



Lab #: 914334 Job #: 57920 IS-69033 Co. Job#:
 Sample Name: BW_Buffalo_58905_F Co. Lab#:
 Company: Oxy USA Inc.
 API/Well:
 Container: IsoFlask
 Field/Site Name: BWSE/GWA_Griswold_27N_11HZ
 Location: SENW_12_1N_66W
 Formation/Depth: IN
 Sampling Point: 753953
 Date Sampled: 3/04/2024 10:47 Date Received: 3/08/2024 Date Reported: 4/19/2024

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 -----	0.699				0.37	0.61
Oxygen -----	3.86					
Nitrogen -----	35.12				17	19
Carbon Dioxide -----	0.61					
Methane -----	59.63	-72.10	-258.4		31	21
Ethane -----	0.0797	-47.7			0.045	0.056
Ethylene -----	nd					
Propane -----	0.0011				0.00060	0.0011
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 = 0.73

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

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. %.