

Lab #: 695194 Job #: 40313 IS-102673 Co. Job#:  
 Sample Name: Ophora Water DO Co. Lab#:  
 Company: Ophora Water Technologies  
 API/Well:  
 Container: IsoFlask  
 Field/Site Name: **Dissolved Oxygen Test**  
 Location: Ophora Water Tech  
 Formation/Depth:  
 Sampling Point:  
 Date Sampled: 12/11/2018 13:00 Date Received: 12/12/2018 Date Reported: 12/19/2018

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 -----	4.48					
Oxygen -----	90.90				52	69
Nitrogen -----	4.56					
Carbon Dioxide -----	0.059					
Methane -----	nd				< 0.0003	< 0.0002
Ethane -----	nd				< 0.0002	< 0.0002
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 = 0.60

\*Addition of helium negates the ability to detect native helium and may negate the ability to detect hydrogen. Oxygen concentration in the headspace was measured above the calibrated range.

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. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

