



GCU 358
30-045-26367
Bradenhead Sample

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

Analysis No: SO180015
Cust No: 15950-10505

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: GCU #358; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation: FS
Cust. Stn. No.: API 3004526367

Source: BRADENHEAD
Well Flowing: Y
Pressure: 30 PSIA
Flow Temp: DEG. F
Ambient Temp: 91 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 06/13/2018
Sample Time: 1.11 PM
Sampled By: EUGENIA HAMILTON
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

NMCOG
FEB 13 2013
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.8216	0.8214	0.0910	0.00	0.0079
CO2	0.0267	0.0267	0.0050	0.00	0.0004
Methane	89.2436	89.2201	15.1660	901.36	0.4943
Ethane	5.9469	5.9453	1.5940	105.24	0.0617
Propane	2.2049	2.2043	0.6090	55.48	0.0336
Iso-Butane	0.4747	0.4746	0.1560	15.44	0.0095
N-Butane	0.5143	0.5142	0.1630	16.78	0.0103
I-Pentane	0.2901	0.2900	0.1060	11.61	0.0072
N-Pentane	0.0836	0.0836	0.0300	3.35	0.0021
Hexane Plus	0.3936	0.3935	0.1760	20.75	0.0130
Total	100.0000	99.9737	18.0960	1130.00	0.6402

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
BTU/CU.FT IDEAL: 1132.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1135.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1115.9
DRY BTU @ 15.025: 1158.4
REAL SPECIFIC GRAVITY: 0.6416

CYLINDER #: 7056
CYLINDER PRESSURE: 28 PSIG
ANALYSIS DATE: 06/19/2018
ANALYSIS TIME: 03:52:06 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: 06/21/2018

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BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: GCU #358; BHD
Stn. No.: API 3004526367
Mtr. No.:

BRADENHEAD
FS

06/21/2018
15950-10505

Smpl Date: 06/13/2018
Test Date: 06/19/2018
Run No: SO180015

Nitrogen: 0.8216
CO2: 0.0267
Methane: 89.2436
Ethane: 5.9469
Propane: 2.2049
I-Butane: 0.4747
N-Butane: 0.5143
I-Pentane: 0.2901
N-Pentane: 0.0836
Hexane+: 0.3936

BTU: 1135.7
GPM: 18.0960
SPG: 0.6416



GCU 358
30-045-26367
Casing Sample

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

Analysis No: SO180016
Cust No: 15950-10510

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: GCU #358; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: FS
Cust. Str. No.: API 3004526367

Source: CASING
Well Flowing: Y
Pressure: 66 PSIA
Flow Temp: DEG. F
Ambient Temp: 91 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 06/13/2018
Sample Time: 1.28 PM
Sampled By: EUGENIA HAMILTON
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

NM000
FEB 13 2013
DISTRICT III

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5633	0.5694	0.0620	0.00	0.0054
CO2	0.9847	0.9953	0.1690	0.00	0.0150
Methane	58.6025	59.2326	9.9990	591.89	0.3246
Ethane	16.2727	16.4477	4.3800	287.98	0.1689
Propane	13.2618	13.4044	3.6770	333.68	0.2019
Iso-Butane	1.7893	1.8085	0.5890	58.19	0.0359
N-Butane	4.5582	4.6072	1.4460	148.70	0.0915
I-Pentane	1.2092	1.2222	0.4450	48.38	0.0301
N-Pentane	1.1841	1.1968	0.4320	47.47	0.0295
Hexane Plus	1.5742	1.5911	0.7070	82.98	0.0521
Total	100.0000	101.0752	21.9060	1599.25	0.9550

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0067
BTU/CU.FT IDEAL: 1603.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1613.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1585.5
DRY BTU @ 15.025: 1645.9
REAL SPECIFIC GRAVITY: 0.9609

CYLINDER #: 7013
CYLINDER PRESSURE: 66 PSIG
ANALYSIS DATE: 06/19/2018
ANALYSIS TIME: 03:36:35 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: 06/21/2018



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: GCU #358; CSG
Stn. No.: API 3004526367
Mtr. No.:

CASING
FS

06/21/2018
15950-10510

Smpl Date: 06/13/2018
Test Date: 06/19/2018
Run No: SO180016

Nitrogen: 0.5633
CO2: 0.9847
Methane: 58.6025
Ethane: 16.2727
Propane: 13.2618
I-Butane: 1.7893
N-Butane: 4.5582
I-Pentane: 1.2092
N-Pentane: 1.1841
Hexane+: 1.5742

BTU: 1613.6
GPM: 21.9060
SPG: 0.9609



GCU 358
30-045-26367
Tubing Sample

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

Analysis No: SO180017
Cust No: 15950-10515

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: GCU #358; TBG
County/State: SAN JUAN NM
Location:
Field:
Formation: FS
Cust. Stn. No.: API 3004526367

Source: TUBING
Well Flowing: Y
Pressure: 64 PSIA
Flow Temp: DEG. F
Ambient Temp: 91 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 06/13/2018
Sample Time: 1.21 PM
Sampled By: EUGENIA HAMILTON
Sampled by (CO): PESCO

Heat Trace: N

Remarks:



Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5189	0.5155	0.0570	0.00	0.0050
CO2	1.1533	1.1457	0.1980	0.00	0.0175
Methane	63.9449	63.5263	10.8990	645.84	0.3542
Ethane	15.5989	15.4968	4.1940	276.05	0.1619
Propane	11.4717	11.3966	3.1770	288.64	0.1747
Iso-Butane	1.4580	1.4485	0.4800	47.41	0.0293
N-Butane	3.1857	3.1648	1.0100	103.93	0.0639
I-Pentane	0.7113	0.7066	0.2620	28.46	0.0177
N-Pentane	0.6371	0.6329	0.2320	25.54	0.0159
Hexane Plus	1.3202	1.3116	0.5920	69.59	0.0437
Total	100.0000	99.3453	21.1010	1485.46	0.8838

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0056
BTU/CU.FT IDEAL: 1488.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1497.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1471.2
DRY BTU @ 15.025: 1527.3
REAL SPECIFIC GRAVITY: 0.8884

CYLINDER #: 7031
CYLINDER PRESSURE: 58 PSIG
ANALYSIS DATE: 06/19/2018
ANALYSIS TIME: 03:45:22 PM
ANALYSIS RUN BY: PATRICIA KING

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: 06/21/2018



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: GCU #358; TBG
Stn. No.: API 3004526367
Mtr. No.:

TUBING
FS

06/21/2018
15950-10515

Smpl Date: 06/13/2018
Test Date: 06/19/2018
Run No: SO180017
Nitrogen: 0.5189
CO2: 1.1533
Methane: 63.9449
Ethane: 15.5989
Propane: 11.4717
I-Butane: 1.4580
N-Butane: 3.1857
I-Pentane: 0.7113
N-Pentane: 0.6371
Hexane+: 1.3202
BTU: 1497.3
GPM: 21.1010
SPG: 0.8884