



Well Name: Bolack 2
API# 30-045-23257
Casing Sampled: Production
Sample Type Gas

Analysis No: SO190031

Cust No: 15950-11500

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: BOLACK #2; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: DK / MV
Cust. Str. No.: API 3004523257

Source: CASING
Well Flowing: Y
Pressure: 124.5 PSIA
Flow Temp: DEG. F
Ambient Temp: 65 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 04/17/2019
Sample Time: 1.16 PM
Sampled By: EUGENIA HAMILTON
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3271	0.3208	0.0360	0.00	0.0032
CO2	0.4986	0.4890	0.0850	0.00	0.0076
Methane	82.6906	81.0919	14.0640	835.18	0.4580
Ethane	8.7646	8.5952	2.3520	155.11	0.0910
Propane	3.8940	3.8187	1.0760	97.98	0.0593
Iso-Butane	0.7413	0.7270	0.2430	24.11	0.0149
N-Butane	1.1734	1.1507	0.3710	38.28	0.0235
I-Pentane	0.4875	0.4781	0.1790	19.50	0.0121
N-Pentane	0.3860	0.3785	0.1400	15.47	0.0096
Hexane Plus	1.0369	1.0169	0.4640	54.66	0.0343
Total	100.0000	98.0668	19.0100	1240.28	0.7135

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0035
BTU/CU.FT IDEAL: 1243.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1247.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1225.8
DRY BTU @ 15.025: 1272.5
REAL SPECIFIC GRAVITY: 0.7158

CYLINDER #: 7075
CYLINDER PRESSURE: 124 PSIG
ANALYSIS DATE: 04/25/2019
ANALYSIS TIME: 08:32:24 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: 04/30/2019

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: BOLACK #2; CSG
Stn. No.: API 3004523257
Mtr. No.:

CASING
DK / MV

04/30/2019
15950-11500

Smpl Date: 04/17/2019
Test Date: 04/25/2019
Run No: SO190031

Nitrogen: 0.3271
CO2: 0.4986
Methane: 82.6906
Ethane: 8.7646
Propane: 3.8940
I-Butane: 0.7413
N-Butane: 1.1734
I-Pentane: 0.4875
N-Pentane: 0.3860
Hexane+: 1.0369

BTU: 1247.5
GPM: 19.0100
SPG: 0.7158



Well Name: Bolack 2
 API# 30 - 045 - 23257
 Casing Sampled: Tubing
 Sample Type GAS
 (000) 020-0022

Analysis No: SO190030
 Cust No: 15950-11495

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
 Well Name: Bolack BLANCO #2; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation: DK / MV
 Cust. Stn. No.: API 3004523257

Source: TUBING
 Well Flowing: Y
 Pressure: 102.9 PSIA
 Flow Temp: DEG. F
 Ambient Temp: 65 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 04/17/2019
 Sample Time: 1.19 PM
 Sampled By: EUGENIA HAMILTON
 Sampled by (CO):

Heat Trace: N
 Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3349	0.3300	0.0370	0.00	0.0032
CO2	1.0651	1.0496	0.1820	0.00	0.0162
Methane	80.1206	78.9548	13.6280	809.22	0.4438
Ethane	10.2211	10.0724	2.7430	180.88	0.1061
Propane	4.7498	4.6807	1.3130	119.51	0.0723
Iso-Butane	0.7782	0.7669	0.2560	25.31	0.0156
N-Butane	1.2923	1.2735	0.4090	42.16	0.0259
I-Pentane	0.4276	0.4214	0.1570	17.11	0.0107
N-Pentane	0.3235	0.3188	0.1180	12.97	0.0081
Hexane Plus	0.6869	0.6769	0.3070	36.21	0.0227
Total	100.0000	98.5450	19.1500	1243.36	0.7246

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
 BTU/CU.FT IDEAL: 1246.2
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1250.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1228.9
 DRY BTU @ 15.025: 1275.7
 REAL SPECIFIC GRAVITY: 0.727

CYLINDER #: 7008
 CYLINDER PRESSURE: 106 PSIG
 ANALYSIS DATE: 04/25/2019
 ANALYSIS TIME: 08:48:08 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

GC Method: C6+ Gas

Last Cal/Verify: 04/30/2019



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: BLANCO #2; TBG
Stn. No.: API 3004523257
Mtr. No.:

TUBING
DK / MV

04/30/2019
15950-11495

Smpl Date: 04/17/2019
Test Date: 04/25/2019
Run No: SO190030

Nitrogen: 0.3349
CO2: 1.0651
Methane: 80.1206
Ethane: 10.2211
Propane: 4.7498
I-Butane: 0.7782
N-Butane: 1.2923
I-Pentane: 0.4276
N-Pentane: 0.3235
Hexane+: 0.6869

BTU: 1250.7
GPM: 19.1500
SPG: 0.7270