Lab #:	913257	Job #: 57833	IS-69033	Co. Job#:
Sample Name:	BW_Buffalo_58905_F			Co. Lab#:
Company:	Oxy USA Inc.			
API/Well:				
Container:	125ml Plastic Bottle			
Field/Site Name:	BWSE/GWA_Griswold_27N_11HZ			
Location:	SENW_12_1N_66W			
Formation/Depth:	IN			
Sampling Point:	772625			
Date Sampled:	3/04/2024 10:47	Date Received: 3/08/2024		Date Reported: 3/27/2024

δD of water	---------------	-102.4 ‰ relative to VSMOW
δ^{18}O of water	---------------	-13.48 ‰ relative to VSMOW
Tritium content of water	---------------	na
δ^{13}C of DIC	---------------	-8.3 ‰ relative to VPDB
^{14}C content of DIC	---------------	na
δ^{15}N of nitrate	---------------	na
δ^{18}O of nitrate	---------------	na
δ^{34}S of sulfate	---------------	na
δ^{18}O of sulfate	---------------	na
Vacuum Distilled? *	---------------	No
Remarks:		

nd = not detected. na = not analyzed.
*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

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:	772625				

Date Sampled: 3/04/2024 10:47   Date Received: 3/08/2024   Date Reported: 4/19/2024

Component	Chemical mol. %	$\delta^{13}C$ ‰	δD ‰	$\delta^{18}O$ ‰	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. %.