



NEW MEXICO ENERGY, MINERALS
AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
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<http://www.emnrd.state.nm.us/ocd/>

OIL CONS. DIV DIST. 3

DEC 18 2015

BRADENHEAD TEST REPORT

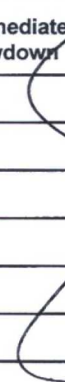
(Submit 2 copies to above address)

Date of Test 6/9/15 Operator BP America Production Company API # 3004526735

Property Name CITY OF FARMINGTON 002-DK Location: Unit J Section 10 Township 29 Range 13
(Well Name and Number)

Pressure (Shut-in or Producing) 200 Intermediate N/A Casing 202 Bradenhead 162

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Time	Bradenhead			Intermediate		Bradenhead Flowed	Intermediate Flowed
	BH Blowdown	Casing Monitor	Intermediate Monitor	Intermediate Blowdown	Casing Monitor		
5 minutes	W	168				Steady Flow	
10 minutes	W	162				Surges	
15 minutes	W	158				Down to Nothing	
20 minutes	W	156				No Flow	
25 minutes	W	160				Gas	
30 minutes	W	161				Gas and Water	
5 minute SI	9	166				Water	

If bradenhead flowed water, check all of the descriptions that apply below:

Clear _____ Fresh _____ Salty _____ Sulfur _____ Black _____

5 Minute Shut-in Bradenhead 9 Intermediate N/A

REMARKS:

BH blew for 10 sec down to a whisper. Blew from 1" valve

By [Signature] Witness _____

(Position)



API 30-045-26735

Casing

Gas Analysis Certificate

GPA Standard 2261-13

Acquisition Method Name au_report_150_C6+
Last calibration date 7/10/2015 10:21:38 AM

Client:	BP	Project #:	03143-0880
Site Name:	City of Farmington 2	Meter ID:	3004526735 (CSG)
Sampled by:	Daniel F.	Date Sampled:	06-09-15
Analyzed by:	Logan Richter	Date Received:	06-19-15
Sample Pressure:	78 psig	Date Analyzed:	06-24-15
Sample Temperature		Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.051	0.009	0.005
Oxygen	0.009	0.012	0.001
Nitrogen	0.825	1.027	0.091
Carbon Dioxide	0.732	1.432	0.125
Methane	76.729	54.696	13.030
Ethane	10.152	13.565	2.720
Propane	5.759	11.284	1.589
i-Butane	0.808	2.087	0.265
n-Butane	1.979	5.112	0.625
i-Pentane	0.698	2.236	0.256
n-Pentane	0.773	2.479	0.281
C6+	1.484	6.061	0.649
	100.000	100.000	19.635

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99579	C2+	6.384
Density (G) (Dry Gas)	0.77770	C3+	3.664
Component MW Total	22.51	C5+	1.185
Heating Value (Dry Ideal) Total BTU	1325.43	Heating Value (Sat Ideal) Total BTU	1302.30
Heating Value (Dry Real) Total BTU	1331.04	Heating Value (Sat Real) Total BTU	1307.62

R9152-

10/20/2015

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OIL CONS. DIV DIST. 3

DEC 18 2015

UPI 30-045-26 105
Bradenhead**Gas Analysis Certificate****GPA Standard 2261-13**Acquisition Method Name au_report_150_C6+
Last calibration date 7/10/2015 10:21:38 AM

Client:	BP	Project #:	03143-0880
Site Name:	City of Farmington 2	Meter ID:	3004526735 (BHD)
Sampled by:	Daniel F.	Date Sampled	06-09-15
Analyzed by:	Logan Richter	Date Received:	06-19-15
Sample Pressure:	78 psig	Date Analyzed:	06-24-15
Sample Temperature		Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.031	0.007	0.003
Oxygen	0.027	0.048	0.002
Nitrogen	1.273	1.951	0.140
Carbon Dioxide	0.221	0.531	0.038
Methane	92.141	80.867	15.621
Ethane	3.259	5.362	0.872
Propane	0.869	2.096	0.239
i-Butane	0.207	0.657	0.068
n-Butane	0.417	1.325	0.131
i-Pentane	0.276	1.089	0.101
n-Pentane	0.341	1.347	0.124
C6+	0.939	4.721	0.410
	100.000	100.000	17.749

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99739	C2+	1.944
Density (G) (Dry Gas)	0.63154	C3+	1.073
Component MW Total	18.28	C5+	0.634
Heating Value (Dry Ideal) Total BTU	1103.36	Heating Value (Sat Ideal) Total BTU	1084.11
Heating Value (Dry Real) Total BTU	1106.25	Heating Value (Sat Real) Total BTU	1086.85

RSG

10/20/2015

**City of Farmington 002**

Dakota

API 300452673500

Unit J - Sec 10 - T29N - R13W

San Juan County, NM

Formation Tops

Fruitland	1085
Pictured Clif	1240
Cliff House	2908
Menefee	3046
Point Lookot	3884
Mancos	4287
Gallup	5253
Greenhorn	6042
Dakota	6160

KB: 5357'

GL: 5345'

TOC: Surface

Surface Casing Data

Hole Size: 12 1/4"

9 5/8", 36# casing at 550'

Cmt w/ 275 sx

Circulated 23 bbls to surface

Perf 540' w/ 4 spf

Attempt to circulate annulus, no communication

Squeeze perforations with cement

TOC: Surface

DV Tool @ 1757'

*Squeeze casing leak from 4523'-4550'
with 150 sacks Class B cement. (3/1996)

DV Tool @ 4668'

Perforation Data

6162-6174' 2 JSPF

6184-6186' 2 JSPF

6190-6194' 2 JSPF

6241-6245' 2 JSPF

6270-6292' 2 JSPF

6302-6308' 2 JSPF

Frac'd w/ 190,000# sand, 108,000 gals XL gel

Production Casing Data

Hole Size: 7 7/8"

4 1/2", 10.5# casing at 6420'

Stage 1: Cement w/ 275 sacks LITE with additives

Stage 2: 350 sacks 65/35 POZ with additives

followed with 50 sacks Class B with additives

Stage 3: Cemented with 500 sacks 65/35 POZ with additive

followed with 50 sacks Class B with additives

1.78" F Nipple @ 6235'

2-3/8" EOT @ 6236'

PBSD: 6376'

TD: 6420'