

Gas Quality Reports

LS333 - Blackwell to Wichita

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	1,020.6	1,002.8	0.598	1,319.39	-92.92	2.842	0.590	91.405	4.975	0.183	0.002	0.004	0	0	0
05/18/2019	1,021.4	1,003.6	0.596	1,323.27	-91.22	2.597	0.560	91.974	4.659	0.187	0.006	0.011	0.002	0.002	0.001
05/19/2019	1,018.9	1,001.2	0.594	1,322.32	-91.16	2.571	0.549	92.331	4.388	0.145	0.004	0.008	0.002	0.002	0.001
05/21/2019	1,022.6	1,004.8	0.594	1,326.57	-94.82	2.366	0.569	92.241	4.684	0.133	0.003	0.004	0	0	0
05/22/2019	1,022.2	1,004.5	0.595	1,325.01	-90.56	2.495	0.558	92.092	4.665	0.166	0.006	0.012	0.002	0.002	0.001
05/23/2019	1,020.6	1,002.8	0.595	1,323.15	-94.89	2.579	0.552	92.074	4.635	0.154	0.002	0.004	0	0	0
05/24/2019	1,022.9	1,005.1	0.595	1,326.33	-94.33	2.438	0.544	92.126	4.726	0.160	0.002	0.004	0	0	0
05/25/2019	1,023.8	1,005.9	0.594	1,328.11	-94.65	2.315	0.554	92.251	4.739	0.138	0.002	0.002	0	0	0
05/26/2019	1,021.1	1,003.3	0.595	1,323.88	-94.95	2.529	0.560	92.089	4.684	0.132	0.002	0.004	0	0	0
05/27/2019	1,021.0	1,003.2	0.594	1,324.61	-95.50	2.505	0.533	92.214	4.611	0.134	0.001	0.002	0	0	0
05/28/2019	1,023.4	1,005.6	0.595	1,326.40	-94.07	2.498	0.515	91.970	4.873	0.139	0.002	0.003	0	0	0
05/29/2019	1,018.5	1,000.8	0.591	1,324.61	-96.70	2.584	0.401	92.647	4.238	0.125	0.002	0.002	0	0	0
05/30/2019	1,017.5	999.8	0.595	1,318.94	-95.53	3.012	0.401	91.817	4.614	0.148	0.003	0.005	0	0	0
05/31/2019	1,009.9	992.3	0.590	1,315.09	-101.05	2.955	0.402	92.899	3.621	0.118	0.002	0.003	0	0	0
06/01/2019	1,010.7	993.1	0.590	1,316.27	-100.78	2.901	0.398	92.937	3.641	0.118	0.002	0.004	0	0	0
06/02/2019	1,008.9	991.3	0.587	1,317.34	-103.11	2.772	0.365	93.554	3.179	0.125	0.002	0.003	0	0	0
06/03/2019	1,003.9	986.4	0.589	1,308.29	-102.92	3.224	0.404	93.079	3.155	0.127	0.003	0.006	0.001	0.001	0
06/04/2019	1,003.8	986.4	0.587	1,310.02	-104.12	3.092	0.394	93.392	3.000	0.116	0.002	0.004	0	0	0
06/05/2019	1,009.2	991.7	0.585	1,319.51	-102.77	2.597	0.371	93.893	3.019	0.112	0.002	0.004	0	0	0
06/06/2019	1,001.7	984.3	0.584	1,310.40	-105.62	3.004	0.359	93.966	2.554	0.103	0.004	0.007	0.002	0.001	0.001
06/07/2019	999.7	982.3	0.586	1,306.12	-106.05	3.243	0.373	93.615	2.668	0.094	0.002	0.005	0	0	0
06/08/2019	999.8	982.4	0.586	1,306.36	-106.49	3.243	0.363	93.621	2.673	0.096	0.002	0.003	0	0	0
06/09/2019	1,002.8	985.4	0.584	1,312.53	-106.33	2.908	0.342	94.067	2.569	0.108	0.002	0.004	0	0	0
06/10/2019	1,006.0	988.5	0.585	1,315.68	-100.20	2.780	0.357	93.996	2.692	0.152	0.006	0.012	0.002	0.002	0.001
06/11/2019	1,015.4	997.7	0.591	1,320.64	-97.21	2.842	0.347	92.812	3.652	0.331	0.006	0.009	0.001	0.001	0
06/12/2019	1,012.9	995.2	0.596	1,311.86	-94.20	3.407	0.384	91.720	4.182	0.278	0.008	0.015	0.003	0.003	0.001
06/13/2019	1,011.3	993.7	0.596	1,309.86	-93.26	3.517	0.373	91.546	4.386	0.161	0.004	0.009	0.001	0.001	0.001
06/14/2019	1,011.0	993.4	0.594	1,311.80	-97.79	3.348	0.366	91.965	4.163	0.150	0.003	0.005	0	0	0
06/15/2019	1,010.0	992.4	0.593	1,311.11	-98.42	3.346	0.370	92.114	3.993	0.169	0.003	0.005	0	0	0
06/16/2019	1,008.7	991.1	0.590	1,312.98	-100.61	3.142	0.356	92.776	3.567	0.148	0.003	0.006	0	0	0
06/17/2019	1,011.2	993.6	0.593	1,313.47	-98.62	3.229	0.354	92.265	3.979	0.165	0.003	0.005	0	0	0
06/18/2019	1,010.3	992.7	0.591	1,313.65	-99.35	3.197	0.336	92.500	3.789	0.169	0.003	0.006	0	0	0
06/19/2019	1,008.6	991.0	0.593	1,309.54	-98.23	3.404	0.374	92.146	3.909	0.155	0.004	0.006	0.001	0.001	0
06/20/2019	1,010.5	992.9	0.595	1,309.95	-97.33	3.454	0.381	91.784	4.192	0.180	0.003	0.005	0	0	0
06/21/2019	1,009.5	992.0	0.599	1,304.19	-94.98	3.862	0.408	90.933	4.576	0.210	0.004	0.007	0	0	0
06/22/2019	1,007.5	990.0	0.596	1,304.90	-97.81	3.735	0.383	91.471	4.258	0.147	0.002	0.004	0	0	0
06/23/2019	1,008.2	990.7	0.596	1,305.70	-97.28	3.705	0.380	91.481	4.257	0.169	0.003	0.005	0	0	0
06/24/2019	1,006.8	989.3	0.595	1,305.17	-98.69	3.683	0.377	91.697	4.097	0.141	0.002	0.004	0	0	0
06/25/2019	1,008.8	991.2	0.596	1,306.49	-97.32	3.662	0.383	91.484	4.315	0.150	0.002	0.004	0	0	0
06/26/2019	1,010.3	992.7	0.597	1,307.65	-96.56	3.633	0.387	91.353	4.460	0.161	0.002	0.004	0	0	0
06/27/2019	1,009.8	992.2	0.598	1,305.56	-95.80	3.732	0.424	91.115	4.557	0.165	0.003	0.005	0	0	0
06/28/2019	1,010.9	993.3	0.597	1,308.46	-96.24	3.565	0.407	91.394	4.454	0.172	0.003	0.005	0	0	0
06/29/2019	1,010.3	992.7	0.597	1,307.06	-95.35	3.620	0.430	91.277	4.514	0.153	0.002	0.004	0	0	0

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06/30/2019	1,010.3	992.8	0.597	1,307.09	-95.34	3.636	0.419	91.284	4.485	0.166	0.003	0.006	0	0.001	0
07/01/2019	1,012.0	994.3	0.596	1,310.72	-96.70	3.444	0.395	91.560	4.437	0.159	0.002	0.004	0	0	0
07/02/2019	1,028.5	1,010.6	0.611	1,315.51	-84.24	3.517	0.634	88.704	6.959	0.180	0.003	0.004	0	0	0
07/03/2019	1,029.8	1,011.9	0.613	1,315.53	-83.14	3.535	0.667	88.408	7.207	0.176	0.002	0.004	0	0	0
07/04/2019	1,031.8	1,013.9	0.612	1,318.87	-82.56	3.340	0.671	88.640	7.118	0.222	0.003	0.006	0	0	0
07/05/2019	1,032.6	1,014.6	0.611	1,320.58	-83.15	3.247	0.661	88.721	7.195	0.170	0.002	0.004	0	0	0
07/06/2019	1,035.5	1,017.5	0.611	1,325.03	-82.50	3.012	0.659	88.930	7.185	0.208	0.002	0.004	0	0	0
07/07/2019	1,032.3	1,014.4	0.609	1,322.48	-84.11	3.109	0.633	89.155	6.918	0.175	0.003	0.005	0	0	0
07/08/2019	1,036.2	1,018.2	0.611	1,325.54	-82.31	3.011	0.654	88.839	7.298	0.192	0.003	0.004	0	0	0
07/09/2019	1,037.2	1,019.1	0.614	1,324.14	-80.41	3.178	0.657	88.385	7.516	0.251	0.005	0.008	0	0	0
07/10/2019	1,042.1	1,023.9	0.616	1,327.74	-77.60	3.107	0.662	87.961	7.950	0.303	0.006	0.011	0	0	0
07/11/2019	1,038.9	1,020.9	0.613	1,326.98	-79.41	3.029	0.652	88.501	7.572	0.234	0.004	0.008	0	0.001	0
07/12/2019	1,033.4	1,015.4	0.613	1,319.78	-81.60	3.367	0.654	88.439	7.286	0.246	0.003	0.005	0	0	0
07/13/2019	1,034.6	1,016.6	0.613	1,321.11	-81.37	3.313	0.656	88.368	7.434	0.222	0.002	0.004	0	0	0
07/14/2019	1,034.6	1,016.6	0.614	1,320.70	-80.99	3.351	0.653	88.319	7.427	0.241	0.003	0.006	0.001	0.001	0
07/15/2019	1,035.9	1,017.9	0.615	1,321.39	-78.63	3.364	0.649	88.213	7.447	0.305	0.008	0.013	0.001	0.001	0
07/16/2019	1,031.7	1,013.8	0.615	1,315.69	-81.06	3.649	0.649	88.028	7.399	0.266	0.003	0.006	0	0	0
07/17/2019	1,028.0	1,010.2	0.611	1,315.56	-84.22	3.588	0.570	88.812	6.780	0.243	0.003	0.005	0	0	0
07/18/2019	1,025.3	1,007.5	0.612	1,310.37	-83.84	3.912	0.563	88.412	6.875	0.229	0.003	0.005	0	0	0
07/19/2019	1,031.3	1,013.4	0.616	1,313.99	-79.69	3.776	0.649	87.751	7.581	0.236	0.003	0.004	0	0	0
07/20/2019	1,034.7	1,016.7	0.614	1,320.96	-81.08	3.361	0.634	88.334	7.409	0.254	0.003	0.004	0	0	0
07/21/2019	1,038.4	1,020.4	0.615	1,323.99	-75.97	3.270	0.647	88.146	7.586	0.319	0.008	0.018	0.002	0.003	0.002
07/22/2019	1,034.9	1,016.9	0.615	1,319.48	-79.67	3.476	0.651	88.017	7.575	0.270	0.004	0.006	0	0	0
07/23/2019	1,035.0	1,017.0	0.602	1,333.74	-76.33	2.448	0.519	90.646	6.168	0.206	0.004	0.006	0.001	0.001	0
07/24/2019	1,035.0	1,017.0	0.602	1,333.74	-76.33	2.448	0.519	90.646	6.168	0.206	0.004	0.006	0.001	0.001	0
07/25/2019	1,035.0	1,017.0	0.602	1,333.74	-76.33	2.448	0.519	90.646	6.168	0.206	0.004	0.006	0.001	0.001	0
07/26/2019	1,033.9	1,015.9	0.625	1,308.01	-74.94	4.457	0.643	85.997	8.511	0.379	0.005	0.008	0	0	0
07/27/2019	1,037.5	1,019.4	0.622	1,315.18	-74.71	4.018	0.634	86.556	8.421	0.355	0.006	0.010	0	0	0
07/28/2019	1,040.3	1,022.2	0.621	1,319.91	-73.78	3.745	0.635	86.816	8.442	0.348	0.005	0.009	0	0	0
07/29/2019	1,041.9	1,023.7	0.621	1,321.99	-74.63	3.637	0.639	86.885	8.448	0.371	0.007	0.012	0	0	0
07/30/2019	1,041.9	1,023.7	0.621	1,321.99	-74.63	3.637	0.639	86.885	8.448	0.371	0.007	0.012	0	0	0
07/31/2019	1,041.9	1,023.7	0.621	1,321.99	-74.63	3.637	0.639	86.885	8.448	0.371	0.007	0.012	0	0	0
08/01/2019	1,041.9	1,023.7	0.621	1,321.99	-74.63	3.637	0.639	86.885	8.448	0.371	0.007	0.012	0	0	0
08/02/2019	1,041.9	1,023.7	0.621	1,321.99	-74.63	3.637	0.639	86.885	8.448	0.371	0.007	0.012	0	0	0
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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%)
08/12/2019	1,041.9	1,023.7	0.621	1,321.99	-74.63	3.637	0.639	86.885	8.448	0.371	0.007	0.012	0	0	0
08/13/2019	1,041.9	1,023.7	0.621	1,321.99	-74.63	3.637	0.639	86.885	8.448	0.371	0.007	0.012	0	0	0
08/14/2019	1,041.9	1,023.7	0.621	1,321.99	-74.63	3.637	0.639	86.885	8.448	0.371	0.007	0.012	0	0	0
08/15/2019	1,041.1	1,022.9	0.623	1,319.19	-73.55	3.851	0.634	86.516	8.592	0.388	0.007	0.012	0	0	0

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 = 66322