

Gas Quality Reports

LS195 - Fairfax at Tonganoxie

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	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/17/2019	1,022.2	1,004.5	0.589	1,331.48	-151.87	2.033	0.503	93.454	3.697	0.264	0.013	0.023	0.004	0.003	0.005
05/18/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/18/2019	1,056.7	1,038.4	0.608	1,355.74	-53.50	1.610	0.538	90.888	5.771	1.006	0.056	0.100	0.013	0.011	0.008
05/19/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/19/2019	1,079.8	1,061.0	0.621	1,370.40	-37.17	1.313	0.647	88.995	7.272	1.493	0.084	0.151	0.019	0.017	0.010
05/20/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/20/2019	1,076.7	1,058.0	0.623	1,364.28	-38.12	1.674	0.654	88.459	7.518	1.423	0.080	0.147	0.019	0.017	0.009
05/21/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/21/2019	1,069.7	1,051.1	0.627	1,350.78	-29.61	2.547	0.622	87.505	7.621	1.387	0.086	0.165	0.025	0.024	0.018
05/22/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/22/2019	1,072.4	1,053.7	0.624	1,357.63	-29.31	2.088	0.620	88.092	7.628	1.273	0.080	0.151	0.024	0.023	0.022
05/23/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/23/2019	1,066.6	1,048.1	0.619	1,355.40	-37.98	2.161	0.512	88.671	7.251	1.160	0.067	0.125	0.019	0.018	0.016
05/24/2019	1,047.6	1,029.4	0.608	1,343.13	-60.54	2.599	0.299	89.996	6.197	0.773	0.038	0.068	0.011	0.010	0.008
05/24/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/25/2019	1,048.4	1,030.1	0.607	1,345.21	-56.37	2.458	0.301	90.292	6.001	0.792	0.043	0.079	0.013	0.012	0.010
05/25/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/26/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/26/2019	1,065.7	1,047.2	0.619	1,354.15	-41.32	2.376	0.412	88.521	7.277	1.171	0.068	0.127	0.018	0.017	0.012
05/27/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/27/2019	1,069.7	1,051.1	0.620	1,358.14	-40.98	2.102	0.497	88.468	7.491	1.196	0.070	0.130	0.019	0.017	0.011
05/28/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/28/2019	1,068.2	1,049.6	0.620	1,356.67	-42.40	2.180	0.478	88.495	7.427	1.184	0.066	0.126	0.018	0.016	0.010
05/29/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/29/2019	1,068.2	1,049.6	0.620	1,356.67	-42.40	2.180	0.478	88.495	7.427	1.184	0.066	0.126	0.018	0.016	0.010
05/30/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/30/2019	1,068.2	1,049.6	0.620	1,356.67	-42.40	2.180	0.478	88.495	7.427	1.184	0.066	0.126	0.018	0.016	0.010
05/31/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
05/31/2019	1,068.2	1,049.6	0.620	1,356.67	-42.40	2.180	0.478	88.495	7.427	1.184	0.066	0.126	0.018	0.016	0.010
06/01/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
06/01/2019	1,057.3	1,038.9	0.613	1,350.56	-56.29	2.219	0.446	89.542	6.639	0.990	0.049	0.089	0.011	0.009	0.005
06/02/2019	1,054.9	1,036.5	0.611	1,349.89	-66.13	2.277	0.369	89.600	6.853	0.780	0.038	0.064	0.008	0.007	0.003
06/02/2019	1,058.3	1,039.9	0.615	1,349.08	-55.45	2.377	0.460	89.057	6.899	1.043	0.051	0.088	0.011	0.009	0.005
06/03/2019	1,058.5	1,040.1	0.615	1,349.81	-52.17	2.373	0.425	89.179	6.780	1.067	0.053	0.093	0.012	0.010	0.007
06/04/2019	1,064.8	1,046.3	0.620	1,352.47	-50.46	2.471	0.416	88.342	7.326	1.268	0.056	0.099	0.010	0.009	0.004
06/05/2019	1,056.3	1,037.9	0.615	1,347.06	-55.78	2.549	0.394	89.074	6.771	1.057	0.048	0.085	0.010	0.008	0.005
06/06/2019	1,070.8	1,052.1	0.617	1,363.14	-44.06	2.183	0.195	88.965	7.045	1.401	0.071	0.106	0.015	0.011	0.009
06/07/2019	1,073.3	1,054.6	0.612	1,371.46	-38.42	1.579	0.208	90.145	6.333	1.520	0.071	0.103	0.015	0.010	0.016
06/08/2019	1,063.1	1,044.6	0.609	1,361.97	-48.95	1.912	0.195	90.324	6.180	1.222	0.054	0.083	0.012	0.008	0.011
06/09/2019	1,056.1	1,037.8	0.606	1,357.11	-52.39	1.994	0.191	90.818	5.828	1.022	0.046	0.070	0.011	0.007	0.012
06/10/2019	1,053.2	1,034.9	0.608	1,351.00	-55.50	2.314	0.227	90.279	6.098	0.942	0.042	0.072	0.009	0.007	0.010
06/11/2019	1,066.0	1,047.4	0.612	1,362.81	-35.74	1.806	0.310	89.991	6.531	1.150	0.059	0.098	0.018	0.014	0.023

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06/12/2019	1,047.8	1,029.6	0.609	1,342.71	-54.57	2.775	0.217	89.748	6.355	0.780	0.034	0.059	0.011	0.009	0.013
06/13/2019	1,049.2	1,030.9	0.610	1,343.24	-67.37	2.790	0.220	89.533	6.496	0.855	0.034	0.057	0.006	0.005	0.003
06/14/2019	1,055.7	1,037.3	0.616	1,344.57	-56.28	2.703	0.415	88.783	6.848	1.083	0.054	0.092	0.010	0.009	0.003
06/15/2019	1,064.1	1,045.6	0.618	1,353.38	-48.97	2.239	0.494	88.763	7.128	1.174	0.062	0.110	0.013	0.012	0.006
06/16/2019	1,061.6	1,043.1	0.615	1,353.98	-47.77	2.241	0.379	89.292	6.745	1.170	0.052	0.088	0.012	0.011	0.010
06/17/2019	1,073.8	1,055.2	0.622	1,361.94	-44.04	2.025	0.465	88.241	7.700	1.367	0.062	0.107	0.013	0.011	0.007
06/18/2019	1,037.0	1,019.0	0.602	1,336.44	-61.92	2.144	0.629	91.694	4.607	0.786	0.041	0.070	0.011	0.009	0.010
06/19/2019	1,013.1	995.4	0.588	1,320.59	-156.16	2.061	0.785	94.190	2.448	0.424	0.025	0.042	0.007	0.006	0.011
06/20/2019	1,016.8	999.1	0.592	1,321.60	-79.57	2.386	0.637	93.347	3.069	0.468	0.024	0.042	0.008	0.007	0.012
06/21/2019	1,030.7	1,012.7	0.596	1,334.54	-73.05	2.088	0.566	92.539	4.097	0.609	0.030	0.048	0.007	0.006	0.009
06/22/2019	1,056.7	1,038.4	0.612	1,351.17	-56.34	2.207	0.402	89.756	6.447	1.044	0.045	0.076	0.010	0.008	0.007
06/23/2019	1,057.9	1,039.5	0.611	1,352.93	-52.39	2.157	0.373	89.896	6.301	1.108	0.051	0.085	0.012	0.009	0.008
06/24/2019	1,049.8	1,031.5	0.606	1,348.64	-60.58	2.095	0.393	90.807	5.656	0.912	0.042	0.071	0.010	0.008	0.007
06/25/2019	1,025.8	1,008.0	0.593	1,331.81	-146.60	2.072	0.573	93.056	3.698	0.516	0.025	0.042	0.006	0.005	0.007
06/26/2019	1,011.2	993.6	0.587	1,320.28	-159.15	2.247	0.621	94.157	2.646	0.268	0.015	0.027	0.005	0.004	0.009
06/27/2019	1,045.6	1,027.4	0.603	1,347.04	-73.66	2.115	0.336	91.103	5.666	0.694	0.028	0.043	0.005	0.004	0.005
06/28/2019	1,030.7	1,012.7	0.595	1,335.67	-143.20	2.323	0.350	92.293	4.485	0.482	0.020	0.033	0.005	0.004	0.006
06/29/2019	1,040.7	1,022.6	0.603	1,339.99	-69.53	2.466	0.341	90.951	5.442	0.704	0.029	0.047	0.007	0.006	0.007
06/30/2019	1,023.2	1,005.4	0.591	1,330.89	-149.65	2.102	0.519	93.290	3.646	0.375	0.019	0.032	0.006	0.005	0.007
07/01/2019	1,028.9	1,011.0	0.594	1,334.58	-144.90	2.097	0.502	92.689	4.199	0.429	0.022	0.041	0.007	0.007	0.008
07/02/2019	1,016.5	998.8	0.585	1,328.54	-156.75	1.937	0.541	94.405	2.806	0.222	0.019	0.042	0.009	0.010	0.010
07/03/2019	1,023.5	1,005.7	0.589	1,333.89	-150.12	1.956	0.460	93.759	3.382	0.349	0.021	0.042	0.009	0.009	0.011
07/04/2019	1,037.2	1,019.1	0.597	1,342.01	-77.10	2.105	0.352	92.086	4.794	0.571	0.027	0.045	0.007	0.006	0.007
07/05/2019	1,049.6	1,031.3	0.605	1,349.79	-66.29	2.198	0.256	90.668	6.036	0.732	0.034	0.053	0.008	0.007	0.007
07/06/2019	1,046.1	1,027.9	0.604	1,346.14	-69.43	2.275	0.296	90.798	5.836	0.693	0.033	0.049	0.007	0.006	0.006
07/07/2019	1,012.0	994.4	0.587	1,320.79	-158.56	2.170	0.668	94.149	2.672	0.275	0.017	0.029	0.006	0.005	0.009
07/08/2019	1,027.9	1,010.0	0.597	1,330.54	-73.38	2.329	0.540	92.343	4.142	0.550	0.029	0.044	0.008	0.006	0.010
07/09/2019	1,035.1	1,017.1	0.597	1,339.92	-140.60	2.030	0.450	92.236	4.683	0.515	0.025	0.039	0.007	0.005	0.008
07/10/2019	1,037.3	1,019.3	0.599	1,340.39	-138.61	2.120	0.436	91.825	4.965	0.566	0.028	0.042	0.007	0.005	0.006
07/11/2019	1,000.6	983.2	0.582	1,311.69	-171.20	2.181	0.792	95.134	1.723	0.121	0.011	0.020	0.005	0.004	0.010
07/12/2019	1,028.4	1,010.5	0.593	1,335.63	-146.72	1.917	0.546	92.953	4.175	0.335	0.019	0.036	0.006	0.006	0.007
07/13/2019	1,028.8	1,010.9	0.595	1,333.27	-53.00	2.006	0.632	92.807	3.973	0.407	0.036	0.085	0.017	0.019	0.019
07/14/2019	1,032.9	1,014.9	0.596	1,337.67	-59.81	1.987	0.530	92.523	4.369	0.448	0.031	0.067	0.014	0.016	0.015
07/15/2019	1,027.9	1,010.0	0.595	1,332.79	-80.74	2.078	0.582	92.685	4.142	0.421	0.024	0.042	0.008	0.008	0.010
07/16/2019	1,042.3	1,024.1	0.603	1,342.36	-61.37	2.062	0.523	91.453	5.046	0.758	0.043	0.089	0.010	0.009	0.009
07/17/2019	1,037.0	1,019.0	0.598	1,341.55	-139.58	1.868	0.528	92.219	4.759	0.527	0.027	0.054	0.006	0.005	0.006
07/18/2019	1,047.8	1,029.6	0.604	1,348.41	-67.22	2.062	0.365	90.985	5.748	0.710	0.037	0.072	0.008	0.006	0.006
07/19/2019	1,035.0	1,017.0	0.598	1,338.68	-140.86	2.069	0.490	91.960	4.962	0.453	0.020	0.033	0.005	0.004	0.005
07/20/2019	1,046.6	1,028.4	0.604	1,347.12	-132.74	2.066	0.396	90.915	5.874	0.667	0.026	0.041	0.005	0.004	0.005
07/21/2019	1,056.7	1,038.3	0.610	1,352.60	-54.25	2.242	0.298	89.743	6.737	0.828	0.041	0.076	0.013	0.012	0.010
07/22/2019	1,044.5	1,026.3	0.603	1,345.38	-134.04	2.053	0.435	91.111	5.676	0.641	0.026	0.043	0.006	0.005	0.006
07/23/2019	1,039.2	1,021.1	0.600	1,341.45	-137.72	2.128	0.434	91.488	5.345	0.533	0.023	0.037	0.005	0.004	0.004
07/24/2019	1,053.7	1,035.4	0.607	1,351.91	-65.00	2.148	0.303	90.183	6.478	0.779	0.034	0.054	0.008	0.006	0.006

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07/25/2019	1,056.5	1,038.1	0.610	1,352.25	-58.86	2.227	0.321	89.722	6.727	0.884	0.037	0.059	0.008	0.006	0.008
07/26/2019	1,065.8	1,047.3	0.617	1,357.23	-52.10	2.281	0.306	88.719	7.416	1.131	0.048	0.077	0.009	0.007	0.006
07/27/2019	1,067.4	1,048.8	0.615	1,361.38	-56.02	2.243	0.148	88.891	7.487	1.102	0.043	0.068	0.008	0.006	0.005
07/28/2019	1,066.2	1,047.7	0.614	1,360.36	-51.57	2.241	0.170	89.015	7.362	1.064	0.047	0.074	0.011	0.009	0.008
07/29/2019	1,051.1	1,032.8	0.607	1,348.83	-66.43	2.334	0.268	90.162	6.362	0.769	0.033	0.053	0.008	0.006	0.006
07/30/2019	1,019.6	1,001.9	0.592	1,325.17	-150.08	2.293	0.593	93.260	3.302	0.475	0.021	0.036	0.006	0.005	0.009
07/31/2019	1,069.9	1,051.3	0.618	1,360.76	-45.74	2.362	0.184	88.587	7.313	1.380	0.054	0.092	0.011	0.009	0.009
08/01/2019	1,035.5	1,017.5	0.598	1,338.72	-140.21	2.040	0.523	91.951	4.913	0.499	0.022	0.037	0.005	0.004	0.005
08/02/2019	1,027.7	1,009.8	0.591	1,337.31	-149.39	1.673	0.594	93.340	4.084	0.273	0.010	0.016	0.002	0.002	0.004
08/03/2019	1,031.6	1,013.7	0.594	1,338.82	-145.30	1.948	0.454	92.593	4.629	0.332	0.013	0.022	0.003	0.002	0.004
08/04/2019	1,030.6	1,012.6	0.595	1,335.87	-145.40	1.940	0.589	92.392	4.751	0.281	0.013	0.022	0.003	0.003	0.004
08/05/2019	1,034.7	1,016.7	0.599	1,337.30	-141.26	2.180	0.486	91.594	5.343	0.356	0.012	0.020	0.002	0.002	0.004
08/06/2019	1,030.7	1,012.7	0.596	1,335.43	-145.58	1.984	0.588	92.197	4.964	0.241	0.008	0.012	0.001	0.001	0.004
08/07/2019	1,042.1	1,023.9	0.602	1,343.58	-136.09	2.034	0.469	91.241	5.663	0.528	0.020	0.031	0.004	0.003	0.006
08/08/2019	1,045.6	1,027.4	0.604	1,345.61	-73.14	2.222	0.348	90.739	5.993	0.621	0.024	0.038	0.005	0.004	0.006
08/09/2019	1,047.3	1,029.0	0.606	1,344.97	-69.41	2.370	0.338	90.284	6.236	0.690	0.024	0.040	0.006	0.005	0.007
08/10/2019	1,027.7	1,009.8	0.594	1,332.93	-147.00	2.073	0.571	92.478	4.577	0.260	0.011	0.019	0.003	0.003	0.005
08/11/2019	1,049.7	1,031.4	0.605	1,349.59	-63.38	2.050	0.368	90.836	5.809	0.831	0.032	0.052	0.008	0.006	0.008
08/12/2019	1,048.3	1,030.1	0.606	1,346.51	-68.03	2.247	0.367	90.467	6.050	0.780	0.027	0.046	0.006	0.005	0.006
08/13/2019	1,033.8	1,015.9	0.597	1,338.13	-143.16	1.953	0.562	91.943	5.255	0.257	0.008	0.014	0.002	0.002	0.004
08/14/2019	1,040.8	1,022.7	0.600	1,343.93	-138.42	1.925	0.483	91.400	5.794	0.359	0.011	0.020	0.002	0.002	0.004
08/15/2019	1,049.6	1,031.3	0.606	1,348.73	-59.34	2.084	0.390	90.639	6.068	0.689	0.034	0.064	0.011	0.011	0.010

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 = 48031