envirotech 30-045-33226

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:	Schwerdtfeger A LS 25	Meter ID:	3004533226 (BHD)
Sampled by:	Daniel F.	Date Sampled	07-24-15
Analyzed by:	Logan Richter	Date Received:	08-27-15
Sample Pressure:	87 psig	Date Analyzed:	09-02-15
Sample Temperature	N/R	Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.052	0.010	0.005
Oxygen	0.026	0.042	0.002
Nitrogen	3.520	4.954	0.387
Carbon Dioxide	0.000	0.000	0.000
Methane	83.688	67.457	14.193
Ethane	5.438	8.216	1.455
Propane	4.076	9.032	1.123
i-Butane	1.143	3.339	0.374
n-Butane	1.128	3.293	0.356
i-Pentane	0.378	1.370	0.138
n-Pentane	0.261	0.947	0.095
C6+	0.290	1.339	0.127
	100.000	100.000	18.257

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99702	C2+	3.668
Density (G) (Dry Gas)	0.68730	C3+	2.213
Component MW Total	19.90	C5+	0.360
Heating Value (Dry Ideal) Total BTU	1158.49	Heating Value (Sat Ideal) Total BTU	1138.27
Heating Value (Dry Real) Total BTU	1161.95	Heating Value (Sat Real) Total BTU	1141.55

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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:	Schwerdtfeger A LS 25	Meter ID:	3004533226 (CSG)
Sampled by:	Daniel F.	Date Sampled	07-24-15
Analyzed by:	Logan Richter	Date Received:	08-27-15
Sample Pressure:	38 psig	Date Analyzed:	09-02-15
Sample Temperature	N/R	Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.013	0.002	0.001
Oxygen	11.984	15.383	1.062
Nitrogen	44.582	50.099	4.898
Carbon Dioxide	0.146	0.258	0.025
Methane	37.384	24.058	6.330
Ethane	2.981	3.596	0.796
Propane	1.509	2.669	0.415
i-Butane	0.372	0.867	0.122
n-Butane	0.381	0.888	0.120
i-Pentane	0.149	0.431	0.054
n-Pentane	0.110	0.318	0.040
C6+	0.388	1.431	0.169
	100.000	100.000	14.033

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99874	C2+	1.716
Density (G) (Dry Gas)	0.86088	C3+	0.920
Component MW Total	24.93	C5+	0.263
Heating Value (Dry Ideal) Total BTU	523.09	Heating Value (Sat Ideal) Total BTU	513.96
Heating Value (Dry Real) Total BTU	523.75	Heating Value (Sat Real) Total BTU	514.59

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