



GCU 217E
30-045-24645
Bradenhead Sample

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

Analysis No: SO180160
Cust No: 15950-11230

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: GCU #217E; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: API 3004524645

Source: BRADENHEAD
Well Flowing: Y
Pressure: 145 PSIA
Flow Temp: DEG. F
Ambient Temp: 73 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/31/2018
Sample Time: 9.18 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

NMOOD
FEB 13 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2553	0.2512	0.0280	0.00	0.0025
CO2	0.0025	0.0025	0.0000	0.00	0.0000
Methane	90.0320	88.5999	15.3000	909.32	0.4987
Ethane	6.0515	5.9552	1.6220	107.09	0.0628
Propane	2.2548	2.2189	0.6230	56.73	0.0343
Iso-Butane	0.4172	0.4106	0.1370	13.57	0.0084
N-Butane	0.4887	0.4809	0.1540	15.94	0.0098
I-Pentane	0.1663	0.1637	0.0610	6.65	0.0041
N-Pentane	0.1076	0.1059	0.0390	4.31	0.0027
Hexane Plus	0.2241	0.2205	0.1000	11.81	0.0074
Total	100.0000	98.4093	18.0640	1125.44	0.6308

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
BTU/CU.FT IDEAL: 1128.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1131.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1111.4
DRY BTU @ 15.025: 1153.8
REAL SPECIFIC GRAVITY: 0.6322

CYLINDER #: 7044
CYLINDER PRESSURE: 129 PSIG
ANALYSIS DATE: 08/06/2018
ANALYSIS TIME: 07:34:49 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

Last Cal/Verify: 08/09/2018

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: GCU #217E; BHD
Stn. No.: API 3004524645
Mtr. No.:

BRADENHEAD
PC

08/09/2018
15950-11230

Smpl Date: 07/31/2018
Test Date: 08/06/2018
Run No: SO180160

Nitrogen: 0.2553
CO2: 0.0025
Methane: 90.0320
Ethane: 6.0515
Propane: 2.2548
I-Butane: 0.4172
N-Butane: 0.4887
I-Pentane: 0.1663
N-Pentane: 0.1076
Hexane+: 0.2241

BTU: 1131.1
GPM: 18.0640
SPG: 0.6322



GCU 217E
30-045-24645
Casing Sample

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

Analysis No: SO180161
Cust No: 15950-11235

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: GCU #217E; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: API 3004524645

Source: CASING
Well Flowing: Y
Pressure: 20 PSIA
Flow Temp: DEG. F
Ambient Temp: 73 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/31/2018
Sample Time: 9.26 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

NM000
FEB 13 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6131	0.6052	0.0680	0.00	0.0059
CO2	1.1107	1.0963	0.1900	0.00	0.0169
Methane	74.7886	73.8202	12.7390	755.36	0.4143
Ethane	10.6146	10.4772	2.8520	187.85	0.1102
Propane	5.4655	5.3947	1.5130	137.52	0.0832
Iso-Butane	0.7783	0.7682	0.2560	25.31	0.0156
N-Butane	1.7939	1.7707	0.5680	58.52	0.0360
I-Pentane	0.6405	0.6322	0.2350	25.63	0.0160
N-Pentane	0.6592	0.6507	0.2400	26.43	0.0164
Hexane Plus	3.5356	3.4898	1.5840	186.36	0.1170
Total	100.0000	98.7052	20.2450	1402.98	0.8315

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.005
BTU/CU.FT IDEAL: 1406.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1413.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1388.7
DRY BTU @ 15.025: 1441.6
REAL SPECIFIC GRAVITY: 0.8353

CYLINDER #: 7073
CYLINDER PRESSURE: 18 PSIG
ANALYSIS DATE: 08/03/2018
ANALYSIS TIME: 12:36:19 AM
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

Last Cal/Verify: 08/09/2018

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: GCU #217E; CSG
Stn. No.: API 3004524645
Mtr. No.:

CASING
PC

08/09/2018
15950-11235

Smpl Date: 07/31/2018
Test Date: 08/03/2018
Run No: SO180161

Nitrogen: 0.6131
CO2: 1.1107
Methane: 74.7886
Ethane: 10.6146
Propane: 5.4655
I-Butane: 0.7783
N-Butane: 1.7939
I-Pentane: 0.6405
N-Pentane: 0.6592
Hexane+: 3.5356

BTU: 1413.3
GPM: 20.2450
SPG: 0.8353