



Well Name: UTE MOUNTAIN UTE #40;  
 API #: API # 3004529354  
 Source: BRADENHEAD  
 Sample Type: GAS  
 Analysis No: HS2021065  
 Cust No: 35825-11195

### Well/Lease Information

|                 |                           |                  |              |
|-----------------|---------------------------|------------------|--------------|
| Customer Name:  | HILCORP (BHD PROJECT)     | Source:          | BRADENHEAD   |
| Well Name:      | UTE MOUNTAIN UTE #40; BHD | Well Flowing:    | N            |
| County/State:   | SAN JUAN NM               | Pressure:        | 20 PSIG      |
| Location:       |                           | Flow Temp:       | 50 DEG. F    |
| Lease/PA/CA:    | I-22-IND-2772             | Ambient Temp:    | DEG. F       |
| Formation:      |                           | Flow Rate:       | MCF/D        |
| Cust. Stn. No.: | API # 3004529354          | Sample Method:   | Purge & Fill |
|                 |                           | Sample Date:     | 04/27/2021   |
|                 |                           | Sample Time:     | 2.38 PM      |
|                 |                           | Sampled By:      | KEVIN A.     |
|                 |                           | Sampled by (CO): | HILCORP      |

Heat Trace: AREA 2 / RUN 0200

Remarks: PRESSURED WITH HELIUM TO 30LBS. H2S

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 5.0943   | 0.8078          | 0.5620  | 0.00    | 0.0493       |
| CO2         | 0.0505   | 0.0080          | 0.0090  | 0.00    | 0.0008       |
| Methane     | 87.7927  | 13.9213         | 14.9150 | 886.71  | 0.4863       |
| Ethane      | 4.1250   | 0.6541          | 1.1060  | 73.00   | 0.0428       |
| Propane     | 1.5955   | 0.2530          | 0.4410  | 40.14   | 0.0243       |
| Iso-Butane  | 0.2384   | 0.0378          | 0.0780  | 7.75    | 0.0048       |
| N-Butane    | 0.4547   | 0.0721          | 0.1440  | 14.83   | 0.0091       |
| I-Pentane   | 0.1614   | 0.0256          | 0.0590  | 6.46    | 0.0040       |
| N-Pentane   | 0.1362   | 0.0216          | 0.0490  | 5.46    | 0.0034       |
| Hexane Plus | 0.3513   | 0.0557          | 0.1570  | 18.52   | 0.0116       |
| Total       | 100.0000 | 15.8570         | 17.5200 | 1052.87 | 0.6364       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

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

|                                      |        |                    |                |
|--------------------------------------|--------|--------------------|----------------|
| COMPRESSIBILITY FACTOR (1/Z):        | 1.0024 | CYLINDER #:        | 6036           |
| BTU/CU.FT IDEAL:                     | 1055.3 | CYLINDER PRESSURE: | 1 PSIG         |
| BTU/CU.FT (DRY) CORRECTED FOR (1/Z): | 1057.8 | ANALYSIS DATE:     | 05/04/2021     |
| BTU/CU.FT (WET) CORRECTED FOR (1/Z): | 1039.4 | ANALYSIS TIME:     | 01:58:54 PM    |
| DRY BTU @ 15.025:                    | 1079.0 | ANALYSIS RUN BY:   | RICHARD WILSON |
| REAL SPECIFIC GRAVITY:               | 0.6377 |                    |                |

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: 05/05/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|                  |                           |            |             |
|------------------|---------------------------|------------|-------------|
| <b>Lease:</b>    | UTE MOUNTAIN UTE #40; BHD | BRADENHEAD | 05/05/2021  |
| <b>Stn. No.:</b> | API # 3004529354          |            | 35825-11195 |
| <b>Mtr. No.:</b> |                           |            |             |

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|                   |            |            |
|-------------------|------------|------------|
| <b>Smpl Date:</b> | 04/27/2021 | 05/14/2019 |
| <b>Test Date:</b> | 05/04/2021 | 05/20/2019 |
| <b>Run No:</b>    | HS2021065  | HS190065   |
| <b>Nitrogen:</b>  | 5.0943     | 3.1376     |
| <b>CO2:</b>       | 0.0505     | 0.0864     |
| <b>Methane:</b>   | 87.7927    | 90.2159    |
| <b>Ethane:</b>    | 4.1250     | 3.8964     |
| <b>Propane:</b>   | 1.5955     | 1.3900     |
| <b>I-Butane:</b>  | 0.2384     | 0.2052     |
| <b>N-Butane:</b>  | 0.4547     | 0.3377     |
| <b>I-Pentane:</b> | 0.1614     | 0.1305     |
| <b>N-Pentane:</b> | 0.1362     | 0.1305     |
| <b>Hexane+:</b>   | 0.3513     | 0.4698     |
| <b>BTU:</b>       | 1057.8     | 1073.1     |
| <b>GPM:</b>       | 17.5200    | 17.5950    |
| <b>SPG:</b>       | 0.6377     | 0.6272     |



Well Name: UTE MOUNTAIN UTE #40;  
 API #: API # 3004529354  
 Source: CASING  
 Sample Type: GAS  
 Analysis No: HS2021066  
 Cust No: 35825-11200

### Well/Lease Information

|                 |                           |                  |              |
|-----------------|---------------------------|------------------|--------------|
| Customer Name:  | HILCORP (BHD PROJECT)     | Source:          | CASING       |
| Well Name:      | UTE MOUNTAIN UTE #40; CSG | Well Flowing:    | N            |
| County/State:   | SAN JUAN NM               | Pressure:        | 976 PSIG     |
| Location:       |                           | Flow Temp:       | 50 DEG. F    |
| Lease/PA/CA:    | I-22-IND-2772             | Ambient Temp:    | DEG. F       |
| Formation:      |                           | Flow Rate:       | MCF/D        |
| Cust. Stn. No.: | API # 3004529354          | Sample Method:   | Purge & Fill |
|                 |                           | Sample Date:     | 04/27/2021   |
|                 |                           | Sample Time:     | 2.34 PM      |
|                 |                           | Sampled By:      | KEVIN A.     |
|                 |                           | Sampled by (CO): | HILCORP      |

Heat Trace: AREA 2 / RUN 0200

Remarks: H2S

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 1.1618   | 1.1526          | 0.1280  | 0.00    | 0.0112       |
| CO2         | 0.4090   | 0.4058          | 0.0700  | 0.00    | 0.0062       |
| Methane     | 90.5200  | 89.8061         | 15.3820 | 914.25  | 0.5014       |
| Ethane      | 4.5539   | 4.5180          | 1.2210  | 80.59   | 0.0473       |
| Propane     | 1.6785   | 1.6653          | 0.4640  | 42.23   | 0.0256       |
| Iso-Butane  | 0.3723   | 0.3694          | 0.1220  | 12.11   | 0.0075       |
| N-Butane    | 0.5338   | 0.5296          | 0.1690  | 17.41   | 0.0107       |
| I-Pentane   | 0.2072   | 0.2056          | 0.0760  | 8.29    | 0.0052       |
| N-Pentane   | 0.1645   | 0.1632          | 0.0600  | 6.59    | 0.0041       |
| Hexane Plus | 0.3990   | 0.3959          | 0.1780  | 21.03   | 0.0132       |
| Total       | 100.0000 | 99.2115         | 17.8700 | 1102.51 | 0.6323       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

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

|                                      |        |                    |                |
|--------------------------------------|--------|--------------------|----------------|
| COMPRESSIBILITY FACTOR (1/Z):        | 1.0026 | CYLINDER #:        | 4144           |
| BTU/CU.FT IDEAL:                     | 1105.1 | CYLINDER PRESSURE: | 1045 PSIG      |
| BTU/CU.FT (DRY) CORRECTED FOR (1/Z): | 1107.9 | ANALYSIS DATE:     | 05/04/2021     |
| BTU/CU.FT (WET) CORRECTED FOR (1/Z): | 1088.6 | ANALYSIS TIME:     | 02:25:06 PM    |
| DRY BTU @ 15.025:                    | 1130.1 | ANALYSIS RUN BY:   | RICHARD WILSON |
| REAL SPECIFIC GRAVITY:               | 0.6337 |                    |                |

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: 05/05/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|                  |                           |        |             |
|------------------|---------------------------|--------|-------------|
| <b>Lease:</b>    | UTE MOUNTAIN UTE #40; CSG | CASING | 05/05/2021  |
| <b>Stn. No.:</b> | API # 3004529354          |        | 35825-11200 |
| <b>Mtr. No.:</b> |                           |        |             |

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|                   |            |            |
|-------------------|------------|------------|
| <b>Smpl Date:</b> | 04/27/2021 | 05/14/2019 |
| <b>Test Date:</b> | 05/04/2021 | 05/20/2019 |
| <b>Run No:</b>    | HS2021066  | HS190066   |
| <b>Nitrogen:</b>  | 1.1618     | 1.4712     |
| <b>CO2:</b>       | 0.4090     | 0.3301     |
| <b>Methane:</b>   | 90.5200    | 90.6223    |
| <b>Ethane:</b>    | 4.5539     | 4.3224     |
| <b>Propane:</b>   | 1.6785     | 1.5739     |
| <b>I-Butane:</b>  | 0.3723     | 0.3741     |
| <b>N-Butane:</b>  | 0.5338     | 0.5158     |
| <b>I-Pentane:</b> | 0.2072     | 0.2074     |
| <b>N-Pentane:</b> | 0.1645     | 0.1592     |
| <b>Hexane+:</b>   | 0.3990     | 0.4236     |
| <b>BTU:</b>       | 1107.9     | 1102.8     |
| <b>GPM:</b>       | 17.8700    | 17.8200    |
| <b>SPG:</b>       | 0.6337     | 0.6324     |



Well Name: UTE MOUNTAIN UTE #40;  
 API #: API # 3004529354  
 Source: TUBING  
 Sample Type: GAS  
 Analysis No: HS2021067  
 Cust No: 35825-11205

### Well/Lease Information

|                 |                           |                  |              |
|-----------------|---------------------------|------------------|--------------|
| Customer Name:  | HILCORP (BHD PROJECT)     | Source:          | TUBING       |
| Well Name:      | UTE MOUNTAIN UTE #40; TBG | Well Flowing:    | N            |
| County/State:   | SAN JUAN NM               | Pressure:        | 976 PSIG     |
| Location:       |                           | Flow Temp:       | 50 DEG. F    |
| Lease/PA/CA:    | I-22-IND-2772             | Ambient Temp:    | DEG. F       |
| Formation:      |                           | Flow Rate:       | MCF/D        |
| Cust. Stn. No.: | API # 3004529354          | Sample Method:   | Purge & Fill |
|                 |                           | Sample Date:     | 04/27/2021   |
|                 |                           | Sample Time:     | 2.40 PM      |
|                 |                           | Sampled By:      | KEVIN A.     |
|                 |                           | Sampled by (CO): | HILCORP      |

Heat Trace: AREA 2 / RUN 0200

Remarks: H2S

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:  | *SP Gravity: |
|-------------|----------|-----------------|---------|--------|--------------|
| Nitrogen    | 1.3764   | 1.3652          | 0.1520  | 0.00   | 0.0133       |
| CO2         | 10.6941  | 10.6071         | 1.8300  | 0.00   | 0.1625       |
| Methane     | 83.9399  | 83.2574         | 14.2650 | 847.79 | 0.4649       |
| Ethane      | 1.8999   | 1.8845          | 0.5090  | 33.62  | 0.0197       |
| Propane     | 0.7719   | 0.7656          | 0.2130  | 19.42  | 0.0118       |
| Iso-Butane  | 0.2239   | 0.2221          | 0.0730  | 7.28   | 0.0045       |
| N-Butane    | 0.2682   | 0.2660          | 0.0850  | 8.75   | 0.0054       |
| I-Pentane   | 0.1494   | 0.1482          | 0.0550  | 5.98   | 0.0037       |
| N-Pentane   | 0.1191   | 0.1181          | 0.0430  | 4.77   | 0.0030       |
| Hexane Plus | 0.5572   | 0.5527          | 0.2490  | 29.37  | 0.0184       |
| Total       | 100.0000 | 99.1869         | 17.4740 | 956.99 | 0.7072       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

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

COMPRESSIBILITY FACTOR (1/Z): 1.0027  
 BTU/CU.FT IDEAL: 959.2  
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 961.8  
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 945.1  
 DRY BTU @ 15.025: 981.1  
 REAL SPECIFIC GRAVITY: 0.7089

CYLINDER #: 5032  
 CYLINDER PRESSURE: 941 PSIG  
 ANALYSIS DATE: 05/04/2021  
 ANALYSIS TIME: 12:54:04 AM  
 ANALYSIS RUN BY: RICHARD WILSON

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: 05/05/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|                  |                           |        |             |
|------------------|---------------------------|--------|-------------|
| <b>Lease:</b>    | UTE MOUNTAIN UTE #40; TBG | TUBING | 05/05/2021  |
| <b>Stn. No.:</b> | API # 3004529354          |        | 35825-11205 |
| <b>Mtr. No.:</b> |                           |        |             |

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|                   |            |            |
|-------------------|------------|------------|
| <b>Smpl Date:</b> | 04/27/2021 | 05/14/2019 |
| <b>Test Date:</b> | 05/04/2021 | 05/20/2019 |
| <b>Run No:</b>    | HS2021067  | HS190067   |
| <b>Nitrogen:</b>  | 1.3764     | 1.3938     |
| <b>CO2:</b>       | 10.6941    | 9.5293     |
| <b>Methane:</b>   | 83.9399    | 84.7776    |
| <b>Ethane:</b>    | 1.8999     | 2.1961     |
| <b>Propane:</b>   | 0.7719     | 0.7779     |
| <b>I-Butane:</b>  | 0.2239     | 0.2196     |
| <b>N-Butane:</b>  | 0.2682     | 0.2847     |
| <b>I-Pentane:</b> | 0.1494     | 0.1412     |
| <b>N-Pentane:</b> | 0.1191     | 0.1045     |
| <b>Hexane+:</b>   | 0.5572     | 0.5753     |
| <b>BTU:</b>       | 961.8      | 976.2      |
| <b>GPM:</b>       | 17.4740    | 17.5050    |
| <b>SPG:</b>       | 0.7089     | 0.6994     |

**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 27329

**CONDITIONS OF APPROVAL**

|              |                        |                    |                  |        |        |                |       |              |              |
|--------------|------------------------|--------------------|------------------|--------|--------|----------------|-------|--------------|--------------|
| Operator:    | HILCORP ENERGY COMPANY | 1111 Travis Street | Houston, TX77002 | OGRID: | 372171 | Action Number: | 27329 | Action Type: | GAS ANALYSIS |
| OCD Reviewer | Condition              |                    |                  |        |        |                |       |              |              |
| mkuehling    | None                   |                    |                  |        |        |                |       |              |              |