

Energy Laboratories Inc

ANALYTICAL RUN Summary

20-Sep-21

Run ID FID-HEADSPACE_210120A

Run Start Date: 1/20/2021
 Analyst: Jeff Whitmer
 Ical:
 Column ID: porapak Q
 Comments: thermometer used for temp:S94278.

| Instrument ID | Description |
|-----------------|---------------------------------|
| 1000_SGE_041819 | 1000 mL SGE Syringe _ Gas Tight |

| Std ID | Std Name | Std Amount | Std Units | Samp Amount | Samp Units | SampType | Expiration Date |
|--------|------------------|------------|-----------|-------------|------------|----------|-----------------|
| 10711 | HC-Methane-W-CCV | 0.3 | ml | | | lcs | 8/9/2022 |
| 12173 | HC-Methane-W-CCV | 0.3 | ml | | | CCV | 11/23/2023 |

| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|--------|-------------|------------|---------|------------------|-------|----------|-----------|----------|--------|--------|------|-----|------|------|---|
| 14188877 | MBLK | HC-METHANE- | MBLK | | 1/20/2021 11:50: | 1 | R355741 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Ethane | A | mg/L | | 0 | | | 0 | 0 | 0.00031 | 0.001 | 0 | 0% | 0 | 0 | 0% | |
| Ethene | A | mg/L | | 0 | | | 0 | 0 | 0.00023 | 0.001 | 0 | 0% | 0 | 0 | 0% | |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.001 | 0 | 0% | 0 | 0 | 0% | |
| Ethylene | X | mg/L | | 0 | | | 0 | 0 | 0.001 | 0.001 | 0 | 0% | 0 | 0 | 0% | |

| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|--------|-------------|------------|------------|------------------|-------|----------|-----------|--------|--------|--------|------|-----|------|------|---|
| 14188879 | Cal1 | HC-METHANE- | CAL1 | | 1/20/2021 11:54: | 1 | R355741 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Ethane | A | ppm | | 2.66692829 | | 2.5 | 0 | 0 | 2 | 2 | 0 | 107% | 50 | 150 | 0% | |
| Ethene | A | ppm | | 2.68217219 | | 2.5 | 0 | 0 | 2 | 2 | 0 | 107% | 50 | 150 | 0% | |
| Methane | A | ppm | | 2.9330938 | | 2.5 | 0 | 0 | 2 | 2 | 0 | 117% | 50 | 150 | 0% | |
| Ethylene | X | ppm | | 2.68217219 | | 1000 | 0 | 0 | 2 | 2 | 0 | 0% | 0 | 0 | 0% | |

| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|--------|-------------|------------|---------|------------------|-------|----------|-----------|--------|--------|--------|------|-----|------|------|---|
| 14188881 | Cal2 | HC-METHANE- | CAL2 | | 1/20/2021 12:00: | 1 | R355741 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |

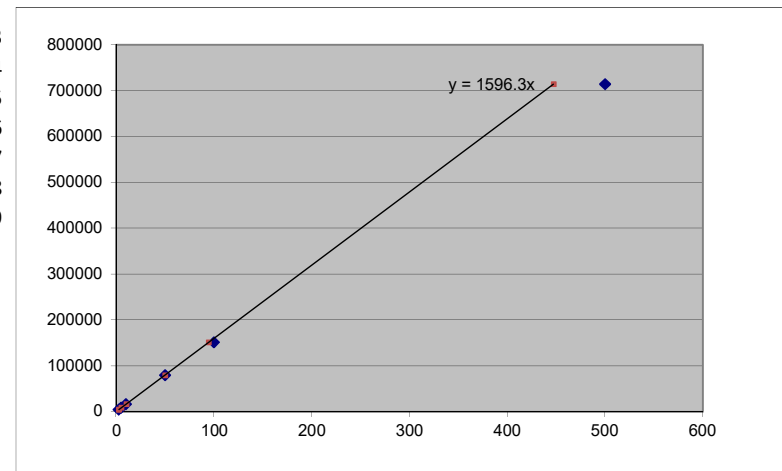
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|--------|-------------|------------|------------|------------------|-------|----------|-----------|--------|--------|--------|------|-----|------|------|---|
| 14188881 | Cal2 | HC-METHANE- | CAL2 | | 1/20/2021 12:00: | 1 | R355741 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Ethane | A | ppm | | 5.15876183 | | 5 | 0 | 0 | 2 | 2 | 0 | 103% | 85 | 115 | 0% | |
| Ethene | A | ppm | | 5.18455183 | | 5 | 0 | 0 | 2 | 2 | 0 | 104% | 85 | 115 | 0% | |
| Methane | A | ppm | | 5.47590194 | | 5 | 0 | 0 | 2 | 2 | 0 | 110% | 85 | 115 | 0% | |
| Ethylene | X | ppm | | 5.18455183 | | 1000 | 0 | 0 | 2 | 2 | 0 | 1% | 0 | 0 | 0% | S |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14188883 | Cal3 | HC-METHANE- | CAL3 | | 1/20/2021 12:04: | 1 | R355741 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Ethane | A | ppm | | 10.3740375 | | 10 | 0 | 0 | 2 | 2 | 0 | 104% | 85 | 115 | 0% | |
| Ethene | A | ppm | | 10.2107455 | | 10 | 0 | 0 | 2 | 2 | 0 | 102% | 85 | 115 | 0% | |
| Methane | A | ppm | | 10.5521213 | | 10 | 0 | 0 | 2 | 2 | 0 | 106% | 85 | 115 | 0% | |
| Ethylene | X | ppm | | 10.2107455 | | 1000 | 0 | 0 | 2 | 2 | 0 | 1% | 0 | 0 | 0% | S |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14188885 | Cal4 | HC-METHANE- | CAL4 | | 1/20/2021 12:09: | 1 | R355741 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Ethane | A | ppm | | 50.4828227 | | 50 | 0 | 0 | 2 | 2 | 0 | 101% | 85 | 115 | 0% | |
| Ethene | A | ppm | | 50.7731613 | | 50 | 0 | 0 | 2 | 2 | 0 | 102% | 85 | 115 | 0% | |
| Methane | A | ppm | | 49.9741048 | | 50 | 0 | 0 | 2 | 2 | 0 | 100% | 85 | 115 | 0% | |
| Ethylene | X | ppm | | 50.7731613 | | 1000 | 0 | 0 | 2 | 2 | 0 | 5% | 0 | 0 | 0% | S |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14188887 | Cal5 | HC-METHANE- | CAL5 | | 1/20/2021 12:14: | 1 | R355741 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Ethane | A | ppm | | 96.640217 | | 100 | 0 | 0 | 2 | 2 | 0 | 97% | 85 | 115 | 0% | |
| Ethene | A | ppm | | 96.3665695 | | 100 | 0 | 0 | 2 | 2 | 0 | 96% | 85 | 115 | 0% | |
| Methane | A | ppm | | 94.8118498 | | 100 | 0 | 0 | 2 | 2 | 0 | 95% | 85 | 115 | 0% | |
| Ethylene | X | ppm | | 96.3665695 | | 1000 | 0 | 0 | 2 | 2 | 0 | 10% | 0 | 0 | 0% | S |

| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|--------|-------------|------------|------------|------------------|-------|----------|-----------|--------|--------|--------|------|-----|------|------|---|
| 14188889 | Cal6 | HC-METHANE- | CAL6 | | 1/20/2021 12:22: | 1 | R355741 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Ethane | A | ppm | | 444.006974 | | 500 | 0 | 0 | 2 | 2 | 0 | 89% | 85 | 115 | 0% | |
| Ethene | A | ppm | | 445.008645 | | 500 | 0 | 0 | 2 | 2 | 0 | 89% | 85 | 115 | 0% | |
| Methane | A | ppm | | 447.326874 | | 500 | 0 | 0 | 2 | 2 | 0 | 89% | 85 | 115 | 0% | |
| Ethylene | X | ppm | | 445.008645 | | 1000 | 0 | 0 | 2 | 2 | 0 | 45% | 0 | 0 | 0% | S |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14188891 | Cal7 | HC-METHANE- | CAL7 | | 1/20/2021 12:31: | 1 | R355741 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | ppm | | 834.11562 | | 1000 | 0 | 0 | 2 | 2 | 0 | 83% | 85 | 115 | 0% | S |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14188893 | LCS | HC-METHANE- | CCV | | 1/20/2021 12:36: | 1 | R355741 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Ethane | A | ppm | | 97.2572953 | | 100 | 0 | 0 | 2 | 2 | 0 | 97% | 85 | 115 | 0% | |
| Ethene | A | ppm | | 97.1407652 | | 100 | 0 | 0 | 2 | 2 | 0 | 97% | 85 | 115 | 0% | |
| Methane | A | ppm | | 96.8898234 | | 100 | 0 | 0 | 2 | 2 | 0 | 97% | 85 | 115 | 0% | |
| Ethylene | X | ppm | | 97.1407652 | | 1000 | 0 | 0 | 2 | 2 | 0 | 10% | 85 | 115 | 0% | S |

Inst ID FID-HeadSpace

Curve Data for samples analyzed after 1/29/2021

| Blank,cts | STD ID | | | | | |
|------------------------|----------|-------------|-----------|-----------------|-------|--|
| 0 | #12173 | 1000000 | | | | |
| Decimal | Sample | Response | Date/Time | Run Id | | |
| Amnt, Injtd Equivalent | Conc ppm | Area Counts | Factor | | | |
| 300ul | | | | | | |
| 0.0000025 | 2.5 | 4682 | 1872.8 | 1/21/2021 11:54 | 16483 | |
| 0.000005 | 5 | 8741 | 1748.2 | 1/21/2021 12:00 | 16484 | |
| 0.00001 | 10 | 16844 | 1684.4 | 1/21/2021 12:04 | 16485 | |
| 0.00005 | 50 | 79772 | 1595.44 | 1/21/2021 12:09 | 16486 | |
| 0.0001 | 100 | 151345 | 1513.45 | 1/21/2021 12:14 | 16487 | |
| 0.0005 | 500 | 714053 | 1428.106 | 1/21/2021 12:22 | 16488 | |
| 0.001 | 1000 | 1331471 | 1331.471 | 1/21/2021 12:31 | 16489 | |



| | | | |
|---------|-----------|--------|----------|
| | | StdDev | 188.2268 |
| Methane | MW= 16.04 | Avg RF | 1596.267 |
| | | %RSD | 11.79169 |

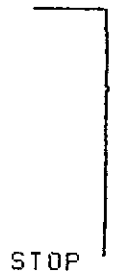
| Calculated Recoveries | | | |
|-----------------------|-----------|----------|------------|
| [PPM] | Area Cnts | PPM | % recovery |
| 2.5 | 4682 | 2.933094 | 1.1732375 |
| 5 | 8741 | 5.475902 | 1.0951804 |
| 10 | 16844 | 10.55212 | 1.0552121 |
| 50 | 79772 | 49.9741 | 0.9994821 |
| 100 | 151345 | 94.81185 | 0.9481185 |
| 500 | 714053 | 447.3269 | 0.8946537 |
| 1000 | 1331471 | 834.1156 | 0.8341156 |

| Sample | Area Count | Dilution | Temperature (°C) | Concentration ppm and mg/L | Date and Time | Analyst | Sample | Test Code | Analyte |
|--------|------------|----------|------------------|----------------------------|-----------------|---------|--------|----------------|---------|
| MBLK | 0 | 1 | 20 | 0 | 1/20/2021 11:50 | jdw | MBLK | HC-METHANE-W | Methane |
| MBLK | 0 | 1 | 20 | 0 | 1/20/2021 11:50 | jdw | MBLK | HC-METHANE-W | Ethane |
| MBLK | 0 | 1 | 20 | 0 | 1/20/2021 11:50 | jdw | MBLK | HC-METHANE-W | Ethene |
| Cal1 | 4682 | 1 | 20 | 2.9330938 | 1/20/2021 11:54 | jdw | CCV | HC-METHANE-CCV | Methane |
| Cal1 | 8164 | 1 | 20 | 2.66692829 | 1/20/2021 11:54 | jdw | CCV | HC-METHANE-CCV | Ethane |
| Cal1 | 8384 | 1 | 20 | 2.68217219 | 1/20/2021 11:54 | jdw | CCV | HC-METHANE-CCV | Ethene |
| Cal2 | 8741 | 1 | 20 | 5.47590194 | 1/20/2021 12:00 | jdw | CCV | HC-METHANE-CCV | Methane |
| Cal2 | 15792 | 1 | 20 | 5.15876183 | 1/20/2021 12:00 | jdw | CCV | HC-METHANE-CCV | Ethane |
| Cal2 | 16206 | 1 | 20 | 5.18455183 | 1/20/2021 12:00 | jdw | CCV | HC-METHANE-CCV | Ethene |
| Cal3 | 16844 | 1 | 20 | 10.5521213 | 1/20/2021 12:04 | jdw | CCV | HC-METHANE-CCV | Methane |
| Cal3 | 31757 | 1 | 20 | 10.37403746 | 1/20/2021 12:04 | jdw | CCV | HC-METHANE-CCV | Ethane |
| Cal3 | 31917 | 1 | 20 | 10.21074545 | 1/20/2021 12:04 | jdw | CCV | HC-METHANE-CCV | Ethene |
| Cal4 | 79772 | 1 | 20 | 49.97410476 | 1/20/2021 12:09 | jdw | CCV | HC-METHANE-CCV | Methane |
| Cal4 | 154538 | 1 | 20 | 50.48282269 | 1/20/2021 12:09 | jdw | CCV | HC-METHANE-CCV | Ethane |
| Cal4 | 158708 | 1 | 20 | 50.7731613 | 1/20/2021 12:09 | jdw | CCV | HC-METHANE-CCV | Ethene |
| Cal5 | 151345 | 1 | 20 | 94.81184983 | 1/20/2021 12:14 | jdw | CCV | HC-METHANE-CCV | Methane |
| Cal5 | 295835 | 1 | 20 | 96.64021698 | 1/20/2021 12:14 | jdw | CCV | HC-METHANE-CCV | Ethane |
| Cal5 | 301225 | 1 | 20 | 96.3665695 | 1/20/2021 12:14 | jdw | CCV | HC-METHANE-CCV | Ethene |
| Cal6 | 714053 | 1 | 20 | 447.3268744 | 1/20/2021 12:22 | jdw | CCV | HC-METHANE-CCV | Methane |
| Cal6 | 1359194 | 1 | 20 | 444.0069737 | 1/20/2021 12:22 | jdw | CCV | HC-METHANE-CCV | Ethane |
| Cal6 | 1391019 | 1 | 20 | 445.0086452 | 1/20/2021 12:22 | jdw | CCV | HC-METHANE-CCV | Ethene |
| Cal7 | 1331471 | 1 | 20 | 834.11562 | 1/20/2021 12:22 | jdw | CCV | HC-METHANE-CCV | Methane |
| LCS | 154662 | 1 | 20 | 96.88982337 | 1/20/2021 12:36 | jdw | CCV | HC-METHANE-CCV | Methane |
| LCS | 297724 | 1 | 20 | 97.25729532 | 1/20/2021 12:36 | jdw | CCV | HC-METHANE-CCV | Ethane |
| LCS | 303645 | 1 | 20 | 97.1407652 | 1/20/2021 12:36 | jdw | CCV | HC-METHANE-CCV | Ethene |

Calibration
Methane, Ethane,
Ethene
JOW
1/20/2021

*ID MB

* RUN #16482 JAN 20, 2021 11:50:13
START

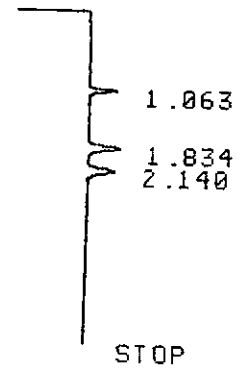


RUN# 16482 JAN 20, 2021 11:50:13

IDENTIFIER : MB
NO RUN PERKS STORED

*ID CAL1-2.5PPM

* RUN #16483 JAN 20, 2021 11:54:22
START



RUN# 16483 JAN 20, 2021 11:54:22

IDENTIFIER : CAL1-2.5PPM
AREA%

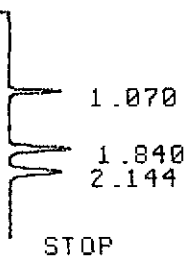
| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|----------|
| 1.063 | 4682 | PP | .048 | 22.05370 |
| 1.834 | 8384 | PV | .078 | 39.49128 |
| 2.140 | 8164 | UP | .087 | 38.45502 |

TOTAL AREA= 21230
MUL FACTOR=1.0000E+00

*ID CAL2-5PPM

* RUN #16484 JAN 20, 2021 12:00:03

START



RUN# 16484 JAN 20, 2021 12:00:03

IDENTIFIER : CAL2-5PPM

AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|-------|------|-------|----------|
| 1.070 | 8741 | UP | .049 | 21.45610 |
| 1.840 | 16206 | PU | .076 | 39.78006 |
| 2.144 | 15792 | UU | .088 | 38.76384 |

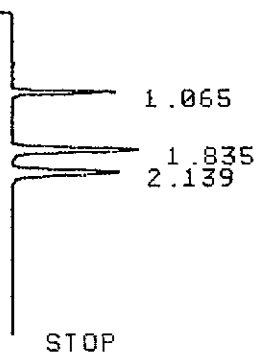
TOTAL AREA= 40739

MUL FACTOR=1.0000E+00

*ID CAL3-10PPM

* RUN #16485 JAN 20, 2021 12:04:08

START



RUN# 16485 JAN 20, 2021 12:04:08

IDENTIFIER : CAL3-10PPM

AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|-------|------|-------|----------|
| 1.065 | 16844 | PU | .047 | 20.91955 |
| 1.835 | 31917 | UP | .074 | 39.63958 |
| 2.139 | 31757 | PU | .087 | 39.44088 |

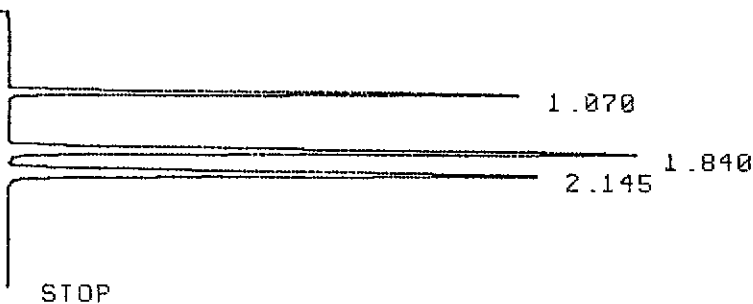
TOTAL AREA= 80518

MUL FACTOR=1.0000E+00

*ID CAL4-50PPM

* RUN #16486 JAN 20, 2021 12:09:55

START



RUN# 16486 JAN 20, 2021 12:09:55

IDENTIFIER : CAL4-50PPM
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|--------|------|-------|----------|
| 1.070 | 79772 | PB | .046 | 20.29729 |
| 1.840 | 158708 | PB | .075 | 40.38187 |
| 2.145 | 154538 | BB | .087 | 39.32085 |

TOTAL AREA= 393018
MUL FACTOR=1.0000E+00

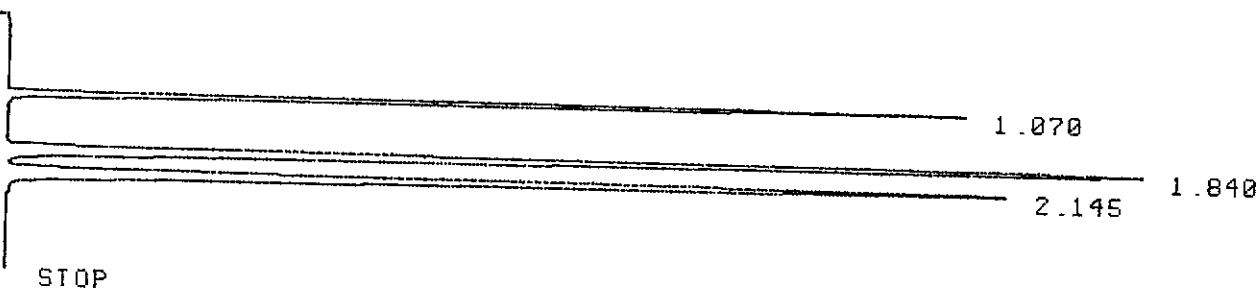
*CAL5-100PPM

INVALID SYSTEM COMMAND

*ID CAL5-100PPM

* RUN #16487 JAN 20, 2021 12:14:46

START



RUN# 16487 JAN 20, 2021 12:14:46

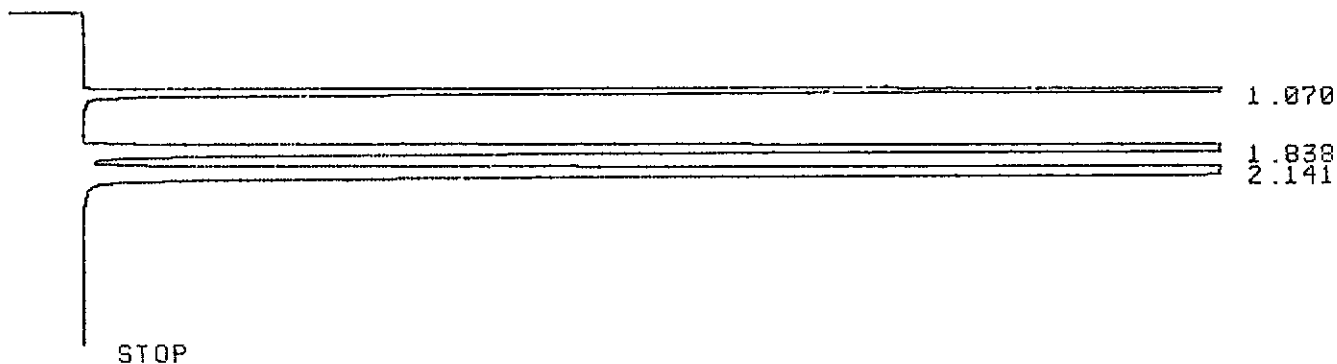
IDENTIFIER : CAL5-100PPM
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|--------|------|-------|----------|
| 1.070 | 151345 | PB | .047 | 20.22234 |
| 1.840 | 301225 | PB | .075 | 40.24893 |
| 2.145 | 295835 | BB | .088 | 39.52874 |

TOTAL AREA= 748405
MUL FACTOR=1.0000E+00

*ID CAL6-500PPM

* RUN #16488 JAN 20, 2021 12:22:48
START



RUN# 16488 JAN 20, 2021 12:22:48

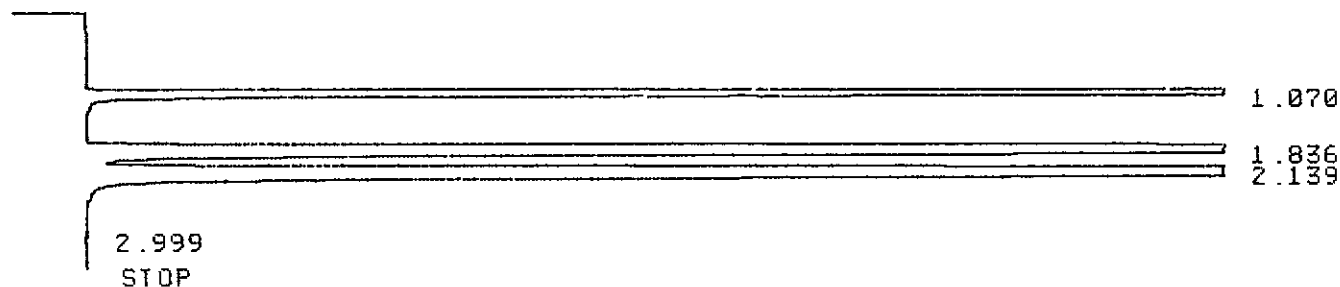
IDENTIFIER : CAL6-500PPM
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|---------|------|-------|----------|
| 1.070 | 714053 | PB | .047 | 20.61195 |
| 1.838 | 1391019 | PB | .077 | 40.15334 |
| 2.141 | 1359194 | BB | .090 | 39.23469 |

TOTAL AREA=3464266
MUL FACTOR=1.0000E+00

*ID CAL7-1000PPM

* RUN #16489 JAN 20, 2021 12:31:25
START



RUN# 16489 JAN 20, 2021 12:31:25

IDENTIFIER : CAL7-1000PPM
AREA%

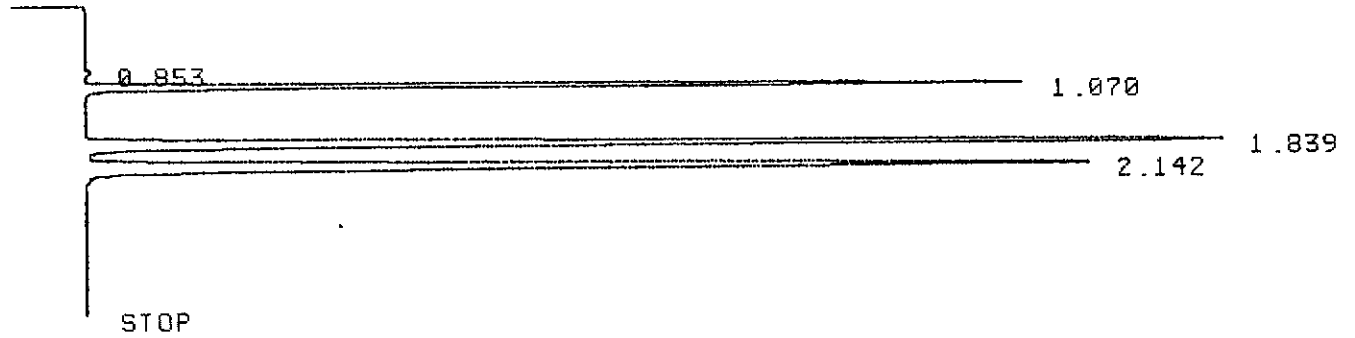
| RT | AREA | TYPE | WIDTH | AREA% |
|-------|---------|------|-------|----------|
| 1.070 | 1331471 | PB | .049 | 21.86052 |

2.139 2333118 UB .095 37.95542
2.999 795 PP .068 .01293

TOTAL AREA=6146995
MUL FACTOR=1.0000E+00

*ID 10711-LCS

* RUN #16490 JAN 20, 2021 12:36:18
START



RUN# 16490 JAN 20, 2021 12:36:18

IDENTIFIER : 10711-LCS
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|--------|------|-------|----------|
| .853 | 1141 | PU | .054 | .15069 |
| 1.070 | 154662 | BB | .049 | 20.42627 |
| 1.839 | 303645 | BU | .075 | 40.10251 |
| 2.142 | 297724 | UU | .088 | 39.32053 |

TOTAL AREA= 757172
MUL FACTOR=1.0000E+00

*

Energy Laboratories Inc

ANALYTICAL RUN Summary

21-Jan-22

Run ID FID-HEADSPACE_220120A

Run Start Date: 1/20/2022
 Analyst: Jeff Whitmer
 Ical:
 Column ID: porapak Q
 Comments: See Preservation Comment column for sample pH; thermometer used for temp:S94278.

| Instrument ID | Description |
|-----------------|---------------------------------|
| 1000_SGE_041819 | 1000 mL SGE Syringe _ Gas Tight |

| Std ID | Std Name | Std Amount | Std Units | Samp Amount | Samp Units | SampType | Expiration Date |
|--------|------------------|------------|-----------|-------------|------------|----------|-----------------|
| 10711 | HC-Methane-W-CCV | 0.3 | ml | | | lcs | 8/9/2022 |
| 12173 | HC-Methane-W-CCV | 0.3 | ml | | | CCV | 11/23/2023 |

| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|--------|-------------|------------|------------|------------------|-------|----------|-----------|--------|--------|--------|------|-----|------|------|---|
| 14990854 | CCV | HC-METHANE- | CCV | | 1/20/2022 9:16:0 | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | ppm | | 98.0487776 | | 100 | 0 | 0 | 2 | 2 | 0 | 98% | 85 | 115 | 0% | |

| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|--------|-------------|------------|------------|------------------|-------|----------|-----------|--------|--------|--------|------|-----|------|------|---|
| 14990855 | LCS | HC-METHANE- | LCS | | 1/20/2022 9:21:0 | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | ppm | | 99.3806352 | | 100 | 0 | 0 | 2 | 2 | 0 | 99% | 85 | 115 | 0% | |

| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|--------|-------------|------------|------------|------------------|-------|----------|-----------|--------|--------|--------|------|-----|------|------|---|
| 14990856 | LCSD | HC-METHANE- | LCSD | | 1/20/2022 9:25:0 | 1 | R373491 | | 0 | 1E+07 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | ppm | | 99.3092186 | | 100 | 0 | 99.380635 | 2 | 2 | 0 | 99% | 85 | 115 | 0% | |

| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|----------------|-------------|------------|------------|------------------|-------|----------|-----------|----------|--------|--------|------|-----|------|------|---|
| 14990857 | MBLK | HC-METHANE- | MBLK | | 1/20/2022 10:29: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.001 | 0 | 0% | 0 | 0 | 0% | |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990858 | B22011124-001I | HC-METHANE- | SAMP | | 1/20/2022 10:33: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990859 | B22011124-005 | HC-METHANE- | SAMP | | 1/20/2022 10:39: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990860 | B22011125-001I | HC-METHANE- | SAMP | | 1/20/2022 10:51: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990861 | B22011125-005 | HC-METHANE- | SAMP | | 1/20/2022 10:57: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990862 | B22011126-001I | HC-METHANE- | SAMP | | 1/20/2022 11:03: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0.01044371 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | |

| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|----------------|-------------|------------|------------|------------------|-------|----------|-----------|----------|--------|--------|------|-----|------|------|---|
| 14990863 | B22011126-001I | HC-METHANE- | DUP | | 1/20/2022 11:12: | 1 | R373491 | | 0 | 1E+07 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0.01033240 | | | 0 | 0.0104437 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 1% | |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990864 | B22011126-005 | HC-METHANE- | SAMP | | 1/20/2022 11:21: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990865 | B22011127-001I | HC-METHANE- | SAMP | | 1/20/2022 11:29: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990866 | B22011127-005 | HC-METHANE- | SAMP | | 1/20/2022 11:35: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990867 | B22011128-001I | HC-METHANE- | SAMP | | 1/20/2022 11:41: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990868 | B22011128-005 | HC-METHANE- | SAMP | | 1/20/2022 11:46: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |

| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|----------------|-------------|------------|---------|------------------|-------|----------|-----------|----------|--------|--------|------|-----|------|------|---|
| 14990869 | B22011129-001I | HC-METHANE- | SAMP | | 1/20/2022 11:52: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990870 | B22011129-005 | HC-METHANE- | SAMP | | 1/20/2022 11:58: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990871 | B22011130-001I | HC-METHANE- | SAMP | | 1/20/2022 12:04: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990872 | B22011130-005 | HC-METHANE- | SAMP | | 1/20/2022 12:14: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990873 | B22011131-001I | HC-METHANE- | SAMP | | 1/20/2022 12:20: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990874 | B22011131-005 | HC-METHANE- | SAMP | | 1/20/2022 12:26: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |

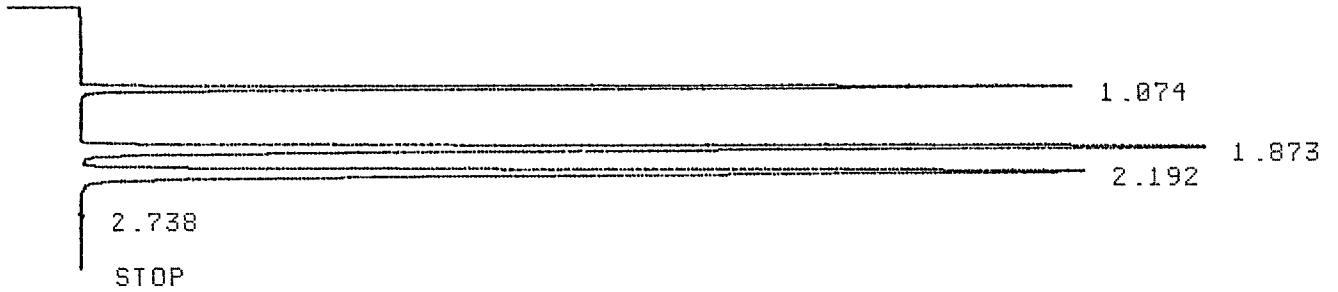
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|----------------|-------------|------------|------------|------------------|-------|----------|-----------|----------|--------|--------|------|-----|------|------|---|
| 14990875 | B22011132-001I | HC-METHANE- | SAMP | | 1/20/2022 12:32: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990876 | B22011132-005 | HC-METHANE- | SAMP | | 1/20/2022 12:39: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990877 | B22011133-001I | HC-METHANE- | SAMP | | 1/20/2022 12:44: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990878 | B22011133-005 | HC-METHANE- | SAMP | | 1/20/2022 12:50: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | U |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14990879 | CCV | HC-METHANE- | CCV | | 1/20/2022 12:56: | 1 | R373491 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | ppm | | 95.9426132 | | 100 | 0 | 0 | 2 | 2 | 0 | 96% | 85 | 115 | 0% | |

| Sample ID | Area Count | Dilution Factor | Temperature (C) | Concentration | Date/Time Analyzed | Analyst | Sample Type | Test Code | Analyte | Headspace Volume | Liquid Volume |
|-------------------|------------|-----------------|-----------------|---------------|--------------------|---------|-------------|----------------|---------|------------------|---------------|
| CCV | 156512 | 1 | 20 | 98.04877756 | 1/20/2022 9:16 | jdw | CCV | HC-METHANE-CCV | Methane | | |
| LCS | 158638 | 1 | 20 | 99.38063519 | 1/20/2022 9:21 | jdw | LCS | HC-METHANE-CCV | Methane | | |
| LCS | 158524 | 1 | 20 | 99.30921855 | 1/20/2022 9:25 | jdw | LCS | HC-METHANE-CCV | Methane | | |
| MBLK | 1052 | 1 | 20 | 0.000153068 | 1/20/2022 10:29 | jdw | MBLK | HC-METHANE-W | Methane | 10 | 32 |
| B22011124-001I | 1033 | 1 | 20 | -2.76454E-06 | 1/20/2022 10:33 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011124-005A | 1592 | 1 | 20 | 7.85712E-05 | 1/20/2022 10:39 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011125-001I | 804 | 1 | 20 | -3.60845E-05 | 1/20/2022 10:51 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011125-005A | 866 | 1 | 20 | -2.70634E-05 | 1/20/2022 10:57 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011126-001I | 72829 | 1 | 20 | 0.010443711 | 1/20/2022 11:03 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011126-001IDUP | 72064 | 1 | 20 | 0.010332402 | 1/20/2022 11:12 | jdw | DUP | HC-METHANE-W | Methane | 10 | 32 |
| B22011126-005A | 848 | 1 | 20 | -2.96824E-05 | 1/20/2022 11:21 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011127-001I | 3426 | 1 | 20 | 0.000345422 | 1/20/2022 11:29 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011127-005A | 1070 | 1 | 20 | 2.61904E-06 | 1/20/2022 11:35 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011128-001I | 3707 | 1 | 20 | 0.000386308 | 1/20/2022 11:41 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011128-005A | 1009 | 1 | 20 | -6.25659E-06 | 1/20/2022 11:46 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011129-001I | 0 | 1 | 20 | -0.000153068 | 1/20/2022 11:52 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011129-005A | 973 | 1 | 20 | -1.14947E-05 | 1/20/2022 11:58 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011130-001I | 1241 | 1 | 20 | 2.74999E-05 | 1/20/2022 12:04 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011130-005A | 1030 | 1 | 20 | -3.20105E-06 | 1/20/2022 12:14 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011131-001I | 4845 | 1 | 20 | 0.00055189 | 1/20/2022 12:20 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011131-005A | 1051 | 1 | 20 | -1.45502E-07 | 1/20/2022 12:26 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011132-001I | 735 | 1 | 20 | -4.61242E-05 | 1/20/2022 12:32 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011132-005A | 1140 | 1 | 20 | 1.28042E-05 | 1/20/2022 12:39 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011133-001I | 790 | 1 | 20 | -3.81216E-05 | 1/20/2022 12:44 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22011133-005A | 1230 | 1 | 20 | 2.58994E-05 | 1/20/2022 12:50 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| CCV | 153150 | 1 | 20 | 95.94261324 | 1/20/2022 12:56 | jdw | CCV | HC-METHANE-CCV | Methane | | |

JDW
1/20/2022

*ID 12173-500X-CCU

* RUN #19119 JAN 20, 2022 09:16:23
START



RUN# 19119 JAN 20, 2022 09:16:23

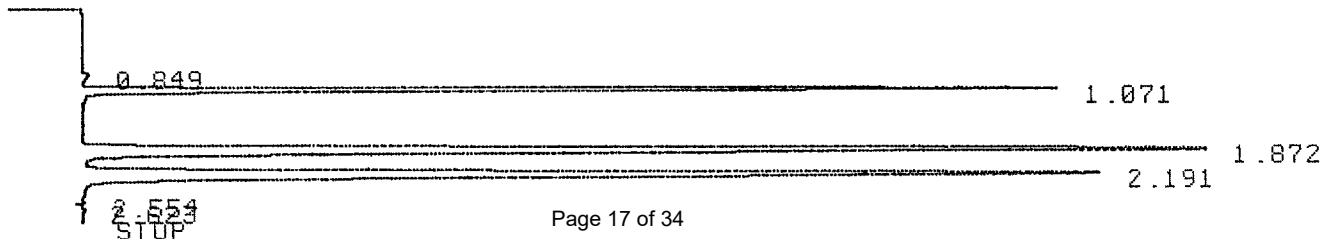
IDENTIFIER : 12173-500X-C
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|--------|------|-------|----------|
| 1.074 | 156512 | PB | .046 | 20.15308 |
| 1.873 | 312449 | PB | .076 | 40.23211 |
| 2.192 | 307173 | BU | .090 | 39.55275 |
| 2.738 | 482 | PU | .033 | .06206 |

TOTAL AREA= 776616
MUL FACTOR=1.0000E+00

*ID 10711-LCS

* RUN #19120 JAN 20, 2022 09:21:17
START



IDENTIFIER : 10711-LCS

AREA%

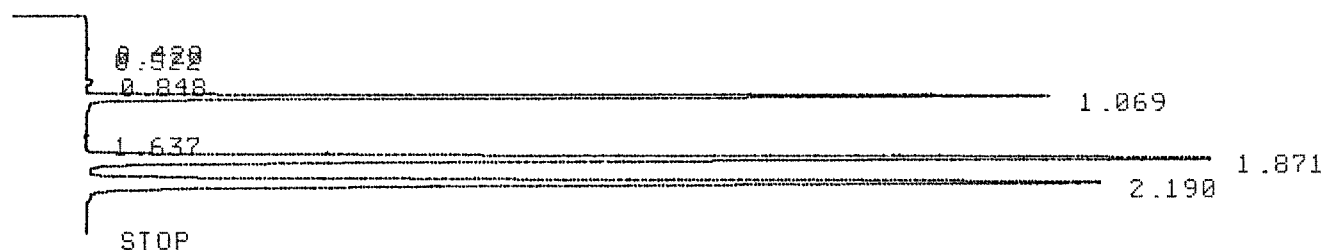
| RT | AREA | TYPE | WIDTH | AREA% |
|-------|--------|------|-------|----------|
| .849 | 1374 | UU | .058 | .17458 |
| 1.071 | 158638 | PB | .048 | 20.15674 |
| 1.872 | 314796 | PB | .076 | 39.99838 |
| 2.191 | 309219 | BB | .089 | 39.28974 |
| 2.554 | 689 | BP | .031 | .08755 |
| 2.623 | 2306 | PV | .086 | .29300 |

TOTAL AREA= 787022
MUL FACTOR=1.0000E+00

*ID 10711-LCSD

* RUN #19121 JAN 20, 2022 09:25:36

START



RUN# 19121 JAN 20, 2022 09:25:36

IDENTIFIER : 10711-LCSD

AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|--------|------|-------|----------|
| .420 | 570 | PP | .054 | .07235 |
| .848 | 1064 | UU | .047 | .13505 |
| 1.069 | 158524 | UB | .048 | 20.12019 |
| 1.637 | 738 | PV | .060 | .09367 |
| 1.871 | 316984 | UB | .076 | 40.23227 |
| 2.190 | 310005 | PB | .089 | 39.34648 |

TOTAL AREA= 787885
MUL FACTOR=1.0000E+00

*

*

*ID MB

* RUN #19122 JAN 20, 2022 10:29:35
START

┌───┐
│ │
│ │
│ │
│ │
│ │
│ │
│ │
│ │
│ │
│ │
└───┘ 1.089
:21070

RUN# 19122 JAN 20, 2022 10:29:35

IDENTIFIER : MB
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.089 | 1052 | PU | .068 | 100.00000 |

TOTAL AREA= 1052
MUL FACTOR=1.0000E+00

*ID 1124-1I

* RUN #19123 JAN 20, 2022 10:33:09
START

┌───┐
│ │
│ │
│ │
│ │
│ │
│ │
│ │
│ │
│ │
│ │
└───┘ 1.081
:21070

RUN# 19123 JAN 20, 2022 10:33:09

IDENTIFIER : 1124-1I
AREA%

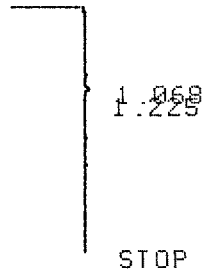
| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.081 | 1033 | UU | .064 | 100.00000 |

TOTAL AREA= 1033
MUL FACTOR=1.0000E+00

*

*ID 1124-5A

* RUN #19124 JAN 20, 2022 10:39:07
START



RUN# 19124 JAN 20, 2022 10:39:07

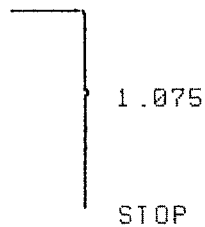
IDENTIFIER : 1124-5A
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|----------|
| 1.068 | 1592 | UP | .081 | 78.11578 |
| 1.225 | 446 | PV | .055 | 21.88420 |

TOTAL AREA= 2038
MUL FACTOR=1.0000E+00

*ID 1125-1I

* RUN #19125 JAN 20, 2022 10:51:56
START



RUN# 19125 JAN 20, 2022 10:51:56

IDENTIFIER : 1125-1I
AREA%

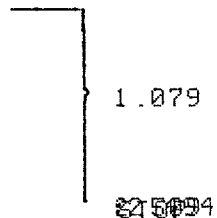
| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.075 | 804 | PV | .057 | 100.00000 |

TOTAL AREA= 804
MUL FACTOR=1.0000E+00

*

*ID 1125-5A

* RUN #19126 JAN 20, 2022 10:57:54
START



RUN# 19126 JAN 20, 2022 10:57:54

IDENTIFIER : 1125-5A

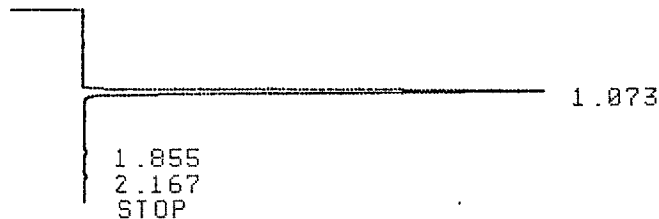
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.079 | 866 | PU | .056 | 100.00000 |

TOTAL AREA= 866
MUL FACTOR=1.0000E+00

*ID 1126-1I

* RUN #19127 JAN 20, 2022 11:03:21
START



RUN# 19127 JAN 20, 2022 11:03:21

IDENTIFIER : 1126-1I

AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|-------|------|-------|----------|
| 1.073 | 72829 | BB | .046 | 97.84634 |
| 1.855 | 709 | UP | .076 | .95255 |
| 2.167 | 894 | UU | .091 | 1.20110 |

TOTAL AREA= 74432
MUL FACTOR=1.0000E+00

* PLOT

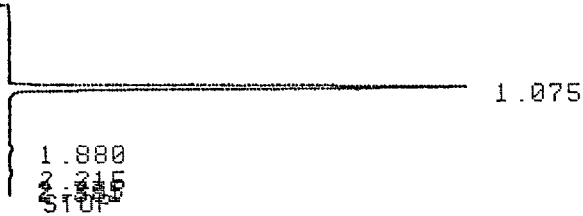
STOP

* PLOT

STOP

*ID 1126-1I-DUP

* RUN #19128 JAN 20, 2022 11:12:08
START



RUN# 19128 JAN 20, 2022 11:12:08

IDENTIFIER : 1126-1I-DUP
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|-------|------|-------|----------|
| 1.075 | 72064 | BB | .046 | 97.32589 |
| 1.880 | 781 | BU | .059 | 1.05478 |
| 2.215 | 1199 | UP | .092 | 1.61931 |

TOTAL AREA= 74044
MUL FACTOR=1.0000E+00

* PLOT

STOP

* PLOT

STOP

*ID 1126-5A

* RUN #19129 JAN 20, 2022 11:21:33
START

```

┌───┐
│   │ } 0.088
│   │ } 1.777
│   │
└───┘ STOP

```

RUN# 19129 JAN 20, 2022 11:21:33

IDENTIFIER : 1126-5A
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|----------|
| 1.088 | 848 | PU | .052 | 60.18454 |
| 1.777 | 561 | PU | .075 | 39.81547 |

TOTAL AREA= 1409
MUL FACTOR=1.0000E+00

*ID 1127-1I

* RUN #19130 JAN 20, 2022 11:29:37
START

```

┌───┐
│   │ } 1.070
│   │
└───┘ STOP

```

RUN# 19130 JAN 20, 2022 11:29:37

IDENTIFIER : 1127-1I
AREA%

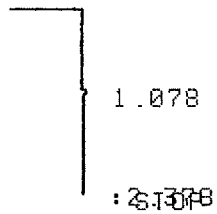
| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.070 | 3426 | PP | .051 | 100.00000 |

TOTAL AREA= 3426
MUL FACTOR=1.0000E+00

*

*ID 1127-5A

* RUN #19131 JAN 20, 2022 11:35:35
START



RUN# 19131 JAN 20, 2022 11:35:35

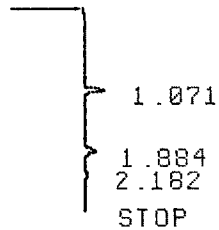
IDENTIFIER : 1127-5A
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.078 | 1070 | PU | .063 | 100.00000 |

TOTAL AREA= 1070
MUL FACTOR=1.0000E+00

*ID 1128-1I

* RUN #19132 JAN 20, 2022 11:41:02
START



RUN# 19132 JAN 20, 2022 11:41:02

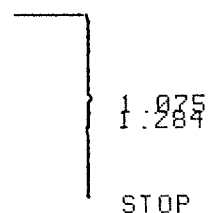
IDENTIFIER : 1128-1I
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|----------|
| 1.071 | 3707 | PU | .052 | 47.03122 |
| 1.884 | 3391 | UU | .091 | 43.02208 |
| 2.182 | 784 | PU | .067 | 9.94671 |

TOTAL AREA= 7882
MUL FACTOR=1.0000E+00

*ID 1128-5A

* RUN #19133 JAN 20, 2022 11:46:58
START



RUN# 19133 JAN 20, 2022 11:46:58

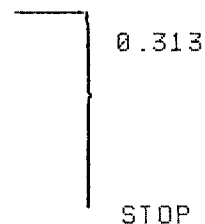
IDENTIFIER : 1128-5A
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.075 | 1009 | UP | .062 | 100.00000 |

TOTAL AREA= 1009
MUL FACTOR=1.0000E+00

*ID 1129-1I

* RUN #19134 JAN 20, 2022 11:52:32
START



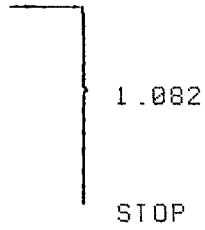
RUN# 19134 JAN 20, 2022 11:52:32

IDENTIFIER : 1129-1I
NO RUN PEAKS STORED

*

*ID 1129-5A

* RUN #19135 JAN 20, 2022 11:58:26
START



RUN# 19135 JAN 20, 2022 11:58:26

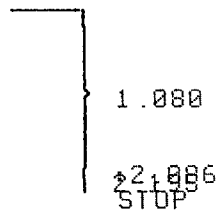
IDENTIFIER : 1129-5A
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.082 | 973 | PU | .054 | 100.00000 |

TOTAL AREA= 973
MUL FACTOR=1.0000E+00

*ID 1130-1I

* RUN #19136 JAN 20, 2022 12:04:28
START



RUN# 19136 JAN 20, 2022 12:04:28

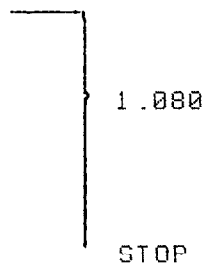
IDENTIFIER : 1130-1I
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|----------|
| 1.080 | 1241 | PP | .062 | 63.31632 |
| 2.195 | 719 | PU | .091 | 36.68366 |

TOTAL AREA= 1960
MUL FACTOR=1.0000E+00

*ID 1131-5A

* RUN #19139 JAN 20, 2022 12:26:04
START



RUN# 19139 JAN 20, 2022 12:26:04

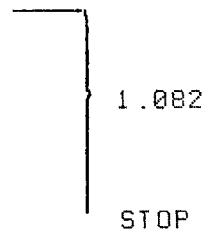
IDENTIFIER : 1131-5A
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.080 | 1051 | PU | .068 | 100.00000 |

TOTAL AREA= 1051
MUL FACTOR=1.0000E+00

*ID 1132-1I

* RUN #19140 JAN 20, 2022 12:32:25
START



RUN# 19140 JAN 20, 2022 12:32:25

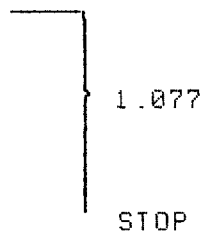
IDENTIFIER : 1132-1I
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.082 | 735 | PU | .060 | 100.00000 |

TOTAL AREA= 735
MUL FACTOR=1.0000E+00

*ID 1133-5A

* RUN #19143 JAN 20, 2022 12:50:05
START



RUN# 19143 JAN 20, 2022 12:50:05

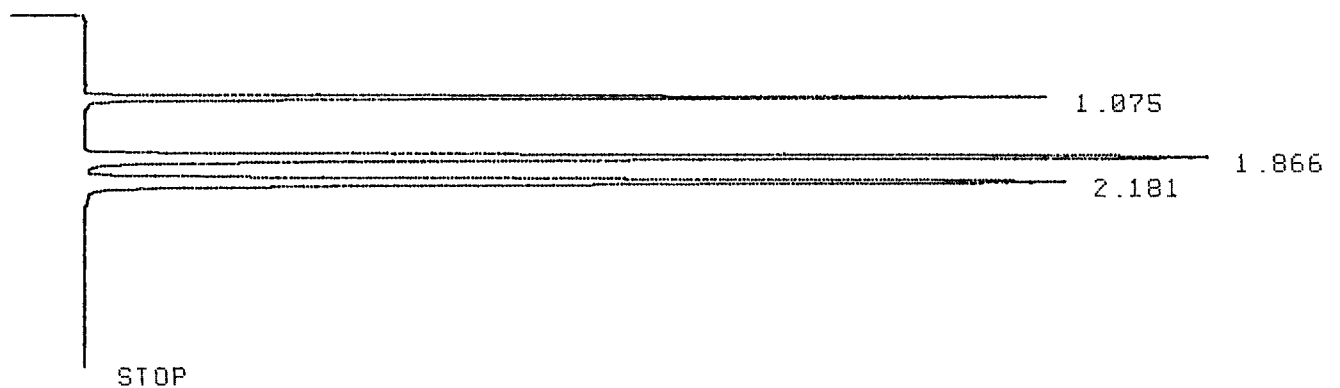
IDENTIFIER : 1133-5A
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.077 | 1230 | PP | .072 | 100.00000 |

TOTAL AREA= 1230
MUL FACTOR=1.0000E+00

*ID 12173-500X-CCU

* RUN #19144 JAN 20, 2022 12:56:57
START



RUN# 19144 JAN 20, 2022 12:56:57

IDENTIFIER : 12173-500X-C
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|--------|------|-------|----------|
| 1.075 | 153150 | BB | .047 | 20.19526 |
| 1.866 | 305310 | PB | .077 | 40.26000 |
| 2.181 | 299886 | BB | .090 | 39.54474 |

TOTAL AREA= 758346
MUL FACTOR=1.0000E+00

Energy Laboratories Inc

Spike LOG

Standard ID: 12173
 Standard Name: HC-Methane-W-CCV
 Date Prepared: 11/22/2019
 Date Expires: 11/23/2023
 Department: GAS
 Vendor: Matheson
 Lot Number: 109-96-04454
 Balance ID:

Type: Primary
 BY:
 Status: New

Comments: CCV Gas Standard for Methane, Ethene, Ethane: 50000ppm stock diluted from 100 - 500ppm with Helium for CCV. Diluted from 2.5ppm - 1000ppm with Helium for Calibration.

| Chemical / Solvent Used | BottleNo | Amt | Units | Exp |
|--------------------------------------|----------|-----|-------|-------|
| 3 Multi-Component Gas Standard in Ni | 12173 | | mL | 11/23 |

Final Volume: mL

Stock Source

Base Units

Amount Added

Analyses

CAS

Conc: ug/mL

MATHESON TRI-GAS INC
1650 Enterprise Pkwy
Twinsburg, OH 44087
1-215-648-4000

CERTIFICATE OF ANALYSIS

Energy Laboratories Inc
1120 South 27th Street
Billings, MT 59101

Ref Po# 3008099

14 LITER DISPOSABLE

LOT NUMBER: 109-96-04454

COMPONENT

CONCENTRATION

| | | |
|----------|-------|-----|
| methane | 50010 | ppm |
| ethane | 50030 | ppm |
| ethylene | 50030 | ppm |
| nitrogen | Bal | |

ITEM NUMBER: GMT2685284TC

CGA: 160

PSIG: 240

FILL DATE: 11/22/19

EXPIRATION DATE: 11/23/23

ID #: 12173

Opened: _____

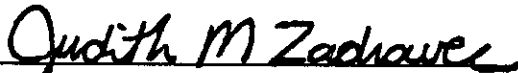
3 Multi-Component Gas Standard in Nitrogen

Expires: 11/23/2023

Rec'd: 12/3/2019

Energy Laboratories Inc 1120 So. 27th Street
Billings MT 59107

Above are the results of the analysis you requested, as reported by our laboratory. Results are in mole percent, unless otherwise indicated. Mixture accuracy is $\pm 2\%$. NIST traceable by weights or gaseous standards.



Judy Zadravec, Chemist

10/19/2018

DATE

Energy Laboratories Inc

Spike LOG

Standard ID: 10711
 Standard Name: HC-Methane-W-CCV
 Date Prepared: 8/8/2018
 Date Expires: 8/9/2022
 Department: GAS
 Vendor: Matheson
 Lot Number: 109-86-03507
 Balance ID:

Type: Primary
 BY:
 Status: New

Comments: LCS Gas Standard for Methane, Ethene, Ethane: 100ppm per standard used undiluted for LCS

| Chemical / Solvent Used | BottleNo | Amt | Units | Exp |
|--------------------------------------|----------|-----|-------|--------|
| 3 Multi-Component Gas Standard in Ni | 10711 | | mL | 8/9/22 |

Final Volume: mL

Stock Source

Base Units

Amount Added

Analyses

CAS

Conc: ug/mL

MATHESON TRI-GAS INC
1650 Enterprise Pkwy
Twinsburg, OH 44087
1-215-648-4000

CERTIFICATE OF ANALYSIS

Energy Laboratories Inc
1120 South 27th Street
Billings, MT 59101

Ref Po# 3005062

14 LITER DISPOSABLE

LOT NUMBER: 109-86-03507

| <u>COMPONENT</u> | <u>CONCENTRATION</u> |
|------------------|----------------------|
| methane | 100.0 ppm |
| ethane | 100.0 ppm |
| ethylene | 100.0 ppm |
| nitrogen | Bal |

ITEM NUMBER: GMT2677328TC

CGA: 160

PSIG: 240

FILL DATE: 08/08/18

EXPIRATION DATE: 08/09/22

Above are the results of the analysis you requested, as reported by our laboratory. Results are in mole percent, unless otherwise indicated. Mixture accuracy is $\pm 2\%$. NIST traceable by weights or gaseous standards.

Judith M Zadravec

Judy Zadravec, Chemist

8/14/2018

DATE

ID #: 10711
Opened: _____
3 Multi-Component Gas Standard in Nitrogen
Expires: 8/9/2022
Rec'd: 8/27/2018
Energy Laboratories Inc 1120 So. 27th Street
Billings MT 59107