



Well Name: MARCOTTE GC1 ; CSG
 API #: API #300451106700
 Source: CASING
 Sample Type: GAS
 Analysis No: SO200173
 Cust No: 15950-12225

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
 Well Name: MARCOTTE GC1 ; CSG
 County/State: NM
 Location:
 Lease/PA/CA:
 Formation:
 Cust. Stn. No.: API #300451106700
 70544

Source: CASING
 Well Flowing: Y
 Pressure: 45 PSIG
 Flow Temp: DEG. F
 Ambient Temp: 86 DEG. F
 Flow Rate: MCF/D
 Sample Method:
 Sample Date: 09/24/2020
 Sample Time: 3.35 PM
 Sampled By: SEAN C.
 Sampled by (CO): ABC

Heat Trace:
 Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1984	0.1928	0.0220	0.00	0.0019
CO2	1.6534	1.6067	0.2830	0.00	0.0251
Methane	82.4908	80.1628	14.0300	833.16	0.4569
Ethane	8.4204	8.1828	2.2590	149.02	0.0874
Propane	3.6061	3.5043	0.9970	90.73	0.0549
Iso-Butane	0.6145	0.5972	0.2020	19.98	0.0123
N-Butane	1.0693	1.0391	0.3380	34.88	0.0215
I-Pentane	0.3963	0.3851	0.1450	15.86	0.0099
N-Pentane	0.3210	0.3119	0.1170	12.87	0.0080
Hexane Plus	1.2298	1.1951	0.5500	64.82	0.0407
Total	100.0000	97.1778	18.9430	1221.32	0.7186

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0035
 BTU/CU.FT IDEAL: 1224.1
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1228.4
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1207.0
 DRY BTU @ 15.025: 1253.0
 REAL SPECIFIC GRAVITY: 0.7209

CYLINDER #: 1086
 CYLINDER PRESSURE: 38 PSIG
 ANALYSIS DATE: 09/30/2020
 ANALYSIS TIME: 02:02:47 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

Last Cal/Verify: 10/06/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: MARCOTTE GC1 ; CSG
Stn. No.: API
Mtr. No.: 70544

CASING

10/06/2020
15950-12225

Smpl Date: 09/24/2020
Test Date: 09/30/2020
Run No: SO200173

Nitrogen: 0.1984
CO2: 1.6534
Methane: 82.4908
Ethane: 8.4204
Propane: 3.6061
I-Butane: 0.6145
N-Butane: 1.0693
I-Pentane: 0.3963
N-Pentane: 0.3210
Hexane+: 1.2298

BTU: 1228.4
GPM: 18.9430
SPG: 0.7209



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

Analysis No: SO200174
Cust No: 15950-12230

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: MARCOTTE GC1; INT
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API #300451106700
70544

Source: INTERMEDIATE
Well Flowing:
Pressure: 50 PSIG
Flow Temp: DEG. F
Ambient Temp: 86 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/24/2020
Sample Time: 3.30 PM
Sampled By: SEAN C.
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	9.3821	1.8063	1.0350	0.00	0.0907
CO2	0.0312	0.0060	0.0050	0.00	0.0005
Methane	80.3584	15.4711	13.6660	811.62	0.4451
Ethane	3.4567	0.6655	0.9270	61.17	0.0359
Propane	1.4206	0.2735	0.3930	35.74	0.0216
Iso-Butane	0.2436	0.0469	0.0800	7.92	0.0049
N-Butane	0.5397	0.1039	0.1710	17.61	0.0108
I-Pentane	0.5578	0.1074	0.2050	22.32	0.0139
N-Pentane	0.5672	0.1092	0.2060	22.74	0.0141
Hexane Plus	3.4427	0.6628	1.5400	181.47	0.1139
Total	100.0000	19.2526	18.2280	1160.59	0.7515

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0034
BTU/CU.FT IDEAL: 1163.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1167.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1146.9
DRY BTU @ 15.025: 1190.6
REAL SPECIFIC GRAVITY: 0.7538

CYLINDER #: 577
CYLINDER PRESSURE: 48 PSIG
ANALYSIS DATE: 09/30/2020
ANALYSIS TIME: 01:48:14 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: 10/06/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: MARCOTTE GC1; INT
Stn. No.: API
Mtr. No.: 70544

INTERMEDIATE

10/06/2020
15950-12230

Smpl Date: 09/24/2020
Test Date: 09/30/2020
Run No: SO200174

Nitrogen: 9.3821
CO2: 0.0312
Methane: 80.3584
Ethane: 3.4567
Propane: 1.4206
I-Butane: 0.2436
N-Butane: 0.5397
I-Pentane: 0.5578
N-Pentane: 0.5672
Hexane+: 3.4427

BTU: 1167.2
GPM: 18.2280
SPG: 0.7538



Well Name: MARCOTTE GC 1 ; TBG
 API #: API #300451106700
 Source: TUBING
 Sample Type: GAS
 Analysis No: SO200194
 Cust No: 15950-12330

Well/Lease Information

Customer Name:	BP - SOUTH BHD PROJECT	Source:	TUBING
Well Name:	MARCOTTE GC 1 ; TBG	Well Flowing:	N
County/State:	NM	Pressure:	42 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	86 DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	API #300451106700 70544	Sample Method:	Purge & Fill
		Sample Date:	09/24/2020
		Sample Time:	3.40 PM
		Sampled By:	SEAN C.
		Sampled by (CO):	ABC
Heat Trace:	N		
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1801	0.1767	0.0200	0.00	0.0017
CO2	2.0546	2.0160	0.3520	0.00	0.0312
Methane	81.8342	80.2950	13.9180	826.53	0.4533
Ethane	8.7130	8.5491	2.3380	154.19	0.0905
Propane	3.8531	3.7806	1.0650	96.95	0.0587
Iso-Butane	0.7028	0.6896	0.2310	22.85	0.0141
N-Butane	1.1289	1.1077	0.3570	36.83	0.0227
I-Pentane	0.4152	0.4074	0.1520	16.61	0.0103
N-Pentane	0.3179	0.3119	0.1160	12.74	0.0079
Hexane Plus	0.8002	0.7851	0.3580	42.18	0.0265
Total	100.0000	98.1191	18.9070	1208.88	0.7169

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0035	CYLINDER #:	2001
BTU/CU.FT IDEAL:	1211.7	CYLINDER PRESSURE:	39 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1215.8	ANALYSIS DATE:	09/30/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1194.6	ANALYSIS TIME:	02:02:33 PM
DRY BTU @ 15.025:	1240.1	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.719		

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: 10/06/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: MARCOTTE GC 1 ; TBG
Stn. No.: API
Mtr. No.: 70544

TUBING

10/06/2020
15950-12330

Smpl Date: 09/24/2020
Test Date: 09/30/2020
Run No: SO200194

Nitrogen: 0.1801
CO2: 2.0546
Methane: 81.8342
Ethane: 8.7130
Propane: 3.8531
I-Butane: 0.7028
N-Butane: 1.1289
I-Pentane: 0.4152
N-Pentane: 0.3179
Hexane+: 0.8002

BTU: 1215.8
GPM: 18.9070
SPG: 0.7190