



NMOCD REC'D
10/12/20

Well Name: NEBU 44A; BHD
API #: API # 300392172300
Source: BRADENHEAD
Sample Type: GAS
Analysis No: SO200035
Cust No: 15950-11680

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 44A; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300392172300

Source: BRADENHEAD
Well Flowing: Y
Pressure: 35 PSIG
Flow Temp: DEG. F
Ambient Temp: 64 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 06/18/2020
Sample Time: 9.02 AM
Sampled By: ERIK SHAW
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1481	0.1367	0.0160	0.00	0.0014
CO2	0.3367	0.3108	0.0580	0.00	0.0051
Methane	89.1494	82.3027	15.1550	900.41	0.4938
Ethane	5.5851	5.1562	1.4980	98.84	0.0580
Propane	1.9110	1.7642	0.5280	48.08	0.0291
Iso-Butane	0.4852	0.4479	0.1590	15.78	0.0097
N-Butane	0.5929	0.5474	0.1870	19.34	0.0119
I-Pentane	0.3923	0.3622	0.1440	15.70	0.0098
N-Pentane	0.2778	0.2565	0.1010	11.14	0.0069
Hexane Plus	1.1215	1.0354	0.5020	59.12	0.0371
Total	100.0000	92.3200	18.3480	1168.40	0.6629

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
BTU/CU.FT IDEAL: 1171.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1174.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1154.2
DRY BTU @ 15.025: 1198.1
REAL SPECIFIC GRAVITY: 0.6646

CYLINDER #: 0106
CYLINDER PRESSURE: 22 PSIG
ANALYSIS DATE: 06/23/2020
ANALYSIS TIME: 10:47:29 AM
ANALYSIS RUN BY: SHYANN ELLEDGE

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: 06/25/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 44A; BHD
Stn. No.: API #
Mtr. No.:

BRADENHEAD

06/25/2020
15950-11680

Smpl Date: 06/18/2020
Test Date: 06/23/2020
Run No: SO200035

Nitrogen: 0.1481
CO2: 0.3367
Methane: 89.1494
Ethane: 5.5851
Propane: 1.9110
I-Butane: 0.4852
N-Butane: 0.5929
I-Pentane: 0.3923
N-Pentane: 0.2778
Hexane+: 1.1215

BTU: 1174.6
GPM: 18.3480
SPG: 0.6646



NMOCD REC'D
10/12/20

Well Name: NEBU 44A; CSG
API #: API # 300392172300
Source: CASING
Sample Type: GAS
Analysis No: SO200036
Cust No: 15950-11685

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 44A; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300392172300

Source: CASING
Well Flowing: Y
Pressure: 34 PSIG
Flow Temp: DEG. F
Ambient Temp: 64 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 06/18/2020
Sample Time: 9.12 AM
Sampled By: ERIK SHAW
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1454	0.1356	0.0160	0.00	0.0014
CO2	0.4702	0.4384	0.0800	0.00	0.0071
Methane	87.9835	82.0338	14.9610	888.63	0.4873
Ethane	5.5927	5.2145	1.5000	98.97	0.0581
Propane	1.9803	1.8464	0.5470	49.83	0.0302
Iso-Butane	0.5303	0.4944	0.1740	17.24	0.0106
N-Butane	0.6713	0.6259	0.2120	21.90	0.0135
I-Pentane	0.4558	0.4250	0.1670	18.24	0.0114
N-Pentane	0.3426	0.3194	0.1250	13.73	0.0085
Hexane Plus	1.8279	1.7043	0.8180	96.35	0.0605
Total	100.0000	93.2377	18.6000	1204.90	0.6886

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0033
BTU/CU.FT IDEAL: 1207.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1211.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1190.6
DRY BTU @ 15.025: 1236.0
REAL SPECIFIC GRAVITY: 0.6906

CYLINDER #: 234
CYLINDER PRESSURE: 33 PSIG
ANALYSIS DATE: 06/23/2020
ANALYSIS TIME: 10:49:53 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: 06/25/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 44A; CSG
Stn. No.: API #
Mtr. No.:

CASING

06/25/2020
15950-11685

Smpl Date: 06/18/2020
Test Date: 06/23/2020
Run No: SO200036

Nitrogen: 0.1454
CO2: 0.4702
Methane: 87.9835
Ethane: 5.5927
Propane: 1.9803
I-Butane: 0.5303
N-Butane: 0.6713
I-Pentane: 0.4558
N-Pentane: 0.3426
Hexane+: 1.8279

BTU: 1211.7
GPM: 18.6000
SPG: 0.6906



NMOCD REC'D
10/12/20

Well Name: NEBU 44A; TBG
API #: API # 300392172300
Source: TUBING
Sample Type: GAS
Analysis No: SO200037
Cust No: 15950-11690

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 44A; TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300392172300

Source: TUBING
Well Flowing: Y
Pressure: 32 PSIG
Flow Temp: DEG. F
Ambient Temp: 64 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 06/18/2020
Sample Time: 9.07 AM
Sampled By: ERIK SHAW
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	12.0203	11.8586	1.3250	0.00	0.1163
CO2	1.7352	1.7119	0.2970	0.00	0.0264
Methane	78.3411	77.2874	13.3100	791.25	0.4339
Ethane	4.8689	4.8034	1.3050	86.16	0.0505
Propane	1.4576	1.4380	0.4020	36.67	0.0222
Iso-Butane	0.3212	0.3169	0.1050	10.45	0.0064
N-Butane	0.3512	0.3465	0.1110	11.46	0.0070
I-Pentane	0.1871	0.1846	0.0690	7.49	0.0047
N-Pentane	0.1228	0.1211	0.0450	4.92	0.0031
Hexane Plus	0.5946	0.5866	0.2660	31.34	0.0197
Total	100.0000	98.6550	17.2350	979.74	0.6902

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0024
BTU/CU.FT IDEAL: 982.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 984.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 967.3
DRY BTU @ 15.025: 1004.1
REAL SPECIFIC GRAVITY: 0.6916

CYLINDER #: 1072
CYLINDER PRESSURE: 20 PSIG
ANALYSIS DATE: 06/23/2020
ANALYSIS TIME: 11:18:04 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: 06/25/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 44A; TBG
Stn. No.: API #
Mtr. No.:

TUBING

06/25/2020
15950-11690

Smpl Date: 06/18/2020
Test Date: 06/23/2020
Run No: SO200037

Nitrogen: 12.0203
CO2: 1.7352
Methane: 78.3411
Ethane: 4.8689
Propane: 1.4576
I-Butane: 0.3212
N-Butane: 0.3512
I-Pentane: 0.1871
N-Pentane: 0.1228
Hexane+: 0.5946

BTU: 984.4
GPM: 17.2350
SPG: 0.6916