



A Subsidiary of MDU Resources Group, Inc.

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January 15, 2025

Mr. Steven Kahl  
Executive Secretary  
North Dakota Public Service Commission  
State Capitol Building  
Bismarck, ND 58505-0480

Re: Case No. PU-24-002 (Therm Billing)  
Monthly Report – November 2024

Mr. Kahl,

Montana-Dakota Utilities Co. herewith electronically submits the following information, pursuant to the Ordering paragraphs one and two of the Order issued in Case No. 11,006, dated October 20, 1987 and pursuant to the North Dakota Administrative Code 69-09-01-02, part 2.

1. Attachment A is a schedule showing the thermal billing factors by community that reflect the BTU values shown on Attachment B and were used for billing purposes in December 2024.
2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our suppliers for the month of November 2024.
3. Attachment C is a listing which states the type of measuring device in place at each zone.
4. Attachment D is a monthly list of the heating value data, by zone, for the most recent 12-month period and an average thereof. It is being provided pursuant to a Staff request.
5. Attachment E provides a brief explanation of the thermal variances, where applicable, for the month of November 2024.

Montana-Dakota respectfully requests this electronic filing, in lieu of an original and one copy, be accepted as being in full compliance with the filing requirements of this Commission.

Sincerely,

*/s/ Travis R. Jacobson*

Travis R. Jacobson  
Vice President of Regulatory Affairs

**Montana-Dakota Utilities Co.**  
**Therm Billing Factors - North Dakota**  
**Dec-24**

<u>Town</u>	<u>Heat Zone</u>	<u>Therm Factor</u>
MDU-303-ALEXANDER	025	1.1278
MDU-308-ARNEGARD	025	1.1278
MDU-314-APPLE VALLEY	271	1.1694
MDU-318-BEACH	032	1.0526
MDU-319-BELFIELD	032	1.0603
MDU-323-BERTHOLD	262	1.1428
MDU-327-BISMARCK	028	1.1299
MDU-330-BOWMAN	034	1.0183
MDU-337-BURLINGTON	262	1.1675
MDU-343-CARRINGTON	273	1.1685
MDU-344-CLEVELAND	272	1.1602
MDU-364-CAVALIER	273	1.1931
MDU-365-DAWSON	271	1.1612
MDU-368-DES LACS	262	1.1511
MDU-369-DICKINSON	031	1.0418
MDU-374-FT TOTTEN	273	1.1767
MDU-375-DEVILS LAKE	273	1.1767
MDU-379-BARLOW	273	1.1685
MDU-384-EPPING	264	1.1173
MDU-387-ELDRIDGE	272	1.1685
MDU-407-GLADSTONE	031	1.0418
MDU-411-GLEN ULLIN	031	1.0493
MDU-413-GOLVA	032	1.0371
MDU-416-GARRISON	262	1.1511
MDU-417-GRAFTON	273	1.2013
MDU-403-GWINNER	601	1.1399
MDU-429-HEBRON	031	1.0493
MDU-432-HETTINGER	903	2.4049
MDU-449-JAMESTOWN	272	1.1767
MDU-459-KILLDEER	033	1.1003
MDU-463-LANGDON	273	1.1685
MDU-469-LEFOR	031	1.0418
MDU-474-LIGNITE	263	1.0759
MDU-475-LINTON	802	1.0604
MDU-478-LINCOLN	028	1.1299
MDU-488-MCKENZIE	271	1.1694
MDU-494-MEDINA	271	1.1612
MDU-498-MANDAN	028	1.1299
MDU-500-MARMARTH	034	1.0258
MDU-505-MINOT	262	1.1675
MDU-510-MOTT	031	1.0418
MDU-512-MAX	262	1.1428
MDU-513-MILNOR	601	1.1399
MDU-522-NEW ENGLAND	031	1.0343
MDU-524-NEW SALEM	028	1.1060
MDU-532-NEW ROCKFORD	273	1.1685
MDU-539-PARK RIVER	273	1.1931
MDU-540-PALERMO	262	1.1428
MDU-558-RAY	264	1.1013

MDU-561-REGENT	031	1.0418
MDU-563-RHAME	034	1.0107
MDU-564-RICHARDTON	031	1.0343
MDU-568-ROSS	261	1.1328
MDU-572-RUTHVILLE	262	1.1646
MDU-574-SANBORN	272	1.1767
MDU-583-SENTINEL BUTTE	032	1.0526
MDU-588-SOUTH HEART	031	1.0650
MDU-717-SPIRITWOOD	272	1.1767
MDU-590-SPRINGBROOK	264	1.1221
MDU-591-STANLEY	261	1.1410
MDU-593-STEELE	271	1.1612
MDU-594-STERLING	028	1.1299
MDU-598-SHEYENNE	273	1.1767
MDU-605-SURREY	262	1.1675
MDU-610-TAPPEN	271	1.1612
MDU-611-TAYLOR	031	1.0343
MDU-616-TIOGA	260	1.1168
MDU-619-TURTLE LAKE	262	1.1444
MDU-620-TRENTON	024	1.1292
MDU-624-UNDERWOOD	262	1.1511
MDU-625-VALLEY CITY	272	1.1849
MDU-629-WALHALLA	273	1.1931
MDU-632-WATFORD CITY	610	1.0673
MDU-636-WHEELOCK	264	1.1140
MDU-637-WHITE EARTH	261	1.1410
MDU-642-WILLISTON	024	1.1292
MDU-646-WASHBURN	262	1.1593
MDU-647-WILTON	262	1.1400
MDU-664-RIVERDALE	262	1.1444
MDU-691-FAIRVIEW	241	1.1273
MDU-712-MINOT AFB	262	1.1675
MDU-718-FAIRMOUNT	600	1.1376
MDU-732-NEKOMA	273	1.1685
MDU-732-MSR SITE	273	1.1685

# Source Daily Summary

November 2024

Source #: 251  
Name: SDNY BDR-MNDK JNCTN-SDNY PLT

<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Temperature Base:</b>	60	<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7254	1169.6	1190.3	1189.7	1.324	3.501	69.971	21.565	3.182	0.142	0.278	0.015	0.012	0.009	0.000	0.000	0.000	0.000	1397.59	
2	0.7132	1169.6	1190.3	1189.7	0.665	3.366	70.903	22.148	2.655	0.085	0.158	0.009	0.007	0.006	0.000	0.000	0.000	0.000	1409.62	
3	0.7088	1162.6	1183.2	1182.7	0.670	3.369	71.635	21.561	2.514	0.081	0.150	0.008	0.006	0.005	0.000	0.000	0.000	0.000	1405.63	
4	0.7080	1159.4	1179.9	1179.4	0.724	3.407	71.863	21.230	2.522	0.084	0.154	0.008	0.006	0.004	0.000	0.000	0.000	0.000	1402.44	
5	0.7280	1169.8	1190.5	1189.9	1.380	3.651	69.718	21.368	3.416	0.150	0.283	0.015	0.011	0.008	0.000	0.000	0.000	0.000	1395.25	
6	0.7261	1171.2	1192.0	1191.5	1.318	3.477	69.768	21.856	3.126	0.140	0.277	0.016	0.013	0.008	0.000	0.000	0.000	0.000	1398.88	
7	0.7289	1170.3	1191.0	1190.4	1.382	3.703	69.381	21.809	3.253	0.146	0.287	0.017	0.013	0.009	0.000	0.000	0.000	0.000	1394.98	
8	0.7265	1168.0	1188.7	1188.1	1.355	3.652	69.859	21.412	3.254	0.143	0.284	0.017	0.014	0.010	0.000	0.000	0.000	0.000	1394.63	
9	0.7185	1163.6	1184.2	1183.7	1.181	3.432	71.232	20.545	3.152	0.134	0.279	0.018	0.017	0.009	0.000	0.000	0.000	0.000	1397.10	
10	0.7208	1160.8	1181.4	1180.8	1.294	3.650	70.866	20.549	3.178	0.141	0.282	0.017	0.014	0.009	0.000	0.000	0.000	0.000	1391.47	
11	0.7224	1168.1	1188.8	1188.3	1.251	3.421	70.372	21.456	3.069	0.131	0.263	0.016	0.014	0.009	0.000	0.000	0.000	0.000	1398.71	
12	0.7192	1165.0	1185.6	1185.1	1.150	3.462	70.715	21.205	3.049	0.127	0.254	0.015	0.013	0.008	0.000	0.000	0.000	0.000	1398.03	
13	0.7155	1161.4	1182.0	1181.5	1.128	3.354	71.356	20.548	3.040	0.128	0.265	0.017	0.016	0.009	0.000	0.000	0.000	0.000	1397.38	
14	0.7154	1158.3	1178.8	1178.2	1.185	3.459	71.715	20.154	3.061	0.126	0.260	0.016	0.015	0.009	0.000	0.000	0.000	0.000	1393.71	
15	0.7257	1169.6	1190.3	1189.8	1.308	3.561	69.866	21.602	3.241	0.134	0.256	0.013	0.011	0.009	0.000	0.000	0.000	0.000	1397.22	
16	0.7213	1168.5	1189.2	1188.7	1.147	3.451	70.410	21.530	3.059	0.121	0.244	0.015	0.013	0.009	0.000	0.000	0.000	0.000	1400.25	
17	0.7197	1167.4	1188.1	1187.6	1.108	3.426	70.649	21.419	2.989	0.124	0.248	0.015	0.013	0.008	0.000	0.000	0.000	0.000	1400.51	
18	0.7192	1165.9	1186.5	1186.1	1.142	3.416	70.841	21.160	3.028	0.125	0.251	0.015	0.014	0.009	0.000	0.000	0.000	0.000	1399.19	
19	0.7245	1168.7	1189.4	1189.0	1.304	3.505	70.160	21.358	3.219	0.140	0.276	0.016	0.013	0.009	0.000	0.000	0.000	0.000	1397.33	
20	0.6925	1152.2	1172.6	1172.2	0.104	3.331	73.224	21.334	1.897	0.021	0.028	0.001	0.001	0.002	0.000	0.000	0.000	0.000	1409.10	
21	0.6942	1157.9	1178.4	1177.9	0.052	3.229	73.112	21.537	2.029	0.018	0.020	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1414.27	
22	0.6944	1158.5	1179.0	1178.6	0.051	3.212	73.031	21.677	1.991	0.016	0.018	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1414.81	
23	0.6962	1156.2	1176.7	1176.3	0.218	3.260	72.995	21.382	2.062	0.031	0.046	0.002	0.002	0.003	0.000	0.000	0.000	0.000	1410.36	
24	0.7126	1164.9	1185.5	1185.1	0.820	3.353	71.187	21.737	2.631	0.087	0.163	0.009	0.007	0.006	0.000	0.000	0.000	0.000	1404.55	
25	0.7145	1160.4	1180.9	1180.5	1.095	3.387	71.641	20.545	2.922	0.121	0.250	0.016	0.015	0.009	0.000	0.000	0.000	0.000	1397.09	
26	0.7134	1158.3	1178.8	1178.4	1.126	3.366	72.079	19.964	3.010	0.131	0.278	0.019	0.018	0.010	0.000	0.000	0.000	0.000	1395.61	
27	0.7157	1160.5	1181.1	1180.7	1.134	3.432	71.622	20.328	3.033	0.130	0.275	0.018	0.018	0.010	0.000	0.000	0.000	0.000	1396.09	
28	0.7184	1164.3	1185.0	1184.6	1.168	3.400	71.081	20.889	3.024	0.128	0.267	0.017	0.016	0.010	0.000	0.000	0.000	0.000	1398.06	
29	0.7169	1161.5	1182.1	1181.7	1.143	3.468	71.389	20.503	3.054	0.129	0.270	0.018	0.017	0.010	0.000	0.000	0.000	0.000	1396.15	
30	0.7163	1162.5	1183.1	1182.7	1.135	3.361	71.517	20.507	3.032	0.130	0.273	0.018	0.017	0.010	0.000	0.000	0.000	0.000	1397.94	
Avg	0.7157	1164.0	1184.4	1184.0	1.002	3.435	71.139	21.163	2.890	0.112	0.221	0.013	0.012	0.008	0.000	0.000	0.000	0.000	1400.13	

# Source Daily Summary

November 2024

Source #: 571  
Name: WILLISTON BDR-CHARBN STN

<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Temperature Base:</b>	60	<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7049	1162.8	1183.4	1182.9	1.038	2.422	73.217	20.426	2.531	0.104	0.224	0.016	0.019	0.003	0.000	0.000	0.000	0.000	1409.51	
2	0.7053	1164.6	1185.3	1184.8	1.031	2.364	73.084	20.657	2.510	0.101	0.217	0.016	0.018	0.003	0.000	0.000	0.000	0.000	1411.28	
3	0.7055	1164.7	1185.3	1184.8	1.036	2.372	73.118	20.547	2.565	0.103	0.221	0.016	0.019	0.003	0.000	0.000	0.000	0.000	1411.12	
4	0.7073	1168.2	1188.9	1188.4	1.024	2.336	73.040	20.438	2.761	0.113	0.244	0.018	0.021	0.004	0.000	0.000	0.000	0.000	1413.65	
5	0.7047	1164.9	1185.5	1185.1	1.015	2.312	73.373	20.297	2.624	0.107	0.231	0.017	0.020	0.003	0.000	0.000	0.000	0.000	1412.19	
6	0.7079	1163.8	1184.4	1184.0	0.999	2.701	72.876	20.205	2.825	0.110	0.242	0.018	0.021	0.004	0.000	0.000	0.000	0.000	1407.74	
7	0.7117	1171.3	1192.1	1191.6	1.042	2.532	72.231	20.935	2.850	0.114	0.251	0.019	0.021	0.004	0.000	0.000	0.000	0.000	1413.07	
8	0.7091	1166.2	1186.9	1186.4	1.004	2.661	72.775	20.214	2.945	0.112	0.247	0.018	0.021	0.004	0.000	0.000	0.000	0.000	1409.41	
9	0.7045	1156.2	1176.7	1176.3	0.948	2.919	73.563	19.286	2.885	0.111	0.246	0.018	0.021	0.003	0.000	0.000	0.000	0.000	1401.93	
10	0.7056	1154.0	1174.4	1174.0	0.981	3.116	73.304	19.325	2.888	0.107	0.239	0.017	0.020	0.004	0.000	0.000	0.000	0.000	1398.04	
11	0.7070	1161.9	1182.5	1182.1	0.999	2.732	73.005	20.070	2.819	0.105	0.230	0.017	0.019	0.003	0.000	0.000	0.000	0.000	1406.32	
12	0.7033	1155.2	1175.7	1175.3	0.967	2.840	73.630	19.451	2.741	0.103	0.228	0.017	0.019	0.003	0.000	0.000	0.000	0.000	1401.90	
13	0.7034	1154.9	1175.3	1175.0	0.943	2.907	73.687	19.259	2.818	0.107	0.239	0.017	0.020	0.004	0.000	0.000	0.000	0.000	1401.37	
14	0.7028	1152.4	1172.8	1172.4	0.951	2.988	73.824	19.024	2.823	0.107	0.241	0.018	0.021	0.004	0.000	0.000	0.000	0.000	1398.98	
15	0.7058	1154.9	1175.4	1175.0	0.953	3.115	73.347	19.221	2.961	0.112	0.250	0.018	0.020	0.004	0.000	0.000	0.000	0.000	1399.04	
16	0.7074	1160.7	1181.3	1180.9	0.986	2.867	73.027	19.816	2.902	0.112	0.246	0.019	0.022	0.004	0.000	0.000	0.000	0.000	1404.42	
17	0.7060	1157.0	1177.5	1177.1	0.971	2.978	73.262	19.511	2.880	0.110	0.246	0.018	0.020	0.004	0.000	0.000	0.000	0.000	1401.37	
18	0.7033	1153.1	1173.5	1173.2	0.952	2.989	73.761	19.066	2.822	0.112	0.253	0.019	0.022	0.004	0.000	0.000	0.000	0.000	1399.36	
19	0.7065	1158.2	1178.7	1178.4	0.995	2.912	73.161	19.697	2.832	0.111	0.249	0.018	0.021	0.004	0.000	0.000	0.000	0.000	1402.41	
20	0.7079	1162.1	1182.7	1182.3	1.028	2.758	72.970	19.994	2.827	0.115	0.260	0.019	0.023	0.005	0.000	0.000	0.000	0.000	1405.67	
21	0.7116	1169.7	1190.4	1190.0	1.068	2.582	72.307	20.767	2.849	0.117	0.262	0.020	0.023	0.005	0.000	0.000	0.000	0.000	1411.19	
22	0.7111	1168.3	1189.0	1188.6	1.080	2.607	72.278	20.847	2.797	0.109	0.241	0.017	0.020	0.004	0.000	0.000	0.000	0.000	1409.99	
23	0.7112	1169.2	1189.9	1189.6	1.075	2.567	72.230	20.960	2.789	0.107	0.234	0.017	0.019	0.004	0.000	0.000	0.000	0.000	1411.01	
24	0.7058	1159.5	1180.0	1179.7	1.010	2.753	73.127	20.038	2.702	0.103	0.227	0.016	0.019	0.004	0.000	0.000	0.000	0.000	1404.55	
25	0.7001	1146.7	1167.0	1166.7	0.918	3.137	74.187	18.661	2.708	0.107	0.241	0.017	0.020	0.005	0.000	0.000	0.000	0.000	1394.72	
26	0.7008	1149.3	1169.7	1169.4	0.930	3.026	74.070	18.885	2.696	0.108	0.243	0.018	0.021	0.004	0.000	0.000	0.000	0.000	1397.18	
27	0.7020	1149.8	1170.1	1169.8	0.936	3.103	73.862	18.968	2.736	0.108	0.244	0.018	0.021	0.005	0.000	0.000	0.000	0.000	1396.53	
28	0.7037	1153.1	1173.5	1173.2	0.944	3.042	73.593	19.237	2.790	0.108	0.243	0.018	0.020	0.005	0.000	0.000	0.000	0.000	1398.96	
29	0.6991	1143.6	1163.9	1163.6	0.901	3.250	74.444	18.272	2.717	0.112	0.256	0.019	0.023	0.006	0.000	0.000	0.000	0.000	1392.01	
30	0.7017	1150.1	1170.5	1170.2	0.939	3.041	73.947	18.948	2.727	0.109	0.246	0.018	0.021	0.005	0.000	0.000	0.000	0.000	1397.32	
Avg	0.7056	1159.0	1179.4	1179.0	0.989	2.798	73.277	19.767	2.777	0.109	0.241	0.018	0.020	0.004	0.000	0.000	0.000	0.000	1404.08	

# Gas Composition and Properties

Effective November 1, 2024

Attachment B  
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Source #: 0602160  
Name: FAIRVIEW BORDER

Component	Mole %	Liquid Content	Mass %	Property	Total Sample	C6 Plus Fraction
Carbon Dioxide, CO2	1.0341		2.2225	Pressure Base	14.730	
Nitrogen, N2	3.0434		4.1635	Temperature Base	60.00	
Methane, C1	72.5702		56.8546	HCDP @ Sample Pressure	-20.100	
Ethane, C2	20.1382	5.3892	29.5716	Cricondentherm	-5.449	
Propane, C3	2.8595	0.7883	6.1577	HV, Dry @ Base P, T	1179.59	
iso-Butane, iC4	0.1012	0.0331	0.2872	HV, Sat @ Base P, T	1159.06	
n-Butane, nC4	0.2199	0.0694	0.6242	HV, Sat @ Sample P, T	1179.59	
iso-Pentane, iC5	0.0164	0.0060	0.0578	Relative Density	0.7090	
n-Pentane, nC5	0.0161	0.0058	0.0567			
Neo-Pentane, neo						
Hexanes Plus, C6+	0.0010	0.0004	0.0042			
Argon, Ar						
Carbon Monoxide, CO						
Hydrogen, H2						
Oxygen, O2						
Helium, He						
Water, H2O						
Hydrogen Sulfide, H2S						
<b>Totals</b>	<b>100.0000</b>	<b>6.2910</b>	<b>100.0000</b>			

C6+: 100

## Sample

Date: 11/01/2024                      Type:  
Tech: Tipton, Joshua  
Pressure:                      420 psi      Temp.:                      °F  
Gauge:                                      Gauge                      H2O:  
Atm. Pressure:                                      H2S:

Remarks:

## Analysis

Date: 11/01/2024                      Instrument:  
Tech: Tipton, Joshua                      Cylinder:                      397

Remarks:



# Source Daily Summary

November 2024

Source #: 602  
Name: TIOGA STN-N TIOGA TRANSFER

<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Temperature Base:</b>	60	<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7006	1150.0	1170.4	1170.0	0.972	2.901	74.032	19.116	2.615	0.098	0.222	0.017	0.020	0.005	0.000	0.000	0.000	0.000	1398.52	-9.62
2	0.6893	1144.6	1164.9	1164.6	0.987	2.148	75.372	19.471	1.790	0.065	0.139	0.011	0.013	0.003	0.000	0.000	0.000	0.000	1403.07	-17.50
3	0.6914	1146.6	1167.0	1166.6	0.990	2.216	75.352	19.048	2.119	0.077	0.166	0.013	0.015	0.003	0.000	0.000	0.000	0.000	1403.39	-14.63
4	0.6939	1151.3	1171.7	1171.4	0.976	2.181	75.191	18.955	2.381	0.089	0.191	0.015	0.017	0.004	0.000	0.000	0.000	0.000	1406.62	-11.78
5	0.7304	1175.6	1196.4	1196.1	0.946	4.164	70.119	19.656	4.530	0.163	0.362	0.026	0.029	0.006	0.000	0.000	0.000	0.000	1400.47	8.81
6	0.7501	1182.9	1203.9	1203.6	0.948	5.568	66.918	20.511	5.365	0.191	0.430	0.029	0.034	0.008	0.000	0.000	0.000	0.000	1390.05	17.64
7	0.7532	1184.7	1205.7	1205.4	0.940	5.763	66.483	20.528	5.585	0.195	0.436	0.029	0.033	0.008	0.000	0.000	0.000	0.000	1389.25	19.05
8	0.7495	1182.8	1203.7	1203.4	0.949	5.520	67.004	20.489	5.376	0.180	0.413	0.028	0.032	0.008	0.000	0.000	0.000	0.000	1390.44	17.21
9	0.7516	1182.3	1203.2	1203.0	0.948	5.743	66.708	20.425	5.489	0.191	0.427	0.028	0.032	0.008	0.000	0.000	0.000	0.000	1387.99	18.10
10	0.7548	1185.5	1206.5	1206.2	0.942	5.858	66.304	20.468	5.713	0.199	0.444	0.029	0.034	0.008	0.000	0.000	0.000	0.000	1388.75	19.88
11	0.7508	1183.9	1204.9	1204.5	0.951	5.572	66.865	20.481	5.434	0.191	0.434	0.030	0.035	0.009	0.000	0.000	0.000	0.000	1390.52	18.20
12	0.7512	1184.0	1205.0	1204.7	0.950	5.602	66.792	20.498	5.469	0.187	0.430	0.029	0.034	0.009	0.000	0.000	0.000	0.000	1390.32	18.29
13	0.7437	1179.9	1200.8	1200.5	0.967	5.120	67.879	20.404	4.966	0.174	0.415	0.030	0.036	0.010	0.000	0.000	0.000	0.000	1392.53	15.13
14	0.7489	1186.6	1207.6	1207.3	0.960	5.217	67.172	20.646	5.324	0.181	0.423	0.030	0.036	0.010	0.000	0.000	0.000	0.000	1395.48	17.72
15	0.7516	1183.1	1204.1	1203.8	0.944	5.702	66.790	20.314	5.553	0.190	0.433	0.030	0.035	0.009	0.000	0.000	0.000	0.000	1388.89	18.65
16	0.7512	1180.5	1201.4	1201.1	0.942	5.823	66.827	20.170	5.556	0.189	0.422	0.029	0.033	0.008	0.000	0.000	0.000	0.000	1386.24	18.12
17	0.7373	1171.3	1192.0	1191.7	0.970	5.041	68.856	19.810	4.687	0.171	0.394	0.028	0.033	0.009	0.000	0.000	0.000	0.000	1388.32	12.08
18	0.7348	1171.5	1192.3	1192.0	0.983	4.779	69.203	19.930	4.456	0.168	0.406	0.030	0.036	0.009	0.000	0.000	0.000	0.000	1390.87	11.41
19	0.7243	1161.3	1181.8	1181.5	0.972	4.435	70.813	19.206	3.982	0.150	0.365	0.030	0.036	0.010	0.000	0.000	0.000	0.000	1388.63	6.50
20	0.7212	1148.6	1168.9	1168.7	0.897	5.017	71.971	16.932	4.504	0.180	0.424	0.030	0.035	0.010	0.000	0.000	0.000	0.000	1376.53	7.41
21	0.7321	1156.7	1177.1	1176.9	0.943	5.484	70.178	17.785	4.908	0.187	0.438	0.030	0.036	0.010	0.000	0.000	0.000	0.000	1375.76	11.47
22	0.7266	1156.2	1176.7	1176.5	0.875	5.095	71.072	17.509	4.803	0.174	0.405	0.027	0.032	0.008	0.000	0.000	0.000	0.000	1380.51	9.18
23	0.7599	1188.3	1209.3	1209.1	0.928	6.184	65.616	20.413	6.167	0.188	0.437	0.028	0.032	0.008	0.000	0.000	0.000	0.000	1387.33	21.86
24	0.7228	1155.1	1175.6	1175.3	0.950	4.692	71.251	18.305	4.245	0.145	0.350	0.025	0.029	0.007	0.000	0.000	0.000	0.000	1382.98	5.19
25	0.7275	1154.7	1175.2	1174.9	0.970	5.133	70.540	18.374	4.316	0.172	0.418	0.031	0.037	0.010	0.000	0.000	0.000	0.000	1377.73	8.83
26	0.7335	1166.1	1186.8	1186.5	0.993	4.966	69.149	20.094	4.162	0.162	0.399	0.030	0.036	0.009	0.000	0.000	0.000	0.000	1385.74	9.72
27	0.7387	1171.0	1191.7	1191.4	0.987	5.173	68.297	20.479	4.429	0.165	0.397	0.029	0.034	0.009	0.000	0.000	0.000	0.000	1386.54	11.71
28	0.7410	1173.3	1194.1	1193.8	0.980	5.255	68.045	20.420	4.664	0.167	0.398	0.028	0.033	0.008	0.000	0.000	0.000	0.000	1387.15	12.93
29	0.7317	1165.8	1186.5	1186.2	1.003	4.803	69.402	20.140	4.015	0.167	0.397	0.030	0.035	0.009	0.000	0.000	0.000	0.000	1387.04	8.96
30	0.7340	1173.3	1194.0	1193.7	0.998	4.571	69.049	20.646	4.102	0.166	0.398	0.029	0.034	0.009	0.000	0.000	0.000	0.000	1393.72	10.02
Avg	0.7343	1170.0	1190.6	1190.3	0.959	4.858	69.308	19.707	4.557	0.164	0.380	0.027	0.032	0.008	0.000	0.000	0.000	0.000	1389.71	10.02

# Source Daily Summary

November 2024

Source #: 601  
Name: TIOGA STN-ROBINSON LAKE PLNT

<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Temperature Base:</b>	60	<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7581	1186.8	1207.8	1207.6	0.928	6.114	65.744	20.605	5.900	0.189	0.447	0.030	0.034	0.009	0.000	0.000	0.000	0.000	1387.18	
2	0.7581	1186.7	1207.7	1207.4	0.927	6.118	65.844	20.437	5.933	0.208	0.459	0.030	0.034	0.009	0.000	0.000	0.000	0.000	1387.08	
3	0.7596	1188.3	1209.4	1209.1	0.924	6.161	65.631	20.506	6.045	0.205	0.459	0.029	0.033	0.008	0.000	0.000	0.000	0.000	1387.62	
4	0.7586	1186.6	1207.6	1207.3	0.927	6.167	65.777	20.417	5.980	0.206	0.457	0.029	0.033	0.008	0.000	0.000	0.000	0.000	1386.55	
5	0.7595	1188.2	1209.3	1209.0	0.924	6.155	65.648	20.500	6.044	0.205	0.455	0.029	0.032	0.008	0.000	0.000	0.000	0.000	1387.64	
6	0.7586	1187.1	1208.1	1207.9	0.928	6.140	65.789	20.400	6.027	0.203	0.446	0.029	0.032	0.008	0.000	0.000	0.000	0.000	1387.08	
7	0.7611	1190.9	1212.0	1211.7	0.925	6.147	65.463	20.573	6.142	0.211	0.467	0.030	0.034	0.008	0.000	0.000	0.000	0.000	1389.21	
8	0.7581	1185.9	1206.9	1206.6	0.927	6.160	65.798	20.451	5.962	0.196	0.437	0.028	0.032	0.008	0.000	0.000	0.000	0.000	1386.22	
9	0.7580	1186.0	1207.0	1206.7	0.931	6.144	65.833	20.415	5.980	0.196	0.435	0.027	0.031	0.007	0.000	0.000	0.000	0.000	1386.33	
10	0.7577	1185.7	1206.7	1206.5	0.933	6.123	65.904	20.391	5.937	0.202	0.443	0.028	0.032	0.008	0.000	0.000	0.000	0.000	1386.33	
11	0.7605	1190.6	1211.7	1211.4	0.930	6.098	65.544	20.580	6.110	0.206	0.459	0.030	0.034	0.009	0.000	0.000	0.000	0.000	1389.45	
12	0.7577	1186.1	1207.1	1206.8	0.931	6.109	65.879	20.429	5.946	0.198	0.441	0.028	0.032	0.008	0.000	0.000	0.000	0.000	1386.76	
13	0.7548	1185.4	1206.3	1206.1	0.940	5.872	66.274	20.497	5.716	0.190	0.438	0.029	0.034	0.009	0.000	0.000	0.000	0.000	1388.54	
14	0.7624	1195.0	1216.1	1215.8	0.932	6.012	65.296	20.803	6.199	0.207	0.474	0.032	0.036	0.009	0.000	0.000	0.000	0.000	1392.76	
15	0.7605	1189.5	1210.6	1210.3	0.928	6.168	65.503	20.568	6.109	0.202	0.450	0.030	0.034	0.009	0.000	0.000	0.000	0.000	1388.18	
16	0.7588	1186.3	1207.3	1207.1	0.927	6.210	65.695	20.450	6.014	0.196	0.437	0.029	0.033	0.008	0.000	0.000	0.000	0.000	1385.94	
17	0.7574	1184.7	1205.7	1205.4	0.931	6.167	65.904	20.373	5.920	0.200	0.439	0.028	0.031	0.008	0.000	0.000	0.000	0.000	1385.36	
18	0.7565	1186.8	1207.8	1207.5	0.933	5.951	66.118	20.396	5.885	0.194	0.451	0.030	0.034	0.008	0.000	0.000	0.000	0.000	1388.65	
19	0.7571	1184.1	1205.1	1204.9	0.927	6.180	66.114	20.051	5.970	0.209	0.477	0.030	0.034	0.008	0.000	0.000	0.000	0.000	1384.96	
20	0.7588	1187.5	1208.5	1208.3	0.932	6.131	65.775	20.411	6.014	0.207	0.463	0.029	0.032	0.008	0.000	0.000	0.000	0.000	1387.33	
21	0.7591	1188.3	1209.4	1209.1	0.933	6.098	65.812	20.329	6.089	0.203	0.463	0.029	0.033	0.009	0.000	0.000	0.000	0.000	1388.11	
22	0.7571	1182.8	1203.7	1203.5	0.930	6.255	65.964	20.195	5.970	0.188	0.433	0.027	0.031	0.008	0.000	0.000	0.000	0.000	1383.45	
23	0.7595	1188.0	1209.0	1208.8	0.931	6.162	65.675	20.400	6.134	0.189	0.439	0.029	0.032	0.008	0.000	0.000	0.000	0.000	1387.32	
24	0.7558	1183.1	1204.1	1203.9	0.924	6.125	66.256	20.017	5.997	0.182	0.432	0.028	0.032	0.008	0.000	0.000	0.000	0.000	1384.99	
25	0.7610	1189.5	1210.6	1210.4	0.924	6.222	65.475	20.421	6.258	0.185	0.445	0.029	0.032	0.008	0.000	0.000	0.000	0.000	1387.71	
26	0.7592	1186.6	1207.6	1207.4	0.928	6.227	65.624	20.450	6.108	0.177	0.422	0.027	0.030	0.007	0.000	0.000	0.000	0.000	1385.91	
27	0.7580	1184.0	1205.0	1204.8	0.926	6.273	65.741	20.375	6.041	0.174	0.409	0.026	0.028	0.007	0.000	0.000	0.000	0.000	1384.06	
28	0.7592	1186.2	1207.3	1207.1	0.926	6.249	65.612	20.446	6.108	0.178	0.419	0.027	0.030	0.007	0.000	0.000	0.000	0.000	1385.56	
29	0.7600	1187.9	1208.9	1208.7	0.928	6.224	65.510	20.527	6.137	0.182	0.427	0.027	0.031	0.007	0.000	0.000	0.000	0.000	1386.70	
30	0.7570	1183.2	1204.2	1204.0	0.928	6.222	65.900	20.359	5.924	0.188	0.417	0.026	0.029	0.007	0.000	0.000	0.000	0.000	1384.06	
Avg	0.7586	1187.0	1208.0	1207.7	0.929	6.146	65.770	20.426	6.020	0.196	0.445	0.029	0.032	0.008	0.000	0.000	0.000	0.000	1386.90	

# Source Daily Summary

November 2024

Source #: 091  
Name: MNT BRD-PLRMO BRD-BIS STN

<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Temperature Base:</b>	60	<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7593	1186.5	1207.5	1207.1	0.941	6.220	65.707	20.370	6.012	0.215	0.464	0.030	0.034	0.007	0.000	0.000	0.000	0.000	1385.73	
2	0.7613	1189.4	1210.5	1210.1	0.936	6.238	65.414	20.517	6.146	0.215	0.465	0.030	0.033	0.007	0.000	0.000	0.000	0.000	1387.31	
3	0.7593	1185.5	1206.5	1206.1	0.940	6.279	65.689	20.322	6.031	0.212	0.458	0.029	0.033	0.007	0.000	0.000	0.000	0.000	1384.63	
4	0.7609	1188.3	1209.3	1208.9	0.937	6.272	65.466	20.444	6.136	0.212	0.463	0.029	0.033	0.007	0.000	0.000	0.000	0.000	1386.31	
5	0.7616	1189.4	1210.5	1210.1	0.939	6.264	65.387	20.477	6.182	0.213	0.469	0.030	0.033	0.007	0.000	0.000	0.000	0.000	1387.03	
6	0.7607	1188.5	1209.5	1209.1	0.938	6.238	65.497	20.458	6.130	0.209	0.460	0.029	0.033	0.007	0.000	0.000	0.000	0.000	1386.75	
7	0.7604	1188.0	1209.1	1208.7	0.939	6.233	65.506	20.482	6.129	0.201	0.445	0.028	0.031	0.006	0.000	0.000	0.000	0.000	1386.55	
8	0.7580	1183.9	1204.9	1204.5	0.945	6.252	65.819	20.308	5.974	0.201	0.436	0.027	0.031	0.006	0.000	0.000	0.000	0.000	1383.89	
9	0.7587	1185.2	1206.1	1205.8	0.945	6.244	65.740	20.343	6.012	0.206	0.446	0.028	0.031	0.006	0.000	0.000	0.000	0.000	1384.68	
10	0.7619	1190.9	1212.0	1211.6	0.945	6.192	65.369	20.540	6.199	0.213	0.469	0.031	0.035	0.007	0.000	0.000	0.000	0.000	1388.49	
11	0.7602	1187.8	1208.8	1208.4	0.944	6.221	65.572	20.433	6.101	0.206	0.454	0.030	0.033	0.007	0.000	0.000	0.000	0.000	1386.43	
12	0.7615	1189.2	1210.3	1209.9	0.941	6.261	65.366	20.522	6.186	0.203	0.452	0.029	0.033	0.007	0.000	0.000	0.000	0.000	1386.90	
13	0.7628	1192.0	1213.1	1212.7	0.941	6.218	65.226	20.612	6.250	0.211	0.469	0.031	0.035	0.008	0.000	0.000	0.000	0.000	1388.90	
14	0.7626	1191.2	1212.3	1212.0	0.941	6.239	65.239	20.610	6.220	0.211	0.467	0.031	0.034	0.007	0.000	0.000	0.000	0.000	1388.28	
15	0.7612	1188.3	1209.3	1208.9	0.940	6.290	65.399	20.502	6.138	0.205	0.455	0.030	0.034	0.007	0.000	0.000	0.000	0.000	1386.12	
16	0.7590	1185.6	1206.6	1206.2	0.941	6.244	65.715	20.356	6.021	0.205	0.450	0.028	0.032	0.007	0.000	0.000	0.000	0.000	1385.00	
17	0.7605	1187.5	1208.5	1208.2	0.938	6.271	65.660	20.196	6.154	0.217	0.490	0.031	0.035	0.007	0.000	0.000	0.000	0.000	1385.85	
18	0.7604	1185.8	1206.8	1206.4	0.942	6.366	65.549	20.273	6.131	0.206	0.463	0.030	0.034	0.007	0.000	0.000	0.000	0.000	1383.91	
19	0.7560	1178.4	1199.3	1198.9	0.941	6.402	66.013	20.105	5.891	0.184	0.405	0.025	0.028	0.006	0.000	0.000	0.000	0.000	1379.33	
20	0.7554	1177.0	1197.8	1197.5	0.950	6.420	66.072	20.044	5.909	0.166	0.385	0.024	0.026	0.006	0.000	0.000	0.000	0.000	1378.23	
21	0.7567	1180.2	1201.0	1200.7	0.934	6.372	66.055	19.962	5.987	0.188	0.439	0.027	0.030	0.006	0.000	0.000	0.000	0.000	1380.72	
22	0.7610	1188.7	1209.8	1209.4	0.943	6.244	65.421	20.504	6.192	0.193	0.438	0.028	0.032	0.007	0.000	0.000	0.000	0.000	1386.77	
23	0.7609	1187.6	1208.6	1208.3	0.940	6.308	65.415	20.446	6.204	0.188	0.434	0.028	0.031	0.007	0.000	0.000	0.000	0.000	1385.56	
24	0.7609	1187.2	1208.3	1207.9	0.937	6.336	65.396	20.438	6.212	0.184	0.431	0.028	0.031	0.007	0.000	0.000	0.000	0.000	1385.10	
25	0.7597	1184.7	1205.7	1205.3	0.936	6.376	65.532	20.350	6.148	0.179	0.418	0.026	0.029	0.006	0.000	0.000	0.000	0.000	1383.27	
26	0.7590	1183.5	1204.4	1204.1	0.939	6.382	65.600	20.346	6.081	0.178	0.413	0.026	0.029	0.006	0.000	0.000	0.000	0.000	1382.47	
27	0.7605	1187.0	1208.0	1207.7	0.938	6.306	65.458	20.451	6.159	0.190	0.434	0.028	0.031	0.006	0.000	0.000	0.000	0.000	1385.26	
28	0.7580	1182.5	1203.4	1203.1	0.938	6.346	65.749	20.300	6.009	0.185	0.413	0.026	0.028	0.006	0.000	0.000	0.000	0.000	1382.28	
29	0.7593	1185.0	1206.0	1205.7	0.939	6.309	65.602	20.394	6.081	0.189	0.424	0.027	0.029	0.006	0.000	0.000	0.000	0.000	1384.09	
30	0.7608	1188.4	1209.5	1209.2	0.943	6.242	65.455	20.492	6.156	0.199	0.445	0.029	0.032	0.007	0.000	0.000	0.000	0.000	1386.64	
Avg	0.7599	1186.0	1207.4	1207.1	0.940	6.286	65.569	20.387	6.106	0.200	0.445	0.028	0.032	0.007	0.000	0.000	0.000	0.000	1385.08	

# Gas Composition and Properties

Effective October 1, 2021

Attachment B  
Page 8 of 24

Source #: 2501030  
Name: LIGNITE PLANT

Component	Mole %	Liquid Content	Mass %	Property	Total Sample	C6 Plus Fraction
Carbon Dioxide, CO2	0.2283		0.5237	Pressure Base	14.730	
Nitrogen, N2	2.9631		4.3268	Temperature Base	60.00	
Methane, C1	79.4957		66.4767	HCDP @ Sample Pressure		
Ethane, C2	15.2390	4.0765	23.8852	Cricondentherm	-32.804	
Propane, C3	2.0456	0.5637	4.7019	HV, Dry @ Base P, T	1130.73	
iso-Butane, iC4	0.0244	0.0080	0.0739	HV, Sat @ Base P, T	1111.05	
n-Butane, nC4	0.0039	0.0012	0.0118	HV, Sat @ Sample P, T	1130.73	
iso-Pentane, iC5				Relative Density	0.6640	
n-Pentane, nC5						
Neo-Pentane, neo						
Hexanes Plus, C6+						
Argon, Ar						
Carbon Monoxide, CO						
Hydrogen, H2						
Oxygen, O2						
Helium, He						
Water, H2O						
Hydrogen Sulfide, H2S						
				C6+: 100		
<b>Totals</b>	<b>100.0000</b>	<b>4.6490</b>	<b>100.0000</b>			

**Sample**

Date: 10/01/2021                      Type:

Tech: Wayne Sampson

Pressure:                                      Temp.:

Gauge:    H2O:

Atm. Pressure:                                      H2S:

Remarks:

**Analysis**

Date:    Instrument:

Tech:    Cylinder:

Remarks:



# Source Daily Summary

November 2024

Source #: 603  
Name: TIOGA STN-COUNTY LINE PLANT

<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Temperature Base:</b>	60	<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7197	1163.5	1184.1	1183.7	1.007	3.821	70.999	20.447	3.171	0.141	0.342	0.028	0.035	0.011	0.000	0.000	0.000	0.000	1395.70	
2	0.7204	1163.1	1183.7	1183.3	1.006	3.906	70.908	20.403	3.219	0.142	0.344	0.028	0.034	0.010	0.000	0.000	0.000	0.000	1394.60	
3	0.7219	1164.8	1185.4	1185.0	1.002	3.946	70.811	20.288	3.354	0.150	0.373	0.030	0.037	0.010	0.000	0.000	0.000	0.000	1395.23	
4	0.7210	1162.9	1183.4	1183.1	1.006	3.978	70.847	20.338	3.249	0.144	0.361	0.029	0.037	0.011	0.000	0.000	0.000	0.000	1393.73	
5	0.7208	1162.4	1182.9	1182.6	1.001	3.996	71.006	20.024	3.403	0.143	0.352	0.028	0.036	0.011	0.000	0.000	0.000	0.000	1393.32	
6	0.7210	1161.3	1181.9	1181.5	0.998	4.079	71.143	19.662	3.514	0.153	0.371	0.031	0.039	0.010	0.000	0.000	0.000	0.000	1391.90	
7	0.7249	1166.1	1186.8	1186.4	1.006	4.141	70.308	20.444	3.514	0.149	0.362	0.029	0.036	0.010	0.000	0.000	0.000	0.000	1393.93	
8	0.7261	1151.8	1172.2	1171.8	1.014	5.125	69.807	20.032	3.446	0.146	0.357	0.029	0.035	0.010	0.000	0.000	0.000	0.000	1375.58	
9	0.7247	1166.7	1187.3	1187.0	1.006	4.100	70.449	20.228	3.615	0.153	0.374	0.029	0.036	0.010	0.000	0.000	0.000	0.000	1394.70	
10	0.7222	1162.0	1182.6	1182.2	1.011	4.132	70.842	19.956	3.456	0.151	0.373	0.030	0.038	0.011	0.000	0.000	0.000	0.000	1391.56	
11	0.7238	1165.4	1186.1	1185.7	1.012	4.077	70.480	20.376	3.472	0.147	0.360	0.029	0.036	0.010	0.000	0.000	0.000	0.000	1394.07	
12	0.7234	1167.7	1188.4	1188.0	1.007	3.910	70.608	20.383	3.521	0.144	0.353	0.028	0.035	0.010	0.000	0.000	0.000	0.000	1397.16	
13	0.7249	1166.8	1187.4	1187.1	1.004	4.106	70.514	20.073	3.702	0.150	0.372	0.030	0.037	0.011	0.000	0.000	0.000	0.000	1394.66	
14	0.7287	1173.7	1194.5	1194.2	1.003	4.040	70.031	20.340	3.989	0.149	0.370	0.030	0.037	0.011	0.000	0.000	0.000	0.000	1399.31	
15	0.7257	1169.2	1189.9	1189.6	1.005	4.028	70.407	20.209	3.764	0.149	0.362	0.030	0.036	0.011	0.000	0.000	0.000	0.000	1396.84	
16	0.7239	1163.0	1183.6	1183.3	0.995	4.256	70.861	19.413	3.875	0.151	0.371	0.031	0.037	0.010	0.000	0.000	0.000	0.000	1391.09	
17	0.7218	1156.9	1177.4	1177.0	1.016	4.400	71.079	19.162	3.806	0.136	0.330	0.027	0.033	0.010	0.000	0.000	0.000	0.000	1385.81	
18	0.7199	1158.7	1179.2	1178.8	1.004	4.132	71.358	19.349	3.583	0.145	0.356	0.028	0.035	0.011	0.000	0.000	0.000	0.000	1389.75	
19	0.7240	1164.2	1184.8	1184.5	1.013	4.170	70.635	19.924	3.668	0.147	0.366	0.030	0.037	0.009	0.000	0.000	0.000	0.000	1392.37	
20	0.7220	1160.1	1180.7	1180.3	0.981	4.266	71.551	18.443	4.131	0.162	0.390	0.030	0.036	0.010	0.000	0.000	0.000	0.000	1389.51	
21	0.7000	1120.0	1139.8	1139.5	0.967	4.674	75.345	14.903	3.455	0.165	0.405	0.032	0.040	0.013	0.000	0.000	0.000	0.000	1362.24	
22	0.7302	1176.0	1196.8	1196.5	0.990	4.049	71.178	18.147	4.670	0.242	0.607	0.046	0.056	0.016	0.000	0.000	0.000	0.000	1400.52	
23	0.7195	1154.0	1174.5	1174.1	0.976	4.404	72.773	16.697	4.234	0.219	0.565	0.048	0.062	0.020	0.000	0.000	0.000	0.000	1384.61	
24	0.7107	1140.5	1160.7	1160.4	0.964	4.429	73.909	16.034	3.875	0.193	0.487	0.041	0.051	0.017	0.000	0.000	0.000	0.000	1376.77	
25	0.7027	1119.4	1139.2	1138.9	0.963	4.963	74.868	15.005	3.529	0.170	0.419	0.033	0.040	0.012	0.000	0.000	0.000	0.000	1359.02	
26	0.7211	1159.0	1179.5	1179.2	1.007	4.217	71.151	19.487	3.503	0.161	0.396	0.030	0.036	0.011	0.000	0.000	0.000	0.000	1389.00	
27	0.7265	1156.6	1177.0	1176.7	1.015	4.867	69.971	19.981	3.538	0.159	0.390	0.031	0.038	0.010	0.000	0.000	0.000	0.000	1380.91	
28	0.7264	1167.2	1187.9	1187.5	1.019	4.197	70.161	20.398	3.600	0.160	0.388	0.030	0.037	0.010	0.000	0.000	0.000	0.000	1393.73	
29	0.7255	1156.1	1176.6	1176.3	1.023	4.790	70.077	20.045	3.448	0.159	0.383	0.030	0.036	0.010	0.000	0.000	0.000	0.000	1381.30	
30	0.7229	1163.0	1183.6	1183.3	1.021	4.128	70.742	20.028	3.448	0.163	0.393	0.030	0.037	0.010	0.000	0.000	0.000	0.000	1392.02	
Avg	0.7216	1159.0	1179.9	1179.6	1.001	4.244	71.161	19.341	3.625	0.158	0.389	0.031	0.038	0.011	0.000	0.000	0.000	0.000	1389.03	

# Source Daily Summary

November 2024

Source #: 043  
Name: BISMARCK STN-CLEVELAND STN

<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Temperature Base:</b>	60	<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7585	1189.6	1210.6	1209.7	0.890	6.037	65.940	20.283	6.078	0.217	0.483	0.029	0.032	0.009	0.000	0.000	0.000	0.000	1390.05	
2	0.7592	1189.9	1211.0	1210.0	0.886	6.086	65.828	20.296	6.149	0.213	0.474	0.029	0.031	0.008	0.000	0.000	0.000	0.000	1389.85	
3	0.7578	1187.4	1208.5	1207.4	0.889	6.103	66.026	20.159	6.072	0.212	0.471	0.028	0.031	0.008	0.000	0.000	0.000	0.000	1388.20	
4	0.7592	1189.8	1210.9	1209.7	0.887	6.097	65.816	20.294	6.151	0.212	0.473	0.029	0.031	0.008	0.000	0.000	0.000	0.000	1389.65	
5	0.7593	1189.5	1210.6	1209.3	0.889	6.114	65.812	20.281	6.152	0.210	0.474	0.029	0.031	0.008	0.000	0.000	0.000	0.000	1389.29	
6	0.7595	1190.6	1211.7	1210.4	0.886	6.073	65.762	20.377	6.150	0.210	0.475	0.029	0.031	0.008	0.000	0.000	0.000	0.000	1390.39	
7	0.7590	1189.9	1211.0	1209.7	0.886	6.068	65.835	20.310	6.177	0.200	0.459	0.028	0.030	0.008	0.000	0.000	0.000	0.000	1390.01	
8	0.7571	1186.9	1207.9	1206.6	0.893	6.067	66.079	20.197	6.044	0.202	0.453	0.027	0.029	0.008	0.000	0.000	0.000	0.000	1388.16	
9	0.7583	1189.0	1210.0	1208.8	0.894	6.051	65.963	20.232	6.111	0.210	0.470	0.029	0.031	0.008	0.000	0.000	0.000	0.000	1389.53	
10	0.7599	1191.7	1212.8	1211.6	0.892	6.031	65.766	20.346	6.203	0.212	0.477	0.030	0.032	0.009	0.000	0.000	0.000	0.000	1391.32	
11	0.7590	1190.4	1211.5	1210.3	0.892	6.033	65.868	20.310	6.147	0.209	0.472	0.029	0.032	0.009	0.000	0.000	0.000	0.000	1390.53	
12	0.7592	1189.7	1210.7	1209.6	0.889	6.101	65.811	20.276	6.194	0.201	0.461	0.028	0.031	0.008	0.000	0.000	0.000	0.000	1389.51	
13	0.7622	1195.5	1216.6	1215.5	0.890	6.026	65.471	20.486	6.354	0.212	0.487	0.031	0.034	0.009	0.000	0.000	0.000	0.000	1393.53	
14	0.7609	1192.7	1213.8	1212.5	0.889	6.077	65.582	20.447	6.250	0.209	0.475	0.030	0.032	0.009	0.000	0.000	0.000	0.000	1391.46	
15	0.7571	1187.0	1208.0	1207.1	0.892	6.057	66.096	20.193	6.041	0.199	0.453	0.028	0.031	0.009	0.000	0.000	0.000	0.000	1388.37	
16	0.7541	1183.1	1204.0	1203.2	0.894	6.011	66.513	20.007	5.864	0.200	0.447	0.027	0.029	0.008	0.000	0.000	0.000	0.000	1386.55	
17	0.7529	1183.9	1204.9	1204.1	0.896	5.851	66.843	19.799	5.869	0.202	0.471	0.029	0.031	0.009	0.000	0.000	0.000	0.000	1388.57	
18	0.7579	1186.7	1207.7	1206.9	0.891	6.151	66.016	20.100	6.101	0.202	0.468	0.029	0.031	0.009	0.000	0.000	0.000	0.000	1387.27	
19	0.7429	1169.1	1189.8	1189.1	0.904	5.798	68.023	19.392	5.290	0.167	0.376	0.022	0.023	0.006	0.000	0.000	0.000	0.000	1380.49	
20	0.7247	1151.6	1172.0	1171.3	0.933	5.123	70.366	19.000	4.156	0.114	0.271	0.015	0.016	0.005	0.000	0.000	0.000	0.000	1376.75	
21	0.7265	1155.1	1175.6	1174.8	0.891	5.138	70.251	18.931	4.301	0.131	0.312	0.019	0.020	0.006	0.000	0.000	0.000	0.000	1379.20	
22	0.7315	1163.8	1184.5	1183.7	0.870	5.108	69.561	19.350	4.596	0.141	0.326	0.020	0.021	0.006	0.000	0.000	0.000	0.000	1384.87	
23	0.7345	1166.9	1187.6	1186.8	0.865	5.212	69.145	19.470	4.774	0.146	0.339	0.021	0.022	0.006	0.000	0.000	0.000	0.000	1385.66	
24	0.7374	1169.2	1190.0	1189.2	0.865	5.339	68.727	19.577	4.951	0.146	0.346	0.021	0.023	0.006	0.000	0.000	0.000	0.000	1385.72	
25	0.7352	1166.5	1187.1	1186.4	0.848	5.326	68.921	19.612	4.788	0.136	0.322	0.019	0.020	0.006	0.000	0.000	0.000	0.000	1384.52	
26	0.7327	1165.8	1186.4	1185.7	0.860	5.115	69.239	19.722	4.574	0.133	0.312	0.019	0.020	0.006	0.000	0.000	0.000	0.000	1386.10	
27	0.7318	1164.8	1185.5	1184.8	0.863	5.089	69.408	19.586	4.560	0.134	0.314	0.019	0.020	0.006	0.000	0.000	0.000	0.000	1385.75	
28	0.7295	1162.0	1182.6	1181.9	0.872	5.031	69.742	19.453	4.407	0.139	0.311	0.019	0.020	0.005	0.000	0.000	0.000	0.000	1384.58	
29	0.7284	1161.1	1181.7	1181.0	0.865	4.992	69.838	19.512	4.327	0.129	0.295	0.018	0.019	0.005	0.000	0.000	0.000	0.000	1384.56	
30	0.7294	1161.0	1181.5	1180.9	0.932	4.995	69.817	19.370	4.393	0.138	0.310	0.019	0.021	0.006	0.000	0.000	0.000	0.000	1383.43	
Avg	0.7479	1179.0	1199.6	1198.6	0.886	5.710	67.335	19.912	5.508	0.180	0.409	0.025	0.027	0.007	0.000	0.000	0.000	0.000	1387.13	

# Source Daily Summary

November 2024

Source #: 063  
Name: CLEVELAND STN-MAPLETON

<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Temperature Base:</b>	60	<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7598	1188.8	1209.9	1209.4	0.926	6.148	65.633	20.509	6.029	0.210	0.469	0.031	0.034	0.013	0.000	0.000	0.000	0.000	1388.05	
2	0.7593	1187.9	1208.9	1208.7	0.928	6.154	65.741	20.378	6.049	0.216	0.461	0.030	0.032	0.012	0.000	0.000	0.000	0.000	1387.42	
3	0.7620	1192.2	1213.3	1213.0	0.924	6.158	65.375	20.552	6.227	0.218	0.471	0.031	0.033	0.010	0.000	0.000	0.000	0.000	1389.87	
4	0.7593	1187.1	1208.1	1207.9	0.928	6.205	65.707	20.367	6.057	0.213	0.454	0.029	0.031	0.010	0.000	0.000	0.000	0.000	1386.45	
5	0.7605	1189.0	1210.0	1209.8	0.925	6.204	65.558	20.428	6.143	0.213	0.458	0.029	0.032	0.009	0.000	0.000	0.000	0.000	1387.59	
6	0.7608	1189.3	1210.4	1210.1	0.929	6.207	65.523	20.440	6.155	0.213	0.462	0.030	0.032	0.010	0.000	0.000	0.000	0.000	1387.70	
7	0.7602	1189.0	1210.1	1209.8	0.924	6.177	65.592	20.446	6.125	0.210	0.455	0.029	0.031	0.011	0.000	0.000	0.000	0.000	1387.88	
8	0.7601	1189.2	1210.2	1210.0	0.925	6.162	65.574	20.481	6.148	0.201	0.442	0.028	0.030	0.010	0.000	0.000	0.000	0.000	1388.11	
9	0.7583	1185.9	1206.9	1206.7	0.937	6.167	65.811	20.371	6.009	0.203	0.436	0.028	0.030	0.009	0.000	0.000	0.000	0.000	1386.03	
10	0.7601	1189.3	1210.3	1210.1	0.934	6.139	65.634	20.432	6.119	0.212	0.457	0.030	0.032	0.010	0.000	0.000	0.000	0.000	1388.24	
11	0.7614	1191.5	1212.6	1212.4	0.930	6.126	65.472	20.524	6.200	0.213	0.461	0.030	0.033	0.012	0.000	0.000	0.000	0.000	1389.71	
12	0.7597	1188.6	1209.7	1209.4	0.931	6.148	65.663	20.419	6.110	0.207	0.450	0.029	0.031	0.011	0.000	0.000	0.000	0.000	1387.85	
13	0.7612	1190.2	1211.3	1211.1	0.929	6.188	65.456	20.496	6.206	0.204	0.450	0.029	0.032	0.011	0.000	0.000	0.000	0.000	1388.40	
14	0.7630	1193.9	1215.1	1214.8	0.928	6.139	65.248	20.622	6.308	0.212	0.467	0.031	0.034	0.012	0.000	0.000	0.000	0.000	1391.01	
15	0.7612	1190.5	1211.6	1210.7	0.929	6.168	65.466	20.519	6.176	0.209	0.457	0.030	0.033	0.012	0.000	0.000	0.000	0.000	1388.75	
16	0.7644	1186.8	1207.8	1206.9	0.960	5.735	65.119	21.078	6.360	0.210	0.464	0.030	0.033	0.010	0.000	0.000	0.000	0.000	1383.03	
17	0.7529	1183.9	1204.9	1204.0	0.896	5.851	66.843	19.799	5.869	0.202	0.471	0.029	0.031	0.009	0.000	0.000	0.000	0.000	1388.56	
18	0.7579	1186.7	1207.7	1206.8	0.891	6.151	66.016	20.100	6.102	0.202	0.469	0.029	0.031	0.009	0.000	0.000	0.000	0.000	1387.27	
19	0.7429	1169.1	1189.8	1189.0	0.904	5.798	68.023	19.392	5.290	0.167	0.376	0.022	0.023	0.006	0.000	0.000	0.000	0.000	1380.49	
20	0.7247	1151.6	1172.0	1171.1	0.933	5.123	70.366	19.000	4.156	0.114	0.271	0.015	0.016	0.005	0.000	0.000	0.000	0.000	1376.75	
21	0.7265	1155.1	1175.6	1174.6	0.891	5.138	70.251	18.931	4.301	0.131	0.312	0.019	0.020	0.006	0.000	0.000	0.000	0.000	1379.20	
22	0.7315	1163.8	1184.5	1183.5	0.870	5.108	69.561	19.350	4.596	0.141	0.326	0.020	0.021	0.006	0.000	0.000	0.000	0.000	1384.87	
23	0.7345	1166.9	1187.6	1186.7	0.865	5.212	69.145	19.470	4.774	0.146	0.339	0.021	0.022	0.006	0.000	0.000	0.000	0.000	1385.65	
24	0.7374	1169.2	1190.0	1189.1	0.865	5.339	68.727	19.577	4.951	0.146	0.346	0.021	0.023	0.006	0.000	0.000	0.000	0.000	1385.72	
25	0.7349	1166.0	1186.7	1185.8	0.852	5.322	68.961	19.589	4.772	0.136	0.321	0.019	0.020	0.006	0.000	0.000	0.000	0.000	1384.26	
26	0.7359	1165.6	1186.2	1185.3	0.885	5.392	68.740	19.750	4.737	0.136	0.309	0.019	0.020	0.010	0.000	0.000	0.000	0.000	1382.78	
27	0.7343	1165.7	1186.4	1185.5	0.893	5.222	68.937	19.875	4.584	0.135	0.303	0.019	0.021	0.010	0.000	0.000	0.000	0.000	1384.46	
28	0.7332	1165.1	1185.7	1184.9	0.902	5.142	69.181	19.725	4.553	0.138	0.309	0.020	0.021	0.010	0.000	0.000	0.000	0.000	1384.76	
29	0.7301	1160.7	1181.2	1180.4	0.908	5.108	69.596	19.549	4.355	0.138	0.297	0.019	0.020	0.010	0.000	0.000	0.000	0.000	1382.48	
30	0.7299	1160.7	1181.2	1180.4	0.916	5.081	69.579	19.634	4.324	0.132	0.288	0.018	0.019	0.010	0.000	0.000	0.000	0.000	1382.62	
Avg	0.7493	1179.0	1199.5	1198.9	0.912	5.774	67.083	20.060	5.526	0.181	0.402	0.026	0.027	0.009	0.000	0.000	0.000	0.000	1385.87	

# Source Daily Summary

November 2024

Source #: 061  
Name: CLEVELAND STN-GRAFTON BDR

<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Temperature Base:</b>	60	<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7600	1189.2	1210.3	1210.0	0.927	6.146	65.613	20.508	6.046	0.210	0.472	0.032	0.035	0.013	0.000	0.000	0.000	0.000	1388.27	
2	0.7596	1188.4	1209.4	1209.3	0.929	6.150	65.708	20.397	6.061	0.217	0.464	0.030	0.033	0.012	0.000	0.000	0.000	0.000	1387.72	
3	0.7615	1191.1	1212.2	1212.0	0.925	6.175	65.428	20.524	6.194	0.216	0.465	0.030	0.032	0.010	0.000	0.000	0.000	0.000	1389.06	
4	0.7596	1187.7	1208.8	1208.6	0.928	6.198	65.674	20.377	6.079	0.215	0.458	0.029	0.032	0.010	0.000	0.000	0.000	0.000	1386.87	
5	0.7607	1189.4	1210.4	1210.2	0.926	6.203	65.529	20.444	6.151	0.215	0.461	0.030	0.032	0.010	0.000	0.000	0.000	0.000	1387.81	
6	0.7604	1188.3	1209.4	1209.1	0.933	6.222	65.569	20.407	6.128	0.211	0.458	0.030	0.032	0.010	0.000	0.000	0.000	0.000	1386.92	
7	0.7605	1189.4	1210.4	1210.2	0.925	6.181	65.559	20.461	6.129	0.213	0.460	0.030	0.032	0.011	0.000	0.000	0.000	0.000	1388.04	
8	0.7598	1188.3	1209.4	1209.1	0.925	6.178	65.617	20.447	6.125	0.200	0.440	0.028	0.030	0.010	0.000	0.000	0.000	0.000	1387.47	
9	0.7577	1184.7	1205.7	1205.4	0.934	6.189	65.890	20.302	5.988	0.200	0.431	0.028	0.030	0.009	0.000	0.000	0.000	0.000	1385.16	
10	0.7596	1188.2	1209.3	1209.1	0.937	6.154	65.685	20.400	6.088	0.211	0.454	0.029	0.032	0.010	0.000	0.000	0.000	0.000	1387.46	
11	0.7611	1191.0	1212.1	1211.9	0.932	6.134	65.502	20.499	6.184	0.213	0.461	0.030	0.033	0.012	0.000	0.000	0.000	0.000	1389.32	
12	0.7602	1189.4	1210.5	1210.3	0.932	6.140	65.617	20.441	6.133	0.209	0.455	0.030	0.032	0.011	0.000	0.000	0.000	0.000	1388.37	
13	0.7609	1189.6	1210.7	1210.5	0.930	6.197	65.489	20.472	6.190	0.203	0.448	0.029	0.031	0.011	0.000	0.000	0.000	0.000	1387.96	
14	0.7639	1195.5	1216.6	1216.4	0.929	6.122	65.153	20.675	6.352	0.214	0.475	0.032	0.035	0.012	0.000	0.000	0.000	0.000	1392.03	
15	0.7611	1190.2	1211.3	1210.7	0.929	6.186	65.462	20.509	6.175	0.208	0.456	0.030	0.033	0.012	0.000	0.000	0.000	0.000	1388.41	
16	0.7581	1187.0	1208.0	1207.6	0.924	6.105	65.882	20.341	6.037	0.200	0.441	0.029	0.031	0.010	0.000	0.000	0.000	0.000	1387.44	
17	0.7529	1183.9	1204.9	1204.5	0.896	5.851	66.843	19.799	5.869	0.202	0.471	0.029	0.031	0.009	0.000	0.000	0.000	0.000	1388.56	
18	0.7579	1186.7	1207.7	1207.2	0.891	6.151	66.016	20.100	6.102	0.202	0.469	0.029	0.031	0.009	0.000	0.000	0.000	0.000	1387.27	
19	0.7429	1169.1	1189.8	1189.6	0.904	5.798	68.023	19.392	5.290	0.167	0.376	0.022	0.023	0.006	0.000	0.000	0.000	0.000	1380.49	
20	0.7247	1151.6	1172.0	1171.8	0.933	5.123	70.366	19.000	4.156	0.114	0.271	0.015	0.016	0.005	0.000	0.000	0.000	0.000	1376.75	
21	0.7265	1155.1	1175.6	1175.3	0.891	5.138	70.251	18.931	4.301	0.131	0.312	0.019	0.020	0.006	0.000	0.000	0.000	0.000	1379.20	
22	0.7315	1163.8	1184.5	1184.2	0.870	5.108	69.561	19.350	4.596	0.141	0.326	0.020	0.021	0.006	0.000	0.000	0.000	0.000	1384.87	
23	0.7345	1166.9	1187.6	1187.0	0.865	5.212	69.145	19.470	4.774	0.146	0.339	0.021	0.022	0.006	0.000	0.000	0.000	0.000	1385.65	
24	0.7374	1169.2	1190.0	1189.4	0.865	5.339	68.727	19.577	4.951	0.146	0.346	0.021	0.023	0.006	0.000	0.000	0.000	0.000	1385.72	
25	0.7349	1166.1	1186.7	1186.3	0.852	5.318	68.966	19.589	4.771	0.137	0.321	0.019	0.020	0.006	0.000	0.000	0.000	0.000	1384.31	
26	0.7358	1165.3	1185.9	1185.6	0.884	5.405	68.749	19.735	4.734	0.136	0.309	0.019	0.020	0.010	0.000	0.000	0.000	0.000	1382.53	
27	0.7343	1165.6	1186.3	1185.9	0.894	5.225	68.942	19.865	4.584	0.136	0.304	0.020	0.021	0.010	0.000	0.000	0.000	0.000	1384.37	
28	0.7331	1164.8	1185.4	1185.0	0.903	5.147	69.195	19.711	4.547	0.137	0.308	0.020	0.021	0.010	0.000	0.000	0.000	0.000	1384.51	
29	0.7301	1160.7	1181.2	1180.9	0.909	5.111	69.594	19.545	4.356	0.139	0.298	0.019	0.020	0.010	0.000	0.000	0.000	0.000	1382.44	
30	0.7298	1160.6	1181.1	1180.7	0.915	5.086	69.583	19.629	4.321	0.132	0.288	0.018	0.019	0.010	0.000	0.000	0.000	0.000	1382.55	
Avg	0.7490	1179.0	1199.4	1199.1	0.911	5.790	67.111	20.030	5.514	0.181	0.401	0.026	0.027	0.009	0.000	0.000	0.000	0.000	1385.92	

# Source Daily Summary

November 2024

Source #: 041  
Name: BISMARCK STN-GLEN ULLIN STN

<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Temperature Base:</b>	60	<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6696	1096.8	1116.2	1115.7	0.966	3.243	78.959	14.995	1.656	0.053	0.112	0.006	0.007	0.003	0.000	0.000	0.000	0.000	1364.19	
2	0.7385	1172.4	1193.1	1192.5	0.928	5.155	68.285	20.468	4.612	0.155	0.346	0.021	0.023	0.007	0.000	0.000	0.000	0.000	1388.66	
3	0.7578	1187.5	1208.5	1208.0	0.889	6.097	66.028	20.162	6.073	0.212	0.471	0.028	0.031	0.008	0.000	0.000	0.000	0.000	1388.30	
4	0.7071	1136.2	1156.3	1155.7	0.934	4.410	73.412	17.331	3.499	0.117	0.260	0.016	0.017	0.005	0.000	0.000	0.000	0.000	1375.12	
5	0.7495	1179.4	1200.2	1199.7	0.900	5.797	67.230	19.736	5.650	0.192	0.432	0.026	0.028	0.008	0.000	0.000	0.000	0.000	1386.47	
6	0.7595	1190.6	1211.7	1211.1	0.886	6.070	65.767	20.381	6.140	0.211	0.475	0.029	0.031	0.008	0.000	0.000	0.000	0.000	1390.39	
7	0.7590	1189.9	1211.0	1210.4	0.886	6.071	65.825	20.318	6.174	0.200	0.459	0.028	0.030	0.008	0.000	0.000	0.000	0.000	1390.01	
8	0.7572	1186.9	1207.9	1207.4	0.893	6.070	66.067	20.202	6.050	0.201	0.452	0.027	0.029	0.008	0.000	0.000	0.000	0.000	1388.18	
9	0.7579	1188.2	1209.3	1208.7	0.894	6.058	66.009	20.211	6.086	0.208	0.466	0.028	0.031	0.008	0.000	0.000	0.000	0.000	1389.02	
10	0.7597	1191.4	1212.5	1211.9	0.893	6.037	65.781	20.339	6.192	0.211	0.476	0.030	0.032	0.009	0.000	0.000	0.000	0.000	1391.07	
11	0.7306	1160.7	1181.3	1180.8	0.925	5.131	69.961	18.754	4.669	0.157	0.352	0.022	0.024	0.007	0.000	0.000	0.000	0.000	1382.09	
12	0.7478	1177.1	1197.9	1197.4	0.901	5.777	67.440	19.640	5.596	0.179	0.409	0.025	0.027	0.007	0.000	0.000	0.000	0.000	1385.36	
13	0.7540	1186.7	1207.7	1207.1	0.898	5.776	66.647	20.041	5.921	0.196	0.451	0.029	0.031	0.009	0.000	0.000	0.000	0.000	1390.87	
14	0.7604	1191.7	1212.8	1212.2	0.889	6.089	65.640	20.417	6.218	0.207	0.470	0.030	0.032	0.009	0.000	0.000	0.000	0.000	1390.79	
15	0.6620	1089.9	1109.2	1108.6	0.985	2.927	79.833	15.079	1.074	0.030	0.062	0.003	0.004	0.002	0.000	0.000	0.000	0.000	1363.28	
16	0.6547	1083.2	1102.4	1101.9	0.983	2.647	80.952	14.622	0.738	0.018	0.036	0.002	0.002	0.002	0.000	0.000	0.000	0.000	1362.45	
17	0.6553	1084.1	1103.3	1102.8	0.990	2.641	80.811	14.785	0.715	0.018	0.035	0.002	0.002	0.002	0.000	0.000	0.000	0.000	1362.89	
18	0.6559	1084.5	1103.7	1103.2	0.991	2.674	80.720	14.802	0.750	0.020	0.038	0.002	0.002	0.002	0.000	0.000	0.000	0.000	1362.76	
19	0.6558	1083.6	1102.7	1102.3	0.997	2.709	80.693	14.837	0.706	0.018	0.035	0.002	0.002	0.002	0.000	0.000	0.000	0.000	1361.74	
20	0.6668	1098.8	1118.2	1117.8	1.016	2.789	78.346	17.179	0.627	0.014	0.026	0.001	0.001	0.002	0.000	0.000	0.000	0.000	1369.39	
21	0.6784	1113.7	1133.4	1132.9	0.909	3.134	76.709	17.781	1.323	0.043	0.087	0.005	0.005	0.003	0.000	0.000	0.000	0.000	1376.03	
22	0.6786	1114.3	1134.0	1133.6	0.829	3.235	76.825	17.430	1.508	0.052	0.106	0.007	0.007	0.003	0.000	0.000	0.000	0.000	1376.60	
23	0.6846	1121.0	1140.9	1140.4	0.806	3.424	75.923	17.813	1.833	0.058	0.123	0.008	0.008	0.003	0.000	0.000	0.000	0.000	1378.86	
24	0.6785	1114.7	1134.5	1134.0	0.802	3.241	76.738	17.591	1.479	0.045	0.090	0.006	0.006	0.003	0.000	0.000	0.000	0.000	1377.24	
25	0.6795	1117.7	1137.5	1137.0	0.747	3.235	76.394	18.061	1.440	0.038	0.073	0.005	0.005	0.002	0.000	0.000	0.000	0.000	1379.91	
26	0.6871	1128.2	1148.2	1147.7	0.812	3.212	75.262	18.834	1.711	0.052	0.101	0.006	0.006	0.003	0.000	0.000	0.000	0.000	1385.15	
27	0.6850	1124.9	1144.8	1144.4	0.818	3.207	75.694	18.417	1.687	0.053	0.106	0.007	0.007	0.003	0.000	0.000	0.000	0.000	1383.19	
28	0.6837	1122.4	1142.3	1141.9	0.842	3.200	75.971	18.136	1.668	0.055	0.110	0.007	0.007	0.003	0.000	0.000	0.000	0.000	1381.47	
29	0.6942	1133.0	1153.0	1152.6	0.836	3.545	74.411	18.783	2.190	0.069	0.144	0.009	0.009	0.004	0.000	0.000	0.000	0.000	1383.98	
30	0.6822	1115.4	1135.1	1134.7	0.985	3.275	76.179	17.895	1.524	0.044	0.085	0.005	0.005	0.003	0.000	0.000	0.000	0.000	1374.26	
Avg	0.7064	1139.0	1159.0	1158.5	0.901	4.229	73.150	18.168	3.184	0.104	0.230	0.014	0.015	0.005	0.000	0.000	0.000	0.000	1379.32	

# Source Daily Summary

November 2024

Source #: 271  
Name: DCKSN BRD-BLFD TSF-G.U. STN

<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Temperature Base:</b>	60	<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6888	1131.2	1151.2	1150.9	0.929	3.020	74.216	20.706	1.040	0.030	0.054	0.003	0.002	0.000	0.000	0.000	0.000	0.000	1387.10	
2	0.6904	1132.9	1153.0	1152.6	0.877	3.141	74.185	20.352	1.312	0.043	0.081	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1387.61	
3	0.6557	1084.1	1103.3	1103.0	0.981	2.692	80.712	14.834	0.727	0.019	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1362.49	
4	0.6577	1086.6	1105.9	1105.6	0.980	2.725	80.505	14.844	0.851	0.029	0.060	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1363.62	
5	0.6959	1142.3	1162.5	1162.3	1.024	2.874	72.146	23.485	0.453	0.008	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1393.53	
6	0.6996	1146.9	1167.2	1167.0	1.054	2.891	71.393	24.224	0.423	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1395.52	
7	0.6908	1135.1	1155.2	1154.9	1.018	2.839	73.279	22.321	0.511	0.011	0.020	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1389.90	
8	0.6928	1137.7	1157.8	1157.5	0.884	3.067	73.113	22.015	0.865	0.021	0.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1391.06	
9	0.6944	1139.5	1159.7	1159.3	0.932	3.038	72.757	22.425	0.797	0.020	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1391.65	
10	0.6990	1147.2	1167.5	1167.2	1.023	2.868	71.492	24.171	0.431	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1396.41	
11	0.7000	1148.5	1168.8	1168.6	1.039	2.854	71.321	24.333	0.437	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1397.04	
12	0.6965	1142.9	1163.2	1162.9	0.993	2.933	72.205	23.209	0.618	0.015	0.026	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1393.75	
13	0.6741	1109.5	1129.2	1128.9	1.017	2.815	76.614	18.927	0.591	0.014	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1375.23	
14	0.6580	1086.5	1105.7	1105.4	0.999	2.736	80.233	15.262	0.718	0.019	0.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1363.15	
15	0.6572	1085.9	1105.2	1104.9	0.992	2.703	80.371	15.192	0.693	0.018	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1363.28	
16	0.6583	1088.1	1107.4	1107.1	0.985	2.682	80.145	15.447	0.692	0.018	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1364.90	
17	0.6972	1142.5	1162.8	1162.5	1.042	2.953	71.992	23.445	0.547	0.008	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1392.56	
18	0.6851	1125.5	1145.4	1145.1	1.036	2.857	74.586	20.859	0.630	0.012	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1383.81	
19	0.6974	1142.9	1163.1	1162.9	1.033	2.961	71.943	23.496	0.542	0.009	0.014	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1392.81	
20	0.6913	1132.8	1152.8	1152.5	0.989	3.068	73.589	21.380	0.899	0.025	0.046	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1386.52	
21	0.6815	1118.1	1137.9	1137.6	0.836	3.263	76.246	17.954	1.526	0.055	0.107	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1378.42	
22	0.6807	1118.2	1138.0	1137.7	0.783	3.268	76.274	18.033	1.486	0.050	0.095	0.006	0.006	0.000	0.000	0.000	0.000	0.000	1379.26	
23	0.6808	1118.4	1138.2	1137.9	0.783	3.256	76.257	18.070	1.483	0.048	0.092	0.005	0.006	0.000	0.000	0.000	0.000	0.000	1379.54	
24	0.6803	1117.7	1137.5	1137.2	0.776	3.262	76.212	18.224	1.403	0.040	0.075	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1379.19	
25	0.6874	1129.0	1149.0	1148.7	0.780	3.242	74.998	19.236	1.603	0.047	0.086	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1385.82	
26	0.6889	1130.7	1150.8	1150.5	0.785	3.263	74.879	19.186	1.714	0.056	0.105	0.006	0.006	0.000	0.000	0.000	0.000	0.000	1386.51	
27	0.6896	1131.1	1151.1	1150.9	0.811	3.273	74.782	19.225	1.725	0.058	0.112	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1386.17	
28	0.6900	1131.1	1151.2	1150.9	0.818	3.301	74.696	19.273	1.731	0.058	0.110	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1385.78	
29	0.6860	1122.2	1142.1	1141.9	0.926	3.296	75.398	18.673	1.560	0.049	0.090	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1378.96	
30	0.6857	1123.1	1143.0	1142.8	0.873	3.296	75.519	18.497	1.652	0.052	0.099	0.006	0.006	0.000	0.000	0.000	0.000	0.000	1380.34	
Avg	0.6844	1124.0	1144.2	1143.9	0.933	3.014	75.069	19.910	0.989	0.028	0.052	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1383.06	

# Source Daily Summary

November 2024

Source #: 051  
Name: CABIN CRK STN-BELFIELD TRSFR

<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Temperature Base:</b>	60	<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6860	1122.4	1142.3	1141.3	0.944	3.253	76.052	17.540	1.959	0.078	0.153	0.011	0.010	0.000	0.000	0.000	0.000	0.000	1379.19	
2	0.6817	1116.3	1136.1	1135.4	0.972	3.181	76.756	17.068	1.794	0.071	0.139	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1375.96	
3	0.6788	1113.6	1133.3	1132.8	0.884	3.214	76.544	17.920	1.323	0.040	0.069	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1375.54	
4	0.6782	1111.2	1130.9	1130.4	0.947	3.205	77.263	16.709	1.671	0.064	0.125	0.009	0.008	0.000	0.000	0.000	0.000	0.000	1373.18	
5	0.6795	1112.6	1132.3	1131.5	0.968	3.200	77.312	16.413	1.856	0.077	0.153	0.011	0.010	0.000	0.000	0.000	0.000	0.000	1373.71	
6	0.6792	1112.2	1131.9	1131.3	0.969	3.203	77.355	16.372	1.850	0.077	0.154	0.011	0.010	0.000	0.000	0.000	0.000	0.000	1373.43	
7	0.6801	1113.5	1133.2	1132.3	0.981	3.191	77.102	16.695	1.794	0.073	0.145	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1374.11	
8	0.6803	1115.1	1134.9	1134.0	0.864	3.282	76.830	17.055	1.774	0.062	0.117	0.008	0.007	0.000	0.000	0.000	0.000	0.000	1375.97	
9	0.6783	1110.5	1130.2	1129.8	0.848	3.404	76.973	16.977	1.648	0.051	0.089	0.005	0.004	0.000	0.000	0.000	0.000	0.000	1372.29	
10	0.6759	1107.8	1127.4	1127.1	0.850	3.342	77.473	16.547	1.633	0.053	0.093	0.006	0.005	0.000	0.000	0.000	0.000	0.000	1371.34	
11	0.6840	1124.7	1144.7	1144.5	0.525	3.565	75.899	17.806	2.025	0.063	0.107	0.006	0.005	0.000	0.000	0.000	0.000	0.000	1384.00	
12	0.6864	1127.1	1147.1	1146.8	0.669	3.423	75.748	17.840	2.096	0.074	0.135	0.008	0.007	0.000	0.000	0.000	0.000	0.000	1384.53	
13	0.6793	1113.6	1133.3	1132.9	0.874	3.272	76.513	17.658	1.531	0.051	0.091	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1375.00	
14	0.6783	1114.8	1134.5	1134.1	0.880	3.104	76.442	18.314	1.168	0.033	0.055	0.003	0.002	0.000	0.000	0.000	0.000	0.000	1377.49	
15	0.6802	1116.7	1136.5	1136.1	0.889	3.149	76.232	18.320	1.294	0.039	0.069	0.004	0.003	0.000	0.000	0.000	0.000	0.000	1377.98	
16	0.6910	1134.5	1154.6	1154.2	0.646	3.443	74.568	19.186	1.968	0.064	0.113	0.006	0.005	0.000	0.000	0.000	0.000	0.000	1388.99	
17	0.6896	1135.6	1155.7	1155.3	0.519	3.438	75.003	18.641	2.178	0.073	0.133	0.008	0.006	0.000	0.000	0.000	0.000	0.000	1391.70	
18	0.6811	1116.6	1136.4	1136.1	0.870	3.266	76.270	17.955	1.499	0.048	0.084	0.005	0.004	0.000	0.000	0.000	0.000	0.000	1376.95	
19	0.6778	1110.6	1130.2	1130.0	0.963	3.183	76.995	17.287	1.423	0.049	0.090	0.006	0.005	0.000	0.000	0.000	0.000	0.000	1372.82	
20	0.6796	1113.7	1133.4	1132.6	0.899	3.257	77.058	16.788	1.778	0.069	0.133	0.009	0.009	0.000	0.000	0.000	0.000	0.000	1374.85	
21	0.6801	1114.0	1133.7	1132.6	0.901	3.278	77.076	16.654	1.854	0.074	0.145	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1374.76	
22	0.6801	1113.9	1133.7	1132.6	0.895	3.292	77.114	16.566	1.890	0.076	0.149	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1374.68	
23	0.6797	1113.3	1133.0	1132.1	0.898	3.288	77.196	16.491	1.883	0.075	0.149	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1374.28	
24	0.6792	1112.5	1132.2	1131.3	0.905	3.286	77.236	16.493	1.844	0.073	0.144	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1373.73	
25	0.6790	1112.2	1131.9	1131.0	0.893	3.295	77.308	16.401	1.863	0.074	0.146	0.010	0.010	0.000	0.000	0.000	0.000	0.000	1373.66	
26	0.6786	1111.7	1131.4	1130.6	0.879	3.306	77.358	16.365	1.855	0.073	0.144	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1373.50	
27	0.6782	1111.3	1130.9	1130.1	0.871	3.310	77.419	16.317	1.848	0.073	0.143	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1373.32	
28	0.6779	1111.0	1130.6	1129.8	0.858	3.322	77.447	16.298	1.843	0.072	0.140	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1373.22	
29	0.6777	1110.8	1130.5	1130.0	0.850	3.331	77.471	16.274	1.844	0.072	0.139	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1373.16	
30	0.6775	1110.5	1130.2	1129.5	0.846	3.334	77.497	16.258	1.837	0.071	0.138	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1373.03	
Avg	0.6804	1115.0	1135.2	1134.6	0.858	3.287	76.784	17.107	1.761	0.065	0.123	0.008	0.007	0.000	0.000	0.000	0.000	0.000	1376.21	

# Source Daily Summary

November 2024

Source #: 111  
Name: LITTLE KNIFE PLANT

<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Temperature Base:</b>	60	<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7000	1146.3	1166.6	1164.8	1.108	2.880	71.450	24.042	0.504	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1394.43	-22.99
2	0.6993	1145.4	1165.7	1163.7	1.104	2.884	71.506	24.056	0.436	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1393.94	-23.56
3	0.6992	1145.6	1165.9	1164.1	1.098	2.867	71.523	24.069	0.429	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1394.32	-23.60
4	0.6989	1145.3	1165.6	1163.6	1.084	2.885	71.547	24.047	0.422	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1394.18	-23.74
5	0.6990	1145.2	1165.5	1163.6	1.096	2.876	71.558	24.028	0.428	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1394.04	-23.71
6	0.6984	1144.2	1164.5	1162.8	1.096	2.886	71.658	23.928	0.417	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1393.36	-24.05
7	0.6994	1146.2	1166.5	1164.5	1.089	2.860	71.567	23.980	0.467	0.010	0.021	0.002	0.002	0.001	0.000	0.000	0.000	0.000	1394.88	-22.82
8	0.6990	1145.4	1165.7	1163.7	1.093	2.867	71.572	24.018	0.436	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1394.27	-23.68
9	0.6989	1145.6	1165.9	1164.0	1.092	2.851	71.582	24.023	0.437	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1394.57	-23.66
10	0.6992	1146.1	1166.4	1164.5	1.091	2.849	71.524	24.082	0.440	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1394.94	-23.48
11	0.6990	1145.5	1165.8	1164.2	1.096	2.860	71.560	24.046	0.426	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1394.37	-23.69
12	0.6990	1145.6	1165.9	1164.0	1.091	2.860	71.572	24.013	0.449	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1394.52	-23.57
13	0.6979	1142.9	1163.1	1161.4	1.096	2.916	72.033	23.263	0.665	0.009	0.015	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1392.24	-23.26
14	0.6978	1142.6	1162.8	1161.2	1.100	2.911	71.985	23.401	0.581	0.007	0.013	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1392.10	-23.75
15	0.6970	1140.9	1161.1	1159.3	1.107	2.938	72.129	23.226	0.577	0.007	0.013	0.000	0.001	0.001	0.000	0.000	0.000	0.000	1390.70	-24.15
16	0.6966	1140.4	1160.6	1158.9	1.095	2.942	72.181	23.213	0.546	0.007	0.013	0.000	0.001	0.001	0.000	0.000	0.000	0.000	1390.57	-24.44
17	0.6976	1141.8	1162.0	1160.0	1.100	2.949	72.015	23.326	0.588	0.007	0.013	0.000	0.000	0.002	0.000	0.000	0.000	0.000	1391.20	-23.80
18	0.6975	1141.7	1161.9	1160.3	1.101	2.942	72.010	23.358	0.566	0.007	0.013	0.000	0.001	0.001	0.000	0.000	0.000	0.000	1391.23	-23.96
19	0.6963	1139.7	1159.8	1158.4	1.105	2.948	72.196	23.228	0.501	0.007	0.012	0.001	0.001	0.001	0.000	0.000	0.000	0.000	1389.94	-24.79
20	0.6996	1145.0	1165.3	1163.7	1.109	2.925	71.456	24.054	0.440	0.006	0.008	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1393.19	-23.44
21	0.7001	1146.7	1167.0	1164.7	1.087	2.898	71.322	24.256	0.423	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1394.82	-23.20
22	0.6976	1141.7	1161.9	1160.2	1.102	2.945	71.974	23.420	0.539	0.007	0.012	0.000	0.001	0.001	0.000	0.000	0.000	0.000	1391.19	-24.06
23	0.6966	1140.4	1160.6	1158.8	1.099	2.939	72.193	23.182	0.564	0.007	0.013	0.000	0.001	0.001	0.000	0.000	0.000	0.000	1390.55	-24.40
24	0.6961	1139.5	1159.7	1158.1	1.097	2.949	72.260	23.142	0.530	0.007	0.012	0.000	0.001	0.002	0.000	0.000	0.000	0.000	1389.98	-24.74
25	0.6973	1141.9	1162.2	1160.3	1.085	2.935	72.110	23.223	0.609	0.011	0.022	0.001	0.001	0.002	0.000	0.000	0.000	0.000	1391.68	-23.52
26	0.6968	1140.9	1161.1	1158.9	1.101	2.929	72.027	23.470	0.454	0.006	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1390.91	-24.79
27	0.6959	1139.5	1159.6	1157.8	1.098	2.928	72.149	23.422	0.389	0.005	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1390.15	-25.59
28	0.6964	1140.3	1160.5	1158.2	1.104	2.920	72.053	23.512	0.398	0.005	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1390.64	-25.28
29	0.6966	1140.5	1160.6	1158.1	1.098	2.940	72.037	23.480	0.431	0.005	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1390.60	-25.07
30	0.6962	1139.7	1159.9	1157.4	1.105	2.931	72.163	23.328	0.459	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1390.17	-25.20
Avg	0.6980	1143.0	1163.3	1161.4	1.098	2.907	71.830	23.661	0.485	0.007	0.011	0.000	0.000	0.001	0.000	0.000	0.000	0.000	1392.46	-24.00

# Source Daily Summary

November 2024

Source #: 351  
Name: BADLANDS PLANT

<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Temperature Base:</b>	60	<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6810	1117.1	1136.8	1136.3	0.873	3.223	76.546	17.520	1.655	0.056	0.111	0.007	0.007	0.002	0.000	0.000	0.000	0.000	1377.62	
2	0.6781	1112.3	1132.0	1131.4	0.980	3.085	77.083	17.180	1.496	0.053	0.106	0.007	0.007	0.002	0.000	0.000	0.000	0.000	1374.59	
3	0.6780	1113.1	1132.8	1132.3	0.904	3.142	76.973	17.343	1.473	0.050	0.099	0.007	0.007	0.002	0.000	0.000	0.000	0.000	1375.71	
4	0.6766	1110.3	1130.0	1129.5	0.950	3.108	77.271	17.080	1.428	0.049	0.099	0.007	0.007	0.002	0.000	0.000	0.000	0.000	1373.71	
5	0.6761	1109.4	1129.1	1128.7	0.971	3.082	77.548	16.681	1.526	0.056	0.116	0.008	0.008	0.003	0.000	0.000	0.000	0.000	1373.12	
6	0.6756	1108.5	1128.1	1127.8	0.973	3.089	77.655	16.566	1.523	0.057	0.118	0.008	0.008	0.003	0.000	0.000	0.000	0.000	1372.46	
7	0.6737	1105.4	1125.0	1124.6	0.977	3.084	77.937	16.392	1.432	0.053	0.108	0.007	0.007	0.002	0.000	0.000	0.000	0.000	1370.70	
8	0.6720	1103.5	1123.1	1122.6	0.944	3.096	78.161	16.254	1.383	0.049	0.098	0.007	0.007	0.002	0.000	0.000	0.000	0.000	1370.00	
9	0.6777	1111.4	1131.1	1130.6	0.790	3.384	76.962	17.121	1.614	0.042	0.076	0.005	0.004	0.001	0.000	0.000	0.000	0.000	1373.95	
10	0.6749	1107.1	1126.7	1126.3	0.841	3.307	77.558	16.597	1.552	0.046	0.087	0.005	0.005	0.002	0.000	0.000	0.000	0.000	1371.49	
11	0.6785	1114.2	1133.9	1133.5	0.695	3.437	76.893	17.064	1.747	0.053	0.098	0.006	0.005	0.002	0.000	0.000	0.000	0.000	1376.54	
12	0.6875	1129.6	1149.6	1149.1	0.625	3.451	75.485	18.084	2.131	0.071	0.135	0.008	0.008	0.002	0.000	0.000	0.000	0.000	1386.40	
13	0.6749	1106.6	1126.2	1125.8	0.853	3.319	77.578	16.558	1.543	0.048	0.090	0.005	0.005	0.002	0.000	0.000	0.000	0.000	1370.84	
14	0.6845	1125.4	1145.4	1144.9	0.798	3.161	75.367	19.177	1.367	0.041	0.079	0.005	0.004	0.002	0.000	0.000	0.000	0.000	1384.36	
15	0.6759	1112.2	1131.9	1131.5	0.858	3.069	76.797	18.129	1.058	0.028	0.054	0.003	0.003	0.001	0.000	0.000	0.000	0.000	1376.81	
16	0.6867	1127.5	1147.5	1147.2	0.786	3.252	75.113	19.152	1.551	0.046	0.087	0.005	0.005	0.002	0.000	0.000	0.000	0.000	1384.79	
17	0.6838	1124.4	1144.3	1143.9	0.677	3.336	76.050	17.824	1.914	0.062	0.120	0.007	0.007	0.002	0.000	0.000	0.000	0.000	1383.84	
18	0.6777	1113.4	1133.1	1132.7	0.791	3.257	77.113	17.025	1.634	0.055	0.109	0.007	0.007	0.002	0.000	0.000	0.000	0.000	1376.47	
19	0.6754	1108.2	1127.8	1127.5	0.942	3.135	77.447	16.934	1.383	0.048	0.096	0.006	0.006	0.002	0.000	0.000	0.000	0.000	1372.32	
20	0.6699	1101.2	1120.7	1120.4	0.901	3.108	78.470	16.039	1.330	0.046	0.093	0.006	0.006	0.002	0.000	0.000	0.000	0.000	1369.23	
21	0.6671	1097.0	1116.5	1116.0	0.913	3.076	78.956	15.669	1.246	0.042	0.084	0.005	0.006	0.002	0.000	0.000	0.000	0.000	1366.96	
22	0.6663	1096.0	1115.5	1115.0	0.922	3.045	79.091	15.596	1.211	0.041	0.081	0.005	0.005	0.002	0.000	0.000	0.000	0.000	1366.56	
23	0.6653	1094.5	1113.9	1113.6	0.922	3.043	79.265	15.451	1.187	0.040	0.080	0.005	0.005	0.002	0.000	0.000	0.000	0.000	1365.71	
24	0.6661	1095.7	1115.1	1114.8	0.919	3.059	79.154	15.492	1.236	0.042	0.085	0.006	0.006	0.002	0.000	0.000	0.000	0.000	1366.25	
25	0.6655	1094.8	1114.2	1113.8	0.918	3.054	79.251	15.426	1.217	0.040	0.080	0.005	0.005	0.002	0.000	0.000	0.000	0.000	1365.81	
26	0.6646	1093.6	1112.9	1112.5	0.921	3.046	79.378	15.346	1.182	0.038	0.077	0.005	0.005	0.002	0.000	0.000	0.000	0.000	1365.14	
27	0.6652	1094.5	1113.8	1113.5	0.922	3.046	79.261	15.457	1.189	0.038	0.076	0.005	0.005	0.002	0.000	0.000	0.000	0.000	1365.64	
28	0.6649	1094.0	1113.4	1113.0	0.925	3.043	79.290	15.455	1.164	0.037	0.074	0.005	0.005	0.002	0.000	0.000	0.000	0.000	1365.36	
29	0.6650	1094.3	1113.6	1113.3	0.917	3.041	79.289	15.454	1.175	0.037	0.074	0.005	0.005	0.002	0.000	0.000	0.000	0.000	1365.66	
30	0.6633	1091.8	1111.2	1110.8	0.923	3.021	79.559	15.275	1.107	0.035	0.069	0.004	0.004	0.002	0.000	0.000	0.000	0.000	1364.37	
Avg	0.6737	1107.0	1126.5	1126.1	0.878	3.153	77.750	16.645	1.422	0.047	0.092	0.006	0.006	0.002	0.000	0.000	0.000	0.000	1372.41	



November-24

ZONE 550

MANDAN BORDER

NBPL - St Anthony

WBI - Mandan Border

Weighted

Start Date	End Date	NBPL - St Anthony			WBI - Mandan Border			AVG BTU	
		MCF	DK	BTU	MCF	DK	BTU Zone 28		
11/1/2024	11/2/2024	6,257	6,871	1097.8	3,773	4,209	1116.2	1104.722	11/1/2024
11/2/2024	11/3/2024	0	0	0	2,559	3,040	1194.1	1194.100	11/2/2024
11/3/2024	11/4/2024	7	7	1100.4	2,377	2,875	1208.5	1208.183	11/3/2024
11/4/2024	11/5/2024	3	4	1105.8	4,115	4,763	1156.3	1156.263	11/4/2024
11/5/2024	11/6/2024	0	0	0	3,051	3,656	1200.2	1200.200	11/5/2024
11/6/2024	11/7/2024	6	6	1093.1	3,834	4,647	1211.7	1211.515	11/6/2024
11/7/2024	11/8/2024	4	4	1102.8	3,223	3,908	1211	1210.866	11/7/2024
11/8/2024	11/9/2024	0	0	0	2,713	3,279	1207.9	1207.900	11/8/2024
11/9/2024	11/10/2024	0	0	0	2,595	3,141	1209.3	1209.300	11/9/2024
11/10/2024	11/11/2024	15	17	1099	2,738	3,321	1212.5	1211.882	11/10/2024
11/11/2024	11/12/2024	0	0	0	4,005	4,726	1181.3	1181.300	11/11/2024
11/12/2024	11/13/2024	5	5	1102.6	2,951	3,531	1197.9	1197.739	11/12/2024
11/13/2024	11/14/2024	8	8	1102.6	3,368	4,078	1207.7	1207.451	11/13/2024
11/14/2024	11/15/2024	7	8	1104	3,146	3,818	1212.8	1212.558	11/14/2024
11/15/2024	11/16/2024	0	0	0	3,033	3,372	1109.2	1109.200	11/15/2024
11/16/2024	11/17/2024	1	1	1102.5	3,528	3,890	1102.4	1102.400	11/16/2024
11/17/2024	11/18/2024	11	12	1101.9	3,177	3,506	1103.3	1103.295	11/17/2024
11/18/2024	11/19/2024	0	0	0	3,172	3,501	1103.7	1103.700	11/18/2024
11/19/2024	11/20/2024	6	7	1105.7	5,850	6,451	1102.7	1102.703	11/19/2024
11/20/2024	11/21/2024	3	3	1100.5	6,563	7,338	1118.2	1118.192	11/20/2024
11/21/2024	11/22/2024	5	5	1098	5,366	6,085	1133.4	1133.367	11/21/2024
11/22/2024	11/23/2024	0	0	0	4,638	5,260	1134	1134.000	11/22/2024
11/23/2024	11/24/2024	0	0	0	4,935	5,632	1140.9	1140.900	11/23/2024
11/24/2024	11/25/2024	21	22	1096	6,277	7,119	1134.5	1134.372	11/24/2024
11/25/2024	11/26/2024	12	13	1096.8	6,962	7,921	1137.5	1137.430	11/25/2024
11/26/2024	11/27/2024	0	0	0	5,883	6,755	1148.2	1148.200	11/26/2024
11/27/2024	11/28/2024	2,461	2,694	1094.7	3,230	3,697	1144.8	1123.135	11/27/2024
11/28/2024	11/29/2024	2,535	2,772	1093.6	4,457	5,092	1142.3	1124.643	11/28/2024
11/29/2024	11/30/2024	2,543	2,781	1093.5	4,716	5,442	1153	1132.156	11/29/2024
11/30/2024	12/1/2024	2,566	2,807	1094.2	4,171	4,737	1135.1	1119.522	11/30/2024
		16,476	18,047	732.8500	120,406	138,790	1159.0200	1156.0398	



# Alliance Pipeline

DAILY ANALYSIS --- USA  
 ND07MD1 --- Hankinson Sales  
 November 2024

DAY	Heating Value (BTU/ft3)	Relative Density	C1 Mol%	C2 Mol%	C3 Mol%	IC4 Mol%	NC4 Mol%	IC5 Mol%	NC5 Mol%	C6+ Mol%	N2 Mol%	CO2 Mol%	Hel Mol%
1	1,159.428	0.6641	83.7075	10.3356	3.4991	0.3510	0.6134	0.0636	0.0512	0.0194	0.9327	0.4200	0.0065
2	1,159.483	0.6639	83.7196	10.3607	3.4996	0.3486	0.6057	0.0612	0.0496	0.0186	0.9069	0.4227	0.0067
3	1,159.379	0.6629	83.9338	10.2307	3.4857	0.3550	0.6148	0.0588	0.0491	0.0187	0.8413	0.4051	0.0071
4	1,155.390	0.6604	84.2308	10.0907	3.3658	0.3413	0.5809	0.0601	0.0497	0.0193	0.8482	0.4063	0.0068
5	1,154.135	0.6598	84.3976	9.9137	3.3489	0.3471	0.5892	0.0637	0.0508	0.0189	0.8439	0.4193	0.0067
6	1,155.389	0.6611	84.2134	9.9919	3.4003	0.3496	0.6000	0.0647	0.0501	0.0185	0.8708	0.4341	0.0068
7	1,155.493	0.6612	84.1813	10.0270	3.3994	0.3504	0.5948	0.0634	0.0504	0.0187	0.8770	0.4308	0.0069
8	1,156.823	0.6619	84.0848	10.0813	3.4462	0.3517	0.5982	0.0634	0.0501	0.0188	0.8724	0.4260	0.0069
9	1,157.397	0.6621	84.1038	10.0572	3.4607	0.3556	0.6037	0.0649	0.0507	0.0198	0.8462	0.4302	0.0072
10	1,155.627	0.6608	84.2476	10.0326	3.3773	0.3490	0.5888	0.0641	0.0516	0.0204	0.8316	0.4285	0.0084
11	1,154.304	0.6599	84.3454	9.9896	3.3486	0.3428	0.5769	0.0623	0.0497	0.0190	0.8311	0.4264	0.0082
12	1,155.588	0.6605	84.2639	10.0388	3.3904	0.3453	0.5823	0.0619	0.0485	0.0185	0.8139	0.4282	0.0084
13	1,154.339	0.6597	84.3491	10.0215	3.3322	0.3414	0.5743	0.0619	0.0491	0.0194	0.8156	0.4273	0.0084
14	1,153.258	0.6591	84.4338	9.9600	3.3038	0.3385	0.5720	0.0630	0.0492	0.0193	0.8317	0.4205	0.0082
15	1,153.182	0.6587	84.4995	9.9338	3.2858	0.3395	0.5770	0.0636	0.0488	0.0188	0.8091	0.4154	0.0086
16	1,154.216	0.6598	84.3294	10.0291	3.3217	0.3398	0.5826	0.0627	0.0488	0.0187	0.8435	0.4154	0.0084
17	1,153.925	0.6591	84.4671	9.9424	3.3273	0.3398	0.5741	0.0632	0.0488	0.0181	0.7877	0.4244	0.0072
18	1,154.476	0.6596	84.4257	9.9469	3.3387	0.3444	0.5826	0.0644	0.0507	0.0191	0.7953	0.4255	0.0069
19	1,153.149	0.6591	84.4547	9.9308	3.3109	0.3404	0.5752	0.0609	0.0488	0.0184	0.8286	0.4245	0.0069
20	1,153.990	0.6593	84.4634	9.9119	3.3403	0.3432	0.5877	0.0605	0.0469	0.0170	0.7968	0.4255	0.0069
21	1,152.022	0.6571	84.7725	9.7957	3.2533	0.3379	0.5690	0.0599	0.0469	0.0166	0.7256	0.4153	0.0071
22	1,154.954	0.6595	84.5029	9.8568	3.3717	0.3518	0.5962	0.0618	0.0494	0.0177	0.7711	0.4140	0.0068
23	1,155.326	0.6597	84.4441	9.9157	3.3678	0.3517	0.5932	0.0628	0.0502	0.0186	0.7696	0.4166	0.0098
24	1,154.169	0.6590	84.4965	9.9271	3.3289	0.3442	0.5782	0.0611	0.0486	0.0179	0.7735	0.4154	0.0086
25	1,153.997	0.6589	84.5341	9.8904	3.3167	0.3451	0.5831	0.0633	0.0505	0.0190	0.7745	0.4148	0.0085
26	1,153.545	0.6585	84.5904	9.8445	3.3287	0.3418	0.5780	0.0615	0.0483	0.0175	0.7685	0.4125	0.0082
27	1,153.820	0.6587	84.5424	9.8993	3.3216	0.3433	0.5771	0.0607	0.0481	0.0173	0.7625	0.4191	0.0087
28	1,155.439	0.6603	84.3202	9.9876	3.3891	0.3475	0.5881	0.0616	0.0485	0.0179	0.8081	0.4228	0.0085
29	1,155.152	0.6598	84.3695	9.9926	3.3681	0.3460	0.5794	0.0615	0.0485	0.0178	0.7879	0.4198	0.0088
30	1,155.755	0.6598	84.4269	9.9336	3.3908	0.3500	0.5885	0.0632	0.0486	0.0178	0.7704	0.4018	0.0085
<b>Volume</b>	<b>1,155.096</b>	<b>0.6601</b>	<b>84.3300</b>	<b>9.9949</b>	<b>3.3670</b>	<b>0.3458</b>	<b>0.5868</b>	<b>0.0623</b>	<b>0.0493</b>	<b>0.0185</b>	<b>0.8174</b>	<b>0.4203</b>	<b>0.0077</b>
<b>Weight Avg Energy</b>	<b>1,155.099</b>	<b>0.6601</b>	<b>84.3297</b>	<b>9.9950</b>	<b>3.3671</b>	<b>0.3458</b>	<b>0.5868</b>	<b>0.0623</b>	<b>0.0493</b>	<b>0.0185</b>	<b>0.8175</b>	<b>0.4203</b>	<b>0.0077</b>



# Alliance Pipeline

DAILY ANALYSIS --- USA  
 ND14MD1 --- Milnor Sales  
 November 2024

DAY	Heating Value (BTU/ft3)	Relative Density	C1 Mol%	C2 Mol%	C3 Mol%	IC4 Mol%	NC4 Mol%	IC5 Mol%	NC5 Mol%	C6+ Mol%	N2 Mol%	CO2 Mol%	Hel Mol%
1	1,159.369	0.6641	83.7045	10.3333	3.4998	0.3511	0.6131	0.0638	0.0511	0.0193	0.9368	0.4206	0.0066
2	1,159.691	0.6640	83.7224	10.3548	3.5075	0.3501	0.6081	0.0606	0.0494	0.0185	0.9006	0.4214	0.0068
3	1,159.440	0.6630	83.9168	10.2470	3.4846	0.3543	0.6134	0.0592	0.0495	0.0189	0.8408	0.4085	0.0071
4	1,154.976	0.6601	84.2744	10.0661	3.3530	0.3403	0.5786	0.0604	0.0497	0.0194	0.8465	0.4048	0.0068
5	1,154.588	0.6601	84.3648	9.9282	3.3605	0.3494	0.5928	0.0643	0.0511	0.0190	0.8427	0.4206	0.0067
6	1,155.019	0.6608	84.2510	9.9705	3.3896	0.3490	0.5975	0.0646	0.0502	0.0185	0.8707	0.4317	0.0068
7	1,155.926	0.6615	84.1453	10.0509	3.4092	0.3513	0.5968	0.0636	0.0506	0.0189	0.8756	0.4309	0.0069
8	1,157.190	0.6622	84.0525	10.1004	3.4543	0.3527	0.6002	0.0639	0.0505	0.0191	0.8746	0.4249	0.0069
9	1,156.839	0.6617	84.1447	10.0358	3.4460	0.3538	0.6002	0.0644	0.0503	0.0197	0.8451	0.4327	0.0073
10	1,155.519	0.6606	84.2682	10.0310	3.3674	0.3486	0.5874	0.0641	0.0517	0.0207	0.8256	0.4267	0.0084
11	1,154.100	0.6597	84.3819	9.9592	3.3443	0.3435	0.5777	0.0625	0.0500	0.0191	0.8292	0.4245	0.0082
12	1,155.722	0.6606	84.2485	10.0561	3.3919	0.3451	0.5817	0.0617	0.0482	0.0182	0.8127	0.4275	0.0084
13	1,154.198	0.6596	84.3608	10.0145	3.3268	0.3410	0.5739	0.0620	0.0493	0.0196	0.8180	0.4258	0.0083
14	1,153.327	0.6591	84.4337	9.9628	3.3036	0.3386	0.5728	0.0632	0.0491	0.0192	0.8308	0.4182	0.0082
15	1,153.313	0.6588	84.4893	9.9388	3.2897	0.3400	0.5781	0.0637	0.0488	0.0187	0.8104	0.4140	0.0086
16	1,154.233	0.6598	84.3368	10.0155	3.3301	0.3398	0.5823	0.0625	0.0486	0.0186	0.8386	0.4189	0.0083
17	1,154.320	0.6595	84.4169	9.9726	3.3346	0.3409	0.5769	0.0637	0.0492	0.0185	0.7959	0.4238	0.0071
18	1,154.487	0.6596	84.4236	9.9492	3.3378	0.3446	0.5829	0.0642	0.0508	0.0191	0.7961	0.4249	0.0068
19	1,153.524	0.6594	84.4149	9.9497	3.3225	0.3413	0.5789	0.0610	0.0487	0.0182	0.8330	0.4249	0.0068
20	1,153.642	0.6590	84.5069	9.8944	3.3286	0.3418	0.5847	0.0601	0.0466	0.0168	0.7893	0.4240	0.0069
21	1,152.517	0.6574	84.7386	9.8002	3.2709	0.3404	0.5735	0.0606	0.0477	0.0172	0.7297	0.4141	0.0071
22	1,155.213	0.6595	84.4971	9.8585	3.3771	0.3534	0.5983	0.0622	0.0496	0.0176	0.7662	0.4131	0.0068
23	1,155.049	0.6596	84.4477	9.9218	3.3593	0.3495	0.5901	0.0623	0.0499	0.0186	0.7730	0.4178	0.0101
24	1,154.327	0.6591	84.4792	9.9362	3.3309	0.3452	0.5800	0.0615	0.0487	0.0181	0.7758	0.4157	0.0087
25	1,153.874	0.6587	84.5597	9.8771	3.3138	0.3444	0.5819	0.0630	0.0505	0.0190	0.7700	0.4122	0.0084
26	1,153.593	0.6585	84.5918	9.8445	3.3286	0.3422	0.5783	0.0616	0.0484	0.0176	0.7662	0.4125	0.0083
27	1,154.087	0.6589	84.5190	9.9131	3.3305	0.3437	0.5782	0.0605	0.0479	0.0172	0.7629	0.4183	0.0087
28	1,155.170	0.6602	84.3238	9.9950	3.3777	0.3465	0.5843	0.0616	0.0487	0.0180	0.8122	0.4237	0.0086
29	1,155.525	0.6600	84.3612	9.9836	3.3853	0.3477	0.5828	0.0618	0.0487	0.0178	0.7830	0.4194	0.0088
30	1,155.668	0.6597	84.4265	9.9369	3.3853	0.3496	0.5889	0.0633	0.0484	0.0177	0.7741	0.4007	0.0085
<b>Volume</b>	<b>1,155.016</b>	<b>0.6601</b>	<b>84.3395</b>	<b>9.9895</b>	<b>3.3641</b>	<b>0.3457</b>	<b>0.5865</b>	<b>0.0623</b>	<b>0.0494</b>	<b>0.0185</b>	<b>0.8168</b>	<b>0.4200</b>	<b>0.0077</b>
<b>Weight Avg Energy</b>	<b>1,155.018</b>	<b>0.6601</b>	<b>84.3393</b>	<b>9.9897</b>	<b>3.3642</b>	<b>0.3457</b>	<b>0.5865</b>	<b>0.0623</b>	<b>0.0494</b>	<b>0.0185</b>	<b>0.8168</b>	<b>0.4199</b>	<b>0.0077</b>

November-24

ZONE 610

Watford City

Watford City West Border

Watford City East Border

Weighted

Start Date	End Date	Watford City West Border			Watford City East Border			AVG BTU	
		MCF	DK	BTU Zone 25	MCF	DK	BTU Zone 43		
11/1/2024	11/2/2024	250	296	1185.5	483	536	1109.3	1135.289	11/1/2024
11/2/2024	11/3/2024	233	277	1185.5	455	504	1109.3	1135.106	11/2/2024
11/3/2024	11/4/2024	230	273	1185.5	518	574	1109.3	1132.730	11/3/2024
11/4/2024	11/5/2024	257	305	1185.5	313	347	1109.3	1143.657	11/4/2024
11/5/2024	11/6/2024	252	299	1185.5	0	0	1109.3	1185.500	11/5/2024
11/6/2024	11/7/2024	327	388	1185.5	0	0	1109.3	1185.500	11/6/2024
11/7/2024	11/8/2024	261	309	1185.5	0	0	1109.3	1185.500	11/7/2024
11/8/2024	11/9/2024	208	247	1185.5	311	345	1109.3	1139.839	11/8/2024
11/9/2024	11/10/2024	194	230	1185.5	441	489	1109.3	1132.580	11/9/2024
11/10/2024	11/11/2024	230	273	1185.5	494	548	1109.3	1133.507	11/10/2024
11/11/2024	11/12/2024	266	316	1185.5	616	683	1109.3	1132.281	11/11/2024
11/12/2024	11/13/2024	269	319	1185.5	634	704	1109.3	1132.000	11/12/2024
11/13/2024	11/14/2024	247	293	1185.5	556	617	1109.3	1132.739	11/13/2024
11/14/2024	11/15/2024	237	281	1185.5	480	533	1109.3	1134.487	11/14/2024
11/15/2024	11/16/2024	234	277	1185.5	494	548	1109.3	1133.793	11/15/2024
11/16/2024	11/17/2024	304	360	1185.5	719	798	1109.3	1131.944	11/16/2024
11/17/2024	11/18/2024	256	303	1185.5	606	672	1109.3	1131.930	11/17/2024
11/18/2024	11/19/2024	270	320	1185.5	585	649	1109.3	1133.363	11/18/2024
11/19/2024	11/20/2024	492	583	1185.5	996	1,105	1109.3	1134.495	11/19/2024
11/20/2024	11/21/2024	536	635	1185.5	1,088	1,207	1109.3	1134.450	11/20/2024
11/21/2024	11/22/2024	433	514	1185.5	963	1,068	1109.3	1132.935	11/21/2024
11/22/2024	11/23/2024	405	480	1185.5	820	909	1109.3	1134.493	11/22/2024
11/23/2024	11/24/2024	407	483	1185.5	951	1,055	1109.3	1132.138	11/23/2024
11/24/2024	11/25/2024	522	619	1185.5	1,221	1,354	1109.3	1132.121	11/24/2024
11/25/2024	11/26/2024	542	642	1185.5	1,206	1,337	1109.3	1132.927	11/25/2024
11/26/2024	11/27/2024	476	564	1185.5	1,041	1,155	1109.3	1133.210	11/26/2024
11/27/2024	11/28/2024	522	619	1185.5	1,234	1,369	1109.3	1131.952	11/27/2024
11/28/2024	11/29/2024	556	659	1185.5	1,300	1,442	1109.3	1132.127	11/28/2024
11/29/2024	11/30/2024	560	664	1185.5	1,394	1,546	1109.3	1131.138	11/29/2024
11/30/2024	12/1/2024	513	608	1185.5	1,232	1,367	1109.3	1131.701	11/30/2024
		10,489	12,436	1185.5000	21,151	23,461	1109.3000	1138.8477	



<b>NORTH DAKOTA HEATING VALUE ZONES</b>		
<b>ZONES</b>	<b>MEASURING DEVICE</b>	<b>LOCATION</b>
211	Chromatograph	Sidney Border
24	Chromatograph	Williston Border
241	Accumulated Sample	Fairview Border
25	Accumulated Sample	Watford City West Border
260	Chromatograph	North Tioga Transfer
261	Chromatograph	Tioga Comp Station – Robinson Lake Plant
262	Chromatograph	Minot Border
263	Accumulated Sample	Lignite Plant
264	Accumulated Sample	Epping Border
265	Chromatograph	Tioga Comp Station – County Line Plant
271	Chromatograph	Bismarck – Cleveland
272	Chromatograph	Cleveland – Mapleton
273	Chromatograph	Cleveland – Grafton
28	Chromatograph	Bismarck Station
31	Chromatograph	Dickinson Border
32	Chromatograph	Cabin Creek Station
33	Chromatograph	Little Knife Plant
34	Chromatograph	Bowman Border
43	Accumulated Sample	Watford City East Border
550	Accumulated Sample & Chromatograph	Mandan Border
600	Chromatograph	Hankinson Area
601	Chromatograph	Milnor Area
610	Accumulated Sample & Chromatograph	Watford City
802	Chromatograph	Linton

MONTANA DAKOTA UTILITIES CO  
NORTH DAKOTA  
HEATING VALUE DATA

STATE	ZONE	ZONE BOUNDARY	12 MONTH AVERAGE	NOV24	OCT24	SEP24	AUG24	JUL24	JUN24	MAY24	APR24	MAR24	FEB24	JAN24	DEC23	ZONE
MT/ND	211	Sidney Border - MonDak Tfr - Sidney Plt	1187	1184	1182	1191	1194	1192	1190	1187	1184	1185	1187	1179	1192	211
ND	24	Williston Border - Charbonneau Station	1187	1179	1187	1187	1185	1191	1186	1184	1181	1181	1192	1197	1194	24
ND	25	Watford City West Border	1194	1186	1194	1194	1197	1192	1187	1201	1193	1194	1194	1198	1197	25
ND	28	Bismarck Station - Glen Ullin Station	1170	1159	1171	1204	1203	1200	1202	1200	1160	1147	1126	1131	1138	28
ND	31	Dickinson Brd - Belfield Trf - G Ullin Stn	1122	1144	1111	1106	1111	1115	1108	1106	1133	1147	1127	1127	1134	31
ND/MT	32	Cabin Creek Station - Belfied Transfer	1130	1135	1139	1128	1135	1110	1135	1144	1144	1116	1118	1122	1132	32
ND	33	Little Knife Plant	1169	1163	1165	1162	1165	1173	1170	1170	1173	1173	1171	1169	1168	33
ND	34	Badlands Plant/Bowman Border	1043	1127	1110	1034	980	981	1040	1043	1005	1027	1000	1094	1079	34
ND	43	Watford City East Border	1101	1110	1112	1112	1117	1085	1081	1075	1066	1085	1113	1127	1132	43
ND/MT	241	Fairview Border	1184	1180	1185	1183	1182	1185	1181	1172	1182	1186	1192	1185	1192	241
ND	267	North Tioga Transfer - Nesson Plant	1185	1191	1191	1195	1199	1191	1191	1193	1183	1187	1165	1166	1171	267
ND	261	Tioga Comp Station - Robinson Lake Plant	1197	1208	1208	1195	1200	1195	1197	1195	1196	1195	1192	1178	1201	261
ND	262	Minot Bdr - Palermo Bdr - Bismarck Stn	1200	1207	1210	1203	1201	1199	1200	1199	1195	1195	1196	1198	1202	262
ND	263	Lignite Plant	1131	1131	1131	1131	1131	1131	1131	1131	1131	1131	1131	1131	1131	263
ND	264	Epping Border	1182	1166	1183	1188	1182	1179	1172	1168	1176	1172	1193	1204	1206	264
ND	265	Tioga Comp Station - County Line Plant	1182	1180	1175	1179	1181	1183	1174	1188	1195	1192	1179	1169	1183	265
ND	266	County Line Plant	1183	1182	1177	1181	1183	1187	1174	1188	1195	1193	1181	1171	1184	266
ND	271	Bismarck Station - Cleveland Station	1199	1200	1212	1204	1203	1200	1202	1201	1198	1192	1183	1186	1201	271
ND	272	Cleveland Station - Mapleton	1198	1200	1211	1202	1202	1200	1201	1200	1197	1191	1183	1185	1200	272
ND	273	Cleveland Station - Grafton Border	1198	1199	1211	1202	1202	1200	1202	1199	1198	1191	1183	1186	1201	273
ND	550	Mandan Border / NBPL-St Anthony	1159	1156	1164	1198	1179	1168	1160	1192	1157	1146	1126	1124	1138	550
ND	610	MDU-Watford City BTU	1127	1139	1130	1115	1127	1108	1111	1121	1112	1118	1138	1150	1151	610
ND	802	NBPL - Linton	1106	1100	1099	1103	1108	1100	1100	1104	1109	1114	1114	1103	1114	802
ND	903	Hettinger Propane	2549	2549	2549	2549	2549	2549	2549	2549	2549	2549	2549	2549	2549	903
ND	600	Alliance Pipeline - Hankinson	1150	1155	1157	1159	1157	1148	1147	1148	1148	1146	1144	1144	1147	600
ND	601	Alliance Pipeline - Milnor	1150	1155	1157	1160	1157	1149	1147	1149	1148	1146	1144	1144	1147	601

<b>THERMAL ZONE VARIANCE DOCUMENTATION</b>		
<b>November 2024</b>		
<b><i>ZONE</i></b>	<b><i>BTU VARIANCE</i></b>	<b><i>REASON</i></b>
31	33	Operational