



30-045-22735
Bradenhead

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

Analysis No: SO170013
Cust No: 15950-10060

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEIL A 2A; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation: PC/MV
Cust. Strn. No.: API 3004522735

Source: BRADENHEAD
Pressure: PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 05/24/2017
Sampled By: EUGENIA HAMILTON
Foreman/Engr.: SABRE BEEBE

OIL CONS. DIV DIST. 3
AUG 09 2017

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.643	0.0710	0.00	0.0062
CO2	0.582	0.1000	0.00	0.0088
Methane	86.632	14.7270	874.98	0.4799
Ethane	6.352	1.7030	112.41	0.0659
Propane	3.210	0.8870	80.77	0.0489
Iso-Butane	0.716	0.2350	23.28	0.0144
N-Butane	0.835	0.2640	27.24	0.0168
I-Pentane	0.306	0.1120	12.24	0.0076
N-Pentane	0.185	0.0670	7.42	0.0046
Hexane Plus	0.539	0.2410	28.41	0.0178
Total	100.000	18.4070	1166.76	0.6709

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1173.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1152.6
REAL SPECIFIC GRAVITY: 0.6727

GPM, BTU, and SPG calculations as shown
above are based on current GPA factors.

DRY BTU @ 14.650: 1166.6
DRY BTU @ 14.696: 1170.3
DRY BTU @ 14.730: 1173.0
DRY BTU @ 15.025: 1196.5

CYLINDER #: 7098
CYLINDER PRESSURE: 84 PSIG
DATE RUN: 6/2/17 11:12 AM
ANALYSIS RUN BY: PATRICIA KING

30-045-22735
Bradenhead



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEIL A 2A; BHD
Stn. No.: API 3004522735
Mtr. No.:

BRADENHEAD
PC/MV

06/27/2017
15950-10060

Smpl Date: 05/24/2017
Test Date: 06/02/2017
Run No: SO170013

Nitrogen: 0.643
CO2: 0.582
Methane: 86.632
Ethane: 6.352
Propane: 3.210
I-Butane: 0.716
N-Butane: 0.835
I-Pentane: 0.306
N-Pentane: 0.185
Hexane+: 0.539

BTU: 1173.0
GPM: 18.4070
SPG: 0.6727



30-045-22735
Casing

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

Analysis No: SO170014
Cust No: 15950-10065

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEIL A 2A; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC/MV
Cust. Stn. No.: API 3004522735

Source: CASING
Pressure: PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 05/24/2017
Sampled By: EUGENIA HAMILTON
Foreman/Engr.: SABRE BEEBE

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.183	0.0200	0.00	0.0018
CO2	0.812	0.1390	0.00	0.0123
Methane	86.069	14.6330	869.30	0.4767
Ethane	7.285	1.9540	128.92	0.0756
Propane	3.044	0.8410	76.59	0.0463
Iso-Butane	0.567	0.1860	18.44	0.0114
N-Butane	0.845	0.2670	27.57	0.0170
I-Pentane	0.330	0.1210	13.20	0.0082
N-Pentane	0.231	0.0840	9.26	0.0058
Hexane Plus	0.634	0.2840	33.42	0.0210
Total	100.000	18.5290	1176.69	0.6761

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0031
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1183.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1162.5
REAL SPECIFIC GRAVITY: 0.6779

GPM, BTU, and SPG calculations as shown
above are based on current GPA factors.

DRY BTU @ 14.650: 1176.7
DRY BTU @ 14.696: 1180.4
DRY BTU @ 14.730: 1183.1
DRY BTU @ 15.025: 1206.8

CYLINDER #: 7086
CYLINDER PRESSURE: 118 PSIG
DATE RUN: 6/2/17 11:13 AM
ANALYSIS RUN BY: PATRICIA KING

30-045-22735
Casing



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEIL A 2A; CSG
Stn. No.: API 3004522735
Mtr. No.:

CASING
PC/MV

06/27/2017
15950-10065

Smpl Date: 05/24/2017
Test Date: 06/02/2017
Run No: SO170014

Nitrogen: 0.183
CO2: 0.812
Methane: 86.069
Ethane: 7.285
Propane: 3.044
I-Butane: 0.567
N-Butane: 0.845
I-Pentane: 0.330
N-Pentane: 0.231
Hexane+: 0.634

BTU: 1183.1
GPM: 18.5290
SPG: 0.6779



30-045-27735
Tubing
2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: SO170015
Cust No: 15950-10070

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEIL A 2A; TBG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC/MV
Cust. Stn. No.: API 3004522735

Source: TUBING
Pressure: PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 05/24/2017
Sampled By: EUGENIA HAMILTON
Foreman/Engr.: SABRE BEEBE

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.269	0.0300	0.00	0.0026
CO2	1.061	0.1820	0.00	0.0161
Methane	81.304	13.8300	821.17	0.4503
Ethane	9.386	2.5190	166.10	0.0974
Propane	4.217	1.1660	106.10	0.0642
Iso-Butane	0.682	0.2240	22.18	0.0137
N-Butane	1.303	0.4120	42.51	0.0261
I-Pentane	0.462	0.1700	18.48	0.0115
N-Pentane	0.370	0.1350	14.83	0.0092
Hexane Plus	0.946	0.4230	49.86	0.0313
Total	100.000	19.0910	1241.24	0.7226

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1248.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1226.9
REAL SPECIFIC GRAVITY: 0.7249

GPM, BTU, and SPG calculations as shown
above are based on current GPA factors.

DRY BTU @ 14.650: 1241.8
DRY BTU @ 14.696: 1245.7
DRY BTU @ 14.730: 1248.6
DRY BTU @ 15.025: 1273.6

CYLINDER #: 7021
CYLINDER PRESSURE: 127 PSIG
DATE RUN: 6/2/17 11:15 AM
ANALYSIS RUN BY: PATRICIA KING



30-045-2735
Tubing

BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEIL A 2A; TBG
Stn. No.: API 3004522735
Mtr. No.:

TUBING
PC/MV

06/27/2017
15950-10070

Smpl Date: 05/24/2017
Test Date: 06/02/2017
Run No: SO170015

Nitrogen: 0.269
CO2: 1.061
Methane: 81.304
Ethane: 9.386
Propane: 4.217
I-Butane: 0.682
N-Butane: 1.303
I-Pentane: 0.462
N-Pentane: 0.370
Hexane+: 0.946

BTU: 1248.6
GPM: 19.0910
SPG: 0.7249