



NMOCD REC'D
10/12/20

Well Name: NEBU 33-12;CSG
API #: API # 300451086700
Source: CASING
Sample Type: GAS
Analysis No: SO200123
Cust No: 15950-11980

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 33-12;CSG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300451086700

Source: CASING
Well Flowing: Y
Pressure: 153 PSIG
Flow Temp: DEG. F
Ambient Temp: 84 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/16/2020
Sample Time: 4.00 PM
Sampled By: ERIK SHAW
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0738	0.0734	0.0080	0.00	0.0007
CO2	1.8674	1.8570	0.3190	0.00	0.0284
Methane	96.3688	95.8342	16.3680	973.32	0.5338
Ethane	1.4902	1.4819	0.3990	26.37	0.0155
Propane	0.1465	0.1457	0.0400	3.69	0.0022
Iso-Butane	0.0253	0.0252	0.0080	0.82	0.0005
N-Butane	0.0122	0.0121	0.0040	0.40	0.0002
I-Pentane	0.0043	0.0043	0.0020	0.17	0.0001
N-Pentane	0.0021	0.0021	0.0010	0.08	0.0001
Hexane Plus	0.0094	0.0093	0.0040	0.50	0.0003
Total	100.0000	99.4452	17.1530	1005.36	0.5818

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
BTU/CU.FT IDEAL: 1007.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1009.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 992.2
DRY BTU @ 15.025: 1030.0
REAL SPECIFIC GRAVITY: 0.5828

CYLINDER #: 1416
CYLINDER PRESSURE: 143 PSIG
ANALYSIS DATE: 09/23/2020
ANALYSIS TIME: 12:56:40 AM
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: 09/24/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease:	NEBU 33-12;CSG	CASING	09/24/2020
Stn. No.:	API #		15950-11980
Mtr. No.:			

Smpl Date:	09/16/2020
Test Date:	09/23/2020
Run No:	SO200123
Nitrogen:	0.0738
CO2:	1.8674
Methane:	96.3688
Ethane:	1.4902
Propane:	0.1465
I-Butane:	0.0253
N-Butane:	0.0122
I-Pentane:	0.0043
N-Pentane:	0.0021
Hexane+:	0.0094
BTU:	1009.8
GPM:	17.1530
SPG:	0.5828



NMOCD REC'D
10/12/20

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

Analysis No: SO200124
Cust No: 15950-11985

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 33-12; INT
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300451086700

Source: INTERMEDIATE
Well Flowing: Y
Pressure: 151 PSIG
Flow Temp: DEG. F
Ambient Temp: 84 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/16/2020
Sample Time: 4.05 PM
Sampled By: ERIK SHAW
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0779	0.0772	0.0090	0.00	0.0008
CO2	1.8643	1.8477	0.3190	0.00	0.0283
Methane	96.5685	95.7086	16.4010	975.34	0.5349
Ethane	1.3109	1.2992	0.3510	23.20	0.0136
Propane	0.1357	0.1345	0.0370	3.41	0.0021
Iso-Butane	0.0229	0.0227	0.0080	0.74	0.0005
N-Butane	0.0099	0.0098	0.0030	0.32	0.0002
I-Pentane	0.0036	0.0036	0.0010	0.14	0.0001
N-Pentane	0.0011	0.0011	0.0000	0.04	0.0000
Hexane Plus	0.0052	0.0052	0.0020	0.27	0.0002
Total	100.0000	99.1096	17.1310	1003.49	0.5806

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
BTU/CU.FT IDEAL: 1005.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1007.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 990.4
DRY BTU @ 15.025: 1028.1
REAL SPECIFIC GRAVITY: 0.5816

CYLINDER #: 1060
CYLINDER PRESSURE: 135 PSIG
ANALYSIS DATE: 09/23/2020
ANALYSIS TIME: 11:09:37 AM
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: 09/24/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease:	NEBU 33-12; INT	INTERMEDIATE	09/24/2020
Stn. No.:	API #		15950-11985
Mtr. No.:			

Smpl Date:	09/16/2020
Test Date:	09/23/2020
Run No:	SO200124
Nitrogen:	0.0779
CO2:	1.8643
Methane:	96.5685
Ethane:	1.3109
Propane:	0.1357
I-Butane:	0.0229
N-Butane:	0.0099
I-Pentane:	0.0036
N-Pentane:	0.0011
Hexane+:	0.0052
BTU:	1007.9
GPM:	17.1310
SPG:	0.5816



NMOCD REC'D
10/12/20

Well Name: NEBU 33-12; TBG
API #: API # 300451086700
Source: TUBING
Sample Type: GAS
Analysis No: SO200125
Cust No: 15950-11990

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 33-12; TBG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300451086700

Source: TUBING
Well Flowing: Y
Pressure: 150 PSIG
Flow Temp: DEG. F
Ambient Temp: 84 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/16/2020
Sample Time: 3.55 PM
Sampled By: ERIK SHAW
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0770	0.0766	0.0080	0.00	0.0007
CO2	1.8708	1.8602	0.3200	0.00	0.0284
Methane	96.3779	95.8341	16.3690	973.42	0.5338
Ethane	1.4734	1.4651	0.3950	26.07	0.0153
Propane	0.1478	0.1470	0.0410	3.72	0.0023
Iso-Butane	0.0249	0.0248	0.0080	0.81	0.0005
N-Butane	0.0120	0.0119	0.0040	0.39	0.0002
I-Pentane	0.0048	0.0048	0.0020	0.19	0.0001
N-Pentane	0.0019	0.0019	0.0010	0.08	0.0000
Hexane Plus	0.0095	0.0094	0.0040	0.50	0.0003
Total	100.0000	99.4358	17.1520	1005.18	0.5818

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
BTU/CU.FT IDEAL: 1007.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1009.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 992.0
DRY BTU @ 15.025: 1029.8
REAL SPECIFIC GRAVITY: 0.5828

CYLINDER #: 1064
CYLINDER PRESSURE: 138 PSIG
ANALYSIS DATE: 09/23/2020
ANALYSIS TIME: 11:15:45 AM
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: 09/24/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 33-12; TBG
Stn. No.: API #
Mtr. No.:

TUBING

09/24/2020
15950-11990

Smpl Date: 09/16/2020
Test Date: 09/23/2020
Run No: SO200125

Nitrogen: 0.0770
CO2: 1.8708
Methane: 96.3779
Ethane: 1.4734
Propane: 0.1478
I-Butane: 0.0249
N-Butane: 0.0120
I-Pentane: 0.0048
N-Pentane: 0.0019
Hexane+: 0.0095

BTU: 1009.6
GPM: 17.1520
SPG: 0.5828