



Well Name: City of Farmington 2
API: 30-045-24735
Geo Source: Bradenhead

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

Analysis No: SO180045
Cust No: 15950-10655

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: CITY OF FARMINGTON 2; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: 3004526735

Source: BRADENHEAD
Well Flowing: Y
Pressure: 129 PSIA
Flow Temp: DEG. F
Ambient Temp: 68 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/06/2018
Sample Time: 8.08 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

NMCOO
FEB 13 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.0472	0.9728	0.1150	0.00	0.0101
CO2	0.0064	0.0059	0.0010	0.00	0.0001
Methane	95.9919	89.1715	16.3050	969.52	0.5317
Ethane	2.3488	2.1819	0.6290	41.57	0.0244
Propane	0.1480	0.1375	0.0410	3.72	0.0023
Iso-Butane	0.0446	0.0414	0.0150	1.45	0.0009
N-Butane	0.0502	0.0466	0.0160	1.64	0.0010
I-Pentane	0.0333	0.0309	0.0120	1.33	0.0008
N-Pentane	0.0441	0.0410	0.0160	1.77	0.0011
Hexane Plus	0.2855	0.2652	0.1280	15.05	0.0094
Total	100.0000	92.8947	17.2780	1036.05	0.5818

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
BTU/CU.FT IDEAL: 1038.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1040.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1022.6
DRY BTU @ 15.025: 1061.5
REAL SPECIFIC GRAVITY: 0.5829

CYLINDER #: 7012
CYLINDER PRESSURE: 117 PSIG
ANALYSIS DATE: 07/10/2018
ANALYSIS TIME: 03:59:13 AM
ANALYSIS RUN BY: RICHARD WILSON

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: 07/12/2018

GC Method: C6+ Gas

b



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: CITY OF FARMINGTON 2; BHD
Stn. No.: 3004526735
Mtr. No.:

BRADENHEAD
PC

07/12/2018
15950-10655

Smpl Date: 07/06/2018
Test Date: 07/10/2018
Run No: SO180045

Nitrogen: 1.0472
CO2: 0.0064
Methane: 95.9919
Ethane: 2.3488
Propane: 0.1480
I-Butane: 0.0446
N-Butane: 0.0502
I-Pentane: 0.0333
N-Pentane: 0.0441
Hexane+: 0.2855

BTU: 1040.7
GPM: 17.2780
SPG: 0.5829



City of Farmington 2
30-045-24735
Casing Sample

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

Analysis No: SO180046
Cust No: 15950-10660

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: CITY OF FARMINGTON 2; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: 3004526735

Source: CASING
Well Flowing: Y
Pressure: 135 PSIA
Flow Temp: DEG. F
Ambient Temp: 68 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/06/2018
Sample Time: 8.15 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

HM000
FEB 13 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.9595	0.9495	0.1060	0.00	0.0093
CO2	0.0886	0.0877	0.0150	0.00	0.0013
Methane	80.9534	80.1122	13.7700	817.63	0.4484
Ethane	8.6015	8.5121	2.3080	152.22	0.0893
Propane	5.1445	5.0910	1.4220	129.44	0.0783
Iso-Butane	0.6572	0.6504	0.2160	21.37	0.0132
N-Butane	1.8151	1.7962	0.5740	59.21	0.0364
I-Pentane	0.5663	0.5604	0.2080	22.66	0.0141
N-Pentane	0.5763	0.5703	0.2100	23.10	0.0144
Hexane Plus	0.6376	0.6310	0.2850	33.61	0.0211
Total	100.0000	98.9608	19.1140	1259.24	0.7258

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
BTU/CU.FT IDEAL: 1262.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1266.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1244.7
DRY BTU @ 15.025: 1292.1
REAL SPECIFIC GRAVITY: 0.7282

CYLINDER #: 8001
CYLINDER PRESSURE: 126 PSIG
ANALYSIS DATE: 07/10/2018
ANALYSIS TIME: 03:36:59 AM
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: 07/12/2018

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: CITY OF FARMINGTON 2; CSG
Stn. No.: 3004526735
Mtr. No.:

CASING
PC

07/12/2018
15950-10660

Smpl Date: 07/06/2018
Test Date: 07/10/2018
Run No: SO180046

Nitrogen: 0.9595
CO2: 0.0886
Methane: 80.9534
Ethane: 8.6015
Propane: 5.1445
I-Butane: 0.6572
N-Butane: 1.8151
I-Pentane: 0.5663
N-Pentane: 0.5763
Hexane+: 0.6376

BTU: 1266.7
GPM: 19.1140
SPG: 0.7282



City of Farmington 2
API 30-045-26735
Tubing Sample

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

Analysis No: SO180047
Cust No: 15950-10665

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: CITY OF FARMINGTON 2; TBG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: 3004526735

Source: TUBING
Well Flowing: Y
Pressure: 123 PSIA
Flow Temp: DEG. F
Ambient Temp: 68 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/06/2018
Sample Time: 8.23 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

RECEIVED
FEB 13 2013
DISTRICT III

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.8979	0.8926	0.0990	0.00	0.0087
CO2	0.9043	0.8990	0.1550	0.00	0.0137
Methane	78.6782	78.2179	13.3830	794.65	0.4358
Ethane	10.7168	10.6541	2.8760	189.66	0.1113
Propane	5.4139	5.3822	1.4970	136.22	0.0824
Iso-Butane	0.6714	0.6675	0.2200	21.83	0.0135
N-Butane	1.4009	1.3927	0.4430	45.70	0.0281
I-Pentane	0.3489	0.3469	0.1280	13.96	0.0087
N-Pentane	0.3187	0.3168	0.1160	12.78	0.0079
Hexane Plus	0.6490	0.6452	0.2900	34.21	0.0215
Total	100.0000	99.4149	19.2070	1249.00	0.7316

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
BTU/CU.FT IDEAL: 1251.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1256.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1234.5
DRY BTU @ 15.025: 1281.6
REAL SPECIFIC GRAVITY: 0.734

CYLINDER #: 7016
CYLINDER PRESSURE: 119 PSIG
ANALYSIS DATE: 07/10/2018
ANALYSIS TIME: 02:33:18 AM
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: 07/12/2018



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: CITY OF FARMINGTON 2; TBG
Stn. No.: 3004526735
Mtr. No.:

TUBING
PC

07/12/2018
15950-10665

Smpl Date: 07/06/2018
Test Date: 07/10/2018
Run No: SO180047

Nitrogen: 0.8979
CO2: 0.9043
Methane: 78.6782
Ethane: 10.7168
Propane: 5.4139
I-Butane: 0.6714
N-Butane: 1.4009
I-Pentane: 0.3489
N-Pentane: 0.3187
Hexane+: 0.6490

BTU: 1256.4
GPM: 19.2070
SPG: 0.7340