



NMOCD REC'D
10/12/20

Well Name: NEBU 50E; CSG
API #: API # 300453240900
Source: CASING
Sample Type: GAS
Analysis No: SO200148
Cust No: 15950-12105

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 50E; CSG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300453240900

Source: CASING
Well Flowing: N
Pressure: 860 PSIG
Flow Temp: DEG. F
Ambient Temp: 55 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/17/2020
Sample Time: 7.25 AM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1569	0.1566	0.0170	0.00	0.0015
CO2	2.2480	2.2437	0.3840	0.00	0.0342
Methane	96.9195	96.7327	16.4610	978.89	0.5368
Ethane	0.6096	0.6084	0.1630	10.79	0.0063
Propane	0.0439	0.0438	0.0120	1.10	0.0007
Iso-Butane	0.0112	0.0112	0.0040	0.36	0.0002
N-Butane	0.0057	0.0057	0.0020	0.19	0.0001
I-Pentane	0.0023	0.0023	0.0010	0.09	0.0001
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0029	0.0029	0.0010	0.15	0.0001
Total	100.0000	99.8073	17.0450	991.57	0.5800

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
BTU/CU.FT IDEAL: 993.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 996.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 978.7
DRY BTU @ 15.025: 1015.9
REAL SPECIFIC GRAVITY: 0.581

CYLINDER #: 223
CYLINDER PRESSURE: 800 PSIG
ANALYSIS DATE: 09/24/2020
ANALYSIS TIME: 02:34:49 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: 09/29/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 50E; CSG
Stn. No.: API #
Mtr. No.:

CASING

09/29/2020
15950-12105

Smpl Date: 09/17/2020
Test Date: 09/24/2020
Run No: SO200148

Nitrogen: 0.1569
CO2: 2.2480
Methane: 96.9195
Ethane: 0.6096
Propane: 0.0439
I-Butane: 0.0112
N-Butane: 0.0057
I-Pentane: 0.0023
N-Pentane: 0.0000
Hexane+: 0.0029

BTU: 996.0
GPM: 17.0450
SPG: 0.5810



NMOCD REC'D
10/12/20

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

Analysis No: SO200149
Cust No: 15950-12110

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 50E; INT
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300453240900

Source: INTERMEDIATE
Well Flowing:
Pressure: 180 PSIG
Flow Temp: DEG. F
Ambient Temp: 55 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 09/17/2020
Sample Time: 7.20 AM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace:
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5848	0.4422	0.0640	0.00	0.0057
CO2	0.0021	0.0016	0.0000	0.00	0.0000
Methane	98.7813	74.6880	16.7760	997.69	0.5471
Ethane	0.4075	0.3081	0.1090	7.21	0.0042
Propane	0.0854	0.0646	0.0240	2.15	0.0013
Iso-Butane	0.0213	0.0161	0.0070	0.69	0.0004
N-Butane	0.0332	0.0251	0.0100	1.08	0.0007
I-Pentane	0.0165	0.0125	0.0060	0.66	0.0004
N-Pentane	0.0139	0.0105	0.0050	0.56	0.0003
Hexane Plus	0.0540	0.0408	0.0240	2.85	0.0018
Total	100.0000	75.6095	17.0250	1012.89	0.5620

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.002
BTU/CU.FT IDEAL: 1015.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1017.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 999.6
DRY BTU @ 15.025: 1037.7
REAL SPECIFIC GRAVITY: 0.5629

CYLINDER #: 1072
CYLINDER PRESSURE: 191 PSIG
ANALYSIS DATE: 09/24/2020
ANALYSIS TIME: 02:22:32 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: 09/29/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 50E; INT
Stn. No.: API #
Mtr. No.:

INTERMEDIATE

09/29/2020
15950-12110

Smpl Date: 09/17/2020
Test Date: 09/24/2020
Run No: SO200149

Nitrogen: 0.5848
CO2: 0.0021
Methane: 98.7813
Ethane: 0.4075
Propane: 0.0854
I-Butane: 0.0213
N-Butane: 0.0332
I-Pentane: 0.0165
N-Pentane: 0.0139
Hexane+: 0.0540

BTU: 1017.3
GPM: 17.0250
SPG: 0.5629



NMOCD REC'D
10/12/20

Well Name: NEBU 50E; TBG
API #: API # 300453240900
Source: TUBING
Sample Type: GAS
Analysis No: SO200150
Cust No: 15950-12115

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 50E; TBG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 300453240900

Source: TUBING
Well Flowing: N
Pressure: 750 PSIG
Flow Temp: DEG. F
Ambient Temp: 55 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/17/2020
Sample Time: 7.30 AM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5432	0.5393	0.0600	0.00	0.0053
CO2	2.4226	2.4054	0.4140	0.00	0.0368
Methane	96.4010	95.7164	16.3730	973.65	0.5340
Ethane	0.5973	0.5931	0.1600	10.57	0.0062
Propane	0.0249	0.0247	0.0070	0.63	0.0004
Iso-Butane	0.0057	0.0057	0.0020	0.19	0.0001
N-Butane	0.0028	0.0028	0.0010	0.09	0.0001
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	0.0025	0.0025	0.0010	0.13	0.0001
Total	100.0000	99.2899	17.0180	985.26	0.5829

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
BTU/CU.FT IDEAL: 987.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 989.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 972.4
DRY BTU @ 15.025: 1009.4
REAL SPECIFIC GRAVITY: 0.5839

CYLINDER #: 0115
CYLINDER PRESSURE: 659 PSIG
ANALYSIS DATE: 09/24/2020
ANALYSIS TIME: 02:30:21 PM
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 50E; TBG
Stn. No.: API #
Mtr. No.:

TUBING

09/29/2020
15950-12115

Smpl Date: 09/17/2020
Test Date: 09/24/2020
Run No: SO200150

Nitrogen: 0.5432
CO2: 2.4226
Methane: 96.4010
Ethane: 0.5973
Propane: 0.0249
I-Butane: 0.0057
N-Butane: 0.0028
I-Pentane: 0.0000
N-Pentane: 0.0000
Hexane+: 0.0025

BTU: 989.6
GPM: 17.0180
SPG: 0.5839