



GCU 222E
30-045-26192
Bradenhead Sample

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

Analysis No: SO180010
Cust No: 15950-10480

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: GCU #222E; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Str. No.: API 3004526192

Source: BRADENHEAD
Well Flowing: Y
Pressure: 83 PSIA
Flow Temp: DEG. F
Ambient Temp: 67 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 06/13/2018
Sample Time: 8.20 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	1.5068	1.5108	0.1660	0.00	0.0146
CO2	0.0019	0.0019	0.0000	0.00	0.0000
Methane	90.9875	91.2285	15.4600	918.97	0.5040
Ethane	4.7785	4.7912	1.2810	84.57	0.0496
Propane	1.7051	1.7096	0.4710	42.90	0.0260
Iso-Butane	0.3122	0.3130	0.1020	10.15	0.0063
N-Butane	0.3680	0.3690	0.1160	12.01	0.0074
I-Pentane	0.1249	0.1252	0.0460	5.00	0.0031
N-Pentane	0.0820	0.0822	0.0300	3.29	0.0020
Hexane Plus	0.1331	0.1335	0.0590	7.02	0.0044
Total	100.0000	100.2649	17.7310	1083.90	0.6174

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0025
BTU/CU.FT IDEAL: 1086.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1089.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1070.1
DRY BTU @ 15.025: 1110.9
REAL SPECIFIC GRAVITY: 0.6187

CYLINDER #: 7065
CYLINDER PRESSURE: 76 PSIG
ANALYSIS DATE: 06/19/2018
ANALYSIS TIME: 03:03:57 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

Last Cal/Verify: 06/21/2018

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: GCU #222E; BHD
Stn. No.: API 3004526192
Mtr. No.:

BRADENHEAD
PC

06/21/2018
15950-10480

Smpl Date: 06/13/2018
Test Date: 06/19/2018
Run No: SO180010

Nitrogen: 1.5068
CO2: 0.0019
Methane: 90.9875
Ethane: 4.7785
Propane: 1.7051
I-Butane: 0.3122
N-Butane: 0.3680
I-Pentane: 0.1249
N-Pentane: 0.0820
Hexane+: 0.1331

BTU: 1089.1
GPM: 17.7310
SPG: 0.6187



GCU 222 E
30-045-26192
Casing Sample

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

Analysis No: SO180011
Cust No: 15950-10485

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: GCU #222E; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: API 3004526192

Source: CASING
Well Flowing: Y
Pressure: 25 PSIA
Flow Temp: DEG. F
Ambient Temp: 67 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 06/13/2018
Sample Time: 8.34 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	0.8392	0.8249	0.0930	0.00	0.0081
CO2	0.8251	0.8111	0.1410	0.00	0.0125
Methane	76.0974	74.8020	12.9560	768.58	0.4215
Ethane	9.8598	9.6920	2.6480	174.49	0.1024
Propane	6.0715	5.9682	1.6800	152.77	0.0924
Iso-Butane	0.7903	0.7768	0.2600	25.70	0.0159
N-Butane	2.1177	2.0817	0.6700	69.09	0.0425
I-Pentane	0.6138	0.6034	0.2250	24.56	0.0153
N-Pentane	0.6719	0.6605	0.2450	26.93	0.0167
Hexane Plus	2.1133	2.0773	0.9460	111.39	0.0699
Total	100.0000	98.2979	19.8640	1353.51	0.7973

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0045
BTU/CU.FT IDEAL: 1356.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1362.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1339.1
DRY BTU @ 15.025: 1390.1
REAL SPECIFIC GRAVITY: 0.8006

CYLINDER #: 7086
CYLINDER PRESSURE: 26 PSIG
ANALYSIS DATE: 06/19/2018
ANALYSIS TIME: 03:08:30 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 #222E; CSG
Stn. No.: API 3004526192
Mtr. No.:

CASING
PC

06/21/2018
15950-10485

Smpl Date: 06/13/2018
Test Date: 06/19/2018
Run No: SO180011

Nitrogen: 0.8392
CO2: 0.8251
Methane: 76.0974
Ethane: 9.8598
Propane: 6.0715
I-Butane: 0.7903
N-Butane: 2.1177
I-Pentane: 0.6138
N-Pentane: 0.6719
Hexane+: 2.1133

BTU: 1362.8
GPM: 19.8640
SPG: 0.8006