



NMOCD REC'D
10/12/20

Well Name: W D HEATH B 1A ; CSG
API #: API #300452268200
Source: CASING
Sample Type: GAS
Analysis No: SO200181
Cust No: 15950-12265

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: W D HEATH B 1A ; CSG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API #300452268200
89888

Source: CASING
Well Flowing: N
Pressure: 113 PSIG
Flow Temp: DEG. F
Ambient Temp: 65 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/24/2020
Sample Time: 10.15 AM
Sampled By: SEAN C.
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3412	0.3367	0.0380	0.00	0.0033
CO2	0.2145	0.2116	0.0370	0.00	0.0033
Methane	84.5462	83.4205	14.3750	853.92	0.4683
Ethane	8.2124	8.1031	2.2030	145.33	0.0853
Propane	3.9467	3.8942	1.0910	99.30	0.0601
Iso-Butane	0.5592	0.5518	0.1840	18.18	0.0112
N-Butane	1.0008	0.9875	0.3160	32.65	0.0201
I-Pentane	0.3018	0.2978	0.1110	12.07	0.0075
N-Pentane	0.2463	0.2430	0.0900	9.87	0.0061
Hexane Plus	0.6309	0.6225	0.2820	33.26	0.0209
Total	100.0000	98.6687	18.7270	1204.59	0.6861

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0032
BTU/CU.FT IDEAL: 1207.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1211.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1190.2
DRY BTU @ 15.025: 1235.6
REAL SPECIFIC GRAVITY: 0.688

CYLINDER #: 069
CYLINDER PRESSURE: 113 PSIG
ANALYSIS DATE: 09/30/2020
ANALYSIS TIME: 12:07:30 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: W D HEATH B 1A ; CSG
Stn. No.: API
Mtr. No.: 89888

CASING

10/06/2020
15950-12265

Smpl Date: 09/24/2020
Test Date: 09/30/2020
Run No: SO200181

Nitrogen: 0.3412
CO2: 0.2145
Methane: 84.5462
Ethane: 8.2124
Propane: 3.9467
I-Butane: 0.5592
N-Butane: 1.0008
I-Pentane: 0.3018
N-Pentane: 0.2463
Hexane+: 0.6309

BTU: 1211.3
GPM: 18.7270
SPG: 0.6880



NMOCD REC'D
10/12/20

Well Name: W D HEATH B 1A ; TBG
API #: API #300452268200
Source: TUBING
Sample Type: GAS
Analysis No: SO200182
Cust No: 15950-12270

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: W D HEATH B 1A ; TBG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API #300452268200
89888

Source: TUBING
Well Flowing: N
Pressure: 108 PSIG
Flow Temp: DEG. F
Ambient Temp: 65 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/24/2020
Sample Time: 10.20 AM
Sampled By: SEAN C.
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3307	0.3353	0.0370	0.00	0.0032
CO2	1.0694	1.0842	0.1830	0.00	0.0162
Methane	76.4021	77.4581	13.0040	771.66	0.4232
Ethane	11.1394	11.2934	2.9910	197.13	0.1156
Propane	5.8433	5.9241	1.6160	147.02	0.0890
Iso-Butane	0.9312	0.9441	0.3060	30.28	0.0187
N-Butane	1.8420	1.8675	0.5830	60.09	0.0370
I-Pentane	0.6318	0.6405	0.2320	25.28	0.0157
N-Pentane	0.5533	0.5609	0.2010	22.18	0.0138
Hexane Plus	1.2568	1.2742	0.5630	66.25	0.0416
Total	100.0000	101.3823	19.7160	1319.90	0.7740

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0042
BTU/CU.FT IDEAL: 1322.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1328.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1305.4
DRY BTU @ 15.025: 1355.1
REAL SPECIFIC GRAVITY: 0.777

CYLINDER #: 2004
CYLINDER PRESSURE: 108 PSIG
ANALYSIS DATE: 09/30/2020
ANALYSIS TIME: 12:23:59 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: W D HEATH B 1A ; TBG
Stn. No.: API
Mtr. No.: 89888

TUBING

10/06/2020
15950-12270

Smpl Date: 09/24/2020
Test Date: 09/30/2020
Run No: SO200182

Nitrogen: 0.3307
CO2: 1.0694
Methane: 76.4021
Ethane: 11.1394
Propane: 5.8433
I-Butane: 0.9312
N-Butane: 1.8420
I-Pentane: 0.6318
N-Pentane: 0.5533
Hexane+: 1.2568

BTU: 1328.5
GPM: 19.7160
SPG: 0.7770