

API # 30-045-28448



NMOCB
JUN 04 2018
DISTRICT III

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

Analysis No: HS180051
Cust No: 35825-10215

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: FROST 501; BHD
County/State: SAN JUAN NM
Location:
Field: AREA 6 / RUN 606
Formation:
Cust. Stn. No.:

Source: BRADENHEAD
Well Flowing: Y
Pressure: PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 05/21/2018
Sample Time: 1.08 PM
Sampled By: JAMIE R.
Sampled by (CO): HILCORP

Heat Trace:

Remarks: PRESSURED WITH HELIUM TO 30LBS.

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2965	0.1269	0.0330	0.00	0.0029
CO2	2.5942	1.1104	0.4440	0.00	0.0394
Methane	92.2225	39.4741	15.6660	931.45	0.5108
Ethane	4.5244	1.9366	1.2120	80.07	0.0470
Propane	0.2813	0.1204	0.0780	7.08	0.0043
Iso-Butane	0.0668	0.0286	0.0220	2.17	0.0013
N-Butane	0.0089	0.0038	0.0030	0.29	0.0002
I-Pentane	0.0054	0.0023	0.0020	0.22	0.0001
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0000	0.0000	0.0000	0.00	0.0000
Total	100.0000	42.8031	17.4600	1021.27	0.6060

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0023
BTU/CU.FT IDEAL: 1023.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1026.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1008.1
DRY BTU @ 15.025: 1046.5
REAL SPECIFIC GRAVITY: 0.6072

CYLINDER #: 4010
CYLINDER PRESSURE: PSIG
ANALYSIS DATE: 05/23/2018
ANALYSIS TIME: 02:46:20 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

GC Method: C6+ Gas

Last Cal/Verify: 05/24/2018

7



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: FROST 501; BHD
Stn. No.:
Mtr. No.:

BRADENHEAD

05/24/2018
35825-10215

Smpl Date: 05/21/2018
Test Date: 05/23/2018
Run No: HS180051

Nitrogen: 0.2965
CO2: 2.5942
Methane: 92.2225
Ethane: 4.5244
Propane: 0.2813
I-Butane: 0.0668
N-Butane: 0.0089
I-Pentane: 0.0054
N-Pentane: 0.0000
Hexane+: 0.0000

BTU: 1026.0
GPM: 17.4600
SPG: 0.6072

API # 30-045-28448



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

Analysis No: HS180052
Cust No: 35825-10220

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: FROST 501; CSG
County/State: SAN JUAN NM
Location:
Field: AREA 6 / RUN 606
Formation:
Cust. Stn. No.:

Source: CASING
Well Flowing: Y
Pressure: PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 05/21/2018
Sample Time: 1.03 PM
Sampled By: JAMIE R.
Sampled by (CO): HILCORP

Heat Trace:

Remarks: PRESSURED WITH HELIUM TO 30LBS.

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2794	0.1273	0.0310	0.00	0.0027
CO2	2.5920	1.1809	0.4430	0.00	0.0394
Methane	92.2259	42.0171	15.6670	931.48	0.5108
Ethane	4.5376	2.0673	1.2160	80.30	0.0471
Propane	0.2840	0.1294	0.0780	7.15	0.0043
Iso-Butane	0.0669	0.0305	0.0220	2.18	0.0013
N-Butane	0.0094	0.0043	0.0030	0.31	0.0002
I-Pentane	0.0048	0.0022	0.0020	0.19	0.0001
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0000	0.0000	0.0000	0.00	0.0000
Total	100.0000	45.5590	17.4620	1021.60	0.6060

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0023
BTU/CU.FT IDEAL: 1024.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1026.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1008.4
DRY BTU @ 15.025: 1046.9
REAL SPECIFIC GRAVITY: 0.6072

CYLINDER #: 6245
CYLINDER PRESSURE: PSIG
ANALYSIS DATE: 05/23/2018
ANALYSIS TIME: 02:33:05 PM
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

GC Method: C6+ Gas

Last Cal/Verify: 05/24/2018



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: FROST 501; CSG
Stn. No.:
Mtr. No.:

CASING

05/24/2018
35825-10220

Smpl Date: 05/21/2018
Test Date: 05/23/2018
Run No: HS180052

Nitrogen: 0.2794
CO2: 2.5920
Methane: 92.2259
Ethane: 4.5376
Propane: 0.2840
I-Butane: 0.0669
N-Butane: 0.0094
I-Pentane: 0.0048
N-Pentane: 0.0000
Hexane+: 0.0000

BTU: 1026.3
GPM: 17.4620
SPG: 0.6072

API # 30-045-28448



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

Analysis No: HS180053
Cust No: 35825-10225

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: FROST 501; TBG
County/State: SAN JUAN NM
Location:
Field: AREA 6 / RUN 606
Formation:
Cust. Stn. No.:

Source: TUBING
Well Flowing: Y
Pressure: 8 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 05/21/2018
Sample Time: 12.55 PM
Sampled By: JAMIE R.
Sampled by (CO): HILCORP

Heat Trace: N
Remarks: PRESSURED WITH HELIUM TO 30LBS.

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3182	0.1560	0.0350	0.00	0.0031
CO2	2.5547	1.2524	0.4370	0.00	0.0388
Methane	92.3721	45.2837	15.6920	932.96	0.5116
Ethane	4.4010	2.1575	1.1790	77.88	0.0457
Propane	0.2746	0.1346	0.0760	6.91	0.0042
Iso-Butane	0.0653	0.0320	0.0210	2.12	0.0013
N-Butane	0.0092	0.0045	0.0030	0.30	0.0002
I-Pentane	0.0049	0.0024	0.0020	0.20	0.0001
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0000	0.0000	0.0000	0.00	0.0000
Total	100.0000	49.0231	17.4450	1020.37	0.6050

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0023
BTU/CU.FT IDEAL: 1022.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1025.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1007.3
DRY BTU @ 15.025: 1045.6
REAL SPECIFIC GRAVITY: 0.6062

CYLINDER #: 4063
CYLINDER PRESSURE: PSIG
ANALYSIS DATE: 05/23/2018
ANALYSIS TIME: 02:23:13 PM
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: 05/24/2018

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: FROST 501; TBG
Stn. No.:
Mtr. No.:

TUBING

05/24/2018
35825-10225

Smpl Date: 05/21/2018
Test Date: 05/23/2018
Run No: HS180053

Nitrogen: 0.3182
CO2: 2.5547
Methane: 92.3721
Ethane: 4.4010
Propane: 0.2746
I-Butane: 0.0653
N-Butane: 0.0092
I-Pentane: 0.0049
N-Pentane: 0.0000
Hexane+: 0.0000

BTU: 1025.1
GPM: 17.4450
SPG: 0.6062

Well Name: FROST #501

API / UWI 3004528448	Surface Legal Location 025-027N-010W-B	Field Name BASIN (FRUITLAND COAL)	License No.	State/Province NEW MEXICO	Well Configuration Type
Ground Elevation (ft) 6,530.00	Original KB/RT Elevation (ft) 6,542.00	KB-Ground Distance (ft) 12.00	KB-Casing Flange Distance (ft)	KB-Tubing Hanger Distance (ft)	

Original Hole, 6/1/2018 8:45:36 AM
