

Gas Quality Reports

LS335 Blackwell to Shidler

11/25/2019 - 2/25/2020

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%)
11/25/2019	1,045.7	1,027.5	0.597	1,353.01	-138.96	1.506	0.413	91.644	6.256	0.174	0.002	0.003	0	0	0.002
11/26/2019	1,046.0	1,027.8	0.597	1,353.90	-138.93	1.450	0.412	91.745	6.202	0.182	0.003	0.004	0	0	0.003
11/27/2019	1,046.3	1,028.1	0.597	1,353.89	-138.51	1.458	0.415	91.726	6.169	0.220	0.004	0.006	0	0	0.003
11/28/2019	1,046.0	1,027.8	0.597	1,353.82	-138.97	1.466	0.405	91.723	6.218	0.181	0.002	0.003	0	0	0.002
11/29/2019	1,046.3	1,028.1	0.597	1,354.09	-138.82	1.456	0.407	91.695	6.256	0.180	0.002	0.003	0	0	0.002
11/30/2019	1,046.3	1,028.1	0.597	1,354.03	-138.74	1.453	0.410	91.709	6.243	0.173	0.003	0.005	0	0.001	0.003
12/01/2019	1,045.9	1,027.7	0.597	1,353.70	-139.05	1.465	0.410	91.708	6.244	0.166	0.002	0.003	0	0	0.002
12/02/2019	1,045.2	1,027.1	0.597	1,352.58	-139.09	1.523	0.411	91.679	6.198	0.180	0.003	0.004	0	0	0.003
12/03/2019	1,042.9	1,024.8	0.595	1,351.80	-141.03	1.493	0.400	92.063	5.864	0.172	0.002	0.004	0	0	0.002
12/04/2019	1,041.1	1,022.9	0.594	1,350.79	-141.27	1.480	0.405	92.490	5.347	0.223	0.012	0.027	0.005	0.005	0.007
12/05/2019	1,036.3	1,018.3	0.591	1,348.11	-146.31	1.490	0.396	92.885	5.106	0.115	0.002	0.003	0	0	0.002
12/06/2019	1,034.2	1,016.2	0.590	1,346.86	-147.89	1.491	0.398	93.140	4.855	0.109	0.002	0.003	0	0	0.002
12/07/2019	1,031.8	1,013.8	0.588	1,345.50	-149.90	1.470	0.409	93.477	4.534	0.102	0.002	0.003	0	0	0.002
12/08/2019	1,033.4	1,015.4	0.589	1,346.58	-148.19	1.465	0.405	93.378	4.602	0.098	0.041	0.003	0	0	0.007
12/09/2019	1,031.4	1,013.4	0.588	1,345.26	-150.13	1.494	0.394	93.513	4.485	0.106	0.002	0.004	0	0	0.002
12/10/2019	1,027.7	1,009.8	0.586	1,342.17	-152.14	1.629	0.357	93.811	4.061	0.127	0.004	0.007	0	0	0.005
12/11/2019	1,030.9	1,012.9	0.588	1,344.57	-150.05	1.519	0.399	93.540	4.406	0.122	0.003	0.006	0	0	0.005
12/12/2019	1,029.9	1,012.0	0.588	1,343.60	-150.76	1.565	0.390	93.566	4.354	0.114	0.003	0.005	0	0	0.003
12/13/2019	1,030.8	1,012.8	0.588	1,343.66	-149.87	1.562	0.416	93.408	4.484	0.117	0.003	0.006	0	0	0.003
12/14/2019	1,030.2	1,012.3	0.588	1,343.17	-150.21	1.580	0.415	93.435	4.442	0.117	0.003	0.005	0	0	0.003
12/15/2019	1,030.3	1,012.4	0.588	1,343.30	-150.11	1.587	0.404	93.441	4.437	0.116	0.003	0.006	0	0	0.004
12/16/2019	1,031.7	1,013.7	0.589	1,344.30	-148.84	1.587	0.394	93.319	4.543	0.139	0.004	0.008	0	0	0.005
12/17/2019	1,031.2	1,013.3	0.589	1,343.89	-149.15	1.603	0.392	93.336	4.521	0.131	0.004	0.007	0	0	0.005
12/18/2019	1,031.6	1,013.6	0.588	1,344.80	-149.32	1.541	0.395	93.415	4.509	0.126	0.003	0.007	0	0	0.005
12/19/2019	1,032.6	1,014.6	0.589	1,345.74	-148.56	1.503	0.400	93.378	4.566	0.135	0.004	0.008	0	0.001	0.006
12/20/2019	1,032.4	1,014.4	0.589	1,345.49	-148.67	1.507	0.404	93.390	4.551	0.129	0.004	0.008	0	0.001	0.007
12/21/2019	1,031.1	1,013.2	0.588	1,344.64	-149.65	1.522	0.401	93.511	4.427	0.121	0.004	0.007	0.001	0	0.006
12/22/2019	1,031.7	1,013.7	0.588	1,344.90	-149.10	1.530	0.400	93.432	4.490	0.129	0.004	0.008	0	0	0.007
12/23/2019	1,028.8	1,010.9	0.587	1,343.27	-151.75	1.523	0.402	93.777	4.181	0.103	0.003	0.005	0	0	0.005
12/24/2019	1,030.4	1,012.5	0.590	1,341.94	-149.28	1.696	0.412	93.166	4.583	0.132	0.003	0.005	0	0	0.003
12/25/2019	1,031.9	1,013.9	0.591	1,342.56	-147.86	1.712	0.414	92.959	4.749	0.154	0.003	0.006	0	0	0.004
12/26/2019	1,029.0	1,011.1	0.586	1,343.76	-151.74	1.501	0.396	93.825	4.151	0.113	0.003	0.006	0	0	0.005
12/27/2019	1,029.6	1,011.7	0.587	1,344.06	-151.11	1.510	0.393	93.744	4.223	0.114	0.003	0.006	0	0	0.006
12/28/2019	1,029.8	1,011.9	0.587	1,343.85	-150.74	1.520	0.404	93.671	4.269	0.118	0.004	0.007	0	0	0.006
12/29/2019	1,031.8	1,013.8	0.588	1,345.29	-148.93	1.502	0.400	93.514	4.419	0.138	0.005	0.010	0.002	0.001	0.008
12/30/2019	1,029.8	1,011.9	0.587	1,344.02	-150.45	1.511	0.401	93.738	4.194	0.129	0.005	0.010	0.002	0.001	0.008
12/31/2019	1,028.1	1,010.2	0.586	1,343.23	-151.93	1.493	0.401	94.011	3.939	0.124	0.006	0.012	0.002	0.002	0.009
01/01/2020	1,019.8	1,002.1	0.581	1,338.10	-159.83	1.569	0.370	94.899	3.063	0.083	0.003	0.006	0	0	0.006
01/02/2020	1,020.1	1,002.4	0.581	1,338.23	-159.50	1.573	0.371	94.852	3.104	0.086	0.003	0.006	0	0	0.006
01/03/2020	1,022.3	1,004.5	0.583	1,339.08	-156.93	1.603	0.372	94.556	3.330	0.116	0.005	0.009	0.001	0.001	0.008
01/04/2020	1,020.0	1,002.3	0.581	1,338.19	-159.51	1.585	0.362	94.863	3.088	0.086	0.003	0.006	0	0	0.007
01/05/2020	1,018.2	1,000.5	0.580	1,337.20	-161.52	1.581	0.360	95.099	2.875	0.072	0.003	0.005	0	0	0.006
01/06/2020	1,018.4	1,000.7	0.580	1,337.23	-161.10	1.595	0.357	95.042	2.915	0.076	0.003	0.006	0	0	0.006

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01/07/2020	1,020.3	1,002.5	0.581	1,338.24	-159.24	1.600	0.357	94.807	3.131	0.090	0.003	0.006	0	0	0.006
01/08/2020	1,021.3	1,003.5	0.582	1,338.31	-157.72	1.628	0.366	94.624	3.251	0.107	0.004	0.009	0.001	0.001	0.007
01/09/2020	1,019.5	1,001.7	0.581	1,337.53	-159.86	1.617	0.358	94.883	3.027	0.098	0.004	0.007	0	0	0.005
01/10/2020	1,020.6	1,002.9	0.581	1,338.97	-159.27	1.556	0.357	94.862	3.117	0.091	0.003	0.007	0	0	0.005
01/11/2020	1,022.3	1,004.6	0.583	1,339.24	-156.86	1.607	0.363	94.558	3.333	0.114	0.005	0.010	0.001	0.001	0.008
01/12/2020	1,025.9	1,008.0	0.585	1,341.36	-152.08	1.604	0.358	94.327	3.430	0.204	0.016	0.036	0.007	0.008	0.011
01/13/2020	1,020.2	1,002.4	0.582	1,337.84	-158.80	1.634	0.353	94.783	3.103	0.102	0.005	0.010	0.002	0.002	0.007
01/14/2020	1,020.8	1,003.1	0.582	1,337.69	-157.86	1.671	0.357	94.612	3.226	0.109	0.005	0.010	0.002	0.002	0.007
01/15/2020	1,019.4	1,001.7	0.582	1,336.57	-159.25	1.695	0.357	94.714	3.117	0.098	0.004	0.008	0.001	0.001	0.006
01/16/2020	1,024.5	1,006.7	0.584	1,340.75	-154.53	1.582	0.366	94.386	3.489	0.137	0.008	0.015	0.003	0.003	0.011
01/17/2020	1,023.4	1,005.6	0.583	1,340.18	-155.93	1.573	0.368	94.504	3.407	0.119	0.005	0.011	0.002	0.002	0.009
01/18/2020	1,027.4	1,009.5	0.586	1,342.22	-150.79	1.589	0.369	94.146	3.617	0.202	0.016	0.034	0.007	0.008	0.012
01/19/2020	1,023.3	1,005.5	0.583	1,339.93	-155.66	1.582	0.370	94.534	3.343	0.130	0.008	0.016	0.003	0.003	0.010
01/20/2020	1,022.8	1,005.0	0.583	1,339.54	-156.37	1.589	0.371	94.538	3.358	0.114	0.006	0.011	0.002	0.002	0.009
01/21/2020	1,023.0	1,005.2	0.583	1,339.73	-156.20	1.582	0.372	94.533	3.365	0.117	0.006	0.011	0.003	0.002	0.009
01/22/2020	1,021.8	1,004.1	0.582	1,339.13	-157.59	1.581	0.369	94.652	3.272	0.102	0.005	0.009	0.001	0.001	0.007
01/23/2020	1,021.9	1,004.1	0.582	1,339.05	-157.40	1.599	0.363	94.630	3.276	0.106	0.005	0.010	0.001	0.002	0.007
01/24/2020	1,022.9	1,005.1	0.584	1,339.00	-156.02	1.635	0.373	94.412	3.434	0.116	0.005	0.012	0.002	0.002	0.008
01/25/2020	1,022.0	1,004.2	0.583	1,338.64	-157.17	1.634	0.366	94.516	3.361	0.102	0.004	0.008	0.001	0.001	0.007
01/26/2020	1,022.2	1,004.4	0.583	1,338.45	-156.61	1.663	0.363	94.443	3.394	0.111	0.005	0.010	0.001	0.002	0.008
01/27/2020	1,020.4	1,002.6	0.582	1,337.11	-158.40	1.691	0.360	94.590	3.244	0.097	0.003	0.007	0.001	0.001	0.006
01/28/2020	1,024.9	1,007.0	0.585	1,340.16	-153.45	1.640	0.370	94.210	3.594	0.144	0.008	0.018	0.004	0.004	0.010
01/29/2020	1,022.0	1,004.3	0.584	1,337.51	-156.21	1.720	0.372	94.325	3.436	0.121	0.005	0.010	0.001	0.002	0.008
01/30/2020	1,022.3	1,004.5	0.583	1,339.06	-156.70	1.629	0.357	94.528	3.348	0.112	0.005	0.011	0.002	0.002	0.008
01/31/2020	1,024.8	1,007.0	0.585	1,340.23	-153.64	1.632	0.369	94.222	3.607	0.133	0.006	0.014	0.003	0.003	0.011
02/01/2020	1,021.1	1,003.3	0.582	1,338.21	-157.90	1.630	0.364	94.656	3.221	0.106	0.004	0.009	0.001	0.001	0.008
02/02/2020	1,021.4	1,003.7	0.582	1,338.41	-157.78	1.616	0.373	94.600	3.292	0.099	0.004	0.008	0	0.001	0.007
02/03/2020	1,021.5	1,003.7	0.583	1,338.20	-157.34	1.652	0.363	94.554	3.299	0.107	0.005	0.010	0.001	0.002	0.007
02/04/2020	1,024.2	1,006.4	0.584	1,339.67	-154.29	1.645	0.372	94.273	3.536	0.133	0.007	0.015	0.003	0.004	0.012
02/05/2020	1,025.3	1,007.5	0.586	1,339.85	-152.31	1.683	0.373	94.079	3.662	0.154	0.008	0.018	0.004	0.004	0.014
02/06/2020	1,027.0	1,009.1	0.586	1,341.17	-150.77	1.653	0.374	93.966	3.778	0.171	0.010	0.022	0.005	0.005	0.016
02/07/2020	1,026.0	1,008.1	0.585	1,341.18	-152.24	1.595	0.379	94.199	3.617	0.159	0.009	0.020	0.004	0.005	0.015
02/08/2020	1,024.7	1,006.8	0.585	1,339.95	-153.49	1.637	0.376	94.232	3.567	0.146	0.007	0.016	0.003	0.003	0.012
02/09/2020	1,023.9	1,006.1	0.584	1,339.47	-155.05	1.639	0.378	94.261	3.571	0.125	0.005	0.011	0	0.001	0.009
02/10/2020	1,024.3	1,006.5	0.585	1,339.77	-154.36	1.635	0.376	94.258	3.557	0.138	0.007	0.017	0	0	0.012
02/11/2020	1,024.7	1,006.8	0.585	1,340.09	-153.41	1.632	0.372	94.265	3.537	0.146	0.010	0.021	0.001	0.002	0.013
02/12/2020	1,022.5	1,004.7	0.583	1,339.17	-155.49	1.595	0.378	94.660	3.152	0.156	0.012	0.024	0.004	0.005	0.015
02/13/2020	1,017.0	999.3	0.580	1,335.82	-83.22	1.610	0.378	95.386	2.377	0.183	0.013	0.026	0.005	0.006	0.017
02/14/2020	1,001.5	984.1	0.570	1,327.05	-180.89	1.591	0.377	97.376	0.457	0.151	0.008	0.018	0.004	0.004	0.014
02/15/2020	997.3	980.0	0.568	1,323.88	-199.97	1.645	0.379	97.780	0	0.152	0.008	0.017	0.003	0.003	0.013
02/16/2020	996.7	979.4	0.567	1,323.46	-199.97	1.662	0.371	97.799	0	0.133	0.006	0.013	0.002	0.003	0.011
02/17/2020	996.4	979.1	0.567	1,323.65	-199.97	1.639	0.367	97.851	0	0.119	0.004	0.010	0.001	0.001	0.007
02/18/2020	997.8	980.4	0.567	1,325.26	-199.97	1.559	0.376	97.892	0	0.139	0.006	0.014	0.003	0.002	0.010

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02/19/2020	1,000.2	982.8	0.567	1,328.69	-199.97	1.570	0.260	97.926	0	0.190	0.011	0.025	0.002	0.001	0.017
02/20/2020	1,004.0	986.5	0.563	1,338.67	-199.97	1.327	0.013	98.471	0	0.153	0.006	0.018	0	0	0.011
02/21/2020	1,025.0	1,007.2	0.582	1,343.48	-156.21	1.413	0.345	94.690	3.418	0.110	0.005	0.011	0.001	0.002	0.005
02/22/2020	1,022.7	1,004.9	0.581	1,341.62	-158.59	1.448	0.351	94.819	3.295	0.076	0.002	0.005	0.001	0.001	0.002
02/23/2020	1,022.0	1,004.2	0.580	1,341.40	-159.67	1.426	0.355	94.923	3.232	0.061	0.001	0.002	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 = 66332