

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 |

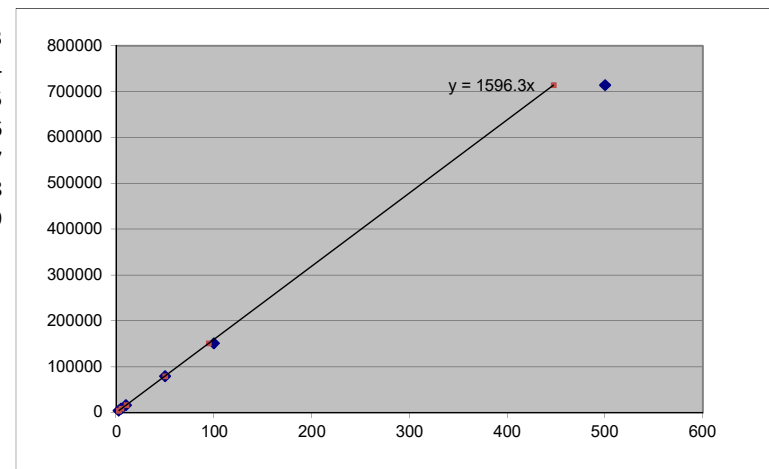
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|--------|-------------|------------|------------|------------------|-------|----------|-----------|--------|--------|--------|------|-----|------|------|---|
| 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 | Conc ppm | Area | | | | |
| Equivalent | | Counts | | | | |
| 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 | jdww | MBLK | HC-METHANE-W | Methane |
| MBLK | 0 | 1 | 20 | 0 | 1/20/2021 11:50 | jdww | MBLK | HC-METHANE-W | Ethane |
| MBLK | 0 | 1 | 20 | 0 | 1/20/2021 11:50 | jdww | MBLK | HC-METHANE-W | Ethene |
| Cal1 | 4682 | 1 | 20 | 2.9330938 | 1/20/2021 11:54 | jdww | CCV | HC-METHANE-CCV | Methane |
| Cal1 | 8164 | 1 | 20 | 2.66692829 | 1/20/2021 11:54 | jdww | CCV | HC-METHANE-CCV | Ethane |
| Cal1 | 8384 | 1 | 20 | 2.68217219 | 1/20/2021 11:54 | jdww | CCV | HC-METHANE-CCV | Ethene |
| Cal2 | 8741 | 1 | 20 | 5.47590194 | 1/20/2021 12:00 | jdww | CCV | HC-METHANE-CCV | Methane |
| Cal2 | 15792 | 1 | 20 | 5.15876183 | 1/20/2021 12:00 | jdww | CCV | HC-METHANE-CCV | Ethane |
| Cal2 | 16206 | 1 | 20 | 5.18455183 | 1/20/2021 12:00 | jdww | CCV | HC-METHANE-CCV | Ethene |
| Cal3 | 16844 | 1 | 20 | 10.5521213 | 1/20/2021 12:04 | jdww | CCV | HC-METHANE-CCV | Methane |
| Cal3 | 31757 | 1 | 20 | 10.37403746 | 1/20/2021 12:04 | jdww | CCV | HC-METHANE-CCV | Ethane |
| Cal3 | 31917 | 1 | 20 | 10.21074545 | 1/20/2021 12:04 | jdww | CCV | HC-METHANE-CCV | Ethene |
| Cal4 | 79772 | 1 | 20 | 49.97410476 | 1/20/2021 12:09 | jdww | CCV | HC-METHANE-CCV | Methane |
| Cal4 | 154538 | 1 | 20 | 50.48282269 | 1/20/2021 12:09 | jdww | CCV | HC-METHANE-CCV | Ethane |
| Cal4 | 158708 | 1 | 20 | 50.7731613 | 1/20/2021 12:09 | jdww | CCV | HC-METHANE-CCV | Ethene |
| Cal5 | 151345 | 1 | 20 | 94.81184983 | 1/20/2021 12:14 | jdww | CCV | HC-METHANE-CCV | Methane |
| Cal5 | 295835 | 1 | 20 | 96.64021698 | 1/20/2021 12:14 | jdww | CCV | HC-METHANE-CCV | Ethane |
| Cal5 | 301225 | 1 | 20 | 96.3665695 | 1/20/2021 12:14 | jdww | CCV | HC-METHANE-CCV | Ethene |
| Cal6 | 714053 | 1 | 20 | 447.3268744 | 1/20/2021 12:22 | jdww | CCV | HC-METHANE-CCV | Methane |
| Cal6 | 1359194 | 1 | 20 | 444.0069737 | 1/20/2021 12:22 | jdww | CCV | HC-METHANE-CCV | Ethane |
| Cal6 | 1391019 | 1 | 20 | 445.0086452 | 1/20/2021 12:22 | jdww | CCV | HC-METHANE-CCV | Ethene |
| Cal7 | 1331471 | 1 | 20 | 834.11562 | 1/20/2021 12:22 | jdww | CCV | HC-METHANE-CCV | Methane |
| LCS | 154662 | 1 | 20 | 96.88982337 | 1/20/2021 12:36 | jdww | CCV | HC-METHANE-CCV | Methane |
| LCS | 297724 | 1 | 20 | 97.25729532 | 1/20/2021 12:36 | jdww | CCV | HC-METHANE-CCV | Ethane |
| LCS | 303645 | 1 | 20 | 97.1407652 | 1/20/2021 12:36 | jdww | CCV | HC-METHANE-CCV | Ethene |

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

*ID MB

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

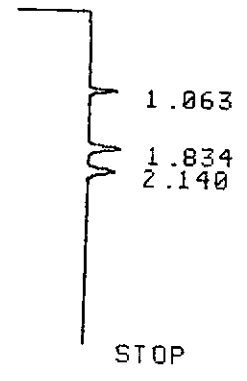


RUN# 16482 JAN 20, 2021 11:50:13

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%

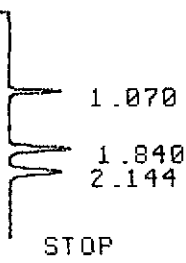
| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|----------|
| 1.063 | 4682 | PP | .048 | 22.05370 |
| 1.834 | 8384 | PV | .078 | 39.49128 |
| 2.140 | 8164 | UP | .087 | 38.45502 |

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 |

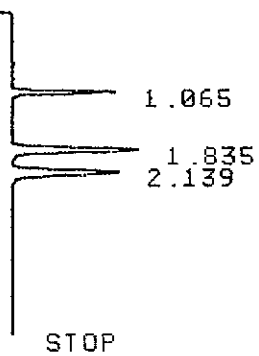
TOTAL AREA= 40739

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 |

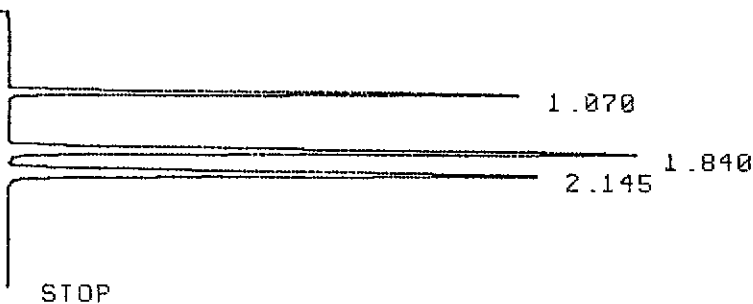
TOTAL AREA= 80518

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

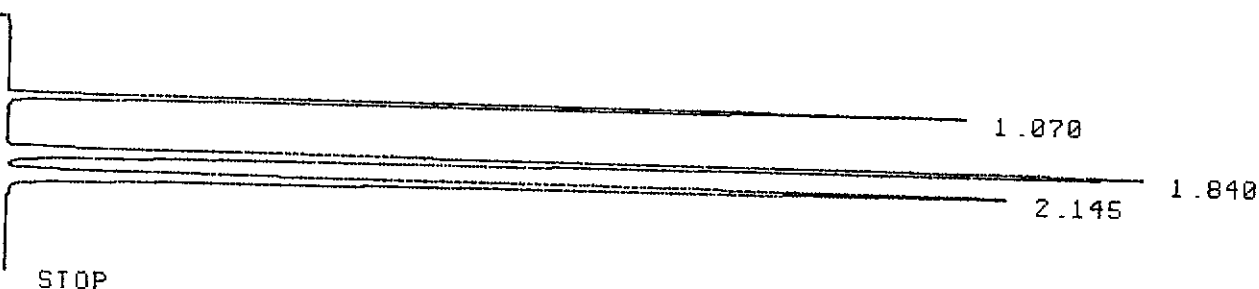
*CAL5-100PPM

INVALID SYSTEM COMMAND

*ID CAL5-100PPM

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

START



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

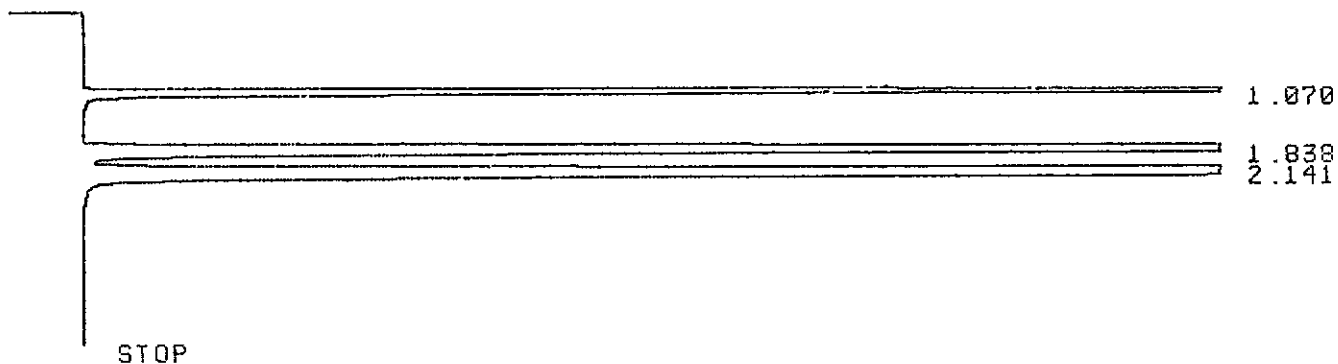
IDENTIFIER : CAL5-100PPM
AREA%

| 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

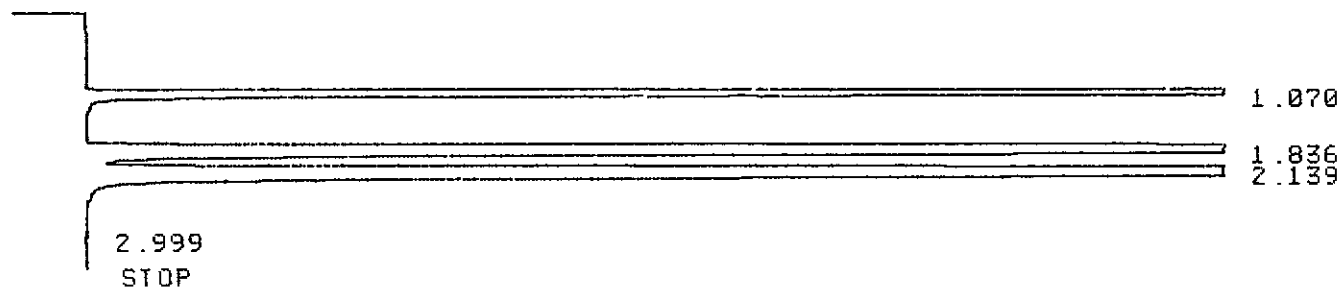
IDENTIFIER : CAL6-500PPM
AREA%

| 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%

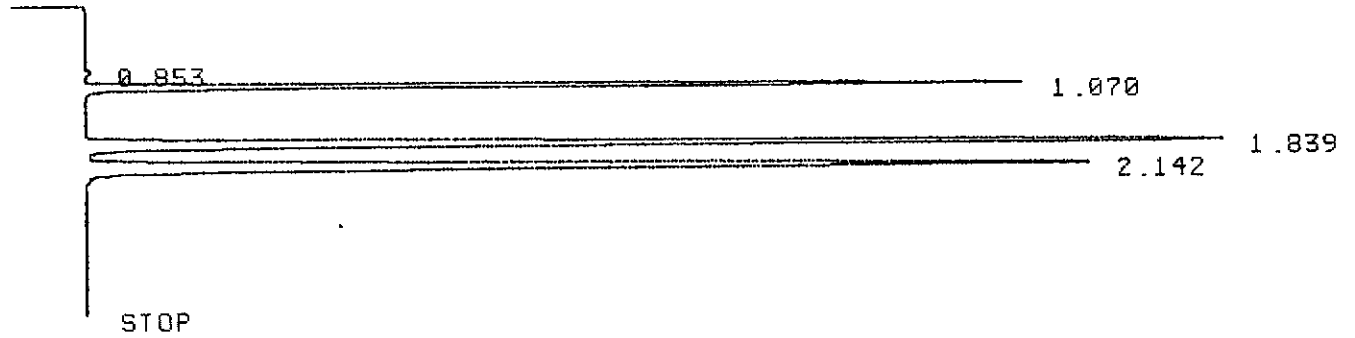
| RT | AREA | TYPE | WIDTH | AREA% |
|-------|---------|------|-------|----------|
| 1.070 | 1331471 | PB | .049 | 21.86052 |

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

06-Jan-22

Run ID FID-HEADSPACE_220105A

Run Start Date: 1/5/2022
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 | | | | | |
|----------|--------|-------------|------------|------------|------------------|-------|----------|-----------|--------|--------|--------|------|-----|------|------|---|
| 14964427 | CCV | HC-METHANE- | CCV | | 1/5/2022 8:57:00 | 1 | R372735 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | ppm | | 99.6700605 | | 100 | 0 | 0 | 2 | 2 | 0 | 100% | 85 | 115 | 0% | |

| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|--------|-------------|------------|------------|------------------|-------|----------|-----------|--------|--------|--------|------|-----|------|------|---|
| 14964428 | LCS | HC-METHANE- | LCS | | 1/5/2022 9:01:00 | 1 | R372735 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | ppm | | 99.1707705 | | 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 | | | | | |
|----------|--------|-------------|------------|------------|------------------|-------|----------|-----------|--------|--------|--------|------|-----|------|------|---|
| 14964429 | LCSD | HC-METHANE- | LCSD | | 1/5/2022 9:07:00 | 1 | R372735 | | 0 | 1E+07 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | ppm | | 97.7681227 | | 100 | 0 | 99.170771 | 2 | 2 | 0 | 98% | 85 | 115 | 1% | |

| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
|----------|----------------|-------------|------------|------------|------------------|-------|----------|-----------|----------|--------|--------|------|-----|------|------|---|
| 14964430 | MBLK | HC-METHANE- | MBLK | | 1/5/2022 10:31:0 | 1 | R372735 | | 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 | | | | | |
| 14964431 | B22010096-001I | HC-METHANE- | SAMP | | 1/5/2022 10:37:0 | 1 | R372735 | | 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 | | | | | |
| 14964432 | B22010096-005 | HC-METHANE- | SAMP | | 1/5/2022 10:43:0 | 1 | R372735 | | 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 | | | | | |
| 14964433 | B22010120-001I | HC-METHANE- | SAMP | | 1/5/2022 10:49:0 | 1 | R372735 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0.00073205 | | | 0 | 0 | 0.000704 | 0.002 | 0 | 0% | 0 | 0 | 0% | J |
| Seq No | Lab ID | Test Code | Sample Typ | File ID | Analysis Date | DF | Batch ID | Prep Date | SPKref | RPDref | pmoist | | | | | |
| 14964434 | B22010120-005 | HC-METHANE- | SAMP | | 1/5/2022 10:54:0 | 1 | R372735 | | 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 | | | | | |
| 14964435 | B22010134-001I | HC-METHANE- | SAMP | | 1/5/2022 11:00:0 | 1 | R372735 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0.01527456 | | | 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 | | | | | |
|----------|----------------|-------------|------------|------------|------------------|-------|----------|-----------|----------|--------|--------|------|-----|------|------|---|
| 14964436 | B22010134-001I | HC-METHANE- | DUP | | 1/5/2022 11:09:0 | 1 | R372735 | | 0 | 1E+07 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0.01516106 | | | 0 | 0.0152746 | 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 | | | | | |
| 14964437 | B22010134-005 | HC-METHANE- | SAMP | | 1/5/2022 11:19:0 | 1 | R372735 | | 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 | | | | | |
| 14964438 | B22010141-001I | HC-METHANE- | SAMP | | 1/5/2022 11:25:0 | 1 | R372735 | | 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 | | | | | |
| 14964439 | B22010141-005 | HC-METHANE- | SAMP | | 1/5/2022 11:31:0 | 1 | R372735 | | 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 | | | | | |
| 14964440 | B22010142-001I | HC-METHANE- | SAMP | | 1/5/2022 11:37:0 | 1 | R372735 | | 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 | | | | | |
| 14964441 | B22010142-005 | HC-METHANE- | SAMP | | 1/5/2022 11:46:0 | 1 | R372735 | | 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 | | | | | |
|----------|----------------|-------------|------------|------------|------------------|-------|----------|-----------|----------|--------|--------|------|-----|------|------|---|
| 14964442 | B22010143-001I | HC-METHANE- | SAMP | | 1/5/2022 11:52:0 | 1 | R372735 | | 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 | | | | | |
| 14964443 | B22010143-005 | HC-METHANE- | SAMP | | 1/5/2022 12:02:0 | 1 | R372735 | | 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 | | | | | |
| 14964444 | B22010145-001I | HC-METHANE- | SAMP | | 1/5/2022 12:08:0 | 1 | R372735 | | 0 | 0 | | | | | | |
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| Methane | A | mg/L | | 0.00403763 | | | 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 | | | | | |
| 14964445 | B22010145-005 | HC-METHANE- | SAMP | | 1/5/2022 12:18:0 | 1 | R372735 | | 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 | | | | | |
| 14964446 | B22010148-001I | HC-METHANE- | SAMP | | 1/5/2022 12:23:0 | 1 | R372735 | | 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 | | | | | |
| 14964447 | B22010148-005 | HC-METHANE- | SAMP | | 1/5/2022 12:29:0 | 1 | R372735 | | 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 | | | | | |
|----------|--------|-------------|------------|------------|------------------|-------|----------|-----------|--------|--------|--------|------|-----|------|------|---|
| Analyte | T | Units | RAW | Final | Text | Spike | SPKref | RPDref | MDL | PQL | UQL | %REC | LOW | HIGH | %RPD | Q |
| 14964448 | CCV | HC-METHANE- | CCV | | 1/5/2022 12:35:0 | 1 | R372735 | | 0 | 0 | | | | | | |
| Methane | A | ppm | | 100.273343 | | 100 | 0 | 0 | 2 | 2 | 0 | 100% | 85 | 115 | 0% | |

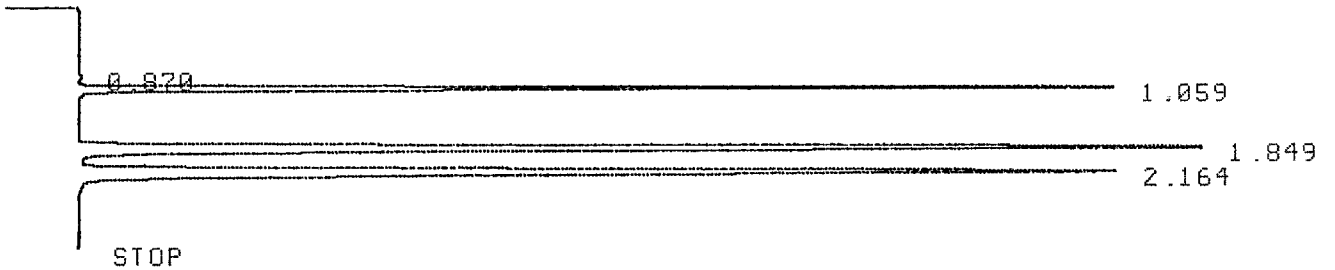
| Sample ID | Area Count | Dilution Factor | Temperature (C) | Concentration | Date/Time Analyzed | Analyst | Sample Type | Test Code | Analyte | Headspace Volume | Liquid Volume |
|-------------------|------------|-----------------|-----------------|---------------|--------------------|---------|-------------|----------------|---------|------------------|---------------|
| CCV | 159100 | 1 | 19 | 99.67006051 | 1/5/2022 8:57 | jdw | CCV | HC-METHANE-CCV | Methane | | |
| LCS | 158303 | 1 | 19 | 99.17077051 | 1/5/2022 9:01 | jdw | LCS | HC-METHANE-CCV | Methane | | |
| LCS | 156064 | 1 | 19 | 97.76812271 | 1/5/2022 9:07 | jdw | LCS | HC-METHANE-CCV | Methane | | |
| MBLK | 832 | 1 | 19 | 0.000121692 | 1/5/2022 10:31 | jdw | MBLK | HC-METHANE-W | Methane | 10 | 32 |
| B22010096-001I | 1629 | 1 | 19 | 0.000116573 | 1/5/2022 10:37 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010096-005A | 1093 | 1 | 19 | 3.81751E-05 | 1/5/2022 10:43 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010120-001I | 5837 | 1 | 19 | 0.000732054 | 1/5/2022 10:49 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010120-005A | 942 | 1 | 19 | 1.60891E-05 | 1/5/2022 10:54 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010134-001I | 105263 | 1 | 19 | 0.015274557 | 1/5/2022 11:00 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010134-001IDUP | 104487 | 1 | 19 | 0.015161055 | 1/5/2022 11:09 | jdw | DUP | HC-METHANE-W | Methane | 10 | 32 |
| B22010134-005A | 1328 | 1 | 19 | 7.25472E-05 | 1/5/2022 11:19 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010141-001I | 1758 | 1 | 19 | 0.000135441 | 1/5/2022 11:25 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010141-005A | 4074 | 1 | 19 | 0.00047419 | 1/5/2022 11:31 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010142-001I | 4338 | 1 | 19 | 0.000512804 | 1/5/2022 11:37 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010142-005A | 1882 | 1 | 19 | 0.000153578 | 1/5/2022 11:46 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010143-001I | 4089 | 1 | 19 | 0.000476384 | 1/5/2022 11:52 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010143-005A | 906 | 1 | 19 | 1.08236E-05 | 1/5/2022 12:02 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010145-001I | 28437 | 1 | 19 | 0.004037634 | 1/5/2022 12:08 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010145-005A | 2507 | 1 | 19 | 0.000244993 | 1/5/2022 12:18 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010148-001I | 4721 | 1 | 19 | 0.000568823 | 1/5/2022 12:23 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| B22010148-005A | 981 | 1 | 19 | 2.17934E-05 | 1/5/2022 12:29 | jdw | SAMP | HC-METHANE-W | Methane | 10 | 32 |
| CCV | 160063 | 1 | 19 | 100.2733431 | 1/5/2022 12:35 | jdw | CCV | HC-METHANE-CCV | Methane | | |

JDW
1/5/2022

*ID 12173-500X-CCU

* RUN #18876 JAN 5, 2022 08:57:03

START



RUN# 18876 JAN 5, 2022 08:57:03

IDENTIFIER : 12173-500X-C

AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|--------|------|-------|----------|
| .870 | 441 | PV | .074 | .05593 |
| 1.059 | 159100 | UB | .045 | 20.17840 |
| 1.849 | 317027 | PB | .075 | 40.20802 |
| 2.164 | 311899 | BB | .088 | 39.55765 |

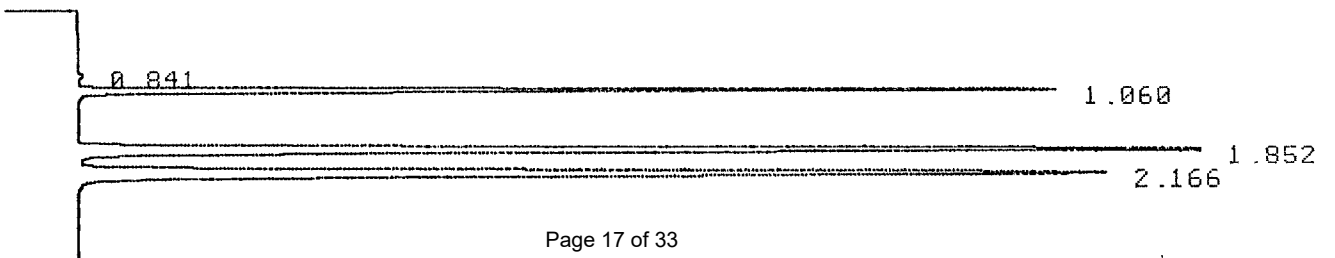
TOTAL AREA= 788467

MUL FACTOR=1.0000E+00

*ID 10711-LCS

* RUN #18877 JAN 5, 2022 09:01:47

START



RUN# 18877 JAN 5, 2022 09:01:47

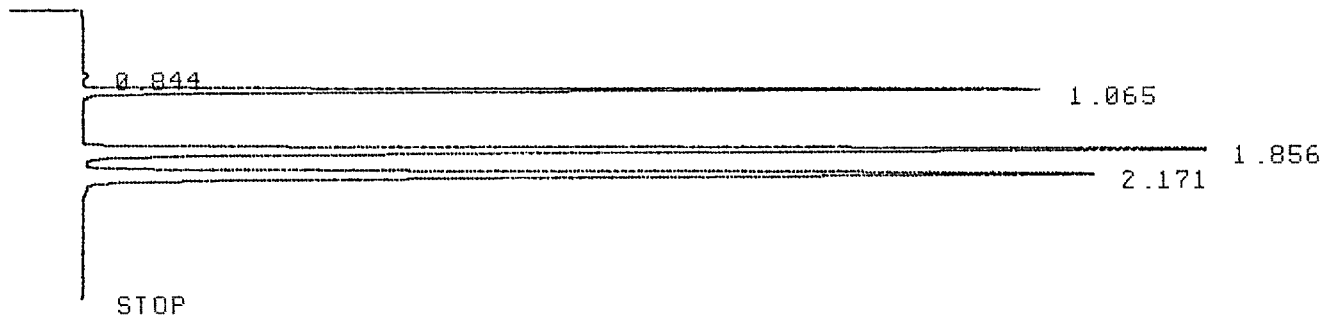
IDENTIFIER : 10711-LCS
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|--------|------|-------|----------|
| .841 | 910 | PP | .052 | .11599 |
| 1.060 | 158303 | PB | .047 | 20.17768 |
| 1.852 | 315922 | PB | .075 | 40.26819 |
| 2.166 | 309410 | BB | .088 | 39.43814 |

TOTAL AREA= 784545
MUL FACTOR=1.0000E+00

*ID 10711-LCSD

* RUN #18878 JAN 5, 2022 09:07:10
START



RUN# 18878 JAN 5, 2022 09:07:10

IDENTIFIER : 10711-LCSD
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|--------|------|-------|----------|
| .844 | 908 | UV | .049 | .11685 |
| 1.065 | 156064 | PB | .048 | 20.08453 |
| 1.856 | 312619 | BV | .076 | 40.23224 |
| 2.171 | 307445 | VB | .089 | 39.56637 |

TOTAL AREA= 777036
MUL FACTOR=1.0000E+00

*

*ID MB

* RUN #18879 JAN 5, 2022 10:31:36
START

┌───┐
│ │
│ │ } 0.085
│ │
└───┘
STOP

RUN# 18879 JAN 5, 2022 10:31:36

IDENTIFIER : MB
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.067 | 832 | UU | .064 | 100.00000 |

TOTAL AREA= 832
MUL FACTOR=1.0000E+00

*ID 0096-1I

* RUN #18880 JAN 5, 2022 10:37:38
START

┌───┐
│ │
│ │ } 0.879
│ │ } 1.058
│ │
└───┘
STOP

RUN# 18880 JAN 5, 2022 10:37:38

IDENTIFIER : 0096-1I
AREA%

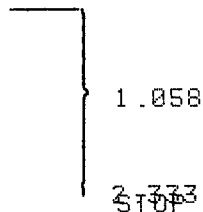
| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|----------|
| .879 | 988 | PU | .123 | 32.84574 |
| 1.058 | 1629 | UU | .073 | 54.15558 |
| 2.633 | 391 | I PH | .031 | 12.99867 |

TOTAL AREA= 3008
MUL FACTOR=1.0000E+00

*ID 0096-5A

* RUN #18881 JAN 5, 2022 10:43:38

START



RUN# 18881 JAN 5, 2022 10:43:38

IDENTIFIER : 0096-5A

AREA%

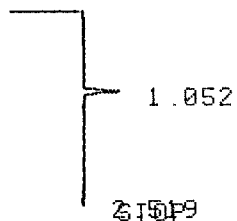
| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|----------|
| 1.058 | 1093 | UP | .057 | 65.33174 |
| 2.333 | 580 | PP | .050 | 34.66826 |

TOTAL AREA= 1673
MUL FACTOR=1.0000E+00

*ID 0120-1I

* RUN #18882 JAN 5, 2022 10:49:20

START



RUN# 18882 JAN 5, 2022 10:49:20

IDENTIFIER : 0120-1I

AREA%

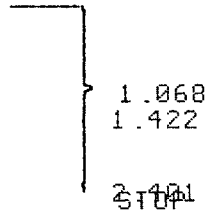
| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.052 | 5837 | PP | .047 | 100.00000 |

TOTAL AREA= 5837
MUL FACTOR=1.0000E+00

*

*ID ID 0120-5A

* RUN #18883 JAN 5, 2022 10:54:50
START



RUN# 18883 JAN 5, 2022 10:54:50

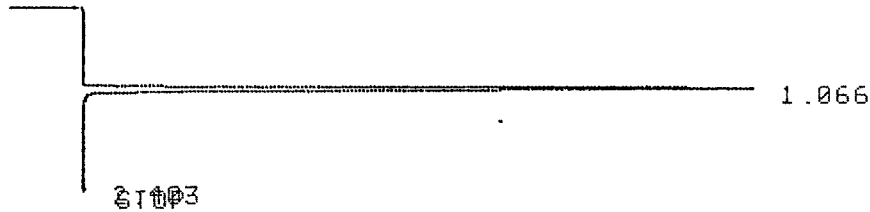
IDENTIFIER : ID 0120-5A
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|----------|
| 1.068 | 942 | BP | .038 | 66.47850 |
| 1.422 | 475 | PU | .068 | 33.52154 |

TOTAL AREA= 1417
MUL FACTOR=1.0000E+00

*ID 0134-1I

* RUN #18884 JAN 5, 2022 11:00:14
START



RUN# 18884 JAN 5, 2022 11:00:14

IDENTIFIER : 0134-1I
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|--------|------|-------|-----------|
| 1.066 | 105263 | PB | .046 | 100.00000 |

TOTAL AREA= 105263
MUL FACTOR=1.0000E+00

* PLOT

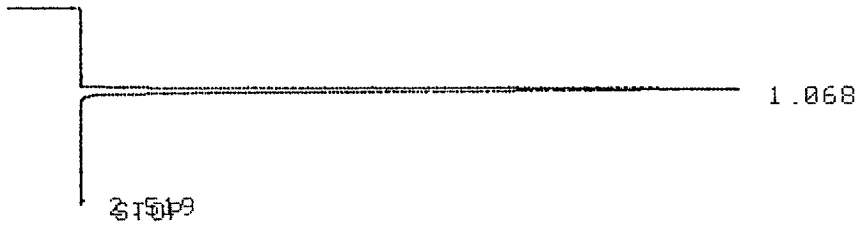
STOP

* PLOT

STOP

*ID 0134-1I-DUP

* RUN #18885 JAN 5, 2022 11:09:45
START



RUN# 18885 JAN 5, 2022 11:09:45

IDENTIFIER : 0134-1I-DUP
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|--------|------|-------|-----------|
| 1.068 | 104487 | PB | .046 | 100.00000 |

TOTAL AREA= 104487
MUL FACTOR=1.0000E+00

* PLOT

STOP

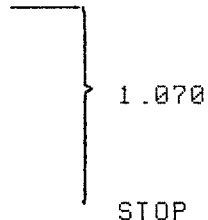
* PLOT

STOP

*ID 0134-5A

* RUN #18886 JAN 5, 2022 11:19:38

START



RUN# 18886 JAN 5, 2022 11:19:38

IDENTIFIER : 0134-5A

AREA%

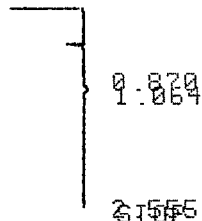
| RT | AREA TYPE | WIDTH | AREA% |
|-------|-----------|-------|-----------|
| 1.070 | 1328 PU | .053 | 100.00000 |

TOTAL AREA= 1328
MUL FACTOR=1.0000E+00

*ID 0141-1I

* RUN #18887 JAN 5, 2022 11:25:14

START



RUN# 18887 JAN 5, 2022 11:25:14

IDENTIFIER : 0141-1I

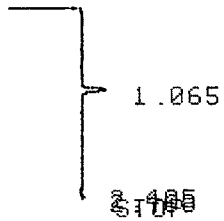
AREA%

| RT | AREA TYPE | WIDTH | AREA% |
|-------|-----------|-------|----------|
| .870 | 1566 PU | .139 | 47.11190 |
| 1.064 | 1758 UU | .083 | 52.88810 |

TOTAL AREA= 3324
MUL FACTOR=1.0000E+00

*ID 141-5A

* RUN #18888 JAN 5, 2022 11:31:39
START



RUN# 18888 JAN 5, 2022 11:31:39

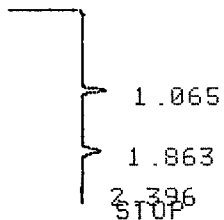
IDENTIFIER : 141-5A
AREA%

| RT | AREA TYPE | WIDTH | AREA% |
|-------|-----------|-------|----------|
| 1.065 | 4074 PU | .049 | 91.12054 |
| 2.468 | 397 I UH | .045 | 8.87944 |

TOTAL AREA= 4471
MUL FACTOR=1.0000E+00

*ID 0142-1I

* RUN #18889 JAN 5, 2022 11:37:52
START



RUN# 18889 JAN 5, 2022 11:37:52

IDENTIFIER : 0142-1I
AREA%

| RT | AREA TYPE | WIDTH | AREA% |
|-------|-----------|-------|----------|
| 1.065 | 4338 PP | .051 | 44.36490 |
| 1.863 | 5440 UU | .081 | 55.63510 |

TOTAL AREA= 9778
MUL FACTOR=1.0000E+00

* PLOT



STOP

* PLOT

STOP

*ID 0142-5A

* RUN #18890 JAN 5, 2022 11:46:21

START

1.066

STOP

RUN# 18890 JAN 5, 2022 11:46:21

IDENTIFIER : 0142-5A

AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.066 | 1882 | UP | .064 | 100.00000 |

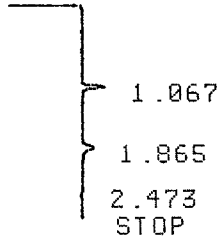
TOTAL AREA= 1882

MUL FACTOR=1.0000E+00

*

*ID 0143-1I

* RUN #18891 JAN 5, 2022 11:52:39
START



RUN# 18891 JAN 5, 2022 11:52:39

IDENTIFIER : 0143-1I
AREA%

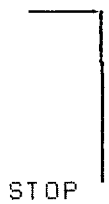
| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|----------|
| 1.067 | 4089 | UP | .052 | 50.80765 |
| 1.865 | 3527 | PP | .086 | 43.82456 |
| 2.473 | 432 | PU | .043 | 5.36780 |

TOTAL AREA= 8048
MUL FACTOR=1.0000E+00

* PLOT



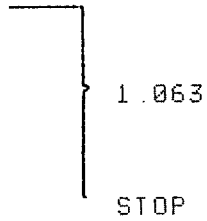
* PLOT



*

*ID 0143-5A

* RUN #18892 JAN 5, 2022 12:02:35
START



RUN# 18892 JAN 5, 2022 12:02:35

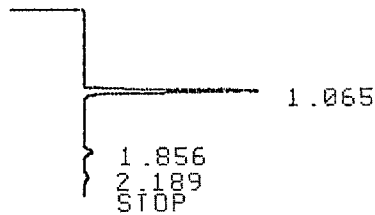
IDENTIFIER : 0143-5A
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.063 | 906 | BP | .046 | 100.00000 |

TOTAL AREA= 906
MUL FACTOR=1.0000E+00

*ID 0145-1I

* RUN #18893 JAN 5, 2022 12:08:55
START



RUN# 18893 JAN 5, 2022 12:08:55

IDENTIFIER : 0145-1I
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|-------|------|-------|----------|
| 1.065 | 28437 | PV | .047 | 87.00854 |
| 1.856 | 2723 | UP | .079 | 8.33155 |
| 2.189 | 1523 | UU | .081 | 4.65992 |

TOTAL AREA= 32683
MUL FACTOR=1.0000E+00

STOP

* PLOT

STOP

*ID 0145-5A

* RUN #18894 JAN 5, 2022 12:18:14
START

1.068
2.038
STOP

RUN# 18894 JAN 5, 2022 12:18:14

IDENTIFIER : 0145-5A
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|----------|
| 1.068 | 2507 | BP | .048 | 86.50794 |
| 2.038 | 391 | PU | .043 | 13.49206 |

TOTAL AREA= 2898
MUL FACTOR=1.0000E+00

*ID 0148-1I

* RUN #18895 JAN 5, 2022 12:23:23
START

1.065
1.876
2.290
STOP

RUN# 18895 JAN 5, 2022 12:23:23

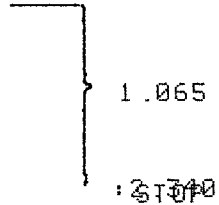
IDENTIFIER : 0148-1I

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|----------|
| 1.065 | 4721 | PU | .049 | 84.98650 |
| 1.876 | 834 | UU | .076 | 15.01350 |

TOTAL AREA= 5555
MUL FACTOR=1.0000E+00

*ID 0148-5A

* RUN #18896 JAN 5, 2022 12:29:21
START



RUN# 18896 JAN 5, 2022 12:29:21

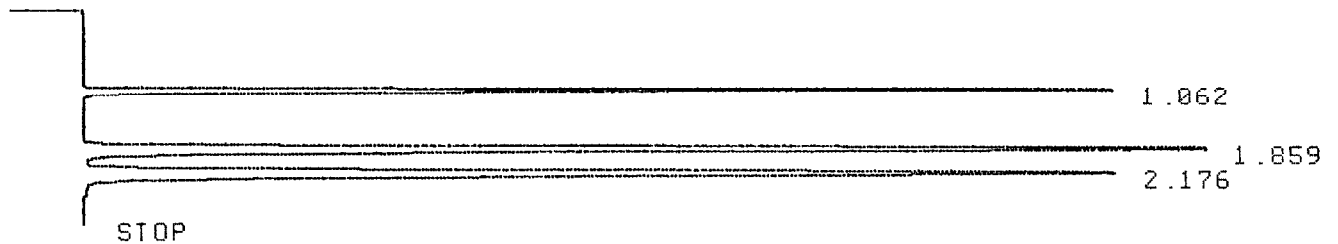
IDENTIFIER : 0148-5A
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|------|------|-------|-----------|
| 1.065 | 981 | BP | .044 | 100.00000 |

TOTAL AREA= 981
MUL FACTOR=1.0000E+00

*ID 12173-500X-CCU

* RUN #18897 JAN 5, 2022 12:35:13
START



RUN# 18897 JAN 5, 2022 12:35:13

IDENTIFIER : 12173-500X-C
AREA%

| RT | AREA | TYPE | WIDTH | AREA% |
|-------|--------|------|-------|----------|
| 1.062 | 160063 | PB | .045 | 20.14782 |
| 1.859 | 319848 | UU | .076 | 40.26067 |
| 2.176 | 314532 | UB | .089 | 39.59152 |

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

Analtes

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: _____

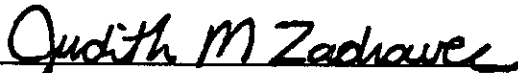
3 Multi-Component Gas Standard in Nitrogen

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

COMPONENT

CONCENTRATION

| | | |
|----------|-------|-----|
| 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