

400 North Fourth Street  
Bismarck, ND 58501  
701-222-7900

May 20, 2021

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

Re: Case No. PU-21-002 (Therm Billing)  
Monthly Report – March 2021

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 April 2021.
2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our suppliers for the month of March 2021.
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 March 2021.

Montana-Dakota respectfully request 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  
Director of Regulatory Affairs

**Montana-Dakota Utilities Co.**  
**Therm Billing Factors - North Dakota**  
**Apr-21**

<u>Town</u>	<u>Heat Zone</u>	<u>Therm Factor</u>
MDU-303-ALEXANDER	025	1.1277
MDU-308-ARNEGARD	025	1.1277
MDU-314-APPLE VALLEY	271	1.1241
MDU-318-BEACH	032	1.0082
MDU-319-BELFIELD	032	1.0156
MDU-323-BERTHOLD	262	1.1211
MDU-324-BEULAH	032	1.0156
MDU-327-BISMARCK	028	1.0710
MDU-330-BOWMAN	034	0.9898
MDU-337-BURLINGTON	262	1.1453
MDU-343-CARRINGTON	273	1.1231
MDU-344-CLEVELAND	272	1.1162
MDU-364-CAVALIER	273	1.1468
MDU-365-DAWSON	271	1.1162
MDU-368-DES LACS	262	1.1292
MDU-369-DICKINSON	031	1.0437
MDU-374-FT TOTTEN	273	1.1310
MDU-375-DEVILS LAKE	273	1.1310
MDU-379-BARLOW	273	1.1231
MDU-384-EPPING	264	1.1032
MDU-387-ELDRIDGE	272	1.1241
MDU-407-GLADSTONE	031	1.0437
MDU-411-GLEN ULLIN	031	1.0512
MDU-413-GOLVA	032	0.9934
MDU-416-GARRISON	262	1.1292
MDU-417-GRAFTON	273	1.1547
MDU-403-GWINNER	601	1.1291
MDU-429-HEBRON	031	1.0512
MDU-432-HETTINGER	903	2.4049
MDU-449-JAMESTOWN	272	1.1320
MDU-459-KILLDEER	033	1.1060
MDU-463-LANGDON	273	1.1231
MDU-469-LEFOR	031	1.0437
MDU-474-LIGNITE	263	1.0702
MDU-475-LINTON	802	1.0623
MDU-478-LINCOLN	028	1.0710
MDU-488-MCKENZIE	271	1.1241
MDU-494-MEDINA	271	1.1162
MDU-498-MANDAN	028	1.0710
MDU-500-MARMARTH	034	0.9971
MDU-505-MINOT	262	1.1453
MDU-510-MOTT	031	1.0437
MDU-512-MAX	262	1.1453
MDU-513-MILNOR	601	1.1291
MDU-522-NEW ENGLAND	031	1.0361
MDU-524-NEW SALEM	028	1.0484
MDU-532-NEW ROCKFORD	273	1.1231
MDU-539-PARK RIVER	273	1.1468
MDU-540-PALERMO	262	1.1211

MDU-558-RAY	264	1.1032
MDU-561-REGENT	031	1.0437
MDU-563-RHAME	034	0.9825
MDU-564-RICHARDTON	031	1.0361
MDU-568-ROSS	261	1.0981
MDU-572-RUTHVILLE	262	1.1453
MDU-574-SANBORN	272	1.1320
MDU-583-SENTINEL BUTTE	032	1.4317
MDU-588-SOUTH HEART	031	1.0361
MDU-717-SPIRITWOOD	272	1.4317
MDU-590-SPRINGBROOK	264	1.1032
MDU-591-STANLEY	261	1.1060
MDU-593-STEELE	271	1.1162
MDU-594-STERLING	028	1.0710
MDU-598-SHEYENNE	273	1.1310
MDU-605-SURREY	262	1.1453
MDU-610-TAPPEN	271	1.1162
MDU-611-TAYLOR	031	1.0361
MDU-616-TIOGA	260	1.0774
MDU-619-TURTLE LAKE	262	1.1292
MDU-620-TRENTON	024	1.1187
MDU-624-UNDERWOOD	262	1.1292
MDU-625-VALLEY CITY	272	1.1399
MDU-629-WALHALLA	273	1.1468
MDU-632-WATFORD CITY	610	1.0777
MDU-636-WHEELOCK	264	1.0952
MDU-637-WHITE EARTH	261	1.1060
MDU-642-WILLISTON	024	1.1187
MDU-646-WASHBURN	262	1.1372
MDU-647-WILTON	262	1.1211
MDU-664-RIVERDALE	262	1.1292
MDU-691-FAIRVIEW	241	1.1454
MDU-712-MINOT AFB	262	1.1453
MDU-718-FAIRMOUNT	600	1.1267
MDU-732-NEKOMA	273	1.1231
MDU-732-MSR SITE	273	1.1231

# Source Daily Summary

March 2021

Number: 251      Pressure Base: 14.730      Contract Day: 1  
 Name: SDNY BDR-MNDK JNCTN-SDNY PLT      Temperature Base:      Contract Hour: 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	0.7162	1173.5	1194.2	1191.0	0.652	3.429	69.624	23.959	2.149	0.065	0.112	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1408.08
2	0.7417	1192.3	1213.4	1209.9	1.391	3.561	66.105	25.797	2.804	0.117	0.207	0.010	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1405.46
3	0.7433	1194.6	1215.7	1212.2	1.383	3.576	65.922	25.839	2.933	0.119	0.210	0.010	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1406.72
4	0.7398	1189.2	1210.2	1206.7	1.386	3.575	66.536	25.324	2.829	0.119	0.211	0.010	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1403.62
5	0.7232	1180.8	1201.7	1198.3	0.771	3.462	68.739	24.306	2.492	0.080	0.139	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1409.92
6	0.7397	1189.5	1210.6	1207.1	1.379	3.558	66.537	25.343	2.839	0.118	0.208	0.010	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1404.13
7	0.7402	1190.2	1211.3	1207.8	1.386	3.552	66.442	25.441	2.840	0.117	0.205	0.010	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1404.46
8	0.7405	1190.4	1211.5	1208.0	1.384	3.568	66.387	25.482	2.836	0.118	0.208	0.010	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1404.44
9	0.7420	1193.0	1214.1	1210.6	1.387	3.552	66.109	25.721	2.898	0.115	0.200	0.009	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1406.03
10	0.7451	1198.7	1219.9	1216.4	1.385	3.496	65.647	26.103	3.020	0.120	0.211	0.010	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1409.81
11	0.7402	1190.4	1211.5	1208.0	1.388	3.541	66.383	25.562	2.784	0.118	0.207	0.010	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1404.68
12	0.7414	1192.4	1213.5	1210.0	1.388	3.529	66.191	25.737	2.802	0.121	0.214	0.010	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1405.89
13	0.7408	1192.0	1213.1	1209.6	1.375	3.519	66.282	25.685	2.787	0.120	0.213	0.010	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1405.99
14	0.7411	1191.6	1212.7	1209.3	1.378	3.559	66.235	25.680	2.798	0.120	0.212	0.010	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1405.33
15	0.7445	1197.0	1218.2	1214.6	1.378	3.554	66.068	25.384	3.211	0.135	0.246	0.013	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1408.23
16	0.7336	1177.6	1198.5	1195.1	1.365	3.733	67.809	23.819	2.944	0.115	0.199	0.009	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1395.80
17	0.7285	1171.8	1192.6	1189.2	1.318	3.678	68.790	22.997	2.861	0.120	0.216	0.011	0.009	0.000	0.000	0.000	0.000	0.000	0.000	1393.79
18	0.7253	1169.9	1190.7	1187.2	1.268	3.560	69.364	22.677	2.756	0.121	0.227	0.013	0.012	0.000	0.000	0.000	0.000	0.000	0.000	1394.68
19	0.7318	1182.2	1203.1	1199.5	1.288	3.403	67.916	24.407	2.627	0.115	0.219	0.013	0.012	0.000	0.000	0.000	0.000	0.000	0.000	1402.92
20	0.7286	1179.8	1200.7	1197.2	1.253	3.299	68.570	23.882	2.632	0.114	0.221	0.014	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1403.18
21	0.7298	1181.3	1202.2	1198.7	1.256	3.310	68.417	23.940	2.714	0.114	0.221	0.014	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1403.86
22	0.7350	1186.5	1207.5	1204.0	1.311	3.399	67.337	24.911	2.695	0.114	0.211	0.012	0.010	0.000	0.000	0.000	0.000	0.000	0.000	1405.07
23	0.7318	1183.4	1204.4	1200.9	1.280	3.332	67.950	24.421	2.665	0.113	0.213	0.012	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1404.48
24	0.7317	1184.6	1205.6	1202.1	1.259	3.287	68.150	24.068	2.898	0.106	0.206	0.013	0.012	0.000	0.000	0.000	0.000	0.000	0.000	1405.94
25	0.7329	1186.6	1207.6	1204.1	1.245	3.293	68.172	23.797	3.148	0.108	0.211	0.013	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1407.16
26	0.7315	1182.8	1203.8	1200.3	1.274	3.351	68.176	24.017	2.817	0.116	0.222	0.013	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1404.04
27	0.7363	1188.2	1209.3	1205.8	1.313	3.412	67.141	25.028	2.755	0.115	0.213	0.012	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1405.87
28	0.7371	1190.5	1211.5	1207.9	1.294	3.381	66.950	25.297	2.720	0.116	0.218	0.013	0.012	0.000	0.000	0.000	0.000	0.000	0.000	1407.74
29	0.7445	1197.6	1218.8	1215.3	1.380	3.516	65.490	26.487	2.809	0.110	0.192	0.009	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1409.11
30	0.7442	1196.7	1217.9	1214.4	1.389	3.531	65.607	26.282	2.873	0.111	0.192	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1408.32
31	0.7417	1192.1	1213.2	1209.7	1.392	3.567	65.959	26.087	2.660	0.115	0.203	0.010	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1405.30
Avg	0.7363	1187.0	1208.4	1204.9	1.300	3.487	67.129	24.951	2.793	0.114	0.206	0.011	0.009	0.000	0.000	0.000	0.000	0.000	0.000	1404.84

# Source Daily Summary

March 2021

Number: 571

Pressure Base: 14.730

Contract Day: 1

Name: WILLISTON BDR-CHARBN STN

Temperature Base:

Contract Hour: 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	0.7041	1158.2	1178.7	1175.5	0.950	2.762	73.300	20.120	2.450	0.112	0.257	0.022	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1401.36
2	0.7038	1157.7	1178.2	1175.1	0.946	2.767	73.334	20.099	2.448	0.109	0.250	0.021	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1401.13
3	0.7050	1159.2	1179.7	1176.4	0.951	2.790	73.246	20.043	2.526	0.117	0.271	0.024	0.030	0.000	0.000	0.000	0.000	0.000	0.000	1401.55
4	0.7026	1155.6	1176.1	1172.9	0.940	2.795	73.582	19.814	2.460	0.111	0.252	0.021	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1399.72
5	0.7022	1155.0	1175.5	1172.3	0.946	2.781	73.671	19.725	2.473	0.110	0.248	0.020	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1399.44
6	0.7020	1154.7	1175.2	1172.0	0.948	2.777	73.741	19.633	2.497	0.111	0.249	0.020	0.024	0.000	0.000	0.000	0.000	0.000	0.000	1399.30
7	0.7025	1155.2	1175.7	1172.5	0.958	2.778	73.642	19.747	2.459	0.113	0.255	0.021	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1399.37
8	0.7007	1152.1	1172.5	1169.4	0.956	2.800	73.977	19.408	2.452	0.112	0.252	0.020	0.024	0.000	0.000	0.000	0.000	0.000	0.000	1397.45
9	0.7002	1150.6	1170.9	1167.8	0.948	2.860	74.053	19.298	2.430	0.112	0.254	0.021	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1396.04
10	0.7034	1156.9	1177.4	1174.2	0.961	2.761	73.398	20.050	2.418	0.111	0.252	0.021	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1400.48
11	0.7034	1156.7	1177.2	1174.0	0.957	2.773	73.353	20.135	2.377	0.110	0.249	0.021	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1400.32
12	0.7040	1158.1	1178.6	1175.4	0.954	2.751	73.367	20.030	2.476	0.114	0.258	0.022	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1401.32
13	0.7038	1158.0	1178.6	1175.3	0.963	2.726	73.466	19.909	2.501	0.117	0.266	0.023	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1401.43
14	0.7033	1157.5	1178.0	1174.8	0.956	2.721	73.571	19.804	2.513	0.118	0.267	0.022	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1401.27
15	0.7036	1157.8	1178.3	1175.1	0.966	2.714	73.531	19.844	2.509	0.117	0.267	0.023	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1401.36
16	0.7043	1158.8	1179.4	1176.1	0.958	2.724	73.361	20.038	2.479	0.118	0.269	0.023	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1401.98
17	0.7022	1156.0	1176.5	1173.3	0.963	2.696	73.633	19.913	2.388	0.110	0.248	0.021	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1400.61
18	0.7027	1156.7	1177.2	1174.0	0.968	2.695	73.516	20.041	2.373	0.110	0.249	0.021	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1400.93
19	0.7035	1157.9	1178.4	1175.1	0.964	2.707	73.485	19.946	2.469	0.115	0.263	0.022	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1401.52
20	0.7020	1155.0	1175.4	1172.1	0.970	2.729	73.791	19.632	2.449	0.115	0.263	0.023	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1399.53
21	0.7013	1154.0	1174.5	1171.3	0.961	2.731	73.869	19.595	2.431	0.112	0.253	0.021	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1399.15
22	0.7013	1154.1	1174.6	1171.3	0.966	2.724	73.856	19.620	2.421	0.112	0.253	0.021	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1399.20
23	0.7020	1155.3	1175.8	1172.6	0.959	2.728	73.758	19.670	2.462	0.115	0.260	0.021	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1399.95
24	0.7014	1154.0	1174.4	1171.2	0.961	2.747	73.886	19.517	2.473	0.114	0.256	0.021	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1398.94
25	0.7015	1154.1	1174.5	1171.2	0.964	2.751	73.921	19.426	2.509	0.117	0.263	0.022	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1398.92
26	0.7023	1155.1	1175.5	1172.2	0.972	2.748	73.706	19.697	2.456	0.114	0.258	0.022	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1399.37
27	0.7028	1155.5	1175.9	1172.6	0.969	2.777	73.627	19.727	2.475	0.116	0.261	0.022	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1399.35
28	0.7048	1157.5	1178.0	1174.7	0.969	2.840	73.396	19.728	2.625	0.119	0.271	0.023	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1399.80
29	0.7047	1154.4	1174.9	1171.6	0.962	3.032	73.322	19.624	2.647	0.115	0.255	0.020	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1396.21
30	0.7037	1153.8	1174.2	1171.0	0.959	2.984	73.444	19.627	2.584	0.113	0.248	0.019	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1396.40
31	0.7036	1153.7	1174.2	1170.9	0.956	2.975	73.467	19.635	2.558	0.111	0.252	0.021	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1396.50
Avg	0.7029	1156.0	1176.2	1173.0	0.959	2.779	73.590	19.777	2.477	0.113	0.257	0.021	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1399.67





# Source Daily Summary

March 2021

Number: 164

Pressure Base: 14.730

Contract Day: 1

Name: N TIOGA TRANSFER-NESSON PLT

Temperature Base:

Contract Hour: 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	0.6976	1141.4	1161.6		0.816	3.387	74.008	19.208	2.236	0.086	0.206	0.020	0.026	0.007					1387.55	
2	0.6993	1143.7	1164.0		0.827	3.383	73.792	19.307	2.340	0.089	0.209	0.021	0.027	0.005					1388.73	
3	0.7007	1145.8	1166.1		0.842	3.365	73.644	19.388	2.376	0.094	0.226	0.024	0.033	0.009					1389.86	
4	0.6934	1134.1	1154.2		0.825	3.421	74.653	18.649	2.174	0.075	0.168	0.014	0.018	0.003					1382.90	
5	0.6922	1131.6	1151.7		0.849	3.422	74.880	18.449	2.120	0.074	0.167	0.015	0.019	0.005					1381.08	
6	0.6934	1133.3	1153.3		0.840	3.444	74.733	18.506	2.178	0.079	0.182	0.016	0.020	0.003					1381.92	
7	0.6934	1133.4	1153.4		0.832	3.457	74.725	18.495	2.185	0.079	0.186	0.016	0.020	0.005					1381.97	
8	0.6965	1137.7	1157.9		0.874	3.417	74.172	19.041	2.173	0.082	0.196	0.018	0.022	0.005					1384.20	
9	0.6968	1138.8	1158.9		0.859	3.403	74.028	19.257	2.148	0.079	0.185	0.016	0.020	0.003					1385.20	
10	0.6985	1141.6	1161.9		0.857	3.391	74.004	19.056	2.324	0.092	0.221	0.022	0.029	0.006					1386.97	
11	0.6977	1140.2	1160.4		0.856	3.402	73.991	19.191	2.228	0.085	0.200	0.018	0.024	0.005					1386.08	
12	0.6983	1142.5	1162.7		0.839	3.349	74.066	19.021	2.357	0.092	0.217	0.022	0.030	0.007					1388.19	
13	0.6979	1141.6	1161.8		0.844	3.357	74.111	18.988	2.351	0.090	0.207	0.020	0.027	0.005					1387.51	
14	0.6976	1140.9	1161.1		0.850	3.354	74.239	18.821	2.370	0.094	0.219	0.021	0.027	0.006					1387.08	
15	0.6975	1140.7	1160.9		0.851	3.359	74.203	18.894	2.332	0.092	0.215	0.021	0.028	0.006					1386.90	
16	0.7004	1145.5	1165.8		0.857	3.333	73.690	19.385	2.347	0.095	0.229	0.023	0.031	0.009					1389.82	
17	0.6987	1143.1	1163.4		0.854	3.318	74.026	19.058	2.381	0.093	0.217	0.021	0.027	0.006					1388.66	
18	0.6981	1142.0	1162.2		0.847	3.345	73.961	19.251	2.252	0.087	0.205	0.020	0.025	0.007					1387.85	
19	0.6994	1143.3	1163.6		0.859	3.365	73.849	19.208	2.361	0.091	0.215	0.020	0.025	0.006					1388.19	
20	0.6971	1139.2	1159.3		0.872	3.387	74.346	18.671	2.350	0.093	0.222	0.022	0.028	0.009					1385.35	
21	0.6973	1140.1	1160.2		0.863	3.367	74.217	18.860	2.352	0.090	0.207	0.018	0.022	0.004					1386.24	
22	0.6973	1139.7	1159.8		0.865	3.383	74.361	18.600	2.420	0.095	0.221	0.021	0.027	0.007					1385.78	
23	0.6941	1135.3	1155.5		0.828	3.407	74.789	18.316	2.323	0.089	0.205	0.018	0.021	0.004					1383.67	
24	0.6927	1132.9	1153.0		0.829	3.416	75.178	17.843	2.381	0.093	0.213	0.019	0.023	0.005					1382.16	
25	0.6951	1135.9	1156.1		0.862	3.406	74.843	18.057	2.461	0.097	0.223	0.020	0.025	0.006					1383.46	
26	0.6969	1138.5	1158.6		0.878	3.403	74.431	18.508	2.410	0.094	0.223	0.021	0.026	0.006					1384.69	
27	0.7002	1142.1	1162.3		0.874	3.490	73.949	18.722	2.586	0.099	0.229	0.021	0.026	0.006					1385.91	
28	0.7029	1144.0	1164.3		0.876	3.627	73.619	18.711	2.752	0.106	0.248	0.023	0.029	0.008					1385.51	
29	0.7040	1140.3	1160.5		0.866	3.973	73.386	18.472	2.933	0.103	0.227	0.017	0.020	0.003					1379.94	
30	0.7031	1142.0	1162.3		0.869	3.772	73.560	18.562	2.867	0.101	0.225	0.018	0.022	0.004					1382.99	
31	0.7034	1143.0	1163.2		0.858	3.769	73.503	18.633	2.841	0.104	0.239	0.021	0.026	0.006					1383.71	
Avg	0.6978	1140.0	1160.0		0.852	3.441	74.160	18.811	2.384	0.091	0.211	0.020	0.025	0.006					1385.49	

# Source Daily Summary

March 2021

Number: 601

Pressure Base: 14.730

Contract Day: 1

Name: TIOGA STN-ROBINSON LAKE PLNT

Temperature Base:

Contract Hour: 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	0.7052	1150.9	1171.3	1168.1	0.951	3.308	72.861	20.089	2.433	0.094	0.220	0.019	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1391.47
2	0.7058	1152.3	1172.7	1169.5	0.943	3.288	72.791	20.153	2.461	0.094	0.222	0.021	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1392.57
3	0.7075	1155.3	1175.8	1172.5	0.941	3.275	72.569	20.269	2.564	0.099	0.231	0.022	0.030	0.000	0.000	0.000	0.000	0.000	0.000	1394.45
4	0.7084	1156.2	1176.7	1173.3	0.951	3.285	72.540	20.199	2.606	0.105	0.253	0.026	0.035	0.000	0.000	0.000	0.000	0.000	0.000	1394.60
5	0.7036	1148.9	1169.2	1166.1	0.937	3.306	73.093	19.903	2.441	0.087	0.195	0.017	0.022	0.000	0.000	0.000	0.000	0.000	0.000	1390.57
6	0.7014	1144.7	1165.0	1161.8	0.955	3.327	73.383	19.723	2.314	0.081	0.182	0.016	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1387.69
7	0.7009	1143.4	1163.7	1160.6	0.955	3.351	73.531	19.509	2.348	0.083	0.187	0.015	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1386.75
8	0.7044	1148.7	1169.0	1165.8	0.967	3.344	73.001	19.918	2.430	0.090	0.209	0.018	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1389.55
9	0.7045	1149.2	1169.6	1166.5	0.971	3.321	72.872	20.147	2.358	0.088	0.204	0.017	0.022	0.000	0.000	0.000	0.000	0.000	0.000	1390.09
10	0.7053	1149.8	1170.2	1166.9	1.002	3.315	72.699	20.358	2.294	0.087	0.205	0.018	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1389.92
11	0.7072	1153.9	1174.3	1171.1	0.968	3.287	72.575	20.308	2.485	0.097	0.229	0.021	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1393.08
12	0.7064	1152.4	1172.8	1169.5	0.970	3.307	72.661	20.265	2.427	0.095	0.226	0.021	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1391.96
13	0.7066	1154.0	1174.5	1171.2	0.950	3.256	72.725	20.158	2.530	0.099	0.231	0.022	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1393.75
14	0.7076	1155.4	1175.9	1172.5	0.958	3.244	72.766	19.962	2.653	0.106	0.251	0.025	0.034	0.000	0.000	0.000	0.000	0.000	0.000	1394.46
15	0.7057	1152.7	1173.1	1169.9	0.953	3.245	72.921	19.959	2.548	0.099	0.228	0.020	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1393.08
16	0.7063	1153.7	1174.1	1170.8	0.954	3.243	72.905	19.898	2.601	0.105	0.243	0.022	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1393.61
17	0.7053	1151.5	1171.9	1168.6	0.968	3.263	73.021	19.831	2.538	0.099	0.229	0.022	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1391.92
18	0.7042	1149.4	1169.8	1166.6	0.964	3.278	73.358	19.402	2.593	0.104	0.245	0.024	0.031	0.000	0.000	0.000	0.000	0.000	0.000	1390.68
19	0.7043	1149.6	1170.0	1166.6	0.965	3.275	73.408	19.318	2.613	0.106	0.254	0.026	0.034	0.000	0.000	0.000	0.000	0.000	0.000	1390.73
20	0.7043	1149.2	1169.6	1166.2	0.976	3.289	73.304	19.486	2.542	0.102	0.243	0.025	0.034	0.000	0.000	0.000	0.000	0.000	0.000	1390.18
21	0.7047	1150.1	1170.5	1167.3	0.970	3.281	73.119	19.736	2.513	0.099	0.233	0.021	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1390.96
22	0.7043	1149.8	1170.2	1166.9	0.964	3.274	73.262	19.550	2.560	0.102	0.239	0.022	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1390.92
23	0.6992	1142.3	1162.6	1159.3	0.913	3.323	74.083	18.888	2.419	0.097	0.230	0.021	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1386.96
24	0.7011	1145.5	1165.7	1162.5	0.921	3.298	73.739	19.207	2.463	0.097	0.229	0.020	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1388.90
25	0.7058	1152.4	1172.8	1169.7	0.955	3.263	72.806	20.104	2.528	0.094	0.211	0.017	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1392.77
26	0.7063	1153.4	1173.8	1170.7	0.952	3.259	72.720	20.179	2.543	0.095	0.213	0.018	0.022	0.000	0.000	0.000	0.000	0.000	0.000	1393.39
27	0.7056	1152.2	1172.6	1169.5	0.952	3.261	72.938	19.925	2.553	0.099	0.227	0.020	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1392.68
28	0.7095	1155.0	1175.5	1172.2	0.946	3.468	72.356	20.090	2.739	0.105	0.246	0.022	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1392.21
29	0.7434	1167.5	1188.2	1185.1	0.917	5.924	67.605	19.982	4.996	0.168	0.359	0.024	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1374.95
30	0.7476	1164.1	1184.7	1181.7	0.905	6.553	66.884	19.797	5.297	0.172	0.352	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1366.93
31	0.7495	1167.5	1188.2	1185.1	0.906	6.512	66.659	19.937	5.408	0.177	0.362	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1369.30
Avg	0.7091	1152.0	1172.7	1169.5	0.952	3.588	72.424	19.879	2.768	0.104	0.238	0.021	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1389.39

# Source Daily Summary

March 2021

Number: 091

Pressure Base: 14.730

Contract Day: 1

Name: MNT BRD-PLRMO BRD-BIS STN

Temperature Base:

Contract Hour: 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	0.7461	1166.5	1187.1	1184.1	0.922	6.238	67.092	20.032	5.176	0.164	0.338	0.019	0.020	0.000	0.000	0.000	0.000	0.000	1371.15	
2	0.7511	1169.6	1190.3	1187.3	0.916	6.520	66.441	20.023	5.531	0.170	0.360	0.019	0.020	0.000	0.000	0.000	0.000	0.000	1370.30	
3	0.7523	1169.2	1189.9	1186.8	0.916	6.660	66.289	19.957	5.577	0.182	0.377	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1368.66	
4	0.7525	1170.0	1190.7	1187.7	0.916	6.633	66.250	20.014	5.581	0.185	0.378	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1369.40	
5	0.7497	1167.3	1187.9	1184.9	0.920	6.523	66.655	19.912	5.395	0.182	0.370	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1368.83	
6	0.7501	1168.2	1188.9	1185.8	0.918	6.516	66.588	19.949	5.438	0.180	0.368	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1369.45	
7	0.7518	1170.7	1191.5	1188.4	0.918	6.515	66.406	20.021	5.515	0.189	0.389	0.023	0.024	0.000	0.000	0.000	0.000	0.000	1370.92	
8	0.7502	1167.5	1188.2	1185.0	0.921	6.557	66.624	19.846	5.447	0.183	0.378	0.021	0.023	0.000	0.000	0.000	0.000	0.000	1368.60	
9	0.7551	1174.7	1195.5	1192.4	0.916	6.590	66.028	20.060	5.734	0.201	0.420	0.025	0.027	0.000	0.000	0.000	0.000	0.000	1372.50	
10	0.7551	1175.7	1196.5	1193.3	0.916	6.522	66.044	20.115	5.739	0.198	0.414	0.025	0.026	0.000	0.000	0.000	0.000	0.000	1373.71	
11	0.7536	1171.9	1192.7	1189.5	0.915	6.622	66.185	19.970	5.680	0.187	0.394	0.023	0.025	0.000	0.000	0.000	0.000	0.000	1370.61	
12	0.7511	1167.8	1188.4	1185.3	0.917	6.636	66.463	19.878	5.503	0.181	0.377	0.021	0.023	0.000	0.000	0.000	0.000	0.000	1368.04	
13	0.7541	1171.6	1192.4	1189.2	0.918	6.672	66.130	19.939	5.709	0.188	0.397	0.023	0.024	0.000	0.000	0.000	0.000	0.000	1369.91	
14	0.7511	1170.3	1191.0	1187.9	0.919	6.475	66.517	19.994	5.467	0.189	0.391	0.023	0.025	0.000	0.000	0.000	0.000	0.000	1371.02	
15	0.7528	1173.4	1194.2	1191.0	0.919	6.442	66.315	20.112	5.571	0.193	0.399	0.024	0.025	0.000	0.000	0.000	0.000	0.000	1373.13	
16	0.7532	1170.2	1190.9	1187.8	0.915	6.683	66.180	19.985	5.618	0.190	0.385	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1369.00	
17	0.7511	1166.7	1187.4	1184.3	0.916	6.700	66.437	19.832	5.528	0.180	0.367	0.019	0.020	0.000	0.000	0.000	0.000	0.000	1366.85	
18	0.7536	1171.4	1192.2	1189.0	0.915	6.651	66.142	19.999	5.681	0.187	0.384	0.021	0.021	0.000	0.000	0.000	0.000	0.000	1370.07	
19	0.7566	1177.2	1198.1	1194.9	0.914	6.573	65.785	20.236	5.846	0.195	0.405	0.022	0.023	0.000	0.000	0.000	0.000	0.000	1374.16	
20	0.7565	1177.0	1197.8	1194.7	0.913	6.587	65.784	20.219	5.862	0.189	0.401	0.022	0.023	0.000	0.000	0.000	0.000	0.000	1373.90	
21	0.7547	1174.1	1194.9	1191.8	0.915	6.588	66.039	20.078	5.750	0.189	0.396	0.022	0.023	0.000	0.000	0.000	0.000	0.000	1372.21	
22	0.7508	1166.4	1187.1	1184.0	0.912	6.690	66.476	19.834	5.506	0.177	0.363	0.020	0.020	0.000	0.000	0.000	0.000	0.000	1366.83	
23	0.7524	1169.7	1190.4	1187.3	0.913	6.647	66.300	19.930	5.596	0.188	0.383	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1369.15	
24	0.7520	1168.8	1189.5	1186.4	0.913	6.661	66.331	19.923	5.567	0.185	0.377	0.020	0.021	0.000	0.000	0.000	0.000	0.000	1368.49	
25	0.7547	1173.8	1194.5	1191.4	0.914	6.611	66.023	20.085	5.731	0.194	0.397	0.022	0.023	0.000	0.000	0.000	0.000	0.000	1371.81	
26	0.7526	1169.4	1190.1	1187.0	0.913	6.680	66.267	19.921	5.609	0.186	0.381	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1368.64	
27	0.7504	1165.2	1185.8	1182.7	0.914	6.734	66.511	19.781	5.478	0.180	0.363	0.019	0.020	0.000	0.000	0.000	0.000	0.000	1365.66	
28	0.7496	1164.0	1184.6	1181.5	0.917	6.728	66.588	19.771	5.434	0.174	0.351	0.018	0.018	0.000	0.000	0.000	0.000	0.000	1364.99	
29	0.7516	1167.6	1188.2	1185.1	0.922	6.686	66.381	19.877	5.532	0.184	0.374	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1367.40	
30	0.7511	1166.3	1187.0	1183.9	0.922	6.718	66.389	19.879	5.527	0.169	0.356	0.019	0.020	0.000	0.000	0.000	0.000	0.000	1366.36	
31	0.7507	1165.8	1186.4	1183.3	0.918	6.713	66.444	19.859	5.508	0.166	0.354	0.018	0.019	0.000	0.000	0.000	0.000	0.000	1366.17	
Avg	0.7522	1170.0	1190.7	1187.5	0.917	6.606	66.326	19.969	5.575	0.184	0.380	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1369.61	





# Source Daily Summary

March 2021

Number: 603      Pressure Base: 14.730      Contract Day: 1  
 Name: TIOGA STN-COUNTY LINE PLANT      Temperature Base:      Contract Hour: 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	0.7051	1150.8	1171.2	1168.0	0.953	3.305	72.861	20.098	2.427	0.093	0.218	0.019	0.024	0.000	0.000	0.000	0.000	0.000	0.000	1391.42
2	0.7055	1151.6	1171.9	1168.7	0.947	3.301	72.838	20.098	2.452	0.094	0.222	0.020	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1391.95
3	0.7074	1155.4	1175.8	1172.5	0.938	3.266	72.580	20.283	2.553	0.099	0.231	0.022	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1394.61
4	0.7079	1155.4	1175.8	1172.5	0.951	3.291	72.591	20.173	2.588	0.103	0.244	0.025	0.034	0.000	0.000	0.000	0.000	0.000	0.000	1394.08
5	0.7050	1151.1	1171.5	1168.3	0.939	3.294	72.936	19.993	2.493	0.092	0.209	0.019	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1391.89
6	0.7021	1145.9	1166.1	1163.0	0.957	3.321	73.275	19.813	2.331	0.082	0.185	0.016	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1388.37
7	0.7002	1142.5	1162.8	1159.7	0.952	3.352	73.626	19.442	2.332	0.082	0.182	0.015	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1386.26
8	0.7045	1149.0	1169.3	1166.1	0.965	3.340	72.974	19.952	2.430	0.089	0.208	0.018	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1389.77
9	0.7048	1149.6	1170.0	1166.8	0.969	3.327	72.859	20.117	2.391	0.089	0.209	0.018	0.022	0.000	0.000	0.000	0.000	0.000	0.000	1390.28
10	0.7056	1150.4	1170.8	1167.5	0.986	3.327	72.651	20.390	2.310	0.088	0.207	0.019	0.024	0.000	0.000	0.000	0.000	0.000	0.000	1390.42
11	0.7077	1154.6	1175.0	1171.8	0.972	3.287	72.476	20.396	2.493	0.098	0.230	0.020	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1393.42
12	0.7071	1153.6	1174.0	1170.7	0.966	3.305	72.575	20.318	2.452	0.098	0.234	0.022	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1392.70
13	0.7069	1154.3	1174.8	1171.5	0.950	3.263	72.616	20.304	2.494	0.097	0.228	0.020	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1393.86
14	0.7076	1155.7	1176.1	1172.8	0.950	3.245	72.632	20.187	2.590	0.102	0.239	0.023	0.031	0.000	0.000	0.000	0.000	0.000	0.000	1394.76
15	0.7063	1153.5	1174.0	1170.7	0.954	3.244	72.845	20.008	2.564	0.101	0.235	0.021	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1393.54
16	0.7058	1152.7	1173.1	1169.8	0.961	3.244	73.013	19.801	2.578	0.104	0.244	0.024	0.032	0.000	0.000	0.000	0.000	0.000	0.000	1392.91
17	0.7060	1152.4	1172.8	1169.4	0.964	3.271	72.975	19.819	2.564	0.105	0.248	0.023	0.031	0.000	0.000	0.000	0.000	0.000	0.000	1392.38
18	0.7053	1151.4	1171.8	1168.4	0.966	3.269	73.178	19.569	2.601	0.106	0.253	0.025	0.033	0.000	0.000	0.000	0.000	0.000	0.000	1391.78
19	0.7044	1150.1	1170.5	1167.2	0.967	3.257	73.194	19.684	2.516	0.099	0.234	0.021	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1391.23
20	0.7059	1152.1	1172.5	1169.1	0.966	3.280	72.956	19.841	2.564	0.101	0.239	0.022	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1392.08
21	0.7062	1152.0	1172.4	1169.0	0.978	3.295	72.942	19.825	2.551	0.102	0.249	0.025	0.033	0.000	0.000	0.000	0.000	0.000	0.000	1391.66
22	0.7056	1151.9	1172.3	1169.0	0.969	3.257	72.977	19.865	2.549	0.100	0.234	0.021	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1392.24
23	0.7063	1152.8	1173.3	1170.0	0.971	3.263	72.866	19.943	2.576	0.100	0.233	0.021	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1392.66
24	0.7060	1152.7	1173.1	1169.9	0.961	3.261	73.004	19.745	2.627	0.105	0.247	0.022	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1392.77
25	0.7045	1150.3	1170.7	1167.5	0.953	3.275	73.203	19.606	2.588	0.100	0.229	0.020	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1391.43
26	0.7014	1145.0	1165.3	1162.0	0.947	3.318	73.925	18.763	2.648	0.107	0.243	0.021	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1387.99
27	0.7061	1151.4	1171.8	1168.5	0.997	3.290	73.015	19.679	2.622	0.104	0.242	0.022	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1391.13
28	0.7058	1151.6	1171.9	1168.6	0.979	3.282	73.114	19.558	2.656	0.106	0.251	0.023	0.030	0.000	0.000	0.000	0.000	0.000	0.000	1391.57
29	0.7067	1152.9	1173.4	1170.0	0.984	3.271	73.037	19.583	2.698	0.108	0.258	0.027	0.034	0.000	0.000	0.000	0.000	0.000	0.000	1392.36
30	0.7053	1151.1	1171.5	1168.2	0.972	3.279	73.093	19.665	2.608	0.100	0.234	0.022	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1391.48
31	0.7029	1146.8	1167.1	1163.9	0.974	3.309	73.479	19.300	2.595	0.094	0.210	0.017	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1388.72
Avg	0.7054	1151.0	1171.7	1168.4	0.963	3.287	72.978	19.865	2.530	0.098	0.230	0.021	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1391.67









# Source Daily Summary

March 2021

Number: 271      Pressure Base: 14.730      Contract Day: 1  
 Name: DCKSN BRD-BLFD TSF-G.U. STN      Temperature Base:      Contract Hour: 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	0.6528	1084.8	1104.0	1101.3	0.378	3.289	81.134	13.942	1.164	0.033	0.053	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1363.31
2	0.6518	1083.2	1102.4	1099.6	0.344	3.347	81.243	13.852	1.128	0.031	0.049	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1362.30
3	0.6558	1088.6	1107.9	1105.1	0.410	3.296	80.612	14.369	1.209	0.037	0.060	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1364.88
4	0.6581	1092.6	1112.0	1109.2	0.435	3.225	80.270	14.685	1.263	0.042	0.070	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1367.58
5	0.6629	1098.3	1117.7	1114.9	0.500	3.229	79.565	15.141	1.420	0.050	0.083	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1369.69
6	0.6633	1098.9	1118.3	1115.6	0.470	3.276	79.405	15.322	1.388	0.048	0.080	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1370.03
7	0.6649	1101.2	1120.7	1118.0	0.443	3.322	79.059	15.633	1.404	0.048	0.081	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1371.34
8	0.6725	1112.6	1132.3	1129.5	0.561	3.167	78.003	16.416	1.661	0.064	0.111	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1377.57
9	0.6823	1126.9	1146.9	1144.1	0.657	3.073	76.314	17.928	1.809	0.074	0.129	0.009	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1385.25
10	0.6777	1121.6	1141.5	1138.7	0.647	2.973	77.003	17.567	1.632	0.060	0.103	0.007	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1383.48
11	0.6651	1103.8	1123.3	1120.6	0.475	3.144	78.944	15.990	1.332	0.040	0.066	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1374.23
12	0.6652	1102.1	1121.6	1118.8	0.455	3.289	78.874	15.941	1.326	0.041	0.066	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1372.01
13	0.6639	1099.6	1119.1	1116.3	0.405	3.391	79.064	15.715	1.313	0.040	0.065	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1370.28
14	0.6694	1107.1	1126.7	1124.0	0.439	3.397	78.171	16.389	1.470	0.047	0.079	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1374.00
15	0.6675	1104.6	1124.2	1121.4	0.482	3.306	78.508	16.204	1.371	0.045	0.075	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1372.82
16	0.6651	1101.2	1120.7	1117.9	0.462	3.323	78.961	15.762	1.368	0.043	0.072	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1370.98
17	0.6652	1101.2	1120.7	1118.0	0.413	3.401	78.873	15.818	1.381	0.041	0.066	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1370.98
18	0.6685	1105.3	1124.9	1122.1	0.517	3.303	78.406	16.213	1.425	0.047	0.078	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1372.67
19	0.6724	1111.6	1131.3	1128.4	0.571	3.207	77.806	16.753	1.504	0.054	0.094	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1376.43
20	0.6773	1118.2	1138.0	1135.1	0.619	3.190	76.833	17.720	1.481	0.052	0.094	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1379.64
21	0.6778	1118.6	1138.4	1135.6	0.578	3.279	76.753	17.669	1.556	0.054	0.099	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1379.60
22	0.6762	1116.4	1136.1	1133.3	0.570	3.273	77.014	17.482	1.507	0.051	0.093	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1378.49
23	0.6745	1113.6	1133.3	1130.5	0.586	3.264	77.221	17.392	1.399	0.046	0.082	0.004	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1376.74
24	0.6767	1117.7	1137.4	1134.7	0.614	3.179	76.913	17.672	1.477	0.049	0.087	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1379.54
25	0.6726	1111.5	1131.1	1128.9	0.556	3.272	77.498	17.119	1.422	0.044	0.077	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1376.22
26	0.6750	1115.5	1135.2	1132.5	0.452	3.391	77.095	17.413	1.512	0.045	0.082	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1378.66
27	0.6746	1115.9	1135.7	1132.9	0.422	3.374	77.059	17.581	1.433	0.044	0.078	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1379.58
28	0.6762	1119.1	1138.9	1136.0	0.503	3.209	76.820	17.921	1.412	0.046	0.080	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1381.86
29	0.6924	1141.8	1162.1	1159.2	0.715	3.027	74.487	19.600	1.922	0.084	0.144	0.011	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1393.27
30	0.6673	1105.6	1125.2	1122.4	0.573	3.091	78.597	16.317	1.287	0.047	0.078	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1374.23
31	0.6646	1101.7	1121.2	1118.5	0.498	3.182	78.968	16.015	1.221	0.040	0.067	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1372.27
Avg	0.6693	1108.0	1127.4	1124.6	0.508	3.248	78.241	16.437	1.426	0.048	0.082	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1374.84









March-21

ZONE 550

MANDAN BORDER

		NBPL - St Anthony			WBI - Mandan Border			Weighted	
Start Date	End Date	MCF	DK	BTU	MCF	DK	BTU Zone 28	AVG BTU	
3/1/2021	3/2/2021				4,754	5,246	1103.9	1103.900	3/1/2021
3/2/2021	3/3/2021				3,247	3,589	1106.6	1106.600	3/2/2021
3/3/2021	3/4/2021				3,039	3,387	1117.2	1117.200	3/3/2021
3/4/2021	3/5/2021				2,928	3,360	1155.6	1155.600	3/4/2021
3/5/2021	3/6/2021				3,428	3,895	1141.4	1141.400	3/5/2021
3/6/2021	3/7/2021				2,766	3,231	1169.6	1169.600	3/6/2021
3/7/2021	3/8/2021				3,076	3,602	1178.5	1178.500	3/7/2021
3/8/2021	3/9/2021				2,597	3,053	1176	1176.000	3/8/2021
3/9/2021	3/10/2021				3,306	3,805	1157.6	1157.600	3/9/2021
3/10/2021	3/11/2021				4,412	5,060	1146.4	1146.400	3/10/2021
3/11/2021	3/12/2021				4,856	5,509	1136	1136.000	3/11/2021
3/12/2021	3/13/2021				3,296	3,688	1118.6	1118.600	3/12/2021
3/13/2021	3/14/2021				2,418	2,753	1138.7	1138.700	3/13/2021
3/14/2021	3/15/2021				3,459	3,916	1134.9	1134.900	3/14/2021
3/15/2021	3/16/2021				4,498	5,049	1122.6	1122.600	3/15/2021
3/16/2021	3/17/2021				4,048	4,542	1121.9	1121.900	3/16/2021
3/17/2021	3/18/2021				4,568	5,110	1118.4	1118.400	3/17/2021
3/18/2021	3/19/2021				3,984	4,486	1127.6	1127.600	3/18/2021
3/19/2021	3/20/2021				2,836	3,340	1177.2	1177.200	3/19/2021
3/20/2021	3/21/2021				2,196	2,634	1198.6	1198.600	3/20/2021
3/21/2021	3/22/2021				2,950	3,529	1196.3	1196.300	3/21/2021
3/22/2021	3/23/2021				2,658	3,128	1178.8	1178.800	3/22/2021
3/23/2021	3/24/2021				3,127	3,706	1187.9	1187.900	3/23/2021
3/24/2021	3/25/2021				3,639	4,171	1148.8	1148.800	3/24/2021
3/25/2021	3/26/2021				2,764	3,265	1180.2	1180.200	3/25/2021
3/26/2021	3/27/2021				3,455	4,009	1162.4	1162.400	3/26/2021
3/27/2021	3/28/2021				4,343	4,917	1132.3	1132.300	3/27/2021
3/28/2021	3/29/2021				2,965	3,401	1148.2	1148.200	3/28/2021
3/29/2021	3/30/2021				4,234	4,821	1143.3	1143.300	3/29/2021
3/30/2021	3/31/2021				6,209	7,124	1148.7	1148.700	3/30/2021
3/31/2021	4/1/2021				4,498	5,036	1119.1	1119.100	3/31/2021
		0	0	#DIV/0!	110,554	126,362	1148.1710	1148.1710	



# Alliance Pipeline

DAILY ANALYSIS --- USA  
 ND07MD1 --- Hankinson Sales  
 March 2021

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	1,146.261	0.6563	85.1020	9.0814	3.2932	0.3579	0.6289	0.0566	0.0441	0.0212	0.9626	0.4419	0.0101
2	1,147.141	0.6567	85.0621	9.0891	3.3267	0.3614	0.6342	0.0571	0.0442	0.0209	0.9596	0.4349	0.0099
3	1,147.898	0.6572	84.9743	9.1867	3.3143	0.3623	0.6398	0.0563	0.0446	0.0214	0.9555	0.4351	0.0097
4	1,146.825	0.6564	85.1198	9.0437	3.3069	0.3631	0.6450	0.0562	0.0443	0.0215	0.9649	0.4247	0.0099
5	1,153.973	0.6613	84.5335	9.2904	3.5485	0.3831	0.6939	0.0604	0.0463	0.0224	0.9853	0.4264	0.0097
6	1,150.585	0.6590	84.8999	9.0118	3.4894	0.3764	0.6808	0.0605	0.0461	0.0228	0.9716	0.4309	0.0098
7	1,149.843	0.6588	84.9545	8.9163	3.5285	0.3722	0.6671	0.0613	0.0461	0.0223	0.9868	0.4349	0.0100
8	1,149.626	0.6586	84.9782	8.9077	3.5056	0.3749	0.6742	0.0608	0.0453	0.0224	0.9889	0.4322	0.0098
9	1,149.425	0.6583	85.0520	8.8552	3.5047	0.3755	0.6742	0.0596	0.0458	0.0227	0.9664	0.4337	0.0100
10	1,149.281	0.6581	85.0465	8.8863	3.4919	0.3743	0.6667	0.0598	0.0455	0.0223	0.9677	0.4291	0.0100
11	1,149.382	0.6582	85.0363	8.8955	3.4919	0.3732	0.6698	0.0597	0.0453	0.0219	0.9678	0.4286	0.0099
12	1,148.679	0.6577	85.0886	8.8620	3.4845	0.3709	0.6615	0.0586	0.0443	0.0217	0.9722	0.4260	0.0098
13	1,149.643	0.6584	84.9823	8.9311	3.5160	0.3720	0.6609	0.0591	0.0443	0.0210	0.9742	0.4290	0.0099
14	1,151.852	0.6598	84.7925	9.0622	3.5406	0.3797	0.6861	0.0598	0.0452	0.0216	0.9706	0.4318	0.0099
15	1,150.726	0.6589	84.9338	8.9838	3.5064	0.3762	0.6810	0.0593	0.0455	0.0216	0.9521	0.4305	0.0099
16	1,149.227	0.6575	85.1360	8.9069	3.4449	0.3694	0.6654	0.0611	0.0462	0.0219	0.9106	0.4278	0.0099
17	1,147.683	0.6562	85.0544	9.1858	3.4225	0.3373	0.5449	0.0583	0.0458	0.0225	0.8912	0.4273	0.0100
18	1,148.210	0.6570	84.8754	9.3215	3.4529	0.3314	0.5284	0.0574	0.0450	0.0217	0.9291	0.4272	0.0100
19	1,147.004	0.6567	84.8998	9.2953	3.4096	0.3330	0.5291	0.0575	0.0454	0.0220	0.9661	0.4320	0.0101
20	1,147.910	0.6573	84.8444	9.3016	3.4256	0.3388	0.5517	0.0582	0.0457	0.0216	0.9670	0.4352	0.0102
21	1,148.338	0.6580	84.9237	9.0555	3.4826	0.3566	0.6070	0.0611	0.0462	0.0220	0.9920	0.4431	0.0102
22	1,150.769	0.6593	84.9242	8.9295	3.5282	0.3811	0.6794	0.0637	0.0486	0.0245	0.9718	0.4386	0.0104
23	1,151.732	0.6600	84.7774	9.0204	3.5824	0.3807	0.6825	0.0589	0.0437	0.0195	0.9857	0.4385	0.0103
24	1,150.854	0.6598	84.8231	8.9565	3.5860	0.3775	0.6735	0.0597	0.0443	0.0206	1.0052	0.4436	0.0101
25	1,152.454	0.6604	84.7579	9.0320	3.5870	0.3833	0.6838	0.0628	0.0472	0.0229	0.9728	0.4403	0.0099
26	1,151.026	0.6595	84.8511	9.0030	3.5583	0.3778	0.6656	0.0607	0.0448	0.0197	0.9574	0.4522	0.0097
27	1,151.230	0.6596	84.8205	9.0115	3.5813	0.3770	0.6667	0.0574	0.0428	0.0192	0.9720	0.4416	0.0100
28	1,151.584	0.6598	84.8033	8.9948	3.6026	0.3793	0.6733	0.0578	0.0429	0.0186	0.9885	0.4288	0.0100
29	1,152.542	0.6604	84.7406	9.0226	3.6249	0.3797	0.6802	0.0605	0.0453	0.0204	0.9864	0.4294	0.0100
30	1,151.290	0.6591	84.9231	8.9714	3.5565	0.3756	0.6696	0.0612	0.0455	0.0202	0.9419	0.4248	0.0101
31	1,150.160	0.6586	85.0391	8.8166	3.5694	0.3775	0.6755	0.0583	0.0451	0.0204	0.9648	0.4234	0.0099
<b>Volume</b>	<b>1,149.792</b>	<b>0.6585</b>	<b>84.9268</b>	<b>9.0266</b>	<b>3.4933</b>	<b>0.3687</b>	<b>0.6497</b>	<b>0.0593</b>	<b>0.0452</b>	<b>0.0215</b>	<b>0.9660</b>	<b>0.4330</b>	<b>0.0100</b>
<b>Weight Avg Energy</b>	<b>1,149.795</b>	<b>0.6585</b>	<b>84.9266</b>	<b>9.0266</b>	<b>3.4934</b>	<b>0.3687</b>	<b>0.6497</b>	<b>0.0593</b>	<b>0.0452</b>	<b>0.0215</b>	<b>0.9660</b>	<b>0.4330</b>	<b>0.0100</b>



# Alliance Pipeline

DAILY ANALYSIS --- USA  
 ND14MD1 --- Milnor Sales  
 March 2021

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	1,146.236	0.6564	85.0999	9.0834	3.2929	0.3573	0.6284	0.0565	0.0443	0.0212	0.9629	0.4430	0.0102
2	1,147.302	0.6568	85.0541	9.1012	3.3275	0.3622	0.6345	0.0566	0.0440	0.0208	0.9558	0.4334	0.0099
3	1,147.906	0.6573	84.9604	9.1971	3.3135	0.3617	0.6393	0.0565	0.0447	0.0215	0.9583	0.4372	0.0098
4	1,147.887	0.6572	85.0309	9.0870	3.3407	0.3657	0.6529	0.0562	0.0441	0.0215	0.9677	0.4235	0.0099
5	1,153.701	0.6611	84.5615	9.2691	3.5444	0.3824	0.6929	0.0602	0.0463	0.0223	0.9860	0.4254	0.0097
6	1,150.672	0.6591	84.8925	9.0149	3.4954	0.3763	0.6794	0.0609	0.0461	0.0226	0.9706	0.4316	0.0098
7	1,150.606	0.6594	84.8860	8.9429	3.5525	0.3776	0.6759	0.0598	0.0452	0.0223	0.9977	0.4301	0.0098
8	1,149.128	0.6583	85.0235	8.8884	3.4927	0.3727	0.6680	0.0606	0.0453	0.0224	0.9824	0.4341	0.0099
9	1,149.275	0.6582	85.0566	8.8598	3.5040	0.3738	0.6677	0.0597	0.0460	0.0228	0.9655	0.4341	0.0100
10	1,148.827	0.6579	85.0866	8.8653	3.4818	0.3719	0.6629	0.0593	0.0453	0.0222	0.9646	0.4299	0.0100
11	1,148.961	0.6580	85.0700	8.8697	3.4835	0.3716	0.6678	0.0600	0.0455	0.0221	0.9709	0.4289	0.0099
12	1,148.142	0.6575	85.1334	8.8307	3.4764	0.3684	0.6572	0.0586	0.0443	0.0216	0.9728	0.4267	0.0099
13	1,150.152	0.6587	84.9325	8.9915	3.5124	0.3729	0.6616	0.0587	0.0440	0.0212	0.9679	0.4274	0.0099
14	1,152.466	0.6602	84.7422	9.1048	3.5461	0.3809	0.6907	0.0601	0.0455	0.0218	0.9670	0.4311	0.0097
15	1,150.506	0.6588	84.9655	8.9648	3.4999	0.3755	0.6806	0.0592	0.0455	0.0216	0.9469	0.4305	0.0100
16	1,148.622	0.6571	85.1898	8.8826	3.4298	0.3671	0.6565	0.0616	0.0465	0.0219	0.9068	0.4276	0.0098
17	1,147.914	0.6565	84.9956	9.2487	3.4308	0.3337	0.5344	0.0576	0.0454	0.0226	0.8937	0.4274	0.0101
18	1,147.717	0.6567	84.9106	9.3070	3.4361	0.3304	0.5251	0.0569	0.0450	0.0216	0.9286	0.4287	0.0100
19	1,146.756	0.6566	84.9204	9.2790	3.4079	0.3317	0.5256	0.0578	0.0458	0.0222	0.9678	0.4315	0.0102
20	1,148.141	0.6576	84.8187	9.3091	3.4328	0.3391	0.5564	0.0585	0.0456	0.0216	0.9716	0.4364	0.0102
21	1,148.704	0.6582	84.9793	8.9538	3.4947	0.3667	0.6360	0.0616	0.0462	0.0220	0.9868	0.4426	0.0102
22	1,149.931	0.6587	84.9992	8.8918	3.5069	0.3776	0.6730	0.0632	0.0481	0.0241	0.9703	0.4353	0.0105
23	1,151.301	0.6599	84.8054	9.0011	3.5739	0.3781	0.6799	0.0589	0.0437	0.0198	0.9898	0.4391	0.0102
24	1,150.803	0.6598	84.8198	8.9745	3.5814	0.3754	0.6699	0.0594	0.0440	0.0204	1.0015	0.4435	0.0101
25	1,151.737	0.6600	84.8063	9.0096	3.5667	0.3803	0.6792	0.0624	0.0470	0.0226	0.9726	0.4434	0.0099
26	1,151.262	0.6597	84.8232	9.0236	3.5621	0.3778	0.6658	0.0615	0.0452	0.0196	0.9590	0.4525	0.0097
27	1,150.852	0.6594	84.8759	8.9671	3.5743	0.3775	0.6673	0.0576	0.0427	0.0190	0.9714	0.4371	0.0100
28	1,152.846	0.6608	84.6766	9.0573	3.6381	0.3829	0.6835	0.0587	0.0437	0.0189	1.0019	0.4286	0.0099
29	1,152.444	0.6604	84.7414	9.0426	3.6130	0.3787	0.6778	0.0601	0.0448	0.0202	0.9817	0.4297	0.0100
30	1,150.890	0.6588	84.9644	8.9471	3.5458	0.3740	0.6675	0.0612	0.0456	0.0204	0.9394	0.4245	0.0101
31	1,150.003	0.6584	85.0702	8.7989	3.5666	0.3777	0.6736	0.0581	0.0448	0.0202	0.9570	0.4230	0.0099
<b>Volume</b>	<b>1,149.644</b>	<b>0.6584</b>	<b>84.9506</b>	<b>9.0085</b>	<b>3.4871</b>	<b>0.3690</b>	<b>0.6521</b>	<b>0.0593</b>	<b>0.0452</b>	<b>0.0215</b>	<b>0.9637</b>	<b>0.4329</b>	<b>0.0100</b>
<b>Weight Avg Energy</b>	<b>1,149.648</b>	<b>0.6584</b>	<b>84.9504</b>	<b>9.0085</b>	<b>3.4872</b>	<b>0.3690</b>	<b>0.6522</b>	<b>0.0593</b>	<b>0.0452</b>	<b>0.0215</b>	<b>0.9637</b>	<b>0.4329</b>	<b>0.0100</b>

March-21

ZONE 610

Watford City

Watford City West Border

Watford City East Border

Weighted

Start Date	End Date	BTU			BTU			AVG BTU	
		MCF	DK	Zone 25	MCF	DK	Zone 43		
3/1/2021	3/2/2021	371	443	1194.4	423	476	1126.1	1158.013	3/1/2021
3/2/2021	3/3/2021	325	388	1194.4	355	399	1126.1	1158.743	3/2/2021
3/3/2021	3/4/2021	324	387	1194.4	378	426	1126.1	1157.623	3/3/2021
3/4/2021	3/5/2021	306	365	1194.4	342	386	1126.1	1158.353	3/4/2021
3/5/2021	3/6/2021	309	369	1194.4	301	339	1126.1	1160.698	3/5/2021
3/6/2021	3/7/2021	298	356	1194.4	285	321	1126.1	1161.011	3/6/2021
3/7/2021	3/8/2021	344	411	1194.4	392	442	1126.1	1158.023	3/7/2021
3/8/2021	3/9/2021	285	340	1194.4	303	342	1126.1	1159.205	3/8/2021
3/9/2021	3/10/2021	393	469	1194.4	518	583	1126.1	1155.564	3/9/2021
3/10/2021	3/11/2021	385	460	1194.4	535	602	1126.1	1154.682	3/10/2021
3/11/2021	3/12/2021	439	525	1194.4	680	766	1126.1	1152.895	3/11/2021
3/12/2021	3/13/2021	374	447	1194.4	420	473	1126.1	1158.272	3/12/2021
3/13/2021	3/14/2021	294	351	1194.4	309	348	1126.1	1159.400	3/13/2021
3/14/2021	3/15/2021	346	413	1194.4	385	433	1126.1	1158.428	3/14/2021
3/15/2021	3/16/2021	394	470	1194.4	508	572	1126.1	1155.934	3/15/2021
3/16/2021	3/17/2021	398	475	1194.4	516	581	1126.1	1155.841	3/16/2021
3/17/2021	3/18/2021	399	477	1194.4	514	579	1126.1	1155.949	3/17/2021
3/18/2021	3/19/2021	363	433	1194.4	393	442	1126.1	1158.895	3/18/2021
3/19/2021	3/20/2021	256	306	1194.4	239	269	1126.1	1161.423	3/19/2021
3/20/2021	3/21/2021	291	347	1194.4	251	283	1126.1	1162.770	3/20/2021
3/21/2021	3/22/2021	349	416	1194.4	370	416	1126.1	1159.253	3/21/2021
3/22/2021	3/23/2021	325	388	1194.4	323	364	1126.1	1160.355	3/22/2021
3/23/2021	3/24/2021	347	414	1194.4	388	437	1126.1	1158.345	3/23/2021
3/24/2021	3/25/2021	330	394	1194.4	341	385	1126.1	1159.690	3/24/2021
3/25/2021	3/26/2021	313	374	1194.4	295	332	1126.1	1161.261	3/25/2021
3/26/2021	3/27/2021	370	442	1194.4	404	455	1126.1	1158.750	3/26/2021
3/27/2021	3/28/2021	394	471	1194.4	467	526	1126.1	1157.355	3/27/2021
3/28/2021	3/29/2021	268	321	1194.4	235	264	1126.1	1162.490	3/28/2021
3/29/2021	3/30/2021	475	568	1194.4	687	774	1126.1	1154.020	3/29/2021
3/30/2021	3/31/2021	546	652	1194.4	877	988	1126.1	1152.306	3/30/2021
3/31/2021	4/1/2021	390	466	1194.4	414	466	1126.1	1159.231	3/31/2021
		11,001	13,138	1194.4000	12,848	14,469	1126.1000	1158.2187	

OW ID	LOCATION DESCRIPTION	GROSS HEATING VALUE (BTU/Gal)	SPECIFIC GRAVITY	WOBBE (calc)	CRICONDENTHE RM (deg F)	NITROGEN (mole percent)	CARBON DIOXIDE (mole percent)	METHANE (mole percent)	ETHANE (mole percent)	PROPANE (mole percent)	NORMAL BUTANE (mole percent)	ISO BUTANE (mole percent)	PENTANE (mole percent)	ISO PENTANE (mole percent)	NEO PENTANE (mole percent)	HEXANES PLUS (mole percent)	HYDROGEN (mole percent)	HELIUM (mole percent)	PRODUCTION DATE	POSTING DATE	Changestimestamp	NOTES
11587	GLEN ULLIN	1095.2	0.6449	1363.8	-50.5	2.161	0.9787	82.5815	13.4006	0.6821	0.0186	0.0111	0	0.0001	N/A	0	0.1437	0.0228	3/31/2021	4/1/2021	4/1/2021 17:29	
11587	GLEN ULLIN	1097.8	0.6468	1365	-43.8	2.1358	1.0099	82.597	13.0553	0.9166	0.0508	0.0382	0.0044	0.0062	N/A	0.0038	0.1595	0.0226	4/1/2021	4/2/2021	4/2/2021 17:42	
11587	GLEN ULLIN	1090.3	0.6432	1359.5	-47.8	2.2659	0.9979	83.2153	12.3826	0.8761	0.0428	0.0305	0.003	0.0043	N/A	0.0026	0.1556	0.0236	4/2/2021	4/3/2021	4/3/2021 18:11	
11587	GLEN ULLIN	1092.2	0.6453	1359.7	-50	2.3711	0.987	82.5258	13.1253	0.7662	0.0244	0.0141	0.0003	0.0005	N/A	0	0.161	0.0245	4/3/2021	4/4/2021	4/4/2021 17:15	
11587	GLEN ULLIN	1096.2	0.6487	1361	-47.9	2.443	0.9915	82.0195	13.5574	0.8247	0.0266	0.0155	0.0004	0.0006	N/A	0	0.0961	0.0249	4/4/2021	4/5/2021	4/5/2021 17:11	
11587	GLEN ULLIN	1099.4	0.6518	1361.7	-46.2	2.5038	1.0151	81.5875	13.9219	0.8703	0.0279	0.0164	0.0005	0.001	N/A	0	0.0299	0.0259	4/5/2021	4/6/2021	4/6/2021 17:53	
11587	GLEN ULLIN	1095.6	0.6489	1360	-47.9	2.4884	0.9953	81.9521	13.5482	0.8319	0.0263	0.0152	0.0003	0.0006	N/A	0	0.1162	0.0256	4/6/2021	4/7/2021	4/7/2021 17:31	
11587	GLEN ULLIN	1094.9	0.6489	1359.2	-47.9	2.5343	0.9949	81.7968	13.5913	0.832	0.0241	0.0142	0.0002	0.0002	N/A	0	0.1872	0.025	4/7/2021	4/8/2021	4/8/2021 17:46	
11587	GLEN ULLIN	1093.5	0.6478	1358.6	-48.7	2.5072	0.9998	82.033	13.4262	0.801	0.0237	0.0138	0.0003	0.0003	N/A	0	0.1696	0.0251	4/8/2021	4/9/2021	4/9/2021 17:01	
11587	GLEN ULLIN	1091.6	0.6455	1358.7	-50.2	2.4021	1.0017	82.4909	13.1278	0.7633	0.0206	0.0124	0.0002	0.0002	N/A	0	0.1563	0.0245	4/9/2021	4/10/2021	4/10/2021 17:24	
11587	GLEN ULLIN	1090.8	0.6448	1358.4	-50.8	2.3918	0.9977	82.6113	13.0433	0.7413	0.0198	0.0122	0.0002	0.0002	N/A	0	0.158	0.0242	4/10/2021	4/11/2021	4/11/2021 16:53	
11587	GLEN ULLIN	1088.7	0.6443	1356.4	-51.2	2.4567	1.0038	82.7215	12.8496	0.7524	0.0202	0.0124	0.0001	0.0003	N/A	0	0.1584	0.0246	4/11/2021	4/12/2021	4/12/2021 17:11	
11587	GLEN ULLIN	1089	0.6447	1356.3	-51.1	2.4765	1.0066	82.6322	12.9239	0.747	0.0197	0.0123	0.0001	0.0002	N/A	0	0.1569	0.0248	4/12/2021	4/13/2021	4/13/2021 17:22	
11587	GLEN ULLIN	1089.3	0.6441	1357.2	-51.2	2.4235	0.9932	82.7603	12.8536	0.7525	0.0216	0.0132	0.0002	0.0004	N/A	0	0.1571	0.0246	4/13/2021	4/14/2021	4/14/2021 17:17	
11587	GLEN ULLIN	1085.3	0.6405	1356	-53.6	2.332	0.9904	83.4594	12.2908	0.7171	0.018	0.0116	0	0.0002	N/A	0	0.1563	0.0242	4/14/2021	4/15/2021	4/15/2021 18:00	
11587	GLEN ULLIN	1086.4	0.6415	1356.4	-52.8	2.3341	1.0031	83.3034	12.4166	0.7311	0.0202	0.0125	0.0002	0.0004	N/A	0	0.1548	0.0238	4/15/2021	4/16/2021	4/16/2021 17:09	
11587	GLEN ULLIN	1087.1	0.6418	1356.9	-52.4	2.3343	0.9922	83.2896	12.4217	0.7596	0.0215	0.013	0.0001	0.0002	N/A	0	0.1441	0.024	4/16/2021	4/17/2021	4/17/2021 16:59	
11587	GLEN ULLIN	1093.2	0.6459	1360.2	-49.6	2.319	1.0197	82.4842	13.1834	0.7829	0.0234	0.0142	0	0.0003	N/A	0	0.1494	0.0237	4/17/2021	4/18/2021	4/18/2021 16:51	
11587	GLEN ULLIN	1094.2	0.6468	1360.5	-49	2.3243	1.0322	82.3259	13.309	0.793	0.0249	0.0151	0.0003	0.001	N/A	0	0.1507	0.0238	4/18/2021	4/19/2021	4/19/2021 17:06	
11587	GLEN ULLIN	1093.2	0.6466	1359.5	-49.3	2.3656	1.0317	82.3171	13.286	0.7718	0.0249	0.0149	0.0003	0.0008	N/A	0	0.1631	0.0239	4/19/2021	4/20/2021	4/20/2021 17:16	
11587	GLEN ULLIN	1092.4	0.6456	1359.6	-50.1	2.3198	1.0312	82.477	13.2087	0.74	0.0222	0.013	0.0001	0.0001	N/A	0	0.1641	0.0238	4/20/2021	4/21/2021	4/21/2021 16:43	
11587	GLEN ULLIN	1093.6	0.6448	1361.9	-49.6	2.2027	1.0089	82.7395	13.0063	0.8138	0.0262	0.0158	0.0004	0.0009	N/A	0	0.1626	0.023	4/21/2021	4/22/2021	4/22/2021 16:49	
11587	GLEN ULLIN	1093.2	0.6466	1359.5	-49.3	2.3577	1.0373	82.3641	13.2506	0.78	0.025	0.0145	0.0006	0.0007	N/A	0	0.1456	0.0241	4/22/2021	4/23/2021	4/23/2021 16:38	
11587	GLEN ULLIN	1093.8	0.6473	1359.5	-49.1	2.3721	1.0468	82.1766	13.4402	0.7496	0.0232	0.0137	0.0004	0.0005	N/A	0	0.1532	0.024	4/23/2021	4/24/2021	4/24/2021 16:26	
11587	GLEN ULLIN	1094.5	0.6478	1359.8	-48.8	2.368	1.0504	82.1082	13.4849	0.7751	0.0216	0.0133	0	0.0001	N/A	0	0.1548	0.0238	4/24/2021	4/25/2021	4/25/2021 16:38	
11587	GLEN ULLIN	1092.9	0.6468	1358.9	-49.5	2.3718	1.0502	82.2712	13.3404	0.7463	0.0224	0.0139	0.0002	0.0006	N/A	0	0.1594	0.0238	4/25/2021	4/26/2021	4/26/2021 16:48	
11587	GLEN ULLIN	1093.9	0.6474	1359.5	-49.2	2.3707	1.0499	82.1729	13.4504	0.7506	0.0212	0.0133	0.0002	0.0003	N/A	0	0.1465	0.024	4/26/2021	4/27/2021	4/27/2021 16:53	
11587	GLEN ULLIN	1091.8	0.6458	1358.5	-50.5	2.3651	1.0413	82.3798	13.2828	0.7088	0.0169	0.0109	0	0	N/A	0	0.1709	0.0238	4/27/2021	4/28/2021	4/28/2021 17:03	
11587	GLEN ULLIN	1094.8	0.648	1360.1	-48.8	2.365	1.0531	82.0689	13.5424	0.7676	0.0203	0.0126	0.0002	0.0002	N/A	0	0.146	0.0237	4/28/2021	4/29/2021	4/29/2021 16:46	
11587	GLEN ULLIN	1095.6	0.6491	1359.9	-48.1	2.4182	1.055	81.8518	13.6703	0.7919	0.0222	0.0133	0	0.0001	N/A	0	0.1531	0.0242	4/29/2021	4/30/2021	4/30/2021 17:19	
11587	GLEN ULLIN	1097.7	0.6512	1360.3	-47	2.4915	1.0538	81.3882	14.0453	0.797	0.0205	0.0125	0	0.0001	N/A	0	0.1667	0.0241	4/30/2021	5/1/2021	5/1/2021 17:20	

<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	MAR 21	FEB 21	JAN 21	DEC 20	NOV 20	OCT 20	SEPT 20	AUG 20	JULY 20	JUNE 20	MAY 20	APR 20	ZONE
MT/ND	211	Sidney Border - MonDak Tfr - Sidney Plt	1197	1208	1206	1209	1207	1198	1200	1202	1196	1191	1169	1174	1202	211
ND	24	Williston Border - Charbonneau Station	1164	1176	1176	1177	1175	1167	1158	1157	1157	1153	1163	1159	1155	24
ND	25	Watford City West Border	1192	1194	1194	1195	1195	1193	1193	1194	1191	1194	1161	1206	1188	25
ND	28	Bismarck Station - Glen Ullin Station	1152	1148	1110	1121	1135	1131	1152	1174	1195	1190	1186	1129	1149	28
ND	31	Dickinson Brd - Belfield Trf - G Ullin Stn	1117	1127	1113	1122	1131	1129	1136	1125	1104	1092	1085	1093	1150	31
ND/MT	32	Cabin Creek Station - Belfied Transfer	1117	1121	1091	1105	1119	1123	1127	1134	1120	1115	1109	1109	1133	32
ND	33	Little Knife Plant	1175	1172	1171	1172	1172	1172	1172	1174	1179	1183	1182	1179	1175	33
ND	34	Badlands Plant/Bowman Border	1053	1040	1079	1172	1094	1070	1060	1025	984	984	1036	1047	1048	34
ND	43 1/	Watford City East Border	1136	1126	1106	1104	1147	1147	1140	1139	1137	1142	1138	1151	1157	43
ND/MT	241	Fairview Border	1179	1198	1204	1192	1195	1203	1169	1157	1172	1153	1159	1164	1182	241
ND	260	North Tioga Transfer - Nesson Plant	1128	1160	1149	1144	1142	1134	1114	1131	1129	1116	1116	1099	1096	260
ND	261	Tioga Comp Station - Robinson Lake Plan	1170	1173	1171	1168	1166	1159	1164	1162	1172	1167	1177	1178	1179	261
ND	262	Minot Bdr - Palermo Bdr - Bismarck Stn	1188	1191	1187	1184	1181	1178	1182	1191	1195	1189	1192	1193	1190	262
ND	263	Lignite Plant	1141	1148	1125	1133	1134	1137	1137	1149	1147	1143	1149	1146	1146	263
ND	264	Epping Border	1159	1168	1168	1167	1165	1163	1156	1155	1147	1147	1153	1168	1147	264
ND	265	Tioga Comp Station - County Line Plant	1168	1172	1171	1168	1166	1159	1164	1163	1173	1168	1178	1158	1180	265
ND	266	County Line Plant	1178	1174	1176	1164	1166	1165	1161	1190	1194	1191	1194	1168	1193	266
ND	271	Bismarck Station - Cleveland Station	1185	1191	1165	1180	1179	1174	1181	1191	1195	1190	1193	1190	1186	271
ND	272	Cleveland Station - Mapleton	1184	1190	1165	1179	1178	1173	1182	1191	1195	1190	1192	1189	1185	272
ND	273	Cleveland Station - Grafton Border	1184	1189	1164	1179	1178	1173	1181	1190	1194	1190	1192	1189	1184	273
ND	550	Mandan Border / NBPL-St Anthony	1150	1148	1110	1121	1133	1131	1152	1174	1190	1181	1186	1129	1149	550
ND	610	MDU-Watford City BTU	1161	1158	1141	1140	1167	1166	1165	1170	1163	1163	1149	1182	1171	610
ND	802	NBPL - Linton	1102	1099	1101	1103	1111	1113	1110	1120	1102	1088	1082	1086	1105	802
ND	903	Hettinger Propane	2549	2549	2549	2549	2549	2549	2549	2549	2549	2549	2549	2549	2549	903
ND	600	Alliance Pipeline - Hankinson	1157	1150	1146	1148	1155	1155	1166	1166	1160	1158	1164	1158	1163	600
ND	601	Alliance Pipeline - Milnor	1157	1150	1146	1148	1155	1155	1166	1167	1161	1158	1164	1157	1158	602

1/ Values for June 2020 forward reflect the BTU from the accumulated sampler and previous values were from the chromatograph

<b>THERMAL ZONE VARIANCE DOCUMENTATION</b>		
<b>March 2021</b>		
<b><i>ZONE</i></b>	<b><i>BTU VARIANCE</i></b>	<b><i>REASON</i></b>
28	38	Operational
32	30	Operational
34	-39	Operational
43	20	Operational
263	23	Operational
271	26	Operational
272	25	Operational
273	25	Operational
550	38	Operational