



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

Analysis No: SO170020
Cust No: 15950-10095

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: GARTNER A 004-MV; INT
County/State: SAN JUAN NM
Location:
Field:
Formation: MV
Cust. Stn. No.: API # 3004509010

Source: INTERMEDIATE
Well Flowing: Y
Pressure: 13 PSIA
Flow Temp: DEG. F
Ambient Temp: 83 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 05/30/2017
Sample Time: 12.29 PM
Sampled By: M. YAZZIE
Sampled by (CO): SABRE BEEBE

OIL CONS. DIV DIST. 3

JAN 02 2018

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0990	0.0110	0.00	0.0010
CO2	1.6870	0.2890	0.00	0.0256
Methane	88.0982	14.9730	889.79	0.4880
Ethane	5.8429	1.5670	103.40	0.0607
Propane	2.4630	0.6800	61.97	0.0375
Iso-Butane	0.4350	0.1430	14.15	0.0087
N-Butane	0.6350	0.2010	20.72	0.0127
I-Pentane	0.2040	0.0750	8.16	0.0051
N-Pentane	0.1430	0.0520	5.73	0.0036
Hexane Plus	0.3930	0.1760	20.71	0.0130
Total	100.0000	18.1670	1124.63	0.6558

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0028
BTU/CU.FT IDEAL: 1127.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1130.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1110.7
DRY BTU @ 15.025: 1153.0
REAL SPECIFIC GRAVITY: 0.6574

CYLINDER #: 8003
CYLINDER PRESSURE: 95 PSIG
DATE RUN: 6/12/17 12:29 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: 10/02/2017

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BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: GARTNER A 004-MV; INT
Stn. No.: API # 3004509010
Mtr. No.:

INTERMEDIATE
MV

10/02/2017
15950-10095

Smpl Date: 05/30/2017
Test Date: 06/12/2017
Run No: SO170020

Nitrogen: 0.0990
CO2: 1.6870
Methane: 88.0982
Ethane: 5.8429
Propane: 2.4630
I-Butane: 0.4350
N-Butane: 0.6350
I-Pentane: 0.2040
N-Pentane: 0.1430
Hexane+: 0.3930

BTU: 1130.4
GPM: 18.1670
SPG: 0.6574



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

Analysis No: SO170019
Cust No: 15950-10090

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: GARTNER A 004-MV; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: MV
Cust. Str. No.: API # 3004509010

Source: CASING
Well Flowing: Y
Pressure: 13 PSIA
Flow Temp: DEG. F
Ambient Temp: 83 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 05/30/2017
Sample Time: 12.27 PM
Sampled By: M. YAZZIE
Sampled by (CO): SABRE BEEBE

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1170	0.0130	0.00	0.0011
CO2	1.6360	0.2800	0.00	0.0249
Methane	87.3761	14.8540	882.50	0.4840
Ethane	5.7179	1.5330	101.19	0.0594
Propane	2.5470	0.7040	64.08	0.0388
Iso-Butane	0.4850	0.1590	15.77	0.0097
N-Butane	0.7390	0.2340	24.11	0.0148
I-Pentane	0.2840	0.1040	11.36	0.0071
N-Pentane	0.2210	0.0800	8.86	0.0055
Hexane Plus	0.8770	0.3920	46.23	0.0290
Total	100.0000	18.3530	1154.10	0.6743

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
BTU/CU.FT IDEAL: 1156.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1160.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1140.1
DRY BTU @ 15.025: 1183.5
REAL SPECIFIC GRAVITY: 0.676

CYLINDER #: 80746
CYLINDER PRESSURE: 67 PSIG
DATE RUN: 6/12/17 12:27 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: 10/02/2017

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: GARTNER A 004-MV; CSG
Stn. No.: API # 3004509010
Mtr. No.:

CASING
MV

10/02/2017
15950-10090

Smpl Date: 05/30/2017
Test Date: 06/12/2017
Run No: SO170019

Nitrogen: 0.1170
CO2: 1.6360
Methane: 87.3761
Ethane: 5.7179
Propane: 2.5470
I-Butane: 0.4850
N-Butane: 0.7390
I-Pentane: 0.2840
N-Pentane: 0.2210
Hexane+: 0.8770

BTU: 1160.3
GPM: 18.3530
SPG: 0.6760



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

Analysis No: SO170021
Cust No: 15950-10100

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: GARTNER A 004-MV; TBG
County/State: SAN JUAN NM
Location:
Field:
Formation: MV
Cust. Str. No.: API # 3004509010

Source: TUBING
Well Flowing: Y
Pressure: 13 PSIA
Flow Temp: DEG. F
Ambient Temp: 83 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 05/30/2017
Sample Time: 12.31 PM
Sampled By: M. YAZZIE
Sampled by (CO): SABRE BEEBE

Remarks: PRESSURED W/ 30# OF HELIUM

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1510	0.0170	0.00	0.0015
CO2	1.5540	0.2660	0.00	0.0236
Methane	82.3380	14.0050	831.61	0.4561
Ethane	7.9400	2.1310	140.51	0.0824
Propane	3.9890	1.1030	100.37	0.0607
Iso-Butane	0.8300	0.2730	26.99	0.0167
N-Butane	1.1780	0.3730	38.43	0.0236
I-Pentane	0.4780	0.1750	19.12	0.0119
N-Pentane	0.3720	0.1350	14.91	0.0093
Hexane Plus	1.1700	0.5240	61.67	0.0387
Total	100.0000	19.0020	1233.62	0.7245

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
BTU/CU.FT IDEAL: 1236.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1240.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1219.3
DRY BTU @ 15.025: 1265.8
REAL SPECIFIC GRAVITY: 0.7268

CYLINDER #: 7071
CYLINDER PRESSURE: 13 PSIG
DATE RUN: 6/12/17 12:31 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: 10/02/2017

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: GARTNER A 004-MV; TBG
Stn. No.: API # 3004509010
Mtr. No.:

TUBING
MV

10/02/2017
15950-10100

Smpl Date: 05/30/2017
Test Date: 06/12/2017
Run No: SO170021

Nitrogen: 0.1510
CO2: 1.5540
Methane: 82.3380
Ethane: 7.9400
Propane: 3.9890
I-Butane: 0.8300
N-Butane: 1.1780
I-Pentane: 0.4780
N-Pentane: 0.3720
Hexane+: 1.1700

BTU: 1240.9
GPM: 19.0020
SPG: 0.7268