

Gas Quality Reports

LS315 - Straight Blackwell at Blackwell
5/13/2020 - 8/13/2020

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%)
05/13/2020	1,014.0	996.3	0.577	1,335.33	-35.31	1.505	0.378	95.834	2.149	0.111	0.005	0.011	0.002	0.003	0.001
05/14/2020	1,014.2	996.6	0.577	1,335.01	-33.14	1.534	0.385	95.723	2.217	0.116	0.006	0.012	0.002	0.003	0.001
05/15/2020	1,010.3	992.8	0.576	1,331.82	-36.95	1.648	0.360	95.977	1.909	0.090	0.004	0.009	0.001	0.002	0.001
05/16/2020	1,008.3	990.7	0.574	1,331.16	-39.30	1.635	0.339	96.309	1.623	0.080	0.004	0.007	0.001	0.001	0
05/17/2020	1,008.6	991.1	0.574	1,331.29	-39.66	1.649	0.333	96.233	1.704	0.069	0.003	0.006	0.001	0.001	0
05/18/2020	1,011.8	994.2	0.576	1,333.02	-33.62	1.621	0.357	95.878	2.025	0.100	0.004	0.009	0.002	0.002	0.001
05/19/2020	1,011.4	993.8	0.576	1,333.25	-35.50	1.593	0.353	95.970	1.982	0.085	0.004	0.008	0.002	0.002	0.001
05/20/2020	1,017.4	999.7	0.577	1,339.17	-33.13	1.309	0.408	95.801	2.328	0.126	0.006	0.013	0.003	0.004	0.002
05/21/2020	1,017.4	999.7	0.577	1,339.71	-34.27	1.256	0.413	95.951	2.188	0.159	0.008	0.016	0.003	0.003	0.002
05/22/2020	1,016.6	998.9	0.577	1,338.54	-32.24	1.325	0.406	95.913	2.162	0.160	0.008	0.016	0.003	0.003	0.002
05/23/2020	1,018.2	1,000.5	0.577	1,339.95	-31.96	1.297	0.400	95.812	2.261	0.200	0.008	0.015	0.003	0.003	0.002
05/24/2020	1,015.7	998.0	0.579	1,335.15	-36.19	1.589	0.386	95.457	2.369	0.173	0.006	0.012	0.002	0.002	0.001
05/25/2020	1,016.3	998.6	0.580	1,334.86	-69.20	1.633	0.393	95.272	2.491	0.186	0.007	0.013	0.002	0.002	0.001
05/26/2020	1,015.4	997.8	0.579	1,334.59	-71.60	1.647	0.370	95.402	2.365	0.193	0.006	0.011	0.002	0.002	0.001
05/27/2020	1,013.0	995.4	0.578	1,332.88	-33.29	1.689	0.358	95.625	2.146	0.161	0.005	0.011	0.002	0.002	0.001
05/28/2020	1,015.7	998.0	0.579	1,334.62	-34.68	1.612	0.400	95.382	2.400	0.179	0.007	0.013	0.002	0.003	0.001
05/29/2020	1,015.5	997.9	0.579	1,334.13	-29.45	1.639	0.404	95.336	2.415	0.176	0.007	0.014	0.003	0.003	0.002
05/30/2020	1,025.8	1,008.0	0.585	1,340.92	-18.26	1.595	0.385	94.835	2.548	0.421	0.042	0.103	0.022	0.026	0.017
05/31/2020	1,008.7	991.2	0.575	1,330.86	-33.13	1.673	0.345	96.164	1.715	0.084	0.004	0.009	0.002	0.002	0.001
06/01/2020	1,012.3	994.6	0.576	1,333.87	-32.59	1.596	0.344	95.876	2.087	0.084	0.003	0.007	0.001	0.002	0.001
06/02/2020	1,022.5	1,004.7	0.582	1,340.38	-34.68	1.479	0.390	94.784	3.170	0.156	0.005	0.010	0.002	0.002	0.001
06/03/2020	1,027.3	1,009.5	0.585	1,342.84	-27.41	1.481	0.405	94.402	3.361	0.255	0.019	0.045	0.010	0.011	0.008
06/04/2020	1,018.1	1,000.4	0.580	1,336.66	-35.96	1.602	0.372	95.041	2.882	0.090	0.003	0.007	0.001	0.002	0.001
06/05/2020	1,017.2	999.5	0.581	1,334.74	-33.92	1.706	0.380	94.933	2.852	0.106	0.005	0.012	0.002	0.003	0.001
06/06/2020	1,017.6	999.9	0.581	1,335.51	-33.00	1.672	0.372	94.961	2.879	0.101	0.004	0.007	0.001	0.002	0.001
06/07/2020	1,017.6	999.9	0.581	1,335.35	-28.92	1.706	0.359	95.019	2.739	0.127	0.009	0.022	0.005	0.007	0.005
06/08/2020	1,015.8	998.1	0.580	1,333.88	-32.60	1.720	0.372	95.067	2.739	0.088	0.003	0.007	0.001	0.002	0.001
06/09/2020	1,017.0	999.3	0.580	1,335.33	-32.70	1.654	0.375	95.074	2.775	0.101	0.004	0.010	0.002	0.002	0.001
06/10/2020	1,019.0	1,001.3	0.581	1,336.75	-30.57	1.619	0.384	94.866	3.017	0.098	0.004	0.007	0.001	0.001	0.001
06/11/2020	1,016.5	998.8	0.580	1,334.81	-32.52	1.660	0.383	95.073	2.795	0.080	0.002	0.005	0.001	0.001	0.001
06/12/2020	1,018.9	1,001.2	0.581	1,336.65	-32.54	1.613	0.392	94.866	3.019	0.095	0.003	0.008	0.001	0.001	0.001
06/13/2020	1,017.3	999.6	0.580	1,336.02	-57.23	1.614	0.375	95.083	2.843	0.078	0.002	0.005	0	0	0
06/14/2020	1,014.9	997.2	0.579	1,333.97	-67.93	1.666	0.374	95.254	2.644	0.057	0.001	0.003	0	0	0
06/15/2020	1,015.8	998.1	0.578	1,335.55	-65.63	1.601	0.360	95.323	2.653	0.057	0.002	0.003	0	0	0
06/16/2020	1,019.0	1,001.2	0.580	1,338.33	-68.73	1.522	0.362	95.126	2.892	0.088	0.003	0.006	0.001	0.001	0
06/17/2020	1,019.1	1,001.3	0.580	1,337.73	-70.89	1.566	0.369	94.976	3.007	0.077	0.002	0.003	0	0	0
06/18/2020	1,026.6	1,008.8	0.586	1,341.65	-65.49	1.585	0.381	94.103	3.668	0.245	0.008	0.010	0	0	0
06/19/2020	1,021.3	1,003.5	0.581	1,339.44	-47.62	1.504	0.387	94.884	3.076	0.121	0.006	0.015	0.003	0.003	0.002
06/20/2020	1,019.3	1,001.5	0.580	1,338.70	-61.01	1.475	0.383	95.134	2.923	0.076	0.002	0.005	0	0.001	0
06/21/2020	1,019.5	1,001.7	0.580	1,338.74	-71.65	1.477	0.385	95.099	2.953	0.076	0.003	0.005	0.001	0.001	0.001
06/22/2020	1,019.2	1,001.5	0.580	1,338.05	-71.06	1.532	0.379	95.015	2.987	0.076	0.003	0.006	0.001	0.001	0.001
06/23/2020	1,018.7	1,001.0	0.580	1,338.20	-71.09	1.501	0.375	95.159	2.882	0.076	0.002	0.005	0	0	0
06/24/2020	1,019.3	1,001.5	0.580	1,338.62	-63.57	1.480	0.383	95.144	2.891	0.088	0.003	0.007	0.001	0.001	0.001

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5/13/2020 - 8/13/2020

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%)
06/25/2020	1,019.5	1,001.8	0.580	1,338.89	-55.82	1.469	0.384	95.131	2.916	0.087	0.003	0.006	0.001	0.001	0.001
06/26/2020	1,019.7	1,001.9	0.580	1,338.91	-56.15	1.474	0.384	95.092	2.951	0.088	0.003	0.005	0.001	0.001	0
06/27/2020	1,020.6	1,002.8	0.580	1,339.81	-56.67	1.458	0.376	95.034	3.032	0.087	0.003	0.007	0.001	0.001	0.001
06/28/2020	1,021.2	1,003.4	0.580	1,340.49	-56.13	1.435	0.373	95.012	3.083	0.086	0.003	0.006	0.001	0.001	0.001
06/29/2020	1,022.7	1,004.9	0.582	1,340.87	-53.15	1.456	0.386	94.756	3.285	0.103	0.003	0.007	0.001	0.001	0.001
06/30/2020	1,022.8	1,005.0	0.582	1,340.51	-37.22	1.506	0.374	94.657	3.352	0.098	0.003	0.007	0.001	0.001	0.001
07/01/2020	1,019.5	1,001.7	0.581	1,336.88	-34.04	1.613	0.395	94.807	3.064	0.102	0.004	0.010	0.002	0.002	0.001
07/02/2020	1,016.0	998.3	0.579	1,335.01	-27.43	1.627	0.379	95.246	2.645	0.086	0.004	0.009	0.002	0.002	0.001
07/03/2020	1,015.4	997.8	0.579	1,334.75	-28.79	1.651	0.360	95.299	2.594	0.079	0.004	0.009	0.002	0.002	0.001
07/04/2020	1,015.1	997.5	0.578	1,334.99	-29.55	1.611	0.364	95.423	2.503	0.081	0.004	0.010	0.002	0.002	0.001
07/05/2020	1,017.0	999.3	0.579	1,336.31	-29.52	1.584	0.369	95.286	2.616	0.117	0.006	0.014	0.003	0.003	0.001
07/06/2020	1,020.3	1,002.6	0.582	1,337.90	-53.87	1.585	0.386	94.916	2.870	0.210	0.009	0.018	0.003	0.003	0.001
07/07/2020	1,019.4	1,001.7	0.581	1,337.42	-70.91	1.571	0.393	94.981	2.855	0.185	0.005	0.009	0.001	0.001	0
07/08/2020	1,023.2	1,005.4	0.583	1,339.80	-55.78	1.546	0.399	94.654	3.119	0.242	0.010	0.022	0.003	0.004	0.002
07/09/2020	1,029.7	1,011.8	0.587	1,344.07	-32.98	1.499	0.402	94.139	3.493	0.388	0.020	0.040	0.006	0.007	0.004
07/10/2020	1,025.1	1,007.2	0.585	1,340.57	-32.29	1.551	0.411	94.433	3.258	0.303	0.012	0.023	0.003	0.003	0.001
07/11/2020	1,026.6	1,008.7	0.585	1,342.49	-31.95	1.473	0.406	94.549	3.103	0.424	0.014	0.024	0.003	0.003	0.002
07/12/2020	1,021.7	1,004.0	0.582	1,339.33	-31.05	1.521	0.395	94.825	3.039	0.200	0.006	0.011	0.001	0.001	0.001
07/13/2020	1,023.0	1,005.2	0.583	1,339.61	-31.40	1.535	0.410	94.623	3.182	0.229	0.006	0.011	0.001	0.002	0.001
07/14/2020	1,019.4	1,001.6	0.580	1,338.09	-35.76	1.548	0.370	95.068	2.843	0.159	0.004	0.007	0	0	0
07/15/2020	1,022.6	1,004.8	0.583	1,339.73	-41.34	1.545	0.383	94.737	3.067	0.241	0.008	0.015	0.002	0.001	0
07/16/2020	1,021.1	1,003.3	0.582	1,338.60	-34.44	1.563	0.387	94.831	2.994	0.202	0.006	0.012	0.002	0.002	0.001
07/17/2020	1,023.9	1,006.1	0.584	1,340.28	-30.71	1.545	0.396	94.585	3.162	0.277	0.010	0.018	0.002	0.002	0.001
07/18/2020	1,023.6	1,005.7	0.584	1,339.78	-31.13	1.548	0.409	94.552	3.208	0.258	0.007	0.012	0.001	0.001	0.001
07/19/2020	1,024.6	1,006.8	0.584	1,340.49	-33.20	1.537	0.412	94.468	3.266	0.292	0.008	0.014	0.001	0.001	0.001
07/20/2020	1,024.5	1,006.7	0.584	1,340.50	-79.80	1.539	0.406	94.488	3.248	0.297	0.007	0.012	0.001	0.001	0
07/21/2020	1,021.6	1,003.8	0.582	1,338.64	-43.96	1.549	0.408	94.811	2.969	0.226	0.009	0.020	0.003	0.003	0.001
07/22/2020	1,016.3	998.7	0.579	1,335.75	-29.75	1.550	0.401	95.349	2.574	0.112	0.004	0.008	0.001	0.001	0.001
07/23/2020	1,020.6	1,002.8	0.579	1,340.91	-25.71	1.296	0.422	95.435	2.637	0.180	0.007	0.014	0.002	0.003	0.002
07/24/2020	1,028.7	1,010.8	0.585	1,345.13	-23.84	1.319	0.429	94.716	2.995	0.447	0.025	0.050	0.007	0.007	0.003
07/25/2020	1,027.9	1,010.0	0.584	1,344.78	-23.08	1.304	0.434	94.715	3.091	0.401	0.016	0.029	0.004	0.004	0.002
07/26/2020	1,029.6	1,011.6	0.585	1,345.78	-22.71	1.296	0.436	94.590	3.145	0.469	0.019	0.033	0.004	0.004	0.003
07/27/2020	1,031.4	1,013.4	0.587	1,345.83	-24.57	1.351	0.454	94.248	3.355	0.520	0.021	0.037	0.004	0.005	0.002
07/28/2020	1,030.6	1,012.7	0.586	1,346.64	-23.90	1.275	0.436	94.546	3.170	0.503	0.021	0.037	0.004	0.004	0.003
07/29/2020	1,035.8	1,017.8	0.589	1,349.27	-21.88	1.268	0.461	93.912	3.713	0.568	0.023	0.041	0.005	0.005	0.003
07/30/2020	1,027.8	1,009.9	0.584	1,345.10	-23.88	1.236	0.459	94.773	3.132	0.344	0.015	0.028	0.004	0.005	0.003
07/31/2020	1,029.3	1,011.4	0.586	1,345.01	-25.76	1.316	0.456	94.481	3.275	0.407	0.018	0.034	0.005	0.005	0.003
08/01/2020	1,028.1	1,010.2	0.584	1,345.50	-25.47	1.174	0.486	94.855	3.052	0.366	0.019	0.035	0.005	0.005	0.003
08/02/2020	1,024.0	1,006.1	0.581	1,342.92	-25.67	1.220	0.468	95.159	2.875	0.231	0.011	0.023	0.004	0.004	0.003
08/03/2020	1,022.6	1,004.8	0.580	1,342.30	-29.79	1.218	0.461	95.308	2.777	0.195	0.010	0.020	0.003	0.004	0.002
08/04/2020	1,020.4	1,002.6	0.579	1,341.18	-25.25	1.222	0.450	95.567	2.570	0.150	0.009	0.020	0.004	0.004	0.003
08/05/2020	1,019.4	1,001.7	0.578	1,341.18	-25.01	1.262	0.395	95.654	2.556	0.105	0.006	0.013	0.003	0.003	0.002
08/06/2020	1,019.6	1,001.8	0.578	1,341.41	-23.79	1.259	0.388	95.650	2.574	0.104	0.005	0.011	0.002	0.003	0.002

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5/13/2020 - 8/13/2020

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%)
08/07/2020	1,020.7	1,002.9	0.579	1,341.78	-22.70	1.265	0.399	95.491	2.701	0.113	0.006	0.014	0.003	0.004	0.003
08/08/2020	1,020.9	1,003.2	0.578	1,342.35	-24.73	1.239	0.393	95.518	2.712	0.110	0.006	0.012	0.003	0.003	0.002
08/09/2020	1,020.3	1,002.6	0.578	1,342.03	-35.35	1.239	0.392	95.569	2.677	0.104	0.004	0.009	0.002	0.002	0.001
08/10/2020	1,021.6	1,003.8	0.579	1,342.73	-28.20	1.228	0.399	95.453	2.782	0.110	0.006	0.013	0.003	0.003	0.002
08/11/2020	1,020.5	1,002.8	0.578	1,341.95	-26.20	1.229	0.410	95.555	2.668	0.112	0.006	0.012	0.003	0.003	0.002

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: Business Unit ID = 70; Analysis_Key = 66321