

Natural Gas Analysis Report

SAN JUAN DIVISION

Sample Information

Sample Information	
Sample Name	UTE INDIANS A8 CASING API# 30-045 20750
TECH	Tim Doering
GC Serial	GC1008B621
Report Date	2015-05-27 08:15:59

Component Results

Component Name	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	0.9472	0.0	0.00916	0.104
Oxygen	0.0313	0.0	0.00035	0.003
Methane	85.6630	867.2	0.47449	14.558
Carbon Dioxide	7.8059	0.0	0.11861	1.335
Ethane	2.8779	51.0	0.02988	0.772
Propane	1.0341	26.1	0.01574	0.286
I-Butane	0.2780	9.1	0.00558	0.091
N-Butane	0.4599	15.0	0.00923	0.145
I-Pentane	0.1961	7.9	0.00489	0.072
N-Pentane	0.2092	8.4	0.00521	0.076
Hexanes	0.1931	9.2	0.00575	0.080
Heptanes	0.1304	7.2	0.00451	0.060
Octanes	0.1173	7.3	0.00463	0.060
Nonanes	0.0020	0.1	0.00009	0.001
Hydrogen Sulfide	0.0546	0.3	0.00064	0.007
Water	0.0000	0.0	0.00000	0.000
Total:	100.0000	1008.9	0.68875	17.651

Results Summary

Result	Dry	Sat.
Total Normalized Mole%	100.0000	100.0000
Pressure Base (psia)	14.730	
Flowing Temperature (Deg. F)	70.0	
Flowing Pressure (psia)	70.0	
Gross Heating Value (BTU / Real cu.ft.)	1011.7	994.4
Relative Density (G), Real	0.6903	0.6894
Compressibility (Z) Factor	0.9973	0.9969
Total GPM	17.651	17.450

Natural Gas Analysis Report

SAN JUAN DIVISION

Sample Information

Sample Information	
Sample Name	UTE INDIANS A8 BH API # 30-045-20750
TECH	Tim Doering
GC Serial	GC1008B621
Report Date	2015-05-27 08:07:47

Component Results

Component Name	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	1.0562	0.0	0.01022	0.117
Oxygen	0.0346	0.0	0.00038	0.003
Methane	80.0482	810.4	0.44339	13.624
Carbon Dioxide	0.0000	0.0	0.00000	0.000
Ethane	8.9293	158.4	0.09270	2.397
Propane	5.0974	128.6	0.07761	1.410
I-Butane	0.5434	17.7	0.01090	0.179
N-Butane	1.3615	44.5	0.02732	0.431
I-Pentane	0.3533	14.2	0.00880	0.130
N-Pentane	0.4157	16.7	0.01036	0.151
Hexanes	0.3716	17.7	0.01106	0.153
Heptanes	0.3735	20.6	0.01292	0.173
Octanes	1.2319	77.2	0.04859	0.634
Nonanes	0.1834	12.9	0.00812	0.104
Hydrogen Sulfide	0.0000	0.0	0.00000	0.000
Water	0.0000	0.0	0.00000	0.000
Total:	100.0000	1318.7	0.76237	19.505

Results Summary

Result	Dry	Sat.
Total Normalized Mole%	100.0000	100.0000
Pressure Base (psia)	14.730	
Flowing Temperature (Deg. F)	70.0	
Flowing Pressure (psia)	70.0	
Gross Heating Value (BTU / Real cu.ft.)	1324.3	1301.8
Relative Density (G), Real	0.7652	0.7631
Compressibility (Z) Factor	0.9958	0.9954
Total GPM	19.505	19.274

Natural Gas Analysis Report

SAN JUAN DIVISION

Sample Information

Sample Information	
Sample Name	UTE INDIANS A8 TUBING API # 30-045-20750
TECH	Tim Doering
GC Serial	GC1008B621
Report Date	2015-05-27 08:22:08

Component Results

Component Name	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	1.4640	0.0	0.01416	0.162	
Oxygen	0.0448	0.0	0.00049	0.004	
Methane	73.3080	742.1	0.40605	12.464	
Carbon Dioxide	20.8671	0.0	0.31708	3.572	
Ethane	1.0625	18.8	0.01103	0.285	
Propane	0.3684	9.3	0.00561	0.102	
I-Butane	0.1676	5.5	0.00336	0.055	
N-Butane	0.2659	8.7	0.00534	0.084	
I-Pentane	0.1356	5.4	0.00338	0.050	
N-Pentane	0.1463	5.9	0.00364	0.053	
Hexanes	0.1676	8.0	0.00499	0.069	
Heptanes	0.1538	8.5	0.00532	0.071	
Octanes	0.5019	31.4	0.01979	0.258	
Nonanes	0.0609	4.3	0.00270	0.034	
Hydrogen Sulfide	1.2856	8.2	0.01513	0.174	
Water	0.0000	0.0	0.00000	0.000	
Total:	100.0000	856.1	0.81807	17.437	

Results Summary

Result	Dry	Sat.
Total Normalized Mole%	100.0000	100.0000
Pressure Base (psia)	14.730	
Flowing Temperature (Deg. F)	70.0	
Flowing Pressure (psia)	70.0	
Gross Heating Value (BTU / Real cu.ft.)	858.8	844.2
Relative Density (G), Real	0.8203	0.8172
Compressibility (Z) Factor	0.9969	0.9965
Total GPM	17.437	17.240