

Lab #: 168422 Job #: 11814  
Sample Name: Anderson Co. Lab#:  
Company: Colorado Oil & Gas Conservation  
Date Sampled: 8/11/2009  
Container: Dissolved Gas Bottle  
Field/Site Name:  
Location: Weld County  
Formation/Depth:  
Sampling Point:  
Date Received: 8/12/2009 Date Reported: 9/14/2009

Component	Chemical mol. %	Delta 13C per mil	Delta D per mil	Delta 15N per mil
Carbon Monoxide -----	nd			
Hydrogen Sulfide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	na			
Oxygen + Argon -----	3.37			
Nitrogen -----	7.09			
Carbon Dioxide -----	0.14			
Methane -----	74.92	-49.13	-228.4	
Ethane -----	9.14	-28.65		
Ethylene -----	nd			
Propane -----	4.05	-26.41		
Iso-butane -----	0.493			
N-butane -----	0.632			
Iso-pentane -----	0.0953			
N-pentane -----	0.0546			
Hexanes + -----	0.0142			

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 1069  
Specific gravity, calculated: 0.706

Remarks: Analysis is of gas extracted from water by headspace equilibration. Analysis has been corrected for helium added to create headspace. Helium dilution factor = 0.62  
\*Addition of helium negates the ability to detect native helium or hydrogen.

nd = not detected. na = not analyzed. Isotopic composition of carbon is relative to VPDB. Isotopic composition of hydrogen is relative to VSMOW. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %. Chemical analysis based on standards accurate to within 2%