



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

Analysis No: HS190246
Cust No: 35825-11985

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: OHIO F GOVT 1A; TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: 22077 / 78462
API # 3004523000
AREA 2 / RUN 203

Source: TUBING
Well Flowing: Y
Pressure: 25 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 08/14/2019
Sample Time: 11.00 AM
Sampled By: PETE
Sampled by (CO): HILCORP

NMOC

AUG 30 2019

DISTRICT III

Heat Trace:
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1955	0.1925	0.0220	0.00	0.0019
CO2	0.7111	0.7003	0.1220	0.00	0.0108
Methane	82.0146	80.7667	13.9480	828.35	0.4543
Ethane	9.6841	9.5367	2.5980	171.38	0.1005
Propane	4.2311	4.1667	1.1690	106.46	0.0644
Iso-Butane	0.8249	0.8123	0.2710	26.82	0.0166
N-Butane	1.0858	1.0693	0.3430	35.42	0.0218
I-Pentane	0.3837	0.3779	0.1410	15.35	0.0096
N-Pentane	0.2565	0.2526	0.0930	10.28	0.0064
Hexane Plus	0.6127	0.6034	0.2740	32.30	0.0203
Total	100.0000	98.4784	18.9810	1226.36	0.7065

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0034
BTU/CU.FT IDEAL: 1229.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1233.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1211.9
DRY BTU @ 15.025: 1258.1
REAL SPECIFIC GRAVITY: 0.7086

CYLINDER #: 6216
CYLINDER PRESSURE: 54 PSIG
ANALYSIS DATE: 08/26/2019
ANALYSIS TIME: 03:13:31 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: 08/28/2019

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: OHIO F GOVT 1A; TBG
Stn. No.: 22077 / 78462
Mtr. No.: API # 3004523000

TUBING

08/28/2019
35825-11985

Smpl Date: 08/14/2019
Test Date: 08/26/2019
Run No: HS190246

Nitrogen: 0.1955
CO2: 0.7111
Methane: 82.0146
Ethane: 9.6841
Propane: 4.2311
I-Butane: 0.8249
N-Butane: 1.0858
I-Pentane: 0.3837
N-Pentane: 0.2565
Hexane+: 0.6127

BTU: 1233.4
GPM: 18.9810
SPG: 0.7086



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

Analysis No: HS190244
Cust No: 35825-11975

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: OHIO F GOVT 1A; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: 22077 / 78462
API # 3004523000

AREA 2 / RUN 203

Source: BRADENHEAD
Well Flowing: Y
Pressure: 31 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 08/14/2019
Sample Time: 11.00 AM
Sampled By: PETE
Sampled by (CO): HILCORP

Heat Trace:
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.6589	1.6433	0.1830	0.00	0.0160
CO2	0.0194	0.0192	0.0030	0.00	0.0003
Methane	88.4896	87.6560	15.0380	893.74	0.4901
Ethane	6.2169	6.1583	1.6670	110.02	0.0645
Propane	2.0746	2.0551	0.5730	52.20	0.0316
Iso-Butane	0.3867	0.3831	0.1270	12.58	0.0078
N-Butane	0.3624	0.3590	0.1150	11.82	0.0073
I-Pentane	0.1713	0.1697	0.0630	6.85	0.0043
N-Pentane	0.0479	0.0474	0.0170	1.92	0.0012
Hexane Plus	0.5723	0.5669	0.2560	30.17	0.0189
Total	100.0000	99.0580	18.0420	1119.30	0.6420

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
BTU/CU.FT IDEAL: 1121.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1124.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1105.3
DRY BTU @ 15.025: 1147.4
REAL SPECIFIC GRAVITY: 0.6435

CYLINDER #: 6115
CYLINDER PRESSURE: 28 PSIG
ANALYSIS DATE: 08/26/2019
ANALYSIS TIME: 03:01:58 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

GC Method: C6+ Gas

Last Cal/Verify: 08/28/2019



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: OHIO F GOVT 1A; BHD
Stn. No.: 22077 / 78462
Mtr. No.: API # 3004523000

BRADENHEAD

08/28/2019
35825-11975

Smpl Date: 08/14/2019
Test Date: 08/26/2019
Run No: HS190244

Nitrogen: 1.6589
CO2: 0.0194
Methane: 88.4896
Ethane: 6.2169
Propane: 2.0746
I-Butane: 0.3867
N-Butane: 0.3624
I-Pentane: 0.1713
N-Pentane: 0.0479
Hexane+: 0.5723

BTU: 1124.9
GPM: 18.0420
SPG: 0.6435



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

Analysis No: HS190245
Cust No: 35825-11980

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: OHIO F GOVT 1A; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Str. No.: 22077 / 78462
API # 3004523000

AREA 2 / RUN 203

Source: CASING
Well Flowing:
Pressure: 50 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 08/14/2019
Sample Time: 11.00 AM
Sampled By: PETE
Sampled by (CO): HILCORP

Heat Trace:
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.8471	0.8353	0.0940	0.00	0.0082
CO2	0.0109	0.0107	0.0020	0.00	0.0002
Methane	77.9701	76.8877	13.2720	787.50	0.4319
Ethane	8.5522	8.4335	2.2960	151.35	0.0888
Propane	6.4989	6.4087	1.7980	163.52	0.0989
Iso-Butane	1.1516	1.1356	0.3780	37.45	0.0231
N-Butane	2.1488	2.1190	0.6800	70.10	0.0431
I-Pentane	0.7463	0.7359	0.2740	29.86	0.0186
N-Pentane	0.6495	0.6405	0.2360	26.04	0.0162
Hexane Plus	1.4246	1.4048	0.6380	75.09	0.0471
Total	100.0000	98.6117	19.6680	1340.90	0.7761

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0043
BTU/CU.FT IDEAL: 1344.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1349.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1326.3
DRY BTU @ 15.025: 1376.8
REAL SPECIFIC GRAVITY: 0.7792

CYLINDER #: 4236
CYLINDER PRESSURE: 53 PSIG
ANALYSIS DATE: 08/26/2019
ANALYSIS TIME: 02:48:06 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

GC Method: C6+ Gas

Last Cal/Verify: 08/28/2019



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: OHIO F GOVT 1A; CSG
Stn. No.: 22077 / 78462
Mtr. No.: API # 3004523000

CASING

08/28/2019
35825-11980

Smpl Date: 08/14/2019
Test Date: 08/26/2019
Run No: HS190245

Nitrogen: 0.8471
CO2: 0.0109
Methane: 77.9701
Ethane: 8.5522
Propane: 6.4989
I-Butane: 1.1516
N-Butane: 2.1488
I-Pentane: 0.7463
N-Pentane: 0.6495
Hexane+: 1.4246

BTU: 1349.8
GPM: 19.6680
SPG: 0.7792