



Well Name: Florance GC D 4A
 API# 30-045-22147
 Casing Sampled: Bradenhead
 Sample Type: GAD

Analysis No: SO190067
 Cust No: 15950-10300

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
 Well Name: FLORANCE GC D 004A;BHD
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation: MV
 Cust. Stn. No.:
 API 3004522147

NMOCD
DISTRICT III

Source: BRADENHEAD
 Well Flowing: Y
 Pressure: 32 PSIA
 Flow Temp: DEG. F
 Ambient Temp: 73 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 06/17/2019
 Sample Time: 11.37 AM
 Sampled By: EUGENIA HAMILTON
 Sampled by (CO): PESCO

Heat Trace: N
 Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	9.4488	9.3294	1.0410	0.00	0.0914
CO2	0.2556	0.2524	0.0440	0.00	0.0039
Methane	88.1154	87.0016	14.9630	889.97	0.4881
Ethane	1.3506	1.3335	0.3620	23.90	0.0140
Propane	0.5127	0.5062	0.1410	12.90	0.0078
Iso-Butane	0.0904	0.0893	0.0300	2.94	0.0018
N-Butane	0.1018	0.1005	0.0320	3.32	0.0020
I-Pentane	0.0367	0.0362	0.0130	1.47	0.0009
N-Pentane	0.0177	0.0175	0.0060	0.71	0.0004
Hexane Plus	0.0703	0.0694	0.0310	3.71	0.0023
Total	100.0000	98.7360	16.6630	938.91	0.6127

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0019
 BTU/CU.FT IDEAL: 941.1
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 942.9
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 926.5
 DRY BTU @ 15.025: 961.8
 REAL SPECIFIC GRAVITY: 0.6136

CYLINDER #: 2584
 CYLINDER PRESSURE: 30 PSIG
 ANALYSIS DATE: 06/25/2019
 ANALYSIS TIME: 01:47:40 PM
 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: 06/28/2019

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: FLORANCE GC D 004A;BHD
Stn. No.:
Mtr. No.: API 3004522147

BRADENHEAD
MV

06/28/2019
15950-10300

Smpl Date:	06/17/2019	08/14/2017
Test Date:	06/25/2019	08/14/2017
Run No:	SO190067	SO170066
Nitrogen:	9.4488	9.9573
CO2:	0.2556	0.2475
Methane:	88.1154	87.4751
Ethane:	1.3506	1.4027
Propane:	0.5127	0.5453
I-Butane:	0.0904	0.0946
N-Butane:	0.1018	0.1342
I-Pentane:	0.0367	0.0677
N-Pentane:	0.0177	0.0287
Hexane+:	0.0703	0.0469
BTU:	942.9	939.8
GPM:	16.6630	16.6480
SPG:	0.6136	0.6169



Well Name: Florance GCD 4A
 API# 30 - 045 - 22147
 Casing Sampled: Production
 Sample Type: Gas

Analysis No: SO190068
 Cust No: 15950-10295

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
 Well Name: FLORANCE GC D 004A;CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation: MV
 Cust. Str. No.:
 API 3004522147

Source: CASING
 Well Flowing: Y
 Pressure: 49 PSIA
 Flow Temp: DEG. F
 Ambient Temp: 73 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 06/17/2019
 Sample Time: 11.42 AM
 Sampled By: EUGENIA HAMILTON
 Sampled by (CO): PESCO

Heat Trace: N
 Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1566	0.1551	0.0170	0.00	0.0015
CO2	7.1461	7.0799	1.2220	0.00	0.1086
Methane	87.1297	86.3221	14.8040	880.01	0.4826
Ethane	3.6844	3.6502	0.9880	65.20	0.0383
Propane	1.3944	1.3815	0.3850	35.08	0.0212
Iso-Butane	0.2536	0.2512	0.0830	8.25	0.0051
N-Butane	0.1235	0.1224	0.0390	4.03	0.0025
I-Pentane	0.0406	0.0402	0.0150	1.62	0.0010
N-Pentane	0.0140	0.0139	0.0050	0.56	0.0003
Hexane Plus	0.0571	0.0566	0.0260	3.01	0.0019
Total	100.0000	99.0731	17.5840	997.77	0.6630

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0025
 BTU/CU.FT IDEAL: 1000.1
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1002.6
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 985.2
 DRY BTU @ 15.025: 1022.7
 REAL SPECIFIC GRAVITY: 0.6644

CYLINDER #: 018
 CYLINDER PRESSURE: 47 PSIG
 ANALYSIS DATE: 06/25/2019
 ANALYSIS TIME: 01:09:55 PM
 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: 06/28/2019

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: FLORANCE GC D 004A;CSG
Stn. No.:
Mtr. No.: API 3004522147

CASING
MV

06/28/2019
15950-10295

Smpl Date:	06/17/2019	08/14/2017
Test Date:	06/25/2019	08/14/2017
Run No:	SO190068	SO170067
Nitrogen:	0.1566	0.1376
CO2:	7.1461	4.5665
Methane:	87.1297	86.4866
Ethane:	3.6844	5.0067
Propane:	1.3944	1.9893
I-Butane:	0.2536	0.4151
N-Butane:	0.1235	0.4320
I-Pentane:	0.0406	0.1967
N-Pentane:	0.0140	0.1307
Hexane+:	0.0571	0.6388
BTU:	1002.6	1092.2
GPM:	17.5840	18.0680
SPG:	0.6644	0.6800



Well Name: Florance GC D 4A
API# 30 - 045 - 22147
Casing Sampled: Tubing
Sample Type GAS

Analysis No: SO190069
Cust No: 15950-10290

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: FLORANCE GC D 004 A;TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MS
Cust. Stn. No.:
API 3004522147

Source: TUBING
Well Flowing: Y
Pressure: 17 PSIA
Flow Temp: DEG. F
Ambient Temp: 73 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 06/17/2019
Sample Time: 11.39 AM
Sampled By: EUGENIA HAMILTON
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1946	0.1881	0.0210	0.00	0.0019
CO2	3.3807	3.2683	0.5790	0.00	0.0514
Methane	84.2977	81.4941	14.3330	851.41	0.4669
Ethane	6.6096	6.3898	1.7730	116.97	0.0686
Propane	2.8470	2.7523	0.7870	71.63	0.0433
Iso-Butane	0.5652	0.5464	0.1860	18.38	0.0113
N-Butane	0.7498	0.7249	0.2370	24.46	0.0150
I-Pentane	0.2958	0.2860	0.1080	11.83	0.0074
N-Pentane	0.2229	0.2155	0.0810	8.94	0.0056
Hexane Plus	0.8367	0.8089	0.3740	44.10	0.0277
Total	100.0000	96.6743	18.4790	1147.72	0.6991

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0032
BTU/CU.FT IDEAL: 1150.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1154.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1134.0
DRY BTU @ 15.025: 1177.2
REAL SPECIFIC GRAVITY: 0.7011

CYLINDER #: 1014
CYLINDER PRESSURE: 18 PSIG
ANALYSIS DATE: 06/25/2019
ANALYSIS TIME: 04:10:44 PM
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: 06/28/2019

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: FLORANCE GC D 004 A;TBG
Stn. No.:
Mtr. No.: API 3004522147

TUBING
MS

06/28/2019
15950-10290

Smpl Date:	06/17/2019	08/14/2017
Test Date:	06/25/2019	08/14/2017
Run No:	SO190069	SO170068
Nitrogen:	0.1946	0.1378
CO2:	3.3807	2.6869
Methane:	84.2977	84.1899
Ethane:	6.6096	7.0359
Propane:	2.8470	2.8739
I-Butane:	0.5652	0.6255
N-Butane:	0.7498	0.8522
I-Pentane:	0.2958	0.3706
N-Pentane:	0.2229	0.2860
Hexane+:	0.8367	0.9413
BTU:	1154.1	1177.8
GPM:	18.4790	18.6070
SPG:	0.7011	0.7045