

Natural Gas Analysis Report SAN JUAN DIVISION

OIL CONS. DIV DIST. 3

NOV 03 2017

Sample Information

Sample Information	
Sample Name	OHIO E GOVT 1C TUBING API #: 30-045-30132
TECH	Tim Doering
GC Serial	GC1008B621
Operator	XTO
Report Date	2017-10-23 11:03:04

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	0.2620	0.2565	0.0	0.00248	0.028
Oxygen	0.0060	0.0059	0.0	0.00007	0.001
Methane	83.5020	81.7339	827.4	0.45272	13.900
Carbon Dioxide	0.8310	0.8134	0.0	0.01236	0.139
Ethane	9.4050	9.2059	163.3	0.09558	2.470
Propane	4.8010	4.6994	118.5	0.07155	1.299
I-Butane	1.0260	1.0043	32.7	0.02015	0.330
N-Butane	1.2330	1.2069	39.5	0.02422	0.382
I-Pentane	0.4730	0.4630	18.6	0.01153	0.170
N-Pentane	0.3200	0.3132	12.6	0.00780	0.114
Hexanes	0.3040	0.2976	14.2	0.00885	0.123
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:	102.1630	100.0000	1226.8	0.70732	18.954

Results Summary

Result	Dry	Sat.
Total Normalized Mole%	100.0000	100.0000
Pressure Base (psia)	14.730	
Flowing Temperature (Deg. F)	60.0	
Flowing Pressure (psia)	15.0	
Gross Heating Value (BTU / Real cu.ft.)	1230.9	1210.0
Relative Density (G), Real	0.7094	0.7082
Compressibility (Z) Factor	0.9966	0.9962
Total GPM	18.954	18.732

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Sample Information	
Sample Name	OHIO E GOVT 1C CASING <i>API #: 30-045-30132</i>
TECH	Tim Doering
GC Serial	GC1008B621
Operator	XTO
Report Date	2017-10-23 11:07:03

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	0.3930	0.3888	0.0	0.00376	0.043
Oxygen	0.0110	0.0109	0.0	0.00012	0.001
Methane	69.6080	68.8725	697.2	0.38148	11.737
Carbon Dioxide	2.7870	2.7575	0.0	0.04190	0.473
Ethane	8.9580	8.8633	157.2	0.09202	2.383
Propane	8.9460	8.8515	223.2	0.13476	2.451
I-Butane	2.4570	2.4310	79.2	0.04879	0.800
N-Butane	3.3060	3.2711	107.0	0.06564	1.037
I-Pentane	1.7710	1.7523	70.3	0.04365	0.644
N-Pentane	1.4750	1.4594	58.6	0.03636	0.532
Hexanes	1.3560	1.3417	64.0	0.03992	0.555
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:	101.0680	100.0000	1456.7	0.88841	20.655

Results Summary

Result	Dry	Sat.
Total Normalized Mole%	100.0000	100.0000
Pressure Base (psia)	14.730	
Flowing Temperature (Deg. F)	60.0	
Flowing Pressure (psia)	10.0	
Gross Heating Value (BTU / Real cu.ft.)	1464.7	1439.9
Relative Density (G), Real	0.8929	0.8887
Compressibility (Z) Factor	0.9945	0.9941
Total GPM	20.655	20.405