

Gas Quality Reports

LS225 - C.V. to Saginaw at Saginaw

5/17/2019 - 8/17/2019

Gas Day	Gross Heating Value (HHV) (Btu/scf)	Net Heating Value (LHV) (Btu/scf)	Specific Gravity	Wobbe Index	Hydrocarbon Dewpoint (HCDP) (deg F)	N2 (mol%)	CO2 (mol%)	Methane (mol%)	Ethane (mol%)	Propane (mol%)	Isobutane (mol%)	N-Butane (mol%)	Isopentane (mol%)	N-Pentane (mol%)	C6 Plus (mol%)
05/17/2019	1,032.2	1,014.2	0.594	1,338.87	-46.70	1.784	0.578	92.773	4.488	0.252	0.027	0.044	0.013	0.013	0.029
05/18/2019	1,032.2	1,014.2	0.594	1,338.87	-46.70	1.784	0.578	92.773	4.488	0.252	0.027	0.044	0.013	0.013	0.029
05/19/2019	1,032.2	1,014.2	0.594	1,338.87	-46.70	1.784	0.578	92.773	4.488	0.252	0.027	0.044	0.013	0.013	0.029
05/20/2019	1,032.2	1,014.2	0.594	1,338.87	-46.70	1.784	0.578	92.773	4.488	0.252	0.027	0.044	0.013	0.013	0.029
05/21/2019	1,032.2	1,014.2	0.594	1,338.87	-46.70	1.784	0.578	92.773	4.488	0.252	0.027	0.044	0.013	0.013	0.029
05/22/2019	1,032.2	1,014.2	0.594	1,338.87	-46.70	1.784	0.578	92.773	4.488	0.252	0.027	0.044	0.013	0.013	0.029
05/23/2019	1,032.2	1,014.2	0.594	1,338.87	-46.70	1.784	0.578	92.773	4.488	0.252	0.027	0.044	0.013	0.013	0.029
05/24/2019	1,032.2	1,014.2	0.594	1,338.87	-46.70	1.784	0.578	92.773	4.488	0.252	0.027	0.044	0.013	0.013	0.029
05/25/2019	1,032.2	1,014.2	0.594	1,338.87	-46.70	1.784	0.578	92.773	4.488	0.252	0.027	0.044	0.013	0.013	0.029
05/26/2019	1,032.2	1,014.2	0.594	1,338.87	-46.70	1.784	0.578	92.773	4.488	0.252	0.027	0.044	0.013	0.013	0.029
05/27/2019	1,037.5	1,019.5	0.597	1,343.21	-58.52	1.703	0.563	92.215	5.173	0.251	0.022	0.037	0.008	0.008	0.020
05/28/2019	1,032.2	1,014.2	0.591	1,343.15	-146.58	1.586	0.473	93.258	4.424	0.193	0.015	0.025	0.006	0.006	0.014
05/29/2019	1,035.0	1,017.0	0.593	1,344.54	-144.73	1.541	0.517	92.867	4.816	0.198	0.015	0.025	0.006	0.006	0.009
05/30/2019	1,028.2	1,010.3	0.586	1,342.94	-151.25	1.496	0.420	94.008	3.895	0.128	0.011	0.021	0.005	0.006	0.010
05/31/2019	1,028.9	1,011.0	0.587	1,342.94	-149.62	1.584	0.384	93.908	3.856	0.189	0.020	0.033	0.008	0.007	0.012
06/01/2019	1,025.2	1,007.4	0.586	1,339.16	-152.32	1.761	0.357	93.962	3.690	0.179	0.014	0.020	0.004	0.004	0.009
06/02/2019	1,026.0	1,008.2	0.586	1,339.87	-152.01	1.755	0.348	93.869	3.806	0.176	0.012	0.019	0.004	0.003	0.006
06/03/2019	1,022.8	1,005.0	0.583	1,339.51	-156.27	1.652	0.333	94.521	3.311	0.145	0.010	0.015	0.003	0.003	0.005
06/04/2019	1,022.8	1,005.0	0.583	1,339.51	-156.27	1.652	0.333	94.521	3.311	0.145	0.010	0.015	0.003	0.003	0.005
06/05/2019	1,020.1	1,002.3	0.585	1,334.21	-156.47	1.902	0.372	94.214	3.317	0.161	0.008	0.014	0.003	0.003	0.006
06/06/2019	1,017.0	999.3	0.584	1,331.24	-158.99	1.950	0.404	94.381	3.108	0.128	0.007	0.012	0.003	0.003	0.005
06/07/2019	1,016.1	998.4	0.583	1,330.45	-159.86	1.952	0.416	94.454	3.030	0.123	0.005	0.010	0.002	0.002	0.005
06/08/2019	1,017.4	999.7	0.583	1,332.59	-159.57	1.840	0.414	94.549	3.056	0.117	0.005	0.010	0.002	0.002	0.005
06/09/2019	1,021.0	1,003.3	0.583	1,337.42	-157.84	1.669	0.380	94.512	3.330	0.085	0.005	0.009	0.002	0.002	0.005
06/10/2019	1,020.0	1,002.3	0.583	1,335.90	-156.88	1.665	0.432	94.728	2.950	0.145	0.016	0.036	0.008	0.009	0.010
06/11/2019	1,019.6	1,001.8	0.588	1,329.91	-24.40	2.042	0.492	94.584	2.178	0.408	0.066	0.120	0.031	0.032	0.047
06/12/2019	1,021.7	1,004.0	0.583	1,338.56	-45.24	1.724	0.302	94.938	2.643	0.263	0.029	0.047	0.011	0.011	0.032
06/13/2019	1,021.4	1,003.7	0.581	1,339.58	-65.18	1.603	0.318	95.078	2.694	0.204	0.024	0.041	0.009	0.009	0.020
06/14/2019	1,020.1	1,002.3	0.581	1,338.78	-55.30	1.691	0.261	95.189	2.567	0.189	0.019	0.034	0.011	0.014	0.025
06/15/2019	1,018.5	1,000.8	0.580	1,337.15	-72.36	1.736	0.272	95.132	2.629	0.167	0.013	0.021	0.005	0.007	0.019
06/16/2019	1,018.5	1,000.8	0.583	1,333.51	-158.09	1.867	0.383	94.440	3.150	0.129	0.007	0.010	0.002	0.003	0.009
06/17/2019	1,016.7	999.0	0.581	1,334.18	-159.85	1.673	0.415	95.213	2.446	0.174	0.020	0.033	0.008	0.008	0.011
06/18/2019	1,019.9	1,002.2	0.581	1,337.84	-45.76	1.666	0.323	95.262	2.367	0.243	0.028	0.052	0.013	0.014	0.031
06/19/2019	1,022.8	1,005.0	0.583	1,339.76	-74.64	1.575	0.371	94.644	3.244	0.111	0.010	0.017	0.004	0.005	0.019
06/20/2019	1,023.1	1,005.3	0.584	1,338.41	-70.90	1.626	0.421	94.399	3.372	0.117	0.010	0.023	0.006	0.007	0.019
06/21/2019	1,022.6	1,004.8	0.586	1,335.77	-63.25	1.956	0.330	94.037	3.390	0.205	0.017	0.030	0.007	0.007	0.021
06/22/2019	1,023.4	1,005.6	0.587	1,335.70	-65.45	1.993	0.335	93.899	3.435	0.240	0.022	0.040	0.009	0.009	0.019
06/23/2019	1,022.5	1,004.7	0.584	1,337.61	-154.92	1.692	0.402	94.353	3.357	0.141	0.010	0.021	0.005	0.005	0.013
06/24/2019	1,018.8	1,001.0	0.585	1,332.48	-156.11	1.972	0.377	94.264	3.197	0.123	0.011	0.025	0.007	0.008	0.016
06/25/2019	1,021.2	1,003.4	0.585	1,334.89	-71.14	1.833	0.414	94.238	3.290	0.149	0.014	0.029	0.007	0.008	0.018
06/26/2019	1,020.7	1,003.0	0.584	1,335.89	-156.27	1.741	0.406	94.424	3.273	0.104	0.009	0.019	0.005	0.006	0.013
06/27/2019	1,021.9	1,004.1	0.584	1,337.73	-155.89	1.657	0.398	94.486	3.301	0.106	0.010	0.018	0.005	0.005	0.014
06/28/2019	1,023.4	1,005.6	0.585	1,338.00	-68.96	1.694	0.405	94.303	3.373	0.151	0.013	0.027	0.007	0.008	0.019

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06/29/2019	1,030.4	1,012.5	0.590	1,341.86	-46.54	1.716	0.400	93.780	3.576	0.353	0.037	0.077	0.017	0.019	0.026
06/30/2019	1,029.5	1,011.6	0.589	1,341.48	-43.07	1.722	0.387	93.960	3.386	0.357	0.038	0.082	0.019	0.022	0.028
07/01/2019	1,030.9	1,013.0	0.589	1,343.14	-29.51	1.658	0.383	94.108	3.236	0.367	0.045	0.106	0.026	0.031	0.041
07/02/2019	1,028.6	1,010.7	0.596	1,332.41	-28.73	2.523	0.331	92.603	3.825	0.470	0.053	0.102	0.024	0.027	0.041
07/03/2019	1,023.5	1,005.7	0.594	1,327.82	-48.99	2.668	0.326	92.551	3.964	0.358	0.029	0.054	0.012	0.013	0.025
07/04/2019	1,025.0	1,007.1	0.588	1,336.17	-67.27	1.861	0.445	93.636	3.806	0.182	0.012	0.025	0.006	0.007	0.019
07/05/2019	1,022.2	1,004.4	0.596	1,323.58	-146.40	2.967	0.325	91.806	4.506	0.332	0.017	0.026	0.005	0.005	0.010
07/06/2019	1,029.2	1,011.2	0.590	1,339.87	-50.08	1.823	0.399	93.628	3.677	0.304	0.033	0.074	0.018	0.020	0.023
07/07/2019	1,023.4	1,005.6	0.587	1,335.48	-38.66	1.593	0.607	94.364	3.052	0.222	0.028	0.062	0.016	0.019	0.036
07/08/2019	1,036.7	1,018.6	0.605	1,333.15	-30.97	2.504	0.566	90.876	5.472	0.369	0.045	0.086	0.021	0.021	0.039
07/09/2019	1,022.1	1,004.3	0.587	1,334.58	-61.73	1.898	0.417	93.969	3.496	0.143	0.014	0.027	0.007	0.008	0.022
07/10/2019	1,024.3	1,006.5	0.587	1,336.84	-152.52	1.830	0.409	93.768	3.796	0.155	0.010	0.017	0.003	0.004	0.009
07/11/2019	1,053.7	1,035.4	0.604	1,355.80	-26.49	1.637	0.419	91.658	5.187	0.758	0.071	0.168	0.031	0.037	0.034
07/12/2019	1,062.7	1,044.2	0.609	1,361.58	-2.86	1.579	0.417	91.292	5.267	0.909	0.100	0.249	0.055	0.064	0.067
07/13/2019	1,066.3	1,047.8	0.612	1,362.83	6.37	1.656	0.412	91.146	5.028	1.094	0.123	0.308	0.068	0.085	0.081
07/14/2019	1,046.8	1,028.6	0.601	1,350.73	-13.47	1.726	0.423	92.238	4.679	0.599	0.059	0.145	0.031	0.040	0.059
07/15/2019	1,030.3	1,012.4	0.590	1,341.08	-147.49	1.722	0.438	93.223	4.400	0.160	0.010	0.020	0.005	0.006	0.016
07/16/2019	1,030.5	1,012.6	0.591	1,340.53	-147.47	1.780	0.437	93.024	4.551	0.164	0.010	0.016	0.004	0.004	0.011
07/17/2019	1,041.2	1,023.1	0.608	1,335.36	-69.43	2.668	0.485	89.734	6.667	0.361	0.024	0.037	0.007	0.006	0.010
07/18/2019	1,048.0	1,029.8	0.602	1,350.17	-70.33	1.692	0.520	91.042	6.298	0.364	0.023	0.038	0.007	0.007	0.011
07/19/2019	1,039.8	1,021.7	0.594	1,348.80	-141.31	1.535	0.437	92.506	5.210	0.252	0.014	0.023	0.006	0.006	0.011
07/20/2019	1,040.2	1,022.1	0.594	1,349.25	-141.60	1.536	0.425	92.388	5.395	0.222	0.006	0.011	0.003	0.003	0.010
07/21/2019	1,038.2	1,020.1	0.593	1,348.51	-142.89	1.500	0.428	92.793	4.973	0.257	0.010	0.021	0.005	0.005	0.008
07/22/2019	1,035.2	1,017.2	0.592	1,345.91	-145.24	1.542	0.448	92.972	4.773	0.230	0.007	0.013	0.003	0.003	0.009
07/23/2019	1,034.6	1,016.6	0.591	1,345.31	-145.33	1.586	0.433	93.009	4.708	0.219	0.009	0.017	0.004	0.005	0.010
07/24/2019	1,034.7	1,016.7	0.593	1,343.53	-144.19	1.686	0.466	92.717	4.853	0.226	0.011	0.019	0.005	0.005	0.013
07/25/2019	1,036.0	1,018.0	0.595	1,343.59	-142.99	1.768	0.453	92.321	5.212	0.210	0.007	0.012	0.003	0.003	0.011
07/26/2019	1,032.1	1,014.1	0.591	1,342.77	-146.91	1.646	0.451	93.128	4.537	0.194	0.009	0.016	0.004	0.004	0.010
07/27/2019	1,033.0	1,015.0	0.591	1,343.51	-146.67	1.606	0.466	93.043	4.647	0.212	0.006	0.009	0.001	0.001	0.009
07/28/2019	1,032.8	1,014.8	0.591	1,343.69	-147.12	1.583	0.466	93.115	4.596	0.216	0.006	0.009	0.002	0.002	0.006
07/29/2019	1,031.6	1,013.6	0.589	1,343.83	-147.43	1.563	0.433	93.480	4.270	0.188	0.014	0.025	0.007	0.007	0.013
07/30/2019	1,032.2	1,014.3	0.590	1,344.34	-52.27	1.535	0.443	93.549	4.171	0.204	0.017	0.035	0.009	0.011	0.026
07/31/2019	1,024.6	1,006.8	0.588	1,336.53	-47.92	1.768	0.476	93.898	3.585	0.183	0.017	0.028	0.007	0.008	0.031
08/01/2019	1,026.7	1,008.8	0.589	1,337.42	-65.78	1.853	0.437	93.459	4.001	0.167	0.015	0.031	0.008	0.009	0.019
08/02/2019	1,032.1	1,014.1	0.595	1,338.47	-66.57	2.010	0.448	92.364	4.921	0.185	0.013	0.027	0.007	0.008	0.018
08/03/2019	1,041.1	1,023.0	0.599	1,345.20	-62.67	1.876	0.453	91.679	5.566	0.323	0.026	0.043	0.010	0.010	0.015
08/04/2019	1,044.6	1,026.4	0.597	1,351.92	-138.19	1.507	0.436	91.918	5.853	0.235	0.011	0.018	0.004	0.004	0.013
08/05/2019	1,055.2	1,036.8	0.604	1,357.27	-69.11	1.371	0.567	90.681	6.977	0.335	0.019	0.028	0.005	0.005	0.012
08/06/2019	1,055.3	1,037.0	0.604	1,358.34	-131.74	1.341	0.532	90.668	7.156	0.262	0.011	0.016	0.003	0.003	0.007
08/07/2019	1,054.6	1,036.3	0.603	1,357.74	-131.88	1.353	0.536	90.777	6.983	0.304	0.013	0.020	0.004	0.004	0.007
08/08/2019	1,054.6	1,036.3	0.603	1,357.74	-131.88	1.353	0.536	90.777	6.983	0.304	0.013	0.020	0.004	0.004	0.007
08/09/2019	1,054.6	1,036.3	0.603	1,357.74	-131.88	1.353	0.536	90.777	6.983	0.304	0.013	0.020	0.004	0.004	0.007
08/10/2019	1,054.6	1,036.3	0.603	1,357.74	-131.88	1.353	0.536	90.777	6.983	0.304	0.013	0.020	0.004	0.004	0.007

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5/17/2019 - 8/17/2019

Gas Day	Gross Heating Value (HHV) (Btu/scf)	Net Heating Value (LHV) (Btu/scf)	Specific Gravity	Wobbe Index	Hydrocarbon Dewpoint (HCDP) (deg F)	N2 (mol%)	CO2 (mol%)	Methane (mol%)	Ethane (mol%)	Propane (mol%)	Isobutane (mol%)	N-Butane (mol%)	Isopentane (mol%)	N-Pentane (mol%)	C6 Plus (mol%)
08/11/2019	1,054.6	1,036.3	0.603	1,357.74	-131.88	1.353	0.536	90.777	6.983	0.304	0.013	0.020	0.004	0.004	0.007
08/12/2019	1,054.6	1,036.3	0.603	1,357.74	-131.88	1.353	0.536	90.777	6.983	0.304	0.013	0.020	0.004	0.004	0.007
08/13/2019	1,054.6	1,036.3	0.603	1,357.74	-131.88	1.353	0.536	90.777	6.983	0.304	0.013	0.020	0.004	0.004	0.007
08/14/2019	1,054.6	1,036.3	0.603	1,357.74	-131.88	1.353	0.536	90.777	6.983	0.304	0.013	0.020	0.004	0.004	0.007
08/15/2019	1,054.6	1,036.3	0.603	1,357.74	-131.88	1.353	0.536	90.777	6.983	0.304	0.013	0.020	0.004	0.004	0.007

NOTES:**Wobbe Index:** Interchangeability constant calculated using the Gross (or Higher) Heating Value (HHV) divided by the square root of the Specific Gravity**Hydrocarbon Dewpoint (HCDP):** Theoretically determined value using the Redlich-Kwong equation of state (EOS)

Selection: Business Unit ID = 70; Analysis_Key = 53874