



Well Name: UTE MOUNTAIN UTE 51;  
 API #: API # 3004529547  
 Source: BRADENHEAD  
 Sample Type: GAS  
 Analysis No: HS20220047  
 Cust No: 35825-11730

### Well/Lease Information

|                 |                          |                  |              |
|-----------------|--------------------------|------------------|--------------|
| Customer Name:  | HILCORP (BHD PROJECT)    | Source:          | BRADENHEAD   |
| Well Name:      | UTE MOUNTAIN UTE 51; BHD | Well Flowing:    | N            |
| County/State:   | SAN JUAN NM              | Pressure:        | 49 PSIG      |
| Location:       |                          | Flow Temp:       | DEG. F       |
| Lease/PA/CA:    | I-22-IND-2772            | Ambient Temp:    | DEG. F       |
| Formation:      |                          | Flow Rate:       | MCF/D        |
| Cust. Stn. No.: | API # 3004529547         | Sample Method:   | Purge & Fill |
|                 |                          | Sample Date:     | 04/27/2022   |
|                 |                          | Sample Time:     | 9.47 AM      |
|                 |                          | Sampled By:      | KEVIN A.     |
|                 |                          | Sampled by (CO): | HILCORP      |

Heat Trace: AREA 2 / RUN 0200

Remarks: PRESSURED WITH HELIUM TO 30 LBS.

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 0.6495   | 0.2045          | 0.0720  | 0.00    | 0.0063       |
| CO2         | 0.1220   | 0.0384          | 0.0210  | 0.00    | 0.0019       |
| Methane     | 86.0523  | 27.0962         | 14.6270 | 869.13  | 0.4766       |
| Ethane      | 8.0774   | 2.5434          | 2.1660  | 142.95  | 0.0839       |
| Propane     | 3.1771   | 1.0004          | 0.8780  | 79.94   | 0.0484       |
| Iso-Butane  | 0.4878   | 0.1536          | 0.1600  | 15.86   | 0.0098       |
| N-Butane    | 0.7727   | 0.2433          | 0.2440  | 25.21   | 0.0155       |
| I-Pentane   | 0.2309   | 0.0727          | 0.0850  | 9.24    | 0.0058       |
| N-Pentane   | 0.1677   | 0.0528          | 0.0610  | 6.72    | 0.0042       |
| Hexane Plus | 0.2626   | 0.0827          | 0.1170  | 13.84   | 0.0087       |
| Total       | 100.0000 | 31.4880         | 18.4310 | 1162.89 | 0.6609       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

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

|                                      |        |                    |                |
|--------------------------------------|--------|--------------------|----------------|
| COMPRESSIBILITY FACTOR (1/Z):        | 1.0029 | CYLINDER #:        | 4097           |
| BTU/CU.FT IDEAL:                     | 1165.6 | CYLINDER PRESSURE: | 3 PSIG         |
| BTU/CU.FT (DRY) CORRECTED FOR (1/Z): | 1169.0 | ANALYSIS DATE:     | 05/03/2022     |
| BTU/CU.FT (WET) CORRECTED FOR (1/Z): | 1148.7 | ANALYSIS TIME:     | 10:14:25 AM    |
| DRY BTU @ 15.025:                    | 1192.4 | ANALYSIS RUN BY:   | RICHARD WILSON |
| REAL SPECIFIC GRAVITY:               | 0.6626 |                    |                |

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: 05/06/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|                  |                          |            |             |
|------------------|--------------------------|------------|-------------|
| <b>Lease:</b>    | UTE MOUNTAIN UTE 51; BHD | BRADENHEAD | 05/06/2022  |
| <b>Stn. No.:</b> | API # 3004529547         |            | 35825-11730 |
| <b>Mtr. No.:</b> |                          |            |             |

|                   |            |            |            |
|-------------------|------------|------------|------------|
| <b>Smpl Date:</b> | 04/27/2022 | 04/27/2021 | 08/01/2019 |
| <b>Test Date:</b> | 05/03/2022 | 05/04/2021 | 08/05/2019 |
| <b>Run No:</b>    | HS20220047 | HS2021068  | HS190198   |
| <b>Nitrogen:</b>  | 0.6495     | 1.4169     | 17.3207    |
| <b>CO2:</b>       | 0.1220     | 0.0131     | 0.0160     |
| <b>Methane:</b>   | 86.0523    | 83.9541    | 71.3339    |
| <b>Ethane:</b>    | 8.0774     | 8.8949     | 6.9389     |
| <b>Propane:</b>   | 3.1771     | 3.5945     | 2.7596     |
| <b>I-Butane:</b>  | 0.4878     | 0.5485     | 0.4214     |
| <b>N-Butane:</b>  | 0.7727     | 0.8853     | 0.6445     |
| <b>I-Pentane:</b> | 0.2309     | 0.2688     | 0.1980     |
| <b>N-Pentane:</b> | 0.1677     | 0.2016     | 0.1483     |
| <b>Hexane+:</b>   | 0.2626     | 0.2223     | 0.2187     |
| <b>BTU:</b>       | 1169.0     | 1179.3     | 977.3      |
| <b>GPM:</b>       | 18.4310    | 18.5390    | 17.2190    |
| <b>SPG:</b>       | 0.6626     | 0.6756     | 0.7156     |



Well Name: UTE MOUNTAIN UTE 51;  
 API #: API # 3004529547  
 Source: CASING  
 Sample Type: GAS  
 Analysis No: HS20220048  
 Cust No: 35825-11735

### Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)  
 Well Name: UTE MOUNTAIN UTE 51; CSG  
 County/State: SAN JUAN NM  
 Location:  
 Lease/PA/CA: I-22-IND-2772  
 Formation:  
 Cust. Stn. No.: API # 3004529547

Source: CASING  
 Well Flowing: N  
 Pressure: 684 PSIG  
 Flow Temp: DEG. F  
 Ambient Temp: 65 DEG. F  
 Flow Rate: MCF/D  
 Sample Method: Purge & Fill  
 Sample Date: 04/27/2022  
 Sample Time: 9.47 AM  
 Sampled By: KEVIN A.  
 Sampled by (CO): HILCORP

AREA 2 / RUN 0200

Heat Trace:

Remarks:

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 0.9704   | 0.9551          | 0.1070  | 0.00    | 0.0094       |
| CO2         | 0.4577   | 0.4505          | 0.0780  | 0.00    | 0.0070       |
| Methane     | 94.5154  | 93.0232         | 16.0560 | 954.61  | 0.5235       |
| Ethane      | 2.2571   | 2.2215          | 0.6050  | 39.94   | 0.0234       |
| Propane     | 0.7123   | 0.7011          | 0.1970  | 17.92   | 0.0108       |
| Iso-Butane  | 0.1972   | 0.1941          | 0.0650  | 6.41    | 0.0040       |
| N-Butane    | 0.2829   | 0.2784          | 0.0890  | 9.23    | 0.0057       |
| I-Pentane   | 0.1320   | 0.1299          | 0.0480  | 5.28    | 0.0033       |
| N-Pentane   | 0.1113   | 0.1095          | 0.0400  | 4.46    | 0.0028       |
| Hexane Plus | 0.3637   | 0.3580          | 0.1630  | 19.17   | 0.0120       |
| Total       | 100.0000 | 98.4213         | 17.4480 | 1057.03 | 0.6019       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

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

COMPRESSIBILITY FACTOR (1/Z): 1.0023  
 BTU/CU.FT IDEAL: 1059.5  
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1061.9  
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1043.4  
 DRY BTU @ 15.025: 1083.2  
 REAL SPECIFIC GRAVITY: 0.603

CYLINDER #: 5021  
 CYLINDER PRESSURE: 293 PSIG  
 ANALYSIS DATE: 05/02/2022  
 ANALYSIS TIME: 04:27:14 PM  
 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: 05/06/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|                  |                          |        |             |
|------------------|--------------------------|--------|-------------|
| <b>Lease:</b>    | UTE MOUNTAIN UTE 51; CSG | CASING | 05/06/2022  |
| <b>Stn. No.:</b> | API # 3004529547         |        | 35825-11735 |
| <b>Mtr. No.:</b> |                          |        |             |

|                   |            |            |            |
|-------------------|------------|------------|------------|
| <b>Smpl Date:</b> | 04/27/2022 | 04/27/2021 | 08/01/2019 |
| <b>Test Date:</b> | 05/02/2022 | 05/04/2021 | 08/02/2019 |
| <b>Run No:</b>    | HS20220048 | HS2021069  | HS190199   |
| <b>Nitrogen:</b>  | 0.9704     | 1.0131     | 1.0048     |
| <b>CO2:</b>       | 0.4577     | 0.4253     | 0.9518     |
| <b>Methane:</b>   | 94.5154    | 94.5725    | 94.0476    |
| <b>Ethane:</b>    | 2.2571     | 2.2700     | 2.2751     |
| <b>Propane:</b>   | 0.7123     | 0.7078     | 0.7132     |
| <b>I-Butane:</b>  | 0.1972     | 0.1946     | 0.1995     |
| <b>N-Butane:</b>  | 0.2829     | 0.2718     | 0.2720     |
| <b>I-Pentane:</b> | 0.1320     | 0.1257     | 0.1209     |
| <b>N-Pentane:</b> | 0.1113     | 0.1054     | 0.1008     |
| <b>Hexane+:</b>   | 0.3637     | 0.3138     | 0.3143     |
| <b>BTU:</b>       | 1061.9     | 1059.0     | 1053.7     |
| <b>GPM:</b>       | 17.4480    | 17.4280    | 17.4300    |
| <b>SPG:</b>       | 0.6030     | 0.6011     | 0.6061     |



Well Name: UTE MOUNTAIN UTE 51;  
 API #: API # 3004529547  
 Source: TUBING  
 Sample Type: GAS  
 Analysis No: HS20220049  
 Cust No: 35825-11740

### Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)  
 Well Name: UTE MOUNTAIN UTE 51; TBG  
 County/State: SAN JUAN NM  
 Location:  
 Lease/PA/CA: I-22-IND-2772  
 Formation:  
 Cust. Stn. No.: API # 3004529547  
 AREA 2 / RUN 0200  
 Heat Trace: N  
 Remarks:

Source: TUBING  
 Well Flowing: N  
 Pressure: 684 PSIG  
 Flow Temp: DEG. F  
 Ambient Temp: 64 DEG. F  
 Flow Rate: MCF/D  
 Sample Method:  
 Sample Date: 04/27/2022  
 Sample Time: 9.47 AM  
 Sampled By: KEVIN A.  
 Sampled by (CO): HILCORP

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 0.9421   | 0.9279          | 0.1040  | 0.00    | 0.0091       |
| CO2         | 0.5247   | 0.5168          | 0.0900  | 0.00    | 0.0080       |
| Methane     | 94.1944  | 92.7751         | 16.0030 | 951.36  | 0.5217       |
| Ethane      | 2.3536   | 2.3181          | 0.6310  | 41.65   | 0.0244       |
| Propane     | 0.7793   | 0.7676          | 0.2150  | 19.61   | 0.0119       |
| Iso-Butane  | 0.2175   | 0.2142          | 0.0710  | 7.07    | 0.0044       |
| N-Butane    | 0.3074   | 0.3028          | 0.0970  | 10.03   | 0.0062       |
| I-Pentane   | 0.1477   | 0.1455          | 0.0540  | 5.91    | 0.0037       |
| N-Pentane   | 0.1263   | 0.1244          | 0.0460  | 5.06    | 0.0031       |
| Hexane Plus | 0.4070   | 0.4009          | 0.1820  | 21.45   | 0.0135       |
| Total       | 100.0000 | 98.4933         | 17.4930 | 1062.15 | 0.6060       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

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

COMPRESSIBILITY FACTOR (1/Z): 1.0024  
 BTU/CU.FT IDEAL: 1064.6  
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1067.2  
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1048.6  
 DRY BTU @ 15.025: 1088.6  
 REAL SPECIFIC GRAVITY: 0.6072

CYLINDER #: 7056  
 CYLINDER PRESSURE: 678 PSIG  
 ANALYSIS DATE: 05/02/2022  
 ANALYSIS TIME: 04:35:18 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: 05/06/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|                  |                          |        |             |
|------------------|--------------------------|--------|-------------|
| <b>Lease:</b>    | UTE MOUNTAIN UTE 51; TBG | TUBING | 05/06/2022  |
| <b>Stn. No.:</b> | API # 3004529547         |        | 35825-11740 |
| <b>Mtr. No.:</b> |                          |        |             |

|                   |            |            |            |
|-------------------|------------|------------|------------|
| <b>Smpl Date:</b> | 04/27/2022 | 04/27/2021 | 08/01/2019 |
| <b>Test Date:</b> | 05/02/2022 | 05/04/2021 | 08/02/2019 |
| <b>Run No:</b>    | HS20220049 | HS2021070  | HS190200   |
| <b>Nitrogen:</b>  | 0.9421     | 1.0122     | 2.8656     |
| <b>CO2:</b>       | 0.5247     | 0.4172     | 5.1151     |
| <b>Methane:</b>   | 94.1944    | 94.5421    | 88.0626    |
| <b>Ethane:</b>    | 2.3536     | 2.2610     | 2.2283     |
| <b>Propane:</b>   | 0.7793     | 0.7259     | 0.6649     |
| <b>I-Butane:</b>  | 0.2175     | 0.2042     | 0.1651     |
| <b>N-Butane:</b>  | 0.3074     | 0.2860     | 0.2496     |
| <b>I-Pentane:</b> | 0.1477     | 0.1364     | 0.1166     |
| <b>N-Pentane:</b> | 0.1263     | 0.1144     | 0.0953     |
| <b>Hexane+:</b>   | 0.4070     | 0.3006     | 0.4369     |
| <b>BTU:</b>       | 1067.2     | 1059.9     | 995.3      |
| <b>GPM:</b>       | 17.4930    | 17.4330    | 17.3390    |
| <b>SPG:</b>       | 0.6072     | 0.6015     | 0.6558     |

**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**

COMMENTS

Action 106595

COMMENTS

|                                                                                |                                                     |
|--------------------------------------------------------------------------------|-----------------------------------------------------|
| Operator:<br>HILCORP ENERGY COMPANY<br>1111 Travis Street<br>Houston, TX 77002 | OGRID:<br>372171                                    |
|                                                                                | Action Number:<br>106595                            |
|                                                                                | Action Type:<br>[UF-GA] Gas Analysis (GAS ANALYSIS) |

COMMENTS

| Created By | Comment         | Comment Date |
|------------|-----------------|--------------|
| mkuehling  | FOR RECORD ONLY | 6/14/2022    |

**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 106595

CONDITIONS

|                                                                                |                                                     |
|--------------------------------------------------------------------------------|-----------------------------------------------------|
| Operator:<br>HILCORP ENERGY COMPANY<br>1111 Travis Street<br>Houston, TX 77002 | OGRID:<br>372171                                    |
|                                                                                | Action Number:<br>106595                            |
|                                                                                | Action Type:<br>[UF-GA] Gas Analysis (GAS ANALYSIS) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|-----------|----------------|
| mkuehling  | None      | 6/14/2022      |