

Lab #: 889898 Job #: 56045 IS-69033 Co. Job#:
 Sample Name: BW_Hoy_260947 Co. Lab#:
 Company: Oxy USA Inc.
 API/Well:
 Container: IsoFlask
 Field/Site Name: BWSE/GWA_Hoy_Water_Well
 Location: NWNW_33_3N_66W
 Formation/Depth: SP
 Sampling Point: 705801
 Date Sampled: 9/11/2023 10:27 Date Received: 9/19/2023 Date Reported: 10/30/2023

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{18}\text{O}$ ‰	Dissolved gas cc/L	Dissolved gas ppm
Carbon Monoxide -----	nd					
Helium -----	na					
Hydrogen -----	nd					
Argon -----	0.908				0.40	0.66
Oxygen -----	3.19					
Nitrogen -----	48.02				18	21
Carbon Dioxide -----	3.15					
Methane -----	44.66	-71.87	-244.7		20	13
Ethane -----	0.0740	-47.8			0.035	0.044
Ethylene -----	nd					
Propane -----	0.0003				0.0002	0.0003
Propylene -----	nd					
Iso-butane -----	nd					
N-butane -----	nd					
Iso-pentane -----	nd					
N-pentane -----	nd					
Hexanes + -----	0.0017					

Remarks:

Analysis is of gas extracted from water by headspace equilibration. Analysis has been corrected for helium added to create headspace. Helium dilution factor = 0.71

*Addition of helium negates the ability to detect native helium and may negate the ability to detect hydrogen.
 4501253961

Ethane carbon isotope data obtained online via GC-C-IRMS.

Insufficient propane, butane, and pentane 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. %.