



Well Name: State Corn B 3
API# 30 - 045 - 09534
Casing Sampled: Bradenhead
Sample Type: Gas

Analysis No: SO190079

Cust No: 15950-10265

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: STATE COM B 3;BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MV
Cust. Str. No.:
API 3004509534

Heat Trace: N
Remarks:

Source: BRADENHEAD
Well Flowing: Y
Pressure: 22 PSIA
Flow Temp: DEG. F
Ambient Temp: 80 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 06/17/2019
Sample Time: 1.17 PM
Sampled By: EUGENIA HAMILTON
Sampled by (CO): PESCO

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	16.9145	5.4155	1.8670	0.00	0.1636
CO2	0.2008	0.0643	0.0340	0.00	0.0031
Methane	66.4710	21.2820	11.3090	671.36	0.3682
Ethane	6.0049	1.9226	1.6120	106.27	0.0623
Propane	3.4488	1.1042	0.9540	86.78	0.0525
Iso-Butane	0.7852	0.2514	0.2580	25.53	0.0158
N-Butane	1.1563	0.3702	0.3660	37.72	0.0232
I-Pentane	0.6696	0.2144	0.2460	26.79	0.0167
N-Pentane	0.6178	0.1978	0.2250	24.77	0.0154
Hexane Plus	3.7311	1.1946	1.6700	196.67	0.1235
Total	100.0000	32.0170	18.5410	1175.88	0.8442

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0038
BTU/CU.FT IDEAL: 1178.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1183.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1162.5
DRY BTU @ 15.025: 1206.8
REAL SPECIFIC GRAVITY: 0.8471

CYLINDER #: 226
CYLINDER PRESSURE: 28 PSIG
ANALYSIS DATE: 06/25/2019
ANALYSIS TIME: 02:32:32 PM
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: 06/28/2019



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: STATE COM B 3;BHD
Stn. No.:
Mtr. No.: API 3004509534

BRADENHEAD
MV

06/28/2019
15950-10265

Smpl Date:	06/17/2019	08/02/2017
Test Date:	06/25/2019	08/02/2017
Run No:	SO190079	SO170057
Nitrogen:	16.9145	22.5616
CO2:	0.2008	0.0531
Methane:	66.4710	64.4175
Ethane:	6.0049	5.4483
Propane:	3.4488	3.2405
I-Butane:	0.7852	0.6588
N-Butane:	1.1563	1.0138
I-Pentane:	0.6696	0.5989
N-Pentane:	0.6178	0.4915
Hexane+:	3.7311	1.5160
BTU:	1183.1	1011.8
GPM:	18.5410	17.4150
SPG:	0.8471	0.7945



Well Name: State Com B 3
 API# 30 - 045 - 04534
 Casing Sampled: Production
 Sample Type: Gas

Analysis No: SO190080
 Cust No: 15950-10285

Well/Lease Information

Customer Name:	BP - SOUTH BHD PROJECT	Source:	CASING
Well Name:	STATE COM B 3;CSG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	36 PSIA
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	80 DEG. F
Formation:	MV	Flow Rate:	MCF/D
Cust. Str. No.:		Sample Method:	Purge & Fill
	API 3004509534	Sample Date:	06/17/2019
		Sample Time:	1.21 PM
		Sampled By:	EUGENIA HAMILTON
		Sampled by (CO):	PESCO
Heat Trace:	N		
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2066	0.2027	0.0230	0.00	0.0020
CO2	1.2179	1.1949	0.2090	0.00	0.0185
Methane	84.2743	82.6815	14.3320	851.17	0.4668
Ethane	7.6566	7.5119	2.0540	135.50	0.0795
Propane	3.1644	3.1046	0.8750	79.62	0.0482
Iso-Butane	0.6249	0.6131	0.2050	20.32	0.0125
N-Butane	0.8576	0.8414	0.2710	27.98	0.0172
I-Pentane	0.3562	0.3495	0.1310	14.25	0.0089
N-Pentane	0.2845	0.2791	0.1030	11.40	0.0071
Hexane Plus	1.3570	1.3314	0.6070	71.53	0.0449
Total	100.0000	98.1101	18.8100	1211.77	0.7056

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0034	CYLINDER #:	223
BTU/CU.FT IDEAL:	1214.6	CYLINDER PRESSURE:	44 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1218.7	ANALYSIS DATE:	06/26/2019
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1197.5	ANALYSIS TIME:	10:03:32 AM
DRY BTU @ 15.025:	1243.1	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.7077		

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: 06/28/2019



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: STATE COM B 3;CSG
Stn. No.:
Mtr. No.: API 3004509534

CASING
MV

06/28/2019
15950-10285

Smpl Date:	06/17/2019	08/02/2017
Test Date:	06/26/2019	08/02/2017
Run No:	SO190080	SO170058
Nitrogen:	0.2066	0.1590
CO2:	1.2179	1.0280
Methane:	84.2743	80.8961
Ethane:	7.6566	7.9836
Propane:	3.1644	4.2783
I-Butane:	0.6249	0.8943
N-Butane:	0.8576	1.4720
I-Pentane:	0.3562	0.6978
N-Pentane:	0.2845	0.5519
Hexane+:	1.3570	2.0390
BTU:	1218.7	1309.0
GPM:	18.8100	19.4170
SPG:	0.7077	0.7622



Well Name: State Corn B 3
 API# 30-045-09534
 Casing Sampled: Tubing
 Sample Type: Gas

Analysis No: SO190081
 Cust No: 15950-10270

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
 Well Name: STATE COM B 3;TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation: MV
 Cust. Str. No.:
 API 3004509534

Heat Trace: N
 Remarks:

Source: TUBING
 Well Flowing: Y
 Pressure: 28 PSIA
 Flow Temp: DEG. F
 Ambient Temp: 80 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 06/17/2019
 Sample Time: 1.19 PM
 Sampled By: EUGENIA HAMILTON
 Sampled by (CO): PESCO

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2783	0.2741	0.0310	0.00	0.0027
CO2	1.6340	1.6093	0.2800	0.00	0.0248
Methane	80.6342	79.4132	13.7180	814.41	0.4466
Ethane	8.7922	8.6591	2.3600	155.60	0.0913
Propane	4.3083	4.2431	1.1910	108.40	0.0656
Iso-Butane	0.8226	0.8101	0.2700	26.75	0.0165
N-Butane	1.3080	1.2882	0.4140	42.67	0.0262
I-Pentane	0.4993	0.4917	0.1830	19.98	0.0124
N-Pentane	0.3833	0.3775	0.1390	15.37	0.0095
Hexane Plus	1.3398	1.3195	0.6000	70.62	0.0443
Total	100.0000	98.4858	19.1860	1253.79	0.7401

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0038
 BTU/CU.FT IDEAL: 1256.7
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1261.5
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1239.5
 DRY BTU @ 15.025: 1286.8
 REAL SPECIFIC GRAVITY: 0.7426

CYLINDER #: 230
 CYLINDER PRESSURE: 30 PSIG
 ANALYSIS DATE: 06/26/2019
 ANALYSIS TIME: 09:50:00 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: 06/28/2019



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: STATE COM B 3;TBG
Stn. No.:
Mtr. No.: API 3004509534

TUBING
MV

06/28/2019
15950-10270

Smpl Date:	06/17/2019	08/02/2017
Test Date:	06/26/2019	08/02/2017
Run No:	SO190081	SO170059
Nitrogen:	0.2783	0.2354
CO2:	1.6340	1.5930
Methane:	80.6342	80.8315
Ethane:	8.7922	8.5787
Propane:	4.3083	4.0889
I-Butane:	0.8226	0.8090
N-Butane:	1.3080	1.2847
I-Pentane:	0.4993	0.5003
N-Pentane:	0.3833	0.3875
Hexane+:	1.3398	1.6910
BTU:	1261.5	1271.8
GPM:	19.1860	19.2400
SPG:	0.7426	0.7482