



OCD Received 10/28/2020

Well Name: SANDOVAL GC A 1R ; TBG
API #: API # 300452390700
Source: TUBING
Sample Type: GAS
Analysis No: SO200220
Cust No: 15950-12460

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: SANDOVAL GC A 1R ; TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300452390700
93346

Source: TUBING
Well Flowing: Y
Pressure: 40 PSIG
Flow Temp: DEG. F
Ambient Temp: 84 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/23/2020
Sample Time: 5.29 PM
Sampled By: ERIK SHAW
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1994	0.1997	0.0220	0.00	0.0019
CO2	1.2506	1.2524	0.2140	0.00	0.0190
Methane	81.2479	81.3619	13.8210	820.60	0.4500
Ethane	9.0646	9.0773	2.4330	160.42	0.0941
Propane	4.2307	4.2366	1.1700	106.45	0.0644
Iso-Butane	0.7919	0.7930	0.2600	25.75	0.0159
N-Butane	1.2216	1.2233	0.3860	39.85	0.0245
I-Pentane	0.4573	0.4579	0.1680	18.30	0.0114
N-Pentane	0.3624	0.3629	0.1320	14.53	0.0090
Hexane Plus	1.1736	1.1752	0.5250	61.86	0.0388
Total	100.0000	100.1402	19.1310	1247.76	0.7292

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0037
BTU/CU.FT IDEAL: 1250.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1255.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1233.5
DRY BTU @ 15.025: 1280.4
REAL SPECIFIC GRAVITY: 0.7316

CYLINDER #: 001
CYLINDER PRESSURE: 35 PSIG
ANALYSIS DATE: 10/05/2020
ANALYSIS TIME: 02:29:55 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: 10/08/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: SANDOVAL GC A 1R ; TBG
Stn. No.: API #
Mtr. No.: 93346

TUBING

10/08/2020
15950-12460

Smpl Date: 09/23/2020
Test Date: 10/05/2020
Run No: SO200220

Nitrogen: 0.1994
CO2: 1.2506
Methane: 81.2479
Ethane: 9.0646
Propane: 4.2307
I-Butane: 0.7919
N-Butane: 1.2216
I-Pentane: 0.4573
N-Pentane: 0.3624
Hexane+: 1.1736

BTU: 1255.3
GPM: 19.1310
SPG: 0.7316



OCD Received 10/28/2020

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

Analysis No: SO200221
Cust No: 15950-12465

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: SANDOVAL GC A 1R ; INT
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300452390700
93346

Source: INTERMEDIATE
Well Flowing: Y
Pressure: 147 PSIG
Flow Temp: DEG. F
Ambient Temp: 84 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/23/2020
Sample Time: 5.40 PM
Sampled By: ERIK SHAW
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5063	0.4931	0.0560	0.00	0.0049
CO2	0.0000	0.0000	0.0000	0.00	0.0000
Methane	92.4980	90.0936	15.7160	934.23	0.5123
Ethane	4.0055	3.9014	1.0740	70.89	0.0416
Propane	1.8087	1.7617	0.4990	45.51	0.0275
Iso-Butane	0.3824	0.3725	0.1250	12.44	0.0077
N-Butane	0.3779	0.3681	0.1190	12.33	0.0076
I-Pentane	0.1448	0.1410	0.0530	5.79	0.0036
N-Pentane	0.0817	0.0796	0.0300	3.28	0.0020
Hexane Plus	0.1947	0.1896	0.0870	10.26	0.0064
Total	100.0000	97.4006	17.7590	1094.72	0.6137

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0025
BTU/CU.FT IDEAL: 1097.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1100.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1080.9
DRY BTU @ 15.025: 1122.0
REAL SPECIFIC GRAVITY: 0.615

CYLINDER #: 034
CYLINDER PRESSURE: 134 PSIG
ANALYSIS DATE: 10/02/2020
ANALYSIS TIME: 03:59:20 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: 10/08/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: SANDOVAL GC A 1R ; INT
Stn. No.: API #
Mtr. No.: 93346

INTERMEDIATE

10/08/2020
15950-12465

Smpl Date: 09/23/2020
Test Date: 10/02/2020
Run No: SO200221

Nitrogen: 0.5063
CO2: 0.0000
Methane: 92.4980
Ethane: 4.0055
Propane: 1.8087
I-Butane: 0.3824
N-Butane: 0.3779
I-Pentane: 0.1448
N-Pentane: 0.0817
Hexane+: 0.1947

BTU: 1100.0
GPM: 17.7590
SPG: 0.6150



OCD Received 10/28/2020

Well Name: SANDOVAL GC A 1R ; CSG
API #: API # 300452390700
Source: CASING
Sample Type: GAS
Analysis No: SO200222
Cust No: 15950-12470

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: SANDOVAL GC A 1R ; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300452390700
93346

Source: CASING
Well Flowing: Y
Pressure: 43 PSIG
Flow Temp: DEG. F
Ambient Temp: 84 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/23/2020
Sample Time: 5.35 AM
Sampled By: ERIK SHAW
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1568	0.1537	0.0170	0.00	0.0015
CO2	1.1120	1.0897	0.1900	0.00	0.0169
Methane	85.4681	83.7532	14.5320	863.23	0.4734
Ethane	7.2074	7.0628	1.9330	127.55	0.0748
Propane	3.0465	2.9854	0.8420	76.65	0.0464
Iso-Butane	0.5650	0.5537	0.1850	18.37	0.0113
N-Butane	0.8392	0.8224	0.2650	27.38	0.0168
I-Pentane	0.3342	0.3275	0.1230	13.37	0.0083
N-Pentane	0.2514	0.2464	0.0910	10.08	0.0063
Hexane Plus	1.0194	0.9989	0.4560	53.73	0.0337
Total	100.0000	97.9937	18.6340	1190.36	0.6895

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0032
BTU/CU.FT IDEAL: 1193.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1196.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1176.1
DRY BTU @ 15.025: 1220.9
REAL SPECIFIC GRAVITY: 0.6915

CYLINDER #: 24
CYLINDER PRESSURE: 28 PSIG
ANALYSIS DATE: 10/05/2020
ANALYSIS TIME: 09:30:46 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: 10/08/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: SANDOVAL GC A 1R ; CSG
Stn. No.: API #
Mtr. No.: 93346

CASING

10/08/2020
15950-12470

Smpl Date: 09/23/2020
Test Date: 10/05/2020
Run No: SO200222

Nitrogen: 0.1568
CO2: 1.1120
Methane: 85.4681
Ethane: 7.2074
Propane: 3.0465
I-Butane: 0.5650
N-Butane: 0.8392
I-Pentane: 0.3342
N-Pentane: 0.2514
Hexane+: 1.0194

BTU: 1196.9
GPM: 18.6340
SPG: 0.6915