



API 30-045-08413
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:	Bruington GC B1	Meter ID:	3004508413 (BHD)
Sampled by:	Daniel F.	Date Sampled	07-09-15
Analyzed by:	Logan Richter	Date Received:	07-13-15
Sample Pressure:	20 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	0.018	0.004	0.002
Oxygen	0.195	0.334	0.017
Nitrogen	2.092	3.128	0.230
Carbon Dioxide	0.093	0.218	0.016
Methane	87.045	74.541	14.759
Ethane	7.030	11.284	1.880
Propane	2.002	4.712	0.552
i-Butane	0.311	0.965	0.102
n-Butane	0.489	1.518	0.154
i-Pentane	0.127	0.489	0.046
n-Pentane	0.118	0.455	0.043
C6+	0.480	2.352	0.209
	100.000	100.000	18.010

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99732	C2+	2.987
Density (G) (Dry Gas)	0.64703	C3+	1.106
Component MW Total	18.73	C5+	0.299
Heating Value (Dry Ideal) Total BTU	1114.43	Heating Value (Sat Ideal) Total BTU	1094.98
Heating Value (Dry Real) Total BTU	1117.43	Heating Value (Sat Real) Total BTU	1097.83



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:	Bruington GC B1	Meter ID:	3004508413 (CSG)
Sampled by:	Daniel F.	Date Sampled	07-09-15
Analyzed by:	Logan Richter	Date Received:	07-13-15
Sample Pressure:	65 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	0.043	0.008	0.004
Oxygen	0.007	0.012	0.001
Nitrogen	0.518	0.710	0.057
Carbon Dioxide	1.456	3.137	0.249
Methane	81.629	64.129	13.849
Ethane	9.948	14.649	2.663
Propane	3.693	7.975	1.018
i-Butane	0.481	1.370	0.158
n-Butane	0.894	2.545	0.282
i-Pentane	0.279	0.986	0.102
n-Pentane	0.261	0.921	0.095
C6+	0.790	3.556	0.345
	100.000	100.000	18.822

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99667	C2+	4.662
Density (G) (Dry Gas)	0.70540	C3+	2.000
Component MW Total	20.42	C5+	0.542
Heating Value (Dry Ideal) Total BTU	1200.41	Heating Value (Sat Ideal) Total BTU	1179.46
Heating Value (Dry Real) Total BTU	1204.42	Heating Value (Sat Real) Total BTU	1183.27



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/>

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

OIL CONS. DIV DIST. 3

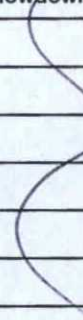
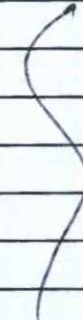
DEC 18 2015

Date of Test 5/15/15 Operator BP America Production Company API # 3004508413

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

Pressure (Shut-in or Producing) Tubing 99 Intermediate NA Casing 99 Bradenhead 25

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Time	Bradenhead			Intermediate			Bradenhead Intermediate Flowed Flowed	
	BH Blowdown	Casing Monitor	Intermediate Monitor	Intermediate Blowdown	Casing Monitor			
5 minutes	<u>W</u>	<u>100</u>				Steady Flow		
10 minutes	<u>W</u>	<u>101</u>				Surges		
15 minutes	<u>W</u>	<u>102</u>				Down to Nothing		
20 minutes	<u>W</u>	<u>103</u>				No Flow		
25 minutes	<u>W</u>	<u>104</u>				Gas		
30 minutes	<u>W</u>	<u>104</u>				Gas and Water		
5 minute SI	<u>6</u>	<u>104</u>				Water		

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

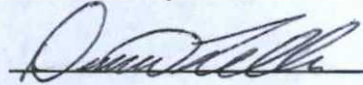
Clear _____ Fresh _____ Salty _____ Sulfur _____ Black _____

5 Minute Shut-in Bradenhead 6 Intermediate NA

REMARKS:

BH went from 25 psi to a whisper in 1sec. Blew through
1" valve.

W = whisper

By  Witness _____
Daniel Fuller
(Position)