



NMOCD REC'D
10/12/20

Well Name: NEBU 32; CSG
API #: API # 300451333300
Source: CASING
Sample Type: GAS
Analysis No: SO200120
Cust No: 15950-11965

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 32; CSG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300451333300

Source: CASING
Well Flowing: Y
Pressure: 73.2 PSIG
Flow Temp: DEG. F
Ambient Temp: 82 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 09/16/2020
Sample Time: 7.00 PM
Sampled By: TONY FELIX
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1355	0.1327	0.0150	0.00	0.0013
CO2	1.9855	1.9447	0.3400	0.00	0.0302
Methane	86.9000	85.1139	14.7700	877.69	0.4813
Ethane	7.1905	7.0427	1.9280	127.25	0.0747
Propane	2.4563	2.4058	0.6780	61.80	0.0374
Iso-Butane	0.2612	0.2558	0.0860	8.49	0.0052
N-Butane	0.5283	0.5174	0.1670	17.23	0.0106
I-Pentane	0.1267	0.1241	0.0460	5.07	0.0032
N-Pentane	0.1113	0.1090	0.0400	4.46	0.0028
Hexane Plus	0.3047	0.2984	0.1360	16.06	0.0101
Total	100.0000	97.9445	18.2060	1118.06	0.6567

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0028
BTU/CU.FT IDEAL: 1120.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1123.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1104.2
DRY BTU @ 15.025: 1146.3
REAL SPECIFIC GRAVITY: 0.6583

CYLINDER #: 1411
CYLINDER PRESSURE: 68 PSIG
ANALYSIS DATE: 09/23/2020
ANALYSIS TIME: 10:27:59 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 32; CSG
Stn. No.: API #
Mtr. No.:

CASING

09/24/2020
15950-11965

Smpl Date: 09/16/2020
Test Date: 09/23/2020
Run No: SO200120

Nitrogen: 0.1355
CO2: 1.9855
Methane: 86.9000
Ethane: 7.1905
Propane: 2.4563
I-Butane: 0.2612
N-Butane: 0.5283
I-Pentane: 0.1267
N-Pentane: 0.1113
Hexane+: 0.3047

BTU: 1123.8
GPM: 18.2060
SPG: 0.6583



NMOCD REC'D
10/12/20

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

Analysis No: SO200121
Cust No: 15950-11970

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 32; INT
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300451333300

Source: INTERMEDIATE
Well Flowing: Y
Pressure: 71.3 PSIG
Flow Temp: DEG. F
Ambient Temp: 82 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 09/16/2020
Sample Time: 6.42 PM
Sampled By: TONY FELIX
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2050	0.2010	0.0230	0.00	0.0020
CO2	1.9388	1.9014	0.3320	0.00	0.0295
Methane	86.8855	85.2095	14.7670	877.54	0.4813
Ethane	7.2397	7.1000	1.9410	128.12	0.0752
Propane	2.4768	2.4290	0.6840	62.32	0.0377
Iso-Butane	0.2585	0.2535	0.0850	8.41	0.0052
N-Butane	0.5334	0.5231	0.1690	17.40	0.0107
I-Pentane	0.1237	0.1213	0.0450	4.95	0.0031
N-Pentane	0.1059	0.1039	0.0380	4.25	0.0026
Hexane Plus	0.2327	0.2282	0.1040	12.27	0.0077
Total	100.0000	98.0709	18.1880	1115.25	0.6549

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0028
BTU/CU.FT IDEAL: 1117.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1121.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1101.5
DRY BTU @ 15.025: 1143.5
REAL SPECIFIC GRAVITY: 0.6565

CYLINDER #: 1306
CYLINDER PRESSURE: 67 PSIG
ANALYSIS DATE: 09/23/2020
ANALYSIS TIME: 10:14:26 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 32; INT
Stn. No.: API #
Mtr. No.:

INTERMEDIATE

09/24/2020
15950-11970

Smpl Date: 09/16/2020
Test Date: 09/23/2020
Run No: SO200121

Nitrogen: 0.2050
CO2: 1.9388
Methane: 86.8855
Ethane: 7.2397
Propane: 2.4768
I-Butane: 0.2585
N-Butane: 0.5334
I-Pentane: 0.1237
N-Pentane: 0.1059
Hexane+: 0.2327

BTU: 1121.0
GPM: 18.1880
SPG: 0.6565



NMOCD REC'D
10/12/20

Well Name: NEBU 32; TBG
API #: API # 300451333300
Source: TUBING
Sample Type: GAS
Analysis No: SO200122
Cust No: 15950-11975

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 32; TBG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300451333300

Source: TUBING
Well Flowing: Y
Pressure: 73.2 PSIG
Flow Temp: DEG. F
Ambient Temp: 82 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 09/16/2020
Sample Time: 6.50 PM
Sampled By: TONY FELIX
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1006	0.0982	0.0110	0.00	0.0010
CO2	1.8372	1.7937	0.3140	0.00	0.0279
Methane	87.1124	85.0507	14.8070	879.84	0.4825
Ethane	6.7649	6.6048	1.8140	119.72	0.0702
Propane	2.2896	2.2354	0.6320	57.61	0.0349
Iso-Butane	0.4516	0.4409	0.1480	14.69	0.0091
N-Butane	0.5393	0.5265	0.1700	17.59	0.0108
I-Pentane	0.2149	0.2098	0.0790	8.60	0.0054
N-Pentane	0.1487	0.1452	0.0540	5.96	0.0037
Hexane Plus	0.5408	0.5280	0.2420	28.51	0.0179
Total	100.0000	97.6332	18.2710	1132.51	0.6633

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0029
BTU/CU.FT IDEAL: 1135.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1138.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1118.6
DRY BTU @ 15.025: 1161.2
REAL SPECIFIC GRAVITY: 0.665

CYLINDER #: 1432
CYLINDER PRESSURE: 67 PSIG
ANALYSIS DATE: 09/23/2020
ANALYSIS TIME: 10:41:57 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 32; TBG
Stn. No.: API #
Mtr. No.:

TUBING

09/24/2020
15950-11975

Smpl Date: 09/16/2020
Test Date: 09/23/2020
Run No: SO200122

Nitrogen: 0.1006
CO2: 1.8372
Methane: 87.1124
Ethane: 6.7649
Propane: 2.2896
I-Butane: 0.4516
N-Butane: 0.5393
I-Pentane: 0.2149
N-Pentane: 0.1487
Hexane+: 0.5408

BTU: 1138.4
GPM: 18.2710
SPG: 0.6650