NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NM 87410
(505 334-6178 FAX: (505) 334-6170
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 12/2/15 **Operator** BP America Production Company **API #** 3004507076

Property Name GCU 049-FC **Location:** Unit A Section 31 Township 28 Range 12
(Well Name and Number)

Pressure (Shut-in or Producing) Tubing 0 Intermediate — Casing 26 Bradenhead 57

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Time	Bradenhead: BH Blowdown	Bradenhead: Casing Monitor	Bradenhead: Intermediate Monitor	Intermediate: Intermediate Blowdown	Intermediate: Casing Monitor
5 minutes	W	26			
10 minutes	W	26			
15 minutes	W	26			
20 minutes	W	26			
25 minutes	W	26			
30 minutes	0	26			
5 minute SI	2	26			

	Bradenhead Flowed	Intermediate Flowed
Steady Flow		
Surges		
Down to Nothing	✓	
No Flow		
Gas		
Gas and Water		
Water		

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

Clear _____ Fresh _____ Salty _____ Sulfur _____ Black _____

5 Minute Shut-in Bradenhead 2 Intermediate —

REMARKS:
Blew from 1" valve. BH whispered to the 25 minute mark then down to nothing

W = whisper

By _____ **Witness** _____

(Position)

4

NMOCD Test Area: B 102

API 3004507076

OIL CONS. DIV DIST. 3

DEC 18 2015

envirotech

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:	GCU 49	Meter ID:	3004507076 (CSG)
Sampled by:	Daniel F.	Date Sampled	07-07-15
Analyzed by:	Logan Richter	Date Received:	07-13-15
Sample Pressure:	26 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	0.009	0.002	0.001
Oxygen	8.786	12.038	0.779
Nitrogen	32.714	39.239	3.596
Carbon Dioxide	0.735	1.386	0.125
Methane	50.966	35.008	8.632
Ethane	3.817	4.915	1.020
Propane	1.519	2.869	0.418
i-Butane	0.297	0.739	0.097
n-Butane	0.366	0.910	0.115
i-Pentane	0.141	0.435	0.051
n-Pentane	0.115	0.355	0.042
C6+	0.535	2.106	0.233
	100.000	100.000	15.110

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99839	C2+	1.977
Density (G) (Dry Gas)	0.80661	C3+	0.957
Component MW Total	23.35	C5+	0.326
Heating Value (Dry Ideal) Total BTU	679.81	Heating Value (Sat Ideal) Total BTU	667.95
Heating Value (Dry Real) Total BTU	680.91	Heating Value (Sat Real) Total BTU	668.99

10/20/2015

API 3004507076

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Gas Analysis Certificate

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

Client:	BP	Project #:	03143-0880
Site Name:	GCU 49	Meter ID:	3004507076 (BHD)
Sampled by:	Daniel F.	Date Sampled	07-07-15
Analyzed by:	Logan Richter	Date Received:	07-13-15
Sample Pressure:	56 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	0.010	0.002	0.001
Oxygen	0.007	0.014	0.001
Nitrogen	0.604	0.972	0.066
Carbon Dioxide	0.086	0.218	0.015
Methane	93.130	85.797	15.785
Ethane	4.370	7.547	1.169
Propane	1.092	2.766	0.301
i-Butane	0.200	0.669	0.066
n-Butane	0.236	0.788	0.074
i-Pentane	0.083	0.346	0.030
n-Pentane	0.056	0.232	0.020
C6+	0.123	0.651	0.054
	100.000	100.000	17.582

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99765	C2+	1.714
Density (G) (Dry Gas)	0.60130	C3+	0.545
Component MW Total	17.41	C5+	0.105
Heating Value (Dry Ideal) Total BTU	1071.57	Heating Value (Sat Ideal) Total BTU	1052.87
Heating Value (Dry Real) Total BTU	1074.10	Heating Value (Sat Real) Total BTU	1055.27

16.07.2015 14:51:26

10/20/2015

API 3004507076

OIL CONS. DIV DIST. 3

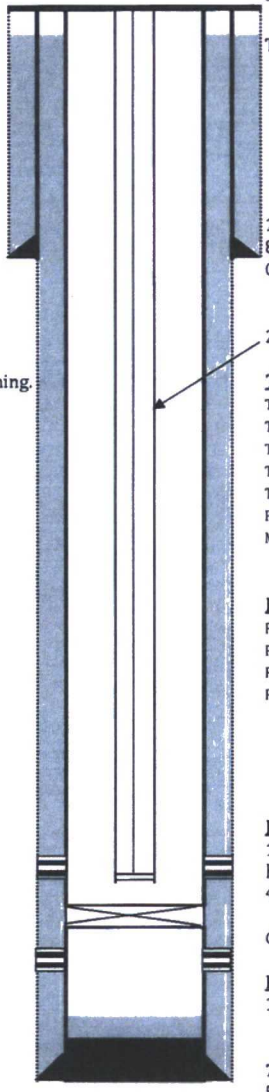
DEC 18 2015

bp

Gallegos Canyon Unit 049
Fruitland Coal
API # 30-045-07076
T-28N, R-12-W, Sec. 31
San Juan County, New Mexico

Well History
10/5/53: Spud date
11/29/53: Completion Date
1/11/96: Recomplete Fruitland
Install pumping unit, rods and pump
2/5/07: Workover. Tag at 1261'. Cleaned out to 1270'.
Ran new string of 2 3/8" tubing. Ran pump and rods.
6/7/10: Workover. Tagged PBTD. Changed out pump.
Found pressure on the bradenhead
1/13/11: 55psi on the Bradenhead. Blew down gas to nothing.
7 psi on bradenhead after 5 min. Shutin.

Formation Tops
Ojo Alamo
Kirtland
Fruitland
PC 1270'



Elev. 5625'

TOC: Unknown

12 1/4" Hole
8 5/8", 24#, J-55 @ 97'
Cmt w/ 70 sx

2 3/8", 4.7#, J-55, EUE @1267'

Tbg Detail (6/2010)	Joints	Length (ft)
TBG HANDER 7.027"	1	
TBG JTS 2.375", J55, 4.7# EUE 8RD	1	31.5
TBG PUP JT 2.375",J55,4.7, EUE 8RD	1	4
TBG PUP JT 2.375",J55,4.7, EUE 8RD	1	8
TBG JTS 2.375", J55, 4.7# EUE 8RD	38	1192.62
PROFILE NIPPLE 2.375"	1	0.93
MULE SHOE JOINT	1	18.1

Rod Detail (6/2010)	Joints	Length (ft)
POLISHED ROD, 1.25"	1	16
PONY ROD 0.75", D	1	2
ROD 0.875", C (Plain rods, slim coup.)	49	1225
ROD PUMP (2"x1.25"x14' RHAC, Top hold down insert)	1	14

Fruitland Coal Perforations
1251-1267'
Frac w/ 250 gals 15% HCl & 17M gal 30# X-link gel,
40M 20/40 brady sand

CIBP @ 1272'

Pictured Cliffs Perforations
1289-1325'

7 7/8" Hole
5 1/2", 14#, J-55 @ 1274'
Cmt w/ 100 sxs

PBTD: 1272'
TD: 1331'