



Isotech Gas Data

Job 49043

CoreTrac IS-107457

Isotech Lab No.	Sample Name	Sample Date	Sample Time	Field Name	Location	GC Date	He	H ₂	Ar	O ₂	CO ₂	N ₂	CO	C ₁	C ₂	C ₂ H ₄	C ₃	C ₃ H ₆	iC ₄	nC ₄	iC ₅	nC ₅	C ₆ +	MS	δ ¹³ CO ₂	δ ¹³ C ₁	δDC ₁	δ ¹³ C ₂	δ ¹³ C ₃	δ ¹³ C ₄	δ ¹³ nC ₄	δ ¹³ iC ₅	δ ¹³ nC ₅	Specific Gravity	BTU	Comments				
806108	SVE02-1004-1127	10/4/2021	11:27	State 30-16	Erie, CO	10/12/2021	nd	nd	0.969	20.98	1.25	76.79	nd	0.0035	0.0016	nd	0.0014	nd	0.0004	0.0012	0.0006	0.0007	0.0021															1.007	0	
806109	SVE06-1004-1205	10/4/2021	12:05	State 30-16	Erie, CO	10/12/2021	nd	nd	0.976	20.19	1.96	76.87	nd	0.0007	0.0002	nd	0.0003	nd	nd	0.0003	0.0002	0.0002	0.0004															1.010	0	
806110	SVE03-1004-1136	10/4/2021	11:36	State 30-16	Erie, CO	10/12/2021	nd	nd	0.985	18.47	2.64	77.90	nd	0.0038	0.0013	nd	0.0010	nd	0.0003	0.0008	0.0004	0.0005	0.0008															1.011	0	
806111	SVE04-1004-1146	10/4/2021	11:46	State 30-16	Erie, CO	10/12/2021	nd	nd	1.03	14.75	3.00	81.22	nd	0.0021	0.0005	nd	0.0005	nd	0.0002	0.0004	0.0002	0.0003	0.0003															1.008	0	
806112	SVE05-1004-1156	10/4/2021	11:56	State 30-16	Erie, CO	10/12/2021	nd	nd	0.967	21.53	1.19	76.31	nd	0.0005	0.0002	nd	0.0003	nd	nd	0.0002	0.0001	0.0001	0.0002															1.007	0	
806113	SVE01-1004-1107	10/4/2021	11:07	State 30-16	Erie, CO	10/12/2021	nd	nd	0.875	14.02	1.39	69.14	nd	11.68	1.92	nd	0.662	0.0005	0.103	0.158	0.0348	0.0177	0.0036	10/20/2021	-33.59	-38.22	-214.5	-28.77	-26.30	-30.1	-25.9	-27.5	-25.6	0.958	180					

All gas component carbon isotope values are reported on a scale defined by a two point calibration of LSVEC and NBS 19

nd = not detected, na = not analyzed

In red = isotopes obtained online via GC-C-IRMS

Isotech Gas Data

Job 49125

CoreTrac IS-107457

Isotech Lab No.	Sample Name	Sample Date	Sample Time	Field Name	Location	GC Date	He %	H ₂ %	Ar %	O ₂ %	CO ₂ %	N ₂ %	CO %	C ₁ %	C ₂ %	C ₂ H ₄ %	C ₃ %	C ₃ H ₆ %	iC ₄ %	nC ₄ %	iC ₅ %	nC ₅ %	C ₆ + %	Specific Gravity	BTU	Comments	
806837	SVP38-1014-1057	10/14/2021	10:57	State 30-16	Dacono, CO	10/28/2021	nd	nd	0.940	19.48	2.18	77.40	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.010	0	
806838	SVP40-1014-1112	10/14/2021	11:12	State 30-16	Dacono, CO	10/28/2021	nd	nd	0.938	20.00	2.13	76.93	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.010	0	
806839	SVP48-1014-1149	10/14/2021	11:49	State 30-16	Dacono, CO	10/28/2021	nd	nd	0.953	18.82	1.96	78.27	nd	0.0006	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.008	0	
806840	SVP59-1014-1230	10/14/2021	12:30	State 30-16	Dacono, CO	10/28/2021	nd	nd	0.946	18.48	2.66	77.91	nd	0.0005	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.011	0	
806841	SVP57-1014-1222	10/14/2021	12:22	State 30-16	Dacono, CO	10/28/2021	nd	nd	0.950	18.76	2.37	77.92	nd	0.0004	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.010	0	
806842	SVP66-1014-1407	10/14/2021	14:07	State 30-16	Dacono, CO	10/28/2021	nd	nd	0.958	18.96	1.87	78.21	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.008	0	
806843	SVP73-1014-1439	10/14/2021	14:39	State 30-16	Dacono, CO	10/28/2021	nd	nd	0.920	19.89	2.45	76.74	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.012	0	
806844	SVP65-1014-1403	10/14/2021	14:03	State 30-16	Dacono, CO	10/28/2021	nd	nd	0.959	17.27	2.90	78.87	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.011	0	
806845	SVP75-1014-1446	10/14/2021	14:46	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.934	18.52	3.44	77.11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.016	0	
806846	SVP69-1014-1416	10/14/2021	14:16	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.939	21.44	0.16	77.46	nd	0.0002	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.001	0	
806847	SVP67-1014-1410	10/14/2021	14:10	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.947	19.34	1.52	78.19	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.006	0	
806848	SVP72-1014-1436	10/14/2021	14:36	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.938	17.40	4.40	77.26	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.019	0	
806849	SVP71-1014-1423	10/14/2021	14:23	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.938	21.42	0.14	77.50	nd	0.0012	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.001	0	
806850	SVP70-1014-1420	10/14/2021	14:20	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.948	16.87	3.73	78.45	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.015	0	
806851	SVP74-1014-1442	10/14/2021	14:42	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.928	20.40	2.16	76.51	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.011	0	
806852	SVP61-1014-1347	10/14/2021	13:47	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.943	17.96	3.41	77.69	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.015	0	
806853	SVP62-1014-1351	10/14/2021	13:51	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.957	15.73	4.11	79.20	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.016	0	
806854	SVP64-1014-1357	10/14/2021	13:57	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.963	16.39	2.91	79.74	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.010	0	
806855	SVP63-1014-1353	10/14/2021	13:53	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.939	21.41	0.19	77.46	nd	0.0004	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.002	0	
806856	SVP60-1014-1342	10/14/2021	13:42	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.940	19.78	1.89	77.39	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.009	0	
806857	SVP41-1014-1116	10/14/2021	11:16	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.936	17.52	4.17	77.37	nd	0.0004	nd	nd	nd	nd	nd	nd	nd	nd	0.0001	1.018	0		
806858	SVP43-1014-1124	10/14/2021	11:24	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.951	17.89	2.85	78.31	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.012	0	
806859	SVP49-1014-1155	10/14/2021	11:55	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.946	21.52	0.20	77.33	nd	0.0003	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.002	0	
806860	SVP54-1014-1212	10/14/2021	12:12	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.954	18.38	2.10	78.57	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.008	0	
806861	SVP76-1014-1457	10/14/2021	14:57	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.950	18.95	1.90	78.20	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.008	0	
806862	SVP44-1014-1129	10/14/2021	11:29	State 30-16	Dacono, CO	10/29/2021	nd	nd	0.945	17.51	3.78	77.77	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.016	0	
806863	SVP46-1014-1139	10/14/2021	11:39	State 30-16	Dacono, CO	11/1/2021	nd	nd	0.954	16.29	3.81	78.95	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.015	0	
806864	SVP50-1014-1158	10/14/2021	11:58	State 30-16	Dacono, CO	11/1/2021	nd	nd	0.945	20.80	0.65	77.60	nd	0.0002	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.003	0	
806865	SVP51-1014-1202	10/14/2021	12:02	State 30-16	Dacono, CO	11/1/2021	nd	nd	0.943	21.16	0.34	77.56	nd	0.0003	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.002	0	
806866	SVP68-1014-1413	10/14/2021	14:13	State 30-16	Dacono, CO	11/1/2021	nd	nd	0.943	21.42	0.11	77.53	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.001	0	
806867	SVP45-1014-1134	10/14/2021	11:34	State 30-16	Dacono, CO	11/1/2021	nd	nd	0.943	20.26	1.11	77.69	nd	0.0002	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.005	0	
806868	SVP42-1014-1119	10/14/2021	11:19	State 30-16	Dacono, CO	11/1/2021	nd	nd	0.939	20.15	1.35	77.56	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.006	0	
806869	SVP56-1014-1219	10/14/2021	12:19	State 30-16	Dacono, CO	11/1/2021	nd	nd	0.952	19.21	1.33	78.51	nd	0.0002	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.005	0	
806870	SVP55-1014-1216	10/14/2021	12:16	State 30-16	Dacono, CO	11/1/2021	nd	nd	0.950	19.36	1.56	78.13	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.006	0	
806871	SVP52-1014-1206	10/14/2021	12:06	State 30-16	Dacono, CO	11/1/2021	nd	nd	0.938	20.10	1.71	77.25	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.008	0	
806872	SVP39-1014-1106	10/14/2021	11:06	State 30-16	Dacono, CO	11/1/2021	nd	nd	0.943	20.78	0.89	77.39	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.005	0	
806873	SVP47-1014-1143	10/14/2021	11:43	State 30-16	Dacono, CO	11/1/2021	nd	nd	0.943	20.79	0.67	77.60	nd	0.0002	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.003	0	
806874	SVP58-1014-1226	10/14/2021	12:26	State 30-16	Dacono, CO	11/1/2021	nd	nd	0.940	21.04	0.61	77.41	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.003	0	
806875	SVP53-1014-1209	10/14/2021	12:09	State 30-16	Dacono, CO	11/1/2021	nd	nd	0.938	20.22	1.31	77.53	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.006	0	

nd = not detected, na = not analyzed

Lab #: 806108 Job #: 49043 IS-107457 Co. Job#:
 Sample Name: SVE02-1004-1127 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Erie, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/04/2021 11:27 Date Received: 10/12/2021 Date Reported: 10/20/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.969			
Oxygen -----	20.98			
Nitrogen -----	76.79			
Carbon Dioxide -----	1.25			
Methane -----	0.0035			
Ethane -----	0.0016			
Ethylene -----	nd			
Propane -----	0.0014			
Propylene -----	nd			
Iso-butane -----	0.0004			
N-butane -----	0.0012			
Iso-pentane -----	0.0006			
N-pentane -----	0.0007			
Hexanes + -----	0.0021			

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

Specific gravity, calculated: 1.007

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 #: 806109 Job #: 49043 IS-107457 Co. Job#:
 Sample Name: SVE06-1004-1205 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Erie, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/04/2021 12:05 Date Received: 10/12/2021 Date Reported: 10/20/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.976			
Oxygen -----	20.19			
Nitrogen -----	76.87			
Carbon Dioxide -----	1.96			
Methane -----	0.0007			
Ethane -----	0.0002			
Ethylene -----	nd			
Propane -----	0.0003			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	0.0003			
Iso-pentane -----	0.0002			
N-pentane -----	0.0002			
Hexanes + -----	0.0004			

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

Specific gravity, calculated: 1.010

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 #: 806110 Job #: 49043 IS-107457 Co. Job#:
 Sample Name: SVE03-1004-1136 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Erie, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/04/2021 11:36 Date Received: 10/12/2021 Date Reported: 10/20/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.985			
Oxygen -----	18.47			
Nitrogen -----	77.90			
Carbon Dioxide -----	2.64			
Methane -----	0.0038			
Ethane -----	0.0013			
Ethylene -----	nd			
Propane -----	0.0010			
Propylene -----	nd			
Iso-butane -----	0.0003			
N-butane -----	0.0008			
Iso-pentane -----	0.0004			
N-pentane -----	0.0005			
Hexanes + -----	0.0008			

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

Specific gravity, calculated: 1.011

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 #: 806111 Job #: 49043 IS-107457 Co. Job#:
 Sample Name: SVE04-1004-1146 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Erie, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/04/2021 11:46 Date Received: 10/12/2021 Date Reported: 10/20/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	1.03			
Oxygen -----	14.75			
Nitrogen -----	81.22			
Carbon Dioxide -----	3.00			
Methane -----	0.0021			
Ethane -----	0.0005			
Ethylene -----	nd			
Propane -----	0.0005			
Propylene -----	nd			
Iso-butane -----	0.0002			
N-butane -----	0.0004			
Iso-pentane -----	0.0002			
N-pentane -----	0.0003			
Hexanes + -----	0.0003			

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

Specific gravity, calculated: 1.008

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 #: 806112 Job #: 49043 IS-107457 Co. Job#:
 Sample Name: SVE05-1004-1156 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Erie, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/04/2021 11:56 Date Received: 10/12/2021 Date Reported: 10/20/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.967			
Oxygen -----	21.53			
Nitrogen -----	76.31			
Carbon Dioxide -----	1.19			
Methane -----	0.0005			
Ethane -----	0.0002			
Ethylene -----	nd			
Propane -----	0.0003			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	0.0002			
Iso-pentane -----	0.0001			
N-pentane -----	0.0001			
Hexanes + -----	0.0002			

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

Specific gravity, calculated: 1.007

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 #: 806113 Job #: 49043 IS-107457 Co. Job#:
 Sample Name: SVE01-1004-1107 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Erie, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/04/2021 11:07 Date Received: 10/12/2021 Date Reported: 10/20/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.875			
Oxygen -----	14.02			
Nitrogen -----	69.14			
Carbon Dioxide -----	1.39	-33.59		
Methane -----	11.68	-38.22	-214.5	
Ethane -----	1.92	-28.77		
Ethylene -----	nd			
Propane -----	0.662	-26.30		
Propylene -----	0.0005			
Iso-butane -----	0.103	-30.1		
N-butane -----	0.158	-25.9		
Iso-pentane -----	0.0348	-27.5		
N-pentane -----	0.0177	-25.6		
Hexanes + -----	0.0036			

Total BTU/cu.ft. dry @ 60deg F & 14.73psia, calculated: 180

Specific gravity, calculated: 0.958

Remarks: Butane and pentane carbon isotope data obtained online via GC-C-IRMS.

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 #: 806837 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP38-1014-1057 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 10:57 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.940			
Oxygen -----	19.48			
Nitrogen -----	77.40			
Carbon Dioxide -----	2.18			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.010

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806838 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP40-1014-1112 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 11:12 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.938			
Oxygen -----	20.00			
Nitrogen -----	76.93			
Carbon Dioxide -----	2.13			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.010

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806839 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP48-1014-1149 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 11:49 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.953			
Oxygen -----	18.82			
Nitrogen -----	78.27			
Carbon Dioxide -----	1.96			
Methane -----	0.0006			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.008

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806840 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP59-1014-1230 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 12:30 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.946			
Oxygen -----	18.48			
Nitrogen -----	77.91			
Carbon Dioxide -----	2.66			
Methane -----	0.0005			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.011

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806841 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP57-1014-1222 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 12:22 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.950			
Oxygen -----	18.76			
Nitrogen -----	77.92			
Carbon Dioxide -----	2.37			
Methane -----	0.0004			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.010

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806842 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP66-1014-1407 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 14:07 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.958			
Oxygen -----	18.96			
Nitrogen -----	78.21			
Carbon Dioxide -----	1.87			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.008

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806843 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP73-1014-1439 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 14:39 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.920			
Oxygen -----	19.89			
Nitrogen -----	76.74			
Carbon Dioxide -----	2.45			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.012

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806844 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP65-1014-1403 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 14:03 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.959			
Oxygen -----	17.27			
Nitrogen -----	78.87			
Carbon Dioxide -----	2.90			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.011

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806845 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP75-1014-1446 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 14:46 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.934			
Oxygen -----	18.52			
Nitrogen -----	77.11			
Carbon Dioxide -----	3.44			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.016

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806846 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP69-1014-1416 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 14:16 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.939			
Oxygen -----	21.44			
Nitrogen -----	77.46			
Carbon Dioxide -----	0.16			
Methane -----	0.0002			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.001

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806847 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP67-1014-1410 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 14:10 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.947			
Oxygen -----	19.34			
Nitrogen -----	78.19			
Carbon Dioxide -----	1.52			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.006

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806848 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP72-1014-1436 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 14:36 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.938			
Oxygen -----	17.40			
Nitrogen -----	77.26			
Carbon Dioxide -----	4.40			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.019

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806849 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP71-1014-1423 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 14:23 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.938			
Oxygen -----	21.42			
Nitrogen -----	77.50			
Carbon Dioxide -----	0.14			
Methane -----	0.0012			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.001

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806850 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP70-1014-1420 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 14:20 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.948			
Oxygen -----	16.87			
Nitrogen -----	78.45			
Carbon Dioxide -----	3.73			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Lab #: 806851 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP74-1014-1442 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 14:42 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.928			
Oxygen -----	20.40			
Nitrogen -----	76.51			
Carbon Dioxide -----	2.16			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.011

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806852 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP61-1014-1347 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 13:47 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.943			
Oxygen -----	17.96			
Nitrogen -----	77.69			
Carbon Dioxide -----	3.41			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Lab #: 806853 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP62-1014-1351 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 13:51 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.957			
Oxygen -----	15.73			
Nitrogen -----	79.20			
Carbon Dioxide -----	4.11			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.016

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806854 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP64-1014-1357 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 13:57 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.963			
Oxygen -----	16.39			
Nitrogen -----	79.74			
Carbon Dioxide -----	2.91			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.010

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806855 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP63-1014-1353 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 13:53 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.939			
Oxygen -----	21.41			
Nitrogen -----	77.46			
Carbon Dioxide -----	0.19			
Methane -----	0.0004			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Lab #: 806856 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP60-1014-1342 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 13:42 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.940			
Oxygen -----	19.78			
Nitrogen -----	77.39			
Carbon Dioxide -----	1.89			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.009

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806857 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP41-1014-1116 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 11:16 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.936			
Oxygen -----	17.52			
Nitrogen -----	77.37			
Carbon Dioxide -----	4.17			
Methane -----	0.0004			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	0.0001			

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

Specific gravity, calculated: 1.018

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806858 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP43-1014-1124 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 11:24 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.951			
Oxygen -----	17.89			
Nitrogen -----	78.31			
Carbon Dioxide -----	2.85			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.012

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806859 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP49-1014-1155 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 11:55 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.946			
Oxygen -----	21.52			
Nitrogen -----	77.33			
Carbon Dioxide -----	0.20			
Methane -----	0.0003			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Lab #: 806860 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP54-1014-1212 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 12:12 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.954			
Oxygen -----	18.38			
Nitrogen -----	78.57			
Carbon Dioxide -----	2.10			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.008

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806861 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP76-1014-1457 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 14:57 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.950			
Oxygen -----	18.95			
Nitrogen -----	78.20			
Carbon Dioxide -----	1.90			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.008

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806862 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP44-1014-1129 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 11:29 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.945			
Oxygen -----	17.51			
Nitrogen -----	77.77			
Carbon Dioxide -----	3.78			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.016

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806863 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP46-1014-1139 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 11:39 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.954			
Oxygen -----	16.29			
Nitrogen -----	78.95			
Carbon Dioxide -----	3.81			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Lab #: 806864 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP50-1014-1158 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 11:58 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.945			
Oxygen -----	20.80			
Nitrogen -----	77.60			
Carbon Dioxide -----	0.65			
Methane -----	0.0002			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Lab #: 806865 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP51-1014-1202 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 12:02 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.943			
Oxygen -----	21.16			
Nitrogen -----	77.56			
Carbon Dioxide -----	0.34			
Methane -----	0.0003			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Lab #: 806866 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP68-1014-1413 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 14:13 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.943			
Oxygen -----	21.42			
Nitrogen -----	77.53			
Carbon Dioxide -----	0.11			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.001

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806867 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP45-1014-1134 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 11:34 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.943			
Oxygen -----	20.26			
Nitrogen -----	77.69			
Carbon Dioxide -----	1.11			
Methane -----	0.0002			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.005

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806868 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP42-1014-1119 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 11:19 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.939			
Oxygen -----	20.15			
Nitrogen -----	77.56			
Carbon Dioxide -----	1.35			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.006

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806869 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP56-1014-1219 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 12:19 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.952			
Oxygen -----	19.21			
Nitrogen -----	78.51			
Carbon Dioxide -----	1.33			
Methane -----	0.0002			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.005

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806870 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP55-1014-1216 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 12:16 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.950			
Oxygen -----	19.36			
Nitrogen -----	78.13			
Carbon Dioxide -----	1.56			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.006

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806871 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP52-1014-1206 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 12:06 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.938			
Oxygen -----	20.10			
Nitrogen -----	77.25			
Carbon Dioxide -----	1.71			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.008

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806872 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP39-1014-1106 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 11:06 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.943			
Oxygen -----	20.78			
Nitrogen -----	77.39			
Carbon Dioxide -----	0.89			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.005

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 806873 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP47-1014-1143 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 11:43 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.943			
Oxygen -----	20.79			
Nitrogen -----	77.60			
Carbon Dioxide -----	0.67			
Methane -----	0.0002			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Lab #: 806874 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP58-1014-1226 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 12:26 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.940			
Oxygen -----	21.04			
Nitrogen -----	77.41			
Carbon Dioxide -----	0.61			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Lab #: 806875 Job #: 49125 IS-107457 Co. Job#:
 Sample Name: SVP53-1014-1209 Co. Lab#:
 Company: Anadarko
 API/Well:
 Container: IsoTube®
 Field/Site Name: State 30-16
 Location: Dacono, CO
 Formation:
 Sampling Point:
 Date Sampled: 10/14/2021 12:09 Date Received: 10/19/2021 Date Reported: 11/03/2021

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.938			
Oxygen -----	20.22			
Nitrogen -----	77.53			
Carbon Dioxide -----	1.31			
Methane -----	nd			
Ethane -----	nd			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

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

Specific gravity, calculated: 1.006

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.