



Florence GC B1E
30-045-25541
Bradenhead Sample

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

Analysis No: SO180142
Cust No: 15950-11140

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: FLORENCE GC B #1E; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: API 3004525541

Source: BRADENHEAD
Well Flowing: Y
Pressure: 25 PSIA
Flow Temp: DEG. F
Ambient Temp: 68 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/18/2018
Sample Time: 8.31 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

NM000
FEB 13 2013
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2590	0.2529	0.0290	0.00	0.0025
CO2	0.0342	0.0334	0.0060	0.00	0.0005
Methane	87.6324	85.5639	14.8970	885.09	0.4854
Ethane	7.0349	6.8688	1.8870	124.50	0.0730
Propane	2.8090	2.7427	0.7760	70.68	0.0428
Iso-Butane	0.4932	0.4816	0.1620	16.04	0.0099
N-Butane	0.7416	0.7241	0.2340	24.19	0.0149
I-Pentane	0.2639	0.2577	0.0970	10.56	0.0066
N-Pentane	0.1953	0.1907	0.0710	7.83	0.0049
Hexane Plus	0.5365	0.5238	0.2400	28.28	0.0178
Total	100.0000	97.6396	18.3990	1167.16	0.6582

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
BTU/CU.FT IDEAL: 1169.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1173.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1152.9
DRY BTU @ 15.025: 1196.8
REAL SPECIFIC GRAVITY: 0.6598

CYLINDER #: 7044
CYLINDER PRESSURE: 29 PSIG
ANALYSIS DATE: 07/31/2018
ANALYSIS TIME: 09:29:14 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

GC Method: C6+ Gas

Last Cal/Verify: 08/02/2018



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: FLORENCE GC B #1E; BHD
Stn. No.: API 3004525541
Mtr. No.:

BRADENHEAD
PC

08/02/2018
15950-11140

Smpl Date: 07/18/2018
Test Date: 07/31/2018
Run No: SO180142
Nitrogen: 0.2590
CO2: 0.0342
Methane: 87.6324
Ethane: 7.0349
Propane: 2.8090
I-Butane: 0.4932
N-Butane: 0.7416
I-Pentane: 0.2639
N-Pentane: 0.1953
Hexane+: 0.5365
BTU: 1173.3
GPM: 18.3990
SPG: 0.6598



Florence GC B 1E
30-045-25541
Casing Sample

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

Analysis No: SO180143
Cust No: 15950-11145

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: FLORENCE GC B #1E; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: API 3004525541

Source: CASING
Well Flowing: Y
Pressure: 81 PSIA
Flow Temp: DEG. F
Ambient Temp: 68 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/18/2018
Sample Time: 8.47 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

NM000

FEB 13 2013

DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6280	0.6339	0.0690	0.00	0.0061
CO2	1.2536	1.2654	0.2150	0.00	0.0190
Methane	78.9793	79.7222	13.4370	797.69	0.4375
Ethane	10.4467	10.5450	2.8040	184.88	0.1085
Propane	4.7407	4.7853	1.3110	119.28	0.0722
Iso-Butane	0.6556	0.6618	0.2150	21.32	0.0132
N-Butane	1.3746	1.3875	0.4350	44.84	0.0276
I-Pentane	0.4102	0.4141	0.1510	16.41	0.0102
N-Pentane	0.3902	0.3939	0.1420	15.64	0.0097
Hexane Plus	1.1211	1.1316	0.5020	59.09	0.0371
Total	100.0000	100.9407	19.2810	1259.16	0.7410

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0038
BTU/CU.FT IDEAL: 1262.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1266.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1244.9
DRY BTU @ 15.025: 1292.3
REAL SPECIFIC GRAVITY: 0.7435

CYLINDER #: 80746
CYLINDER PRESSURE: 72 PSIG
ANALYSIS DATE: 07/30/2018
ANALYSIS TIME: 03:25:29 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: 08/02/2018

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: FLORENCE GC B #1E; CSG
Stn. No.: API 3004525541
Mtr. No.:

CASING
PC

08/02/2018
15950-11145

Smpl Date: 07/18/2018
Test Date: 07/30/2018
Run No: SO180143

Nitrogen: 0.6280
CO2: 1.2536
Methane: 78.9793
Ethane: 10.4467
Propane: 4.7407
I-Butane: 0.6556
N-Butane: 1.3746
I-Pentane: 0.4102
N-Pentane: 0.3902
Hexane+: 1.1211

BTU: 1266.9
GPM: 19.2810
SPG: 0.7435



Florence GC B1E
30-045-25541
Tubing Sample

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

Analysis No: SO180144
Cust No: 15950-11150

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: FLORENCE GC B #1E; TBG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Str. No.: API 3004525541

Source: TUBING
Well Flowing: Y
Pressure: 82 PSIA
Flow Temp: DEG. F
Ambient Temp: 68 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/18/2018
Sample Time: 8.38 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Heat Trace: N
Remarks:



Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6496	0.6568	0.0720	0.00	0.0063
CO2	1.0610	1.0728	0.1820	0.00	0.0161
Methane	81.4347	82.3414	13.8480	822.49	0.4511
Ethane	10.2608	10.3750	2.7520	181.59	0.1065
Propane	3.9627	4.0068	1.0950	99.71	0.0603
Iso-Butane	0.5119	0.5176	0.1680	16.65	0.0103
N-Butane	0.9947	1.0058	0.3150	32.45	0.0200
I-Pentane	0.2627	0.2656	0.0960	10.51	0.0065
N-Pentane	0.2338	0.2364	0.0850	9.37	0.0058
Hexane Plus	0.6281	0.6351	0.2810	33.11	0.0208
Total	100.0000	101.1133	18.8940	1205.87	0.7037

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0033
BTU/CU.FT IDEAL: 1208.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1212.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1191.6
DRY BTU @ 15.025: 1237.0
REAL SPECIFIC GRAVITY: 0.7058

CYLINDER #: 7031
CYLINDER PRESSURE: 71 PSIG
ANALYSIS DATE: 07/31/2018
ANALYSIS TIME: 11:17:21 AM
ANALYSIS RUN BY: CAMERON MANGAN

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: 08/02/2018

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: FLORENCE GC B #1E; TBG
Stn. No.: API 3004525541
Mtr. No.:

TUBING
PC

08/02/2018
15950-11150

Smpl Date: 07/18/2018
Test Date: 07/31/2018
Run No: SO180144
Nitrogen: 0.6496
CO2: 1.0610
Methane: 81.4347
Ethane: 10.2608
Propane: 3.9627
I-Butane: 0.5119
N-Butane: 0.9947
I-Pentane: 0.2627
N-Pentane: 0.2338
Hexane+: 0.6281
BTU: 1212.7
GPM: 18.8940
SPG: 0.7058