

CPI 30-045-11622
Casing



Gas Analysis Certificate

GPA Standard 2261-13

OIL CONS. DIV DIST. 3

Acquisition Method Name au_report_150_C6+
Last calibration date 7/10/2015 10:21:38 AM

DEC 18 2015

Client:	BP	Project #:	03143-0880
Site Name:	GCU 215	Meter ID:	3004511622 (CSG)
Sampled by:	Daniel F.	Date Sampled:	07-08-15
Analyzed by:	Logan Richter	Date Received:	07-13-15
Sample Pressure:	98 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	0.046	0.009	0.005
Oxygen	0.246	0.377	0.022
Nitrogen	1.711	2.297	0.188
Carbon Dioxide	1.036	2.186	0.177
Methane	81.482	62.645	13.826
Ethane	8.067	11.624	2.159
Propane	3.434	7.256	0.947
i-Butane	0.616	1.715	0.202
n-Butane	1.167	3.252	0.368
i-Pentane	0.559	1.933	0.205
n-Pentane	0.530	1.832	0.192
C6+	1.107	4.875	0.483
	100.000	100.000	18.774

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99657	C2+	4.556
Density (G) (Dry Gas)	0.72096	C3+	2.397
Component MW Total	20.87	C5+	0.880
Heating Value (Dry Ideal) Total BTU	1210.61	Heating Value (Sat Ideal) Total BTU	1189.48
Heating Value (Dry Real) Total BTU	1214.77	Heating Value (Sat Real) Total BTU	1193.43

UP 100-015 11600
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 215	Meter ID:	3004511622 (BHD)
Sampled by:	Daniel F.	Date Sampled:	07-08-15
Analyzed by:	Logan Richter	Date Received:	07-13-15
Sample Pressure:	73 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	0.004	0.006	0.000
Nitrogen	0.277	0.418	0.031
Carbon Dioxide	0.000	0.000	0.000
Methane	88.975	76.820	15.087
Ethane	6.275	10.154	1.678
Propane	2.768	6.570	0.763
i-Butane	0.486	1.520	0.159
n-Butane	0.613	1.918	0.193
i-Pentane	0.188	0.731	0.069
n-Pentane	0.129	0.502	0.047
C6+	0.274	1.357	0.120
	100.000	100.000	18.148

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99724	C2+	3.029
Density (G) (Dry Gas)	0.64166	C3+	1.351
Component MW Total	18.58	C5+	0.236
Heating Value (Dry Ideal) Total BTU	1141.94	Heating Value (Sat Ideal) Total BTU	1122.02
Heating Value (Dry Real) Total BTU	1145.11	Heating Value (Sat Real) Total BTU	1125.02

RGR

10/20/2015