



30-045-24429

API 30-045-24429
Bradenhead

Gas Analysis Certificate

OIL CONS. DIV DIST. 3

GPA Standard 2261-13

DEC 18 2015

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 166E	Meter ID:	3004524429 (BHD)
Sampled by:	Sawyer M.	Date Sampled	07-13-15
Analyzed by:	Logan Richter	Date Received:	07-14-15
Sample Pressure:	80 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	0.012	0.003	0.001
Oxygen	0.005	0.008	0.000
Nitrogen	0.349	0.528	0.038
Carbon Dioxide	0.000	0.000	0.000
Methane	88.906	76.937	15.075
Ethane	6.454	10.468	1.726
Propane	2.614	6.217	0.720
i-Butane	0.489	1.532	0.160
n-Butane	0.621	1.947	0.196
i-Pentane	0.206	0.802	0.075
n-Pentane	0.140	0.546	0.051
C6+	0.204	1.012	0.089
	100.000	100.000	18.133

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99726	C2+	3.018
Density (G) (Dry Gas)	0.64016	C3+	1.291
Component MW Total	18.54	C5+	0.215
Heating Value (Dry Ideal) Total BTU	1138.42	Heating Value (Sat Ideal) Total BTU	1118.55
Heating Value (Dry Real) Total BTU	1141.55	Heating Value (Sat Real) Total BTU	1121.52

16.07.2015 14:21:46

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3



API 30-045-24429

Casing

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 166E	Meter ID:	3004524429 (CSG)
Sampled by:	Sawyer M.	Date Sampled	07-13-15
Analyzed by:	Logan Richter	Date Received:	07-14-15
Sample Pressure:	185 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	0.070	0.014	0.007
Oxygen	0.011	0.019	0.001
Nitrogen	0.843	1.214	0.093
Carbon Dioxide	0.954	2.157	0.163
Methane	84.819	69.917	14.385
Ethane	8.521	13.165	2.280
Propane	2.718	6.158	0.749
i-Butane	0.439	1.312	0.144
n-Butane	0.692	2.067	0.218
i-Pentane	0.229	0.850	0.084
n-Pentane	0.190	0.705	0.069
C6+	0.513	2.422	0.224
	100.000	100.000	18.417

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99702	C2+	3.768
Density (G) (Dry Gas)	0.67219	C3+	1.488
Component MW Total	19.46	C5+	0.377
Heating Value (Dry Ideal) Total BTU	1155.82	Heating Value (Sat Ideal) Total BTU	1135.65
Heating Value (Dry Real) Total BTU	1159.27	Heating Value (Sat Real) Total BTU	1138.93

R9/60-

10/20/2015



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 5-28-15 Operator BP America Production Company API # 3004524429

Property Name GCU 166E-DK Location: Unit E Section 34 Township 28 Range 12
(Well Name and Number)

Pressure (Shut-in or Producing) Tubing 305 Intermediate N/A Casing 305 Bradenhead 68

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>305</u>				Steady Flow	
10 minutes	<u>W</u>	<u>305</u>				Surges	
15 minutes	<u>W</u>	<u>305</u>				Down to Nothing	
20 minutes	<u>W</u>	<u>305</u>				No Flow	
25 minutes	<u>W</u>	<u>305</u>				Gas	
30 minutes	<u>W</u>	<u>305</u>				Gas and Water	
5 minute SI						Water	

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

Clear Fresh Salty Sulfur Black

5 Minute Shut-in Bradenhead 1 Intermediate N/A

REMARKS:

Blew through 1" valve. BH blew to a whisper in 17 sec. BH whisper
all 30 min test
Need to pull gas sample
"w" whisper

By Braden/Kennedy Witness
22 1.7c
(Position)