

Lab #: 317849 Job #: 19917  
 Sample Name/Number: 007-095-111912  
 Company: Shaw Environmental & Infrastructure  
 Date Sampled: 11/19/2012  
 Container: Dissolved Gas Bottle  
 Field/Site Name: LDNR-Bayou Corne  
 Location: Industrial Water Well 007-095  
 Formation/Depth:  
 Sampling Point:  
 Date Received: 11/21/2012 Date Reported: 11/28/2012

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 -----	0.232			
Oxygen -----	1.50			
Nitrogen -----	11.19			
Carbon Dioxide -----	1.73			
Methane -----	82.52			
Ethane -----	2.12			
Ethylene -----	nd			
Propane -----	0.556			
Propylene -----	nd			
Iso-butane -----	0.0957			
N-butane -----	0.0496			
Iso-pentane -----	0.0057			
N-pentane -----	0.0010			
Hexanes + -----	0.0007			

**Remarks:**

Analysis is of gas extracted from water by headspace equilibration. Analysis has been corrected for helium added to create headspace. Helium dilution factor = 0.31

\*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. %.

Lab #: 317850 Job #: 19917  
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Carbon Monoxide -----	nd			
Hydrogen Sulfide -----	na			
Helium -----	na			
Hydrogen -----	nd			
Argon -----	0.403			
Oxygen -----	5.22			
Nitrogen -----	20.59			
Carbon Dioxide -----	1.77			
Methane -----	69.75			
Ethane -----	1.68			
Ethylene -----	nd			
Propane -----	0.454			
Propylene -----	nd			
Iso-butane -----	0.0803			
N-butane -----	0.0415			
Iso-pentane -----	0.0057			
N-pentane -----	0.0012			
Hexanes + -----	0.0008			

**Remarks:**

Analysis is of gas extracted from water by headspace equilibration. Analysis has been corrected for helium added to create headspace. Helium dilution factor = 0.35

\*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. %.