



NMOCD REC'D
10/12/20

Well Name: NEBU 333; BHD
API #: API # 300453224600
Source: BRADENHEAD
Sample Type: GAS
Analysis No: SO200108
Cust No: 15950-11920

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 333; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300453224600

Source: BRADENHEAD
Well Flowing: Y
Pressure: 10 PSIG
Flow Temp: DEG. F
Ambient Temp: 85 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/21/2020
Sample Time: 11.22 AM
Sampled By: CELIA L.
Sampled by (CO): ABC

Heat Trace: N
Remarks: PRESSURED WITH HELIUM TO 30LBS.

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	98.0850	44.7306	10.7920	0.00	0.9487
CO2	0.0215	0.0098	0.0040	0.00	0.0003
Methane	1.7358	0.7916	0.2940	17.53	0.0096
Ethane	0.0702	0.0320	0.0190	1.24	0.0007
Propane	0.0660	0.0301	0.0180	1.66	0.0010
Iso-Butane	0.0000	0.0000	0.0000	0.00	0.0000
N-Butane	0.0088	0.0040	0.0030	0.29	0.0002
I-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0127	0.0058	0.0060	0.67	0.0004
Total	100.0000	45.6039	11.1360	21.39	0.9609

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0003	CYLINDER #:	003
BTU/CU.FT IDEAL:	21.4	CYLINDER PRESSURE:	PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	21.4	ANALYSIS DATE:	08/26/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	21.0	ANALYSIS TIME:	01:09:57 PM
DRY BTU @ 15.025:	21.8	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.9609		

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: 09/03/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 333; BHD
Stn. No.: API #
Mtr. No.:

BRADENHEAD

09/03/2020
15950-11920

Smpl Date: 08/21/2020
Test Date: 08/26/2020
Run No: SO200108

Nitrogen: 98.0850
CO2: 0.0215
Methane: 1.7358
Ethane: 0.0702
Propane: 0.0660
I-Butane: 0.0000
N-Butane: 0.0088
I-Pentane: 0.0000
N-Pentane: 0.0000
Hexane+: 0.0127

BTU: 21.4
GPM: 11.1360
SPG: 0.9609



NMOCD REC'D
10/12/20

Well Name: NEBU 333; CSG
API #: API # 300453224600
Source: CASING
Sample Type: GAS
Analysis No: SO200109
Cust No: 15950-11925

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 333; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300453224600

Source: CASING
Well Flowing: Y
Pressure: 130 PSIG
Flow Temp: DEG. F
Ambient Temp: 83 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/21/2020
Sample Time: 11.31 AM
Sampled By: CELIA L.
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5438	0.5251	0.0600	0.00	0.0053
CO2	0.7852	0.7582	0.1340	0.00	0.0119
Methane	84.0558	81.1655	14.2910	848.96	0.4656
Ethane	8.7951	8.4927	2.3590	155.65	0.0913
Propane	3.8278	3.6962	1.0580	96.31	0.0583
Iso-Butane	0.5587	0.5395	0.1830	18.17	0.0112
N-Butane	0.6430	0.6209	0.2030	20.98	0.0129
I-Pentane	0.1246	0.1203	0.0460	4.99	0.0031
N-Pentane	0.0760	0.0734	0.0280	3.05	0.0019
Hexane Plus	0.5900	0.5697	0.2640	31.10	0.0195
Total	100.0000	96.5615	18.6260	1179.20	0.6810

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0031
BTU/CU.FT IDEAL: 1181.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1185.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1165.0
DRY BTU @ 15.025: 1209.3
REAL SPECIFIC GRAVITY: 0.6828

CYLINDER #: 1070
CYLINDER PRESSURE: 56 PSIG
ANALYSIS DATE: 08/26/2020
ANALYSIS TIME: 11:35:21 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: 09/03/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 333; CSG
Stn. No.: API #
Mtr. No.:

CASING

09/03/2020
15950-11925

Smpl Date: 08/21/2020
Test Date: 08/26/2020
Run No: SO200109

Nitrogen: 0.5438
CO2: 0.7852
Methane: 84.0558
Ethane: 8.7951
Propane: 3.8278
I-Butane: 0.5587
N-Butane: 0.6430
I-Pentane: 0.1246
N-Pentane: 0.0760
Hexane+: 0.5900

BTU: 1185.6
GPM: 18.6260
SPG: 0.6828



NMOCD REC'D
10/12/20

Well Name: NEBU 333; INT
API #: API # 300453224600
Source: INTERMEDIATE CASING
Sample Type: GAS
Analysis No: SO200110
Cust No: 15950-11930

Well/Lease Information

Customer Name:	BP - SOUTH BHD PROJECT	Source:	INTERMEDIATE CASING
Well Name:	NEBU 333; INT	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	15 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	82 DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	API # 300453224600	Sample Method:	Purge & Fill
		Sample Date:	08/21/2020
		Sample Time:	11.25 AM
		Sampled By:	CELIA L.
		Sampled by (CO):	ABC
Heat Trace:	N		
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	7.9655	4.9391	0.8790	0.00	0.0770
CO2	0.0144	0.0089	0.0020	0.00	0.0002
Methane	77.5210	48.0678	13.1800	782.96	0.4294
Ethane	7.8350	4.8582	2.1010	138.66	0.0813
Propane	3.5356	2.1923	0.9770	88.96	0.0538
Iso-Butane	0.5806	0.3600	0.1910	18.88	0.0117
N-Butane	0.8839	0.5481	0.2790	28.84	0.0177
I-Pentane	0.3235	0.2006	0.1190	12.94	0.0081
N-Pentane	0.2693	0.1670	0.0980	10.80	0.0067
Hexane Plus	1.0712	0.6642	0.4790	56.46	0.0355
Total	100.0000	62.0062	18.3050	1138.50	0.7214

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0031	CYLINDER #:	0103
BTU/CU.FT IDEAL:	1141.1	CYLINDER PRESSURE:	12 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1144.7	ANALYSIS DATE:	08/26/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1124.8	ANALYSIS TIME:	11:18:48 AM
DRY BTU @ 15.025:	1167.6	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.7234		

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: 09/03/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 333; INT
Stn. No.: API #
Mtr. No.:

INTERMEDIATE CASING

09/03/2020
15950-11930

Smpl Date: 08/21/2020
Test Date: 08/26/2020
Run No: SO200110

Nitrogen: 7.9655
CO2: 0.0144
Methane: 77.5210
Ethane: 7.8350
Propane: 3.5356
I-Butane: 0.5806
N-Butane: 0.8839
I-Pentane: 0.3235
N-Pentane: 0.2693
Hexane+: 1.0712

BTU: 1144.7
GPM: 18.3050
SPG: 0.7234



NMOCD REC'D
10/12/20

Well Name: NEBU 333; TBG
API #: API # 300453224600
Source: TUBING
Sample Type: GAS
Analysis No: SO200111
Cust No: 15950-11935

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 333; TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300453224600

Source: TUBING
Well Flowing: Y
Pressure: 130 PSIG
Flow Temp: DEG. F
Ambient Temp: 85 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/21/2020
Sample Time: 11.30 AM
Sampled By: CELIA L.
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1939	0.1932	0.0210	0.00	0.0019
CO2	1.5584	1.5530	0.2670	0.00	0.0237
Methane	87.1899	86.8854	14.8200	880.62	0.4829
Ethane	6.1114	6.0900	1.6390	108.15	0.0634
Propane	2.9737	2.9633	0.8210	74.82	0.0453
Iso-Butane	0.5228	0.5210	0.1720	17.00	0.0105
N-Butane	0.7060	0.7035	0.2230	23.03	0.0142
I-Pentane	0.2183	0.2175	0.0800	8.73	0.0054
N-Pentane	0.1630	0.1624	0.0590	6.53	0.0041
Hexane Plus	0.3626	0.3613	0.1620	19.11	0.0120
Total	100.0000	99.6506	18.2640	1138.01	0.6634

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0029
BTU/CU.FT IDEAL: 1140.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1144.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1124.1
DRY BTU @ 15.025: 1166.9
REAL SPECIFIC GRAVITY: 0.665

CYLINDER #: 1073
CYLINDER PRESSURE: 115 PSIG
ANALYSIS DATE: 08/26/2020
ANALYSIS TIME: 11:27:15 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: 09/03/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 333; TBG
Stn. No.: API #
Mtr. No.:

TUBING

09/03/2020
15950-11935

Smpl Date: 08/21/2020
Test Date: 08/26/2020
Run No: SO200111

Nitrogen: 0.1939
CO2: 1.5584
Methane: 87.1899
Ethane: 6.1114
Propane: 2.9737
I-Butane: 0.5228
N-Butane: 0.7060
I-Pentane: 0.2183
N-Pentane: 0.1630
Hexane+: 0.3626

BTU: 1144.0
GPM: 18.2640
SPG: 0.6650