



NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
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BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

OIL CONS. DIV DIST. 3

DEC 18 2015

Date of Test 5/15/15 Operator BP America Production Company API # 3004508335

Property Name MARSROW GC 001-DK Location: Unit F Section 15 Township 29 Range 12
(Well Name and Number)

Pressure (Shut-in or Producing) Ø Tubing Ø Intermediate N/A Casing 290 Bradenhead 43

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	<u>W</u>	<u>290</u>				Steady Flow	
10 minutes	<u>W</u>	<u>290</u>				Surges	
15 minutes	<u>W</u>	<u>290</u>				Down to Nothing	
20 minutes	<u>W</u>	<u>290</u>				No Flow	
25 minutes	<u>W</u>	<u>290</u>				Gas	
30 minutes	<u>W</u>	<u>290</u>				Gas and Water	
5 minute SI	<u>35</u>	<u>290</u>				Water	

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

Clear Fresh Salty Sulfur Black

5 Minute Shut-in Bradenhead 35 Intermediate N/A

REMARKS:

Blew from 1" valve. BH had 43 psi, then ~~off~~ to a whisper.
Shut BH in for 5 min. and built up to 35 psi.

W = whisper

By Witness

Daniel Fuller

(Position)



UPI 30-045-08335
30-045-08335
Casing
Gas Analysis Certificate

OIL CONS. DIV DIST. 3 GPA Standard 2261-13

DEC 18 2015

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

Client:	BP	Project #:	03143-0880
Site Name:	Marsrow GC 1	Meter ID:	3004508335 (CSG)
Sampled by:	Daniel F.	Date Sampled	07-09-15
Analyzed by:	Logan Richter	Date Received:	07-13-15
Sample Pressure:	281 psig	Date Analyzed:	07-15-15
Sample Temperature	N/R	Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.037	0.007	0.004
Oxygen	0.007	0.012	0.001
Nitrogen	0.498	0.699	0.055
Carbon Dioxide	0.062	0.137	0.011
Methane	83.599	67.211	14.182
Ethane	8.821	13.292	2.361
Propane	4.114	9.092	1.134
i-Butane	0.637	1.856	0.209
n-Butane	1.130	3.291	0.356
i-Pentane	0.343	1.240	0.126
n-Pentane	0.301	1.090	0.109
C6+	0.450	2.073	0.197
	100.000	100.000	18.743

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99676	C2+	4.492
Density (G) (Dry Gas)	0.68917	C3+	2.131
Component MW Total	19.95	C5+	0.431
Heating Value (Dry Ideal) Total BTU	1210.46	Heating Value (Sat Ideal) Total BTU	1189.34
Heating Value (Dry Real) Total BTU	1214.39	Heating Value (Sat Real) Total BTU	1193.07

UPI 30-045-08305
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:	Marsrow GC1	Meter ID:	3004508335 (BHD)
Sampled by:	Daniel F.	Date Sampled:	07-09-15
Analyzed by:	Logan Richter	Date Received:	07-13-15
Sample Pressure:	35 psig	Date Analyzed:	07-15-15
Sample Temperature	N/R	Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.008	0.002	0.001
Oxygen	0.290	0.497	0.026
Nitrogen	1.511	2.270	0.166
Carbon Dioxide	0.067	0.158	0.011
Methane	89.280	76.814	15.138
Ethane	4.830	7.789	1.292
Propane	1.757	4.156	0.484
i-Butane	0.438	1.365	0.143
n-Butane	0.857	2.672	0.270
i-Pentane	0.251	0.970	0.092
n-Pentane	0.187	0.723	0.068
C6+	0.524	2.585	0.229
	100.000	100.000	17.920

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99731	C2+	2.578
Density (G) (Dry Gas)	0.64403	C3+	1.286
Component MW Total	18.65	C5+	0.388
Heating Value (Dry Ideal) Total BTU	1118.05	Heating Value (Sat Ideal) Total BTU	1098.54
Heating Value (Dry Real) Total BTU	1121.06	Heating Value (Sat Real) Total BTU	1101.39

UPI 30-045-08335

30-045-08335



Marsrow GC 01

Dakota

API # 30-045-08335

Sec. 15, T29N, R12W

1850' FNL x 1850' FWL

San Juan County, New Mexico

GL: 5573'

KB: 5585'

History

Spud date 07/09/1963

Completed on 08/04/1963

Squeeze Bradenhead 11/14/1990

9/8/08: Workover

7/24/09: Well servicing

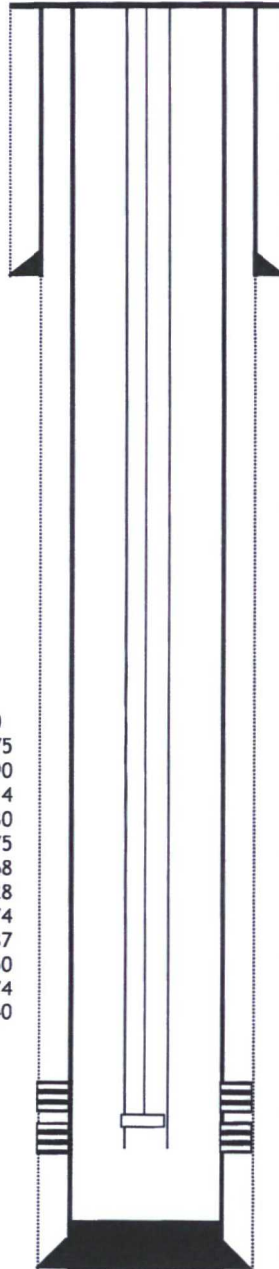
1/11/10: Well servicing.

8/21/2012: Pump change

Formation Tops

Kirtland-Fruitland Sand and Shale	358-1610
Pictured Cliffs Sand and Shale	1610-1775
Lewis Shale	1775-3190
Mesaverde Sand and Shale	3190-4314
Mancos Shale	4314-5230
Gallup Sand and Shale	5230-5575
Mancos Shale	5575-5968
Greenhorn Shale	5968-6028
Graneros Shale	6028-6074
Graneros Dakota Pay Sand	6074-6087
Dakota Sand and Shale	6087-6150
Main Dakota Pay Sand	6150-6174
Dakota Sand and Shale	6174-6240

Comments: 11/1990: Perf 3548-3459' @ 4SPF, could not pump into. Set cmt retainer @ 3250' and drill out from 3151-3564'. Perf 2420-2421' @ 4SPF, could not pump into. Pump cmt and drill out from 2593-2738'. Perf 1350-1351' @ 4SPF. Set cmt retainer @ 1294' and drill out cmt from 1289-1387'. Perf 992-993' @ 4SPF. Pump cmt and drill out cmt from 853-1002'. Reland tbq @ 6166' KB.



PBTD: 6178'
TD: 6240'

OIL CONS. DIV DIST. 3

DEC 18 2015

12-1/4" Hole
8-5/8", 24.0# @ 358'
Cmt w/ 200 sks Quixtrength neat cmt w/ 2% CaCl
TOC @ Surface

Rod Details	Length
Rods, Polished 1.25 X 26'	26
8' Pony Rod	8
0.75 Grade D rods	5725
3/4 Molded Guide Rods	250
1.25x25 sinker bars	100
2x1.25x10x11x14 RHAC pump	14

Tubing Detail	Length
2.375", 4.7# J-55 EUE	31.57
2.375", 4.7# J-55 EUE	8.25
2.375", 4.7# J-55 EUE	6
2.375", 4.7# J-55 EUE	6055.77
Baker 1.78 F-Nipple	0.93
2.375", 4.7# J-55 EUE, perforatec	4.25
2.375", 4.7# J-55 EUE	31.57
2 3/8" Purge Valve	0.7

EOT @ 6151'

Fluid tag'd @ 5320' (7/22/08)

Fill tag'd @ 6169' (7/22/08)

Dakota Perforations

6075-6087' @ 4SPF

Fracd w/ 34,770 gal. H2O w/ 2.5 lbs/1000 gal. FR-2
28,500 lbs. sand

6154-6170' @ 2SPF

Fracd w/ 40,000 gal. H2O w/ 1% CaCl, 2.5 lbs/1000 gal. FR-2
40,000 lbs. sand

7-7/8" Hole

4-1/2", 10.5# @ 6237'

Cmt: 1st stage w/ 500 sks Quixtrength w/ 4% gel, 1.5 lbs/sk tur plug
Tailed w/ 100 sks Quixtrength neat cmt.