

Lab #: 689016      Job #: 39898      IS-79658      Co. Job#: \_\_\_\_\_  
 Sample Name: Bagley 26H-1      Co. Lab#: \_\_\_\_\_  
 Company: GSI Environmental Inc.  
 API/Well: \_\_\_\_\_  
 Container: IsoFlask  
 Field/Site Name: 4927 XTO Desoto  
 Location: \_\_\_\_\_  
 Formation/Depth: \_\_\_\_\_  
 Sampling Point: \_\_\_\_\_  
 Date Sampled: 10/25/2018 12:30      Date Received: 10/29/2018      Date Reported: 11/05/2018

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	$\delta\text{D}$ ‰	$\delta^{18}\text{O}$ ‰	Dissolved gas cc/L	Dissolved gas ppm
Carbon Monoxide -----	nd					
Helium -----	na					
Hydrogen -----	nd					
Argon -----	1.42					
Oxygen -----	1.61					
Nitrogen -----	69.56					
Carbon Dioxide -----	0.38					
Methane -----	27.02	-72.98	-205.2		8.9	6.0
Ethane -----	0.0061				0.0022	0.0027
Ethylene -----	nd					
Propane -----	nd				< 0.0001	< 0.0003
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 = 0.77

\*Addition of helium negates the ability to detect native helium and may negate the ability to detect hydrogen. Insufficient C2-C3 concentrations for isotopic analysis.

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. All gas component carbon isotope values are reported on a scale defined by a two point calibration of LSVEC and NBS 19. Isotopic composition of oxygen is relative to VSMOW, except for carbon dioxide which is relative to VPDB. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.