



Hutton GC 1
30-045-13268
Bradenhead Sample

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

Analysis No: SO180084
Cust No: 15950-10850

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: HUTTON GC 1; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: API 3004513268

Source: BRADENHEAD
Well Flowing: Y
Pressure: 136 PSIA
Flow Temp: DEG. F
Ambient Temp: 71 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/10/2018
Sample Time: 8.35 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

NMOCB
FEB 13 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2411	0.2406	0.0270	0.00	0.0023
CO2	0.0052	0.0052	0.0010	0.00	0.0001
Methane	88.7035	88.5069	15.0760	895.91	0.4913
Ethane	7.0155	6.9999	1.8810	124.15	0.0728
Propane	2.5785	2.5728	0.7120	64.88	0.0393
Iso-Butane	0.4069	0.4060	0.1330	13.23	0.0082
N-Butane	0.5789	0.5776	0.1830	18.89	0.0116
I-Pentane	0.1685	0.1681	0.0620	6.74	0.0042
N-Pentane	0.1149	0.1146	0.0420	4.61	0.0029
Hexane Plus	0.1870	0.1866	0.0840	9.86	0.0062
Total	100.0000	99.7783	18.2010	1138.26	0.6389

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0028
BTU/CU.FT IDEAL: 1140.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1144.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1124.1
DRY BTU @ 15.025: 1166.9
REAL SPECIFIC GRAVITY: 0.6403

CYLINDER #: 7085
CYLINDER PRESSURE: 100 PSIG
ANALYSIS DATE: 07/17/2018
ANALYSIS TIME: 03:37:20 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: 07/19/2018



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: HUTTON GC 1; BHD
Stn. No.: API 3004513268
Mtr. No.:

BRADENHEAD
PC

07/19/2018
15950-10850

Smpl Date: 07/10/2018
Test Date: 07/17/2018
Run No: SO180084

Nitrogen: 0.2411
CO2: 0.0052
Methane: 88.7035
Ethane: 7.0155
Propane: 2.5785
I-Butane: 0.4069
N-Butane: 0.5789
I-Pentane: 0.1685
N-Pentane: 0.1149
Hexane+: 0.1870

BTU: 1144.0
GPM: 18.2010
SPG: 0.6403



HUTTON GC 1
30-045-13268
Casing Sample

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

Analysis No: SO180085
Cust No: 15950-10855

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: HUTTON GC 1; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: API 3004513268

Source: CASING
Well Flowing: Y
Pressure: 135 PSIA
Flow Temp: DEG. F
Ambient Temp: 71 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/10/2018
Sample Time: 8.40 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	0.4114	0.4076	0.0450	0.00	0.0040
CO2	1.5564	1.5419	0.2660	0.00	0.0236
Methane	83.1948	82.4203	14.1470	840.27	0.4608
Ethane	8.5332	8.4538	2.2890	151.01	0.0886
Propane	3.4896	3.4571	0.9640	87.80	0.0531
Iso-Butane	0.5256	0.5207	0.1730	17.09	0.0105
N-Butane	0.9469	0.9381	0.2990	30.89	0.0190
I-Pentane	0.3173	0.3143	0.1160	12.69	0.0079
N-Pentane	0.2753	0.2727	0.1000	11.04	0.0069
Hexane Plus	0.7495	0.7425	0.3350	39.51	0.0248
Total	100.0000	99.0690	18.7340	1190.30	0.6993

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0033
BTU/CU.FT IDEAL: 1193.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1197.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1176.2
DRY BTU @ 15.025: 1221.0
REAL SPECIFIC GRAVITY: 0.7013

CYLINDER #: 7020
CYLINDER PRESSURE: 128 PSIG
ANALYSIS DATE: 07/17/2018
ANALYSIS TIME: 03:32:49 PM
ANALYSIS RUN BY: SHYANN ELLEDGE

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: 07/19/2018



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: HUTTON GC 1; CSG
Stn. No.: API 3004513268
Mtr. No.:

CASING
PC

07/19/2018
15950-10855

Smpl Date: 07/10/2018
Test Date: 07/17/2018
Run No: SO180085

Nitrogen: 0.4114
CO2: 1.5564
Methane: 83.1948
Ethane: 8.5332
Propane: 3.4896
I-Butane: 0.5256
N-Butane: 0.9469
I-Pentane: 0.3173
N-Pentane: 0.2753
Hexane+: 0.7495

BTU: 1197.0
GPM: 18.7340
SPG: 0.7013



HUTTON GC 1
30-045-13268
Tubing Sample

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

Analysis No: SO180086
Cust No: 15950-10860

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: HUTTON GC 1; TBG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: API 3004513268

Source: TUBING
Well Flowing: Y
Pressure: 135 PSIA
Flow Temp: DEG. F
Ambient Temp: 71 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/10/2018
Sample Time: 8.44 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	0.4686	0.4699	0.0520	0.00	0.0045
CO2	1.1015	1.1044	0.1880	0.00	0.0167
Methane	88.8546	89.0919	15.0990	897.43	0.4922
Ethane	7.4669	7.4868	2.0020	132.14	0.0775
Propane	1.3511	1.3547	0.3730	34.00	0.0206
Iso-Butane	0.1407	0.1411	0.0460	4.58	0.0028
N-Butane	0.1826	0.1831	0.0580	5.96	0.0037
I-Pentane	0.0533	0.0534	0.0200	2.13	0.0013
N-Pentane	0.0383	0.0384	0.0140	1.54	0.0010
Hexane Plus	0.3424	0.3433	0.1530	18.05	0.0113
Total	100.0000	100.2670	18.0050	1095.82	0.6316

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
BTU/CU.FT IDEAL: 1098.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1101.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1082.0
DRY BTU @ 15.025: 1123.3
REAL SPECIFIC GRAVITY: 0.633

CYLINDER #: 7079
CYLINDER PRESSURE: 124 PSIG
ANALYSIS DATE: 07/17/2018
ANALYSIS TIME: 03:26:47 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: 07/19/2018



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: HUTTON GC 1; TBG
Stn. No.: API 3004513268
Mtr. No.:

TUBING
PC

07/19/2018
15950-10860

Smpl Date: 07/10/2018
Test Date: 07/17/2018
Run No: SO180086
Nitrogen: 0.4686
CO2: 1.1015
Methane: 88.8546
Ethane: 7.4669
Propane: 1.3511
I-Butane: 0.1407
N-Butane: 0.1826
I-Pentane: 0.0533
N-Pentane: 0.0383
Hexane+: 0.3424
BTU: 1101.2
GPM: 18.0050
SPG: 0.6330