

Lab #: 317192 Job #: 19862  
 Sample Name/Number: Turley Well  
 Company: Colorado Oil & Gas Conservation  
 Date Sampled: 8/23/2012  
 Container: Dissolved Gas Bottle  
 Field/Site Name: Turley Well  
 Location: S13 T2N R66W  
 Formation/Depth:  
 Sampling Point:  
 Date Received: 11/16/2012 Date Reported: 11/29/2012

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	$\delta\text{D}$ ‰	$\delta^{18}\text{O}$ ‰
Carbon Monoxide -----	nd			
Hydrogen Sulfide -----	na			
Helium -----	na			
Hydrogen -----	nd			
Argon -----	1.09			
Oxygen -----	20.25			
Nitrogen -----	57.29			
Carbon Dioxide -----	6.72			
Methane -----	14.64	-69.57	-271.9	
Ethane -----	0.0090			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

**Remarks:**

Analysis is of gas extracted from water by headspace equilibration. Analysis has been corrected for helium added to create headspace. Helium dilution factor = 0.74

\*Addition of helium negates the ability to detect native helium and may negate the ability to detect hydrogen.

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