



Well Name: REID A SRC 1; BHD  
 API #: 3004512043  
 Source: BRADENHEAD  
 Sample Type: GAS  
 Analysis No: HS20230006  
 Cust No: 35825-14705

### Well/Lease Information

|                 |                                  |                  |              |
|-----------------|----------------------------------|------------------|--------------|
| Customer Name:  | HILCORP (BHD PROJECT)            | Source:          | BRADENHEAD   |
| Well Name:      | REID A SRC 1; BHD                | Well Flowing:    | Y            |
| County/State:   | SAN JUAN NM                      | Pressure:        | PSIG         |
| Location:       |                                  | Flow Temp:       | DEG. F       |
| Lease/PA/CA:    | 306                              | Ambient Temp:    | DEG. F       |
| Formation:      | MV/DK                            | Flow Rate:       | MCF/D        |
| Cust. Stn. No.: | 3004512043                       | Sample Method:   | Purge & Fill |
|                 | 34307                            | Sample Date:     | 04/13/2023   |
|                 |                                  | Sample Time:     | 12.59 PM     |
|                 |                                  | Sampled By:      | C.V          |
|                 |                                  | Sampled by (CO): | HILCORP      |
| Heat Trace:     | N                                |                  |              |
| Remarks:        | PRESSURED WITH HELIUM TO 30 LBS. |                  |              |

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 3.1245   | 1.1726          | 0.3440  | 0.00    | 0.0302       |
| CO2         | 0.0144   | 0.0054          | 0.0020  | 0.00    | 0.0002       |
| Methane     | 90.0904  | 33.8108         | 15.3040 | 909.91  | 0.4990       |
| Ethane      | 4.8657   | 1.8261          | 1.3040  | 86.11   | 0.0505       |
| Propane     | 1.2052   | 0.4523          | 0.3330  | 30.32   | 0.0183       |
| Iso-Butane  | 0.3235   | 0.1214          | 0.1060  | 10.52   | 0.0065       |
| N-Butane    | 0.0813   | 0.0305          | 0.0260  | 2.65    | 0.0016       |
| I-Pentane   | 0.1426   | 0.0535          | 0.0520  | 5.71    | 0.0036       |
| N-Pentane   | 0.0000   | 0.0000          | 0.0000  | 0.00    | 0.0000       |
| Hexane Plus | 0.1524   | 0.0572          | 0.0680  | 8.03    | 0.0050       |
| Total       | 100.0000 | 37.5298         | 17.5390 | 1053.26 | 0.6150       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

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

|                                      |        |                    |                |
|--------------------------------------|--------|--------------------|----------------|
| COMPRESSIBILITY FACTOR (1/Z):        | 1.0023 | CYLINDER #:        | 1924           |
| BTU/CU.FT IDEAL:                     | 1055.7 | CYLINDER PRESSURE: | PSIG           |
| BTU/CU.FT (DRY) CORRECTED FOR (1/Z): | 1058.1 | ANALYSIS DATE:     | 04/18/2023     |
| BTU/CU.FT (WET) CORRECTED FOR (1/Z): | 1039.7 | ANALYSIS TIME:     | 11:51:53 AM    |
| DRY BTU @ 15.025:                    | 1079.3 | ANALYSIS RUN BY:   | KERRA GONZALEZ |
| REAL SPECIFIC GRAVITY:               | 0.6162 |                    |                |

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: 04/21/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|                  |                   |            |             |
|------------------|-------------------|------------|-------------|
| <b>Lease:</b>    | REID A SRC 1; BHD | BRADENHEAD | 04/21/2023  |
| <b>Stn. No.:</b> | 3004512043        | MV/DK      | 35825-14705 |
| <b>Mtr. No.:</b> | 34307             |            |             |

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|                   |            |
|-------------------|------------|
| <b>Smpl Date:</b> | 04/13/2023 |
| <b>Test Date:</b> | 04/18/2023 |
| <b>Run No:</b>    | HS20230006 |
| <b>Nitrogen:</b>  | 3.1245     |
| <b>CO2:</b>       | 0.0144     |
| <b>Methane:</b>   | 90.0904    |
| <b>Ethane:</b>    | 4.8657     |
| <b>Propane:</b>   | 1.2052     |
| <b>I-Butane:</b>  | 0.3235     |
| <b>N-Butane:</b>  | 0.0813     |
| <b>I-Pentane:</b> | 0.1426     |
| <b>N-Pentane:</b> | 0.0000     |
| <b>Hexane+:</b>   | 0.1524     |
| <b>BTU:</b>       | 1058.1     |
| <b>GPM:</b>       | 17.5390    |
| <b>SPG:</b>       | 0.6162     |



Well Name: REID A SRC 1; TBG

API #: 3004512043

Source: TUBING

Sample Type: GAS

Analysis No: HS20230007

Cust No: 35825-14710

### Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: REID A SRC 1; TBG

County/State: SAN JUAN NM

Location:

Lease/PA/CA: 306

Formation: MV/DK

Cust. Stn. No.: 3004512043  
34307

Source: TUBING

Well Flowing: Y

Pressure: PSIG

Flow Temp: DEG. F

Ambient Temp: DEG. F

Flow Rate: MCF/D

Sample Method: Purge &amp; Fill

Sample Date: 04/13/2023

Sample Time: 12.54 PM

Sampled By: C.V

Sampled by (CO): HILCORP

Heat Trace: N

Remarks:

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 0.3151   | 0.3150          | 0.0350  | 0.00    | 0.0030       |
| CO2         | 1.0011   | 1.0009          | 0.1710  | 0.00    | 0.0152       |
| Methane     | 79.2642  | 79.2498         | 13.4850 | 800.57  | 0.4390       |
| Ethane      | 10.2054  | 10.2035         | 2.7390  | 180.60  | 0.1060       |
| Propane     | 5.1524   | 5.1514          | 1.4250  | 129.64  | 0.0784       |
| Iso-Butane  | 0.8386   | 0.8384          | 0.2750  | 27.27   | 0.0168       |
| N-Butane    | 1.4926   | 1.4923          | 0.4720  | 48.69   | 0.0300       |
| I-Pentane   | 0.4916   | 0.4915          | 0.1800  | 19.67   | 0.0122       |
| N-Pentane   | 0.4036   | 0.4035          | 0.1470  | 16.18   | 0.0101       |
| Hexane Plus | 0.8354   | 0.8352          | 0.3740  | 44.03   | 0.0276       |
| Total       | 100.0000 | 99.9815         | 19.3030 | 1266.66 | 0.7384       |

\* @ 14.730 PSIA DRY &amp; UNCORRECTED FOR COMPRESSIBILITY

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

COMPRESSIBILITY FACTOR (1/Z): 1.0038  
 BTU/CU.FT IDEAL: 1269.6  
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1274.4  
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1252.2  
 DRY BTU @ 15.025: 1299.9  
 REAL SPECIFIC GRAVITY: 0.741

CYLINDER #: 2124  
 CYLINDER PRESSURE: 91 PSIG  
 ANALYSIS DATE: 04/18/2023  
 ANALYSIS TIME: 11:29:56 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: 04/21/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|                  |                   |        |             |
|------------------|-------------------|--------|-------------|
| <b>Lease:</b>    | REID A SRC 1; TBG | TUBING | 04/21/2023  |
| <b>Stn. No.:</b> | 3004512043        | MV/DK  | 35825-14710 |
| <b>Mtr. No.:</b> | 34307             |        |             |

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**Smpl Date:** 04/13/2023  
**Test Date:** 04/18/2023  
**Run No:** HS20230007

**Nitrogen:** 0.3151  
**CO2:** 1.0011  
**Methane:** 79.2642  
**Ethane:** 10.2054  
**Propane:** 5.1524  
**I-Butane:** 0.8386  
**N-Butane:** 1.4926  
**I-Pentane:** 0.4916  
**N-Pentane:** 0.4036  
**Hexane+:** 0.8354

**BTU:** 1274.4  
**GPM:** 19.3030  
**SPG:** 0.7410



Well Name: REID A SRC 1; CSG

API #: 3004512043

Source: CASING

Sample Type: GAS

Analysis No: HS20230008

Cust No: 35825-14715

### Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: REID A SRC 1; CSG

County/State: SAN JUAN NM

Location:

Lease/PA/CA: 306

Formation: MV/DK

Cust. Stn. No.: 3004512043  
34307

Source: CASING

Well Flowing: Y

Pressure: PSIG

Flow Temp: DEG. F

Ambient Temp: DEG. F

Flow Rate: MCF/D

Sample Method: Purge &amp; Fill

Sample Date: 04/13/2023

Sample Time: 12.57 PM

Sampled By: C.V

Sampled by (CO): HILCORP

Heat Trace: N

Remarks:

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 0.3172   | 0.3171          | 0.0350  | 0.00    | 0.0031       |
| CO2         | 1.0297   | 1.0295          | 0.1760  | 0.00    | 0.0156       |
| Methane     | 78.3873  | 78.3705         | 13.3370 | 791.71  | 0.4342       |
| Ethane      | 10.5153  | 10.5130         | 2.8220  | 186.09  | 0.1092       |
| Propane     | 5.4282   | 5.4270          | 1.5010  | 136.58  | 0.0826       |
| Iso-Butane  | 0.8978   | 0.8976          | 0.2950  | 29.20   | 0.0180       |
| N-Butane    | 1.5877   | 1.5874          | 0.5020  | 51.80   | 0.0319       |
| I-Pentane   | 0.5267   | 0.5266          | 0.1930  | 21.07   | 0.0131       |
| N-Pentane   | 0.4258   | 0.4257          | 0.1550  | 17.07   | 0.0106       |
| Hexane Plus | 0.8843   | 0.8841          | 0.3960  | 46.61   | 0.0293       |
| Total       | 100.0000 | 99.9785         | 19.4120 | 1280.12 | 0.7476       |

\* @ 14.730 PSIA DRY &amp; UNCORRECTED FOR COMPRESSIBILITY

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

COMPRESSIBILITY FACTOR (1/Z): 1.0039  
 BTU/CU.FT IDEAL: 1283.1  
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1288.1  
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1265.7  
 DRY BTU @ 15.025: 1313.9  
 REAL SPECIFIC GRAVITY: 0.7502

CYLINDER #: 1871  
 CYLINDER PRESSURE: 91 PSIG  
 ANALYSIS DATE: 04/18/2023  
 ANALYSIS TIME: 11:22:10 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: 04/21/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|                  |                   |        |             |
|------------------|-------------------|--------|-------------|
| <b>Lease:</b>    | REID A SRC 1; CSG | CASING | 04/21/2023  |
| <b>Stn. No.:</b> | 3004512043        | MV/DK  | 35825-14715 |
| <b>Mtr. No.:</b> | 34307             |        |             |

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**Smpl Date:** 04/13/2023  
**Test Date:** 04/18/2023  
**Run No:** HS20230008

**Nitrogen:** 0.3172  
**CO2:** 1.0297  
**Methane:** 78.3873  
**Ethane:** 10.5153  
**Propane:** 5.4282  
**I-Butane:** 0.8978  
**N-Butane:** 1.5877  
**I-Pentane:** 0.5267  
**N-Pentane:** 0.4258  
**Hexane+:** 0.8843

**BTU:** 1288.1  
**GPM:** 19.4120  
**SPG:** 0.7502

**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 214090

CONDITIONS

|                                                                                |                                                     |
|--------------------------------------------------------------------------------|-----------------------------------------------------|
| Operator:<br>HILCORP ENERGY COMPANY<br>1111 Travis Street<br>Houston, TX 77002 | OGRID:<br>372171                                    |
|                                                                                | Action Number:<br>214090                            |
|                                                                                | Action Type:<br>[UF-GA] Gas Analysis (GAS ANALYSIS) |

CONDITIONS

| Created By | Condition                     | Condition Date |
|------------|-------------------------------|----------------|
| mkuehling  | high nitrogen - different gas | 10/6/2023      |