



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

Analysis No: SO170080
Cust No: 15950-10400

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: HEATH GC K 001;CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: DK
Cust. Str. No.:
API 3004511661

OIL CONS. DIV DIST. 3

JAN 02 2018

Source: CASING
Well Flowing: Y
Pressure: 136 PSIA
Flow Temp: 76 DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 10/16/2017
Sample Time: 2.01 PM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1545	0.1547	0.0170	0.00	0.0015
CO2	1.9429	1.9453	0.3320	0.00	0.0295
Methane	90.5029	90.6165	15.3840	914.08	0.5013
Ethane	3.7823	3.7870	1.0140	66.94	0.0393
Propane	0.9956	0.9968	0.2750	25.05	0.0152
Iso-Butane	0.4140	0.4145	0.1360	13.46	0.0083
N-Butane	0.3339	0.3343	0.1060	10.89	0.0067
I-Pentane	0.3521	0.3525	0.1290	14.09	0.0088
N-Pentane	0.2129	0.2132	0.0770	8.53	0.0053
Hexane Plus	1.3089	1.3105	0.5850	68.99	0.0433
Total	100.0000	100.1253	18.0550	1122.04	0.6591

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0029
BTU/CU.FT IDEAL: 1124.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1127.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1108.3
DRY BTU @ 15.025: 1150.5
REAL SPECIFIC GRAVITY: 0.6608

CYLINDER #: 7049
CYLINDER PRESSURE: 128 PSIG
DATE RUN: 10/24/17 2:01 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: 10/26/2017

4



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: HEATH GC K 001;CSG
Stn. No.:
Mtr. No.: API 3004511661

CASING
DK

10/26/2017
15950-10400

Smpl Date: 10/16/2017
Test Date: 10/24/2017
Run No: SO170080

Nitrogen: 0.1545
CO2: 1.9429
Methane: 90.5029
Ethane: 3.7823
Propane: 0.9956
I-Butane: 0.4140
N-Butane: 0.3339
I-Pentane: 0.3521
N-Pentane: 0.2129
Hexane+: 1.3089

BTU: 1127.9
GPM: 18.0550
SPG: 0.6608



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

Analysis No: SO170081
Cust No: 15950-10395

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: HEATH GC K 001;TBG
County/State: SAN JUAN NM
Location:
Field:
Formation: DK
Cust. Stn. No.:
API 3004511661

OIL CONS. DIV DIST. 3

JAN 02 2018

Source: TUBING
Well Flowing: Y
Pressure: 115 PSIA
Flow Temp: DEG. F
Ambient Temp: 76 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 10/16/2017
Sample Time: 2.10 PM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1523	0.1517	0.0170	0.00	0.0015
CO2	1.9229	1.9151	0.3290	0.00	0.0292
Methane	92.4069	92.0302	15.7010	933.31	0.5118
Ethane	3.6553	3.6404	0.9800	64.69	0.0379
Propane	0.8086	0.8053	0.2230	20.35	0.0123
Iso-Butane	0.2851	0.2839	0.0940	9.27	0.0057
N-Butane	0.1983	0.1975	0.0630	6.47	0.0040
I-Pentane	0.1349	0.1344	0.0490	5.40	0.0034
N-Pentane	0.0803	0.0800	0.0290	3.22	0.0020
Hexane Plus	0.3554	0.3540	0.1590	18.73	0.0118
Total	100.0000	99.5925	17.6440	1061.43	0.6196

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0025
BTU/CU.FT IDEAL: 1063.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1066.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1048.0
DRY BTU @ 15.025: 1088.0
REAL SPECIFIC GRAVITY: 0.6209

CYLINDER #: 7086
CYLINDER PRESSURE: 107 PSIG
DATE RUN: 10/24/17 2:10 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: 10/26/2017



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: HEATH GC K 001;TBG
Stn. No.:
Mtr. No.: API 3004511661

TUBING
DK

10/26/2017
15950-10395

Smpl Date: 10/16/2017
Test Date: 10/24/2017
Run No: SO170081

Nitrogen: 0.1523
CO2: 1.9229
Methane: 92.4069
Ethane: 3.6553
Propane: 0.8086
I-Butane: 0.2851
N-Butane: 0.1983
I-Pentane: 0.1349
N-Pentane: 0.0803
Hexane+: 0.3554

BTU: 1066.6
GPM: 17.6440
SPG: 0.6209