



30-045-25234

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 133E	Meter ID:	3004511630 (BHD)
Sampled by:	Daniel F.	Date Sampled	052615
Analyzed by:	Logan Richter	Date Received:	060215
Sample Pressure:	146 psi	Date Analyzed:	060415
Sample Temperature	NA	Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.924	0.196	0.094
Oxygen	0.006	0.010	0.001
Nitrogen	0.454	0.673	0.050
Carbon Dioxide	0.056	0.130	0.010
Methane	85.294	72.455	14.464
Ethane	8.214	13.079	2.197
Propane	3.269	7.632	0.901
i-Butane	0.504	1.552	0.165
n-Butane	0.828	2.550	0.261
i-Pentane	0.253	0.966	0.092
n-Pentane	0.198	0.757	0.072
C6+	0.000	0.000	0.000
	100.000	100.000	18.307

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99716	C2+	3.689
Density (G) (Dry Gas)	0.65205	C3+	1.491
Component MW Total	18.89	C5+	0.164
Heating Value (Dry Ideal) Total BTU	1150.57	Heating Value (Sat Ideal) Total BTU	1130.49
Heating Value (Dry Real) Total BTU	1153.84	Heating Value (Sat Real) Total BTU	1133.60

Reviewed by

RJR

mm dd/yyyy

07/01/2015



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 133E	Meter ID:	3004525234 (CSG)
Sampled by:	Daniel F.	Date Sampled:	052615
Analyzed by:	Logan Richter	Date Received:	060215
Sample Pressure:	160 psi	Date Analyzed:	060415
Sample Temperature:	NA	Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	1.083	0.224	0.110
Oxygen	0.223	0.369	0.020
Nitrogen	1.500	2.168	0.165
Carbon Dioxide	1.005	2.281	0.172
Methane	83.262	68.897	14.120
Ethane	7.532	11.681	2.015
Propane	3.174	7.218	0.875
i-Butane	0.501	1.501	0.164
n-Butane	1.024	3.070	0.323
i-Pentane	0.356	1.323	0.130
n-Pentane	0.341	1.269	0.124
C6+	0.000	0.000	0.000
	100.000	100.000	18.216

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99714	C2+	3.630
Density (G) (Dry Gas)	0.66939	C3+	1.615
Component MW Total	19.39	C5+	0.254
Heating Value (Dry Ideal) Total BTU	1131.66	Heating Value (Sat Ideal) Total BTU	1111.92
Heating Value (Dry Real) Total BTU	1134.91	Heating Value (Sat Real) Total BTU	1114.99


Reviewed by

07/01/2015
mm dd/yyyy