



NMOCD REC'D
10/12/20

Well Name: NEBU 318; CSG
API #: API # 300453109300
Source: CASING
Sample Type: GAS
Analysis No: SO200134
Cust No: 15950-12035

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 318; CSG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300453109300

Source: CASING
Well Flowing: Y
Pressure: 104 PSIG
Flow Temp: DEG. F
Ambient Temp: 82 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/16/2020
Sample Time: 2.35 PM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1672	0.1649	0.0180	0.00	0.0016
CO2	2.3759	2.3430	0.4060	0.00	0.0361
Methane	91.2245	89.9605	15.5000	921.37	0.5053
Ethane	4.2703	4.2111	1.1450	75.57	0.0443
Propane	0.9710	0.9575	0.2680	24.43	0.0148
Iso-Butane	0.1232	0.1215	0.0400	4.01	0.0025
N-Butane	0.1655	0.1632	0.0520	5.40	0.0033
I-Pentane	0.0582	0.0574	0.0210	2.33	0.0014
N-Pentane	0.0390	0.0385	0.0140	1.56	0.0010
Hexane Plus	0.6052	0.5968	0.2710	31.90	0.0200
Total	100.0000	98.6144	17.7350	1066.57	0.6304

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0025
BTU/CU.FT IDEAL: 1069.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1071.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1053.1
DRY BTU @ 15.025: 1093.2
REAL SPECIFIC GRAVITY: 0.6317

CYLINDER #: 203
CYLINDER PRESSURE: 97 PSIG
ANALYSIS DATE: 09/21/2020
ANALYSIS TIME: 03:29:47 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: 09/24/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 318; CSG
Stn. No.: API #
Mtr. No.:

CASING

09/24/2020
15950-12035

Smpl Date: 09/16/2020
Test Date: 09/21/2020
Run No: SO200134

Nitrogen: 0.1672
CO2: 2.3759
Methane: 91.2245
Ethane: 4.2703
Propane: 0.9710
I-Butane: 0.1232
N-Butane: 0.1655
I-Pentane: 0.0582
N-Pentane: 0.0390
Hexane+: 0.6052

BTU: 1071.7
GPM: 17.7350
SPG: 0.6317



NMOCD REC'D
10/12/20

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

Analysis No: SO200135
Cust No: 15950-12040

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 318; INT
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300453109300

Source: INTERMEDIATE
Well Flowing:
Pressure: 97.6 PSIG
Flow Temp: DEG. F
Ambient Temp: 82 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/16/2020
Sample Time: 2.30 PM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace:
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	3.1599	1.4450	0.3480	0.00	0.0306
CO2	0.0129	0.0059	0.0020	0.00	0.0002
Methane	87.9215	40.2052	14.9370	888.01	0.4870
Ethane	6.8727	3.1428	1.8420	121.63	0.0714
Propane	1.7584	0.8041	0.4850	44.24	0.0268
Iso-Butane	0.1607	0.0735	0.0530	5.23	0.0032
N-Butane	0.0960	0.0439	0.0300	3.13	0.0019
I-Pentane	0.0098	0.0045	0.0040	0.39	0.0002
N-Pentane	0.0037	0.0017	0.0010	0.15	0.0001
Hexane Plus	0.0044	0.0020	0.0020	0.23	0.0001
Total	100.0000	45.7286	17.7040	1063.01	0.6215

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0024
BTU/CU.FT IDEAL: 1065.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1068.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1049.4
DRY BTU @ 15.025: 1089.4
REAL SPECIFIC GRAVITY: 0.6228

CYLINDER #: 198
CYLINDER PRESSURE: 95 PSIG
ANALYSIS DATE: 09/21/2020
ANALYSIS TIME: 03:59:16 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: 09/24/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 318; INT
Stn. No.: API #
Mtr. No.:

INTERMEDIATE

09/24/2020
15950-12040

Smpl Date: 09/16/2020
Test Date: 09/21/2020
Run No: SO200135

Nitrogen: 3.1599
CO2: 0.0129
Methane: 87.9215
Ethane: 6.8727
Propane: 1.7584
I-Butane: 0.1607
N-Butane: 0.0960
I-Pentane: 0.0098
N-Pentane: 0.0037
Hexane+: 0.0044

BTU: 1068.0
GPM: 17.7040
SPG: 0.6228



NMOCD REC'D
10/12/20

Well Name: NEBU 318; TBG
API #: API # 300453109300
Source: TUBING
Sample Type: GAS
Analysis No: SO200136
Cust No: 15950-12045

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 318; TBG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300453109300

Source: TUBING
Well Flowing: Y
Pressure: 103 PSIG
Flow Temp: DEG. F
Ambient Temp: 82 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/16/2020
Sample Time: 2.40 PM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1141	0.1129	0.0130	0.00	0.0011
CO2	2.1929	2.1699	0.3750	0.00	0.0333
Methane	95.6353	94.6306	16.2450	965.92	0.5297
Ethane	1.7292	1.7110	0.4630	30.60	0.0180
Propane	0.2376	0.2351	0.0660	5.98	0.0036
Iso-Butane	0.0381	0.0377	0.0120	1.24	0.0008
N-Butane	0.0242	0.0239	0.0080	0.79	0.0005
I-Pentane	0.0094	0.0093	0.0030	0.38	0.0002
N-Pentane	0.0038	0.0038	0.0010	0.15	0.0001
Hexane Plus	0.0154	0.0152	0.0070	0.81	0.0005
Total	100.0000	98.9494	17.1930	1005.87	0.5878

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
BTU/CU.FT IDEAL: 1008.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1010.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 992.7
DRY BTU @ 15.025: 1030.5
REAL SPECIFIC GRAVITY: 0.5888

CYLINDER #: 210
CYLINDER PRESSURE: 94 PSIG
ANALYSIS DATE: 09/21/2020
ANALYSIS TIME: 03:48:10 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: 09/24/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 318; TBG
Stn. No.: API #
Mtr. No.:

TUBING

09/24/2020
15950-12045

Smpl Date: 09/16/2020
Test Date: 09/21/2020
Run No: SO200136

Nitrogen: 0.1141
CO2: 2.1929
Methane: 95.6353
Ethane: 1.7292
Propane: 0.2376
I-Butane: 0.0381
N-Butane: 0.0242
I-Pentane: 0.0094
N-Pentane: 0.0038
Hexane+: 0.0154

BTU: 1010.3
GPM: 17.1930
SPG: 0.5888