



30-045-29355

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

Analysis No: HS190081
Cust No: 35825-11270

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: UTE MOUNTAIN UTE #41; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Str. No.: 91901143
API # 3004529355
AREA 2 / RUN 200
Heat Trace: N
Remarks:

Source: CASING
Well Flowing: Y
Pressure: 138 PSIG
Flow Temp: 76 DEG. F
Ambient Temp: 81 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/16/2019
Sample Time: 1.08 PM
Sampled By: KALAN DIBBLE
Sampled by (CO): HILCORP

NMOC

JUN 17 2019

DISTRICT III

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.8900	0.8615	0.0980	0.00	0.0086
CO2	0.6023	0.5830	0.1030	0.00	0.0092
Methane	88.8281	85.9839	15.1090	897.16	0.4920
Ethane	3.4789	3.3675	0.9330	61.57	0.0361
Propane	1.2481	1.2081	0.3450	31.40	0.0190
Iso-Butane	0.3330	0.3223	0.1090	10.83	0.0067
N-Butane	0.6099	0.5904	0.1930	19.90	0.0122
I-Pentane	0.3579	0.3464	0.1310	14.32	0.0089
N-Pentane	0.3699	0.3581	0.1350	14.83	0.0092
Hexane Plus	3.2819	3.1768	1.4690	172.99	0.1086
Total	100.0000	96.7980	18.6250	1223.00	0.7106

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
BTU/CU.FT IDEAL: 1225.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1230.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1208.9
DRY BTU @ 15.025: 1254.9
REAL SPECIFIC GRAVITY: 0.7129

CYLINDER #: 4147
CYLINDER PRESSURE: 51 PSIG
ANALYSIS DATE: 05/23/2019
ANALYSIS TIME: 12:59:49 AM
ANALYSIS RUN BY: PATRICIA KING

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 MOUNTAIN UTE #41; CSG	CASING	05/30/2019
Stn. No.:	91901143		35825-11270
Mtr. No.:	API # 3004529355		

Smpl Date:	05/16/2019
Test Date:	05/23/2019
Run No:	HS190081
Nitrogen:	0.8900
CO2:	0.6023
Methane:	88.8281
Ethane:	3.4789
Propane:	1.2481
I-Butane:	0.3330
N-Butane:	0.6099
I-Pentane:	0.3579
N-Pentane:	0.3699
Hexane+:	3.2819
BTU:	1230.3
GPM:	18.6250
SPG:	0.7129



30-045-29355

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

Analysis No: HS190082
Cust No: 35825-11275

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: UTE MOUNTAIN UTE #41; TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Str. No.: 91901143
API # 3004529355
AREA 2 / RUN 200
Heat Trace: N
Remarks:

Source: TUBING
Well Flowing: Y
Pressure: 138 PSIG
Flow Temp: 76 DEG. F
Ambient Temp: 81 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/16/2019
Sample Time: 1.08 PM
Sampled By: KALAN DIBBLE
Sampled by (CO): HILCORP

WMOCD
JUN 17 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.7827	0.7700	0.0860	0.00	0.0076
CO2	0.4986	0.4905	0.0850	0.00	0.0076
Methane	91.7288	90.2372	15.5870	926.46	0.5081
Ethane	4.1201	4.0531	1.1040	72.91	0.0428
Propane	1.3319	1.3102	0.3680	33.51	0.0203
Iso-Butane	0.2786	0.2741	0.0910	9.06	0.0056
N-Butane	0.4894	0.4814	0.1550	15.97	0.0098
I-Pentane	0.1789	0.1760	0.0660	7.16	0.0045
N-Pentane	0.1688	0.1661	0.0610	6.77	0.0042
Hexane Plus	0.4222	0.4153	0.1890	22.25	0.0140
Total	100.0000	98.3739	17.7920	1094.09	0.6243

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
BTU/CU.FT IDEAL: 1096.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1099.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1080.3
DRY BTU @ 15.025: 1121.4
REAL SPECIFIC GRAVITY: 0.6256

CYLINDER #: 5027
CYLINDER PRESSURE: 44 PSIG
ANALYSIS DATE: 05/23/2019
ANALYSIS TIME: 11:13:32 AM
ANALYSIS RUN BY: PATRICIA KING

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 MOUNTAIN UTE #41; TBG	TUBING	05/30/2019
Stn. No.:	91901143		35825-11275
Mtr. No.:	API # 3004529355		

Smpl Date:	05/16/2019
Test Date:	05/23/2019
Run No:	HS190082

Nitrogen:	0.7827
CO2:	0.4986
Methane:	91.7288
Ethane:	4.1201
Propane:	1.3319
I-Butane:	0.2786
N-Butane:	0.4894
I-Pentane:	0.1789
N-Pentane:	0.1688
Hexane+:	0.4222

BTU:	1099.4
GPM:	17.7920
SPG:	0.6256



30-045-29355

2030 Afton Place
Farmington, NM 87401
(505) 325-6622Analysis No: HS190080
Cust No: 35825-11265**Well/Lease Information**

Customer Name: HILCORP (BHD PROJECT)
Well Name: UTE MOUNTAIN UTE #41; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: 91901143
API # 3004529355
AREA 2 / RUN 200
Heat Trace: N
Remarks:

Source: BRADENHEAD
Well Flowing: Y
Pressure: 138 PSIG
Flow Temp: 76 DEG. F
Ambient Temp: 81 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/16/2019
Sample Time: 1.08 PM
Sampled By: KALAN DIBBLE
Sampled by (CO): HILCORP

WMOCD
JUN 17 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.9892	0.9774	0.1090	0.00	0.0096
CO2	0.0551	0.0544	0.0090	0.00	0.0008
Methane	93.7967	92.6808	15.9340	947.35	0.5195
Ethane	3.3380	3.2983	0.8950	59.07	0.0347
Propane	0.9937	0.9819	0.2740	25.00	0.0151
Iso-Butane	0.1951	0.1928	0.0640	6.34	0.0039
N-Butane	0.3057	0.3021	0.0970	9.97	0.0061
I-Pentane	0.0977	0.0965	0.0360	3.91	0.0024
N-Pentane	0.0824	0.0814	0.0300	3.30	0.0021
Hexane Plus	0.1464	0.1447	0.0650	7.72	0.0048
Total	100.0000	98.8103	17.5130	1062.67	0.5991

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0023
BTU/CU.FT IDEAL: 1065.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1067.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1049.0
DRY BTU @ 15.025: 1089.0
REAL SPECIFIC GRAVITY: 0.6003

CYLINDER #: 7039
CYLINDER PRESSURE: 18 PSIG
ANALYSIS DATE: 05/23/2019
ANALYSIS TIME: 12:54:45 AM
ANALYSIS RUN BY: PATRICIA KING

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 MOUNTAIN UTE #41; BHD
Stn. No.: 91901143
Mtr. No.: API # 3004529355

BRADENHEAD

05/30/2019
35825-11265

Smpl Date: 05/16/2019
Test Date: 05/23/2019
Run No: HS190080

Nitrogen: 0.9892
CO2: 0.0551
Methane: 93.7967
Ethane: 3.3380
Propane: 0.9937
I-Butane: 0.1951
N-Butane: 0.3057
I-Pentane: 0.0977
N-Pentane: 0.0824
Hexane+: 0.1464

BTU: 1067.6
GPM: 17.5130
SPG: 0.6003