

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

June 14, 2022

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

Re: Case No. PU-22-002 (Therm Billing)
Monthly Report – April 2022

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 May 2022.
2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our suppliers for the month of April 2022.
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 April 2022.

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

Sincerely,

/s/ Travis R. Jacobson

Travis R. Jacobson
Director of Regulatory Affairs

Montana-Dakota Utilities Co.
Therm Billing Factors - North Dakota
May-22

Town	Heat Zone	Therm Factor
MDU-303-ALEXANDER	025	1.1249
MDU-308-ARNEGARD	025	1.1249
MDU-314-APPLE VALLEY	271	1.1433
MDU-318-BEACH	032	1.0119
MDU-319-BELFIELD	032	1.0194
MDU-323-BERTHOLD	262	1.1277
MDU-324-BEULAH	032	1.0194
MDU-327-BISMARCK	028	1.0913
MDU-330-BOWMAN	034	0.9816
MDU-337-BURLINGTON	262	1.1521
MDU-343-CARRINGTON	273	1.1347
MDU-344-CLEVELAND	272	1.1344
MDU-364-CAVALIER	273	1.1586
MDU-365-DAWSON	271	1.1353
MDU-368-DES LACS	262	1.1358
MDU-369-DICKINSON	031	1.0596
MDU-374-FT TOTTEN	273	1.1427
MDU-375-DEVILS LAKE	273	1.1427
MDU-379-BARLOW	273	1.1347
MDU-384-EPPING	264	1.1192
MDU-387-ELDRIDGE	272	1.1424
MDU-407-GLADSTONE	031	1.0615
MDU-411-GLEN ULLIN	031	1.0673
MDU-413-GOLVA	032	0.9971
MDU-416-GARRISON	262	1.1358
MDU-417-GRAFTON	273	1.1666
MDU-403-GWINNER	601	1.1399
MDU-429-HEBRON	031	1.0673
MDU-432-HETTINGER	903	2.3875
MDU-449-JAMESTOWN	272	1.1504
MDU-459-KILLDEER	033	1.1126
MDU-463-LANGDON	273	1.1347
MDU-469-LEFOR	031	1.0596
MDU-474-LIGNITE	263	1.0759
MDU-475-LINTON	802	1.0353
MDU-478-LINCOLN	028	1.0913
MDU-488-MCKENZIE	271	1.1434
MDU-494-MEDINA	271	1.1353
MDU-498-MANDAN	028	1.0913
MDU-500-MARMARTH	034	0.9888
MDU-505-MINOT	262	1.1521
MDU-510-MOTT	031	1.0615
MDU-512-MAX	262	1.1277
MDU-513-MILNOR	601	1.1399
MDU-522-NEW ENGLAND	031	1.0519
MDU-524-NEW SALEM	028	1.0673
MDU-532-NEW ROCKFORD	273	1.1347
MDU-539-PARK RIVER	273	1.1586
MDU-540-PALERMO	262	1.1277

MDU-558-RAY	264	1.1192
MDU-561-REGENT	031	1.0519
MDU-563-RHAME	034	0.9743
MDU-564-RICHARDTON	031	1.0519
MDU-568-ROSS	261	1.1168
MDU-572-RUTHVILLE	262	1.1521
MDU-574-SANBORN	272	1.1504
MDU-583-SENTINEL BUTTE	032	1.0119
MDU-588-SOUTH HEART	031	1.0519
MDU-717-SPIRITWOOD	272	1.1504
MDU-590-SPRINGBROOK	264	1.1192
MDU-591-STANLEY	261	1.1249
MDU-593-STEELE	271	1.1353
MDU-594-STERLING	028	1.0913
MDU-598-SHEYENNE	273	1.1427
MDU-605-SURREY	262	1.1521
MDU-610-TAPPEN	271	1.1353
MDU-611-TAYLOR	031	1.0519
MDU-616-TIOGA	260	1.0990
MDU-619-TURTLE LAKE	262	1.1358
MDU-620-TRENTON	024	1.1311
MDU-624-UNDERWOOD	262	1.1358
MDU-625-VALLEY CITY	272	1.1585
MDU-629-WALHALLA	273	1.1586
MDU-632-WATFORD CITY	610	1.0267
MDU-636-WHEELOCK	264	1.1112
MDU-637-WHITE EARTH	261	1.1249
MDU-642-WILLISTON	024	1.1311
MDU-646-WASHBURN	262	1.1439
MDU-647-WILTON	262	1.1277
MDU-664-RIVERDALE	262	1.1358
MDU-691-FAIRVIEW	241	1.1330
MDU-712-MINOT AFB	262	1.1521
MDU-718-FAIRMOUNT	600	1.1376
MDU-732-NEKOMA	273	1.1347
MDU-732-MSR SITE	273	1.1347

Source Daily Summary

April 2022

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

Pressure Base:	14.730	Contract Day:	1
Temperature Base:	60	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	0.7116	1170.6	1191.3	1191.0	0.564	3.304	70.618	23.062	2.259	0.067	0.118	0.005	0.003	0.000	0.000	0.000	0.000	0.000	1412.50	
2	0.7448	1199.6	1220.8	1220.5	1.368	3.433	66.101	25.417	3.259	0.140	0.259	0.013	0.009	0.000	0.000	0.000	0.000	0.000	1414.61	
3	0.7421	1192.9	1214.0	1213.7	1.377	3.573	66.573	24.863	3.197	0.138	0.256	0.013	0.010	0.000	0.000	0.000	0.000	0.000	1409.29	
4	0.7423	1197.7	1218.9	1218.5	1.239	3.510	66.245	25.521	3.095	0.130	0.239	0.012	0.009	0.000	0.000	0.000	0.000	0.000	1414.87	
5	0.6949	1161.4	1182.0	1181.7	0.016	3.131	72.743	22.267	1.784	0.025	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.95	
6	0.6968	1162.8	1183.4	1183.0	0.016	3.224	72.431	22.407	1.857	0.027	0.038	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.69	
7	0.7160	1176.3	1197.1	1196.7	0.595	3.324	69.990	23.419	2.454	0.075	0.132	0.005	0.004	0.000	0.000	0.000	0.000	0.000	1414.97	
8	0.6941	1157.7	1178.2	1177.8	0.015	3.287	72.872	21.985	1.780	0.025	0.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.19	
9	0.7245	1182.2	1203.1	1202.7	0.852	3.376	68.945	23.795	2.737	0.098	0.180	0.009	0.007	0.000	0.000	0.000	0.000	0.000	1413.66	
10	0.7456	1201.1	1222.4	1222.0	1.358	3.434	65.818	25.808	3.170	0.136	0.252	0.013	0.010	0.000	0.000	0.000	0.000	0.000	1415.63	
11	0.7435	1197.1	1218.3	1217.9	1.369	3.468	66.302	25.215	3.240	0.135	0.248	0.013	0.010	0.000	0.000	0.000	0.000	0.000	1412.84	
12	0.7267	1183.3	1204.3	1204.0	0.939	3.383	68.534	24.139	2.725	0.095	0.170	0.008	0.006	0.000	0.000	0.000	0.000	0.000	1412.83	
13	0.6978	1158.0	1178.5	1178.2	0.168	3.387	72.144	22.593	1.632	0.029	0.045	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1410.85	
14	0.6868	1145.9	1166.2	1165.9	0.009	3.334	73.551	22.032	1.052	0.011	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1407.19	
15	0.6894	1151.0	1171.4	1171.0	0.008	3.269	73.139	22.405	1.155	0.011	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1410.76	
16	0.6906	1155.0	1175.5	1175.1	0.016	3.122	72.888	22.836	1.116	0.010	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.51	
17	0.7450	1201.4	1222.6	1222.3	1.315	3.422	65.994	25.615	3.225	0.141	0.264	0.013	0.010	0.000	0.000	0.000	0.000	0.000	1416.56	
18	0.7286	1189.0	1210.1	1209.7	0.852	3.347	68.185	24.516	2.793	0.103	0.189	0.009	0.006	0.000	0.000	0.000	0.000	0.000	1417.80	
19	0.7356	1191.1	1212.2	1211.9	1.267	3.235	67.829	24.090	3.145	0.138	0.268	0.015	0.013	0.000	0.000	0.000	0.000	0.000	1413.43	
20	0.7244	1181.5	1202.4	1202.1	1.145	2.959	69.618	23.077	2.801	0.121	0.247	0.016	0.016	0.000	0.000	0.000	0.000	0.000	1412.75	
21	0.7374	1195.5	1216.7	1216.3	1.247	3.168	67.315	24.811	3.042	0.133	0.257	0.014	0.012	0.000	0.000	0.000	0.000	0.000	1416.91	
22	0.7244	1181.1	1202.0	1201.6	1.158	2.969	69.631	23.020	2.826	0.121	0.244	0.015	0.014	0.000	0.000	0.000	0.000	0.000	1412.18	
23	0.7341	1188.1	1209.2	1208.9	1.256	3.299	68.144	23.681	3.189	0.138	0.266	0.015	0.013	0.000	0.000	0.000	0.000	0.000	1411.26	
24	0.6807	1109.2	1128.9	1128.5	0.716	3.905	76.840	16.312	1.988	0.079	0.146	0.008	0.007	0.000	0.000	0.000	0.000	0.000	1366.70	
25	0.6070	993.8	1011.3	1011.0	0.271	4.697	89.375	5.180	0.431	0.016	0.027	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1296.71	
26	0.7256	1177.0	1197.9	1197.5	0.488	4.332	69.806	20.944	3.955	0.138	0.302	0.017	0.018	0.000	0.000	0.000	0.000	0.000	1406.33	
27	0.7232	1178.5	1199.3	1199.0	0.307	4.294	70.275	20.519	4.163	0.128	0.275	0.018	0.020	0.000	0.000	0.000	0.000	0.000	1410.29	
28	0.7346	1186.8	1207.8	1207.4	0.687	4.281	68.652	21.554	4.296	0.154	0.327	0.024	0.025	0.000	0.000	0.000	0.000	0.000	1409.23	
29	0.7365	1181.5	1202.4	1202.1	1.028	4.271	67.595	23.185	3.471	0.139	0.280	0.016	0.014	0.000	0.000	0.000	0.000	0.000	1401.09	
30	0.7259	1171.6	1192.4	1192.0	0.880	4.102	69.126	22.412	3.091	0.121	0.243	0.013	0.012	0.000	0.000	0.000	0.000	0.000	1399.52	
Avg	0.7170	1171.0	1191.4	1191.0	0.751	3.528	70.243	22.556	2.631	0.094	0.179	0.009	0.008	0.000	0.000	0.000	0.000	0.000	1406.84	

Source Daily Summary

April 2022

Source #: 571
Name: WILLISTON BDR-CHARBN STN

Pressure Base:	14.730	Contract Day:	1
Temperature Base:	60	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	0.7110	1176.3	1197.1	1196.9	0.959	2.289	72.461	21.092	2.666	0.139	0.326	0.030	0.037	0.000	0.000	0.000	0.000	0.000	1419.74	
2	0.7111	1176.4	1197.2	1197.0	0.966	2.284	72.494	21.024	2.683	0.142	0.337	0.031	0.038	0.000	0.000	0.000	0.000	0.000	1419.71	
3	0.7063	1168.7	1189.4	1189.2	0.965	2.306	72.831	21.120	2.373	0.110	0.248	0.021	0.025	0.000	0.000	0.000	0.000	0.000	1415.26	
4	0.7042	1165.4	1186.1	1185.8	0.955	2.327	72.965	21.167	2.247	0.096	0.208	0.016	0.018	0.000	0.000	0.000	0.000	0.000	1413.36	
5	0.7054	1167.3	1188.0	1187.7	0.961	2.314	72.883	21.118	2.367	0.102	0.218	0.017	0.019	0.000	0.000	0.000	0.000	0.000	1414.45	
6	0.7062	1167.7	1188.4	1188.1	0.982	2.331	72.778	21.149	2.407	0.101	0.216	0.017	0.019	0.000	0.000	0.000	0.000	0.000	1414.16	
7	0.7070	1168.5	1189.2	1188.9	0.981	2.361	72.626	21.258	2.421	0.100	0.216	0.017	0.019	0.000	0.000	0.000	0.000	0.000	1414.29	
8	0.7071	1168.5	1189.2	1188.8	0.987	2.362	72.618	21.248	2.436	0.100	0.215	0.016	0.019	0.000	0.000	0.000	0.000	0.000	1414.19	
9	0.7039	1163.8	1184.4	1184.2	0.981	2.359	72.803	21.451	2.125	0.080	0.174	0.013	0.015	0.000	0.000	0.000	0.000	0.000	1411.71	
10	0.7023	1160.7	1181.3	1181.0	0.972	2.409	73.115	21.095	2.127	0.081	0.174	0.013	0.014	0.000	0.000	0.000	0.000	0.000	1409.58	
11	0.7024	1159.7	1180.3	1180.0	0.973	2.478	73.153	20.929	2.178	0.083	0.179	0.013	0.015	0.000	0.000	0.000	0.000	0.000	1408.28	
12	0.7058	1165.7	1186.4	1186.1	0.990	2.406	72.653	21.348	2.283	0.091	0.196	0.015	0.017	0.000	0.000	0.000	0.000	0.000	1412.13	
13	0.7073	1167.5	1188.2	1187.9	1.001	2.417	72.558	21.264	2.412	0.099	0.213	0.016	0.019	0.000	0.000	0.000	0.000	0.000	1412.83	
14	0.7046	1163.1	1183.7	1183.4	1.003	2.432	72.935	21.008	2.301	0.092	0.198	0.015	0.017	0.000	0.000	0.000	0.000	0.000	1410.15	
15	0.7059	1159.4	1179.9	1179.6	0.918	2.916	72.387	21.245	2.226	0.092	0.188	0.014	0.014	0.000	0.000	0.000	0.000	0.000	1404.38	
16	0.7207	1177.3	1198.2	1197.8	0.818	3.366	69.739	23.059	2.653	0.112	0.223	0.015	0.015	0.000	0.000	0.000	0.000	0.000	1411.32	
17	0.7136	1171.5	1192.3	1192.0	1.034	2.716	71.410	21.956	2.511	0.103	0.230	0.018	0.021	0.000	0.000	0.000	0.000	0.000	1411.43	
18	0.7041	1163.6	1184.2	1183.9	1.001	2.357	73.038	21.008	2.257	0.096	0.208	0.016	0.018	0.000	0.000	0.000	0.000	0.000	1411.27	
19	0.7037	1162.8	1183.4	1183.2	0.996	2.380	72.961	21.202	2.133	0.092	0.202	0.016	0.018	0.000	0.000	0.000	0.000	0.000	1410.68	
20	0.7033	1161.6	1182.2	1182.0	0.992	2.416	73.056	21.048	2.168	0.090	0.196	0.015	0.018	0.000	0.000	0.000	0.000	0.000	1409.69	
21	0.7046	1163.9	1184.5	1184.3	0.996	2.394	72.780	21.345	2.176	0.089	0.191	0.014	0.016	0.000	0.000	0.000	0.000	0.000	1411.17	
22	0.7039	1163.4	1184.0	1183.7	0.992	2.369	72.939	21.204	2.180	0.091	0.194	0.015	0.017	0.000	0.000	0.000	0.000	0.000	1411.17	
23	0.7039	1163.6	1184.2	1183.9	1.020	2.312	72.904	21.318	2.142	0.092	0.184	0.012	0.017	0.000	0.000	0.000	0.000	0.000	1411.49	
24	0.7047	1165.1	1185.7	1185.3	0.992	2.342	72.840	21.265	2.242	0.095	0.196	0.011	0.018	0.000	0.000	0.000	0.000	0.000	1412.43	
25	0.7116	1162.1	1182.7	1182.3	0.850	3.380	71.849	20.685	2.873	0.111	0.225	0.013	0.014	0.000	0.000	0.000	0.000	0.000	1402.20	
26	0.7627	1192.0	1213.1	1212.9	0.950	6.184	65.461	20.275	6.333	0.229	0.506	0.029	0.032	0.000	0.000	0.000	0.000	0.000	1389.10	
27	0.7491	1167.9	1188.6	1188.3	0.918	6.436	66.962	19.476	5.634	0.176	0.361	0.018	0.018	0.000	0.000	0.000	0.000	0.000	1373.25	
28	0.7580	1184.3	1205.3	1205.0	0.925	6.253	66.033	19.994	5.997	0.236	0.508	0.027	0.028	0.000	0.000	0.000	0.000	0.000	1384.37	
29	0.7484	1172.3	1193.0	1192.8	0.926	6.085	67.267	19.567	5.465	0.204	0.437	0.024	0.026	0.000	0.000	0.000	0.000	0.000	1379.12	
30	0.7310	1162.3	1182.9	1182.6	0.929	5.068	69.490	19.653	4.338	0.156	0.330	0.018	0.019	0.000	0.000	0.000	0.000	0.000	1383.47	
Avg	0.7138	1168.0	1188.4	1188.1	0.965	3.068	71.666	21.019	2.879	0.116	0.250	0.017	0.020	0.000	0.000	0.000	0.000	0.000	1406.88	

Gas Composition and Properties

Effective March 1, 2022

Source #: 0602160
Name: FAIRVIEW BORDER

Component	Mole %	Liquid Content	Mass %
Carbon Dioxide, CO2	1.1579		2.4027
Nitrogen, N2	4.5593		6.0220
Methane, C1	67.1766		50.8119
Ethane, C2	23.9324	6.4056	33.9298
Propane, C3	2.8357	0.7819	5.8957
iso-Butane, iC4	0.1151	0.0377	0.3154
n-Butane, nC4	0.2059	0.0650	0.5643
iso-Pentane, iC5	0.0099	0.0036	0.0337
n-Pentane, nC5	0.0072	0.0026	0.0245
Neo-Pentane, neo			
Hexanes Plus, C6+			
Argon, Ar			
Carbon Monoxide, CO			
Hydrogen, H2			
Oxygen, O2			
Helium, He			
Water, H2O			
Hydrogen Sulfide, H2S			
Totals	100.0000	7.2980	100.0000

Property	Total Sample	C6 Plus Fraction
Pressure Base	14.730	
Temperature Base	60.00	
HCDP @ Sample Pressure	-14.515	
Cricondentherm	0.569	
HV, Dry @ Base P, T	1191.26	
HV, Sat @ Base P, T	1170.53	
HV, Sat @ Sample P, T	1191.26	
Relative Density	0.7345	
C6+: 100		

Sample

Date: 03/01/2022 Type:

Tech: Joshua Tipton

Pressure: 460 psi Temp.: °F

Gauge: Gauge H2O:

Atm. Pressure: H2S:

Remarks:

Analysis

Date: Instrument:

Tech: Cylinder: 127

Remarks:

Source Daily Summary

April 2022

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

Pressure Base:	14.730	Contract Day:	1
Temperature Base:	60	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	0.6994	1156.5	1176.9	1176.7	0.971	2.396	73.435	21.148	1.711	0.087	0.210	0.019	0.023	0.000	0.000	0.000	0.000	0.000	1407.33	-12.53
2	0.7097	1172.7	1193.5	1193.3	0.962	2.398	72.622	21.030	2.357	0.149	0.388	0.041	0.053	0.000	0.000	0.000	0.000	0.000	1416.63	-0.37
3	0.7113	1174.3	1195.1	1194.9	0.956	2.445	72.466	21.029	2.443	0.156	0.407	0.043	0.055	0.000	0.000	0.000	0.000	0.000	1416.99	0.87
4	0.7032	1161.6	1182.2	1182.0	0.953	2.467	73.076	21.120	1.966	0.103	0.257	0.025	0.032	0.000	0.000	0.000	0.000	0.000	1409.76	-8.56
5	0.6947	1149.2	1169.5	1169.3	0.939	2.463	73.788	21.093	1.528	0.054	0.118	0.008	0.009	0.000	0.000	0.000	0.000	0.000	1403.20	-17.74
6	0.6966	1152.7	1173.1	1172.9	0.940	2.418	73.329	21.666	1.497	0.044	0.092	0.006	0.007	0.000	0.000	0.000	0.000	0.000	1405.54	-17.68
7	0.6966	1152.3	1172.7	1172.5	0.943	2.433	73.410	21.493	1.568	0.045	0.096	0.006	0.007	0.000	0.000	0.000	0.000	0.000	1405.13	-17.41
8	0.6971	1153.6	1174.0	1173.8	0.930	2.428	73.331	21.537	1.622	0.045	0.095	0.006	0.006	0.000	0.000	0.000	0.000	0.000	1406.10	-16.96
9	0.6988	1156.8	1177.3	1177.1	0.942	2.363	73.120	21.720	1.698	0.046	0.098	0.006	0.007	0.000	0.000	0.000	0.000	0.000	1408.35	-15.81
10	0.7116	1150.9	1171.3	1171.1	1.082	3.720	71.722	20.536	2.572	0.103	0.232	0.015	0.018	0.000	0.000	0.000	0.000	0.000	1388.51	-6.60
11	0.7116	1151.5	1171.9	1171.7	1.138	3.597	71.721	20.681	2.493	0.102	0.234	0.016	0.019	0.000	0.000	0.000	0.000	0.000	1389.23	-6.65
12	0.7111	1151.2	1171.6	1171.4	1.142	3.563	71.739	20.786	2.404	0.100	0.230	0.016	0.019	0.000	0.000	0.000	0.000	0.000	1389.36	-7.13
13	0.7016	1153.9	1174.4	1174.2	0.992	2.732	72.755	21.491	1.820	0.059	0.130	0.009	0.010	0.000	0.000	0.000	0.000	0.000	1402.06	-14.03
14	0.6965	1153.1	1173.5	1173.3	0.936	2.384	73.559	21.276	1.694	0.045	0.095	0.006	0.006	0.000	0.000	0.000	0.000	0.000	1406.18	-16.91
15	0.7032	1147.6	1168.0	1167.8	1.151	3.018	72.753	20.865	1.989	0.064	0.142	0.009	0.010	0.000	0.000	0.000	0.000	0.000	1392.91	-13.42
16	0.7023	1157.2	1177.6	1177.4	1.038	2.531	73.269	20.675	2.168	0.091	0.197	0.014	0.016	0.000	0.000	0.000	0.000	0.000	1405.22	-10.44
17	0.7031	1165.5	1186.2	1185.9	0.985	2.170	73.697	20.188	2.547	0.118	0.252	0.019	0.022	0.000	0.000	0.000	0.000	0.000	1414.56	-6.39
18	0.7003	1153.3	1173.7	1173.5	0.993	2.640	73.304	20.840	1.957	0.077	0.165	0.011	0.013	0.000	0.000	0.000	0.000	0.000	1402.63	-12.98
19	0.6915	1143.5	1163.7	1163.5	0.995	2.418	74.460	20.460	1.498	0.050	0.105	0.007	0.007	0.000	0.000	0.000	0.000	0.000	1399.40	-19.81
20	0.6945	1145.7	1165.9	1165.7	0.993	2.569	73.883	20.839	1.539	0.052	0.111	0.007	0.008	0.000	0.000	0.000	0.000	0.000	1399.07	-18.41
21	0.6865	1127.6	1147.5	1147.3	0.882	3.081	75.517	18.653	1.666	0.058	0.126	0.008	0.009	0.000	0.000	0.000	0.000	0.000	1384.94	-22.16
22	0.6949	1147.0	1167.3	1167.1	0.971	2.558	73.746	21.038	1.519	0.049	0.105	0.007	0.006	0.000	0.000	0.000	0.000	0.000	1400.31	-18.45
23	0.6948	1148.3	1168.6	1168.5	0.969	2.490	73.685	21.191	1.510	0.047	0.096	0.007	0.006	0.000	0.000	0.000	0.000	0.000	1402.00	-18.45
24	0.6970	1151.6	1172.0	1171.8	0.944	2.523	73.249	21.612	1.517	0.047	0.095	0.006	0.007	0.000	0.000	0.000	0.000	0.000	1403.71	-17.54
25	0.7050	1153.9	1174.3	1174.1	0.952	2.374	73.346	21.884	1.316	0.038	0.080	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1398.57	-19.12
26	0.7130	1156.2	1176.7	1176.5	0.954	2.324	73.376	21.975	1.249	0.036	0.075	0.005	0.004	0.000	0.000	0.000	0.000	0.000	1393.54	-19.65
27	0.7209	1158.5	1179.0	1178.8	0.954	2.324	73.376	21.975	1.249	0.036	0.075	0.005	0.004	0.000	0.000	0.000	0.000	0.000	1388.60	-19.65
28	0.7289	1160.7	1181.3	1181.1	0.944	4.938	69.804	19.559	4.282	0.142	0.298	0.016	0.017	0.000	0.000	0.000	0.000	0.000	1383.91	3.95
29	0.7566	1181.5	1202.4	1202.2	0.930	6.288	66.154	19.958	5.912	0.224	0.480	0.026	0.028	0.000	0.000	0.000	0.000	0.000	1382.34	19.93
30	0.7506	1175.3	1196.1	1195.9	0.947	6.078	66.838	19.971	5.482	0.203	0.433	0.023	0.025	0.000	0.000	0.000	0.000	0.000	1380.64	16.55
Avg	0.7061	1155.0	1175.9	1175.7	0.981	2.938	72.684	20.943	2.159	0.082	0.184	0.013	0.015	0.000	0.000	0.000	0.000	0.000	1399.56	-11.12

*** End of Report ***

Source Daily Summary

April 2022

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

Pressure Base:	14.730	Contract Day:	1
Temperature Base:	60	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	0.7505	1171.0	1191.7	1191.5	0.929	6.354	66.729	19.896	5.416	0.204	0.427	0.022	0.023	0.000	0.000	0.000	0.000	0.000	1375.62	
2	0.7593	1185.1	1206.0	1205.8	0.922	6.335	65.721	20.251	5.978	0.236	0.503	0.026	0.028	0.000	0.000	0.000	0.000	0.000	1384.08	
3	0.7568	1180.5	1201.4	1201.2	0.920	6.383	66.004	20.100	5.841	0.225	0.476	0.025	0.026	0.000	0.000	0.000	0.000	0.000	1381.01	
4	0.7579	1182.9	1203.9	1203.6	0.925	6.334	65.923	20.125	5.900	0.235	0.503	0.026	0.028	0.000	0.000	0.000	0.000	0.000	1382.80	
5	0.7606	1187.7	1208.7	1208.5	0.928	6.288	65.669	20.204	6.065	0.247	0.538	0.029	0.031	0.000	0.000	0.000	0.000	0.000	1385.94	
6	0.7585	1183.2	1204.1	1203.9	0.927	6.365	65.831	20.149	5.947	0.233	0.494	0.027	0.028	0.000	0.000	0.000	0.000	0.000	1382.63	
7	0.7567	1180.0	1200.9	1200.7	0.925	6.393	66.042	20.028	5.866	0.223	0.471	0.025	0.027	0.000	0.000	0.000	0.000	0.000	1380.53	
8	0.7600	1186.3	1207.3	1207.0	0.923	6.330	65.647	20.217	6.128	0.226	0.475	0.027	0.028	0.000	0.000	0.000	0.000	0.000	1384.82	
9	0.7591	1184.8	1205.8	1205.5	0.926	6.327	65.799	20.114	6.074	0.226	0.478	0.027	0.029	0.000	0.000	0.000	0.000	0.000	1383.94	
10	0.7347	1153.7	1174.1	1173.9	0.834	6.073	69.373	18.095	5.000	0.188	0.393	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1369.80	
11	0.7596	1186.6	1207.6	1207.4	0.927	6.261	65.731	20.247	6.049	0.235	0.496	0.027	0.028	0.000	0.000	0.000	0.000	0.000	1385.63	
12	0.7574	1182.2	1203.1	1203.0	0.929	6.324	65.960	20.127	5.904	0.226	0.477	0.026	0.027	0.000	0.000	0.000	0.000	0.000	1382.43	
13	0.7562	1180.5	1201.4	1201.2	0.928	6.315	66.118	20.069	5.825	0.222	0.470	0.026	0.028	0.000	0.000	0.000	0.000	0.000	1381.51	
14	0.7374	1172.7	1193.5	1193.3	0.981	4.954	68.446	20.610	4.452	0.165	0.350	0.020	0.022	0.000	0.000	0.000	0.000	0.000	1390.13	
15	0.6779	1109.2	1128.8	1128.7	0.845	3.449	77.489	16.090	1.881	0.069	0.156	0.010	0.012	0.000	0.000	0.000	0.000	0.000	1370.91	
16	0.6930	1135.7	1155.8	1155.6	0.977	3.049	74.802	18.884	2.005	0.080	0.177	0.012	0.013	0.000	0.000	0.000	0.000	0.000	1388.31	
17	0.6955	1138.3	1158.4	1158.3	0.961	3.153	74.580	18.735	2.252	0.091	0.199	0.014	0.015	0.000	0.000	0.000	0.000	0.000	1388.96	
18	0.7493	1173.2	1194.0	1193.8	0.940	6.093	67.186	19.490	5.642	0.189	0.414	0.023	0.024	0.000	0.000	0.000	0.000	0.000	1379.39	
19	0.7332	1162.5	1183.1	1182.9	0.933	5.256	69.305	19.359	4.623	0.155	0.328	0.020	0.021	0.000	0.000	0.000	0.000	0.000	1381.84	
20	0.7421	1168.8	1189.5	1189.3	0.946	5.681	67.859	20.019	4.923	0.173	0.356	0.020	0.021	0.000	0.000	0.000	0.000	0.000	1380.85	
21	0.7096	1126.9	1146.9	1146.7	0.745	5.485	73.227	16.018	4.066	0.141	0.287	0.015	0.016	0.000	0.000	0.000	0.000	0.000	1361.55	
22	0.7430	1162.4	1182.9	1182.7	0.891	6.244	67.999	18.946	5.278	0.195	0.405	0.021	0.021	0.000	0.000	0.000	0.000	0.000	1372.35	
23	0.7514	1170.4	1191.1	1190.9	0.923	6.489	66.718	19.580	5.600	0.209	0.436	0.023	0.023	0.000	0.000	0.000	0.000	0.000	1374.11	
24	0.7520	1170.8	1191.5	1191.3	0.910	6.545	66.652	19.515	5.680	0.210	0.442	0.023	0.024	0.000	0.000	0.000	0.000	0.000	1374.01	
25	0.7518	1172.5	1193.3	1193.1	0.910	6.545	66.652	19.515	5.680	0.210	0.442	0.023	0.024	0.000	0.000	0.000	0.000	0.000	1376.25	
26	0.7516	1174.3	1195.1	1194.9	0.910	6.545	66.652	19.515	5.680	0.210	0.442	0.023	0.024	0.000	0.000	0.000	0.000	0.000	1378.51	
27	0.7515	1176.1	1196.9	1196.7	0.910	6.545	66.652	19.515	5.680	0.210	0.442	0.023	0.024	0.000	0.000	0.000	0.000	0.000	1380.68	
28	0.7513	1177.8	1198.7	1198.5	0.903	4.949	70.948	18.567	4.150	0.147	0.304	0.016	0.017	0.000	0.000	0.000	0.000	0.000	1382.94	
29	0.7511	1179.6	1200.5	1200.3	0.935	5.877	66.970	19.887	5.605	0.214	0.459	0.025	0.027	0.000	0.000	0.000	0.000	0.000	1385.29	
30	0.7561	1179.4	1200.3	1200.0	0.926	6.382	66.142	19.921	5.905	0.216	0.459	0.024	0.026	0.000	0.000	0.000	0.000	0.000	1380.30	
Avg	0.7442	1170.0	1190.5	1190.3	0.916	5.844	67.961	19.460	5.170	0.194	0.410	0.022	0.024	0.000	0.000	0.000	0.000	0.000	1380.24	

Source Daily Summary

April 2022

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

Pressure Base:	14.730	Contract Day:	1
Temperature Base:	60	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	0.7603	1183.8	1204.7	1204.5	0.928	6.502	65.591	20.110	6.071	0.240	0.505	0.026	0.028	0.000	0.000	0.000	0.000	0.000	1381.64	
2	0.7591	1181.8	1202.8	1202.5	0.926	6.510	65.746	20.022	6.014	0.236	0.494	0.026	0.028	0.000	0.000	0.000	0.000	0.000	1380.46	
3	0.7604	1184.5	1205.5	1205.3	0.931	6.462	65.634	20.078	6.073	0.245	0.520	0.027	0.030	0.000	0.000	0.000	0.000	0.000	1382.39	
4	0.7621	1187.1	1208.1	1207.9	0.935	6.452	65.500	20.067	6.182	0.254	0.548	0.029	0.032	0.000	0.000	0.000	0.000	0.000	1383.91	
5	0.7581	1179.8	1200.7	1200.4	0.934	6.534	65.862	19.952	5.944	0.232	0.488	0.026	0.028	0.000	0.000	0.000	0.000	0.000	1378.92	
6	0.7612	1185.2	1206.2	1206.0	0.931	6.486	65.519	20.088	6.191	0.237	0.491	0.027	0.029	0.000	0.000	0.000	0.000	0.000	1382.55	
7	0.7613	1185.3	1206.3	1206.0	0.928	6.497	65.515	20.040	6.260	0.231	0.472	0.027	0.029	0.000	0.000	0.000	0.000	0.000	1382.53	
8	0.7575	1179.0	1199.9	1199.6	0.931	6.529	65.963	19.839	6.002	0.223	0.460	0.025	0.028	0.000	0.000	0.000	0.000	0.000	1378.55	
9	0.7612	1185.9	1206.9	1206.6	0.931	6.449	65.502	20.155	6.182	0.237	0.490	0.026	0.028	0.000	0.000	0.000	0.000	0.000	1383.32	
10	0.7599	1184.0	1205.0	1204.7	0.936	6.439	65.694	20.055	6.081	0.239	0.500	0.027	0.029	0.000	0.000	0.000	0.000	0.000	1382.24	
11	0.7571	1178.5	1199.4	1199.1	0.934	6.510	65.999	19.900	5.901	0.228	0.475	0.025	0.027	0.000	0.000	0.000	0.000	0.000	1378.42	
12	0.7588	1181.3	1202.2	1202.0	0.932	6.500	65.786	19.975	6.066	0.225	0.463	0.025	0.027	0.000	0.000	0.000	0.000	0.000	1380.17	
13	0.7682	1195.8	1216.9	1216.7	0.947	6.474	64.939	19.920	6.858	0.251	0.542	0.033	0.035	0.000	0.000	0.000	0.000	0.000	1388.45	
14	0.7334	1140.3	1160.5	1160.3	0.946	6.596	69.855	16.977	4.850	0.212	0.492	0.033	0.037	0.000	0.000	0.000	0.000	0.000	1355.15	
15	0.7282	1138.6	1158.8	1158.5	0.915	6.264	70.746	16.575	4.764	0.207	0.468	0.029	0.031	0.000	0.000	0.000	0.000	0.000	1357.77	
16	0.7738	1207.7	1229.1	1228.8	0.943	6.281	64.364	20.294	7.134	0.276	0.629	0.038	0.041	0.000	0.000	0.000	0.000	0.000	1397.18	
17	0.7569	1177.4	1198.3	1198.1	0.938	6.554	66.193	19.435	6.188	0.202	0.437	0.025	0.027	0.000	0.000	0.000	0.000	0.000	1377.29	
18	0.7557	1176.7	1197.6	1197.3	0.927	6.497	66.205	19.694	6.016	0.204	0.410	0.023	0.025	0.000	0.000	0.000	0.000	0.000	1377.62	
19	0.7571	1179.4	1200.3	1200.1	0.930	6.462	66.012	19.836	6.081	0.211	0.422	0.022	0.023	0.000	0.000	0.000	0.000	0.000	1379.50	
20	0.7590	1183.6	1204.6	1204.3	0.932	6.385	65.811	20.046	6.045	0.235	0.495	0.025	0.027	0.000	0.000	0.000	0.000	0.000	1382.59	
21	0.7546	1173.7	1194.5	1194.2	0.925	6.584	66.316	19.645	5.812	0.218	0.453	0.022	0.024	0.000	0.000	0.000	0.000	0.000	1375.05	
22	0.7578	1180.0	1200.9	1200.7	0.926	6.501	65.956	19.833	6.030	0.228	0.477	0.023	0.025	0.000	0.000	0.000	0.000	0.000	1379.49	
23	0.7676	1196.1	1217.3	1217.1	0.932	6.419	64.763	20.461	6.562	0.257	0.541	0.031	0.034	0.000	0.000	0.000	0.000	0.000	1389.44	
24	0.7790	1214.2	1235.7	1235.5	0.916	6.408	63.684	20.501	7.461	0.286	0.658	0.041	0.045	0.000	0.000	0.000	0.000	0.000	1400.07	
25	0.7345	1168.6	1189.3	1189.1	0.858	5.101	70.491	17.215	5.566	0.222	0.481	0.030	0.035	0.000	0.000	0.000	0.000	0.000	1388.83	
26	0.7703	1202.3	1223.6	1223.4	0.932	6.301	64.604	20.417	6.843	0.257	0.573	0.035	0.039	0.000	0.000	0.000	0.000	0.000	1394.09	
27	0.7485	1164.8	1185.5	1185.3	0.930	6.552	67.040	19.297	5.625	0.171	0.348	0.018	0.019	0.000	0.000	0.000	0.000	0.000	1370.17	
28	0.7519	1169.2	1189.9	1189.7	0.936	6.593	66.669	19.422	5.701	0.208	0.427	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1372.20	
29	0.7601	1184.5	1205.4	1205.2	0.941	6.420	65.752	19.950	6.123	0.238	0.515	0.029	0.031	0.000	0.000	0.000	0.000	0.000	1382.60	
30	0.7565	1178.9	1199.8	1199.5	0.937	6.422	66.115	19.877	5.907	0.222	0.467	0.025	0.027	0.000	0.000	0.000	0.000	0.000	1379.46	
Avg	0.7577	1181.0	1201.8	1201.6	0.930	6.423	66.128	19.656	6.084	0.231	0.491	0.027	0.030	0.000	0.000	0.000	0.000	0.000	1380.74	

Gas Composition and Properties

Effective October 1, 2021

Source #: 2501030
Name: LIGNITE PLANT

Component	Mole %	Liquid Content	Mass %
Carbon Dioxide, CO2	0.2283		0.5237
Nitrogen, N2	2.9631		4.3268
Methane, C1	79.4957		66.4767
Ethane, C2	15.2390	4.0765	23.8852
Propane, C3	2.0456	0.5637	4.7019
iso-Butane, iC4	0.0244	0.0080	0.0739
n-Butane, nC4	0.0039	0.0012	0.0118
iso-Pentane, iC5			
n-Pentane, nC5			
Neo-Pentane, neo			
Hexanes Plus, C6+			
Argon, Ar			
Carbon Monoxide, CO			
Hydrogen, H2			
Oxygen, O2			
Helium, He			
Water, H2O			
Hydrogen Sulfide, H2S			
Totals	100.0000	4.6490	100.0000

Property	Total Sample	C6 Plus Fraction
Pressure Base	14.730	
Temperature Base	60.00	
HCDP @ Sample Pressure		
Cricondentherm	-32.804	
HV, Dry @ Base P, T	1130.73	
HV, Sat @ Base P, T	1111.05	
HV, Sat @ Sample P, T	1130.73	
Relative Density	0.6640	
C6+: 100		

Sample

Date: 10/01/2021 Type:

Tech: Wayne Sampson

Pressure: Temp.:

Gauge: H2O:

Atm. Pressure: H2S:

Remarks:

Analysis

Date: Instrument:

Tech: Cylinder:

Remarks:

Gas Composition and Properties

Effective April 1, 2022

Source #: 3002013
Name: EPPING BORDER

Component	Mole %	Liquid Content	Mass %	Property	Total Sample	C6 Plus Fraction
Carbon Dioxide, CO2	0.9650		2.0606	Pressure Base	13.000	
Nitrogen, N2	3.0680		4.1700	Temperature Base	60.00	
Methane, C1	71.6660		55.7829	HCDP @ Sample Pressure		
Ethane, C2	21.0190	5.6231	30.6653	Cricondentherm	-2.872	
Propane, C3	2.8790	0.7934	6.1596	HV, Dry @ Base P, T	1188.40	
iso-Butane, iC4	0.1160	0.0380	0.3271	HV, Sat @ Base P, T	1164.96	
n-Butane, nC4	0.2500	0.0788	0.7050	HV, Sat @ Sample P, T	1188.40	
iso-Pentane, iC5	0.0170	0.0062	0.0595	Relative Density	0.7138	
n-Pentane, nC5	0.0200	0.0073	0.0700			
Neo-Pentane, neo						
Hexanes Plus, C6+						
Argon, Ar						
Carbon Monoxide, CO						
Hydrogen, H2						
Oxygen, O2						
Helium, He						
Water, H2O						
Hydrogen Sulfide, H2S						
				C6+: 100		
Totals	100.0000	6.5460	100.0000			

Sample

Date: _____ Type: _____

Tech: _____

Pressure: _____ Temp.: _____

Gauge: _____ H2O: _____

Atm. Pressure: _____ H2S: _____

Remarks: _____

Analysis

Date: _____ Instrument: _____

Tech: _____ Cylinder: _____

Remarks: _____

*** End of Report ***

Source Daily Summary

April 2022

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

Pressure Base:	14.730	Contract Day:	1
Temperature Base:	60	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	0.7110	1153.1	1173.5	1173.3	1.158	3.411	71.692	21.091	2.288	0.098	0.227	0.016	0.019	0.000	0.000	0.000	0.000	0.000	1391.70	
2	0.7112	1153.3	1173.7	1173.5	1.155	3.420	71.657	21.121	2.282	0.098	0.230	0.017	0.020	0.000	0.000	0.000	0.000	0.000	1391.79	
3	0.7112	1153.3	1173.7	1173.5	1.142	3.438	71.664	21.095	2.296	0.098	0.230	0.017	0.019	0.000	0.000	0.000	0.000	0.000	1391.78	
4	0.7085	1148.5	1168.8	1168.6	1.142	3.474	72.134	20.652	2.249	0.094	0.220	0.016	0.019	0.000	0.000	0.000	0.000	0.000	1388.62	
5	0.7088	1149.0	1169.4	1169.2	1.136	3.484	72.075	20.674	2.285	0.094	0.218	0.015	0.018	0.000	0.000	0.000	0.000	0.000	1388.98	
6	0.7091	1149.4	1169.7	1169.5	1.130	3.505	72.005	20.725	2.289	0.094	0.217	0.016	0.019	0.000	0.000	0.000	0.000	0.000	1389.03	
7	0.7097	1150.4	1170.7	1170.5	1.126	3.500	71.920	20.800	2.301	0.095	0.222	0.016	0.019	0.000	0.000	0.000	0.000	0.000	1389.72	
8	0.7090	1149.1	1169.5	1169.3	1.126	3.504	72.057	20.661	2.308	0.094	0.218	0.015	0.017	0.000	0.000	0.000	0.000	0.000	1388.96	
9	0.7096	1150.6	1171.0	1170.8	1.138	3.466	71.935	20.810	2.301	0.095	0.221	0.016	0.018	0.000	0.000	0.000	0.000	0.000	1390.03	
10	0.7096	1149.8	1170.1	1169.9	1.137	3.512	71.933	20.774	2.290	0.097	0.223	0.016	0.018	0.000	0.000	0.000	0.000	0.000	1389.08	
11	0.7097	1150.2	1170.6	1170.4	1.145	3.482	71.921	20.809	2.293	0.095	0.220	0.015	0.018	0.000	0.000	0.000	0.000	0.000	1389.54	
12	0.7104	1151.5	1171.9	1171.7	1.155	3.459	71.798	20.940	2.293	0.097	0.224	0.016	0.019	0.000	0.000	0.000	0.000	0.000	1390.35	
13	0.7089	1149.5	1169.9	1169.7	1.141	3.450	72.111	20.641	2.302	0.096	0.222	0.017	0.020	0.000	0.000	0.000	0.000	0.000	1389.54	
14	0.7095	1150.2	1170.5	1170.3	1.144	3.472	71.940	20.807	2.291	0.094	0.218	0.015	0.018	0.000	0.000	0.000	0.000	0.000	1389.64	
15	0.7089	1145.8	1166.1	1165.9	1.220	3.565	72.082	20.520	2.285	0.089	0.206	0.014	0.017	0.000	0.000	0.000	0.000	0.000	1384.96	
16	0.7115	1151.1	1171.5	1171.3	1.268	3.411	71.432	21.425	2.177	0.081	0.181	0.012	0.013	0.000	0.000	0.000	0.000	0.000	1388.85	
17	0.7080	1149.5	1169.8	1169.6	1.127	3.398	72.177	20.716	2.249	0.092	0.210	0.015	0.017	0.000	0.000	0.000	0.000	0.000	1390.28	
18	0.7079	1150.0	1170.3	1170.1	1.098	3.399	72.136	20.821	2.214	0.091	0.210	0.014	0.016	0.000	0.000	0.000	0.000	0.000	1391.01	
19	0.7091	1151.6	1172.0	1171.8	1.099	3.415	71.943	20.950	2.258	0.092	0.211	0.015	0.018	0.000	0.000	0.000	0.000	0.000	1391.75	
20	0.7058	1141.5	1161.7	1161.5	1.091	3.729	72.667	19.839	2.316	0.097	0.224	0.017	0.020	0.000	0.000	0.000	0.000	0.000	1382.80	
21	0.7008	1136.0	1156.1	1155.9	1.040	3.674	73.564	19.114	2.266	0.094	0.216	0.015	0.018	0.000	0.000	0.000	0.000	0.000	1380.96	
22	0.7074	1146.3	1166.6	1166.4	1.097	3.581	72.463	20.109	2.378	0.102	0.233	0.017	0.020	0.000	0.000	0.000	0.000	0.000	1386.99	
23	0.7080	1147.3	1167.6	1167.4	1.122	3.537	72.337	20.278	2.364	0.100	0.225	0.017	0.019	0.000	0.000	0.000	0.000	0.000	1387.61	
24	0.7080	1146.8	1167.1	1166.9	1.126	3.560	72.328	20.261	2.369	0.098	0.223	0.016	0.019	0.000	0.000	0.000	0.000	0.000	1387.03	
25	0.7082	1147.1	1167.4	1167.2	1.123	3.564	72.275	20.315	2.364	0.098	0.225	0.017	0.018	0.000	0.000	0.000	0.000	0.000	1387.23	
26	0.7083	1147.3	1167.6	1167.3	1.123	3.565	72.257	20.334	2.362	0.099	0.226	0.017	0.018	0.000	0.000	0.000	0.000	0.000	1387.31	
27	0.7083	1147.3	1167.6	1167.3	1.123	3.565	72.257	20.334	2.362	0.099	0.226	0.017	0.018	0.000	0.000	0.000	0.000	0.000	1387.31	
28	0.7088	1148.5	1168.8	1168.6	1.100	3.574	72.164	20.394	2.412	0.098	0.225	0.015	0.017	0.000	0.000	0.000	0.000	0.000	1388.26	
29	0.7401	1172.3	1193.1	1192.9	0.959	5.258	68.312	20.029	4.836	0.180	0.383	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1387.02	
30	0.7421	1165.3	1185.9	1185.7	0.971	5.863	67.918	19.714	4.923	0.179	0.385	0.022	0.024	0.000	0.000	0.000	0.000	0.000	1376.72	
Avg	0.7109	1150.0	1170.4	1170.2	1.122	3.641	71.838	20.559	2.473	0.101	0.231	0.016	0.019	0.000	0.000	0.000	0.000	0.000	1388.16	

Source Daily Summary

April 2022

Source #: 043
Name: BISMARCK STN-CLEVELAND STN

Pressure Base:	14.730	Contract Day:	1
Temperature Base:	60	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	0.7600	1185.8	1206.8	1205.7	0.908	6.379	65.693	20.136	6.066	0.246	0.517	0.027	0.028	0.000	0.000	0.000	0.000	0.000	1384.31	
2	0.7580	1182.2	1203.1	1202.0	0.907	6.416	65.928	19.997	5.969	0.237	0.494	0.026	0.027	0.000	0.000	0.000	0.000	0.000	1381.89	
3	0.7573	1181.8	1202.7	1201.7	0.913	6.363	66.085	19.917	5.919	0.241	0.509	0.026	0.028	0.000	0.000	0.000	0.000	0.000	1382.09	
4	0.7614	1188.5	1209.6	1208.5	0.916	6.335	65.664	20.024	6.184	0.259	0.557	0.030	0.031	0.000	0.000	0.000	0.000	0.000	1386.18	
5	0.7585	1183.0	1204.0	1202.9	0.915	6.396	65.863	20.064	5.972	0.239	0.500	0.026	0.027	0.000	0.000	0.000	0.000	0.000	1382.43	
6	0.7583	1182.6	1203.5	1202.5	0.913	6.413	65.857	20.059	5.987	0.234	0.485	0.026	0.027	0.000	0.000	0.000	0.000	0.000	1382.03	
7	0.7621	1189.6	1210.7	1209.7	0.910	6.341	65.425	20.266	6.275	0.237	0.488	0.028	0.029	0.000	0.000	0.000	0.000	0.000	1386.80	
8	0.7590	1184.1	1205.1	1204.2	0.913	6.380	65.886	19.915	6.134	0.234	0.484	0.027	0.028	0.000	0.000	0.000	0.000	0.000	1383.24	
9	0.7603	1187.0	1208.0	1207.1	0.911	6.326	65.728	20.057	6.176	0.243	0.503	0.027	0.028	0.000	0.000	0.000	0.000	0.000	1385.44	
10	0.7612	1189.0	1210.0	1209.1	0.916	6.290	65.639	20.118	6.201	0.251	0.528	0.028	0.029	0.000	0.000	0.000	0.000	0.000	1386.86	
11	0.7568	1180.6	1201.5	1200.6	0.916	6.383	66.077	19.955	5.910	0.231	0.478	0.025	0.026	0.000	0.000	0.000	0.000	0.000	1381.16	
12	0.7516	1174.7	1195.5	1194.6	0.912	6.258	66.847	19.580	5.687	0.218	0.450	0.023	0.024	0.000	0.000	0.000	0.000	0.000	1379.04	
13	0.7537	1180.6	1201.5	1200.6	0.908	6.099	66.877	19.297	6.087	0.222	0.460	0.025	0.026	0.000	0.000	0.000	0.000	0.000	1384.04	
14	0.7363	1154.0	1174.5	1173.6	0.886	6.129	69.506	17.590	5.136	0.210	0.479	0.031	0.033	0.000	0.000	0.000	0.000	0.000	1368.62	
15	0.6974	1117.3	1137.0	1136.2	0.776	4.892	74.869	15.913	3.087	0.131	0.295	0.018	0.019	0.000	0.000	0.000	0.000	0.000	1361.55	
16	0.7192	1146.8	1167.1	1166.3	0.725	5.202	71.802	17.406	4.259	0.172	0.387	0.023	0.024	0.000	0.000	0.000	0.000	0.000	1376.24	
17	0.7313	1161.8	1182.4	1181.6	0.772	5.356	70.096	18.150	5.027	0.172	0.380	0.022	0.023	0.000	0.000	0.000	0.000	0.000	1382.64	
18	0.7389	1162.9	1183.5	1182.7	0.869	5.852	68.764	18.613	5.362	0.170	0.333	0.017	0.018	0.000	0.000	0.000	0.000	0.000	1376.87	
19	0.7426	1165.2	1185.8	1185.0	0.905	6.006	68.156	18.876	5.532	0.164	0.330	0.014	0.016	0.000	0.000	0.000	0.000	0.000	1376.12	
20	0.7229	1126.7	1146.7	1145.8	0.956	6.443	68.903	21.138	2.251	0.190	0.099	0.012	0.006	0.000	0.000	0.000	0.000	0.000	1348.48	
21	0.6975	1083.2	1102.4	1101.6	0.976	6.709	70.740	21.574	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1319.93	
22	0.6991	1085.3	1104.5	1103.7	0.976	6.727	70.427	21.869	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1321.02	
23	0.6807	1077.5	1096.6	1095.8	0.958	5.496	74.366	19.180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1329.26	
24	0.6097	1039.7	1058.2	1057.2	0.756	1.410	89.133	8.699	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1355.80	
25	0.6062	1044.0	1062.4	1061.5	0.760	0.811	90.096	8.332	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1364.59	
26	0.6100	1044.5	1063.0	1062.2	0.815	1.055	89.321	8.809	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1361.04	
27	0.6043	1039.6	1058.0	1057.1	0.768	0.897	90.166	8.166	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1361.09	
28	0.6651	1079.8	1099.0	1097.9	0.901	3.965	78.585	15.694	0.828	0.007	0.019	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1348.24	
29	0.7690	1185.7	1206.7	1205.7	0.535	7.797	63.610	20.941	6.110	0.017	0.987	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1376.06	
30	0.7740	1194.1	1215.2	1214.2	0.351	8.034	63.188	20.742	6.423	0.000	1.262	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1381.30	
Avg	0.7221	1143.0	1163.5	1162.6	0.851	5.505	70.977	18.036	4.086	0.144	0.367	0.016	0.017	0.000	0.000	0.000	0.000	0.000	1369.81	

Source Daily Summary

April 2022

Source #: 063
Name: CLEVELAND STN-MAPLETON

Pressure Base:	14.730	Contract Day:	1
Temperature Base:	60	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	1163.6	1184.2	1184.1	0.898	6.452	67.393	19.292	5.328	0.198	0.399	0.020	0.020	0.000	0.000	0.000	0.000	0.000	1370.94	
2	0.7595	1184.0	1205.0	1204.9	0.916	6.430	65.731	20.092	6.031	0.242	0.504	0.026	0.027	0.000	0.000	0.000	0.000	0.000	1382.68	
3	0.7583	1182.1	1203.0	1202.9	0.915	6.442	65.855	20.039	5.975	0.235	0.487	0.026	0.027	0.000	0.000	0.000	0.000	0.000	1381.44	
4	0.7569	1180.4	1201.3	1201.2	0.920	6.398	66.117	19.877	5.898	0.238	0.498	0.027	0.028	0.000	0.000	0.000	0.000	0.000	1380.84	
5	0.7610	1186.8	1207.8	1207.7	0.924	6.384	65.657	20.051	6.132	0.253	0.538	0.029	0.031	0.000	0.000	0.000	0.000	0.000	1384.60	
6	0.7579	1181.0	1201.9	1201.8	0.929	6.446	65.939	19.968	5.941	0.236	0.488	0.026	0.027	0.000	0.000	0.000	0.000	0.000	1380.56	
7	0.7570	1179.4	1200.3	1200.2	0.924	6.469	66.036	19.891	5.929	0.229	0.470	0.025	0.026	0.000	0.000	0.000	0.000	0.000	1379.48	
8	0.7607	1185.9	1206.9	1206.8	0.919	6.418	65.610	20.072	6.222	0.232	0.472	0.027	0.027	0.000	0.000	0.000	0.000	0.000	1383.80	
9	0.7590	1183.3	1204.2	1204.1	0.922	6.421	65.840	19.944	6.114	0.231	0.473	0.027	0.028	0.000	0.000	0.000	0.000	0.000	1382.22	
10	0.7597	1185.1	1206.1	1206.0	0.920	6.378	65.735	20.083	6.107	0.237	0.486	0.026	0.027	0.000	0.000	0.000	0.000	0.000	1383.71	
11	0.7607	1187.1	1208.1	1208.0	0.924	6.345	65.631	20.156	6.133	0.246	0.510	0.027	0.028	0.000	0.000	0.000	0.000	0.000	1385.11	
12	0.7570	1180.0	1200.9	1200.8	0.923	6.428	66.035	19.948	5.916	0.229	0.470	0.025	0.025	0.000	0.000	0.000	0.000	0.000	1380.26	
13	0.7521	1174.5	1195.3	1195.2	0.920	6.310	66.774	19.574	5.707	0.219	0.448	0.024	0.024	0.000	0.000	0.000	0.000	0.000	1378.26	
14	0.7515	1176.2	1197.0	1196.9	0.916	6.155	67.120	19.181	5.918	0.217	0.443	0.024	0.025	0.000	0.000	0.000	0.000	0.000	1380.80	
15	0.7398	1158.2	1178.7	1178.6	0.902	6.172	69.029	17.804	5.341	0.213	0.478	0.031	0.032	0.000	0.000	0.000	0.000	0.000	1370.39	
16	0.6965	1116.4	1136.1	1135.9	0.780	4.847	75.008	15.887	3.029	0.128	0.283	0.018	0.019	0.000	0.000	0.000	0.000	0.000	1361.43	
17	0.7163	1142.3	1162.5	1162.1	0.725	5.213	72.217	17.138	4.124	0.166	0.370	0.023	0.024	0.000	0.000	0.000	0.000	0.000	1373.49	
18	0.7304	1161.3	1181.9	1181.4	0.769	5.307	70.254	18.102	4.953	0.178	0.390	0.023	0.024	0.000	0.000	0.000	0.000	0.000	1382.89	
19	0.7384	1161.4	1181.9	1181.5	0.873	5.895	68.825	18.569	5.291	0.169	0.340	0.019	0.020	0.000	0.000	0.000	0.000	0.000	1375.49	
20	0.7426	1165.5	1186.1	1185.6	0.912	5.984	68.275	18.758	5.464	0.190	0.376	0.020	0.020	0.000	0.000	0.000	0.000	0.000	1376.37	
21	0.7577	1184.2	1205.2	1204.7	0.922	6.240	66.067	19.970	6.036	0.233	0.482	0.025	0.025	0.000	0.000	0.000	0.000	0.000	1384.55	
22	0.7515	1171.7	1192.4	1191.7	0.917	6.430	66.772	19.522	5.668	0.212	0.435	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1375.52	
23	0.7550	1177.2	1198.1	1197.7	0.914	6.427	66.348	19.697	5.880	0.224	0.463	0.023	0.024	0.000	0.000	0.000	0.000	0.000	1378.80	
24	0.7216	1146.8	1167.1	1167.0	0.901	5.159	71.774	17.000	4.579	0.177	0.369	0.020	0.020	0.000	0.000	0.000	0.000	0.000	1374.08	
25	0.6097	1046.1	1064.6	1064.4	0.721	1.064	90.192	7.248	0.692	0.026	0.052	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1363.81	
26	0.6153	1053.9	1072.6	1072.4	0.787	1.017	88.987	8.558	0.565	0.025	0.053	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1367.35	
27	0.6094	1045.4	1063.9	1063.8	0.782	0.985	89.869	7.981	0.356	0.010	0.016	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1362.94	
28	0.6092	1044.7	1063.2	1063.0	0.782	1.014	89.870	7.966	0.349	0.008	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1362.19	
29	0.7206	1147.7	1168.1	1167.9	0.914	4.998	71.910	17.034	4.620	0.156	0.331	0.018	0.019	0.000	0.000	0.000	0.000	0.000	1376.34	
30	0.7547	1176.3	1197.1	1196.9	0.932	6.428	66.368	19.710	5.845	0.218	0.450	0.024	0.025	0.000	0.000	0.000	0.000	0.000	1377.96	
Avg	0.7289	1154.0	1174.7	1174.5	0.880	5.422	70.575	17.637	4.871	0.186	0.386	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1376.61	

Source Daily Summary

April 2022

Source #: 061
Name: CLEVELAND STN-GRAFTON BDR

Pressure Base:	14.730	Contract Day:	1
Temperature Base:	60	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	0.7458	1163.4	1184.0	1183.9	0.897	6.438	67.444	19.268	5.317	0.197	0.398	0.020	0.021	0.000	0.000	0.000	0.000	0.000	1370.96	
2	0.7549	1175.6	1196.4	1196.3	0.918	6.508	66.206	19.886	5.771	0.220	0.448	0.021	0.021	0.000	0.000	0.000	0.000	0.000	1377.03	
3	0.7509	1168.8	1189.5	1189.4	0.920	6.549	66.594	19.763	5.556	0.197	0.388	0.017	0.016	0.000	0.000	0.000	0.000	0.000	1372.69	
4	0.7492	1166.7	1187.4	1187.3	0.925	6.513	66.864	19.607	5.467	0.198	0.393	0.017	0.016	0.000	0.000	0.000	0.000	0.000	1371.75	
5	0.7526	1171.9	1192.7	1192.6	0.931	6.503	66.489	19.741	5.663	0.211	0.425	0.019	0.018	0.000	0.000	0.000	0.000	0.000	1374.77	
6	0.7480	1163.3	1183.9	1183.9	0.939	6.583	66.932	19.597	5.372	0.186	0.360	0.016	0.014	0.000	0.000	0.000	0.000	0.000	1368.90	
7	0.7421	1153.0	1173.4	1173.4	0.935	6.671	67.547	19.341	5.045	0.156	0.286	0.010	0.009	0.000	0.000	0.000	0.000	0.000	1362.09	
8	0.7432	1155.1	1175.6	1175.5	0.931	6.652	67.380	19.437	5.166	0.150	0.267	0.009	0.008	0.000	0.000	0.000	0.000	0.000	1363.57	
9	0.7435	1155.8	1176.2	1176.2	0.931	6.635	67.420	19.355	5.190	0.158	0.290	0.011	0.010	0.000	0.000	0.000	0.000	0.000	1364.11	
10	0.7476	1163.5	1184.1	1184.0	0.927	6.553	66.963	19.615	5.401	0.178	0.338	0.013	0.012	0.000	0.000	0.000	0.000	0.000	1369.47	
11	0.7522	1171.9	1192.7	1192.6	0.930	6.469	66.491	19.820	5.649	0.204	0.403	0.018	0.017	0.000	0.000	0.000	0.000	0.000	1375.13	
12	0.7498	1167.1	1187.7	1187.7	0.928	6.540	66.777	19.638	5.504	0.196	0.384	0.017	0.017	0.000	0.000	0.000	0.000	0.000	1371.63	
13	0.7457	1162.7	1183.3	1183.3	0.924	6.421	67.403	19.330	5.337	0.187	0.365	0.016	0.015	0.000	0.000	0.000	0.000	0.000	1370.36	
14	0.7444	1163.5	1184.1	1184.0	0.921	6.262	67.820	18.928	5.497	0.184	0.356	0.016	0.015	0.000	0.000	0.000	0.000	0.000	1372.37	
15	0.7340	1147.0	1167.3	1167.3	0.908	6.305	69.562	17.591	5.016	0.183	0.392	0.022	0.021	0.000	0.000	0.000	0.000	0.000	1362.53	
16	0.6978	1117.6	1137.4	1137.2	0.789	4.892	74.800	15.978	3.082	0.130	0.290	0.019	0.019	0.000	0.000	0.000	0.000	0.000	1361.52	
17	0.7170	1143.2	1163.5	1163.3	0.728	5.214	72.127	17.178	4.164	0.168	0.373	0.023	0.024	0.000	0.000	0.000	0.000	0.000	1373.98	
18	0.7316	1163.3	1183.9	1183.6	0.770	5.299	70.103	18.179	5.018	0.181	0.400	0.024	0.025	0.000	0.000	0.000	0.000	0.000	1384.08	
19	0.7397	1163.1	1183.7	1183.4	0.876	5.907	68.652	18.646	5.362	0.172	0.346	0.020	0.020	0.000	0.000	0.000	0.000	0.000	1376.29	
20	0.7438	1167.0	1187.6	1187.4	0.913	6.006	68.094	18.850	5.522	0.193	0.381	0.020	0.021	0.000	0.000	0.000	0.000	0.000	1377.01	
21	0.7583	1185.0	1206.0	1205.6	0.923	6.243	65.991	20.011	6.062	0.234	0.484	0.025	0.026	0.000	0.000	0.000	0.000	0.000	1384.92	
22	0.7520	1172.4	1193.2	1192.7	0.918	6.433	66.709	19.546	5.696	0.214	0.440	0.022	0.023	0.000	0.000	0.000	0.000	0.000	1375.90	
23	0.7550	1176.8	1197.7	1197.4	0.916	6.450	66.335	19.695	5.866	0.225	0.466	0.024	0.024	0.000	0.000	0.000	0.000	0.000	1378.33	
24	0.7309	1156.5	1177.0	1176.9	0.909	5.430	70.325	17.735	4.958	0.194	0.404	0.022	0.022	0.000	0.000	0.000	0.000	0.000	1376.85	
25	0.6255	1059.9	1078.7	1078.5	0.750	1.664	87.572	8.621	1.242	0.047	0.095	0.005	0.005	0.000	0.000	0.000	0.000	0.000	1364.60	
26	0.6151	1053.6	1072.3	1072.1	0.788	1.018	89.020	8.523	0.565	0.025	0.053	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1367.14	
27	0.6094	1045.3	1063.9	1063.7	0.783	0.988	89.869	7.978	0.355	0.010	0.016	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1362.85	
28	0.6091	1044.6	1063.1	1062.9	0.781	1.014	89.882	7.956	0.346	0.008	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1362.13	
29	0.7194	1146.3	1166.6	1166.5	0.915	4.962	72.112	16.925	4.566	0.154	0.328	0.018	0.019	0.000	0.000	0.000	0.000	0.000	1375.86	
30	0.7545	1175.7	1196.6	1196.4	0.932	6.444	66.388	19.685	5.833	0.218	0.451	0.024	0.025	0.000	0.000	0.000	0.000	0.000	1377.51	
Avg	0.7254	1147.0	1167.6	1167.5	0.885	5.519	70.862	17.547	4.653	0.166	0.334	0.016	0.016	0.000	0.000	0.000	0.000	0.000	1371.54	

Source Daily Summary

April 2022

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

Pressure Base:	14.730	Contract Day:	1
Temperature Base:	60	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	0.6872	1123.0	1142.9	1142.5	0.488	4.032	75.373	17.727	2.148	0.076	0.142	0.008	0.007	0.000	0.000	0.000	0.000	0.000	1378.66	
2	0.7298	1153.3	1173.7	1173.3	0.900	5.544	70.256	17.913	4.773	0.186	0.386	0.020	0.020	0.000	0.000	0.000	0.000	0.000	1374.15	
3	0.6299	1049.6	1068.1	1067.8	0.931	2.438	85.943	9.962	0.666	0.019	0.036	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1345.88	
4	0.6322	1051.7	1070.3	1069.9	0.931	2.529	85.589	10.107	0.772	0.023	0.045	0.002	0.003	0.000	0.000	0.000	0.000	0.000	1346.09	
5	0.6348	1055.7	1074.4	1074.0	0.908	2.563	84.981	10.746	0.739	0.021	0.038	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1348.46	
6	0.6387	1060.5	1079.3	1079.0	0.947	2.576	84.209	11.468	0.740	0.020	0.037	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1350.54	
7	0.6352	1056.6	1075.3	1074.9	0.975	2.446	84.938	10.877	0.700	0.020	0.039	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1349.16	
8	0.6323	1053.5	1072.2	1071.8	0.949	2.398	85.449	10.496	0.653	0.018	0.034	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1348.37	
9	0.6319	1052.7	1071.4	1071.0	0.951	2.406	85.530	10.403	0.655	0.018	0.033	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1347.77	
10	0.6349	1056.5	1075.2	1074.8	0.956	2.456	85.047	10.706	0.768	0.022	0.041	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1349.33	
11	0.6340	1055.2	1073.8	1073.5	0.946	2.459	85.190	10.610	0.731	0.021	0.038	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1348.69	
12	0.6316	1052.3	1070.9	1070.6	0.929	2.444	85.529	10.415	0.634	0.017	0.030	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1347.46	
13	0.6385	1065.7	1084.6	1084.3	0.810	2.454	83.992	12.061	0.639	0.015	0.027	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1357.27	
14	0.6495	1084.0	1103.2	1102.9	0.649	2.617	81.869	13.891	0.911	0.022	0.037	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1368.83	
15	0.6568	1092.9	1112.2	1112.0	0.529	2.942	80.476	14.841	1.128	0.030	0.050	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1372.40	
16	0.6610	1099.3	1118.8	1118.5	0.396	3.147	79.534	15.639	1.189	0.032	0.057	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1376.12	
17	0.6503	1081.8	1100.9	1100.7	0.410	3.193	81.463	13.895	0.965	0.024	0.044	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1365.18	
18	0.6443	1074.7	1093.7	1093.4	0.602	2.765	82.803	12.927	0.841	0.022	0.037	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1362.60	
19	0.6239	1047.9	1066.5	1066.2	0.878	2.057	86.936	9.608	0.492	0.011	0.017	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1350.20	
20	0.6292	1033.3	1051.6	1051.3	0.865	3.468	85.340	10.191	0.122	0.001	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1325.93	
21	0.6271	1024.8	1043.0	1042.7	0.828	3.847	85.438	9.888	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1317.15	
22	0.6271	1022.1	1040.2	1039.9	0.821	4.030	85.392	9.756	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1313.54	
23	0.6221	1029.1	1047.3	1047.1	0.824	3.119	86.576	9.480	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1327.95	
24	0.5971	1025.1	1043.3	1043.0	0.703	1.197	91.678	6.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1350.27	
25	0.6050	1043.2	1061.7	1061.4	0.755	0.754	90.344	8.146	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1364.92	
26	0.6112	1045.1	1063.6	1063.4	0.837	1.095	89.099	8.969	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1360.53	
27	0.6162	1048.5	1067.1	1066.8	0.866	1.321	88.056	9.757	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1359.35	
28	0.6235	1038.0	1056.4	1056.1	0.887	2.625	86.366	10.030	0.089	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1337.86	
29	0.7573	1177.8	1198.7	1198.3	0.365	7.449	65.050	20.657	5.658	0.009	0.813	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1377.52	
30	0.7736	1194.7	1215.9	1215.4	0.332	7.987	63.218	20.818	6.389	0.000	1.257	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1382.39	
Avg	0.6455	1068.0	1087.2	1086.9	0.772	3.012	83.055	11.947	1.080	0.021	0.108	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1353.49	

Source Daily Summary

April 2022

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

Pressure Base:	14.730	Contract Day:	1
Temperature Base:	60	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	0.6652	1091.2	1110.5	1110.1	0.496	3.887	79.048	14.938	1.491	0.049	0.084	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1361.56
2	0.6687	1105.9	1125.4	1125.1	0.210	3.757	77.837	16.732	1.384	0.030	0.047	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1376.31
3	0.6748	1110.5	1130.1	1130.0	0.404	3.752	77.103	17.008	1.606	0.046	0.075	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1375.78
4	0.6657	1097.7	1117.1	1117.0	0.303	3.829	78.598	15.764	1.409	0.036	0.057	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1369.23
5	0.6625	1100.2	1119.7	1119.5	0.253	3.458	79.061	15.873	1.287	0.026	0.039	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1375.59
6	0.6694	1113.7	1133.4	1133.1	0.100	3.515	77.564	17.392	1.371	0.024	0.033	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1385.28
7	0.6658	1107.1	1126.7	1126.3	0.131	3.535	78.121	16.973	1.196	0.019	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1380.76
8	0.6540	1085.9	1105.2	1104.9	0.206	3.598	80.563	14.438	1.139	0.022	0.033	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1366.57
9	0.6677	1109.2	1128.8	1128.5	0.145	3.561	78.202	16.468	1.512	0.037	0.068	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1381.34
10	0.6800	1126.2	1146.2	1146.0	0.227	3.557	76.013	18.365	1.690	0.048	0.090	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1389.88
11	0.6799	1124.2	1144.1	1143.8	0.329	3.516	75.938	18.530	1.588	0.036	0.058	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1387.50
12	0.6784	1118.5	1138.3	1137.9	0.431	3.565	76.399	17.883	1.601	0.043	0.072	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1381.99
13	0.6784	1121.6	1141.5	1140.6	0.278	3.604	76.237	18.160	1.611	0.039	0.065	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1385.90
14	0.6760	1119.3	1139.1	1138.5	0.249	3.568	76.709	17.750	1.602	0.041	0.073	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1385.46
15	0.6721	1114.3	1134.0	1133.2	0.209	3.568	77.492	16.993	1.608	0.042	0.078	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1383.22
16	0.6590	1093.3	1112.7	1112.0	0.330	3.432	79.891	14.988	1.269	0.031	0.053	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1370.58
17	0.6588	1093.3	1112.7	1112.0	0.296	3.459	79.819	15.136	1.213	0.027	0.044	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1370.88
18	0.6717	1110.2	1129.9	1129.4	0.369	3.529	77.684	16.749	1.537	0.045	0.079	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1378.62
19	0.6673	1105.2	1124.7	1124.4	0.493	3.235	78.611	16.111	1.432	0.041	0.069	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1376.88
20	0.6822	1126.4	1146.3	1145.9	0.533	3.281	75.971	18.357	1.689	0.055	0.102	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1387.93
21	0.6811	1123.3	1143.2	1142.8	0.516	3.399	76.130	18.101	1.692	0.054	0.098	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1385.14
22	0.6850	1128.8	1148.8	1148.4	0.581	3.323	75.585	18.519	1.808	0.060	0.111	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1388.05
23	0.6752	1117.4	1137.2	1136.8	0.598	3.073	77.323	17.296	1.559	0.049	0.091	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1383.93
24	0.6631	1097.2	1116.7	1115.9	0.572	3.203	79.435	15.362	1.312	0.039	0.069	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1371.20
25	0.6489	1076.2	1095.2	1095.1	0.527	3.223	82.010	13.068	1.075	0.033	0.057	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1359.56
26	0.6373	1051.7	1070.3	1070.1	0.856	3.120	84.770	10.075	1.052	0.043	0.073	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1340.08
27	0.6726	1102.3	1121.8	1121.5	0.383	4.072	78.176	15.044	2.109	0.066	0.133	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1367.88
28	0.6609	1092.8	1112.2	1111.8	0.135	3.933	78.819	16.118	0.965	0.013	0.017	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1368.10
29	0.6830	1120.9	1140.7	1140.4	0.416	3.871	75.541	18.356	1.661	0.050	0.095	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1380.35
30	0.6841	1119.1	1138.9	1138.5	0.465	4.010	75.483	18.112	1.748	0.058	0.112	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1376.97
Avg	0.6696	1107.0	1126.4	1126.0	0.368	3.548	78.004	16.489	1.474	0.040	0.070	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1376.42

Source Daily Summary

April 2022

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

Pressure Base:	14.730	Contract Day:	1
Temperature Base:	60	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	0.6731	1114.5	1134.3	1134.1	0.338	3.448	77.196	17.523	1.365	0.044	0.078	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1382.56	
2	0.6844	1152.7	1173.1	1172.8	0.006	2.702	73.536	23.279	0.459	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1418.01	
3	0.6823	1145.1	1165.4	1165.2	0.073	2.865	74.250	22.104	0.670	0.015	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1410.80	
4	0.6752	1123.1	1143.0	1142.7	0.248	3.267	76.265	19.107	1.028	0.031	0.050	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1390.96	
5	0.6731	1124.0	1144.0	1143.7	0.364	2.832	76.722	19.125	0.883	0.027	0.045	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1394.33	
6	0.6443	1074.8	1093.8	1093.6	0.808	2.448	82.789	13.287	0.625	0.017	0.027	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1362.51	
7	0.6349	1057.6	1076.4	1076.2	0.983	2.345	84.975	10.957	0.680	0.021	0.037	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1350.82	
8	0.6324	1054.8	1073.5	1073.2	0.958	2.319	85.409	10.626	0.639	0.018	0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1349.87	
9	0.6329	1055.5	1074.2	1074.0	0.962	2.316	85.322	10.700	0.650	0.018	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1350.25	
10	0.6552	1097.4	1116.8	1116.6	0.580	2.452	80.350	15.920	0.654	0.015	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1379.24	
11	0.6860	1155.0	1175.5	1175.3	0.068	2.668	73.567	22.965	0.704	0.012	0.015	0.002	0.001	0.000	0.000	0.000	0.000	0.000	1419.24	
12	0.6958	1172.1	1192.8	1192.6	0.983	2.994	73.808	21.022	0.991	0.050	0.049	0.053	0.049	0.000	0.000	0.000	0.000	0.000	1430.00	
13	0.6829	1135.0	1155.1	1154.9	0.234	3.287	75.063	19.909	1.425	0.032	0.049	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1397.78	
14	0.6701	1112.3	1132.0	1131.7	0.373	3.255	77.719	17.260	1.306	0.033	0.053	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1382.75	
15	0.6701	1112.9	1132.6	1132.4	0.297	3.328	77.690	17.253	1.331	0.036	0.062	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1383.62	
16	0.6583	1094.8	1114.2	1114.1	0.298	3.316	79.841	15.363	1.100	0.030	0.051	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1373.30	
17	0.6548	1089.2	1108.5	1108.3	0.354	3.250	80.431	14.948	0.950	0.025	0.041	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1369.84	
18	0.6605	1100.2	1119.7	1119.5	0.282	3.219	79.228	16.229	0.984	0.022	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1377.80	
19	0.6361	1066.0	1084.9	1084.7	0.667	2.429	84.322	11.907	0.635	0.015	0.026	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1360.20	
20	0.6240	1049.1	1067.7	1067.4	0.880	1.991	86.912	9.710	0.473	0.013	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1351.60	
21	0.6271	1052.7	1071.4	1071.2	0.866	2.081	86.304	10.192	0.522	0.014	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1352.95	
22	0.6262	1051.2	1069.8	1069.6	0.871	2.088	86.473	10.020	0.514	0.013	0.021	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1351.88	
23	0.6251	1047.8	1066.4	1066.2	0.893	2.157	86.653	9.802	0.461	0.014	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1348.73	
24	0.6328	1060.5	1079.3	1079.1	0.795	2.253	84.916	11.590	0.420	0.010	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1356.73	
25	0.6435	1079.8	1098.9	1098.7	0.628	2.342	82.686	13.770	0.541	0.012	0.021	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1369.87	
26	0.6242	1061.0	1079.7	1079.5	0.735	1.505	86.837	10.404	0.476	0.015	0.027	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1366.75	
27	0.6188	1053.1	1071.7	1071.5	0.857	1.290	88.060	9.288	0.478	0.011	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1362.46	
28	0.6276	1058.5	1077.2	1076.9	0.915	1.710	86.326	10.458	0.559	0.013	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1359.73	
29	0.6274	1057.0	1075.7	1075.5	0.916	1.771	86.423	10.259	0.588	0.016	0.026	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1358.11	
30	0.6248	1054.9	1073.6	1073.3	0.884	1.708	86.865	9.965	0.545	0.014	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1358.18	
Avg	0.6501	1089.0	1108.0	1107.8	0.604	2.521	81.565	14.498	0.755	0.020	0.032	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1374.03	

Source Daily Summary

April 2022

Source #: 111
Name: LITTLE KNIFE PLANT

Pressure Base:	14.730	Contract Day:	1
Temperature Base:	60	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	0.6847	1152.7	1173.1	1171.1	0.000	2.734	73.456	23.346	0.449	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.79	-27.48
2	0.6861	1155.0	1175.4	1173.5	0.000	2.729	73.152	23.669	0.435	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.10	-26.80
3	0.6860	1154.5	1175.0	1172.9	0.000	2.749	73.160	23.648	0.429	0.006	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1418.63	-26.91
4	0.6869	1156.1	1176.6	1174.6	0.000	2.736	73.041	23.730	0.470	0.008	0.014	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1419.67	-26.12
5	0.6842	1151.2	1171.6	1169.6	0.000	2.779	73.686	22.942	0.576	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.42	-27.39
6	0.6848	1152.0	1172.4	1170.4	0.000	2.784	73.615	22.958	0.623	0.007	0.012	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1416.84	-26.82
7	0.6868	1156.7	1177.2	1175.4	0.000	2.690	73.250	23.393	0.644	0.008	0.014	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1420.46	-25.47
8	0.6890	1160.4	1180.9	1179.4	0.000	2.680	72.844	23.752	0.696	0.010	0.017	0.000	0.001	0.000	0.000	0.000	0.000	0.000	1422.62	-24.06
9	0.6886	1159.4	1179.9	1178.4	0.000	2.696	72.931	23.658	0.687	0.010	0.018	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1421.89	-24.35
10	0.6888	1159.5	1180.0	1178.6	0.000	2.710	72.879	23.692	0.699	0.008	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.80	-24.37
11	0.6902	1161.9	1182.5	1181.1	0.000	2.693	72.684	23.828	0.763	0.011	0.020	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1423.34	-23.23
12	0.6874	1157.3	1177.8	1176.6	0.000	2.707	73.142	23.467	0.651	0.011	0.020	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1420.64	-25.07
13	0.6853	1152.4	1172.8	1171.6	0.000	2.814	73.269	23.504	0.398	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.73	-27.53
14	0.6855	1152.2	1172.7	1171.2	0.000	2.843	73.212	23.546	0.384	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.33	-27.55
15	0.6862	1153.3	1173.7	1172.0	0.000	2.843	73.105	23.629	0.407	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.89	-27.13
16	0.6862	1152.8	1173.3	1171.8	0.000	2.876	73.081	23.617	0.411	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.29	-27.13
17	0.6869	1153.9	1174.3	1172.9	0.000	2.876	72.959	23.723	0.425	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.89	-26.73
18	0.6867	1153.6	1174.0	1172.6	0.000	2.872	73.003	23.679	0.430	0.006	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.78	-26.80
19	0.6859	1152.5	1172.9	1171.1	0.000	2.869	73.155	23.536	0.425	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.17	-27.22
20	0.6869	1154.3	1174.8	1173.3	0.000	2.847	73.059	23.556	0.520	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.44	-26.29
21	0.6877	1155.5	1176.0	1174.5	0.000	2.853	72.952	23.593	0.582	0.008	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1418.03	-25.65
22	0.6876	1155.1	1175.5	1173.7	0.000	2.863	72.952	23.617	0.549	0.008	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.67	-25.89
23	0.6919	1162.2	1182.8	1181.9	0.000	2.833	72.422	23.855	0.857	0.011	0.018	0.001	0.002	0.000	0.000	0.000	0.000	0.000	1421.98	-22.39
24	0.6894	1158.3	1178.8	1178.2	0.000	2.839	72.832	23.533	0.764	0.012	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1419.68	-24.09
25	0.6863	1153.0	1173.4	1172.5	0.000	2.872	73.217	23.349	0.541	0.008	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.43	-26.60
26	0.6856	1152.2	1172.6	1171.4	0.000	2.854	73.284	23.370	0.475	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.17	-27.17
27	0.6864	1153.9	1174.3	1172.8	0.000	2.832	73.117	23.549	0.484	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.35	-26.63
28	0.6869	1154.7	1175.1	1173.4	0.000	2.828	73.054	23.578	0.521	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.85	-26.23
29	0.6866	1154.2	1174.7	1173.1	0.000	2.821	73.141	23.490	0.531	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.67	-26.37
30	0.6861	1153.8	1174.3	1172.8	0.000	2.801	73.216	23.456	0.509	0.007	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.67	-26.64
Avg	0.6869	1155.0	1175.6	1174.1	0.000	2.797	73.096	23.542	0.544	0.008	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1418.44	-26.07

Source Daily Summary

April 2022

Source #: 351
Name: BADLANDS PLANT

Pressure Base:	14.730	Contract Day:	1
Temperature Base:	60	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	0.6287	1036.8	1055.2	1054.9	0.314	4.043	85.823	8.681	1.018	0.039	0.069	0.006	0.006	0.000	0.000	0.000	0.000	0.000	1330.72	
2	0.5723	962.6	979.7	979.3	0.106	3.574	95.996	0.300	0.016	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1295.00	
3	0.5725	962.2	979.2	978.9	0.111	3.611	95.958	0.297	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1294.21	
4	0.5723	962.5	979.6	979.2	0.109	3.579	95.993	0.297	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1294.84	
5	0.5862	980.6	997.9	997.6	0.157	3.710	93.485	2.352	0.261	0.016	0.017	0.001	0.002	0.000	0.000	0.000	0.000	0.000	1303.40	
6	0.6080	1009.4	1027.2	1026.9	0.390	3.650	89.696	5.576	0.611	0.027	0.042	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1317.44	
7	0.6083	1014.4	1032.4	1032.0	0.529	3.160	89.825	5.810	0.603	0.027	0.040	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1323.68	
8	0.6114	1018.9	1037.0	1036.5	0.567	3.122	89.258	6.346	0.632	0.027	0.042	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1326.18	
9	0.6169	1027.0	1045.2	1044.7	0.638	3.045	88.206	7.401	0.640	0.025	0.039	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1330.65	
10	0.6174	1028.2	1046.4	1046.0	0.645	3.006	88.128	7.500	0.650	0.025	0.040	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1331.70	
11	0.6066	1012.6	1030.5	1030.1	0.519	3.131	90.062	5.701	0.523	0.023	0.036	0.003	0.002	0.000	0.000	0.000	0.000	0.000	1323.10	
12	0.5881	985.7	1003.1	1002.8	0.294	3.376	93.254	2.789	0.251	0.015	0.017	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1307.97	
13	0.5723	962.5	979.5	979.3	0.107	3.585	95.986	0.298	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1294.76	
14	0.6238	1034.6	1052.9	1052.6	0.281	3.775	86.444	8.680	0.750	0.026	0.039	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1332.84	
15	0.6404	1060.8	1079.6	1079.4	0.418	3.528	83.423	11.627	0.912	0.031	0.054	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1349.08	
16	0.6392	1058.5	1077.2	1076.9	0.410	3.567	83.624	11.437	0.870	0.030	0.053	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1347.37	
17	0.6385	1056.1	1074.8	1074.5	0.393	3.679	83.752	11.189	0.896	0.031	0.052	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1345.00	
18	0.6241	1038.1	1056.5	1056.2	0.299	3.551	86.389	9.000	0.694	0.023	0.037	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1337.13	
19	0.5931	991.6	1009.2	1008.8	0.187	3.646	92.136	3.695	0.302	0.015	0.017	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1310.28	
20	0.6181	1027.8	1046.0	1045.6	0.298	3.622	87.508	7.895	0.616	0.022	0.034	0.003	0.003	0.000	0.000	0.000	0.000	0.000	1330.43	
21	0.6185	1031.3	1049.6	1049.2	0.382	3.314	87.658	7.875	0.701	0.026	0.039	0.003	0.002	0.000	0.000	0.000	0.000	0.000	1334.58	
22	0.6193	1035.8	1054.2	1053.8	0.669	2.678	88.008	7.772	0.775	0.033	0.055	0.004	0.004	0.000	0.000	0.000	0.000	0.000	1339.54	
23	0.6025	1010.1	1028.0	1027.7	0.502	2.920	90.755	5.385	0.393	0.017	0.024	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1324.32	
24	0.5745	965.9	983.0	982.6	0.135	3.540	95.606	0.666	0.041	0.008	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1296.87	
25	0.5723	962.5	979.5	979.1	0.107	3.586	95.988	0.297	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1294.75	
26	0.5723	962.5	979.6	979.2	0.107	3.577	95.997	0.296	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1294.90	
27	0.5749	966.4	983.5	983.1	0.140	3.536	95.538	0.729	0.046	0.009	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1297.14	
28	0.5955	998.6	1016.3	1015.8	0.408	3.108	91.946	4.200	0.302	0.015	0.018	0.001	0.001	0.000	0.000	0.000	0.000	0.000	1316.86	
29	0.5828	978.8	996.2	995.8	0.242	3.364	94.173	2.053	0.148	0.011	0.009	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1304.93	
30	0.5723	962.5	979.6	979.2	0.107	3.578	95.996	0.296	0.015	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1294.89	
Avg	0.6008	1004.0	1021.3	1020.9	0.319	3.439	90.887	4.881	0.425	0.019	0.026	0.002	0.002	0.000	0.000	0.000	0.000	0.000	1317.49	

April-22

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	
4/1/2022	4/2/2022	10	11	1063.10	3,558	4,062	1142.9	1142.676	4/1/2022
4/2/2022	4/3/2022	0	0	0.00	3,003	3,516	1173.7	1173.700	4/2/2022
4/3/2022	4/4/2022	0	0	0.00	4,038	4,314	1068.1	1068.100	4/3/2022
4/4/2022	4/5/2022	0	0	0.00	3,090	3,306	1070.3	1070.300	4/4/2022
4/5/2022	4/6/2022	0	0	0.00	3,823	4,113	1074.4	1074.400	4/5/2022
4/6/2022	4/7/2022	0	0	0.00	4,305	4,644	1079.3	1079.300	4/6/2022
4/7/2022	4/8/2022	0	0	0.00	4,361	4,690	1075.3	1075.300	4/7/2022
4/8/2022	4/9/2022	0	0	0.00	3,013	3,231	1072.2	1072.200	4/8/2022
4/9/2022	4/10/2022	0	0	0.00	2,630	2,818	1071.4	1071.400	4/9/2022
4/10/2022	4/11/2022	0	0	0.00	2,952	3,173	1075.2	1075.200	4/10/2022
4/11/2022	4/12/2022	635	680	1070.40	3,297	3,538	1073.8	1073.251	4/11/2022
4/12/2022	4/13/2022	0	0	0.00	5,835	6,249	1070.9	1070.900	4/12/2022
4/13/2022	4/14/2022	0	0	0.00	5,770	6,268	1084.6	1084.600	4/13/2022
4/14/2022	4/15/2022	0	0	0.00	5,785	6,391	1103.2	1103.200	4/14/2022
4/15/2022	4/16/2022	0	0	0.00	5,586	6,220	1112.2	1112.200	4/15/2022
4/16/2022	4/17/2022	0	0	0.00	4,526	5,062	1118.8	1118.800	4/16/2022
4/17/2022	4/18/2022	0	0	0.00	5,380	5,911	1100.9	1100.900	4/17/2022
4/18/2022	4/19/2022	0	0	0.00	4,288	4,676	1093.7	1093.700	4/18/2022
4/19/2022	4/20/2022	0	0	0.00	4,259	4,541	1066.5	1066.500	4/19/2022
4/20/2022	4/21/2022	0	0	0.00	3,033	3,174	1051.6	1051.600	4/20/2022
4/21/2022	4/22/2022	0	0	0.00	3,750	3,916	1043	1043.000	4/21/2022
4/22/2022	4/23/2022	0	0	0.00	3,852	4,009	1040.2	1040.200	4/22/2022
4/23/2022	4/24/2022	0	0	0.00	5,337	5,589	1047.3	1047.300	4/23/2022
4/24/2022	4/25/2022	0	0	0.00	5,485	5,723	1043.3	1043.300	4/24/2022
4/25/2022	4/26/2022	0	0	0.00	4,064	4,319	1061.6	1061.600	4/25/2022
4/26/2022	4/27/2022	0	0	0.00	4,234	4,503	1063.6	1063.600	4/26/2022
4/27/2022	4/28/2022	0	0	0.00	3,269	3,488	1067.1	1067.100	4/27/2022
4/28/2022	4/29/2022	0	0	0.00	2,266	2,400	1056.4	1056.400	4/28/2022
4/29/2022	4/30/2022	0	0	0.00	3,571	4,280	1198.7	1198.700	4/29/2022
4/30/2022	5/1/2022	0	0	0.00	3,647	4,440	1215.9	1215.900	4/30/2022
		645	691	71.1167	122,007	132,564	1087.2033	1087.1776	



Alliance Pipeline

DAILY ANALYSIS --- USA
ND07MD1 --- Hankinson Sales
April 2022

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	1,158.088	0.6614	84.3172	9.6043	3.7912	0.3461	0.5702	0.0577	0.0451	0.0224	0.9160	0.3209	0.0091
2	1,157.656	0.6614	84.2741	9.6660	3.7503	0.3420	0.5728	0.0584	0.0446	0.0220	0.9428	0.3177	0.0093
3	1,158.037	0.6619	84.2356	9.6155	3.8144	0.3415	0.5793	0.0566	0.0429	0.0218	0.9654	0.3178	0.0091
4	1,159.619	0.6632	84.0858	9.6828	3.8458	0.3513	0.5982	0.0588	0.0445	0.0218	0.9638	0.3379	0.0092
5	1,159.789	0.6631	84.1084	9.6722	3.8200	0.3572	0.6093	0.0596	0.0470	0.0238	0.9694	0.3246	0.0085
6	1,155.898	0.6600	84.4436	9.6116	3.6791	0.3386	0.5566	0.0549	0.0449	0.0236	0.9194	0.3193	0.0085
7	1,154.813	0.6595	84.4388	9.6755	3.6168	0.3314	0.5451	0.0552	0.0448	0.0238	0.9434	0.3166	0.0085
8	1,154.674	0.6588	84.6311	9.5082	3.6627	0.3296	0.5337	0.0562	0.0462	0.0252	0.8868	0.3118	0.0085
9	1,155.694	0.6589	84.6241	9.5673	3.6510	0.3341	0.5376	0.0584	0.0472	0.0237	0.8419	0.3065	0.0083
10	1,155.849	0.6592	84.6597	9.4332	3.6959	0.3422	0.5587	0.0609	0.0481	0.0226	0.8662	0.3044	0.0081
11	1,152.916	0.6580	84.7595	9.3871	3.6168	0.3320	0.5421	0.0575	0.0455	0.0228	0.9052	0.3233	0.0082
12	1,158.496	0.6610	84.3793	9.6179	3.7921	0.3433	0.5582	0.0587	0.0457	0.0209	0.8620	0.3135	0.0083
13	1,157.366	0.6597	84.5628	9.5780	3.7239	0.3398	0.5403	0.0597	0.0473	0.0220	0.7929	0.3248	0.0085
14	1,152.408	0.6542	85.3907	9.2232	3.5363	0.3263	0.4854	0.0585	0.0470	0.0228	0.5900	0.3114	0.0085
15	1,148.571	0.6506	85.7480	9.3403	3.1648	0.3185	0.4845	0.0596	0.0482	0.0243	0.5063	0.2960	0.0095
16	1,152.551	0.6548	85.2339	9.3366	3.5125	0.3238	0.5034	0.0566	0.0443	0.0226	0.6518	0.3033	0.0111
17	1,150.192	0.6550	85.1564	9.3252	3.4157	0.3268	0.5421	0.0545	0.0423	0.0203	0.7880	0.3189	0.0098
18	1,160.787	0.6630	84.1580	9.6856	3.8329	0.3553	0.6167	0.0606	0.0438	0.0203	0.8900	0.3273	0.0095
19	1,154.892	0.6586	84.5711	9.6401	3.6601	0.3223	0.5109	0.0541	0.0430	0.0199	0.8538	0.3151	0.0097
20	1,159.437	0.6629	83.9960	9.8575	3.8495	0.3329	0.5451	0.0565	0.0444	0.0212	0.9540	0.3333	0.0094
21	1,157.143	0.6611	84.2041	9.7810	3.7887	0.3216	0.5183	0.0541	0.0421	0.0201	0.9317	0.3287	0.0096
22	1,158.716	0.6614	84.2521	9.7405	3.7872	0.3376	0.5504	0.0582	0.0446	0.0201	0.8771	0.3232	0.0091
23	1,158.097	0.6611	84.2805	9.7269	3.7977	0.3314	0.5319	0.0567	0.0435	0.0198	0.8721	0.3309	0.0087
24	1,149.419	0.6513	85.5829	9.5141	3.1512	0.3196	0.4807	0.0580	0.0469	0.0238	0.5052	0.3085	0.0092
25	1,143.786	0.6465	86.1816	9.3517	2.8979	0.3005	0.4389	0.0538	0.0439	0.0219	0.3884	0.3110	0.0103
26	1,145.792	0.6498	85.7002	9.5020	3.0150	0.3066	0.4696	0.0548	0.0438	0.0219	0.5417	0.3344	0.0101
27	1,149.495	0.6540	85.1667	9.6170	3.1729	0.3267	0.5380	0.0584	0.0444	0.0214	0.6979	0.3467	0.0099
28	1,153.729	0.6575	84.6725	9.8667	3.3313	0.3330	0.5539	0.0580	0.0455	0.0216	0.7484	0.3593	0.0099
29	1,154.550	0.6581	84.5972	9.9032	3.3410	0.3374	0.5641	0.0592	0.0477	0.0231	0.7647	0.3528	0.0097
30	1,150.274	0.6561	84.7131	9.9188	3.2152	0.3186	0.5257	0.0554	0.0431	0.0165	0.8067	0.3758	0.0110
Volume	1,154.597	0.6580	84.7089	9.5967	3.5630	0.3322	0.5384	0.0573	0.0451	0.0219	0.8035	0.3237	0.0092
Weight Avg Energy	1,154.612	0.6581	84.7070	9.5970	3.5639	0.3322	0.5386	0.0573	0.0451	0.0219	0.8040	0.3237	0.0092



Alliance Pipeline

DAILY ANALYSIS --- USA
ND14MD1 --- Milnor Sales
April 2022

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	1,158.510	0.6619	84.2526	9.6368	3.8031	0.3477	0.5731	0.0582	0.0454	0.0226	0.9266	0.3246	0.0091
2	1,158.013	0.6618	84.2163	9.6851	3.7703	0.3418	0.5776	0.0580	0.0439	0.0216	0.9582	0.3177	0.0092
3	1,158.194	0.6620	84.2078	9.6676	3.7982	0.3402	0.5777	0.0564	0.0431	0.0221	0.9553	0.3223	0.0093
4	1,159.750	0.6633	84.0957	9.6667	3.8473	0.3533	0.6033	0.0591	0.0448	0.0223	0.9636	0.3348	0.0091
5	1,159.231	0.6627	84.1740	9.6439	3.8042	0.3551	0.6031	0.0591	0.0467	0.0235	0.9569	0.3250	0.0084
6	1,155.772	0.6601	84.4169	9.6329	3.6854	0.3363	0.5477	0.0543	0.0447	0.0236	0.9276	0.3220	0.0085
7	1,155.061	0.6598	84.4269	9.6662	3.6342	0.3318	0.5475	0.0555	0.0447	0.0237	0.9446	0.3164	0.0085
8	1,154.727	0.6587	84.6576	9.5084	3.6472	0.3304	0.5353	0.0570	0.0472	0.0257	0.8716	0.3111	0.0086
9	1,155.973	0.6591	84.6113	9.5640	3.6660	0.3352	0.5396	0.0589	0.0471	0.0230	0.8429	0.3039	0.0081
10	1,155.415	0.6592	84.6665	9.4184	3.6899	0.3406	0.5582	0.0605	0.0479	0.0227	0.8834	0.3038	0.0080
11	1,153.646	0.6586	84.6972	9.4118	3.6431	0.3348	0.5474	0.0578	0.0455	0.0224	0.9057	0.3260	0.0083
12	1,158.268	0.6607	84.4223	9.6181	3.7756	0.3415	0.5523	0.0585	0.0457	0.0212	0.8447	0.3119	0.0083
13	1,157.188	0.6595	84.6094	9.5544	3.7204	0.3396	0.5359	0.0597	0.0475	0.0220	0.7753	0.3273	0.0085
14	1,151.773	0.6536	85.4699	9.2204	3.4858	0.3247	0.4832	0.0585	0.0471	0.0231	0.5718	0.3070	0.0085
15	1,148.633	0.6507	85.7528	9.3220	3.1690	0.3205	0.4888	0.0599	0.0486	0.0243	0.5093	0.2951	0.0097
16	1,152.704	0.6552	85.1910	9.3232	3.5529	0.3214	0.5023	0.0557	0.0437	0.0222	0.6748	0.3019	0.0109
17	1,151.516	0.6565	84.9638	9.3903	3.4505	0.3350	0.5715	0.0555	0.0418	0.0199	0.8373	0.3249	0.0097
18	1,160.519	0.6628	84.1745	9.6951	3.8325	0.3515	0.6033	0.0598	0.0439	0.0203	0.8837	0.3259	0.0094
19	1,155.117	0.6589	84.5453	9.6569	3.6649	0.3225	0.5113	0.0546	0.0433	0.0202	0.8537	0.3176	0.0097
20	1,159.370	0.6630	83.9764	9.8580	3.8622	0.3317	0.5422	0.0558	0.0440	0.0209	0.9684	0.3311	0.0094
21	1,157.321	0.6612	84.2028	9.7746	3.7942	0.3231	0.5210	0.0546	0.0423	0.0201	0.9292	0.3285	0.0095
22	1,158.551	0.6614	84.2593	9.7407	3.7800	0.3371	0.5495	0.0580	0.0444	0.0201	0.8767	0.3251	0.0091
23	1,158.195	0.6612	84.2762	9.7458	3.7908	0.3309	0.5311	0.0569	0.0436	0.0201	0.8659	0.3302	0.0086
24	1,148.023	0.6496	85.8088	9.4772	3.0548	0.3162	0.4686	0.0570	0.0465	0.0235	0.4325	0.3055	0.0095
25	1,143.812	0.6467	86.1601	9.3554	2.9004	0.3008	0.4403	0.0542	0.0442	0.0226	0.3998	0.3119	0.0103
26	1,145.888	0.6500	85.6698	9.5168	3.0201	0.3065	0.4715	0.0546	0.0435	0.0212	0.5481	0.3377	0.0101
27	1,149.595	0.6541	85.1539	9.6328	3.1747	0.3260	0.5351	0.0584	0.0446	0.0216	0.6964	0.3466	0.0099
28	1,153.828	0.6575	84.6713	9.8806	3.3336	0.3314	0.5505	0.0570	0.0455	0.0218	0.7417	0.3567	0.0098
29	1,153.763	0.6577	84.6290	9.8976	3.3176	0.3345	0.5563	0.0591	0.0472	0.0223	0.7710	0.3556	0.0099
30	1,150.913	0.6566	84.6582	9.9466	3.2329	0.3204	0.5309	0.0557	0.0432	0.0167	0.8050	0.3794	0.0111
Volume	1,154.367	0.6579	84.7348	9.5964	3.5463	0.3317	0.5373	0.0572	0.0450	0.0219	0.7953	0.3249	0.0093
Weight Avg Energy	1,154.382	0.6579	84.7331	9.5963	3.5477	0.3317	0.5372	0.0572	0.0450	0.0219	0.7958	0.3248	0.0093

April-22

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		
4/1/2022	4/2/2022	261	313	1200.3	692	720	1041.5	1084.991	4/1/2022
4/2/2022	4/3/2022	183	220	1200.3	541	563	1041.5	1081.639	4/2/2022
4/3/2022	4/4/2022	255	306	1200.3	543	566	1041.5	1092.244	4/3/2022
4/4/2022	4/5/2022	154	185	1200.3	422	441	1044.4	1086.082	4/4/2022
4/5/2022	4/6/2022	261	313	1200.3	524	546	1041.5	1094.298	4/5/2022
4/6/2022	4/7/2022	284	340	1200.3	569	592	1041.5	1094.371	4/6/2022
4/7/2022	4/8/2022	282	338	1200.3	572	596	1041.5	1093.937	4/7/2022
4/8/2022	4/9/2022	189	226	1200.3	428	445	1041.5	1090.144	4/8/2022
4/9/2022	4/10/2022	226	271	1200.3	429	446	1041.5	1096.292	4/9/2022
4/10/2022	4/11/2022	233	280	1200.3	488	509	1041.5	1092.818	4/10/2022
4/11/2022	4/12/2022	282	338	1200.3	616	642	1041.5	1091.368	4/11/2022
4/12/2022	4/13/2022	456	548	1200.3	832	866	1041.5	1097.721	4/12/2022
4/13/2022	4/14/2022	487	584	1200.3	860	896	1041.5	1098.913	4/13/2022
4/14/2022	4/15/2022	448	537	1200.3	807	841	1041.5	1098.187	4/14/2022
4/15/2022	4/16/2022	429	515	1200.3	805	839	1041.5	1096.707	4/15/2022
4/16/2022	4/17/2022	344	413	1200.3	666	694	1041.5	1095.586	4/16/2022
4/17/2022	4/18/2022	372	446	1200.3	710	739	1041.5	1096.097	4/17/2022
4/18/2022	4/19/2022	294	353	1200.3	679	707	1041.5	1089.483	4/18/2022
4/19/2022	4/20/2022	272	327	1200.3	633	659	1041.5	1089.228	4/19/2022
4/20/2022	4/21/2022	266	320	1200.3	564	587	1041.5	1092.393	4/20/2022
4/21/2022	4/22/2022	284	341	1200.3	579	603	1041.5	1093.759	4/21/2022
4/22/2022	4/23/2022	304	365	1200.3	584	609	1041.5	1095.864	4/22/2022
4/23/2022	4/24/2022	360	432	1200.3	630	656	1041.5	1099.245	4/23/2022
4/24/2022	4/25/2022	300	360	1200.3	542	564	1041.5	1098.080	4/24/2022
4/25/2022	4/26/2022	287	344	1200.3	712	742	1041.5	1087.121	4/25/2022
4/26/2022	4/27/2022	332	398	1200.3	658	685	1041.5	1094.754	4/26/2022
4/27/2022	4/28/2022	230	276	1200.3	491	511	1041.5	1092.157	4/27/2022
4/28/2022	4/29/2022	145	174	1200.3	389	405	1041.5	1084.620	4/28/2022
4/29/2022	4/30/2022	202	243	1200.3	425	442	1041.5	1092.660	4/29/2022
4/30/2022	5/1/2022	176	211	1200.3	393	410	1041.5	1090.619	4/30/2022
		8,598	10,317	1200.3000	17,783	18,521	1041.5967	1092.7126	

Tsp	EffDate	EndDate	Device	GasDay	EndDt	BTU	SpecGrav	CriconTherm	WobbeIndex	CO2	N2	Methane	Ethane	Propane	iButane	nButane	iPentane	nPentane	NeoPentane	C6Plus	Hydrogen	Helium	WaterVapor	TotalSulfur	HydrogenSulfur	Oxygen
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/1/2022	4/2/2022	1067	0.6291	-60.5	1345.254882	0.9446	2.4099	85.7826	9.9355	0.6941	0.0196	0.0345	0.0019	0.0015	N/A	0	0.1521	0.024	0.4736	0.0708	0.0354	0.0012
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/2/2022	4/3/2022	1066	0.6282	-61.3	1344.956502	0.9429	2.3788	85.9917	9.7959	0.6809	0.0178	0.0334	0.0017	0.0015	N/A	0	0.1314	0.0242	0.4658	0.0683	0.0357	0.001
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/3/2022	4/4/2022	1066	0.6289	-60.8	1344.207788	0.9402	2.4174	85.8417	9.8943	0.686	0.0183	0.0346	0.0017	0.0017	N/A	0	0.1394	0.0248	0.4577	0.0717	0.0378	0.0012
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/5/2022	4/6/2022	1071	0.633	-58.6	1346.131899	0.9685	2.4566	85.0095	10.6798	0.68	0.0166	0.0306	0.0008	0.0006	N/A	0	0.1323	0.0247	0.438	0.0686	0.0373	0.0006
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/6/2022	4/7/2022	1073	0.6333	-58	1348.326214	0.979	2.3899	84.9552	10.756	0.6962	0.0173	0.0313	0.001	0.0008	N/A	0	0.1494	0.024	0.4477	0.0851	0.048	0.0009
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/7/2022	4/8/2022	1071	0.6319	-58.6	1347.303051	0.9606	2.3738	85.2966	10.4612	0.6973	0.0194	0.0373	0.0019	0.0016	N/A	0	0.1262	0.0242	0.4572	0.0873	0.0472	0.0009
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/8/2022	4/9/2022	1069	0.6305	-60	1346.279274	0.9621	2.3699	85.4895	10.2849	0.6696	0.0171	0.0311	0.0012	0.0007	N/A	0	0.1501	0.0238	0.4572	0.0892	0.0479	0.001
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/9/2022	4/10/2022	1071	0.6317	-59.2	1347.516316	0.9640	2.3528	85.3295	10.4716	0.6878	0.0172	0.0312	0.001	0.0004	N/A	0	0.1198	0.0239	0.4655	0.0968	0.0506	0.0009
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/12/2022	4/12/2022	1069	0.63	-60.4	1346.813405	0.9364	2.3922	85.5724	10.2139	0.6693	0.0169	0.0302	0.0007	0.0005	N/A	0	0.1437	0.024	0.4612	0.0816	0.0416	0.0008
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/12/2022	4/13/2022	1067	0.6293	-61.3	1345.041095	0.928	2.4149	85.6199	10.1688	0.6368	0.0155	0.0277	0.0005	0.0001	N/A	0	0.164	0.0239	0.4309	0.0593	0.0328	0.0008
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/13/2022	4/14/2022	1066	0.6273	-62.2	1345.920974	0.944	2.2633	86.0432	9.8574	0.643	0.0158	0.0277	0.0004	0.0003	N/A	0	0.1818	0.0232	0.4504	0.0821	0.0453	0.0008
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/14/2022	4/15/2022	1064	0.6211	-66.1	1350.084227	0.8912	1.9224	87.233	9.1655	0.5573	0.0142	0.0242	0.0004	0.0001	N/A	0	0.1706	0.0212	0.4633	0.0966	0.0542	0.0008
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/15/2022	4/16/2022	1060	0.6155	-70.5	1351.11351	0.8501	1.7011	88.2478	8.5279	0.4479	0.0112	0.0182	0	0	N/A	0	0.1757	0.0202	0.487	0.1012	0.054	0.0008
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/16/2022	4/17/2022	1063	0.6207	-66.5	1349.249892	0.8722	1.9233	87.3081	9.1407	0.5297	0.0142	0.0253	0.0008	0.0008	N/A	0	0.1634	0.0215	0.4679	0.0977	0.0546	0.0008
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/17/2022	4/18/2022	1065	0.6222	-65.9	1350.158032	0.8906	1.9613	87.138	9.3197	0.5438	0.0129	0.0216	0.0003	0.0002	N/A	0	0.0897	0.022	0.4499	0.091	0.0513	0.0008
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/18/2022	4/19/2022	1065	0.6231	-65.3	1349.182602	0.8904	1.9985	86.8593	9.5365	0.5244	0.0133	0.0235	0.0003	0.0001	N/A	0	0.1322	0.0217	0.4631	0.0954	0.0524	0.0008
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/19/2022	4/20/2022	1063	0.6214	-67.1	1348.48972	0.883	2.0016	87.1454	9.3071	0.4793	0.0115	0.0198	0	0	N/A	0	0.1309	0.0216	0.4464	0.0956	0.0534	0.0008
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/20/2022	4/21/2022	1066	0.6248	-64.6	1348.610989	0.8995	2.0945	86.5218	9.7878	0.5252	0.0121	0.0208	0.0001	0.0001	N/A	0	0.1159	0.0223	0.4895	0.1155	0.062	0.0011
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/21/2022	4/22/2022	1067	0.6257	-63.8	1348.90493	0.888	2.1339	86.3318	9.911	0.5561	0.0122	0.0203	0	0	N/A	0	0.1242	0.0225	0.4568	0.1056	0.0624	0.0012
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/22/2022	4/23/2022	1065	0.6249	-64.6	1347.238067	0.899	2.1509	86.4963	9.7374	0.5353	0.0122	0.0212	0	0	N/A	0	0.1254	0.0224	0.4759	0.1044	0.0623	0.0012
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/23/2022	4/24/2022	1058	0.614	-72.3	1350.210504	0.8417	1.6833	88.476	8.4085	0.3792	0.0087	0.0142	0.0001	0.0001	N/A	0	0.1691	0.0192	0.4974	0.1006	0.0599	0.0012
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/24/2022	4/25/2022	1050	0.5947	-85.4	1361.571116	0.7176	0.5402	92.1265	6.2338	0.1438	0.0034	0.003	0	0	N/A	0	0.2206	0.0113	0.5834	0.1123	0.0688	0.0011
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/25/2022	4/26/2022	1069	0.6123	-66.4	1366.141158	0.7766	0.9198	89.2199	8.2636	0.5657	0.0237	0.0497	0.0034	0.0037	N/A	0.0006	0.1595	0.014	0.5277	0.1142	0.0706	0.0012
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/26/2022	4/27/2022	1065	0.614	-70.6	1359.143843	0.8437	1.223	88.6583	8.6693	0.4264	0.0084	0.0112	0	0	N/A	0	0.1439	0.0161	0.4907	0.1036	0.0606	0.0012
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/27/2022	4/28/2022	1071	0.6217	-64.9	1358.310435	0.8901	1.524	87.264	9.5881	0.5605	0.0114	0.0174	0.0001	0.0001	N/A	0	0.1264	0.018	0.4935	0.103	0.0615	0.0012
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/28/2022	4/29/2022	1074	0.6276	-61.1	1355.697558	0.9423	1.7991	86.1781	10.2945	0.6191	0.0142	0.0241	0.0004	0.0004	N/A	0	0.1082	0.0197	0.4856	0.1001	0.0638	0.0012
NBPL	3/30/2022 0:00	5/2/2022 0:00	GLNU1 - GLEN ULLIN	4/29/2022	4/30/2022	1072	0.6251	-62.6	1355.876195	0.919	1.7765	86.5333	9.9376	0.6092	0.0142	0.0229	0.0001	0.0001	N/A	0	0.1678	0.0194	0.477	0.1047	0.0621	0.0012

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	APR22	MAR22	FEB22	JAN22	DEC21	NOV21	OCT21	SEP21	AUG21	JUL21	JUN 21	MAY 21	ZONE
MT/ND	211	Sidney Border - MonDak Tfr - Sidney Plt	1198	1191	1196	1196	1171	1215	1208	1201	1213	1216	1210	1152	1204	211
ND	24	Williston Border - Charbonneau Station	1169	1188	1189	1180	1155	1152	1161	1159	1167	1173	1172	1164	1168	24
ND	25	Watford City West Border	1203	1200	1197	1200	1198	1202	1208	1206	1205	1211	1203	1199	1202	25
ND	28	Bismarck Station - Glen Ullin Station	1158	1087	1131	1131	1126	1142	1135	1185	1196	1202	1200	1202	1161	28
ND	31	Dickinson Brd - Belfield Trf - G Ullin Stn	1138	1108	1130	1132	1132	1143	1141	1141	1130	1191	1123	1129	1160	31
ND/MT	32	Cabin Creek Station - Belfied Transfer	1129	1126	1095	1122	1127	1131	1129	1132	1136	1162	1135	1127	1122	32
ND	33	Little Knife Plant	1178	1176	1178	1176	1173	1176	1182	1177	1179	1182	1184	1179	1175	33
ND	34	Badlands Plant/Bowman Border	1034	1021	1070	1087	1097	1093	981	1022	1059	1025	980	980	989	34
ND	43	Watford City East Border	1078	1042	1042	1108	1094	1042	1047	1060	1062	1088	1109	1119	1123	43
ND/MT	241	Fairview Border	1193	1191	1191	1197	1200	1208	1197	1162	1193	1201	1213	1185	1173	241
ND	267	North Tioga Transfer - Nesson Plant	1150	1176	1172	1157	1122	1122	1137	1135	1145	1159	1167	1153	1159	267
ND	261	Tioga Comp Station - Robinson Lake Plan	1185	1191	1191	1155	1175	1161	1176	1197	1192	1194	1196	1195	1193	261
ND	262	Minot Bdr - Palermo Bdr - Bismarck Stn	1198	1202	1194	1187	1180	1199	1198	1211	1203	1202	1200	1203	1195	262
ND	263	Lignite Plant	1134	1131	1131	1131	1131	1131	1131	1131	1134	1129	1143	1147	1137	263
ND	264	Epping Border	1164	1188	1185	1173	1145	1147	1152	1145	1164	1167	1172	1165	1163	264
ND	265	Tioga Comp Station - County Line Plant	1163	1170	1167	1150	1157	1152	1159	1166	1165	1163	1166	1165	1172	265
ND	266	County Line Plant	1175	1173	1172	1166	1175	1178	1183	1174	1185	1175	1174	1169	1171	266
ND	271	Bismarck Station - Cleveland Station	1189	1164	1185	1169	1162	1188	1198	1208	1197	1202	1200	1202	1196	271
ND	272	Cleveland Station - Mapleton	1190	1175	1184	1167	1161	1189	1198	1211	1196	1202	1199	1200	1196	272
ND	273	Cleveland Station - Grafton Border	1188	1168	1176	1166	1161	1188	1198	1210	1195	1202	1200	1200	1195	273
ND	550	Mandan Border / NBPL-St Anthony	1150	1087	1103	1119	1116	1136	1135	1173	1196	1196	1190	1182	1161	550
ND	610	MDU-Watford City BTU	1117	1093	1087	1138	1129	1095	1110	1130	1098	1106	1121	1132	1162	610
ND	802	NBPL - Linton	1086	1067	1073	1088	1091	1085	1086	1089	1094	1090	1089	1090	1094	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	1155	1157	1152	1149	1155	1158	1158	1158	1153	1156	1157	1158	600
ND	601	Alliance Pipeline - Milnor	1155	1154	1157	1152	1149	1154	1157	1158	1158	1153	1156	1157	1158	602

THERMAL ZONE VARIANCE DOCUMENTATION		
April 2022		
<i>ZONE</i>	<i>BTU VARIANCE</i>	<i>REASON</i>
28	-44	Operational
31	-22	Operational
32	31	Operational/Blend
34	-49	Blend
271	-21	Operational