



Well Name: SAN JUAN 27-4 UNIT 7;  
 API #: 3003907111  
 Source: INTERMEDIATE CASING  
 Sample Type: GAS  
 Analysis No: HS20220079  
 Cust No: 35825-14430

### Well/Lease Information

|                 |                                 |                  |                     |
|-----------------|---------------------------------|------------------|---------------------|
| Customer Name:  | HILCORP (BHD PROJECT)           | Source:          | INTERMEDIATE CASING |
| Well Name:      | SAN JUAN 27-4 UNIT 7; INTRM CSG | Well Flowing:    | Y                   |
| County/State:   | RIO ARRIBA NM                   | Pressure:        | 8 PSIG              |
| Location:       |                                 | Flow Temp:       | 58 DEG. F           |
| Lease/PA/CA:    | 080668                          | Ambient Temp:    | 58 DEG. F           |
| Formation:      | DK                              | Flow Rate:       | MCF/D               |
| Cust. Stn. No.: | 3003907111                      | Sample Method:   | Purge & Fill        |
|                 |                                 | Sample Date:     | 05/12/2022          |
|                 |                                 | Sample Time:     | 10.51 AM            |
|                 |                                 | Sampled By:      | J.J. GRIEGO         |
|                 |                                 | Sampled by (CO): | HILCORP             |

Heat Trace: N

Remarks: AREA 14 / RUN 1400  
 PRESSURED WITH HELIUM TO 30 LBS.

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 0.4072   | 0.1707          | 0.0450  | 0.00    | 0.0039       |
| CO2         | 0.9359   | 0.3923          | 0.1600  | 0.00    | 0.0142       |
| Methane     | 84.7379  | 35.5194         | 14.4080 | 855.85  | 0.4694       |
| Ethane      | 7.7840   | 3.2628          | 2.0880  | 137.75  | 0.0808       |
| Propane     | 3.5346   | 1.4816          | 0.9770  | 88.93   | 0.0538       |
| Iso-Butane  | 0.3729   | 0.1563          | 0.1220  | 12.13   | 0.0075       |
| N-Butane    | 1.0614   | 0.4449          | 0.3360  | 34.63   | 0.0213       |
| I-Pentane   | 0.2965   | 0.1243          | 0.1090  | 11.86   | 0.0074       |
| N-Pentane   | 0.3197   | 0.1340          | 0.1160  | 12.82   | 0.0080       |
| Hexane Plus | 0.5499   | 0.2305          | 0.2460  | 28.99   | 0.0182       |
| Total       | 100.0000 | 41.9168         | 18.6070 | 1182.96 | 0.6845       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

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

|                                      |        |                    |                 |
|--------------------------------------|--------|--------------------|-----------------|
| COMPRESSIBILITY FACTOR (1/Z):        | 1.0032 | CYLINDER #:        | 6190            |
| BTU/CU.FT IDEAL:                     | 1185.7 | CYLINDER PRESSURE: | PSIG            |
| BTU/CU.FT (DRY) CORRECTED FOR (1/Z): | 1189.5 | ANALYSIS DATE:     | 05/19/2022      |
| BTU/CU.FT (WET) CORRECTED FOR (1/Z): | 1168.8 | ANALYSIS TIME:     | 02:52:00 PM     |
| DRY BTU @ 15.025:                    | 1213.3 | ANALYSIS RUN BY:   | ALEXIS MITCHELL |
| REAL SPECIFIC GRAVITY:               | 0.6864 |                    |                 |

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: 08/23/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|           |                                 |                     |             |
|-----------|---------------------------------|---------------------|-------------|
| Lease:    | SAN JUAN 27-4 UNIT 7; INTRM CSG | INTERMEDIATE CASING | 08/23/2022  |
| Stn. No.: | 3003907111                      | DK                  | 35825-14430 |
| Mtr. No.: |                                 |                     |             |

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Smpl Date: 05/12/2022  
Test Date: 05/19/2022  
Run No: HS20220079

Nitrogen: 0.4072  
CO2: 0.9359  
Methane: 84.7379  
Ethane: 7.7840  
Propane: 3.5346  
I-Butane: 0.3729  
N-Butane: 1.0614  
I-Pentane: 0.2965  
N-Pentane: 0.3197  
Hexane+: 0.5499

BTU: 1189.5  
GPM: 18.6070  
SPG: 0.6864



Well Name: SAN JUAN 27-4 UNIT 7;  
 API #: 3003907111  
 Source: CASING  
 Sample Type: GAS  
 Analysis No: HS20220078  
 Cust No: 35825-14425

### Well/Lease Information

|                 |                           |                  |              |
|-----------------|---------------------------|------------------|--------------|
| Customer Name:  | HILCORP (BHD PROJECT)     | Source:          | CASING       |
| Well Name:      | SAN JUAN 27-4 UNIT 7; CSG | Well Flowing:    | Y            |
| County/State:   | RIO ARRIBA NM             | Pressure:        | 138 PSIG     |
| Location:       |                           | Flow Temp:       | 58 DEG. F    |
| Lease/PA/CA:    | 080668                    | Ambient Temp:    | 58 DEG. F    |
| Formation:      | DK                        | Flow Rate:       | MCF/D        |
| Cust. Stn. No.: | 3003907111                | Sample Method:   | Purge & Fill |
|                 |                           | Sample Date:     | 05/12/2022   |
|                 |                           | Sample Time:     | 10.27 AM     |
|                 |                           | Sampled By:      | J.J. GRIEGO  |
|                 |                           | Sampled by (CO): | HILCORP      |

Heat Trace: N

Remarks:

AREA 14 / RUN 1400

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 0.1832   | 0.1821          | 0.0200  | 0.00    | 0.0018       |
| CO2         | 1.2011   | 1.1938          | 0.2060  | 0.00    | 0.0183       |
| Methane     | 83.8430  | 83.3318         | 14.2590 | 846.81  | 0.4644       |
| Ethane      | 7.8234   | 7.7757          | 2.0990  | 138.45  | 0.0812       |
| Propane     | 3.5591   | 3.5374          | 0.9840  | 89.55   | 0.0542       |
| Iso-Butane  | 0.7336   | 0.7291          | 0.2410  | 23.86   | 0.0147       |
| N-Butane    | 1.0233   | 1.0171          | 0.3240  | 33.38   | 0.0205       |
| I-Pentane   | 0.4573   | 0.4545          | 0.1680  | 18.30   | 0.0114       |
| N-Pentane   | 0.3368   | 0.3347          | 0.1220  | 13.50   | 0.0084       |
| Hexane Plus | 0.8392   | 0.8341          | 0.3750  | 44.23   | 0.0278       |
| Total       | 100.0000 | 99.3903         | 18.7980 | 1208.09 | 0.7027       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

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

|                                      |        |                    |                 |
|--------------------------------------|--------|--------------------|-----------------|
| COMPRESSIBILITY FACTOR (1/Z):        | 1.0034 | CYLINDER #:        | 7056            |
| BTU/CU.FT IDEAL:                     | 1210.9 | CYLINDER PRESSURE: | 132 PSIG        |
| BTU/CU.FT (DRY) CORRECTED FOR (1/Z): | 1215.0 | ANALYSIS DATE:     | 05/19/2022      |
| BTU/CU.FT (WET) CORRECTED FOR (1/Z): | 1193.9 | ANALYSIS TIME:     | 03:08:00 PM     |
| DRY BTU @ 15.025:                    | 1239.3 | ANALYSIS RUN BY:   | ALEXIS MITCHELL |
| REAL SPECIFIC GRAVITY:               | 0.7048 |                    |                 |

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: 08/23/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|                  |                           |        |             |
|------------------|---------------------------|--------|-------------|
| <b>Lease:</b>    | SAN JUAN 27-4 UNIT 7; CSG | CASING | 08/23/2022  |
| <b>Stn. No.:</b> | 3003907111                | DK     | 35825-14425 |
| <b>Mtr. No.:</b> |                           |        |             |

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**Smpl Date:** 05/12/2022  
**Test Date:** 05/19/2022  
**Run No:** HS20220078

**Nitrogen:** 0.1832  
**CO2:** 1.2011  
**Methane:** 83.8430  
**Ethane:** 7.8234  
**Propane:** 3.5591  
**I-Butane:** 0.7336  
**N-Butane:** 1.0233  
**I-Pentane:** 0.4573  
**N-Pentane:** 0.3368  
**Hexane+:** 0.8392

**BTU:** 1215.0  
**GPM:** 18.7980  
**SPG:** 0.7048

**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 136752

CONDITIONS

|                                                                                |                                                     |
|--------------------------------------------------------------------------------|-----------------------------------------------------|
| Operator:<br>HILCORP ENERGY COMPANY<br>1111 Travis Street<br>Houston, TX 77002 | OGRID:<br>372171                                    |
|                                                                                | Action Number:<br>136752                            |
|                                                                                | Action Type:<br>[UF-GA] Gas Analysis (GAS ANALYSIS) |

CONDITIONS

| Created By | Condition                                   | Condition Date |
|------------|---------------------------------------------|----------------|
| mkuehling  | same gas intermediate and production casing | 9/20/2022      |