



NMOCD REC'D
10/12/20

Well Name: SAMMONS GC A 1M; CSG
API #: API #300453115800
Source: CASING
Sample Type: GAS
Analysis No: SO200170
Cust No: 15950-12210

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: SAMMONS GC A 1M; CSG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API #300453115800
98741

Source: CASING
Well Flowing: N
Pressure: 58 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: 5.50 PM
Sampled By: SEAN C.
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1335	0.0977	0.0150	0.00	0.0013
CO2	0.0082	0.0060	0.0010	0.00	0.0001
Methane	95.1268	69.6353	16.1610	960.78	0.5269
Ethane	2.7084	1.9826	0.7260	47.93	0.0281
Propane	0.9456	0.6922	0.2610	23.79	0.0144
Iso-Butane	0.1904	0.1394	0.0620	6.19	0.0038
N-Butane	0.2299	0.1683	0.0730	7.50	0.0046
I-Pentane	0.0910	0.0666	0.0330	3.64	0.0023
N-Pentane	0.0709	0.0519	0.0260	2.84	0.0018
Hexane Plus	0.4953	0.3626	0.2210	26.11	0.0164
Total	100.0000	73.2026	17.5790	1078.79	0.5997

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0024
BTU/CU.FT IDEAL: 1081.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1083.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1065.0
DRY BTU @ 15.025: 1105.6
REAL SPECIFIC GRAVITY: 0.6009

CYLINDER #: 004
CYLINDER PRESSURE: 55 PSIG
ANALYSIS DATE: 09/30/2020
ANALYSIS TIME: 02:25:44 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: SAMMONS GC A 1M; CSG
Stn. No.: API
Mtr. No.: 98741

CASING

10/06/2020
15950-12210

Smpl Date: 09/24/2020
Test Date: 09/30/2020
Run No: SO200170

Nitrogen: 0.1335
CO2: 0.0082
Methane: 95.1268
Ethane: 2.7084
Propane: 0.9456
I-Butane: 0.1904
N-Butane: 0.2299
I-Pentane: 0.0910
N-Pentane: 0.0709
Hexane+: 0.4953

BTU: 1083.9
GPM: 17.5790
SPG: 0.6009



NMOCD REC'D
10/12/20

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

Analysis No: SO200171
Cust No: 15950-12215

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: SAMMONS GC A 1M ; INT
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API #300453115800
98741

Source: INTERMEDIATE
Well Flowing: N
Pressure: 45 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: 5.45 PM
Sampled By: SEAN C.
Sampled by (CO): ABC

Heat Trace:
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1305	0.1271	0.0140	0.00	0.0013
CO2	2.9903	2.9121	0.5120	0.00	0.0454
Methane	84.9373	82.7152	14.4390	857.87	0.4705
Ethane	7.5993	7.4005	2.0380	134.48	0.0789
Propane	2.6974	2.6268	0.7450	67.87	0.0411
Iso-Butane	0.2673	0.2603	0.0880	8.69	0.0054
N-Butane	0.6764	0.6587	0.2140	22.07	0.0136
I-Pentane	0.1583	0.1542	0.0580	6.33	0.0039
N-Pentane	0.1578	0.1537	0.0570	6.33	0.0039
Hexane Plus	0.3854	0.3753	0.1720	20.31	0.0128
Total	100.0000	97.3839	18.3370	1123.95	0.6767

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
BTU/CU.FT IDEAL: 1126.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1129.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1110.2
DRY BTU @ 15.025: 1152.5
REAL SPECIFIC GRAVITY: 0.6785

CYLINDER #: 048
CYLINDER PRESSURE: 46 PSIG
ANALYSIS DATE: 09/30/2020
ANALYSIS TIME: 02:42:28 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: 10/06/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease:	SAMMONS GC A 1M ; INT	INTERMEDIATE	10/06/2020
Stn. No.:	API		15950-12215
Mtr. No.:	98741		

Smpl Date:	09/24/2020
Test Date:	09/30/2020
Run No:	SO200171

Nitrogen:	0.1305
CO2:	2.9903
Methane:	84.9373
Ethane:	7.5993
Propane:	2.6974
I-Butane:	0.2673
N-Butane:	0.6764
I-Pentane:	0.1583
N-Pentane:	0.1578
Hexane+:	0.3854

BTU:	1129.9
GPM:	18.3370
SPG:	0.6785



NMOCD REC'D
10/12/20

Well Name: SAMMONS GC A 1M ; TBG
API #: API #300453115800
Source: TUBING
Sample Type: GAS
Analysis No: SO200172
Cust No: 15950-12220

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: SAMMONS GC A 1M ; TBG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API #300453115800
98741

Source: TUBING
Well Flowing: Y
Pressure: 20 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: 5.55 PM
Sampled By: SEAN C.
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1476	0.1465	0.0160	0.00	0.0014
CO2	2.2129	2.1960	0.3790	0.00	0.0336
Methane	87.6381	86.9694	14.8980	885.14	0.4854
Ethane	5.2469	5.2069	1.4070	92.85	0.0545
Propane	2.2814	2.2640	0.6300	57.40	0.0347
Iso-Butane	0.4672	0.4636	0.1530	15.19	0.0094
N-Butane	0.7150	0.7095	0.2260	23.33	0.0143
I-Pentane	0.2920	0.2898	0.1070	11.68	0.0073
N-Pentane	0.2327	0.2309	0.0850	9.33	0.0058
Hexane Plus	0.7662	0.7604	0.3430	40.39	0.0254
Total	100.0000	99.2370	18.2440	1135.32	0.6718

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
BTU/CU.FT IDEAL: 1137.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1141.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1121.5
DRY BTU @ 15.025: 1164.3
REAL SPECIFIC GRAVITY: 0.6736

CYLINDER #: 019
CYLINDER PRESSURE: 20 PSIG
ANALYSIS DATE: 09/30/2020
ANALYSIS TIME: 02:18:00 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: SAMMONS GC A 1M ; TBG
Stn. No.: API
Mtr. No.: 98741

TUBING

10/06/2020
15950-12220

Smpl Date: 09/24/2020
Test Date: 09/30/2020
Run No: SO200172

Nitrogen: 0.1476
CO2: 2.2129
Methane: 87.6381
Ethane: 5.2469
Propane: 2.2814
I-Butane: 0.4672
N-Butane: 0.7150
I-Pentane: 0.2920
N-Pentane: 0.2327
Hexane+: 0.7662

BTU: 1141.4
GPM: 18.2440
SPG: 0.6736