

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

September 16, 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 – July 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 August 2021.
2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our suppliers for the month of July 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 July 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
Aug-21

<u>Town</u>	<u>Heat Zone</u>	<u>Therm Factor</u>
MDU-303-ALEXANDER	025	1.1325
MDU-308-ARNEGARD	025	1.1325
MDU-314-APPLE VALLEY	271	1.1598
MDU-318-BEACH	032	1.0415
MDU-319-BELFIELD	032	1.0492
MDU-323-BERTHOLD	262	1.1362
MDU-324-BEULAH	032	1.0492
MDU-327-BISMARCK	028	1.1598
MDU-330-BOWMAN	034	0.8990
MDU-337-BURLINGTON	262	1.1607
MDU-343-CARRINGTON	273	1.1578
MDU-344-CLEVELAND	272	1.1497
MDU-364-CAVALIER	273	1.1823
MDU-365-DAWSON	271	1.1516
MDU-368-DES LACS	262	1.1444
MDU-369-DICKINSON	031	1.0587
MDU-374-FT TOTTEN	273	1.1660
MDU-375-DEVILS LAKE	273	1.1660
MDU-379-BARLOW	273	1.1578
MDU-384-EPPING	264	1.1003
MDU-387-ELDRIDGE	272	1.1578
MDU-407-GLADSTONE	031	1.0587
MDU-411-GLEN ULLIN	031	1.0663
MDU-413-GOLVA	032	1.0262
MDU-416-GARRISON	262	1.1444
MDU-417-GRAFTON	273	1.1904
MDU-403-GWINNER	601	1.1399
MDU-429-HEBRON	031	1.0663
MDU-432-HETTINGER	903	2.3875
MDU-449-JAMESTOWN	272	1.1660
MDU-459-KILLDEER	033	1.1136
MDU-463-LANGDON	273	1.1578
MDU-469-LEFOR	031	1.0587
MDU-474-LIGNITE	263	1.0911
MDU-475-LINTON	802	1.0517
MDU-478-LINCOLN	028	1.1598
MDU-488-MCKENZIE	271	1.1598
MDU-494-MEDINA	271	1.1516
MDU-498-MANDAN	028	1.1598
MDU-500-MARMARTH	034	0.9057
MDU-505-MINOT	262	1.1607
MDU-510-MOTT	031	1.0587
MDU-512-MAX	262	1.1362
MDU-513-MILNOR	601	1.1399
MDU-522-NEW ENGLAND	031	1.0510
MDU-524-NEW SALEM	028	1.1353
MDU-532-NEW ROCKFORD	273	1.1578
MDU-539-PARK RIVER	273	1.1823
MDU-540-PALERMO	262	1.1362

MDU-558-RAY	264	1.1003
MDU-561-REGENT	031	1.0510
MDU-563-RHAME	034	0.8923
MDU-564-RICHARDTON	031	1.0510
MDU-568-ROSS	261	1.1206
MDU-572-RUTHVILLE	262	1.1607
MDU-574-SANBORN	272	1.1660
MDU-583-SENTINEL BUTTE	032	1.0415
MDU-588-SOUTH HEART	031	1.0510
MDU-717-SPIRITWOOD	272	1.1660
MDU-590-SPRINGBROOK	264	1.1003
MDU-591-STANLEY	261	1.1287
MDU-593-STEELE	271	1.1516
MDU-594-STERLING	028	1.1598
MDU-598-SHEYENNE	273	1.1660
MDU-605-SURREY	262	1.1607
MDU-610-TAPPEN	271	1.1516
MDU-611-TAYLOR	031	1.0510
MDU-616-TIOGA	260	1.0968
MDU-619-TURTLE LAKE	262	1.1444
MDU-620-TRENTON	024	1.1073
MDU-624-UNDERWOOD	262	1.1444
MDU-625-VALLEY CITY	272	1.1741
MDU-629-WALHALLA	273	1.1823
MDU-632-WATFORD CITY	610	1.0692
MDU-636-WHEELOCK	264	1.0924
MDU-637-WHITE EARTH	261	1.1287
MDU-642-WILLISTON	024	1.1073
MDU-646-WASHBURN	262	1.1526
MDU-647-WILTON	262	1.1362
MDU-664-RIVERDALE	262	1.1444
MDU-691-FAIRVIEW	241	1.1273
MDU-712-MINOT AFB	262	1.1607
MDU-718-FAIRMOUNT	600	1.1376
MDU-732-NEKOMA	273	1.1578
MDU-732-MSR SITE	273	1.1578

Source Daily Summary

July 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	0.7118	1172.9	1193.7	1189.4	0.414	3.408	70.627	22.843	2.548	0.056	0.096	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1411.77
2	0.7445	1198.9	1220.1	1215.5	1.339	3.494	66.283	25.055	3.386	0.141	0.272	0.016	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1410.63
3	0.7491	1206.9	1228.3	1223.5	1.321	3.459	65.351	26.055	3.356	0.144	0.283	0.017	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1415.77
4	0.7481	1205.1	1226.5	1221.7	1.321	3.477	65.651	25.627	3.469	0.144	0.278	0.017	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1414.55
5	0.7483	1206.2	1227.6	1223.1	1.327	3.418	65.596	25.769	3.435	0.144	0.280	0.017	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1415.69
6	0.7544	1216.9	1238.4	1234.2	1.312	3.362	64.925	25.923	4.052	0.134	0.261	0.016	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1422.26
7	0.7420	1195.2	1216.4	1212.1	1.345	3.471	66.603	24.952	3.193	0.137	0.267	0.017	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1408.71
8	0.7391	1190.1	1211.2	1206.9	1.351	3.498	67.123	24.477	3.115	0.137	0.267	0.017	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1405.48
9	0.7368	1185.4	1206.4	1202.1	1.360	3.561	67.664	23.779	3.194	0.140	0.271	0.017	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1402.06
10	0.7408	1192.3	1213.4	1209.0	1.348	3.533	66.906	24.546	3.205	0.145	0.284	0.017	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1406.38
11	0.7434	1196.6	1217.8	1213.3	1.345	3.516	66.645	24.606	3.381	0.158	0.311	0.020	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1409.01
12	0.7428	1196.1	1217.2	1212.9	1.348	3.489	66.363	25.285	3.049	0.146	0.287	0.018	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1408.98
13	0.7420	1194.7	1215.9	1211.5	1.348	3.501	66.444	25.241	3.022	0.141	0.274	0.017	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1408.12
14	0.7417	1194.4	1215.6	1211.0	1.335	3.506	66.682	24.864	3.151	0.144	0.280	0.020	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1408.01
15	0.7257	1188.3	1209.3	1204.9	0.652	3.418	68.968	23.535	3.056	0.116	0.230	0.013	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1416.36
16	0.7192	1184.8	1205.8	1201.4	0.403	3.394	70.095	22.627	3.124	0.111	0.224	0.012	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1418.60
17	0.7288	1189.3	1210.3	1205.8	0.777	3.452	68.821	23.200	3.348	0.129	0.245	0.015	0.012	0.000	0.000	0.000	0.000	0.000	0.000	1414.56
18	0.7262	1185.5	1206.5	1202.0	0.803	3.407	68.751	23.854	2.841	0.109	0.211	0.012	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1412.57
19	0.7271	1184.2	1205.2	1200.6	0.776	3.600	69.490	22.114	3.545	0.148	0.292	0.018	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1410.16
20	0.7345	1195.5	1216.7	1212.4	0.923	3.386	67.752	24.279	3.231	0.134	0.265	0.016	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1416.46
21	0.7181	1186.4	1207.4	1203.1	0.373	3.242	69.932	23.284	2.875	0.092	0.183	0.010	0.009	0.000	0.000	0.000	0.000	0.000	0.000	1421.61
22	0.7039	1172.7	1193.5	1189.3	0.045	3.240	71.733	22.419	2.421	0.048	0.086	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1419.26
23	0.7231	1184.5	1205.5	1201.2	0.686	3.350	69.128	23.756	2.782	0.095	0.185	0.010	0.009	0.000	0.000	0.000	0.000	0.000	0.000	1414.51
24	0.7463	1201.9	1223.2	1218.7	1.337	3.480	65.888	25.542	3.276	0.148	0.293	0.019	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1412.49
25	0.7461	1202.9	1224.2	1219.6	1.289	3.468	66.122	25.152	3.481	0.152	0.300	0.019	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1413.88
26	0.7124	1177.2	1198.1	1193.8	0.359	3.289	70.514	23.114	2.531	0.064	0.117	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1416.29
27	0.7052	1173.6	1194.4	1190.2	0.037	3.322	71.337	22.789	2.425	0.035	0.053	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1419.03
28	0.7036	1172.4	1193.2	1189.1	0.034	3.253	71.583	22.699	2.337	0.035	0.056	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1419.15
29	0.6991	1164.2	1184.8	1180.8	0.042	3.317	72.317	22.087	2.146	0.034	0.055	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1413.75
30	0.6982	1163.0	1183.6	1179.4	0.041	3.312	72.321	22.224	2.046	0.024	0.032	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1413.16
31	0.7305	1191.3	1212.4	1208.1	0.854	3.374	68.067	24.372	3.008	0.103	0.198	0.012	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1415.37
Avg	0.7301	1189.0	1210.4	1206.0	0.879	3.419	68.248	24.067	3.033	0.113	0.217	0.013	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1413.37

Source Daily Summary

July 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	0.6997	1144.4	1164.7	1161.0	0.951	3.185	73.831	19.348	2.361	0.092	0.200	0.014	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1389.16
2	0.6992	1144.4	1164.7	1161.0	0.943	3.154	74.000	19.158	2.411	0.095	0.205	0.015	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1389.59
3	0.7001	1144.8	1165.1	1161.5	0.937	3.222	73.842	19.202	2.463	0.095	0.206	0.015	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1389.24
4	0.6994	1143.5	1163.8	1160.1	0.951	3.212	73.966	19.121	2.415	0.095	0.207	0.015	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1388.36
5	0.7009	1142.4	1162.6	1159.1	0.995	3.359	73.666	19.232	2.411	0.096	0.210	0.015	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1385.50
6	0.6984	1142.0	1162.2	1158.7	0.966	3.192	74.049	19.168	2.302	0.093	0.199	0.014	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1387.45
7	0.6998	1143.2	1163.5	1160.0	0.959	3.262	73.863	19.159	2.431	0.094	0.202	0.014	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1387.55
8	0.7049	1146.5	1166.8	1163.2	0.961	3.532	73.114	19.375	2.639	0.107	0.234	0.017	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1386.51
9	0.7021	1144.5	1164.7	1161.1	0.964	3.390	73.507	19.281	2.515	0.100	0.213	0.014	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1386.83
10	0.7044	1151.5	1171.9	1168.2	1.017	3.097	73.046	20.079	2.418	0.097	0.212	0.016	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1393.05
11	0.7077	1154.3	1174.7	1171.1	1.023	3.226	72.554	20.259	2.573	0.104	0.227	0.016	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1393.22
12	0.7074	1154.7	1175.2	1171.5	1.038	3.148	72.506	20.508	2.443	0.100	0.223	0.016	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1394.05
13	0.7074	1154.6	1175.1	1171.4	1.025	3.179	72.468	20.541	2.426	0.101	0.225	0.016	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1393.86
14	0.7069	1154.8	1175.2	1171.5	1.033	3.113	72.514	20.618	2.366	0.099	0.222	0.017	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1394.54
15	0.7082	1157.2	1177.7	1173.9	1.025	3.095	72.414	20.610	2.477	0.105	0.236	0.018	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1396.20
16	0.7093	1157.5	1178.0	1174.2	1.025	3.181	72.369	20.402	2.616	0.112	0.254	0.019	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1395.46
17	0.7090	1156.4	1176.8	1173.1	1.020	3.231	72.366	20.399	2.585	0.111	0.248	0.018	0.022	0.000	0.000	0.000	0.000	0.000	0.000	1394.37
18	0.7050	1155.4	1175.9	1172.0	1.028	2.897	72.951	20.415	2.333	0.102	0.231	0.019	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1397.22
19	0.7025	1152.1	1172.5	1168.8	1.022	2.878	73.168	20.444	2.168	0.089	0.198	0.015	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1395.69
20	0.7044	1152.3	1172.7	1169.0	1.024	3.043	73.001	20.241	2.331	0.099	0.223	0.017	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1393.98
21	0.7059	1153.9	1174.3	1170.6	1.022	3.086	72.757	20.377	2.394	0.100	0.226	0.017	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1394.49
22	0.7063	1155.5	1176.0	1172.3	1.021	3.029	72.716	20.454	2.410	0.102	0.230	0.018	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1396.01
23	0.7076	1155.9	1176.4	1172.7	1.014	3.129	72.535	20.448	2.502	0.103	0.230	0.017	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1395.28
24	0.7068	1154.3	1174.7	1170.9	1.009	3.172	72.620	20.372	2.460	0.102	0.227	0.017	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1393.95
25	0.7052	1153.6	1174.1	1170.3	1.012	3.049	72.925	20.233	2.419	0.100	0.224	0.017	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1394.84
26	0.7054	1152.9	1173.3	1169.5	1.021	3.102	72.897	20.184	2.435	0.101	0.223	0.017	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1393.73
27	0.7110	1156.8	1177.3	1173.5	0.994	3.425	72.141	20.268	2.738	0.121	0.271	0.020	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1392.99
28	0.7089	1156.1	1176.6	1172.8	0.997	3.272	72.358	20.375	2.604	0.111	0.244	0.018	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1394.17
29	0.7053	1154.8	1175.2	1171.5	1.021	2.978	72.937	20.266	2.446	0.099	0.218	0.017	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1396.09
30	0.7093	1157.8	1178.3	1174.5	1.013	3.183	72.329	20.444	2.654	0.106	0.235	0.017	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1395.80
31	0.7069	1155.5	1175.9	1172.2	1.020	3.084	72.583	20.528	2.426	0.098	0.222	0.017	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1395.40
Avg	0.7050	1152.0	1172.1	1168.4	1.002	3.165	72.967	20.049	2.457	0.101	0.223	0.017	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1392.73

Gas Composition and Properties

Effective July 1, 2021

Source #: 0602225
Name: WATFORD CITY WEST BORDER

Component	Mole %	Liquid Content	Mass %
Carbon Dioxide, CO2	1.2633		2.6173
Nitrogen, N2	3.7839		4.9901
Methane, C1	69.7559		52.6817
Ethane, C2	20.1656	5.3977	28.5454
Propane, C3	4.0849	1.1264	8.4797
iso-Butane, iC4	0.2449	0.0802	0.6701
n-Butane, nC4	0.5716	0.1804	1.5640
iso-Pentane, iC5	0.0547	0.0200	0.1858
n-Pentane, nC5	0.0593	0.0215	0.2014
Neo-Pentane, NeoC5			
Hexanes Plus, C6+	0.0159	0.0065	0.0645
Water, H2O			
Hydrogen Sulfide, H2S			
Oxygen, O2			
Carbon Monoxide, CO			
Hydrogen, H2			
Helium, He			
Argon, Ar			
Totals	100.0000	6.8330	100.0000

Property	Total Sample	C6 Plus Fraction
Pressure Base	14.730	
Temperature Base	60.00	
HCDP @ Sample Pressure		
Cricodentherm	16.416	
HV, Dry @ Base P, T	1202.97	
HV, Sat @ Base P, T	1182.03	
HV, Sat @ Sample P, T	1202.97	
Relative Density	0.7356	
C6+:		

Sample

Date: 07/01/2021 Pressure:
 Type: Temperature:
 Tech: Cory Scheitlin H2O: lbs/mm
 H2S: ppm

Remarks:

Analysis

Date: 07/01/2021 Instrument:
 Cylinder:
 Tech: Cory Scheitlin

Remarks:

Source Daily Summary

July 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	0.6981	1130.6	1150.6		0.819	4.078	74.304	17.663	2.822	0.092	0.195	0.013	0.014	0.000						1373.98		
2	0.6981	1131.5	1151.6		0.811	4.034	74.405	17.534	2.887	0.096	0.201	0.014	0.016	0.006							1375.21	
3	0.7004	1133.8	1153.8		0.806	4.125	74.043	17.662	3.030	0.098	0.206	0.013	0.014	0.000							1375.51	
4	0.6995	1131.3	1151.3		0.835	4.142	74.224	17.507	2.941	0.099	0.216	0.015	0.017	0.003							1373.47	
5	0.7011	1127.5	1147.5		0.909	4.418	73.865	17.540	2.935	0.098	0.208	0.013	0.014	0.001							1367.25	
6	0.6936	1125.0	1144.9		0.843	3.962	74.971	17.369	2.559	0.085	0.180	0.012	0.014	0.005							1371.63	
7	0.7024	1133.7	1153.7		0.847	4.254	73.772	17.675	3.103	0.102	0.217	0.014	0.015	0.001							1373.49	
8	0.7075	1135.5	1155.6		0.849	4.617	72.982	17.865	3.275	0.118	0.255	0.017	0.019	0.003							1370.72	
9	0.7025	1132.8	1152.8		0.844	4.321	73.665	17.793	3.029	0.104	0.215	0.013	0.014	0.003							1372.35	
10	0.7124	1149.3	1169.7		0.971	4.048	71.930	19.580	3.112	0.103	0.222	0.015	0.017	0.004							1382.77	
11	0.7180	1151.9	1172.3		0.969	4.019	71.140	19.629	3.436	0.119	0.256	0.016	0.017	0.000							1380.37	
12	0.7148	1153.5	1174.0		1.009	3.965	71.320	20.410	2.923	0.104	0.232	0.016	0.018	0.004							1385.44	
13	0.7156	1153.3	1173.8		0.978	4.096	71.264	20.237	3.027	0.111	0.250	0.017	0.018	0.002							1384.40	
14	0.7155	1154.5	1175.0		0.994	3.988	71.232	20.457	2.931	0.108	0.247	0.018	0.021	0.004							1385.95	
15	0.7149	1154.4	1174.8		0.975	3.971	71.371	20.316	2.972	0.109	0.246	0.017	0.020	0.003							1386.34	
16	0.7160	1154.4	1174.9		0.980	4.068	71.377	19.994	3.151	0.117	0.266	0.020	0.022	0.004							1385.26	
17	0.7164	1153.9	1174.3		0.970	4.155	71.345	19.879	3.216	0.120	0.271	0.019	0.021	0.004							1384.20	
18	0.7074	1148.8	1169.1		0.969	3.618	72.420	20.086	2.582	0.090	0.201	0.015	0.017	0.005							1386.94	
19	0.7054	1147.4	1167.7		0.970	3.522	72.672	20.069	2.457	0.085	0.191	0.015	0.017	0.004							1387.11	
20	0.7089	1147.3	1167.6		0.981	3.832	72.329	19.743	2.753	0.100	0.227	0.016	0.017	0.002							1383.62	
21	0.7117	1150.3	1170.7		0.977	3.915	71.860	20.014	2.867	0.102	0.229	0.016	0.017	0.002							1384.56	
22	0.7129	1153.9	1174.4		0.975	3.814	71.659	20.316	2.851	0.104	0.238	0.018	0.021	0.004							1387.70	
23	0.7141	1153.6	1174.1		0.966	3.958	71.610	19.999	3.075	0.110	0.243	0.017	0.019	0.003							1386.17	
24	0.7151	1154.4	1174.9		0.954	4.023	71.489	19.979	3.151	0.113	0.249	0.018	0.021	0.004							1386.14	
25	0.7097	1149.2	1169.6		0.958	3.824	72.303	19.645	2.907	0.103	0.225	0.016	0.018	0.002							1385.14	
26	0.7113	1150.3	1170.6		0.978	3.882	72.082	19.703	2.981	0.105	0.229	0.017	0.019	0.004							1384.85	
27	0.7254	1160.2	1180.7		0.908	4.699	70.233	19.777	3.828	0.154	0.345	0.024	0.027	0.005							1386.35	
28	0.7174	1156.4	1176.9		0.929	4.156	71.175	19.998	3.321	0.121	0.261	0.017	0.019	0.003							1386.27	
29	0.7087	1149.6	1169.9		0.976	3.684	72.266	20.051	2.690	0.093	0.205	0.015	0.018	0.004							1386.59	
30	0.7156	1154.8	1175.3		0.959	4.039	71.273	20.255	3.097	0.105	0.234	0.016	0.018	0.002							1386.11	
31	0.7143	1154.5	1174.9		0.970	3.917	71.508	20.221	3.000	0.103	0.238	0.018	0.021	0.004							1387.01	
Avg	0.7098	1146.0	1166.7		0.932	4.050	72.325	19.321	2.997	0.106	0.232	0.016	0.018	0.003							1381.71	

Source Daily Summary

July 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	0.7579	1182.2	1203.1	1199.1	0.919	6.387	65.808	20.241	5.911	0.219	0.457	0.027	0.030	0.000	0.000	0.000	0.000	0.000	0.000	1378.68
2	0.7564	1179.1	1200.0	1196.0	0.918	6.436	66.129	19.864	5.896	0.221	0.478	0.028	0.030	0.000	0.000	0.000	0.000	0.000	0.000	1376.48
3	0.7552	1177.1	1197.9	1193.8	0.918	6.441	66.420	19.560	5.883	0.226	0.493	0.029	0.031	0.000	0.000	0.000	0.000	0.000	0.000	1375.23
4	0.7550	1177.2	1198.0	1194.0	0.914	6.428	66.493	19.465	5.916	0.225	0.499	0.029	0.031	0.000	0.000	0.000	0.000	0.000	0.000	1375.47
5	0.7557	1179.3	1200.2	1196.4	0.914	6.365	66.426	19.533	5.973	0.223	0.503	0.030	0.032	0.000	0.000	0.000	0.000	0.000	0.000	1377.30
6	0.7505	1167.9	1188.6	1185.2	0.939	6.535	66.812	19.490	5.552	0.201	0.422	0.023	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1368.77
7	0.7538	1176.3	1197.1	1193.6	0.945	6.318	66.347	20.007	5.715	0.200	0.418	0.024	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1375.66
8	0.7369	1165.1	1185.8	1182.1	0.963	5.394	68.625	19.859	4.595	0.166	0.355	0.022	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1378.17
9	0.7525	1172.3	1193.1	1189.4	0.916	6.483	66.663	19.530	5.666	0.219	0.468	0.026	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1372.14
10	0.7521	1170.2	1190.9	1186.9	0.920	6.554	66.659	19.555	5.604	0.212	0.446	0.025	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1370.11
11	0.7536	1174.0	1194.8	1190.8	0.918	6.485	66.455	19.703	5.703	0.219	0.465	0.026	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1373.08
12	0.7490	1165.1	1185.7	1182.0	0.919	6.591	67.100	19.203	5.494	0.206	0.439	0.023	0.024	0.000	0.000	0.000	0.000	0.000	0.000	1366.82
13	0.7490	1168.9	1189.6	1185.9	0.929	6.327	67.167	19.457	5.393	0.211	0.462	0.026	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1371.48
14	0.7534	1173.4	1194.1	1190.5	0.918	6.503	66.612	19.457	5.731	0.227	0.493	0.028	0.030	0.000	0.000	0.000	0.000	0.000	0.000	1372.49
15	0.7560	1177.8	1198.6	1194.7	0.918	6.472	66.438	19.433	5.874	0.245	0.549	0.034	0.037	0.000	0.000	0.000	0.000	0.000	0.000	1375.26
16	0.7600	1184.9	1205.9	1201.9	0.919	6.413	66.033	19.589	6.102	0.264	0.599	0.039	0.043	0.000	0.000	0.000	0.000	0.000	0.000	1379.89
17	0.7597	1182.7	1203.6	1199.4	0.915	6.527	66.200	19.229	6.150	0.269	0.622	0.041	0.046	0.000	0.000	0.000	0.000	0.000	0.000	1377.53
18	0.7597	1182.6	1203.5	1199.3	0.915	6.531	66.200	19.225	6.151	0.269	0.622	0.041	0.046	0.000	0.000	0.000	0.000	0.000	0.000	1377.45
19	0.7313	1165.2	1185.9	1181.9	0.966	4.855	69.333	20.228	4.052	0.159	0.358	0.023	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1383.73
20	0.7123	1158.3	1178.8	1175.1	0.992	3.472	71.159	21.722	2.385	0.077	0.167	0.012	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1393.42
21	0.7417	1163.4	1184.0	1180.2	0.917	6.012	68.505	18.689	5.071	0.221	0.514	0.033	0.037	0.000	0.000	0.000	0.000	0.000	0.000	1371.64
22	0.7547	1174.7	1195.5	1191.6	0.925	6.527	66.875	18.842	5.900	0.258	0.595	0.037	0.041	0.000	0.000	0.000	0.000	0.000	0.000	1372.81
23	0.7509	1175.7	1196.5	1192.5	0.948	6.081	67.176	19.458	5.481	0.236	0.540	0.036	0.042	0.000	0.000	0.000	0.000	0.000	0.000	1377.40
24	0.7630	1189.8	1210.8	1206.7	0.927	6.382	65.655	19.816	6.265	0.268	0.603	0.040	0.045	0.000	0.000	0.000	0.000	0.000	0.000	1382.76
25	0.7603	1184.0	1205.0	1200.8	0.929	6.465	65.972	19.597	6.127	0.257	0.574	0.037	0.041	0.000	0.000	0.000	0.000	0.000	0.000	1378.66
26	0.7436	1168.7	1189.4	1185.5	0.947	5.829	68.041	19.368	5.063	0.211	0.477	0.030	0.034	0.000	0.000	0.000	0.000	0.000	0.000	1376.10
27	0.7546	1174.1	1194.9	1191.0	0.933	6.545	66.565	19.342	5.782	0.238	0.528	0.032	0.035	0.000	0.000	0.000	0.000	0.000	0.000	1372.25
28	0.7545	1176.1	1196.9	1193.0	0.935	6.410	66.667	19.366	5.757	0.243	0.546	0.036	0.040	0.000	0.000	0.000	0.000	0.000	0.000	1374.63
29	0.7597	1183.3	1204.3	1200.4	0.932	6.462	66.081	19.503	6.077	0.264	0.600	0.038	0.043	0.000	0.000	0.000	0.000	0.000	0.000	1378.30
30	0.7525	1179.1	1200.0	1196.0	0.937	6.037	66.819	19.843	5.547	0.231	0.516	0.033	0.037	0.000	0.000	0.000	0.000	0.000	0.000	1380.07
31	0.7584	1181.3	1202.3	1198.4	0.930	6.463	65.931	19.904	5.969	0.227	0.510	0.032	0.035	0.000	0.000	0.000	0.000	0.000	0.000	1377.28
Avg	0.7517	1175.0	1196.0	1192.1	0.930	6.217	66.883	19.615	5.574	0.223	0.494	0.030	0.033	0.000	0.000	0.000	0.000	0.000	0.000	1376.16

Source Daily Summary

July 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	0.7581	1179.7	1200.6	1197.0	0.930	6.538	65.892	19.873	6.018	0.222	0.471	0.027	0.029	0.000	0.000	0.000	0.000	0.000	1375.68	
2	0.7576	1178.5	1199.4	1195.8	0.931	6.564	66.186	19.430	6.062	0.242	0.521	0.031	0.033	0.000	0.000	0.000	0.000	0.000	1374.68	
3	0.7566	1177.3	1198.2	1194.5	0.924	6.554	66.298	19.376	6.064	0.223	0.499	0.030	0.032	0.000	0.000	0.000	0.000	0.000	1374.21	
4	0.7572	1178.9	1199.7	1196.1	0.931	6.507	66.223	19.488	6.038	0.232	0.515	0.031	0.034	0.000	0.000	0.000	0.000	0.000	1375.43	
5	0.7528	1168.8	1189.5	1185.9	0.952	6.678	66.536	19.429	5.707	0.208	0.437	0.025	0.027	0.000	0.000	0.000	0.000	0.000	1367.71	
6	0.7602	1182.7	1203.7	1200.2	0.944	6.526	65.611	20.023	6.146	0.224	0.469	0.028	0.029	0.000	0.000	0.000	0.000	0.000	1377.31	
7	0.7574	1179.3	1200.2	1196.6	0.926	6.501	66.085	19.736	5.948	0.236	0.507	0.029	0.032	0.000	0.000	0.000	0.000	0.000	1375.83	
8	0.7545	1172.4	1193.2	1189.6	0.926	6.655	66.416	19.425	5.807	0.229	0.485	0.027	0.029	0.000	0.000	0.000	0.000	0.000	1370.39	
9	0.7554	1173.2	1194.0	1190.4	0.927	6.685	66.241	19.565	5.822	0.226	0.477	0.027	0.029	0.000	0.000	0.000	0.000	0.000	1370.53	
10	0.7530	1169.8	1190.5	1186.9	0.927	6.667	66.563	19.393	5.723	0.218	0.457	0.025	0.027	0.000	0.000	0.000	0.000	0.000	1368.75	
11	0.7509	1164.9	1185.6	1182.0	0.929	6.761	66.908	19.022	5.651	0.218	0.461	0.025	0.026	0.000	0.000	0.000	0.000	0.000	1365.03	
12	0.7553	1173.5	1194.2	1190.7	0.928	6.657	66.373	19.371	5.888	0.232	0.495	0.028	0.029	0.000	0.000	0.000	0.000	0.000	1370.96	
13	0.7559	1174.8	1195.6	1192.0	0.926	6.639	66.431	19.227	5.931	0.244	0.534	0.032	0.035	0.000	0.000	0.000	0.000	0.000	1371.86	
14	0.7615	1184.7	1205.7	1202.0	0.929	6.548	65.787	19.599	6.206	0.265	0.588	0.037	0.041	0.000	0.000	0.000	0.000	0.000	1378.35	
15	0.7619	1185.8	1206.8	1203.0	0.929	6.524	65.816	19.522	6.243	0.272	0.610	0.040	0.044	0.000	0.000	0.000	0.000	0.000	1379.16	
16	0.7611	1184.7	1205.6	1201.9	0.926	6.516	65.984	19.361	6.255	0.270	0.603	0.040	0.045	0.000	0.000	0.000	0.000	0.000	1378.66	
17	0.7600	1183.2	1204.2	1200.4	0.927	6.503	65.955	19.579	6.141	0.258	0.562	0.036	0.040	0.000	0.000	0.000	0.000	0.000	1377.99	
18	0.7600	1182.1	1203.0	1199.1	0.933	6.567	66.006	19.409	6.173	0.260	0.574	0.037	0.041	0.000	0.000	0.000	0.000	0.000	1376.61	
19	0.7520	1167.8	1188.5	1184.8	0.930	6.689	67.149	18.560	5.810	0.247	0.547	0.032	0.035	0.000	0.000	0.000	0.000	0.000	1367.23	
20	0.7573	1175.9	1196.7	1193.0	0.935	6.684	66.542	18.811	6.070	0.268	0.609	0.038	0.042	0.000	0.000	0.000	0.000	0.000	1371.87	
21	0.7598	1180.7	1201.6	1197.8	0.938	6.622	66.150	19.167	6.157	0.272	0.612	0.039	0.043	0.000	0.000	0.000	0.000	0.000	1375.17	
22	0.7640	1188.1	1209.2	1205.4	0.939	6.566	65.418	19.808	6.328	0.269	0.590	0.038	0.043	0.000	0.000	0.000	0.000	0.000	1379.97	
23	0.7651	1190.1	1211.2	1207.4	0.942	6.536	65.300	19.875	6.396	0.272	0.595	0.039	0.044	0.000	0.000	0.000	0.000	0.000	1381.38	
24	0.7581	1177.0	1197.8	1194.1	0.940	6.683	66.225	19.213	6.054	0.253	0.556	0.035	0.040	0.000	0.000	0.000	0.000	0.000	1372.41	
25	0.7578	1176.1	1197.0	1193.2	0.942	6.703	66.237	19.238	5.981	0.255	0.567	0.035	0.040	0.000	0.000	0.000	0.000	0.000	1371.72	
26	0.7611	1182.7	1203.7	1199.9	0.943	6.612	65.807	19.542	6.180	0.262	0.576	0.036	0.040	0.000	0.000	0.000	0.000	0.000	1376.40	
27	0.7598	1178.9	1199.8	1196.0	0.934	6.735	66.111	19.113	6.151	0.268	0.604	0.039	0.044	0.000	0.000	0.000	0.000	0.000	1373.11	
28	0.7609	1181.5	1202.4	1198.6	0.945	6.665	65.946	19.299	6.185	0.271	0.607	0.039	0.043	0.000	0.000	0.000	0.000	0.000	1375.12	
29	0.7589	1179.1	1200.0	1196.3	0.942	6.628	65.952	19.600	6.035	0.242	0.530	0.033	0.037	0.000	0.000	0.000	0.000	0.000	1374.19	
30	0.7633	1187.6	1208.6	1204.9	0.943	6.524	65.146	20.402	6.174	0.224	0.514	0.034	0.037	0.000	0.000	0.000	0.000	0.000	1380.09	
31	0.7630	1188.1	1209.1	1205.3	0.953	6.451	65.183	20.516	6.063	0.226	0.530	0.037	0.041	0.000	0.000	0.000	0.000	0.000	1380.88	
Avg	0.7584	1179.0	1199.8	1196.2	0.935	6.603	66.080	19.483	6.045	0.245	0.539	0.033	0.037	0.000	0.000	0.000	0.000	0.000	1374.47	

Source Daily Summary

July 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	0.7015	1142.9	1163.1	1159.8	1.008	3.370	73.243	19.856	2.276	0.069	0.151	0.012	0.015	0.000	0.000	0.000	0.000	0.000	1385.41	
2	0.7027	1145.7	1166.0	1162.7	0.984	3.342	73.017	20.090	2.334	0.068	0.144	0.010	0.012	0.000	0.000	0.000	0.000	0.000	1387.71	
3	0.7024	1146.4	1166.7	1163.2	0.955	3.321	73.332	19.573	2.560	0.076	0.155	0.012	0.015	0.000	0.000	0.000	0.000	0.000	1388.68	
4	0.7040	1148.8	1169.2	1165.9	0.952	3.323	73.000	19.880	2.601	0.075	0.148	0.010	0.012	0.000	0.000	0.000	0.000	0.000	1390.20	
5	0.7028	1145.4	1165.7	1162.2	0.987	3.362	73.349	19.436	2.599	0.078	0.161	0.012	0.015	0.000	0.000	0.000	0.000	0.000	1387.19	
6	0.7040	1143.0	1163.2	1159.9	1.117	3.432	72.994	19.775	2.419	0.077	0.163	0.011	0.013	0.000	0.000	0.000	0.000	0.000	1383.13	
7	0.7018	1141.8	1162.0	1158.5	1.051	3.393	73.415	19.483	2.383	0.081	0.169	0.011	0.014	0.000	0.000	0.000	0.000	0.000	1383.76	
8	0.7015	1142.6	1162.8	1159.5	1.023	3.360	73.434	19.479	2.465	0.072	0.147	0.009	0.012	0.000	0.000	0.000	0.000	0.000	1385.11	
9	0.7024	1143.8	1164.1	1160.7	1.015	3.381	73.261	19.648	2.438	0.073	0.156	0.012	0.015	0.000	0.000	0.000	0.000	0.000	1385.68	
10	0.7039	1145.5	1165.8	1162.4	1.041	3.382	73.045	19.771	2.493	0.081	0.166	0.010	0.012	0.000	0.000	0.000	0.000	0.000	1386.24	
11	0.7021	1143.6	1163.8	1160.4	1.026	3.358	73.252	19.737	2.376	0.072	0.155	0.011	0.014	0.000	0.000	0.000	0.000	0.000	1385.62	
12	0.7035	1145.2	1165.5	1162.2	1.029	3.382	72.920	20.063	2.363	0.071	0.150	0.010	0.012	0.000	0.000	0.000	0.000	0.000	1386.34	
13	0.7067	1147.8	1168.1	1164.8	1.053	3.489	72.445	20.297	2.425	0.081	0.181	0.013	0.016	0.000	0.000	0.000	0.000	0.000	1386.27	
14	0.7075	1148.5	1168.8	1165.5	1.025	3.566	72.217	20.506	2.383	0.084	0.191	0.013	0.015	0.000	0.000	0.000	0.000	0.000	1386.32	
15	0.7076	1148.8	1169.1	1165.7	1.036	3.536	72.154	20.660	2.319	0.081	0.185	0.013	0.016	0.000	0.000	0.000	0.000	0.000	1386.60	
16	0.7072	1148.5	1168.9	1165.5	1.020	3.536	72.198	20.636	2.326	0.079	0.177	0.012	0.015	0.000	0.000	0.000	0.000	0.000	1386.75	
17	0.7058	1146.1	1166.4	1163.1	1.028	3.548	72.519	20.245	2.379	0.080	0.176	0.012	0.015	0.000	0.000	0.000	0.000	0.000	1385.12	
18	0.7058	1146.0	1166.3	1163.0	1.028	3.548	72.530	20.234	2.378	0.080	0.176	0.012	0.015	0.000	0.000	0.000	0.000	0.000	1385.07	
19	0.7056	1147.3	1167.6	1164.2	1.003	3.485	72.563	20.310	2.350	0.080	0.179	0.014	0.017	0.000	0.000	0.000	0.000	0.000	1386.81	
20	0.7058	1147.4	1167.7	1164.4	1.008	3.494	72.627	20.130	2.438	0.085	0.189	0.014	0.016	0.000	0.000	0.000	0.000	0.000	1386.71	
21	0.7036	1143.7	1163.9	1160.5	1.022	3.495	72.989	19.851	2.348	0.081	0.184	0.014	0.017	0.000	0.000	0.000	0.000	0.000	1384.32	
22	0.7043	1145.4	1165.7	1162.4	1.015	3.466	72.719	20.236	2.295	0.075	0.168	0.012	0.014	0.000	0.000	0.000	0.000	0.000	1385.80	
23	0.7060	1148.5	1168.8	1165.4	1.015	3.438	72.471	20.450	2.340	0.079	0.177	0.013	0.016	0.000	0.000	0.000	0.000	0.000	1387.79	
24	0.7051	1147.4	1167.7	1164.4	1.000	3.446	72.599	20.338	2.346	0.077	0.168	0.012	0.014	0.000	0.000	0.000	0.000	0.000	1387.35	
25	0.7043	1146.3	1166.6	1163.2	0.992	3.446	72.839	20.043	2.403	0.078	0.171	0.013	0.016	0.000	0.000	0.000	0.000	0.000	1386.81	
26	0.7044	1147.1	1167.5	1164.1	0.986	3.413	72.813	20.090	2.429	0.078	0.165	0.011	0.013	0.000	0.000	0.000	0.000	0.000	1387.78	
27	0.7029	1144.0	1164.3	1160.8	1.008	3.430	73.188	19.659	2.430	0.081	0.174	0.013	0.017	0.000	0.000	0.000	0.000	0.000	1385.39	
28	0.7048	1146.4	1166.7	1163.4	0.957	3.538	72.677	20.160	2.384	0.081	0.175	0.012	0.015	0.000	0.000	0.000	0.000	0.000	1386.52	
29	0.7042	1147.3	1167.6	1164.2	0.929	3.470	72.754	20.195	2.384	0.078	0.165	0.012	0.014	0.000	0.000	0.000	0.000	0.000	1388.15	
30	0.7055	1147.8	1168.1	1164.7	1.002	3.452	72.638	20.203	2.420	0.080	0.175	0.013	0.016	0.000	0.000	0.000	0.000	0.000	1387.44	
31	0.7056	1148.0	1168.3	1165.0	0.999	3.457	72.478	20.458	2.341	0.076	0.166	0.011	0.013	0.000	0.000	0.000	0.000	0.000	1387.64	
Avg	0.7044	1146.0	1166.3	1163.0	1.010	3.441	72.828	20.048	2.401	0.078	0.168	0.012	0.014	0.000	0.000	0.000	0.000	0.000	1386.44	

Source Daily Summary

July 2021

Number: 043

Pressure Base: 14.730

Contract Day: 1

Name: BISMARCK STN-CLEVELAND 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	0.7566	1179.5	1200.4	1195.8	0.912	6.442	66.179	19.718	5.985	0.226	0.482	0.027	0.028	0.000	0.000	0.000	0.000	0.000	1376.74	
2	0.7556	1177.0	1197.8	1193.0	0.910	6.501	66.581	19.155	6.005	0.246	0.537	0.032	0.033	0.000	0.000	0.000	0.000	0.000	1374.64	
3	0.7565	1179.4	1200.3	1195.5	0.905	6.445	66.346	19.425	6.101	0.224	0.496	0.029	0.029	0.000	0.000	0.000	0.000	0.000	1376.73	
4	0.7559	1177.9	1198.8	1194.1	0.910	6.473	66.528	19.233	6.005	0.244	0.542	0.032	0.033	0.000	0.000	0.000	0.000	0.000	1375.49	
5	0.7507	1167.3	1188.0	1183.5	0.937	6.591	66.844	19.340	5.608	0.205	0.428	0.023	0.023	0.000	0.000	0.000	0.000	0.000	1367.86	
6	0.7587	1182.5	1203.4	1199.2	0.926	6.436	65.835	19.987	6.058	0.225	0.477	0.028	0.029	0.000	0.000	0.000	0.000	0.000	1378.27	
7	0.7562	1179.4	1200.3	1195.9	0.907	6.410	66.289	19.685	5.902	0.238	0.509	0.029	0.030	0.000	0.000	0.000	0.000	0.000	1377.02	
8	0.7524	1171.1	1191.8	1187.5	0.905	6.568	66.674	19.222	6.076	0.191	0.334	0.013	0.017	0.000	0.000	0.000	0.000	0.000	1370.73	
9	0.7539	1173.1	1193.8	1189.5	0.909	6.586	66.406	19.454	6.055	0.199	0.363	0.013	0.016	0.000	0.000	0.000	0.000	0.000	1371.66	
10	0.7514	1169.6	1190.4	1186.1	0.909	6.561	66.756	19.240	5.992	0.189	0.326	0.013	0.015	0.000	0.000	0.000	0.000	0.000	1369.94	
11	0.7495	1164.8	1185.5	1181.2	0.909	6.669	67.122	18.883	5.783	0.208	0.390	0.018	0.019	0.000	0.000	0.000	0.000	0.000	1366.09	
12	0.7557	1176.6	1197.5	1193.1	0.909	6.530	66.444	19.355	5.941	0.242	0.520	0.030	0.031	0.000	0.000	0.000	0.000	0.000	1374.20	
13	0.7551	1175.6	1196.4	1191.9	0.908	6.545	66.608	19.178	5.899	0.250	0.546	0.033	0.034	0.000	0.000	0.000	0.000	0.000	1373.42	
14	0.7607	1185.6	1206.6	1202.0	0.910	6.448	66.006	19.482	6.188	0.274	0.610	0.039	0.042	0.000	0.000	0.000	0.000	0.000	1380.06	
15	0.7607	1185.8	1206.8	1202.1	0.910	6.433	66.078	19.384	6.215	0.277	0.620	0.040	0.043	0.000	0.000	0.000	0.000	0.000	1380.31	
16	0.7590	1183.4	1204.4	1199.8	0.907	6.425	66.295	19.271	6.151	0.269	0.602	0.039	0.042	0.000	0.000	0.000	0.000	0.000	1379.06	
17	0.7579	1181.7	1202.6	1197.9	0.908	6.433	66.283	19.417	6.064	0.258	0.565	0.035	0.037	0.000	0.000	0.000	0.000	0.000	1378.04	
18	0.7559	1177.0	1197.8	1193.1	0.914	6.521	66.424	19.376	5.930	0.244	0.526	0.031	0.033	0.000	0.000	0.000	0.000	0.000	1374.41	
19	0.7513	1168.8	1189.5	1184.7	0.910	6.598	67.364	18.427	5.796	0.257	0.577	0.035	0.037	0.000	0.000	0.000	0.000	0.000	1368.94	
20	0.7559	1175.8	1196.7	1191.9	0.917	6.582	66.728	18.782	6.089	0.260	0.576	0.032	0.034	0.000	0.000	0.000	0.000	0.000	1373.06	
21	0.7596	1182.9	1203.8	1198.8	0.919	6.495	66.247	19.207	6.143	0.278	0.627	0.040	0.043	0.000	0.000	0.000	0.000	0.000	1377.88	
22	0.7639	1190.3	1211.4	1206.4	0.920	6.451	65.556	19.735	6.364	0.278	0.613	0.040	0.043	0.000	0.000	0.000	0.000	0.000	1382.56	
23	0.7641	1190.5	1211.6	1206.6	0.922	6.454	65.531	19.746	6.373	0.278	0.613	0.040	0.043	0.000	0.000	0.000	0.000	0.000	1382.59	
24	0.7570	1177.5	1198.4	1193.6	0.921	6.580	66.461	19.111	6.014	0.260	0.578	0.036	0.039	0.000	0.000	0.000	0.000	0.000	1373.97	
25	0.7563	1175.9	1196.8	1191.9	0.924	6.613	66.540	19.050	5.958	0.261	0.580	0.036	0.038	0.000	0.000	0.000	0.000	0.000	1372.70	
26	0.7602	1183.0	1203.9	1199.0	0.923	6.543	66.086	19.309	6.184	0.272	0.603	0.038	0.042	0.000	0.000	0.000	0.000	0.000	1377.41	
27	0.7582	1178.4	1199.3	1194.6	0.921	6.633	66.336	19.098	6.074	0.266	0.592	0.038	0.041	0.000	0.000	0.000	0.000	0.000	1373.97	
28	0.7614	1185.5	1206.5	1201.6	0.926	6.500	65.893	19.511	6.202	0.275	0.612	0.039	0.042	0.000	0.000	0.000	0.000	0.000	1379.22	
29	0.7574	1179.1	1199.9	1195.1	0.926	6.523	66.110	19.666	5.961	0.237	0.514	0.031	0.032	0.000	0.000	0.000	0.000	0.000	1375.42	
30	0.7647	1192.6	1213.7	1208.7	0.925	6.377	65.022	20.608	6.213	0.234	0.544	0.037	0.041	0.000	0.000	0.000	0.000	0.000	1384.57	
31	0.7628	1190.9	1212.0	1207.0	0.932	6.300	65.316	20.490	6.098	0.234	0.551	0.038	0.041	0.000	0.000	0.000	0.000	0.000	1384.22	
Avg	0.7573	1179.0	1200.2	1195.5	0.916	6.505	66.287	19.405	6.046	0.245	0.531	0.032	0.034	0.000	0.000	0.000	0.000	0.000	1375.84	

Source Daily Summary

July 2021

Number: 063

Pressure Base: 14.730

Contract Day: 1

Name: CLEVELAND STN-MAPLETON

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	0.7587	1181.8	1202.8	1199.4	0.922	6.479	65.834	19.972	6.013	0.233	0.487	0.030	0.031	0.000	0.000	0.000	0.000	0.000	1377.55	
2	0.7567	1178.9	1199.8	1196.5	0.920	6.472	66.106	19.788	5.968	0.221	0.469	0.027	0.028	0.000	0.000	0.000	0.000	0.000	1376.03	
3	0.7562	1177.4	1198.3	1194.9	0.918	6.516	66.439	19.281	6.011	0.243	0.526	0.032	0.033	0.000	0.000	0.000	0.000	0.000	1374.69	
4	0.7563	1178.2	1199.0	1195.7	0.916	6.483	66.337	19.433	6.058	0.223	0.490	0.029	0.030	0.000	0.000	0.000	0.000	0.000	1375.51	
5	0.7560	1177.5	1198.4	1195.0	0.919	6.491	66.457	19.314	5.988	0.239	0.528	0.032	0.033	0.000	0.000	0.000	0.000	0.000	1374.97	
6	0.7511	1167.4	1188.1	1184.7	0.945	6.616	66.792	19.335	5.628	0.207	0.429	0.024	0.025	0.000	0.000	0.000	0.000	0.000	1367.53	
7	0.7583	1181.1	1202.0	1198.6	0.935	6.474	65.875	19.928	6.045	0.222	0.465	0.028	0.029	0.000	0.000	0.000	0.000	0.000	1376.94	
8	0.7560	1178.5	1199.4	1196.0	0.918	6.440	66.272	19.695	5.880	0.236	0.500	0.029	0.030	0.000	0.000	0.000	0.000	0.000	1376.05	
9	0.7527	1170.8	1191.5	1188.3	0.916	6.602	66.669	19.342	5.708	0.228	0.479	0.027	0.028	0.000	0.000	0.000	0.000	0.000	1370.09	
10	0.7530	1170.6	1191.3	1188.0	0.917	6.644	66.590	19.369	5.737	0.223	0.467	0.026	0.027	0.000	0.000	0.000	0.000	0.000	1369.55	
11	0.7519	1169.6	1190.3	1187.0	0.919	6.594	66.738	19.341	5.679	0.220	0.458	0.025	0.026	0.000	0.000	0.000	0.000	0.000	1369.46	
12	0.7494	1163.9	1184.5	1181.2	0.921	6.704	67.107	18.976	5.572	0.216	0.454	0.025	0.025	0.000	0.000	0.000	0.000	0.000	1365.05	
13	0.7558	1176.1	1196.9	1193.6	0.920	6.561	66.364	19.427	5.921	0.239	0.509	0.030	0.031	0.000	0.000	0.000	0.000	0.000	1373.47	
14	0.7548	1174.3	1195.1	1191.7	0.916	6.583	66.606	19.174	5.874	0.246	0.535	0.032	0.034	0.000	0.000	0.000	0.000	0.000	1372.22	
15	0.7605	1184.6	1205.6	1202.1	0.918	6.484	65.973	19.513	6.167	0.270	0.596	0.039	0.042	0.000	0.000	0.000	0.000	0.000	1379.06	
16	0.7612	1186.0	1207.0	1203.5	0.920	6.455	65.962	19.469	6.223	0.276	0.612	0.040	0.043	0.000	0.000	0.000	0.000	0.000	1380.07	
17	0.7591	1182.8	1203.7	1200.2	0.916	6.461	66.254	19.273	6.155	0.266	0.594	0.039	0.042	0.000	0.000	0.000	0.000	0.000	1378.24	
18	0.7577	1180.4	1201.3	1197.9	0.916	6.477	66.278	19.402	6.045	0.255	0.556	0.035	0.037	0.000	0.000	0.000	0.000	0.000	1376.80	
19	0.7561	1176.8	1197.6	1194.2	0.924	6.542	66.375	19.390	5.939	0.243	0.521	0.032	0.034	0.000	0.000	0.000	0.000	0.000	1373.98	
20	0.7504	1166.6	1187.3	1183.9	0.921	6.627	67.396	18.461	5.734	0.247	0.545	0.033	0.035	0.000	0.000	0.000	0.000	0.000	1367.28	
21	0.7557	1174.8	1195.6	1192.2	0.927	6.610	66.769	18.754	6.001	0.266	0.596	0.038	0.041	0.000	0.000	0.000	0.000	0.000	1372.07	
22	0.7584	1179.8	1200.7	1197.3	0.924	6.568	66.357	19.093	6.093	0.273	0.609	0.040	0.043	0.000	0.000	0.000	0.000	0.000	1375.43	
23	0.7642	1190.1	1211.1	1207.6	0.925	6.482	65.482	19.783	6.358	0.277	0.608	0.041	0.045	0.000	0.000	0.000	0.000	0.000	1382.09	
24	0.7642	1189.9	1210.9	1207.3	0.930	6.486	65.487	19.772	6.362	0.276	0.602	0.040	0.045	0.000	0.000	0.000	0.000	0.000	1381.84	
25	0.7574	1177.7	1198.6	1195.1	0.924	6.601	66.383	19.149	6.040	0.258	0.568	0.037	0.040	0.000	0.000	0.000	0.000	0.000	1373.88	
26	0.7566	1175.9	1196.8	1193.3	0.923	6.639	66.454	19.121	5.955	0.259	0.573	0.037	0.040	0.000	0.000	0.000	0.000	0.000	1372.51	
27	0.7601	1182.5	1203.5	1199.9	0.923	6.564	66.020	19.398	6.156	0.267	0.590	0.039	0.042	0.000	0.000	0.000	0.000	0.000	1377.02	
28	0.7587	1178.5	1199.4	1195.8	0.931	6.662	66.255	19.119	6.091	0.267	0.593	0.039	0.043	0.000	0.000	0.000	0.000	0.000	1373.60	
29	0.7611	1184.0	1204.9	1201.3	0.938	6.543	65.926	19.456	6.178	0.273	0.605	0.039	0.042	0.000	0.000	0.000	0.000	0.000	1377.75	
30	0.7576	1178.5	1199.4	1195.9	0.936	6.554	66.124	19.582	5.984	0.240	0.515	0.031	0.033	0.000	0.000	0.000	0.000	0.000	1374.64	
31	0.7629	1188.5	1209.6	1206.0	0.931	6.449	65.265	20.358	6.175	0.228	0.520	0.035	0.038	0.000	0.000	0.000	0.000	0.000	1381.47	
Avg	0.7571	1178.0	1199.0	1195.6	0.923	6.544	66.289	19.402	5.992	0.246	0.535	0.033	0.035	0.000	0.000	0.000	0.000	0.000	1374.74	

Source Daily Summary

July 2021

Number: 061

Pressure Base: 14.730

Contract Day: 1

Name: CLEVELAND STN-GRAFTON BDR

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	0.7569	1178.7	1199.6	1195.9	0.922	6.502	65.993	19.948	5.887	0.225	0.465	0.028	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1375.54
2	0.7570	1179.5	1200.3	1197.1	0.921	6.470	66.069	19.802	5.988	0.223	0.473	0.027	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1376.34
3	0.7563	1177.6	1198.4	1194.7	0.922	6.511	66.420	19.297	6.019	0.241	0.524	0.032	0.033	0.000	0.000	0.000	0.000	0.000	0.000	1374.79
4	0.7568	1179.0	1199.9	1196.7	0.920	6.477	66.279	19.462	6.077	0.227	0.499	0.030	0.031	0.000	0.000	0.000	0.000	0.000	0.000	1376.00
5	0.7565	1178.5	1199.4	1195.8	0.918	6.478	66.391	19.362	6.013	0.241	0.532	0.032	0.033	0.000	0.000	0.000	0.000	0.000	0.000	1375.68
6	0.7551	1174.8	1195.6	1192.2	0.928	6.560	66.510	19.288	5.905	0.237	0.509	0.030	0.031	0.000	0.000	0.000	0.000	0.000	0.000	1372.56
7	0.7584	1181.2	1202.2	1198.9	0.935	6.472	65.877	19.915	6.051	0.224	0.469	0.028	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1377.05
8	0.7564	1179.0	1199.9	1196.6	0.918	6.439	66.237	19.708	5.898	0.237	0.503	0.029	0.031	0.000	0.000	0.000	0.000	0.000	0.000	1376.33
9	0.7533	1171.7	1192.5	1189.3	0.915	6.599	66.631	19.330	5.746	0.232	0.491	0.028	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1370.68
10	0.7528	1170.0	1190.7	1187.3	0.919	6.653	66.630	19.326	5.727	0.223	0.469	0.026	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1369.12
11	0.7522	1170.0	1190.7	1187.5	0.920	6.591	66.715	19.344	5.695	0.221	0.462	0.025	0.026	0.000	0.000	0.000	0.000	0.000	0.000	1369.69
12	0.7496	1164.2	1184.8	1181.7	0.919	6.705	67.098	18.964	5.589	0.217	0.458	0.025	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1365.26
13	0.7563	1177.0	1197.8	1194.6	0.919	6.552	66.321	19.436	5.954	0.241	0.516	0.030	0.031	0.000	0.000	0.000	0.000	0.000	0.000	1374.07
14	0.7557	1176.0	1196.8	1193.5	0.917	6.561	66.488	19.265	5.914	0.248	0.540	0.033	0.035	0.000	0.000	0.000	0.000	0.000	0.000	1373.41
15	0.7611	1185.6	1206.5	1203.1	0.921	6.476	65.915	19.535	6.196	0.272	0.602	0.039	0.042	0.000	0.000	0.000	0.000	0.000	0.000	1379.61
16	0.7613	1186.2	1207.2	1203.7	0.920	6.454	65.955	19.466	6.231	0.276	0.615	0.040	0.043	0.000	0.000	0.000	0.000	0.000	0.000	1380.19
17	0.7591	1182.8	1203.7	1200.3	0.918	6.462	66.248	19.274	6.156	0.266	0.594	0.039	0.042	0.000	0.000	0.000	0.000	0.000	0.000	1378.20
18	0.7579	1180.6	1201.5	1198.2	0.919	6.480	66.266	19.390	6.056	0.256	0.560	0.035	0.037	0.000	0.000	0.000	0.000	0.000	0.000	1376.86
19	0.7564	1177.1	1198.0	1194.7	0.925	6.542	66.353	19.394	5.951	0.244	0.525	0.032	0.034	0.000	0.000	0.000	0.000	0.000	0.000	1374.17
20	0.7518	1168.9	1189.6	1186.2	0.921	6.621	67.228	18.542	5.806	0.253	0.559	0.035	0.037	0.000	0.000	0.000	0.000	0.000	0.000	1368.64
21	0.7569	1176.9	1197.8	1194.3	0.927	6.592	66.643	18.809	6.065	0.271	0.611	0.039	0.042	0.000	0.000	0.000	0.000	0.000	0.000	1373.46
22	0.7577	1178.5	1199.4	1195.7	0.924	6.583	66.442	19.032	6.061	0.271	0.604	0.039	0.043	0.000	0.000	0.000	0.000	0.000	0.000	1374.53
23	0.7643	1190.3	1211.4	1207.9	0.925	6.481	65.476	19.773	6.369	0.279	0.611	0.041	0.045	0.000	0.000	0.000	0.000	0.000	0.000	1382.23
24	0.7644	1190.3	1211.4	1207.9	0.927	6.485	65.458	19.785	6.377	0.277	0.605	0.041	0.045	0.000	0.000	0.000	0.000	0.000	0.000	1382.14
25	0.7578	1178.5	1199.3	1196.0	0.922	6.596	66.330	19.183	6.062	0.259	0.571	0.037	0.041	0.000	0.000	0.000	0.000	0.000	0.000	1374.40
26	0.7570	1176.5	1197.4	1194.0	0.924	6.635	66.421	19.129	5.975	0.260	0.578	0.037	0.041	0.000	0.000	0.000	0.000	0.000	0.000	1372.85
27	0.7605	1183.3	1204.2	1200.8	0.926	6.555	65.957	19.447	6.175	0.268	0.590	0.039	0.043	0.000	0.000	0.000	0.000	0.000	0.000	1377.50
28	0.7591	1179.3	1200.2	1196.6	0.929	6.653	66.213	19.146	6.113	0.268	0.596	0.040	0.043	0.000	0.000	0.000	0.000	0.000	0.000	1374.15
29	0.7615	1184.5	1205.5	1201.9	0.940	6.544	65.899	19.446	6.199	0.276	0.612	0.040	0.043	0.000	0.000	0.000	0.000	0.000	0.000	1378.01
30	0.7581	1179.3	1200.2	1196.8	0.939	6.548	66.066	19.607	6.012	0.242	0.521	0.032	0.034	0.000	0.000	0.000	0.000	0.000	0.000	1375.14
31	0.7629	1188.6	1209.7	1206.2	0.928	6.451	65.274	20.333	6.187	0.229	0.523	0.035	0.038	0.000	0.000	0.000	0.000	0.000	0.000	1381.54
Avg	0.7575	1179.0	1199.7	1196.3	0.923	6.540	66.252	19.411	6.015	0.249	0.541	0.034	0.036	0.000	0.000	0.000	0.000	0.000	0.000	1375.17

Source Daily Summary

July 2021

Number: 041

Pressure Base: 14.730

Contract Day: 1

Name: BISMARCK STN-GLEN ULLIN 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	0.7568	1179.8	1200.7	1196.7	0.912	6.444	66.161	19.718	5.999	0.227	0.484	0.028	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1376.86
2	0.7560	1177.8	1198.7	1194.6	0.911	6.488	66.513	19.221	6.021	0.246	0.536	0.032	0.033	0.000	0.000	0.000	0.000	0.000	0.000	1375.24
3	0.7561	1178.7	1199.6	1195.6	0.905	6.454	66.397	19.390	6.078	0.224	0.495	0.028	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1376.22
4	0.7560	1178.1	1198.9	1194.8	0.909	6.470	66.521	19.241	6.011	0.243	0.541	0.032	0.033	0.000	0.000	0.000	0.000	0.000	0.000	1375.62
5	0.7506	1167.2	1187.8	1183.9	0.936	6.598	66.891	19.262	5.617	0.209	0.439	0.024	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1367.74
6	0.7586	1182.2	1203.2	1199.4	0.929	6.435	65.814	20.040	6.040	0.222	0.466	0.027	0.028	0.000	0.000	0.000	0.000	0.000	0.000	1378.08
7	0.7560	1179.2	1200.1	1196.3	0.907	6.411	66.318	19.656	5.899	0.239	0.511	0.029	0.030	0.000	0.000	0.000	0.000	0.000	0.000	1376.87
8	0.7525	1171.5	1192.2	1188.3	0.906	6.558	66.612	19.292	6.108	0.176	0.319	0.012	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1371.05
9	0.7536	1172.5	1193.3	1189.4	0.908	6.587	66.468	19.397	6.055	0.198	0.357	0.013	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1371.33
10	0.7518	1170.3	1191.0	1187.1	0.909	6.559	66.706	19.278	5.992	0.193	0.335	0.012	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1370.31
11	0.7494	1164.8	1185.5	1181.5	0.910	6.663	67.100	18.919	5.797	0.199	0.377	0.017	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1366.15
12	0.7551	1175.4	1196.2	1192.2	0.909	6.549	66.528	19.279	5.915	0.241	0.519	0.029	0.030	0.000	0.000	0.000	0.000	0.000	0.000	1373.31
13	0.7551	1175.7	1196.5	1192.6	0.908	6.537	66.599	19.196	5.901	0.249	0.544	0.032	0.034	0.000	0.000	0.000	0.000	0.000	0.000	1373.58
14	0.7607	1185.7	1206.7	1202.6	0.910	6.447	65.983	19.517	6.185	0.273	0.605	0.039	0.041	0.000	0.000	0.000	0.000	0.000	0.000	1380.10
15	0.7606	1185.7	1206.7	1202.5	0.910	6.434	66.076	19.397	6.204	0.276	0.619	0.040	0.043	0.000	0.000	0.000	0.000	0.000	0.000	1380.22
16	0.7592	1183.7	1204.7	1200.5	0.907	6.427	66.278	19.266	6.166	0.270	0.605	0.039	0.042	0.000	0.000	0.000	0.000	0.000	0.000	1379.19
17	0.7581	1181.9	1202.8	1198.6	0.908	6.434	66.280	19.406	6.071	0.259	0.569	0.035	0.037	0.000	0.000	0.000	0.000	0.000	0.000	1378.14
18	0.7561	1177.4	1198.3	1194.0	0.915	6.513	66.415	19.371	5.946	0.246	0.530	0.031	0.033	0.000	0.000	0.000	0.000	0.000	0.000	1374.71
19	0.7517	1169.5	1190.2	1186.1	0.910	6.585	67.268	18.543	5.802	0.255	0.569	0.034	0.035	0.000	0.000	0.000	0.000	0.000	0.000	1369.50
20	0.7556	1175.3	1196.2	1192.0	0.917	6.589	66.791	18.711	6.083	0.261	0.580	0.033	0.035	0.000	0.000	0.000	0.000	0.000	0.000	1372.69
21	0.7585	1180.9	1201.9	1197.7	0.919	6.518	66.369	19.127	6.090	0.275	0.619	0.039	0.043	0.000	0.000	0.000	0.000	0.000	0.000	1376.54
22	0.7637	1189.9	1211.0	1206.8	0.920	6.454	65.570	19.744	6.344	0.277	0.610	0.039	0.043	0.000	0.000	0.000	0.000	0.000	0.000	1382.29
23	0.7640	1190.3	1211.4	1207.2	0.922	6.451	65.554	19.729	6.371	0.278	0.613	0.039	0.043	0.000	0.000	0.000	0.000	0.000	0.000	1382.53
24	0.7570	1177.7	1198.5	1194.5	0.921	6.576	66.443	19.134	6.020	0.259	0.574	0.036	0.038	0.000	0.000	0.000	0.000	0.000	0.000	1374.12
25	0.7567	1176.5	1197.3	1193.1	0.924	6.611	66.504	19.066	5.972	0.263	0.585	0.036	0.039	0.000	0.000	0.000	0.000	0.000	0.000	1373.02
26	0.7599	1182.7	1203.7	1199.4	0.924	6.532	66.105	19.327	6.165	0.270	0.598	0.038	0.041	0.000	0.000	0.000	0.000	0.000	0.000	1377.37
27	0.7583	1178.8	1199.6	1195.5	0.919	6.634	66.324	19.088	6.092	0.267	0.595	0.038	0.042	0.000	0.000	0.000	0.000	0.000	0.000	1374.16
28	0.7610	1184.4	1205.4	1201.2	0.927	6.523	65.979	19.412	6.179	0.277	0.620	0.040	0.043	0.000	0.000	0.000	0.000	0.000	0.000	1378.37
29	0.7576	1179.3	1200.2	1196.2	0.925	6.526	66.122	19.628	5.971	0.242	0.523	0.031	0.033	0.000	0.000	0.000	0.000	0.000	0.000	1375.51
30	0.7632	1189.8	1210.9	1206.8	0.925	6.408	65.212	20.466	6.156	0.229	0.529	0.035	0.038	0.000	0.000	0.000	0.000	0.000	0.000	1382.68
31	0.7628	1190.4	1211.5	1207.4	0.932	6.324	65.294	20.505	6.085	0.232	0.548	0.038	0.041	0.000	0.000	0.000	0.000	0.000	0.000	1383.72
Avg	0.7572	1179.0	1200.0	1196.0	0.916	6.508	66.297	19.398	6.043	0.244	0.529	0.032	0.034	0.000	0.000	0.000	0.000	0.000	0.000	1375.72

Source Daily Summary

July 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	0.7157	1142.7	1162.9	1158.9	0.936	4.817	72.206	17.577	3.984	0.147	0.297	0.018	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1371.62
2	0.6855	1112.9	1132.7	1129.0	0.950	3.773	76.891	15.395	2.682	0.093	0.193	0.011	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1364.86
3	0.6778	1106.1	1125.7	1122.0	0.948	3.468	78.255	14.593	2.433	0.094	0.185	0.012	0.012	0.000	0.000	0.000	0.000	0.000	0.000	1364.18
4	0.6703	1098.4	1117.9	1114.2	0.954	3.218	79.377	14.111	2.099	0.073	0.149	0.009	0.009	0.000	0.000	0.000	0.000	0.000	0.000	1362.34
5	0.6595	1089.7	1109.0	1105.3	0.980	2.704	81.004	13.566	1.582	0.055	0.097	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1362.45
6	0.6484	1078.6	1097.7	1094.3	0.989	2.329	82.650	12.895	1.049	0.029	0.056	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1360.01
7	0.6688	1097.6	1117.0	1113.5	0.962	3.125	79.524	14.204	1.963	0.067	0.140	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1362.71
8	0.6685	1097.8	1117.3	1113.7	0.968	3.071	79.520	14.317	1.913	0.065	0.132	0.007	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1363.35
9	0.6595	1090.3	1109.6	1106.0	0.995	2.649	80.939	13.745	1.518	0.050	0.096	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1363.16
10	0.6571	1086.0	1105.3	1101.7	0.992	2.685	81.334	13.388	1.461	0.046	0.088	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1360.33
11	0.6497	1078.2	1097.3	1093.6	0.979	2.488	82.606	12.564	1.245	0.041	0.074	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1358.20
12	0.6497	1078.9	1098.0	1094.4	0.977	2.442	82.548	12.733	1.197	0.036	0.062	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1359.12
13	0.6705	1098.6	1118.0	1114.5	0.923	3.283	79.344	14.044	2.163	0.076	0.151	0.007	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1362.20
14	0.6759	1104.4	1123.9	1120.3	0.923	3.436	78.545	14.420	2.381	0.089	0.184	0.010	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1363.90
15	0.6765	1105.3	1124.9	1121.2	0.935	3.408	78.500	14.455	2.395	0.091	0.194	0.011	0.012	0.000	0.000	0.000	0.000	0.000	0.000	1364.57
16	0.6784	1107.6	1127.2	1123.4	0.930	3.463	78.227	14.563	2.484	0.097	0.209	0.013	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1365.37
17	0.6781	1106.4	1126.0	1122.1	0.929	3.508	78.318	14.399	2.510	0.098	0.211	0.013	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1364.18
18	0.6736	1101.7	1121.2	1117.3	0.962	3.323	78.787	14.499	2.175	0.077	0.158	0.009	0.010	0.000	0.000	0.000	0.000	0.000	0.000	1362.98
19	0.6618	1089.8	1109.1	1105.2	0.951	2.954	80.674	13.523	1.702	0.060	0.119	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1360.23
20	0.6764	1103.3	1122.8	1119.0	0.941	3.517	78.542	14.258	2.435	0.092	0.192	0.011	0.012	0.000	0.000	0.000	0.000	0.000	0.000	1362.10
21	0.6940	1120.2	1140.0	1136.2	0.942	4.135	75.842	15.508	3.120	0.129	0.286	0.018	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1365.49
22	0.6842	1111.6	1131.3	1127.7	0.961	3.711	77.203	15.180	2.585	0.104	0.227	0.014	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1364.55
23	0.6870	1115.6	1135.4	1131.6	0.957	3.737	76.755	15.477	2.708	0.107	0.229	0.014	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1366.63
24	0.6830	1111.2	1130.9	1127.1	0.967	3.615	77.331	15.248	2.513	0.097	0.203	0.012	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1365.22
25	0.6768	1104.1	1123.6	1119.7	0.946	3.502	78.321	14.614	2.321	0.088	0.185	0.011	0.012	0.000	0.000	0.000	0.000	0.000	0.000	1362.65
26	0.6760	1103.4	1122.9	1119.0	0.947	3.466	78.486	14.496	2.307	0.089	0.186	0.011	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1362.60
27	0.6877	1115.7	1135.4	1131.6	0.947	3.816	76.754	15.269	2.826	0.113	0.243	0.015	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1366.03
28	0.6780	1105.4	1125.0	1121.2	0.956	3.518	78.102	14.796	2.334	0.088	0.184	0.011	0.012	0.000	0.000	0.000	0.000	0.000	0.000	1363.09
29	0.6825	1110.5	1130.2	1126.5	0.950	3.638	77.544	14.913	2.602	0.104	0.221	0.014	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1364.87
30	0.6849	1112.9	1132.6	1128.8	0.935	3.741	77.064	15.232	2.703	0.096	0.204	0.012	0.012	0.000	0.000	0.000	0.000	0.000	0.000	1365.37
31	0.6890	1119.5	1139.3	1135.5	0.930	3.730	76.472	15.637	2.875	0.099	0.226	0.015	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1369.37
Avg	0.6750	1103.0	1122.9	1119.2	0.954	3.364	78.634	14.504	2.267	0.084	0.174	0.010	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1363.67

Source Daily Summary

July 2021

Number: 051

Pressure Base: 14.730

Contract Day: 1

Name: CABIN CRK STN-BELFIELD TRSFR

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	0.6757	1115.3	1135.0	1131.6	0.180	3.886	76.879	17.096	1.850	0.037	0.065	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1377.64
2	0.6739	1108.9	1128.5	1125.1	0.326	3.878	77.496	16.289	1.865	0.046	0.090	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1371.63
3	0.6754	1111.7	1131.4	1128.0	0.431	3.689	77.397	16.405	1.922	0.050	0.096	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1373.56
4	0.6677	1103.2	1122.8	1119.4	0.452	3.452	78.806	15.418	1.733	0.045	0.083	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1370.87
5	0.6676	1101.7	1121.3	1117.9	0.397	3.615	78.545	15.747	1.580	0.038	0.070	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1369.18
6	0.6725	1114.7	1134.5	1131.0	0.470	3.184	77.613	17.070	1.567	0.033	0.057	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1380.16
7	0.6727	1116.3	1136.1	1132.7	0.431	3.164	77.566	17.143	1.602	0.031	0.058	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1381.95
8	0.6781	1119.7	1139.5	1136.1	0.600	3.199	77.076	17.069	1.889	0.051	0.104	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1380.66
9	0.6728	1114.8	1134.5	1131.2	0.653	2.920	77.831	16.932	1.527	0.042	0.085	0.004	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1380.04
10	0.6697	1113.2	1132.9	1129.5	0.647	2.743	78.298	16.797	1.401	0.036	0.071	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1381.17
11	0.6662	1108.8	1128.4	1125.0	0.634	2.699	78.886	16.379	1.304	0.031	0.059	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1379.33
12	0.6616	1104.8	1124.3	1121.0	0.632	2.516	79.644	15.993	1.138	0.026	0.046	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1379.10
13	0.6675	1109.4	1129.1	1125.7	0.588	2.853	78.777	16.174	1.484	0.039	0.077	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1378.80
14	0.6701	1110.8	1130.5	1128.0	0.431	3.689	77.397	16.405	1.922	0.050	0.096	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1373.56
15	0.6753	1115.9	1135.7	1131.0	0.470	3.184	77.613	17.070	1.567	0.033	0.057	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1380.16
16	0.6804	1121.1	1140.9	1137.4	0.653	3.253	76.945	16.875	2.039	0.068	0.149	0.009	0.010	0.000	0.000	0.000	0.000	0.000	0.000	1379.95
17	0.6820	1123.3	1143.2	1139.6	0.639	3.292	76.695	17.008	2.119	0.071	0.155	0.010	0.010	0.000	0.000	0.000	0.000	0.000	0.000	1381.01
18	0.6820	1123.3	1143.2	1139.6	0.629	3.308	76.604	17.153	2.074	0.067	0.146	0.009	0.009	0.000	0.000	0.000	0.000	0.000	0.000	1381.02
19	0.6742	1119.8	1139.6	1136.1	0.551	2.905	77.363	17.581	1.484	0.036	0.071	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1384.74
20	0.6750	1117.7	1137.5	1133.9	0.603	3.026	77.651	16.763	1.784	0.052	0.108	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1381.32
21	0.6852	1123.6	1143.5	1140.0	0.671	3.516	76.237	17.049	2.256	0.078	0.172	0.010	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1378.28
22	0.6903	1127.1	1147.0	1143.4	0.712	3.724	75.484	17.307	2.468	0.088	0.194	0.011	0.012	0.000	0.000	0.000	0.000	0.000	0.000	1377.44
23	0.6877	1123.5	1143.4	1139.7	0.730	3.675	75.999	16.855	2.438	0.087	0.191	0.012	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1375.50
24	0.6856	1122.3	1142.1	1138.5	0.737	3.541	76.228	16.943	2.287	0.078	0.167	0.010	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1376.17
25	0.6826	1119.0	1138.8	1135.2	0.750	3.435	76.737	16.652	2.175	0.073	0.157	0.009	0.010	0.000	0.000	0.000	0.000	0.000	0.000	1375.17
26	0.6786	1109.6	1129.2	1125.6	0.844	3.487	77.768	15.380	2.240	0.081	0.178	0.011	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1367.62
27	0.6714	1098.2	1117.7	1114.2	0.844	3.507	79.114	14.102	2.172	0.077	0.164	0.010	0.010	0.000	0.000	0.000	0.000	0.000	0.000	1360.86
28	0.6808	1105.6	1125.2	1121.6	0.826	3.963	77.738	14.503	2.627	0.099	0.216	0.013	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1360.54
29	0.6792	1112.0	1131.7	1128.1	0.803	3.463	77.470	15.846	2.158	0.076	0.163	0.010	0.010	0.000	0.000	0.000	0.000	0.000	0.000	1369.97
30	0.6856	1125.2	1145.2	1141.6	0.666	3.464	76.046	17.389	2.184	0.074	0.159	0.009	0.010	0.000	0.000	0.000	0.000	0.000	0.000	1379.87
31	0.6876	1127.8	1147.8	1144.2	0.694	3.455	75.782	17.505	2.319	0.071	0.154	0.009	0.010	0.000	0.000	0.000	0.000	0.000	0.000	1380.96
Avg	0.6766	1115.0	1134.9	1131.4	0.603	3.345	77.409	16.545	1.909	0.057	0.118	0.007	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1376.39

Source Daily Summary

July 2021

Number: 111

Pressure Base: 14.730

Contract Day: 1

Name: LITTLE KNIFE 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	0.6901	1161.4	1182.0	1177.6	0.000	2.714	73.185	22.817	1.248	0.013	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.51	-21.58
2	0.6893	1159.6	1180.1	1176.0	0.000	2.745	73.264	22.788	1.172	0.011	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1418.19	-22.37
3	0.6895	1159.5	1180.0	1175.6	0.000	2.774	73.204	22.830	1.161	0.011	0.019	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1417.80	-22.36
4	0.6896	1159.6	1180.1	1176.0	0.000	2.776	73.164	22.885	1.141	0.012	0.020	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1417.85	-22.36
5	0.6889	1158.7	1179.2	1175.1	0.000	2.760	73.320	22.747	1.139	0.012	0.020	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1417.52	-22.69
6	0.6893	1158.9	1179.4	1175.4	0.000	2.788	73.188	22.896	1.095	0.011	0.020	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1417.32	-22.72
7	0.6908	1161.5	1182.1	1178.1	0.000	2.765	73.006	22.985	1.208	0.013	0.022	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1419.04	-21.51
8	0.6900	1160.2	1180.8	1176.7	0.000	2.773	73.083	22.976	1.136	0.012	0.020	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1418.23	-22.20
9	0.6913	1161.6	1182.2	1177.7	0.000	2.809	72.817	23.209	1.132	0.012	0.020	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1418.59	-21.67
10	0.6918	1162.9	1183.5	1179.4	0.000	2.783	72.744	23.269	1.174	0.011	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.61	-21.21
11	0.6925	1164.0	1184.6	1180.4	0.000	2.775	72.693	23.262	1.230	0.013	0.024	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1420.28	-20.56
12	0.6909	1161.5	1182.1	1178.0	0.000	2.785	72.864	23.199	1.130	0.010	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1418.81	-21.93
13	0.6903	1160.7	1181.2	1177.0	0.000	2.780	72.993	23.085	1.104	0.013	0.023	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1418.38	-22.05
14	0.6905	1161.1	1181.7	1177.5	0.000	2.765	72.952	23.145	1.108	0.011	0.018	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1418.83	-22.06
15	0.6909	1161.8	1182.3	1178.2	0.000	2.763	72.901	23.170	1.136	0.011	0.019	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1419.20	-21.76
16	0.6914	1162.9	1183.5	1179.3	0.000	2.739	72.838	23.221	1.172	0.011	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.10	-21.36
17	0.6909	1162.3	1182.9	1178.8	0.000	2.727	72.917	23.181	1.146	0.011	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.91	-21.68
18	0.6917	1163.5	1184.1	1179.8	0.000	2.731	72.793	23.260	1.187	0.011	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.49	-21.18
19	0.6924	1165.1	1185.7	1181.3	0.000	2.708	72.788	23.144	1.325	0.014	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.61	-20.25
20	0.6953	1166.5	1187.1	1183.0	0.000	2.888	72.151	23.626	1.304	0.012	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.45	-19.35
21	0.6960	1166.6	1187.3	1183.0	0.000	2.948	72.013	23.693	1.312	0.013	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.87	-19.05
22	0.6969	1167.7	1188.3	1184.2	0.000	2.974	71.861	23.774	1.352	0.014	0.023	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1420.16	-18.46
23	0.6968	1168.2	1188.9	1184.7	0.000	2.930	71.875	23.818	1.340	0.014	0.022	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1420.96	-18.49
24	0.6971	1168.8	1189.5	1185.3	0.000	2.916	71.836	23.868	1.345	0.014	0.021	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1421.43	-18.35
25	0.6970	1169.1	1189.8	1185.5	0.000	2.896	71.884	23.803	1.378	0.015	0.023	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1421.78	-18.17
26	0.6981	1170.3	1191.0	1186.3	0.008	2.922	71.725	23.917	1.364	0.019	0.038	0.003	0.004	0.000	0.000	0.000	0.000	0.000	1421.86	-17.36
27	0.6924	1163.8	1184.4	1179.9	0.000	2.788	72.594	23.426	1.168	0.010	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.04	-21.07
28	0.6959	1167.2	1187.9	1183.3	0.000	2.904	72.232	23.381	1.402	0.025	0.050	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1420.62	-17.97
29	0.6916	1162.2	1182.8	1178.3	0.002	2.799	72.647	23.497	1.028	0.010	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.02	-21.95
30	0.6899	1160.9	1181.5	1177.2	0.000	2.720	72.981	23.262	1.013	0.009	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.21	-22.68
31	0.6913	1163.1	1183.7	1179.6	0.000	2.718	72.828	23.286	1.137	0.011	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.45	-21.49
Avg	0.6923	1163.0	1183.9	1179.6	0.000	2.802	72.688	23.272	1.203	0.012	0.021	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1419.59	-20.90

Source Daily Summary

July 2021

Number:	351	Pressure Base:	14.730	Contract Day:	1
Name:	BADLANDS 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	0.5726	961.8	978.8	975.1	0.104	3.662	95.908	0.304	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1290.47
2	0.5726	961.9	978.9	975.4	0.104	3.652	95.912	0.308	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1290.67
3	0.5724	962.1	979.1	975.3	0.104	3.623	95.956	0.295	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.13
4	0.5724	962.1	979.1	975.5	0.104	3.619	95.960	0.295	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.20
5	0.5725	962.2	979.2	975.7	0.104	3.620	95.952	0.302	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.22
6	0.5724	962.1	979.2	975.9	0.104	3.618	95.961	0.295	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.22
7	0.5724	962.0	979.0	975.6	0.105	3.630	95.949	0.295	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.00
8	0.5724	962.2	979.3	975.8	0.105	3.610	95.963	0.299	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.37
9	0.5724	962.1	979.1	975.7	0.104	3.622	95.957	0.295	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.15
10	0.5724	962.1	979.1	975.7	0.103	3.624	95.956	0.294	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.12
11	0.5724	962.1	979.1	975.5	0.103	3.620	95.960	0.294	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.19
12	0.5725	962.4	979.4	976.0	0.104	3.610	95.951	0.310	0.016	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.46
13	0.5724	962.2	979.3	975.9	0.104	3.611	95.965	0.298	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.38
14	0.5724	962.4	979.4	976.0	0.104	3.602	95.968	0.302	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.55
15	0.5731	960.6	977.6	974.0	0.104	3.780	95.789	0.304	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1288.38
16	0.5733	960.3	977.3	973.6	0.104	3.812	95.752	0.308	0.016	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1287.80
17	0.5725	962.1	979.1	975.5	0.104	3.634	95.936	0.303	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.00
18	0.5724	962.4	979.4	975.7	0.104	3.606	95.962	0.304	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.50
19	0.5724	962.3	979.3	975.5	0.103	3.608	95.967	0.298	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.45
20	0.5724	962.3	979.4	975.7	0.103	3.605	95.969	0.299	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.50
21	0.5724	962.5	979.5	975.9	0.104	3.593	95.975	0.305	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.76
22	0.5724	962.1	979.1	975.8	0.102	3.625	95.956	0.294	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.15
23	0.5724	962.3	979.3	975.9	0.103	3.614	95.957	0.302	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.38
24	0.5723	962.5	979.5	976.1	0.104	3.590	95.984	0.299	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.77
25	0.5723	962.4	979.4	975.8	0.104	3.597	95.980	0.297	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.62
26	0.5723	962.5	979.6	976.0	0.105	3.587	95.982	0.303	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1291.81
27	0.5727	963.1	980.2	976.4	0.106	3.588	95.916	0.359	0.021	0.009	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1292.11
28	0.5879	985.0	1002.4	997.2	0.165	3.589	93.494	2.403	0.253	0.028	0.022	0.022	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1303.41
29	0.5739	964.6	981.6	978.3	0.110	3.602	95.725	0.508	0.037	0.010	0.002	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1292.69
30	0.5779	969.6	986.8	982.7	0.125	3.644	95.075	1.022	0.095	0.015	0.008	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1294.79
31	0.5730	961.4	978.4	974.9	0.106	3.711	95.841	0.317	0.016	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1289.63
Avg	0.5732	963.0	980.2	976.6	0.107	3.629	95.825	0.400	0.026	0.009	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1291.61

July-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	
7/1/2021	7/2/2021	0	0		823	988	1200.7	1200.700	7/1/2021
7/2/2021	7/3/2021	0	0		761	911	1198.7	1198.700	7/2/2021
7/3/2021	7/4/2021	0	0		679	814	1199.6	1199.600	7/3/2021
7/4/2021	7/5/2021	0	0		631	757	1198.9	1198.900	7/4/2021
7/5/2021	7/6/2021	0	0		780	927	1187.8	1187.800	7/5/2021
7/6/2021	7/7/2021	1,220	1,324	1085.40	926	1,113	1203.2	1136.231	7/6/2021
7/7/2021	7/8/2021	0	0		861	1,033	1200.1	1200.100	7/7/2021
7/8/2021	7/9/2021	0	0		793	945	1192.2	1192.200	7/8/2021
7/9/2021	7/10/2021	0	0		768	916	1193.3	1193.300	7/9/2021
7/10/2021	7/11/2021	0	0		673	802	1191	1191.000	7/10/2021
7/11/2021	7/12/2021	0	0		735	872	1185.5	1185.500	7/11/2021
7/12/2021	7/13/2021	0	0		772	923	1196.2	1196.200	7/12/2021
7/13/2021	7/14/2021	2,317	2,510	1084.10	737	882	1196.5	1111.225	7/13/2021
7/14/2021	7/15/2021	0	0		761	918	1206.7	1206.700	7/14/2021
7/15/2021	7/16/2021	0	0		758	914	1206.7	1206.700	7/15/2021
7/16/2021	7/17/2021	0	0		813	980	1204.7	1204.700	7/16/2021
7/17/2021	7/18/2021	0	0		621	747	1202.8	1202.800	7/17/2021
7/18/2021	7/19/2021	0	0		653	783	1198.3	1198.300	7/18/2021
7/19/2021	7/20/2021	0	0		2,717	3,212	1190.6	1190.600	7/19/2021
7/20/2021	7/21/2021	0	0		738	883	1196.2	1196.200	7/20/2021
7/21/2021	7/22/2021	0	0		833	1,000	1201.9	1201.900	7/21/2021
7/22/2021	7/23/2021	0	0		765	927	1211	1211.000	7/22/2021
7/23/2021	7/24/2021	0	0		680	824	1211.4	1211.400	7/23/2021
7/24/2021	7/25/2021	0	0		628	753	1198.5	1198.500	7/24/2021
7/25/2021	7/26/2021	0	0		652	781	1197.3	1197.300	7/25/2021
7/26/2021	7/27/2021	0	0		699	841	1203.7	1203.700	7/26/2021
7/27/2021	7/28/2021	1,145	1,250	1092.30	705	846	1199.6	1133.190	7/27/2021
7/28/2021	7/29/2021	1,779	1,944	1092.70	735	886	1205.4	1125.649	7/28/2021
7/29/2021	7/30/2021	0	0		743	892	1200.2	1200.200	7/29/2021
7/30/2021	7/31/2021	0	0		694	840	1210.9	1210.900	7/30/2021
7/31/2021	8/1/2021	0	0		629	762	1211.5	1211.500	7/31/2021
		6,461	7,028	1088.6250	24,763	29,672	1200.0355	1190.4095	



Alliance Pipeline

DAILY ANALYSIS --- USA
 ND07MD1 --- Hankinson Sales
 July 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	1,150.584	0.6602	84.5988	9.3344	3.3059	0.3910	0.6775	0.0749	0.0606	0.0317	1.0916	0.4235	0.0101
2	1,154.079	0.6624	84.4062	9.2946	3.4977	0.4016	0.6975	0.0753	0.0628	0.0354	1.1169	0.4030	0.0092
3	1,157.646	0.6635	84.5329	9.0575	3.6485	0.4194	0.7258	0.0847	0.0723	0.0435	0.9926	0.4132	0.0095
4	1,151.756	0.6596	84.8909	8.9976	3.4285	0.3977	0.6957	0.0760	0.0625	0.0349	1.0123	0.3946	0.0092
5	1,156.648	0.6622	84.5444	9.2082	3.5593	0.4126	0.7185	0.0760	0.0650	0.0346	1.0132	0.3588	0.0094
6	1,154.880	0.6606	84.7619	9.1314	3.4975	0.4048	0.7002	0.0736	0.0643	0.0336	0.9522	0.3712	0.0093
7	1,157.335	0.6630	84.4313	9.2651	3.5905	0.4129	0.7240	0.0748	0.0633	0.0337	1.0124	0.3827	0.0093
8	1,154.697	0.6618	84.5380	9.1832	3.5451	0.4041	0.7107	0.0727	0.0588	0.0315	1.0806	0.3659	0.0095
9	1,155.222	0.6615	84.5158	9.3290	3.4981	0.3980	0.6978	0.0726	0.0585	0.0311	1.0206	0.3686	0.0100
10	1,150.817	0.6581	84.9155	9.2178	3.3527	0.3839	0.6417	0.0694	0.0544	0.0273	0.9452	0.3821	0.0099
11	1,152.013	0.6590	84.7793	9.3453	3.3191	0.3930	0.6459	0.0761	0.0602	0.0319	0.9618	0.3780	0.0095
12	1,150.948	0.6589	84.7235	9.3865	3.3057	0.3826	0.6437	0.0719	0.0561	0.0288	1.0014	0.3901	0.0096
13	1,158.770	0.6623	84.4382	9.5873	3.4735	0.4050	0.6843	0.0800	0.0638	0.0320	0.8157	0.4099	0.0102
14	1,161.187	0.6644	84.1885	9.7102	3.5154	0.4115	0.7028	0.0854	0.0693	0.0409	0.8321	0.4336	0.0104
15	1,157.385	0.6621	84.3702	9.6727	3.4196	0.3955	0.6682	0.0782	0.0632	0.0338	0.8584	0.4298	0.0104
16	1,159.567	0.6634	84.2138	9.7364	3.4961	0.4030	0.6897	0.0772	0.0618	0.0303	0.8708	0.4105	0.0102
17	1,158.422	0.6623	84.4118	9.5838	3.4753	0.4039	0.6875	0.0776	0.0630	0.0319	0.8471	0.4081	0.0099
18	1,160.411	0.6636	84.3084	9.5875	3.5310	0.4166	0.7141	0.0800	0.0654	0.0333	0.8363	0.4171	0.0102
19	1,156.168	0.6593	84.9117	9.3487	3.3803	0.3998	0.6629	0.0779	0.0652	0.0344	0.7172	0.3917	0.0102
20	1,155.786	0.6591	85.0015	9.2630	3.3555	0.4029	0.6771	0.0806	0.0672	0.0366	0.7003	0.4050	0.0103
21	1,158.233	0.6613	84.6762	9.4001	3.4439	0.4080	0.6986	0.0822	0.0702	0.0365	0.7764	0.3976	0.0102
22	1,158.063	0.6615	84.5572	9.4976	3.4648	0.4030	0.6784	0.0786	0.0665	0.0343	0.8165	0.3930	0.0100
23	1,160.550	0.6632	84.3688	9.5564	3.5482	0.4106	0.7144	0.0776	0.0650	0.0323	0.8345	0.3822	0.0101
24	1,161.216	0.6638	84.2990	9.5814	3.5629	0.4123	0.7226	0.0803	0.0669	0.0331	0.8380	0.3932	0.0103
25	1,159.166	0.6625	84.4125	9.5660	3.5125	0.4015	0.7031	0.0746	0.0618	0.0288	0.8315	0.3979	0.0099
26	1,157.384	0.6616	84.4380	9.6356	3.4548	0.3838	0.6629	0.0746	0.0616	0.0307	0.8309	0.4165	0.0106
27	1,155.390	0.6591	84.8227	9.4798	3.3607	0.3776	0.6450	0.0744	0.0623	0.0316	0.7343	0.4011	0.0106
28	1,157.102	0.6605	84.6439	9.5312	3.4206	0.3873	0.6739	0.0731	0.0610	0.0300	0.7667	0.4018	0.0105
29	1,157.642	0.6610	84.5507	9.5817	3.4566	0.3881	0.6693	0.0707	0.0591	0.0294	0.7828	0.4014	0.0103
30	1,156.269	0.6605	84.5736	9.6058	3.4119	0.3798	0.6520	0.0703	0.0585	0.0290	0.7909	0.4177	0.0104
31	1,152.887	0.6587	84.8020	9.4749	3.3307	0.3689	0.6340	0.0683	0.0544	0.0269	0.7878	0.4417	0.0105
Volume	1,156.399	0.6613	84.5674	9.4239	3.4572	0.3988	0.6847	0.0762	0.0628	0.0328	0.8868	0.3995	0.0100
Weight Avg Energy	1,156.407	0.6613	84.5671	9.4242	3.4573	0.3989	0.6847	0.0762	0.0628	0.0328	0.8867	0.3995	0.0100



Alliance Pipeline

DAILY ANALYSIS --- USA
 ND14MD1 --- Milnor Sales
 July 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	1,150.175	0.6603	84.5682	9.3442	3.3044	0.3883	0.6766	0.0740	0.0597	0.0307	1.1166	0.4270	0.0101
2	1,152.571	0.6617	84.3607	9.4714	3.4000	0.3893	0.6681	0.0727	0.0601	0.0326	1.1159	0.4200	0.0093
3	1,155.531	0.6621	84.7022	8.9882	3.5767	0.4123	0.7139	0.0834	0.0712	0.0424	0.9873	0.4128	0.0095
4	1,152.715	0.6603	84.8130	9.0358	3.4513	0.4020	0.7039	0.0769	0.0632	0.0353	1.0193	0.3903	0.0091
5	1,153.331	0.6601	84.8066	9.0575	3.5005	0.4004	0.6954	0.0704	0.0596	0.0308	1.0104	0.3589	0.0095
6	1,154.672	0.6605	84.7766	9.1282	3.4907	0.4034	0.6978	0.0738	0.0642	0.0335	0.9516	0.3708	0.0094
7	1,158.254	0.6638	84.3281	9.3205	3.6187	0.4163	0.7291	0.0748	0.0630	0.0336	1.0238	0.3828	0.0093
8	1,153.923	0.6614	84.5890	9.1519	3.5262	0.4010	0.7078	0.0722	0.0582	0.0312	1.0862	0.3667	0.0095
9	1,155.937	0.6620	84.4761	9.3376	3.5206	0.4017	0.7045	0.0728	0.0589	0.0317	1.0227	0.3636	0.0098
10	1,150.588	0.6580	84.9128	9.2423	3.3320	0.3835	0.6376	0.0701	0.0546	0.0274	0.9479	0.3820	0.0099
11	1,151.930	0.6593	84.7141	9.3684	3.3343	0.3905	0.6474	0.0742	0.0583	0.0312	0.9926	0.3797	0.0094
12	1,151.729	0.6593	84.6913	9.4073	3.3246	0.3849	0.6477	0.0724	0.0567	0.0289	0.9820	0.3945	0.0097
13	1,159.234	0.6626	84.4097	9.6022	3.4817	0.4064	0.6882	0.0810	0.0645	0.0328	0.8117	0.4116	0.0103
14	1,160.779	0.6642	84.2065	9.7158	3.5004	0.4091	0.6971	0.0847	0.0690	0.0409	0.8335	0.4327	0.0103
15	1,157.685	0.6624	84.3452	9.6840	3.4318	0.3966	0.6719	0.0773	0.0625	0.0328	0.8634	0.4241	0.0103
16	1,161.272	0.6645	84.0665	9.8271	3.5342	0.4069	0.6980	0.0791	0.0635	0.0318	0.8688	0.4138	0.0103
17	1,157.981	0.6621	84.4664	9.5435	3.4622	0.4048	0.6888	0.0774	0.0628	0.0320	0.8409	0.4113	0.0100
18	1,159.506	0.6632	84.3871	9.5286	3.5134	0.4146	0.7096	0.0804	0.0656	0.0330	0.8358	0.4217	0.0101
19	1,156.409	0.6595	84.8993	9.3547	3.3831	0.4004	0.6646	0.0786	0.0659	0.0356	0.7162	0.3913	0.0102
20	1,155.914	0.6591	85.0017	9.2646	3.3579	0.4033	0.6783	0.0805	0.0674	0.0362	0.6979	0.4018	0.0104
21	1,158.147	0.6615	84.6253	9.4352	3.4493	0.4060	0.6936	0.0812	0.0693	0.0360	0.7939	0.4000	0.0102
22	1,158.170	0.6617	84.5621	9.4856	3.4672	0.4040	0.6846	0.0785	0.0663	0.0341	0.8143	0.3934	0.0100
23	1,159.864	0.6627	84.4356	9.5387	3.5236	0.4061	0.7034	0.0782	0.0656	0.0331	0.8192	0.3865	0.0101
24	1,160.621	0.6635	84.3439	9.5657	3.5471	0.4098	0.7168	0.0795	0.0661	0.0325	0.8331	0.3951	0.0104
25	1,158.939	0.6623	84.4234	9.5866	3.4909	0.4002	0.6998	0.0746	0.0617	0.0287	0.8348	0.3894	0.0099
26	1,157.147	0.6614	84.4708	9.6239	3.4481	0.3824	0.6594	0.0743	0.0613	0.0307	0.8227	0.4158	0.0107
27	1,155.116	0.6589	84.8556	9.4691	3.3498	0.3764	0.6417	0.0743	0.0625	0.0317	0.7281	0.4003	0.0105
28	1,157.496	0.6610	84.5994	9.5459	3.4341	0.3892	0.6790	0.0734	0.0610	0.0300	0.7739	0.4037	0.0105
29	1,157.546	0.6610	84.5657	9.5642	3.4596	0.3879	0.6683	0.0713	0.0591	0.0295	0.7836	0.4006	0.0103
30	1,155.669	0.6603	84.6138	9.5732	3.4006	0.3786	0.6499	0.0703	0.0580	0.0288	0.7928	0.4236	0.0104
31	1,152.516	0.6586	84.7967	9.4860	3.3272	0.3658	0.6314	0.0662	0.0522	0.0255	0.7933	0.4452	0.0104
Volume	1,156.369	0.6613	84.5705	9.4390	3.4473	0.3983	0.6829	0.0762	0.0628	0.0327	0.8812	0.3991	0.0100
Weight Avg Energy	1,156.406	0.6613	84.5672	9.4408	3.4482	0.3984	0.6830	0.0762	0.0628	0.0328	0.8814	0.3991	0.0100

July-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		
7/1/2021	7/2/2021	13	16	1203	75	83	1108.6	1122.545	7/1/2021
7/2/2021	7/3/2021	7	9	1203	70	77	1108.6	1117.182	7/2/2021
7/3/2021	7/4/2021	0	0	1203	62	69	1108.6	1108.600	7/3/2021
7/4/2021	7/5/2021	1	1	1203	62	68	1108.6	1110.098	7/4/2021
7/5/2021	7/6/2021	17	21	1203	80	89	1108.6	1125.144	7/5/2021
7/6/2021	7/7/2021	31	38	1203	107	118	1108.6	1129.806	7/6/2021
7/7/2021	7/8/2021	28	34	1203	89	99	1108.6	1131.191	7/7/2021
7/8/2021	7/9/2021	11	13	1203	103	114	1108.6	1117.709	7/8/2021
7/9/2021	7/10/2021	6	7	1203	82	91	1108.6	1115.036	7/9/2021
7/10/2021	7/11/2021	2	2	1203	74	83	1108.6	1111.084	7/10/2021
7/11/2021	7/12/2021	4	5	1203	108	119	1108.6	1111.971	7/11/2021
7/12/2021	7/13/2021	20	25	1203	82	91	1108.6	1127.110	7/12/2021
7/13/2021	7/14/2021	17	20	1203	87	96	1108.6	1124.031	7/13/2021
7/14/2021	7/15/2021	10	12	1203	78	87	1108.6	1119.327	7/14/2021
7/15/2021	7/16/2021	7	9	1203	84	93	1108.6	1115.862	7/15/2021
7/16/2021	7/17/2021	1	1	1203	83	92	1108.6	1109.724	7/16/2021
7/17/2021	7/18/2021	3	3	1203	84	93	1108.6	1111.855	7/17/2021
7/18/2021	7/19/2021	2	2	1203	87	96	1108.6	1110.721	7/18/2021
7/19/2021	7/20/2021	2	2	1203	74	82	1108.6	1111.084	7/19/2021
7/20/2021	7/21/2021	3	3	1203	91	101	1108.6	1111.613	7/20/2021
7/21/2021	7/22/2021	3	4	1203	102	113	1108.6	1111.297	7/21/2021
7/22/2021	7/23/2021	20	24	1203	104	115	1108.6	1123.826	7/22/2021
7/23/2021	7/24/2021	36	44	1203	105	117	1108.6	1132.702	7/23/2021
7/24/2021	7/25/2021	8	9	1203	74	82	1108.6	1117.810	7/24/2021
7/25/2021	7/26/2021	67	81	1203	96	107	1108.6	1147.402	7/25/2021
7/26/2021	7/27/2021	12	15	1203	75	83	1108.6	1121.621	7/26/2021
7/27/2021	7/28/2021	10	12	1203	100	111	1108.6	1117.182	7/27/2021
7/28/2021	7/29/2021	48	58	1203	101	112	1108.6	1139.011	7/28/2021
7/29/2021	7/30/2021	61	73	1203	101	112	1108.6	1144.146	7/29/2021
7/30/2021	7/31/2021	38	46	1203	94	104	1108.6	1135.776	7/30/2021
7/31/2021	8/1/2021	30	36	1203	89	99	1108.6	1132.398	7/31/2021
		518	625	1203.0000	2,703	2,996	1108.6000	1121.4473	

ROW ID	LOCATION DESCRIPTION	GROSS HEATING VALUE (BTU/CF)	SPECIFIC GRAVITY	WOBBE (cal)	CRICONDENTH ERM (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
11587	GLEN ULLIN	1093.1	0.6457	1360.3	-49.4	2.3219	1.0038	82.689	12.9734	0.8451	0.0254	0.016	0.0002	0.0007	N/A	0	0.1013	0.0234	6/30/2021	7/1/2021	7/1/2021 17:40
11587	GLEN ULLIN	1090.9	0.6441	1359.3	-50.4	2.3213	0.9934	82.9558	12.7248	0.8245	0.0267	0.0158	0.0002	0.0005	N/A	0	0.114	0.0232	7/1/2021	7/2/2021	7/2/2021 17:53
11587	GLEN ULLIN	1089.3	0.6431	1358.4	-50.2	2.3206	0.9937	83.1752	12.4212	0.867	0.0322	0.0203	0.001	0.0016	N/A	0.0004	0.1432	0.0237	7/2/2021	7/3/2021	7/3/2021 18:12
11587	GLEN ULLIN	1088.9	0.6417	1359.3	-48.5	2.2494	0.9689	83.6207	11.9647	0.9528	0.0449	0.031	0.0031	0.0045	N/A	0.0018	0.1345	0.0237	7/3/2021	7/4/2021	7/4/2021 18:00
11587	GLEN ULLIN	1089.6	0.6422	1359.7	-50	2.2304	0.9871	83.4805	12.2132	0.8961	0.0348	0.0236	0.0014	0.0022	N/A	0.0008	0.1064	0.0235	7/4/2021	7/5/2021	7/5/2021 18:13
11587	GLEN ULLIN	1090.9	0.6427	1360.8	-49.7	2.1894	0.9925	83.3405	12.3672	0.8944	0.0342	0.023	0.0013	0.0021	N/A	0.0006	0.132	0.0228	7/5/2021	7/6/2021	7/6/2021 17:55
11587	GLEN ULLIN	1087.2	0.6392	1359.9	-52.9	2.0993	0.9798	83.8877	12.0504	0.7724	0.028	0.0162	0.0012	0.0012	N/A	0	0.1416	0.0223	7/6/2021	7/7/2021	7/7/2021 18:47
11587	GLEN ULLIN	1088.6	0.6406	1360.1	-52.1	2.1429	0.9877	83.6054	12.2651	0.7874	0.0279	0.0163	0.0009	0.001	N/A	0	0.1428	0.0226	7/7/2021	7/8/2021	7/8/2021 18:08
11587	GLEN ULLIN	1091.3	0.6435	1360.4	-50.3	2.2118	1.0138	83.1462	12.5878	0.8539	0.0289	0.0174	0.0003	0.0007	N/A	0	0.1158	0.0235	7/8/2021	7/9/2021	7/9/2021 18:14
11587	GLEN ULLIN	1090.8	0.6421	1361.3	-50.8	2.102	1.0166	83.4173	12.4073	0.8489	0.0298	0.0181	0.0003	0.0009	N/A	0	0.1363	0.0226	7/9/2021	7/10/2021	7/10/2021 18:03
11587	GLEN ULLIN	1086.1	0.6391	1358.6	-52.9	2.1218	1.0011	84.0394	11.8074	0.8394	0.0288	0.018	0.0004	0.0008	N/A	0.0001	0.12	0.0228	7/10/2021	7/11/2021	7/11/2021 17:54
11587	GLEN ULLIN	1086	0.6393	1358.3	-52	2.1548	0.9988	84.0439	11.7155	0.8827	0.0339	0.0222	0.0012	0.0019	N/A	0.0004	0.1217	0.0232	7/11/2021	7/12/2021	7/12/2021 18:04
11587	GLEN ULLIN	1086.2	0.6387	1359.2	-53.1	2.1264	0.9713	84.0396	11.8244	0.8356	0.0269	0.0164	0.0003	0.0005	N/A	0	0.1361	0.0225	7/12/2021	7/13/2021	7/13/2021 18:04
11587	GLEN ULLIN	1086.1	0.6382	1359.6	-53.2	2.1087	0.9532	84.1294	11.7552	0.8424	0.0275	0.0166	0.0002	0.0007	N/A	0	0.144	0.0224	7/13/2021	7/14/2021	7/14/2021 18:00
11587	GLEN ULLIN	1087.7	0.64	1359.6	-52.2	2.1764	0.9582	83.7874	12.0131	0.8609	0.0276	0.0163	0.0002	0.0005	N/A	0	0.1369	0.0226	7/14/2021	7/15/2021	7/15/2021 18:18
11587	GLEN ULLIN	1087.6	0.6407	1358.8	-51.7	2.2277	0.9727	83.6861	12.022	0.8896	0.0291	0.0173	0.0004	0.0007	N/A	0	0.1318	0.0226	7/15/2021	7/16/2021	7/16/2021 17:57
11587	GLEN ULLIN	1087.3	0.6404	1358.7	-51.5	2.2438	0.9601	83.7373	11.9388	0.9043	0.032	0.0189	0.0011	0.0016	N/A	0.0001	0.1395	0.0227	7/16/2021	7/17/2021	7/17/2021 18:03
11587	GLEN ULLIN	1086.5	0.6403	1357.8	-52.2	2.2584	0.9721	83.7756	11.9172	0.8842	0.0278	0.0167	0.0004	0.0008	N/A	0	0.124	0.023	7/17/2021	7/18/2021	7/18/2021 17:56
11587	GLEN ULLIN	1090.4	0.6447	1358	-49.2	2.3963	1.0023	82.9766	12.4588	0.9697	0.0313	0.0188	0.0009	0.0012	N/A	0	0.1205	0.0238	7/18/2021	7/19/2021	7/19/2021 18:04
11587	GLEN ULLIN	1081.8	0.6363	1356.1	-54.8	2.1769	0.9636	84.5232	11.3202	0.817	0.0282	0.0167	0.0009	0.0011	N/A	0	0.1298	0.0225	7/19/2021	7/20/2021	7/20/2021 18:34
11587	GLEN ULLIN	1087.9	0.6415	1358.3	-51.3	2.2628	0.9906	83.515	12.1268	0.8927	0.0285	0.0172	0.0006	0.0009	N/A	0	0.1421	0.0229	7/20/2021	7/21/2021	7/21/2021 17:38
11587	GLEN ULLIN	1090.7	0.644	1359.1	-50.3	2.3147	0.9989	82.9665	12.6657	0.8517	0.0263	0.0154	0.0003	0.0006	N/A	0	0.136	0.0241	7/21/2021	7/22/2021	7/22/2021 17:50
11587	GLEN ULLIN	1090.5	0.6446	1358.2	-50.2	2.37	1.0098	82.8357	12.7504	0.8323	0.0276	0.016	0.0002	0.0008	N/A	0	0.133	0.0244	7/22/2021	7/23/2021	7/23/2021 17:17
11587	GLEN ULLIN	1091.4	0.6457	1358.2	-49.5	2.4233	1.0101	82.58	12.9333	0.8414	0.0273	0.0158	0.0003	0.0005	N/A	0	0.1435	0.0247	7/23/2021	7/24/2021	7/24/2021 17:08
11587	GLEN ULLIN	1090.3	0.6447	1357.9	-50	2.3972	1.0075	82.8201	12.721	0.8504	0.0282	0.0165	0.0003	0.0008	N/A	0	0.1337	0.0245	7/24/2021	7/25/2021	7/25/2021 16:52
11587	GLEN ULLIN	1089.4	0.6427	1358.9	-51.3	2.2923	0.9817	83.3538	12.3998	0.8373	0.0276	0.0164	0.0002	0.0006	N/A	0	0.0662	0.0242	7/25/2021	7/26/2021	7/26/2021 16:52
11587	GLEN ULLIN	1089.7	0.6425	1359.4	-50.9	2.256	0.9849	83.512	12.2527	0.8861	0.0301	0.0178	0.0006	0.001	N/A	0	0.035	0.024	7/26/2021	7/27/2021	7/27/2021 16:53
11587	GLEN ULLIN	1092.8	0.6454	1360.3	-49.2	2.3333	0.9909	82.9337	12.7239	0.9076	0.0305	0.0183	0.0007	0.0012	N/A	0	0.0356	0.0245	7/27/2021	7/28/2021	7/28/2021 15:14
11587	GLEN ULLIN	1091.2	0.6448	1358.9	-49.9	2.3635	0.9914	83.0341	12.6177	0.8816	0.0299	0.0177	0.0006	0.0011	N/A	0	0.0383	0.0242	7/28/2021	7/29/2021	7/29/2021 15:11
11587	GLEN ULLIN	1089.5	0.6423	1359.4	-51.4	2.239	0.9884	83.5122	12.3113	0.8432	0.0269	0.0166	0.0003	0.0009	N/A	0	0.0379	0.0234	7/29/2021	7/30/2021	7/30/2021 15:09
11587	GLEN ULLIN	1091.1	0.6439	1359.7	-49.8	2.2704	1.0031	83.2981	12.3824	0.9285	0.0327	0.02	0.001	0.0016	N/A	0.0001	0.0385	0.0238	7/30/2021	7/31/2021	7/31/2021 15:17
11587	GLEN ULLIN	1089.1	0.6422	1359.1	-50.9	2.2618	0.9839	83.422	12.2483	0.8955	0.0293	0.0178	0.0005	0.0011	N/A	0	0.1165	0.0234	7/31/2021	8/1/2021	8/1/2021 15:10

NORTH DAKOTA HEATING VALUE ZONES		
ZONES	MEASURING DEVICE	LOCATION
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	JUL21	JUN 21	MAY 21	APR 21	MAR 21	FEB 21	JAN 21	DEC 20	NOV 20	OCT 20	SEPT 20	AUG 20	ZONE
MT/ND	211	Sidney Border - MonDak Tfr - Sidney Plt	1199	1210	1152	1204	1198	1208	1206	1209	1207	1198	1200	1202	1196	211
ND	24	Williston Border - Charbonneau Station	1168	1172	1164	1168	1167	1176	1176	1177	1175	1167	1158	1157	1157	24
ND	25	Watford City West Border	1196	1203	1199	1202	1199	1194	1194	1195	1195	1193	1193	1194	1191	25
ND	28	Bismarck Station - Glen Ullin Station	1154	1200	1202	1161	1117	1148	1110	1121	1135	1131	1152	1174	1195	28
ND	31	Dickinson Brd - Belfield Trf - G Ullin Stn	1129	1123	1129	1160	1154	1127	1113	1122	1131	1129	1136	1125	1104	31
ND/MT	32	Cabin Creek Station - Belfied Transfer	1121	1135	1127	1122	1124	1121	1091	1105	1119	1123	1127	1134	1120	32
ND	33	Little Knife Plant	1175	1184	1179	1175	1173	1172	1171	1172	1172	1172	1172	1174	1179	33
ND	34	Badlands Plant/Bowman Border	1038	980	980	989	981	1040	1079	1172	1094	1070	1060	1025	984	34
ND	43	Watford City East Border	1126	1109	1119	1123	1119	1126	1106	1104	1147	1147	1140	1139	1137	43
ND/MT	241	Fairview Border	1187	1213	1185	1173	1185	1198	1204	1192	1195	1203	1169	1157	1172	241
ND	260	North Tioga Transfer - Nesson Plant	1144	1167	1153	1159	1148	1160	1149	1144	1142	1134	1114	1131	1129	260
ND	261	Tioga Comp Station - Robinson Lake Plan	1175	1196	1195	1193	1180	1173	1171	1168	1166	1159	1164	1162	1172	261
ND	262	Minot Bdr - Palermo Bdr - Bismarck Stn	1190	1200	1203	1195	1189	1191	1187	1184	1181	1178	1182	1191	1195	262
ND	263	Lignite Plant	1140	1143	1147	1137	1147	1148	1125	1133	1134	1137	1137	1149	1147	263
ND	264	Epping Border	1163	1172	1165	1163	1165	1168	1168	1167	1165	1163	1156	1155	1147	264
ND	265	Tioga Comp Station - County Line Plant	1167	1166	1165	1172	1170	1172	1171	1168	1166	1159	1164	1163	1173	265
ND	266	County Line Plant	1173	1174	1169	1171	1169	1174	1176	1164	1166	1165	1161	1190	1194	266
ND	271	Bismarck Station - Cleveland Station	1187	1200	1202	1196	1186	1191	1165	1180	1179	1174	1181	1191	1195	271
ND	272	Cleveland Station - Mapleton	1186	1199	1200	1196	1185	1190	1165	1179	1178	1173	1182	1191	1195	272
ND	273	Cleveland Station - Grafton Border	1186	1200	1200	1195	1184	1189	1164	1179	1178	1173	1181	1190	1194	273
ND	550	Mandan Border / NBPL-St Anthony	1151	1190	1182	1161	1120	1148	1110	1121	1133	1131	1152	1174	1190	550
ND	610	MDU-Watford City BTU	1154	1121	1132	1162	1158	1158	1141	1140	1167	1166	1165	1170	1163	610
ND	802	NBPL - Linton	1102	1089	1090	1094	1093	1099	1101	1103	1111	1113	1110	1120	1102	802
ND	903	Hettinger Propane	2549	2549	2549	2549	2549	2549	2549	2549	2549	2549	2549	2549	2549	903
ND	600	Alliance Pipeline - Hankinson	1156	1156	1157	1158	1154	1150	1146	1148	1155	1155	1166	1166	1160	600
ND	601	Alliance Pipeline - Milnor	1156	1156	1157	1158	1154	1150	1146	1148	1155	1155	1166	1167	1161	602

THERMAL ZONE VARIANCE DOCUMENTATION		
July 2021		
<i>ZONE</i>	<i>BTU VARIANCE</i>	<i>REASON</i>
211	58	Operational/Blend
241	28	Operational/Blend