



NMOCD REC'D
10/12/20

Well Name: LOBATO GC E 1; BHD
API #: API # 300451308400
Source: BRADENHEAD
Sample Type: GAS
Analysis No: SO200022
Cust No: 15950-11630

Well/Lease Information

Customer Name:	BP - SOUTH BHD PROJECT	Source:	BRADENHEAD
Well Name:	LOBATO GC E 1; BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	39 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	76 DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	API # 300451308400	Sample Method:	Purge & Fill
		Sample Date:	06/08/2020
		Sample Time:	9.57 AM
		Sampled By:	ERIK SHAW
		Sampled by (CO):	ABC
Heat Trace:	N		
Remarks:	PRESSURED WITH HELIUM TO 30LBS.		

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.9404	0.9061	0.1040	0.00	0.0091
CO2	0.0152	0.0146	0.0030	0.00	0.0002
Methane	89.7164	86.4471	15.2470	906.14	0.4969
Ethane	5.0909	4.9054	1.3650	90.09	0.0529
Propane	2.7016	2.6032	0.7460	67.97	0.0411
Iso-Butane	0.4256	0.4101	0.1400	13.84	0.0085
N-Butane	0.5932	0.5716	0.1870	19.35	0.0119
I-Pentane	0.1695	0.1633	0.0620	6.78	0.0042
N-Pentane	0.1183	0.1140	0.0430	4.74	0.0029
Hexane Plus	0.2289	0.2206	0.1020	12.07	0.0076
Total	100.0000	96.3560	17.9990	1120.99	0.6354

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0027
BTU/CU.FT IDEAL:	1123.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1126.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1107.0
DRY BTU @ 15.025:	1149.2
REAL SPECIFIC GRAVITY:	0.6369

CYLINDER #:	104
CYLINDER PRESSURE:	14 PSIG
ANALYSIS DATE:	06/15/2020
ANALYSIS TIME:	08:10:35 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: 06/16/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: LOBATO GC E 1; BHD
Stn. No.: API #
Mtr. No.:

BRADENHEAD

06/16/2020
15950-11630

Smpl Date: 06/08/2020
Test Date: 06/15/2020
Run No: SO200022

Nitrogen: 0.9404
CO2: 0.0152
Methane: 89.7164
Ethane: 5.0909
Propane: 2.7016
I-Butane: 0.4256
N-Butane: 0.5932
I-Pentane: 0.1695
N-Pentane: 0.1183
Hexane+: 0.2289

BTU: 1126.6
GPM: 17.9990
SPG: 0.6369



NMOCD REC'D
10/12/20

Well Name: LOBATO GC E 1; CSG
API #: API # 300451308400
Source: CASING
Sample Type: GAS
Analysis No: SO200023
Cust No: 15950-11635

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: LOBATO GC E 1; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300451308400

Source: CASING
Well Flowing: Y
Pressure: 145 PSIG
Flow Temp: DEG. F
Ambient Temp: 76 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 06/08/2020
Sample Time: 10.04 AM
Sampled By: ERIK SHAW
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2022	0.2020	0.0220	0.00	0.0020
CO2	1.8986	1.8969	0.3250	0.00	0.0288
Methane	88.0480	87.9685	14.9660	889.28	0.4877
Ethane	5.5233	5.5183	1.4810	97.75	0.0573
Propane	1.9399	1.9381	0.5360	48.81	0.0295
Iso-Butane	0.5635	0.5630	0.1850	18.32	0.0113
N-Butane	0.5453	0.5448	0.1720	17.79	0.0109
I-Pentane	0.2986	0.2983	0.1090	11.95	0.0074
N-Pentane	0.2113	0.2111	0.0770	8.47	0.0053
Hexane Plus	0.7693	0.7686	0.3440	40.55	0.0255
Total	100.0000	99.9096	18.2170	1132.92	0.6658

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0029
BTU/CU.FT IDEAL: 1135.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1138.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1119.0
DRY BTU @ 15.025: 1161.6
REAL SPECIFIC GRAVITY: 0.6675

CYLINDER #: 2003
CYLINDER PRESSURE: 135 PSIG
ANALYSIS DATE: 06/15/2020
ANALYSIS TIME: 08:14:07 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: 06/16/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: LOBATO GC E 1; CSG
Stn. No.: API #
Mtr. No.:

CASING

06/16/2020
15950-11635

Smpl Date: 06/08/2020
Test Date: 06/15/2020
Run No: SO200023

Nitrogen: 0.2022
CO2: 1.8986
Methane: 88.0480
Ethane: 5.5233
Propane: 1.9399
I-Butane: 0.5635
N-Butane: 0.5453
I-Pentane: 0.2986
N-Pentane: 0.2113
Hexane+: 0.7693

BTU: 1138.8
GPM: 18.2170
SPG: 0.6675



NMOCD REC'D
10/12/20

Well Name: LOBATO GC E 1; TBG
API #: API # 300451308400
Source: TUBING
Sample Type: GAS
Analysis No: SO200024
Cust No: 15950-11640

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: LOBATO GC E 1; TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300451308400

Source: TUBING
Well Flowing: Y
Pressure: 145 PSIG
Flow Temp: DEG. F
Ambient Temp: 76 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 06/08/2020
Sample Time: 10.01 AM
Sampled By: ERIK SHAW
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2127	0.2128	0.0230	0.00	0.0021
CO2	1.9136	1.9141	0.3270	0.00	0.0291
Methane	87.2084	87.2328	14.8240	880.80	0.4830
Ethane	6.0412	6.0429	1.6200	106.91	0.0627
Propane	2.3152	2.3159	0.6400	58.25	0.0352
Iso-Butane	0.6306	0.6308	0.2070	20.51	0.0127
N-Butane	0.6319	0.6321	0.2000	20.61	0.0127
I-Pentane	0.2923	0.2924	0.1070	11.69	0.0073
N-Pentane	0.2079	0.2080	0.0760	8.33	0.0052
Hexane Plus	0.5462	0.5464	0.2440	28.79	0.0181
Total	100.0000	100.0282	18.2680	1135.91	0.6680

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0029
BTU/CU.FT IDEAL: 1138.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1141.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1121.9
DRY BTU @ 15.025: 1164.7
REAL SPECIFIC GRAVITY: 0.6697

CYLINDER #: 060
CYLINDER PRESSURE: 137 PSIG
ANALYSIS DATE: 06/15/2020
ANALYSIS TIME: 08:27:14 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: 06/16/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: LOBATO GC E 1; TBG
Stn. No.: API #
Mtr. No.:

TUBING

06/16/2020
15950-11640

Smpl Date: 06/08/2020
Test Date: 06/15/2020
Run No: SO200024

Nitrogen: 0.2127
CO2: 1.9136
Methane: 87.2084
Ethane: 6.0412
Propane: 2.3152
I-Butane: 0.6306
N-Butane: 0.6319
I-Pentane: 0.2923
N-Pentane: 0.2079
Hexane+: 0.5462

BTU: 1141.8
GPM: 18.2680
SPG: 0.6697