envirotech 30-045-07767

Gas Analysis Certificate

GPA Standard 2261-13

Method Name	au_report_150_C6+
Last calibration date	1/15/2015 1:00:58 PM

Client:	BP	Project #:	03143-0880
Site Name:	GCU Com A 142 - CH/DK	Meter ID:	3004507767 (BH)
Sampled by:	Daniel F.	Date Sampled	05-14-15
Analysed by:	Logan Richter	Date Received:	05-15-15
Sample Pressure:	40 psig	Date Analyzed:	05-20-15
Sample Temperature	N/R	Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.000	0.000	0.000
Oxygen	0.042	0.070	0.004
Nitrogen	0.833	1.203	0.092
Carbon Dioxide	0.101	0.230	0.017
Methane	84.782	70.145	14.380
Ethane	8.867	13.750	2.372
Propane	3.329	7.570	0.917
i-Butane	0.531	1.593	0.174
n-Butane	0.757	2.269	0.239
i-Pentane	0.245	0.911	0.090
n-Pentane	0.168	0.625	0.061
C6+	0.345	1.635	0.151
	100.000	100.000	18.496

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99700	C2+	4.003
Density (G) (Dry Gas)	0.66964	C3+	1.631
Component MW Total	19.39	C5+	0.301
Heating Value (Dry Ideal) Total BTU	1173.16	Heating Value (Sat Ideal) Total BTU	1152.69
Heating Value (Dry Real) Total BTU	1176.69	Heating Value (Sat Real) Total BTU	1156.04

Reviewed by

05/22/2015
mm/dd/yyyy

20.05.2015 09:49:17

2

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Gas Analysis Certificate

GPA Standard 2261-13

Method Name	au_report_150_C6+
Last calibration date	1/15/2015 1:00:58 PM

Client:	BP	Project #:	03143-0880
Site Name:	GCU Com A 142 - CH/DK	Meter ID:	3004507769 (PC)
Sampled by:	Daniel F.	Date Sampled	05-14-15
Analysed by:	Logan Richter	Date Received:	05-15-15
Sample Pressure:	131 psig	Date Analyzed:	05-20-15
Sample Temperature	N/R	Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.000	0.000	0.000
Oxygen	0.006	0.010	0.001
Nitrogen	0.806	1.125	0.089
Carbon Dioxide	0.174	0.382	0.030
Methane	87.182	69.699	14.791
Ethane	4.919	7.371	1.317
Propane	2.893	6.358	0.798
i-Butane	0.602	1.743	0.197
n-Butane	0.944	2.734	0.298
i-Pentane	0.423	1.521	0.155
n-Pentane	0.340	1.224	0.123
C6+	1.710	7.833	0.747
	100.000	100.000	18.544

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99670	C2+	3.634
Density (G) (Dry Gas)	0.69360	C3+	2.318
Component MW Total	20.07	C5+	1.025
Heating Value (Dry Ideal) Total BTU	1209.04	Heating Value (Sat Ideal) Total BTU	1187.95
Heating Value (Dry Real) Total BTU	1213.05	Heating Value (Sat Real) Total BTU	1191.75

Reviewed by

05/22/2015
mm/dd/yyyy