



Well Name: NEBU 604 Com 3 H
API# 30-045-35829
Casing Sampled: INTERMEDIATE #1
Sample Type: GAS
(303) 323-0022

Analysis No: SO190042
Cust No: 15950-11555

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 604 3H; INT 1
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MANCOS
Cust. Stn. No.: API # 3004535829



Source: INTERMEDIATE 1
Well Flowing: Y
Pressure: 9.3 PSIG
Flow Temp: DEG. F
Ambient Temp: 53 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 06/07/2019
Sample Time: 9.22 AM
Sampled By: SABRE BEEBE
Sampled by (CO): BPX

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

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	65.9911	1.2405	7.2690	0.00	0.6383
CO2	1.5534	0.0292	0.2650	0.00	0.0236
Methane	25.0877	0.4716	4.2580	253.39	0.1390
Ethane	3.3780	0.0635	0.9050	59.78	0.0351
Propane	0.4788	0.0090	0.1320	12.05	0.0073
Iso-Butane	0.1170	0.0022	0.0380	3.80	0.0023
N-Butane	0.0958	0.0018	0.0300	3.13	0.0019
I-Pentane	0.0638	0.0012	0.0230	2.55	0.0016
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	3.2344	0.0608	1.4440	170.49	0.1070
Total	100.0000	1.8798	14.3640	505.18	0.9561

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0015
BTU/CU.FT IDEAL: 506.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 507.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 498.3
DRY BTU @ 15.025: 517.3
REAL SPECIFIC GRAVITY: 0.9571

CYLINDER #: 7590
CYLINDER PRESSURE: PSIG
ANALYSIS DATE: 06/10/2019
ANALYSIS TIME: 08:23:56 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: 06/11/2019

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 604 3H; INT 1
Stn. No.: API # 3004535829
Mtr. No.:

INTERMEDIATE 1
MANCOS

06/11/2019
15950-11555

Smpl Date: 06/07/2019
Test Date: 06/10/2019
Run No: SO190042

Nitrogen: 65.9911
CO2: 1.5534
Methane: 25.0877
Ethane: 3.3780
Propane: 0.4788
I-Butane: 0.1170
N-Butane: 0.0958
I-Pentane: 0.0638
N-Pentane: 0.0000
Hexane+: 3.2344

BTU: 507.1
GPM: 14.3640
SPG: 0.9571



Well Name: NEBU 604 Com 3H
API# 30 415 - 35829
Casing Sampled: Intermediate 2
Sample Type gas
(000) 020-0022

Analysis No: SO190043
Cust No: 15950-11560

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: NEBU 604 3H; INT 2
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MANCOS
Cust. Stn. No.: API # 3004535829

Source: INTERMEDIATE 2
Well Flowing: Y
Pressure: 103 PSIG
Flow Temp: DEG. F
Ambient Temp: 63 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 06/07/2019
Sample Time: 10.02 AM
Sampled By: SABRE BEEBE
Sampled by (CO): BPX

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6203	0.5579	0.0680	0.00	0.0060
CO2	0.0042	0.0038	0.0010	0.00	0.0001
Methane	99.1262	89.1558	16.8340	1001.17	0.5491
Ethane	0.2493	0.2242	0.0670	4.41	0.0026
Propane	0.0000	0.0000	0.0000	0.00	0.0000
Iso-Butane	0.0000	0.0000	0.0000	0.00	0.0000
N-Butane	0.0000	0.0000	0.0000	0.00	0.0000
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	0.0000	0.0000	0.0000	0.00	0.0000
Total	100.0000	89.9417	16.9700	1005.59	0.5577

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.002
BTU/CU.FT IDEAL: 1007.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1009.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 992.3
DRY BTU @ 15.025: 1030.1
REAL SPECIFIC GRAVITY: 0.5586

CYLINDER #: 7054
CYLINDER PRESSURE: 95 PSIG
ANALYSIS DATE: 06/10/2019
ANALYSIS TIME: 08:58:00 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: 06/11/2019

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 604 3H; INT 2
Stn. No.: API # 3004535829
Mtr. No.:

INTERMEDIATE 2
MANCOS

06/11/2019
15950-11560

Smpl Date: 06/07/2019
Test Date: 06/10/2019
Run No: SO190043

Nitrogen: 0.6203
CO2: 0.0042
Methane: 99.1262
Ethane: 0.2493
Propane: 0.0000
I-Butane: 0.0000
N-Butane: 0.0000
I-Pentane: 0.0000
N-Pentane: 0.0000
Hexane+: 0.0000

BTU: 1009.9
GPM: 16.9700
SPG: 0.5586



Well Name: NEBU 604 Com 3H
 API# 30-04535829
 Casing Sampled: Production
 Sample Type: gas
 (000) 020-0022

Analysis No: SO190041
 Cust No: 15950-11550

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
 Well Name: NEBU 604 3H; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation: MANCOS
 Cust. Stn. No.: API # 3004535829

Source: CASING
 Well Flowing: Y
 Pressure: 416 PSIG
 Flow Temp: DEG. F
 Ambient Temp: 63 DEG. F
 Flow Rate: MCF/D
 Sample Method:
 Sample Date: **06/07/2019**
 Sample Time: 9.41 AM
 Sampled By: SABRE BEEBE
 Sampled by (CO): BPX

Heat Trace: N
 Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0580	0.0582	0.0060	0.00	0.0006
CO2	2.9468	2.9569	0.5040	0.00	0.0448
Methane	96.2147	96.5441	16.3410	971.77	0.5329
Ethane	0.7416	0.7441	0.1990	13.12	0.0077
Propane	0.0292	0.0293	0.0080	0.73	0.0004
Iso-Butane	0.0037	0.0037	0.0010	0.12	0.0001
N-Butane	0.0017	0.0017	0.0010	0.06	0.0000
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	0.0043	0.0043	0.0020	0.23	0.0001
Total	100.0000	100.3423	17.0620	986.03	0.5867

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
 BTU/CU.FT IDEAL: 988.3
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 990.4
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 973.2
 DRY BTU @ 15.025: 1010.2
 REAL SPECIFIC GRAVITY: 0.5877

CYLINDER #: 7071
 CYLINDER PRESSURE: 184 PSIG
 ANALYSIS DATE: 06/10/2019
 ANALYSIS TIME: 08:38:28 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: 06/11/2019

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: NEBU 604 3H; CSG
Stn. No.: API # 3004535829
Mtr. No.:

CASING
MANCOS

06/11/2019
15950-11550

Smpl Date: 06/07/2019
Test Date: 06/10/2019
Run No: SO190041
Nitrogen: 0.0580
CO2: 2.9468
Methane: 96.2147
Ethane: 0.7416
Propane: 0.0292
I-Butane: 0.0037
N-Butane: 0.0017
I-Pentane: 0.0000
N-Pentane: 0.0000
Hexane+: 0.0043
BTU: 990.4
GPM: 17.0620
SPG: 0.5877