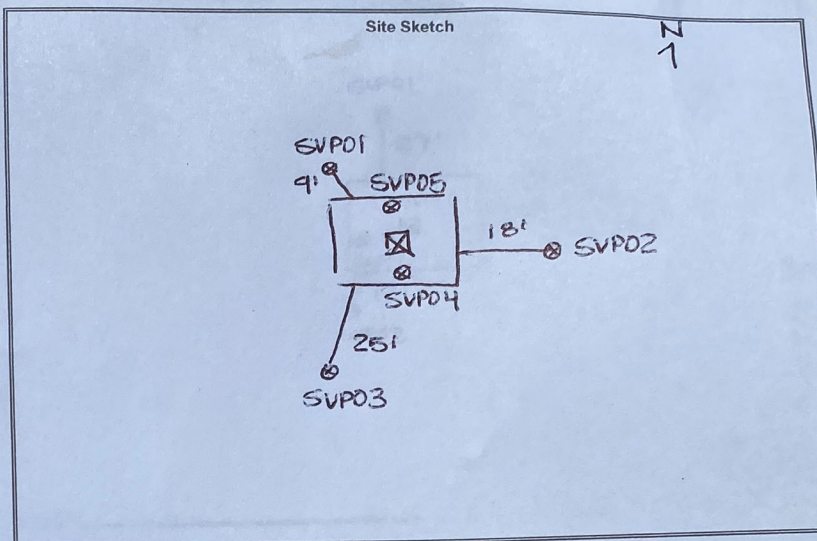


Site Information	
Site Name	Shuttl 20-34
Date	4/24/23
Sampler	F. Smith
Weather	58° partly cloudy

Gas Meter Information	
Make/Model	
S/N	10871

Calibration Information	
Gas	Time
Pure N ₂	1149
Fresh Air	1150
50 ppm CO, 10 ppm H ₂ S	1152
15% CH ₄ , 15% CO ₂ , Bal N ₂	1154



Bump Test						
Time		CH ₄ (%)	CO ₂ (%)	O ₂ (%)	H ₂ S (ppm)	CO (ppm)
1201	Calibration Gas	15.0	15.0	0.0	0	0
	Readings	14.7	14.8	0.0	0	0

Field Readings										
Point ID	Time	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	H ₂ S (ppm)	CO (ppm)	Purge Length	Sampled? (Y/N)	Sample ID	Comments
SVPO1	1210	0.0	0.1	20.5	0	0	19	Y		water in line
SVPO2	1209	0.1	0.2	20.2	0	1	38	↓		
SVPO3	1204	0.0	4.0	13.7	0	0	70	↓		
SVPO4	1207	0.0	0.5	19.9	0	1	65	↓		
SVPO5	1212	0.0	0.1	20.6	0	9	12	✓		Line clogged

Notes and Observations

Lab #: 870437 Job #: 54517 IS-69033 Co. Job#:
 Sample Name: SVP01-0424-1210 Co. Lab#:
 Company: Oxy USA Inc.
 API/Well:
 Container: IsoTube®
 Field/Site Name: Shutt 20-34 Wellhead
 Location: Weld County
 Formation:
 Sampling Point:
 Date Sampled: 4/24/2023 12:10 Date Received: 5/02/2023 Date Reported: 6/29/2023

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.952			
Oxygen -----	21.12			
Nitrogen -----	77.52			
Carbon Dioxide -----	0.41			
Methane -----	0.0003			
Ethane -----	nd			
Ethylene -----	0.0002			
Propane -----	nd			
Propylene -----	0.0002			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	0.0010			

Total BTU/cu.ft. dry @ 60deg F & 14.73psia, calculated: 0

Specific gravity, calculated: 1.003

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. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 870438 Job #: 54517 IS-69033 Co. Job#:
 Sample Name: SVP02-0424-1209 Co. Lab#:
 Company: Oxy USA Inc.
 API/Well:
 Container: IsoTube®
 Field/Site Name: Shutt 20-34 Wellhead
 Location: Weld County
 Formation:
 Sampling Point:
 Date Sampled: 4/24/2023 12:09 Date Received: 5/02/2023 Date Reported: 6/29/2023

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.951			
Oxygen -----	21.22			
Nitrogen -----	77.60			
Carbon Dioxide -----	0.23			
Methane -----	0.0012			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	0.0009			

Total BTU/cu.ft. dry @ 60deg F & 14.73psia, calculated: 0

Specific gravity, calculated: 1.002

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. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 870439 Job #: 54517 IS-69033 Co. Job#:
 Sample Name: SVP03-0424-1204 Co. Lab#:
 Company: Oxy USA Inc.
 API/Well:
 Container: IsoTube®
 Field/Site Name: Shutt 20-34 Wellhead
 Location: Weld County
 Formation:
 Sampling Point:
 Date Sampled: 4/24/2023 12:04 Date Received: 5/02/2023 Date Reported: 6/29/2023

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.983			
Oxygen -----	14.25			
Nitrogen -----	80.38			
Carbon Dioxide -----	4.39	-22.28		
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	0.0007			

Total BTU/cu.ft. dry @ 60deg F & 14.73psia, calculated: 0

Specific gravity, calculated: 1.015

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. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 870440 Job #: 54517 IS-69033 Co. Job#:
 Sample Name: SVP04-0424-1207 Co. Lab#:
 Company: Oxy USA Inc.
 API/Well:
 Container: IsoTube®
 Field/Site Name: Shutt 20-34 Wellhead
 Location: Weld County
 Formation:
 Sampling Point:
 Date Sampled: 4/24/2023 12:07 Date Received: 5/02/2023 Date Reported: 6/29/2023

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.951			
Oxygen -----	21.19			
Nitrogen -----	77.56			
Carbon Dioxide -----	0.30			
Methane -----	0.0010			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	0.0007			

Total BTU/cu.ft. dry @ 60deg F & 14.73psia, calculated: 0

Specific gravity, calculated: 1.002

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. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 870441 Job #: 54517 IS-69033 Co. Job#:
 Sample Name: SVP05-0424-1212 Co. Lab#:
 Company: Oxy USA Inc.
 API/Well:
 Container: IsoTube®
 Field/Site Name: Shutt 20-34 Wellhead
 Location: Weld County
 Formation:
 Sampling Point:
 Date Sampled: 4/24/2023 12:12 Date Received: 5/02/2023 Date Reported: 6/29/2023

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.953			
Oxygen -----	21.07			
Nitrogen -----	77.52			
Carbon Dioxide -----	0.46			
Methane -----	0.0002			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	0.0011			

Total BTU/cu.ft. dry @ 60deg F & 14.73psia, calculated: 0

Specific gravity, calculated: 1.003

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. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.