



NMOCD REC'D
10/12/20

Well Name: NEBU 321; CSG
API #: API # 300453116300
Source: CASING
Sample Type: GAS
Analysis No: SO200161
Cust No: 15950-12165

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 321; CSG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300453116300

Source: CASING
Well Flowing: Y
Pressure: 51 PSIG
Flow Temp: DEG. F
Ambient Temp: 82 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 09/16/2020
Sample Time: 3.40 PM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2189	0.2148	0.0240	0.00	0.0021
CO2	0.7891	0.7744	0.1350	0.00	0.0120
Methane	82.2920	80.7630	13.9950	831.15	0.4558
Ethane	9.1020	8.9329	2.4420	161.08	0.0945
Propane	4.5174	4.4335	1.2480	113.66	0.0688
Iso-Butane	0.7839	0.7693	0.2570	25.49	0.0157
N-Butane	1.0792	1.0591	0.3410	35.21	0.0217
I-Pentane	0.3230	0.3170	0.1180	12.92	0.0080
N-Pentane	0.2491	0.2445	0.0910	9.99	0.0062
Hexane Plus	0.6454	0.6334	0.2890	34.02	0.0214
Total	100.0000	98.1419	18.9400	1223.52	0.7062

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0034
BTU/CU.FT IDEAL: 1226.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1230.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1209.1
DRY BTU @ 15.025: 1255.1
REAL SPECIFIC GRAVITY: 0.7083

CYLINDER #: 034
CYLINDER PRESSURE: 44 PSIG
ANALYSIS DATE: 09/21/2020
ANALYSIS TIME: 03:06:21 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: 09/29/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 321; CSG
Stn. No.: API #
Mtr. No.:

CASING

09/29/2020
15950-12165

Smpl Date: 09/16/2020
Test Date: 09/21/2020
Run No: SO200161

Nitrogen: 0.2189
CO2: 0.7891
Methane: 82.2920
Ethane: 9.1020
Propane: 4.5174
I-Butane: 0.7839
N-Butane: 1.0792
I-Pentane: 0.3230
N-Pentane: 0.2491
Hexane+: 0.6454

BTU: 1230.5
GPM: 18.9400
SPG: 0.7083



NMOCD REC'D
10/12/20

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

Analysis No: SO200162
Cust No: 15950-12170

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 321; INT
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300453116300

Source: INTERMEDIATE
Well Flowing:
Pressure: 181 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: 3.35 PM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace:
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3425	0.3272	0.0380	0.00	0.0033
CO2	0.0039	0.0037	0.0010	0.00	0.0001
Methane	83.4492	79.7153	14.1920	842.84	0.4622
Ethane	8.7291	8.3385	2.3420	154.48	0.0906
Propane	3.8128	3.6422	1.0540	95.93	0.0580
Iso-Butane	0.9189	0.8778	0.3020	29.88	0.0184
N-Butane	1.4897	1.4230	0.4710	48.60	0.0299
I-Pentane	0.4919	0.4699	0.1800	19.68	0.0123
N-Pentane	0.3421	0.3268	0.1240	13.71	0.0085
Hexane Plus	0.4199	0.4011	0.1880	22.13	0.0139
Total	100.0000	95.5255	18.8920	1227.26	0.6973

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0034
BTU/CU.FT IDEAL: 1230.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1234.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1212.7
DRY BTU @ 15.025: 1258.9
REAL SPECIFIC GRAVITY: 0.6993

CYLINDER #: 013
CYLINDER PRESSURE: 169 PSIG
ANALYSIS DATE: 09/21/2020
ANALYSIS TIME: 03:17:29 PM
ANALYSIS RUN BY: PATRICIA KING

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: 09/29/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 321; INT
Stn. No.: API #
Mtr. No.:

INTERMEDIATE

09/29/2020
15950-12170

Smpl Date: 09/16/2020
Test Date: 09/21/2020
Run No: SO200162

Nitrogen: 0.3425
CO2: 0.0039
Methane: 83.4492
Ethane: 8.7291
Propane: 3.8128
I-Butane: 0.9189
N-Butane: 1.4897
I-Pentane: 0.4919
N-Pentane: 0.3421
Hexane+: 0.4199

BTU: 1234.2
GPM: 18.8920
SPG: 0.6993



NMOCD REC'D
10/12/20

Well Name: NEBU 321; TBG
API #: API # 300453116300
Source: TUBING
Sample Type: GAS
Analysis No: SO200163
Cust No: 15950-12175

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 321; TBG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300453116300

Source: TUBING
Well Flowing: Y
Pressure: 141 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: 3.45 PM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0809	0.0803	0.0090	0.00	0.0008
CO2	1.9223	1.9073	0.3290	0.00	0.0292
Methane	96.0360	95.2877	16.3110	969.96	0.5319
Ethane	1.6793	1.6662	0.4500	29.72	0.0174
Propane	0.1970	0.1955	0.0540	4.96	0.0030
Iso-Butane	0.0375	0.0372	0.0120	1.22	0.0008
N-Butane	0.0177	0.0176	0.0060	0.58	0.0004
I-Pentane	0.0080	0.0079	0.0030	0.32	0.0002
N-Pentane	0.0029	0.0029	0.0010	0.12	0.0001
Hexane Plus	0.0184	0.0183	0.0080	0.97	0.0006
Total	100.0000	99.2209	17.1830	1007.84	0.5844

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
BTU/CU.FT IDEAL: 1010.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1012.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 994.7
DRY BTU @ 15.025: 1032.6
REAL SPECIFIC GRAVITY: 0.5854

CYLINDER #: 0106
CYLINDER PRESSURE: 136 PSIG
ANALYSIS DATE: 09/21/2020
ANALYSIS TIME: 03:15:25 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: 09/29/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 321; TBG
Stn. No.: API #
Mtr. No.:

TUBING

09/29/2020
15950-12175

Smpl Date: 09/16/2020
Test Date: 09/21/2020
Run No: SO200163

Nitrogen: 0.0809
CO2: 1.9223
Methane: 96.0360
Ethane: 1.6793
Propane: 0.1970
I-Butane: 0.0375
N-Butane: 0.0177
I-Pentane: 0.0080
N-Pentane: 0.0029
Hexane+: 0.0184

BTU: 1012.3
GPM: 17.1830
SPG: 0.5854