq On : 9 Oct 20 13:48 Operator: MA
Sample : 60ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.18	107	559643	63.32936	ppb		95
39)	2-Methylnaphthalene	7.34	142	1177796	60.57965	ppb		99
40)	1-Methylnaphthalene	7.45	142	1234148	61.74353	ppb		99
42)	Hexachlorocyclopentadiene	7.53	237	516096	83.27665	ppb		99
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	668403	62.65001	ppb		98
44)	2,4,6-Trichlorophenol	7.67	196	440643	64.95683	ppb		97
45)	2,4,5-Trichlorophenol	7.71	196	470012	65.02106	ppb	#	91
47)	1,1'-Biphenyl	7.89	154	1591238	62.58220	ppb		98
48)	2-Chloronaphthalene	7.91	162	1245206	62.17213	ppb		97
49)	2-Nitroaniline	8.02	65	315928	62.70664	ppb		81
50)	Dimethyl phthalate	8.25	163	1479647	62.22764	ppb		99
51)	2,6-DNT	8.32	165	349882	63.68387	ppb		86
52)	Acenaphthylene	8.38	152	1881817	61.47692	ppb		99
53)	3-Nitroaniline	8.02	138	423264	63.40756	ppb		92
54)	Acenaphthene	8.59	154	1310275	66.41842	ppb		99
55)	2,4-Dinitrophenol	8.62	184	182908	58.39930	ppb		91
56)	4-Nitrophenol	8.70	65	246481	72.37691	ppb		96
57)	Dibenzofuran	8.79	168	1811009	63.65514	ppb		97
58)	2,4-DNT	8.78	165	497859	66.05799	ppb		95
59)	2,3,4,6-Tetrachlorophenol	8.93	232	395509	68.65791	ppb		96
60)	Diethyl phthalate	9.08	149	1460883	63.51663	ppb		97
61)	4-Chlorophenyl phenyl ethe	9.20	204	843816	64.02884	ppb		92
62)	Fluorene	9.19	166	1504737	62.79109	ppb		100
63)	4-Nitroaniline	8.50	138	347408	62.32887	ppb		92
66)	4,6-Dinitro-2-methylphenol	9.26	198	331067	63.75362	ppb		96
67)	Diphenyl amine	9.34	169	2444378	123.21803	ppb		99
68)	n-Nitrosodiphenylamine	9.34	169	2444378	123.21803	ppb		99
69)	1,2-Diphenylhydrazine	9.39	77	1175442	56.67260	ppb		91
70)	4-Bromophenyl phenyl ether	9.77	248	490153	60.74659	ppb	#	88
71)	Hexachlorobenzene	9.82	284	519777	60.39622	ppb	#	83
72)	Atrazine	9.97	200	229178	31.17709	ppb		96
73)	Pentachlorophenol	10.05	266	370963	78.87552	ppb		97
74)	Phenanthrene	10.30	178	2171501	60.73335	ppb		100
75)	Anthracene	10.37	178	2316830	62.64649	ppb		99
76)	Carbazol	10.56	167	2027916	60.86531	ppb		98
77)	Di-n-butylphthalate	10.99	149	2587194	64.24978	ppb		99
78)	Fluoranthene	11.70	202	2578280	62.29077	ppb		98
80)	Benzidine	11.85	184	797359	62.63243	ppb	#	98
81)	Pyrene	11.96	202	2633995	61.41393	ppb		99
83)	Butyl benzylphthalate	12.74	149	1122344	61.77318	ppb	#	81
84)	3,3'-Dichlorobenzidine	13.33	252	913703	64.03000	ppb		98
85)	Benz (a) anthracene	13.35	228	2708309	60.92803	ppb		100
86)	Bis (2-ethylhexyl) phthala	13.41	149	1563586	62.67403	ppb	#	94
87)	Chrysene	13.40	228	2513650	61.59902	ppb		99
88)	Di-n-octylphthalate	14.15	149	2692154	63.51796	ppb		96
90)	Benzo (b) fluoranthene	14.58	252	2761032	63.16662	ppb		99
91)	Benzo (k) fluoranthene	14.62	252	2236355	61.03467	ppb		99
92)	Benzo (a) pyrene	15.00	252	2399690	62.67216	ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.76	276	2670757	69.38547	ppb		99
94)	Dibenz (a,h) anthracene	16.80	278	2342060	60.46373	ppb		97
95)	Benzo (g,h,i) perylene	17.26	276	2296516	60.89490	ppb		100

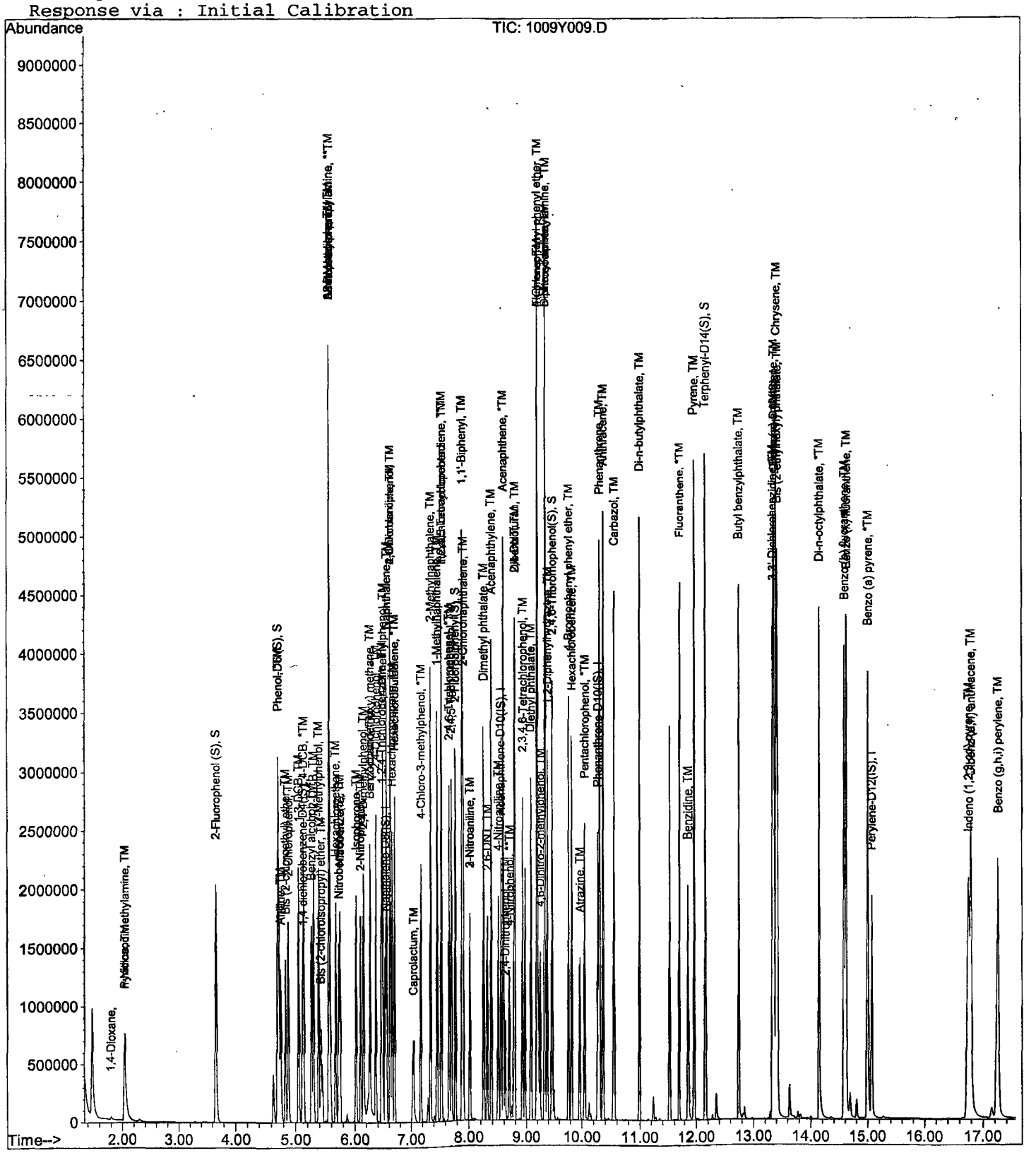
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y009.D Vial: 9
Acq On : 9 Oct 20 13:48 Operator: MA
Sample : 60ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:30 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y010.D Vial: 10
Acq On : 9 Oct 20 14:13 Operator: MA
Sample : 80ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:31 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	199908	40.00000 ppb		0.00
21) Napthalene-D8(IS)	6.53	136	822746	40.00000 ppb		0.00
41) Acenaphthene-D10(IS)	8.55	164	511195	40.00000 ppb		0.00
65) Phenanthrene-D10(IS)	10.27	188	992166	40.00000 ppb		0.00
79) Chrysene-D12(IS)	13.37	240	1029591	40.00000 ppb		0.00
89) Perylene-D12(IS)	15.07	264	1003036	40.00000 ppb		0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.66	112	1307580	176.07661 ppb		0.00
Spiked Amount 200.000				Recovery = 88.039%		
6) Phenol-D6 (S)	4.72	99	1668447	177.38141 ppb		0.01
Spiked Amount 200.000				Recovery = 88.691%		
22) Nitrobenzene-D5(S)	5.73	82	724439	83.73375 ppb		0.00
Spiked Amount 100.000				Recovery = 83.734%		
46) 2-Fluorobiphenyl(S)	7.78	172	1772965	83.24089 ppb		0.00
Spiked Amount 100.000				Recovery = 83.241%		
64) 2,4,6-Tribromophenol(S)	9.48	330	664642	184.97376 ppb		0.00
Spiked Amount 200.000				Recovery = 92.487%		
82) Terphenyl-D14(S)	12.16	244	2566414	87.55780 ppb		0.00
Spiked Amount 100.000				Recovery = 87.558%		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.80	58	16101	8.78643		93
3) n-Nitrosodimethylamine	2.03	42	245706	101.39560 ppb		98
4) Pyridine	2.05	79	674374	89.91207 ppb		97
7) Phenol	4.73	94	946942	83.87586 ppb		94
8) Aniline	4.76	93	595648	76.28794 ppb		100
9) Bis (2-chloroethyl) ether	4.83	63	381747	85.86772 ppb		97
10) 2-Chlorophenol	4.88	128	777140	85.17327 ppb		94
11) 1,3-DCB	5.06	146	823911	82.93322 ppb		99
12) 1,4-DCB	5.14	146	836229	82.89972 ppb		99
13) Benzyl alcohol	5.27	108	435239	87.38531 ppb		97
14) 1,2-DCB	5.30	146	779749	82.58828 ppb		98
15) 2-Methylphenol	5.39	107	577025	82.11400 ppb		97
16) Bis (2-chloroisopropyl) et	5.43	45	483628	83.75703 ppb		99
17) Acetophenone	5.57	105	1004527	90.21296 ppb		97
18) 3&4-Methylphenol	5.57	107	1626995	182.15944 ppb		97
19) n-Nitrosodi-n-propylamine	5.60	70	504518	86.42523 ppb		97
20) Hexachloroethane	5.67	117	301343	84.45510 ppb		76
23) Nitrobenzene	5.75	77	744324	84.19022 ppb		97
24) Isophorone	6.02	82	1271610	82.90795 ppb		96
25) 2-Nitrophenol	6.11	139	461361	85.26142 ppb		98
26) 2,4-Dimethylphenol	6.15	122	688220	84.37619 ppb		97
27) Benzoic acid	6.28	105	470524	83.22559 ppb		92
28) Bis (2-chloroethoxy) metha	6.26	93	802093	83.26927 ppb		100
29) 2,4-Dichlorophenol	6.37	162	698975	85.11654 ppb		98
30) 1,2,4-Trichlorobenzene	6.47	180	757691	81.40239 ppb		97
31) 3,4-Dimethylphenol	6.49	107	976963	84.72951 ppb		99
32) Naphthalene	6.56	128	2249726	83.03981 ppb		100
33) 4-Chloroaniline	6.63	127	917641	86.14072 ppb	#	92
34) 2,6-Dichlorophenol	6.63	162	689918	84.43855 ppb		99
35) Hexachloropropene	6.65	213	576739	82.70026 ppb		98
36) Hexachlorobutadiene	6.70	225	468931	82.35111 ppb		99
37) Caprolactum	7.05	55	228208	83.65485 ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y010.D Vial: 10
Acq On : 9 Oct 20 14:13 Operator: MA
Sample : 80ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:31 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:30:22 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.17	107	714169	86.32107	ppb		93
39)	2-Methylnaphthalene	7.35	142	1555911	85.47975	ppb		100
40)	1-Methylnaphthalene	7.46	142	1569961	83.89477	ppb		100
42)	Hexachlorocyclopentadiene	7.54	237	481920	81.37334	ppb		98
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	851260	83.46201	ppb		99
44)	2,4,6-Trichlorophenol	7.67	196	579509	89.35977	ppb		96
45)	2,4,5-Trichlorophenol	7.71	196	595401	86.15859	ppb		96
47)	1,1'-Biphenyl	7.89	154	2005696	82.51344	ppb		99
48)	2-Chloronaphthalene	7.91	162	1580519	82.54641	ppb		98
49)	2-Nitroaniline	8.03	65	410286	85.18361	ppb		93
50)	Dimethyl phthalate	8.26	163	1938212	85.26492	ppb		98
51)	2,6-DNT	8.32	165	439964	83.76622	ppb		92
52)	Acenaphthylene	8.39	152	2480932	84.78001	ppb		100
53)	3-Nitroaniline	8.03	138	542486	85.00846	ppb		97
54)	Acenaphthene	8.59	154	1597192	84.68902	ppb		99
55)	2,4-Dinitrophenol	8.62	184	244773	76.18312	ppb		92
56)	4-Nitrophenol	8.70	65	312094	95.86188	ppb		90
57)	Dibenzofuran	8.79	168	2310205	84.93903	ppb		99
58)	2,4-DNT	8.78	165	635264	88.16924	ppb		90
59)	2,3,4,6-Tetrachlorophenol	8.93	232	513386	93.22279	ppb		99
60)	Diethyl phthalate	9.09	149	1863223	84.73850	ppb		98
61)	4-Chlorophenyl phenyl ethe	9.20	204	1101504	87.42947	ppb		97
62)	Fluorene	9.19	166	1957666	85.45154	ppb		99
63)	4-Nitroaniline	8.51	138	444753	83.46650	ppb	#	73
66)	4,6-Dinitro-2-methylphenol	9.26	198	429156	87.74880	ppb	#	87
67)	Diphenyl amine	9.35	169	3170279	169.68381	ppb		100
68)	n-Nitrosodiphenylamine	9.35	169	3170279	169.68381	ppb		100
69)	1,2-Diphenylhydrazine	9.38	77	1513036	77.45656	ppb		100
70)	4-Bromophenyl phenyl ether	9.77	248	638815	84.06251	ppb		98
71)	Hexachlorobenzene	9.83	284	684444	84.44378	ppb		99
72)	Atrazine	9.97	200	286672	41.40806	ppb		99
73)	Pentachlorophenol	10.05	266	481637	108.73478	ppb		99
74)	Phenanthrene	10.31	178	2802193	83.21513	ppb		100
75)	Anthracene	10.37	178	2915092	83.69353	ppb		100
76)	Carbazol	10.56	167	2679776	85.39951	ppb		96
77)	Di-n-butylphthalate	10.99	149	3209640	84.63227	ppb		100
78)	Fluoranthene	11.69	202	3251828	83.41770	ppb		99
80)	Benzidine	11.85	184	891315	72.96077	ppb	#	96
81)	Pyrene	11.95	202	3422797	84.42138	ppb		100
83)	Butyl benzylphthalate	12.74	149	1466865	85.40504	ppb		99
84)	3,3'-Dichlorobenzidine	13.34	252	1151082	85.33046	ppb	#	95
85)	Benz (a) anthracene	13.36	228	3475329	82.70547	ppb		100
86)	Bis (2-ethylhexyl) phthala	13.42	149	2058241	87.27331	ppb		98
87)	Chrysene	13.40	228	3362601	87.16933	ppb		100
88)	Di-n-octylphthalate	14.15	149	3486511	87.01760	ppb		99
90)	Benzo (b) fluoranthene	14.58	252	3298763	79.00740	ppb		98
91)	Benzo (k) fluoranthene	14.62	252	3148776	89.96594	ppb		98
92)	Benzo (a) pyrene	15.01	252	3081952	84.26473	ppb		98
93)	Indeno (1,2,3-cd) pyrene	16.76	276	3443782	93.66348	ppb		100
94)	Dibenz (a,h) anthracene	16.81	278	3035076	82.02892	ppb		96
95)	Benzo (g,h,i) perylene	17.27	276	2946677	81.79833	ppb		97

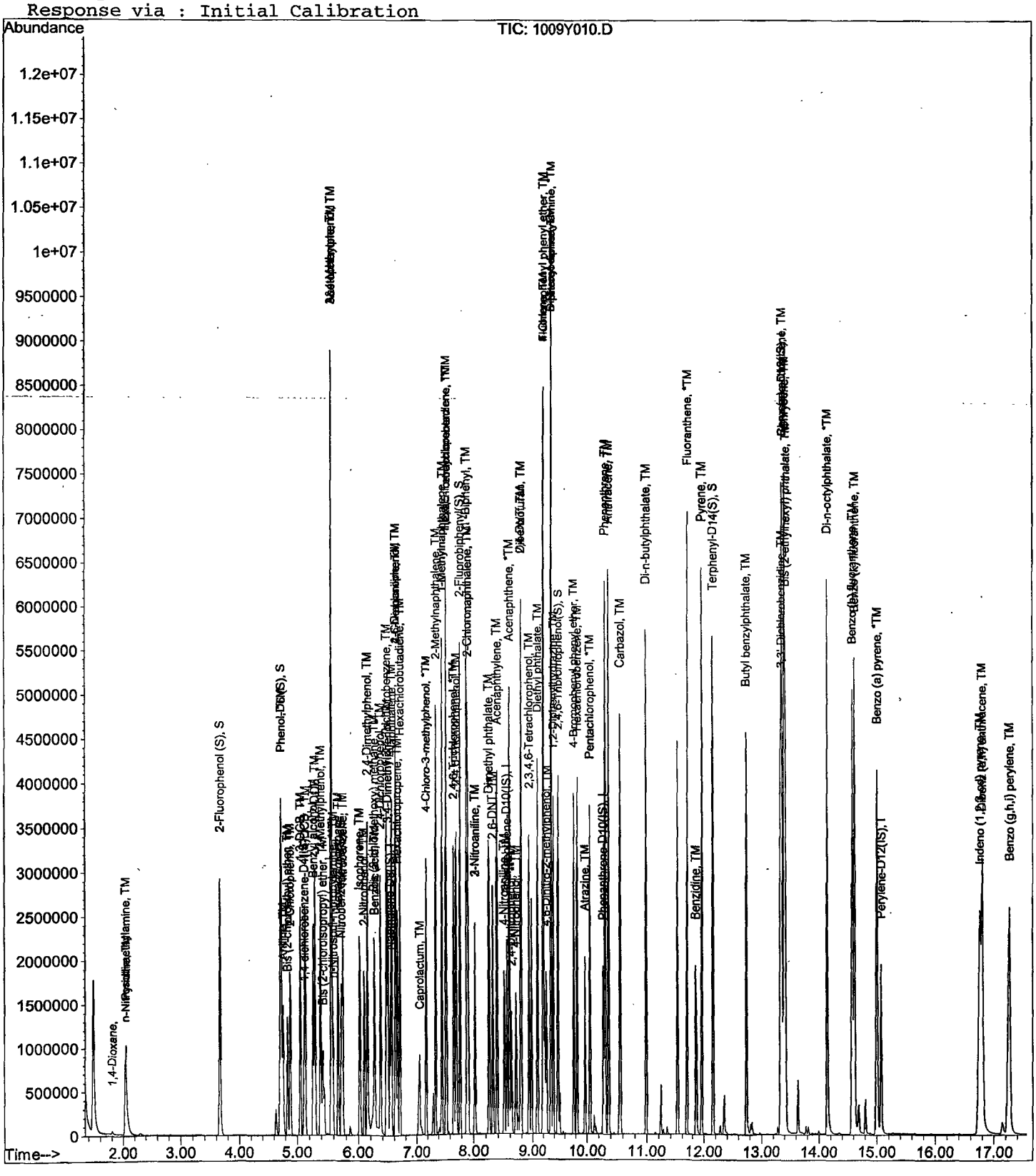
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y010.D Vial: 10
Acq On : 9 Oct 20 14:13 Operator: MA
Sample : 80ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:31 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y011.D Vial: 11
Acq On : 9 Oct 20 14:38 Operator: MA
Sample : 100ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:48 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:48:37 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.12	152	234180	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	972023	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.56	164	590025	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.28	188	1196320	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.38	240	1245991	40.00000 ppb	0.02
89) Perylene-D12(IS)	15.08	264	1198755	40.00000 ppb	0.02
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.67	112	1936097	213.31149 ppb	0.01
Spiked Amount 200.000				Recovery = 106.656%	
6) Phenol-D6 (S)	4.73	99	2450115	214.12626 ppb	0.02
Spiked Amount 200.000				Recovery = 107.063%	
22) Nitrobenzene-D5(S)	5.73	82	1058683	104.12375 ppb	0.01
Spiked Amount 100.000				Recovery = 104.124%	
46) 2-Fluorobiphenyl(S)	7.78	172	2603920	104.70949 ppb	0.00
Spiked Amount 100.000				Recovery = 104.709%	
64) 2,4,6-Tribromophenol(S)	9.49	330	1038078	243.20617 ppb	0.01
Spiked Amount 200.000				Recovery = 121.603%	
82) Terphenyl-D14(S)	12.16	244	3840871	106.94020 ppb	0.00
Spiked Amount 100.000				Recovery = 106.940%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.81	58	18198	8.66444	96
3) n-Nitrosodimethylamine	2.03	42	339228	104.48193 ppb	99
4) Pyridine	2.05	79	921056	101.43260 ppb	98
7) Phenol	4.74	94	1379601	105.26624 ppb	88
8) Aniline	4.76	93	764224	75.33429 ppb	100
9) Bis (2-chloroethyl) ether	4.84	63	542689	102.47863 ppb	97
10) 2-Chlorophenol	4.89	128	1124033	103.02814 ppb	97
11) 1,3-DCB	5.06	146	1160721	99.54557 ppb	97
12) 1,4-DCB	5.14	146	1193185	100.25418 ppb	98
13) Benzyl alcohol	5.28	108	637158	104.43694 ppb	97
14) 1,2-DCB	5.30	146	1125378	100.61606 ppb	99
15) 2-Methylphenol	5.39	107	839012	103.90643 ppb	97
16) Bis (2-chloroisopropyl) et	5.43	45	696813	100.35717 ppb	100
17) Acetophenone	5.57	105	1482877	105.28115 ppb	89
18) 3&4-Methylphenol	5.58	107	2373694	211.68938 ppb	96
19) n-Nitrosodi-n-propylamine	5.60	70	713820	100.61361 ppb	96
20) Hexachloroethane	5.68	117	425851	101.53827 ppb	93
23) Nitrobenzene	5.75	77	1059867	101.22529 ppb	90
24) Isophorone	6.04	82	1847460	103.03444 ppb	98
25) 2-Nitrophenol	6.11	139	657732	104.31740 ppb	89
26) 2,4-Dimethylphenol	6.16	122	1017298	103.28111 ppb	98
27) Benzoic acid	6.32	105	647906	90.40887 ppb	95
28) Bis (2-chloroethoxy) metha	6.27	93	1161742	102.05205 ppb	98
29) 2,4-Dichlorophenol	6.38	162	1014783	103.55586 ppb	98
30) 1,2,4-Trichlorobenzene	6.47	180	1122465	102.78304 ppb	99
31) 3,4-Dimethylphenol	6.50	107	1392083	101.16261 ppb	99
32) Naphthalene	6.56	128	3258921	102.24622 ppb	99
33) 4-Chloroaniline	6.63	127	1265642	94.38186 ppb	98
34) 2,6-Dichlorophenol	6.64	162	1011491	104.73826 ppb	97
35) Hexachloropropene	6.66	213	854165	107.47308 ppb	99
36) Hexachlorobutadiene	6.70	225	686312	102.32413 ppb	99
37) Caprolactum	7.08	55	334644	104.86032 ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y011.D Vial: 11
Acq On : 9 Oct 20 14:38 Operator: MA
Sample : 100ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:48 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:48:37 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.18	107	1042700	104.11119	ppb	94
39)	2-Methylnaphthalene	7.35	142	2223045	103.34364	ppb	100
40)	1-Methylnaphthalene	7.46	142	2296876	103.10412	ppb	99
42)	Hexachlorocyclopentadiene	7.54	237	974336	110.88585	ppb	99
43)	1,2,4,5-Tetrachlorobenzene	7.55	216	1284262	107.88153	ppb	98
44)	2,4,6-Trichlorophenol	7.68	196	841149	106.44387	ppb	98
45)	2,4,5-Trichlorophenol	7.72	196	887080	107.15160	ppb	96
47)	1,1'-Biphenyl	7.90	154	3032625	106.85905	ppb	99
48)	2-Chloronaphthalene	7.92	162	2355156	104.92684	ppb	98
49)	2-Nitroaniline	8.03	65	608089	108.58922	ppb	81
50)	Dimethyl phthalate	8.26	163	2796128	104.11497	ppb	99
51)	2,6-DNT	8.32	165	645515	108.19239	ppb	98
52)	Acenaphthylene	8.39	152	3616990	105.04111	ppb	100
53)	3-Nitroaniline	8.04	138	821534	111.08507	ppb	96
54)	Acenaphthene	8.59	154	2335278	102.06025	ppb	99
55)	2,4-Dinitrophenol	8.63	184	389765	105.34252	ppb	95
56)	4-Nitrophenol	8.71	65	474507	119.01514	ppb	97
57)	Dibenzofuran	8.80	168	3493296	107.17658	ppb	96
58)	2,4-DNT	8.79	165	930649	109.63231	ppb	89
59)	2,3,4,6-Tetrachlorophenol	8.94	232	752679	108.86610	ppb	94
60)	Diethyl phthalate	9.10	149	2737766	104.37047	ppb	100
61)	4-Chlorophenyl phenyl ethe	9.21	204	1664349	110.03777	ppb	87
62)	Fluorene	9.20	166	2940280	109.05817	ppb	100
63)	4-Nitroaniline	8.51	138	625089	100.98447	ppb	96
66)	4,6-Dinitro-2-methylphenol	9.27	198	649905	128.95708	ppb	99
67)	Diphenyl amine	9.36	169	4748951	209.69183	ppb	100
68)	n-Nitrosodiphenylamine	9.36	169	4748951	209.69183	ppb	100
69)	1,2-Diphenylhydrazine	9.39	77	2225656	101.51080	ppb	90
70)	4-Bromophenyl phenyl ether	9.77	248	951261	106.18835	ppb #	90
71)	Hexachlorobenzene	9.83	284	1013970	105.31842	ppb #	85
72)	Atrazine	9.98	200	428874	51.53333	ppb	98
73)	Pentachlorophenol	10.06	266	744723	118.13417	ppb	98
74)	Phenanthrene	10.31	178	4159271	102.39611	ppb	99
75)	Anthracene	10.38	178	4367316	103.45209	ppb	99
76)	Carbazol	10.56	167	3878089	102.12814	ppb	99
77)	Di-n-butylphthalate	11.00	149	4933775	107.36559	ppb	99
78)	Fluoranthene	11.70	202	5012062	106.71067	ppb	98
80)	Benzidine	11.86	184	1349972	97.67324	ppb #	98
81)	Pyrene	11.96	202	5009915	100.79799	ppb	100
83)	Butyl benzylphthalate	12.74	149	2184357	106.66433	ppb	88
84)	3,3'-Dichlorobenzidine	13.34	252	1673720	101.70510	ppb	98
85)	Benz (a) anthracene	13.36	228	5304645	105.99160	ppb	100
86)	Bis (2-ethylhexyl) phthala	13.42	149	3048518	106.15141	ppb	99
87)	Chrysene	13.40	228	5009685	104.01725	ppb	99
88)	Di-n-octylphthalate	14.15	149	5241077	111.45361	ppb #	93
90)	Benzo (b) fluoranthene	14.59	252	5155192	110.83607	ppb	99
91)	Benzo (k) fluoranthene	14.63	252	4542937	100.83056	ppb	98
92)	Benzo (a) pyrene	15.02	252	4685422	110.17104	ppb	98
93)	Indeno (1,2,3-cd) pyrene	16.77	276	5149976	107.25377	ppb	97
94)	Dibenz (a,h) anthracene	16.83	278	4621429	110.48379	ppb	95
95)	Benzo (g,h,i) perylene	17.29	276	4391087	105.26855	ppb	98

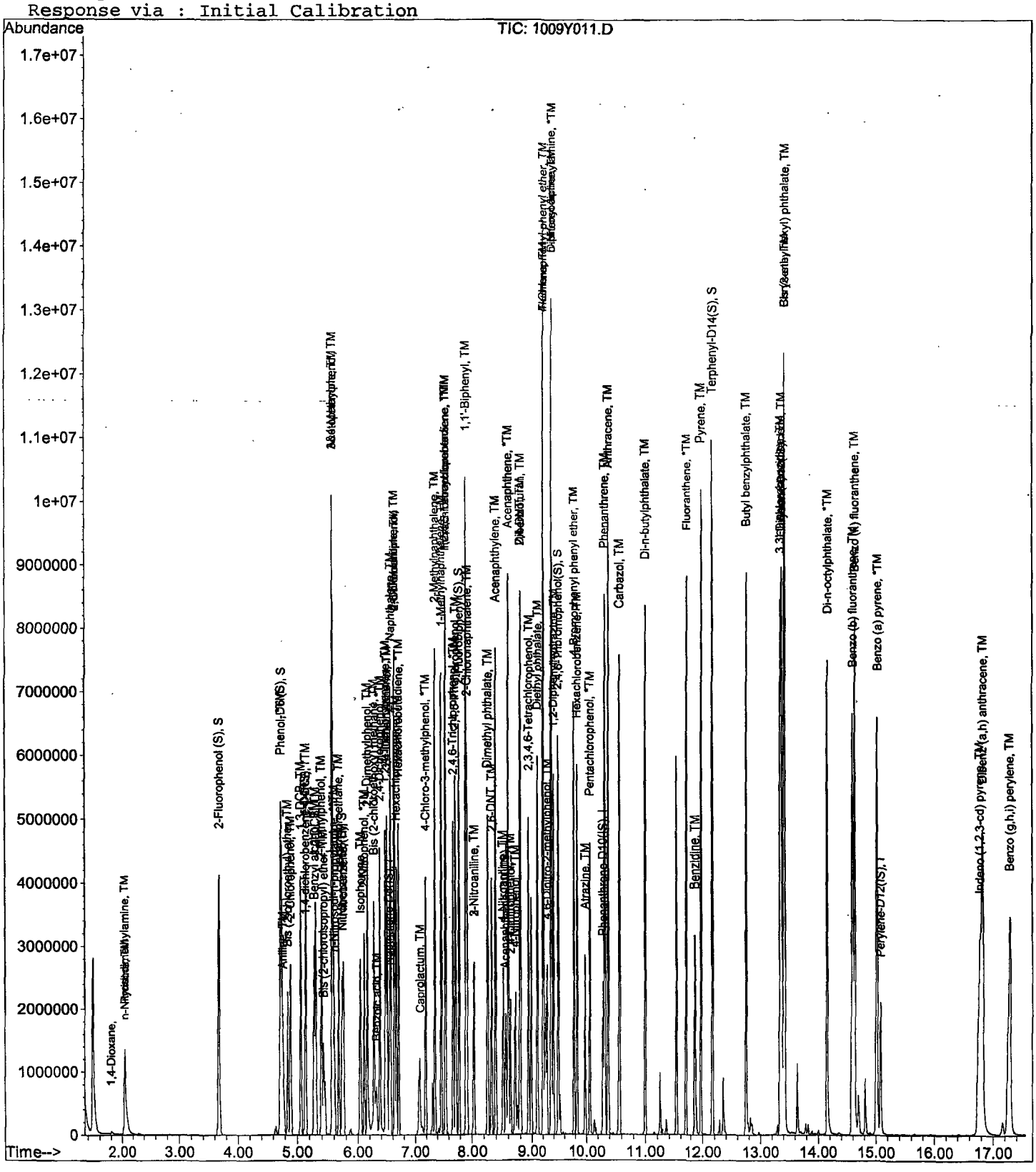
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y011.D Vial: 11
Acq On : 9 Oct 20 14:38 Operator: MA
Sample : 100ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 14:48 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 9 Oct 20 15:04
Instrument: Yoda
Initial Cal. Date: 10/09/20
Data File: 1009Y012.D

		Compound	MEAN	CCRF	%D		%Drift
1		1,4-Dioxane	0.3588	0.3840	7.0		
2	TM	n-Nitrosodimethylamine	0.5546	0.6000	8.2	TM	
3	TM	Pyridine	1.551	1.511	2.6	TM	
4	*TM	Phenol	2.239	2.219	0.88	*TM	
5	TM	Aniline	1.755	1.852	5.5	TM	
6	TM	Bis (2-chloroethyl) ether	0.9045	0.8733	3.4	TM	
7	TM	2-Chlorophenol	1.864	1.873	0.51	TM	
8	TM	1,3-DCB	1.992	2.059	3.4	TM	
9	*TM	1,4-DCB	2.033	2.070	1.8	*TM	
10	TM	Benzyl alcohol	1.042	1.029	1.2	TM	
11	TM	1,2-DCB	1.910	1.941	1.6	TM	
12	TM	2-Methylphenol	1.379	1.341	2.8	TM	
13	TM	Bis (2-chloroisopropyl) ether	1.186	1.133	4.5	TM	
14	TM	Acetophenone	2.406	2.331	3.1	TM	
15	TM	3&4-Methylphenol	1.915	1.919	0.18	TM	
16	**TM	n-Nitrosodi-n-propylamine	1.212	1.184	2.3	**TM	
17	TM	Hexachloroethane	0.7164	0.7439	3.8	TM	
18	TM	Nitrobenzene	0.4309	0.4428	2.8	TM	
19	TM	Isophorone	0.7379	0.7698	4.3	TM	
20	*TM	2-Nitrophenol	0.2595	0.2685	3.5	*TM	
21	TM	2,4-Dimethylphenol	0.4053	0.4011	1.0	TM	
22	TML	Benzoic acid	0.2281	0.3005	32	TML	9.1
23	TM	Bis (2-chloroethoxy) methane	0.4685	0.4517	3.6	TM	
24	*TM	2,4-Dichlorophenol	0.4033	0.4044	0.27	*TM	
25	TM	1,2,4-Trichlorobenzene	0.4494	0.4623	2.9	TM	
26	TM	3,4-Dimethylphenol	0.5663	0.5509	2.7	TM	
27	TM	Naphthalene	1.312	1.311	0.02	TM	
28	TM	4-Chloroaniline	0.5518	0.5476	0.77	TM	
29	TM	2,6-Dichlorophenol	0.3974	0.3950	0.60	TM	
30	TM	Hexachloropropene	0.3271	0.3385	3.5	TM	
31	*TM	Hexachlorobutadiene	0.2760	0.2880	4.3	*TM	
32	TM	Caprolactum	0.1313	0.1297	1.2	TM	
33	*TM	4-Chloro-3-methylphenol	0.4121	0.4175	1.3	*TM	
34	TM	2-Methylnaphthalene	0.8852	0.9660	9.1	TM	
35	TM	1-Methylnaphthalene	0.9167	0.9017	1.6	TM	
36	**TM	Hexachlorocyclopentadiene	0.5574	0.5527	0.84	**TM	
37	TM	1,2,4,5-Tetrachlorobenzene	0.8070	0.7867	2.5	TM	
38	*TM	2,4,6-Trichlorophenol	0.5357	0.5317	0.76	*TM	
39	TM	2,4,5-Trichlorophenol	0.5612	0.5730	2.1	TM	
40	TM	1,1'-Biphenyl	1.924	1.880	2.3	TM	
		Average			3.4		

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 9 Oct 20 15:04
Matrix: 0 Instrument: Yoda
Cal. Date: 10/09/20
Data File: 1009Y012.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	2-Chloronaphthalene	1.522	1.530	0.52	TM	
42	TM	2-Nitroaniline	0.3796	0.3919	3.2	TM	
43	TM	Dimethyl phthalate	1.821	1.754	3.7	TM	
44	TM	2,6-DNT	0.4045	0.4267	5.5	TM	
45	TM	Acenaphthylene	2.334	2.281	2.3	TM	
46	TM	3-Nitroaniline	0.5014	0.5212	4.0	TM	
47	*TM	Acenaphthene	1.551	1.552	0.05	*TM	
48	**TML	2,4-Dinitrophenol	0.1987	0.2081	4.7	**TML	0.27
49	**TM	4-Nitrophenol	0.2824	0.2943	4.2	**TM	
50	TM	Dibenzofuran	2.210	2.160	2.3	TM	
51	TM	2,4-DNT	0.5755	0.6014	4.5	TM	
52	TM	2,3,4,6-Tetrachlorophenol	0.4687	0.4860	3.7	TM	
53	TM	Diethyl phthalate	1.778	1.698	4.5	TM	
54	TM	4-Chlorophenyl phenyl ether	1.025	0.9806	4.4	TM	
55	TM	Fluorene	1.828	1.777	2.8	TM	
56	TM	4-Nitroaniline	0.4196	0.4194	0.06	TM	
57	TM	4,6-Dinitro-2-methylphenol	0.1946	0.2041	4.9	TM	
58	TM	Diphenyl amine	0.7572	0.7578	0.07	TM	
59	*TM	n-Nitrosodiphenylamine	0.7572	0.7578	0.07	*TM	
60	TM	1,2-Diphenylhydrazine	0.7331	0.7678	4.7	TM	
61	TM	4-Bromophenyl phenyl ether	0.2995	0.2940	1.8	TM	
62	TM	Hexachlorobenzene	0.3219	0.3228	0.27	TM	
63	TM	Atrazine	0.2783	0.2851	2.5	TM	
64	*TM	Pentachlorophenol	0.2190	0.2289	4.5	*TM	
65	TM	Phenanthrene	1.358	1.342	1.2	TM	
66	TM	Anthracene	1.412	1.409	0.20	TM	
67	TM	Carbazol	1.270	1.264	0.43	TM	
68	TM	Di-n-butylphthalate	1.536	1.511	1.7	TM	
69	*TM	Fluoranthene	1.570	1.560	0.67	*TM	
70	TM	Benzidine	0.4483	0.5235	17	TM	
71	TM	Pyrene	1.596	1.586	0.61	TM	
72	TM	Butyl benzylphthalate	0.6574	0.6699	1.9	TM	
73	TM	3,3'-Dichlorobenzidine	0.5283	0.5702	7.9	TM	
74	TM	Benz (a) anthracene	1.607	1.576	1.9	TM	
75	TM	Bis (2-ethylhexyl) phthalate	0.9220	0.9398	1.9	TM	
76	TM	Chrysene	1.546	1.515	2.0	TM	
77	*TM	Di-n-octylphthalate	1.510	1.579	4.6	*TM	
78	TM	Benzo (b) fluoranthene	1.552	1.621	4.4	TM	
79	TM	Benzo (k) fluoranthene	1.503	1.517	0.88	TM	
80	*TM	Benzo (a) pyrene	1.419	1.463	3.1	*TM	
		Average			3.0		

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: 0

SDG No:
Date Analyzed: 9 Oct 20 15:04
Instrument: Yoda
Cal. Date: 10/09/20
Data File: 1009Y012.D

		Compound	MEAN	CCRF	%D	%Drift	
81	TM	Indeno (1,2,3-cd) pyrene	1.602	1.568	2.1	TM	
82	TM	Dibenz (a,h) anthracene	1.396	1.434	2.7	TM	
83	TM	Benzo (g,h,i) perylene	1.392	1.406	1.00	TM	
84							
85							
86							
87							
88							
89							
90							
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117							
118							
119							
120							
		Average			1.9		

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y012.D Vial: 12
Acq On : 9 Oct 20 15:04 Operator: MA
Sample : SS 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 15:03 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.12	152	216183	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	873280	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	536403	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	1035458	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.37	240	1061772	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.07	264	1035051	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	0.00	112	0	0.00000 ppb	
Spiked Amount 200.000			Recovery =	0.000%	
6) Phenol-D6 (S)	0.00	99	0	0.00000 ppb	
Spiked Amount 200.000			Recovery =	0.000%	
22) Nitrobenzene-D5(S)	5.68	82	44035	4.82064 ppb	-0.05
Spiked Amount 100.000			Recovery =	4.821%	
46) 2-Fluorobiphenyl(S)	7.71	172	695	0.03074 ppb	-0.06
Spiked Amount 100.000			Recovery =	0.031%	
64) 2,4,6-Tribromophenol(S)	9.47	330	157	0.04046 ppb	0.00
Spiked Amount 200.000			Recovery =	0.020%	
82) Terphenyl-D14(S)	0.00	244	0	0.00000 ppb	
Spiked Amount 100.000			Recovery =	0.000%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.81	58	10377	5.35201	83
3) n-Nitrosodimethylamine	2.03	42	162139	54.09601 ppb	99
4) Pyridine	2.05	79	408244	48.70119 ppb	100
7) Phenol	4.72	94	599636	49.56231 ppb	94
8) Aniline	4.76	93	500352	52.75609 ppb	97
9) Bis (2-chloroethyl) ether	4.83	63	236003	48.27565 ppb	97
10) 2-Chlorophenol	4.88	128	506162	50.25677 ppb	95
11) 1,3-DCB	5.06	146	556468	51.69667 ppb	98
12) 1,4-DCB	5.14	146	559251	50.90140 ppb	100
13) Benzyl alcohol	5.27	108	278105	49.37920 ppb	98
14) 1,2-DCB	5.30	146	524514	50.79889 ppb	99
15) 2-Methylphenol	5.39	107	362346	48.61004 ppb	99
16) Bis (2-chloroisopropyl) et	5.43	45	306191	47.76973 ppb	97
17) Acetophenone	5.57	105	629817	48.43822 ppb	97
18) 3&4-Methylphenol	5.57	107	1037012	100.18123 ppb	97
19) n-Nitrosodi-n-propylamine	5.57	70	320028	48.86346 ppb	91
20) Hexachloroethane	5.68	117	201028	51.92266 ppb	95
23) Nitrobenzene	5.74	77	483369	51.38537 ppb	89
24) Isophorone	6.02	82	840280	52.16202 ppb	98
25) 2-Nitrophenol	6.10	139	293131	51.74788 ppb #	81
26) 2,4-Dimethylphenol	6.15	122	437860	49.48015 ppb	98
27) Benzoic acid	6.24	105	327995m	54.56581 ppb	97
28) Bis (2-chloroethoxy) metha	6.26	93	493099	48.21356 ppb	100
29) 2,4-Dichlorophenol	6.37	162	441395	50.13626 ppb	99
30) 1,2,4-Trichlorobenzene	6.47	180	504605	51.43079 ppb	98
31) 3,4-Dimethylphenol	6.49	107	601322	48.63904 ppb	98
32) Naphthalene	6.56	128	1431422	49.98782 ppb	100
33) 4-Chloroaniline	6.62	127	597741	49.61508 ppb	100
34) 2,6-Dichlorophenol	6.63	162	431213	49.70021 ppb	99
35) Hexachloropropene	6.66	213	369517	51.75060 ppb	98
36) Hexachlorobutadiene	6.70	225	314356	52.16765 ppb	99
37) Caprolactum	7.03	55	141607	49.38964 ppb	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y012.D Vial: 12
Acq On : 9 Oct 20 15:04 Operator: MA
Sample : SS 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 15:03 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.17	107	455719	50.64752 ppb		99
39)	2-Methylnaphthalene	7.35	142	1054475	54.56257 ppb		100
40)	1-Methylnaphthalene	7.46	142	984333	49.18170 ppb		100
42)	Hexachlorocyclopentadiene	7.54	237	370560	49.57797 ppb		99
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	527503	48.74136 ppb		100
44)	2,4,6-Trichlorophenol	7.66	196	356488	49.62173 ppb		96
45)	2,4,5-Trichlorophenol	7.71	196	384178	51.04434 ppb		99
47)	1,1'-Biphenyl	7.89	154	1260850	48.86920 ppb		99
48)	2-Chloronaphthalene	7.91	162	1025569	50.25867 ppb		99
49)	2-Nitroaniline	8.02	65	262797	51.62014 ppb		76
50)	Dimethyl phthalate	8.25	163	1175916	48.16279 ppb		99
51)	2,6-DNT	8.31	165	286088	52.74354 ppb		98
52)	Acenaphthylene	8.38	152	1529580	48.86112 ppb		99
53)	3-Nitroaniline	8.03	138	349489	51.98079 ppb		95
54)	Acenaphthene	8.58	154	1040624	50.02546 ppb		99
55)	2,4-Dinitrophenol	8.62	184	139500	50.13590 ppb		98
56)	4-Nitrophenol	8.70	65	197361	52.10820 ppb		93
57)	Dibenzofuran	8.79	168	1448178	48.87263 ppb		99
58)	2,4-DNT	8.78	165	403252	52.25266 ppb		98
59)	2,3,4,6-Tetrachlorophenol	8.93	232	325882	51.84686 ppb		99
60)	Diethyl phthalate	9.08	149	1138241	47.73036 ppb		97
61)	4-Chlorophenyl phenyl ethe	9.20	204	657483	47.81467 ppb		97
62)	Fluorene	9.19	166	1191367	48.60649 ppb		99
63)	4-Nitroaniline	8.50	138	281204	49.97047 ppb		95
66)	4,6-Dinitro-2-methylphenol	9.25	198	264110	52.42572 ppb		91
67)	Diphenyl amine	9.34	169	1961662	100.07437 ppb		99
68)	n-Nitrosodiphenylamine	9.34	169	1961662	100.07437 ppb		99
69)	1,2-Diphenylhydrazine	9.38	77	993810	52.36878 ppb		97
70)	4-Bromophenyl phenyl ether	9.76	248	380543	49.07901 ppb	#	81
71)	Hexachlorobenzene	9.83	284	417763	50.13304 ppb		95
72)	Atrazine	9.97	200	184523	25.61674 ppb		98
73)	Pentachlorophenol	10.05	266	296210	52.24180 ppb		99
74)	Phenanthrene	10.31	178	1736593	49.39457 ppb		99
75)	Anthracene	10.37	178	1823356	49.90120 ppb		100
76)	Carbazol	10.55	167	1636229	49.78363 ppb		100
77)	Di-n-butylphthalate	10.99	149	1955769	49.17204 ppb		100
78)	Fluoranthene	11.69	202	2019048	49.66528 ppb		99
80)	Benzidine	11.85	184	694739	58.38120 ppb	#	96
81)	Pyrene	11.95	202	2104725	49.69360 ppb		100
83)	Butyl benzylphthalate	12.73	149	889142	50.95072 ppb	#	77
84)	3,3'-Dichlorobenzidine	13.33	252	756835	53.96905 ppb		100
85)	Benz (a) anthracene	13.36	228	2092220	49.05758 ppb		99
86)	Bis (2-ethylhexyl) phthala	13.42	149	1247309	50.96766 ppb		99
87)	Chrysene	13.39	228	2011174	49.00363 ppb		99
88)	Di-n-octylphthalate	14.14	149	2096116	52.30853 ppb		99
90)	Benzo (b) fluoranthene	14.58	252	2096677	52.20793 ppb		99
91)	Benzo (k) fluoranthene	14.62	252	1962159	50.43806 ppb		100
92)	Benzo (a) pyrene	15.00	252	1893209	51.55680 ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.75	276	2028571	48.92899 ppb		98
94)	Dibenz (a,h) anthracene	16.79	278	1855439	51.37332 ppb		99
95)	Benzo (g,h,i) perylene	17.25	276	1818788	50.49837 ppb		99

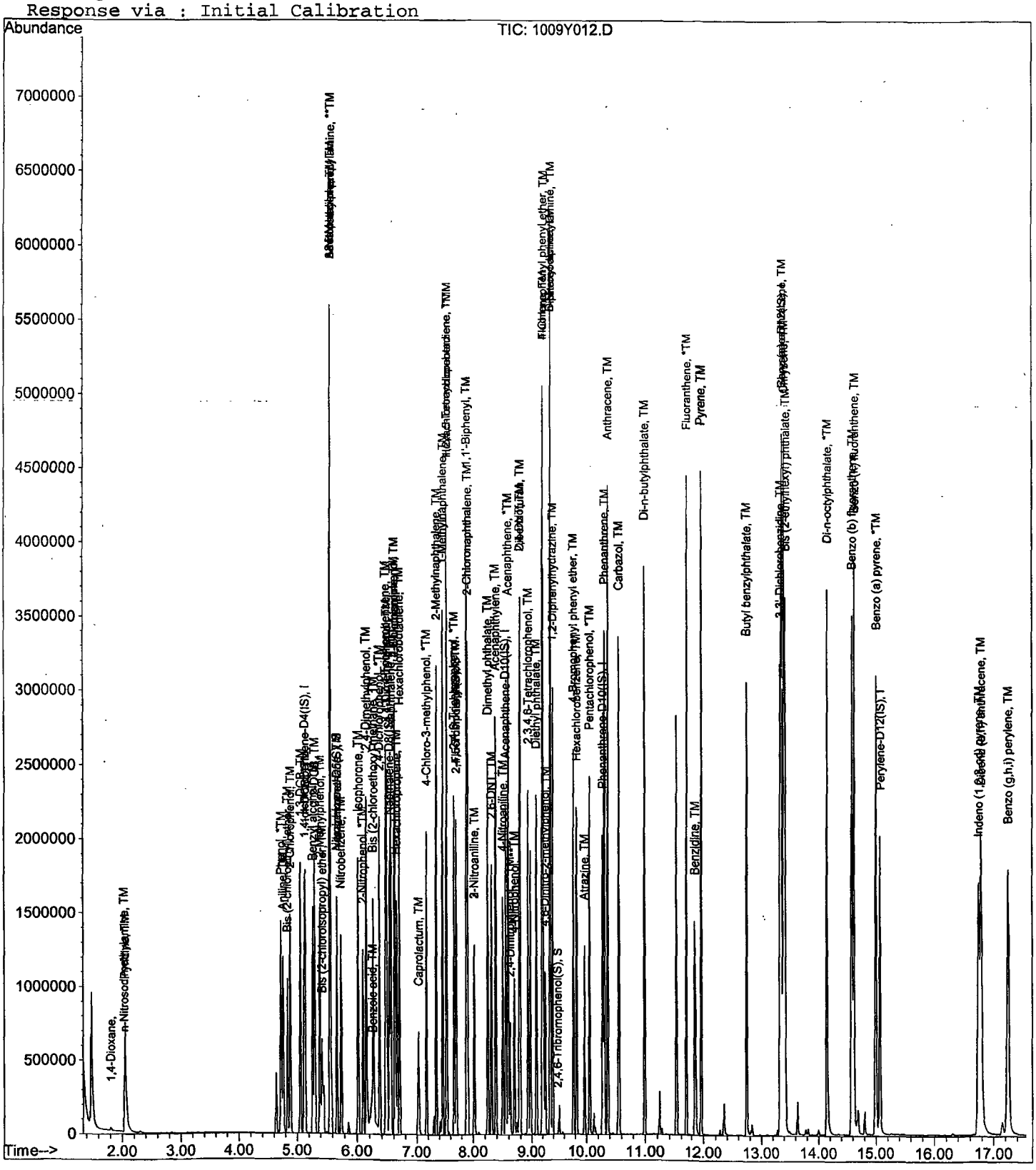
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y012.D Vial: 12
Acq On : 9 Oct 20 15:04 Operator: MA
Sample : SS 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 9 15:03 2020 Quant Results File: Y1009.RES

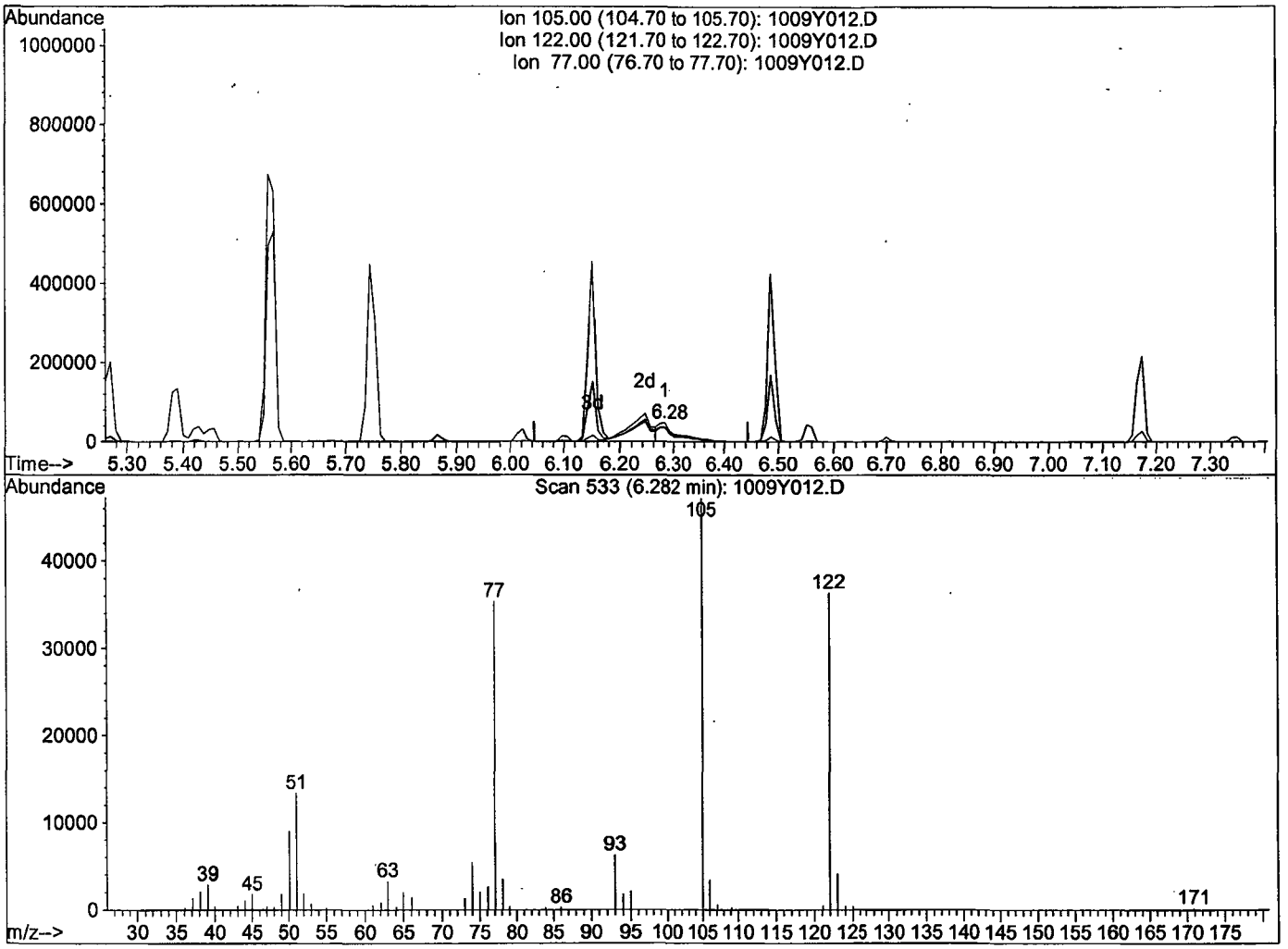
Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y012.D Vial: 12
Acq On : 9 Oct 20 15:04 Operator: MA
Sample : SS 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 15:03 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Multiple Level Calibration



TIC: 1009Y012.D

(27) Benzoic acid (TM)

6.28min 25.1987ppb

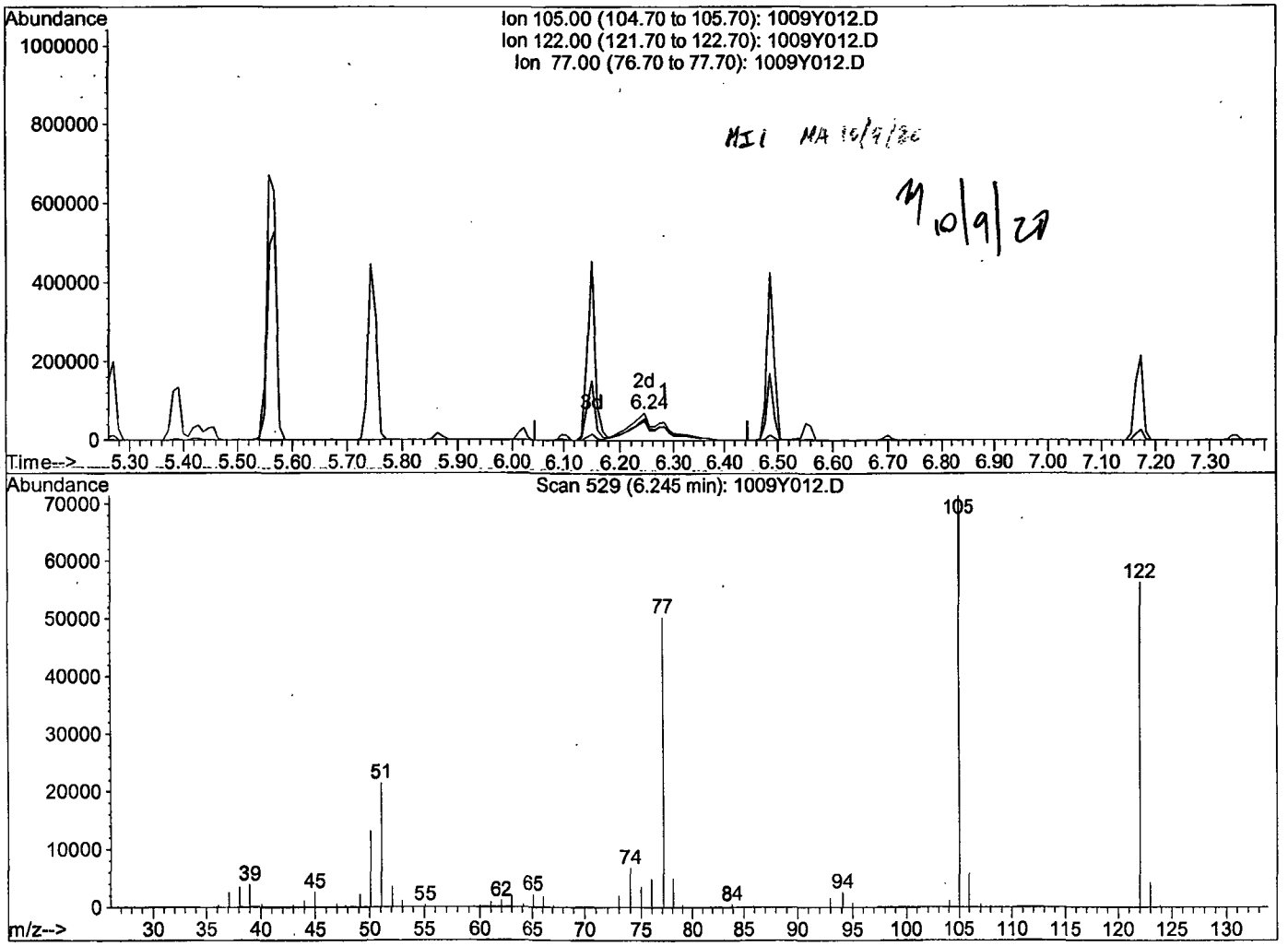
response 119810

Ion	Exp%	Act%
105.00	100	100
122.00	78.10	76.27
77.00	70.50	74.55
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y012.D Vial: 12
Acq On : 9 Oct 20 15:04 Operator: MA
Sample : SS 50ug/mL 8270 7/22/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 15:03 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Multiple Level Calibration



TIC: 1009Y012.D

(27) Benzoic acid (TM)

6.24min 54.5658ppb m

response 327995

Ion	Exp%	Act%
105.00	100	100
122.00	78.10	78.87
77.00	70.50	70.48
0.00	0.00	0.00

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/14/20
Instrument: Yoda
Initial Cal. Date: 10/09/20
Data File: 1009Y063.D

		Compound	MEAN	CCRF	%D		%Drift	
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I		
2		1,4-Dioxane	0.3588	0.3976	11			
3	TM	n-Nitrosodimethylamine	0.5546	0.6457	16	TM		
4	TM	Pyridine	1.551	1.762	14	TM		
5	S	2-Fluorophenol (S)	1.550	1.693	9.2	S		
6	S	Phenol-D6 (S)	1.954	1.943	0.59	S		
7	*TM	Phenol	2.239	2.309	3.1	*TM		
8	TM	Aniline	1.755	1.712	2.4	TM		
9	TM	Bis (2-chloroethyl) ether	0.9045	0.9154	1.2	TM		
10	TM	2-Chlorophenol	1.864	1.887	1.2	TM		
11	TM	1,3-DCB	1.992	2.018	1.3	TM		
12	*TM	1,4-DCB	2.033	2.056	1.1	*TM		
13	TM	Benzyl alcohol	1.042	1.037	0.48	TM		
14	TM	1,2-DCB	1.910	1.937	1.4	TM		
15	TM	2-Methylphenol	1.379	1.390	0.80	TM		
16	TM	Bis (2-chloroisopropyl) ether	1.186	1.189	0.28	TM		
17	TM	Acetophenone	2.406	2.416	0.42	TM		
18	TM	3&4-Methylphenol	1.915	1.958	2.2	TM		
19	**TM	n-Nitrosodi-n-propylamine	1.212	1.202	0.83	**TM		
20	TM	Hexachloroethane	0.7164	0.7025	1.9	TM		
21	I	Napthalene-D8(IS)	ISTD			I		
22	S	Nitrobenzene-D5(S)	0.4184	0.5135	23	S		*
23	TM	Nitrobenzene	0.4309	0.5146	19	TM		
24	TM	Isophorone	0.7379	0.8035	8.9	TM		
25	*TM	2-Nitrophenol	0.2595	0.2920	13	*TM		
26	TM	2,4-Dimethylphenol	0.4053	0.4370	7.8	TM		
27	TML	Benzoic acid	0.2281	0.2721	19	TML	0.39	
28	TM	Bis (2-chloroethoxy) methane	0.4685	0.5189	11	TM		
29	*TM	2,4-Dichlorophenol	0.4033	0.4299	6.6	*TM		
30	TM	1,2,4-Trichlorobenzene	0.4494	0.4582	2.0	TM		
31	TM	3,4-Dimethylphenol	0.5663	0.5737	1.3	TM		
32	TM	Naphthalene	1.312	1.366	4.1	TM		
33	TM	4-Chloroaniline	0.5518	0.5460	1.1	TM		
34	TM	2,6-Dichlorophenol	0.3974	0.4039	1.6	TM		
35	TM	Hexachloropropene	0.3271	0.3185	2.6	TM		
36	*TM	Hexachlorobutadiene	0.2760	0.2722	1.4	*TM		
37	TM	Caprolactum	0.1313	0.1367	4.1	TM		
38	*TM	4-Chloro-3-methylphenol	0.4121	0.4227	2.6	*TM		
39	TM	2-Methylnaphthalene	0.8852	0.9140	3.3	TM		
40	TM	1-Methylnaphthalene	0.9167	0.9460	3.2	TM		
		Average			5.4			

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: 0

SDG No:
Date Analyzed: 10/14/20
Instrument: Yoda
Cal. Date: 10/09/20
Data File: 1009Y063.D

		Compound	MEAN	CCRF	%D		%Drift
41	I	Acenaphthene-D10(IS)	ISTD			I	
42	**TM	Hexachlorocyclopentadiene	0.5574	0.4694	16	**TM	
43	TM	1,2,4,5-Tetrachlorobenzene	0.8070	0.8038	0.40	TM	
44	*TM	2,4,6-Trichlorophenol	0.5357	0.5423	1.2	*TM	
45	TM	2,4,5-Trichlorophenol	0.5612	0.5830	3.9	TM	
46	S	2-Fluorobiphenyl(S)	1.686	1.756	4.1	S	
47	TM	1,1'-Biphenyl	1.924	1.939	0.80	TM	
48	TM	2-Chloronaphthalene	1.522	1.533	0.72	TM	
49	TM	2-Nitroaniline	0.3796	0.3825	0.74	TM	
50	TM	Dimethyl phthalate	1.821	1.828	0.40	TM	
51	TM	2,6-DNT	0.4045	0.4289	6.0	TM	
52	TM	Acenaphthylene	2.334	2.404	3.0	TM	
53	TM	3-Nitroaniline	0.5014	0.5367	7.0	TM	
54	*TM	Acenaphthene	1.551	1.544	0.45	*TM	
55	**TML	2,4-Dinitrophenol	0.1987	0.1978	0.44	**TML	3.1
56	**TM	4-Nitrophenol	0.2824	0.2769	1.9	**TM	
57	TM	Dibenzofuran	2.210	2.224	0.66	TM	
58	TM	2,4-DNT	0.5755	0.6074	5.5	TM	
59	TM	2,3,4,6-Tetrachlorophenol	0.4687	0.4901	4.6	TM	
60	TM	Diethyl phthalate	1.778	1.778	0.00	TM	
61	TM	4-Chlorophenyl phenyl ether	1.025	1.040	1.5	TM	
62	TM	Fluorene	1.828	1.864	2.0	TM	
63	TM	4-Nitroaniline	0.4196	0.4461	6.3	TM	
64	S	2,4,6-Tribromophenol(S)	0.2894	0.2991	3.3	S	
65	I	Phenanthrene-D10(IS)	ISTD			I	
66	TM	4,6-Dinitro-2-methylphenol	0.1946	0.1938	0.41	TM	
67	TM	Diphenyl amine	0.7572	0.7753	2.4	TM	
68	*TM	n-Nitrosodiphenylamine	0.7572	0.7753	2.4	*TM	
69	TM	1,2-Diphenylhydrazine	0.7331	0.7370	0.54	TM	
70	TM	4-Bromophenyl phenyl ether	0.2995	0.3096	3.4	TM	
71	TM	Hexachlorobenzene	0.3219	0.3286	2.1	TM	
72	TM	Atrazine	0.2783	0.2480	11	TM	
73	*TM	Pentachlorophenol	0.2190	0.2297	4.9	*TM	
74	TM	Phenanthrene	1.358	1.386	2.1	TM	
75	TM	Anthracene	1.412	1.485	5.2	TM	
76	TM	Carbazol	1.270	1.317	3.7	TM	
77	TM	Di-n-butylphthalate	1.536	1.614	5.1	TM	
78	*TM	Fluoranthene	1.570	1.632	3.9	*TM	
79	I	Chrysene-D12(IS)	ISTD			I	
80	TM	Benzidine	0.4483	0.3943	12	TM	
		Average			3.5		

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: 0

SDG No:
Date Analyzed: 10/14/20
Instrument: Yoda
Cal. Date: 10/09/20
Data File: 1009Y063.D

		Compound	MEAN	CCRF	%D	%Drift	
81	TM	Pyrene	1.596	1.623	1.7	TM	
82	S	Terphenyl-D14(S)	1.153	1.171	1.6	S	
83	TM	Butyl benzylphthalate	0.6574	0.6967	6.0	TM	
84	TM	3,3'-Dichlorobenzidine	0.5283	0.6177	17	TM	
85	TM	Benz (a) anthracene	1.607	1.634	1.7	TM	
86	TM	Bis (2-ethylhexyl) phthalate	0.9220	0.9604	4.2	TM	
87	TM	Chrysene	1.546	1.517	1.9	TM	
88	*TM	Di-n-octylphthalate	1.510	1.664	10	*TM	
89	I	Perylene-D12(IS)	ISTD			I	
90	TM	Benzo (b) fluoranthene	1.552	1.745	12	TM	
91	TM	Benzo (k) fluoranthene	1.503	1.386	7.8	TM	
92	*TM	Benzo (a) pyrene	1.419	1.500	5.7	*TM	
93	TM	Indeno (1,2,3-cd) pyrene	1.602	1.703	6.3	TM	
94	TM	Dibenz (a,h) anthracene	1.396	1.518	8.8	TM	
95	TM	Benzo (g,h,i) perylene	1.392	1.453	4.4	TM	
96							
97							
98							
99							
100							
101							
102							
103							
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106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			6.4		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y063.D Vial: 63
Acq On : 14 Oct 20 14:47 Operator: MA
Sample : 50ug/mL 8270 7/22/20 (4) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 14:46 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.12	152	219480	40.00000 ppb		0.01
21) Napthalene-D8(IS)	6.53	136	730683	40.00000 ppb		0.00
41) Acenaphthene-D10(IS)	8.55	164	447386	40.00000 ppb		0.00
65) Phenanthrene-D10(IS)	10.28	188	877882	40.00000 ppb		0.00
79) Chrysene-D12(IS)	13.37	240	904146	40.00000 ppb		0.01
89) Perylene-D12(IS)	15.07	264	888903	40.00000 ppb		0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.67	112	929100	109.22057 ppb		0.01
Spiked Amount 200.000			Recovery = 54.611%			
6) Phenol-D6 (S)	4.72	99	1066133	99.41449 ppb		0.01
Spiked Amount 200.000			Recovery = 49.707%			
22) Nitrobenzene-D5(S)	5.73	82	468972	61.35901 ppb		0.00
Spiked Amount 100.000			Recovery = 61.359%			
46) 2-Fluorobiphenyl(S)	7.78	172	981895	52.07287 ppb		0.00
Spiked Amount 100.000			Recovery = 52.073%			
64) 2,4,6-Tribromophenol(S)	9.48	330	334480	103.34817 ppb		0.00
Spiked Amount 200.000			Recovery = 51.674%			
82) Terphenyl-D14(S)	12.15	244	1323944	50.79924 ppb		0.00
Spiked Amount 100.000			Recovery = 50.799%			
Target Compounds						Qvalue
3) n-Nitrosodimethylamine	2.04	42	177161	58.22004 ppb		91
4) Pyridine	2.06	79	483425	56.80355 ppb		98
7) Phenol	4.74	94	633443	51.57010 ppb		99
8) Aniline	4.76	93	469760	48.78649 ppb		98
9) Bis (2-chloroethyl) ether	4.84	63	251133	50.59889 ppb		97
10) 2-Chlorophenol	4.89	128	517592	50.61966 ppb		98
11) 1,3-DCB	5.06	146	553705	50.66726 ppb		99
12) 1,4-DCB	5.14	146	564004	50.56287 ppb		99
13) Benzyl alcohol	5.27	108	284525	49.76022 ppb		100
14) 1,2-DCB	5.30	146	531481	50.70041 ppb		96
15) 2-Methylphenol	5.40	107	381437	50.40248 ppb		98
16) Bis (2-chloroisopropyl) et	5.42	45	326281	50.13936 ppb		96
17) Acetophenone	5.57	105	662779	50.20756 ppb		98
18) 3&4-Methylphenol	5.57	107	1074267	102.22130 ppb		96
19) n-Nitrosodi-n-propylamine	5.57	70	329701	49.58418 ppb		91
20) Hexachloroethane	5.68	117	192731	49.03188 ppb		85
23) Nitrobenzene	5.75	77	470019	59.71736 ppb		96
24) Isophorone	6.02	82	733893	54.44872 ppb		97
25) 2-Nitrophenol	6.11	139	266694	56.26892 ppb		98
26) 2,4-Dimethylphenol	6.15	122	399161	53.90988 ppb		99
27) Benzoic acid	6.27	105	248521	50.19658 ppb		93
28) Bis (2-chloroethoxy) metha	6.27	93	473930	55.38266 ppb		99
29) 2,4-Dichlorophenol	6.38	162	392681	53.30757 ppb		95
30) 1,2,4-Trichlorobenzene	6.47	180	418514	50.98074 ppb		98
31) 3,4-Dimethylphenol	6.50	107	523970	50.65343 ppb		96
32) Naphthalene	6.56	128	1247308	52.05886 ppb		100
33) 4-Chloroaniline	6.63	127	498672	49.46980 ppb	#	91
34) 2,6-Dichlorophenol	6.63	162	368877	50.81272 ppb		99
35) Hexachloropropene	6.65	213	290917	48.69390 ppb		99
36) Hexachlorobutadiene	6.70	225	248611	49.30879 ppb		100
37) Caprolactum	7.04	55	124813	52.02780 ppb		98
38) 4-Chloro-3-methylphenol	7.18	107	386119	51.28693 ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y063.D Vial: 63
Acq On : 14 Oct 20 14:47 Operator: MA
Sample : 50ug/mL 8270 7/22/20 (4) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 14:46 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
39)	2-Methylnaphthalene	7.35	142	834803	51.62583 ppb		99
40)	1-Methylnaphthalene	7.46	142	864035	51.59616 ppb		99
42)	Hexachlorocyclopentadiene	7.53	237	262528	42.11285 ppb		99
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	449539	49.80224 ppb		98
44)	2,4,6-Trichlorophenol	7.68	196	303259	50.61153 ppb		98
45)	2,4,5-Trichlorophenol	7.72	196	326053	51.94122 ppb		98
47)	1,1'-Biphenyl	7.89	154	1084550	50.39996 ppb		99
48)	2-Chloronaphthalene	7.91	162	857107	50.36049 ppb		98
49)	2-Nitroaniline	8.03	65	213884	50.37162 ppb		97
50)	Dimethyl phthalate	8.25	163	1022209	50.19770 ppb		99
51)	2,6-DNT	8.32	165	239844	53.01604 ppb		95
52)	Acenaphthylene	8.38	152	1344606	51.49856 ppb		99
53)	3-Nitroaniline	8.03	138	300125	53.52052 ppb		99
54)	Acenaphthene	8.59	154	863569	49.77406 ppb		99
55)	2,4-Dinitrophenol	8.62	184	110615	48.47490 ppb		99
56)	4-Nitrophenol	8.71	65	154870	49.02537 ppb		85
57)	Dibenzofuran	8.79	168	1243829	50.32841 ppb		96
58)	2,4-DNT	8.78	165	339689	52.77426 ppb		92
59)	2,3,4,6-Tetrachlorophenol	8.94	232	274108	52.28687 ppb	#	90
60)	Diethyl phthalate	9.08	149	994495	50.00022 ppb		99
61)	4-Chlorophenyl phenyl ethe	9.20	204	581873	50.73569 ppb		92
62)	Fluorene	9.19	166	1042153	50.97873 ppb		99
63)	4-Nitroaniline	8.51	138	249449	53.14746 ppb	#	65
66)	4,6-Dinitro-2-methylphenol	9.25	198	212683	49.79534 ppb	#	92
67)	Diphenyl amine	9.34	169	1701506	102.38316 ppb		100
68)	n-Nitrosodiphenylamine	9.34	169	1701506	102.38316 ppb		100
69)	1,2-Diphenylhydrazine	9.38	77	808797	50.26955 ppb		88
70)	4-Bromophenyl phenyl ether	9.76	248	339792	51.68941 ppb	#	86
71)	Hexachlorobenzene	9.82	284	360561	51.03513 ppb	#	82
72)	Atrazine	9.97	200	136045	22.27677 ppb		98
73)	Pentachlorophenol	10.06	266	252109	52.44488 ppb		97
74)	Phenanthrene	10.30	178	1521319	51.03848 ppb		99
75)	Anthracene	10.37	178	1630072	52.61901 ppb		98
76)	Carbazol	10.56	167	1444793	51.84949 ppb		94
77)	Di-n-butylphthalate	10.99	149	1771263	52.52669 ppb		98
78)	Fluoranthene	11.70	202	1790800	51.95768 ppb		99
80)	Benzidine	11.86	184	445643	43.97756 ppb		99
81)	Pyrene	11.96	202	1834818	50.87341 ppb		100
83)	Butyl benzylphthalate	12.74	149	787355	52.98373 ppb		91
84)	3,3'-Dichlorobenzidine	13.33	252	698087	58.45825 ppb		99
85)	Benz (a) anthracene	13.36	228	1847130	50.86147 ppb		99
86)	Bis (2-ethylhexyl) phthala	13.41	149	1085423	52.08496 ppb		99
87)	Chrysene	13.39	228	1713993	49.04337 ppb		100
88)	Di-n-octylphthalate	14.14	149	1880296	55.10312 ppb		98
90)	Benzo (b) fluoranthene	14.58	252	1939043	56.22115 ppb		99
91)	Benzo (k) fluoranthene	14.62	252	1539596	46.08274 ppb		99
92)	Benzo (a) pyrene	15.00	252	1666727	52.85174 ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.76	276	1892206	53.14371 ppb		98
94)	Dibenz (a,h) anthracene	16.79	278	1687172	54.39484 ppb		99
95)	Benzo (g,h,i) perylene	17.26	276	1614144	52.18491 ppb		99

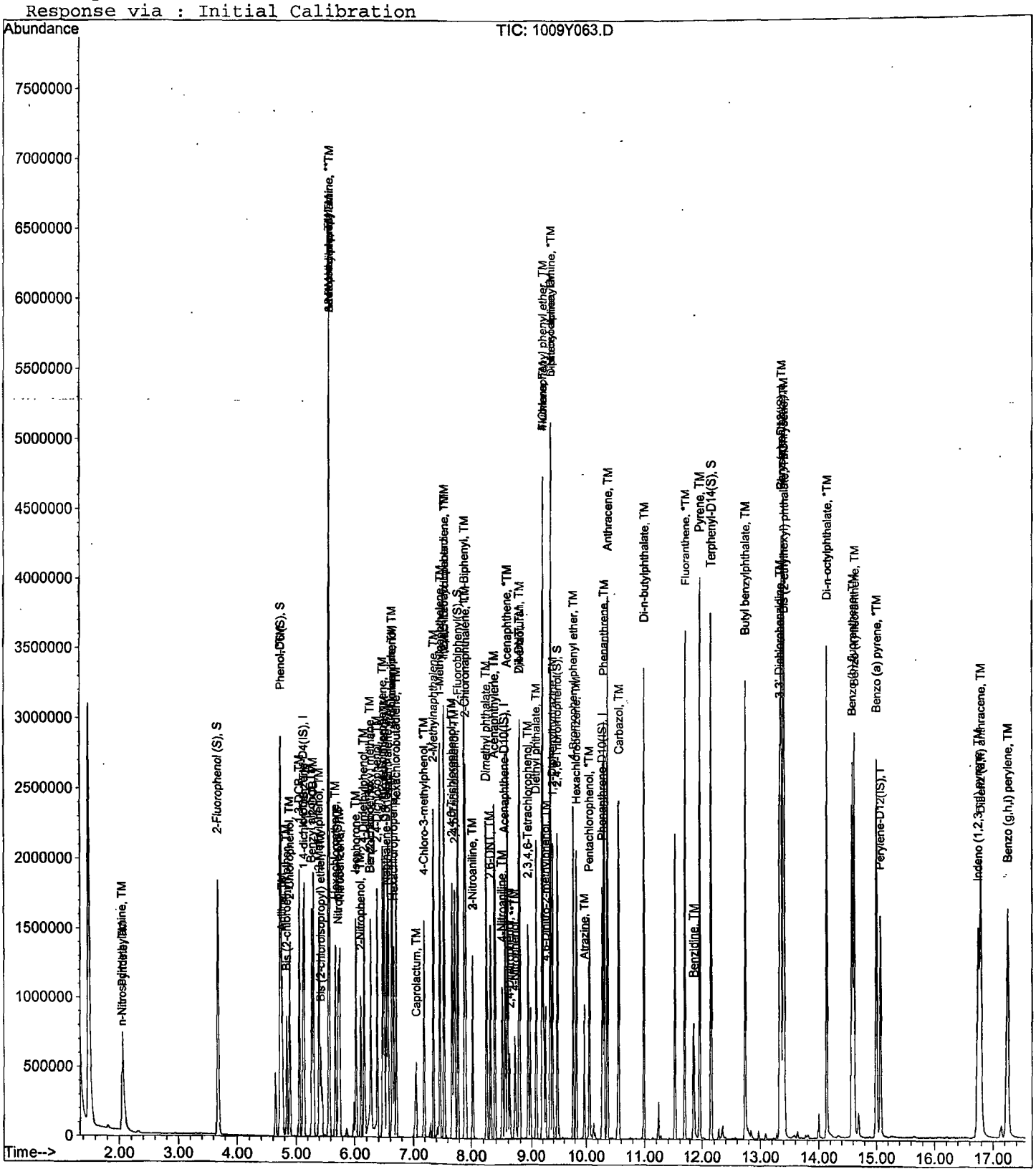
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y063.D Vial: 63
Acq On : 14 Oct 20 14:47 Operator: MA
Sample : 50ug/mL 8270 7/22/20 (4) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 14:46 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/14/20
Instrument: Yoda
Initial Cal. Date: 10/09/20
Data File: 1009Y083.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2		1,4-Dioxane	0.3588	0.3601	0.38		
3	TM	n-Nitrosodimethylamine	0.5546	0.5772	4.1	TM	
4	TM	Pyridine	1.551	1.644	6.0	TM	
5	S	2-Fluorophenol (S)	1.550	1.569	1.2	S	
6	S	Phenol-D6 (S)	1.954	1.985	1.5	S	
7	*TM	Phenol	2.239	2.376	6.1	*TM	
8	TM	Aniline	1.755	1.571	10	TM	
9	TM	Bis (2-chloroethyl) ether	0.9045	0.9476	4.8	TM	
10	TM	2-Chlorophenol	1.864	1.982	6.4	TM	
11	TM	1,3-DCB	1.992	2.090	4.9	TM	
12	*TM	1,4-DCB	2.033	2.116	4.1	*TM	
13	TM	Benzyl alcohol	1.042	1.113	6.8	TM	
14	TM	1,2-DCB	1.910	1.987	4.0	TM	
15	TM	2-Methylphenol	1.379	1.462	6.0	TM	
16	TM	Bis (2-chloroisopropyl) ether	1.186	1.271	7.1	TM	
17	TM	Acetophenone	2.406	2.495	3.7	TM	
18	TM	3&4-Methylphenol	1.915	2.067	7.9	TM	
19	**TM	n-Nitrosodi-n-propylamine	1.212	1.264	4.3	**TM	
20	TM	Hexachloroethane	0.7164	0.7267	1.4	TM	
21	I	Napthalene-D8(IS)	ISTD			I	
22	S	Nitrobenzene-D5(S)	0.4184	0.4209	0.60	S	
23	TM	Nitrobenzene	0.4309	0.4358	1.2	TM	
24	TM	Isophorone	0.7379	0.7616	3.2	TM	
25	*TM	2-Nitrophenol	0.2595	0.2835	9.3	*TM	
26	TM	2,4-Dimethylphenol	0.4053	0.4355	7.4	TM	
27	TML	Benzoic acid	0.2281	0.3143	38	TML	13
28	TM	Bis (2-chloroethoxy) methane	0.4685	0.4971	6.1	TM	
29	*TM	2,4-Dichlorophenol	0.4033	0.4262	5.7	*TM	
30	TM	1,2,4-Trichlorobenzene	0.4494	0.4698	4.5	TM	
31	TM	3,4-Dimethylphenol	0.5663	0.5587	1.3	TM	
32	TM	Naphthalene	1.312	1.385	5.6	TM	
33	TM	4-Chloroaniline	0.5518	0.5646	2.3	TM	
34	TM	2,6-Dichlorophenol	0.3974	0.4169	4.9	TM	
35	TM	Hexachloropropene	0.3271	0.3269	0.04	TM	
36	*TM	Hexachlorobutadiene	0.2760	0.2800	1.5	*TM	
37	TM	Caprolactum	0.1313	0.1446	10	TM	
38	*TM	4-Chloro-3-methylphenol	0.4121	0.4353	5.6	*TM	
39	TM	2-Methylnaphthalene	0.8852	0.9514	7.5	TM	
40	TM	1-Methylnaphthalene	0.9167	0.9707	5.9	TM	
		Average			5.6		

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/14/20
Matrix: 0 Instrument: Yoda
Cal. Date: 10/09/20
Data File: 1009Y083.D

		Compound	MEAN	CCRF	%D		%Drift
41	I	Acenaphthene-D10(IS)	ISTD			I	
42	**TM	Hexachlorocyclopentadiene	0.5574	0.4754	15	**TM	
43	TM	1,2,4,5-Tetrachlorobenzene	0.8070	0.8269	2.5	TM	
44	*TM	2,4,6-Trichlorophenol	0.5357	0.5587	4.3	*TM	
45	TM	2,4,5-Trichlorophenol	0.5612	0.5930	5.7	TM	
46	S	2-Fluorobiphenyl(S)	1.686	1.687	0.06	S	
47	TM	1,1'-Biphenyl	1.924	1.986	3.2	TM	
48	TM	2-Chloronaphthalene	1.522	1.581	3.9	TM	
49	TM	2-Nitroaniline	0.3796	0.3842	1.2	TM	
50	TM	Dimethyl phthalate	1.821	1.879	3.2	TM	
51	TM	2,6-DNT	0.4045	0.4356	7.7	TM	
52	TM	Acenaphthylene	2.334	2.472	5.9	TM	
53	TM	3-Nitroaniline	0.5014	0.5479	9.3	TM	
54	*TM	Acenaphthene	1.551	1.592	2.6	*TM	
55	**TML	2,4-Dinitrophenol	0.1987	0.2338	18	**TML	8.6
56	**TM	4-Nitrophenol	0.2824	0.2916	3.2	**TM	
57	TM	Dibenzofuran	2.210	2.246	1.6	TM	
58	TM	2,4-DNT	0.5755	0.6057	5.3	TM	
59	TM	2,3,4,6-Tetrachlorophenol	0.4687	0.4751	1.4	TM	
60	TM	Diethyl phthalate	1.778	1.798	1.1	TM	
61	TM	4-Chlorophenyl phenyl ether	1.025	1.078	5.1	TM	
62	TM	Fluorene	1.828	1.897	3.8	TM	
63	TM	4-Nitroaniline	0.4196	0.4525	7.8	TM	
64	S	2,4,6-Tribromophenol(S)	0.2894	0.2903	0.34	S	
65	I	Phenanthrene-D10(IS)	ISTD			I	
66	TM	4,6-Dinitro-2-methylphenol	0.1946	0.2004	3.0	TM	
67	TM	Diphenyl amine	0.7572	0.8148	7.6	TM	
68	*TM	n-Nitrosodiphenylamine	0.7572	0.8148	7.6	*TM	
69	TM	1,2-Diphenylhydrazine	0.7331	0.7440	1.5	TM	
70	TM	4-Bromophenyl phenyl ether	0.2995	0.3208	7.1	TM	
71	TM	Hexachlorobenzene	0.3219	0.3426	6.4	TM	
72	TM	Atrazine	0.2783	0.2460	12	TM	
73	*TM	Pentachlorophenol	0.2190	0.1870	15	*TM	
74	TM	Phenanthrene	1.358	1.438	5.9	TM	
75	TM	Anthracene	1.412	1.468	4.0	TM	
76	TM	Carbazol	1.270	1.347	6.1	TM	
77	TM	Di-n-butylphthalate	1.536	1.660	8.0	TM	
78	*TM	Fluoranthene	1.570	1.654	5.3	*TM	
79	I	Chrysene-D12(IS)	ISTD			I	
80	TM	Benzidine	0.4483	0.4457	0.59	TM	
		Average			5.5		

Semi-Volatile Analysis by GC-MS
EPA 8270

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: 0

SDG No:
Date Analyzed: 10/14/20
Instrument: Yoda
Cal. Date: 10/09/20
Data File: 1009Y083.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	Pyrene	1.596	1.712	7.3	TM	
82	S	Terphenyl-D14(S)	1.153	1.176	2.0	S	
83	TM	Butyl benzylphthalate	0.6574	0.7186	9.3	TM	
84	TM	3,3'-Dichlorobenzidine	0.5283	0.6590	25	TM	
85	TM	Benz (a) anthracene	1.607	1.696	5.5	TM	
86	TM	Bis (2-ethylhexyl) phthalate	0.9220	1.006	9.1	TM	
87	TM	Chrysene	1.546	1.597	3.3	TM	
88	*TM	Di-n-octylphthalate	1.510	1.740	15	*TM	
89	I	Perylene-D12(IS)	ISTD			I	
90	TM	Benzo (b) fluoranthene	1.552	1.764	14	TM	
91	TM	Benzo (k) fluoranthene	1.503	1.409	6.3	TM	
92	*TM	Benzo (a) pyrene	1.419	1.521	7.2	*TM	
93	TM	Indeno (1,2,3-cd) pyrene	1.602	1.736	8.3	TM	
94	TM	Dibenz (a,h) anthracene	1.396	1.547	11	TM	
95	TM	Benzo (g,h,i) perylene	1.392	1.481	6.4	TM	
96							
97							
98							
99							
100							
101							
102							
103							
104							
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108							
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110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			9.3		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y083.D Vial: 83
Acq On : 14 Oct 20 23:20 Operator: MA
Sample : 50ug/mL 8270 8/13/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 15 9:23 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.12	152	204116	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	829831	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	507825	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.28	188	984797	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.37	240	974303	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.07	264	967490	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.68	112	800460	101.18113 ppb	0.02
Spiked Amount 200.000			Recovery =	50.590%	
6) Phenol-D6 (S)	4.73	99	1012725	101.54248 ppb	0.02
Spiked Amount 200.000			Recovery =	50.771%	
22) Nitrobenzene-D5(S)	5.73	82	436627	50.30155 ppb	0.01
Spiked Amount 100.000			Recovery =	50.302%	
46) 2-Fluorobiphenyl(S)	7.78	172	1070839	50.03097 ppb	0.00
Spiked Amount 100.000			Recovery =	50.031%	
64) 2,4,6-Tribromophenol(S)	9.48	330	368597	100.33506 ppb	0.00
Spiked Amount 200.000			Recovery =	50.168%	
82) Terphenyl-D14(S)	12.15	244	1431742	50.97965 ppb	0.00
Spiked Amount 100.000			Recovery =	50.980%	
Target Compounds					Qvalue
3) n-Nitrosodimethylamine	2.04	42	147275	52.04168 ppb	95
4) Pyridine	2.07	79	419332	52.98126 ppb	95
7) Phenol	4.74	94	606155	53.06303 ppb	98
8) Aniline	4.76	93	400768	44.75427 ppb	100
9) Bis (2-chloroethyl) ether	4.84	63	241773	52.37968 ppb	91
10) 2-Chlorophenol	4.89	128	505700	53.17928 ppb	95
11) 1,3-DCB	5.06	146	533255	52.46888 ppb	99
12) 1,4-DCB	5.14	146	539995	52.05437 ppb	99
13) Benzyl alcohol	5.28	108	284092	53.42429 ppb	90
14) 1,2-DCB	5.31	146	506953	52.00072 ppb	95
15) 2-Methylphenol	5.40	107	372969	52.99315 ppb	98
16) Bis (2-chloroisopropyl) et	5.43	45	324225	53.57367 ppb	96
17) Acetophenone	5.57	105	636593	51.85374 ppb	91
18) 3&4-Methylphenol	5.58	107	1054976	107.94180 ppb	99
19) n-Nitrosodi-n-propylamine	5.58	70	322605	52.16892 ppb	97
20) Hexachloroethane	5.68	117	185424	50.72368 ppb	98
23) Nitrobenzene	5.75	77	452086	50.57613 ppb	97
24) Isophorone	6.02	82	789981	51.60727 ppb	98
25) 2-Nitrophenol	6.11	139	294063	54.63048 ppb	94
26) 2,4-Dimethylphenol	6.16	122	451760	53.72388 ppb	96
27) Benzoic acid	6.29	105	326067	56.70213 ppb	87
28) Bis (2-chloroethoxy) metha	6.27	93	515616	53.05488 ppb	97
29) 2,4-Dichlorophenol	6.38	162	442125	52.84860 ppb	99
30) 1,2,4-Trichlorobenzene	6.47	180	487272	52.26452 ppb	100
31) 3,4-Dimethylphenol	6.50	107	579517	49.32964 ppb	96
32) Naphthalene	6.56	128	1436303	52.78450 ppb	100
33) 4-Chloroaniline	6.63	127	585698	51.16091 ppb	94
34) 2,6-Dichlorophenol	6.64	162	432408	52.44740 ppb	97
35) Hexachloropropene	6.66	213	339111	49.97890 ppb	99
36) Hexachlorobutadiene	6.70	225	290467	50.72711 ppb	99
37) Caprolactum	7.04	55	149981	55.04923 ppb	99
38) 4-Chloro-3-methylphenol	7.18	107	451582	52.81552 ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y083.D Vial: 83
Acq On : 14 Oct 20 23:20 Operator: MA
Sample : 50ug/mL 8270 8/13/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 15 9:23 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
39) 2-Methylnaphthalene	7.35	142	986904	53.73996 ppb		100
40) 1-Methylnaphthalene	7.46	142	1006874	52.94202 ppb		99
42) Hexachlorocyclopentadiene	7.54	237	301760	42.64509 ppb		100
43) 1,2,4,5-Tetrachlorobenzene	7.54	216	524883	51.22858 ppb		98
44) 2,4,6-Trichlorophenol	7.67	196	354655	52.14470 ppb		99
45) 2,4,5-Trichlorophenol	7.72	196	376430	52.82949 ppb		92
47) 1,1'-Biphenyl	7.89	154	1260639	51.61069 ppb		98
48) 2-Chloronaphthalene	7.91	162	1003535	51.94644 ppb		100
49) 2-Nitroaniline	8.03	65	243872	50.59852 ppb		89
50) Dimethyl phthalate	8.25	163	1192651	51.59716 ppb		100
51) 2,6-DNT	8.32	165	276510	53.84651 ppb		95
52) Acenaphthylene	8.39	152	1569429	52.95537 ppb		100
53) 3-Nitroaniline	8.03	138	347825	54.64460 ppb		95
54) Acenaphthene	8.59	154	1010508	51.31143 ppb		99
55) 2,4-Dinitrophenol	8.62	184	148424	54.30945 ppb		92
56) 4-Nitrophenol	8.71	65	185098	51.62067 ppb		96
57) Dibenzofuran	8.79	168	1425681	50.82100 ppb		100
58) 2,4-DNT	8.78	165	384495	52.62592 ppb		96
59) 2,3,4,6-Tetrachlorophenol	8.94	232	301591	50.68245 ppb	#	91
60) Diethyl phthalate	9.08	149	1141189	50.54698 ppb		98
61) 4-Chlorophenyl phenyl ethe	9.20	204	684049	52.54615 ppb		93
62) Fluorene	9.19	166	1204095	51.89035 ppb		99
63) 4-Nitroaniline	8.51	138	287223	53.91235 ppb	#	79
66) 4,6-Dinitro-2-methylphenol	9.25	198	246660	51.48066 ppb		90
67) Diphenyl amine	9.35	169	2005991	107.60029 ppb		100
68) n-Nitrosodiphenylamine	9.35	169	2005991	107.60029 ppb		100
69) 1,2-Diphenylhydrazine	9.38	77	915885	50.74530 ppb		94
70) 4-Bromophenyl phenyl ether	9.76	248	394885	53.54864 ppb	#	83
71) Hexachlorobenzene	9.83	284	421694	53.20804 ppb		97
72) Atrazine	9.97	200	151434	22.10459 ppb		99
73) Pentachlorophenol	10.06	266	230152	42.67946 ppb		98
74) Phenanthrene	10.31	178	1770240	52.94184 ppb		99
75) Anthracene	10.37	178	1806949	51.99615 ppb		100
76) Carbazol	10.56	167	1658615	53.06081 ppb		95
77) Di-n-butylphthalate	10.99	149	2043080	54.00970 ppb		99
78) Fluoranthene	11.69	202	2036096	52.66115 ppb		99
80) Benzidine	11.86	184	542782	49.70659 ppb		99
81) Pyrene	11.95	202	2084868	53.64397 ppb		99
83) Butyl benzylphthalate	12.73	149	875207	54.65467 ppb		88
84) 3,3'-Dichlorobenzidine	13.33	252	802595	62.37021 ppb		99
85) Benz (a) anthracene	13.36	228	2065260	52.77287 ppb		100
86) Bis (2-ethylhexyl) phthala	13.41	149	1225181	54.55796 ppb		99
87) Chrysene	13.39	228	1945019	51.64635 ppb		100
88) Di-n-octylphthalate	14.14	149	2119130	57.63046 ppb		97
90) Benzo (b) fluoranthene	14.58	252	2133783	56.84214 ppb		99
91) Benzo (k) fluoranthene	14.62	252	1704195	46.86609 ppb		98
92) Benzo (a) pyrene	15.00	252	1839323	53.58715 ppb		100
93) Indeno (1,2,3-cd) pyrene	16.75	276	2099234	54.16917 ppb		99
94) Dibenz (a,h) anthracene	16.79	278	1870525	55.40765 ppb		100
95) Benzo (g,h,i) perylene	17.26	276	1790697	53.19032 ppb		100

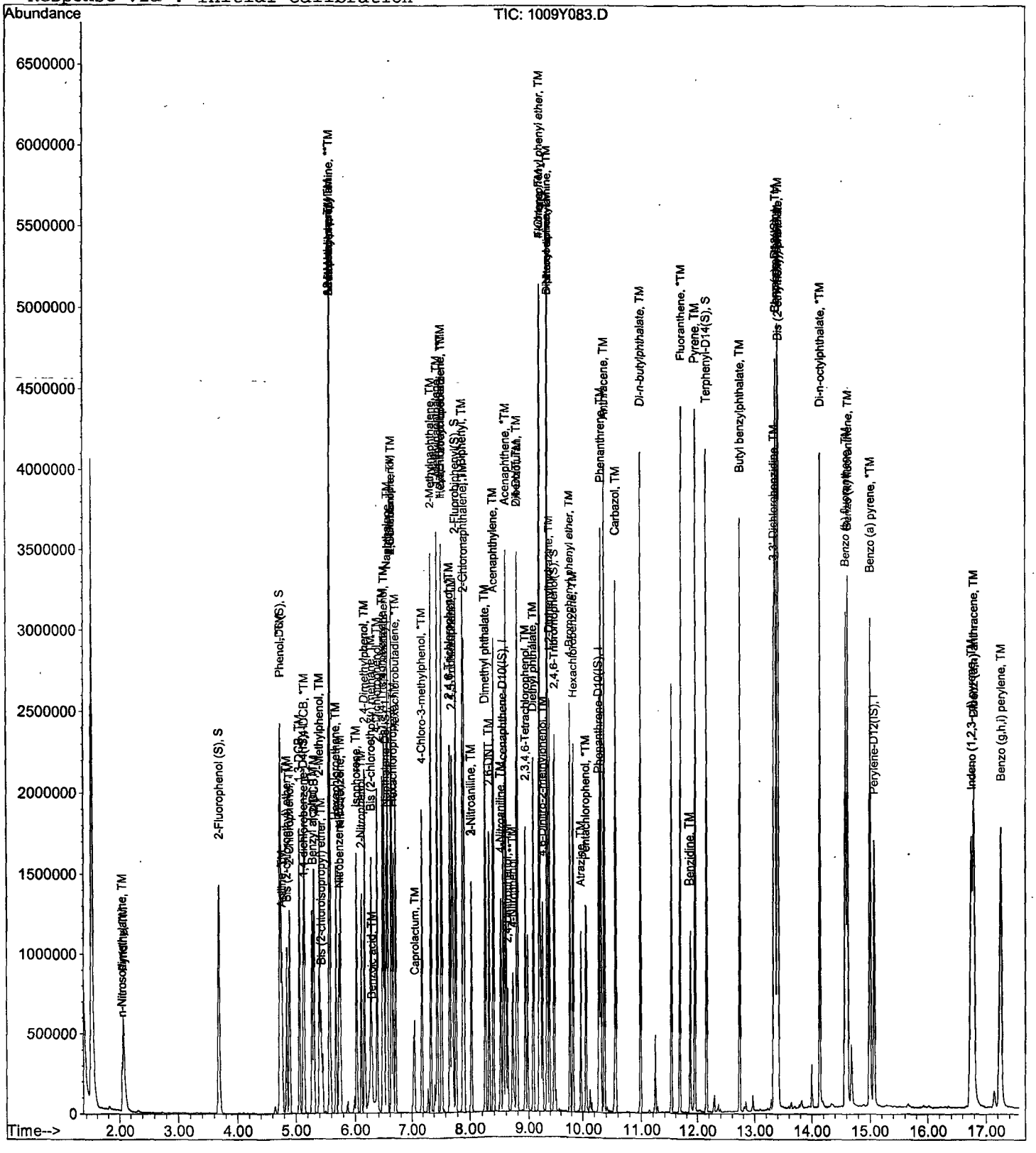
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y083.D Vial: 83
Acq On : 14 Oct 20 23:20 Operator: MA
Sample : 50ug/mL 8270 8/13/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 15 9:23 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y064.D Vial: 64
Acq On : 14 Oct 20 15:14 Operator: MA
Sample : 201012A BLK 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 14 15:39 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.11	152	231431	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	933066	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	573770	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.28	188	1092093	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	1103383	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.07	264	1091808	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.68	112	1281899	178.64022 ppb	0.01
Spiked Amount 250.000			Recovery =	71.456%	
6) Phenol-D6 (S)	4.72	99	1734426	191.72446 ppb	0.01
Spiked Amount 250.000			Recovery =	76.690%	
22) Nitrobenzene-D5(S)	5.73	82	827181	105.93967 ppb	0.00
Spiked Amount 125.000			Recovery =	84.752%	
46) 2-Fluorobiphenyl(S)	7.78	172	1954830	101.04388 ppb	0.00
Spiked Amount 125.000			Recovery =	80.835%	
64) 2,4,6-Tribromophenol(S)	9.47	330	713636	214.91362 ppb	0.00
Spiked Amount 250.000			Recovery =	85.966%	
82) Terphenyl-D14(S)	12.15	244	3094635	121.62401 ppb	0.00
Spiked Amount 125.000			Recovery =	97.299%	

Target Compounds Qvalue

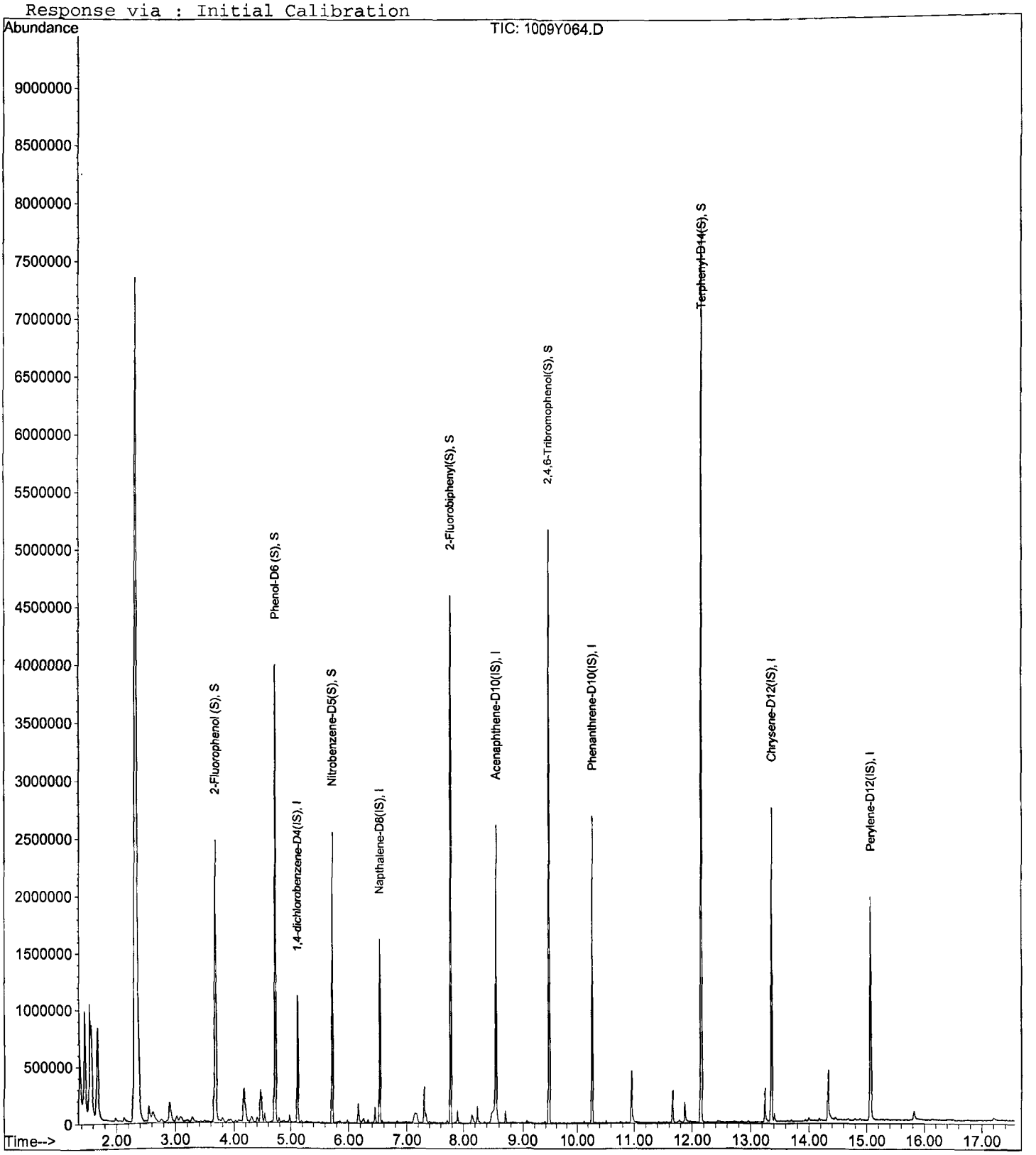
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y064.D Vial: 64
Acq On : 14 Oct 20 15:14 Operator: MA
Sample : 201012A BLK 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 14 15:39 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y065.D Vial: 65
Acq On : 14 Oct 20 15:39 Operator: MA
Sample : 201012A LCS-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 14 16:03 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.12	152	216845	40.00000	ppb	0.00
21) Napthalene-D8(IS)	6.54	136	861834	40.00000	ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	528577	40.00000	ppb	0.00
65) Phenanthrene-D10(IS)	10.28	188	1028745	40.00000	ppb	0.00
79) Chrysene-D12(IS)	13.36	240	1043040	40.00000	ppb	0.00
89) Perylene-D12(IS)	15.07	264	1035177	40.00000	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol (S)	3.69	112	1476928	219.66298	ppb	0.02
Spiked Amount 250.000			Recovery	= 87.865%		
6) Phenol-D6 (S)	4.73	99	1842967	217.42598	ppb	0.02
Spiked Amount 250.000			Recovery	= 86.970%		
22) Nitrobenzene-D5(S)	5.73	82	820333	113.74622	ppb	0.00
Spiked Amount 125.000			Recovery	= 90.997%		
46) 2-Fluorobiphenyl(S)	7.78	172	1948382	109.32128	ppb	0.00
Spiked Amount 125.000			Recovery	= 87.457%		
64) 2,4,6-Tribromophenol(S)	9.47	330	743870	243.17213	ppb	0.00
Spiked Amount 250.000			Recovery	= 97.269%		
82) Terphenyl-D14(S)	12.15	244	3009476	125.11982	ppb	0.00
Spiked Amount 125.000			Recovery	= 100.096%		
Target Compounds						Qvalue
2) 1,4-Dioxane	1.81	58	7744	4.97729		98
3) n-Nitrosodimethylamine	2.04	42	133810	55.63505	ppb	94
4) Pyridine	2.06	79	292016	43.41188	ppb	96
7) Phenol	4.74	94	544945	56.13047	ppb	93
8) Aniline	4.76	93	323008	42.44166	ppb	97
9) Bis (2-chloroethyl) ether	4.84	63	211154	53.82599	ppb	96
10) 2-Chlorophenol	4.89	128	423381	52.38640	ppb	99
11) 1,3-DCB	5.06	146	423690	49.05155	ppb	97
12) 1,4-DCB	5.13	146	433583	49.17873	ppb	98
13) Benzyl alcohol	5.27	108	237930	52.64615	ppb	96
14) 1,2-DCB	5.30	146	416150	50.22607	ppb	97
15) 2-Methylphenol	5.39	107	315964	52.82290	ppb	98
16) Bis (2-chloroisopropyl) et	5.42	45	274685	53.40446	ppb	98
17) Acetophenone	5.56	105	535501	51.32349	ppb	91
18) 3&4-Methylphenol	5.57	107	902567	108.65862	ppb	100
19) n-Nitrosodi-n-propylamine	5.57	70	284293	54.09344	ppb	95
20) Hexachloroethane	5.67	117	133955	43.11629	ppb	86
23) Nitrobenzene	5.75	77	403460	54.32517	ppb	91
24) Isophorone	6.02	82	693903	54.55934	ppb	96
25) 2-Nitrophenol	6.10	139	246743	55.17160	ppb #	88
26) 2,4-Dimethylphenol	6.16	122	374226	53.56358	ppb	100
27) Benzoic acid	6.27	105	332551	69.78938	ppb	99
28) Bis (2-chloroethoxy) metha	6.27	93	449065	55.61401	ppb	98
29) 2,4-Dichlorophenol	6.37	162	381825	54.93243	ppb	98
30) 1,2,4-Trichlorobenzene	6.47	180	385776	49.80200	ppb	98
31) 3,4-Dimethylphenol	6.49	107	543419	55.67403	ppb	98
32) Naphthalene	6.55	128	1215917	53.78242	ppb	99
33) 4-Chloroaniline	6.62	127	349888	36.78490	ppb	97
34) 2,6-Dichlorophenol	6.63	162	378128	55.20077	ppb	97
35) Hexachloropropene	6.66	213	164819	29.23668	ppb	97
36) Hexachlorobutadiene	6.70	225	205455	43.18532	ppb	98
37) Caprolactum	7.03	55	133156	58.82363	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y065.D Vial: 65
Acq On : 14 Oct 20 15:39 Operator: MA
Sample : 201012A LCS-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 14 16:03 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.18	107	391986	55.17871 ppb		91
39)	2-Methylnaphthalene	7.34	142	848405	55.60344 ppb		98
40)	1-Methylnaphthalene	7.45	142	839928	53.15492 ppb		98
42)	Hexachlorocyclopentadiene	7.53	237	94576	16.05107 ppb		98
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	436023	51.10637 ppb		97
44)	2,4,6-Trichlorophenol	7.67	196	308624	54.49411 ppb		96
45)	2,4,5-Trichlorophenol	7.71	196	324062	54.61805 ppb	#	93
47)	1,1'-Biphenyl	7.89	154	1099800	54.07275 ppb		97
48)	2-Chloronaphthalene	7.91	162	844572	52.50199 ppb		96
49)	2-Nitroaniline	8.02	65	213884	53.29298 ppb		79
50)	Dimethyl phthalate	8.25	163	1129261	58.67088 ppb		98
51)	2,6-DNT	8.32	165	238918	55.87421 ppb	#	80
52)	Acenaphthylene	8.38	152	1294673	52.46193 ppb		100
53)	3-Nitroaniline	8.03	138	292753	55.23364 ppb		92
54)	Acenaphthene	8.59	154	859824	52.43240 ppb		99
55)	2,4-Dinitrophenol	8.62	184	129953	60.36800 ppb		91
56)	4-Nitrophenol	8.71	65	168706	56.50257 ppb		89
57)	Dibenzofuran	8.79	168	1237148	52.96126 ppb		94
58)	2,4-DNT	8.77	165	323234	53.13025 ppb		91
59)	2,3,4,6-Tetrachlorophenol	8.93	232	276133	55.72799 ppb		96
60)	Diethyl phthalate	9.08	149	1017211	54.10838 ppb		100
61)	4-Chlorophenyl phenyl ethe	9.20	204	584397	53.91102 ppb		89
62)	Fluorene	9.19	166	1043687	54.01470 ppb		98
63)	4-Nitroaniline	8.50	138	155702	35.09773 ppb	#	77
66)	4,6-Dinitro-2-methylphenol	9.25	198	203385	50.79410 ppb		90
67)	Diphenyl amine	9.34	169	1462764	93.88749 ppb		100
68)	n-Nitrosodiphenylamine	9.34	169	1462764	93.88749 ppb		100
69)	1,2-Diphenylhydrazine	9.38	77	788573	52.28123 ppb		98
70)	4-Bromophenyl phenyl ether	9.77	248	341800	55.46243 ppb		95
71)	Hexachlorobenzene	9.82	284	359392	54.26218 ppb		93
72)	Atrazine	9.96	200	134239	23.44697 ppb		96
73)	Pentachlorophenol	10.05	266	232803	51.65850 ppb		99
74)	Phenanthrene	10.30	178	1499513	53.66191 ppb		100
75)	Anthracene	10.36	178	1536816	52.91711 ppb		100
76)	Carbazol	10.56	167	1402194	53.67665 ppb		98
77)	Di-n-butylphthalate	10.98	149	1779978	56.30540 ppb		100
78)	Fluoranthene	11.69	202	1737312	53.76738 ppb		98
80)	Benzidine	11.86	184	24187	2.58627 ppb	#	90
81)	Pyrene	11.96	202	1866852	56.08611 ppb		99
83)	Butyl benzylphthalate	12.74	149	801600	58.44902 ppb		99
84)	3,3'-Dichlorobenzidine	13.33	252	150214	13.62995 ppb	#	97
85)	Benz (a) anthracene	13.35	228	1747444	52.13656 ppb		99
86)	Bis (2-ethylhexyl) phthala	13.41	149	1140113	59.28009 ppb	#	94
87)	Chrysene	13.39	228	1758518	54.52124 ppb		100
88)	Di-n-octylphthalate	14.14	149	1890806	60.04053 ppb	#	94
90)	Benzo (b) fluoranthene	14.58	252	1830991	56.98339 ppb		99
91)	Benzo (k) fluoranthene	14.61	252	1684144	54.10788 ppb		99
92)	Benzo (a) pyrene	14.99	252	1576635	53.66310 ppb		100
93)	Indeno (1,2,3-cd) pyrene	16.74	276	1764184	53.18352 ppb		97
94)	Dibenz (a,h) anthracene	16.78	278	1652817	57.19695 ppb		97
95)	Benzo (g,h,i) perylene	17.25	276	1568131	54.41702 ppb		98

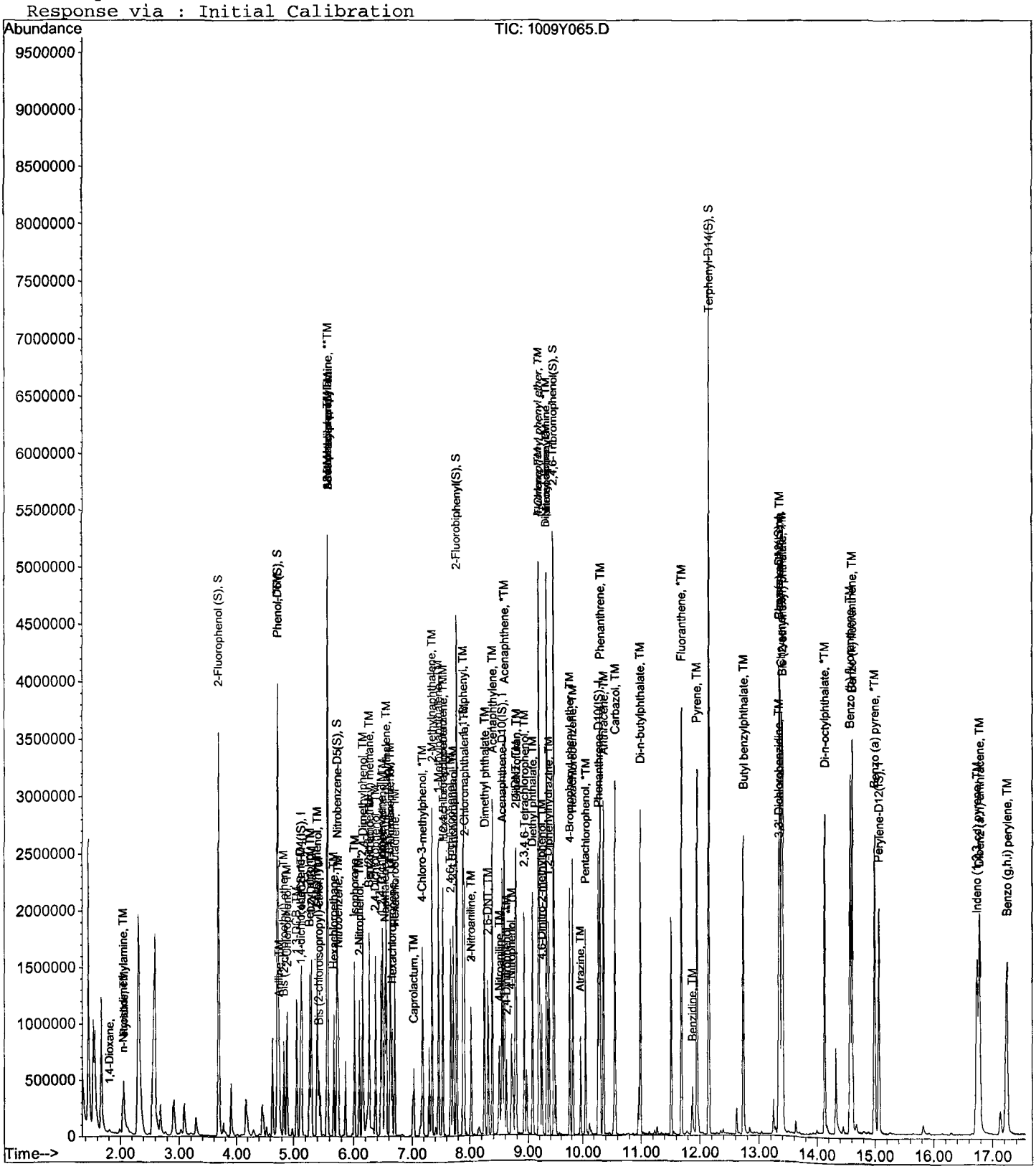
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y065.D Vial: 65
Acq On : 14 Oct 20 15:39 Operator: MA
Sample : 201012A LCS-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 14 16:03 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y066.D Vial: 66
Acq On : 14 Oct 20 16:05 Operator: MA
Sample : 201012A LCSD-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 14 16:03 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.12	152	206182	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	836241	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	512559	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	990309	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.37	240	1017811	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.06	264	996956	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.68	112	1607979	251.52235 ppb	0.02
Spiked Amount 250.000			Recovery	= 100.609%	
6) Phenol-D6 (S)	4.73	99	1964509	243.75109 ppb	0.02
Spiked Amount 250.000			Recovery	= 97.500%	
22) Nitrobenzene-D5(S)	5.73	82	886012	126.61308 ppb	0.00
Spiked Amount 125.000			Recovery	= 101.290%	
46) 2-Fluorobiphenyl(S)	7.78	172	2091547	121.02152 ppb	0.00
Spiked Amount 125.000			Recovery	= 96.818%	
64) 2,4,6-Tribromophenol(S)	9.48	330	799143	269.40500 ppb	0.00
Spiked Amount 250.000			Recovery	= 107.762%	
82) Terphenyl-D14(S)	12.16	244	3300355	140.61437 ppb	0.00
Spiked Amount 125.000			Recovery	= 112.491%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.81	58	9656	6.52714	96
3) n-Nitrosodimethylamine	2.04	42	140736	61.54089 ppb	100
4) Pyridine	2.06	79	363683	56.86219 ppb	100
7) Phenol	4.74	94	579728	62.80134 ppb	86
8) Aniline	4.76	93	384064	53.07394 ppb	100
9) Bis (2-chloroethyl) ether	4.84	63	231327	62.01799 ppb	89
10) 2-Chlorophenol	4.89	128	460688	59.95049 ppb	97
11) 1,3-DCB	5.06	146	461661	56.21165 ppb	98
12) 1,4-DCB	5.14	146	475656	56.74097 ppb	100
13) Benzyl alcohol	5.27	108	259829	60.46495 ppb	99
14) 1,2-DCB	5.30	146	447431	56.79420 ppb	98
15) 2-Methylphenol	5.40	107	346788	60.97438 ppb	98
16) Bis (2-chloroisopropyl) et	5.42	45	296948	60.71858 ppb	97
17) Acetophenone	5.57	105	580699	58.53366 ppb	96
18) 3&4-Methylphenol	5.57	107	967757	122.53206 ppb	96
19) n-Nitrosodi-n-propylamine	5.57	70	305987	61.23223 ppb	91
20) Hexachloroethane	5.68	117	144959	49.07116 ppb	89
23) Nitrobenzene	5.75	77	447296	62.07086 ppb	99
24) Isophorone	6.02	82	763719	61.88652 ppb	98
25) 2-Nitrophenol	6.11	139	270451	62.32345 ppb	99
26) 2,4-Dimethylphenol	6.15	122	398997	58.85691 ppb	96
27) Benzoic acid	6.27	105	366380	77.83703 ppb	98
28) Bis (2-chloroethoxy) metha	6.26	93	486872	62.14153 ppb	99
29) 2,4-Dichlorophenol	6.37	162	411978	61.08444 ppb	96
30) 1,2,4-Trichlorobenzene	6.47	180	421976	56.14247 ppb	98
31) 3,4-Dimethylphenol	6.50	107	581345	61.38241 ppb	97
32) Naphthalene	6.56	128	1333709	60.79805 ppb	100
33) 4-Chloroaniline	6.62	127	400225	43.36476 ppb	99
34) 2,6-Dichlorophenol	6.63	162	400851	60.30890 ppb	100
35) Hexachloropropene	6.65	213	158013	28.88723 ppb	96
36) Hexachlorobutadiene	6.70	225	212783	46.09444 ppb	99
37) Caprolactum	7.03	55	138315	62.97273 ppb	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y066.D Vial: 66
Acq On : 14 Oct 20 16:05 Operator: MA
Sample : 201012A LCSD-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 14 16:03 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	4-Chloro-3-methylphenol	7.18	107	414545	60.14019 ppb		97
39)	2-Methylnaphthalene	7.35	142	926752	62.59709 ppb		99
40)	1-Methylnaphthalene	7.46	142	904497	58.99303 ppb		99
42)	Hexachlorocyclopentadiene	7.53	237	72712	12.72605 ppb		99
43)	1,2,4,5-Tetrachlorobenzene	7.54	216	461444	55.77622 ppb		99
44)	2,4,6-Trichlorophenol	7.67	196	329774	60.04830 ppb		98
45)	2,4,5-Trichlorophenol	7.72	196	352373	61.24563 ppb		98
47)	1,1'-Biphenyl	7.89	154	1153158	58.46796 ppb		99
48)	2-Chloronaphthalene	7.91	162	900931	57.75572 ppb		98
49)	2-Nitroaniline	8.03	65	232430	59.72392 ppb		98
50)	Dimethyl phthalate	8.25	163	1195552	64.05620 ppb		99
51)	2,6-DNT	8.31	165	259721	62.63744 ppb		93
52)	Acenaphthylene	8.38	152	1396836	58.37058 ppb		99
53)	3-Nitroaniline	8.03	138	316208	61.52329 ppb		100
54)	Acenaphthene	8.58	154	904351	56.87110 ppb		99
55)	2,4-Dinitrophenol	8.62	184	151868	68.53792 ppb		99
56)	4-Nitrophenol	8.70	65	182460	63.01875 ppb		89
57)	Dibenzofuran	8.79	168	1319748	58.26290 ppb		98
58)	2,4-DNT	8.78	165	365333	61.92672 ppb		90
59)	2,3,4,6-Tetrachlorophenol	8.94	232	291282	60.62240 ppb	#	89
60)	Diethyl phthalate	9.08	149	1093476	59.98285 ppb		99
61)	4-Chlorophenyl phenyl ethe	9.20	204	626169	59.56971 ppb		92
62)	Fluorene	9.19	166	1117780	59.65714 ppb		99
63)	4-Nitroaniline	8.50	138	214950	49.96740 ppb		99
66)	4,6-Dinitro-2-methylphenol	9.25	198	227297	58.96918 ppb	#	83
67)	Diphenyl amine	9.34	169	1629672	108.66025 ppb		100
68)	n-Nitrosodiphenylamine	9.34	169	1629672	108.66025 ppb		100
69)	1,2-Diphenylhydrazine	9.38	77	857679	59.06982 ppb	#	88
70)	4-Bromophenyl phenyl ether	9.76	248	362752	61.14679 ppb	#	88
71)	Hexachlorobenzene	9.82	284	386971	60.69379 ppb	#	83
72)	Atrazine	9.97	200	157446	28.56780 ppb		98
73)	Pentachlorophenol	10.05	266	248226	57.21863 ppb		99
74)	Phenanthrene	10.30	178	1617513	60.13131 ppb		99
75)	Anthracene	10.37	178	1658786	59.33373 ppb		99
76)	Carbazol	10.55	167	1519349	60.41876 ppb		100
77)	Di-n-butylphthalate	10.99	149	1951268	64.11938 ppb		98
78)	Fluoranthene	11.69	202	1867092	60.02660 ppb		98
80)	Benzidine	11.86	184	97538	10.68807 ppb	#	97
81)	Pyrene	11.95	202	1960472	60.35871 ppb		100
83)	Butyl benzylphthalate	12.73	149	853209	63.75420 ppb		90
84)	3,3'-Dichlorobenzidine	13.33	252	135129	12.56511 ppb	#	97
85)	Benz (a) anthracene	13.35	228	1929706	59.00164 ppb		100
86)	Bis (2-ethylhexyl) phthala	13.41	149	1200810	63.98366 ppb		99
87)	Chrysene	13.39	228	1849286	58.75662 ppb		99
88)	Di-n-octylphthalate	14.14	149	2053057	66.80860 ppb		96
90)	Benzo (b) fluoranthene	14.58	252	1857217	60.01549 ppb		98
91)	Benzo (k) fluoranthene	14.61	252	1897323	63.29381 ppb		98
92)	Benzo (a) pyrene	14.99	252	1678776	59.33022 ppb		99
93)	Indeno (1,2,3-cd) pyrene	16.74	276	1897143	59.38434 ppb		99
94)	Dibenz (a,h) anthracene	16.79	278	1763716	63.37462 ppb		95
95)	Benzo (g,h,i) perylene	17.25	276	1681666	60.59416 ppb		99

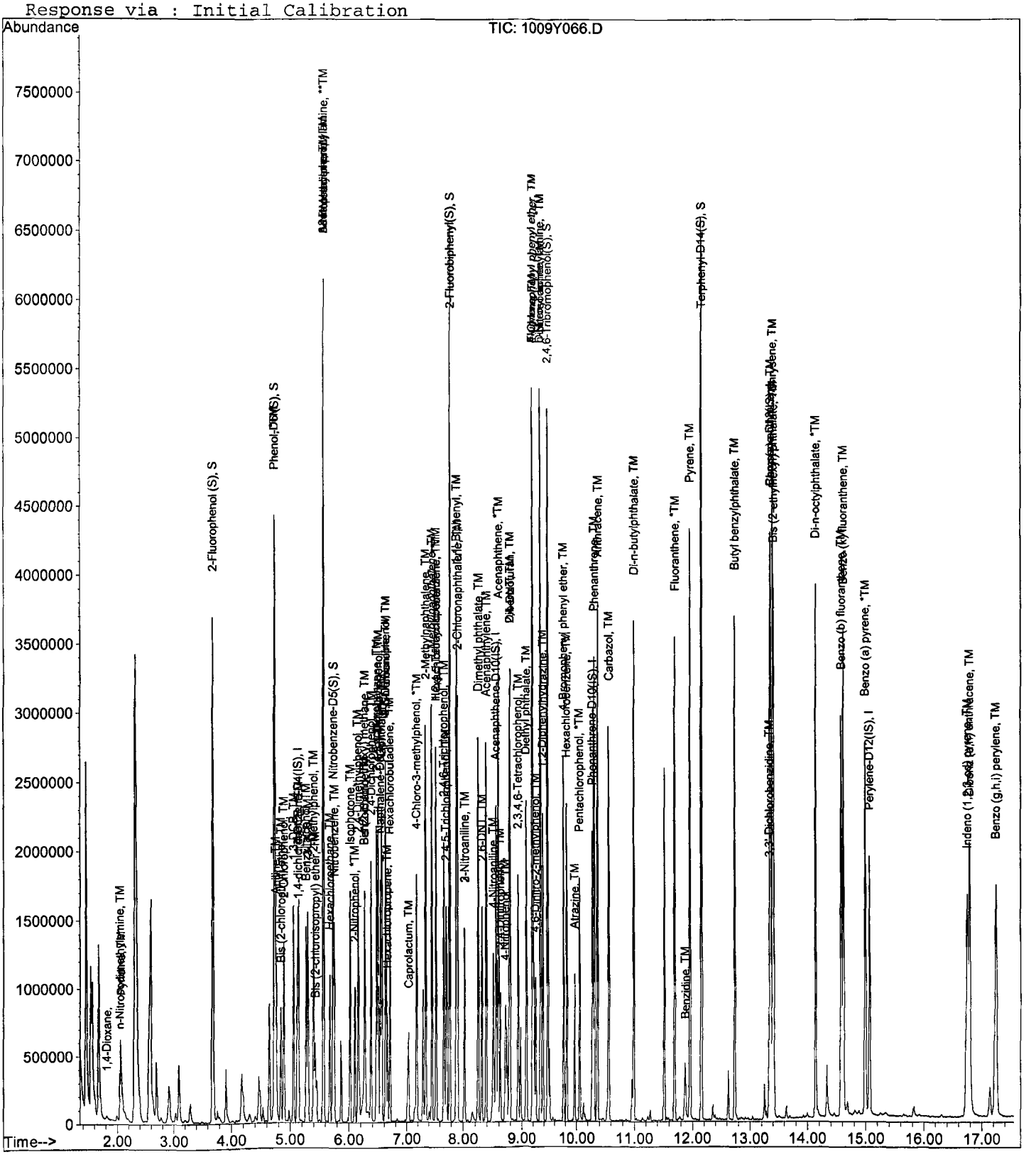
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y066.D Vial: 66
Acq On : 14 Oct 20 16:05 Operator: MA
Sample : 201012A LCSD-1 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 14 16:03 2020 Quant Results File: Y1009.RES

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y201009\1009Y067.D Vial: 67
Acq On : 14 Oct 20 16:30 Operator: MA
Sample : BA19640W17 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 14 16:46 2020 Quant Results File: Y1009.RES

Quant Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration
DataAcq Meth : SVOC1011

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.12	152	218131	40.00000 ppb	0.00
21) Napthalene-D8(IS)	6.53	136	874559	40.00000 ppb	0.00
41) Acenaphthene-D10(IS)	8.55	164	527087	40.00000 ppb	0.00
65) Phenanthrene-D10(IS)	10.27	188	1012046	40.00000 ppb	0.00
79) Chrysene-D12(IS)	13.36	240	1024379	40.00000 ppb	0.00
89) Perylene-D12(IS)	15.06	264	1007321	40.00000 ppb	0.00
System Monitoring Compounds					
5) 2-Fluorophenol (S)	3.68	112	1515357	224.04978 ppb	0.02
Spiked Amount 250.000			Recovery =	89.620%	
6) Phenol-D6 (S)	4.72	99	1931202	226.49238 ppb	0.00
Spiked Amount 250.000			Recovery =	90.597%	
22) Nitrobenzene-D5(S)	5.72	82	868357	118.65324 ppb	0.00
Spiked Amount 125.000			Recovery =	94.922%	
46) 2-Fluorobiphenyl(S)	7.78	172	2070713	116.51355 ppb	0.00
Spiked Amount 125.000			Recovery =	93.211%	
64) 2,4,6-Tribromophenol(S)	9.47	330	767453	251.59065 ppb	0.00
Spiked Amount 250.000			Recovery =	100.636%	
82) Terphenyl-D14(S)	12.16	244	3337470	141.28397 ppb	0.00
Spiked Amount 125.000			Recovery =	113.027%	

Target Compounds	Qvalue

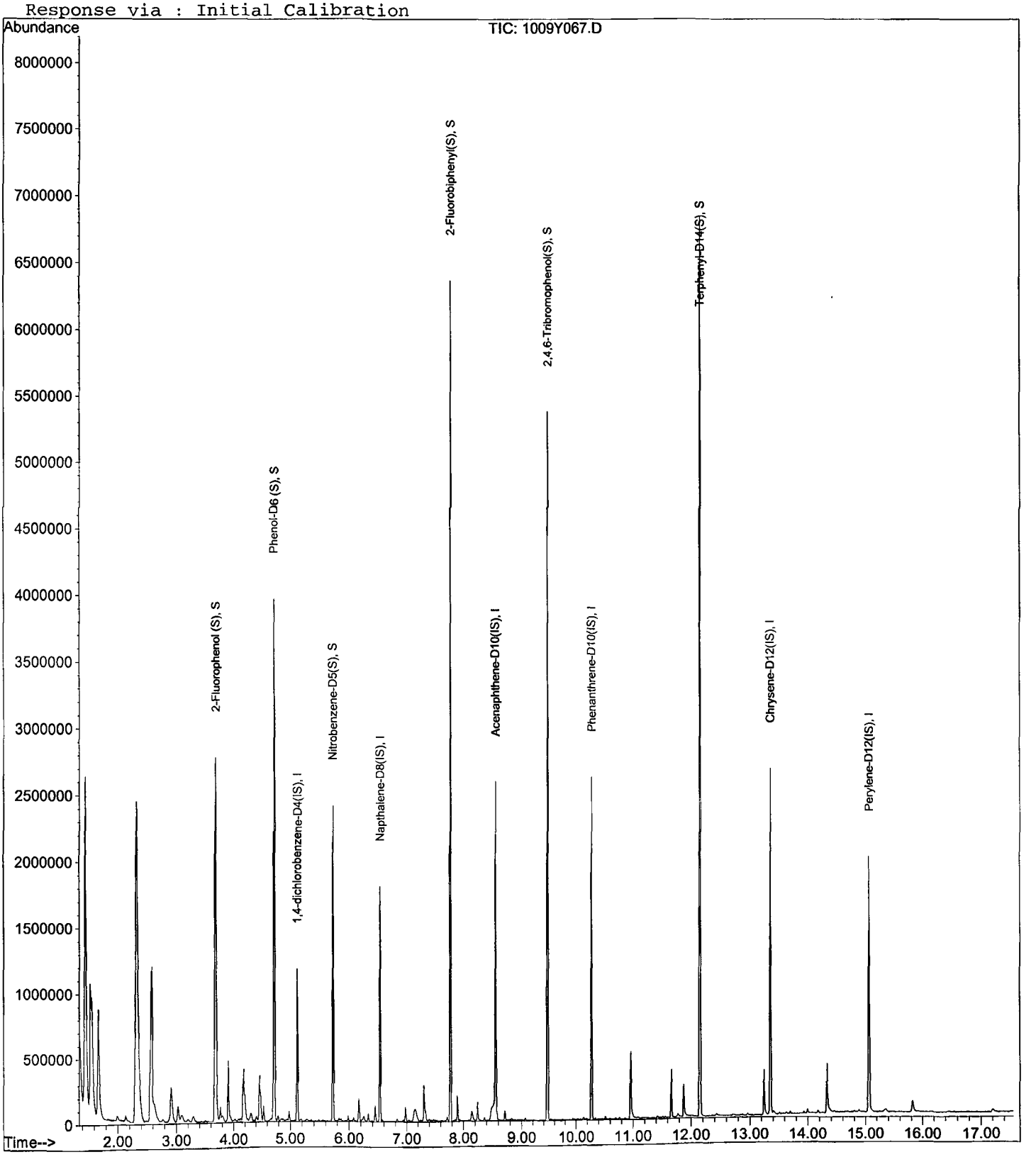
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y067.D Vial: 67
Acq On : 14 Oct 20 16:30 Operator: MA
Sample : BA19640W17 1/800 Inst : Yoda
Misc : Multiplr: 1.25

Quant Time: Oct 14 16:46 2020 Quant Results File: Y1009.RES

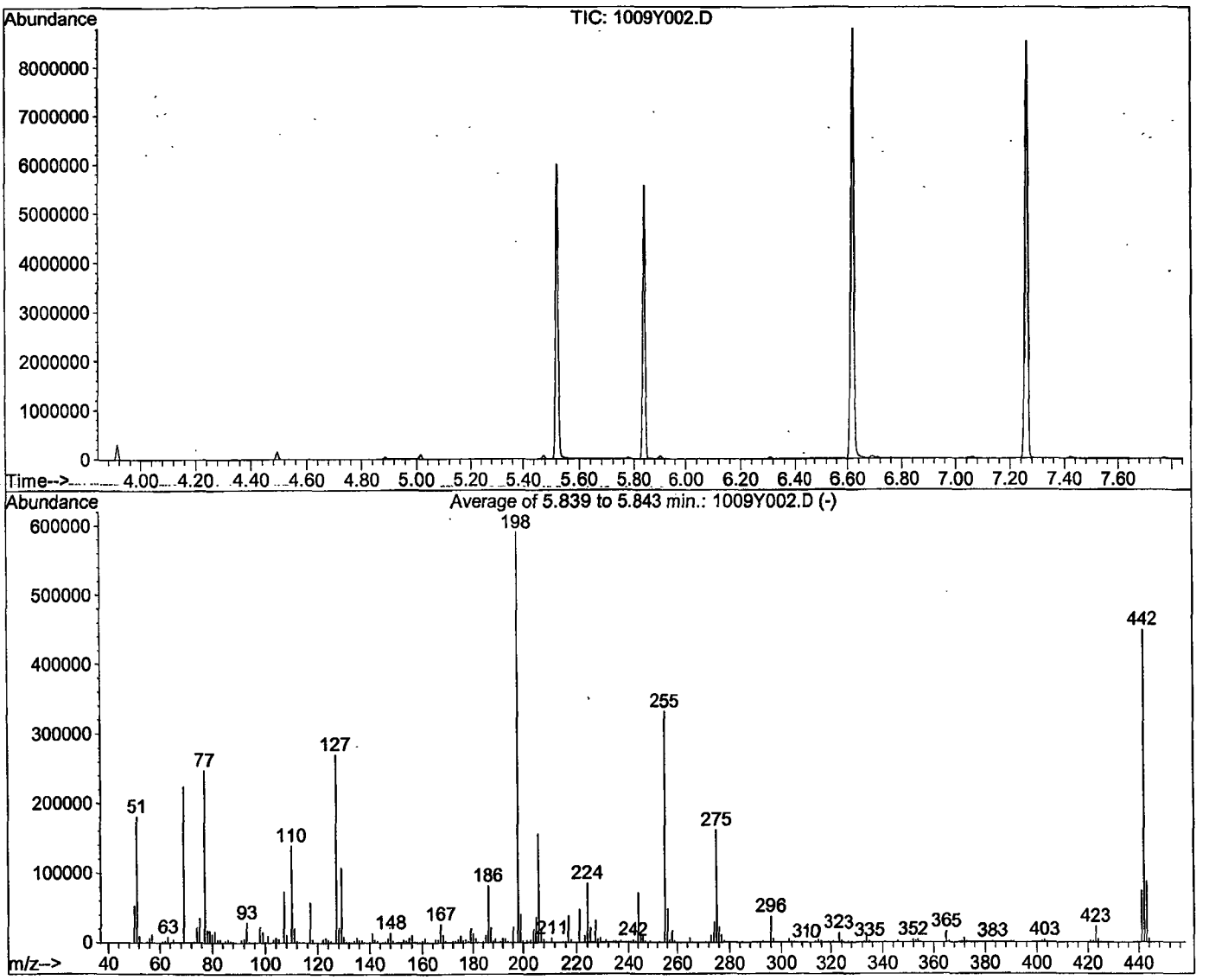
Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Oct 09 14:58:57 2020
Response via : Initial Calibration



DFTPP

Data File : M:\YODA\DATA\Y201009\1009Y002.D Vial: 2
Acq On : 9 Oct 20 10:55 Operator: MA
Sample : SV TUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 902, 903, 904; Background Corrected with Scan 893

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	30.7	181099	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.2	468	PASS
127	198	10	80	45.8	270485	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	590528	PASS
199	198	5	9	6.9	40837	PASS
275	198	10	60	27.3	160981	PASS
365	198	1	100	2.7	15871	PASS
441	442	0.01	24	16.5	74272	PASS
442	198	50	500	76.1	449344	PASS
443	442	15	24	19.4	86981	PASS

Data File Name:	**1009Y002.D**
Data File Path:	**M:\YODA\DATA\Y201009**
Operator:	**MA**
Date Acquired:	**9 Oct 20 10:55**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/02/20**
Vial Number:	**2**
Instrument Name:	**Yoda**

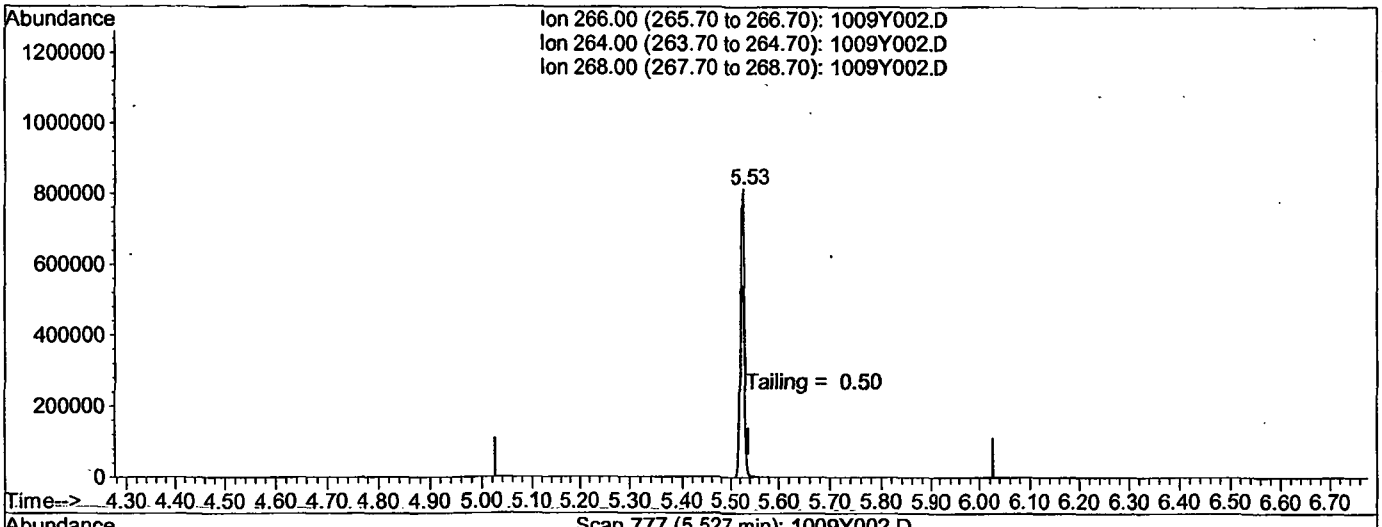
#	Name	Ret Time	Target Response
1)	DDT	7.26	61419600
2)	DDD	7.02	151178
3)	DDE	5.93	385231

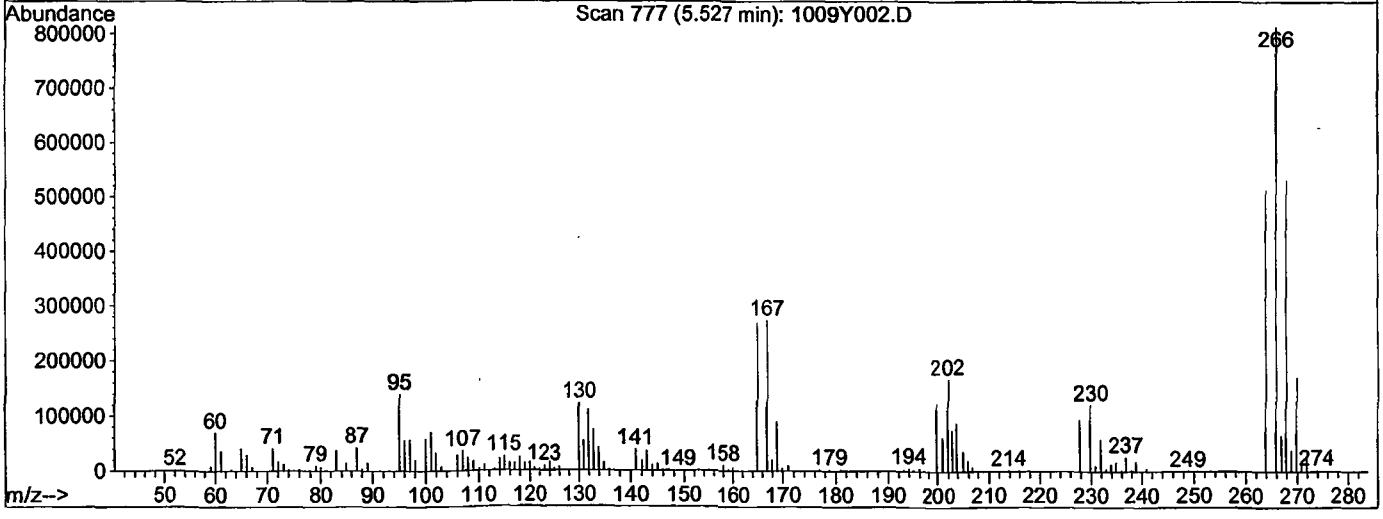
Breakdown **0.87**

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y002.D Vial: 2
Acq On : 9 Oct 20 10:55 Operator: MA
Sample : SV TUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 10:49 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration





TIC: 1009Y002.D

(5) Pentachlorophenol

5.53min 0.0000

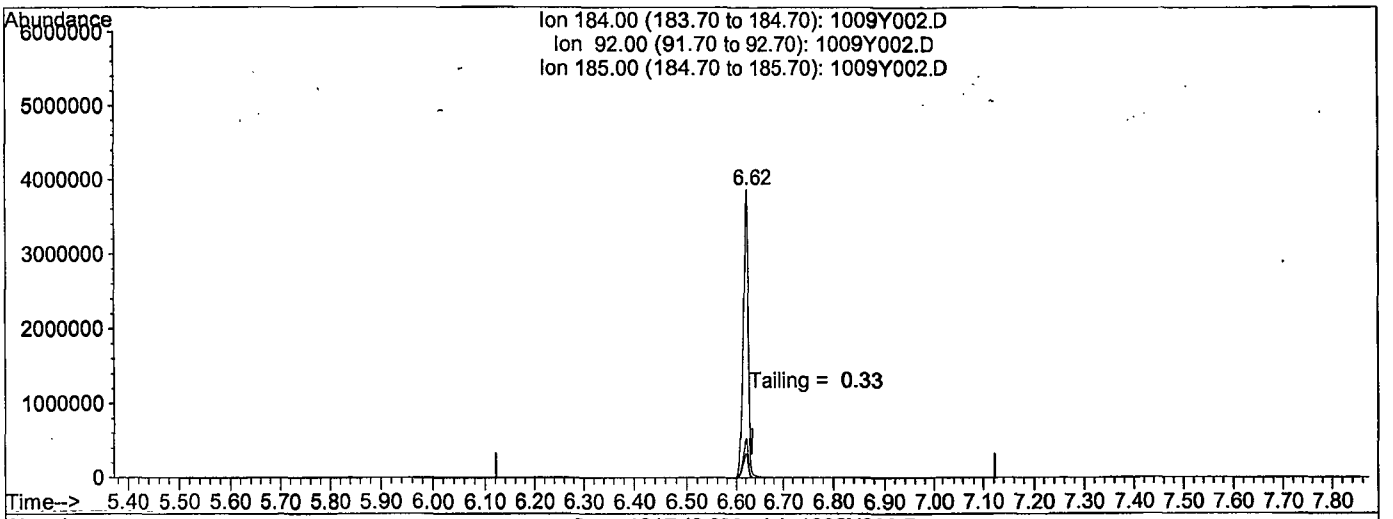
response 5042204

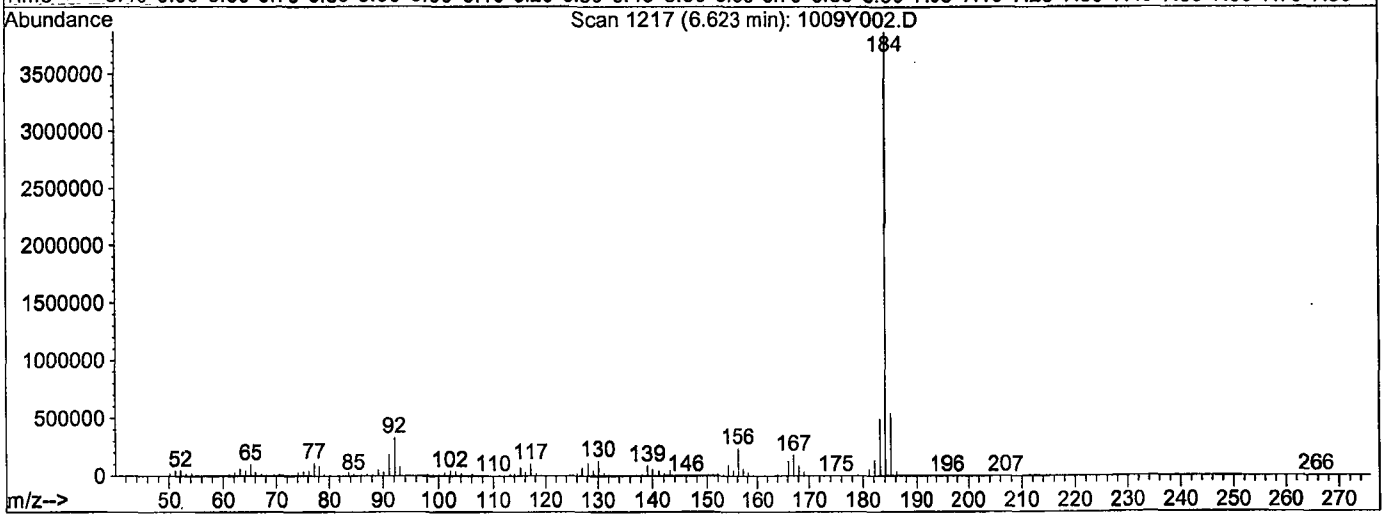
Ion	Exp%	Act%
266.00	100	100
264.00	63.10	64.09
268.00	65.40	65.83
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y002.D Vial: 2
Acq On : 9 Oct 20 10:55 Operator: MA
Sample : SV TUNE 10/02/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 9 10:49 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration





TIC: 1009Y002.D

(6) Benzidine

6.62min 0.0000

response 29089801

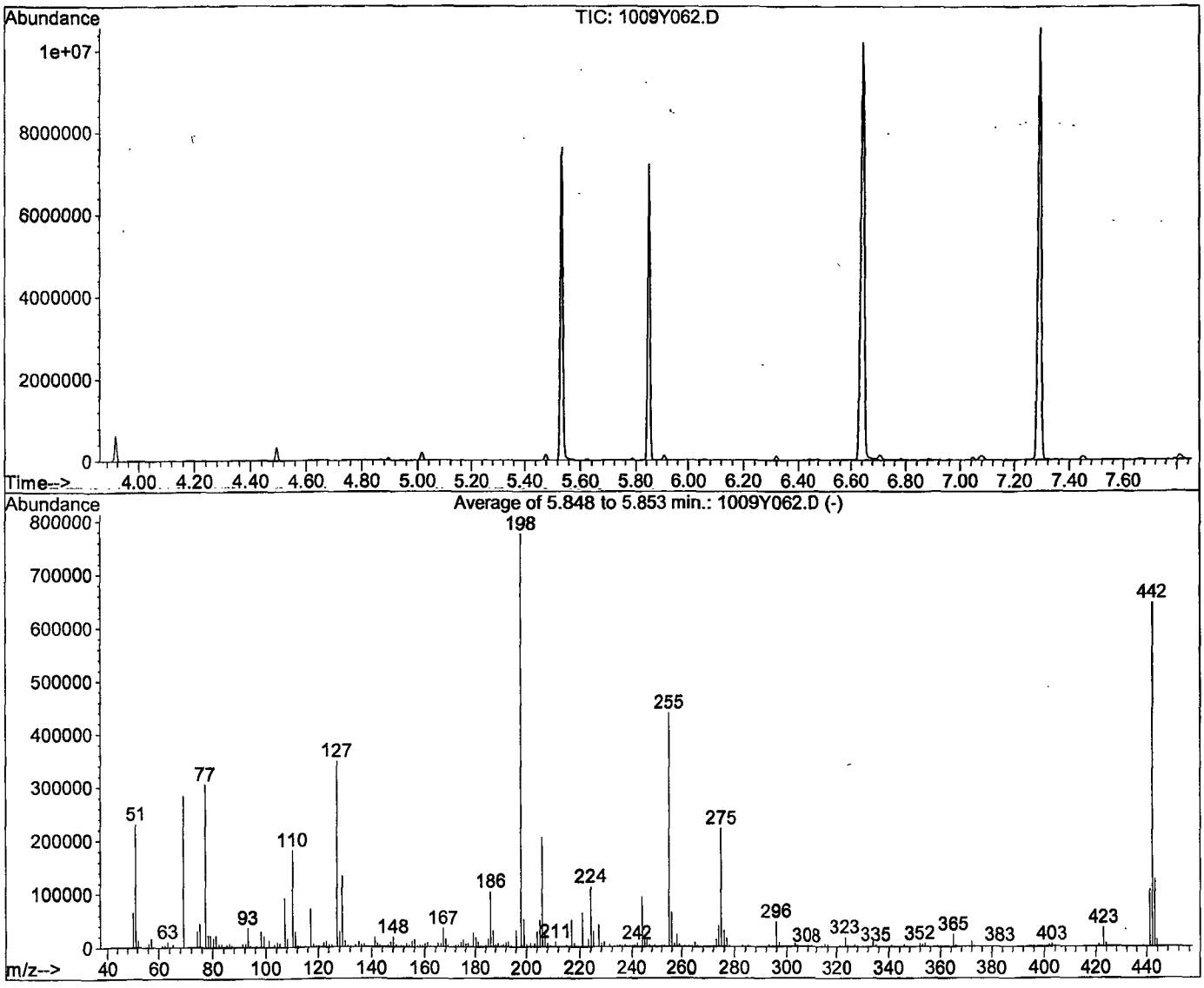
Ion	Exp%	Act%
184.00	100	100
92.00	8.50	8.82
185.00	13.80	13.96
0.00	0.00	0.00

DFTPP

Data File : M:\YODA\DATA\Y201009\1009Y062.D
Acq On : 14 Oct 20 14:32
Sample : SV TUNE 10/2/20
Misc :

Vial: 62
Operator: MA
Inst : Yoda
Multiplr: 1.00

Method : M:\YODA\DATA\Y201009\Y1009.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 906, 907, 908; Background Corrected with Scan 897

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	29.7	230101	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.0	0	PASS
127	198	10	80	44.8	347541	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	774997	PASS
199	198	5	9	6.6	50949	PASS
275	198	10	60	28.4	220395	PASS
365	198	1	100	2.9	22088	PASS
441	442	0.01	24	16.5	106213	PASS
442	198	50	500	83.2	645141	PASS
443	442	15	24	19.4	124976	PASS

Data File Name:	**1009Y062.D**
Data File Path:	**M:\YODA\DATA\Y201009**
Operator:	**MA**
Date Acquired:	**14 Oct 2020 14:32**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/2/20**
Vial Number:	**62**
Instrument Name:	**Yoda**

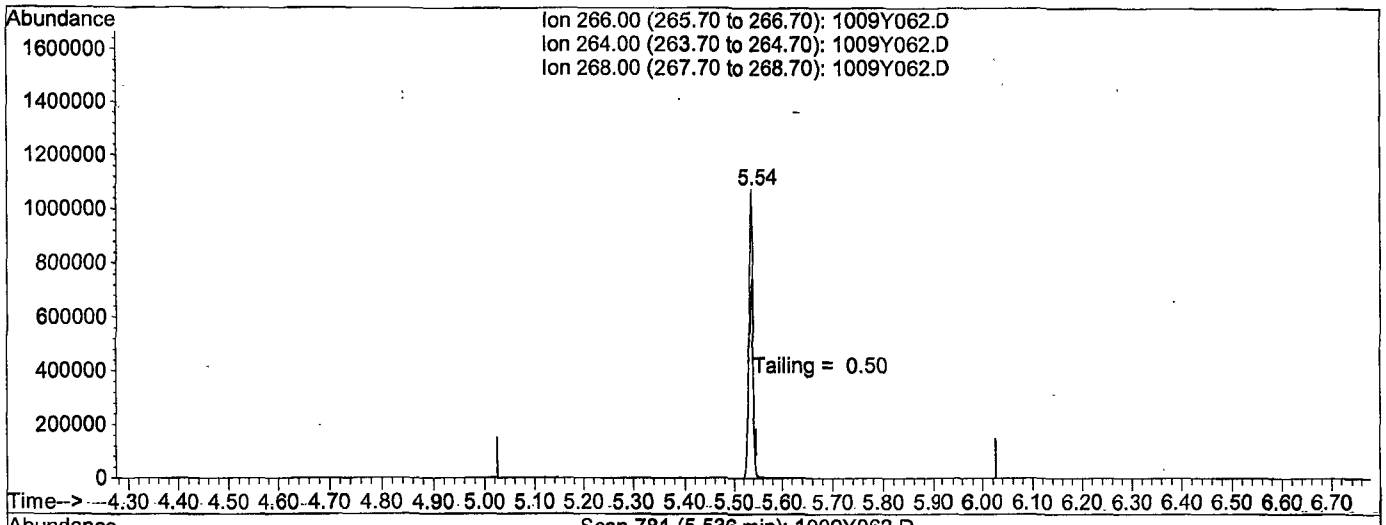
#	Name	Ret Time	Target Response
1)	DDT	7.26	82142100
2)	DDD	7.02	492837
3)	DDE	5.93	791659

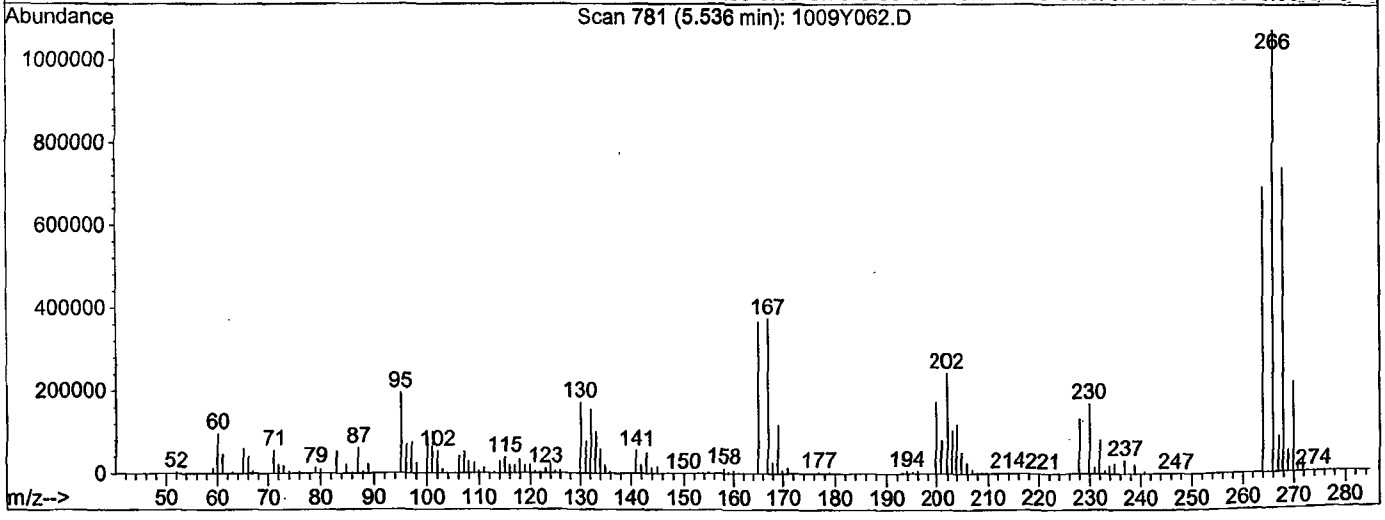
Breakdown **1.54**

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y062.D Vial: 62
Acq On : 14 Oct 20 14:32 Operator: MA
Sample : SV TUNE 10/2/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 14 14:30 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration





TIC: 1009Y062.D

(5) Pentachlorophenol

5.54min 0.0000

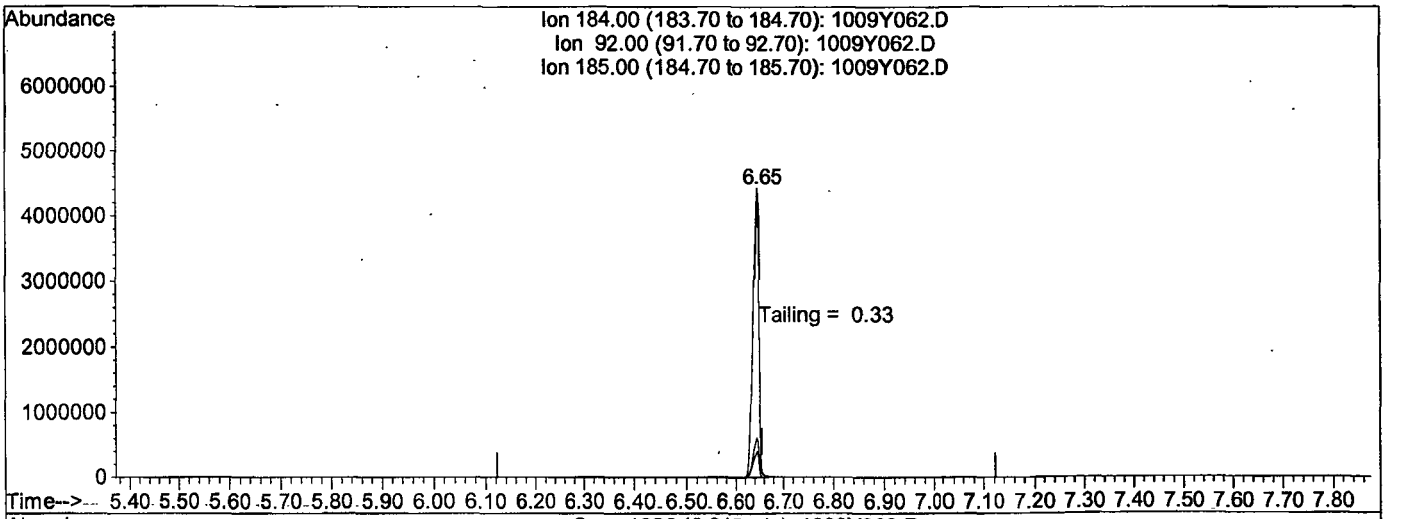
response 6571509

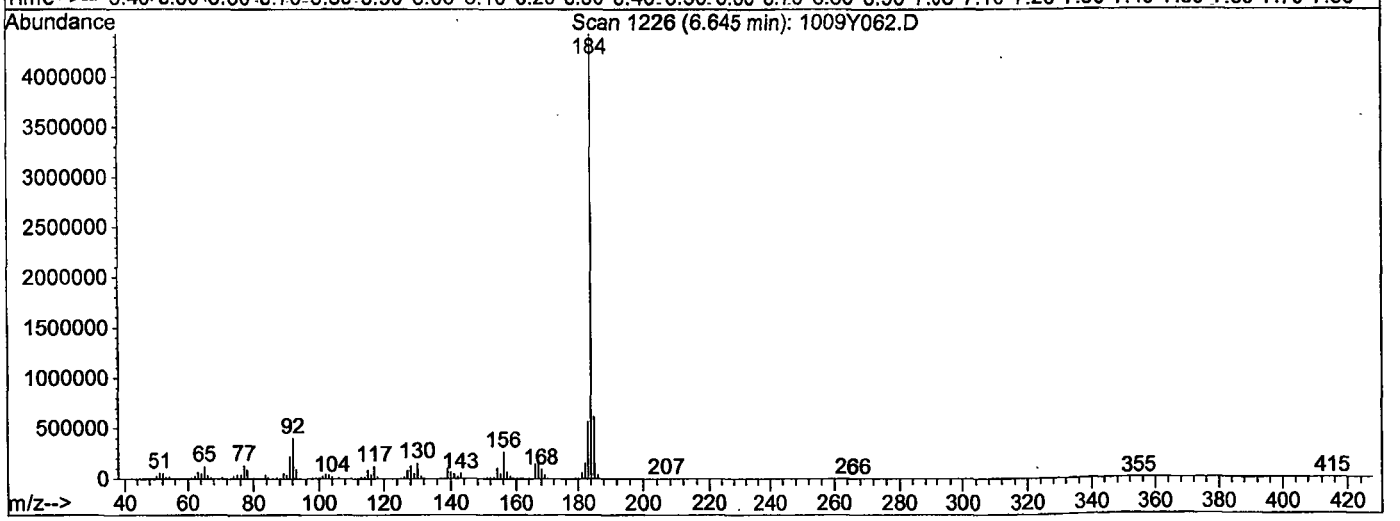
Ion	Exp%	Act%
266.00	100	100
264.00	63.10	63.41
268.00	65.40	66.07
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y201009\1009Y062.D Vial: 62
Acq On : 14 Oct 20 14:32 Operator: MA
Sample : SV TUNE 10/2/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 14 14:30 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y201009\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration





TIC: 1009Y062.D

(6) Benzidine

6.65min 0.0000

response 37616296

Ion	Exp%	Act%
184.00	100	100
92.00	8.50	8.97
185.00	13.80	13.94
0.00	0.00	0.00

Name of Final Standard: 8270 Full Scan Standard Curve
Prep Date: 07/22/20
Exp Date: 03/03/20
Prep'd By (Initials): CD

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	4 uL	200uL	MC 56258 192uL	4 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	4 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	5 uL	200uL	MC 56258 190uL	5 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	5 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	5 uL	100uL	MC 56258 90uL	10 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	5 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	10 uL	100uL	MC 56258 80uL	20 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	10 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	20 uL	100uL	MC 56258 60uL	40 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	20 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	50 uL	200 uL	MC 56258 100uL	50 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	50 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	4 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	30 uL	100uL	MC 56258 40uL	60 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	30 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	40 uL	100uL	MC 56258 20uL	80 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	40 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	2 uL			
8270 Stock	APPL	8270 Stock	200 ug/mL	07/20/20	07/20/21	50 uL	100uL	na	100 ug/mL
8270 Surrogate	APPL	8270 Surrogate	200/400 ug/mL	03/03/20	03/03/21	50 uL			
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	2 uL			

Name of Final Standard: 8270 Full Scan Second Source
Prep Date: 07/22/20
Exp Date: 07/22/21
Prep'd By (Initials): CD

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 SS Stock	o2si	8270 SS Stock	200 ug/mL	07/20/20	07/20/21	50 uL	200uL	MC 56258 150uL	50 ug/mL
SV Internal Standard	APPL	SV Internal Standard	2000 ug/mL	05/29/20	12/20/25	4 uL			

Name of Final Standard	8270 Stock	Prep'd By (Initials)	CD
Prep Date	07/20/20		
Exp Date	07/20/21		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
10001	Absolute	10001	2000	041720-50312	07/20/21	1.0 mL	10 mL	NA	200 ug/mL
10002	Absolute	10002	2000	042820-50317	07/20/21	1.0 mL	"	"	200 ug/mL
10004	Absolute	10004	2000	103119-50322	07/20/21	1.0 mL	"	"	200 ug/mL
10005	Absolute	10005	2000	031618-50362	07/20/21	1.0 mL	"	"	200 ug/mL
10006	Absolute	10006	2000	050420-50327	07/20/21	1.0 mL	"	"	200 ug/mL
10007	Absolute	10007	2000	060118-50332	07/20/21	1.0 mL	"	"	200 ug/mL
10018	Absolute	10018	2000	022620-50337	07/20/21	1.0 mL	"	"	200 ug/mL
70023	Absolute	70023	1000	112119-50342	07/20/21	1.0 mL	"	"	100 ug/mL
82705	Absolute	82705	2000	050620-50352	07/20/21	1.0 mL	"	"	200 ug/mL
94552	Absolute	94552	various	032520-50356	07/20/21	1.0 mL	"	"	various

Name of Final Standard	8270 2nd Source Stock	Prep'd By (Initials)	CD
Prep Date	07/20/20		
Exp Date	01/17/21		

Initial Standard Information						Final Standard Information			
Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
10001	Absolute	10001	2000	031618-39204	07/20/21	1.0 mL	10 mL	NA	200 ug/mL
10002	Absolute	10002	2000	041619-50074	07/20/21	1.0 mL	"	"	200 ug/mL
10004	Absolute	10004	2000	071618-50210	07/20/21	1.0 mL	"	"	200 ug/mL
10005	Absolute	10005	2000	011620-49804	07/20/21	1.0 mL	"	"	200 ug/mL
10006	Absolute	10006	2000	011718-39209	1/17/21	1.0 mL	"	"	200 ug/mL
10007	Absolute	10007	2000	011620-49809	07/20/21	1.0 mL	"	"	200 ug/mL
10018	Absolute	10018	2000	091919-49568	07/20/21	1.0 mL	"	"	200 ug/mL
70023	Absolute	70023	1000	051618-39216	07/20/21	1.0 mL	"	"	100 ug/mL
82705	Absolute	82705	2000	081418-50071	07/20/21	1.0 mL	"	"	200 ug/mL
94552	Absolute	94552	various	053119-50061	07/20/21	1.0 mL	"	"	various

Name of Final Standard	8270 Working Surrogate Stock	Prep'd By (Initials)	JP
Prep Date	03/03/20		
Exp Date	03/03/21		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Surrogate Stock	APPL	8270 Surrogate Stock	2000:1000 ug/mL	03/03/20	03/03/21	1.5 mL	7.5 mL	MC DW717 6 mL	400:200 ug/mL

8270 Internal Standard Ampules

Name of Final Standard	**(4)**	**Prep'd By (Initials)**	**MA**
Prep Date	**05/29/20**		
Exp Date	**12/31/25**		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Semivolatile Internal Standard	Restek	31206	2000 ug/mL	AO157142-49996to49999	12/31/25	3 mL	3 mL	NA	2000ug/mL

Name of Final Standard	8270 Surrogate	Prep'd By (Initials)	MA
Prep Date	10/06/20		
Exp Date	10/06/21		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
8270 Acid Surrogate Mix	Restek	33029	10,000 ug/mL	A0158618-50006, A0152714-49436	09/30/27	20 mL	200 mL	Acetone246130/ MC59353 1:1	1000 ug/mL
8270 B/N Surrogate Mix	Restek	31086	5000 ug/mL	A0158684-50244,5024550248,50004	02/28/26	20 mL	"	"	500 ug/mL

Use 0.2ml in extraction.

Name of Final Standard	8270 Spike	Prep'd By (Initials)	MA
Prep Date	10/06/20		
Exp Date	10/06/21		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
10001	Absolute	10001	2000	041720-50309,50311	04/17/23	2.0 mL	80 mL	Acetone Lot# 0246130	50 ug/mL
10002	Absolute	10002	2000	042820-50646,50647	04/28/23	2.0 mL	"	"	50 ug/mL
10004	Absolute	10004	2000	103119-50319,50321	10/31/24	2.0 mL	"	"	50 ug/mL
10005	Absolute	10005	2000	011620-50671,50672	01/16/25	2.0 mL	"	"	50 ug/mL
10006	Absolute	10006	2000	050420-50324,50325	05/04/23	2.0 mL	"	"	50 ug/mL
10007	Absolute	10007	2000	060118-50066,50067	06/01/23	2.0 mL	"	"	50 ug/mL
10018	Absolute	10018	2000	022620-50334,50687	02/26/25	2.0 mL	"	"	50 ug/mL
70023	Absolute	70023	1000	112119-50691,50692	11/21/24	2.0 mL	"	"	25 ug/mL
82705	Absolute	82705	2000	050620-50349,50350	05/06/23	2.0 mL	"	"	50 ug/mL
94552	Absolute	94552	various	032520-50711,50712	03/25/22	2.0 mL	"	"	various

_LIQ003

Organic Extraction Worksheet

Method	Continuous Liquid/Liquid SVOC 3520C	Extraction Set	201012A	Extraction Method	LIQ003	Units	mL

Spiked ID 1	8270T Spike 10/6/20 ex 10/6/21		Surrogate ID 1	8270 Surrogate 10/6/20 ex 10/6/21	
Spiked ID 2	Sim Spike 9/11/20 ex 9/11/21		Surrogate ID 2	SIM Surrogate 8/11/20 ex 8/11/21	
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:		
Spiked ID 7			Ext. Start Time:	10/12/20 13:40	
Spiked ID 8			Ext. End Time:	10/14/20 12:45	
			GC Requires Extract By:		

pH1	2	10/12/20 13:45	Water Bath Temp 1 °C	EWB5 75/74.1 °
pH2	14	10/13/20 11:15	Water Bath Temp 2 °C	
pH3			Water Bath Temp 3 °C	

Spiked By: DL **Date** 10/14/20 2:12:57 PM **Witnessed By:** CFM **Date** 10/14/20 2:13:04 PM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201012A Blk				0.2,0.050	1,2 equip	800 EWB5	1	2/1	10/12/20 13:40	
2	201012A LCS-1		1	1	1	1 equip	800 EWB5	1	2/1	10/12/20 13:40	
3	201012A LCS-2		0.125	2	0.050	2 equip	800 EWB5	1	2/1	10/12/20 13:40	
4	201012A LCSD-1		1	1	1	1 equip	800 EWB5	1	2/1	10/12/20 13:40	
5	201012A LCSD-2		0.125	2	0.050	2 equip	800 EWB5	1	2/1	10/12/20 13:40	
6	BA19640	BA19640W17			0.2,0.050	1,2 equip	800 EWB5	1	2/1	10/12/20 13:40	93659

Solvent and Lot#	
PH Strips	HC904495
Dichloromethane (DCM)	60127
1+1 H2SO4	238844
10N NaOH	10/6/20
Filter Paper	400178
Na2SO4	2019070279

Extraction COC Transfer	
Extraction lab employee Initials	DL
GC analyst's initials	MA
Date	10/14/20
Time	1:45
Refrigerator	GC_C

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL

Modified	10/14/20 5:14:08 PM

Reviewed By: MA **Date** 12/14/20

Injection Log

Directory: M:\YODA\DATA\Y201009\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
2	1009Y002.D	1	SV TUNE 10/02/20		9 Oct 20 10:55
3	1009Y003.D	1	4ug/mL 8270 7/22/20		9 Oct 20 11:14
4	1009Y004.D	1	5ug/mL 8270 7/22/20		9 Oct 20 11:40
5	1009Y005.D	1	10ug/mL 8270 7/22/20		9 Oct 20 12:05
6	1009Y006.D	1	20ug/mL 8270 7/22/20		9 Oct 20 12:31
7	1009Y007.D	1	40ug/mL 8270 7/22/20		9 Oct 20 12:56
8	1009Y008.D	1	50ug/mL 8270 7/22/20		9 Oct 20 13:22
9	1009Y009.D	1	60ug/mL 8270 7/22/20		9 Oct 20 13:48
10	1009Y010.D	1	80ug/mL 8270 7/22/20		9 Oct 20 14:13
11	1009Y011.D	1	100ug/mL 8270 7/22/20		9 Oct 20 14:38
12	1009Y012.D	1	SS 50ug/mL 8270 7/22/20		9 Oct 20 15:04
83	1009Y083.D	1	50ug/mL 8270 8/13/20 (2)		14 Oct 20 23:20
62	1009Y062.D	1	SV TUNE 10/2/20		14 Oct 20 14:32
63	1009Y063.D	1	50ug/mL 8270 7/22/20 (4)		14 Oct 20 14:47
64	1009Y064.D	1.25	201012A BLK 1/800		14 Oct 20 15:14
65	1009Y065.D	1.25	201012A LCS-1 1/800		14 Oct 20 15:39
66	1009Y066.D	1.25	201012A LCSD-1 1/800		14 Oct 20 16:05
67	1009Y067.D	1.25	BA19640W17 1/800		14 Oct 20 16:30
83	1009Y083.D	1	50ug/mL 8270 8/13/20 (2)		14 Oct 20 23:20

ORGANICS

Calibration Data

PAH by GCMS SIM
EPA 8270 SIM

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 08/21/20
Matrix: Instrument: Linus
Initials: MA

			0821L003.D	0821L004.D	0821L005.D	0821L006.D	0821L007.D	0821L008.D	0821L009.D	0821L010.D								
		Compound	0.1	0.2	0.5	1	5	10	50	100			Avg	%RSD	Type	r^2	Q	MRF
1	I	Napthalene-D8(IS)																
2	TM	Naphthalene	1.049	0.9900	0.9625	1.002	0.9263	0.9136	0.9185	0.8468			0.95	6.6	TM			0.700
3	S	2-Methylnaphthalene-D10 (2M	1.120	1.030	1.005	1.066	1.074	1.086	1.065	1.009			1.1	3.8	S			
4	TM	2-Methylnaphthalene	0.6254	0.6007	0.6044	0.6323	0.6177	0.6175	0.5870	0.5392			0.60	4.9	TM			0.400
5	TM	1-Methylnaphthalene	0.6685	0.6480	0.6351	0.6664	0.6222	0.6134	0.5936	0.5444			0.62	6.6	TM			
6	I	Acenaphthene-D10(IS)																
7	TM	Acenaphthylene	3.438	3.300	3.279	3.413	3.571	3.672	3.329	2.983			3.4	6.2	TM			0.900
8	*TM	Acenaphthene	1.255	1.161	1.093	1.112	1.070	1.068	1.031	0.8315			1.1	11	*TM			0.900
9	TM	Fluorene	1.319	1.236	1.269	1.329	1.346	1.376	1.322	1.052			1.3	8.0	TM			0.900
10	I	Phenanthrene-D10(IS)																
11	TM	Phenanthrene	1.084	1.053	1.034	1.068	1.048	1.028	0.9123	0.7999			1.0	9.7	TM			0.700
12	TM	Anthracene	0.8762	0.8766	0.8807	0.9282	0.9871	0.9898	0.8603	0.7338			0.89	9.1	TM			0.700
13	S	Fluoranthene-D10 (FRT)	1.241	1.106	1.066	1.101	1.158	1.226	1.247	1.140			1.2	6.0	S			
14	*TM	Fluoranthene	1.314	1.266	1.290	1.391	1.418	1.417	1.300	1.056			1.3	9.0	*TM			0.600
15	I	Chrysene-D12(IS)																
16	TM	Pyrene	1.028	0.9899	0.9978	1.047	1.052	1.030	0.9732	0.9448			1.0	3.7	TM			0.600
17	TM	Benz (a) anthracene	1.046	0.9637	0.9378	0.9959	0.9576	0.9544	0.9956	0.9384			0.97	3.8	TM			0.800
18	TM	Chrysene	1.211	1.134	1.105	1.083	1.076	1.031	0.9348	0.8899			1.1	9.9	TM			0.700
19	TM	Indeno (1,2,3-cd) pyrene	1.173	1.103	1.123	1.184	1.255	1.280	1.340	1.376			1.2	8.1	TM			0.500
20	I	Perylene-D12(IS)																
21	TM	Benzo (b) fluoranthene	0.7972	0.8337	0.7844	0.8517	0.9819	1.024	0.9930	0.9545			0.90	11	TM			0.700
22	TM	Benzo (k) fluoranthene	1.182	1.079	1.124	1.171	1.122	1.074	1.007	0.8885			1.1	8.9	TM			0.700
23	*TM	Benzo (a) pyrene	0.7027	0.7007	0.8138	0.8645	0.9319	0.9476	0.9350	0.8728			0.85	12	*TM			0.700
24	TM	Dibenz (a,h) anthracene	0.9366	0.8981	0.8981	0.9568	1.036	1.032	1.013	0.9514			0.97	5.8	TM			0.400
25	TM	Benzo (g,h,i) perylene	0.9887	0.9339	0.9420	0.9985	1.055	1.062	1.038	0.9676			1.00	5.0	TM			0.500
26																		
27																		
28																		
29																		
30																		
31																		
32																		
33																		
34																		
35																		

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L200821\0821L003.D Vial: 3
Acq On : 21 Aug 20 10:46 Operator: MA
Sample : 0.1 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 12:43 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 12:43:08 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	3.82	136	51685	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	5.82	164	27647	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.53	188	54582	2.50000	ppb		0.00
15) Chrysene-D12(IS)	10.61	240	70965	2.50000	ppb		0.01
20) Perylene-D12(IS)	12.87	264	74389	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	4.61	152	1158	0.04744	ppb		0.01
Spiked Amount 5.000			Recovery	= 0.940%			
13) Fluoranthene-D10 (FRT)	8.93	212	1355	0.04488	ppb		0.02
Spiked Amount 5.000			Recovery	= 0.900%			
Target Compounds							Qvalue
2) Naphthalene	3.84	128	2168	0.10120	ppb		99
4) 2-Methylnaphthalene	4.65	142	1293	0.09391	ppb		95
5) 1-Methylnaphthalene	4.76	142	1382	0.09640	ppb		93
7) Acenaphthylene	5.67	152	3802	0.09060	ppb		99
8) Acenaphthene	5.86	154	1388	0.10459	ppb		93
9) Fluorene	6.47	166	1459	0.09138	ppb		98
11) Phenanthrene	7.57	178	2366	0.09568	ppb		99
12) Anthracene	7.64	178	1913	0.08746	ppb		98
14) Fluoranthene	8.95	202	2868	0.08548	ppb		98
16) Pyrene	9.20	202	2917	0.08354	ppb		94
17) Benz (a) anthracene	10.60	228	2968	0.09545	ppb		96
18) Chrysene	10.64	228	3438	0.09514	ppb		99
19) Indeno (1,2,3-cd) pyrene	14.48	276	3331	0.08197	ppb	#	93
21) Benzo (b) fluoranthene	12.19	252	2372	0.08250	ppb	#	92
22) Benzo (k) fluoranthene	12.24	252	3517	0.09604	ppb	#	92
23) Benzo (a) pyrene	12.78	252	2091	0.07319	ppb		97
24) Dibenz (a,h) anthracene	14.49	278	2787	0.08822	ppb		97
25) Benzo (g,h,i) perylene	14.79	276	2942	0.08841	ppb	#	94

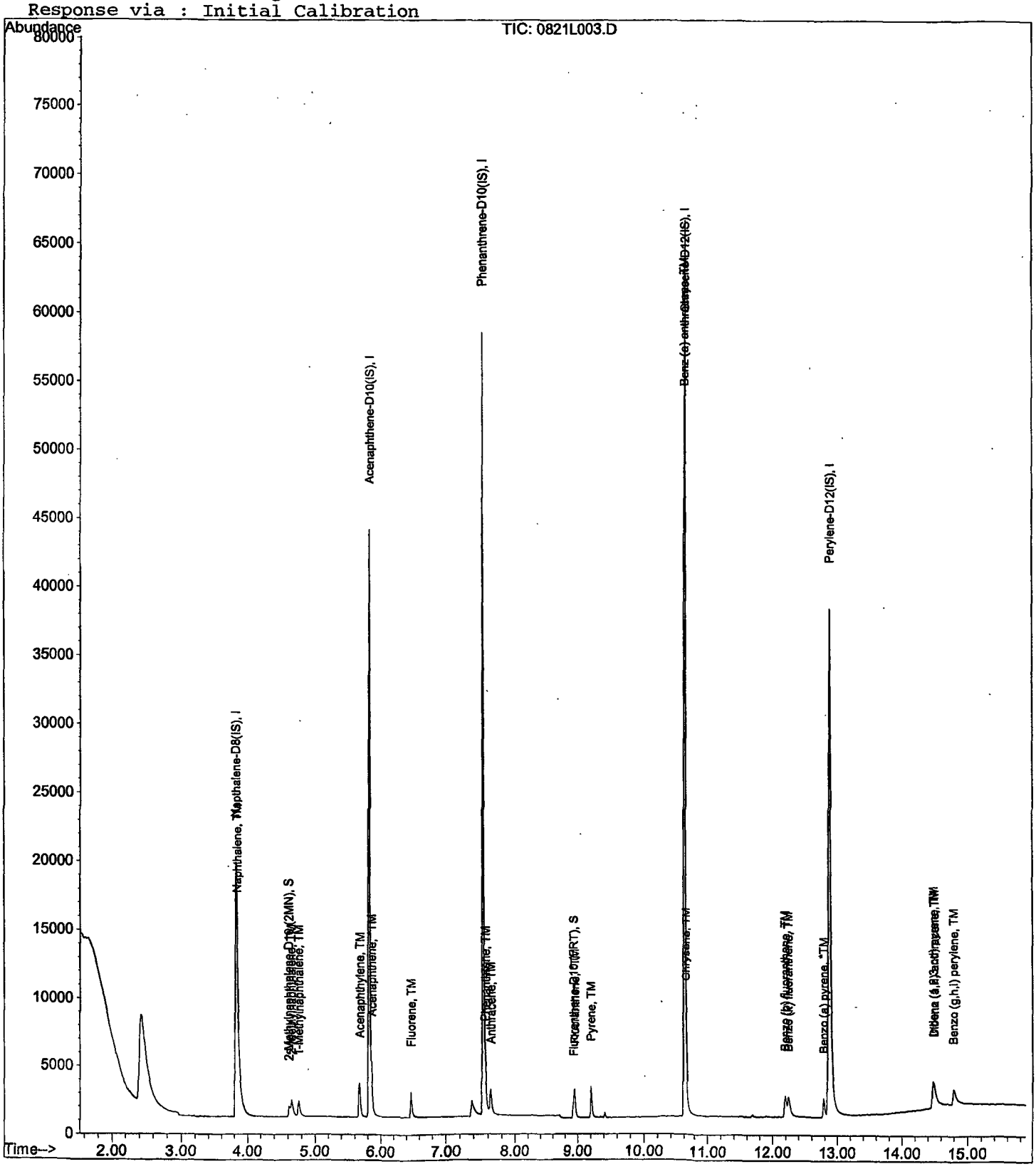
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200821\0821L003.D Vial: 3
Acq On : 21 Aug 20 10:46 Operator: MA
Sample : 0.1 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 12:43 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 13:50:04 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L200821\0821L004.D Vial: 4
Acq On : 21 Aug 20 11:08 Operator: MA
Sample : 0.2 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 12:43 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 12:43:08 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	3.82	136	58369	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	5.82	164	31527	2.50000 ppb		0.00
10) Phenanthrene-D10(IS)	7.53	188	59663	2.50000 ppb		0.00
15) Chrysene-D12(IS)	10.61	240	78189	2.50000 ppb		0.01
20) Perylene-D12(IS)	12.87	264	82205	2.50000 ppb		0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	4.61	152	2405	0.08724 ppb		0.01
Spiked Amount 5.000			Recovery =	1.740%		
13) Fluoranthene-D10 (FRT)	8.92	212	2639	0.07997 ppb		0.01
Spiked Amount 5.000			Recovery =	1.600%		
Target Compounds						Qvalue
2) Naphthalene	3.84	128	4623	0.19109 ppb		98
4) 2-Methylnaphthalene	4.65	142	2805	0.18041 ppb		100
5) 1-Methylnaphthalene	4.75	142	3026	0.18691 ppb		99
7) Acenaphthylene	5.66	152	8322	0.17390 ppb		99
8) Acenaphthene	5.86	154	2928	0.19348 ppb		95
9) Fluorene	6.47	166	3118	0.17125 ppb		97
11) Phenanthrene	7.57	178	5025	0.18590 ppb		99
12) Anthracene	7.64	178	4184	0.17499 ppb		98
14) Fluoranthene	8.94	202	6045	0.16482 ppb	#	92
16) Pyrene	9.20	202	6192	0.16095 ppb	#	89
17) Benz (a) anthracene	10.60	228	6028	0.17595 ppb		97
18) Chrysene	10.64	228	7094	0.17818 ppb		99
19) Indeno (1,2,3-cd) pyrene	14.46	276	6899	0.15408 ppb	#	91
21) Benzo (b) fluoranthene	12.19	252	5483	0.17257 ppb	#	91
22) Benzo (k) fluoranthene	12.24	252	7096	0.17535 ppb	#	91
23) Benzo (a) pyrene	12.78	252	4608	0.14595 ppb		98
24) Dibenz (a,h) anthracene	14.48	278	5906	0.16918 ppb	#	97
25) Benzo (g,h,i) perylene	14.79	276	6142	0.16702 ppb		99

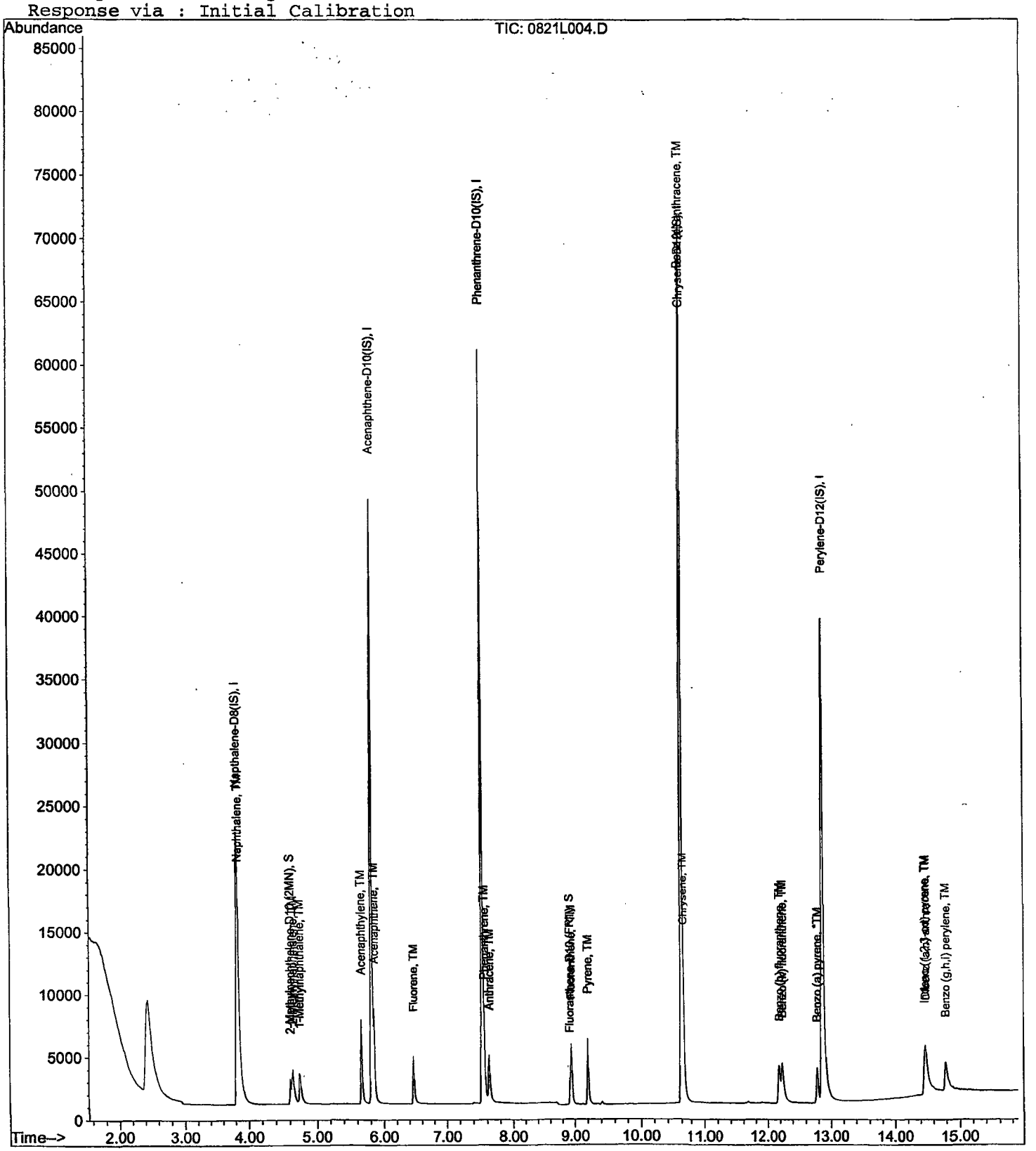
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200821\0821L004.D Vial: 4
Acq On : 21 Aug 20 11:08 Operator: MA
Sample : 0.2 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 12:43 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 13:50:04 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L200821\0821L005.D Vial: 5
Acq On : 21 Aug 20 11:30 Operator: MA
Sample : 0.5 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 12:43 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 12:43:08 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	3.82	136	54040	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	5.82	164	29495	2.50000 ppb		0.00
10) Phenanthrene-D10(IS)	7.53	188	55686	2.50000 ppb		0.00
15) Chrysene-D12(IS)	10.61	240	72458	2.50000 ppb		0.01
20) Perylene-D12(IS)	12.87	264	76717	2.50000 ppb		0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	4.61	152	5432	0.21283 ppb		0.01
Spiked Amount 5.000			Recovery	= 4.260%		
13) Fluoranthene-D10 (FRT)	8.92	212	5937	0.19275 ppb		0.01
Spiked Amount 5.000			Recovery	= 3.860%		
Target Compounds						Qvalue
2) Naphthalene	3.84	128	10403	0.46445 ppb		99
4) 2-Methylnaphthalene	4.65	142	6532	0.45376 ppb		100
5) 1-Methylnaphthalene	4.74	142	6864	0.45794 ppb		97
7) Acenaphthylene	5.66	152	19345	0.43210 ppb		99
8) Acenaphthene	5.86	154	6445	0.45523 ppb		94
9) Fluorene	6.46	166	7485	0.43942 ppb		98
11) Phenanthrene	7.57	178	11514	0.45637 ppb		99
12) Anthracene	7.63	178	9808	0.43951 ppb		99
14) Fluoranthene	8.94	202	14362	0.41954 ppb		98
16) Pyrene	9.20	202	14460	0.40560 ppb	#	86
17) Benz (a) anthracene	10.60	228	13590	0.42805 ppb		97
18) Chrysene	10.64	228	16009	0.43391 ppb		99
19) Indeno (1,2,3-cd) pyrene	14.45	276	16274	0.39222 ppb	#	96
21) Benzo (b) fluoranthene	12.18	252	12036	0.40592 ppb	#	93
22) Benzo (k) fluoranthene	12.24	252	17248	0.45671 ppb	#	91
23) Benzo (a) pyrene	12.78	252	12486	0.42375 ppb		99
24) Dibenz (a,h) anthracene	14.48	278	13780	0.42296 ppb		97
25) Benzo (g,h,i) perylene	14.78	276	14453	0.42115 ppb		98

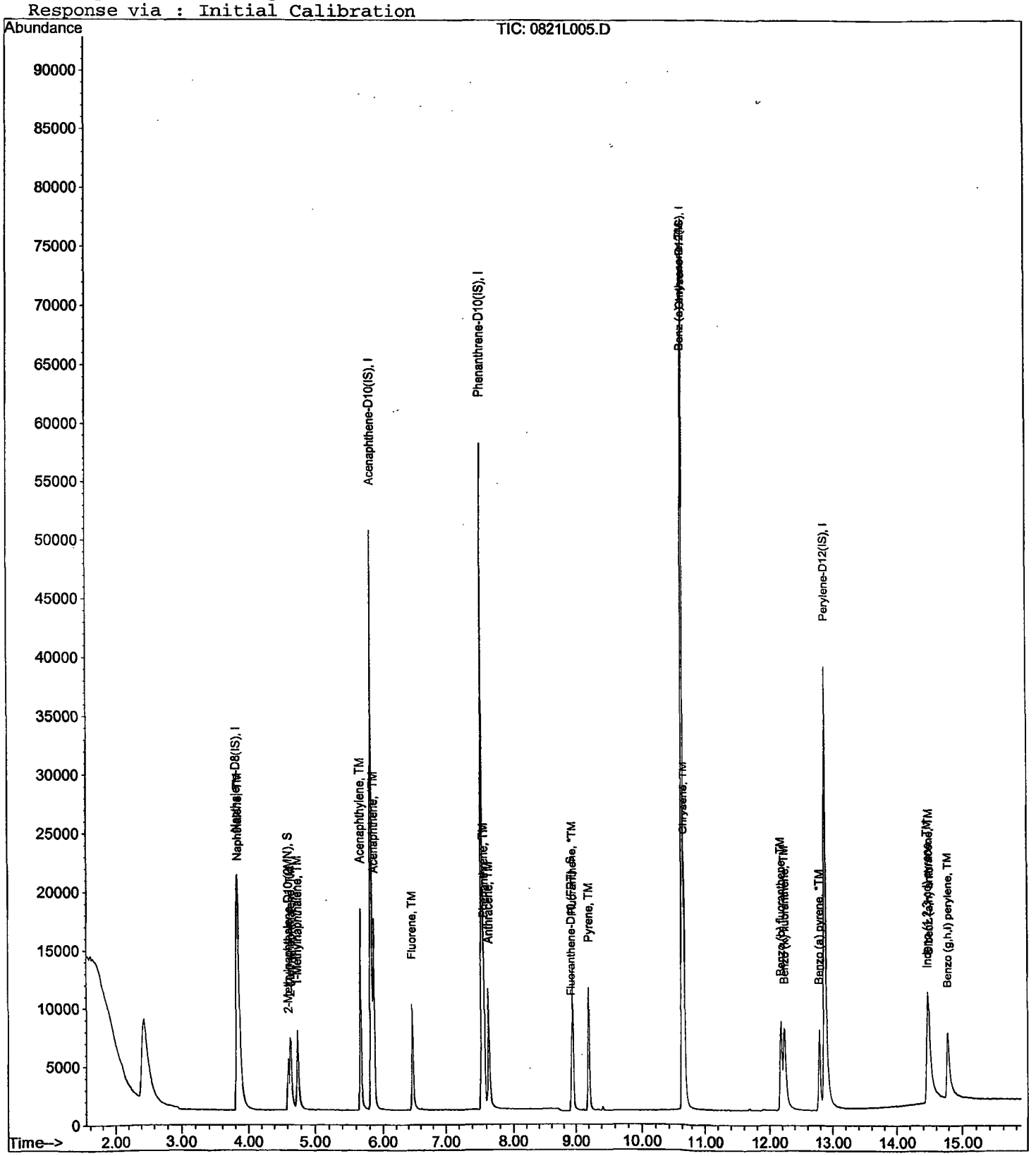
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200821\0821L005.D Vial: 5
Acq On : 21 Aug 20 11:30 Operator: MA
Sample : 0.5 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 12:43 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 13:50:04 2020
Response via : Initial Calibration



3/13/2018

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L200821\0821L006.D Vial: 6
Acq On : 21 Aug 20 11:53 Operator: MA
Sample : 1 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 12:42 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 12:41:53 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	3.82	136	55656	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	5.82	164	30473	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.53	188	57512	2.50000	ppb		0.00
15) Chrysene-D12(IS)	10.60	240	75867	2.50000	ppb		0.00
20) Perylene-D12(IS)	12.87	264	79796	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	4.60	152	11871	0.45161	ppb		0.00
Spiked Amount 5.000			Recovery = 9.040%				
13) Fluoranthene-D10 (FRT)	8.92	212	12667	0.39820	ppb		0.01
Spiked Amount 5.000			Recovery = 7.960%				
Target Compounds							Qvalue
2) Naphthalene	3.84	128	22317	0.96743	ppb		99
4) 2-Methylnaphthalene	4.64	142	14077	0.94950	ppb		97
5) 1-Methylnaphthalene	4.74	142	14836	0.96106	ppb		98
7) Acenaphthylene	5.66	152	41603	0.89943	ppb		99
8) Acenaphthene	5.86	154	13551	0.92643	ppb		95
9) Fluorene	6.46	166	16202	0.92065	ppb		97
11) Phenanthrene	7.56	178	24562	0.94264	ppb		99
12) Anthracene	7.63	178	21353	0.92647	ppb		99
14) Fluoranthene	8.93	202	31995	0.90497	ppb	#	91
16) Pyrene	9.19	202	31759	0.85081	ppb		91
17) Benz (a) anthracene	10.60	228	30222	0.90915	ppb		97
18) Chrysene	10.64	228	32859	0.85059	ppb		98
19) Indeno (1,2,3-cd) pyrene	14.44	276	35929	0.82701	ppb	#	97
21) Benzo (b) fluoranthene	12.17	252	27185	0.88146	ppb		98
22) Benzo (k) fluoranthene	12.21	252	37380	0.95160	ppb		99
23) Benzo (a) pyrene	12.77	252	27594	0.90035	ppb		100
24) Dibenz (a,h) anthracene	14.46	278	30539	0.90119	ppb		98
25) Benzo (g,h,i) perylene	14.77	276	31869	0.89280	ppb		99

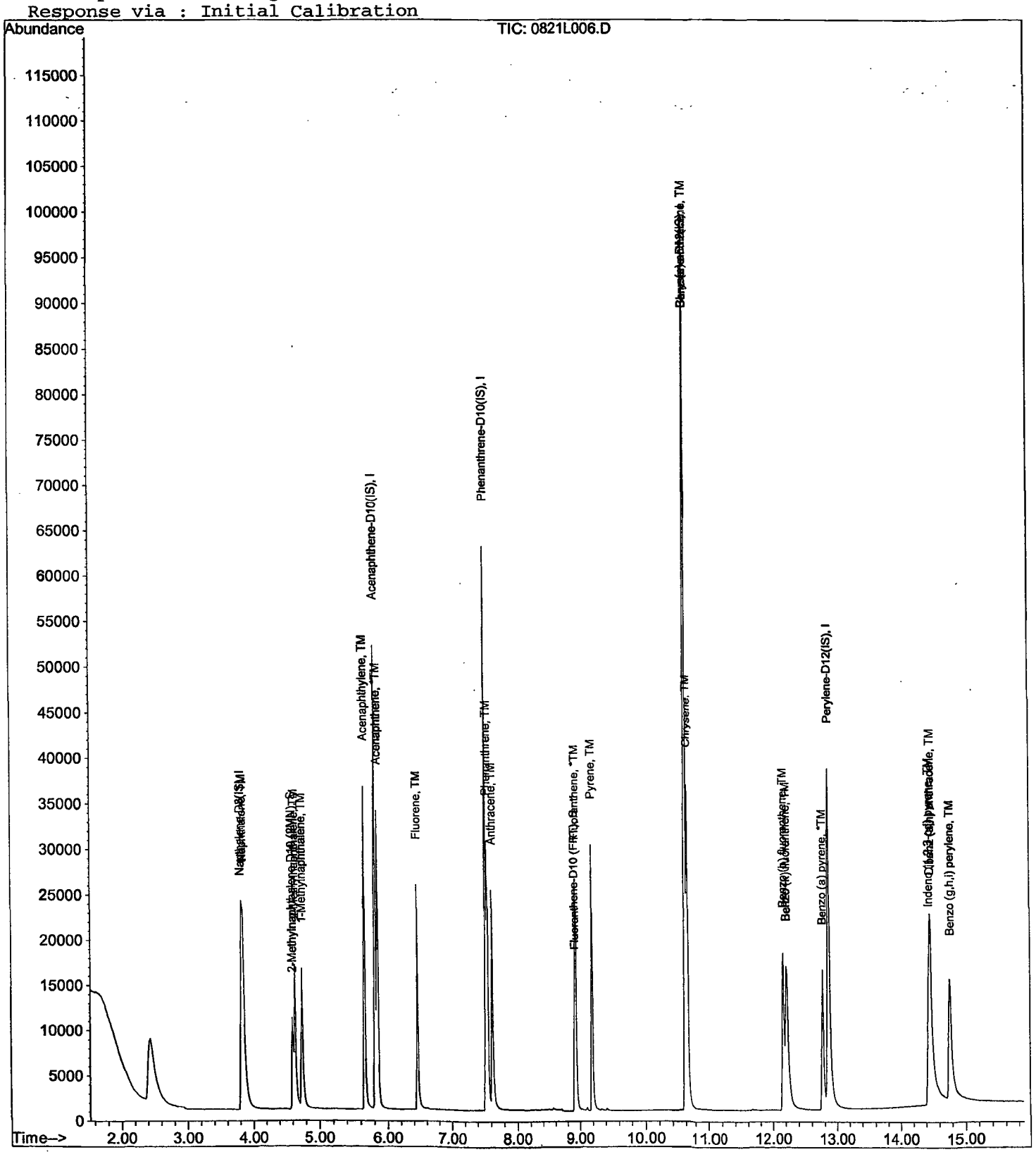
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200821\0821L006.D Vial: 6
Acq On : 21 Aug 20 11:53 Operator: MA
Sample : 1 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 12:42 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 13:50:04 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L200821\0821L007.D Vial: 7
Acq On : 21 Aug 20 12:15 Operator: MA
Sample : 5 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 12:44 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 12:44:28 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	3.82	136	54119	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	5.82	164	28820	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.53	188	54918	2.50000	ppb		0.00
15) Chrysene-D12(IS)	10.60	240	74509	2.50000	ppb		0.00
20) Perylene-D12(IS)	12.87	264	77721	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	4.60	152	58149	2.27501	ppb		0.00
Spiked Amount 5.000			Recovery = 45.500%				
13) Fluoranthene-D10 (FRT)	8.91	212	63592	2.09350	ppb		0.00
Spiked Amount 5.000			Recovery = 41.860%				
Target Compounds							Qvalue
2) Naphthalene	3.84	128	100263	4.46981	ppb		100
4) 2-Methylnaphthalene	4.64	142	66860	4.63783	ppb		100
5) 1-Methylnaphthalene	4.73	142	67342	4.48623	ppb		100
7) Acenaphthylene	5.65	152	205818	4.70489	ppb		100
8) Acenaphthene	5.86	154	61703	4.46036	ppb		100
9) Fluorene	6.45	166	77560	4.65999	ppb		100
11) Phenanthrene	7.56	178	115106	4.62620	ppb		100
12) Anthracene	7.62	178	108424	4.92653	ppb		100
14) Fluoranthene	8.93	202	155693	4.61173	ppb		100
16) Pyrene	9.18	202	156704	4.27452	ppb		100
17) Benz (a) anthracene	10.58	228	142698	4.37093	ppb		100
18) Chrysene	10.63	228	160366	4.22691	ppb		100
19) Indeno (1,2,3-cd) pyrene	14.42	276	187041	4.38376	ppb	#	100
21) Benzo (b) fluoranthene	12.15	252	152623	5.08084	ppb		100
22) Benzo (k) fluoranthene	12.20	252	174461	4.55991	ppb		100
23) Benzo (a) pyrene	12.76	252	144850	4.85244	ppb		100
24) Dibenz (a,h) anthracene	14.45	278	160982	4.87734	ppb		100
25) Benzo (g,h,i) perylene	14.75	276	163956	4.71582	ppb		100

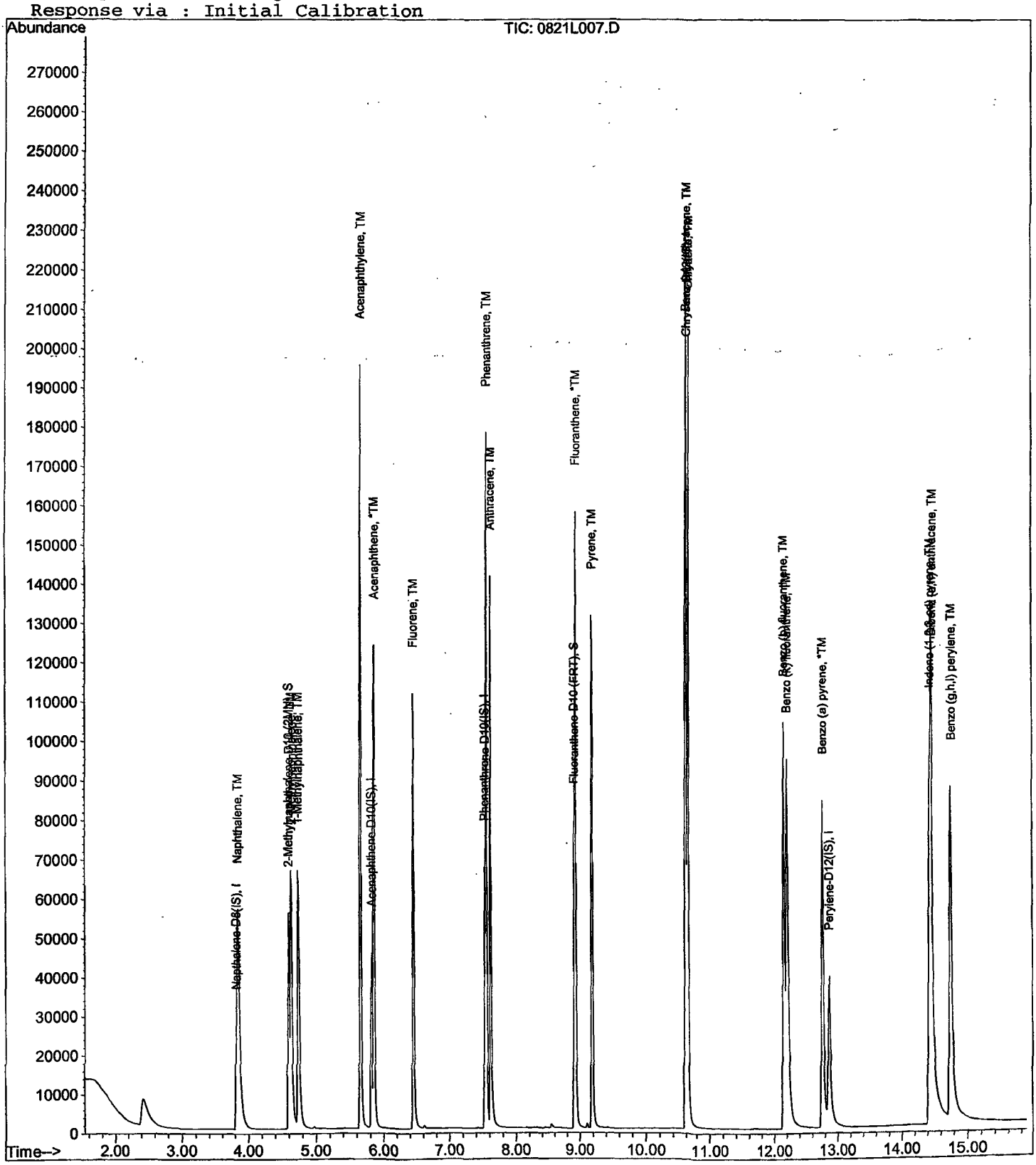
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200821\0821L007.D Vial: 7
Acq On : 21 Aug 20 12:15 Operator: MA
Sample : 5 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 12:44 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 13:50:04 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L200821\0821L008.D Vial: 8
Acq On : 21 Aug 20 12:37 Operator: MA
Sample : 10 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 12:56 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 12:44:28 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	3.82	136	56076	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	5.82	164	29594	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.53	188	56809	2.50000	ppb		0.00
15) Chrysene-D12(IS)	10.60	240	79229	2.50000	ppb		0.00
20) Perylene-D12(IS)	12.87	264	83182	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	4.60	152	121798	4.59889	ppb		0.00
Spiked Amount 5.000			Recovery	= 91.980%			
13) Fluoranthene-D10 (FRT)	8.91	212	139292	4.43296	ppb		0.00
Spiked Amount 5.000			Recovery	= 88.660%			
Target Compounds							Qvalue
2) Naphthalene	3.84	128	204928	8.81703	ppb		100
4) 2-Methylnaphthalene	4.62	142	138498	9.27181	ppb		96
5) 1-Methylnaphthalene	4.73	142	137582	8.84566	ppb		100
7) Acenaphthylene	5.65	152	434694	9.67699	ppb		99
8) Acenaphthene	5.84	154	126407	8.89868	ppb		84
9) Fluorene	6.45	166	162868	9.52956	ppb		97
11) Phenanthrene	7.56	178	233515	9.07275	ppb		99
12) Anthracene	7.62	178	224907	9.87907	ppb		99
14) Fluoranthene	8.93	202	322043	9.22160	ppb		99
16) Pyrene	9.18	202	326326	8.37112	ppb		97
17) Benz (a) anthracene	10.58	228	302454	8.71244	ppb		99
18) Chrysene	10.63	228	326691	8.09791	ppb		100
19) Indeno (1,2,3-cd) pyrene	14.42	276	405676	8.94156	ppb	#	94
21) Benzo (b) fluoranthene	12.15	252	340797	10.60036	ppb		100
22) Benzo (k) fluoranthene	12.20	252	357235	8.72410	ppb		99
23) Benzo (a) pyrene	12.76	252	315296	9.86891	ppb		100
24) Dibenz (a,h) anthracene	14.45	278	343234	9.71640	ppb		99
25) Benzo (g,h,i) perylene	14.74	276	353213	9.49239	ppb		97

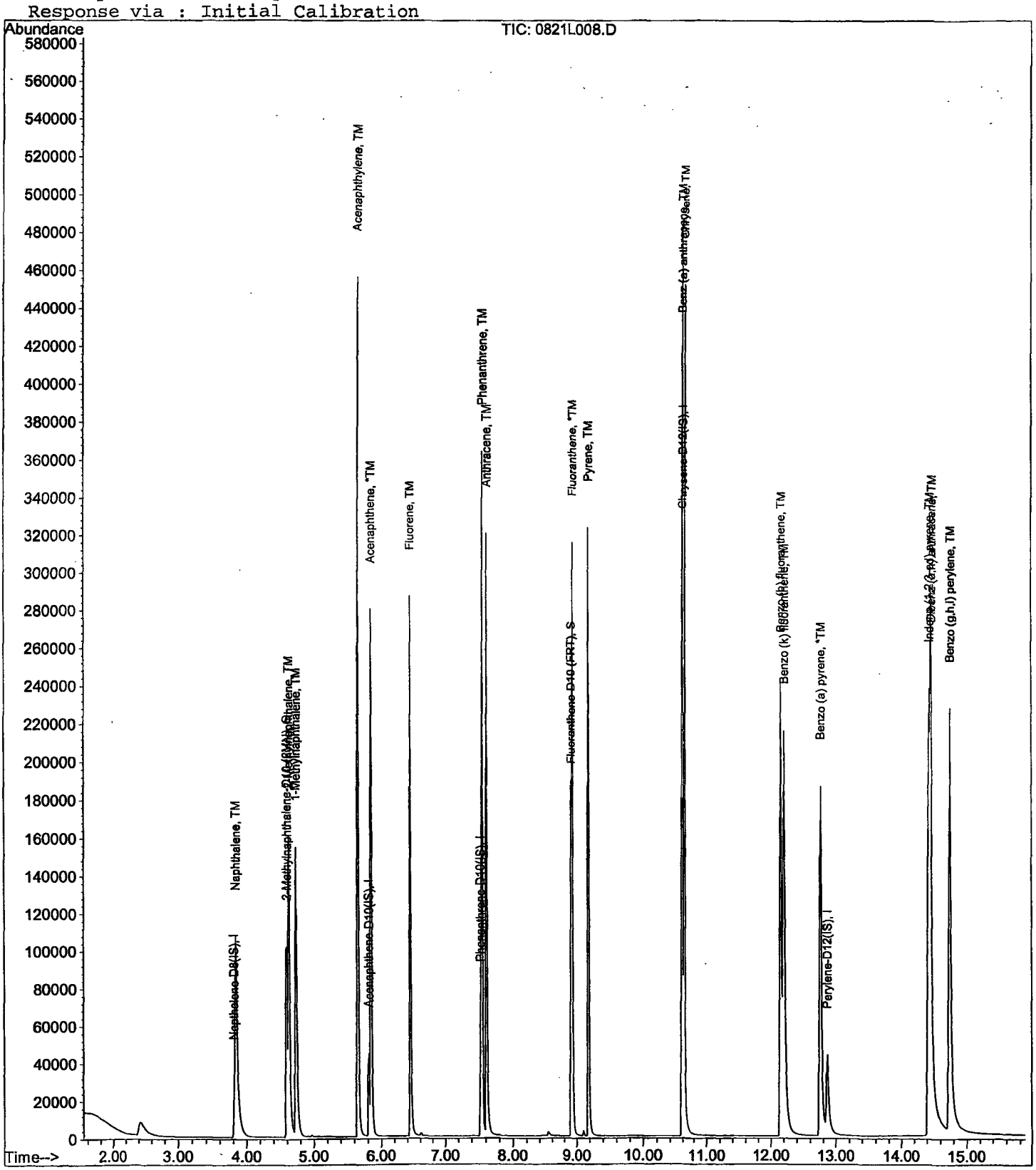
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200821\0821L008.D Vial: 8
Acq On : 21 Aug 20 12:37 Operator: MA
Sample : 10 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 12:56 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 13:50:04 2020
Response via : Initial Calibration



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Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L200821\0821L009.D Vial: 9
Acq On : 21 Aug 20 12:59 Operator: MA
Sample : 50 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 13:49 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 12:44:28 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	3.82	136	51327	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	5.82	164	27262	2.50000 ppb		0.00
10) Phenanthrene-D10(IS)	7.53	188	52603	2.50000 ppb		0.00
15) Chrysene-D12(IS)	10.61	240	70669	2.50000 ppb		0.01
20) Perylene-D12(IS)	12.87	264	78677	2.50000 ppb		0.00
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	4.59	152	546782	22.55581 ppb		-0.01
Spiked Amount 5.000			Recovery = 451.120%			
13) Fluoranthene-D10 (FRT)	8.91	212	656051	22.54819 ppb		0.00
Spiked Amount 5.000			Recovery = 450.960%			
Target Compounds						Qvalue
2) Naphthalene	3.84	128	942836	44.31881 ppb		99
4) 2-Methylnaphthalene	4.62	142	602629	44.07602 ppb		98
5) 1-Methylnaphthalene	4.73	142	609384	42.80465 ppb		97
7) Acenaphthylene	5.65	152	1815015	43.86142 ppb		99
8) Acenaphthene	5.85	154	562062	42.95212 ppb		99
9) Fluorene	6.46	166	720550	45.76647 ppb		88
11) Phenanthrene	7.56	178	959751	40.27072 ppb		98
12) Anthracene	7.62	178	905038	42.93255 ppb		98
14) Fluoranthene	8.93	202	1367222	42.28029 ppb	#	89
16) Pyrene	9.19	202	1375515	39.55967 ppb	#	90
17) Benz (a) anthracene	10.60	228	1407184	45.44504 ppb		97
18) Chrysene	10.64	228	1321248	36.71767 ppb		98
19) Indeno (1,2,3-cd) pyrene	14.43	276	1893493	46.79000 ppb		95
21) Benzo (b) fluoranthene	12.17	252	1562579	51.38642 ppb		96
22) Benzo (k) fluoranthene	12.23	252	1583855	40.89438 ppb		98
23) Benzo (a) pyrene	12.77	252	1471189	48.68561 ppb		97
24) Dibenz (a,h) anthracene	14.46	278	1594005	47.70744 ppb		98
25) Benzo (g,h,i) perylene	14.76	276	1633937	46.42542 ppb		97

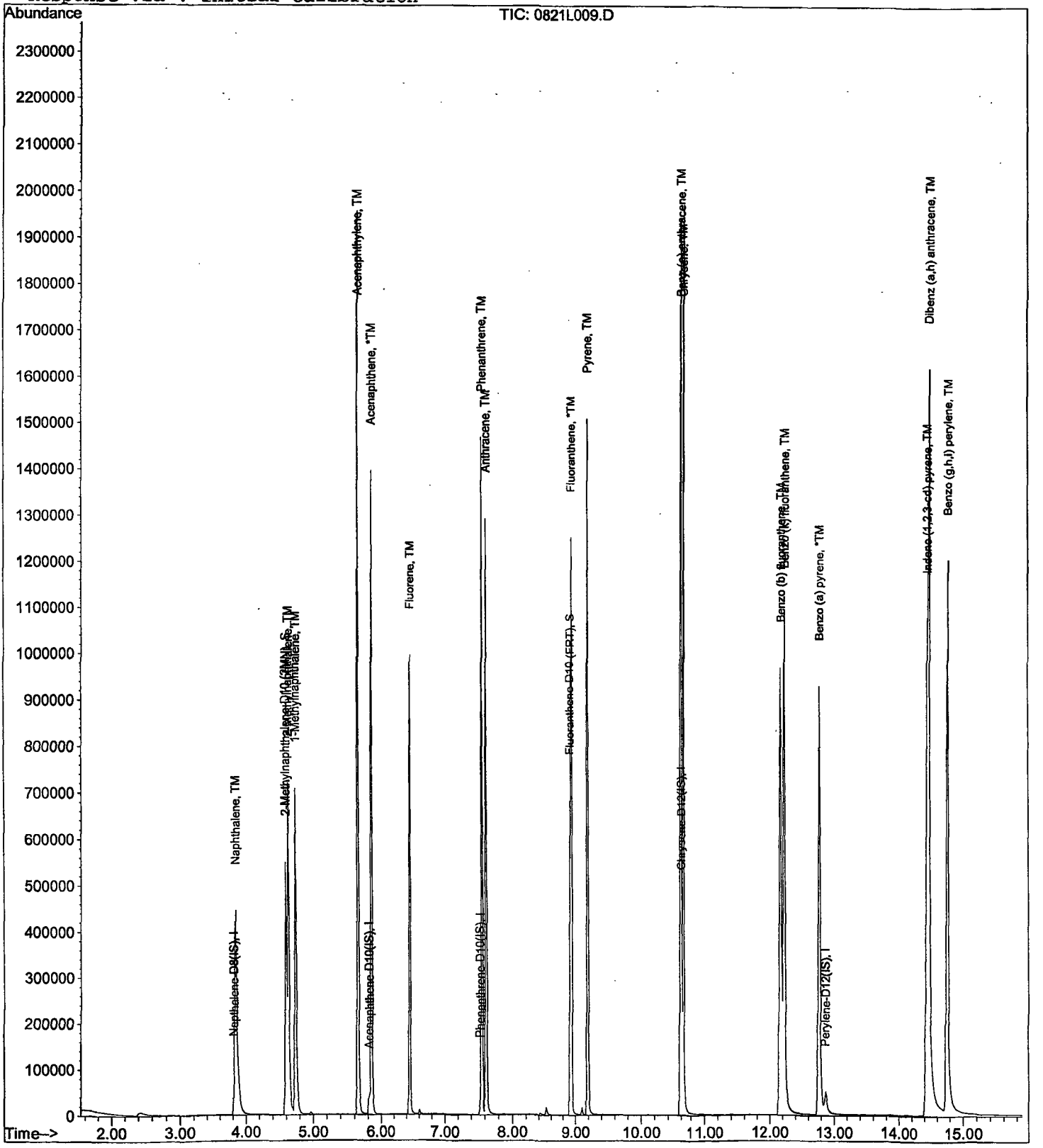
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200821\0821L009.D Vial: 9
Acq On : 21 Aug 20 12:59 Operator: MA
Sample : 50 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 13:49 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 13:50:04 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L200821\0821L010.D Vial: 10
Acq On : 21 Aug 20 13:21 Operator: MA
Sample : 100 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 14:51 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 14:51:39 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	3.80	136	54753	2.50000	ppb		-0.01
6) Acenaphthene-D10(IS)	5.82	164	29570	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.53	188	58270	2.50000	ppb		0.00
15) Chrysene-D12(IS)	10.62	240	70702	2.50000	ppb		0.02
20) Perylene-D12(IS)	12.88	264	87051	2.50000	ppb		0.01
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	4.59	152	1104918	47.72534	ppb		-0.01
Spiked Amount 5.000			Recovery = 954.500%				
13) Fluoranthene-D10 (FRT)	8.92	212	1329047	49.12455	ppb		0.01
Spiked Amount 5.000			Recovery = 982.500%				
Target Compounds							Qvalue
2) Naphthalene	3.84	128	1854530	89.03016	ppb		99
4) 2-Methylnaphthalene	4.62	142	1181001	89.42116	ppb		99
5) 1-Methylnaphthalene	4.73	142	1192388	87.25670	ppb		97
7) Acenaphthylene	5.65	152	3528366	88.43679	ppb		99
8) Acenaphthene	5.86	154	983478	77.15914	ppb		95
9) Fluorene	6.46	166	1244243	82.11485	ppb		92
11) Phenanthrene	7.57	178	1864382	79.73217	ppb		97
12) Anthracene	7.63	178	1710367	82.30499	ppb		97
14) Fluoranthene	8.94	202	2461510	80.84180	ppb	#	91
16) Pyrene	9.20	202	2671992	93.76383	ppb	#	87
17) Benz (a) anthracene	10.61	228	2653952	96.38567	ppb		97
18) Chrysene	10.65	228	2516747	84.10798	ppb		96
19) Indeno (1,2,3-cd) pyrene	14.46	276	3891598	111.93909	ppb	#	90
21) Benzo (b) fluoranthene	12.19	252	3323519	105.74917	ppb		100
22) Benzo (k) fluoranthene	12.26	252	3093923	83.47428	ppb		100
23) Benzo (a) pyrene	12.79	252	3039249	103.15748	ppb		96
24) Dibenz (a,h) anthracene	14.49	278	3312778	98.57443	ppb	#	93
25) Benzo (g,h,i) perylene	14.79	276	3369391	96.94106	ppb	#	92

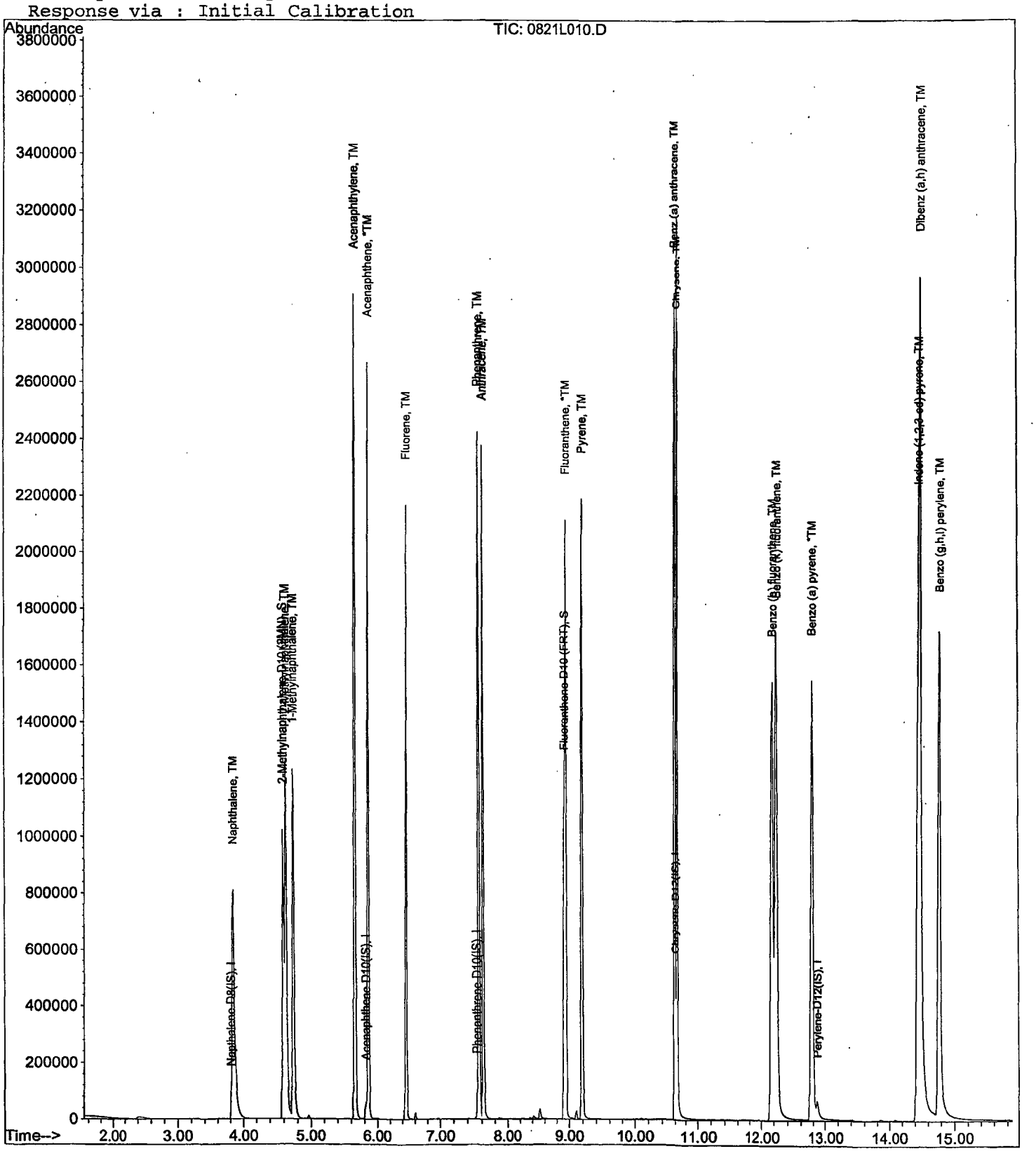
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200821\0821L010.D Vial: 10
Acq On : 21 Aug 20 13:21 Operator: MA
Sample : 100 SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 14:51 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 14:51:39 2020
Response via : Initial Calibration



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PAH by GCMS SIM
EPA 8270 SIM

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 08/21/20
Instrument: Linus
Initial Cal. Date: 08/21/20
Data File: 0821L011.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	Naphthalene	0.9511	0.9069	4.6	TM	
2	TM	2-Methylnaphthalene	0.6030	0.5986	0.74	TM	
3	TM	1-Methylnaphthalene	0.6240	0.6016	3.6	TM	
4	TM	Acenaphthylene	3.373	3.629	7.6	TM	
5	*TM	Acenaphthene	1.078	1.095	1.6	*TM	
6	TM	Fluorene	1.281	1.351	5.4	TM	
7	TM	Phenanthrene	1.003	1.026	2.3	TM	
8	TM	Anthracene	0.8916	1.022	15	TM	
9	*TM	Fluoranthene	1.306	1.352	3.5	*TM	
10	TM	Pyrene	1.008	1.028	2.0	TM	
11	TM	Benz (a) anthracene	0.9736	0.9822	0.88	TM	
12	TM	Chrysene	1.058	0.9760	7.8	TM	
13	TM	Indeno (1,2,3-cd) pyrene	1.229	1.266	3.0	TM	
14	TM	Benzo (b) fluoranthene	0.9026	0.9068	0.46	TM	
15	TM	Benzo (k) fluoranthene	1.081	1.207	12	TM	
16	*TM	Benzo (a) pyrene	0.8461	0.9692	15	*TM	
17	TM	Dibenz (a,h) anthracene	0.9651	1.029	6.6	TM	
18	TM	Benzo (g,h,i) perylene	0.9982	1.052	5.4	TM	
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			5.4		

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L200821\0821L011.D Vial: 11
Acq On : 21 Aug 20 14:18 Operator: MA
Sample : SS SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 15:01 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 14:54:22 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	3.82	136	57823	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	5.82	164	30246	2.50000	ppb		0.00
10) Phenanthrene-D10(IS)	7.53	188	59149	2.50000	ppb		0.00
15) Chrysene-D12(IS)	10.61	240	80680	2.50000	ppb		0.01
20) Perylene-D12(IS)	12.87	264	82091	2.50000	ppb		0.00
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	0.00	152	0d	0.00000	ppb		
Spiked Amount 5.000			Recovery	=	0.000%		
13) Fluoranthene-D10 (FRT)	0.00	212	0d	0.00000	ppb		
Spiked Amount 5.000			Recovery	=	0.000%		
Target Compounds							Qvalue
2) Naphthalene	3.84	128	104880	4.76764	ppb		100
4) 2-Methylnaphthalene	4.64	142	69224	4.96311	ppb		100
5) 1-Methylnaphthalene	4.74	142	69572	4.82084	ppb		96
7) Acenaphthylene	5.65	152	219520	5.37919	ppb		99
8) Acenaphthene	5.86	154	66222	5.07935	ppb		96
9) Fluorene	6.46	166	81701	5.27142	ppb		93
11) Phenanthrene	7.56	178	121373	5.11350	ppb		100
12) Anthracene	7.62	178	120864	5.72969	ppb		99
14) Fluoranthene	8.93	202	159923	5.17420	ppb		94
16) Pyrene	9.19	202	165855	5.10029	ppb	#	86
17) Benz (a) anthracene	10.60	228	158489	5.04411	ppb		96
18) Chrysene	10.63	228	157483	4.61208	ppb	#	97
19) Indeno (1,2,3-cd) pyrene	14.43	276	204253	5.14859	ppb	#	96
21) Benzo (b) fluoranthene	12.16	252	148877	5.02325	ppb		99
22) Benzo (k) fluoranthene	12.21	252	198178	5.58353	ppb		99
23) Benzo (a) pyrene	12.77	252	159118	5.72706	ppb		99
24) Dibenz (a,h) anthracene	14.45	278	168944	5.33081	ppb		97
25) Benzo (g,h,i) perylene	14.75	276	172770	5.27112	ppb		98

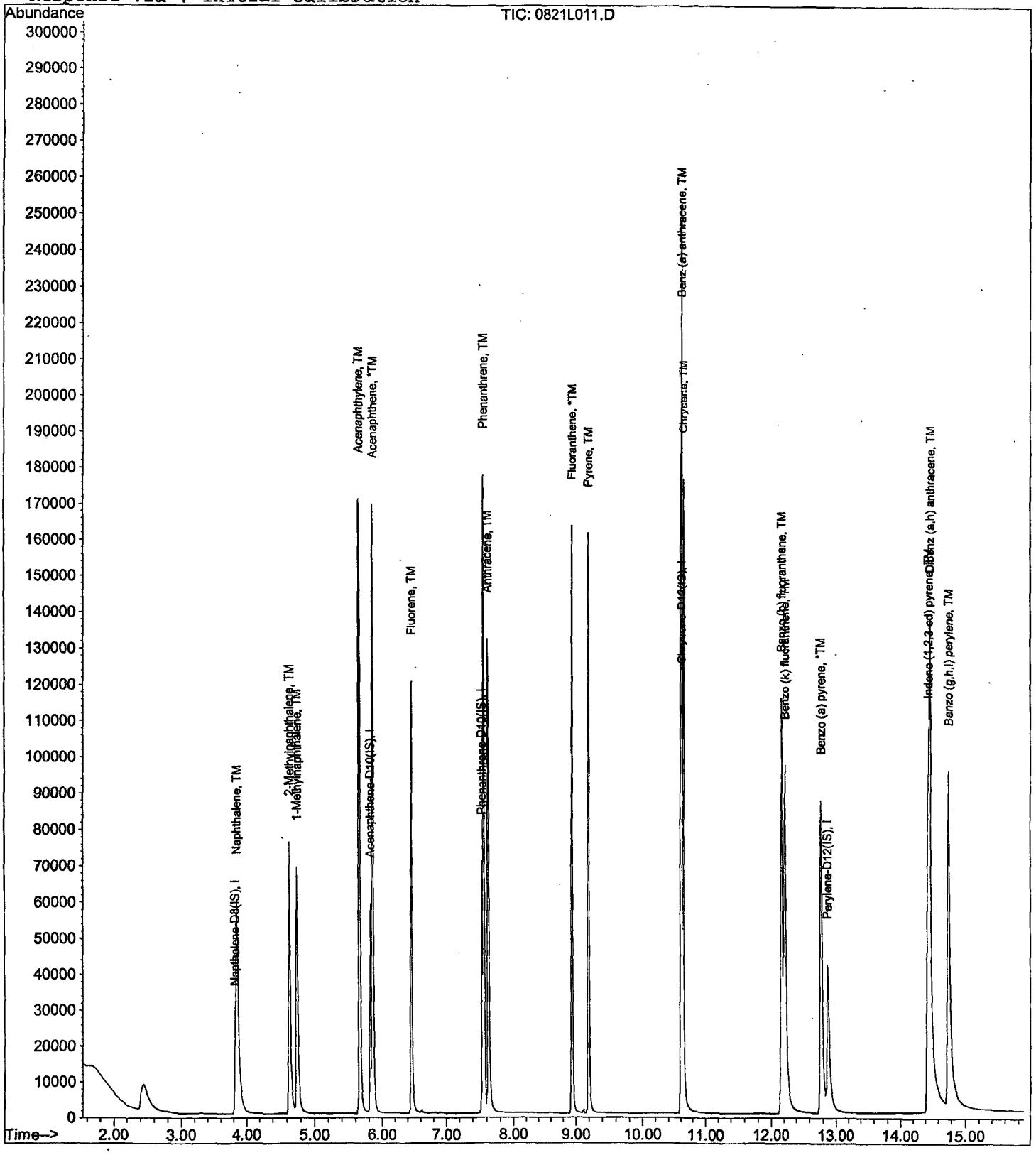
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200821\0821L011.D Vial: 11
Acq On : 21 Aug 20 14:18 Operator: MA
Sample : SS SIM 08/21/20 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 21 15:01 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 14:54:22 2020
Response via : Initial Calibration



326026618

PAH by GCMS SIM
EPA 8270 SIM

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/14/20
Instrument: Linus
Initial Cal. Date: 08/21/20
Data File: 0929L171.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	TM	Naphthalene	0.9511	0.9272	2.5	TM	
3	S	2-Methylnaphthalene-D10 (2MN)	1.057	1.120	5.9	S	
4	TM	2-Methylnaphthalene	0.6030	0.6098	1.1	TM	
5	TM	1-Methylnaphthalene	0.6240	0.6053	3.0	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	TM	Acenaphthylene	3.373	3.644	8.0	TM	
8	*TM	Acenaphthene	1.078	1.063	1.3	*TM	
9	TM	Fluorene	1.281	1.349	5.3	TM	
10	I	Phenanthrene-D10(IS)	ISTD			I	
11	TM	Phenanthrene	1.003	1.065	6.2	TM	
12	TM	Anthracene	0.8916	0.9700	8.8	TM	
13	S	Fluoranthene-D10 (FRT)	1.161	1.303	12	S	
14	*TM	Fluoranthene	1.306	1.495	14	*TM	
15	I	Chrysene-D12(IS)	ISTD			I	
16	TM	Pyrene	1.008	1.035	2.7	TM	
17	TM	Benz (a) anthracene	0.9736	0.9664	0.74	TM	
18	TM	Chrysene	1.058	1.070	1.1	TM	
19	TM	Indeno (1,2,3-cd) pyrene	1.229	1.363	11	TM	
20	I	Perylene-D12(IS)	ISTD			I	
21	TM	Benzo (b) fluoranthene	0.9026	0.9980	11	TM	
22	TM	Benzo (k) fluoranthene	1.081	1.131	4.6	TM	
23	*TM	Benzo (a) pyrene	0.8461	0.9516	12	*TM	
24	TM	Dibenz (a,h) anthracene	0.9651	1.106	15	TM	
25	TM	Benzo (g,h,i) perylene	0.9982	1.091	9.3	TM	
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			6.8		

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L200929\0929L171.D Vial: 71
Acq On : 14 Oct 20 13:26 Operator: MA
Sample : 5 SIM 08/21/20 (1) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:49 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200929\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 14:54:22 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	3.77	136	56912	2.50000	ppb		-0.05
6) Acenaphthene-D10(IS)	5.77	164	29618	2.50000	ppb		-0.05
10) Phenanthrene-D10(IS)	7.48	188	55369	2.50000	ppb		-0.05
15) Chrysene-D12(IS)	10.56	240	79232	2.50000	ppb		-0.03
20) Perylene-D12(IS)	12.82	264	84749	2.50000	ppb		-0.04
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	4.55	152	63730	2.64830	ppb		-0.05
Spiked Amount 5.000			Recovery	= 52.960%			
13) Fluoranthene-D10 (FRT)	8.87	212	72144	2.80632	ppb		-0.04
Spiked Amount 5.000			Recovery	= 56.120%			
Target Compounds							Qvalue
2) Naphthalene	3.79	128	105541	4.87448	ppb		100
4) 2-Methylnaphthalene	4.59	142	69411	5.05618	ppb		97
5) 1-Methylnaphthalene	4.68	142	68902	4.85084	ppb		99
7) Acenaphthylene	5.60	152	215845	5.40128	ppb		99
8) Acenaphthene	5.81	154	62995	4.93429	ppb		99
9) Fluorene	6.41	166	79896	5.26426	ppb		93
11) Phenanthrene	7.51	178	117962	5.30908	ppb		99
12) Anthracene	7.58	178	107421	5.44007	ppb		99
14) Fluoranthene	8.89	202	165581	5.72299	ppb		95
16) Pyrene	9.15	202	164014	5.13585	ppb	#	88
17) Benz (a) anthracene	10.55	228	153142	4.96301	ppb		97
18) Chrysene	10.60	228	169483	5.05423	ppb		99
19) Indeno (1,2,3-cd) pyrene	14.39	276	215986	5.54384	ppb		93
21) Benzo (b) fluoranthene	12.11	252	169151	5.52831	ppb		99
22) Benzo (k) fluoranthene	12.16	252	191685	5.23121	ppb		100
23) Benzo (a) pyrene	12.71	252	161287	5.62306	ppb		99
24) Dibenz (a,h) anthracene	14.41	278	187544	5.73211	ppb	#	96
25) Benzo (g,h,i) perylene	14.71	276	184966	5.46622	ppb		97

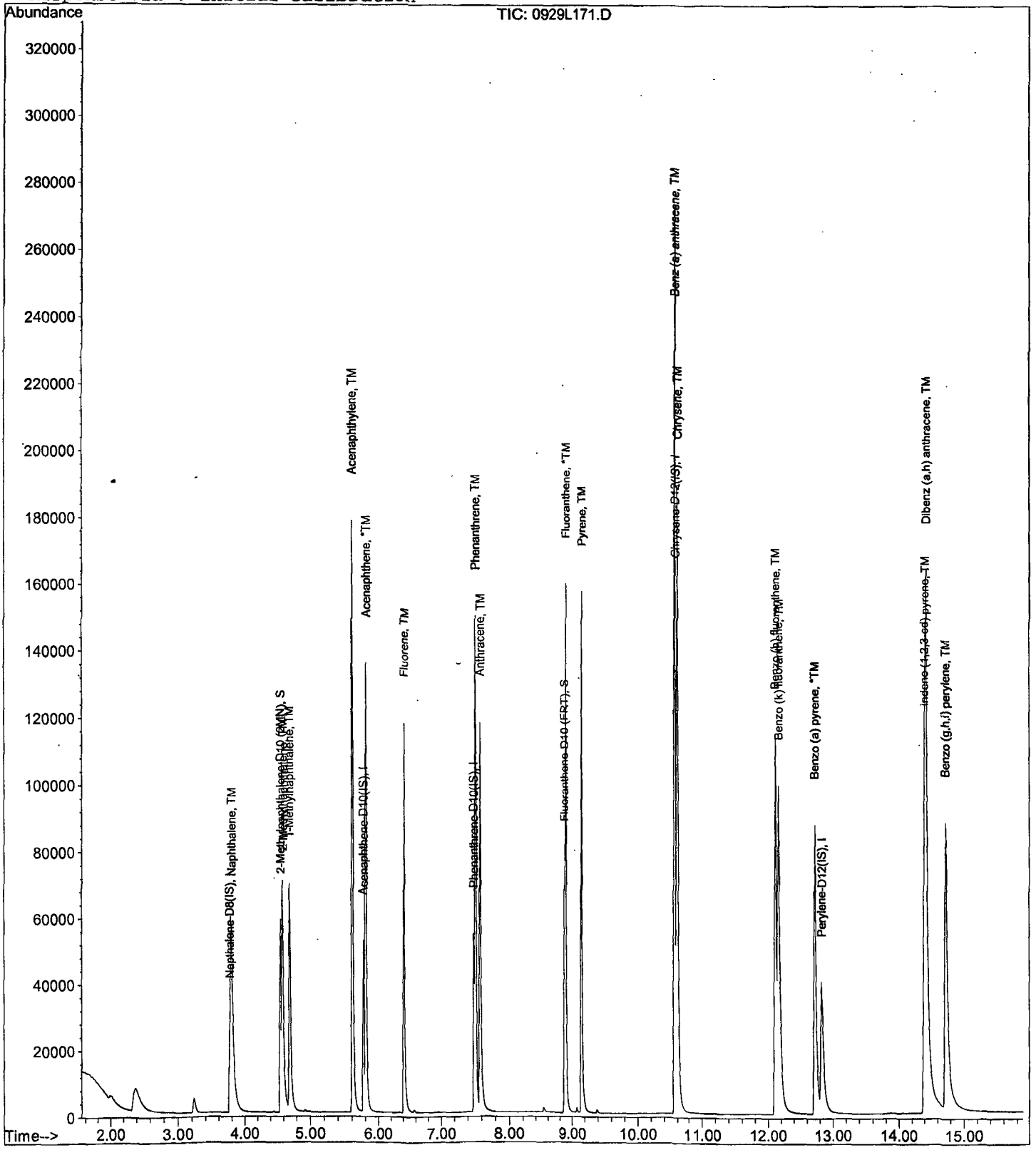
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200929\0929L171.D Vial: 71
Acq On : 14 Oct 20 13:26 Operator: MA
Sample : 5 SIM 08/21/20 (1) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:49 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200929\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 14:54:22 2020
Response via : Initial Calibration



PAH by GCMS SIM
EPA 8270 SIM

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/14/20
Instrument: Linus
Initial Cal. Date: 08/21/20
Data File: 0929L191.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	TM	Naphthalene	0.9511	1.075	13	TM	
3	S	2-Methylnaphthalene-D10 (2MN)	1.057	1.304	23	S	
4	TM	2-Methylnaphthalene	0.6030	0.7424	23	TM	
5	TM	1-Methylnaphthalene	0.6240	0.7727	24	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	TM	Acenaphthylene	3.373	4.171	24	TM	
8	*TM	Acenaphthene	1.078	1.221	13	*TM	
9	TM	Fluorene	1.281	1.463	14	TM	
10	I	Phenanthrene-D10(IS)	ISTD			I	
11	TM	Phenanthrene	1.003	1.105	10	TM	
12	TM	Anthracene	0.8916	1.035	16	TM	
13	S	Fluoranthene-D10 (FRT)	1.161	1.462	26	S	
14	*TM	Fluoranthene	1.306	1.582	21	*TM	
15	I	Chrysene-D12(IS)	ISTD			I	
16	TM	Pyrene	1.008	1.277	27	TM	
17	TM	Benz (a) anthracene	0.9736	1.231	26	TM	
18	TM	Chrysene	1.058	1.142	8.0	TM	
19	TM	Indeno (1,2,3-cd) pyrene	1.229	1.619	32	TM	
20	I	Perylene-D12(IS)	ISTD			I	
21	TM	Benzo (b) fluoranthene	0.9026	1.011	12	TM	
22	TM	Benzo (k) fluoranthene	1.081	1.144	5.8	TM	
23	*TM	Benzo (a) pyrene	0.8461	0.9909	17	*TM	
24	TM	Dibenz (a,h) anthracene	0.9651	1.154	20	TM	
25	TM	Benzo (g,h,i) perylene	0.9982	1.131	13	TM	
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			18.4		

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L200929\0929L191.D Vial: 91
Acq On : 14 Oct 20 21:23 Operator: MA
Sample : 5 SIM 08/21/20 (2) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 15 9:25 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200929\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed Oct 14 18:05:08 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	3.77	136	49606	2.50000 ppb		-0.05
6) Acenaphthene-D10(IS)	5.76	164	33940	2.50000 ppb		-0.06
10) Phenanthrene-D10(IS)	7.48	188	55761	2.50000 ppb		-0.05
15) Chrysene-D12(IS)	10.56	240	74026	2.50000 ppb		-0.03
20) Perylene-D12(IS)	12.82	264	90949	2.50000 ppb		-0.04
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	4.54	152	64699	3.08454 ppb		-0.06
Spiked Amount 5.000			Recovery	= 61.700%		
13) Fluoranthene-D10 (FRT)	8.87	212	81550	3.14990 ppb		-0.04
Spiked Amount 5.000			Recovery	= 63.000%		
Target Compounds						Qvalue
2) Naphthalene	3.79	128	106692	5.65339 ppb		100
4) 2-Methylnaphthalene	4.58	142	73658	6.15579 ppb		97
5) 1-Methylnaphthalene	4.68	142	76659	6.19182 ppb		99
7) Acenaphthylene	5.60	152	283130	6.18279 ppb		99
8) Acenaphthene	5.79	154	82852	5.66324 ppb		87
9) Fluorene	6.40	166	99292	5.70913 ppb		99
11) Phenanthrene	7.51	178	123213	5.50642 ppb		99
12) Anthracene	7.57	178	115374	5.80175 ppb		99
14) Fluoranthene	8.89	202	176385	6.05355 ppb		100
16) Pyrene	9.15	202	189009	6.33476 ppb	#	85
17) Benz (a) anthracene	10.55	228	182258	6.32198 ppb		96
18) Chrysene	10.60	228	169136	5.39860 ppb	#	97
19) Indeno (1,2,3-cd) pyrene	14.39	276	239674	6.58449 ppb	#	78
21) Benzo (b) fluoranthene	12.11	252	183954	5.60227 ppb		98
22) Benzo (k) fluoranthene	12.16	252	208098	5.29198 ppb		99
23) Benzo (a) pyrene	12.71	252	180239	5.85543 ppb		99
24) Dibenz (a,h) anthracene	14.42	278	209904	5.97817 ppb		98
25) Benzo (g,h,i) perylene	14.72	276	205700	5.66456 ppb	#	86

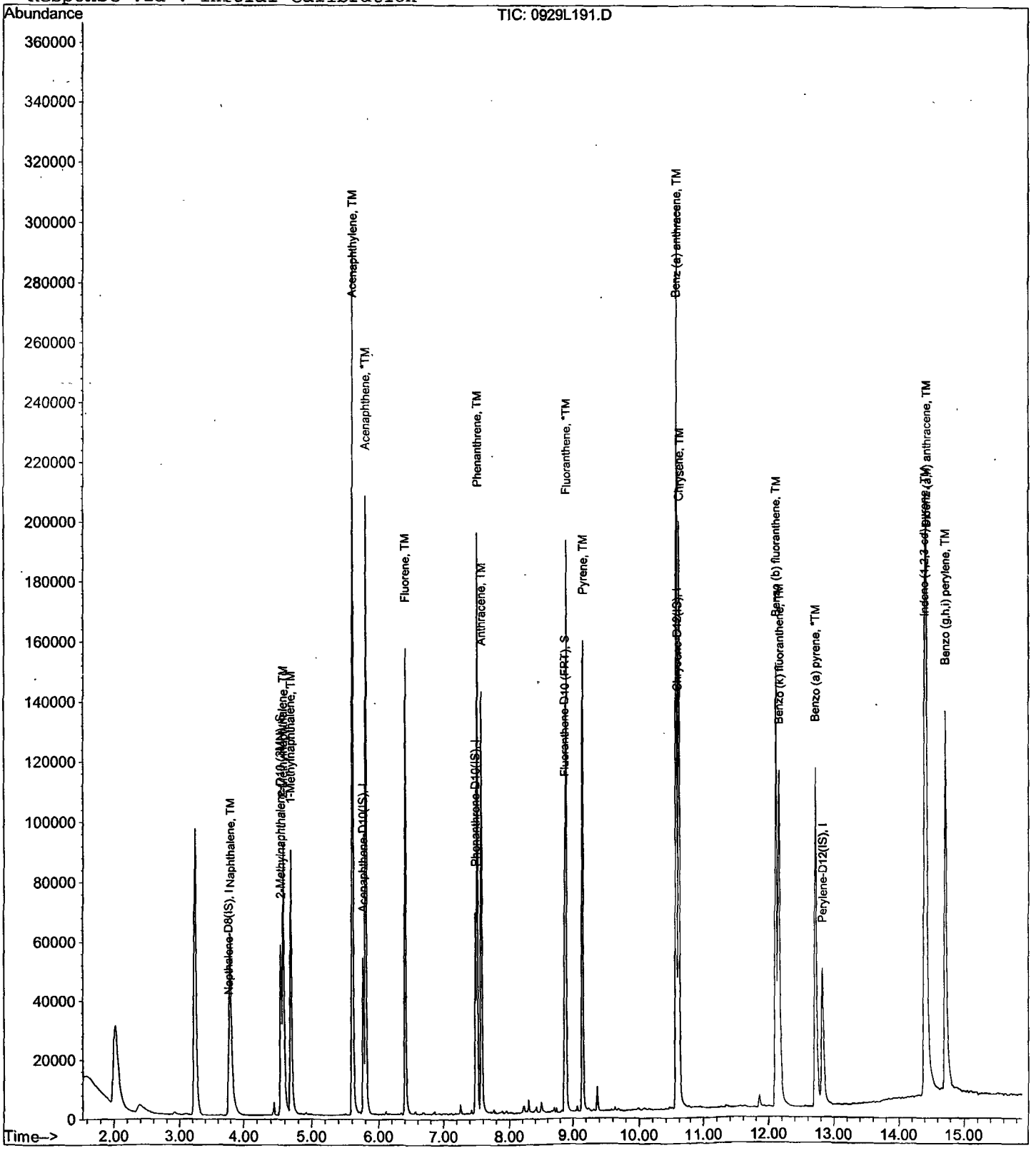
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200929\0929L191.D Vial: 91
Acq On : 14 Oct 20 21:23 Operator: MA
Sample : 5 SIM 08/21/20 (2) Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Oct 15 9:25 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200929\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed Oct 14 18:05:08 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L200929\0929L172.D Vial: 72
Acq On : 14 Oct 20 14:11 Operator: MA
Sample : 201012A BLK 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 14 14:56 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200929\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 14:54:22 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	3.77	136	51965	2.50000	ppb	-0.05
6) Acenaphthene-D10(IS)	5.77	164	27068	2.50000	ppb	-0.05
10) Phenanthrene-D10(IS)	7.50	188	53587	2.50000	ppb	-0.04
15) Chrysene-D12(IS)	10.57	240	73178	2.50000	ppb	-0.02
20) Perylene-D12(IS)	12.83	264	81802	2.50000	ppb	-0.03
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	4.55	152	97954	5.57248	ppb	-0.05
Spiked Amount 6.250			Recovery = 89.152%			
13) Fluoranthene-D10 (FRT)	8.88	212	119611	6.00931	ppb	-0.03
Spiked Amount 6.250			Recovery = 96.144%			

Target Compounds Qvalue

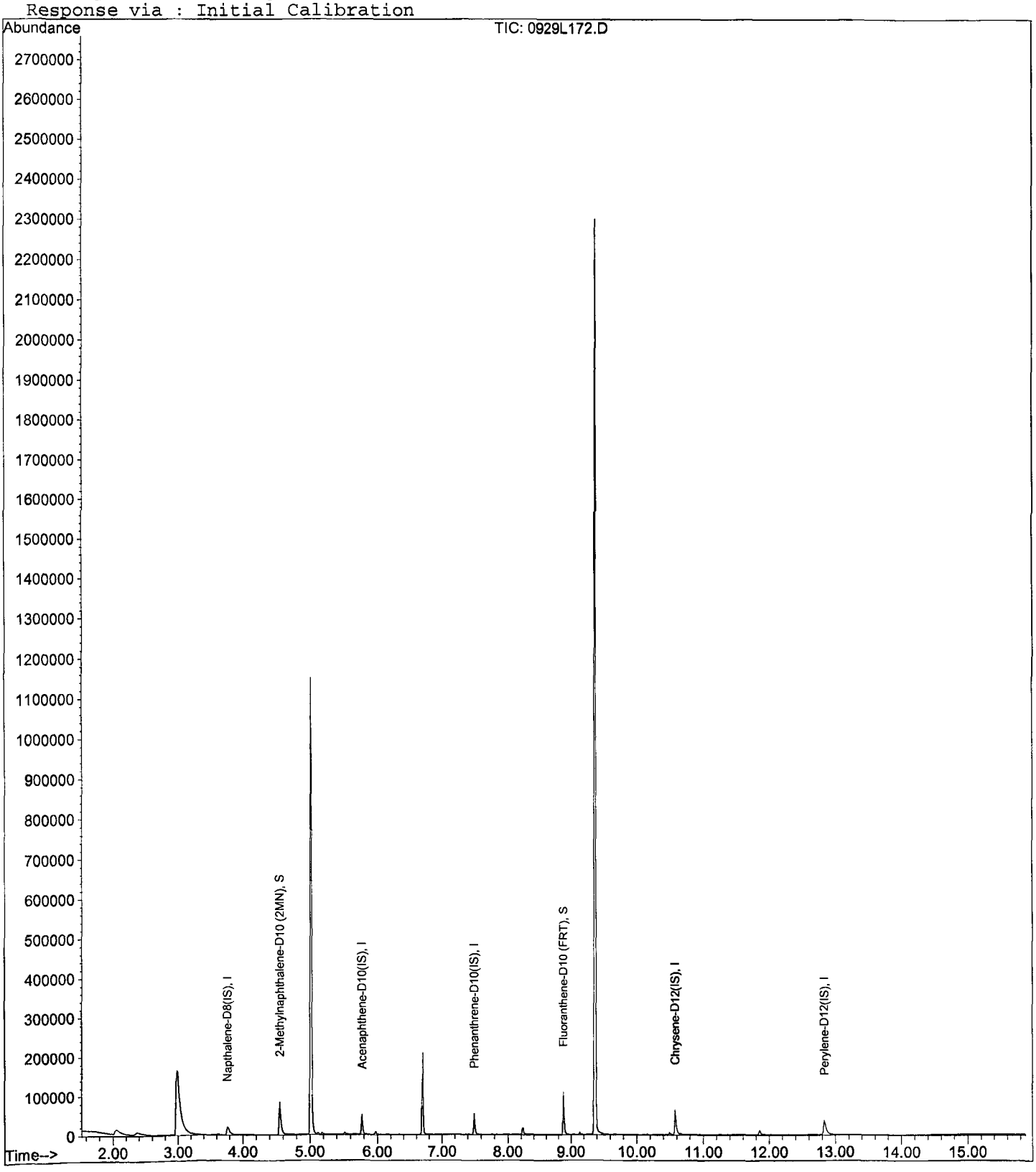
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200929\0929L172.D Vial: 72
Acq On : 14 Oct 20 14:11 Operator: MA
Sample : 201012A BLK 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 14 14:56 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200929\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 14:54:22 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L200929\0929L173.D Vial: 73
Acq On : 14 Oct 20 14:33 Operator: MA
Sample : 201012A LCS-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 14 15:12 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200929\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 14:54:22 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	3.77	136	54764	2.50000 ppb		-0.05
6) Acenaphthene-D10(IS)	5.76	164	28216	2.50000 ppb		-0.06
10) Phenanthrene-D10(IS)	7.48	188	54701	2.50000 ppb		-0.05
15) Chrysene-D12(IS)	10.56	240	77599	2.50000 ppb		-0.03
20) Perylene-D12(IS)	12.82	264	85736	2.50000 ppb		-0.04
System Monitoring Compounds						
3) 2-Methylnaphthalene-D10 (2	4.54	152	111376	6.01220 ppb		-0.06
Spiked Amount 6.250			Recovery	= 96.192%		
13) Fluoranthene-D10 (FRT)	8.87	212	133342	6.56274 ppb		-0.04
Spiked Amount 6.250			Recovery	= 105.008%		
Target Compounds						Qvalue
2) Naphthalene	3.79	128	94054	5.64291 ppb		100
4) 2-Methylnaphthalene	4.58	142	62903	5.95229 ppb		96
5) 1-Methylnaphthalene	4.68	142	63105	5.77122 ppb		98
7) Acenaphthylene	5.60	152	196058	6.43739 ppb		99
8) Acenaphthene	5.79	154	58134	5.97474 ppb		84
9) Fluorene	6.40	166	74066	6.40326 ppb		96
11) Phenanthrene	7.51	178	113229	6.44787 ppb		99
12) Anthracene	7.58	178	98479	6.31016 ppb		98
14) Fluoranthene	8.89	202	154632	6.76229 ppb		98
16) Pyrene	9.15	202	156239	6.24418 ppb	#	86
17) Benz (a) anthracene	10.55	228	154383	6.38564 ppb		96
18) Chrysene	10.60	228	156015	5.93813 ppb		99
19) Indeno (1,2,3-cd) pyrene	14.39	276	202031	6.61847 ppb		95
21) Benzo (b) fluoranthene	12.11	252	166692	6.73154 ppb		99
22) Benzo (k) fluoranthene	12.16	252	175430	5.91561 ppb		99
23) Benzo (a) pyrene	12.71	252	141144	6.08019 ppb		99
24) Dibenz (a,h) anthracene	14.42	278	177259	6.69423 ppb		99
25) Benzo (g,h,i) perylene	14.71	276	173144	6.32243 ppb		98

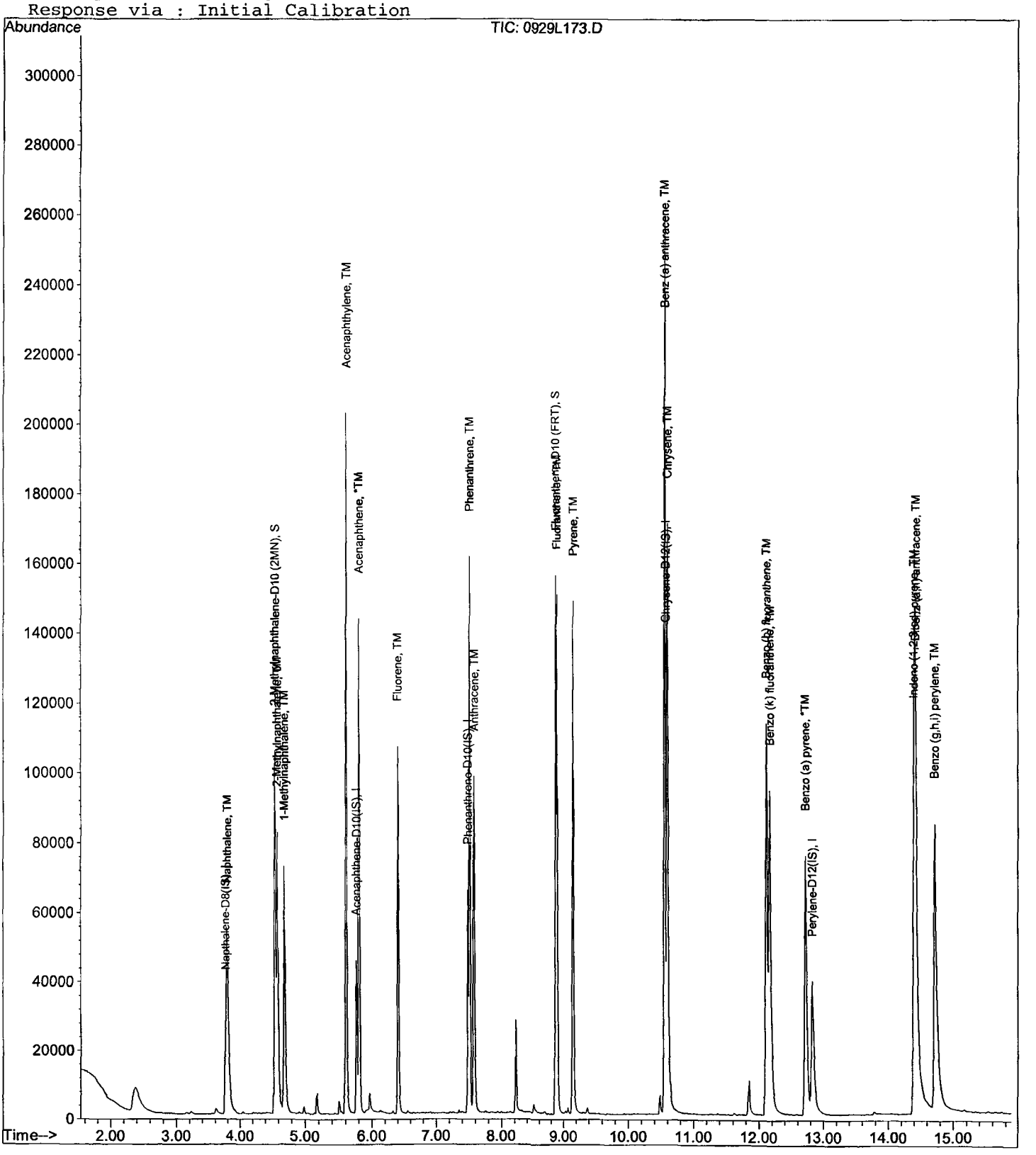
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200929\0929L173.D Vial: 73
Acq On : 14 Oct 20 14:33 Operator: MA
Sample : 201012A LCS-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 14 15:12 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200929\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 14:54:22 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L200929\0929L174.D Vial: 74
Acq On : 14 Oct 20 14:55 Operator: MA
Sample : 201012A LCSD-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 14 15:34 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200929\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 14:54:22 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	3.77	136	52368	2.50000	ppb		-0.05
6) Acenaphthene-D10(IS)	5.76	164	28124	2.50000	ppb		-0.06
10) Phenanthrene-D10(IS)	7.48	188	54599	2.50000	ppb		-0.05
15) Chrysene-D12(IS)	10.56	240	76696	2.50000	ppb		-0.03
20) Perylene-D12(IS)	12.82	264	82462	2.50000	ppb		-0.04
System Monitoring Compounds							
3) 2-Methylnaphthalene-D10 (2	4.54	152	100932	5.69770	ppb		-0.06
Spiked Amount 6.250			Recovery	= 91.168%			
13) Fluoranthene-D10 (FRT)	8.87	212	129664	6.39364	ppb		-0.04
Spiked Amount 6.250			Recovery	= 102.304%			
Target Compounds							Qvalue
2) Naphthalene	3.79	128	91694	5.75302	ppb		99
4) 2-Methylnaphthalene	4.58	142	59464	5.88432	ppb		98
5) 1-Methylnaphthalene	4.68	142	61683	5.89927	ppb		100
7) Acenaphthylene	5.60	152	192571	6.34358	ppb		99
8) Acenaphthene	5.79	154	57128	5.89055	ppb		88
9) Fluorene	6.40	166	72611	6.29801	ppb		98
11) Phenanthrene	7.51	178	105797	6.03590	ppb		99
12) Anthracene	7.58	178	94969	6.09662	ppb		98
14) Fluoranthene	8.89	202	144165	6.31633	ppb		99
16) Pyrene	9.15	202	151735	6.13557	ppb	#	85
17) Benz (a) anthracene	10.55	228	145844	6.10347	ppb		95
18) Chrysene	10.60	228	149162	5.74414	ppb		98
19) Indeno (1,2,3-cd) pyrene	14.39	276	197581	6.54889	ppb		96
21) Benzo (b) fluoranthene	12.11	252	158805	6.66765	ppb		99
22) Benzo (k) fluoranthene	12.16	252	167504	5.87259	ppb		98
23) Benzo (a) pyrene	12.71	252	138359	6.19686	ppb		99
24) Dibenz (a,h) anthracene	14.42	278	171590	6.73742	ppb		100
25) Benzo (g,h,i) perylene	14.71	276	168009	6.37850	ppb		97

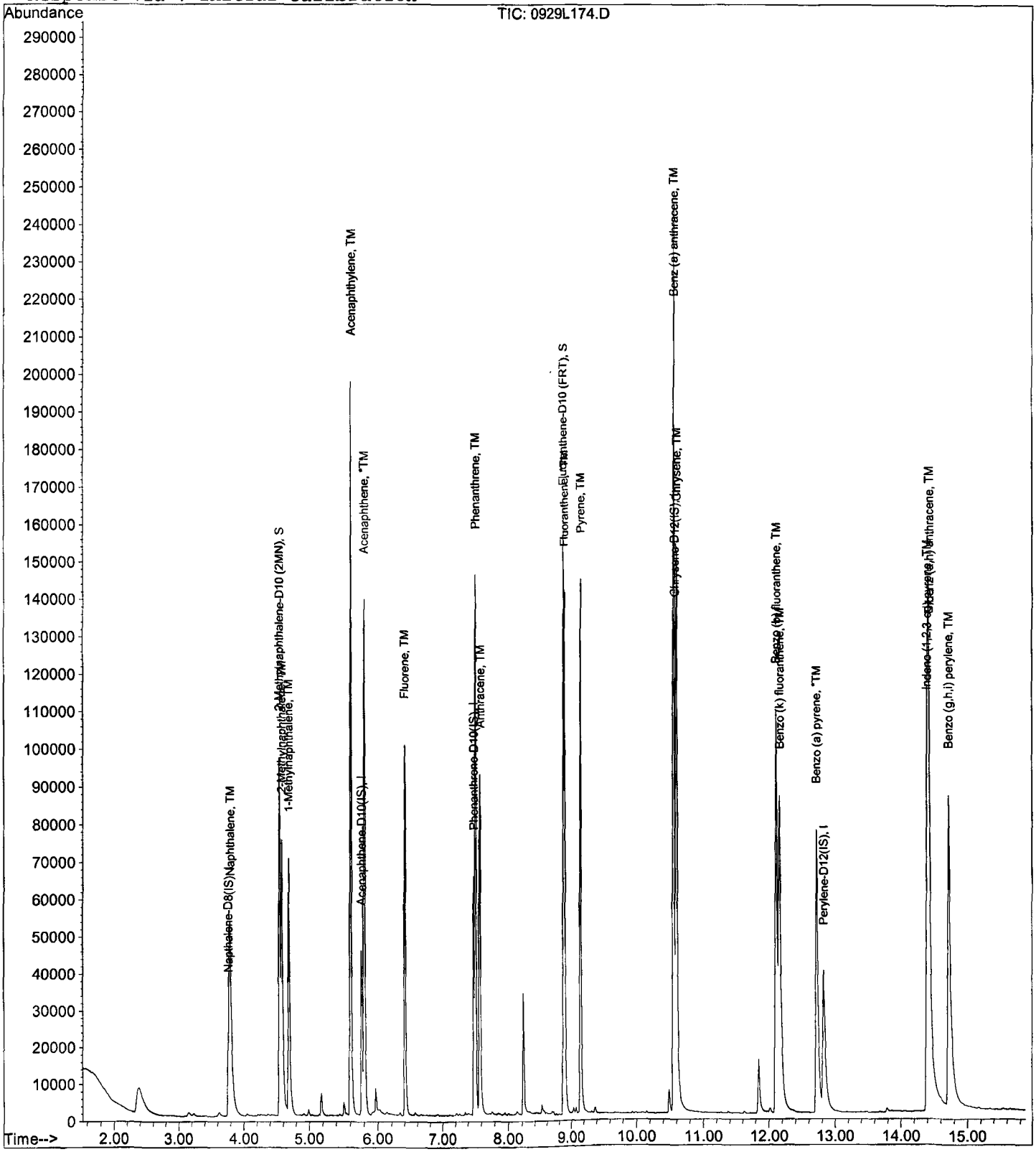
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200929\0929L174.D Vial: 74
Acq On : 14 Oct 20 14:55 Operator: MA
Sample : 201012A LCSD-2 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 14 15:34 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200929\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 14:54:22 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L200929\0929L175.D Vial: 75
Acq On : 14 Oct 20 15:17 Operator: MA
Sample : BA19640W17 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 14 15:38 2020 Quant Results File: L0821.RES

Quant Method : M:\LINUS\DATA\L200929\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 14:54:22 2020
Response via : Initial Calibration
DataAcq Meth : SIM_2

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	3.77	136	51696	2.50000 ppb	-0.05
6) Acenaphthene-D10(IS)	5.77	164	27943	2.50000 ppb	-0.05
10) Phenanthrene-D10(IS)	7.50	188	55540	2.50000 ppb	-0.04
15) Chrysene-D12(IS)	10.57	240	75807	2.50000 ppb	-0.02
20) Perylene-D12(IS)	12.82	264	86825	2.50000 ppb	-0.04
System Monitoring Compounds					
3) 2-Methylnaphthalene-D10 (2	4.54	152	110666	6.32840 ppb	-0.06
Spiked Amount 6.250			Recovery = 101.248%		
13) Fluoranthene-D10 (FRT)	8.87	212	138834	6.72982 ppb	-0.04
Spiked Amount 6.250			Recovery = 107.680%		

Target Compounds Qvalue

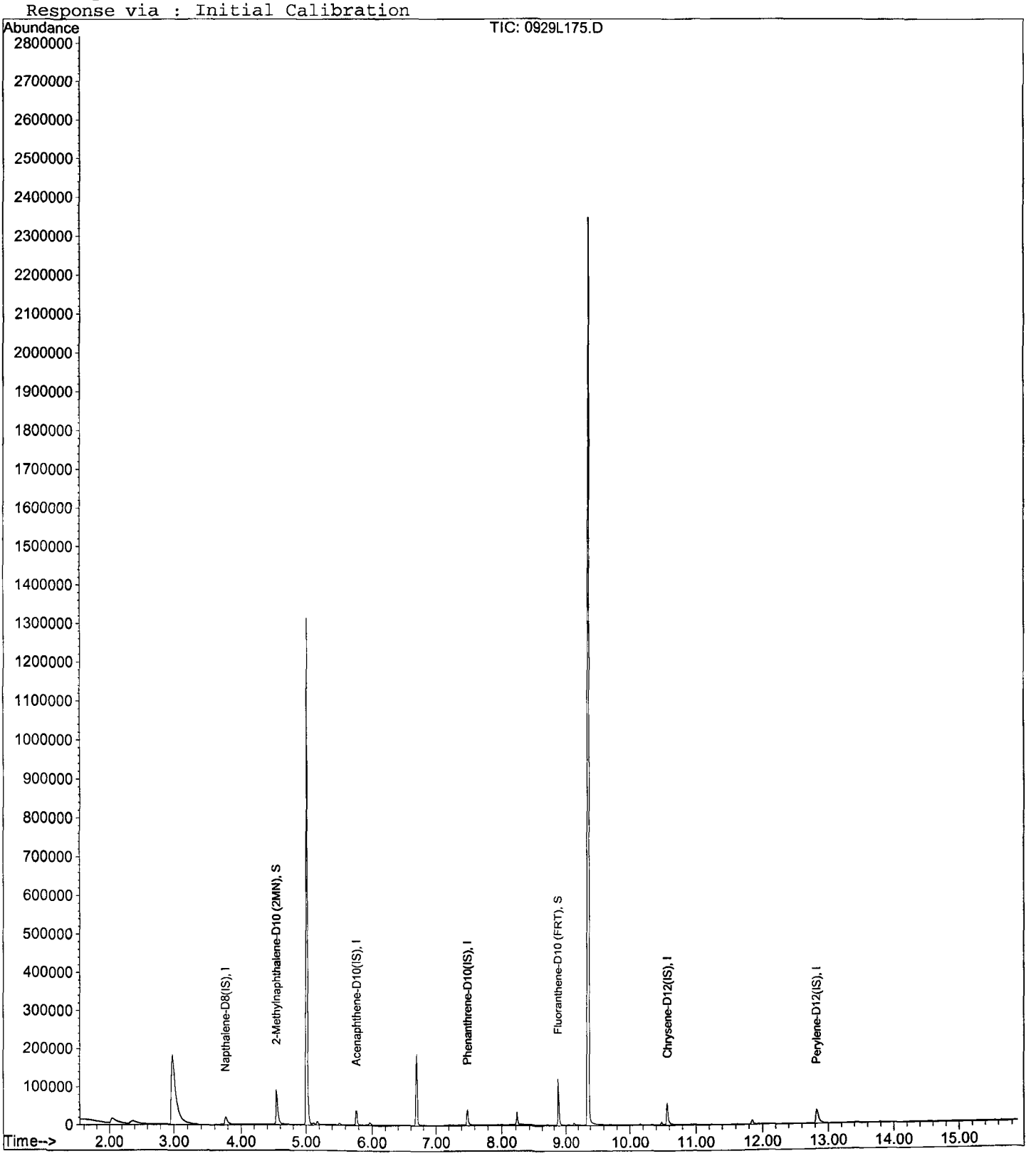
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L200929\0929L175.D Vial: 75
Acq On : 14 Oct 20 15:17 Operator: MA
Sample : BA19640W17 1/800 Inst : Linus
Misc : Multiplr: 1.25

Quant Time: Oct 14 15:38 2020 Quant Results File: L0821.RES

Method : M:\LINUS\DATA\L200929\L0821.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Aug 21 14:54:22 2020
Response via : Initial Calibration

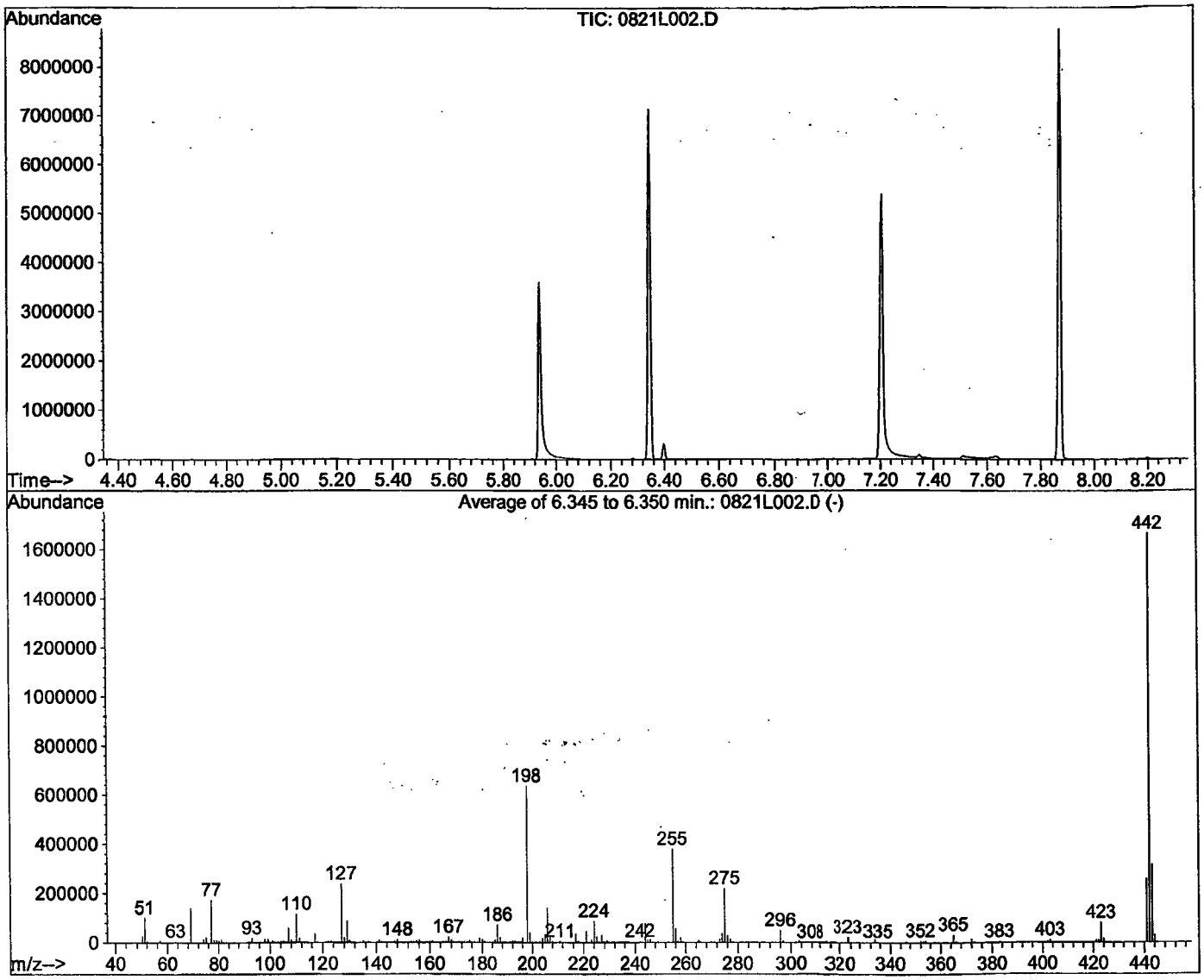


DFTPP

Data File : M:\LINUS\DATA\L200821\0821L002.D
Acq On : 21 Aug 20 10:27
Sample : SV Tune 10/01/19
Misc :

Vial: 2
Operator: MA
Inst : Linus
Multiplr: 1.00

Method : M:\LINUS\DATA\L200821\L0821.M (RTE Integrator)
Title : EPA 8270



AutoFind: Scans 1510, 1511, 1512; Background Corrected with Scan 1500

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	15.9	101264	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.7	939	PASS
127	198	10	80	37.4	237675	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	635264	PASS
199	198	5	9	6.4	40931	PASS
275	198	10	60	34.4	218688	PASS
365	198	1	100	5.0	32077	PASS
441	442	0.01	24	15.6	259627	PASS
442	198	50	500	262.6	1667925	PASS
443	442	15	24	18.9	315435	PASS

Data File Name:	**0821L002.D**
Data File Path:	**M:\LINUS\DATA\L200821**
Operator:	**MA**
Date Acquired:	**21 Aug 2020 10:27**
Method File:	**DFTPP2.M**
Sample Name:	**SV Tune 10/01/19**
Vial Number:	**2**
Instrument Name:	**Linus**

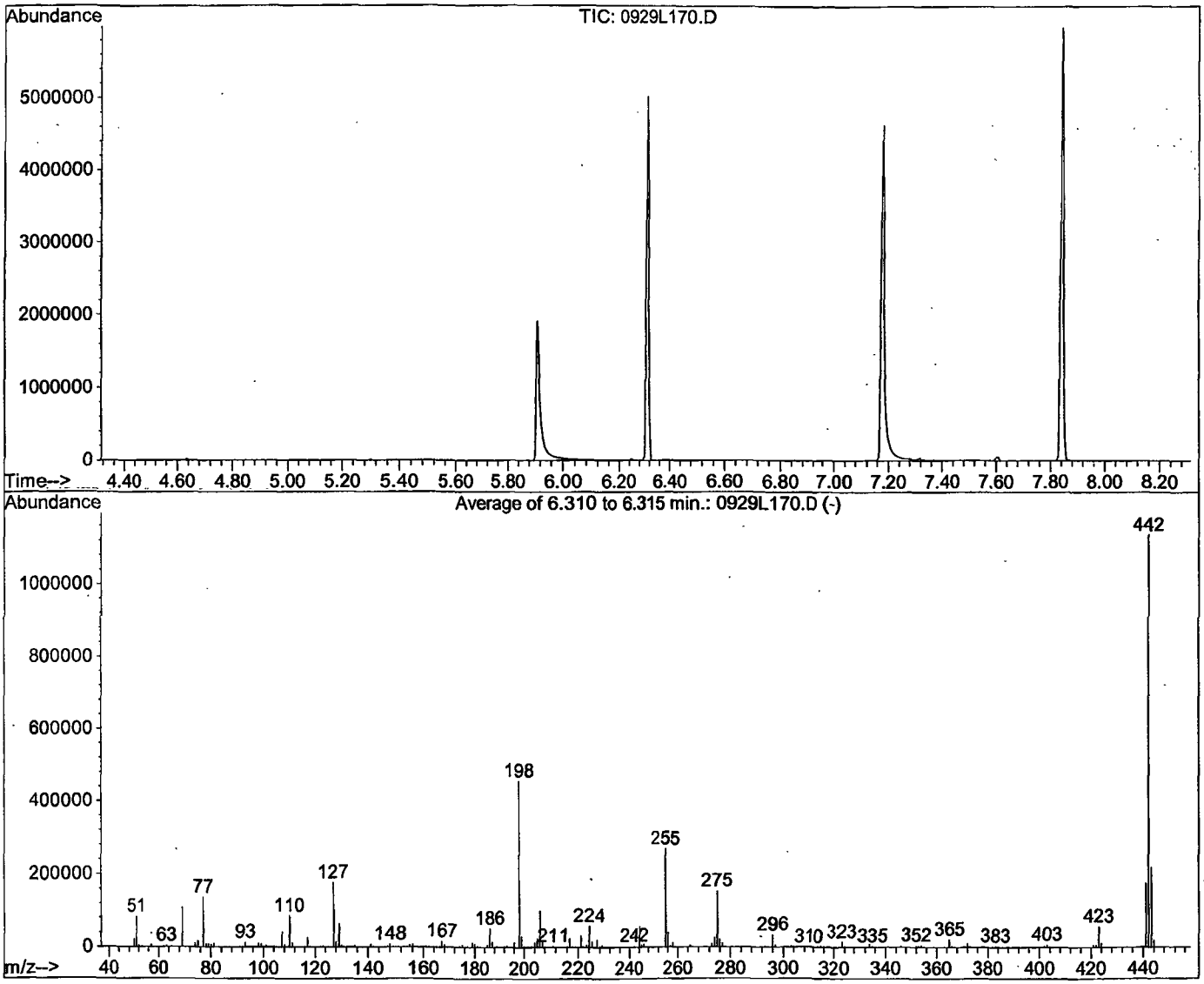
#	Name	Ret Time	Target Response
1)	DDT	7.87	62242700
2)	DDD	7.63	799085
3)	DDE	7.35	419143

Breakdown **1.92**

Data File : M:\LINUS\DATA\L200929\0929L170.D
Acq On : 14 Oct 20 13:10
Sample : SV TUNE 10/2/20
Misc :

Vial: 70
Operator: MA
Inst : Linus
Multiplr: 1.00

Method : M:\LINUS\DATA\L200929\L0821.M (RTE Integrator)
Title : EPA 8270



AutoFind: Scans 1496, 1497, 1498; Background Corrected with Scan 1487

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	18.2	83087	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	427	PASS
127	198	10	80	38.7	176192	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	455765	PASS
199	198	5	9	6.6	30003	PASS
275	198	10	60	33.6	153003	PASS
365	198	1	100	4.7	21480	PASS
441	442	0.01	24	15.4	175104	PASS
442	198	50	500	249.2	1135808	PASS
443	442	15	24	19.3	219093	PASS

0929L170.D L0821.M Wed Oct 14 13:40:41 2020

Data File Name:	**0929L170.D**
Data File Path:	**M:\LINUS\DATA\L200929**
Operator:	**MA**
Date Acquired:	**14 Oct 2020 13:10**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/2/20**
Vial Number:	**70**
Instrument Name:	**Linus**

#	Name	Ret Time	Target Response
1)	DDT	7.83	42165900
2)	DDD	7.59	464243
3)	DDE	7.31	121263

Breakdown **1.37**

Standard	**SIM Curve**	**Prep'd By (Initials)**	**MA**
Prep Date	**08/21/20**		
Exp Date	**06/19/21**		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc or (range)
1.0 ug/mL SIM	APPL	1.0 ug/mL SIM	1.0 ug/mL	**08/21/20**	**06/19/21**	10 uL	100uL	**MC 59130 90uL**	0.1 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	2 uL			2.5ug/mL
1.0 ug/mL SIM	APPL	1.0 ug/mL SIM	1.0 ug/mL	**08/21/20**	**06/19/21**	20 uL	100uL	**MC 59130 80uL**	0.2 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	2 uL			2.5ug/mL
5.0 ug/mL SIM	APPL	5.0 ug/mL SIM	5.0 ug/mL	**08/21/20**	**06/19/21**	10 uL	100uL	**MC 59130 90uL**	0.5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	2 uL			2.5ug/mL
5.0 ug/mL SIM	APPL	5.0 ug/mL SIM	5.0 ug/mL	**08/21/20**	**06/19/21**	20 uL	100uL	**MC 59130 80 uL**	1.0 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	2 uL			2.5ug/mL
SIM STOCK	APPL	SIM STOCK	200 ug/mL	**08/20/20**	**08/20/21**	5 uL	200uL	**MC 59130 190 uL**	5.0 ug/mL
SIM SURROGATE	APPL	SIM SURR	100 ug/mL	**08/11/20**	**08/11/21**	5 uL			2.5ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	4 uL			2.5ug/mL
SIM STOCK	APPL	SIM STOCK	200 ug/mL	**08/20/20**	**08/20/21**	5 uL	100 uL	**MC 59130 80 uL**	10 ug/mL
SIM SURROGATE	APPL	SIM SURR	100 ug/mL	**08/11/20**	**08/11/21**	5 uL			5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	2 uL			2.5ug/mL
SIM STOCK	APPL	SIM STOCK	200	**08/20/20**	**08/20/21**	25 uL	100uL	**MC 59130 50 uL**	50 ug/mL
SIM SURROGATE	APPL	SIM SURR	100 ug/mL	**08/11/20**	**08/11/21**	25 uL			25ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	2 uL			2.5ug/mL
SIM STOCK	APPL	SIM STOCK	200 ug/mL	**08/20/20**	**08/20/21**	50 uL	100uL	na	100 ug/mL
SIM SURROGATE	APPL	SIM SURR	100 ug/mL	**08/11/20**	**08/11/21**	50 uL			50 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	2 uL			2.5ug/mL

Name of Final Standard	***8270 PAH SIM Second Source***	**Prep'd By (Initials)**	**MA**
Prep Date	**08/21/20**		
Exp Date	**06/19/21**		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc or (range)
PAH SIM SS Stock	Phenova	AL0-130490	200 ug/mL	**CL13117-40623. Open 7/24/19**	**12/31/22**	5 uL	2000uL	**MC 59130 195uL**	5 ug/mL
SIM Internal Standard	APPL	SIM Internal Standard	125 ug/mL	**06/19/20**	**06/19/21**	4 uL			2.5ug/mL

Name of Final Standard	**PAH SIM Stock (Ampule)**	**Prep'd By (I**	**MA**
Prep Date	**08/20/20**		
Exp Date	**08/20/21**		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Custom PAH SIM Mix	Phenova	ALO-130490	200 ug/mL	**CL13121-41383**	**12/31/22**	1000 uL	1mL	NA	200ug/mL

Name of Final Standard	SIM Surrogate
Prep Date	08/11/20
Exp Date	04/01/21

Prep'd By (Initials) CD

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Sim Surrogate Deuterated	Restek	33913	2000 ug/mL	A0154854-49995,49992,50255,50256,50257	10/01/25	5mL	100 mL	Acetone #0234320	100 ug/mL

Name of Final Standard	**8270 SIM PAH Internal Standard**
Prep Date	**06/19/20**
Exp Date	**06/19/21**

Prep'd By (Initials) **CD**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
SV Internal Standard	Restek	31206	2000 ug/mL	**A0157142-49875**	**12/31/25**	625uL	10mL	**MC DW717**	125 ug/mL

Name of Final Standard	SIM Spike	Prep'd By (Initials)	MA
Prep Date	09/11/20		
Exp Date	09/11/21		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Custom PAH Sim Mix	Phenova	AL0-130490	200 ug/mL	CL13121- 41545 41546 41547 49548	12/31/22	5 mL	25 mL	Acetone 0246130	40 ug/mL

Name of Final Standard	SIM Surrogate
Prep Date	08/11/20
Exp Date	04/01/21

Prep'd By (Initials) CD

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Sim Surrogate Deuterated	Restek	33913	2000 ug/mL	A0154854-49995,49992,50255,50256,50257	10/01/25	5mL	100 mL	Acetone #0234320	100 ug/mL

Organic Extraction Worksheet

Method	Continuous Liquid/Liquid SVOC 3520C	Extraction Set	201012A	Extraction Method	LIQ003	Units	mL

Spiked ID 1	8270T Spike 10/6/20 ex 10/6/21		Surrogate ID 1	8270 Surrogate 10/6/20 ex 10/6/21	
Spiked ID 2	Sim Spike 9/11/20 ex 9/11/21		Surrogate ID 2	SIM Surrogate 8/11/20 ex 8/11/21	
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:		
Spiked ID 7			Ext. Start Time:	10/12/20 13:40	
Spiked ID 8			Ext. End Time:	10/14/20 12:45	
			GC Requires Extract By:		

pH1	2	10/12/20 13:45	Water Bath Temp 1 °C	EWB5 75/74.1 °
pH2	14	10/13/20 11:15	Water Bath Temp 2 °C	
pH3			Water Bath Temp 3 °C	

Spiked By: DL **Date** 10/14/20 2:12:57 PM **Witnessed By:** CFM **Date** 10/14/20 2:13:04 PM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201012A Blk				0.2,0.050	1,2	800	1	2/1	10/12/20 13:40	
						equip	EWB5				
2	201012A LCS-1		1	1	1	1	800	1	2/1	10/12/20 13:40	
						equip	EWB5				
3	201012A LCS-2		0.125	2	0.050	2	800	1	2/1	10/12/20 13:40	
						equip	EWB5				
4	201012A LCSD-1		1	1	1	1	800	1	2/1	10/12/20 13:40	
						equip	EWB5				
5	201012A LCSD-2		0.125	2	0.050	2	800	1	2/1	10/12/20 13:40	
						equip	EWB5				
6	BA19640	BA19640W17			0.2,0.050	1,2	800	1	2/1	10/12/20 13:40	93659
						equip	EWB5				

Solvent and Lot#	
PH Strips	HC904495
Dichloromethane (DCM)	60127
1+1 H2SO4	238844
10N NaOH	10/6/20
Filter Paper	400178
Na2SO4	2019070279

Extraction COC Transfer	
Extraction lab employee Initials	DL
GC analyst's initials	MA
Date	10/14/20
Time	1:45
Refrigerator	GC_C

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL

Modified	10/14/20 5:14:08 PM

Reviewed By: MA **Date** 12/14/20

Injection Log

Directory: M:\LINUS\DATA\L200929\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	0821L002.D	1	SV Tune 10/01/19		21 Aug 20 10:27
2	3	0821L003.D	1	0.1 SIM 08/21/20		21 Aug 20 10:46
3	4	0821L004.D	1	0.2 SIM 08/21/20		21 Aug 20 11:08
4	5	0821L005.D	1	0.5 SIM 08/21/20		21 Aug 20 11:30
5	6	0821L006.D	1	1 SIM 08/21/20		21 Aug 20 11:53
6	7	0821L007.D	1	5 SIM 08/21/20		21 Aug 20 12:15
7	8	0821L008.D	1	10 SIM 08/21/20		21 Aug 20 12:37
8	9	0821L009.D	1	50 SIM 08/21/20		21 Aug 20 12:59
9	10	0821L010.D	1	100 SIM 08/21/20		21 Aug 20 13:21
10	11	0821L011.D	1	SS SIM 08/21/20		21 Aug 20 14:18
11	70	0929L170.D	1	SV TUNE 10/2/20		14 Oct 20 13:10
12	71	0929L171.D	1	5 SIM 08/21/20 (1)		14 Oct 20 13:26
13	72	0929L172.D	1.25	201012A BLK 1/800		14 Oct 20 14:11
14	73	0929L173.D	1.25	201012A LCS-2 1/800		14 Oct 20 14:33
15	74	0929L174.D	1.25	201012A LCSD-2 1/800		14 Oct 20 14:55
16	75	0929L175.D	12.5	BA19640W17 1/800		14 Oct 20 15:17
17	91	0929L191.D	1	5 SIM 08/21/20 (2)		14 Oct 20 21:23

ORGANICS

Calibration Data

2MEE
EPA 8270

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 05/01/20
Matrix: Instrument: Yoda Initials: MA

0501Y003.D 0501Y004.D 0501Y006.D 0501Y007.D 0501Y008.D 0501Y009.D 0501Y010.D 0501Y011.D

		Compound	1	2	3	4	5	6	7	8			Avg	%RSD	Type	r^2	Q	MRF
1	I	1,4-dichlorobenzene-D4(IS)																
2	TM	2-(2-Methoxyethoxy)ethanol	0.1264	0.1827	0.1475	0.1625	0.1354	0.1644	0.1592	0.1806			0.16	13	TM			
3																		
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Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y003.D Vial: 39
Acq On : 1 May 20 9:39 Operator: MA,SS
Sample : 50ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:24 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	428206	40.00000	ppb	-0.01
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.28	45	67679	26.91018	ppb	95

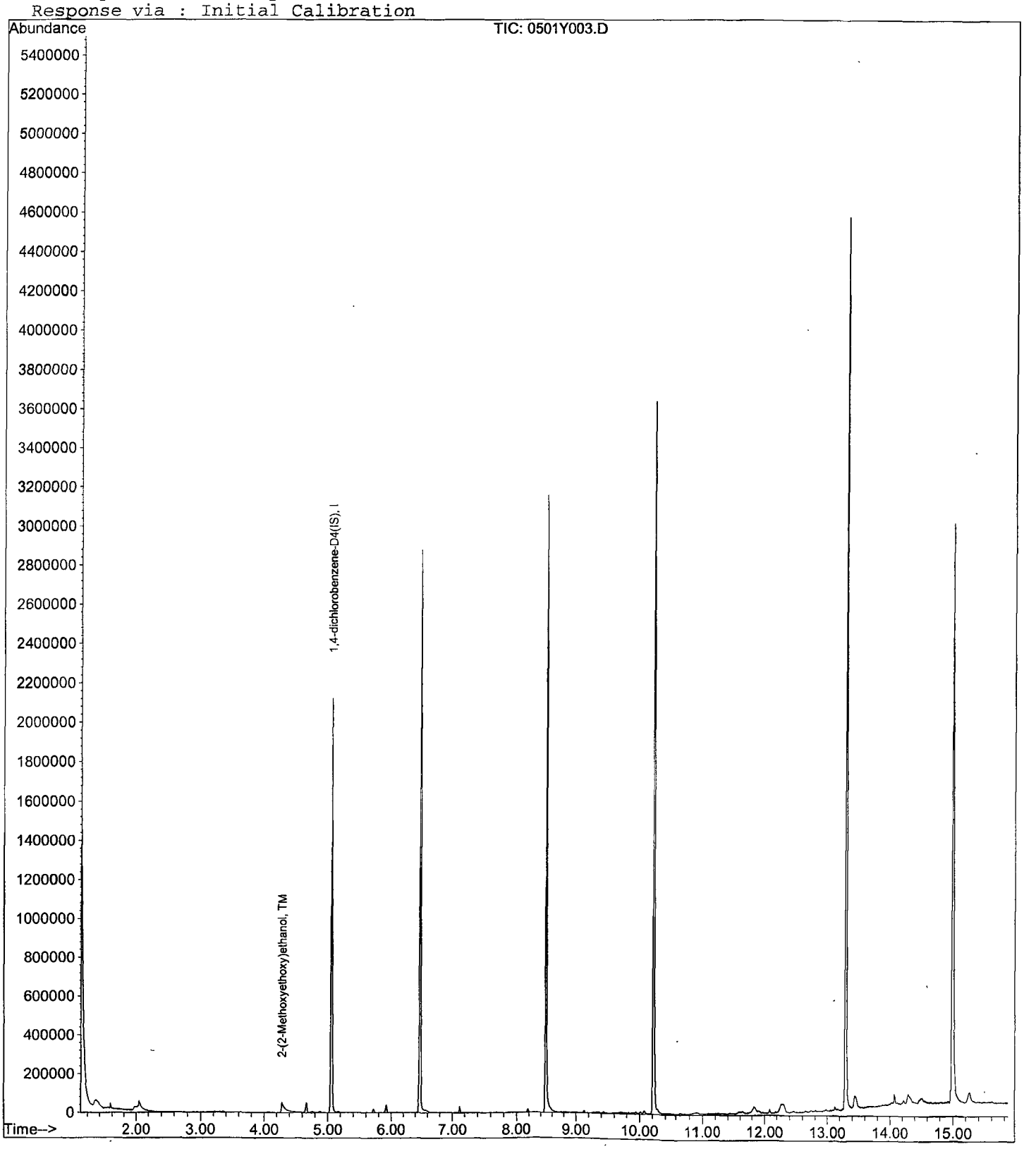
(#) = qualifier out of range (m) = manual integration
0501Y003.D YMEE0501.M Fri May 01 14:33:06 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y003.D Vial: 39
Acq On : 1 May 20 9:39 Operator: MA,SS
Sample : 50ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y004.D Vial: 40
Acq On : 1 May 20 10:03 Operator: MA,SS
Sample : 100ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:44 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	358512	40.00000	ppb	-0.01
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.26	45	163785	77.78322	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

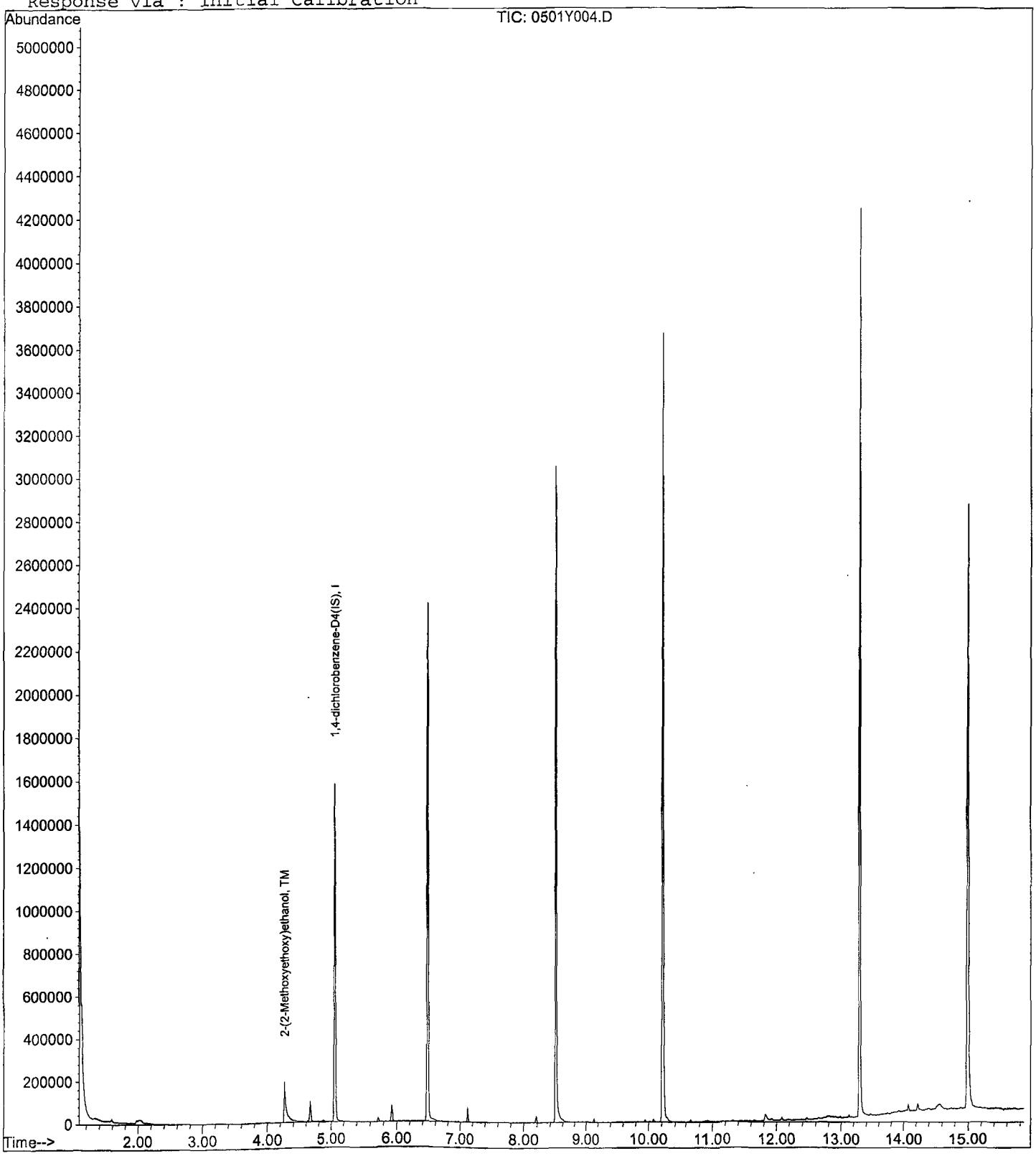
Data File : M:\YODA\DATA\Y200501M\0501Y004.D
Acq On : 1 May 20 10:03
Sample : 100ug/ml MEE 05/01/20
Misc : soil

Vial: 40
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Quant Time: May 1 11:49 2020

Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y006.D Vial: 42
Acq On : 1 May 20 10:51 Operator: MA,SS
Sample : 200ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:44 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	431824	40.00000 ppb	-0.01

System Monitoring Compounds

Target Compounds					Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.26	45	318364	125.52571 ppb	98

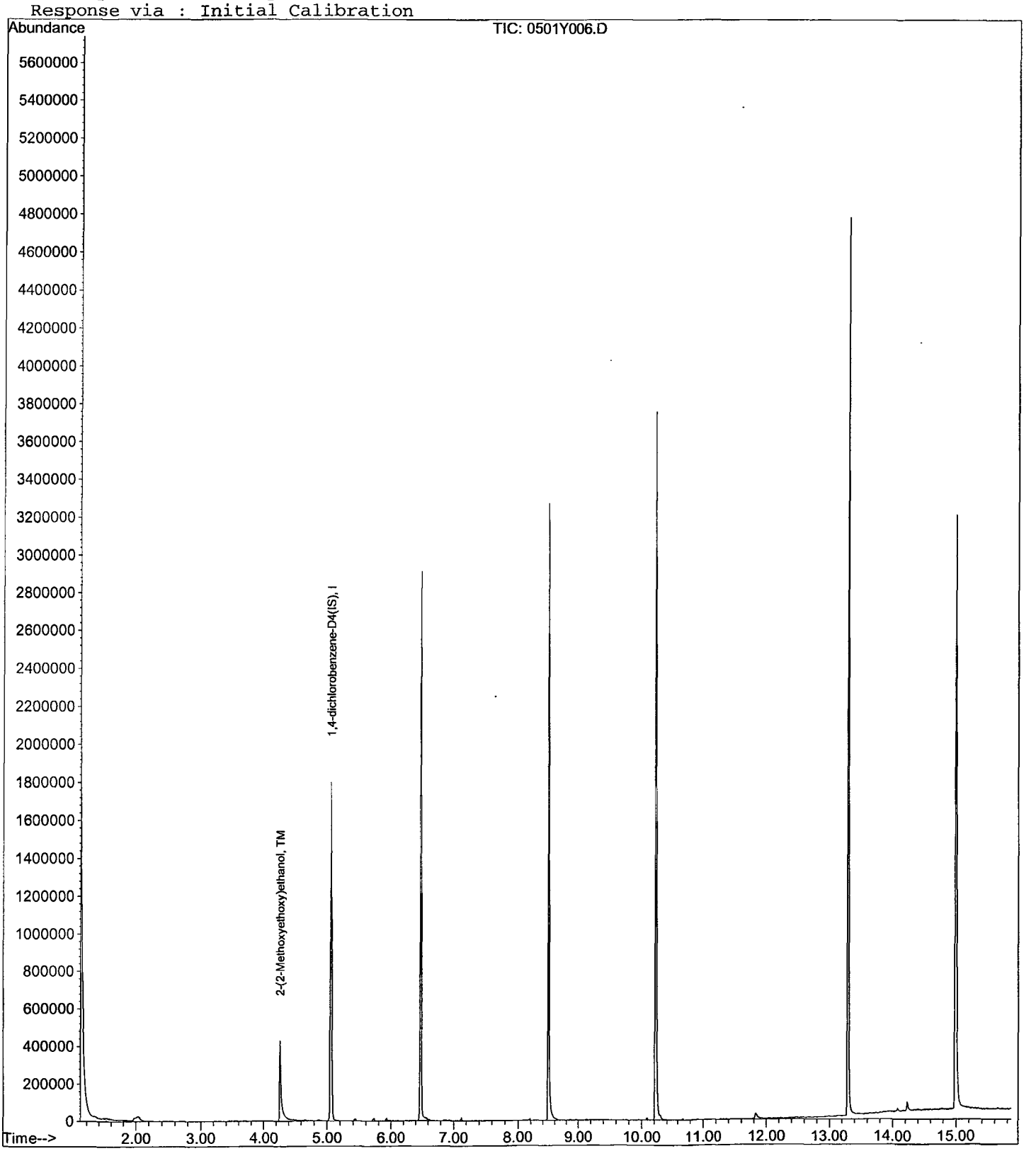
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y006.D Vial: 42
Acq On : 1 May 20 10:51 Operator: MA,SS
Sample : 200ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y007.D Vial: 7
Acq On : 1 May 20 11:24 Operator: MA,SS
Sample : 400ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:44 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	425852	40.00000 ppb	-0.01

System Monitoring Compounds

Target Compounds					Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.26	45	692148	276.72970 ppb	99

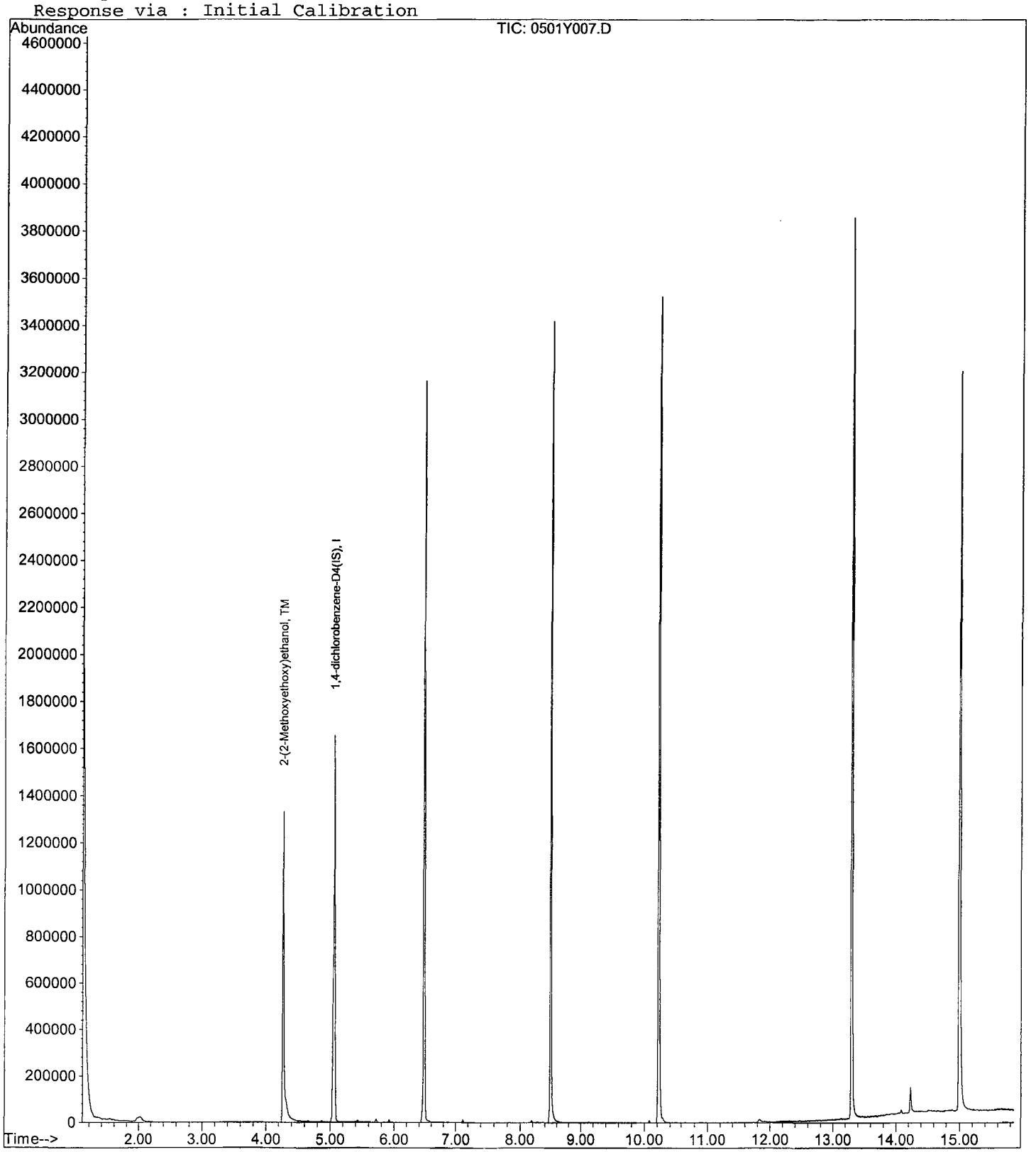
(#) = qualifier out of range (m) = manual integration
0501Y007.D YMEE0501.M Fri May 01 14:33:20 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y007.D Vial: 7
Acq On : 1 May 20 11:24 Operator: MA,SS
Sample : 400ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 11:49 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y008.D Vial: 8
Acq On : 1 May 20 11:48 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:16 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 12:15:50 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.07	152	483204	40.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.28	45	818058	442.11333	ppb	100

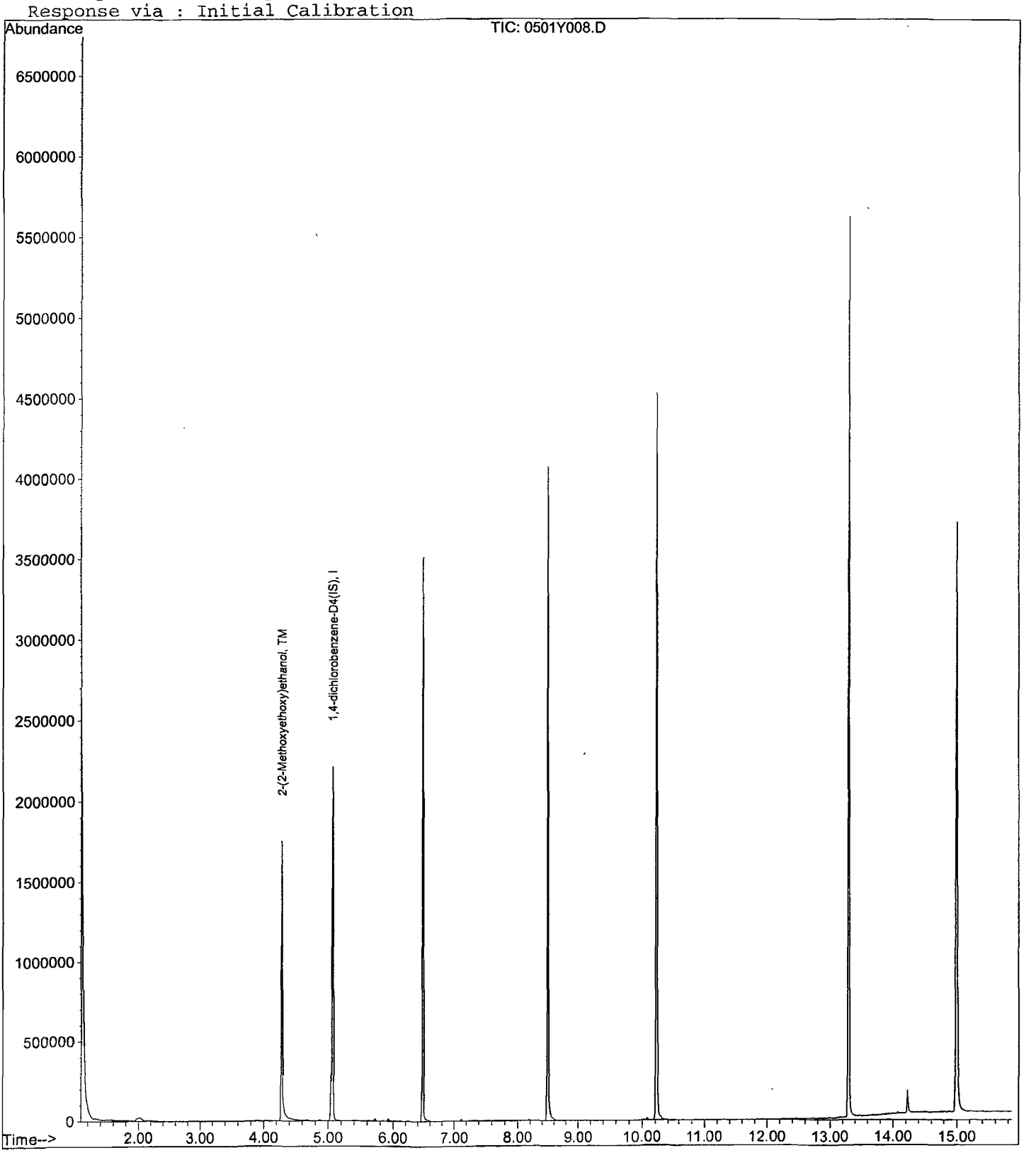
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y008.D Vial: 8
Acq On : 1 May 20 11:48 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:16 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y009.D Vial: 9
Acq On : 1 May 20 12:13 Operator: MA,SS
Sample : 600ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:14 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 11:48:44 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	445147	40.00000	ppb	-0.01

System Monitoring Compounds

Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.27	45	1097935	518.98742	ppb	99

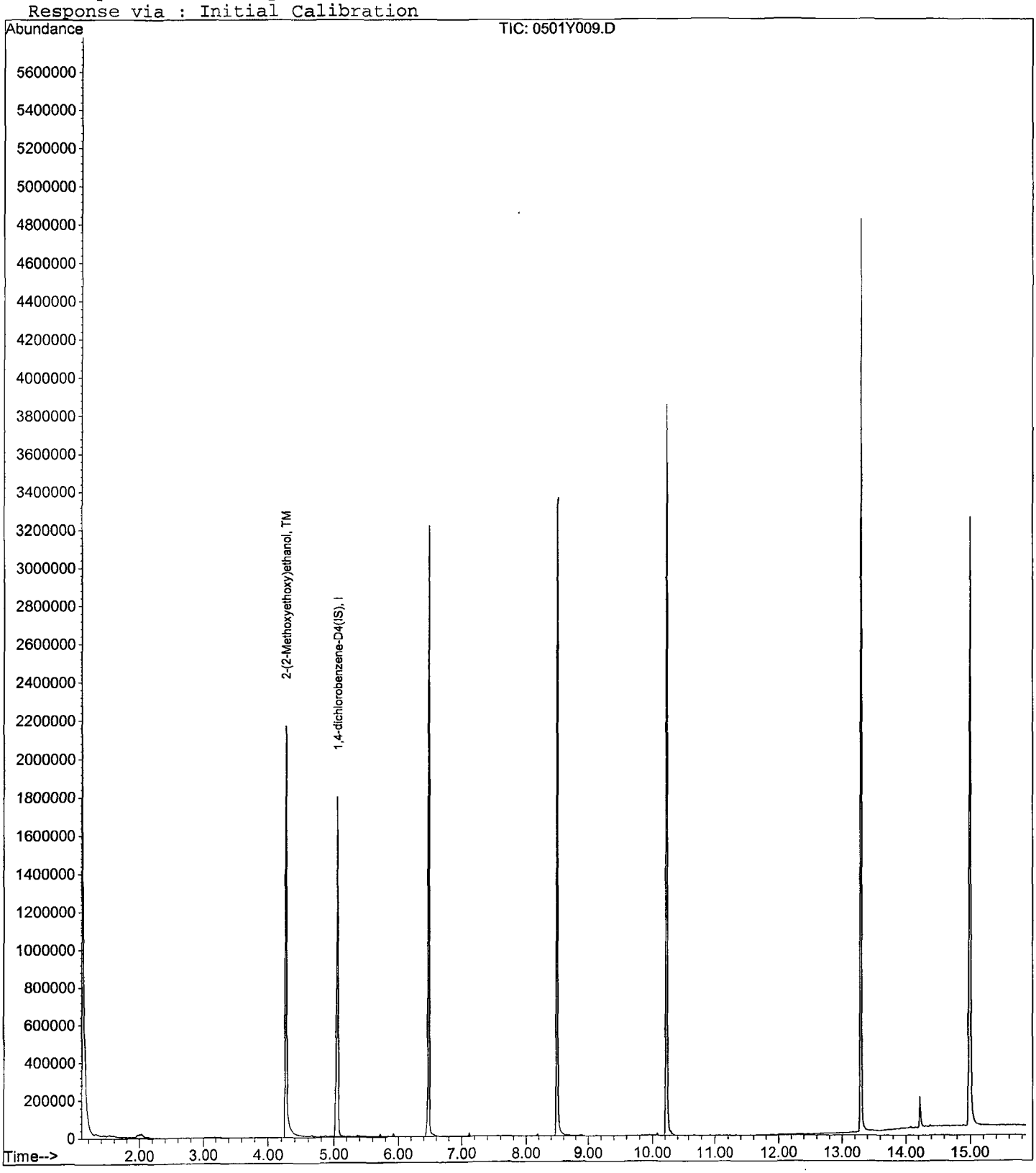
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y009.D Vial: 9
Acq On : 1 May 20 12:13 Operator: MA,SS
Sample : 600ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:14 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y010.D Vial: 10
Acq On : 1 May 20 12:37 Operator: MA,SS
Sample : 800ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:36 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 12:15:50 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.07	152	461483	40.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.30	45	1469246	831.41690	ppb	99

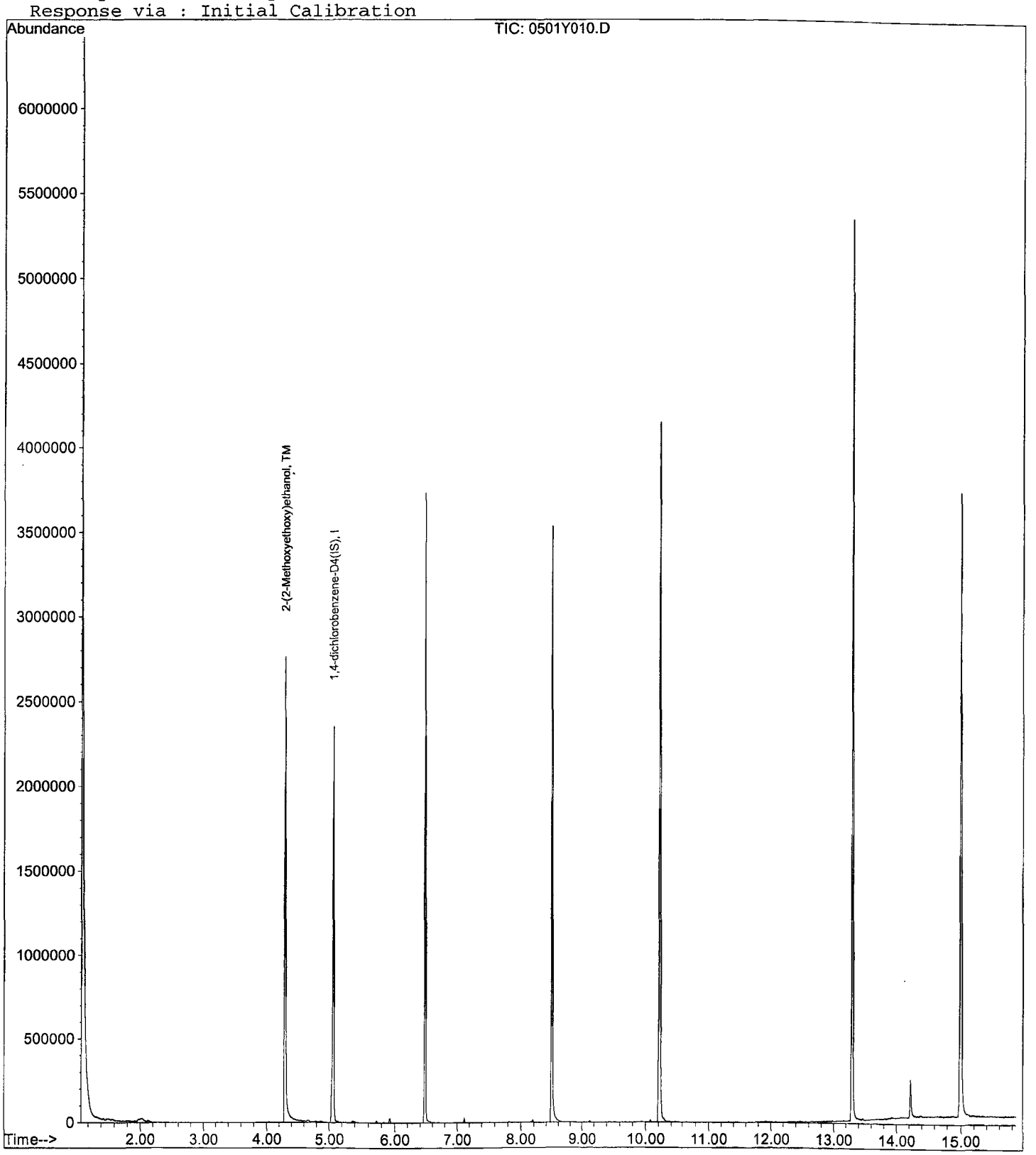
(#) = qualifier out of range (m) = manual integration
0501Y010.D YMEE0501.M Fri May 01 14:33:33 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y010.D Vial: 10
Acq On : 1 May 20 12:37 Operator: MA,SS
Sample : 800ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 12:36 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y011.D Vial: 11
Acq On : 1 May 20 13:01 Operator: MA,SS
Sample : 1000ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 13:03 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 12:15:50 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	445958	40.00000	ppb	-0.01

System Monitoring Compounds

Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.29	45	2014018	1172.78870	ppb	100

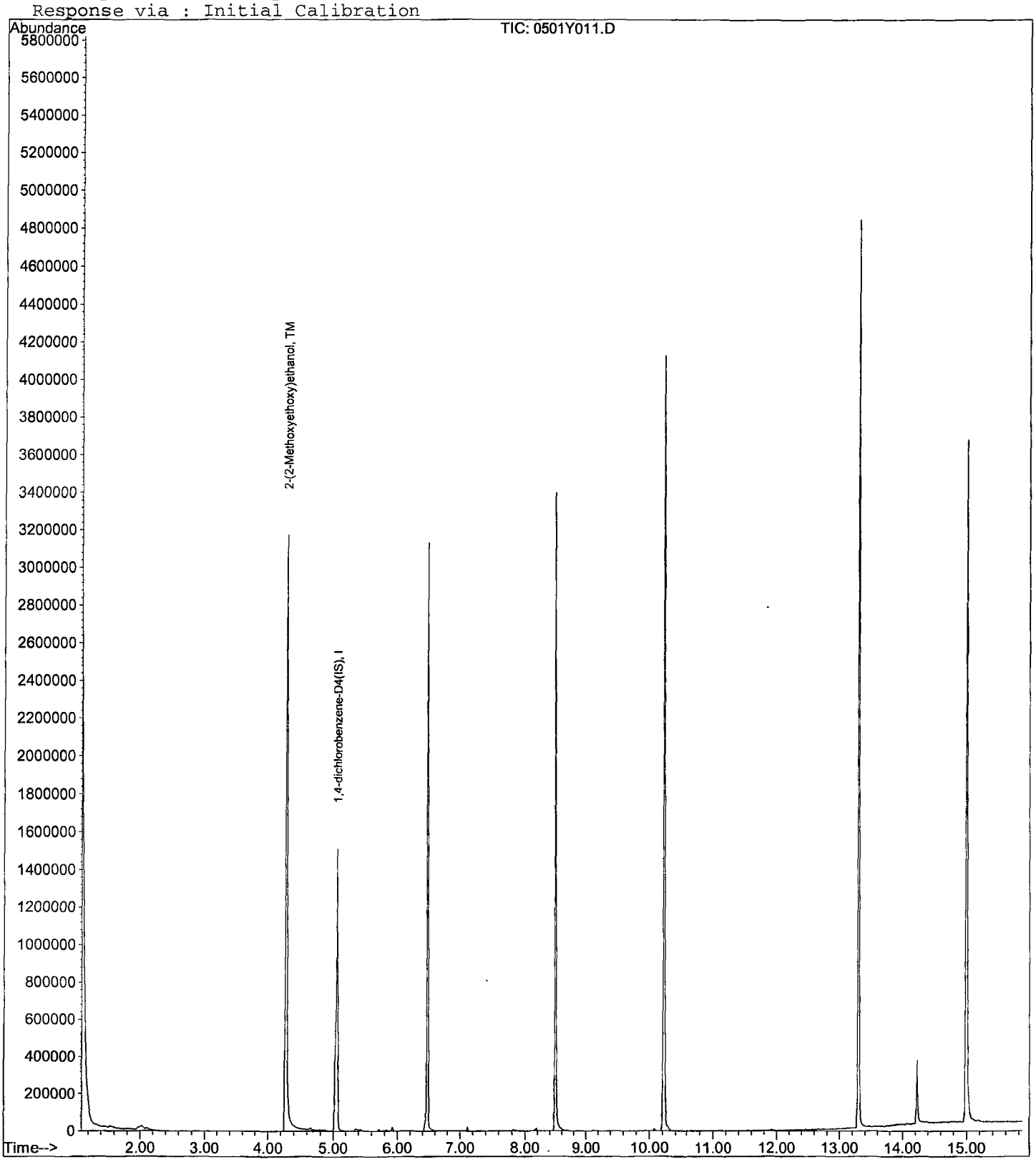
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y011.D Vial: 11
Acq On : 1 May 20 13:01 Operator: MA,SS
Sample : 1000ug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 13:03 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



2MEE
EPA 8270

Form 7

Second Source

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 1 May 20 13:50
Instrument: Yoda
Initial Cal. Date: 05/01/20
Data File: 0501Y013.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	TM	2-(2-Methoxyethoxy)ethanol	0.1574	0.1794	14	TM	
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
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29							
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31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			14.0		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y013.D Vial: 13
Acq On : 1 May 20 13:50 Operator: MA,SS
Sample : SSug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 14:30 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.06	152	461050	40.00000 ppb	-0.01

System Monitoring Compounds

Target Compounds					Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.26	45	1033684	569.91471 ppb	100

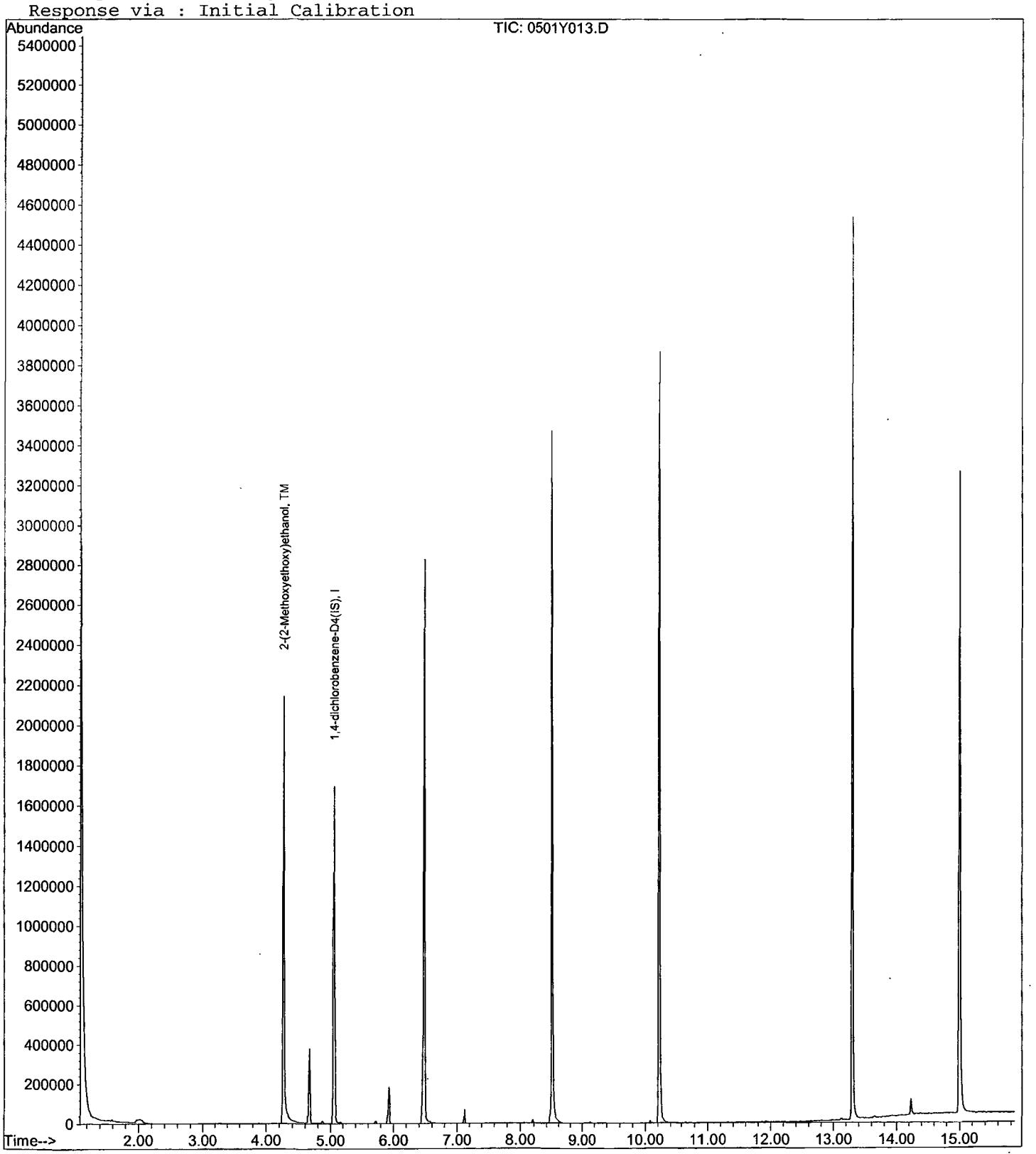
(#) = qualifier out of range (m) = manual integration
0501Y013.D YMEE0501.M Fri May 01 14:33:42 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y013.D Vial: 13
Acq On : 1 May 20 13:50 Operator: MA,SS
Sample : SSug/ml MEE 05/01/20 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: May 1 14:30 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 01 13:05:24 2020
Response via : Initial Calibration



2MEE
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/14/20
Instrument: Yoda
Initial Cal. Date: 05/01/20
Data File: 0501Y097.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	TM	2-(2-Methoxyethoxy)ethanol	0.1574	0.1740	11	TM	
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
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29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			11.0		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y097.D Vial: 97
Acq On : 14 Oct 20 11:16 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (1) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 11:16 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 14 11:16:28 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.37	152	164308	40.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.58	45	357349	552.84573	ppb	100

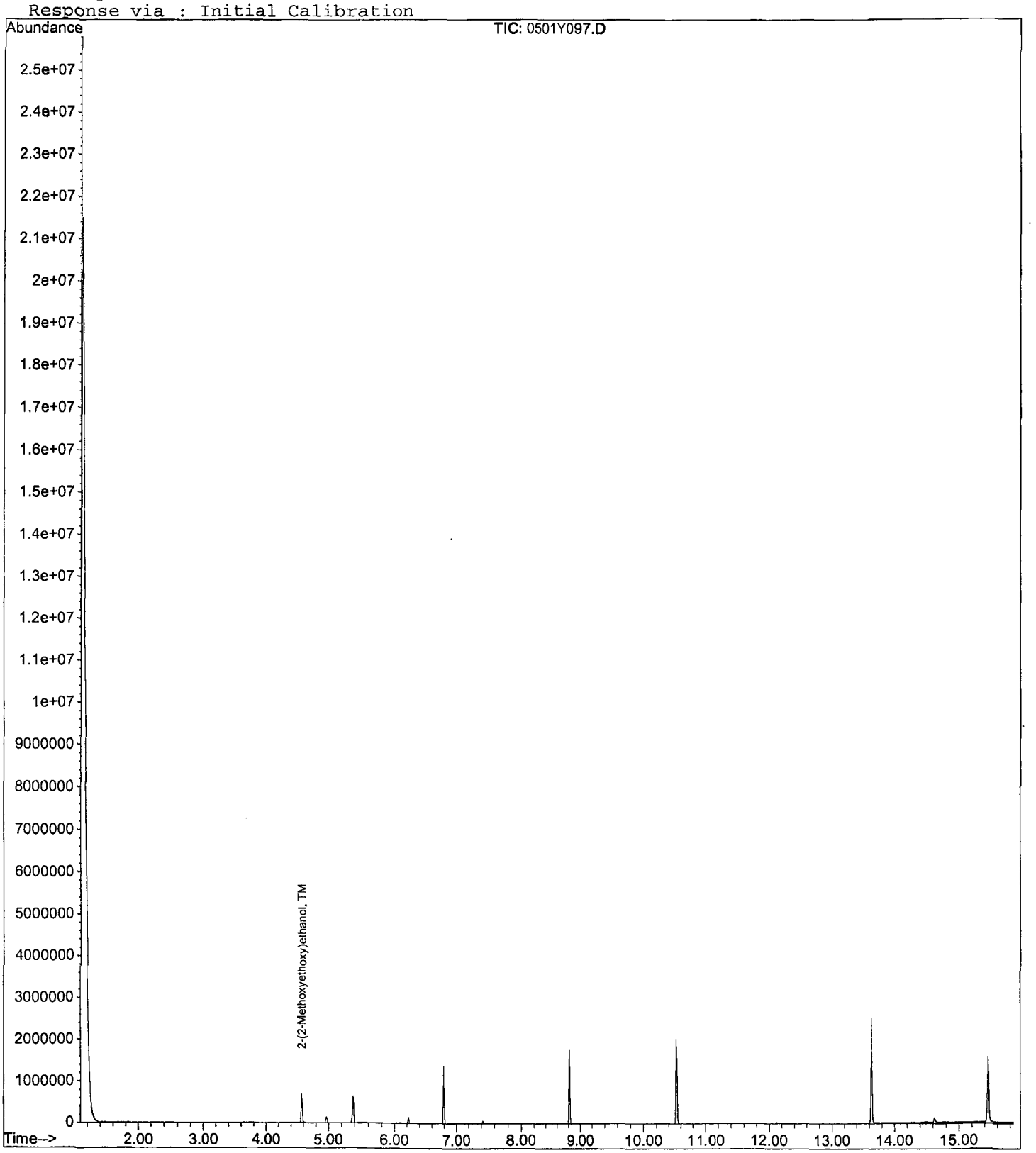
(#) = qualifier out of range (m) = manual integration
0501Y097.D YMEE0501.M Wed Oct 14 11:32:21 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y097.D Vial: 97
Acq On : 14 Oct 20 11:16 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (1) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 11:16 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 14 11:16:28 2020
Response via : Initial Calibration



2MEE
EPA 8270

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/14/20
Instrument: Yoda
Initial Cal. Date: 05/01/20
Data File: 0501Y102.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	TM	2-(2-Methoxyethoxy)ethanol	0.1574	0.1400	11	TM	
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
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27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			11.0		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y102.D Vial: 2
Acq On : 14 Oct 20 13:33 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:41 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 14 11:16:28 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.38	152	189383	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.57	45	331344	444.74208	ppb	99

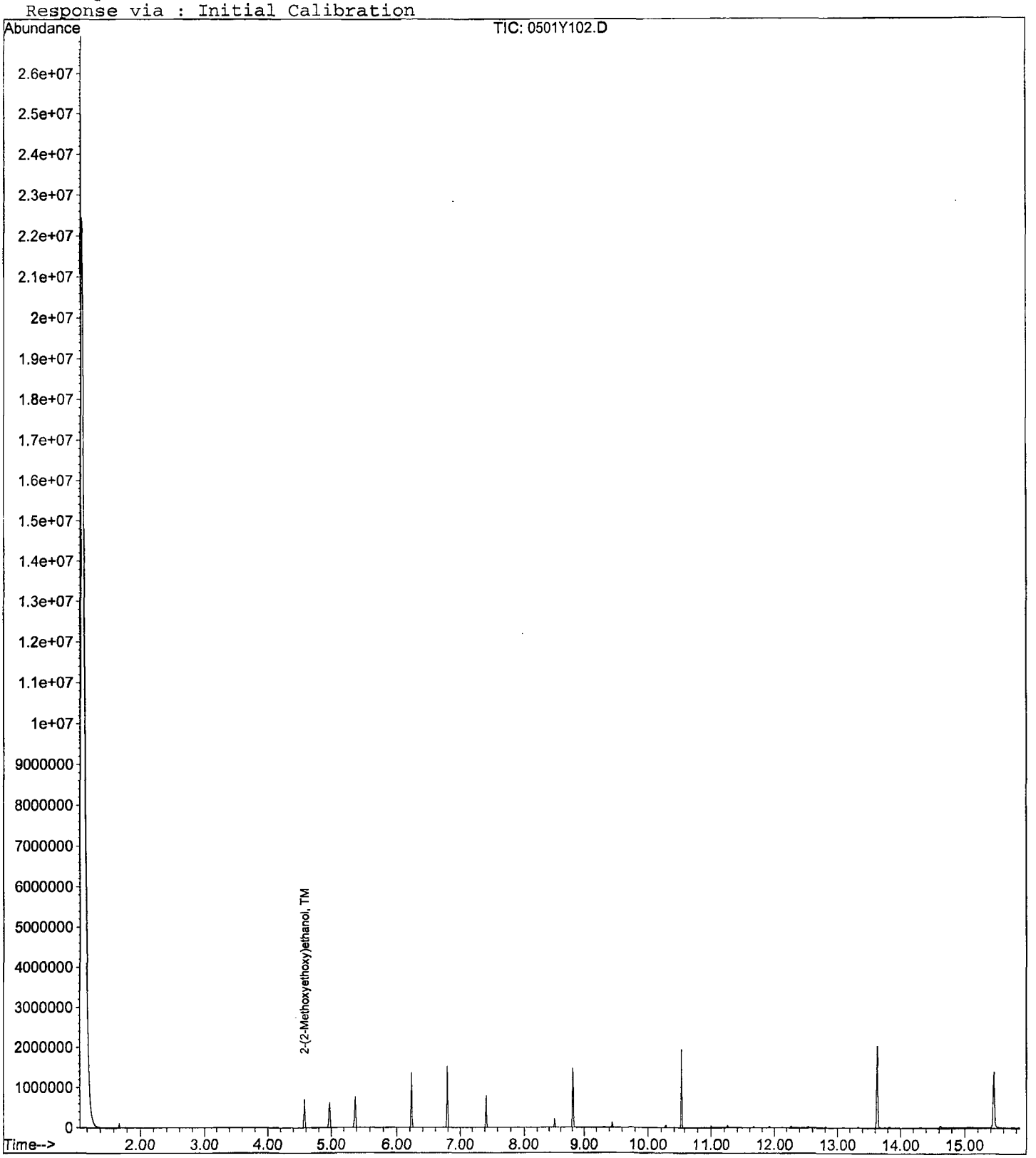
(#) = qualifier out of range (m) = manual integration
0501Y102.D YMEE0501.M Wed Oct 14 13:41:24 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y102.D Vial: 2
Acq On : 14 Oct 20 13:33 Operator: MA,SS
Sample : 500ug/ml MEE 05/01/20 (2) Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:41 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 14 11:16:28 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y101.D Vial: 1
Acq On : 14 Oct 20 13:09 Operator: MA,SS
Sample : BA19640W14 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:41 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 14 11:16:28 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.36	152	195770	40.00000	ppb	-0.01

System Monitoring Compounds

Target Compounds Qvalue

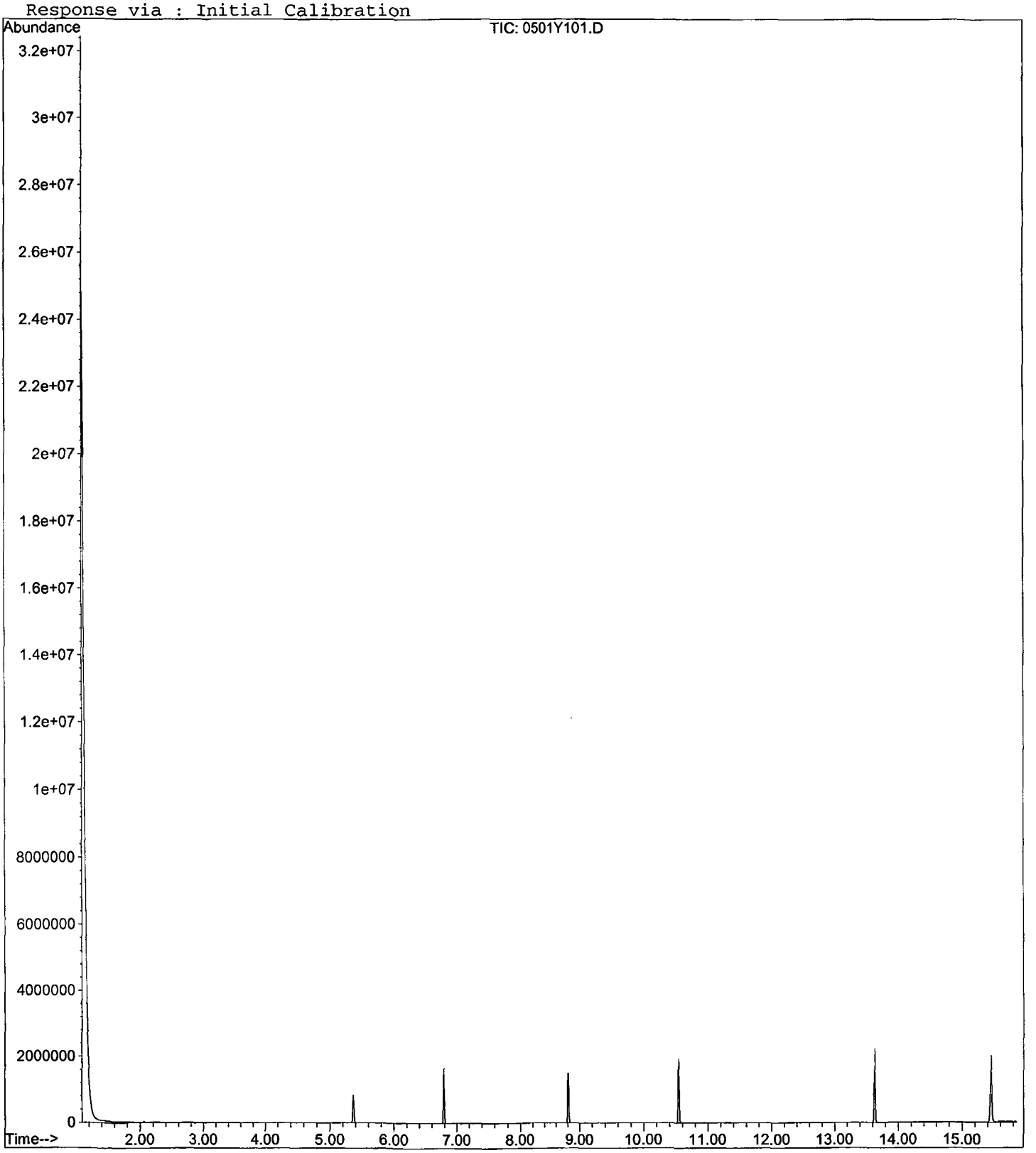
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y101.D Vial: 1
Acq On : 14 Oct 20 13:09 Operator: MA,SS
Sample : BA19640W14 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:41 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 14 11:16:28 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y098.D Vial: 98
Acq On : 14 Oct 20 11:41 Operator: MA,SS
Sample : 201013A BLK 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:40 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 14 11:16:28 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.37	152	124546	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

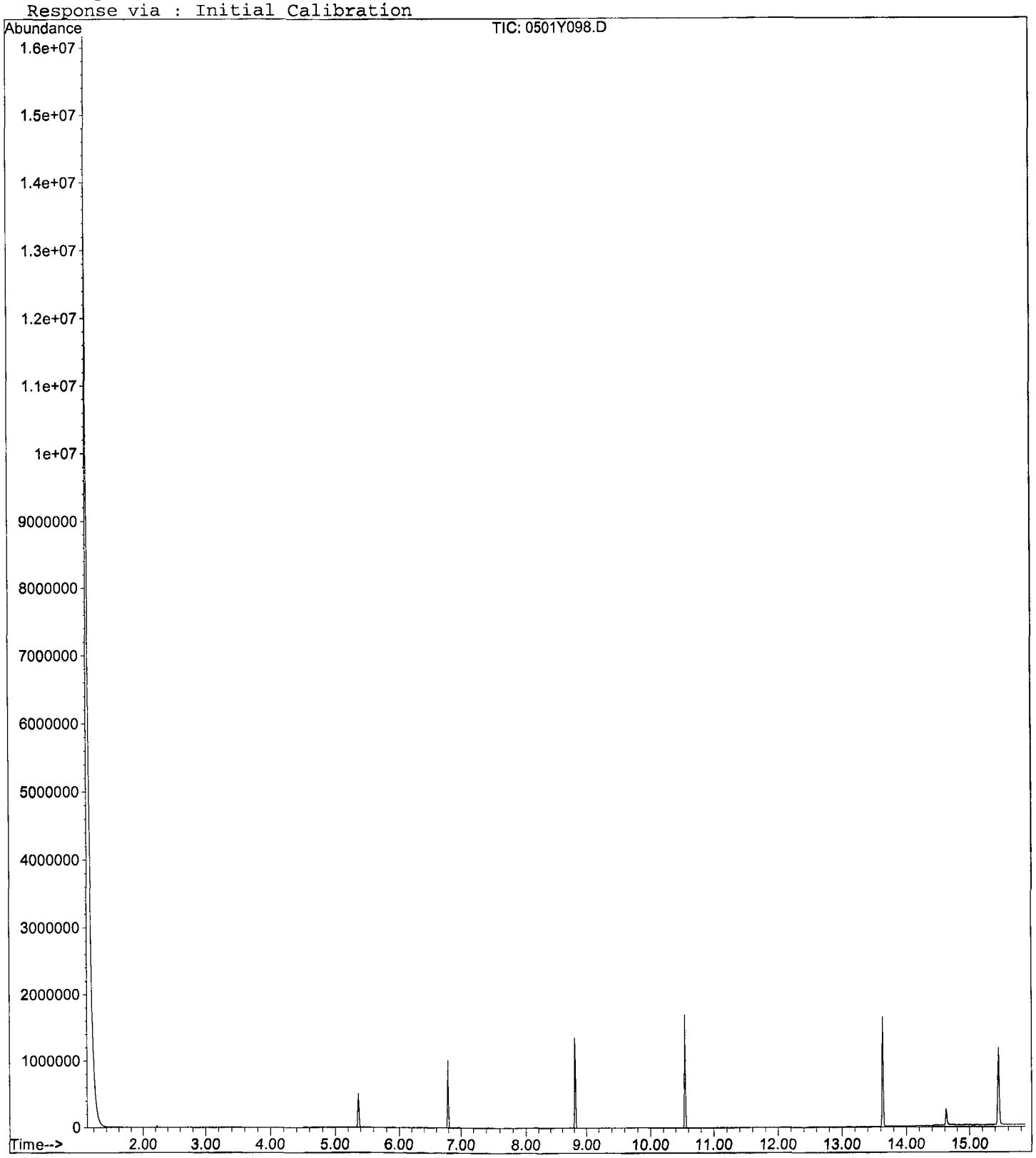
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y098.D Vial: 98
Acq On : 14 Oct 20 11:41 Operator: MA,SS
Sample : 201013A BLK 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:40 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 14 11:16:28 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y099.D Vial: 99
Acq On : 14 Oct 20 12:04 Operator: MA,SS
Sample : 201013A LCS-1 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:41 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 14 11:16:28 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.37	152	168354	40.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.65	45	28298	42.72700	ppb	98

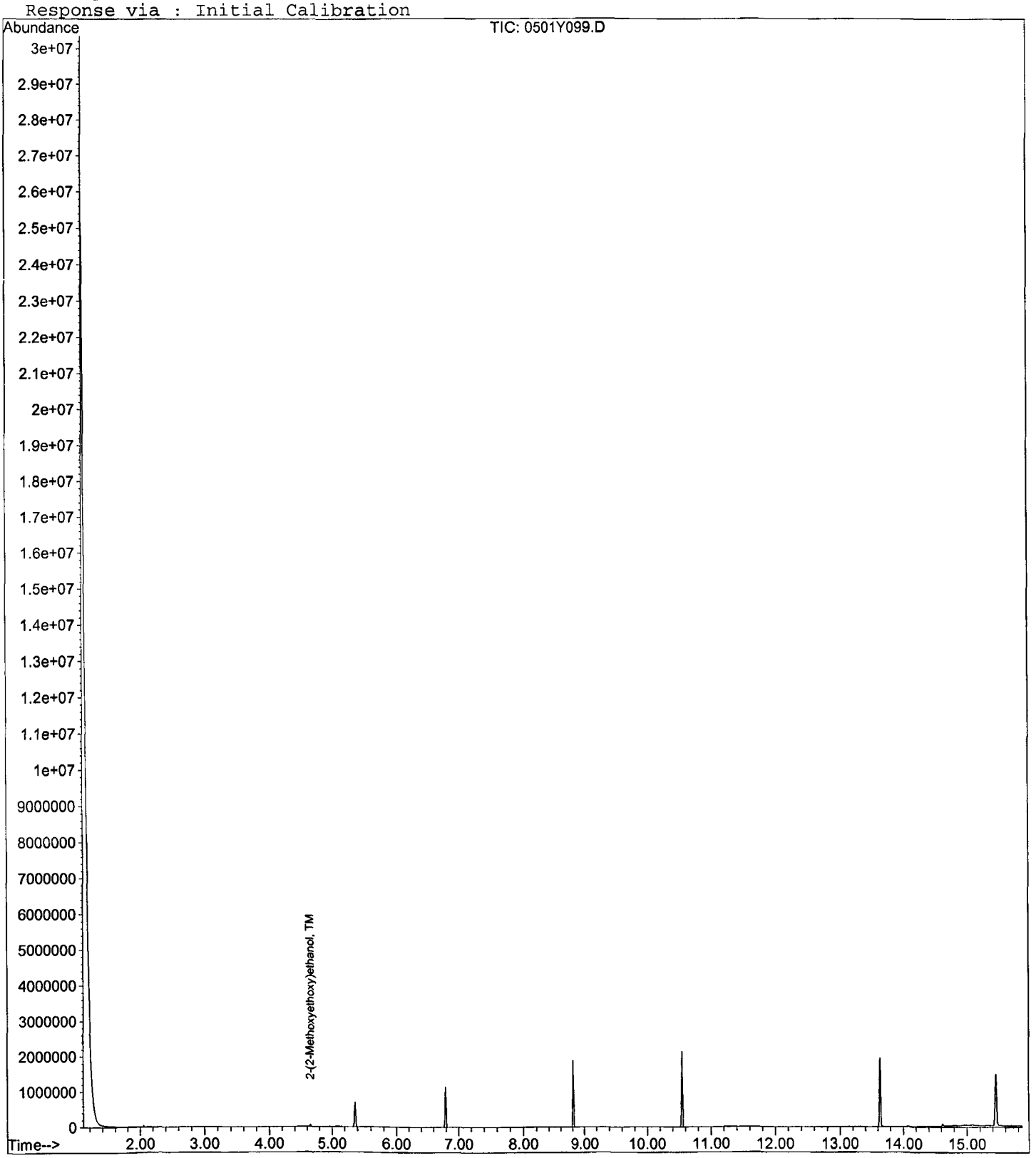
(#) = qualifier out of range (m) = manual integration
0501Y099.D YMEE0501.M Wed Oct 14 14:56:46 2020 Page 1

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y099.D Vial: 99
Acq On : 14 Oct 20 12:04 Operator: MA,SS
Sample : 201013A LCS-1 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:41 2020 Quant Results File: YMEE0501.RES

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 14 11:16:28 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y200501M\0501Y100.D Vial: 100
Acq On : 14 Oct 20 12:28 Operator: MA,SS
Sample : 201013A LCSD-1 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 12:28 2020 Quant Results File: YMEE0501.RES

Quant Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 14 11:16:28 2020
Response via : Initial Calibration
DataAcq Meth : GED

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.37	152	166521	40.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) 2-(2-Methoxyethoxy)ethanol	4.67	45	44182	67.44449	ppb	97

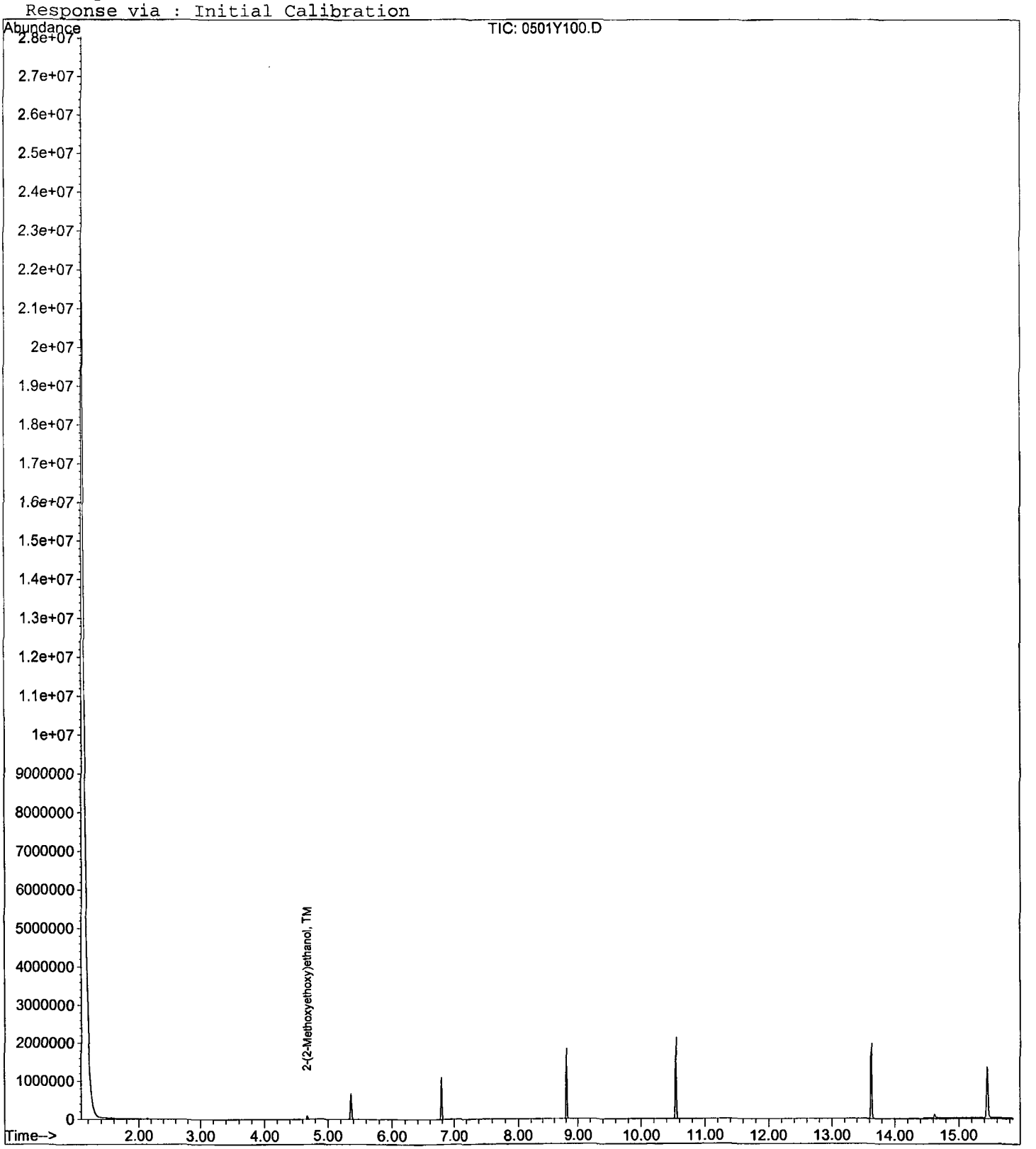
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y100.D Vial: 100
Acq On : 14 Oct 20 12:28 Operator: MA,SS
Sample : 201013A LCSD-1 2/500 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Oct 14 12:28 2020 Quant Results File: YMEE0501.RES

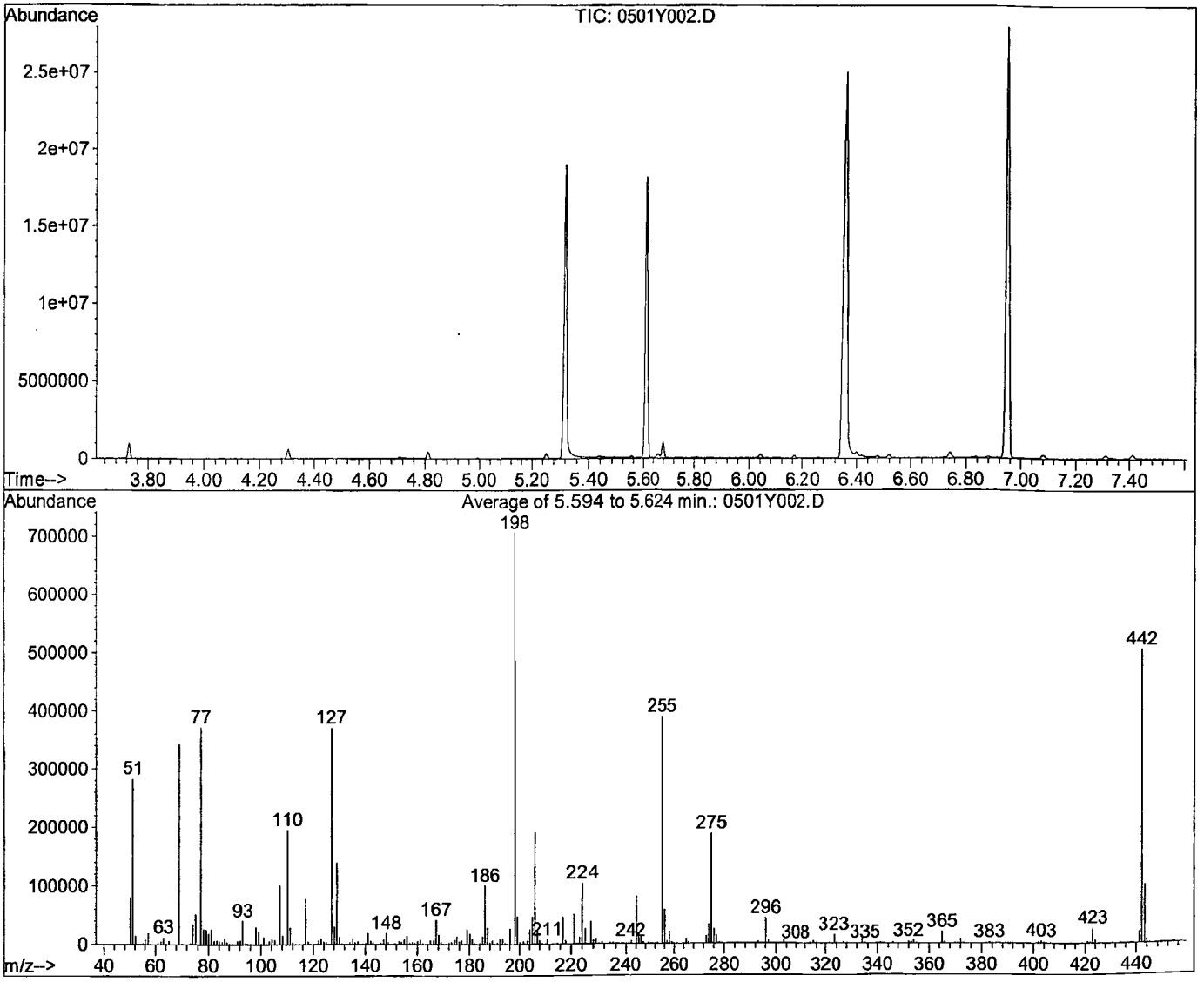
Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Oct 14 11:16:28 2020
Response via : Initial Calibration



Data File : M:\YODA\DATA\Y200501M\0501Y002.D
Acq On : 1 May 20 9:23
Sample : SV TUNE 10/01/19
Misc : soil

Vial: 38
Operator: MA,SS
Inst : Yoda
Multiplr: 1.00

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C



Spectrum Information: Average of 5.594 to 5.624 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	40.1	283365	PASS
68	69	0.00	2	0.0	30	PASS
70	69	0.00	2	0.5	1711	PASS
127	198	10	80	52.5	370953	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	706767	PASS
199	198	5	9	6.8	48387	PASS
275	198	10	60	26.7	188525	PASS
365	198	1	100	2.8	20013	PASS
441	442	0.01	24	3.9	19955	PASS
442	198	50	500	71.6	506304	PASS
443	442	15	24	19.8	100283	PASS

Data File Name:	**0501Y002.D**
Data File Path:	**M:\YODA\DATA\Y200501M**
Operator:	**MA,SS**
Date Acquired:	**1 May 20 9:23**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/01/19**
Vial Number:	**38**
Instrument Name:	**Yoda**

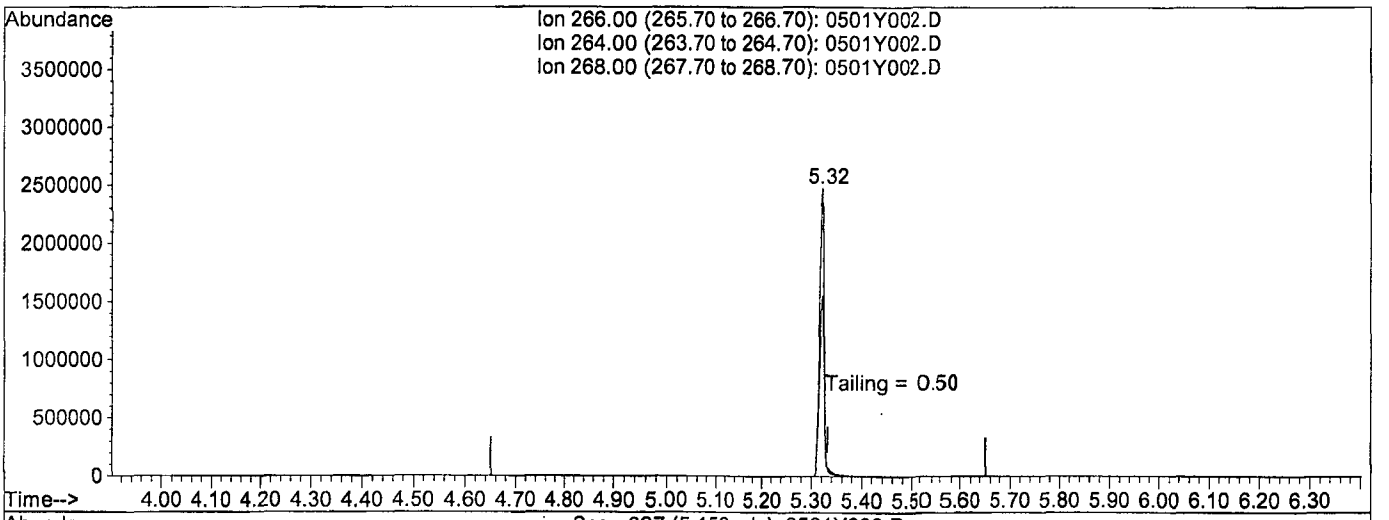
#	Name	Ret Time	Target Response
1)	DDT	6.95	212314000
2)	DDD	6.72	691986
3)	DDE	6.31	0

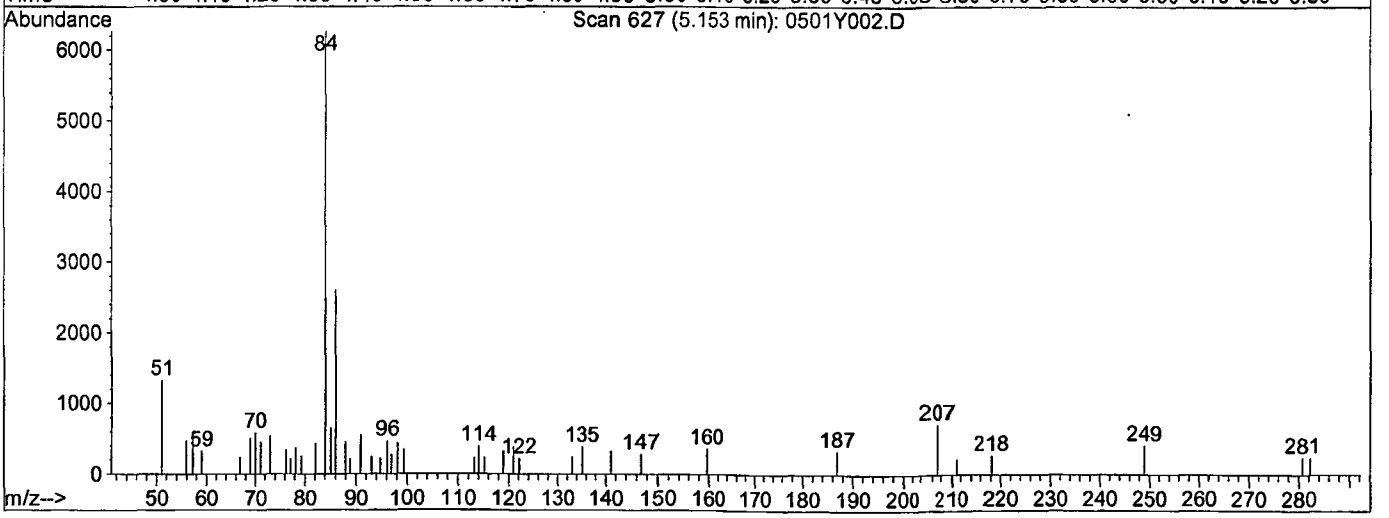
Breakdown **0.32**

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y002.D Vial: 38
Acq On : 1 May 20 9:23 Operator: MA,SS
Sample : SV TUNE 10/01/19 Inst : Yoda
Misc : soil Multiplr: 1.00
Quant Time: Aug 7 11:03 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y200501M\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Wed Jul 22 08:17:43 2020
Response via : Single Level Calibration





TIC: 0501Y002.D

(5) Pentachlorophenol

5.15min 0.0000

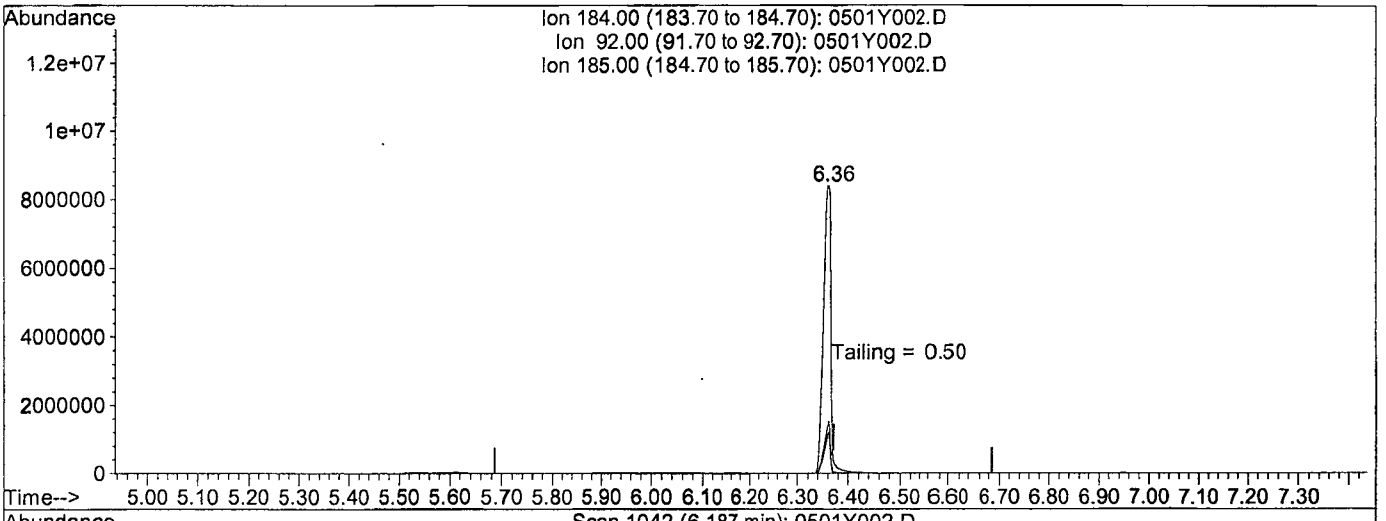
response 0

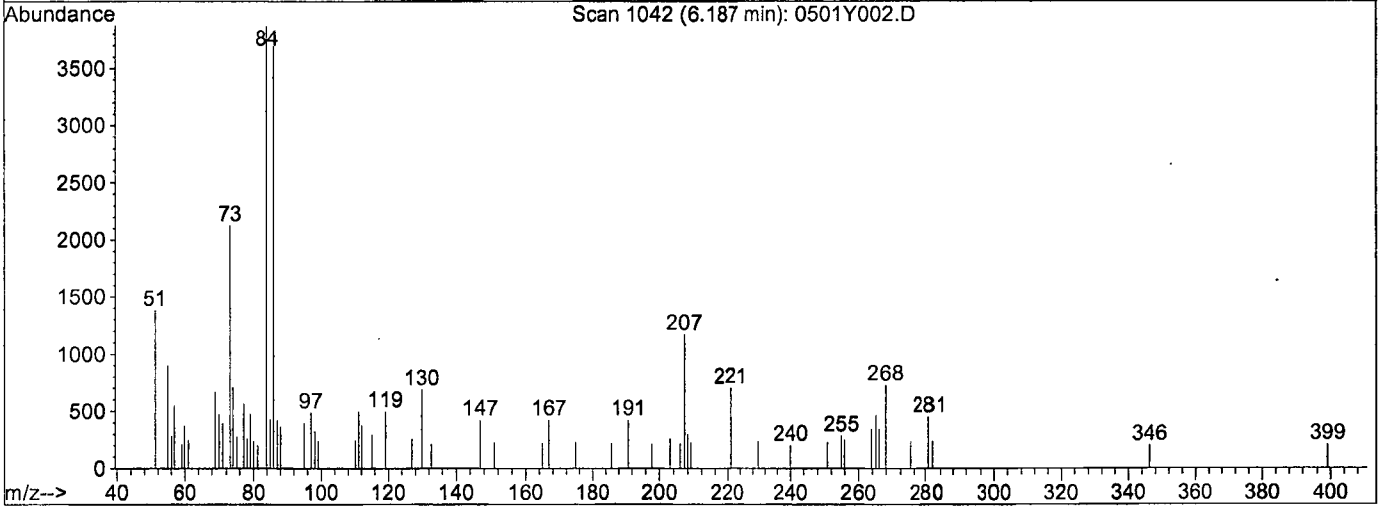
Ion	Exp%	Act%
266.00	100	0.00
264.00	63.90	0.00#
268.00	65.20	0.00#
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y002.D Vial: 38
Acq On : 1 May 20 9:23 Operator: MA,SS
Sample : SV TUNE 10/01/19 Inst : Yoda
Misc : soil Multiplr: 1.00
Quant Time: Aug 7 11:03 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y200501M\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Wed Jul 22 08:17:43 2020
Response via : Single Level Calibration





TIC: 0501Y002.D

(6) Benzidine

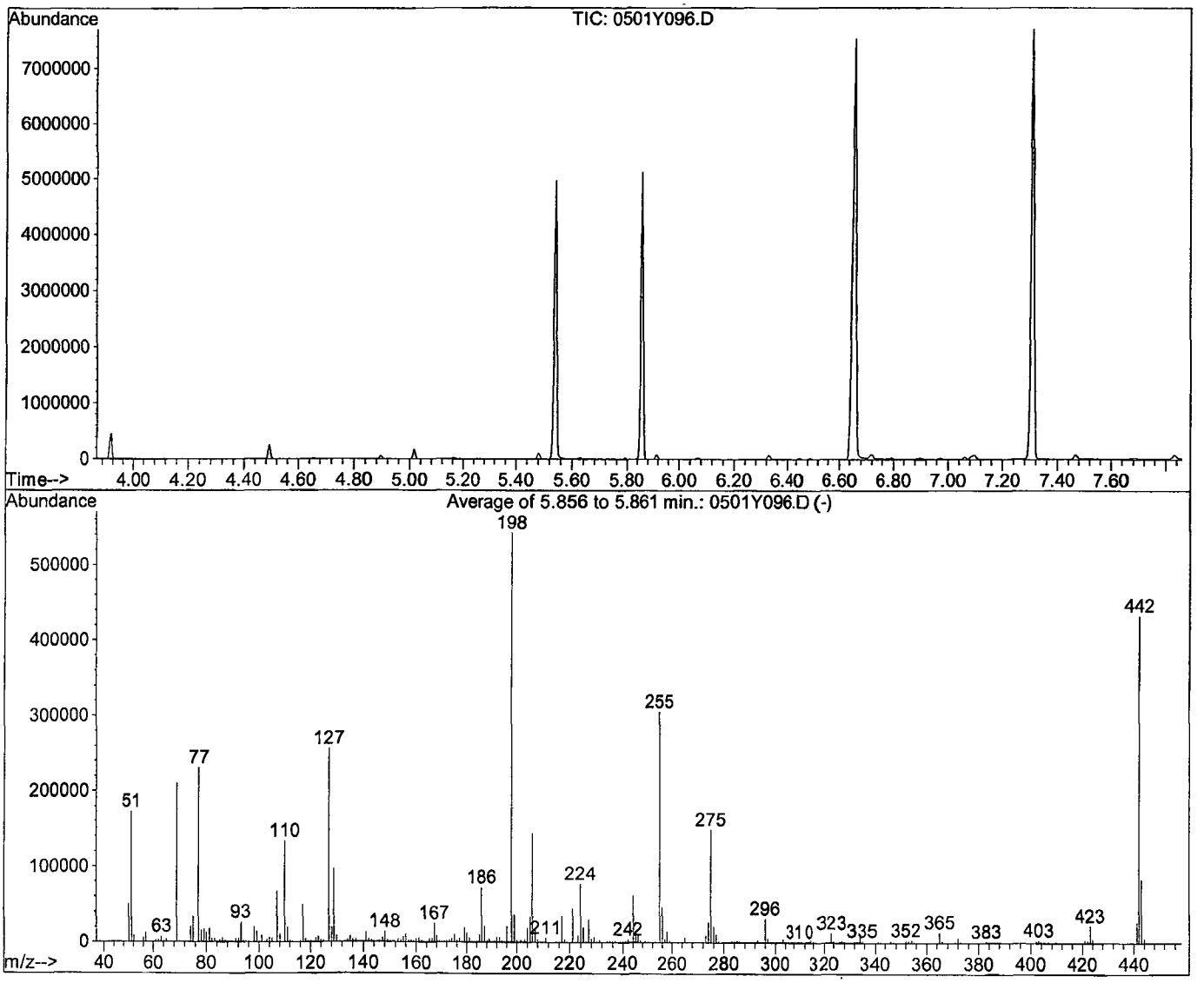
6.19min 0.0000

response 0

Ion	Exp%	Act%
184.00	100	0.00
92.00	10.00	0.00#
185.00	14.30	0.00#
0.00	0.00	0.00

Data File : M:\YODA\DATA\Y200501M\0501Y096.D Vial: 62
Acq On : 14 Oct 20 10:31 Operator: MA
Sample : SV TUNE 10/2/20 Inst : Yoda
Misc : Multiplr: 1.00

Method : M:\YODA\DATA\Y200501M\YMEE0501.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 908, 909, 910; Background Corrected with Scan 898

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	31.8	172632	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.5	1108	PASS
127	198	10	80	47.2	256341	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	542955	PASS
199	198	5	9	6.7	36205	PASS
275	198	10	60	27.4	149035	PASS
365	198	1	100	2.6	13937	PASS
441	442	0.01	24	6.3	27117	PASS
442	198	50	500	79.7	432469	PASS
443	442	15	24	19.5	84147	PASS

Data File Name:	**0501Y096.D**
Data File Path:	**M:\YODA\DATA\Y200501M**
Operator:	**MA**
Date Acquired:	**14 Oct 2020 10:31**
Method File:	**DFTPP2.M**
Sample Name:	**SV TUNE 10/2/20**
Vial Number:	**62**
Instrument Name:	**Yoda**

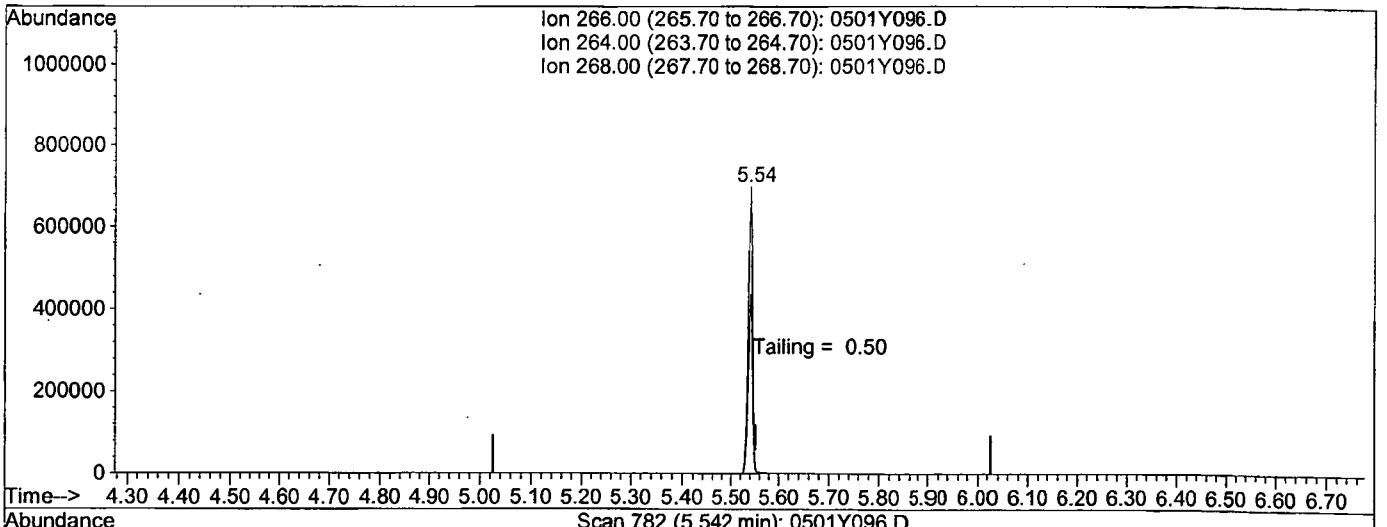
#	Name	Ret Time	Target Response
1)	DDT	7.26	58269300
2)	DDD	7.02	352181
3)	DDE	5.93	557973

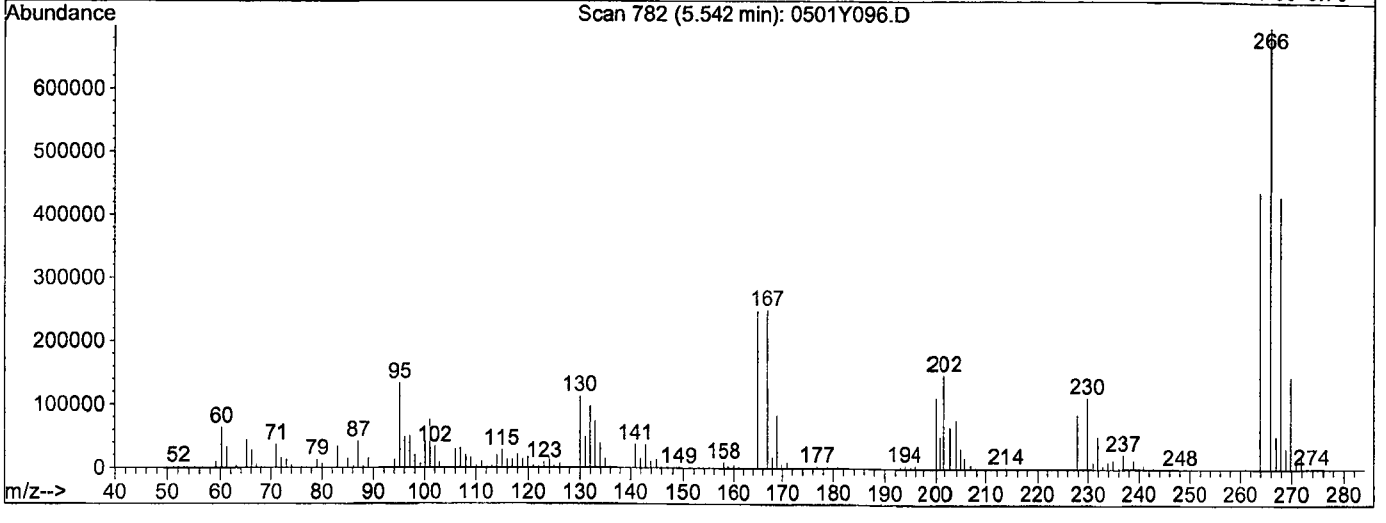
Breakdown **1.54**

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y096.D Vial: 62
Acq On : 14 Oct 20 10:31 Operator: MA
Sample : SV TUNE 10/2/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 14 10:49 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y200501M\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration





TIC: 0501Y096.D

(5) Pentachlorophenol

5.54min 0.0000

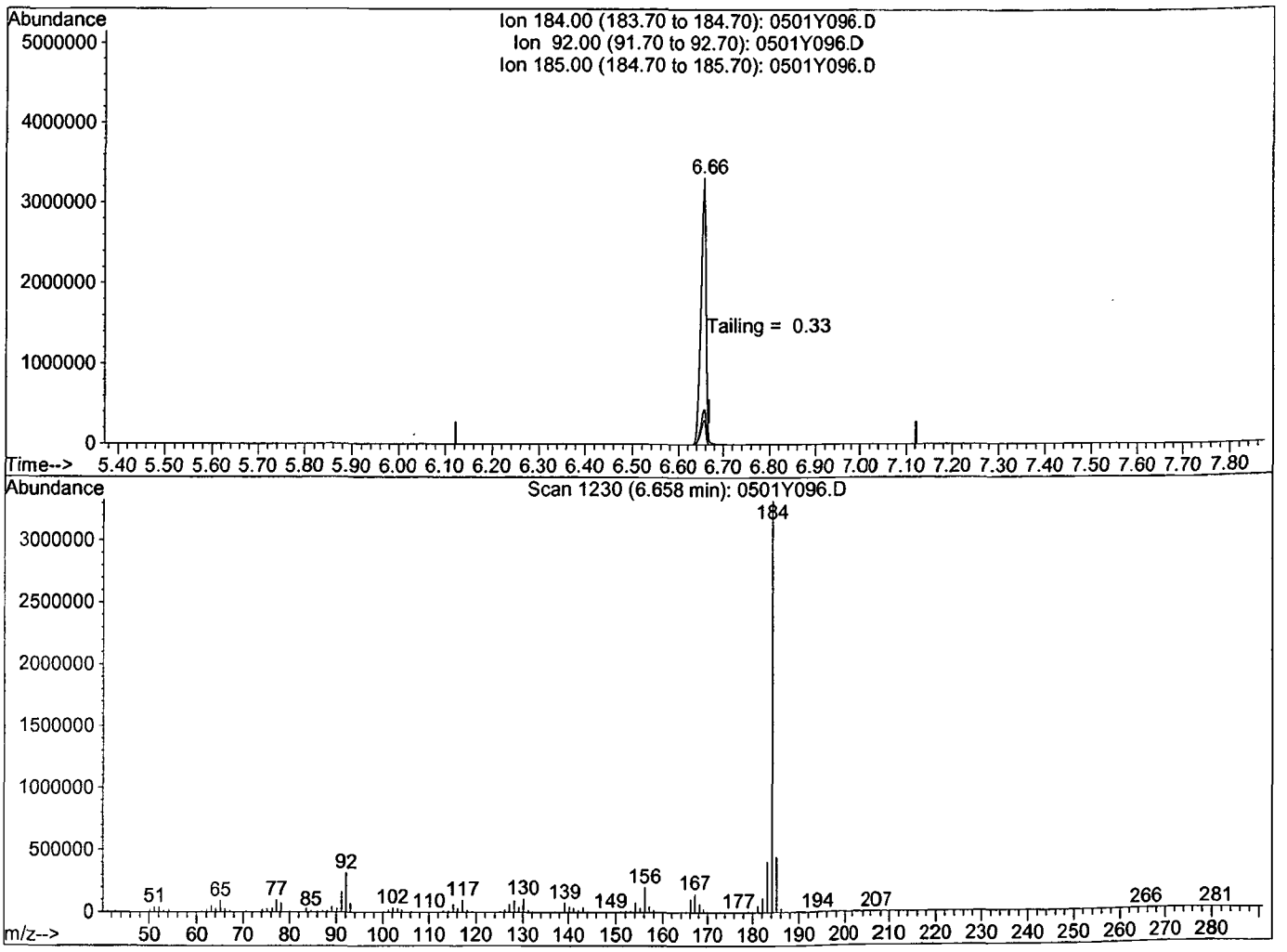
response 4319171

Ion	Exp%	Act%
266.00	100	100
264.00	63.10	61.41
268.00	65.40	62.51
0.00	0.00	0.00

Quantitation Report

Data File : M:\YODA\DATA\Y200501M\0501Y096.D Vial: 62
Acq On : 14 Oct 20 10:31 Operator: MA
Sample : SV TUNE 10/2/20 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Oct 14 10:49 2020 Quant Results File: temp.res

Method : M:\YODA\DATA\Y200501M\DFTPP2.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 09 10:49:12 2020
Response via : Single Level Calibration



TIC: 0501Y096.D

(6) Benzidine

6.66min 0.0000

response 26744467

Ion	Exp%	Act%
184.00	100	100
92.00	8.50	9.49
185.00	13.80	13.86
0.00	0.00	0.00

Name of Final Standard: MEE Curve
Prep'd By (Initials): CD
Prep Date: 05/01/20
Exp Date: 11/06/20

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	5 uL	200uL	Methanol 195uL Lot# 235140	50 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	5 uL	100uL	Methanol 95uL Lot# 235140	100 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	10 uL	100uL	Methanol 90uL Lot# 235140	200 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	20 uL	100uL	Methanol 80 uL Lot# 235140	400 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	50 uL	200 uL	Methanol 150 uL Lot# 235140	500 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	4 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	30 uL	100uL	Methanol 70 uL Lot# 235140	600 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	40 uL	100uL	Methanol 60 uL Lot# 235140	800 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*
MEE M STD Stock	APPL		2000 ug/mL	11/06/19	11/06/20	50 uL	100uL	Methanol 50uL Lot# 235140	1000 ug/mL
SV Internal Standard	APPL	8270 Internal Standard	2000 ug/mL	03/03/20	03/03/21	2 uL	*	*	*

Name of Final Standard: MEE Second Source
Prep'd By (Initials): MA
Prep Date: 05/01/20
Exp Date: 11/06/20

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from container Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
MEE SS	APPL		2000 ug/mL	11/06/19	11/06/20	50 uL	200uL	Methanol 150uL Lot# 235140	500 ug/mL
SV Internal Standard	APPL	8277 Internal Standard	2000 ug/mL	03/03/20	03/03/21	4 uL	*	*	*

Name of Final Standard Diethylene Glycol **Prep'd By (Initials)** MA

Prep Date 11/05/19

Exp Date 11/05/20

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Diethylene glycol methyl ether	AccuStandard	S-72273	2000 ug/mL	**218101558-39890**	**12/01/20**	1.0 mL	2 mL	Methanol #208858	1000 ug/mL

Given to Extraction to do **MEE M STD Stock** (used for ICAL) Final concentration 2000ug/L

Name of Final Standard 2MEE Second Source Stock **Prep'd By (Initials)** JP

Prep Date 10/28/19
Exp Date 10/28/20

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Methoxyethanol-Neat	Chem Service	N-12404-1G	Neat 99.5%	**7079100 - 39417**	**07/31/22**	0.1022g	10 mL	**MC #56258**	10220 ug/mL

Given to Extraction to do **MEE SS** (used for ICAL SS)
0.097ml were spiked in 500ml of water and extracted on 04/29/19 . Final concentration is 2000ug/L

Name of Final Standard	8270 Internal Standard Ampules (2)	Prep'd By (Initials)	MA
Prep Date	11/20/19		
Exp Date	11/20/20		

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Semivolatile Internal Standard	Restek	31206	2000 ug/mL	**AO157142-49871,872,873**	**07/31/25**	3 mL	3 mL	**NA**	2000ug/mL

_MWE2MEE

Organic Extraction Worksheet

Method	Solid Phase Extraction of 2MEE in Water	Extraction Set	201013A	Extraction Method	MWE2MEE	Units	mL

Spiked ID 1	Diethylene Glycol 4-29-20 12-1-20		Surrogate ID 1		
Spiked ID 2			Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:		
Spiked ID 7			Ext. Start Time:	10/13/20 8:00	
Spiked ID 8			Ext. End Time:	10/13/20 13:15	
			GC Requires Extract By:		

pH1			Water Bath Temp 1 °C	
pH2			Water Bath Temp 2 °C	
pH3			Water Bath Temp 3 °C	

Spiked By: DL **Date** 10/13/20 **Witnessed By:** CFM **Date** 10/13/20

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201013A Blk				NA	NA equip	500	2	7	10/13/20 8:00	
2	201013A LCS-1		0.040	1	NA	NA equip	500	2	7	10/13/20 8:00	
3	201013A LCSD-1		0.040	1	NA	NA equip	500	2	7	10/13/20 8:00	
4	BA19640	BA19640W14			NA	NA equip	500	2	7	10/13/20 8:00	93659

Solvent and Lot#	
ENVIRO-CLEAN CARTRIDGES	50193-EY
PH Strip	HC904495
Di Water	10/13/20
Methanol:DCM 80:20 PREP	8/4/20

Extraction COC Transfer	
Extraction lab employee Initials	DL
GC analyst's initials	MA
Date	10/14/20
Time	10:00
Refrigerator	GC_C

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL
Concentration	DL

Modified	10/13/20 1:08:24 PM

Reviewed By: MA **Date** 10/14/20

Injection Log

Directory: M:\YODA\DATA\Y200501M\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	38	0501Y002.D	1	SV TUNE 10/01/19	soil	1 May 20 9:23
2	39	0501Y003.D	1	50ug/ml MEE 05/01/20	soil	1 May 20 9:39
3	40	0501Y004.D	1	100ug/ml MEE 05/01/20	soil	1 May 20 10:03
4	42	0501Y006.D	1	200ug/ml MEE 05/01/20	soil	1 May 20 10:51
5	7	0501Y007.D	1	400ug/ml MEE 05/01/20	soil	1 May 20 11:24
6	8	0501Y008.D	1	500ug/ml MEE 05/01/20	soil	1 May 20 11:48
7	9	0501Y009.D	1	600ug/ml MEE 05/01/20	soil	1 May 20 12:13
8	10	0501Y010.D	1	800ug/ml MEE 05/01/20	soil	1 May 20 12:37
9	11	0501Y011.D	1	1000ug/ml MEE 05/01/20	soil	1 May 20 13:01
10	13	0501Y013.D	1	SSug/ml MEE 05/01/20	soil	1 May 20 13:50
11	62	0501Y096.D	1	SV TUNE 10/2/20		14 Oct 20 10:31
12	97	0501Y097.D	1	500ug/ml MEE 05/01/20 (1)		14 Oct 20 11:16
13	98	0501Y098.D	1	201013A BLK 2/500		14 Oct 20 11:41
14	99	0501Y099.D	1	201013A LCS-1 2/500		14 Oct 20 12:04
15	100	0501Y100.D	1	201013A LCSD-1 2/500		14 Oct 20 12:28
16	1	0501Y101.D	1	BA19640W14 2/500		14 Oct 20 13:09
17	2	0501Y102.D	1	500ug/ml MEE 05/01/20 (2)		14 Oct 20 13:33

ORGANICS

Calibration Data

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/06/20
Matrix: Water Instrument. ZEUS Initials: CH

		Compound	1006Z23 D	1006Z24.D	1006Z25.D	1006Z26 D	1006Z27.D	1006Z28 D	1006Z29.D	1006Z30.D	1006Z31 D		Avg	%RSD	Type	r^2	Q	MRF
1	I	Fluorobenzene (IS)																
2	TM	Chlorotrifluoroethene													TM			
3	TM	Dichlorodifluoromethane	0.0399	0.0496	0.0458	0.0489	0.0345	0.0390	0.0400	0.0370	0.0370		0.04	13	TM			
4	TML	Freon 114	0.0698	0.0778	0.0761	0.0661	0 0458	0.0507	0.0455	0.0451	0.0380		0.06	26	TM	0.995		
5	TM**	Chloromethane			0.2234	0.1918	0.1440	0.1631	0.1680	0.1601	0.1592		0.17	15	TM**			
6	TM*	Vinyl chloride	0.1780	0.1836	0.1712	0.1663	0.1301	0.1447	0.1478	0.1432	0.1447		0.16	12	TM*			
7		Butane																
8	TM	2-Chloro-1,1,1-trifluoroethane													TM			
9	TML	Bromomethane	0.1084	0.0905	0.0920	0.0681	0.0579	0.0628					0.08	25	TM	0.996		
10	TML	Chloroethane	0.1509	0.1462	0.1072	0.1110	0.0742	0.0762					0.11	30	TM	0.993		
11	TM	Dichlorofluoromethane	0.3780	0.3380	0.3189	0.3134	0.2643	0.2808	0.2786	0.2697	0.2508		0.30	14	TM			
12	TM	Trichlorofluoromethane	0.2399	0.2358	0.2402	0.2207	0 1741	0.1952	0.2023	0.1923	0.2011		0.21	11	TM			
13	TM	Pentane													TM			
14	TM	Diethyl ether													TM			
15	TM	1,2 Dichlorotrifluoroethane													TM			
16	TM	Acrolein	0.0043	0.0048	0.0046	0.0047	0.0047	0.0048	0.0046	0.0049	0.0038		0.00	6.9	TM			
17	TML	Acetone	0.0847	0.0693	0.0587	0.0555	0.0552	0.0537	0.0503	0.0523	0.0508		0.06	19	TM	0.999		
18	TM	Freon-113	0.1386	0.1462	0.1387	0.1337	0.1094	0.1200	0.1191	0.1135	0.1162		0.13	10	TM			
19	TM*	1,1-DCE	0.2359	0.2370	0.2269	0.2201	0.1807	0.1982	0.1953	0.1908	0.1993		0.21	10.0	TM*			
20	TM	2-Propanol													TM			
21	TM	Acetonitrile	0.0086	0.0079	0.0080	0.0074	0.0072	0.0067	0.0058	0.0056			0.01	15	TM			
22	TM	t-Butanol	0.0106	0.0123	0.0116	0.0120	0.0125	0.0125	0.0139	0.0160	0.0163		0.01	15	TM			
23	TM	Methyl Acetate		0.1798	0.1626	0.1336	0.1219	0.1288	0.1242	0.1289	0.1306		0.14	15	TM			
24	TML	Iodomethane	0.0797	0.0706	0.0715	0.0657	0.0586	0.0749	0.0872	0.1026	0.1149		0.08	22	TM	0.997		
25	TM	Acrylonitrile	0.0673	0.0601	0.0610	0.0553	0.0498	0.0542	0.0529	0.0551	0.0564		0.06	9.1	TM			
26	TML	Methylene chloride		0.2523	0.1981	0.1755	0.1415	0.1476	0.1432	0.1382	0.1416		0.17	24	TM	1.000		
27	TM	Carbon disulfide		0.2095	0.1945	0.1950	0.1412	0.1587	0.1568				0.18	15	TM			
28	TML	Methyl t-butyl ether (MtBE)			0.2961	0.2915	0.2864	0.3290	0.3475	0.3552	0.3870		0.33	12	TM	0.999		
29	TM	Trans-1,2-DCE	0.2386	0.2177	0.2101	0 2034	0.1670	0.1858	0.1876	0.1813	0.1906		0.20	11	TM			
30	TM	Hexane													TM			
31	TML	Diisopropyl Ether			0.3820	0.3846	0.3767	0.4373	0.4724	0.4762	0.4982		0.43	12	TM	1.000		
32	TM**	2,2-Dichloro-1,1,1-trifluoroethane													TM**			
33	TM**	1,1-DCA	0.3157	0.2851	0.2744	0.2639	0.2258	0.2467	0.2463	0.2416	0.2498		0.26	10	TM**			
34	TM	Vinyl Acetate	0.1006	0.1043	0.0740	0.0860	0.0752	0.0852	0.0960	0.1009	0.1149		0.09	15	TM			
35	TML	Ethyl tert Butyl Ether			0.2917	0.2939	0.2833	0.3461	0.3826	0.3945			0.33	15	TM	0.999		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/06/20
Matrix: Water Instrument: ZEUS Initials: CH

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type		Q	MRF
36	TM	MEK (2-Butanone)	0.0681	0.0683	0.0674	0.0703	0.0736	0.0755	0.0753	0.0804	0.0813		0.07	7.1	TM			
37	TM	Cis-1,2-DCE	0.2509	0.2544	0.2465	0.2336	0.2054	0.2257	0.2265	0.2225	0.2333		0.23	6.7	TM			
38	TM	2,2-Dichloropropane	0.1945	0.2024	0.1877	0.1782	0.1577	0.1822	0.1869	0.1871	0.2011		0.19	7.2	TM			
39	TM	2-Methylpentane													TM			
40	TM	3-Methylpentane													TM			
41	TM*	Chloroform	0.2726	0.2784	0.2624	0.2523	0.2251	0.2455	0.2461	0.2404	0.2487		0.25	6.5	TM*			
42	TM	Bromochloromethane	0.1473	0.1477	0.1371	0.1334	0.1110	0.1259	0.1254	0.1193	0.1227		0.13	9.6	TM			
43	S	Dibromofluoromethane(S)	0.1998	0.2026	0.2455	0.2443	0.2715	0.2723	0.2798	0.2788	0.2861		0.25	13	S			
44	TM	1,1,1-TCA	0.2156	0.2061	0.2114	0.2019	0.1802	0.2025	0.2033	0.1989	0.2094		0.20	5.0	TM			
45	TM	Cyclohexane	0.2100	0.2213	0.2145	0.2237	0.1903	0.2218	0.2261	0.2255	0.2324		0.22	5.7	TM			
46	TM	1,1-Dichloropropene	0.1775	0.1847	0.1834	0.1815	0.1614	0.1824	0.1817	0.1825	0.1929		0.18	4.6	TM			
47	TML	2,2,4-Trimethylpentane			0.4707	0.4953	0.4361	0.5025	0.5278	0.5327	0.5512		0.50	7.9	TM	1.000		
48	S	1,2-DCA-D4(S)	0.2630	0.2660	0.3113	0.3141	0.3417	0.3436	0.3505	0.3430	0.3481		0.32	11	S			
49	TM	Carbon Tetrachloride	0.1726	0.1695	0.1639	0.1581	0.1415	0.1587	0.1603	0.1607	0.1714		0.16	5.8	TM			
50	TML	Tert Amyl Methyl Ether	0.2261	0.2391	0.2359	0.2496	0.2525	0.3051	0.3363	0.3503			0.27	18	TM	0.999		
51	TM	Methylcyclopentane													TM			
52	TM	1,2-DCA	0.2447	0.2390	0.2165	0.2101	0.1805	0.1941	0.1927	0.1885	0.1955		0.21	11	TM			
53	TM	Benzene	0.6398	0.6354	0.5988	0.5788	0.5086	0.5581	0.5539	0.5432	0.5603		0.58	7.5	TM			
54	TM	TCE	0.1727	0.1626	0.1549	0.1528	0.1236	0.1393	0.1421	0.1411	0.1462		0.15	9.7	TM			
55	TML	2-Pentanone	0.0776	0.0940	0.0949	0.0997	0.1098	0.1150	0.1200	0.1302	0.1258		0.11	16	TM	0.994		
56	TM*	1,2-Dichloropropane	0.1561	0.1701	0.1576	0.1496	0.1355	0.1486	0.1496	0.1457	0.1544		0.15	6.2	TM*			
57	TM	Bromodichloromethane	0.1616	0.1621	0.1576	0.1527	0.1362	0.1567	0.1666	0.1686	0.1854		0.16	8.2	TM			
58	TM	Methyl Cyclohexane	0.2057	0.2231	0.2314	0.2318	0.1962	0.2234	0.2258	0.2242	0.2342		0.22	5.7	TM			
59	TM	Dibromomethane	0.0830	0.0807	0.0858	0.0787	0.0657	0.0780	0.0800	0.0791	0.0857		0.08	7.5	TM			
60	TML	MIBK (methyl isobutyl ketone	0.0933	0.1012	0.1096	0.1173	0.1295	0.1352	0.1399	0.1515	0.1595		0.13	18	TM	0.993		
61	TM	1-Bromo-2-chloroethane	0.0187	0.0194	0.0193	0.0208	0.0179	0.0199	0.0205	0.0206	0.0219		0.02	6.0	TM			
62	TM	2-Chloroethyl vinyl ether													TM			
63	TML	Cis-1,3-Dichloropropene		0.1586	0.1594	0.1583	0.1470	0.1851	0.2047	0.2138			0.18	15	TM	0.998		
64	TM*	Toluene	0.6370	0.6193	0.5863	0.5831	0.5053	0.5593	0.5700	0.5625	0.5827		0.58	6.5	TM*			
65	TML	Trans-1,3-Dichloropropene	0.1366	0.1343	0.1359	0.1302	0.1287	0.1591	0 1774	0.1878			0.15	15	TM	0.998		
66	TM	1,1,2-TCA	0.1206	0.1137	0.1169	0.1063	0.1027	0.1127	0.1143	0.1152	0.1228		0.11	5.5	TM			
67	TML	2-Hexanone	0.0567	0.0682	0.0699	0.0784	0.0868	0.0927	0.0936	0.1029	0.1066		0.08	20	TM	0.994		
68	I	Chlorobenzene-D5 (IS)																
69	SL	Toluene-D8(S)	0.9683	0.9968	1.231	1.272	1.424	1.468	1.495	1.479	1.452		1.3	16	S	0.999		
70	TM	1,2-EDB	0.1651	0.1491	0.1384	0.1410	0.1353	0.1559	0.1649	0.1632	0.1752		0.15	9.1	TM			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No. Initial Cal. Date: 10/06/20
Matrix: Water Instrument: ZEUS Initials: CH

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type		Q	MRF
71	TM	Tetrachloroethene	0.2061	0.2146	0.2006	0.1938	0.1652	0.1864	0.1847	0.1825	0.1936		0.19	7.6	TM			
72	TML	1-Chlorohexane	0.4055	0.3589	0.2773	0.2599	0.2173	0.2509	0.2571	0.2540			0.29	22	TM	1.000		
73	TM	1,1,1,2-Tetrachloroethane	0.1395	0.1526	0.1503	0.1423	0.1348	0.1608	0.1723	0.1706	0.1825		0.16	11	TM			
74	TM	m&p-Xylene	0.5594	0.5569	0.5668	0.6158	0.5730	0.6709	0.6819	0.6628	0.6632		0.62	8.6	TM			
75	TM	o-Xylene	0.5299	0.5103	0.5320	0.5585	0.5411	0.6527	0.6892	0.6772	0.7217		0.60	14	TM			
76	TML	Styrene	0.3322	0.3417	0.3293	0.3850	0.3944	0.4970	0.5339	0.5391			0.42	22	TM	0.999		
77	SL	4-Bromofluorobenzene(S)	0.3053	0.3099	0.4019	0.4199	0.4900	0.5088	0.5365	0.5310	0.5596		0.45	21	S	1.000		
78	TM	1,3-Dichloropropane	0.2866	0.2842	0.2857	0.2795	0.2529	0.2961	0.3007	0.2996	0.3208		0.29	6.4	TM			
79	TML	Dibromochloromethane	0.1218	0.1300	0.1271	0.1270	0.1219	0.1438	0.1594	0.1637	0.1852		0.14	16	TM	0.998		
80	TM**	Chlorobenzene	0.6036	0.5936	0.5703	0.5317	0.4652	0.5230	0.5193	0.5018	0.5198		0.54	8.3	TM**			
81	TM*	Ethylbenzene	0.8101	0.8028	0.8045	0.7968	0.7501	0.8602	0.8937	0.8756	0.9084		0.83	6.3	TM*			
82	TM**L	Bromoform		0.0717	0.0682	0.0647	0.0680	0.0818	0 0935	0.1047	0.1263		0.10	26	TM**	0.995		
83	I	1,4-Dichlorobenzene-D (IS)																
84	TML	Isopropylbenzene		1.092	1.108	1.198	1.226	1.517	1.593	1.604			1.3	17	TM	0.999		
85	TM**	1,1,2,2-Tetrachloroethane	0.3919	0.3737	0.3572	0.3596	0.3347	0.3974	0.4140	0.4276	0.4561		0.39	9.8	TM**			
86	TM	1,2,3-Trichloropropane	0.1256	0.1291	0.1301	0.1249	0.1092	0.1268	0.1284	0.1331	0.1359		0.13	5.9	TM			
87	TML	t-1,4-Dichloro-2-Butene			0.0701	0.0800	0.0748	0.0943	0.0967	0.1091	0.1179		0.09	19	TM	0.999		
88	TM	Bromobenzene	0.7921	0.7374	0.7087	0.7498	0.6625	0.7576	0.7732	0.7781	0.8255		0.75	6.3	TM			
89	TM	n-Propylbenzene	1.414	1.471	1.577	1.674	1.639	1.947	2.016	2.007	2.010		1.8	14	TM			
90	TML	4-Ethyltoluene		1.106	1.232	1.377	1.341	1.605	1.642	1.619			1.4	15	TM	1.000		
91	TM	2-Chlorotoluene	1.002	1.123	1.226	1.203	1.122	1.326	1.332	1.322	1.353		1.2	10.0	TM			
92	TM	1,3,5-Trimethylbenzene		0.9189	1.037	1.194	1.172	1.372	1.393	1.374	1.417		1.2	15	TM			
93	TM	4-Chlorotoluene	1.111	1.137	1.171	1.296	1.214	1.353	1.383	1.349	1.405		1.3	8.8	TM			
94	TML	Tert-Butylbenzene		0.7905	0.8693	0.9260	0.9239	1.127	1.180	1.199	1.235		1.0	17	TM	1.000		
95	TML	1,2,4-Trimethylbenzene	0.7648	0.8739	0.9488	1.083	1.127	1.350	1.400	1.403	1.432		1.2	22	TM	1.000		
96	TML	Sec-Butylbenzene	1.173	1.246	1.376	1.481	1.520	1.817	1.863	1.883	1.901		1.6	18	TM	1.000		
97	TM	p-Isopropyltoluene	1.145	1.172	1.258	1.330	1.309	1.540	1.602	1.587	1.608		1.4	14	TM			
98	TML	Benzyl Chloride	0.3869	0.3892	0.3740	0.3919	0.3687	0.5053	0.5904	0.6706	0.7527		0.49	30	TM	0.997		
99	TM	1,3-DCB	0.9779	0.7623	0.7501	0.7493	0.6860	0.7738	0.7811	0.7680	0.7862		0.78	10	TM			
100	TM	1,4-DCB	0.9779	0.9165	0.8289	0.8407	0.7298	0.8001	0.8008	0.7829	0.8034		0.83	8.9	TM			
101	TML	n-Butylbenzene		1.020	1.070	1.174	1.225	1.520	1.598	1.621	1.644		1.4	19	TM	1.000		
102	TM	1,2-DCB	0.7223	0.7421	0.6917	0.6871	0.6330	0.7348	0.7428	0.7293	0.7523		0.72	5.3	TM			
103	TML	Hexachloroethane			0.1168	0.1180	0.1119	0.1456	0.1679	0.1897	0.2224		0.15	28	TM	0.996		
104	TML	1,2-Dibromo-3-chloropropane			0.0500	0.0551	0.0514	0.0645	0.0719	0.0823	0.0907		0.07	24	TM	0.998		
105	TML	1,2,4-Trichlorobenzene		0.3641	0.3544	0.3750	0.3580	0.4482	0.4954	0.5088	0.5505		0.43	18	TM	0.999		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/06/20
Matrix: Water Instrument: ZEUS Initials: CH

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type		Q	MRF
106	TM	Hexachlorobutadiene	0.2493	0.2175	0.2260	0.2065	0.1938	0.2216	0.2419	0.2423	0.2550		0.23	9.0	TM			
107	TML	Naphthalene		0.6381	0.6580	0.7202	0.7983	1.161	1.294	1.376	1.362		1.0	33	TM	1.000		
108	TM	1,2,3-Trichlorobenzene		0.3565	0.3692	0.3742	0.3669	0.4518	0.4763	0.4841			0.41	14	TM			
109																		
110																		
111																		
112																		
113																		
114																		
115																		
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136																		
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138																		
139																		
140																		

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z23.D Vial: 3
Acq On : 06 Oct 20 16:16 Operator: LP,DG,CH
Sample : 0.3ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2232438	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.77	117	1586048	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.98	152	844143	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.54	111	89215	3.94	ppb		0.00
Spiked Amount 25.000			Recovery	=	15.768%		
48) 1,2-DCA-D4(S)	4.82	65	117422	4.11	ppb		0.00
Spiked Amount 25.000			Recovery	=	16.428%		
69) Toluene-D8(S)	6.48	98	307153	4.40	ppb		0.00
Spiked Amount 25.000			Recovery	=	17.604%		
77) 4-Bromofluorobenzene(S)	8.87	95	96850	5.51	ppb		0.00
Spiked Amount 25.000			Recovery	=	22.024%		
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.20	87	1068	0.29	ppb		91
4) Freon 114	1.32	85	1869	-1.46	ppb		91
5) Chloromethane	1.39	50	7069	0.46	ppb		93
6) Vinyl chloride	1.44	62	4768	0.34	ppb		92
9) Bromomethane	1.72	94	2905	0.28	ppb	#	67
11) Dichlorofluoromethane	2.01	67	10127	0.38	ppb		92
12) Trichlorofluoromethane	2.07	101	6426	0.34	ppb		88
16) Acrolein	2.46	55	3840	9.41	ppb		84
17) Acetone	2.62	43	37838	4.66	ppb		97
18) Freon-113	2.58	101	3713	0.33	ppb		90
19) 1,1-DCE	2.55	61	6319	0.34	ppb	#	83
21) Acetonitrile	2.85	40	7716	12.07	ppb		80
22) t-Butanol	3.15	59	9446	8.09	ppb		92
23) Methyl Acetate	2.94	43	5893	0.48	ppb	#	86
24) Iodomethane	2.68	142	2136	2.07	ppb	#	72
25) Acrylonitrile	3.21	52	1803	0.35	ppb	#	76
26) Methylene chloride	2.99	84	10248	0.56	ppb		95
27) Carbon disulfide	2.74	76	6771	0.43	ppb	#	91
28) Methyl t-butyl ether (MtBE	3.28	73	8022	1.59	ppb	#	83
29) Trans-1,2-DCE	3.25	61	6393	0.36	ppb	#	83
31) Diisopropyl Ether	3.72	45	10673	1.21	ppb	#	80
33) 1,1-DCA	3.62	63	8457	0.36	ppb		98
34) Vinyl Acetate	3.69	43	2696	0.32	ppb	#	74
35) Ethyl tert Butyl Ether	4.04	59	7322	1.08	ppb		97
36) MEK (2-Butanone)	4.15	43	30422	4.64	ppb		94
37) Cis-1,2-DCE	4.13	61	6721	0.32	ppb		95
38) 2,2-Dichloropropane	4.13	77	5210	0.31	ppb	#	90
41) Chloroform	4.40	83	7302	0.32	ppb		85
42) Bromochloromethane	4.33	49	3945	0.34	ppb		86
44) 1,1,1-TCA	4.56	97	5776	0.32	ppb		92
45) Cyclohexane	4.61	56	5625	0.29	ppb		92
46) 1,1-Dichloropropene	4.70	75	4756	0.29	ppb	#	89
47) 2,2,4-Trimethylpentane	4.97	57	11865	0.97	ppb		100
49) Carbon Tetrachloride	4.70	117	4624	0.32	ppb		93
50) Tert Amyl Methyl Ether	5.00	73	6057	0.83	ppb	#	58
52) 1,2-DCA	4.88	62	6555	0.35	ppb	#	90
53) Benzene	4.88	78	17140	0.33	ppb		100
54) TCE	5.43	130	4627	0.35	ppb	#	80
55) 2-Pentanone	5.59	43	69258	17.12	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z23.D Vial: 3
Acq On : 06 Oct 20 16:16 Operator: LP,DG,CH
Sample : 0.3ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
56)	1,2-Dichloropropane	5.61	63	4183	0.31 ppb	#	87
57)	Bromodichloromethane	5.85	83	4329	0.30 ppb		98
58)	Methyl Cyclohexane	5.60	83	5511	0.28 ppb	#	81
59)	Dibromomethane	5.70	174	2223	0.31 ppb		95
60)	MIBK (methyl isobutyl ket	6.39	43	41638	8.88 ppb		94
61)	1-Bromo-2-chloroethane	6.11	144	500	0.28 ppb		96
63)	Cis-1,3-Dichloropropene	6.24	75	4481	1.00 ppb		97
64)	Toluene	6.54	91	17065	0.33 ppb		90
65)	Trans-1,3-Dichloropropene	6.73	75	3660	0.92 ppb		96
66)	1,1,2-TCA	6.88	97	3230	0.32 ppb		93
67)	2-Hexanone	7.13	43	25327	8.75 ppb		94
70)	1,2-EDB	7.33	107	3142	0.32 ppb	#	86
71)	Tetrachloroethene	7.03	166	3922	0.32 ppb		93
72)	1-Chlorohexane	7.78	91	7717	0.50 ppb	#	17
73)	1,1,1,2-Tetrachloroethane	7.88	131	2655	0.27 ppb	#	75
74)	m&p-Xylene	8.02	91	21295	0.54 ppb		98
75)	o-Xylene	8.38	91	10086	0.26 ppb		94
76)	Styrene	8.39	104	6323	0.73 ppb		93
78)	1,3-Dichloropropane	7.04	76	5454	0.30 ppb		91
79)	Dibromochloromethane	7.24	129	2318	1.54 ppb		84
80)	Chlorobenzene	7.80	112	11489	0.34 ppb	#	88
81)	Ethylbenzene	7.91	91	15419	0.29 ppb		98
82)	Bromoform	8.55	173	1331	2.63 ppb		94
84)	Isopropylbenzene	8.74	105	10214	0.73 ppb		97
85)	1,1,2,2-Tetrachloroethane	9.00	83	3970	0.30 ppb	#	83
86)	1,2,3-Trichloropropane	9.04	110	1272	0.30 ppb	#	76
87)	t-1,4-Dichloro-2-Butene	9.06	53	830	2.05 ppb		99
88)	Bromobenzene	9.01	77	8024	0.32 ppb		91
89)	n-Propylbenzene	9.13	91	14324	0.24 ppb		99
90)	4-Ethyltoluene	9.24	105	10282	0.51 ppb		97
91)	2-Chlorotoluene	9.20	91	10148	0.25 ppb		98
92)	1,3,5-Trimethylbenzene	9.31	105	8737	0.21 ppb		90
93)	4-Chlorotoluene	9.31	91	11253	0.26 ppb	#	88
94)	Tert-Butylbenzene	9.62	119	8425	0.94 ppb		100
95)	1,2,4-Trimethylbenzene	9.66	105	7747	0.67 ppb	#	86
96)	Sec-Butylbenzene	9.83	105	11879	0.61 ppb		97
97)	p-Isopropyltoluene	9.98	119	11595	0.25 ppb		95
98)	Benzyl Chloride	10.13	91	3919	2.01 ppb	#	91
99)	1,3-DCB	10.01	146	9906	0.38 ppb		95
100)	1,4-DCB	10.01	146	9906	0.35 ppb		93
101)	n-Butylbenzene	10.38	91	10370	0.84 ppb		94
102)	1,2-DCB	10.37	146	7317	0.30 ppb	#	89
103)	Hexachloroethane	10.62	201	1184	2.98 ppb	#	62
104)	1,2-Dibromo-3-chloropropan	11.13	157	479	2.44 ppb		93
105)	1,2,4-Trichlorobenzene	11.95	180	4167	1.52 ppb	#	73
106)	Hexachlorobutadiene	12.14	225	2525	0.33 ppb		92
107)	Naphthalene	12.19	128	7122	1.15 ppb		98
108)	1,2,3-Trichlorobenzene	12.44	180	3286	0.24 ppb		95

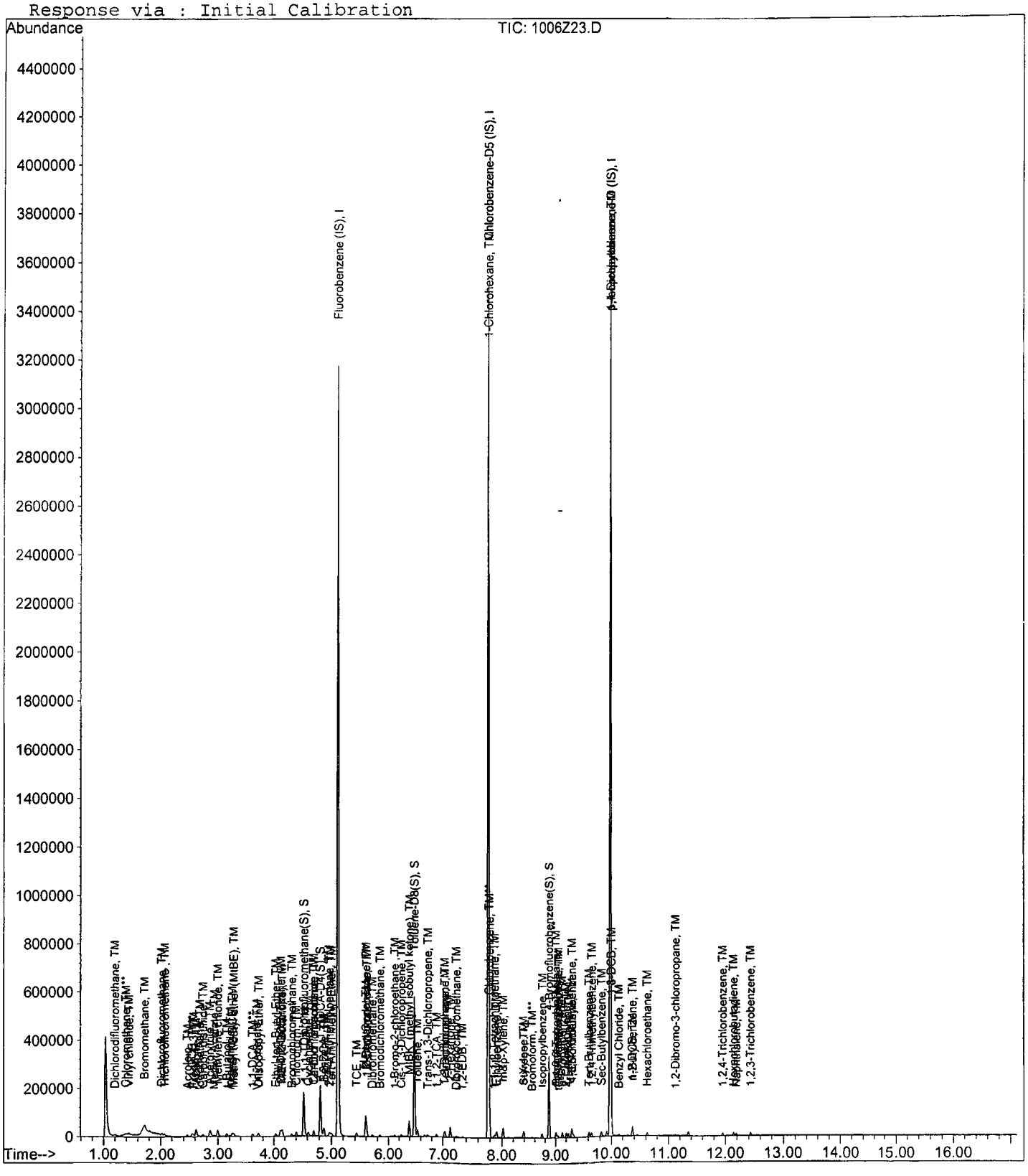
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z23.D Vial: 3
Acq On : 06 Oct 20 16:16 Operator: LP,DG,CH
Sample : 0.3ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z24.D Vial: 4
Acq On : 06 Oct 20 16:39 Operator: LP,DG,CH
Sample : 0.5ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2233405	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.77	117	1590772	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.99	152	856057	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.54	111	90503	4.00	ppb		0.00
Spiked Amount 25.000			Recovery	=	15.992%		
48) 1,2-DCA-D4(S)	4.82	65	118837	4.15	ppb		0.00
Spiked Amount 25.000			Recovery	=	16.620%		
69) Toluene-D8(S)	6.48	98	317124	4.50	ppb		0.00
Spiked Amount 25.000			Recovery	=	17.988%		
77) 4-Bromofluorobenzene(S)	8.87	95	98610	5.55	ppb		0.00
Spiked Amount 25.000			Recovery	=	22.184%		
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.20	87	2216	0.60	ppb		86
4) Freon 114	1.31	85	3473	-0.99	ppb	#	78
5) Chloromethane	1.38	50	10953	0.71	ppb		92
6) Vinyl chloride	1.44	62	8201	0.59	ppb		91
9) Bromomethane	1.72	94	4042	0.49	ppb		99
10) Chloroethane	1.81	64	6530	0.48	ppb		98
11) Dichlorofluoromethane	2.02	67	15099	0.56	ppb		97
12) Trichlorofluoromethane	2.07	101	10531	0.56	ppb	#	78
16) Acrolein	2.46	55	10635	26.05	ppb		98
17) Acetone	2.62	43	61867	10.14	ppb		97
18) Freon-113	2.57	101	6531	0.58	ppb		93
19) 1,1-DCE	2.55	61	10587	0.57	ppb	#	91
21) Acetonitrile	2.85	40	17615	27.55	ppb		97
22) t-Butanol	3.15	59	27402	23.47	ppb		90
23) Methyl Acetate	2.93	43	8033	0.65	ppb	#	87
24) Iodomethane	2.67	142	3154	2.17	ppb		95
25) Acrylonitrile	3.21	52	2686	0.53	ppb	#	81
26) Methylene chloride	3.00	84	11268	0.64	ppb		89
27) Carbon disulfide	2.74	76	9359	0.60	ppb	#	92
28) Methyl t-butyl ether (MtBE	3.28	73	13932	1.76	ppb	#	84
29) Trans-1,2-DCE	3.25	61	9723	0.55	ppb		98
31) Diisopropyl Ether	3.72	45	17387	1.36	ppb		99
33) 1,1-DCA	3.62	63	12737	0.55	ppb	#	92
34) Vinyl Acetate	3.69	43	4658	0.56	ppb		100
35) Ethyl tert Butyl Ether	4.04	59	13197	1.25	ppb		89
36) MEK (2-Butanone)	4.15	43	61010	9.31	ppb		99
37) Cis-1,2-DCE	4.12	61	11364	0.55	ppb		94
38) 2,2-Dichloropropane	4.13	77	9039	0.54	ppb		95
41) Chloroform	4.40	83	12436	0.55	ppb		96
42) Bromochloromethane	4.32	49	6599	0.57	ppb		95
44) 1,1,1-TCA	4.56	97	9206	0.51	ppb	#	86
45) Cyclohexane	4.61	56	9883	0.51	ppb		94
46) 1,1-Dichloropropene	4.70	75	8250	0.51	ppb		99
47) 2,2,4-Trimethylpentane	4.97	57	20899	1.15	ppb		97
49) Carbon Tetrachloride	4.70	117	7573	0.52	ppb		93
50) Tert Amyl Methyl Ether	5.00	73	10678	0.98	ppb	#	81
52) 1,2-DCA	4.88	62	10675	0.58	ppb		96
53) Benzene	4.88	78	28381	0.55	ppb		95
54) TCE	5.43	130	7265	0.55	ppb	#	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z24.D Vial: 4
Acq On : 06 Oct 20 16:39 Operator: LP,DG,CH
Sample : 0.5ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.59	43	209879	29.08	ppb		98
56)	1,2-Dichloropropane	5.61	63	7599	0.56	ppb	#	96
57)	Bromodichloromethane	5.85	83	7239	0.50	ppb		100
58)	Methyl Cyclohexane	5.60	83	9967	0.50	ppb		94
59)	Dibromomethane	5.71	174	3605	0.51	ppb		92
60)	MIBK (methyl isobutyl ket	6.39	43	90372	12.22	ppb		95
61)	1-Bromo-2-chloroethane	6.11	144	867	0.49	ppb	#	80
63)	Cis-1,3-Dichloropropene	6.24	75	7083	1.14	ppb		91
64)	Toluene	6.54	91	27661	0.54	ppb		95
65)	Trans-1,3-Dichloropropene	6.73	75	5998	1.06	ppb	#	76
66)	1,1,2-TCA	6.88	97	5077	0.50	ppb		88
67)	2-Hexanone	7.13	43	60962	12.37	ppb		94
70)	1,2-EDB	7.34	107	4744	0.48	ppb	#	80
71)	Tetrachloroethene	7.03	166	6828	0.56	ppb		95
72)	1-Chlorohexane	7.79	91	11418	0.72	ppb		95
73)	1,1,1,2-Tetrachloroethane	7.87	131	4856	0.49	ppb		96
74)	m&p-Xylene	8.02	91	35435	0.90	ppb		93
75)	o-Xylene	8.38	91	16236	0.42	ppb		99
76)	Styrene	8.39	104	10871	0.86	ppb		97
78)	1,3-Dichloropropane	7.04	76	9041	0.49	ppb		94
79)	Dibromochloromethane	7.24	129	4135	1.70	ppb	#	75
80)	Chlorobenzene	7.80	112	18885	0.55	ppb		96
81)	Ethylbenzene	7.91	91	25540	0.48	ppb		95
82)	Bromoform	8.55	173	2281	2.74	ppb	#	82
84)	Isopropylbenzene	8.74	105	18699	0.88	ppb		99
85)	1,1,2,2-Tetrachloroethane	9.01	83	6399	0.48	ppb	#	90
86)	1,2,3-Trichloropropane	9.04	110	2210	0.51	ppb	#	74
87)	t-1,4-Dichloro-2-Butene	9.07	53	1381	2.19	ppb	#	82
88)	Bromobenzene	9.01	77	12625	0.49	ppb		89
89)	n-Propylbenzene	9.13	91	25177	0.42	ppb		100
90)	4-Ethyltoluene	9.24	105	18943	0.66	ppb		94
91)	2-Chlorotoluene	9.20	91	19232	0.46	ppb	#	88
92)	1,3,5-Trimethylbenzene	9.31	105	15733	0.37	ppb		98
93)	4-Chlorotoluene	9.31	91	19466	0.45	ppb		89
94)	Tert-Butylbenzene	9.61	119	13534	1.05	ppb		97
95)	1,2,4-Trimethylbenzene	9.66	105	14963	0.81	ppb		91
96)	Sec-Butylbenzene	9.83	105	21340	0.75	ppb		100
97)	p-Isopropyltoluene	9.98	119	20060	0.42	ppb		92
98)	Benzyl Chloride	10.14	91	6663	2.11	ppb	#	91
99)	1,3-DCB	9.92	146	13052	0.49	ppb		95
100)	1,4-DCB	10.01	146	15692	0.55	ppb	#	93
101)	n-Butylbenzene	10.38	91	17466	0.96	ppb		94
102)	1,2-DCB	10.37	146	12706	0.52	ppb		96
103)	Hexachloroethane	10.63	201	2072	3.09	ppb		89
104)	1,2-Dibromo-3-chloropropan	11.12	157	1047	2.61	ppb		95
105)	1,2,4-Trichlorobenzene	11.96	180	6234	1.63	ppb		99
106)	Hexachlorobutadiene	12.15	225	3724	0.48	ppb	#	83
107)	Naphthalene	12.20	128	10925	1.22	ppb	#	74
108)	1,2,3-Trichlorobenzene	12.44	180	6103	0.43	ppb		88

(#) = qualifier out of range (m) = manual integration

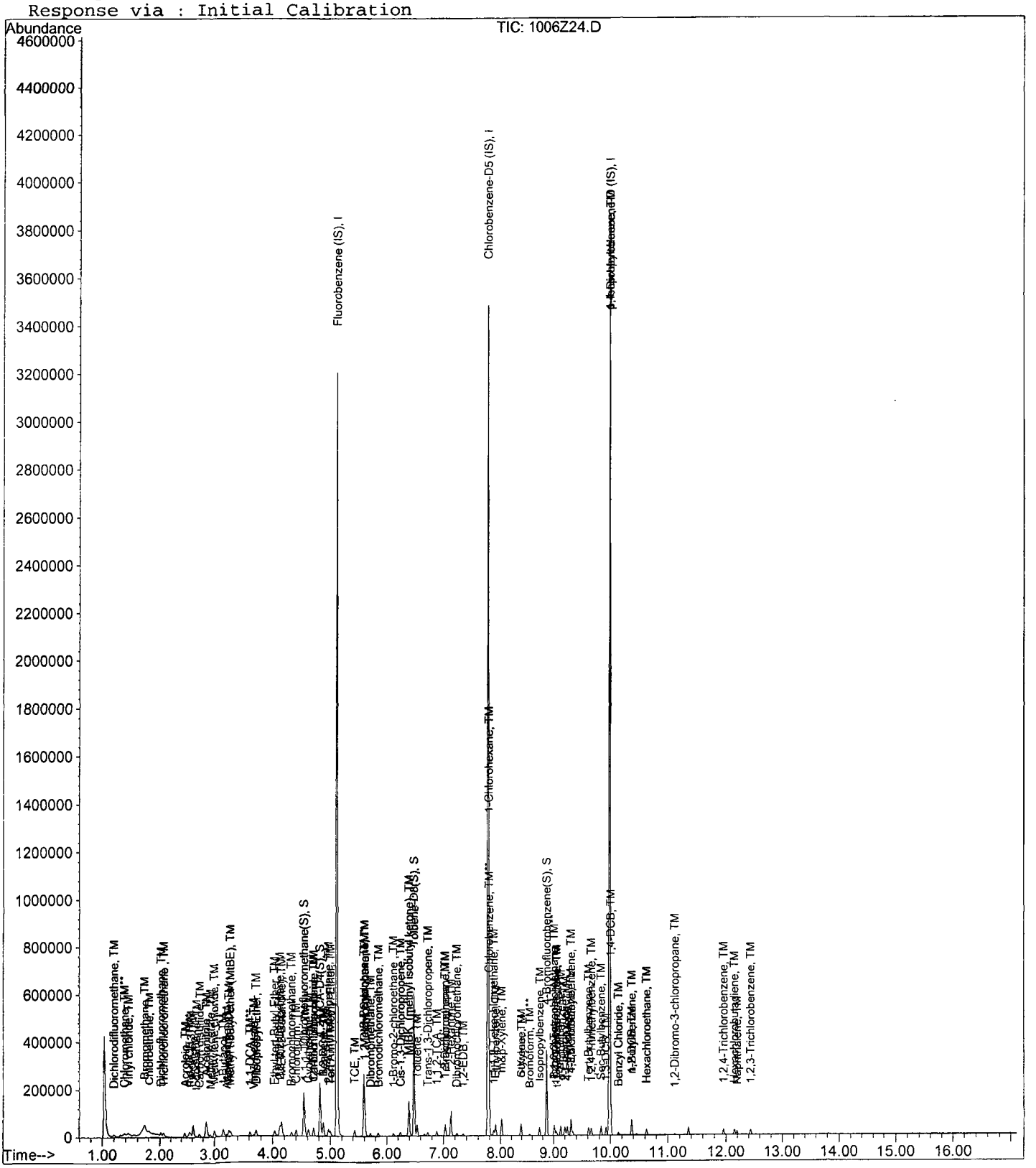
Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z24.D
Acq On : 06 Oct 20 16:39
Sample : 0.5ug/L VOC STD10/6/20
Misc :

Vial: 4
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z25.D Vial: 5
Acq On : 06 Oct 20 17:02 Operator: LP,DG,CH
Sample : 1.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2221763	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.77	117	1579471	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.98	152	848895	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.54	111	218176	9.69	ppb		0.00
Spiked Amount 25.000			Recovery =	38.748%			
48) 1,2-DCA-D4(S)	4.81	65	276655	9.72	ppb		0.00
Spiked Amount 25.000			Recovery =	38.896%			
69) Toluene-D8(S)	6.48	98	777702	9.42	ppb		0.00
Spiked Amount 25.000			Recovery =	37.696%			
77) 4-Bromofluorobenzene(S)	8.87	95	253927	9.86	ppb		0.00
Spiked Amount 25.000			Recovery =	39.448%			
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.20	87	4070	1.11	ppb		89
5) Chloromethane	1.38	50	19856	1.29	ppb	#	83
6) Vinyl chloride	1.44	62	15217	1.09	ppb		96
9) Bromomethane	1.72	94	8175	1.27	ppb		87
10) Chloroethane	1.81	64	9525	0.96	ppb	#	86
11) Dichlorofluoromethane	2.01	67	28342	1.07	ppb	#	88
12) Trichlorofluoromethane	2.06	101	21346	1.14	ppb		98
16) Acrolein	2.46	55	20454	50.37	ppb		94
17) Acetone	2.62	43	104294	19.94	ppb		98
18) Freon-113	2.56	101	12325	1.10	ppb	#	84
19) 1,1-DCE	2.55	61	20168	1.08	ppb		96
21) Acetonitrile	2.85	40	35347	55.57	ppb		93
22) t-Butanol	3.16	59	51678	44.49	ppb		92
23) Methyl Acetate	2.93	43	14452	1.17	ppb		92
24) Iodomethane	2.67	142	6350	2.48	ppb	#	94
25) Acrylonitrile	3.22	52	5424	1.07	ppb		84
26) Methylene chloride	3.00	84	17602	1.15	ppb		90
27) Carbon disulfide	2.73	76	17288	1.11	ppb		99
28) Methyl t-butyl ether (MtBE	3.28	73	26318	2.12	ppb		100
29) Trans-1,2-DCE	3.25	61	18676	1.06	ppb		88
31) Diisopropyl Ether	3.72	45	33949	1.74	ppb		93
33) 1,1-DCA	3.62	63	24386	1.05	ppb		97
34) Vinyl Acetate	3.69	43	6577	0.80	ppb		99
35) Ethyl tert Butyl Ether	4.03	59	25927	1.61	ppb		97
36) MEK (2-Butanone)	4.15	43	119847	18.38	ppb		97
37) Cis-1,2-DCE	4.12	61	21910	1.06	ppb		89
38) 2,2-Dichloropropane	4.13	77	16682	1.01	ppb		95
41) Chloroform	4.40	83	23322	1.04	ppb		93
42) Bromochloromethane	4.32	49	12187	1.06	ppb		98
44) 1,1,1-TCA	4.56	97	18785	1.04	ppb		94
45) Cyclohexane	4.61	56	19061	0.98	ppb		94
46) 1,1-Dichloropropene	4.70	75	16296	1.01	ppb		95
47) 2,2,4-Trimethylpentane	4.97	57	41827	1.58	ppb		95
49) Carbon Tetrachloride	4.70	117	14569	1.01	ppb		96
50) Tert Amyl Methyl Ether	5.00	73	20963	1.31	ppb	#	72
52) 1,2-DCA	4.88	62	19241	1.05	ppb		95
53) Benzene	4.88	78	53214	1.04	ppb		99
54) TCE	5.43	130	13770	1.04	ppb		91
55) 2-Pentanone	5.59	43	421557	47.26	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z25.D Vial: 5
Acq On : 06 Oct 20 17:02 Operator: LP,DG,CH
Sample : 1.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
56)	1,2-Dichloropropane	5.61	63	14005	1.04 ppb		99
57)	Bromodichloromethane	5.84	83	14003	0.98 ppb	#	82
58)	Methyl Cyclohexane	5.60	83	20562	1.04 ppb		94
59)	Dibromomethane	5.71	174	7624	1.08 ppb		88
60)	MIBK (methyl isobutyl ket	6.39	43	194779	19.46 ppb		97
61)	1-Bromo-2-chloroethane	6.11	144	1716	0.97 ppb	#	53
63)	Cis-1,3-Dichloropropene	6.23	75	14163	1.51 ppb		95
64)	Toluene	6.54	91	52101	1.01 ppb		93
65)	Trans-1,3-Dichloropropene	6.72	75	12078	1.42 ppb		99
66)	1,1,2-TCA	6.88	97	10391	1.03 ppb		88
67)	2-Hexanone	7.13	43	124269	18.89 ppb		99
70)	1,2-EDB	7.34	107	8742	0.90 ppb	#	91
71)	Tetrachloroethene	7.03	166	12676	1.05 ppb		93
72)	1-Chlorohexane	7.79	91	17521	1.11 ppb		92
73)	1,1,1,2-Tetrachloroethane	7.87	131	9493	0.96 ppb		92
74)	m&p-Xylene	8.02	91	71621	1.84 ppb		96
75)	o-Xylene	8.38	91	33613	0.88 ppb		98
76)	Styrene	8.39	104	20806	1.16 ppb		97
78)	1,3-Dichloropropane	7.04	76	18049	0.99 ppb		97
79)	Dibromochloromethane	7.24	129	8033	2.03 ppb		82
80)	Chlorobenzene	7.80	112	36028	1.06 ppb		99
81)	Ethylbenzene	7.91	91	50828	0.97 ppb		93
82)	Bromoform	8.55	173	4310	3.00 ppb		96
84)	Isopropylbenzene	8.73	105	37623	1.23 ppb		91
85)	1,1,2,2-Tetrachloroethane	9.00	83	12130	0.92 ppb	#	99
86)	1,2,3-Trichloropropane	9.04	110	4419	1.02 ppb	#	86
87)	t-1,4-Dichloro-2-Butene	9.07	53	2379	2.44 ppb		95
88)	Bromobenzene	9.01	77	24066	0.94 ppb		90
89)	n-Propylbenzene	9.13	91	53555	0.90 ppb		98
90)	4-Ethyltoluene	9.24	105	41825	1.08 ppb		97
91)	2-Chlorotoluene	9.20	91	41624	1.00 ppb		92
92)	1,3,5-Trimethylbenzene	9.30	105	35224	0.84 ppb		99
93)	4-Chlorotoluene	9.31	91	39767	0.92 ppb		100
94)	Tert-Butylbenzene	9.62	119	29517	1.44 ppb		99
95)	1,2,4-Trimethylbenzene	9.66	105	32217	1.17 ppb		98
96)	Sec-Butylbenzene	9.83	105	46716	1.15 ppb		93
97)	p-Isopropyltoluene	9.98	119	42729	0.90 ppb		97
98)	Benzyl Chloride	10.14	91	12699	2.35 ppb		99
99)	1,3-DCB	9.92	146	25469	0.96 ppb		95
100)	1,4-DCB	10.01	146	28145	1.00 ppb		97
101)	n-Butylbenzene	10.38	91	36326	1.30 ppb		94
102)	1,2-DCB	10.37	146	23487	0.97 ppb		96
103)	Hexachloroethane	10.63	201	3967	3.34 ppb	#	79
104)	1,2-Dibromo-3-chloropropan	11.13	157	1699	2.83 ppb	#	77
105)	1,2,4-Trichlorobenzene	11.96	180	12033	1.94 ppb		93
106)	Hexachlorobutadiene	12.14	225	7675	0.99 ppb		90
107)	Naphthalene	12.19	128	22344	1.47 ppb	#	94
108)	1,2,3-Trichlorobenzene	12.44	180	12536	0.90 ppb		95

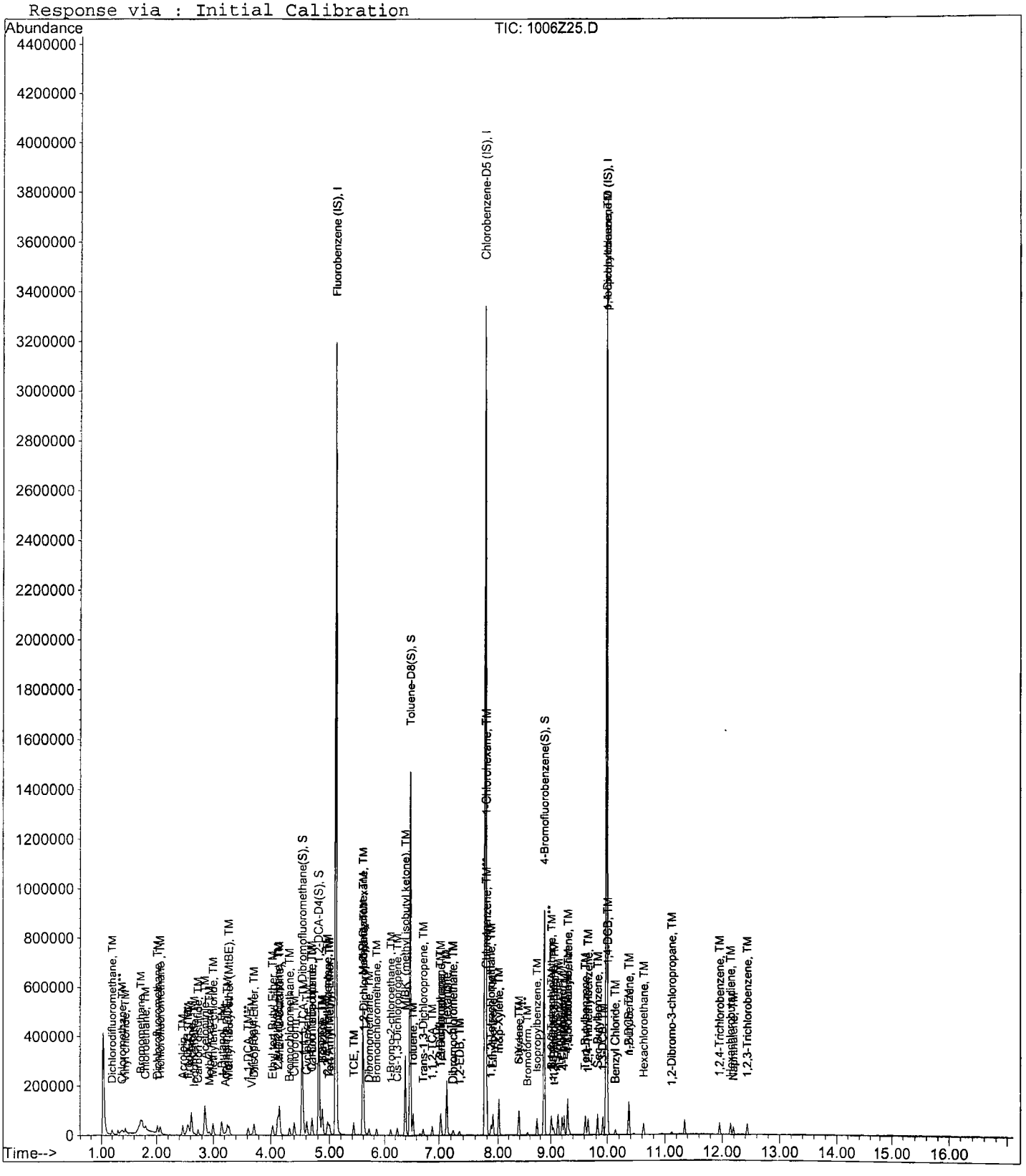
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z25.D Vial: 5
Acq On : 06 Oct 20 17:02 Operator: LP,DG,CH
Sample : 1.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z26.D Vial: 6
Acq On : 06 Oct 20 17:26 Operator: LP,DG,CH
Sample : 2.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2280051	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.77	117	1612391	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.98	152	871563	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.54	111	222833	9.64	ppb		0.00
Spiked Amount 25.000			Recovery = 38.564%				
48) 1,2-DCA-D4(S)	4.82	65	286509	9.81	ppb		0.00
Spiked Amount 25.000			Recovery = 39.252%				
69) Toluene-D8(S)	6.48	98	820298	9.70	ppb		0.00
Spiked Amount 25.000			Recovery = 38.796%				
77) 4-Bromofluorobenzene(S)	8.87	95	270830	10.18	ppb		0.00
Spiked Amount 25.000			Recovery = 40.708%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.20	87	8916	2.37	ppb		91
4) Freon 114	1.31	85	12054	1.45	ppb		99
5) Chloromethane	1.38	50	34980	2.22	ppb		97
6) Vinyl chloride	1.44	62	30327	2.12	ppb		97
9) Bromomethane	1.72	94	12421	2.01	ppb		92
10) Chloroethane	1.81	64	20240	2.56	ppb		96
11) Dichlorofluoromethane	2.01	67	57173	2.10	ppb		98
12) Trichlorofluoromethane	2.06	101	40259	2.09	ppb		100
16) Acrolein	2.46	55	31925	76.61	ppb		99
17) Acetone	2.62	43	151846	29.96	ppb		95
18) Freon-113	2.57	101	24389	2.12	ppb		97
19) 1,1-DCE	2.55	61	40140	2.10	ppb		96
21) Acetonitrile	2.85	40	50863	77.92	ppb		93
22) t-Butanol	3.15	59	82336	69.07	ppb		93
23) Methyl Acetate	2.93	43	24365	1.92	ppb		100
24) Iodomethane	2.67	142	11979	3.00	ppb	#	93
25) Acrylonitrile	3.21	52	10086	1.94	ppb		97
26) Methylene chloride	3.00	84	32003	2.23	ppb		100
27) Carbon disulfide	2.73	76	35560	2.22	ppb		98
28) Methyl t-butyl ether (MtBE	3.28	73	53168	2.86	ppb		95
29) Trans-1,2-DCE	3.25	61	37101	2.05	ppb		97
31) Diisopropyl Ether	3.72	45	70156	2.51	ppb		99
33) 1,1-DCA	3.62	63	48137	2.02	ppb		99
34) Vinyl Acetate	3.69	43	15679	1.85	ppb	#	89
35) Ethyl tert Butyl Ether	4.04	59	53617	2.34	ppb		99
36) MEK (2-Butanone)	4.15	43	192451	28.76	ppb		97
37) Cis-1,2-DCE	4.12	61	42613	2.00	ppb		93
38) 2,2-Dichloropropane	4.13	77	32498	1.91	ppb		93
41) Chloroform	4.40	83	46013	2.00	ppb		94
42) Bromochloromethane	4.32	49	24333	2.05	ppb		93
44) 1,1,1-TCA	4.56	97	36825	1.99	ppb		96
45) Cyclohexane	4.61	56	40808	2.05	ppb		98
46) 1,1-Dichloropropene	4.70	75	33103	2.01	ppb		99
47) 2,2,4-Trimethylpentane	4.97	57	90344	2.52	ppb		98
49) Carbon Tetrachloride	4.70	117	28837	1.95	ppb		96
50) Tert Amyl Methyl Ether	5.00	73	45526	2.05	ppb		94
52) 1,2-DCA	4.88	62	38324	2.03	ppb		100
53) Benzene	4.87	78	105575	2.01	ppb		99
54) TCE	5.43	130	27864	2.06	ppb		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z26.D Vial: 6
Acq On : 06 Oct 20 17:26 Operator: LP,DG,CH
Sample : 2.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.59	43	681800	68.01	ppb		99
56)	1,2-Dichloropropane	5.61	63	27280	1.97	ppb		99
57)	Bromodichloromethane	5.85	83	27858	1.90	ppb		99
58)	Methyl Cyclohexane	5.60	83	42286	2.09	ppb		89
59)	Dibromomethane	5.70	174	14356	1.98	ppb		92
60)	MIBK (methyl isobutyl ket	6.39	43	320938	27.59	ppb		100
61)	1-Bromo-2-chloroethane	6.11	144	3799	2.09	ppb		96
63)	Cis-1,3-Dichloropropene	6.24	75	28881	2.24	ppb		94
64)	Toluene	6.54	91	106364	2.02	ppb		100
65)	Trans-1,3-Dichloropropene	6.73	75	23743	2.08	ppb		93
66)	1,1,2-TCA	6.88	97	19392	1.87	ppb		89
67)	2-Hexanone	7.13	43	214589	27.57	ppb		95
70)	1,2-EDB	7.33	107	18192	1.83	ppb		98
71)	Tetrachloroethene	7.03	166	24997	2.02	ppb		94
72)	1-Chlorohexane	7.79	91	33519	2.06	ppb		97
73)	1,1,1,2-Tetrachloroethane	7.87	131	18359	1.82	ppb		95
74)	m&p-Xylene	8.02	91	158862	3.99	ppb		98
75)	o-Xylene	8.38	91	72047	1.86	ppb		98
76)	Styrene	8.39	104	49667	1.96	ppb		99
78)	1,3-Dichloropropane	7.04	76	36056	1.93	ppb		99
79)	Dibromochloromethane	7.24	129	16376	2.72	ppb		95
80)	Chlorobenzene	7.80	112	68588	1.98	ppb		99
81)	Ethylbenzene	7.91	91	102777	1.91	ppb		100
82)	Bromoform	8.55	173	8342	3.48	ppb		94
84)	Isopropylbenzene	8.74	105	83512	2.02	ppb		95
85)	1,1,2,2-Tetrachloroethane	9.00	83	25074	1.84	ppb		94
86)	1,2,3-Trichloropropane	9.04	110	8712	1.97	ppb		90
87)	t-1,4-Dichloro-2-Butene	9.06	53	5577	3.19	ppb		93
88)	Bromobenzene	9.01	77	52277	1.99	ppb		98
89)	n-Propylbenzene	9.13	91	116745	1.91	ppb		99
90)	4-Ethyltoluene	9.24	105	96028	2.01	ppb		97
91)	2-Chlorotoluene	9.20	91	83886	1.97	ppb		97
92)	1,3,5-Trimethylbenzene	9.30	105	83284	1.93	ppb		97
93)	4-Chlorotoluene	9.31	91	90371	2.04	ppb		98
94)	Tert-Butylbenzene	9.62	119	64563	2.23	ppb		98
95)	1,2,4-Trimethylbenzene	9.66	105	75533	2.02	ppb		98
96)	Sec-Butylbenzene	9.83	105	103296	1.98	ppb		98
97)	p-Isopropyltoluene	9.98	119	92752	1.91	ppb		97
98)	Benzyl Chloride	10.14	91	27323	2.89	ppb		95
99)	1,3-DCB	9.92	146	52245	1.92	ppb		95
100)	1,4-DCB	10.01	146	58620	2.02	ppb		99
101)	n-Butylbenzene	10.38	91	81854	2.07	ppb		97
102)	1,2-DCB	10.37	146	47905	1.92	ppb		98
103)	Hexachloroethane	10.63	201	8228	3.87	ppb	#	69
104)	1,2-Dibromo-3-chloropropan	11.12	157	3843	3.48	ppb		94
105)	1,2,4-Trichlorobenzene	11.95	180	26148	2.66	ppb		98
106)	Hexachlorobutadiene	12.14	225	14399	1.81	ppb		93
107)	Naphthalene	12.19	128	50218	2.04	ppb		99
108)	1,2,3-Trichlorobenzene	12.44	180	26094	1.82	ppb		97

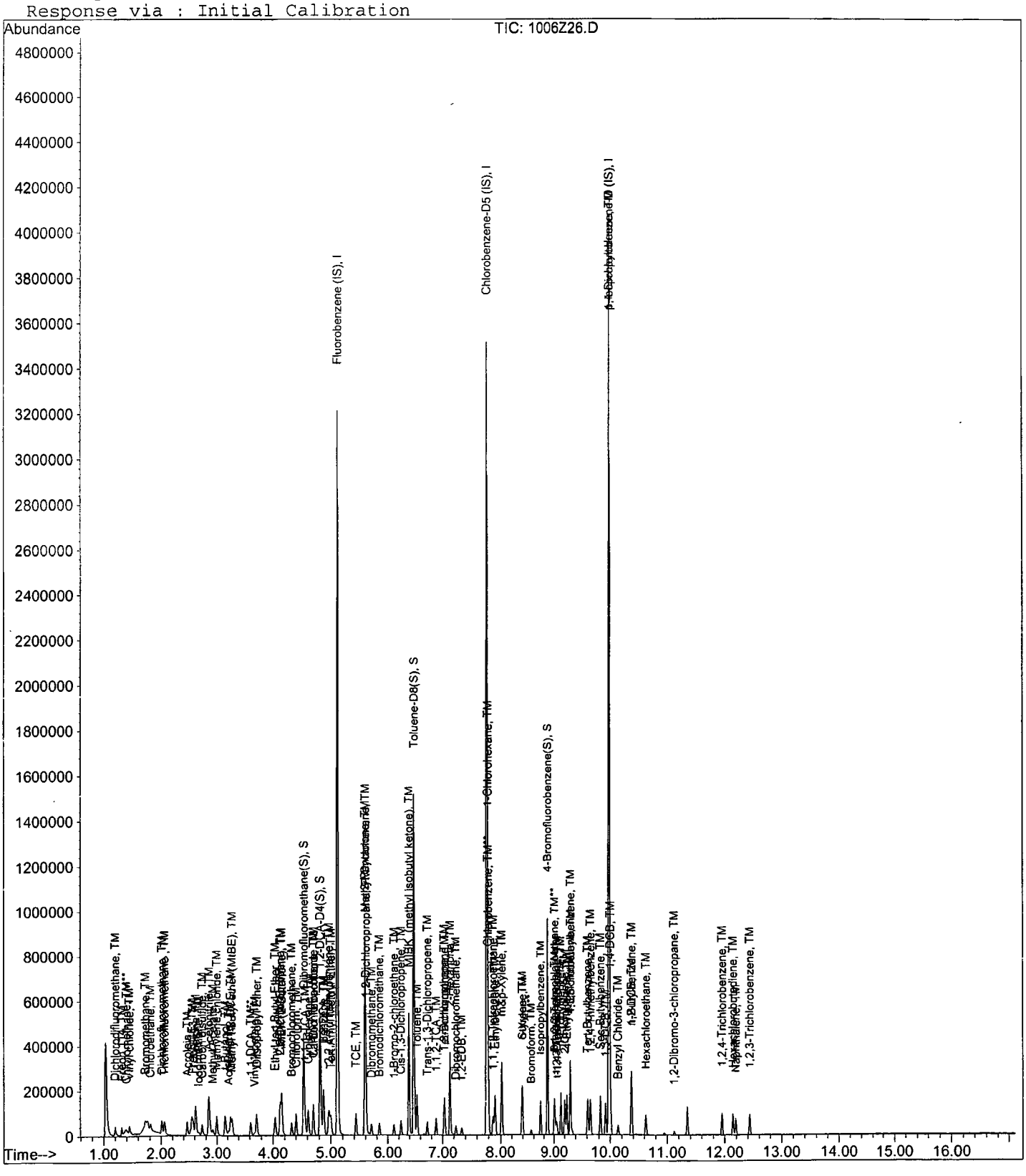
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z26.D Vial: 6
Acq On : 06 Oct 20 17:26 Operator: LP,DG,CH
Sample : 2.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z27.D Vial: 7
Acq On : 06 Oct 20 17:49 Operator: LP,DG,CH
Sample : 5.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2356780	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.77	117	1665669	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.98	152	901702	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.54	111	639880	26.78	ppb		0.00
Spiked Amount 25.000			Recovery = 107.136%				
48) 1,2-DCA-D4(S)	4.81	65	805376	26.68	ppb		0.00
Spiked Amount 25.000			Recovery = 106.740%				
69) Toluene-D8(S)	6.48	98	2372437	25.09	ppb		0.00
Spiked Amount 25.000			Recovery = 100.368%				
77) 4-Bromofluorobenzene(S)	8.87	95	816178	24.25	ppb		0.00
Spiked Amount 25.000			Recovery = 96.988%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.20	87	16272	4.18	ppb		96
4) Freon 114	1.31	85	21608	3.99	ppb		87
5) Chloromethane	1.39	50	67878	4.17	ppb		98
6) Vinyl chloride	1.44	62	61300	4.15	ppb		98
9) Bromomethane	1.71	94	27273	4.56	ppb		99
10) Chloroethane	1.80	64	34966	4.63	ppb		97
11) Dichlorofluoromethane	2.01	67	124576	4.42	ppb		98
12) Trichlorofluoromethane	2.06	101	82043	4.12	ppb		98
16) Acrolein	2.46	55	43902	101.92	ppb		96
17) Acetone	2.62	43	207972	40.98	ppb		100
18) Freon-113	2.57	101	51582	4.34	ppb		98
19) 1,1-DCE	2.55	61	85184	4.32	ppb		96
21) Acetonitrile	2.86	40	67784	100.46	ppb		97
22) t-Butanol	3.16	59	118170	95.90	ppb		96
23) Methyl Acetate	2.93	43	57438	4.39	ppb		93
24) Iodomethane	2.67	142	27643	4.41	ppb	#	97
25) Acrylonitrile	3.22	52	23472	4.37	ppb		96
26) Methylene chloride	2.99	84	66699	4.77	ppb		95
27) Carbon disulfide	2.73	76	66560	4.01	ppb		98
28) Methyl t-butyl ether (MtBE	3.28	73	134975	5.04	ppb		98
29) Trans-1,2-DCE	3.25	61	78715	4.22	ppb		99
31) Diisopropyl Ether	3.72	45	177548	4.74	ppb		99
33) 1,1-DCA	3.62	63	106447	4.33	ppb		97
34) Vinyl Acetate	3.68	43	35435	4.04	ppb		97
35) Ethyl tert Butyl Ether	4.03	59	133527	4.41	ppb		98
36) MEK (2-Butanone)	4.15	43	277504	40.13	ppb		99
37) Cis-1,2-DCE	4.12	61	96829	4.40	ppb		98
38) 2,2-Dichloropropane	4.13	77	74329	4.23	ppb		96
41) Chloroform	4.40	83	106108	4.46	ppb		97
42) Bromochloromethane	4.32	49	52343	4.27	ppb		93
44) 1,1,1-TCA	4.56	97	84942	4.43	ppb		96
45) Cyclohexane	4.61	56	89699	4.36	ppb		98
46) 1,1-Dichloropropene	4.70	75	76081	4.46	ppb		98
47) 2,2,4-Trimethylpentane	4.97	57	205551	4.67	ppb		99
49) Carbon Tetrachloride	4.70	117	66711	4.37	ppb		96
50) Tert Amyl Methyl Ether	5.00	73	119029	4.22	ppb		95
52) 1,2-DCA	4.88	62	85088	4.36	ppb		98
53) Benzene	4.87	78	239710	4.42	ppb		98
54) TCE	5.43	130	58256	4.16	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z27.D Vial: 7
Acq On : 06 Oct 20 17:49 Operator: LP,DG,CH
Sample : 5.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

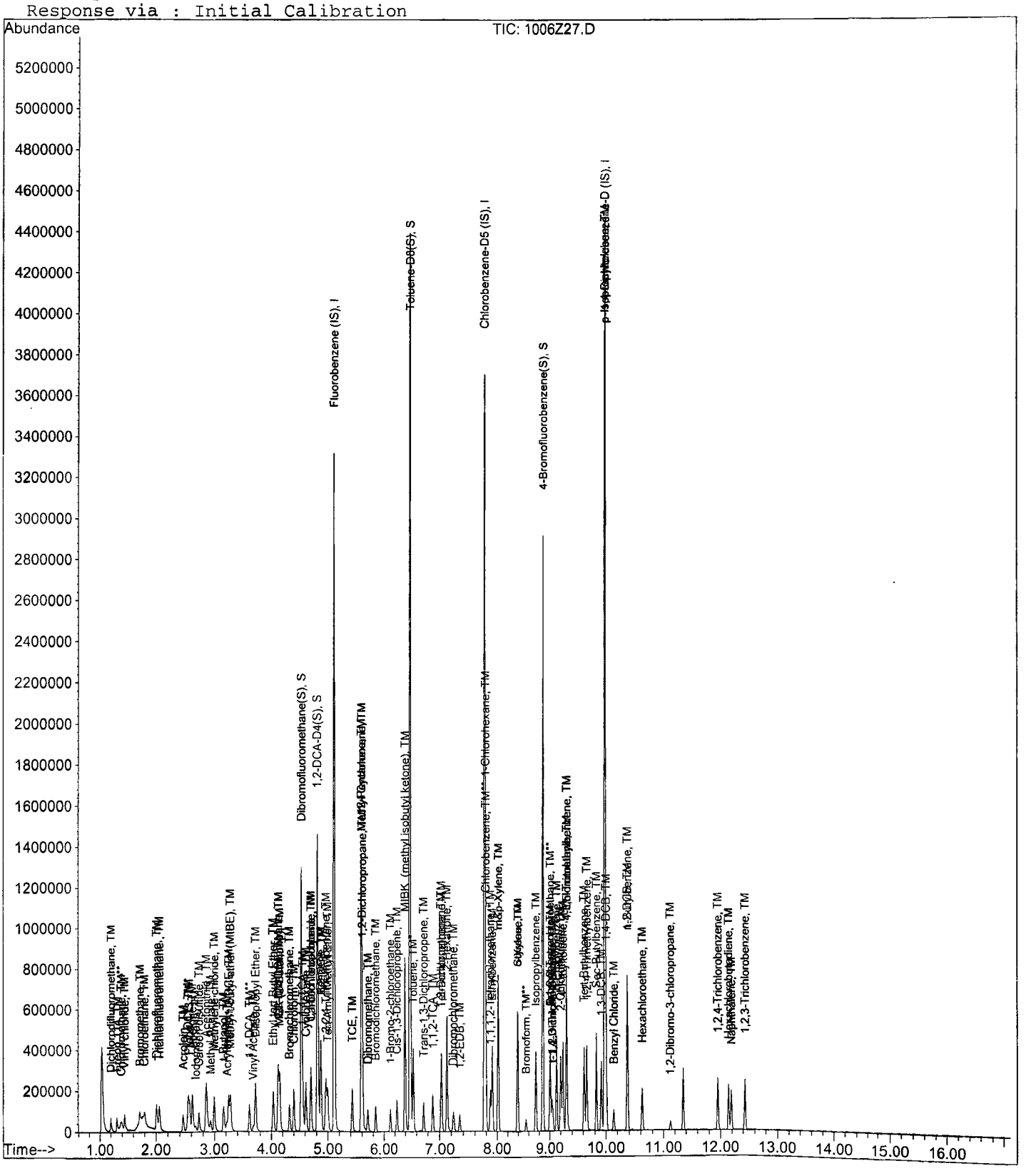
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.59	43	1035267	94.65	ppb		100
56)	1,2-Dichloropropane	5.61	63	63861	4.46	ppb	#	97
57)	Bromodichloromethane	5.85	83	64189	4.23	ppb		98
58)	Methyl Cyclohexane	5.60	83	92460	4.42	ppb		95
59)	Dibromomethane	5.70	174	30953	4.12	ppb	#	78
60)	MIBK (methyl isobutyl ket	6.39	43	488222	37.77	ppb		98
61)	1-Bromo-2-chloroethane	6.11	144	8460	4.51	ppb		93
63)	Cis-1,3-Dichloropropene	6.24	75	69293	4.17	ppb		90
64)	Toluene	6.54	91	238171	4.37	ppb		99
65)	Trans-1,3-Dichloropropene	6.73	75	60665	4.12	ppb		96
66)	1,1,2-TCA	6.88	97	48410	4.51	ppb		98
67)	2-Hexanone	7.13	43	327233	37.74	ppb		98
70)	1,2-EDB	7.34	107	45078	4.39	ppb		99
71)	Tetrachloroethene	7.03	166	55019	4.30	ppb		96
72)	1-Chlorohexane	7.79	91	72399	4.29	ppb		98
73)	1,1,1,2-Tetrachloroethane	7.88	131	44892	4.31	ppb		96
74)	m&p-Xylene	8.02	91	381752	9.29	ppb		98
75)	o-Xylene	8.38	91	180266	4.50	ppb		97
76)	Styrene	8.39	104	131384	4.17	ppb		95
78)	1,3-Dichloropropane	7.04	76	84242	4.37	ppb		97
79)	Dibromochloromethane	7.24	129	40597	4.64	ppb		94
80)	Chlorobenzene	7.80	112	154965	4.34	ppb		97
81)	Ethylbenzene	7.91	91	249882	4.50	ppb		99
82)	Bromoform	8.55	173	22660	5.15	ppb		99
84)	Isopropylbenzene	8.74	105	221058	4.32	ppb		99
85)	1,1,2,2-Tetrachloroethane	9.00	83	60362	4.29	ppb		100
86)	1,2,3-Trichloropropane	9.04	110	19685	4.30	ppb		92
87)	t-1,4-Dichloro-2-Butene	9.06	53	13492	4.99	ppb		100
88)	Bromobenzene	9.01	77	119481	4.39	ppb		97
89)	n-Propylbenzene	9.13	91	295631	4.68	ppb		100
90)	4-Ethyltoluene	9.24	105	241787	4.42	ppb		98
91)	2-Chlorotoluene	9.20	91	202346	4.59	ppb		98
92)	1,3,5-Trimethylbenzene	9.30	105	211447	4.75	ppb		100
93)	4-Chlorotoluene	9.31	91	218954	4.78	ppb		99
94)	Tert-Butylbenzene	9.62	119	166622	4.46	ppb		97
95)	1,2,4-Trimethylbenzene	9.66	105	203321	4.43	ppb		100
96)	Sec-Butylbenzene	9.83	105	274075	4.41	ppb		99
97)	p-Isopropyltoluene	9.97	119	236114	4.69	ppb		96
98)	Benzyl Chloride	10.14	91	66497	4.30	ppb	#	95
99)	1,3-DCB	9.92	146	123712	4.39	ppb		100
100)	1,4-DCB	10.01	146	131612	4.39	ppb		96
101)	n-Butylbenzene	10.37	91	221004	4.36	ppb		97
102)	1,2-DCB	10.37	146	114160	4.43	ppb		98
103)	Hexachloroethane	10.63	201	20171	5.31	ppb		87
104)	1,2-Dibromo-3-chloropropan	11.13	157	9268	5.08	ppb		96
105)	1,2,4-Trichlorobenzene	11.95	180	64555	4.54	ppb		96
106)	Hexachlorobutadiene	12.14	225	34945	4.25	ppb		98
107)	Naphthalene	12.19	128	143966	3.89	ppb		97
108)	1,2,3-Trichlorobenzene	12.44	180	66174	4.46	ppb		98

(#) = qualifier out of range (m) = manual integration

Data File : M:\ZEUS\DATA\201006\1006Z27.D Vial: 7
Acq On : 06 Oct 20 17:49 Operator: LP,DG,CH
Sample : 5.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z28.D Vial: 8
Acq On : 06 Oct 20 18:12 Operator: LP,DG,CH
Sample : 10ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2479958	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.77	117	1737323	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.98	152	937391	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.54	111	675269	26.86	ppb	0.00
Spiked Amount 25.000			Recovery =	107.448%		
48) 1,2-DCA-D4(S)	4.82	65	852102	26.83	ppb	0.00
Spiked Amount 25.000			Recovery =	107.324%		
69) Toluene-D8(S)	6.48	98	2550947	25.83	ppb	0.00
Spiked Amount 25.000			Recovery =	103.328%		
77) 4-Bromofluorobenzene(S)	8.87	95	883992	25.07	ppb	0.00
Spiked Amount 25.000			Recovery =	100.280%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.20	87	38692	9.44	ppb	100
4) Freon 114	1.31	85	50264	11.26	ppb	100
5) Chloromethane	1.39	50	161765	9.44	ppb	100
6) Vinyl chloride	1.45	62	143573	9.24	ppb	100
9) Bromomethane	1.72	94	62308	10.20	ppb	100
10) Chloroethane	1.80	64	75575	10.08	ppb	100
11) Dichlorofluoromethane	2.01	67	278532	9.39	ppb	100
12) Trichlorofluoromethane	2.06	101	193661	9.24	ppb	100
16) Acrolein	2.46	55	59180	130.56	ppb	100
17) Acetone	2.62	43	266581	50.79	ppb	100
18) Freon-113	2.57	101	119068	9.51	ppb	100
19) 1,1-DCE	2.55	61	196629	9.47	ppb	100
21) Acetonitrile	2.86	40	83360	117.41	ppb	100
22) t-Butanol	3.16	59	154698	119.31	ppb	100
23) Methyl Acetate	2.93	43	127771	9.28	ppb	100
24) Iodomethane	2.67	142	74329	8.37	ppb	100
25) Acrylonitrile	3.22	52	53812	9.53	ppb	100
26) Methylene chloride	3.00	84	146448	10.23	ppb	100
27) Carbon disulfide	2.73	76	157440	9.02	ppb	100
28) Methyl t-butyl ether (MtBE	3.28	73	326338	9.83	ppb	100
29) Trans-1,2-DCE	3.25	61	184337	9.38	ppb	100
31) Diisopropyl Ether	3.72	45	433836	9.71	ppb	100
33) 1,1-DCA	3.62	63	244683	9.45	ppb	100
34) Vinyl Acetate	3.69	43	84535	9.16	ppb	100
35) Ethyl tert Butyl Ether	4.04	59	343339	9.50	ppb	100
36) MEK (2-Butanone)	4.15	43	374228	51.42	ppb	100
37) Cis-1,2-DCE	4.13	61	223847	9.68	ppb	100
38) 2,2-Dichloropropane	4.13	77	180760	9.77	ppb	100
41) Chloroform	4.40	83	243556	9.73	ppb	100
42) Bromochloromethane	4.32	49	124845	9.68	ppb	100
44) 1,1,1-TCA	4.56	97	200839	9.96	ppb	100
45) Cyclohexane	4.61	56	219999	10.15	ppb	100
46) 1,1-Dichloropropene	4.70	75	180973	10.08	ppb	100
47) 2,2,4-Trimethylpentane	4.96	57	498449	9.81	ppb	100
49) Carbon Tetrachloride	4.70	117	157456	9.81	ppb	100
50) Tert Amyl Methyl Ether	5.00	73	302652	9.29	ppb	100
52) 1,2-DCA	4.88	62	192497	9.38	ppb	100
53) Benzene	4.88	78	553634	9.70	ppb	100
54) TCE	5.43	130	138145	9.39	ppb	100

(#) = qualifier out of range (m) = manual integration

Data File : M:\ZEUS\DATA\201006\1006Z28.D Vial: 8
Acq On : 06 Oct 20 18:12 Operator: LP,DG,CH
Sample : 10ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55)	2-Pentanone	5.59	43	1425765	120.40	ppb	100
56)	1,2-Dichloropropane	5.61	63	147411	9.78	ppb	100
57)	Bromodichloromethane	5.85	83	155478	9.75	ppb	100
58)	Methyl Cyclohexane	5.60	83	221614	10.07	ppb	100
59)	Dibromomethane	5.71	174	77399	9.80	ppb	100
60)	MIBK (methyl isobutyl ket	6.39	43	670383	47.45	ppb	100
61)	1-Bromo-2-chloroethane	6.12	144	19727	10.00	ppb	100
63)	Cis-1,3-Dichloropropene	6.24	75	183646	9.34	ppb	100
64)	Toluene	6.54	91	554811	9.67	ppb	100
65)	Trans-1,3-Dichloropropene	6.73	75	157866	9.14	ppb	100
66)	1,1,2-TCA	6.88	97	111765	9.89	ppb	100
67)	2-Hexanone	7.13	43	459669	48.31	ppb	100
70)	1,2-EDB	7.34	107	108335	10.11	ppb	100
71)	Tetrachloroethene	7.03	166	129564	9.71	ppb	100
72)	1-Chlorohexane	7.79	91	174358	9.89	ppb	100
73)	1,1,1,2-Tetrachloroethane	7.87	131	111745	10.30	ppb	100
74)	m&p-Xylene	8.02	91	932445	21.76	ppb	100
75)	o-Xylene	8.38	91	453591	10.85	ppb	100
76)	Styrene	8.39	104	345376	9.67	ppb	100
78)	1,3-Dichloropropane	7.04	76	205759	10.23	ppb	100
79)	Dibromochloromethane	7.24	129	99959	9.13	ppb	100
80)	Chlorobenzene	7.80	112	363438	9.75	ppb	100
81)	Ethylbenzene	7.91	91	597791	10.32	ppb	100
82)	Bromoform	8.55	173	56847	8.93	ppb	100
84)	Isopropylbenzene	8.74	105	568935	9.88	ppb	100
85)	1,1,2,2-Tetrachloroethane	9.00	83	148991	10.18	ppb	100
86)	1,2,3-Trichloropropane	9.04	110	47557	9.99	ppb	100
87)	t-1,4-Dichloro-2-Butene	9.06	53	35370	9.78	ppb	100
88)	Bromobenzene	9.01	77	284068	10.05	ppb	100
89)	n-Propylbenzene	9.13	91	729959	11.12	ppb	100
90)	4-Ethyltoluene	9.24	105	601623	10.12	ppb	100
91)	2-Chlorotoluene	9.20	91	497121	10.84	ppb	100
92)	1,3,5-Trimethylbenzene	9.30	105	514440	11.11	ppb	100
93)	4-Chlorotoluene	9.31	91	507158	10.66	ppb	100
94)	Tert-Butylbenzene	9.62	119	422658	9.83	ppb	100
95)	1,2,4-Trimethylbenzene	9.66	105	506342	9.91	ppb	100
96)	Sec-Butylbenzene	9.83	105	681354	9.95	ppb	100
97)	p-Isopropyltoluene	9.97	119	577537	11.04	ppb	100
98)	Benzyl Chloride	10.14	91	189468	8.55	ppb	100
99)	1,3-DCB	9.92	146	290138	9.90	ppb	100
100)	1,4-DCB	10.01	146	299985	9.63	ppb	100
101)	n-Butylbenzene	10.38	91	569838	9.85	ppb	100
102)	1,2-DCB	10.37	146	275531	10.28	ppb	100
103)	Hexachloroethane	10.63	201	54611	9.31	ppb	100
104)	1,2-Dibromo-3-chloropropan	11.13	157	24187	9.31	ppb	100
105)	1,2,4-Trichlorobenzene	11.96	180	168071	9.41	ppb	100
106)	Hexachlorobutadiene	12.15	225	83092	9.71	ppb	100
107)	Naphthalene	12.19	128	435239	9.41	ppb	100
108)	1,2,3-Trichlorobenzene	12.44	180	169411	10.99	ppb	100

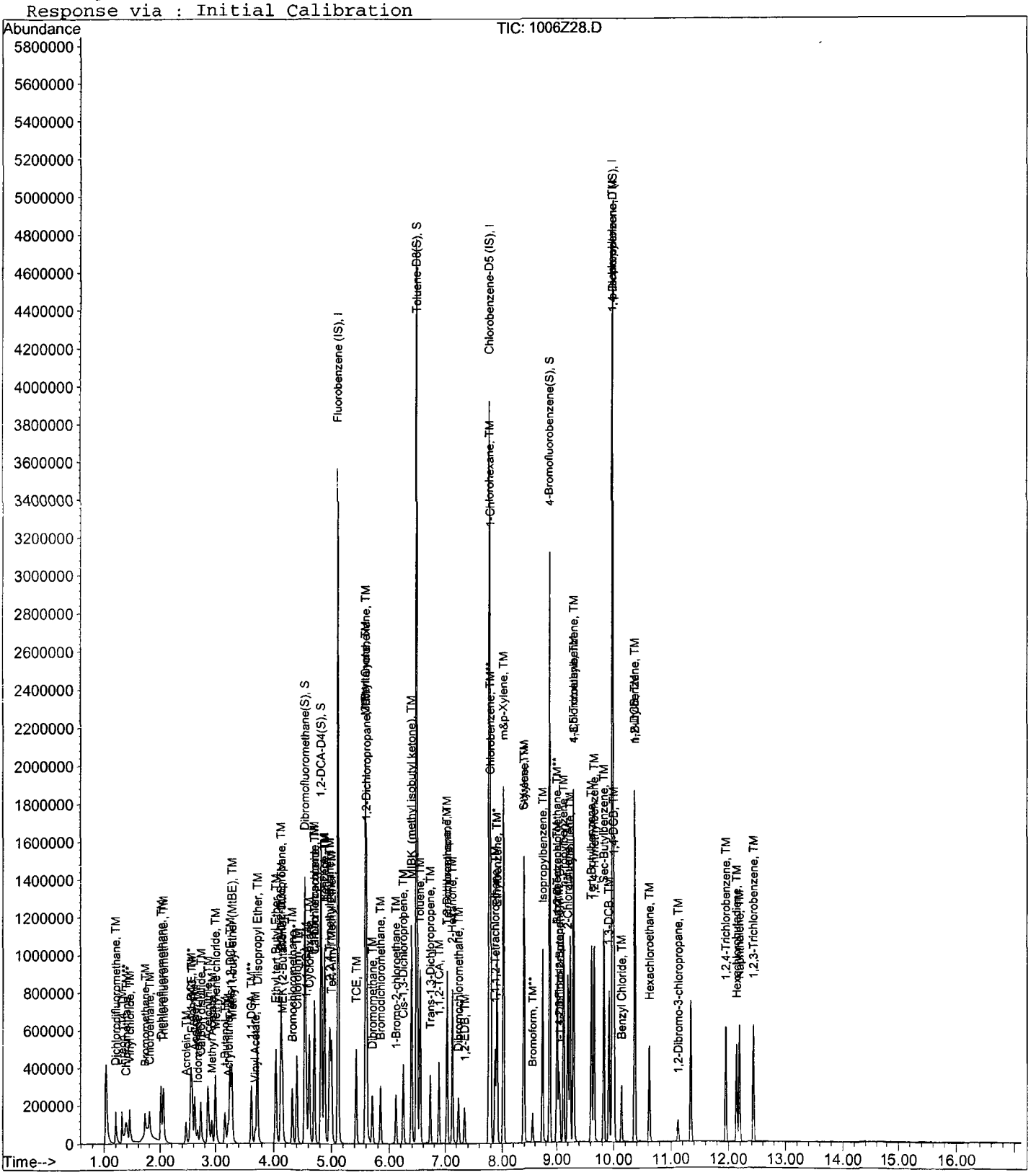
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z28.D Vial: 8
Acq On : 06 Oct 20 18:12 Operator: LP,DG,CH
Sample : 10ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z29.D Vial: 9
Acq On : 06 Oct 20 18:36 Operator: LP,DG,CH
Sample : 20ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2623832	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.77	117	1851340	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.99	152	1002428	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.54	111	1468289	55.20	ppb	0.00
Spiked Amount 25.000			Recovery = 220.816%			
48) 1,2-DCA-D4(S)	4.81	65	1839219	54.74	ppb	0.00
Spiked Amount 25.000			Recovery = 218.948%			
69) Toluene-D8(S)	6.48	98	5536072	51.42	ppb	0.00
Spiked Amount 25.000			Recovery = 205.684%			
77) 4-Bromofluorobenzene(S)	8.87	95	1986369	49.72	ppb	0.00
Spiked Amount 25.000			Recovery = 198.872%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.20	87	83976	19.37	ppb	90
4) Freon 114	1.31	85	95603	21.84	ppb	86
5) Chloromethane	1.38	50	352655	19.45	ppb	99
6) Vinyl chloride	1.44	62	310291	18.88	ppb	98
9) Bromomethane	1.72	94	122359	19.15	ppb	96
10) Chloroethane	1.80	64	136296	17.57	ppb	96
11) Dichlorofluoromethane	2.01	67	584700	18.62	ppb	98
12) Trichlorofluoromethane	2.05	101	424554	19.15	ppb	96
16) Acrolein	2.46	55	73154	152.54	ppb	99
17) Acetone	2.63	43	316773	57.53	ppb	97
18) Freon-113	2.57	101	250077	18.89	ppb	96
19) 1,1-DCE	2.54	61	409970	18.66	ppb	97
21) Acetonitrile	2.86	40	91847	122.27	ppb	96
22) t-Butanol	3.17	59	218257	159.09	ppb	97
23) Methyl Acetate	2.93	43	260771	17.90	ppb	96
24) Iodomethane	2.67	142	183107	17.03	ppb	97
25) Acrylonitrile	3.22	52	111111	18.60	ppb	98
26) Methylene chloride	2.99	84	300644	20.10	ppb	94
27) Carbon disulfide	2.73	76	329152	17.82	ppb	98
28) Methyl t-butyl ether (MtBE	3.28	73	729442	19.25	ppb	99
29) Trans-1,2-DCE	3.25	61	393733	18.95	ppb	97
31) Diisopropyl Ether	3.72	45	991679	19.84	ppb	97
33) 1,1-DCA	3.62	63	516950	18.87	ppb	97
34) Vinyl Acetate	3.69	43	201500	20.64	ppb	98
35) Ethyl tert Butyl Ether	4.04	59	803172	19.94	ppb	97
36) MEK (2-Butanone)	4.15	43	474134	61.58	ppb	99
37) Cis-1,2-DCE	4.12	61	475403	19.42	ppb	99
38) 2,2-Dichloropropane	4.13	77	392351	20.05	ppb	97
41) Chloroform	4.40	83	516552	19.50	ppb	100
42) Bromochloromethane	4.32	49	263226	19.30	ppb	96
44) 1,1,1-TCA	4.56	97	426820	20.01	ppb	97
45) Cyclohexane	4.61	56	474657	20.71	ppb	99
46) 1,1-Dichloropropene	4.70	75	381479	20.09	ppb	99
47) 2,2,4-Trimethylpentane	4.97	57	1107880	19.81	ppb	99
49) Carbon Tetrachloride	4.70	117	336379	19.80	ppb	100
50) Tert Amyl Methyl Ether	5.00	73	705829	19.72	ppb	93
52) 1,2-DCA	4.88	62	404579	18.64	ppb	98
53) Benzene	4.87	78	1162716	19.26	ppb	100
54) TCE	5.43	130	298360	19.16	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z29.D Vial: 9
Acq On : 06 Oct 20 18:36 Operator: LP,DG,CH
Sample : 20ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55)	2-Pentanone	5.59	43	1889270	147.96	ppb	99
56)	1,2-Dichloropropane	5.61	63	314085	19.70	ppb	99
57)	Bromodichloromethane	5.85	83	349656	20.71	ppb	96
58)	Methyl Cyclohexane	5.60	83	474009	20.37	ppb	99
59)	Dibromomethane	5.71	174	167866	20.09	ppb	98
60)	MIBK (methyl isobutyl ket	6.39	43	880682	57.46	ppb	99
61)	1-Bromo-2-chloroethane	6.11	144	42974	20.59	ppb	97
63)	Cis-1,3-Dichloropropene	6.24	75	429650	19.73	ppb	99
64)	Toluene	6.54	91	1196407	19.71	ppb	97
65)	Trans-1,3-Dichloropropene	6.73	75	372413	19.52	ppb	99
66)	1,1,2-TCA	6.88	97	239973	20.07	ppb	97
67)	2-Hexanone	7.13	43	589419	57.25	ppb	99
70)	1,2-EDB	7.34	107	244161	21.38	ppb	95
71)	Tetrachloroethene	7.03	166	273550	19.24	ppb	99
72)	1-Chlorohexane	7.79	91	380844	20.25	ppb	96
73)	1,1,1,2-Tetrachloroethane	7.88	131	255195	22.06	ppb	99
74)	m&p-Xylene	8.02	91	2019889	44.23	ppb	100
75)	o-Xylene	8.38	91	1020751	22.92	ppb	99
76)	Styrene	8.39	104	790715	20.14	ppb	98
78)	1,3-Dichloropropane	7.04	76	445394	20.77	ppb	98
79)	Dibromochloromethane	7.24	129	236027	18.60	ppb	95
80)	Chlorobenzene	7.80	112	769121	19.36	ppb	98
81)	Ethylbenzene	7.91	91	1323561	21.44	ppb	99
82)	Bromoform	8.55	173	138502	17.26	ppb	98
84)	Isopropylbenzene	8.74	105	1277495	20.15	ppb	98
85)	1,1,2,2-Tetrachloroethane	9.01	83	331984	21.22	ppb	95
86)	1,2,3-Trichloropropane	9.04	110	102946	20.21	ppb	97
87)	t-1,4-Dichloro-2-Butene	9.06	53	77522	18.10	ppb	87
88)	Bromobenzene	9.01	77	620058	20.51	ppb	92
89)	n-Propylbenzene	9.13	91	1616689	23.03	ppb	98
90)	4-Ethyltoluene	9.24	105	1316999	20.37	ppb	100
91)	2-Chlorotoluene	9.20	91	1068506	21.79	ppb	99
92)	1,3,5-Trimethylbenzene	9.31	105	1116751	22.56	ppb	100
93)	4-Chlorotoluene	9.31	91	1109231	21.80	ppb	97
94)	Tert-Butylbenzene	9.62	119	946443	19.77	ppb	100
95)	1,2,4-Trimethylbenzene	9.66	105	1122917	20.01	ppb	98
96)	Sec-Butylbenzene	9.83	105	1493925	19.96	ppb	99
97)	p-Isopropyltoluene	9.98	119	1284742	22.97	ppb	97
98)	Benzyl Chloride	10.14	91	473433	17.51	ppb	99
99)	1,3-DCB	9.93	146	626383	19.99	ppb	100
100)	1,4-DCB	10.01	146	642161	19.27	ppb	98
101)	n-Butylbenzene	10.38	91	1281692	19.99	ppb	99
102)	1,2-DCB	10.37	146	595718	20.78	ppb	98
103)	Hexachloroethane	10.63	201	134675	17.77	ppb	85
104)	1,2-Dibromo-3-chloropropan	11.13	157	57697	17.97	ppb	98
105)	1,2,4-Trichlorobenzene	11.96	180	397292	19.23	ppb	99
106)	Hexachlorobutadiene	12.15	225	194008	21.20	ppb	99
107)	Naphthalene	12.20	128	1038059	19.77	ppb	100
108)	1,2,3-Trichlorobenzene	12.44	180	381992	23.16	ppb	99

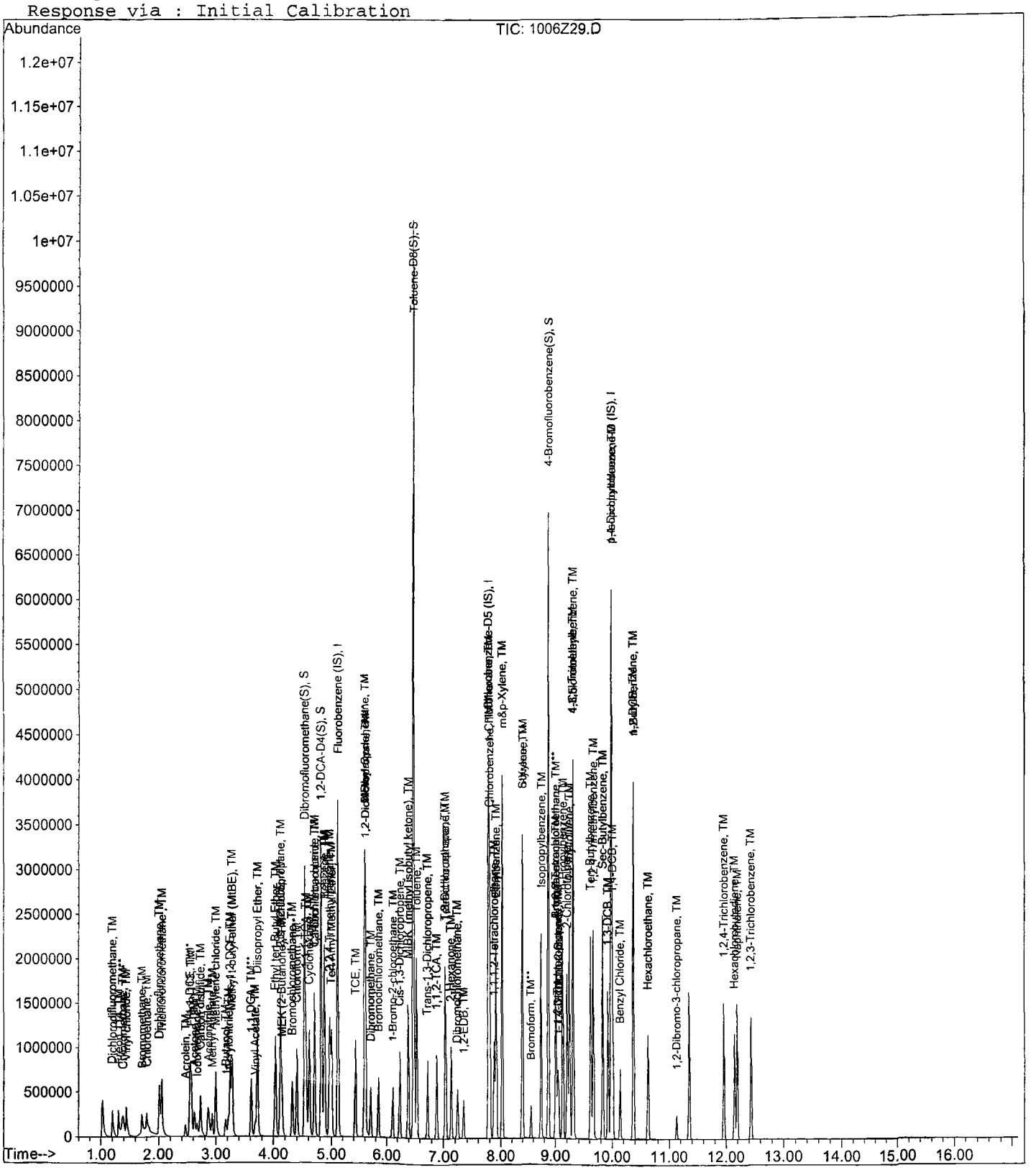
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z29.D Vial: 9
Acq On : 06 Oct 20 18:36 Operator: LP,DG,CH
Sample : 20ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z30.D Vial: 10
Acq On : 06 Oct 20 18:59 Operator: LP,DG,CH
Sample : 40ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2814209	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.77	117	2020157	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.99	152	1080782	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.54	111	1569363	55.01	ppb	0.00
Spiked Amount 25.000			Recovery =	220.052%		
48) 1,2-DCA-D4(S)	4.81	65	1930305	53.56	ppb	0.00
Spiked Amount 25.000			Recovery =	214.248%		
69) Toluene-D8(S)	6.48	98	5974272	50.87	ppb	0.00
Spiked Amount 25.000			Recovery =	203.468%		
77) 4-Bromofluorobenzene(S)	8.87	95	2145285	49.24	ppb	0.00
Spiked Amount 25.000			Recovery =	196.948%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.20	87	166810	35.88	ppb	98
4) Freon 114	1.31	85	203009	45.22	ppb	90
5) Chloromethane	1.39	50	720804	37.06	ppb	99
6) Vinyl chloride	1.44	62	644612	36.56	ppb	95
9) Bromomethane	1.71	94	235960	34.63	ppb	99
10) Chloroethane	1.80	64	259321	31.58	ppb	97
11) Dichlorofluoromethane	2.00	67	1214428	36.06	ppb	98
12) Trichlorofluoromethane	2.04	101	865811	36.40	ppb	98
16) Acrolein	2.46	55	96055	186.74	ppb	95
17) Acetone	2.63	43	471310	81.35	ppb	96
18) Freon-113	2.56	101	510989	35.98	ppb	96
19) 1,1-DCE	2.54	61	858953	36.45	ppb	97
21) Acetonitrile	2.86	40	110176	136.75	ppb	96
22) t-Butanol	3.17	59	314413	213.68	ppb	96
23) Methyl Acetate	2.93	43	580471	37.15	ppb	97
24) Iodomethane	2.67	142	462107	37.55	ppb	98
25) Acrylonitrile	3.22	52	248104	38.73	ppb	98
26) Methylene chloride	2.99	84	622169	39.03	ppb	97
27) Carbon disulfide	2.73	76	724736	36.59	ppb	96
28) Methyl t-butyl ether (MtBE	3.28	73	1599481	37.93	ppb	99
29) Trans-1,2-DCE	3.25	61	816546	36.63	ppb	98
31) Diisopropyl Ether	3.72	45	2143980	39.01	ppb	95
33) 1,1-DCA	3.62	63	1088013	37.03	ppb	99
34) Vinyl Acetate	3.69	43	454294	43.39	ppb	100
35) Ethyl tert Butyl Ether	4.04	59	1776431	40.19	ppb	98
36) MEK (2-Butanone)	4.15	43	723868	87.66	ppb	100
37) Cis-1,2-DCE	4.12	61	1001888	38.16	ppb	98
38) 2,2-Dichloropropane	4.13	77	842276	40.14	ppb	98
41) Chloroform	4.40	83	1082661	38.11	ppb	99
42) Bromochloromethane	4.32	49	537041	36.71	ppb	94
44) 1,1,1-TCA	4.56	97	895662	39.15	ppb	98
45) Cyclohexane	4.61	56	1015568	41.31	ppb	98
46) 1,1-Dichloropropene	4.70	75	821850	40.36	ppb	96
47) 2,2,4-Trimethylpentane	4.97	57	2398631	39.24	ppb	98
49) Carbon Tetrachloride	4.70	117	723459	39.71	ppb	100
50) Tert Amyl Methyl Ether	5.00	73	1577356	40.39	ppb	88
52) 1,2-DCA	4.88	62	848978	36.46	ppb	99
53) Benzene	4.87	78	2445958	37.78	ppb	99
54) TCE	5.43	130	635291	38.04	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z30.D Vial: 10
Acq On : 06 Oct 20 18:59 Operator: LP,DG,CH
Sample : 40ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.59	43	2564029	184.24	ppb		99
56)	1,2-Dichloropropane	5.61	63	656159	38.37	ppb		100
57)	Bromodichloromethane	5.85	83	758975	41.92	ppb		100
58)	Methyl Cyclohexane	5.60	83	1009388	40.43	ppb		99
59)	Dibromomethane	5.70	174	356067	39.73	ppb		92
60)	MIBK (methyl isobutyl ket	6.39	43	1364481	80.33	ppb		99
61)	1-Bromo-2-chloroethane	6.11	144	92881	41.48	ppb		94
63)	Cis-1,3-Dichloropropene	6.24	75	962707	40.37	ppb		98
64)	Toluene	6.54	91	2532576	38.90	ppb		99
65)	Trans-1,3-Dichloropropene	6.72	75	845467	40.54	ppb		99
66)	1,1,2-TCA	6.88	97	518718	40.45	ppb		96
67)	2-Hexanone	7.13	43	926306	81.01	ppb		99
70)	1,2-EDB	7.34	107	527453	42.32	ppb		97
71)	Tetrachloroethene	7.03	166	589906	38.03	ppb		99
72)	1-Chlorohexane	7.79	91	820845	39.98	ppb		92
73)	1,1,1,2-Tetrachloroethane	7.88	131	551412	43.69	ppb		97
74)	m&p-Xylene	8.02	91	4284942	85.98	ppb		99
75)	o-Xylene	8.38	91	2188755	45.04	ppb		100
76)	Styrene	8.39	104	1742469	40.11	ppb		99
78)	1,3-Dichloropropane	7.04	76	968236	41.38	ppb		99
79)	Dibromochloromethane	7.24	129	528985	36.79	ppb		99
80)	Chlorobenzene	7.80	112	1621783	37.41	ppb		98
81)	Ethylbenzene	7.91	91	2830250	42.02	ppb		99
82)	Bromoform	8.55	173	338308	35.58	ppb		95
84)	Isopropylbenzene	8.74	105	2774004	40.03	ppb		99
85)	1,1,2,2-Tetrachloroethane	9.00	83	739425	43.83	ppb		100
86)	1,2,3-Trichloropropane	9.04	110	230202	41.93	ppb		98
87)	t-1,4-Dichloro-2-Butene	9.06	53	188683	38.55	ppb	#	77
88)	Bromobenzene	9.01	77	1345488	41.28	ppb		99
89)	n-Propylbenzene	9.13	91	3471146	45.87	ppb		98
90)	4-Ethyltoluene	9.24	105	2800412	39.86	ppb		100
91)	2-Chlorotoluene	9.20	91	2285604	43.22	ppb		97
92)	1,3,5-Trimethylbenzene	9.30	105	2375623	44.50	ppb		100
93)	4-Chlorotoluene	9.31	91	2333337	42.54	ppb		95
94)	Tert-Butylbenzene	9.62	119	2073370	39.41	ppb		99
95)	1,2,4-Trimethylbenzene	9.66	105	2425358	39.58	ppb		99
96)	Sec-Butylbenzene	9.83	105	3256701	39.91	ppb		100
97)	p-Isopropyltoluene	9.98	119	2744856	45.53	ppb		99
98)	Benzyl Chloride	10.14	91	1159557	37.42	ppb		98
99)	1,3-DCB	9.92	146	1328122	39.30	ppb		100
100)	1,4-DCB	10.01	146	1353775	37.67	ppb		98
101)	n-Butylbenzene	10.38	91	2802481	39.87	ppb		100
102)	1,2-DCB	10.37	146	1261095	40.80	ppb		99
103)	Hexachloroethane	10.63	201	327982	36.59	ppb	#	76
104)	1,2-Dibromo-3-chloropropan	11.13	157	142269	38.17	ppb		96
105)	1,2,4-Trichlorobenzene	11.96	180	879809	38.14	ppb		96
106)	Hexachlorobutadiene	12.14	225	418959	42.47	ppb		99
107)	Naphthalene	12.19	128	2379411	40.91	ppb		98
108)	1,2,3-Trichlorobenzene	12.44	180	837136	47.08	ppb		98

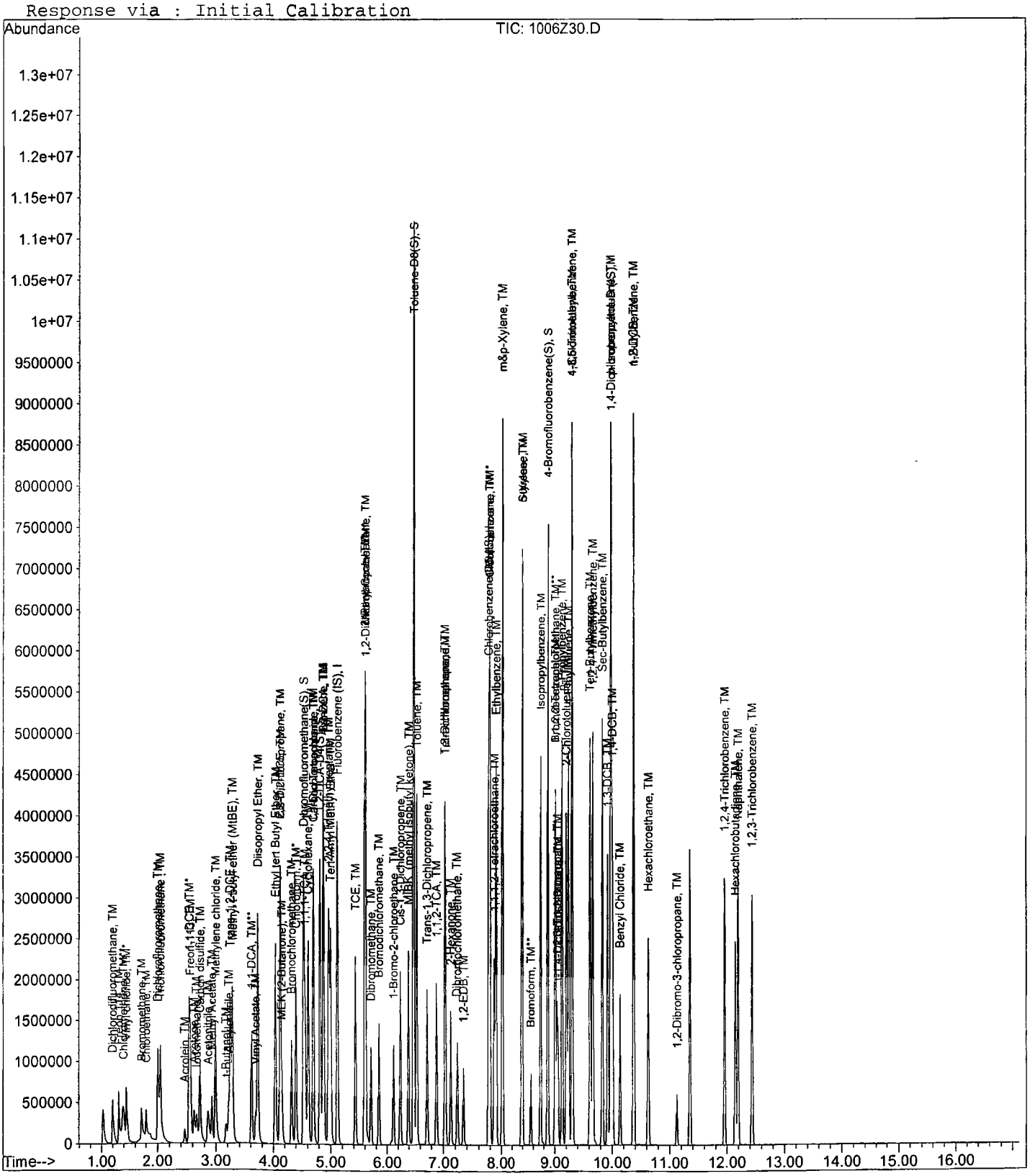
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z30.D Vial: 10
Acq On : 06 Oct 20 18:59 Operator: LP,DG,CH
Sample : 40ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z31.D Vial: 11
Acq On : 06 Oct 20 19:22 Operator: LP,DG,CH
Sample : 100ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3009565	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.77	117	2176035	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.99	152	1187084	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.54	111	3444225	112.90	ppb		0.00
Spiked Amount 25.000			Recovery = 451.592%				
48) 1,2-DCA-D4(S)	4.82	65	4190564	108.73	ppb		0.00
Spiked Amount 25.000			Recovery = 434.924%				
69) Toluene-D8(S)	6.48	98	12634988	98.77	ppb		0.00
Spiked Amount 25.000			Recovery = 395.072%				
77) 4-Bromofluorobenzene(S)	8.87	95	4870652	100.64	ppb		0.00
Spiked Amount 25.000			Recovery = 402.548%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.20	87	445586	89.61	ppb		99
4) Freon 114	1.31	85	457455	97.50	ppb		87
5) Chloromethane	1.39	50	1916143	92.12	ppb		100
6) Vinyl chloride	1.45	62	1741666	92.38	ppb		97
9) Bromomethane	1.72	94	623782	86.00	ppb		98
10) Chloroethane	1.80	64	618416	71.09	ppb		100
11) Dichlorofluoromethane	2.00	67	3019705	83.84	ppb		97
12) Trichlorofluoromethane	2.03	101	2421040	95.19	ppb		97
16) Acrolein	2.47	55	104018	189.10	ppb		99
17) Acetone	2.64	43	612078	99.64	ppb		97
18) Freon-113	2.56	101	1398383	92.07	ppb		98
19) 1,1-DCE	2.54	61	2399493	95.21	ppb		96
21) Acetonitrile	2.87	40	95059	110.33	ppb		93
22) t-Butanol	3.20	59	441278	280.43	ppb		92
23) Methyl Acetate	2.94	43	1572368	94.10	ppb		100
24) Iodomethane	2.67	142	1382619	101.72	ppb		99
25) Acrylonitrile	3.22	52	678598	99.05	ppb		100
26) Methylene chloride	2.99	84	1704021	100.35	ppb		99
27) Carbon disulfide	2.72	76	2051072	96.83	ppb		97
28) Methyl t-butyl ether (MtBE	3.29	73	4658347	100.96	ppb		99
29) Trans-1,2-DCE	3.25	61	2294129	96.24	ppb		100
31) Diisopropyl Ether	3.73	45	5997384	100.45	ppb		96
33) 1,1-DCA	3.62	63	3007002	95.69	ppb		98
34) Vinyl Acetate	3.69	43	1382899	123.52	ppb		99
35) Ethyl tert Butyl Ether	4.04	59	5246454	109.45	ppb		100
36) MEK (2-Butanone)	4.16	43	979094	110.87	ppb		100
37) Cis-1,2-DCE	4.12	61	2808881	100.05	ppb		96
38) 2,2-Dichloropropane	4.13	77	2421321	107.90	ppb		98
41) Chloroform	4.40	83	2994006	98.54	ppb		100
42) Bromochloromethane	4.32	49	1476668	94.38	ppb		98
44) 1,1,1-TCA	4.56	97	2520314	103.01	ppb		98
45) Cyclohexane	4.61	56	2797777	106.41	ppb		98
46) 1,1-Dichloropropene	4.70	75	2322445	106.65	ppb		98
47) 2,2,4-Trimethylpentane	4.97	57	6635985	100.36	ppb		99
49) Carbon Tetrachloride	4.70	117	2063152	105.88	ppb		98
50) Tert Amyl Methyl Ether	5.00	73	4706127	111.55	ppb	#	83
52) 1,2-DCA	4.88	62	2353153	94.50	ppb		99
53) Benzene	4.87	78	6745573	97.42	ppb		99
54) TCE	5.43	130	1760354	98.55	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z31.D Vial: 11
Acq On : 06 Oct 20 19:22 Operator: LP,DG,CH
Sample : 100ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.59	43	3408032	226.27	ppb		99
56)	1,2-Dichloropropane	5.61	63	1858372	101.62	ppb		98
57)	Bromodichloromethane	5.85	83	2232465	115.31	ppb		100
58)	Methyl Cyclohexane	5.60	83	2819950	105.63	ppb		100
59)	Dibromomethane	5.70	174	1031125	107.58	ppb		94
60)	MIBK (methyl isobutyl ket	6.39	43	1920633	103.84	ppb		99
61)	1-Bromo-2-chloroethane	6.11	144	263262	109.95	ppb		95
63)	Cis-1,3-Dichloropropene	6.24	75	2880335	111.56	ppb		97
64)	Toluene	6.54	91	7015156	100.75	ppb		100
65)	Trans-1,3-Dichloropropene	6.73	75	2554733	113.26	ppb		96
66)	1,1,2-TCA	6.88	97	1478399	107.81	ppb		96
67)	2-Hexanone	7.13	43	1283314	103.12	ppb		97
70)	1,2-EDB	7.34	107	1525339	113.62	ppb		100
71)	Tetrachloroethene	7.03	166	1685472	100.88	ppb		98
72)	1-Chlorohexane	7.79	91	2383411	107.75	ppb		92
73)	1,1,1,2-Tetrachloroethane	7.88	131	1588082	116.82	ppb		98
74)	m&p-Xylene	8.02	91	11545258	215.07	ppb		95
75)	o-Xylene	8.38	91	6281614	120.00	ppb		99
76)	Styrene	8.39	104	5081488	107.65	ppb		96
78)	1,3-Dichloropropane	7.04	76	2792311	110.79	ppb		97
79)	Dibromochloromethane	7.24	129	1612257	101.63	ppb		97
80)	Chlorobenzene	7.80	112	4524824	96.90	ppb		94
81)	Ethylbenzene	7.91	91	7906791	108.98	ppb		99
82)	Bromoform	8.55	173	1099112	102.36	ppb		96
84)	Isopropylbenzene	8.74	105	7831332	102.03	ppb		99
85)	1,1,2,2-Tetrachloroethane	9.01	83	2165765	116.88	ppb		99
86)	1,2,3-Trichloropropane	9.04	110	645113	106.97	ppb		96
87)	t-1,4-Dichloro-2-Butene	9.07	53	559605	100.94	ppb	#	61
88)	Bromobenzene	9.01	77	3919815	109.50	ppb		95
89)	n-Propylbenzene	9.13	91	9542172	114.80	ppb		96
90)	4-Ethyltoluene	9.24	105	7776983	100.27	ppb		98
91)	2-Chlorotoluene	9.21	91	6423123	110.59	ppb		99
92)	1,3,5-Trimethylbenzene	9.31	105	6726153	114.72	ppb		99
93)	4-Chlorotoluene	9.31	91	6672806	110.75	ppb		94
94)	Tert-Butylbenzene	9.62	119	5863704	100.32	ppb		97
95)	1,2,4-Trimethylbenzene	9.66	105	6797640	100.20	ppb		98
96)	Sec-Butylbenzene	9.83	105	9027106	100.07	ppb		100
97)	p-Isopropyltoluene	9.98	119	7634383	115.29	ppb		96
98)	Benzyl Chloride	10.14	91	3574047	101.67	ppb		97
99)	1,3-DCB	9.93	146	3733024	100.58	ppb		99
100)	1,4-DCB	10.01	146	3814937	96.66	ppb		98
101)	n-Butylbenzene	10.38	91	7804088	100.09	ppb		97
102)	1,2-DCB	10.37	146	3572326	105.21	ppb		97
103)	Hexachloroethane	10.63	201	1056134	101.80	ppb	#	67
104)	1,2-Dibromo-3-chloropropan	11.13	157	430547	101.16	ppb		94
105)	1,2,4-Trichlorobenzene	11.96	180	2614110	100.95	ppb		99
106)	Hexachlorobutadiene	12.15	225	1210831	111.74	ppb		97
107)	Naphthalene	12.20	128	6467444	99.79	ppb		98
108)	1,2,3-Trichlorobenzene	12.44	180	2355397	120.61	ppb		99

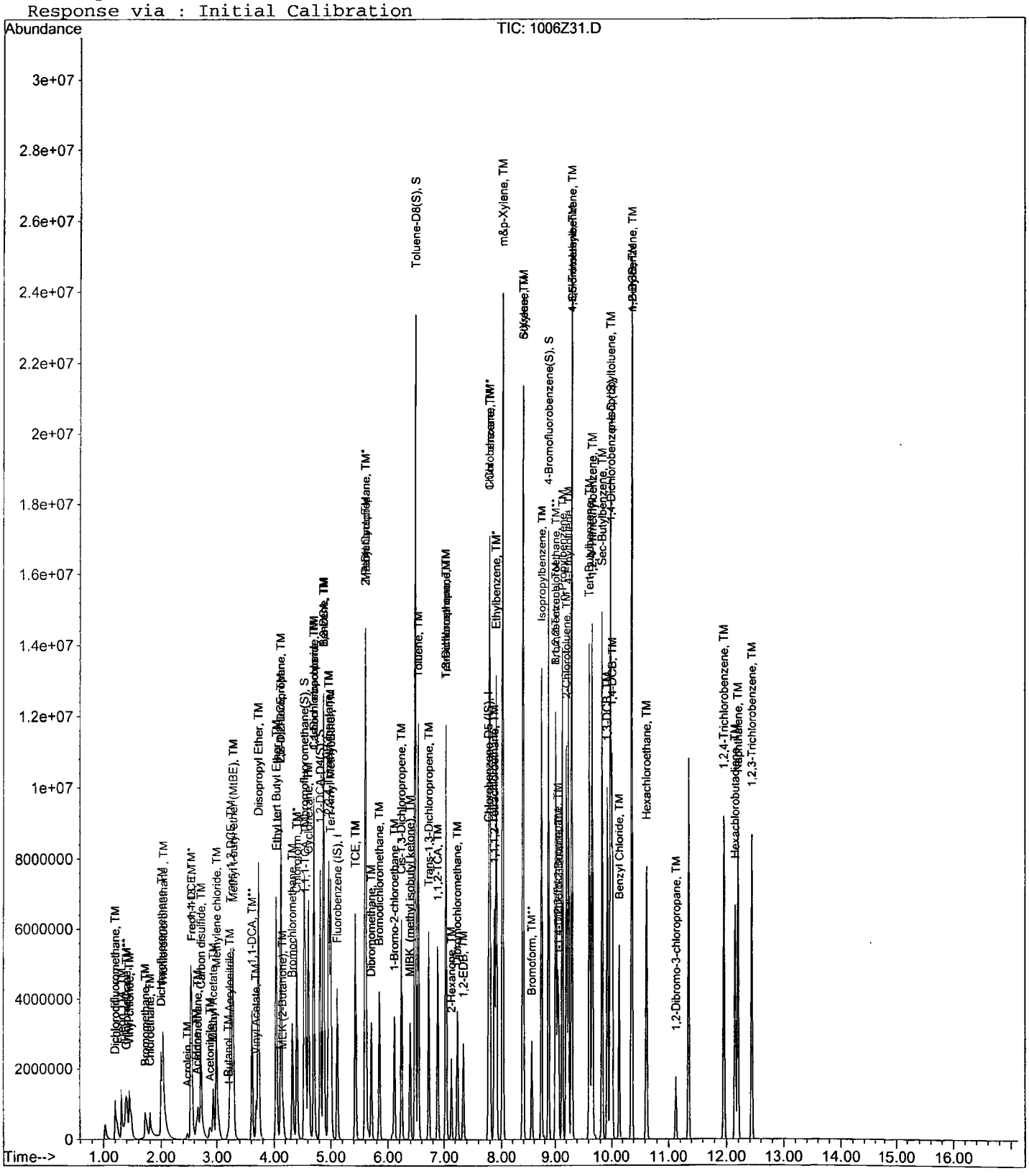
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z31.D Vial: 11
Acq On : 06 Oct 20 19:22 Operator: LP,DG,CH
Sample : 100ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/06/20
Matrix: Water Instrument: ZEUS
Initial Cal. Date: 10/06/20
Data File: 1006Z33.D

		Compound	MEAN	CCRF	%D		%Drift	
1	TM	Dichlorodifluoromethane	0.0413	0.0484	17	TM		
2	TML	Freon 114	0.0572	0.0727	27	TML	70	*NT
3	TM**	Chloromethane	0.1728	0.1975	14	TM**		
4	TM*	Vinyl chloride	0.1566	0.1759	12	TM*		
5		Butane	0.0000	0.0000	0.00			
6	TML	Bromomethane	0.0799	0.0839	4.9	TML	37	*
7	TML	Chloroethane	0.1109	0.0887	20	TML	18	
8	TM	Dichlorofluoromethane	0.2992	0.3332	11	TM		
9	TM	Trichlorofluoromethane	0.2113	0.2123	0.51	TM		
10	TM	Pentane	0.0000	0.0019	0.00	TM		
11	TM	1,2 Dichlorotrifluoroethane	0.0000	0.0000	0.00	TM		
12	TM	Acrolein	0.0046	0.0045	1.5	TM		
13	TML	Acetone	0.0590	0.0516	12	TML	2.8	
14	TM	Freon-113	0.1262	0.1423	13	TM		
15	TM*	1,1-DCE	0.2094	0.2202	5.2	TM*		
16	TM	2-Propanol	0.0000	0.0001	0.00	TM		
17	TM	Acetonitrile	0.0072	0.0063	12	TM		
18	TM	t-Butanol	0.0131	0.0125	4.3	TM		
19	TM	Methyl Acetate	0.1388	0.1490	7.3	TM		
20	TML	Iodomethane	0.0806	0.0933	16	TML	0.24	
21	TM	Acrylonitrile	0.0569	0.0607	6.7	TM		
22	TML	Methylene chloride	0.1672	0.1642	1.8	TML	14	
23	TM	Carbon disulfide	0.1760	0.2113	20	TM		
24	TML	Methyl t-butyl ether (MtBE)	0.3275	0.3997	22	TML	16	
25	TM	Trans-1,2-DCE	0.1980	0.2103	6.2	TM		
26	TM	Hexane	0.0000	0.0003	0.00	TM		
27	TML	Diisopropyl Ether	0.4325	0.5254	21	TML	15	
28	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.0000	0.0001	0.00	TM**		
29	TM**	1,1-DCA	0.2610	0.2804	7.4	TM**		
30	TM	Vinyl Acetate	0.0930	0.1714	84	TM		*NT
31	TML	Ethyl tert Butyl Ether	0.3320	0.4315	30	TML	16	
32	TM	MEK (2-Butanone)	0.0734	0.0723	1.5	TM		
33	TM	Cis-1,2-DCE	0.2332	0.2460	5.5	TM		
34	TM	2,2-Dichloropropane	0.1864	0.1905	2.2	TM		
35	TM	3-Methylpentane	0.0000	0.0935	0.00	TM		
36	TM*	Chloroform	0.2524	0.2675	6.0	TM*		
37	TM	Bromochloromethane	0.1300	0.1359	4.5	TM		
38	TM	1,1,1-TCA	0.2032	0.2157	6.1	TM		
39	TM	Cyclohexane	0.2184	0.2771	27	TM		*NT
40	TM	1,1-Dichloropropene	0.1809	0.2004	11	TM		
		Average			11.0			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/06/20
Matrix: Water Instrument: ZEUS
Cal. Date: 10/06/20
Data File: 1006Z33.D

		Compound	MEAN	CCRF	%D		%Drift	
41	TML	2,2,4-Trimethylpentane	0.5023	0.6129	22	TML	18	
42	TM	Carbon Tetrachloride	0.1619	0.1689	4.3	TM		
43	TML	Tert Amyl Methyl Ether	0.2744	0.3782	38	TML	14	
44	TM	Methylcyclopentane	0.0000	0.0280	0.00	TM		
45	TM	1,2-DCA	0.2068	0.2071	0.14	TM		
46	TM	Benzene	0.5752	0.6055	5.3	TM		
47	TM	TCE	0.1484	0.1519	2.4	TM		
48	TML	2-Pentanone	0.1074	0.1109	3.2	TML	6.8	
49	TM*	1,2-Dichloropropane	0.1519	0.1621	6.7	TM*		
50	TM	Bromodichloromethane	0.1608	0.1696	5.5	TM		
51	TM	Methyl Cyclohexane	0.2218	0.2742	24	TM		*NT
52	TM	Dibromomethane	0.0796	0.0883	11	TM		
53	TML	MIBK (methyl isobutyl ketone)	0.1263	0.1314	4.1	TML	7.4	
54	TM	1-Bromo-2-chloroethane	0.0199	0.0235	18	TM		
55	TM	2-Chloroethyl vinyl ether	0.0000	0.0001	0.00	TM		
56	TML	Cis-1,3-Dichloropropene	0.1753	0.2104	20	TML	5.2	
57	TM*	Toluene	0.5784	0.6176	6.8	TM*		
58	TML	Trans-1,3-Dichloropropene	0.1488	0.1797	21	TML	2.3	
59	TM	1,1,2-TCA	0.1139	0.1191	4.5	TM		
60	TML	2-Hexanone	0.0840	0.0878	4.6	TML	7.8	
61	TM	1,2-EDB	0.1542	0.1687	9.4	TM		
62	TM	Tetrachloroethene	0.1920	0.2069	7.8	TM		
63	TML	1-Chlorohexane	0.2851	0.3050	7.0	TML	20	
64	TM	1,1,1,2-Tetrachloroethane	0.1562	0.1686	8.0	TM		
65	TM	m&p-Xylene	0.6167	0.7268	18	TM		
66	TM	o-Xylene	0.6014	0.7084	18	TM		
67	TML	Styrene	0.4191	0.5350	28	TML	3.6	
68	TM	1,3-Dichloropropane	0.2896	0.3203	11	TM		
69	TML	Dibromochloromethane	0.1422	0.1537	8.1	TML	3.3	
70	TM**	Chlorobenzene	0.5365	0.5563	3.7	TM**		
71	TM*	Ethylbenzene	0.8336	0.9319	12	TM*		
72	TM**L	Bromoform	0.0849	0.0905	6.6	TM**L	3.8	
73	TML	Isopropylbenzene	1.334	1.644	23	TML	6.6	
74	TM**	1,1,2,2-Tetrachloroethane	0.3903	0.4007	2.7	TM**		
75	TM	1,2,3-Trichloropropane	0.1270	0.1274	0.33	TM		
76	TML	t-1,4-Dichloro-2-Butene	0.0918	0.1073	17	TML	8.7	
77	TM	Bromobenzene	0.7539	0.8111	7.6	TM		
78	TM	n-Propylbenzene	1.751	2.093	20	TM		
79	TML	4-Ethyltoluene	1.417	1.889	33	TML	19	
80	TM	2-Chlorotoluene	1.223	1.426	17	TM		
		Average			11.5			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/06/20
Instrument: ZEUS
Cal. Date: 10/06/20
Data File: 1006Z33.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	1,3,5-Trimethylbenzene	1.235	1.453	18	TM	
82	TM	4-Chlorotoluene	1.269	1.452	14	TM	
83	TML	Tert-Butylbenzene	1.031	1.190	15	TML	3.3
84	TML	1,2,4-Trimethylbenzene	1.154	1.463	27	TML	7.0
85	TML	Sec-Butylbenzene	1.585	1.909	20	TML	4.3
86	TM	p-Isopropyltoluene	1.395	1.617	16	TM	
87	TML	Benzyl Chloride	0.4922	0.4872	1.0	TML	17
88	TM	1,3-DCB	0.7816	0.8174	4.6	TM	
89	TM	1,4-DCB	0.8312	0.8521	2.5	TM	
90	TML	n-Butylbenzene	1.359	1.618	19	TML	4.4
91	TM	1,2-DCB	0.7151	0.7650	7.0	TM	
92	TML	Hexachloroethane	0.1532	0.1616	5.5	TML	0.16
93	TML	1,2-Dibromo-3-chloropropane	0.0666	0.0682	2.5	TML	2.8
94	TML	1,2,4-Trichlorobenzene	0.4318	0.5166	20	TML	6.5
95	TM	Hexachlorobutadiene	0.2282	0.2468	8.1	TM	
96	TML	Naphthalene	1.001	1.210	21	TML	2.3
97	TM	1,2,3-Trichlorobenzene	0.4113	0.4892	19	TM	
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			13.0		

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z33.D Vial: 13
Acq On : 06 Oct 20 20:08 Operator: LP,DG,CH
Sample : (SS)10ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2877447	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.77	117	2018989	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.98	152	1088313	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.54	111	770375	26.41	ppb	0.00
Spiked Amount 25.000			Recovery =	105.644%		
48) 1,2-DCA-D4(S)	4.81	65	972420	26.39	ppb	0.00
Spiked Amount 25.000			Recovery =	105.560%		
69) Toluene-D8(S)	6.48	98	2918041	25.44	ppb	0.00
Spiked Amount 25.000			Recovery =	101.780%		
77) 4-Bromofluorobenzene(S)	8.87	95	1025168	25.02	ppb	0.00
Spiked Amount 25.000			Recovery =	100.096%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	1.20	87	55721	11.72	ppb	99
4) Freon 114	1.31	85	83655	17.02	ppb	97
5) Chloromethane	1.38	50	227319	11.43	ppb	97
6) Vinyl chloride	1.45	62	202477	11.23	ppb	98
9) Bromomethane	1.72	94	96524	13.70	ppb	99
10) Chloroethane	1.81	64	102056	11.82	ppb	99
11) Dichlorofluoromethane	2.01	67	383561	11.14	ppb	98
12) Trichlorofluoromethane	2.06	101	244407	10.05	ppb	99
16) Acrolein	2.46	55	64747	123.11	ppb	96
17) Acetone	2.62	43	297001	48.61	ppb	98
18) Freon-113	2.57	101	163783	11.28	ppb	99
19) 1,1-DCE	2.55	61	253468	10.52	ppb	99
21) Acetonitrile	2.86	40	90991	110.45	ppb	96
22) t-Butanol	3.16	59	180024	119.66	ppb	93
23) Methyl Acetate	2.93	43	171503	10.73	ppb	98
24) Iodomethane	2.67	142	107443	9.98	ppb	98
25) Acrylonitrile	3.22	52	69917	10.67	ppb	98
26) Methylene chloride	2.99	84	188967	11.41	ppb	96
27) Carbon disulfide	2.73	76	243200	12.01	ppb	97
28) Methyl t-butyl ether (MtBE	3.28	73	460081	11.65	ppb	99
29) Trans-1,2-DCE	3.25	61	242096	10.62	ppb	99
31) Diisopropyl Ether	3.72	45	604684	11.47	ppb	99
33) 1,1-DCA	3.62	63	322697	10.74	ppb	99
34) Vinyl Acetate	3.69	43	197236	18.43	ppb	99
35) Ethyl tert Butyl Ether	4.03	59	496647	11.63	ppb	98
36) MEK (2-Butanone)	4.15	43	415952	49.26	ppb	95
37) Cis-1,2-DCE	4.12	61	283098	10.55	ppb	98
38) 2,2-Dichloropropane	4.13	77	219224	10.22	ppb	100
41) Chloroform	4.40	83	307857	10.60	ppb	99
42) Bromochloromethane	4.32	49	156369	10.45	ppb	99
44) 1,1,1-TCA	4.56	97	248277	10.61	ppb	99
45) Cyclohexane	4.61	56	318900	12.69	ppb	96
46) 1,1-Dichloropropene	4.70	75	230682	11.08	ppb	96
47) 2,2,4-Trimethylpentane	4.97	57	705413	11.81	ppb	99
49) Carbon Tetrachloride	4.70	117	194399	10.43	ppb	94
50) Tert Amyl Methyl Ether	5.00	73	435354	11.37	ppb	93
52) 1,2-DCA	4.88	62	238415	10.01	ppb	100
53) Benzene	4.87	78	696875	10.53	ppb	98
54) TCE	5.43	130	174877	10.24	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z33.D Vial: 13
Acq On : 06 Oct 20 20:08 Operator: LP,DG,CH
Sample : (SS)10ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55)	2-Pentanone	5.59	43	1595069	116.50	ppb	98
56)	1,2-Dichloropropane	5.61	63	186586	10.67	ppb	99
57)	Bromodichloromethane	5.85	83	195234	10.55	ppb	100
58)	Methyl Cyclohexane	5.60	83	315544	12.36	ppb	98
59)	Dibromomethane	5.70	174	101655	11.09	ppb	96
60)	MIBK (methyl isobutyl ket	6.39	43	756437	46.31	ppb	99
61)	1-Bromo-2-chloroethane	6.11	144	26998	11.79	ppb	99
63)	Cis-1,3-Dichloropropene	6.24	75	242207	10.52	ppb	98
64)	Toluene	6.54	91	710863	10.68	ppb	98
65)	Trans-1,3-Dichloropropene	6.72	75	206774	10.23	ppb	98
66)	1,1,2-TCA	6.88	97	137030	10.45	ppb	99
67)	2-Hexanone	7.13	43	505389	46.10	ppb	100
70)	1,2-EDB	7.34	107	136268	10.94	ppb	99
71)	Tetrachloroethene	7.03	166	167057	10.78	ppb	99
72)	1-Chlorohexane	7.79	91	246343	12.02	ppb	98
73)	1,1,1,2-Tetrachloroethane	7.88	131	136177	10.80	ppb	93
74)	m&p-Xylene	8.02	91	1173951	23.57	ppb	100
75)	o-Xylene	8.38	91	572099	11.78	ppb	99
76)	Styrene	8.39	104	432028	10.36	ppb	99
78)	1,3-Dichloropropane	7.04	76	258687	11.06	ppb	98
79)	Dibromochloromethane	7.24	129	124135	9.67	ppb	99
80)	Chlorobenzene	7.80	112	449266	10.37	ppb	98
81)	Ethylbenzene	7.91	91	752583	11.18	ppb	98
82)	Bromoform	8.55	173	73047	9.62	ppb	98
84)	Isopropylbenzene	8.74	105	715567	10.66	ppb	97
85)	1,1,2,2-Tetrachloroethane	9.00	83	174432	10.27	ppb	97
86)	1,2,3-Trichloropropane	9.04	110	55474	10.03	ppb	91
87)	t-1,4-Dichloro-2-Butene	9.06	53	46712	10.87	ppb	87
88)	Bromobenzene	9.01	77	353103	10.76	ppb	98
89)	n-Propylbenzene	9.13	91	911187	11.96	ppb	99
90)	4-Ethyltoluene	9.24	105	822308	11.85	ppb	99
91)	2-Chlorotoluene	9.20	91	620777	11.66	ppb	100
92)	1,3,5-Trimethylbenzene	9.30	105	632536	11.77	ppb	98
93)	4-Chlorotoluene	9.31	91	631889	11.44	ppb	98
94)	Tert-Butylbenzene	9.62	119	518148	10.33	ppb	99
95)	1,2,4-Trimethylbenzene	9.66	105	637020	10.70	ppb	100
96)	Sec-Butylbenzene	9.83	105	830843	10.43	ppb	99
97)	p-Isopropyltoluene	9.97	119	704083	11.60	ppb	99
98)	Benzyl Chloride	10.14	91	212103	8.31	ppb	98
99)	1,3-DCB	9.92	146	355842	10.46	ppb	99
100)	1,4-DCB	10.01	146	370938	10.25	ppb	98
101)	n-Butylbenzene	10.37	91	704143	10.44	ppb	98
102)	1,2-DCB	10.37	146	333018	10.70	ppb	99
103)	Hexachloroethane	10.63	201	70347	10.02	ppb	89
104)	1,2-Dibromo-3-chloropropan	11.13	157	29701	9.72	ppb	94
105)	1,2,4-Trichlorobenzene	11.96	180	224889	10.65	ppb	98
106)	Hexachlorobutadiene	12.14	225	107436	10.81	ppb	99
107)	Naphthalene	12.20	128	526597	9.77	ppb	99
108)	1,2,3-Trichlorobenzene	12.44	180	212959	11.89	ppb	97

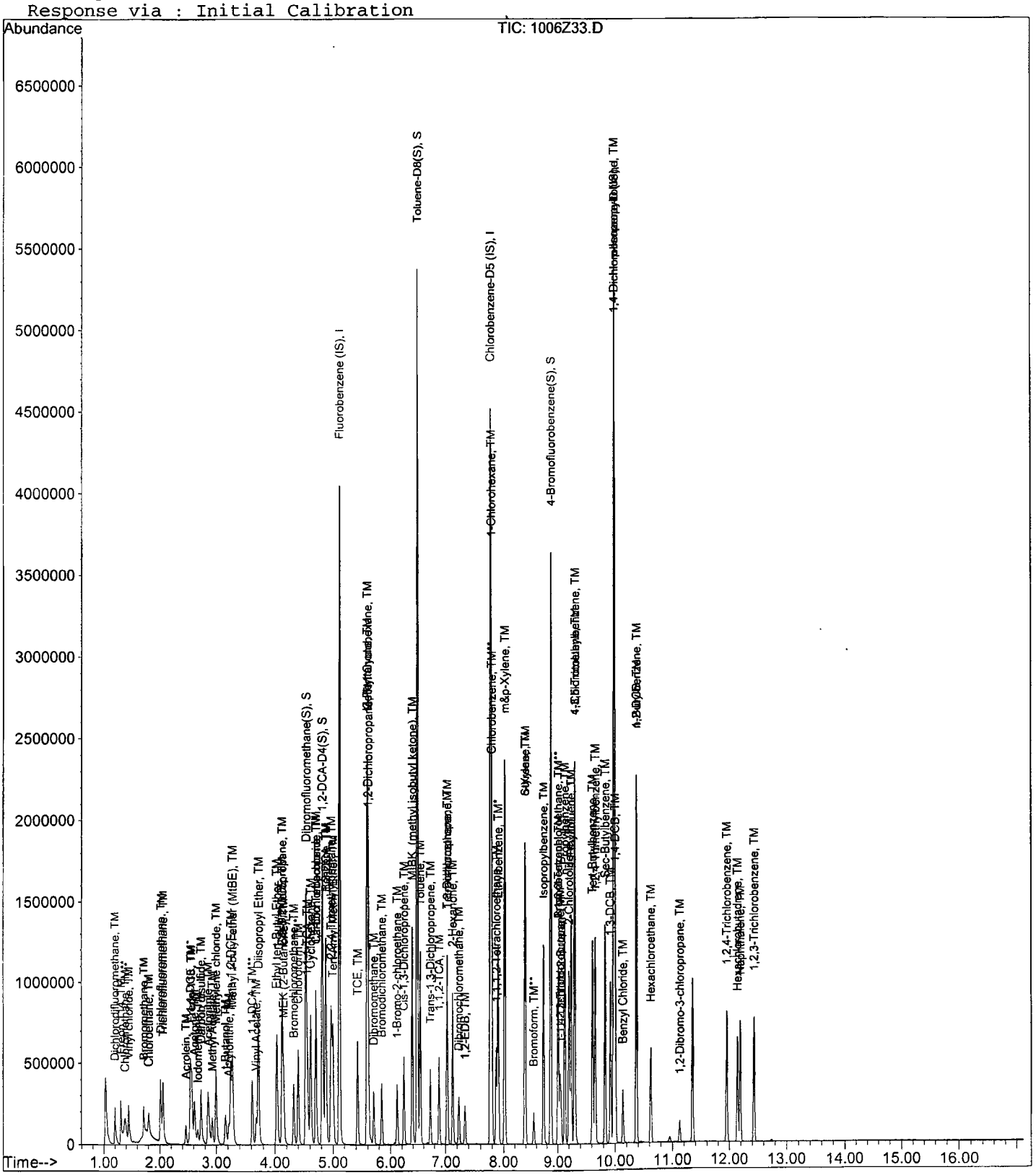
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z33.D Vial: 13
Acq On : 06 Oct 20 20:08 Operator: LP,DG,CH
Sample : (SS)10ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 7 9:52 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/09/20
Instrument: ZEUS
Initial Cal. Date: 10/06/20
Data File: 1009Z02.D

		Compound	MEAN	CCRF	%D		%Drift	
1	I	Fluorobenzene (IS)	ISTD			I		
2	TM	Dichlorodifluoromethane	0.0413	0.0327	21	TM		*
3	TML	Freon 114	0.0572	0.0359	37	TML	26	*NT
4	TM**	Chloromethane	0.1728	0.1611	6.8	TM**		
5	TM*	Vinyl chloride	0.1566	0.1558	0.54	TM*		
6		Butane	0.0000	0.0001	0.00			
7	TML	Bromomethane	0.0799	0.0560	30	TML	9.4	
8	TML	Chloroethane	0.1109	0.0870	22	TML	16	
9	TM	Dichlorofluoromethane	0.2992	0.3012	0.66	TM		
10	TM	Trichlorofluoromethane	0.2113	0.1990	5.8	TM		
11	TM	Pentane	0.0000	0.0015	0.00	TM		
12	TM	1,2 Dichlorotrifluoroethane	0.0000	0.0000	0.00	TM		
13	TM	Acrolein	0.0046	0.0041	11	TM		
14	TML	Acetone	0.0590	0.0438	26	TML	19	
15	TM	Freon-113	0.1262	0.0949	25	TM		*NT
16	TM*	1,1-DCE	0.2094	0.1834	12	TM*		
17	TM	2-Propanol	0.0000	0.0002	0.00	TM		
18	TM	Acetonitrile	0.0072	0.0053	27	TM		*NT
19	TM	t-Butanol	0.0131	0.0124	5.5	TM		
20	TM	Methyl Acetate	0.1388	0.1083	22	TM		*NT
21	TML	Iodomethane	0.0806	0.0750	7.0	TML	16	
22	TM	Acrylonitrile	0.0569	0.0488	14	TM		
23	TML	Methylene chloride	0.1672	0.1375	18	TML	4.8	
24	TM	Carbon disulfide	0.1760	0.1393	21	TM		*NT
25	TML	Methyl t-butyl ether (MtBE)	0.3275	0.3468	5.9	TML	2.9	
26	TM	Trans-1,2-DCE	0.1980	0.1784	9.9	TM		
27	TM	Hexane	0.0000	0.0003	0.00	TM		
28	TML	Diisopropyl Ether	0.4325	0.4033	6.7	TML	9.7	
29	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.0000	0.0001	0.00	TM**		
30	TM**	1,1-DCA	0.2610	0.2388	8.5	TM**		
31	TM	Vinyl Acetate	0.0930	0.0790	15	TM		
32	TML	Ethyl tert Butyl Ether	0.3320	0.3641	9.7	TML	0.49	
33	TM	MEK (2-Butanone)	0.0734	0.0615	16	TM		
34	TM	Cis-1,2-DCE	0.2332	0.2205	5.5	TM		
35	TM	2,2-Dichloropropane	0.1864	0.1980	6.2	TM		
36	TM	3-Methylpentane	0.0000	0.0784	0.00	TM		
37	TM*	Chloroform	0.2524	0.2498	1.0	TM*		
38	TM	Bromochloromethane	0.1300	0.1121	14	TM		
39	S	Dibromofluoromethane(S)	0.2534	0.2835	12	S		
40	TM	1,1,1-TCA	0.2032	0.2059	1.3	TM		
		Average			10.9			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/09/20
Instrument: ZEUS
Cal. Date: 10/06/20
Data File: 1009Z02.D

		Compound	MEAN	CCRF	%D		%Drift	
41	TM	Cyclohexane	0.2184	0.1734	21	TM		*NT
42	TM	1,1-Dichloropropene	0.1809	0.1754	3.0	TM		
43	TML	2,2,4-Trimethylpentane	0.5023	0.3831	24	TML	23	*NT
44	S	1,2-DCA-D4(S)	0.3201	0.3617	13	S		
45	TM	Carbon Tetrachloride	0.1619	0.1537	5.0	TM		
46	TML	Tert Amyl Methyl Ether	0.2744	0.3156	15	TML	4.1	
47	TM	Methylcyclopentane	0.0000	0.0214	0.00	TM		
48	TM	1,2-DCA	0.2068	0.1904	8.0	TM		
49	TM	Benzene	0.5752	0.5269	8.4	TM		
50	TM	TCE	0.1484	0.1341	9.6	TM		
51	TML	2-Pentanone	0.1074	0.0973	9.4	TML	17	
52	TM*	1,2-Dichloropropane	0.1519	0.1388	8.6	TM*		
53	TM	Bromodichloromethane	0.1608	0.1563	2.8	TM		
54	TM	Methyl Cyclohexane	0.2218	0.1753	21	TM		*NT
55	TM	Dibromomethane	0.0796	0.0811	1.8	TM		
56	TML	MIBK (methyl isobutyl ketone)	0.1263	0.1192	5.6	TML	15	
57	TM	1-Bromo-2-chloroethane	0.0199	0.0191	3.8	TM		
58	TM	2-Chloroethyl vinyl ether	0.0000	0.0000	0.00	TM		
59	TML	Cis-1,3-Dichloropropene	0.1753	0.1952	11	TML	1.9	
60	TM*	Toluene	0.5784	0.5508	4.8	TM*		
61	TML	Trans-1,3-Dichloropropene	0.1488	0.1662	12	TML	4.8	
62	TM	1,1,2-TCA	0.1139	0.1085	4.8	TM		
63	TML	2-Hexanone	0.0840	0.0816	2.9	TML	13	
64	I	Chlorobenzene-D5 (IS)	ISTD			I		
65	SL	Toluene-D8(S)	1.310	1.487	14	SL	4.6	
66	TM	1,2-EDB	0.1542	0.1476	4.3	TM		
67	TM	Tetrachloroethene	0.1920	0.1916	0.16	TM		
68	TML	1-Chlorohexane	0.2851	0.2491	13	TML	1.8	
69	TM	1,1,1,2-Tetrachloroethane	0.1562	0.1527	2.2	TM		
70	TM	m&p-Xylene	0.6167	0.6606	7.1	TM		
71	TM	o-Xylene	0.6014	0.6701	11	TM		
72	TML	Styrene	0.4191	0.4942	18	TML	3.8	
73	SL	4-Bromofluorobenzene(S)	0.4514	0.5432	20	SL	6.3	
74	TM	1,3-Dichloropropane	0.2896	0.2788	3.7	TM		
75	TML	Dibromochloromethane	0.1422	0.1357	4.6	TML	13	
76	TM**	Chlorobenzene	0.5365	0.4895	8.7	TM**		
77	TM*	Ethylbenzene	0.8336	0.8584	3.0	TM*		
78	TM**L	Bromoform	0.0849	0.0841	0.94	TM**L	8.9	
79	I	1,4-Dichlorobenzene-D (IS)	ISTD			I		
80	TML	Isopropylbenzene	1.334	1.491	12	TML	2.8	
		Average			8.4			

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/09/20
Instrument: ZEUS
Cal. Date: 10/06/20
Data File: 1009Z02.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM**	1,1,2,2-Tetrachloroethane	0.3903	0.3538	9.3	TM**	
82	TM	1,2,3-Trichloropropane	0.1270	0.1175	7.5	TM	
83	TML	t-1,4-Dichloro-2-Butene	0.0918	0.0878	4.4	TML	7.7
84	TM	Bromobenzene	0.7539	0.7126	5.5	TM	
85	TM	n-Propylbenzene	1.751	1.888	7.8	TM	
86	TML	4-Ethyltoluene	1.417	1.536	8.3	TML	3.0
87	TM	2-Chlorotoluene	1.223	1.257	2.8	TM	
88	TM	1,3,5-Trimethylbenzene	1.235	1.313	6.3	TM	
89	TM	4-Chlorotoluene	1.269	1.304	2.8	TM	
90	TML	Tert-Butylbenzene	1.031	1.094	6.1	TML	4.4
91	TML	1,2,4-Trimethylbenzene	1.154	1.310	14	TML	3.7
92	TML	Sec-Butylbenzene	1.585	1.726	8.9	TML	5.3
93	TM	p-Isopropyltoluene	1.395	1.495	7.2	TM	
94	TML	Benzyl Chloride	0.4922	0.5211	5.9	TML	12
95	TM	1,3-DCB	0.7816	0.7289	6.7	TM	
96	TM	1,4-DCB	0.8312	0.7404	11	TM	
97	TML	n-Butylbenzene	1.359	1.463	7.6	TML	5.0
98	TM	1,2-DCB	0.7151	0.6795	5.0	TM	
99	TML	Hexachloroethane	0.1532	0.1619	5.7	TML	0.28
100	TML	1,2-Dibromo-3-chloropropane	0.0666	0.0609	8.5	TML	11
101	TML	1,2,4-Trichlorobenzene	0.4318	0.4951	15	TML	2.6
102	TM	Hexachlorobutadiene	0.2282	0.2544	11	TM	
103	TML	Naphthalene	1.001	1.102	10	TML	10
104	TM	1,2,3-Trichlorobenzene	0.4113	0.4623	12	TM	
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			7.9		

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z02.D Vial: 2
Acq On : 09 Oct 20 10:04 Operator: LP,DG,CH
Sample : 201008A CCV 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 9 12:04 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3403130	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.77	117	2444408	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.99	152	1358458	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.54	111	964829	27.97	ppb		0.00
Spiked Amount 25.000			Recovery = 111.876%				
48) 1,2-DCA-D4(S)	4.81	65	1230857	28.24	ppb		0.00
Spiked Amount 25.000			Recovery = 112.972%				
69) Toluene-D8(S)	6.48	98	3634892	26.15	ppb		0.00
Spiked Amount 25.000			Recovery = 104.584%				
77) 4-Bromofluorobenzene(S)	8.87	95	1327761	26.57	ppb		0.00
Spiked Amount 25.000			Recovery = 106.284%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.20	87	44503	7.91	ppb		93
4) Freon 114	1.31	85	48847	7.39	ppb		97
5) Chloromethane	1.38	50	219321	9.32	ppb		100
6) Vinyl chloride	1.45	62	212038	9.95	ppb		97
9) Bromomethane	1.72	94	76185	9.06	ppb		99
10) Chloroethane	1.81	64	118395	11.59	ppb		99
11) Dichlorofluoromethane	2.01	67	409961	10.07	ppb		99
12) Trichlorofluoromethane	2.06	101	270893	9.42	ppb		99
16) Acrolein	2.46	55	69120	111.12	ppb		100
17) Acetone	2.62	43	298354	40.69	ppb		97
18) Freon-113	2.57	101	129154	7.52	ppb		96
19) 1,1-DCE	2.55	61	249674	8.76	ppb		95
21) Acetonitrile	2.86	40	89462	91.82	ppb		95
22) t-Butanol	3.16	59	210268	118.17	ppb	#	85
23) Methyl Acetate	2.93	43	147481	7.81	ppb		98
24) Iodomethane	2.67	142	102035	8.38	ppb		97
25) Acrylonitrile	3.21	52	66494	8.58	ppb		98
26) Methylene chloride	2.99	84	187199	9.52	ppb		99
27) Carbon disulfide	2.73	76	189568	7.91	ppb		98
28) Methyl t-butyl ether (MtBE	3.28	73	472130	10.29	ppb		99
29) Trans-1,2-DCE	3.25	61	242873	9.01	ppb		99
31) Diisopropyl Ether	3.72	45	549015	9.03	ppb		99
33) 1,1-DCA	3.62	63	325077	9.15	ppb		99
34) Vinyl Acetate	3.68	43	107481	8.49	ppb		97
35) Ethyl tert Butyl Ether	4.03	59	495639	9.95	ppb		96
36) MEK (2-Butanone)	4.15	43	418499	41.91	ppb		97
37) Cis-1,2-DCE	4.12	61	300111	9.45	ppb		97
38) 2,2-Dichloropropane	4.13	77	269524	10.62	ppb		97
41) Chloroform	4.40	83	339982	9.90	ppb		100
42) Bromochloromethane	4.32	49	152654	8.63	ppb		91
44) 1,1,1-TCA	4.56	97	280318	10.13	ppb		98
45) Cyclohexane	4.61	56	235990	7.94	ppb		99
46) 1,1-Dichloropropene	4.70	75	238799	9.70	ppb		98
47) 2,2,4-Trimethylpentane	4.96	57	521512	7.66	ppb		98
49) Carbon Tetrachloride	4.70	117	209228	9.50	ppb		99
50) Tert Amyl Methyl Ether	5.00	73	429663	9.59	ppb		89
52) 1,2-DCA	4.88	62	259130	9.20	ppb		98
53) Benzene	4.87	78	717230	9.16	ppb		100
54) TCE	5.43	130	182544	9.04	ppb		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z02.D Vial: 2
Acq On : 09 Oct 20 10:04 Operator: LP,DG,CH
Sample : 201008A CCV 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 9 12:04 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.58	43	1655523	103.61	ppb		96
56)	1,2-Dichloropropane	5.61	63	188909	9.14	ppb		99
57)	Bromodichloromethane	5.85	83	212733	9.72	ppb		99
58)	Methyl Cyclohexane	5.60	83	238613	7.90	ppb		97
59)	Dibromomethane	5.70	174	110358	10.18	ppb		99
60)	MIBK (methyl isobutyl ket	6.39	43	811228	42.56	ppb		96
61)	1-Bromo-2-chloroethane	6.11	144	26043	9.62	ppb		88
63)	Cis-1,3-Dichloropropene	6.24	75	265684	9.81	ppb		96
64)	Toluene	6.54	91	749726	9.52	ppb		97
65)	Trans-1,3-Dichloropropene	6.72	75	226302	9.52	ppb		98
66)	1,1,2-TCA	6.88	97	147631	9.52	ppb		95
67)	2-Hexanone	7.13	43	555141	43.26	ppb		95
70)	1,2-EDB	7.34	107	144309	9.57	ppb		97
71)	Tetrachloroethene	7.03	166	187383	9.98	ppb		95
72)	1-Chlorohexane	7.79	91	243520	9.82	ppb		94
73)	1,1,1,2-Tetrachloroethane	7.87	131	149334	9.78	ppb		98
74)	m&p-Xylene	8.02	91	1291857	21.42	ppb		97
75)	o-Xylene	8.38	91	655197	11.14	ppb		99
76)	Styrene	8.39	104	483186	9.62	ppb		99
78)	1,3-Dichloropropane	7.04	76	272630	9.63	ppb		96
79)	Dibromochloromethane	7.24	129	132666	8.69	ppb		96
80)	Chlorobenzene	7.80	112	478655	9.13	ppb		98
81)	Ethylbenzene	7.91	91	839308	10.30	ppb		100
82)	Bromoform	8.55	173	82195	9.11	ppb		100
84)	Isopropylbenzene	8.74	105	809937	9.72	ppb		100
85)	1,1,2,2-Tetrachloroethane	9.00	83	192249	9.07	ppb		99
86)	1,2,3-Trichloropropane	9.04	110	63827	9.25	ppb		93
87)	t-1,4-Dichloro-2-Butene	9.07	53	47725	9.23	ppb	#	75
88)	Bromobenzene	9.01	77	387210	9.45	ppb		98
89)	n-Propylbenzene	9.13	91	1025778	10.78	ppb		100
90)	4-Ethyltoluene	9.24	105	834464	9.70	ppb		98
91)	2-Chlorotoluene	9.20	91	683292	10.28	ppb		96
92)	1,3,5-Trimethylbenzene	9.30	105	713395	10.63	ppb		97
93)	4-Chlorotoluene	9.31	91	708679	10.28	ppb		96
94)	Tert-Butylbenzene	9.62	119	594505	9.56	ppb		97
95)	1,2,4-Trimethylbenzene	9.66	105	711778	9.63	ppb		98
96)	Sec-Butylbenzene	9.83	105	937807	9.47	ppb		99
97)	p-Isopropyltoluene	9.98	119	812412	10.72	ppb		99
98)	Benzyl Chloride	10.14	91	283153	8.76	ppb		99
99)	1,3-DCB	9.92	146	396079	9.33	ppb		99
100)	1,4-DCB	10.01	146	402297	8.91	ppb		97
101)	n-Butylbenzene	10.38	91	794859	9.50	ppb		100
102)	1,2-DCB	10.37	146	369205	9.50	ppb		99
103)	Hexachloroethane	10.63	201	87961	10.03	ppb		90
104)	1,2-Dibromo-3-chloropropan	11.13	157	33098	8.92	ppb		94
105)	1,2,4-Trichlorobenzene	11.96	180	269043	10.26	ppb		94
106)	Hexachlorobutadiene	12.15	225	138242	11.15	ppb		98
107)	Naphthalene	12.20	128	598967	8.99	ppb		99
108)	1,2,3-Trichlorobenzene	12.44	180	251221	11.24	ppb		100

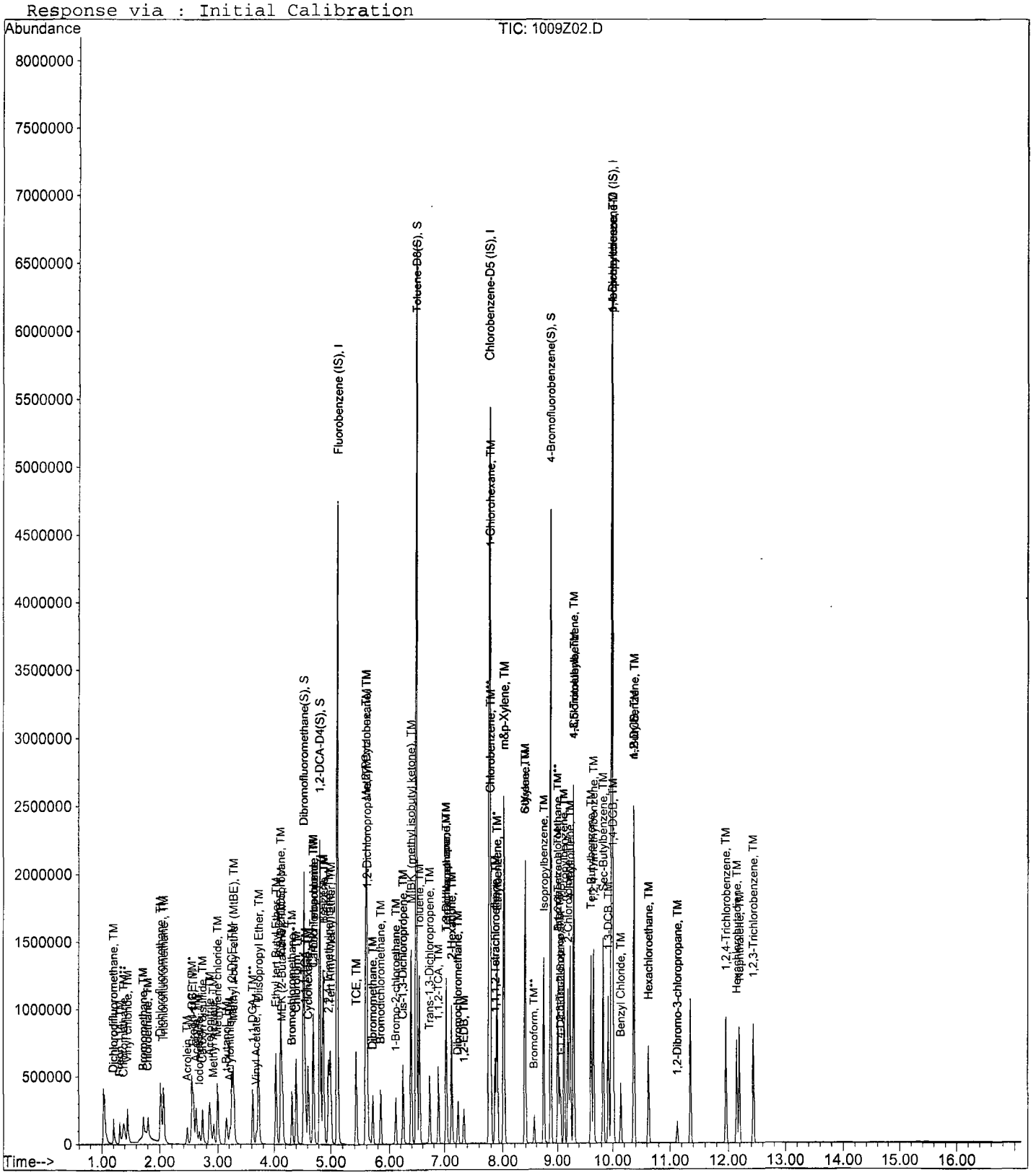
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1009Z02.D Vial: 2
Acq On : 09 Oct 20 10:04 Operator: LP,DG,CH
Sample : 201008A CCV 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 9 12:04 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/09/20
Matrix: Water Instrument: ZEUS
Initial Cal. Date: 10/06/20
Data File: 1009Z27.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TM	Dichlorodifluoromethane	0.0413	0.0346	16	TM	
3	TML	Freon 114	0.0572	0.0364	36	TML	25
4	TM**	Chloromethane	0.1728	0.1568	9.3	TM**	
5	TM*	Vinyl chloride	0.1566	0.1549	1.1	TM*	
6		Butane	0.0000	0.0001	0.00		
7	TML	Bromomethane	0.0799	0.0586	27	TML	5.0
8	TML	Chloroethane	0.1109	0.0789	29	TML	4.6
9	TM	Dichlorofluoromethane	0.2992	0.2854	4.6	TM	
10	TM	Trichlorofluoromethane	0.2113	0.1892	10	TM	
11	TM	Pentane	0.0000	0.0023	0.00	TM	
12	TM	1,2 Dichlorotrifluoroethane	0.0000	0.0000	0.00	TM	
13	TM	Acrolein	0.0046	0.0048	5.1	TM	
14	TML	Acetone	0.0590	0.0498	16	TML	6.6
15	TM	Freon-113	0.1262	0.0945	25	TM	
16	TM*	1,1-DCE	0.2094	0.1744	17	TM*	
17	TM	2-Propanol	0.0000	0.0002	0.00	TM	
18	TM	Acetonitrile	0.0072	0.0052	27	TM	
19	TM	t-Butanol	0.0131	0.0151	16	TM	
20	TM	Methyl Acetate	0.1388	0.1186	15	TM	
21	TML	Iodomethane	0.0806	0.0746	7.4	TML	17
22	TM	Acrylonitrile	0.0569	0.0524	8.0	TM	
23	TML	Methylene chloride	0.1672	0.1415	15	TML	2.0
24	TM	Carbon disulfide	0.1760	0.1224	30	TM	
25	TML	Methyl t-butyl ether (MtBE)	0.3275	0.3816	17	TML	12
26	TM	Trans-1,2-DCE	0.1980	0.1721	13	TM	
27	TM	Hexane	0.0000	0.0004	0.00	TM	
28	TML	Diisopropyl Ether	0.4325	0.4330	0.12	TML	3.8
29	TM**	2,2-Dichloro-1,1,1-trifluoroethane	0.0000	0.0002	0.00	TM**	
30	TM**	1,1-DCA	0.2610	0.2408	7.8	TM**	
31	TM	Vinyl Acetate	0.0930	0.0562	40	TM	
32	TML	Ethyl tert Butyl Ether	0.3320	0.3954	19	TML	7.3
33	TM	MEK (2-Butanone)	0.0734	0.0699	4.8	TM	
34	TM	Cis-1,2-DCE	0.2332	0.2182	6.4	TM	
35	TM	2,2-Dichloropropane	0.1864	0.1674	10	TM	
36	TM	3-Methylpentane	0.0000	0.0853	0.00	TM	
37	TM*	Chloroform	0.2524	0.2469	2.2	TM*	
38	TM	Bromochloromethane	0.1300	0.1207	7.1	TM	
39	S	Dibromofluoromethane(S)	0.2534	0.2735	7.9	S	
40	TM	1,1,1-TCA	0.2032	0.1971	3.0	TM	
		Average			11.6		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/09/20
Instrument: ZEUS
Cal. Date: 10/06/20
Data File: 1009Z27.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	Cyclohexane	0.2184	0.1722	21	TM	
42	TM	1,1-Dichloropropene	0.1809	0.1653	8.6	TM	
43	TML	2,2,4-Trimethylpentane	0.5023	0.3749	25	TML	25
44	S	1,2-DCA-D4(S)	0.3201	0.3586	12	S	
45	TM	Carbon Tetrachloride	0.1619	0.1443	11	TM	
46	TML	Tert Amyl Methyl Ether	0.2744	0.3509	28	TML	5.9
47	TM	Methylcyclopentane	0.0000	0.0222	0.00	TM	
48	TM	1,2-DCA	0.2068	0.2030	1.9	TM	
49	TM	Benzene	0.5752	0.5302	7.8	TM	
50	TM	TCE	0.1484	0.1377	7.2	TM	
51	TML	2-Pentanone	0.1074	0.1092	1.6	TML	8.1
52	TM*	1,2-Dichloropropane	0.1519	0.1439	5.3	TM*	
53	TM	Bromodichloromethane	0.1608	0.1618	0.60	TM	
54	TM	Methyl Cyclohexane	0.2218	0.1746	21	TM	
55	TM	Dibromomethane	0.0796	0.0894	12	TM	
56	TML	MIBK (methyl isobutyl ketone)	0.1263	0.1341	6.2	TML	5.7
57	TM	1-Bromo-2-chloroethane	0.0199	0.0207	4.3	TM	
58	TM	2-Chloroethyl vinyl ether	0.0000	0.0000	0.00	TM	
59	TML	Cis-1,3-Dichloropropene	0.1753	0.1983	13	TML	0.49
60	TM*	Toluene	0.5784	0.5520	4.6	TM*	
61	TML	Trans-1,3-Dichloropropene	0.1488	0.1747	17	TML	0.32
62	TM	1,1,2-TCA	0.1139	0.1171	2.8	TM	
63	TML	2-Hexanone	0.0840	0.0919	9.4	TML	4.1
64	I	Chlorobenzene-D5 (IS)	ISTD			I	
65	SL	Toluene-D8(S)	1.310	1.431	9.3	SL	0.83
66	TM	1,2-EDB	0.1542	0.1600	3.8	TM	
67	TM	Tetrachloroethene	0.1920	0.1819	5.2	TM	
68	TML	1-Chlorohexane	0.2851	0.2272	20	TML	10
69	TM	1,1,1,2-Tetrachloroethane	0.1562	0.1570	0.54	TM	
70	TM	m&p-Xylene	0.6167	0.6441	4.4	TM	
71	TM	o-Xylene	0.6014	0.6655	11	TM	
72	TML	Styrene	0.4191	0.4928	18	TML	4.1
73	SL	4-Bromofluorobenzene(S)	0.4514	0.5243	16	SL	3.0
74	TM	1,3-Dichloropropane	0.2896	0.3022	4.4	TM	
75	TML	Dibromochloromethane	0.1422	0.1408	0.97	TML	10
76	TM**	Chlorobenzene	0.5365	0.4912	8.4	TM**	
77	TM*	Ethylbenzene	0.8336	0.8453	1.4	TM*	
78	TM**L	Bromoform	0.0849	0.0871	2.6	TM**L	6.5
79	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
80	TML	Isopropylbenzene	1.334	1.444	8.2	TML	5.7
		Average			8.8		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 10/09/20
Matrix: Water Instrument: ZEUS
Cal. Date: 10/06/20
Data File: 1009Z27.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM**	1,1,2,2-Tetrachloroethane	0.3903	0.3642	6.7	TM**	
82	TM	1,2,3-Trichloropropane	0.1270	0.1247	1.9	TM	
83	TML	t-1,4-Dichloro-2-Butene	0.0918	0.0911	0.78	TML	4.9
84	TM	Bromobenzene	0.7539	0.7500	0.52	TM	
85	TM	n-Propylbenzene	1.751	1.790	2.3	TM	
86	TML	4-Ethyltoluene	1.417	1.465	3.3	TML	7.4
87	TM	2-Chlorotoluene	1.223	1.238	1.2	TM	
88	TM	1,3,5-Trimethylbenzene	1.235	1.285	4.1	TM	
89	TM	4-Chlorotoluene	1.269	1.286	1.4	TM	
90	TML	Tert-Butylbenzene	1.031	1.063	3.0	TML	7.0
91	TML	1,2,4-Trimethylbenzene	1.154	1.293	12	TML	4.9
92	TML	Sec-Butylbenzene	1.585	1.651	4.2	TML	9.2
93	TM	p-Isopropyltoluene	1.395	1.411	1.2	TM	
94	TML	Benzyl Chloride	0.4922	0.4159	15	TML	26
95	TM	1,3-DCB	0.7816	0.7286	6.8	TM	
96	TM	1,4-DCB	0.8312	0.7561	9.0	TM	
97	TML	n-Butylbenzene	1.359	1.350	0.69	TML	12
98	TM	1,2-DCB	0.7151	0.7008	2.0	TM	
99	TML	Hexachloroethane	0.1532	0.1545	0.88	TML	3.0
100	TML	1,2-Dibromo-3-chloropropane	0.0666	0.0683	2.6	TML	2.7
101	TML	1,2,4-Trichlorobenzene	0.4318	0.5046	17	TML	4.3
102	TM	Hexachlorobutadiene	0.2282	0.2386	4.6	TM	
103	TML	Naphthalene	1.001	1.172	17	TML	5.0
104	TM	1,2,3-Trichlorobenzene	0.4113	0.4733	15	TM	
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			5.5		

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z27.D Vial: 27
Acq On : 09 Oct 20 20:11 Operator: LP,DG,CH
Sample : Ending CCV 10ug/L 10/8/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 11 12:28 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3422219	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.77	117	2490212	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.99	152	1376604	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.54	111	936063	26.98	ppb		0.00
Spiked Amount 25.000			Recovery = 107.932%				
48) 1,2-DCA-D4(S)	4.82	65	1227222	28.00	ppb		0.00
Spiked Amount 25.000			Recovery = 112.012%				
69) Toluene-D8(S)	6.48	98	3563836	25.21	ppb		0.00
Spiked Amount 25.000			Recovery = 100.828%				
77) 4-Bromofluorobenzene(S)	8.87	95	1305552	25.74	ppb		0.00
Spiked Amount 25.000			Recovery = 102.980%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.20	87	47366	8.38	ppb		93
4) Freon 114	1.31	85	49801	7.52	ppb		98
5) Chloromethane	1.39	50	214585	9.07	ppb		98
6) Vinyl chloride	1.45	62	212096	9.89	ppb		95
9) Bromomethane	1.72	94	80257	9.50	ppb		95
10) Chloroethane	1.81	64	107974	10.46	ppb		99
11) Dichlorofluoromethane	2.01	67	390717	9.54	ppb		97
12) Trichlorofluoromethane	2.06	101	258927	8.95	ppb		100
16) Acrolein	2.46	55	82155	131.34	ppb		99
17) Acetone	2.62	43	340523	46.72	ppb		98
18) Freon-113	2.57	101	129380	7.49	ppb		95
19) 1,1-DCE	2.55	61	238720	8.33	ppb		94
21) Acetonitrile	2.86	40	88792	90.63	ppb		97
22) t-Butanol	3.16	59	259231	144.88	ppb	#	84
23) Methyl Acetate	2.93	43	162305	8.54	ppb		95
24) Iodomethane	2.67	142	102175	8.35	ppb		95
25) Acrylonitrile	3.22	52	71680	9.20	ppb		98
26) Methylene chloride	3.00	84	193716	9.80	ppb		93
27) Carbon disulfide	2.73	76	167552	6.96	ppb		97
28) Methyl t-butyl ether (MtBE	3.28	73	522394	11.18	ppb		100
29) Trans-1,2-DCE	3.25	61	235644	8.69	ppb		99
31) Diisopropyl Ether	3.72	45	592729	9.62	ppb		98
33) 1,1-DCA	3.62	63	329605	9.22	ppb		99
34) Vinyl Acetate	3.69	43	76934	6.04	ppb		100
35) Ethyl tert Butyl Ether	4.04	59	541206	10.73	ppb		97
36) MEK (2-Butanone)	4.15	43	478191	47.62	ppb		96
37) Cis-1,2-DCE	4.12	61	298664	9.36	ppb		98
38) 2,2-Dichloropropane	4.13	77	229213	8.98	ppb		99
41) Chloroform	4.40	83	337959	9.78	ppb		99
42) Bromochloromethane	4.32	49	165275	9.29	ppb		96
44) 1,1,1-TCA	4.56	97	269741	9.70	ppb		97
45) Cyclohexane	4.61	56	235739	7.89	ppb		98
46) 1,1-Dichloropropene	4.70	75	226225	9.14	ppb		98
47) 2,2,4-Trimethylpentane	4.97	57	513181	7.51	ppb		99
49) Carbon Tetrachloride	4.70	117	197536	8.92	ppb		97
50) Tert Amyl Methyl Ether	5.00	73	480342	10.59	ppb	#	87
52) 1,2-DCA	4.88	62	277826	9.81	ppb		97
53) Benzene	4.87	78	725799	9.22	ppb		100
54) TCE	5.43	130	188516	9.28	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z27.D Vial: 27
Acq On : 09 Oct 20 20:11 Operator: LP,DG,CH
Sample : Ending CCV 10ug/L 10/8/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 11 12:28 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
55)	2-Pentanone	5.59	43	1867812	114.87 ppb	95
56)	1,2-Dichloropropane	5.61	63	197030	9.47 ppb	99
57)	Bromodichloromethane	5.85	83	221465	10.06 ppb	99
58)	Methyl Cyclohexane	5.60	83	239036	7.87 ppb	97
59)	Dibromomethane	5.71	174	122379	11.23 ppb	94
60)	MIBK (methyl isobutyl ket	6.39	43	917899	47.13 ppb	97
61)	1-Bromo-2-chloroethane	6.11	144	28395	10.43 ppb	88
63)	Cis-1,3-Dichloropropene	6.24	75	271385	9.95 ppb	97
64)	Toluene	6.54	91	755600	9.54 ppb	98
65)	Trans-1,3-Dichloropropene	6.73	75	239147	9.97 ppb	97
66)	1,1,2-TCA	6.88	97	160256	10.28 ppb	97
67)	2-Hexanone	7.13	43	628878	47.95 ppb	96
70)	1,2-EDB	7.34	107	159416	10.38 ppb	99
71)	Tetrachloroethene	7.03	166	181203	9.48 ppb	97
72)	1-Chlorohexane	7.79	91	226294	8.95 ppb	94
73)	1,1,1,2-Tetrachloroethane	7.88	131	156408	10.05 ppb	95
74)	m&p-Xylene	8.02	91	1283126	20.89 ppb	97
75)	o-Xylene	8.38	91	662922	11.07 ppb	97
76)	Styrene	8.39	104	490913	9.59 ppb	98
78)	1,3-Dichloropropane	7.04	76	301027	10.44 ppb	99
79)	Dibromochloromethane	7.24	129	140270	8.97 ppb	98
80)	Chlorobenzene	7.80	112	489268	9.16 ppb	97
81)	Ethylbenzene	7.91	91	841949	10.14 ppb	99
82)	Bromoform	8.55	173	86738	9.35 ppb	99
84)	Isopropylbenzene	8.74	105	794852	9.43 ppb	100
85)	1,1,2,2-Tetrachloroethane	9.00	83	200526	9.33 ppb	99
86)	1,2,3-Trichloropropane	9.04	110	68640	9.81 ppb	98
87)	t-1,4-Dichloro-2-Butene	9.06	53	50172	9.51 ppb	91
88)	Bromobenzene	9.01	77	412974	9.95 ppb	99
89)	n-Propylbenzene	9.13	91	985628	10.23 ppb	100
90)	4-Ethyltoluene	9.24	105	806436	9.26 ppb	99
91)	2-Chlorotoluene	9.20	91	681709	10.12 ppb	97
92)	1,3,5-Trimethylbenzene	9.30	105	707532	10.41 ppb	98
93)	4-Chlorotoluene	9.31	91	708311	10.14 ppb	95
94)	Tert-Butylbenzene	9.62	119	585075	9.30 ppb	99
95)	1,2,4-Trimethylbenzene	9.66	105	711837	9.51 ppb	100
96)	Sec-Butylbenzene	9.83	105	909073	9.08 ppb	98
97)	p-Isopropyltoluene	9.97	119	777226	10.12 ppb	99
98)	Benzyl Chloride	10.14	91	229020	7.37 ppb	99
99)	1,3-DCB	9.92	146	401187	9.32 ppb	99
100)	1,4-DCB	10.01	146	416364	9.10 ppb	98
101)	n-Butylbenzene	10.38	91	743100	8.82 ppb	100
102)	1,2-DCB	10.37	146	385909	9.80 ppb	99
103)	Hexachloroethane	10.63	201	85100	9.70 ppb	91
104)	1,2-Dibromo-3-chloropropan	11.13	157	37609	9.73 ppb	94
105)	1,2,4-Trichlorobenzene	11.96	180	277835	10.43 ppb	99
106)	Hexachlorobutadiene	12.15	225	131385	10.46 ppb	99
107)	Naphthalene	12.19	128	645560	9.50 ppb	98
108)	1,2,3-Trichlorobenzene	12.44	180	260619	11.51 ppb	98

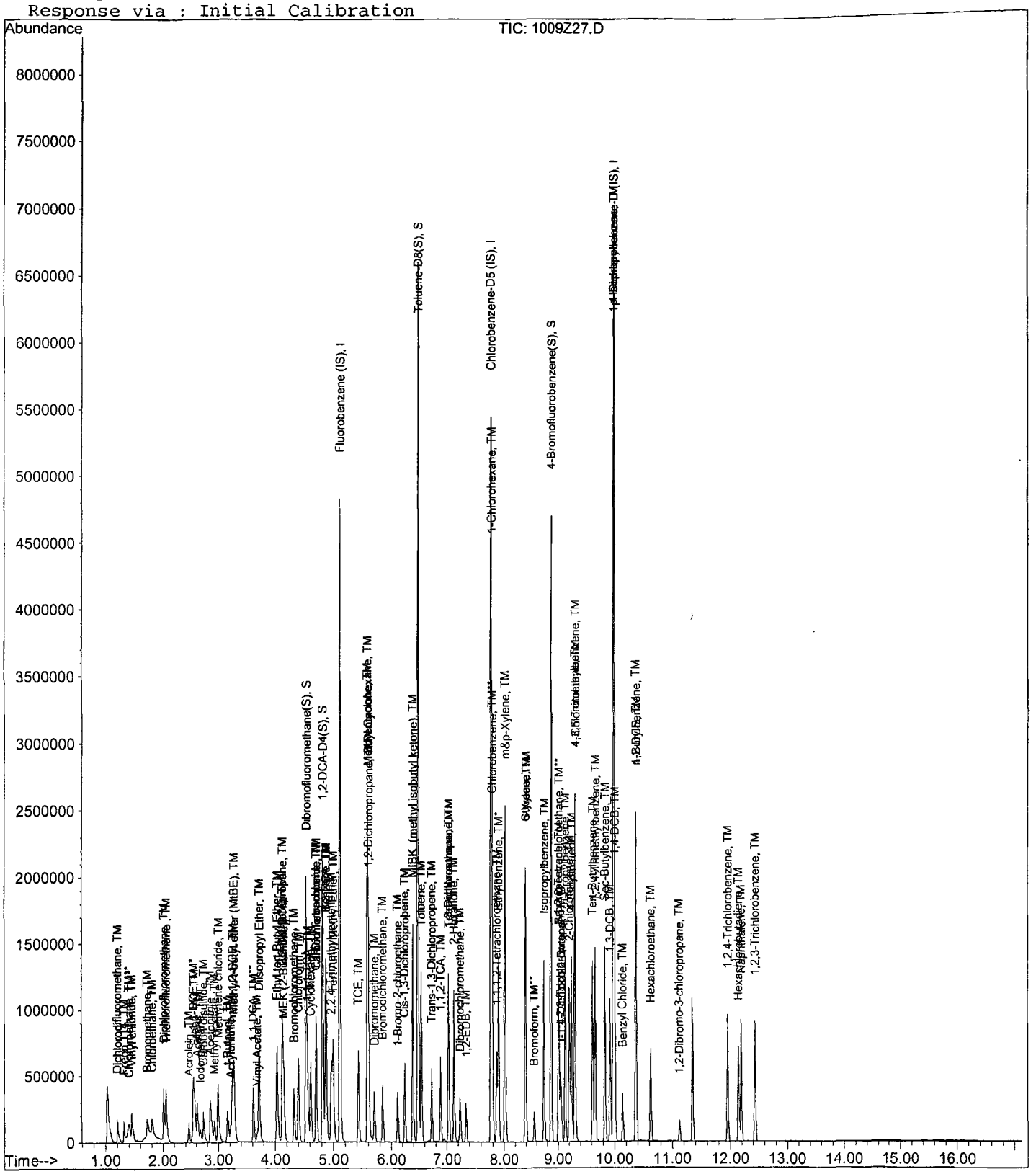
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1009Z27.D Vial: 27
Acq On : 09 Oct 20 20:11 Operator: LP,DG,CH
Sample : Ending CCV 10ug/L 10/8/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 11 12:28 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z25.D Vial: 25
Acq On : 09 Oct 20 19:25 Operator: LP,DG,CH
Sample : BA19639W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:56 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3337675	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.77	117	2419442	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.98	152	1335829	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.54	111	931391	27.53	ppb	0.00
Spiked Amount 25.000			Recovery = 110.116%			
48) 1,2-DCA-D4(S)	4.82	65	1221628	28.58	ppb	0.00
Spiked Amount 25.000			Recovery = 114.324%			
69) Toluene-D8(S)	6.48	98	3473980	25.29	ppb	0.00
Spiked Amount 25.000			Recovery = 101.144%			
77) 4-Bromofluorobenzene(S)	8.87	95	1266164	25.70	ppb	0.00
Spiked Amount 25.000			Recovery = 102.816%			

Target Compounds Qvalue

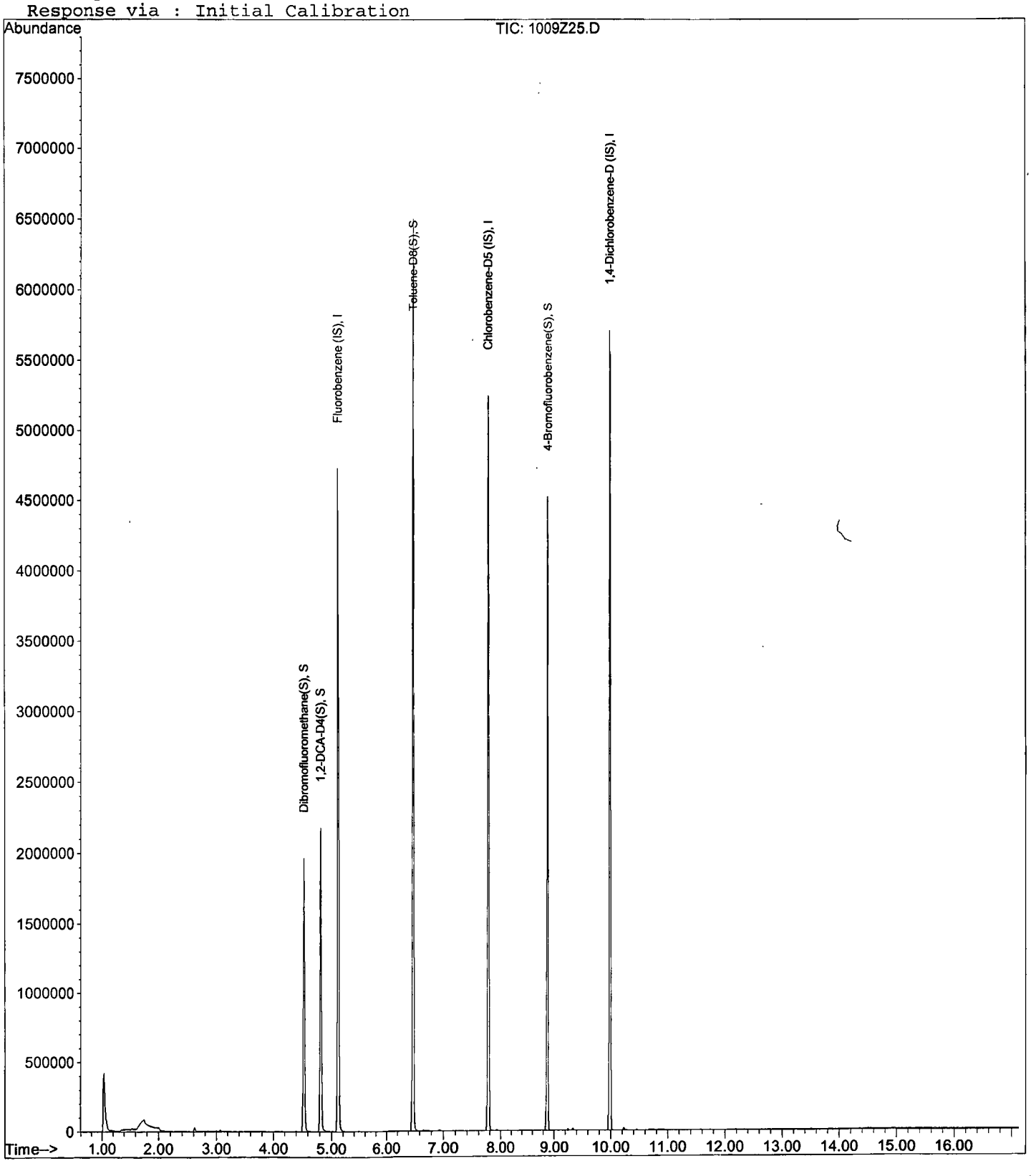
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1009Z25.D Vial: 25
Acq On : 09 Oct 20 19:25 Operator: LP,DG,CH
Sample : BA19639W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:56 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201011\Z1011W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 12 08:57:09 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z26.D Vial: 26
Acq On : 09 Oct 20 19:48 Operator: LP,DG,CH
Sample : BA19640W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:55 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3342257	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.77	117	2436716	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.99	152	1342814	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.54	111	929139	27.42	ppb	0.00
Spiked Amount 25.000			Recovery = 109.700%			
48) 1,2-DCA-D4(S)	4.82	65	1237163	28.91	ppb	0.00
Spiked Amount 25.000			Recovery = 115.620%			
69) Toluene-D8(S)	6.48	98	3469333	25.08	ppb	0.00
Spiked Amount 25.000			Recovery = 100.332%			
77) 4-Bromofluorobenzene(S)	8.87	95	1262965	25.48	ppb	0.00
Spiked Amount 25.000			Recovery = 101.936%			

Target Compounds Qvalue

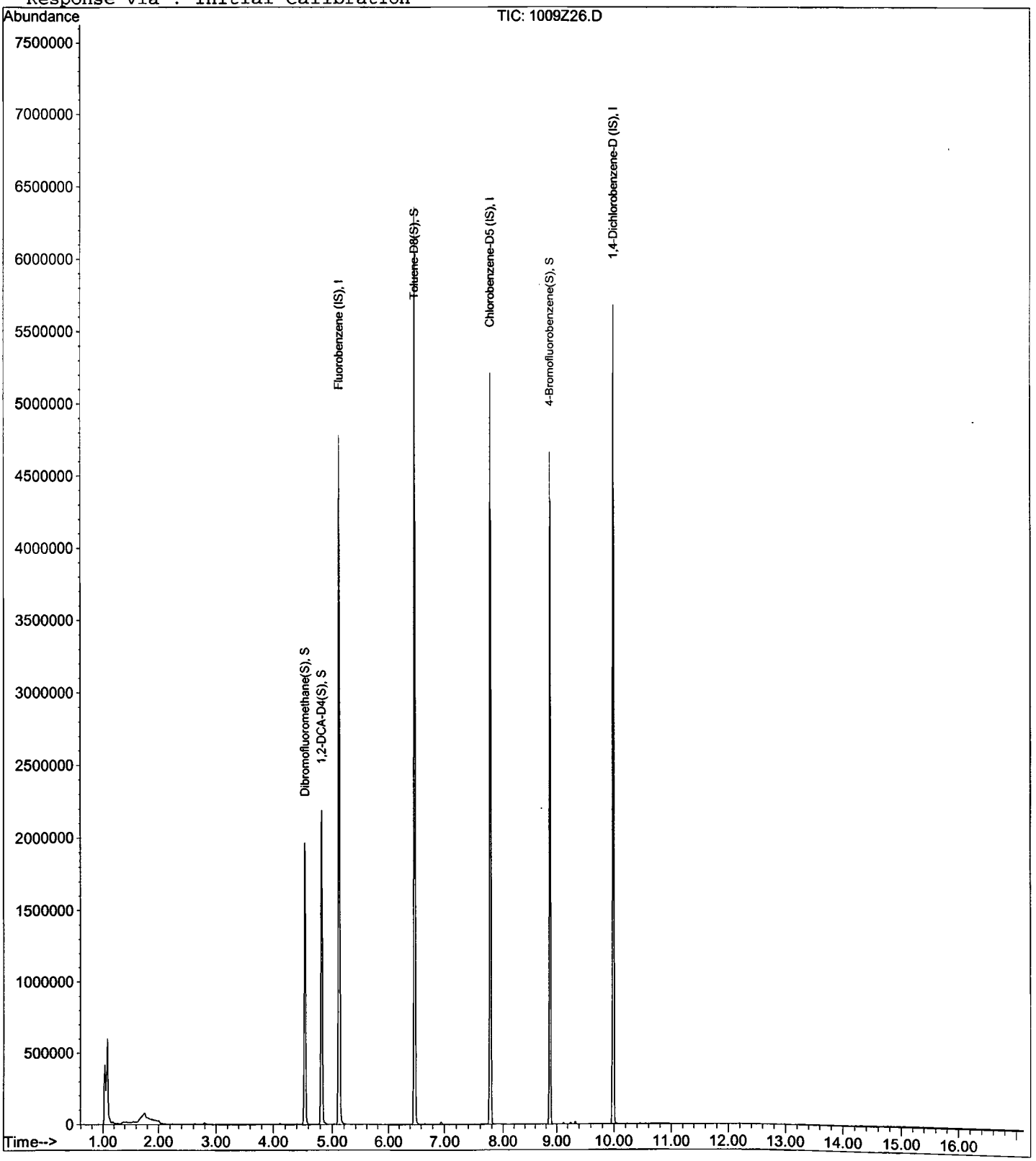
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1009Z26.D Vial: 26
Acq On : 09 Oct 20 19:48 Operator: LP,DG,CH
Sample : BA19640W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:55 2020 Quant Results File: Z1006W.RES

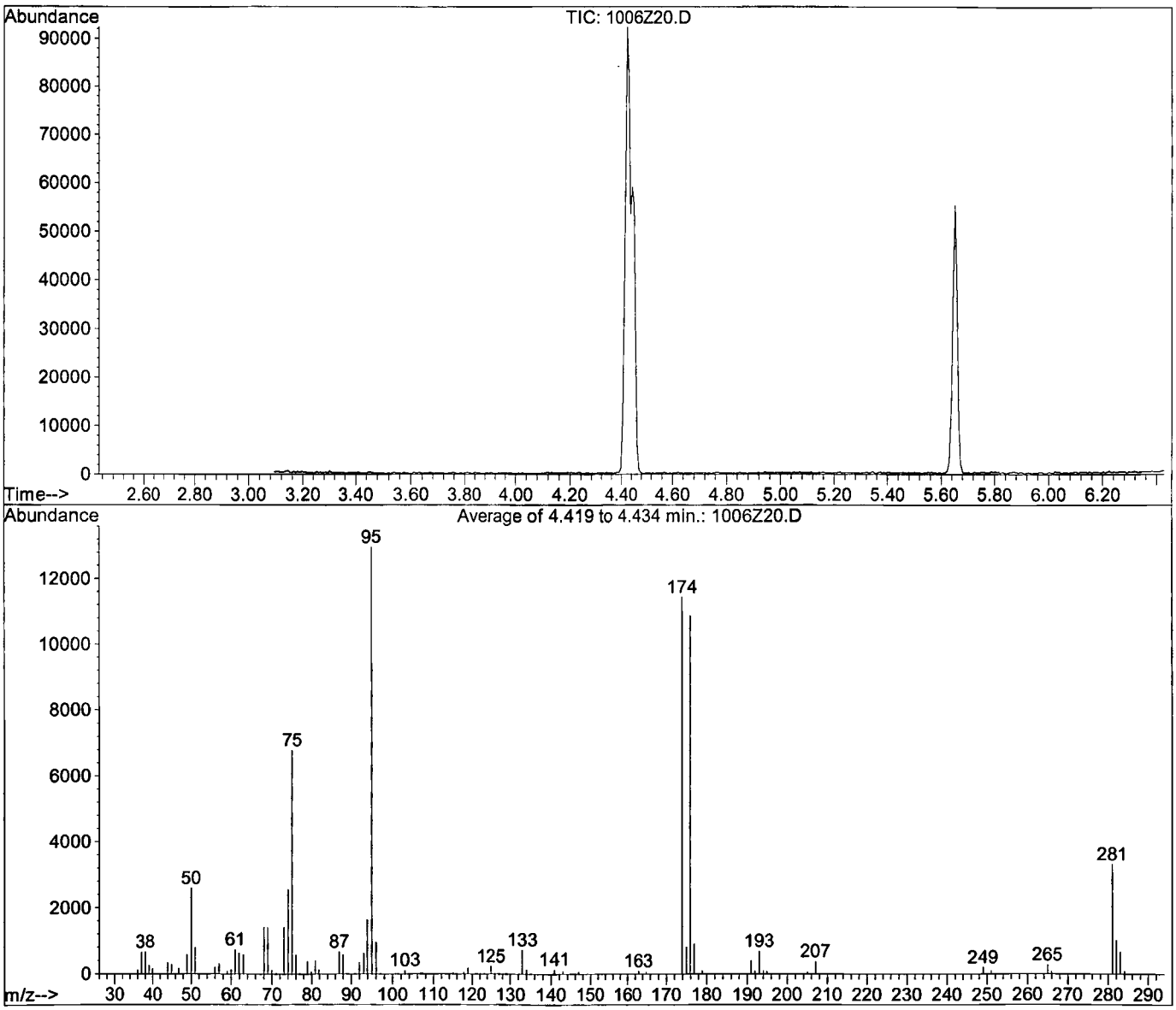
Method : M:\ZEUS\DATA\201011\Z1011W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 12 08:57:09 2020
Response via : Initial Calibration



Data File : M:\ZEUS\DATA\201006\1006Z20.D
Acq On : 06 Oct 20 15:00
Sample : 25ug/L BFB STD 9/14/20
Misc :

Vial: 1
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Method : M:\ZEUS\DATA\201011\Z1011W.M (RTE Integrator)
Title : METHOD 8260B



Spectrum Information: Average of 4.419 to 4.434 min.

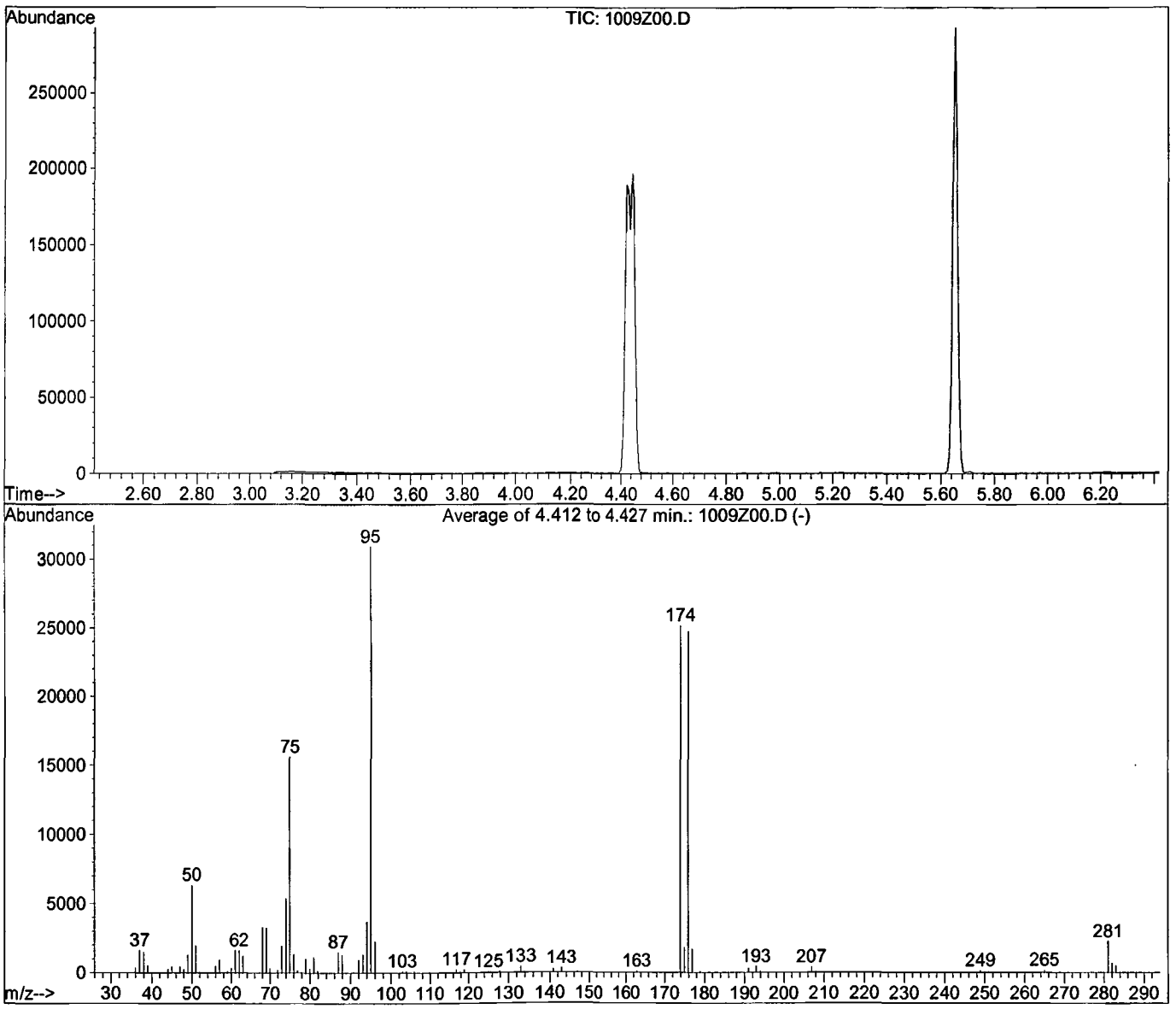
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.0	2592	PASS
75	95	30	60	52.4	6788	PASS
95	95	100	100	100.0	12962	PASS
96	95	5	9	7.4	955	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	200	88.2	11438	PASS
175	174	5	9	7.2	820	PASS
176	174	95	101	95.2	10884	PASS
177	176	5	9	8.3	907	PASS

1006Z20.D Z1011W.M Thu Nov 05 07:48:53 2020

Data File : M:\ZEUS\DATA\201006\1009Z00.D
Acq On : 09 Oct 20 09:14
Sample : 25ug/L BFB STD 9/14/20
Misc :

Vial: 1
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Method : M:\ZEUS\DATA\201011\Z1011W.M (RTE Integrator)
Title : METHOD 8260B



Spectrum Information: Average of 4.412 to 4.427 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.5	6338	PASS
75	95	30	60	50.6	15625	PASS
95	95	100	100	100.0	30907	PASS
96	95	5	9	7.3	2259	PASS
173	174	0.00	2	0.2	62	PASS
174	95	50	200	81.5	25196	PASS
175	174	5	9	7.2	1802	PASS
176	174	95	101	98.3	24762	PASS
177	176	5	9	6.8	1691	PASS

1009Z00.D Z1011W.M Thu Nov 05 07:50:35 2020

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z10.D Vial: 10
Acq On : 09 Oct 20 13:37 Operator: LP,DG,CH
Sample : 201008A BLK Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 11 12:33 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3459125	25.00	ppb	0.00
68) Chlorobenzene-D5 (IS)	7.77	117	2517732	25.00	ppb	0.00
83) 1,4-Dichlorobenzene-D (IS)	9.98	152	1371218	25.00	ppb	0.00
System Monitoring Compounds						
43) Dibromofluoromethane(S)	4.54	111	948426	27.05	ppb	0.00
Spiked Amount 25.000			Recovery =	108.192%		
48) 1,2-DCA-D4(S)	4.81	65	1267184	28.61	ppb	0.00
Spiked Amount 25.000			Recovery =	114.424%		
69) Toluene-D8(S)	6.48	98	3597198	25.17	ppb	0.00
Spiked Amount 25.000			Recovery =	100.668%		
77) 4-Bromofluorobenzene(S)	8.87	95	1300456	25.41	ppb	0.00
Spiked Amount 25.000			Recovery =	101.624%		

Target Compounds Qvalue

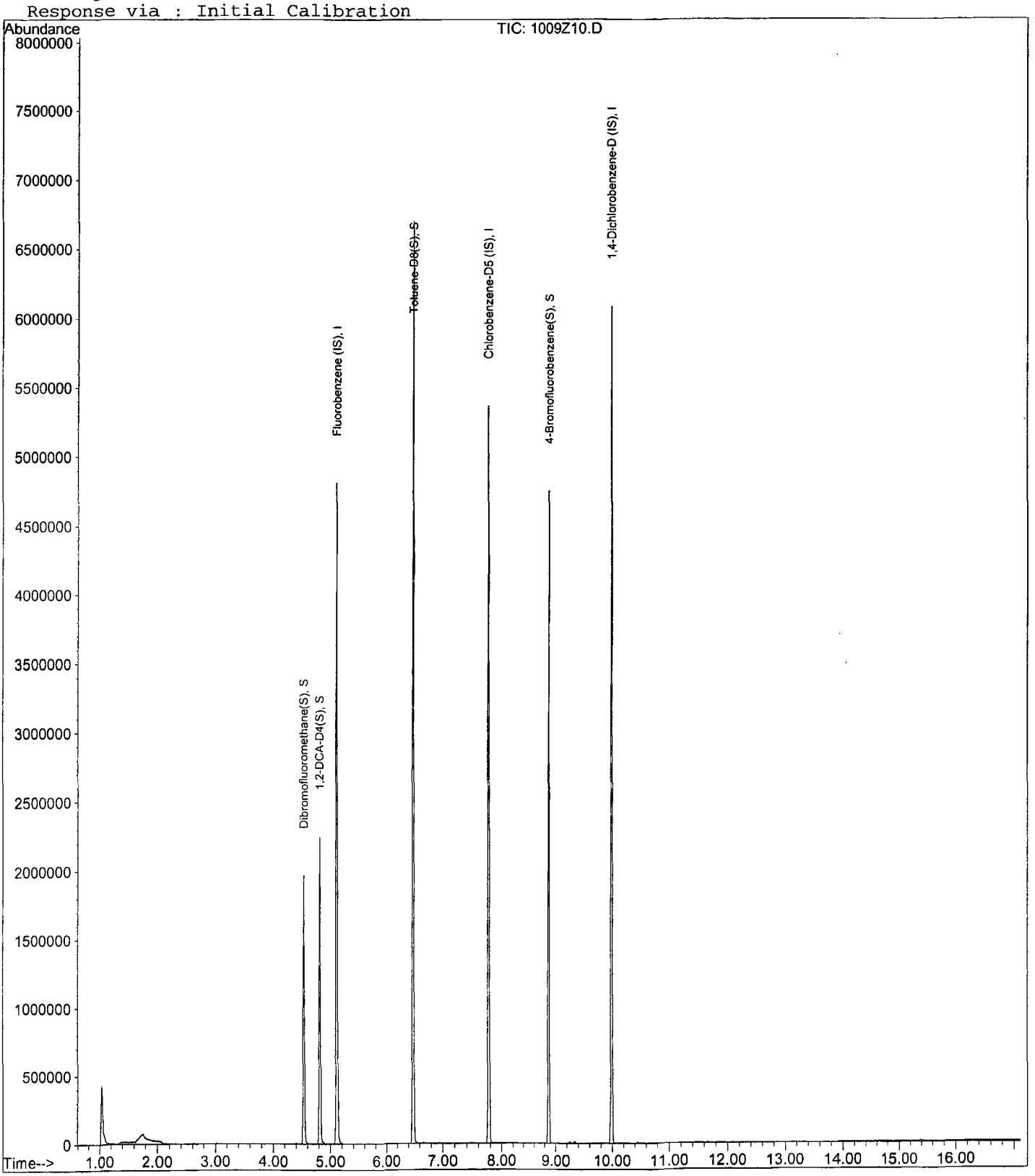
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1009Z10.D Vial: 10
Acq On : 09 Oct 20 13:37 Operator: LP,DG,CH
Sample : 201008A BLK Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 11 12:33 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z03.D Vial: 3
Acq On : 09 Oct 20 10:27 Operator: LP,DG,CH
Sample : 201008A LCS 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 9 12:04 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3639700	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.77	117	2614194	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.98	152	1438589	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.54	111	1025026	27.78	ppb		0.00
Spiked Amount 25.000			Recovery = 111.128%				
48) 1,2-DCA-D4(S)	4.82	65	1316034	28.24	ppb		0.00
Spiked Amount 25.000			Recovery = 112.940%				
69) Toluene-D8(S)	6.48	98	3888177	26.15	ppb		0.00
Spiked Amount 25.000			Recovery = 104.608%				
77) 4-Bromofluorobenzene(S)	8.87	95	1426885	26.69	ppb		0.00
Spiked Amount 25.000			Recovery = 106.744%				
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.20	87	48093	8.00	ppb		96
4) Freon 114	1.31	85	47638	6.56	ppb		95
5) Chloromethane	1.38	50	223642	8.89	ppb		98
6) Vinyl chloride	1.45	62	215676	9.46	ppb		96
9) Bromomethane	1.72	94	79203	8.80	ppb		100
10) Chloroethane	1.81	64	99070	8.95	ppb		98
11) Dichlorofluoromethane	2.01	67	395921	9.09	ppb		99
12) Trichlorofluoromethane	2.06	101	288700	9.39	ppb		98
16) Acrolein	2.46	55	78800	118.45	ppb		94
17) Acetone	2.62	43	339921	43.61	ppb		98
18) Freon-113	2.57	101	128806	7.01	ppb		96
19) 1,1-DCE	2.55	61	238584	7.83	ppb		94
21) Acetonitrile	2.86	40	92297	88.58	ppb		94
22) t-Butanol	3.16	59	271932	142.90	ppb	#	83
23) Methyl Acetate	2.93	43	163338	8.08	ppb		97
24) Iodomethane	2.67	142	113634	8.65	ppb		99
25) Acrylonitrile	3.22	52	72818	8.79	ppb		99
26) Methylene chloride	3.00	84	191544	9.09	ppb		92
27) Carbon disulfide	2.73	76	170048	6.64	ppb		98
28) Methyl t-butyl ether (MtBE	3.28	73	517458	10.51	ppb		98
29) Trans-1,2-DCE	3.25	61	236872	8.22	ppb		100
31) Diisopropyl Ether	3.72	45	586196	9.02	ppb		96
33) 1,1-DCA	3.62	63	329836	8.68	ppb		98
34) Vinyl Acetate	3.69	43	125148	9.24	ppb		98
35) Ethyl tert Butyl Ether	4.04	59	536059	10.05	ppb		99
36) MEK (2-Butanone)	4.15	43	483531	45.27	ppb		94
37) Cis-1,2-DCE	4.12	61	304850	8.98	ppb		98
38) 2,2-Dichloropropane	4.13	77	265561	9.78	ppb		96
41) Chloroform	4.40	83	339602	9.24	ppb		98
42) Bromochloromethane	4.32	49	161271	8.52	ppb		95
44) 1,1,1-TCA	4.56	97	269960	9.12	ppb		96
45) Cyclohexane	4.61	56	236075	7.42	ppb		98
46) 1,1-Dichloropropene	4.70	75	232376	8.82	ppb		98
47) 2,2,4-Trimethylpentane	4.96	57	459509	6.44	ppb		99
49) Carbon Tetrachloride	4.70	117	201013	8.53	ppb		92
50) Tert Amyl Methyl Ether	5.00	73	479963	9.99	ppb	#	87
52) 1,2-DCA	4.88	62	270404	8.98	ppb		98
53) Benzene	4.87	78	730307	8.72	ppb		99
54) TCE	5.43	130	186601	8.64	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z03.D Vial: 3
Acq On : 09 Oct 20 10:27 Operator: LP,DG,CH
Sample : 201008A LCS 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 9 12:04 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
55)	2-Pentanone	5.59	43	1935633	112.22	ppb		95
56)	1,2-Dichloropropane	5.61	63	196338	8.88	ppb		98
57)	Bromodichloromethane	5.85	83	222185	9.49	ppb		99
58)	Methyl Cyclohexane	5.60	83	236415	7.32	ppb		100
59)	Dibromomethane	5.70	174	120208	10.37	ppb		95
60)	MIBK (methyl isobutyl ket	6.39	43	920961	44.80	ppb		95
61)	1-Bromo-2-chloroethane	6.11	144	28034	9.68	ppb		85
63)	Cis-1,3-Dichloropropene	6.24	75	278889	9.64	ppb		97
64)	Toluene	6.54	91	752944	8.94	ppb		100
65)	Trans-1,3-Dichloropropene	6.73	75	242640	9.54	ppb		97
66)	1,1,2-TCA	6.88	97	159081	9.59	ppb		97
67)	2-Hexanone	7.13	43	639071	46.09	ppb		96
70)	1,2-EDB	7.34	107	159614	9.90	ppb		99
71)	Tetrachloroethene	7.03	166	181767	9.06	ppb		94
72)	1-Chlorohexane	7.79	91	234397	8.84	ppb		92
73)	1,1,1,2-Tetrachloroethane	7.87	131	155263	9.51	ppb		98
74)	m&p-Xylene	8.02	91	1299858	20.16	ppb		97
75)	o-Xylene	8.38	91	665344	10.58	ppb		97
76)	Styrene	8.39	104	491453	9.17	ppb		99
78)	1,3-Dichloropropane	7.04	76	293078	9.68	ppb		98
79)	Dibromochloromethane	7.24	129	140347	8.61	ppb		98
80)	Chlorobenzene	7.80	112	486805	8.68	ppb		96
81)	Ethylbenzene	7.91	91	840493	9.64	ppb		100
82)	Bromoform	8.55	173	87513	9.08	ppb		98
84)	Isopropylbenzene	8.73	105	803889	9.14	ppb		98
85)	1,1,2,2-Tetrachloroethane	9.00	83	209510	9.33	ppb		98
86)	1,2,3-Trichloropropane	9.04	110	71024	9.72	ppb		94
87)	t-1,4-Dichloro-2-Butene	9.06	53	54031	9.74	ppb	#	80
88)	Bromobenzene	9.01	77	403474	9.30	ppb		95
89)	n-Propylbenzene	9.13	91	998171	9.91	ppb		98
90)	4-Ethyltoluene	9.24	105	824419	9.07	ppb		97
91)	2-Chlorotoluene	9.20	91	686278	9.75	ppb		97
92)	1,3,5-Trimethylbenzene	9.30	105	700799	9.86	ppb		99
93)	4-Chlorotoluene	9.31	91	716601	9.81	ppb		97
94)	Tert-Butylbenzene	9.62	119	581181	8.88	ppb		98
95)	1,2,4-Trimethylbenzene	9.66	105	708798	9.09	ppb		98
96)	Sec-Butylbenzene	9.83	105	873668	8.39	ppb		98
97)	p-Isopropyltoluene	9.97	119	769213	9.59	ppb		100
98)	Benzyl Chloride	10.14	91	313009	9.07	ppb		99
99)	1,3-DCB	9.92	146	406387	9.04	ppb		100
100)	1,4-DCB	10.01	146	412093	8.62	ppb		98
101)	n-Butylbenzene	10.38	91	717556	8.20	ppb		100
102)	1,2-DCB	10.37	146	381677	9.28	ppb		97
103)	Hexachloroethane	10.63	201	85336	9.42	ppb		91
104)	1,2-Dibromo-3-chloropropan	11.13	157	37435	9.37	ppb		93
105)	1,2,4-Trichlorobenzene	11.95	180	263358	9.58	ppb		100
106)	Hexachlorobutadiene	12.14	225	107906	8.22	ppb		97
107)	Naphthalene	12.19	128	640880	9.07	ppb		98
108)	1,2,3-Trichlorobenzene	12.44	180	248807	10.51	ppb		100

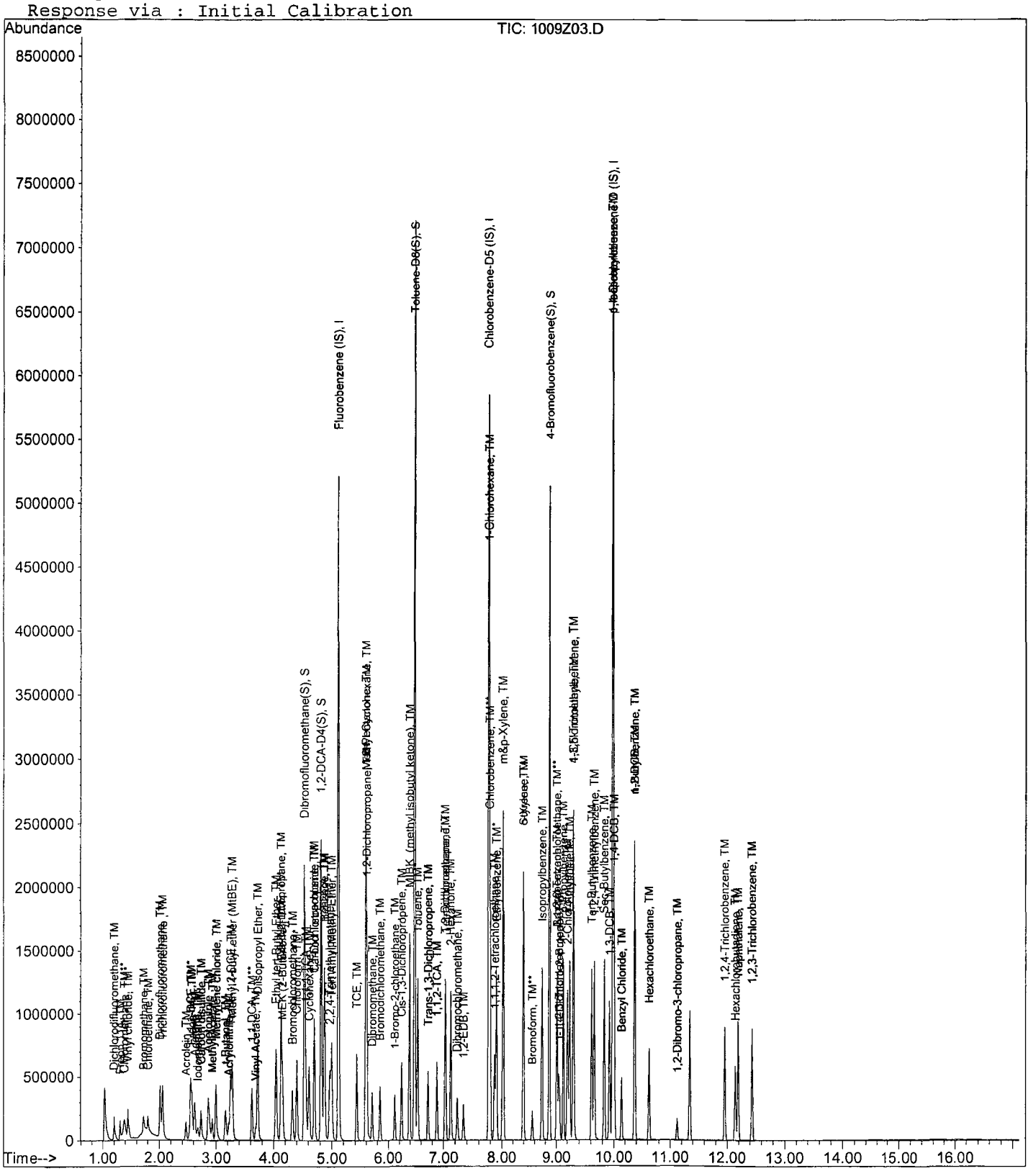
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1009Z03.D Vial: 3
Acq On : 09 Oct 20 10:27 Operator: LP,DG,CH
Sample : 201008A LCS 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 9 12:04 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z04.D Vial: 4
Acq On : 09 Oct 20 10:50 Operator: LP,DG,CH
Sample : 201008A LCSD 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 9 12:04 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3437616	25.00	ppb		0.00
68) Chlorobenzene-D5 (IS)	7.77	117	2461824	25.00	ppb		0.00
83) 1,4-Dichlorobenzene-D (IS)	9.98	152	1350241	25.00	ppb		0.00
System Monitoring Compounds							
43) Dibromofluoromethane(S)	4.54	111	960938	27.58	ppb		0.00
Spiked Amount 25.000			Recovery =	110.304%			
48) 1,2-DCA-D4(S)	4.82	65	1235650	28.07	ppb		0.00
Spiked Amount 25.000			Recovery =	112.276%			
69) Toluene-D8(S)	6.48	98	3695225	26.38	ppb		0.00
Spiked Amount 25.000			Recovery =	105.528%			
77) 4-Bromofluorobenzene(S)	8.87	95	1332765	26.49	ppb		0.00
Spiked Amount 25.000			Recovery =	105.968%			
Target Compounds							Qvalue
3) Dichlorodifluoromethane	1.20	87	42675	7.51	ppb		96
4) Freon 114	1.31	85	46798	6.90	ppb		92
5) Chloromethane	1.38	50	212881	8.96	ppb		99
6) Vinyl chloride	1.45	62	203895	9.47	ppb		98
9) Bromomethane	1.72	94	74060	8.70	ppb		96
10) Chloroethane	1.81	64	94741	9.07	ppb		99
11) Dichlorofluoromethane	2.01	67	379416	9.22	ppb		97
12) Trichlorofluoromethane	2.06	101	257371	8.86	ppb		100
16) Acrolein	2.46	55	74632	118.78	ppb		98
17) Acetone	2.62	43	317386	43.06	ppb		99
18) Freon-113	2.57	101	120676	6.96	ppb		96
19) 1,1-DCE	2.55	61	237359	8.25	ppb		97
21) Acetonitrile	2.86	40	88950	90.38	ppb		99
22) t-Butanol	3.16	59	255172	141.97	ppb	#	84
23) Methyl Acetate	2.93	43	151260	7.92	ppb		94
24) Iodomethane	2.67	142	113845	9.06	ppb		96
25) Acrylonitrile	3.22	52	66164	8.45	ppb		99
26) Methylene chloride	3.00	84	180027	9.05	ppb		93
27) Carbon disulfide	2.73	76	173888	7.19	ppb		98
28) Methyl t-butyl ether (MtBE	3.28	73	471229	10.18	ppb		100
29) Trans-1,2-DCE	3.25	61	229142	8.42	ppb		98
31) Diisopropyl Ether	3.72	45	544481	8.88	ppb		98
33) 1,1-DCA	3.62	63	308532	8.60	ppb		96
34) Vinyl Acetate	3.69	43	109173	8.54	ppb		97
35) Ethyl tert Butyl Ether	4.04	59	490773	9.77	ppb		96
36) MEK (2-Butanone)	4.15	43	453098	44.92	ppb		97
37) Cis-1,2-DCE	4.12	61	290590	9.06	ppb		96
38) 2,2-Dichloropropane	4.13	77	253980	9.91	ppb		97
41) Chloroform	4.40	83	321381	9.26	ppb		100
42) Bromochloromethane	4.32	49	147116	8.23	ppb		94
44) 1,1,1-TCA	4.56	97	264853	9.48	ppb		97
45) Cyclohexane	4.61	56	223163	7.43	ppb		98
46) 1,1-Dichloropropene	4.70	75	226652	9.11	ppb		98
47) 2,2,4-Trimethylpentane	4.97	57	502515	7.34	ppb		98
49) Carbon Tetrachloride	4.70	117	196796	8.84	ppb		100
50) Tert Amyl Methyl Ether	5.00	73	437991	9.68	ppb	#	85
52) 1,2-DCA	4.88	62	251585	8.85	ppb		98
53) Benzene	4.87	78	683320	8.64	ppb		99
54) TCE	5.43	130	176789	8.67	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z04.D Vial: 4
Acq On : 09 Oct 20 10:50 Operator: LP,DG,CH
Sample : 201008A LCSD 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 9 12:04 2020 Quant Results File: Z1006W.RES

Quant Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55)	2-Pentanone	5.59	43	1799832	110.65	ppb	94
56)	1,2-Dichloropropane	5.61	63	185501	8.88	ppb	100
57)	Bromodichloromethane	5.85	83	203814	9.22	ppb	100
58)	Methyl Cyclohexane	5.60	83	229426	7.52	ppb	92
59)	Dibromomethane	5.71	174	111357	10.17	ppb	89
60)	MIBK (methyl isobutyl ket	6.39	43	862737	44.49	ppb	96
61)	1-Bromo-2-chloroethane	6.11	144	26203	9.58	ppb	99
63)	Cis-1,3-Dichloropropene	6.24	75	253940	9.32	ppb	96
64)	Toluene	6.54	91	716547	9.01	ppb	98
65)	Trans-1,3-Dichloropropene	6.73	75	224114	9.35	ppb	94
66)	1,1,2-TCA	6.88	97	144676	9.24	ppb	96
67)	2-Hexanone	7.13	43	601093	45.93	ppb	96
70)	1,2-EDB	7.34	107	143253	9.43	ppb	98
71)	Tetrachloroethene	7.03	166	176603	9.34	ppb	95
72)	1-Chlorohexane	7.79	91	232732	9.32	ppb	87
73)	1,1,1,2-Tetrachloroethane	7.87	131	143507	9.33	ppb	98
74)	m&p-Xylene	8.02	91	1240620	20.43	ppb	98
75)	o-Xylene	8.38	91	630534	10.65	ppb	99
76)	Styrene	8.39	104	458385	9.09	ppb	97
78)	1,3-Dichloropropane	7.04	76	271356	9.52	ppb	99
79)	Dibromochloromethane	7.24	129	129221	8.45	ppb	96
80)	Chlorobenzene	7.80	112	461732	8.74	ppb	98
81)	Ethylbenzene	7.91	91	801675	9.77	ppb	98
82)	Bromoform	8.55	173	80242	8.91	ppb	98
84)	Isopropylbenzene	8.74	105	773821	9.36	ppb	100
85)	1,1,2,2-Tetrachloroethane	9.00	83	192571	9.14	ppb	96
86)	1,2,3-Trichloropropane	9.04	110	63758	9.29	ppb	96
87)	t-1,4-Dichloro-2-Butene	9.06	53	48438	9.39	ppb	89
88)	Bromobenzene	9.01	77	375973	9.23	ppb	96
89)	n-Propylbenzene	9.13	91	974743	10.31	ppb	99
90)	4-Ethyltoluene	9.24	105	798532	9.35	ppb	99
91)	2-Chlorotoluene	9.20	91	656550	9.94	ppb	98
92)	1,3,5-Trimethylbenzene	9.30	105	678956	10.18	ppb	98
93)	4-Chlorotoluene	9.31	91	676681	9.87	ppb	96
94)	Tert-Butylbenzene	9.62	119	565544	9.18	ppb	99
95)	1,2,4-Trimethylbenzene	9.66	105	672575	9.18	ppb	100
96)	Sec-Butylbenzene	9.83	105	886318	9.03	ppb	99
97)	p-Isopropyltoluene	9.97	119	760983	10.10	ppb	99
98)	Benzyl Chloride	10.14	91	282769	8.79	ppb	98
99)	1,3-DCB	9.92	146	376418	8.92	ppb	99
100)	1,4-DCB	10.01	146	387150	8.62	ppb	97
101)	n-Butylbenzene	10.37	91	747280	9.02	ppb	99
102)	1,2-DCB	10.37	146	353186	9.15	ppb	98
103)	Hexachloroethane	10.63	201	81210	9.52	ppb	96
104)	1,2-Dibromo-3-chloropropan	11.13	157	33294	9.00	ppb	91
105)	1,2,4-Trichlorobenzene	11.95	180	258520	9.96	ppb	97
106)	Hexachlorobutadiene	12.14	225	130298	10.57	ppb	98
107)	Naphthalene	12.19	128	611945	9.21	ppb	99
108)	1,2,3-Trichlorobenzene	12.44	180	245027	11.03	ppb	99

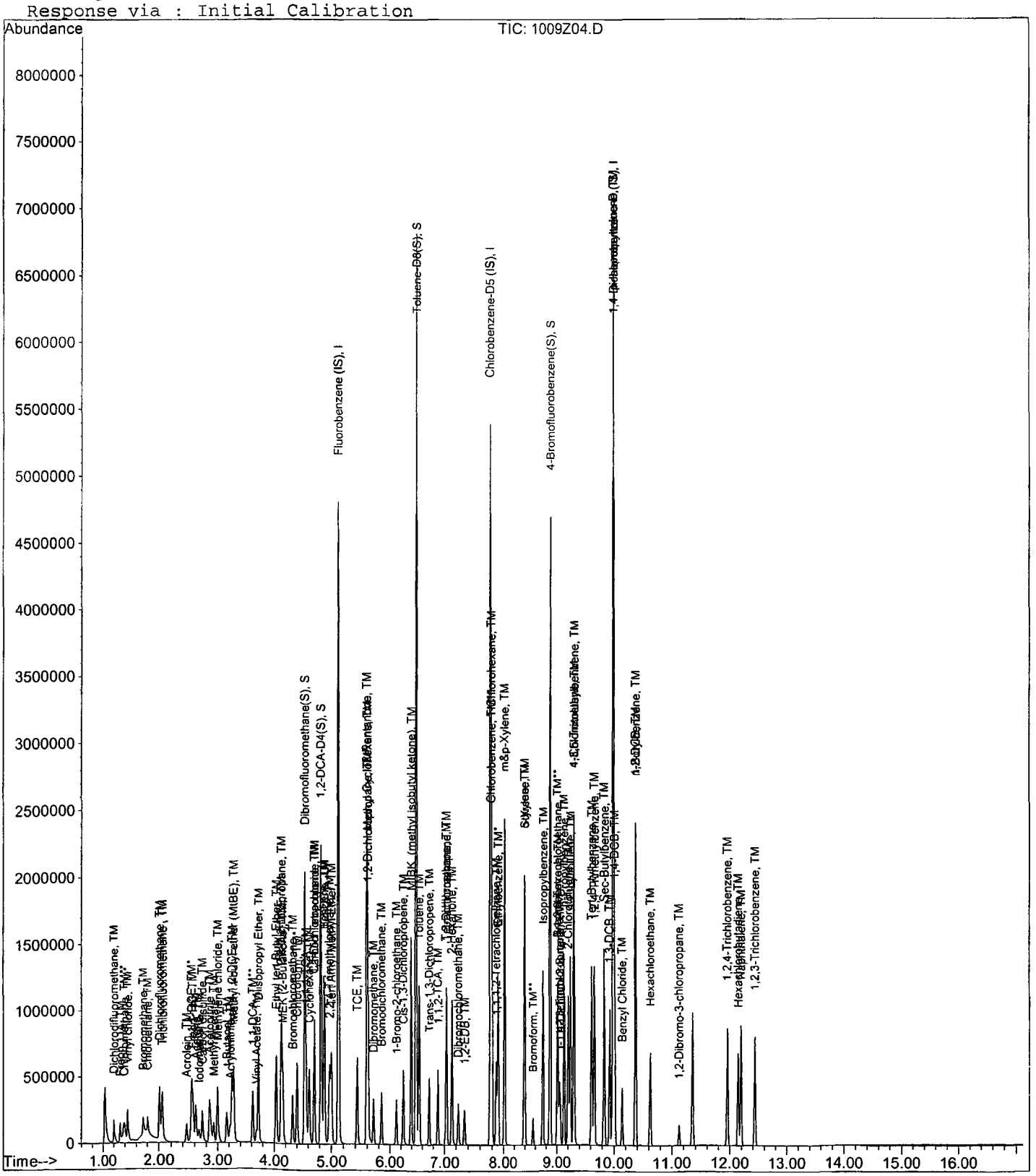
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1009Z04.D Vial: 4
Acq On : 09 Oct 20 10:50 Operator: LP,DG,CH
Sample : 201008A LCSD 10ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 9 12:04 2020 Quant Results File: Z1006W.RES

Method : M:\ZEUS\DATA\201006\Z1006W.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Algorithm Check for Linear Regression

Data file:	1006Z33.D
Analyte:	Chloroethane
Area of target analyte:	102056
Area of internal standard:	2877447
concentration of internal standard:	25
multiplyer:	1
amt:	0.00155
response ratio:	0.0717

$$\frac{((\text{Area pk/area IS}) - \text{constant term}) * (\text{conc IS} * \text{multiplyer})}{\text{slope}} =$$

11.83

Primary and Secondary Working Standards

Primary Standards

VOA STD 7

Prepared: 09/24/20 A
Expires: 11/23/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses STD	Phenova	ALO-101206	2,000	**CL14506-50536**	**09/24/21**	**10/31/24**	100uL	4mL	Methanol	50
Hexachloroethane	Absolute	70199	1,000	**091818-50779**	**09/24/21**	**09/18/23**	200uL			50
Benzyl Chloride	Accusta	M-8010-01	1,000	**052820-50459**	**09/24/21**	**05/28/21**	200uL			50

VOA STD 8

Prepared: 09/24/20 B
Expires: 10/21/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Additions STD	Phenova	ALO-130175	2,000	**CL15724-50828**	**09/24/21**	**09/30/22**	100uL	4mL	Methanol	50
502.2 Cal. Std.	Phenova	ALO-101200	2,000	**CL14379-50560**	**09/24/21**	**10/31/24**	100uL			50
Vinyl Acetate	Phenova	ALO-101228	2,000	**CL15825-50816**	**09/24/21**	**10/21/20**	100uL			50

VOA STD TBA

Prepared: 09/24/20 C
Expires: 10/21/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOC Mix	Phenova	ALO-130176	2,000	**CL15725-50773**	**09/24/21**	**09/30/23**	500uL	4mL	Methanol	250
Acrolein	Phenova	ALO-130549	10,000	**CL15829-50817**	**09/24/21**	**10/21/20**	100uL			250

VOA STD 1

Prepared: 09/24/20 D
Expires: 11/23/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE	Absolute	82408	2,000	**121119-50467**	**09/24/21**	**12/11/22**	50	2mL	Methanol	50

VOA STD 2

Prepared: 09/24/20 E
Expires: 11/23/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Std.	Phenova	ALO-109211	2,000	**CL12730-50634**	**09/24/21**	**08/31/28**	100	4mL	Methanol	50

VOA STD 9

Prepared: 09/24/20 F
Expires: 11/23/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 7		VOA STD. 9	50	Prepared 09/24/20	**09/24/21**	N/A	200uL	2mL	Methanol	5
VOA STD. 8			50	Prepared 09/24/20	**09/24/21**	N/A	200uL			5

VOA STD. 10

Prepared: 09/24/20 G
Expires: 11/23/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 1		VOA STD. 10	50	Prepared 09/24/20	**09/24/21**	N/A	200uL	2mL	Methanol	5

VOA STD. 12

Prepared: 09/24/20 H
Expires: 11/23/20
Prepared By (Initials): CH
Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA STD. 2		VOA STD. 12	50	Prepared 09/24/20	**09/24/21**	N/A	200uL	2mL	Methanol	5

Second Source (SS) Standards

VOA STD. 3

Prepared: 09/24/20 I

Expires: 11/23/20

Prepared By (Initials): CH

Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Ketones Standard	Phenova	ALO-101211	2,000	CL13994-50638	09/24/21	08/31/29	50uL	2mL	Methanol	50

VOA STD. Gases

Prepared: 09/24/20 J

Expires: 11/23/20

Prepared By (Initials): CH

Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260 Gases (SS)	Phenova	ALO-101206	2,000	CL14505-50823	09/24/21	10/31/24	50uL	2mL	Methanol	50

VOA STD. 6

Prepared: 09/24/20 K

Expires: 10/08/20

Prepared By (Initials): CH

Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
502.2 Calibration STD. (54-compounds)	Phenova	ALO-101200	2,000	CL14381-50564	09/24/21	10/31/24	50uL	2mL	Methanol	50
Vinyl Acetate	Phenova	ALO-101228	2,000	CL15742-50741	09/06/21	10/08/20	50uL			50
Hexachloroethane	Accustan	AS-E0011	1,000	219061767-50625	09/24/21	06/28/29	100uL			50
Benzyl Chloride	Accustan	M-8010-01	200	219111303-50801	09/24/21	12/25/21	500uL			50

VOA STD. TBA

Prepared: 09/24/20 L

Expires: 09/23/20

Prepared By (Initials): CH

Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Custom VOA Mix (4-3)	Phenova	ALO-130176	2,000	CL12929-50569	09/24/21	11/30/20	250uL	2mL	Methanol	250
Acrolein	Phenova	ALO-101224	10,000	CL15776-50742	09/15/21	09/23/20	50uL			250

VOA STD. 0

Prepared: 09/24/20 M

Expires: 11/23/20

Prepared By (Initials): CH

Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Addition STD.	Phenova	ALO-130175	2,000	CL14058-50578	09/24/21	08/31/21	50uL	2mL	Methanol	50

VOA STD. 2-CEVE

Prepared: 09/24/20 N

Expires: 11/23/20

Prepared By (Initials): CH

Methanol Lot No. DW117-US-0095

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
2-CEVE (SS)	Absolute	82408	2,000	011320-50462	09/24/21	01/13/23	50uL	2mL	Methanol	50

Zeus 8260 Standard Prep

Zeus 8260 Water Calibration Curve

Prepared By (Initials): CH

0.3ug/L
Prepared: 10/06/20
Expires: 10/21/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	0.3ug/L	5	Prepared 09/24/20	11/23/20	N/A	3uL	50mL	P&T Water	0.3
VOA STD. 1	Absolute		50	Prepared 09/24/20	11/23/20	N/A	5uL			5
VOA STD. 2	Phenova		100	Prepared 09/24/20	11/23/20	N/A	2.5uL			5
VOA STD. TBA	Various		250	Prepared 09/24/20	10/21/20	N/A	2uL			10

0.5ug/L
Prepared: 10/06/20
Expires: 10/21/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	0.5ug/L	5	Prepared 09/24/20	11/23/20	N/A	5uL	50mL	P&T Water	0.5
VOA STD. 1	Absolute		50	Prepared 09/24/20	11/23/20	N/A	10uL			10
VOA STD. 2	Phenova		100	Prepared 09/24/20	11/23/20	N/A	5uL			10
VOA STD. TBA	Various		250	Prepared 09/24/20	10/21/20	N/A	5uL			25

1.0ug/L
Prepared: 10/06/20
Expires: 10/21/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	1.0ug/L	5	Prepared 09/24/20	11/23/20	N/A	10uL	50mL	P&T Water	1
VOA STD. 1	Absolute		50	Prepared 09/24/20	11/23/20	N/A	20uL			20
VOA STD. 2	Phenova		100	Prepared 09/24/20	11/23/20	N/A	10uL			20
VOA STD. TBA	Various		250	Prepared 09/24/20	10/21/20	N/A	10uL			50

2.0ug/L
Prepared: 10/06/20
Expires: 10/21/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 9	Various	2.0ug/L	5	Prepared 09/24/20	11/23/20	N/A	20uL	50mL	P&T Water	2
VOA STD. 1	Absolute		50	Prepared 09/24/20	11/23/20	N/A	30uL			30
VOA STD. 2	Phenova		100	Prepared 09/24/20	11/23/20	N/A	15uL			30
VOA STD. TBA	Various		250	Prepared 09/24/20	10/21/20	N/A	15uL			75

5ug/L
Prepared: 10/06/20
Expires: 10/21/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	5ug/L	50	Prepared 09/24/20	11/23/20	N/A	5uL	50mL	P&T Water	5
VOA STD. 8	Phenova		50	Prepared 09/24/20	10/21/20	N/A	5uL			5
VOA STD. 1	Absolute		50	Prepared 09/24/20	11/23/20	N/A	40uL			40
VOA STD. 2	Phenova		100	Prepared 09/24/20	11/23/20	N/A	20uL			20
VOA STD. TBA	Various		250	Prepared 09/24/20	10/21/20	N/A	20uL			100

10ug/L
Prepared: 10/06/20
Expires: 10/21/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD 7	Various	10ug/L	50	Prepared 09/24/20	11/23/20	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova		50	Prepared 09/24/20	10/21/20	N/A	10uL			10
VOA STD. 1	Absolute		50	Prepared 09/24/20	11/23/20	N/A	50uL			50
VOA STD. 2	Phenova		100	Prepared 09/24/20	11/23/20	N/A	25uL			50
VOA STD. TBA	Various		250	Prepared 09/24/20	10/21/20	N/A	25uL			125

20ug/L

Prepared: 10/06/20

Expires: 10/21/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	20ug/L	50	Prepared 09/24/20	11/23/20	N/A	20uL	50mL	P&T Water	20
VOA STD 8	Phenova		50	Prepared 09/24/20	10/21/20	N/A	20uL			20
VOA STD. 1	Absolute		50	Prepared 09/24/20	11/23/20	N/A	60uL			60
VOA STD. 2	Phenova		100	Prepared 09/24/20	11/23/20	N/A	30uL			60
VOA STD. TBA	Various		250	Prepared 09/24/20	10/21/20	N/A	30uL			150

40ug/L

Prepared: 10/06/20

Expires: 10/21/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	40ug/L	50	Prepared 09/24/20	11/23/20	N/A	40uL	50mL	P&T Water	40
VOA STD. 8	Phenova		50	Prepared 09/24/20	10/21/20	N/A	40uL			40
VOA STD. 1	Absolute		50	Prepared 09/24/20	11/23/20	N/A	80uL			80
VOA STD. 2	Phenova		100	Prepared 09/24/20	11/23/20	N/A	40uL			80
VOA STD. TBA	Various		250	Prepared 09/24/20	10/21/20	N/A	35uL			175

100ug/L

Prepared: 10/06/20

Expires: 10/21/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	100ug/L	50	Prepared 09/24/20	11/23/20	N/A	100uL	50mL	P&T Water	100
VOA STD. 8	Phenova		50	Prepared 09/24/20	10/21/20	N/A	100uL			100
VOA STD. 1	Absolute		50	Prepared 09/24/20	11/23/20	N/A	100uL			100
VOA STD. 2	Phenova		100	Prepared 09/24/20	11/23/20	N/A	50uL			100
VOA STD. TBA	Various		250	Prepared 09/24/20	10/21/20	N/A	40uL			200

Zeus 8260 Water Second Source (SS)

Prepared: 10/06/20

Expires: 10/21/20

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 3	Phenova	8260 Water SS	100	Prepared 09/24/20	11/23/20	N/A	25uL	50mL	P&T Water	50
VOA STD. GASES	Phenova	8260 Water SS	50	Prepared 09/24/20	11/23/20	N/A	10uL			10
VOA STD. 0	Phenova	8260 Water SS	50	Prepared 09/24/20	11/23/20	N/A	10uL			10
VOA STD. 2-CEVE	Absolute	8260 Water SS	50	Prepared 09/24/20	09/24/20	N/A	50uL			50
VOA STD. 6	Various	8260 Water SS	50	Prepared 09/24/20	10/08/20	N/A	10uL			10
Voa STD. TBA	Various	8260 Water SS	250	Prepared 09/24/20	09/23/20	N/A	25uL			250

8260 Water Continuing Calibrations (CCV)/ Lab Control Spikes (LCS)

Prepared: 10/06/20

Expires: 10/07/20

Prepared By (Initials): CH

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA STD. 7	Various	CCV/ LCS	50	Prepared 09/24/20	11/23/20	N/A	10uL	50mL	P&T Water	10
VOA STD. 8	Phenova	CCV/ LCS	50	Prepared 09/24/20	10/21/20	N/A	10uL			10
VOA STD. 1	Absolute	CCV/ LCS	50	Prepared 09/24/20	11/23/20	N/A	50uL			50
VOA STD 2	Phenova	CCV/ LCS	100	Prepared 09/24/20	11/23/20	N/A	25uL			50
VOA STD. TBA	Various	CCV/ LCS	250	Prepared 09/24/20	10/21/20	N/A	25uL			125

Injection Log

Directory: M:\ZEUS\DATA\201006\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1006Z20.D	1	25ug/L BFB STD 9/14/20		06 Oct 20 15:00
2	3	1006Z23.D	1	0.3ug/L VOC STD10/6/20		06 Oct 20 16:16
3	4	1006Z24.D	1	0.5ug/L VOC STD10/6/20		06 Oct 20 16:39
4	5	1006Z25.D	1	1.0ug/L VOC STD10/6/20		06 Oct 20 17:02
5	6	1006Z26.D	1	2.0ug/L VOC STD10/6/20		06 Oct 20 17:26
6	7	1006Z27.D	1	5.0ug/L VOC STD10/6/20		06 Oct 20 17:49
7	8	1006Z28.D	1	10ug/L VOC STD10/6/20		06 Oct 20 18:12
8	9	1006Z29.D	1	20ug/L VOC STD10/6/20		06 Oct 20 18:36
9	10	1006Z30.D	1	40ug/L VOC STD10/6/20		06 Oct 20 18:59
10	11	1006Z31.D	1	100ug/L VOC STD10/6/20		06 Oct 20 19:22
11	13	1006Z33.D	1	(SS)10ug/L VOC STD10/6/20		06 Oct 20 20:08
12	1	1009Z00.D	1	25ug/L BFB STD 9/14/20		09 Oct 20 09:14
13	2	1009Z02.D	1	201009A CCV 10ug/L		09 Oct 20 10:04
14	3	1009Z03.D	1	201009A LCS 10ug/L		09 Oct 20 10:27
15	4	1009Z04.D	1	201009A LCSD 10ug/L		09 Oct 20 10:50
16	10	1009Z10.D	1	201009A BLK		09 Oct 20 13:37
17	25	1009Z25.D	1	BA19639W01		09 Oct 20 19:25
18	26	1009Z26.D	1	BA19640W01		09 Oct 20 19:48
19	27	1009Z27.D	1	Ending CCV 10ug/L 10/9/20		09 Oct 20 20:11

ORGANICS

Calibration Data

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc SDG No:
Case No: Initial Cal. Date: 10/04/20
Matrix: water Instrument: ZEUS Initials: Dg

		Compound	1003Z32.D	1003Z33.D	1003Z34.D	1003Z35.D	1003Z36.D	1003Z37.D	1003Z38.D				Avg	%RSD	Type	r^2	Q	MRF
1	I	Fluorobenzene (IS)																
2	TMHBL	Gasoline C6-C10	9.835	4.204	2.283	1.011	0.6941	0.6136	0.5756				2.7	124	TMHBL	1.000		
3	I	Chlorobenzene-D5 (IS)																
4	I	1,4-Dichlorobenzene-D (IS)																
5																		
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Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201003\1003Z32.D Vial: 22
Acq On : 03 Oct 20 19:22 Operator: LP,DG,CH
Sample : 20ug/L GAS STD 10/3/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 5 11:15 2020 Quant Results File: ZGAS1003.RES

Quant Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Sep 15 15:04:18 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	TIC	2737725	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	7.77	TIC	2915765	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.98	TIC	3051056	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Gasoline C6-C10	6.48	TIC	21540011m	33.88 ppb	100

(#) = qualifier out of range (m) = manual integration

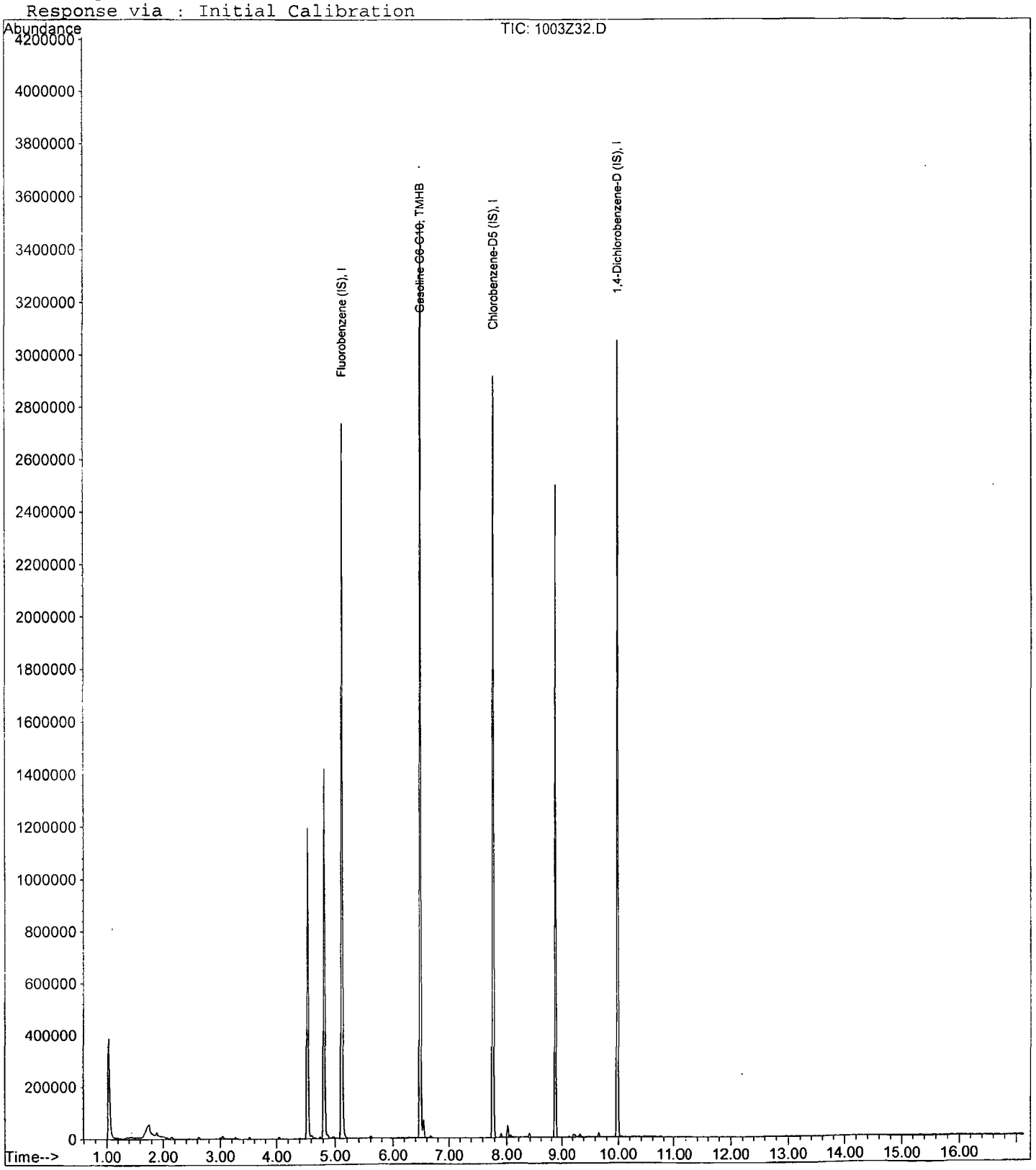
Quantitation Report

Data File : M:\ZEUS\DATA\201003\1003Z32.D
Acq On : 03 Oct 20 19:22
Sample : 20ug/L GAS STD 10/3/20
Misc :

Vial: 22
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 5 11:15 2020 Quant Results File: ZGAS1003.RES

Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201003\1003Z33.D Vial: 23
Acq On : 03 Oct 20 19:46 Operator: LP,DG,CH
Sample : 50ug/L GAS STD 10/3/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 5 11:15 2020 Quant Results File: ZGAS1003.RES

Quant Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Sep 15 15:04:18 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	TIC	2726173	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	7.77	TIC	2937522	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.98	TIC	3199470	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Gasoline C6-C10	6.48	TIC	22921144m	75.61 ppb	100

(#) = qualifier out of range (m) = manual integration

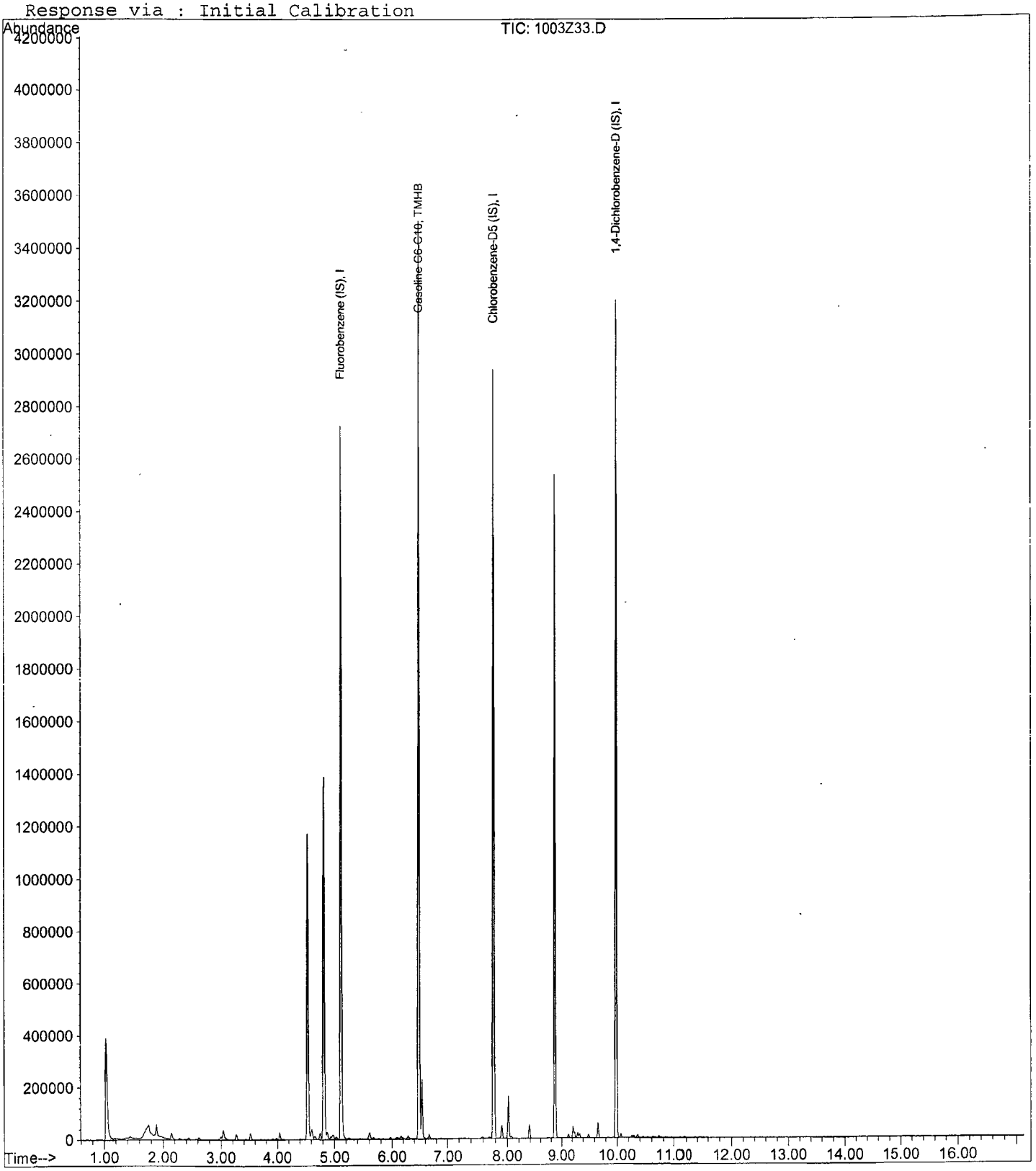
Quantitation Report

Data File : M:\ZEUS\DATA\201003\1003Z33.D
Acq On : 03 Oct 20 19:46
Sample : 50ug/L GAS STD 10/3/20
Misc :

Vial: 23
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 5 11:15 2020 Quant Results File: ZGAS1003.RES

Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201003\1003Z34.D Vial: 24
Acq On : 03 Oct 20 20:09 Operator: LP,DG,CH
Sample : 100ug/L GAS STD 10/3/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 5 11:16 2020 Quant Results File: ZGAS1003.RES

Quant Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Sep 15 15:04:18 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	TIC	2713428	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	7.77	TIC	2839292	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.98	TIC	3164115	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.48	TIC	24773744m	131.42	ppb	100

(#) = qualifier out of range (m) = manual integration
1003Z34.D ZGAS1003.M Mon Oct 05 14:55:08 2020 Page 1

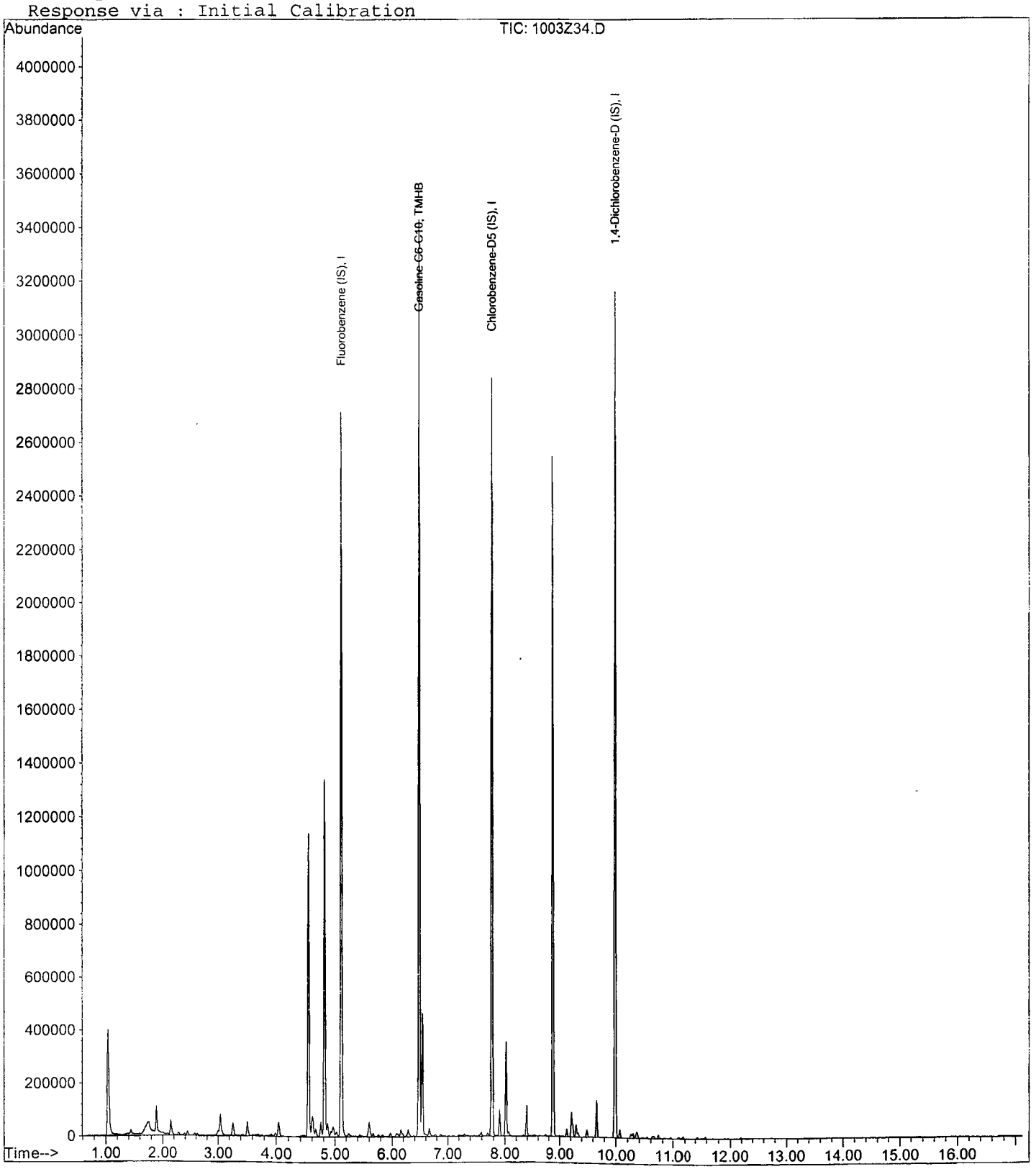
Quantitation Report

Data File : M:\ZEUS\DATA\201003\1003Z34.D
Acq On : 03 Oct 20 20:09
Sample : 100ug/L GAS STD 10/3/20
Misc :

Vial: 24
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 5 11:16 2020 Quant Results File: ZGAS1003.RES

Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201003\1003Z35.D Vial: 25
Acq On : 03 Oct 20 20:32 Operator: LP,DG,CH
Sample : 300ug/L GAS STD 10/3/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 5 11:16 2020 Quant Results File: ZGAS1003.RES

Quant Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Sep 15 15:04:18 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	TIC	2908618	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	7.77	TIC	3076288	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.98	TIC	3307633	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Gasoline C6-C10	6.48	TIC	35281286m	363.23 ppb	100

(#) = qualifier out of range (m) = manual integration

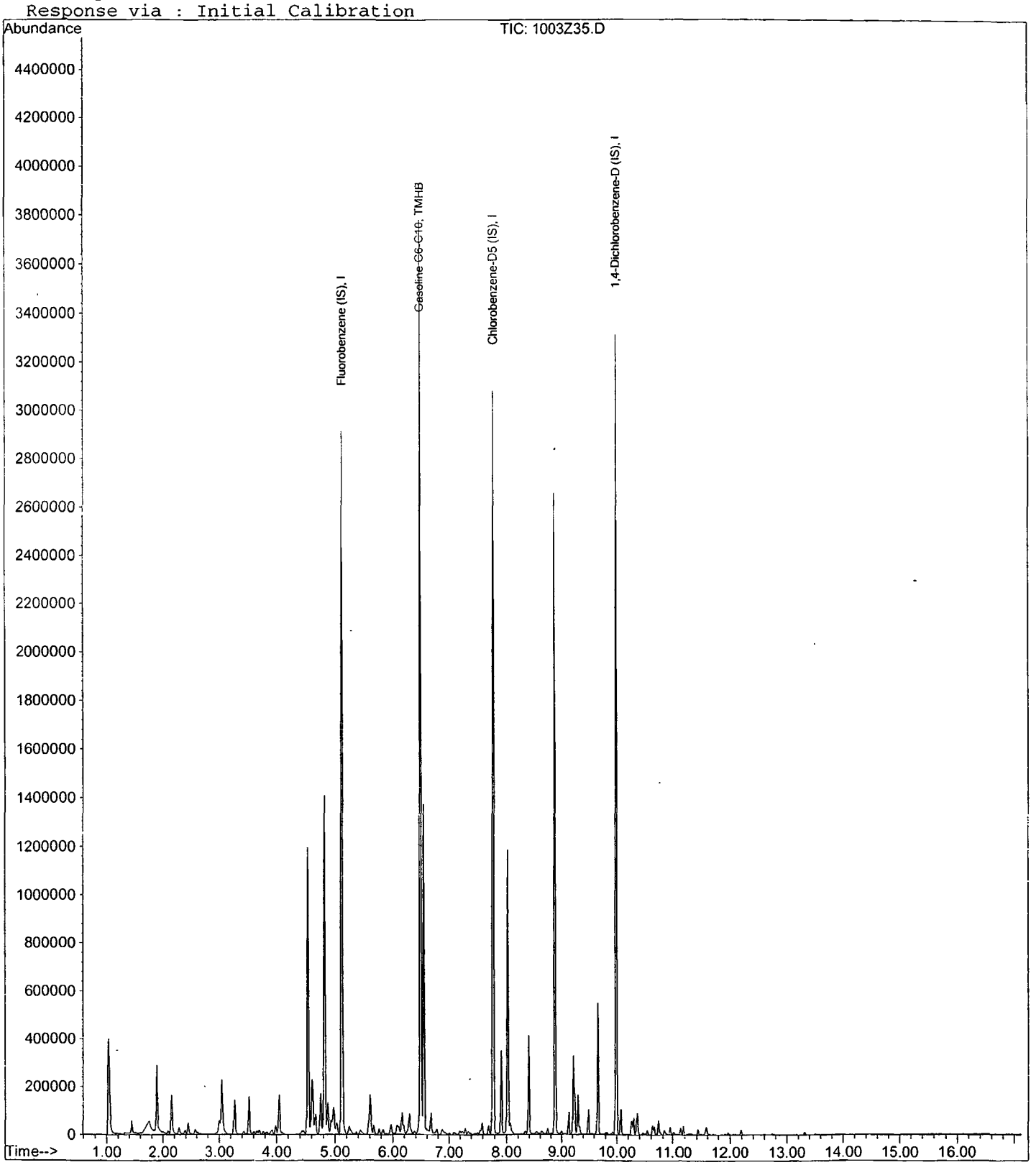
Quantitation Report

Data File : M:\ZEUS\DATA\201003\1003Z35.D
Acq On : 03 Oct 20 20:32
Sample : 300ug/L GAS STD 10/3/20
Misc :

Vial: 25
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 5 11:16 2020 Quant Results File: ZGAS1003.RES

Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201003\1003Z36.D Vial: 26
Acq On : 03 Oct 20 20:55 Operator: LP,DG,CH
Sample : 600ug/L GAS STD 10/3/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 5 11:16 2020 Quant Results File: ZGAS1003.RES

Quant Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Sep 15 15:04:18 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	TIC	3115723	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	7.77	TIC	3312593	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.98	TIC	3577133	25.00 ppb	0.00
System Monitoring Compounds					
Target Compounds					Qvalue
2) Gasoline C6-C10	6.48	TIC	51899254m	713.06 ppb	100

(#) = qualifier out of range (m) = manual integration

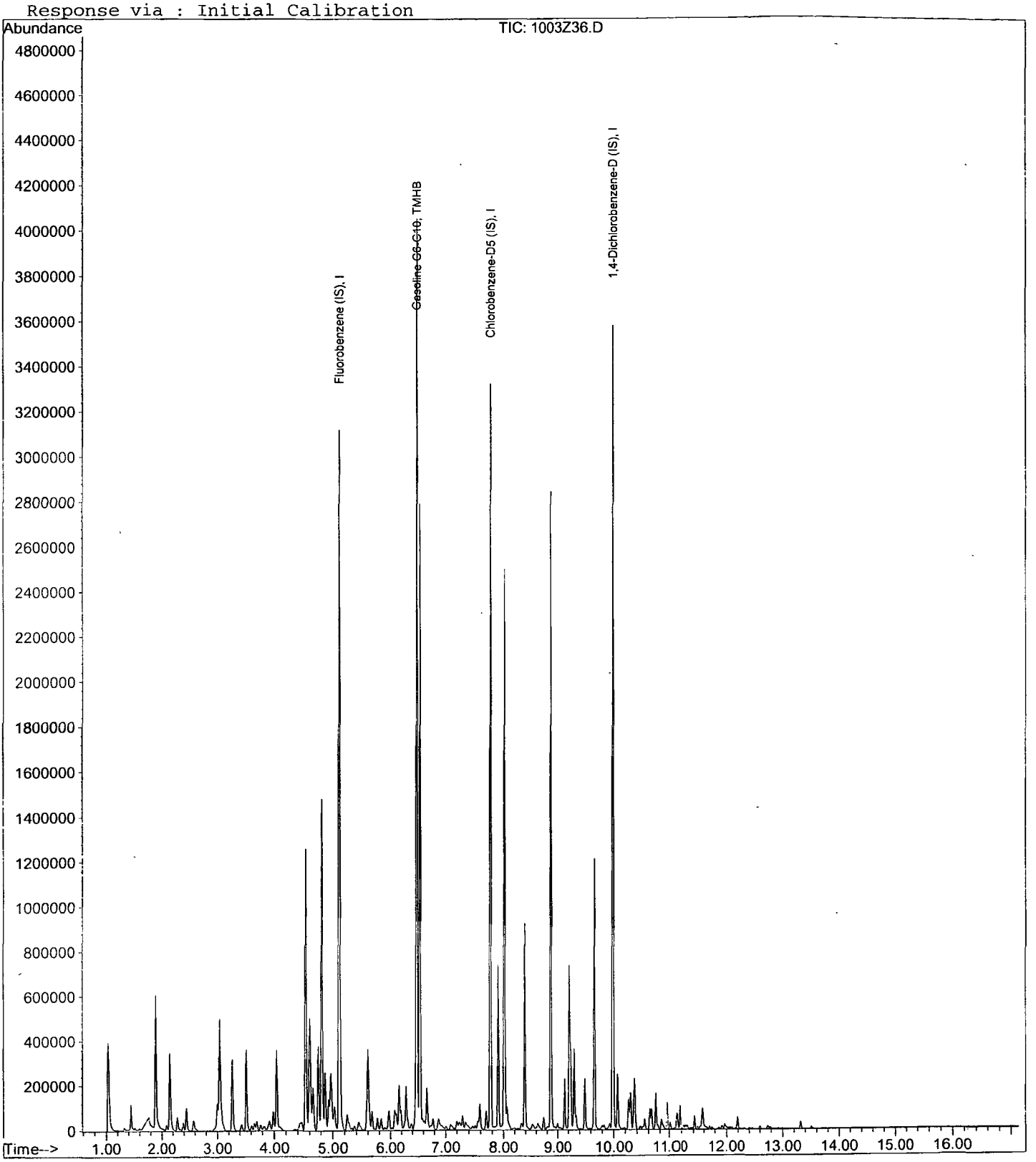
Quantitation Report

Data File : M:\ZEUS\DATA\201003\1003Z36.D
Acq On : 03 Oct 20 20:55
Sample : 600ug/L GAS STD 10/3/20
Misc :

Vial: 26
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 5 11:16 2020 Quant Results File: ZGAS1003.RES

Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201003\1003Z37.D Vial: 27
Acq On : 03 Oct 20 21:18 Operator: LP,DG,CH
Sample : 800ug/L GAS STD 10/3/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 5 11:16 2020 Quant Results File: ZGAS1003.RES

Quant Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Sep 15 15:04:18 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	TIC	3381585	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	7.77	TIC	3485335	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.98	TIC	3730913	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Gasoline C6-C10	6.48	TIC	66393602m	943.08 ppb	100

(#) = qualifier out of range (m) = manual integration
1003Z37.D ZGAS1003.M Mon Oct 05 14:55:14 2020 Page 1

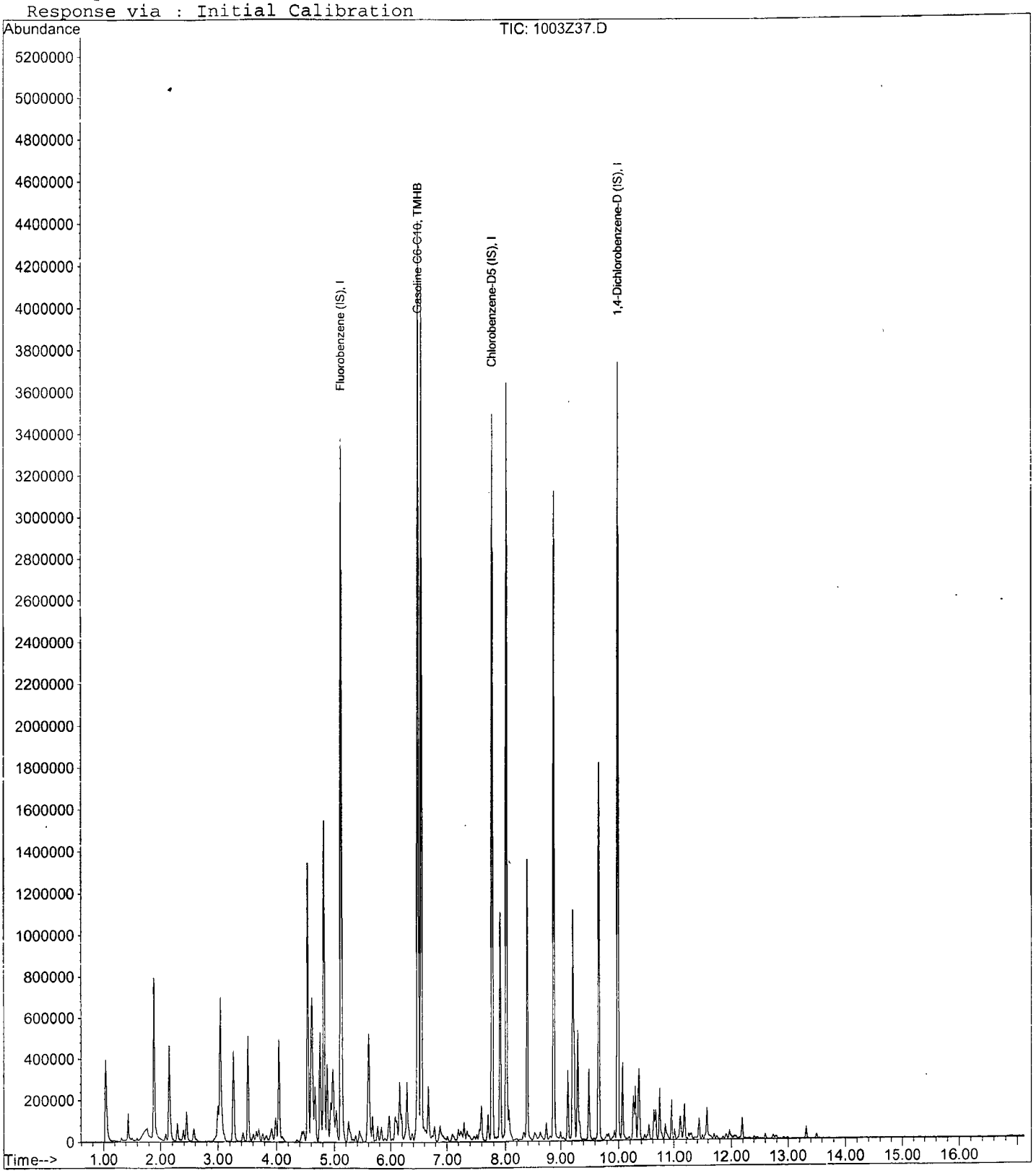
Quantitation Report

Data File : M:\ZEUS\DATA\201003\1003Z37.D
Acq On : 03 Oct 20 21:18
Sample : 800ug/L GAS STD 10/3/20
Misc :

Vial: 27
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 5 11:16 2020 Quant Results File: ZGAS1003.RES

Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201003\1003Z38.D Vial: 28
Acq On : 03 Oct 20 21:41 Operator: LP,DG,CH
Sample : 1000ug/L GAS STD 10/3/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 5 11:17 2020 Quant Results File: ZGAS1003.RES

Quant Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Sep 15 15:04:18 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	TIC	3666252	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	7.77	TIC	3861504	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.98	TIC	4239587	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.54	TIC	84409583m	1205.00	ppb	100

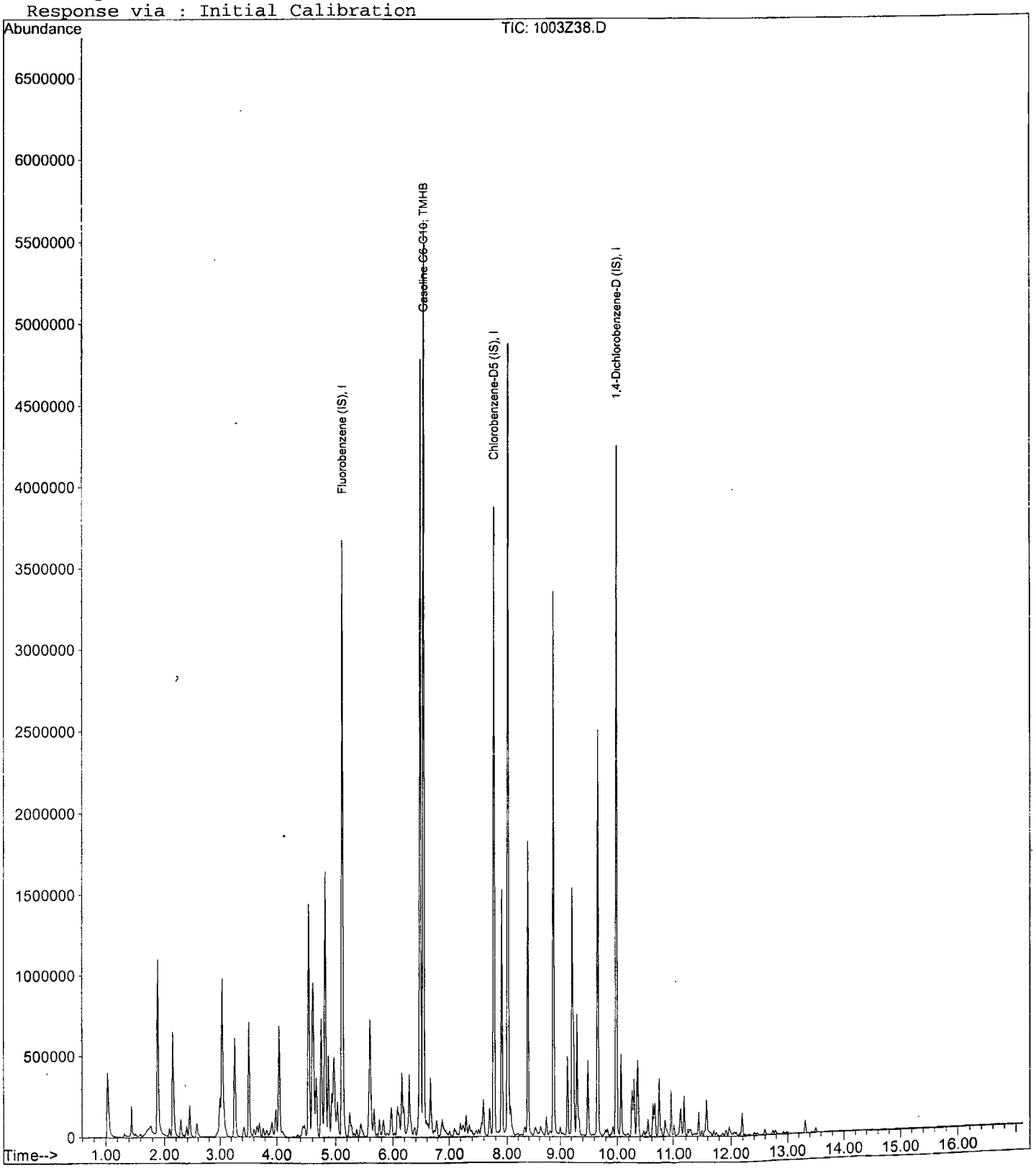
(#) = qualifier out of range (m) = manual integration

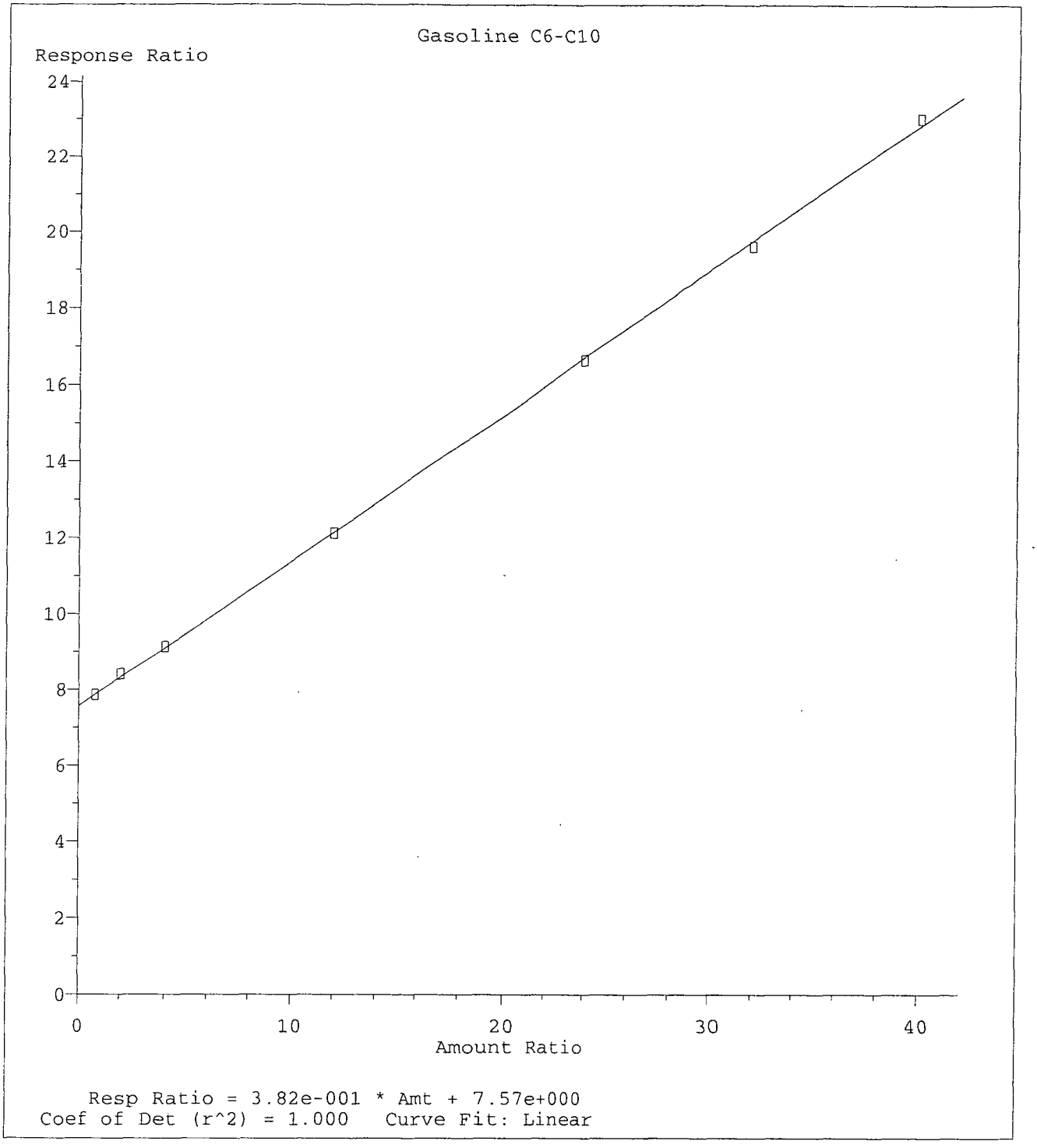
Quantitation Report

Data File : M:\ZEUS\DATA\201003\1003Z38.D Vial: 28
Acq On : 03 Oct 20 21:41 Operator: LP,DG,CH
Sample : 1000ug/L GAS STD 10/3/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 5 11:17 2020 Quant Results File: ZGAS1003.RES

Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration





Method Name: M:\ZEUS\DATA\201003\ZGAS1003.M
Calibration Table Last Updated: Mon Oct 05 11:17:26 2020

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: water

SDG No:
Date Analyzed: 10/03/20
Instrument: ZEUS
Initial Cal. Date: 10/03/20
Data File: 1003Z39.D

		Compound	MEAN	CCRF	%D		%Drift
1	TMHB	Gasoline C6-C10	2.745	0.9797	64	TMHBL	8.7
2							
3							
4							
5							
6							
7							
8							
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36							
37							
38							
39							
40							
		Average			64.0		

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201003\1003Z39.D Vial: 29
Acq On : 03 Oct 20 22:05 Operator: LP,DG,CH
Sample : (SS)300ug/L GAS STD 10/3/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 5 12:08 2020 Quant Results File: ZGAS1003.RES

Quant Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	TIC	3869860	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	7.77	TIC	3858453	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.99	TIC	4345256	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Gasoline C6-C10	6.48	TIC	45495969m	273.86 ppb	100

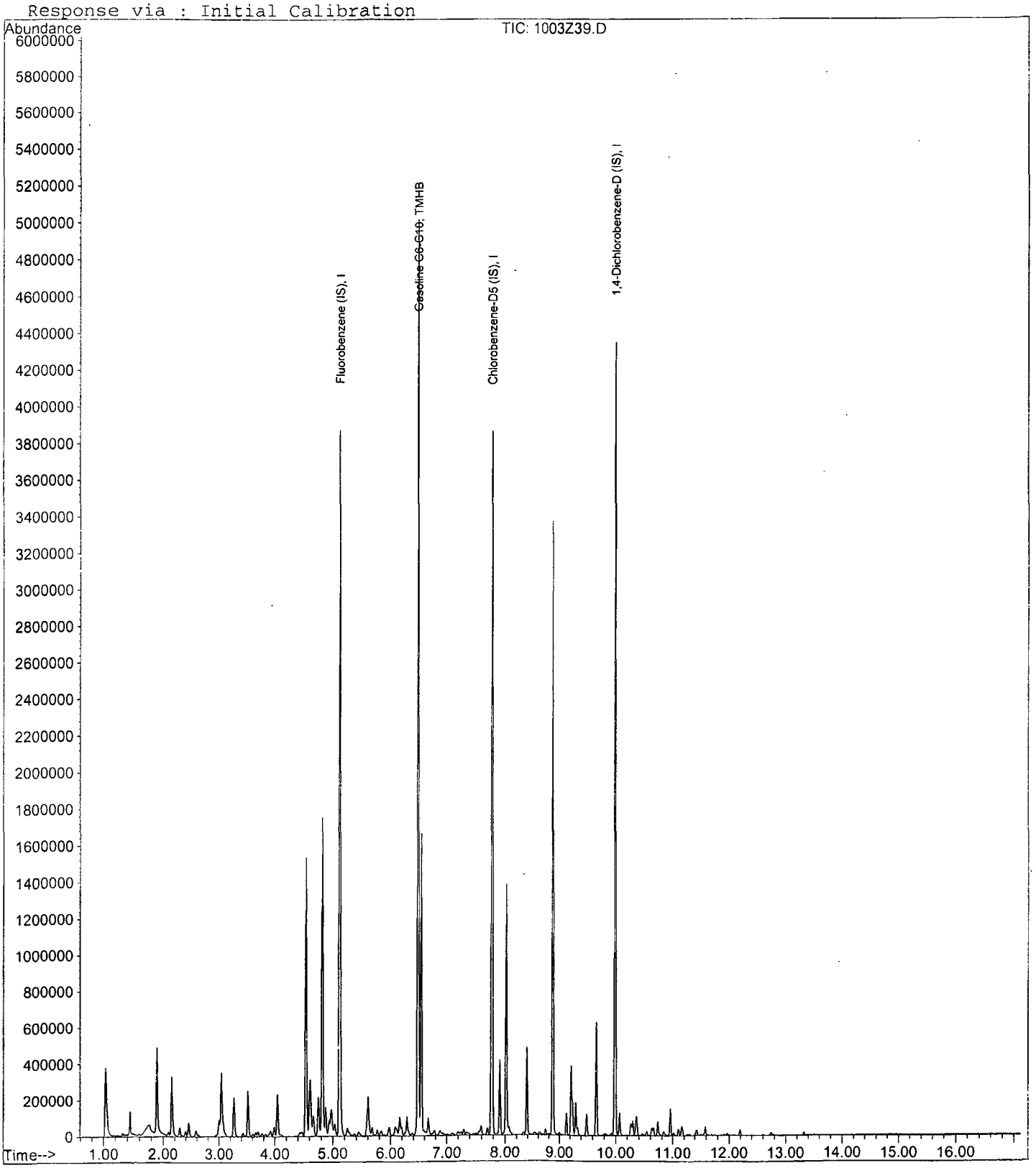
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201003\1003Z39.D Vial: 29
Acq On : 03 Oct 20 22:05 Operator: LP,DG,CH
Sample : (SS)300ug/L GAS STD 10/3/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 5 12:08 2020 Quant Results File: ZGAS1003.RES

Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 10/06/20
Matrix: Water Instrument: ZEUS Initials: CH

			1006Z23.D	1006Z24.D	1006Z25.D	1006Z26.D	1006Z27.D	1006Z28.D	1006Z29.D	1006Z30.D	1006Z31.D							
		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	Type	r^2	Q	MRF
1	I	Fluorobenzene (IS)																
2	S	Dibromofluoromethane(S)	0.1998	0.2026	0.2455	0.2443	0.2715	0.2723	0.2798	0.2788	0.2861		0.25	13	TM			
3	S	1,2-DCA-D4(S)	0.2630	0.2660	0.3113	0.3141	0.3417	0.3436	0.3505	0.3430	0.3481		0.32	11	TM			
4	I	Chlorobenzene-D5 (IS)																
5	SL	Toluene-D8(S)	0.9683	0.9968	1.231	1.272	1.424	1.468	1.495	1.479	1.452		1.3	16	TM**	0.999		
6	SL	4-Bromofluorobenzene(S)	0.3053	0.3099	0.4019	0.4199	0.4900	0.5088	0.5365	0.5310	0.5596		0.45	21	TM*	1.000		
7	I	1,4-Dichlorobenzene-D (IS)																
8																		
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10																		
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35																		

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z23.D Vial: 3
Acq On : 06 Oct 20 16:16 Operator: LP,DG,CH
Sample : 0.3ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:06 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2232438	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.77	117	1586048	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.98	152	844143	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	89215	3.94	ppb	0.00
Spiked Amount 25.000			Recovery =	15.768%		
3) 1,2-DCA-D4(S)	4.82	65	117422	4.11	ppb	0.00
Spiked Amount 25.000			Recovery =	16.428%		
5) Toluene-D8(S)	6.48	98	307153	4.40	ppb	0.00
Spiked Amount 25.000			Recovery =	17.604%		
6) 4-Bromofluorobenzene(S)	8.87	95	96850	5.51	ppb	0.00
Spiked Amount 25.000			Recovery =	22.024%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

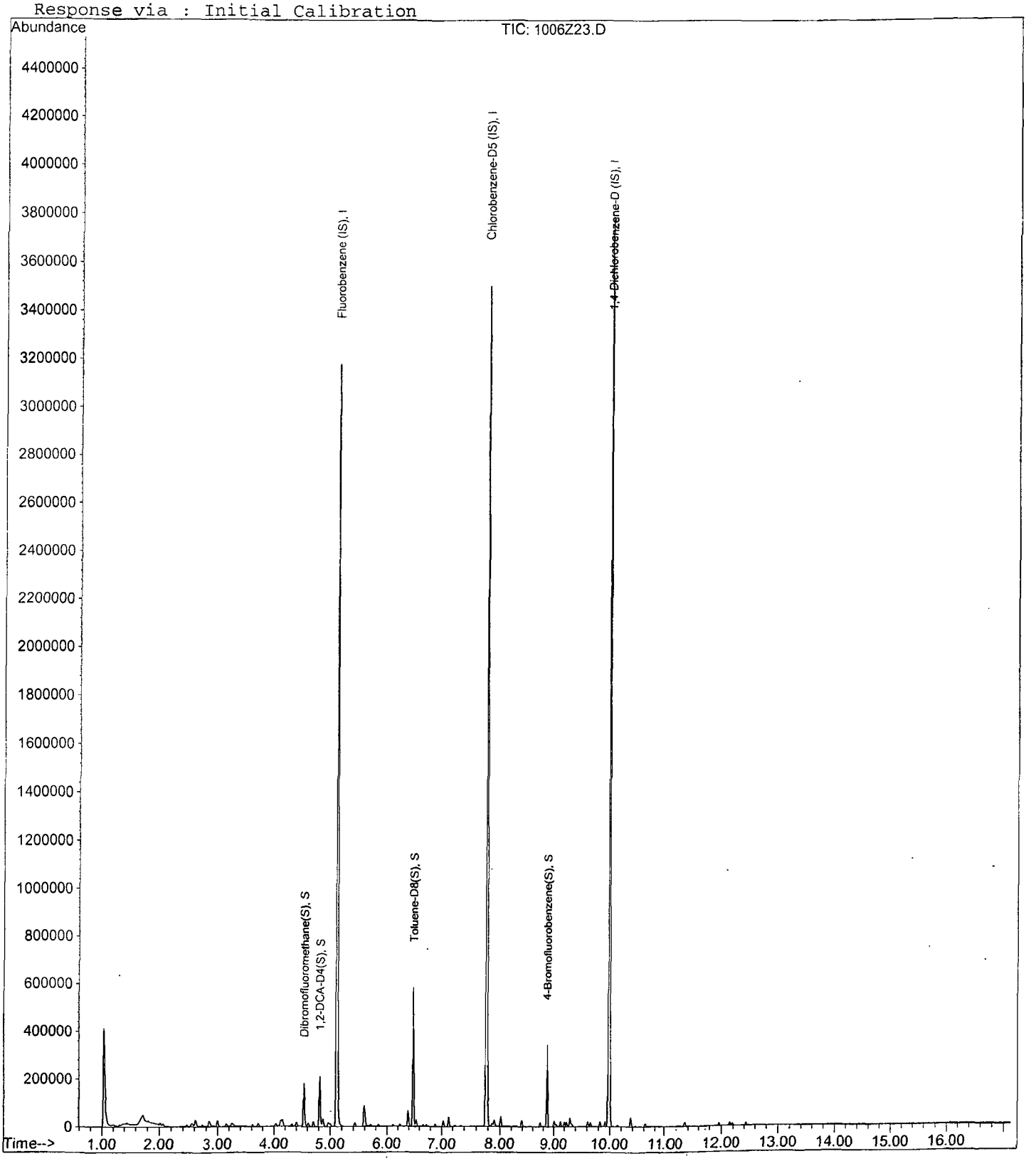
Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z23.D
Acq On : 06 Oct 20 16:16
Sample : 0.3ug/L VOC STD10/6/20
Misc :

Vial: 3
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 12 13:06 2020 Quant Results File: ZSUR1006.RES

Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z24.D Vial: 4
Acq On : 06 Oct 20 16:39 Operator: LP,DG,CH
Sample : 0.5ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:06 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2233405	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.77	117	1590772	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.99	152	856057	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	90503	4.00	ppb	0.00
Spiked Amount 25.000			Recovery =	15.992%		
3) 1,2-DCA-D4(S)	4.82	65	118837	4.15	ppb	0.00
Spiked Amount 25.000			Recovery =	16.620%		
5) Toluene-D8(S)	6.48	98	317124	4.50	ppb	0.00
Spiked Amount 25.000			Recovery =	17.988%		
6) 4-Bromofluorobenzene(S)	8.87	95	98610	5.55	ppb	0.00
Spiked Amount 25.000			Recovery =	22.184%		

Target Compounds Qvalue

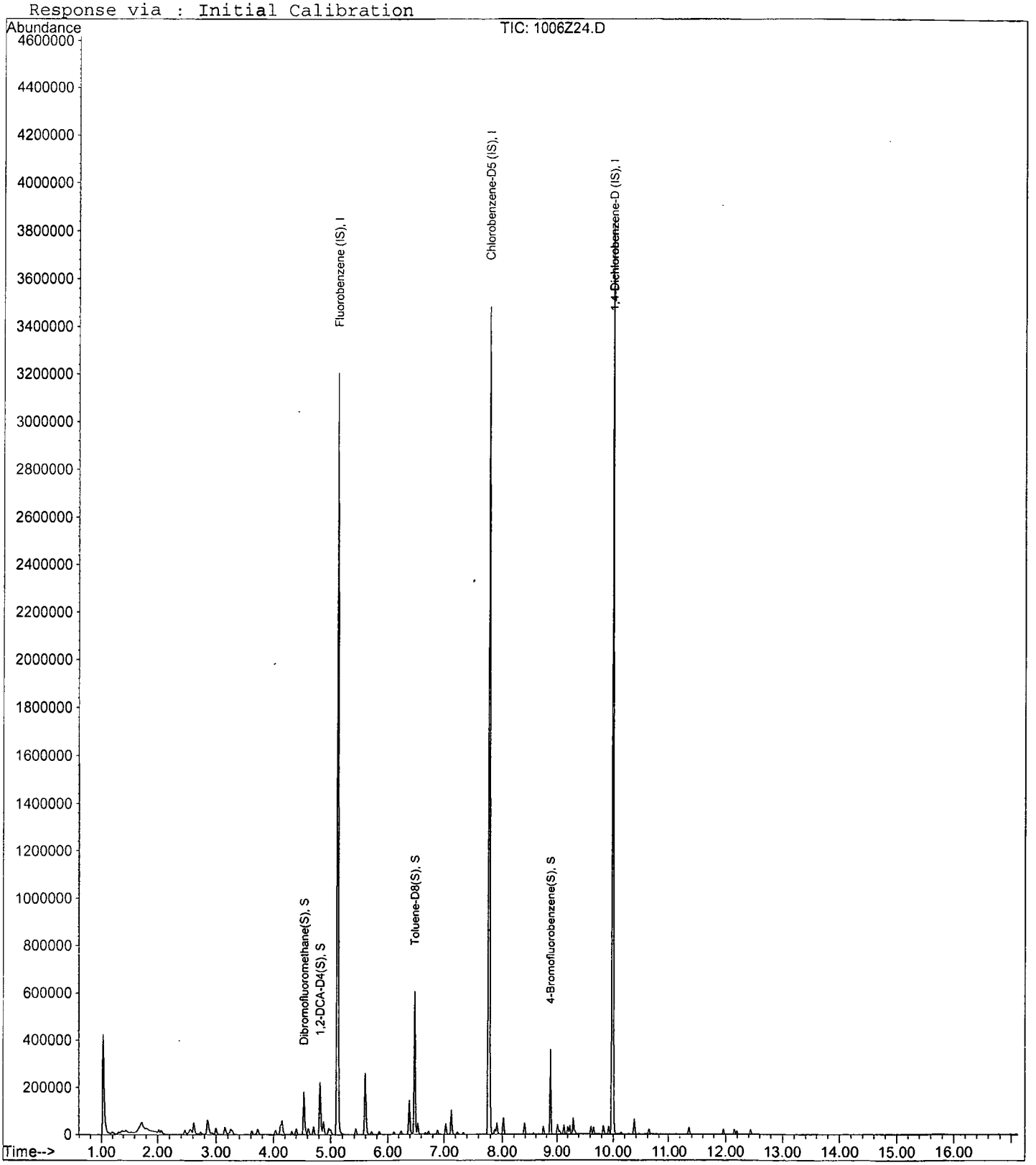
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z24.D Vial: 4
Acq On : 06 Oct 20 16:39 Operator: LP,DG,CH
Sample : 0.5ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:06 2020 Quant Results File: ZSUR1006.RES

Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z25.D Vial: 5
Acq On : 06 Oct 20 17:02 Operator: LP,DG,CH
Sample : 1.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:06 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2221763	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.77	117	1579471	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.98	152	848895	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	218176	9.69	ppb	0.00
Spiked Amount 25.000			Recovery =	38.748%		
3) 1,2-DCA-D4(S)	4.81	65	276655	9.72	ppb	0.00
Spiked Amount 25.000			Recovery =	38.896%		
5) Toluene-D8(S)	6.48	98	777702	9.42	ppb	0.00
Spiked Amount 25.000			Recovery =	37.696%		
6) 4-Bromofluorobenzene(S)	8.87	95	253927	9.86	ppb	0.00
Spiked Amount 25.000			Recovery =	39.448%		

Target Compounds Qvalue

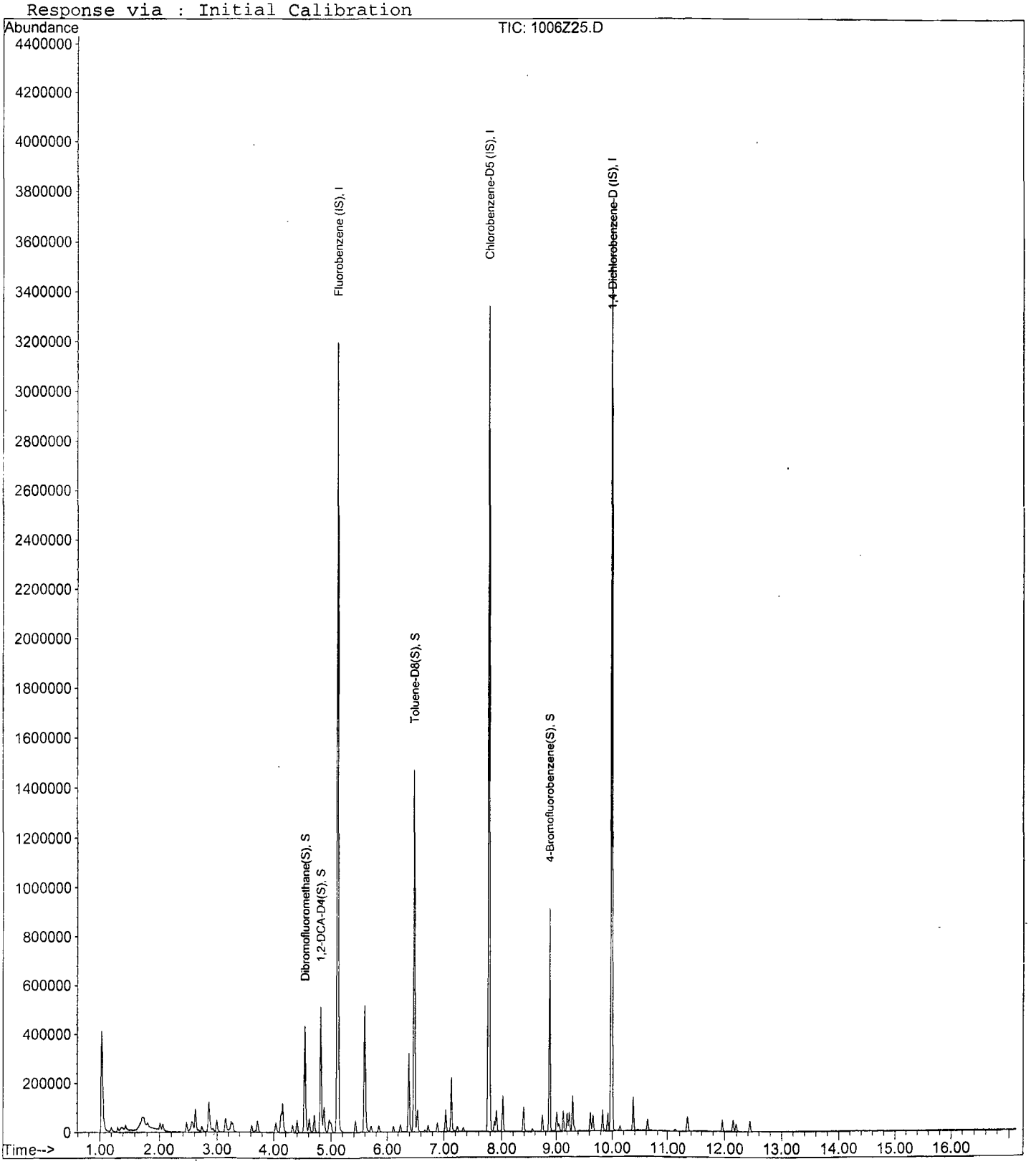
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z25.D Vial: 5
Acq On : 06 Oct 20 17:02 Operator: LP,DG,CH
Sample : 1.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:06 2020 Quant Results File: ZSUR1006.RES

Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z26.D Vial: 6
Acq On : 06 Oct 20 17:26 Operator: LP,DG,CH
Sample : 2.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:06 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2280051	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.77	117	1612391	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.98	152	871563	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	222833	9.64	ppb	0.00
Spiked Amount 25.000			Recovery =	38.564%		
3) 1,2-DCA-D4(S)	4.82	65	286509	9.81	ppb	0.00
Spiked Amount 25.000			Recovery =	39.252%		
5) Toluene-D8(S)	6.48	98	820298	9.70	ppb	0.00
Spiked Amount 25.000			Recovery =	38.796%		
6) 4-Bromofluorobenzene(S)	8.87	95	270830	10.18	ppb	0.00
Spiked Amount 25.000			Recovery =	40.708%		

Target Compounds Qvalue

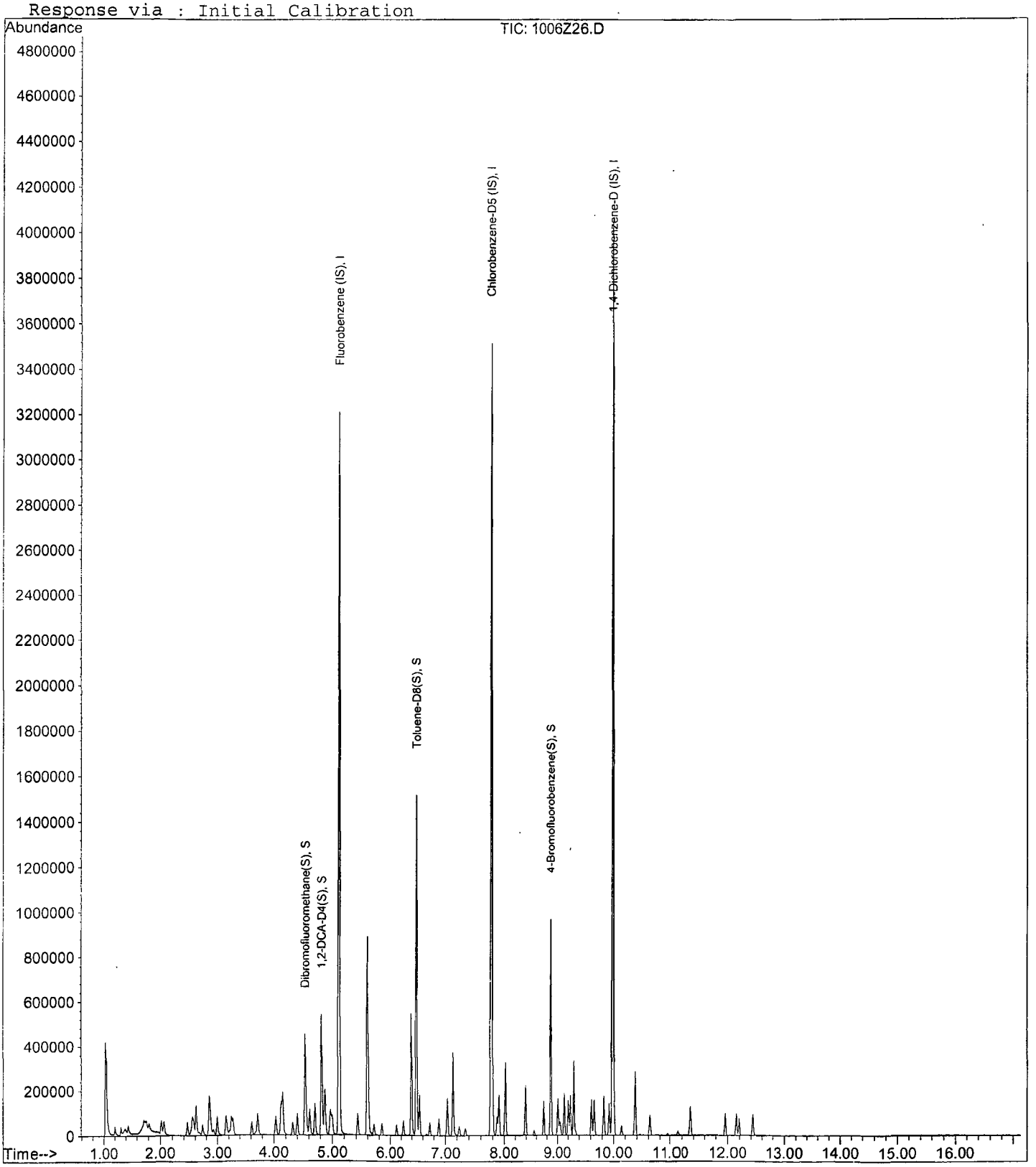
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z26.D Vial: 6
Acq On : 06 Oct 20 17:26 Operator: LP,DG,CH
Sample : 2.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:06 2020 Quant Results File: ZSUR1006.RES

Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z27.D Vial: 7
Acq On : 06 Oct 20 17:49 Operator: LP,DG,CH
Sample : 5.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:07 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2356780	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.77	117	1665669	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.98	152	901702	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	639880	26.78	ppb	0.00
Spiked Amount 25.000			Recovery =	107.136%		
3) 1,2-DCA-D4(S)	4.81	65	805376	26.68	ppb	0.00
Spiked Amount 25.000			Recovery =	106.740%		
5) Toluene-D8(S)	6.48	98	2372437	25.09	ppb	0.00
Spiked Amount 25.000			Recovery =	100.368%		
6) 4-Bromofluorobenzene(S)	8.87	95	816178	24.25	ppb	0.00
Spiked Amount 25.000			Recovery =	96.988%		

Target Compounds Qvalue

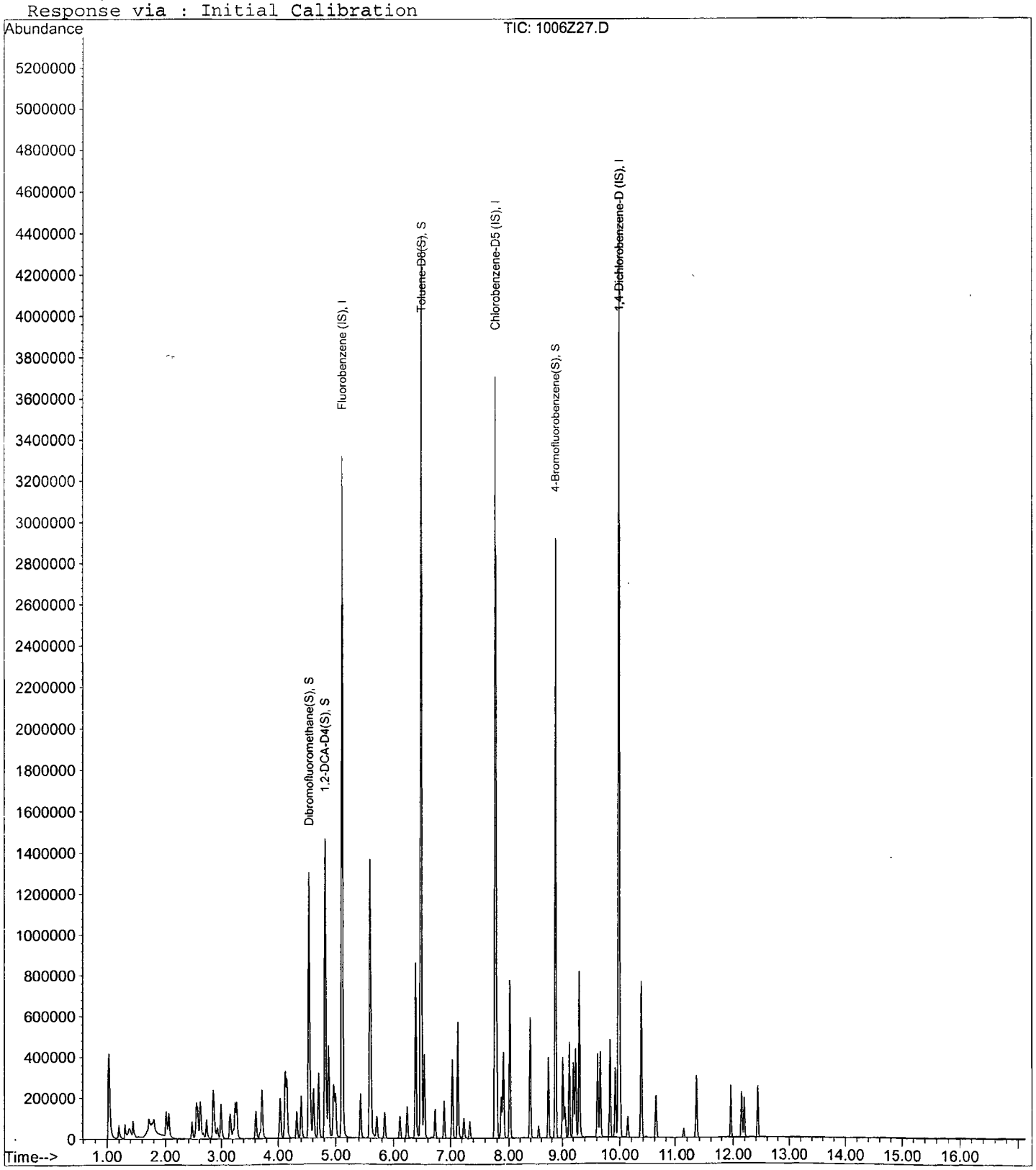
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z27.D Vial: 7
Acq On : 06 Oct 20 17:49 Operator: LP,DG,CH
Sample : 5.0ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:07 2020 Quant Results File: ZSUR1006.RES

Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z28.D Vial: 8
Acq On : 06 Oct 20 18:12 Operator: LP,DG,CH
Sample : 10ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:07 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2479958	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.77	117	1737323	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.98	152	937391	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	675269	26.86	ppb	0.00
Spiked Amount 25.000			Recovery = 107.448%			
3) 1,2-DCA-D4(S)	4.82	65	852102	26.83	ppb	0.00
Spiked Amount 25.000			Recovery = 107.324%			
5) Toluene-D8(S)	6.48	98	2550947	25.83	ppb	0.00
Spiked Amount 25.000			Recovery = 103.328%			
6) 4-Bromofluorobenzene(S)	8.87	95	883992	25.07	ppb	0.00
Spiked Amount 25.000			Recovery = 100.280%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

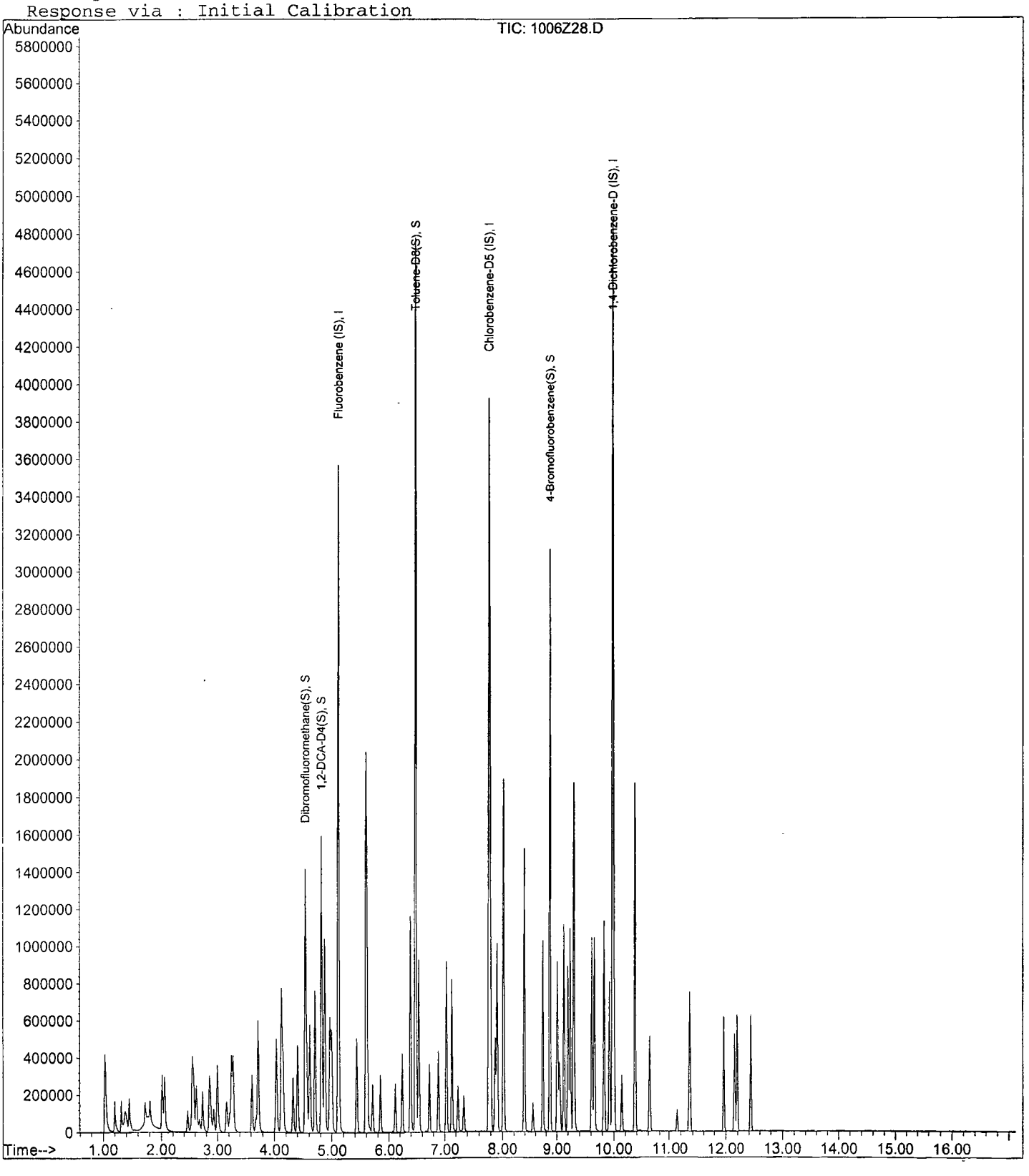
Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z28.D
Acq On : 06 Oct 20 18:12
Sample : 10ug/L VOC STD10/6/20
Misc :

Vial: 8
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 12 13:07 2020 Quant Results File: ZSUR1006.RES

Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z29.D Vial: 9
Acq On : 06 Oct 20 18:36 Operator: LP,DG,CH
Sample : 20ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:07 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2623832	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.77	117	1851340	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.99	152	1002428	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	1468289	55.20	ppb	0.00
Spiked Amount 25.000			Recovery = 220.816%			
3) 1,2-DCA-D4(S)	4.81	65	1839219	54.74	ppb	0.00
Spiked Amount 25.000			Recovery = 218.948%			
5) Toluene-D8(S)	6.48	98	5536072	51.42	ppb	0.00
Spiked Amount 25.000			Recovery = 205.684%			
6) 4-Bromofluorobenzene(S)	8.87	95	1986369	49.72	ppb	0.00
Spiked Amount 25.000			Recovery = 198.872%			

Target Compounds Qvalue

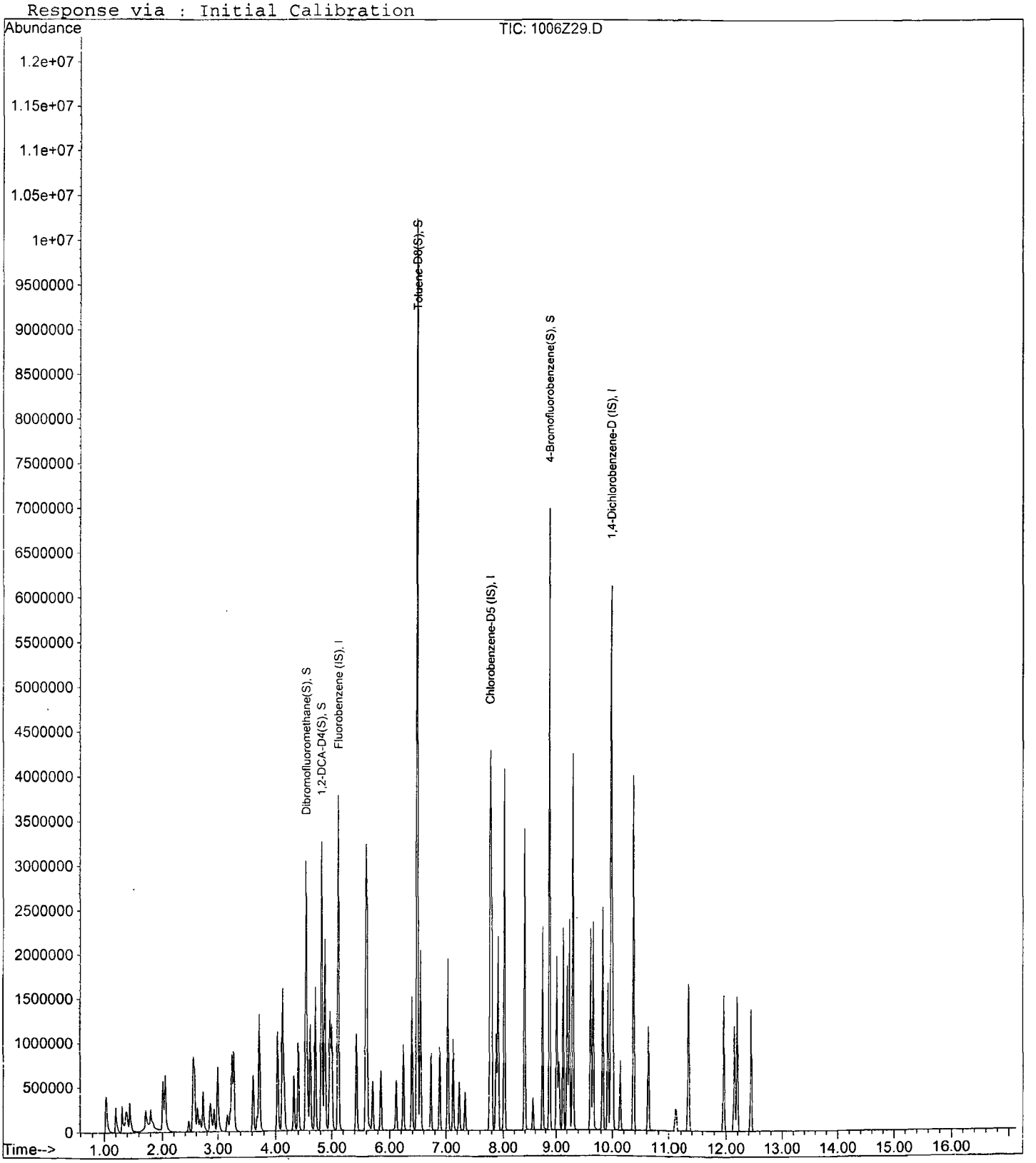
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z29.D Vial: 9
Acq On : 06 Oct 20 18:36 Operator: LP,DG,CH
Sample : 20ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:07 2020 Quant Results File: ZSUR1006.RES

Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z30.D Vial: 10
Acq On : 06 Oct 20 18:59 Operator: LP,DG,CH
Sample : 40ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:07 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	2814209	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.77	117	2020157	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.99	152	1080782	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	1569363	55.01	ppb	0.00
Spiked Amount 25.000			Recovery = 220.052%			
3) 1,2-DCA-D4(S)	4.81	65	1930305	53.56	ppb	0.00
Spiked Amount 25.000			Recovery = 214.248%			
5) Toluene-D8(S)	6.48	98	5974272	50.87	ppb	0.00
Spiked Amount 25.000			Recovery = 203.468%			
6) 4-Bromofluorobenzene(S)	8.87	95	2145285	49.24	ppb	0.00
Spiked Amount 25.000			Recovery = 196.948%			

Target Compounds Qvalue

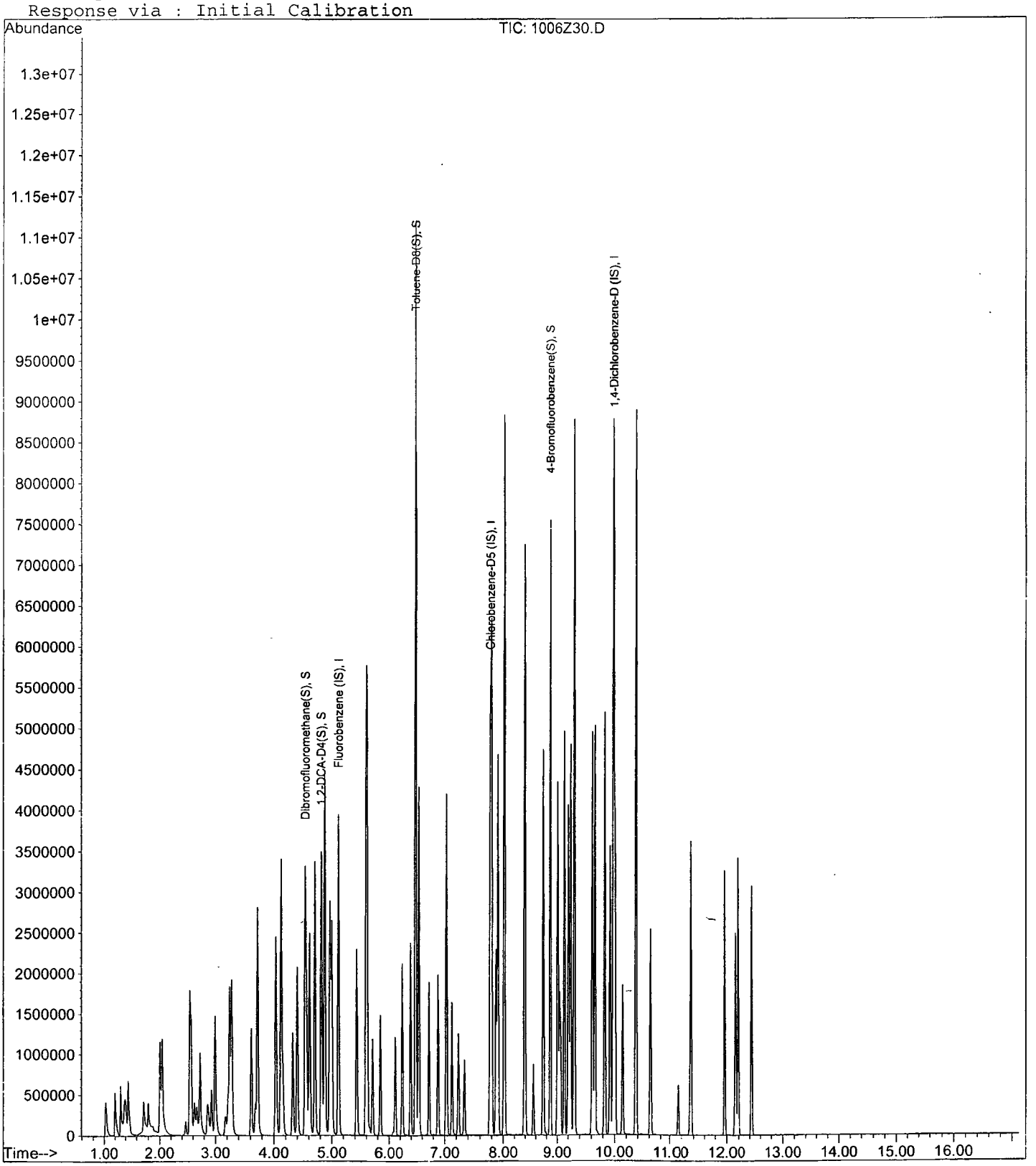
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z30.D Vial: 10
Acq On : 06 Oct 20 18:59 Operator: LP,DG,CH
Sample : 40ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:07 2020 Quant Results File: ZSUR1006.RES

Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1006Z31.D Vial: 11
Acq On : 06 Oct 20 19:22 Operator: LP,DG,CH
Sample : 100ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:07 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3009565	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.77	117	2176035	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.99	152	1187084	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	3444225	112.90	ppb	0.00
Spiked Amount 25.000			Recovery =	451.592%		
3) 1,2-DCA-D4(S)	4.82	65	4190564	108.73	ppb	0.00
Spiked Amount 25.000			Recovery =	434.924%		
5) Toluene-D8(S)	6.48	98	12634988	98.77	ppb	0.00
Spiked Amount 25.000			Recovery =	395.072%		
6) 4-Bromofluorobenzene(S)	8.87	95	4870652	100.64	ppb	0.00
Spiked Amount 25.000			Recovery =	402.548%		

Target Compounds Qvalue

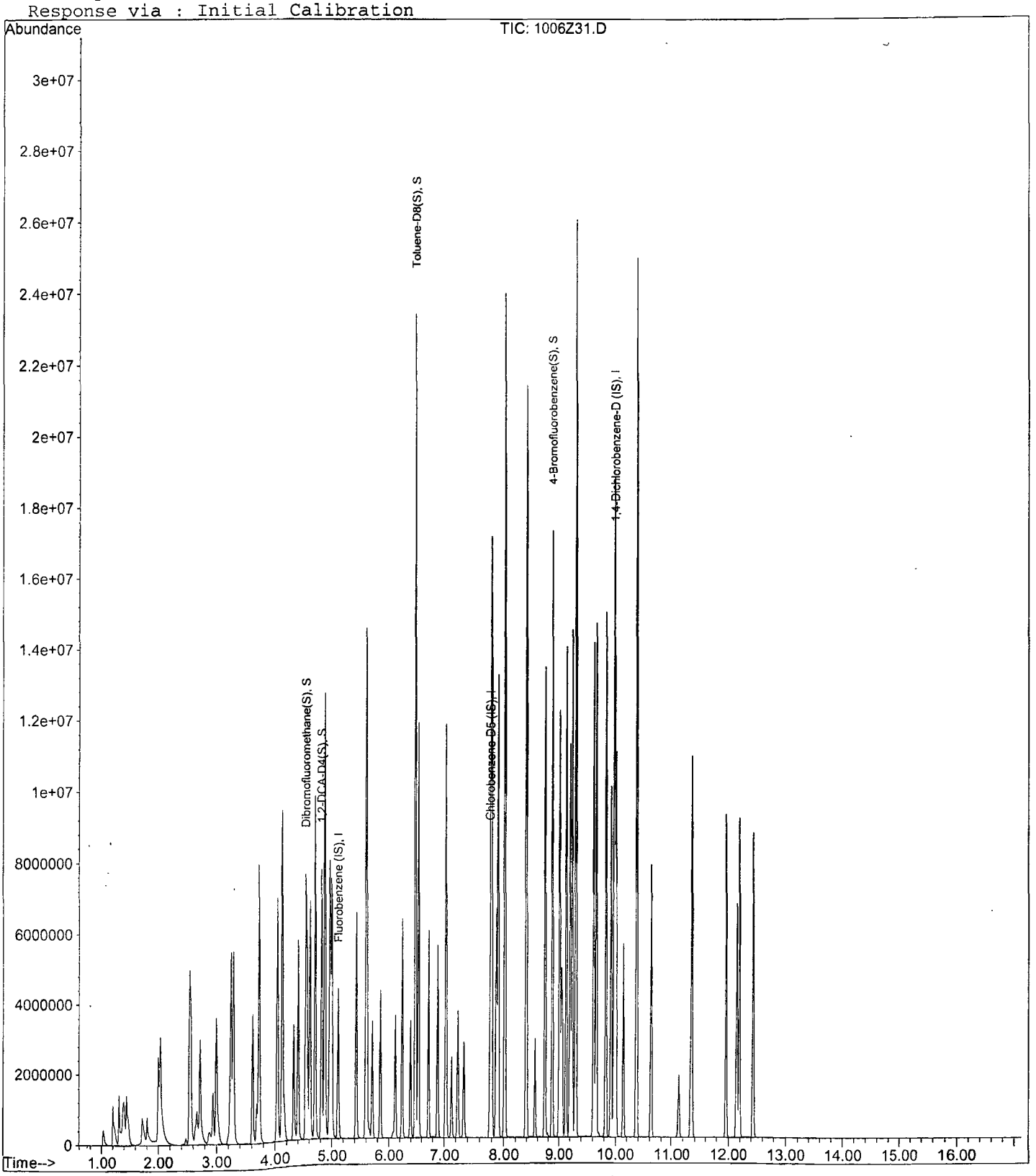
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1006Z31.D Vial: 11
Acq On : 06 Oct 20 19:22 Operator: LP,DG,CH
Sample : 100ug/L VOC STD10/6/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 13:07 2020 Quant Results File: ZSUR1006.RES

Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/09/20
Instrument: ZEUS
Initial Cal. Date: 10/03/20
Data File: 1009Z05.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline C6-C10	2.745	1.023	63	TMHBL	2.5
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
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40							
		Average			63.0		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/09/20
Instrument: ZEUS
Initial Cal. Date: 10/03/20
Data File: 1009Z05.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	S	Dibromofluoromethane(S)	0.2534	0.2771	9.3	S	
3	S	1,2-DCA-D4(S)	0.3201	0.3580	12	S	
4	I	Chlorobenzene-D5 (IS)	ISTD			I	
5	SL	Toluene-D8(S)	1.310	1.487	14	SL	4.6
6	SL	4-Bromofluorobenzene(S)	0.4514	0.5374	19	SL	5.3
7	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
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		Average			13.6		

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z05.D Vial: 5
Acq On : 09 Oct 20 11:14 Operator: LP,DG,CH
Sample : 201008A CCV/LCS 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 11:07 2020 Quant Results File: ZGAS1003.RES

Quant Method : M:\ZEUS\DATA\201006\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	TIC	4803970	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	7.77	TIC	5225052	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.98	TIC	5884533	25.00 ppb	0.00
System Monitoring Compounds					
Target Compounds					Qvalue
2) Gasoline C6-C10	6.48	TIC	58953801m	307.61 ppb	100

(#) = qualifier out of range (m) = manual integration
1009Z05.D ZGAS1003.M Wed Oct 14 14:51:14 2020 Page 1

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z05.D Vial: 5
Acq On : 09 Oct 20 11:14 Operator: LP,DG,CH
Sample : 201009A CCV/LCS 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 10:05 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3401888	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.77	117	2444499	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.98	152	1337129	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	942510	27.33	ppb	0.00
Spiked Amount 25.000			Recovery = 109.328%			
3) 1,2-DCA-D4(S)	4.82	65	1217777	27.95	ppb	0.00
Spiked Amount 25.000			Recovery = 111.812%			
5) Toluene-D8(S)	6.48	98	3635372	26.15	ppb	0.00
Spiked Amount 25.000			Recovery = 104.596%			
6) 4-Bromofluorobenzene(S)	8.87	95	1313647	26.32	ppb	0.00
Spiked Amount 25.000			Recovery = 105.272%			

Target Compounds Qvalue

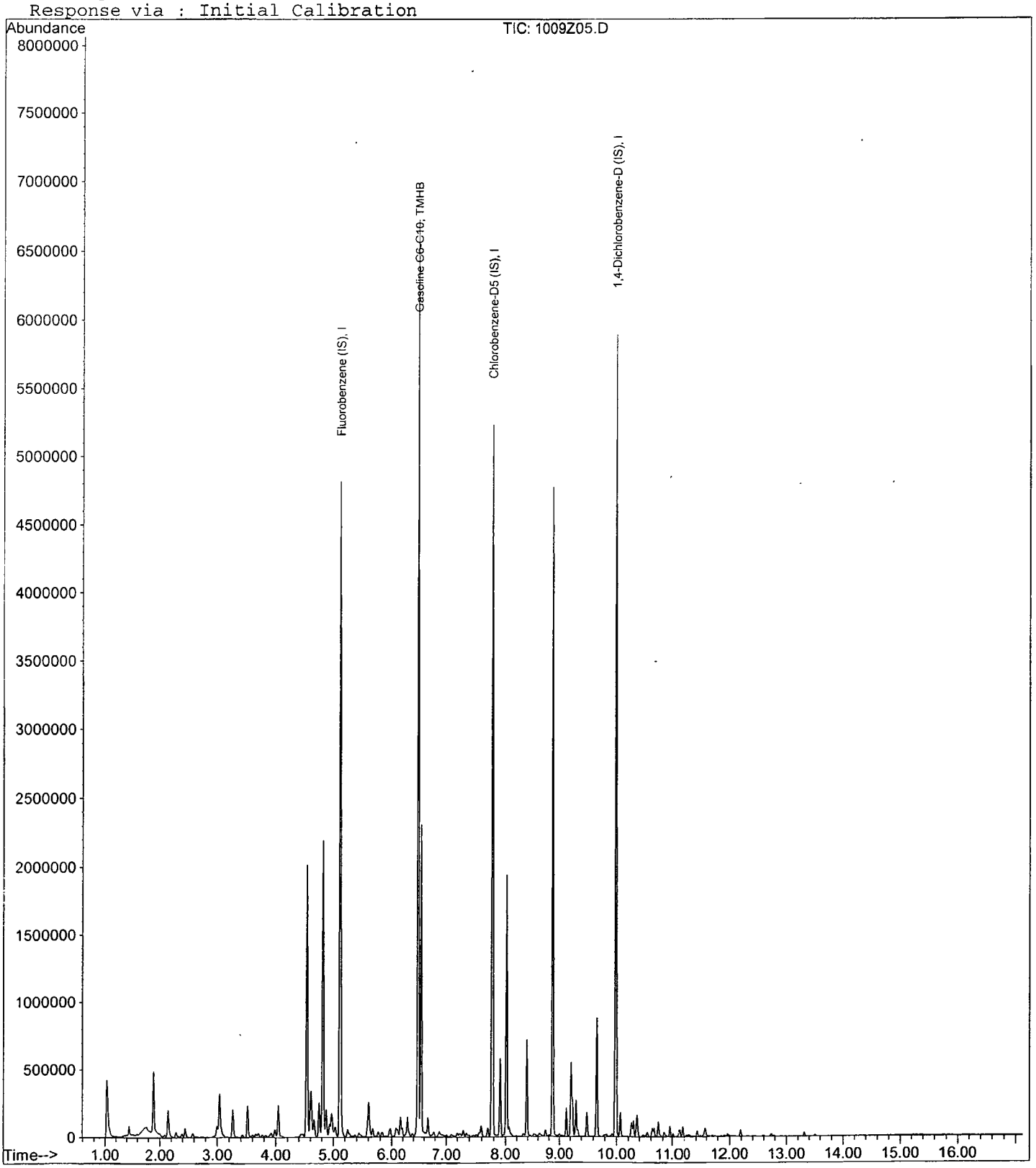
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1009Z05.D Vial: 5
Acq On : 09 Oct 20 11:14 Operator: LP,DG,CH
Sample : 201008A CCV/LCS 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 11:07 2020 Quant Results File: ZGAS1003.RES

Method : M:\ZEUS\DATA\201006\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/09/20
Instrument: ZEUS
Initial Cal. Date: 10/03/20
Data File: 1009Z28.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	S	Dibromofluoromethane(S)	0.2534	0.2732	7.8	S	
3	S	1,2-DCA-D4(S)	0.3201	0.3605	13	S	
4	I	Chlorobenzene-D5 (IS)	ISTD			I	
5	SL	Toluene-D8(S)	1.310	1.442	10	SL	1.6
6	SL	4-Bromofluorobenzene(S)	0.4514	0.5193	15	SL	2.1
7	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
8							
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39							
40							
		Average			11.5		

VOLATILE ORGANIC ANALYSIS
VOLATILE ORGANIC COMPOUNDS

Form 7

Ending Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/09/20
Instrument: ZEUS
Initial Cal. Date: 10/03/20
Data File: 1009Z28.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline C6-C10	2.745	0.9985	64	TMHBL	3.8
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
6							
7							
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		Average			64.0		

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z28.D Vial: 28
Acq On : 09 Oct 20 20:35 Operator: LP,DG,CH
Sample : Ending CCV 300ug/L 10/8/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 14 14:52 2020 Quant Results File: ZGAS1003.RES

Quant Method : M:\ZEUS\DATA\201006\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	TIC	4806486	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	7.77	TIC	5267962	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.98	TIC	5783027	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline C6-C10	6.48	TIC	57590764m	288.62	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z28.D Vial: 28
Acq On : 09 Oct 20 20:35 Operator: LP,DG,CH
Sample : Ending CCV 300ug/L 10/9/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 10:05 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3387889	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.77	117	2461426	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.98	152	1343502	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	925581	26.95	ppb	0.00
Spiked Amount 25.000			Recovery = 107.808%			
3) 1,2-DCA-D4(S)	4.82	65	1221253	28.15	ppb	0.00
Spiked Amount 25.000			Recovery = 112.596%			
5) Toluene-D8(S)	6.48	98	3549683	25.39	ppb	0.00
Spiked Amount 25.000			Recovery = 101.568%			
6) 4-Bromofluorobenzene(S)	8.87	95	1278201	25.53	ppb	0.00
Spiked Amount 25.000			Recovery = 102.108%			

Target Compounds Qvalue

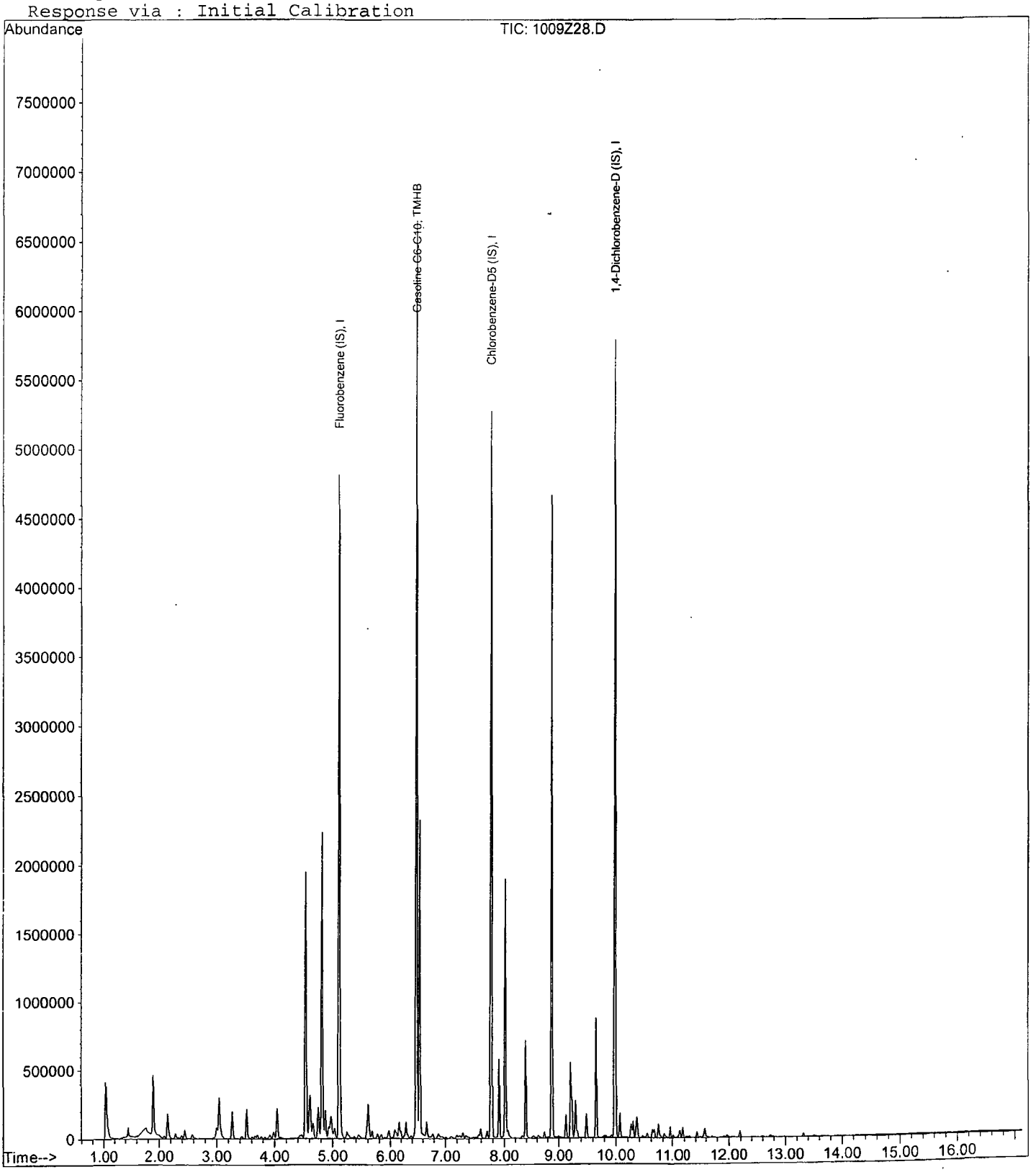
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1009Z28.D Vial: 28
Acq On : 09 Oct 20 20:35 Operator: LP,DG,CH
Sample : Ending CCV 300ug/L 10/8/20 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 14 14:52 2020 Quant Results File: ZGAS1003.RES

Method : M:\ZEUS\DATA\201006\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration



ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z25.D
Acq On : 09 Oct 20 19:25
Sample : BA19639W01
Misc :

Vial: 25
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 14 13:53 2020 Quant Results File: ZGAS1003.RES

Quant Method : M:\ZEUS\DATA\201006\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	TIC	4728550	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	7.77	TIC	5246764	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.98	TIC	5707518	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z25.D Vial: 25
Acq On : 09 Oct 20 19:25 Operator: LP,DG,CH
Sample : BA19639W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 10:05 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3337675	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.77	117	2419442	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.98	152	1335829	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	931391	27.53	ppb	0.00
Spiked Amount 25.000			Recovery =	110.116%		
3) 1,2-DCA-D4(S)	4.82	65	1221628	28.58	ppb	0.00
Spiked Amount 25.000			Recovery =	114.324%		
5) Toluene-D8(S)	6.48	98	3473980	25.29	ppb	0.00
Spiked Amount 25.000			Recovery =	101.144%		
6) 4-Bromofluorobenzene(S)	8.87	95	1266164	25.70	ppb	0.00
Spiked Amount 25.000			Recovery =	102.816%		

Target Compounds Qvalue

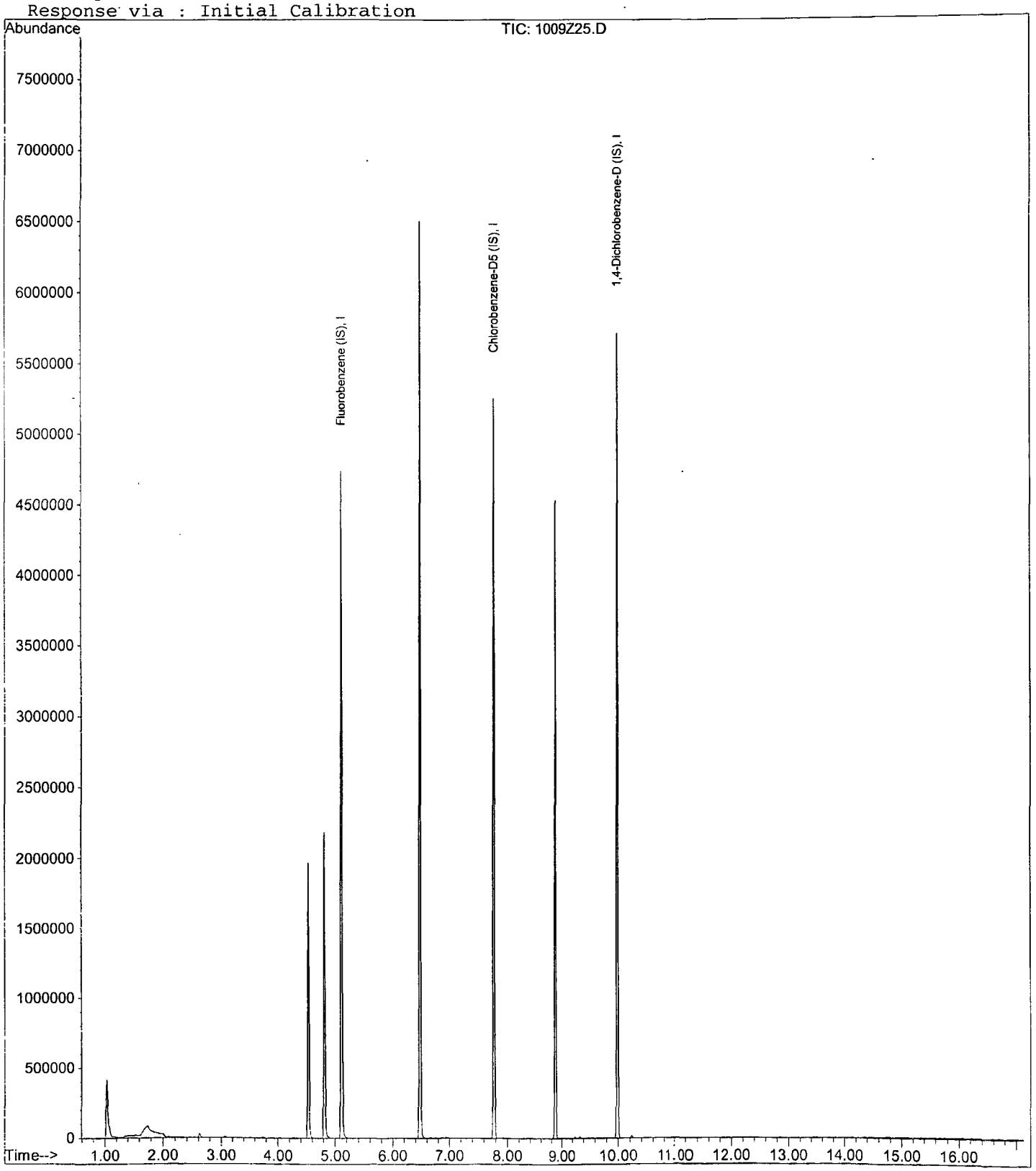
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\ZEUS\DATA\201006\1009Z25.D Vial: 25
Acq On : 09 Oct 20 19:25 Operator: LP,DG,CH
Sample : BA19639W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:53 2020 Quant Results File: ZGAS1003.RES

Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z26.D Vial: 26
Acq On : 09 Oct 20 19:48 Operator: LP,DG,CH
Sample : BA19640W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 14 13:54 2020 Quant Results File: ZGAS1003.RES

Quant Method : M:\ZEUS\DATA\201006\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	TIC	4777479	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	7.77	TIC	5207206	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.99	TIC	5679314	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z26.D Vial: 26
Acq On : 09 Oct 20 19:48 Operator: LP,DG,CH
Sample : BA19640W01 Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 10:05 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3342257	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.77	117	2436716	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.99	152	1342814	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	929139	27.42	ppb	0.00
Spiked Amount 25.000			Recovery = 109.700%			
3) 1,2-DCA-D4(S)	4.82	65	1237163	28.91	ppb	0.00
Spiked Amount 25.000			Recovery = 115.620%			
5) Toluene-D8(S)	6.48	98	3469333	25.08	ppb	0.00
Spiked Amount 25.000			Recovery = 100.332%			
6) 4-Bromofluorobenzene(S)	8.87	95	1262965	25.48	ppb	0.00
Spiked Amount 25.000			Recovery = 101.936%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

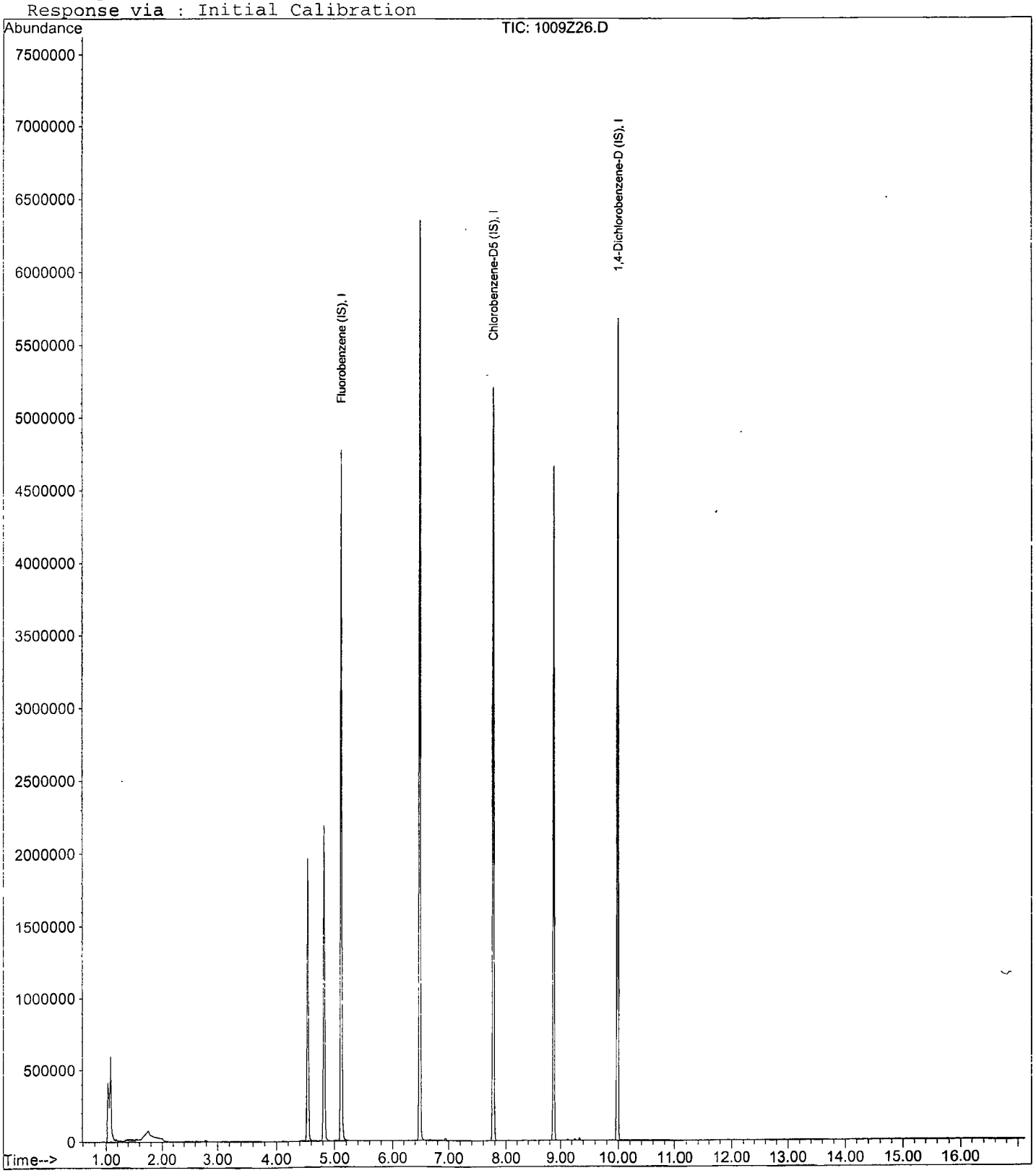
Quantitation Report

Data File : M:\ZEUS\DATA\201006\1009Z26.D
Acq On : 09 Oct 20 19:48
Sample : BA19640W01
Misc :

Vial: 26
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 14 13:54 2020 Quant Results File: ZGAS1003.RES

Method : M:\ZEUS\DATA\201003\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z10.D Vial: 10
Acq On : 09 Oct 20 13:37 Operator: LP,DG,CH
Sample : 201008A BLK Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 11:11 2020 Quant Results File: ZGAS1003.RES

Quant Method : M:\ZEUS\DATA\201006\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	TIC	4808885	25.00	ppb	0.00
3) Chlorobenzene-D5 (IS)	7.77	TIC	5364589	25.00	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.98	TIC	6081388	25.00	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z10.D Vial: 10
Acq On : 09 Oct 20 13:37 Operator: LP,DG,CH
Sample : 201009A BLK Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 10:05 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3459125	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.77	117	2517732	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.98	152	1371218	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	948426	27.05	ppb	0.00
Spiked Amount 25.000			Recovery =	108.192%		
3) 1,2-DCA-D4(S)	4.81	65	1267184	28.61	ppb	0.00
Spiked Amount 25.000			Recovery =	114.424%		
5) Toluene-D8(S)	6.48	98	3597198	25.17	ppb	0.00
Spiked Amount 25.000			Recovery =	100.668%		
6) 4-Bromofluorobenzene(S)	8.87	95	1300456	25.41	ppb	0.00
Spiked Amount 25.000			Recovery =	101.624%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

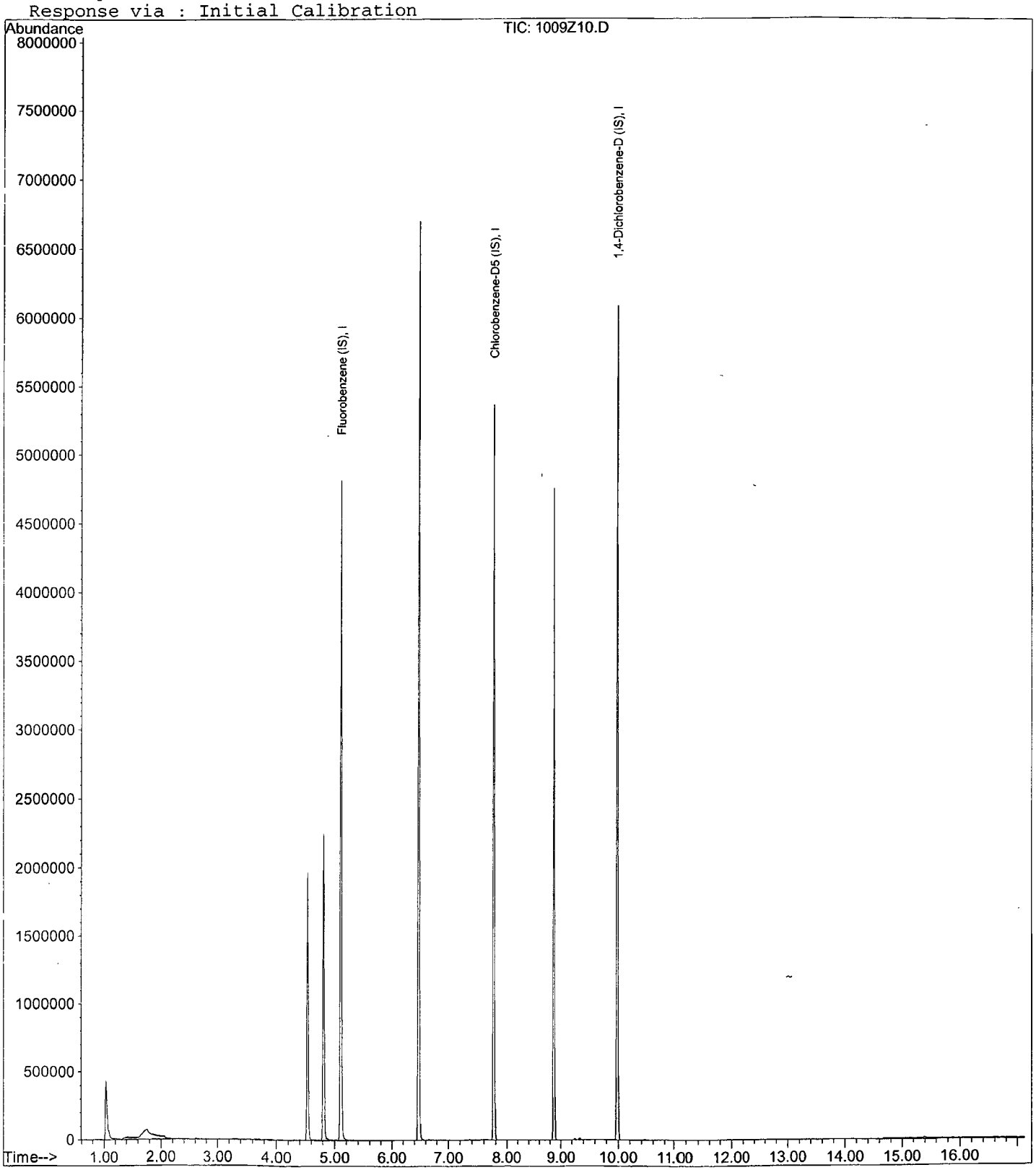
Quantitation Report

Data File : M:\ZEUS\DATA\201006\1009Z10.D
Acq On : 09 Oct 20 13:37
Sample : 201008A BLK
Misc :

Vial: 10
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 12 11:11 2020 Quant Results File: ZGAS1003.RES

Method : M:\ZEUS\DATA\201006\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z06.D Vial: 6
Acq On : 09 Oct 20 11:37 Operator: LP,DG,CH
Sample : 201008A LCSD 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 11:07 2020 Quant Results File: ZGAS1003.RES

Quant Method : M:\ZEUS\DATA\201006\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	TIC	4904833	25.00 ppb	0.00
3) Chlorobenzene-D5 (IS)	7.77	TIC	5209008	25.00 ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	9.99	TIC	5881674	25.00 ppb	0.00

System Monitoring Compounds

Target Compounds					Qvalue
2) Gasoline C6-C10	6.48	TIC	59172066m	294.00 ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : M:\ZEUS\DATA\201006\1009Z06.D Vial: 6
Acq On : 09 Oct 20 11:37 Operator: LP,DG,CH
Sample : 201009A LCSD 300ug/L Inst : ZEUS
Misc : Multiplr: 1.00

Quant Time: Oct 12 10:05 2020 Quant Results File: ZSUR1006.RES

Quant Method : M:\ZEUS\DATA\201006\ZSUR1006.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed Oct 07 09:50:16 2020
Response via : Initial Calibration
DataAcq Meth : EST_TEST.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	5.11	96	3438838	25.00	ppb	0.00
4) Chlorobenzene-D5 (IS)	7.78	117	2462887	25.00	ppb	0.00
7) 1,4-Dichlorobenzene-D (IS)	9.99	152	1360232	25.00	ppb	0.00
System Monitoring Compounds						
2) Dibromofluoromethane(S)	4.54	111	938627	26.93	ppb	0.00
Spiked Amount 25.000			Recovery = 107.704%			
3) 1,2-DCA-D4(S)	4.82	65	1228470	27.90	ppb	0.00
Spiked Amount 25.000			Recovery = 111.584%			
5) Toluene-D8(S)	6.48	98	3646088	26.04	ppb	0.00
Spiked Amount 25.000			Recovery = 104.140%			
6) 4-Bromofluorobenzene(S)	8.87	95	1307539	26.03	ppb	0.00
Spiked Amount 25.000			Recovery = 104.136%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

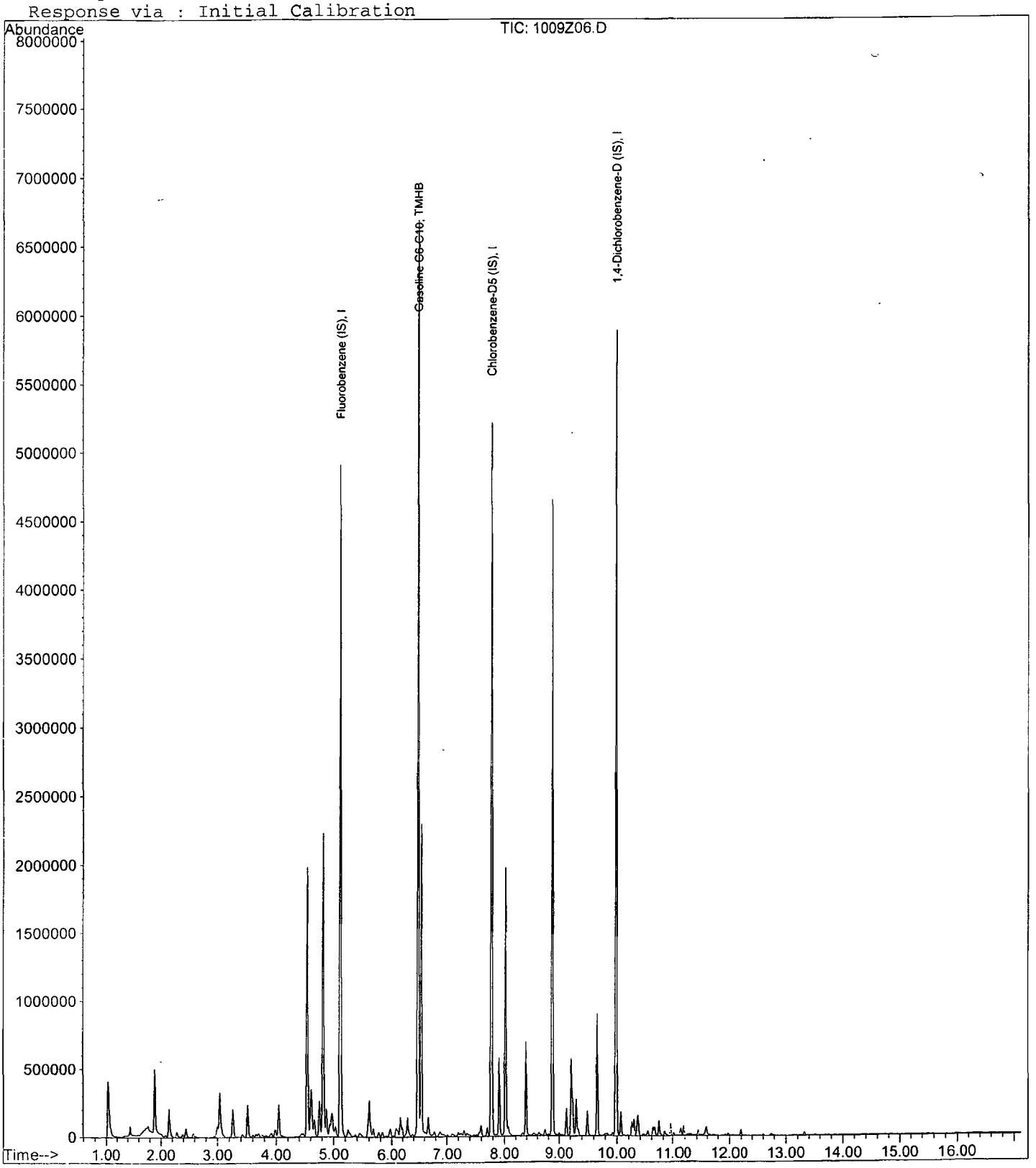
Quantitation Report

Data File : M:\ZEUS\DATA\201006\1009Z06.D
Acq On : 09 Oct 20 11:37
Sample : 201008A LCSD 300ug/L
Misc :

Vial: 6
Operator: LP,DG,CH
Inst : ZEUS
Multiplr: 1.00

Quant Time: Oct 12 11:07 2020 Quant Results File: ZGAS1003.RES

Method : M:\ZEUS\DATA\201006\ZGAS1003.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Oct 05 11:17:26 2020
Response via : Initial Calibration



Zeus Gas Standard Prep

Gas Primary Working Standard

Prepared: 08/20/20 — Prepared By (Initials): CH
Expires: 01/06/21
Methanol Lot No. 58019-00962

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
50,000ug/mL Gas STD	Restek	30205	50,000	A0132443-39859	01/06/21	12/31/24	80uL	2mL	Methanol	2,000

Gas Second Source (SS) Working Standard

Prepared: 08/20/20 — Prepared By (Initials): CH
Expires: 10/13/20
Methanol Lot No. 58019-00962

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Gasoline (50,000ppm)	Phenova	ALO-101543	50,000	CL11750-40998	10/13/20	02/28/27	800uL	2mL	Methanol	2,000

Zeus Gas Calibration Curve

Prepared: 10/03/20 — Prepared By (Initials): CH
Expires: 12/02/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
VOA Gasses Standards	Phenova	20ug/L	2,000	Prepared 08/20/20	01/06/21	N/A	1uL	100mL	P&T Water	20
VOA Gasses Standards	Phenova	50ug/L	2,000	Prepared 08/20/20	01/06/21	N/A	2.5uL	100mL	P&T Water	50
VOA Gasses Standards	Phenova	100ug/L	2,000	Prepared 08/20/20	01/06/21	N/A	5uL	100mL	P&T Water	100
VOA Gasses Standards	Phenova	300ug/L	2,000	Prepared 08/20/20	01/06/21	N/A	15uL	100mL	P&T Water	300
VOA Gasses Standards	Phenova	600ug/L	2,000	Prepared 08/20/20	01/06/21	N/A	30uL	100mL	P&T Water	600
VOA Gasses Standards	Phenova	800ug/L	2,000	Prepared 08/20/20	01/06/21	N/A	40uL	100mL	P&T Water	800
VOA Gasses Standards	Phenova	1,000ug/L	2,000	Prepared 08/20/20	01/06/21	N/A	50uL	100mL	P&T Water	1,000

Zeus Gas Second Source

Prepared: 10/03/20 — Prepared By (Initials): CH
Expires: 12/02/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc (ug/L)
50,000ug/mL Gas STD	Phenova	SS 300ug/L	2,000	Prepared 08/20/20	10/13/20	N/A	15uL	100mL	P&T Water	300

Zeus Gas Continuing Calibrations/Lab Control Spikes

Prepared: 10/03/20 — Prepared By (Initials): CH
Expires: 10/04/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
VOA Gasses Standards	Phenova	300ug/L	2,000	Prepared 08/20/20	01/06/21	N/A	15uL	100mL	P&T Water	300

Thor Gas Surrogate

Prepared: 08/13/18 — Prepared By (Initials): PC
Expires: 04/02/19
Methanol Lot No. 57159

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
8260B Surrogate Solution	O2SI	120002-01	2,000	275545-36329	06/09/19	04/02/19	375uL	15mL	Methanol	50

Thor Gas Internal Standard

Prepared: 05/09/18 — Prepared By (Initials): PC
Expires: 04/13/19
Methanol Lot No. 58149

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier P/N#	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturers)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/L)
IS Solution	O2SI	120004-02	2,000	326533-38443	04/13/19	04/27/21	375uL	15mL	Methanol	50

Injection Log

Directory: M:\ZEUS\DATA\201003\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	22	1003Z32.D	1	20ug/L GAS STD 10/3/20		03 Oct 20 19:22
2	23	1003Z33.D	1	50ug/L GAS STD 10/3/20		03 Oct 20 19:46
3	24	1003Z34.D	1	100ug/L GAS STD 10/3/20		03 Oct 20 20:09
4	25	1003Z35.D	1	300ug/L GAS STD 10/3/20		03 Oct 20 20:32
5	26	1003Z36.D	1	600ug/L GAS STD 10/3/20		03 Oct 20 20:55
6	27	1003Z37.D	1	800ug/L GAS STD 10/3/20		03 Oct 20 21:18
7	28	1003Z38.D	1	1000ug/L GAS STD 10/3/20		03 Oct 20 21:41
8	29	1003Z39.D	1	(SS)300ug/L GAS STD 10/3/20		03 Oct 20 22:05
9	3	1006Z23.D	1	0.3ug/L VOC STD10/6/20		06 Oct 20 16:16
10	4	1006Z24.D	1	0.5ug/L VOC STD10/6/20		06 Oct 20 16:39
11	5	1006Z25.D	1	1.0ug/L VOC STD10/6/20		06 Oct 20 17:02
12	6	1006Z26.D	1	2.0ug/L VOC STD10/6/20		06 Oct 20 17:26
13	7	1006Z27.D	1	5.0ug/L VOC STD10/6/20		06 Oct 20 17:49
14	8	1006Z28.D	1	10ug/L VOC STD10/6/20		06 Oct 20 18:12
15	9	1006Z29.D	1	20ug/L VOC STD10/6/20		06 Oct 20 18:36
16	10	1006Z30.D	1	40ug/L VOC STD10/6/20		06 Oct 20 18:59
17	11	1006Z31.D	1	100ug/L VOC STD10/6/20		06 Oct 20 19:22
18	5	1009Z05.D	1	201009A CCV/LCS 300ug/L		09 Oct 20 11:14
19	6	1009Z06.D	1	201009A LCSD 300ug/L		09 Oct 20 11:37
20	10	1009Z10.D	1	201009A BLK		09 Oct 20 13:37
21	25	1009Z25.D	1	BA19639W01		09 Oct 20 19:25
22	26	1009Z26.D	1	BA19640W01		09 Oct 20 19:48
23	28	1009Z28.D	1	Ending CCV 300ug/L 10/9/20		09 Oct 20 20:35

ORGANICS

Calibration Data

RSK 175
RSK 175

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 09/14/20
Matrix: Instrument: 7890
Initials: CD

0914R07.D 0914R08.D 0914R09.D 0914R10.D 0914R11.D 0914R12.D 0914R13.D

		Compound	1	2	3	4	5	6	7				Avg	%RSD	Type	r^2	Q
1	ATML	Methane	31176	26056	25998	23232	23337	25358	24640				25685	10	ATM	1.000	
2	ATML	Ethane	21362	19532	19181	17082	17815	18853	18215				18863	7.3	ATM	1.000	
3	ATML	Ethene	16420	15064	15131	13510	13711	15061	14685				14797	6.6	ATM	1.000	
4																	
5																	
6																	
7																	
8																	
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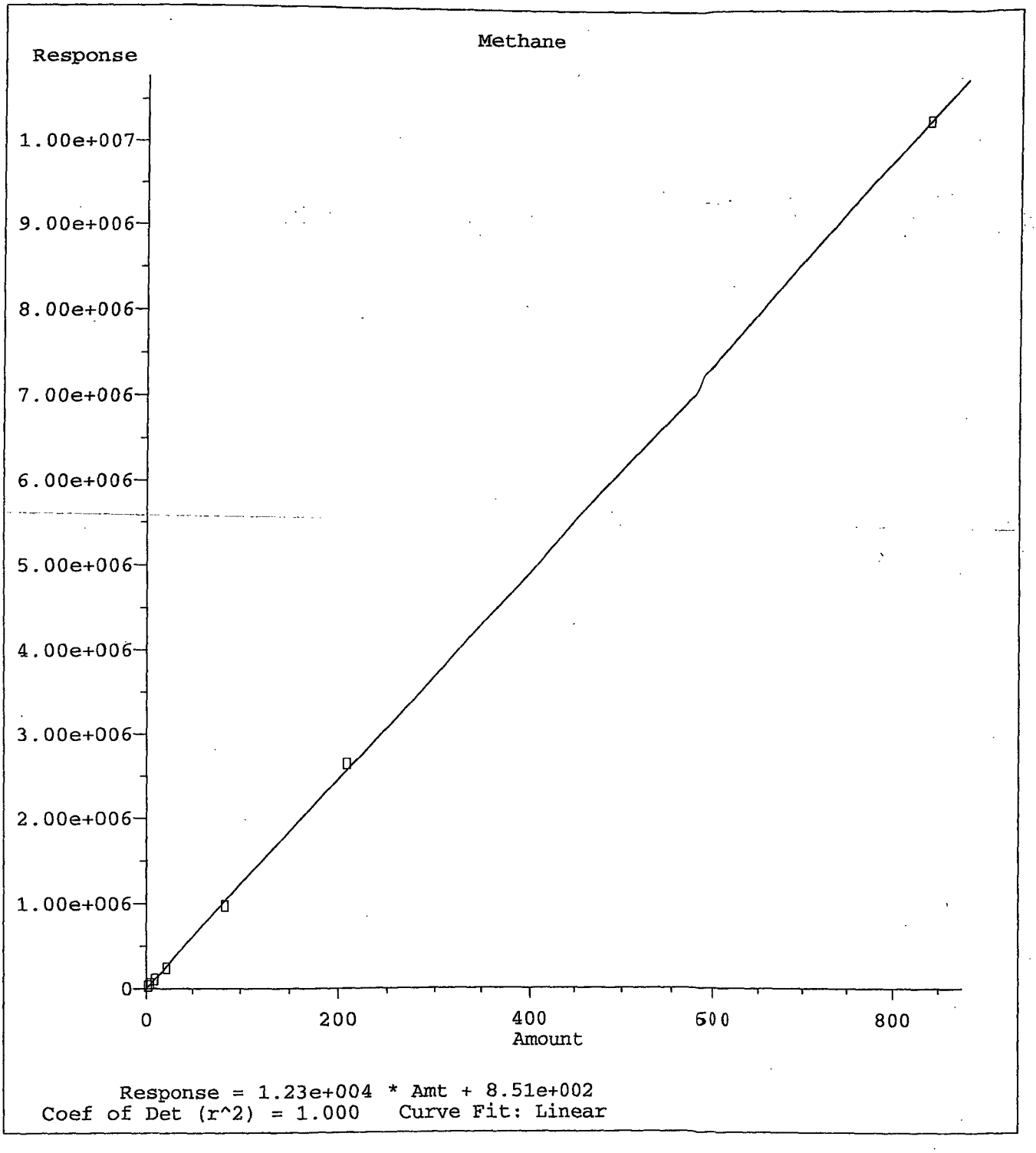
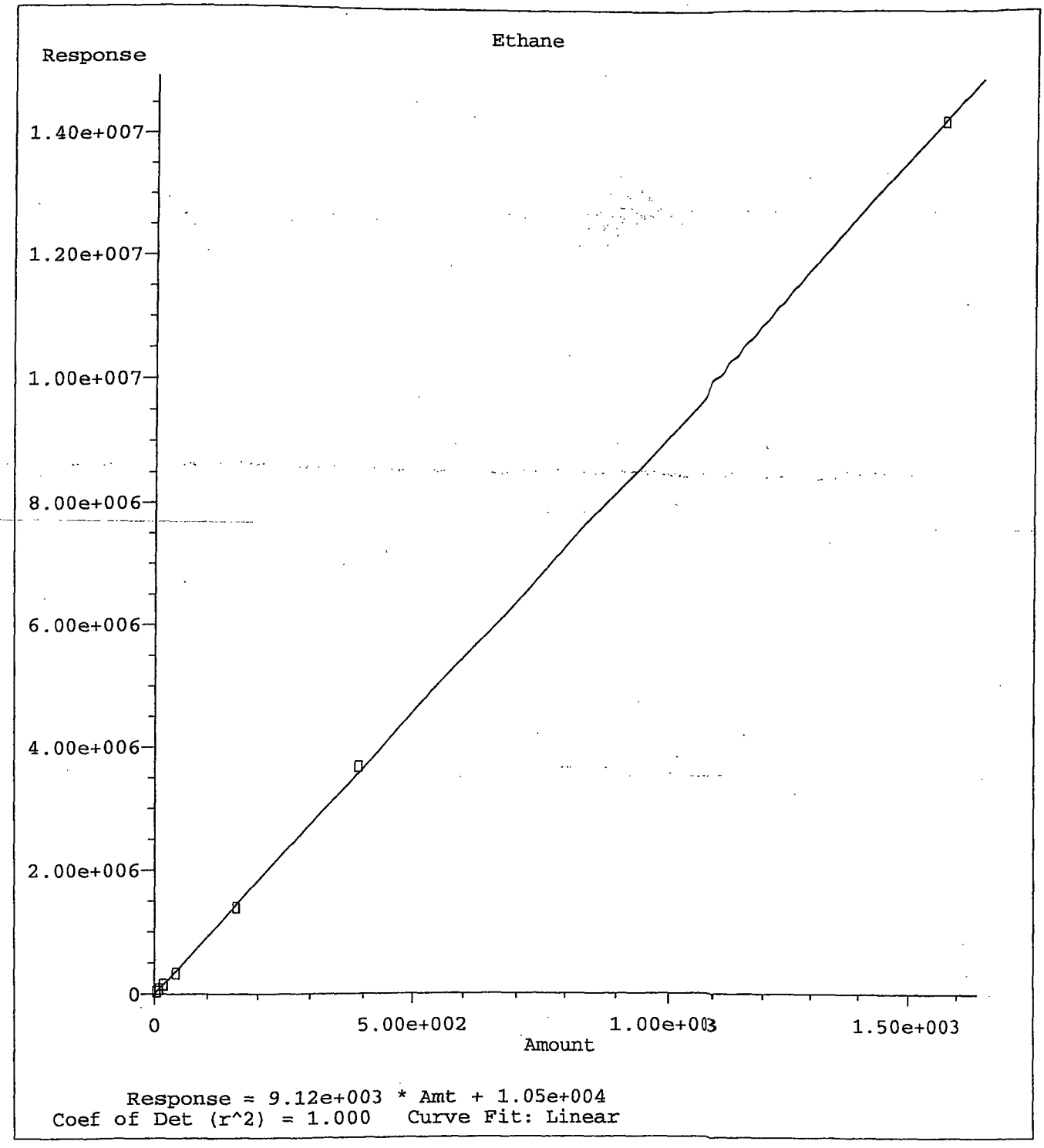
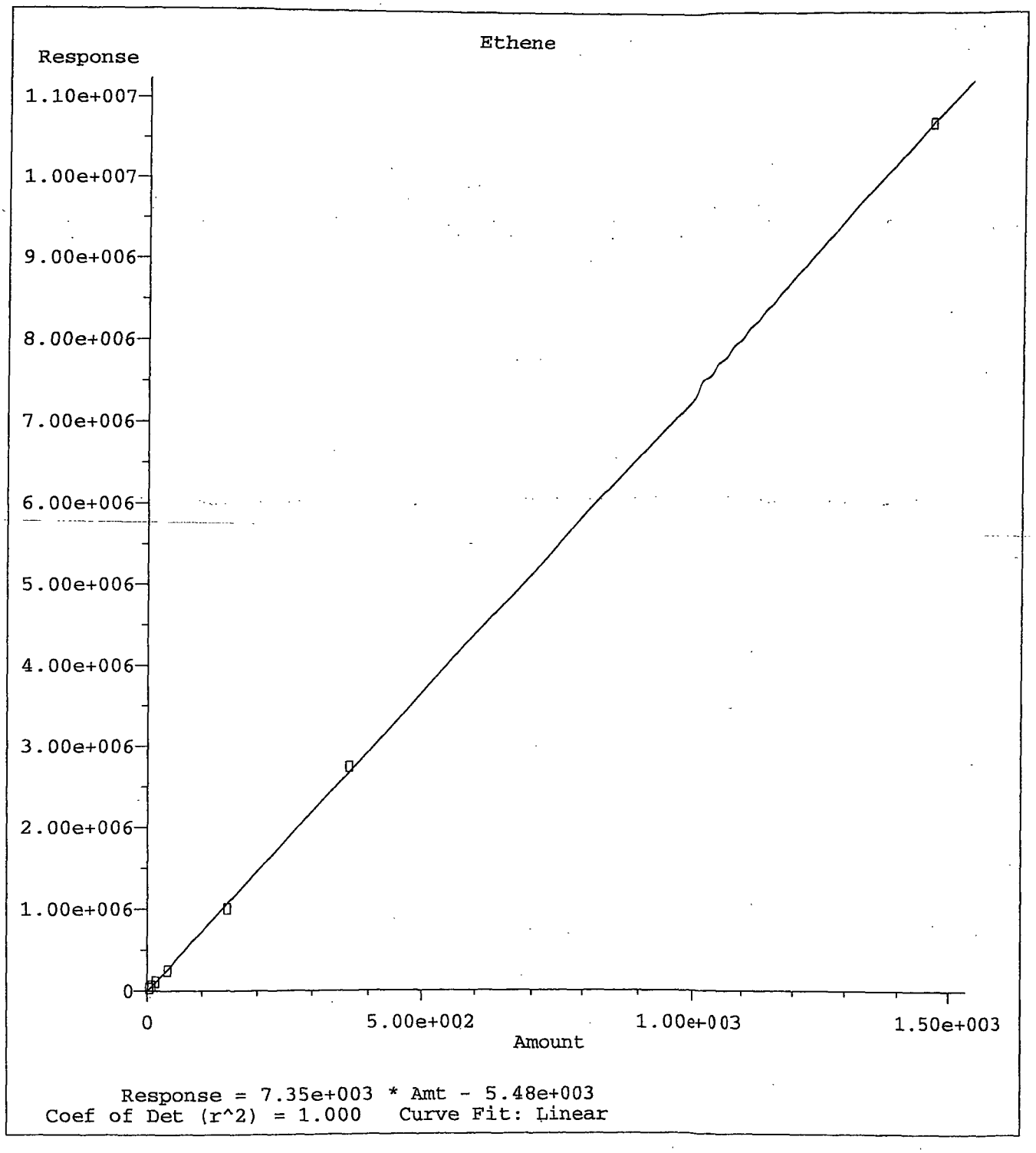
0.696467



Method Name: G:\ROCKY\DATA\200624RS\RSK0914A.M
Calibration Table Last Updated: Mon Sep 14 12:40:32 2020



Method Name: G:\ROCKY\DATA\200624RS\RSK0914A.M
Calibration Table Last Updated: Mon Sep 14 12:40:32 2020



Method Name: G:\ROCKY\DATA\200624RS\RSK0914A.M
Calibration Table Last Updated: Mon Sep 14 12:40:32 2020

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R07.D Vial: 1
Acq On : 14 Sep 20 12:06 Operator: CD
Sample : RSK STD1 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

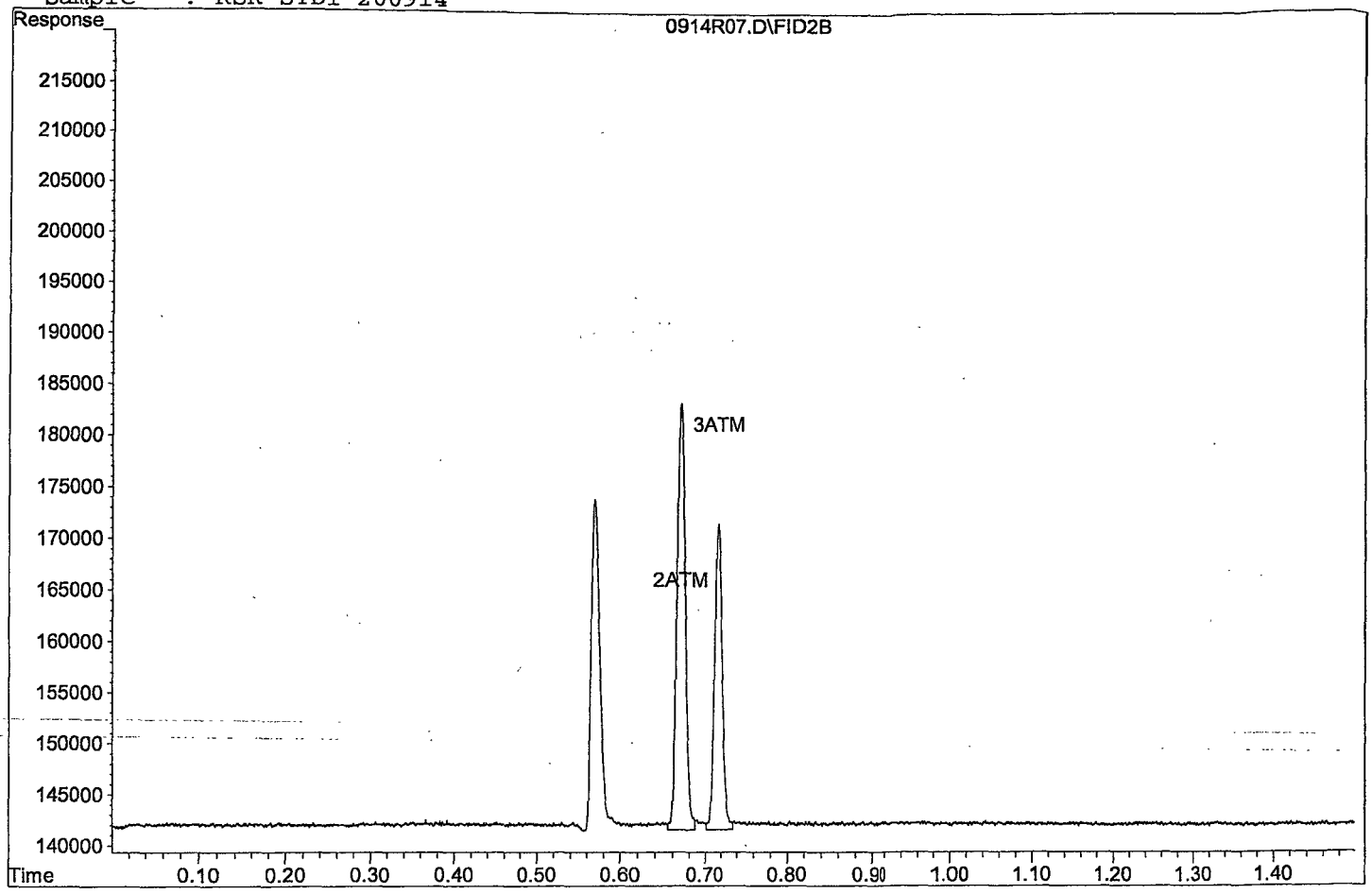
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
2) ATM Ethane	0.67	41762	102628.492 ppb
3) ATM Ethene	0.72	29966	4.139 ppb
Target Compounds			
1) ATM Methane	0.57	32423	N.D. ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R07.D
Sample : RSK STD1 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R08.D Vial: 1
Acq On : 14 Sep 20 12:10 Operator: CD
Sample : RSK STD2 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

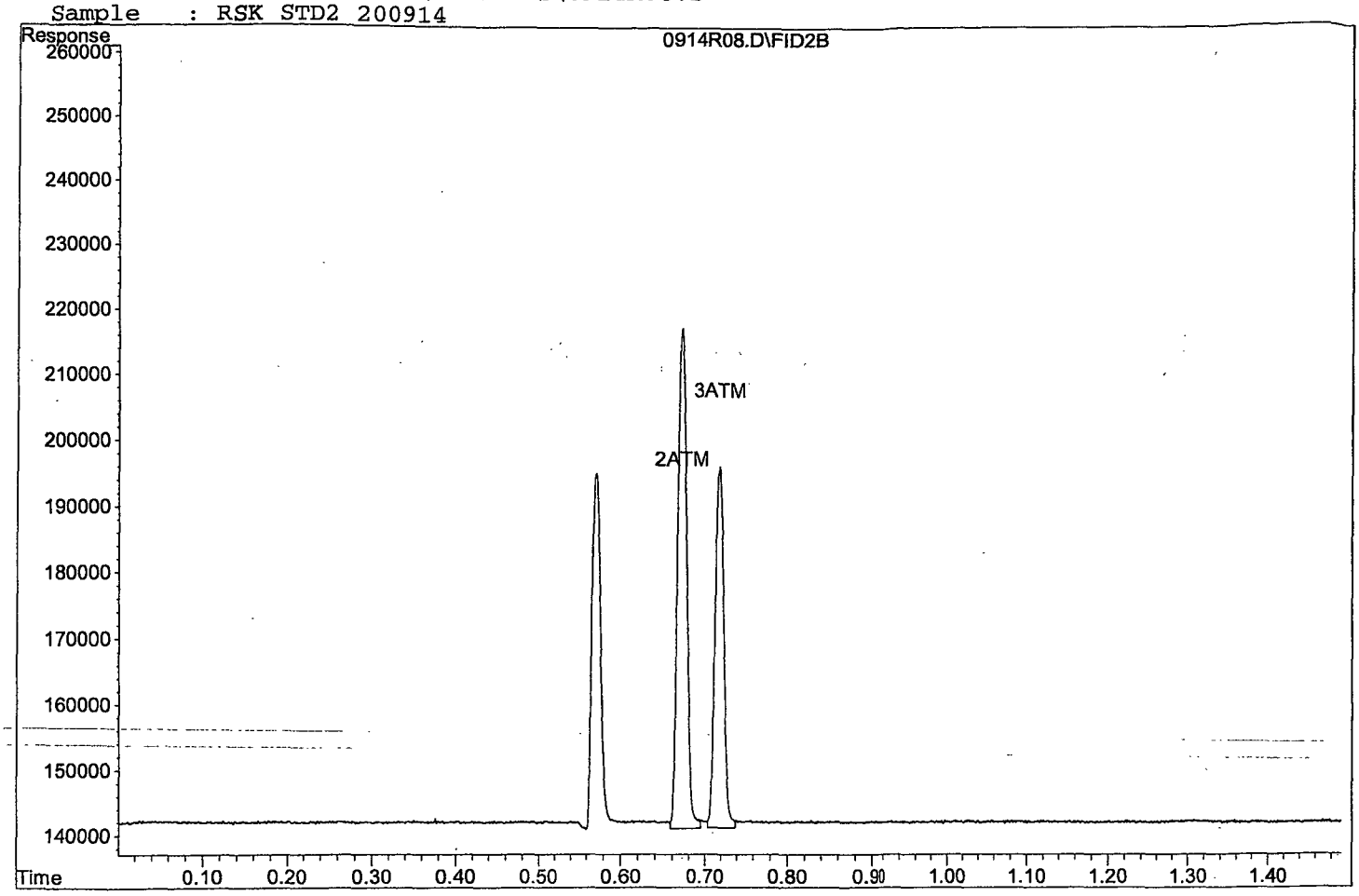
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
2) ATM Ethane	0.67	76271	190289.144	ppb
3) ATM Ethene	0.72	54983	7.686	ppb
Target Compounds				
1) ATM Methane	0.57	54196	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R08.D
Sample : RSK STD2 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R09.D Vial: 1
Acq On : 14 Sep 20 12:13 Operator: CD
Sample : RSK STD3 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

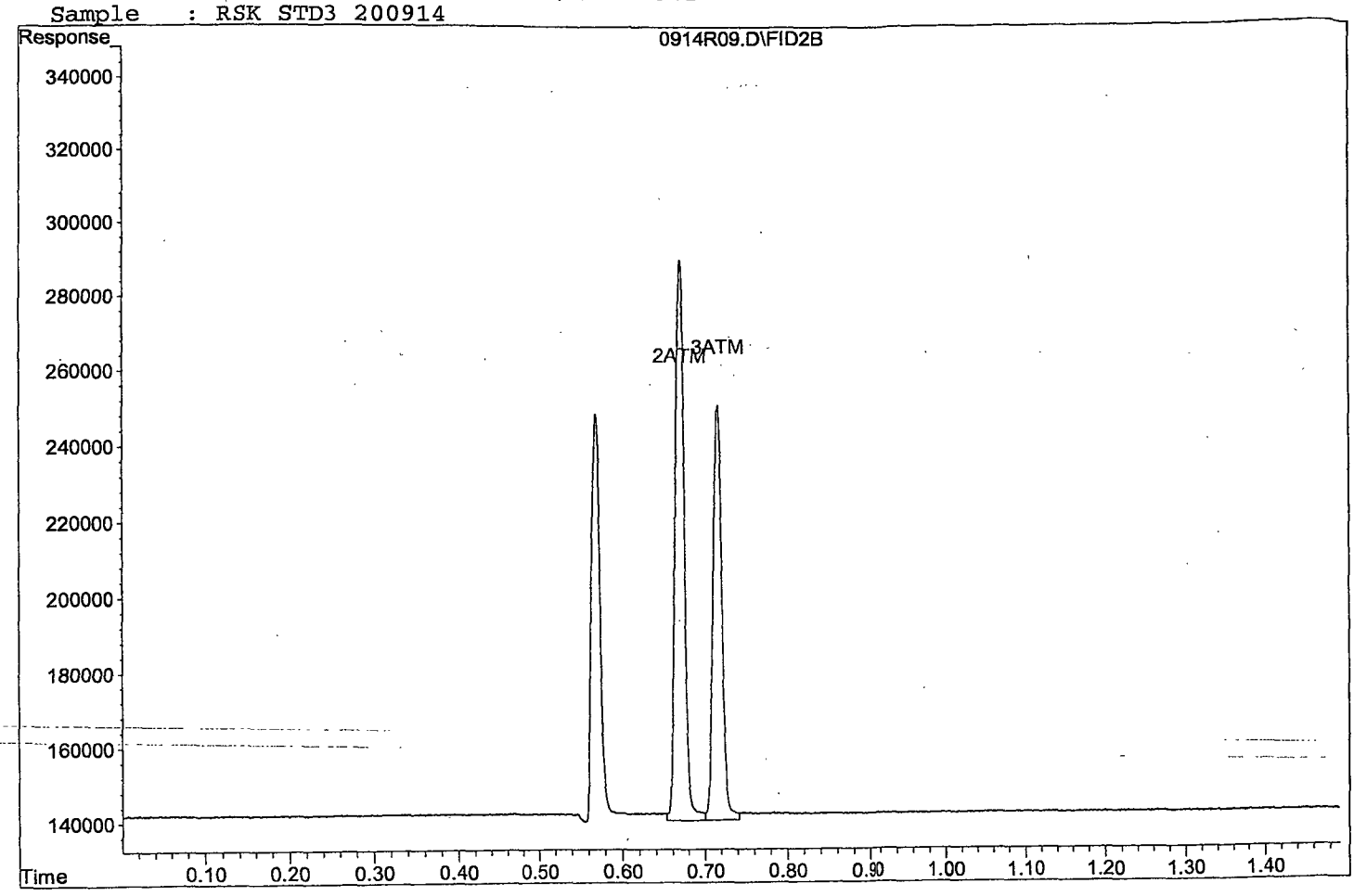
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
2) ATM Ethane	0.67	149612	376595.524 ppb
3) ATM Ethene	0.72	110455	15.551 ppb
Target Compounds			
1) ATM Methane	0.57	108403	N.D. ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R09.D
Sample : RSK STD3 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R10.D Vial: 1
Acq On : 14 Sep 20 12:18 Operator: CD
Sample : RSK STD4 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

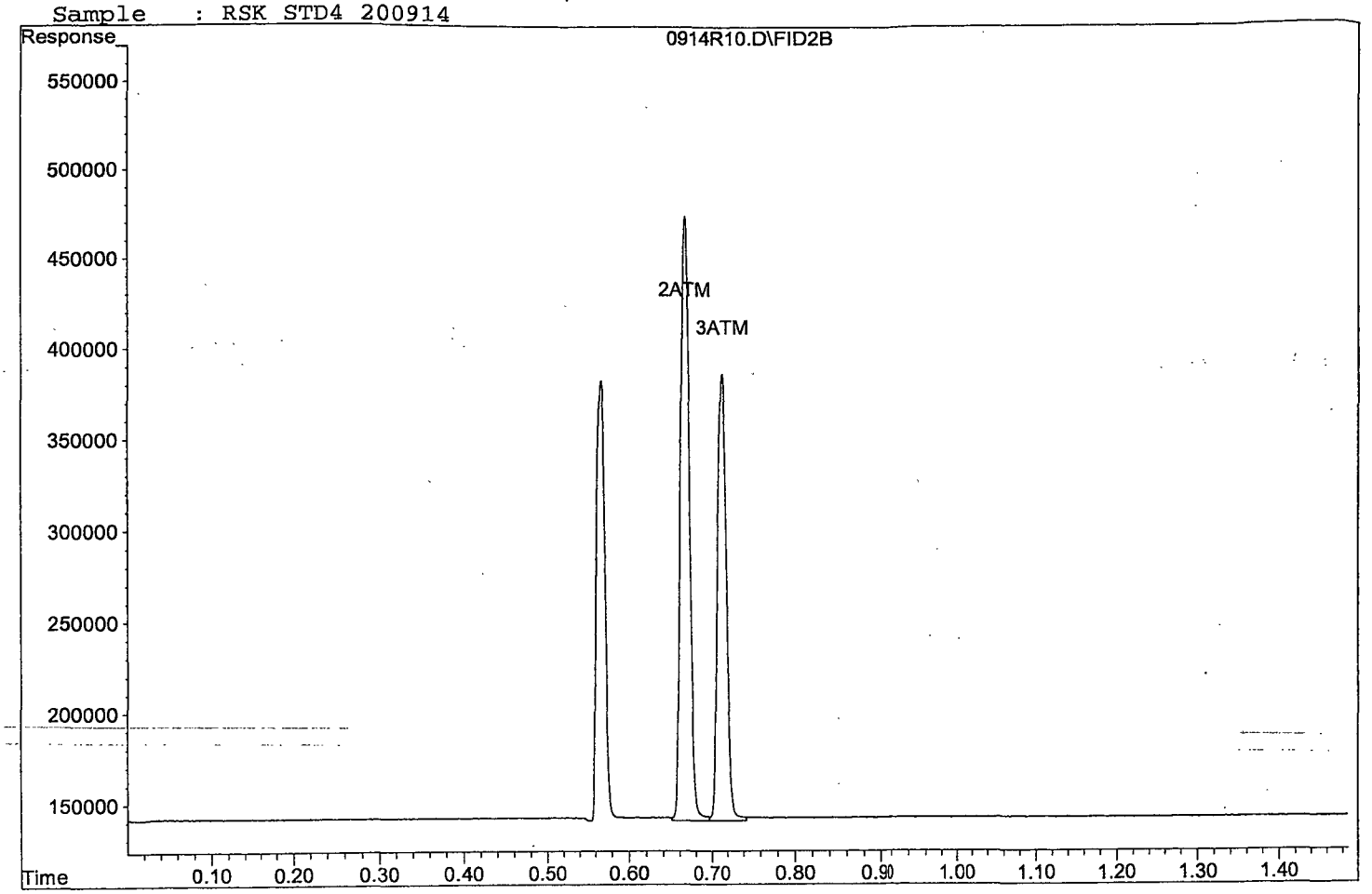
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
2) ATM Ethane	0.67	333873	844(67.853 ppb
3) ATM Ethene	0.71	246286	34.810 ppb
Target Compounds			
1) ATM Methane	0.57	242197	N.D. ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R10.D
Sample : RSK STD4 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R11.D Vial: 1
Acq On : 14 Sep 20 12:21 Operator: CD
Sample : RSK STD5 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

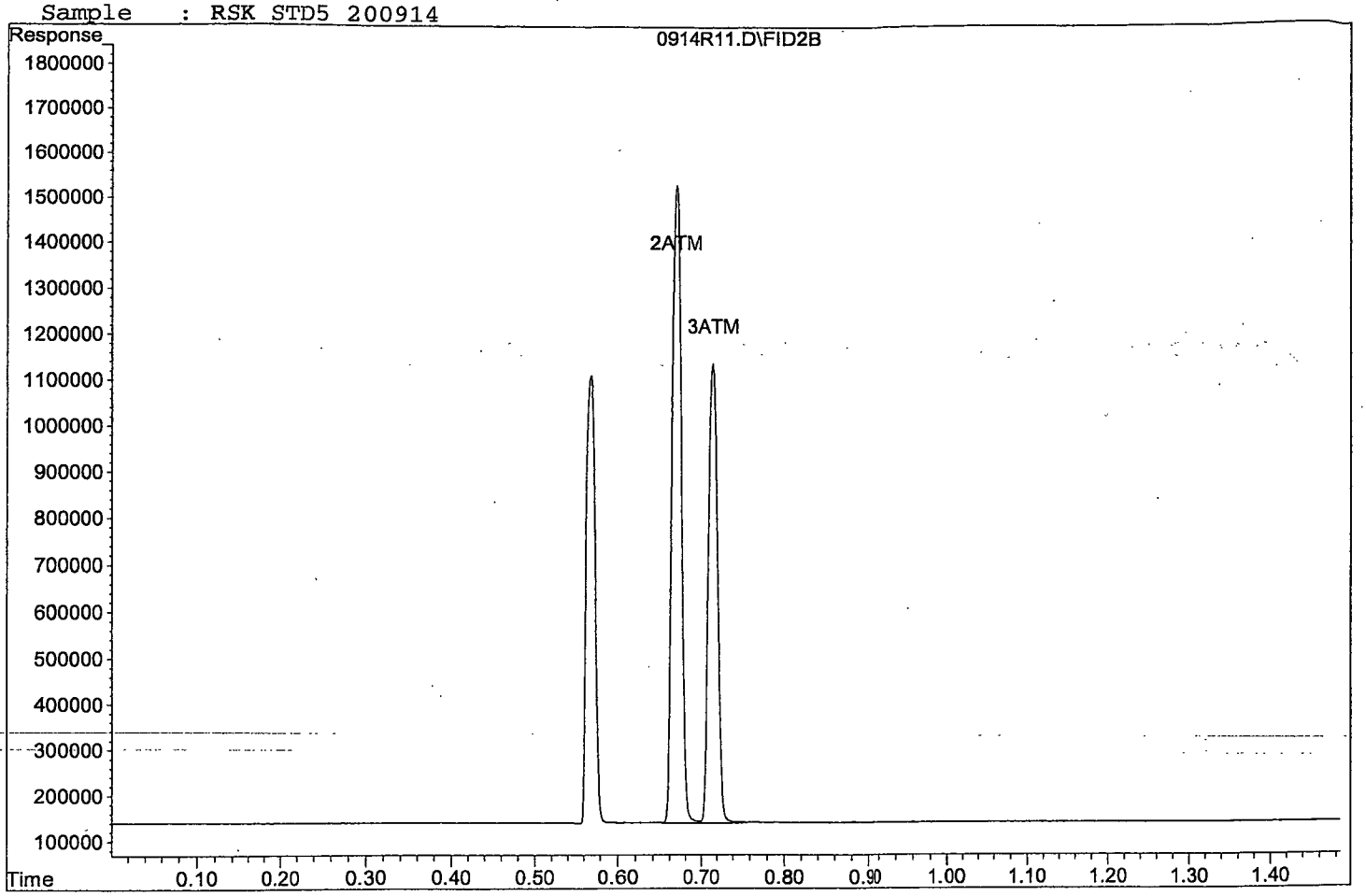
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
2) ATM Ethane	0.67	1392673	3534302.847	ppb
3) ATM Ethene	0.71	999836	141.654	ppb
Target Compounds				
1) ATM Methane	0.57	973152	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R11.D
Sample : RSK STD5 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R12.D Vial: 1
Acq On : 14 Sep 20 12:25 Operator: CD
Sample : RSK STD6 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

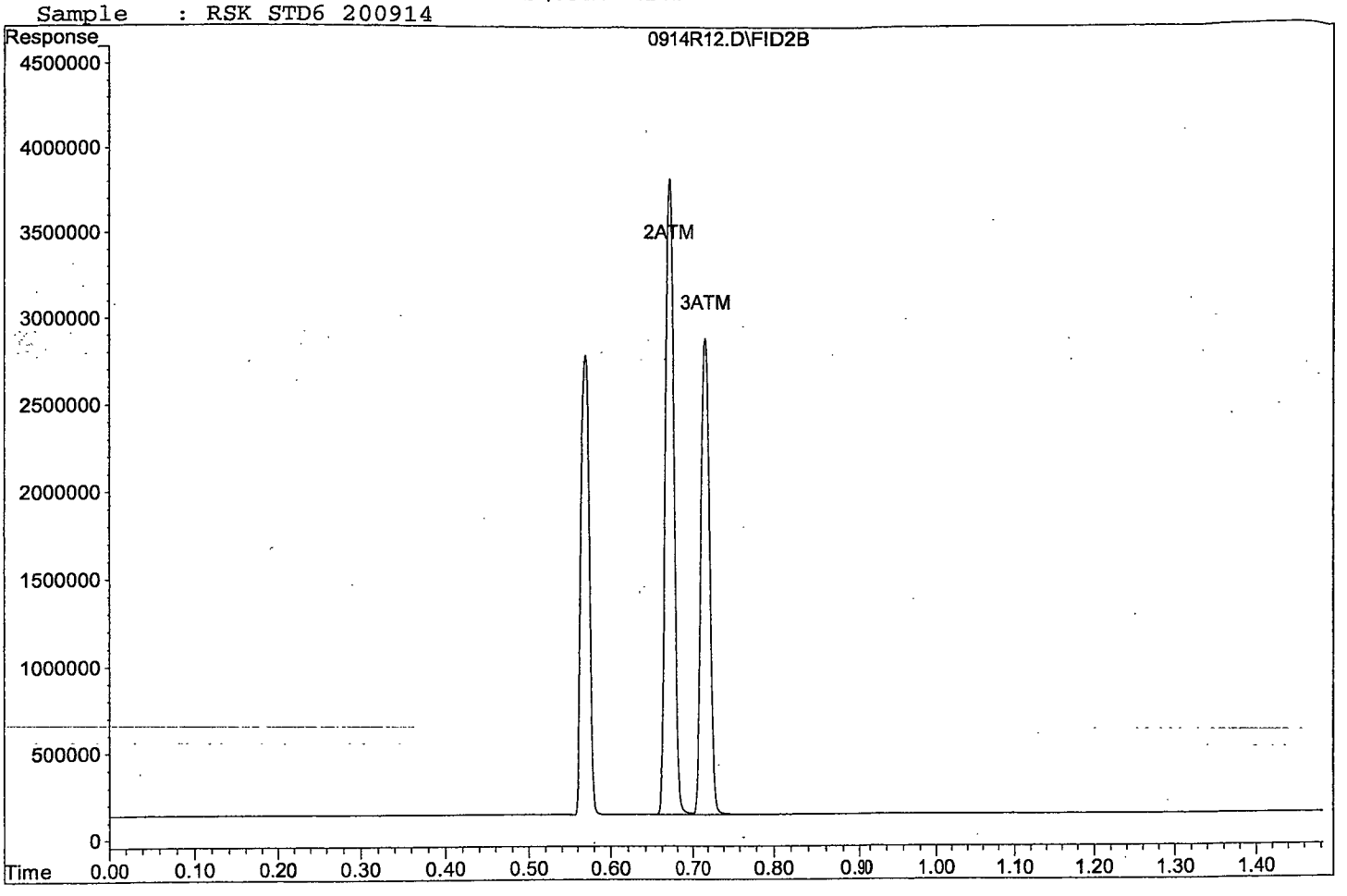
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
2) ATM Ethane	0.67	3684845	9357031.284 ppb
3) ATM Ethene	0.72	2745673	389.192 ppb
Target Compounds			
1) ATM Methane	0.57	2643568	N.D. ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R12.D
Sample : RSK STD6 200914



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R13.D Vial: 1
Acq On : 14 Sep 20 12:28 Operator: CD
Sample : RSK STD7 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:38 2020 Quant Results File: RSK0914A.RES

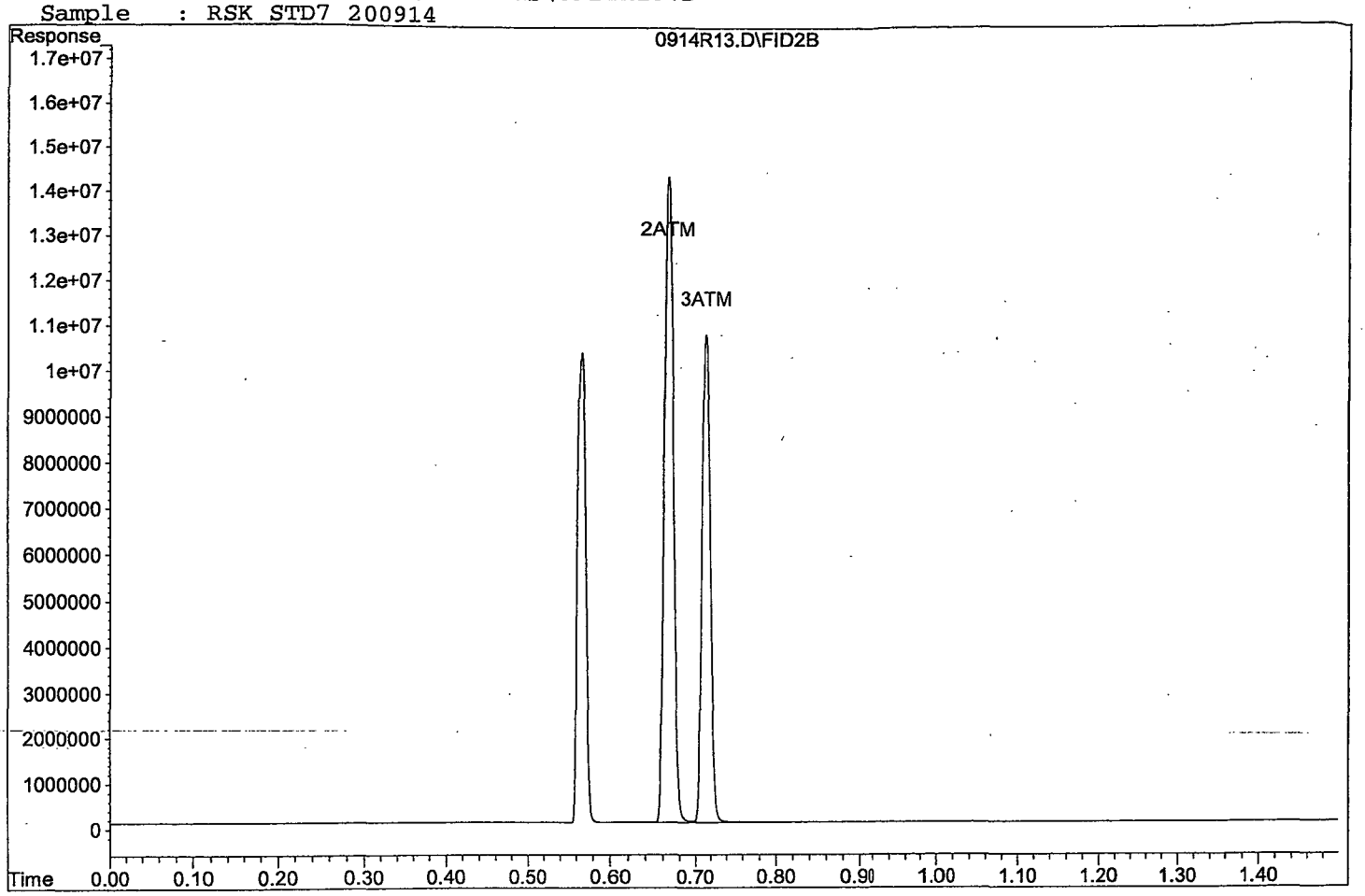
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
2) ATM Ethane	0.67	14239394	3616 8407.278	ppb
3) ATM Ethene	0.71	10708428	1518.210	ppb
Target Compounds				
1) ATM Methane	0.57	10274710	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R13.D
Sample : RSK STD7 200914



RSK 175
RSK 175

Form 7

Second Source Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 09/14/20
Matrix: Instrument: 7890
Initial Cal. Date: 09/14/20
Data File: 0914R14.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATML	Methane	25685	23394	8.9	ATML	5.2
2	ATML	Ethane	18863	17545	7.0	ATML	4.5
3	ATML	Ethene	14798	13693	7.5	ATML	6.4
4							
5							
6							
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		Average			7.8		

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\0914R14.D Vial: 1
Acq On : 14 Sep 20 12:32 Operator: CD
Sample : SS RSK STD5 200914 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Sep 14 12:48 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Mon Sep 14 12:40:32 2020
Response via : Multiple Level Calibration

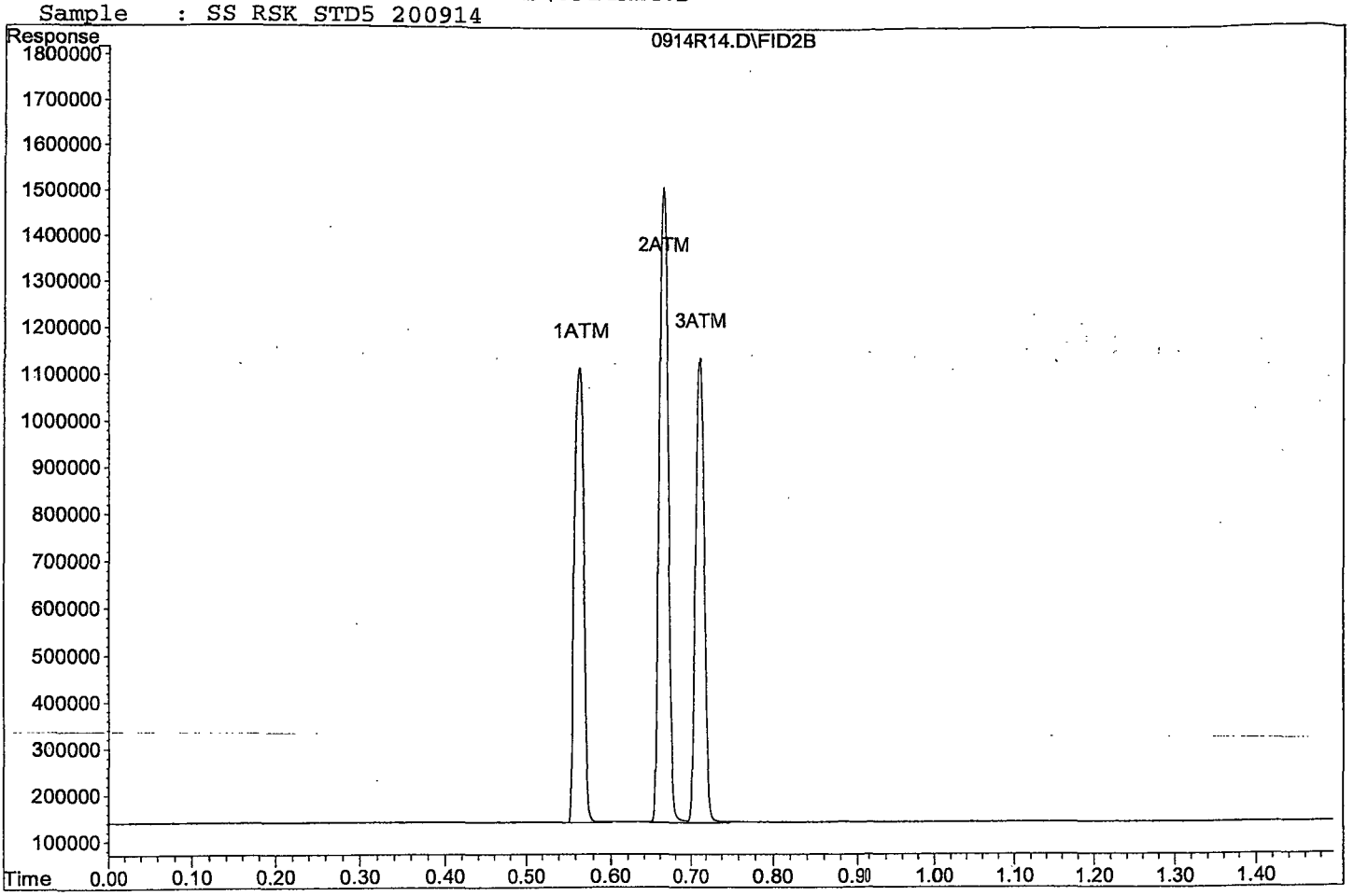
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	0.56	975516	79.029 ppb
2) ATM Ethane	0.66	1371570	149.323 ppb
3) ATM Ethene	0.71	998467	136.525 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\0914R14.D
Sample : SS RSK STD5 200914



Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/14/20
Instrument: 7890
Initial Cal. Date: 09/14/20
Data File: 1014R02.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATML	Methane	25685	27216	6.0	ATML	10
2	ATML	Ethane	18863	20167	6.9	ATML	9.9
3	ATML	Ethene	14798	16857	14	ATML	15
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40							
		Average			9.0		

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1014R02.D Vial: 2
Acq On : 14 Oct 20 16:42 Operator: GA
Sample : 201014 LCS/CCV Inst : 7890
Misc : RSK STD 5 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 14 16:45 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed Oct 14 16:41:33 2020
Response via : Multiple Level Calibration

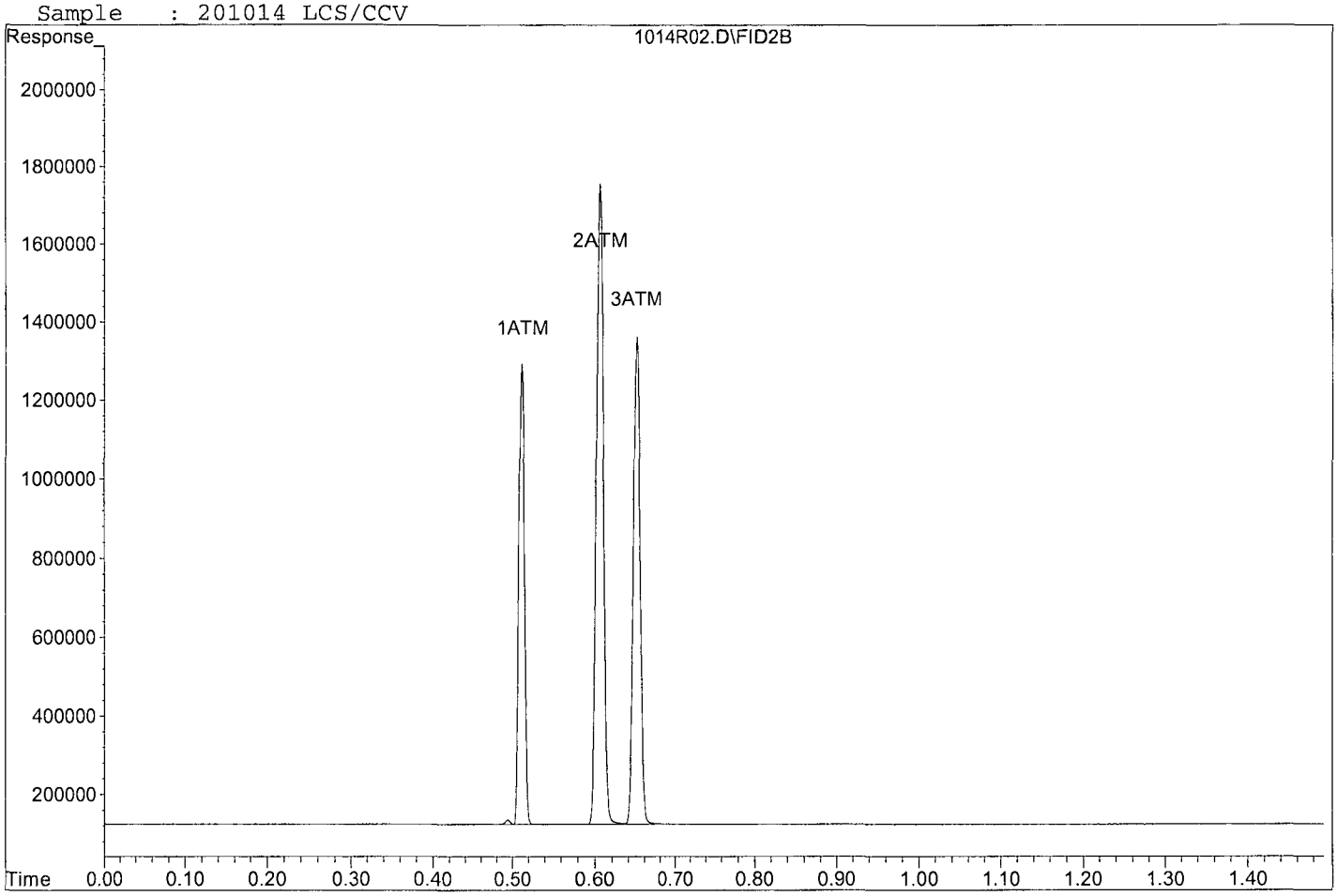
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) ATM Methane	0.51	1134925	91.954	ppb
2) ATM Ethane	0.61	1576583	171.815	ppb
3) ATM Ethene	0.65	1229205	167.903	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1014R02.D
Sample : 201014 LCS/CCV



Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No:
Date Analyzed: 10/14/20
Instrument: 7890
Initial Cal. Date: 09/14/20
Data File: 1014R06.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATML	Methane	25685	21883	15	ATML	11
2	ATML	Ethane	18863	16078	15	ATML	13
3	ATML	Ethene	14798	13080	12	ATML	11
4							
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40							
		Average			14.0		

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1014R06.D Vial: 6
Acq On : 14 Oct 20 16:54 Operator: GA
Sample : 201014A LCSD/CCV Inst : 7890
Misc : RSK STD 5 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 14 16:56 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed Oct 14 16:41:33 2020
Response via : Multiple Level Calibration

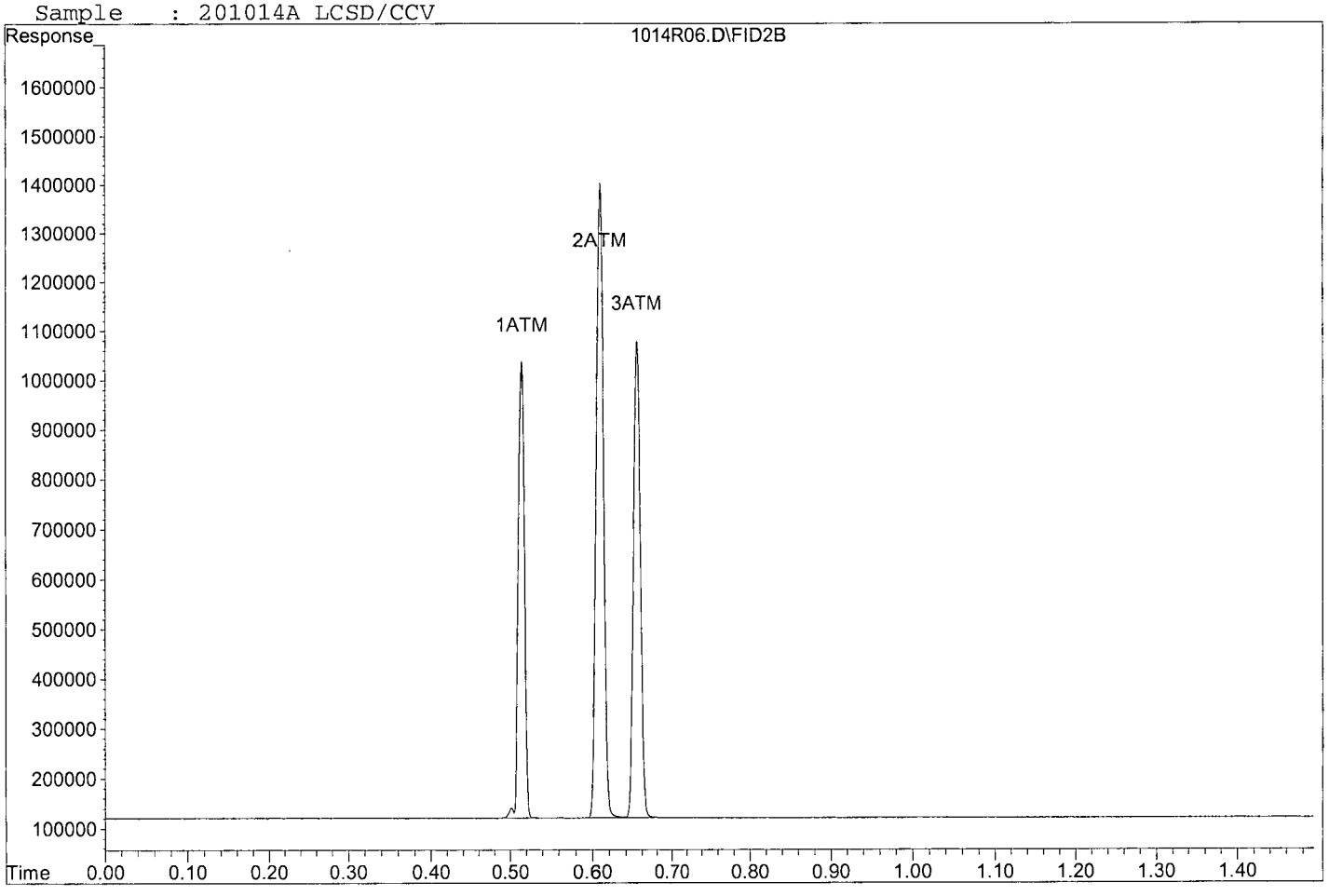
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	0.51	912518	73.921 ppb
2) ATM Ethane	0.61	1256909	136.744 ppb
3) ATM Ethene	0.65	953804	130.451 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1014R06.D
Sample : 201014A LCSD/CCV



ORGANICS

Raw Data

Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1014R04.D Vial: 4
Acq On : 14 Oct 20 16:48 Operator: GA
Sample : BA19639W04 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 14 16:50 2020 Quant Results File: RSK0914A.RES

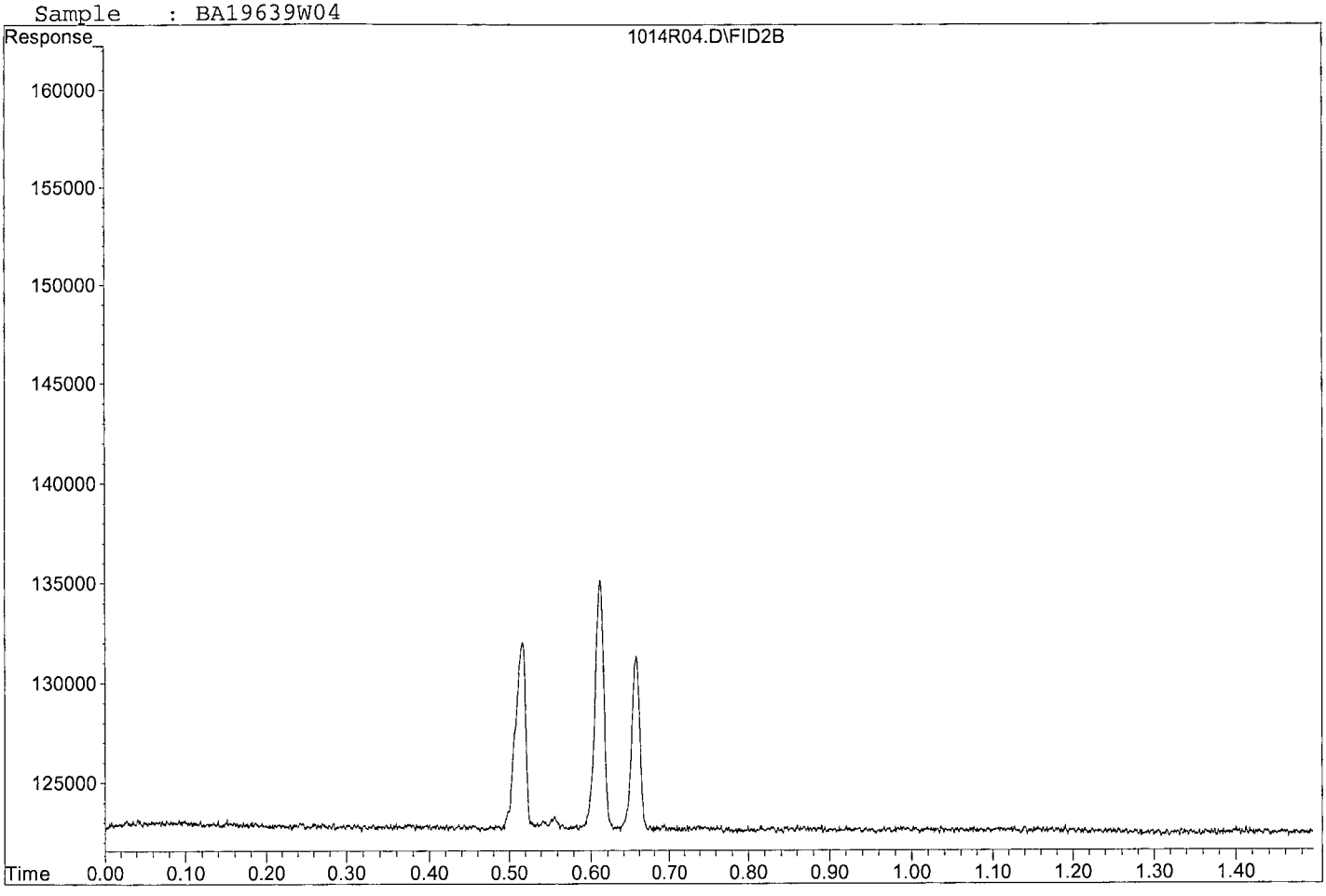
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed Oct 14 16:41:33 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
Target Compounds				
1) ATM Methane	0.00	0	N.D.	ppb
2) ATM Ethane	0.00	0	N.D.	ppb
3) ATM Ethene	0.00	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1014R04.D
Sample : BA19639W04



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1014R05.D Vial: 5
Acq On : 14 Oct 20 16:51 Operator: GA
Sample : BA19640W04 Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 14 16:53 2020 Quant Results File: RSK0914A.RES

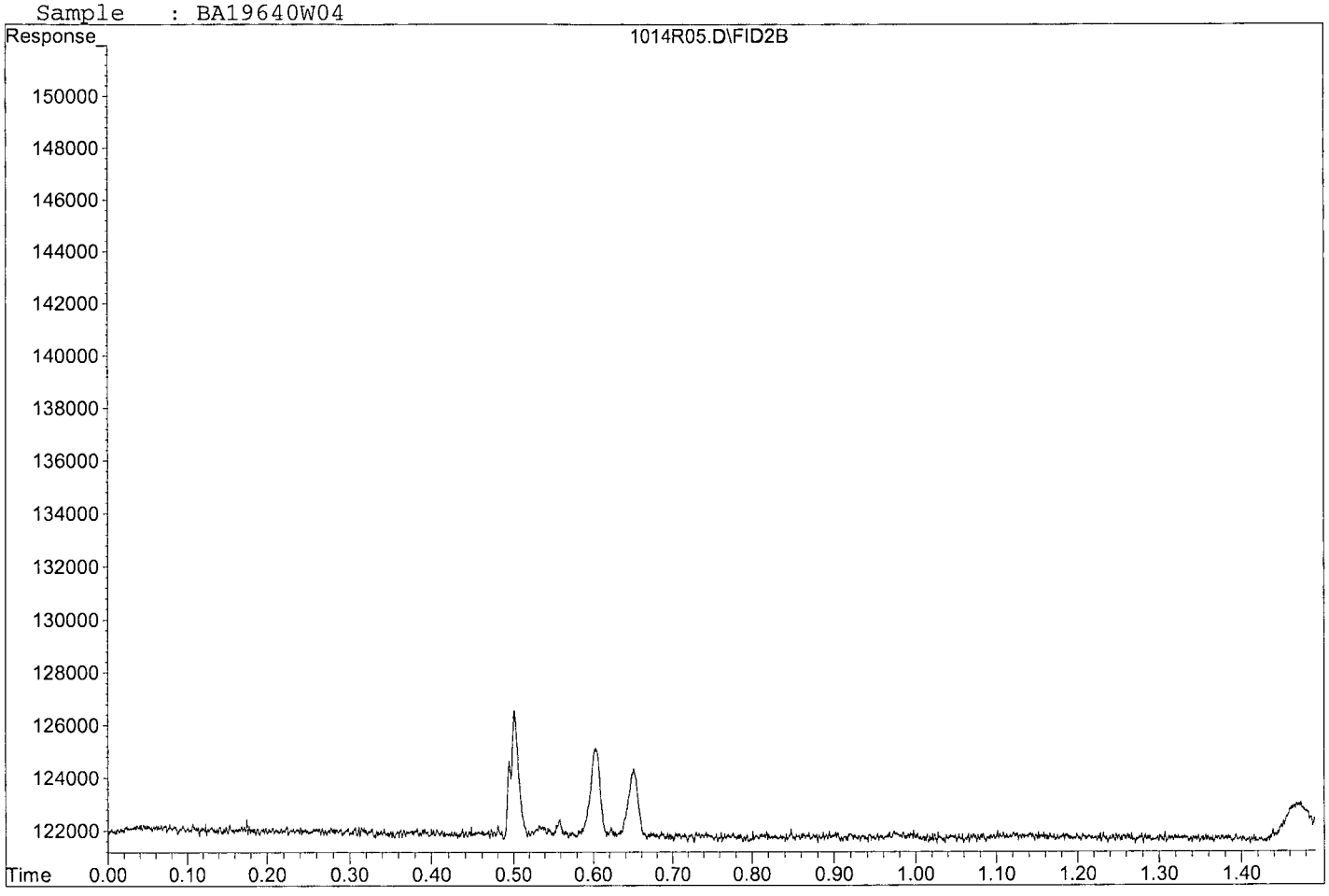
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed Oct 14 16:41:33 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
Target Compounds				
1) ATM Methane	0.00	0	N.D.	ppb
2) ATM Ethane	0.00	0	N.D.	ppb
3) ATM Ethene	0.00	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1014R05.D
Sample : BA19640W04



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1014R03.D Vial: 3
Acq On : 14 Oct 20 16:45 Operator: GA
Sample : 201014A BLK Inst : 7890
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 14 16:47 2020 Quant Results File: RSK0914A.RES

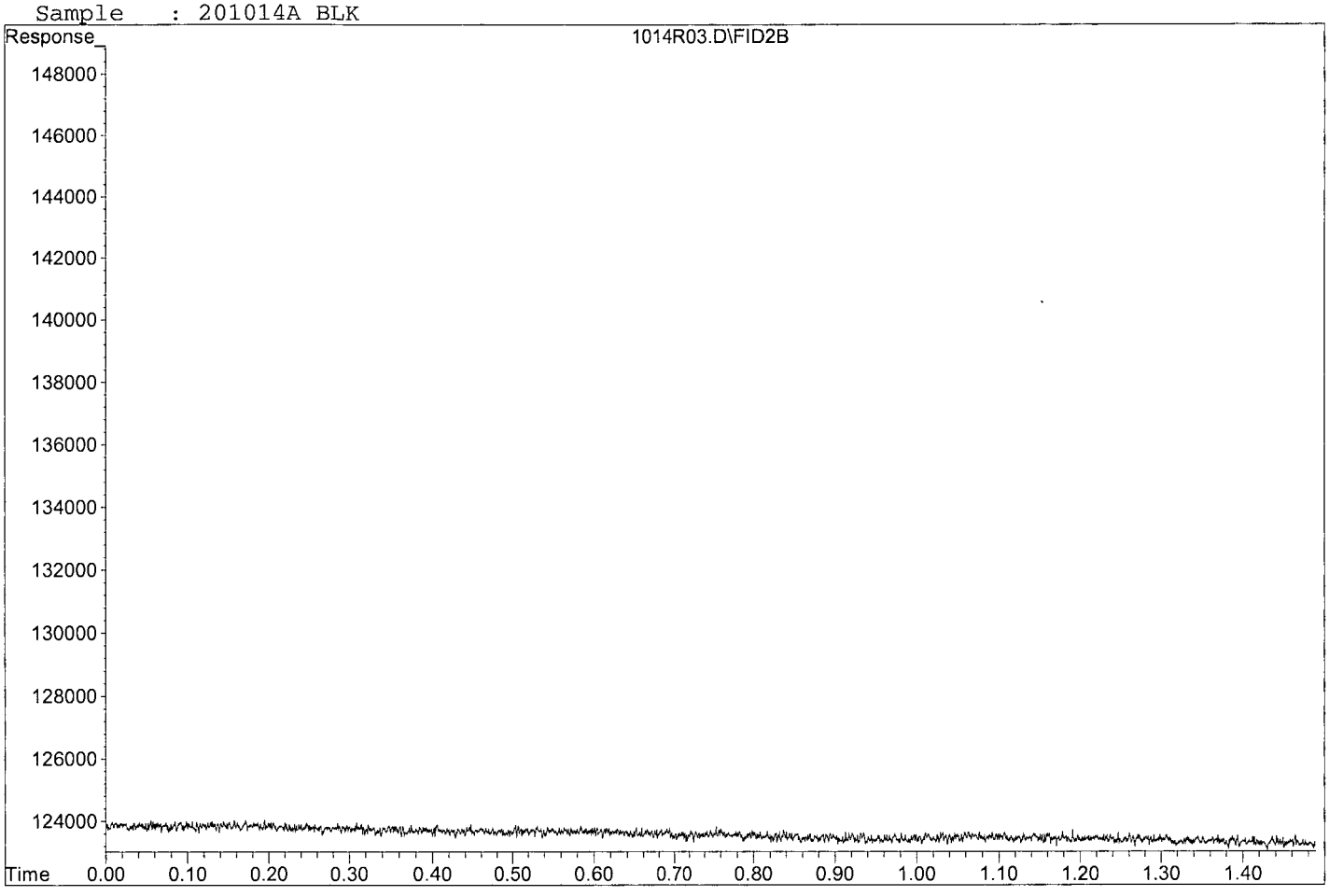
Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed Oct 14 16:41:33 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
Target Compounds				
1) ATM Methane	0.00	0	N.D.	ppb
2) ATM Ethane	0.00	0	N.D.	ppb
3) ATM Ethene	0.00	0	N.D.	ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1014R03.D
Sample : 201014A BLK



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1014R02.D Vial: 2
Acq On : 14 Oct 20 16:42 Operator: GA
Sample : 201014A LCS/CCV Inst : 7890
Misc : RSK STD 5 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 14 16:45 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed Oct 14 16:41:33 2020
Response via : Multiple Level Calibration

Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

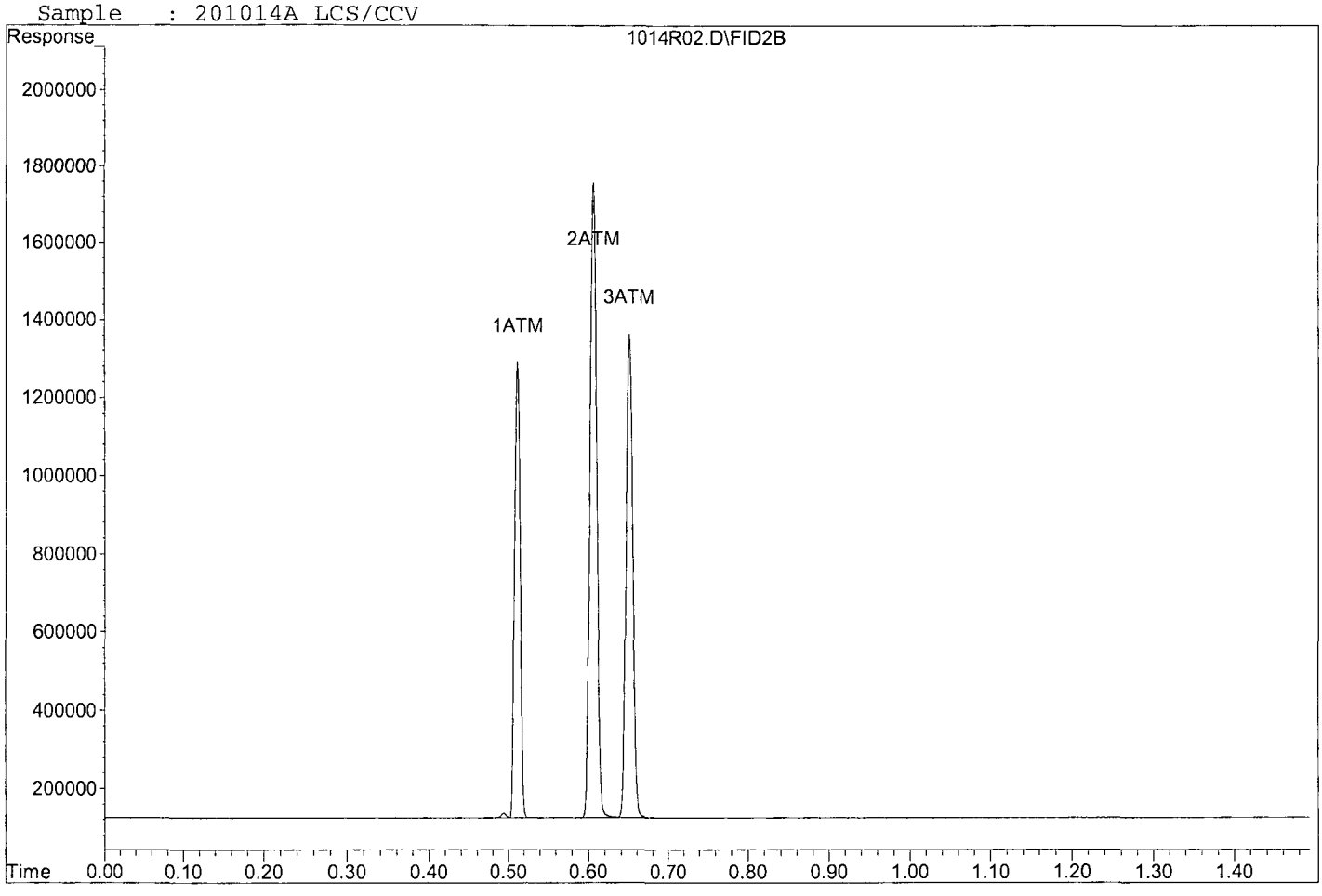
Compound	R.T.	Response	Conc	Units
Target Compounds				
1) ATM Methane	0.51	1134925	91.954	ppb
2) ATM Ethane	0.61	1576583	171.815	ppb
3) ATM Ethene	0.65	1229205	167.903	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File: G:\ROCKY\DATA\200914RS\1014R02.D
Sample : 201014A LCS/CCV



Quantitation Report (Not Reviewed)

Data File : G:\ROCKY\DATA\200914RS\1014R06.D Vial: 6
Acq On : 14 Oct 20 16:54 Operator: GA
Sample : 201014A LCSD/CCV Inst : 7890
Misc : RSK STD 5 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 14 16:56 2020 Quant Results File: RSK0914A.RES

Method : G:\ROCKY\DATA\200624RS\RSK0914A.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed Oct 14 16:41:33 2020
Response via : Multiple Level Calibration

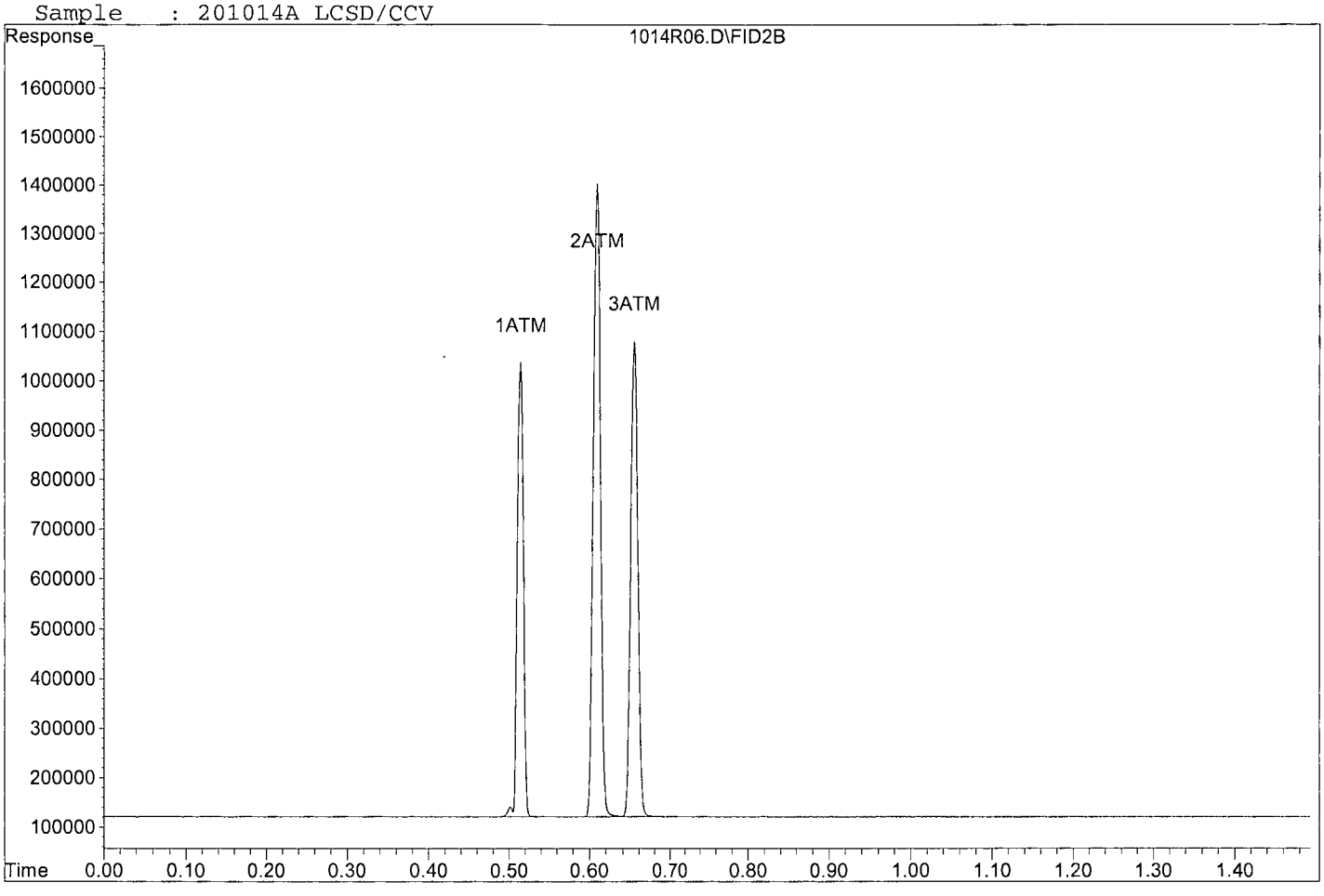
Volume Inj. : 0.500 mL
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	0.51	912518	73.921 ppb
2) ATM Ethane	0.61	1256909	136.744 ppb
3) ATM Ethene	0.65	953804	130.451 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\ROCKY\DATA\200914RS\1014R06.D
Sample : 201014A LCSD/CCV



Primary Stock Source

10,000ppmV **Manufacture Expiration:** 09/21/21

RSK Gas Mix (Scott Specialty Gas) CAT#X04NI97CP140001 LOT#160-401558175-1

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

RSK Calibration Curve

Analyte	Conc Std 1 (1/2 = LOD) (ug/L)	Conc Std 2 (LOQ Chk) (ug/L)	Conc Std 3 (ug/L)	Conc Std 4 (ug/L)	Conc Std 5 (ug/L)	Conc Std 6 (ug/L)	Conc Std 7 (ug/L)
Methane (MW 16.04)	2.08	4.16	8.34	20.85	83.40	208.5	834.0
Ethane (MW 30.07)	3.91	7.81	15.6	39.09	156.35	390.9	1563.5
Ethene (MW 28.05)	3.65	7.30	14.6	36.46	145.84	364.6	1458.4
Stock Source	160-401558175-1	160-401558175-1	160-401558175-1	160-401558175-1	160-401558175-1	160-401558175-1	160-401558175-1
Stock Conc (ppmv)	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV	10,000 ppmV
Stock Aliquot (mL)	0.010	0.020	0.040	0.100	0.400	1.00	4.00
Final Volume P&T Water	32 mL	32 mL	32 mL	32 mL	32 mL	32 mL	32 mL
Curve Prep:	09/14/20						
Expiration Date	09/15/20						
Analyst	CD						

Second Source Stock Standard 10,000ppmV **Manufacturer Exp date 9-21-2021**

RSK Gas Mix (Scott Specialty Gas) Cat.# 23452, Lot # 160-401303032-1-39774

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

Second Source **Expires 06/25/2020** **CD 09/14/20**

Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace

final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene

CCV/LCS/LCSD **GA 10/14/20**

Spike 0.400mL of 10,000ppmV into 32mL DI water, with 8mL Nitrogen headspace
final conc: 83.40ug/L Methane, 156.35ug/L Ethane, and 145.84ug/L Ethene

Injection Log

Directory: G:\ROCKY\DATA\200914RS\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0914R07.D	1	RSK STD1 200914		14 Sep 20 12:06
2	1	0914R08.D	1	RSK STD2 200914		14 Sep 20 12:10
3	1	0914R09.D	1	RSK STD3 200914		14 Sep 20 12:13
4	1	0914R10.D	1	RSK STD4 200914		14 Sep 20 12:18
5	1	0914R11.D	1	RSK STD5 200914		14 Sep 20 12:21
6	1	0914R12.D	1	RSK STD6 200914		14 Sep 20 12:25
7	1	0914R13.D	1	RSK STD7 200914		14 Sep 20 12:28
8	1	0914R14.D	1	SS RSK STD5 200914		14 Sep 20 12:32
9	2	1014R02.D	1	201014A LCS/CCV	RSK STD 5	14 Oct 20 16:42
10	3	1014R03.D	1	201014A BLK		14 Oct 20 16:45
11	4	1014R04.D	1	BA19639W04		14 Oct 20 16:48
12	5	1014R05.D	1	BA19640W04		14 Oct 20 16:51
13	6	1014R06.D	1	201014A LCSD/CCV	RSK STD 5	14 Oct 20 16:54

INORGANIC ANALYSIS
Calibration Data

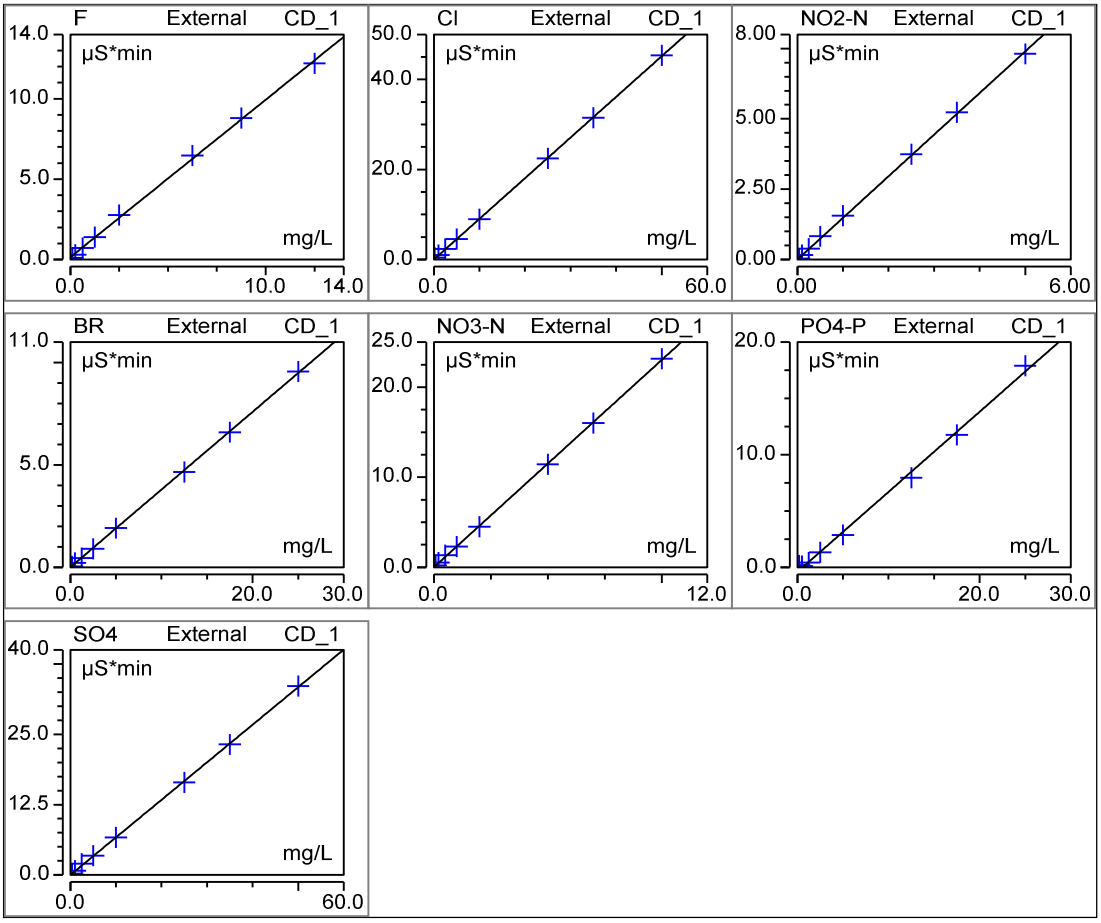
Calibration Batch Report

Sequence:	**200914**	*Injection Volume:*	**100.00**
Instrument Method:	**Anions IM**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:14**	*Run Time:*	**11.3**

Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
F	Area	Lin, WithOffset	8.000	0.145	0.979	0.000	99.9001
Cl	Area	Lin	8.000	0.000	0.903	0.000	99.9935
NO2-N	Area	Lin	8.000	0.000	1.479	0.000	99.9464
BR	Area	Lin	8.000	0.000	0.380	0.000	99.9760
NO3-N	Area	Lin	8.000	0.000	2.303	0.000	99.9829
PO4-P	Area	Lin, WithOffset	8.000	-0.422	0.712	0.000	99.6941
SO4	Area	Lin	8.000	0.000	0.668	0.000	99.9749

Injection Name	Amount mg/L CD_1 F	Amount mg/L CD_1 Cl	Amount mg/L CD_1 NO2-N	Amount mg/L CD_1 BR	Amount mg/L CD_1 NO3-N	Amount mg/L CD_1 PO4-P	Amount mg/L CD_1 SO4
Cal 1 2020.09.14	n.a.	0.4466	0.0267	0.1154	0.0851	0.8392	0.3384
Cal 2 2020.09.14	0.156	1.0882	0.1103	0.5719	0.2207	0.7580	1.0968
Cal 3 2020.09.14	0.579	2.5688	0.2608	1.1951	0.5851	1.1858	3.0282
Cal 6 2020.09.14	6.454	24.8384	2.5325	12.2607	4.9590	11.7563	24.6682
Cal 7 2020.09.14	8.833	34.8728	3.5379	17.3849	6.9578	17.1045	34.7367
Cal 8 2020.09.14	12.309	50.1817	4.9401	25.2082	10.0551	25.7199	50.3133
Cal 4 2020.09.14	1.274	5.0060	0.5579	2.3764	0.9968	2.4551	5.1734
Cal 5 2020.09.14	2.674	9.9066	1.0533	5.0316	1.9525	4.6312	9.9586

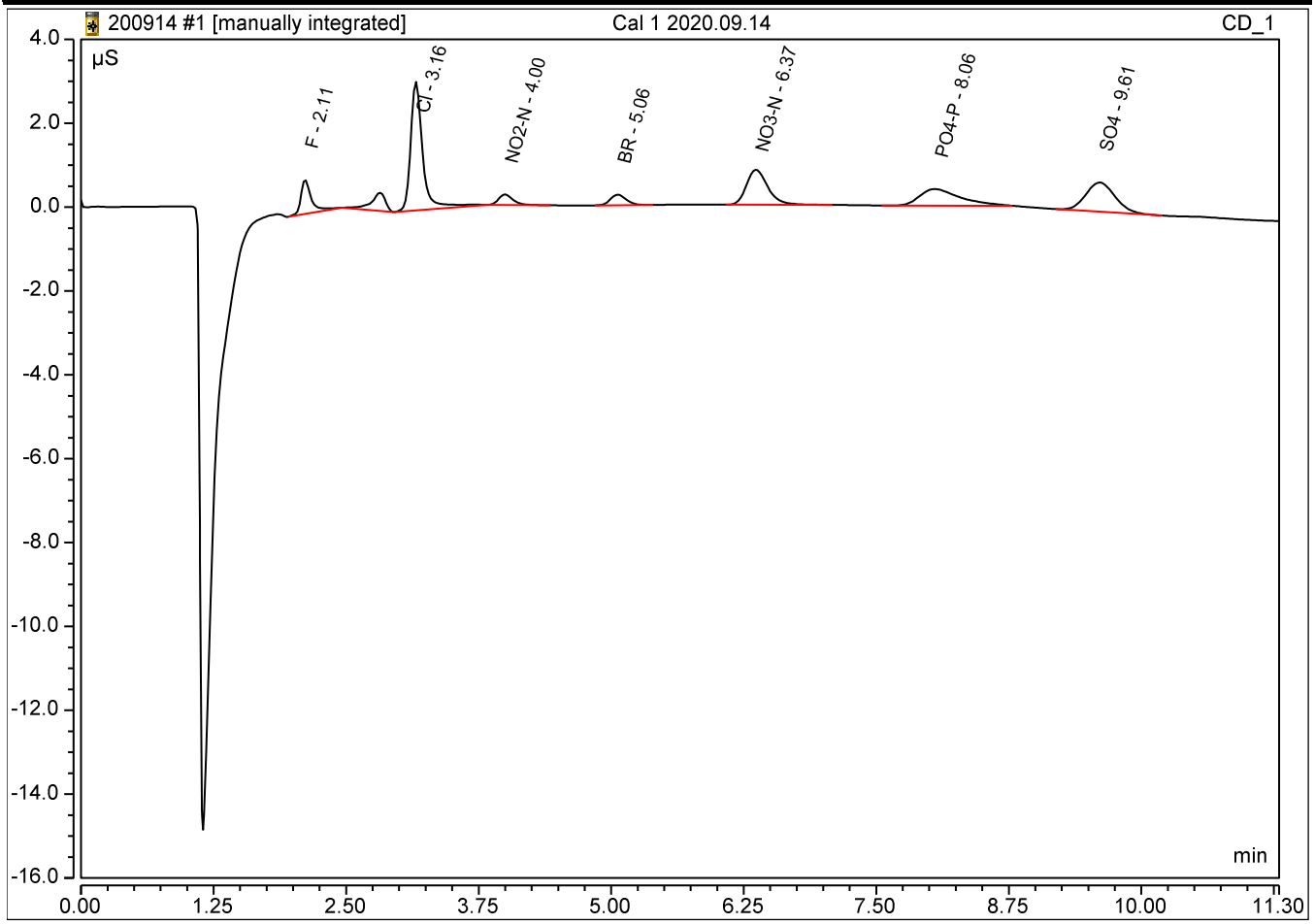


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 1 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:17**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.11	**F**	BMB	0.093	0.817	n.a.	0.1	951224067 c
3	3.16	**Cl**	BMB	0.403	3.072	0.45	0.2	223.3%
4	4.00	**NO2-N**	BMB	0.039	0.250	0.03	0.04	66.7%
5	5.06	**BR**	BMB	0.044	0.253	0.12	0.2	57.7%
6	6.37	**NO3-N**	BMB	0.196	0.837	0.09	0.08	106.4%
7	8.06	**PO4-P**	BMB*	0.176	0.398	0.84	0.2	419.6%
8	9.61	**SO4**	BMB	0.226	0.700	0.34	0.4	84.6%

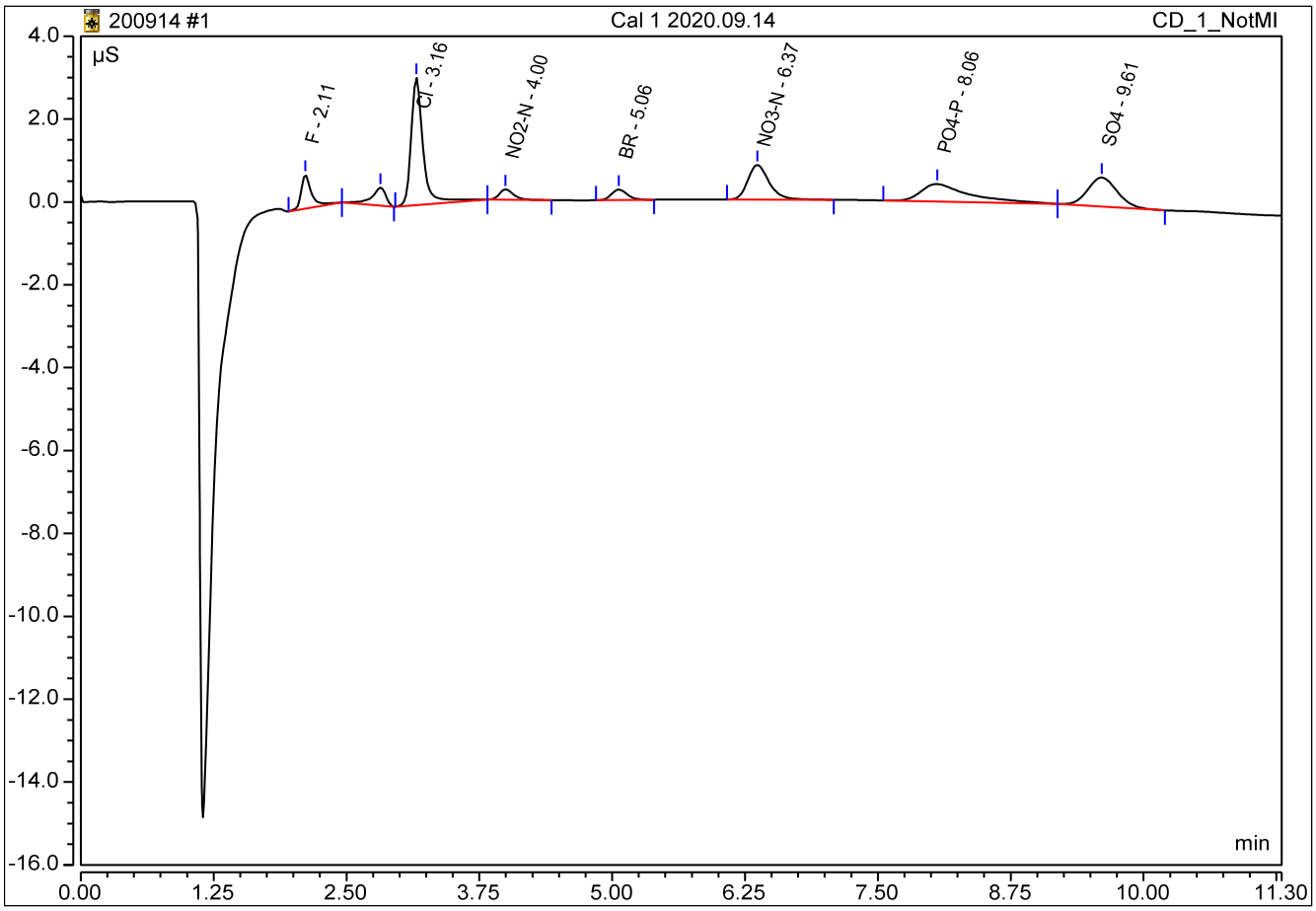


MI 5 PO4 GA 9/14/20

Not Manipulated Peak Integration Report

Sample Name:	**Cal 1 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:17**	*Run Time:*	**11.30**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Ammount mg/L
1	2.11	**F**	BMB	0.093	0.817	-0.0531
3	3.16	**Cl**	BMB	0.403	3.072	0.4466
4	4.00	**NO2-N**	BMB	0.039	0.250	0.0267
5	5.06	**BR**	BMB	0.044	0.253	0.1154
6	6.37	**NO3-N**	BMB	0.196	0.837	0.0849
7	8.06	**PO4-P**	BMB*	0.223	0.422	0.8905
8	9.61	**SO4**	BMB	0.226	0.700	0.3383

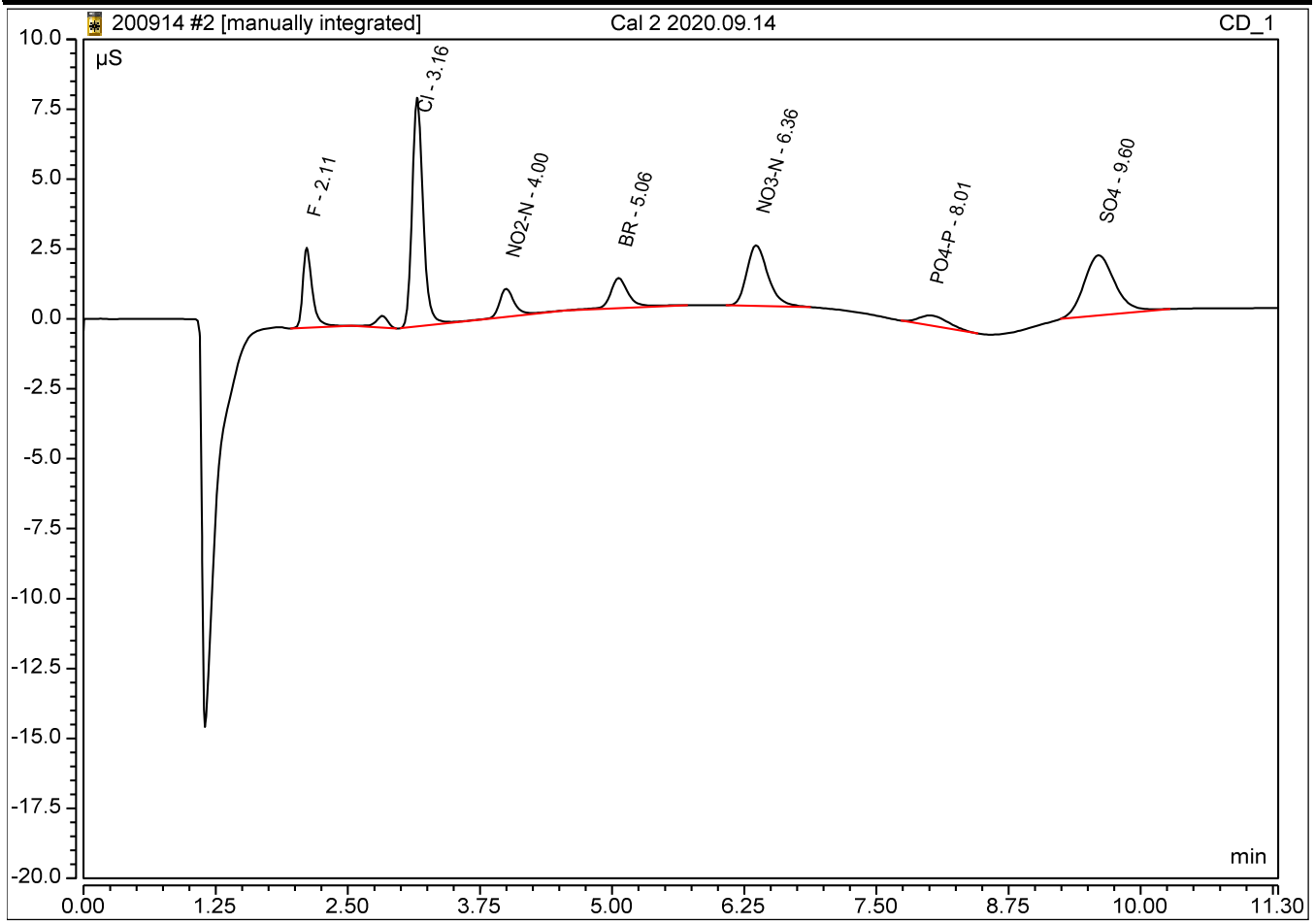


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 2 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:31**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.11	**F**	BMB	0.298	2.857	0.16	0.25	62.4%
3	3.16	**Cl**	BMB	0.983	8.183	1.09	1	108.8%
4	4.00	**NO2-N**	BMB	0.163	1.007	0.11	0.1	110.3%
5	5.06	**BR**	BMB	0.217	1.077	0.57	0.5	114.4%
6	6.36	**NO3-N**	BMB*	0.508	2.172	0.22	0.2	110.4%
7	8.01	**PO4-P**	BMB	0.118	0.358	0.76	0.5	151.6%
8	9.60	**SO4**	BMB*	0.732	2.158	1.10	1	109.7%



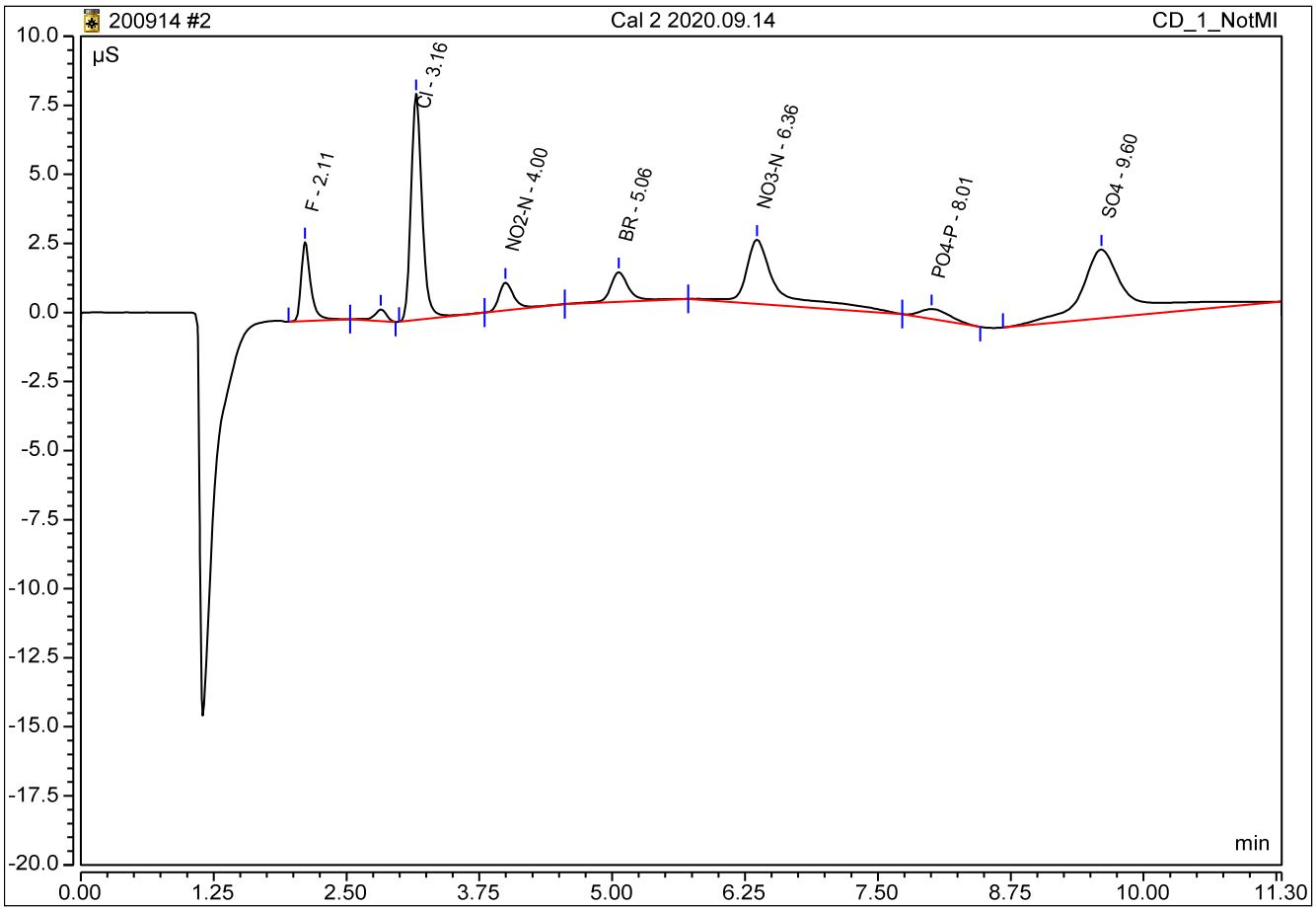
MI 5 F GA 9/14/20

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Not Manipulated Peak Integration Report

Sample Name:	**Cal 2 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:31**	*Run Time:*	**11.30**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Ammount mg/L
1	2.11	**F**	BMB	0.298	2.857	0.1559
3	3.16	**Cl**	BMB	0.983	8.183	1.0882
4	4.00	**NO2-N**	BMB	0.163	1.007	0.1103
5	5.06	**BR**	BMB	0.217	1.077	0.5719
6	6.36	**NO3-N**	BMB*	0.803	2.321	0.3480
7	8.01	**PO4-P**	BMB	0.118	0.358	0.7435
8	9.60	**SO4**	BMB*	1.336	2.496	2.0007

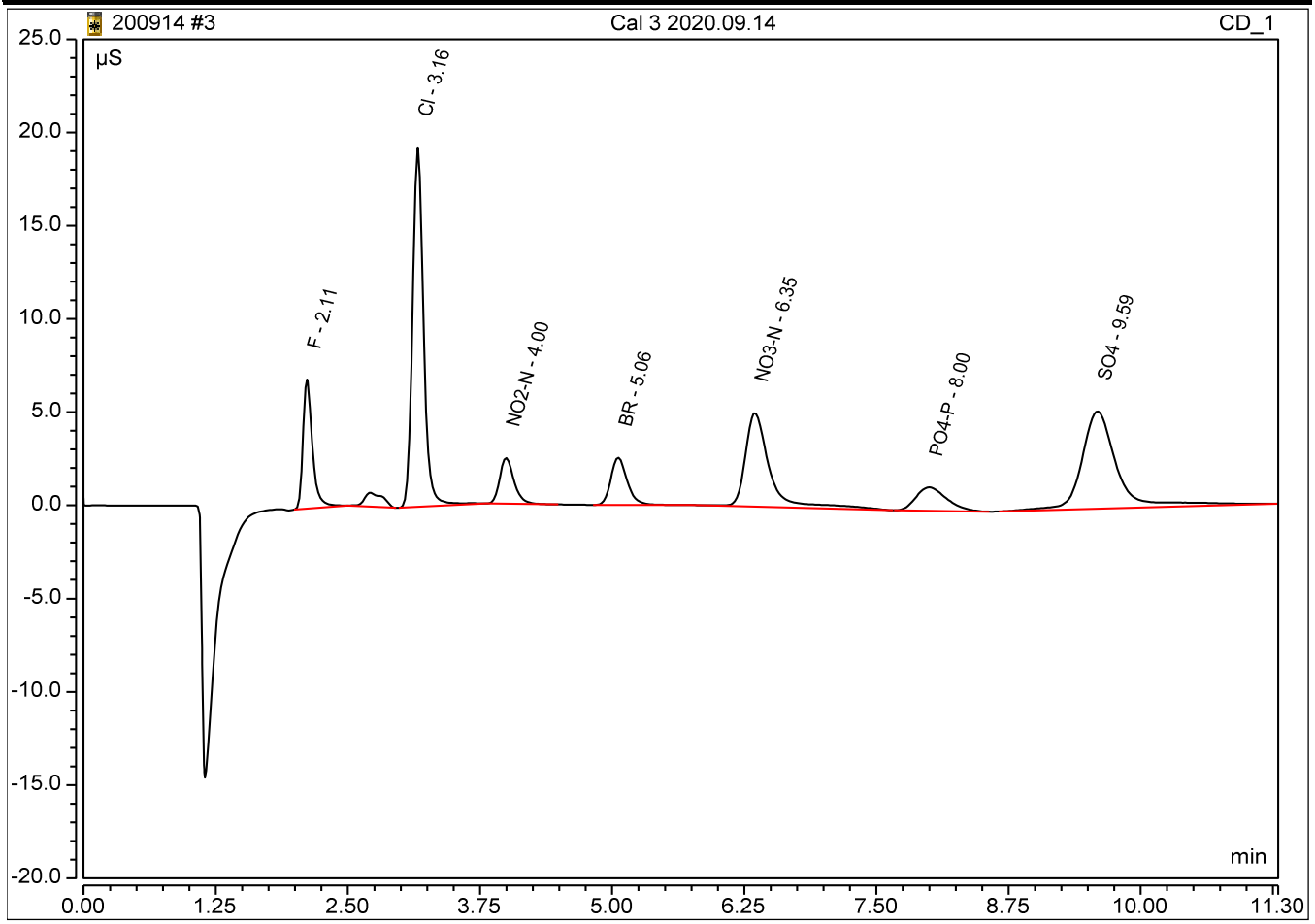


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 3 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 11:46**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.11	**F**	BMB	0.712	6.920	0.58	0.625	92.6%
3	3.16	**Cl**	BMB	2.321	19.279	2.57	2.5	102.8%
4	4.00	**NO2-N**	BMB	0.386	2.457	0.26	0.25	104.3%
5	5.06	**BR**	BMB	0.454	2.538	1.20	1.25	95.6%
6	6.35	**NO3-N**	BMB	1.347	5.037	0.59	0.5	117.0%
7	8.00	**PO4-P**	BMB	0.423	1.261	1.19	1.25	94.9%
8	9.59	**SO4**	BMB	2.022	5.227	3.03	2.5	121.1%



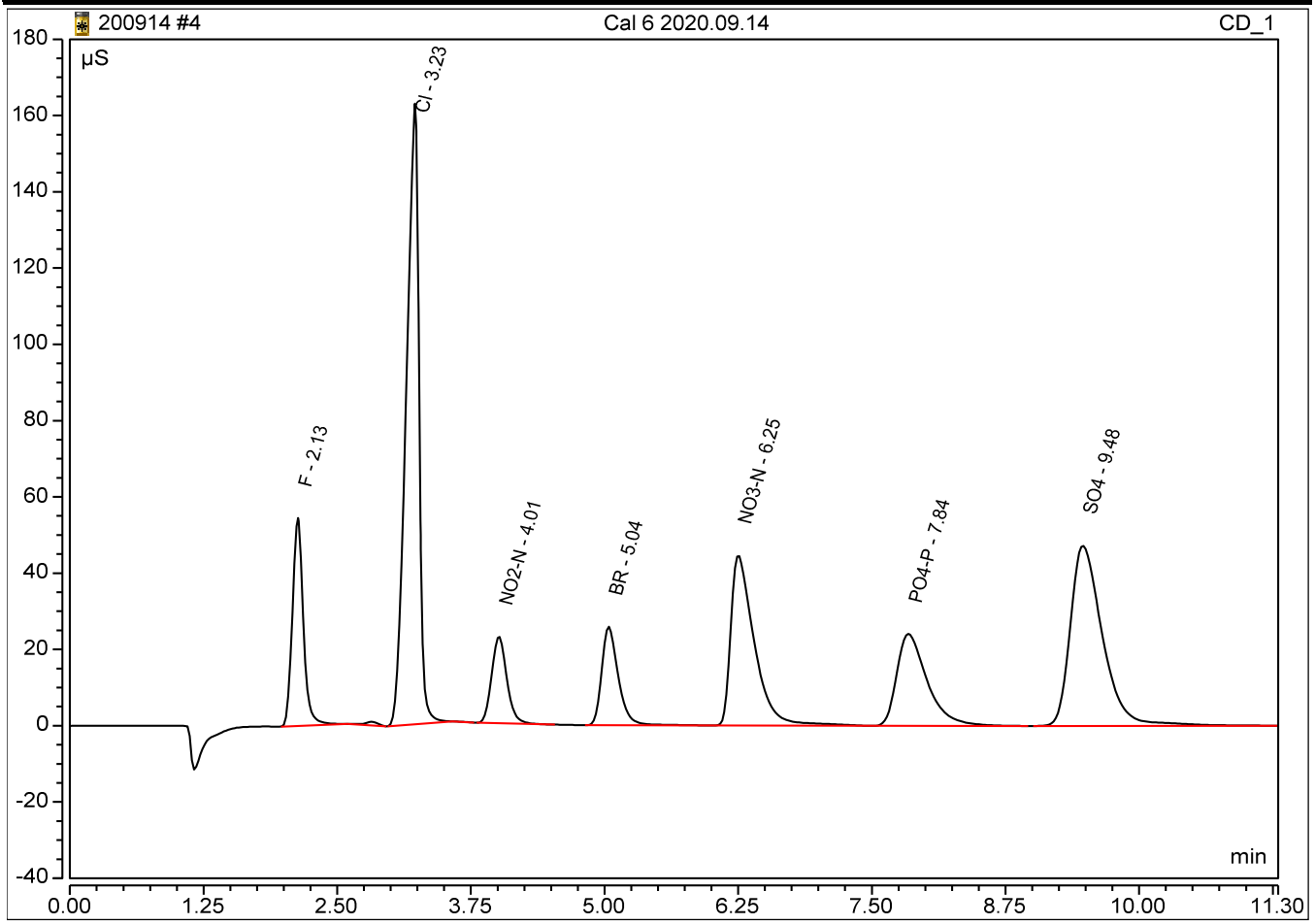
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 6 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 12:30**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.13	**F**	BMB	6.464	54.477	6.45	6.25	103.3%
3	3.23	**Cl**	BMB	22.440	162.678	24.84	25	99.4%
5	4.01	**NO2-N**	BMB	3.747	22.824	2.53	2.5	101.3%
6	5.04	**BR**	BMB	4.656	25.839	12.26	12.5	98.1%
7	6.25	**NO3-N**	BMB	11.419	44.646	4.96	5	99.2%
8	7.84	**PO4-P**	BMB	7.951	24.149	11.76	12.5	94.1%
9	9.48	**SO4**	BMB	16.472	47.232	24.67	25	98.7%



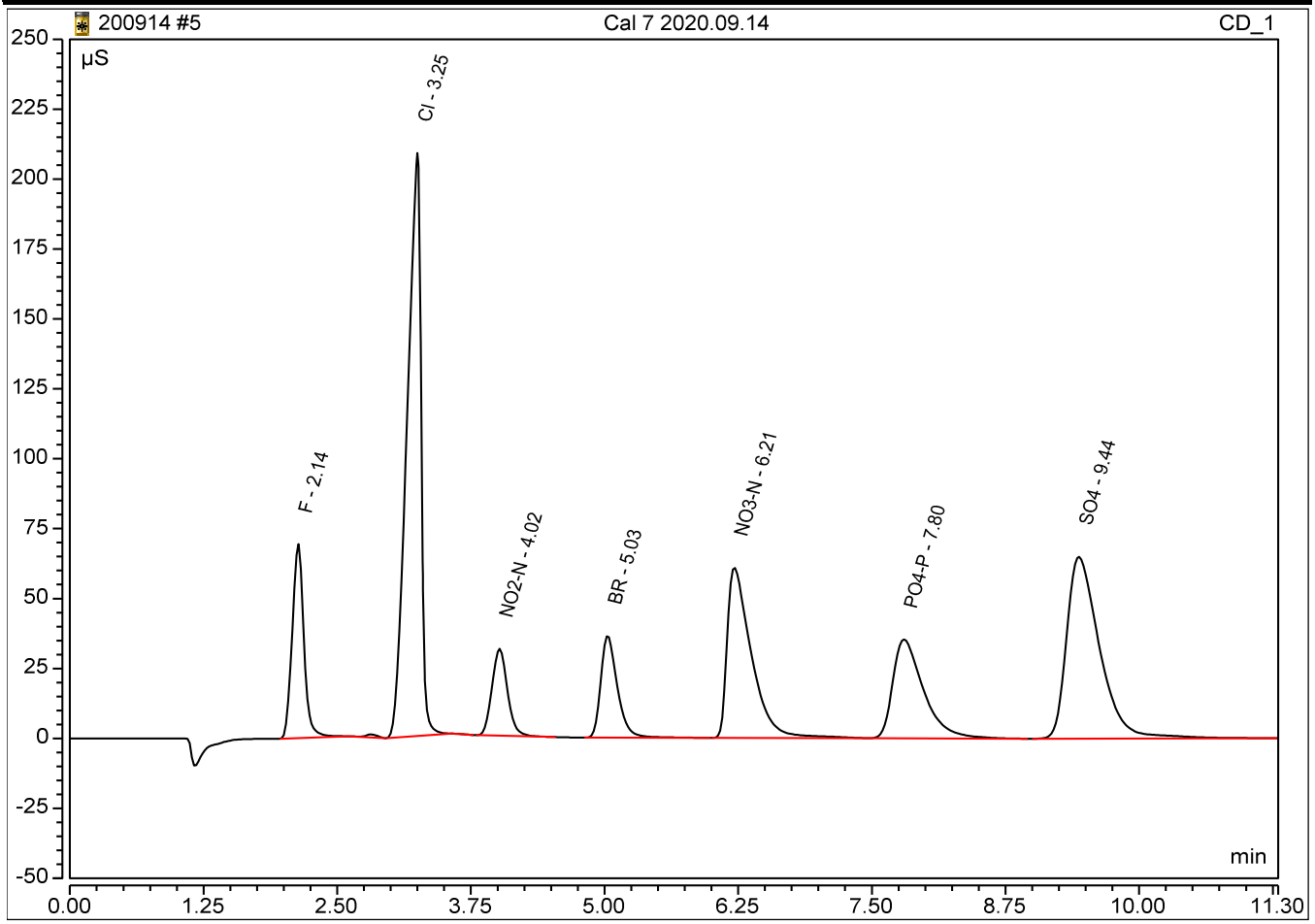
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 7 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 12:44**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.14	**F**	BMB	8.794	69.377	8.83	8.75	100.9%
3	3.25	**Cl**	BMB	31.505	208.470	34.87	35	99.6%
5	4.02	**NO2-N**	BMB	5.234	31.143	3.54	3.5	101.1%
6	5.03	**BR**	BMB	6.602	36.544	17.38	17.5	99.3%
7	6.21	**NO3-N**	BMB	16.022	60.982	6.96	7	99.4%
8	7.80	**PO4-P**	BMB	11.759	35.362	17.10	17.5	97.7%
9	9.44	**SO4**	BMB	23.196	65.073	34.74	35	99.2%



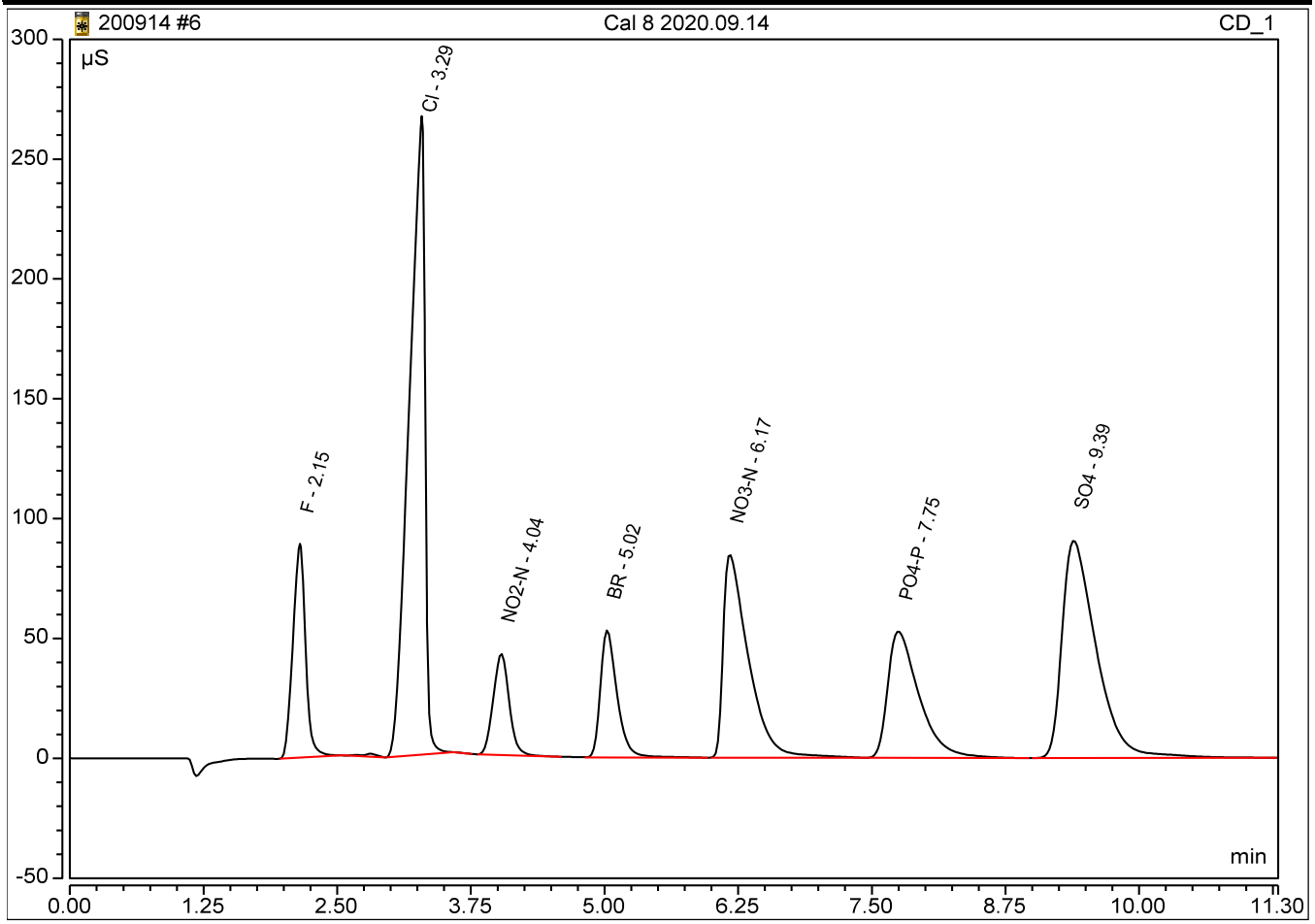
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 8 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 12:59**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.15	**F**	BMB	12.197	89.244	12.31	12.5	98.5%
3	3.29	**Cl**	BMB	45.336	266.470	50.18	50	100.4%
5	4.04	**NO2-N**	BMB	7.309	42.267	4.94	5	98.8%
6	5.02	**BR**	BMB	9.573	52.969	25.21	25	100.8%
7	6.17	**NO3-N**	BMB	23.155	84.819	10.06	10	100.6%
8	7.75	**PO4-P**	BMB	17.895	52.746	25.72	25	102.9%
9	9.39	**SO4**	BMB	33.597	90.716	50.31	50	100.6%



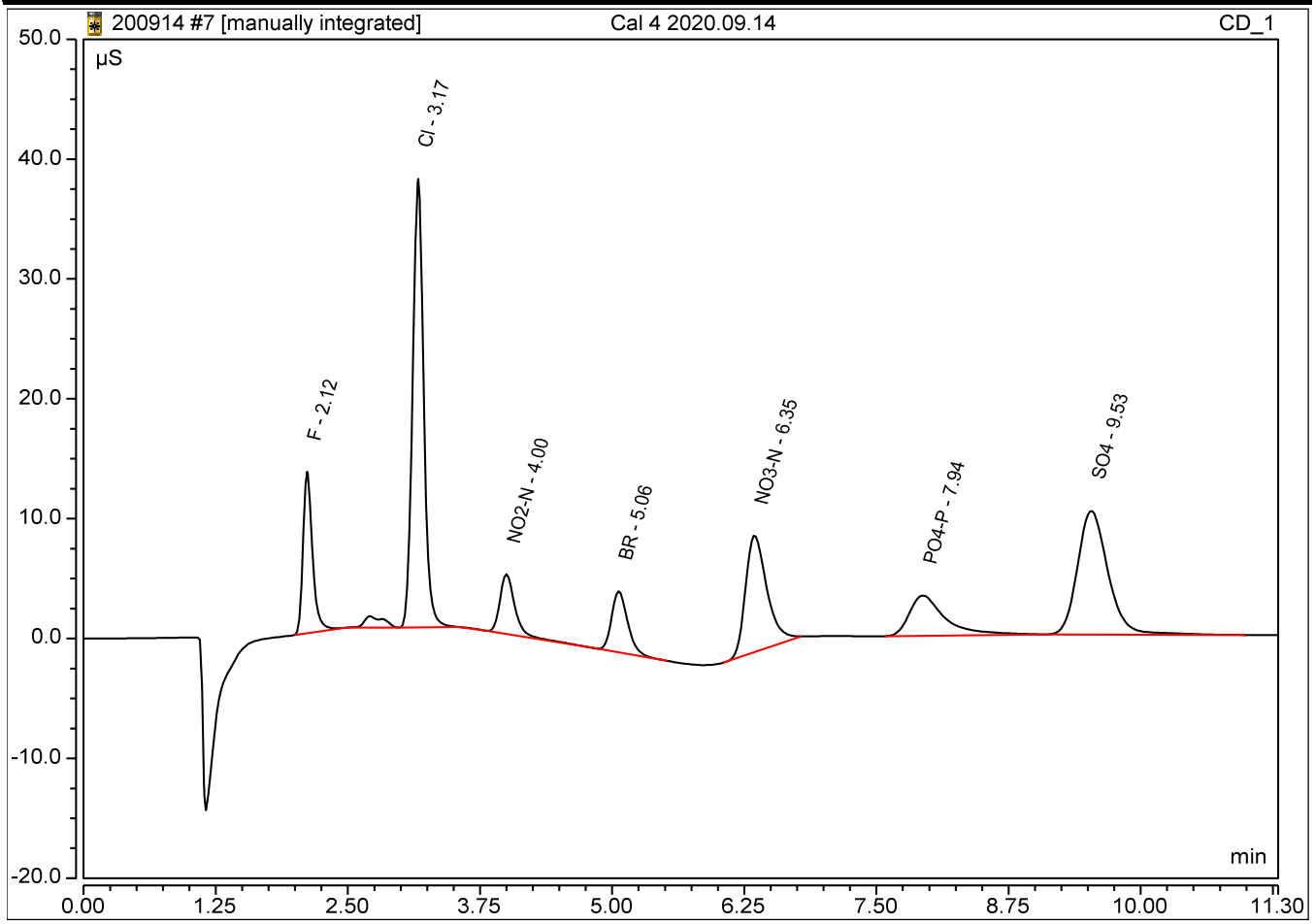
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 4 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 14:59**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.12	**F**	BMB	1.393	13.483	1.27	1.25	101.9%
3	3.17	**Cl**	BMB	4.523	37.438	5.01	5	100.1%
5	4.00	**NO2-N**	BMB	0.825	4.993	0.56	0.5	111.6%
6	5.06	**BR**	BMB	0.902	5.100	2.38	2.5	95.1%
7	6.35	**NO3-N**	BMB*	2.295	9.746	1.00	1	99.7%
8	7.94	**PO4-P**	BMB	1.327	3.365	2.46	2.5	98.2%
9	9.53	**SO4**	BMB	3.455	10.323	5.17	5	103.5%



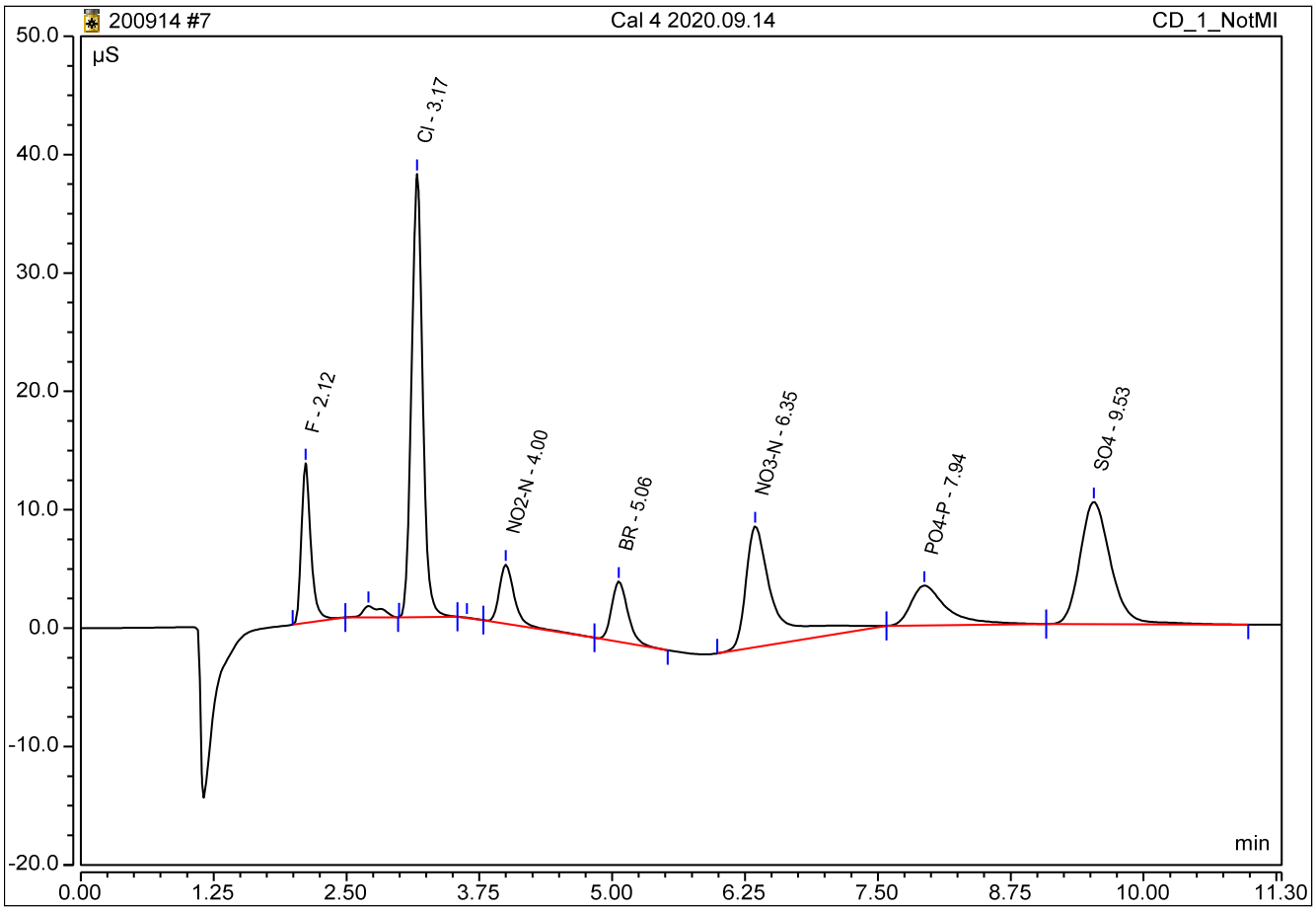
MI 5 NO3 GA 9/14/20

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Not Manipulated Peak Integration Report

Sample Name:	**Cal 4 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 14:59**	*Run Time:*	**11.30**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Ammount mg/L
1	2.12	**F**	BMB	1.393	13.483	1.2743
3	3.17	**Cl**	BMB	4.523	37.438	5.0060
5	4.00	**NO2-N**	BMB	0.825	4.993	0.5579
6	5.06	**BR**	BMB	0.902	5.100	2.3764
7	6.35	**NO3-N**	BMB*	3.185	10.217	1.3799
8	7.94	**PO4-P**	BMB	1.327	3.365	2.4421
9	9.53	**SO4**	BMB	3.455	10.323	5.1723

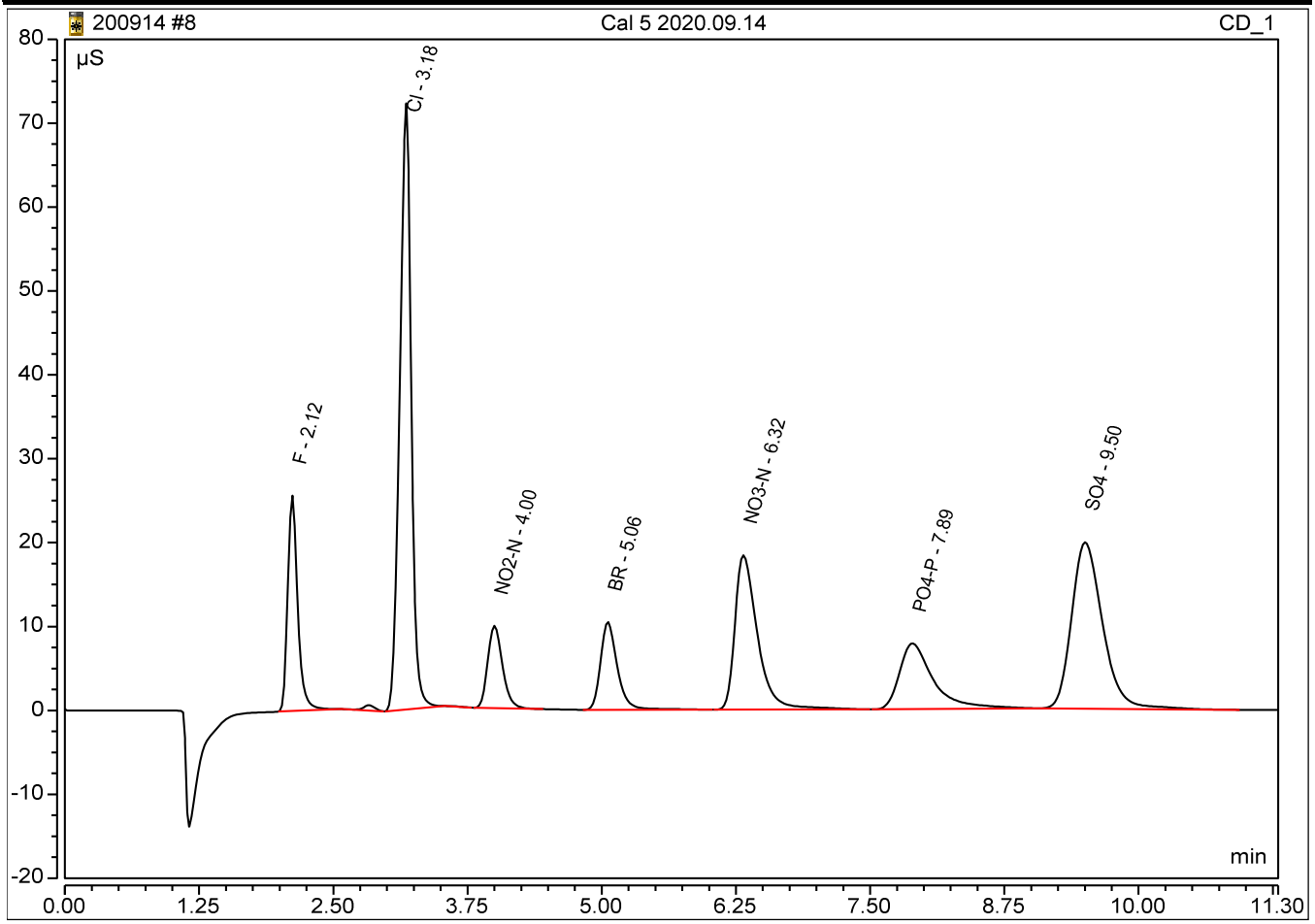


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**Cal 5 2020.09.14**	*Inj. Vol.:*	**100uL**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:14**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.12	**F**	BMB	2.764	25.690	2.67	2.5	107.0%
3	3.18	**Cl**	BMB	8.950	72.239	9.91	10	99.1%
5	4.00	**NO2-N**	BMB	1.558	9.806	1.05	1	105.3%
6	5.06	**BR**	BMB	1.911	10.461	5.03	5	100.6%
7	6.32	**NO3-N**	BMB	4.496	18.415	1.95	2	97.6%
8	7.89	**PO4-P**	BMB	2.876	7.859	4.63	5	92.6%
9	9.50	**SO4**	BMB	6.650	19.846	9.96	10	99.6%



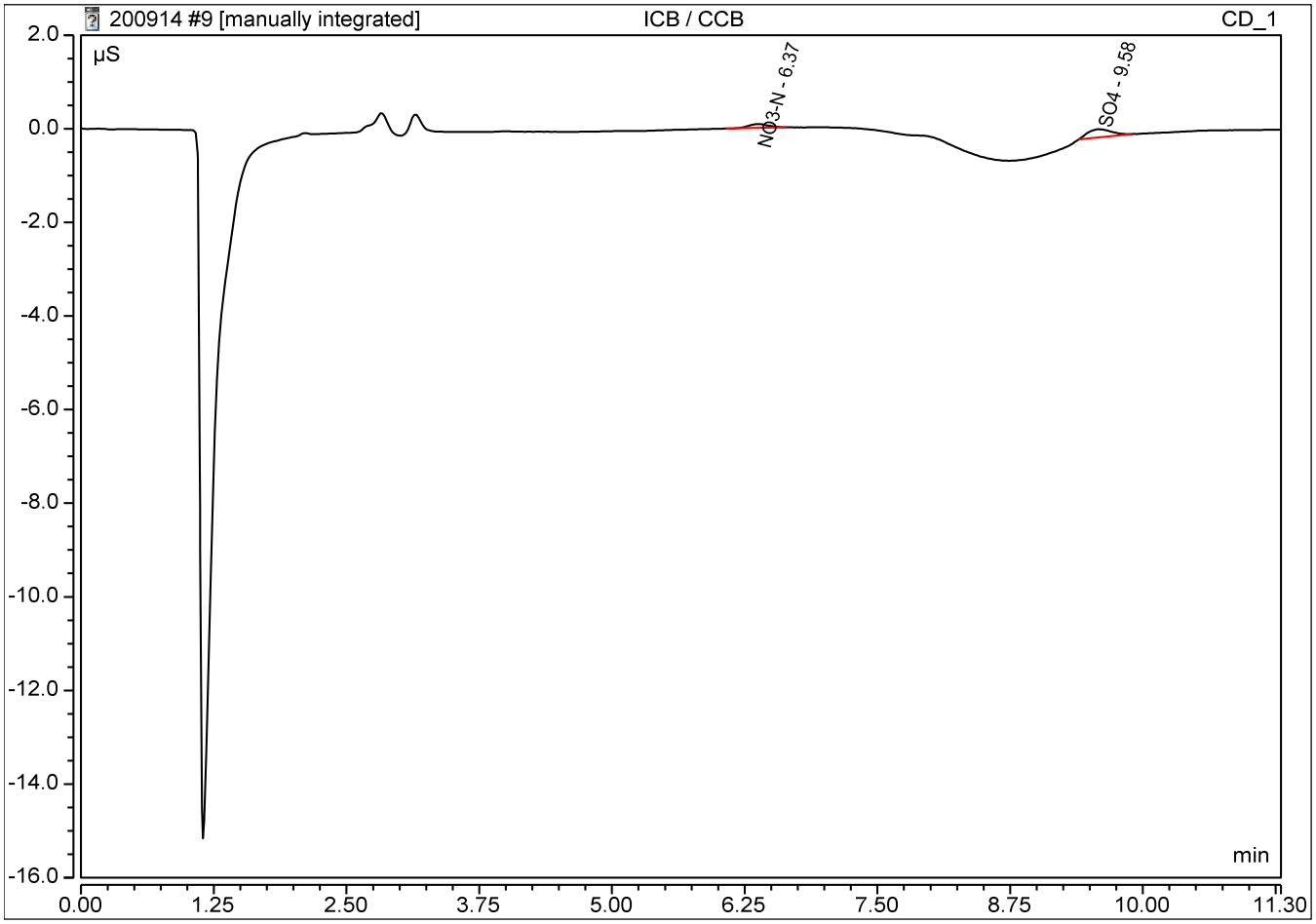
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**ICB / CCB**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:29**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	6.37	**NO3-N**	BMB*	0.017	0.081	0.01		
2	9.58	**SO4**	BMB*	0.046	0.175	0.07		

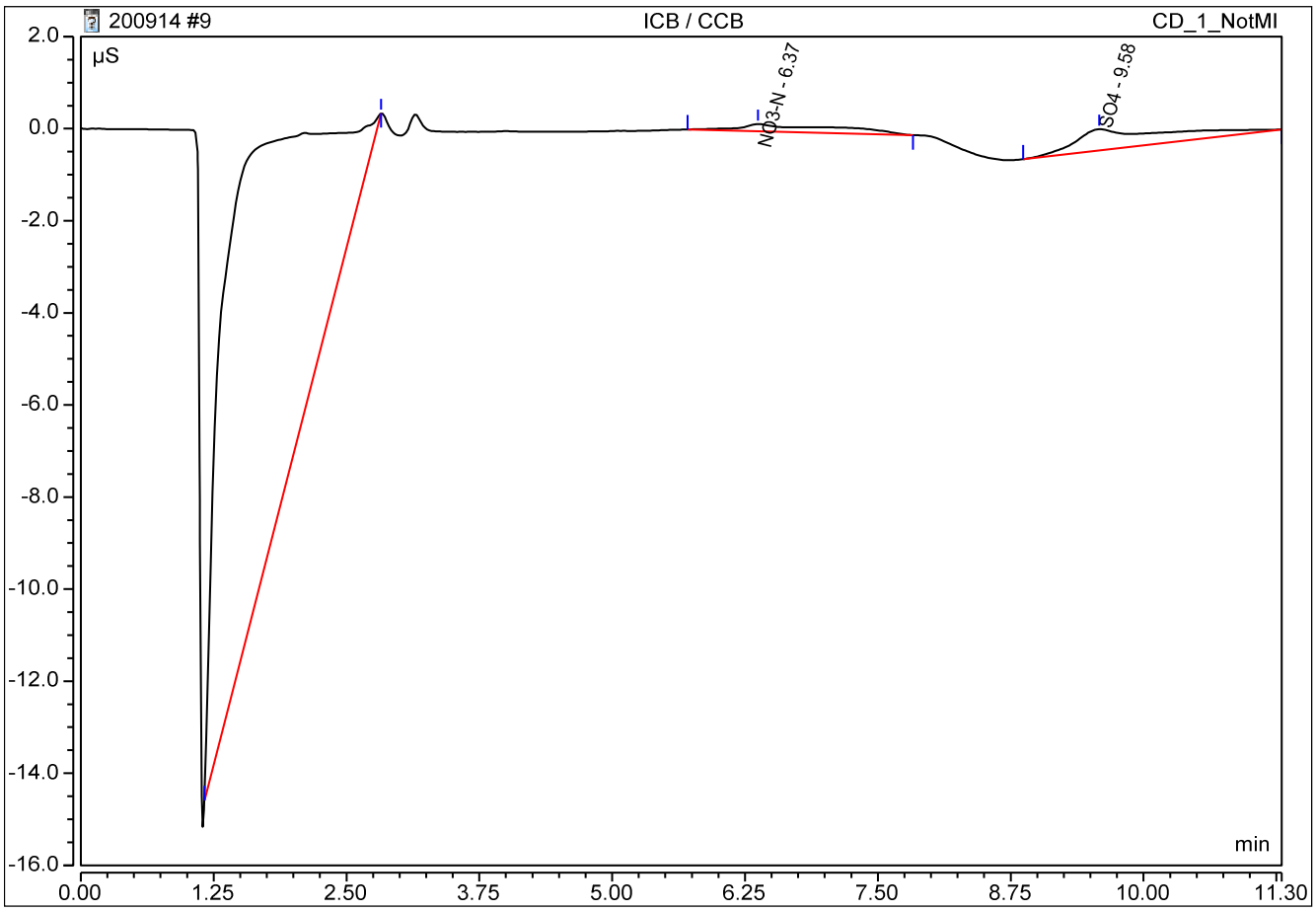


MI 5 F SO4 GA 9/14/20

Not Manipulated Peak Integration Report

Sample Name:	**ICB / CCB**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:29**	*Run Time:*	**11.30**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Ammount mg/L
1	6.37	**NO3-N**	BMB*	0.177	0.155	0.0769
2	9.58	**SO4**	BMB*	0.456	0.464	0.6832

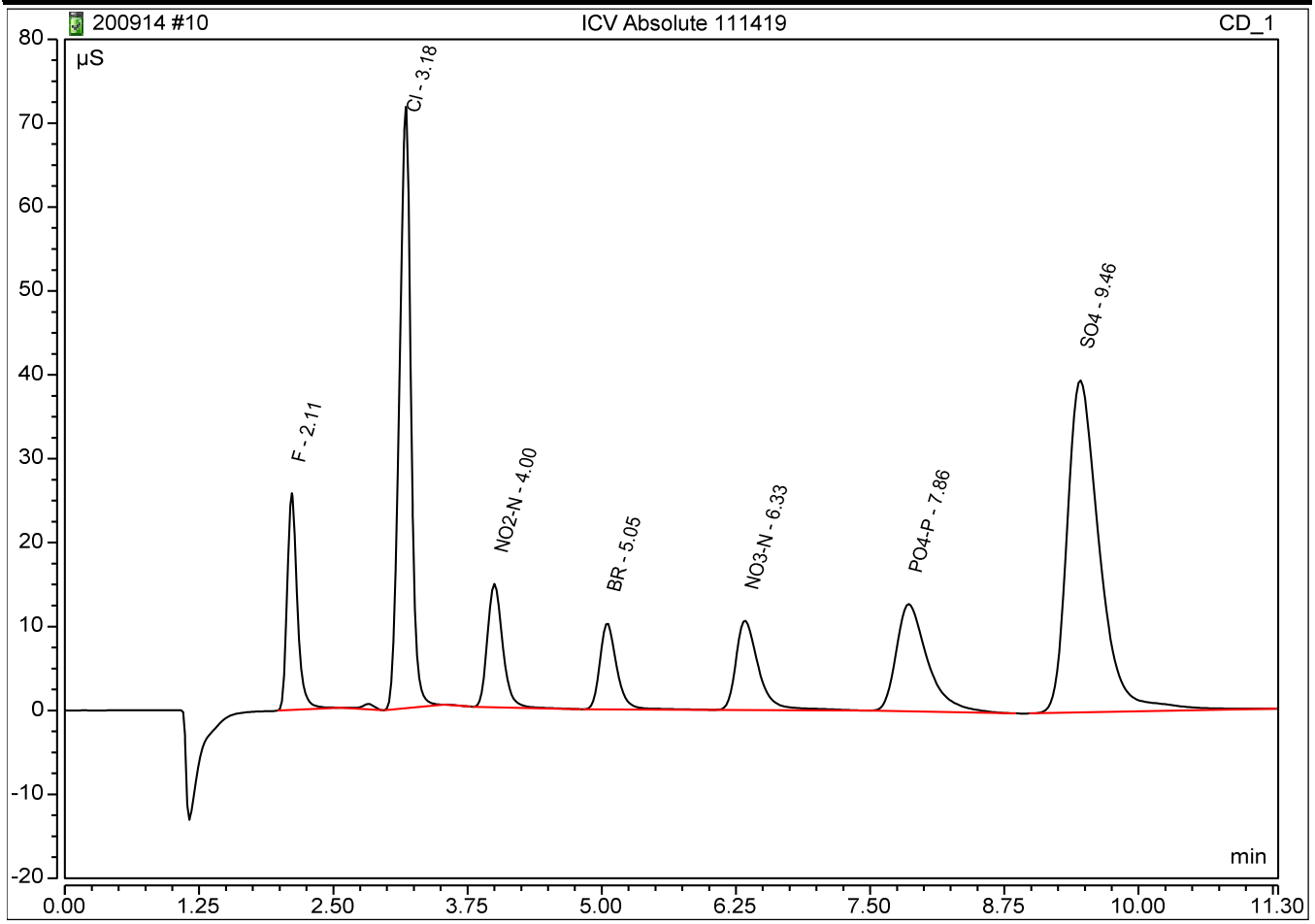


Logged on User: GA
Instrument: Charlie System_1
Sequence: 200914

Peak Integration Report

Sample Name:	**ICV Absolute 111419**	*Inj. Vol.:*	**100uL**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**14-Sep-2020 / 15:43**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.11	**F**	BMB	2.829	25.835	2.74	2.5	109.6%
3	3.18	**Cl**	BMB	8.963	71.696	9.92	10	99.2%
5	4.00	**NO2-N**	BMB	2.425	14.715	1.64	1.522334	107.7%
6	5.05	**BR**	BMB	1.878	10.287	4.95	5	98.9%
7	6.33	**NO3-N**	BMB	2.618	10.656	1.14	1.129525	100.7%
8	7.86	**PO4-P**	BMB	4.336	12.817	6.68	6.522	102.4%
9	9.46	**SO4**	BMB	13.880	39.594	20.79	20	103.9%



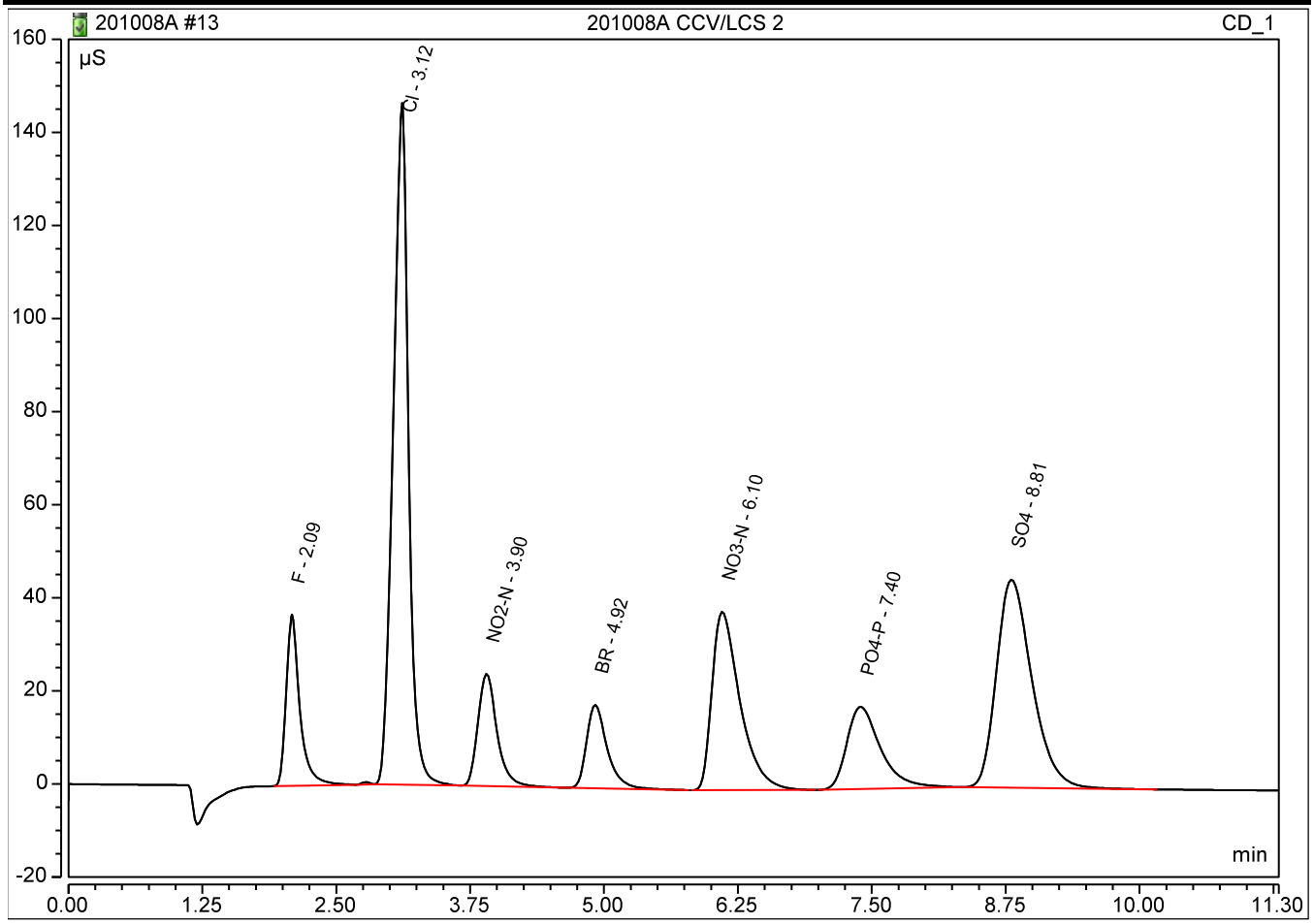
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201008A

Peak Integration Report

Sample Name:	**201008A CCV/LCS 2**	*Inj. Vol.:*	**100uL**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**08-Oct-2020 / 15:35**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.09	**F**	BMB	5.461	36.806	5.38	5	107.6%
3	3.12	**Cl**	BMB	24.209	146.461	26.29	25	105.2%
4	3.90	**NO2-N**	BMB	4.984	24.163	3.31	3.04	108.7%
5	4.92	**BR**	BMB	4.013	17.924	10.37	10	103.7%
6	6.10	**NO3-N**	BMB	11.578	38.307	4.93	5	98.6%
7	7.40	**PO4-P**	BMB	6.492	17.672	9.30	10	93.0%
8	8.81	**SO4**	BMB	17.185	44.710	25.26	25	101.0%



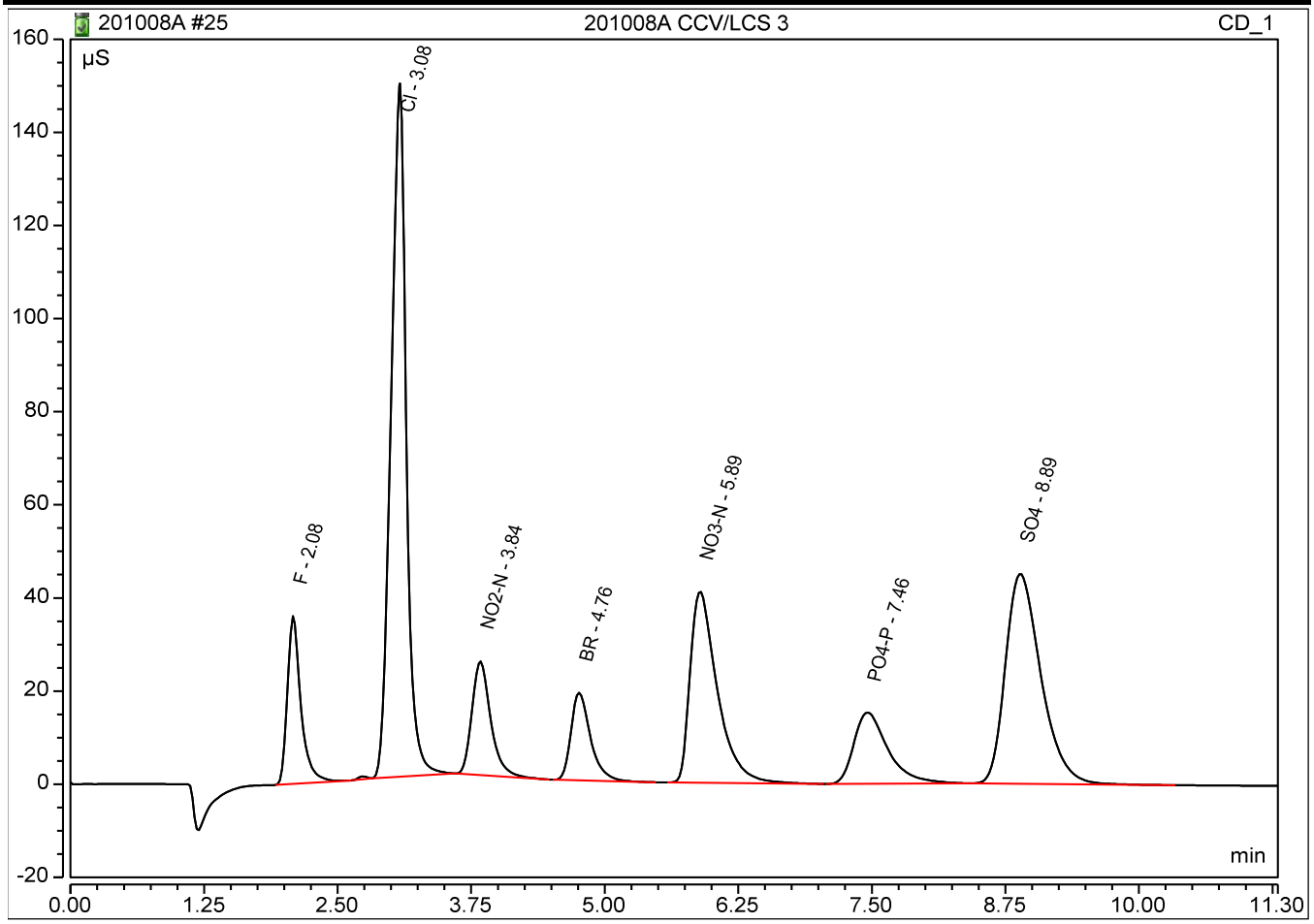
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201008A

Peak Integration Report

Sample Name:	**201008A CCV/LCS 3**	*Inj. Vol.:*	**100uL**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**08-Oct-2020 / 18:31**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	2.08	**F**	BMB	5.328	36.154	5.25	5	104.9%
3	3.08	**Cl**	BMB	24.561	148.905	26.67	25	106.7%
4	3.84	**NO2-N**	BMB	5.002	24.474	3.32	3.04	109.1%
5	4.76	**BR**	BMB	3.996	18.852	10.33	10	103.3%
6	5.89	**NO3-N**	BMB	12.123	41.090	5.16	5	103.2%
7	7.46	**PO4-P**	BMB	5.678	15.305	8.13	10	81.3%
8	8.89	**SO4**	BMB	17.404	45.141	25.58	25	102.3%



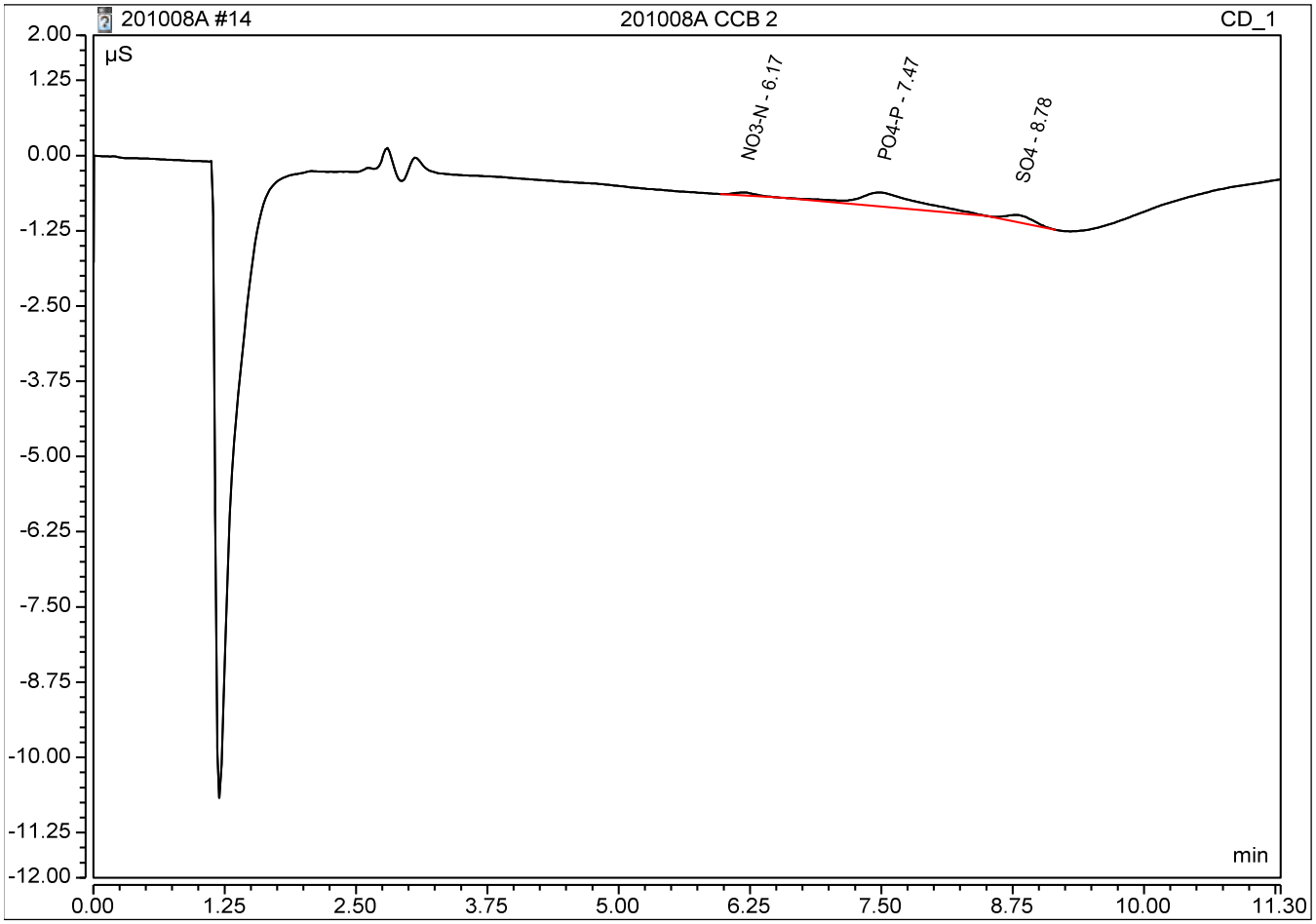
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201008A

Peak Integration Report

Sample Name:	**201008A CCB 2**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**08-Oct-2020 / 15:50**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	6.17	**NO3-N**	BMB	0.012	0.049	0.01		
2	7.47	**PO4-P**	BMB	0.168	0.231	0.24		
3	8.78	**SO4**	BMB	0.036	0.113	0.05		



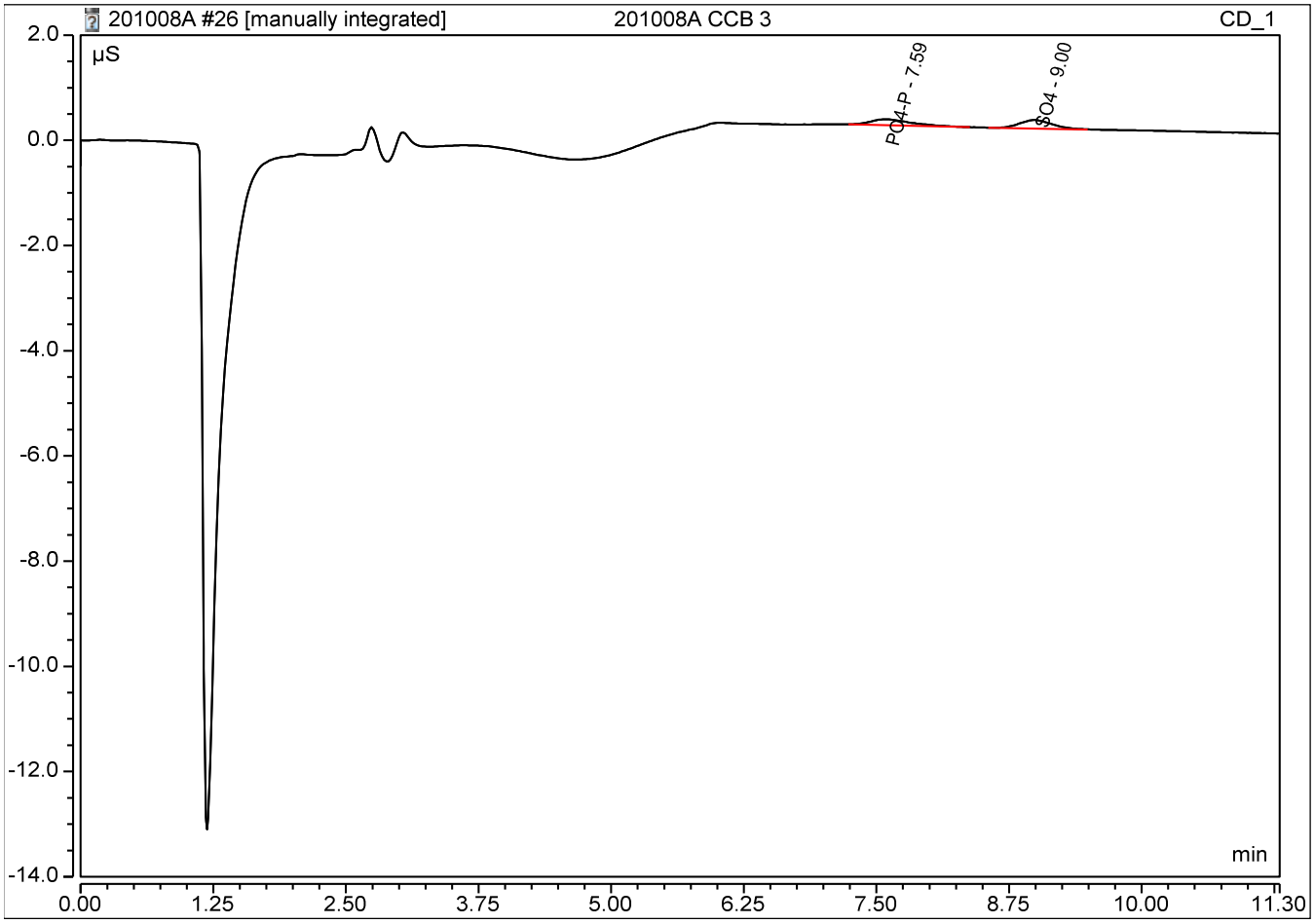
Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201008A

Peak Integration Report

Sample Name:	**201008A CCB 3**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**08-Oct-2020 / 18:46**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
1	7.59	**PO4-P**	BMB	0.052	0.116	0.07		
2	9.00	**SO4**	BMB	0.057	0.162	0.08		

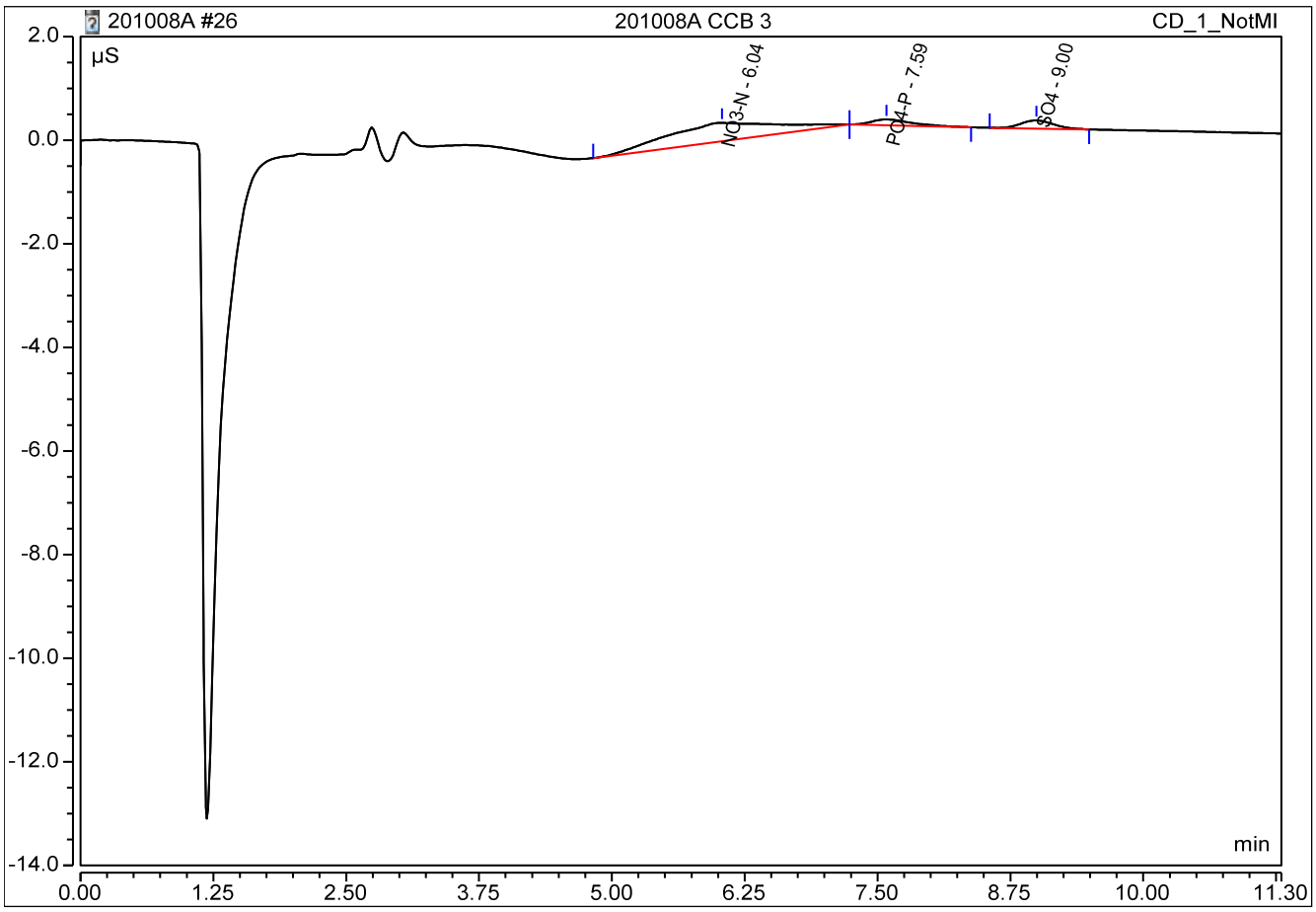


MI 5 PO4 GA 10/9/20 KS 10/13/20

Not Manipulated Peak Integration Report

Sample Name:	**201008A CCB 3**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**08-Oct-2020 / 18:46**	*Run Time:*	**11.30**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Ammount mg/L
1	7.59	**PO4-P**	BMB	0.052	0.116	0.0741
2	9.00	**SO4**	BMB	0.057	0.162	0.0842



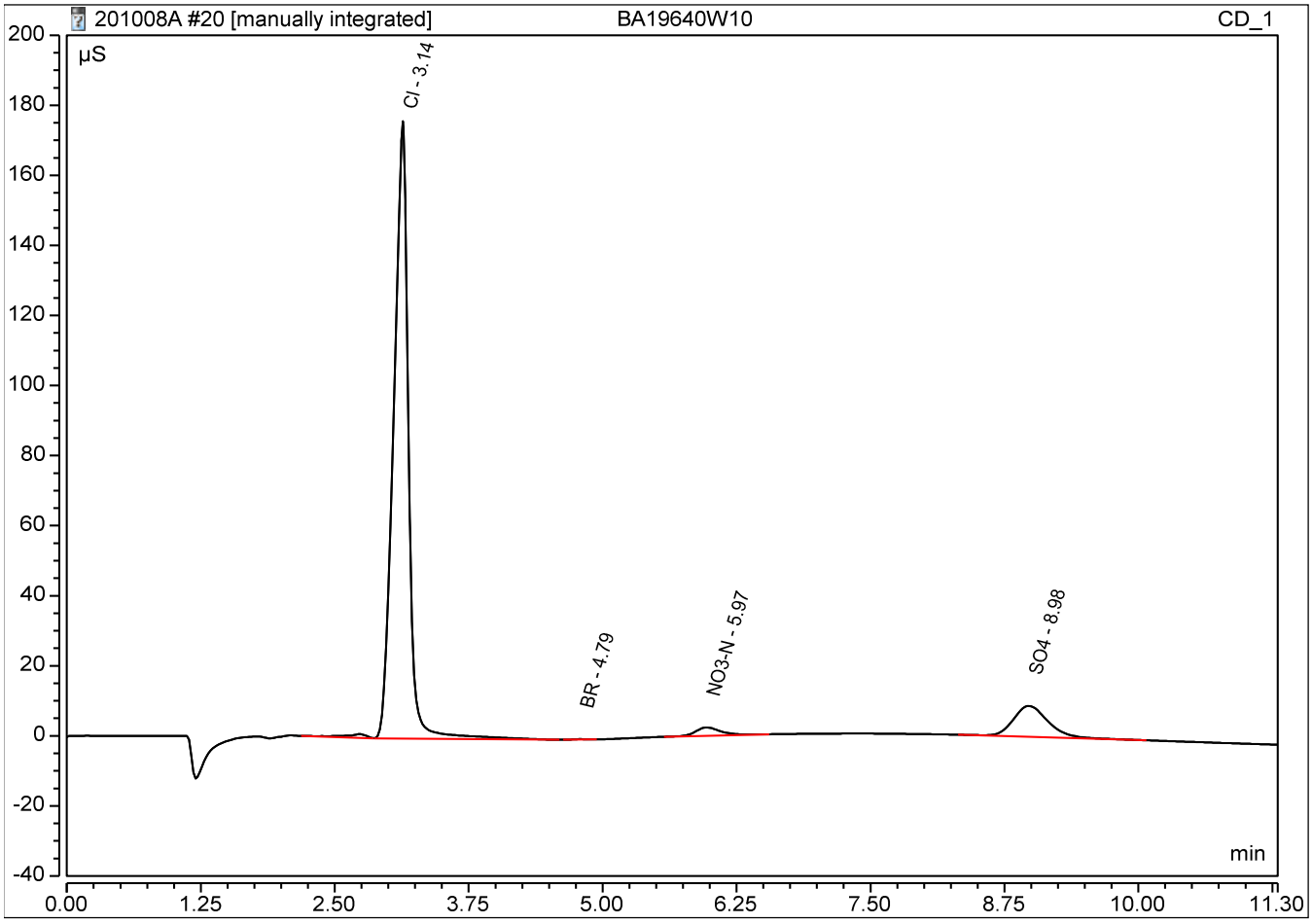
INORGANIC ANALYSIS
Raw Data

Logged on User: GA
Instrument: Charlie System_1
Sequence: 201008A

Peak Integration Report

Sample Name:	**BA19640W10**	*Inj. Vol.:*	**100uL**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.00**
Program:	**Anion APM 2020.09.14**	*Operator:*	**chemist_wetlab**
Inj. Date / Time:	**08-Oct-2020 / 17:18**	*Run Time:*	**11.30**

No.	Time (min) min	Peak Name	Peak Type	Area (µS*min) µS*min	Height (µS) µS	Amount mg/L	Spike Level mg/L	Recovery
2	3.14	**Cl**	BMB	28.118	176.241	30.53		
3	4.79	**BR**	BMB	0.017	0.118	0.04		
4	5.97	**NO3-N**	BMB*	0.645	2.382	0.27		
5	8.98	**SO4**	BMB*	3.326	8.813	4.89		



Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Anion Chromatography Working Standard

Prep Date: 08/25/20

Exp Date: 08/26/20

Prep'd By (Initials): GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (µg/mL)
Ion Chromatography Standard Fluoride 1000 µg/mL in H2O	o2si	O2SI-062002-01-01	1000	**687393-38-40744**	**10/30/20**	312.5 µL	25 mL	Millipore Water	12.5
Ion Chromatography Standard Nitrite 1000 µg/mL in H2O	Inorganic Ventures	ICCL1	1000	**P2-CL675597-41353**	**01/15/23**	411 µL	25 mL	Millipore Water	5 as NO2-N
Ion Chromatography Standard Chloride 5000 µg/mL in H2O	Inorganic Ventures	ICNO21	1000	**N2-NOX672889-49601**	**01/30/23**	1250 µL	25 mL	Millipore Water	50
Ortho-Phosphate as P Standard	Agilent	ICC-005A	1000	**G34-CP-3323-49590**	**05/31/25**	625 µL	25 mL	Millipore Water	25
Ion Chromatography Standard Nitrate as N 1000 µg/mL in H2O	Inorganic Ventures	P2-NOX675324	1000	**P2-NOX675324-49391**	**02/14/23**	250 µL	25 mL	Millipore Water	10
Bromide Standard	CPI international	4400-IC8M	1000	**1011817-12-49602**	**06/04/21**	625 µL	25 mL	Millipore Water	25
Sulfate Standard	Inorganic Ventures	ICS041	1000	**P2-SOX677315**	**04/03/23**	1250 µL	25 mL	Millipore Water	50

Anion Chromatography Calibration Curve

Prep Date: 09/14/20

Exp Date: 09/15/20

Prep'd By (Initials): GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. Range (ug/mL)	Reference To APPL Prep Date	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc. Range (µg/mL)
Anion Chromatography Working Standard	Varies	ICal1A	5.0-50.0	Prepared 08/25/20	09/15/20	2 µL	1000 µL	Millipore Water	0.02-0.20
Anion Chromatography Working Standard	Varies	ICal1	5.0-50.0	Prepared 08/25/20	09/15/20	4 µL	1000 µL	Millipore Water	0.04-0.40
Anion Chromatography Working Standard	Varies	ICal2	5.0-50.0	Prepared 08/25/20	09/15/20	20 µL	1000 µL	Millipore Water	0.1-1.0
Anion Chromatography Working Standard	Varies	ICal3	5.0-50.0	Prepared 08/25/20	09/15/20	50 µL	1000 µL	Millipore Water	0.25-2.5
Anion Chromatography Working Standard	Varies	ICal4	5.0-50.0	Prepared 08/25/20	09/15/20	100 µL	1000 µL	Millipore Water	0.5-5.0
Anion Chromatography Working Standard	Varies	ICal5	5.0-50.0	Prepared 08/25/20	09/15/20	200 µL	1000 µL	Millipore Water	1.0-10.0
Anion Chromatography Working Standard	Varies	ICal6	5.0-50.0	Prepared 08/25/20	09/15/20	500 µL	1000 µL	Millipore Water	2.5-25.0
Anion Chromatography Working Standard	Varies	ICal7	5.0-50.0	Prepared 08/25/20	09/15/20	700 µL	1000 µL	Millipore Water	3.5-35.0
Anion Chromatography Working Standard	Varies	ICal8	5.0-50.0	Prepared 08/25/20	09/15/20	1000 µL	1000 µL	Millipore Water	5.0-50.0

Anion Chromatography ICV Absolute COA 49866

Prep Date: See injection Log

Exp Date: 24 hours after prep

Prep'd By (Initials): Absolute

Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. Range (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (µg/mL)
Flouride	Absolute	50021	2.5	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	2.5
Nitrite	Absolute	50021	1.522334	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	1.522334
Chloride	Absolute	50021	1.522334	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	1.522334
O-Phosphate as P	Absolute	50021	6.522	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	6.522
Nitrate as N	Absolute	50021	1.129525	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	1.129525
Ion Chromatography Standard Bromide, 1000 µg/mL in H2O	Absolute	50021	5	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	5
Sulfate	Absolute	50021	20	**111419-49866**	**11/14/21**	1000 µL	1000 µL	N / A	20

Anion Chromatography CCV / LCS

Prep Date: See injection Log

Exp Date: 24 hours after prep

Prep'd By (Initials): GA

Initial Standard Information						Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (µg/mL)
Ion Chromatography Standard Fluoride 1000 µg/mL in H2O	o2si	O2SI-062002-01-01	1000	**687393-38-40744**	**10/30/20**	125 µL	25 mL	Millipore Water	5
Ion Chromatography Standard Nitrite 1000 µg/mL in H2O	Inorganic Ventures	ICCL1	1000	**P2-CL675597-41353**	**01/15/23**	250 µL	25 mL	Millipore Water	10
Ion Chromatography Standard Chloride 5000 µg/mL in H2O	Inorganic Ventures	ICNO21	1000	**N2-NOX672889-49601**	**01/30/23**	125 µL	25 mL	Millipore Water	25
Ortho-Phosphate as P Standard	Agilent	ICC-005A	1000	**G34-CP-3323-49590**	**05/31/25**	250 µL	25 mL	Millipore Water	10
Ion Chromatography Standard Nitrate as N 1000 µg/mL in H2O	Inorganic Ventures	P2-NOX675324	1000	**P2-NOX675324-49391**	**02/14/23**	125 µL	25 mL	Millipore Water	5
Bromide Standard	CPI international	4400-IC8M	1000	**1011817-12-49602**	**06/04/21**	250 µL	25 mL	Millipore Water	10
Sulfate Standard	Inorganic Ventures	ICS041	1000	**P2-SOX677315**	**04/03/23**	625 µL	25 mL	Millipore Water	25

Method 300 and 9056 Injection Log

No.	Position	Injection Description	Inject Time		Type	Comment
1	BC1	Cal 1 2020.09.14	14/Sep/2020	11:17	Calibration Standard	
2	BC2	Cal 2 2020.09.14	14/Sep/2020	11:31	Calibration Standard	
3	BC3	Cal 3 2020.09.14	14/Sep/2020	11:46	Calibration Standard	
4	BC6	Cal 6 2020.09.14	14/Sep/2020	12:30	Calibration Standard	
5	BC7	Cal 7 2020.09.14	14/Sep/2020	12:44	Calibration Standard	
6	BC8	Cal 8 2020.09.14	14/Sep/2020	12:59	Calibration Standard	
7	BC4	Cal 4 2020.09.14	14/Sep/2020	14:59	Calibration Standard	
8	BC5	Cal 5 2020.09.14	14/Sep/2020	15:14	Calibration Standard	
9	R1	ICB / CCB	14/Sep/2020	15:29	Unknown	
10	BD1	ICV Absolute 111419	14/Sep/2020	15:43	Check Standard	

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

Method 300 and 9056 Injection Log

No.	Position	Injection Description	Inject Time		Type	Comment
1	R2	201008A CCV/LCS 1	08/Oct/2020	08:59	Check Standard	
2	R1	201008A CCB 1	08/Oct/2020	09:14	Unknown	
3	BE2	BA19533W01 DF5	08/Oct/2020	09:28	Unknown	
4	BE3	BA19527W01 DF5	08/Oct/2020	09:43	Unknown	
5	BE4	BA19522W01 DF5	08/Oct/2020	09:58	Unknown	
6	BA1	BA19598W01	08/Oct/2020	13:53	Unknown	
7	BA2	BA19599W01	08/Oct/2020	14:08	Unknown	
8	BA3	BA19600W01	08/Oct/2020	14:22	Unknown	
9	BA4	BA19601W01	08/Oct/2020	14:37	Unknown	
10	BA5	BA19602W01	08/Oct/2020	14:51	Unknown	
11	BA6	BA19603W01	08/Oct/2020	15:06	Unknown	
12	BA7	BA19604W01	08/Oct/2020	15:21	Unknown	
13	R2	201008A CCV/LCS 2	08/Oct/2020	15:35	Check Standard	
14	R1	201008A CCB 2	08/Oct/2020	15:50	Unknown	
15	BA8	BA19605W01	08/Oct/2020	16:05	Unknown	
16	BB1	BA19606W01	08/Oct/2020	16:19	Unknown	
17	BB2	BA19607W01	08/Oct/2020	16:34	Unknown	
18	BB3	BA19602W01 DF5	08/Oct/2020	16:49	Unknown	
19	BB4	BA19604W01 DF5	08/Oct/2020	17:03	Unknown	
20	BB5	BA19640W10	08/Oct/2020	17:18	Unknown	93659 ERH 1155
21	BB6	BA19741W07	08/Oct/2020	17:33	Unknown	93655 280W 25
22	BB7	BA19742W04	08/Oct/2020	17:47	Unknown	93655 280W 34
23	BB8	BA19743W04	08/Oct/2020	18:02	Unknown	93655 28SI 13
24	BC1	BA19743W04 DF5	08/Oct/2020	18:17	Unknown	93655 28SI 13 DF5
25	R2	201008A CCV/LCS 3	08/Oct/2020	18:31	Check Standard	
26	R1	201008A CCB 3	08/Oct/2020	18:46	Unknown	
27	BC2	BA19728W04	08/Oct/2020	19:01	Unknown	93653 280W 30
28	BC3	BA19729W04	08/Oct/2020	19:15	Unknown	93653 280W 33
29	BC4	BA19730W04	08/Oct/2020	19:30	Unknown	93653 280W 32
30	BC5	BA19731W04	08/Oct/2020	19:44	Unknown	93653 280W 11
31	BC6	BA19732W04	08/Oct/2020	19:59	Unknown	93653 28SI 16
32	BC7	BA19733W04	08/Oct/2020	20:14	Unknown	93653 280W 31
33	BC8	BA19734W04	08/Oct/2020	20:28	Unknown	93653 280W 10
34	BD1	BA19735W04	08/Oct/2020	20:43	Unknown	93653 280W 09
35	R2	201008A CCV/LCS 4	08/Oct/2020	20:58	Check Standard	
36	R1	201008A CCB 4	08/Oct/2020	21:12	Unknown	
37	R2	STOP	08/Oct/2020	21:24	Unknown	

Chromeleon (c) Dionex 1996-2009
Version 7.2.4.8340

INORGANIC ANALYSIS
Calibration and Raw Data

A.P.P.L. INC.
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: AECOM
ARF No: 93659 SDG: 93659
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 10/12/20

Analyte	Calibration Verification									M
	True CCV1	Found 12:56	%R(1)	True ICV	Found 13:01	%R(1)	True CCV1	Found 13:11	%R(1)	
TOXN	3	3.0689	102	3	3.2075	107	3	3.2535	108	

(1) Control Limits: 90-110

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: AECOM

ARF No.: 93659 SDG: 93659

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 10/12/20 12:59	C	ICB 10/12/20 13:03	C	CCB 10/12/20 13:12	C		C		C	
TOXN	.100	U	.100	U	.100	U					

AQ2 Report

Serial Number:	190170
Software Version:	2.1.0
Report Requested By:	Kyle S
Date & Time:	2020-10-12 13:20:56
Tray Number:	2
Tray Name:	201012A TOXN

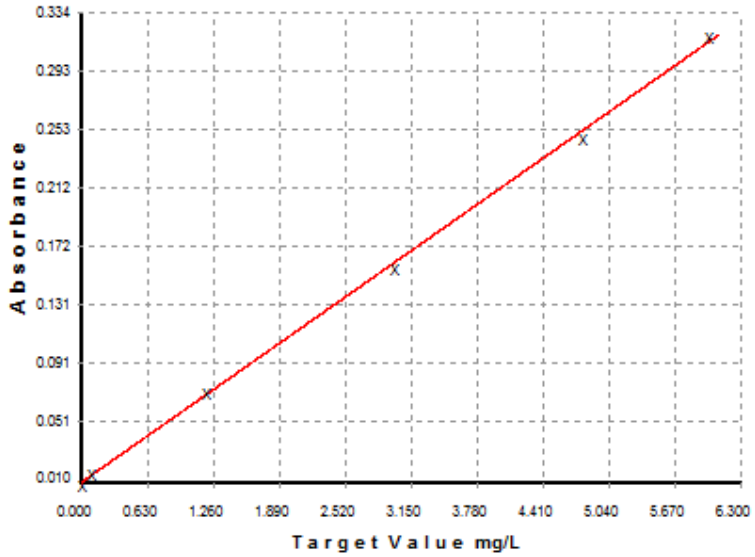
TOXN

Calibration Chart

Type	Absorbance	Calc mg/L	Target mg/L	% Error
S1	0.0101	-0.0071	0.0000	
S90	0.0170	0.1286	0.1000	28.62
S91	0.0726	1.2304	1.2000	2.54
S92	0.1590	2.9437	3.0000	-1.88
S93	0.2482	4.7138	4.8000	-1.80
S94	0.3177	6.0906	6.0000	1.51
S0	0.0118	0.0260	0.0000	

Polynomial Order:	1
Correlation Coefficient:	0.9997
Carryover(%):	0.5
Calibration equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured absorbance
a =:	-2.081507E-001
b =:	1.982849E+001
Date & Time:	2020-10-12 12:54:38

Calibration Graph



Cup	Type	ID	Result	Units	QC Pro	Raw Data	Auto Dil.	Man Dil.	User	Time/Date
	S1	Standard 1	0.0101			0.010139			KS	2020-10-12 12:40:51
	S90	Standard 90	0.0170			0.016984			KS	2020-10-12 12:43:09
	S91	Standard 91	0.0726			0.072552			KS	2020-10-12 12:45:27
	S92	Standard 92	0.1590			0.158956			KS	2020-10-12 12:47:44
	S93	Standard 93	0.2482			0.248225			KS	2020-10-12 12:50:02
	S94	Standard 94	0.3177			0.317660			KS	2020-10-12 12:52:20
	S0	Standard 0	0.0118			0.011811			KS	2020-10-12 12:54:38
	CCV	CCV	3.0689	mg/L		0.165270			KS	2020-10-12 12:56:56
	CCB	CCB	-0.0030	mg/L		0.010346			KS	2020-10-12 12:59:14
3	U1	ICV TOXN	3.2075	mg/L		0.172260			KS	2020-10-12 13:01:33
4	U2	ICB TOXN	0.0196	mg/L		0.011487			KS	2020-10-12 13:03:52
5	U3	201012A Blk TOXN	-0.0020	mg/L		0.010398			KS	2020-10-12 13:05:00
6	U4	201012A LCS TOXN	3.0909	mg/L		0.166381			KS	2020-10-12 13:05:56
7	U5	201012A LCSD TOXN	3.2887	mg/L		0.176357			KS	2020-10-12 13:06:52
8	U6	1 ppm NO3	1.0351	mg/L		0.062702			KS	2020-10-12 13:07:49
9	U7	BA19640W11 MS Thing 1 pH5.89	4.2159	mg/L		0.223114			KS	2020-10-12 13:08:45
10	U8	BA19640W11 MSD pH5.89	4.0689	mg/L		0.215700			KS	2020-10-12 13:09:41
11	U9	BA19640W11 pH5.89	0.3793	mg/L		0.029625			KS	2020-10-12 13:10:38
	CCV	CCV	3.2535	mg/L		0.174577			KS	2020-10-12 13:11:34
	CCB	CCB	0.0240	mg/L		0.011707			KS	2020-10-12 13:12:31

Nitrite

High Point @ 1.5 mg/L
0.2463 mL NO2 Inorganic Ventures lot N2-NOX672889-40759 exp: 05/01/20
50 mL DI Water

CCV @ 0.75 mg/L
0.1232 mL NO2 Inorganic Ventures lot N2-NOX672889-40759 exp: 05/01/20
50 mL DI Water

ICV/LCS @ 0.73 mg/L
0.120 mL NO2 Inorganic Ventures lot M2-NOX660562-40468 exp: 08/25/21
50 mL DI Water

1 mg/L NO2
400 uL of High point and 200 uL of DI made directly into a sample cup

Prep 09/09/20
Exp 09/16/20
ERR

Nitrate/TOXN

High Point @ 6 mg/L
0.300 mL NO3 O2Si lot 880117-4-39577 exp: 2/21/20
50 mL DI Water

CCV @ 3.0 mg/L
0.150 mL NO3 O2Si lot 880117-4-39577 exp: 2/21/20
50 mL DI Water

ICV/LCS @ 3.0 mg/L
0.150 mL NO3 Inorganic Ventures lot P2-NOX675324-49391 exp: 02/14/23
50 mL DI Water

1 mg/L NO3
100 uL of High point and 500 uLof DI made directly into a sample cup

MS @ 0.73 mg/L NO2 and 2.5 mg/L NO3
0.120 mL NO2 Inorganic Ventures lot M2-NOX660562-40468 exp: 08/25/21and
0.125 mL NO3 Inorganic Ventures lot P2-NOX675324-49391 exp: 02/14/23
Final volume 50 mL of sample

Prep 09/09/20
Exp 09/16/20
ERR

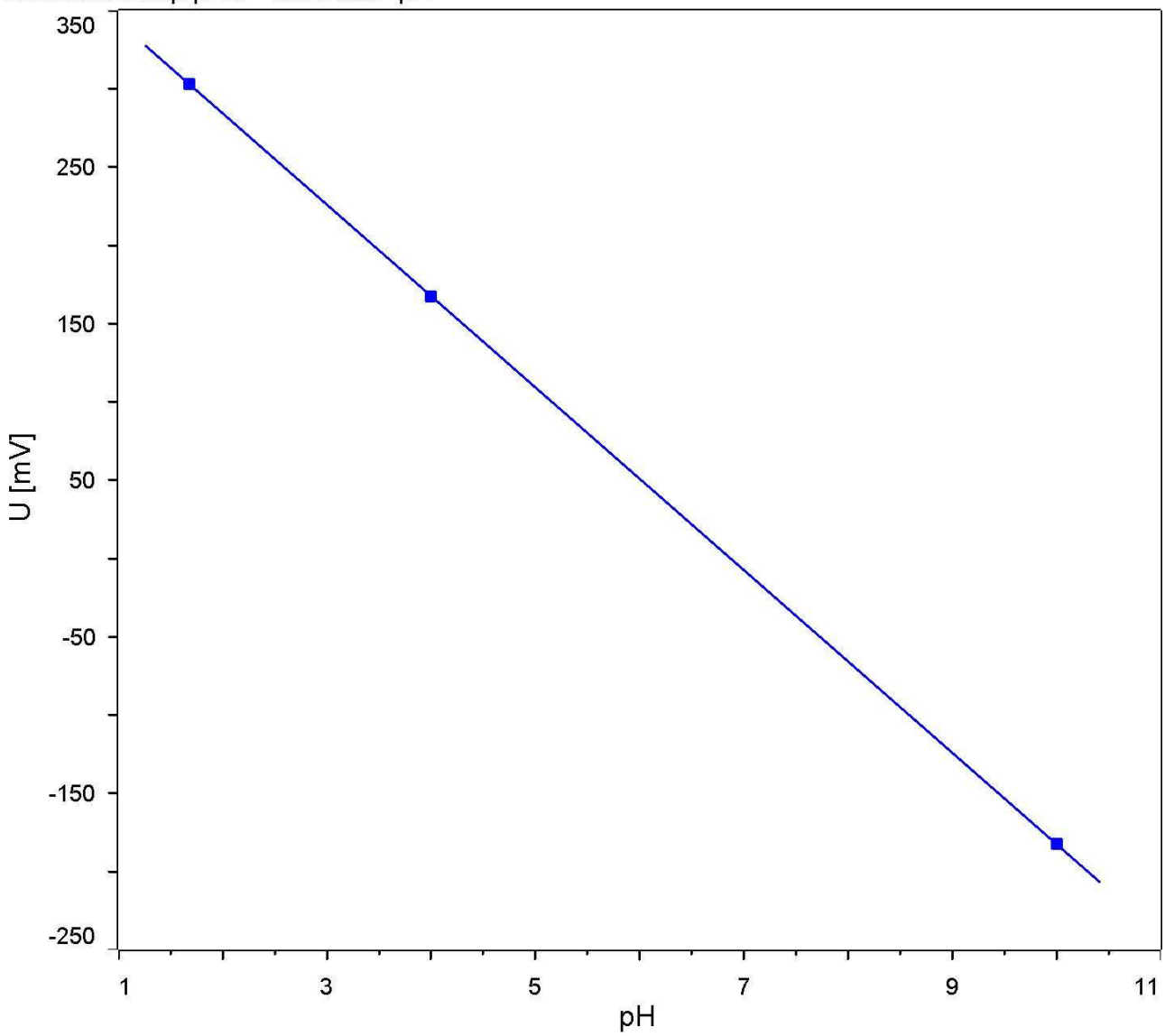
Timao Calibration Curve

2020-10-12 15:05:41

Calculations

Buffer 7	7.02	
Formula	'MEAS pH.EME'	
MEAS pH.EME	7.0245	
Slope	99.90	
Formula	'Calibration loop pH.SLO'	
Calibration loop pH.SLO	99.9	
pH(as)	6.87	
Formula	'Calibration loop pH.ENP'	
Calibration loop pH.ENP	6.871	
Res19	21.2	°C
Formula	'CAL MEAS pH.ETE'	
CAL MEAS pH.ETE	21.2459	

Calibration loop pH.1 - CAL LOOP pH



Metrohm 814/809 Titrando Data

Sample ID	Analysis Date/Time	Method	Titration Volume (to 8.3)	Titration Volume (total)	OH	CO3	HCO3	Total Alk	Unit	Sample Vol	N	Batch	Initials
201012A LCSD	2020-10-12 21:58:07 UTC-7	Alkalinity	0.234	6.238	0.00	18.91	233.11	252.02	mg/L	25 mL	0.0202	201012A	AR
BA19834W01	2020-10-12 21:53:24 UTC-7	Alkalinity	0.000	2.084	0.00	0.00	84.19	84.19	mg/L	25 mL	0.0202	201012A	AR
BA19833W01	2020-10-12 21:45:15 UTC-7	Alkalinity	0.244	4.588	0.00	19.72	165.64	185.36	mg/L	25 mL	0.0202	201012A	AR
BA19730W04	2020-10-12 20:42:37 UTC-7	Alkalinity	0.000	10.060	0.00	0.00	406.42	406.42	mg/L	25 mL	0.0202	201012A	AR
BA19640W10	2020-10-12 20:37:43 UTC-7	Alkalinity	0.000	1.656	0.00	0.00	66.90	66.90	mg/L	25 mL	0.0202	201012A	AR
BA19743W04	2020-10-12 19:42:58 UTC-7	Alkalinity	0.000	17.658	0.00	0.00	713.38	713.38	mg/L	25 mL	0.0202	201012A	AR
BA19742W04	2020-10-12 19:12:37 UTC-7	Alkalinity	0.000	25.524	0.00	0.00	1031.17	1031.17	mg/L	25 mL	0.0202	201012A	AR
BA19741W07	2020-10-12 19:02:47 UTC-7	Alkalinity	0.000	5.456	0.00	0.00	220.42	220.42	mg/L	25 mL	0.0202	201012A	AR
BA19735W04	2020-10-12 18:50:11 UTC-7	Alkalinity	0.000	9.416	0.00	0.00	380.41	380.41	mg/L	25 mL	0.0202	201012A	AR
BA19733W04	2020-10-12 18:24:36 UTC-7	Alkalinity	0.000	21.714	0.00	0.00	877.25	877.25	mg/L	25 mL	0.0202	201012A	AR
BA19734W04	2020-10-12 18:14:43 UTC-7	Alkalinity	0.000	6.226	0.00	0.00	251.53	251.53	mg/L	25 mL	0.0202	201012A	AR
BA19731W04	2020-10-12 18:05:32 UTC-7	Alkalinity	0.000	5.932	0.00	0.00	239.65	239.65	mg/L	25 mL	0.0202	201012A	AR
BA19732W04	2020-10-12 17:52:08 UTC-7	Alkalinity	0.000	10.594	0.00	0.00	428.00	428.00	mg/L	25 mL	0.0202	201012A	AR
BA19729W04	2020-10-12 17:35:00 UTC-7	Alkalinity	0.000	15.400	0.00	0.00	622.16	622.16	mg/L	25 mL	0.0202	201012A	AR
BA19728W04	2020-10-12 17:01:51 UTC-7	Alkalinity	0.000	8.398	0.00	0.00	339.28	339.28	mg/L	25 mL	0.0202	201012A	AR

Metrohm 814/809 Titrando Data

Sample ID	Analysis Date/Time	Method	Titration Volume (to 8.3)	Titration Volume (total)	OH	CO3	HCO3	Total Alk	Unit	Sample Vol	N	Batch	Initials
201012A LCS	2020-10-12 16:11:04 UTC-7	Alkalinity	0.194	6.166	0.00	15.68	233.43	249.11	mg/L	25 mL	0.0202	201012A	AR
201012A BLK	2020-10-12 16:07:39 UTC-7	Alkalinity	0.000	0.140	0.00	0.00	5.66	5.66	mg/L	25 mL	0.0202	201012A	AR

Tiamo Alkalinity Standard Prep

Prep'd By (Initials): AR

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Unit	Conc	Lot Number - QA Number	Prep/Opened	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc
Sulfuric Acid (H2SO4)	J.T.Baker	NA	NA	**167828**	**NA**	**NA**	PURCHASED	NA	NA	NA
0.10N Sulfuric Acid (H2SO4)	J.T.Baker	Normality	0.1N	**167828**	**03/06/20**	**03/06/21**	3ml	1L	DI	0.10N
0.02N Sulfuric Acid (H2SO4)	J.T.Baker	Normality	0.02N	**167828**	**03/06/20**	**03/06/21**	200mL	1L	DI	0.02N
Inorganic Spike(NaHCO3)	BDH	NA	NA	**19K0856189**	**04/09/20**	**NA**	PURCHASED	NA	NA	NA
Inorganic Spike Solution	BDH	Milligrams/Liters	250mg/L	**1575C510**	**07/27/20**	**01/27/21**	3.5g	500mL	DI	250mg/L
Standarizing Solution(NaCO3)	J.T.Baker	Normality	1N	**223443**	**07/02/20**	**03/11/21**	PURCHASED	NA	NA	NA

Tiamo Electroconductivity Standard Prep

Prep'd By (Initials): AR

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Units	Conc	Lot Number	Prep/Opened	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc. Range (µg/mL)
EC Spike(KCl)	Mallinckrodt AR	Na	NA	**6858 KHMV**	**NA**	**NA**	PURCHASED	NA	NA	NA
EC Spike Solution	Mallinckrodt AR	Moles/Conductivity	0.01M	**6858 KHMV**	**04/23/20**	4/23/21	0.7456g	1L	DI	1412umos
EC Daily LCS Solution	Mallinckrodt AR	Moles/Conductivity	0.0070824M	**6858 KHMV**	05/25/20	5/25/21	0.5280g	1L	DI	1000umos
Storage Solution EC Probe	APPL	NA	NA	NA	NA	NA	NA	NA	DI	NA

Tiamo pH Buffer Reference Standards

Prep Date: Daily

Exp Date: Daily

Prep'd By (Initials): AR **AR**

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Units	pH	Lot Number - QA Number	Opened	Exp. Date	Aliquot from Stock	Final Volume	Solvent	Final Standard Conc (µg/mL)
pH 1.68 Buffer	VWR	pH Units	1.68	**1006705**	**07/02/20**	**11/27/20**	NA	NA	NA	NA
pH 4.00 Buffer	VWR	pH Units	4	**1901A35-40706**	**01/19/19**	**01/13/21**	NA	NA	NA	NA
pH 10.01 Buffer	VWR	pH Units	10.01	**1004B81**	**07/02/20**	**10/12/21**	NA	NA	NA	NA
pH 7.00 Buffer	Ricca	pH Units	7	**1912A15**	**07/02/20**	**12/01/21**	NA	NA	NA	NA

Ferrous Iron — Rev 2, 04-05-19

Method SM3500Fe | Units mg/L | Instrument: Genisis Spectrometer
Analyte Fe2+ | QCG: 201009 | Wavelength: 510 nm
Analyist fjr | Final Volume: 50mL | Units: mg/L

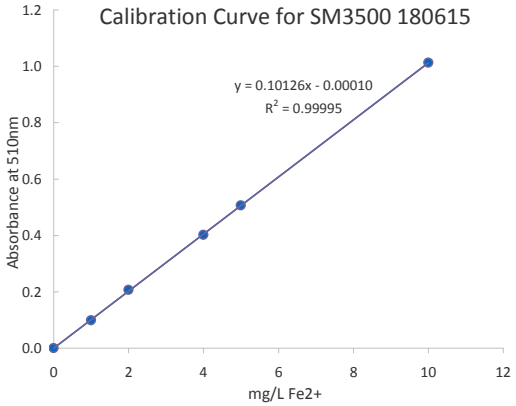
Date	Time	Appl ID	[Fe2+]	Absorbance	% Recovery
06/26/20	10:49	ICB	0.00	0.000	
06/26/20	10:49	Ical 1	1.00	0.099	97.9%
06/26/20	10:50	Ical 2	2.00	0.207	102.3%
06/26/20	10:51	Ical 3	4.00	0.402	99.3%
06/26/20	10:51	Ical 4	5.00	0.506	100.0%
06/26/20	10:52	Ical 5	10.00	1.013	100.1%
06/26/20	10:52	ICV	3.00	0.313	103.1%
06/26/20	10:53	ICB	0.00	0.000	

Slope	0.101255102
Intercept	-0.000102041
Coefficient of Determination	0.999948376

Algortithm Check:	Appl ID	Absorbance	Result
	LCS A201009	0.301	2.97

Result = (Absorbance-Raw Blk-Intercept)/ Slope

Test:	FJR	10/09/20	2.97



Date	Time	Appl ID	DF	Raw Result	SubSample Amount	Raw BLK	Calc Conc	Result	QC True	% Recovery
10/09/20	16:30	CCV 4.0 A200923	1	0.408	25mL		4.03	4.03	4.00	100.8%
10/09/20	16:31	CCB A201009	1	0.000	25mL		0.00	0.00		
10/09/20	16:32	LCS A201009	1	0.301	25mL		2.97	2.97	3.00	99.1%
10/09/20	16:33	LCSD A201009	1	0.305	25mL		3.01	3.01	3.00	100.4%
10/09/20										
10/09/20										
10/09/20	16:36	BA19640W12	1	0.010	25mL		0.10	0.10		
10/09/20	16:37	BA19640W12 MS	1	0.312	25mL		3.08	3.08		
10/09/20	16:38	BA19640W12 MSD	1	0.320	25mL		3.16	3.16		
10/09/20	16:39	CCV 4.0 A201009	1	0.402	25mL		3.97	3.97	4.00	99.3%
10/09/20	16:40	CCB A201009	1	0.001	25mL		0.01	0.01		

Standard Prep

	Ferrous Iron Standards		Prep'd By (Initials)		FJR		
Prep Date	06/26/20						
Exp Date	06/26/21						
Stock Label	Supplier	Batch Number	Exp Date	Aliquot from Stock	Final Volume	Solvent	Ferrous Iron Concentration
Ferrous Ammonium Sulfate	J.T.Baker	0000184592	08/21/20	0.351	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Sulfate	Mallinckrodt	Lot 5056 KDRX	NA	0.250	250mL	5ml H2SO4 (0000167828) Diluted with water	200ug/L
Ferrous Iron CCV/LCS/MS/ICV			Prep'd By (Initials)		FJR		
Prep Date	See Injection Log						
Exp Date	24 Hours						
Initial Standard Information	Supplier	Batch Number	Exp Date	Final Standard Information			
Ferrous Iron CCV	J.T.Baker	0000184592	Prep Daily	500uL	25mL	Deionized water	4mg/L
Ferrous Iron ICV/LCS	Mallinckrodt	Lot 5056 KDRX	Prep Daily	375uL	25mL	Deionized water	3mg/L
	Ferrous Iron Calibration Curve		Prep'd By (Initials)		FJR		
Prep Date	06/26/20						
Exp Date	06/26/21						
Final Standard Information							
Point Label	Supplier	Batch Number	Exp Date	Aliquot from Stock (mL)	Final Volume	Solvent	Ferrous Iron Concentration
CCB	J.T.Baker	0000184592	06/26/21	0	25mL	Deionized water	0mg/L
Ical 1	J.T.Baker	0000184592	06/26/21	0.125	25mL	Deionized water	1mg/L
Ical 2	J.T.Baker	0000184592	06/26/21	0.25	25mL	Deionized water	2mg/L
Ical 3	J.T.Baker	0000184592	06/26/21	0.5	25mL	Deionized water	4mg/L
Ical 4	J.T.Baker	0000184592	06/26/21	0.625	25mL	Deionized water	5mg/L
Ical 5	J.T.Baker	0000184592	06/26/21	1.25	25mL	Deionized water	10mg/L
ICV	Mallinckrodt	Lot 5056 KDRX	06/26/21	0.375	25mL	Deionized water	3mg/L

Reagent Prep

Reagent	Chemical Lot #	Chemical	Chemical Expiration Date	Amount	Date Prep
Colorizer	0747C107	1,10-phenanthroline	na	0.2056	07/28/20
		HCL conc	na	enough to dissolve	
Buffer	Z28B018	Ammonia Acetate	na	249.2	04/29/20
	2018071399	Glacial Acetic Acid	na	700mL	

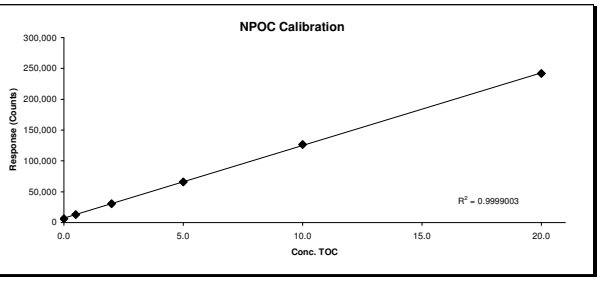
TOTAL ORGANIC CARBON

Method: WetChem | Units mg/L | Instrument: Tic Toc

Analyte: TOC | QCG: 201012A

Analyist: AAR | Final Volume: 40mL

Date	Time	Appl ID	[TOC]	Raw	% Recovery
06/11/20	0:01	QC blank	0.00	6172	
06/11/20	0:41	Ical 1	0.50	13120	
06/11/20	1:19	Ical 2	2.00	30622	
06/11/20	1:58	Ical 3	5.00	66151	
06/11/20	2:37	Ical 4	10.00	126505	
06/11/20	3:16	Ical 5	20.00	241922	
06/11/20	18:06	ICB	0.00	6336	
06/11/20	18:46	ICV	4.99	65817	99.8%



Date	Time	Appl ID	DF	Raw Result	SubSample Amount	Filter Blank Subtract	Calc Conc	Result	Range (mg/L)	QC True	% Recovery
2020-10-12	04:07 PM	QCB	1	6112	40mL	0.000	0	0.00	0.00		
2020-10-12	04:47 PM	CCV	1	63773	40mL	0.000	4.894	4.89	0.19	5.00	97.9%
2020-10-12	05:28 PM	CCB	1	3970	40mL	0.000	0	0.00	0.00		
2020-10-12	06:08 PM	201012A LCS	1	61929	40mL	0.000	4.738	4.74	0.17	5.00	94.8%
2020-10-12	06:50 PM	201012A LCSD	1	61404	40mL	0.000	4.693	4.69	0.04	5.00	93.9%
2020-10-12	07:31 PM	BA19394W03	1	21622	40mL	0.000	1.692	1.69	0.11		
2020-10-12	08:10 PM	BA19395W06	1	19161	40mL	0.000	1.483	1.48	0.02		
2020-10-12	08:49 PM	BA19396W06	1	18849	40mL	0.000	1.457	1.46	0.13		
2020-10-12	09:28 PM	BA19397W05	1	5731	40mL	0.000	0.343	0.34	0.04		
2020-10-12	10:05 PM	BA19728W03	1	14920	40mL	0.000	1.123	1.12	0.11		
2020-10-12	10:43 PM	BA19729W03	1	19339	40mL	0.000	1.498	1.50	0.17		
2020-10-12	11:20 PM	BA19730W03	1	15523	40mL	0.000	1.174	1.17	0.11		
2020-10-12	11:57 PM	BA19731W03	1	8434	40mL	0.000	0.572	0.57	0.01		
2020-10-13	12:34 AM	BA19732W03	1	25428	40mL	0.000	2.015	2.02	0.52		
2020-10-13	01:12 AM	BA19733W03	1	63678	40mL	0.000	5.261	5.26	0.39		
2020-10-13	01:51 AM	CCV	1	60744	40mL	0.000	4.637	4.64	0.11	5.00	92.7%
2020-10-13	02:31 AM	CCB	1	3411	40mL	0.000	0	0.00	0.00		
2020-10-13	03:10 AM	BA19734W03	1	8884	40mL	0.000	0.611	0.61	0.06		
2020-10-13	03:46 AM	BA19735W03	1	13756	40mL	0.000	1.024	1.02	0.01		
2020-10-13	04:22 AM	BA19741W05	1	13739	40mL	0.000	1.023	1.02	0.00		
2020-10-13	05:00 AM	BA19742W03	1	59532	40mL	0.000	4.91	4.91	1.04		
2020-10-13	05:38 AM	BA19743W03	1	474796	40mL	0.000	40.158	40.16	4.26		
2020-10-13	06:17 AM	BA19640W08	1	8880	40mL	0.000	0.61	0.61	0.01		
2020-10-13	06:53 AM	BA19758W03	1	21428	40mL	0.000	1.675	1.68	0.19		
2020-10-13	07:30 AM	BA19759W05	1	37048	40mL	0.000	3.001	3.00	0.44		
2020-10-13	08:08 AM	BA19760W05	1	22485	40mL	0.000	1.765	1.77	0.03		
2020-10-13	08:46 AM	CCV	1	62021	40mL	0.000	4.745	4.75	0.17	5.00	94.9%
2020-10-13	09:26 AM	CCB	1	3720	40mL	0.000	0	0.00	0.00		

Name of Final Standard **TOC Calibration Curve** **Prep'd By (Initials)** **AR**

Prep Date **06/11/20**

Exp Date **06/11/21**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	20 uL	40 mL	**DI Water**	0.5 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	100 uL	40 mL	**DI Water**	2 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	250 uL	40 mL	**DI Water**	5 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	500 uL	40 mL	**DI Water**	10 ppm
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**CS-5157-40233**	**11/30/20**	1000 uL	40 mL	**DI Water**	20 ppm

Name of Final Standard **ICV (TOC)** **Prep'd By (Initials)** **AR**

Prep Date **06/11/20**

Exp Date **06/11/21**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
1000 PPM ICV TOC Intermediate	APPL Inc.	Prep: 2/11/19	1000 mg/L	**6465171-49409**	**06/30/21**	500 uL	40mL	**DI Water**	10 ppm

Name of Final Standard **CCV (TOC)** **Prep'd By (Initials)** **AR**

Prep Date **See Data**

Exp Date **1 year**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	Agilent	IQC-1 06-5	1000 mg/L	**6465171-49409**	**06/30/21**	200 uL	40 mL	**DI Water**	5 ppm

Name of Final Standard **TOC_LCS/LCSD** **Prep'd By (Initials)** **AR**

Prep Date **See Data**

Exp Date **1 year**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	ULTRA Scientific	IQC-106-5	1000 mg/L	**6465171-49409**	**06/30/21**	200 uL	40 mL	**DI Water**	5 ppm

Name of Final Standard **TOC_MS/MSD** **Prep'd By (Initials)** **AR**

Prep Date **See Data**

Exp Date **1 year**

Initial Standard Information						Final Standard Information			
Name of Initial Standard (from contianer Label)	Supplier	Supplier P/N# (or APPL Mix Name)	Conc.(range)	Lot # with QA # (or reference to APPL prep date)	Exp Date	Aliquot from Stock	Final Volume	Final Solvent + Lot# (or APPL Prep Date)	Final Standard Conc (range)
Total Organic Carbon (TOC) Standard	ULTRA Scientific	IQC-106-5	1000 mg/L	**6465171-49409**	**06/30/21**	200 uL	40 mL	**sample**	5 ppm

908 North Temperance Ave. ∇ Clovis, CA 93611 ∇ Phone 559-275-2175 ∇ Fax 559-275-4422

Certification Number: CA1312
NELAP Certification number: CA00046
DoD-ELAP Certificate number: 4064.01

Data Validatable Report

December 9, 2020

AECOM
1001 Bishop Street, Suite 1600
Honolulu, Hawaii 96813

Attn: Brooke Gottmeier

Title: Report of Data: Case 93704 Addendum

Project: 60571032 CV18F0126 Red Hill Fuel Storage, HI

Contract #: Prime contract # for DoD: NAVY CLEAN N62742-17-F-1800, CV18F0126
Subcontract: 18S-22209-HI27

Dear Ms. Gottmeier:

Four water samples were received October 13, 2020. Revised written results for the requested analyses are being provided on this December 9, 2020.

Addendum 12/9/2020: The low point for motor oil was included in the ICAL. The motor oil ICAL model was changed from average response factor to linear regression. The samples were calculated against the new curve and the data is reported in this package. These results supercede all data for this quarter.

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

If you have any questions or require further information, please contact your APPL Project Manager, Libby Cheeseborough, libby@applinc.com, at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC and DoD QSM. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.


SD for PM

Paula McCartney, Laboratory Director
APPL, Inc.

PM/lac
Enclosure
cc: File

Data Validation Package
for
60571032 CV18F0126 Red Hill Fuel Storage
APPL SDG 93704 Addendum
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CASE NARRATIVE

Case Narrative

ARF: 93704 Addendum

Project: 60571032 CV18F0126 Red Hill Fuel Storage. HI

Sample Receipt Information:

Four water samples were received October 13, 2020, at 3.0°C, and 2.0°C. The sample group was assigned Analytical Request Form (ARF) number 93704.

Sample Preparation and Analysis Information:

For the EPA 8015B analysis, the samples were extracted according to EPA method 3520C. The sample extracts were silica gel cleaned according to APPL's SOP CLN004 and placed on hold.

The blanks are reported as U to the LOD for extracts that calculate below160ppb which is ½ the LOQ and follows QSM 5.3. Samples that calculate between 150ppb and 160 ppb are compared to the chromatogram of the blank. If it is similar to the blank pattern, the sample is reported as U to the LOD as specified in the EPA 8015B method. If the pattern is not the same as the blank, the sample is reported at that level as a J value.

Only the portion of the injection log relative to these samples is included. A full sequence log is available upon request. Measurement uncertainty can be reported upon request.

Analytical Exceptions, Deviations and Abnormalities.

8015B: The CCV 1028069 recovered the surrogate ortho terphenyl at 22%.

Sample ERH1160 was taken off hold to perform and report the silica gel clean up.

SDG	Received	Client ID	APPL ID	Collected DateTime	Matrix	Method	Method Description
93704	10/13/20	ERH1159	BA20022	10/12/20 9:00:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93704	10/13/20	ERH1159	BA20022	10/12/20 9:00:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
93704	10/13/20	ERH1159	BA20022	10/12/20 9:00:00 AM	WATER	RSK 175	METHANE BY RSK 175
93704	10/13/20	ERH1160	BA20023	10/12/20 10:45:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
93704	10/13/20	ERH1160	BA20023	10/12/20 10:45:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
93704	10/13/20	ERH1160	BA20023	10/12/20 10:45:00 AM	WATER	EPA 353.2	WETLAB 353.2 TOXN- WATER
93704	10/13/20	ERH1160	BA20023	10/12/20 10:45:00 AM	WATER	SM3500FeB	Ferrous Iron
93704	10/13/20	ERH1160	BA20023	10/12/20 10:45:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93704	10/13/20	ERH1160	BA20023	10/12/20 10:45:00 AM	WATER	EPA 8270D	EPA 8270D WATER
93704	10/13/20	ERH1160	BA20023	10/12/20 10:45:00 AM	WATER	EPA 8270D	EPA 8270D WATER RE-EXTRACT
93704	10/13/20	ERH1160	BA20023	10/12/20 10:45:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
93704	10/13/20	ERH1160	BA20023	10/12/20 10:45:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
93704	10/13/20	ERH1160	BA20023	10/12/20 10:45:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
93704	10/13/20	ERH1160	BA20023	10/12/20 10:45:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
93704	10/13/20	ERH1160	BA20023	10/12/20 10:45:00 AM	WATER	RSK 175	METHANE BY RSK 175
93704	10/13/20	ERH1160	BA20023	10/12/20 10:45:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
93704	10/13/20	ERH1160	BA20023	10/12/20 10:45:00 AM	WATER	SW846 9060A	9060A TOC
93704	10/13/20	ERH1170	BA20024	10/12/20 8:15:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93704	10/13/20	ERH1170	BA20024	10/12/20 8:15:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
93704	10/13/20	ERH1170	BA20024	10/12/20 8:15:00 AM	WATER	RSK 175	METHANE BY RSK 175
93704	10/13/20	ERH1171	BA20025	10/12/20 10:25:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
93704	10/13/20	ERH1171	BA20025	10/12/20 10:25:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
93704	10/13/20	ERH1171	BA20025	10/12/20 10:25:00 AM	WATER	EPA 353.2	WETLAB 353.2 TOXN- WATER
93704	10/13/20	ERH1171	BA20025	10/12/20 10:25:00 AM	WATER	SM3500FeB	Ferrous Iron
93704	10/13/20	ERH1171	BA20025	10/12/20 10:25:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93704	10/13/20	ERH1171	BA20025	10/12/20 10:25:00 AM	WATER	EPA 8270D	EPA 8270D WATER
93704	10/13/20	ERH1171	BA20025	10/12/20 10:25:00 AM	WATER	EPA 8270D	EPA 8270D WATER RE-EXTRACT
93704	10/13/20	ERH1171	BA20025	10/12/20 10:25:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
93704	10/13/20	ERH1171	BA20025	10/12/20 10:25:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
93704	10/13/20	ERH1171	BA20025	10/12/20 10:25:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
93704	10/13/20	ERH1171	BA20025	10/12/20 10:25:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
93704	10/13/20	ERH1171	BA20025	10/12/20 10:25:00 AM	WATER	RSK 175	METHANE BY RSK 175
93704	10/13/20	ERH1171	BA20025	10/12/20 10:25:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
93704	10/13/20	ERH1171	BA20025	10/12/20 10:25:00 AM	WATER	SW846 9060A	9060A TOC

APPL Inc.
Abbreviations and Flags

FLAG	DESCRIPTION
#	Recovery or RPD outside control limits
*	Recovery or RPD outside control limits
B	Analyte detected in associated method blank
C1	Reason for correction: wrote incorrect response
C2	Reason for correction: calculated incorrectly
C3	Reason for correction: needs to be rechecked
C4	Reason for correction: data not usable
DO	Diluted out
E	Exceeds linear range
F	Estimated value
G1	Includes a wide range of hydrocarbons which does not match our gasoline standard
G10	Includes a match to hydrocarbon profiles within the range of mineral spirits
G11	Includes a match to hydrocarbon profiles within the range of JP-4
G12	Pattern does not match the gasoline standard; the carbon range for this sample is consistent with JP8
G13	Closely resembles the hydrocarbon profile of aviation gasoline
G14	Analyte concentration may be biased due to carry over
G2	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G3	Includes higher boiling hydrocarbons
G4	Includes dominant peak(s) not indicative of petroleum hydrocarbons
G5	Is mainly dominant peak(s) not indicative of petroleum hydrocarbons
G6	Contains recognizable contaminant peak(s) which has been removed from quantitation
G7	Is mainly a match to hydrocarbons within the range of gasoline
G8	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G9	Includes hydrocarbons within the range of kerosene
J	Estimated value
M	Matrix effect
MI1	Manual integration: integration does not follow baseline
MI2	Manual integration: non-target peak interference
MI3	Manual integration: to split a peak that was integrated as one peak by the computer.
MI4	Manual integration: to integrate a split peak
MI5	Manual integration: the whole peak or part of the peak was not integrated
MI6	Manual integration: computer integrated wrong peak
MI7	Manual integration: other – (See case narrative)
MDL	Method detection limit
ND	Not detected
NT	Non-target
Q	Acceptance criteria not met
T1 I	Includes wide range of hydrocarbons not indicative of diesel
T1 M	Is mainly wide range of hydrocarbons not necessarily indicative of diesel
T2 I	Includes lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T2 M	Is mainly lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T3 I	Includes higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T3 M	Is mainly higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T4 I	Includes dominant peak(s) not indicative of hydrocarbons
T4 M	Is mainly dominant peak(s) not indicative of hydrocarbons
T5	Contains recognizable contaminant peak(s) which has been removed from quantitation
T6	Is mainly a match to hydrocarbons within range of diesel fuel
T7	Closely resembles the boiling point hydrocarbon profile consistent with diesel fuel
T8	Includes a match to hydrocarbon profiles within range of diesel and kerosene fuel
T9 I	Includes non-diesel hydrocarbons within boiling point range of diesel fuel
T9 M	Is mainly non-diesel hydrocarbons within boiling point range of diesel fuel
U	Not detected
Y	Percent difference between primary and confirmation column > 40%

SAMPLE RECORDS MANAGEMENT

CHAIN OF CUSTODY,

ARF, CRF, AND

CLIENT COMMUNICATION

APPL - Analysis Request Form

93704

Client: AECOM
Address: 1001 Bishop Street, Suite 1600
Honolulu, HI 96813
Attn: Brooke Gottmeier
Phone: 808-954-4536 Fax: 808-523-8950
Job: 60571032 CV18F0126 Red Hill Fuel Storage
PO #: 18S-22209-HI27 PO# 102604
Chain of Custody (Y/N): Y # 102,106
RAD Screen (Y/N): Y pH (Y/N): Y
Turn Around Type: 1 WEEK

Received by: AAR
Date Received: 10/13/20 Time: 10:00
Delivered by: FEDEX
Shuttle Custody Seals (Y/N): Y Time Zone: -10
Chest Temp(s): 3.0,2.0°C
Color: VFRG/A-Green
Samples Chilled until Placed in Refrig/Freezer: Y
Project Manager: Libby Cheesebor
QC Report Type: DVP4DOD/EQUIS/HI
Due Date: 10/20/20

Comments:
PM: login and F1s to Margie.Pascua@aecom.com & brooke.gottmeier@aecom.com
AN: 7 day TAT for Form 1s; 21 day TAT for PKG STYLE 1; DOD v5.1; DOD Forms: LOD database
Report MS/MSD/DUPs when AECOM sample used
Wetlab: EPA 300 (NO3,CL,SO4). EPA 353.2 (TOXN).
8260: BTEX & TPH-G only; 8270 SIM: 1-methylnaphthalene, 2-methylnaphthalene & naphthalene only.
TPH D & O both with and w/o SGC, reverse surrogate for the SGC; analyze SGC if detections
RSK: Methane only; $87DC53W5: report phenol only
FR: email ftp info to Margie, Brooke,Stella, trommelfanger@lab-data.com & jcanlas@lab-data.com
EDD: AECOM EQuIS EDD 2.5.3 Red Hill 87DMEE->3535A to brooke.gottmeier@, Margie.Pascua@aec

Sample Distribution:
GC: 2-$87DC53W5, 2-$87DMEEW5, 2-$DOC53W5LIQ, 2-$SIM53LIQ51
Extractions: 2-_LIQ003, 2-_LIQ005, 2-_MWE2MEE
VOA: 4-$86BTOTXDOD5W, 4-$GASBL, 4-$GRO86BW, 4-$RSKMETH
Wetlab: 2-$232W(HCO3,CO3,ALK), 2-$300W, 2-$353TOXNW, 2-$35FE, 2-$TOCW53

Charges:

Invoice To:
ACCOUNTS PAYABLE
1001 Bishop Street, Ste 1600
USAPImaging@aecom.com
mary.basano@aecom.com

	Client ID	APPL ID	Sampled	Analyses Requested
1.	ERH1159	LCSD BA20022W	10/12/20 09:00	$86BTOTXDOD5W, $GASBL, $GRO86BW, $RSKMETH -- See Comments
2.	ERH1160	LCSD BA20023W	10/12/20 10:45	$232W(HCO3,CO3,ALK), $300W, $353TOXNW, $35FE, $86BTOTXDOD5W, $87DC53W5, $87DMEEW5, $DOC53W5LIQ, $GASBL, $GRO86BW, $RSKMETH, $SIM53LIQ51, $TOCW53 -- See Comments
3.	ERH1170	LCSD BA20024W	10/12/20 08:15	$86BTOTXDOD5W, $GASBL, $GRO86BW, $RSKMETH -- See Comments

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

4.	ERH1171	LCSD	BA20025W	10/12/20 10:25	$232W(HCO3,CO3,ALK), $300W, $353TOXNW, $35FE, $86BTOTXDOD5W, $87DC53W5, $87DMEEW5, $DOC53W5LIQ, $GASBL, $GRO86BW, $RSKMETH, $SIM53LIQ51, $TOCW53 -- See Comments

APPL Sample Receipt Form

ARF# **93704**

Sample	Container Type	Count	p
BA20022	[13] VOAs - HCL	4	NA
BA20023	[3] PL 250mL	1	NA
	[10] PL 250mL - H2SO4	1	1.6
	[13] VOAs - HCL	4	NA
	[17] Amber Liter	4	NA
	[32] Clear VOA - H2SO4	2	NA
	[38] 250mL brn poly, HCl prsvd	1	1.6
	[40] 500mL Amber, unprsrvd	3	NA
BA20024	[13] VOAs - HCL	4	NA
BA20025	[3] PL 250mL	1	NA
	[10] PL 250mL - H2SO4	1	1.6
	[13] VOAs - HCL	4	NA
	[17] Amber Liter	4	NA
	[32] Clear VOA - H2SO4	2	NA
	[38] 250mL brn poly, HCl prsvd	1	1.6
	[40] 500mL Amber, unprsrvd	3	NA

Sample	Container Type	Count	p

93784

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
www.applinc.com
Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 102

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM Phone: 808-954-4536	Company Name: AECOM Phone: 512-419-6709
Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950	Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950
Attn: Brooke Gottmeier	Attn: Sheree Smith
Email: brooke.gottmeier@aecom.com	Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number: CV18F0126 / 60571032
Purchase Order Number: 102604
Sampler (Print): KL, MM, DM
Sampler (Signature):
Date Shipped: 10/12/20
Carrier: FedEx
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC
ERH1159	Trip Blank	10/12/20	0900	HST	4	X			X							X						
ERH1160	RHMW01	10/12/20	1045	HST	16	X			X		X	X	X	X	X	X	X	X	X		X	

BS 10/12/20

*Analyze TPH w/SGT only if TPH-d/o detected.

** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM

TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature: R3: 3.0/3.0 2.0/2.0

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other: _____

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler: (AECOM)	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
	10/12/20	15:00					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
					10/13/20	1000	

See page 01 for Container Preservative and Sampling Information

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
www.applinc.com

Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 106

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM Phone: 808-954-4536	Company Name: AECOM Phone: 512-419-6709
Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950	Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950
Attn: Brooke Gottmeier	Attn: Sheree Smith
Email: brooke.gottmeier@aecom.com	Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number: CV18F0126 / 60571032
Purchase Order Number: 102604
Sampler (Print): CM, KS, JV EC
Sampler (Signature):

Date Shipped: 10/12/20
Carrier: FedEx
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC
ERH1170	Trip Blank	10/12/20	0915	HST	4	X			X							X						
ERH1170-1	RHMW06	10/12/20	1025	HST	16	X			X		X	X*	X	X	X	X	X	X	X		X	

BB 9/24

BB 10/12/20

*Analyze TPH w/SGT only if TPH-d/o detected.

** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM

TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature:

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other:

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
(AECOM)	10/12/20	1:15PM					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
					10/13/20	1000	

See page for Container Preservative and Sampling Information

COOLER RECEIPT FORM **ARF: 93704**

1) Project: 60571032 CV18F0126 Red Hill Fuel Storage Date Received: 10/13/20

2) Coolers: Number of Coolers: 2

3) YES Were custody seals present and intact?
How many? 4 Name/Date on seal? See below

4) YES Was there a shipping slip? Carrier name: FEDEX

5) Type of packing in cooler: X bubble wrap __ popcorn __ foam X plastic bags __ other
X wet ice __ dry ice __ no ice __ gel ice

6) YES Were cooler temperatures acceptable?

7) Serial number of calibrated thermometer used: R3 CF: 0.0°C

8) Cooler temp(s): In °C. Thermometer Temp / Corrected Temp
1: 3.0/3.0 2: 2.0/2.0 3: ____ 4: ____ 5: ____ 6: ____
7: ____ 8: ____ 9: ____ 10: ____ 11: ____ 12: ____

Chain of custody:

9) YES Was a chain of custody received?

10) YES Were the custody papers complete/signed in the appropriate places?

Sample Labels:

11) YES Were all sample labels complete (sample ID, date/time of sampling, etc.)?

12) YES Did all container labels agree with custody papers?

Sample Containers:

13) YES Were all containers sealed in separate bags?

14) YES Did all containers arrive in good condition:(unbroken, no leakage, no cracked/broken lids)?

15) YES Were correct containers and preservatives used for the tests indicated?

16) YES Was a sufficient amount of sample sent for tests indicated?

17) Yes Were bubbles present in volatile samples?
If yes, the following were received with air bubbles:
Larger than a pea: BA20022W02-W04, BA20023W01-W04,
Smaller than a pea: BA20022W01, BA20024W04,

Preservation Hold time:

18) Yes Was a sufficient amount of holding time remaining to analyze the samples?

19) Yes Was the pH taken of all non-VOA preserved samples and written on the sample container?

20) Yes Was the pH of acid preserved non-VOA samples < 2?

21) NA Was the pH of the "basic" preserved samples for Cyanide > 12, Sulfide >9, Hexchrom >9?

22) NO Were unpreserved VOA Vials received for VOA Dept analysis?

23) NA If "yes", are the unpreserved VOA vials noted in the ADD TEST FIELD on the ARF?
pH strip lot number: HC908519
Lab notified if pH was not adequate: ____

Notes/Deficiencies:

CUSTODY SEAL
AECOM (808) 521-3051
Initials BS Date 10/12/20

Personnel receiving samples: YL AA Second reviewer: [signature]
Personnel labeling samples: YL
Project manager notified: YES AA Date/Time of notification 10/13/20
Name of client notified: ____ Date/Time of notification ____

SAMPLE RESULTS

EPA 8015B TPH LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93704

Sample ID: ERH1160

APPL ID: BA20023

Sample Collection Date: 10/12/20

QCG: #DOC53-201019A5-259394

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	170 J	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	89.0	60-142			%	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	86.5	56-125			%	10/19/20	10/20/20

J = Estimated value.

Quant Method:	LRDOC905.M
Run #:	1019034
Instrument:	Apollo
Sequence:	201019
Dilution Factor:	1
Initials:	LA

Printed: 12/09/20 3:53:53 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH WATER L-L SGC

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93704

Sample ID: ERH1160

APPL ID: BA20023

Sample Collection Date: 10/12/20

QCG: #DOC53-201019A1-258239

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/29/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/29/20
EPA 8015B-e	SURROGATE: (R) DECANOIC ACID (S)	0.0	0-1			%	10/19/20	10/29/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	92.8	60-142			%	10/19/20	10/29/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	83.7	56-125			%	10/19/20	10/29/20

Quant Method:	LRDOC905.M
Run #:	1028059
Instrument:	Apollo
Sequence:	201028
Dilution Factor:	1
Initials:	SSE

Printed: 12/09/20 1:26:46 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93704

Sample ID: ERH1171

APPL ID: BA20025

Sample Collection Date: 10/12/20

QCG: #DOC53-201019A5-259394

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	87.4	60-142			%	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	84.8	56-125			%	10/19/20	10/20/20

Quant Method:	LRDOC905.M
Run #:	1019035
Instrument:	Apollo
Sequence:	201019
Dilution Factor:	1
Initials:	LA

Printed: 12/09/20 1:26:46 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

QC FORMS

EPA 8015B-eHL

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93704

Case No: 93704 Date Analyzed: 10/29/20

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: (R) DECANOIC ACID (S)			SURROGATE: OCTACOSANE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201019A1-BLK	Blank	0-1	0.0		60-142	92.2	
BA20023	ERH1160	0-1	0.0		60-142	92.8	

Comments: Batch: #DOC53-201019A1

EPA 8015B-eHL

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93704

Case No: 93704 Date Analyzed: 10/29/20

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: ORTHO-TERPHENYL (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
201019A1-BLK	Blank	56-125	80.1				
BA20023	ERH1160	56-125	83.7				

Comments: Batch: #DOC53-201019A1

EPA 8015B-eHL

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93704

Case No: 93704 Date Analyzed: 10/20/20

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201019A5-LCS	Lab Control Spike	60-142	86.3		56-125	94.1	
BA20023	ERH1160	60-142	89.0		56-125	86.5	
BA20025	ERH1171	60-142	87.4		56-125	84.8	
201019A5-BLK	Blank	60-142	92.0		56-125	85.4	

Comments: Batch: #DOC53-201019A5

EPA 8015B-eH

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93704
Case No:	93704	Date Analyzed:	10/29/20
Matrix:	WATER	Instrument:	Apollo
Blank ID:	201019A1-BLK	Time Analyzed:	1715

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201019A1-BLK	Blank	1028057	10/29/20 1715
BA20023	ERH1160	1028059	10/29/20 1811

Comments: Batch: #DOC53-201019A1

EPA 8015B-eH

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93704
Case No:	93704	Date Analyzed:	10/29/20
Matrix:	WATER	Instrument:	Apollo
Blank ID:	201019A5-BLK	Time Analyzed:	0202

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201019A5-LCS	Lab Control Spike	1019033	10/20/20 1607
BA20023	ERH1160	1019034	10/20/20 1635
BA20025	ERH1171	1019035	10/20/20 1703
201019A5-BLK	Blank	1028030	10/29/20 0202

Comments: Batch: #DOC53-201019A5

Method Blank
EPA 8015B TPH WATER L-L SGC

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201019W-20054 - 258239**
Batch ID: #DOC53-201019A1

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/29/20
BLANK	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/29/20
BLANK	SURROGATE: (R) DECANOIC AC	0.0	0-1			%	10/19/20	10/29/20
BLANK	SURROGATE: OCTACOSANE (S)	92.2	60-142			%	10/19/20	10/29/20
BLANK	SURROGATE: ORTHO-TERPHEN	80.1	56-125			%	10/19/20	10/29/20

Quant Method: LRDOC905.
Run #: 1028057
Instrument: Apollo
Sequence: 201028
Initials: SSE

GC SC-Blank-REG MDLs-DOD
Printed: 12/09/20 1:26:50 PM

Method Blank
EPA 8015B TPH LIQ-LIQ

Blank Name/QCG: **201019W-20054 - 259394**
Batch ID: #DOC53-201019A5

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/29/20
BLANK	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/29/20
BLANK	SURROGATE: OCTACOSANE (S)	92.0	60-142			%	10/19/20	10/29/20
BLANK	SURROGATE: ORTHO-TERPHEN	85.4	56-125			%	10/19/20	10/29/20

Quant Method: LRDOC905.
Run #: 1028030
Instrument: Apollo
Sequence: 201028
Initials: LA

GC SC-Blank-REG MDLs-DOD
Printed: 12/09/20 1:26:50 PM

EPA 8015B-eH

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93704
Case No:	93704	Date Analyzed:	
Matrix:	WATER	Instrument:	Apollo
Blank ID:		Time Analyzed:	

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201019A1-BLK	Blank	1028057	10/29/20 1715
BA20023	ERH1160	1028059	10/29/20 1811

Comments: Batch: #DOC53-201019A1

EPA 8015B-eH

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93704
Case No:	93704	Date Analyzed:	10/20/20
Matrix:	WATER	Instrument:	Apollo
LCS ID:	201019A5-LCS	Time Analyzed:	1607

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201019A5-LCS	Lab Control Spike	1019033	10/20/20 1607
BA20023	ERH1160	1019034	10/20/20 1635
BA20025	ERH1171	1019035	10/20/20 1703
201019A5-BLK	Blank	1028030	10/29/20 0202

Comments: Batch: #DOC53-201019A5

Laboratory Control Spike Recovery
EPA 8015B TPH LIQ-LIQ

APPL ID: **201019W-20054 LCS - 259394**
Batch ID: #DOC53-201019A5

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
DIESEL (C10-C24)	1250	1150	92.0	36-132
OIL (C24-C40)	1250	1320	106	41-113
SURROGATE: OCTACOSANE (S)	75.0	64.7	86.3	60-142
SURROGATE: ORTHO-TERPHENYL (S)	75.0	70.6	94.1	56-125

Comments:

Primary	SPK
Quant Method :	LRDOC905.M
Extraction Date :	10/19/20
Analysis Date :	10/20/20
Instrument :	Apollo
Run :	1019033
Initials :	LA

Printed: 12/09/20 1:26:43 PM
APPL Standard LCS

ORGANICS

Calibration Data

TPH Extractables
LRDOC905

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 9/5/2020
Matrix: Water Instrument: Apollo Initials:

		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
			905007.D	905008.D	905009.D	905010.D	905011.D	905012.D									
1	HATML	Diesel (C10-C24)	3520375	2214378	2281032	2080486	2123388	2190073					2401622	23	HATM	0.999	
2	HBTML	Motor Oil (C24-C40)	3878492	1596138	1576848	1430288	1467043	1498633					1907907	51	HBTM	0.999	
3	SA	Ortho-Terphenyl(S)		2811060	2679862	2349319	2368660	2417877					2525355	8.2	SA		
4	SA	Octacosane(S)		2182984	2114335	1968540	2003128	2024026					2058603	4.3	SA		
5																	
6																	
7																	
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2.463274

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905007.D Vial: 7
Acq On : 9-5-20 17:04:35 Operator:
Sample : Diesel Motor Oil-1 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:45 2020 Quant Results File: LRDOC905.RES

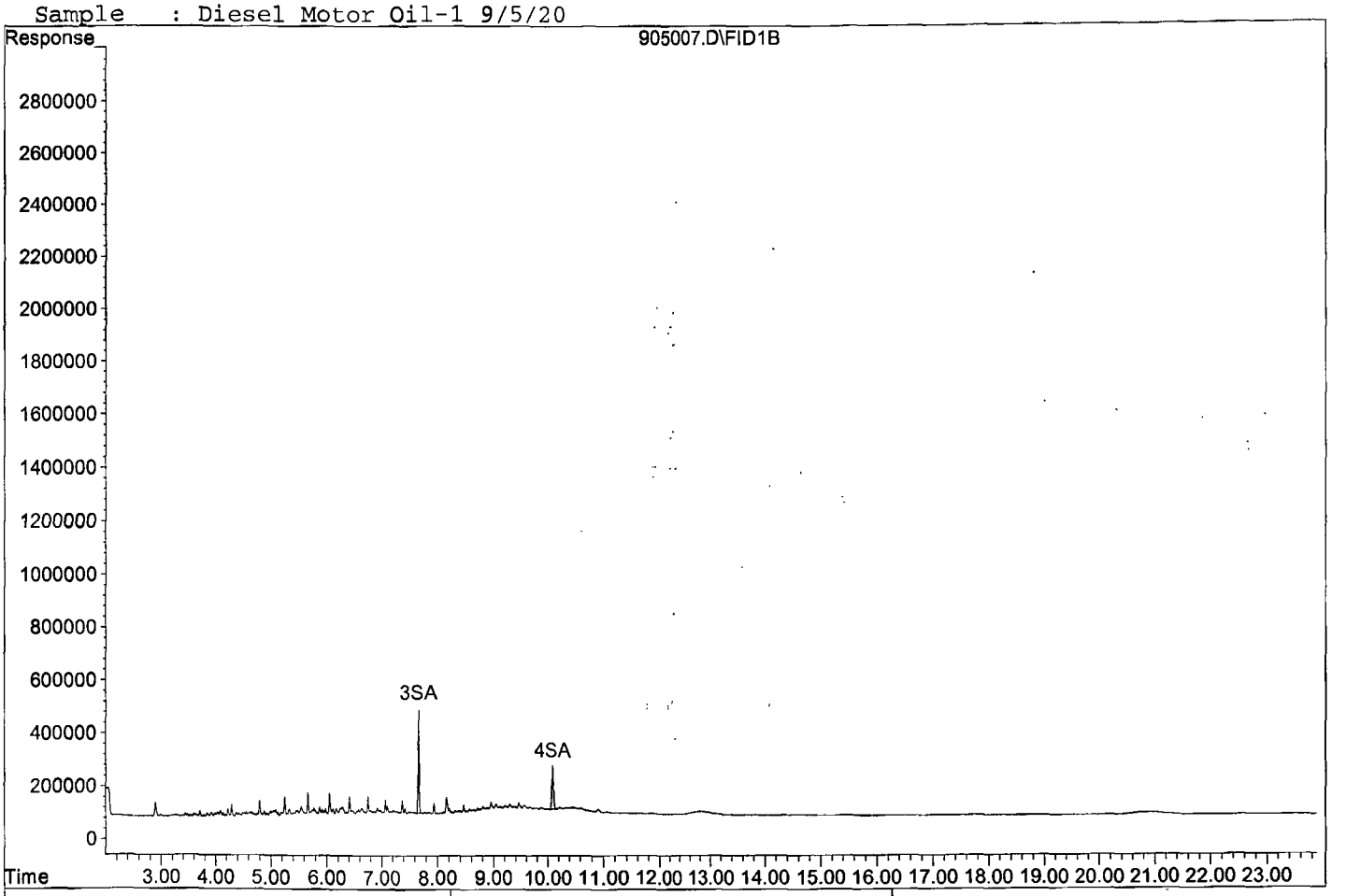
Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

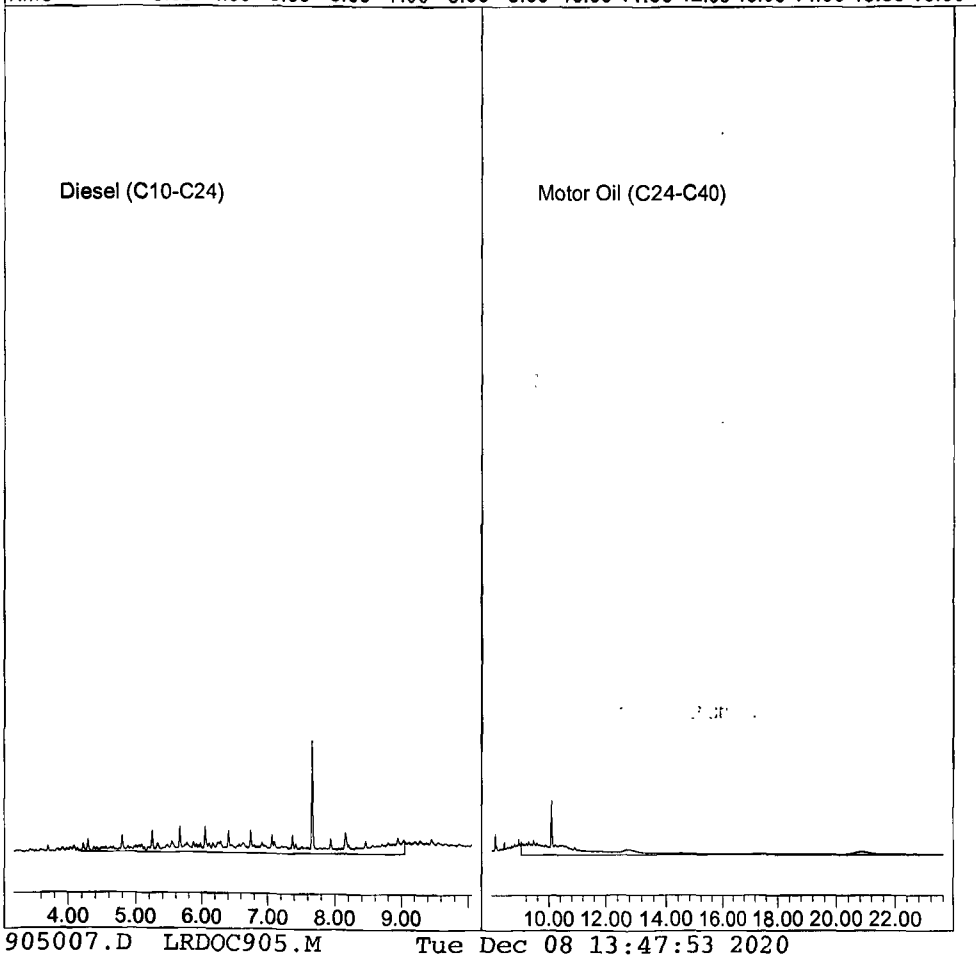
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	4755108	0.977 ppb
Surrogate Spike 30.000	Recovery =		3.26%
4) SA Octacosane(S)	10.09	3753150	0.943 ppb
Surrogate Spike 30.000	Recovery =		3.14%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	70407491	16.135 ppb
2) HBTM Motor Oil (C24-C40)	15.82	77569840	20.150 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905007.D
Sample : Diesel Motor Oil-1 9/5/20





905007.D LRDOC905.M Tue Dec 08 13:47:53 2020

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905008.D Vial: 8
Acq On : 9-5-20 17:32:40 Operator:
Sample : Diesel Motor Oil-2 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:45 2020 Quant Results File: LRDOC905.RES

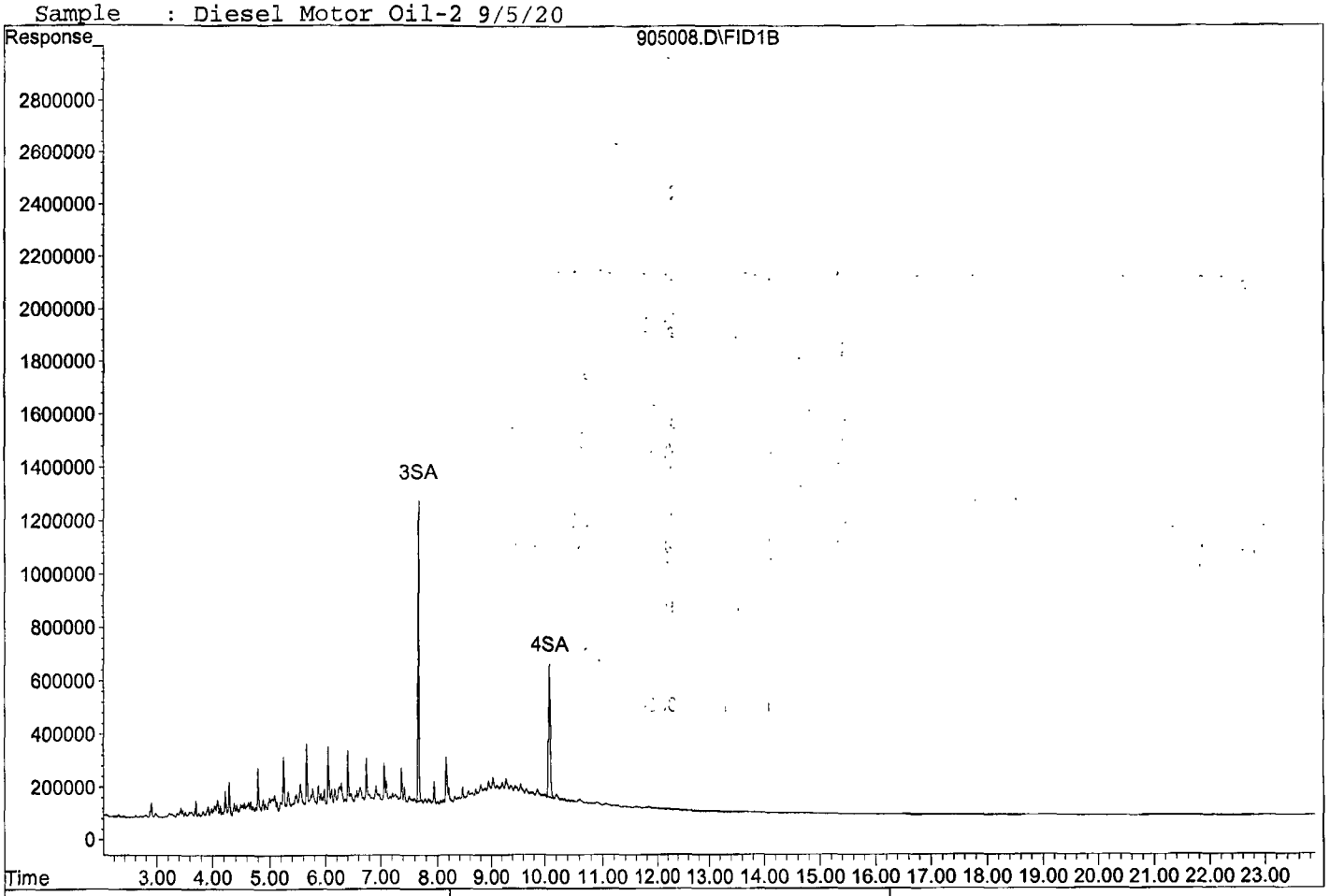
Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

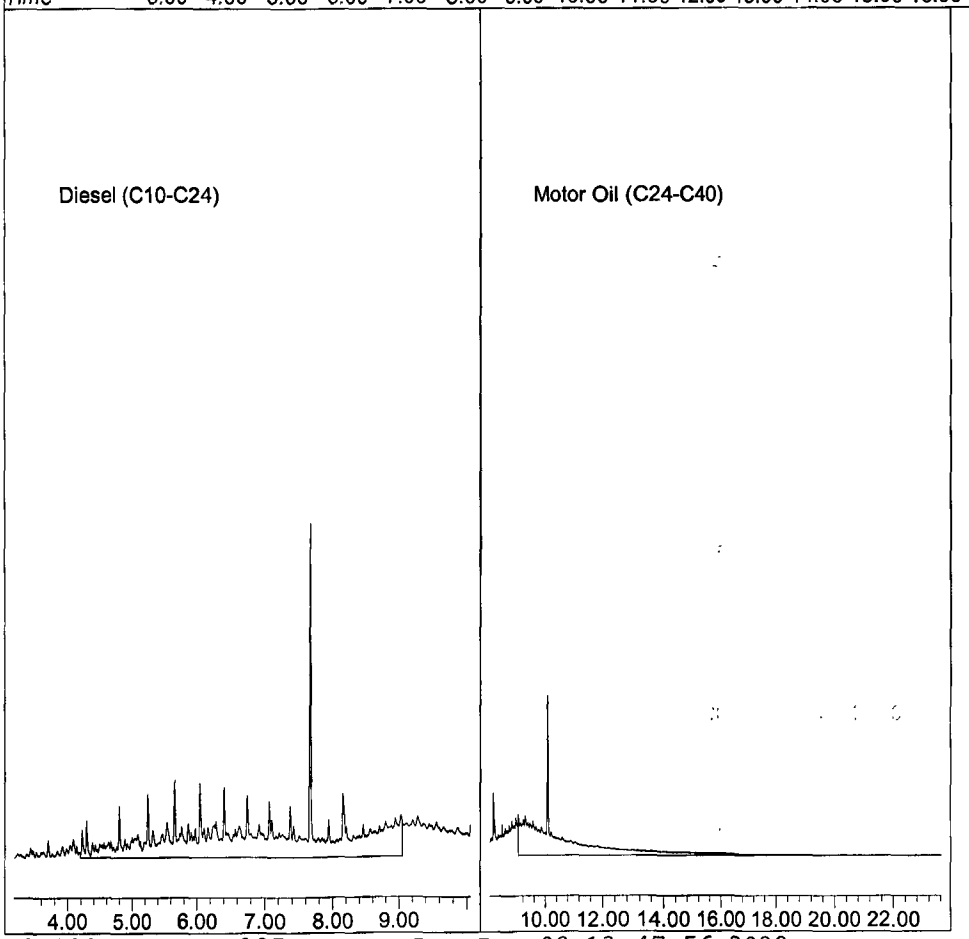
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	14055300	2.888 ppb
Surrogate Spike 30.000	Recovery =		9.63%
4) SA Octacosane(S)	10.08	10914920	2.744 ppb
Surrogate Spike 30.000	Recovery =		9.15%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	221437795	51.175 ppb
2) HBTM Motor Oil (C24-C40)	15.82	159613804	47.973 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905008.D
Sample : Diesel Motor Oil-2 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905009.D Vial: 9
Acq On : 9-5-20 18:00:45 Operator:
Sample : Diesel Motor Oil-3 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:45 2020 Quant Results File: LRDOC905.RES

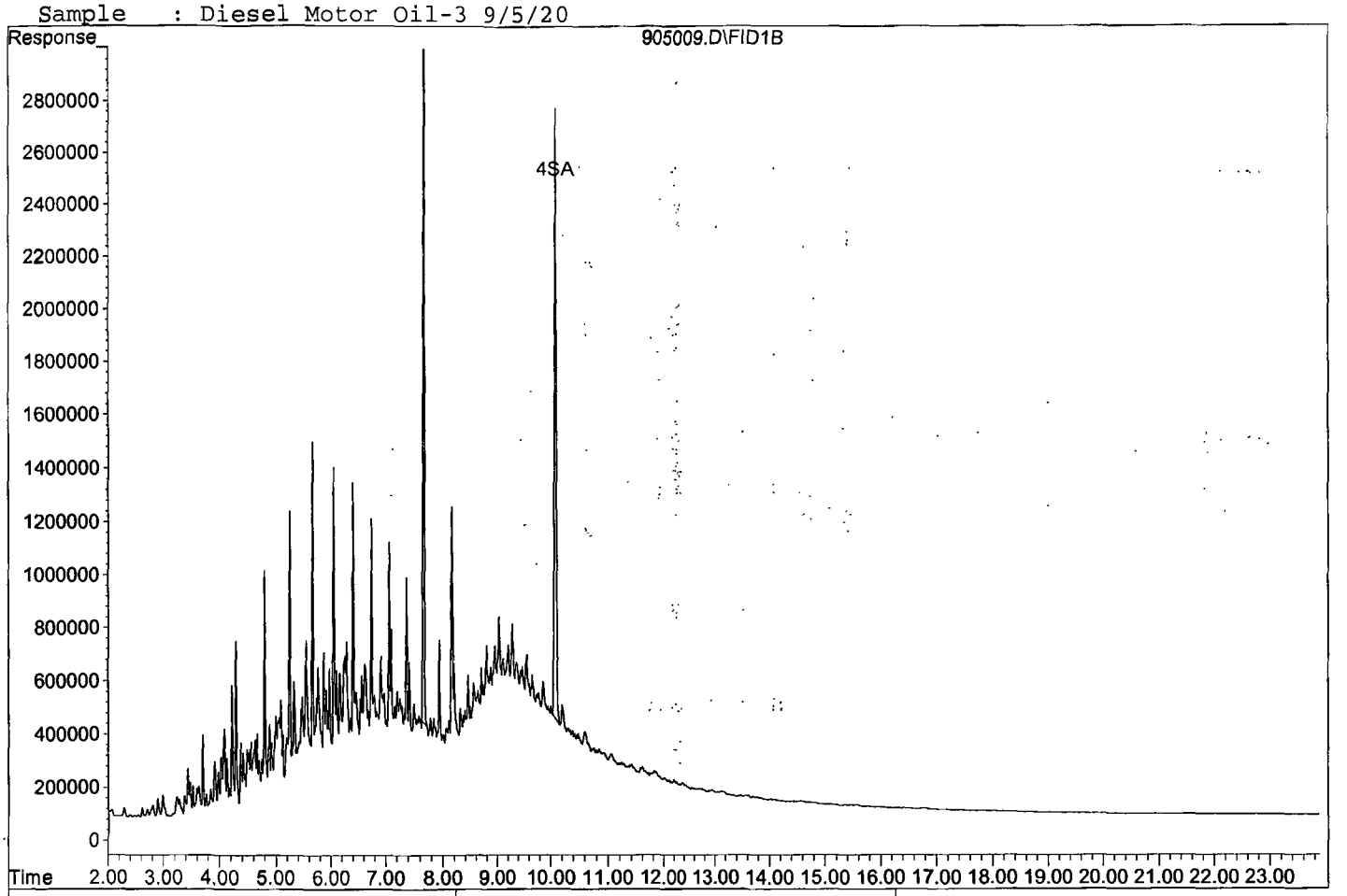
Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

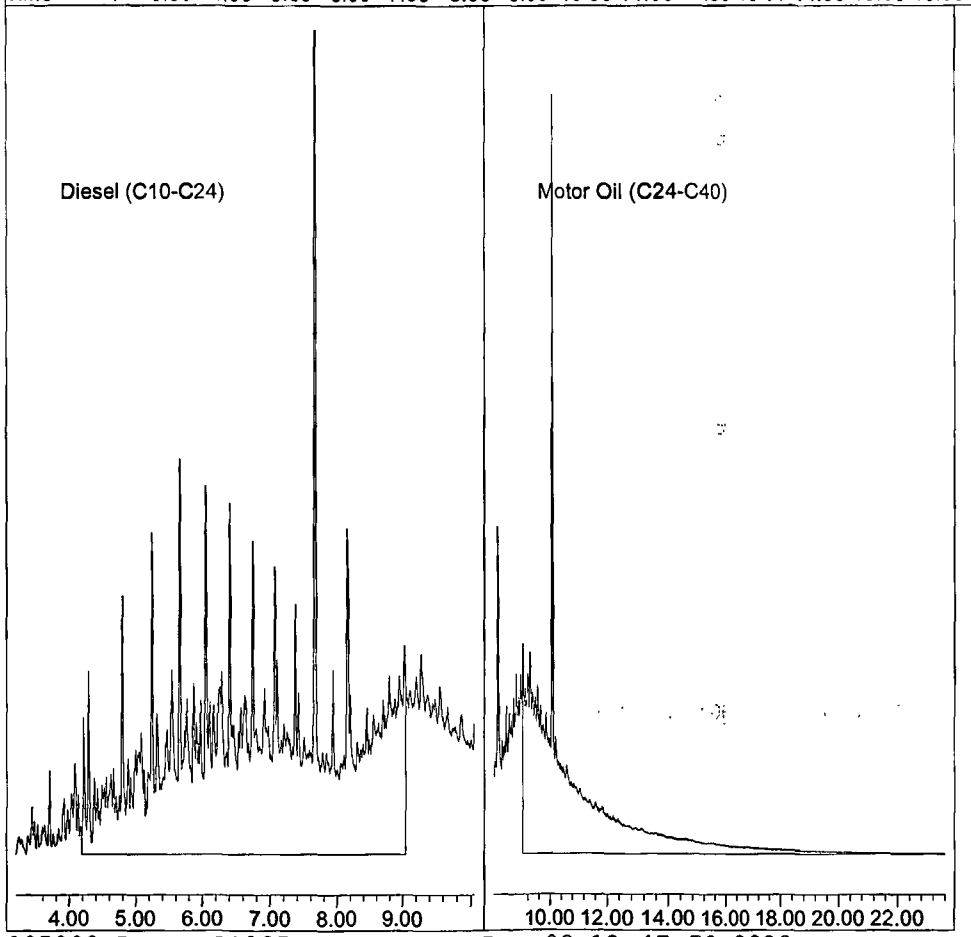
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	66996540	13.765 ppb
Surrogate Spike 30.000		Recovery =	45.88%
4) SA Octacosane(S)	10.09	52858376	13.288 ppb
Surrogate Spike 30.000		Recovery =	44.29%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1140515960	264.403 ppb
2) HBTM Motor Oil (C24-C40)	15.82	788424096	261.220 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905009.D
Sample : Diesel Motor Oil-3 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905010.D Vial: 10
Acq On : 9-5-20 18:28:54 Operator:
Sample : Diesel Motor Oil-4 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:46 2020 Quant Results File: LRDOC905.RES

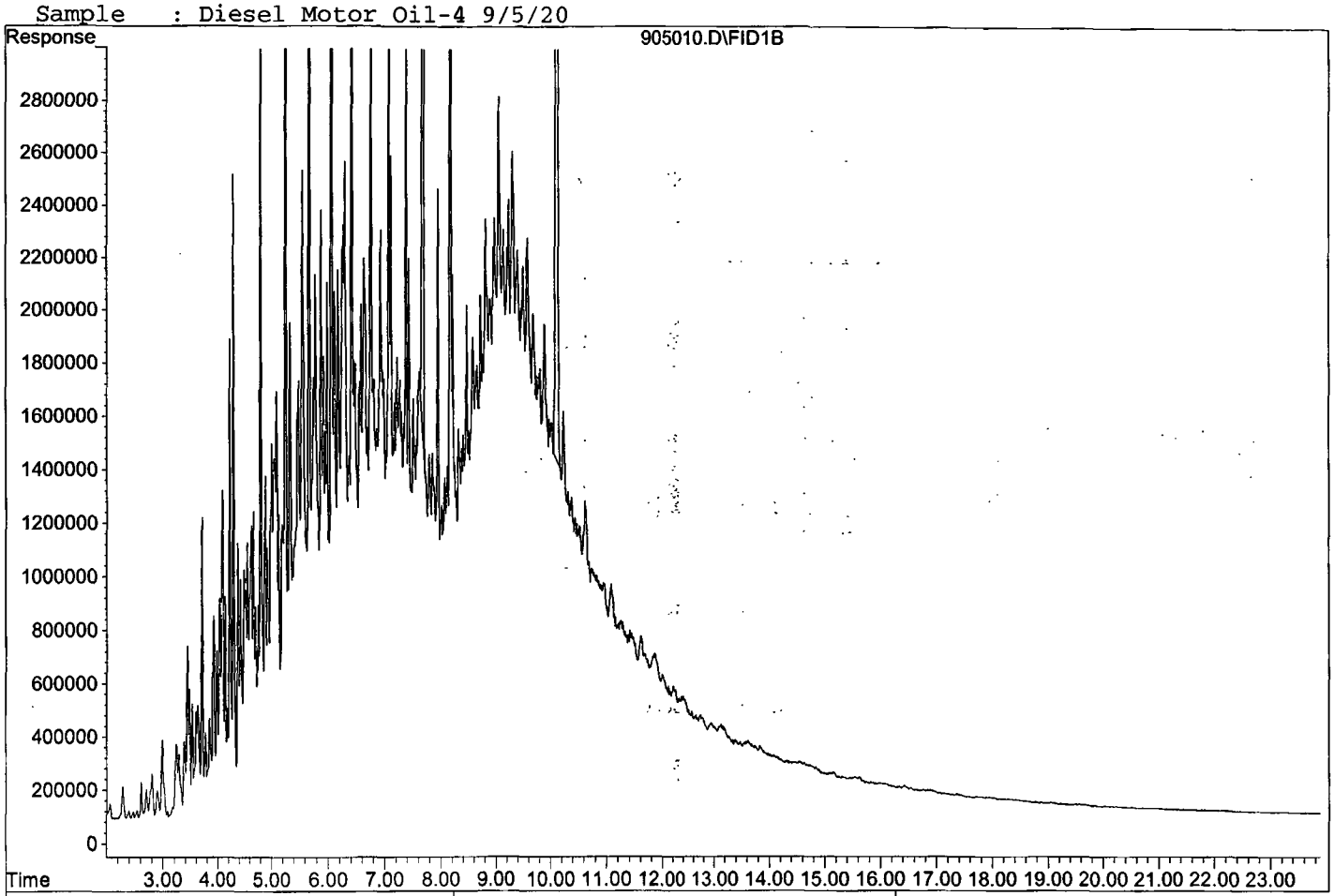
Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

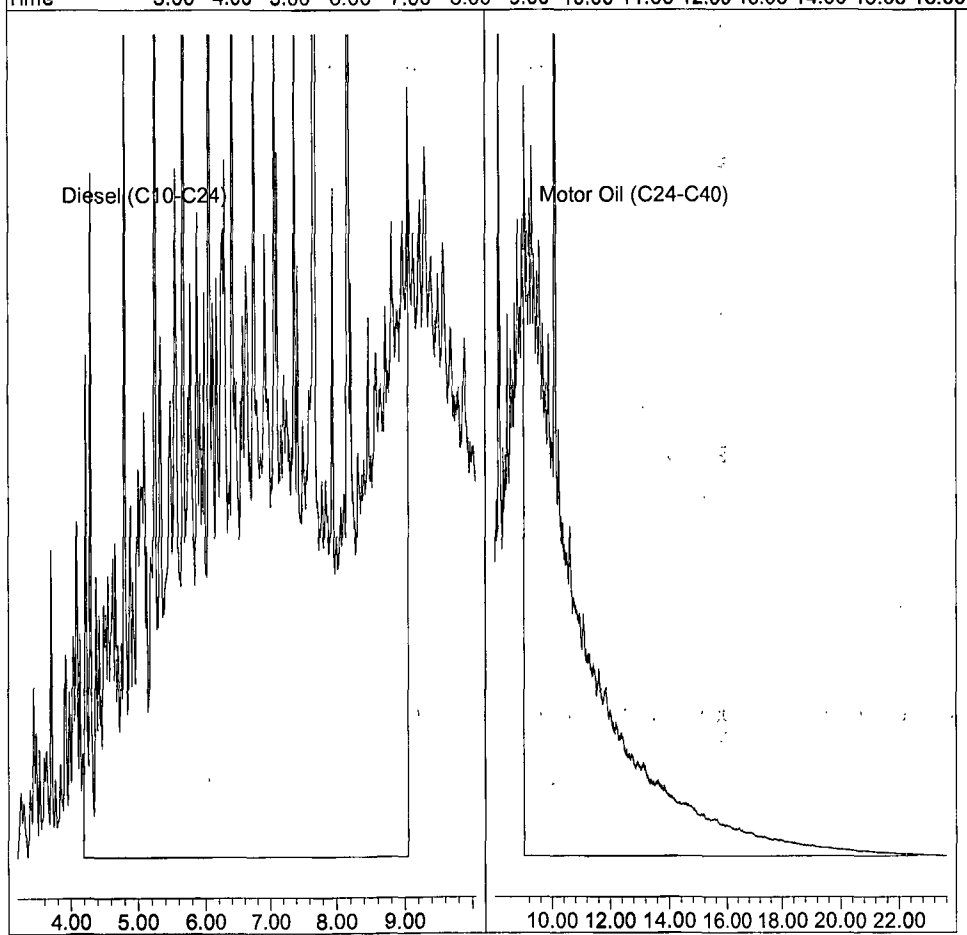
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	234931900	48.270 ppb
Surrogate Spike 30.000		Recovery =	160.90%
4) SA Octacosane(S)	10.11	196853973	49.487 ppb
Surrogate Spike 30.000		Recovery =	164.96%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	4160972977	965.157 ppb
2) HBTM Motor Oil (C24-C40)	15.82	2860576922	963.942 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905010.D
Sample : Diesel Motor Oil-4 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905011.D Vial: 11
Acq On : 9-5-20 18:56:54 Operator:
Sample : Diesel Motor Oil-5 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:46 2020 Quant Results File: LRDOC905.RES

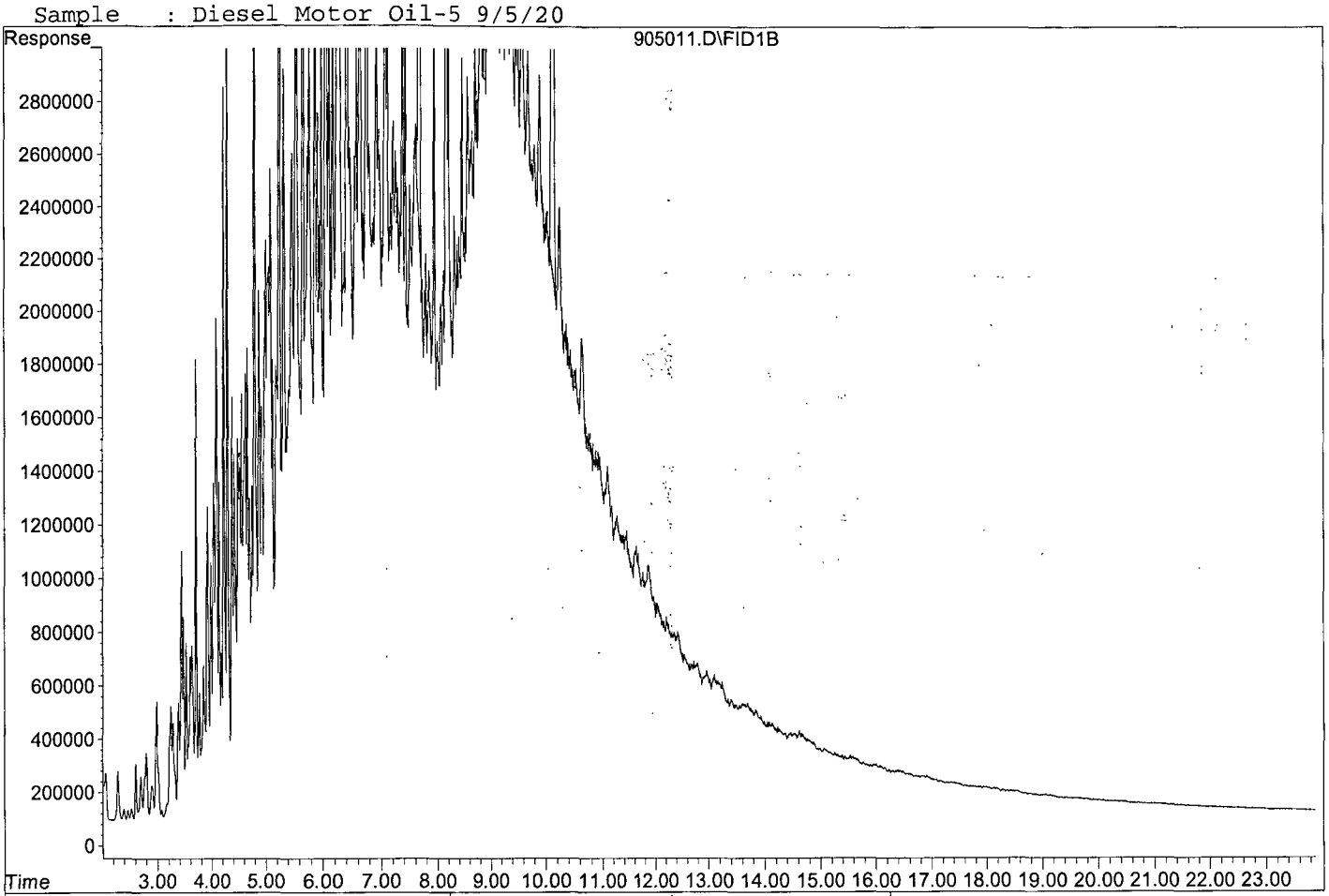
Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

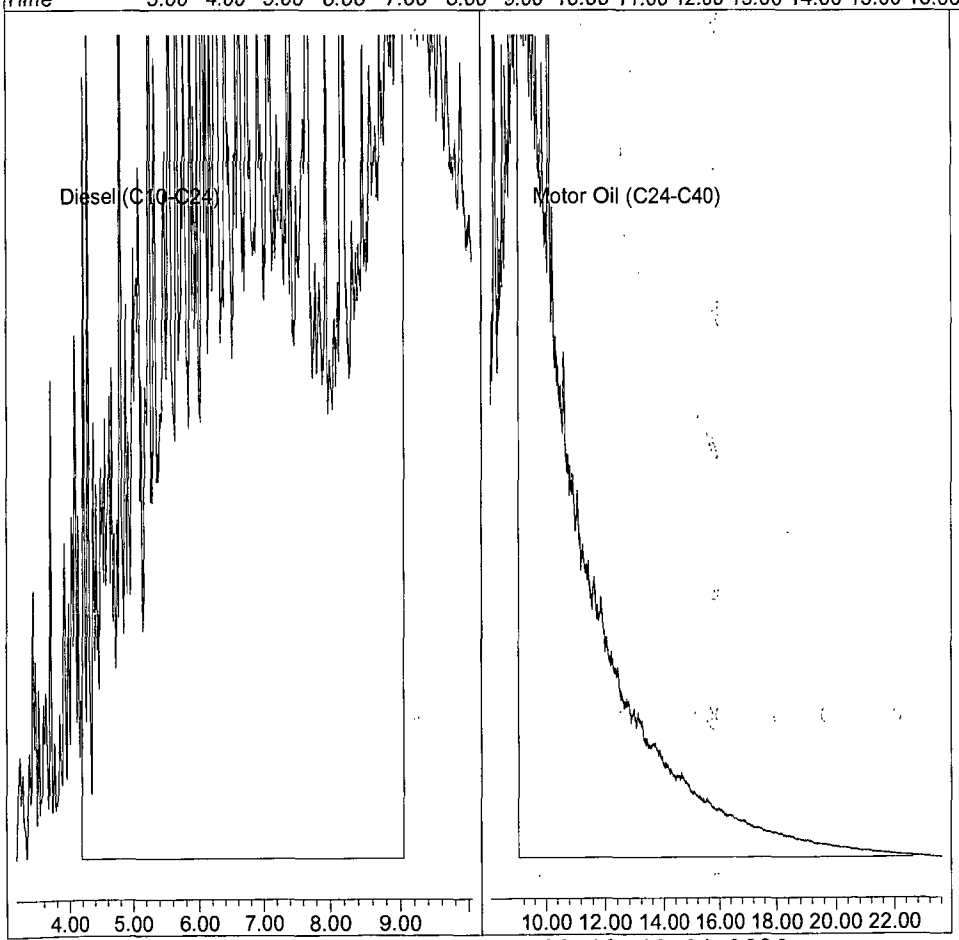
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	355298964	73.002 ppb
Surrogate Spike 30.000		Recovery =	243.34%
4) SA Octacosane(S)	10.12	300469164	75.534 ppb
Surrogate Spike 30.000		Recovery =	251.78%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	6370162550	1477.694 ppb
2) HBTM Motor Oil (C24-C40)	15.82	4401128474	1486.384 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905011.D
Sample : Diesel Motor Oil-5 9/5/20





905011.D LRDOC905.M Tue Dec 08 13:48:04 2020

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905012.D Vial: 12
Acq On : 9-5-20 19:24:55 Operator:
Sample : Diesel Motor Oil-6 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:46 2020 Quant Results File: LRDOC905.RES

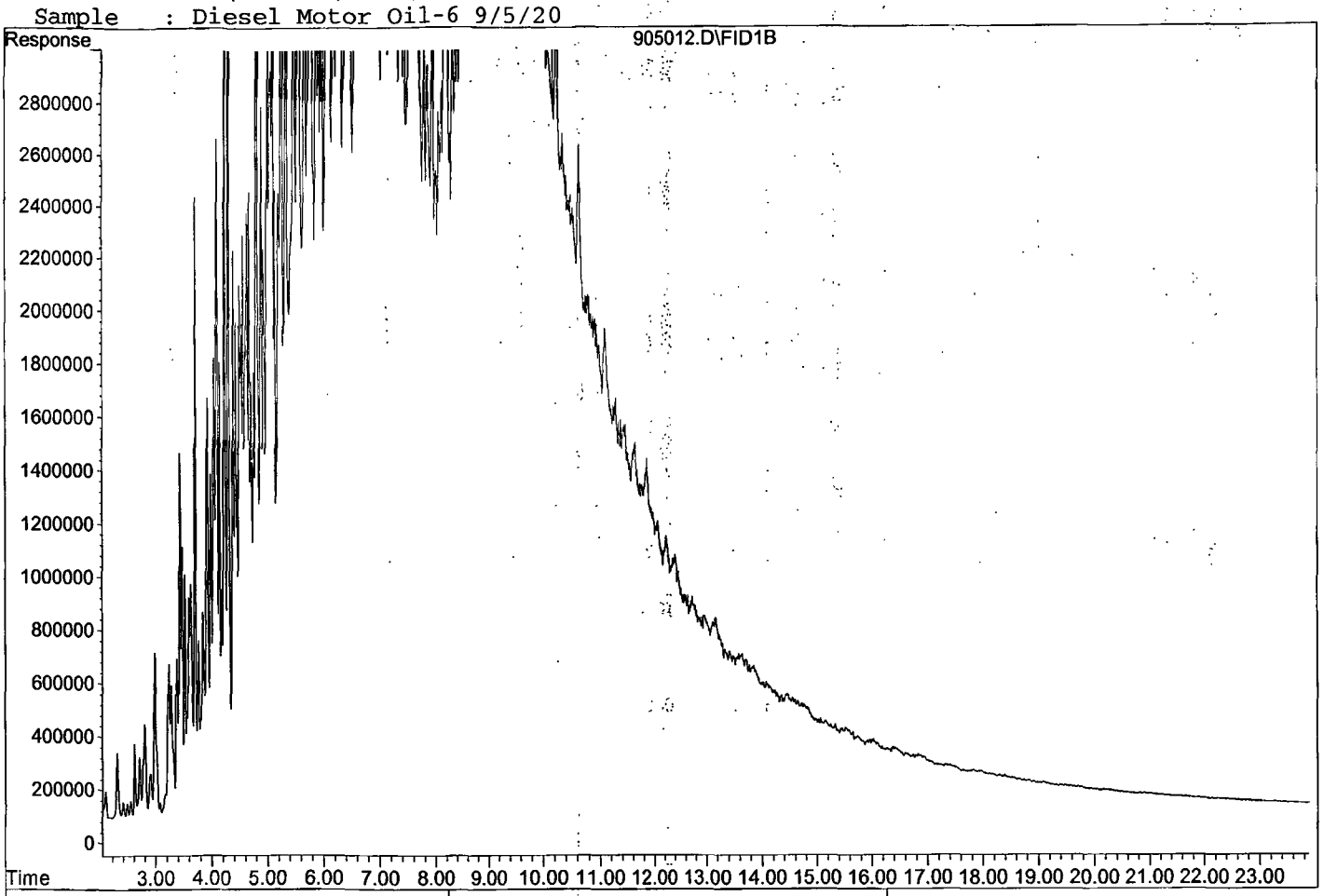
Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

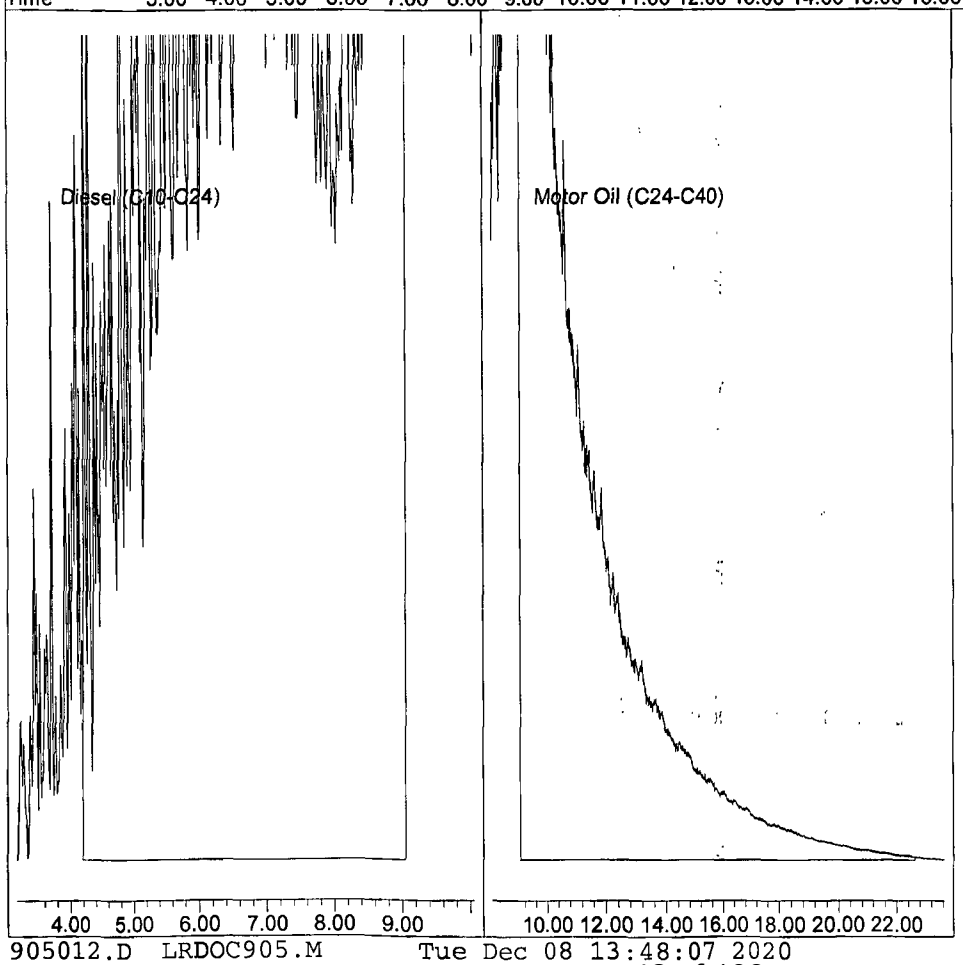
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.68	483575307	99.358	ppb
Surrogate Spike 30.000		Recovery =	331.19%	
4) SA Octacosane(S)	10.11	404805297	101.763	ppb
Surrogate Spike 30.000		Recovery =	339.21%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	8760292310	2032.210	ppb
2) HBTM Motor Oil (C24-C40)	15.82	5994530170	2026.749	ppb
Target Compounds				

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905012.D
Sample : Diesel Motor Oil-6 9/5/20





TPH Extractables
LRDOC905

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 9/5/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 905013.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2384790	0.70	HATML	11
2	HBTM	Motor Oil (C24-C40)	1907910	1737110	9.0	HBTML	16
3							
4							
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40							
		Average			4.9		

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\200905\905013.D Vial: 13
Acq On : 9-5-20 19:52:52 Operator:
Sample : Diesel Motor Oil-SS 7/21/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:58 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:55:54 2020
Response via : Multiple Level Calibration

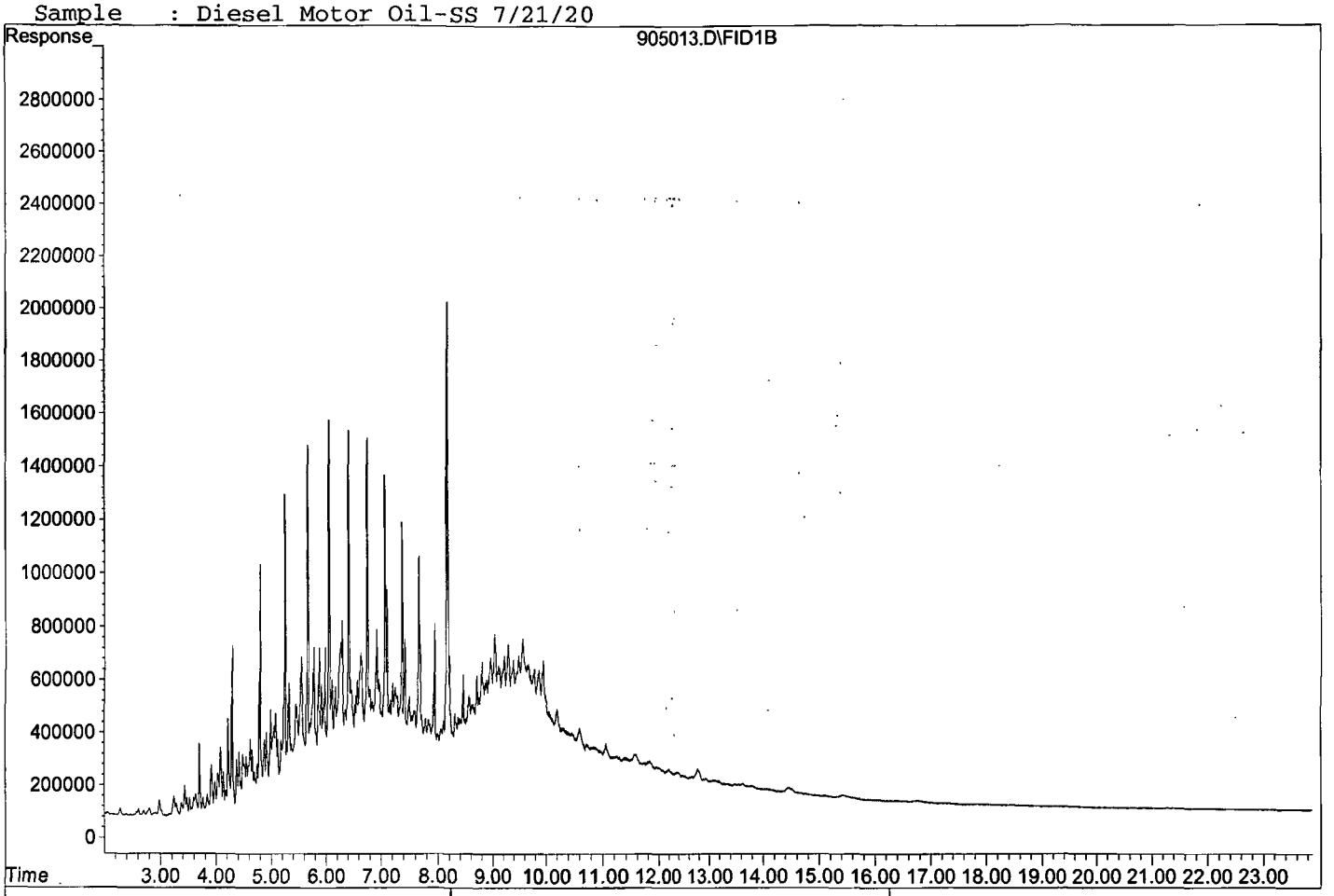
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

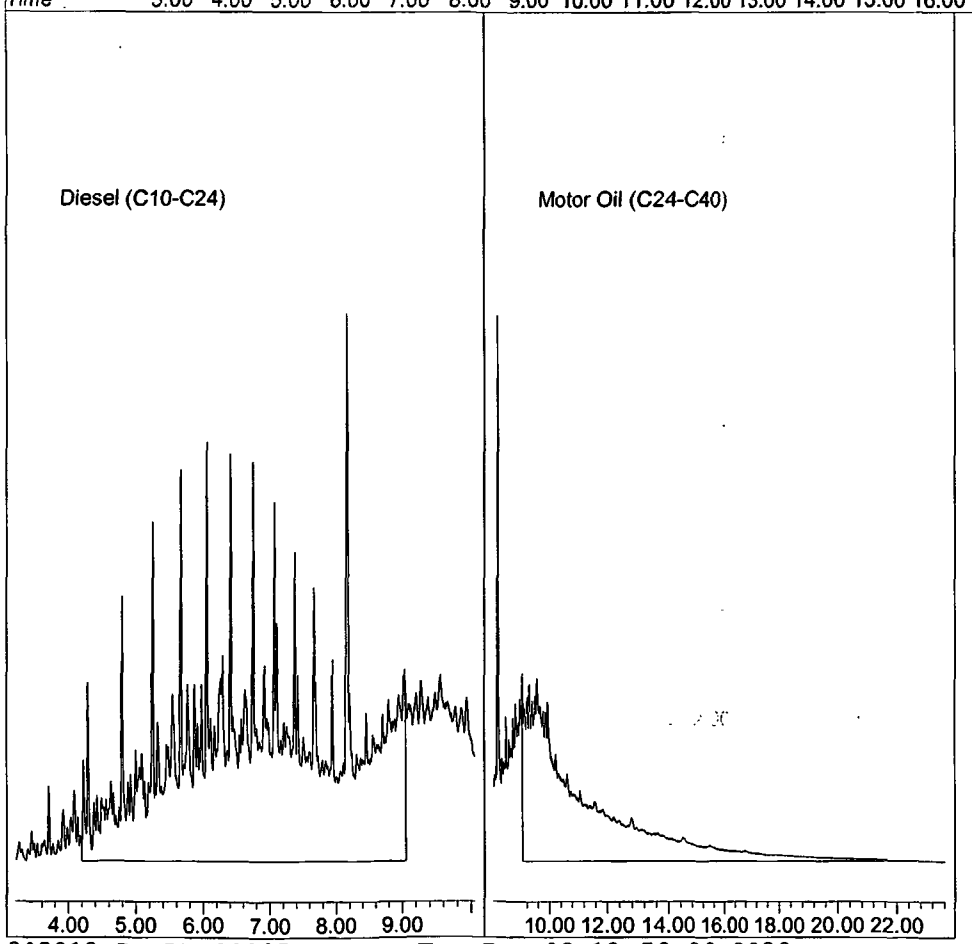
Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
3) SA Ortho-Terphenyl(S)	0.00	0	N.D.	ppb	d
Surrogate Spike 30.000	Recovery	=	0.00%		
4) SA Octacosane(S)	0.00	0	N.D.	ppb	d
Surrogate Spike 30.000	Recovery	=	0.00%		
Target Compounds					
1) HATM Diesel (C10-C24)	6.62	1192394512	277.344	ppb	
2) HBTM Motor Oil (C24-C40)	15.82	868552578	289.389	ppb	

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905013.D
Sample : Diesel Motor Oil-SS 7/21/20





905013.D LRDOC905.M Tue Dec 08 13:59:32 2020

TPH Extractables
DEC0914

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 9/14/2020
Matrix: Water Instrument: Apollo Initials:

914004.D 914005.D 914006.D 914007.D 914008.D 914009.D

		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
1	SC	Decanoic Acid(S)	1032713	1038468	1205026	1249387	1259834	1291198					1179438	9.7	SC		
2																	
3																	
4																	
5																	
6																	
7																	
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9																	
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0.278114

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914004.D Vial: 4
Acq On : 9-14-20 10:24:43 Operator:
Sample : Decanoic Acid-1 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 15:45 2020 Quant Results File: DEC0914.RES

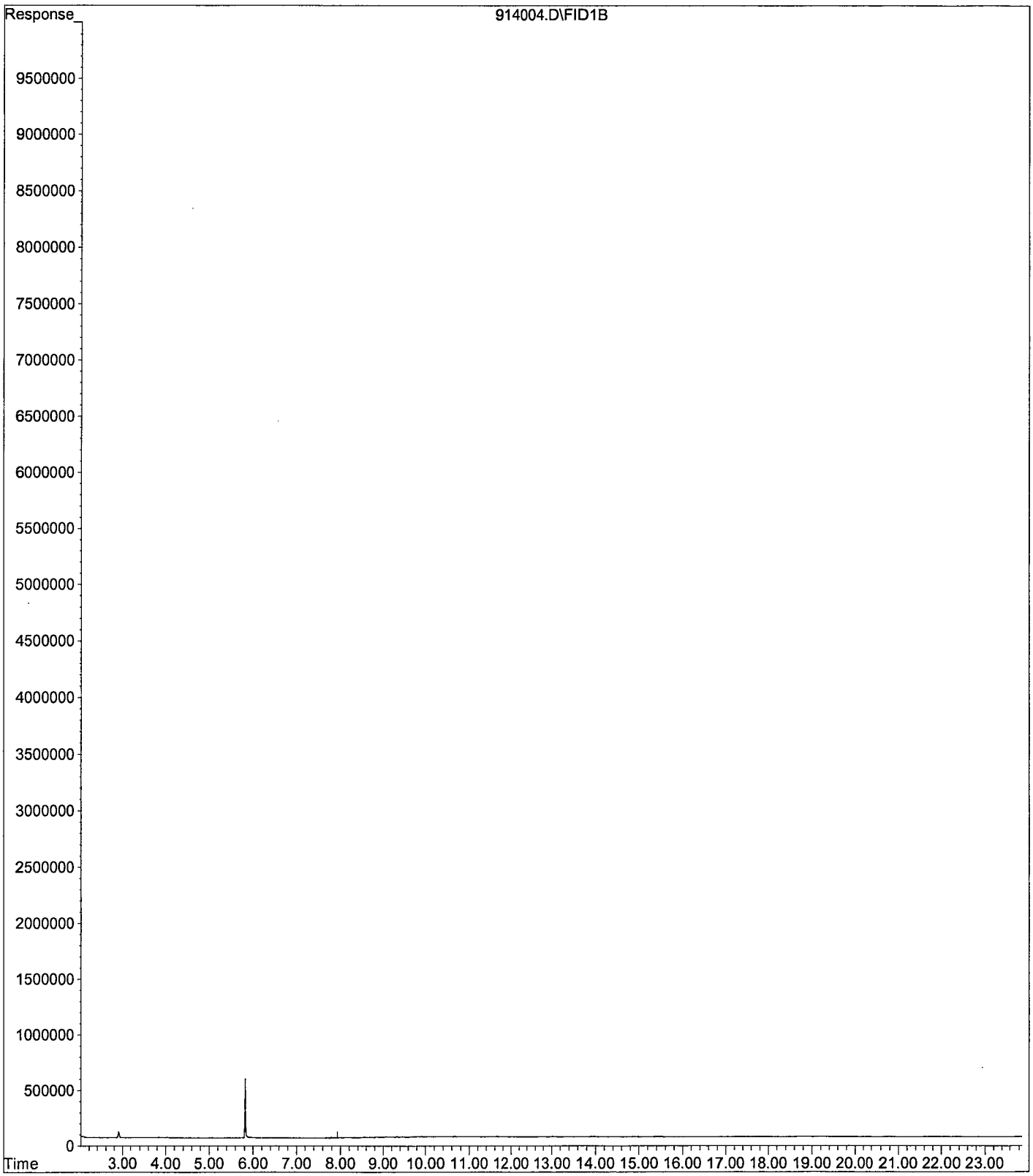
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.82	6196276	2.627 ppb
Surrogate Spike 24.000	Recovery =		10.95%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914004.D
Operator :
Acquired : 9-14-20 10:24:43 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-1 9/14/20
Misc Info : water
Vial Number: 4



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914005.D Vial: 5
Acq On : 9-14-20 10:52:47 Operator:
Sample : Decanoic Acid-2 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 15:45 2020 Quant Results File: DEC0914.RES

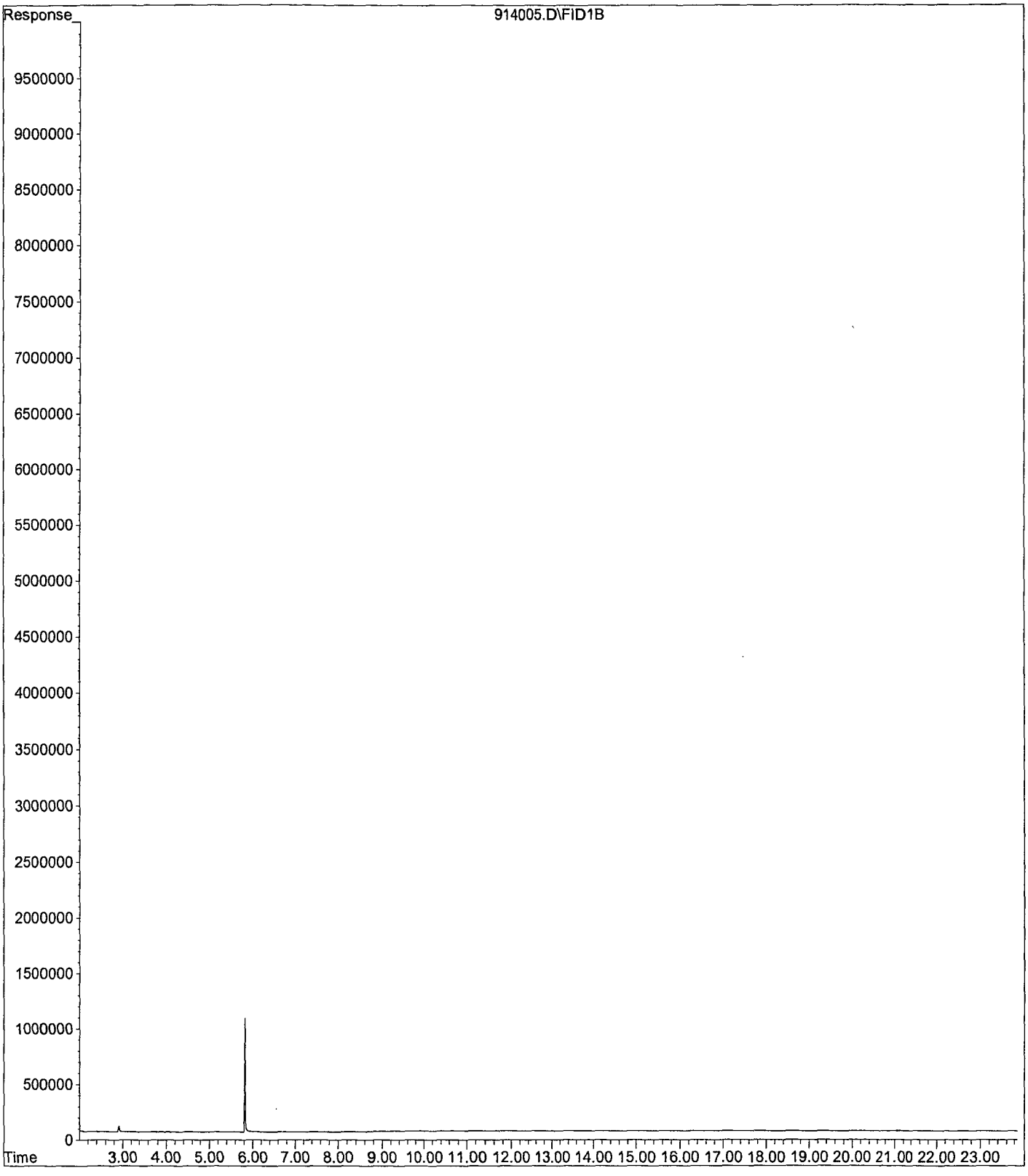
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.82	12461617	5.283 ppb
Surrogate Spike 24.000	Recovery =		22.01%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914005.D
Operator :
Acquired : 9-14-20 10:52:47 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-2 9/14/20
Misc Info : water
Vial Number: 5



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914006.D Vial: 6
Acq On : 9-14-20 11:20:51 Operator:
Sample : Decanoic Acid-3 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 15:45 2020 Quant Results File: DEC0914.RES

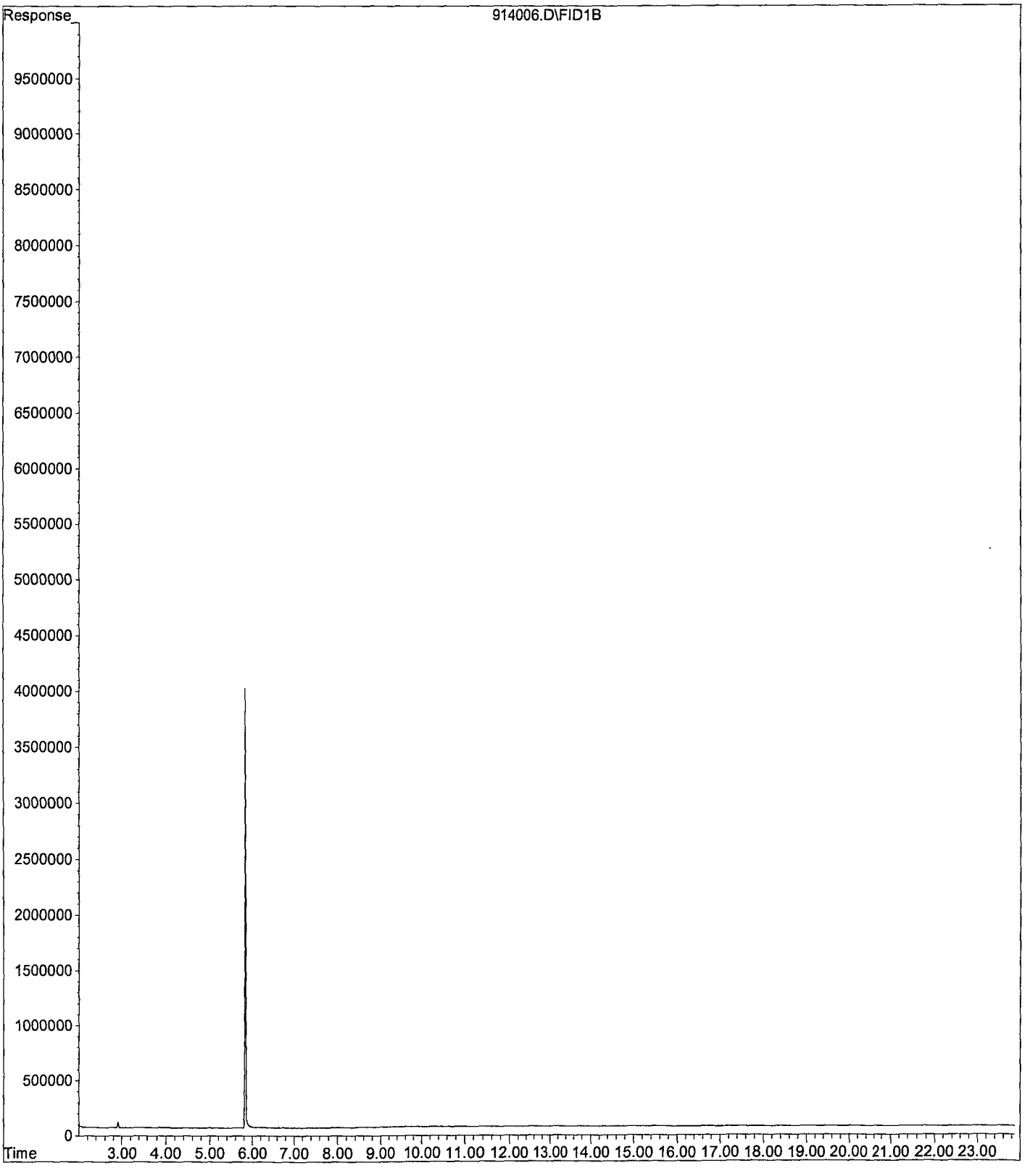
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.83	57841244	24.521 ppb
Surrogate Spike 24.000		Recovery =	102.17%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914006.D
Operator :
Acquired : 9-14-20 11:20:51 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-3 9/14/20
Misc Info : water
Vial Number: 6



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914007.D Vial: 7
Acq On : 9-14-20 11:48:52 Operator:
Sample : Decanoic Acid-4 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 15:45 2020 Quant Results File: DEC0914.RES

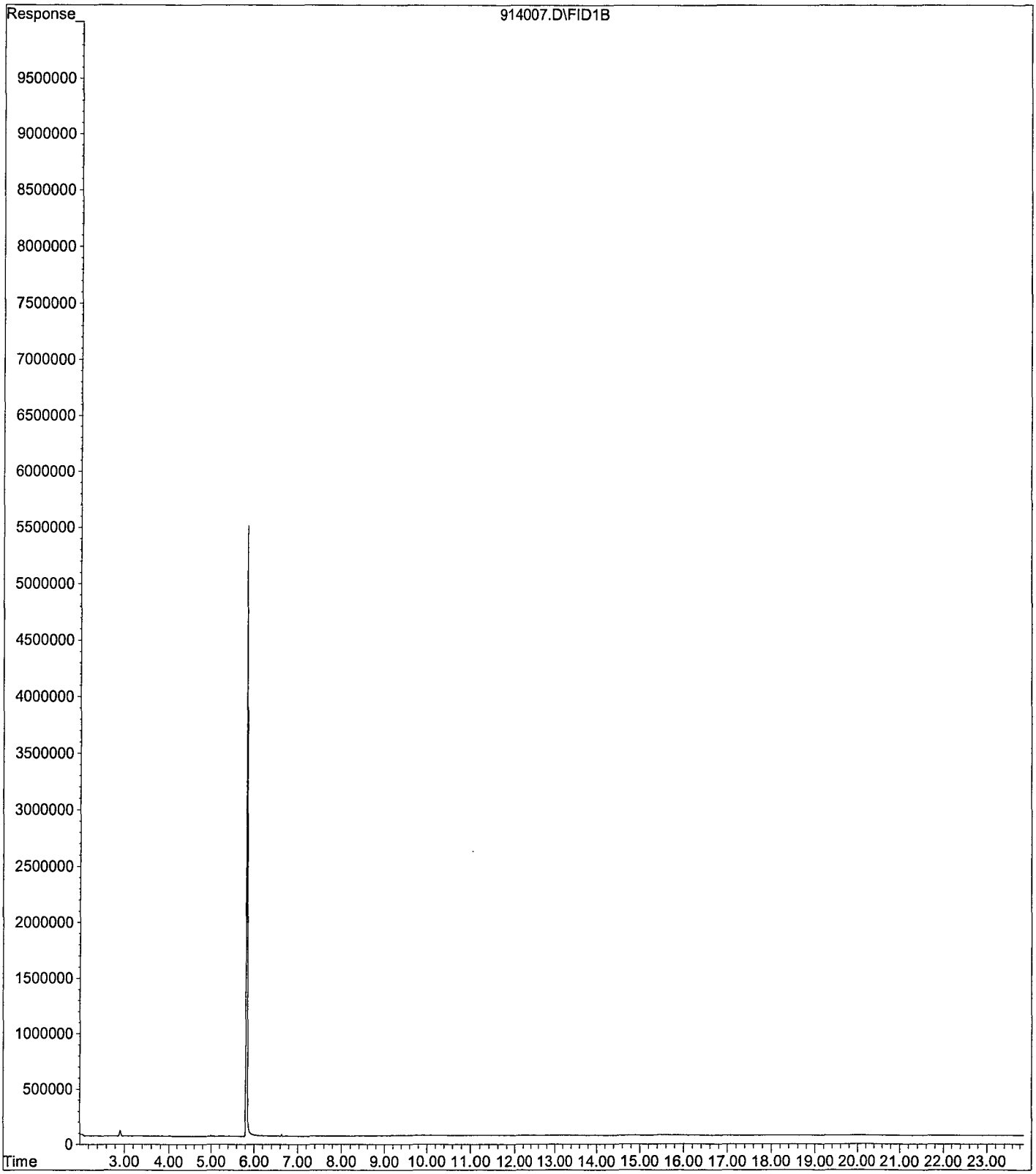
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.84	89955859	38.135 ppb
Surrogate Spike 24.000		Recovery =	158.90%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914007.D
Operator :
Acquired : 9-14-20 11:48:52 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-4 9/14/20
Misc Info : water
Vial Number: 7



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914008.D Vial: 8
Acq On : 9-14-20 12:16:53 Operator:
Sample : Decanoic Acid-5 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 15:45 2020 Quant Results File: DEC0914.RES

Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.85	120944103	51.272 ppb
Surrogate Spike 24.000		Recovery =	213.63%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914009.D Vial: 9
Acq On : 9-14-20 12:44:57 Operator:
Sample : Decanoic Acid-6 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 15:45 2020 Quant Results File: DEC0914.RES

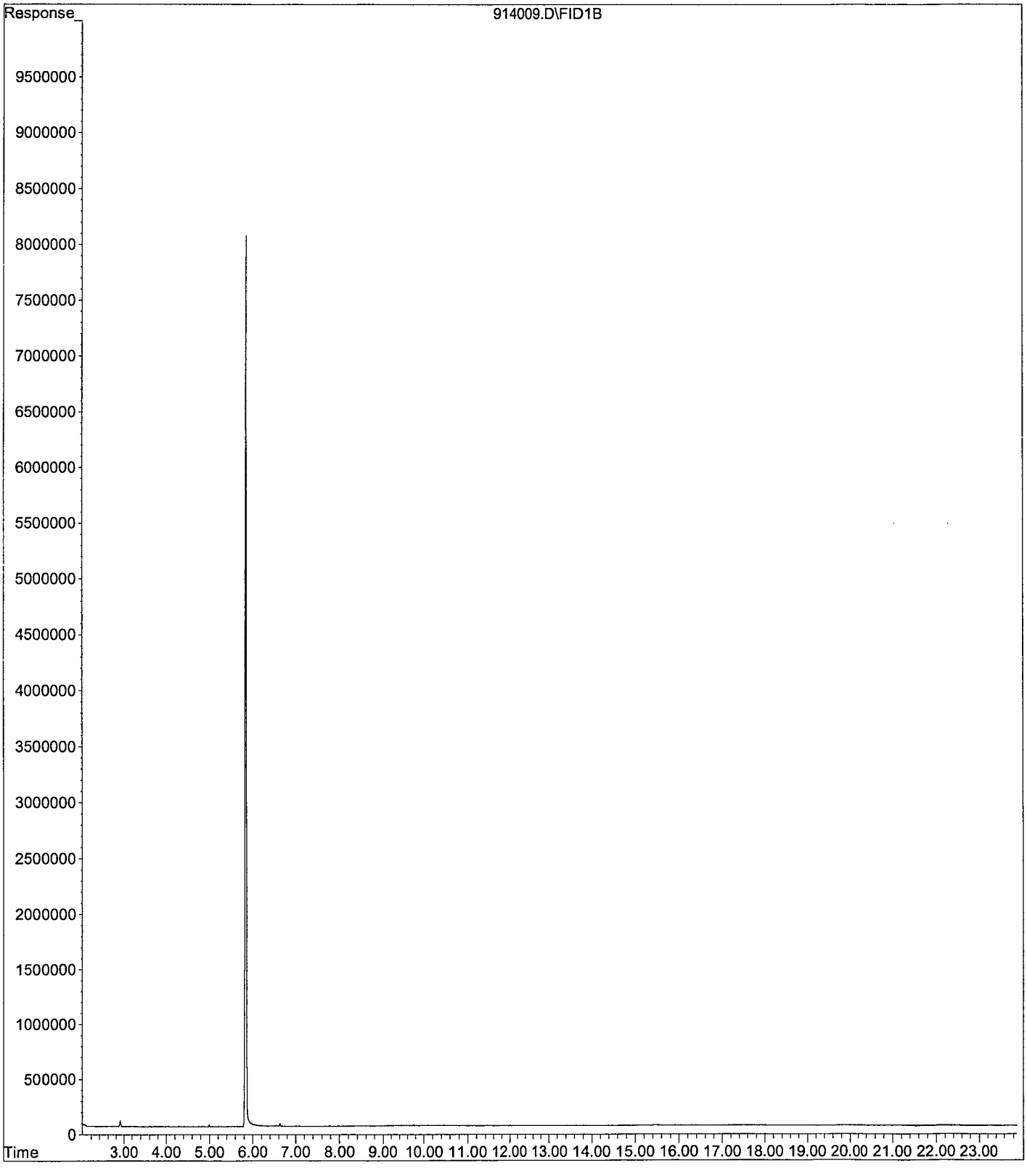
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.85	154943704	65.685 ppb
Surrogate Spike 24.000	Recovery =		273.69%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914009.D
Operator :
Acquired : 9-14-20 12:44:57 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-6 9/14/20
Misc Info : water
Vial Number: 9



TPH Extractables
LRDOC905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/20/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 1019032.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2034570	15	HATML	5.3
2	HBTM	Motor Oil (C24-C40)	1907910	1424470	25	HBTML	5.4
3	SA	Ortho-Terphenyl(S)	2525360	2479280	1.8	SA	
4	SA	Octacosane(S)	2058600	1853750	10	SA	
5							
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		Average			13.0		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201019\1019032.D Vial: 32
Acq On : 10-20-20 12:52:56 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 14:12 2020 Quant Results File: LRDOC905.RES

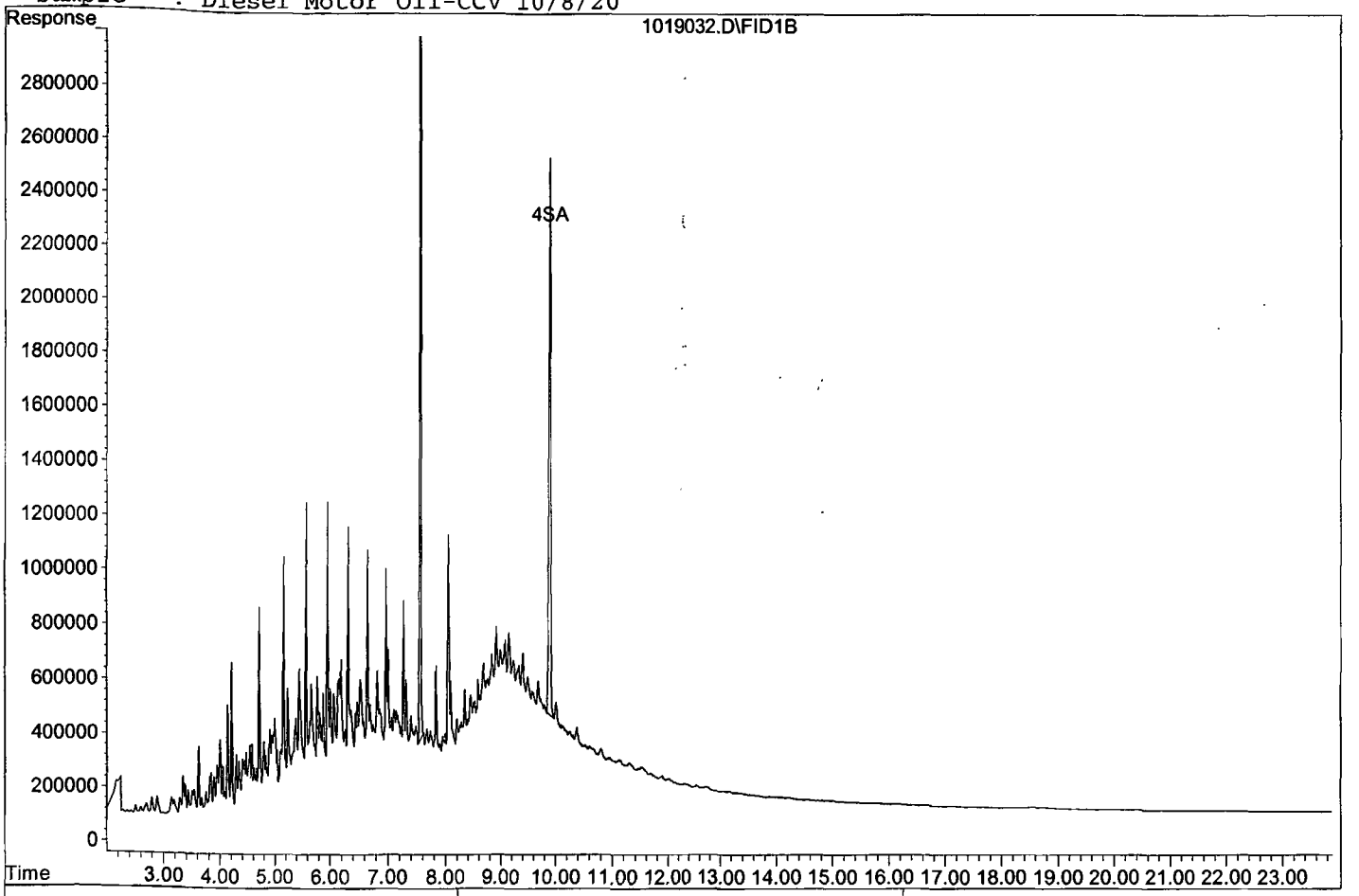
Method : G:\APOLLO\DATA\201019\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:12:47 2020
Response via : Multiple Level Calibration

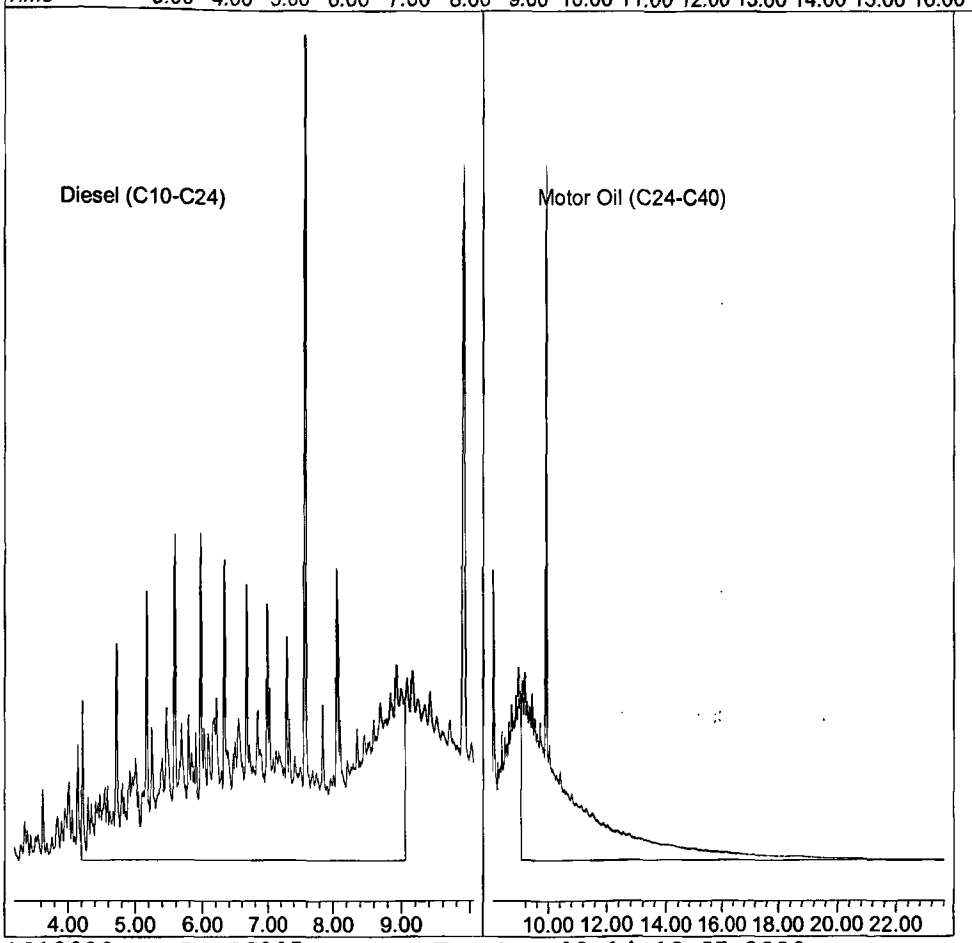
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	61981982	12.272 ppb
Surrogate Spike 30.000		Recovery =	40.91%
4) SA Octacosane(S)	9.90	46343770	11.256 ppb
Surrogate Spike 30.000		Recovery =	37.52%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1017283507	236.747 ppb
2) HBTM Motor Oil (C24-C40)	15.82	712233098	236.418 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201019\1019032.D
Sample : Diesel Motor Oil-CCV 10/8/20





TPH Extractables
LRDOC905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/20/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 1019042.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2123880	12	HATML	1.2
2	HBTM	Motor Oil (C24-C40)	1907910	1423120	25	HBTML	5.5
3	SA	Ortho-Terphenyl(S)	2525360	2581000	2.2	SA	
4	SA	Octacosane(S)	2058600	1959380	4.8	SA	
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		Average			11.0		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201019\1019042.D Vial: 42
Acq On : 10-20-20 20:21:12 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 14:32 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\201019\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:32:29 2020
Response via : Multiple Level Calibration

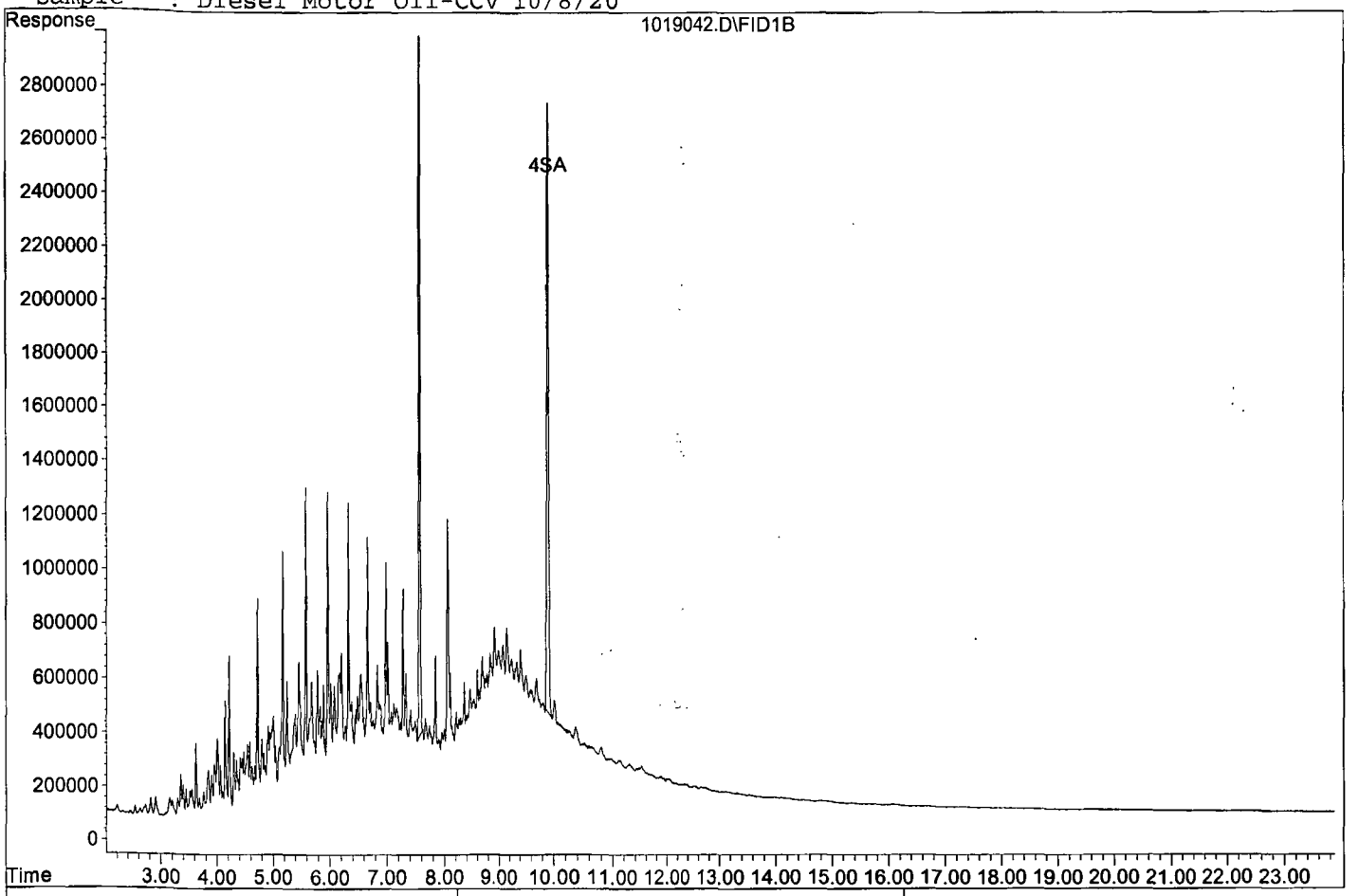
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

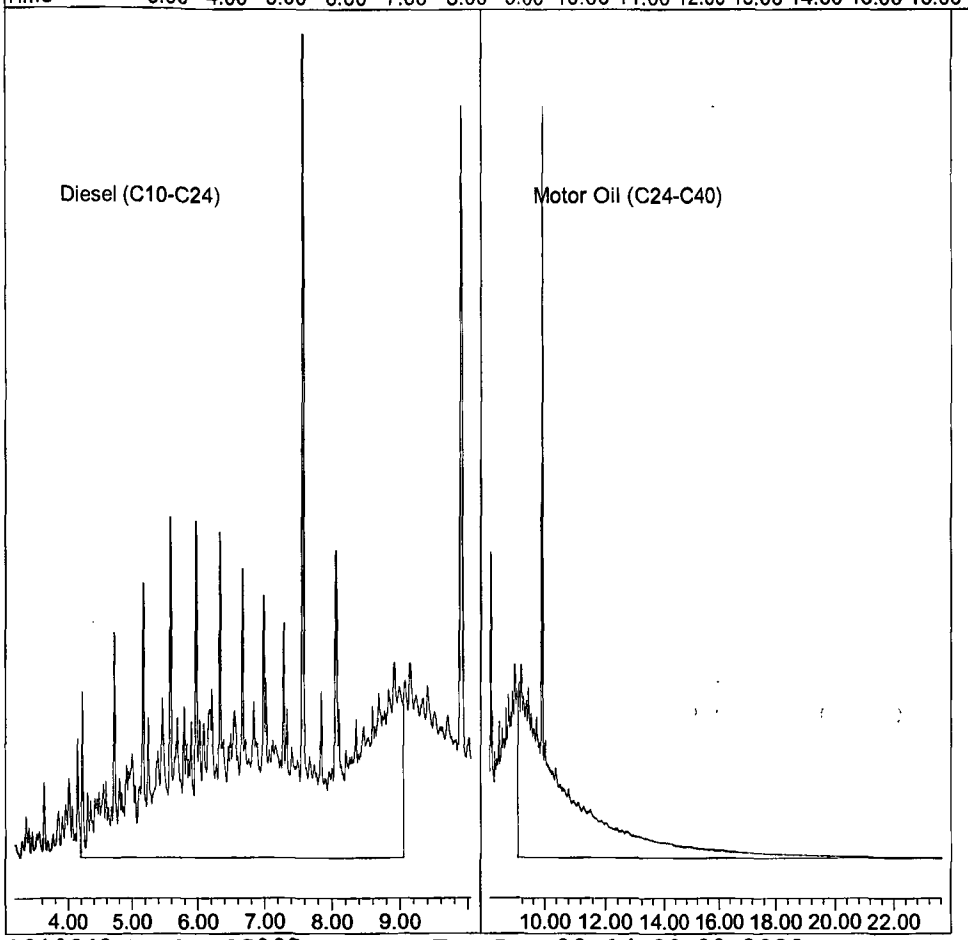
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	64525001	12.775 ppb
Surrogate Spike 12.000	Recovery =		106.46%
4) SA Octacosane(S)	9.90	48984601	11.898 ppb
Surrogate Spike 12.000	Recovery =		99.15%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1061941289	247.100 ppb
2) HBTM Motor Oil (C24-C40)	15.82	711561975	236.191 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201019\1019042.D
Sample : Diesel Motor Oil-CCV 10/8/20





TPH Extractables
DOC0905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/29/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 1028029.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2151690	10	HATML	0.13
2	HBTM	Motor Oil (C24-C40)	1513790	1404120	7.2	HBTM	
3	SA	Ortho-Terphenyl(S)	2525360	2682100	6.2	SA	
4	SA	Octacosane(S)	2058600	2056860	0.09	SA	
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39							
40							
		Average			5.9		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028029.D Vial: 29
Acq On : 10-29-20 1:34:57 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 14:35 2020 Quant Results File: DOC0905.RES

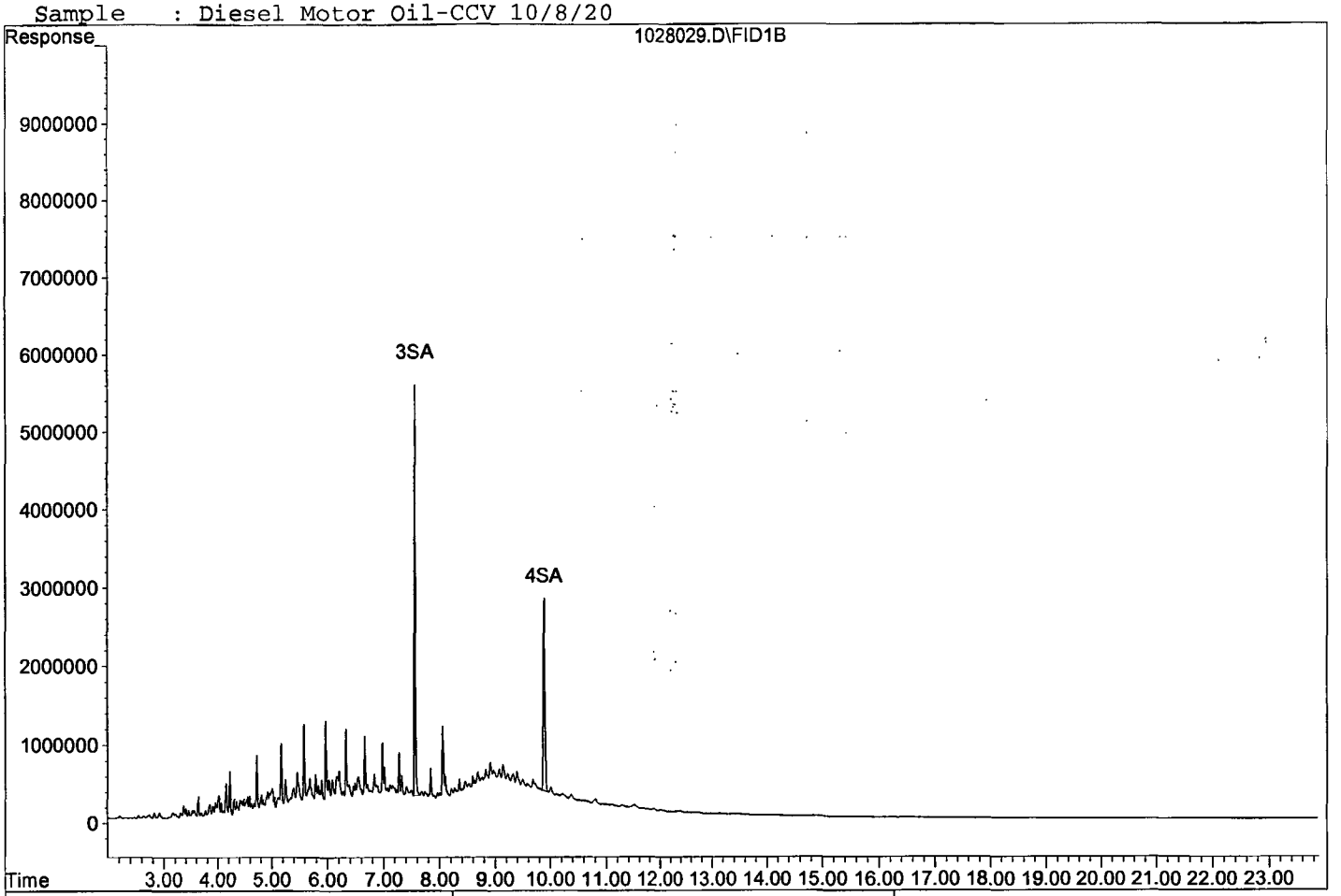
Method : G:\APOLLO\DATA\201028\DOC0905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:35:05 2020
Response via : Multiple Level Calibration

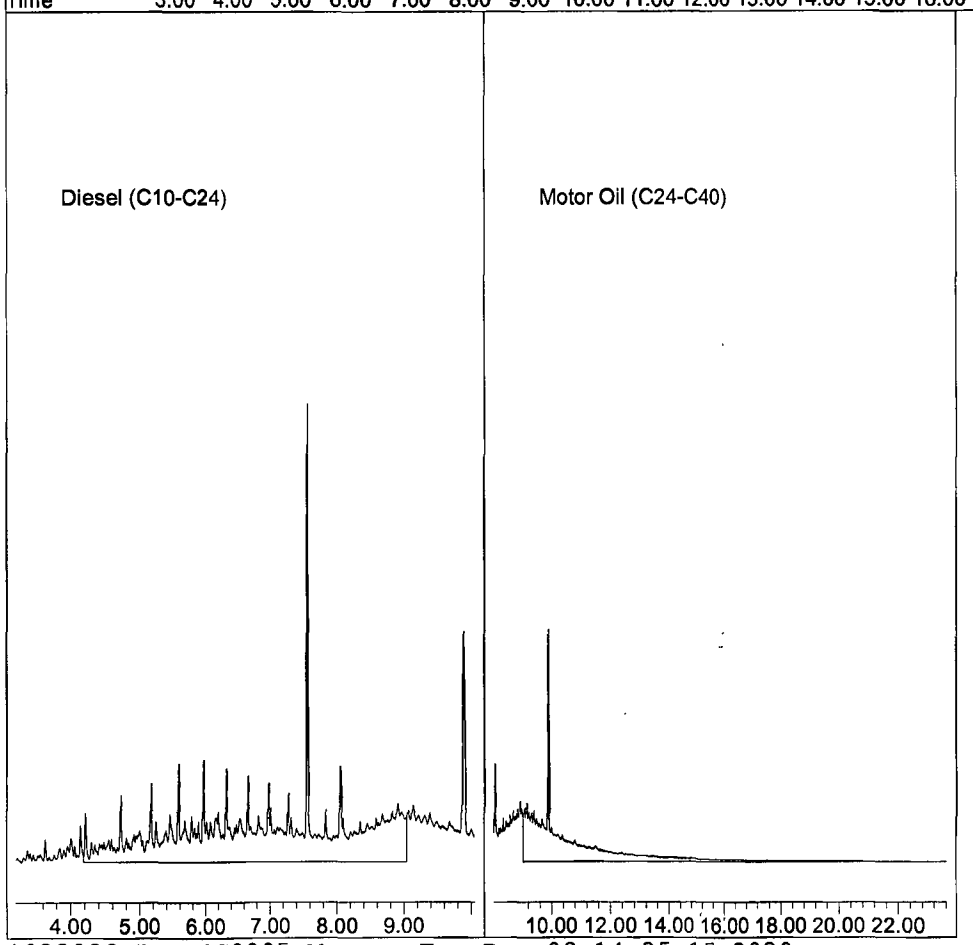
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	67052445	13.276 ppb
Surrogate Spike 12.000		Recovery =	110.63%
4) SA Octacosane(S)	9.89	51421557	12.489 ppb
Surrogate Spike 12.000		Recovery =	104.08%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1075845285	250.324 ppb
2) HBTM Motor Oil (C24-C40)	15.82	702058009	231.888 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028029.D
Sample : Diesel Motor Oil-CCV 10/8/20





TPH Extractables
LRDOC905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/29/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 1028036.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2213350	7.8	HATML	3.0
2	HBTM	Motor Oil (C24-C40)	1907910	1444610	24	HBTML	4.1
3	SA	Ortho-Terphenyl(S)	2525360	2707430	7.2	SA	
4	SA	Octacosane(S)	2058600	2147360	4.3	SA	
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		Average			10.8		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028036.D Vial: 36
Acq On : 10-29-20 4:48:47 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 14:38 2020 Quant Results File: LRDOC905.RES

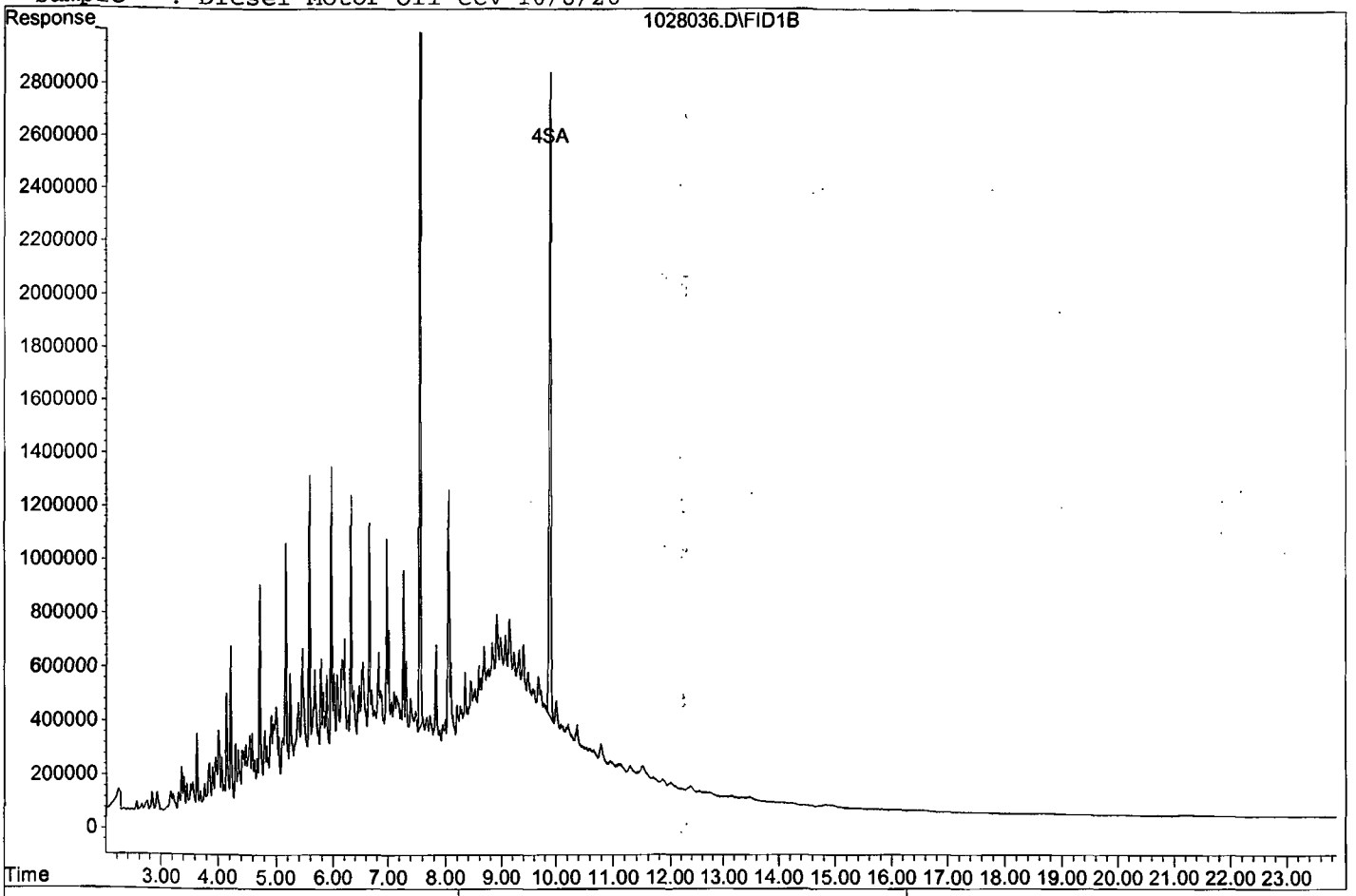
Method : G:\APOLLO\DATA\201028\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:37:31 2020
Response via : Multiple Level Calibration

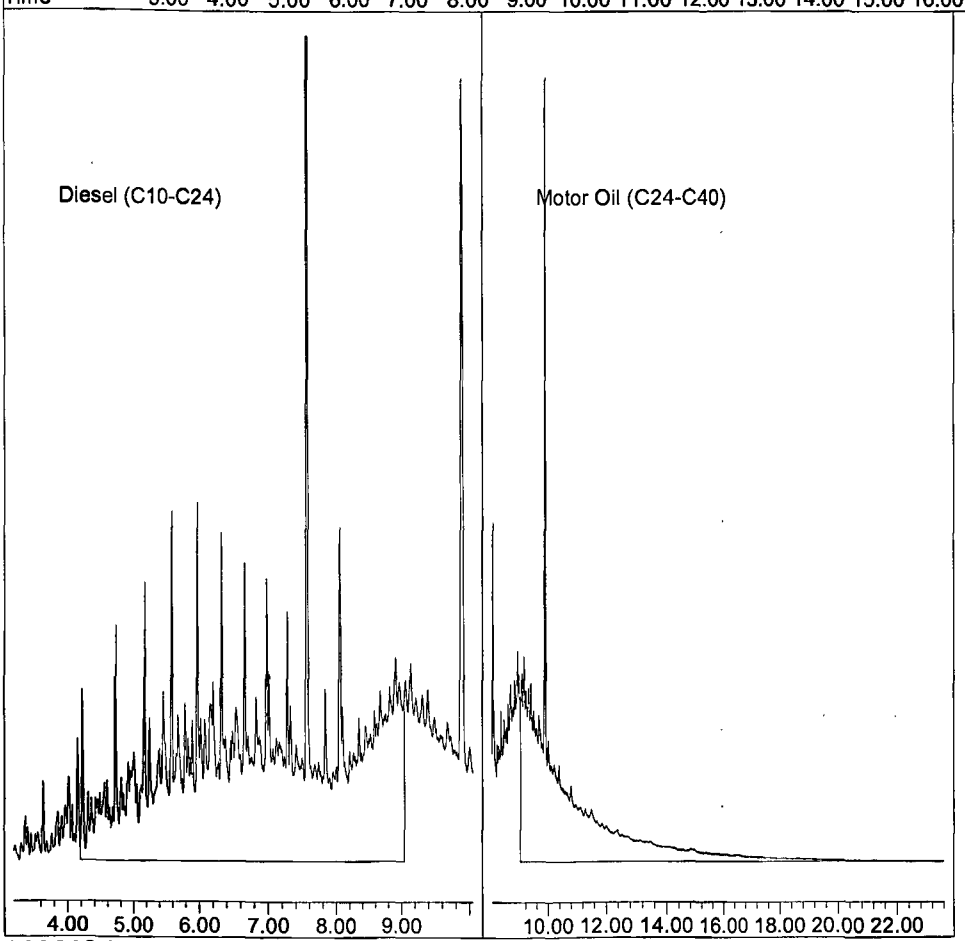
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.56	67685793	13.401 ppb
Surrogate Spike 12.000	Recovery =		111.68%
4) SA Octacosane(S)	9.89	53683978	13.039 ppb
Surrogate Spike 12.000	Recovery =		108.66%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1106675239	257.471 ppb
2) HBTM Motor Oil (C24-C40)	15.82	722305208	239.831 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028036.D
Sample : Diesel Motor Oil-CCV 10/8/20





TPH Extractables
DEC0914

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/29/2020
Instrument: Apollo
Initial Cal. Date: 9/14/2020
Data File: 1028056.D

		Compound	MEAN	CCRF	%D	%Drift	
1	SC	Decanoic Acid(S)	1179440	1074540	8.9	SC	
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		Average			8.9		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028056.D Vial: 56
Acq On : 10-29-20 16:47:16 Operator:
Sample : Decanoic Acid-CCV 7/28/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 4 12:40 2020 Quant Results File: DEC0914.RES

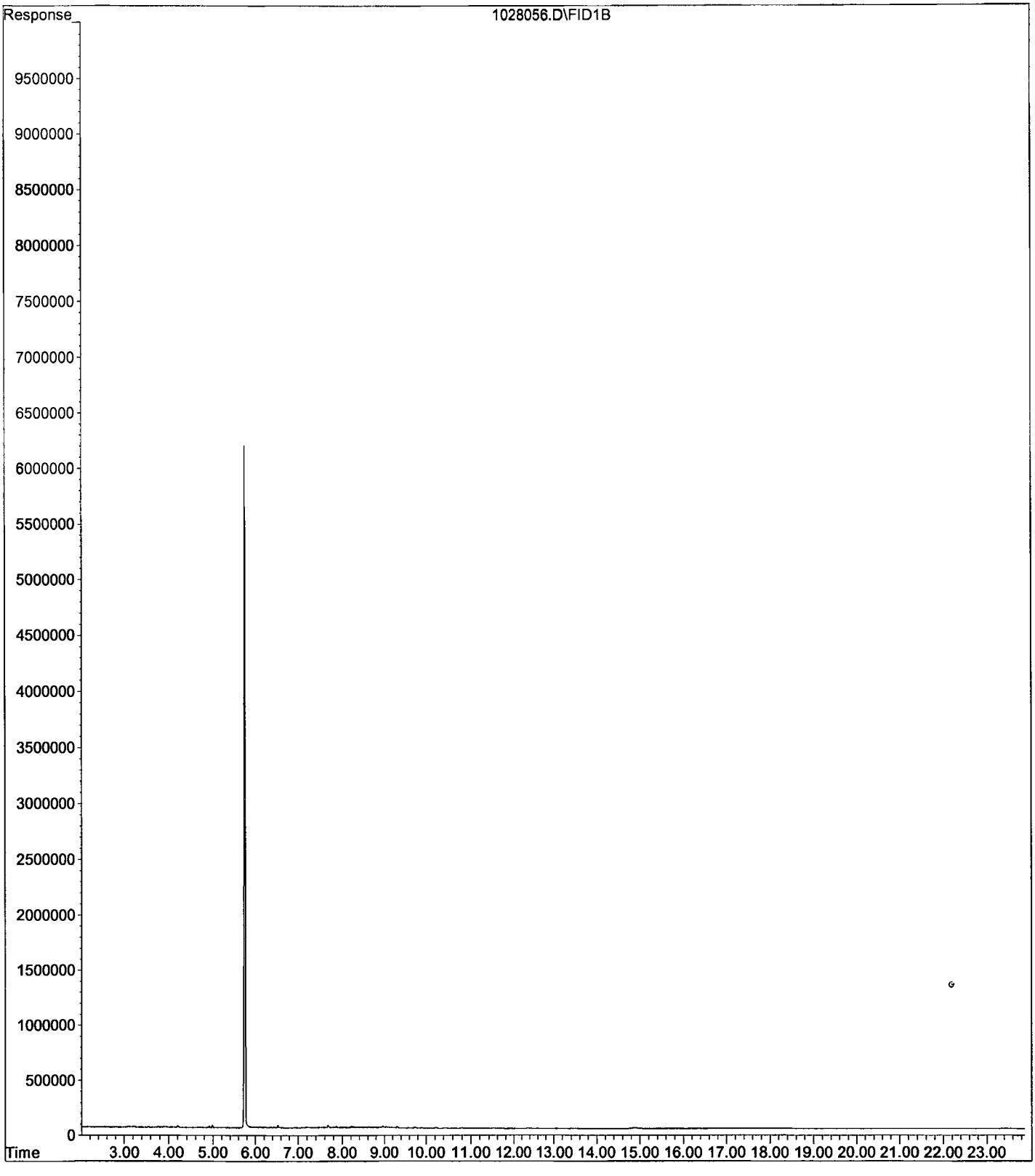
Method : G:\APOLLO\DATA\201028\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.76	103156174	43.731 ppb
Surrogate Spike 24.000	Recovery =		182.21%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\201028\1028056.D
Operator :
Acquired : 10-29-20 16:47:16 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-CCV 7/28/20
Misc Info : water
Vial Number: 56



TPH Extractables
LRDOC905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/29/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 1028055.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2206950	8.1	HATML	2.7
2	HBTM	Motor Oil (C24-C40)	1907910	1440700	24	HBTML	4.3
3	SA	Ortho-Terphenyl(S)	2525360	2765720	9.5	SA	
4	SA	Octacosane(S)	2058600	2124370	3.2	SA	
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40							
		Average			11.2		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028055.D Vial: 55
Acq On : 10-29-20 16:19:06 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 9 11:58 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\201028\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 15:45:49 2020
Response via : Multiple Level Calibration

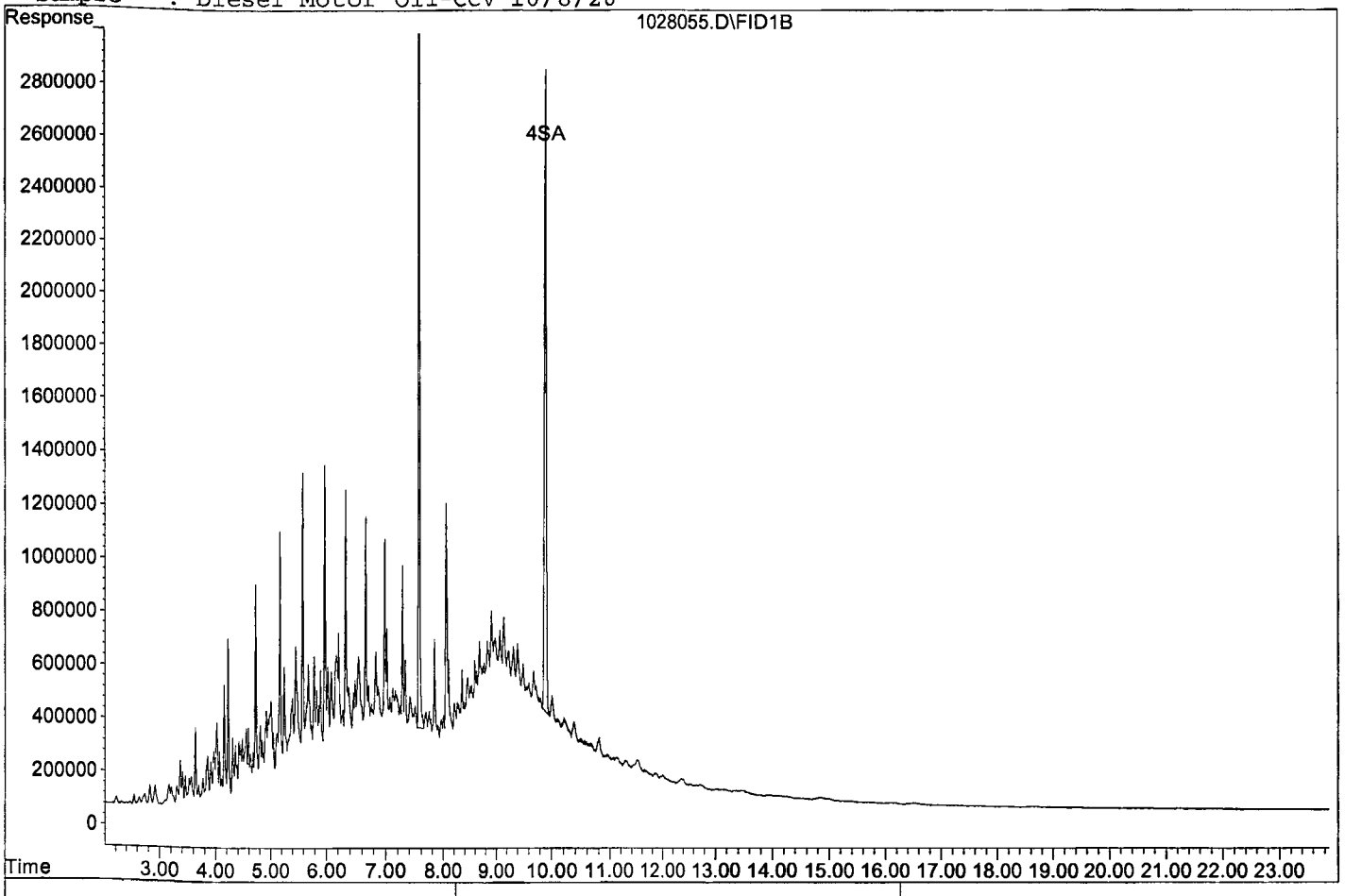
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

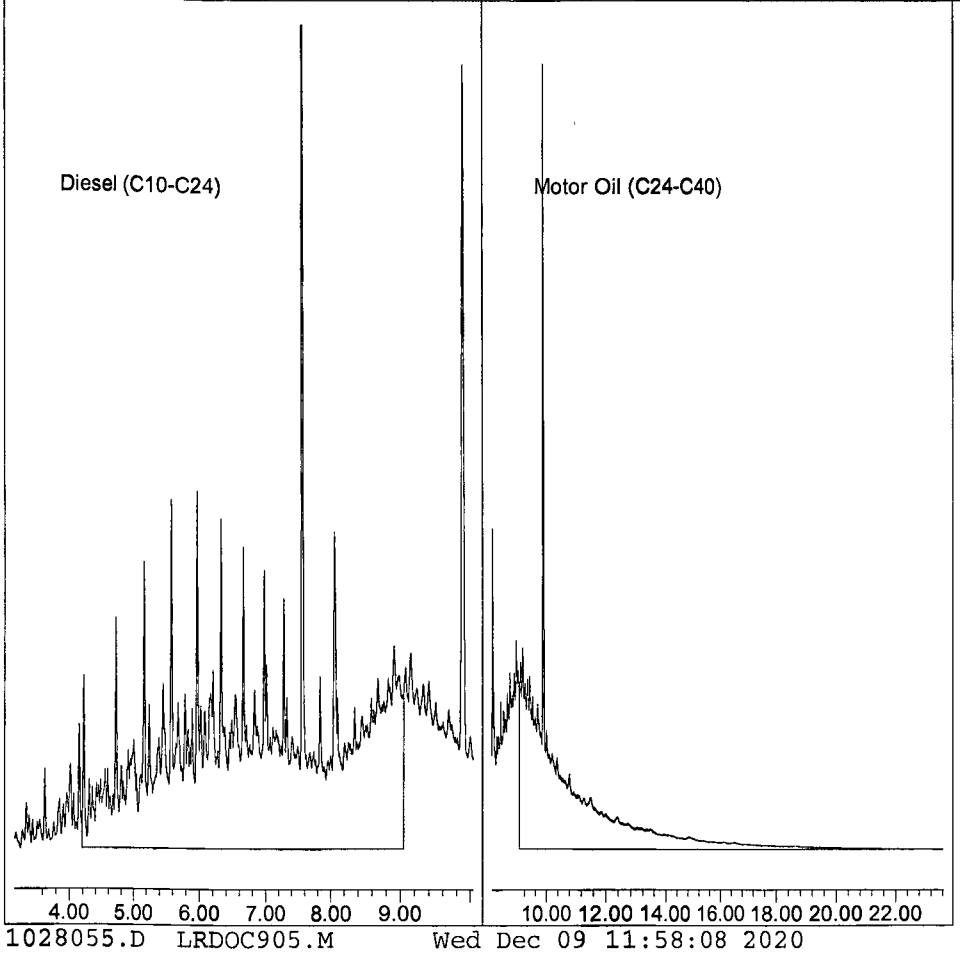
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.57	69143040	13.690	ppb
Surrogate Spike 12.000	Recovery =		114.08%	
4) SA Octacosane(S)	9.89	53109370	12.899	ppb
Surrogate Spike 12.000	Recovery =		107.49%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	1103474091	256.729	ppb
2) HBTM Motor Oil (C24-C40)	15.82	720348951	239.168	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028055.D
Sample : Diesel Motor Oil-CCV 10/8/20





1028055.D LRDOC905.M Wed Dec 09 11:58:08 2020

TPH Extractables
DEC0914

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/29/2020
Instrument: Apollo
Initial Cal. Date: 9/14/2020
Data File: 1028068.D

		Compound	MEAN	CCRF	%D	%Drift	
1	SC	Decanoic Acid(S)	1179440	1076580	8.7	SC	
2							
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40							
		Average			8.7		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028068.D Vial: 68
Acq On : 10-29-20 22:23:40 Operator:
Sample : Decanoic Acid-CCV 7/28/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Nov 4 12:41 2020 Quant Results File: DEC0914.RES

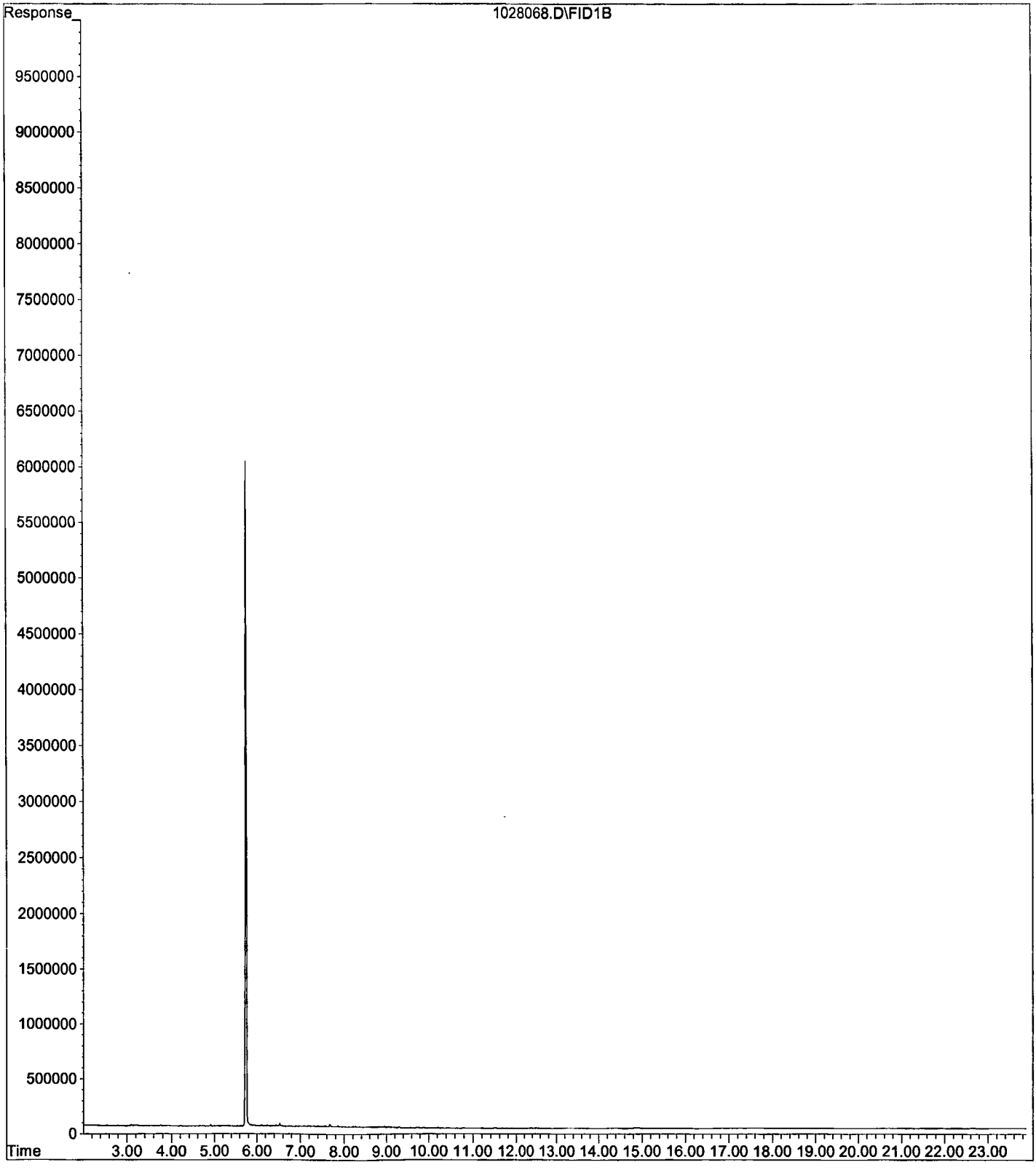
Method : G:\APOLLO\DATA\201028\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.76	103351498	43.814 ppb
Surrogate Spike 24.000		Recovery =	182.56%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\201028\1028068.D
Operator :
Acquired : 10-29-20 22:23:40 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-CCV 7/28/20
Misc Info : water
Vial Number: 68



TPH Extractables
LRDOC905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/29/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 1028069.D

		Compound	MEAN	CCRF	%D		%Drift	
1	HATM	Diesel (C10-C24)	2401620	2243620	6.6	HATML	4.4	
2	HBTM	Motor Oil (C24-C40)	1907910	1448710	24	HBTML	3.8	
3	SA	Ortho-Terphenyl(S)	2525360	3090830	22	SA		*
4	SA	Octacosane(S)	2058600	2249890	9.3	SA		
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40								
		Average			15.5			

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028069.D Vial: 69
Acq On : 10-29-20 22:51:28 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 9 12:04 2020 Quant Results File: LRDOC905.RES

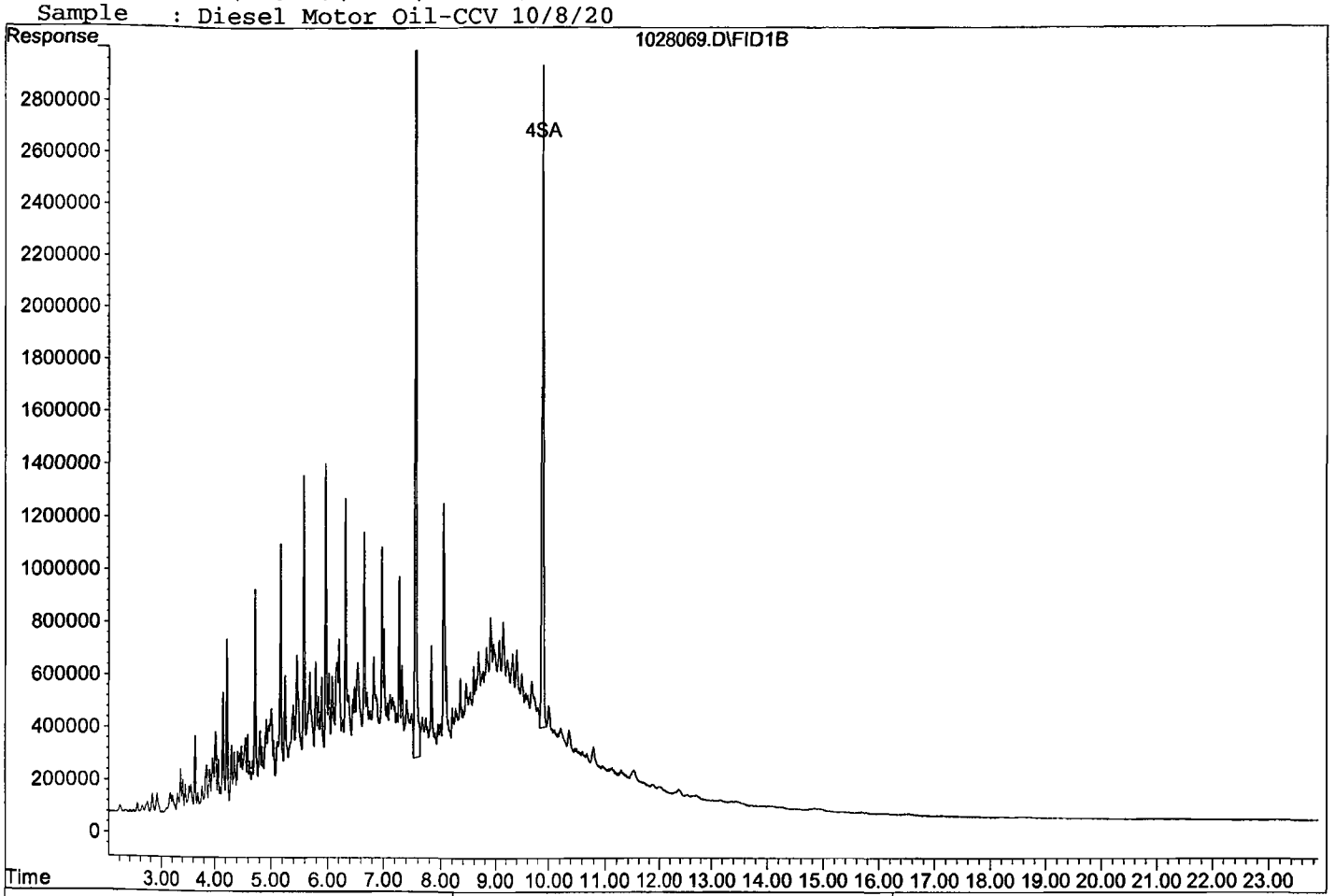
Method : G:\APOLLO\DATA\201028\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 15:45:49 2020
Response via : Multiple Level Calibration

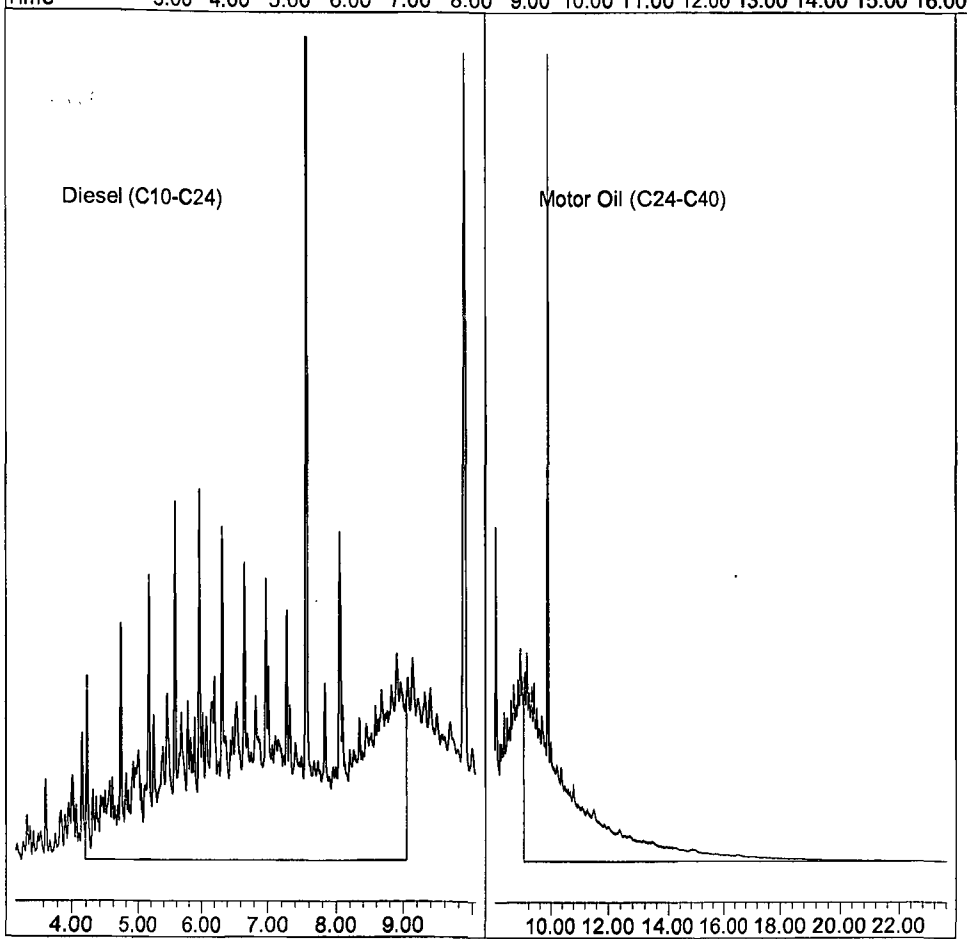
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.56	77270718	15.299 ppb
Surrogate Spike 12.000	Recovery =		127.49%
4) SA Octacosane(S)	9.89	56247296	13.662 ppb
Surrogate Spike 12.000	Recovery =		113.85%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1121808487	260.980 ppb
2) HBTM Motor Oil (C24-C40)	15.82	724355645	240.526 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028069.D
Sample : Diesel Motor Oil-CCV 10/8/20





ORGANICS

Raw Data

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201019\1019034.D Vial: 34
Acq On : 10-20-20 16:35:29 Operator:
Sample : BA20023W14 5/800 Inst : Apollo
Misc : Water Multiplr: 6.25
IntFile : events.e
Quant Time: Dec 8 14:27 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\201019\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:26:31 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

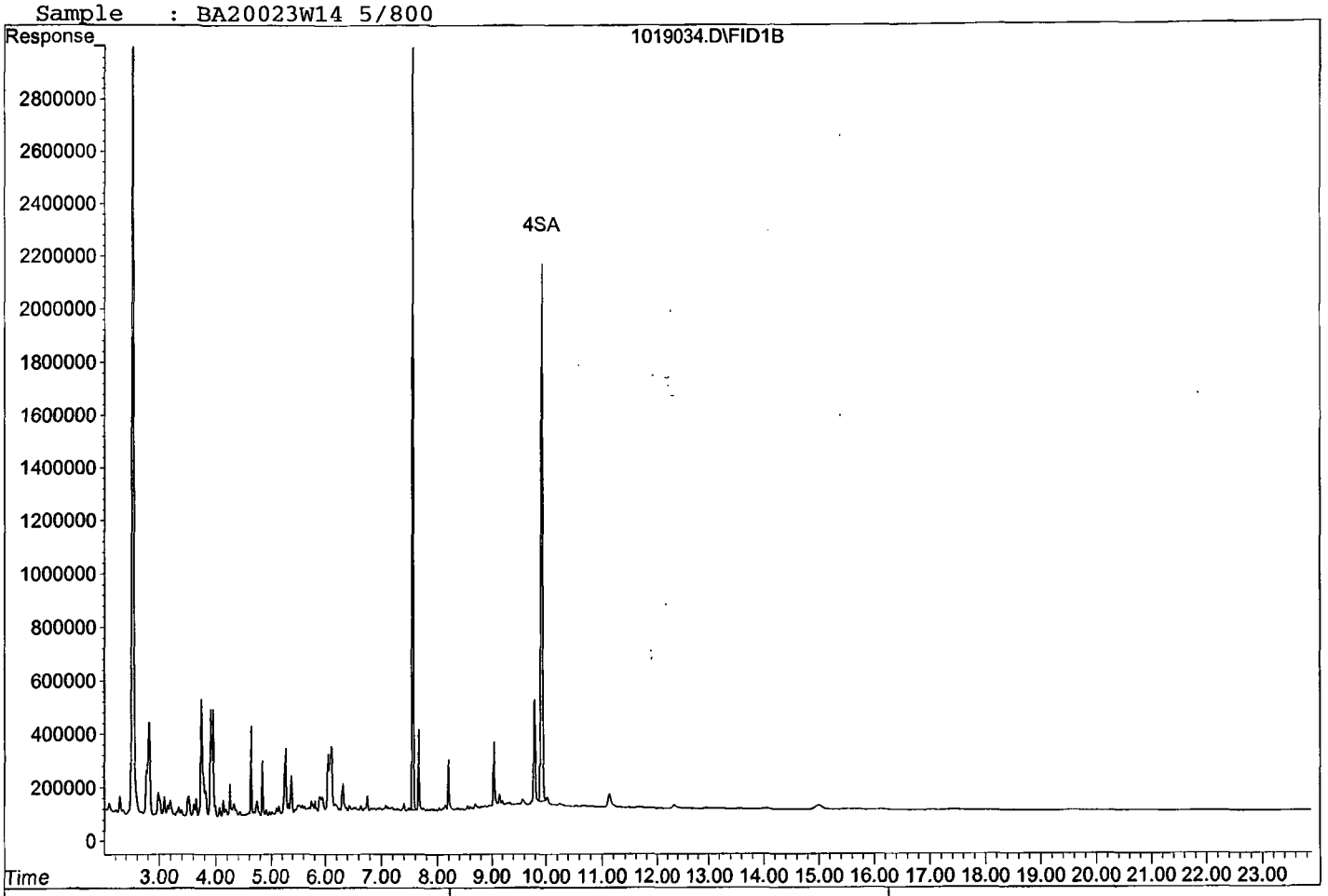
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	52410499	64.855 ppb
Surrogate Spike 75.000	Recovery =		86.47%
4) SA Octacosane(S)	9.93	43982731	66.767 ppb
Surrogate Spike 75.000	Recovery =		89.02%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	115966120	173.658 ppb
2) HBTM Motor Oil (C24-C40)	15.82	84903190	148.997 ppb

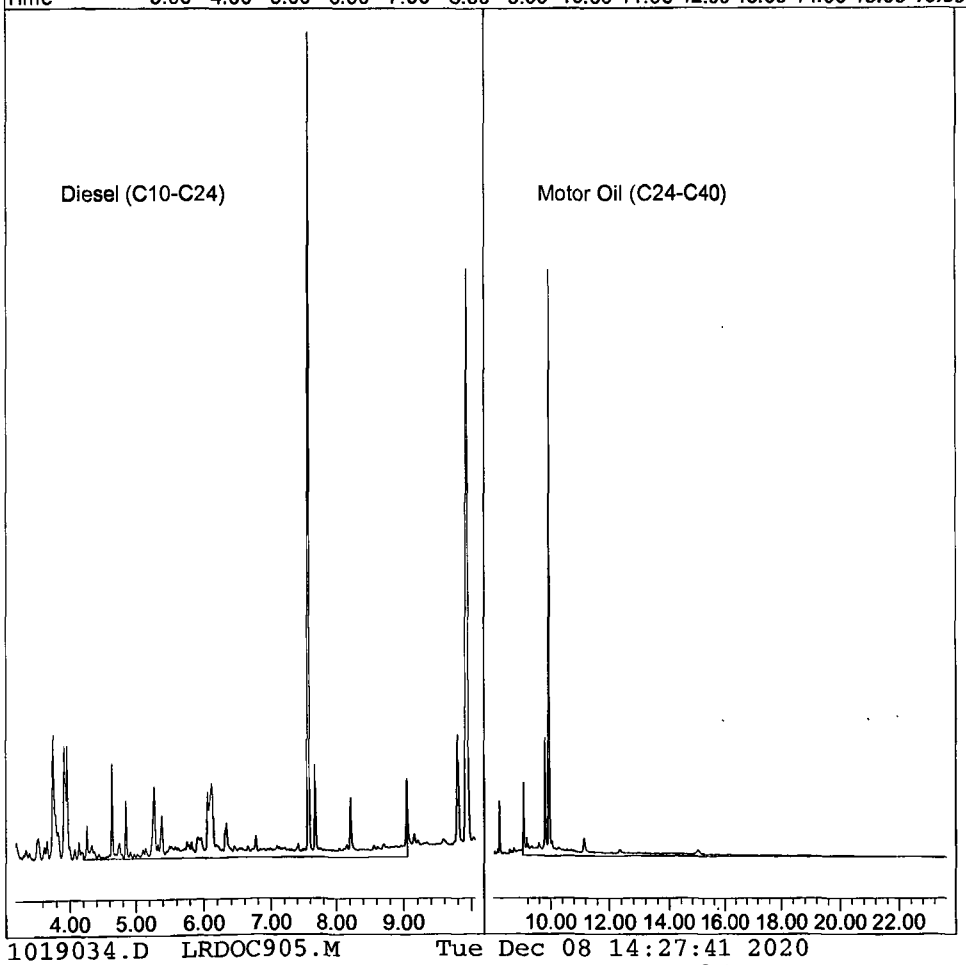
Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File: G:\APOLLO\DATA\201019\1019034.D
Sample : BA20023W14 5/800





1019034.D LRDOC905.M Tue Dec 08 14:27:41 2020 Page 2

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201019\1019035.D Vial: 35
Acq On : 10-20-20 17:03:38 Operator:
Sample : BA20025W15 5/800 Inst : Apollo
Misc : Water Multiplr: 6.25
IntFile : events.e
Quant Time: Dec 8 14:30 2020 Quant Results File: LRDOC905.RES

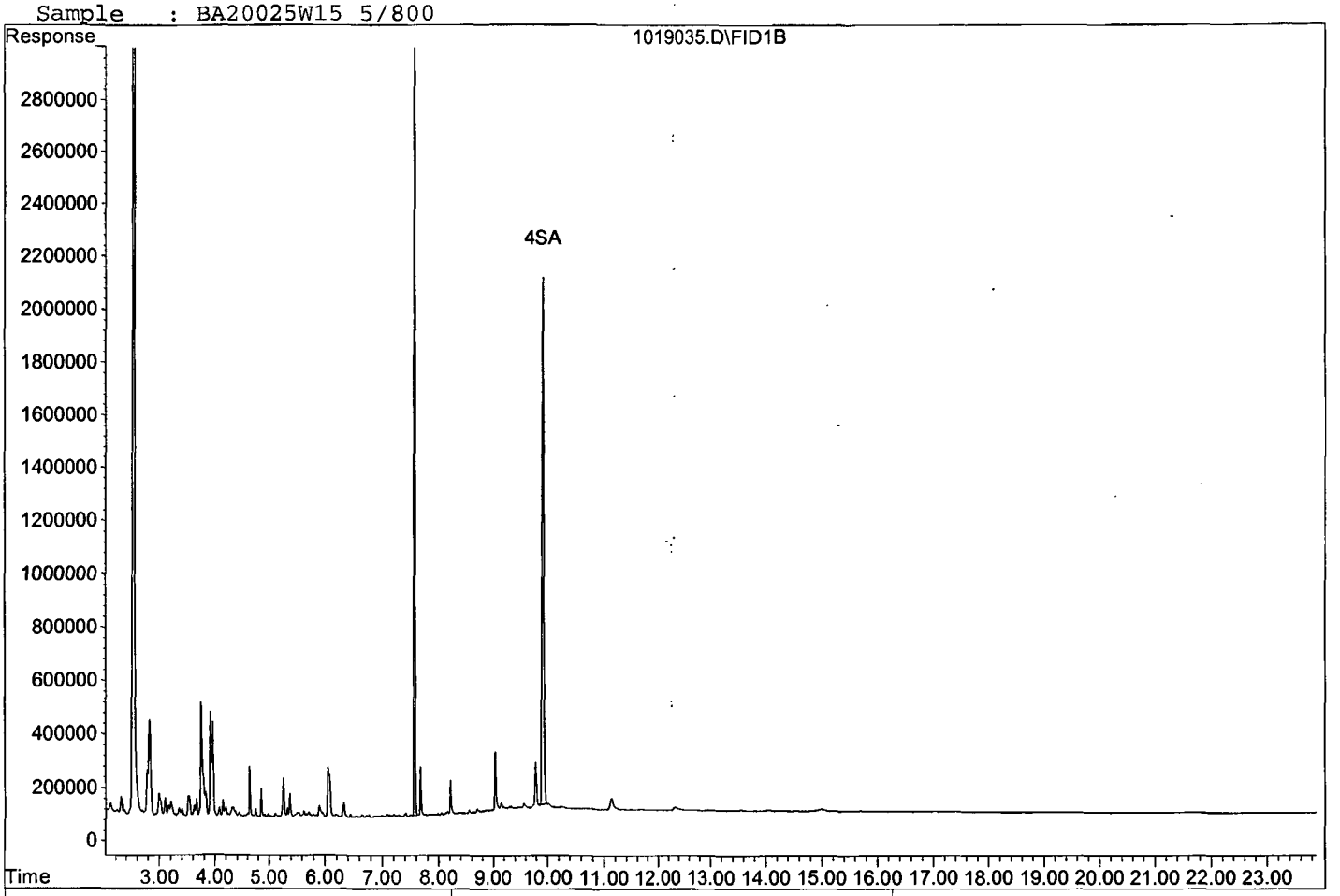
Method : G:\APOLLO\DATA\201019\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:26:31 2020
Response via : Multiple Level Calibration

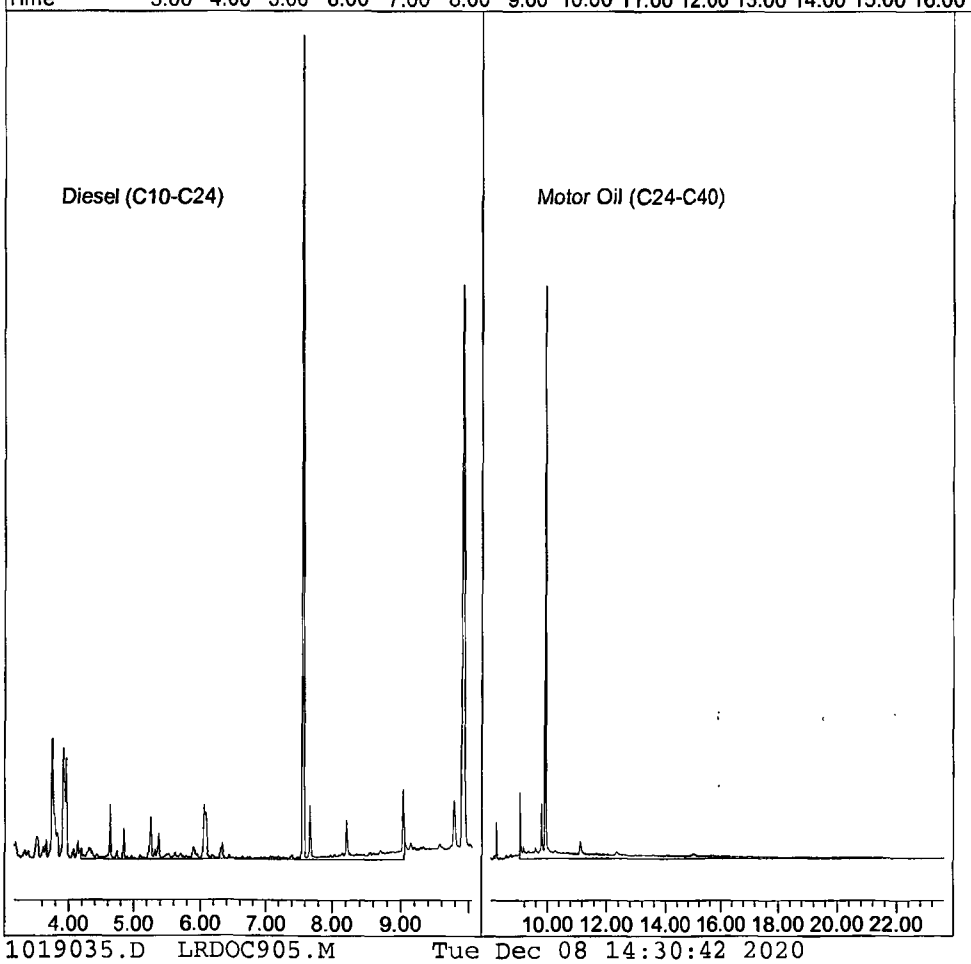
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	51371144	63.569 ppb
Surrogate Spike 75.000	Recovery =		84.76%
4) SA Octacosane(S)	9.92	43194431	65.570 ppb
Surrogate Spike 75.000	Recovery =		87.43%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	52288354	81.389 ppb
2) HBTM Motor Oil (C24-C40)	15.82	83050216	145.072 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201019\1019035.D
Sample : BA20025W15 5/800





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028059.D Vial: 59
Acq On : 10-29-20 18:11:36 Operator:
Sample : BA20023W14 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Dec 9 12:02 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\201028\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 15:45:49 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	50774704	62.831 ppb
Surrogate Spike 75.000	Recovery =		83.77%
4) SA Octacosane(S)	9.89	45858882	69.615 ppb
Surrogate Spike 75.000	Recovery =		92.82%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	39276106	62.534 ppb
2) HBTM Motor Oil (C24-C40)	15.82	24271565	20.585 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028059.D Vial: 59
Acq On : 10-29-20 18:11:36 Operator:
Sample : BA20023W14 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 4 12:41 2020 Quant Results File: DEC0914.RES

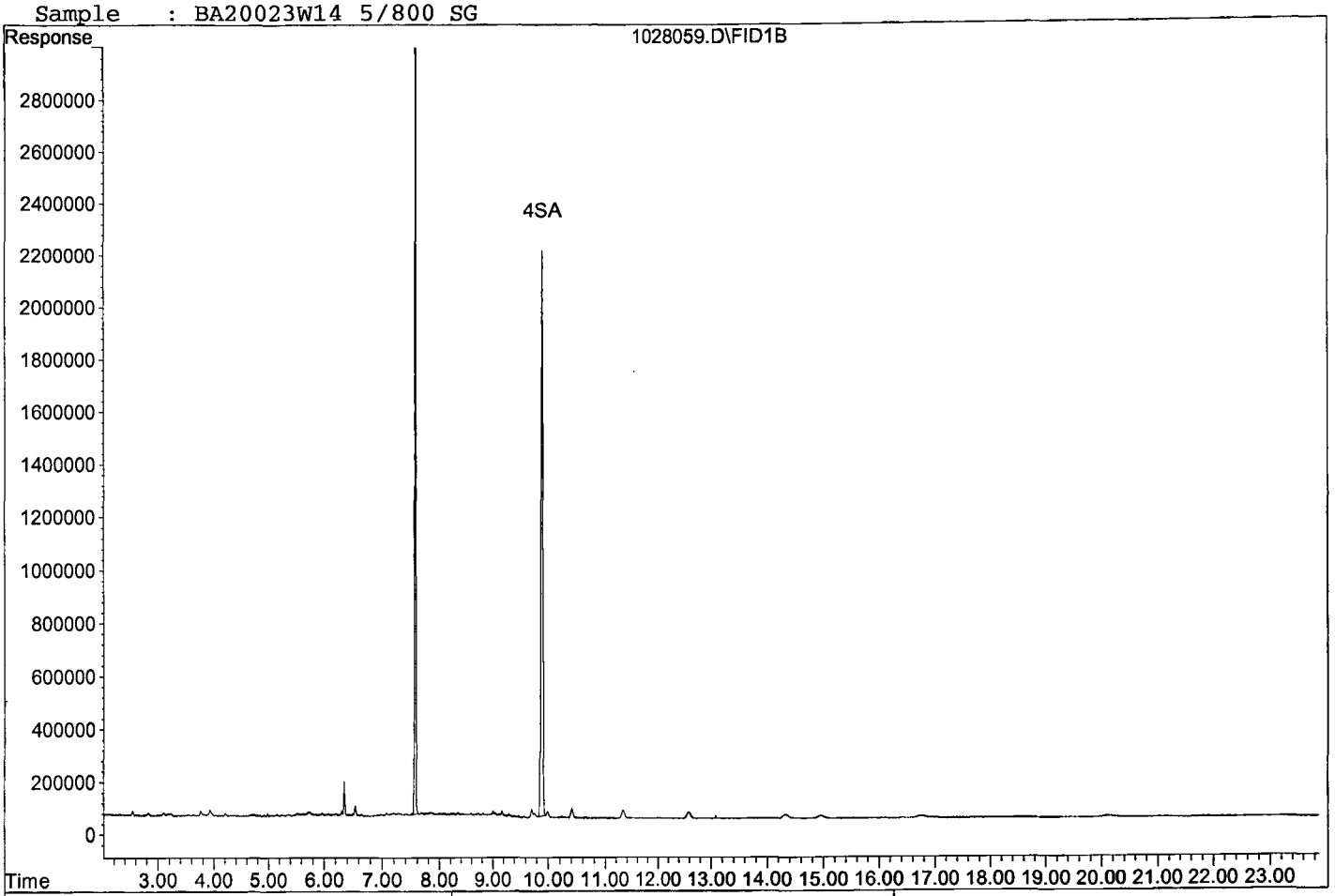
Method : G:\APOLLO\DATA\201028\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

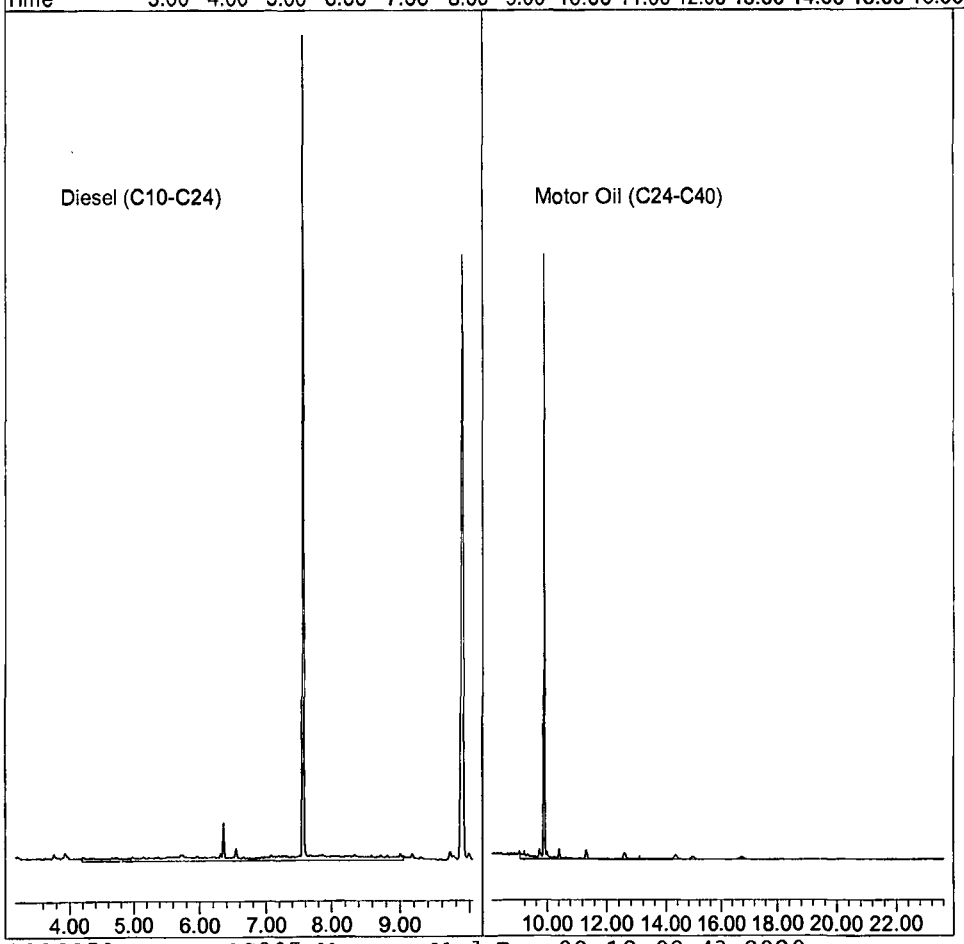
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) SC Decanoic Acid(S)	0.00	0	N.D.	ppb
Surrogate Spike 150.000		Recovery =	0.00%	
Target Compounds				
Target Compounds				

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028059.D
Sample : BA20023W14 5/800 SG





1028059.D LRDOC905.M Wed Dec 09 12:02:43 2020 Page 2

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028030.D Vial: 30
Acq On : 10-29-20 2:02:42 Operator:
Sample : 201019A BLK 5/800 Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Dec 8 14:37 2020 Quant Results File: LRDOC905.RES

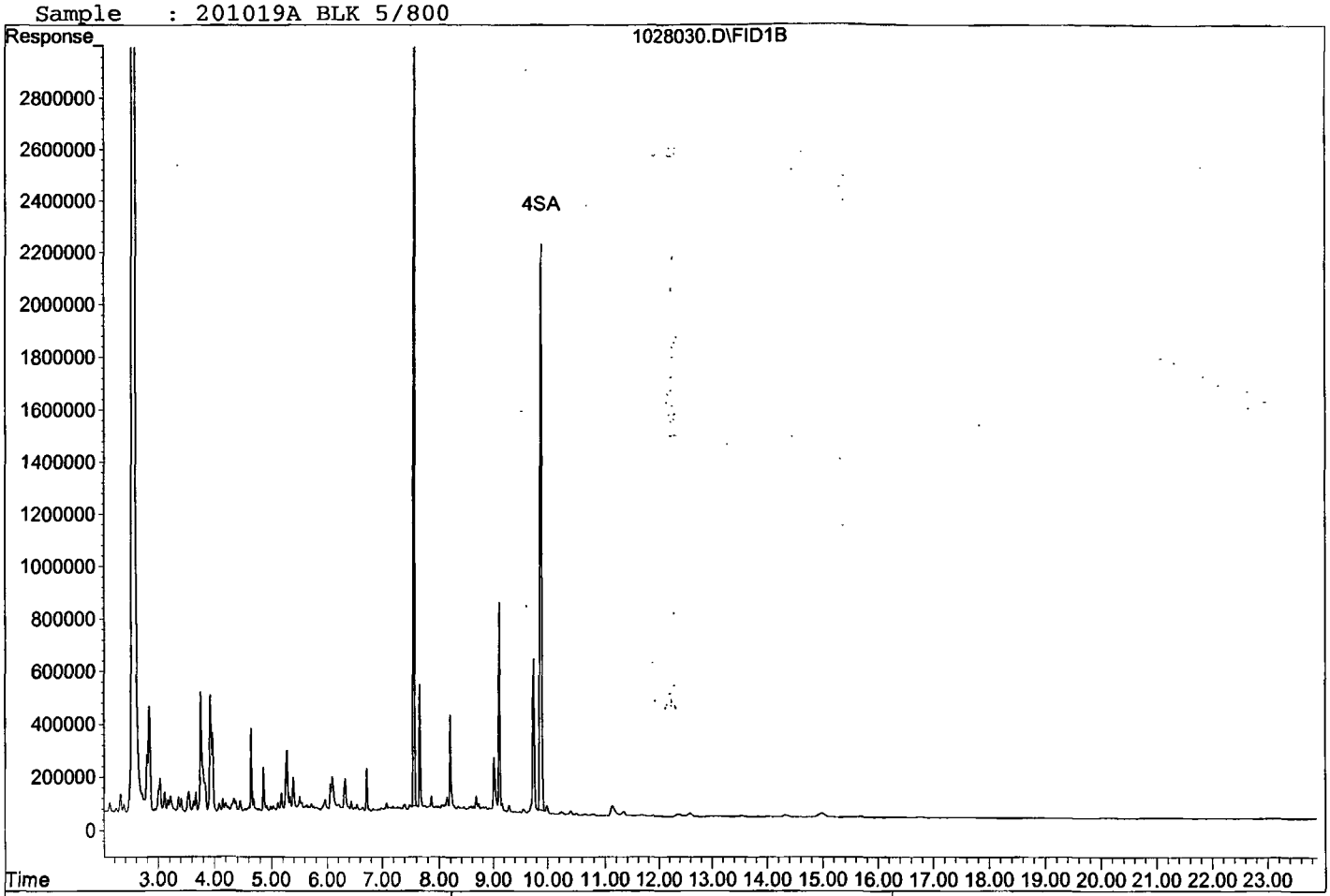
Method : G:\APOLLO\DATA\201028\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:37:31 2020
Response via : Multiple Level Calibration

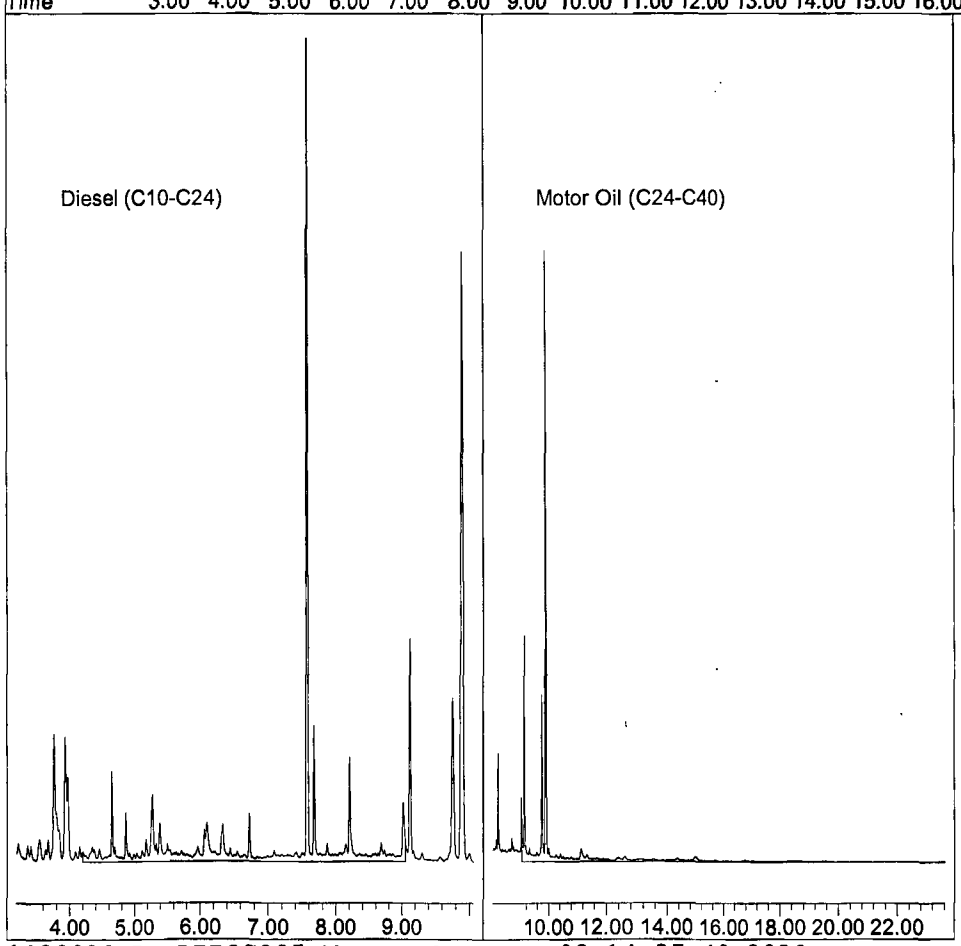
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.56	51772725	64.066 ppb
Surrogate Spike 75.000	Recovery =		85.42%
4) SA Octacosane(S)	9.89	45453522	68.999 ppb
Surrogate Spike 75.000	Recovery =		92.00%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	106494417	159.933 ppb
2) HBTM Motor Oil (C24-C40)	15.82	82173656	143.216 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028030.D
Sample : 201019A BLK 5/800





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201019\1019033.D Vial: 33
Acq On : 10-20-20 16:07:25 Operator:
Sample : 201019A LCS-1 5/800 Inst : Apollo
Misc : Water Multiplr: 6.25
IntFile : events.e
Quant Time: Dec 8 14:25 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\201019\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:25:38 2020
Response via : Multiple Level Calibration

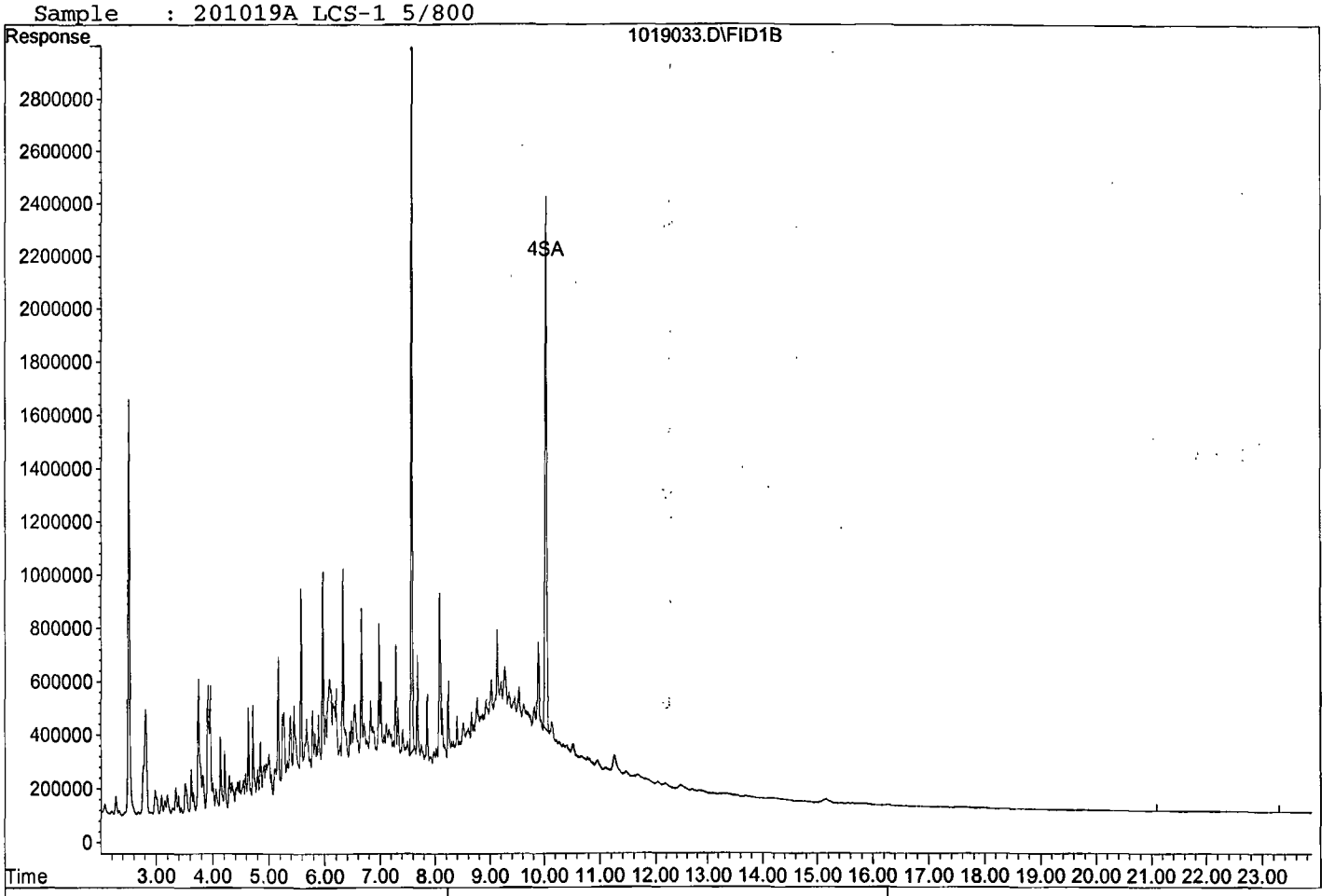
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

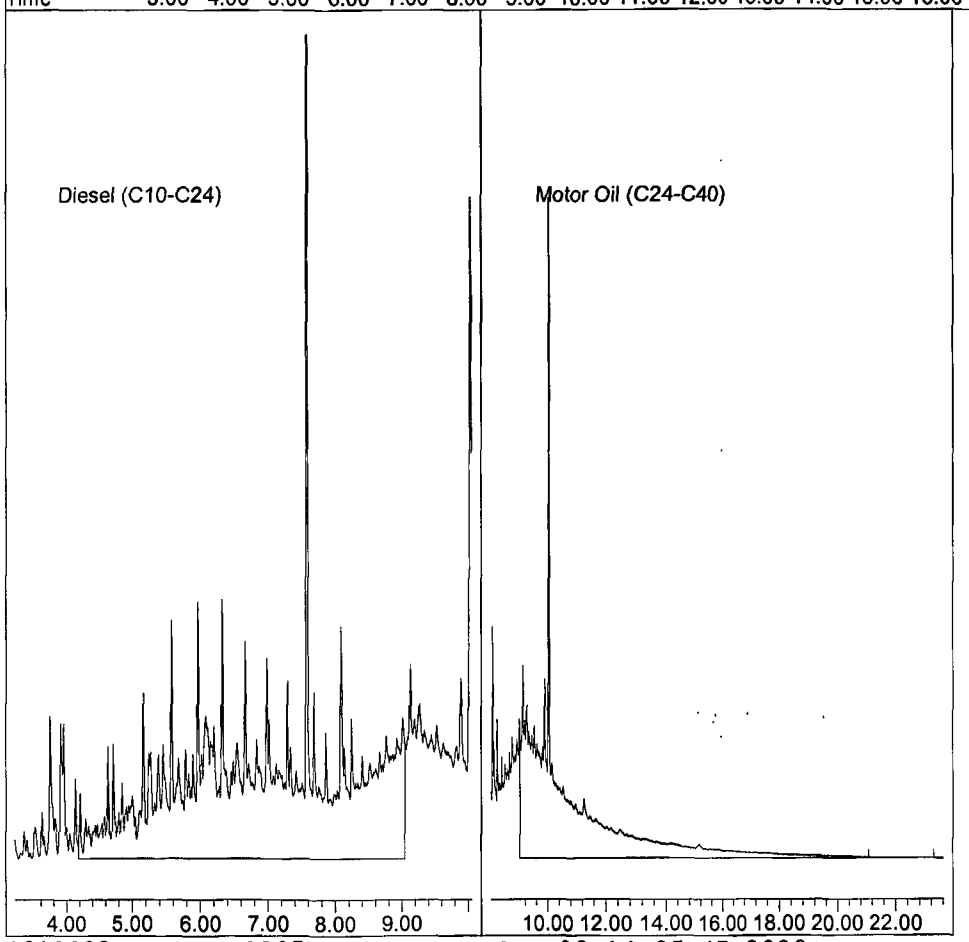
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.58	57014701	70.553 ppb
Surrogate Spike 75.000	Recovery =		94.07%
4) SA Octacosane(S)	10.04	42648908	64.742 ppb
Surrogate Spike 75.000	Recovery =		86.32%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	791829236	1152.983 ppb
2) HBTM Motor Oil (C24-C40)	15.82	637718912	1319.801 ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201019\1019033.D
Sample : 201019A LCS-1 5/800





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028057.D Vial: 57
Acq On : 10-29-20 17:15:25 Operator:
Sample : 201019A BLK 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Dec 9 12:01 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\201028\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 15:45:49 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	48518861	60.040 ppb
Surrogate Spike 75.000	Recovery =		80.05%
4) SA Octacosane(S)	9.89	45537025	69.126 ppb
Surrogate Spike 75.000	Recovery =		92.17%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	33404710	54.026 ppb
2) HBTM Motor Oil (C24-C40)	15.82	23288408	18.503 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028057.D Vial: 57
Acq On : 10-29-20 17:15:25 Operator:
Sample : 201019A BLK 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 4 12:41 2020 Quant Results File: DEC0914.RES

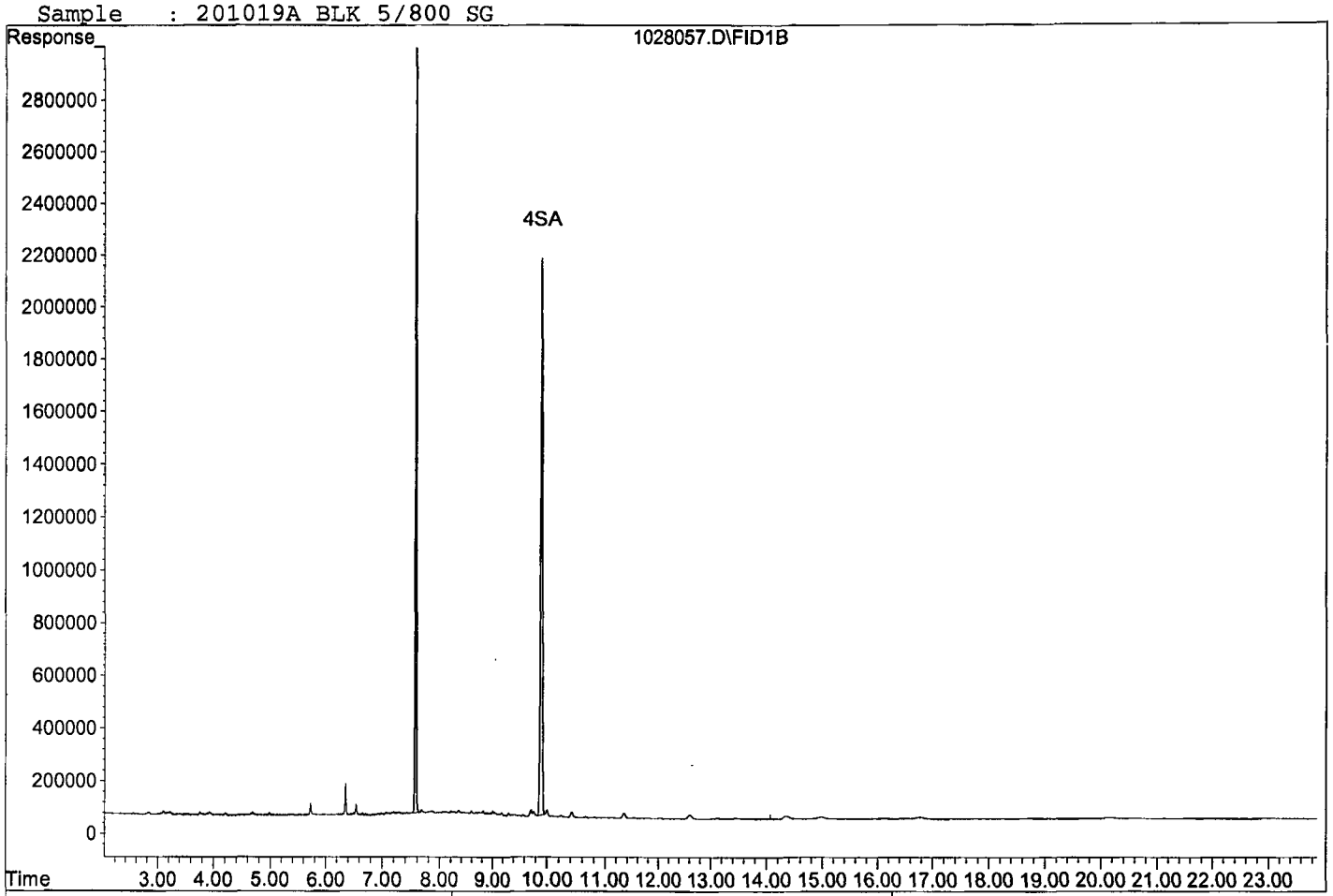
Method : G:\APOLLO\DATA\201028\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

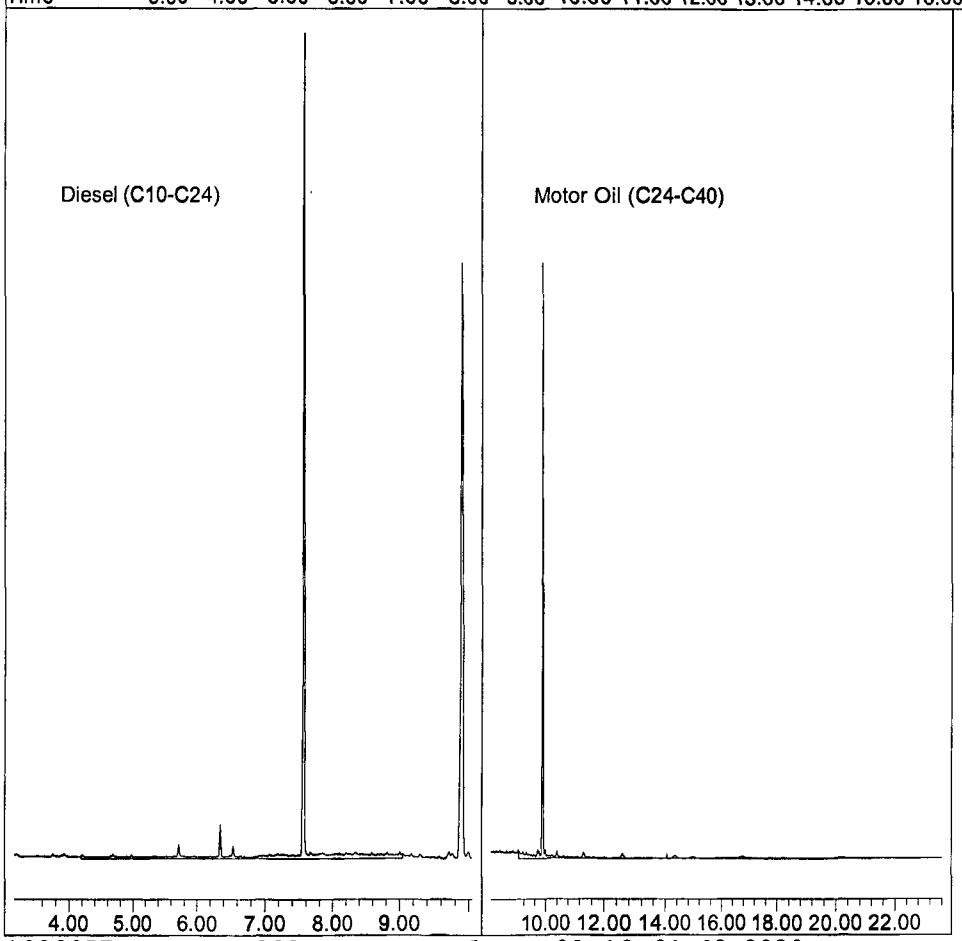
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	0.00	0	N.D. ppb
Surrogate Spike 150.000		Recovery =	0.00%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028057.D
Sample : 201019A BLK 5/800 SG





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028058.D Vial: 58
Acq On : 10-29-20 17:43:32 Operator:
Sample : 201019A LCS-1 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Dec 9 12:01 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\201028\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 15:45:49 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	52443199	64.896 ppb
Surrogate Spike 75.000	Recovery =		86.53%
4) SA Octacosane(S)	9.89	42100581	63.910 ppb
Surrogate Spike 75.000	Recovery =		85.21%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	591094124	862.118 ppb
2) HBTM Motor Oil (C24-C40)	15.82	499627741	1027.339 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\201028\1028058.D Vial: 58
Acq On : 10-29-20 17:43:32 Operator:
Sample : 201019A LCS-1 5/800 SG Inst : Apollo
Misc : water Multiplr: 6.25
IntFile : events.e
Quant Time: Nov 4 12:42 2020 Quant Results File: DEC0914.RES

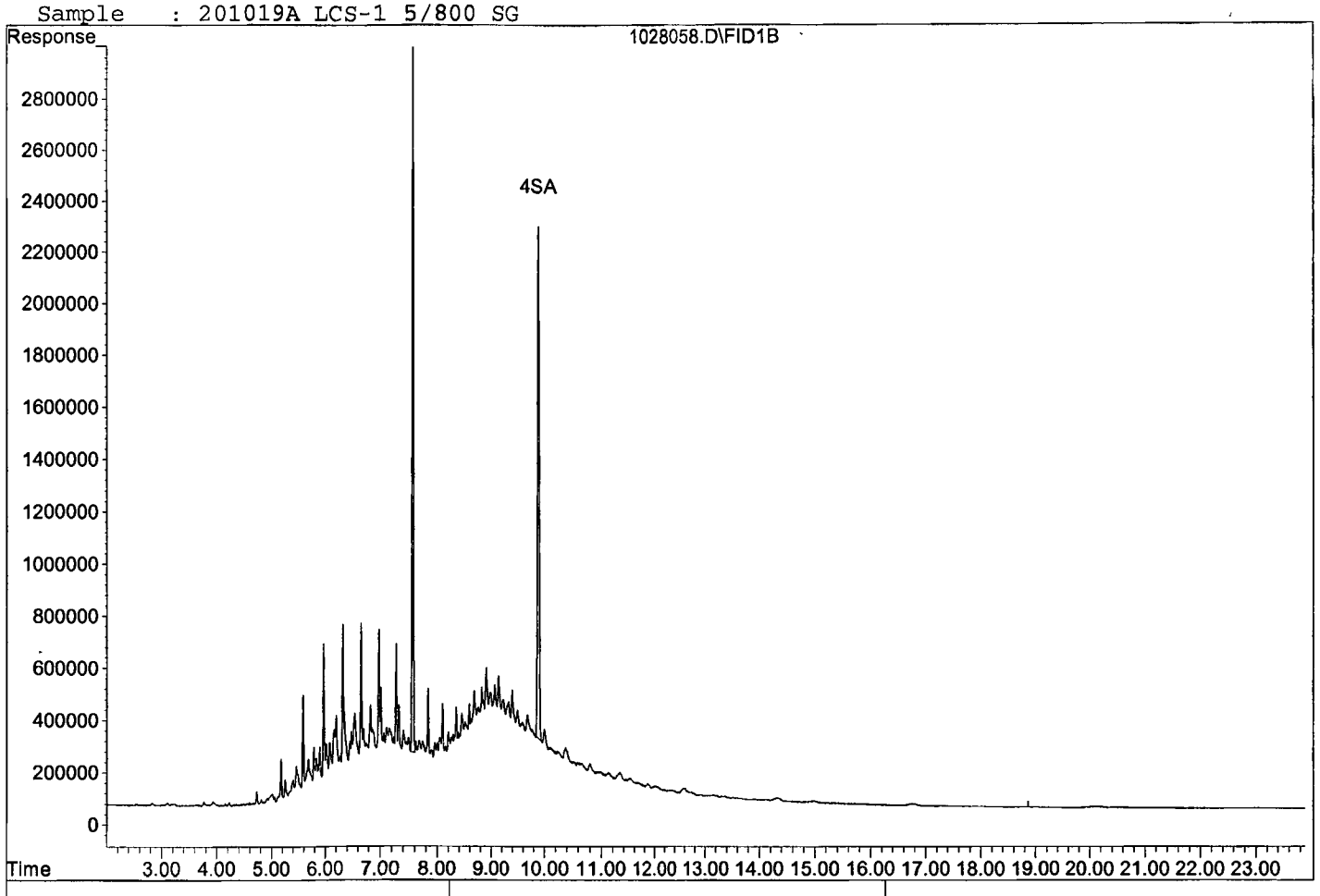
Method : G:\APOLLO\DATA\201028\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

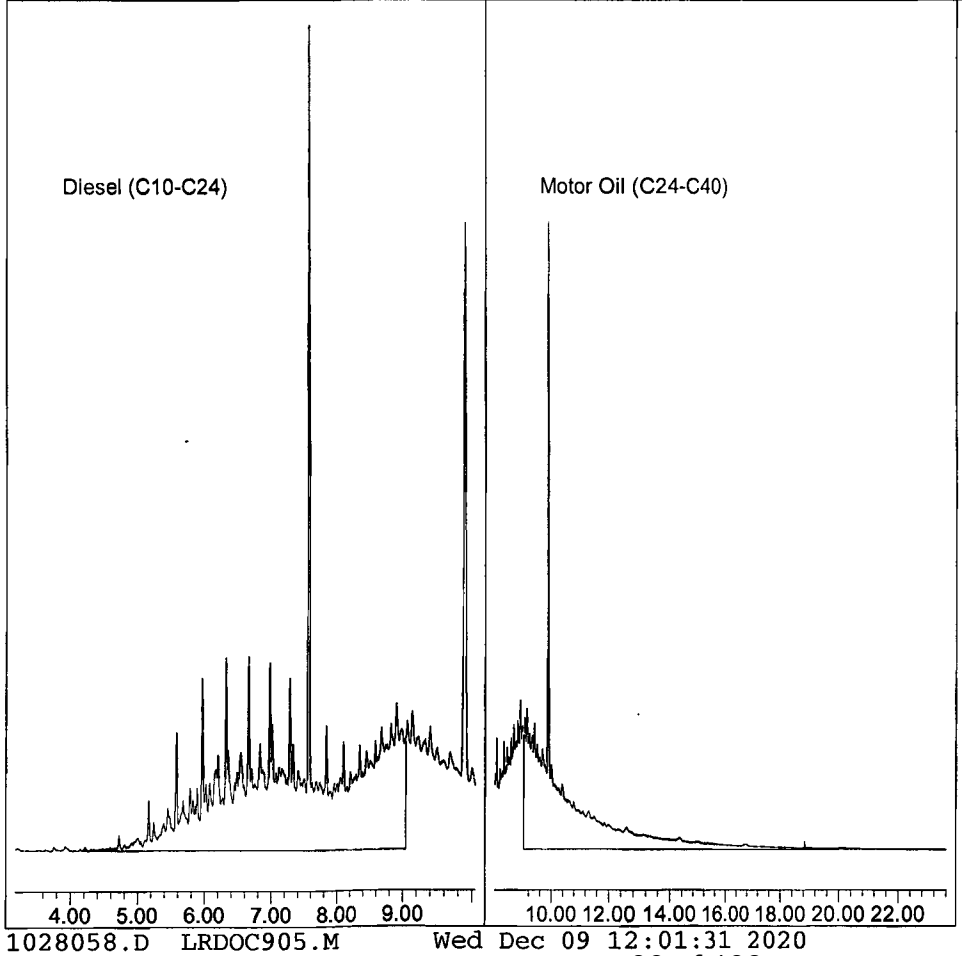
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) SC Decanoic Acid(S)	0.00	0	N.D.	ppb d
Surrogate Spike 150.000		Recovery =	0.00%	
Target Compounds				
Target Compounds				

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028058.D
Sample : 201019A LCS-1 5/800 SG





THC Surrogate

Prepared: 10/15/20 **Prepared By (Initials): SS**

Expires: 10/15/20

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
O-terphenyl / Octacosane Mix	Phenova	ALO-130161	600	**CL15440-50426**	**10/15/21**	**06/30/25**	N/A	N/A	N/A	600

Diesel / Motor Oil Calibration Curve

Prepared: 09/05/20

Expires: 08/05/21

Prepared By (Initials): SS

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference to APPL Prep Date and Lot #'s	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 1	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	5uL	1mL	MC	10
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil -2	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	25uL	1mL	MC	50
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 3	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	125uL	1mL	MC	250
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 4	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	500uL	1mL	MC	1000
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 5	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	750uL	1mL	MC	1500
Diesel / Motor Oil Calibration STD	Restek	Diesel / Motor Oil - 6	2,000	Perp'd: 09/05/20 A0154201-50381,50522,50526 A0155668-50515,50518,50519 CL15440-50421	08/05/21	06/30/25	100uL	100uL	N/A	2,000

Diesel / Motor Oil Calibration Standard

Prepared: 09/05/20

Expires: 08/05/21

Prepared By (Initials): SS

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Diesel Fuel #2	Restek	31258	50,000	**A0154201-50381,50522,50526**	**08/11/21**	**11/30/26**	400uL	10mL	MC	2000
Motor Oil	Restek	31464	50,000	**A0155668-50515,50518,50519**	**08/11/21**	**01/31/27**	400uL			2000
THC Surrogate	Phenova	ALO-130161	600	**CL15440-50421**	**08/05/21**	**06/30/25**	1666uL			100

Decanoic Acid Standard

Prepared: 09/14/20

Expires: 09/14/21

Prepared By (Initials): SS

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Decanoic Acid	O2SI	011729-01-05-5PAK	1,000	**397380-50547**	**09/14/21**	**12/30/21**	600uL	10mL	MC	60

Decanoic Acid Calibration Curve

Prepared: 09/14/20

Expires: 09/14/20

Prepared By (Initials): SS

Methylene Chloride Lot No. 58059

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	APPL Mix Name	Conc. (ug/mL)	Reference To APPL Prep Date	Exp. Date	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Decanoic Acid STD	O2SI	Decanoic Acid-1	60	Prepared 09/14/20	09/14/21	N/A	50uL	1mL	MC	3
Decanoic Acid STD	O2SI	Decanoic Acid-2	60	Prepared 09/14/20	09/14/21	N/A	100uL	1mL	MC	6
Decanoic Acid STD	O2SI	Decanoic Acid-3	60	Prepared 09/14/20	09/14/21	N/A	400uL	1mL	MC	24
Decanoic Acid STD	O2SI	Decanoic Acid-4	60	Prepared 09/14/20	09/14/21	N/A	600uL	1mL	MC	36
Decanoic Acid STD	O2SI	Decanoic Acid-5	60	Prepared 09/14/20	09/14/21	N/A	800uL	1mL	MC	48
Decanoic Acid STD	O2SI	Decanoic Acid-6	60	Prepared 09/14/20	09/14/21	N/A	100uL	100uL	N/A	60

Decanoic Acid Spike

Prepared: 09/11/20 **Prepared By (Initials): SS**

Expires: 09/11/21

Initial Standard Information							Final Standard Information			
Name of Initial Standard (QAU Label)	Supplier	Supplier Part No.	Conc. (ug/mL)	Lot Number - QA Number	Exp. Date (1 yr.)	Exp. Date (Manufacturer)	Aliquot From Stock	Final Volume	Solvent	Final Standard Conc. (ug/mL)
Decanoic Acid Spike	O2SI	011729-01-05-5PAK	1,000	**397380-50547**	**09/11/21**	**12/30/21**	N/A	N/A	N/A	1,000

Organic Extraction Worksheet

Method	Continuous Liq/Liq TPH-Diesel/MO 3520C	Extraction Set	201019A	Extraction Method	LIQ005	Units	mL

Spiked ID 1	Diesel Motor Oil Mix 9/29/20-9/29/21		Surrogate ID 1	THC Surrogate 10/15/20-10/15/21	
Spiked ID 2	Decanoic Acid Spike 9/11/20-9/11/21		Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	YES	
Spiked ID 7			Ext. Start Time:	10/19/20 12:05	
Spiked ID 8			Ext. End Time:	10/21/20 10:00	
			GC Requires Extract By:		

pH1	2	10/19/20 11:00	Water Bath Temp 1 °C	37/37 WB1 °C
pH2			Water Bath Temp 2 °C	36/37 WB2
pH3			Water Bath Temp 3 °C	36/34 WB3 °C

Spiked By: DL **Date** 10/19/20 **Witnessed By:** KY **Date** 10/19/20

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	201019A Blk				0.1	1 equip	800 E-HP47 E-WB1	5	2	10/19/20 12:05	*
2	201019A LCS-1		0.040	1	0.1	1 equip	800 E-HP25 E-WB1	5	2	10/19/20 12:05	*
3	BA20023	BA20023W14			0.1	1 equip	800 E-HP26 E-WB2	5	2	10/19/20 12:05	93704*
4	BA20025	BA20025W15			0.1	1 equip	800 E-HP27 E-WB1	5	2	10/19/20 12:05	93704*
5	BA20054 MS-1	BA20054W22	0.040	1	0.1	1 equip	800 E-HP29 E-WB2	5	2	10/19/20 12:05	93719
6	BA20054 MSD-1	BA20054W23	0.040	1	0.1	1 equip	800 E-HP30 E-WB3	5	2	10/19/20 12:05	93719
7	BA20054	BA20054W24			0.1	1 equip	800 E-HP28 E-WB1	5	2	10/19/20 12:05	93719*
8	BA20055	BA20055W10			0.1	1 equip	800 E-HP16 E-WB3	5	2	10/19/20 12:05	93719*
9	BA20057	BA20057W13			0.1	1 equip	800 E-HP15 E-WB1	5	2	10/19/20 12:05	93719*
10	BA20058	BA20058W11			0.1	1 equip	800 E-HP14 E-WB2	5	2	10/19/20 12:05	93719*
11	BA20060	BA20060W15			0.1	1 equip	800 E-HP13 E-WB1	5	2	10/19/20 12:05	93719*
12	BA20062	BA20062W13			0.1	1 equip	800 E-HP12 E-WB2	5	2	10/19/20 12:05	93719*
13	BA20064	BA20064W15			0.1	1 equip	800 E-HP11 E-WB1	5	2	10/19/20 12:05	93719*
14	BA20070	BA20070W08			0.1	1 equip	800 E-HP10 E-WB2	5	2	10/19/20 12:05	93725
15	BA20071 MS-1	BA20071W17	0.040	1	0.1	1 equip	800 E-HP8 E-WB3	5	2	10/19/20 12:05	93725
16	BA20071 MSD-1	BA20071W16	0.040	1	0.1	1 equip	800 E-HP7 E-WB1	5	2	10/19/20 12:05	93725

Solvent and Lot#	
1+1 HCL Amber Liter	9/28/20
PH Strips	HC904495
Dicholormethane	60127
Filter Paper	400178
B. Sodium Sulfate	2019070279
Silica Gel (*)	050627T

Extraction COC Transfer	
Extraction lab employee Initials	SS
GC analyst's initials	SS
Date	10/20/20
Time	15:00
Refrigerator	HOBART

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL,DS
Concentration	DS,MP

Modified	11/05/20 3:04:59 PM

Reviewed By: SS **Date** 11/05/20

Organic Extraction Worksheet

Method	Continuous Liq/Liq TPH-Diesel/MO 3520C	Extraction Set	201019A	Extraction Method	LIQ005	Units	mL

Spiked ID 1	Diesel Motor Oil Mix 9/29/20-9/29/21		Surrogate ID 1	THC Surrogate 10/15/20-10/15/21	
Spiked ID 2	Decanoic Acid Spike 9/11/20-9/11/21		Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	YES	
Spiked ID 7			Ext. Start Time:	10/19/20 12:05	
Spiked ID 8			Ext. End Time:	10/21/20 10:00	
			GC Requires Extract By:		

pH1	2	10/19/20 11:00	Water Bath Temp 1 °C	37/37 WB1 °C
pH2			Water Bath Temp 2 °C	36/37 WB2
pH3			Water Bath Temp 3 °C	36/34 WB3 °C

Spiked By: DL **Date** 10/19/20 **Witnessed By:** KY **Date** 10/19/20

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	BA20071	BA20071W18			0.1	1	800	5	2	10/19/20 12:05	93725
						equip	E-HP9 E-WB3				
18	BA20184	BA20184W15			0.1	1	800	5	2	10/19/20 12:05	93740*
						equip	E-HP6 E-WB2				
19	BA20186	BA20186W13			0.1	1	800	5	2	10/19/20 12:05	93740*
						equip	E-HP26 E-WB2				
20	BA20188	BA20188W13			0.1	1	800	5	2	10/19/20 12:05	93740*
						equip	E-HP27 E-WB1				
21	BA20190	BA20190W16			0.1	1	800	5	2	10/19/20 12:05	93740*
						equip	E-HP28 E-WB1				
22	BA20268	BA20268W13			0.1	1	800	5	2	10/19/20 12:05	93765*
						equip	E-HP29 E-WB2				

Solvent and Lot#	
1+1 HCL Amber Liter	9/28/20
PH Strips	HC904495
Dicholormethane	60127
Filter Paper	400178
B. Sodium Sulfate	2019070279
Silica Gel (*)	050627T

Extraction COC Transfer	
Extraction lab employee Initials	SS
GC analyst's initials	SS
Date	
Time	
Refrigerator	HOBART

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL,DS
Concentration	DS,MP

Modified	11/05/20 3:04:59 PM

Reviewed By: SS **Date** 11/05/20

Injection Log

Directory: G:\APOLLO\DATA\200905\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	7	905007.D	1	Diesel Motor Oil-1 9/5/20	Water	9-5-20 17:04:35
2	8	905008.D	1	Diesel Motor Oil-2 9/5/20	Water	9-5-20 17:32:40
3	9	905009.D	1	Diesel Motor Oil-3 9/5/20	Water	9-5-20 18:00:45
4	10	905010.D	1	Diesel Motor Oil-4 9/5/20	Water	9-5-20 18:28:54
5	11	905011.D	1	Diesel Motor Oil-5 9/5/20	Water	9-5-20 18:56:54
6	12	905012.D	1	Diesel Motor Oil-6 9/5/20	Water	9-5-20 19:24:55
7	13	905013.D	1	Diesel Motor Oil-SS 7/21/20	Water	9-5-20 19:52:52
8	4	914004.D	1	Decanoic Acid-1 9/14/20	water	9-14-20 10:24:43
9	5	914005.D	1	Decanoic Acid-2 9/14/20	water	9-14-20 10:52:47
10	6	914006.D	1	Decanoic Acid-3 9/14/20	water	9-14-20 11:20:51
11	7	914007.D	1	Decanoic Acid-4 9/14/20	water	9-14-20 11:48:52
12	8	914008.D	1	Decanoic Acid-5 9/14/20	water	9-14-20 12:16:53
13	9	914009.D	1	Decanoic Acid-6 9/14/20	water	9-14-20 12:44:57
14	32	1019032.D	1	Diesel Motor Oil-CCV 10/8/20	Water	10-20-20 12:52:56
15	33	1019033.D	6.25	201019A LCS-1 5/800	Water	10-20-20 16:07:25
16	34	1019034.D	6.25	BA20023W14 5/800	Water	10-20-20 16:35:29
17	35	1019035.D	6.25	BA20025W15 5/800	Water	10-20-20 17:03:38
18	42	1019042.D	1	Diesel Motor Oil-CCV 10/8/20	Water	10-20-20 20:21:12
19	29	1028029.D	1	Diesel Motor Oil-CCV 10/8/20	water	10-29-20 1:34:57
20	30	1028030.D	6.25	201019A BLK 5/800	water	10-29-20 2:02:42
21	36	1028036.D	1	Diesel Motor Oil-CCV 10/8/20	water	10-29-20 4:48:47
22	55	1028055.D	1	Diesel Motor Oil-CCV 10/8/20	water	10-29-20 16:19:06
23	56	1028056.D	1	Decanoic Acid-CCV 7/28/20	water	10-29-20 16:47:16
24	57	1028057.D	6.25	201019A BLK 5/800 SG	water	10-29-20 17:15:25
25	58	1028058.D	6.25	201019A LCS-1 5/800 SG	water	10-29-20 17:43:32
26	59	1028059.D	6.25	BA20023W14 5/800 SG	water	10-29-20 18:11:36
27	68	1028068.D	1	Decanoic Acid-CCV 7/28/20	water	10-29-20 22:23:40
28	69	1028069.D	1	Diesel Motor Oil-CCV 10/8/20	water	10-29-20 22:51:28

908 North Temperance Ave. ∇ Clovis, CA 93611 ∇ Phone 559-275-2175 ∇ Fax 559-275-4422

Certification Number: CA1312
NELAP Certification number: CA00046
DoD-ELAP Certificate number: 4064.01

Data Validatable Report

December 9, 2020

AECOM
1001 Bishop Street, Suite 1600
Honolulu, Hawaii 96813 Addendum

Attn: Brooke Gottmeier

Title: Report of Data: Case 93719 Addendum

Project: 60571032 CV18F0126 Red Hill Fuel Storage, HI

Contract #: Prime contract # for DoD: NAVY CLEAN N62742-17-F-1800, CV18F0126
Subcontract: 18S-22209-HI27

Dear Ms. Gottmeier:

Twelve water samples were received October 14, 2020. Revised written results for the requested analyses are being provided on this December 9, 2020**. Revision 11-25-20**: Sample ERH1158 diesel result reported as non-detect.

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Addendum 12/9/2020: The low point for motor oil was included in the ICAL. The motor oil ICAL model was changed from average response factor to linear regression. The samples were calculated against the new curve and the data is reported in this package. These results supercede all data for this quarter.

If you have any questions or require further information, please contact your APPL Project Manager, Libby Cheeseborough, libby@applinc.com, at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC and DoD QSM. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.

Sharon Dekmlow SD for PM

Paula McCartney, Laboratory Director
APPL, Inc.

PM/lac
Enclosure
cc: File

Data Validation Package

for

60571032 CV18F0126 Red Hill Fuel Storage

APPL SDG 93719 Addendum

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CASE NARRATIVE

Case Narrative

ARF: 93719 Addendum

Project: 60571032 CV18F0126 Red Hill Fuel Storage, HI

Sample Receipt Information:

Twelve water samples were received October 14, 2020, at 1.5°C, 1.6°C, 2.0°C, 1.5°C, 3.0°C, 2.5°C, 3.0°C, 3.0°C, 4.0°C, and 3.0°C. The sample group was assigned Analytical Request Form (ARF) number 93719.

Sample Preparation and Analysis Information:

For the EPA 8015B analysis, the samples were extracted according to EPA method 3520C. The sample extracts were silica gel cleaned according to APPL's SOP CLN004 and placed on hold.

The blanks are reported as U to the LOD for extracts that calculate below160ppb which is ½ the LOQ and follows QSM 5.3. Samples that calculate between 150ppb and 160 ppb are compared to the chromatogram of the blank. If it is similar to the blank pattern, the sample is reported as U to the LOD as specified in the EPA 8015B method. If the pattern is not the same as the blank, the sample is reported at that level as a J value.

Only the portion of the injection log relative to these samples is included. A full sequence log is available upon request. Measurement uncertainty can be reported upon request.

Analytical Exceptions, Deviations and Abnormalities.

EPA 8015B: The CCV 1028069 recovered the surrogate ortho terphenyl at 22%.

The blank associated with sample ERH1158 had motor oil detected above the LOQ. The sample was extracted again 15 days after collection.

Three samples were taken off hold and silica gel was performed and reported.

SDG	Received	Client ID	APPL ID	Collected DateTime	Matrix	Method	Method Description
93719	10/14/20	ERH1156	BA20053	10/13/20 8:05:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93719	10/14/20	ERH1156	BA20053	10/13/20 8:05:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
93719	10/14/20	ERH1156	BA20053	10/13/20 8:05:00 AM	WATER	RSK 175	METHANE BY RSK 175
93719	10/14/20	ERH1157	BA20054	10/13/20 8:40:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
93719	10/14/20	ERH1157	BA20054	10/13/20 8:40:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
93719	10/14/20	ERH1157	BA20054	10/13/20 8:40:00 AM	WATER	EPA 353.2	WETLAB 353.2 TOXN- WATER
93719	10/14/20	ERH1157	BA20054	10/13/20 8:40:00 AM	WATER	SM3500FeB	Ferrous Iron
93719	10/14/20	ERH1157	BA20054	10/13/20 8:40:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93719	10/14/20	ERH1157	BA20054	10/13/20 8:40:00 AM	WATER	EPA 8270D	EPA 8270D WATER
93719	10/14/20	ERH1157	BA20054	10/13/20 8:40:00 AM	WATER	EPA 8270D	EPA 8270D WATER RE-EXTRACT
93719	10/14/20	ERH1157	BA20054	10/13/20 8:40:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
93719	10/14/20	ERH1157	BA20054	10/13/20 8:40:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
93719	10/14/20	ERH1157	BA20054	10/13/20 8:40:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
93719	10/14/20	ERH1157	BA20054	10/13/20 8:40:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
93719	10/14/20	ERH1157	BA20054	10/13/20 8:40:00 AM	WATER	RSK 175	METHANE BY RSK 175
93719	10/14/20	ERH1157	BA20054	10/13/20 8:40:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
93719	10/14/20	ERH1157	BA20054	10/13/20 8:40:00 AM	WATER	SW846 9060A	9060A TOC
93719	10/14/20	ERH1158	BA20055	10/13/20 8:40:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93719	10/14/20	ERH1158	BA20055	10/13/20 8:40:00 AM	WATER	EPA 8270D	EPA 8270D WATER
93719	10/14/20	ERH1158	BA20055	10/13/20 8:40:00 AM	WATER	EPA 8270D	EPA 8270D WATER RE-EXTRACT
93719	10/14/20	ERH1158	BA20055	10/13/20 8:40:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
93719	10/14/20	ERH1158	BA20055	10/13/20 8:40:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
93719	10/14/20	ERH1158	BA20055	10/13/20 8:40:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
93719	10/14/20	ERH1158	BA20055	10/13/20 8:40:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH RE-EXTRACT
93719	10/14/20	ERH1158	BA20055	10/13/20 8:40:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
93719	10/14/20	ERH1158	BA20055	10/13/20 8:40:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
93719	10/14/20	ERH1161	BA20056	10/12/20 1:15:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93719	10/14/20	ERH1161	BA20056	10/12/20 1:15:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
93719	10/14/20	ERH1161	BA20056	10/12/20 1:15:00 PM	WATER	RSK 175	METHANE BY RSK 175
93719	10/14/20	ERH1162	BA20057	10/12/20 2:15:00 PM	WATER	SM 2320B	Wetlab 2320B - Water
93719	10/14/20	ERH1162	BA20057	10/12/20 2:15:00 PM	WATER	EPA 300.0	Wetlab 300.0 - Water
93719	10/14/20	ERH1162	BA20057	10/12/20 2:15:00 PM	WATER	EPA 353.2	WETLAB 353.2 TOXN- WATER
93719	10/14/20	ERH1162	BA20057	10/12/20 2:15:00 PM	WATER	SM3500FeB	Ferrous Iron
93719	10/14/20	ERH1162	BA20057	10/12/20 2:15:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93719	10/14/20	ERH1162	BA20057	10/12/20 2:15:00 PM	WATER	EPA 8270D	EPA 8270D WATER
93719	10/14/20	ERH1162	BA20057	10/12/20 2:15:00 PM	WATER	EPA 8270D	EPA 8270D WATER RE-EXTRACT
93719	10/14/20	ERH1162	BA20057	10/12/20 2:15:00 PM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
93719	10/14/20	ERH1162	BA20057	10/12/20 2:15:00 PM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
93719	10/14/20	ERH1162	BA20057	10/12/20 2:15:00 PM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
93719	10/14/20	ERH1162	BA20057	10/12/20 2:15:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
93719	10/14/20	ERH1162	BA20057	10/12/20 2:15:00 PM	WATER	RSK 175	METHANE BY RSK 175
93719	10/14/20	ERH1162	BA20057	10/12/20 2:15:00 PM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
93719	10/14/20	ERH1162	BA20057	10/12/20 2:15:00 PM	WATER	SW846 9060A	9060A TOC
93719	10/14/20	ERH1163	BA20058	10/12/20 2:15:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93719	10/14/20	ERH1163	BA20058	10/12/20 2:15:00 PM	WATER	EPA 8270D	EPA 8270D WATER
93719	10/14/20	ERH1163	BA20058	10/12/20 2:15:00 PM	WATER	EPA 8270D	EPA 8270D WATER RE-EXTRACT
93719	10/14/20	ERH1163	BA20058	10/12/20 2:15:00 PM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
93719	10/14/20	ERH1163	BA20058	10/12/20 2:15:00 PM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
93719	10/14/20	ERH1163	BA20058	10/12/20 2:15:00 PM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
93719	10/14/20	ERH1163	BA20058	10/12/20 2:15:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
93719	10/14/20	ERH1163	BA20058	10/12/20 2:15:00 PM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ

93719	10/14/20	ERH1164	BA20059	10/12/20 3:35:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93719	10/14/20	ERH1164	BA20059	10/12/20 3:35:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
93719	10/14/20	ERH1164	BA20059	10/12/20 3:35:00 PM	WATER	RSK 175	METHANE BY RSK 175
93719	10/14/20	ERH1165	BA20060	10/12/20 4:10:00 PM	WATER	SM 2320B	Wetlab 2320B - Water
93719	10/14/20	ERH1165	BA20060	10/12/20 4:10:00 PM	WATER	EPA 300.0	Wetlab 300.0 - Water
93719	10/14/20	ERH1165	BA20060	10/12/20 4:10:00 PM	WATER	EPA 353.2	WETLAB 353.2 TOXN- WATER
93719	10/14/20	ERH1165	BA20060	10/12/20 4:10:00 PM	WATER	SM3500FeB	Ferrous Iron
93719	10/14/20	ERH1165	BA20060	10/12/20 4:10:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93719	10/14/20	ERH1165	BA20060	10/12/20 4:10:00 PM	WATER	EPA 8270D	EPA 8270D WATER
93719	10/14/20	ERH1165	BA20060	10/12/20 4:10:00 PM	WATER	EPA 8270D	EPA 8270D WATER RE-EXTRACT
93719	10/14/20	ERH1165	BA20060	10/12/20 4:10:00 PM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
93719	10/14/20	ERH1165	BA20060	10/12/20 4:10:00 PM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
93719	10/14/20	ERH1165	BA20060	10/12/20 4:10:00 PM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
93719	10/14/20	ERH1165	BA20060	10/12/20 4:10:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
93719	10/14/20	ERH1165	BA20060	10/12/20 4:10:00 PM	WATER	RSK 175	METHANE BY RSK 175
93719	10/14/20	ERH1165	BA20060	10/12/20 4:10:00 PM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
93719	10/14/20	ERH1165	BA20060	10/12/20 4:10:00 PM	WATER	SW846 9060A	9060A TOC
93719	10/14/20	ERH1166	BA20061	10/12/20 2:15:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93719	10/14/20	ERH1166	BA20061	10/12/20 2:15:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
93719	10/14/20	ERH1166	BA20061	10/12/20 2:15:00 PM	WATER	RSK 175	METHANE BY RSK 175
93719	10/14/20	ERH1167	BA20062	10/12/20 2:22:00 PM	WATER	SM 2320B	Wetlab 2320B - Water
93719	10/14/20	ERH1167	BA20062	10/12/20 2:22:00 PM	WATER	EPA 300.0	Wetlab 300.0 - Water
93719	10/14/20	ERH1167	BA20062	10/12/20 2:22:00 PM	WATER	EPA 353.2	WETLAB 353.2 TOXN- WATER
93719	10/14/20	ERH1167	BA20062	10/12/20 2:22:00 PM	WATER	SM3500FeB	Ferrous Iron
93719	10/14/20	ERH1167	BA20062	10/12/20 2:22:00 PM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93719	10/14/20	ERH1167	BA20062	10/12/20 2:22:00 PM	WATER	EPA 8270D	EPA 8270D WATER
93719	10/14/20	ERH1167	BA20062	10/12/20 2:22:00 PM	WATER	EPA 8270D	EPA 8270D WATER RE-EXTRACT
93719	10/14/20	ERH1167	BA20062	10/12/20 2:22:00 PM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
93719	10/14/20	ERH1167	BA20062	10/12/20 2:22:00 PM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
93719	10/14/20	ERH1167	BA20062	10/12/20 2:22:00 PM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
93719	10/14/20	ERH1167	BA20062	10/12/20 2:22:00 PM	WATER	EPA 8260B	EPA 8260B GRO WATER
93719	10/14/20	ERH1167	BA20062	10/12/20 2:22:00 PM	WATER	RSK 175	METHANE BY RSK 175
93719	10/14/20	ERH1167	BA20062	10/12/20 2:22:00 PM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
93719	10/14/20	ERH1167	BA20062	10/12/20 2:22:00 PM	WATER	SW846 9060A	9060A TOC
93719	10/14/20	ERH1174	BA20063	10/13/20 7:50:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93719	10/14/20	ERH1174	BA20063	10/13/20 7:50:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
93719	10/14/20	ERH1174	BA20063	10/13/20 7:50:00 AM	WATER	RSK 175	METHANE BY RSK 175
93719	10/14/20	ERH1175	BA20064	10/13/20 9:20:00 AM	WATER	SM 2320B	Wetlab 2320B - Water
93719	10/14/20	ERH1175	BA20064	10/13/20 9:20:00 AM	WATER	EPA 300.0	Wetlab 300.0 - Water
93719	10/14/20	ERH1175	BA20064	10/13/20 9:20:00 AM	WATER	EPA 353.2	WETLAB 353.2 TOXN- WATER
93719	10/14/20	ERH1175	BA20064	10/13/20 9:20:00 AM	WATER	SM3500FeB	Ferrous Iron
93719	10/14/20	ERH1175	BA20064	10/13/20 9:20:00 AM	WATER	EPA 8260B	EPA 8260B BTEX WATER
93719	10/14/20	ERH1175	BA20064	10/13/20 9:20:00 AM	WATER	EPA 8270D	EPA 8270D WATER
93719	10/14/20	ERH1175	BA20064	10/13/20 9:20:00 AM	WATER	EPA 8270D	EPA 8270D WATER RE-EXTRACT
93719	10/14/20	ERH1175	BA20064	10/13/20 9:20:00 AM	WATER	EPA 8270D	EPA 8270D MODIFIED WATER
93719	10/14/20	ERH1175	BA20064	10/13/20 9:20:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH WATER L-L SGC
93719	10/14/20	ERH1175	BA20064	10/13/20 9:20:00 AM	WATER	EPA 8015B-eHL	EPA 8015B TPH LIQ-LIQ
93719	10/14/20	ERH1175	BA20064	10/13/20 9:20:00 AM	WATER	EPA 8260B	EPA 8260B GRO WATER
93719	10/14/20	ERH1175	BA20064	10/13/20 9:20:00 AM	WATER	RSK 175	METHANE BY RSK 175
93719	10/14/20	ERH1175	BA20064	10/13/20 9:20:00 AM	WATER	8270D-SIM	EPA 8270D SIM LIQ-LIQ
93719	10/14/20	ERH1175	BA20064	10/13/20 9:20:00 AM	WATER	SW846 9060A	9060A TOC

APPL Inc.
Abbreviations and Flags

FLAG	DESCRIPTION
#	Recovery or RPD outside control limits
*	Recovery or RPD outside control limits
B	Analyte detected in associated method blank
C1	Reason for correction: wrote incorrect response
C2	Reason for correction: calculated incorrectly
C3	Reason for correction: needs to be rechecked
C4	Reason for correction: data not usable
DO	Diluted out
E	Exceeds linear range
F	Estimated value
G1	Includes a wide range of hydrocarbons which does not match our gasoline standard
G10	Includes a match to hydrocarbon profiles within the range of mineral spirits
G11	Includes a match to hydrocarbon profiles within the range of JP-4
G12	Pattern does not match the gasoline standard; the carbon range for this sample is consistent with JP8
G13	Closely resembles the hydrocarbon profile of aviation gasoline
G14	Analyte concentration may be biased due to carry over
G2	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G3	Includes higher boiling hydrocarbons
G4	Includes dominant peak(s) not indicative of petroleum hydrocarbons
G5	Is mainly dominant peak(s) not indicative of petroleum hydrocarbons
G6	Contains recognizable contaminant peak(s) which has been removed from quantitation
G7	Is mainly a match to hydrocarbons within the range of gasoline
G8	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G9	Includes hydrocarbons within the range of kerosene
J	Estimated value
M	Matrix effect
MI1	Manual integration: integration does not follow baseline
MI2	Manual integration: non-target peak interference
MI3	Manual integration: to split a peak that was integrated as one peak by the computer.
MI4	Manual integration: to integrate a split peak
MI5	Manual integration: the whole peak or part of the peak was not integrated
MI6	Manual integration: computer integrated wrong peak
MI7	Manual integration: other – (See case narrative)
MDL	Method detection limit
ND	Not detected
NT	Non-target
Q	Acceptance criteria not met
T1 I	Includes wide range of hydrocarbons not indicative of diesel
T1 M	Is mainly wide range of hydrocarbons not necessarily indicative of diesel
T2 I	Includes lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T2 M	Is mainly lower boiling hydrocarbons, e.g. mineral spirits, kerosene, stoddard solvent, white gas
T3 I	Includes higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T3 M	Is mainly higher boiling hydrocarbons, e.g. asphaltene, waste oil, motor oil, or weathered diesel fuel
T4 I	Includes dominant peak(s) not indicative of hydrocarbons
T4 M	Is mainly dominant peak(s) not indicative of hydrocarbons
T5	Contains recognizable contaminant peak(s) which has been removed from quantitation
T6	Is mainly a match to hydrocarbons within range of diesel fuel
T7	Closely resembles the boiling point hydrocarbon profile consistent with diesel fuel
T8	Includes a match to hydrocarbon profiles within range of diesel and kerosene fuel
T9 I	Includes non-diesel hydrocarbons within boiling point range of diesel fuel
T9 M	Is mainly non-diesel hydrocarbons within boiling point range of diesel fuel
U	Not detected
Y	Percent difference between primary and confirmation column > 40%

SAMPLE RECORDS MANAGEMENT

CHAIN OF CUSTODY,

ARF, CRF, AND

CLIENT COMMUNICATION

APPL - Analysis Request Form

93719

Client: **AECOM**
Address: **1001 Bishop Street, Suite 1600**
Honolulu, HI 96813
Attn: **Brooke Gottmeier**
Phone: **808-954-4536** Fax: **808-523-8950**
Job: **60571032 CV18F0126 Red Hill Fuel Storage**
PO #: **18S-22209-HI27 PO# 102604**
Chain of Custody (Y/N): **Y** # **119-123,103,104,108,**
RAD Screen (Y/N): **Y** pH (Y/N): **Y**
Turn Around Type: **1 WEEK**

Received by: **AAR**
Date Received: **10/14/20** Time: **10:00**
Delivered by: **FEDEX**
Shuttle Custody Seals (Y/N): **Y** Time Zone: **-10**
Chest Temp(s): **SEE CRF**
Color: **VFRG/E-Brown**
Samples Chilled until Placed in Refrig/Freezer: **Y**
Project Manager: **Libby Cheesebor**
QC Report Type: **DVP4DOD/EQUIS/HI**
Due Date: **10/21/20**

Comments:
PM: login and F1s to Margie.Pascua@aecom.com & brooke.gottmeier@aecom.com
AN: 7 day TAT for Form 1s; 21 day TAT for PKG STYLE 1; DOD v5.1; DOD Forms: LOD database
Report MS/MSD/DUPs when AECOM sample used
Wetlab: EPA 300 (NO3,CL,SO4). EPA 353.2 (TOXN).
8260: BTEX & TPH-G only; 8270 SIM: 1-methylnaphthalene, 2-methylnaphthalene & naphthalene only.
TPH D & O both with and w/o SGC, reverse surrogate for the SGC; analyze SGC if detections
RSK: Methane only; $87DC53W5: report phenol only
FR: email ftp info to Margie, Stella, trommelfanger@lab-data.com & jcanlas@lab-data.com
EDD: AECOM EQuIS EDD 2.5.3 Red Hill 87DMEE->3535A to brooke.gottmeier@, Margie.Pascua@aec

Sample Distribution:
GC: 7-$87DC53W5, 7-$87DMEEW5, 7-$DOC53W5LIQ, 7-$SIM53LIQ51
Extractions: 7-_LIQ003, 7-_LIQ005, 7-_MWE2MEE
VOA: 12-$86BTOTXDOD5W, 12-$GASBL, 12-$GRO86BW, 10-$RSKMETH
Wetlab: 5-$232W(HCO3,CO3,ALK), 5-$300W, 5-$353TOXNW, 5-$35FE, 5-$TOCW53

Charges:

Invoice To:
ACCOUNTS PAYABLE
1001 Bishop Street, Ste 1600
USAPImaging@aecom.com
mary.basano@aecom.com

	Client ID		APPL ID	Sampled		Analyses Requested
1.	ERH1156	LCSD	BA20053W	10/13/20	08:05	$86BTOTXDOD5W, $GASBL, $GRO86BW, $RSKMETH -- See Comments
2.	ERH1157	MS/MSD	BA20054W	10/13/20	08:40	$232W(HCO3,CO3,ALK), $300W, $353TOXNW, $35FE, $86BTOTXDOD5W, $87DC53W5, $87DMEEW5, $DOC53W5LIQ, $GASBL, $GRO86BW, $RSKMETH, $SIM53LIQ51, $TOCW53 -- See Comments
3.	ERH1158	LCSD	BA20055W	10/13/20	08:40	$86BTOTXDOD5W, $87DC53W5, $87DMEEW5, $DOC53W5LIQ, $GASBL, $GRO86BW, $SIM53LIQ51 -- See Comments

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

4.	ERH1161	LCSD	BA20056W	10/12/20 13:15	$86BTOTXDOD5W, $GASBL, $GRO86BW, $RSKMETH -- See Comments
5.	ERH1162	LCSD	BA20057W	10/12/20 14:15	$232W(HCO3,CO3,ALK), $300W, $353TOXNW, $35FE, $86BTOTXDOD5W, $87DC53W5, $87DMEEW5, $DOC53W5LIQ, $GASBL, $GRO86BW, $RSKMETH, $SIM53LIQ51, $TOCW53 -- See Comments
6.	ERH1163	LCSD	BA20058W	10/12/20 14:15	$86BTOTXDOD5W, $87DC53W5, $87DMEEW5, $DOC53W5LIQ, $GASBL, $GRO86BW, $SIM53LIQ51 -- See Comments
7.	ERH1164	LCSD	BA20059W	10/12/20 15:35	$86BTOTXDOD5W, $GASBL, $GRO86BW, $RSKMETH -- See Comments
8.	ERH1165	LCSD	BA20060W	10/12/20 16:10	$232W(HCO3,CO3,ALK), $300W, $353TOXNW, $35FE, $86BTOTXDOD5W, $87DC53W5, $87DMEEW5, $DOC53W5LIQ, $GASBL, $GRO86BW, $RSKMETH, $SIM53LIQ51, $TOCW53 -- See Comments
9.	ERH1166	LCSD	BA20061W	10/12/20 14:15	$86BTOTXDOD5W, $GASBL, $GRO86BW, $RSKMETH -- See Comments
10.	ERH1167	LCSD	BA20062W	10/12/20 14:22	$232W(HCO3,CO3,ALK), $300W, $353TOXNW, $35FE, $86BTOTXDOD5W, $87DC53W5, $87DMEEW5, $DOC53W5LIQ, $GASBL, $GRO86BW, $RSKMETH, $SIM53LIQ51, $TOCW53 -- See Comments
11.	ERH1174	LCSD	BA20063W	10/13/20 07:50	$86BTOTXDOD5W, $GASBL, $GRO86BW, $RSKMETH -- See Comments
12.	ERH1175	LCSD	BA20064W	10/13/20 09:20	$232W(HCO3,CO3,ALK), $300W, $353TOXNW, $35FE, $86BTOTXDOD5W, $87DC53W5, $87DMEEW5, $DOC53W5LIQ, $GASBL, $GRO86BW, $RSKMETH, $SIM53LIQ51, $TOCW53 -- See Comments

APPL Sample Receipt Form

ARF# **93719**

Sample	Container Type	Count	p
BA20053	[13] VOAs - HCL	4	NA
BA20054	[3] PL 250mL	1	NA
	[10] PL 250mL - H2SO4	1	1.3
	[13] VOAs - HCL	7	NA
	[17] Amber Liter	13	NA
	[32] Clear VOA - H2SO4	2	NA
	[38] 250mL brn poly, HCl prsvd	1	1.6
	[40] 500mL Amber, unprsrvd	9	NA
BA20055	[13] VOAs - HCL	4	NA
	[17] Amber Liter	4	NA
	[40] 500mL Amber, unprsrvd	3	NA
BA20056	[13] VOAs - HCL	4	NA
BA20057	[3] PL 250mL	1	NA
	[10] PL 250mL - H2SO4	1	1.3
	[13] VOAs - HCL	4	NA
	[17] Amber Liter	4	NA
	[32] Clear VOA - H2SO4	2	NA
	[38] 250mL brn poly, HCl prsvd	1	1.6
	[40] 500mL Amber, unprsrvd	3	NA
BA20058	[13] VOAs - HCL	4	NA
	[17] Amber Liter	4	NA
	[40] 500mL Amber, unprsrvd	3	NA
BA20059	[13] VOAs - HCL	4	NA
BA20060	[3] PL 250mL	1	NA
	[10] PL 250mL - H2SO4	1	1.3
	[13] VOAs - HCL	4	NA
	[17] Amber Liter	4	NA
	[32] Clear VOA - H2SO4	2	NA
	[38] 250mL brn poly, HCl prsvd	1	1.6
	[40] 500mL Amber, unprsrvd	3	NA
BA20061	[13] VOAs - HCL	4	NA
BA20062	[3] PL 250mL	1	NA
	[10] PL 250mL - H2SO4	1	1.3
	[13] VOAs - HCL	4	NA
	[17] Amber Liter	4	NA
	[32] Clear VOA - H2SO4	2	NA
	[38] 250mL brn poly, HCl prsvd	1	1.6
	[40] 500mL Amber, unprsrvd	3	NA
BA20063	[13] VOAs - HCL	4	NA
BA20064	[3] PL 250mL	1	NA
	[10] PL 250mL - H2SO4	1	1.3
	[13] VOAs - HCL	4	NA
	[17] Amber Liter	4	NA
	[32] Clear VOA - H2SO4	2	NA
	[38] 250mL brn poly, HCl prsvd	1	1.6
	[40] 500mL Amber, unprsrvd	3	NA

Sample	Container Type	Count	p

93719

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
www.applinc.com

Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 119

Report to: PLEASE PRINT

Company Name: AECOM Phone: 808-954-4536
Address: 1001 Bishop St, Suite 1600
Honolulu, HI 96813 Fax: 808-523-8950
Attn: Brooke Gottmeier
Email: brooke.gottmeier@aecom.com

Invoice to: PLEASE PRINT

Company Name: AECOM Phone: 512-419-6709
Address: 1001 Bishop St, Suite 1600
Honolulu, HI 96813 Fax: 808-523-8950
Attn: Sheree Smith
Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number: CV18F0126 / 60571032
Sampler (Print): KL, MM, DM
Purchase Order Number: 102604
Sampler (Signature): [signature]

Date Shipped: 10/13/20
Carrier: FedEx
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Matrix: Sed.	Matrix: Soil		8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC	
ERH1156	Trip Blank	10/13/20	0805	HST	0	X				X							X							
ERH1157	RHMW2254-01	10/13/20	0840	HST	7	X				X**		X**	X**	X**	X**	X**	X	X	X	X		X		
ERH1158	RHMW2254-01	10/13/20	0840	HST	4	X				X		X	X*	X	X	X								

BL 10/13/20

*Analyze TPH w/SGT only if TPH-d/o detected.

** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM

TPH-d/o & PAHs need liquid-liquid extraction.

3.0/3.0 3.0/3.0 2.5/2.5 3.0/3.0 R3 +0.0C 3.0/3.0 R3 3.0/3.0 3.4/1.0 3.8/2.0 3.3/1.5 IR -1.8°C 3.3/1.5

Shuttle Temperature: IR -1.8°C

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other:

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
[signature] (AECOM)	10/13/20	1500					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
					10/14/20	10:00	[signature]

See page 2 for Container Preservative and Sampling Information

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
www.applinc.com

Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 121

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM Phone: 808-954-4536	Company Name: AECOM Phone: 512-419-6709
Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950	Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950
Attn: Brooke Gottmeier	Attn: Sheree Smith
Email: brooke.gottmeier@aecom.com	Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number: CV18F0126 / 60571032
Purchase Order Number: 102604
Sampler (Print): KL, MM, DM
Sampler (Signature):

Date Shipped: 10/13/20
Carrier: FedEx
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC
ERH1156	Trip Blank	10/13/20	0805	HST	4	X			X							X						
ERH1157	RHMW2254-01	10/13/20	0840	HST	7	X			X**		X**	X**	X**	X**	X**	X	X	X	X		X	
ERH1158	RHMW2254-01	10/13/20	0840	HST	19	X			X		X	X**	X	X	X							

10/13/20

*Analyze TPH w/SGT only if TPH-d/o detected.

** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM

TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature:

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other: _____

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
AECOM	10/13/20	1500					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
					10/14/20	10:00	

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908 N Temperance Ave
Clovis, CA 93611
www.applinc.com
Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 120

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM Phone: 808-954-4536	Company Name: AECOM Phone: 512-419-6709
Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950	Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950
Attn: Brooke Gottmeier	Attn: Sheree Smith
Email: brooke.gottmeier@aecom.com	Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number: CV18F0126 / 60571032
Purchase Order Number: 102604
Sampler (Print): KL, MM, DM
Sampler (Signature):
Date Shipped: 10/13/20
Carrier: FedEx
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC
ERH1156	Trip Blank	10/13/20	0805	HST	0	X			X							X						
ERH1157	RHMW2254-01	10/13/20	0840	HST	8	X			X***		X**	X**	X**	X**	X**	X	X	X	X		X	
ERH1158	RHMW2254-01	10/13/20	0840	HST	0	X			X		X	X	X*	X	X							

RH 10/13/20

*Analyze TPH w/SGT only if TPH-d/o detected.

** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM

TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature:

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other:

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler: (AECOM)	Date 10/13/20	Time 1500	Received by:	Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date 10/14/20	Time 1100	Received at lab by:

See page 2 for Container Preservative and Sampling Information

APPL, Inc.
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www.applinc.com

Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 123

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM Phone: 808-954-4536	Company Name: AECOM Phone: 512-419-6709
Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950	Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950
Attn: Brooke Gottmeier	Attn: Sheree Smith
Email: brooke.gottmeier@aecom.com	Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number: CV18F0126 / 60571032
Purchase Order Number: 102604
Sampler (Print): KL, OM, MM
Sampler (Signature):

Date Shipped: 10/13/20
Carrier: FedEx
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC	
ERH1161	Trip Blank	10/12/20	13:15	HST	0	X			X							X							
ERH1162	RHMW02	10/12/20	14:15	HST	4	X			X		X	X	X	X	X	X	X	X	X		X		See other cooler
ERH1163	RHMW02	10/12/20	14:15	HST	3	X			X		X	X	X	X	X								

10/13/20

*Analyze TPH w/SGT only if TPH-d/o detected.

** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM

TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature:

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other:

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler: (AECOM)	Date 10/13/20	Time 11:00	Received by:	Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date 10/14/20	Time 10:00	Received at lab By:

See page 02 for Container Preservative and Sampling Information

APPL, Inc.
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Clovis, CA 93611
www.applinc.com

Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 122

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM Phone: 808-954-4536	Company Name: AECOM Phone: 512-419-6709
Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950	Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950
Attn: Brooke Gottmeier	Attn: Sheree Smith
Email: brooke.gottmeier@aecom.com	Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number: CV18F0126 / 60571032
Purchase Order Number: 102604
Sampler (Print): KL, DM, MH
Sampler (Signature):

Date Shipped: 10/13/20
Carrier: FedEx
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC	
ERH1161	Trip Blank	10/12/20	1315	HST	4	X			X							X							see other
ERH1162	RHMW02	10/12/20	1415	HST	12	X			X		X	X	X	X	X	X	X	X	X		X		Cooler
ERH1163	RHMW02	10/12/20	1415	HST	8	X			X		X	X	X	X	X								

BL 10/13/20

*Analyze TPH w/SGT only if TPH-d/o detected.

** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM

TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature:

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other: _____

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler: (AECOM)	Date 10/13/20	Time 10:00	Received by:	Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date 10/14/20	Time 10:00	Received at lab by:

See page 2 for Container Preservative and Sampling Information

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
www.applinc.com

Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 103

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM Phone: 808-954-4536	Company Name: AECOM Phone: 512-419-6709
Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950	Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950
Attn: Brooke Gottmeier	Attn: Sheree Smith
Email: brooke.gottmeier@aecom.com	Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number: CV18F0126 / 60571032
Purchase Order Number: 102604
Sampler (Print): GM, JV, RS
Sampler (Signature):

Date Shipped: 10/13/20
Carrier: FedEx
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Matrix: Sed.	Matrix: Soil	8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC
ERH1164	Trip Blank	10/12/20	1535	HST	4	X			X							X						
ERH1165	RHMW03	10/12/20	1610	HST	16	X			X		X	X	X	X	X	X	X	X	X		X	
~~ERH~~ BB 9/24/20																						

BB 10/13/20

*Analyze TPH w/SGT only if TPH-d/o detected.

** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM

TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature:

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other: _____

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler: (AECOM)	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
	10/13/20	1100					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
					10/14/20	10:00	

See page 01 for Container Preservative and Sampling Information

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
www.applinc.com
Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 104

Report to: PLEASE PRINT

Company Name: AECOM Phone: 808-954-4536

Address: 1001 Bishop St, Suite 1600
Honolulu, HI 96813 Fax: 808-523-8950

Attn: Brooke Gottmeier

Email: brooke.gottmeier@aecom.com

Invoice to: PLEASE PRINT

Company Name: AECOM Phone: 512-419-6709

Address: 1001 Bishop St, Suite 1600
Honolulu, HI 96813 Fax: 808-523-8950

Attn: Sheree Smith

Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number: CV18F0126 / 60571032

Purchase Order Number: 102604

Sampler (Print): GM, JV, KS

Sampler (Signature):

Date Shipped: 10/13/20

Carrier: FedEx

Waybill No.:

Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Matrix: Sed.	Matrix: Soil	8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC
ERH1166	Trip Blank	10/12/20	1415	HST	4	X			X							X						
ERH1167	RHMW04	10/12/20	1422	HST	16	X			X		X	X*	X	X	X	X	X	X	X		X	

BR 10/13/20

*Analyze TPH w/SGT only if TPH-d/o detected.

** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM

TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature:

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other:

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by/sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
(AECOM)	10/13/20	1100					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
					10/14/20	10:00	

See page 2 for Container Preservative and Sampling Information

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
www.applinc.com

Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

CHAIN OF CUSTODY RECORD

C.O.C. 108

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: AECOM Phone: 808-954-4536	Company Name: AECOM Phone: 512-419-6709
Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950	Address: 1001 Bishop St, Suite 1600 Honolulu, HI 96813 Fax: 808-523-8950
Attn: Brooke Gottmeier	Attn: Sheree Smith
Email: brooke.gottmeier@aecom.com	Email: sheree.smith@aecom.com; usapimaging@aecom.com

Project Name/Number: CV18F0126 / 60571032
Purchase Order Number: 102604
Sampler (Print): GM, JV, LS
Sampler (Signature):

Date Shipped: 10/8/20
Carrier: FedEx
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	8260C BTEX,TPH-g	8260C DCA 8011 EDB	8015C TPH-d/o	3630/8015C TPH-d/o w/ SGT	8270D SIM PAHs short list	8270D Phenol	8270D 2-(2-methoxy ethoxy)-ethanol	RSK175M Methane	SM3500-Fe Ferrous Iron	353.2 Nitrate-Nitrite N	SM2320B Alkalinity 300.0 Nitrate,Sulfate,Chloride	300.0 Bromide/Fluoride 6010 Total Ca,Mg,Mn,K,Na SM4500 Total & Dissolved Silica	9060A TOC	9060A DOC
ERH1174	Trip Blank	10/13/20	0750	HST	4	X			X							X						
ERH1175	RHMW08	10/13/20	0920	HST	16	X			X		X	X*	X	X	X	X	X	X	X		X	

10/13/20

*Analyze TPH w/SGT only if TPH-d/o detected.

** MS/MSD: 8011, 8015, 8260, 8270, 8270SIM

TPH-d/o & PAHs need liquid-liquid extraction.

Shuttle Temperature:

Turnaround Requested: Check one
☐ Standard 2-3 wk ☒ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other: _____

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
(AECOM)	10/13/20	1500					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
					10/14/20	1003	

COOLER RECEIPT FORM **ARF: 93719**

1) Project: 60571032 CV18F0126 Red Hill Fuel Storage Date Received: 10/14/20

2) Coolers: Number of Coolers: 10

3) YES Were custody seals present and intact?
How many? 20 Name/Date on seal? SEE BELOW

4) YES Was there a shipping slip? Carrier name: FEDEX

5) Type of packing in cooler: X bubble wrap __ popcorn __ foam X plastic bags __ other
X wet ice __ dry ice __ no ice __ gel ice

6) YES Were cooler temperatures acceptable?

7) Serial number of calibrated thermometer used: IR GUN CF:-1.8°, R3 CF:+0.0°

8) Cooler temp(s): In °C. Thermometer Temp / Corrected Temp

1:	3.3/1.5	2:	3.4/1.6	3:	3.8/2.0	4:	3.3/1.5	5:	3.0/3.0	6:	2.5/2.5
7:	3.0/3.0	8:	3.0/3.0	9:	4.0/4.0	10:	3.0/3.0	11:		12:	

Chain of custody:

9) YES Was a chain of custody received?

10) YES Were the custody papers complete/signed in the appropriate places?

Sample Labels:

11) YES Were all sample labels complete (sample ID, date/time of sampling, etc.)?

12) YES Did all container labels agree with custody papers?

Sample Containers:

13) YES Were all containers sealed in separate bags?

14) YES Did all containers arrive in good condition:(unbroken, no leakage, no cracked/broken lids)?

15) YES Were correct containers and preservatives used for the tests indicated?

16) YES Was a sufficient amount of sample sent for tests indicated?

17) Yes Were bubbles present in volatile samples?
If yes, the following were received with air bubbles:
Larger than a pea: BA20053all, BA20056all, BA20059all, BA20061all, BA20063all
Smaller than a pea: BA20054w06w07w34, BA20060w02-04, BA20064w03-04

Preservation Hold time:

18) Yes Was a sufficient amount of holding time remaining to analyze the samples?

19) Yes Was the pH taken of all non-VOA preserved samples and written on the sample container?

20) Yes Was the pH of acid preserved non-VOA samples < 2?

21) NA Was the pH of the "basic" preserved samples for Cyanide > 12, Sulfide >9, Hexchrom >9?

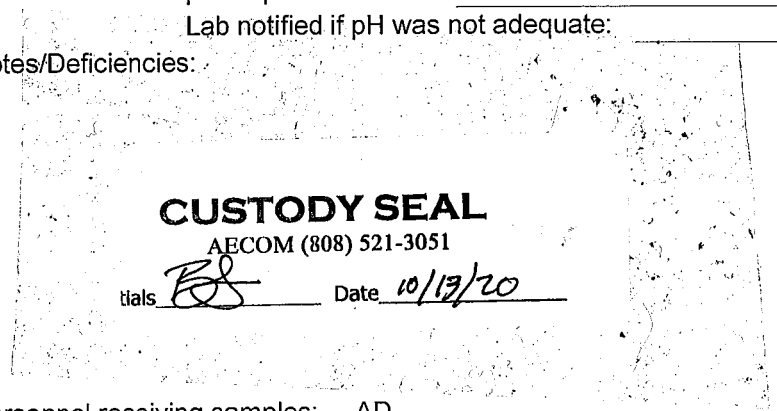
22) NO Were unpreserved VOA Vials received for VOA Dept analysis?

23) NA If "yes", are the unpreserved VOA vials noted in the ADD TEST FIELD on the ARF?

pH strip lot number: HC908519

Lab notified if pH was not adequate:

Notes/Deficiencies:



Sample ERH 1157 the COC listed 22 containers and ERH 1158 listed 23. It was decided by the PM and Receiving Supervisor that the count should have been 34 for ~~1158~~ 1157 and 11 for 1158. The values on COC 121 got swapped 1157 listed 7 containers and 1158 listed 18. Upon labeling there was 34 for 1157 + 11 for 1158. AA

Personnel receiving samples: AD Second reviewer: AA

Personnel labeling samples: MS

Project manager notified: AA Date/Time of notification 10/14/20

Name of client notified: Date/Time of notification

SAMPLE RESULTS

EPA 8015B TPH LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93719

Sample ID: ERH1157

APPL ID: BA20054

Sample Collection Date: 10/13/20

QCG: #DOC53-201019A5-259394

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	90.7	60-142			%	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	86.1	56-125			%	10/19/20	10/20/20

Quant Method:	LRDOC905.M
Run #:	1019038
Instrument:	Apollo
Sequence:	201019
Dilution Factor:	1
Initials:	LA

Printed: 12/09/20 2:03:15 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93719

Sample ID: ERH1158

APPL ID: BA20055

Sample Collection Date: 10/13/20

QCG: #DOC53-201028A1-259397

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/28/20	11/03/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/28/20	11/03/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	88.9	60-142			%	10/28/20	11/03/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	83.5	56-125			%	10/28/20	11/03/20

Quant Method:	LRDOC905.M
Run #:	1028108
Instrument:	Apollo
Sequence:	201028
Dilution Factor:	1
Initials:	LA

Printed: 12/09/20 2:03:15 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH WATER L-L SGC

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93719

Sample ID: ERH1162

APPL ID: BA20057

Sample Collection Date: 10/12/20

QCG: #DOC53-201019A1-258239

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	360 ++	320	300.0	150.0	ug/L	10/19/20	10/29/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/29/20
EPA 8015B-e	SURROGATE: (R) DECANOIC ACID (S)	0.0	0-1			%	10/19/20	10/29/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	89.4	60-142			%	10/19/20	10/29/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	81.1	56-125			%	10/19/20	10/29/20

++(T6) The analyst has noted that the chromatogram of this sample is mainly a match to hydrocarbons within the range of diesel fuel.

Quant Method:	LRDOC905.M
Run #:	1028063
Instrument:	Apollo
Sequence:	201028
Dilution Factor:	1
Initials:	SSE

Printed: 12/09/20 2:03:15 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93719

Sample ID: ERH1162

APPL ID: BA20057

Sample Collection Date: 10/12/20

QCG: #DOC53-201019A5-259394

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	2000 ++	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	OIL (C24-C40)	270 J	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	89.0	60-142			%	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	91.8	56-125			%	10/19/20	10/20/20

J = Estimated value.
++(T6) The analyst has noted that the chromatogram of this sample is mainly a match to hydrocarbons within the range of diesel fuel.

Quant Method:	LRDOC905.M
Run #:	1019040
Instrument:	Apollo
Sequence:	201019
Dilution Factor:	1
Initials:	LA

Printed: 12/09/20 2:03:15 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH WATER L-L SGC

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93719

Sample ID: ERH1163

APPL ID: BA20058

Sample Collection Date: 10/12/20

QCG: #DOC53-201019A1-258239

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	560 ++	320	300.0	150.0	ug/L	10/19/20	10/29/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/29/20
EPA 8015B-e	SURROGATE: (R) DECANOIC ACID (S)	0.0	0-1			%	10/19/20	10/29/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	98.5	60-142			%	10/19/20	10/29/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	90.0	56-125			%	10/19/20	10/29/20

++(T6) The analyst has noted that the chromatogram of this sample is mainly a match to hydrocarbons within the range of diesel fuel.

Quant Method:	LRDOC905.M
Run #:	1028064
Instrument:	Apollo
Sequence:	201028
Dilution Factor:	1
Initials:	SSE

Printed: 12/09/20 2:03:15 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93719

Sample ID: ERH1163

APPL ID: BA20058

Sample Collection Date: 10/12/20

QCG: #DOC53-201019A5-259394

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	2000 ++	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	OIL (C24-C40)	290 J	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	88.5	60-142			%	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	91.5	56-125			%	10/19/20	10/20/20

J = Estimated value.
++(T6) The analyst has noted that the chromatogram of this sample is mainly a match to hydrocarbons within the range of diesel fuel.

Quant Method:	LRDOC905.M
Run #:	1019041
Instrument:	Apollo
Sequence:	201019
Dilution Factor:	1
Initials:	LA

Printed: 12/09/20 2:03:15 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH WATER L-L SGC

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93719

Sample ID: ERH1165

APPL ID: BA20060

Sample Collection Date: 10/12/20

QCG: #DOC53-201019A1-258239

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/29/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/29/20
EPA 8015B-e	SURROGATE: (R) DECANOIC ACID (S)	0.0	0-1			%	10/19/20	10/29/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	90.6	60-142			%	10/19/20	10/29/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	82.4	56-125			%	10/19/20	10/29/20

Quant Method: LRDOC905.M
Run #: 1028065
Instrument: Apollo
Sequence: 201028
Dilution Factor: 1
Initials: SSE

Printed: 12/09/20 2:03:15 PM
APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93719

Sample ID: ERH1165

APPL ID: BA20060

Sample Collection Date: 10/12/20

QCG: #DOC53-201019A5-259394

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	220 J	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	OIL (C24-C40)	260 J	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	89.0	60-142			%	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	86.0	56-125			%	10/19/20	10/20/20

J = Estimated value.

Quant Method:	LRDOC905.M
Run #:	1019043
Instrument:	Apollo
Sequence:	201019
Dilution Factor:	1
Initials:	LA

Printed: 12/09/20 2:03:15 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93719

Sample ID: ERH1167

APPL ID: BA20062

Sample Collection Date: 10/12/20

QCG: #DOC53-201019A5-259394

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	88.7	60-142			%	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	84.5	56-125			%	10/19/20	10/20/20

Quant Method:	LRDOC905.M
Run #:	1019044
Instrument:	Apollo
Sequence:	201019
Dilution Factor:	1
Initials:	LA

Printed: 12/09/20 2:03:15 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

EPA 8015B TPH LIQ-LIQ

AECOM
1001 Bishop Street, Suite 1600
Honolulu, HI 96813

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Brooke Gottmeier

Project: 60571032 CV18F0126 Red Hill Fuel Storage

ARF: 93719

Sample ID: ERH1175

APPL ID: BA20064

Sample Collection Date: 10/13/20

QCG: #DOC53-201019A5-259394

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-e	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: OCTACOSANE (S)	89.1	60-142			%	10/19/20	10/20/20
EPA 8015B-e	SURROGATE: ORTHO-TERPHENYL (S)	84.1	56-125			%	10/19/20	10/20/20

Quant Method:	LRDOC905.M
Run #:	1019045
Instrument:	Apollo
Sequence:	201019
Dilution Factor:	1
Initials:	LA

Printed: 12/09/20 2:03:15 PM

APPL-F1-SC-NoMC-REG MDLs-DOD

QC FORMS

EPA 8015B-eHL

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93719

Case No: 93719 Date Analyzed: 10/29/20

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: (R) DECANOIC ACID (S)			SURROGATE: OCTACOSANE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201019A1-BLK	Blank	0-1	0		60-142	92.2	
201019A1-LCS	Lab Control Spike	0-1	0.0		60-142	85.2	
BA20057	ERH1162	0-1	0.0		60-142	89.4	
BA20058	ERH1163	0-1	0.0		60-142	98.5	
BA20060	ERH1165	0-1	0.0		60-142	90.6	

Comments: Batch: #DOC53-201019A1

EPA 8015B-eHL

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93719

Case No: 93719 Date Analyzed: 10/29/20

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: ORTHO-TERPHENYL (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
201019A1-BLK	Blank	56-125	80.1				
201019A1-LCS	Lab Control Spike	56-125	86.5				
BA20057	ERH1162	56-125	81.1				
BA20058	ERH1163	56-125	90.0				
BA20060	ERH1165	56-125	82.4				

Comments: Batch: #DOC53-201019A1

EPA 8015B-eHL

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93719

Case No: 93719 Date Analyzed: 10/20/20

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201019A5-LCS	Lab Control Spike	60-142	86.3		56-125	94.1	
BA20054-MS	Matrix Spike	60-142	89.3		56-125	96.3	
BA20054-MSD	Matrix SpikeD	60-142	89.6		56-125	95.1	
BA20054	ERH1157	60-142	90.7		56-125	86.1	
BA20057	ERH1162	60-142	89.0		56-125	91.8	
BA20058	ERH1163	60-142	88.5		56-125	91.5	
BA20060	ERH1165	60-142	89.0		56-125	86.0	
BA20062	ERH1167	60-142	88.7		56-125	84.5	
BA20064	ERH1175	60-142	89.1		56-125	84.1	
201019A5-BLK	Blank	60-142	92.0		56-125	85.4	

Comments: Batch: #DOC53-201019A5

EPA 8015B-eHL

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 93719

Case No: 93719 Date Analyzed: 11/03/20

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
201028A1-BLK	Blank	60-142	89.6		56-125	83.3	
201028A1-LCS	Lab Control Spike	60-142	90.7		56-125	96.0	
201028A1-LCSD	Lab Control SpikeD	60-142	88.0		56-125	92.4	
BA20055	ERH1158	60-142	88.9		56-125	83.5	

Comments: Batch: #DOC53-201028A1

EPA 8015B-eH

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93719
Case No:	93719	Date Analyzed:	10/29/20
Matrix:	WATER	Instrument:	Apollo
Blank ID:	201019A1-BLK	Time Analyzed:	1715

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201019A1-BLK	Blank	1028057	10/29/20 1715
201019A1-LCS	Lab Control Spike	1028058	10/29/20 1743
BA20057	ERH1162	1028063	10/29/20 2004
BA20058	ERH1163	1028064	10/29/20 2032
BA20060	ERH1165	1028065	10/29/20 2100

Comments: Batch: #DOC53-201019A1

EPA 8015B-eH

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 93719

Case No: 93719 Date Analyzed: 10/29/20

Matrix: WATER Instrument: Apollo

Blank ID: 201019A5-BLK Time Analyzed: 0202

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201019A5-LCS	Lab Control Spike	1019033	10/20/20 1607
201019A5-MS	Matrix Spike	1019036	10/20/20 1731
201019A5-MSD	Matrix SpikeD	1019037	10/20/20 1800
BA20054	ERH1157	1019038	10/20/20 1828
BA20057	ERH1162	1019040	10/20/20 1924
BA20058	ERH1163	1019041	10/20/20 1953
BA20060	ERH1165	1019043	10/20/20 2049
BA20062	ERH1167	1019044	10/20/20 2117
BA20064	ERH1175	1019045	10/20/20 2145
201019A5-BLK	Blank	1028030	10/29/20 0202

Comments: Batch: #DOC53-201019A5

EPA 8015B-eH

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	93719
Case No:	93719	Date Analyzed:	11/03/20
Matrix:	WATER	Instrument:	Apollo
Blank ID:	201028A1-BLK	Time Analyzed:	1309

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201028A1-BLK	Blank	1028105	11/03/20 1309
201028A1-LCS	Lab Control Spike	1028106	11/03/20 1337
201028A1-LCSD	Lab Control SpikeD	1028107	11/03/20 1405
BA20055	ERH1158	1028108	11/03/20 1433

Comments: Batch: #DOC53-201028A1

Method Blank
EPA 8015B TPH WATER L-L SGC

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201019W-20057 - 258239**
Batch ID: #DOC53-201019A1

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/29/20
BLANK	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/29/20
BLANK	SURROGATE: (R) DECANOIC AC	0	0-1			%	10/19/20	10/29/20
BLANK	SURROGATE: OCTACOSANE (S)	92.2	60-142			%	10/19/20	10/29/20
BLANK	SURROGATE: ORTHO-TERPHEN	80.1	56-125			%	10/19/20	10/29/20

Quant Method: LRDOC905.
Run #: 1028057
Instrument: Apollo
Sequence: 201028
Initials: LA

GC SC-Blank-REG MDLs-DOD
Printed: 12/09/20 2:03:18 PM

Method Blank
EPA 8015B TPH LIQ-LIQ

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **201019W-20054 - 259394**
Batch ID: #DOC53-201019A5

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/29/20
BLANK	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/19/20	10/29/20
BLANK	SURROGATE: OCTACOSANE (S)	92.0	60-142			%	10/19/20	10/29/20
BLANK	SURROGATE: ORTHO-TERPHEN	85.4	56-125			%	10/19/20	10/29/20

Quant Method: LRDOC905.
Run #: 1028030
Instrument: Apollo
Sequence: 201028
Initials: LA

GC SC-Blank-REG MDLs-DOD
Printed: 12/09/20 2:03:18 PM

Method Blank
EPA 8015B TPH LIQ-LIQ

Blank Name/QCG: **201028W-20055 - 259397**
Batch ID: #DOC53-201028A1

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL (C10-C24)	300.0 U	320	300.0	150.0	ug/L	10/28/20	11/03/20
BLANK	OIL (C24-C40)	300.0 U	320	300.0	150.0	ug/L	10/28/20	11/03/20
BLANK	SURROGATE: OCTACOSANE (S)	89.6	60-142			%	10/28/20	11/03/20
BLANK	SURROGATE: ORTHO-TERPHEN	83.3	56-125			%	10/28/20	11/03/20

Quant Method: LRDOC905.
Run #: 1028105
Instrument: Apollo
Sequence: 201028
Initials: LA

GC SC-Blank-REG MDLs-DOD
Printed: 12/09/20 2:03:18 PM

EPA 8015B-eH

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93719
Case No:	93719	Date Analyzed:	10/29/20
Matrix:	WATER	Instrument:	Apollo
LCS ID:	201019A1-LCS	Time Analyzed:	1743

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201019A1-BLK	Blank	1028057	10/29/20 1715
201019A1-LCS	Lab Control Spike	1028058	10/29/20 1743
BA20057	ERH1162	1028063	10/29/20 2004
BA20058	ERH1163	1028064	10/29/20 2032
BA20060	ERH1165	1028065	10/29/20 2100

Comments: Batch: #DOC53-201019A1

EPA 8015B-eH

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93719
Case No:	93719	Date Analyzed:	10/20/20
Matrix:	WATER	Instrument:	Apollo
LCS ID:	201019A5-LCS	Time Analyzed:	1607

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201019A5-LCS	Lab Control Spike	1019033	10/20/20 1607
201019A5-MS	Matrix Spike	1019036	10/20/20 1731
201019A5-MSD	Matrix SpikeD	1019037	10/20/20 1800
BA20054	ERH1157	1019038	10/20/20 1828
BA20057	ERH1162	1019040	10/20/20 1924
BA20058	ERH1163	1019041	10/20/20 1953
BA20060	ERH1165	1019043	10/20/20 2049
BA20062	ERH1167	1019044	10/20/20 2117
BA20064	ERH1175	1019045	10/20/20 2145
201019A5-BLK	Blank	1028030	10/29/20 0202

Comments: Batch: #DOC53-201019A5

EPA 8015B-eH

Form 4

LCS Summary

Lab Name:	APPL, Inc.	SDG No:	93719
Case No:	93719	Date Analyzed:	11/03/20
Matrix:	WATER	Instrument:	Apollo
LCS ID:	201028A1-LCS	Time Analyzed:	1337

APPL ID.	Client Sample No.	File ID.	Date Analyzed
201028A1-BLK	Blank	1028105	11/03/20 1309
201028A1-LCS	Lab Control Spike	1028106	11/03/20 1337
201028A1-LCSD	Lab Control SpikeD	1028107	11/03/20 1405
BA20055	ERH1158	1028108	11/03/20 1433

Comments: Batch: #DOC53-201028A1

Laboratory Control Spike Recoveries
EPA 8015B TPH LIQ-LIQ

APPL ID: **201028W-20055 LCS - 259397**
Batch ID: #DOC53-201028A1

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	1130	1160	90.4	92.8	36-132	2.6	30
OIL (C24-C40)	1250	1090	1110	87.2	88.8	41-113	1.8	30
SURROGATE: OCTACOSANE (S)	75.0	68.0	66.0	90.7	88.0	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	72.0	69.3	96.0	92.4	56-125		

Comments:

Primary	SPK	DUP
Quant Method :	LRDOC905.M	LRDOC905.M
Extraction Date :	10/28/20	10/28/20
Analysis Date :	11/03/20	11/03/20
Instrument :	Apollo	Apollo
Run :	1028106	1028107
Initials :	LA	

Printed: 12/09/20 2:03:53 PM
APPL Standard LCSD

Matrix Spike Recoveries
EPA 8015B TPH LIQ-LIQ

APPL ID: **201019W-20054 MS - 259394**
Batch ID: #DOC53-201019A5
Sample ID: BA20054
Client ID: ERH1157

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL (C10-C24)	1250	96	1230	1240	90.7	91.5	36-132	0.81	30
OIL (C24-C40)	1250	140	1270	1280	90.4	91.2	41-113	0.78	30
SURROGATE: OCTACOSANE (S)	75.0	NA	67.0	67.2	89.3	89.6	60-142		
SURROGATE: ORTHO-TERPHENYL (S)	75.0	NA	72.2	71.3	96.3	95.1	56-125		

Comments:

Primary	SPK	DUP
Quant Method :	LRDOC905.M	LRDOC905.M
Extraction Date :	10/19/20	10/19/20
Analysis Date :	10/20/20	10/20/20
Instrument :	Apollo	Apollo
Run :	1019036	1019037
Initials :	LA	

Printed: 12/09/20 2:03:36 PM
APPL MSD SCII

ORGANICS

Calibration Data

TPH Extractables
LRDOC905

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 9/5/2020
Matrix: Water Instrument: Apollo Initials:

			905007.D	905008.D	905009.D	905010.D	905011.D	905012.D									
		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
1	HATML	Diesel (C10-C24)	3520375	2214378	2281032	2080486	2123388	2190073					2401622	23	HATM	0.999	
2	HBTML	Motor Oil (C24-C40)	3878492	1596138	1576848	1430288	1467043	1498633					1907907	51	HBTM	0.999	
3	SA	Ortho-Terphenyl(S)		2811060	2679862	2349319	2368660	2417877					2525355	8.2	SA		
4	SA	Octacosane(S)		2182984	2114335	1968540	2003128	2024026					2058603	4.3	SA		
5																	
6																	
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2.463274

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905007.D Vial: 7
Acq On : 9-5-20 17:04:35 Operator:
Sample : Diesel Motor Oil-1 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:45 2020 Quant Results File: LRDOC905.RES

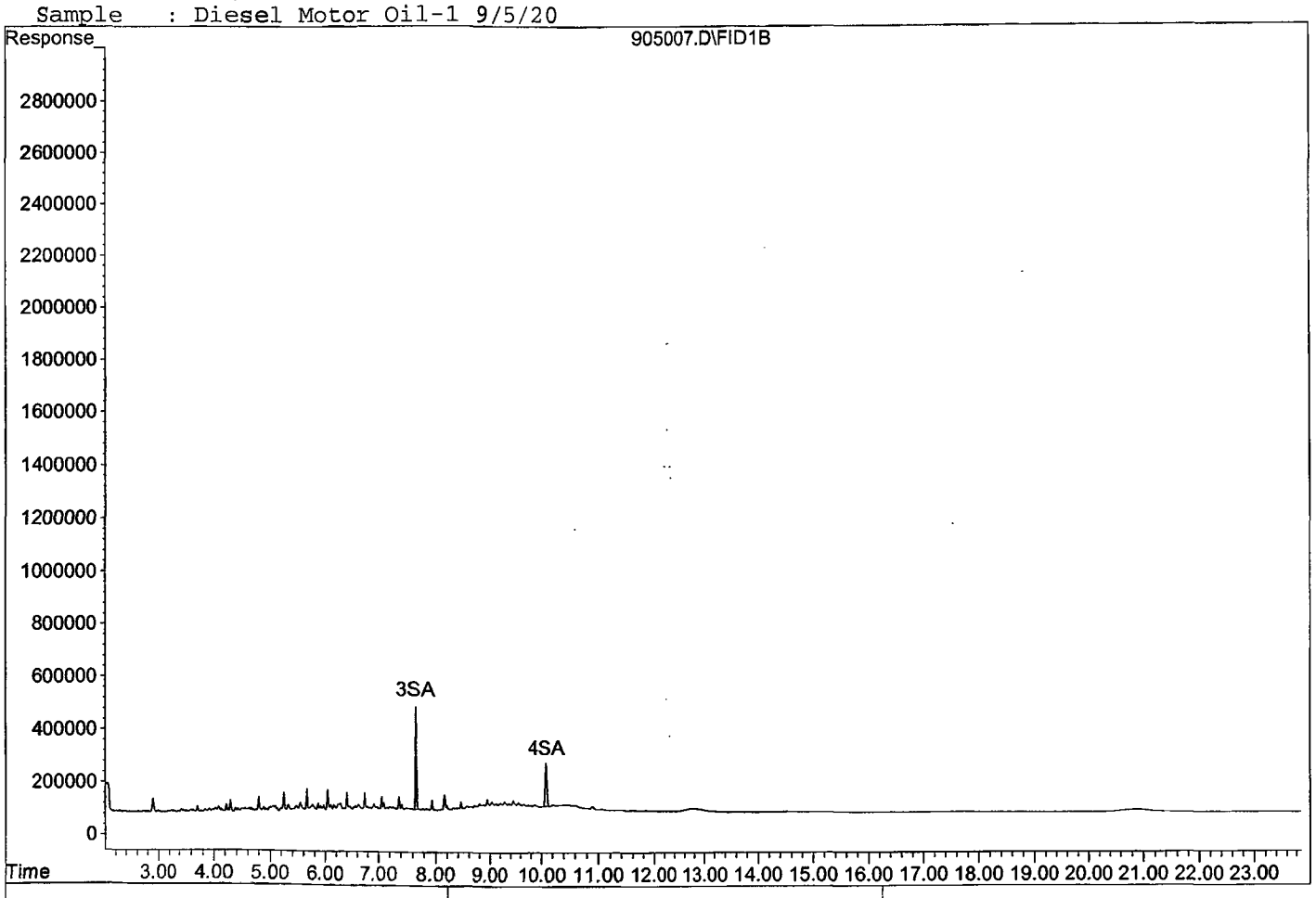
Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

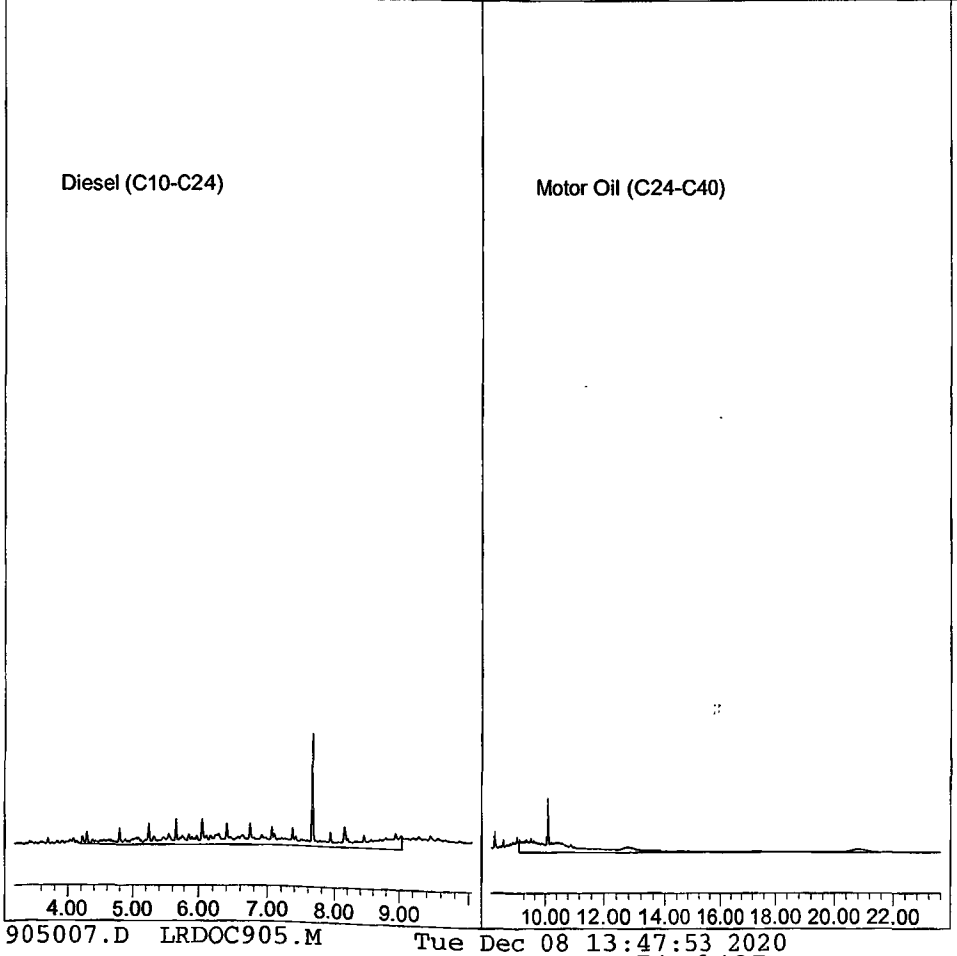
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	4755108	0.977 ppb
Surrogate Spike 30.000	Recovery =		3.26%
4) SA Octacosane(S)	10.09	3753150	0.943 ppb
Surrogate Spike 30.000	Recovery =		3.14%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	70407491	16.135 ppb
2) HBTM Motor Oil (C24-C40)	15.82	77569840	20.150 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905007.D
Sample : Diesel Motor Oil-1 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905008.D Vial: 8
Acq On : 9-5-20 17:32:40 Operator:
Sample : Diesel Motor Oil-2 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:45 2020 Quant Results File: LRDOC905.RES

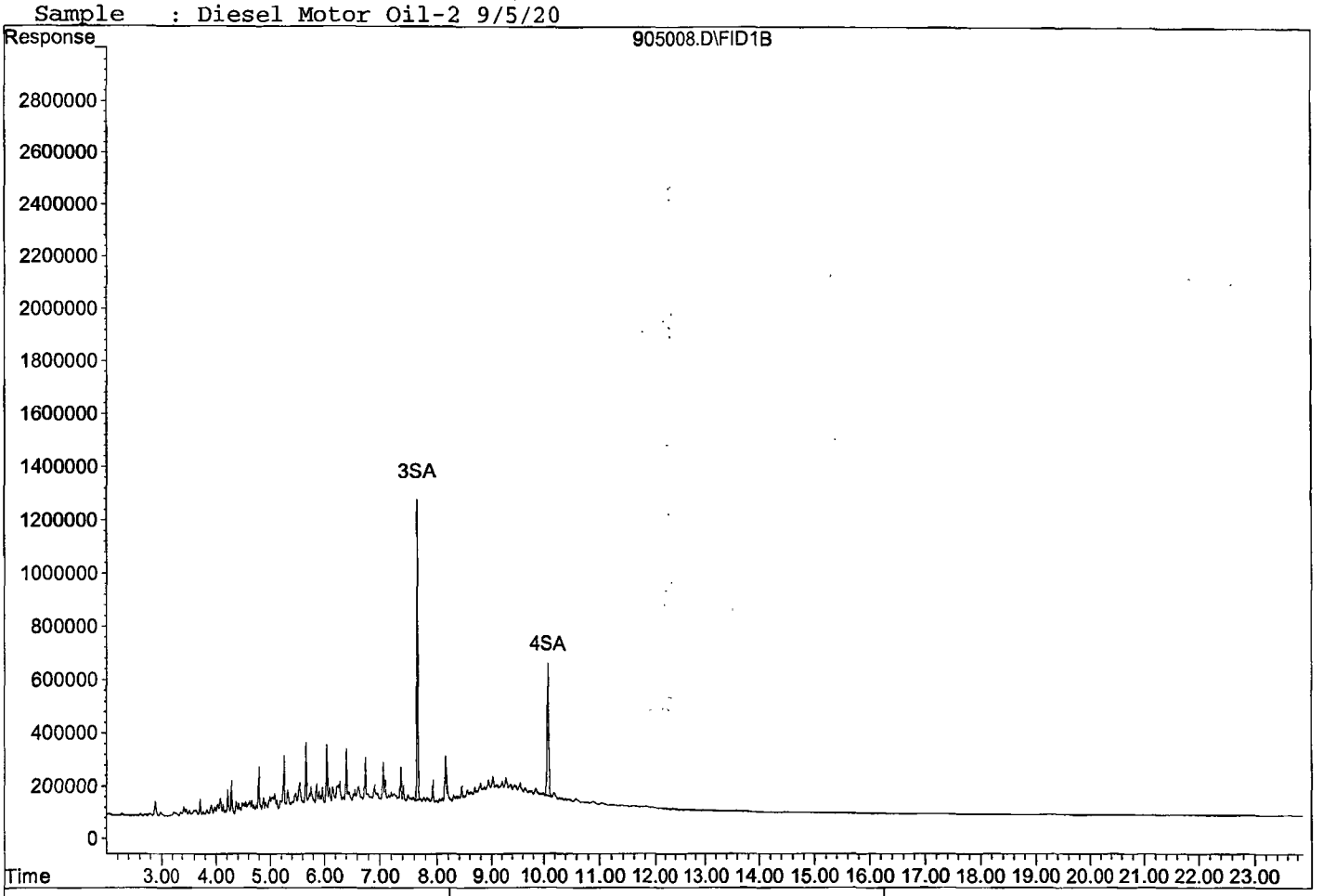
Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

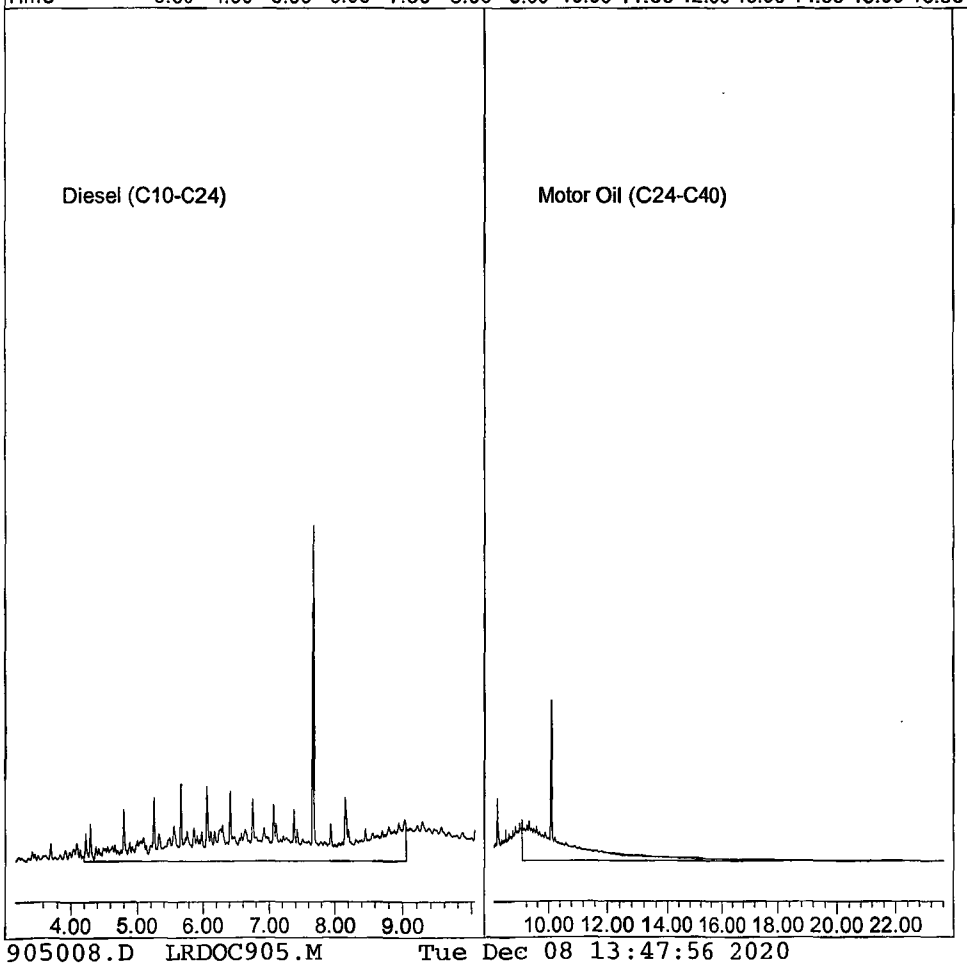
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	14055300	2.888 ppb
Surrogate Spike 30.000	Recovery =		9.63%
4) SA Octacosane(S)	10.08	10914920	2.744 ppb
Surrogate Spike 30.000	Recovery =		9.15%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	221437795	51.175 ppb
2) HBTM Motor Oil (C24-C40)	15.82	159613804	47.973 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905008.D
Sample : Diesel Motor Oil-2 9/5/20





905008.D LRDOC905.M Tue Dec 08 13:47:56 2020

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905009.D Vial: 9
Acq On : 9-5-20 18:00:45 Operator:
Sample : Diesel Motor Oil-3 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:45 2020 Quant Results File: LRDOC905.RES

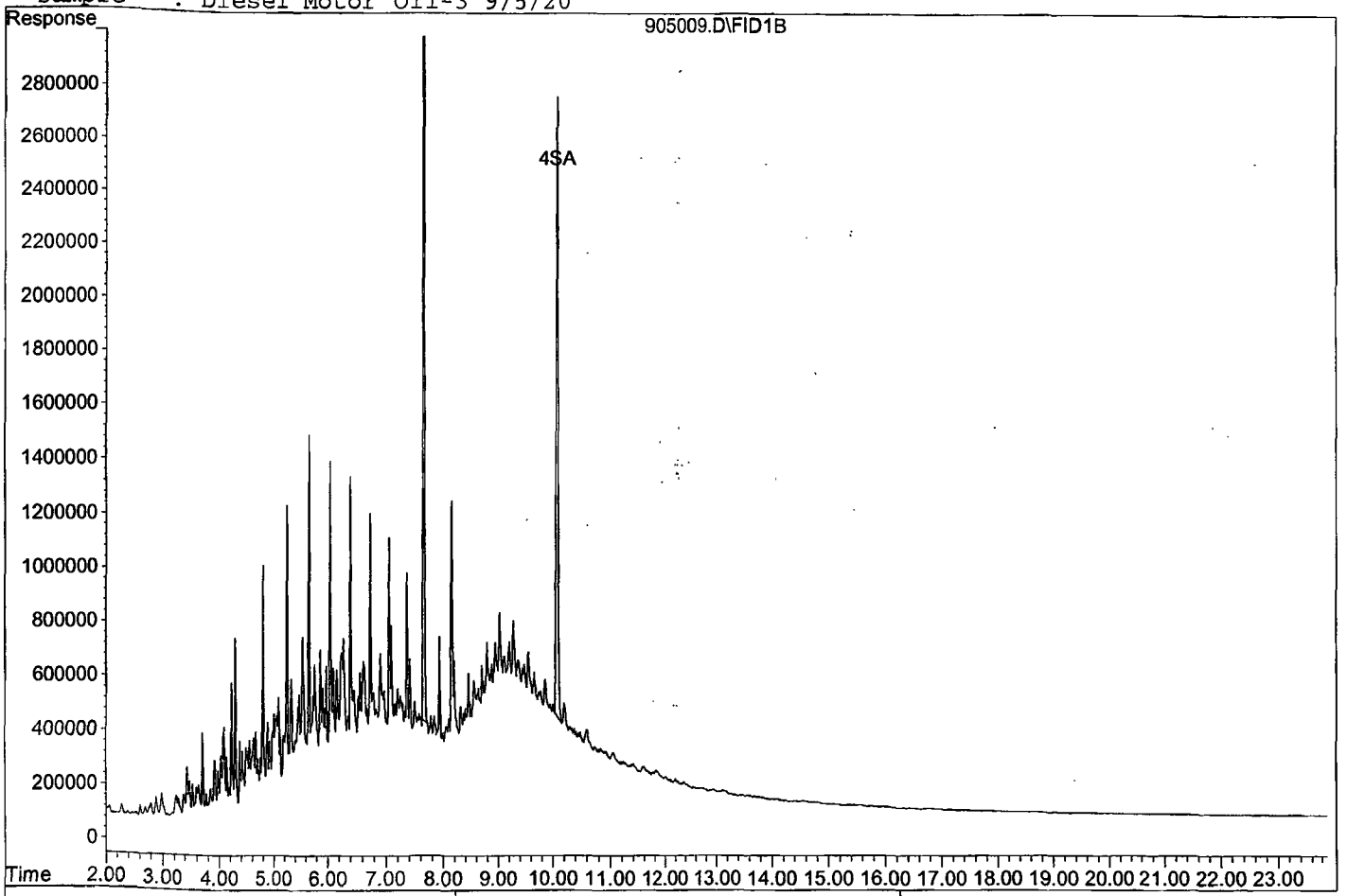
Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

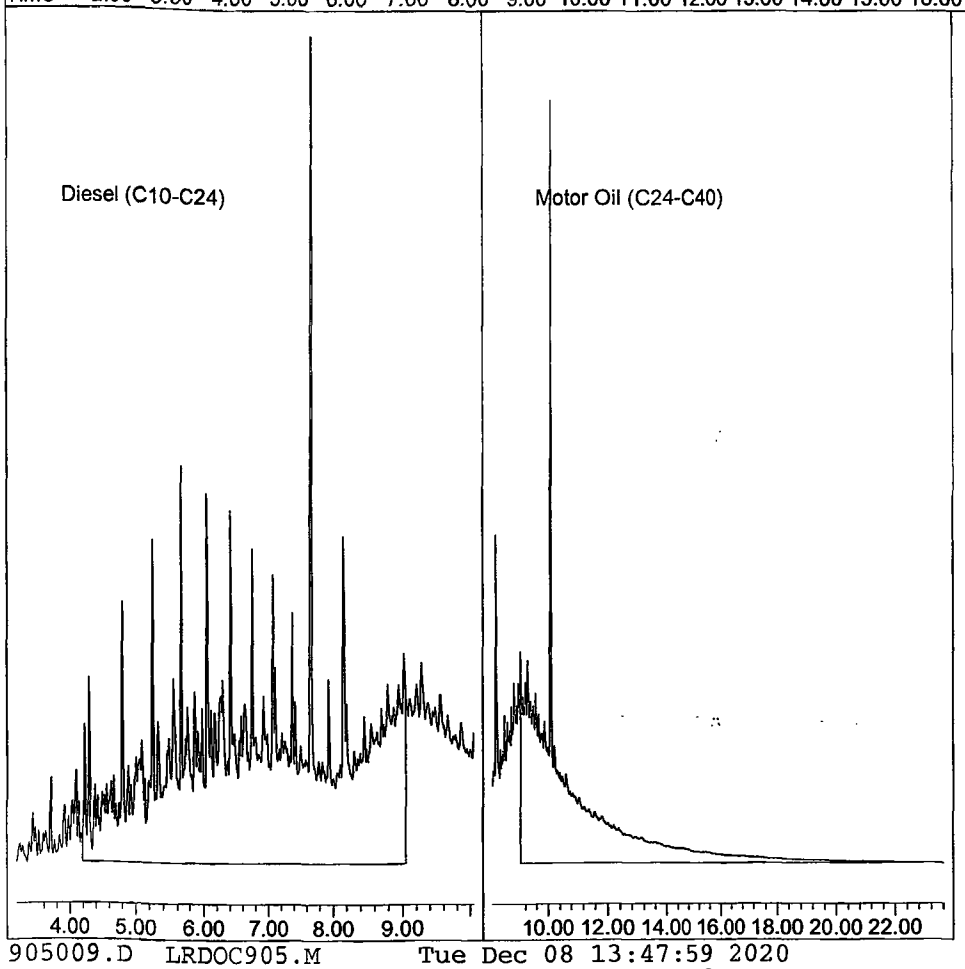
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	66996540	13.765 ppb
Surrogate Spike 30.000		Recovery =	45.88%
4) SA Octacosane(S)	10.09	52858376	13.288 ppb
Surrogate Spike 30.000		Recovery =	44.29%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1140515960	264.403 ppb
2) HBTM Motor Oil (C24-C40)	15.82	788424096	261.220 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905009.D
Sample : Diesel Motor Oil-3 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905010.D Vial: 10
Acq On : 9-5-20 18:28:54 Operator:
Sample : Diesel Motor Oil-4 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:46 2020 Quant Results File: LRDOC905.RES

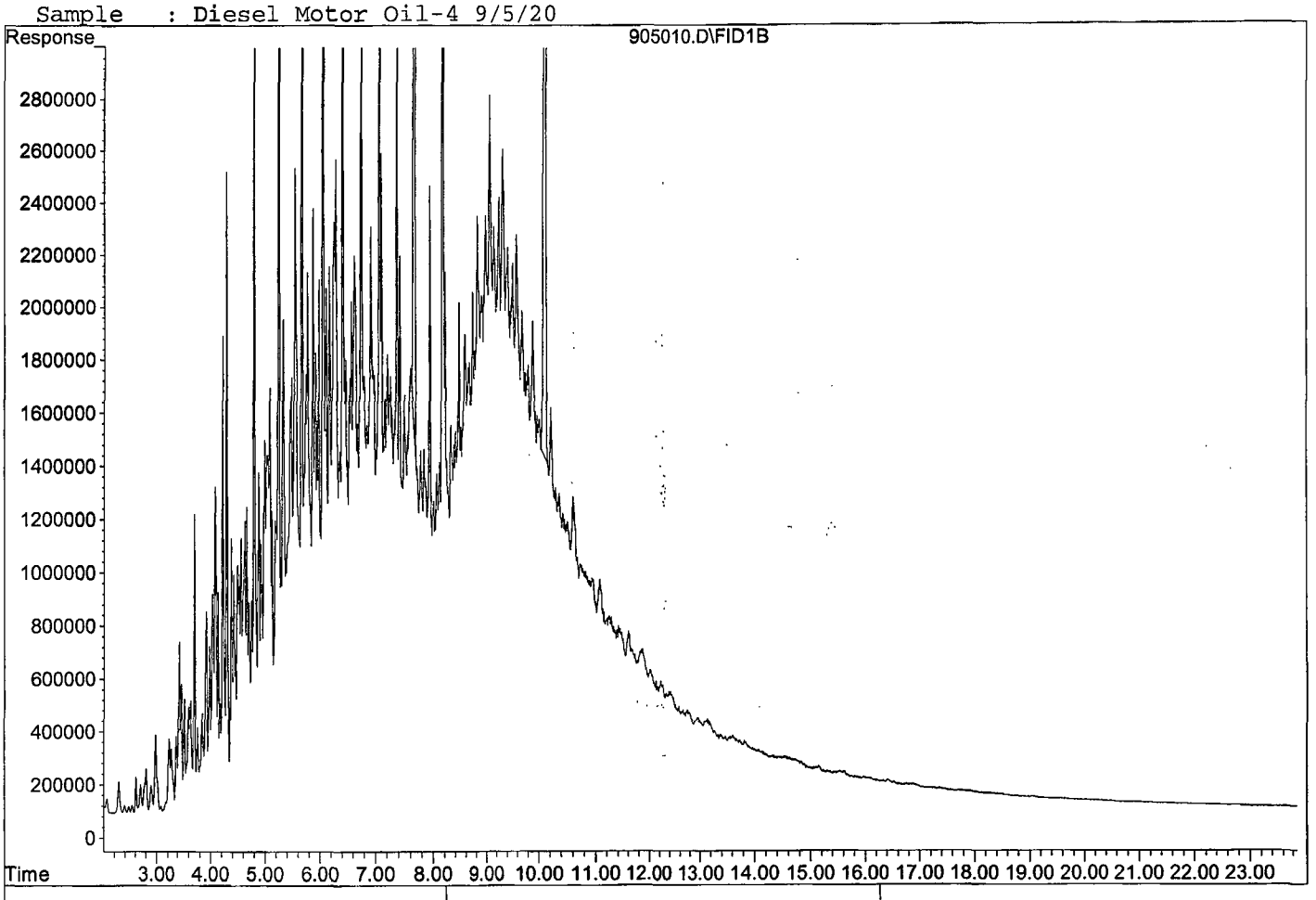
Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

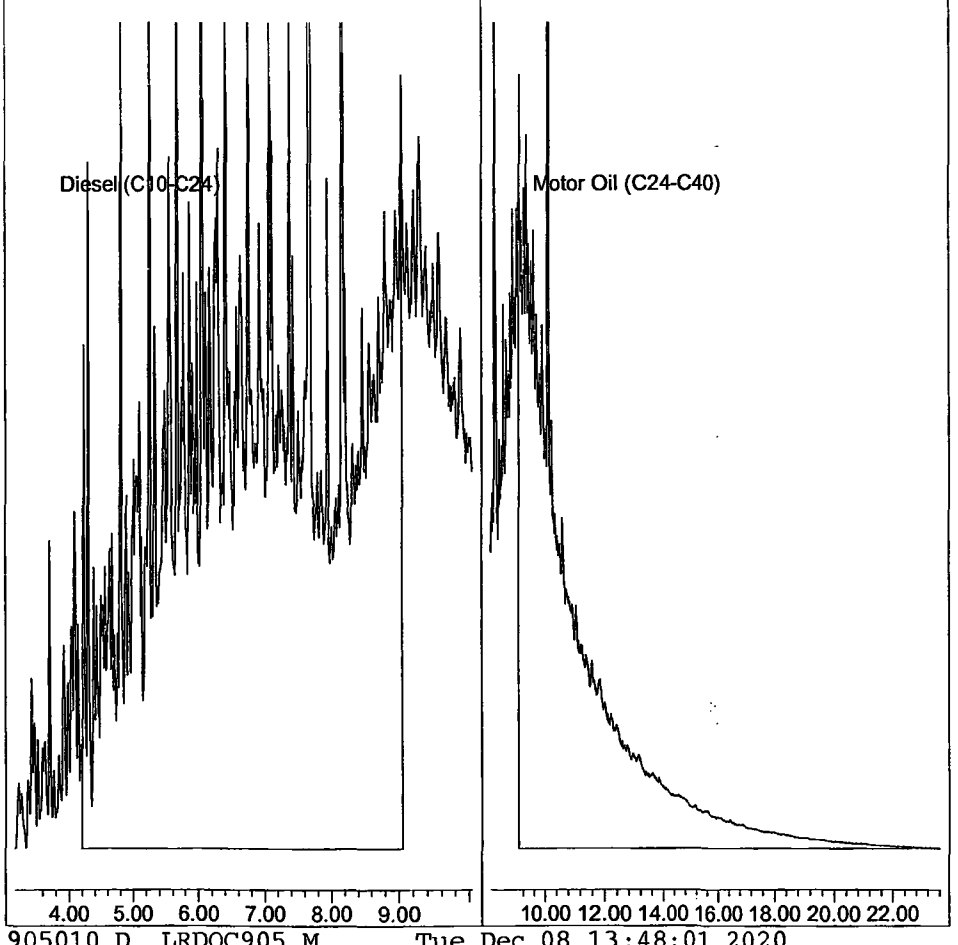
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.67	234931900	48.270 ppb
Surrogate Spike 30.000		Recovery =	160.90%
4) SA Octacosane(S)	10.11	196853973	49.487 ppb
Surrogate Spike 30.000		Recovery =	164.96%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	4160972977	965.157 ppb
2) HBTM Motor Oil (C24-C40)	15.82	2860576922	963.942 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905010.D
Sample : Diesel Motor Oil-4 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905011.D Vial: 11
Acq On : 9-5-20 18:56:54 Operator:
Sample : Diesel Motor Oil-5 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:46 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

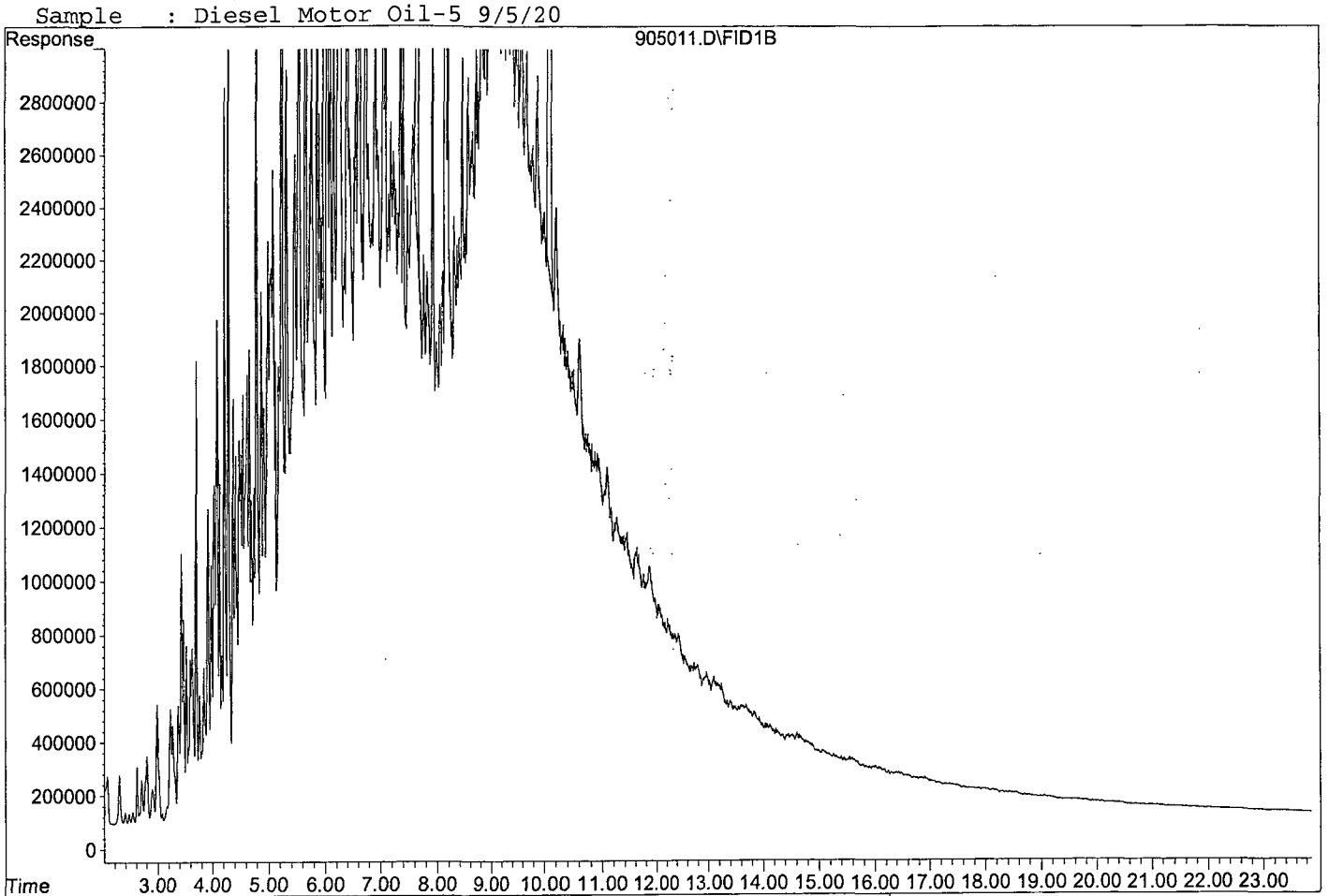
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

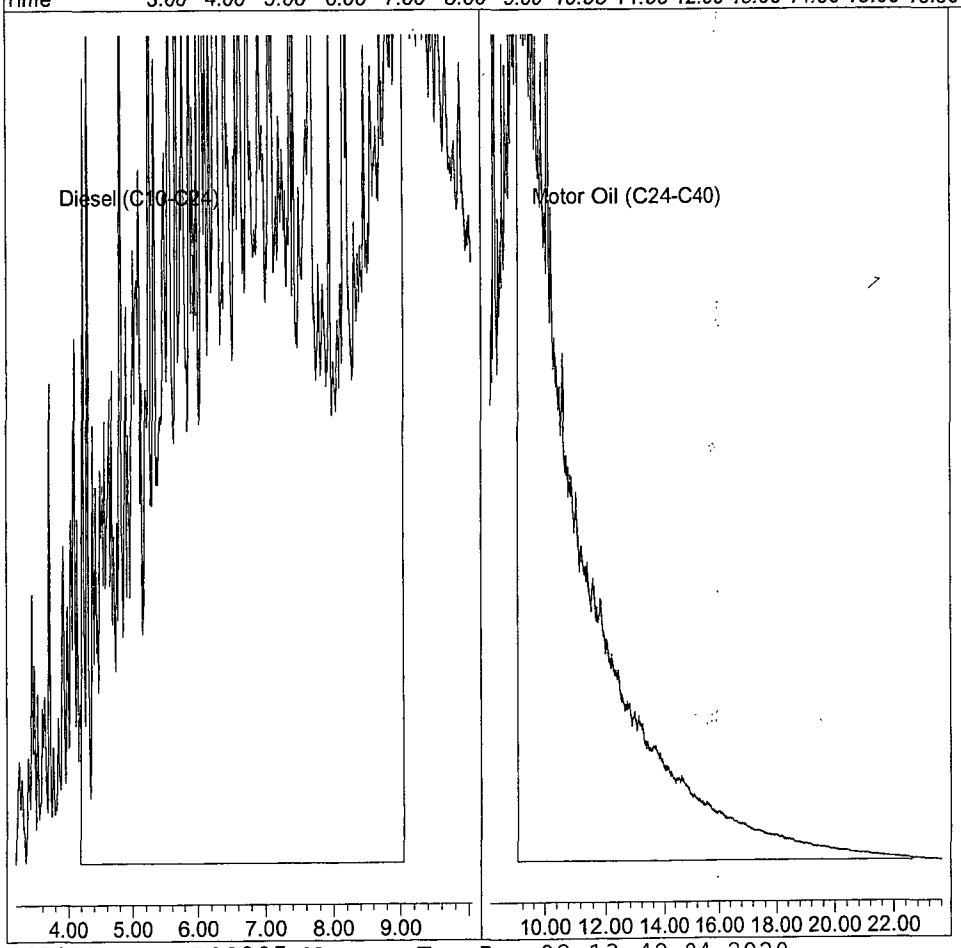
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.67	355298964	73.002	ppb
Surrogate Spike 30.000		Recovery =	243.34%	
4) SA Octacosane(S)	10.12	300469164	75.534	ppb
Surrogate Spike 30.000		Recovery =	251.78%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	6370162550	1477.694	ppb
2) HBTM Motor Oil (C24-C40)	15.82	4401128474	1486.384	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905011.D
Sample : Diesel Motor Oil-5 9/5/20





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200905\905012.D Vial: 12
Acq On : 9-5-20 19:24:55 Operator:
Sample : Diesel Motor Oil-6 9/5/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:46 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:43:11 2020
Response via : Multiple Level Calibration

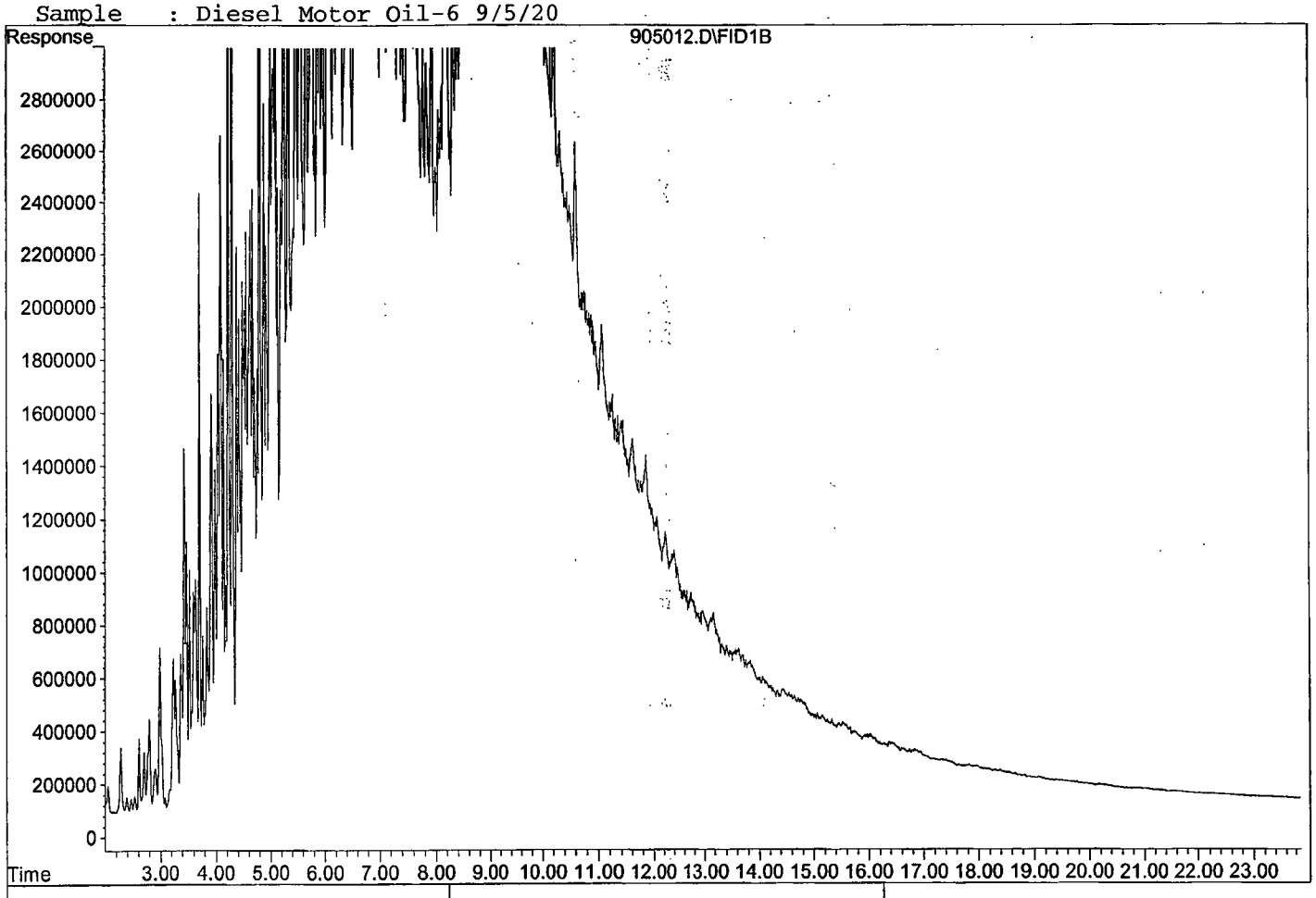
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

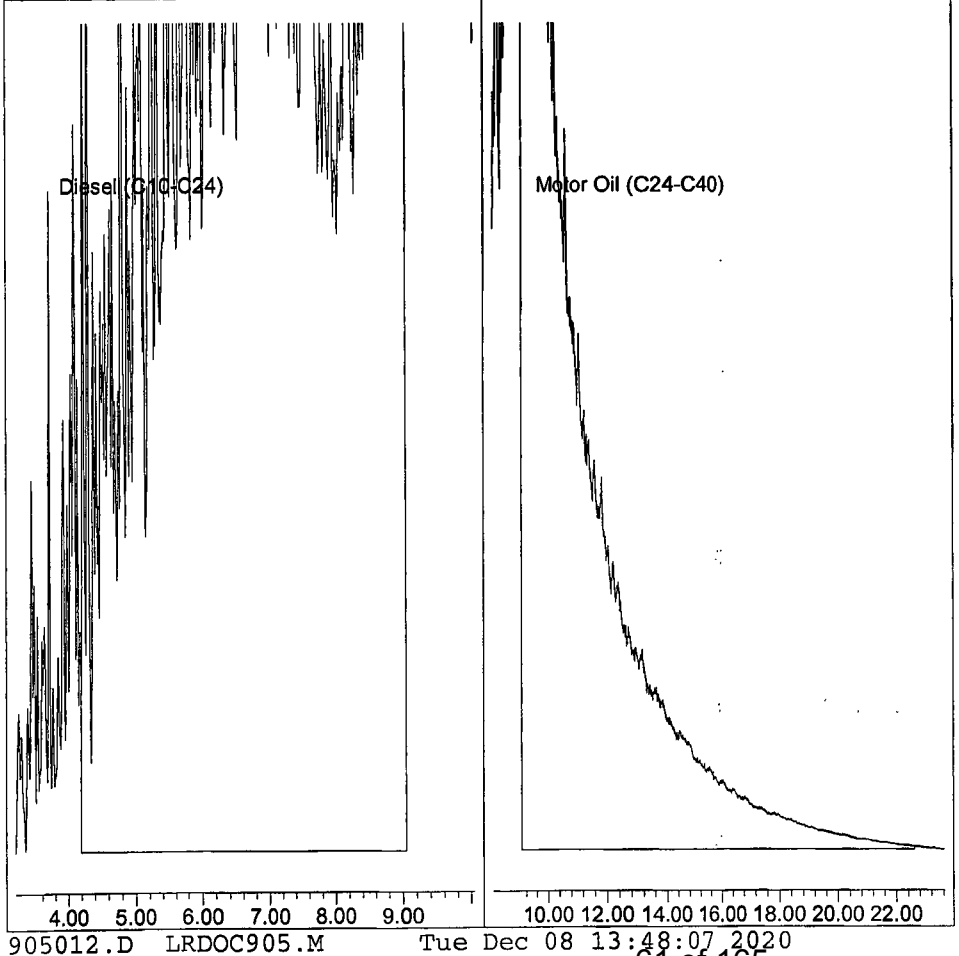
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.68	483575307	99.358	ppb
Surrogate Spike 30.000		Recovery =	331.19%	
4) SA Octacosane(S)	10.11	404805297	101.763	ppb
Surrogate Spike 30.000		Recovery =	339.21%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	8760292310	2032.210	ppb
2) HBTM Motor Oil (C24-C40)	15.82	5994530170	2026.749	ppb

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905012.D
Sample : Diesel Motor Oil-6 9/5/20





TPH Extractables
LRDOC905

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 9/5/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 905013.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2384790	0.70	HATML	11
2	HBTM	Motor Oil (C24-C40)	1907910	1737110	9.0	HBTML	16
3							
4							
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40							
		Average			4.9		

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\200905\905013.D Vial: 13
Acq On : 9-5-20 19:52:52 Operator:
Sample : Diesel Motor Oil-SS 7/21/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 13:58 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\200905\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 13:55:54 2020
Response via : Multiple Level Calibration

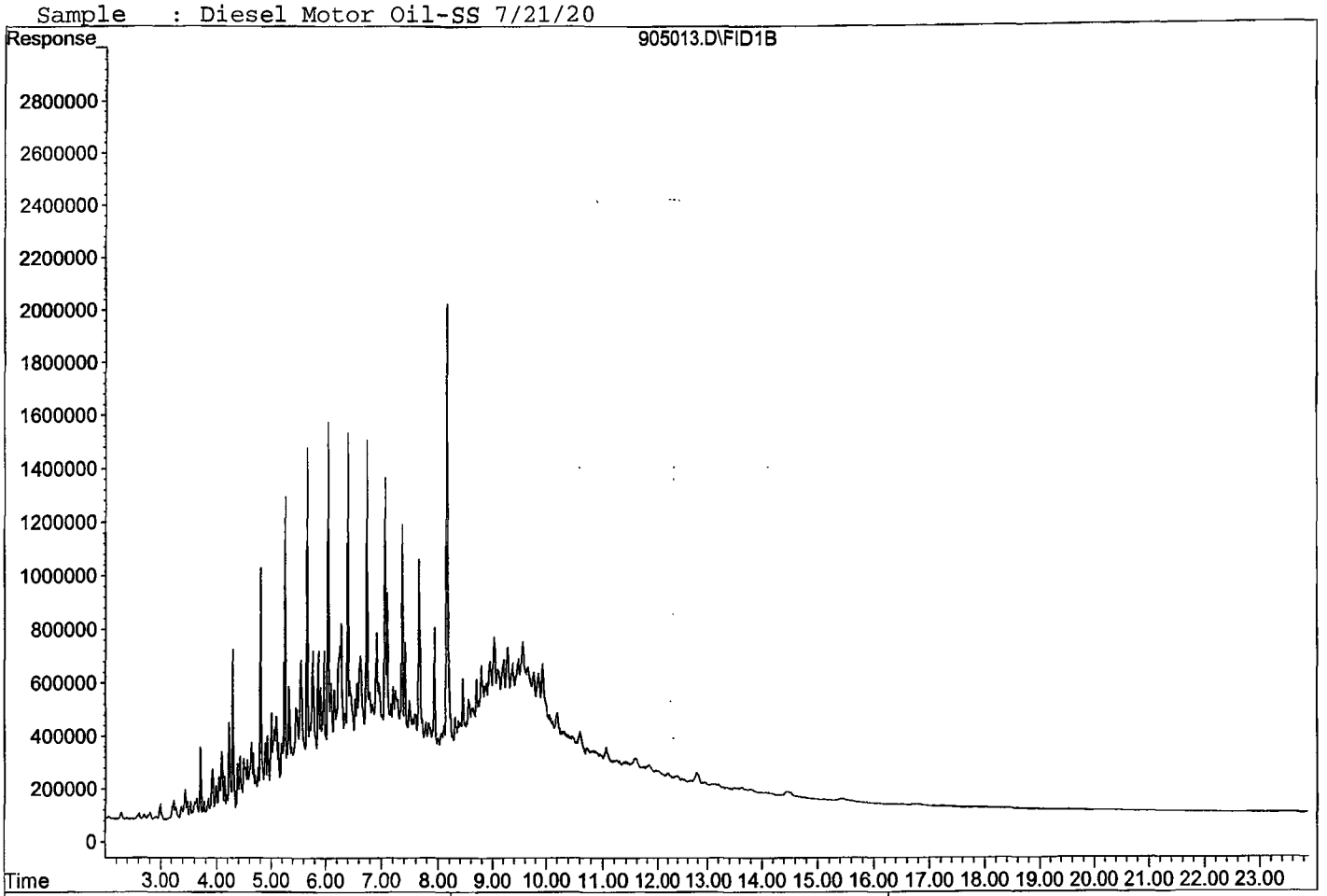
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

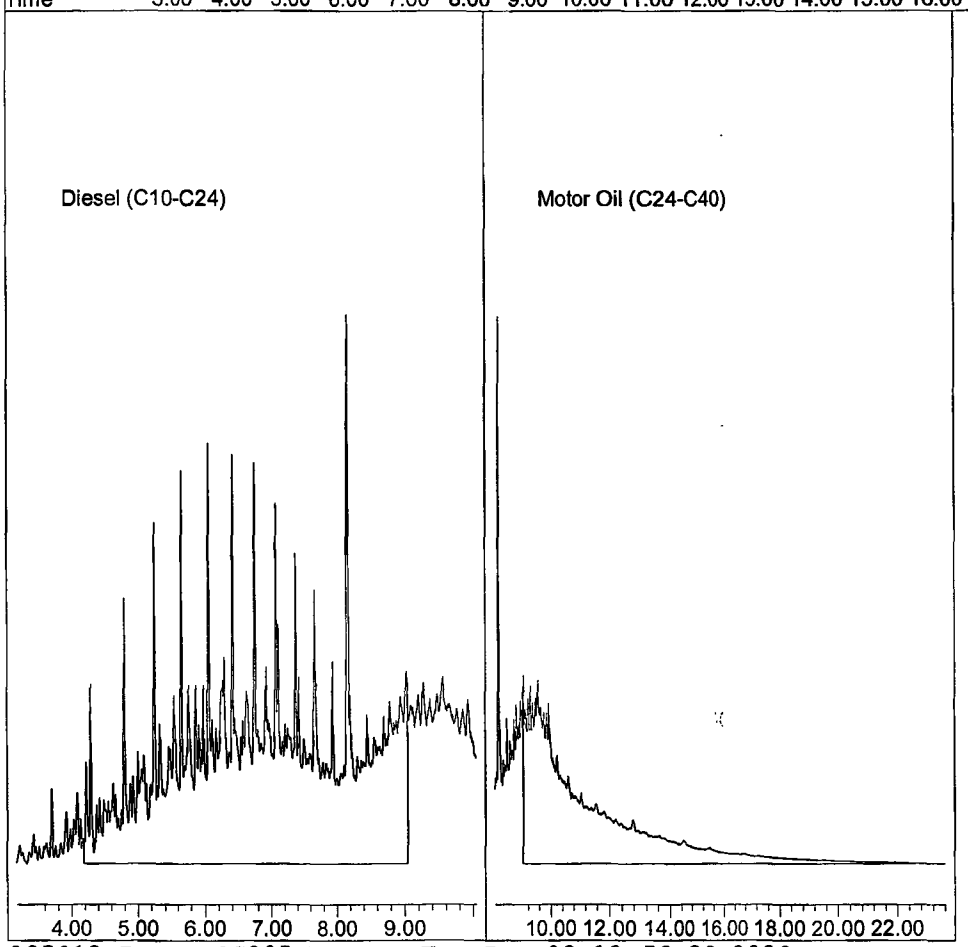
Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
3) SA Ortho-Terphenyl(S)	0.00	0	N.D.	ppb	d
Surrogate Spike 30.000	Recovery	=	0.00%		
4) SA Octacosane(S)	0.00	0	N.D.	ppb	d
Surrogate Spike 30.000	Recovery	=	0.00%		
Target Compounds					
1) HATM Diesel (C10-C24)	6.62	1192394512	277.344	ppb	
2) HBTM Motor Oil (C24-C40)	15.82	868552578	289.389	ppb	

Target Compounds

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\200905\905013.D
Sample : Diesel Motor Oil-SS 7/21/20





TPH Extractables
DEC0914

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 9/14/2020
Matrix: Water Instrument: Apollo Initials:

914004.D 914005.D 914006.D 914007.D 914008.D 914009.D

		Compound	1	2	3	4	5	6					Avg	%RSD	Type	r^2	Q
1	SC	Decanoic Acid(S)	1032713	1038468	1205026	1249387	1259834	1291198					1179438	9.7	SC		
2																	
3																	
4																	
5																	
6																	
7																	
8																	
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0.278114

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914004.D Vial: 4
Acq On : 9-14-20 10:24:43 Operator:
Sample : Decanoic Acid-1 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 15:45 2020 Quant Results File: DEC0914.RES

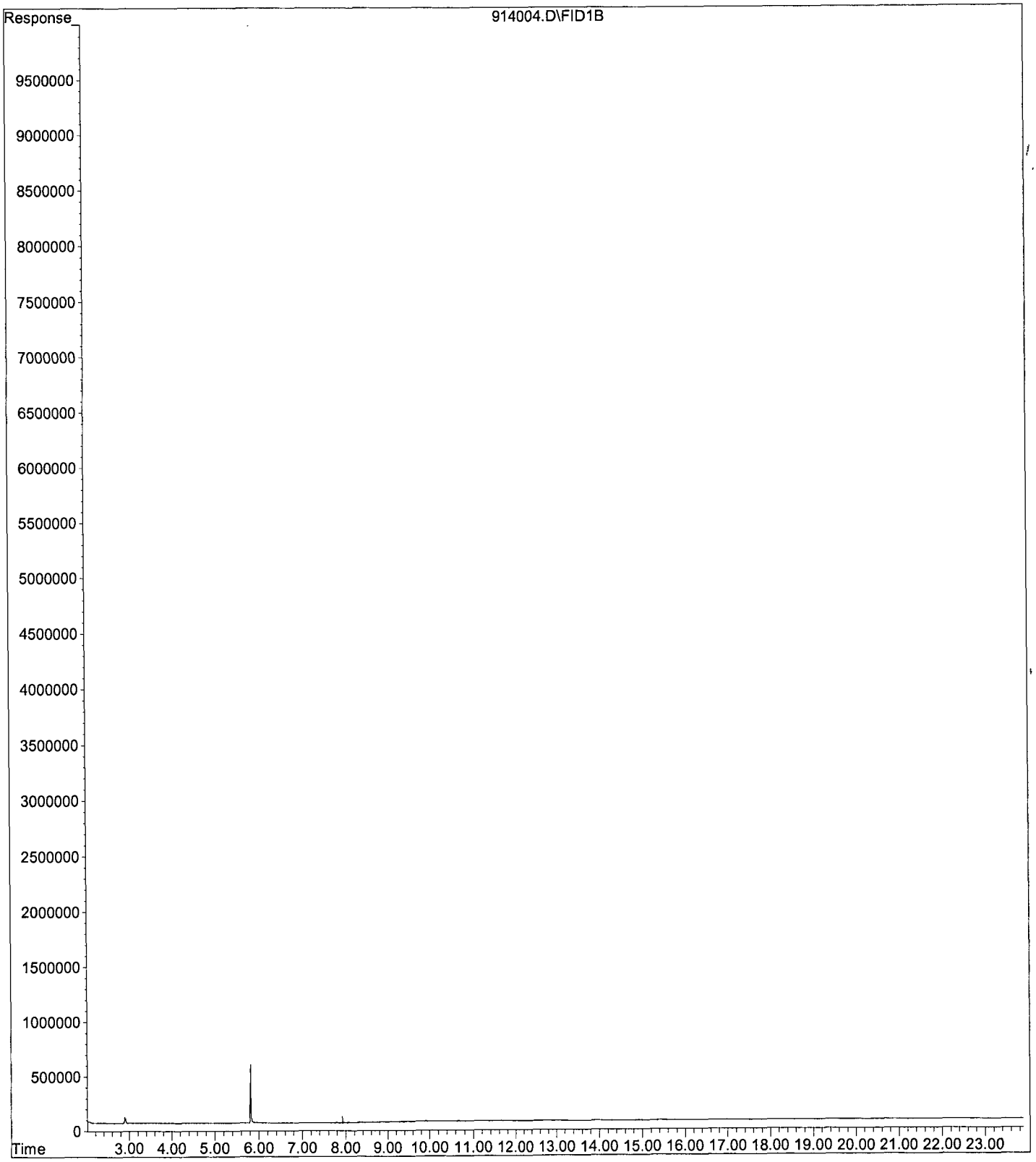
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.82	6196276	2.627 ppb
Surrogate Spike 24.000	Recovery =		10.95%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914004.D
Operator :
Acquired : 9-14-20 10:24:43 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-1 9/14/20
Misc Info : water
Vial Number: 4



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914005.D Vial: 5
Acq On : 9-14-20 10:52:47 Operator:
Sample : Decanoic Acid-2 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 15:45 2020 Quant Results File: DEC0914.RES

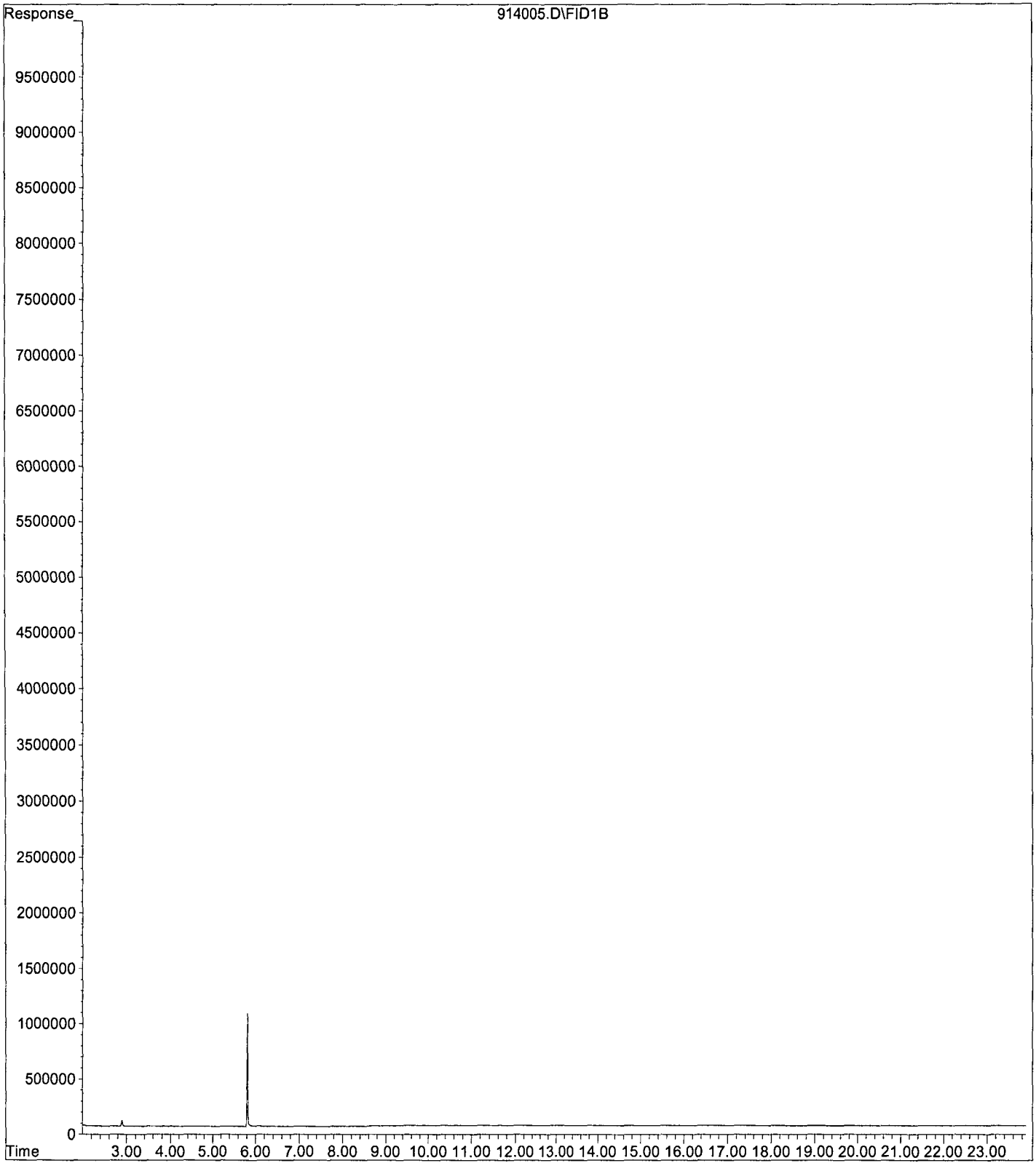
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.82	12461617	5.283 ppb
Surrogate Spike 24.000	Recovery =		22.01%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914005.D
Operator :
Acquired : 9-14-20 10:52:47 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-2 9/14/20
Misc Info : water
Vial Number: 5



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914006.D Vial: 6
Acq On : 9-14-20 11:20:51 Operator:
Sample : Decanoic Acid-3 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 15:45 2020 Quant Results File: DEC0914.RES

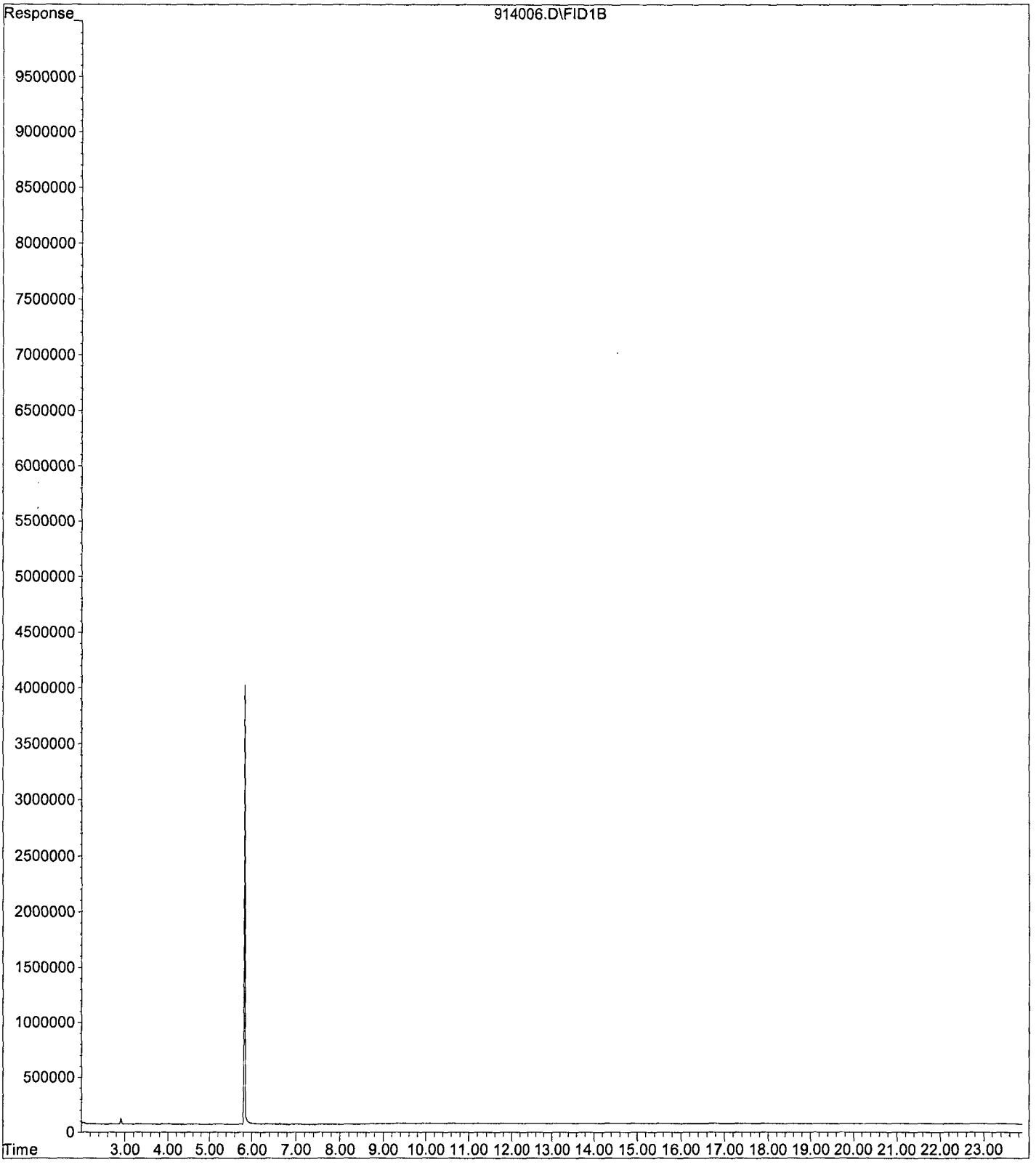
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.83	57841244	24.521 ppb
Surrogate Spike 24.000		Recovery =	102.17%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914006.D
Operator :
Acquired : 9-14-20 11:20:51 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-3 9/14/20
Misc Info : water
Vial Number: 6



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914007.D Vial: 7
Acq On : 9-14-20 11:48:52 Operator:
Sample : Decanoic Acid-4 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 15:45 2020 Quant Results File: DEC0914.RES

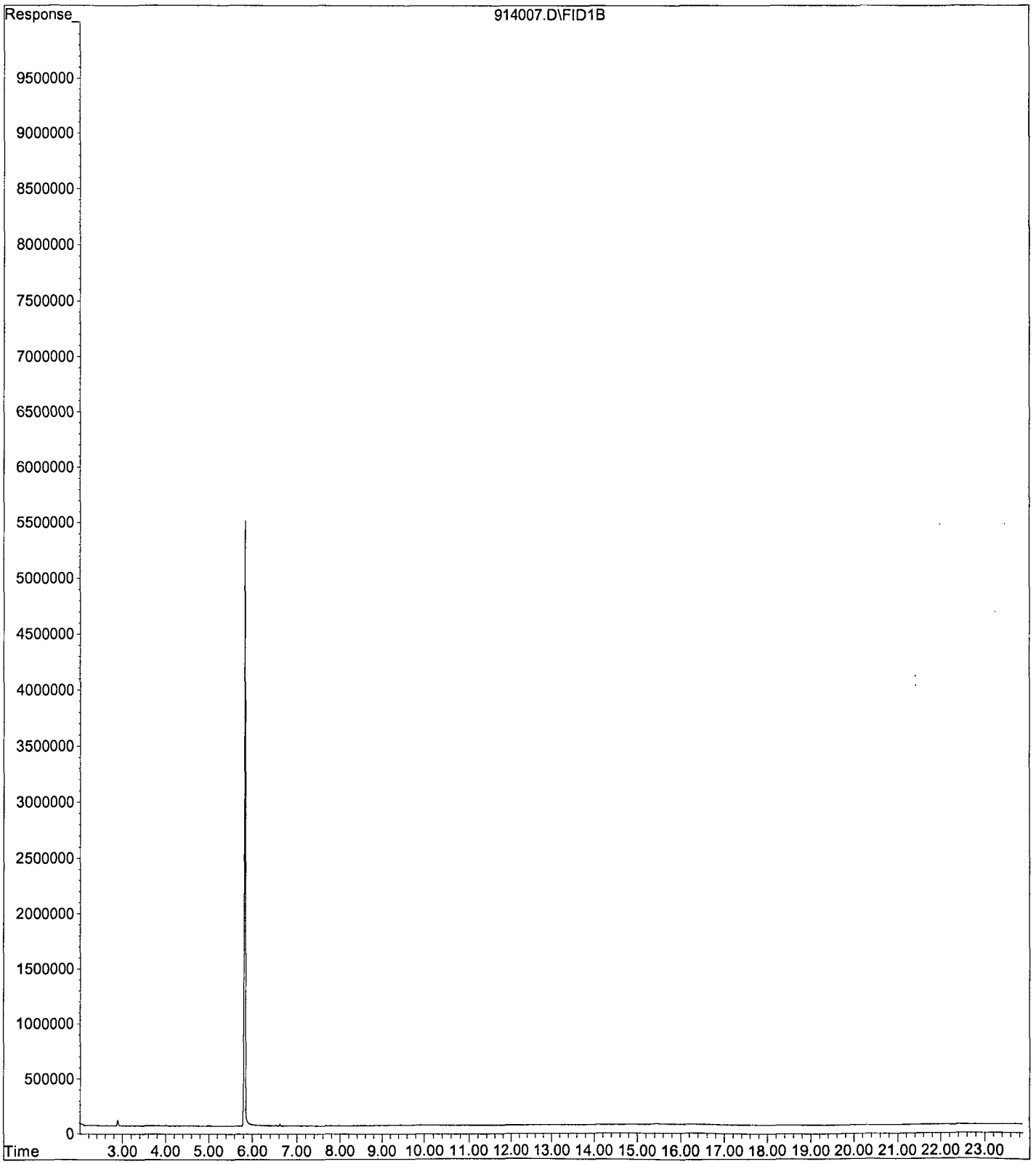
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.84	89955859	38.135 ppb
Surrogate Spike 24.000	Recovery =		158.90%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914007.D
Operator :
Acquired : 9-14-20 11:48:52 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-4 9/14/20
Misc Info : water
Vial Number: 7



Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914008.D Vial: 8
Acq On : 9-14-20 12:16:53 Operator:
Sample : Decanoic Acid-5 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 15:45 2020 Quant Results File: DEC0914.RES

Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.85	120944103	51.272 ppb
Surrogate Spike 24.000	Recovery =		213.63%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\200914\914009.D Vial: 9
Acq On : 9-14-20 12:44:57 Operator:
Sample : Decanoic Acid-6 9/14/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 14 15:45 2020 Quant Results File: DEC0914.RES

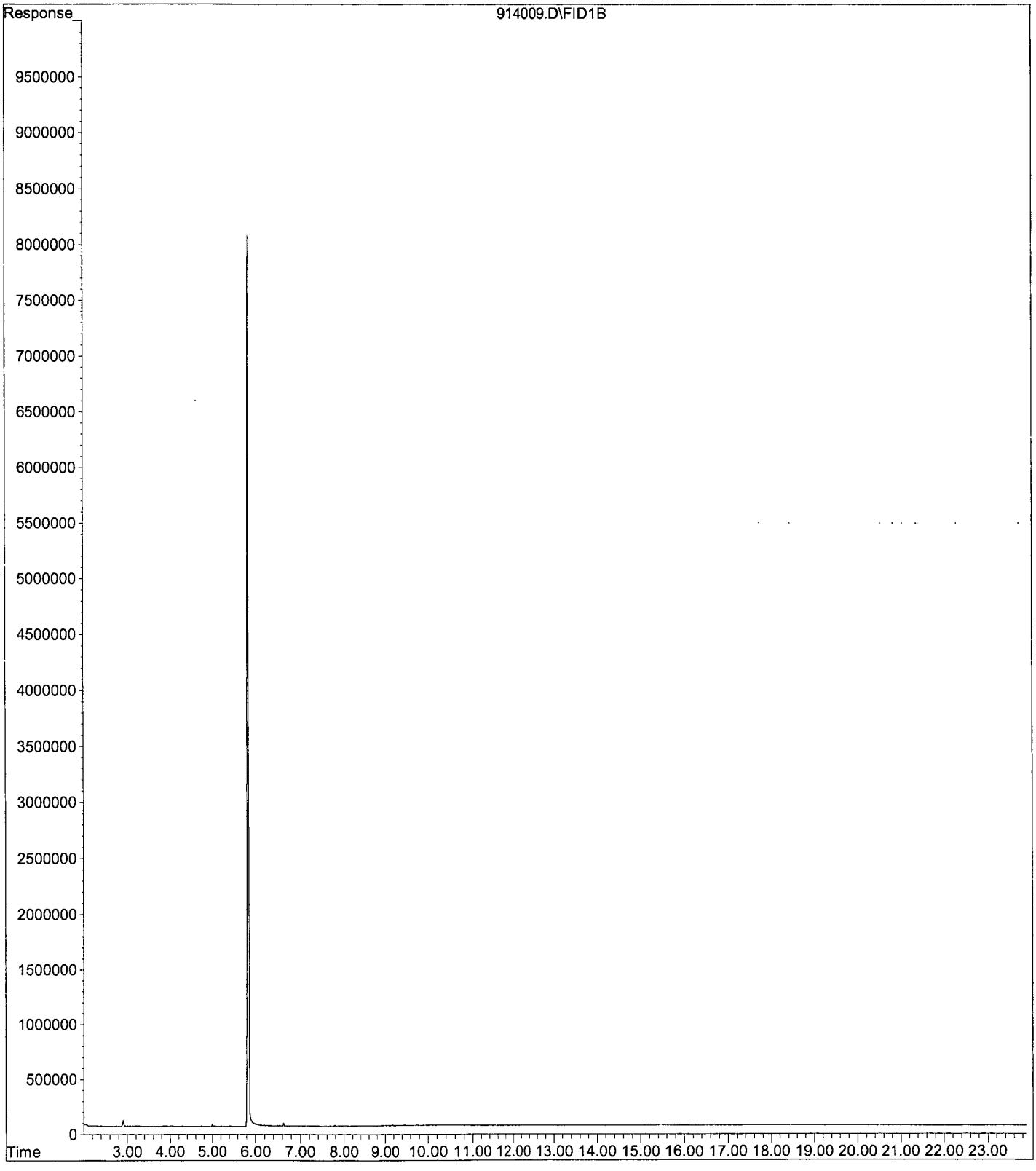
Method : G:\APOLLO\DATA\200914\DEC0914.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Thu Oct 29 11:37:40 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) SC Decanoic Acid(S)	5.85	154943704	65.685 ppb
Surrogate Spike 24.000		Recovery =	273.69%
Target Compounds			
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

File : G:\APOLLO\DATA\200914\914009.D
Operator :
Acquired : 9-14-20 12:44:57 using AcqMethod TPHSN.M
Instrument : Apollo
Sample Name: Decanoic Acid-6 9/14/20
Misc Info : water
Vial Number: 9



TPH Extractables
LRDOC905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/20/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 1019032.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2034570	15	HATML	5.3
2	HBTM	Motor Oil (C24-C40)	1907910	1424470	25	HBTML	5.4
3	SA	Ortho-Terphenyl(S)	2525360	2479280	1.8	SA	
4	SA	Octacosane(S)	2058600	1853750	10	SA	
5							
6							
7							
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		Average			13.0		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201019\1019032.D Vial: 32
Acq On : 10-20-20 12:52:56 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 14:12 2020 Quant Results File: LRDOC905.RES

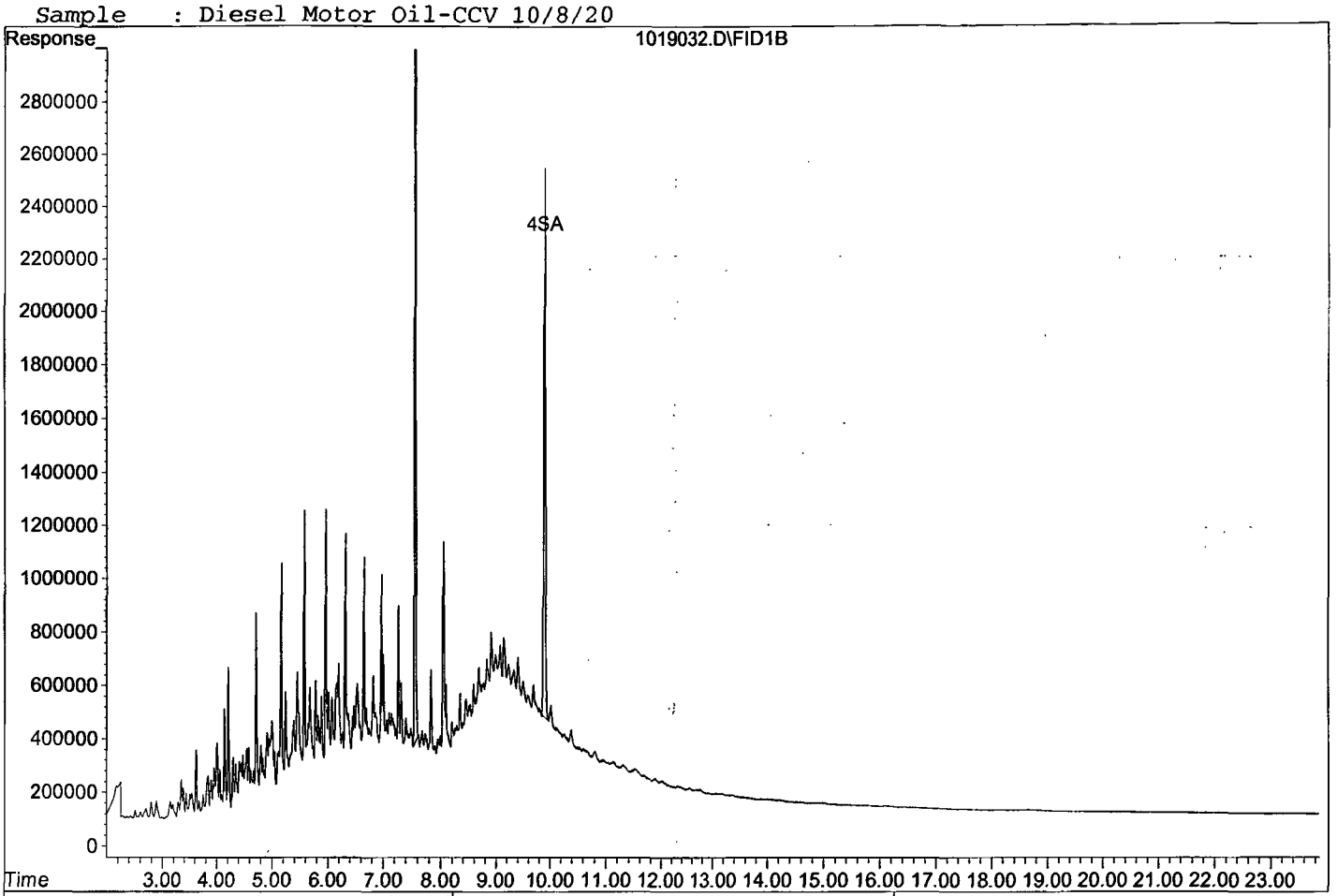
Method : G:\APOLLO\DATA\201019\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:32:29 2020
Response via : Multiple Level Calibration

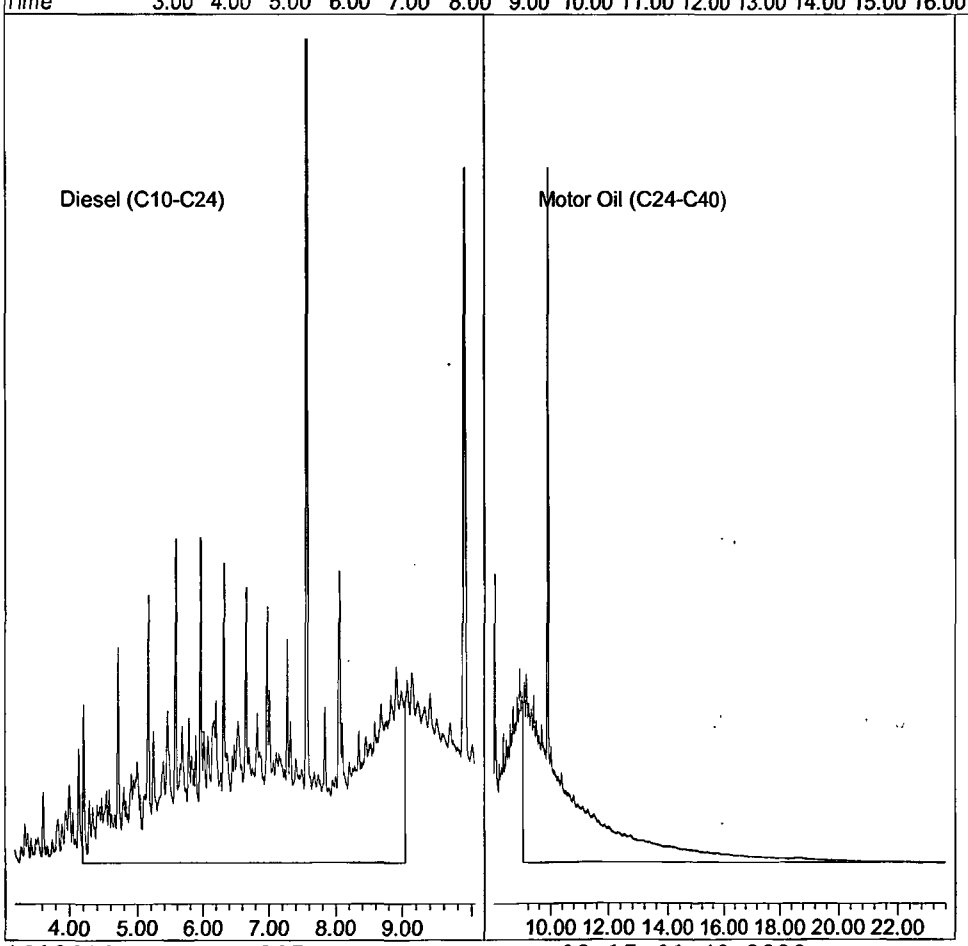
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	61981982	12.272 ppb
Surrogate Spike 30.000		Recovery =	40.91%
4) SA Octacosane(S)	9.90	46343770	11.256 ppb
Surrogate Spike 30.000		Recovery =	37.52%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1017283507	236.747 ppb
2) HBTM Motor Oil (C24-C40)	15.82	712233098	236.418 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201019\1019032.D
Sample : Diesel Motor Oil-CCV 10/8/20





TPH Extractables
LRDOC905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/20/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 1019042.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2123880	12	HATML	1.2
2	HBTM	Motor Oil (C24-C40)	1907910	1423120	25	HBTML	5.5
3	SA	Ortho-Terphenyl(S)	2525360	2581000	2.2	SA	
4	SA	Octacosane(S)	2058600	1959380	4.8	SA	
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		Average			11.0		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201019\1019042.D Vial: 42
Acq On : 10-20-20 20:21:12 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 14:54 2020 Quant Results File: LRDOC905.RES

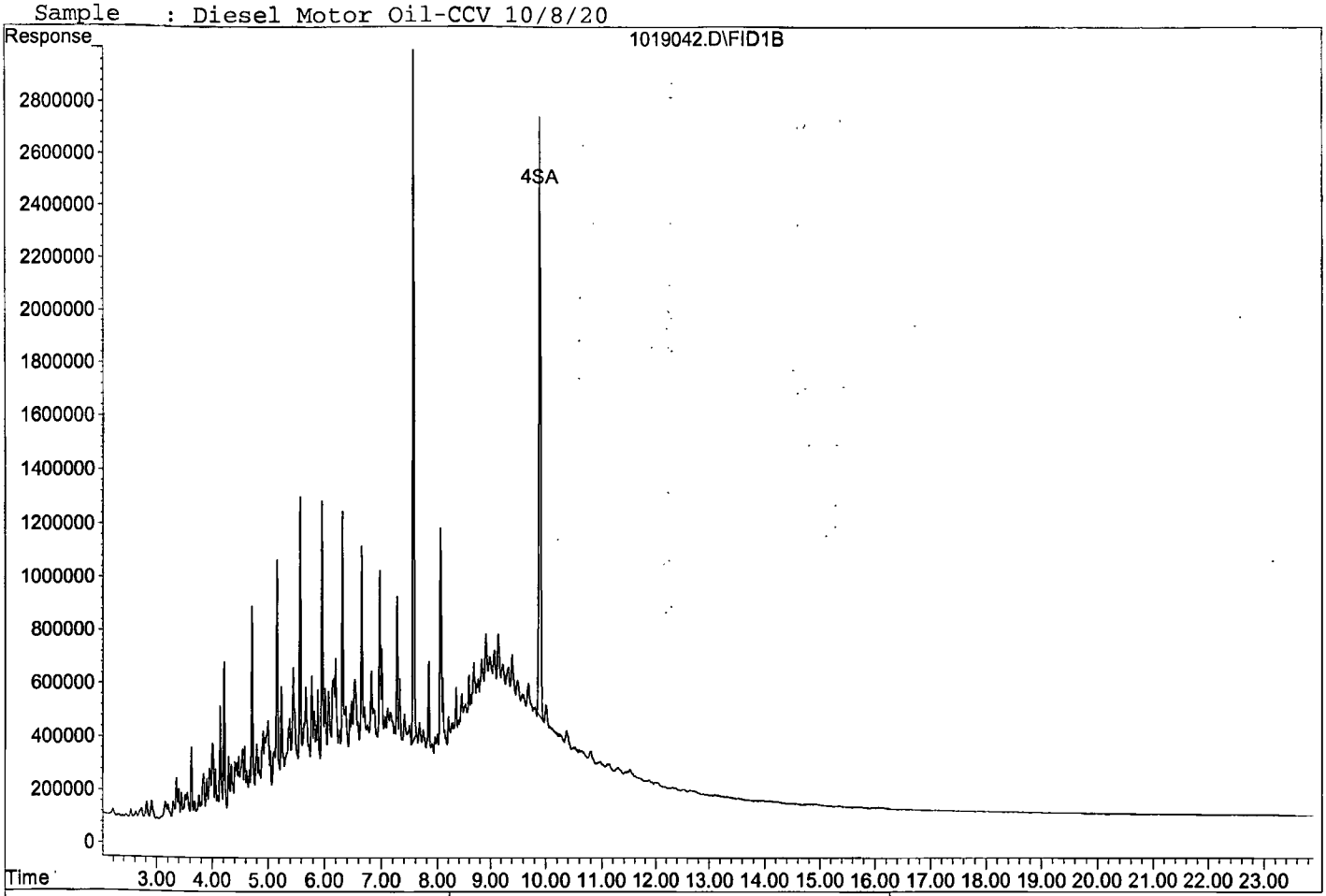
Method : G:\APOLLO\DATA\201019\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:32:29 2020
Response via : Multiple Level Calibration

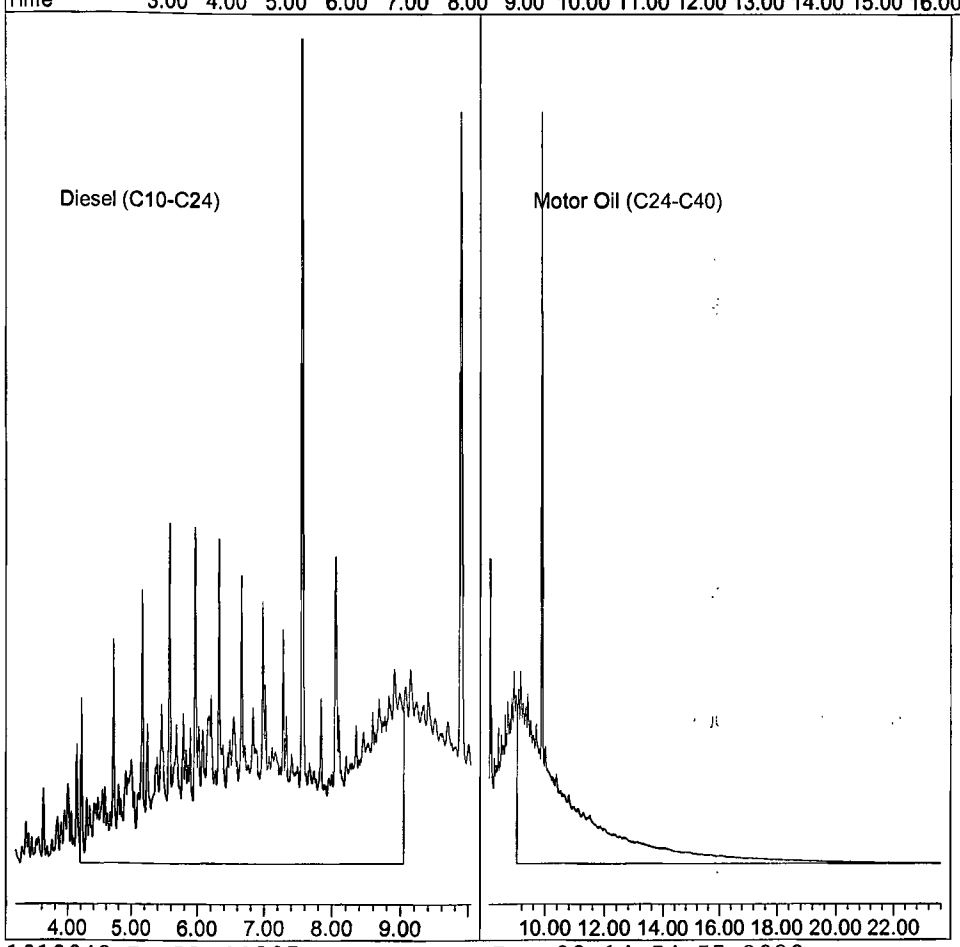
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	64525001	12.775 ppb
Surrogate Spike 12.000		Recovery =	106.46%
4) SA Octacosane(S)	9.90	48984601	11.898 ppb
Surrogate Spike 12.000		Recovery =	99.15%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1061941289	247.100 ppb
2) HBTM Motor Oil (C24-C40)	15.82	711561975	236.191 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201019\1019042.D
Sample : Diesel Motor Oil-CCV 10/8/20





TPH Extractables
LRDOC905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/21/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 1019050.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2184420	9.0	HATML	1.6
2	HBTM	Motor Oil (C24-C40)	1907910	1458620	24	HBTML	3.1
3	SA	Ortho-Terphenyl(S)	2525360	2662640	5.4	SA	
4	SA	Octacosane(S)	2058600	2050690	0.38	SA	
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		Average			9.7		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201019\1019050.D Vial: 50
Acq On : 10-21-20 0:06:44 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 14:56 2020 Quant Results File: LRDOC905.RES

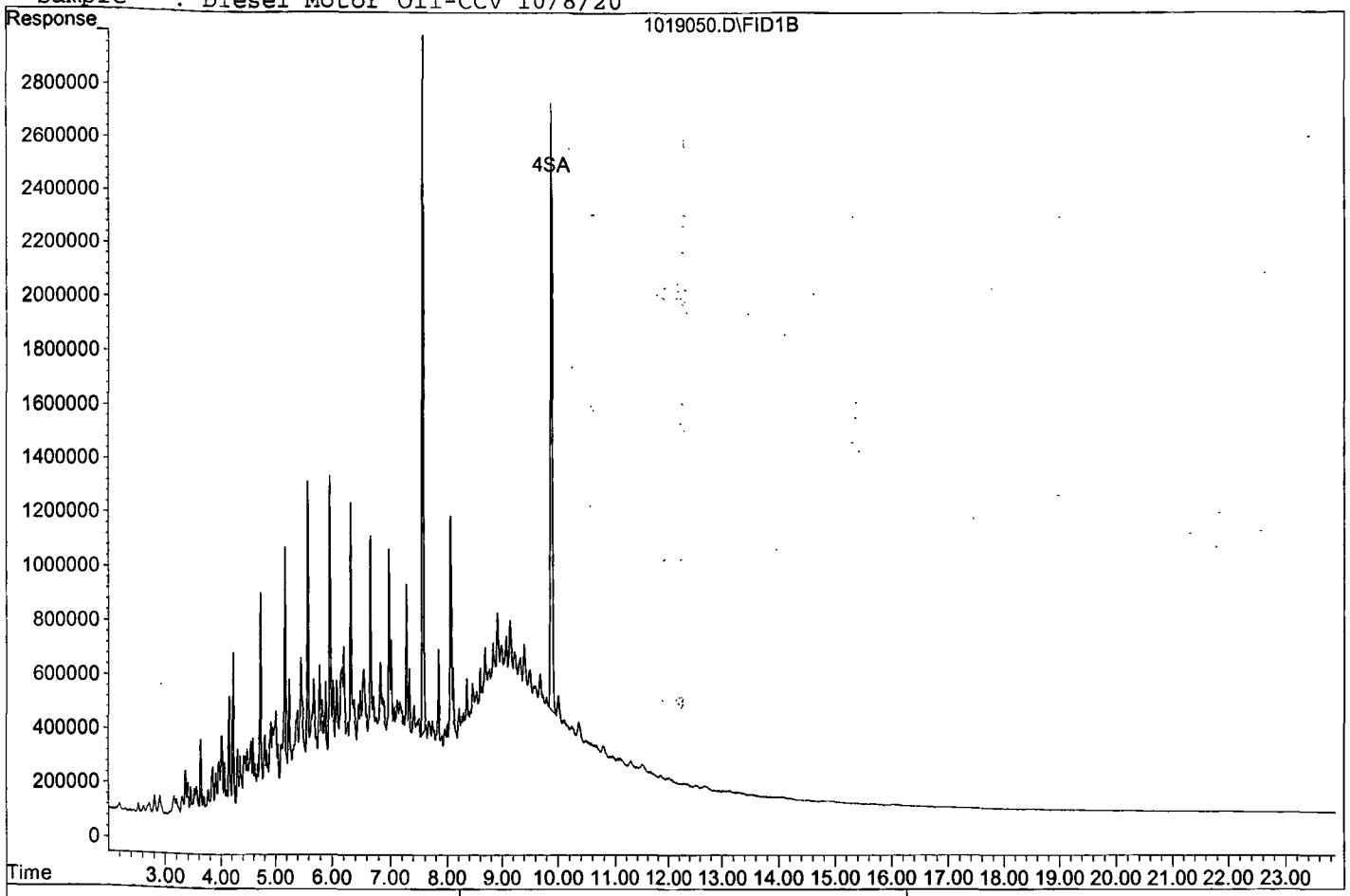
Method : G:\APOLLO\DATA\201019\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:32:29 2020
Response via : Multiple Level Calibration

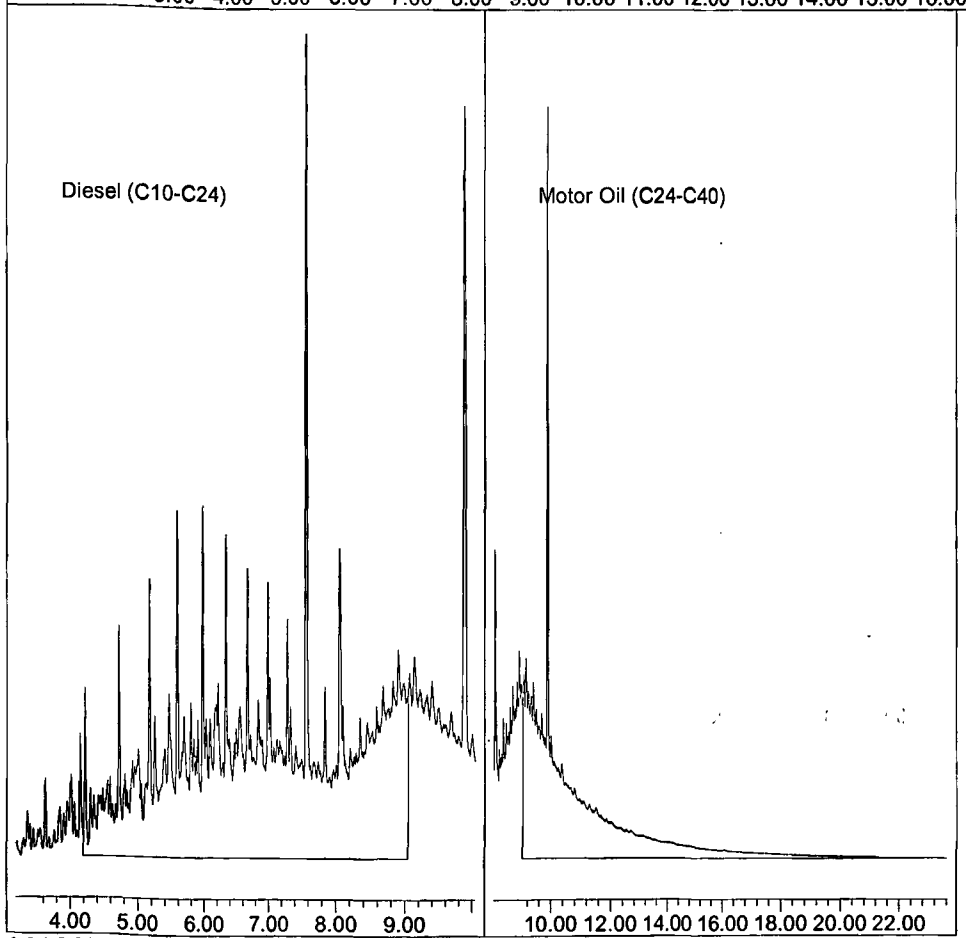
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.57	66566056	13.180	ppb
Surrogate Spike 12.000		Recovery =	109.83%	
4) SA Octacosane(S)	9.89	51267336	12.452	ppb
Surrogate Spike 12.000		Recovery =	103.77%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	1092211257	254.118	ppb
2) HBTM Motor Oil (C24-C40)	15.82	729310186	242.205	ppb
Target Compounds				

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201019\1019050.D
Sample : Diesel Motor Oil-CCV 10/8/20





TPH Extractables
LRDOC905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/29/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 1028029.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2151690	10	HATML	0.13
2	HBTM	Motor Oil (C24-C40)	1907910	1404120	26	HBTML	6.8
3	SA	Ortho-Terphenyl(S)	2525360	2682100	6.2	SA	
4	SA	Octacosane(S)	2058600	2056860	0.09	SA	
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		Average			10.6		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028029.D Vial: 29
Acq On : 10-29-20 1:34:57 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 15:51 2020 Quant Results File: LRDOC905.RES

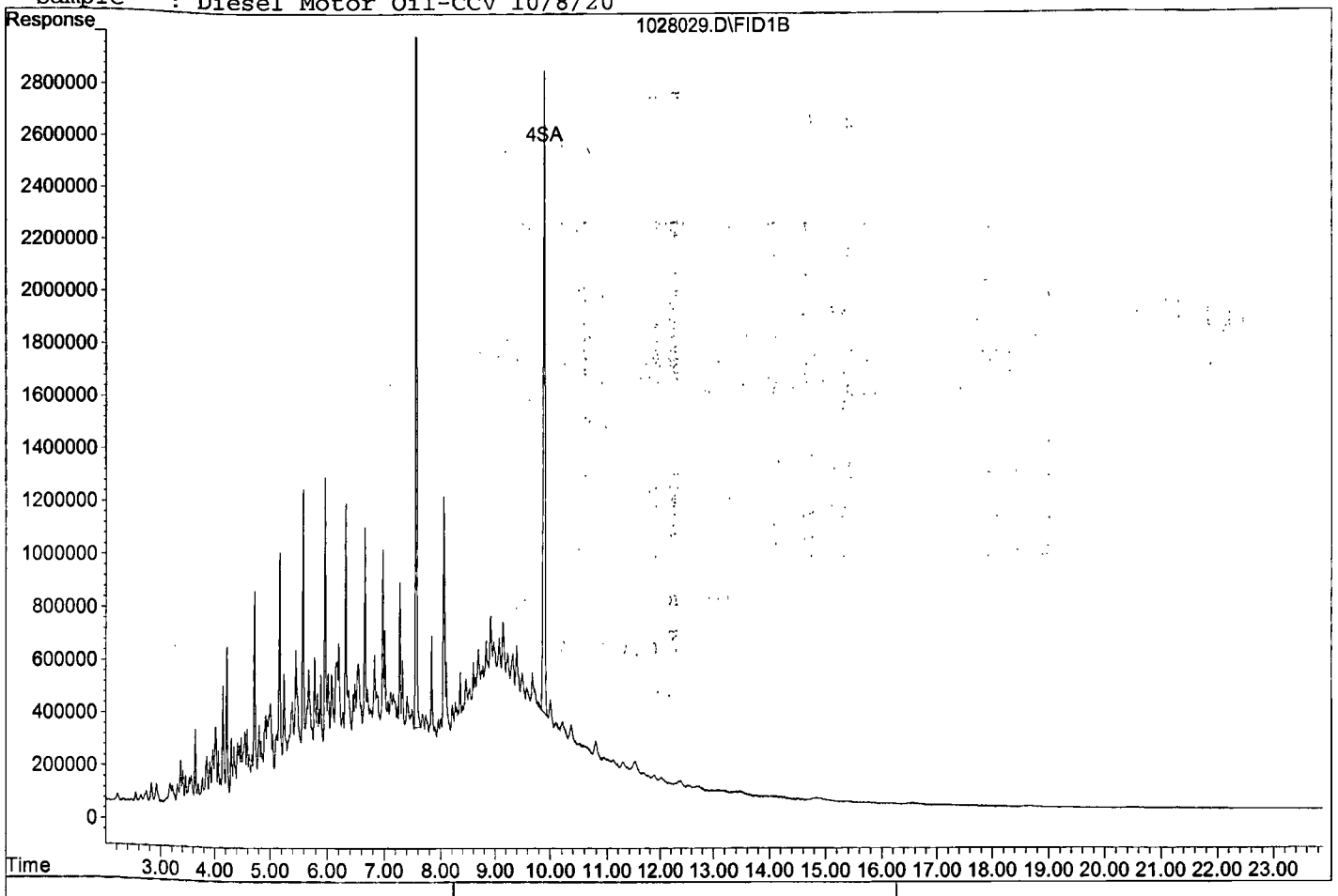
Method : G:\APOLLO\DATA\201028\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 15:45:49 2020
Response via : Multiple Level Calibration

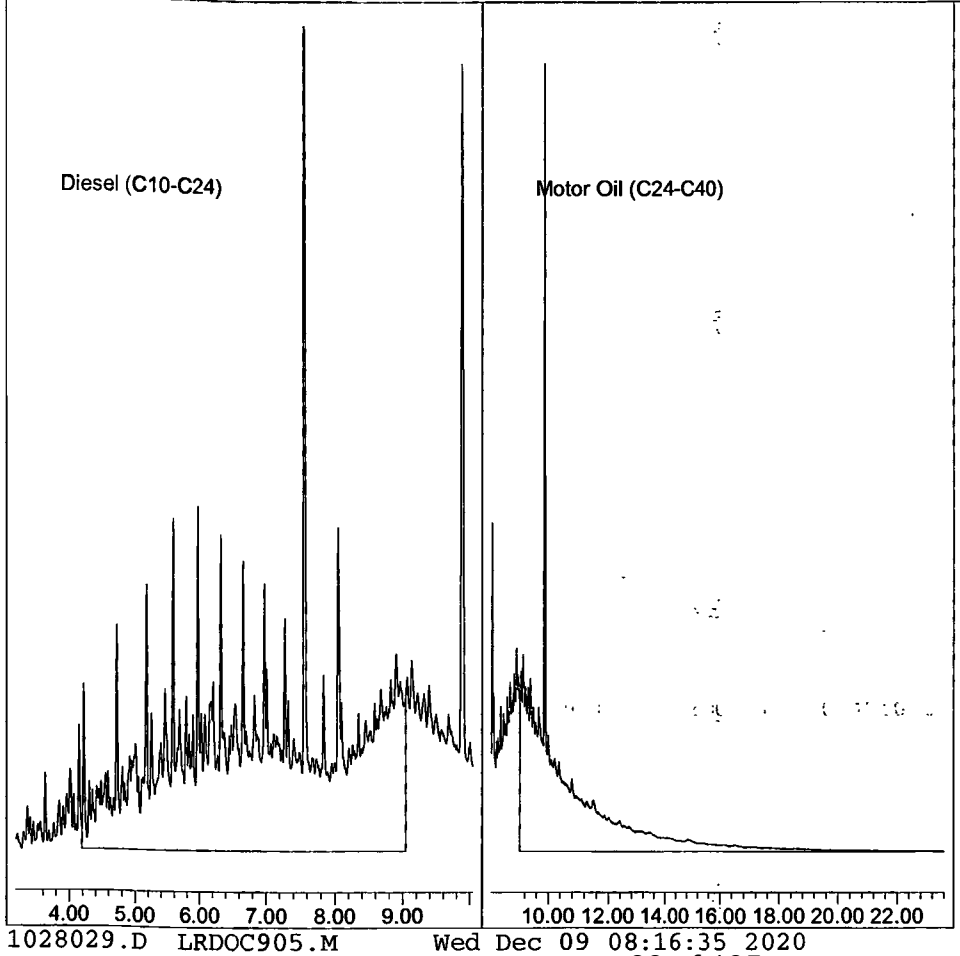
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	7.57	67052445	13.276 ppb
Surrogate Spike 12.000		Recovery =	110.63%
4) SA Octacosane(S)	9.89	51421557	12.489 ppb
Surrogate Spike 12.000		Recovery =	104.08%
Target Compounds			
1) HATM Diesel (C10-C24)	6.62	1075845285	250.324 ppb
2) HBTM Motor Oil (C24-C40)	15.82	702058009	232.970 ppb
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\201028\1028029.D
Sample : Diesel Motor Oil-CCV 10/8/20





TPH Extractables
LRDOC905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/29/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 1028036.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2213350	7.8	HATML	3.0
2	HBTM	Motor Oil (C24-C40)	1907910	1444610	24	HBTML	4.1
3	SA	Ortho-Terphenyl(S)	2525360	2707430	7.2	SA	
4	SA	Octacosane(S)	2058600	2147360	4.3	SA	
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		Average			10.8		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028036.D Vial: 36
Acq On : 10-29-20 4:48:47 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 8 14:38 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\201019\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 14:32:29 2020
Response via : Multiple Level Calibration

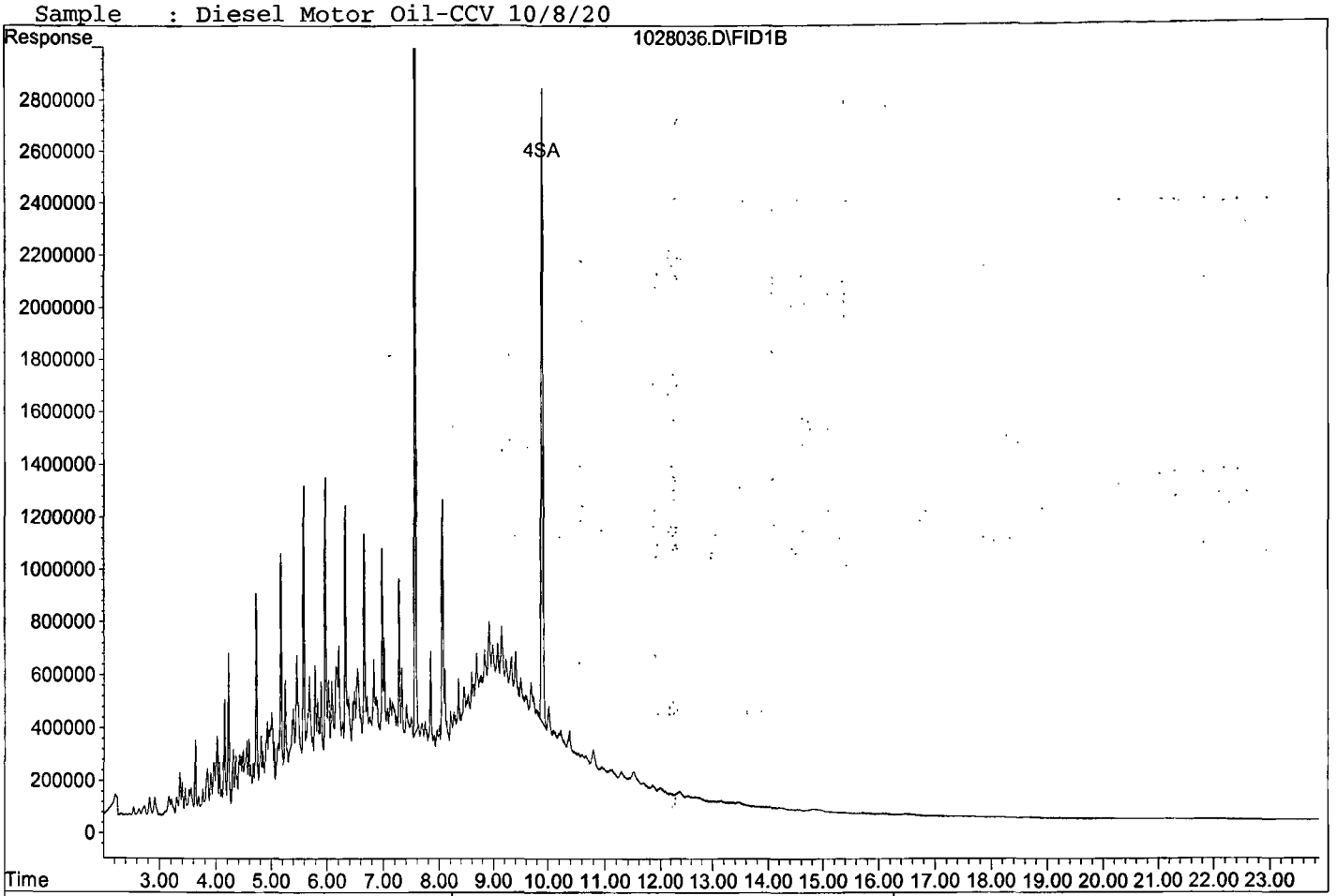
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

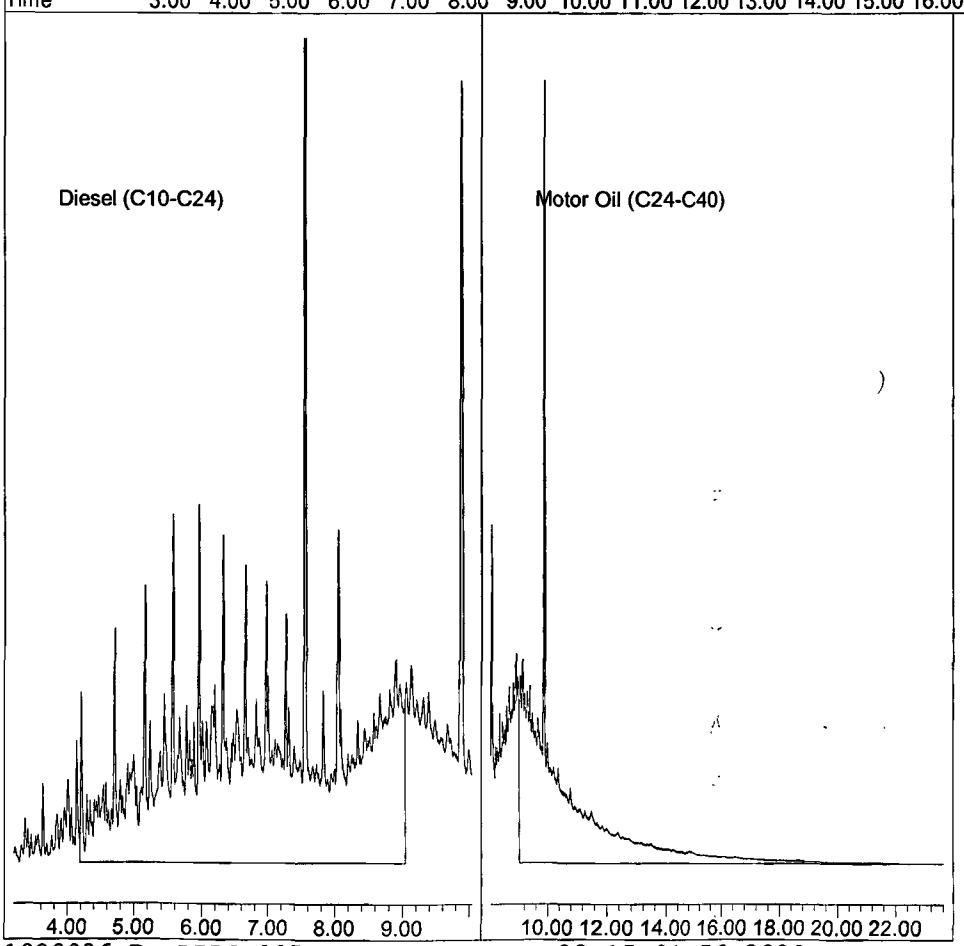
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.56	67685793	13.401	ppb
Surrogate Spike 12.000		Recovery =	111.68%	
4) SA Octacosane(S)	9.89	53683978	13.039	ppb
Surrogate Spike 12.000		Recovery =	108.66%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	1106675239	257.471	ppb
2) HBTM Motor Oil (C24-C40)	15.82	722305208	239.831	ppb
Target Compounds				

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File: G:\APOLLO\DATA\201028\1028036.D
Sample : Diesel Motor Oil-CCV 10/8/20





1028036.D LRDOC905.M Tue Dec 08 15:01:56 2020

TPH Extractables
LRDOC905

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 10/29/2020
Instrument: Apollo
Initial Cal. Date: 9/5/2020
Data File: 1028055.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C24)	2401620	2206950	8.1	HATML	2.7
2	HBTM	Motor Oil (C24-C40)	1907910	1440700	24	HBTML	4.3
3	SA	Ortho-Terphenyl(S)	2525360	2765720	9.5	SA	
4	SA	Octacosane(S)	2058600	2124370	3.2	SA	
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		Average			11.2		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\201028\1028055.D Vial: 55
Acq On : 10-29-20 16:19:06 Operator:
Sample : Diesel Motor Oil-CCV 10/8/20 Inst : Apollo
Misc : water Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 9 12:24 2020 Quant Results File: LRDOC905.RES

Method : G:\APOLLO\DATA\201028\LRDOC905.M (Chemstation Integrator)
Title : 8015 B&C
Last Update : Tue Dec 08 15:45:49 2020
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	7.57	69143040	13.690	ppb
Surrogate Spike 12.000	Recovery =		114.08%	
4) SA Octacosane(S)	9.89	53109370	12.899	ppb
Surrogate Spike 12.000	Recovery =		107.49%	
Target Compounds				
1) HATM Diesel (C10-C24)	6.62	1103474091	256.729	ppb
2) HBTM Motor Oil (C24-C40)	15.82	720348951	239.168	ppb
Target Compounds				

(f)=RT Delta > 1/2 Window (m)=manual int.