



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

Analysis No: HS190106
Cust No: 35825-11380

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: SAN JUAN 30-5 UNIT 24; BHD
County/State:
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 3003907836

Source: BRADENHEAD
Well Flowing: Y
Pressure: 44 PSIG
Flow Temp: DEG. F
Ambient Temp: 70 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 05/31/2019
Sample Time: 10.20 AM
Sampled By: GREG CRESSWELL
Sampled by (CO): HILCORP

Heat Trace: AREA 12 / RUN 1201
Remarks: N

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.0409	1.0431	0.1150	0.00	0.0101
CO2	0.0125	0.0125	0.0020	0.00	0.0002
Methane	93.6759	93.8734	15.9120	946.13	0.5189
Ethane	4.7844	4.7945	1.2820	84.67	0.0497
Propane	0.2702	0.2708	0.0750	6.80	0.0041
Iso-Butane	0.1024	0.1026	0.0340	3.33	0.0021
N-Butane	0.0342	0.0343	0.0110	1.12	0.0007
I-Pentane	0.0299	0.0300	0.0110	1.20	0.0007
N-Pentane	0.0021	0.0021	0.0010	0.08	0.0001
Hexane Plus	0.0475	0.0476	0.0210	2.50	0.0016
Total	100.0000	100.2109	17.4640	1045.82	0.5880

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
BTU/CU.FT IDEAL: 1048.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1050.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1032.3
DRY BTU @ 15.025: 1071.6
REAL SPECIFIC GRAVITY: 0.5891

CYLINDER #: 7057
CYLINDER PRESSURE: 44 PSIG
ANALYSIS DATE: 06/06/2019
ANALYSIS TIME: 01:28:24 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: 06/11/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 30-5 UNIT 24; BHD
Stn. No.: API # 3003907836
Mtr. No.:

BRADENHEAD

06/11/2019
35825-11380

Smpl Date: 05/31/2019
Test Date: 06/06/2019
Run No: HS190106
Nitrogen: 1.0409
CO2: 0.0125
Methane: 93.6759
Ethane: 4.7844
Propane: 0.2702
I-Butane: 0.1024
N-Butane: 0.0342
I-Pentane: 0.0299
N-Pentane: 0.0021
Hexane+: 0.0475
BTU: 1050.6
GPM: 17.4640
SPG: 0.5891



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

Analysis No: HS190107
Cust No: 35825-11385

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: SAN JUAN 30-5 UNIT 24; CSG
County/State:
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 3003907836

Source: CASING
Well Flowing: Y
Pressure: 105 PSIG
Flow Temp: DEG. F
Ambient Temp: 70 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 05/31/2019
Sample Time: 10.20 AM
Sampled By: GREG CRESSWELL
Sampled by (CO): HILCORP

Heat Trace: AREA 12 / RUN 1201
Remarks: N

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1850	0.1812	0.0200	0.00	0.0018
CO2	1.1981	1.1736	0.2050	0.00	0.0182
Methane	85.5208	83.7723	14.5380	863.76	0.4737
Ethane	8.8577	8.6766	2.3750	156.75	0.0920
Propane	2.6697	2.6151	0.7380	67.17	0.0406
Iso-Butane	0.3296	0.3229	0.1080	10.72	0.0066
N-Butane	0.5077	0.4973	0.1600	16.56	0.0102
I-Pentane	0.1611	0.1578	0.0590	6.45	0.0040
N-Pentane	0.1133	0.1110	0.0410	4.54	0.0028
Hexane Plus	0.4570	0.4477	0.2040	24.09	0.0151
Total	100.0000	97.9555	18.4480	1150.04	0.6651

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
BTU/CU.FT IDEAL: 1152.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1156.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1136.1
DRY BTU @ 15.025: 1179.4
REAL SPECIFIC GRAVITY: 0.6668

CYLINDER #: 6192
CYLINDER PRESSURE: 105 PSIG
ANALYSIS DATE: 06/06/2019
ANALYSIS TIME: 02:14:30 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: 06/11/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 30-5 UNIT 24; CSG
Stn. No.: API # 3003907836
Mtr. No.:

CASING

06/11/2019
35825-11385

Smpl Date: 05/31/2019
Test Date: 06/06/2019
Run No: HS190107
Nitrogen: 0.1850
CO2: 1.1981
Methane: 85.5208
Ethane: 8.8577
Propane: 2.6697
I-Butane: 0.3296
N-Butane: 0.5077
I-Pentane: 0.1611
N-Pentane: 0.1133
Hexane+: 0.4570
BTU: 1156.2
GPM: 18.4480
SPG: 0.6668



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

Analysis No: HS190108
Cust No: 35825-11390

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: SAN JUAN 30-5 UNIT 24; TBG
County/State:
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 3003907836

Source: TUBING
Well Flowing: Y
Pressure: 104 PSIG
Flow Temp: DEG. F
Ambient Temp: 70 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 05/31/2019
Sample Time: 10.20 AM
Sampled By: GREG CRESSWELL
Sampled by (CO): HILCORP

Heat Trace: AREA 12 / RUN 1201

Remarks: N

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1579	0.1562	0.0170	0.00	0.0015
CO2	1.6198	1.6021	0.2770	0.00	0.0246
Methane	84.1950	83.2765	14.3130	850.37	0.4664
Ethane	9.5964	9.4917	2.5730	169.83	0.0996
Propane	2.9297	2.8977	0.8090	73.71	0.0446
Iso-Butane	0.3566	0.3527	0.1170	11.60	0.0072
N-Butane	0.5467	0.5407	0.1730	17.83	0.0110
I-Pentane	0.1681	0.1663	0.0620	6.73	0.0042
N-Pentane	0.1126	0.1114	0.0410	4.51	0.0028
Hexane Plus	0.3172	0.3137	0.1420	16.72	0.0105
Total	100.0000	98.9090	18.5240	1151.30	0.6723

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
BTU/CU.FT IDEAL: 1154.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1157.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1137.3
DRY BTU @ 15.025: 1180.6
REAL SPECIFIC GRAVITY: 0.6741

CYLINDER #: 4132
CYLINDER PRESSURE: 105 PSIG
ANALYSIS DATE: 06/06/2019
ANALYSIS TIME: 02:00:44 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: 06/11/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 30-5 UNIT 24; TBG
Stn. No.: API # 3003907836
Mtr. No.:

TUBING

06/11/2019
35825-11390

Smpl Date: 05/31/2019
Test Date: 06/06/2019
Run No: HS190108
Nitrogen: 0.1579
CO2: 1.6198
Methane: 84.1950
Ethane: 9.5964
Propane: 2.9297
I-Butane: 0.3566
N-Butane: 0.5467
I-Pentane: 0.1681
N-Pentane: 0.1126
Hexane+: 0.3172
BTU: 1157.4
GPM: 18.5240
SPG: 0.6741