



NEW MEXICO ENERGY, MINERALS
AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
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AZTEC, NM 87410
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<http://www.emnrd.state.nm.us/ocd/>

OIL CONS. DIV DIST. 3

JAN 28 2016

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

Date of Test 6/22/15 Operator BP America Production Company API # 3004511566

Property Name GCU 201-DK Location: Unit M Section 12 Township 28 Range 12
(Well Name and Number)

Pressure (Shut-in or Producing) Tubing 83 Intermediate — Casing 11 Bradenhead 83

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>10</u>				Steady Flow	
10 minutes	<u>W</u>	<u>10</u>				Surges	
15 minutes	<u>0</u>	<u>11</u>				Down to Nothing	
20 minutes	<u>0</u>	<u>11</u>				No Flow	
25 minutes	<u>0</u>	<u>11</u>				Gas	
30 minutes						Gas and Water	
5 minute SI	<u>2</u>	<u>11</u>				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 had blown to a whisper in
15 seconds.

By Witness —

(Position)

API 30-045-11566
Bradenhead



Gas Analysis Certificate

GPA Standard 2261-13

Acquisition Method Name au_report_150_C6+
Last calibration date 9/28/2015 11:07:06 AM

Client:	BP	Project #:	03143-0880
Site Name:	GCU 201 (BHD)	Meter ID:	3004511566 (BHD)
Sampled by:	Daniel F.	Date Sampled	06-26-15
Analyzed by:	Logan Richter	Date Received:	07-13-15
Sample Pressure:	83 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	0.000	0.000	0.000
Oxygen	0.000	0.000	0.000
Nitrogen	0.000	0.000	0.000
Carbon Dioxide	0.000	0.000	0.000
Methane	89.490	78.007	15.174
Ethane	6.533	10.674	1.748
Propane	2.464	5.904	0.679
i-Butane	0.437	1.381	0.143
n-Butane	0.550	1.736	0.173
i-Pentane	0.184	0.720	0.067
n-Pentane	0.122	0.480	0.044
C6+	0.220	1.098	0.096
	100.000	100.000	18.124

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99728	C2+	2.950
Density (G) (Dry Gas)	0.63553	C3+	1.203
Component MW Total	18.40	C5+	0.208
Heating Value (Dry Ideal) Total BTU	1137.15	Heating Value (Sat Ideal) Total BTU	1117.31
Heating Value (Dry Real) Total BTU	1140.25	Heating Value (Sat Real) Total BTU	1120.25

Logan Richter

10/20/2015



API 30-045-11566
Caving
Gas Analysis Certificate

GPA Standard 2261-13

Acquisition Method Name au_report_150_C6+
Last calibration date 11/17/2015 7:56:54 PM

Client:	BP	Project #:	03143-0880
Site Name:	GCU 201	Meter ID:	3004511566
Sampled by:	D. Fuller	Date Sampled	12-1615
Analyzed by:	Logan Richter	Date Received:	12-17-15
Sample Pressure:	145 psig	Date Analyzed:	12-17-15
Sample Temperature	°F	Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.000	0.000	0.000
Oxygen	1.439	2.001	0.128
Nitrogen	4.516	5.495	0.498
Carbon Dioxide	1.064	2.033	0.182
Methane	68.668	47.849	11.657
Ethane	13.319	17.396	3.567
Propane	6.555	12.554	1.808
i-Butane	1.012	2.555	0.332
n-Butane	1.772	4.474	0.560
i-Pentane	0.615	1.927	0.225
n-Pentane	0.505	1.584	0.183
C6+	0.534	2.132	0.233
	100.000	100.000	19.373

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99609	C2+	6.908
Density (G) (Dry Gas)	0.79514	C3+	3.341
Component MW Total	23.02	C5+	0.642
Heating Value (Dry Ideal) Total BTU	1257.16	Heating Value (Sat Ideal) Total BTU	1235.22
Heating Value (Dry Real) Total BTU	1262.10	Heating Value (Sat Real) Total BTU	1239.91

API 30-045-115 lde



GCU 201 DK

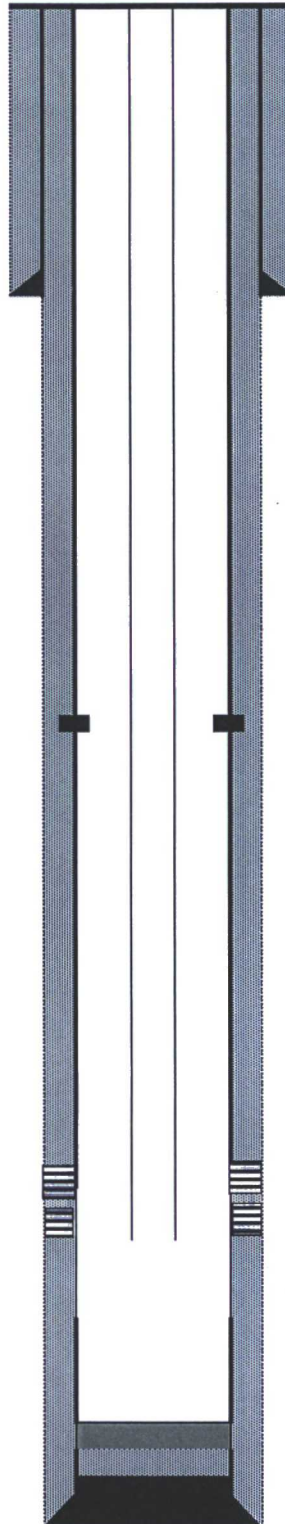
Dakota
API# 30-045-11566
Unit M - Sec 12 - T28N - R12W
San Juan County, New Mexico

OIL CONS. DIV DIST. 3

JAN 28 2016

Formation Tops

Pictured Cliffs	1390
Mesaverde	3095
Mancos	4130
Gallup	5025
Greenhorn	5802
Dakota	5964



12-1/4" Hole
8-5/8", 28#, J-55 @ 384'
Cmt w/ 250 sks Class A w/ 2% CaCl
Circulated to surface

DV Tool set @ 4242'

1.875" Nipple @5992'
1.78 Nipple @ 5997'
2-3/8" EOT @ 6001'

Dakota Perforations

5893'-5913' w/ 4 spf Stage 2
5966-5990' w/ 2 spf Stage 1
5999'-6008' w/ 4 spf Stage 1

Stage 2: Frac'd with 30,330 gal water.
20,000 lbs 20/40 sand
10,000 lbs 10/20 sand
Stage 1: Frac'd with 43,150 gal water
40,000 lbs 20/40 sand
10,000 lbs 10/20 sand
7-7/8" hole
4-1/2" 10.5#, J-55 @ 6076'
Cmt with 400 sks Type C w/ 6% Gel
and 100 sks neat.
950 sks w/ 6% Gel
Circulated to surface

PBTD: 6042'
TD: 6076'