

Natural Gas Analysis Report

SAN JUAN DIVISION

Sample Information

Sample Information	
Sample Name	OHIO F GOVT 1 CASING <i>API #: 30-045-10620</i>
TECH	Tim Doering
GC Serial	GC1008B621
Operator	XTO
Report Date	2017-10-23 09:00:05

Component Results

Component Name	Raw Amount	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	0.2050	0.1995	0.0	0.00193	0.022
Oxygen	0.0110	0.0107	0.0	0.00012	0.001
Methane	82.9970	80.7771	817.7	0.44742	13.739
Carbon Dioxide	0.8000	0.7786	0.0	0.01183	0.133
Ethane	10.0350	9.7666	173.2	0.10140	2.620
Propane	5.0570	4.9218	124.1	0.07493	1.360
I-Butane	1.0330	1.0054	32.8	0.02018	0.330
N-Butane	1.3250	1.2896	42.2	0.02588	0.408
I-Pentane	0.5170	0.5032	20.2	0.01254	0.185
N-Pentane	0.3680	0.3582	14.4	0.00892	0.130
Hexanes	0.4000	0.3893	18.6	0.01158	0.161
Heptanes	0.0000	0.0000	0.0	0.00000	0.000
Octanes	0.0000	0.0000	0.0	0.00000	0.000
Nonanes	0.0000	0.0000	0.0	0.00000	0.000
Hydrogen Sulfide	0.0000	0.0000	0.0	0.00000	0.000
Water	0.0000	0.0000	0.0	0.00000	0.000
Total:	102.7480	100.0000	1243.2	0.71673	19.089

Results Summary

Result	Dry	Sat.
Total Normalized Mole%	100.0000	100.0000
Pressure Base (psia)	14.730	
Flowing Temperature (Deg. F)	41.0	
Flowing Pressure (psia)	15.0	
Gross Heating Value (BTU / Real cu.ft.)	1247.5	1226.3
Relative Density (G), Real	0.7189	0.7176
Compressibility (Z) Factor	0.9965	0.9961
Total GPM	19.089	18.864

OIL CONS. DIV DIST. 3
NOV 03 2017

Natural Gas Analysis Report SAN JUAN DIVISION

Sample Information

Sample Information	
Sample Name	OHIO F GOVT 1 TUBING <i>API: 30-045-10620</i>
TECH	Tim Doering
GC Serial	GC1008B621
Operator	XTO
Report Date	2017-10-23 08:56:05

Component Results

Component Name	Raw Amount	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	0.2300	0.2253	0.0	0.00218	0.025
Oxygen	0.0120	0.0118	0.0	0.00013	0.001
Methane	82.3440	80.6496	816.4	0.44672	13.717
Carbon Dioxide	0.8010	0.7845	0.0	0.01192	0.134
Ethane	10.0240	9.8177	174.1	0.10193	2.634
Propane	5.0530	4.9490	124.8	0.07535	1.368
I-Butane	1.0340	1.0127	33.0	0.02032	0.332
N-Butane	1.3260	1.2987	42.5	0.02606	0.411
I-Pentane	0.5140	0.5034	20.2	0.01254	0.185
N-Pentane	0.3660	0.3585	14.4	0.00893	0.130
Hexanes	0.3970	0.3888	18.5	0.01157	0.160
Heptanes	0.0000	0.0000	0.0	0.00000	0.000
Octanes	0.0000	0.0000	0.0	0.00000	0.000
Nonanes	0.0000	0.0000	0.0	0.00000	0.000
Hydrogen Sulfide	0.0000	0.0000	0.0	0.00000	0.000
Water	0.0000	0.0000	0.0	0.00000	0.000
Total:	102.1010	100.0000	1244.0	0.71765	19.098

Results Summary

Result	Dry	Sat.
Total Normalized Mole%	100.0000	100.0000
Pressure Base (psia)	14.730	
Flowing Temperature (Deg. F)	41.0	
Flowing Pressure (psia)	15.0	
Gross Heating Value (BTU / Real cu.ft.)	1248.4	1227.2
Relative Density (G), Real	0.7199	0.7185
Compressibility (Z) Factor	0.9965	0.9961
Total GPM	19.098	18.873

OIL CONS. DIV DIST. 3

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Sample Information

Sample Information	
Sample Name	OHIO F GOVT 1 BH <i>API #: 30-045-10620</i>
TECH	Tim Doering
GC Serial	GC1008B621
Operator	XTO
Report Date	2017-10-23 08:52:12

Component Results

Component Name	Raw Amount	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	12.4020	12.3999	0.0	0.11993	1.366
Oxygen	0.2130	0.2130	0.0	0.00235	0.019
Methane	84.3370	84.3226	853.6	0.46706	14.318
Carbon Dioxide	0.1620	0.1620	0.0	0.00246	0.028
Ethane	2.1740	2.1736	38.6	0.02257	0.582
Propane	0.4010	0.4009	10.1	0.00610	0.111
I-Butane	0.1120	0.1120	3.7	0.00225	0.037
N-Butane	0.0850	0.0850	2.8	0.00171	0.027
I-Pentane	0.0480	0.0480	1.9	0.00120	0.018
N-Pentane	0.0260	0.0260	1.0	0.00065	0.009
Hexanes	0.0570	0.0570	2.7	0.00170	0.023
Heptanes	0.0000	0.0000	0.0	0.00000	0.000
Octanes	0.0000	0.0000	0.0	0.00000	0.000
Nonanes	0.0000	0.0000	0.0	0.00000	0.000
Hydrogen Sulfide	0.0000	0.0000	0.0	0.00000	0.000
Water	0.0000	0.0000	0.0	0.00000	0.000
Total:	100.0170	100.0000	914.4	0.62797	16.538

Results Summary

Result	Dry	Sat.
Total Normalized Mole%	100.0000	100.0000
Pressure Base (psia)	14.730	
Flowing Temperature (Deg. F)	41.0	
Flowing Pressure (psia)	10.0	
Gross Heating Value (BTU / Real cu.ft.)	916.1	900.5
Relative Density (G), Real	0.6289	0.6290
Compressibility (Z) Factor	0.9981	0.9978
Total GPM	16.538	16.355

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