



30-045-34327

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

Analysis No: HS190059
Cust No: 35825-11165

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: UTE INDIANS A #46; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: 52900026
API # 3004534327
Heat Trace: N
Remarks: H2S

Source: BRADENHEAD
Well Flowing: Y
Pressure: 16.7 PSIG
Flow Temp: 76 DEG. F
Ambient Temp: 80 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/13/2019
Sample Time: 10.43 AM
Sampled By: KALAN DIBBLE
Sampled by (CO): HILCORP

NMOC

JUN 17 2019

DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.1840	1.1587	0.1310	0.00	0.0115
CO2	0.0059	0.0058	0.0010	0.00	0.0001
Methane	82.2898	80.5337	13.9930	831.13	0.4558
Ethane	8.5828	8.3996	2.3020	151.89	0.0891
Propane	5.1857	5.0750	1.4330	130.48	0.0790
Iso-Butane	0.5924	0.5798	0.1940	19.26	0.0119
N-Butane	1.4062	1.3762	0.4450	45.87	0.0282
I-Pentane	0.3039	0.2974	0.1110	12.16	0.0076
N-Pentane	0.2429	0.2377	0.0880	9.74	0.0061
Hexane Plus	0.2064	0.2020	0.0920	10.88	0.0068
Total	100.0000	97.8659	18.7900	1211.41	0.6960

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0033
BTU/CU.FT IDEAL: 1214.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1218.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1197.0
DRY BTU @ 15.025: 1242.6
REAL SPECIFIC GRAVITY: 0.698

CYLINDER #: 6192
CYLINDER PRESSURE: 79 PSIG
ANALYSIS DATE: 05/17/2019
ANALYSIS TIME: 02:14:01 PM
ANALYSIS RUN BY: SHYANN ELLEDGE

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: 05/24/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: UTE INDIANS A #46; BHD
Stn. No.: 52900026
Mtr. No.: API # 3004534327

BRADENHEAD

05/24/2019
35825-11165

Smpl Date: 05/13/2019
Test Date: 05/17/2019
Run No: HS190059

Nitrogen: 1.1840
CO2: 0.0059
Methane: 82.2898
Ethane: 8.5828
Propane: 5.1857
I-Butane: 0.5924
N-Butane: 1.4062
I-Pentane: 0.3039
N-Pentane: 0.2429
Hexane+: 0.2064

BTU: 1218.2
GPM: 18.7900
SPG: 0.6980



30-045-34327

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

Analysis No: HS190060
Cust No: 35825-11170

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: UTE INDIANS A #46; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: 52900026
API # 3004534327
AREA 2 / RUN 200
Heat Trace: N
Remarks: H2S

Source: CASING
Well Flowing: Y
Pressure: 16.7 PSIG
Flow Temp: 76 DEG. F
Ambient Temp: 80 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/13/2019
Sample Time: 10.46 AM
Sampled By: KALAN DIBBLE
Sampled by (CO): HILCORP

NMOC
JUN 17 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.3289	1.3105	0.1470	0.00	0.0129
CO2	0.9295	0.9167	0.1590	0.00	0.0141
Methane	94.2384	92.9361	16.0110	951.81	0.5220
Ethane	1.4468	1.4268	0.3880	25.60	0.0150
Propane	0.5482	0.5406	0.1510	13.79	0.0083
Iso-Butane	0.1994	0.1966	0.0650	6.48	0.0040
N-Butane	0.2851	0.2812	0.0900	9.30	0.0057
I-Pentane	0.1784	0.1759	0.0650	7.14	0.0044
N-Pentane	0.1558	0.1536	0.0570	6.25	0.0039
Hexane Plus	0.6895	0.6800	0.3080	36.34	0.0228
Total	100.0000	98.6180	17.4410	1056.72	0.6132

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0024
BTU/CU.FT IDEAL: 1059.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1061.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1043.2
DRY BTU @ 15.025: 1083.0
REAL SPECIFIC GRAVITY: 0.6144

CYLINDER #: 4162
CYLINDER PRESSURE: 133 PSIG
ANALYSIS DATE: 05/17/2019
ANALYSIS TIME: 02:34:57 PM
ANALYSIS RUN BY: SHYANN ELLEDGE

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: 05/24/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: UTE INDIANS A #46; CSG
Stn. No.: 52900026
Mtr. No.: API # 3004534327

CASING

05/24/2019
35825-11170

Smpl Date: 05/13/2019
Test Date: 05/17/2019
Run No: HS190060
Nitrogen: 1.3289
CO2: 0.9295
Methane: 94.2384
Ethane: 1.4468
Propane: 0.5482
I-Butane: 0.1994
N-Butane: 0.2851
I-Pentane: 0.1784
N-Pentane: 0.1558
Hexane+: 0.6895
BTU: 1061.7
GPM: 17.4410
SPG: 0.6144



30-045-34327

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

Analysis No: HS190061
Cust No: 35825-11175

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: UTE INDIANS A #46; TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: 52900026
API # 3004534327

AREA 2 / RUN 200
Heat Trace: N
Remarks: H2S

Source: TUBIING
Well Flowing: Y
Pressure: 16.7 PSIG
Flow Temp: 76 DEG. F
Ambient Temp: 80 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/13/2019
Sample Time: 10.47 AM
Sampled By: KALAN DIBBLE
Sampled by (CO): HILCORP

NMOC
JUN 17 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.4633	1.4218	0.1610	0.00	0.0142
CO2	2.8813	2.7996	0.4930	0.00	0.0438
Methane	92.4934	89.8701	15.7140	934.18	0.5123
Ethane	1.4264	1.3859	0.3820	25.24	0.0148
Propane	0.3875	0.3765	0.1070	9.75	0.0059
Iso-Butane	0.1269	0.1233	0.0420	4.13	0.0025
N-Butane	0.1929	0.1874	0.0610	6.29	0.0039
I-Pentane	0.1308	0.1271	0.0480	5.23	0.0033
N-Pentane	0.1415	0.1375	0.0510	5.67	0.0035
Hexane Plus	0.7560	0.7346	0.3380	39.85	0.0250
Total	100.0000	97.1638	17.3970	1030.35	0.6292

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0024
BTU/CU.FT IDEAL: 1032.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1035.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1017.2
DRY BTU @ 15.025: 1055.9
REAL SPECIFIC GRAVITY: 0.6304

CYLINDER #: 4192
CYLINDER PRESSURE: 15 PSIG
ANALYSIS DATE: 05/17/2019
ANALYSIS TIME: 03:59:37 PM
ANALYSIS RUN BY: SHYANN ELLEDGE

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: 05/24/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: UTE INDIANS A #46; TBG
Stn. No.: 52900026
Mtr. No.: API # 3004534327

TUBIING

05/24/2019
35825-11175

Smpl Date: 05/13/2019
Test Date: 05/17/2019
Run No: HS190061

Nitrogen: 1.4633
CO2: 2.8813
Methane: 92.4934
Ethane: 1.4264
Propane: 0.3875
I-Butane: 0.1269
N-Butane: 0.1929
I-Pentane: 0.1308
N-Pentane: 0.1415
Hexane+: 0.7560

BTU: 1035.2
GPM: 17.3970
SPG: 0.6304