

Gas Quality Reports

Coffeyville Area
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	1,021.2	1,003.5	0.580	1,340.57	-158.54	1.484	0.358	94.705	3.391	0.054	0.001	0.004	0.001	0.001	0.001
05/18/2019	1,024.6	1,006.8	0.584	1,340.76	-158.22	1.534	0.368	94.698	3.307	0.072	0.003	0.011	0.002	0.003	0.003
05/19/2019	1,021.2	1,003.5	0.581	1,340.00	-157.98	1.494	0.368	94.654	3.401	0.070	0.002	0.007	0.001	0.001	0.001
05/20/2019	1,025.6	1,007.8	0.583	1,342.99	-155.66	1.535	0.366	94.393	3.581	0.098	0.005	0.015	0.003	0.003	0.002
05/21/2019	1,024.4	1,006.6	0.582	1,343.09	-157.49	1.497	0.367	94.487	3.597	0.051	0	0.001	0	0	0.001
05/22/2019	1,028.8	1,010.9	0.584	1,345.94	-156.08	1.422	0.370	94.382	3.768	0.057	0	0.001	0	0	0.001
05/23/2019	1,021.4	1,003.7	0.581	1,339.54	-156.85	1.470	0.366	94.429	3.681	0.054	0	0	0	0	0
05/24/2019	1,026.8	1,009.0	0.586	1,341.88	-156.86	1.413	0.370	94.487	3.680	0.050	0	0	0	0	0
05/25/2019	1,026.6	1,008.7	0.584	1,343.06	-158.84	1.487	0.363	94.685	3.419	0.045	0	0.001	0	0	0
05/26/2019	1,029.9	1,012.0	0.587	1,343.81	-156.35	1.452	0.382	94.408	3.686	0.065	0.001	0.004	0.001	0.001	0.001
05/27/2019	1,023.8	1,006.1	0.582	1,342.50	-154.68	1.409	0.389	94.245	3.866	0.082	0.002	0.005	0.001	0.001	0.001
05/28/2019	1,022.6	1,004.8	0.582	1,340.84	-157.35	1.400	0.374	94.598	3.565	0.061	0	0.001	0	0	0
05/29/2019	1,026.6	1,008.8	0.583	1,344.40	-158.85	1.399	0.368	94.800	3.382	0.051	0	0	0	0	0
05/30/2019	1,023.3	1,005.6	0.582	1,341.79	-156.26	1.438	0.363	94.416	3.720	0.061	0	0.002	0	0	0.001
05/31/2019	1,017.4	999.8	0.580	1,336.22	-157.72	1.448	0.366	94.576	3.557	0.052	0	0	0	0	0
06/01/2019	1,022.2	1,004.4	0.581	1,340.76	-159.22	1.506	0.356	94.725	3.364	0.048	0	0	0	0	0
06/02/2019	1,025.0	1,007.2	0.583	1,342.60	-159.26	1.496	0.356	94.754	3.343	0.048	0	0.001	0	0	0
06/03/2019	1,022.1	1,004.4	0.582	1,339.76	-157.16	1.533	0.354	94.404	3.654	0.054	0	0	0	0	0
06/04/2019	1,026.3	1,008.4	0.581	1,346.10	-157.20	1.596	0.360	94.378	3.594	0.065	0.001	0.004	0	0	0.001
06/05/2019	1,026.3	1,008.5	0.582	1,344.75	-158.19	1.467	0.371	94.806	3.245	0.090	0.003	0.011	0.002	0.002	0.003
06/06/2019	1,027.7	1,009.9	0.583	1,345.85	-156.40	1.467	0.384	94.570	3.446	0.111	0.003	0.011	0.002	0.002	0.003
06/07/2019	1,025.0	1,007.1	0.584	1,340.79	-155.61	1.367	0.377	94.554	3.582	0.102	0.003	0.009	0.001	0.002	0.003
06/08/2019	1,029.9	1,012.0	0.583	1,348.33	-152.77	1.480	0.384	94.291	3.646	0.148	0.009	0.025	0.005	0.006	0.006
06/09/2019	1,023.2	1,005.4	0.584	1,339.42	-153.20	1.324	0.374	94.316	3.860	0.105	0.004	0.010	0.001	0.003	0.003
06/10/2019	1,020.1	1,002.4	0.582	1,337.46	-155.00	1.417	0.367	94.376	3.732	0.092	0.003	0.008	0.001	0.001	0.002
06/11/2019	1,029.4	1,011.5	0.584	1,347.09	-160.02	1.745	0.405	94.596	3.160	0.082	0.001	0.006	0.001	0.001	0.002
06/12/2019	1,021.7	1,004.0	0.582	1,339.44	-157.54	1.469	0.368	94.588	3.507	0.061	0.001	0.004	0.001	0.001	0.002
06/13/2019	1,020.7	1,003.0	0.581	1,339.53	-156.94	1.569	0.376	94.364	3.611	0.074	0	0.003	0	0	0.001
06/14/2019	1,021.3	1,003.6	0.581	1,340.11	-156.77	1.705	0.405	94.153	3.648	0.083	0	0.004	0	0	0.001
06/15/2019	1,024.3	1,006.5	0.583	1,341.34	-157.78	1.769	0.397	94.227	3.520	0.079	0.001	0.005	0	0.001	0.001
06/16/2019	1,021.4	1,003.6	0.581	1,339.57	-157.49	1.528	0.343	94.585	3.451	0.083	0.001	0.005	0.001	0.001	0.002
06/17/2019	1,023.3	1,005.5	0.582	1,340.92	-158.12	1.529	0.338	94.687	3.353	0.082	0.001	0.006	0	0.001	0.002
06/18/2019	1,027.4	1,009.6	0.585	1,343.47	-157.74	1.654	0.380	94.386	3.495	0.079	0.001	0.004	0	0	0.001
06/19/2019	1,027.4	1,009.6	0.585	1,343.07	-156.91	1.628	0.378	94.276	3.642	0.071	0	0.003	0	0.001	0.001
06/20/2019	1,022.2	1,004.4	0.583	1,339.24	-155.59	1.591	0.389	94.129	3.807	0.080	0	0.003	0	0	0.001
06/21/2019	1,019.8	1,002.1	0.584	1,334.99	-157.63	1.631	0.372	94.359	3.574	0.060	0	0.002	0	0.001	0.001
06/22/2019	1,019.4	1,001.7	0.583	1,335.47	-157.51	1.782	0.354	94.216	3.569	0.070	0.001	0.004	0.001	0.002	0.001
06/23/2019	1,021.5	1,003.8	0.584	1,336.40	-153.38	1.938	0.361	93.837	3.658	0.152	0.010	0.026	0.006	0.007	0.005
06/24/2019	1,026.1	1,008.3	0.584	1,342.62	-156.94	1.738	0.376	94.182	3.616	0.079	0.001	0.005	0.001	0.001	0.002
06/25/2019	1,025.2	1,007.4	0.584	1,341.99	-156.75	1.701	0.379	94.168	3.672	0.074	0	0.004	0	0	0.001
06/26/2019	1,032.8	1,014.9	0.589	1,346.35	-156.51	1.555	0.369	94.349	3.640	0.081	0	0.004	0	0	0.001
06/27/2019	1,040.3	1,022.3	0.593	1,351.09	-153.31	1.543	0.372	94.006	3.952	0.115	0.001	0.006	0.001	0.001	0.001
06/28/2019	1,030.2	1,012.3	0.588	1,343.75	-44.34	1.466	0.373	92.815	4.580	0.526	0.049	0.115	0.024	0.031	0.020

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5/17/2019 - 8/17/2019

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06/29/2019	1,034.9	1,016.9	0.589	1,348.33	-36.90	1.637	0.366	93.655	3.582	0.472	0.055	0.131	0.031	0.044	0.026
06/30/2019	1,040.1	1,022.0	0.593	1,350.41	-36.90	1.637	0.366	93.655	3.582	0.472	0.055	0.131	0.031	0.044	0.026
07/05/2019	1,025.3	1,007.5	0.586	1,339.85	-148.98	1.775	0.407	93.186	4.436	0.161	0.007	0.018	0.003	0.004	0.004
07/06/2019	1,025.9	1,008.1	0.586	1,340.58	-151.23	1.801	0.419	93.276	4.381	0.115	0.001	0.005	0	0	0.002
07/07/2019	1,025.1	1,007.3	0.586	1,339.03	-147.11	1.805	0.420	93.144	4.359	0.195	0.012	0.035	0.008	0.014	0.008
07/08/2019	1,023.1	1,005.3	0.585	1,337.88	-151.16	1.827	0.443	93.266	4.326	0.124	0.001	0.006	0.001	0.005	0.002
07/09/2019	1,026.5	1,008.6	0.587	1,340.05	-155.63	1.765	0.387	93.932	3.826	0.082	0	0.004	0	0.001	0.001
07/10/2019	1,058.7	1,040.3	0.607	1,358.93	-152.88	1.723	0.426	93.686	4.025	0.125	0.002	0.008	0.001	0.003	0.002
07/11/2019	1,068.7	1,050.2	0.611	1,367.73	-146.30	1.652	0.447	93.092	4.519	0.232	0.010	0.029	0.005	0.008	0.005
07/12/2019	1,033.4	1,015.4	0.590	1,344.79	-21.84	1.485	0.423	91.289	5.561	0.823	0.081	0.202	0.044	0.060	0.033
07/13/2019	1,031.8	1,013.8	0.589	1,344.66	-30.93	1.606	0.426	91.638	5.239	0.767	0.065	0.154	0.031	0.049	0.026
07/14/2019	1,032.9	1,015.0	0.589	1,346.16	-148.33	1.682	0.400	93.028	4.744	0.135	0.001	0.005	0.001	0.002	0.001
07/15/2019	1,034.8	1,016.8	0.590	1,347.30	-147.18	1.623	0.386	92.858	5.009	0.120	0	0.003	0	0	0.001
07/16/2019	1,039.8	1,021.8	0.594	1,349.18	-146.55	1.637	0.398	92.756	5.064	0.139	0.001	0.004	0	0	0.001
07/17/2019	1,038.2	1,020.2	0.590	1,351.20	-144.13	1.600	0.391	92.414	5.435	0.153	0	0.004	0	0.001	0.001
07/18/2019	1,041.4	1,023.3	0.594	1,350.74	-145.24	1.562	0.396	92.695	5.172	0.166	0.001	0.005	0	0.001	0.001
07/19/2019	1,035.1	1,017.1	0.591	1,346.34	-143.33	1.564	0.425	92.422	5.378	0.203	0.001	0.006	0.001	0	0.001
07/20/2019	1,036.1	1,018.1	0.593	1,345.00	-143.50	1.502	0.396	92.600	5.275	0.217	0.001	0.006	0	0.002	0.002
07/21/2019	1,037.0	1,018.9	0.591	1,348.80	-144.73	1.593	0.406	92.609	5.187	0.196	0.001	0.005	0	0.001	0.002
07/22/2019	1,036.5	1,018.5	0.591	1,348.17	-143.27	1.671	0.419	92.309	5.380	0.206	0.002	0.008	0	0.001	0.002
07/23/2019	1,034.8	1,016.9	0.590	1,347.37	-144.11	1.596	0.413	92.475	5.324	0.180	0.001	0.007	0	0.001	0.002
07/24/2019	1,036.4	1,018.4	0.592	1,346.78	-146.49	1.582	0.409	92.849	5.003	0.147	0.001	0.006	0	0	0.002
07/25/2019	1,034.0	1,016.0	0.593	1,342.85	-146.22	1.523	0.394	92.907	5.018	0.147	0.001	0.006	0.001	0.001	0.002
07/26/2019	1,035.6	1,017.6	0.589	1,348.82	-145.77	1.547	0.396	92.811	5.080	0.156	0.001	0.006	0	0.001	0.002
07/27/2019	1,036.3	1,018.3	0.592	1,346.52	-144.40	1.676	0.409	92.524	5.149	0.227	0.003	0.009	0	0	0.002
07/28/2019	1,035.0	1,017.0	0.594	1,343.36	-143.29	1.544	0.417	92.567	5.233	0.217	0.003	0.010	0.002	0.004	0.004
07/29/2019	1,034.2	1,016.2	0.591	1,345.28	-144.87	1.676	0.410	92.484	5.260	0.158	0.001	0.006	0.001	0.001	0.003
07/30/2019	1,038.0	1,020.0	0.593	1,348.09	-144.99	1.795	0.419	92.295	5.332	0.151	0.001	0.005	0	0	0.002
07/31/2019	1,037.4	1,019.3	0.599	1,340.52	-144.20	1.701	0.406	92.314	5.418	0.148	0.001	0.006	0.001	0.002	0.002
08/01/2019	1,031.1	1,013.2	0.593	1,339.39	-142.52	2.006	0.405	91.683	5.734	0.157	0.001	0.007	0.001	0.002	0.003
08/02/2019	1,047.2	1,029.1	0.599	1,352.75	-142.29	2.175	0.416	91.415	5.802	0.182	0.001	0.006	0	0	0.002
08/03/2019	1,052.2	1,033.9	0.600	1,357.95	-137.39	1.524	0.380	91.510	6.326	0.240	0.004	0.012	0.001	0.001	0.001
08/04/2019	1,057.4	1,039.0	0.603	1,362.13	-135.28	1.379	0.402	91.235	6.714	0.264	0.001	0.004	0	0	0.001
08/05/2019	1,057.7	1,039.3	0.603	1,362.49	-132.80	1.415	0.400	90.662	7.286	0.230	0.001	0.004	0	0.001	0.001
08/06/2019	1,058.6	1,040.2	0.603	1,363.07	-133.36	1.412	0.386	90.737	7.251	0.211	0	0.003	0	0	0
08/07/2019	1,055.2	1,036.9	0.602	1,359.60	-132.59	1.449	0.404	90.602	7.282	0.257	0.001	0.004	0	0	0.001
08/08/2019	1,058.0	1,039.6	0.604	1,361.62	-132.14	1.439	0.393	90.546	7.355	0.263	0.001	0.004	0	0	0.001
08/09/2019	1,056.6	1,038.2	0.604	1,359.41	-129.13	1.373	0.389	90.508	7.311	0.355	0.012	0.031	0.006	0.008	0.007
08/10/2019	1,053.2	1,034.9	0.602	1,356.93	-133.25	1.420	0.410	90.827	7.067	0.262	0.003	0.008	0.001	0.001	0.002
08/11/2019	1,056.3	1,037.9	0.604	1,359.51	-134.25	1.411	0.424	90.969	6.930	0.256	0.002	0.007	0	0	0.001
08/12/2019	1,053.5	1,035.2	0.601	1,358.73	-133.37	1.436	0.413	90.901	6.929	0.307	0.003	0.008	0.001	0.001	0.002
08/13/2019	1,081.7	1,062.9	0.619	1,374.70	-132.65	1.467	0.401	90.602	7.273	0.248	0.002	0.006	0	0	0.001
08/14/2019	1,054.9	1,036.6	0.601	1,360.71	-129.44	1.434	0.401	90.477	7.278	0.339	0.014	0.036	0.007	0.010	0.005

TSP Name: Southern Star Central Gas Pipeline, Inc.

CSI048

TSP: 007906233

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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%)
08/15/2019	1,055.3	1,036.9	0.601	1,360.96	-39.52	1.407	0.398	90.102	7.314	0.559	0.040	0.100	0.021	0.038	0.020

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 = 69032