



NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
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OIL CONS. DIV DIST. 3

JAN 28 2016

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

Date of Test 7/10/15 Operator BP America Production Company API # 3004525169

Property Name GCU 085E-DK Location: Unit I Section 19 Township 28 Range 12
(Well Name and Number)

Pressure (Shut-in or Producing) 23 Tubing 23 Intermediate - Casing 58 Bradenhead 53

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Time	Bradenhead			Intermediate		Bradenhead Intermediate	
	BH Blowdown	Casing Monitor	Intermediate Monitor	Intermediate Blowdown	Casing Monitor	Flowed	Flowed
5 minutes	<u>W</u>	<u>58</u>				Steady Flow	
10 minutes	<u>W</u>	<u>58</u>				Surges	
15 minutes	<u>W</u>	<u>58</u>				Down to Nothing	☒
20 minutes	<u>W</u>	<u>58</u>				No Flow	
25 minutes	<u>W</u>	<u>58</u>				Gas	
30 minutes	<u>0</u>	<u>58</u>				Gas and Water	
5 minute SI	<u>0</u>	<u>5</u>				Water	

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

Clear ☐ Fresh ☐ Salty ☐ Sulfur ☐ Black ☐

5 Minute Shut-in Bradenhead 0 Intermediate -

REMARKS:

Blow from 1" valve. BH had blown to a whisper in 45 sec.

By [Signature] Witness

(Position)



API 30-045-25169
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:	GCU 85E	Meter ID:	3004525169 (BHD)
Sampled by:	Daniel F.	Date Sampled:	07-10-15
Analyzed by:	Logan Richter	Date Received:	07-13-15
Sample Pressure:	53 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	0.006	0.011	0.001
Nitrogen	0.447	0.714	0.049
Carbon Dioxide	0.000	0.000	0.000
Methane	92.649	84.842	15.704
Ethane	4.635	7.956	1.239
Propane	1.490	3.752	0.411
i-Butane	0.299	0.993	0.098
n-Butane	0.295	0.980	0.093
i-Pentane	0.100	0.412	0.037
n-Pentane	0.015	0.064	0.006
C6+	0.052	0.275	0.023
	100.000	100.000	17.661

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99760	C2+	1.906
Density (G) (Dry Gas)	0.60489	C3+	0.667
Component MW Total	17.52	C5+	0.065
Heating Value (Dry Ideal) Total BTU	1081.96	Heating Value (Sat Ideal) Total BTU	1063.08
Heating Value (Dry Real) Total BTU	1084.56	Heating Value (Sat Real) Total BTU	1065.55



API 30-045-25169
Casing
Gas Analysis Certificate

GPA Standard 2261-13

Acquisition Method Name au_report_150_C6+
Last calibration date 11/11/2015 9:18:28 AM

Client:	BP	Project #:	03143-0880
Site Name:	GCU 85E	Meter ID:	3004525169 (CSG)
Sampled by:	Daniel F.	Date Sampled	07-10-15
Analyzed by:	Logan Richter	Date Received:	07-13-15
Sample Pressure:	58 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	0.063	0.013	0.006
Oxygen	0.006	0.009	0.000
Nitrogen	0.396	0.565	0.044
Carbon Dioxide	1.115	2.500	0.190
Methane	86.033	70.304	14.593
Ethane	7.215	11.051	1.931
Propane	2.542	5.710	0.701
i-Butane	0.436	1.290	0.143
n-Butane	0.699	2.069	0.220
i-Pentane	0.273	1.002	0.100
n-Pentane	0.238	0.873	0.086
C6+	0.986	4.614	0.430
	100.000	100.000	18.444

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99692	C2+	3.611
Density (G) (Dry Gas)	0.67827	C3+	1.680
Component MW Total	19.63	C5+	0.616
Heating Value (Dry Ideal) Total BTU	1168.54	Heating Value (Sat Ideal) Total BTU	1148.15
Heating Value (Dry Real) Total BTU	1172.15	Heating Value (Sat Real) Total BTU	1151.58

API 30-045-25169

OIL CONS. DIV DIST. 3

JAN 28 2016



Ground Elevation 5863'
KB Measurement 5877'

GCU 085E-DK

Dakota
API #30-45-2516900
Unit I - Sec 19 - T28N - R12W
San Juan County, NM

Well History

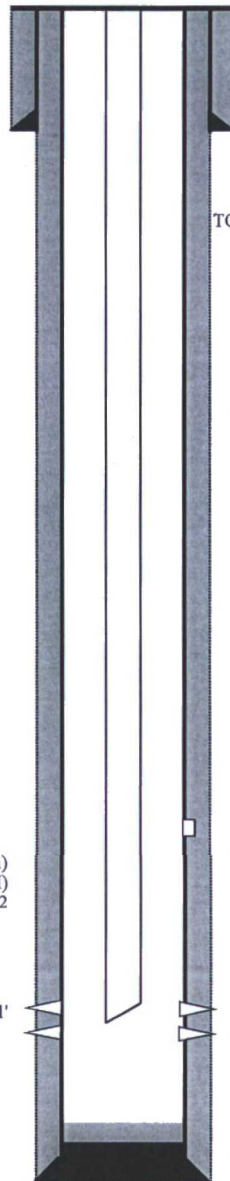
4/21/83: Spud date
5/11/83: Completion date
Note: This well may have a Ground Bed Cathodic Protection Well.
Completed 5/27/97 to 390'
8 5/8" csg to 20' w/ 4 bags cmt zia 1&2
4/25/05: Wirelined: Retrieved Pacemaker plunger, bas, and spring at 6074'. Ran gauge ring to 6076'

Formation Tops

Formation	Surface csg
Kirtland	1115
Fruitland	1407
Pictured Clif	2327
Chacra	
Lewis Shale	
Cliffhouse	2940
Menefee	3010
Pt. Lookout	3890
Gallup	5074
Mancos	
Greenhorn	5892
Graneros DK	5999
Graneros Sh	5955
Main Dakota	6074

Nipple Data (SN 1 jt up from btm)
2 3/8" EUE 8r Dover "OB" (API)
5173 w/ ID 1.7813 Bore 1 25/32

End of Tubing at 6121'



PBTD 6209'
Total Depth 6223'

TOC: Circulated 48 cu. Ft. to surface.

Surface Casing Data

12 1/4" hole
8 5/8", 24#, K55 casing at 338'
Cmt w/ 360 cu ft. Class B

TOC: Circulated to surface during stage 1.
600' est from stage 2.

Rod Details

none

LengthTubing Details

Tubing 2 3/8" EUE 8R J55 T&C
NIPPLE
Tubing 2 3/8" EUE 8R J55 T&C
Saw Tooth Coupling - 2 3/8" EUE 8R

Length

6106.74
0.8
31.92
40

DV Tool: 4231'

Perforation Data

6004-6012, 6026-6034, 6073-6163
Frac'd w/ 150,000 gals N2 foam & 265,000# 20/40 mesh sand

Production Casing Data

7 7/8" hole
4 1/2", 105#, K55 casing at 6211'
Stage 1: Cmt w/ 539 cu ft Class B
Stage 2: Cmt w/ 1477 cu ft Class B

Depth	Deviation
350	0.25
859	0.5
1349	0.5
2304	0.5
2800	0.75
3313	0.75
3809	1
4312	1
4810	0.75
5300	1
5797	1
6221	1