



Moncrief Federal 1E
30-045-26450
Bradenhead Sample

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

Analysis No: SO180145
Cust No: 15950-11155

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: MONCRIEF FEDERAL #1E; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Str. No.: API 3004526450

Source: BRADENHEAD
Well Flowing: Y
Pressure: 47 PSIA
Flow Temp: DEG. F
Ambient Temp: 64 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/18/2018
Sample Time: 7.28 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4280	0.4304	0.0470	0.00	0.0041
CO2	0.0037	0.0037	0.0010	0.00	0.0001
Methane	89.2587	89.7566	15.1690	901.51	0.4944
Ethane	6.0885	6.1225	1.6320	107.75	0.0632
Propane	2.5329	2.5470	0.7000	63.73	0.0386
Iso-Butane	0.4797	0.4824	0.1570	15.60	0.0096
N-Butane	0.6212	0.6247	0.1960	20.27	0.0125
I-Pentane	0.2171	0.2183	0.0800	8.69	0.0054
N-Pentane	0.1413	0.1421	0.0510	5.66	0.0035
Hexane Plus	0.2289	0.2302	0.1020	12.07	0.0076
Total	100.0000	100.5579	18.1350	1135.27	0.6390

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
BTU/CU.FT IDEAL: 1137.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1141.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1121.1
DRY BTU @ 15.025: 1163.9
REAL SPECIFIC GRAVITY: 0.6404

CYLINDER #: 7065
CYLINDER PRESSURE: 38 PSIG
ANALYSIS DATE: 07/30/2018
ANALYSIS TIME: 04:38:10 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

Last Cal/Verify: 08/02/2018

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: MONCRIEF FEDERAL #1E; BHD
Stn. No.: API 3004526450
Mtr. No.:

BRADENHEAD
PC

08/02/2018
15950-11155

Smpl Date: 07/18/2018
Test Date: 07/30/2018
Run No: SO180145

Nitrogen: 0.4280
CO2: 0.0037
Methane: 89.2587
Ethane: 6.0885
Propane: 2.5329
I-Butane: 0.4797
N-Butane: 0.6212
I-Pentane: 0.2171
N-Pentane: 0.1413
Hexane+: 0.2289

BTU: 1141.0
GPM: 18.1350
SPG: 0.6404



Moncrief Federal 1E
30-045-26450
Casing Sample

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

Analysis No: SO180146
Cust No: 15950-11160

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: MONCRIEF FEDERAL #1E; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: API 3004526450

Source: CASING
Well Flowing: Y
Pressure: 93 PSIA
Flow Temp: DEG. F
Ambient Temp: 64 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/18/2018
Sample Time: 7.36 AM
Sampled By: SCOTT WILLARD
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

NM000
FEB 13 2019
DISTRICT III

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3765	0.3705	0.0420	0.00	0.0036
CO2	0.0068	0.0067	0.0010	0.00	0.0001
Methane	78.8869	77.6386	13.4260	796.76	0.4370
Ethane	9.1935	9.0480	2.4680	162.70	0.0954
Propane	4.9127	4.8350	1.3590	123.61	0.0748
Iso-Butane	1.1368	1.1188	0.3730	36.97	0.0228
N-Butane	2.3966	2.3587	0.7590	78.18	0.0481
I-Pentane	1.1686	1.1501	0.4290	46.75	0.0291
N-Pentane	1.0228	1.0066	0.3720	41.00	0.0255
Hexane Plus	0.8988	0.8846	0.4020	47.38	0.0297
Total	100.0000	98.4176	19.6310	1333.35	0.7662

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0042
BTU/CU.FT IDEAL: 1336.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1342.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1318.7
DRY BTU @ 15.025: 1369.0
REAL SPECIFIC GRAVITY: 0.7691

CYLINDER #: 7590
CYLINDER PRESSURE: 72 PSIG
ANALYSIS DATE: 07/30/2018
ANALYSIS TIME: 02:28:14 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: MONCRIEF FEDERAL #1E; CSG
Stn. No.: API 3004526450
Mtr. No.:

CASING
PC

08/02/2018
15950-11160

Smpl Date: 07/18/2018
Test Date: 07/30/2018
Run No: SO180146
Nitrogen: 0.3765
CO2: 0.0068
Methane: 78.8869
Ethane: 9.1935
Propane: 4.9127
I-Butane: 1.1368
N-Butane: 2.3966
I-Pentane: 1.1686
N-Pentane: 1.0228
Hexane+: 0.8988
BTU: 1342.1
GPM: 19.6310
SPG: 0.7691



Moncrief Federal 1E
30-045-26450
Tubing Sample

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

Analysis No: SO180147
Cust No: 15950-11165

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: MONCRIEF FEDERAL #1E; TBG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: API 3004526450

Source: TUBING
Well Flowing: Y
Pressure: 96 PSIA
Flow Temp: DEG. F
Ambient Temp: 64 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/18/2018
Sample Time: 7.45 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	0.3378	0.3349	0.0370	0.00	0.0033
CO2	1.6783	1.6637	0.2870	0.00	0.0255
Methane	81.5284	80.8181	13.8660	823.44	0.4516
Ethane	9.0017	8.9233	2.4150	159.30	0.0935
Propane	3.9228	3.8886	1.0840	98.70	0.0597
Iso-Butane	0.6986	0.6925	0.2290	22.72	0.0140
N-Butane	1.2189	1.2083	0.3860	39.76	0.0245
I-Pentane	0.4349	0.4311	0.1600	17.40	0.0108
N-Pentane	0.3545	0.3514	0.1290	14.21	0.0088
Hexane Plus	0.8241	0.8169	0.3690	43.44	0.0273
Total	100.0000	99.1288	18.9620	1218.97	0.7190

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0035
BTU/CU.FT IDEAL: 1221.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1226.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1204.8
DRY BTU @ 15.025: 1250.7
REAL SPECIFIC GRAVITY: 0.7212

CYLINDER #: 5122
CYLINDER PRESSURE: 89 PSIG
ANALYSIS DATE: 07/31/2018
ANALYSIS TIME: 10:08:25 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: MONCRIEF FEDERAL #1E; TBG
Stn. No.: API 3004526450
Mtr. No.:

TUBING
PC

08/02/2018
15950-11165

Smpl Date: 07/18/2018
Test Date: 07/31/2018
Run No: SO180147

Nitrogen: 0.3378
CO2: 1.6783
Methane: 81.5284
Ethane: 9.0017
Propane: 3.9228
I-Butane: 0.6986
N-Butane: 1.2189
I-Pentane: 0.4349
N-Pentane: 0.3545
Hexane+: 0.8241

BTU: 1226.1
GPM: 18.9620
SPG: 0.7212