

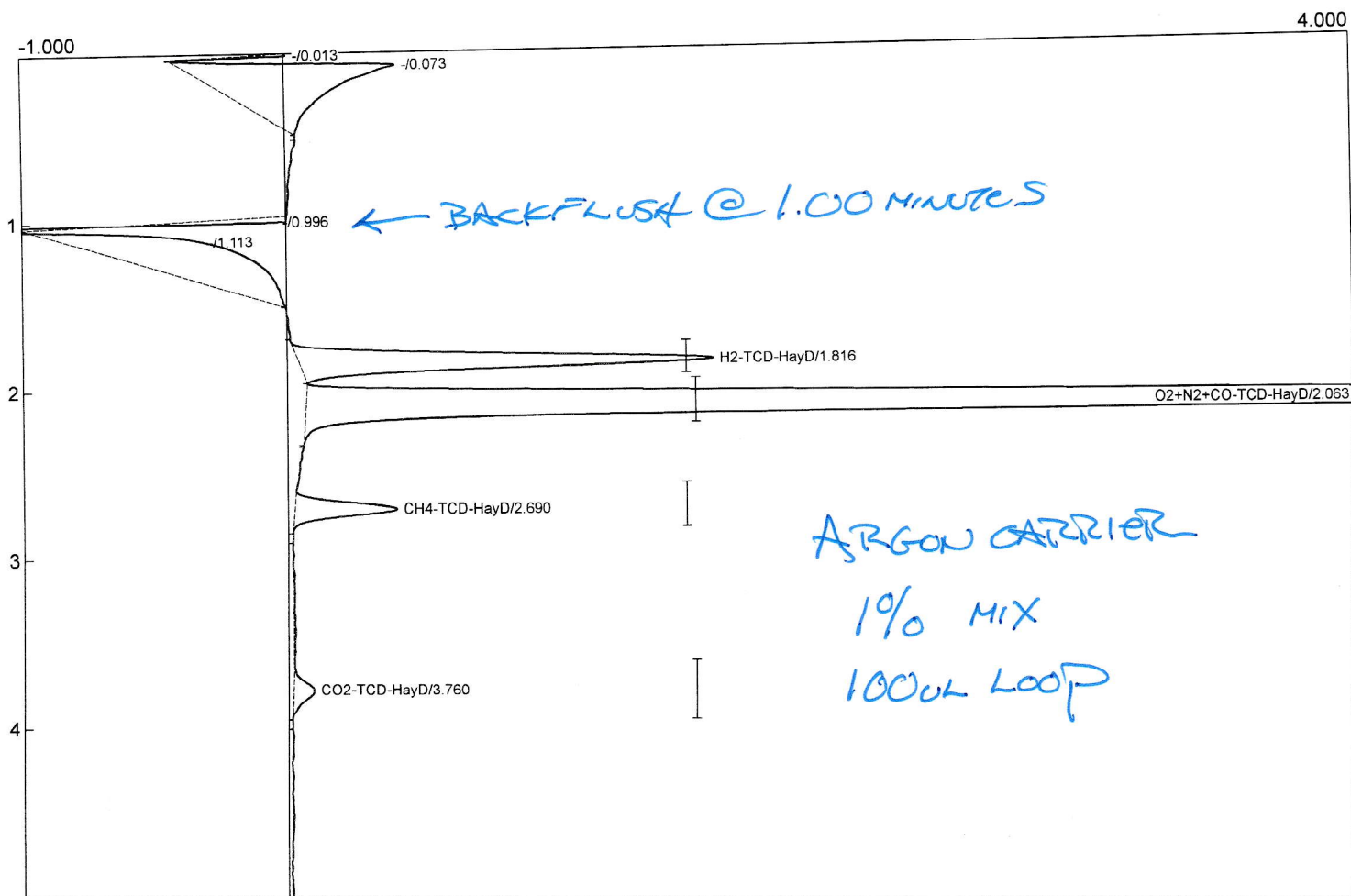
Lab name: SRI Instruments
 Client: Lydian
 Client ID: N2724
 Analysis date: 12/14/2023 12:44:55
 Method: 100ul valve loop
 Description: TCD low current
 Column: 18" HayD PC+12"HayD
 Carrier: Argon@20psi
 Integration: Peak sens=95.0 Base sens=60.0 Min area= 0.10 Standard=100.000 Sample=100.000 Tangents=off
 Data file: GalacticFID19.chr ()
 Sample: 1% mix

Temperature program:

| Init temp | Hold | Ramp | Final temp |
|-----------|--------|-------|------------|
| 90.00 | 10.000 | 0.000 | 90.00 |

Events:

| Time | Event |
|-------|-----------------------|
| 0.000 | ZERO |
| 0.000 | SOUND |
| 0.020 | G ON (Valve1Rotate) |
| 1.000 | G OFF (Valve1Rotate) |
| 1.500 | INTEG BASED IMMEDIATE |



| Component | Retention | Area | Internal | Units |
|-------------------|-----------|---------|------------|-------|
| H2-TCD-HayD | 1.816 | 8.6216 | 10000.0000 | ppm |
| O2+N2+CO-TCD-HayD | 2.063 | 74.7670 | 95.0000 | % |
| CH4-TCD-HayD | 2.690 | 2.0409 | 10000.0000 | % |
| CO2-TCD-HayD | 3.760 | 0.6154 | 10000.0000 | % |
| CO-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | % |
| C2H6-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | ppm |
| CO-FIDm-MS5A | 0.000 | 0.0000 | 0.0000 | ppm |
| CH4-FIDm-MS5A | 0.000 | 0.0000 | 0.0000 | ppm |
| CO2-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | % |

86.0449 20096.0000

} CALIBRATE ON 1% MIX
 10000 ppm

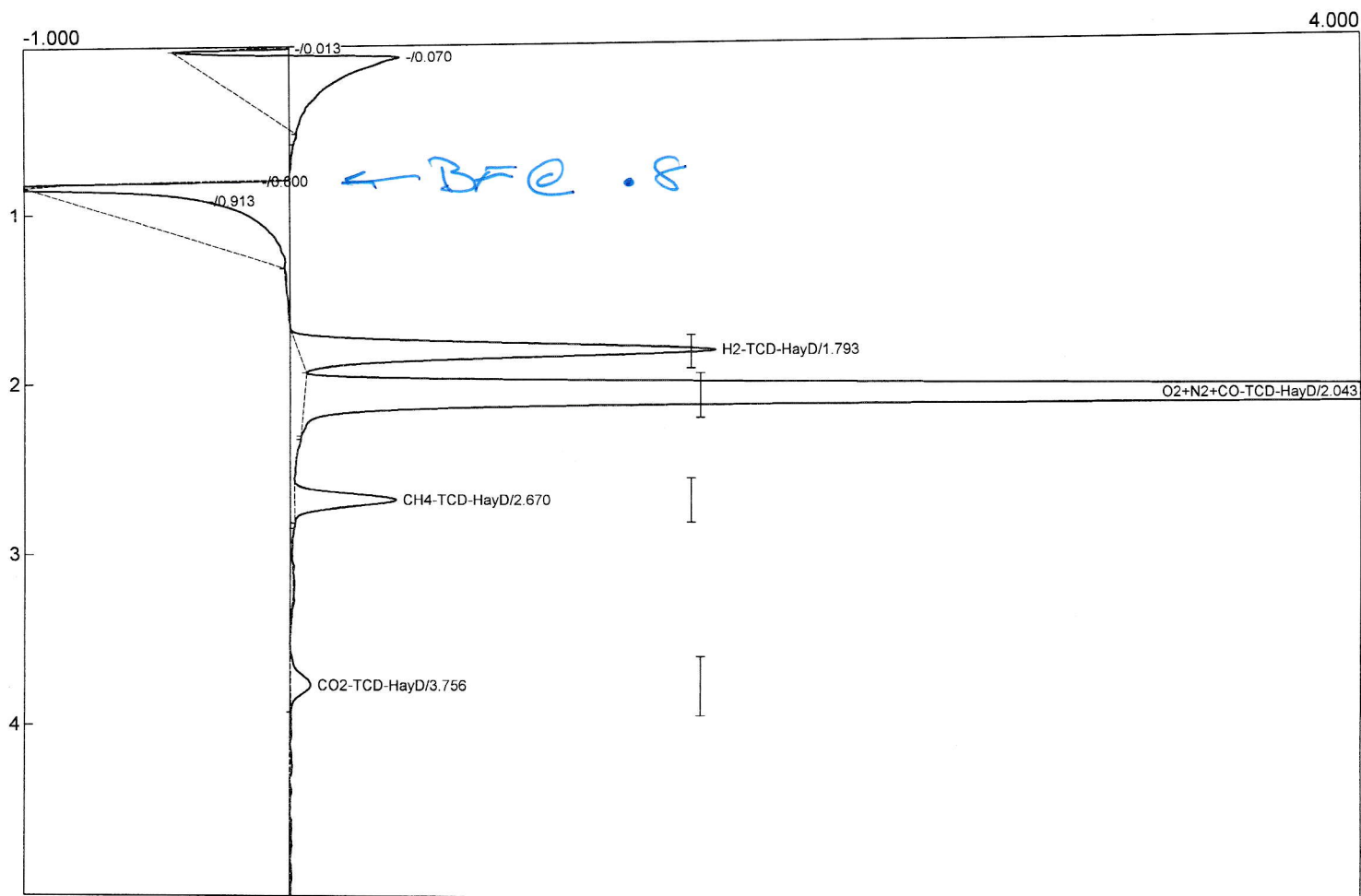
Lab name: SRI Instruments
 Client: Lydian
 Client ID: N2724
 Analysis date: 12/14/2023 12:56:46
 Method: 100ul valve loop
 Description: TCD low current
 Column: 18" HayD PC+12'HayD
 Carrier: Argon@20psi
 Integration: Peak sens=95.0 Base sens=60.0 Min area= 0.10 Standard=100.000 Sample=100.000 Tangents=off
 Data file: GalacticFID20.chr ()
 Sample: 1% mix

Temperature program:

| Init temp | Hold | Ramp | Final temp |
|-----------|--------|-------|------------|
| 90.00 | 10.000 | 0.000 | 90.00 |

Events:

| Time | Event |
|-------|-----------------------|
| 0.000 | ZERO |
| 0.000 | SOUND |
| 0.020 | G ON (Valve1Rotate) |
| 0.800 | G OFF (Valve1Rotate) |
| 1.500 | INTEG BASED IMMEDIATE |



| Component | Retention | Area | Internal | Units |
|-------------------|-----------|---------|------------|-------|
| H2-TCD-HayD | 1.793 | 8.6083 | 9984.5736 | ppm |
| O2+N2+CO-TCD-HayD | 2.043 | 74.7980 | 95.0394 | % |
| CH4-TCD-HayD | 2.670 | 2.0186 | 0.9891 | % |
| CO2-TCD-HayD | 3.756 | 0.6215 | 10099.1225 | % |
| CO-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | % |
| C2H6-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | ppm |
| CO-FIDm-MS5A | 0.000 | 0.0000 | 0.0000 | ppm |
| CH4-FIDm-MS5A | 0.000 | 0.0000 | 0.0000 | ppm |
| CO2-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | % |

← same area as BFE @ 1.00

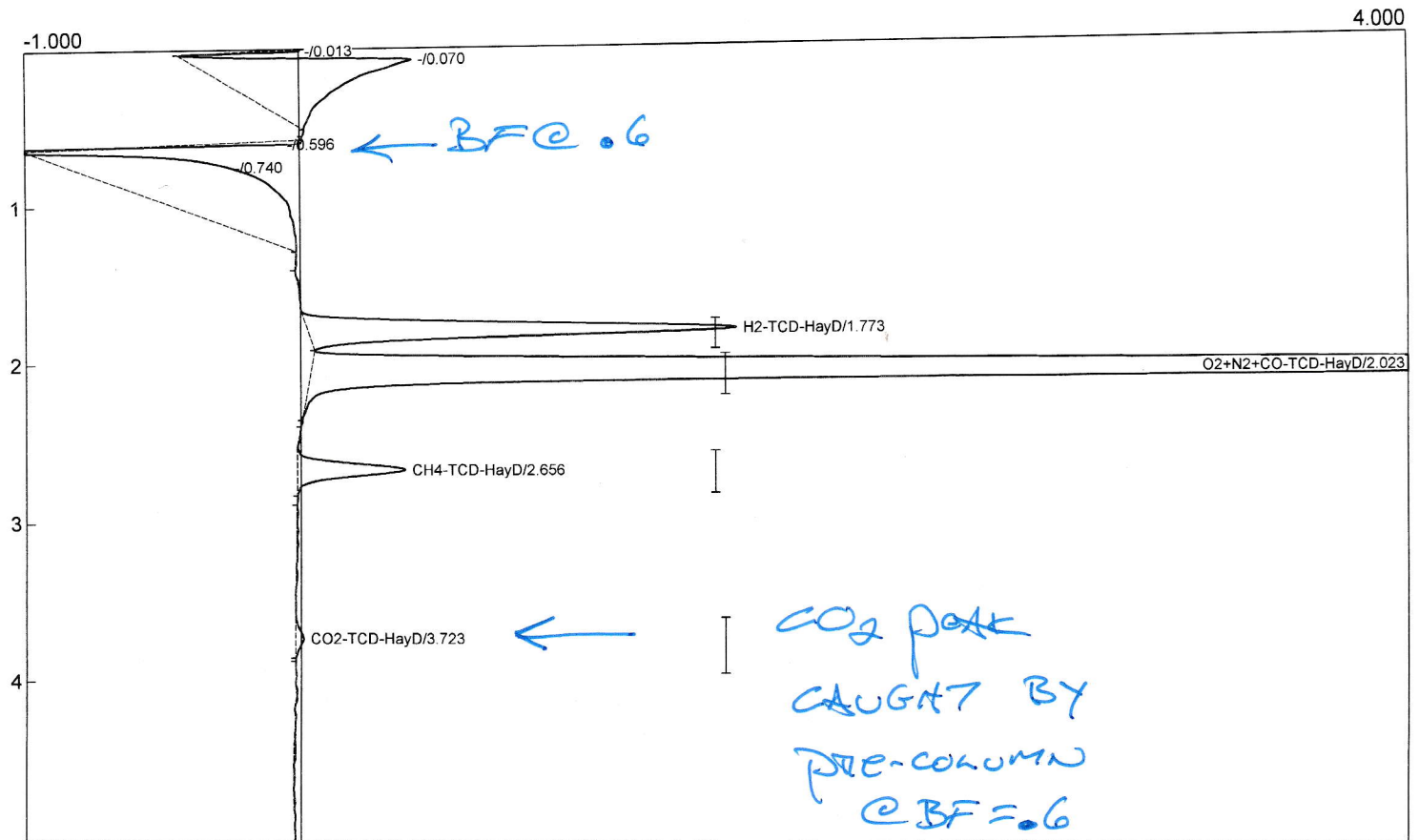
Lab name: SRI Instruments
 Client: Lydian
 Client ID: N2724
 Analysis date: 12/14/2023 13:15:11
 Method: 100ul valve loop
 Description: TCD low current
 Column: 18" HayD PC+12'HayD
 Carrier: Argon@20psi
 Integration: Peak sens=95.0 Base sens=60.0 Min area= 0.10 Standard=100.000 Sample=100.000 Tangents=off
 Data file: GalacticFID21.chr ()
 Sample: 1% mix

Temperature program:

| Init temp | Hold | Ramp | Final temp |
|-----------|--------|-------|------------|
| 90.00 | 10.000 | 0.000 | 90.00 |

Events:

| Time | Event |
|-------|-----------------------|
| 0.000 | ZERO |
| 0.000 | SOUND |
| 0.020 | G ON (Valve1Rotate) |
| 0.600 | G OFF (Valve1Rotate) |
| 1.500 | INTEG BASED IMMEDIATE |



| Component | Retention | Area | Internal | Units |
|-------------------|-----------|---------|------------|-------|
| H2-TCD-HayD | 1.773 | 8.5626 | 9931.5672 | ppm |
| O2+N2+CO-TCD-HayD | 2.023 | 74.8588 | 95.1166 | % |
| CH4-TCD-HayD | 2.656 | 2.1396 | 10483.6102 | ppm |
| CO2-TCD-HayD | 3.723 | 0.2207 | 3586.2853 | ppm |
| CO-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | % |
| C2H6-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | ppm |
| CO-FIDm-MS5A | 0.000 | 0.0000 | 0.0000 | ppm |
| CH4-FIDm-MS5A | 0.000 | 0.0000 | 0.0000 | ppm |
| CO2-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | % |

85.7817 24096.5794

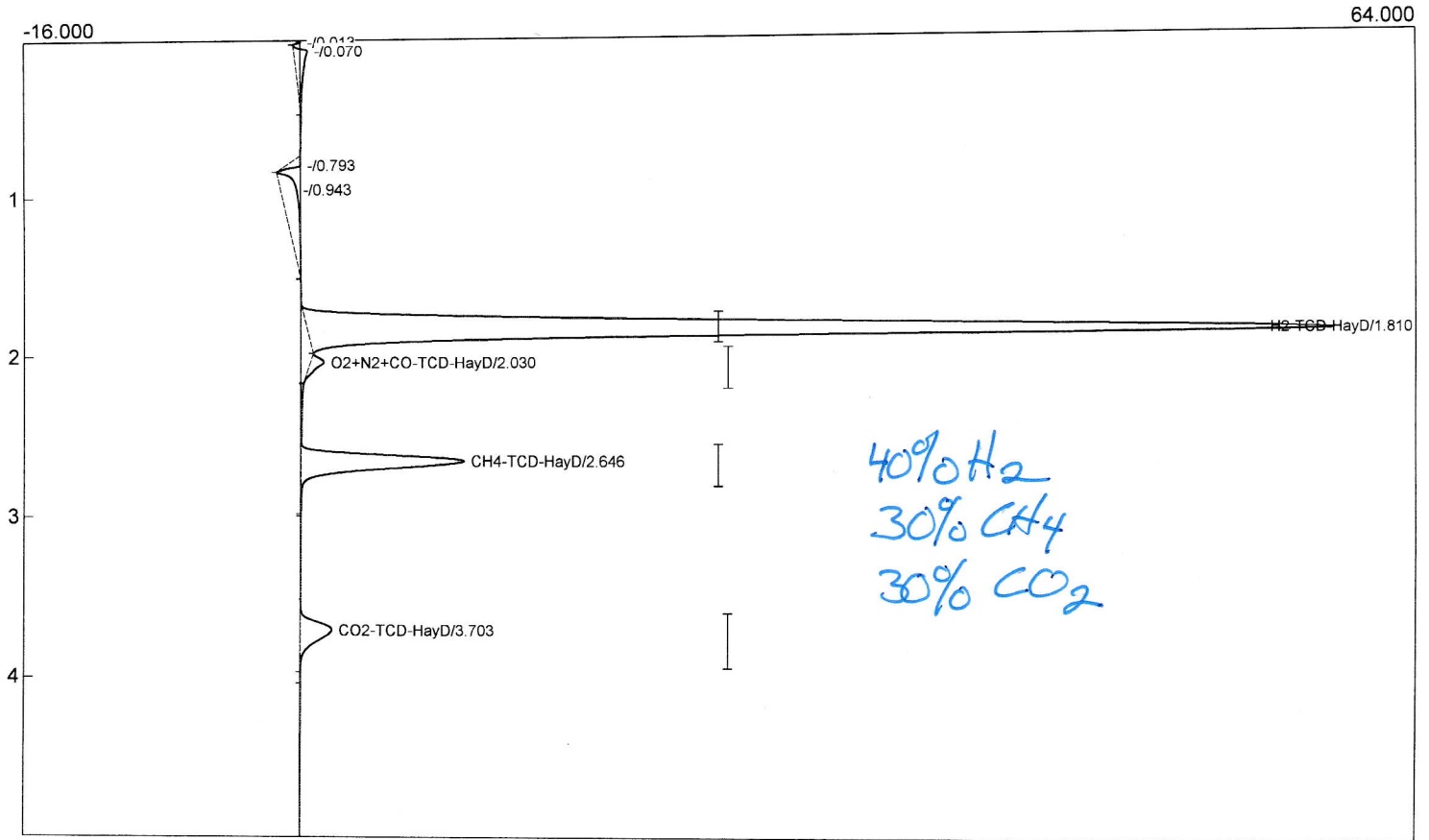
Lab name: SRI Instruments
 Client: Lydian
 Client ID: N2724
 Analysis date: 12/14/2023 13:26:14
 Method: 100ul valve loop
 Description: TCD low current
 Column: 18" HayD PC+12'HayD
 Carrier: Argon@20psi
 Integration: Peak sens=95.0 Base sens=60.0 Min area= 0.10 Standard=100.000 Sample=100.000 Tangents=off
 Data file: GalacticFID23.chr ()
 Sample: 40%H2-30%CH4-30%CO2

Temperature program:

| Init temp | Hold | Ramp | Final temp |
|-----------|--------|-------|------------|
| 90.00 | 10.000 | 0.000 | 90.00 |

Events:

| Time | Event |
|-------|-----------------------|
| 0.000 | ZERO |
| 0.000 | SOUND |
| 0.020 | G ON (Valve1Rotate) |
| 0.800 | G OFF (Valve1Rotate) |
| 1.500 | INTEG BASED IMMEDIATE |



| Component | Retention | Area | Internal | Units |
|-------------------|-----------|----------|-------------|-------|
| H2-TCD-HayD | 1.810 | 339.3262 | 393576.8303 | ppm |
| O2+N2+CO-TCD-HayD | 2.030 | 3.6935 | 4.6930 | % |
| CH4-TCD-HayD | 2.646 | 52.4854 | 257167.9161 | ppm |
| CO2-TCD-HayD | 3.703 | 14.7620 | 239876.5031 | ppm |
| CO-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | % |
| C2H6-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | ppm |
| CO-FIDm-MS5A | 0.000 | 0.0000 | 0.0000 | ppm |
| CH4-FIDm-MS5A | 0.000 | 0.0000 | 0.0000 | ppm |
| CO2-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | % |

} BASED ON CALIBRATION
 @ 10,000 ppm

410.2671 890625.9425

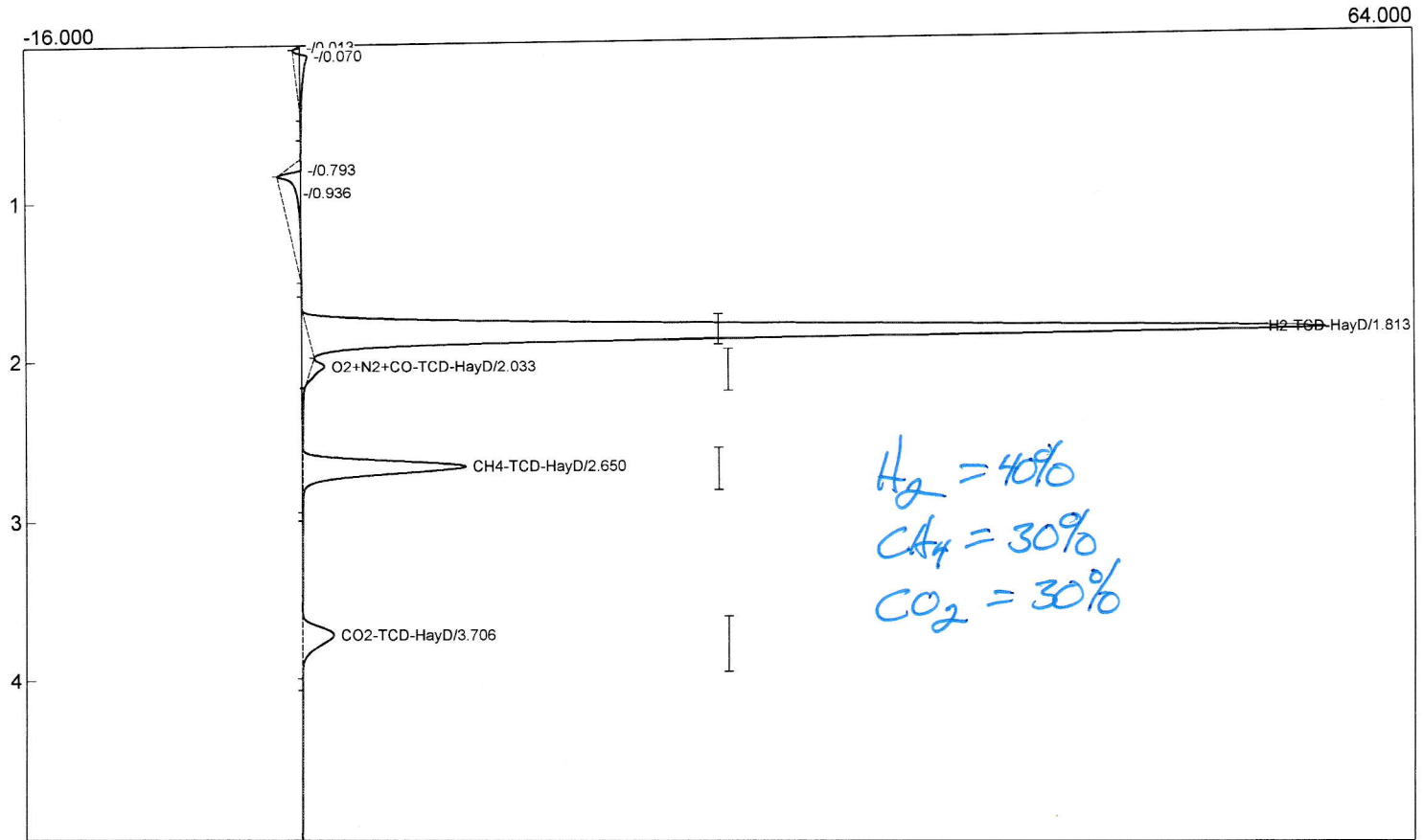
Lab name: SRI Instruments
 Client: Lydian
 Client ID: N2724
 Analysis date: 12/14/2023 13:34:33
 Method: 100ul valve loop
 Description: TCD low current
 Column: 18" HayD PC+12"HayD
 Carrier: Argon@20psi
 Integration: Peak sens=95.0 Base sens=60.0 Min area= 0.10 Standard=100.000 Sample=100.000 Tangents=off
 Data file: GalacticFID24.chr (
 Sample: 40%H2-30%CH4-30%CO2

Temperature program:

| Init temp | Hold | Ramp | Final temp |
|-----------|--------|-------|------------|
| 90.00 | 10.000 | 0.000 | 90.00 |

Events:

| Time | Event |
|-------|-----------------------|
| 0.000 | ZERO |
| 0.000 | SOUND |
| 0.020 | G ON (Valve1Rotate) |
| 0.800 | G OFF (Valve1Rotate) |
| 1.500 | INTEG BASED IMMEDIATE |



| Component | Retention | Area | Internal | Units |
|-------------------|-----------|----------|-------------|-------|
| H2-TCD-HayD | 1.813 | 337.4726 | 391426.8813 | ppm |
| O2+N2+CO-TCD-HayD | 2.033 | 3.6916 | 4.6906 | % |
| CH4-TCD-HayD | 2.650 | 52.5942 | 257701.0143 | ppm |
| CO2-TCD-HayD | 3.706 | 14.7894 | 240321.7420 | ppm |
| CO-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | % |
| C2H6-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | ppm |
| CO-FIDm-MS5A | 0.000 | 0.0000 | 0.0000 | ppm |
| CH4-FIDm-MS5A | 0.000 | 0.0000 | 0.0000 | ppm |
| CO2-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | % |

Replicate

408.5478 889454.3281

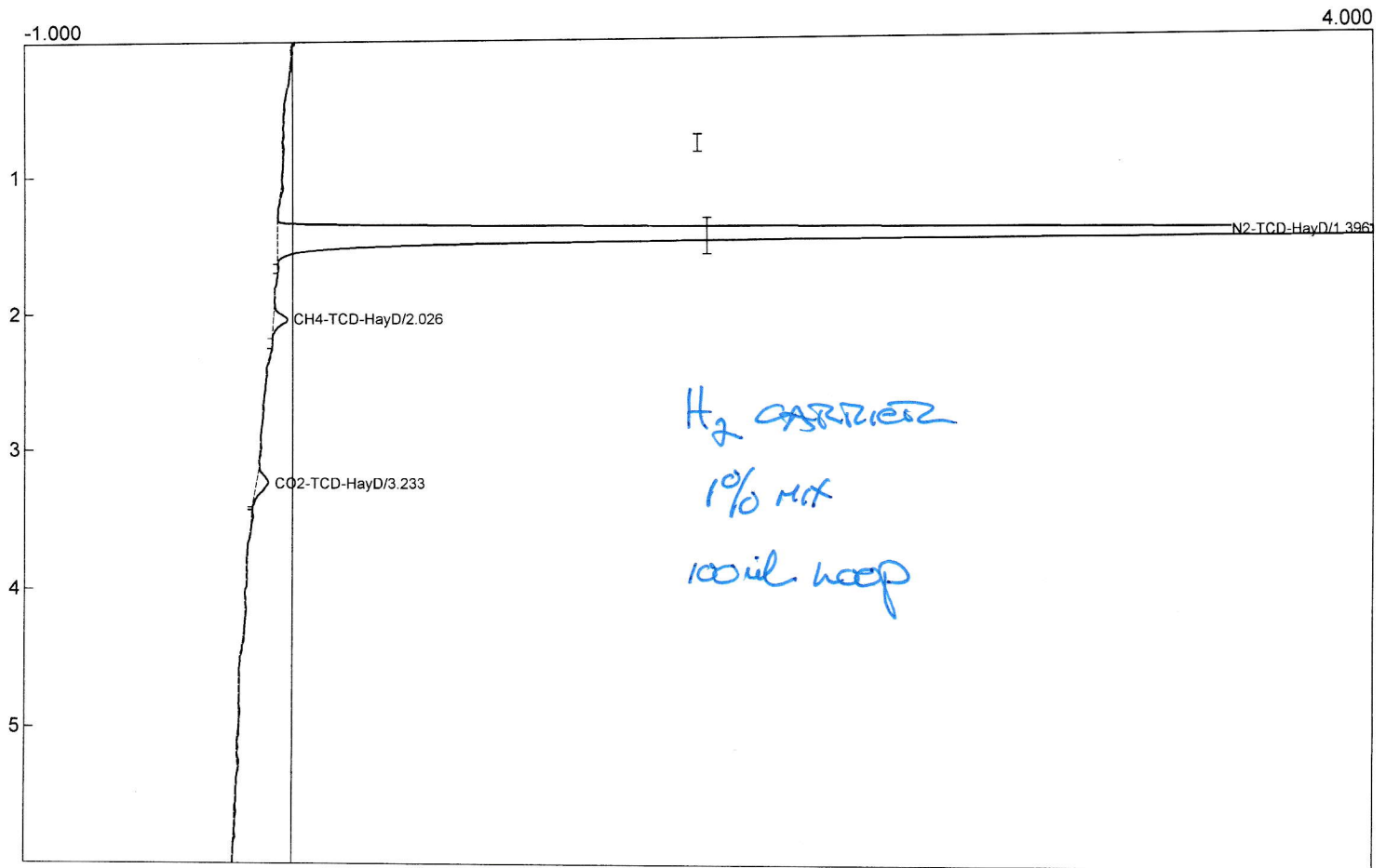
Lab name: SRI Instruments
 Client: Lydian
 Client ID: N2724
 Analysis date: 12/13/2023 14:20:58
 Method: 100ul valve loop
 Description: TCD low current
 Column: 18" HayD PC+12"HayD
 Carrier: H2@12psi
 Integration: Peak sens=95.0 Base sens=60.0 Min area= 0.10 Standard=100.000 Sample=100.000 Tangents=off
 Data file: GalacticFID08.chr ()
 Sample: 1% mix

Temperature program:

| Init temp | Hold | Ramp | Final temp |
|-----------|--------|-------|------------|
| 50.00 | 10.000 | 0.000 | 50.00 |

Events:

| Time | Event |
|-------|---------------------|
| 0.000 | ZERO |
| 0.000 | SOUND |
| 0.020 | G ON (Valve1Rotate) |



| Component | Retention | Area | Internal | Units |
|----------------|-----------|---------|----------|-------|
| O2 | 0.000 | 0.0000 | 0.0000 | ppm |
| N2-TCD-HayD | 1.396 | 29.4158 | 95.0000 | % |
| CH4-TCD-HayD | 2.026 | 0.2846 | 1.0000 | % |
| CO2-TCD-HayD | 3.233 | 0.3345 | 1.0000 | % |
| CO-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | % |
| C2H6-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | ppm |
| CO-FIDm-MS5A | 0.000 | 0.0000 | 0.0000 | ppm |
| CH4-FIDm-MS5A | 0.000 | 0.0000 | 0.0000 | ppm |
| CO2-FIDm-HayD | 0.000 | 0.0000 | 0.0000 | % |
| | | 30.0349 | 97.0000 | |