

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

April 6, 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 – January 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 February 2021.
2. Attachment B consists of copies of the monthly Heating Value Test Reports received from our suppliers for the month of January 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 January 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**  
**Feb-21**

<u>Town</u>	<u>Heat Zone</u>	<u>Therm Factor</u>
MDU-303-ALEXANDER	025	1.1287
MDU-308-ARNEGARD	025	1.1287
MDU-314-APPLE VALLEY	271	1.1376
MDU-318-BEACH	032	1.0341
MDU-319-BELFIELD	032	1.0417
MDU-323-BERTHOLD	262	1.1155
MDU-324-BEULAH	032	1.0417
MDU-327-BISMARCK	028	1.0951
MDU-330-BOWMAN	034	1.0036
MDU-337-BURLINGTON	262	1.1395
MDU-343-CARRINGTON	273	1.1366
MDU-344-CLEVELAND	272	1.1286
MDU-364-CAVALIER	273	1.1606
MDU-365-DAWSON	271	1.1296
MDU-368-DES LACS	262	1.2975
MDU-369-DICKINSON	031	1.0606
MDU-374-FT TOTTEN	273	1.1446
MDU-375-DEVILS LAKE	273	1.1446
MDU-379-BARLOW	273	1.1366
MDU-384-EPPING	264	1.1003
MDU-387-ELDRIDGE	272	1.1366
MDU-407-GLADSTONE	031	1.0606
MDU-411-GLEN ULLIN	031	1.0682
MDU-413-GOLVA	032	1.0189
MDU-416-GARRISON	262	1.1235
MDU-417-GRAFTON	273	1.1686
MDU-403-GWINNER	601	1.1379
MDU-429-HEBRON	031	1.0682
MDU-432-HETTINGER	903	2.4049
MDU-449-JAMESTOWN	272	1.1446
MDU-459-KILLDEER	033	1.1070
MDU-463-LANGDON	273	1.1366
MDU-469-LEFOR	031	1.0606
MDU-474-LIGNITE	263	1.0788
MDU-475-LINTON	802	1.0720
MDU-478-LINCOLN	028	1.0951
MDU-488-MCKENZIE	271	1.1376
MDU-494-MEDINA	271	1.1296
MDU-498-MANDAN	028	1.0951
MDU-500-MARMARTH	034	1.0110
MDU-505-MINOT	262	1.1395
MDU-510-MOTT	031	1.0606
MDU-512-MAX	262	1.1155
MDU-513-MILNOR	601	1.1379
MDU-522-NEW ENGLAND	031	1.0529
MDU-524-NEW SALEM	028	1.0720
MDU-532-NEW ROCKFORD	273	1.1366
MDU-539-PARK RIVER	273	1.1606
MDU-540-PALERMO	262	1.1155

MDU-558-RAY	264	1.1003
MDU-561-REGENT	031	1.0606
MDU-563-RHAME	034	0.9961
MDU-564-RICHARDTON	031	1.0529
MDU-568-ROSS	261	1.0934
MDU-572-RUTHVILLE	262	1.1395
MDU-574-SANBORN	272	1.1446
MDU-583-SENTINEL BUTTE	032	1.0341
MDU-588-SOUTH HEART	031	1.0529
MDU-717-SPIRITWOOD	272	1.1446
MDU-590-SPRINGBROOK	264	1.1003
MDU-591-STANLEY	261	1.1013
MDU-593-STEELE	271	1.1296
MDU-594-STERLING	028	1.0951
MDU-598-SHEYENNE	273	1.1446
MDU-605-SURREY	262	1.1395
MDU-610-TAPPEN	271	1.1296
MDU-611-TAYLOR	031	1.0529
MDU-616-TIOGA	260	1.0709
MDU-619-TURTLE LAKE	262	1.1235
MDU-620-TRENTON	024	1.1178
MDU-624-UNDERWOOD	262	1.1235
MDU-625-VALLEY CITY	272	1.1526
MDU-629-WALHALLA	273	1.1606
MDU-632-WATFORD CITY	610	1.1022
MDU-636-WHEELOCK	264	1.0924
MDU-637-WHITE EARTH	261	1.1013
MDU-642-WILLISTON	024	1.1178
MDU-646-WASHBURN	262	1.1315
MDU-647-WILTON	262	1.1155
MDU-664-RIVERDALE	262	1.1235
MDU-691-FAIRVIEW	241	1.1368
MDU-712-MINOT AFB	262	1.1395
MDU-718-FAIRMOUNT	600	1.1356
MDU-732-NEKOMA	273	1.1366
MDU-732-MSR SITE	273	1.1366

# Source Daily Summary

January 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	0.7429	1195.6	1216.8	1212.6	1.345	3.547	66.056	25.761	2.934	0.122	0.216	0.011	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1407.81
2	0.7433	1196.4	1217.6	1212.6	1.345	3.547	66.056	25.761	2.934	0.122	0.216	0.011	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1407.81
3	0.7437	1197.3	1218.5	1212.6	1.345	3.547	66.056	25.761	2.934	0.122	0.216	0.011	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1407.81
4	0.7441	1198.1	1219.3	1210.7	1.334	3.555	66.362	25.387	3.009	0.121	0.214	0.011	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1406.88
5	0.7445	1198.9	1220.1	1216.6	1.339	3.501	65.606	26.295	2.912	0.119	0.211	0.011	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1410.61
6	0.7466	1202.7	1224.0	1220.6	1.334	3.470	65.062	26.993	2.795	0.119	0.208	0.011	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1413.20
7	0.7407	1194.4	1215.6	1211.9	1.315	3.448	66.434	25.531	2.897	0.124	0.227	0.013	0.010	0.000	0.000	0.000	0.000	0.000	0.000	1408.90
8	0.7405	1193.7	1214.8	1214.6	1.263	3.295	66.559	25.616	2.901	0.120	0.222	0.014	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1412.74
9	0.7403	1192.9	1214.0	1214.6	1.263	3.295	66.559	25.616	2.901	0.120	0.222	0.014	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1412.74
10	0.7400	1192.0	1213.1	1214.6	1.263	3.295	66.559	25.616	2.901	0.120	0.222	0.014	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1412.74
11	0.7398	1191.2	1212.3	1214.6	1.263	3.295	66.559	25.616	2.901	0.120	0.222	0.014	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1412.74
12	0.7396	1190.4	1211.5	1214.6	1.263	3.295	66.559	25.616	2.901	0.120	0.222	0.014	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1412.74
13	0.7394	1189.6	1210.7	1214.6	1.263	3.295	66.559	25.616	2.901	0.120	0.222	0.014	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1412.74
14	0.7391	1188.7	1209.8	1214.4	1.267	3.302	66.559	25.605	2.901	0.120	0.221	0.014	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1412.51
15	0.7389	1188.0	1209.0	1205.6	1.382	3.570	66.787	25.022	2.867	0.126	0.225	0.011	0.009	0.000	0.000	0.000	0.000	0.000	0.000	1403.10
16	0.7396	1190.4	1211.5	1208.1	1.357	3.517	66.837	24.856	3.063	0.124	0.224	0.012	0.009	0.000	0.000	0.000	0.000	0.000	0.000	1405.37
17	0.7412	1191.6	1212.7	1209.2	1.377	3.571	66.543	25.052	3.092	0.124	0.222	0.011	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1405.15
18	0.7412	1191.6	1212.7	1209.3	1.382	3.567	66.498	25.119	3.074	0.123	0.218	0.011	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1405.16
19	0.7396	1190.7	1211.7	1208.3	1.325	3.556	66.725	25.008	3.031	0.122	0.215	0.010	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1405.63
20	0.7364	1184.2	1205.1	1201.7	1.378	3.573	67.342	24.419	2.919	0.125	0.224	0.011	0.009	0.000	0.000	0.000	0.000	0.000	0.000	1400.95
21	0.7323	1186.8	1207.8	1204.4	1.060	3.508	67.562	24.807	2.773	0.100	0.174	0.008	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1408.20
22	0.7387	1188.2	1209.2	1205.8	1.367	3.562	66.771	25.101	2.836	0.124	0.221	0.011	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1403.53
23	0.7367	1193.4	1214.5	1211.1	1.088	3.481	67.165	24.758	3.197	0.107	0.188	0.009	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1411.67
24	0.7132	1176.6	1197.4	1194.2	0.387	3.366	70.230	23.379	2.482	0.056	0.093	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1414.67
25	0.7075	1177.7	1198.6	1195.4	0.052	3.263	71.075	22.923	2.596	0.037	0.053	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1421.67
26	0.7042	1171.8	1192.6	1189.5	0.046	3.323	71.355	22.924	2.290	0.026	0.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1417.90
27	0.7070	1176.2	1197.0	1193.9	0.046	3.317	71.080	22.942	2.525	0.036	0.052	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1420.38
28	0.7025	1169.6	1190.3	1187.2	0.042	3.313	71.533	22.921	2.122	0.028	0.039	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.84
29	0.7108	1172.5	1193.2	1190.1	0.413	3.349	70.471	23.385	2.255	0.047	0.075	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1412.22
30	0.7209	1181.4	1202.3	1199.1	0.646	3.404	69.079	24.108	2.563	0.070	0.120	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1412.86
31	0.7027	1169.1	1189.8	1186.7	0.054	3.342	71.498	22.902	2.157	0.021	0.026	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1416.08
Avg	0.7322	1188.0	1208.8	1206.4	1.019	3.428	67.616	24.852	2.792	0.100	0.176	0.009	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1410.75

# Source Daily Summary

January 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	0.7032	1157.3	1177.8	1174.6	0.963	2.714	73.486	19.962	2.478	0.109	0.243	0.020	0.025	0.000	0.000	0.000	0.000	0.000	1401.15	
2	0.7025	1156.7	1177.2	1174.0	0.962	2.686	73.627	19.847	2.483	0.108	0.241	0.020	0.024	0.000	0.000	0.000	0.000	0.000	1401.14	
3	0.7022	1156.3	1176.8	1173.6	0.963	2.682	73.647	19.878	2.438	0.108	0.240	0.020	0.025	0.000	0.000	0.000	0.000	0.000	1400.93	
4	0.7023	1156.1	1176.5	1173.4	0.963	2.704	73.661	19.794	2.489	0.108	0.239	0.019	0.023	0.000	0.000	0.000	0.000	0.000	1400.60	
5	0.7018	1155.3	1175.8	1172.6	0.961	2.708	73.744	19.718	2.483	0.107	0.236	0.019	0.024	0.000	0.000	0.000	0.000	0.000	1400.15	
6	0.7023	1155.6	1176.0	1172.9	0.957	2.741	73.672	19.721	2.526	0.107	0.236	0.018	0.022	0.000	0.000	0.000	0.000	0.000	1400.01	
7	0.7016	1154.8	1175.2	1172.1	0.960	2.721	73.702	19.825	2.415	0.105	0.233	0.018	0.022	0.000	0.000	0.000	0.000	0.000	1399.75	
8	0.7023	1156.4	1176.9	1173.7	0.962	2.679	73.500	20.126	2.365	0.103	0.226	0.018	0.021	0.000	0.000	0.000	0.000	0.000	1401.08	
9	0.7019	1156.0	1176.5	1173.3	0.958	2.679	73.677	19.877	2.412	0.109	0.243	0.020	0.024	0.000	0.000	0.000	0.000	0.000	1400.89	
10	0.7040	1159.5	1180.0	1176.8	0.957	2.665	73.450	19.963	2.534	0.117	0.265	0.022	0.027	0.000	0.000	0.000	0.000	0.000	1403.00	
11	0.7042	1159.4	1180.0	1176.8	0.960	2.683	73.479	19.843	2.603	0.117	0.267	0.022	0.027	0.000	0.000	0.000	0.000	0.000	1402.74	
12	0.7055	1161.4	1182.0	1178.8	0.961	2.675	73.232	20.102	2.593	0.118	0.269	0.023	0.027	0.000	0.000	0.000	0.000	0.000	1403.92	
13	0.7052	1161.1	1181.7	1178.4	0.953	2.686	73.319	19.976	2.625	0.119	0.271	0.023	0.028	0.000	0.000	0.000	0.000	0.000	1403.72	
14	0.7020	1157.5	1178.0	1174.8	0.953	2.600	73.743	19.828	2.471	0.113	0.248	0.020	0.023	0.000	0.000	0.000	0.000	0.000	1402.67	
15	0.7021	1157.7	1178.2	1175.0	0.964	2.582	73.764	19.808	2.469	0.113	0.254	0.021	0.025	0.000	0.000	0.000	0.000	0.000	1402.75	
16	0.6976	1149.4	1169.7	1166.6	0.942	2.695	74.738	18.669	2.527	0.118	0.264	0.022	0.026	0.000	0.000	0.000	0.000	0.000	1397.21	
17	0.7001	1153.1	1173.5	1170.3	0.956	2.689	74.173	19.270	2.493	0.114	0.258	0.021	0.025	0.000	0.000	0.000	0.000	0.000	1399.16	
18	0.7023	1157.4	1177.9	1174.7	0.966	2.617	73.665	19.920	2.422	0.113	0.253	0.021	0.024	0.000	0.000	0.000	0.000	0.000	1402.20	
19	0.7031	1158.4	1178.9	1175.7	0.969	2.624	73.538	20.012	2.443	0.113	0.255	0.021	0.025	0.000	0.000	0.000	0.000	0.000	1402.64	
20	0.7024	1157.3	1177.8	1174.6	0.964	2.639	73.687	19.825	2.469	0.113	0.256	0.021	0.026	0.000	0.000	0.000	0.000	0.000	1401.95	
21	0.7021	1156.9	1177.4	1174.2	0.965	2.631	73.717	19.838	2.440	0.112	0.250	0.021	0.026	0.000	0.000	0.000	0.000	0.000	1401.77	
22	0.7020	1157.1	1177.6	1174.3	0.951	2.628	73.751	19.800	2.458	0.113	0.252	0.021	0.025	0.000	0.000	0.000	0.000	0.000	1402.12	
23	0.7028	1158.4	1179.0	1175.7	0.951	2.627	73.602	19.926	2.481	0.113	0.253	0.021	0.025	0.000	0.000	0.000	0.000	0.000	1402.90	
24	0.7014	1156.4	1176.9	1173.7	0.953	2.613	73.747	19.924	2.366	0.109	0.242	0.020	0.024	0.000	0.000	0.000	0.000	0.000	1401.90	
25	0.7007	1155.3	1175.7	1172.6	0.959	2.603	73.894	19.774	2.388	0.107	0.234	0.018	0.022	0.000	0.000	0.000	0.000	0.000	1401.28	
26	0.7007	1154.7	1175.2	1172.0	0.971	2.618	73.889	19.766	2.372	0.108	0.236	0.018	0.021	0.000	0.000	0.000	0.000	0.000	1400.64	
27	0.7007	1154.6	1175.1	1172.0	0.971	2.629	73.844	19.830	2.343	0.107	0.237	0.018	0.022	0.000	0.000	0.000	0.000	0.000	1400.48	
28	0.7013	1154.6	1175.1	1171.9	0.984	2.667	73.733	19.891	2.339	0.106	0.238	0.019	0.023	0.000	0.000	0.000	0.000	0.000	1399.84	
29	0.7018	1155.1	1175.5	1172.4	0.988	2.676	73.681	19.895	2.368	0.107	0.241	0.019	0.023	0.000	0.000	0.000	0.000	0.000	1399.94	
30	0.7015	1154.3	1174.7	1171.5	0.990	2.695	73.733	19.852	2.326	0.108	0.247	0.021	0.026	0.000	0.000	0.000	0.000	0.000	1399.21	
31	0.7013	1154.3	1174.7	1171.6	0.985	2.681	73.717	19.924	2.304	0.107	0.240	0.020	0.023	0.000	0.000	0.000	0.000	0.000	1399.50	
Avg	0.7021	1156.0	1176.9	1173.7	0.963	2.662	73.704	19.819	2.449	0.111	0.247	0.020	0.024	0.000	0.000	0.000	0.000	0.000	1401.20	

# Gas Composition and Properties

Effective January 1, 2021

Source #: 0602160  
Name: FAIRVIEW BORDER

Component	Mole %	Liquid Content	Mass %
Carbon Dioxide, CO2	1.1397		2.4121
Nitrogen, N2	3.1900		4.2975
Methane, C1	70.3887		54.3037
Ethane, C2	22.1161	5.9191	31.9803
Propane, C3	2.7665	0.7627	5.8665
iso-Butane, iC4	0.1171	0.0383	0.3273
n-Butane, nC4	0.2475	0.0781	0.6918
iso-Pentane, iC5	0.0152	0.0056	0.0527
n-Pentane, nC5	0.0170	0.0062	0.0590
Neo-Pentane, NeoC5			
Hexanes Plus, C6+	0.0022	0.0009	0.0091
Water, H2O			
Hydrogen Sulfide, H2S			
Oxygen, O2			
Carbon Monoxide, CO			
Hydrogen, H2			
Helium, He			
Argon, Ar			
<b>Totals</b>	<b>100.0000</b>	<b>6.8110</b>	<b>100.0000</b>

Property	Total Sample	C6 Plus Fraction
Pressure Base	14.730	
Temperature Base	60.00	
HCDP @ Sample Pressure	-18.389	
Cricondentherm	-1.437	
HV, Dry @ Base P, T	1191.87	
HV, Sat @ Base P, T	1171.13	
HV, Sat @ Sample P, T	1191.87	
Relative Density	0.7201	

C6+: 100

## Sample

Date: 01/01/2021      Pressure: 400.0  
Type:                      Temperature:  
Tech: Joshua Tipton      H2O: lbs/mm  
   H2S: ppm

Remarks:

## Analysis

Date: 01/01/2021      Instrument:  
   Cylinder: 1004  
Tech: Joshua Tipton

Remarks:



# Source Daily Summary

January 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	0.6967	1122.3	1142.2		0.773	3.456	74.861	17.649	2.919	0.085	0.205	0.020	0.025	0.008					1386.38	
2	0.6879	1125.1	1145.0		0.794	3.501	75.919	17.257	2.169	0.088	0.215	0.022	0.028	0.008					1377.31	
3	0.7109	1116.5	1136.3		0.772	4.020	73.587	16.760	4.505	0.080	0.197	0.023	0.025	0.030					1387.24	
4	0.6874	1123.8	1143.7		0.788	3.533	75.954	17.244	2.136	0.085	0.208	0.020	0.025	0.006					1376.36	
5	0.6879	1125.0	1144.9		0.783	3.516	75.888	17.295	2.170	0.085	0.209	0.020	0.025	0.006					1377.23	
6	0.6893	1125.3	1145.2		0.782	3.503	75.691	17.426	2.234	0.091	0.218	0.021	0.026	0.007					1378.86	
7	0.6881	1125.7	1145.6		0.774	3.507	75.764	17.493	2.132	0.083	0.198	0.018	0.023	0.005					1377.86	
8	0.6890	1126.8	1146.8		0.785	3.512	75.643	17.545	2.172	0.086	0.209	0.020	0.025	0.006					1378.43	
9	0.6864	1122.6	1142.4		0.770	3.542	76.145	17.038	2.172	0.085	0.202	0.019	0.023	0.004					1375.83	
10	0.6900	1128.5	1148.5		0.782	3.505	75.540	17.586	2.223	0.089	0.216	0.022	0.028	0.008					1379.46	
11	0.6907	1129.7	1149.7		0.784	3.498	75.416	17.704	2.233	0.091	0.220	0.022	0.028	0.007					1380.15	
12	0.6945	1135.8	1155.9		0.797	3.457	74.859	18.108	2.398	0.095	0.227	0.023	0.029	0.008					1383.91	
13	0.6907	1130.4	1150.5		0.758	3.486	75.467	17.605	2.331	0.089	0.209	0.021	0.026	0.007					1381.13	
14	0.6579	1080.2	1099.3		0.520	3.831	80.686	13.294	1.475	0.053	0.121	0.010	0.011	0.002					1352.24	
15	0.6870	1123.2	1143.1		0.765	3.576	75.927	17.292	2.109	0.082	0.200	0.019	0.024	0.005					1375.91	
16	0.6914	1130.7	1150.8		0.787	3.489	75.151	18.072	2.165	0.084	0.203	0.019	0.024	0.005					1380.82	
17	0.6921	1131.0	1151.1		0.808	3.515	74.938	18.290	2.126	0.082	0.197	0.018	0.022	0.005					1380.40	
18	0.6877	1124.6	1144.5		0.771	3.544	75.691	17.642	2.044	0.078	0.188	0.017	0.021	0.004					1376.99	
19	0.6865	1122.8	1142.6		0.770	3.541	75.992	17.300	2.086	0.080	0.190	0.017	0.020	0.004					1375.97	
20	0.6855	1121.5	1141.3		0.757	3.546	76.238	17.030	2.099	0.082	0.198	0.019	0.024	0.007					1375.38	
21	0.6888	1127.1	1147.0		0.794	3.463	75.490	17.874	2.094	0.076	0.175	0.014	0.017	0.002					1378.90	
22	0.6901	1129.6	1149.7		0.770	3.466	75.255	18.087	2.128	0.077	0.179	0.016	0.019	0.003					1380.73	
23	0.6880	1126.8	1146.7		0.748	3.478	75.507	17.954	2.056	0.071	0.159	0.013	0.015	0.001					1379.34	
24	0.6847	1121.3	1141.2		0.749	3.501	75.997	17.606	1.900	0.067	0.151	0.013	0.015	0.002					1375.95	
25	0.6837	1119.5	1139.3		0.753	3.512	76.140	17.475	1.901	0.062	0.135	0.010	0.011	0.000					1374.71	
26	0.6825	1114.8	1134.5		0.789	3.624	76.533	16.871	1.922	0.070	0.161	0.013	0.015	0.002					1370.20	
27	0.6865	1121.0	1140.9		0.821	3.576	75.852	17.481	1.991	0.074	0.174	0.014	0.016	0.002					1373.81	
28	0.6907	1127.3	1147.3		0.886	3.484	75.242	18.001	2.073	0.080	0.193	0.017	0.020	0.004					1377.33	
29	0.6924	1130.9	1150.9		0.886	3.433	74.951	18.299	2.104	0.082	0.200	0.018	0.022	0.004					1379.90	
30	0.6942	1133.0	1153.0		0.902	3.444	74.749	18.389	2.152	0.087	0.217	0.022	0.028	0.009					1380.73	
31	0.6932	1131.8	1151.9		0.885	3.453	74.741	18.523	2.078	0.081	0.197	0.018	0.022	0.004					1380.28	
Avg	0.6888	1124.0	1144.3		0.784	3.533	75.671	17.490	2.203	0.081	0.193	0.018	0.022	0.006					1377.73	

# Source Daily Summary

January 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	0.7029	1146.5	1166.8	1163.5	0.974	3.324	73.457	19.397	2.464	0.098	0.236	0.022	0.028	0.000	0.000	0.000	0.000	0.000	1388.36	
2	0.7028	1145.0	1165.3	1162.1	0.985	3.387	73.517	19.235	2.478	0.099	0.243	0.024	0.030	0.000	0.000	0.000	0.000	0.000	1386.68	
3	0.7021	1145.3	1165.6	1162.4	0.958	3.347	73.583	19.275	2.449	0.098	0.237	0.023	0.030	0.000	0.000	0.000	0.000	0.000	1387.71	
4	0.7031	1147.4	1167.8	1164.5	0.946	3.328	73.439	19.396	2.497	0.100	0.241	0.023	0.030	0.000	0.000	0.000	0.000	0.000	1389.29	
5	0.7033	1147.2	1167.5	1164.2	0.959	3.345	73.455	19.326	2.507	0.102	0.249	0.025	0.033	0.000	0.000	0.000	0.000	0.000	1388.70	
6	0.7018	1145.0	1165.3	1162.1	0.946	3.353	73.669	19.166	2.477	0.099	0.238	0.023	0.029	0.000	0.000	0.000	0.000	0.000	1387.66	
7	0.7022	1145.5	1165.8	1162.5	0.959	3.344	73.676	19.098	2.521	0.102	0.245	0.024	0.032	0.000	0.000	0.000	0.000	0.000	1387.77	
8	0.7026	1146.4	1166.7	1163.5	0.946	3.347	73.494	19.351	2.473	0.099	0.238	0.023	0.030	0.000	0.000	0.000	0.000	0.000	1388.52	
9	0.7024	1146.1	1166.4	1163.1	0.942	3.351	73.527	19.323	2.477	0.097	0.233	0.022	0.028	0.000	0.000	0.000	0.000	0.000	1388.33	
10	0.7043	1148.9	1169.3	1166.0	0.949	3.350	73.219	19.555	2.533	0.101	0.242	0.023	0.029	0.000	0.000	0.000	0.000	0.000	1389.88	
11	0.7033	1147.6	1167.9	1164.7	0.942	3.348	73.351	19.470	2.508	0.098	0.235	0.021	0.027	0.000	0.000	0.000	0.000	0.000	1389.28	
12	0.7050	1150.2	1170.5	1167.2	0.952	3.335	73.182	19.537	2.582	0.104	0.252	0.024	0.032	0.000	0.000	0.000	0.000	0.000	1390.63	
13	0.7056	1151.4	1171.8	1168.4	0.946	3.323	73.126	19.556	2.633	0.105	0.251	0.026	0.034	0.000	0.000	0.000	0.000	0.000	1391.53	
14	0.7076	1154.0	1174.4	1171.0	0.948	3.348	72.953	19.496	2.815	0.112	0.266	0.027	0.036	0.000	0.000	0.000	0.000	0.000	1392.67	
15	0.6932	1135.0	1155.1	1152.1	0.785	3.406	74.660	18.681	2.223	0.070	0.149	0.012	0.014	0.000	0.000	0.000	0.000	0.000	1384.10	
16	0.7063	1150.9	1171.3	1168.1	0.957	3.400	72.776	19.961	2.524	0.098	0.235	0.021	0.028	0.000	0.000	0.000	0.000	0.000	1390.40	
17	0.7070	1152.9	1173.3	1170.1	0.956	3.345	72.627	20.180	2.514	0.097	0.233	0.021	0.028	0.000	0.000	0.000	0.000	0.000	1392.11	
18	0.7072	1152.2	1172.7	1169.5	0.978	3.375	72.551	20.252	2.466	0.096	0.232	0.022	0.028	0.000	0.000	0.000	0.000	0.000	1391.07	
19	0.7064	1152.0	1172.4	1169.2	0.958	3.352	72.564	20.357	2.418	0.091	0.217	0.019	0.023	0.000	0.000	0.000	0.000	0.000	1391.52	
20	0.7058	1150.9	1171.3	1168.1	0.960	3.356	72.781	20.083	2.451	0.095	0.226	0.021	0.027	0.000	0.000	0.000	0.000	0.000	1390.77	
21	0.7035	1147.6	1168.0	1164.8	0.932	3.374	73.289	19.540	2.488	0.097	0.231	0.022	0.028	0.000	0.000	0.000	0.000	0.000	1389.17	
22	0.7024	1146.6	1166.9	1163.7	0.946	3.317	73.366	19.621	2.413	0.090	0.207	0.018	0.023	0.000	0.000	0.000	0.000	0.000	1388.97	
23	0.7034	1149.4	1169.8	1166.7	0.902	3.309	73.052	20.026	2.383	0.087	0.201	0.018	0.022	0.000	0.000	0.000	0.000	0.000	1391.43	
24	0.7024	1147.9	1168.2	1165.2	0.892	3.323	73.179	19.921	2.381	0.083	0.187	0.015	0.018	0.000	0.000	0.000	0.000	0.000	1390.61	
25	0.7013	1145.5	1165.8	1162.7	0.910	3.336	73.286	19.917	2.258	0.080	0.181	0.015	0.018	0.000	0.000	0.000	0.000	0.000	1388.80	
26	0.7002	1143.4	1163.6	1160.6	0.922	3.346	73.375	19.896	2.207	0.072	0.156	0.011	0.013	0.000	0.000	0.000	0.000	0.000	1387.33	
27	0.7025	1143.7	1164.0	1161.0	0.983	3.442	73.221	19.700	2.341	0.085	0.194	0.015	0.018	0.000	0.000	0.000	0.000	0.000	1385.52	
28	0.7013	1141.6	1161.8	1158.9	0.991	3.452	73.395	19.567	2.283	0.084	0.195	0.015	0.018	0.000	0.000	0.000	0.000	0.000	1384.09	
29	0.7025	1143.6	1163.8	1160.8	1.029	3.390	73.337	19.561	2.335	0.090	0.217	0.018	0.023	0.000	0.000	0.000	0.000	0.000	1385.23	
30	0.7036	1145.9	1166.2	1163.1	1.027	3.347	73.123	19.831	2.322	0.091	0.218	0.019	0.023	0.000	0.000	0.000	0.000	0.000	1387.04	
31	0.7047	1147.5	1167.8	1164.4	1.031	3.350	73.108	19.724	2.392	0.098	0.242	0.024	0.032	0.000	0.000	0.000	0.000	0.000	1387.66	
Avg	0.7033	1147.0	1167.5	1164.3	0.952	3.356	73.269	19.613	2.446	0.094	0.223	0.020	0.026	0.000	0.000	0.000	0.000	0.000	1388.80	

# Source Daily Summary

January 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	0.7412	1162.7	1183.3	1180.2	0.939	5.980	67.786	19.919	4.866	0.149	0.322	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1371.25
2	0.7416	1163.4	1184.0	1180.9	0.936	5.984	67.738	19.929	4.900	0.149	0.324	0.019	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1371.64
3	0.7408	1161.9	1182.4	1179.3	0.934	6.002	67.838	19.876	4.841	0.149	0.320	0.019	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1370.60
4	0.7401	1159.8	1180.3	1177.2	0.932	6.069	67.909	19.778	4.817	0.143	0.312	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1368.75
5	0.7372	1155.8	1176.2	1173.1	0.933	6.038	68.286	19.625	4.650	0.137	0.295	0.017	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1366.75
6	0.7364	1154.4	1174.8	1171.7	0.933	6.051	68.404	19.533	4.608	0.139	0.296	0.018	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1365.83
7	0.7370	1155.8	1176.3	1173.2	0.933	6.021	68.312	19.630	4.634	0.139	0.296	0.017	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1366.95
8	0.7362	1154.2	1174.7	1171.6	0.929	6.050	68.385	19.594	4.582	0.137	0.288	0.016	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1365.81
9	0.7379	1156.8	1177.3	1174.2	0.934	6.039	68.179	19.701	4.669	0.142	0.301	0.017	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1367.36
10	0.7374	1156.7	1177.1	1174.1	0.933	6.008	68.244	19.704	4.634	0.143	0.299	0.017	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1367.58
11	0.7385	1157.8	1178.3	1175.2	0.935	6.032	68.114	19.729	4.707	0.142	0.303	0.018	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1367.94
12	0.7424	1163.3	1183.9	1180.8	0.933	6.062	67.632	19.909	4.939	0.154	0.330	0.019	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1370.85
13	0.7478	1171.9	1192.6	1189.5	0.931	6.050	66.980	20.191	5.265	0.167	0.368	0.023	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1375.93
14	0.7456	1166.3	1187.0	1183.8	0.922	6.202	67.227	19.924	5.174	0.159	0.348	0.021	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1371.40
15	0.7404	1162.6	1183.2	1180.1	0.899	5.977	67.905	19.824	4.902	0.144	0.313	0.017	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1371.79
16	0.7448	1170.2	1191.0	1187.8	0.925	5.876	67.381	20.172	5.091	0.160	0.352	0.021	0.022	0.000	0.000	0.000	0.000	0.000	0.000	1376.81
17	0.7460	1171.3	1192.0	1188.9	0.932	5.917	67.187	20.273	5.128	0.163	0.357	0.021	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1376.91
18	0.7433	1166.1	1186.8	1183.6	0.935	5.974	67.489	20.122	4.946	0.156	0.336	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1373.32
19	0.7428	1166.4	1187.1	1184.0	0.934	5.917	67.564	20.126	4.926	0.159	0.334	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1374.09
20	0.7431	1167.7	1188.4	1185.2	0.930	5.866	67.622	20.053	4.971	0.164	0.348	0.022	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1375.38
21	0.7431	1161.9	1182.5	1179.4	0.920	6.238	67.524	19.776	5.012	0.160	0.332	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1368.53
22	0.7446	1164.2	1184.8	1181.7	0.924	6.231	67.324	19.893	5.088	0.163	0.338	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1369.86
23	0.7445	1164.4	1185.0	1181.9	0.919	6.219	67.314	19.928	5.087	0.160	0.335	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1370.17
24	0.7397	1159.0	1179.5	1176.5	0.918	6.096	67.957	19.718	4.827	0.146	0.305	0.016	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1368.30
25	0.7392	1157.8	1178.3	1175.3	0.926	6.108	68.034	19.660	4.784	0.149	0.306	0.016	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1367.38
26	0.7396	1159.2	1179.7	1176.6	0.924	6.065	67.980	19.736	4.804	0.150	0.307	0.016	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1368.60
27	0.7421	1162.9	1183.5	1180.4	0.933	6.066	67.652	19.904	4.922	0.158	0.327	0.018	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1370.61
28	0.7425	1161.6	1182.2	1179.1	0.936	6.172	67.619	19.786	4.958	0.162	0.331	0.018	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1368.79
29	0.7486	1170.3	1191.0	1187.9	0.935	6.218	66.885	20.025	5.339	0.181	0.374	0.021	0.022	0.000	0.000	0.000	0.000	0.000	0.000	1373.31
30	0.7536	1177.7	1198.5	1195.4	0.934	6.231	66.290	20.255	5.633	0.196	0.411	0.024	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1377.44
31	0.7463	1166.1	1186.8	1183.7	0.936	6.259	67.147	19.884	5.201	0.175	0.358	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1370.51
Avg	0.7421	1163.0	1183.5	1180.4	0.930	6.065	67.674	19.877	4.933	0.155	0.328	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1370.66

# Gas Composition and Properties

Effective January 1, 2021

Source #: 2501030  
Name: LIGNITE PLANT

Component	Mole %	Liquid Content	Mass %
Carbon Dioxide, CO2	0.2142		0.4907
Nitrogen, N2	2.9421		4.2901
Methane, C1	78.8753		65.8658
Ethane, C2	16.3082	4.3625	25.5253
Propane, C3	1.6363	0.4509	3.7558
iso-Butane, iC4	0.0190	0.0062	0.0575
n-Butane, nC4	0.0049	0.0015	0.0148
iso-Pentane, iC5			
n-Pentane, nC5			
Neo-Pentane, NeoC5			
Hexanes Plus, C6+			
Water, H2O			
Hydrogen Sulfide, H2S			
Oxygen, O2			
Carbon Monoxide, CO			
Hydrogen, H2			
Helium, He			
Argon, Ar			
<b>Totals</b>	<b>100.0000</b>	<b>4.8220</b>	<b>100.0000</b>

Property	Total Sample	C6 Plus Fraction
Pressure Base	14.730	
Temperature Base	60.00	
HCDP @ Sample Pressure	-42.518	
Cricodentherm	-34.182	
HV, Dry @ Base P, T	1132.98	
HV, Sat @ Base P, T	1113.26	
HV, Sat @ Sample P, T	1132.98	
Relative Density	0.6649	
C6+: 100		

**Sample**  
Date: 01/01/2021      Pressure: 530.0  
Type:                      Temperature:  
Tech: Joshua Tipton      H2O: lbs/mm  
   H2S: ppm

Remarks:

**Analysis**  
Date: 01/01/2021      Instrument:  
   Cylinder: 310  
Tech: Joshua Tipton

Remarks:

# Gas Composition and Properties

Effective January 1, 2021

Source #: 3002013  
Name: EPPING BORDER

Component	Mole %	Liquid Content	Mass %
Carbon Dioxide, CO2	0.9462		2.0743
Nitrogen, N2	2.6052		3.6354
Methane, C1	74.8577		59.8202
Ethane, C2	18.9636	5.0743	28.4040
Propane, C3	2.2497	0.6201	4.9415
iso-Butane, iC4	0.1006	0.0329	0.2913
n-Butane, nC4	0.2350	0.0741	0.6804
iso-Pentane, iC5	0.0183	0.0067	0.0658
n-Pentane, nC5	0.0209	0.0076	0.0751
Neo-Pentane, NeoC5			
Hexanes Plus, C6+	0.0028	0.0012	0.0120
Water, H2O			
Hydrogen Sulfide, H2S			
Oxygen, O2			
Carbon Monoxide, CO			
Hydrogen, H2			
Helium, He			
Argon, Ar			
<b>Totals</b>	<b>100.0000</b>	<b>5.8170</b>	<b>100.0000</b>

Property	Total Sample	C6 Plus Fraction
Pressure Base	14.730	
Temperature Base	60.00	
HCDP @ Sample Pressure	-16.095	
Cricondentherm	-11.242	
HV, Dry @ Base P, T	1167.19	
HV, Sat @ Base P, T	1146.88	
HV, Sat @ Sample P, T	1167.19	
Relative Density	0.6950	
C6+: 100		

**Sample**  
Date: 01/01/2021      Pressure: 570.0  
Type:                      Temperature:  
Tech: Joshua Tipton      H2O: lbs/mm  
   H2S: ppm

Remarks:

**Analysis**  
Date: 01/01/2021      Instrument:  
   Cylinder: 127  
Tech: Joshua Tipton

Remarks:

\*\*\* End of Report \*\*\*

# Source Daily Summary

January 2021

<b>Number:</b>	603	<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Name:</b>	TIOGA STN-COUNTY LINE PLANT	<b>Temperature Base:</b>		<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7034	1146.1	1166.4	1163.1	0.984	3.378	73.403	19.347	2.491	0.100	0.244	0.023	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1387.43
2	0.7026	1145.3	1165.6	1162.3	0.976	3.364	73.544	19.256	2.464	0.100	0.243	0.024	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1387.21
3	0.7026	1146.9	1167.2	1163.9	0.945	3.321	73.511	19.351	2.480	0.099	0.239	0.023	0.030	0.000	0.000	0.000	0.000	0.000	0.000	1389.08
4	0.7042	1148.7	1169.1	1165.7	0.961	3.331	73.299	19.485	2.509	0.103	0.252	0.026	0.034	0.000	0.000	0.000	0.000	0.000	0.000	1389.70
5	0.7022	1145.5	1165.8	1162.5	0.948	3.361	73.599	19.211	2.490	0.099	0.239	0.023	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1387.81
6	0.7023	1145.7	1166.0	1162.7	0.959	3.340	73.656	19.124	2.514	0.102	0.248	0.024	0.032	0.000	0.000	0.000	0.000	0.000	0.000	1387.95
7	0.7027	1146.7	1167.0	1163.7	0.948	3.339	73.477	19.365	2.482	0.099	0.238	0.022	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1388.76
8	0.7025	1145.9	1166.2	1162.8	0.951	3.355	73.551	19.272	2.478	0.100	0.239	0.023	0.031	0.000	0.000	0.000	0.000	0.000	0.000	1388.02
9	0.7043	1149.0	1169.4	1166.1	0.943	3.349	73.221	19.551	2.542	0.101	0.241	0.022	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1390.05
10	0.7045	1149.3	1169.6	1166.4	0.948	3.347	73.163	19.628	2.522	0.100	0.240	0.023	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1390.13
11	0.7042	1149.1	1169.4	1166.1	0.945	3.346	73.301	19.438	2.576	0.102	0.247	0.024	0.030	0.000	0.000	0.000	0.000	0.000	0.000	1390.16
12	0.7057	1151.2	1171.6	1168.2	0.952	3.329	73.107	19.590	2.594	0.106	0.260	0.026	0.035	0.000	0.000	0.000	0.000	0.000	0.000	1391.25
13	0.7076	1154.5	1175.0	1171.6	0.949	3.313	72.859	19.714	2.728	0.110	0.264	0.027	0.036	0.000	0.000	0.000	0.000	0.000	0.000	1393.38
14	0.7060	1151.8	1172.2	1168.8	0.942	3.343	73.147	19.410	2.734	0.108	0.256	0.026	0.034	0.000	0.000	0.000	0.000	0.000	0.000	1391.63
15	0.6942	1136.3	1156.4	1153.4	0.793	3.404	74.488	18.830	2.238	0.071	0.151	0.012	0.014	0.000	0.000	0.000	0.000	0.000	0.000	1384.77
16	0.7065	1151.3	1171.7	1168.4	0.958	3.395	72.757	19.976	2.526	0.099	0.239	0.022	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1390.63
17	0.7071	1153.2	1173.6	1170.4	0.953	3.342	72.598	20.214	2.513	0.097	0.233	0.021	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1392.38
18	0.7074	1152.4	1172.8	1169.6	0.980	3.380	72.522	20.266	2.469	0.097	0.235	0.022	0.029	0.000	0.000	0.000	0.000	0.000	0.000	1391.10
19	0.7067	1152.3	1172.7	1169.5	0.960	3.352	72.557	20.341	2.430	0.093	0.222	0.020	0.025	0.000	0.000	0.000	0.000	0.000	0.000	1391.66
20	0.7055	1150.5	1170.9	1167.6	0.955	3.354	72.850	20.020	2.454	0.094	0.225	0.021	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1390.64
21	0.7047	1149.4	1169.8	1166.4	0.947	3.355	73.114	19.684	2.514	0.098	0.235	0.023	0.030	0.000	0.000	0.000	0.000	0.000	0.000	1390.12
22	0.7021	1146.5	1166.8	1163.6	0.936	3.315	73.345	19.691	2.387	0.088	0.202	0.017	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1389.16
23	0.7035	1149.4	1169.7	1166.5	0.903	3.315	73.061	19.992	2.399	0.088	0.202	0.018	0.022	0.000	0.000	0.000	0.000	0.000	0.000	1391.30
24	0.7024	1147.8	1168.1	1165.0	0.892	3.326	73.174	19.936	2.372	0.083	0.186	0.015	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1390.52
25	0.7008	1144.5	1164.8	1161.7	0.914	3.340	73.369	19.848	2.239	0.079	0.179	0.014	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1388.17
26	0.6999	1142.8	1163.0	1160.0	0.921	3.358	73.440	19.806	2.219	0.073	0.158	0.011	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1386.89
27	0.7020	1142.7	1163.0	1159.9	0.988	3.457	73.298	19.622	2.322	0.085	0.196	0.015	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1384.72
28	0.7013	1141.6	1161.8	1158.7	0.994	3.447	73.432	19.515	2.295	0.085	0.199	0.015	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1384.07
29	0.7027	1143.8	1164.1	1160.9	1.032	3.383	73.303	19.607	2.328	0.090	0.217	0.018	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1385.39
30	0.7035	1145.9	1166.2	1163.0	1.024	3.346	73.164	19.776	2.333	0.092	0.221	0.019	0.024	0.000	0.000	0.000	0.000	0.000	0.000	1387.07
31	0.7050	1147.9	1168.2	1164.8	1.033	3.354	73.034	19.798	2.384	0.098	0.243	0.024	0.032	0.000	0.000	0.000	0.000	0.000	0.000	1387.82
Avg	0.7035	1148.0	1167.9	1164.6	0.953	3.356	73.237	19.634	2.452	0.095	0.226	0.021	0.027	0.000	0.000	0.000	0.000	0.000	0.000	1389.00

# Source Daily Summary

January 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	0.7402	1163.6	1184.2	1180.4	0.921	5.857	67.978	19.897	4.833	0.150	0.325	0.019	0.020	0.000	0.000	0.000	0.000	0.000	1373.21	
2	0.7409	1164.3	1184.9	1181.1	0.920	5.887	67.877	19.915	4.883	0.150	0.329	0.019	0.020	0.000	0.000	0.000	0.000	0.000	1373.33	
3	0.7398	1162.0	1182.6	1178.7	0.916	5.930	67.999	19.836	4.811	0.149	0.321	0.019	0.020	0.000	0.000	0.000	0.000	0.000	1371.65	
4	0.7413	1164.2	1184.8	1180.8	0.916	5.935	67.800	19.943	4.889	0.150	0.328	0.019	0.020	0.000	0.000	0.000	0.000	0.000	1372.85	
5	0.7359	1155.4	1175.8	1172.0	0.913	5.977	68.452	19.612	4.587	0.134	0.291	0.016	0.017	0.000	0.000	0.000	0.000	0.000	1367.39	
6	0.7368	1157.0	1177.5	1173.6	0.916	5.954	68.369	19.657	4.623	0.141	0.303	0.018	0.019	0.000	0.000	0.000	0.000	0.000	1368.49	
7	0.7362	1156.5	1176.9	1173.1	0.913	5.934	68.430	19.662	4.592	0.138	0.296	0.017	0.017	0.000	0.000	0.000	0.000	0.000	1368.44	
8	0.7360	1155.7	1176.2	1172.2	0.916	5.957	68.451	19.637	4.575	0.137	0.294	0.016	0.017	0.000	0.000	0.000	0.000	0.000	1367.74	
9	0.7369	1157.2	1177.7	1173.8	0.915	5.952	68.336	19.687	4.639	0.140	0.298	0.017	0.017	0.000	0.000	0.000	0.000	0.000	1368.69	
10	0.7368	1157.8	1178.3	1174.4	0.915	5.910	68.357	19.725	4.608	0.145	0.305	0.017	0.018	0.000	0.000	0.000	0.000	0.000	1369.42	
11	0.7376	1158.3	1178.8	1174.9	0.916	5.956	68.263	19.696	4.683	0.144	0.306	0.018	0.018	0.000	0.000	0.000	0.000	0.000	1369.22	
12	0.7392	1160.6	1181.1	1177.2	0.917	5.960	68.088	19.742	4.787	0.149	0.319	0.018	0.019	0.000	0.000	0.000	0.000	0.000	1370.49	
13	0.7467	1171.3	1192.0	1188.1	0.910	6.014	67.132	20.147	5.225	0.164	0.364	0.022	0.022	0.000	0.000	0.000	0.000	0.000	1376.24	
14	0.7463	1170.3	1191.0	1187.1	0.910	6.046	67.156	20.133	5.181	0.167	0.363	0.022	0.023	0.000	0.000	0.000	0.000	0.000	1375.33	
15	0.7411	1164.9	1185.5	1181.6	0.890	5.914	67.835	19.920	4.931	0.148	0.324	0.018	0.019	0.000	0.000	0.000	0.000	0.000	1373.84	
16	0.7429	1168.7	1189.4	1185.5	0.914	5.821	67.622	20.114	4.986	0.157	0.345	0.020	0.021	0.000	0.000	0.000	0.000	0.000	1376.58	
17	0.7444	1171.2	1192.0	1188.1	0.914	5.798	67.446	20.219	5.062	0.161	0.356	0.021	0.022	0.000	0.000	0.000	0.000	0.000	1378.26	
18	0.7421	1167.8	1188.5	1184.7	0.902	5.811	67.703	20.131	4.913	0.158	0.342	0.020	0.021	0.000	0.000	0.000	0.000	0.000	1376.39	
19	0.7366	1161.4	1181.9	1178.2	0.889	5.708	68.455	19.819	4.635	0.147	0.311	0.017	0.018	0.000	0.000	0.000	0.000	0.000	1373.88	
20	0.7430	1170.1	1190.8	1186.9	0.907	5.753	67.691	20.082	4.987	0.172	0.363	0.022	0.023	0.000	0.000	0.000	0.000	0.000	1378.19	
21	0.7296	1153.3	1173.7	1170.0	0.834	5.630	69.511	19.186	4.381	0.137	0.288	0.016	0.016	0.000	0.000	0.000	0.000	0.000	1370.84	
22	0.7298	1152.7	1173.1	1169.4	0.843	5.675	69.537	19.045	4.428	0.142	0.295	0.017	0.017	0.000	0.000	0.000	0.000	0.000	1369.90	
23	0.7337	1156.9	1177.4	1173.7	0.845	5.778	68.970	19.287	4.629	0.148	0.309	0.017	0.017	0.000	0.000	0.000	0.000	0.000	1371.28	
24	0.7229	1146.9	1167.2	1163.6	0.799	5.447	70.489	18.743	4.111	0.123	0.259	0.014	0.014	0.000	0.000	0.000	0.000	0.000	1369.53	
25	0.7195	1143.1	1163.3	1159.8	0.796	5.361	71.016	18.478	3.948	0.123	0.251	0.013	0.013	0.000	0.000	0.000	0.000	0.000	1368.25	
26	0.7167	1140.9	1161.1	1157.6	0.795	5.228	71.468	18.297	3.824	0.119	0.242	0.013	0.013	0.000	0.000	0.000	0.000	0.000	1368.35	
27	0.7191	1144.7	1165.0	1161.4	0.817	5.192	71.109	18.581	3.894	0.124	0.254	0.014	0.014	0.000	0.000	0.000	0.000	0.000	1370.58	
28	0.7198	1144.6	1164.9	1161.3	0.801	5.291	71.043	18.464	3.981	0.129	0.263	0.014	0.014	0.000	0.000	0.000	0.000	0.000	1369.78	
29	0.7327	1155.9	1176.4	1172.7	0.854	5.728	69.199	19.109	4.607	0.154	0.315	0.017	0.017	0.000	0.000	0.000	0.000	0.000	1371.09	
30	0.7455	1172.5	1193.3	1189.5	0.875	5.884	67.534	19.778	5.303	0.188	0.393	0.022	0.023	0.000	0.000	0.000	0.000	0.000	1378.74	
31	0.7408	1162.9	1183.5	1179.7	0.889	6.007	67.986	19.610	4.960	0.168	0.344	0.018	0.018	0.000	0.000	0.000	0.000	0.000	1371.82	
Avg	0.7358	1159.0	1179.6	1175.8	0.883	5.784	68.623	19.553	4.661	0.147	0.313	0.018	0.018	0.000	0.000	0.000	0.000	0.000	1371.93	

# Source Daily Summary

January 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	0.7359	1159.9	1180.5	1177.3	0.906	5.711	68.583	19.696	4.621	0.142	0.304	0.018	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1372.70
2	0.7403	1163.1	1183.7	1180.5	0.928	5.895	67.941	19.893	4.834	0.149	0.320	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1372.38
3	0.7410	1163.7	1184.3	1181.1	0.927	5.922	67.855	19.908	4.877	0.149	0.322	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1372.46
4	0.7400	1161.5	1182.1	1178.9	0.923	5.964	67.964	19.843	4.805	0.148	0.315	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1370.86
5	0.7413	1163.4	1184.0	1180.8	0.923	5.977	67.786	19.919	4.884	0.149	0.322	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1371.80
6	0.7357	1154.5	1175.0	1171.8	0.920	5.996	68.489	19.572	4.570	0.134	0.286	0.017	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1366.57
7	0.7367	1156.1	1176.6	1173.4	0.923	5.990	68.394	19.588	4.629	0.141	0.300	0.017	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1367.47
8	0.7362	1155.8	1176.3	1173.2	0.920	5.968	68.423	19.632	4.593	0.138	0.292	0.017	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1367.60
9	0.7361	1155.2	1175.6	1172.5	0.922	5.990	68.439	19.610	4.579	0.137	0.289	0.017	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1366.96
10	0.7371	1156.8	1177.2	1174.1	0.922	5.986	68.317	19.662	4.645	0.140	0.295	0.017	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1367.92
11	0.7368	1157.2	1177.7	1174.5	0.923	5.933	68.349	19.727	4.592	0.143	0.298	0.017	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1368.66
12	0.7381	1158.3	1178.8	1175.7	0.923	5.985	68.184	19.733	4.692	0.144	0.303	0.018	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1368.80
13	0.7399	1160.9	1181.5	1178.3	0.925	5.992	67.972	19.806	4.801	0.148	0.316	0.019	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1370.18
14	0.7453	1168.6	1189.3	1186.4	0.904	6.049	67.278	20.068	5.154	0.158	0.346	0.021	0.022	0.000	0.000	0.000	0.000	0.000	0.000	1374.54
15	0.7411	1164.9	1185.5	1182.4	0.890	5.914	67.836	19.920	4.931	0.148	0.324	0.018	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1373.84
16	0.7429	1168.7	1189.4	1186.3	0.914	5.821	67.622	20.114	4.986	0.157	0.345	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1376.58
17	0.7444	1171.2	1192.0	1188.9	0.914	5.798	67.446	20.219	5.062	0.161	0.356	0.021	0.022	0.000	0.000	0.000	0.000	0.000	0.000	1378.26
18	0.7425	1168.4	1189.1	1186.0	0.902	5.816	67.652	20.152	4.935	0.159	0.344	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1376.63
19	0.7369	1160.9	1181.5	1178.3	0.895	5.756	68.406	19.808	4.645	0.145	0.309	0.018	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1373.01
20	0.7431	1168.3	1188.9	1185.7	0.916	5.855	67.590	20.135	4.954	0.165	0.343	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1375.92
21	0.7342	1160.2	1180.8	1177.6	0.870	5.581	68.891	19.605	4.560	0.146	0.310	0.018	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1374.77
22	0.7281	1149.9	1170.2	1167.1	0.840	5.688	69.752	18.954	4.310	0.139	0.283	0.016	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1368.11
23	0.7343	1156.2	1176.7	1173.6	0.861	5.845	68.888	19.277	4.640	0.149	0.306	0.017	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1369.91
24	0.7290	1152.1	1172.5	1169.4	0.828	5.654	69.621	19.059	4.389	0.136	0.282	0.016	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1369.98
25	0.7209	1144.3	1164.6	1161.5	0.802	5.409	70.811	18.560	4.018	0.122	0.250	0.013	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1368.33
26	0.7176	1140.1	1160.3	1157.3	0.801	5.356	71.299	18.307	3.854	0.119	0.239	0.013	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1366.44
27	0.7173	1142.1	1162.3	1159.3	0.813	5.194	71.374	18.399	3.830	0.121	0.243	0.013	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1369.05
28	0.7207	1145.9	1166.2	1163.1	0.813	5.272	70.918	18.580	3.995	0.129	0.262	0.015	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1370.47
29	0.7254	1148.0	1168.3	1165.3	0.835	5.552	70.214	18.731	4.225	0.137	0.276	0.015	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1368.52
30	0.7410	1165.8	1186.5	1183.3	0.876	5.867	68.096	19.557	5.033	0.174	0.357	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1374.98
31	0.7441	1168.5	1189.2	1186.0	0.887	5.975	67.654	19.710	5.184	0.180	0.370	0.021	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1375.30
Avg	0.7356	1158.0	1178.9	1175.8	0.889	5.797	68.647	19.540	4.639	0.145	0.307	0.018	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1371.26

# Source Daily Summary

January 2021

<b>Number:</b>	061	<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Name:</b>	CLEVELAND STN-GRAFTON BDR	<b>Temperature Base:</b>		<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.7354	1159.4	1179.9	1176.8	0.903	5.696	68.661	19.668	4.594	0.140	0.302	0.018	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1372.57
2	0.7402	1162.9	1183.5	1180.4	0.929	5.890	67.963	19.889	4.823	0.149	0.319	0.019	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1372.31
3	0.7413	1164.1	1184.7	1181.6	0.928	5.920	67.824	19.921	4.892	0.150	0.325	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1372.72
4	0.7400	1161.4	1182.0	1178.8	0.924	5.972	67.966	19.828	4.807	0.148	0.316	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1370.69
5	0.7416	1164.0	1184.6	1181.4	0.924	5.964	67.755	19.946	4.895	0.150	0.325	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1372.24
6	0.7361	1155.0	1175.5	1172.3	0.922	6.006	68.428	19.593	4.593	0.135	0.289	0.017	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1366.71
7	0.7368	1156.2	1176.7	1173.6	0.924	5.990	68.377	19.608	4.627	0.140	0.299	0.018	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1367.53
8	0.7365	1156.0	1176.5	1173.4	0.921	5.975	68.394	19.642	4.602	0.139	0.294	0.017	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1367.63
9	0.7362	1155.3	1175.8	1172.6	0.923	5.992	68.426	19.608	4.588	0.137	0.290	0.017	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1366.99
10	0.7370	1156.6	1177.0	1173.9	0.922	5.987	68.332	19.653	4.638	0.139	0.294	0.017	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1367.79
11	0.7375	1158.3	1178.8	1175.7	0.924	5.932	68.257	19.771	4.631	0.145	0.304	0.018	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1369.29
12	0.7377	1157.6	1178.1	1175.0	0.924	5.988	68.237	19.708	4.665	0.143	0.300	0.017	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1368.36
13	0.7394	1160.2	1180.8	1177.6	0.926	5.989	68.026	19.791	4.769	0.147	0.313	0.019	0.020	0.000	0.000	0.000	0.000	0.000	0.000	1369.82
14	0.7460	1169.3	1190.0	1187.0	0.919	6.057	67.192	20.102	5.170	0.161	0.354	0.022	0.023	0.000	0.000	0.000	0.000	0.000	0.000	1374.58
15	0.7411	1164.9	1185.5	1182.5	0.890	5.914	67.836	19.920	4.931	0.148	0.324	0.018	0.019	0.000	0.000	0.000	0.000	0.000	0.000	1373.84
16	0.7429	1168.7	1189.4	1186.3	0.914	5.821	67.622	20.114	4.986	0.157	0.345	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1376.58
17	0.7444	1171.2	1191.9	1188.9	0.914	5.799	67.447	20.219	5.062	0.161	0.356	0.021	0.022	0.000	0.000	0.000	0.000	0.000	0.000	1378.25
18	0.7425	1168.4	1189.1	1186.0	0.902	5.817	67.647	20.153	4.937	0.159	0.344	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1376.66
19	0.7369	1160.8	1181.3	1178.2	0.896	5.761	68.410	19.803	4.642	0.145	0.309	0.018	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1372.86
20	0.7434	1168.5	1189.2	1186.1	0.917	5.864	67.551	20.143	4.974	0.166	0.345	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1375.98
21	0.7350	1160.7	1181.2	1178.1	0.870	5.628	68.771	19.628	4.608	0.147	0.311	0.018	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1374.53
22	0.7285	1150.3	1170.7	1167.6	0.841	5.694	69.700	18.980	4.328	0.140	0.285	0.016	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1368.29
23	0.7342	1156.1	1176.6	1173.5	0.862	5.846	68.896	19.271	4.636	0.148	0.306	0.017	0.017	0.000	0.000	0.000	0.000	0.000	0.000	1369.82
24	0.7290	1152.0	1172.4	1169.4	0.828	5.660	69.616	19.055	4.391	0.136	0.282	0.016	0.016	0.000	0.000	0.000	0.000	0.000	0.000	1369.87
25	0.7209	1144.1	1164.4	1161.4	0.802	5.415	70.814	18.555	4.015	0.122	0.250	0.014	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1368.17
26	0.7175	1139.9	1160.1	1157.2	0.801	5.358	71.312	18.294	3.852	0.119	0.239	0.013	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1366.35
27	0.7174	1142.2	1162.4	1159.4	0.814	5.198	71.359	18.406	3.833	0.121	0.243	0.013	0.013	0.000	0.000	0.000	0.000	0.000	0.000	1369.05
28	0.7207	1145.9	1166.2	1163.2	0.813	5.274	70.916	18.578	3.997	0.130	0.263	0.015	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1370.43
29	0.7254	1148.0	1168.3	1165.3	0.835	5.552	70.214	18.730	4.226	0.137	0.276	0.015	0.015	0.000	0.000	0.000	0.000	0.000	0.000	1368.52
30	0.7408	1165.6	1186.2	1183.1	0.876	5.866	68.113	19.553	5.022	0.173	0.356	0.020	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1374.86
31	0.7442	1168.8	1189.5	1186.3	0.887	5.974	67.633	19.719	5.193	0.180	0.372	0.021	0.021	0.000	0.000	0.000	0.000	0.000	0.000	1375.46
Avg	0.7357	1158.0	1179.0	1175.9	0.890	5.800	68.635	19.544	4.643	0.146	0.307	0.018	0.018	0.000	0.000	0.000	0.000	0.000	0.000	1371.25

# Source Daily Summary

January 2021

<b>Number:</b>	041	<b>Pressure Base:</b>	14.730	<b>Contract Day:</b>	1
<b>Name:</b>	BISMARCK STN-GLEN ULLIN STN	<b>Temperature Base:</b>		<b>Contract Hour:</b>	9

Day	Relative Density	Heating Value Wet	Heating Value Dry	Heating Value As Del	CO2	N2	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	Wobbe	CCT
1	0.6632	1099.2	1118.7	1115.6	0.505	3.200	79.264	15.674	1.255	0.034	0.059	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1370.41
2	0.6641	1101.8	1121.3	1118.2	0.454	3.208	78.953	16.089	1.205	0.031	0.053	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1372.68
3	0.6830	1116.4	1136.2	1133.0	0.584	3.886	76.265	16.946	2.121	0.062	0.121	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000	1371.65
4	0.6756	1111.6	1131.3	1128.2	0.474	3.650	77.209	16.784	1.737	0.046	0.088	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1373.21
5	0.6683	1106.7	1126.3	1123.2	0.455	3.304	78.205	16.623	1.311	0.035	0.060	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1374.43
6	0.6657	1101.7	1121.2	1118.2	0.443	3.370	78.734	16.034	1.321	0.033	0.057	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1371.04
7	0.6712	1106.4	1126.0	1122.9	0.484	3.543	77.892	16.414	1.543	0.041	0.075	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1371.20
8	0.6767	1111.5	1131.2	1128.1	0.526	3.685	77.041	16.858	1.739	0.049	0.092	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1371.86
9	0.6745	1112.2	1131.9	1128.8	0.486	3.491	77.329	16.943	1.619	0.044	0.080	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1375.07
10	0.6733	1114.4	1134.1	1131.0	0.427	3.344	77.223	17.531	1.369	0.036	0.064	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1378.90
11	0.6752	1113.8	1133.5	1130.4	0.449	3.523	77.051	17.305	1.542	0.043	0.079	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1376.26
12	0.6808	1115.4	1135.1	1132.0	0.495	3.877	76.319	17.264	1.875	0.054	0.104	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1372.58
13	0.7012	1136.4	1156.6	1153.3	0.640	4.294	73.380	18.609	2.791	0.087	0.178	0.011	0.011	0.000	0.000	0.000	0.000	0.000	0.000	1377.97
14	0.6714	1110.1	1129.8	1126.7	0.500	3.309	77.800	16.844	1.415	0.043	0.078	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1375.61
15	0.6645	1101.2	1120.7	1117.6	0.522	3.173	79.068	15.850	1.269	0.038	0.068	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1371.57
16	0.6641	1101.5	1121.0	1117.9	0.439	3.241	79.003	15.966	1.259	0.031	0.054	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1372.39
17	0.6656	1102.3	1121.9	1118.8	0.469	3.287	78.764	16.089	1.288	0.035	0.060	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1371.89
18	0.6654	1102.7	1122.2	1119.1	0.451	3.280	78.820	16.015	1.333	0.034	0.059	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1372.43
19	0.6623	1098.9	1118.4	1115.3	0.423	3.258	79.347	15.612	1.271	0.031	0.052	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1371.01
20	0.6603	1095.7	1115.1	1112.1	0.426	3.252	79.742	15.252	1.239	0.030	0.051	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1369.17
21	0.6657	1102.6	1122.2	1119.1	0.440	3.319	78.755	16.052	1.335	0.034	0.058	0.004	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1372.20
22	0.6563	1089.2	1108.5	1105.5	0.475	3.200	80.576	14.472	1.182	0.032	0.055	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1365.13
23	0.6554	1088.7	1107.9	1104.9	0.436	3.213	80.670	14.428	1.164	0.030	0.051	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1365.33
24	0.6568	1091.5	1110.9	1107.9	0.418	3.191	80.400	14.719	1.184	0.030	0.050	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1367.55
25	0.6548	1088.6	1107.9	1104.9	0.429	3.168	80.814	14.325	1.174	0.031	0.052	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1365.92
26	0.6543	1087.5	1106.7	1103.7	0.473	3.125	80.966	14.176	1.162	0.033	0.056	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1364.98
27	0.6615	1097.6	1117.0	1114.0	0.559	3.051	79.857	15.061	1.337	0.044	0.077	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1370.17
28	0.6571	1091.3	1110.7	1107.7	0.472	3.154	80.489	14.534	1.246	0.035	0.060	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1366.92
29	0.6572	1091.6	1110.9	1107.9	0.447	3.181	80.421	14.626	1.228	0.033	0.056	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1367.18
30	0.6525	1084.3	1103.5	1100.5	0.416	3.231	81.238	13.881	1.147	0.029	0.049	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1362.91
31	0.6538	1086.9	1106.1	1103.2	0.406	3.214	80.966	14.168	1.162	0.029	0.048	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1364.80
Avg	0.6662	1102.0	1121.4	1118.4	0.472	3.362	78.792	15.843	1.414	0.039	0.069	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1370.79

# Source Daily Summary

January 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	0.6689	1109.1	1128.7	1122.3	0.481	3.084	78.759	16.286	1.296	0.030	0.058	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1375.82
2	0.6688	1108.8	1128.4	1122.4	0.481	3.084	78.759	16.286	1.296	0.030	0.058	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1375.82
3	0.6687	1108.6	1128.2	1122.4	0.481	3.084	78.759	16.286	1.296	0.030	0.058	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1375.82
4	0.6687	1108.5	1128.1	1125.4	0.445	3.234	78.118	16.797	1.306	0.036	0.060	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1376.48
5	0.6647	1102.6	1122.1	1119.3	0.428	3.246	78.850	16.123	1.264	0.033	0.053	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1373.22
6	0.6654	1103.5	1123.1	1120.3	0.433	3.247	78.705	16.270	1.257	0.033	0.054	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1373.69
7	0.6672	1106.1	1125.7	1122.9	0.454	3.231	78.397	16.543	1.277	0.035	0.060	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1374.98
8	0.6705	1113.1	1132.8	1130.6	0.417	3.186	77.611	17.378	1.314	0.034	0.056	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1380.44
9	0.6706	1113.3	1133.0	1130.3	0.403	3.188	77.598	17.485	1.234	0.033	0.056	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1380.46
10	0.6724	1114.6	1134.4	1131.6	0.404	3.275	77.329	17.573	1.314	0.037	0.063	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1380.23
11	0.6694	1109.1	1128.7	1126.0	0.400	3.242	77.826	17.095	1.242	0.035	0.058	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1376.39
12	0.6756	1117.9	1137.7	1134.9	0.493	3.241	76.969	17.709	1.452	0.046	0.081	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1381.00
13	0.6732	1114.0	1133.7	1130.9	0.494	3.254	77.439	17.241	1.436	0.046	0.080	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1378.57
14	0.6662	1104.4	1123.9	1121.1	0.530	3.129	78.779	16.127	1.307	0.044	0.074	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1373.82
15	0.6638	1102.3	1121.9	1119.1	0.444	3.153	79.043	16.034	1.235	0.033	0.055	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1373.84
16	0.6658	1104.3	1123.9	1121.1	0.454	3.213	78.678	16.275	1.281	0.036	0.059	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1374.17
17	0.6662	1104.9	1124.5	1121.7	0.453	3.206	78.657	16.260	1.323	0.036	0.060	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1374.60
18	0.6636	1101.8	1121.4	1118.6	0.425	3.196	79.097	15.904	1.286	0.033	0.054	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1373.39
19	0.6613	1098.9	1118.3	1115.6	0.415	3.180	79.504	15.569	1.245	0.031	0.051	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1372.02
20	0.6653	1104.4	1123.9	1121.2	0.399	3.242	78.760	16.179	1.329	0.033	0.054	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	1374.76
21	0.6611	1097.2	1116.7	1113.9	0.468	3.178	79.621	15.395	1.240	0.035	0.058	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1370.23
22	0.6560	1090.8	1110.1	1107.4	0.439	3.134	80.554	14.616	1.169	0.031	0.052	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1367.46
23	0.6571	1093.2	1112.5	1109.8	0.409	3.142	80.288	14.904	1.173	0.030	0.049	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1369.25
24	0.6556	1091.2	1110.5	1107.8	0.415	3.104	80.633	14.577	1.181	0.031	0.052	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1368.44
25	0.6541	1089.0	1108.3	1105.6	0.430	3.076	80.920	14.338	1.148	0.031	0.052	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1367.23
26	0.6586	1095.1	1114.5	1111.8	0.523	2.987	80.285	14.823	1.260	0.041	0.070	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1370.16
27	0.6598	1096.5	1115.9	1113.1	0.509	3.034	80.062	14.981	1.294	0.041	0.070	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1370.66
28	0.6571	1093.1	1112.4	1109.7	0.451	3.078	80.421	14.735	1.218	0.034	0.056	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1369.21
29	0.6547	1089.1	1108.4	1105.7	0.419	3.140	80.814	14.364	1.175	0.031	0.052	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1366.77
30	0.6536	1087.9	1107.1	1104.4	0.398	3.149	80.963	14.264	1.144	0.029	0.047	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1366.28
31	0.6544	1089.5	1108.8	1106.1	0.401	3.124	80.838	14.375	1.179	0.030	0.049	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1367.47
Avg	0.6638	1102.0	1121.5	1118.5	0.445	3.167	79.130	15.896	1.264	0.034	0.058	0.003	0.002	0.000	0.000	0.000	0.000	0.000	0.000	1373.31

# Source Daily Summary

January 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	0.6625	1096.3	1115.7	1112.4	0.595	3.174	79.714	14.974	1.411	0.044	0.077	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1367.53
2	0.6575	1088.3	1107.6	1104.3	0.480	3.360	80.406	14.366	1.293	0.032	0.056	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1362.80
3	0.6629	1095.0	1114.4	1111.1	0.528	3.385	79.503	15.057	1.411	0.039	0.068	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1365.63
4	0.6606	1091.5	1110.9	1107.5	0.536	3.375	79.958	14.617	1.397	0.039	0.069	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1363.56
5	0.6567	1086.4	1105.6	1102.3	0.509	3.363	80.616	14.104	1.303	0.035	0.061	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1361.15
6	0.6588	1089.4	1108.7	1105.4	0.520	3.361	80.233	14.450	1.327	0.037	0.064	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1362.75
7	0.6626	1095.1	1114.5	1111.2	0.530	3.349	79.594	14.976	1.434	0.039	0.069	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1366.04
8	0.6636	1096.1	1115.5	1112.4	0.537	3.369	79.371	15.205	1.399	0.040	0.071	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1366.29
9	0.6597	1090.0	1109.3	1106.1	0.517	3.410	80.108	14.467	1.378	0.041	0.071	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1362.64
10	0.6525	1079.2	1098.3	1095.1	0.497	3.415	81.395	13.361	1.227	0.036	0.061	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1356.62
11	0.6655	1098.5	1117.9	1114.5	0.661	3.220	79.391	14.996	1.558	0.057	0.102	0.007	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1367.15
12	0.6612	1092.7	1112.1	1108.8	0.595	3.265	80.021	14.540	1.431	0.048	0.087	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1364.47
13	0.6546	1083.7	1102.8	1099.6	0.561	3.250	81.191	13.550	1.318	0.042	0.077	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1359.93
14	0.6547	1084.8	1104.1	1100.8	0.593	3.138	81.217	13.609	1.313	0.043	0.076	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1361.32
15	0.6531	1082.8	1101.9	1098.6	0.524	3.218	81.377	13.502	1.269	0.037	0.064	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1360.38
16	0.6527	1081.5	1100.6	1097.3	0.524	3.262	81.428	13.425	1.255	0.036	0.062	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1359.15
17	0.6508	1079.1	1098.2	1094.9	0.502	3.257	81.784	13.112	1.242	0.035	0.060	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1358.20
18	0.6478	1075.2	1094.2	1091.0	0.493	3.225	82.325	12.676	1.184	0.033	0.056	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1356.42
19	0.6427	1067.9	1086.8	1083.6	0.495	3.194	83.286	11.820	1.110	0.032	0.055	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1352.44
20	0.6536	1082.9	1102.0	1098.8	0.519	3.267	81.268	13.558	1.280	0.037	0.063	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1359.98
21	0.6498	1078.2	1097.3	1094.0	0.520	3.199	81.960	13.015	1.204	0.034	0.059	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1358.00
22	0.6511	1080.7	1099.9	1096.6	0.483	3.217	81.665	13.322	1.216	0.032	0.055	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1359.90
23	0.6526	1083.7	1102.9	1099.6	0.471	3.198	81.380	13.603	1.251	0.032	0.056	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1362.02
24	0.6504	1080.4	1099.5	1096.3	0.479	3.172	81.851	13.160	1.238	0.033	0.058	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1360.27
25	0.6471	1075.2	1094.3	1091.0	0.497	3.156	82.465	12.613	1.171	0.033	0.056	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1357.14
26	0.6631	1097.6	1117.1	1113.7	0.772	2.873	80.182	14.354	1.613	0.067	0.120	0.010	0.009	0.000	0.000	0.000	0.000	0.000	0.000	1368.58
27	0.6624	1096.5	1115.9	1112.6	0.778	2.867	80.331	14.205	1.611	0.068	0.121	0.010	0.010	0.000	0.000	0.000	0.000	0.000	0.000	1367.92
28	0.6643	1099.5	1119.0	1115.6	0.780	2.862	79.974	14.536	1.638	0.068	0.122	0.010	0.010	0.000	0.000	0.000	0.000	0.000	0.000	1369.64
29	0.6451	1072.0	1090.9	1087.7	0.491	3.172	82.858	12.228	1.152	0.033	0.057	0.005	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1355.15
30	0.6468	1075.0	1094.0	1090.8	0.460	3.202	82.462	12.615	1.169	0.031	0.053	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1357.10
31	0.6471	1075.3	1094.4	1091.1	0.462	3.201	82.431	12.626	1.187	0.031	0.053	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	1357.29
Avg	0.6553	1085.0	1104.7	1101.4	0.545	3.225	81.024	13.763	1.322	0.040	0.070	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1361.53

# Source Daily Summary

January 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	0.6846	1152.6	1173.0	1168.0	0.000	2.740	73.650	22.956	0.639	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.35	-26.85
2	0.6844	1151.7	1172.1	1167.6	0.000	2.771	73.695	22.876	0.642	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.54	-27.02
3	0.6841	1151.3	1171.7	1167.0	0.000	2.765	73.750	22.840	0.631	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.39	-27.21
4	0.6842	1151.5	1171.9	1167.2	0.000	2.760	73.729	22.866	0.631	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.58	-27.15
5	0.6850	1153.0	1173.4	1168.5	0.000	2.750	73.594	22.977	0.664	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.49	-26.57
6	0.6847	1152.5	1172.9	1168.0	0.000	2.750	73.645	22.946	0.645	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.21	-26.81
7	0.6844	1152.1	1172.5	1167.4	0.000	2.741	73.720	22.871	0.652	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.10	-26.93
8	0.6845	1151.9	1172.3	1167.3	0.000	2.771	73.684	22.878	0.652	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.63	-26.92
9	0.6845	1152.1	1172.5	1167.5	0.000	2.752	73.693	22.887	0.653	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.99	-26.88
10	0.6840	1151.4	1171.8	1167.1	0.000	2.749	73.782	22.819	0.635	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.61	-27.21
11	0.6848	1152.9	1173.3	1168.7	0.000	2.728	73.653	22.940	0.663	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.69	-26.66
12	0.6847	1152.0	1172.4	1167.6	0.000	2.779	73.653	22.889	0.663	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.64	-26.80
13	0.6842	1152.1	1172.5	1168.1	0.000	2.729	73.732	22.896	0.627	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1414.20	-27.07
14	0.6837	1150.7	1171.1	1166.8	0.000	2.761	73.789	22.855	0.580	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.11	-27.60
15	0.6848	1151.9	1172.3	1167.6	0.000	2.797	73.604	22.944	0.639	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.39	-26.85
16	0.6844	1151.7	1172.1	1167.7	0.000	2.774	73.683	22.893	0.633	0.007	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.50	-27.03
17	0.6849	1151.9	1172.3	1167.4	0.000	2.806	73.597	22.936	0.645	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.25	-26.83
18	0.6846	1151.9	1172.3	1167.8	0.000	2.783	73.622	22.965	0.614	0.007	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.50	-27.02
19	0.6842	1151.4	1171.8	1167.1	0.000	2.774	73.711	22.875	0.624	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.33	-27.17
20	0.6848	1151.8	1172.2	1167.9	0.000	2.800	73.598	22.957	0.630	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.31	-26.91
21	0.6848	1151.9	1172.3	1167.6	0.000	2.796	73.596	22.960	0.632	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.39	-26.89
22	0.6846	1151.5	1171.9	1167.1	0.000	2.802	73.638	22.914	0.630	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.10	-27.02
23	0.6845	1151.5	1171.9	1167.2	0.000	2.792	73.648	22.932	0.613	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.19	-27.13
24	0.6839	1150.5	1170.9	1166.0	0.000	2.799	73.732	22.863	0.591	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1412.59	-27.50
25	0.6840	1151.0	1171.4	1166.7	0.000	2.777	73.713	22.913	0.583	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.11	-27.44
26	0.6842	1151.1	1171.5	1166.9	0.000	2.788	73.679	22.928	0.591	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.05	-27.33
27	0.6845	1151.2	1171.6	1166.7	0.000	2.808	73.655	22.898	0.624	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1412.87	-27.12
28	0.6847	1151.7	1172.1	1167.4	0.000	2.800	73.608	22.952	0.623	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.23	-26.98
29	0.6870	1155.4	1175.9	1170.9	0.000	2.784	73.258	23.211	0.731	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1415.49	-25.41
30	0.6845	1151.8	1172.2	1167.1	0.000	2.768	73.690	22.878	0.649	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.66	-26.95
31	0.6846	1152.2	1172.6	1167.8	0.000	2.762	73.668	22.894	0.660	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.93	-26.80
Avg	0.6845	1152.0	1172.3	1167.5	0.000	2.773	73.660	22.916	0.635	0.006	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1413.63	-26.97

# Source Daily Summary

January 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	0.6530	1077.5	1096.6	1093.7	0.529	3.522	81.371	13.195	1.264	0.039	0.070	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1353.89
2	0.6527	1076.8	1095.8	1092.9	0.526	3.547	81.414	13.136	1.258	0.039	0.070	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1353.21
3	0.6529	1077.5	1096.6	1093.7	0.526	3.513	81.399	13.181	1.261	0.038	0.070	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1354.02
4	0.6532	1077.7	1096.8	1093.8	0.525	3.538	81.348	13.184	1.280	0.040	0.073	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1353.86
5	0.6530	1077.0	1096.1	1093.1	0.520	3.566	81.397	13.105	1.286	0.040	0.074	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1353.21
6	0.6529	1077.1	1096.2	1093.3	0.520	3.548	81.415	13.109	1.284	0.040	0.073	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1353.50
7	0.6528	1076.7	1095.8	1092.9	0.520	3.564	81.440	13.064	1.286	0.040	0.075	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1353.09
8	0.6531	1077.4	1096.5	1093.5	0.518	3.558	81.383	13.118	1.296	0.040	0.075	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1353.57
9	0.6538	1078.7	1097.8	1094.9	0.517	3.537	81.261	13.253	1.305	0.040	0.075	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1354.59
10	0.6532	1078.0	1097.1	1094.2	0.518	3.526	81.355	13.194	1.285	0.039	0.072	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1354.28
11	0.6531	1077.7	1096.8	1093.8	0.514	3.545	81.373	13.150	1.292	0.040	0.074	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1353.96
12	0.6534	1077.4	1096.4	1093.5	0.516	3.588	81.342	13.115	1.310	0.041	0.077	0.006	0.007	0.000	0.000	0.000	0.000	0.000	0.000	1353.27
13	0.6515	1075.0	1094.0	1091.0	0.508	3.569	81.670	12.857	1.272	0.040	0.073	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1352.21
14	0.6498	1074.1	1093.1	1090.1	0.508	3.459	81.974	12.722	1.225	0.038	0.065	0.005	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1352.90
15	0.6504	1074.1	1093.1	1090.1	0.508	3.516	81.898	12.697	1.259	0.040	0.071	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1352.27
16	0.6508	1074.7	1093.7	1090.7	0.508	3.522	81.818	12.755	1.272	0.040	0.073	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1352.55
17	0.6518	1075.6	1094.7	1091.6	0.512	3.547	81.664	12.846	1.300	0.041	0.077	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1352.76
18	0.6506	1073.5	1092.5	1089.5	0.504	3.579	81.865	12.642	1.280	0.041	0.075	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1351.29
19	0.6496	1072.3	1091.3	1088.3	0.499	3.564	82.047	12.508	1.258	0.040	0.072	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1350.83
20	0.6488	1072.2	1091.1	1088.2	0.498	3.502	82.176	12.469	1.237	0.039	0.069	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1351.47
21	0.6471	1068.6	1087.5	1084.6	0.484	3.573	82.490	12.119	1.215	0.039	0.069	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1348.83
22	0.6465	1067.4	1086.3	1083.4	0.480	3.599	82.598	11.991	1.212	0.039	0.069	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1347.92
23	0.6462	1067.4	1086.3	1083.3	0.480	3.579	82.645	11.970	1.206	0.039	0.068	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1348.09
24	0.6462	1067.0	1085.9	1083.0	0.479	3.593	82.668	11.927	1.210	0.040	0.070	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1347.75
25	0.6456	1066.8	1085.7	1082.8	0.477	3.551	82.773	11.888	1.193	0.039	0.067	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1348.13
26	0.6453	1066.5	1085.4	1082.5	0.476	3.549	82.818	11.849	1.190	0.039	0.067	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1347.99
27	0.6449	1066.6	1085.5	1082.6	0.477	3.507	82.881	11.844	1.177	0.038	0.065	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1348.48
28	0.6451	1065.4	1084.2	1081.3	0.472	3.602	82.878	11.726	1.200	0.040	0.070	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1346.80
29	0.6451	1065.0	1083.9	1080.9	0.469	3.629	82.880	11.688	1.208	0.041	0.073	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1346.35
30	0.6444	1064.2	1083.1	1080.1	0.467	3.614	82.994	11.616	1.189	0.039	0.069	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1346.08
31	0.6438	1064.7	1083.6	1080.6	0.468	3.531	83.089	11.633	1.166	0.038	0.065	0.006	0.005	0.000	0.000	0.000	0.000	0.000	0.000	1347.25
Avg	0.6497	1073.0	1091.6	1088.6	0.501	3.553	82.010	12.566	1.248	0.039	0.071	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000	1351.11

# Gas Composition and Properties

Effective January 1, 2021

Source #: 2702230  
Name: WATFORD CITY EAST BORDER

Component	Mole %	Liquid Content	Mass %
Carbon Dioxide, CO2	1.1509		2.6556
Nitrogen, N2	2.8009		4.1138
Methane, C1	79.5352		66.8974
Ethane, C2	16.1179	4.3112	25.4101
Propane, C3	0.3820	0.1053	0.8832
iso-Butane, iC4	0.0045	0.0015	0.0137
n-Butane, nC4	0.0086	0.0027	0.0262
iso-Pentane, iC5			
n-Pentane, nC5			
Neo-Pentane, NeoC5			
Hexanes Plus, C6+			
Water, H2O			
Hydrogen Sulfide, H2S			
Oxygen, O2			
Carbon Monoxide, CO			
Hydrogen, H2			
Helium, He			
Argon, Ar			
<b>Totals</b>	<b>100.0000</b>	<b>4.4200</b>	<b>100.0000</b>

Property	Total Sample	C6 Plus Fraction
Pressure Base	14.730	
Temperature Base	60.00	
HCDP @ Sample Pressure	-74.618	
Cricodentherm	-45.615	
HV, Dry @ Base P, T	1104.10	
HV, Sat @ Base P, T	1084.88	
HV, Sat @ Sample P, T	1104.10	
Relative Density	0.6601	
C6+: 100		

**Sample**

Date: 01/01/2021      Pressure: 300.0  
 Type:                      Temperature:  
 Tech: Joshua Tipton      H2O: lbs/mm  
    H2S: ppm

Remarks:

**Analysis**

Date: 01/01/2021      Instrument:  
    Cylinder: 370  
 Tech: Joshua Tipton

Remarks:

January-21

ZONE 550

MANDAN BORDER

NBPL - St Anthony

WBI - Mandan Border

Weighted

Start Date	End Date	NBPL - St Anthony			WBI - Mandan Border			AVG BTU	
		MCF	DK	BTU	MCF	DK	BTU Zone 28		
1/1/2021	1/2/2021				5,035	5,630	1118.7000	1118.700	1/1/2021
1/2/2021	1/3/2021				4,358	4,886	1121.3000	1121.300	1/2/2021
1/3/2021	1/4/2021				3,824	4,346	1136.2000	1136.200	1/3/2021
1/4/2021	1/5/2021				4,396	4,966	1131.3000	1131.300	1/4/2021
1/5/2021	1/6/2021				4,270	4,810	1126.3000	1126.300	1/5/2021
1/6/2021	1/7/2021				4,234	4,747	1121.2000	1121.200	1/6/2021
1/7/2021	1/8/2021				4,167	4,691	1126.0000	1126.000	1/7/2021
1/8/2021	1/9/2021				4,104	4,642	1131.2000	1131.200	1/8/2021
1/9/2021	1/10/2021				4,391	4,970	1131.9000	1131.900	1/9/2021
1/10/2021	1/11/2021				4,352	4,936	1134.1000	1134.100	1/10/2021
1/11/2021	1/12/2021				4,253	4,821	1133.5000	1133.500	1/11/2021
1/12/2021	1/13/2021				3,492	3,964	1135.1000	1135.100	1/12/2021
1/13/2021	1/14/2021				3,850	4,442	1156.6000	1156.600	1/13/2021
1/14/2021	1/15/2021				5,555	6,275	1129.8000	1129.800	1/14/2021
1/15/2021	1/16/2021				5,648	6,330	1120.7000	1120.700	1/15/2021
1/16/2021	1/17/2021				4,606	5,163	1121.0000	1121.000	1/16/2021
1/17/2021	1/18/2021				4,615	5,178	1121.9000	1121.900	1/17/2021
1/18/2021	1/19/2021				5,382	6,039	1122.2000	1122.200	1/18/2021
1/19/2021	1/20/2021				5,458	6,104	1118.4000	1118.400	1/19/2021
1/20/2021	1/21/2021				4,559	5,085	1115.1000	1115.100	1/20/2021
1/21/2021	1/22/2021				6,119	6,866	1122.2000	1122.200	1/21/2021
1/22/2021	1/23/2021				5,811	6,442	1108.5000	1108.500	1/22/2021
1/23/2021	1/24/2021				5,940	6,582	1107.9000	1107.900	1/23/2021
1/24/2021	1/25/2021				6,542	7,266	1110.9000	1110.900	1/24/2021
1/25/2021	1/26/2021				7,437	8,239	1107.9000	1107.900	1/25/2021
1/26/2021	1/27/2021				7,982	8,835	1106.7000	1106.700	1/26/2021
1/27/2021	1/28/2021				7,249	8,096	1117.0000	1117.000	1/27/2021
1/28/2021	1/29/2021				6,444	7,158	1110.7000	1110.700	1/28/2021
1/29/2021	1/30/2021				5,838	6,485	1110.9000	1110.900	1/29/2021
1/30/2021	1/31/2021				5,550	6,124	1103.5000	1103.500	1/30/2021
1/31/2021	2/1/2021				5,705	6,310	1106.1000	1106.100	1/31/2021
		0	0	#DIV/0!	161,166	180,428	1121.4452	1121.4452	



# Alliance Pipeline

DAILY ANALYSIS --- USA  
ND07MD1 --- Hankinson Sales  
January 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	1,140.503	0.6526	85.5552	8.9217	3.0352	0.3457	0.5835	0.0654	0.0523	0.0266	0.9777	0.4264	0.0105
2	1,145.452	0.6556	85.3396	8.8487	3.2647	0.3658	0.6332	0.0683	0.0545	0.0288	0.9589	0.4273	0.0103
3	1,149.144	0.6582	85.1278	8.7458	3.4925	0.3798	0.6790	0.0686	0.0536	0.0275	0.9882	0.4268	0.0103
4	1,150.637	0.6591	85.0369	8.7893	3.5372	0.3836	0.6908	0.0694	0.0533	0.0270	0.9722	0.4298	0.0104
5	1,150.239	0.6589	85.0295	8.7926	3.5348	0.3841	0.6894	0.0659	0.0506	0.0261	0.9917	0.4251	0.0101
6	1,150.960	0.6593	84.9724	8.8509	3.5361	0.3855	0.6861	0.0669	0.0536	0.0289	0.9835	0.4261	0.0100
7	1,151.773	0.6599	84.8777	8.9215	3.5483	0.3852	0.6909	0.0681	0.0538	0.0288	0.9849	0.4306	0.0101
8	1,152.233	0.6601	84.8532	8.9463	3.5496	0.3849	0.6942	0.0713	0.0544	0.0284	0.9785	0.4290	0.0102
9	1,150.585	0.6590	84.9782	8.8984	3.5056	0.3782	0.6752	0.0685	0.0540	0.0290	0.9709	0.4318	0.0102
10	1,150.490	0.6589	85.0195	8.8406	3.5204	0.3806	0.6793	0.0681	0.0532	0.0285	0.9718	0.4275	0.0105
11	1,148.677	0.6577	85.1279	8.8260	3.4654	0.3733	0.6638	0.0639	0.0488	0.0253	0.9689	0.4262	0.0105
12	1,151.458	0.6595	84.8576	9.0059	3.5329	0.3796	0.6755	0.0640	0.0488	0.0254	0.9765	0.4234	0.0104
13	1,150.415	0.6589	84.8940	9.0214	3.4983	0.3723	0.6657	0.0626	0.0468	0.0230	0.9791	0.4262	0.0105
14	1,148.832	0.6573	85.1074	9.0035	3.3920	0.3661	0.6437	0.0635	0.0486	0.0249	0.9030	0.4364	0.0109
15	1,148.948	0.6575	85.1228	8.9148	3.4307	0.3727	0.6543	0.0630	0.0492	0.0247	0.9293	0.4278	0.0107
16	1,146.585	0.6568	85.1907	8.7647	3.4743	0.3644	0.6354	0.0560	0.0453	0.0217	1.0101	0.4269	0.0104
17	1,144.031	0.6551	85.2521	8.8934	3.3785	0.3440	0.5619	0.0576	0.0455	0.0213	1.0110	0.4242	0.0104
18	1,145.668	0.6560	85.1423	8.9799	3.4092	0.3441	0.5694	0.0602	0.0463	0.0222	0.9893	0.4267	0.0104
19	1,145.534	0.6560	85.1395	8.9679	3.4011	0.3478	0.5752	0.0599	0.0466	0.0222	1.0030	0.4263	0.0105
20	1,144.967	0.6560	85.1781	8.8820	3.4204	0.3469	0.5798	0.0605	0.0460	0.0214	1.0275	0.4269	0.0105
21	1,144.162	0.6545	85.4061	8.8360	3.3328	0.3461	0.5771	0.0604	0.0464	0.0219	0.9324	0.4300	0.0108
22	1,147.187	0.6568	85.1580	8.9230	3.3644	0.3663	0.6563	0.0585	0.0463	0.0219	0.9626	0.4321	0.0107
23	1,145.894	0.6560	85.2833	8.8240	3.3218	0.3669	0.6565	0.0621	0.0476	0.0231	0.9743	0.4299	0.0105
24	1,148.085	0.6573	85.0986	8.9713	3.3595	0.3702	0.6642	0.0638	0.0484	0.0234	0.9535	0.4363	0.0107
25	1,149.316	0.6582	85.0263	8.9328	3.4229	0.3801	0.6874	0.0649	0.0477	0.0221	0.9748	0.4304	0.0105
26	1,147.840	0.6575	85.0787	8.9458	3.3651	0.3726	0.6735	0.0631	0.0468	0.0230	0.9885	0.4323	0.0105
27	1,146.862	0.6560	85.3303	8.8160	3.3222	0.3743	0.6719	0.0623	0.0459	0.0218	0.9205	0.4244	0.0105
28	1,144.173	0.6546	85.4311	8.8176	3.2358	0.3638	0.6427	0.0584	0.0443	0.0214	0.9476	0.4269	0.0104
29	1,144.945	0.6555	85.2446	8.9642	3.2561	0.3599	0.6287	0.0603	0.0455	0.0213	0.9780	0.4309	0.0105
30	1,145.182	0.6558	85.2324	8.9124	3.2929	0.3624	0.6387	0.0608	0.0448	0.0202	0.9935	0.4315	0.0104
31	1,145.481	0.6565	85.0951	9.0053	3.2907	0.3618	0.6436	0.0601	0.0441	0.0204	1.0329	0.4357	0.0104
<b>Volume</b>	<b>1,147.604</b>	<b>0.6571</b>	<b>85.1360</b>	<b>8.8955</b>	<b>3.4024</b>	<b>0.3680</b>	<b>0.6471</b>	<b>0.0634</b>	<b>0.0488</b>	<b>0.0243</b>	<b>0.9753</b>	<b>0.4288</b>	<b>0.0104</b>
<b>Weight Avg Energy</b>	<b>1,147.611</b>	<b>0.6571</b>	<b>85.1356</b>	<b>8.8955</b>	<b>3.4027</b>	<b>0.3680</b>	<b>0.6472</b>	<b>0.0634</b>	<b>0.0488</b>	<b>0.0243</b>	<b>0.9753</b>	<b>0.4288</b>	<b>0.0104</b>



# Alliance Pipeline

DAILY ANALYSIS --- USA  
ND14MD1 --- Milnor Sales  
January 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	1,140.907	0.6528	85.5315	8.9416	3.0401	0.3463	0.5858	0.0659	0.0529	0.0270	0.9711	0.4273	0.0105
2	1,146.888	0.6566	85.2469	8.8397	3.3400	0.3711	0.6487	0.0680	0.0540	0.0282	0.9654	0.4278	0.0103
3	1,149.425	0.6585	85.1079	8.7542	3.4996	0.3812	0.6815	0.0688	0.0538	0.0278	0.9876	0.4274	0.0103
4	1,150.722	0.6592	85.0381	8.7839	3.5412	0.3840	0.6931	0.0694	0.0530	0.0269	0.9700	0.4300	0.0104
5	1,150.101	0.6589	85.0303	8.8001	3.5309	0.3833	0.6867	0.0653	0.0501	0.0258	0.9940	0.4234	0.0101
6	1,151.198	0.6596	84.9509	8.8643	3.5378	0.3860	0.6881	0.0676	0.0544	0.0295	0.9845	0.4270	0.0100
7	1,151.535	0.6598	84.9108	8.8968	3.5456	0.3848	0.6894	0.0684	0.0537	0.0286	0.9823	0.4294	0.0101
8	1,151.937	0.6600	84.8714	8.9403	3.5404	0.3837	0.6918	0.0711	0.0543	0.0283	0.9786	0.4298	0.0103
9	1,150.238	0.6589	85.0076	8.8768	3.5014	0.3769	0.6724	0.0683	0.0539	0.0290	0.9719	0.4317	0.0102
10	1,150.362	0.6589	85.0304	8.8273	3.5186	0.3816	0.6809	0.0678	0.0528	0.0283	0.9749	0.4270	0.0104
11	1,148.637	0.6577	85.1344	8.8210	3.4655	0.3729	0.6628	0.0641	0.0491	0.0254	0.9679	0.4264	0.0105
12	1,151.529	0.6596	84.8405	9.0204	3.5362	0.3791	0.6737	0.0639	0.0486	0.0252	0.9798	0.4222	0.0104
13	1,150.223	0.6588	84.9192	9.0075	3.4922	0.3712	0.6648	0.0628	0.0471	0.0232	0.9749	0.4268	0.0105
14	1,148.647	0.6573	85.1164	8.9922	3.3916	0.3658	0.6432	0.0632	0.0483	0.0246	0.9074	0.4365	0.0108
15	1,148.940	0.6576	85.1271	8.8833	3.4469	0.3738	0.6575	0.0622	0.0489	0.0247	0.9391	0.4258	0.0107
16	1,146.809	0.6571	85.1401	8.8061	3.4826	0.3628	0.6312	0.0558	0.0452	0.0217	1.0161	0.4281	0.0104
17	1,144.536	0.6554	85.2256	8.9179	3.3809	0.3455	0.5669	0.0586	0.0458	0.0215	1.0026	0.4244	0.0104
18	1,145.417	0.6558	85.1770	8.9563	3.4016	0.3445	0.5691	0.0603	0.0464	0.0222	0.9864	0.4258	0.0105
19	1,145.473	0.6561	85.1326	8.9697	3.4012	0.3475	0.5750	0.0598	0.0465	0.0221	1.0081	0.4269	0.0105
20	1,144.612	0.6556	85.2364	8.8548	3.4088	0.3454	0.5762	0.0604	0.0460	0.0215	1.0133	0.4267	0.0105
21	1,144.697	0.6551	85.3484	8.8473	3.3433	0.3506	0.5929	0.0602	0.0464	0.0218	0.9460	0.4323	0.0108
22	1,147.332	0.6569	85.1557	8.9247	3.3640	0.3674	0.6581	0.0590	0.0467	0.0222	0.9585	0.4330	0.0106
23	1,145.755	0.6560	85.2856	8.8259	3.3184	0.3651	0.6543	0.0625	0.0477	0.0231	0.9765	0.4304	0.0105
24	1,148.393	0.6575	85.0926	8.9697	3.3682	0.3719	0.6677	0.0642	0.0484	0.0232	0.9483	0.4351	0.0107
25	1,149.273	0.6583	85.0240	8.9278	3.4234	0.3808	0.6885	0.0647	0.0477	0.0224	0.9803	0.4301	0.0105
26	1,147.829	0.6574	85.0947	8.9621	3.3501	0.3722	0.6716	0.0631	0.0468	0.0229	0.9731	0.4330	0.0105
27	1,146.573	0.6559	85.3440	8.7987	3.3230	0.3734	0.6700	0.0616	0.0456	0.0216	0.9281	0.4236	0.0105
28	1,144.149	0.6547	85.4175	8.8345	3.2321	0.3629	0.6402	0.0587	0.0444	0.0214	0.9499	0.4279	0.0105
29	1,145.123	0.6557	85.2309	8.9663	3.2646	0.3604	0.6302	0.0604	0.0455	0.0212	0.9802	0.4297	0.0105
30	1,145.084	0.6558	85.2320	8.9163	3.2900	0.3616	0.6375	0.0605	0.0446	0.0202	0.9944	0.4326	0.0104
31	1,145.409	0.6565	85.1032	8.9951	3.2867	0.3626	0.6460	0.0602	0.0443	0.0207	1.0379	0.4330	0.0104
<b>Volume</b>	<b>1,147.777</b>	<b>0.6573</b>	<b>85.1270</b>	<b>8.8977</b>	<b>3.4081</b>	<b>0.3686</b>	<b>0.6495</b>	<b>0.0633</b>	<b>0.0486</b>	<b>0.0241</b>	<b>0.9737</b>	<b>0.4288</b>	<b>0.0105</b>
<b>Weight Avg Energy</b>	<b>1,147.794</b>	<b>0.6573</b>	<b>85.1262</b>	<b>8.8977</b>	<b>3.4087</b>	<b>0.3687</b>	<b>0.6497</b>	<b>0.0634</b>	<b>0.0486</b>	<b>0.0241</b>	<b>0.9737</b>	<b>0.4288</b>	<b>0.0105</b>

January-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		
1/1/2021	1/2/2021	384	459	1195.4	515	569	1104.1	1143.098	1/1/2021
1/2/2021	1/3/2021	380	454	1195.4	500	552	1104.1	1143.525	1/2/2021
1/3/2021	1/4/2021	382	457	1195.4	510	563	1104.1	1143.199	1/3/2021
1/4/2021	1/5/2021	383	457	1195.4	531	586	1104.1	1142.358	1/4/2021
1/5/2021	1/6/2021	403	481	1195.4	566	625	1104.1	1142.071	1/5/2021
1/6/2021	1/7/2021	396	474	1195.4	578	639	1104.1	1141.220	1/6/2021
1/7/2021	1/8/2021	407	487	1195.4	595	656	1104.1	1141.185	1/7/2021
1/8/2021	1/9/2021	419	501	1195.4	619	683	1104.1	1140.954	1/8/2021
1/9/2021	1/10/2021	414	495	1195.4	606	669	1104.1	1141.157	1/9/2021
1/10/2021	1/11/2021	403	481	1195.4	598	660	1104.1	1140.857	1/10/2021
1/11/2021	1/12/2021	381	455	1195.4	527	581	1104.1	1142.410	1/11/2021
1/12/2021	1/13/2021	360	430	1195.4	525	580	1104.1	1141.239	1/12/2021
1/13/2021	1/14/2021	386	461	1195.4	495	547	1104.1	1144.102	1/13/2021
1/14/2021	1/15/2021	516	617	1195.4	786	868	1104.1	1140.283	1/14/2021
1/15/2021	1/16/2021	471	563	1195.4	741	818	1104.1	1139.580	1/15/2021
1/16/2021	1/17/2021	437	522	1195.4	624	689	1104.1	1141.704	1/16/2021
1/17/2021	1/18/2021	421	504	1195.4	603	666	1104.1	1141.636	1/17/2021
1/18/2021	1/19/2021	469	560	1195.4	758	837	1104.1	1138.998	1/18/2021
1/19/2021	1/20/2021	436	521	1195.4	652	720	1104.1	1140.687	1/19/2021
1/20/2021	1/21/2021	432	516	1195.4	612	676	1104.1	1141.879	1/20/2021
1/21/2021	1/22/2021	522	624	1195.4	859	948	1104.1	1138.610	1/21/2021
1/22/2021	1/23/2021	507	607	1195.4	798	881	1104.1	1139.571	1/22/2021
1/23/2021	1/24/2021	547	654	1195.4	884	976	1104.1	1138.999	1/23/2021
1/24/2021	1/25/2021	586	700	1195.4	968	1,069	1104.1	1138.528	1/24/2021
1/25/2021	1/26/2021	635	759	1195.4	1,096	1,210	1104.1	1137.592	1/25/2021
1/26/2021	1/27/2021	645	771	1195.4	1,169	1,290	1104.1	1136.563	1/26/2021
1/27/2021	1/28/2021	573	686	1195.4	956	1,055	1104.1	1138.315	1/27/2021
1/28/2021	1/29/2021	512	612	1195.4	944	1,042	1104.1	1136.205	1/28/2021
1/29/2021	1/30/2021	471	563	1195.4	747	825	1104.1	1139.406	1/29/2021
1/30/2021	1/31/2021	506	605	1195.4	881	972	1104.1	1137.408	1/30/2021
1/31/2021	2/1/2021	481	574	1195.4	864	954	1104.1	1136.751	1/31/2021
		14,265	17,050	1195.4000	22,107	24,406	1104.1000	1140.3256	

ROW ID	LOCATION DESCRIPTION	GROSS HEATING VALUE (BTU/CF)	SPECIFIC GRAVITY	WOBBE (calc)	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	Changetimestamp	NOTES
1587	GLEN ULLIN	1105.5	0.6513	1369.9	-45.7	2.1697	0.963	81.3545	14.5076	0.7928	0.0215	0.0133	0.0001	0.0002	N/A	0	0.1554	0.0222	12/31/2020	1/1/2021	1/1/2021 16:19	
1587	GLEN ULLIN	1107.4	0.6522	1371.2	-45.1	2.1319	0.9733	81.2103	14.6773	0.8087	0.0202	0.0128	0	0	N/A	0	0.1435	0.022	1/1/2021	1/2/2021	1/2/2021 16:14	
1587	GLEN ULLIN	1110.2	0.6544	1372.4	-43.6	2.1504	0.9816	80.8392	14.9729	0.8547	0.0234	0.0145	0	0.0001	N/A	0	0.1411	0.0222	1/2/2021	1/3/2021	1/3/2021 16:14	
1587	GLEN ULLIN	1110.5	0.6549	1372.2	-43.3	2.153	1.0043	80.7659	15.0353	0.8488	0.0246	0.0152	0	0.0003	N/A	0	0.1306	0.0221	1/3/2021	1/4/2021	1/4/2021 16:30	
1587	GLEN ULLIN	1110.9	0.655	1372.6	-43.2	2.1436	1.0023	80.7617	15.0543	0.8505	0.0256	0.0156	0.0002	0.0005	N/A	0	0.1235	0.0223	1/4/2021	1/5/2021	1/5/2021 16:32	
1587	GLEN ULLIN	1109.8	0.6548	1371.5	-43.5	2.2022	0.99	80.7509	15.0053	0.8486	0.0243	0.0147	0.0003	0.0004	N/A	0	0.1407	0.0226	1/5/2021	1/6/2021	1/6/2021 16:35	
1587	GLEN ULLIN	1110.5	0.655	1372.1	-43.5	2.1731	0.9966	80.6969	15.1086	0.8319	0.0216	0.0136	0	0	N/A	0	0.1354	0.0223	1/6/2021	1/7/2021	1/7/2021 17:02	
1587	GLEN ULLIN	1109.8	0.6549	1371.3	-43.6	2.1861	1.0096	80.699	15.0727	0.8217	0.0231	0.0141	0.0003	0.0004	N/A	0	0.1504	0.0228	1/7/2021	1/8/2021	1/8/2021 16:29	
1587	GLEN ULLIN	1110.8	0.6553	1372.2	-43.7	2.1656	1.0056	80.6287	15.2447	0.781	0.0194	0.0124	0	0	N/A	0	0.12	0.0227	1/8/2021	1/9/2021	1/9/2021 16:24	
1587	GLEN ULLIN	1110.2	0.6543	1372.4	-44.1	2.112	1.0037	80.8502	15.0697	0.7904	0.0195	0.0124	0	0	N/A	0	0.1199	0.0222	1/9/2021	1/10/2021	1/10/2021 16:21	
1587	GLEN ULLIN	1109.2	0.6539	1371.7	-44.4	2.1417	1.003	80.8791	15.013	0.7796	0.0193	0.0122	0	0	N/A	0	0.1295	0.0227	1/10/2021	1/11/2021	1/11/2021 16:42	
1587	GLEN ULLIN	1110	0.6545	1372	-43.7	2.151	0.9959	80.828	14.9986	0.8333	0.0231	0.0142	0.0002	0.0002	N/A	0	0.1329	0.0228	1/11/2021	1/12/2021	1/12/2021 16:27	
1587	GLEN ULLIN	1110.8	0.6558	1371.7	-43.2	2.2321	0.9946	80.4256	15.3008	0.8168	0.0201	0.0125	0	0.0001	N/A	0	0.1747	0.0229	1/12/2021	1/13/2021	1/13/2021 16:59	
1587	GLEN ULLIN	1110.2	0.6551	1371.6	-43.5	2.2076	0.9949	80.6391	15.1437	0.815	0.0217	0.0133	0.0005	0.0002	N/A	0	0.1411	0.023	1/13/2021	1/14/2021	1/14/2021 16:51	
1587	GLEN ULLIN	1109.5	0.6531	1372.9	-44.1	2.0555	0.9962	81.0773	14.8224	0.8361	0.0228	0.0143	0.0003	0.0004	N/A	0	0.1529	0.0218	1/14/2021	1/15/2021	1/15/2021 16:24	
1587	GLEN ULLIN	1110.7	0.6547	1372.7	-43.5	2.1456	0.988	80.7282	15.1015	0.8268	0.0225	0.0141	0.0001	0.0004	N/A	0	0.1504	0.0225	1/15/2021	1/16/2021	1/16/2021 16:25	
1587	GLEN ULLIN	1106.6	0.6527	1369.7	-43.1	2.1789	1.0008	81.3081	14.4142	0.8754	0.0361	0.0256	0.0023	0.0031	N/A	0.0021	0.1309	0.0226	1/16/2021	1/17/2021	1/17/2021 16:19	
1587	GLEN ULLIN	1107.8	0.6526	1371.3	-36	2.106	0.9914	81.7613	13.7735	1.081	0.0711	0.0553	0.0075	0.0103	N/A	0.007	0.1132	0.0225	1/17/2021	1/18/2021	1/18/2021 16:28	
1587	GLEN ULLIN	1098.4	0.6463	1366.3	-49.3	2.106	0.9787	82.3847	13.6552	0.7056	0.0212	0.0129	0.0001	0.0002	N/A	0	0.113	0.0225	1/18/2021	1/19/2021	1/19/2021 16:29	
1587	GLEN ULLIN	1098	0.6461	1366	-49.6	2.0985	0.9823	82.4661	13.6105	0.6944	0.02	0.0124	0	0	N/A	0	0.093	0.0228	1/19/2021	1/20/2021	1/20/2021 16:59	
1587	GLEN ULLIN	1099	0.6474	1365.9	-49	2.1838	0.9687	82.2095	13.8101	0.6997	0.0194	0.0119	0.0001	0.0001	N/A	0	0.0734	0.0234	1/20/2021	1/21/2021	1/21/2021 16:36	
1587	GLEN ULLIN	1096.6	0.6448	1365.6	-50	2.0905	0.9653	82.7492	13.3201	0.7205	0.0235	0.0138	0.0002	0.0002	N/A	0	0.0938	0.0228	1/21/2021	1/22/2021	1/22/2021 16:26	
1587	GLEN ULLIN	1095	0.6442	1364.2	-50	2.0953	0.9891	82.9038	13.0564	0.7708	0.0268	0.0158	0.0004	0.0006	N/A	0	0.1186	0.0225	1/22/2021	1/23/2021	1/23/2021 16:27	
1587	GLEN ULLIN	1094.4	0.6445	1363.2	-50.4	2.1562	0.9865	82.7926	13.1548	0.7366	0.0213	0.0131	0	0.0003	N/A	0	0.1163	0.0227	1/23/2021	1/24/2021	1/24/2021 16:23	
1587	GLEN ULLIN	1093.9	0.6436	1363.5	-51	2.1284	0.975	82.9546	13.0649	0.7176	0.0203	0.0125	0	0	N/A	0	0.1044	0.0223	1/24/2021	1/25/2021	1/25/2021 16:28	
1587	GLEN ULLIN	1093.7	0.6436	1363.3	-51.2	2.1523	0.9641	82.9547	13.0752	0.709	0.0184	0.0115	0	0	N/A	0	0.0922	0.0226	1/25/2021	1/26/2021	1/26/2021 16:46	
1587	GLEN ULLIN	1093.8	0.6427	1364.4	-51.6	2.0815	0.9529	83.1263	12.9987	0.7004	0.0166	0.0107	0	0	N/A	0	0.0908	0.0222	1/26/2021	1/27/2021	1/27/2021 16:39	
1587	GLEN ULLIN	1090.8	0.64	1363.5	-53.4	2.0285	0.9355	83.634	12.5934	0.6656	0.0167	0.0106	0	0	N/A	0	0.0943	0.0216	1/27/2021	1/28/2021	1/28/2021 16:34	
1587	GLEN ULLIN	1089.6	0.6399	1362.2	-53.3	2.0664	0.9514	83.6017	12.5151	0.674	0.0201	0.0122	0.0002	0.0003	N/A	0	0.1369	0.0217	1/28/2021	1/29/2021	1/29/2021 16:36	
1587	GLEN ULLIN	1089.9	0.6407	1361.7	-52.1	2.1271	0.9482	83.4857	12.5151	0.7126	0.0253	0.0171	0.0012	0.0019	N/A	0.0003	0.1434	0.0222	1/29/2021	1/30/2021	1/30/2021 16:42	
1587	GLEN ULLIN	1093.2	0.6436	1362.6	-50.9	2.1474	0.9888	82.9199	13.0329	0.7162	0.0224	0.014	0.0003	0.0008	N/A	0	0.1351	0.0225	1/30/2021	1/31/2021	1/31/2021 16:30	
1587	GLEN ULLIN	1095	0.6445	1363.9	-50.4	2.1546	0.9683	82.8223	13.1865	0.7221	0.0231	0.0141	0.0004	0.001	N/A	0	0.0853	0.0225	1/31/2021	2/1/2021	2/1/2021 16:35	

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

MONTANA DAKOTA UTILITIES CO  
NORTH DAKOTA  
HEATING VALUE DATA

STATE	ZONE	ZONE BOUNDARY	12 MONTH AVERAGE	JAN 21	DEC 20	NOV 20	OCT 20	SEPT 20	AUG 20	JULY 20	JUNE 20	MAY 20	APR 20	MAR 20	FEB 20	ZONE
MT/ND	211	Sidney Border - MonDak Tfr - Sidney Plt	1198	1209	1207	1198	1200	1202	1196	1191	1169	1174	1202	1211	1215	211
ND	24	Williston Border - Charbonneau Station	1163	1177	1175	1167	1158	1157	1157	1153	1163	1159	1155	1169	1171	24
ND	25	Watford City West Border	1193	1195	1195	1193	1193	1194	1191	1194	1161	1206	1188	1202	1204	25
ND	28	Bismarck Station - Glen Ullin Station	1152	1121	1135	1131	1152	1174	1195	1190	1186	1129	1149	1138	1126	28
ND	31	Dickinson Brd - Belfield Trf - G Ullin Stn	1119	1122	1131	1129	1136	1125	1104	1092	1085	1093	1150	1138	1126	31
ND/MT	32	Cabin Creek Station - Belfied Transfer	1116	1105	1119	1123	1127	1134	1120	1115	1109	1109	1133	1103	1096	32
ND	33	Little Knife Plant	1176	1172	1172	1172	1172	1174	1179	1183	1182	1179	1175	1173	1175	33
ND	34	Badlands Plant/Bowman Border	1051	1172	1094	1070	1060	1025	984	984	1036	1047	1048	1024	1073	34
ND	43 1/	Watford City East Border	1142	1104	1147	1147	1140	1139	1137	1142	1138	1151	1157	1152	1151	43
ND/MT	241	Fairview Border	1179	1192	1195	1203	1169	1157	1172	1153	1159	1164	1182	1195	1203	241
ND	260	North Tioga Transfer - Nesson Plant	1122	1144	1142	1134	1114	1131	1129	1116	1116	1099	1096	1132	1111	260
ND	261	Tioga Comp Station - Robinson Lake Plan	1170	1168	1166	1159	1164	1162	1172	1167	1177	1178	1179	1174	1173	261
ND	262	Minot Bdr - Palermo Bdr - Bismarck Stn	1186	1184	1181	1178	1182	1191	1195	1189	1192	1193	1190	1180	1180	262
ND	263	Lignite Plant	1144	1133	1134	1137	1137	1149	1147	1143	1149	1146	1146	1160	1143	263
ND	264	Epping Border	1158	1167	1165	1163	1156	1155	1147	1147	1153	1168	1147	1157	1165	264
ND	265	Tioga Comp Station - County Line Plant	1169	1168	1166	1159	1164	1163	1173	1168	1178	1158	1180	1174	1174	265
ND	266	County Line Plant	1176	1164	1166	1165	1161	1190	1194	1191	1194	1168	1193	1164	1161	266
ND	271	Bismarck Station - Cleveland Station	1183	1180	1179	1174	1181	1191	1195	1190	1193	1190	1186	1169	1165	271
ND	272	Cleveland Station - Mapleton	1182	1179	1178	1173	1182	1191	1195	1190	1192	1189	1185	1169	1165	272
ND	273	Cleveland Station - Grafton Border	1182	1179	1178	1173	1181	1190	1194	1190	1192	1189	1184	1169	1165	273
ND	550	Mandan Border / NBPL-St Anthony	1149	1121	1133	1131	1152	1174	1190	1181	1186	1129	1149	1119	1117	550
ND	610	MDU-Watford City BTU	1164	1140	1167	1166	1165	1170	1163	1163	1149	1182	1171	1169	1168	610
ND	802	NBPL - Linton	1102	1103	1111	1113	1110	1120	1102	1088	1082	1086	1105	1102	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	1160	1148	1155	1155	1166	1166	1160	1158	1164	1158	1163	1164	1162	600
ND	601	Alliance Pipeline - Milnor	1160	1148	1155	1155	1166	1167	1161	1158	1164	1157	1158	1164	1162	602

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

<b>THERMAL ZONE VARIANCE DOCUMENTATION</b>		
<b>January 2021</b>		
<b><i>ZONE</i></b>	<b><i>BTU VARIANCE</i></b>	<b><i>REASON</i></b>
34	78	Operational – Blend of Gas