



OIL CONS. DIV DIST. 3

Gas Analysis Certificate

GPA Standard 2261-13

30-045-09624
Bradenhead

DEC 18 2015

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

Client:	BP	Project #:	03143-0880
Site Name:	Storey BLS 004	Meter ID:	3004509624 (BHD)
Sampled by:	Brandon K.	Date Sampled:	06-23-15
Analyzed by:	Logan Richter	Date Received:	06-23-15
Sample Pressure:	15 psig	Date Analyzed:	06-24-15
Sample Temperature		Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) [Mol %]	Wt Percent (%)	GPM
Helium	7.310	1.317	0.743
Oxygen	0.066	0.095	0.006
Nitrogen	9.020	11.373	0.993
Carbon Dioxide	0.095	0.187	0.016
Methane	59.686	43.099	10.126
Ethane	10.717	14.505	2.868
Propane	8.450	16.772	2.330
i-Butane	2.229	5.832	0.730
n-Butane	1.686	4.410	0.532
i-Pentane	0.465	1.510	0.170
n-Pentane	0.277	0.899	0.100
C6+	0.000	0.000	0.000
	100.000	100.000	18.615

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99668	C2+	6.731
Density (G) (Dry Gas)	0.78707	C3+	3.862
Component MW Total	22.22	C5+	0.271
Heating Value (Dry Ideal) Total BTU	1162.29	Heating Value (Sat Ideal) Total BTU	1142.01
Heating Value (Dry Real) Total BTU	1166.17	Heating Value (Sat Real) Total BTU	1145.69

Reviewed by

07/01/2015
mm/dd/yyyy



30-045-09624
Casing

Gas Analysis Certificate

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

Client:	BP	Project #:	03143-0880
Site Name:	Storey BLS 004	Meter ID:	3004509624 (CSG)
Sampled by:	Brandon K.	Date Sampled	06-23-15
Analyzed by:	Logan Richter	Date Received:	06-23-15
Sample Pressure:	54 psig	Date Analyzed:	06-25-15
Sample Temperature		Analysis Time:	Standard

Component Results (14.696)

Name	Qty (Norm) (Mol %)	Wt Percent (%)	GPM
Helium	0.506	0.102	0.051
Oxygen	0.005	0.008	0.000
Nitrogen	0.350	0.494	0.039
Carbon Dioxide	0.000	0.000	0.000
Methane	82.951	67.074	14.071
Ethane	8.718	13.213	2.333
Propane	4.662	10.362	1.285
i-Butane	0.895	2.621	0.293
n-Butane	1.178	3.452	0.372
i-Pentane	0.415	1.509	0.152
n-Pentane	0.320	1.164	0.116
C6+	0.000	0.000	0.000
	100.000	100.000	18.713

Calculations at Pressure Base 14.696

Compressibility (Z) (Dry Gas)	0.99682	C2+	4.551
Density (G) (Dry Gas)	0.68501	C3+	2.218
Component MW Total	19.84	C5+	0.268
Heating Value (Dry Ideal) Total BTU	1206.36	Heating Value (Sat Ideal) Total BTU	1185.31
Heating Value (Dry Real) Total BTU	1210.21	Heating Value (Sat Real) Total BTU	1188.96

Logan Richter
Reviewed by

07/01/2015
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