

Natural Gas Analysis Report **SAN JUAN DIVISION**

Sample Information

30-045-09214

Sample Information	
Sample Name	STEDJE GC 1 TUBING
TECH	Tim Doering
GC Serial	GC1008B621
Report Date	2015-07-01 07:14:29

Component Results

Component Name	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	0.6423	0.0	0.00621	0.071
Oxygen	0.0126	0.0	0.00014	0.001
Methane	78.9609	799.4	0.43736	13.431
Carbon Dioxide	1.6630	0.0	0.02527	0.285
Ethane	10.3934	184.4	0.10790	2.789
Propane	4.8804	123.1	0.07430	1.349
I-Butane	0.7180	23.4	0.01441	0.236
N-Butane	1.3390	43.8	0.02687	0.424
I-Pentane	0.4308	17.3	0.01073	0.158
N-Pentane	0.4657	18.7	0.01160	0.169
Hexanes	0.3512	16.7	0.01045	0.145
Heptanes	0.1349	7.4	0.00467	0.062
Octanes	0.0068	0.4	0.00027	0.003
Nonanes	0.0010	0.1	0.00004	0.001
Hydrogen Sulfide	0.0000	0.0	0.00000	0.000
Water	0.0000	0.0	0.00000	0.000
Total:	100.0000	1234.6	0.73024	19.124

Results Summary

Result	Dry	Sat.
Total Normalized Mole%	100.0000	100.0000
Pressure Base (psia)	14.730	
Flowing Temperature (Deg. F)	113.0	
Flowing Pressure (psia)	70.0	
Gross Heating Value (BTU / Real cu.ft.)	1239.1	1218.0
Relative Density (G), Real	0.7325	0.7309
Compressibility (Z) Factor	0.9964	0.9960
Total GPM	19.124	18.898

Natural Gas Analysis Report SAN JUAN DIVISION

Sample Information

Sample Information	
Sample Name	STEDJE GC 1 CASING
TECH	Tim Doering
GC Serial	GC1008B621
Report Date	2015-07-01 07:21:28

Component Results

Component Name	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	0.5926	0.0	0.00573	0.065
Oxygen	0.0078	0.0	0.00009	0.001
Methane	79.7629	807.5	0.44181	13.566
Carbon Dioxide	0.8476	0.0	0.01288	0.145
Ethane	10.6708	189.3	0.11078	2.863
Propane	5.0642	127.7	0.07710	1.400
I-Butane	0.6838	22.3	0.01372	0.224
N-Butane	1.2479	40.8	0.02504	0.395
I-Pentane	0.3708	14.9	0.00924	0.136
N-Pentane	0.3591	14.4	0.00895	0.131
Hexanes	0.2109	10.1	0.00628	0.087
Heptanes	0.1050	5.8	0.00363	0.049
Octanes	0.0746	4.7	0.00294	0.038
Nonanes	0.0020	0.1	0.00009	0.001
Hydrogen Sulfide	0.0000	0.0	0.00000	0.000
Water	0.0000	0.0	0.00000	0.000
Total:	100.0000	1237.5	0.71828	19.101

Results Summary

Result	Dry	Sat.
Total Normalized Mole%	100.0000	100.0000
Pressure Base (psia)	14.730	
Flowing Temperature (Deg. F)	173.0	
Flowing Pressure (psia)	70.0	
Gross Heating Value (BTU / Real cu.ft.)	1241.9	1220.7
Relative Density (G), Real	0.7205	0.7191
Compressibility (Z) Factor	0.9965	0.9961
Total GPM	19.101	18.876

Natural Gas Analysis Report SAN JUAN DIVISION

Sample Information

Sample Information	
Sample Name	STEDJE GC 1 BH
TECH	Tim Doering
GC Serial	GC1008B621
Report Date	2015-07-01 07:27:43

Component Results

Component Name	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	0.2161	0.0	0.00209	0.024
Oxygen	0.0049	0.0	0.00005	0.000
Methane	87.5846	886.7	0.48513	14.888
Carbon Dioxide	0.0000	0.0	0.00000	0.000
Ethane	6.8442	121.4	0.07106	1.835
Propane	3.2334	81.5	0.04923	0.893
I-Butane	0.5896	19.2	0.01183	0.193
N-Butane	0.7763	25.4	0.01558	0.245
I-Pentane	0.2513	10.1	0.00626	0.092
N-Pentane	0.2268	9.1	0.00565	0.082
Hexanes	0.1555	7.4	0.00463	0.064
Heptanes	0.0557	3.1	0.00193	0.026
Octanes	0.0577	3.6	0.00228	0.030
Nonanes	0.0039	0.3	0.00017	0.002
Hydrogen Sulfide	0.0000	0.0	0.00000	0.000
Water	0.0000	0.0	0.00000	0.000
Total:	100.0000	1167.8	0.65588	18.376

Results Summary

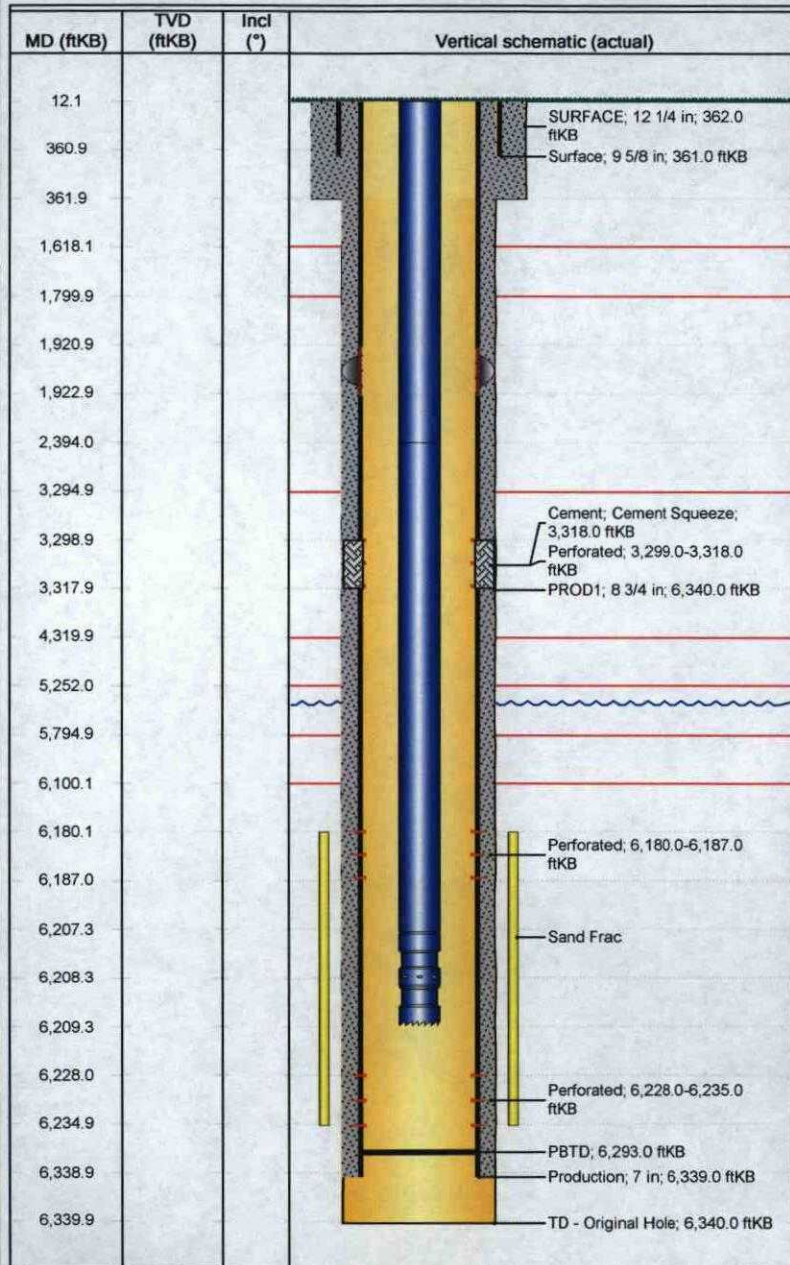
Result	Dry	Sat.
Total Normalized Mole%	100.0000	100.0000
Pressure Base (psia)	14.730	
Flowing Temperature (Deg. F)	70.0	
Flowing Pressure (psia)	55.0	
Gross Heating Value (BTU / Real cu.ft.)	1171.2	1151.2
Relative Density (G), Real	0.6575	0.6572
Compressibility (Z) Factor	0.9971	0.9967
Total GPM	18.376	18.162



Downhole Well Profile - with Schematic

Well Name: Stedje Gas Com 01

API/UWI 30045092140000	XTO Accounting ID 71031	Permit Number	State/Province New Mexico	County San Juan
Location T30N-R12W-S27	Spud Date 10/10/1961 00:00	Original KB Elevation (ft) 5,476.00	Ground/Corrected Ground Elevation (ft) 5,464.00	KB-Ground Distance (ft) 12.00



Wellbores							
Wellbore Name Original Hole		Parent Wellbore Original Hole			Wellbore API/UWI 30045092140000		
Start Depth (ftKB)		Profile Type			Kick Off Depth (ftKB)		
12.0							
Section Des		Size (in)		Act Top (ftKB)		Act Btm (ftKB)	
SURFACE		12 1/4		12.0		362.0	
PROD1		8 3/4		362.0		6,340.0	
Zones							
Zone Name		Top (ftKB)		Btm (ftKB)		Current Status	
Mesaverde		3,299.0		3,318.0			
Dakota		6,180.0		6,235.0			
Casing Strings							
Csg Des		Set Depth (ftKB)		OD (in)		Wt/Len (lb/ft)	
Surface		361.0		9 5/8		32.30	
Production		6,339.0		7		20.00	
Cement							
Des		Type			String		
Surface Casing Cement		Casing			Surface, 361.0ftKB		
Production Casing Cement		Casing			Production, 6,339.0ftKB		
Cement Squeeze		Squeeze					
Tubing Strings							
Tubing Description		Run Date			Set Depth (ftKB)		
Tubing - Production					6,209.3		
Item Des		OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Top (ftKB)
Tubing		2 3/8	4.70	J-55	76	2,382.08	12.0
Tubing		2 3/8	4.70	J-55	122	3,813.31	2,394.1
Seat Nipple		2 3/8			1	1.10	6,207.4
Notched Collar		2 3/8			1	0.78	6,208.5
Rod Strings							
Rod Description		Run Date			Set Depth (ftKB)		
Item Des		OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Top (ftKB)
Other In Hole							
Run Date		Des		OD (in)		Top (ftKB)	
Perforations							
Date		Top (ftKB)		Btm (ftKB)		Zone	
		3,299.0		3,318.0		Mesaverde, Original Hole	
		6,180.0		6,187.0		Dakota, Original Hole	
		6,228.0		6,235.0		Dakota, Original Hole	
Stimulations & Treatments							
Frac #		Top Perf (ftKB)		Bottom Perf (ftKB)		AIR (bbl/min)	
6180		6235					