



30-045-10258
Bradenhead
2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: SO170074
Cust No: 15950-10370

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: RIDDLE C LS 3;BHD
County/State: SAN JUAN NM
Location:
Field:
Formation:
Cust. Stn. No.:
API 3004510258

OIL CONS. DIV DIST. 3

JAN 02 2018

Source: BRADENHEAD
Well Flowing: Y
Pressure: 38 PSIA
Flow Temp: DEG. F
Ambient Temp: 49 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 09/27/2017
Sample Time: 11.40 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	9.5670	1.0540	0.00	0.0925
CO2	0.0186	0.0030	0.00	0.0003
Methane	84.6044	14.3690	854.50	0.4686
Ethane	4.2377	1.1350	74.99	0.0440
Propane	1.0479	0.2890	26.37	0.0160
Iso-Butane	0.1052	0.0340	3.42	0.0021
N-Butane	0.0492	0.0160	1.61	0.0010
I-Pentane	0.0551	0.0200	2.20	0.0014
N-Pentane	0.0180	0.0070	0.72	0.0004
Hexane Plus	0.2969	0.1330	15.65	0.0098
Total	100.0000	17.0600	979.47	0.6361

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
BTU/CU.FT IDEAL: 981.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 983.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 966.7
DRY BTU @ 15.025: 1003.5
REAL SPECIFIC GRAVITY: 0.6372

CYLINDER #: 7028
CYLINDER PRESSURE: 37 PSIG
DATE RUN: 10/2/17 12:00 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

GC Method: C6+ Gas

Last Cal/Verify: 10/10/2017

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30-045-10258
Bradenhead

BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: RIDDLE C LS 3;BHD
Stn. No.:
Mtr. No.: API 3004510258

BRADENHEAD

10/10/2017
15950-10370

Smpl Date: 09/27/2017
Test Date: 10/02/2017
Run No: SO170074
Nitrogen: 9.5670
CO2: 0.0186
Methane: 84.6044
Ethane: 4.2377
Propane: 1.0479
I-Butane: 0.1052
N-Butane: 0.0492
I-Pentane: 0.0551
N-Pentane: 0.0180
Hexane+: 0.2969
BTU: 983.8
GPM: 17.0600
SPG: 0.6372



3004510258
Casing

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

Analysis No: SO170075
Cust No: 15950-10360

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: RIDDLE C LS 3;CSG
County/State: SAN JUAN NM
Location:
Field:
Formation:
Cust. Stn. No.:
API 3004510258

OIL CONS. DIV DIST. 3

JAN 02 2018

Source: CASING
Well Flowing: Y
Pressure: 72 PSIA
Flow Temp: DEG. F
Ambient Temp: 50 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 09/27/2017
Sample Time: 12.18 PM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1481	0.0160	0.00	0.0014
CO2	1.3129	0.2250	0.00	0.0199
Methane	82.1609	13.9740	829.83	0.4551
Ethane	8.7622	2.3510	155.06	0.0910
Propane	4.2041	1.1620	105.78	0.0640
Iso-Butane	0.7226	0.2370	23.50	0.0145
N-Butane	1.1454	0.3620	37.37	0.0230
I-Pentane	0.3973	0.1460	15.90	0.0099
N-Pentane	0.3132	0.1140	12.56	0.0078
Hexane Plus	0.8333	0.3730	43.92	0.0276
Total	100.0000	18.9600	1223.91	0.7142

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0035
BTU/CU.FT IDEAL: 1226.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1231.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1209.6
DRY BTU @ 15.025: 1255.7
REAL SPECIFIC GRAVITY: 0.7164

CYLINDER #: 7099
CYLINDER PRESSURE: 71 PSIG
DATE RUN: 10/2/17 12:00 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

GC Method: C6+ Gas

Last Cal/Verify: 10/10/2017

3004510258
Casing



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: RIDDLE C LS 3;CSG
Stn. No.:
Mtr. No.: API 3004510258

CASING

10/10/2017
15950-10360

Smpl Date: 09/27/2017
Test Date: 10/02/2017
Run No: SO170075
Nitrogen: 0.1481
CO2: 1.3129
Methane: 82.1609
Ethane: 8.7622
Propane: 4.2041
I-Butane: 0.7226
N-Butane: 1.1454
I-Pentane: 0.3973
N-Pentane: 0.3132
Hexane+: 0.8333
BTU: 1231.0
GPM: 18.9600
SPG: 0.7164



3004510258
Tubing
2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: SO170076
Cust No: 15950-10365

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: RIDDLE C LS 3;TBG
County/State: SAN JAUN NM
Location:
Field:
Formation:
Cust. Stn. No.:
API 3004510258

OIL CONS. DIV DIST. 3

JAN 02 2018

Source: TUBING
Well Flowing: Y
Pressure: 74 PSIA
Flow Temp: DEG. F
Ambient Temp: 49 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 09/27/2017
Sample Time: 11.46 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Remarks:

Analysis

Component:	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1167	0.0130	0.00	0.0011
CO2	1.5801	0.2700	0.00	0.0240
Methane	84.7960	14.4180	856.44	0.4697
Ethane	7.7133	2.0690	136.50	0.0801
Propane	3.0763	0.8500	77.40	0.0468
Iso-Butane	0.5906	0.1940	19.21	0.0119
N-Butane	0.8110	0.2560	26.46	0.0163
I-Pentane	0.3047	0.1120	12.19	0.0076
N-Pentane	0.2214	0.0800	8.88	0.0055
Hexane Plus	0.7899	0.3530	41.64	0.0261
Total	100.0000	18.6150	1178.71	0.6891

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0032
BTU/CU.FT IDEAL: 1181.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1185.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1164.6
DRY BTU @ 15.025: 1208.9
REAL SPECIFIC GRAVITY: 0.6911

CYLINDER #: 7012
CYLINDER PRESSURE: 76 PSIG
DATE RUN: 10/2/17 11:46 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: 10/10/2017

GC Method: C6+ Gas



3004510258
TUBING

BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: RIDDLE C LS 3;TBG
Stn. No.:
Mtr. No.: API 3004510258

TUBING

10/10/2017
15950-10365

Smpl Date: 09/27/2017
Test Date: 10/02/2017
Run No: SO170076

Nitrogen: 0.1167
CO2: 1.5801
Methane: 84.7960
Ethane: 7.7133
Propane: 3.0763
I-Butane: 0.5906
N-Butane: 0.8110
I-Pentane: 0.3047
N-Pentane: 0.2214
Hexane+: 0.7899

BTU: 1185.2
GPM: 18.6150
SPG: 0.6911