



NMOCD REC'D
10/12/20

Well Name: NEBU 13M; CSG
API #: API # 300392974800
Source: CASING
Sample Type: GAS
Analysis No: SO200142
Cust No: 15950-12075

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 13M; CSG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300392974800

Source: CASING
Well Flowing: N
Pressure: 65 PSIG
Flow Temp: DEG. F
Ambient Temp: 80 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/17/2020
Sample Time: 2.25 PM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2936	0.2907	0.0320	0.00	0.0028
CO2	2.4584	2.4344	0.4200	0.00	0.0374
Methane	94.6116	93.6898	16.0760	955.58	0.5241
Ethane	1.1153	1.1044	0.2990	19.74	0.0116
Propane	0.0678	0.0671	0.0190	1.71	0.0010
Iso-Butane	0.0243	0.0241	0.0080	0.79	0.0005
N-Butane	0.0088	0.0087	0.0030	0.29	0.0002
I-Pentane	0.0064	0.0063	0.0020	0.26	0.0002
N-Pentane	0.0017	0.0017	0.0010	0.07	0.0000
Hexane Plus	1.4121	1.3983	0.6310	74.43	0.0467
Total	100.0000	99.0255	17.4910	1052.85	0.6245

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0025
BTU/CU.FT IDEAL: 1055.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1057.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1039.5
DRY BTU @ 15.025: 1079.1
REAL SPECIFIC GRAVITY: 0.6258

CYLINDER #: 005
CYLINDER PRESSURE: 62 PSIG
ANALYSIS DATE: 09/24/2020
ANALYSIS TIME: 12:34:56 AM
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 13M; CSG
Stn. No.: API #
Mtr. No.:

CASING

09/29/2020
15950-12075

Smpl Date: 09/17/2020
Test Date: 09/24/2020
Run No: SO200142

Nitrogen: 0.2936
CO2: 2.4584
Methane: 94.6116
Ethane: 1.1153
Propane: 0.0678
I-Butane: 0.0243
N-Butane: 0.0088
I-Pentane: 0.0064
N-Pentane: 0.0017
Hexane+: 1.4121

BTU: 1057.9
GPM: 17.4910
SPG: 0.6258



NMOCD REC'D
10/12/20

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

Analysis No: SO200143
Cust No: 15950-12080

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 13M; INT
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300392974800

Source: INTERMEDIATE
Well Flowing:
Pressure: 21 PSIG
Flow Temp: DEG. F
Ambient Temp: 80 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 09/17/2020
Sample Time: 2.20 PM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace:

Remarks:

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2015	0.1926	0.0220	0.00	0.0019
CO2	0.0140	0.0134	0.0020	0.00	0.0002
Methane	86.3397	82.5264	14.6790	872.03	0.4782
Ethane	7.2737	6.9525	1.9510	128.72	0.0755
Propane	3.6295	3.4692	1.0030	91.32	0.0553
Iso-Butane	0.4379	0.4186	0.1440	14.24	0.0088
N-Butane	0.8719	0.8334	0.2760	28.44	0.0175
I-Pentane	0.2461	0.2352	0.0900	9.85	0.0061
N-Pentane	0.2289	0.2188	0.0830	9.18	0.0057
Hexane Plus	0.7568	0.7234	0.3380	39.89	0.0250
Total	100.0000	95.5835	18.5880	1193.67	0.6743

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0031
BTU/CU.FT IDEAL: 1196.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1200.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1179.3
DRY BTU @ 15.025: 1224.2
REAL SPECIFIC GRAVITY: 0.6762

CYLINDER #: 528
CYLINDER PRESSURE: 20 PSIG
ANALYSIS DATE: 09/24/2020
ANALYSIS TIME: 12:45:23 AM
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 13M; INT
Stn. No.: API #
Mtr. No.:

INTERMEDIATE

09/29/2020
15950-12080

Smpl Date: 09/17/2020
Test Date: 09/24/2020
Run No: SO200143

Nitrogen: 0.2015
CO2: 0.0140
Methane: 86.3397
Ethane: 7.2737
Propane: 3.6295
I-Butane: 0.4379
N-Butane: 0.8719
I-Pentane: 0.2461
N-Pentane: 0.2289
Hexane+: 0.7568

BTU: 1200.2
GPM: 18.5880
SPG: 0.6762



NMOCD REC'D
10/12/20

Well Name: NEBU 13M; TBG
API #: API # 300392974800
Source: TUBING
Sample Type: GAS
Analysis No: SO200144
Cust No: 15950-12085

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 13M; TBG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300392974800

Source: TUBING
Well Flowing: Y
Pressure: 20 PSIG
Flow Temp: DEG. F
Ambient Temp: 80 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/17/2020
Sample Time: 2.30 PM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2385	0.2357	0.0260	0.00	0.0023
CO2	2.1228	2.0982	0.3630	0.00	0.0323
Methane	91.0114	89.9562	15.4650	919.22	0.5041
Ethane	3.9670	3.9210	1.0630	70.20	0.0412
Propane	1.3978	1.3816	0.3860	35.17	0.0213
Iso-Butane	0.3009	0.2974	0.0990	9.78	0.0060
N-Butane	0.3761	0.3717	0.1190	12.27	0.0075
I-Pentane	0.1596	0.1577	0.0590	6.39	0.0040
N-Pentane	0.1099	0.1086	0.0400	4.41	0.0027
Hexane Plus	0.3160	0.3123	0.1410	16.66	0.0105
Total	100.0000	98.8404	17.7610	1074.09	0.6319

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
BTU/CU.FT IDEAL: 1076.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1079.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1060.6
DRY BTU @ 15.025: 1101.0
REAL SPECIFIC GRAVITY: 0.6333

CYLINDER #: 071
CYLINDER PRESSURE: 19 PSIG
ANALYSIS DATE: 09/24/2020
ANALYSIS TIME: 12:23:00 AM
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 13M; TBG
Stn. No.: API #
Mtr. No.:

TUBING

09/29/2020
15950-12085

Smpl Date: 09/17/2020
Test Date: 09/24/2020
Run No: SO200144

Nitrogen: 0.2385
CO2: 2.1228
Methane: 91.0114
Ethane: 3.9670
Propane: 1.3978
I-Butane: 0.3009
N-Butane: 0.3761
I-Pentane: 0.1596
N-Pentane: 0.1099
Hexane+: 0.3160

BTU: 1079.4
GPM: 17.7610
SPG: 0.6333