



NMOCD REC'D
10/12/20

Well Name: NEBU 68M; CSG
API #: API #300453347400
Source: CASING
Sample Type: GAS
Analysis No: SO200102
Cust No: 15950-11890

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 68M; CSG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API #300453347400
52903742

Source: CASING
Well Flowing: Y
Pressure: 107 PSIG
Flow Temp: DEG. F
Ambient Temp: 69 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/03/2020
Sample Time: 8.15 AM
Sampled By: SEAN C.
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3318	0.3258	0.0370	0.00	0.0032
CO2	1.1498	1.1291	0.1970	0.00	0.0175
Methane	78.8026	77.3859	13.4120	795.91	0.4365
Ethane	8.5363	8.3828	2.2920	151.07	0.0886
Propane	4.9572	4.8681	1.3710	124.73	0.0755
Iso-Butane	1.1024	1.0826	0.3620	35.85	0.0221
N-Butane	1.9116	1.8772	0.6050	62.36	0.0384
I-Pentane	1.0408	1.0221	0.3820	41.64	0.0259
N-Pentane	0.9781	0.9605	0.3560	39.21	0.0244
Hexane Plus	1.1894	1.1680	0.5330	62.69	0.0394
Total	100.0000	98.2021	19.5470	1313.46	0.7714

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0042
BTU/CU.FT IDEAL: 1316.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1321.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1298.9
DRY BTU @ 15.025: 1348.4
REAL SPECIFIC GRAVITY: 0.7743

CYLINDER #: 195
CYLINDER PRESSURE: 104 PSIG
ANALYSIS DATE: 08/12/2020
ANALYSIS TIME: 03:50:21 PM
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: 08/17/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 68M; CSG
Stn. No.: API
Mtr. No.: 52903742

CASING

08/17/2020
15950-11890

Smpl Date: 08/03/2020
Test Date: 08/12/2020
Run No: SO200102

Nitrogen: 0.3318
CO2: 1.1498
Methane: 78.8026
Ethane: 8.5363
Propane: 4.9572
I-Butane: 1.1024
N-Butane: 1.9116
I-Pentane: 1.0408
N-Pentane: 0.9781
Hexane+: 1.1894

BTU: 1321.9
GPM: 19.5470
SPG: 0.7743



NMOCD REC'D
10/12/20

Well Name: NEBU 68M; INTRM
API #: API #300453347400
Source: INTERMEDIATE CASING
Sample Type: GAS
Analysis No: SO200103
Cust No: 15950-11895

Well/Lease Information

Customer Name:	BP - SOUTH BHD PROJECT	Source:	INTERMEDIATE CASING
Well Name:	NEBU 68M; INTRM	Well Flowing:	
County/State:	NM	Pressure:	23 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	69 DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	API #300453347400 52903742	Sample Method:	Purge & Fill
		Sample Date:	08/03/2020
		Sample Time:	8.10 AM
		Sampled By:	SEAN C.
		Sampled by (CO):	ABC
Heat Trace:	N		
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	7.5158	1.7461	0.8290	0.00	0.0727
CO2	0.0486	0.0113	0.0080	0.00	0.0007
Methane	79.7176	18.5204	13.5530	805.15	0.4416
Ethane	6.2869	1.4606	1.6860	111.26	0.0653
Propane	3.0070	0.6986	0.8310	75.66	0.0458
Iso-Butane	0.5118	0.1189	0.1680	16.64	0.0103
N-Butane	0.8071	0.1875	0.2550	26.33	0.0162
I-Pentane	0.3827	0.0889	0.1400	15.31	0.0095
N-Pentane	0.3585	0.0833	0.1300	14.37	0.0089
Hexane Plus	1.3640	0.3169	0.6100	71.90	0.0451
Total	100.0000	23.2325	18.2100	1136.62	0.7161

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0031	CYLINDER #:	2584
BTU/CU.FT IDEAL:	1139.2	CYLINDER PRESSURE:	23 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1142.8	ANALYSIS DATE:	08/12/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1122.9	ANALYSIS TIME:	03:15:45 AM
DRY BTU @ 15.025:	1165.7	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.7181		

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: 08/17/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 68M; INTRM
Stn. No.: API
Mtr. No.: 52903742

INTERMEDIATE CASING

08/17/2020
15950-11895

Smpl Date: 08/03/2020
Test Date: 08/12/2020
Run No: SO200103

Nitrogen: 7.5158
CO2: 0.0486
Methane: 79.7176
Ethane: 6.2869
Propane: 3.0070
I-Butane: 0.5118
N-Butane: 0.8071
I-Pentane: 0.3827
N-Pentane: 0.3585
Hexane+: 1.3640

BTU: 1142.8
GPM: 18.2100
SPG: 0.7181



NMOCD REC'D
10/12/20

Well Name: NEBU 68M; TBG
API #: API #300453347400
Source: TUBING
Sample Type: GAS
Analysis No: SO200104
Cust No: 15950-11900

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 68M; TBG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API #300453347400
52903742

Source: TUBING
Well Flowing: Y
Pressure: 110 PSIG
Flow Temp: DEG. F
Ambient Temp: 69 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/03/2020
Sample Time: 8.20 AM
Sampled By: SEAN C.
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2044	0.2003	0.0230	0.00	0.0020
CO2	1.3318	1.3050	0.2280	0.00	0.0202
Methane	85.2202	83.5081	14.4890	860.72	0.4720
Ethane	7.2097	7.0648	1.9340	127.59	0.0749
Propane	3.7344	3.6594	1.0320	93.96	0.0569
Iso-Butane	0.6165	0.6041	0.2020	20.05	0.0124
N-Butane	0.8604	0.8431	0.2720	28.07	0.0173
I-Pentane	0.2429	0.2380	0.0890	9.72	0.0061
N-Pentane	0.1836	0.1799	0.0670	7.36	0.0046
Hexane Plus	0.3961	0.3881	0.1770	20.88	0.0131
Total	100.0000	97.9908	18.5130	1168.35	0.6793

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0031
BTU/CU.FT IDEAL: 1171.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1174.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1154.3
DRY BTU @ 15.025: 1198.2
REAL SPECIFIC GRAVITY: 0.6812

CYLINDER #: 9
CYLINDER PRESSURE: 105 PSIG
ANALYSIS DATE: 08/12/2020
ANALYSIS TIME: 04:05:37 PM
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: 08/17/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 68M; TBG
Stn. No.: API
Mtr. No.: 52903742

TUBING

08/17/2020
15950-11900

Smpl Date: 08/03/2020
Test Date: 08/12/2020
Run No: SO200104

Nitrogen: 0.2044
CO2: 1.3318
Methane: 85.2202
Ethane: 7.2097
Propane: 3.7344
I-Butane: 0.6165
N-Butane: 0.8604
I-Pentane: 0.2429
N-Pentane: 0.1836
Hexane+: 0.3961

BTU: 1174.7
GPM: 18.5130
SPG: 0.6812