



3004522762
BRADENHEAD

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

Analysis No: SO170070
Cust No: 15950-10335

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: STATE GC J 1A; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation: MV
Cust. Str. No.: 3004522762

OIL CONS. DIV DIST. 3

JAN 02 2018

Source: BRADENHEAD
Well Flowing: Y
Pressure: 33.0 PSIA
Flow Temp: DEG. F
Ambient Temp: 85 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 08/16/2017
Sample Time: 5.24 PM
Sampled By: MATTHEW YAZZIE
Sampled by (CO): PESCO

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1968	0.0220	0.00	0.0019
CO2	1.0916	0.1870	0.00	0.0166
Methane	83.7028	14.2350	845.40	0.4636
Ethane	7.9942	2.1450	141.47	0.0830
Propane	3.6564	1.0110	92.00	0.0557
Iso-Butane	0.6677	0.2190	21.71	0.0134
N-Butane	0.9990	0.3160	32.59	0.0200
I-Pentane	0.3724	0.1370	14.90	0.0093
N-Pentane	0.2850	0.1040	11.42	0.0071
Hexane Plus	1.0341	0.4630	54.51	0.0342
Total	100.0000	18.8390	1214.01	0.7048

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0034
BTU/CU.FT IDEAL: 1216.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1221.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1199.8
DRY BTU @ 15.025: 1245.5
REAL SPECIFIC GRAVITY: 0.707

CYLINDER #: 7079
CYLINDER PRESSURE: 31 PSIG
DATE RUN: 8/31/17 5:24 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

GC Method: C6+ Gas

Last Cal/Verify: 10/02/2017

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3004522762
Bradenhead

BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: STATE GC J 1A; BHD
Stn. No.: 3004522762
Mtr. No.:

BRADENHEAD
MV

10/02/2017
15950-10335

Smpl Date: 08/16/2017
Test Date: 08/31/2017
Run No: SO170070
Nitrogen: 0.1968
CO2: 1.0916
Methane: 83.7028
Ethane: 7.9942
Propane: 3.6564
I-Butane: 0.6677
N-Butane: 0.9990
I-Pentane: 0.3724
N-Pentane: 0.2850
Hexane+: 1.0341
BTU: 1221.0
GPM: 18.8390
SPG: 0.7070



30045 22 16-2
Casing
2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: SO170082
Cust No: 15950-10390

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: STATE GC J 1A;CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: MV
Cust. Stn. No.:
API 3004522762

OIL CONS. DIV DIST. 3

JAN 02 2018

Source: CASING
Well Flowing: Y
Pressure: 69 PSIA
Flow Temp: DEG. F
Ambient Temp: 76 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 10/16/2017
Sample Time: 3:52 PM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1714	0.1697	0.0190	0.00	0.0017
CO2	1.1433	1.1320	0.1960	0.00	0.0174
Methane	82.9495	82.1327	14.1090	837.79	0.4595
Ethane	8.1146	8.0347	2.1770	143.60	0.0842
Propane	3.7693	3.7322	1.0420	94.84	0.0574
Iso-Butane	0.6930	0.6862	0.2280	22.54	0.0139
N-Butane	1.0213	1.0112	0.3230	33.32	0.0205
I-Pentane	0.3927	0.3888	0.1440	15.71	0.0098
N-Pentane	0.3019	0.2989	0.1100	12.10	0.0075
Hexane Plus	1.4430	1.4288	0.6460	76.06	0.0478
Total	100.0000	99.0152	18.9940	1235.96	0.7196

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
BTU/CU.FT IDEAL: 1238.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1243.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1221.7
DRY BTU @ 15.025: 1268.2
REAL SPECIFIC GRAVITY: 0.7219

CYLINDER #: 7985
CYLINDER PRESSURE: 68 PSIG
DATE RUN: 10/24/17 3:52 PM
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

GC Method: C6+ Gas

Last Cal/Verify: 10/26/2017



30045 22762
Casing

BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: STATE GC J 1A;CSG
Stn. No.:
Mtr. No.: API 3004522762

CASING
MV

10/26/2017
15950-10390

Smpl Date: 10/16/2017
Test Date: 10/24/2017
Run No: SO170082
Nitrogen: 0.1714
CO2: 1.1433
Methane: 82.9495
Ethane: 8.1146
Propane: 3.7693
I-Butane: 0.6930
N-Butane: 1.0213
I-Pentane: 0.3927
N-Pentane: 0.3019
Hexane+: 1.4430
BTU: 1243.3
GPM: 18.9940
SPG: 0.7219



30045 22762
Tubing

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

Analysis No: SO170069
Cust No: 15950-10340

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: STATE GC J 1A; TBG
County/State: SAN JUAN NM
Location:
Field:
Formation: MV
Cust. Str. No.: 3004522762

Source: TUBING
Well Flowing: Y
Pressure: 17.9 PSIA
Flow Temp: DEG. F
Ambient Temp: 85 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 08/16/2017
Sample Time: 5.33 PM
Sampled By: MATTHEW YAZZIE
Sampled by (CO): PESCO

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2143	0.0240	0.00	0.0021
CO2	0.9437	0.1620	0.00	0.0143
Methane	80.5033	13.6960	813.08	0.4459
Ethane	9.5723	2.5690	169.40	0.0994
Propane	4.5416	1.2560	114.27	0.0691
Iso-Butane	0.8191	0.2690	26.64	0.0164
N-Butane	1.2840	0.4060	41.89	0.0258
I-Pentane	0.4657	0.1710	18.63	0.0116
N-Pentane	0.3746	0.1360	15.02	0.0093
Hexane Plus	1.2814	0.5730	67.54	0.0424
Total	100.0000	19.2620	1266.47	0.7364

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0038
BTU/CU.FT IDEAL: 1269.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1274.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1252.0
DRY BTU @ 15.025: 1299.7
REAL SPECIFIC GRAVITY: 0.7389

CYLINDER #: 7015
CYLINDER PRESSURE: 15 PSIG
DATE RUN: 8/31/17 12:00 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: 10/02/2017

30045 22762
Tubing



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: STATE GC J 1A; TBG
Stn. No.: 3004522762
Mtr. No.:

TUBING
MV

10/02/2017
15950-10340

Smpl Date: 08/16/2017
Test Date: 08/31/2017
Run No: SO170069
Nitrogen: 0.2143
CO2: 0.9437
Methane: 80.5033
Ethane: 9.5723
Propane: 4.5416
I-Butane: 0.8191
N-Butane: 1.2840
I-Pentane: 0.4657
N-Pentane: 0.3746
Hexane+: 1.2814
BTU: 1274.2
GPM: 19.2620
SPG: 0.7389