

Gas Quality Reports

North Wichita
7/12/2017 - 10/12/2017

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%)
07/12/2017	1,048.1	1,029.8	.597	1,356.33	-138.44	.990	.646	92.089	5.994	.273	.004	.004	0	0	0
07/13/2017	1,048.3	1,030.1	.596	1,357.96	-138.62	.940	.597	92.343	5.796	.307	.008	.010	.001	0	0
07/14/2017	1,048.6	1,030.4	.594	1,360.48	-139.38	.768	.582	92.753	5.554	.326	.008	.008	0	0	0
07/15/2017	1,040.4	1,022.3	.588	1,357.04	-146.34	.702	.558	93.977	4.480	.268	.007	.008	0	0	0
07/16/2017	1,040.7	1,022.6	.589	1,356.42	-145.40	.871	.490	93.719	4.628	.272	.008	.010	.001	.001	.001
07/17/2017	1,050.8	1,032.5	.597	1,359.75	-137.27	.932	.582	92.009	6.215	.248	.005	.006	0	.001	.001
07/18/2017	1,055.1	1,036.7	.599	1,362.88	-134.84	.877	.580	91.570	6.728	.234	.004	.005	.001	.001	.001
07/19/2017	1,053.9	1,035.6	.599	1,361.56	-135.30	.817	.656	91.698	6.568	.247	.005	.006	.001	.001	.001
07/20/2017	1,047.5	1,029.3	.596	1,356.43	-138.95	.923	.667	92.261	5.889	.245	.005	.006	0	0	.002
07/21/2017	1,050.0	1,031.7	.597	1,358.45	-137.56	.830	.695	92.096	6.117	.243	.006	.009	.001	.001	.002
07/22/2017	1,049.9	1,031.6	.598	1,357.76	-137.28	.858	.711	92.023	6.133	.254	.006	.009	.001	.001	.002
07/23/2017	1,053.1	1,034.7	.601	1,358.86	-134.94	.899	.723	91.489	6.610	.260	.006	.010	.001	.001	.001
07/24/2017	1,054.2	1,035.9	.601	1,360.38	-134.52	.853	.705	91.498	6.656	.265	.007	.011	.001	.002	.001
07/25/2017	1,047.3	1,029.1	.597	1,355.96	-138.88	.978	.651	92.194	5.926	.229	.006	.011	.002	.002	.001
07/26/2017	1,050.8	1,032.5	.598	1,358.63	-137.08	.913	.656	91.847	6.353	.221	.004	.006	0	0	0
07/27/2017	1,053.3	1,035.0	.600	1,359.75	-134.95	.885	.691	91.585	6.542	.275	.007	.010	.002	.002	.002
07/28/2017	1,046.6	1,028.4	.596	1,355.40	-139.04	1.024	.629	92.273	5.778	.274	.007	.010	.002	.002	.002
07/29/2017	1,050.1	1,031.9	.597	1,359.10	-137.39	.850	.651	92.187	6.006	.284	.007	.010	.001	.001	.003
07/30/2017	1,051.6	1,033.3	.597	1,360.99	-136.92	.830	.606	92.121	6.156	.269	.006	.008	.001	.001	.002
07/31/2017	1,050.4	1,032.2	.595	1,361.53	-137.99	.782	.572	92.515	5.787	.326	.007	.008	0	0	.002
08/01/2017	1,047.1	1,028.9	.592	1,360.81	-140.65	.718	.551	93.176	5.175	.360	.009	.010	0	.001	.001
08/02/2017	1,045.0	1,026.8	.590	1,360.02	-142.30	.716	.530	93.509	4.863	.363	.009	.009	0	0	.001
08/03/2017	1,045.1	1,026.9	.590	1,360.31	-142.34	.728	.510	93.510	4.869	.366	.008	.009	0	0	0
08/04/2017	1,043.0	1,024.9	.588	1,360.01	-144.43	.746	.451	93.848	4.604	.334	.008	.009	.001	0	.001
08/05/2017	1,041.4	1,023.3	.586	1,360.62	-146.07	.728	.380	94.296	4.216	.362	.009	.008	0	0	.001
08/06/2017	1,044.7	1,026.5	.588	1,361.88	-143.19	.688	.438	93.863	4.593	.399	.009	.009	0	0	0
08/07/2017	1,045.3	1,027.1	.589	1,362.14	-142.75	.710	.430	93.710	4.776	.352	.009	.011	.001	.001	.001
08/08/2017	1,046.3	1,028.1	.590	1,362.19	-141.64	.745	.433	93.542	4.863	.388	.011	.015	.001	.001	.001
08/09/2017	1,045.1	1,026.9	.589	1,361.73	-142.77	.780	.399	93.643	4.810	.346	.010	.012	.001	.001	0
08/10/2017	1,026.4	1,008.5	.588	1,338.52	-150.57	2.017	.259	93.520	3.861	.308	.012	.018	.002	.002	.001
08/11/2017	1,000.3	982.9	.585	1,308.35	-165.81	3.595	.038	93.625	2.526	.186	.010	.015	.002	.002	0
08/12/2017	1,004.9	987.4	.585	1,313.51	-162.34	3.319	.085	93.585	2.765	.215	.011	.015	.002	.002	0
08/13/2017	1,044.3	1,026.2	.597	1,351.21	-138.77	1.628	.388	91.778	5.861	.315	.011	.016	.001	.001	0
08/14/2017	1,041.2	1,023.0	.589	1,356.25	-144.35	.926	.476	93.674	4.521	.376	.011	.014	.001	.001	0
08/15/2017	1,045.2	1,027.0	.592	1,358.85	-141.30	.950	.446	93.150	5.069	.357	.011	.015	.001	.001	.001
08/16/2017	1,046.5	1,028.3	.592	1,360.24	-140.66	.842	.482	93.165	5.104	.381	.010	.014	.001	.001	.001
08/17/2017	1,048.6	1,030.3	.594	1,360.78	-139.21	.957	.441	92.616	5.695	.260	.009	.016	.002	.002	.002
08/18/2017	1,053.6	1,035.3	.601	1,359.61	-134.34	1.158	.529	91.255	6.811	.212	.008	.017	.003	.003	.003

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08/19/2017	1,053.0	1,034.7	.601	1,358.21	-134.19	1.252	.526	91.150	6.796	.235	.012	.022	.003	.004	.001
08/20/2017	1,050.2	1,031.9	.600	1,355.61	-135.93	1.390	.489	91.218	6.678	.200	.007	.014	.002	.002	0
08/21/2017	1,054.1	1,035.7	.601	1,359.72	-133.64	1.162	.535	91.210	6.821	.225	.011	.024	.004	.005	.003
08/22/2017	1,056.8	1,038.5	.602	1,362.34	-132.83	.964	.608	91.071	7.127	.206	.006	.012	.002	.002	.002
08/23/2017	1,050.7	1,032.5	.600	1,356.12	-135.30	1.319	.525	91.293	6.596	.229	.010	.019	.004	.004	.003
08/24/2017	1,057.0	1,038.6	.602	1,362.16	-132.24	1.057	.560	91.016	7.095	.232	.009	.021	.004	.004	.003
08/25/2017	1,047.3	1,029.1	.595	1,358.09	-139.43	.967	.542	92.472	5.806	.167	.010	.024	.004	.005	.003
08/26/2017	1,041.7	1,023.6	.592	1,353.51	-143.12	1.051	.560	92.942	5.243	.167	.009	.020	.003	.004	.001
08/27/2017	1,041.5	1,023.3	.592	1,353.25	-141.63	1.069	.554	93.184	4.825	.278	.021	.044	.009	.008	.008
08/28/2017	1,039.4	1,021.3	.593	1,349.95	-142.83	1.058	.677	93.094	4.882	.216	.016	.035	.007	.007	.009
08/29/2017	1,036.0	1,017.9	.591	1,347.71	-146.76	1.058	.691	93.333	4.748	.136	.007	.016	.003	.003	.003
08/30/2017	1,035.9	1,017.9	.591	1,347.36	-146.54	1.058	.710	93.323	4.714	.159	.008	.018	.003	.004	.003
08/31/2017	1,042.2	1,024.0	.596	1,350.16	-141.43	1.073	.743	92.422	5.535	.197	.007	.015	.003	.003	.001
09/01/2017	1,046.1	1,027.9	.598	1,352.55	-138.89	1.027	.766	91.946	6.043	.193	.006	.013	.002	.003	.001
09/02/2017	1,054.1	1,035.8	.600	1,360.63	-134.50	.988	.601	91.427	6.717	.237	.008	.016	.003	.003	.001
09/03/2017	1,050.7	1,032.5	.598	1,358.40	-135.41	1.200	.476	91.832	6.108	.318	.017	.032	.006	.006	.006
09/04/2017	1,054.3	1,036.0	.603	1,357.65	-131.65	1.469	.453	90.856	6.763	.405	.014	.026	.005	.005	.005
09/05/2017	1,019.8	1,002.0	.591	1,326.28	-150.97	2.844	.176	92.669	3.961	.304	.015	.023	.003	.003	.002
09/06/2017	1,058.9	1,040.5	.605	1,361.41	-72.79	1.314	.492	90.597	7.100	.411	.021	.042	.007	.008	.006
09/07/2017	1,062.8	1,044.3	.605	1,366.21	-128.60	1.004	.554	90.527	7.504	.371	.014	.021	.003	.002	.002
09/08/2017	1,063.0	1,044.5	.605	1,366.20	-128.61	.989	.571	90.454	7.601	.353	.012	.016	.002	.001	.001
09/09/2017	1,067.2	1,048.7	.607	1,369.86	-125.89	.931	.539	90.262	7.770	.433	.020	.033	.005	.004	.003
09/10/2017	1,048.0	1,029.8	.601	1,351.91	-134.83	1.746	.388	91.191	6.214	.393	.021	.035	.005	.004	.003
09/11/2017	1,011.3	993.7	.589	1,317.61	-155.36	3.365	.036	92.952	3.264	.313	.021	.036	.005	.005	.002
09/12/2017	1,039.3	1,021.3	.598	1,344.12	-138.89	2.029	.356	91.783	5.346	.409	.021	.037	.007	.007	.006
09/13/2017	1,062.8	1,044.4	.607	1,364.15	-68.54	1.162	.564	90.328	7.393	.472	.021	.037	.007	.007	.008
09/14/2017	1,050.7	1,032.4	.597	1,359.83	-136.41	.921	.581	92.150	6.047	.261	.009	.014	.003	.004	.011
09/15/2017	1,044.9	1,026.7	.595	1,354.98	-140.25	1.016	.603	92.553	5.583	.212	.008	.012	.002	.002	.008
09/16/2017	1,042.9	1,024.8	.591	1,356.08	-143.06	.957	.520	93.086	5.217	.203	.005	.007	.001	0	.003
09/17/2017	1,044.9	1,026.7	.593	1,356.56	-141.32	.910	.587	92.795	5.480	.209	.005	.007	.001	.001	.004
09/18/2017	1,043.4	1,025.3	.593	1,354.73	-141.84	.922	.633	92.899	5.281	.240	.007	.010	.002	.002	.004
09/19/2017	1,046.4	1,028.2	.596	1,355.69	-138.11	.926	.668	92.668	5.301	.358	.021	.037	.008	.006	.008
09/20/2017	1,042.7	1,024.5	.595	1,351.82	-52.41	1.090	.654	92.975	4.750	.412	.028	.048	.011	.010	.022
09/21/2017	1,042.4	1,024.2	.595	1,350.81	-71.03	1.235	.606	92.625	5.090	.372	.018	.029	.006	.005	.014
09/22/2017	1,049.9	1,031.6	.599	1,356.39	-66.95	.969	.712	92.031	5.842	.367	.020	.032	.007	.006	.014
09/23/2017	1,050.6	1,032.3	.599	1,357.81	-135.42	.894	.707	92.000	6.055	.281	.015	.025	.006	.005	.012
09/24/2017	1,050.6	1,032.3	.599	1,357.15	-135.98	.956	.700	91.788	6.248	.274	.009	.014	.003	.002	.006
09/25/2017	1,050.6	1,032.3	.599	1,357.15	-135.98	.956	.700	91.788	6.248	.274	.009	.014	.003	.002	.006

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7/12/2017 - 10/12/2017

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%)
09/26/2017	1,048.5	1,030.2	.600	1,353.46	-56.25	1.360	.570	91.708	5.889	.361	.025	.044	.012	.012	.018
09/27/2017	1,040.1	1,022.0	.597	1,346.10	-63.24	1.683	.498	92.203	5.152	.356	.026	.046	.011	.011	.015
09/28/2017	1,002.2	984.8	.585	1,310.76	-164.53	3.483	.041	93.655	2.586	.200	.012	.017	.003	.002	.001
09/29/2017	1,001.2	983.8	.585	1,309.40	-165.27	3.547	.041	93.620	2.573	.190	.010	.015	.002	.002	0
09/30/2017	1,002.4	985.0	.585	1,310.98	-164.43	3.476	.040	93.660	2.578	.214	.012	.017	.002	.002	0
10/01/2017	1,003.4	985.9	.585	1,312.19	-163.14	3.427	.036	93.692	2.570	.236	.014	.020	.003	.002	0
10/02/2017	1,043.6	1,025.5	.597	1,350.25	-139.00	1.381	.581	92.012	5.703	.275	.013	.022	.004	.004	.005
10/03/2017	1,036.4	1,018.4	.593	1,345.91	-143.45	1.384	.588	92.996	4.679	.284	.016	.030	.007	.006	.010
10/04/2017	1,013.3	995.6	.587	1,322.12	-156.15	2.905	.154	93.443	3.152	.286	.019	.028	.005	.004	.004
10/05/2017	1,009.5	992.0	.586	1,318.77	-158.95	2.970	.175	93.727	2.788	.283	.019	.027	.005	.003	.004
10/06/2017	1,008.6	991.0	.598	1,304.39	-55.28	4.043	.241	91.646	3.424	.492	.037	.070	.014	.015	.018
10/07/2017	1,026.4	1,008.6	.593	1,333.44	-147.10	2.327	.335	92.702	4.262	.308	.018	.028	.005	.005	.010
10/08/2017	1,016.3	998.7	.589	1,324.21	-153.63	2.766	.230	93.206	3.430	.313	.018	.027	.004	.003	.003
10/09/2017	1,007.7	990.1	.587	1,315.26	-159.40	3.328	.073	93.279	3.045	.234	.014	.019	.003	.002	.002
10/10/2017	1,005.4	987.9	.587	1,312.81	-161.09	3.412	.081	93.302	2.982	.190	.010	.016	.003	.002	.002

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: BusinessUnitID = 70; Analysis_Key = 65211;