



NMOCD REC'D
10/12/20

Well Name: VALENCIA GC B 1M ; BHD
API #: API #300452495200
Source: BRADENHEAD
Sample Type: GAS
Analysis No: SO200184
Cust No: 15950-12280

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: VALENCIA GC B 1M ; BHD
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API #300452495200
94367

Source: BRADENHEAD
Well Flowing: N
Pressure: 25 PSIG
Flow Temp: DEG. F
Ambient Temp: 31 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 09/24/2020
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	20.8131	1.9321	2.2970	0.00	0.2013
CO2	0.0162	0.0015	0.0030	0.00	0.0002
Methane	65.4340	6.0743	11.1260	660.88	0.3624
Ethane	3.7757	0.3505	1.0130	66.82	0.0392
Propane	3.9674	0.3683	1.0960	99.82	0.0604
Iso-Butane	0.5429	0.0504	0.1780	17.65	0.0109
N-Butane	1.7817	0.1654	0.5630	58.12	0.0358
I-Pentane	0.7034	0.0653	0.2580	28.14	0.0175
N-Pentane	0.6582	0.0611	0.2390	26.39	0.0164
Hexane Plus	2.3074	0.2142	1.0320	121.62	0.0764
Total	100.0000	9.2831	17.8050	1079.46	0.8205

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0032
BTU/CU.FT IDEAL: 1082.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1085.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1066.5
DRY BTU @ 15.025: 1107.1
REAL SPECIFIC GRAVITY: 0.8228

CYLINDER #: 29
CYLINDER PRESSURE: 27 PSIG
ANALYSIS DATE: 09/30/2020
ANALYSIS TIME: 11:22:53 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: 10/06/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: VALENCIA GC B 1M ; BHD
Stn. No.: API
Mtr. No.: 94367

BRADENHEAD

10/06/2020
15950-12280

Smpl Date: 09/24/2020
Test Date: 09/30/2020
Run No: SO200184

Nitrogen: 20.8131
CO2: 0.0162
Methane: 65.4340
Ethane: 3.7757
Propane: 3.9674
I-Butane: 0.5429
N-Butane: 1.7817
I-Pentane: 0.7034
N-Pentane: 0.6582
Hexane+: 2.3074

BTU: 1085.4
GPM: 17.8050
SPG: 0.8228



NMOCD REC'D
10/12/20

Well Name: VALENCIA GC B 1M ; CSG
API #: API #300452495200
Source: CASING
Sample Type: GAS
Analysis No: SO200185
Cust No: 15950-12285

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: VALENCIA GC B 1M ; CSG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API #300452495200
94367

Source: CASING
Well Flowing: Y
Pressure: 50 PSIG
Flow Temp: DEG. F
Ambient Temp: 51 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 09/24/2020
Sample Time: 8.25 AM
Sampled By: SEAN C.
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.2381	1.2327	0.1370	0.00	0.0120
CO2	0.0010	0.0010	0.0000	0.00	0.0000
Methane	88.9204	88.5336	15.1130	898.10	0.4925
Ethane	4.4949	4.4753	1.2050	79.55	0.0467
Propane	3.5046	3.4894	0.9680	88.18	0.0534
Iso-Butane	0.3863	0.3846	0.1270	12.56	0.0078
N-Butane	0.7131	0.7100	0.2250	23.26	0.0143
I-Pentane	0.1825	0.1817	0.0670	7.30	0.0045
N-Pentane	0.1401	0.1395	0.0510	5.62	0.0035
Hexane Plus	0.4190	0.4172	0.1870	22.09	0.0139
Total	100.0000	99.5650	18.0800	1136.65	0.6485

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0028
BTU/CU.FT IDEAL: 1139.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1142.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1122.6
DRY BTU @ 15.025: 1165.4
REAL SPECIFIC GRAVITY: 0.6501

CYLINDER #: 127
CYLINDER PRESSURE: 49 PSIG
ANALYSIS DATE: 09/30/2020
ANALYSIS TIME: 11:07:04 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: 10/06/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: VALENCIA GC B 1M ; CSG
Stn. No.: API
Mtr. No.: 94367

CASING

10/06/2020
15950-12285

Smpl Date: 09/24/2020
Test Date: 09/30/2020
Run No: SO200185

Nitrogen: 1.2381
CO2: 0.0010
Methane: 88.9204
Ethane: 4.4949
Propane: 3.5046
I-Butane: 0.3863
N-Butane: 0.7131
I-Pentane: 0.1825
N-Pentane: 0.1401
Hexane+: 0.4190

BTU: 1142.5
GPM: 18.0800
SPG: 0.6501



NMOCD REC'D
10/12/20

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

Analysis No: SO200186
Cust No: 15950-12290

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: VALENCIA GC B 1M ; INT
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API #300452495200
94367

Source: INTERMEDIATE
Well Flowing: N
Pressure: 87 PSIG
Flow Temp: DEG. F
Ambient Temp: 51 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 09/24/2020
Sample Time: 8.20 AM
Sampled By: SEAN S.
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.3979	1.4051	0.1540	0.00	0.0135
CO2	0.0028	0.0028	0.0000	0.00	0.0000
Methane	89.7690	90.2325	15.2540	906.67	0.4972
Ethane	4.0320	4.0528	1.0810	71.35	0.0419
Propane	3.4009	3.4185	0.9390	85.57	0.0518
Iso-Butane	0.2998	0.3013	0.0980	9.75	0.0060
N-Butane	0.6462	0.6495	0.2040	21.08	0.0130
I-Pentane	0.1386	0.1393	0.0510	5.55	0.0035
N-Pentane	0.1074	0.1080	0.0390	4.31	0.0027
Hexane Plus	0.2054	0.2065	0.0920	10.83	0.0068
Total	100.0000	100.5163	17.9120	1115.10	0.6363

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
BTU/CU.FT IDEAL: 1117.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1120.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1101.1
DRY BTU @ 15.025: 1143.0
REAL SPECIFIC GRAVITY: 0.6377

CYLINDER #: 509
CYLINDER PRESSURE: 88 PSIG
ANALYSIS DATE: 09/30/2020
ANALYSIS TIME: 11:29:36 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: 10/06/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: VALENCIA GC B 1M ; INT
Stn. No.: API
Mtr. No.: 94367

INTERMEDIATE

10/06/2020
15950-12290

Smpl Date: 09/24/2020
Test Date: 09/30/2020
Run No: SO200186

Nitrogen: 1.3979
CO2: 0.0028
Methane: 89.7690
Ethane: 4.0320
Propane: 3.4009
I-Butane: 0.2998
N-Butane: 0.6462
I-Pentane: 0.1386
N-Pentane: 0.1074
Hexane+: 0.2054

BTU: 1120.6
GPM: 17.9120
SPG: 0.6377



NMOCD REC'D
10/12/20

Well Name: VALENCIA GC B 1M; TBG
API #: API #300452495200
Source: TUBING
Sample Type: GAS
Analysis No: SO200187
Cust No: 15950-12295

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: VALENCIA GC B 1M; TBG
County/State: NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API #300452495200
94367

Source: TUBING
Well Flowing: Y
Pressure: 43 PSIG
Flow Temp: DEG. F
Ambient Temp: 51 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 09/24/2020
Sample Time: 8.30 AM
Sampled By: SEAN C.
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3304	0.3266	0.0360	0.00	0.0032
CO2	1.3324	1.3170	0.2280	0.00	0.0202
Methane	78.2722	77.3672	13.3180	790.55	0.4335
Ethane	10.7506	10.6263	2.8860	190.25	0.1116
Propane	5.0712	5.0126	1.4020	127.60	0.0772
Iso-Butane	0.7527	0.7440	0.2470	24.48	0.0151
N-Butane	1.4927	1.4754	0.4720	48.70	0.0300
I-Pentane	0.4944	0.4887	0.1810	19.78	0.0123
N-Pentane	0.4061	0.4014	0.1480	16.28	0.0101
Hexane Plus	1.0973	1.0846	0.4910	57.84	0.0363
Total	100.0000	98.8438	19.4090	1275.47	0.7496

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0039
BTU/CU.FT IDEAL: 1278.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1283.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1261.1
DRY BTU @ 15.025: 1309.1
REAL SPECIFIC GRAVITY: 0.7523

CYLINDER #: 15
CYLINDER PRESSURE: 35 PSIG
ANALYSIS DATE: 09/30/2020
ANALYSIS TIME: 11:07:41 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: 10/06/2020

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: VALENCIA GC B 1M; TBG
Stn. No.: API
Mtr. No.: 94367

TUBING

10/06/2020
15950-12295

Smpl Date: 09/24/2020
Test Date: 09/30/2020
Run No: SO200187

Nitrogen: 0.3304
CO2: 1.3324
Methane: 78.2722
Ethane: 10.7506
Propane: 5.0712
I-Butane: 0.7527
N-Butane: 1.4927
I-Pentane: 0.4944
N-Pentane: 0.4061
Hexane+: 1.0973

BTU: 1283.4
GPM: 19.4090
SPG: 0.7523