



2030 Afton Place  
Farmington, NM 87401  
(505) 325-6622

Analysis No: HS190216  
Cust No: 35825-11830

### Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)  
Well Name: MOUNTAIN UTE GAS COM N 1; BHD  
County/State: SAN JUAN NM  
Location:  
Lease/PA/CA: UTE 14-20-604-62  
Formation:  
Cust. Stn. No.: 529-000-10  
API # 3004529865  
Heat Trace: N  
Remarks: H2S = 2000 ppm

Source: BRADENHEAD  
Well Flowing: Y  
Pressure: 118 PSIG  
Flow Temp: 75 DEG. F  
Ambient Temp: 75 DEG. F  
Flow Rate: 0 MCF/D  
Sample Method: Purge & Fill  
Sample Date: 08/07/2019  
Sample Time: 2.00 PM  
Sampled By: CASEY NICHOLS  
Sampled by (CO): HILCORP

NMOC  
AUG 20 2019  
DISTRICT III

### Analysis

| Component:  | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 1.2563   | 1.0474          | 0.1390  | 0.00    | 0.0122       |
| CO2         | 0.0368   | 0.0307          | 0.0060  | 0.00    | 0.0006       |
| Methane     | 87.8460  | 73.2417         | 14.9290 | 887.24  | 0.4866       |
| Ethane      | 6.7970   | 5.6670          | 1.8220  | 120.29  | 0.0706       |
| Propane     | 2.7960   | 2.3312          | 0.7720  | 70.35   | 0.0426       |
| Iso-Butane  | 0.2888   | 0.2408          | 0.0950  | 9.39    | 0.0058       |
| N-Butane    | 0.6779   | 0.5652          | 0.2140  | 22.12   | 0.0136       |
| I-Pentane   | 0.1550   | 0.1292          | 0.0570  | 6.20    | 0.0039       |
| N-Pentane   | 0.1003   | 0.0836          | 0.0360  | 4.02    | 0.0025       |
| Hexane Plus | 0.0459   | 0.0383          | 0.0210  | 2.42    | 0.0015       |
| Total       | 100.0000 | 83.3751         | 18.0910 | 1122.03 | 0.6397       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

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

COMPRESSIBILITY FACTOR (1/Z): 1.0027  
BTU/CU.FT IDEAL: 1124.6  
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1127.7  
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1108.1  
DRY BTU @ 15.025: 1150.3  
REAL SPECIFIC GRAVITY: 0.6412

CYLINDER #: 10  
CYLINDER PRESSURE: 66 PSIG  
ANALYSIS DATE: 08/14/2019  
ANALYSIS TIME: 09:57:36 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: 08/14/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

|           |                               |            |             |
|-----------|-------------------------------|------------|-------------|
| Lease:    | MOUNTAIN UTE GAS COM N 1; BHD | BRADENHEAD | 08/14/2019  |
| Stn. No.: | 529-000-10                    |            | 35825-11830 |
| Mtr. No.: | API # 3004529865              |            |             |

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|            |            |
|------------|------------|
| Smpl Date: | 08/07/2019 |
| Test Date: | 08/14/2019 |
| Run No:    | HS190216   |
| Nitrogen:  | 1.2563     |
| CO2:       | 0.0368     |
| Methane:   | 87.8460    |
| Ethane:    | 6.7970     |
| Propane:   | 2.7960     |
| I-Butane:  | 0.2888     |
| N-Butane:  | 0.6779     |
| I-Pentane: | 0.1550     |
| N-Pentane: | 0.1003     |
| Hexane+:   | 0.0459     |
| BTU:       | 1127.7     |
| GPM:       | 18.0910    |
| SPG:       | 0.6412     |



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Analysis No: HS190217  
Cust No: 35825-11835

### Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)  
Well Name: MOUNTAIN UTE GAS COM N 1; CSG  
County/State: SAN JUAN NM  
Location:  
Lease/PA/CA: UTE 14-20-604-62  
Formation:  
Cust. Stn. No.: 529-000-10  
API # 3004529865  
  
AREA 2 / RUN 200  
Heat Trace: N  
Remarks: H2S = 2000 ppm

Source: CASING  
Well Flowing: Y  
Pressure: 118 PSIG  
Flow Temp: 75 DEG. F  
Ambient Temp: 75 DEG. F  
Flow Rate: 0 MCF/D  
Sample Method: Purge & Fill  
Sample Date: 08/07/2019  
Sample Time: 2.00 PM  
Sampled By: CASEY NICHOLS  
Sampled by (CO): HILCORP

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:   | *SP Gravity: |
|-------------|----------|-----------------|---------|---------|--------------|
| Nitrogen    | 1.7019   | 1.6748          | 0.1880  | 0.00    | 0.0165       |
| CO2         | 2.7832   | 2.7389          | 0.4760  | 0.00    | 0.0423       |
| Methane     | 92.8671  | 91.3896         | 15.7760 | 937.96  | 0.5144       |
| Ethane      | 1.3605   | 1.3389          | 0.3650  | 24.08   | 0.0141       |
| Propane     | 0.4317   | 0.4248          | 0.1190  | 10.86   | 0.0066       |
| Iso-Butane  | 0.1419   | 0.1396          | 0.0470  | 4.61    | 0.0028       |
| N-Butane    | 0.1864   | 0.1834          | 0.0590  | 6.08    | 0.0037       |
| I-Pentane   | 0.1008   | 0.0992          | 0.0370  | 4.03    | 0.0025       |
| N-Pentane   | 0.0776   | 0.0764          | 0.0280  | 3.11    | 0.0019       |
| Hexane Plus | 0.3489   | 0.3433          | 0.1560  | 18.39   | 0.0115       |
| Total       | 100.0000 | 98.4089         | 17.2510 | 1009.13 | 0.6164       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

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

COMPRESSIBILITY FACTOR (1/Z): 1.0023  
BTU/CU.FT IDEAL: 1011.5  
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1013.8  
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 996.2  
DRY BTU @ 15.025: 1034.1  
REAL SPECIFIC GRAVITY: 0.6176

CYLINDER #: 3  
CYLINDER PRESSURE: 56 PSIG  
ANALYSIS DATE: 08/14/2019  
ANALYSIS TIME: 10:06:28 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: 08/14/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

Lease: MOUNTAIN UTE GAS COM N 1; CSG CASING  
Stn. No.: 529-000-10  
Mtr. No.: API # 3004529865

08/14/2019  
35825-11835

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Smpl Date: 08/07/2019  
Test Date: 08/14/2019  
Run No: HS190217

Nitrogen: 1.7019  
CO2: 2.7832  
Methane: 92.8671  
Ethane: 1.3605  
Propane: 0.4317  
I-Butane: 0.1419  
N-Butane: 0.1864  
I-Pentane: 0.1008  
N-Pentane: 0.0776  
Hexane+: 0.3489

BTU: 1013.8  
GPM: 17.2510  
SPG: 0.6176



2030 Afton Place  
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Analysis No: HS190218  
Cust No: 35825-11840

### Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)  
Well Name: MOUNTAIN UTE GAS COM N 1; TBG  
County/State: SAN JUAN NM  
Location:  
Lease/PA/CA: UTE 14-20-604-62  
Formation:  
Cust. Stn. No.: 529-000-10  
API # 3004529865  
AREA 2 / RUN 200  
Heat Trace: N  
Remarks: H2S = 2000 ppm

Source: TUBING  
Well Flowing: Y  
Pressure: 118 PSIG  
Flow Temp: 75 DEG. F  
Ambient Temp: 75 DEG. F  
Flow Rate: 0 MCF/D  
Sample Method: Purge & Fill  
Sample Date: 08/07/2019  
Sample Time: 2.00 PM  
Sampled By: CASEY NICHOLS  
Sampled by (CO): HILCORP

### Analysis

| Component:: | Mole%:   | Unnormalized %: | **GPM:  | *BTU:  | *SP Gravity: |
|-------------|----------|-----------------|---------|--------|--------------|
| Nitrogen    | 1.5780   | 1.5449          | 0.1740  | 0.00   | 0.0153       |
| CO2         | 3.9516   | 3.8687          | 0.6760  | 0.00   | 0.0600       |
| Methane     | 92.1844  | 90.2509         | 15.6600 | 931.06 | 0.5106       |
| Ethane      | 1.3263   | 1.2985          | 0.3550  | 23.47  | 0.0138       |
| Propane     | 0.3499   | 0.3426          | 0.0970  | 8.80   | 0.0053       |
| Iso-Butane  | 0.1243   | 0.1217          | 0.0410  | 4.04   | 0.0025       |
| N-Butane    | 0.1517   | 0.1485          | 0.0480  | 4.95   | 0.0030       |
| I-Pentane   | 0.0776   | 0.0760          | 0.0280  | 3.10   | 0.0019       |
| N-Pentane   | 0.0563   | 0.0551          | 0.0200  | 2.26   | 0.0014       |
| Hexane Plus | 0.1999   | 0.1957          | 0.0890  | 10.54  | 0.0066       |
| Total       | 100.0000 | 97.9026         | 17.1880 | 988.23 | 0.6205       |

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

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

COMPRESSIBILITY FACTOR (1/Z): 1.0023  
BTU/CU.FT IDEAL: 990.5  
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 992.7  
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 975.4  
DRY BTU @ 15.025: 1012.6  
REAL SPECIFIC GRAVITY: 0.6216

CYLINDER #: 22  
CYLINDER PRESSURE: 66 PSIG  
ANALYSIS DATE: 08/14/2019  
ANALYSIS TIME: 09:48:34 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: 08/14/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

Lease: MOUNTAIN UTE GAS COM N 1; TBG TUBING  
Stn. No.: 529-000-10  
Mtr. No.: API # 3004529865

08/14/2019  
35825-11840

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Smpl Date: 08/07/2019  
Test Date: 08/14/2019  
Run No: HS190218  
Nitrogen: 1.5780  
CO2: 3.9516  
Methane: 92.1844  
Ethane: 1.3263  
Propane: 0.3499  
I-Butane: 0.1243  
N-Butane: 0.1517  
I-Pentane: 0.0776  
N-Pentane: 0.0563  
Hexane+: 0.1999  
BTU: 992.7  
GPM: 17.1880  
SPG: 0.6216