



Brvington GC B 1
30-045-08413
Bradenhead Samples

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

Analysis No: SO180088
Cust No: 15950-10870

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: BRUINGTON GC B 1; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.:

API 3004508413

Heat Trace: N
Remarks:

Source: BRADENHEAD
Well Flowing: Y
Pressure: 17 PSIA
Flow Temp: DEG. F
Ambient Temp: 75 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/13/2018
Sample Time: 10.04 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

NMOC
FEB 13 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.4252	1.2021	0.1570	0.00	0.0138
CO2	0.0199	0.0168	0.0030	0.00	0.0003
Methane	87.8405	74.0876	14.9280	887.19	0.4865
Ethane	7.0538	5.9494	1.8910	124.83	0.0732
Propane	2.1297	1.7963	0.5880	53.59	0.0324
Iso-Butane	0.3073	0.2592	0.1010	9.99	0.0062
N-Butane	0.4761	0.4016	0.1500	15.53	0.0096
I-Pentane	0.1323	0.1116	0.0490	5.29	0.0033
N-Pentane	0.1202	0.1014	0.0440	4.82	0.0030
Hexane Plus	0.4950	0.4175	0.2210	26.09	0.0164
Total	100.0000	84.3435	18.1320	1127.33	0.6447

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
BTU/CU.FT IDEAL: 1129.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1133.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1113.3
DRY BTU @ 15.025: 1155.7
REAL SPECIFIC GRAVITY: 0.6462

CYLINDER #: 7036
CYLINDER PRESSURE: 11 PSIG
ANALYSIS DATE: 07/24/2018
ANALYSIS TIME: 10:08:20 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: 07/26/2018

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: BRUINGTON GC B 1; BHD
Stn. No.:
Mtr. No.: API 3004508413

BRADENHEAD
PC

07/26/2018
15950-10870

Smpl Date: 07/13/2018
Test Date: 07/24/2018
Run No: SO180088

Nitrogen: 1.4252
CO2: 0.0199
Methane: 87.8405
Ethane: 7.0538
Propane: 2.1297
I-Butane: 0.3073
N-Butane: 0.4761
I-Pentane: 0.1323
N-Pentane: 0.1202
Hexane+: 0.4950

BTU: 1133.0
GPM: 18.1320
SPG: 0.6462



Brvington GC B1
30-045-08413
Casing Sample

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

Analysis No: SO180089
Cust No: 15950-10875

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: BRUINGTON GC B 1: CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Str. No.:
API 3004508413

Source: CASING
Well Flowing: Y
Pressure: 160 PSIA
Flow Temp: DEG. F
Ambient Temp: 75 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/13/2018
Sample Time: 10.15 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

NMOC
FEB 13 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3086	0.3102	0.0340	0.00	0.0030
CO2	0.1220	0.1226	0.0210	0.00	0.0019
Methane	84.5701	85.0021	14.3820	854.16	0.4684
Ethane	7.2727	7.3099	1.9510	128.70	0.0755
Propane	3.9637	3.9840	1.0950	99.73	0.0603
Iso-Butane	0.8487	0.8530	0.2790	27.60	0.0170
N-Butane	1.2417	1.2480	0.3930	40.51	0.0249
I-Pentane	0.4831	0.4856	0.1770	19.33	0.0120
N-Pentane	0.3679	0.3698	0.1340	14.75	0.0092
Hexane Plus	0.8215	0.8257	0.3680	43.30	0.0272
Total	100.0000	100.5109	18.8340	1228.08	0.6995

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0034
BTU/CU.FT IDEAL: 1230.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1235.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1213.6
DRY BTU @ 15.025: 1259.8
REAL SPECIFIC GRAVITY: 0.7016

CYLINDER #: 8005
CYLINDER PRESSURE: 127 PSIG
ANALYSIS DATE: 07/23/2018
ANALYSIS TIME: 04:38:06 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: 07/26/2018



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: BRUINGTON GC B 1: CSG
Stn. No.:
Mtr. No.: API 3004508413

CASING
PC

07/26/2018
15950-10875

Smpl Date: 07/13/2018
Test Date: 07/23/2018
Run No: SO180089

Nitrogen: 0.3086
CO2: 0.1220
Methane: 84.5701
Ethane: 7.2727
Propane: 3.9637
I-Butane: 0.8487
N-Butane: 1.2417
I-Pentane: 0.4831
N-Pentane: 0.3679
Hexane+: 0.8215

BTU: 1235.1
GPM: 18.8340
SPG: 0.7016



Brington GC B1
30-045-08413
Tubing Sample

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

Analysis No: SO180090
Cust No: 15950-10880

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: BRINGTON GC B 1; TBG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Str. No.:
API 3004508413

NMOCD
FEB 13 2019
DISTRICT III

Source: TUBING
Well Flowing: Y
Pressure: 140 PSIA
Flow Temp: DEG. F
Ambient Temp: 75 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/13/2018
Sample Time: 10.21 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5653	0.5691	0.0620	0.00	0.0055
CO2	1.5218	1.5321	0.2610	0.00	0.0231
Methane	81.5590	82.1096	13.8690	823.75	0.4518
Ethane	10.1403	10.2087	2.7200	179.45	0.1053
Propane	3.7001	3.7251	1.0220	93.10	0.0563
Iso-Butane	0.4677	0.4709	0.1540	15.21	0.0094
N-Butane	0.8928	0.8988	0.2820	29.13	0.0179
I-Pentane	0.2437	0.2453	0.0890	9.75	0.0061
N-Pentane	0.2092	0.2106	0.0760	8.39	0.0052
Hexane Plus	0.7001	0.7048	0.3130	36.90	0.0232
Total	100.0000	100.6750	18.8480	1195.67	0.7037

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0033
BTU/CU.FT IDEAL: 1198.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1202.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1181.5
DRY BTU @ 15.025: 1226.5
REAL SPECIFIC GRAVITY: 0.7058

CYLINDER #: 7040
CYLINDER PRESSURE: 130 PSIG
ANALYSIS DATE: 07/23/2018
ANALYSIS TIME: 02:58:18 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: 07/26/2018



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: BRUINGTON GC B 1; TBG
Stn. No.:
Mtr. No.: API 3004508413

TUBING
PC

07/26/2018
15950-10880

Smpl Date: 07/13/2018
Test Date: 07/23/2018
Run No: SO180090
Nitrogen: 0.5653
CO2: 1.5218
Methane: 81.5590
Ethane: 10.1403
Propane: 3.7001
I-Butane: 0.4677
N-Butane: 0.8928
I-Pentane: 0.2437
N-Pentane: 0.2092
Hexane+: 0.7001
BTU: 1202.4
GPM: 18.8480
SPG: 0.7058