

Natural Gas Analysis Report SAN JUAN DIVISION

OCT 02 2015

Sample Information

30-045-09218

Sample Information	
Sample Name	MCCOY GC D1 BH
TECH	Tim Doering
GC Serial	GC1008B621
Report Date	2015-09-28 08:19:34

Component Results

Component Name	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	0.8551	0.0	0.00827	0.094
Oxygen	0.0304	0.0	0.00034	0.003
Methane	90.3893	915.0	0.50067	15.363
Carbon Dioxide	0.0465	0.0	0.00071	0.008
Ethane	4.8082	85.3	0.04992	1.289
Propane	1.7350	43.8	0.02642	0.479
I-Butane	0.3236	10.5	0.00649	0.106
N-Butane	0.4651	15.2	0.00933	0.147
I-Pentane	0.1632	6.5	0.00407	0.060
N-Pentane	0.1775	7.1	0.00442	0.065
Hexanes	0.2601	12.4	0.00774	0.107
Heptanes	0.5998	33.1	0.02075	0.277
Octanes	0.1291	8.1	0.00509	0.066
Nonanes	0.0171	1.2	0.00076	0.010
Hydrogen Sulfide	0.0000	0.0	0.00000	0.000
Water	0.0000	0.0	0.00000	0.000
Total:	100.0000	1138.3	0.64497	18.074

Results Summary

Result	Dry	Sat.
Total Normalized Mole%	100.0000	100.0000
Pressure Base (psia)	14.730	
Flowing Temperature (Deg. F)	65.0	
Flowing Pressure (psia)	22.0	
Gross Heating Value (BTU / Real cu.ft.)	1141.5	1122.0
Relative Density (G), Real	0.6465	0.6463
Compressibility (Z) Factor	0.9972	0.9968
Total GPM	18.074	17.866

Natural Gas Analysis Report

SAN JUAN DIVISION

Sample Information

Sample Information	
Sample Name	MCCOY GC D1 CASEING
TECH	Tim Doering
GC Serial	GC1008B621
Report Date	2015-09-28 08:25:07

Component Results

Component Name	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	0.5133	0.0	0.00496	0.057
Oxygen	0.0190	0.0	0.00021	0.002
Methane	77.3669	783.2	0.42854	13.171
Carbon Dioxide	1.5258	0.0	0.02318	0.261
Ethane	10.3660	183.9	0.10762	2.784
Propane	4.8639	122.7	0.07405	1.346
I-Butane	0.6372	20.8	0.01279	0.209
N-Butane	1.2810	41.9	0.02571	0.406
I-Pentane	0.4429	17.8	0.01103	0.163
N-Pentane	0.4467	17.9	0.01113	0.163
Hexanes	0.4667	22.2	0.01389	0.193
Heptanes	1.0791	59.5	0.03733	0.500
Octanes	0.8315	52.1	0.03279	0.428
Nonanes	0.1600	11.2	0.00709	0.090
Hydrogen Sulfide	0.0000	0.0	0.00000	0.000
Water	0.0000	0.0	0.00000	0.000
Total:	100.0000	1333.2	0.79032	19.772

Results Summary

Result	Dry	Sat.
Total Normalized Mole%	100.0000	100.0000
Pressure Base (psia)	14.730	
Flowing Temperature (Deg. F)	65.0	
Flowing Pressure (psia)	35.0	
Gross Heating Value (BTU / Real cu.ft.)	1339.1	1316.4
Relative Density (G), Real	0.7935	0.7909
Compressibility (Z) Factor	0.9955	0.9951
Total GPM	19.772	19.536

Natural Gas Analysis Report

SAN JUAN DIVISION

Sample Information

Sample Information	
Sample Name	MCCOY GC D1 TUBEING
TECH	Tim Doering
GC Serial	GC1008B621
Report Date	2015-09-28 08:31:27

Component Results

Component Name	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	0.4979	0.0	0.00482	0.055
Oxygen	0.0067	0.0	0.00007	0.001
Methane	81.2782	822.8	0.45020	13.831
Carbon Dioxide	1.6332	0.0	0.02482	0.280
Ethane	8.6706	153.8	0.09002	2.328
Propane	3.5021	88.3	0.05332	0.968
I-Butane	0.4979	16.2	0.00999	0.164
N-Butane	0.9159	29.9	0.01838	0.290
I-Pentane	0.3154	12.6	0.00786	0.116
N-Pentane	0.2888	11.6	0.00719	0.105
Hexanes	0.3810	18.2	0.01134	0.157
Heptanes	0.9824	54.2	0.03399	0.455
Octanes	0.8123	50.9	0.03204	0.418
Nonanes	0.2176	15.3	0.00964	0.123
Hydrogen Sulfide	0.0000	0.0	0.00000	0.000
Water	0.0000	0.0	0.00000	0.000
Total:	100.0000	1273.8	0.75366	19.289

Results Summary

Result	Dry	Sat
Total Normalized Mole%	100.0000	100.0000
Pressure Base (psia)	14.730	
Flowing Temperature (Deg. F)	65.0	
Flowing Pressure (psia)	35.0	
Gross Heating Value (BTU / Real cu.ft.)	1279.0	1257.2
Relative Density (G), Real	0.7564	0.7544
Compressibility (Z) Factor	0.9960	0.9956
Total GPM	19.289	19.062