



30-045-10170
Bradenhead

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

Analysis No: SO170007
Cust No: 15950-10030

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: HEATON COM LS 9; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation: PC/MV
Cust. Stn. No.: API # 3004524988

Source: BRADENHEAD
Pressure: PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 05/11/2017
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	5.035	0.5550	0.00	0.0487
CO2	0.019	0.0030	0.00	0.0003
Methane	83.716	14.2270	845.53	0.4637
Ethane	6.350	1.7020	112.38	0.0659
Propane	2.972	0.8210	74.78	0.0452
Iso-Butane	0.540	0.1770	17.56	0.0108
N-Butane	0.746	0.2360	24.34	0.0150
I-Pentane	0.273	0.1000	10.92	0.0068
N-Pentane	0.160	0.0580	6.41	0.0040
Hexane Plus	0.189	0.0840	9.96	0.0063
Total	100.000	17.9630	1101.88	0.6667

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027

BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1107.4

BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1088.1

REAL SPECIFIC GRAVITY: 0.6683

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

DRY BTU @ 14.650: 1101.4

DRY BTU @ 14.696: 1104.8

DRY BTU @ 14.730: 1107.4

DRY BTU @ 15.025: 1129.6

CYLINDER #: 8001

CYLINDER PRESSURE: 32 PSIG

DATE RUN: 6/2/17 11:07 AM

ANALYSIS RUN BY: PATRICIA KING

30-045-10170
Bradenhead



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: HEATON COM LS 9; BHD
Stn. No.: API # 3004524988
Mtr. No.:

BRADENHEAD
PC/MV

06/27/2017
15950-10030

Smpl Date: 05/11/2017
Test Date: 06/02/2017
Run No: SO170007
Nitrogen: 5.035
CO2: 0.019
Methane: 83.716
Ethane: 6.350
Propane: 2.972
I-Butane: 0.540
N-Butane: 0.746
I-Pentane: 0.273
N-Pentane: 0.160
Hexane+: 0.189
BTU: 1107.4
GPM: 17.9630
SPG: 0.6683



30-045-10170
Casing

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

Analysis No: SO170008
Cust No: 15950-10035

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: HEATON COM LS 9; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC/MV
Cust. Stn. No.: API 3004524988

Source: CASING
Pressure: PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 05/11/2017
Sampled By: EUGENIA HAMILTON
Foreman/Engr.: SABRE BEEBE

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.242	0.0270	0.00	0.0023
CO2	0.513	0.0880	0.00	0.0078
Methane	78.158	13.3060	789.40	0.4329
Ethane	9.655	2.5930	170.86	0.1002
Propane	4.998	1.3830	125.75	0.0761
Iso-Butane	1.010	0.3320	32.84	0.0203
N-Butane	1.618	0.5120	52.78	0.0325
I-Pentane	0.725	0.2660	29.01	0.0181
N-Pentane	0.634	0.2310	25.41	0.0158
Hexane Plus	2.447	1.0960	128.98	0.0810
Total	100.000	19.8340	1355.04	0.7870

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0045
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1364.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1340.6
REAL SPECIFIC GRAVITY: 0.7902

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

DRY BTU @ 14.650: 1356.9
DRY BTU @ 14.696: 1361.2
DRY BTU @ 14.730: 1364.3
DRY BTU @ 15.025: 1391.6

CYLINDER #: 7047
CYLINDER PRESSURE: 31 PSIG
DATE RUN: 6/2/17 11:08 AM
ANALYSIS RUN BY: PATRICIA KING

30-045-1017C
Casing



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: HEATON COM LS 9; CSG
Stn. No.: API 3004524988
Mtr. No.:

CASING
PC/MV

06/27/2017
15950-10035

Smpl Date: 05/11/2017
Test Date: 06/02/2017
Run No: SO170008

Nitrogen: 0.242
CO2: 0.513
Methane: 78.158
Ethane: 9.655
Propane: 4.998
I-Butane: 1.010
N-Butane: 1.618
I-Pentane: 0.725
N-Pentane: 0.634
Hexane+: 2.447

BTU: 1364.3
GPM: 19.8340
SPG: 0.7902



30-045-10170

tubing

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

Analysis No: SO170009
Cust No: 15950-10040

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: HEATON COM LS 9; TBG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC/MV
Cust. Stn. No.: API 3004524988

Source: TUBING
Pressure: PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 05/11/2017
Sampled By: EUGENIA HAMILTON
Foreman/Engr.: SABRE BEEBE

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.289	0.0320	0.00	0.0028
CO2	0.740	0.1270	0.00	0.0112
Methane	81.644	13.8900	824.61	0.4522
Ethane	8.769	2.3530	155.18	0.0910
Propane	4.189	1.1580	105.40	0.0638
Iso-Butane	0.785	0.2580	25.53	0.0158
N-Butane	1.199	0.3790	39.11	0.0241
I-Pentane	0.449	0.1650	17.96	0.0112
N-Pentane	0.344	0.1250	13.79	0.0086
Hexane Plus	1.592	0.7120	83.91	0.0527
Total	100.000	19.1990	1265.50	0.7333

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0038

BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1273.3

BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1251.1

REAL SPECIFIC GRAVITY: 0.7358

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

DRY BTU @ 14.650: 1266.4

DRY BTU @ 14.696: 1270.4

DRY BTU @ 14.730: 1273.3

DRY BTU @ 15.025: 1298.8

CYLINDER #: 7067

CYLINDER PRESSURE: 14 PSIG

DATE RUN: 6/2/17 11:09 AM

ANALYSIS RUN BY: PATRICIA KING

30-045-1017C
tubing



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: HEATON COM LS 9; TBG
Stn. No.: API 3004524988
Mtr. No.:

TUBING
PC/MV

06/27/2017
15950-10040

Smpl Date: 05/11/2017
Test Date: 06/02/2017
Run No: SO170009
Nitrogen: 0.289
CO2: 0.740
Methane: 81.644
Ethane: 8.769
Propane: 4.189
I-Butane: 0.785
N-Butane: 1.199
I-Pentane: 0.449
N-Pentane: 0.344
Hexane+: 1.592
BTU: 1273.3
GPM: 19.1990
SPG: 0.7358