

Gas Quality Reports

LS117-Blackwell to Grabham at Grabham
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	1,021.5	1,003.7	0.582	1,339.48	-158.85	1.536	0.371	94.738	3.284	0.060	0.002	0.005	0.001	0.001	0.004
05/18/2019	1,022.8	1,005.0	0.582	1,340.30	-157.08	1.549	0.360	94.619	3.358	0.087	0.005	0.012	0.002	0.003	0.006
05/19/2019	1,022.2	1,004.4	0.582	1,339.77	-158.19	1.554	0.367	94.589	3.433	0.053	0	0	0	0	0.005
05/20/2019	1,025.5	1,007.7	0.583	1,342.57	-155.76	1.475	0.371	94.341	3.748	0.061	0	0	0	0	0.005
05/21/2019	1,024.8	1,006.9	0.583	1,341.95	-156.31	1.490	0.371	94.397	3.676	0.061	0	0	0	0	0.005
05/22/2019	1,025.3	1,007.5	0.583	1,342.71	-156.14	1.448	0.375	94.406	3.709	0.058	0	0	0	0	0.004
05/23/2019	1,023.1	1,005.3	0.582	1,340.84	-157.90	1.505	0.368	94.575	3.497	0.052	0	0	0	0	0.003
05/24/2019	1,023.0	1,005.2	0.582	1,340.76	-157.92	1.504	0.371	94.585	3.480	0.055	0	0.001	0	0	0.003
05/25/2019	1,024.6	1,006.8	0.583	1,342.39	-156.95	1.442	0.375	94.498	3.629	0.054	0	0	0	0	0.002
05/26/2019	1,024.3	1,006.4	0.582	1,342.05	-157.18	1.448	0.377	94.538	3.574	0.059	0	0	0	0	0.003
05/27/2019	1,023.7	1,005.8	0.582	1,341.86	-157.73	1.439	0.374	94.650	3.470	0.063	0	0.001	0	0	0.003
05/28/2019	1,024.3	1,006.5	0.582	1,342.34	-157.09	1.441	0.368	94.576	3.545	0.063	0.001	0.002	0	0	0.004
05/29/2019	1,024.5	1,006.7	0.583	1,341.75	-156.54	1.501	0.367	94.410	3.657	0.061	0	0	0	0	0.004
05/30/2019	1,022.9	1,005.1	0.582	1,340.94	-158.11	1.488	0.369	94.636	3.449	0.054	0	0	0	0	0.004
05/31/2019	1,021.6	1,003.9	0.582	1,339.61	-158.77	1.559	0.353	94.685	3.337	0.059	0	0.001	0	0	0.004
06/01/2019	1,022.0	1,004.2	0.582	1,339.83	-158.54	1.547	0.363	94.629	3.405	0.053	0	0	0	0	0.004
06/02/2019	1,024.1	1,006.3	0.583	1,340.79	-156.41	1.574	0.357	94.334	3.658	0.070	0.001	0.002	0	0	0.003
06/03/2019	1,021.8	1,004.0	0.581	1,339.93	-158.52	1.527	0.362	94.770	3.242	0.080	0.003	0.009	0.001	0.002	0.004
06/04/2019	1,026.2	1,008.4	0.582	1,344.89	-155.96	1.311	0.376	94.667	3.532	0.099	0.004	0.007	0.001	0.001	0.004
06/05/2019	1,025.0	1,007.2	0.582	1,343.54	-156.90	1.352	0.383	94.689	3.480	0.084	0.002	0.005	0	0	0.003
06/06/2019	1,028.2	1,010.3	0.585	1,344.44	-151.91	1.426	0.385	94.266	3.718	0.152	0.011	0.023	0.005	0.005	0.009
06/07/2019	1,028.8	1,010.9	0.584	1,346.07	-153.55	1.306	0.396	94.262	3.947	0.082	0.002	0.003	0	0	0.003
06/08/2019	1,025.0	1,007.2	0.583	1,342.54	-156.46	1.446	0.376	94.456	3.648	0.069	0.001	0.002	0	0	0.002
06/09/2019	1,021.2	1,003.4	0.582	1,338.65	-158.90	1.591	0.371	94.616	3.360	0.058	0	0	0	0	0.003
06/10/2019	1,023.9	1,006.1	0.582	1,341.56	-156.98	1.476	0.373	94.569	3.497	0.071	0.002	0.005	0.001	0.001	0.005
06/11/2019	1,025.2	1,007.4	0.583	1,342.25	-155.96	1.475	0.378	94.371	3.700	0.069	0.001	0.002	0	0	0.004
06/12/2019	1,022.4	1,004.6	0.582	1,339.97	-158.19	1.544	0.368	94.576	3.452	0.057	0	0	0	0	0.003
06/13/2019	1,021.9	1,004.1	0.582	1,339.29	-158.33	1.580	0.365	94.579	3.410	0.060	0.001	0.002	0	0	0.004
06/14/2019	1,023.5	1,005.7	0.583	1,340.71	-157.25	1.542	0.364	94.450	3.581	0.060	0	0	0	0	0.003
06/15/2019	1,023.1	1,005.3	0.583	1,340.03	-157.47	1.569	0.370	94.433	3.560	0.066	0	0.001	0	0	0.002
06/16/2019	1,022.4	1,004.6	0.583	1,339.45	-157.82	1.583	0.371	94.484	3.494	0.063	0	0.001	0	0	0.003
06/17/2019	1,023.0	1,005.2	0.583	1,339.48	-157.15	1.610	0.371	94.339	3.609	0.067	0	0.001	0	0	0.002
06/18/2019	1,024.3	1,006.5	0.584	1,339.99	-155.84	1.620	0.376	94.164	3.754	0.082	0.001	0.001	0	0	0.003
06/19/2019	1,023.0	1,005.2	0.584	1,338.89	-156.85	1.635	0.386	94.253	3.654	0.068	0	0.001	0	0	0.002
06/20/2019	1,021.5	1,003.8	0.583	1,337.33	-157.65	1.728	0.363	94.294	3.535	0.073	0.001	0.003	0.001	0.001	0.002
06/21/2019	1,024.1	1,006.3	0.587	1,336.11	-151.90	1.944	0.367	93.679	3.777	0.171	0.012	0.029	0.007	0.008	0.007
06/22/2019	1,019.8	1,002.1	0.584	1,335.02	-158.42	1.827	0.369	94.280	3.440	0.077	0.001	0.004	0	0.001	0.002
06/23/2019	1,022.2	1,004.4	0.584	1,337.03	-156.72	1.754	0.382	94.110	3.671	0.078	0.001	0.002	0	0	0.003
06/24/2019	1,025.3	1,007.5	0.585	1,340.95	-154.96	1.588	0.377	94.121	3.813	0.093	0.001	0.003	0	0	0.004
06/25/2019	1,024.4	1,006.6	0.584	1,340.35	-155.65	1.606	0.370	94.212	3.707	0.097	0.001	0.002	0	0	0.004
06/26/2019	1,040.6	1,022.5	0.594	1,350.66	-55.18	1.507	0.378	93.032	4.483	0.434	0.036	0.080	0.016	0.018	0.017
06/27/2019	1,041.7	1,023.6	0.595	1,350.57	-26.66	1.577	0.369	93.299	3.850	0.565	0.068	0.156	0.038	0.041	0.037
06/28/2019	1,035.3	1,017.3	0.591	1,346.95	-39.94	1.576	0.369	93.729	3.692	0.390	0.047	0.110	0.028	0.031	0.027

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06/29/2019	1,035.3	1,017.3	0.591	1,346.95	-39.94	1.576	0.369	93.729	3.692	0.390	0.047	0.110	0.028	0.031	0.027
06/30/2019	1,035.3	1,017.3	0.591	1,346.95	-39.94	1.576	0.369	93.729	3.692	0.390	0.047	0.110	0.028	0.031	0.027
07/01/2019	1,035.3	1,017.3	0.591	1,346.95	-39.94	1.576	0.369	93.729	3.692	0.390	0.047	0.110	0.028	0.031	0.027
07/02/2019	1,068.3	1,049.7	0.611	1,366.38	0.07	1.487	0.379	92.305	3.932	0.396	1.280	0.106	0.026	0.028	0.061
07/03/2019	1,027.1	1,009.2	0.588	1,339.17	-151.87	1.768	0.412	93.393	4.309	0.111	0.002	0.004	0	0	0
07/04/2019	1,026.4	1,008.6	0.589	1,337.97	-151.99	1.832	0.414	93.330	4.302	0.117	0.002	0.003	0	0	0
07/05/2019	1,029.8	1,011.9	0.591	1,339.34	-146.94	1.877	0.416	93.053	4.368	0.207	0.015	0.037	0.008	0.010	0.009
07/06/2019	1,025.8	1,008.0	0.589	1,336.83	-152.04	1.879	0.427	93.271	4.306	0.111	0.002	0.003	0	0	0.001
07/07/2019	1,024.6	1,006.8	0.587	1,337.51	-154.19	1.796	0.404	93.659	4.043	0.091	0.002	0.003	0	0	0.001
07/08/2019	1,023.0	1,005.2	0.586	1,336.40	-155.36	1.822	0.397	93.854	3.804	0.115	0.003	0.005	0	0	0
07/09/2019	1,024.9	1,007.0	0.586	1,338.24	-153.33	1.763	0.394	93.804	3.885	0.130	0.006	0.012	0.002	0.002	0.003
07/10/2019	1,051.5	1,033.2	0.602	1,354.81	-30.16	1.634	0.407	91.815	5.175	0.664	0.061	0.148	0.031	0.035	0.031
07/11/2019	1,068.7	1,050.1	0.612	1,366.65	-3.68	1.480	0.392	91.020	5.480	1.046	0.109	0.275	0.066	0.076	0.057
07/12/2019	1,038.2	1,020.1	0.595	1,346.49	-141.55	1.727	0.388	92.474	4.987	0.358	0.018	0.035	0.004	0.004	0.005
07/13/2019	1,033.0	1,015.0	0.591	1,343.95	-147.88	1.687	0.390	92.869	4.934	0.117	0.001	0.002	0	0	0
07/14/2019	1,033.9	1,015.9	0.591	1,344.87	-147.29	1.659	0.389	92.819	5.004	0.126	0.001	0.002	0	0	0
07/15/2019	1,035.6	1,017.6	0.592	1,346.13	-146.11	1.625	0.394	92.686	5.150	0.140	0.002	0.002	0	0	0
07/16/2019	1,037.5	1,019.4	0.593	1,347.28	-144.62	1.608	0.402	92.496	5.323	0.164	0.002	0.003	0	0	0.001
07/17/2019	1,037.9	1,019.8	0.593	1,348.26	-144.57	1.541	0.405	92.612	5.245	0.190	0.002	0.003	0	0	0.001
07/18/2019	1,039.2	1,021.1	0.593	1,349.03	-143.27	1.544	0.404	92.463	5.364	0.219	0.003	0.003	0	0	0.001
07/19/2019	1,036.7	1,018.7	0.593	1,346.79	-144.99	1.599	0.410	92.638	5.142	0.203	0.003	0.004	0	0	0.001
07/20/2019	1,037.1	1,019.0	0.594	1,345.63	-144.12	1.695	0.422	92.336	5.339	0.199	0.003	0.005	0	0	0.001
07/21/2019	1,037.4	1,019.4	0.594	1,346.64	-144.19	1.632	0.420	92.438	5.308	0.191	0.004	0.006	0	0	0.001
07/22/2019	1,035.1	1,017.1	0.591	1,346.82	-146.82	1.545	0.394	92.948	4.963	0.143	0.002	0.004	0	0	0.002
07/23/2019	1,035.2	1,017.1	0.590	1,347.33	-147.01	1.510	0.391	93.028	4.926	0.136	0.002	0.004	0	0	0.002
07/24/2019	1,035.7	1,017.7	0.591	1,346.70	-146.06	1.572	0.401	92.808	5.053	0.156	0.003	0.004	0	0	0.002
07/25/2019	1,035.6	1,017.6	0.593	1,344.29	-144.74	1.760	0.407	92.428	5.186	0.208	0.004	0.006	0	0	0.002
07/26/2019	1,038.1	1,020.1	0.592	1,348.80	-144.15	1.495	0.413	92.744	5.100	0.228	0.006	0.010	0.001	0.001	0.003
07/27/2019	1,036.1	1,018.1	0.593	1,345.64	-145.09	1.655	0.416	92.547	5.204	0.167	0.003	0.005	0	0	0.003
07/28/2019	1,034.9	1,016.9	0.595	1,342.12	-144.86	1.904	0.407	92.102	5.444	0.137	0.002	0.003	0	0	0.001
07/29/2019	1,035.8	1,017.8	0.593	1,345.09	-145.36	1.725	0.392	92.428	5.325	0.124	0.002	0.003	0	0	0.002
07/30/2019	1,036.2	1,018.1	0.595	1,342.98	-143.54	1.901	0.403	91.982	5.550	0.152	0.003	0.005	0	0	0.003
07/31/2019	1,036.0	1,018.0	0.599	1,338.76	-141.70	2.202	0.433	91.265	5.900	0.190	0.003	0.005	0	0	0.002
08/01/2019	1,038.4	1,020.3	0.596	1,345.26	-142.25	1.847	0.385	91.899	5.664	0.188	0.005	0.009	0.001	0.001	0.001
08/02/2019	1,050.9	1,032.6	0.600	1,357.20	-135.80	1.422	0.404	91.266	6.638	0.265	0.003	0.003	0	0	0
08/03/2019	1,052.4	1,034.1	0.601	1,357.79	-134.84	1.437	0.408	90.993	6.925	0.231	0.002	0.003	0	0	0
08/04/2019	1,055.0	1,036.6	0.602	1,359.84	-133.35	1.414	0.392	90.724	7.251	0.215	0.002	0.001	0	0	0
08/05/2019	1,055.3	1,037.0	0.602	1,359.78	-132.97	1.433	0.393	90.655	7.279	0.236	0.002	0.002	0	0	0
08/06/2019	1,056.0	1,037.6	0.603	1,360.17	-132.45	1.430	0.395	90.594	7.321	0.256	0.002	0.002	0	0	0
08/07/2019	1,058.9	1,040.4	0.604	1,362.12	-129.65	1.405	0.392	90.499	7.305	0.346	0.012	0.025	0.005	0.005	0.006
08/08/2019	1,053.7	1,035.3	0.601	1,358.71	-134.04	1.451	0.388	90.858	7.055	0.244	0.002	0.003	0	0	0
08/09/2019	1,051.0	1,032.7	0.600	1,357.09	-135.79	1.430	0.407	91.195	6.727	0.236	0.002	0.002	0	0	0
08/10/2019	1,050.9	1,032.6	0.600	1,356.51	-135.41	1.478	0.405	91.145	6.690	0.274	0.003	0.004	0	0	0.001

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08/11/2019	1,053.7	1,035.4	0.602	1,358.32	-133.80	1.466	0.402	90.789	7.083	0.255	0.002	0.002	0	0	0
08/12/2019	1,050.9	1,032.6	0.603	1,353.69	-134.33	1.724	0.397	90.565	7.076	0.224	0.004	0.008	0.001	0.001	0.001
08/13/2019	1,070.4	1,051.7	0.612	1,367.73	-27.95	1.465	0.400	89.763	7.383	0.704	0.056	0.136	0.029	0.035	0.031
08/14/2019	1,052.4	1,034.0	0.601	1,357.62	-134.72	1.458	0.402	90.976	6.918	0.239	0.002	0.003	0	0	0.001
08/15/2019	1,053.4	1,035.0	0.601	1,358.60	-133.29	1.415	0.408	91.068	6.774	0.296	0.008	0.018	0.004	0.004	0.005

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 = 66331