

Lab #: 203600 Job #: 14669  
 Sample Name/Number: Dahl WW PM  
 Company: Colorado Oil & Gas Conservation  
 Date Sampled: 2/03/2011  
 Container: Dissolved Gas Bottle  
 Field/Site Name: Complaint 200294386  
 Location:  
 Formation/Depth:  
 Sampling Point:  
 Date Received: 2/07/2011 Date Reported: 3/08/2011

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	$\delta\text{D}$ ‰	$\delta^{18}\text{O}$ ‰
Carbon Monoxide -----	nd			
Hydrogen Sulfide -----	nd			
Helium -----	na			
Hydrogen -----	na			
Argon -----	1.28			
Oxygen -----	22.06			
Nitrogen -----	63.47			
Carbon Dioxide -----	13.18			
Methane -----	0.0102			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			
Water -----			-71.9	-9.62
Dissolved Inorganic Carbon -		-14.62		

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 0      Specific gravity, calculated: 1.076

**Remarks:**

Analysis is of gas extracted from water by headspace equilibration. Analysis has been corrected for helium added to create headspace. Helium dilution factor = 0.75  
 Concentration of methane in water = 0.0026 cc/L ; 0.0017 ppm  
 \*Addition of helium negates the ability to detect native helium or hydrogen.  
 Delta 15N = 0.2

nd = not detected. na = not analyzed. Isotopic composition of carbon is relative to VPDB. Isotopic composition of hydrogen and oxygen are relative to VSMOW. Calculations for BTU and specific gravity per D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.