



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/>

BRADENHEAD TEST REPORT
(Submit 2 copies to above address)

OIL CONS. DIV DIST. 3
DEC 18 2015

Date of Test 7/8/15 Operator BP America Production Company API # 3004511570

Property Name GCU 193-DK Location: Unit E Section 30 Township 28 Range 12
(Well Name and Number)

Pressure (Shut-in or Producing) Producing Tubing 155 Intermediate — Casing 150 Bradenhead 82

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Time	Bradenhead			Intermediate		Steady Flow	Surges	Down to Nothing	No Flow	Gas	Gas and Water	Water
	BH Blowdown	Casing Monitor	Intermediate Monitor	Intermediate Blowdown	Casing Monitor							
5 minutes	<u>W</u>	<u>150</u>										
10 minutes	<u>W</u>	<u>150</u>										
15 minutes	<u>0</u>	<u>150</u>										
20 minutes	<u>0</u>	<u>150</u>										
25 minutes	<u>0</u>	<u>150</u>										
30 minutes	<u>0</u>	<u>150</u>										
5 minute SI	<u>4</u>	<u>150</u>										

	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 4 Intermediate —

REMARKS:

Blew from 1" valve. BH blew to a whisper in 10 sec
then down to nothing at the 15 minute mark.

By [Signature] Witness

(Position)



OIL CONS. DIV DIST. 3

DEC 18 2015

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 193	Meter ID:	3004511570 (CSG)
Sampled by:	Daniel F.	Date Sampled	07-09-15
Analyzed by:	Logan Richter	Date Received:	07-13-15
Sample Pressure:	150 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	0.047	0.010	0.005
Oxygen	0.006	0.011	0.001
Nitrogen	0.439	0.633	0.048
Carbon Dioxide	1.171	2.654	0.200
Methane	85.847	70.902	14.560
Ethane	7.526	11.651	2.014
Propane	2.769	6.286	0.763
i-Butane	0.454	1.359	0.149
n-Butane	0.731	2.186	0.230
i-Pentane	0.258	0.957	0.094
n-Pentane	0.205	0.763	0.074
C6+	0.547	2.590	0.239
	100.000	100.000	18.377

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99702	C2+	3.564
Density (G) (Dry Gas)	0.67090	C3+	1.550
Component MW Total	19.42	C5+	0.408
Heating Value (Dry Ideal) Total BTU	1155.13	Heating Value (Sat Ideal) Total BTU	1134.97
Heating Value (Dry Real) Total BTU	1158.58	Heating Value (Sat Real) Total BTU	1138.25

UPI 30-045-11510
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 193	Meter ID:	3004511570 (BHD)
Sampled by:	Daniel F.	Date Sampled	07-09-15
Analyzed by:	Logan Richter	Date Received:	07-13-15
Sample Pressure:	82 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	0.007	0.012	0.001
Nitrogen	0.436	0.701	0.048
Carbon Dioxide	0.000	0.000	0.000
Methane	93.215	85.931	15.800
Ethane	4.410	7.619	1.179
Propane	1.222	3.096	0.337
i-Butane	0.237	0.791	0.077
n-Butane	0.259	0.864	0.082
i-Pentane	0.089	0.371	0.033
n-Pentane	0.048	0.200	0.018
C6+	0.079	0.415	0.034
	100.000	100.000	17.607

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99764	C2+	1.759
Density (G) (Dry Gas)	0.60089	C3+	0.580
Component MW Total	17.40	C5+	0.084
Heating Value (Dry Ideal) Total BTU	1075.93	Heating Value (Sat Ideal) Total BTU	1057.15
Heating Value (Dry Real) Total BTU	1078.48	Heating Value (Sat Real) Total BTU	1059.57

RGR

10/20/2015

DEC 18 2015

API 30-045-11570

bp



WELL NAME: GCU 193
 LOCATION: 1525' FNL 910' FWL
 SEC/TWN/RNG Sec 30 T28N R12W
 COUNTY, ST: San Juan Co., NM
 WELL TYPE: Gas
 BP WI: _____ NRI: _____
 BCPD BWPD MCFD
 IP 10,089

SPUD DATE: 11/02/65
 RIG REL: _____
 COMP DATE: 12/15/65
 FORMATION: Dakota
 API#: 30-045-115700

GCU 193

INTERMEDIATE CASING DESIGN

SET @ _____
 1st Stg CEMENT _____
 TAIL IN W/ _____
 TOC _____
 Det. By _____

PRODUCTION CASING DESIGN

4 1/2" _____ J-55 10.5#
 DV Tool @ 4359'

SET @ _____
 1st Stg Lead 400 sxs CI-C
 1st Stg Tail 100 sxs CI-C neat
 2nd Stg Lead 1000 sxs CI-C
 2nd Stg Tail _____
 CMT TOP @ ~500'
 DETER. BY CBL (1992)

PERF. DATA:	SPF	FORM.
6099-6115'	4	Dakota
6156-6184'	3	Dakota

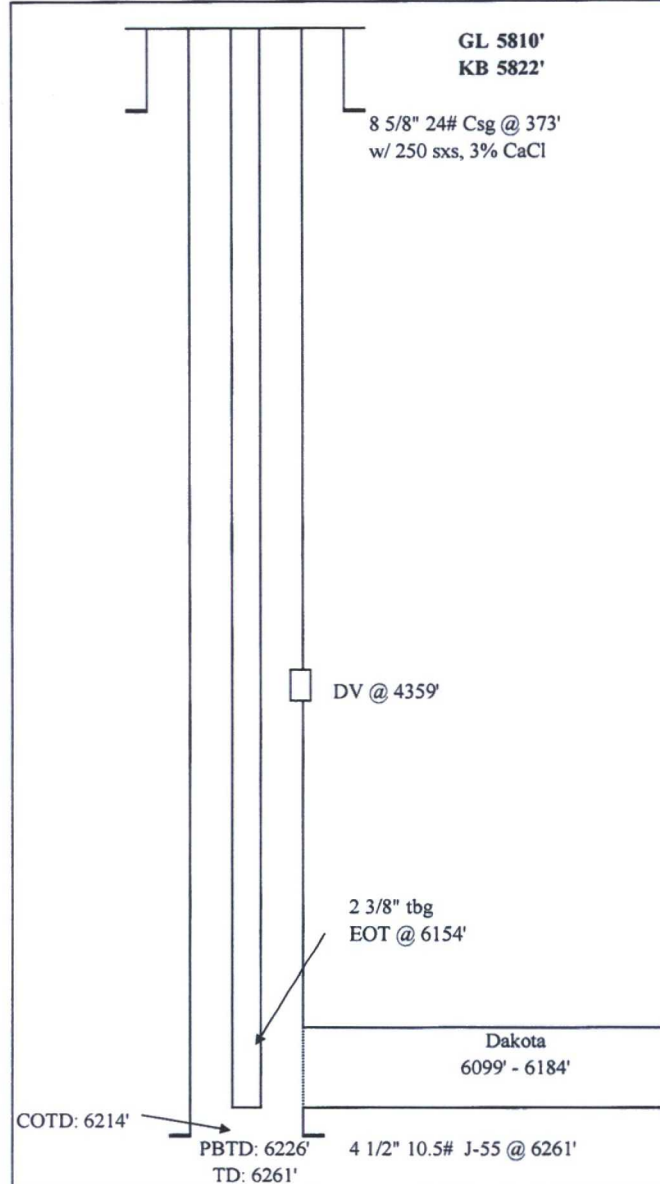
TUBING DATA
 2 3/8" 4.7 #/ft

SET @ 6154'
 PACKER _____
 S.N ID / @ _____
 S.N ID / @ @ 6150' (1.812 ID)

FORMATION TOPS

Pictured Cliff	1490
Lewis	1640
Mesaverde	3195
Gallup	5132
Dakota	6150

Prepared By: Jesse Gracia
 Date: 22-Sep-09

FRAC JOB:

(1) DK: 70Q foam 144,000 20/40

NOTES:

Well Servicing: (3/14/1985): C/O. Expected hole in casing, but casing pressure te
 Well Servicing: (2/26/1992): Ran CBL, CCL, GR from 3200'-surface.
 Expected bradenhead problem. CO but no cement work
 Well Servicing (12/21/2000): cleanout fill, reland tbq