



GCU 49
30-045-07076
Bradenhead sample

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

Analysis No: SO180021
Cust No: 15950-10535

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: GCU #49; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Str. No.: API 3004507076

Source: BRADENHEAD
Well Flowing: Y
Pressure: 56 PSIA
Flow Temp: DEG. F
Ambient Temp: 69 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 06/25/2018
Sample Time: 9.03 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Well
Plugged
17-25-18

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4727	0.4679	0.0520	0.00	0.0046
CO2	0.0182	0.0180	0.0030	0.00	0.0003
Methane	91.0586	90.1251	15.4730	919.69	0.5044
Ethane	5.3713	5.3162	1.4400	95.06	0.0558
Propane	1.8652	1.8461	0.5150	46.93	0.0284
Iso-Butane	0.3431	0.3396	0.1130	11.16	0.0069
N-Butane	0.4258	0.4214	0.1350	13.89	0.0085
I-Pentane	0.1481	0.1466	0.0540	5.93	0.0037
N-Pentane	0.0976	0.0966	0.0350	3.91	0.0024
Hexane Plus	0.1994	0.1974	0.0890	10.51	0.0066
Total	100.0000	98.9749	17.9090	1107.07	0.6215

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
BTU/CU.FT IDEAL: 1109.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1112.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1093.1
DRY BTU @ 15.025: 1134.8
REAL SPECIFIC GRAVITY: 0.6229

CYLINDER #: 7058
CYLINDER PRESSURE: 48 PSIG
ANALYSIS DATE: 07/05/2018
ANALYSIS TIME: 11:32:51 AM
ANALYSIS RUN BY: CAMERON MANGAN

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: 07/09/2018

NMOC
FEB 13 2019
DISTRICT III



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: GCU #49; BHD
Stn. No.: API 3004507076
Mtr. No.:

BRADENHEAD
PC

07/09/2018
15950-10535

Smpl Date: 06/25/2018
Test Date: 07/05/2018
Run No: SO180021

Nitrogen: 0.4727
CO2: 0.0182
Methane: 91.0586
Ethane: 5.3713
Propane: 1.8652
I-Butane: 0.3431
N-Butane: 0.4258
I-Pentane: 0.1481
N-Pentane: 0.0976
Hexane+: 0.1994

BTU: 1112.5
GPM: 17.9090
SPG: 0.6229



GCU 49
30-045-07076
Casing Sample

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

Analysis No: SO180022
Cust No: 15950-10540

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: GCU #49; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: API 3004507076

Source: CASING
Well Flowing: Y
Pressure: 23 PSIA
Flow Temp: DEG. F
Ambient Temp: 69 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 06/25/2018
Sample Time: 9.30 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	2.3572	2.3680	0.2600	0.00	0.0228
CO2	0.0524	0.0526	0.0090	0.00	0.0008
Methane	93.7904	94.2196	15.9310	947.28	0.5195
Ethane	2.7342	2.7467	0.7330	48.39	0.0284
Propane	0.5320	0.5344	0.1470	13.39	0.0081
Iso-Butane	0.1666	0.1674	0.0550	5.42	0.0033
N-Butane	0.0651	0.0654	0.0210	2.12	0.0013
I-Pentane	0.0280	0.0281	0.0100	1.12	0.0007
N-Pentane	0.0185	0.0186	0.0070	0.74	0.0005
Hexane Plus	0.2556	0.2568	0.1140	13.47	0.0085
Total	100.0000	100.4576	17.2870	1031.93	0.5939

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
BTU/CU.FT IDEAL: 1034.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1036.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1018.6
DRY BTU @ 15.025: 1057.4
REAL SPECIFIC GRAVITY: 0.5949

CYLINDER #: 7079
CYLINDER PRESSURE: 14 PSIG
ANALYSIS DATE: 07/05/2018
ANALYSIS TIME: 08:55:17 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: 07/09/2018

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: GCU #49; CSG
Stn. No.: API 3004507076
Mtr. No.:

CASING
PC

07/09/2018
15950-10540

Smpl Date: 06/25/2018
Test Date: 07/05/2018
Run No: SO180022

Nitrogen: 2.3572
CO2: 0.0524
Methane: 93.7904
Ethane: 2.7342
Propane: 0.5320
I-Butane: 0.1666
N-Butane: 0.0651
I-Pentane: 0.0280
N-Pentane: 0.0185
Hexane+: 0.2556

BTU: 1036.6
GPM: 17.2870
SPG: 0.5949