



30-045-33246

2030 Afton Place
Farmington, NM 87401
(505) 325-6622Analysis No: HS190086
Cust No: 35825-11295**Well/Lease Information**

Customer Name: HILCORP (BHD PROJECT)
Well Name: UTE TRIBAL D 12; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Str. No.: 52900019
API # 3004533246
AREA 2 / RUN 202
Heat Trace: N
Remarks: H2S

Source: BRADENHEAD
Well Flowing: Y
Pressure: 28 PSIG
Flow Temp: 77 DEG. F
Ambient Temp: 83 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/16/2019
Sample Time: 9.40 AM
Sampled By: KALAN DIBBLE
Sampled by (CO): HILCORP

NWOC

JUN 17 2019

DISTRICT III

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.7583	0.7394	0.0840	0.00	0.0073
CO2	0.0246	0.0240	0.0040	0.00	0.0004
Methane	84.5539	82.4444	14.3750	853.99	0.4683
Ethane	8.7418	8.5237	2.3450	154.70	0.0908
Propane	3.7404	3.6471	1.0330	94.11	0.0569
Iso-Butane	0.4908	0.4786	0.1610	15.96	0.0098
N-Butane	0.8815	0.8595	0.2790	28.76	0.0177
I-Pentane	0.2497	0.2435	0.0920	9.99	0.0062
N-Pentane	0.2130	0.2077	0.0770	8.54	0.0053
Hexane Plus	0.3460	0.3374	0.1550	18.24	0.0115
Total	100.0000	97.5053	18.6050	1184.29	0.6743

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0031
BTU/CU.FT IDEAL: 1187.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1190.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1170.0
DRY BTU @ 15.025: 1214.5
REAL SPECIFIC GRAVITY: 0.6761

CYLINDER #: 7019
CYLINDER PRESSURE: 20 PSIG
ANALYSIS DATE: 05/23/2019
ANALYSIS TIME: 01:55:43 PM
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: 05/30/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: UTE TRIBAL D 12; BHD
Stn. No.: 52900019
Mtr. No.: API # 3004533246

BRADENHEAD

05/30/2019
35825-11295

Smpl Date: 05/16/2019
Test Date: 05/23/2019
Run No: HS190086

Nitrogen: 0.7583
CO2: 0.0246
Methane: 84.5539
Ethane: 8.7418
Propane: 3.7404
I-Butane: 0.4908
N-Butane: 0.8815
I-Pentane: 0.2497
N-Pentane: 0.2130
Hexane+: 0.3460

BTU: 1190.7
GPM: 18.6050
SPG: 0.6761



30-045-33246

2030 Afton Place
Farmington, NM 87401
(505) 325-6622Analysis No: HS190087
Cust No: 35825-11300**Well/Lease Information**

Customer Name: HILCORP (BHD PROJECT)
Well Name: UTE TRIBAL D 12; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: 52900019
API # 3004533246
AREA 2 / RUN 202
Heat Trace: N
Remarks: H2S

Source: CASING
Well Flowing: Y
Pressure: 28 PSIG
Flow Temp: 77 DEG. F
Ambient Temp: 83 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/16/2019
Sample Time: 9.40 AM
Sampled By: KALAN DIBBLE
Sampled by (CO): HILCORP

NMOC
JUN 17 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	2.6118	2.5313	0.2880	0.00	0.0253
CO2	2.2181	2.1497	0.3790	0.00	0.0337
Methane	92.6319	89.7755	15.7340	935.58	0.5131
Ethane	1.5906	1.5416	0.4260	28.15	0.0165
Propane	0.0000	0.0000	0.0000	0.00	0.0000
Iso-Butane	0.1802	0.1746	0.0590	5.86	0.0036
N-Butane	0.2267	0.2197	0.0720	7.40	0.0045
I-Pentane	0.1021	0.0990	0.0370	4.08	0.0025
N-Pentane	0.0833	0.0807	0.0300	3.34	0.0021
Hexane Plus	0.3553	0.3443	0.1590	18.73	0.0118
Total	100.0000	96.9164	17.1840	1003.14	0.6131

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
BTU/CU.FT IDEAL: 1005.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1007.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 990.2
DRY BTU @ 15.025: 1027.9
REAL SPECIFIC GRAVITY: 0.6142

CYLINDER #: 4077
CYLINDER PRESSURE: 36 PSIG
ANALYSIS DATE: 05/23/2019
ANALYSIS TIME: 01:34:27 PM
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: 05/30/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: UTE TRIBAL D 12; CSG
Stn. No.: 52900019
Mtr. No.: API # 3004533246

CASING

05/30/2019
35825-11300

Smpl Date: 05/16/2019
Test Date: 05/23/2019
Run No: HS190087

Nitrogen: 2.6118
CO2: 2.2181
Methane: 92.6319
Ethane: 1.5906
Propane: 0.0000
I-Butane: 0.1802
N-Butane: 0.2267
I-Pentane: 0.1021
N-Pentane: 0.0833
Hexane+: 0.3553

BTU: 1007.7
GPM: 17.1840
SPG: 0.6142



30-045-33246

2030 Afton Place
Farmington, NM 87401
(505) 325-6622Analysis No: HS190088
Cust No: 35825-11305**Well/Lease Information**

Customer Name: HILCORP (BHD PROJECT)
Well Name: UTE TRIBAL D 12; TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Str. No.: 52900019
API # 3004533246
AREA 2 / RUN 202
Heat Trace: N
Remarks: H2S

Source: TUBING
Well Flowing: Y
Pressure: 28 PSIG
Flow Temp: 77 DEG. F
Ambient Temp: 83 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/16/2019
Sample Time: 9.40 AM
Sampled By: KALAN DIBBLE
Sampled by (CO): HILCORP

NMOC

JUN 17 2019

DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	3.4516	3.3516	0.3810	0.00	0.0334
CO2	6.5993	6.4082	1.1290	0.00	0.1003
Methane	87.7150	85.1749	14.9010	885.92	0.4859
Ethane	1.5379	1.4934	0.4120	27.22	0.0160
Propane	0.0000	0.0000	0.0000	0.00	0.0000
Iso-Butane	0.1346	0.1307	0.0440	4.38	0.0027
N-Butane	0.1838	0.1785	0.0580	6.00	0.0037
I-Pentane	0.0900	0.0874	0.0330	3.60	0.0022
N-Pentane	0.0718	0.0697	0.0260	2.88	0.0018
Hexane Plus	0.2160	0.2097	0.0970	11.39	0.0071
Total	100.0000	97.1041	17.0810	941.38	0.6530

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0023
BTU/CU.FT IDEAL: 943.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 945.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 929.2
DRY BTU @ 15.025: 964.6
REAL SPECIFIC GRAVITY: 0.6543

CYLINDER #: 6018
CYLINDER PRESSURE: 178 PSIG
ANALYSIS DATE: 05/23/2019
ANALYSIS TIME: 11:17:27 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: 05/30/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: UTE TRIBAL D 12; TBG
Stn. No.: 52900019
Mtr. No.: API # 3004533246

TUBING

05/30/2019
35825-11305

Smpl Date: 05/16/2019
Test Date: 05/23/2019
Run No: HS190088

Nitrogen: 3.4516
CO2: 6.5993
Methane: 87.7150
Ethane: 1.5379
Propane: 0.0000
I-Butane: 0.1346
N-Butane: 0.1838
I-Pentane: 0.0900
N-Pentane: 0.0718
Hexane+: 0.2160

BTU: 945.7
GPM: 17.0810
SPG: 0.6543