



30-045-11686

Gas Analysis Certificate

GPA Standard 2261-13

Method Name C6+ Excel Recalc2
Last calibration date 6/19/2015 8:47:52 AM

Client:	BP	Project #:	03143-0880
Site Name:	GCU 233-PC	Meter ID:	3004511686 (BHD)
Sampled by:	Brandon K.	Date Sampled	052815
Analyzed by:	Logan Richter	Date Received:	060215
Sample Pressure:	125 psig	Date Analyzed:	060315
Sample Temperature	NA	Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.590	0.130	0.060
Oxygen	0.082	0.145	0.007
Nitrogen	1.040	1.607	0.114
Carbon Dioxide	0.042	0.102	0.007
Methane	88.670	78.469	15.032
Ethane	6.149	10.200	1.645
Propane	2.330	5.669	0.642
i-Butane	0.405	1.298	0.133
n-Butane	0.480	1.538	0.151
i-Pentane	0.134	0.534	0.049
n-Pentane	0.077	0.307	0.028
C6+	0.000	0.000	0.000
	100.000	100.000	17.868

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99746	C2+	2.647
Density (G) (Dry Gas)	0.62591	C3+	1.003
Component MW Total	18.13	C5+	0.077
Heating Value (Dry Ideal) Total BTU	1100.31	Heating Value (Sat Ideal) Total BTU	1081.11
Heating Value (Dry Real) Total BTU	1103.11	Heating Value (Sat Real) Total BTU	1083.76

Reviewed by

mm dd/yyyy



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GPA Standard 2261-13

Method Name C6+ Excel Recalc2
Last calibration date 6/19/2015 8:47:52 AM

Client:	BP	Project #:	03143-0880
Site Name:	GCU 233-PC	Meter ID:	3004511686 (CSG)
Sampled by:	Brandon K.	Date Sampled:	052815
Analyzed by:	Logan Richter	Date Received:	060215
Sample Pressure:	22 psig	Date Analyzed:	060315
Sample Temperature:	NA	Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) (Mol %)	Wt Percent (%)	GPM
Helium	0.243	0.058	0.025
Oxygen	0.115	0.219	0.010
Nitrogen	0.976	1.628	0.107
Carbon Dioxide	0.321	0.840	0.055
Methane	95.568	91.262	16.194
Ethane	1.930	3.455	0.516
Propane	0.533	1.400	0.147
i-Butane	0.163	0.565	0.053
n-Butane	0.085	0.295	0.027
i-Pentane	0.039	0.169	0.014
n-Pentane	0.025	0.108	0.009
C6+	0.000	0.000	0.000
	100.000	100.000	17.158

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99789	C2+	0.767
Density (G) (Dry Gas)	0.58003	C3+	0.251
Component MW Total	16.80	C5+	0.024
Heating Value (Dry Ideal) Total BTU	1023.50	Heating Value (Sat Ideal) Total BTU	1005.64
Heating Value (Dry Real) Total BTU	1025.66	Heating Value (Sat Real) Total BTU	1007.69


Reviewed by:

07/01/2015
mm/dd/yyyy