



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 9/28/2015 11:07:06 AM

Client:	BP	Project #:	03143-0880
Site Name:	GCU 178E	Meter ID:	3004526206 (BHD)
Sampled by:	Brandon K.	Date Sampled	10-16-15
Analyzed by:	Logan Richter	Date Received:	10-19-15
Sample Pressure:	125 psig	Date Analyzed:	10-26-15
Sample Temperature	NA	Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.000	0.000	0.000
Oxygen	0.016	0.028	0.001
Nitrogen	0.624	0.959	0.069
Carbon Dioxide	0.000	0.000	0.000
Methane	89.836	79.068	15.231
Ethane	5.970	9.849	1.597
Propane	2.238	5.415	0.617
i-Butane	0.443	1.413	0.145
n-Butane	0.460	1.466	0.145
i-Pentane	0.158	0.624	0.058
n-Pentane	0.100	0.398	0.036
C6+	0.155	0.780	0.068
	100.000	100.000	17.966

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99738	C2+	2.665
Density (G) (Dry Gas)	0.62940	C3+	1.068
Component MW Total	18.23	C5+	0.162
Heating Value (Dry Ideal) Total BTU	1117.00	Heating Value (Sat Ideal) Total BTU	1097.51
Heating Value (Dry Real) Total BTU	1119.93	Heating Value (Sat Real) Total BTU	1100.29

27.10.2015 18:15:21

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UPI 30-045-26206
Casing



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 178E	Meter ID:	3004526206 (CSG)
Sampled by:	Brandon K.	Date Sampled	10-16-15
Analyzed by:	Logan Richter	Date Received:	10-19-15
Sample Pressure:	143 psig	Date Analyzed:	10-26-15
Sample Temperature	NA	Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.000	0.000	0.000
Oxygen	0.016	0.027	0.001
Nitrogen	0.884	1.285	0.097
Carbon Dioxide	0.593	1.355	0.101
Methane	85.357	71.097	14.476
Ethane	8.600	13.426	2.301
Propane	2.669	6.111	0.736
i-Butane	0.426	1.286	0.140
n-Butane	0.639	1.929	0.202
i-Pentane	0.225	0.844	0.082
n-Pentane	0.172	0.644	0.062
C6+	0.418	1.996	0.183
	100.000	100.000	18.381

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99707	C2+	3.705
Density (G) (Dry Gas)	0.66519	C3+	1.404
Component MW Total	19.26	C5+	0.327
Heating Value (Dry Ideal) Total BTU	1153.54	Heating Value (Sat Ideal) Total BTU	1133.41
Heating Value (Dry Real) Total BTU	1156.93	Heating Value (Sat Real) Total BTU	1136.62

BSA-

11/03/2015



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC NM 87410
(505) 334-6178 FAX: (505) 334-6170

<http://emnr.state.nm.us/ocd/District/III/3district.htm>

BRADENHEAD TEST REPORT

(submit 1 copy to above address)

OIL CONS. DIV DIST. 3

DEC 18 2015

Date of Test 11/30/15 Operator BP API #30-0 4526206

Property Name GCU Well No. 178E Location: Unit H Section 4 Township 27 Range 12

Well Status (Shut-In or Producing) Initial PSI: Tubing 43 Intermediate - Casing - Bradenhead 92

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Testing	PRESSURE				
	BH	Bradenhead Int	Interm Int	Interm Csg	Interm Csg
TIME					
5 min	0		43		
10 min	0		43		
15 min	0		43		
20 min					
25 min					
30 min					

FLOW CHARACTERISTICS	
BRADENHEAD	INTERMEDIATE
Steady Flow	
Surges	
Down to Nothing	✓
Nothing	
Gas	
Gas & Water	
Water	

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

CLEAR _____ FRESH _____ SALTY _____ SULFUR _____ BLACK _____

5 MINUTE SHUT-IN PRESSURE BRADENHEAD 0 INTERMEDIATE _____

REMARKS:

Blew from 1" valve. BH blew to nothing in 5 sec.
unable to get casing reading due to cement plugging
valve.

By [Signature]

Witness _____

(Position)

E-mail address _____