envirotech

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:	Federal GC L 001	Meter ID:	3004520327 (BHD)
Sampled by:	Brandn K.	Date Sampled	06-23-15
Analyzed by:	Logan Richter	Date Received:	06-23-15
Sample Pressure:	16 psig	Date Analyzed:	06-25-15
Sample Temperature		Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.744	0.147	0.076
Oxygen	0.008	0.012	0.001
Nitrogen	0.662	0.913	0.073
Carbon Dioxide	0.000	0.000	0.000
Methane	81.549	64.435	13.836
Ethane	8.174	12.106	2.188
Propane	5.314	11.541	1.465
i-Butane	1.081	3.096	0.354
n-Butane	1.478	4.232	0.466
i-Pentane	0.551	1.957	0.202
n-Pentane	0.439	1.561	0.159
C6+	0.000	0.000	0.000
	100.000	100.000	18.819

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99668	C2+	4.834
Density (G) (Dry Gas)	0.70101	C3+	2.647
Component MW Total	20.30	C5+	0.361
Heating Value (Dry Ideal) Total BTU	1225.04	Heating Value (Sat Ideal) Total BTU	1203.66
Heating Value (Dry Real) Total BTU	1229.12	Heating Value (Sat Real) Total BTU	1207.54

Reviewed by

07/01/2015
mm dd yyyy

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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:	Federal GC L 001	Meter ID:	3004520327 (CSG)
Sampled by:	Brandon K.	Date Sampled	06-23-15
Analyzed by:	Logan Richter	Date Received:	06-23-15
Sample Pressure:	13 psig	Date Analyzed:	06-25-15
Sample Temperature		Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	0.310	0.030	0.032
Oxygen	0.004	0.003	0.000
Nitrogen	0.347	0.236	0.039
Carbon Dioxide	1.569	1.676	0.271
Methane	32.917	12.819	5.652
Ethane	7.042	5.140	1.907
Propane	18.355	19.647	5.122
i-Butane	9.374	13.225	3.107
n-Butane	16.036	22.625	5.120
i-Pentane	7.959	13.940	2.948
n-Pentane	6.086	10.659	2.234
C6+	0.000	0.000	0.000
	100.000	100.000	26.433

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.98483	C2+	20.439
Density (G) (Dry Gas)	1.42238	C3+	18.531
Component MW Total	41.20	C5+	5.183
Heating Value (Dry Ideal) Total BTU	2309.31	Heating Value (Sat Ideal) Total BTU	2269.01
Heating Value (Dry Real) Total BTU	2344.88	Heating Value (Sat Real) Total BTU	2302.74

Reviewed by

07/01/2015
mm/dd/yyyy

Needs Re-Pull