



Well Name: SENTER 1C; BHD  
 API #: 3004531071  
 Source: BRADENHEAD  
 Sample Type: GAS  
 Analysis No: HS20240124  
 Cust No: 35825-15890

### Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)  
 Well Name: SENTER 1C; BHD  
 County/State: SAN JUAN NM  
 Location:  
 Lease/PA/CA: SF-078464  
 Formation: MV/DK  
 Cust. Stn. No.: 3004531071  
 3644530

Source: BRADENHEAD  
 Well Flowing: N  
 Pressure: 94 PSIG  
 Flow Temp: 102 DEG. F  
 Ambient Temp: 82 DEG. F  
 Flow Rate: 0 MCF/D  
 Sample Method: Purge & Fill  
 Sample Date: 05/29/2024  
 Sample Time: 1.30 PM  
 Sampled By: SHAWN FINCHER  
 Sampled by (CO): HILCORP

Heat Trace: AREA 2 / RUN 0203

Remarks: N

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 0.3955   | 0.3951          | 0.0440  | 0.00    | 0.0038       |
| CO2         | 0.0070   | 0.0070          | 0.0010  | 0.00    | 0.0001       |
| Methane     | 94.1263  | 94.0374         | 15.9900 | 950.68  | 0.5214       |
| Ethane      | 3.5397   | 3.5364          | 0.9490  | 62.64   | 0.0367       |
| Propane     | 1.0703   | 1.0693          | 0.2950  | 26.93   | 0.0163       |
| Iso-Butane  | 0.3046   | 0.3043          | 0.1000  | 9.91    | 0.0061       |
| N-Butane    | 0.2791   | 0.2788          | 0.0880  | 9.11    | 0.0056       |
| I-Pentane   | 0.1152   | 0.1151          | 0.0420  | 4.61    | 0.0029       |
| N-Pentane   | 0.0601   | 0.0600          | 0.0220  | 2.41    | 0.0015       |
| Hexane Plus | 0.1022   | 0.1021          | 0.0460  | 5.39    | 0.0034       |
| Total       | 100.0000 | 99.9055         | 17.5770 | 1071.66 | 0.5978       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\*@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0023  
 BTU/CU.FT IDEAL: 1074.1  
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1076.6  
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1057.9  
 DRY BTU @ 15.025: 1098.2  
 REAL SPECIFIC GRAVITY: 0.5989

CYLINDER #: 1835  
 CYLINDER PRESSURE: 91 PSIG  
 ANALYSIS DATE: 06/06/2024  
 ANALYSIS TIME: 12:59:25 AM  
 ANALYSIS RUN BY: SARAH BALLARD

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500 Last Cal/Verify: 06/07/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|                  |               |            |             |
|------------------|---------------|------------|-------------|
| <b>Lease:</b>    | SENER 1C; BHD | BRADENHEAD | 06/07/2024  |
| <b>Stn. No.:</b> | 3004531071    | MV/DK      | 35825-15890 |
| <b>Mtr. No.:</b> | 3644530       |            |             |

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**Smpl Date:** 05/29/2024  
**Test Date:** 06/06/2024  
**Run No:** HS20240124

**Nitrogen:** 0.3955  
**CO2:** 0.0070  
**Methane:** 94.1263  
**Ethane:** 3.5397  
**Propane:** 1.0703  
**I-Butane:** 0.3046  
**N-Butane:** 0.2791  
**I-Pentane:** 0.1152  
**N-Pentane:** 0.0601  
**Hexane+:** 0.1022

**BTU:** 1076.6  
**GPM:** 17.5770  
**SPG:** 0.5989



Well Name: SENTER 1C; INT  
 API #: 3004531071  
 Source: INTERMEDIATE CASING  
 Sample Type: GAS  
 Analysis No: HS20240127  
 Cust No: 35825-15905

### Well/Lease Information

|                 |                                  |                  |                     |
|-----------------|----------------------------------|------------------|---------------------|
| Customer Name:  | HILCORP (BHD PROJECT)            | Source:          | INTERMEDIATE CASING |
| Well Name:      | SENER 1C; INT                    | Well Flowing:    | N                   |
| County/State:   | SAN JUAN NM                      | Pressure:        | TSTM PSIG           |
| Location:       |                                  | Flow Temp:       | 102 DEG. F          |
| Lease/PA/CA:    | SF-078464                        | Ambient Temp:    | 82 DEG. F           |
| Formation:      | MV/DK                            | Flow Rate:       | 0 MCF/D             |
| Cust. Stn. No.: | 3004531071                       | Sample Method:   | Purge & Fill        |
|                 | 3644530                          | Sample Date:     | 05/29/2024          |
|                 |                                  | Sample Time:     | 1.30 PM             |
|                 | AREA 2 / RUN 0203                | Sampled By:      | SHAWN FINCHER       |
| Heat Trace:     | N                                | Sampled by (CO): | HILCORP             |
| Remarks:        | PRESSURED WITH HELIUM TO 30 LBS. |                  |                     |

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:  | *SP Gravity: |
|-------------|----------|-----------------|---------|--------|--------------|
| Nitrogen    | 50.6409  | 12.2899         | 5.5810  | 0.00   | 0.4898       |
| CO2         | 0.0771   | 0.0187          | 0.0130  | 0.00   | 0.0012       |
| Methane     | 37.0510  | 8.9918          | 6.2920  | 374.22 | 0.2052       |
| Ethane      | 4.7539   | 1.1537          | 1.2740  | 84.13  | 0.0494       |
| Propane     | 3.5997   | 0.8736          | 0.9930  | 90.57  | 0.0548       |
| Iso-Butane  | 0.7071   | 0.1716          | 0.2320  | 22.99  | 0.0142       |
| N-Butane    | 0.8760   | 0.2126          | 0.2770  | 28.58  | 0.0176       |
| I-Pentane   | 0.3663   | 0.0889          | 0.1340  | 14.66  | 0.0091       |
| N-Pentane   | 0.3115   | 0.0756          | 0.1130  | 12.49  | 0.0078       |
| Hexane Plus | 1.6165   | 0.3923          | 0.7220  | 85.21  | 0.0535       |
| Total       | 100.0000 | 24.2687         | 15.6310 | 712.84 | 0.9025       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\*@ 14.730 PSIA & 60 DEG. F.

|                                      |        |                    |                 |
|--------------------------------------|--------|--------------------|-----------------|
| COMPRESSIBILITY FACTOR (1/Z):        | 1.002  | CYLINDER #:        | 2147            |
| BTU/CU.FT IDEAL:                     | 714.5  | CYLINDER PRESSURE: | PSIG            |
| BTU/CU.FT (DRY) CORRECTED FOR (1/Z): | 715.8  | ANALYSIS DATE:     | 06/06/2024      |
| BTU/CU.FT (WET) CORRECTED FOR (1/Z): | 703.3  | ANALYSIS TIME:     | 01:07:08 PM     |
| DRY BTU @ 15.025:                    | 730.1  | ANALYSIS RUN BY:   | ALEXIS MITCHELL |
| REAL SPECIFIC GRAVITY:               | 0.9039 |                    |                 |

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500 Last Cal/Verify: 06/07/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|                  |               |                     |             |
|------------------|---------------|---------------------|-------------|
| <b>Lease:</b>    | SENER 1C; INT | INTERMEDIATE CASING | 06/07/2024  |
| <b>Stn. No.:</b> | 3004531071    | MV/DK               | 35825-15905 |
| <b>Mtr. No.:</b> | 3644530       |                     |             |

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**Smpl Date:** 05/29/2024  
**Test Date:** 06/06/2024  
**Run No:** HS20240127

|                   |         |
|-------------------|---------|
| <b>Nitrogen:</b>  | 50.6409 |
| <b>CO2:</b>       | 0.0771  |
| <b>Methane:</b>   | 37.0510 |
| <b>Ethane:</b>    | 4.7539  |
| <b>Propane:</b>   | 3.5997  |
| <b>I-Butane:</b>  | 0.7071  |
| <b>N-Butane:</b>  | 0.8760  |
| <b>I-Pentane:</b> | 0.3663  |
| <b>N-Pentane:</b> | 0.3115  |
| <b>Hexane+:</b>   | 1.6165  |
| <b>BTU:</b>       | 715.8   |
| <b>GPM:</b>       | 15.6310 |
| <b>SPG:</b>       | 0.9039  |



Well Name: SENTER 1C; CSG  
 API #: 3004531071  
 Source: CASING  
 Sample Type: GAS  
 Analysis No: HS20240125  
 Cust No: 35825-15895

### Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)  
 Well Name: SENTER 1C; CSG  
 County/State: SAN JUAN NM  
 Location:  
 Lease/PA/CA: SF-078464  
 Formation: MV/DK  
 Cust. Stn. No.: 3004531071  
 3644530

Source: CASING  
 Well Flowing:  
 Pressure: 680 PSIG  
 Flow Temp: 102 DEG. F  
 Ambient Temp: 82 DEG. F  
 Flow Rate: 0 MCF/D  
 Sample Method: Purge & Fill  
 Sample Date: 05/29/2024  
 Sample Time: 1.30 PM  
 Sampled By: SHAWN FINCHER  
 Sampled by (CO): HILCORP

AREA 2 / RUN 0203

Heat Trace:

Remarks:

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 0.3217   | 0.3240          | 0.0350  | 0.00    | 0.0031       |
| CO2         | 0.5030   | 0.5066          | 0.0860  | 0.00    | 0.0076       |
| Methane     | 83.4201  | 84.0148         | 14.1840 | 842.54  | 0.4621       |
| Ethane      | 9.7098   | 9.7790          | 2.6040  | 171.83  | 0.1008       |
| Propane     | 3.8724   | 3.9000          | 1.0700  | 97.43   | 0.0590       |
| Iso-Butane  | 0.6101   | 0.6144          | 0.2000  | 19.84   | 0.0122       |
| N-Butane    | 0.8524   | 0.8585          | 0.2700  | 27.81   | 0.0171       |
| I-Pentane   | 0.2688   | 0.2707          | 0.0990  | 10.75   | 0.0067       |
| N-Pentane   | 0.1865   | 0.1878          | 0.0680  | 7.48    | 0.0046       |
| Hexane Plus | 0.2552   | 0.2570          | 0.1140  | 13.45   | 0.0084       |
| Total       | 100.0000 | 100.7128        | 18.7300 | 1191.14 | 0.6817       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\*@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0032  
 BTU/CU.FT IDEAL: 1193.9  
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1197.6  
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1176.8  
 DRY BTU @ 15.025: 1221.6  
 REAL SPECIFIC GRAVITY: 0.6836

CYLINDER #: 2189  
 CYLINDER PRESSURE: 619 PSIG  
 ANALYSIS DATE: 06/06/2024  
 ANALYSIS TIME: 12:43:56 AM  
 ANALYSIS RUN BY: SARAH BALLARD

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500 Last Cal/Verify: 06/07/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|                  |               |        |             |
|------------------|---------------|--------|-------------|
| <b>Lease:</b>    | SENER 1C; CSG | CASING | 06/07/2024  |
| <b>Stn. No.:</b> | 3004531071    | MV/DK  | 35825-15895 |
| <b>Mtr. No.:</b> | 3644530       |        |             |

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**Smpl Date:** 05/29/2024  
**Test Date:** 06/06/2024  
**Run No:** HS20240125

**Nitrogen:** 0.3217  
**CO2:** 0.5030  
**Methane:** 83.4201  
**Ethane:** 9.7098  
**Propane:** 3.8724  
**I-Butane:** 0.6101  
**N-Butane:** 0.8524  
**I-Pentane:** 0.2688  
**N-Pentane:** 0.1865  
**Hexane+:** 0.2552

**BTU:** 1197.6  
**GPM:** 18.7300  
**SPG:** 0.6836



Well Name: SENTER 1C; TBG  
 API #: 3004531071  
 Source: TUBING  
 Sample Type: GAS  
 Analysis No: HS20240126  
 Cust No: 35825-15900

### Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)  
 Well Name: SENTER 1C; TBG  
 County/State: SAN JUAN NM  
 Location:  
 Lease/PA/CA: SF-078464  
 Formation: MV/DK  
 Cust. Stn. No.: 3004531071  
 3644530

Source: TUBING  
 Well Flowing: N  
 Pressure: 680 PSIG  
 Flow Temp: 102 DEG. F  
 Ambient Temp: 82 DEG. F  
 Flow Rate: 0 MCF/D  
 Sample Method: Purge & Fill  
 Sample Date: 05/29/2024  
 Sample Time: 1.30 PM  
 Sampled By: SHAWN FINCHER  
 Sampled by (CO): HILCORP

Heat Trace: AREA 2 / RUN 0203

Remarks: N

### Analysis

| Component:  | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 0.2730   | 0.2751          | 0.0300  | 0.00    | 0.0026       |
| CO2         | 0.5010   | 0.5049          | 0.0860  | 0.00    | 0.0076       |
| Methane     | 82.7160  | 83.3633         | 14.0660 | 835.43  | 0.4582       |
| Ethane      | 9.8940   | 9.9714          | 2.6540  | 175.09  | 0.1027       |
| Propane     | 4.1072   | 4.1393          | 1.1350  | 103.34  | 0.0625       |
| Iso-Butane  | 0.6692   | 0.6744          | 0.2200  | 21.76   | 0.0134       |
| N-Butane    | 0.9685   | 0.9761          | 0.3060  | 31.60   | 0.0194       |
| I-Pentane   | 0.3179   | 0.3204          | 0.1170  | 12.72   | 0.0079       |
| N-Pentane   | 0.2292   | 0.2310          | 0.0830  | 9.19    | 0.0057       |
| Hexane Plus | 0.3240   | 0.3265          | 0.1450  | 17.08   | 0.0107       |
| Total       | 100.0000 | 100.7824        | 18.8420 | 1206.21 | 0.6909       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\*@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0033  
 BTU/CU.FT IDEAL: 1209.0  
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1212.9  
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1191.8  
 DRY BTU @ 15.025: 1237.2  
 REAL SPECIFIC GRAVITY: 0.6928

CYLINDER #: 2142  
 CYLINDER PRESSURE: 685 PSIG  
 ANALYSIS DATE: 06/06/2024  
 ANALYSIS TIME: 01:17:54 AM  
 ANALYSIS RUN BY: ALEXIS MITCHELL

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500 Last Cal/Verify: 06/07/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|                  |               |        |             |
|------------------|---------------|--------|-------------|
| <b>Lease:</b>    | SENER 1C; TBG | TUBING | 06/07/2024  |
| <b>Stn. No.:</b> | 3004531071    | MV/DK  | 35825-15900 |
| <b>Mtr. No.:</b> | 3644530       |        |             |

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**Smpl Date:** 05/29/2024  
**Test Date:** 06/06/2024  
**Run No:** HS20240126

|                   |         |
|-------------------|---------|
| <b>Nitrogen:</b>  | 0.2730  |
| <b>CO2:</b>       | 0.5010  |
| <b>Methane:</b>   | 82.7160 |
| <b>Ethane:</b>    | 9.8940  |
| <b>Propane:</b>   | 4.1072  |
| <b>I-Butane:</b>  | 0.6692  |
| <b>N-Butane:</b>  | 0.9685  |
| <b>I-Pentane:</b> | 0.3179  |
| <b>N-Pentane:</b> | 0.2292  |
| <b>Hexane+:</b>   | 0.3240  |
| <b>BTU:</b>       | 1212.9  |
| <b>GPM:</b>       | 18.8420 |
| <b>SPG:</b>       | 0.6928  |

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS  
  
Action 364544

CONDITIONS

|                                                                                |                                                     |
|--------------------------------------------------------------------------------|-----------------------------------------------------|
| Operator:<br>HILCORP ENERGY COMPANY<br>1111 Travis Street<br>Houston, TX 77002 | OGRID:<br>372171                                    |
|                                                                                | Action Number:<br>364544                            |
|                                                                                | Action Type:<br>[UF-GA] Gas Analysis (GAS ANALYSIS) |

CONDITIONS

| Created By | Condition                                                                                           | Condition Date |
|------------|-----------------------------------------------------------------------------------------------------|----------------|
| mkuehling  | 94 psi on bradenhead at time of sampling - gas does not appear to be the same as production casing. | 8/26/2024      |