



Produced Gas Isotope and Compositional Analyses

**Crestone Peak Resources Produced Gases
Colorado**

Crestone Peak Resources

May 20, 2019



PRODUCED GAS ISOTOPE ANALYSIS

Crestone Peak Resources Crestone Peak Resources Produced Gases, Colorado

Sample ID	Cylinder ID Number	COGCC ID	Sampling Date	Sampling Time	Shipment	Casing Pressure (psia)	Stable Carbon Isotopes		δ ¹³ C Propane (‰)	δ ¹³ C i-Butane (‰)	δ ¹³ C n-Butane (‰)	δ ¹³ C i-Pentane (‰)	δ ¹³ C n-Pentane (‰)	δD Methane (‰)	δ ¹³ C CO ₂ (‰)
							δ ¹³ C Methane (‰)	δ ¹³ C Ethane (‰)							
Anderson 4-2-32 - Production CSG		420311	11/15/2018	8:00 AM	4th Shipment		-48.7	-33.7	-29.2	-32.8	-28.9			-249	-7.9
Anderson 4-2-32 - Surface CSG		420311	11/15/2018	8:08 AM	4th Shipment		-52.4	-34.4	-29.9	-33.6	-30.5			-248	
Aristocrat 4-0-3 - Production CSG		421915	11/11/2019	9:30 AM	6th Shipment		-46.2	-30.2	-29.5	-30.3	-26.6			-231	1.3
Aristocrat 4-0-3 - Surface CSG		421915	11/11/2019	9:30 AM	6th Shipment		-48.3	-33.3	-28.9	-31.2	-27.4			-244	
Bell 34-26 - Production CSG		256596	10/19/2018	1:30 PM	1st Shipment		-48.7	-29.9	-27.3	-30.3	-27.6			-251	-1.3
Cosslett 32-22 - Production CSG		420875	11/11/2018	9:00 AM	2nd Shipment		-49.3	-32.7	-28.4	-31.5	-28.1			-241	-2.7
Cosslett 32-22 - Surface CSG		420875	11/11/2018	9:00 AM	2nd Shipment		-52.1	-33.4	-28.9	-32.4	-28.3			-249	-13.8
Cosslett 4-0-22 - Production CSG		420763	11/11/2018	8:00 AM	2nd Shipment		-49.3	-32.9	-28.1	-32.1	-28.2			-242	0.1
Cosslett 4-0-22 - Surface CSG		420763	11/11/2018	8:00 AM	2nd Shipment		-53.3	-33.6	-28.8	-32.2	-28.3			-249	-15.0
Cosslett 6-4-22 - Production CSG		420884	11/11/2018	10:30 AM	2nd Shipment		-48.8	-32.0	-27.3	-31.9	-27.6			-241	0.1
Cosslett 6-4-22 - Surface CSG		420884	11/11/2018	10:30 AM	2nd Shipment		-50.1	-33.6	-28.7	-33.2	-28.5			-244	-11.9
Cosslett B1X - Production CSG		244835	12/21/2018	-	6th Shipment		-49.3	-33.3	-28.3	-31.9	-28.5			-250	-11.4
Cosslett B1X - Surface CSG		244835	12/21/2018	-	6th Shipment		-52.3	-34.2	-29.2	-32.3	-29.4			-249	-17.0
Davis 1D-9H - Production CSG		454502	12/11/2019	2:30 PM	6th Shipment		-48.4	-33.5	-28.3	-31.1	-28.0			-249	-5.6
Davis 1D-9H - Surface CSG		454502	12/11/2019	2:30 PM	6th Shipment		-49.0	-31.6	-24.7					-248	
Davis 1F-9H - Production CSG		454371	12/11/2019	3:30 PM	6th Shipment		-49.3	-32.3	-27.3	-35.8	-27.4			-252	-14.4
Davis 1F-9H - Surface CSG		454371	12/11/2019	3:30 PM	6th Shipment		-48.7	-33.0	-27.3	-27.9	-27.6			-252	
Davis 1G-9H - Production CSG		454358	12/11/2019	4:00 PM	6th Shipment		-48.3	-32.9	-28.4	-31.6	-28.1			-245	-12.4
Davis 1G-9H - Surface CSG		454358	12/11/2019	4:00 PM	6th Shipment		-49.3	-31.6	-27.2					-239	-14.5
Davis 1H-9H - Production CSG		454363	12/31/2019	9:30 AM	6th Shipment		-49.8	-33.3	-28.4					-253	-10.2
Davis 1H-9H - Surface CSG		454363	12/31/2019	9:30 AM	6th Shipment		-50.9	-32.6	-27.9	-31.3	-28.4			-236	-14.5
Davis 1I-9H - Production CSG		454852	12/31/2019	10:00 AM	6th Shipment		-50.8	-34.3	-28.4	-30.3	-28.6			-251	-6.2
Davis 1I-9H - Surface CSG		454852	12/31/2019	10:00 AM	6th Shipment		-50.3	-34.2	-28.3	-30.3	-28.3			-255	
Davis 1J-9H - Production CSG		454359	12/31/2019	10:30 AM	6th Shipment		-48.0	-32.6	-28.6	-28.6	-28.7			-245	-12.0
Davis 1J-9H - Surface CSG		454359	12/31/2019	10:30 AM	6th Shipment		-49.3	-33.5	-28.3	-29.2	-28.8			-252	-14.8
Davis 1K-9H - Production CSG		454368	12/31/2019	11:00 AM	6th Shipment		-49.6	-34.5	-28.7	-29.4	-28.6			-263	1.0
Davis 1K-9H - Surface CSG		454368	12/31/2019	11:00 AM	6th Shipment		-48.0	-34.3	-28.7	-29.4	-29.0			-259	-3.6
Davis 1L-9H - Production CSG		454687	12/31/2019	11:30 AM	6th Shipment		-49.4	-34.5	-29.0	-28.6	-28.6			-264	0.9
Davis 1L-9H - Surface CSG		454687	12/31/2019	11:30 AM	6th Shipment		-51.3	-34.9	-28.3	-29.2	-28.6			-259	-18.2
Davis 1M-9H - Production CSG		454370	12/31/2019	12:00 PM	6th Shipment		-48.0	-32.5	-27.9	-29.6	-28.0			-254	-8.6
Davis 1M-9H - Surface CSG		454370	12/31/2019	12:00 PM	6th Shipment		-52.1	-32.8	-28.2	-30.1	-28.6			-251	-16.1
Davis 1N-9H - Production CSG		454357	12/31/2019	12:30 PM	6th Shipment		-49.1	-33.2	-28.5	-30.5	-28.2			-253	-10.7
Davis 1N-9H - Surface CSG		454357	12/31/2019	12:30 PM	6th Shipment		-55.4	-33.2	-27.9	-30.8	-28.1			-230	-14.3
Davis 1O-9H - Production CSG		454355	12/31/2019	1:00 PM	6th Shipment		-49.0	-33.1	-27.9	-31.0	-27.9			-258	-12.4
Davis 1O-9H - Surface CSG		454355	12/31/2019	1:00 PM	6th Shipment		-50.1	-34.4	-29.8					-246	-18.0
Davis 1Q-9H - Production CSG		454362	12/31/2019	1:30 PM	6th Shipment		-49.0	-33.0	-28.6	-31.1	-28.5			-256	-12.8
Davis 1Q-9H - Surface CSG		454362	12/31/2019	1:30 PM	6th Shipment		-43.7	-33.2	-28.3	-30.1	-28.0			-252	-15.1
Davis 1R-9H - Production CSG		454356	12/31/2019	2:00 PM	6th Shipment		-48.1	-32.2	-28.1	-30.7	-28.1			-252	-10.3
Davis 1R-9H - Surface CSG		454356	12/31/2019	2:00 PM	6th Shipment		-49.6	-32.2	-25.3					-254	-17.5
Davis 1T-9H - Production CSG		454367	12/31/2019	2:00 PM	6th Shipment		-48.8	-33.7	-29.1	-30.9	-28.4			-249	-14.6
Davis 1T-9H - Surface CSG		454367	12/31/2019	2:00 PM	6th Shipment		-52.5	-33.6	-29.0					-249	-14.4
Dier 33-8 - Production CSG		256299	12/11/2019	12:16 PM	6th Shipment		-49.7	-34.2	-29.7	-31.8	-28.8			-263	-14.3
Dier 33-8 - Surface CSG		256299	12/11/2019	-	6th Shipment		-51.7	-34.3	-29.6	-31.7	-29.4			-266	
Elmqvist 21-23 - Production CSG		276477	10/30/2018	8:45 AM	2nd Shipment		-49.6	-33.8	-29.8	-32.1	-28.7			-254	-0.9
Elmqvist 4-4-23 - Production CSG		418698	10/29/2018	3:03 PM	2nd Shipment		-49.6	-32.6	-28.7	-32.6	-29.3			-254	0.8
Elmqvist 4-4-23 - Surface CSG		418698	10/29/2018	2:55 PM	2nd Shipment		-59.7	-38.5	-29.6	-32.2	-28.9			-242	-0.2
File 3A-32H - Production CSG		452934	10/4/2018	10:40 AM	1st Shipment		-49.1	-31.9	-29.6	-31.8	-28.8			-253	-10.7
File 3A-32H - Surface CSG		452934	10/4/2018	10:40 AM	1st Shipment		-49.5	-29.3	-28.5	-28.3	-24.4			-254	
Geist 22-32 - Production CSG		266935	10/25/2018	1:00 PM	2nd Shipment		-48.2	-32.3	-27.5	-32.1	-27.4			-239	1.0
Geist A 1 - Production CSG		243676	10/25/2018	-	2nd Shipment		-49.7	-33.4	-29.9	-32.4	-29.1			-254	0.3
Geist A 1 - Surface CSG		243676	10/25/2018	11:30 AM	2nd Shipment		-52.7	-35.2	-30.1	-33.5	-30.1			-251	-14.9
Haley 41-22 - Production CSG		277424	11/11/2018	1:25 PM	2nd Shipment		-49.2	-33.8	-29.1	-31.1	-28.2			-253	-4.1
Haley 4-2-22 - Production CSG		301057	11/11/2018	11:25 AM	2nd Shipment		-47.9	-33.6	-30.1	-31.9	-29.7			-251	1.3
Haley 4-2-22 - Surface CSG		301057	11/11/2018	11:20 AM	2nd Shipment		-52.8	-33.4	-30.2	-31.0	-30.3			-241	-11.1
Haley 8-4-22 - Production CSG		301056	11/11/2018	-	2nd Shipment		-49.2	-33.6	-29.4	-31.6	-29.4			-249	-0.4
Haley 8-4-22 - Surface CSG		301056	11/11/2018	11:30 AM	2nd Shipment		-53.7	-33.6	-28.2	-31.2	-27.9			-258	-16.0
Herren 1 - Production CSG		241069	10/11/2018	8:40 AM	1st Shipment		-50.7	-33.6	-29.7	-32.0	-29.2			-263	-6.5
Herren 1 - Surface CSG		241069	9/13/2018	1:00 PM	1st Shipment		-50.0	-32.4	-29.2	-31.4	-28.8			-255	-14.8
Herren 1B-33H - Production CSG		457034	12/21/2018	12:00 PM	6th Shipment		-52.2	-36.1	-30.3	-31.5	-29.7			-263	
Herren 1B-33H - Surface CSG		457034	12/21/2019	9:00 AM	6th Shipment		-51.1	-34.6	-29.9	-31.6	-28.9			-262	
Herren 1C-33H - Surface CSG		457039	12/11/2019	9:00 AM	6th Shipment		-50.5	-32.1	-28.4					-259	-15.6
Herren 1D-33H - Surface CSG		457036	12/11/2019	9:00 AM	6th Shipment		-50.1	-33.6	-28.7					-258	-17.0
Herren 1E-33H - Surface CSG		457033	12/11/2019	9:30 AM	6th Shipment		-53.3	-33.2	-29.1					-257	-15.5
Herren 1F-33H - Surface CSG		457035	12/11/2019	12:00 PM	6th Shipment		-51.6	-33.9	-28.6					-250	-19.6
Herren 1G-33H - Surface CSG		457037	12/11/2019	10:30 AM	6th Shipment		-49.6	-33.2	-29.0	-31.4	-28.4			-253	-15.7
Herren 1H-33H - Surface CSG		457038	12/11/2019	12:00 PM	6th Shipment		-52.7	-34.1	-28.8					-241	-14.1
Herren 1I-33H - Surface CSG		457038	12/11/2019	11:30 AM	6th Shipment		-50.2	-33.3	-29.3	-31.6	-28.8			-258	-13.2
Herren 1J-33H - Surface CSG		457040	12/11/2019	9:30 AM	6th Shipment		-50.4	-33.5	-29.3					-257	-15.8
Herren 31-33 - Surface CSG		265302	12/22/2018	-	6th Shipment		-52.3	-33.8	-29.2	-32.1	-29.4			-263	-17.0
Herren 42-33 - Production CSG		260651	8/13/2018	8:45 AM	1st Shipment		-51.8	-32.8	-29.8	-31.4	-28.7			-260	-6.6
Herren 42-33 - Surface CSG		260651	8/13/2018	8:45 AM	1st Shipment		-52.9	-33.4	-30.2	-31.2	-29.0			-252	-16.8
Hwy 52 4B-32H - Production CSG		434579	12/4/2018	9:30 AM	4th Shipment		-49.1	-33.5	-28.8	-32.3	-29.3			-251	0.8
Hwy 52 4B-32H - Surface CSG		434579	12/4/2018	9:35 AM	4th Shipment		-48.4	-32.8	-29.2	-32.1	-29.5			-252	0.8



PRODUCED GAS ISOTOPE ANALYSIS

Crestone Peak Resources Crestone Peak Resources Produced Gases, Colorado

Sample ID	Cylinder Number	COGCC ID	Sampling Date	Sampling Time	Shipment	Casing Pressure (psia)	Produce Gas Composition															Specific Gravity (Air = 1.0)		
							He Conc. (mole %)	H2 Conc. (mole %)	O2+Ar Conc. (mole %)	N2 Conc. (mole %)	CO2 Conc. (mole %)	H2S Conc. (mole %)	CO Conc. (mole %)	C1 Conc. (mole %)	C2 Conc. (mole %)	C2H4 Conc. (mole %)	C3 Conc. (mole %)	C3H6 Conc. (mole %)	iC4 Conc. (mole %)	nC4 Conc. (mole %)	iC5 Conc. (mole %)		nC5 Conc. (mole %)	C6+ Conc. (mole %)
Anderson 4-2-32 - Production CSG		420311	11/15/2018	8:00 AM	4th Shipment		0.00	0.01	0.23	1.31	0.38	0.00	0.03	82.42	10.68	0.00	3.50	0.00	0.35	0.72	0.12	0.12	0.13	0.673
Anderson 4-2-32 - Surface CSG		420311	11/15/2018	8:05 AM	4th Shipment		0.00	0.00	0.23	1.96	0.00	0.00	0.03	81.18	9.46	0.00	4.94	0.00	0.82	1.21	0.00	0.21	0.16	0.692
Aristocrat 4-3 - Production CSG		421915	11/11/2019	9:30 AM	6th Shipment		0.00	0.81	0.22	0.84	2.77	0.00	0.00	75.68	11.72	0.00	4.57	0.00	0.83	1.67	0.52	0.46	0.11	0.741
Aristocrat 4-3 - Surface CSG		421915	11/11/2019	9:30 AM	6th Shipment		0.00	0.03	0.22	1.12	0.00	0.00	0.00	80.20	11.21	0.00	4.85	0.00	0.67	1.07	0.27	0.16	0.18	0.699
Bell 34-26 - Production CSG		256596	10/19/2018	1:30 PM	1st Shipment		0.00	0.05	1.17	4.62	3.10	0.00	0.00	65.06	14.69	0.00	6.07	0.00	1.25	2.18	0.95	0.63	0.23	0.825
Cosslett 32-22 - Production CSG		420675	11/11/2018	9:00 AM	2nd Shipment		0.00	1.08	0.20	1.04	0.64	0.00	0.03	75.64	12.27	0.00	5.45	0.00	0.78	1.80	0.41	0.43	0.23	0.732
Cosslett 32-22 - Surface CSG		420675	11/11/2018	9:00 AM	2nd Shipment		0.00	0.04	0.25	2.08	0.00	0.00	0.03	82.32	9.36	0.00	4.17	0.00	0.43	0.84	0.16	0.16	0.15	0.678
Cosslett 4-0-22 - Production CSG		420763	11/11/2018	8:00 AM	2nd Shipment		0.00	0.69	0.26	1.45	1.00	0.00	0.03	76.30	12.08	0.00	5.21	0.00	0.68	1.48	0.30	0.29	0.23	0.725
Cosslett 4-0-22 - Surface CSG		420763	11/11/2018	8:00 AM	2nd Shipment		0.00	0.00	0.29	3.80	0.00	0.00	0.03	81.05	7.78	0.00	4.49	0.00	0.69	1.20	0.27	0.24	0.16	0.694
Cosslett 6-4-22 - Production CSG		420884	11/11/2018	10:30 AM	2nd Shipment		0.00	0.81	0.37	1.46	2.07	0.00	0.03	73.08	12.26	0.00	5.63	0.00	0.84	2.04	0.48	0.53	0.40	0.763
Cosslett 6-4-22 - Surface CSG		420884	11/11/2018	10:30 AM	2nd Shipment		0.00	0.06	0.29	1.95	0.00	0.00	0.03	79.82	9.90	0.00	4.98	0.00	0.64	1.44	0.31	0.33	0.26	0.708
Cosslett 81X - Production CSG		244835	12/21/2018	-	6th Shipment		0.00	0.07	0.31	1.29	1.76	0.00	0.00	76.25	13.05	0.00	5.74	0.00	0.77	1.50	0.17	0.09	0.02	0.735
Cosslett 81X - Surface CSG		244835	12/21/2018	-	6th Shipment		0.00	0.00	0.23	2.23	0.01	0.00	0.00	80.69	9.20	0.00	4.74	0.00	0.63	1.37	0.31	0.32	0.27	0.703
Davis 1D-9H - Production CSG		454502	12/1/2019	2:30 PM	6th Shipment		0.00	0.14	0.18	1.51	0.19	0.00	0.00	76.36	12.55	0.00	4.55	0.00	0.58	1.23	0.26	0.06	0.19	0.708
Davis 1D-9H - Surface CSG		454502	12/1/2019	2:30 PM	6th Shipment		0.00	0.00	47.54	0.16	3.43	0.00	0.00	46.98	1.80	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.348
Davis 1F-9H - Production CSG		454371	12/1/2019	3:30 PM	6th Shipment		0.00	92.57	0.35	6.50	0.01	0.00	0.00	0.46	0.05	0.00	0.02	0.00	0.00	0.01	0.00	0.01	0.03	0.136
Davis 1F-9H - Surface CSG		454371	12/1/2019	3:30 PM	6th Shipment		0.00	0.11	0.27	1.80	0.01	0.00	0.00	82.50	10.43	0.00	2.97	0.00	0.37	0.97	0.21	0.22	0.13	0.673
Davis 1G-9H - Production CSG		454358	12/1/2019	4:00 PM	6th Shipment		0.00	0.18	0.19	1.99	0.04	0.00	0.00	76.76	13.41	0.00	4.75	0.00	0.58	1.24	0.26	0.27	0.33	0.718
Davis 1G-9H - Surface CSG		454358	12/1/2019	4:00 PM	6th Shipment		0.00	90.30	0.16	3.64	0.01	0.00	0.00	5.78	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.134
Davis 1H-9H - Production CSG		454363	12/3/2019	9:30 AM	6th Shipment		0.00	0.18	0.33	2.92	0.02	0.00	0.00	79.57	12.22	0.00	3.25	0.00	0.33	0.81	0.13	0.13	0.11	0.692
Davis 1H-9H - Surface CSG		454363	12/3/2019	9:30 AM	6th Shipment		0.00	91.36	0.14	4.59	0.01	0.00	0.00	3.81	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.132
Davis 1I-9H - Production CSG		454852	12/3/2019	10:00 AM	6th Shipment		0.00	0.14	0.18	1.68	0.13	0.00	0.00	78.24	13.01	0.00	4.78	0.00	0.51	1.03	0.15	0.14	0.07	0.701
Davis 1I-9H - Surface CSG		454852	12/3/2019	10:00 AM	6th Shipment		0.00	6.89	0.35	5.19	0.00	0.00	0.00	79.82	6.51	0.01	1.12	0.00	0.06	0.02	0.00	0.00	0.01	0.588
Davis 1J-9H - Production CSG		454359	12/3/2019	10:30 AM	6th Shipment		0.00	0.14	0.28	1.15	0.63	0.00	0.00	77.15	12.88	0.00	4.82	0.00	0.67	1.41	0.36	0.32	0.34	0.723
Davis 1J-9H - Surface CSG		454359	12/3/2019	10:30 AM	6th Shipment		0.00	0.96	0.22	1.54	0.01	0.00	0.00	82.48	10.61	0.00	3.28	0.00	0.34	0.48	0.05	0.02	0.01	0.654
Davis 1K-9H - Production CSG		454368	12/3/2019	11:00 AM	6th Shipment		0.00	0.02	0.32	1.57	2.19	0.00	0.00	79.12	14.83	0.00	1.19	0.00	0.15	0.37	0.08	0.09	0.09	0.679
Davis 1K-9H - Surface CSG		454368	12/3/2019	11:00 AM	6th Shipment		0.00	4.29	0.26	2.01	0.52	0.00	0.00	76.87	14.31	0.00	1.08	0.00	0.13	0.34	0.07	0.08	0.06	0.639
Davis 1L-9H - Production CSG		454687	12/3/2019	11:30 AM	6th Shipment		0.00	0.02	0.71	3.07	2.13	0.00	0.00	78.20	14.54	0.00	0.07	0.00	0.10	0.25	0.06	0.05	0.06	0.678
Davis 1L-9H - Surface CSG		454687	12/3/2019	11:30 AM	6th Shipment		0.00	7.39	0.75	5.91	0.01	0.00	0.00	73.92	9.62	0.00	2.27	0.00	0.09	0.04	0.00	0.00	0.00	0.617
Davis 1M-9H - Production CSG		454370	12/3/2019	12:00 PM	6th Shipment		0.00	0.12	0.12	1.02	0.11	0.00	0.00	76.30	13.47	0.00	5.43	0.00	0.76	1.60	0.38	0.34	0.35	0.734
Davis 1M-9H - Surface CSG		454370	12/3/2019	12:00 PM	6th Shipment		0.00	76.36	0.17	23.15	0.01	0.00	0.00	0.20	0.05	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.01	0.283
Davis 1N-9H - Production CSG		454357	12/3/2019	12:30 PM	6th Shipment		0.00	0.12	0.38	1.95	0.14	0.00	0.00	76.41	12.48	0.00	4.96	0.00	0.64	1.46	0.37	0.45	0.65	0.735
Davis 1N-9H - Surface CSG		454357	12/3/2019	12:30 PM	6th Shipment		0.00	79.18	1.92	12.24	0.02	0.00	0.00	4.86	0.03	0.00	0.09	0.00	0.07	0.29	0.23	0.29	0.77	0.267
Davis 1O-9H - Production CSG		454355	12/3/2019	1:00 PM	6th Shipment		0.00	0.09	0.30	1.68	0.10	0.00	0.00	79.31	12.22	0.00	4.28	0.00	0.47	0.95	0.18	0.19	0.22	0.697
Davis 1O-9H - Surface CSG		454355	12/3/2019	1:00 PM	6th Shipment		0.00	93.15	0.17	4.33	0.01	0.00	0.00	2.31	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.122
Davis 1Q-9H - Production CSG		454362	12/3/2019	1:30 PM	6th Shipment		0.00	0.14	0.27	1.46	0.05	0.00	0.00	80.54	11.85	0.00	3.79	0.00	0.40	0.84	0.16	0.18	0.31	0.687
Davis 1Q-9H - Surface CSG		454362	12/3/2019	1:30 PM	6th Shipment		0.00	1.46	0.40	3.02	0.00	0.00	0.00	74.74	12.97	0.00	5.49	0.00	0.58	1.05	0.12	0.07	0.09	0.707
Davis 1R-9H - Production CSG		454356	12/3/2019	2:00 PM	6th Shipment		0.00	0.15	0.33	1.75	0.09	0.00	0.00	77.33	13.15	0.00	4.59	0.00	0.57	1.12	0.28	0.27	0.37	0.715
Davis 1R-9H - Surface CSG		454356	12/3/2019	2:00 PM	6th Shipment		0.00	21.47	0.17	2.97	0.01	0.00	0.00	73.16	2.10	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.02	0.475
Davis 1T-9H - Production CSG		454367	12/3/2019	2:00 PM	6th Shipment		0.00	0.07	0.24	1.46	0.06	0.00	0.00	78.21	12.10	0.00	4.62	0.00	0.62	1.43	0.36	0.41	0.42	0.720
Davis 1T-9H - Surface CSG		454367	12/3/2019	2:00 PM	6th Shipment		0.00	84.11	0.22	4.14	0.01	0.00	0.00	11.39	0.12	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.166
Dier 33-8 - Production CSG		256299	12/1/2019	12:16 PM	6th Shipment		0.00	0.06	0.23	1.17	1.98	0.00	0.00	74.39	14.22	0.00	6.74	0.00	0.88	0.00	0.24	0.10	0.00	0.732
Dier 33-8 - Surface CSG		256299	12/1/2019	-	6th Shipment		0.00	0.00	0.28	1.84	0.00	0.00	0.00	79.49	11.07	0.00	4.56	0.00	0.54	0.38	0.28	0.32	0.22	0.708
Elmqvist 21-23 - Production CSG		276477	10/30/2018	8:45 AM	2nd Shipment		0.00	0.01	0.37	1.53	1.74	0.00	0.03	74.93	12.85	0.00	5.61	0.00	0.73	1.79	0.24	0.17	0.00	0.740
Elmqvist 4-2-23 - Production CSG		418698	10/29/2018	3:03 PM	2nd Shipment		0.00	0.17	0.66	2.57	1.79	0.00	0.03	71.28	12.80	0.00	6.04	0.00	0.86	2.29	0.62	0.76	0.12	0.761
Elmqvist 4-4-23 - Surface CSG		4																						



PRODUCED GAS ISOTOPE ANALYSIS

Crestone Peak Resources Crestone Peak Resources Produced Gases, Colorado

Sample ID	Cylinder ID Number	COGCC ID	Sampling Date	Sampling Time	Shipment	Casing Pressure (psia)	Hydrocarbon Gas Composition							C6+ Conc. (mole %)
							C1 Conc. (mole %)	C2 Conc. (mole %)	C3 Conc. (mole %)	iC4 Conc. (mole %)	nC4 Conc. (mole %)	iC5 Conc. (mole %)	nC5 Conc. (mole %)	
Anderson 4-2-32 - Production CSG		420311	11/15/2018	8:00 AM	4th Shipment		84.06	10.89	3.57	0.36	0.73	0.12	0.12	0.13
Anderson 4-2-32 - Surface CSG		420311	11/15/2018	8:05 AM	4th Shipment		83.03	9.67	5.05	0.63	1.24	0.00	0.21	0.17
Aristocrat 4-0-3 - Production CSG		421915	11/11/2019	9:30 AM	8th Shipment		79.19	12.27	4.79	0.87	1.75	0.55	0.48	0.11
Aristocrat 4-0-3 - Surface CSG		421915	11/11/2019	9:30 AM	8th Shipment		81.32	11.37	4.91	0.68	1.09	0.28	0.17	0.18
Bell 34-26 - Production CSG		256596	10/19/2018	1:30 PM	1st Shipment		71.44	16.14	6.66	1.37	2.39	1.04	0.70	0.25
Cosslett 32-22 - Production CSG		420875	11/11/2018	9:00 AM	2nd Shipment		77.97	12.54	5.62	0.80	1.86	0.42	0.44	0.24
Cosslett 32-22 - Surface CSG		420875	11/11/2018	9:00 AM	2nd Shipment		84.35	9.59	4.27	0.44	0.86	0.17	0.17	0.15
Cosslett 4-0-22 - Production CSG		420763	11/11/2018	8:00 AM	2nd Shipment		79.01	12.51	5.40	0.70	1.53	0.31	0.30	0.24
Cosslett 4-0-22 - Surface CSG		420763	11/11/2018	8:00 AM	2nd Shipment		84.54	8.11	4.68	0.71	1.25	0.29	0.25	0.17
Cosslett 6-4-22 - Production CSG		420884	11/11/2018	10:30 AM	2nd Shipment		76.73	12.87	5.91	0.88	2.14	0.50	0.55	0.42
Cosslett 6-4-22 - Surface CSG		420884	11/11/2018	10:30 AM	2nd Shipment		81.73	10.14	5.10	0.65	1.47	0.32	0.33	0.27
Cosslett B1X - Production CSG		244835	12/21/2018	-	6th Shipment		77.92	13.51	5.94	0.80	1.55	0.17	0.09	0.02
Cosslett B1X - Surface CSG		244835	12/21/2018	-	6th Shipment		82.73	9.43	4.86	0.65	1.40	0.32	0.33	0.28
Davis 1D-9H - Production CSG		454502	12/11/2019	2:30 PM	6th Shipment		79.97	12.81	4.64	0.60	1.26	0.26	0.27	0.19
Davis 1D-9H - Surface CSG		454502	12/11/2019	2:30 PM	6th Shipment		96.15	3.69	0.15	0.00	0.00	0.00	0.00	0.01
Davis 1F-9H - Production CSG		454371	12/11/2019	3:30 PM	6th Shipment		80.91	7.89	2.69	0.42	1.13	0.79	1.28	4.88
Davis 1F-9H - Surface CSG		454371	12/11/2019	3:30 PM	6th Shipment		84.35	10.67	3.04	0.38	1.00	0.22	0.22	0.13
Davis 1G-9H - Production CSG		454358	12/11/2019	4:00 PM	6th Shipment		78.65	13.74	4.87	0.59	1.27	0.26	0.27	0.34
Davis 1G-9H - Surface CSG		454358	12/11/2019	4:00 PM	6th Shipment		98.17	1.01	0.22	0.03	0.08	0.05	0.08	0.36
Davis 1H-9H - Production CSG		454363	12/31/2019	9:30 AM	6th Shipment		82.41	12.96	3.36	0.34	0.84	0.14	0.14	0.12
Davis 1H-9H - Surface CSG		454363	12/31/2019	9:30 AM	6th Shipment		97.78	1.43	0.36	0.04	0.09	0.03	0.05	0.21
Davis 1I-9H - Production CSG		454852	12/31/2019	10:00 AM	6th Shipment		79.94	13.29	4.83	0.52	1.05	0.15	0.14	0.07
Davis 1I-9H - Surface CSG		454852	12/31/2019	10:00 AM	6th Shipment		91.16	7.44	1.28	0.07	0.03	0.00	0.00	0.02
Davis 1J-9H - Production CSG		454359	12/31/2019	10:30 AM	6th Shipment		78.77	13.15	4.92	0.68	1.44	0.37	0.33	0.34
Davis 1J-9H - Surface CSG		454359	12/31/2019	10:30 AM	6th Shipment		84.79	10.91	3.37	0.35	0.49	0.06	0.02	0.01
Davis 1K-9H - Production CSG		454368	12/31/2019	11:00 AM	6th Shipment		82.50	15.46	1.24	0.15	0.38	0.08	0.09	0.09
Davis 1K-9H - Surface CSG		454368	12/31/2019	11:00 AM	6th Shipment		82.72	15.40	1.16	0.14	0.36	0.08	0.08	0.06
Davis 1L-9H - Production CSG		454687	12/31/2019	11:30 AM	6th Shipment		83.12	15.45	0.88	0.11	0.26	0.06	0.06	0.05
Davis 1L-9H - Surface CSG		454687	12/31/2019	11:30 AM	6th Shipment		86.01	11.19	2.64	0.11	0.04	0.00	0.00	0.01
Davis 1M-9H - Production CSG		454370	12/31/2019	12:00 PM	6th Shipment		77.36	13.65	5.50	0.77	1.62	0.38	0.35	0.35
Davis 1M-9H - Surface CSG		454370	12/31/2019	12:00 PM	6th Shipment		84.93	16.87	9.33	1.43	3.25	1.00	0.98	2.11
Davis 1N-9H - Production CSG		454357	12/31/2019	12:30 PM	6th Shipment		78.44	12.81	5.09	0.66	1.50	0.38	0.46	0.67
Davis 1N-9H - Surface CSG		454357	12/31/2019	12:30 PM	6th Shipment		73.19	0.45	1.42	1.09	4.38	3.48	4.43	11.56
Davis 1O-9H - Production CSG		454355	12/31/2019	1:00 PM	6th Shipment		81.08	12.50	4.38	0.48	0.97	0.18	0.19	0.23
Davis 1O-9H - Surface CSG		454355	12/31/2019	1:00 PM	6th Shipment		98.69	0.24	0.13	0.03	0.10	0.06	0.09	0.65
Davis 1Q-9H - Production CSG		454362	12/31/2019	1:30 PM	6th Shipment		82.13	12.08	3.87	0.40	0.86	0.16	0.18	0.32
Davis 1Q-9H - Surface CSG		454362	12/31/2019	1:30 PM	6th Shipment		78.58	13.63	5.77	0.61	1.11	0.13	0.07	0.09
Davis 1R-9H - Production CSG		454356	12/31/2019	2:00 PM	6th Shipment		79.17	13.46	4.69	0.58	1.15	0.29	0.27	0.38
Davis 1R-9H - Surface CSG		454356	12/31/2019	2:00 PM	6th Shipment		97.06	2.78	0.12	0.00	0.01	0.00	0.00	0.02
Davis 1T-9H - Production CSG		454367	12/31/2019	2:00 PM	6th Shipment		79.67	12.32	4.71	0.63	1.46	0.37	0.42	0.42
Davis 1T-9H - Surface CSG		454367	12/31/2019	2:00 PM	6th Shipment		98.79	1.06	0.05	0.01	0.02	0.01	0.02	0.04
Dier 33-8 - Production CSG		256299	12/11/2019	12:16 PM	6th Shipment		77.03	14.73	6.98	0.91	0.00	0.25	0.10	0.00
Dier 33-8 - Surface CSG		256299	12/11/2019	-	6th Shipment		81.22	11.31	4.66	0.55	1.41	0.29	0.33	0.23
Elmqvist 21-23 - Production CSG		276477	10/30/2018	8:45 AM	2nd Shipment		77.79	13.34	5.83	0.76	1.85	0.25	0.17	0.00
Elmqvist 4-4-23 - Production CSG		418698	10/29/2018	3:03 PM	2nd Shipment		75.21	13.50	6.38	0.91	2.42	0.66	0.60	0.12
Elmqvist 4-4-23 - Surface CSG		418698	10/29/2018	2:55 PM	2nd Shipment		99.75	0.12	0.05	0.01	0.02	0.01	0.01	0.03
File 3A-32H - Production CSG		452934	10/4/2018	10:40 AM	1st Shipment		78.41	12.13	5.04	0.77	1.78	0.49	0.53	0.84
File 3A-32H - Surface CSG		452934	10/4/2018	10:40 AM	1st Shipment		99.23	0.68	0.05	0.01	0.01	0.00	0.00	0.02
Geist 22-32 - Production CSG		256935	10/25/2018	1:00 PM	2nd Shipment		78.50	11.46	4.81	0.80	1.83	0.66	0.75	1.19
Geist A 1 - Production CSG		243676	10/25/2018	-	2nd Shipment		75.75	12.86	5.76	0.82	2.20	0.52	0.65	0.84
Geist A 1 - Surface CSG		243676	10/25/2018	11:30 AM	2nd Shipment		80.18	11.27	5.46	0.60	1.46	0.30	0.34	0.38
Halley 41-22 - Production CSG		277424	11/11/2018	1:25 PM	2nd Shipment		81.37	11.69	4.89	0.57	1.10	0.16	0.13	0.09
Halley 4-2-22 - Production CSG		301057	11/11/2018	11:25 AM	2nd Shipment		84.31	11.86	2.46	0.22	0.91	0.12	0.09	0.02
Halley 4-2-22 - Surface CSG		301057	11/11/2018	11:20 AM	2nd Shipment		84.98	8.23	4.26	0.94	1.03	0.25	0.18	0.13
Halley 8-4-22 - Production CSG		301056	11/11/2018	11:30 AM	2nd Shipment		80.66	12.07	4.64	0.55	1.27	0.26	0.30	0.26
Halley 8-4-22 - Surface CSG		301056	11/11/2018	11:30 AM	2nd Shipment		84.25	6.26	5.02	1.52	1.65	0.47	0.35	0.47
Hennen 1 - Production CSG		241069	10/11/2018	8:40 AM	1st Shipment		75.51	14.46	6.95	0.80	1.71	0.24	0.23	0.10
Hennen 1 - Surface CSG		241069	9/13/2018	1:00 PM	1st Shipment		82.88	11.25	3.97	0.41	0.87	0.17	0.20	0.24
Hennen 1B-33H - Production CSG		457034	12/21/2018	12:00 PM	6th Shipment		90.48	7.26	2.10	0.10	0.05	0.00	0.00	0.01
Hennen 1B-33H - Surface CSG		457034	12/21/2018	9:00 AM	6th Shipment		83.15	5.73	1.04	0.04	0.02	0.00	0.00	0.01
Hennen 1C-33H - Surface CSG		457039	12/11/2019	9:00 AM	6th Shipment		99.24	0.67	0.05	0.00	0.01	0.00	0.00	0.01
Hennen 1D-33H - Surface CSG		457036	12/11/2019	9:00 AM	6th Shipment		95.42	4.08	0.48	0.02	0.01	0.00	0.00	0.00
Hennen 1E-33H - Surface CSG		457033	12/11/2019	9:30 AM	6th Shipment		90.94	6.01	2.09	0.23	0.45	0.09	0.09	0.11
Hennen 1F-33H - Surface CSG		457035	12/11/2019	12:00 PM	6th Shipment		96.05	3.62	0.31	0.01	0.00	0.00	0.00	0.01
Hennen 1G-33H - Surface CSG		457037	12/11/2019	10:30 AM	6th Shipment		90.57	7.61	1.66	0.08	0.06	0.01	0.01	0.01
Hennen 1H-33H - Surface CSG		457038	12/11/2019	12:00 PM	6th Shipment		88.06	8.47	1.91	0.24	0.36	0.08	0.14	0.74
Hennen 1I-33H - Surface CSG		457038	12/11/2019	11:30 AM	6th Shipment		85.62	9.86	3.07	0.29	0.59	0.10	0.11	0.16
Hennen 1J-33H - Surface CSG		457040	12/11/2019	9:30 AM	6th Shipment		85.23	10.07	3.31	0.35	0.67	0.10	0.13	0.14
Hennen 31-33 - Surface CSG		265302	1/21/2019	-	6th Shipment		81.72	11.32	4.58	0.46	1.18	0.29	0.23	0.22
Hennen 42-33 - Production CSG		8168651	9/13/2018	8:45 AM	1st Shipment		78.33	13.06	5.34	0.71	1.66	0.34	0.01	0.21
Hennen 42-33 - Surface CSG		8168651	9/13/2018	8:45 AM	1st Shipment		84.64	8.44	4.62	0.54	1.11	0.22	0.23	0.22
Hwy 52 4B-32H - Production CSG		434579	12/4/2018	9:30 AM	4th Shipment		84.41	10.44	3.51	0.38	0.84	0.15	0.15	0.11
Hwy 52 4B-32H - Surface CSG		434579	12/4/2018	9:35 AM	4th Shipment		83.21	10.84	3.83	0.44	0.99	0.22	0.25	0.22



PRODUCED GAS ISOTOPE ANALYSIS

Crestone Peak Resources Crestone Peak Resources Produced Gases, Colorado

Sample ID	Cylinder ID Number	COGCC ID	Sampling Date	Sampling Time	Shipment	Casing Pressure (psia)	BTU Content		Calculated Ratios		C1/C2 Ratio (mole/mole)	iC4/nC4 Ratio (mole/mole)
							Total Gas (BTU/lb)	Hydrocar. Gas (BTU/lb)	Total HC Gas (ppm by mole)	Wetness (C2 - nC5)		
Anderson 4-2-32 - Production CSG		420311	11/15/2018	8:00 AM	4th Shipment		1,160	1,183	980,433	15.82	8	0.49
Anderson 4-2-32 - Surface CSG		420311	11/15/2018	8:05 AM	4th Shipment		1,187	1,214	977,763	16.84	9	0.51
Aristocrat 4-0-3 - Production CSG		421915	1/11/2019	9:30 AM	6th Shipment		1,213	1,268	955,624	20.72	6	0.50
Aristocrat 4-0-3 - Surface CSG		421915	1/11/2019	9:30 AM	6th Shipment		1,213	1,230	986,250	18.53	7	0.63
Bell 34-26 - Production CSG		256596	10/19/2018	1:30 PM	1st Shipment		1,256	1,379	910,586	28.37	4	0.57
Cosslett 32-22 - Production CSG		420875	11/12/2018	9:00 AM	2nd Shipment		1,247	1,265	970,087	21.84	6	0.43
Cosslett 32-22 - Surface CSG		420875	11/12/2018	9:00 AM	2nd Shipment		1,163	1,192	975,945	15.52	9	0.51
Cosslett 4-0-22 - Production CSG		420783	11/12/2018	8:00 AM	2nd Shipment		1,220	1,264	965,685	20.80	6	0.46
Cosslett 4-0-22 - Surface CSG		420783	11/12/2018	8:00 AM	2nd Shipment		1,159	1,209	958,724	15.32	10	0.57
Cosslett 6-4-22 - Production CSG		420884	11/12/2018	10:30 AM	2nd Shipment		1,250	1,312	952,524	22.95	6	0.41
Cosslett 6-4-22 - Surface CSG		420884	11/12/2018	10:30 AM	2nd Shipment		1,212	1,241	976,681	18.06	8	0.44
Cosslett B1X - Production CSG		244835	12/21/2018	-	6th Shipment		1,220	1,263	965,752	22.07	6	0.52
Cosslett B1X - Surface CSG		244835	12/21/2018	-	6th Shipment		1,201	1,231	975,323	17.04	9	0.46
Davis 1D-9H - Production CSG		454502	1/21/2019	2:30 PM	6th Shipment		1,217	1,242	979,815	19.87	6	0.47
Davis 1D-9H - Surface CSG		454502	1/21/2019	2:30 PM	6th Shipment		508	1,041	488,617	3.85	26	1.23
Davis 1F-9H - Production CSG		454371	1/21/2019	3:30 PM	6th Shipment		8	1,390	5,715	14.94	10	0.38
Davis 1F-9H - Surface CSG		454371	1/21/2019	3:30 PM	6th Shipment		1,160	1,186	978,060	15.54	8	0.38
Davis 1G-9H - Production CSG		454358	1/21/2019	4:00 PM	6th Shipment		1,228	1,258	975,945	21.08	6	0.47
Davis 1G-9H - Surface CSG		454358	1/21/2019	4:00 PM	6th Shipment		61	1,041	58,923	1.47	97	0.37
Davis 1H-9H - Production CSG		454363	1/23/2019	9:30 AM	6th Shipment		1,155	1,196	965,625	17.49	7	0.40
Davis 1H-9H - Surface CSG		454363	1/23/2019	9:30 AM	6th Shipment		41	1,040	38,972	2.02	68	0.51
Davis 1I-9H - Production CSG		454852	1/23/2019	10:00 AM	6th Shipment		1,204	1,230	978,714	20.00	6	0.50
Davis 1I-9H - Surface CSG		454852	1/23/2019	10:00 AM	6th Shipment		953	1,089	875,546	8.62	12	2.39
Davis 1J-9H - Production CSG		454359	1/23/2019	10:30 AM	6th Shipment		1,206	1,239	979,424	20.95	6	0.48
Davis 1J-9H - Surface CSG		454359	1/23/2019	10:30 AM	6th Shipment		1,134	1,165	972,758	15.20	8	0.72
Davis 1K-9H - Production CSG		454368	1/23/2019	11:00 AM	6th Shipment		1,119	1,167	959,071	17.43	5	0.40
Davis 1K-9H - Surface CSG		454368	1/23/2019	11:00 AM	6th Shipment		1,081	1,163	929,254	17.23	5	0.38
Davis 1L-9H - Production CSG		454687	1/23/2019	11:30 AM	6th Shipment		1,086	1,155	940,799	16.83	5	0.40
Davis 1L-9H - Surface CSG		454687	1/23/2019	11:30 AM	6th Shipment		979	1,139	859,462	13.99	8	2.45
Davis 1M-9H - Production CSG		454370	1/23/2019	12:00 PM	6th Shipment		1,268	1,286	986,264	22.36	6	0.48
Davis 1M-9H - Surface CSG		454370	1/23/2019	12:00 PM	6th Shipment		5	1,525	3,068	33.66	4	0.44
Davis 1N-9H - Production CSG		454357	1/23/2019	12:30 PM	6th Shipment		1,249	1,283	974,176	21.03	6	0.44
Davis 1N-9H - Surface CSG		454357	1/23/2019	12:30 PM	6th Shipment		121	1,828	66,423	17.24	162	0.25
Davis 1O-9H - Production CSG		454355	1/23/2019	1:00 PM	6th Shipment		1,196	1,223	978,204	18.74	6	0.49
Davis 1O-9H - Surface CSG		454355	1/23/2019	1:00 PM	6th Shipment		25	1,046	23,456	0.66	408	0.30
Davis 1Q-9H - Production CSG		454362	1/23/2019	1:30 PM	6th Shipment		1,187	1,211	980,705	17.61	7	0.47
Davis 1Q-9H - Surface CSG		454362	1/23/2019	1:30 PM	6th Shipment		1,188	1,249	951,158	21.35	6	0.55
Davis 1R-9H - Production CSG		454356	1/23/2019	2:00 PM	6th Shipment		1,224	1,253	976,757	20.53	6	0.51
Davis 1R-9H - Surface CSG		454356	1/23/2019	2:00 PM	6th Shipment		780	1,034	753,807	2.92	35	0.67
Davis 1T-9H - Production CSG		454367	1/23/2019	2:00 PM	6th Shipment		1,238	1,281	981,771	19.99	6	#331/01
Davis 1T-9H - Surface CSG		454367	1/23/2019	2:00 PM	6th Shipment		118	1,022	115,269	1.17	93	0.37
Dier 33-8 - Production CSG		256299	10/12/2018	12:16 PM	6th Shipment		1,215	1,258	965,620	22.96	5	0.43
Dier 33-8 - Surface CSG		256299	1/21/2019	-	6th Shipment		1,211	1,237	978,759	18.60	7	0.39
Elmquist 21-23 - Production CSG		278477	10/30/2018	8:45 AM	2nd Shipment		1,224	1,271	963,174	22.21	6	0.41
Elmquist 4-4-23 - Production CSG		416898	10/29/2018	3:03 PM	2nd Shipment		1,262	1,332	947,756	24.70	6	0.38
Elmquist 4-4-23 - Surface CSG		416898	10/28/2018	2:55 PM	2nd Shipment		738	1,014	727,992	0.22	828	0.63
File 3A-32H - Production CSG		452934	10/42/2018	10:40 AM	1st Shipment		1,159	1,297	893,329	20.92	6	0.43
File 3A-32H - Surface CSG		452934	10/42/2018	10:40 AM	1st Shipment		934	1,017	918,636	0.75	147	0.54
Geist 22-32 - Production CSG		266935	10/25/2018	1:00 PM	2nd Shipment		1,265	1,315	961,350	20.55	7	0.44
Geist A 1 - Production CSG		243676	10/25/2018	-	2nd Shipment		1,298	1,349	962,510	23.40	6	0.37
Geist A 1 - Surface CSG		243676	10/25/2018	11:30 AM	2nd Shipment		1,124	1,258	893,356	19.51	7	0.41
Haley 4-2-22 - Production CSG		301057	11/12/2018	1:25 PM	2nd Shipment		1,181	1,222	966,599	18.56	7	0.52
Haley 4-2-22 - Surface CSG		301057	11/12/2018	11:25 AM	2nd Shipment		1,128	1,170	964,509	15.67	7	0.24
Haley 4-2-22 - Surface CSG		301057	11/12/2018	11:20 AM	2nd Shipment		1,136	1,199	947,954	14.91	10	0.92
Haley 8-4-22 - Production CSG		301056	11/12/2018	-	2nd Shipment		1,207	1,239	974,523	19.13	7	0.43
Haley 8-4-22 - Surface CSG		301056	11/12/2018	11:30 AM	2nd Shipment		582	1,247	467,023	15.35	13	0.92
Hermen 1 - Production CSG		241069	10/12/2018	8:40 AM	1st Shipment		1,015	1,299	781,419	24.41	5	0.47
Hermen 1 - Surface CSG		241069	9/13/2018	1:00 PM	1st Shipment		1,086	1,204	901,780	16.92	7	0.47
Hermen 1B-33H - Production CSG		457034	1/21/2019	12:00 PM	6th Shipment		614	1,101	557,762	9.51	12	2.01
Hermen 1B-33H - Surface CSG		457034	1/21/2019	9:00 AM	6th Shipment		691	1,071	645,155	6.84	16	2.13
Hermen 1C-33H - Surface CSG		457039	1/21/2019	9:00 AM	6th Shipment		141	1,017	139,004	0.74	147	0.43
Hermen 1D-33H - Surface CSG		457036	1/21/2019	9:00 AM	6th Shipment		330	1,049	314,343	4.58	23	2.93
Hermen 1E-33H - Surface CSG		457033	1/21/2019	9:00 AM	6th Shipment		8	1,112	7,442	8.96	15	0.52
Hermen 1F-33H - Surface CSG		457035	1/21/2019	12:00 PM	6th Shipment		90	1,043	86,190	3.94	27	2.79
Hermen 1G-33H - Surface CSG		457037	1/21/2019	10:30 AM	6th Shipment		161	1,097	146,576	9.42	12	1.29
Hermen 1H-33H - Surface CSG		457038	1/21/2019	12:00 PM	6th Shipment		1	1,151	814	11.28	10	0.67
Hermen 1I-33H - Surface CSG		457038	1/21/2019	11:30 AM	6th Shipment		24	1,163	20,890	14.05	9	0.49
Hermen 1J-33H - Surface CSG		457040	1/21/2019	9:30 AM	6th Shipment		5	1,171	4,658	14.65	8	0.51
Hermen 31-33 - Surface CSG		265302	1/22/2019	-	6th Shipment		1,113	1,226	908,261	18.10	7	0.39
Hermen 42-33 - Production CSG		260651	9/13/2018	8:45 AM	1st Shipment		1,137	1,266	897,847	21.50	6	0.43
Hermen 42-33 - Surface CSG		260651	9/13/2018	8:45 AM	1st Shipment		1,072	1,202	892,119	15.18	10	0.46
Hwy 52 4B-32H - Production CSG		434579	12/4/2018	9:30 AM	4th Shipment		1,148	1,183	970,209	15.49	8	0.46
Hwy 52 4B-32H - Surface CSG		434579	12/4/2018	9:35 AM	4th Shipment		1,162	1,205	964,932	16.61	8	0.44