



OIL CONS. DIV DIST. 3
AUG 09 2017

30-045-22463
Bradenhead

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

Analysis No: SO170034
Cust No: 15950-10155

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEIL A 7A
County/State: NM
Location:
Field:
Formation: PC/MV
Cust. Stn. No.:
API 3004522463

Source: BRADENHEAD
Pressure: 114 PSIA
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 06/21/2017
Sampled By: E. HAMILTON
Foreman/Engr.: KEVIN IRELAND

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.691	0.0760	0.00	0.0067
CO2	0.010	0.0020	0.00	0.0002
Methane	87.822	14.9260	887.00	0.4864
Ethane	6.862	1.8400	121.44	0.0712
Propane	2.792	0.7710	70.25	0.0425
Iso-Butane	0.486	0.1590	15.80	0.0098
N-Butane	0.674	0.2130	21.99	0.0135
I-Pentane	0.226	0.0830	9.04	0.0056
N-Pentane	0.154	0.0560	6.17	0.0038
Hexane Plus	0.283	0.1270	14.92	0.0094
Total	100.000	18.2530	1146.62	0.6491

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0028
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1152.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1132.4
REAL SPECIFIC GRAVITY: 0.6507

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

DRY BTU @ 14.650: 1146.2
DRY BTU @ 14.696: 1149.8
DRY BTU @ 14.730: 1152.5
DRY BTU @ 15.025: 1175.6

CYLINDER #: 75904
CYLINDER PRESSURE: 104 PSIG
DATE RUN: 7/5/17 7:22 AM
ANALYSIS RUN BY: RICHARD WILSON



30-045-22463
Bradenhead

BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEIL A 7A
Stn. No.:
Mtr. No.: API 3004522463

BRADENHEAD
PC/MV

07/11/2017
15950-10155

Smpl Date: 06/21/2017
Test Date: 07/05/2017
Run No: SO170034

Nitrogen: 0.691
CO2: 0.010
Methane: 87.822
Ethane: 6.862
Propane: 2.792
I-Butane: 0.486
N-Butane: 0.674
I-Pentane: 0.226
N-Pentane: 0.154
Hexane+: 0.283

BTU: 1152.5
GPM: 18.2530
SPG: 0.6507



30-045-72463
Casing

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

Analysis No: SO170035
Cust No: 15950-10185

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEIL A 7A
County/State: NM
Location:
Field:
Formation: PC/MV
Cust. Stn. No.:
API 3004522463

Source: CASING
Pressure: 118 PSIA
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 06/21/2017
Sampled By: E. HAMILTON
Foreman/Engr.: KEVIN IRELAND

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.277	0.0310	0.00	0.0027
CO2	0.158	0.0270	0.00	0.0024
Methane	87.271	14.8370	881.43	0.4834
Ethane	6.782	1.8190	120.02	0.0704
Propane	2.961	0.8180	74.51	0.0451
Iso-Butane	0.528	0.1730	17.18	0.0106
N-Butane	0.637	0.2010	20.78	0.0128
I-Pentane	0.235	0.0860	9.39	0.0058
N-Pentane	0.156	0.0570	6.26	0.0039
Hexane Plus	0.995	0.4450	52.43	0.0329
Total	100.000	18.4940	1182.00	0.6700

* @ 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): 1188.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1167.7
REAL SPECIFIC GRAVITY: 0.6718

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

DRY BTU @ 14.650: 1181.9
DRY BTU @ 14.696: 1185.7
DRY BTU @ 14.730: 1188.4
DRY BTU @ 15.025: 1212.2

CYLINDER #: 7089
CYLINDER PRESSURE: 56 PSIG
DATE RUN: 7/5/17 7:25 AM
ANALYSIS RUN BY: RICHARD WILSON



30-045-22463
Casing

BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEIL A 7A
Stn. No.:
Mtr. No.: API 3004522463

CASING
PC/MV

07/11/2017
15950-10185

Smpl Date: 06/21/2017
Test Date: 07/05/2017
Run No: SO170035

Nitrogen: 0.277
CO2: 0.158
Methane: 87.271
Ethane: 6.782
Propane: 2.961
I-Butane: 0.528
N-Butane: 0.637
I-Pentane: 0.235
N-Pentane: 0.156
Hexane+: 0.995

BTU: 1188.4
GPM: 18.4940
SPG: 0.6718



30-045-22463
Tubing
2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: SO170036
Cust No: 15950-10165

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEIL A 7A
County/State: NM
Location:
Field:
Formation: PC/MV
Cust. Stn. No.:
API 3004522463

Source: TUBING
Pressure: 27 PSIA
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 06/21/2017
Sampled By: E. HAMILTON
Foreman/Engr.: KEVIN IRELAND

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.221	0.0240	0.00	0.0021
CO2	1.427	0.2440	0.00	0.0217
Methane	81.434	13.8530	822.48	0.4511
Ethane	9.003	2.4160	159.32	0.0935
Propane	3.940	1.0890	99.13	0.0600
Iso-Butane	0.724	0.2380	23.53	0.0145
N-Butane	1.143	0.3610	37.28	0.0229
I-Pentane	0.437	0.1600	17.50	0.0109
N-Pentane	0.342	0.1240	13.69	0.0085
Hexane Plus	1.331	0.5960	70.17	0.0441
Total	100.000	19.1050	1243.10	0.7292

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0037
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1250.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1228.8
REAL SPECIFIC GRAVITY: 0.7317

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

DRY BTU @ 14.650: 1243.8
DRY BTU @ 14.696: 1247.7
DRY BTU @ 14.730: 1250.6
DRY BTU @ 15.025: 1275.6

CYLINDER #: 7020
CYLINDER PRESSURE: 26 PSIG
DATE RUN: 7/5/17 7:26 AM
ANALYSIS RUN BY: RICHARD WILSON

30-045-22463
Tubing



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEIL A 7A
Stn. No.:
Mtr. No.: API 3004522463

TUBING
PC/MV

07/11/2017
15950-10165

Smpl Date: 06/21/2017
Test Date: 07/05/2017
Run No: SO170036

Nitrogen: 0.221
CO2: 1.427
Methane: 81.434
Ethane: 9.003
Propane: 3.940
I-Butane: 0.724
N-Butane: 1.143
I-Pentane: 0.437
N-Pentane: 0.342
Hexane+: 1.331

BTU: 1250.6
GPM: 19.1050
SPG: 0.7317