

Gas Quality Reports

LS250 - St Joe 20" 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	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
05/17/2019	1,021.7	1,004.0	0.589	1,331.14	-152.41	2.026	0.509	93.503	3.669	0.247	0.012	0.022	0.004	0.003	0.006
05/18/2019	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
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	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
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	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
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	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
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	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
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	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
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	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
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	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
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
05/26/2019	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
05/27/2019	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
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	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
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	1,059.8	1,041.4	0.614	1,352.18	-50.88	2.199	0.449	89.322	6.836	1.010	0.053	0.097	0.013	0.012	0.008
05/29/2019	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
05/30/2019	1,059.6	1,041.2	0.616	1,350.24	-50.26	2.347	0.456	89.032	6.936	1.036	0.055	0.104	0.014	0.013	0.007
05/30/2019	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
05/31/2019	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
05/31/2019	1,054.3	1,035.9	0.612	1,347.26	-56.19	2.239	0.521	89.711	6.390	0.964	0.052	0.095	0.012	0.011	0.006
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
06/01/2019	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
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
06/02/2019	1,021.1	1,003.3	0.587	1,332.59	-73.15	1.948	0.461	93.973	3.284	0.261	0.015	0.031	0.006	0.006	0.016
06/03/2019	1,057.3	1,038.9	0.616	1,347.55	-54.63	2.496	0.435	88.988	6.850	1.070	0.050	0.086	0.010	0.009	0.006
06/04/2019	1,064.9	1,046.4	0.620	1,352.68	-48.87	2.462	0.413	88.391	7.262	1.288	0.057	0.101	0.011	0.009	0.005
06/05/2019	1,057.0	1,038.6	0.615	1,347.73	-55.36	2.504	0.408	89.065	6.800	1.063	0.049	0.087	0.010	0.009	0.005
06/06/2019	1,064.6	1,046.0	0.616	1,356.69	-49.08	2.322	0.268	89.070	6.906	1.249	0.061	0.095	0.013	0.010	0.007
06/07/2019	1,068.8	1,050.2	0.612	1,365.79	-42.12	1.813	0.227	89.989	6.387	1.373	0.069	0.102	0.016	0.011	0.013
06/08/2019	1,066.8	1,048.2	0.612	1,364.18	-45.25	1.880	0.209	90.032	6.369	1.324	0.061	0.091	0.013	0.009	0.012
06/09/2019	1,056.7	1,038.3	0.605	1,358.17	-52.81	1.929	0.194	90.904	5.781	1.044	0.046	0.070	0.012	0.008	0.012
06/10/2019	1,055.8	1,037.5	0.608	1,354.08	-52.00	2.180	0.227	90.347	6.079	1.009	0.048	0.080	0.011	0.008	0.012
06/11/2019	1,064.0	1,045.5	0.611	1,361.25	-40.10	1.810	0.329	90.148	6.380	1.127	0.058	0.097	0.017	0.013	0.019

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06/12/2019	1,054.9	1,036.5	0.611	1,349.92	-45.33	2.449	0.253	89.721	6.502	0.915	0.043	0.074	0.014	0.011	0.018
06/13/2019	1,048.3	1,030.1	0.610	1,342.71	-59.53	2.816	0.206	89.614	6.429	0.821	0.034	0.057	0.008	0.006	0.009
06/14/2019	1,052.7	1,034.4	0.614	1,343.77	-58.18	2.730	0.345	89.135	6.657	0.990	0.046	0.077	0.009	0.007	0.005
06/15/2019	1,061.9	1,043.5	0.618	1,351.07	-49.87	2.372	0.467	88.752	7.063	1.150	0.060	0.106	0.013	0.011	0.006
06/16/2019	1,054.3	1,036.0	0.611	1,348.80	-54.73	2.265	0.418	89.888	6.270	1.004	0.046	0.080	0.011	0.009	0.008
06/17/2019	1,071.2	1,052.6	0.620	1,360.12	-44.44	2.083	0.446	88.421	7.554	1.304	0.059	0.101	0.013	0.011	0.009
06/18/2019	1,033.1	1,015.1	0.600	1,334.00	-65.73	2.129	0.648	92.128	4.230	0.729	0.039	0.068	0.010	0.009	0.009
06/19/2019	1,005.1	987.6	0.584	1,314.69	-164.67	2.115	0.816	94.891	1.786	0.313	0.020	0.035	0.007	0.006	0.010
06/20/2019	1,017.8	1,000.1	0.592	1,322.45	-79.38	2.291	0.686	93.353	3.079	0.490	0.027	0.047	0.009	0.008	0.011
06/21/2019	1,020.3	1,002.6	0.591	1,326.74	-150.26	2.183	0.602	93.363	3.342	0.431	0.022	0.036	0.006	0.005	0.010
06/22/2019	1,053.9	1,035.6	0.610	1,349.37	-56.27	2.172	0.435	90.091	6.144	1.018	0.043	0.072	0.009	0.007	0.008
06/23/2019	1,056.2	1,037.8	0.611	1,351.14	-53.43	2.190	0.396	89.936	6.259	1.057	0.049	0.083	0.011	0.009	0.008
06/24/2019	1,051.8	1,033.5	0.607	1,349.61	-57.71	2.128	0.383	90.549	5.834	0.958	0.045	0.076	0.011	0.009	0.008
06/25/2019	1,025.1	1,007.2	0.593	1,331.59	-147.43	2.056	0.570	93.175	3.625	0.492	0.024	0.040	0.006	0.005	0.007
06/26/2019	1,006.1	988.6	0.584	1,316.46	-164.83	2.231	0.677	94.660	2.166	0.210	0.014	0.024	0.005	0.004	0.009
06/27/2019	1,040.5	1,022.4	0.600	1,343.18	-75.60	2.102	0.396	91.610	5.165	0.642	0.027	0.042	0.006	0.004	0.007
06/28/2019	1,034.0	1,016.0	0.597	1,338.72	-141.15	2.243	0.342	92.098	4.725	0.522	0.021	0.034	0.005	0.004	0.006
06/29/2019	1,032.8	1,014.9	0.598	1,335.43	-140.45	2.381	0.396	91.884	4.692	0.563	0.024	0.040	0.006	0.005	0.007
06/30/2019	1,021.9	1,004.2	0.591	1,329.60	-150.42	2.169	0.506	93.295	3.613	0.351	0.017	0.031	0.005	0.005	0.008
07/01/2019	1,024.5	1,006.7	0.591	1,332.73	-148.75	2.039	0.502	93.339	3.672	0.361	0.021	0.041	0.008	0.008	0.009
07/02/2019	1,018.6	1,000.8	0.587	1,329.46	-154.99	1.962	0.541	94.071	3.091	0.261	0.017	0.035	0.007	0.007	0.008
07/03/2019	1,018.6	1,000.9	0.586	1,330.94	-155.18	1.890	0.510	94.331	2.931	0.250	0.019	0.039	0.009	0.010	0.012
07/04/2019	1,035.5	1,017.4	0.597	1,340.66	-79.13	2.122	0.360	92.249	4.616	0.557	0.026	0.045	0.008	0.007	0.009
07/05/2019	1,045.6	1,027.4	0.602	1,347.20	-68.20	2.174	0.289	91.105	5.649	0.679	0.031	0.050	0.008	0.007	0.008
07/06/2019	1,047.2	1,029.0	0.604	1,347.24	-67.78	2.271	0.274	90.728	5.923	0.701	0.032	0.049	0.008	0.006	0.007
07/07/2019	1,013.8	996.1	0.588	1,322.37	-157.20	2.181	0.632	93.958	2.899	0.265	0.017	0.029	0.006	0.005	0.008
07/08/2019	1,020.7	1,003.0	0.593	1,325.23	-148.81	2.324	0.606	93.020	3.504	0.458	0.026	0.040	0.007	0.006	0.009
07/09/2019	1,034.4	1,016.4	0.598	1,337.70	-72.97	2.161	0.463	92.072	4.644	0.565	0.028	0.044	0.007	0.006	0.009
07/10/2019	1,034.8	1,016.8	0.598	1,338.67	-75.60	2.117	0.452	92.110	4.692	0.537	0.027	0.043	0.007	0.006	0.008
07/11/2019	1,007.1	989.6	0.585	1,316.92	-163.37	2.174	0.722	94.563	2.271	0.213	0.015	0.025	0.005	0.004	0.008
07/12/2019	1,021.0	1,003.3	0.590	1,329.39	-152.18	2.014	0.591	93.459	3.626	0.258	0.013	0.023	0.004	0.004	0.008
07/13/2019	1,029.7	1,011.7	0.595	1,335.05	-68.34	1.971	0.583	92.787	4.115	0.411	0.030	0.066	0.012	0.013	0.012
07/14/2019	1,029.0	1,011.1	0.595	1,334.35	-66.68	1.997	0.586	92.738	4.195	0.363	0.026	0.057	0.012	0.014	0.013
07/15/2019	1,030.7	1,012.8	0.596	1,335.30	-66.66	2.049	0.552	92.545	4.295	0.441	0.028	0.055	0.011	0.012	0.013
07/16/2019	1,033.8	1,015.8	0.598	1,336.90	-69.04	2.049	0.563	92.237	4.452	0.576	0.032	0.064	0.009	0.008	0.010
07/17/2019	1,035.0	1,017.0	0.597	1,339.42	-140.65	1.915	0.550	92.283	4.666	0.491	0.025	0.051	0.006	0.006	0.008
07/18/2019	1,039.4	1,021.3	0.600	1,342.00	-74.19	2.025	0.475	91.730	5.092	0.575	0.029	0.055	0.007	0.006	0.007
07/19/2019	1,037.5	1,019.5	0.599	1,340.98	-138.94	2.039	0.464	91.847	5.059	0.506	0.024	0.044	0.005	0.004	0.006
07/20/2019	1,039.3	1,021.2	0.599	1,342.99	-138.50	2.002	0.433	91.730	5.273	0.498	0.020	0.032	0.004	0.003	0.005
07/21/2019	1,056.9	1,038.5	0.610	1,352.98	-59.11	2.186	0.320	89.785	6.704	0.877	0.038	0.066	0.009	0.008	0.007
07/22/2019	1,043.3	1,025.2	0.603	1,344.06	-69.21	2.123	0.424	91.135	5.605	0.615	0.027	0.048	0.008	0.007	0.008
07/23/2019	1,048.4	1,030.1	0.605	1,347.55	-68.45	2.151	0.373	90.616	6.053	0.706	0.030	0.051	0.007	0.006	0.006
07/24/2019	1,047.5	1,029.3	0.604	1,347.58	-70.97	2.121	0.364	90.792	5.944	0.684	0.030	0.049	0.006	0.005	0.006

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07/25/2019	1,054.0	1,035.7	0.608	1,351.65	-62.66	2.228	0.275	90.055	6.528	0.805	0.035	0.054	0.008	0.006	0.007
07/26/2019	1,063.6	1,045.1	0.615	1,356.22	-53.56	2.212	0.336	89.008	7.245	1.058	0.045	0.072	0.009	0.007	0.007
07/27/2019	1,063.7	1,045.2	0.614	1,357.50	-56.33	2.312	0.202	89.012	7.322	1.025	0.041	0.065	0.008	0.006	0.006
07/28/2019	1,066.9	1,048.4	0.615	1,360.62	-52.47	2.233	0.182	88.945	7.388	1.106	0.047	0.074	0.010	0.008	0.007
07/29/2019	1,062.6	1,044.1	0.613	1,357.17	-55.71	2.319	0.180	89.166	7.224	0.979	0.042	0.066	0.010	0.008	0.007
07/30/2019	1,015.5	997.8	0.589	1,322.79	-155.19	2.271	0.606	93.602	3.163	0.299	0.016	0.027	0.005	0.004	0.007
07/31/2019	1,054.2	1,035.8	0.610	1,350.28	-56.88	2.302	0.307	90.059	6.164	1.038	0.040	0.067	0.009	0.007	0.008
08/01/2019	1,044.3	1,026.1	0.603	1,344.52	-70.30	2.139	0.417	91.093	5.525	0.729	0.029	0.049	0.006	0.005	0.006
08/02/2019	1,033.9	1,015.9	0.596	1,339.65	-142.64	1.826	0.563	92.467	4.645	0.439	0.018	0.029	0.004	0.003	0.005
08/03/2019	1,029.2	1,011.3	0.591	1,339.04	-148.30	1.679	0.542	93.297	4.141	0.301	0.012	0.019	0.003	0.002	0.005
08/04/2019	1,032.8	1,014.8	0.596	1,337.36	-143.11	2.039	0.513	92.121	4.933	0.343	0.014	0.025	0.003	0.003	0.005
08/05/2019	1,032.9	1,015.0	0.597	1,336.68	-142.89	2.066	0.538	91.946	5.086	0.323	0.012	0.020	0.003	0.003	0.005
08/06/2019	1,032.1	1,014.1	0.596	1,336.55	-144.08	2.009	0.555	92.131	4.957	0.310	0.011	0.018	0.003	0.002	0.004
08/07/2019	1,036.4	1,018.4	0.599	1,339.38	-140.56	2.036	0.521	91.636	5.398	0.368	0.012	0.020	0.003	0.002	0.004
08/08/2019	1,037.2	1,019.2	0.599	1,340.64	-140.09	2.027	0.483	91.674	5.380	0.392	0.013	0.021	0.003	0.002	0.005
08/09/2019	1,049.8	1,031.5	0.607	1,347.30	-67.57	2.347	0.303	90.162	6.351	0.748	0.027	0.044	0.006	0.005	0.006
08/10/2019	1,031.5	1,013.5	0.597	1,335.05	-143.27	2.141	0.531	92.015	4.921	0.340	0.014	0.024	0.004	0.004	0.006
08/11/2019	1,035.5	1,017.5	0.597	1,339.76	-141.00	2.001	0.491	92.031	4.971	0.445	0.018	0.029	0.004	0.003	0.005
08/12/2019	1,049.6	1,031.3	0.607	1,347.52	-65.66	2.249	0.350	90.396	6.085	0.822	0.030	0.049	0.007	0.005	0.007
08/13/2019	1,037.9	1,019.9	0.600	1,340.46	-139.27	2.029	0.514	91.535	5.465	0.409	0.013	0.023	0.003	0.003	0.005
08/14/2019	1,039.8	1,021.7	0.600	1,342.79	-138.80	1.954	0.492	91.472	5.667	0.372	0.012	0.021	0.003	0.003	0.005
08/15/2019	1,044.1	1,025.9	0.602	1,345.51	-135.18	2.007	0.444	91.080	5.904	0.496	0.020	0.035	0.005	0.005	0.005

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 = 48033