

Gas Quality Reports

LS335 Blackwell to Shidler

8/28/2024 - 11/28/2024

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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%)
08/27/2024 12:00AM	1,032.2	1,014.3	0.601	1,332.10	-143.10	2.718	0.358	90.642	6.163	0.112	0.002	0.004	0	0	0.001
08/28/2024 12:00AM	1,028.0	1,010.1	0.590	1,338.56	-151.16	1.878	0.406	93.140	4.383	0.165	0.007	0.015	0.003	0.002	0.002
08/29/2024 12:00AM	1,038.2	1,020.1	0.597	1,343.57	-143.91	2.095	0.311	91.389	6.117	0.087	0.001	0.002	0	0	0
08/30/2024 12:00AM	1,015.6	998.0	0.576	1,338.71	-167.57	1.175	0.466	96.120	2.145	0.085	0.003	0.006	0	0	0.001
08/31/2024 12:00AM	1,016.1	998.4	0.576	1,338.91	-166.96	1.181	0.466	96.049	2.206	0.089	0.003	0.006	0	0	0.001
09/01/2024 12:00AM	1,015.6	998.0	0.576	1,338.09	-166.94	1.255	0.447	95.981	2.226	0.082	0.003	0.006	0	0	0.002
09/02/2024 12:00AM	1,015.3	997.6	0.576	1,337.33	-167.06	1.291	0.454	95.908	2.260	0.080	0.002	0.004	0	0	0
09/03/2024 12:00AM	1,014.2	996.6	0.575	1,337.24	-168.47	1.288	0.426	96.118	2.086	0.072	0.002	0.005	0	0	0.001
09/04/2024 12:00AM	1,016.8	999.2	0.578	1,337.68	-164.59	1.328	0.458	95.644	2.462	0.095	0.003	0.007	0	0	0.002
09/05/2024 12:00AM	1,016.9	999.2	0.578	1,337.34	-164.37	1.348	0.464	95.574	2.507	0.094	0.003	0.007	0	0	0.002
09/06/2024 12:00AM	1,016.9	999.2	0.578	1,337.88	-164.74	1.314	0.458	95.673	2.449	0.094	0.003	0.007	0	0	0.002
09/07/2024 12:00AM	1,016.7	999.0	0.577	1,338.04	-164.78	1.309	0.447	95.766	2.348	0.111	0.005	0.011	0.001	0.001	0.003
09/08/2024 12:00AM	1,019.0	1,001.3	0.578	1,339.81	-149.09	1.272	0.447	95.652	2.436	0.147	0.010	0.021	0.004	0.005	0.006
09/09/2024 12:00AM	1,014.5	996.8	0.575	1,337.80	-168.51	1.228	0.444	96.190	2.054	0.074	0.002	0.005	0	0	0.002
09/10/2024 12:00AM	1,012.0	994.4	0.572	1,337.83	-172.83	1.125	0.435	96.732	1.660	0.042	0.002	0.004	0	0	0.001
09/11/2024 12:00AM	1,010.9	993.3	0.574	1,334.47	-171.83	1.346	0.434	96.369	1.794	0.049	0.002	0.004	0	0	0.001
09/12/2024 12:00AM	1,012.2	994.6	0.575	1,334.49	-170.01	1.393	0.444	96.073	2.027	0.057	0.002	0.004	0	0	0.001
09/13/2024 12:00AM	1,014.9	997.3	0.577	1,336.02	-161.66	1.342	0.479	95.791	2.302	0.075	0.003	0.006	0	0	0.003
09/14/2024 12:00AM	1,016.0	998.4	0.577	1,337.02	-165.50	1.343	0.459	95.703	2.390	0.094	0.003	0.006	0	0	0.001
09/15/2024 12:00AM	1,016.4	998.8	0.577	1,337.60	-165.43	1.318	0.456	95.702	2.432	0.083	0.003	0.005	0	0	0.001
09/16/2024 12:00AM	1,016.8	999.1	0.577	1,337.98	-165.16	1.301	0.457	95.715	2.416	0.102	0.003	0.005	0	0	0.001
09/17/2024 12:00AM	1,017.5	999.8	0.578	1,338.33	-164.09	1.298	0.463	95.635	2.476	0.114	0.003	0.007	0.001	0.001	0.001
09/18/2024 12:00AM	1,017.8	1,000.2	0.579	1,338.09	-163.43	1.339	0.460	95.511	2.552	0.126	0.003	0.006	0	0	0.002
09/19/2024 12:00AM	1,015.1	997.4	0.576	1,337.13	-167.05	1.332	0.431	95.898	2.250	0.081	0.003	0.005	0	0	0.001
09/20/2024 12:00AM	1,015.3	997.7	0.576	1,338.01	-167.35	1.257	0.440	96.029	2.179	0.088	0.002	0.005	0	0	0.001
09/21/2024 12:00AM	1,013.0	995.4	0.574	1,337.30	-170.21	1.258	0.406	96.387	1.874	0.064	0.003	0.005	0	0	0.002
09/22/2024 12:00AM	1,012.4	994.8	0.574	1,336.54	-170.52	1.295	0.404	96.390	1.836	0.064	0.002	0.005	0	0	0.003
09/23/2024 12:00AM	1,014.0	996.4	0.574	1,337.88	-168.90	1.252	0.409	96.301	1.935	0.089	0.003	0.006	0	0	0.003
09/24/2024 12:00AM	1,015.8	998.1	0.576	1,338.92	-166.97	1.217	0.433	96.103	2.136	0.099	0.003	0.006	0	0	0.004
09/25/2024 12:00AM	1,006.9	989.4	0.576	1,327.11	-168.30	1.879	0.352	95.900	1.786	0.063	0.004	0.008	0.001	0.002	0.005
09/26/2024 12:00AM	1,007.3	989.8	0.576	1,326.65	-170.77	1.922	0.361	95.721	1.916	0.063	0.004	0.008	0.001	0.001	0.005
09/27/2024 12:00AM	1,011.2	993.6	0.578	1,329.56	-148.14	1.876	0.359	95.365	2.291	0.082	0.004	0.010	0.002	0.002	0.009
09/28/2024 12:00AM	1,010.4	992.8	0.578	1,329.07	-161.77	1.864	0.366	95.526	2.095	0.119	0.007	0.013	0.001	0.002	0.007
09/29/2024 12:00AM	1,017.9	1,000.2	0.579	1,337.88	-162.73	1.418	0.422	95.424	2.602	0.113	0.005	0.009	0	0.001	0.006
09/30/2024 12:00AM	1,014.7	997.0	0.576	1,336.39	-166.60	1.411	0.405	95.849	2.247	0.071	0.003	0.007	0	0.001	0.005
10/01/2024 12:00AM	1,014.4	996.8	0.581	1,330.67	-162.83	2.065	0.277	94.623	2.967	0.062	0.002	0.003	0	0	0.002
10/02/2024 12:00AM	1,013.6	996.0	0.585	1,325.39	-160.20	2.551	0.219	93.698	3.479	0.051	0	0.001	0	0	0
10/03/2024 12:00AM	1,021.4	1,003.6	0.587	1,333.51	-155.21	2.163	0.283	93.543	3.875	0.124	0.004	0.006	0.001	0	0.001
10/04/2024 12:00AM	1,012.5	994.9	0.586	1,323.56	-162.10	2.472	0.356	93.734	3.370	0.063	0.001	0.003	0	0	0.001
10/05/2024 12:00AM	1,011.4	993.8	0.574	1,334.79	-171.10	1.407	0.391	96.272	1.874	0.048	0.002	0.004	0	0	0.001
10/06/2024 12:00AM	1,011.9	994.3	0.574	1,335.59	-170.82	1.358	0.398	96.296	1.890	0.050	0.002	0.004	0	0	0.001
10/07/2024 12:00AM	1,012.3	994.7	0.574	1,335.69	-170.29	1.357	0.404	96.253	1.920	0.057	0.002	0.005	0	0	0.002
10/08/2024 12:00AM	1,014.3	996.7	0.575	1,337.88	-168.57	1.266	0.411	96.197	2.042	0.072	0.003	0.006	0	0.001	0.002

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8/28/2024 - 11/28/2024

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%)
10/09/2024 12:00AM	1,018.2	1,000.5	0.578	1,339.27	-163.02	1.299	0.435	95.696	2.363	0.181	0.008	0.014	0.001	0.001	0.002
10/10/2024 12:00AM	1,016.0	998.3	0.576	1,338.07	-165.37	1.320	0.414	95.998	2.059	0.178	0.008	0.017	0.001	0.001	0.003
10/11/2024 12:00AM	1,010.1	992.5	0.573	1,334.92	-173.60	1.338	0.389	96.619	1.591	0.051	0.003	0.006	0	0.001	0.002
10/12/2024 12:00AM	1,010.3	992.7	0.573	1,334.72	-172.76	1.379	0.380	96.527	1.645	0.056	0.003	0.007	0.001	0.001	0.003
10/13/2024 12:00AM	1,011.0	993.4	0.573	1,335.30	-171.67	1.364	0.381	96.470	1.711	0.059	0.003	0.007	0.001	0.001	0.003
10/14/2024 12:00AM	1,012.1	994.5	0.574	1,335.58	-170.18	1.362	0.401	96.292	1.867	0.062	0.003	0.007	0.001	0.001	0.003
10/15/2024 12:00AM	1,011.9	994.3	0.574	1,335.69	-170.50	1.359	0.392	96.336	1.837	0.061	0.003	0.007	0.001	0.001	0.003
10/16/2024 12:00AM	1,015.2	997.5	0.577	1,337.01	-166.40	1.370	0.414	95.859	2.267	0.071	0.004	0.008	0.001	0.001	0.004
10/17/2024 12:00AM	1,013.6	996.0	0.575	1,336.22	-168.23	1.375	0.406	96.060	2.075	0.066	0.004	0.008	0.001	0.002	0.004
10/18/2024 12:00AM	1,011.2	993.6	0.573	1,336.02	-172.10	1.302	0.389	96.565	1.675	0.054	0.003	0.007	0.001	0.001	0.003
10/19/2024 12:00AM	1,010.3	992.7	0.573	1,335.00	-172.84	1.359	0.379	96.564	1.640	0.048	0.003	0.006	0	0.001	0.003
10/20/2024 12:00AM	1,010.4	992.8	0.572	1,335.83	-173.93	1.298	0.376	96.696	1.576	0.046	0.002	0.005	0	0	0.002
10/21/2024 12:00AM	1,010.8	993.3	0.572	1,336.85	-173.61	1.231	0.381	96.779	1.551	0.048	0.002	0.005	0	0	0.003
10/22/2024 12:00AM	1,012.3	994.7	0.572	1,337.91	-172.17	1.209	0.382	96.662	1.667	0.067	0.003	0.006	0	0	0.002
10/23/2024 12:00AM	1,011.4	993.8	0.571	1,337.93	-173.89	1.168	0.381	96.846	1.553	0.044	0.002	0.004	0	0	0.002
10/24/2024 12:00AM	1,012.7	995.1	0.573	1,337.83	-171.05	1.199	0.406	96.570	1.760	0.052	0.003	0.006	0	0.001	0.004
10/25/2024 12:00AM	1,011.7	994.1	0.573	1,336.62	-171.78	1.266	0.396	96.558	1.717	0.052	0.002	0.005	0	0	0.003
10/26/2024 12:00AM	1,012.0	994.4	0.572	1,337.63	-171.85	1.209	0.390	96.673	1.662	0.053	0.003	0.006	0	0.001	0.004
10/27/2024 12:00AM	1,013.7	996.0	0.574	1,338.49	-170.00	1.177	0.416	96.470	1.869	0.054	0.003	0.006	0	0	0.004
10/28/2024 12:00AM	1,013.2	995.6	0.573	1,338.63	-170.88	1.161	0.407	96.577	1.793	0.053	0.003	0.005	0	0	0.003
10/29/2024 12:00AM	1,013.2	995.6	0.574	1,337.81	-170.26	1.212	0.416	96.447	1.853	0.059	0.003	0.006	0.001	0.001	0.003
10/30/2024 12:00AM	1,013.0	995.4	0.574	1,337.60	-170.39	1.216	0.418	96.462	1.832	0.059	0.003	0.007	0.001	0.001	0.003
10/31/2024 12:00AM	1,011.1	993.5	0.572	1,337.40	-173.57	1.173	0.398	96.860	1.496	0.057	0.003	0.007	0.001	0.001	0.003
11/01/2024 12:00AM	1,011.3	993.7	0.572	1,336.93	-172.87	1.200	0.411	96.742	1.576	0.056	0.003	0.007	0	0.001	0.004
11/02/2024 12:00AM	1,010.0	992.4	0.571	1,336.02	-175.01	1.197	0.421	96.896	1.423	0.051	0.003	0.006	0.001	0.001	0.003
11/03/2024 12:00AM	1,010.8	993.2	0.572	1,336.00	-173.61	1.192	0.450	96.736	1.553	0.055	0.003	0.007	0.001	0.001	0.003
11/04/2024 12:00AM	1,010.4	992.8	0.572	1,336.49	-174.62	1.186	0.416	96.870	1.463	0.052	0.003	0.006	0.001	0.001	0.003
11/05/2024 12:00AM	1,011.0	993.4	0.572	1,336.66	-173.16	1.186	0.424	96.794	1.522	0.056	0.003	0.008	0.001	0.001	0.004
11/06/2024 12:00AM	1,011.4	993.8	0.572	1,337.15	-173.18	1.144	0.440	96.776	1.576	0.051	0.003	0.006	0.001	0.001	0.003
11/07/2024 12:00AM	1,011.2	993.7	0.572	1,336.68	-173.40	1.182	0.434	96.719	1.604	0.050	0.003	0.005	0	0	0.002
11/08/2024 12:00AM	1,011.1	993.5	0.572	1,336.27	-172.61	1.221	0.425	96.695	1.586	0.057	0.004	0.008	0.001	0.001	0.003
11/09/2024 12:00AM	1,010.8	993.2	0.572	1,336.93	-174.37	1.155	0.425	96.863	1.497	0.047	0.003	0.006	0.001	0.001	0.003
11/10/2024 12:00AM	1,010.7	993.1	0.572	1,336.63	-174.52	1.153	0.439	96.848	1.504	0.045	0.002	0.005	0.001	0.001	0.003
11/11/2024 12:00AM	1,011.0	993.4	0.572	1,336.51	-173.54	1.201	0.424	96.732	1.579	0.052	0.003	0.006	0	0	0.002
11/12/2024 12:00AM	1,013.5	995.9	0.575	1,336.85	-168.65	1.274	0.434	96.275	1.923	0.070	0.004	0.009	0.002	0.002	0.007
11/13/2024 12:00AM	1,019.8	1,002.1	0.577	1,342.95	-154.04	1.225	0.337	95.810	2.500	0.109	0.004	0.007	0.001	0.001	0.006
11/14/2024 12:00AM	1,012.0	994.4	0.573	1,337.41	-172.81	1.190	0.412	96.679	1.641	0.064	0.003	0.006	0.001	0.001	0.003
11/15/2024 12:00AM	1,010.0	992.4	0.571	1,336.42	-175.14	1.210	0.392	96.927	1.405	0.053	0.003	0.006	0	0	0.003
11/16/2024 12:00AM	1,009.3	991.8	0.571	1,335.97	-176.10	1.228	0.382	96.995	1.328	0.053	0.003	0.007	0	0	0.003
11/17/2024 12:00AM	1,008.9	991.3	0.571	1,334.88	-176.02	1.311	0.371	96.877	1.378	0.050	0.003	0.006	0	0.001	0.002
11/18/2024 12:00AM	1,009.0	991.4	0.571	1,335.14	-176.20	1.286	0.378	96.906	1.369	0.050	0.003	0.006	0	0	0.002
11/19/2024 12:00AM	1,009.6	992.0	0.571	1,335.54	-175.11	1.279	0.380	96.841	1.435	0.052	0.003	0.006	0.001	0.001	0.002
11/20/2024 12:00AM	1,010.1	992.5	0.570	1,337.52	-176.49	1.118	0.397	97.085	1.352	0.041	0.002	0.004	0	0	0.001

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%)
11/21/2024 12:00AM	1,010.3	992.7	0.571	1,337.02	-175.78	1.162	0.399	96.956	1.434	0.042	0.002	0.004	0	0	0.001
11/22/2024 12:00AM	1,009.2	991.6	0.570	1,336.20	-177.35	1.175	0.401	97.042	1.347	0.032	0.001	0.001	0	0	0
11/23/2024 12:00AM	1,010.2	992.6	0.572	1,336.04	-174.67	1.286	0.368	96.770	1.515	0.051	0.002	0.006	0.001	0.001	0.001
11/24/2024 12:00AM	1,011.7	994.1	0.573	1,336.58	-171.69	1.433	0.290	96.393	1.833	0.046	0.002	0.004	0	0	0.001
11/25/2024 12:00AM	1,010.9	993.3	0.573	1,335.71	-172.95	1.409	0.326	96.468	1.747	0.044	0.001	0.003	0	0	0.001
11/26/2024 12:00AM	1,011.9	994.3	0.575	1,334.57	-170.57	1.482	0.369	96.100	1.968	0.074	0.002	0.004	0	0	0.001
11/27/2024 12:00AM	1,008.3	990.8	0.572	1,332.96	-175.64	1.429	0.380	96.623	1.525	0.037	0.001	0.003	0	0	0.001

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;